

**REGULAR MEETING
DESTIN CITY COUNCIL
JUNE 3, 2024
ANNEX COUNCIL CHAMBERS
6:00 PM**

*****Core Value of the Month - Integrity*****

CALL TO ORDER

*** INVOCATION**

PLEDGE OF ALLEGIANCE

AGENDA APPROVAL *(Matters not specifically listed on the agenda may be added and acted upon with a super-majority vote of the Council members present and eligible to vote on the matter)*

1. PROCLAMATIONS / RECOGNITIONS / SPECIAL / **PUBLIC PRESENTATIONS / ANNOUNCEMENTS

A. Rotary Club of Destin - Citizen Above Self Award 2024

2. PUBLIC COMMENTS (Section 5 - Public Hearings has separate public comments time for these items) (Note: Individual speakers will be limited to 3 minutes. At the discretion of the mayor, this 3 minute allowance may be adjusted depending on the level of business coming before the City Council)

3. * CONSENT AGENDA**

A. Approval of minutes of May 20, 2024 Council Executive Session

B. Approval of minutes of May 6, 2024, Regular City Council Meeting

4. CITY MANAGER REPORTS

A. 2024 Debt Issuance Update

B. Norriego Point -DEP Request

C. Code Compliance Lien Reduction Request-4550 Biscayne Bay and 216 Grand Key Loop

D. Dolphin Point/Moreno Point Road – Parking Options Evaluation

E. Utility Undergrounding Phase 1 - ADS Contract

(March 25, 2024: Motion by Councilmember Schmidt to accept Bid Committee's report and rankings and direct the City Manager to negotiate a contract beginning with the highest ranked proposer in accordance with the Request for Proposals (RFP), was seconded by Councilmember Stephens and passed 6-0)

F. Parks and Recreation Cost Recovery Policy

G. Parks and Recreation Fee Schedule

H. Land Development Code Rewrite Update

I. Pickleball Courts 90% Plans Update

J. Tarpon Beach Parking- 100% Design Plans

K. Median & Grounds Maintenance - Draft RFB for Council consideration/comment

L. Announcements

5. PUBLIC HEARINGS

A. Calhoun Harbor Development Conditional Use

6. COMMENTS / PRESENTATIONS FROM MAYOR, COUNCIL, AND CITY ATTORNEY

A. Councilmember Stephens

B. Councilmember Geile

1) Projects status/updates

C. Councilmember Destin

D. Councilmember Bagby

E. Councilmember Hebert

1) Revocation of rental registration for continued noncompliance

F. Councilmember King

G. Councilmember Schmidt

H. Mayor Wagner

1) Supporting Okaloosa Transit Mobile on Demand RFP

I. City Attorney

7. PUBLIC COMMENTS (Comments from the public on any matters considered at the meeting, or on any matters not on the agenda)

8. ADJOURN

* Any invocation that is offered before the official start of the City Council meeting shall be the voluntary offering of a private person, to and for the benefit of the City Council. The views or beliefs expressed by the invocation speaker have not been previously reviewed or approved by the City Council, or the City staff, and the City is not allowed by law to endorse the religious beliefs or views of this, or any other speaker. Persons in attendance at the City Council meeting are invited to stand during the opening invocation and Pledge of Allegiance. However, such invitation shall not be construed as a demand, order, or any other type of command. No person in attendance at the meeting shall be required to participate in any opening invocation that is offered. A person may exit the City Council Chambers and return upon completion of the opening invocation if a person does not wish to participate in or witness the opening invocation.

** To be placed on the agenda under public presentations, citizens must contact the City Manager or City Clerk's office one (1) week prior to the scheduled City Council Meeting, completing a Speakers Request Form and providing any accompanying documentation as requested in the form's instructions.

*** All items listed under Consent Agenda are considered to be routine by the City Council and will be enacted by one motion. There will be no separate discussion of these items. If discussion is desired, that item will be removed from the Consent Agenda and may be considered separately.

If a person decides to appeal any decision made by the Council with respect to any matter considered at this meeting, he/she may need a record of the proceedings, and for such purpose, he/she may need to ensure that verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. FS 286.0105.

Persons with disabilities who require assistance to participate in City meetings are requested to notify the City Clerk's Office at (850) 837-4242 in advance. Hearing Impaired: TTY: 711. Assistance also available through Human Resources, Title VI Coordinator, at (850) 837-4242. Personas con discapacidades que necesitan asistencia

o personas que necesiten ayuda con un idioma para participar en las reuniones de la ciudad, deberán notificar la oficina de la Secretaria Municipal al (850) 837-4242 antes de la reunión. Discapacidad auditiva: TTY: 711 (Solicitar Espanol CA). La ayuda tambien está disponible por Recursos Humanos, Coordinador del Título VI, al (850) 837-4242.

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CITY OF DESTIN



AGENDA ITEM

COUNCIL MEETING DATE: June 3, 2024

TYPE OF AGENDA ITEM: Special Presentation

AGENDA OUTLINE NUMBER: 1.A.

TO: City Council

THRU: Louis Zunguze, City Manager
Rey Bailey, City Clerk

FROM: Michael Burgess, Public Services Director

DATE: 05/08/2024

SUBJECT: Rotary Club of Destin - Citizen Above Self Award 2024

I. BACKGROUND: Each year, the Rotary Club of Destin recognizes an individual whose level of commitment to customer or community service warrants recognition by our Club. The proclamation this evening recognizes a public servant who epitomizes that dedication to selfless service.

II. DISCUSSION: The 2024 Rotary Club of Destin's "Citizen Above Self" Award will be presented to Ms. Jennifer Lehrmann.

A. Link to Strategic Goals / Objectives: II. Enhanced Quality of Life and Safety for Families

B. Effect on Budget (EOB): None

C. Level of Service (LOS): No change.

D. Legislative Sponsor:

III. CONCLUSION: This is an informational item in support of a proclamation.

IV. RECOMMENDED MOTION: No motion required.

Attachments:

1. Proclamation - Citizen Above Self Day 2024



City of Destin

Proclamation

“CITIZEN ABOVE SELF” AWARD RECOGNIZING THE CITIZENS OF DESTIN

WHEREAS, Rotary International, founded on February 23, 1905 in Chicago, Illinois USA, is the world's first and one of the largest non-profit service organizations; and

WHEREAS, there are over 1.4 million Rotary Club members comprised of professional and business leaders in over 46,000 clubs in 224 countries and geographic areas on all seven continents; and

WHEREAS, the Rotary motto "Service Above Self" inspires members to provide humanitarian service, encourages high ethical standards, and promotes good will and peace in the world; and

WHEREAS, Rotary International funds club projects and sponsors volunteers with community expertise to provide medical supplies, health care, clean water, food production, job training, and education to millions in need, particularly in developing countries; and

WHEREAS, the members of the Rotary Club of Destin have provided the citizens of Destin and Okaloosa County with numerous projects that provide education, environmental, and service to our local area; and

WHEREAS, the Rotary Club of Destin wishes to recognize individuals who provide selfless service to our community; and

WHEREAS, Ms. Jennifer Lehrmann, received a nomination citing her selfless service to a neighbor in need over the course of 42 straight days.

NOW, THEREFORE I, Bobby Wagner, Mayor, along with the City Council of Destin Florida, do hereby proclaim June 3rd, 2024, as the Rotary Club of Destin's "Citizen Above Self" Day in the City of Destin, and encourage all citizens to join me in recognizing Ms. Jennifer Lehrmann as recipient of the 2024 award.

**SO, DONE THIS 3RD DAY OF JUNE 2024
BY:**

Bobby Wagner, Mayor

**MINUTES
EXECUTIVE SESSION
CITY COUNCIL
MAY 20, 2024
5:30 PM
CITY HALL ANNEX COUNCIL CHAMBERS**

The Council of the City of Destin met in an executive session with the following members and staff present:

Council Present

Mayor Pro Tem Dewey Destin
Councilmember Johnny King
Councilmember Terésa Hebert
Councilmember Kevin Schmidt

Councilmember Torey Geile
Councilmember John Stephens
Councilmember Jim Bagby

Staff Present

City Manager Louis Zunguze
City Clerk Rey Bailey
City Attorney Kimberly Kopp
Special Counsel Eric A. Krebs

Others Present

Liz Klein, Court Reporter

CALL TO ORDER

1. Mayor Pro Tem Dewey Destin convenes the meeting by stating that:

“This session of the Destin City Council is hereby convened as noticed by publication in a newspaper of general circulation, The Northwest Florida Daily News, on Sunday, May 19, 2024.

2. The City Attorney stated as follows:

“Pursuant to §286.011(8), Florida Statutes, at this time, I would like to request that we adjourn to executive session so that I, the attorney of record for the City of Destin in:

***Enclave Community Property Association, Inc. vs. City of Destin,
Case Number 2023-CA- 003150, in the First Judicial Circuit, in
and for Okaloosa, County, Florida***

may receive the Council’s advice regarding the strategy to be used in this case and the type of expenses to be incurred.

The entire session would be recorded by a court reporter, the transcript would be filed with the City Clerk, and available to the public at the conclusion of the litigation discussed today. A copy of the published notice of this executive session is hereby identified as Exhibit A and will be attached to the transcript of this executive session.

In addition to the Mayor Pro Tem and City Council members in attendance tonight, the following persons are in attendance:

Attorneys for the City:

***Eric A. Krebs, Esq.
Warner Law Firm, P.A.
P.O. Box 1820
Panama City, Florida 32401***

***Kimberly Romano Kopp, Esq., LEED AP
Romano Kopp Law, PA.
P.O. Box 5524
Destin, Florida 32541***

City Manager

Louis Zunguze

The City Attorney continued:

“At this time will the Mayor Pro Tem and Council members in attendance please identify yourselves for the record?”

***Kevin Schmidt
Johnny King
Dewey Destin
Terésa Hebert
Jim Bagby
Torey Geile
John Stephens***

The City Attorney continued:

“I estimate that this executive session will take approximately 30 minutes. At the conclusion of the executive session, the Council will reconvene the public hearing, accept any motions if applicable, and the mayor will end the session.”

3. The Mayor Pro Tem stated that:

“At this time, we will recess the public portion of tonight’s meeting and convene the executive session.”

Everyone who is not a participant in the Attorney-Client portion of the session left the room.

4. Executive Session

Discussion of the litigation.

5. Following the closed session, and once the Clerk has returned and turned on the recording, the Mayor Pro Tem stated that:

“We will now reconvene the public portion of this meeting and I will accept any motions from Council.”

Councilmember Bagby moved to direct the City Manager not to expend any city funds, but to communicate to the enclave neighborhood that if they want signage or any other improvements on the public property that they can bring the plans to the city for review; seconded by Councilmember Hebert. Motion passed 7-0 (Council members Schmidt, King, Hebert, Bagby, Destin, Geile, and Stephens voted “yes”).

ADJOURNMENT:

Having no further business at this time, the Mayor Pro Tem adjourned the meeting at 5:55 PM.

**ADOPTED THIS 3RD DAY OF JUNE 2024
By:**

Bobby Wagner, Mayor

ATTEST:

Rey Bailey, City Clerk

**REGULAR MEETING
DESTIN CITY COUNCIL
MAY 6, 2024
CITY HALL ANNEX COUNCIL CHAMBERS
6:00 PM**

The Council of the City of Destin met in regular session with the following members and staff present:

Destin City Council

Mayor Bobby Wagner

Councilmember Torey Geile

Councilmember Johnny King

Councilmember Terésa Hebert

Councilmember John Stephens

Councilmember Jim Bagby

Councilmember Dewey Destin

Destin City Staff

City Manager Louis Zunguze

IT Director Andy Peters

Principal Planner Steve O'Connor

Code Compliance Director Troy Williams

Parks & Recreation Director Lisa Firth

Projects/Grants/Contract Manager Jeffrey Cozadd

City Clerk Rey Bailey

City Engineer Ryan Scott

Building Official Noell Bell

Public Works Director Michael Burgess

Finance Director Krystal Strickland

City Attorney Kimberly Kopp

CALL TO ORDER, INVOCATION AND PLEDGE OF ALLEGIANCE

Mayor Bobby Wagner called the meeting to order at 6:00 PM. Pastor David J. Butler of the Faith Assembly Christian Church gave the invocation, which was then followed by the recitation of the Pledge of Allegiance.

AGENDA APPROVAL

Motion by Councilmember Hebert, seconded by Councilmember Stephens, to approve the agenda passed 6-0 (Council members King, Hebert, Bagby, Destin, Geile, and Stephens voted "yes"; Councilmember Schmidt was absent from the meeting)

1. PROCLAMATIONS / RECOGNITIONS / SPECIAL / PUBLIC PRESENTATIONS / ANNOUNCEMENTS

A. Proclamation - National Safe Boating Week

Mayor Wagner read the proclamation designating May 18-24, 2024, as *National Safe Boating Week*, and then presented it to Senior Chief Joshua Menges with the US Coast Guard Station Destin, and Lieutenant Jarrod Molnar with the Division of Law Enforcement from the Division of Florida Fish and Wildlife Conservation Commission.

2. PUBLIC COMMENTS

Mr. Don Dallas, 442 Snapper Drive, expressed concern over the water drainage issues on his property and neighborhood properties. He thanked the city for their initial efforts but requested more permanent solutions. He stated that the city has been responsive by taking pictures during rainstorms, but more action is needed to install proper drainage systems. He requests installation of a sewer system or drainage at the T-junction of Juanita and Snapper Drive.

Mr. Gary Pavo, Laguna Point, expressed that Laguna Point residents were not properly notified about the April 15th meeting regarding the public parking spaces at Dolphin Point. He stressed that the residents did care about the parking spaces contrary to what was stated at that meeting, and that the council's decision will have a direct impact to their community. He urged the council to reinstate the parking spaces and address the community's needs adequately.

Ms. Janice Nicole Moran, 208 Snapper Drive, echoed the previous speaker's concerns about the removal of the parking spaces, highlighting the inconvenience and potential impact on local events and medical access. She requested reconsideration of parking space removal and exploration of alternative solutions such as paid parking or resident-only parking with stickers.

Mr. James Dexter, 28 Moreno Point Road, raised concerns about the one-way in and out access at Point South Townhomes. He mentioned safety issues due to limited parking and potential access problems for emergency services. He asked the council to consider the community's needs and the practicality of maintaining the parking spaces. He also submitted additional written comments from another neighbor.

3. CONSENT AGENDA

- A. Flood Protection/Mitigation Report for 2023-2024, CRS requirement
- B. Continuing Service Provider – Architectural RFQ 23-09-ENG
- C. Resolution 24-07, Adoption of Statewide Mutual Aid Agreement
- D. 510 Vera Cruz Drive, Residential Marine Construction, HWB-001361-2024
- E. Approval of minutes of April 1, 2024, Regular City Council Meeting
- F. Approval of minutes of March 18, 2024, Regular City Council Meeting

Motion by Councilmember Hebert, seconded by Councilmember Stephens, to approve Consent Agenda items 3A through 3F passed 6-0 (Council members King, Hebert, Bagby, Destin, Geile, and Stephens voted “yes”; Councilmember Schmidt was absent from the meeting)

4. CITY MANAGER REPORTS

- A. Dolphin Point- Hold Harmless and Maintenance Agreement

The City Engineer presented their findings on the hold harmless and maintenance agreement requested by the council at the April 15, 2024, council meeting.

Some members of the council raised concerns about the public notification process and asked for clarifications.

The City Engineer detailed the notifications sent out to residents within 300 feet of the Destin Point project area, explaining that notices were sent on February 26th for the April 15th meeting and on April 25th for tonight's meeting. He added that despite these efforts, there were complaints from residents about not being notified in advance.

Capt. Jason Fulghum, from the Okaloosa County Sheriff's Office, provided data on calls for service in the Dolphin Point area, stating that there were 115 calls for service in the past year, but only 36 of those were related to potential criminal activity. Of those, only 6 resulted in reports. He emphasized that the area is not crime-ridden and that many calls were for non-criminal issues like medical emergencies and welfare checks.

Councilmember Hebert moved for approval of the Hold Harmless and Maintenance Agreement with the Dolphin Point Homeowners Association, as presented; seconded by Councilmember Stephens.

Several council members expressed concerns about the impact of the parking spaces at Dolphin Point on surrounding properties and residents. Discussions included:

- The feasibility of making the parking spots available only to residents with a city parking sticker.
- Suggestions to create a system where only residents of the two affected buildings could park in those spots.
- Potential reconfiguration of the parking spots to parallel parking to ensure compliance with city code.

Councilmember Bagby offered a substitute motion to direct city staff to evaluate the feasibility of parallel parking spaces in the affected area and report back to the council; seconded by Councilmember King.

The motion was discussed, with some council members suggesting further exploration of parallel parking options.

Ms. Alicia Belcher, representing Dolphin Point, expressed frustration with the ongoing issues and detailed the efforts made by the Dolphin Point board to comply with city standards. She also reemphasized the safety concerns and the need for a resolution that would prevent misuse of the parking spaces by non-residents.

The mayor called for a vote on the substitute motion, which passed 6-0 (Council members King, Hebert, Bagby, Destin, Geile, and Stephens voted "yes"; Councilmember Schmidt was absent from the meeting)

B. Mobility Plan - Project Priority List

The City Engineer and consultant presented the draft Destin Mobility Plan to the city council.

The draft Destin Mobility Plan includes more than 60 distinct transportation improvements that are estimated to cost approximately \$150 million. Each project would bring benefits to people that use the transportation system. The number and cost of the projects exceed the city's capacity to implement them in the near term, making prioritization important.

Public and stakeholder input played an important role in shaping the prioritization process and recommendation described in the report.

- In February 2022, the city held a public meeting to obtain early input for the Mobility Plan. Attendees participated in a series of real-time polling questions. People were asked how they would allocate \$100 towards the city's infrastructure.
- The city held a second public meeting in August 2023 to obtain input on specific projects. Attendees ranked project types in order of priority.
- The city also engaged with the Parks and Recreation Committee, Local Planning Agency, and Public Works/Public Safety Committee in October and November 2023 to obtain input on project prioritization.

Based on the technical analysis, public input, and committee input, staff worked with the city's consulting team to draft a proposed prioritization. The prioritization divides the project into three phases of 8 years each. The projects for each phase are presented in a series of tables as shown in the report.

- Proposed Phase 1 consists of 8 projects that the public, staff, and city officials have consistently highlighted as top priorities. These projects are proposed to advance to construction by 2032.
- Proposed Phase 2 consists of 35 projects proposed to be under construction by 2041. This phase includes more sidewalks, bicycle lanes, and multi-use path projects than any other phase.
- Proposed Phase 3 consists of 22 projects proposed to be under construction by 2050. This phase includes more intersection enhancements than any other phase.

The final step in prioritization is to obtain the input of the city council and make adjustments based on their feedback and direction. The key questions for city council to provide input on are:

- Which projects should be moved up to a higher level of priority?
- Which projects should be moved down to a lower level of priority?

Once priorities are set, the staff and its consulting team will finalize the Mobility Plan and bring it back to the city council to consider for adoption.

During deliberation, council members expressed the need for another public workshop involving the council to gather additional input and detailed criteria for project prioritization.

Councilmember Destin moved to schedule a City Council Workshop on Mobility Plan, preceding the City Council Budget Workshop on May 13th, seconded by Councilmember King. Motion passed 6-0 (Council members King, Hebert, Bagby, Destin, Geile, and Stephens voted "yes"; Councilmember Schmidt was absent from the meeting)

C. Cross-Town Connector Contract Amendment

According to the City Engineer, the city council approved a motion on April 15, 2024 directing the City Manager to have staff move forward with PD&E reevaluation Option B and bring back proposed funding sources for the \$110,000 change order with Atkins Engineering. Staff recommends using Gas Tax #2 for Amendment #5 to Atkins contract to update the Environmental Impact Report for the Destin Crosstown Connector.

Councilmember Bagby moved to approve Amendment #5 to Atkins contract to update the Environmental Impact Report for the Cross-Town Connector using the funding from Gas Tax #2, seconded by Councilmember Hebert. Motion passed 6-0 (Council members King, Hebert, Bagby, Destin, Geile, and Stephens voted “yes”; Councilmember Schmidt was absent from the meeting)

D. Quarterly Investment Report - For Informational Only

The council reviewed the current quarterly investment report with schedules showing the current status of the city investment accounts with Raymond James. The council requested staff to explore the possible inclusion of Florida Prime Benchmark in the investment report in future reports.

E. Announcements

1. LDC rewrite update: The fourth chapter for the new LDC has been reviewed by the Local Planning Agency. Articles 1-10 of the LDC are available on the city's website for public review and comments. The city council will start the review of these articles later this month. Kudos to city staff members who have been working very diligently on this very complicated process. It is one of a kind as they are not only doing the LDC rewrite, but they are also updating the Comprehensive Plan and the Future Land Use Map. Once everything is completed, two of the city's most important documents will be “speaking” to each other for the first time in the history of this community.
2. The city's initial budget workshop is scheduled for Monday, May 13th.
3. The SRS Visioning Workshop is scheduled for Wednesday, May 22nd, beginning at 5:30 PM.
4. Turtle nesting season has begun. A reminder to residents and visitors that if they are out in the evenings to carry the special red flashlights that are available for pick up at city hall.
5. The city is working with the US Coast Guard 8th District to hold an Open House on May 20th from 9-11:30 AM. Boating safety will be discussed with a lot of demonstrations available.
6. The IT Department will be conducting a demonstration tomorrow, May 7th, starting at 1:00 PM, on the new online licensing system. The city council has received an invitation to participate.
7. The new voting system will take effect starting on May 7th. The IT Department will be offering individualized training to members of the council.

8. Some new fencing and sea oats have been added in front of Turpin. The work was done throughout the county with Mr. Alex Fogg spearheading the effort.
9. Blessings of the Fleet is scheduled for this Thursday, May 9th, at 3:00 PM.
10. Congratulations to Mayor Wagner for being honored by the Northwest Florida League of Cities with the 2024 Home Rule Hero Award at a board meeting and reception at Panama City Beach this weekend. He has also been selected as the second Vice President for the Northwest Florida League of Cities.
11. The Code Compliance Department and the Public Information Office worked together to create a flyer regarding waste management and trash rules for overgrowth and brush. Code Compliance officers are working diligently to distribute the flyers to as many people as possible.

5. PUBLIC HEARINGS

- A. First reading of Ordinance 24-01-LC, Amending 8.01.00 of the Land Development Code, "Right of Way Protection."

The City Attorney read Ordinance 24-01-LC by title, and then presented it to the council on first reading.

AN ORDINANCE OF THE CITY OF DESTIN, FLORIDA; AMENDING SECTION 8.01.00 OF THE LAND DEVELOPMENT CODE "RIGHT-OF-WAY (ROW) PROTECTION"; PROVIDING FOR FINDINGS OF FACT; PROVIDING FOR INCORPORATION INTO THE LAND DEVELOPMENT CODE; PROVIDING FOR CONFLICTING PROVISIONS; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

The mayor opened a public hearing to receive comments for or against the proposed ordinance. Having none, the mayor closed the public hearing portion and turned the matter over to the city council for discussion and approval consideration.

Motion by Councilmember King, seconded by Councilmember Geile, to approve Ordinance 24-01-LC on first reading and direct the City Clerk to advertise it for second reading passed 5-1 (Council members King, Hebert, Destin, Geile, and Stephens voted "yes"; Councilmember Bagby voted "no"; Councilmember Schmidt was absent from the meeting).

- B. First reading of Ordinance 24-02-CC creating Section 18-21 of the Code of Ordinances, Protection of Public Right-of-Way During Permitted Construction Activity."

The City Attorney read Ordinance 24-02-CC by title, and then presented it to the council on first reading.

AN ORDINANCE OF THE CITY OF DESTIN, FLORIDA; CREATING SECTION 18-21 OF THE CODE OF ORDINANCES "PROTECTION OF PUBLIC RIGHT OF WAY DURING CONSTRUCTION ACTIVITY"; PROVIDING FOR FINDINGS OF FACT; PROVIDING FOR INCORPORATION INTO THE CITY CODE OF ORDINANCES; PROVIDING FOR CONFLICTING PROVISIONS; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

The mayor opened a public hearing to receive comments for or against the proposed ordinance. Having none, the mayor closed the public hearing portion and turned the matter over to the city council for discussion and approval consideration.

Motion by Councilmember Stephens, seconded by Councilmember Hebert, to approve Ordinance 24-02-LC on first reading and direct the City Clerk to advertise it for second reading passed 5-1 (Council members King, Hebert, Destin, Geile, and Stephens voted “yes”; Councilmember Bagby voted “no”; Councilmember Schmidt was absent from the meeting).

6. COMMENTS / PRESENTATIONS FROM MAYOR, COUNCIL, AND CITY ATTORNEY

A. Councilmember Stephens

1) Membership Appointment - Local Planning Agency - Larry Cowsert

Motion by Councilmember Stephens, seconded by Councilmember Hebert, to appoint Mr. Larry Cowsert to the Local Planning Agency passed 6-0 (Council members King, Hebert, Bagby, Destin, Geile, and Stephens voted “yes”; Councilmember Schmidt was absent from the meeting)

2) Consensus on the Legislative Sponsor for Livery Ordinance Updates

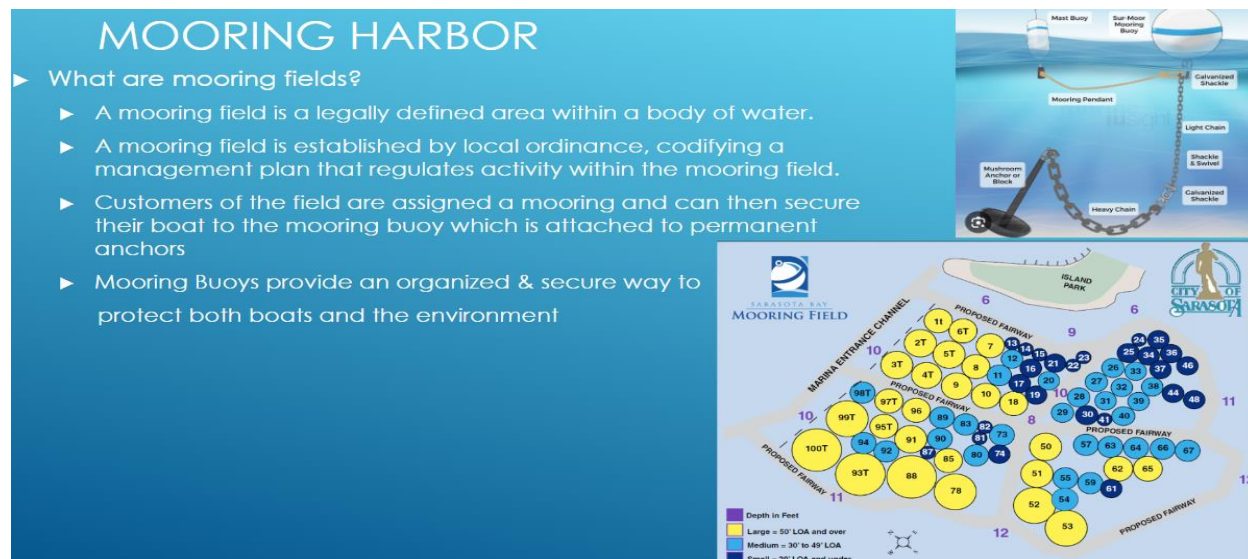
Motion by Councilmember Bagby, seconded by Councilmember Hebert, to appoint Councilmember Stephens as the legislative sponsor for the Livery Ordinance updates passed 6-0 (Council members King, Hebert, Bagby, Destin, Geile, and Stephens voted “yes”; Councilmember Schmidt was absent from the meeting)

3) Livery vessel definition/ordinance amendments

Councilmember Stephens will bring proposed modification to livery vessel definition for discussion at the next council meeting.

4) Mooring Harbor

Councilmember Stephens provided the following slide presentation in discussing the need for establishing a mooring harbor:



MOORING FIELD GOALS

- ▶ Provide public access to Florida waters
- ▶ Be ecologically and habitat friendly
- ▶ Promote tourism and provide economic benefit to merchants with minimal infrastructure requirements
- ▶ Be a self sustaining, user-funded amenity
 - ▶ Fees support Harbormaster, all on-land facilities, mooring maintenance
- ▶ Provide proprietary moorings more secure than normal anchors
- ▶ Enable higher density of vessels for space available
- ▶ Not accommodate or allow derelict or abandoned vessels
- ▶ Enhance oversight of the water resource
- ▶ Enhance real estate values



HOW ARE MOORING FIELDS BENEFICIAL TO DESTIN

- Benefits to safety:
 - Moorings will not attract unlawful tenants, it will actually eliminate them
 - Gain Harbor Master, who has authority on our waterways
 - Harbor Master can ask vessels to leave before a severe storm, such as hurricane approaches
 - Moorings offer greater holding strength than anchors.
 - Allows for fewer break-away vessels, which will protect other vessels & shore-side infrastructure
 - If vessel does break free, Harbor Master will know who to contact
 - Vessels are kept out of illegal or inconvenient places in the waterway
 - At night, vessels are required to display anchor lights
 - Vessels must meet standards:
 - Comply with USCG regulations & safety standards and Chapter 327 of Florida Statutes
 - Must be in good operational condition
 - Capable of maneuvering under their own power
 - Display current registration/documentation
 - Have liability insurance coverage
 - Vessels are able to swing with wind and current without hitting other vessels

HOW ARE MOORING FIELDS BENEFICIAL TO DESTIN

- Benefits to environment:
 - Pump out services required for vessels in mooring field.
 - Illegal discharge of solid or liquid waste into waterway can be controlled
 - Derelict vessels can be identified and removed easier
- Benefits to local economy:
 - No Mooring Fields in panhandle. Could make Destin a destination for Loopers
 - Mooring field generates revenues, which go back into operations & maintenance of facility
 - Mooring field patrons use local services & products, such as boat repairs, groceries, shopping, dining, entertainment venues
- Benefits to boating community:
 - there are no available marine slips
 - boaters can stay on their own boat in a mooring field
 - Vessels can be tied up without impacting other vessels
 - Boaters have access to amenities like restrooms, showers, & other land-based activities

WHAT RULES WILL GOVERN TENANTS TO KEEP FIELD CLEAN

Must have **Mooring Field Management Plan**

- ▶ Rules that must be followed by every vessel within mooring field
- ▶ Customers must show proof of pump-out and/or be pumped out every 3 days
 - ▶ Plan stipulates that the discharge of any solid or liquid waste into waters are prohibited
 - ▶ Violators are subject to immediate ejection from facility, loss of security deposit, and will be turned over to law enforcement
- ▶ Harbormaster will create consistent oversight & monitoring to prevent illegal anchoring, dumping, and other undesirable activities
- ▶ No vessel shall occupy any mooring without approval of Harbormaster
- ▶ Only vessels that are authorized to moor at facility:
 - ▶ in compliance with USCG environmental & safety standards and in good operational condition
 - ▶ Capable of maneuvering under their own power
 - ▶ Must have current registration/documentation & insurance
- ▶ Examples of :
 - ▶ Mooring Field Management Plan -
 - ▶ <https://www.fortmyersbeachfl.gov/DocumentCenter/View/21853/Mooring-Field-Map>
 - ▶ <https://www.fortmyersbeachfl.gov/DocumentCenter/View/17791/21-02-Matanzas-Mooring-Field-Management-Plan>
 - ▶ User License Agreement –
 - ▶ https://www.ci.marathon.fl.us/sites/default/files/fileattachments/marina_and_ports/page/30901/marina_user_agreement_4-15-2023_-_1.pdf

17

PROCESS TO ESTABLISH MOORING FIELD

- ▶ **Permit Provisions**
 - ▶ Moorings must be made available to public on first-come-first-serve basis
 - ▶ Commercial activities prohibited
 - ▶ Use of revenue may be restricted
 - ▶ Manatee education plan must be put in effect
- ▶ **Permits applications (May require coastal engineering consultant)**
 - ▶ Navigational
 - ▶ Biological
 - ▶ Water Quality
 - ▶ Hydrology
- ▶ **Signage needs**
 - ▶ Federal permits (Rivers & Harbors Act, Section 10, USACOE)
 - ▶ State Permits ("Uniform waterway markers" Florida Statute 327.40)

LEGAL STEPS FOR MOORING FIELD

- ▶ Confirm ownership of submerged lands
- ▶ Confirm relevant jurisdiction
- ▶ Review Destin Comprehensive Plans to determine whether Managed Mooring Field will be consistent with the plan
- ▶ Initiate drafting of Proposed Ordinance or Resolution
 - ▶ see Thomas Ankersen, Christopher H. Pearce, An Annotated Model Municipal Harbor Management Ordinance (Aug. 2001)
- ▶ Obtain authorizations
 - ▶ Submerged lands lease
 - ▶ Environmental Resource Permit - DEP
 - ▶ Boating Restricted area - FWC
 - ▶ Obstructions to Navigation – section 10 – Rivers and Harbor Act (USACOE)
 - ▶ Special Anchorage Area Designation – USCG
- ▶ Resource Agency Consultations
 - ▶ Fish & Wildlife Service
 - ▶ Fish and Wildlife Conservation Commission
 - ▶ Other
- ▶ Destin & County attorney Consultation

FEES THAT CAN BE GENERATED FROM MOORING FIELD

- ▶ Mooring Ball Rental, which include showers, one holding Tank Pump-Out (additional fees apply for holiday day/week)
 - ▶ Daily: \$40 + tax (seen a lot of \$25/day)
 - ▶ Weekly: \$250 + tax
- ▶ 1 Harbor Blvd Dinghy Dock rates (additional fees apply for holiday day/week)
 - ▶ Daily: \$20 + tax
 - ▶ Weekly: \$100 + tax
- ▶ 1 Harbor Blvd Transient Slip rates, which includes showers (additional fees apply for holiday day/week)
 - ▶ Hourly: \$10-20/hour + tax
 - ▶ Daily: \$3.50/ft plus tax
 - ▶ Weekly: \$18/ft plus tax, one holding Tank Pump-Out.
 - ▶ Pump-Out Station
 - ▶ Additional Pump-Outs (& Non-Marina Customers) - \$5 (harborwalk charges \$20)
 - ▶ Laundry Facilities – Card operated. Does not include detergent
 - ▶ Washer: \$3/load, Dryer: \$3/load
 - ▶ Water & Ice
 - ▶ Filtered water (honor system) - \$.20/gallon, Ice: \$3/bag
 - ▶ If we want to offer Shore Power:
 - ▶ 30 Amp Electricity: extra \$4/day, 50 Amp Electricity: extra \$6/day
- ▶ Car parking from Parking Lots that want to utilize marina/mooring balls
 - ▶ \$15/day



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CREATE/UPDATE HARBOR MASTER JOB DESCRIPTION

- ▶ Position could be joint Harbor Master/Code Compliance
 - ▶ Budget in next year. Note that this position is not fully complete, as they are will be assigned with helping with plans, until Mooring Harbor Plan is into effect & then can have jurisdiction
- ▶ Create & uphold Strategic Action Plan
- ▶ Responsible for development, coordination, & implementation of Mooring Field Management Plan
- ▶ Plan, develop, & manage capital improvement projects as directed.
- ▶ Responsible for ensuring property maintenance & improvements in all Harbor areas
- ▶ Assist in water sampling with CBA & Analytical Services, then provide updates
- ▶ Inspection of BTR's on all businesses on Harbor, Inspection of livery medallions, find illegal charters
- ▶ Enforcement of ordinances, harbor upland parking restrictions, & all other city marine codes
- ▶ Patrol of Destin Harbor & all City adjacent waterways that we are able to get jurisdiction to with the Mooring Harbor
 - ▶ Joe's Bayou, Indian Bayou, Marler Bayou
- ▶ Marine permitting and inspection
 - ▶ Reviews application for marine construction for code compliance as well as site construction
- ▶ Respond to complaints from citizens and businesses & Emergency situation response within Harbor District
- ▶ Harbor & Waterways Board & Harbor CRA Committee involvement – attend meetings & provide Monthly reports?
- ▶ Responsible for annual budget



27

Councilmember Stephens moved to direct the City Manager to have city staff explore the feasibility of the potential mooring harbor plan, present the result of their review to the Harbor CRA Advisory Committee for their input, and then bring back recommendations to the city council; seconded by Councilmember King. Motion passed 6-0 (Council members King, Hebert, Bagby, Destin, Geile, and Stephens voted “yes”; Councilmember Schmidt was absent from the meeting)

Councilmember Stephens moved to direct the Parks and Recreation Department explore the feasibility of offering an after-school art program or summer art program for the Destin Elementary School children; seconded by Councilmember King.

Councilmember Bagby offered a substitute motion to table this item to the next council meeting to obtain more information about the status of the Arts Education Program at the Destin Elementary School; seconded by Councilmember Hebert. Motion passed 6-0 (Council members King, Hebert, Bagby, Destin, Geile, and Stephens voted “yes”; Councilmember Schmidt was absent from the meeting)

- B. Councilmember Geile
 - 1) Project updates/status
- C. Councilmember Destin
- D. Councilmember Bagby
- E. Councilmember Hebert
- F. Councilmember King

1) Membership Appointment - Town Center CRA Advisory Committee - Marlaine Scanlan

Motion by Councilmember King, seconded by Councilmember Stephens, to appoint Ms. Marlaine Scanlan to the Town Center CRA Advisory Committee passed 6-0 (Council members King, Hebert, Bagby, Destin, Geile, and Stephens voted “yes”; Councilmember Schmidt was absent from the meeting)

- G. Councilmember Schmidt
- H. Mayor Wagner
- I. City Attorney
 - 1) Waiver for any potential conflict of interest.

Councilmember Bagby moved to direct Mayor Wagner to execute the Waiver of Any Potential Conflict of Interest with the White Hat Productions for the purpose of conducting a Mayor’s Ball, seconded by Councilmember Hebert. Motion passed 6-0 (Council members King, Hebert, Bagby, Destin, Geile, and Stephens voted “yes”; Councilmember Schmidt was absent from the meeting)

2) A call for an executive session to be held on May 20, 2024, at 5:30 PM, in the City Hall Annex Council Chamber:

The City Attorney announced an executive session to be conducted on May 20th, at 5:30 PM, with regards to the following case.

Enclave Community Property Association, Inc. vs. City of Destin, Case Number 2023-CA- 003150, in the First Judicial Circuit, in and for Okaloosa, County, Florida.

There we no objections from the council.

3) City Manager Contract

The City Attorney presented the proposed City Manager contract to the city council.

Motion by Councilmember Hebert, seconded by Councilmember Stephens, to approve the City Manager contract as written passed 6-0 (Council members King, Hebert, Bagby, Destin, Geile, and Stephens voted “yes”; Councilmember Schmidt was absent from the meeting)

7. PUBLIC COMMENTS

Mr. Matt Condon discussed the administrative change affecting yacht charters and suggested a carve-out for yacht certified vessels over 32 feet.

Mr. Ryan Holloway supported the comments made by the previous speaker and emphasized the controlled and regulated nature of yacht charters.

Mr. Gary Troop highlighted the economic contribution and responsible operation of yacht charters in Destin.

ADJOURNMENT

Having no further business at this time, the meeting was adjourned at 8:20 PM.

Bobby Wagner, Mayor

ATTEST:

Rey Bailey, City Clerk

CITY OF DESTIN



AGENDA ITEM

COUNCIL MEETING DATE: June 3, 2024**TYPE OF AGENDA ITEM:** City Manager Report**AGENDA OUTLINE NUMBER:** 4.A.

TO: City Council

THRU: Kimberly Kopp, City Attorney
Louis Zunguze, City Manager

FROM: Krystal Strickland, Finance Director

DATE: May 24, 2024

SUBJECT: 2024 Debt Issuance Update

I. BACKGROUND: September 18, 2023, Council adopted the 2024 Budget which includes issuance of up to \$25 million to reimburse the City to underground utilities (\$13 million), to complete the Crosstown Connector Roadway (\$3 million), and for the purchase of 1 Harbor Boulevard (\$9 million).

1. Undergrounding of Overhead Utilities: \$11.5 million

October 16, 2023, Council adopted Resolution 23-22 Reimbursement Resolution to borrow up to \$15 million to underground overhead utilities from the Marler Bridge to Airport Road. In April 2024, Council made a motion for staff to negotiate a contract for ADS to underground the overhead utilities. The contract is expected to be authorized at the June 3, 2024 regular council meeting for an amount not to exceed \$10,513,979. All-in costs to include the ADS construction contract, Undergrounding Consultants of Florida management contract, streetlight conversions by FPL, and landscaping is anticipated to be just over \$14 million. Subtracting accumulated cash-on-hand and expenditures paid to date, staff currently recommend borrowing \$11.5 million to complete this project.

2. Crosstown Connector: \$4.5 million

The FY 2024 adopted budget considers issuance of a contract to begin construction of the Cross Town Connector. Construction and management is currently estimated at \$10 million (\$9.6 million construction and \$400k management). The project will use gas tax#2, road impact fees and a grant from the Okaloosa Board of County Commissioners (Tourism Development Council funds authorized by the BOCC). The current shortfall is \$4.6 million. Staff recommend borrowing \$4.5 million to complete this project.

3. Harbor Boulevard: \$9 million

August 7, 2023, Council passed Resolution 23-13 Reimbursement Resolution to borrow up to \$9 million to reimburse the City for the purchase of 1 Harbor Boulevard. Staff continue to recommend borrowing \$9 million to replenish cash and to allow the Harbor CRA to

repay this debt over the CRA's remaining 20-year life.

II. DISCUSSION: How much will it all cost?

Current 20-year tax exempt municipal bond rates are approximately 4.02% +/- 15 basis points. The following table shows the amount of issuance as compared with debt service for the life of the bonds:

	DEBT ISS	DEBT SVC	Interest
HRBR1	9,000,000	13,268,182	4,268,182
UNDER	11,500,000	16,953,788	5,453,788
XTOWN	4,500,000	6,634,091	2,134,091
	25,000,000	36,856,061	11,856,061

What funding sources will be used to repay this debt?

\$ 4,000,000 Harbor CRA - for Undergrounding
 \$ 4,000,000 Town Center CRA - for Undergrounding
 \$ 8,956,780 Electric Franchise Fees - for Undergrounding
 \$ 6,331,051 GasTax#2 - for Crosstown Connector/Transportation projects
 \$ 303,049 General Fund - for Crosstown Connector/Transportation projects
 \$13,268,180 Harbor CRA - for 1 Harbor Boulevard
 =====

\$36,856,061 total debt service FY 2025 - FY 2044

Cost of issuance to pay the financing team, rating agencies and potential bond insurer are calculated when the Preliminary Official Statement (prospectus) is in its final stages of approvals.

Why Should the City Issue Debt?

Debt issuance is a way to match funding source timing and Intergenerational equity.

Intergenerational equity takes into account that future generations will benefit from the use of the capital asset as opposed to current and past generations of citizens providing the funds for an asset that future generations will use. In addition, it is not always financially prudent to accumulate large cash balances of public funds which are restricted to their types of investments with Safety and Liquidity as the foundational guidance. When funding sources are trickling in over 20 - 30 years, it is not always possible to collect interest equivalent to the rate of inflation on construction labor and materials.

1 Harbor Boulevard - The City General Fund lent cash for closing to the Harbor CRA to purchase 1 Harbor Boulevard in October 2023 in the amount of \$9 million. The Harbor CRA was created as a special taxing district with restrictions to invest property taxes raised by the City and the County into this specific jurisdiction for economic development. It is common practice for a CRA district to purchase land for further development. The Harbor

CRA district currently has a balance of \$800,000, and net revenues are approximately \$800,000 per year. This CRA district has 19 years remaining life (expiring in 2043) and its property tax revenues are the most appropriate source of funding to pay debt service for the purchase of this property.

Undergrounding - The first phase of undergrounding overhead utilities from the Marler Bridge to Airport Road is anticipated to cost just over \$14 million. After consideration of cash-on-hand, staff propose borrowing \$11.5 million to successfully complete this project on time. Materials to underground the overhead utilities were ordered in the fall of 2023.

The construction contract is expected to be approved by Council in June 2024. It is customary to issue debt to quickly complete a construction project of this magnitude. The 30-year Electric Franchise Fee ordinance specifically requires a portion of the fees collected to be expended on undergrounding. Franchise fee collections are approximately \$950,000 per year and are the most appropriate source of funding to pay debt services. In addition, this first phase primarily benefits the Harbor CRA and the Town Center CRA. The CRA district committees acquired council approval to commit funding towards undergrounding, and staff propose to use \$4 million of this commitment from each district towards payment of debt service for this first phase. This type of infrastructure typically has a useful life of 30+ years.

Crosstown Connector - The City has spent many years designing this roadway and purchasing the properties needed for right-of-way. Our current engineering estimates for construction are just over \$9.6 million with an additional \$400,000 needed for construction project management and professional inspections. Considering available cash on hand and grant awards, staff recommend borrowing \$4.5 million now to complete construction in a timely manner. The primary sources for completion of this project are Gas Tax#2 and Road Impact Fees. Both sources are restricted to capital additions to transportation systems. Gas Tax#2 is allocated by the state on a population basis, and the City receives approximately \$300,000 per year. The average collection of road impact fees over the past five years was \$238,000 per year. Staff recommend using these funding sources to pay debt service over a period of 20 years in order to complete construction as soon as possible, as construction costs continue to rise. The base of the roadway and the underlying stormwater system often have a useful life of 50+ years, while the surface of such a roadway may have a life of 15-20 years.

Borrowing Options

Debt options include commercial bank loans and negotiated bonds. Staff recommend negotiated bonds as the terms are currently more favorable than commercial bank loans for this amount and duration.

Options for securitization of the debt include pledging of revenues (revenue bonds), general obligation "GO" debt which must be voted in by the Citizens as it is a property tax increase, and covenant to budget and appropriate (CB&A). CB&A is recommended for its simplicity as it does not require voter referendum and any available funds may be used to repay the debt (within limits set by Florida statute). CB&A is further supported with a solid anti-dilution policy. The city's current anti-dilution policy is to maintain a ratio of 1.25 or higher for net available non-advalorem revenues divided by maximum annual debt service. Borrowing the additional \$25 million would bring our ratio to 5.67.

Bond Issuance Team

City Manager, Louis Zunguze
Finance Director, Krystal Strickland
Financial Advisor, Jon Ford, Ford & Associates
Bond Council, Duane Draper, BMO Law
Bond Disclosure Council, Chris Roe, BMO Law
Underwriter, To Be Determined by City
Underwriter's Council, To Be Determined by Underwriter

Choosing an Underwriter

The role of an underwriter in issuance of bonds is to market the debt instrument to investors. The City of Destin does not issue debt very often and has no real plans to become a large issuer in the future. This issuance is considered small in the bond markets. As a small issuer, staff believe a Request for Financing Proposals would receive very few proposals. In a case like ours, a City can often benefit by hiring an underwriter directly to market their issuance. Siebert Williams Shank, PNC Bank, and Truist have all expressed an interest in working with the City of Destin. Staff have received market updates from all three of these institutions and we have found the attention and details of the market updates and analysis from the Siebert Williams team to be exceptional.

Arbitrage

The City intends to issue tax exempt bonds for one completed project (purchase of 1 Harbor Boulevard) and for several construction projects that will take 18 - 24 months to complete (Undergrounding overhead utilities estimated at 18 months from Construction Notice to Proceed and the Crosstown Connector which is in the permitting stage). Under IRS arbitrage rules, the City can save money on arbitrage reporting costs if it is able to expend all of the bond funds within 24 months on approved projects. If Council elects to include funding for the Crosstown Connector project in this debt issuance, it may be prudent to include a more generalized description of "Transportation" projects as the description in the Preliminary Official Statement. The City is in process of adopting a (transportation) mobility plan which has many eligible projects that could use these bond funds to get underway, all of which are eligible to use Gas Tax #2 funds for debt service.

Bond Credit Rating

The City of Destin does not currently hold a bond credit rating. The top municipal bond rating agencies are Standard & Poor's (S&P), Moody's and Fitch. The city will choose to work with one or more bond rating agencies based upon discussions with the chosen bond underwriter. The major factors that determine a credit rating for a Municipal Bond include: *debt level, financial condition, debt security, economic and demographic profile, and management.*

Next Steps and Timing

Month 1: Upon Council's initial approval of our proposed process, staff will work with Bond Disclosure Council to write the preliminary official statement (POS). The Financial Advisor and Finance Director will discuss bond ratings and potential bond insurance with the Underwriter.

Month 2: Informational packets will be routed to any chosen bond rating agencies and bond insurers. Calls will be set between City Management and any rating agencies to get the bond rating process underway.

Month 3: A completed draft Preliminary Official Statement will be brought forth to Council for review and approval. Upon approval, the POS will be routed to potential investors for 7-10 days for their review before setting a pricing date. Pricing to closing usually takes up to three weeks.

Council Direction

Staff seek Council Direction on:

- 1) Does Council support inclusion of the Crosstown Connector in this debt issuance?
- 2) Does Council support the proposed process and timing?
- 3) Does Council support hiring staff's proposal to hire their preferred Underwriter?

A. Link to Strategic Goals / Objectives:

B. Effect on Budget (EOB): The FY 2024 adopted budget assumed issuance of up to \$25 million over 20 years at a rate of 5%. Minor budget transfers/adjustments may need to be made between funds upon receipt of final pricing. Current estimates are now closer to 4% for a 20-year tax-exempt serial bond placed with Underwriter support.

C. Level of Service (LOS):

D. Legislative Sponsor:

III. CONCLUSION: Staff seek Council Direction on:

- 1) Does Council support inclusion of the Crosstown Connector in this debt issuance?
- 2) Does Council support the proposed process and timing?
- 3) Does Council support hiring staff's proposal to hire their preferred Underwriter?

IV. RECOMMENDED MOTION: I move to approve the proposed process to issue debt with Staff's preferred Underwriter and to include/(exclude the Crosstown Connector and other eligible transportation projects from this bond issuance.

Attachments:

1. Resolution 23-13 Reimbursement intentions 1 Harbor Blvd
2. Resolution 23-22 Reimbursement of certain expenditures related to undergrounding utilities

RESOLUTION NO. 23-13

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF DESTIN, FLORIDA, ESTABLISHING ITS INTENT TO REIMBURSE CERTAIN EXPENDITURES IN CONNECTION WITH A CAPITAL IMPROVEMENT PROJECT RELATED TO ACQUISITION OF REAL PROPERTY FOR PUBLIC PARK OR OTHER PUBLIC PURPOSES AS MORE PARTICULARLY DESCRIBED HEREIN, INCURRED WITH PROCEEDS OF A FUTURE TAXABLE OR TAX-EXEMPT FINANCING OR FINANCINGS; PROVIDING CERTAIN OTHER MATTERS IN CONNECTION THEREWITH; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council (the "City Council") of the City of Destin, Florida (the "Issuer") has determined that the need exists to incur debt in order to finance the costs of all or a portion of a capital improvement project consisting primarily of the acquisition of certain land for the purpose of providing public park or other public facilities located within the Issuer at 1 Harbor Boulevard, Destin, Florida 32541 (collectively, the "Project").

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DESTIN, FLORIDA:

SECTION 1. AUTHORITY. This Resolution is adopted pursuant to the provisions of the Constitution of the State of Florida, Chapter 166, Florida Statutes, the Charter of the Issuer and other applicable provisions of law.

SECTION 2. DECLARATION OF INTENT. The Issuer hereby expresses its intent to be reimbursed from proceeds of a future taxable or tax-exempt financing or financings for capital expenditures to be paid by the Issuer in connection with the Project. Pending reimbursement, the Issuer expects to use legally available funds to pay such costs including but not limited to capital expenditures and other costs associated with the Project. It is reasonably expected that the total amount of debt to be incurred by the Issuer with respect to the Project will not exceed \$9,000,000. This Resolution is intended to constitute a "declaration of official intent" within the meaning of Section 1.150-2 of the Income Tax Regulations which were promulgated pursuant to the Internal Revenue Code of 1986, as amended, with respect to the debt incurred, in one or more financings, to finance the costs of all or a portion of the Project.

SECTION 3. SEVERABILITY. If any one or more of the provisions of this Resolution shall for any reason be held illegal or invalid, such illegality or invalidity shall not affect any other provision contained herein.

SECTION 4. EFFECTIVE DATE; REPEALER. This Resolution shall be effective immediately upon its adoption. This Resolution supersedes all prior actions of the City Council

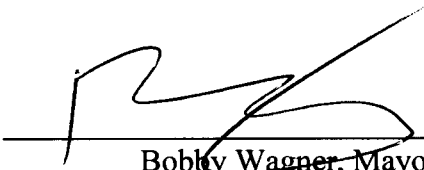
inconsistent herewith. All resolutions or portions thereof in conflict with the provisions of this Resolution are hereby repealed to the extent of any such conflict.

PASSED AND ADOPTED BY THE CITY OF DESTIN, FLORIDA THIS 7TH DAY OF AUGUST 2023.

ATTEST:



Rey Bailey, City Clerk



Bobby Wagner, Mayor

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY FOR THE
CITY OF DESTIN, ONLY:



Kimberly Romano Kopp, City Attorney

RESOLUTION NO. 23-22

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF DESTIN, FLORIDA, ESTABLISHING ITS INTENT TO REIMBURSE CERTAIN EXPENDITURES IN CONNECTION WITH A CAPITAL IMPROVEMENT PROJECT RELATED TO THE UNDERGROUNDING OF ELECTRIC AND OTHER OVERHEAD UTILITIES AS MORE PARTICULARLY DESCRIBED HEREIN, INCURRED WITH PROCEEDS OF A FUTURE TAXABLE OR TAX-EXEMPT FINANCING OR FINANCINGS; PROVIDING CERTAIN OTHER MATTERS IN CONNECTION THEREWITH; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council (the "City Council") of the City of Destin, Florida (the "Issuer") has determined that the need exists to incur debt in order to finance the costs of all or a portion of a capital improvement project consisting primarily of the undergrounding of electric and other overhead utilities located within the Issuer along Highway 98 from Marler Bridge to Airport Road (collectively, the "Project").

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DESTIN, FLORIDA:

SECTION 1. **AUTHORITY.** This Resolution is adopted pursuant to the provisions of the Constitution of the State of Florida, Chapter 166, Florida Statutes, the Charter of the Issuer and other applicable provisions of law.

SECTION 2. **DECLARATION OF INTENT.** The Issuer hereby expresses its intent to be reimbursed from proceeds of a future taxable or tax-exempt financing or financings for capital expenditures to be paid by the Issuer in connection with the Project. Pending reimbursement, the Issuer expects to use legally available funds to pay such costs including but not limited to capital expenditures and other costs associated with the Project. It is reasonably expected that the total amount of debt to be incurred by the Issuer with respect to the Project will not exceed \$15 million. This Resolution is intended to constitute a "declaration of official intent" within the meaning of Section 1.150-2 of the Income Tax Regulations which were promulgated pursuant to the Internal Revenue Code of 1986, as amended, with respect to the debt incurred, in one or more financings, to finance the costs of all or a portion of the Project.

SECTION 3. **SEVERABILITY.** If any one or more of the provisions of this Resolution shall for any reason be held illegal or invalid, such illegality or invalidity shall not affect any other provision contained herein.

SECTION 4. EFFECTIVE DATE; REPEALER. This Resolution shall be effective immediately upon its adoption. This Resolution supersedes all prior actions of the City Council inconsistent herewith. All resolutions or portions thereof in conflict with the provisions of this Resolution are hereby repealed to the extent of any such conflict.

ADOPTED THIS 16TH DAY OF OCTOBER 2023

By:



Bobby Wagner, Mayor

ATTEST:



SEAL

Rey Bailey, City Clerk

Approved as to form and legal sufficiency for the use and reliance of the City of Destin solely.



Kimberly Kopp, City Attorney

CITY OF DESTIN



AGENDA ITEM

COUNCIL MEETING DATE: June 3, 2024**TYPE OF AGENDA ITEM:** Action Item**AGENDA OUTLINE NUMBER:** 4.B.

TO: City Council

THRU: Louis Zunguze, City Manager
Kimberly Kopp, City Attorney

FROM: Jeffrey Cozadd, Projects, Grants and Contracts Manager
Krystal Strickland, Finance Director

DATE: May 28, 2024

SUBJECT: Norriego Point -DEP Request

I. BACKGROUND: The Florida Department of Environmental Protection is administrating the Phase III Recreational Improvements to Norriego Point Park. DEP is in the process of selecting a contractor and finalizing a construction contract. Park construction is anticipated to start later this year.

II. DISCUSSION: The Florida Department of Environmental Protection (DEP) released Bid No. BDC34-23/24 for the construction of Recreational Enhancements at Norriego Point on March 26, 2024. Three qualified bids were received by DEP on May 8th, 2024. The low bid was submitted by RJ Gorman Marine Construction, LLC of Panama City, FL in the amount of \$5,239,816.00. The bid consists of a base bid and three (3) add alternates further described as follows:

- Base bid – (\$4,565,770) Includes Restroom facilities, showers, drinking fountains, lift station, informational/educational signage, harborside boardwalk, dune crossover (middle), beach access boardwalk, bike racks, and shoreline stabilization at northern end of the park.
- Alternate # 1 – (\$233,918) Includes the southernmost crossover boardwalk.
- Alternate #2 – (\$164,096) includes the northernmost crossover boardwalk.
- Alternate #3 – (\$275,232) includes the terminus curve at the end of the Harborside Boardwalk.

Total bid with all three alternates = **\$5,239,816.00**

The low bid still exceeds the budgeted amount currently available so DEP will need to request through a resolution to the Trustee Implementation Group (TIG), (made up of state

and federal agencies) to allow additional funding to be released to allow award the project to RJ Gorman Marine Construction, LLC.

DEP is planning to request additional funding to cover the base bid and alternates #2 and #3 and is requesting the city provide supplemental funding to cover the cost of Alternate #1 in the amount of **\$233,918.00**. If the City chooses to provide the supplemental funding it will be added to the FY25 budget and taken from the General Fund Balance.

Should the City choose not to provide supplemental funding for alternate #1, DEP will likely only include the base bid and alternate #3 in the construction contract. This would still result in the middle crossover being built and the construction of alternate #3 the terminus curve at the end of the point.

A. Link to Strategic Goals / Objectives: Major Projects - 4.9 Norriego Point Park Improvements Phase III - Recreational Components

B. Effect on Budget (EOB): The effect on the FY 2025 budget depends upon Council's choice to complete an additional crossover. The funds will come from the General Fund.

Option 1: Choose not to complete any additional crossovers

Option 2: Complete the Southermost route as requested by FDEP \$233,918

Option 3: Complete the Northermost route \$164,096

C. Level of Service (LOS): LOS will be increased with the addition of recreational components to this park.

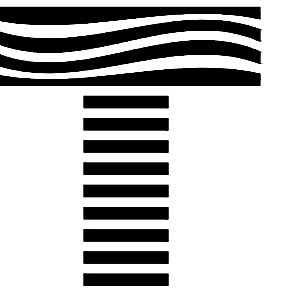
D. Legislative Sponsor:

III. CONCLUSION: If the City is willing to participate financially, a Memorandum of Understanding will be drafted by DEP and brought back to Council for approval.

IV. RECOMMENDED MOTION:

Attachments:

1. 2024 NORRIEGO POINT
RECREATION ENHANCEMENT -
BID DRAWINGS 5



TAYLOR ENGINEERING INC.

4300 LEGENDARY DRIVE
SUITE C246
DESTIN, FLORIDA 32541
(850) 460-7040

REGISTRY # 4815

DUNCAN GREER P.E.#83306

PROJECT TITLE

NORRIEGO POINT
RECREATION
ENHANCEMENT PROJECT
OKALOOSA COUNTY, FLORIDA



PRELIMINARY DRAWINGS: THESE DRAWINGS
ARE NOT IN FINAL FORM, BUT ARE BEING
TRANSMITTED FOR AGENCY REVIEW.

[illegible]

PROJECT NO	C2015-058	B
DATE	SEPT 2023	
DESIGNED	DG	
DRAWN	AF	
CHECKED	BN	
REVIEWED	KK	
SCALE	AS SHOWN	

DRAWING TITLE

PROJECT OVERVIEW

G-5

SHEET 5 OF 64

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CITY OF DESTIN



AGENDA ITEM

COUNCIL MEETING DATE: June 3, 2024**TYPE OF AGENDA ITEM:** Action Item**AGENDA OUTLINE NUMBER:** 4.C.

TO: City Council

THRU: Louis Zunguze, City Manager
Kimberly Kopp, City Attorney

FROM: Troy Williams, Code Compliance Director

DATE: May 16, 2024

SUBJECT: Code Compliance Lien Reduction Request-4550 Biscayne Bay and 216 Grand Key Loop

I. BACKGROUND: This agenda item is for two separate lien reduction requests for two separate properties with one property owner. The liens are for identical time frames and amounts. The property owner for both parcels is CRHGZH LLC, and is represented by Mr. Stephen Tatum, Esq. The request is set forth in detail in correspondence submitted by Mr. Tatum, and Mr. Tatum will be available at the City Council meeting for questions.

II. DISCUSSION:

Liens on both properties were recorded on January 4, 2024 and are less than one year old. The liens accrued at \$250 per day for 105 days. The property came into compliance approximately 105 days after the lien was recorded, and therefore stopped accruing daily fines at that time. Each lien is in the amount of \$26,250.00, and the total amount for both liens is \$52,500.

Sec. 14-86 of the City Code of Ordinances set forth the process for Council consideration of lien reduction requests, as follows:

(a) The city council shall have the authority to reduce any lien imposed by the city's special magistrate for code compliance based on the criteria set forth in section 14-87 of this Code, and subject to the maximum reduction amounts set forth in subsection 14-86(c).

(b) It shall be the responsibility of the applicant for the lien reduction to demonstrate, and each application shall contain, written statements of fact addressing the criteria prescribed in section 14-87.

(c) All lien reduction requests are subject to the following maximum percentage reductions:

Length of time the Violation Remained Non-Compliant with Special Magistrate's Order

Percentage Reduction

Up to 1 year: Reduction up to no more than 30% of lien amount.

More than 1 year: up to 2 years Reduction up to no more than 25% of lien amount

More than 2 years: up to 5 years Reduction up to no more than 10% of lien amount

More than 5 years: up to 10 years Reduction up to no more than 5% of lien amount

More than 10 years: up to 15 years Reduction up to no more than 2% of lien amount

More than 15 years: None

(d) Each request for a lien reduction, and each decision appealed shall be the subject matter of a separate application.

(e) Nothing herein shall obligate the city council to reduce any code compliance lien.

Since the liens are less than 1 year old, the Council may reduce it by up to 30% per Code, but is not required to do so. Staff's position on the liens is attached via a memo from the Code Compliance Director to the City Attorney.

A. Link to Strategic Goals / Objectives: Financially sound city providing service excellence. Enhanced quality of life and safety for families.

B. Effect on Budget (EOB): Total amount at issue is \$52,500.

C. Level of Service (LOS):

D. Legislative Sponsor:

III. CONCLUSION: From Code Compliance Director: I have thoroughly reviewed the files, spoke with owners previously, when they came into the office to straighten out the paperwork and pay the outstanding initial magistrate fine (\$500) on each property and late fees. They advised, they canceled their management company, believed they were complying after communicating with the city, never received notice of the hearings, and I believe they have acted in good faith with us. It is the staff's position that we are in agreement with the daily fines being reduced and/or eliminated.

IV. RECOMMENDED MOTION: I move to reduce the subject liens by 30 percent, in accordance with City Code.

or

I move to deny the lien reduction requests.

or (other).

Attachments:

1. Lien Reduction Request and attachments_Tatum Correspondence

2. Sec. 14_86. ___Application_to_city_council_for_reduction_of_existing_code_compliance_li

en.

3. 4550 Biscayne signed order
4. 216 Grand Key signed order
5. Attachment 1 _Corr
6. Attachment 2 Code file
7. Staff's position 216 Grand Key - 4550 Biscayne

DANA C. MATTHEWS
DANA C. "D.C." MATTHEWS II
MICHAEL A. JONES
Of Counsel
KENNETH M. BORICK
Of Counsel
Also admitted in Georgia and South Carolina

CHRISTA P. DIVINEY
Board Certified Criminal Trial Lawyer
Also admitted in Alabama



C. STEPHEN TATUM
DAWN E. STUNTZ
Also admitted in Mississippi
TIMOTHY A. WILKERSON
MEGHAN M. BETZ
W. HUNTER BELL
ELIZABETH C. BILLHIMER
Also admitted in Texas and District of Columbia

REPLY TO DESTIN
May 29, 2024

STATUM@DESTINLAW.COM

Destin City Council
c/o Kim Kopp, City Attorney
Romano Kopp Law, P.A.
P.O. Box 5524
Destin, FL 32541

RE: Lien Reduction for 4550 Biscayne Bay and 216 Grand Key Loop West

Dear City Council,

I represent the owner of 4550 Biscayne Bay and 216 Grand Key Loop West. Both properties are short-term rentals ("STR") and have been since 2012 and 2011 respectively. In 2022, my clients ceased utilizing a rental management agency and attempted to register the properties with the City of Destin, as is required. The first registration year under my client's management was 2023.

On June 28, 2023, my clients contacted William Morales at Code Compliance, through email, for assistance with the STR licensing process. They subsequently, on or about June 30, created an account in Compass to register for what they believed to be the short-term rental licenses for both properties. In fact, what they had applied and paid for were business tax receipts ("BTR"). My client's let Mr. Morales know they had done what they believed he had told them to do, to which he responded quickly telling them they needed to also file for STR registration.

In late July 2023, believing all requirements for STR registration were met, my client reached out again to Mr. Morales because no registration stickers to place on the required signage were received. Again, Mr. Morales responded saying that he can see that the BTR had been paid for and that they now had to apply for their STR license. Unfortunately, my client still did not understand the distinction between the two things, because the BTR says on its face that it is a **"License Type: Rentals BTR"** and **"Classification: Short Term Rental"**.

On August 21, 2023, my client emailed Sherry Burney stating, "I spoke to you and William a couple of weeks ago. I submitted the business tax receipt and I believe short term rental. Can you please look into my account and let me know what I am missing or what is expired? I feel like I keep submitting the same thing over & over."

Again, on September 11, 2023, my client sent another email to Ms. Burney requesting an update as to whether she had submitted everything that was needed and whether her account was up to date. The following day Ms. Burney responded and stated she had “attached a copy of your BTR also cc’d William Morales on this email. Mr. Morales can further assist you.” To our knowledge, no other correspondence exists after that date. My client did not inquire further because they believed the BTR provided by Ms. Burney was the license they needed. Copies of all email correspondence in our possession are attached to this letter.

While my client was diligently attempting to comply with the City’s STR licensing requirements, Mr. Morales mailed a letter to my client indicating that the properties were in violation of the City’s licensing requirements and that a hearing before the special magistrate was set for September 19, 2023. Unfortunately, that letter was mailed to an address at which my client’s no longer receive mail, as it is rented. The hearing was held on September 19, and due, at least partly, to my client not appearing at the hearing, the special magistrate ordered that my client register for a STR license by October 4, 2023, or face fines of up to \$250/day for each property. On December 14, 2023, the special magistrate issued an order that fines be assessed at \$250/day for each property commencing October 4, 2023. In January of 2024, my client learned of the special magistrate hearings and immediately contacted the City Code Compliance for step-by-step guidance on what they needed to do in order to properly register. Code compliance, including Mr. Williams and Mr. Morales were very helpful and, on January 17, 2024, my client paid the 2023 STR license fees, as well as those for 2024. My client also paid the outstanding \$1000 fee associated with the special magistrate hearing.

Based on the special magistrate’s orders, each property was in violation for 105 days (October 4, 2023 to January 17, 2024), and accruing fines of \$250 each per day, for a grand total of \$52,500. As the purpose of the code compliance department is to bring properties into compliance and it is not intended to be a punitive arm of the City, combined with my client’s multiple good-faith, yet unsuccessful, attempts to comply with the STR licensing requirements, we believe that all fines associated with this unfortunate situation should be rescinded. The total fine being assessed is disproportionate for most any single-family property that failed to register for a STR license, but it is several order of magnitude disproportionate in this particular situation.

Thank you for your consideration.

Sincerely,

C. Stephen Tatum, Esq.

Code Compliance Officer
City of Destin
Office: 850-279-6062
After Hours Line: 850-279-6658
Code Compliance Direct Email Code@cityofdestin.com



From: Fanci Hoffmann <sugarshoresllcofnwflorida@outlook.com>
Sent: Wednesday, June 28, 2023 12:47 PM
To: William Morales <wmorales@cityofdestin.com>
Subject: Violation Notice

You don't often get email from sugarshoresllcofnwflorida@outlook.com. [Learn why this is important](#)

[CAUTION: This email originated from outside of the City of Destin email system. DO NOT CLICK on links or open attachments unless you are sure the content is safe.]

Good Afternoon William,

I am contacting you in regards to 2 properties that are in violation. The address is 4550 Biscayne Bay & 216 Grand Key Loop W. I need your assistance in getting this matter cleared up. I have been to your office on several occasions with my assistant Michelle Burtch. We have done everything that was told to us in order to get the yearly sticker for code compliance. I have never received this from the City of Destin. I had 4 properties at the time and we sold 2 this year. Please let me know what to do or who I should speak to regarding this as I have never gotten an annual sticker. I can be emailed, called or can meet in person. I really need your assistance in this matter.

Thanks so much,

Fanci Hoffmann

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RE: Violation Notice

William Morales <wmorales@cityofdestin.com>

Fri 6/30/2023 11:38 AM

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Once that one is complete, apply for the short term registration.

William Morales

Code Compliance Officer

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Thanks William! I hope I submitted correctly. It gave me a license # RNTBTR-003109-2023

Wish me luck,

Fanci

From: William Morales <wmorales@cityofdestin.com>

Sent: Wednesday, June 28, 2023 12:53 PM

To: Fanci Hoffmann <sugarshoresllcofnwflorida@outlook.com>

Subject: RE: Violation Notice

Good afternoon,

In order to get the year sticker, the properties have to be registered.

Log in to www.cityofdestin.com/compass

Go to apply and search for short term rental registration.

William Morales

216 Grand Key & 4550 Biscayne

William Morales <wmorales@cityofdestin.com>

Wed 8/9/2023 2:08 PM

To: sugarshoresllcofnwflorida@outlook.com <sugarshoresllcofnwflorida@outlook.com>

Good afternoon,

I see that you have received your Destin business tax receipt.

Now you will need to apply for the short term rental registrations.

Once those are submitted and reviewed, the decals for the signs will be ready for pick up.

William Morales

Code Compliance Officer

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Fanci Hoffmann
504-508-3288
sugarshoresofdestin llc

4550 Biscayne Bay, Destin
216 Grand Key Loop W

From: Fanci Hoffmann
Sent: Monday, August 21, 2023 3:33 PM
To: sburney@cityofdestin.com <sburney@cityofdestin.com>
Subject: Up to date

Good Afternoon Sherry! I spoke to you and William a couple of weeks ago. I submitted the business tax and I believe short term rental. Can you please look into my account and let me know what I am missing or what is expired? I feel like I keep submitting the same thing over & over. Very much appreciated

Thanks,
Fanci Hoffmann
504-508-3288
sugarshoresofdestin llc

4550 Biscayne Bay, Destin
216 Grand Key Loop W

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RE: Up to date

Sherry Burney <sburney@cityofdestin.com>

Tue 9/12/2023 7:37 AM

To: Fanci Hoffmann <sugarshoresllcofnwflorida@outlook.com>

 1 attachments (155 KB)

SUGARSHORES OF DESTIN BTR 2024pdf.pdf;

Good morning Fanci,

We have attached copy of your BTR also cc'd William Morales on this email. Mr. Morales can further assist you.

Thank you,

Sherry Burney, CBTO

Business Tax Receipt /Planning Technician

City of Destin | Community Development

4100 Indian Bayou Trail

Phone # 850-654-1119



A BTR is a tax for the privilege of engaging in or managing a business, profession, or occupation within the City limits. However, making a BTR tax payment does not relieve you from your responsibility to adhere to the requirements of all other applicable City Codes, and any other local, state or federal laws.

- The City's acceptance of your BTR payment does not mean that you are in compliance with any other City Codes.
- Development, zoning, building and other staff reviews of applicable City Codes are not part of your BTR tax payment process, and entail separate City staff review(s).
- You may not conduct business in the City of Destin unless and until you meet all applicable City Codes in addition to making your BTR payment.

From: Fanci Hoffmann <sugarshoresllcofnwflorida@outlook.com>

Sent: Monday, September 11, 2023 4:12 PM

To: Sherry Burney <sburney@cityofdestin.com>

Subject: Up to date

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Good Afternoon Sherry—I don't believe I have every received my short term rental stickers. The last thing I got was 8/25/23 or a notice of hearing to be held on 9/19/23. Can you please see if this is still the case. I have submitted everything (I think over & over). I just want to be sure my account is current. Thank you.

Sec. 14-86. Application to city council for reduction of existing code compliance lien.

- (a) The city council shall have the authority to reduce any lien imposed by the city's special magistrate for code compliance based on the criteria set forth in section 14-87 of this Code, and subject to the maximum reduction amounts set forth in subsection 14-86(c).
- (b) It shall be the responsibility of the applicant for the lien reduction to demonstrate, and each application shall contain, written statements of fact addressing the criteria prescribed in section 14-87.
- (c) All lien reduction requests are subject to the following maximum percentage reductions:

Length of time the Violation Remained Non-Compliant with Special Magistrate's Order	Percentage Reduction
Up to 1 year	Reduction up to no more than 30% of lien amount
More than 1 year, up to 2 years	Reduction up to no more than 25% of lien amount
More than 2 years, up to 5 years	Reduction up to no more than 10% of lien amount
More than 5 years, up to 10 years	Reduction up to no more than 5% of lien amount
More than 10 years, up to 15 years	Reduction up to no more than 2% of lien amount
More than 15 years	None

- (d) Each request for a lien reduction, and each decision appealed shall be the subject matter of a separate application.
 - (e) Nothing herein shall obligate the city council to reduce any code compliance lien.
- (Ord. No. 23-04-CC , § 3, 5-1-23)

Sec. 14-87. Required criteria for reduction of existing code compliance lien.

The following criteria must be considered in order for the city council to reduce a lien imposed by the special magistrate in a code compliance case:

- (1) The amount of any administrative and out-of-pocket costs incurred by the city which are directly associated with the underlying code enforcement case and lien, including, but not limited to, code compliance staff and attorney time, postage, advertising and recording costs, and other city expenses related to any measure taken by the city to abate a nuisance caused by the violation;
- (2) The gravity and number of the violation(s);
- (3) The amount of the requested reduction;
- (4) Whether the applicant was responsible for the violation which caused the lien;
- (5) Whether the applicant is or will be a bona fide purchaser of the subject property and is filing or has filed for a homestead exemption evidencing a desire to reside within the city on a non-transient basis, or whether the property is or will be acquired for investment purposes;
- (6) The time it took to bring the property into compliance;
- (7) The accrued amount of the code compliance fine or lien as compared to the current market value of the property;
- (8) Any previous or subsequent code violations pertaining to the property unless an order finding a violation is under appeal at the time of determination;

-
- (9) Any previous or subsequent code violations of the applicant pertaining to other properties owned within the city, unless an order finding a violation is under appeal at the time of the determination;
 - (10) Any relevant information contained in any title policy required to be submitted to the city under this section;
 - (11) Any demonstrated financial hardship;
 - (12) Any other mitigating circumstance which may warrant the reduction or satisfaction of the penalty or fine; and
 - (13) Any other administrative review criteria relevant to whether it is equitable to reduce or release a lien which is adopted by the city manager, in writing, and is intended to be applied to all applications on a uniform basis.

(Ord. No. 23-04-CC , § 3, 5-1-23)

**CODE ENFORCEMENT SPECIAL MAGISTRATE
OF THE
CITY OF DESTIN, FLORIDA**

December 14, 2023

CITY OF DESTIN, FLORIDA

DEPARTMENT OF CODE ENFORCEMENT

Petitioner

Vs.

CASE #: STRV-006980-2023

Crhgzh LLC

Respondent

ORDER IMPOSING ADMINISTRATIVE FINE/LIEN

THIS CAUSE was brought for public hearing before the Code Enforcement Special Magistrate of the City of Destin, Florida, on December 14, 2023, after due notice to the Respondent, and the Special Magistrate, having heard testimony under oath, received evidence, heard argument, and approved its Findings of Fact, Conclusions of Law, and Order, duly issued said Order, which was furnished to Respondent. Said Order found to following violation:

Code of Ordinances Sec. 13-105. - Short Term Registration

Registration required.

It shall be unlawful for any person to allow another person to occupy any single-family detached dwelling unit as a seasonal resident within the City of Destin, or offer such rental services within the City of Destin, unless the person has been registered with the City of Destin in accordance with the provisions of this article.

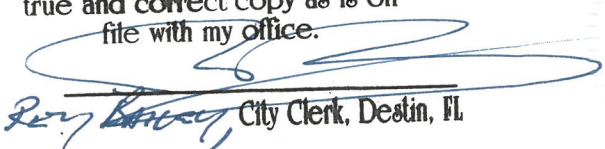
Said Order required Respondent at the property located at 4550 Biscayne Bay, DESTIN, FL 32541, located in Okaloosa County (Tax Parcel ID #00-2S-22-1125-0000-1140), to correct the aforesaid violation on or before October 4, 2023

The Respondent is further ordered to contact the Code Compliance Department of the City of Destin to verify compliance with this Order.

Said Order stated that in the event that City staff finds that the aforesaid property is not brought into compliance after October 4, 2023, the Respondent may be ordered to pay a fine not to exceed \$250.00 per day for each day such violation continues to exist beyond the above stated date for compliance.

After being sworn, the Code Enforcement Office certified to the Special Magistrate that the Respondent has not taken the corrective action ordered by the Special Magistrate, or that Respondent has repeated the violation.

I hereby certify this is a
true and correct copy as is on
file with my office.


City Clerk, Destin, FL

In determining the amount of the fine to be imposed, if any, the Special Magistrate has considered the following factors:

- (1) The gravity of the violation.
- (2) Any actions taken by the violator to correct the violation.
- (3) Any previous violations committed by the violator.

I. ORDER:

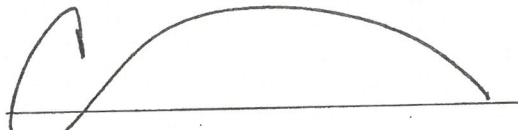
It has been brought to the Special Magistrate's attention by the City's Code Enforcement Officer that the Respondent continues to be in violation.

The Special Magistrate orders that a fine in the amount of \$250.00 per day be imposed against the property for each and every day the violation continues to exist at 4550 Biscayne Bay, DESTIN, FL 32541, located in Okaloosa County (Tax Parcel ID 00-2S-22-1125-0000-1140), after October 4th, 2023.

This Order shall be recorded in the public records of Okaloosa County, Florida, and shall constitute a lien against the land on which the violation exists and upon any other real or personal property owned by Respondent.

A true and correct copy of this Order Imposing Administrative Fine/Lien shall be delivered to Respondent by United States Postal Service regular mail, by hand delivery or posting on property where violation exist.

DONE AND ORDERED this 14th day of December, 2023



CASEY WATERHOUSE

CODE ENFORCEMENT SPECIAL MAGISTRATE

CITY OF DESTIN, FLORIDA

This will certify that a true copy of this order was furnished to Crhgzh LLC at 112 Production DR, Slidell, LA 70460 by United States mail, this day of

January 4th 2023
2024



William Morales, Code Enforcement Officer

City of Destin, Florida

**CODE ENFORCEMENT SPECIAL MAGISTRATE
OF THE
CITY OF DESTIN, FLORIDA**

December 14, 2023

CITY OF DESTIN, FLORIDA

DEPARTMENT OF CODE ENFORCEMENT

Petitioner

Vs.

CASE #: STRV-006968-2023

Crhgzh LLC

Respondent

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Said Order required Respondent at the property located at 216 Grand Key Loop W, DESTIN, FL 32541, located in Okaloosa County (Tax Parcel 00-2S-22-1125-0000-0340), to correct the aforesaid violation on or before October 4, 2023

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file with my office.


Rey Bailey, City Clerk, Destin, FL

In determining the amount of the fine to be imposed, if any, the Special Magistrate has considered the following factors:

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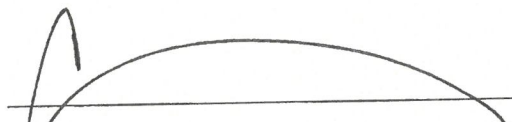
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CITY OF DESTIN, FLORIDA

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January 4th 2023
2024



William Morales, Code Enforcement Officer

City of Destin, Florida

RE: Violation Notice

William Morales <wmorales@cityofdestin.com>

Fri 6/30/2023 11:38 AM

To: Fanci Hoffmann <sugarshoresllcofnwflorida@outlook.com>

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Once that one is complete, apply for the short term registration.

William Morales

Code Compliance Officer

City of Destin

Office: 850-279-6062

After Hours Line: 850-279-6658

Code Compliance Direct Email Code@cityofdestin.com



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Sent: Friday, June 30, 2023 8:45 AM

To: William Morales <wmorales@cityofdestin.com>

Subject: Re: Violation Notice

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Thanks William! I hope I submitted correctly. It gave me a license # RNTBTR-003109-2023

Wish me luck,

Fanci

From: William Morales <wmorales@cityofdestin.com>

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Log in to www.cityofdestin.com/compass

Go to apply and search for short term rental registration.

William Morales

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To: Fanci Hoffmann <sugarshoresllcofnwflorida@outlook.com>

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Business Tax Receipt /Planning Technician

City of Destin | Community Development

4100 Indian Bayou Trail

Phone # 850-654-1119



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Sent: Monday, September 11, 2023 4:12 PM

To: Sherry Burney <sburney@cityofdestin.com>

Subject: Up to date

You don't often get email from sugarshoresllcofnwflorida@outlook.com. [Learn why this is important](#)

[CAUTION: This email originated from outside of the City of Destin email system. DO NOT CLICK on links or open attachments unless you are sure the content is safe.]

Good Afternoon Sherry—I don't believe I have every received my short term rental stickers. The last thing I got was 8/25/23 or a notice of hearing to be held on 9/19/23. Can you please see if this is still the case. I have submitted everything (I think over & over). I just want to be sure my account is current. Thank you.

Fanci Hoffmann
504-508-3288
sugarshoresofdestin llc

4550 Biscayne Bay, Destin
216 Grand Key Loop W

From: Fanci Hoffmann
Sent: Monday, August 21, 2023 3:33 PM
To: sburney@cityofdestin.com <sburney@cityofdestin.com>
Subject: Up to date

Good Afternoon Sherry! I spoke to you and William a couple of weeks ago. I submitted the business tax and I believe short term rental. Can you please look into my account and let me know what I am missing or what is expired? I feel like I keep submitting the same thing over & over. Very much appreciated

Thanks,
Fanci Hoffmann
504-508-3288
sugarshoresofdestin llc

4550 Biscayne Bay, Destin
216 Grand Key Loop W

"Please Note: Florida has a very broad public records law. Most written communications to or from the City of Destin officials are public records available to the public and media upon request. Your e-mail address and communications may therefore be subject to public disclosure."

February 5, 2024

To whom it may concern at the Circuit court of appeals,

I would like to appeal the ruling against the 2 properties 4550 Biscayne Bay and 216 Grand Key Loop W.

Case #STRV-006980-2023 (4550 Biscayne Bay) and case #STRV-006968-2023 (216 Grand Key Loop W).

[REDACTED]
[REDACTED]
[REDACTED]. I would like to appeal this based on I thought I was in full compliance. On June 30th I thought that I filed and paid for the proper payments and was in compliance (see attachment A). Weeks later I inquired about not receiving my short term rental stickers. At that time they said it was not filed. So on or around July 27th I filed and paid a fee with the understanding I was in compliance on 216 Grand Key Loop (see Attachment B). On August 2nd I filed for 4550 Biscayne Bay (see Attachment C) then on August 14 I filed again for 216 Grand Key Loop W (See Attachment D) then on September 30 I filed for 4550 Biscayne Bay (see attachment E). On every one of these certificates in the classifications column it clearly states short term rentals. Then in January when we received the letter we immediately rushed down to Destin to the code compliance building to solve this problem. In doing so we were told that we missed the hearing and they ruled against us. In talking with code compliance office we were told they sent certified letters. In asking to see who signed for the certified letters we were told that they were not signed but it says the letter was left with someone "if the left the letter with someone-why was it not signed" (see attachment F, G, H & I) On the UPS tracking document it states left with individual. --If left with individual then why isn't there a signature (see attachment J & K) As it stands today we have paid all fees for 2023 for code enforcement and permits and we have also paid 2024 code enforcement & permits. We also paid special master/magistrate fees. I also I was doing the right thing by paying fees after fees after fees after fees and thought I was in compliance. Your honor I ask that these 2 cases be appealed-Please.

Sincerely,

Reed M Ingram, reed@iwd-la.com, 985-966-4520

I wish to list my witnesses and wish to list my attachments A-J as evidence.

Fanci Hoffmann, fanci54@hotmail.com, 504-508-3288

Page 1

Page 1

Michelle Burtch, burtch@burtchclover.com, /985-960-0867

Page 1

2012

11:02

◀ Camera



Lacombe
June 30, 2023 8:07 AM

Edit



📷 LIVE ▼

Attachment A

Apply for License

https://cityofdestinfl-energoweb.tylerhost.net/apps/selfservice#/businessLicense/apply/0/78/

Please search for your business location, and click add. Make sure to include all business loc

Type: Location
4550 BISCAYNE BAY, Destin, FL. 32541
Main Address ☒
Parcel Number 00-2S-22-1125-0000-1140
Main Parcel ☒
<button>Remove</button>

Type: Location
216 GRAND KEY LOOP W, Destin, FL. 32541
Main Address ☐
Parcel Number 00-2S-22-1125-0000-0340
Main Parcel ☐
<button>Remove</button>

Location

Add Location

Create Template



City of Destin

4200 Indian Bayou Trail, Destin FL 32541
(850) 654-1119

BUSINESS TAX RECEIPT CERTIFICATE

Business Name: Sugarshores of Destin LLC

Business Location: 216 GRAND KEY LOOP W
Destin, FL 32541

Owner: Sugarshores of Destin

Number: RNTBTR-003109-2023

Issued Date: 7/27/2023

Expiration Date: 9/30/2023

Mailing Address: 216 GRAND KEY LOOP W
Destin, FL 32541

License Type: Rentals BTR

Classification: Short Term Rentals

A BTR is a tax for the privilege of engaging in or managing a business, profession, or occupation within the City limits. However, making a BTR tax payment does not relieve you from your responsibility to adhere to the requirements of all other applicable City Codes, and any other local, state or federal laws.

- The City's acceptance of your BTR payment does not mean that you are in compliance with any other City Codes.
- Development, zoning, building and other staff reviews of applicable City Codes are not part of your BTR tax payment process, and entail separate City staff review(s).
- You may not conduct business in the City of Destin unless and until you meet all applicable City Codes in addition to making your BTR payment.

TO BE POSTED IN A CONSPICUOUS PLACE

Attachment

B



City of Destin

4200 Indian Bayou Trail, Destin FL 32541
(850) 654-1119

BUSINESS TAX RECEIPT CERTIFICATE

Business Name: Sugarshores of Destin LLC

Business Location: 4550 BISCAYNE BAY
Destin, FL 32541

Owner: Sugarshores of Destin

Number: RNTBTR-003109-2023

Issued Date: 8/2/2023

Expiration Date: 9/30/2024

Mailing Address: 216 GRAND KEY LOOP W
Destin, FL 32541

License Type: Rentals BTR

Classification: Short Term Rentals

A BTR is a tax for the privilege of engaging in or managing a business, profession, or occupation within the City limits. However, making a BTR tax payment does not relieve you from your responsibility to adhere to the requirements of all other applicable City Codes, and any other local, state or federal laws.

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TO BE POSTED IN A CONSPICUOUS PLACE

Attachment C



City of Destin

4200 Indian Bayou Trail, Destin FL 32541
(850) 654-1119

BUSINESS TAX RECEIPT CERTIFICATE

Business Name: Sugarshores of Destin LLC

Business Location: 216 GRAND KEY LOOP W
Destin, FL 32541

Owner: Sugarshores of Destin

Number: RNTBTR-003153-2023

Issued Date: 8/14/2023

Expiration Date: 9/30/2024

Mailing Address: 216 GRAND KEY LOOP W
Destin, FL 32541

License Type: Rentals BTR

Classification: Short Term Rentals

A BTR is a tax for the privilege of engaging in or managing a business, profession, or occupation within the City limits. However, making a BTR tax payment does not relieve you from your responsibility to adhere to the requirements of all other applicable City Codes, and any other local, state or federal laws.

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TO BE POSTED IN A CONSPICUOUS PLACE

Attachment *D*



City of Destin
4200 Indian Bayou Trail, Destin FL 32541
(850) 654-1119

BUSINESS TAX RECEIPT CERTIFICATE

Business Name:	Sugarshores of Destin LLC	Mailing Address:	216 GRAND KEY LOOP W Destin, FL 32541
Business Location:	4550 BISCAYNE BAY Destin, FL 32541	License Type:	Rentals BTR
Owner:	Sugarshores of Destin	Classification:	Short Term Rentals
Number:	RNTBTR-003153-2023	Fees Paid:	\$31.25
Issued Date:	9/30/2023		
Expiration Date:			
Business License Year:	2023		

Attachment E

A BTR is a tax for the privilege of engaging in or managing a business, profession, or occupation within the City limits. However, making a BTR tax payment does not relieve you from your responsibility to adhere to the requirements of all other applicable City Codes, and any other local, state or federal laws.

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TO BE POSTED IN A CONSPICUOUS PLACE

20
infasis

Attachment
K

SENDER: COMPLETE THIS SECTION

■ Complete items 1, 2, and 3.
■ Print your name and address on the reverse so that we can return the card to you.
■ Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

CRHG-24 LLC
112 Production Dr
Slidell, LA 70460

9590 9402 8252 3094 9873 75

2. Article Number (Transfer from service label)
9589 0710 5270 0443 5277 58

PS Form 3811, July 2020 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature ☒ Agent

B. Received by (Printed Name) ☐ Address

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☒ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Insured Mail
☐ Insured Mail Restricted Delivery

4. Signature Confirmation
☐ Signature Confirmation
☐ Signature Confirmation Restricted Delivery

5. Restricted Mail
☐ Restricted Mail
☐ Restricted Mail Restricted Delivery

6. Registered Mail
☐ Registered Mail
☐ Registered Mail Restricted Delivery

7. Return Receipt for Merchandise
☐ Return Receipt for Merchandise
☐ Return Receipt for Merchandise Restricted Delivery

8. Signature Confirmation
☐ Signature Confirmation
☐ Signature Confirmation Restricted Delivery

9. Restricted Delivery
☐ Restricted Delivery
☐ Restricted Delivery Restricted Delivery

10. Domestic Return Receipt
☐ Domestic Return Receipt
☐ Domestic Return Receipt Restricted Delivery

SENDER: COMPLETE THIS SECTION

■ Complete items 1, 2, and 3.
■ Print your name and address on the reverse so that we can return the card to you.
■ Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

CRHG-XH LLC
112 Production Dr
Slidell, LA 70460

9590 9402 3568 7305 9304 50

2. Article Number (Transfer from service label)
7022 2410 0002 3568 9304 50

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature ☒ Agent

B. Received by (Printed Name) ☐ Address

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☒ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Insured Mail
☐ Insured Mail Restricted Delivery

4. Signature Confirmation
☐ Signature Confirmation
☐ Signature Confirmation Restricted Delivery

5. Restricted Mail
☐ Restricted Mail
☐ Restricted Mail Restricted Delivery

6. Registered Mail
☐ Registered Mail
☐ Registered Mail Restricted Delivery

7. Return Receipt for Merchandise
☐ Return Receipt for Merchandise
☐ Return Receipt for Merchandise Restricted Delivery

8. Signature Confirmation
☐ Signature Confirmation
☐ Signature Confirmation Restricted Delivery

9. Restricted Delivery
☐ Restricted Delivery
☐ Restricted Delivery Restricted Delivery

10. Domestic Return Receipt
☐ Domestic Return Receipt
☐ Domestic Return Receipt Restricted Delivery

Attachment
G

9550 9402 6252 3050 5823 75

NEW ORLEANS LA 700

CITY OF DESTIN

4200 INDIAN BAYOU TRAIL

CODE COMPLIANCE DEPARTMENT

DESTIN, FL 32541

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

United States
Postal Service

05 71006 5082 6956 7076 0656

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

NEW ORLEANS LA 700

CITY OF DESTIN

4200 INDIAN BAYOU TRAIL

DESTIN, FL 32541

United States
Postal Service

Sender: Please print your name, address, and ZIP+4® in this box.*

CODE COMPLIANCE DEPARTMENT

9550 9402 6252 3050 5823 75

9550 9402 6252 3050 5823 75

Discontinue

Attachment H

PS Form 3811, July 2015 PSN 7530-02-000-9053

Article Number (Transfer from service label)
7022 2410 0002 3589 8104

9590 9402 3568 7305 9304 50

CRHG-XH LLC
112 Production Dr
Stell, LA 70160

SENDER: COMPLETE THIS SECTION

Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

COMPLETE THIS SECTION ON DELIVERY

A. Signature ☒ Agent ☐ Addressee ☐
B. Received by (Printed Name) ☐ Date of Delivery ☐
C. Is delivery address different from item 1? ☐ Yes ☐ No
If YES, enter delivery address below:

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☒ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Insured Mail
☐ Insured Mail Restricted Delivery

☐ Priority Mail Express®
☐ Registered Mail®
☐ Registered Mail Restricted Delivery
☐ Return Receipt for Merchandise
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

Domestic Return Receipt

Article Number (Transfer from service label)
09402 A79117715

9590 9402 3052 3094 9873 75

CRHG-XH LLC
112 Production Dr
Stell, LA 70160

SENDER: COMPLETE THIS SECTION

Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

COMPLETE THIS SECTION ON DELIVERY

A. Signature ☒ Agent ☐ Addressee ☐
B. Received by (Printed Name) ☐ Date of Delivery ☐
C. Is delivery address different from item 1? ☐ Yes ☐ No
If YES, enter delivery address below:

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☒ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Insured Mail
☐ Insured Mail Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053

Attachment

USPS TRACKING #



9590 9402 8252 3094 9873 75

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

United States
Postal Service

• Sender: Please print your name, address, and ZIP+4® in this box •
CITY OF DESTIN

CODE COMPLIANCE DEPARTMENT
4200 INDIAN BAYOU TRAIL
DESTIN, FL. 32541

3541-430500



Y550 Beagle Side-Country

1065505 0557 734 0000 912



• Sender: Please print your name, address, and ZIP+4® in this box •

CITY OF DESTIN

CODE COMPLIANCE DEPARTMENT

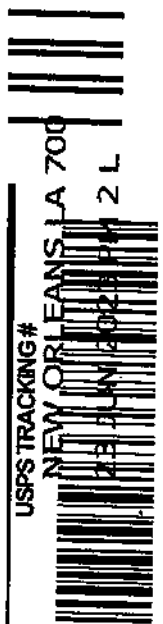
4200 INDIAN BAYOU TRAIL

DESTIN, FL. 32541

United States
Postal Service

05 4066 5062 895E 2046 0656

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10



NEW ORLEANS LA 700

USPS TRACKING #



City of Destin
4200 Indian Bayou Trail
Destin, Florida 32541
850-837-4242

CODE COMPLIANCE SPECIAL MAGISTRATE

December 14, 2023

CASE# STRV-006968-2023

RESPONDENT: Crhgzh LLC
ADDRESS OF VIOLATION: 216 Grand Key Loop W

EXHIBIT LIST:

1. Findings of Fact
2. Notice of Hearing 11-15-2023
3. USPS Tracking
4. Affidavit of Non Compliance
5. Order Imposing Administrative Fine/Lien

Alfred
J

**CODE COMPLIANCE BOARD
OF THE
CITY OF DESTIN, FLORIDA
September 19, 2023**

CASE # STRV-006968-2023

City Of Destin, Department of Code Compliance
PETITIONER

-Vs-

**CRHGZH LLC
RESPONDENT**

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER

THIS CASE comes for public hearing before the Code Compliance Board of the City of Destin on September 19th, 2023, after due notice to the Respondent, and the Board, having heard testimony under oath, received evidence, and heard argument, hereby issues its Findings of Fact, Conclusions of Law, and Order, as follows:

I. FINDINGS OF FACT:

The Respondent, whose mailing address is 112 Production DR, Slidell, LA 70460, is the owner of the property described as 00-2S-22-1125-0000-0340, also known as 216 Grand Key Loop W, Destin, FL 32541. The following conditions exist on subject property:

Sec. 13 105. Registration required.

It shall be unlawful for any person to allow another person to occupy any single-family dwelling unit as a seasonal resident within the City of Destin or offer such rental services within the City of Destin, unless the person has been registered with the City of Destin in accordance with the provisions of this article.

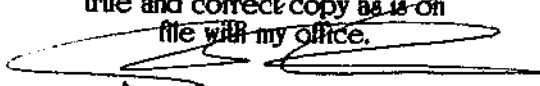
II. CONCLUSIONS OF LAW:

This is a lawfully constituted code compliance proceeding convened pursuant to Chapter 162, Part I, Florida Statutes, and Chapter 14, Article III, Code of Ordinances of the City of Destin. The City of Destin Code Compliance Board has jurisdiction over the subject matter and the Respondents. Notice of this proceeding has been duly provided to Respondents as required by City Code.

The Respondent, CRHGZH LLC, by reason of the foregoing facts, is in violation of the Code of Ordinances, City of Destin, Florida, to wit: Section 13-105. The Respondent is subject to

1

I hereby certify this is a
true and correct copy as is on
file with my office.


Rey Bailey, City Clerk, Destin, FL

the enforcement jurisdiction of City of Destin, Florida Code Compliance Special Magistrate.

III. ORDER:

1. The Respondent is to correct the aforesaid violation on or before October 4, 2023, by registering the property as a short term rental with the City of Destin. Failure to do so within 15 days will violate this order and legal proceedings will be brought forth charging you with a violation of this code.
2. The Respondent is further ordered to contact the Code Compliance Department of the City of Destin to verify compliance with this Order.
3. In the event that City staff finds that the aforesaid property is not brought into compliance by October 4, 2023, the Respondent may be ordered to pay a fine not to exceed \$250.00 for the first violation, and a fine not to exceed \$500.00 per day for each violation thereafter. Assessment of such penalties shall be as provided by law.
4. An administrative fee of \$500.00 is assessed against the Respondent and shall be paid on or before October 4, 2023.

- Check payments payable to the City of Destin with the property address on the memo line.

Mailing address or to pay in person:
City of Destin Attn: Code Compliance
4200 Indian Bayou Trail
Destin, FL 32541

DONE AND ORDERED this 19th day of September 2023.

By: _____

Casey Waterhouse
CODE COMPLIANCE SPECIAL MAGISTRATE
CITY OF DESTIN, FLORIDA

I HEREBY CERTIFY that a true and correct copy of the forgoing Finding of Fact, Conclusions of Law, and Order has been sent by mail to the respondent, this 20th day of September, 2023.

By: _____

William Morales, Code Compliance Officer
City of Destin, FL

**CODE COMPLIANCE SPECIAL MAGISTRATE
OF THE
CITY OF DESTIN, FLORIDA**

December 14, 2023

CITY OF DESTIN, FLORIDA,
DEPARTMENT OF CODE COMPLIANCE,
Petitioner,

CASE# STRV-006968-2023

Vs.

Crhgzh LLC
Respondent

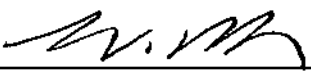
AFFIDAVIT OF NON-COMPLIANCE

COUNTY OF OKALOOSA
STATE OF FLORIDA

BEFORE ME, the undersigned authority, personally appeared William Morales, who was sworn and says:

1. My name is William Morales and I am over 18 and am otherwise sui juris. I have personal knowledge of the fact set forth in this affidavit.
2. The property, 216 Grand Key Loop, Destin, Florida remains in violation of the City of Destin Code of Ordinances as cited in the Findings of Fact, Conclusions of Law and Order issued by the Code Compliance Special Magistrate on September 19, 2023.

FURTHER AFFIANT SAYETH NOT

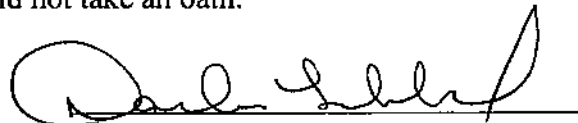


Affiant

Sworn and subscribed before me on this 14 day of December, 2023 by William Morales, who is personally known to me and did not take an oath.



DARLENE LEBOLD
Notary Public
State of Florida
Comm# HH349675
Expires 1/12/2027



Notary Public



City of Destin
Code Compliance Department

City of Destin City Hall
4200 Indian Bayou Trail
Destin, Florida 32541
Phone (850) 654-1119

Email to: wmorales@cityofdestin.com

NOTICE OF HEARING
AMENDED

11/15/2023

City Of Destin,
COMPLIANT

VS-
Crhgzh LLC

RESPONDENT

Locations of the Violation: 4550 Biscayne Bay
216 Grand Key Loop W

Parcel ID No.: 00-2S-22-1125-0000-1140
00-2S-22-1125-0000-0340

Please be advised your HEARING DATE, dated November 21, 2023 at 5:30 p.m. been Amended, and a new HEARING DATE has been changed and will be conducted before the Special Magistrate of the City of Destin on December 14, 2023 at 5:30 p.m. or as soon thereafter as possible. The hearing will be held at the City of Destin, 4200 Indian Bayou Trail, Destin, Florida 32541.

The Special Magistrate will receive testimony and evidence at said hearing regarding the violations occurring upon the property of the Respondent(s), as set forth in the Findings of Fact, Conclusions of Law and Order attached as EXHIBIT "A". shall make a determination as to whether such violations are corrected pursuant to Chapter 14, Article III, of the City of Destin Code of Ordinances.

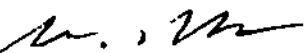
You are entitled to testify and present evidence and witnesses in defense at the hearing. Since the proceedings of the Special Magistrate are legal in nature, you may wish to have legal counsel attend the above referenced hearing.

The Special Magistrate may enter an Order requiring the Property to correct any violations. **AN ADMINISTRATIVE FEE OF \$500 WILL BE CHARGED TO THE PROPERTY OWNER IF THE PROPERTY IS FOUND TO BE IN VIOLATION. ADDITIONALLY, FINES UP TO \$250 PER DAY FOR A FIRST OFFENSE, AND UP TO \$500 PER DAY FOR REPEAT VIOLATIONS MAY BE IMPOSED UNTIL THE VIOLATIONS ARE CORRECTED.** This penalty, if not paid, may become a lien on the Property and any other personal or real property owned by the Respondent(s), which can be satisfied by foreclosure and sale of said Property and/or other personal or real property.

AN AGGRIEVED PARTY, INCLUDING THE CITY COUNCIL OF THE CITY OF DESTIN, MAY APPEAL A FINAL ADMINISTRATIVE ORDER OF THE SPECIAL MAGISTRATE TO THE CIRCUIT COURT OF OKALOOSA COUNTY WITHIN THIRTY DAYS OF EXECUTION OF THE ORDER TO BE APPEALED. FURTHER, IF AN APPEAL IS FILED, THE AGGRIEVED PARTY MAY NEED TO ENSURE THAT A VERBATIM RECORD OF THE BOARD'S HEARING IS MADE, WHICH INCLUDES THE TESTIMONY AND EVIDENCE UPON WHICH THE APPEAL IS TO BE BASED.

SERVED BY: Certified Mail

Dated this 15th day of November 2023.


William Morales
Code Compliance Officer
City of Destin

Tracking Number:

Remove X

9589071052700443528069

Copy

Add to Informed Delivery (<https://informedelivery.usps.com/>)

Latest Update

Your item was delivered to an individual at the address at 1:40 pm on November 20, 2023 in SLIDELL, LA 70460.

Get More Out of USPS Tracking:

USPS Tracking Plus®

Delivered

Delivered, Left with Individual

SLIDELL, LA 70460

November 20, 2023, 1:40 pm

Redelivery Scheduled for Next Business Day

SLIDELL, LA 70460

November 18, 2023, 8:40 am

Arrived at Post Office

SLIDELL, LA 70460

November 18, 2023, 8:10 am

Arrived at USPS Regional Facility

NEW ORLEANS LA DISTRIBUTION CENTER

November 17, 2023, 11:08 am

Arrived at USPS Regional Facility

PENSACOLA FL PROCESSING CENTER

November 16, 2023, 10:23 pm



City of Destin
4200 Indian Bayou Trail
Destin, Florida 32541
850-837-4242

CODE COMPLIANCE SPECIAL MAGISTRATE

December 14, 2023

CASE# STRV-006980-2023

RESPONDENT: Crhgzh LLC
ADDRESS OF VIOLATION: 4550 Biscayne Bay

EXHIBIT LIST:

1. Findings of Fact
2. Notice of Hearing 11-15-2023
3. USPS Tracking
4. Affidavit of Non Compliance
5. Order Imposing Administrative Fine/Lien

Attest K

**CODE COMPLIANCE BOARD
OF THE
CITY OF DESTIN, FLORIDA
September 19, 2023**

CASE # STRV-006980-2023

City Of Destin, Department of Code Compliance
PETITIONER

-Vs-

**CRHGZH LLC
RESPONDENT**

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The Respondent, whose mailing address is 112 Production DR, Slidell, LA 70460, is the owner of the property described as 00-2S-22-1125-0000-1140, also known as 4550 Biscayne Bay, Destin, FL 32541. The following conditions exist on subject property:

Sec. 13 105. Registration required.

It shall be unlawful for any person to allow another person to occupy any single-family dwelling unit as a seasonal resident within the City of Destin or offer such rental services within the City of Destin, unless the person has been registered with the City of Destin in accordance with the provisions of this article.

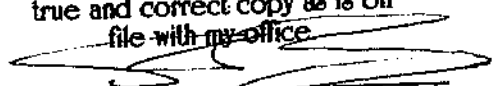
II. CONCLUSIONS OF LAW:

This is a lawfully constituted code compliance proceeding convened pursuant to Chapter 162, Part I, Florida Statutes, and Chapter 14, Article III, Code of Ordinances of the City of Destin. The City of Destin Code Compliance Board has jurisdiction over the subject matter and the Respondents. Notice of this proceeding has been duly provided to Respondents as required by City Code.

The Respondent, CRHGZH LLC, by reason of the foregoing facts, is in violation of the Code of Ordinances, City of Destin, Florida, to wit: Section 13-105. The Respondent is subject to

1

I hereby certify this is a
true and correct copy as is on
file with my office


REY BAILON, City Clerk, Destin, FL

the enforcement jurisdiction of City of Destin, Florida Code Compliance Special Magistrate.

III. ORDER:

1. The Respondent is to correct the aforesaid violation on or before October 4, 2023, by registering the property as a short term rental with the City of Destin. Failure to do so within 15 days will violate this order and legal proceedings will be brought forth charging you with a violation of this code.
2. The Respondent is further ordered to contact the Code Compliance Department of the City of Destin to verify compliance with this Order.
3. In the event that City staff finds that the aforesaid property is not brought into compliance by October 4, 2023, the Respondent may be ordered to pay a fine not to exceed \$250.00 for the first violation, and a fine not to exceed \$500.00 per day for each violation thereafter. Assessment of such penalties shall be as provided by law.
4. An administrative fee of \$500.00 is assessed against the Respondent and shall be paid on or before October 4, 2023.

- Check payments payable to the City of Destin with the property address on the memo line.

Mailing address or to pay in person:
City of Destin Attn: Code Compliance
4200 Indian Bayou Trail
Destin, FL 32541

DONE AND ORDERED this 19th day of September 2023

By: _____

Casey Waterhouse
CODE COMPLIANCE SPECIAL MAGISTRATE
CITY OF DESTIN, FLORIDA

I HEREBY CERTIFY that a true and correct copy of the forgoing Finding of Fact, Conclusions of Law, and Order has been sent by mail to the respondent, this 20th day of September, 2023.

By: _____

William Morales, Code Compliance Officer
City of Destin, FL



City of Destin
Code Compliance Department

City of Destin City Hall
4200 Indian Bayou Trail
Destin, Florida 32541
Phone (850) 654-1119

Email to: wmorales@cityofdestin.com

NOTICE OF HEARING
AMENDED

11/15/2023

City Of Destin,
COMPLIANT

VS-
Crhgzh LLC

RESPONDENT

Locations of the Violation: 4550 Biscayne Bay
216 Grand Key Loop W

Parcel ID No.: 00-2S-22-1125-0000-1140
00-2S-22-1125-0000-0340

Please be advised your **HEARING DATE**, dated November 21, 2023 at 5:30 p.m. been Amended, and a new **HEARING DATE** has been changed and will be conducted before the Special Magistrate of the City of Destin on December 14, 2023 at 5:30 p.m. or as soon thereafter as possible. The hearing will be held at the City of Destin, 4200 Indian Bayou Trail, Destin, Florida 32541.

The Special Magistrate will receive testimony and evidence at said hearing regarding the violations occurring upon the property of the Respondent(s), as set forth in the Findings of Fact, Conclusions of Law and Order attached as **EXHIBIT "A"**. shall make a determination as to whether such violations are corrected pursuant to Chapter 14, Article III, of the City of Destin Code of Ordinances.

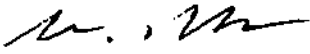
You are entitled to testify and present evidence and witnesses in defense at the hearing. Since the proceedings of the Special Magistrate are legal in nature, you may wish to have legal counsel attend the above referenced hearing.

The Special Magistrate may enter an Order requiring the Property to correct any violations. **AN ADMINISTRATIVE FEE OF \$500 WILL BE CHARGED TO THE PROPERTY OWNER IF THE PROPERTY IS FOUND TO BE IN VIOLATION. ADDITIONALLY, FINES UP TO \$250 PER DAY FOR A FIRST OFFENSE, AND UP TO \$500 PER DAY FOR REPEAT VIOLATIONS MAY BE IMPOSED UNTIL THE VIOLATIONS ARE CORRECTED.** This penalty, if not paid, may become a lien on the Property and any other personal or real property owned by the Respondent(s), which can be satisfied by foreclosure and sale of said Property and/or other personal or real property.

AN AGGRIEVED PARTY, INCLUDING THE CITY COUNCIL OF THE CITY OF DESTIN, MAY APPEAL A FINAL ADMINISTRATIVE ORDER OF THE SPECIAL MAGISTRATE TO THE CIRCUIT COURT OF OKALOOSA COUNTY WITHIN THIRTY DAYS OF EXECUTION OF THE ORDER TO BE APPEALED. FURTHER, IF AN APPEAL IS FILED, THE AGGRIEVED PARTY MAY NEED TO ENSURE THAT A VERBATIM RECORD OF THE BOARD'S HEARING IS MADE, WHICH INCLUDES THE TESTIMONY AND EVIDENCE UPON WHICH THE APPEAL IS TO BE BASED.

SERVED BY: Certified Mail

Dated this 15th day of November 2023.


William Morales
Code Compliance Officer
City of Destin

**CODE COMPLIANCE SPECIAL MAGISTRATE
OF THE
CITY OF DESTIN, FLORIDA**

December 14, 2023

CITY OF DESTIN, FLORIDA,
DEPARTMENT OF CODE COMPLIANCE,
Petitioner,

CASE# STRV-006980-2023

Vs.

Crhgzh LLC
Respondent

AFFIDAVIT OF NON-COMPLIANCE

COUNTY OF OKALOOSA
STATE OF FLORIDA

BEFORE ME, the undersigned authority, personally appeared William Morales, who was sworn and says:

1. My name is William Morales and I am over 18 and am otherwise sui juris. I have personal knowledge of the fact set forth in this affidavit.
2. The property, 4550 Biscayne Bay, Destin, Florida remains in violation of the City of Destin Code of Ordinances as cited in the Findings of Fact, Conclusions of Law and Order issued by the Code Compliance Special Magistrate on September 19, 2023.

FURTHER AFFIANT SAYETH NOT



Affiant

Sworn and subscribed before me on this 14 day of December, 2023 by William Morales, who is personally known to me and did not take an oath.



DARLENE LEBOLD
Notary Public
State of Florida
Comm# HH349675
Expires 1/12/2027



Notary Public

Tracking Number:

Remove X

9589071052700443528069

Copy

Add to Informed Delivery (<https://informedelivery.usps.com/>)

Latest Update

Your item was delivered to an individual at the address at 1:40 pm on November 20, 2023 in SLIDELL, LA 70460.

Get More Out of USPS Tracking:

USPS Tracking Plus®

Delivered

Delivered, Left with Individual

SLIDELL, LA 70460

November 20, 2023, 1:40 pm

Redelivery Scheduled for Next Business Day

SLIDELL, LA 70460

November 18, 2023, 8:40 am

Arrived at Post Office

SLIDELL, LA 70460

November 18, 2023, 8:10 am

Arrived at USPS Regional Facility

NEW ORLEANS LA DISTRIBUTION CENTER

November 17, 2023, 11:08 am

Arrived at USPS Regional Facility

PENSACOLA FL PROCESSING CENTER

November 16, 2023, 10:23 pm

**RECEIPT (REC-020416-2024)
FOR CITY OF DESTIN**

BILLING CONTACT

Sugarshores of Destin
Fanci Hoffmann
112 Production Dr
Slidell, LA 70460



Payment Date: 01/17/2024

Reference Number	Fee Name	Transaction Type	Payment Method	Amount Paid
STR-016858-2024	Reg - Short Term Rental Registration	Fee Payment	Credit Card	\$600.00
4550 BISCAYNE BAY Destin, FL 32541				
SUB TOTAL				\$600.00
TOTAL				\$600.00



City of Destin

4200 Indian Bayou Trail, Destin FL 32541
850 654 1119

PERMIT LICENSE CERTIFICATE

Business Name: CRHGCH LLC

Location: 4550 BISCAYNE BAY
Destin, FL 32541

Owner: Reed Ingram

Number: STR-016858-2024

Issued Date:

Expiration Date: 2/28/2024

Mailing Address:

License Type: Short Term Rental Registration

Classification: Short Term Rental

Fees Paid: \$600.00

TO BE POSTED IN A CONSPICUOUS PLACE

To: Kim Kopp
City of Destin Attorney

From: Troy Williams
Director of Code Compliance

Date: May 29, 2024

Subj: Staff's position on 216 Grand Key and 4550 Biscayne

I have thoroughly reviewed the files, spoke with owners previously, when they came into the office to straighten out the paperwork and pay the outstanding initial magistrate fine (\$500) on each property and late fees. They advised, they canceled their management company, believed they were complying after communicating with the city, never received notice of the hearings, and I believe they have acted in good faith with us. It is staff's position that we are in agreement with the daily fines being reduced and/or eliminated. Below is the code that they were in violation of.

Sec. 13-105. - Registration required.

It shall be unlawful for any person to allow another person to occupy any single-family dwelling unit as a seasonal resident within the City of Destin or offer such rental services within the City of Destin, unless the person has been registered with the City of Destin in accordance with the provisions of this article. Once registration is complete, the applicant will receive a city-issued annual sticker which must be displayed in a conspicuous location at the front of the rental property.

Additionally, the applicant shall post a sign on the property in accordance with section 13-114 of this Code within seven (7) days following the completion of the registration process.

(Ord. No. 17-03-CC, § 3, 2-21-17; Ord. No. 18-10-CC, § 3, 6-18-18)

Sincerely,

Troy

CITY OF DESTIN



AGENDA ITEM

COUNCIL MEETING DATE: June 3, 2024

TYPE OF AGENDA ITEM: Action Item

AGENDA OUTLINE NUMBER: 4.D.

TO: City Council

THRU: Louis Zunguze, City Manager
Kimberly Kopp, City Attorney

FROM: Ryan Scott, City Engineer

DATE: May 29, 2024

SUBJECT: Dolphin Point/Moreno Point Road – Parking Options Evaluation

I. BACKGROUND: At the May 6, 2024, City Council meeting, staff brought back a Hold Harmless & Maintenance Agreement for the Councils consideration as directed by City Council. The following motion was made:

“Councilmember Bagby moved to have City staff go out and evaluate the 9 parking spaces at Dolphin Point to see whether parallel parking is an option; seconded by Councilmember King. Motion passed 6-0.”

II. DISCUSSION: In response to Council’s motion, Staff have completed the evaluation and feasibility of two parking options for the existing parking within the Moreno Point Road for City Council to consider. Option 1 is parallel parking and Option 2 is the existing perpendicular parking attached.

If the City Council decides to leave the existing parking in place, Staff does not recommend moving forward with the parallel parking spaces (Option 1) because it creates unnecessary conflict points for the public traffic having to perform a three-point turn to efficiently use the spaces. Further, it creates conflict points for vehicles leaving the surrounding developments and having to be aware that someone may be stopped and reversing into a parallel parking space.

Of the two options provided, Staff would recommend Option Two. The existing spaces can be made to meet the current Code with respect to depth and width. However, it is important to note that this option **does not** completely comply with current Code as it does not allow a sidewalk to be continued along the remainder of the Moreno Point Road right-of-way and does not meet the standards of **LDC Table 8-5** as shown below:

TABLE 8-5: MINIMUM ON-STREET VEHICLE PARKING DESIGN STANDARDS					
Parking Angle (degrees)	Width of Stall (feet)	Depth of Stall (feet and inches)	Minimum Driving Lane Width (feet)*		Length of Curb per Car (feet and inches)
			1-way	2-way	
0°	8'	22'	12'	22'	22'
45°	8'	19'	13'	22'	12'-9"
60°	8'	19'	15'	22'	10'-5"
90°	Not allowed	Not allowed	Not allowed	Not allowed	Not allowed

A. Link to Strategic Goals / Objectives: I. Financially sound city providing service excellence

II. Enhanced quality of life and safety for families

IV. Effective, efficient, and aesthetically pleasing infrastructure

VI. A green and sustainable environment

B. Effect on Budget (EOB): The pending City Council decision will directly impact how much the project could cost and where the budget would come from.

C. Level of Service (LOS): Provides public parking for the surrounding developments.

D. Legislative Sponsor:

III. CONCLUSION: Neither of the options will completely meet the current Code and there is not enough right-of-way to create a standard cul-de-sac. With that said, Staff has determined the following:

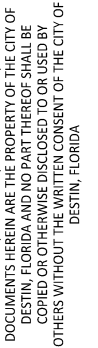
Option 1 - Parallel Parking: The parallel parking (Option 1) would cause additional conflict points in turning around. For these reasons, Staff would not recommend parallel parking (Option 1) in this area.

Option 2 - 90-Degree Parking: Although it is not currently allowed by Code, it would not create the three-point turnaround movements required for the parallel parking option and therefore, would have the least impact on the area of the two options.

IV. RECOMMENDED MOTION:

Attachments:

1. Moreno Point Public Parking-Option 1
2. Moreno Point Public Parking-Option 2



DATE	REVISIONS DESCRIPTION

NO.

DATE: MAY 2024

PROJECT NO.: N/A

FILE NO.: N/A

SCALE: 1" = 30'

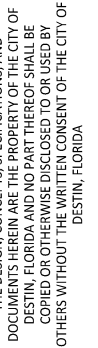
SHEET TITLE

PROPOSED PARKING OPTION 1 EXHIBIT

SHEET NUMBER

1 OF 1





DATE	REVISIONS DESCRIPTION	NO.

DATE: MAY 2024

PROJECT NO: N/A

FILE NO.: N/A

SCALE: 1" = 30'

SHEET TITLE
**PROPOSED
 PARKING
 OPTION 2
 EXHIBIT**

SHEET NUMBER

1 OF 1



CITY OF DESTIN



AGENDA ITEM

COUNCIL MEETING DATE: June 3, 2024**TYPE OF AGENDA ITEM:** Action Item**AGENDA OUTLINE NUMBER:** 4.E.

TO: City Council

THRU: Louis Zunguze, City Manager
Kimberly Kopp, City Attorney

FROM: Jeffrey Cozadd, Projects, Grants and Contracts Manager
Krystal Strickland, Finance Director

DATE: 5/29/2024

SUBJECT: Utility Undergrounding Phase 1 - ADS Contract
(March 25, 2024: Motion by Councilmember Schmidt to accept Bid Committee's report and rankings and direct the City Manager to negotiate a contract beginning with the highest ranked proposer in accordance with the Request for Proposals (RFP), was seconded by Councilmember Stephens and passed 6-0)

I. BACKGROUND: The undergrounding of utilities project is an initiative identified as part of the City's Strategic Plan.

For the purposes of contractor selection, RFP 24-01-ENG Phase 1 Utility Underground Conversion Project was released on January 23, 2024. The proposals were then opened on February 22, 2024. A Special City Council meeting was held March 25, 2024 for the purpose of contractor selection. At the Special Council meeting, Councilmember Schmidt motioned to accept the Bid Committee's report and rankings and direct the City Manager to negotiate a contract beginning with the highest ranked proposer in accordance with the Request for Proposals (RFP); the motion was seconded by Councilmember Stephens and passed on a vote of 6-0.

II. DISCUSSION: City staff, the City's Special Counsel for Undergrounding Schef Wright, and City Attorney Kimberly Kopp met with ADS representatives on May 9th to negotiate a contract. The contract attached to this agenda item was mutually agreed to by all parties at a preliminary level but is subject to review by the City Council. The proposed agreement will be considered a lump sum contract for the bid price of \$10,513,978.75. Attached is the proposal submitted by ADS for RFP 24-01-ENG including the schedule of values.

Materials are ready for release to the City of Destin from FPL. Staff is working with our

Financial Advisor (Ford & Associates) to borrow funds to complete the Undergrounding project over the coming 18-24 months. Jon Ford of Ford & Associates will attend the June 3, 2024 regular council meeting to discuss the most favorable borrowing options.

Staff recommends encumbering the mobilization fee in a limited notice to proceed (\$230,000) to allow ADS to manage the materials and begin set-up while we await permits.

The city is in the process of establishing a laydown yard at 108 Sibert Avenue. The site will be fenced and screened before the arrival of materials. FPL will coordinate the delivery of materials after the laydown yard is ready.

A. Link to Strategic Goals / Objectives: Important Priorities 1.5 Utility Undergrounding

B. Effect on Budget (EOB): The full contract is \$10,513,978.75.

Staff recommend encumbering the fees to mobilize and to complete surveys, stakeouts and to record drawings (\$230,000) in a Limited Notice to Proceed. The remaining contract amount of \$10,283,979 will be encumbered with the full Notice to Proceed when permits are issued.

	12953931-565000-	31553977-565000-	32453900-565000-	
	UNDER	UNDER	UNDER	
	Oka Half Penny	Electric Franch Fee	2024 Bonds	TOTAL
FY 24 Adopted Budget*	\$ 1,868,093	\$ 2,000,000	\$ 11,700,796	\$ 15,568,889
Previous Expenses/Encumbrances	(883,093)	(700,554)	-	(1,583,647)
Available Program Budget	985,000	1,299,446	11,700,796	13,985,242
This Agreement +(-)	-	(230,000)	(10,283,979)	(10,513,979)
FY 24 Remaining Program Budget	\$ 985,000	\$ 1,069,446	\$ 1,416,817	\$ 3,471,264

C. Level of Service (LOS): Level of Service will increase as the undergrounding of utilities will bring the following benefits to the City:

- * Improved safety
- * Reduced maintenance
- * Better aesthetics
- * Potential increase in economic development

D. Legislative Sponsor:

III. CONCLUSION: The contract with ADS is one of several contracts that will be necessary to underground the electric and other utilities in the Phase 1 Underground Project area. Other contracts include those of the other vendors with infrastructure on the electric poles. The other vendor contracts will be brought to City Council at an upcoming meeting. Staff recommends the contract be approved as presented and be executed soon after. Staff also request that a limited Notice to Proceed be issued at time of contract signing to allow for the contractor to establish site control of the laydown yard so that materials from FPL may be received and secured, and to allow ADS to begin surveys, stakeouts, drawing recording and mobilization. A full Notice to Proceed will be issued once the other contracts have been approved and executed

and all necessary permits have been secured.

IV. RECOMMENDED MOTION: I move that City Council approve the construction contract for RFP 24-01-ENG with Accurate Drilling Systems, Inc., as presented, and direct staff to issue a limited Notice to Proceed in an amount not to exceed \$230,000 to ADS as soon as practicable after the contract is executed by both parties.

Attachments:

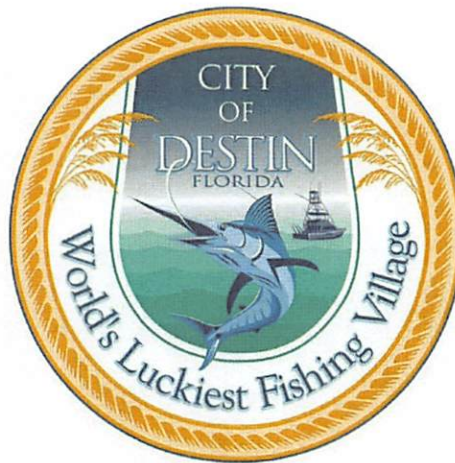
1. RFP 24-01-ENG -- City of Destin -
UG Construction RFP - executed
2. ADS Bid Submission
3. ADS Utilities Underground
Contract.FINAL.05-14-2024
4. ADS Utilities Underground Contract
Exhibit A
5. ADS Utilities Underground Contract
EXHIBIT B
6. ADS Utilities Underground Contract
Exhibit C
7. ADS Limited Notice to Proceed

CITY OF DESTIN, FLORIDA

REQUEST FOR PROPOSALS

RFP NO. 24-01-ENG

PHASE I UTILITY UNDERGROUND CONVERSION



City of Destin, Florida

January 23rd, 2024

A handwritten signature in blue ink, which appears to be "LZ", is written over a horizontal line. To the right of the signature, the date "1/23/2024" is written in blue ink.

Louis Zunguze, Interim City Manager

Phone (850) 837-4242

Facsimile (850) 837-3267

4200 Indian Bayou Trail

Destin, Florida 32541

CITY OF DESTIN, FLORIDA

REQUEST FOR PROPOSALS #24-01-ENG OVERVIEW

The CITY OF DESTIN, Florida (City), is accepting sealed proposals for:

RFP #24-01-ENG FOR PHASE 1 UTILITY UNDERGROUND CONVERSION

Proposal Due Date:

THURSDAY, FEBRUARY 22, 2024, prior to 2:00 p.m. (CST)

Proposals shall be delivered no later than 2:00 p.m. Central Standard Time (CST) on Thursday, February 22, 2024, to the City Clerk, Rey Bailey, at City Hall, 4200 Indian Bayou Trail, Destin, Florida 32541.

Documents for this RFP are available through the City's Clerk, Rey Bailey, via email rbailey@cityofdestin.com

GENERAL PROJECT DESCRIPTION

The City is soliciting proposals from qualified contractors to perform all related work to successfully complete the Florida Power & Light (FPL) conversion of Phase 1 overhead facilities along US Highway 98 to underground consistent with FPL's design. Work will include, but not be limited to, construction of all required FPL, Cox Communication, Century Link, and UnitiFiber's underground infrastructure, coordination, FPL street lighting conduit infrastructure, including final certifications, and as-built drawings.

A bid committee will evaluate the qualifications of all submitting firms meeting the minimum requirements as set forth herein.

COMMUNICATIONS AND INQUIRIES

Questions or requests for clarification regarding this Request for Proposals (RFP) must be submitted via email to Rbailey@cityofdestin.com by 4:00 p.m. (CST), Thursday, February 8, 2024. Responses to questions or requests for clarification will be made pursuant to written addenda to this RFP.

SCHEDULE OF EVENTS

The City anticipates the following projected schedule for the RFP process. The City reserves the right at its sole discretion to revise the projected schedule at any time.

Release of RFP	January 23, 2024
Deadline for questions	February 8, 2024, by 4:00 p.m. (CST)
Proposal due date	February 22, 2024, by 2:00 p.m. (CST)
Bid Committee Meeting (Short-Listing)	March 7, 2024
City Council Meeting Ranking Approval	March 18, 2024
City Council Meeting Contract Award	TBD

CITY OF DESTIN, FLORIDA

REQUEST FOR PROPOSALS

24-01-ENG Phase 1 Utility Underground Conversion

Sealed proposals must be received at City Hall, 4200 Indian Bayou Trail, Destin, Florida 32541, **THURSDAY, FEBRUARY 22, 2024, prior to 2:00 p.m. (CST)**. At that time, the City will publicly open all timely submitted proposals for the sole purpose of recording the names of the contractors submitting proposals. Proposals received after the scheduled time for opening will not be considered but can be claimed by the Contractor within ten (10) calendar days of the opening. After that time, the City reserves the right to destroy the late proposal in accordance with applicable law.

Attached are important instructions and specifications regarding responses to this RFP. The failure of a responding Contractor to follow these instructions could result in disqualification from consideration for a contract to be awarded pursuant to this RFP.

This RFP document is issued by the City and all addenda and changes to the RFP documents shall also be issued by the City. The City shall record its responses to inquiries and provide any supplemental instructions or additional documents pertaining to this RFP in the form of written addenda to the RFP. It is the sole responsibility of each Contractor prior to submitting its proposal to this RFP to ensure that the Contractor has obtained all available instructions, addenda, changes, supporting documents, and any other information pertaining to this RFP.

The City is not responsible for any solicitations issued through a subscriber, publications, or sources other than the City, and the Contractor should not rely on such sources for information regarding this RFP.

NO CONTACT: No Contractor nor any prospective Contractor shall contact, communicate with or discuss any matter relating in any way to this RFP with any member of the CITY OF DESTIN, City Council, City Manager, any agent of the City, or any employee of the City other than the City Clerk (or designee), unless such communication is authorized as part of the selection process for this RFP. This prohibition begins with the issuance of the RFP and ends thirty (30) days after the posted recommendation of award. Any such communication initiated by a Contractor or prospective Contractor shall be grounds for disqualifying the offender from consideration for award pursuant to this RFP and for and other solicitations that the City may issue in the future.

1. INTRODUCTION AND INTENT

The City of Destin is located in Okaloosa County and along the Florida Panhandle and is governed by an elected seven (7) member City Council. Geographically, the city is a narrow barrier island approximately 8 miles in length that is located within Okaloosa County. Harbor Boulevard (also known as Florida State Road US Highway 98) is the main road that connects the City's barrier island to the neighboring cities of Fort Walton Beach to the west and unincorporated Miramar Beach to the east, and Niceville to the north. Harbor Boulevard provides most of the vehicular access to all residential and commercial properties located within the City's limits and is therefore the primary route for ingress and egress to the city. The City of Destin is home to approximately 14,077 full-time residents and is known as the "World's Luckiest Fishing Village."

This RFP for Construction Services for Phase 1 Utility Underground Conversion project (Project) invites proposals regarding the qualifications and experience of Contractors for the purpose of performing all related services to successfully complete the conversion of Phase 1 overhead facilities to underground for all properties/parcels within the project corridor. Services will include, but not be limited to, construction of all required Florida Power & Light (FPL), Cox Communication, Century Link, and UnitiFiber underground infrastructure, design and coordination services associated with the installation of Phase 1, FPL street lighting conduit system, including final certifications and as-built drawings (the Services).

Following receipt of initial submittals on qualifications, the City will establish a short-list of the Contractors to continue in the selection process the short-listed Contractors may also be required to make formal presentations to City Council and or City Staff. At the completion of the selection process, the City will select the highest ranked Contractor to enter into negotiation for award.

It is the intent of the City to select one Contractor to negotiate and award a single contract that will incorporate all preliminary planning, staging, carrier design support, construction and post-construction services.

The City is committed to working in close collaboration with the current Project Management Firm, Utility Consultants of Florida, Inc. (UCoF), and the awarded Contractor to measure the achievability of goals for constructing the Project, to evaluate the Project's designs, to allow for open coordination between all parties and to obtain a mutually agreeable Guaranteed Maximum Price (GMP) for delivery of the Project.

Selection of the awarded Contractor under this RFP is not a guarantee of work.

There is no guarantee that any or all of the services contained within this RFP will be assigned during the term of the contract. Further, the awarded Contractor is providing these services on a non-exclusive basis. The City, at its option, may elect to have any of the services set forth herein performed by other firms or City staff, or publicly solicit for said services. The City reserves the right to formally solicit any individual projects associated with this Project in the open market, should the City deem it to be in its best interest.

2. RFP SCHEDULE

The City anticipates the following schedule for the RFP process. The City reserves the right at its sole discretion to revise the schedule and other aspects of the RFP by issuing addenda to the RFP at any time.

RFP Schedule

Release of RFP	January 23, 2024
Deadline for questions	February 8, 2024, by 4:00 p.m. (CST)
Proposal due date	February 22, 2024, by 2:00 p.m. (CST)
Bid Committee Meeting (Short-Listing)	March 7, 2024
City Council Meeting Ranking Approval	March 18, 2024
City Council Meeting Awarding Bid	TBD

3. PROJECT OVERVIEW

3.1 Project Scope

Generally, the project corridor, and as part of the FPL design of the underground conversion, is along Harbor Boulevard (US 98) from the Marler Bridge to Airport Road ("Phase 1"). This is also inclusive to any existing overhead service crossings that span over Harbor Boulevard (US 98). Other utility companies providing aerial service to the residents within the project includes Cox Communication, Century Link, and UnitiFiber. Additionally, there are numerous utilities within the corridor that are currently underground including but not limited to, water, sewer, reclaim, gas, and communications. Also, within this section FPL has existing streetlights attached to current poles, and some free-standing streetlight poles. As part of this project the Contractor will need to coordinate and install the required conduit and vaults which will ultimately allow FPL to pull wire and install the new streetlight poles as part of their new design & photometrics.

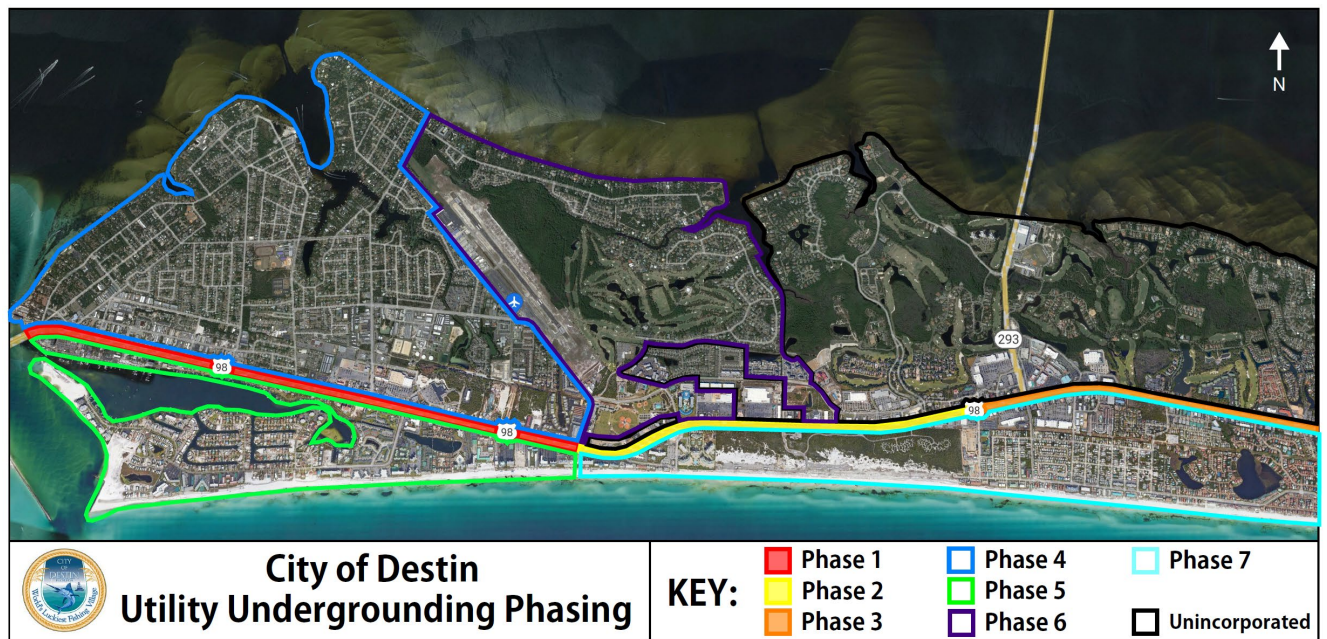
The Contractor shall be experienced and able to perform all aspects of this undergrounding project in accordance with all applicable rules, regulations and utilizing experience on similar type projects. Additionally, the Contractor shall construct, and as-built all work as part of this project, understand and meet the respective utility owners requirements for all aspects. The Contractor shall facilitate coordination of FPL, Century Link, Cox Communication, and UnitiFiber construction activities, and in full coordination with all work designated as part of this project and provide detailed as-builts of all final project work performed by the Contractor in an acceptable format to the respective utility owners and to the Project Manager "PM"/City.

The undergrounding shall require the Contractor provide scope of services; including but not limiting to, undergrounding all FPL existing aerial primary, secondary, service lines, connections, looping of all existing FPL undergrounded radial areas, existing undergrounding tie-ins, meter connections where applicable, support and coordination with FPL portion of the work, support and coordination with the Carriers facilities and service lines in conjunction with the FPL aerial undergrounding, installation, support and coordination with FPL street lighting infrastructure, coordination and provide effective and costs efficiency in the means and manor of scheduling and construction of all work associated with the undergrounding project, coordination with services for commercial and/or residential properties, parcels affected by the undergrounding, provide as-builts and permit requirements where applicable, and conform to FPL plans, specifications and other requirements as part of this project.

3.1.1. Project Phases

During the City and FPL's preliminary design and future underground planning discussions, the Project was divided into (7) Phases for the potential of future "phasing". The focus for this Project is

identified as Phase 1. However, subsequent phasing was determined during initial planning discussions as reflected in the map below. to the City, at the City Council's discretion, may or not to initiate future phases and the numeric numbering currently being reflected may be altered to fit the City's goals and objectives. The following is the current Phasing Map:



3.1.2. Florida Power and Light Company

For all related FPL work as part of this Project, Contractors and sub-contractors performing work shall be experienced and successfully performed similar type FPL underground conversion projects.

FPL's electrical service is provided to the city through a redundant subaqueous transmission line crossing from the mainland beneath the bay leading into Destin that feeds an existing FPL substation on the mid-key of the city. This substation feeds the city distribution grid comprised of feeder lines, radial primary taps, secondary services, and individual customer drops.

The largest component of the Project addresses the undergrounding of currently all overhead electric power facilities owned by FPL which generally consist of wires, transformers, switches, vaults, service lines, utility poles and other related apparatus. Much of the overhead utility infrastructure and critical feeder is located along Harbor Boulevard (US 98) with laterals extending along key side streets and providing distribution within adjacent residential and business sections. A large majority of the underground infrastructure is within the FDOT rights-of-way.

FPL will provide their design plans as part of this Project. For all FPL work, the awarded Contractor shall comply with FPL plans, survey as-built requirements, typical sections, installation guidelines/requirements and specifications. The City will provide available FPL plans as part of the Step two selection process. FPL work includes, but is not limited to, installation of conduit and all related hardware, equipment, design coordination, switching, and certified as-builts necessary to support the Phase 1 undergrounding to ensure a fully functioning system providing active service to all currently fed properties located within the City.

The selected Contractor shall be fully responsible for coordinating storage, delivery, take receipt of, and be accountable for all FPL materials for this Project. Additionally, the material storage will be the awarded Contractor's responsibility including, but not limiting, tracking and securing inventory.

3.1.3. Century Link

In addition to the FPL conversion, certain poles along the corridor currently have aerial attachments by Century Link. Century Link has estimated the conversion of their facilities to involve placement of (3) 2" conduits along the south side of the corridor, with few crossings and shorter runs along the north side of the corridor. Century Link's facilities are predominately aerial. Century Link will provide design plans as part of this Project.

All existing Century Link aerial facilities shall be undergrounded and removed concurrently with the FPL conversion to the fullest extent possible. The awarded Contractor shall install the conduit for Century Link. Installation of Century Link facilities within the new conduit, splicing, pull boxes, pedestals, service connections and, removal of aerial facilities and apparatuses from poles shall be performed by others. However, the selected Contractor will need to schedule and coordinate as efficiently as possible so that the poles can be removed timely and without delays.

3.1.4. Cox Communication

In addition to the FPL conversion, certain poles along the corridor currently have aerial attachments by Cox Communication. Cox Communication has estimated the conversion of their facilities to involve placement of (4) 2" conduits along the south side of the corridor, with few crossings and shorter runs along the north side of the corridor. For a large part, Cox Communication's facilities are predominately aerial. Cox Communication will provide design plans as part of this Project.

All existing Cox Communication aerial facilities shall be undergrounded and removed concurrently with the FPL conversion to the fullest extent possible. The selected Contractor shall install the conduit for Cox Communication. Installation of Cox Communication facilities within the new conduit, splicing, pull boxes, pedestals, service connections and, removal of aerial facilities and apparatuses from poles shall be performed by others. However, the selected Contractor will need to schedule and coordinate as efficiently as possible so that the poles can be removed timely and without delays.

3.1.5. UnitiFiber

In addition to the FPL conversion, certain poles along the corridor currently have aerial attachments by UnitiFiber. UnitiFiber has estimated the conversion of their facilities to involve placement of (3) 1.25" conduits along the south side of the corridor, with few crossings and shorter runs along the north side of the corridor. For a large part, UnitiFiber's facilities are predominately aerial. UnitiFiber will provide design plans as part of this Project.

All existing UnitiFiber aerial facilities shall be undergrounded and removed concurrently with the FPL conversion to the fullest extent possible. The selected Contractor shall install the conduit for UnitiFiber. Installation of UnitiFiber facilities within the new conduit, splicing, pull boxes, pedestals, service connections and, removal of aerial facilities and apparatuses from poles shall be performed by others. However, the selected Contractor will need to schedule and coordinate as efficiently as possible so that the poles can be removed timely and without delays.

3.1.6. Street Lighting

Within the City, FPL currently provides street lighting attached to existing poles on both the south and north sides of the US 98 corridor. Much of the overhead streetlight infrastructure is located along the entire Harbor Boulevard (US 98) extending along some side streets and providing some private

lighting along some of the businesses within the project. FPL Street Lighting has estimated the need for (2) conduits along both sides of the corridor.

This work shall also be inclusive with the undergrounding and concurrent with the overall project installations to the fullest extent possible. The selected Contractor shall install the conduit and pull boxes for FPL street lighting. Installation of the streetlight pole, wire installation, splicing, connections and removal shall be performed by others. However, the selected Contractor will need to schedule and coordinate as efficiently as possible so that the poles can be removed timely and without delays.

3.2 Project Coordination and Communication

The City has and will continue to have various contractors and consultants under contract providing assistance throughout the entire Project. Coordination and communication with all City contractors, consultants, and subcontractors working on the Project is imperative and key to completing the Project successfully. The selected Contractor shall be responsible for implementing successful coordination and communication throughout the duration of the entire Project.

3.3 Project Schedule

The City's goal for this project is an 18-month completion of all proposed infrastructure related to the successful overhead to underground conversion from NTP of construction activities. However, it is expected that there may be some remaining conversions dependent on FPL switching orders and other FPL related activities such as wreck-out of existing facilities that may extend beyond the 18-month period.

4. PROCESS

4.1 Authorized City Representative / Submission of Proposal

For information or questions concerning this RFP, contact the City Clerk:

Mr. Rey Bailey, City Clerk
4200 Indian Bayou Trail
Destin, Florida 32541
Phone: 850-837-4242 Ext. 1002
Email: Rbailey@cityofdestin.com

Contractors must submit a sealed proposal to the attention of the City Clerk at the address stated immediately above. Only those communications that are in writing from the City Clerk shall be considered as duly authorized expressions on behalf of the City. RFP forms and any additional documents required by this RFP must be executed and submitted in a sealed envelope to the City's City Clerk listed above.

4.2 Contractor Communication and/or Inquiries

The Contractors shall review this competitive solicitation in its entirety to determine whether the City's Scope of Services, conditions and requirements are clearly stated. If the Contractor has any questions regarding this competitive solicitation, the Contractor must submit such inquiries and requests for clarification via email only to the City Clerk at Rbailey@cityofdestin.com.

These inquiries or requests for clarification must provide the questions along with the relevant Section(s), Subsection(s), Paragraph(s), and page number(s) of the competitive solicitation being questioned by the Contractor. The City will consider only those communications and/or inquiries

submitted via email and received by the City Clerk on or before **February 8, 2024, by 4:00 p.m. (CST)** (the “Inquiry Deadline Date”).

The City will consider the Contractor’s lack of communicating inquiries or requesting clarifications by the Inquiry Deadline Date to constitute the Contractor’s acceptance of all of the conditions and requirements as stated in this RFP and any amendments thereto.

Unless the City Clerk specifically requests the Contractors to provide additional communications, or to participate in negotiations, the City may not accept or consider any of the Contractor’s written or other communications and/or inquiries received between the Inquiry Deadline Date and the posting of an award, if any, under this competitive solicitation.

To the extent the City determines, in its sole discretion, to respond to any communications, inquiries or requests for clarification prior to the Inquiry Deadline Date, the City’s response will be made in an addendum to this RFP to be distributed by the city clerk.

No interpretation of data, including but not limited to surveys, plans, drawings, and similar materials will be made to any Contractor, except for what is provided in this RFP or by written addendum.

4.3 Addenda

The City Clerk or designee will distribute any addenda.

The Contractor’s authorized representative must acknowledge receipt of each addendum issued. Acknowledgement shall be numbered and dated on the Submitted Proposal Form and included in a submitted proposal.

The Contractor is responsible for checking with clerksdepartment@cityofdestin.com for addenda in order to verify whether any changes have been made to the RFP. Contractors are cautioned that any oral or written representation made by any person that appears to change materially any portion of the competitive solicitation documents shall not be relied upon unless subsequently ratified by a written addendum to this RFP issued by the City Clerk.

4.4 Delivery and Labeling of Sealed Proposals

The Contractor’s proposal to this competitive solicitation shall be prepared in accordance with Section 5 “Proposal Requirements”. The Contractor’s sealed proposal must be received by the City Clerk on or before **THURSDAY, FEBRUARY 22, 2024, prior to 2:00 p.m. (CST)** (the “Proposal Due Date”) according to the time clock at the City. A Contractor may not submit a proposal via telephone, facsimile, or electronic mail.

If the Contractor elects to mail in its proposal, the Contractor must allow sufficient time to ensure the City Clerk’s receipt of the proposal by the Proposal Due Date. Regardless of the form of delivery, it is the Contractor’s responsibility to ensure that the proposal arrives at the City Clerk’s address (See Section 4.1) no later than 2:00 p.m. on the Proposal Due Date. Risk of failure of delivery falls solely on the Contractor.

The City will accept proposals up to the Proposal Due Date. Proposals must be delivered in sealed envelopes with the following information clearly provided on the front of the envelope: The City Clerk’s name and address as provided in Section 4.1, and the number and title of the RFP. The proposals must be submitted with one (1) original marked “ORIGINAL”, eight (8) hard copies marked “COPY” and one (1) electronic copy in .pdf format on a flash drive of the proposal.

No proposal may be withdrawn after the Proposal Due Date.

4.5 Economy of Presentation

The Contractor must use sections and tabs that are clearly identified and also must number and label all parts, pages, figures, and tables in its proposal. The Contractor should prepare its proposal simply and economically, providing a straightforward, concise description of the Contractor's capability to satisfy the conditions and requirements of this competitive solicitation (Fancy bindings, colored displays, and promotional material are not desired). The Contractor's emphasis should be on completeness and clarity of content. To expedite the City's evaluation of the proposal, it is mandatory that the Contractor follow the instructions contained herein. The City is not liable for any costs incurred by the Contractor in responding to this competitive solicitation including, without limitation, costs for any oral presentations requested by the City.

4.6 Proposals Must be in Ink or Typed

The Contractor's proposal must be typed or printed in permanent ink.

4.7 Contractor's Signature

Where the Contractor's signature is required, the Contractor's proposal must contain the Contractor's authorized representative's manual signature, in permanent ink, in the space provided. In addition, the Contractor's authorized representative must initial all the Contractor's handwritten corrections (additions or deletions) in its proposal.

If the proposal is made by a partnership, corporation, joint venture, or team, the name and address of the partnership or corporation or all members of the joint venture or team shall be shown together with the names and addresses of the partners or officers of all entities. If the proposal is made by a partnership, it must be acknowledged by one of the partners; if made by a corporation, by one of the officers; if made by a joint venture or team, by one officer of each participating entity.

4.8 Complete Proposals Required

The Contractor must complete and execute this competitive solicitation document, including any addenda, appendices, exhibits, attachments, requested information and proposal forms and submit them with and as a part of the Contractor's proposal.

4.9 Use of Forms

If this competitive solicitation includes forms for the submission of information, the Contractor must submit the requested information on the forms, attaching additional pages if necessary, or the City may reject the Contractor's proposal.

4.10 Errors or Omissions; Inconsistent Proposals

The Contractor should examine its proposal carefully for any errors prior to submission. The Contractor is solely responsible for the accuracy and completeness of its proposal. The Contractor's errors or omissions, if any, are solely at the risk of the Contractor and may be grounds for the City's finding that the Contractor's proposal is non-responsive. Any Contractor submitting inconsistent copies of its proposal is subject to disqualification from further consideration under this RFP. Multiple proposals from a single Contractor will be deemed non-responsive.

4.11 Proposal Validity Period

The Contractor's proposal shall, in its entirety, remain valid for at least one hundred twenty (120) calendar days after the Proposal Due Date.

4.12 Proposal Opening

The proposals shall be delivered no later than **2:00 p.m. CST on THURSDAY, FEBRUARY 22, 2024**, to the City Clerk at the address stated in Section 4.1. At that time, the City Clerk (or designee) will publicly open all timely submitted proposals for the sole purpose of recording the names of the Contractors submitting proposals at the designated place.

Any person requiring a special accommodation at City Hall because of a disability should call the City Clerk at least five (5) working days prior to the RFP opening at Phone: 850-837-4242 Ext. 1002 for persons with hearing or speech disabilities.

4.13 Government in the Sunshine; Public Records

All submitted material will be subject to Florida's Public Records Law. All Contractor's should prepare their proposal with the understanding that it may become available to the public at some time. All Contractor's acknowledge that all information contained within the proposal is subject to disclosure under the State of Florida's Public Records Law.

The City is not requesting, and does not require, confidential proprietary information or trade secrets to be included as part of any proposal. No information should be labeled confidential unless exempted under said law.

Pursuant to Section 119.071(1)(b)2., F.S., proposals may be exempt from public disclosure for thirty (30) days after opening of the proposals or until such time as the City provides notice of an intended decision, whichever comes first. It is not necessary for Contractors to claim this temporary exemption.

Upon written request, a copy of RFP tabulations will be furnished, with an enclosed, stamped, self-addressed envelope. RFP tabulations will not be provided by telephone. Non-exempt RFP files may be examined during normal working hours by appointment.

Interviews/presentations, negotiation strategy sessions, and/or negotiations with Contractors may not be public but will be recorded pursuant to Section 286.0113(2), F.S., if closed to the public.

5.0 PROPOSAL REQUIREMENTS

5.1. Required Proposal Format

To facilitate the City's analysis of the Contractor's proposal, the Contractor must prepare its proposal in accordance with the instructions provided in this competitive solicitation. If the Contractor's proposal deviates from these instructions, such response may, at the City's discretion, be rejected.

Proposals should not contain information in excess of that requested, must be concise and must specifically address all of the items set forth in this RFP. Unnecessarily elaborate brochures or other presentations beyond those sufficient to present a complete and effective proposal to this RFP are not desired and may be construed as an indication of the Contractor's lack of cost consciousness. Elaborate artwork, expensive visual aids, and other presentation aids are neither necessary nor desired, unless specifically requested.

Proposals must be prepared in at least 12-point font on 8.5" x 11" white paper, with pages sequentially numbered. Proposals can be either single or double-sided. Proposals should be contained within a three (3) ring binder (original and each copy in separate binders).

5.2 Proposal Requirements

Proposal content shall be separated by sequentially numbered tabs and must be submitted in the same order as set forth below and the supplied electronic copy shall be indexed similarly.

5.2.1. Minimum Requirements for Eligibility

Contractors that submit a qualification proposal and do not meet the minimum eligibility requirements listed below will be deemed non-responsible and the Contractor will be prohibited from participating in this RFP process any further.

- Contractor and their subs must meet all State required certifications and/or licensing required to engage in the performance of all related activities for the underground conversion project.
- Contractor and its sub-contractors must have performed, familiar with FPL underground conversion project requirements, and in good standing with FPL. Contractor must prove they maintain thorough understanding and experience with conversion of overhead facilities to underground, preferably with similar coastal projects.

The proposals should include the following:

Tab 1 – Letter of Interest (Limit response to maximum of 4 pages {pages for applicable licenses not included})

- Summarize the Contractor's understanding of the Project, its commitment to perform the Services, the number of years of experience in the field of construction services, and its statement of belief as to why it is the best qualified Contractor to provide services relating to an underground conversion. An authorized agent must sign the Letter of Interest indicating title or authority.
- The Letter of Interest shall also include, but not be limited to the following:
 - Identification of the Contractor's name, point of contact name, address, phone number and email Specify who will be the Contractor's signatory to any contract documents executed with the City.
 - An affirmation that any required business licenses required for the Project have been obtained and the Contractor and all assigned key staff are properly licensed to practice in the State of Florida.
 - Provide a list and brief summary of specific FPL underground conversion projects you have been involved with and what role you performed.

Tab 2 – Contractor Qualification, Ability and Experience (20 Points)

- Provide a summary of the Contractor's capabilities and expertise converting FPL aerial facilities to underground and installing communication facilities on similar underground conversion projects.

The summary should include but not be limited to the following:

- Contractor's approach and understanding of underground conversion project(s) within a similar coastal community. Additionally, provide specific experiences and

lessons learned on these types of projects. **(Limit response to a maximum of three (3) pages)**

- Contractor's familiarity with working on FPL underground conversion projects as it relates to the involved communication companies, your coordination efforts, and your ability to schedule that portion of the work in a timely manner to ensure their facilities can be successfully completed on schedule and ahead of the FPL wreck-out. Include the carriers you have worked with and your approach. **(Limit response to a maximum of three (3) pages)**
- Contractor's familiarity with identifying, protecting and working around existing utilities. **(Limit response to a maximum of five (3) pages)**
- Provide a minimum of three (3) underground conversion projects performed within the past five (5) years that included FPL and provide any similarities that may relate to our city project. **(Limit response to maximum of two (2) pages per project)**
 - For each project include:
 - a) Name and location of the project;
 - b) Size and cost of the project;
 - c) Project owner's representative name, address, phone number, and email address;
 - d) Date project was completed or is anticipated to be completed with current status;
 - e) The nature of the Contractor's responsibility on the project;
 - f) Unforeseen circumstances, errors or oversights and actions taken to mitigate and/or correct; and
 - g) How the Contractor's technical and managerial methodology applied.
- If the Contractor has previously performed a project for the City within the past ten (10) years, identify the project, the work performed and the total fees awarded for such work.

Tab 3 – Contractor Personnel Qualification and Experience (20 Points)

- Provide an organizational chart of the Contractor's team highlighting the key personnel that will be assigned to the Project. Identify the principal supervisory and management staff, including partners, project managers, other supervisors and specialists who will be assigned to the Project. **(Limit response to maximum of two (2) pages)**
- Provide résumés of the Contractor's key personnel listed above to be assigned to the Project. **(Limit response to maximum of two (2) pages per résumé)**
 - Résumés shall include, but not be limited to:
 - a) Name and current position held by the key personnel;
 - b) Number of years with FPL underground conversion project experience(s);
 - c) Experience. Identify: (i) Types of projects/services; (ii) Size of projects/services; and (iii) Specific responsibilities;
 - d) Services anticipated to be designated to the key personnel; and
 - e) Anticipated level of participation on the Project.

- Identify and highlight the Project Manager who will be directly responsible for the day-to-day communication and coordination with the City and their PM. This individual must have the authority to represent the Contractor in a decision-making capacity. The Project Manager should be experienced in working with FPL underground conversion projects. **(Limit response to maximum of two (2) pages)**
- Provide a summarized approach to the project schedule that demonstrates cost and time efficiency capabilities. **(Limit response to maximum of two (2) pages)**
- Provide a summary to your approach to FPL switching, as-builts, and bore logs. **(Limit response to maximum of two (2) pages)**

Tab 4 – Interactions with City and Regulatory Agency Staff (10 Points)

- Provide a summary supporting the specialized qualifications of the proposed key personnel identified in Tab 3 in terms of meeting this scope of service. The summary should highlight the experience with utility companies, regulatory agencies, including construction permitting, applications, governing regulations, use of utility easements or other related activities. Include the Contractor's ability to work with City staff and their assigned PM (UCoF) including residents, businesses, community Condominium and Homeowner Associations in order to successfully fulfill the desired services for the project. Include the Contractor's knowledge of planning and scheduling of construction that demonstrates the ability to work with the city's PM, FPL and others with easement coordination efforts. **(Limit response to maximum of two (2) pages)**
- Provide a summary of how your crews approach public interactions, notifications, concerned residents, ingress & egress concerns during construction. **(Limit response to maximum of two (2) pages)**

Tab 5 – Timely Completion of Projects (20 Points)

- Describe the Contractors' current and recently completed timeliness with FPL projects. Describe how the work was scheduled and communicated with the respective communities to achieve the schedule. Address any delays you may have encountered and how you worked with the communities to mitigate potential delays and achieve the desired goal/schedule. Describe your proposed staffs' ability to accomplish the scope of the project and approach. Include specifically the Contractor's daily ability to handle each aspect of the desired services described herein. Describe how the Contractor plans to maintain a project team member's time in order to ensure sufficient time to complete a project. Provide your current staffing and resources committed to this projects success. **(Limit response to maximum of two (2) pages)**

Tab 6 – Surveys of Past Performance (10 Points)

- Provide reference surveys from past clients for the projects identified under Tab 2.
- Completed surveys. **(See Attachment 1)** The Bid Committee will take the average of all surveys and score as follows:

❖ Average score between 9 – 10	10 Points
❖ Average score between 7 – 8	8 Points
❖ Average score between 5 – 6	6 Points
❖ Average score between 3 – 4	4 Points
❖ Average score between 1 – 2	2 Points
❖ Average score of 0	0 Points

Tab 7 – Price Proposal/Schedule-of-Values (20 Points)

- Complete and provide your Price Proposal/Schedule-of-Values.

Tab 8 – Forms

- Provide the completed and signed forms:
 - ❖ Price Proposal/Schedule-of-Values
 - ❖ Performance Survey Questionnaire
 - ❖ Submitted Proposal Form
 - ❖ Public Entity Crimes Form
 - ❖ Drug-Free Workplace Certification
 - ❖ Conflict of Interest Disclosure Form
 - ❖ Liability & Indemnification Form

6.0 SELECTION PROCESS, EVALUATION CRITERIA AND EVALUATION OF PROPOSALS

6.1 Responsiveness and Responsibility

A responsible and responsive proposal will be considered as one which meets or exceeds the RFP specifications and which is submitted by a Contractor capable of performing the requirements as stated in the RFP.

The City Clerk will initially review each proposal for: (a) minor informalities, irregularities, and apparent clerical mistakes which are unrelated to the substantive content; (b) conformance to the RFP instructions regarding organization and format; and (c) minimum requirements to meet eligibility.

The City reserves the right to reject any or all proposals, in whole or in part, for any reason whatsoever, and to re-let the RFP at the City's discretion. The City reserves the right to waive any minor non-conformance or irregularities when, in the sole opinion of the City, such waiver or acceptance is deemed to be in the best interest of the City.

After the Proposal Due Date, the City may, in its sole discretion, request clarifications of the information submitted, and may also rely upon any information obtained from any source that pertains to the issue of a Contractor's integrity and capability to perform.

Proposals may be excluded from further consideration and the Contractor will be so advised. No deviations from specifications will be accepted; no alternate proposals will be accepted unless requested in writing. The City may, in its sole discretion, also exclude from consideration any Contractor whose proposal contains a material misrepresentation. Such proposals will be deemed as non-responsive to this RFP.

Proposals that are deemed non-responsive to this RFP will be excluded from any further consideration.

A proposal may be deemed non-responsive for any of the following reasons: Contractor fails to attend mandatory meetings as required by the RFP Documents; Contractor fails to specifically include information required by the specifications; Contractor fails to sign a submitted proposal; Contractor fails to submit a proposal that does not include information specifically required in the RFP Documents. The above is not an exclusive list and the City may deem a proposal non-responsive for other valid causes and lack of responsiveness shall solely be by the determination of the City.

6.2 Disqualification of Contractors

Any cause including, but not limited to, the following may be considered as sufficient for the disqualification of a Contractor and the rejection of its proposal:

1. Submission of more than one proposal for the same work by an individual, firm, partnership, or corporation under the same or different names;
2. Evidence of collusion among Contractors, or previous participation in collusive bidding or proposing on work for the City;
3. Uncompleted work for which the Contractor is committed by contract which, in the judgment of the City, might hinder or prevent the prompt completion of the work under this RFP if awarded to Contractor;
4. Inconsistencies between the proposals provided by the Contractor
5. Violations of the cone of silence as provided for herein;
6. Familial relation with the City's purchasing agents (City Manager or City Clerk) or public officer (City Councilmember) as provided for in Section 112.313(3), F.S;
7. Conviction for a Public Entity Crime as provided for in Section 287.133, F.S.; or

The above listed causes are not an exclusive list, and the City may disqualify Contractors for other valid causes.

6.3 Selection Process

In general, the City will conduct the selection process in accordance with this Section and all applicable City purchasing policies and procedures:

- Bid Committee will review each written submission for compliance with the requirements of the RFP, including verifying that each response includes all documents required.
- Bid Committee members will review, analyze, compare, individually score and rank all responses based on the requirements of the RFP, information submitted and, but not limited to, qualifications and price. As part of the Bid Committee's review process, the Bid Committee may require proposers to appear at a meeting of the Bid Committee to answer questions relating to their proposals and related materials submitted to the City.
- Bid Committee will conduct a public meeting chaired by the Bid Committee Chairman to discuss the individual scores, and summarize the scores in a ranking matrix to be forwarded to the City Council. Non-voting advisors of the Bid Committee may attend this meeting.
- The Bid Committee will recommend the top three (3) ranked contractors to the City Council, who may be required to provide a presentation at a City Council Meeting. The City Council shall have sole approval authority. Upon request, responsive bidders may be required to provide a presentation at a City Council meeting.
- Upon consideration of all available information, including the Bid Committee's ranking, related materials submitted by or relating to the proposers' proposals and experience, and presentations to the City Council, including proposers' responses to questions posed by the City Council, the City Council may, in the exercise of its discretion over such procurement decisions, rank all responsive proposals using a method such as the following, consistent with the City's Purchasing Manual. Each City Councilmember will rank all responsive proposers on the basis of which proposers will, in the Councilmember's opinion based on all available information, best meet the City's needs for the Undergrounding Project. For example, if there are three responsive proposals, each Councilmember would assign one point to the proposer the Councilmember believes would best meet the City's needs, two points to the proposers that the Councilmember believes is the second-best suited to meet the City's needs, and three points to the proposer that the Councilmember believes is third-best suited to meet the City's needs. The

point scores assigned by the voting Councilmembers will then be added together to yield an aggregate score, with the proposer receiving the lowest points assigned by voting Councilmembers being ranked the best.

- After a ranking of firms has been approved by the City Council, it is the intent of the City of Destin, in accordance with the RFP documents, to award a contract based on the proposal that best meets the project requirements, meets the required schedule, and will produce the highest quality product for the price. Accordingly, the City Council will direct City staff to negotiate a contract with the proposer whose proposal is ranked best by the Council. If such negotiations are successful, City staff would bring the resulting negotiated contract to the Council for Council's final approval; if the negotiations are unsuccessful, City staff are to come to the Council with a request to negotiate toward a contract with the second-best ranked proposer. A copy of the respondent's proposal and the RFP including scope of work, will be incorporated and become a part of the contract.

6.4 Proposal Evaluation and Selection

Selection of Short-Listed Contractors will be based upon the following steps and factors:

Elevation Level 1 (Purchasing Requirements Assessment):

- The City Clerk shall review all proposals for conformance with the RFP guidelines, minimum eligibility requirements and detailed submittal requirements. Conforming proposals shall be elevated to Elevation Level 2. The City Clerk or designee will distribute proposals and evaluation criteria to the Bid Committee.

Elevation Level 2 (Bid Committee Scoring)

- The Bid Committee may convene with reasonable public notice to review questions that arise during individual member review of submitted proposals prior to Elevation Level 2 to allow for questions, clarifications, explanations or other discussion to be held before the review of proposals is completed.
- The Bid Committee will review and evaluate all RFP responses. A sequential ranking of all respondents will be developed. The three (3) top-ranking responses will be presented to the City Council for consideration. The determination shall be based upon the following criteria and respondents shall provide, as a minimum, the information listed under each criterion. Failure to provide adequate information listed on any criterion may result in rejection of the submittal as non-responsive.

SCORING:

Evaluation Criteria	Points
Contractor Ability and Experience	20
Contractor Personnel Qualification and Experience	20
Interactions with City and Regulatory Agency Staff	10
Timely Completion of Projects	20
Surveys of Past Performance	10
Price Proposal/Schedule-of-Values	20
Total Points	100

- By the process stated under each corresponding Tab description as set forth in Section 5.2 Proposal Requirements, the Bid Committee shall score each proposal on the following evaluation criteria:
 - Surveys of Past Performance (Tab 6) 10 points
 - Subtotal of Points 10 points
- Each Bid Committee member shall score each proposal on the following evaluation criteria:
 - Contractor Ability and Experience (Tab 2) 20 points
 - Contractor Personnel & Resources (Tab 3) 20 points
 - Interaction with City & Regulatory Agencies (Tab 4) 10 points
 - Timely Completion of Projects (Tab 5) 20 points
 - Price Proposal/Schedule-of-Values (Tab 7) 20 points
 - Subtotal of Points 90 points
- (3) A Bid Committee member's total score for each proposal shall equal the sum of the total points allocated for each evaluation criteria.
- (4) When all Bid Committee members have completed their proposal evaluations, the individual Bid Committee member's total scores for each proposal will be added together to produce a final score for each proposal.
- (5) The City Clerk, or designee, will conform the calculations for the final score for each proposal. They shall publish a rank-ordered listing of the proposals to the Bid Committee with the proposal receiving the highest points as the highest-ranked proposal.

Elevation Level 3 (City Council Scoring and Award or Selection for Negotiations)

- The top three (3) proposals, as scored by the Bid Committee, shall move on to Elevation Level 3. At Elevation Level 3, the City Council shall, in the exercise of its discretion over such procurement decisions, have three options: (1) individually re-scoring by each Councilmember the top 3 bids in accordance with the same scoring criteria and calculations as specified in Elevation Level 2 and either awarding the bid to the highest ranked proposer or directing City staff to negotiate a contract with that proposer; (2) ranking all responsive proposers on the basis of which proposers will, in the Councilmember's opinion based on all available information, best meet the City's needs for the Undergrounding Project. For example, if there are three responsive proposals, each Councilmember would assign one point to the proposer that the Councilmember believes would best meet the City's needs, two points to the proposer that the Councilmember believes is the second-best suited to meet the City's needs, and three points to the proposer that the Councilmember believes is the third-best suited to meet the City's needs. The point scores assigned by the voting Councilmembers will then be added together to yield an aggregate score, with the proposer receiving the lowest total points assigned by voting Councilmembers being ranked the best or (3) adopting the Elevation Level 2 scoring of the Bid Committee and awarding the contract or directing City staff to negotiate a contract with the highest-ranked proposer as scored by the Bid Committee accordingly. Additionally, the City Council always has the option to reject all bids.

- At Elevation Level 3, the City Council may require in person and/or virtual presentations from the remaining three proposers.
- The City Council shall, using one of the optional methods set forth above, rank the top three proposers in order of preference and then the City Manager shall negotiate in order of preference in accordance with Section 6.5 below.

6.5 Contract Negotiations

After final ranking by the City Council, the City Manager or designee will begin negotiations with the top ranked firm on an agreement developed from this RFP. The City reserves the right to include additional provisions if the inclusion is in the best interest of the City, as determined solely by the City. If an agreement cannot be reached with the top ranked respondent, then City staff will take the next top ranked respondent to City Council for approval and begin negotiations with the next highest rank respondent from the Bid Committee's list until successful negotiations occur, or the respondents on the Council approved list is exhausted. Assuming the successful negotiation of an agreement, the final contract will be submitted to the City Council for their consideration and approval. The City Council shall have sole approval authority.

6.6 Award of Agreement

The City intends to award the top-ranked Contractor a contract resulting from this competitive solicitation. However, the City is not obligated to make an award under or as a result of this competitive solicitation. The City reserves the right to postpone the award for a period of time not to exceed one hundred eighty (180) days from the Proposal Due Date.

6.7 Posting of Intent to Award

The intent to award a contract to the awarded Contractor(s), if any, will be posted on city website for review by interested parties.

6.8 Protest

Any protest related to this RFP must be in accordance with the City's Purchasing Policy, Purchasing Manual, and any other applicable provisions.

6.9 INSURANCE

The awarded Contractor(s) shall submit to the City Clerk a copy of the Contractor's current insurance coverage with endorsements, as evidenced by certificates of insurance with an insurance carrier approved and licensed by the Insurance Department of the State of Florida. Agreement execution by the City will be subject to proof of insurance and subject to acceptance of the types and amounts of coverage by City Clerk.

Proof of insurance coverage shall be submitted with the copies of the Contractor's executed agreement and become a part of the final negotiated agreement.

The acceptable form of the certificate of insurance shall be the industry standard ACORD certificate.

The CITY OF DESTIN shall be named as additional insured. The insurer shall agree to waive all rights of subrogation against the CITY OF DESTIN. The RFP number and project title shall be noted on the certificate.

The certificates of insurance shall provide thirty (30) days written notice for any change, cancellation, or non-renewal. Insurance coverage required from the awarded Contractor(s) shall be provided by or

on behalf of all subcontractors to cover their operations performed. The awarded Contractor(s) shall be held responsible for any modifications, deviations, or omissions in these insurance requirements as they apply to subcontractors.

7.0 CITY'S RESERVED RIGHTS

- 7.1 To be the judge of the Contractor's qualifications through a Bid Committee comprised of designated City staff or other representatives.
- 7.2 To conduct pre-award discussions with any responsive and responsible Contractors who submit proposals determined to be reasonably acceptable of being selected for award. Such discussions may include, but not be limited to personal interviews with and/or presentations before the Bid Committee.
- 7.3 To request that Contractors modify their proposal to more fully meet the needs of the City or to furnish additional information as the City may reasonably require.
- 7.4 To accord fair and equal treatment with respect to any opportunity for discussions and revisions of proposals. Such revisions may be permitted after submission of proposals and prior to award.
- 7.5 To request additional qualification information.
- 7.6 To hold meetings and interviews, and conduct discussions and correspondence, with one or more Contractors to seek an improved understanding of any information contained in a proposal.
- 7.7 To seek clarification from any Contractor to fully understand information provided in a proposal and to help evaluate and rank the Contractors.
- 7.8 To limit and/or determine the actual services to be included in a negotiated agreement with the awarded Contractor.
- 7.9 To obtain information from any available sources for use in evaluating the proposals.
- 7.10 To waive any irregularity in any proposal, or to reject any or all submittals, in part or in whole, should it be deemed to be in the best interest of the City to do so.
- 7.11 To accept any proposal as a best and final offer.

8.0 GENERAL TERMS

8.1 Equal Opportunity/Affirmative Action

The City is an equal opportunity/affirmative action employer. The City is committed to equal opportunity employment efforts and expects firms that do business with the City to have a vigorous affirmative action program.

8.2 Contractor Affirmation

By submitting a proposal, the Contractor affirms that the proposal is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation, and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; the Contractor has not directly or indirectly induced or solicited any other person to submit a false or sham proposal; the Contractor has not solicited or induced any person, firm, or corporation to refrain from submitting a proposal; and the Contractor has not sought by collusion to obtain any advantage over other persons or over the City.

8.3 Contractor Development Costs

Neither the City nor its representative(s) shall be liable for any expenses incurred in connection with preparation of a response to the RFP. Contractor should prepare a proposal simply and economically, providing a straightforward and concise description of the Contractor's ability to meet the requirements of the RFP.

8.4 Code of Ethics

If any Contractor violates or is a party to a violation of the code of ethics of The CITY OF DESTIN or the State of Florida, with respect to this RFP, such Contractor may be disqualified from performing the Services described in this RFP or from furnishing services for which the proposal is submitted, and shall be further disqualified from bidding on any future requests for work, goods, or services for the City.

8.5 Conflict of Interest

Subject to the provisions of Chapter 112, F.S., all Contractors must disclose with their proposal the name of any officer, director, agent, or shareholder who is also an employee of the City. All Contractors must disclose the name of any City employee who owns, directly or indirectly, an interest of five percent (5%) or more in the Contractors firm or any of its branches.

8.6 Disclosure – Advisory Board Member of City

8.6.1 Sections 112.313(3) and 112.313(7), F.S., prohibit an advisory board member of the City from holding any employment or contractual relationship with any business entity doing business with the City. Section 112.313(12), F.S., provides that an advisory board member will not be in violation of the prohibition if certain conditions are met, including the filing of a disclosure form with the Supervisor of Elections, which is the sole responsibility of the Contractor and must be filed prior to or at the time of submission of the RFP. A copy of the filed disclosure form shall be included as part of the Contractor's response.

8.6.2 Advisory board member is required to, prior to or at the time of the submissions of the proposal, file a statement with the Supervisor of Elections, disclosing his or her interest and the nature of the intended business.

8.6.3 Advisory board member, or his or her spouse or child is required to have in no way used or attempted to use his or her influence to persuade a member of the City or any of its personnel to enter into such a contract other than by the mere submission of the proposal.

8.6.4 Advisory board member, or his or her spouse or child is required to have in no way participated in the determination of the proposal specifications or the determination of the responsible and responsive Contractor.

8.7 Cone of Silence

After the issuance of the RFP by the City, Contractors and their representatives shall not contact, communicate with, or discuss any matter relating in any way to this RFP with the City, including any Councilmember, member of the Bid Committee, agent of the City, or any employee of the City other than the City's City Clerk (or designee) unless otherwise directed in this RFP. This prohibition begins with the issuance of the

RFP and ends upon the City's posting of award(s) of the resulting agreement. Such communications initiated by a Contractor shall be grounds for disqualifying the offending Contractor from consideration for award under this RFP and/or potentially any future procurement with the City.

8.8 Copyright

The awarded Contractor shall irrevocably transfer, assign, set over, and convey to the City all rights, title, and interest, including the sole exclusive and complete copyright interest, in any and all copyrightable works created pursuant to the negotiated agreement awarded under this RFP. The awarded Contractor further agrees to execute such documents as the City may request to affect such transfer or assignment.

8.9 Public Entity Crimes

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a proposal on a contract to provide any goods or services to a public entity, may not submit a proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit proposals on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or contractor under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, F.S., for CATEGORY TWO for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.

8.10 Contractor's Employment of Unauthorized Aliens

Employment of unauthorized aliens is considered a violation of Section 274A(e) of the Immigration and Nationality Act. If the Awarded Contractor knowingly employs unauthorized aliens, such violation shall be cause for the City's unilateral cancellation of the agreement.

8.11 Mistakes

Contractors are required to examine the RFP Documents. Failure to do so will be at Contractor's risk. The City may, at its sole discretion, waive irregularities in any bid.

8.12 Warranty of Title

The awarded Contractor shall warrant and guarantee that title to all work, materials, and equipment covered by any invoice or application for payment will pass to the City, no later than the time of payment, free and clear of all liens.

8.13 Obligation to Keep Project Team Intact

Contractors are advised that all firms and key personnel identified in the Step One qualification proposal shall remain on the Project team for the duration of the procurement process and execution of the Project. If extraordinary circumstances require a change, it must be submitted in writing to the City, who, at his or her sole discretion, will determine whether to authorize a change, recognizing that certain circumstances (such as termination of employment) may occur that are beyond the Contractor's control. Unauthorized changes to the Project team at any time during the procurement process may result in the elimination of the Contractor from further consideration.

8.14 Women/Minority Business Enterprise Outreach

The City hereby notifies all potential Contractors that Women/Minority-Business Enterprises are to be afforded a full opportunity to participate in any request for proposal by the City and will not be subject to discrimination on the basis of race, color, sex, or national origin.

8.15 Trench Safety Act

Contractor acknowledges that the Florida Trench Safety Act, Florida Statute 553.60 et seq., which became effective October 1, 1990, shall be in effect during the period of construction for this project.

Respondent, by submitting a Proposal is, assuring that it will perform any trench excavation in accordance with the applicable trench safety standards as well as the method of compliance.

The Contractor is, and the City and its Advisor(s) or Consultant(s) are not, responsible to review or assess safety precautions, programs, or costs, or the means, methods, techniques or technique adequacy, reasonableness of cost, sequences or procedures of any safety precaution, program or cost, including but not limited to, compliance with any and all requirements of Florida Statute 553.60 cited as the "Trench Safety Act." Contractor is, and the City and its Advisor(s) or Consultant(s) are not, responsible to determine if any safety or safety related standards apply to the project, including, but not limited to, the "Trench Safety Act."

8.16 Florida Licensing

The lead contractor must be licensed to perform work in the State of Florida. Selected Contractor will be required to obtain and document Contractor's licenses prior to execution of a negotiated agreement. Failure to obtain and document the necessary licenses will be grounds terminating negotiation of the agreement.

8.17 Interpretations of Data

No interpretation of data, including but not limited to surveys, plans, drawings, test results, and similar materials will be made to any Contractor except for what is provided in the RFP documents or by written addendum.

8.18 Estimated Quantities

When applicable and unless specifically addressed in the RFP, the estimated quantities of work to be done and materials to be furnished under any contract are to be considered as **APPROXIMATE ONLY** and were developed from FPL provided plans and/or communications with respective carriers. Quantities are to be used solely for the comparison of submittals and Contractor shall carefully examine

documents and perform field verifications. The City does not expressly or by implication represent that the actual quantities involved will correspond exactly therewith, nor shall the Contractor plead misunderstanding or deception because of such estimate of quantities. Payment to the awarded Contractor will be made in accordance with any resulting contract and it is understood that the quantities may be changed as provided in the RFP documents without in any way invalidating any of the unit or lump sum prices.

INSTRUCTION ON HOW TO PREPARE AND SEND PERFORMANCE SURVEYS

The objective of this process is to identify the past performance of the Contractors submitting a proposal for the solicited RFP. This is accomplished by sending survey forms to past clients. The clients should return the survey forms directly to the Contractor. The Contractor is to include all surveys in their proposal.

SENDING THE SURVEYS

1. The surveys shall be sent to all clients for whom the Contractor has identified under Tab 2 of the RFP and the surveys should correlate to all projects identified under Tab 2. (If more surveys are included then what is requested in Tab 2, the City will only use the surveys identified by projects in Tab 2.)
2. The Contractor is responsible for verifying that its information is accurate prior to submission as part of the proposal.
3. The past client/owner shall evaluate the Contractor and complete the survey.
4. The survey shall contain different projects. The Contractor cannot have multiple people evaluating the same project; however, one person may evaluate several different projects.
5. The past projects can be either completed or on-going.
6. The Contractor shall complete the following information for each client that a survey will be sent:
 - **Client Name:** Name of company or institution that the work was performed for (e.g. Beach School District; City of New Beach)
 - **Contact Full Name:** The first and last name of the person who will answer and complete the survey form regarding the Contractor
 - **Contact Phone Number:** Phone number of the reference (including area code)
 - **Email Address:** Current email address for the reference
 - **Project Name:** Name of the project (e.g. DB Services for X Project)
 - **Cost of Services:** The total cost of DB services
 - **Date Complete:** Date when the services were completed or anticipated to be completed

PREPARING THE SURVEYS

1. The Contractor is responsible for sending out a survey to the clients that have been identified under Tab 2. The survey can be found on the next page.
2. The Contractor should enter the clients contact information and project information on each survey form for each reference.
3. The Contractor is responsible for ensuring all surveys are completed correctly and included in their proposal under Tab 6.
4. The City Clerk (or designee) may contact the reference for additional information or to clarify survey data. If the reference cannot be contacted, no credit will be given for that reference.

PERFORMANCE SURVEY QUESTIONNAIRE



CITY OF DESTIN

RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION

Contractor Information

Client/Reference Information

From:		To:	
Company:		Company:	
Phone:		Phone:	
Email:		Email:	

Performance Survey of (project name):	
Cost of Services:	Date Completed:

Client:

Rate each of the criteria on a scale of 1 to 10, with 1 representing that you were very unsatisfied (and would never hire the company again) and 10 representing that you were very satisfied (and would hire the company again). Please rate each of the criteria to the best of your knowledge. If you do not have sufficient knowledge of past performance in a particular area, leave it blank. Once completed, return survey to the Contractor.

Criteria	Unit	Score
1. Ability to manage cost	(1 – 10)	
2. Ability to maintain project schedule (complete/on-time/early)	(1 – 10)	
3. Quality of workmanship	(1 – 10)	
4. Professionalism and ability to manage	(1 – 10)	
5. Close out process	(1 – 10)	
6. Ability to communicate with all staff & applicable parties	(1 – 10)	
7. Ability to resolve issues promptly	(1 – 10)	
8. Ability to follow protocol	(1 – 10)	
9. Ability to maintain proper documentation	(1 – 10)	
10. Ability to offer solid recommendations & solutions	(1 – 10)	
11. Had proper resources and personnel by which to get the project done	(1 – 10)	
12. Overall client satisfaction and comfort level in hiring	(1 – 10)	

Printed Name of Reference

Signature of Reference

CITY OF DESTIN FLORIDA

SUBMITTED PROPOSAL FORM

RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION

The undersigned Contractor declares that the only person or parties interested in this RFP as principals are those named herein, that this proposal is made without any understanding, contract, or connection with any other person, firm, or corporation providing a proposal for the same purpose and that this proposal is in all respects fair and without collusion or fraud. The Contractor understands that this proposal must be manually signed in ink, otherwise it will be considered unresponsive and subject to rejection.

The undersigned Contractor represents that the Contractor accepts, and that this proposal complies with the RFP Documents and that the Contractor has carefully examined the RFP Documents for the designated Services. The Contractor affirms that Contractor is satisfied as to the general nature of the Services; the general character, general quality, and the quantity of the possible materials that may be required; the kind and extent of equipment that generally may be required and other facilities that may be needed for the performance of the Services; the possible conditions and the common difficulties that may be encountered, and all other general and common items which may, in any way, affect the Services or its performance.

The undersigned Contractor proposes, and agrees if this proposal is accepted, that it will contract with the City to provide all necessary machinery, tools, software, labor, apparatus, and other means necessary to do all the Services, and furnish all the materials and equipment specified or referred to in the RFP Documents in the manner and time herein prescribed, and according to the requirements of the City as therein set forth.

Under provisions of Chapter 112, F.S., Contractor must disclose with proposal the name of any officer, director, or agent who is also an employee of the CITY OF DESTIN. Contractor must disclose on an attachment entitled "Submitted Bid Conflict of Interest" the name of any City employee who owns, directly or indirectly, a five percent (5%) or more interest in the Contractor's firm or any of its branches, or in the firm of any subcontractor to this proposal. Absence of such an attachment represents Contractor's certification of no such employee.

Contractor acknowledges receipt of the following addenda issued during the solicitation period; the cost of which, if any, is included in proposal pricing. If an addendum is issued, the Addendum Acknowledgement sheet must be signed and submitted with the proposal package at the time and due date of the proposal.

ADDENDUM #	ADDENDUM DATE	ADDENDUM #	ADDENDUM DATE
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

The undersigned Contractor understands that the City reserves the right to reject any or all proposals and to waive any informalities and minor irregularities in any proposal. The Contractor agrees that this proposal shall be good and may not be withdrawn for a period of at least one hundred twenty (120) days after the scheduled RFP opening.

Having carefully examined the RFP Documents, Contractor agrees to the terms contained therein and proposes to furnish all labor, material, and equipment for the entire services (including mobilization and demobilization), and to execute an agreement for services and any and all bonds, insurance certifications, and other instruments or documents as specified or included in the RFP Documents and will completely perform the services in strict accordance with the terms of the RFP Documents.

The undersigned Contractor acknowledges that services to be performed shall conform to all City codes and regulations. Services must be accomplished in a professional manner and meet all standards of any professional trade requiring a license and or permit. Hours of operation that services can be performed on site, excluding emergency issues and special exceptions, begin at 6:00 a.m. and run through 5:00 p.m. Monday through Saturday in accordance with City Code, Chapter 130.

(Signature of Contractor)

(Typed name of Contractor)

Doing Business As: _____

Business Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

Email: _____

RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION
ATTACHMENT NO. 3
PUBLIC ENTITY CRIMES STATEMENT

SWORN STATEMENT UNDER SECTION 287.133 (3) (A)

FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted with Bid, Proposal or Contract _____

2. This sworn statement is submitted by _____ whose business address is _____

and (if applicable) Federal Employer Identification Number (FEIN) is _____ (If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement: _____)

3. My name is _____ and my relationship to the entity named above is _____

4. I understand that a "public entity crime" as defined in Paragraph 287.133(a)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or any agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

5. I understand that "convicted" or "conviction" as defined in paragraph 287.133(a)(b), Florida Statutes, means finding of guilt or a conviction of a public entity crime with or without an adjudication of guilt, in any federal or state trial court of records relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, non-jury trial, or entry of a plea of guilty or nolo contendere.

6. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means:

1. A predecessor or successor of a person convicted of a public entity crime; or

2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one of shares constituting a controlling income among persons when not for fair interest in another person, or a pooling of equipment or income among persons when not for fair market value under a length agreement, shall be a prima facie case that one person controls another person.

A person who was knowingly convicted of a public entity crime, in Florida during the preceding 36 months shall be considered an affiliate.

7. I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statutes, means any natural person or entity organized under the laws of the state or of the United States with the legal power to enter into a binding contract for provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

8. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies)

____ Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

____The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. (please attach a copy of the final order)

_____ The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in public interest to remove the person or affiliate from the convicted vendor list. (please attach a copy of the final order)

_____ The person or affiliate has not been placed on the convicted vendor list. (Please describe any action taken by, or pending with, the Department of General Services.)

_____ Date: _____

(Signature)

STATE OF FLORIDA
COUNTY OF

PERSONALLY APPEARED BEFORE ME, the undersigned authority, who, after first being sworn by me, affixed his/her signature at the space provided above on this _____ day of _____, 2020, and is personally known to me, or has provided _____ as identification.

Notary Public

My Commission expires:

END OF SECTION

RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION
ATTACHMENT NO. 4
DRUG-FREE WORKPLACE CERTIFICATION

The below signed submitter certifies that it has implemented a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling rehabilitation and employee assistance programs and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection 1.
4. In the statement specified in subsection 1., notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation occurring in the workplace no later than five (5) working days after such conviction.
5. Impose a sanction on or require the satisfactory participation in drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign this statement, I certify that this firm complies fully with the above drug-free workplace requirements.

COMPANY: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

TELEPHONE NUMBER: _____

SIGNATURE: _____ DATE: _____

NAME (TYPED OR PRINTED): _____

TITLE: _____

END OF SECTION

**RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION
ATTACHMENT NO. 5
CONFLICT OF INTEREST DISCLOSURE FORM**

Does any City employee acting as a purchasing agent, or City public officer acting in official or private capacity or his/her spouse, or child own more than 5% of the bidder/proposer's interest?

YES _____

NO _____

Does any City employee acting as a purchasing agent, or City public officer acting in official or private capacity hold any employment or contract with the bidder/proposer?

YES _____

NO _____

If either question number 1 or 2 above has been answered YES, does the bidder/proposer assert any exemptions related to prohibited employment & business relationships?

YES _____

NO _____

If YES, please describe:

FIRM NAME: _____

BY (PRINTED): _____

BY (SIGNATURE): _____

TITLE: _____

ADDRESS: _____

PHONE NUMBER _____

EMAIL: _____

**RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION
ATTACHMENT NO. 6
LIABILITY & INDEMNIFICATION FORM**

To the fullest extent permitted by law, CONTRACTOR shall indemnify and hold harmless CITY, its officers and employees from liabilities, damages, losses, and costs including but not limited to reasonable attorney fees, to the extent caused by the negligence, recklessness, or intentional wrongful conduct of the CONTRACTOR and other persons employed or utilized by the CONTRACTOR in the performance of this Agreement.

Contractor's Company Name

Authorized Signature – Manual

Physical Address

Authorized Signature – Typed

Mailing Address

Title

Phone Number

FAX Number

Cellular Number

After-Hours Number(s)

Email address

DATE

RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION
ATTACHMENT NO. 7
CERTIFICATION OF INDEPENDENCE AND NO CONFLICT OF INTEREST

By submitting a proposal in response to the REQUEST FOR QUALIFICATIONS for RFQ No. 24-01-ENG.
- PHASE I UTILITY UNDERGROUND CONVERSION, the undersigned certifies the following:

1. The proposal has been developed independently, without consultation, communication or agreement with any employee or contractor to the City who has worked on the development of this RFQ, or with any person _____ serving as a member of the evaluation committee.
2. The proposal has been developed independently, without consultation, communication or agreement with any other firm or parties for the purpose of restricting competition.
3. Unless otherwise required by law, the information found in the proposal has not been knowingly disclosed and will not be knowingly disclosed prior to the award of the contract, directly or indirectly, to any other firm.
4. No attempt has been made or will be made by _____ (Name of Firm) to induce any other firm to submit or not to submit a proposal for the purpose of restricting competition.
5. No relationship exists or will exist during the contract period between _____ (Name of Firm) and the City that interferes with fair competition or is a conflict of interest.

Sincerely,

Name and Title

RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION
ATTACHMENT NO. 8
SCHEDULE OF SUB-CONTRACTORS

The Undersigned CONTRACTOR proposes the following major sub-contractors for the major areas of work for the Project. The Bidder is further notified that all sub-contractors shall be properly licensed, bondable and shall be required to furnish the City with a Certificate of Insurance in accordance with the contract general conditions. This page may be reproduced for listing additional sub-contractors, if required.

<u>Name of Sub- Contractor</u>	<u>Address of Sub- Contractor</u>	<u>License No.:</u>	<u>Task</u>	

Signature: _____

Date: _____

Title/Company: _____

The City reserves the right to reject any sub-contractor who has previously failed in the proper performance of an award or failed to deliver on time contracts in a similar nature, or who is not responsible (financial capability, lack of resources, etc.) to perform under this award. The City reserves the right to inspect all facilities of any sub-contractor in order to make a determination as to the foregoing.

CITY OF DESTIN

TECHNICAL SPECIFICATIONS

UNDERGROUND CONVERSION PHASE 1

TECHNICAL PROVISIONS

- | | |
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| 1. 57-7 | SURVEY, STAKEOUT & RECORD DRAWINGS |
| 2. 101 | MOBILIZATION |
| 3. 102.1 | MAINTENANCE OF TRAFFIC |
| 4. 104 | SEDIMENT BARRIER, CLEARING & GRUBBING, SIDEWALK RESTORATION |
| 5. FPL-1 | FPL INFRASTRUCTURE |
| 6. CARRIER-1 | CARRIER INFRASTRUCTURE |
| 7. FPL-SL | FPL STREETLIGHT INFRASTRUCTURE |
| 8. CTD-SCHED | CONTRACT DURATION AND SCHEDULE MISCELLANEOUS |
| 9. FPL-P | FPL PLANS & SPECIFICATIONS |
| 10. ATT-P | CARRIER PLANS & SPECIFICATIONS |

TP 57-7
SURVEY, STAKEOUT & RECORD DRAWINGS

Lines, Grades and Construction Surveying - The Contractor shall employ a Florida licensed professional land surveyor satisfactory to the City and Engineer to lay out the work from the benchmarks, grades, dimensions, points, and lines noted on the working drawings, established at the site, or supplied by the Engineer. All work of every description shall be laid out and checked by the contractor who will be held solely responsible for its correctness, and all expenses in connection with this work shall be paid for by the contractor. The work may be checked by the Engineer, and, in the event of discrepancy, his decision shall be final.

No special compensation will be made to the contractor to defray costs of any work or delays occasioned by making surveys and measurements, tests, or inspections, but such costs shall be considered as having been included in the price stipulated for the several items of work to be done under contract.

In addition, all survey monuments and benchmarks which may be disturbed during construction shall be referenced and replaced by the contractor. All monuments and benchmarks disturbed or destroyed by the contractor or any of his forces through accident or negligence shall be replaced by a Florida licensed professional land surveyor at the contractor's expense.

Protection and Restoration of Property Markers and Survey Monuments - The contractor shall be responsible for the preservation of all public and private property markers and shall protect carefully from disturbance or damage all survey monuments and property markers until locations are witnessed or otherwise referenced by his licensed Florida professional land surveyor, so the said surveyor can restore them in their original location after construction.

Record Drawings/As-Builts - During the entire construction operation, the contractor shall maintain records of all deviations from the plans and specifications and shall maintain "red-lined" record drawings showing correctly and accurately all changes and deviations from the work made during construction to reflect the work as it was constructed.

These drawings shall conform to each of the individual utility owners being undergrounded as part of this project. Each utility owner shall be provided with their required as-builts/plans meeting their submittal requirements, including but not limiting, standards of drafting/detail, bore logs, shall be neat and legible, and shall be provided to the appropriate utility provider(s) at times as may be required elsewhere in these specifications. Copies of the As-built drawings shall also be supplied to the City for record.

The Contractor shall be required to as-built all FPL related undergrounding work and provide both FPL and the PM/City with completed copies in proper format. This includes necessary plan submissions required for FPL to initiate switching orders and final conversions. The Contractor should be familiar with FPL requirements, including final plan submittals, and shall engage at the start of the project in working with FPL to ensure full transparency with all requirements. There should also be consideration for other submittals that may be required as part of the undergrounding work.

Basis for Payment - The work and all incidental costs specified as being covered under this division will be paid for at the contract lump sum for construction surveying and survey monumentation. Payment shall be full compensation for all labor, materials, and related costs to complete the work specified in this division. The work and all incidental costs specified as being covered under this section will be paid for at the contract lump sum for survey, stakeout, as-builts, bore logs & record drawings.

Payment shall be full compensation for all labor, materials, and related costs to complete the work specified in this section.

Payment shall be made under:

Item No. 57-7	Survey, Stakeout & Record Drawings	LS
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TP 101 MOBILIZATION

Mobilization shall include all items detailed in Article 101-1 of the Standard Specifications of FDOT's Road and Bridge Construction dated July 2021, except as amended hereinafter. Furthermore, this item shall be inclusive of all related mobilization required for the underground conversion project.

Method of Measurement - The quantity to be paid for under this section shall be the lump sum quantity which shall include all items described in Section 101.

Basis of Payment - The lump sum quantity for the item of mobilization shall be paid for at the contract lump sum price. Article 101-2.2 of the Standard Specifications is deleted, and the following is added:

The lump sum price for mobilization will be payable with the first month's partial payment except that this initial payment will be limited to 10% of the total contract amount. Any remaining amount will be paid when the value of completed work exceeds 50% of the total contract amount.

Payment shall be made under:

Item No. 101-1	Mobilization	LS
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TP 102.1 MAINTENNACE OF TRAFFIC

The Contractor shall be responsible for a safe and effective Temporary Traffic Control Plan to move vehicular and pedestrian traffic during all phases of construction. Topics to be addressed shall include, but are not limited to, construction phasing, utility efforts/relocations, drop offs within clear zone, pedestrian access, and all work as part of the utility undergrounding project.

Special consideration shall be given to the drainage system when developing the construction phases. Positive drainage must be maintained at all times. When impacted, the required Temporary Traffic Control Plan shall address how to assist with maintenance of traffic throughout the duration of the contract.

The Contractor shall comply with all City Ordinances “Ordinances” for allowable hours of work. The Contractor shall provide written request to extend hours outside of the Ordinance and must be submitted to PM/City in writing for City Manager approval. The Contractor will need City Manager authorization will be provided for any planned work during City events or holidays.

The Contractor shall minimize disruption to sidewalks as practical. Areas of sidewalk impacted and removed to accommodate entry or exit pits and other related undergrounding project work shall be restored. Vehicular traffic and equipment damages to sidewalk will also be the responsibility of the Contractor. Pre-construction video and photo documentation should be performed by the Contractor to confirm pre-existing conditions that support claims that the sidewalk was not impacted by the undergrounding project work. Additionally, Contractor will be responsible to take precautionary measures to avoid damage to existing sewer laterals and make repairs to any damaged due to construction efforts. Furthermore, Contractor shall take video of existing sewer laterals within the work area pre-construction and post-construction and provide a copy to the City. All restoration cost shall be incidental to the cost of the undergrounding work.

All Traffic Control Plans utilized during construction shall be in accordance with the FDOT’s Design Standards and applicable permit requirements. Ingress and egress areas to and from work and staging areas within the limits of the City, including any and all suppliers and subcontractors, will require environmental protection techniques that adequately prevent erosion and debris tracking onto existing roadways in all areas practical. Contractor shall be responsible for immediately addressing and correcting all erosion concerns without impacts to schedule. Any associated costs are incidental to the work.

Contractor shall obtain any required FDOT traffic control permits and/or meet applicable restrictions without impact to City. In addition to FDOT lane restriction requirements, a lane may only be closed during active work periods. Any lane closures must be reported to the local emergency agencies, all applicable agencies, and the PM/City. The Contractor shall develop the Project in a manner that will in no way impede the opening of all lanes of traffic in the event of an emergency. All work within school areas shall be coordinated in advance and meet any requirements.

The Contractor shall also be held responsible for the proper (most updated) MDOT sidewalk & lane closure signs and safety equipment for pedestrians.

The Contractor is advised that the project is located within a hurricane region. Within 30 days after the Effective Date of the Agreement, the Contractor shall submit for PM/City acceptance a hurricane preparedness plan detailing the procedures to be followed by the Contractor to ensure the safety of personnel, equipment, stored materials, and completed work when a hurricane watch notice for the project area is issued by the United States National Weather Service. In the event of major storms, catastrophic weather events, or other emergency situations, the Contractor shall closely coordinate with the PM/City to ensure the project is in compliance with the accepted preparedness plan and ensure that following the event(s) that resources and personnel actively working prior to the event(s) remain dedicated to the project and support restoration efforts, if needed.

Method of Measurement - The quantity to be paid for under this section shall be the lump sum quantity which shall include all items described in Section 102.1.

Basis of Payment - The lump sum quantity for the item of maintenance of traffic shall be paid for at the contract lump sum price.

Payment shall be made under:

Item No. 102-1	Maintenance of Traffic	LS
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**TP 104
CLEARING, GRUBBING, RESTORATION,
AND SIDEWALK**

Contractor shall perform clearing and grubbing activities within the alignment of the proposed work areas where applicable and minimize impacts to the fullest extent possible. The clearing and grubbing shall be sufficient to perform work activities and provide access along the corridor for the installation of FPL and Carriers work while remaining as minimally invasive as possible. Contractor shall coordinate with PM/City prior to performing clearing & grubbing activities to clarify and finalize the method of procedure. Restoration shall be, at minimum, to original condition and inclusive to the cost of the items identified as part of this scope.

As part of clearing & grubbing and due to the nature of this work taking place in areas of commercial and residential properties that have existing irrigation systems, the Contractor shall take all reasonable and precautionary efforts to avoid damages. The Contractor shall coordinate and notify adjacent property owners to identify existing systems that may be impacted by the work. The Contractor shall repair irrigation systems damaged during the undergrounding work and notify the property owner of the repair. Any associated costs for irrigation is incidental to the undergrounding work.

In addition to irrigation, the Contractor should make all attempts to avoid impacts to existing landscaping. In areas where impacts to landscaping are unavoidable the Contractor shall identify the potential impact and work with the City and property owner to determine a resolution. The Contractor shall initiate survey of properties with landscaping and irrigation and begin coordination at a minimum of (3) weeks in advance of any work. All coordination efforts shall be documented and discussed with the PM/City during weekly progress meeting.

Method of Measurement - The quantity to be paid for under this section will be linear for sediment barrier, lump sum for clearing & grubbing, and square yard for sidewalk restoration. Copies of all measured areas shall be provided to the City.

Basis of Payment - The quantities, determined as provided above, shall be paid for at the contract unit price as listed in the bid form. The contract unit price per linear foot (LF), turbidity barrier, measured in place, completed, and accepted. Sidewalk restoration shall be paid for at the contract unit price per square yard (SY). The work and all incidental costs specified as being covered under clearing & grubbing will be paid for at the contract lump sum and shall include irrigation repairs.

Payment shall be made under:

Item No. 104-10-3	Sediment Barrier	LF
Item No. 110-1-1	Clearing & Grubbing	LS
Item No. 522-	Sidewalk Restoration	SF

TP FPL INFRASTRUCTURE

The Contractor shall be experienced and able to perform all aspects of this undergrounding project. Additionally, the Contractor shall construct, and as-built all work as part of this project. The Contractor shall facilitate coordination of FPL, Century Link, Cox Communication, and Mediacom construction activities, and in full coordination with all work designated as part of this project and provide detailed as-builts of all final project work performed by the Contractor in an acceptable format to the respective utility owners and to the Project Manager “PM”/City. The Contractor shall perform minimally invasive work operations, including but not limiting, clearing & grubbing activities to reduce impacts and footprint to State, County, City and property owner rights-of-way. The Contractor shall be responsible for restoration as part of this undergrounding project. **CONTRACTOR MUST MEET ALL FPL SPECIFICATIONS & REQUIREMENTS.**

The City will require that the Contractor provide a qualified superintendent be available to the project during all work activities. The Contractor shall notify the PM/City in the event of any change to the superintendent 30 days in advance and be required to provide an appropriate substitute having the required skill and experience necessary to supervise field activities. The Contractor shall provide notification to residents or business at a minimum of (4) weeks prior to construction by providing acceptable notices. All notices shall also be coordinated with the PM/City for content and distribution.

Perform all work in reasonably close conformity with the lines, grades, cross-sections, dimensions, and material requirements, including tolerances, as specified in the Plans and Contract Documents. Contractor shall not take advantage of any apparent error or omission discovered in the Contract Documents, but immediately notify the PM/City in writing of such discovery. The PM/City will then make such corrections and interpretations as necessary to reflect the actual spirit and intent of the Contract Documents.

The work shall consist of all work to complete the underground conversion, including materials necessary for the work not provided by FPL. Also inclusive to the items of work as part of this project, the Contractor shall provide all required labor, equipment for performing operations, safety, storage and protection of materials on site, or storage area, installation of conduits, directional bores, NPDES, removal of waste, bore pits, electrical pulls, vaults/handholes/pedestals, connections/tie-ins, equipment, including but not limiting, meter services connections/replacements, capping weather-heads as required, and other related work to satisfactorily complete the undergrounding project in its entirety.

As part of this contract, all work for services connections shall stop at the meters but in some instances may require adjustments or replacements by the Contractor to make required connections. All aerial service drops once removed will require the Contractor to cap existing weather-heads.

The Contractor shall maintain all necessary separation requirements of FPL, carriers and existing utilities. All new infrastructure shall be placed uniformly along the right-of-way, in dedicated easements where applicable, and include for all necessary connection points, switches, transformers, laterals, splice points, service connections, points of service and other related sites.

The undergrounding shall require the Contractor provide scope of services; including but not limiting to, undergrounding all FPL existing aerial primary, secondary, service lines, connections, looping of all existing FPL undergrounded radial areas, existing undergrounding tie-ins, meter connections where applicable, support and coordination with FPL portion of the work, support and coordination with the Carriers facilities and service lines in conjunction with the FPL aerial undergrounding, installation, support and coordination with FPL street lighting infrastructure, coordination and provide effective and costs efficiency in the means and manor of scheduling and construction of all work associated with the undergrounding project, coordination with services for commercial and/or residential properties, parcels affected by the undergrounding, provide as-builts and permit requirements where applicable, and conform to FPL plans, specifications and other requirements as part of this project.

Prior to any construction activities the Contractor shall immediately coordinate with all respective stakeholders to verify existing and proposed facilities, explore all existing utilities for avoidance with new infrastructure and alignment, review potential conflicts against field site layout, and notify the PM/City of any findings. The Contractor shall continue to engage throughout the project with FPL, the PM/City, and Carriers. This includes, but is not limited to, confirm design plans, criteria, establish acceptable schedule, and coordination to accommodate for and construct the portions required as part of this undergrounding project.

The Contractor will need to determine required connection points and services and develop a logical sequence of construction that allows a cost-efficient approach to minimize impacts and to

expedite construction for the undergrounding project as well as provide efficiency for the portion of work being performed by the respective utility agencies. Additionally, the Contractor shall provide the PM/City with a detailed approach to the construction with consideration to all work activities for review.

The Contractor shall exercise safe practices during all work activities and abide with state and governing jurisdictions rules and requirements especially when working around existing utilities; including but not limited to, Sunshine One Call (811) - The Underground Facility Damage Prevention and Safety Act, Chapter 556, Florida Statutes, requiring excavators to get underground utility lines located by contacting Sunshine 811 two full business days before digging.

The Contractor shall be responsible for contacting property grounds keepers to identify all private underground utilities not located through Sunshine One Call (811).

The Contractor will be required to ensure the running line for both FPL's new infrastructure and Carriers infrastructure is reviewed in the field prior to the work taking place. The Contractor shall coordinate with PM/City to ensure proper integration with the running lines and to identify and build the infrastructure in such manner as to avoid existing utilities and scheduling inefficiencies. The proposed infrastructure shall be installed to the closest extent possible to the current right-of-way, meet all separation requirements, applicable industry requirements, and be installed in the most cost-efficient manner. See attached water sewer separation clearance requirements.

The Contractor shall ensure that all portions of the work to be performed by the Carriers is successfully coordinated throughout the project to avoid schedule delays.

The Contractor shall provide a minimum 30-day notification to FPL and the PM/City for work completed and ready for FPL red-line review and readiness for switching. The Contractor shall coordinate the switching process with FPL and fully coordinate scheduling with the PM/City. The City desires the work be performed and coordinated so that the pole removal is performed expeditiously, the Contractor coordination and notification shall include full consideration of the Carrier facilities to avoid delays in pole removal.

For cost efficiency and minimal disruption to residents and commercial properties, the proposed duct bank should be placed to avoid interference with property or beautification areas, upon review and acceptable by the PM/City, the duct bank will be diverted to reduce cost and public relations impacts. To the largest extent possible, installation of conduits, structures and other items of work shall be installed on a tangent alignment at a consistent distance from the edge of right-of-way. Exceptions are areas where alignment will need to avoid identified easements, beautification areas, utility apparatuses, signs, signals, and City facilities in which case alignment shall comply with standards for any bends, casing, conduit and fiber optic cable or equipment.

In these areas the Contractor shall transition the conduit run so that transformers, pull boxes, and other related equipment are placed in areas that provide access without obstruction and provide a greater off-set distance from existing pavement while maintaining a gradual transition and desirable bend requirements. The contractor must also coordinate any adjustments or deviations from the FPL design with the FPL PM prior to any adjustments and ensure all minimum standards required by FPL are achieved.

Prior to construction the Contractor shall identify in their plan the proposed alignment in all areas where directional bore or alignment shifts are to be made to minimize or avoid major obstructions and/or beautification impacts. Conduits shall be installed at the required FPL minimum depths and meet FDOT depth requirements when in the Departments rights-of-way.

Before the equipment or box pads are set, Contractor shall touch base with the PM or Inspector to be sure equipment is where customer agreed to.

Contractor shall ensure the construction of the proposed infrastructure is consistent with the permitted improvements. The Contractor shall be responsible for all related permitting not acquired by the City or the utility owners including any environmental, governmental or other FDOT required permitting that is necessary for the work. This includes, but is not limited to, maintenance of traffic, demolition, de-watering, environmental, directional drilling/bores, etc. The Contractor shall provide final as-builts necessary to meet the permit conditions and final documentation must be acceptable to all respective agencies, including FPL.

Immediately following NTP, a site review of the corridor should be conducted by the Contractor and an invitation made to available parties. Any areas of concerns or other unique situations should be identified. The Contractor shall also take pre-construction video of the project and make a copy available to the PM/City. Any claims by individuals regarding damage to site or property that arise during the project shall be supported by Contractor pre-construction video or photo documentation to soundly dispute claim otherwise the Contractor will be responsible for restoration at their expense.

The Contractor shall use sound engineering practices in regard to survey, construction, as-builts, and maintenance of traffic during construction, requirements relative to Project management, scheduling, and coordination with other agencies and entities such as state and local government, utilities and the public. The Contractor shall be responsible for due diligence with FPL and the PM/City to identify and include any additional work or documents needed that are not included in reference documents herewith.

The Contractor shall comply with applicable ordinances, codes, statutes, specifications, rules, and regulations of State of Florida, FDOT permitting, applicable codes, FPL requirements, and applicable regulations of Federal Government, OSHA, NPDES, and applicable safety criteria.

For all FPL work for this project, the Contractor shall comply with FPL plans, survey as-built requirements, typical sections, installation guidelines/requirements, specifications, and details. The Contractor shall review the plans and perform a site review and provide the PM/City with

notification of any constructability or design flaws a minimum of 45 days prior to commencement of work activities. The Contractor shall provide the PM/City a detailed written summary report of any constructability or design flaws immediately after confirmation of error or conflict. If the Contractor utilizes any storage or equipment sites within the City, whether owned by individual parties or the City, the site must be restored to original condition, satisfactory to all property owners.

The Contractor shall fully coordinate all work with the PM/City and with FPL representative(s) assigned to this project. The Contractor shall field review the FPL work prior to construction for alignment and constructability. The Contractor shall fully cooperate and support the PM/City in obtaining the easements where applicable.

Contractor shall maintain a competent superintendent at the site at all times while work is in progress to act as the Contractor's agent. Provide a superintendent who is a competent superintendent capable of properly interpreting the Contract Documents and is thoroughly experienced in the type of work being performed. Provide a superintendent with the full authority to receive instructions from the PM/City and to execute the orders or directions of the PM/City, including promptly supplying any materials, tools, equipment, labor, and incidentals that may be required. Provide such superintendence regardless of the amount of work sublet.

The Contractor must have a means to unload/load wire, conduit and equipment off of a flatbed delivery truck at storage sites. Contractor must also have the means to communicate with FPL local warehousemen to pick up any material needed.

The Contractor shall complete the work phase, as defined and accepted, in its entirety that supports and provides efficiency with FPL's portion of the work they are to perform. This shall include providing FPL crews access, ingress and egress, mobilization and other means for the removal of existing aerial facilities, and other work in an expeditious manner. The Contractor will be required to provide the PM/City with project status and engagement efforts with FPL work at each weekly meeting throughout the project.

Method of Measurement - The quantity for FPL related items identified in the bid tabulation table below and for under this section will be the respective unit(s). The quantity for the FPL aerial conversions, underground conversions, meter replacements, and looping under this section will be each as indicated on the bid tabulation. The units listed in the schedule of values are approximate and should be independently verified by the contractor against the plans before performing any work. Any differences should be immediately brought to the attention of the PM with a copy of the findings to the PM/City.

All unit prices for conduit shall include ALL necessary work required for full completion, including but not limiting tie-ins, bore pits, sweeps to equipment, and all other incidental efforts required to successfully perform the installation.

All unit prices for cable shall include ALL necessary work required for full completion, including but not limiting tie-ins, make-ready to equipment, and all other incidentals required to successfully perform the installation.

All unit prices for FPL equipment shall include ALL necessary work required for full completion of the installation, including but not limiting, chambers, vaults, concrete pads, conduit connections, wiring, and all other incidentals required to successfully complete the full installation(s).

All unit prices for splice box, handholes, or vaults shall include all necessary work required for full completion of the installation and conduit connections.

All meter box connection work shall include all the necessary efforts to connect new underground service to the existing meter. This shall include capping existing weatherheads safely above the roof. Notifying the property owner and scheduling an acceptable time for the required outage.

Easement coordination shall include assisting PM with confirming the placement of the equipment and identifying any conflicts within 45 days of NTP, assisting with the notification of property

owners in advance of the work (minimum 30-day notification), and scheduling the work with the property owner.

Switching Coordination shall be the full responsibility of the Contractor. This includes the Contractor providing all FPL required redlines, as-builts, drawings, bore logs, and all other details and providing the required documentation in an expeditious manner. The Contractor shall provide a detailed report to the PM during this process on a weekly basis identifying the status.

Basis of Payment -

The per each quantity for FPL related items identified below shall be paid for at the contract unit per item. Said per each unit item shall include the actual units required and documented recording of the field measure units where applicable. All unit cost shall include all related cost to perform the entire work. This shall also include the safe storage, tracking, and coordination with FPL for all related materials. Payment shall be made under:

III. FPL INFRASTRUCTURE	DESCRIPTION	APROX QNTY	
FPL-630-1-12	FPL Conduit 1PN1C DIRECTIONAL BORE	4,900	LF
FPL-630-2-12	FPL Conduit 2PN2C DIRECTIONAL BORE	4,000	LF
FPL-630-3-12	FPL Conduit 3PN3C DIRECTIONAL BORE	33,550	LF
FPL-630-4-12	FPL Conduit 4PN4C DIRECTIONAL BORE	100	LF
FPL-630-6-12	FPL Conduit 6PN6C DIRECTIONAL BORE	16,500	LF
FPL-FNC-6-12	FPL Conduit FNC DIRECTIONAL BORE	30,300	LF
FPL-630-SECNDRY	FPL Secondary Conduit	18,175	LF
FPL-635-SB-1	FPL Splice Box (Feeder)	15	EA
FPL-635-SB-2	FPL Splice Box (Primary)	70	EA
FPL -635-HH-1	FPL 30" Handhole / Above Ground Pedestal	55	EA
FPL-FEEDER CBL	FPL Feeder Cable pull (Wire)	36,000	LF
FPL-PRMRY-CBL	FPL Primary cable pull (Wire)	193,000	LF
FPL SERV CABL	FPL Secondary Cable (Wire)	19,000	LF
FPL -635-SWC-1	FPL PME 9/PME 11/Switch Cabinet Installation	54	EA
FPL-635-TSF-1	FPL Transformer & Pad (SINGLE PHASE)	64	EA
FPL-635-TSF-1	FPL Transformer & Pad (3-PHASE)	20	EA
FPL-635-TSF-1	FPL Transformer & Pad (OPEN DELTA)	13	EA
FPL-635-CAP-1	FPL Capacitor Bank Installation	4	EA
FPL - PED-1	FPL 3-Phase Pedestals	14	EA
FPL-635-WH-1	FPL Meter Box Connections	275	EA
FPL-UG-CONV	CONVERSION OF CURRENTLY UNDERGROUNDED SERVICES	275	EA
FPL-UG-COM CONV	CONVERSION OF COMMERCIAL UNDERGROUNDED SERVICES	155	EA
FPL-EASEMENT	COORDINATION OF EASEMENTS	126	EA
FPL-EASEMENT SUR	EASEMENT SURVEY	85	EA
FPL-OH-CONV	CONVERSION OF AERIAL SERVICES	300	EA
FPL-UG-CONV	CONVERSION OF UG SERVICES	55	EA
FPL-MISC/COORD	INCIDENTALS/COORDINATION/MANAGEMENT	1	LS
FPL-SWITCHING	SWITCHING/FPL COORDINATION	1	LS

TP CARRIER INFRASTRUCTURE

As part of this undergrounding project, Contractor shall be experienced and able to perform all aspects of the required conduit installation for the Carriers. Additionally, the Contractor shall construct, and as-built all work as part of this project. The Contractor shall facilitate coordination with Cox Communication, Century Link, and Uniti in conjunction with the FPL underground conversion activities, and in full coordination with all work designated as part of this project and provide detailed as-builts of all final project work performed by the Contractor in an acceptable format to the respective utility owners and to the Project Manager "PM"/City. The Contractor shall perform minimally invasive work operations, including but not limiting, clearing & grubbing activities to reduce impacts and footprint to State, County, City and property owner rights-of-way. The Contractor shall be responsible for restoration as part of this undergrounding project.

The Contractor shall coordinate each of the Carrier work plans and consolidate the conduit installation for ultimate cost and schedule efficiencies. The Contractor shall provide notification to residents or business at a minimum of (4) weeks prior to construction by providing acceptable notices. All notices shall be coordinated with the PM/City for content and distribution.

Perform all work in reasonably close conformity with the lines, grades, cross-sections, dimensions, and material requirements, including tolerances, as specified in the Plans and Contract Documents. Contractor shall not take advantage of any apparent error or omission discovered in the Contract Documents, but immediately notify the PM/City in writing of such discovery. The PM/City will then make such corrections and interpretations as necessary to reflect the actual spirit and intent of the Contract Documents.

The work shall consist of conduit installation to the respective carriers where applicable. Also inclusive to the items of work as part of this project, the Contractor shall provide all required labor, equipment for performing operations, safety, storage and protection of materials on site, or storage area, installation of conduits, directional bores, NPDES, removal of waste, and bore pits as required. The Carriers will provide the conduit and sweep locations.

The Contractor shall maintain all necessary separation requirements in consideration of all work as part of the project. Installation shall be placed uniformly along the right-of-way, in dedicated easements where applicable, and include for all necessary connection points. Prior to any construction activities the Contractor shall immediately coordinate with all respective stakeholders to verify existing and proposed facilities, review potential conflicts against field site layout, and notify the PM/City of any findings. The Contractor shall continue to engage throughout the project with all Carriers and other existing utilities. This includes but not limited to,

confirm design plans, criteria, establish acceptable schedule, and coordination to accommodate for and construct the portions required as part of this undergrounding project.

The Contractor shall exercise safe practices during all work activities and abide with state and governing jurisdictions rules and requirements especially when working around existing utilities; including but not limited to, Sunshine One Call (811) – The Underground Facility Damage Prevention and Safety Act, Chapter 556, Florida Statutes, requiring excavators to get underground utility lines located by contacting Sunshine 811 two full business days before digging.

The Contractor will be required to ensure the running line for the new conduit infrastructure is reviewed in the field prior to the work taking place. The Contractor shall coordinate with PM/City to ensure proper integration with the running lines and to identify and build the infrastructure in such manner as to avoid scheduling inefficiencies. The proposed infrastructure shall be installed to the closest extent possible to the current right-of-way, meet all separation requirements, applicable industry requirements, and be installed in the most cost-efficient manner.

The Contractor shall ensure that all portions of the work to be performed by Cox Communication, Century Link, and Uniti is successfully coordinated throughout the project to avoid schedule delays. The Contractor shall coordinate with the carriers on a routine basis and provide the PM/City with progress updates each month. The communications facilities typically consist of fiber optic cables, coaxial cables, fiber nodes, terminal boxes and amplifiers facilitated by Cox Communication, Century Link, and Uniti, respectively. The Contractor shall coordinate with the carriers on a routine basis and provide the PM/City with progress updates each month.

The communications facilities typically consist of fiber optic cables, coaxial cables, fiber nodes, terminal boxes and amplifiers facilitated by Cox Communication, Century Link, and Uniti, respectively. For a large part, the Carriers will provide the conduit and the Contractor will install the provided conduit via directional bore providing acceptable sweeps at certain points along the project. In some instances, the Contractor will be required to provide and install the conduit. The Contractor, and in coordination with the respective Carriers, shall identify and stake out the locations where the proposed conduit access points/sweeps where the Carriers will need to install their fiber, coax, pedestals/vaults, equipment. Following the completion of the Contractors conduit installation, the Carriers will perform the installation of their facilities and perform aerial wreck-out.

The Contractor shall provide a minimum 30-day notification to the Carriers and the PM/City for work completed. The Contractor shall coordinate the Carriers portion of the work to align with the FPL pole removal in an expeditious manner. The Contractor coordination and notification shall include full consideration of all Cox Communication, Century Link, and Uniti facilities to avoid delays in pole removal.

Prior to construction the Contractor shall identify in their plan the proposed alignment in all areas where directional bore or alignment shifts are to be made to minimize or avoid major obstructions and/or beautification impacts. Conduits shall be installed at the Carriers required minimum depths and meet FDOT depth requirements when in the Departments rights-of-way.

Contractor shall ensure the construction of the proposed infrastructure is consistent with the permitted improvements. The Contractor shall be responsible for all related permitting not acquired by the City or the utility owners including any environmental, governmental or other FDOT required permitting that is necessary for the work. This includes, but is not limited to, maintenance of traffic, demolition, de-watering, environmental, directional drilling/bores, etc. The Contractor shall provide final as-builts necessary to meet the permit conditions and final documentation must be acceptable to all respective agencies, including FPL.

Immediately following NTP, a site review of the corridor should be conducted by the Contractor and an invitation made to available parties. Any areas of concerns or other unique situations should be identified. The Contractor shall also take pre-construction video of the project and make a copy available to the PM/City. Any claims by individuals regarding damage to site or property that arise during the project shall be supported by Contractor pre-construction video or photo documentation to soundly dispute claim otherwise the Contractor will be responsible for restoration at their expense.

The Contractor shall use sound engineering practices in regard to survey, construction, as-builts, and maintenance of traffic during construction, requirements relative to Project management, scheduling, and coordination with other agencies and entities such as state and local government, utilities and the public. The Contractor shall be responsible for due diligence with FPL and the PM/City to identify and include any additional work or documents needed that are not included in reference documents herewith.

The Contractor shall comply with applicable ordinances, codes, statutes, specifications, rules, and regulations of State of Florida, FDOT permitting, applicable codes, Century Link requirements, Cox Communication requirements, Uniti requirements, Uniti requirements, and applicable regulations of Federal Government, OSHA, NPDES, and applicable safety criteria.

For all Carrier work for this project, the Contractor shall comply with plans, survey as-built requirements, typical sections, installation guidelines/requirements, specifications, and details. The Contractor shall review the plans and perform a site review and provide the PM/City with notification of any constructability or design flaws a minimum of 45 days prior to commencement of work activities. The Contractor shall provide the PM/City a detailed written summary report of any

constructability or design flaws immediately after confirmation of error or conflict. If the Contractor utilizes any storage or equipment sites within the City, whether owned by individual parties or the City, the site must be restored to original condition, satisfactory to all property owners.

Method of Measurement - The quantity to be paid for under this section will be linear for installation of Carrier conduit and any associated cost involved to install the conduit. Copies of all measured areas shall be provided to the City.

Basis of Payment - The linear quantity for Carrier provided conduit items identified below shall be paid for at the contract unit price per linear foot (LF). The linear quantity for Contractor provided conduit items identified below shall be paid for at the contract unit price per linear foot (LF).

Payment shall be made under:

IV. CARRIERS	OPTIONAL BID ITEMS		
CARRIER C-01	(4) 2" Conduit DIRECTIONAL BORE "COX" (Install)	18,500	LF
CARRIER C-02	(3) 2" Conduit DIRECTIONAL BORE "Uniti" Fiber (Install)	17,000	LF
CARRIER C-03	(3) 2" Conduit DIRECTIONAL BORE "Century" Link (Install)	17,000	LF
CONDUIT-01	(1) 2" Conduit HDPE (Furnish)	18,500	LF
CONDUIT-02	(2) 2" Conduit HDPE (Furnish)	18,500	LF
CARRIER-COORD	COORDINATION	1	LS

TP FPL STREETLIGHT INFRASTRUCTURE

The Contractor shall be experienced and able to perform all aspects of the conduit installation for FPL streetlighting and as part of the undergrounding project. Additionally, the Contractor shall construct, and as-built all work as part of this project. The Contractor shall perform minimally invasive work operations, including but not limiting, clearing & grubbing activities to reduce impacts and footprint to State, County, City and property owner rights-of-way. The Contractor shall be responsible for restoration as part of this undergrounding project.

Perform all work in reasonably close conformity with the lines, grades, cross-sections, dimensions, and material requirements, including tolerances, as specified in the Plans and Contract Documents. Contractor shall not take advantage of any apparent error or omission discovered in the Contract Documents, but immediately notify the PM/City in writing of such discovery. The PM/City will then make such corrections and interpretations as necessary to reflect the actual spirit and intent of the Contract Documents.

The work shall consist of FPL streetlight conduit installation where applicable. Also inclusive to the items of work as part of this project, the Contractor shall provide all required labor, equipment for performing operations, safety, storage and protection of materials on site, or storage area, installation of conduits, directional bores, NPDES, removal of waste, and bore pits as required. The Carriers will provide the conduit and sweep locations.

The Contractor shall exercise safe practices during all work activities and abide with state and governing jurisdictions rules and requirements especially when working around existing utilities; including but not limited to, Sunshine One Call (811) - The Underground Facility Damage Prevention and Safety Act, Chapter 556, Florida Statutes, requiring excavators to get underground utility lines located by contacting Sunshine 811 two full business days before digging.

The Contractor shall provide a minimum 30-day notification to FPL and the PM/City for work completed and ready for FPL red-line review and readiness for switching. The Contractor shall coordinate the switching process with FPL and fully coordinate scheduling with the PM/City. The City desires the work be performed and coordinated so that the pole removal is performed expeditiously and to avoid delays in FPL pole removal.

Prior to construction the Contractor shall identify in their plan the proposed alignment in all areas where directional bore or alignment shifts are to be made to minimize or avoid major obstructions and/or beautification impacts. Conduits shall be installed at the required FPL minimum depth for streetlighting conduit and meet FDOT depth requirements when in the Departments rights-of-way and as applicable.

Contractor shall ensure the construction of the proposed infrastructure is consistent with the permitted improvements. The Contractor shall be responsible for all related permitting not acquired by the City or the utility owners including any environmental, governmental or other FDOT required permitting that is necessary for the work.

This includes, but is not limited to, maintenance of traffic, demolition, de-watering, environmental, directional drilling/bores, etc. The Contractor shall provide final as-builts necessary to meet the permit conditions and final documentation must be acceptable to all respective agencies, including FPL.

The Contractor shall comply with applicable ordinances, codes, statutes, specifications, rules, and regulations of State of Florida, FDOT permitting, applicable codes, FPL requirements, UnitiFiber requirements, Century Link requirements, Cox Communication requirements, and applicable regulations of Federal Government, OSHA, NPDES, and applicable safety criteria.

For all FPL Streetlight work for this project, the Contractor shall comply with plans, survey as-built requirements, typical sections, installation guidelines/requirements, specifications, and details. The Contractor shall review the plans and perform a site review and provide the PM/City with notification of any constructability or design flaws a minimum of 45 days prior to commencement of work activities. The Contractor shall provide the PM/City a detailed written summary report of any constructability or design flaws immediately after confirmation of error or conflict. If the Contractor utilizes any storage or equipment sites within the City, whether owned by individual parties or the City, the site must be restored to original condition, satisfactory to all property owners.

Method of Measurement - The quantity to be paid for under this section will be linear for installation of FPL streetlight conduit and any associated cost involved to install the conduit. Copies of all measured areas shall be provided to the City.

Basis of Payment - The linear quantity for FPL streetlight conduit items identified below shall be paid for at the contract unit price per linear foot (LF).

Payment shall be made under:

-

FPL-SL-001	FPL STREETLIGHT (1) 2" Conduit DIRECTIONAL BORE	LF
FPL-SL-002	FPL STREETLIGHT (2) 2" Conduit DIRECTIONAL BORE	LF
FPL-SL-SB	Install 24"x16" Splice Box	EA
FPL-SL-COORD	COORDINATION	LS

TP CONTRACT DURATION AND SCHEDULE MISCELLANEOUS

Description

The Contractor shall establish the contract duration for this task assignment for the FPL undergrounding. In no event shall the contract duration exceed 550 calendar days for this assignment, regardless of if other task assignments related to the undergrounding are being performed concurrently by Contractor. The Contractor shall provide a schedule supporting the proposed contract duration for this task assignment and shall identify the work activity durations provided are based on calendar days or working days. The Proposed Contract Time (PCT) reflected may be amended if delays associated with other City work creates reason for a time extension outside the Contractor's control.

The Contractor shall submit a baseline project schedule which supports the established contract duration. The Contractor's schedule shall include all undergrounding work in a logical sequence and in full consideration of all FPL

related work for this task assignment.

The Contractor shall maintain a current project schedule and submit schedule updates each month at estimate cut-off. Changes to schedule logic must be submitted to and accepted by the PM/City prior to incorporation into any monthly update.

If delays are encountered by the Contractor, non-compensable time may be granted if the Contractor can demonstrate to the PM/City that the efforts were properly coordinated and proven outside their control. All potential delays shall be immediately presented to the PM/City in writing within (7) days of impact to schedule. A preliminary request for an extension of contract time must be submitted in writing to the PM/City within ten calendar days after the commencement of a delay to work items associated with this task assignment. If the Contractor fails to submit this required preliminary request for an extension of contract time, the Contractor fully, completely, absolutely and irrevocably waives any entitlement to an extension of contract time for that delay. Each request for an extension of contract time shall include as a minimum the commencement date of the delay, the cause of the delay, and the item of work affected by the delay.

The Contractor shall provide any such delay with a reasonably complete description as to the cause and nature of the delay and the possible impacts to the Contractor's work by such delay. Failure by the Contractor to comply with the ten-calendar day notice shall constitute a waiver of the claim. There shall be no Contractor entitlement to any monetary compensation or time extension for any delays or delay impacts, whatsoever, that are not work items specific to this undergrounding project.

Request for a contract time extension shall include as a minimum all documentation that the Contractor wishes the City to consider related to the delay, and the exact number of days requested to be added to contract time. If the Contractor contends that the delay is compensable, then the Contractor shall also be required to submit with the request for a contract time extension a detailed cost analysis of the requested additional compensation. If the Contractor fails to submit this required request for a contract time extension, with or without a detailed cost analysis, depriving the City of the timely opportunity to verify the delay and the costs of the delay, the Contractor waives any entitlement to an extension of contract time or additional compensation for the delay.

When Contractors leave any equipment overnight on-site, All Contractor's equipment shall be properly placed where it will not be a hazard to the driving or walking public. The equipment will be properly safety taped/coned and secured.

The minimum number of activities included in the Schedule shall be those listed in the Schedule of Values and those listed below at a minimum:

- Materials Quality Tracking

- Long Lead Item procurements
- Start of Construction
- Clearing and Grubbing
- Construction Mobilization
- Maintenance of Traffic
- Permitting
- Utility Coordination
- FPL Scheduled Work
- Carrier Scheduled Work
- FPL Streetlighting Work

All work shall require close coordination with all respective stakeholders and allowances for work when required, including connections, by others and shall be included in the schedule. The schedule shall be fully integrated to achieve final completion within the maximum contract duration time. The Contractor is responsible for planning the work in a manner that properly considers all project elements, the need for continued service, and the final schedule for completion.

The Contractor will be responsible for notifying the Owner as sections are completed and submit required final as-builts upon section completion. The Contractor shall provide updated “as-built” plans reflecting the final conditions as the work is completed.

The Contractor shall be responsible for coordinating construction activities with other construction Projects that are impacted by or impact this Project. This includes Projects under the jurisdiction of City, FDOT, local governments, or other regional and state agencies.

The Contractor shall anticipate periodic meetings with PM/City personnel and other agencies for construction issues. Upon issuance of NTP Contractor shall initiate specific meetings with each stakeholder to discuss construction and design elements with the PM/City present. These meetings may include:

- Technical issue resolution
- Stakeholder coordination meetings
- Weekly progress meetings
- Easement coordination
- Local government and Utility agency coordination
- Schedule

During construction, the Contractor shall meet with PM/City on a weekly basis and provide a one-week look ahead for activities to be performed during the coming week. The Contractor shall, on a bi-weekly basis, provide written progress reports that describe the items of concern and the work performed on each scheduled task. The Contractor shall provide all support necessary to hold various public meetings,

which may include:

Public Information Meetings, meetings with elected and appointed officials, and meetings with special interest groups (private groups, homeowner associations, environmental groups, minority groups and individuals)

The Contractor shall attend meetings as requested by the PM/City for the term of the contract to support the public involvement program. Meetings to provide updates to parties interested in the construction of the project will be publicly advertised and will take place at City Hall.

The Contractor shall provide all technical assistance, data and information necessary for the day-to-day exchange of information with the public, all agencies and elected officials to keep them informed as to the progress and impacts the proposed project will create. This includes workshops, information meetings, and public hearings. The Contractor shall, on an as-needed basis, attend the meetings with an appropriate number of personnel to assist the PM/City's Project Representative.

The Contractor shall be responsible for the professional quality, technical accuracy and coordination of all surveys, drawings, as-builts, and other services furnished under this contract. The Contractor shall describe how the check and review processes are used to document and that required procedures are followed. The Contractor shall, without additional compensation, correct all errors or deficiencies in the work associated with this task assignment.

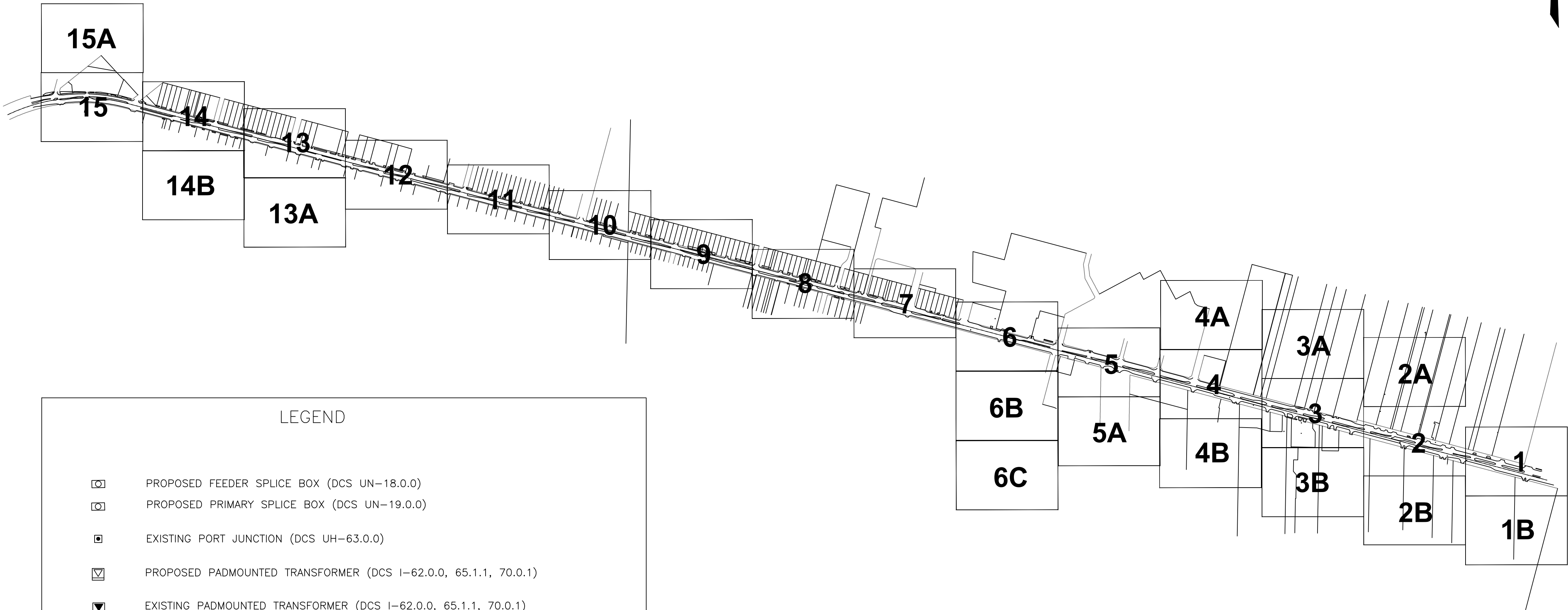
Price Proposal/Schedule-of-Values

City of Destin - Phase 1 Undergrounding

No.	Description	Qty.	Units	Unit Price	Total
I. GENERAL					
57-7	Survey, Stakeout & Record Drawings	1	LS		
101-1	Mobilization	1	LS		
102-1	Maintenance of Traffic	1	LS		
				SUBTOTAL	
II. CLEARING, GRUBBING, RESTORATION, AND SIDEWALK					
104-10-3	Sediment Barrier	5,500	LF		
110-1-1	Clearing & Grubbing	1	LS		
120-6	Sidewalk Restoration	12,000	SF		
				SUBTOTAL	
III. FPL INFRASTRUCTURE					
FPL-630-1-12	FPL Conduit 1PN1C DIRECTIONAL BORE	4,900	LF		
FPL-630-2-12	FPL Conduit 2PN2C DIRECTIONAL BORE	4,000	LF		
FPL-630-3-12	FPL Conduit 3PN3C DIRECTIONAL BORE	33,550	LF		
FPL-630-4-12	FPL Conduit 4PN4C DIRECTIONAL BORE	100	LF		
FPL-630-6-12	FPL Conduit 6PN6C DIRECTIONAL BORE	16,500	LF		
FPL-FNC-6-12	FPL Conduit FNC DIRECTIONAL BORE	30,300	LF		
FPL-630-SECNDRY	FPL Secondary Conduit	18,175	LF		
FPL-635-SB-1	FPL Splice Box (Feeder)	15	EA		
FPL-635-SB-2	FPL Splice Box (Primary)	70	EA		
FPL-635-HH-1	FPL 30" Handhole / Above ground Pedestals	55	EA		
FPL-FEEDER CBL	FPL Feeder Cable pull (Wire)	36,000	LF		
FPL-PRMRY-CBL	FPL Primary cable pull (Wire)	193,000	LF		
FPL SERV CABL	FPL Secondary Cable (Wire)	19,000	LF		
FPL-635-SWC-1	FPL PME 9/PME 11/Switch Cabinet Installation	54	EA		
FPL-635-TSF-1	FPL Transformer & Pad (SINGLE PHASE)	64	EA		
FPL-635-TSF-1	FPL Transformer & Pad (3-PHASE)	20	EA		
FPL-635-TSF-1	FPL Transformer & Pad (OPEN DELTA)	13	EA		
FPL-635-CAP-1	FPL Capacitor Bank Installation	4	EA		
FPL - PED-1	FPL 3-Phase Pedestals	14	EA		
FPL-635-WH-1	FPL Meter Box Connections	275	EA		
FPL-UG-CONV	CONVERSION OF CURRENTLY UNDERGROUNDED SERVICES	275	EA		
FPL-UG-COM CONV	CONVERSION OF COMMERCIAL UNDERGROUNDED SERVICES	155	EA		
FPL-EASEMENT	COORDINATION OF EASEMENTS	126	EA		
FPL-EASEMENT SUR	EASEMENT SURVEY	85	EA		
FPL-OH-CONV	CONVERSION OF AERIAL SERVICES	300	EA		
FPL-UG-CONV	CONVERSION OF UG SERVICES	55	EA		
FPL-MISC/COORD	INCIDENTALS/COORDINATION/MANAGEMENT	1	LS		
FPL-SWITCHING	SWITCHING/FPL COORDINATION	1	LS		
				SUBTOTAL	
IV. CARRIERS					
OPTIONAL BID ITEMS					
CARRIER C-01	(4) 2" Conduit DIRECTIONAL BORE "COX" (Install)	18,500	LF		
CARRIER C-02	(3) 2" Conduit DIRECTIONAL BORE Uniti Fiber (Install)	17,000	LF		
CARRIER C-03	(3) 2" Conduit DIRECTIONAL BORE Century Link (Install)	17,000	LF		
CONDUIT-01	(1) 2" Conduit HDPE (Furish)	18,500	LF		
CONDUIT-02	(2) 2" Conduit HDPE (Furnish)	18,500	LF		
CARRIER-COORD	COORDINATION	1	LS		
				SUBTOTAL	
V. CARRIERS					
FPL STREETLIGHT INFRASTRUCTURE					
FPL-SL-001	FPL STREETLIGHT (1) 2" Conduit DIRECTIONAL BORE	32,000	LF		
FPL-SL-002	FPL STREETLIGHT (2) 2" Conduit DIRECTIONAL BORE	32,000	LF		
FPL-SL-SB	Install 24"x16" Splice Box	150	EA		
FPL-SL-COORD	COORDINATION	1	LS		
				SUBTOTAL	
VI. BOND					
BOND-001	BONDING	1	LS		
				SUBTOTAL	
SUMMARY					
I. GENERAL					
II. CLEARING, GRUBBING, RESTORATION, AND SIDEWALK					
III. FPL INFRASTRUCTURE					
IV. CARRIERS					
V. FPL STREETLIGHT INFRASTRUCTURE					
VI. BOND					
SUBTOTAL					
AWARD: Base Bid Total =					\$
Written in Words: _____					

					\$

WR 11341323 - CITY OF DESTIN CONVERSION - UG FOR CONSTRUCTION



LEGEND

- PROPOSED FEEDER SPLICE BOX (DCS UN-18.0.0)
- PROPOSED PRIMARY SPLICE BOX (DCS UN-19.0.0)
- EXISTING PORT JUNCTION (DCS UH-63.0.0)
- PROPOSED PADMOUNTED TRANSFORMER (DCS I-62.0.0, 65.1.1, 70.0.1)
- EXISTING PADMOUNTED TRANSFORMER (DCS I-62.0.0, 65.1.1, 70.0.1)
- EXISTING OPEN WYE-OPEN DELTA TRANSFORMER (DCS I-68.0.2)
- PROPOSED PADMOUNTED DISCONNECT SWITCH (DCS C-32.0.1, 32.0.2, 32.0.3)
- EXISTING SOLID BLADE SWITCH (UH-20.0.0 F1)
- PROPOSED DISCONNECT SWITCH (UH-15.3.1)

TWNP:00S. RNg:00E. SEC:00. QTR:_____

AS-BUILT COPY		AS-BUILT CREW PRINT		Easement? YES ☐ NO ☐		Survey/Stake? YES ☐ NO ☐		Work with SMO? YES ☐ NO ☐			DESIGNED BY	C. OCHOA	CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION US HWY-90 DESTIN/OKALOOSA, FL		
Initials		Foreman's Signature		Tree Work? YES ☐ NO ☐		Designer/Stake? YES ☐ NO ☐		CT/Special Mtr? YES ☐ NO ☐			DRAWN BY	C.OCHOA			
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.				Map Posting? YES ☐ NO ☐		Trench Feet		Duct Bank Feet			DATE	11/14/22			
Supervisor's Signature		Date		All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.		CITY		DR. DIST.	COUNTY AIR		STATE RD	FAA		MAP NO.	-
Foreman's Signature		Date		Posted by		WMD		RR XING	COUNTY RD.	TRANSM.				DWG NO.	GP
						Telephone Request? YES ☐ NO ☐		CATV Request? YES ☐ NO ☐				0 20 40 80 FEET		WR:11341323WRD011-34-323	

GENERAL NOTES:

☐ INACCESSIBLE ☒ 12KV ☐ FUTURE 23KV ☐ 23KV ☒ SALT SPRAY ☐

CONSTRUCTION NOTES - WR# 11341247

REQUIRED DRAWINGS
FOR CONSTRUCTION NOTES SEE DWG#

COORDINATE WITH:
WR 11341326 - OH FDR Hardening
WR 11341335 - OH Equivalent
WR 11341340 - OH Make Ready
WR 11341346 - OH Removal

STANDARD NOTES
ALL CABLE AND/OR CONDUIT ENDS ARE TO BE MARKED WITH AN ELECTRIC MARKER (XXX') DENOTED CABLE PULL DISTANCE
UNDERGROUND OBSTRUCTIONS ARE TO BE LOCATED PRIOR TO DIGGING
INSTALL NEUTRAL BOND FOR COMMUNICATIONS COMPANIES AT ALL SINGLE PHASE TRANSFORMERS PER D.C.S., G-11.0.0
GENERAL GROUNDING, GUYING AND U-GUARD NOTES:
- U-GUARDS (DCS UH-14.0.0 AND UH-14.0.2)
- WOOD POLES - USE TAPCON FASTENERS IN ALL BASE SECTION HOLES AND EVERY OTHER HOLE OF TOP SECTIONS.
- CONCRETE POLES - USE AT LEAST 10 TAPCON FASTENERS PER 10 FOOT U-GUARD SECTION. FOR SHORTER SECTIONS, USE AT LEAST 6 TAPCON FASTENERS.
- BACK PLATE (UH-14.0.1) REQUIRED ON FIRST 10 FOOT SECTION ABOVE GROUND (WOOD AND CONCRETE POLES)
- GUYING (DCS D-2.0.0) - GUYS SHALL HAVE A GUY MARKER (GUY GUARD) INSTALLED AT ALL LOCATIONS.
- RISERS (DCS G-10.1.0 AND G-10.2.0) - BOND ALL METAL RISER CONDUITS ON POLES.
- GROUND RODS (DCS G-3.0.1) - TOP MUST BE A MINIMUM OF 6 INCHES BELOW GRADE.
UTILITY CONTACT LIST
CALL SUNSHINE 1-800-432-4770

ADDITIONAL CONSTRUCTION NOTES

LOC 1.4:
- INSTALL 3-900A GOAB SWITCH PER GULF SUG 19001
- INSTALL 1-5" U-GRD ON E. QUAD OF POLE

LOC 1.5:
- INSTALL 3-900A GOAB SWITCH PER GULF SUG 19001
- INSTALL 1-5" U-GRD ON N. QUAD OF POLE

LOC 3.4:
- INSTALL 3PH PRIMARY RISER PER DCS UH-20.0.0 FIG 2
- INSTALL 1-5" U-GRD ON S. QUAD OF POLE

LOC 4.8:
- INSTALL 3PH PRIMARY RISER PER DCS UH-20.0.0 FIG 1
- INSTALL 1-5" U-GRD ON W. QUAD OF POLE

LOC 8.1:
- INSTALL 3PH PRIMARY RISER PER DCS UH-15.1.0 FIG 1
- INSTALL 1-5" U-GRD ON W. QUAD OF POLE

LOC 17.1:
- INSTALL 3-900A GOAB SWITCH PER GULF SUG 19001
- INSTALL 1-5" U-GRD ON E. QUAD OF POLE

LOC 23.2:
- INSTALL 3PH PRIMARY RISER PER DCS UH-15.1.0 FIG 1
- INSTALL 1-5" U-GRD ON W. QUAD OF POLE

LOC 24.1:
- INSTALL 3PH PRIMARY RISER PER DCS UH-20.0.0 FIG 1
- INSTALL 1-5" U-GRD ON W. QUAD OF POLE

LOC 33.1:
- INSTALL 3-900A GOAB SWITCH PER GULF SUG 19001
- INSTALL 1-5" U-GRD ON E. FACE OF POLE

LOC 40.1:
- INSTALL (2) 3PH PRIMARY RISERS, BACK TO BACK PER DCS UH-15.2.0
- INSTALL 1-5" U-GRD ON E. FACE OF POLE
- INSTALL 1-5" U-GRD ON W. FACE OF POLE

LOC 47.1:
- INSTALL (2) 3PH PRIMARY RISERS, BACK TO BACK PER DCS UH-15.2.0
- INSTALL 1-5" U-GRD ON E. FACE OF POLE
- INSTALL 1-5" U-GRD ON W. FACE OF POLE

LOC 57.1:
- INSTALL (2) 3PH PRIMARY RISERS, BACK TO BACK PER DCS UH-15.2.0
- INSTALL 1-5" U-GRD ON E. FACE OF POLE
- INSTALL 1-5" U-GRD ON W. FACE OF POLE

LOC 62.1:
- INSTALL 3-900A GOAB SWITCH PER GULF SUG 19001
- INSTALL 1-5" U-GRD ON W. QUAD OF POLE

LOC 61.7:
- INSTALL (2) 3PH PRIMARY RISERS, BACK TO BACK PER DCS UH-15.2.0
- INSTALL 1-5" U-GRD ON E. FACE OF POLE
- INSTALL 1-5" U-GRD ON W. FACE OF POLE

LOC 65.1:

- INSTALL 3PH PRIMARY RISER PER DCS UH-15.1.0 FIG 1
- INSTALL 1-5" U-GRD ON W. QUAD OF POLE

PME DEADFRONT PAD MOUNTED SWITCHGEAR
PME-9
- INSTALL 15KV PME-9 PER DCS C-32.0.1 THROUGH C-32.0.4
- INSTALL CONCRETE PAD PER UX-122.0.0
LOC 2, 3, 4, 5, 8, 9, 10, 11, 12, 14, 15, 16, 19, 20, 21, 22, 23, 24, 25, 26, 30, 34, 35, 39, 40, 42, 44, 45, 47, 51, 52, 54, 55, 56, 57, 58, 59, 60, 61, 65, 66, 67, 68, & 69

PME-11
- INSTALL 15KV PME-11 PER DCS C-32.0.1 THROUGH C-32.0.4
- INSTALL CONCRETE PAD PER UX-122.0.0
LOC 1, 6, 7, 13, 17, 18, 33, 62, 63, & 64

3PH 1200KVAR PAD-MOUNTED CAPACITOR BANK
- INSTALL 15KV 200A 95KV BIL 1200KVAR PAD-MOUNTED CAPACITOR BANK PER DCS J-4.0.0
- INSTALL CONCRETE PAD PER UX-108.0.0
LOC 34.1, 44.8, 59.7, & 64.1

SINGLE PHASE PMTX
- INSTALL ALL SINGLE PHASE DEADFRONT PADMOUNTED TRANSFORMERS (25KVA TRHOUGHT 75KVA) PER DCS I-65.1.1
- INSTALL ALL 100KVA SINGLE PHASE DEADFRONT PADMOUNTED TRANSFORMERS PER DCS I-65.0.1
- INSTALL ALL 167KVA SINGLE PHASE DEADFRONT PADMOUNTED TRANSFORMERS PER DCS I-62.0.1
- INSTALL ALL CONCRETE PADS PER UX-117.0.0

NEW 25KVA PMTX:
LOC 1.3, 4.1, 4.2, 4.7, 5.7, 5.9, 6.4, 9.1, 10.2, 11.1, 12.1, 13.1, 15.2, 16.2, 20.2, 25.7, 25.8, 34.6, 34.14, 34.16, 42.1, 47.11, 47.15, 51.1, 54.1, 54.2, 54.3, 54.4, 54.7, 56.8, 59.2, 61.9, 64.2, 64.3, & 64.4

EXISTING 25KVA PMTX:
- TIE INTO EXISTING PMTX. INSTALL 1-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 15.4, 34.3, 34.12, 34.13, 34.16, & 56.12

EXISTING 37.5KVA PMTX:
- TIE INTO EXISTING PMTX. INSTALL 1-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 15.3

NEW 50KVA PMTX:
LOC 25.3, 25.4, 26.1, 26.4, 26.7, 26.8, 34.9, 39.1, 39.2, 39.6, 42.2, 44.6, 47.5, 47.9, 58.1, 59.3, 61.5, 61.7, & 61.11

EXISTING 50KVA PMTX:
- TIE INTO EXISTING PMTX. INSTALL 1-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 34.15

NEW 75KVA PMTX:
LOC 26.9, 44.2, 47.4, 56.2, & 61.1

EXISTING 75KVA PMTX:
- TIE INTO EXISTING PMTX. INSTALL 1-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 25.2, 25.5, & 59.2

NEW 100KVA PMTX:
LOC 34.17, 44.1, 56.15, & 61.3

EXISTING 100KVA PMTX:
- TIE INTO EXISTING PMTX. INSTALL 1-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 51.4, 56.6, 56.7, & 56.11

NEW 167KVA PMTX:
LOC 39.4

EXISTING 167KVA PMTX:
- TIE INTO EXISTING PMTX. INSTALL 1-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 22.3, 39.3, & 51.3

3 PHASE OPEN DELTA PMTX
- INSTALL ALL 3PHASE OPEN DELTA DEADFRONT PADMOUNTED TRANSFORMERS PER DCS I-68.0.2
- INSTALL ALL CONCRETE PADS PER UX-115.0.0

EXISTING 25/25KVA OPEN DELTA PMTX
- TIE INTO EXISTING PMTX. INSTALL 2-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 56.19

EXISTING 37.5/25KVA OPEN DELTA PMTX
- TIE INTO EXISTING PMTX. INSTALL 2-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 5.3

NEW 50/25KVA OPEN DELTA PMTX
LOC 5.1, 11.2, 42.4, 44.4, & 59.1

EXISTING 50/25KVA OPEN DELTA PMTX
- TIE INTO EXISTING PMTX. INSTALL 2-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 34.4

NEW 50/50KVA OPEN DELTA PMTX
LOC 54.6 & 61.5

NEW 75/25KVA OPEN DELTA PMTX
LOC 34.7 & 39.5

EXISTING 75/37.5KVA OPEN DELTA PMTX
- TIE INTO EXISTING PMTX. INSTALL 2-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 34.5

NEW 75/50KVA OPEN DELTA PMTX
LOC 10.1

NEW 100/25KVA OPEN DELTA PMTX
LOC 47.2

NEW 100/50KVA OPEN DELTA PMTX
LOC 42.3

NEW 167/25KVA OPEN DELTA PMTX
LOC 44.5

3 PHASE PMTX
- INSTALL ALL 3PHASE DEADFRONT LOOP STYLE PADMOUNTED TRANSFORMERS (75KVA THROUGH 750KVA) PER DCS I-70.0.1
- INSTALL ALL CONCRETE PADS PER UX-114.0.0

EXISTING 3 PHASE 112KVA PMTX:
- TIE INTO EXISTING PMTX. INSTALL 3-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 22.2 & 47.6

NEW 3 PHASE 150KVA (120/208V)
LOC 5.8, 11.9, 16.1, 20.1, 26.2, 26.6, 26.11, 34.8, 44.3, 47.8, 54.5, 58.4, & 61.2

NEW 3 PHASE 150KVA (277/480V)
LOC 6.3

EXISTING 3 PHASE 150KVA PMTX:
- TIE INTO EXISTING PMTX. INSTALL 3-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 11.4, 39.7, 47.13, 47.14, & 56.13

EXISTING 3 PHASE 225KVA PMTX:
- TIE INTO EXISTING PMTX. INSTALL 3-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 4.6, 5.4, 6.1, 6.6, 10.4, 44.7, 47.25, 58.2, & 59.4

NEW 3 PHASE 300KVA (120/208V)
LOC 26.3, 26.5, 56.1, 59.6, & 61.4

EXISTING 3 PHASE 300KVA PMTX:
- TIE INTO EXISTING PMTX. INSTALL 3-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 56.5 & 56.21

NEW 3 PHASE 500KVA PMTX (120/208V):
- TIE INTO EXISTING PMTX. INSTALL 3-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 6.2

EXISTING 3 PHASE 500KVA PMTX:
- TIE INTO EXISTING PMTX. INSTALL 3-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 4.4, 5.12, & 11.7

EXISTING 3 PHASE 750KVA PMTX:
- TIE INTO EXISTING PMTX. INSTALL 3-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 4.5, 5.6, 22.4, & 51.5

EXISTING 3 PHASE 1000KVA PMTX:
- TIE INTO EXISTING PMTX. INSTALL 3-200AMP 15KV ELBOW TERMINATOR PER DCS UH-29.0.1
LOC 1.1, 2.1, & 11.5

SPLICE BOX INSTALLATION
NEW 5'X10' FEEDER SPLICE BOX
- INSTALL ALL 5'X10' FEEDER SPLICE BOXES PER DCS UN-18.0.0
- INSTALL 1K-1K STRAIGHT SPLICES PER DCS UE-19.0.0 INSIDE SPLICE BOXES
LOC 4.9, 12.01, 14.01, 18.01, 22.6, 23.1, 63.01, 64.01, & 67.01

NEW 48" PRIMARY SPLICE BOX
- INSTALL ALL 48" PRIMARY SPLICE BOXES PER DCS UN-19.0.0
- INSTALL 1/0A - 1/0A STRAIGHT SPLICES PER DCS UE-19.0.0 INSIDE SPLICE BOXES
LOC 1.2, 2.2, 2.21, 4.41, 5.2, 5.5, 5.13, 5.31, 5.71, 6.5, 6.21, 9.2, 10.3, 11.3, 11.6, 11.8, 11.11, 11.41, 11.81, 12.2, 13.2, 15.1, 15.6, 15.31, 19.1, 19.2, 20.4, 22.1, 22.5, 22.25, 25.1, 25.6, 34.31, 39.8, 47.3, 47.7, 47.12, 51.2, 51.6, 56.3, 56.4, 56.9, 56.14, 56.17, 58.3, 59.5, 64.21, 67.2, 68.1, 69.1, & 69.2

EXISTING 48" PRIMARY SPLICE BOX
- TIE INTO EXISTING PRIMARY SPLICE BOX
- INSTALL 1/0A - 1/0A STRAIGHT SPLICES PER DCS UE-19.0.0 INSIDE SPLICE BOXES
LOC 4.3, 4.6, 5.11, 34.11, 56.16, & 56.18

EXISTING ABOVE GROND PEDESTAL
-TIE INTO EXISTING ABOVEGROUND PEDESTAL
- INSTALL 1/0A - 1/0A STRAIGHT SPLICES PER DCS UE-19.0.0 INSIDE PEDESTAL
LOC 14.1, 15.5, 66.1, 67.1, & 69.3

COMMERCIAL SVC SPANS
-CUSTOMER TO TRENCH/BACKFILL AND INSTALL CONDUIT, FPL CABLE AND METER CAN. ONCE ELECTRICAL INSPECTION OF NEW METER CAN IS COMPLETED BY CUSTOMER, FPL TO MAKE CONNECTIONS AND TAP UP SERVICE.
-ALL SPANS IN 2" CONDUIT UNLESS OTHERWISE NOTED

TWNP: 00S_ RNG: 00E_ SEC: 00_ QTR: _____

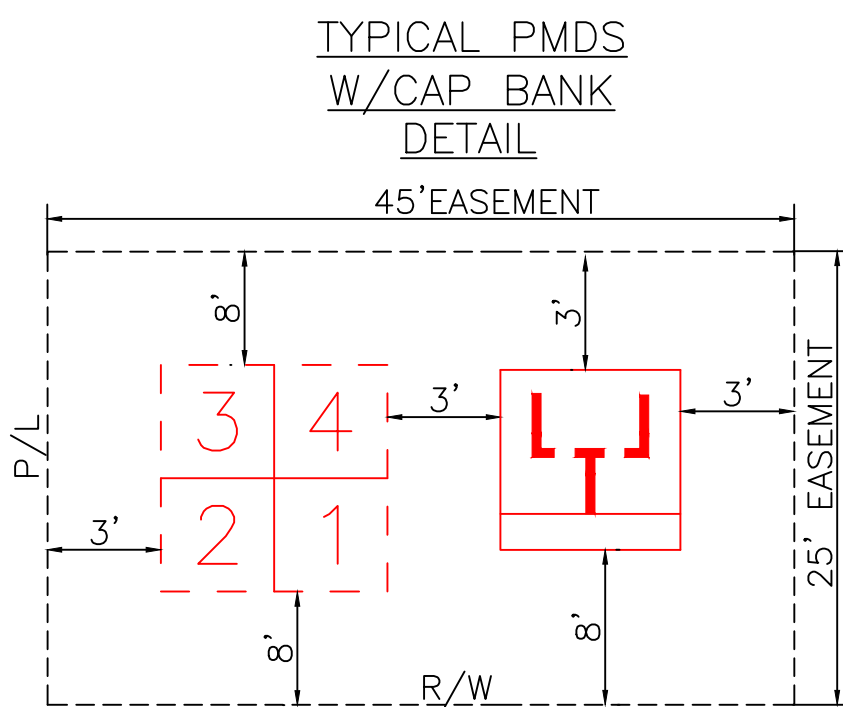
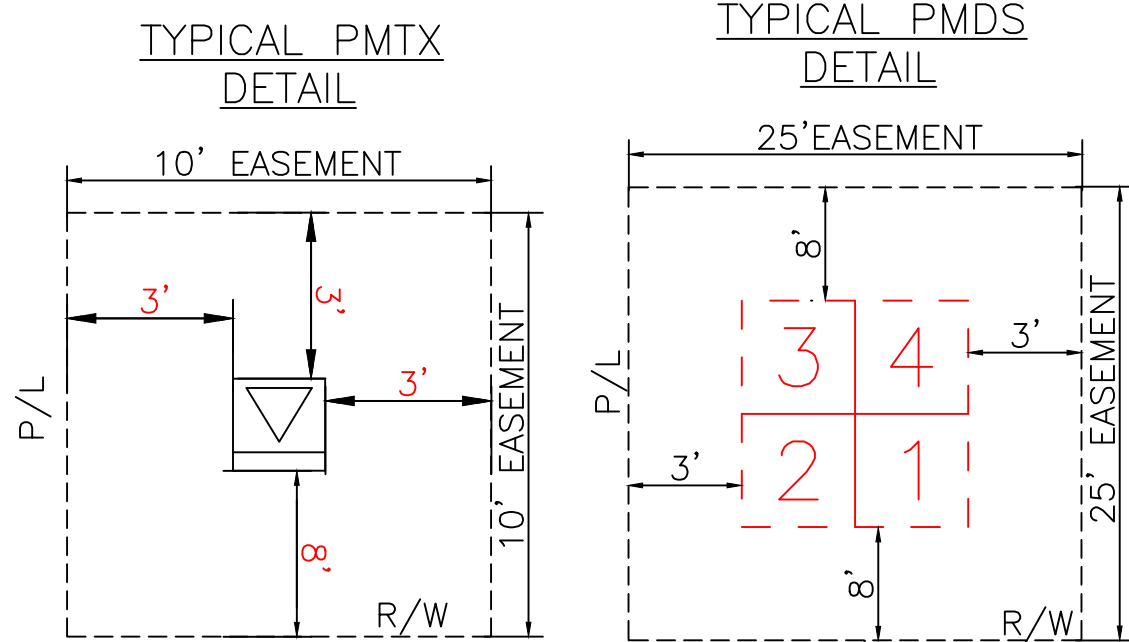
AS—BUILT COPY		AS—BUILT CREW PRINT		Easement? YES ☐ NO ☐		Survey/Stake? YES ☐ NO ☐		Work with SMO? YES ☐ NO ☐			DESIGNED BY		M/A: NW CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION US HWY—90 DESTIN/OKALOOSA, FL				
Initials Cert. Date		Foreman's Signature Date		Tree Work? YES ☐ NO ☐		Designer/Stake? YES ☐ NO ☐		CT/Special Mtr? YES ☐ NO ☐			DRAWN BY						
Job CERTIFIED COMPLETED as shown on this AS—BUILT print. Material changes shown on ROS.				Map Posting? YES ☐ NO ☐		Trench Feet		Duct Bank Feet			DATE						
Supervisor's Signature Date						CITY		DR. DIST.	COUNTY		AIR	STATE		RD	FAA	MAP NO.	—
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.								WMD		RR	XING	COUNTY	RD.	TRANS.		DWG NO.	GP
Foreman's Signature Date						Posted by		Telephone Request? YES ☐ NO ☐		CATV Request? YES ☐ NO ☐				0 20 40 80 FEET		WR: 11341323 WR: D0113 — 41 — 323	

CAD NAME: NO—NAME

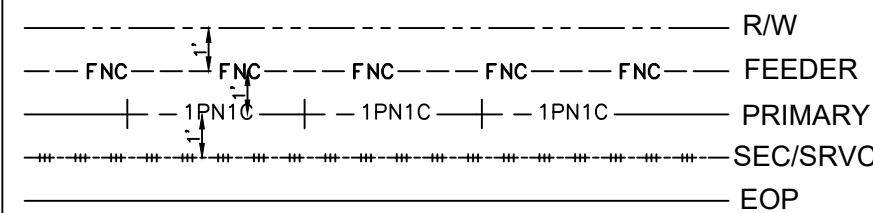
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PLOT DATE: 00/00/00

LOCATION SKETCH
N.T.S.



GENERAL CABLE TIE DOWN DETAILS:
(N.T.S.)



REFERENCE DWG's

ROW AGREEMENT

EASEMENTS REQUIRED

FOR CONTINUATION SEE PAGE 1B

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)

The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

AS-BUILT COPY	AS-BUILT CREW PRINT
Initials	Cert. Date
Foreman's Signature	Date
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.	
Supervisor's Signature	Date
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.	
Foreman's Signature	Date

Easement?	YES ☐ NO ☐	Survey/Stake?	YES ☐ NO ☐	Work with SMO?	YES ☐ NO ☐
Tree Work?	YES ☐ NO ☐	Designer/Stake?	YES ☐ NO ☐	CT/Special Mtr?	YES ☐ NO ☐
Map Posting?	YES ☐ NO ☐	Trench Feet	Duct Bank Feet		
CITY	DR. DIST.	COUNTY AIR	STATE RD	FAA	
	WMD	RR XING	COUNTY RD.	TRANSM.	
Posted by	Telephone Request?	YES ☐ NO ☐	CATV Request?	YES ☐ NO ☐	

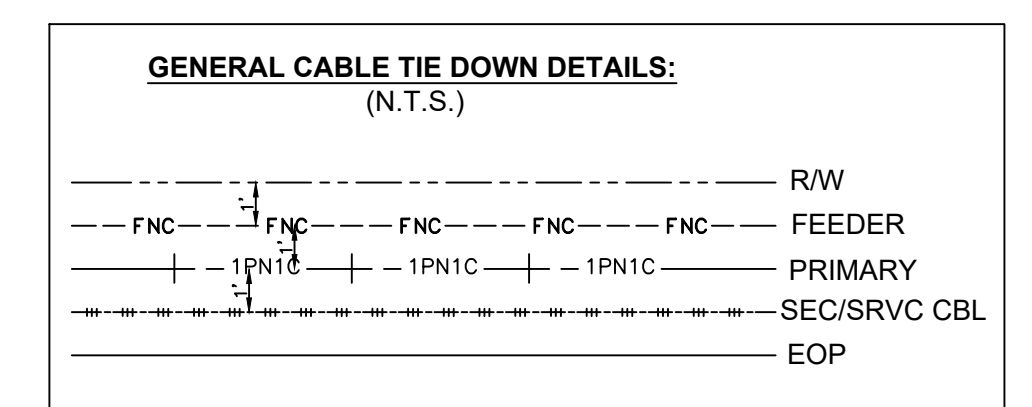
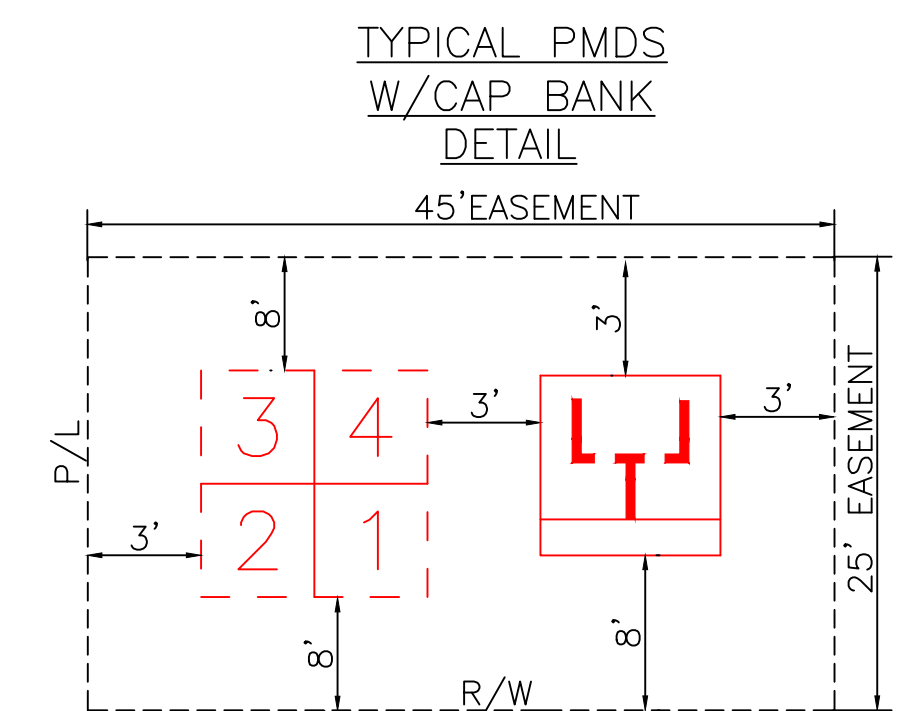
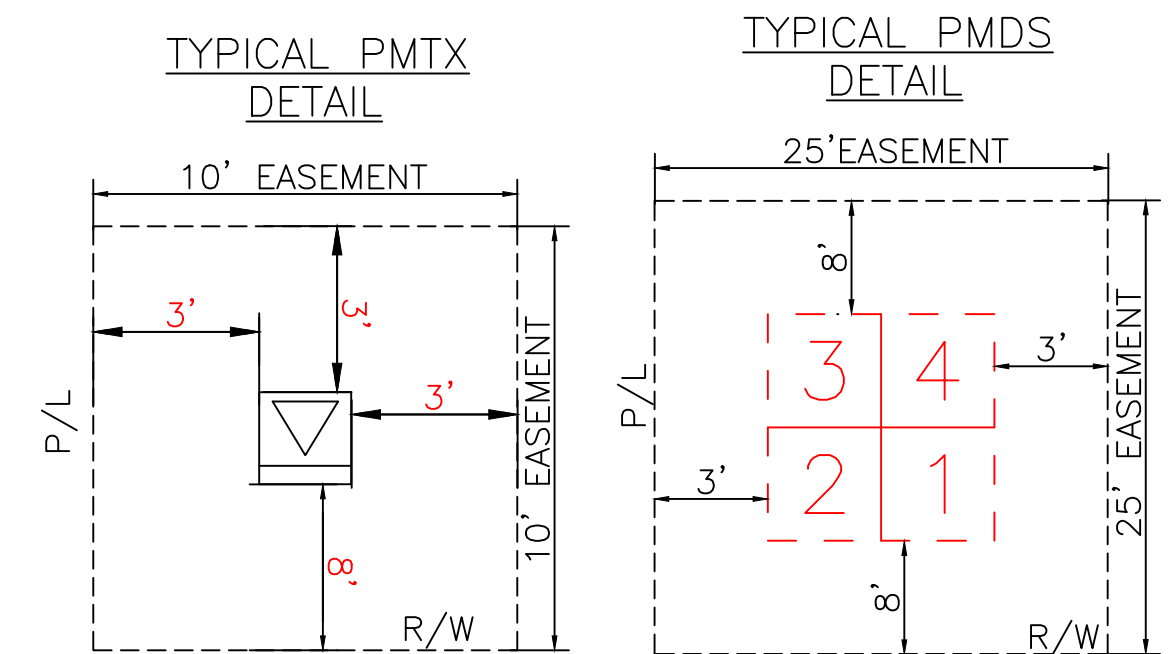
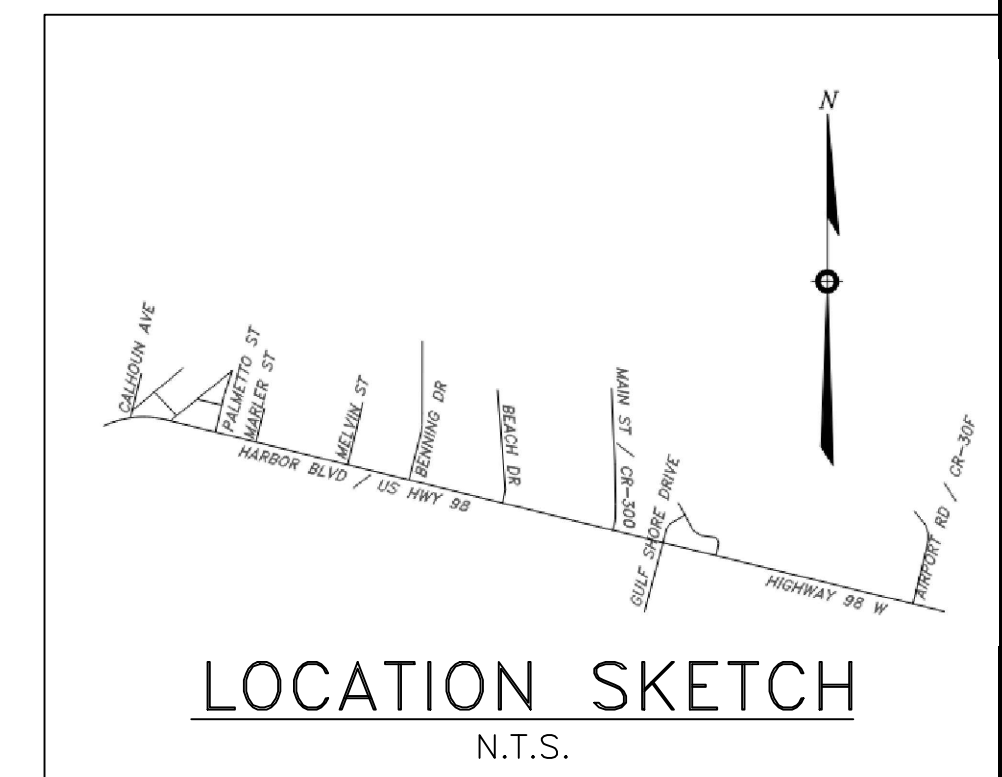
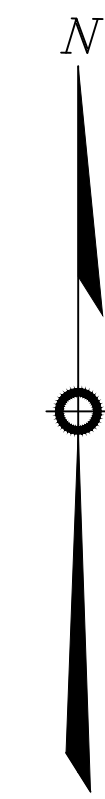
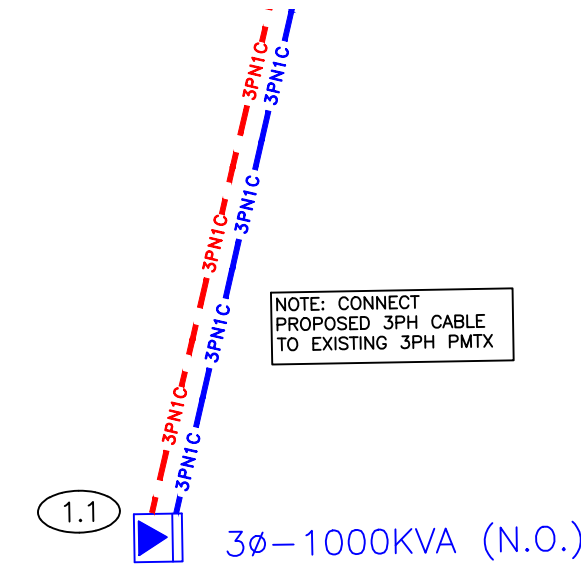


DESIGNED BY	
DRAWN BY	
DATE	
MAP NO.	-
0 20 40 80 FEET	

W/A: NW
CITY OF DESTIN PHASE 1
UG FOR CONSTRUCTION
US HWY-90
DESTIN/OKALOOSA, FL
DWG NO. PAGE 1
WR: 11341323 WR: D0113 - 41 - 323

FOR CONTINUATION SEE PAGE 1

1B



REFERENCE DWG's

EASEMENTS REQUIRED

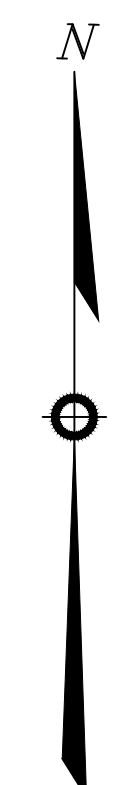
Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)

The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

AS-BUILT COPY		AS-BUILT CREW PRINT		Easement? YES ☐ NO ☐		Survey/State? YES ☐ NO ☐		Work with SMO? YES ☐ NO ☐											
Initials _____ Cart. Date _____		Foreman's Signature _____ Date _____		Tree Work? YES ☐ NO ☐		Designer/State? YES ☐ NO ☐		CT/Special Mtr? YES ☐ NO ☐											
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.				Map Posting? YES ☐ NO ☐		Trench Feet _____		Duct Bank Feet _____											
Supervisor's Signature _____ Date _____		All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.		FOR FPL RECORD <table><tr><td>CITY</td><td>DR. DIST.</td><td>COUNTY AIR</td><td>STATE RD</td><td>FAA</td></tr><tr><td>WMD</td><td>RR XING</td><td>COUNTY RD.</td><td>TRANSM.</td><td></td></tr></table>						CITY	DR. DIST.	COUNTY AIR	STATE RD	FAA	WMD	RR XING	COUNTY RD.	TRANSM.	
CITY	DR. DIST.									COUNTY AIR	STATE RD	FAA							
WMD	RR XING	COUNTY RD.	TRANSM.																
Foreman's Signature _____ Date _____		Posted by _____		Telephone Request? YES ☐ NO ☐		CATV Request? YES ☐ NO ☐													



DESIGNED BY		M/A: NW CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION US HWY-90 DESTIN/OKALOOSA, FL
DRAWN BY		
DATE		
MAP NO.	-	
0 20 40 80  FEET		DWG NO. PAGE 1B WR: 11-341323 WR: D0113 - 41 - 323



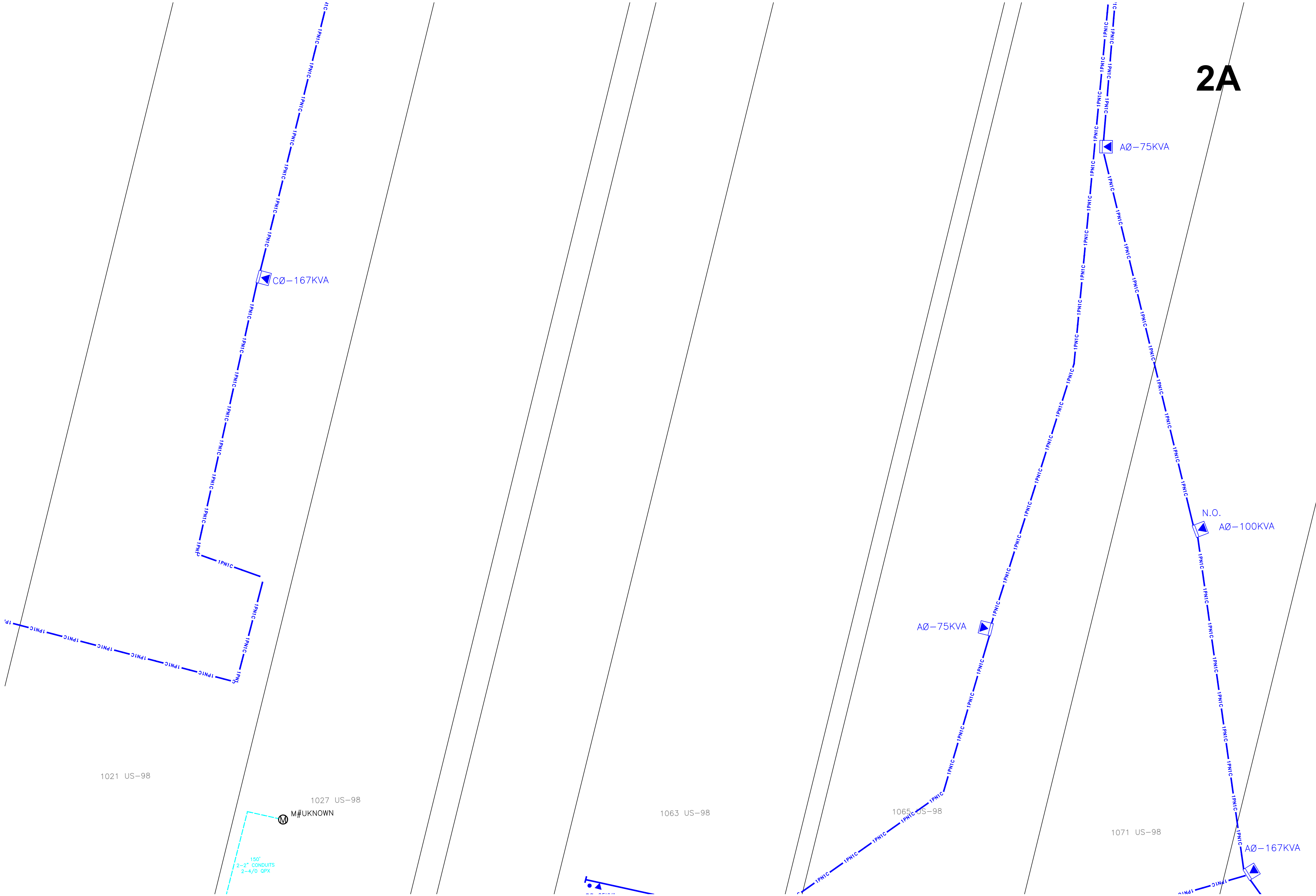
GENERAL CABLE TIE DOWN DETAILS:
(N.T.S.)

----- R/W
----- FEEDER
----- PRIMARY
----- SEC/SRVCS CBL
----- EOP

M/A: NW CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION US HWY-90 DESTIN/OKALOOSA, FL	
DWG NO.	PAGE 2
WR: 11341323	WR: D0113 — 41 — 323

CAD NAME: NO-NAME
PLOT TIME: 00:00:00
PLOT DATE: 00/00/00

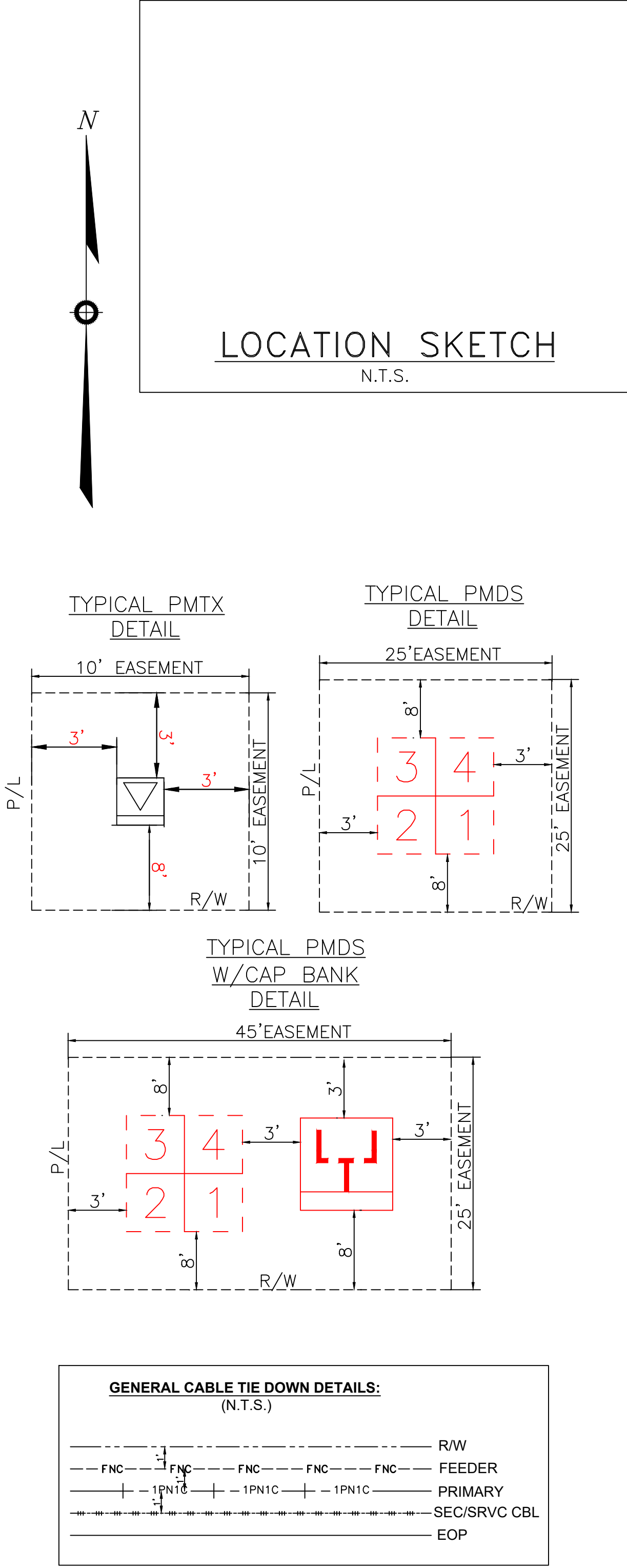
☐ INACCESSIBLE ☒ 12KV ☐ FUTURE 23KV ☐ 23KV ☒ SALT SPRAY ☐



FOR CONTINUATION SEE PAGE 2

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)

The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.



REFERENCE DWG's

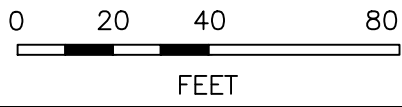
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AS-BUILT COPY	AS-BUILT CREW PRINT
Initials _____ Cert. Date _____	Foreman's Signature _____ Date _____
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.	
Supervisor's Signature _____ Date _____	
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.	
Foreman's Signature _____ Date _____	

Easement?	YES ☐ NO ☐	Survey/Stake?	YES ☐ NO ☐	Work with SMO?	YES ☐ NO ☐
Tree Work?	YES ☐ NO ☐	Designer/Stake?	YES ☐ NO ☐	CT/Special Mtr?	YES ☐ NO ☐
Map Posting?	YES ☐ NO ☐	Trench Feet		Duct Bank Feet	
		CITY	DR. DIST.	COUNTY AIR	STATE RD
		FAA			
		WMD	RR XING	COUNTY RD.	TRANSM.
Posted by		Telephone Request?	YES ☐ NO ☐	CATV Request?	YES ☐ NO ☐

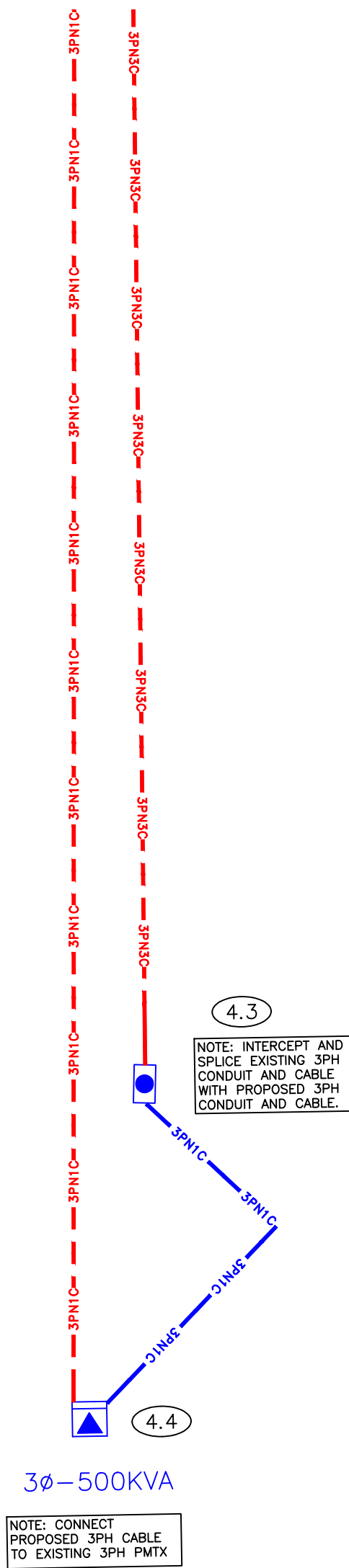
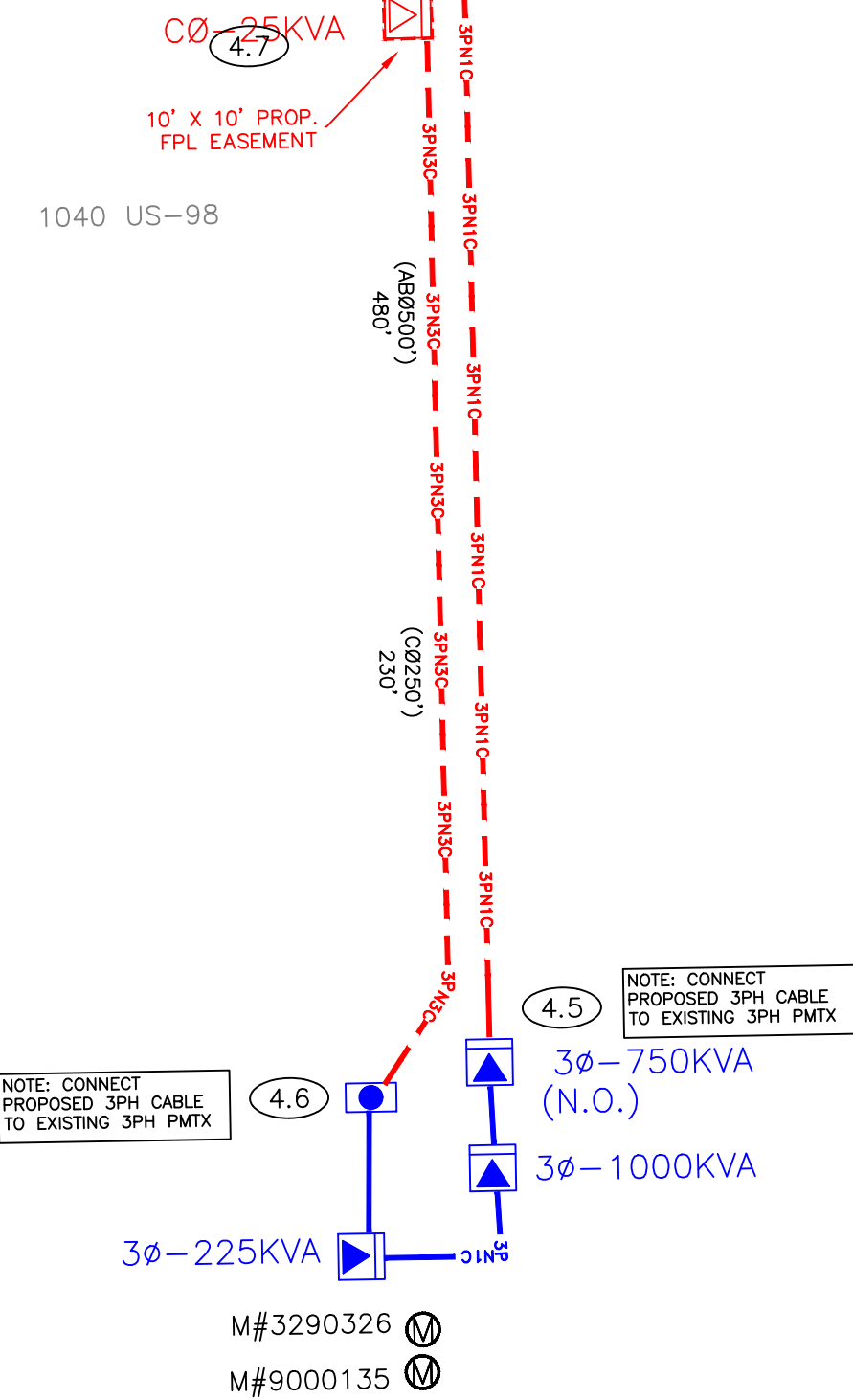
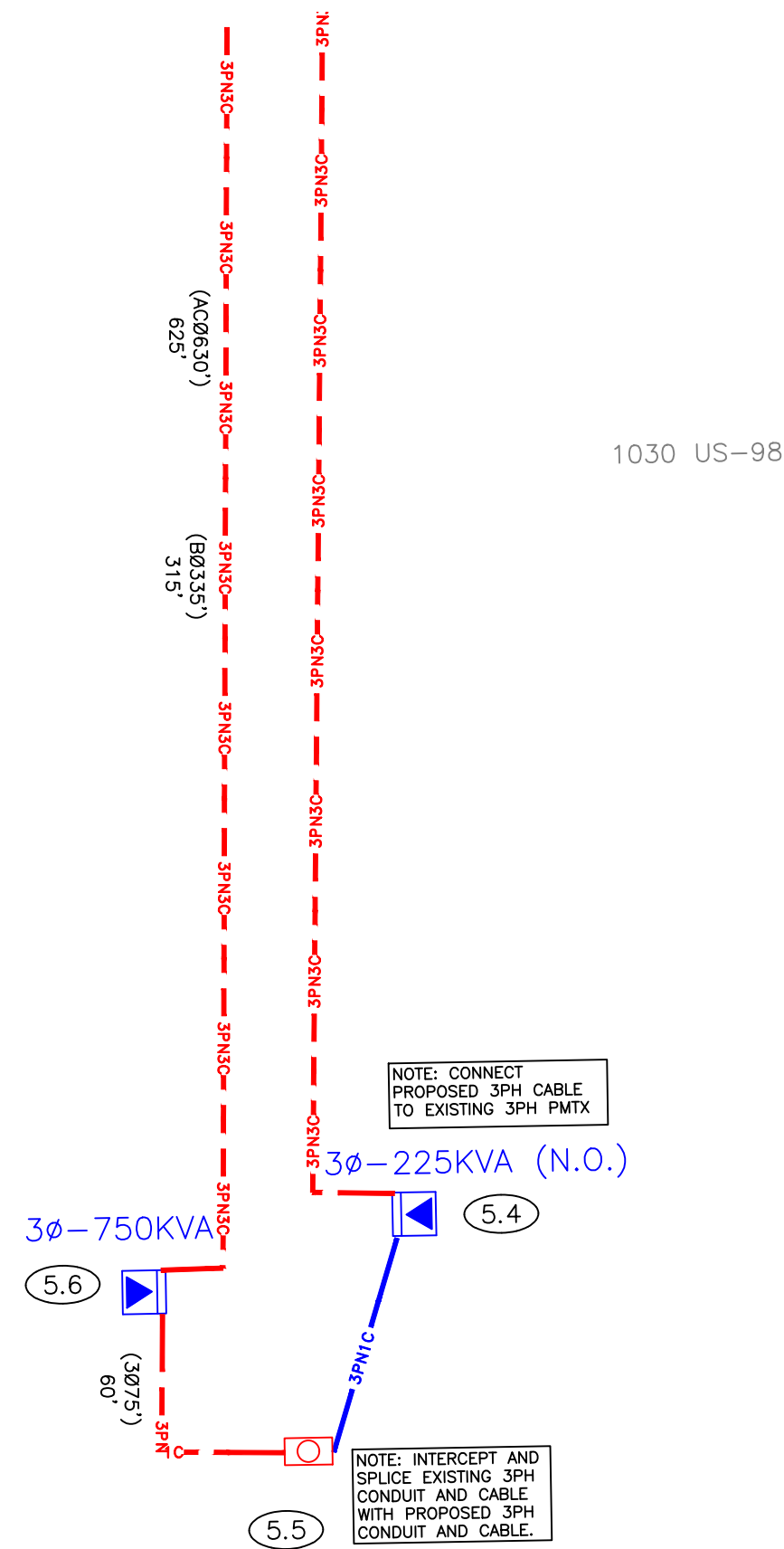


DESIGNED BY	
DRAWN BY	
DATE	
MAP NO.	-

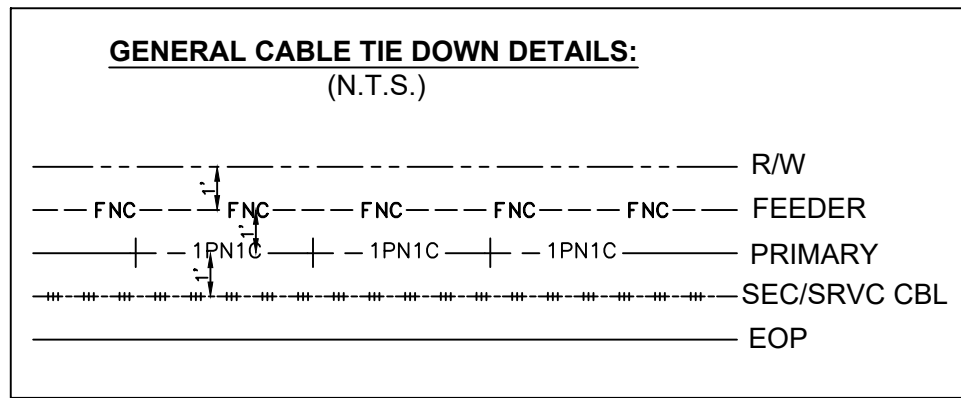
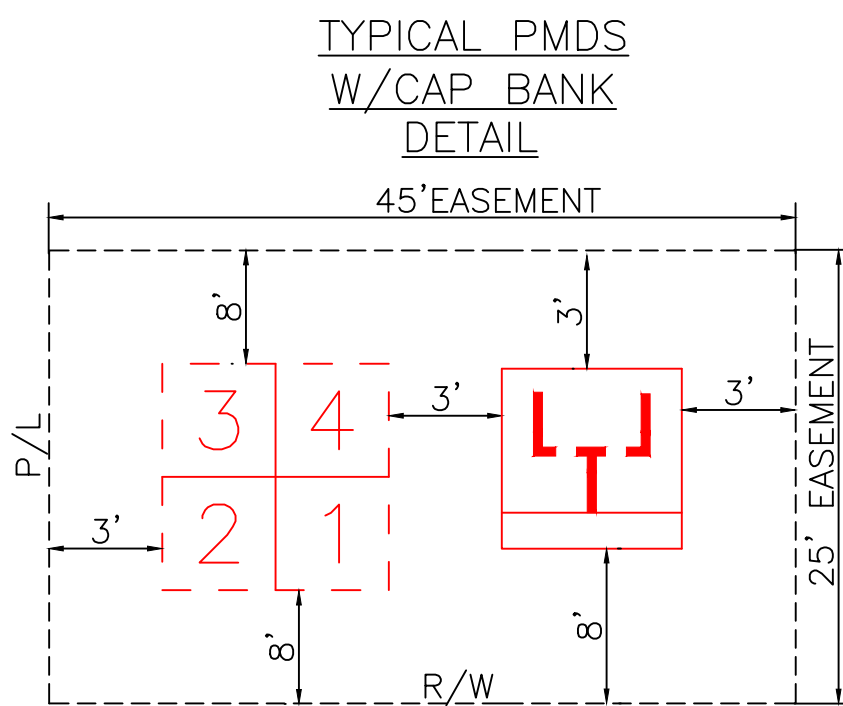
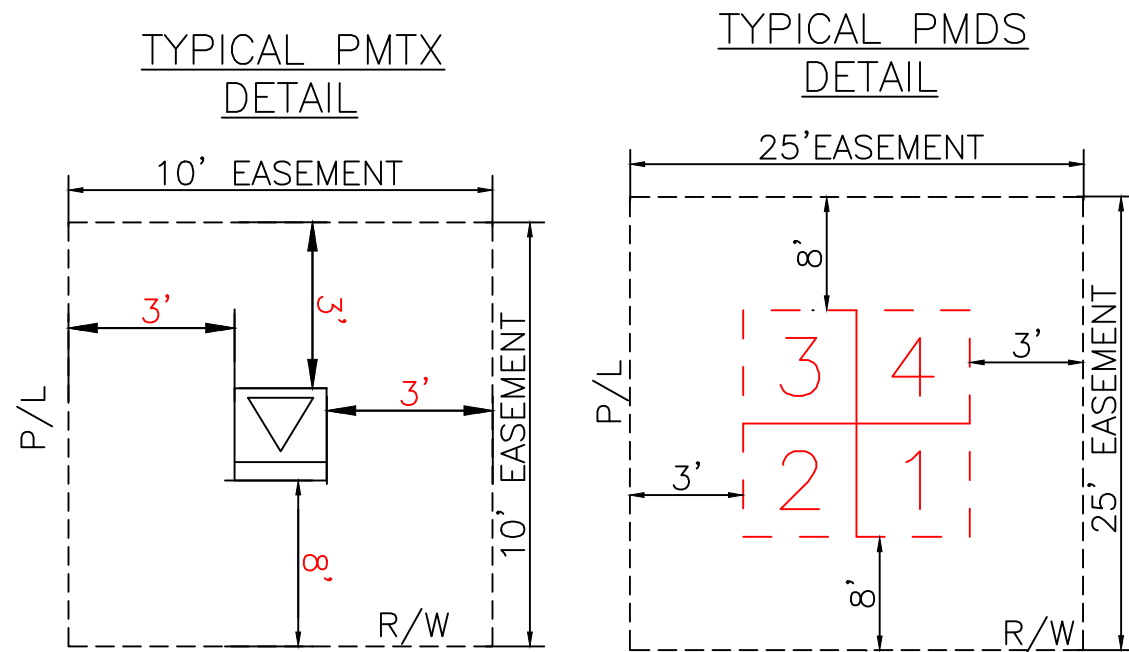


M/A: NW	
CITY OF DESTIN PHASE 1	
UG FOR CONSTRUCTION	
US HWY-90 DESTIN/OKALOOSA, FL	
DWG NO.	PAGE 2A
WR: 11341323	WR: D0113 - 41 - 323

FOR CONTINUATION SEE PAGE 2



2B



REFERENCE DWG's

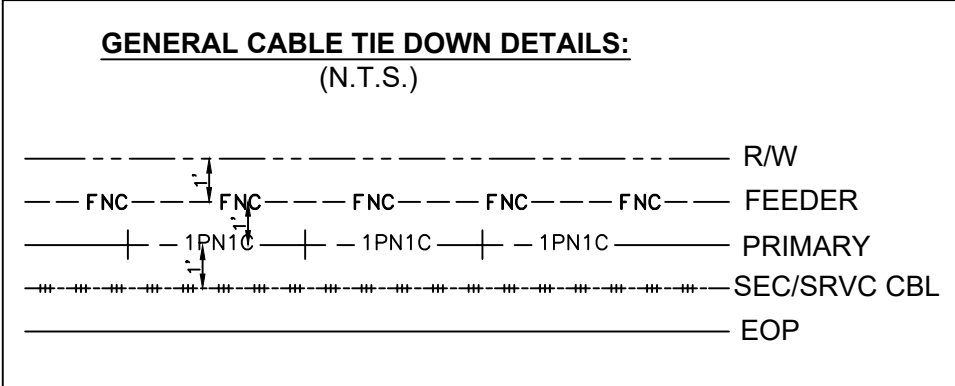
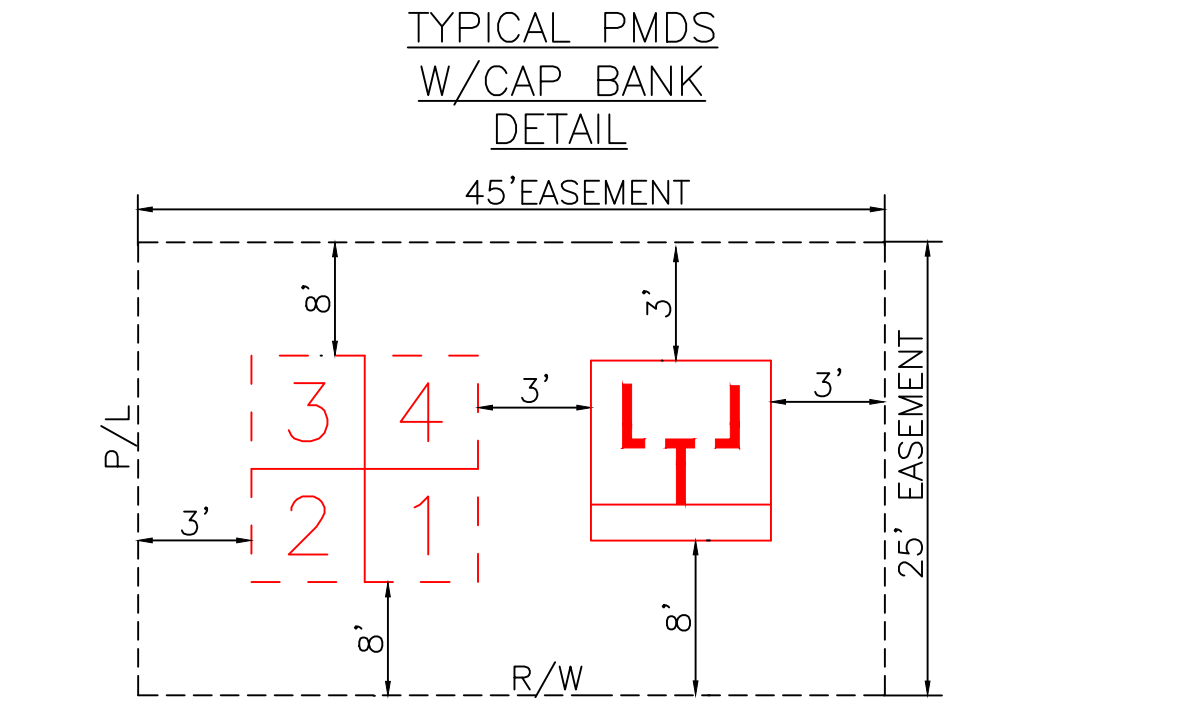
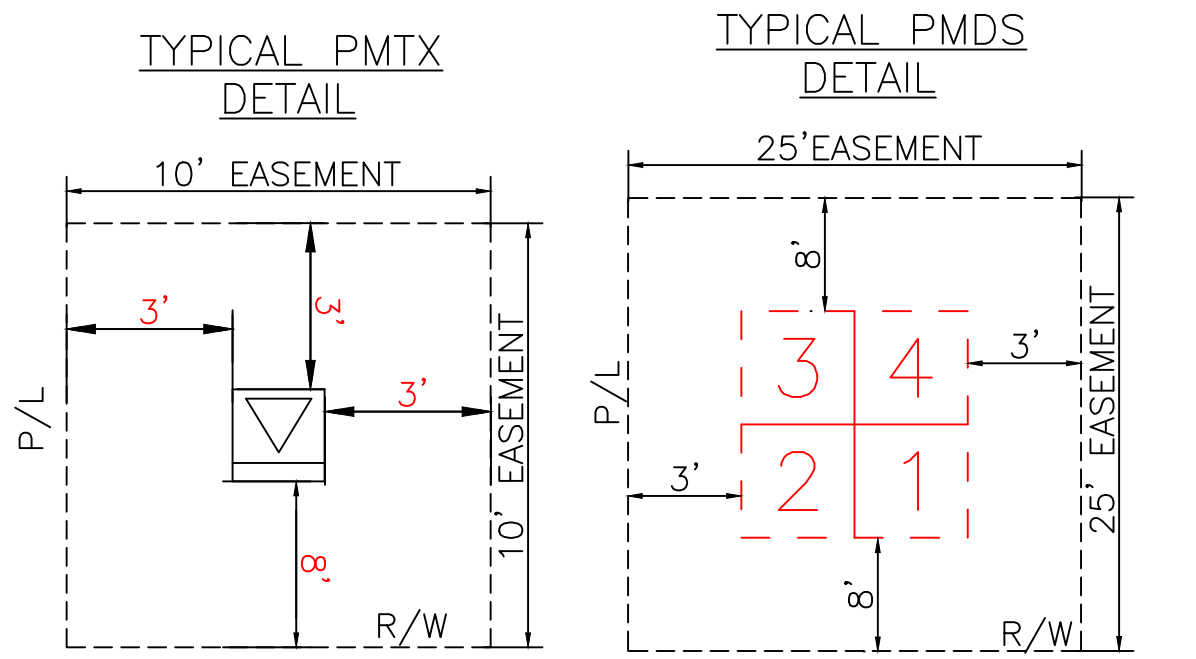
EASEMENTS REQUIRED

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)

The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

AS-BUILT COPY	AS-BUILT CREW PRINT	Easement? YES ☐ NO ☐	Survey/Stake? YES ☐ NO ☐	Work with SMO? YES ☐ NO ☐		DESIGNED BY		M/A: NW CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION US HWY-90 DESTIN/OKALOOSA, FL PAGE 2B DWG NO. 11341323 WR: D0113 - 41 - 323		
Initials	Cert. Date	Foreman's Signature	Date	Tree Work? YES ☐ NO ☐		Designer/Stake? YES ☐ NO ☐	CT/Special Mtr? YES ☐ NO ☐		DRAWN BY	
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.				Map Posting? YES ☐ NO ☐		Trench Feet	Duct Bank Feet		DATE	
Supervisor's Signature									MAP NO.	-
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.				Posted by		Telephone Request? YES ☐ NO ☐	CATV Request? YES ☐ NO ☐			
Foreman's Signature		Date								

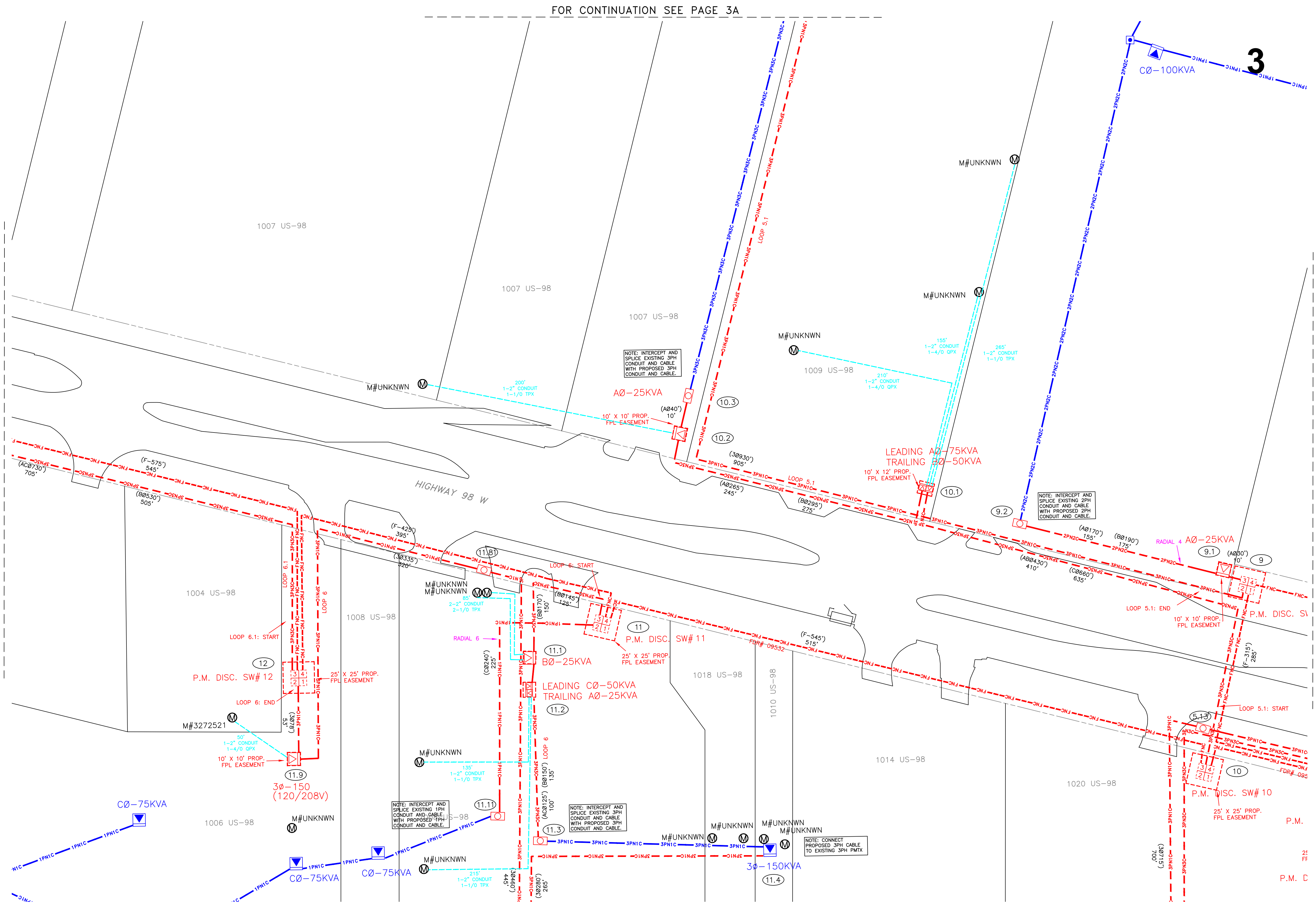
FOR CONTINUATION SEE PAGE 3A



REFERENCE DWG's

FOR CONTINUATION SEE PAGE 4

FOR CONTINUATION SEE PAGE 2



FOR CONTINUATION SEE PAGE 3B

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)

The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

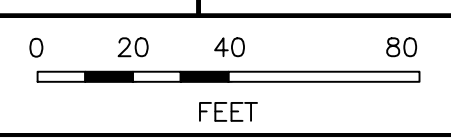
ROW AGREEMENT

EASEMENTS REQUIRED

AS-BUILT COPY	AS-BUILT CREW PRINT	Easement?	YES ☐ NO ☐	Survey/Stake?	YES ☐ NO ☐	Work with SMO?	YES ☐ NO ☐							
Initials	Cert. Date	Foreman's Signature	Date	Tree Work?	YES ☐ NO ☐	Designer/Stake?	YES ☐ NO ☐							
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.				Map Posting?	YES ☐ NO ☐	Trench Feet	Duct Bank Feet							
Supervisor's Signature				CITY				DR. DIST.	COUNTY AIR	STATE RD	FAA			
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.				WMD				RR XING	COUNTY RD.	TRANSM.				
Foreman's Signature				Posted by				Telephone Request?				YES ☐ NO ☐	CATV Request?	YES ☐ NO ☐



DESIGNED BY	
DRAWN BY	
DATE	
MAP NO.	-



M/A: NW

CITY OF DESTIN PHASE 1
UG FOR CONSTRUCTION

US HWY-90
DESTIN/OKALOOSA, FL

DWG NO. PAGE 3

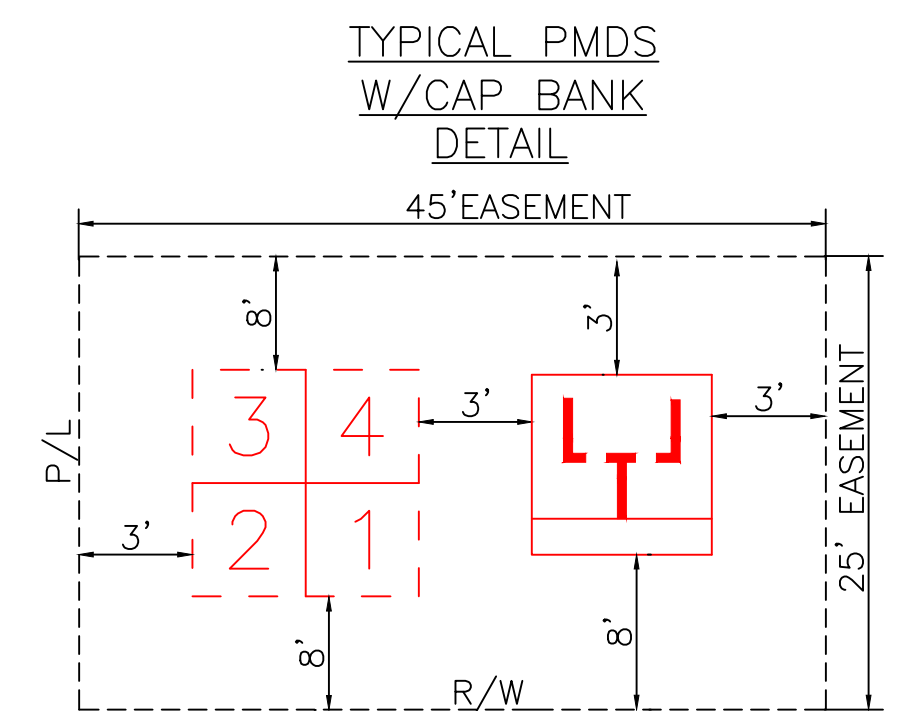
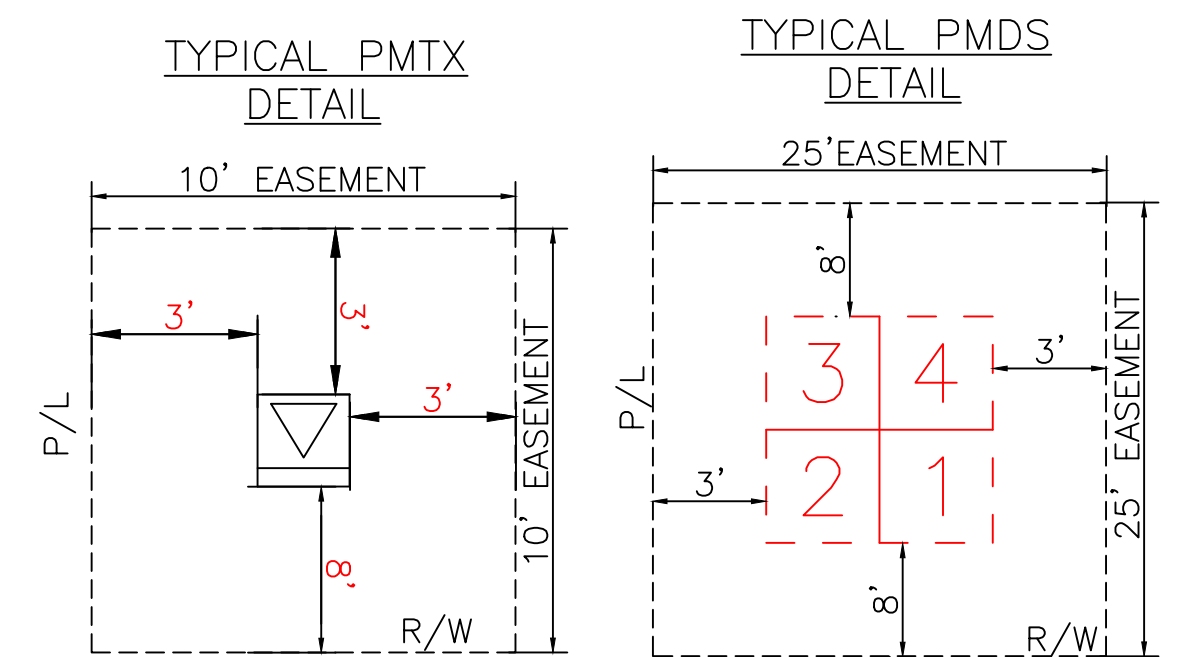
WR: 11341323 WR: D0113 - 41 - 323

FOR CONTINUATION SEE PAGE 4

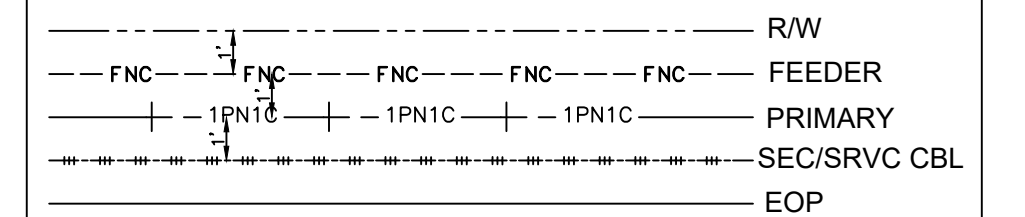
3A



LOCATION SKETCH
N.T.S.



GENERAL CABLE TIE DOWN DETAILS:
(N.T.S.)



REFERENCE DWG'S

ROW AGREEMENT

EASEMENTS REQUIRED

FOR CONTINUATION SEE PAGE 3

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)

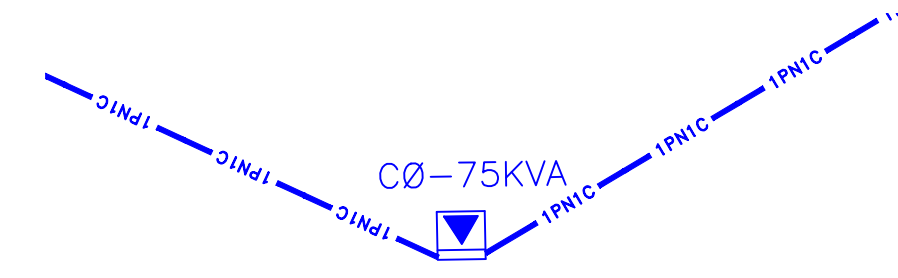
The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

AS-BUILT COPY		AS-BUILT CREW PRINT		Easement? YES ☐ NO ☐		Survey/Stake? YES ☐ NO ☐		Work with SMO? YES ☐ NO ☐	
Initials	Cert. Date	Foreman's Signature _____ Date _____		Tree Work? YES ☐ NO ☐		Designer/Stake? YES ☐ NO ☐		CT/Special Mtr? YES ☐ NO ☐	
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.				Map Posting? YES ☐ NO ☐		Trench Feet		Duct Bank Feet	
Supervisor's Signature _____ Date _____		All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.		PERMIT RECORD CITY DR. DIST. COUNTY AIR WMD RR XING COUNTY RD. TRANSM.		STATE RD FAA			
Foreman's Signature _____ Date _____								Posted by	



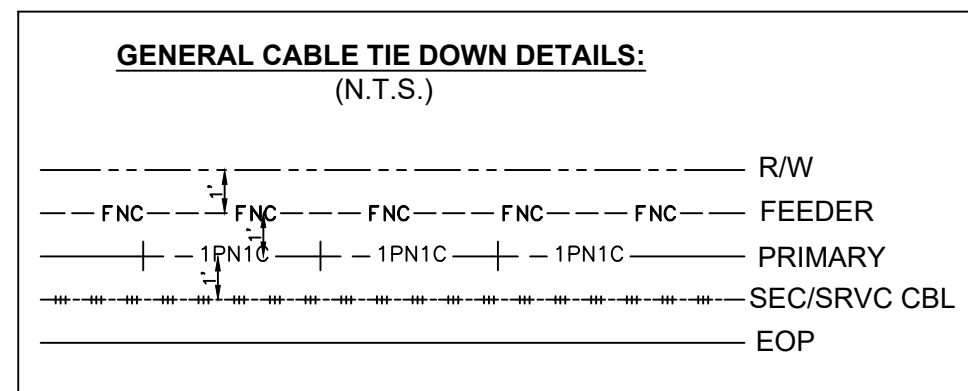
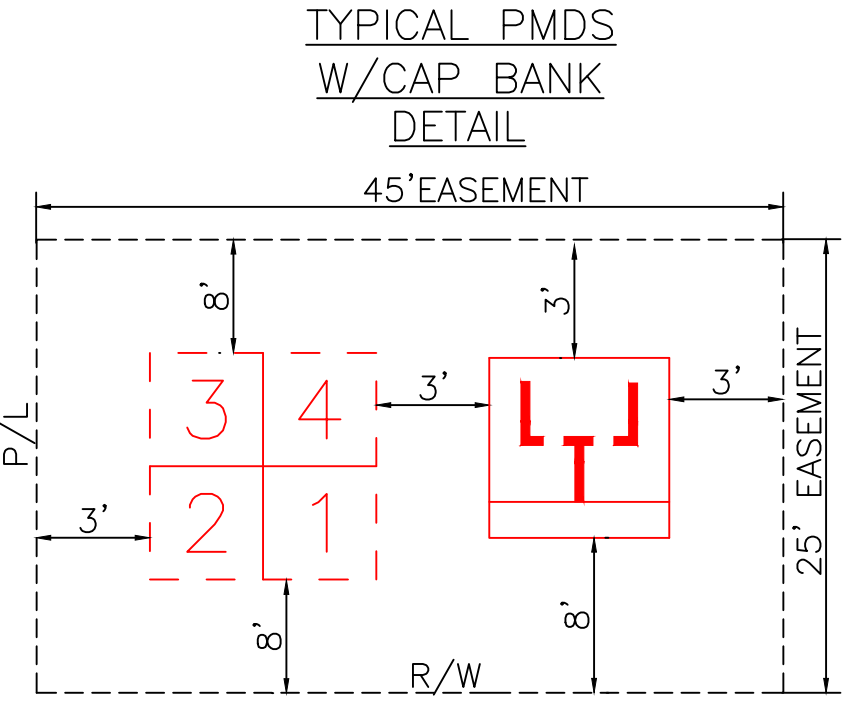
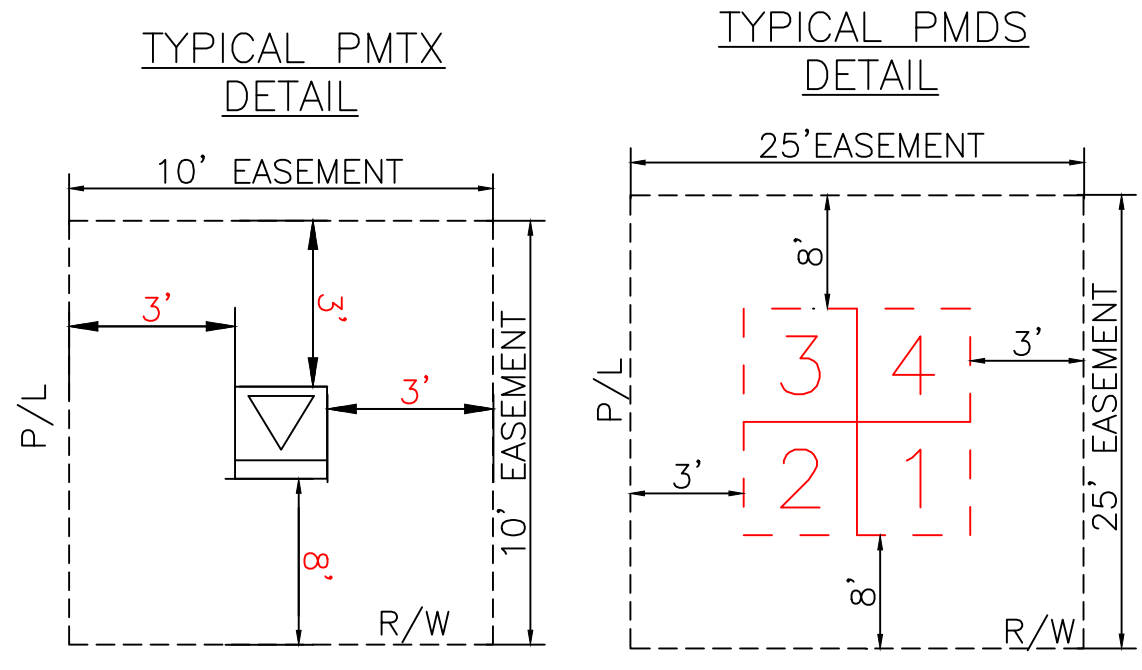
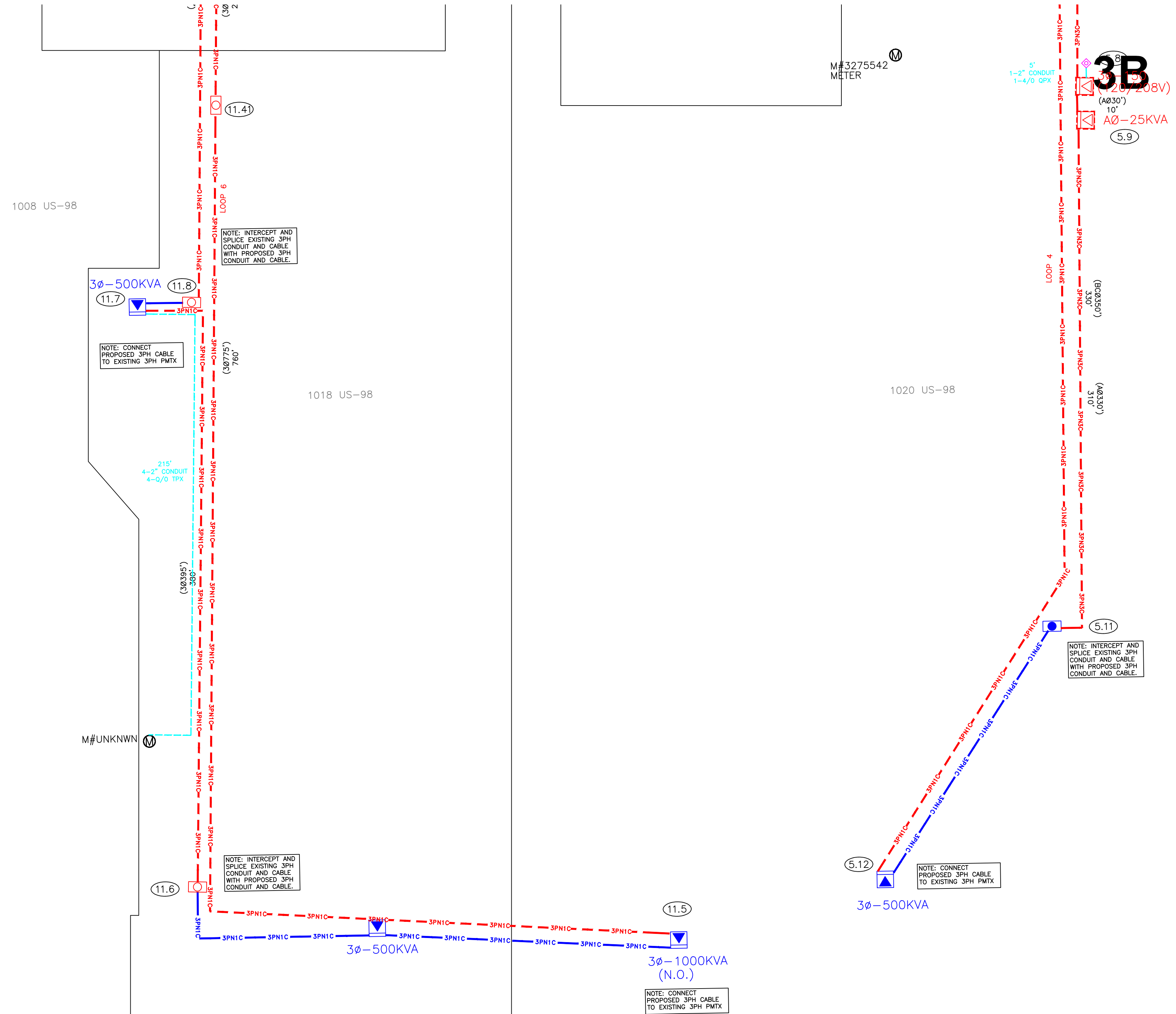
DESIGNED BY		M/A: NW CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION US HWY-90 DESTIN/OKALOOSA, FL
DRAWN BY		
DATE		
MAP NO.	-	
		DWG NO. PAGE 3A WR: 1341323 WR: D0113 - 41 - 323

PLOT DATE: 00/00/00 PLOT TIME: 00:00:00 CAD NAME: NO-NAME



☐ INACCESSIBLE ☒ 12KV ☐ FUTURE 23KV ☐ 23KV ☒ SALT SPRAY ☐

FOR CONTINUATION SEE PAGE 3



REFERENCE DWG's

EASEMENTS REQUIRED

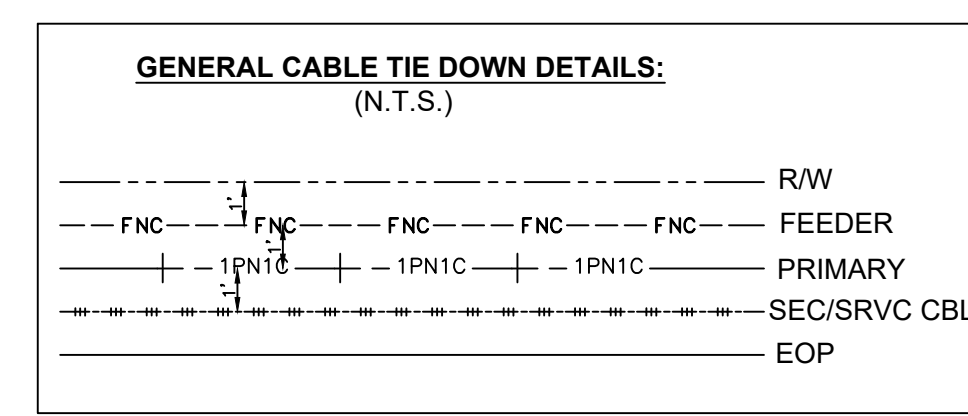
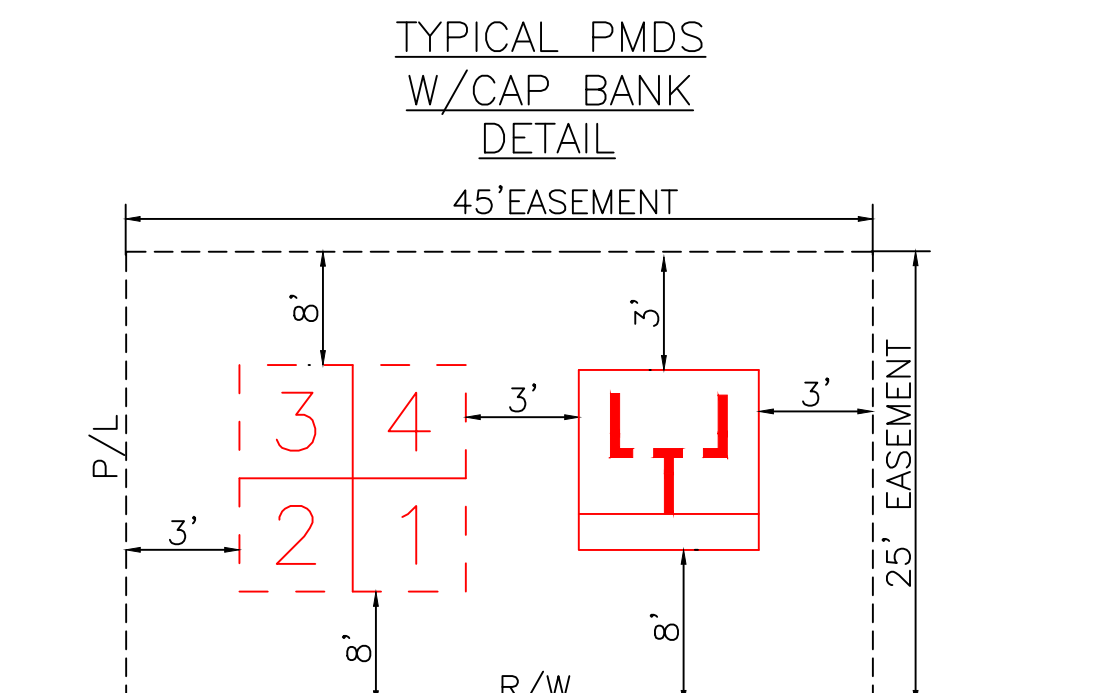
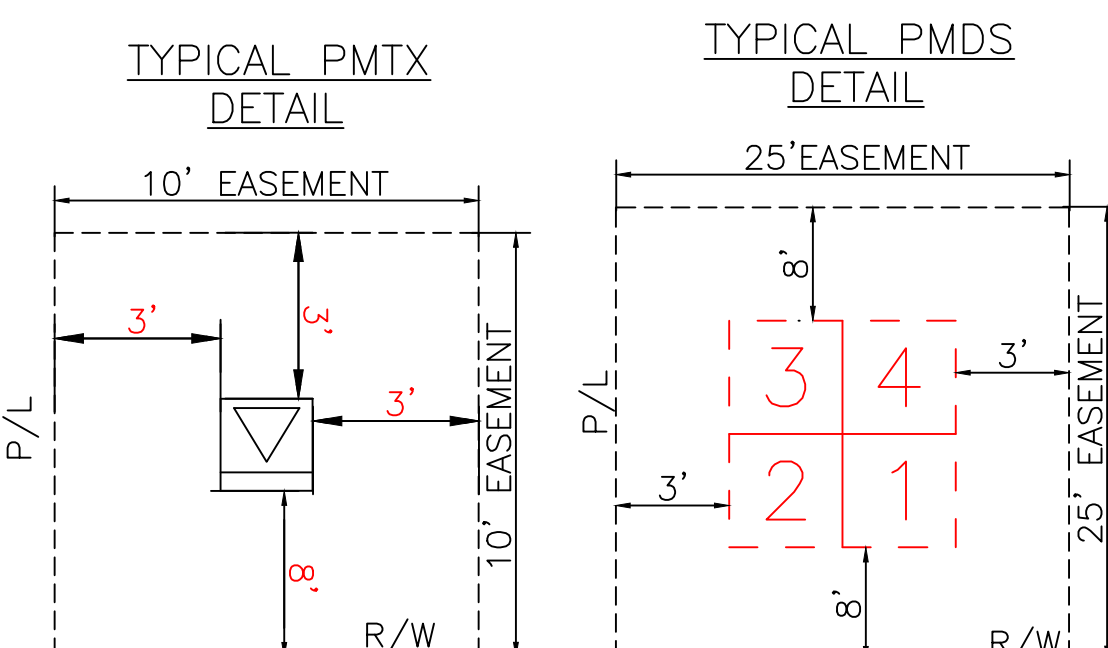
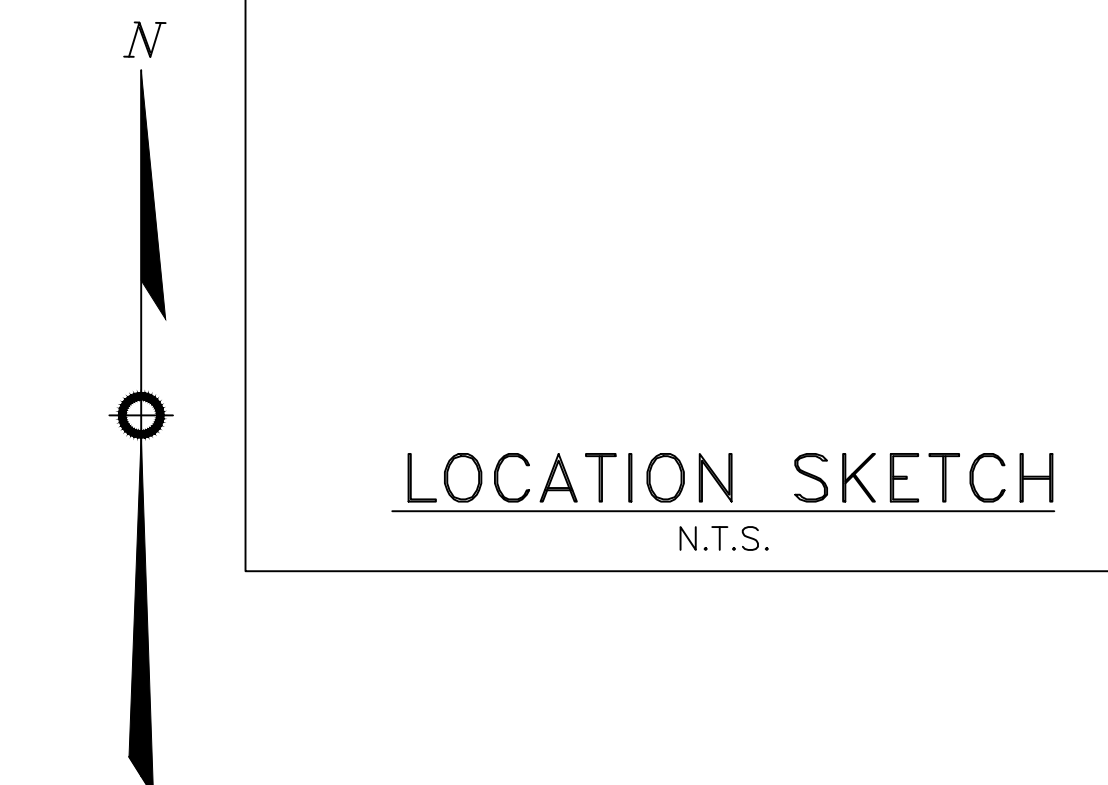
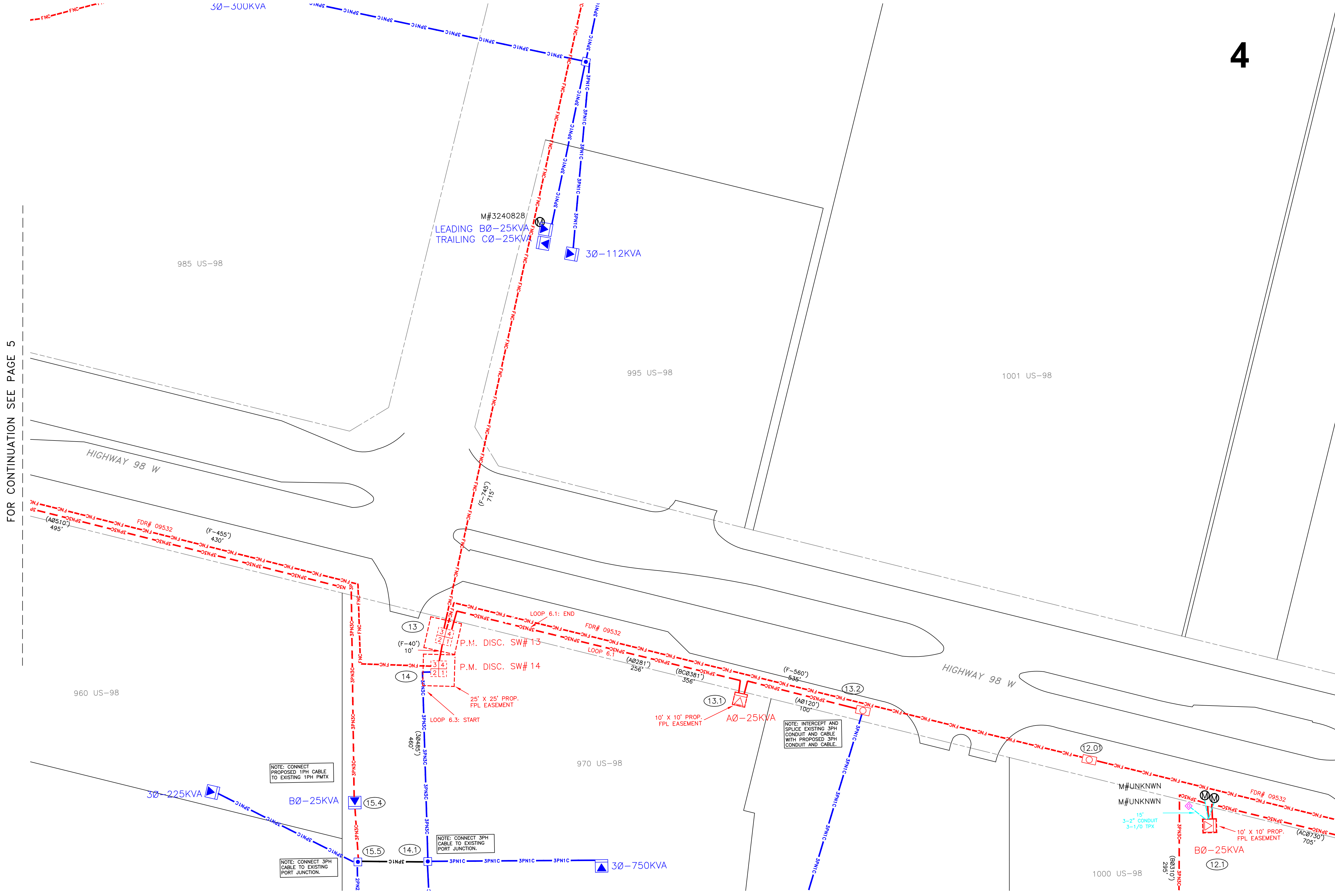
Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)

The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

AS-BUILT COPY		AS-BUILT CREW PRINT		Easement? YES ☐ NO ☐		Survey/Stake? YES ☐ NO ☐		Work with SMO? YES ☐ NO ☐			DESIGNED BY		M/A: NW CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION US HWY-90 DESTIN/OKALOOSA, FL PAGE 3B DWG NO. 11341323 WR: D0113 - 41 - 323	
Initials Cert. Date		Foreman's Signature Date		Tree Work? YES ☐ NO ☐		Designer/Stake? YES ☐ NO ☐		CT/Special Mtr? YES ☐ NO ☐			DRAWN BY			
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.		Supervisor's Signature Date		Map Posting? YES ☐ NO ☐		Trench Feet		Duct Bank Feet			DATE			
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.		Foreman's Signature Date		Posted by		Telephone Request? YES ☐ NO ☐		CATV Request? YES ☐ NO ☐			MAP NO.	-		
												0 20 40 80 FEET		

CAD NAME: NO-NAME
PLOT TIME: 00:00:00
PLOT DATE: 00/00/00

☐ INACCESSIBLE ☒ 12KV ☐ FUTURE 23KV ☐ 23KV ☒ SALT SPRAY ☐



REFERENCE DWG's

ROW AGREEMENT
EASEMENTS REQUIRED

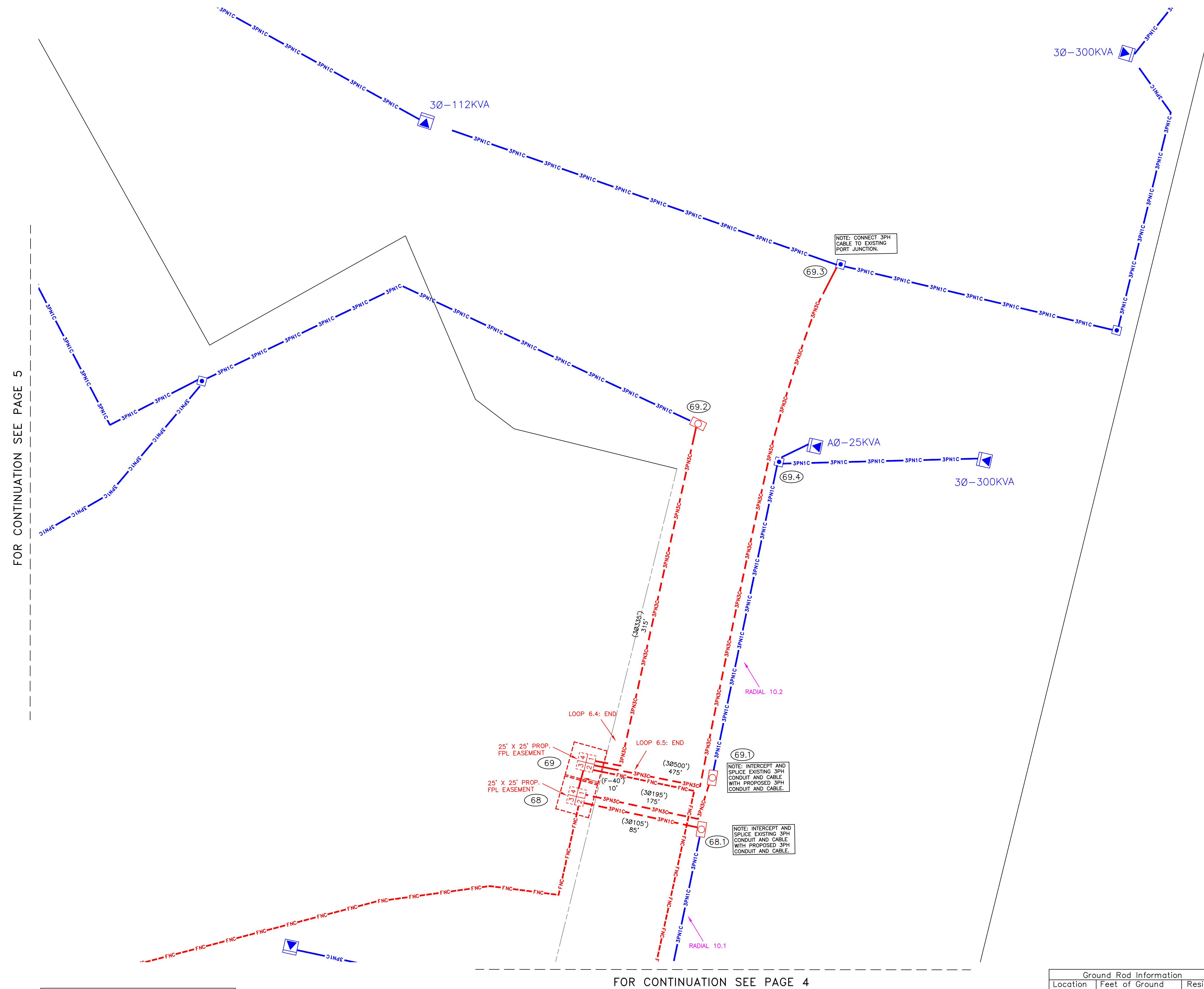
FOR CONTINUATION SEE PAGE 4B

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)

The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

TWNP: 00S_RNG: 00E_SEC: 00_QTR:

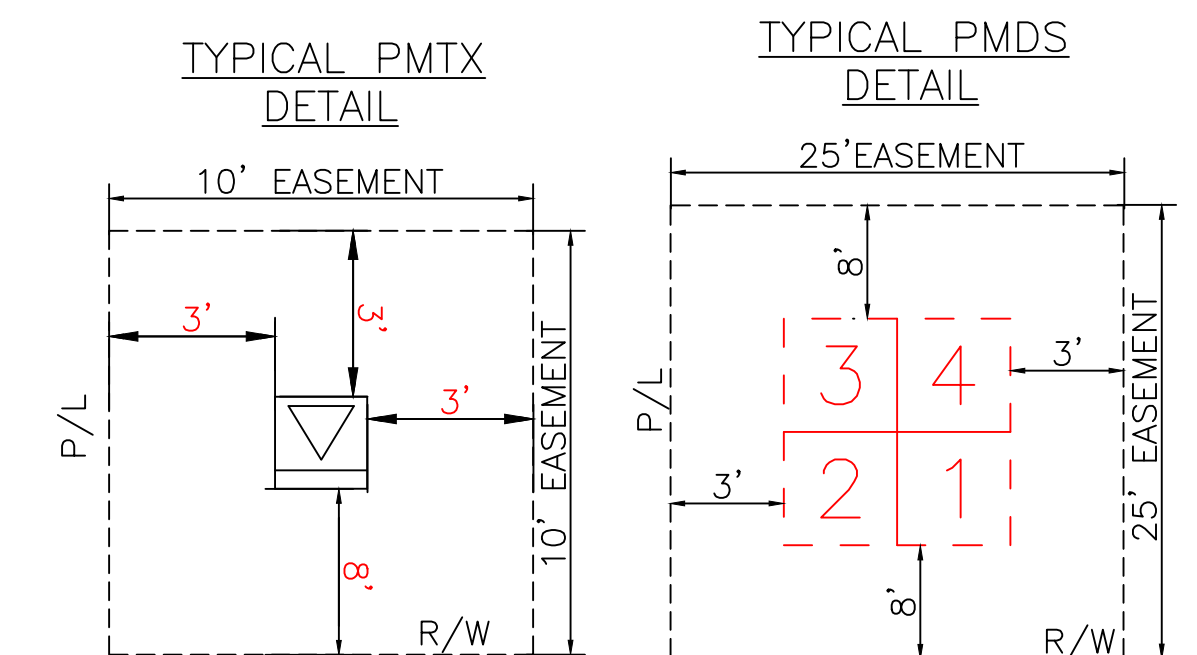
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Initials Cert. Date		Foreman's Signature Date		Tree Work? YES ☐ NO ☐		Designer/Stake? YES ☐ NO ☐		CT/Special Mtr? YES ☐ NO ☐			DRAWN BY			DWG NO. PAGE 4 WR: 11341323 WR: D0113 — 41 — 323
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.		Supervisor's Signature Date		Map Posting? YES ☐ NO ☐		Trench Feet		Duct Bank Feet			DATE			
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.		Foreman's Signature Date		Posted by		Telephone Request? YES ☐ NO ☐		CATV Request? YES ☐ NO ☐			MAP NO.			



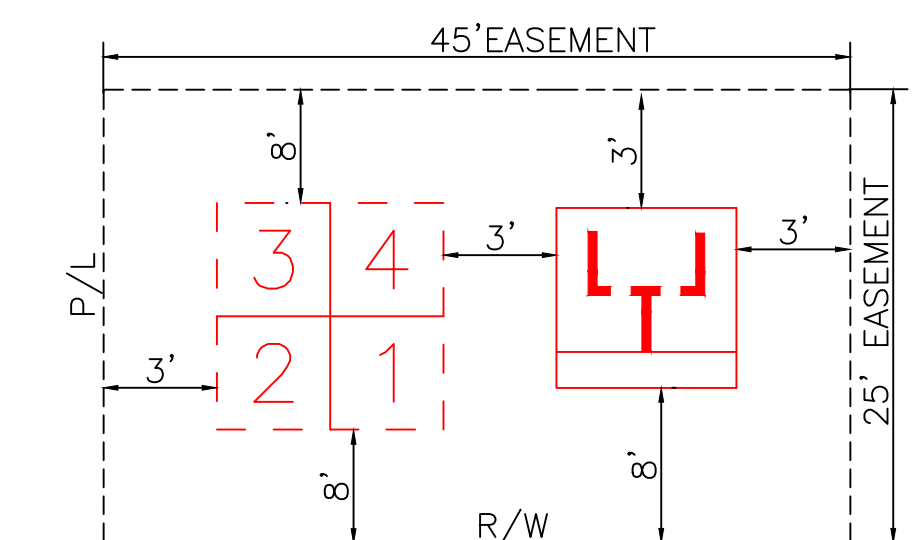
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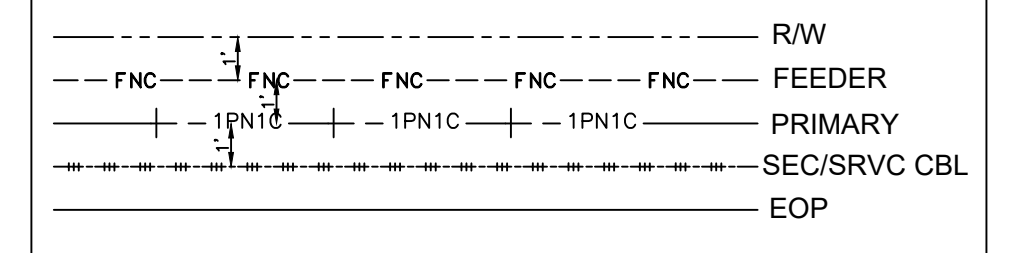
LOCATION SKETCH
N.T.S.



TYPICAL PMDS
W/CAP BANK
DETAIL



GENERAL CABLE TIE DOWN DETAILS:
(N.T.S.)



REFERENCE DWG's

ROW AGREEMENT

EASEMENTS REQUIRED	
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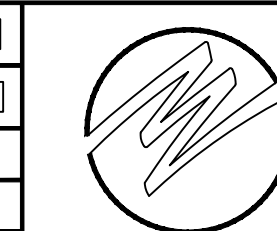
FOR CONTINUATION SEE PAGE 4

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)

The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

TWNP: 00S RNG: 00E SEC: 00 QTR: _____

AS-BUILT COPY		AS-BUILT CREW PRINT		Easement? YES ☐ NO ☐		Survey/State? YES ☐ NO ☐		Work with SMO? YES ☐ NO ☐	
Initials	Cert. Date	Foreman's Signature		Date		Tree Work? YES ☐ NO ☐		Designer/State? YES ☐ NO ☐	
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.				Map Posting? YES ☐ NO ☐		Trench Feet		Duct Bank Feet	
Supervisor's Signature		Date		RECORD COPY CITY WMD DR. DIST. RR XING COUNTY AIR COUNTY RD.		STATE RD		FAA	
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.						TRANSM.			
Foreman's Signature		Date		Posted by		Telephone Request? YES ☐ NO ☐		CATV Request? YES ☐ NO ☐	



DESIGNED BY		M/A: NW CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION US HWY-90 DESTIN/OKALOOSA, FL
DRAWN BY		
DATE		
MAP NO.	-	
0 20 40 80  FEET		DWG. NO. PAGE 4A W/P: 11341323 W/P: D0113 - 41 - 323

12.2

NOTE: INTERCEPT AND SPLICE EXISTING 3PH CONDUIT AND CABLE WITH PROPOSED 3PH CONDUIT AND CABLE.

TYPICAL PMTX
DETAIL

10' EASEMENT

P/L

3'

8'

3'

R/W

TYPICAL PMDS
DETAIL

25' EASEMENT

P/L

3'

8'

3'

R/W

The diagram illustrates a 45-degree easement layout. It features a 3' x 3' grid of four squares labeled 1, 2, 3, and 4. To the right of this grid is a 3' x 3' square with a T-shaped cutout. The layout is bounded by a 45° EASEMENT line at the top and a 25' EASEMENT line on the right. Dimensions include 3', 6', 8', and R/W (Right of Way).

Timing diagram for the SEC/SRVC CBL signal. The diagram shows a sequence of events: R/W (Read/Write) signal, followed by five FNC (Function) signals, then three 1PNTC (1 Pulse Not Truncated) signals, and finally the SEC/SRVC CBL signal. The SEC/SRVC CBL signal is shown as a series of pulses, with the first pulse occurring after the first FNC signal and the last pulse occurring after the third 1PNTC signal. The EOP (End of Packet) signal is shown as a single pulse at the end of the sequence.

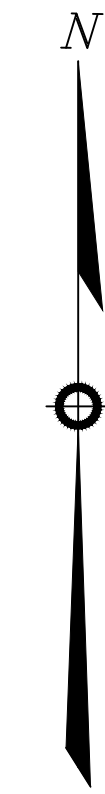
EASEMENTS REQUIRED

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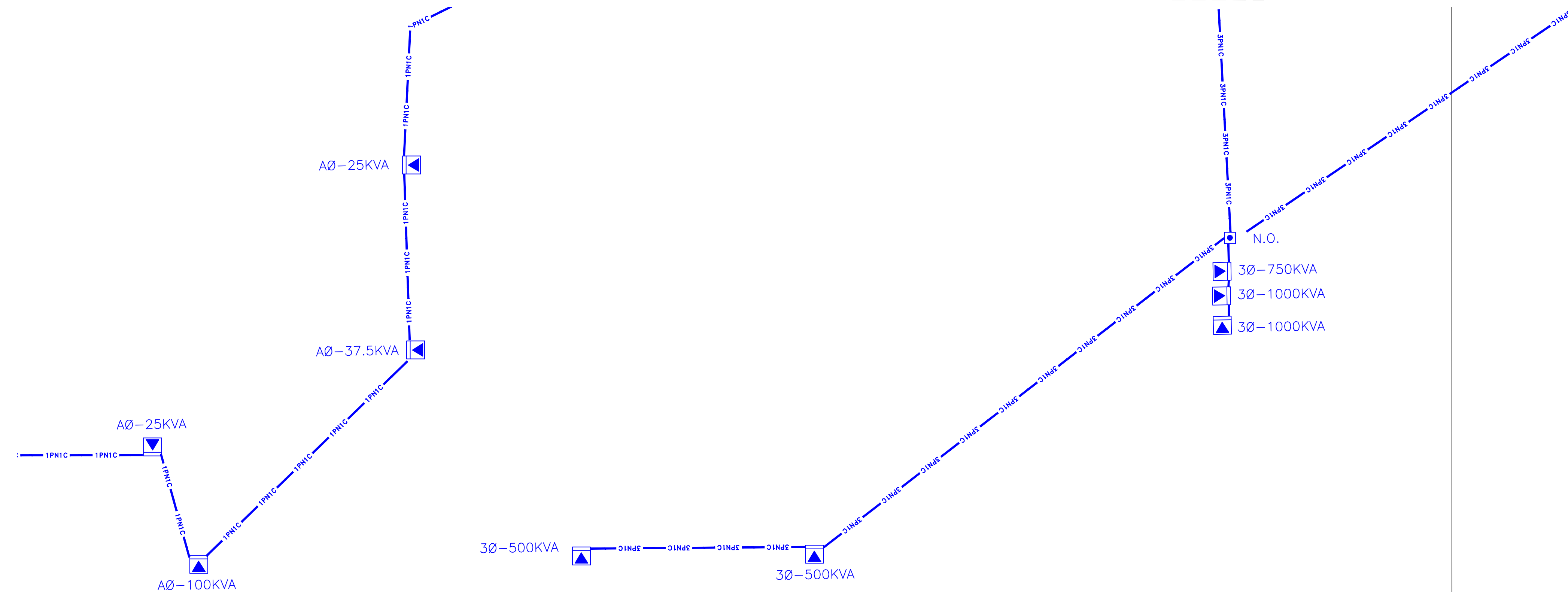
PLOT DATE: 00/00/00

FOR CONTINUATION SEE PAGE 4B

4C



LOCATION SKETCH
N.T.S.



**TYPICAL PMTX
DETAIL**

10' EASEMENT

3'

8'

P/L

R/W

**TYPICAL PMDS
DETAIL**

25' EASEMENT

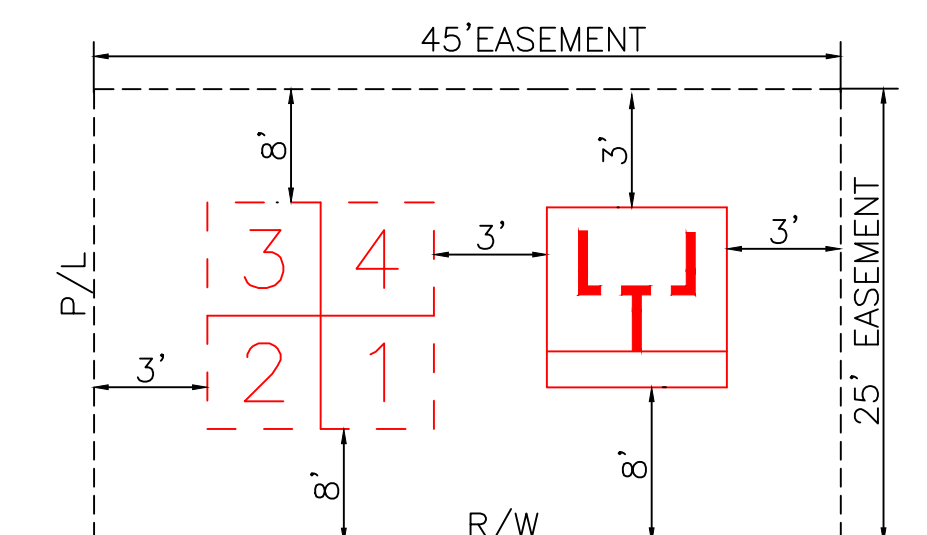
8'

3'

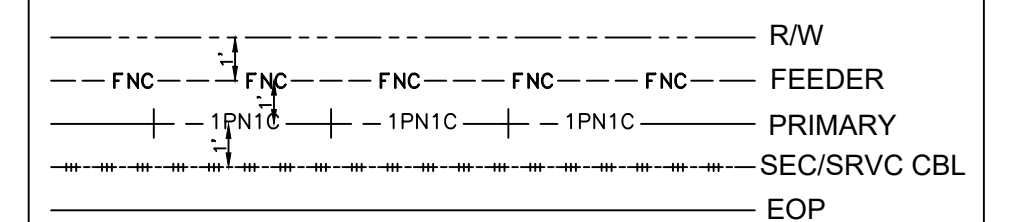
P/L

R/W

TYPICAL PMDS
W/CAP BANK
DETAIL



GENERAL CABLE TIE DOWN DETAILS:
(N.T.S.)



REFERENCE DWG's

ROW AGREEMENT

EASEMENTS REQUIRED

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)

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AS-BUILT COPY		AS-BUILT CREW PRINT		Easement? YES ☐ NO ☐	Survey/Stake? YES ☐ NO ☐	Work with SMO? YES ☐ NO ☐		DESIGNED BY	M/A: NW CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION US HWY-90 DESTIN/OKALOOSA, FL		
Initials	Cart. Date	Foreman's Signature	Date	Tree Work? YES ☐ NO ☐	Designer/Stake? YES ☐ NO ☐	CT/Special Mtr? YES ☐ NO ☐		DRAWN BY			
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.				Map Posting? YES ☐ NO ☐	Trench Feet	Duct Bank Feet		DATE			
Supervisor's Signature		Date		PERMIT RECORD CITY DR. DIST. COUNTY AIR STATE RD FAA WMD RR XING COUNTY RD TRANSM.				MAP NO.		-	
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.					Posted by	Telephone Request? YES ☐ NO ☐		CATV Request? YES ☐ NO ☐		0 20 40 80 FEET	
Foreman's Signature		Date						DWG NO.			
								WR-115413233 WR-D0113 - 41 - 323			



FOR CONTINUATION SEE PAGE 5B

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REFERENCE DWG'S

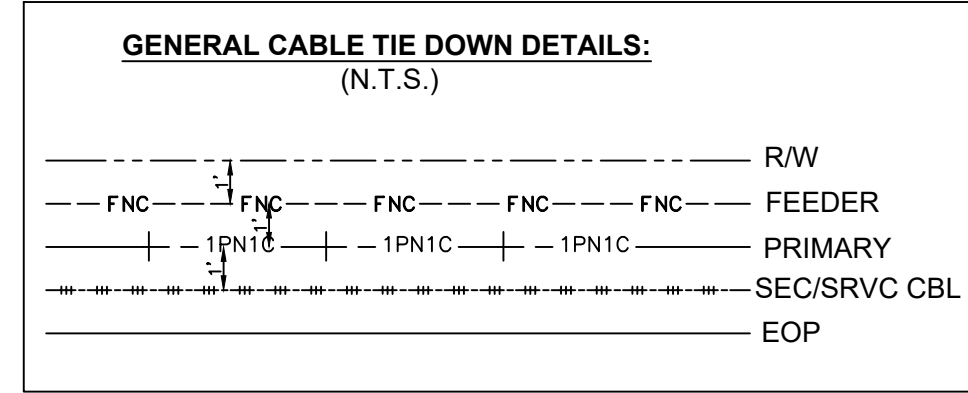
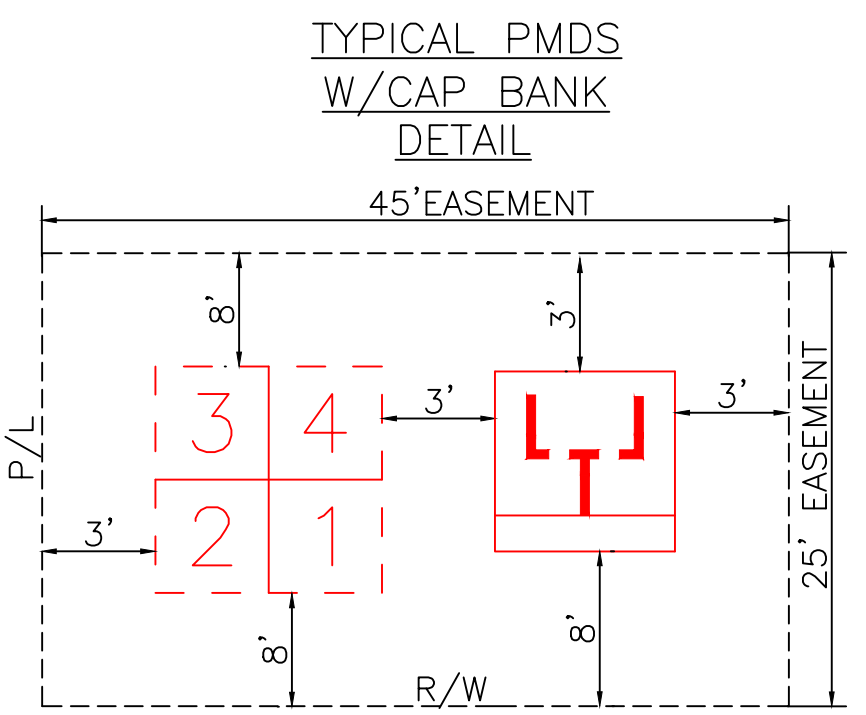
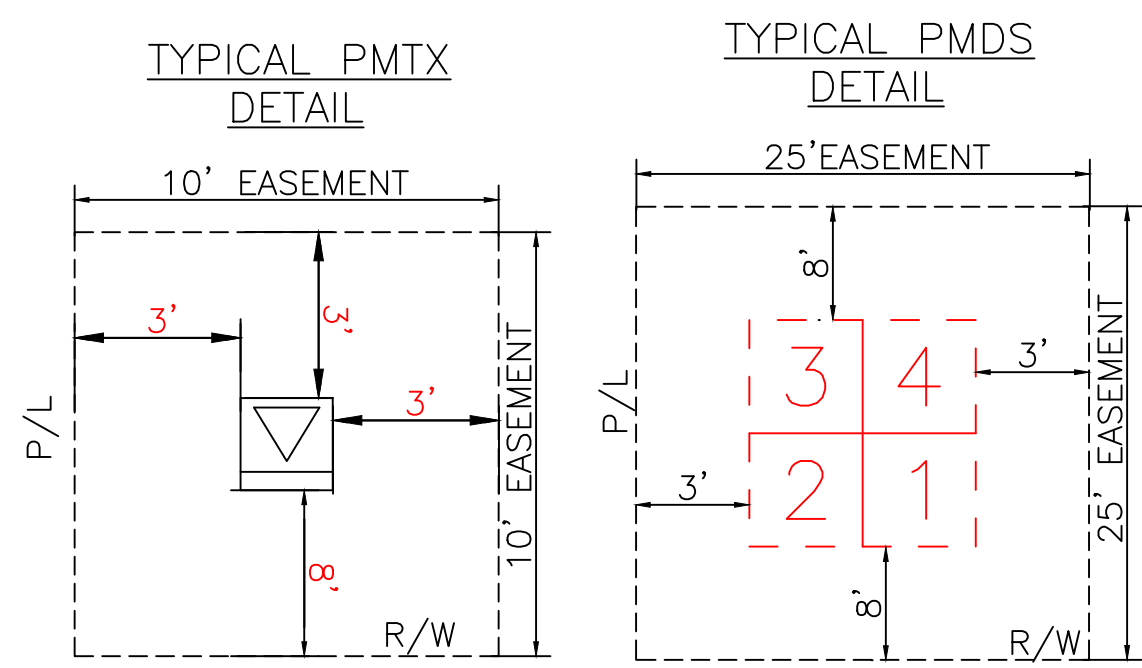
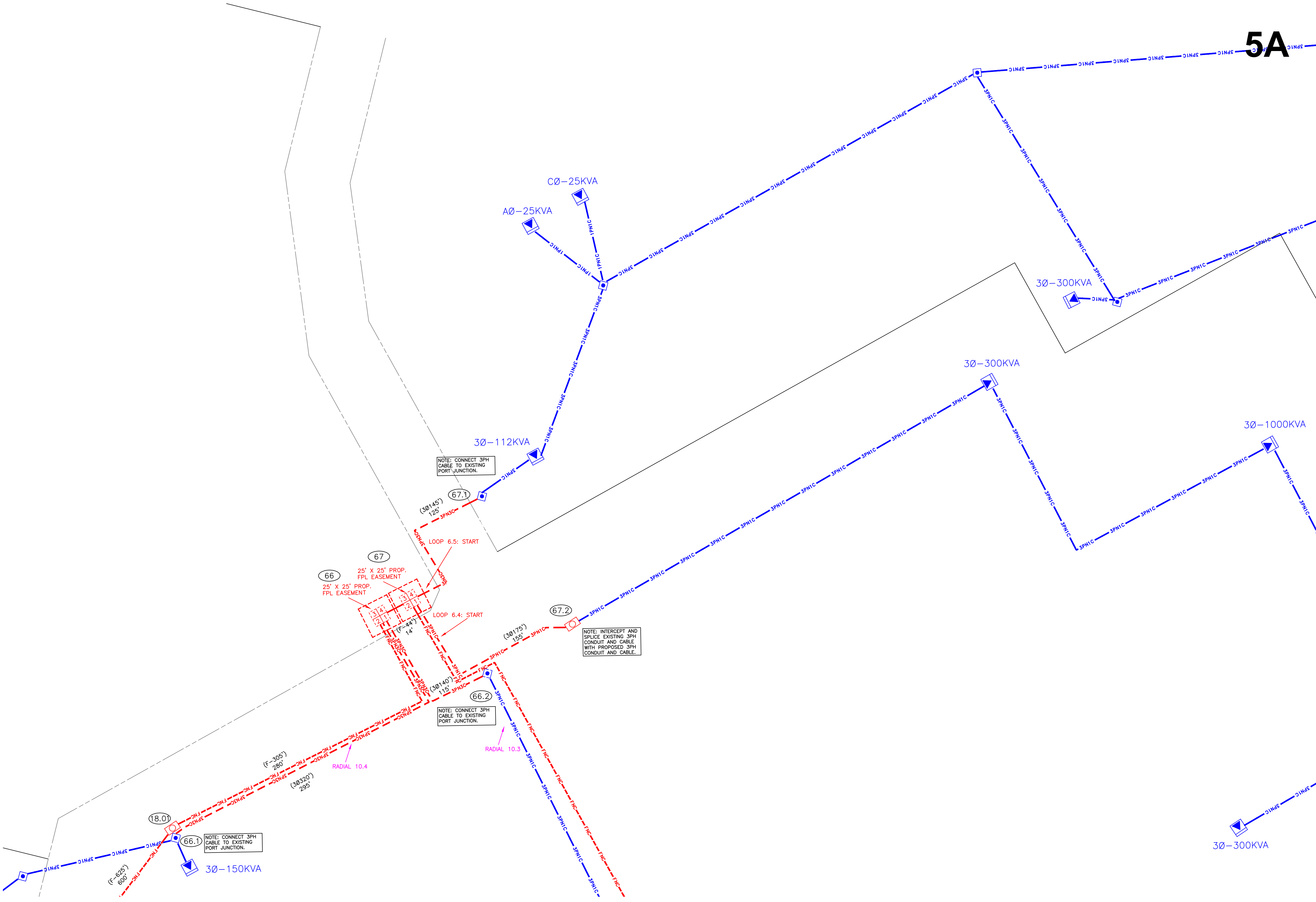
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W/A: NW CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION US HWY-90 DESTIN/OKALOOSA, FL	
DWG NO.	PAGE 5
W/D: 11341323	W/E: D0113 - 41 - 323

CAD NAME: NO-NAME
PLOT TIME: 00:00:00
PLOT DATE: 00/00/00

☐ INACCESSIBLE ☒ 12KV ☐ FUTURE 23KV ☐ 23KV ☒ SALT SPRAY ☐



REFERENCE DWG's

ROW AGREEMENT
EASEMENTS REQUIRED

FOR CONTINUATION SEE PAGE 5

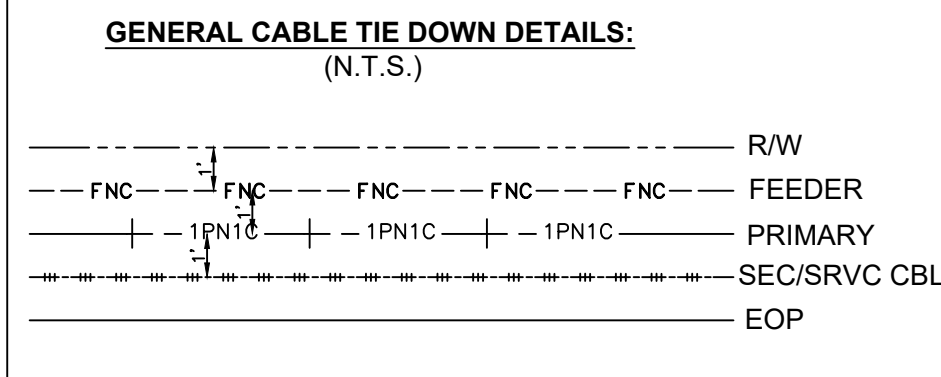
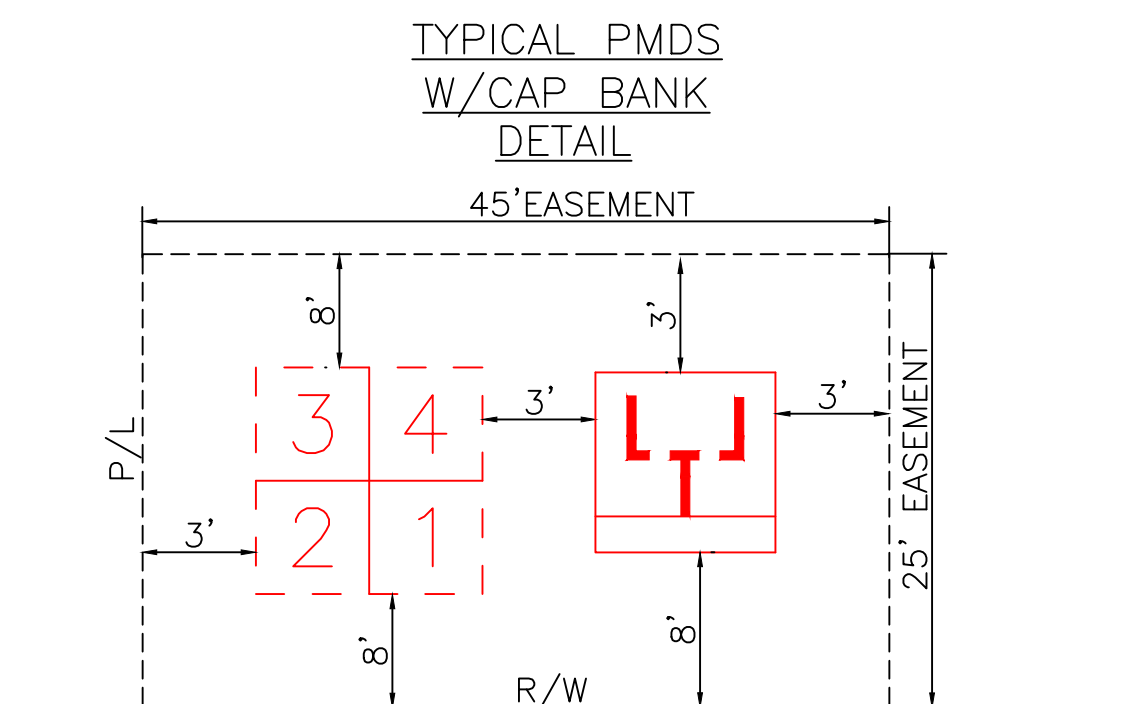
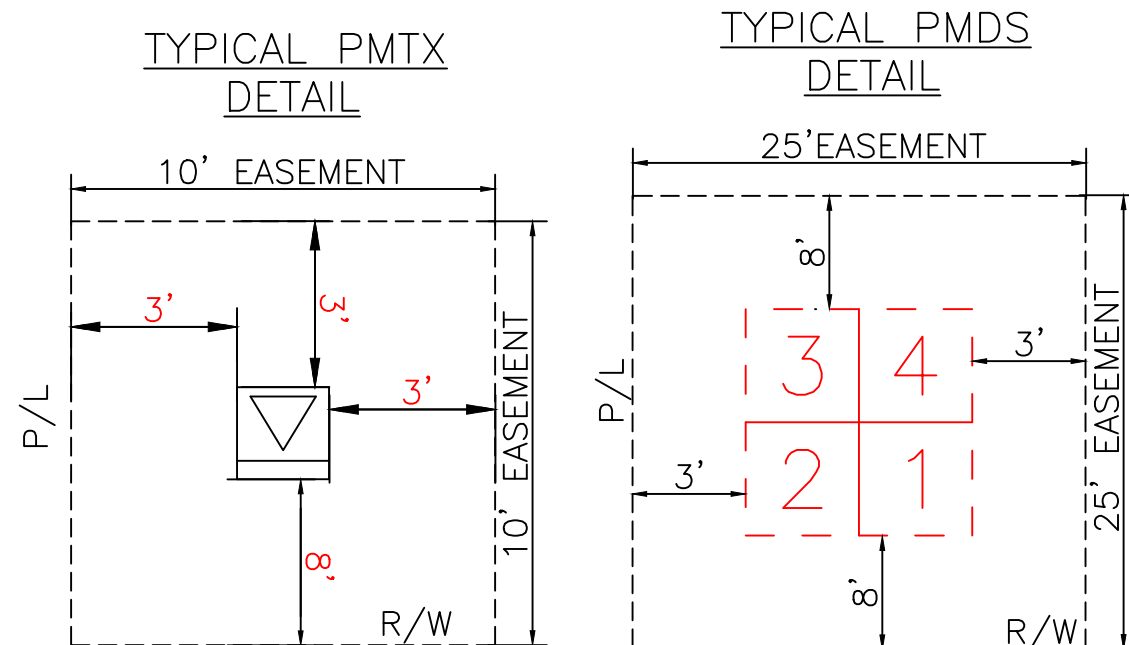
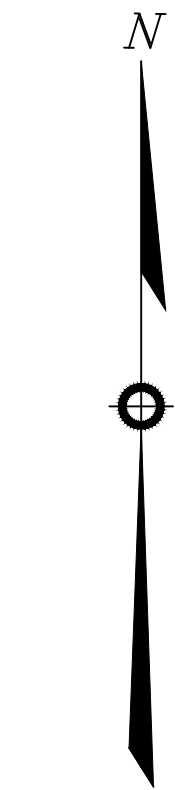
Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)

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AS-BUILT COPY Initials Cert. Date Supervisor's Signature Date Foreman's Signature Date	AS-BUILT CREW PRINT Foreman's Signature Date Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS. All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations. Foreman's Signature Date	Easement? YES ☐ NO ☐ Tree Work? YES ☐ NO ☐ Map Posting? YES ☐ NO ☐ Posted by	Survey/Stake? YES ☐ NO ☐ Designer/Stake? YES ☐ NO ☐ Trench Feet Duct Bank Feet Telephone Request? YES ☐ NO ☐ CATV Request? YES ☐ NO ☐	Work with SMO? YES ☐ NO ☐ CT/Special Mtr? YES ☐ NO ☐ CITY DR. DIST. COUNTY AIR STATE RD FAA WMD RR XING COUNTY RD. TRANSM.		DESIGNED BY DRAWN BY DATE MAP NO.	0 20 40 80 FEET	TWNP: 00S_RNG: 00E_SEC: 00_QTR: M/A: NW CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION US HWY-90 DESTIN/OKALOOSA, FL DWG NO. WR: 11341323WR: D0113-41-323
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6

LOCATION SKETCH
N.T.S.



REFERENCE DWG's

FOR CONTINUATION SEE PAGE 7

FOR CONTINUATION SEE PAGE 5

FOR CONTINUATION SEE PAGE 6B

ROW AGREEMENT

EASEMENTS REQUIRED

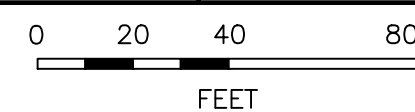
Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)

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AS-BUILT COPY	AS-BUILT CREW PRINT	Easement? YES ☐ NO ☐	Survey/Stake? YES ☐ NO ☐	Work with SMO? YES ☐ NO ☐
Initials _____ Cert. Date _____	Foreman's Signature _____ Date _____	Tree Work? YES ☐ NO ☐	Designer/Stake? YES ☐ NO ☐	CT/Special Mtr? YES ☐ NO ☐
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.		Map Posting? YES ☐ NO ☐	Trench Feet _____ Duct Bank Feet _____	
Supervisor's Signature _____ Date _____		CITY _____ DR. DIST. _____ COUNTY AIR _____ STATE RD _____ FAA _____ WMD _____ RR XING _____ COUNTY RD. _____ TRANSM. _____		
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.		Telephone Request? YES ☐ NO ☐ CATV Request? YES ☐ NO ☐		
Foreman's Signature _____ Date _____		Posted by _____		



DESIGNED BY	
DRAWN BY	
DATE	
MAP NO.	



TWNP: 00S RNG: 00E SEC: 00 QTR: _____

M/A: NW

CITY OF DESTIN PHASE 1
UG FOR CONSTRUCTION

US HWY-90
DESTIN/OKALOOSA, FL

DWG NO. PAGE 6

WR: 11341323 WR: D0113 — 41 — 323

The diagram illustrates a power distribution network. A main line starts from the left and passes through four substations: CØ-100KVA, AØ-50KVA, AØ-75KVA, and AØ-75KVA. A branch line connects the AØ-75KVA substation to another AØ-75KVA substation. The diagram shows the layout of the power lines and the locations of the substations.

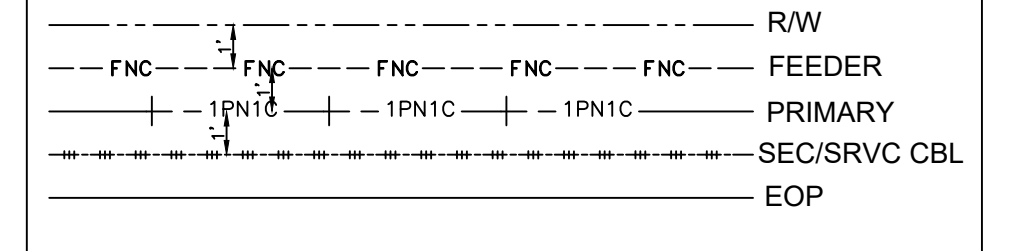
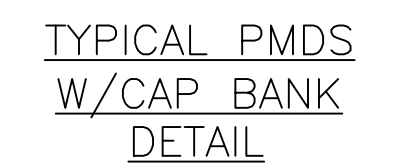
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 --- FNC --- FNC --- FNC --- FNC --- FNC --- FEEDER
 --- 1PNTC --- 1PNTC --- 1PNTC --- PRIMARY
 --- SEC/SRV CBL
 ----- EOP

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)

TWNP: 00S RNG: 00E SEC: 00 QTR: _____

AS-BUILT COPY		AS-BUILT CREW PRINT		Easement? YES ☐ NO ☐		Survey/Stake? YES ☐ NO ☐		Work with SMO? YES ☐ NO ☐			DESIGNED BY		M/A: NW CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION US HWY-90 DESTIN/OKALOOSA, FL	
Initials	Cert. Date	Foreman's Signature		Date	Tree Work? YES ☐ NO ☐	Designer/Stake? YES ☐ NO ☐		CT/Special Mtr? YES ☐ NO ☐			DRAWN BY			
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.				Map Posting? YES ☐ NO ☐	Trench Feet		Duct Bank Feet		DATE					
Supervisor's Signature				Date	PERMIT RECORD CITY DR. DIST. COUNTY AIR STATE RD FAA WMD RR XING COUNTY RD. TRANSM.	Telephone Request? YES ☐ NO ☐		CATV Request? YES ☐ NO ☐			MAP NO.			
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.				Foreman's Signature		Date	Posted by				0 20 40 80 FEET			
DWG NO. PAGE 6B WR: 11341323 WR: D0113 — 41-323														

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)



DWG NO.	PAGE 7
WR: 11341323	WR: D0113- 41 -323



FOR CONTINUATION SEE PAGE 6

EASEMENTS REQUIRED

FPL

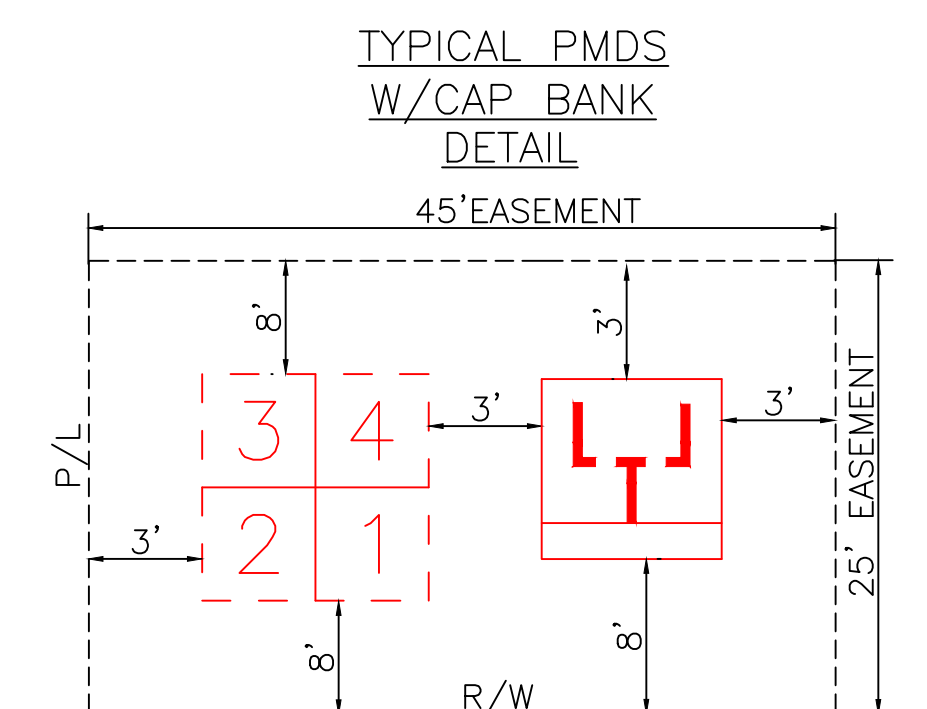
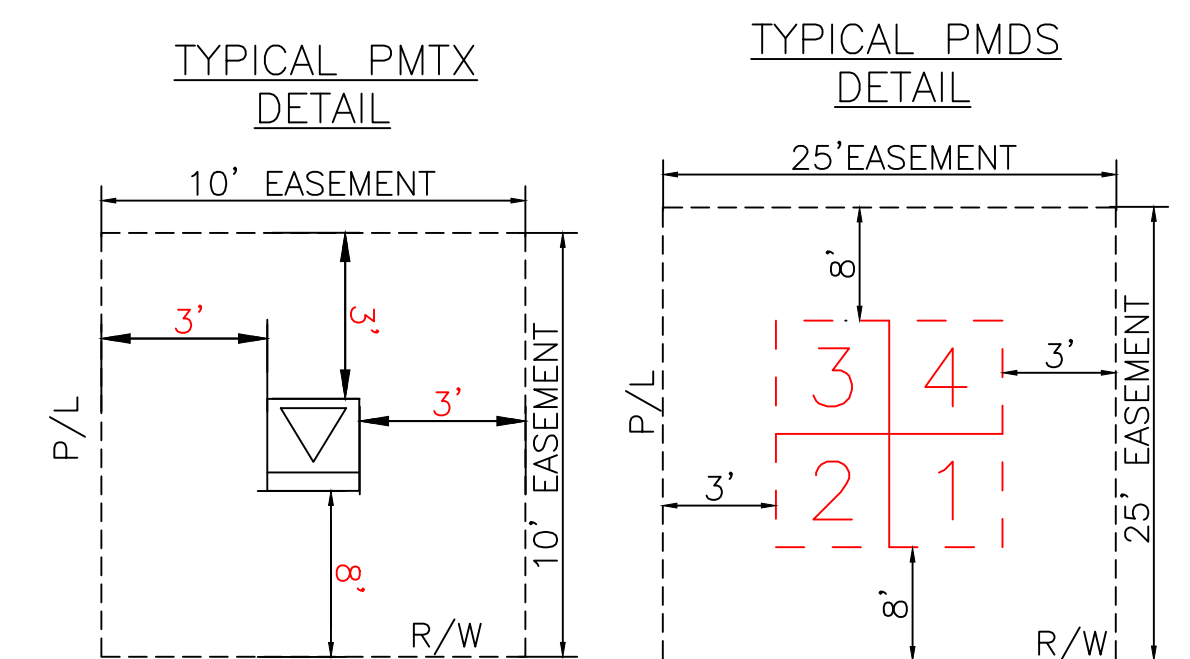
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FOR CONTINUATION SEE PAGE 7

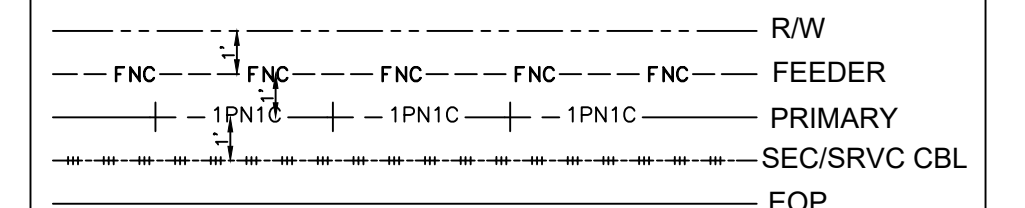


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Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)



GENERAL CABLE TIE DOWN DETAILS:
(N.T.S.)

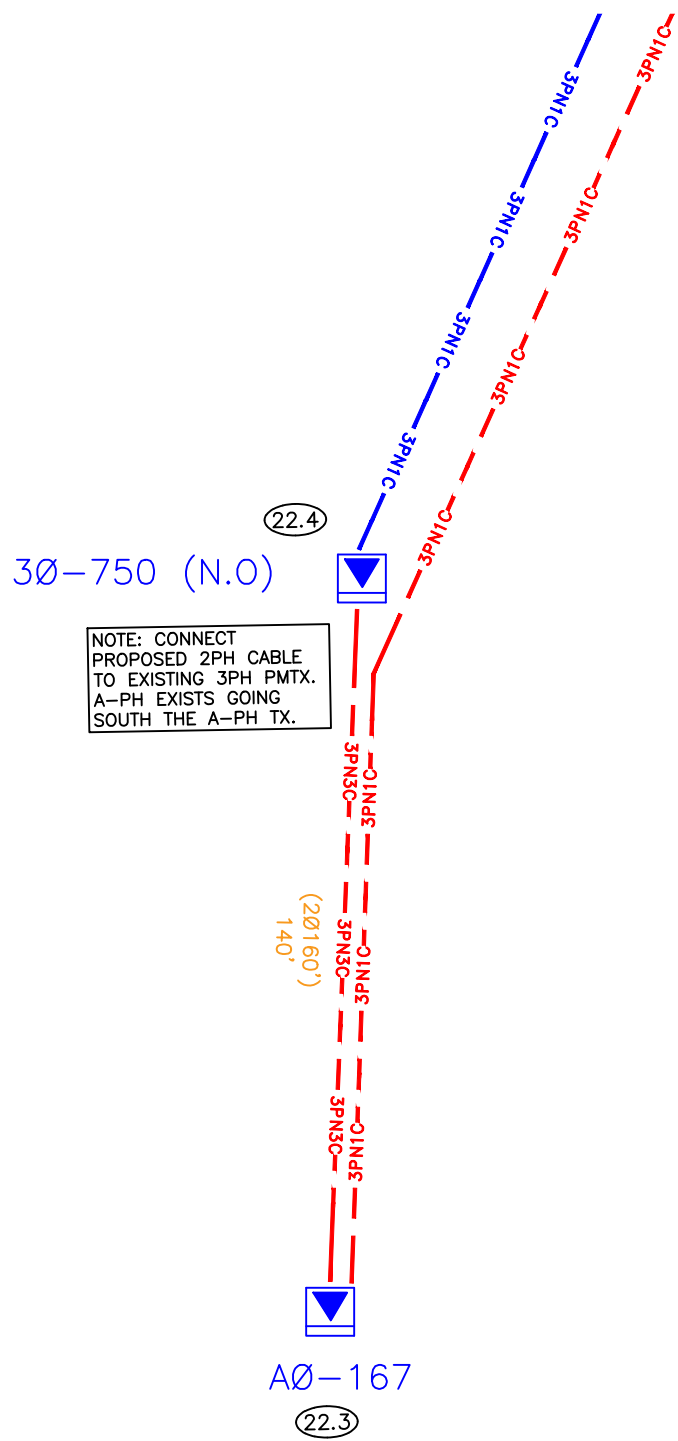


REFERENCE DWG's

EASEMENTS REQUIRED	
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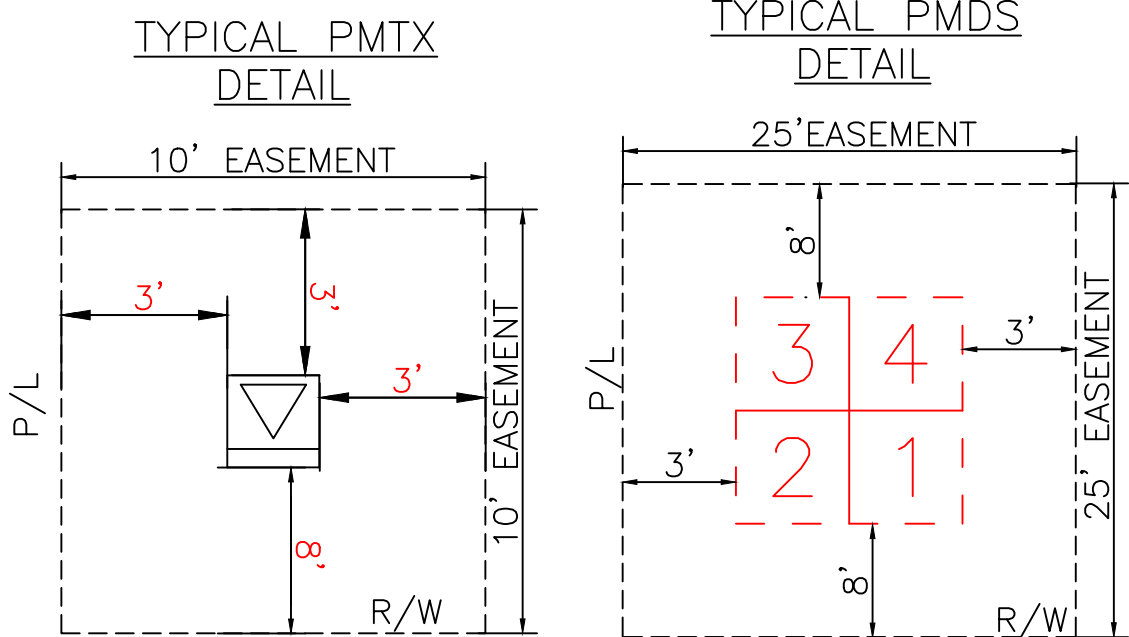
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Initials	Cart. Date	Foreman's Signature				Date	DRAWN BY					
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.						DATE						
Supervisor's Signature						Date	MAP NO.					
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.						0 20 40 80 FEET						
Easement? YES ☐ NO ☐		Survey/Stake? YES ☐ NO ☐		Work with SMO? YES ☐ NO ☐				DWG NO. WR: 11341323 WR: D0113 - 41 - 323				
Tree Work? YES ☐ NO ☐		Designer/Stake? YES ☐ NO ☐		CT/Special Mtr? YES ☐ NO ☐								
Map Posting? YES ☐ NO ☐		Trench Feet		Duct Bank Feet								
PERMIT REQUIRED		CITY	DR. DIST.	COUNTY	AIR					STATE	RD	FAA
		WMD	RR	XING	COUNTY					RD.	TRANSM.	
Posted by		Telephone Request? YES ☐ NO ☐		CATV Request? YES ☐ NO ☐								

FOR CONTINUATION SEE PAGE 7

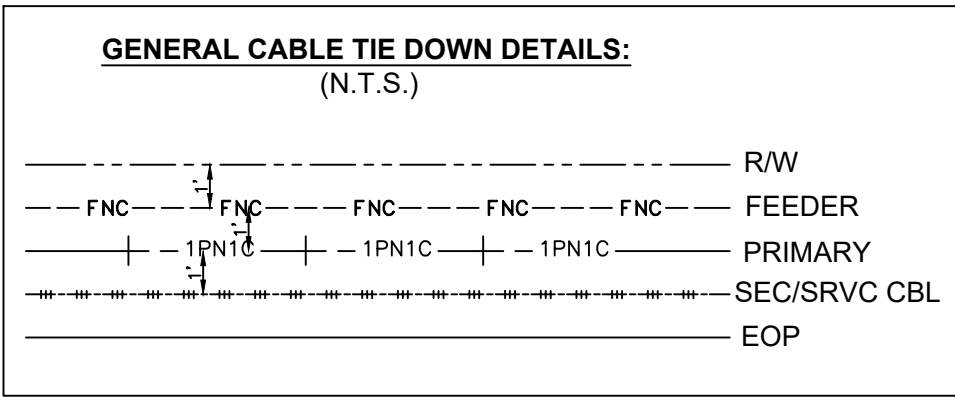
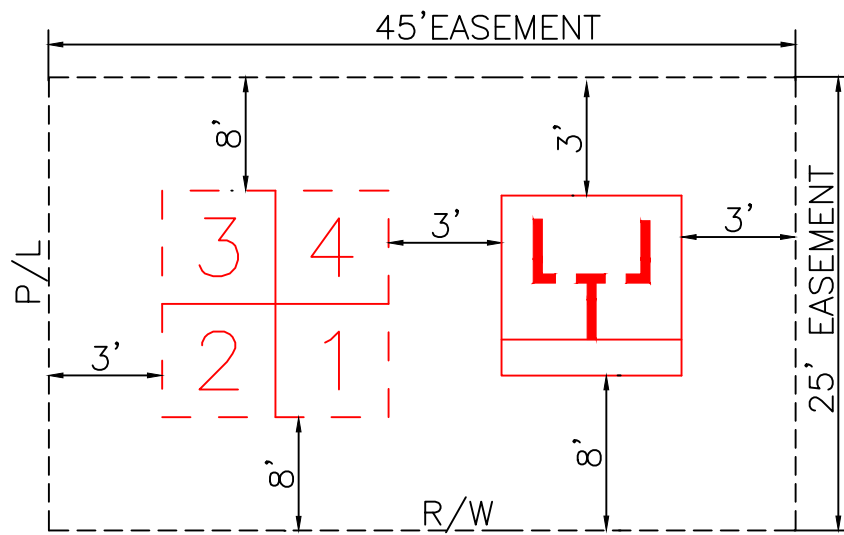


The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)



TYPICAL PMDS
W/CAP BANK
DETAIL



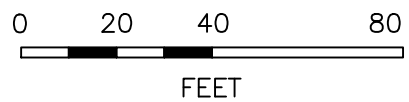
REFERENCE DWG's

EASEMENTS REQUIRED

AS-BUILT COPY	AS-BUILT CREW PRINT	Easement? YES ☐ NO ☐	Survey/Stake? YES ☐ NO ☐	Work with SMO? YES ☐ NO ☐
Initials _____ Date _____	Foreman's Signature _____ Date _____	Tree Work? YES ☐ NO ☐	Designer/Stake? YES ☐ NO ☐	CT/Special Mtr? YES ☐ NO ☐
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.		Map Posting? YES ☐ NO ☐	Trench Feet _____	Duct Bank Feet _____
Supervisor's Signature _____ Date _____		PERMIT RECORD	CITY _____	DR. DIST. _____
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.		WMD _____	RR XING _____	COUNTY RD. _____
Foreman's Signature _____ Date _____		Posted by _____	Telephone Request? YES ☐ NO ☐	CATV Request? YES ☐ NO ☐



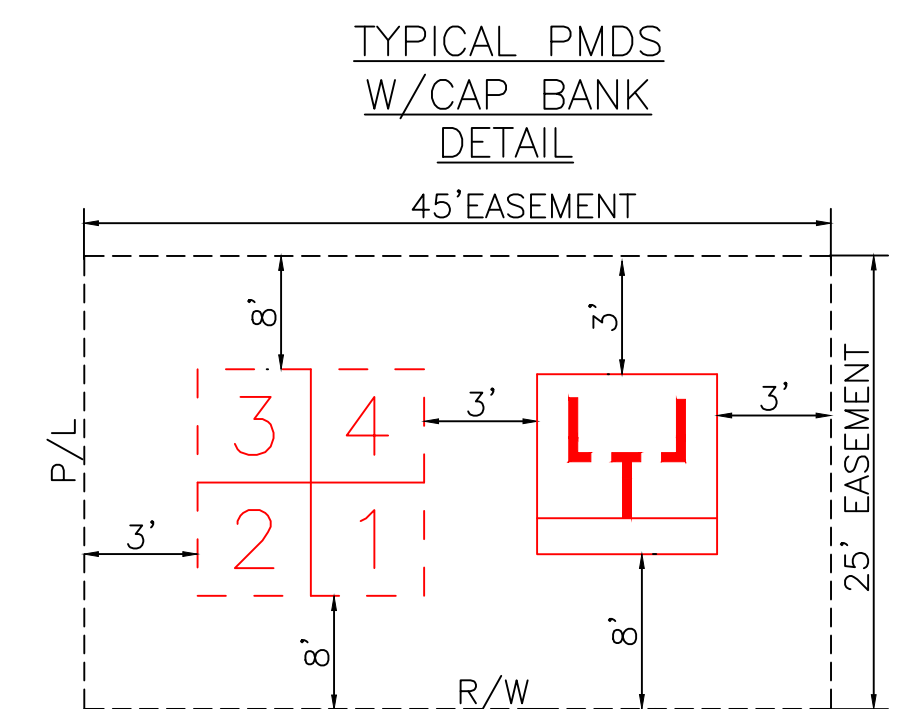
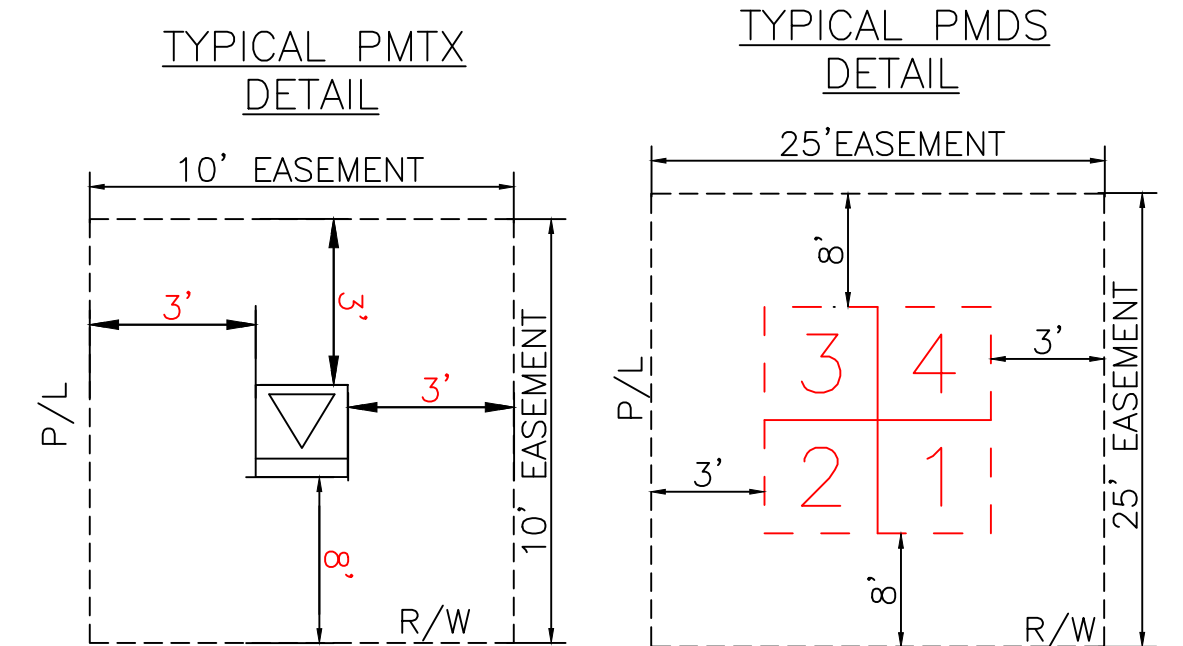
DESIGNED BY	_____
DRAWN BY	_____
DATE	_____
MAP NO.	_____



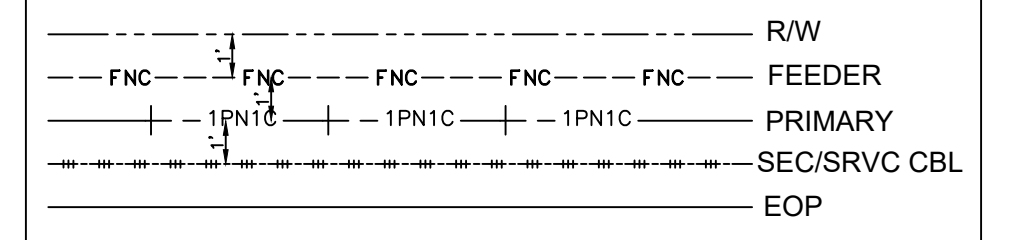
W/A: NW	
CITY OF DESTIN PHASE 1	
UG FOR CONSTRUCTION	
US HWY-90 DESTIN/OKALOOSA, FL	
DWG NO.	PAGE 7A
WR: 1134-323	WR: D0113 - 41 - 323

TWNP: 00S RNG: 00E SEC: 00 QTR: _____

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)



GENERAL CABLE TIE DOWN DETAILS:
(N.T.S.)



REFERENCE DWG's

TWNP: 00S RNG: 00E SEC: 00 QTR:

CITY OF DESTIN PHASE 1
UG FOR CONSTRUCTION

US HWY-90
DESTIN/OKALOOSA, FL

DWG NO.	PAGE 8
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WR: 11341323 WR: D0113- 41 -323



DESIGNED BY	
DRAWN BY	
DATE	
MAP NO.	—

0 20 40 80
FFET

Easement?	YES ☐ NO ☐	Survey/State?	YES ☐ NO ☐	Work with SMO?	YES ☐ NO ☐		
Tree Work?	YES ☐ NO ☐	Designer/State?	YES ☐ NO ☐	CT/Special Mtr?	YES ☐ NO ☐		
Map Posting?	YES ☐ NO ☐	Trench Feet		Duct Bank Feet			
		PERMIT RECORD	CITY	DR. DIST.	COUNTY AIR	STATE RD	FAA
			WMD	RR XING	COUNTY RD.	TRANSM.	
Posted by		Telephone Request? YES ☐ NO ☐		CATV Request? YES ☐ NO ☐			

AS-BUILT COPY		AS-BUILT CREW PRINT	
Initials	Cert. Date	Foreman's Signature	Date
Job CERTIFIED COMPLETED as shown on this AS-BUILT print Material changes shown on ROS.			
Supervisor's Signature		Date	
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.			
Foreman's Signature		Date	

ROW AGREEMENT

EASEMENTS REQUIRED

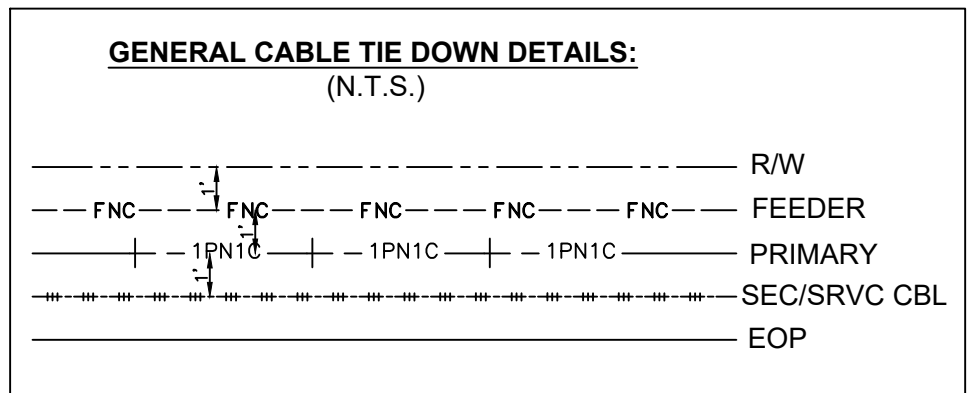
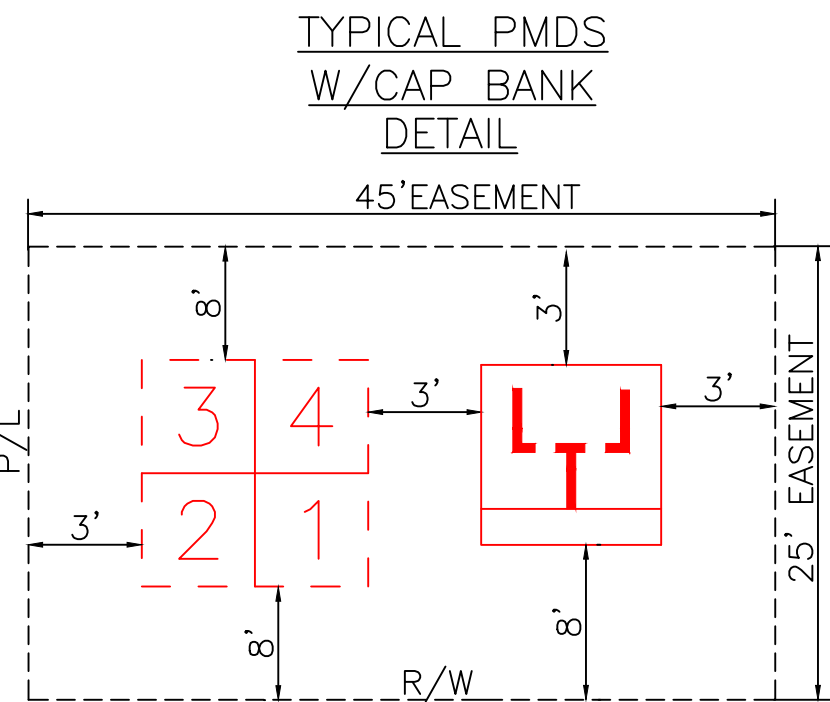
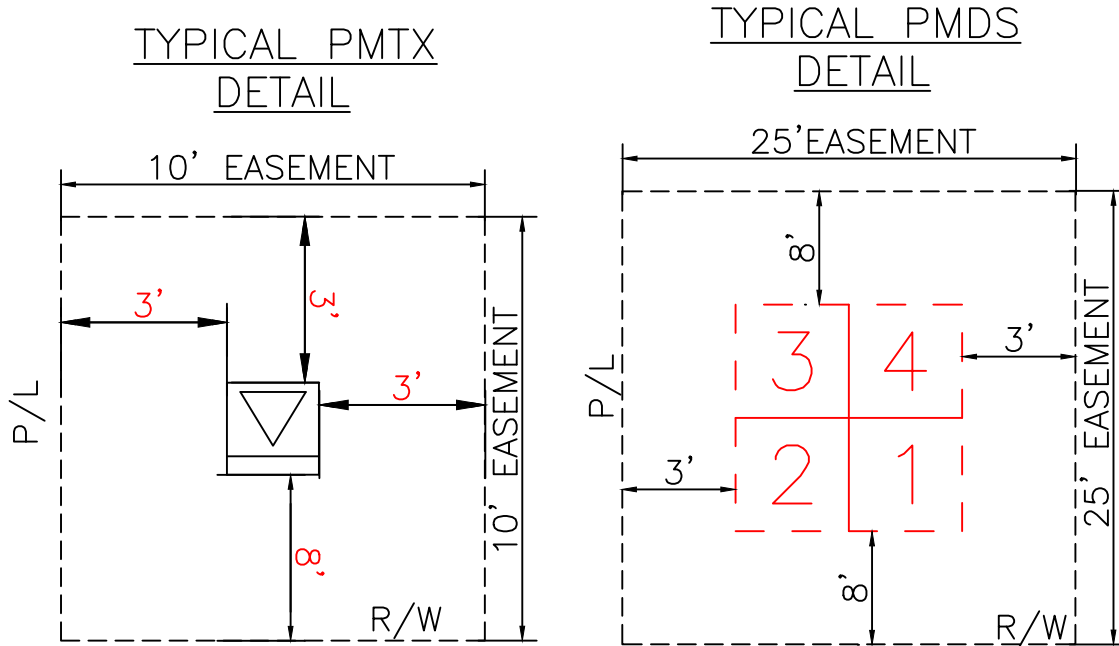
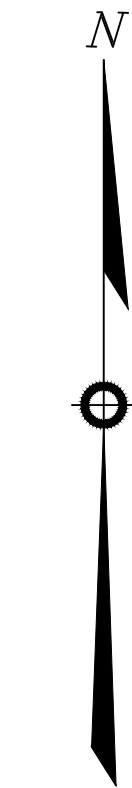
FOR CONTINUATION SEE PAGE 9

FOR CONTINUATION SEE PAGE 7

PLOT DATE: 00/00/00	PLOT TIME: 00:00:00	CAD NAME: NO-NAME
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The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)



REFERENCE DWG's

FOR CONTINUATION SEE PAGE 10

FOR CONTINUATION SEE PAGE 8

ROW AGREEMENT

EASEMENTS REQUIRED

AS-BUILT COPY	AS-BUILT CREW PRINT	Easement? YES ☐ NO ☐	Survey/Stake? YES ☐ NO ☐	Work with SMO? YES ☐ NO ☐
Initials	Foreman's Signature	Tree Work? YES ☐ NO ☐	Designer/Stake? YES ☐ NO ☐	CT/Special Mtr? YES ☐ NO ☐
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.		Map Posting? YES ☐ NO ☐	Trench Feet	Duct Bank Feet
Supervisor's Signature		CITY	DR. DIST.	COUNTY AIR
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.		WMD	RR XING	COUNTY RD.
Foreman's Signature		Posted by	Telephone Request? YES ☐ NO ☐	CATV Request? YES ☐ NO ☐



DESIGNED BY	
DRAWN BY	
DATE	
MAP NO.	-
0 20 40 80 FEET	

W/A: NW	
CITY OF DESTIN PHASE 1	
UG FOR CONSTRUCTION	
US HWY-90	
DESTIN/OKALOOSA, FL	
DWG NO.	PAGE 9
WR: 11341323	WR: D0113 - 41 - 323

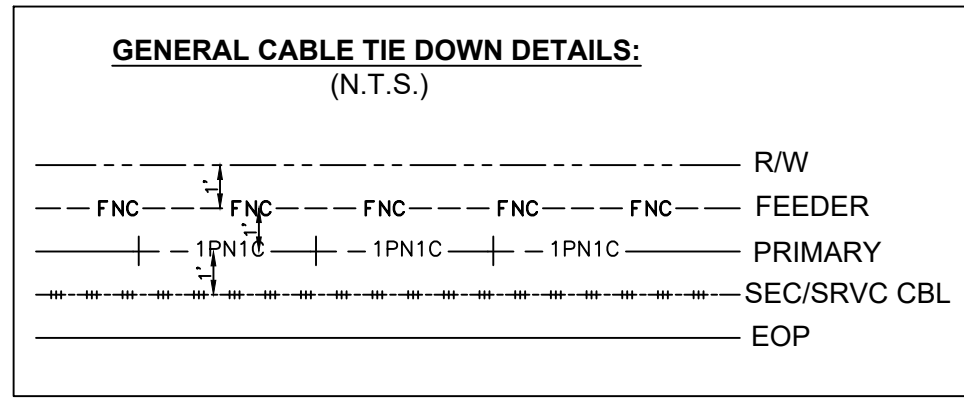
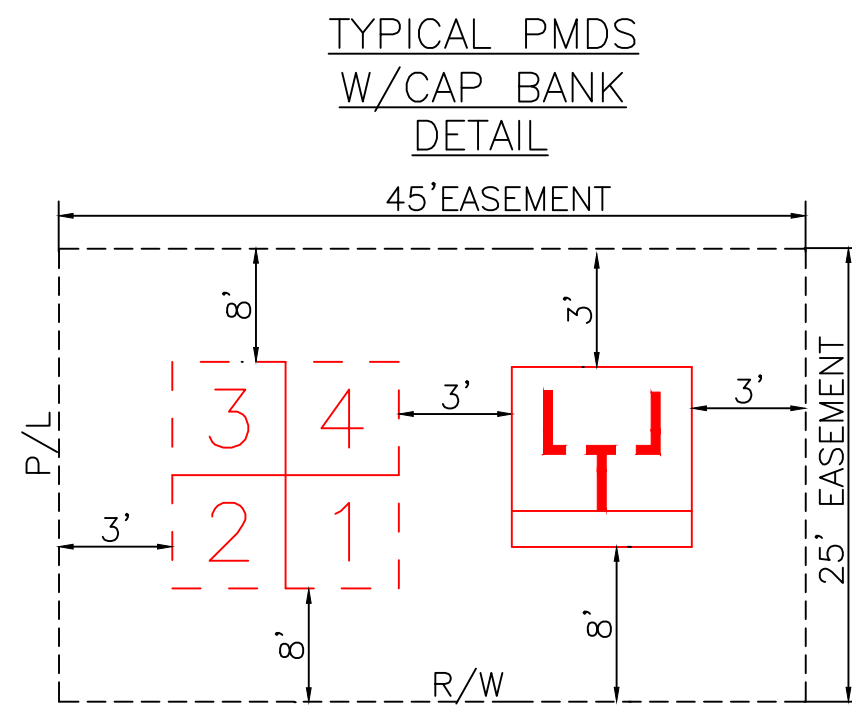
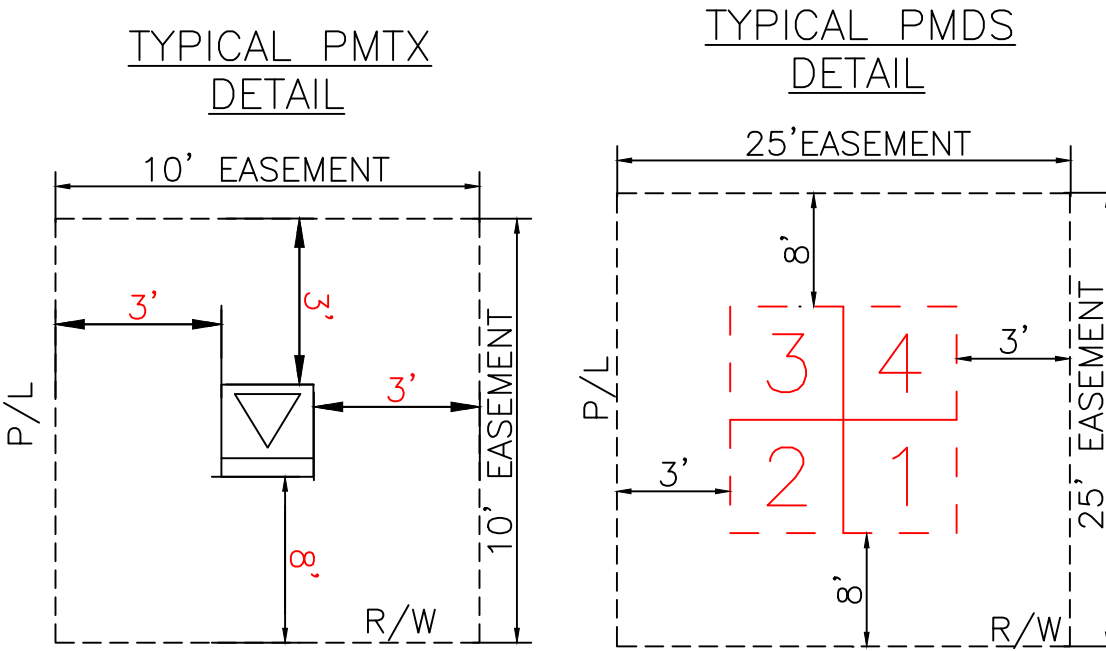
TWNP: 00S RNG: 00E SEC: 00 QTR: _____

☐ INACCESSIBLE ☒ 12KV ☐ FUTURE 25KV ☐ 25KV ☒ SALT SPRAY ☐



The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)



REFERENCE DWG's

FOR CONTINUATION SEE PAGE 11

FOR CONTINUATION SEE PAGE 9

ROW AGREEMENT

EASEMENTS REQUIRED

AS-BUILT COPY	AS-BUILT CREW PRINT
Initials	Cert. Date
Foreman's Signature	
Date	
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.	
Supervisor's Signature	
Date	
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.	
Foreman's Signature	
Date	

Easement?	YES ☐ NO ☐	Survey/Stake?	YES ☐ NO ☐	Work with SMO?	YES ☐ NO ☐
Tree Work?	YES ☐ NO ☐	Designer/Stake?	YES ☐ NO ☐	CT/Special Mtr?	YES ☐ NO ☐
Map Posting?	YES ☐ NO ☐	Trench Feet	Duct Bank Feet		
CITY	DR. DIST.	COUNTY AIR	STATE RD	FAA	
WMD	RR XING	COUNTY RD.	TRANS.		
Posted by	Telephone Request?	YES ☐ NO ☐	CATV Request?	YES ☐ NO ☐	



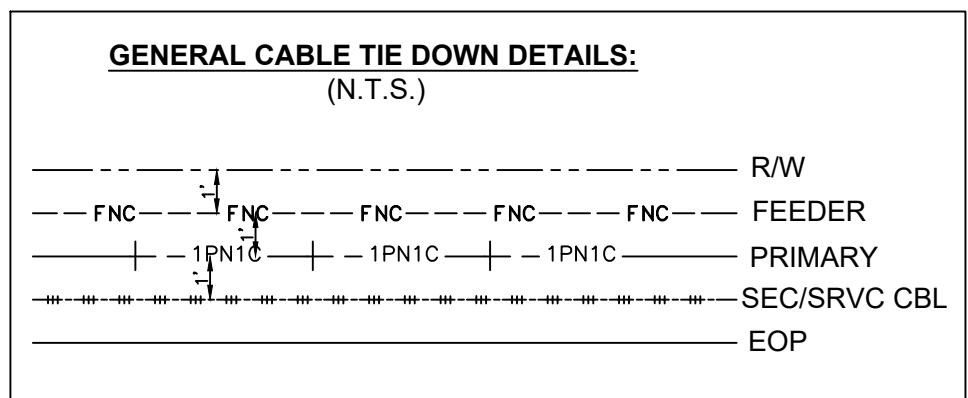
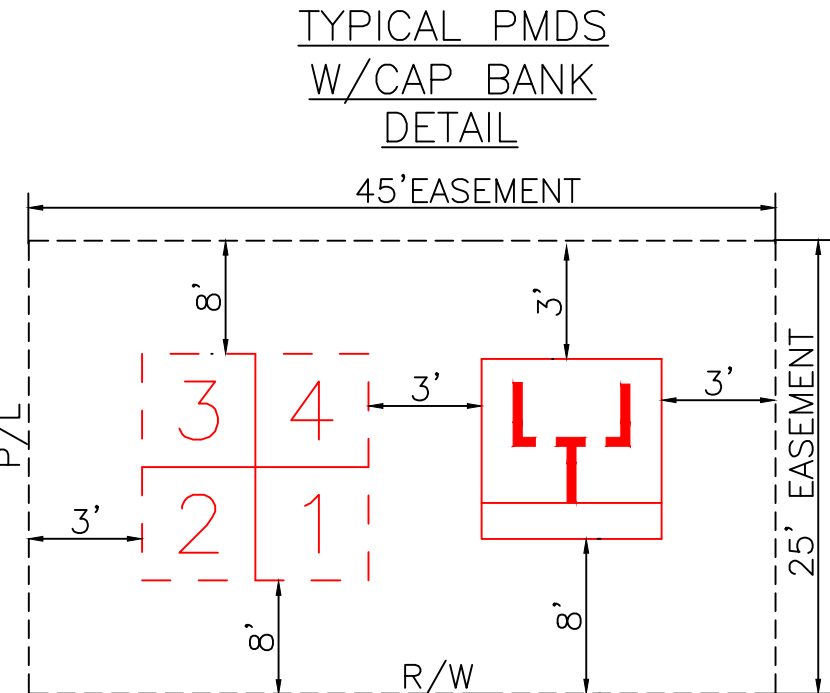
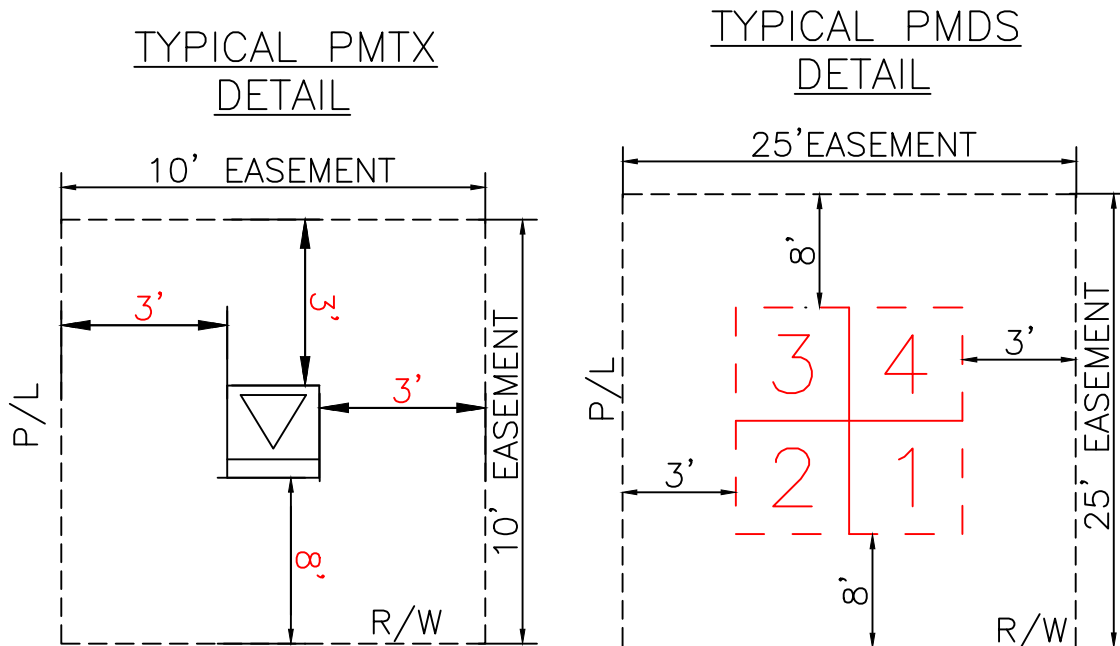
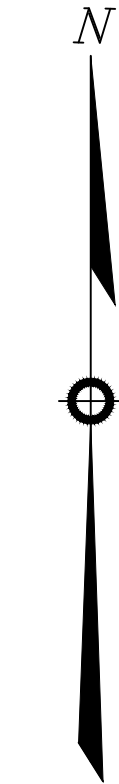
DESIGNED BY	
DRAWN BY	
DATE	
MAP NO.	-
0 20 40 80 FEET	

W/A: NW	
CITY OF DESTIN PHASE 1	
UG FOR CONSTRUCTION	
US HWY-90	
DESTIN/OKALOOSA, FL	
DWG NO.	PAGE 10
WR: 1134	323 WR: D0113 - 41 - 323

PLOT DATE: 06/00/00 PLOT TIME: 00:00:00 CAD NAME: NO-NAME

The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)



REFERENCE DWG's

FOR CONTINUATION SEE PAGE 12

FOR CONTINUATION SEE PAGE 10

ROW AGREEMENT

EASEMENTS REQUIRED

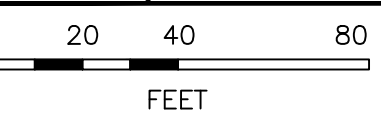
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Initials	Foreman's Signature	Tree Work? YES ☐ NO ☐	Designer/Stake? YES ☐ NO ☐	CT/Special Mtr? YES ☐ NO ☐
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.		Map Posting? YES ☐ NO ☐	Trench Feet	Duct Bank Feet
Supervisor's Signature		CITY	DR. DIST.	COUNTY AIR
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.		WMD	RR XING	COUNTY RD.
Foreman's Signature		Posted by	Telephone Request? YES ☐ NO ☐	CATV Request? YES ☐ NO ☐



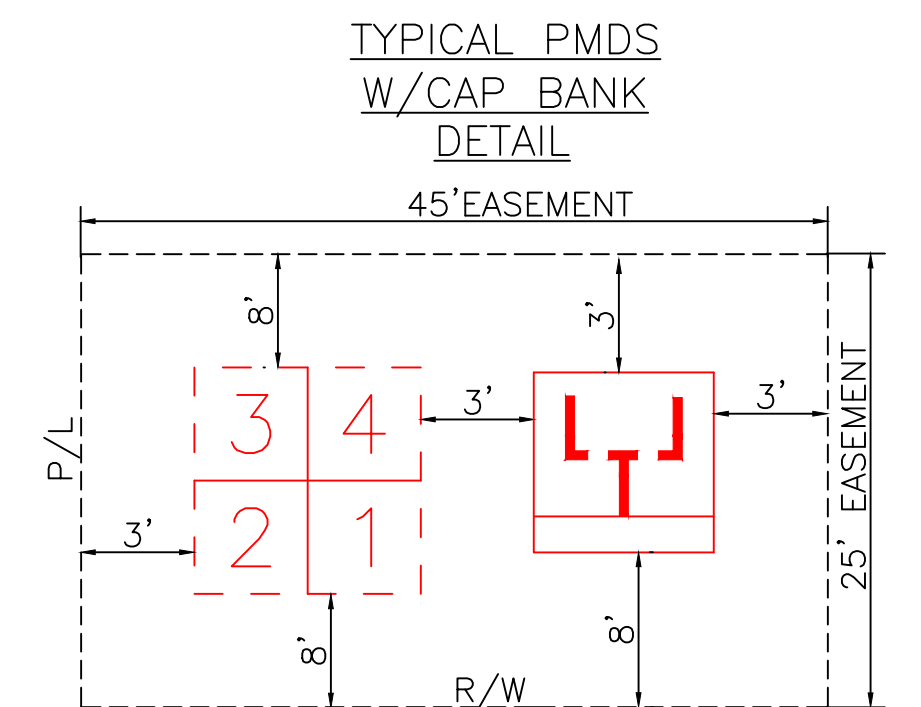
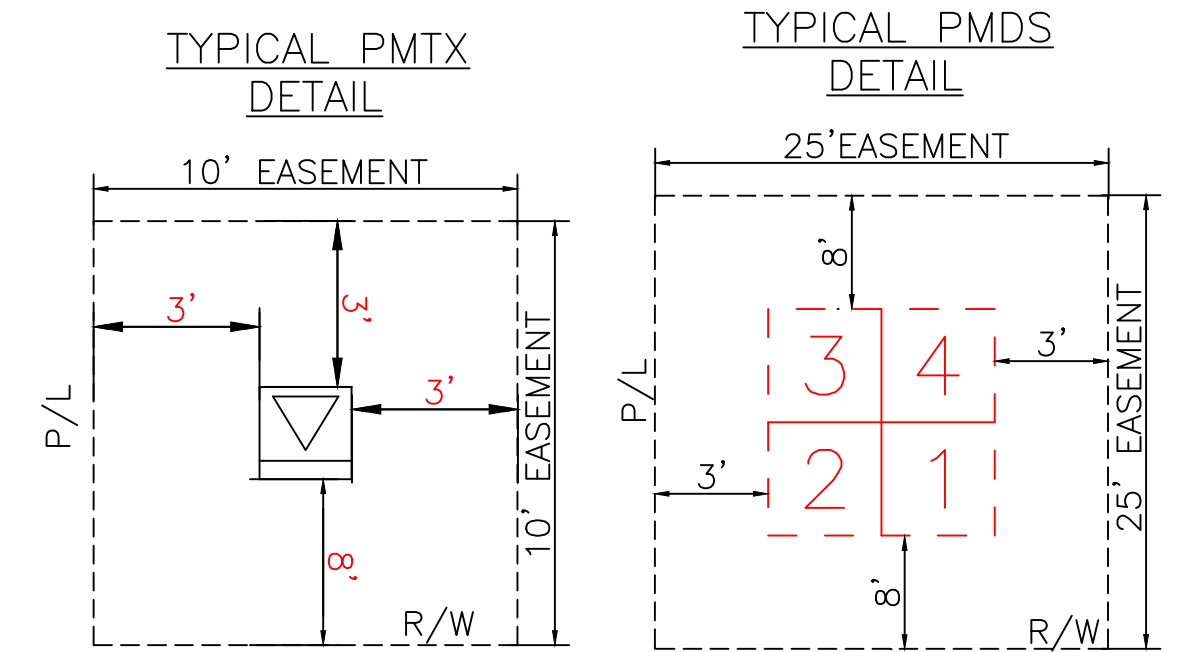
DESIGNED BY	
DRAWN BY	
DATE	
MAP NO.	

W/A: NW
CITY OF DESTIN PHASE 1
UG FOR CONSTRUCTION
US HWY-90
DESTIN/OKALOOSA, FL
DWG NO. 11341323
WR: D0113 - 41 - 323

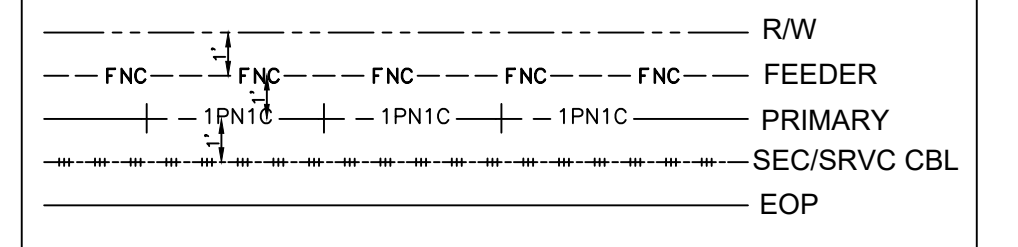
TWNP: 00S RRG: 00E SEC: 00 QTR:



Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)



GENERAL CABLE TIE DOWN DETAILS:
(N.T.S.)



REFERENCE DWG'S

TWNP: 00S RNG: 00E SEC: 00 QTR: _____

CITY OF DESTIN PHASE 1
UG FOR CONSTRUCTION

US HWY-90
DESTIN/OKALOOSA, FL

DWG NO. PAGE 12
WR: 11341323 WR: D0113 — 41 — 323

ROW AGREEMENT

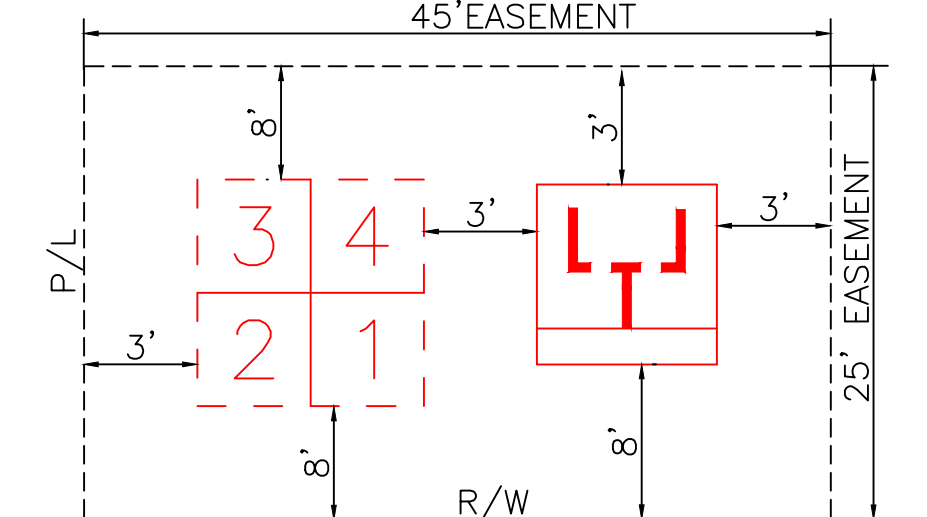
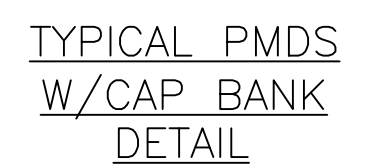
EASEMENTS REQUIRED

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Initials	Cert. Date	Foreman's Signature _____ Date _____		Tree Work? YES ☐ NO ☐		Designer/Stake? YES ☐ NO ☐		CT/Special Mtr? YES ☐ NO ☐			DRAWN BY			
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.				Map Posting? YES ☐ NO ☐		Trench Feet		Duct Bank Feet			DATE			
Supervisor's Signature _____ Date _____ All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.				Permit Rec'd		CITY DR. DIST. COUNTY AIR STATE RD FFA		WMD RR XING COUNTY RD. TRANSM.			MAP NO. _____			
Foreman's Signature _____ Date _____		Posted by		Telephone Request? YES ☐ NO ☐		CATV Request? YES ☐ NO ☐				 0 20 40 80 FEET		DWG NO. PAGE 12		
										WR: 11341323		WR: D0113 - 41 - 323		

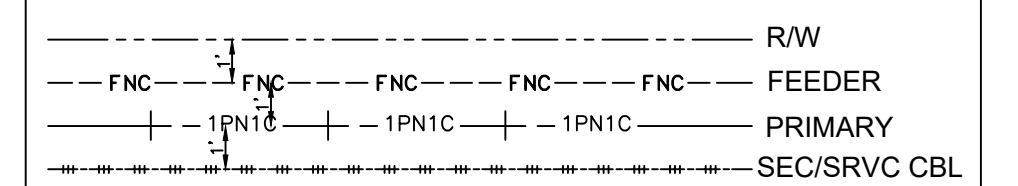
FOR CONTINUATION SEE PAGE 13

FOR CONTINUATION SEE PAGE 11

PLOT DATE: 00/00/00 PLOT TIME: 00:00:00 CAD NAME: NO-NAME



GENERAL CABLE TIE DOWN DETAILS:
(N.T.S.)



REFERENCE DWG'S

DESIGNED BY	
DRAWN BY	
DATE	
MAP NO.	—

0 20 40 80
FFET

Easement?	YES ☐ NO ☐	Survey/State?	YES ☐ NO ☐	Work with SMO?	YES ☐ NO ☐
Tree Work?	YES ☐ NO ☐	Designer/State?	YES ☐ NO ☐	CT/Special Mtr?	YES ☐ NO ☐
Map Posting?	YES ☐ NO ☐	Trench Feet		Duct Bank Feet	
		PERMIT RECORD CITY WM D	DR. DIST. RR XING	COUNTY AIR COUNTY RD.	STATE RD. TRANS.
Posted by		Telephone Request? YES ☐ NO ☐		CATV Request? YES ☐ NO ☐	

AS-BUILT COPY		AS-BUILT CREW PRINT	
Initials	Cert. Date	Foreman's Signature	Date
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.			
Supervisor's Signature		Date	
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.			
Foreman's Signature		Date	

EASEMENTS REQUIRED

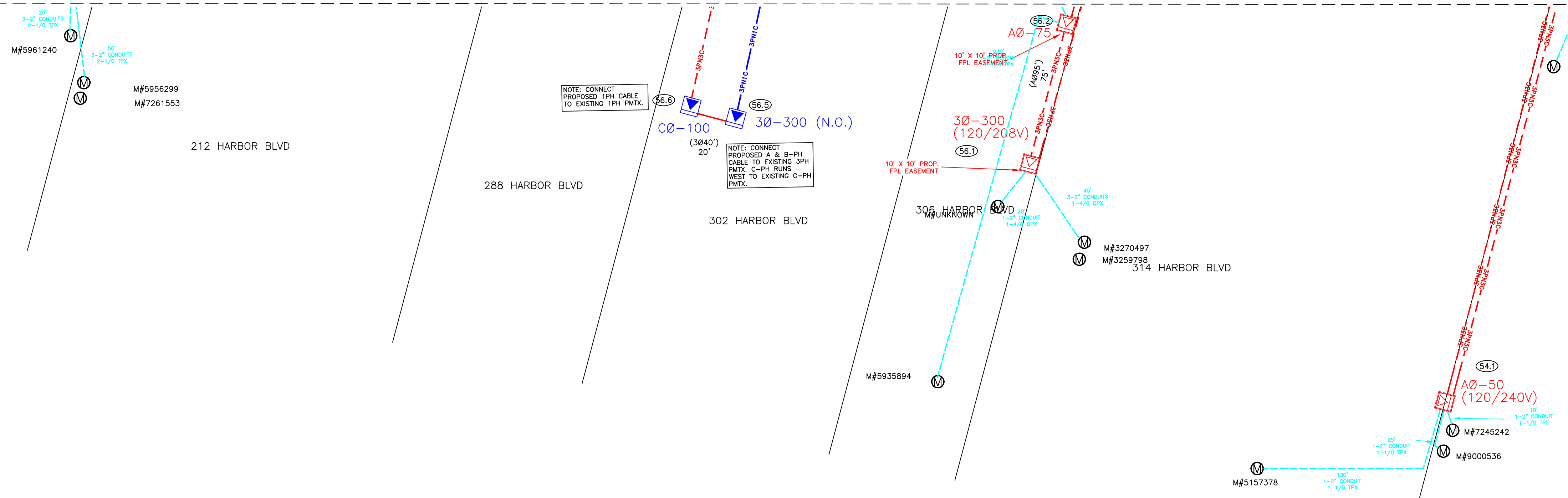
FOR CONTINUATION SEE PAGE 13A

FOR CONTINUATION SEE PAGE 12

PLOT DATE: 00/00/00	PLOT TIME: 00:00:00	CAD NAME: NO-NAME
---------------------	---------------------	-------------------

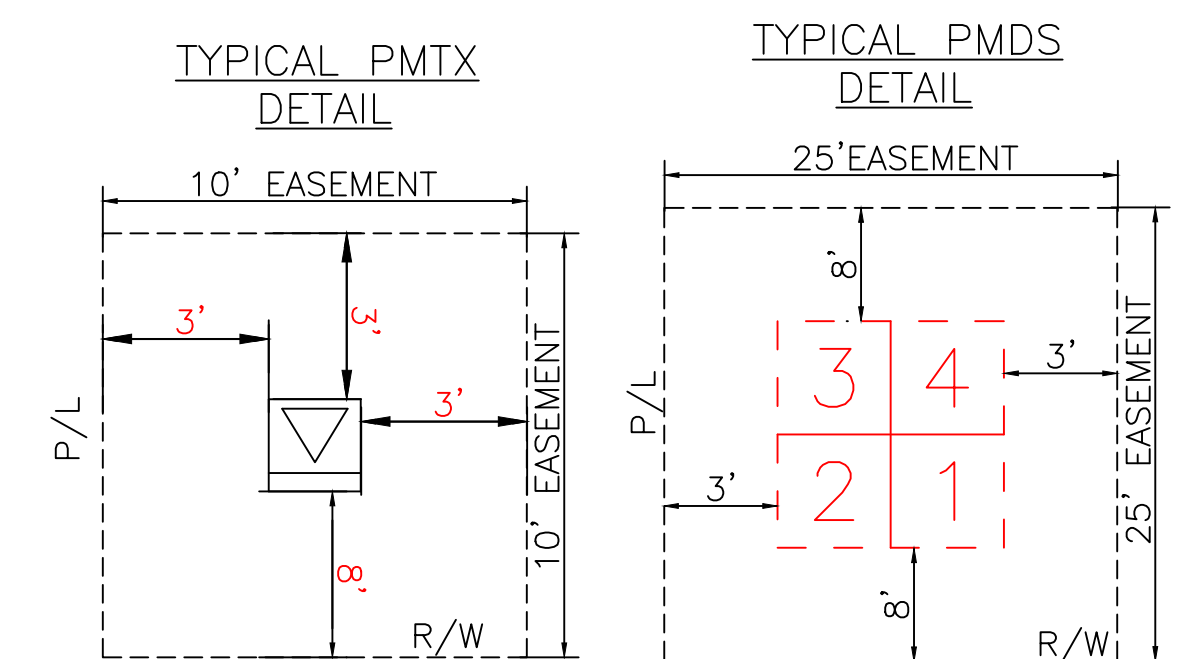
FOR CONTINUATION SEE PAGE 13

FOR CONTINUATION SEE PAGE 13

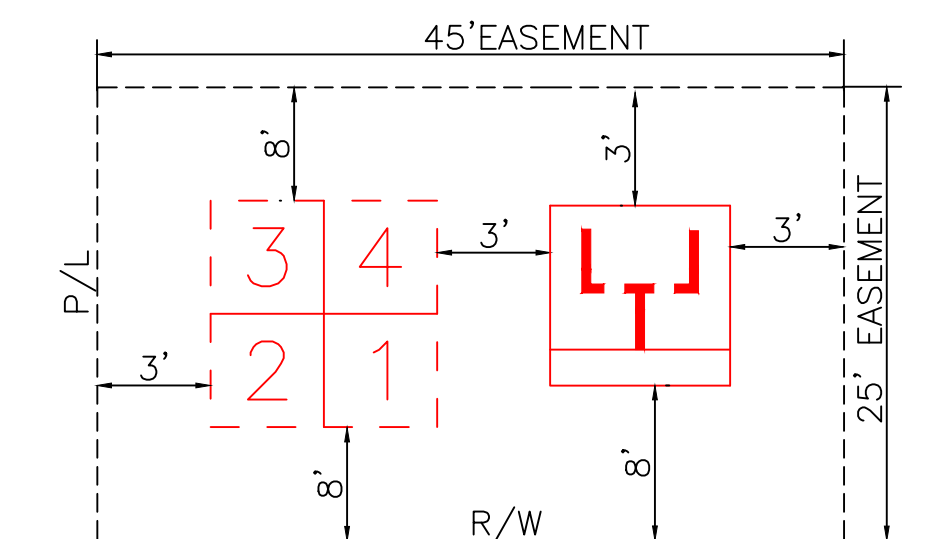


The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

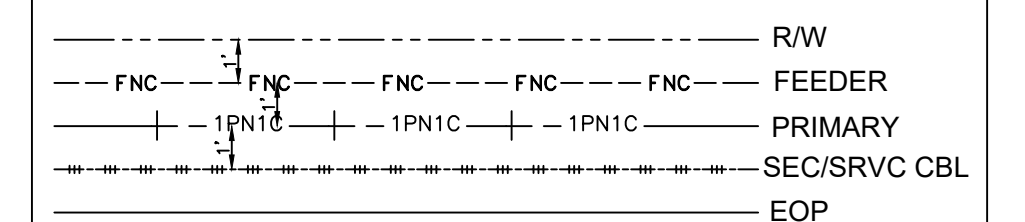
Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)



TYPICAL PMDS
W/CAP BANK
DETAIL



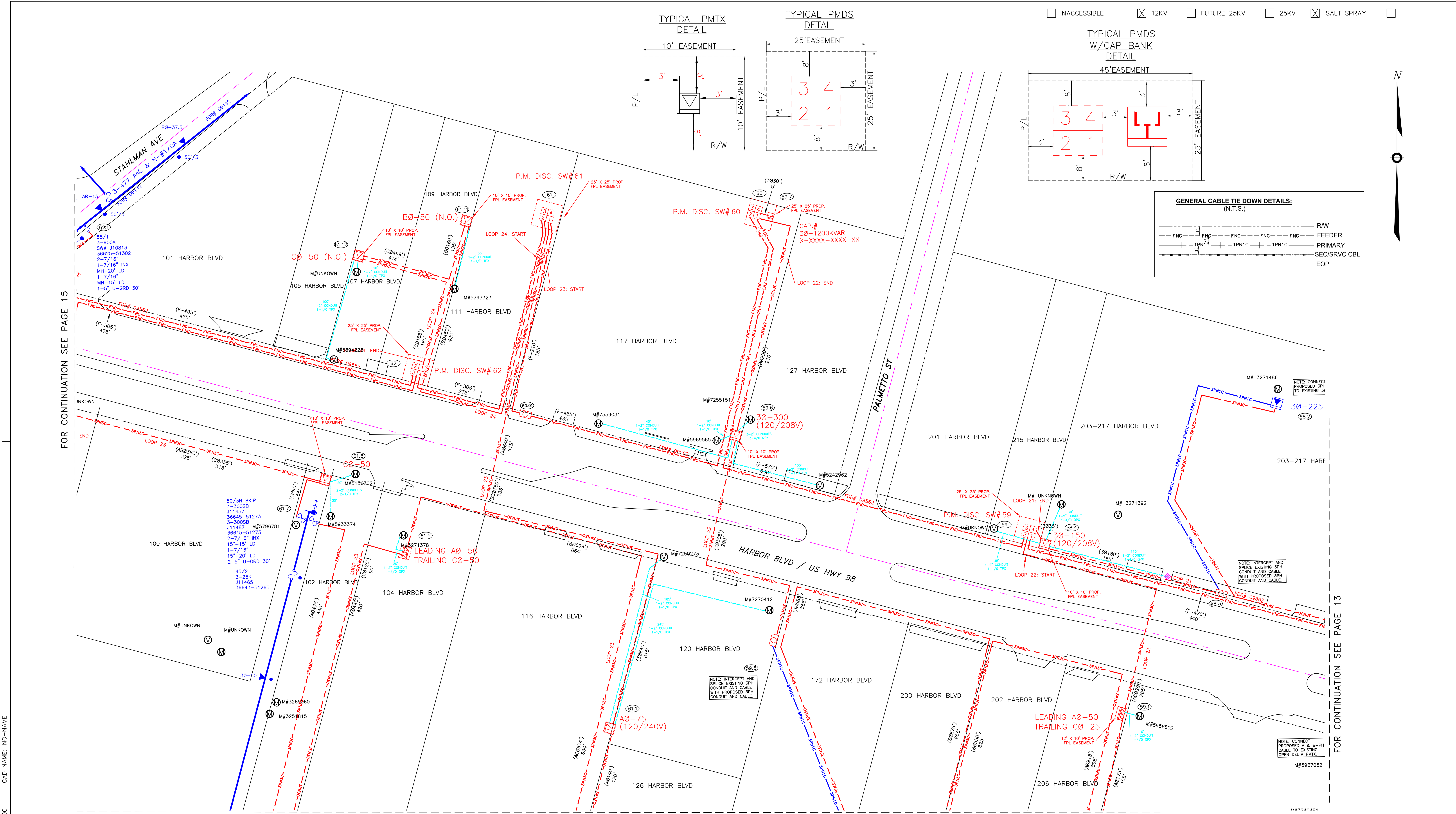
GENERAL CABLE TIE DOWN DETAILS:
(N.T.S.)



REFERENCE DWG's

EASEMENTS REQUIRED

AS-BUILT COPY		AS-BUILT CREW PRINT				DESIGNED BY		M/A: NW CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION US HWY-90 DESTIN/OKALOOSA, FL											
Initials	Cart. Date	Foreman's Signature				Date				DRAWN BY									
Job CERTIFIED COMPLETED as shown on this AS-BUILT print.						Trench Depth				DATE									
Material changes shown on ROS.						Map Posting?				MAP NO.									
Supervisor's Signature						Date				0 20 40 80 FEET									
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.				PERMIT REQUIRED		CITY		DR. DIST.		COUNTY		AIR		STATE		RD		FAA	
Foreman's Signature				Date		WMD		RR		XING		COUNTY		RD.		TRANSM.			
Posted by				Telephone Request?		YES		NO		CATV Request?		YES		NO					



FOR CONTINUATION SEE PAGE 15

FOR CONTINUATION SEE PAGE 13

PLOT DATE: 06/00/00 PLOT TIME: 00:00:00 CAD NAME: NO-NAME

FOR CONTINUATION SEE PAGE 14B

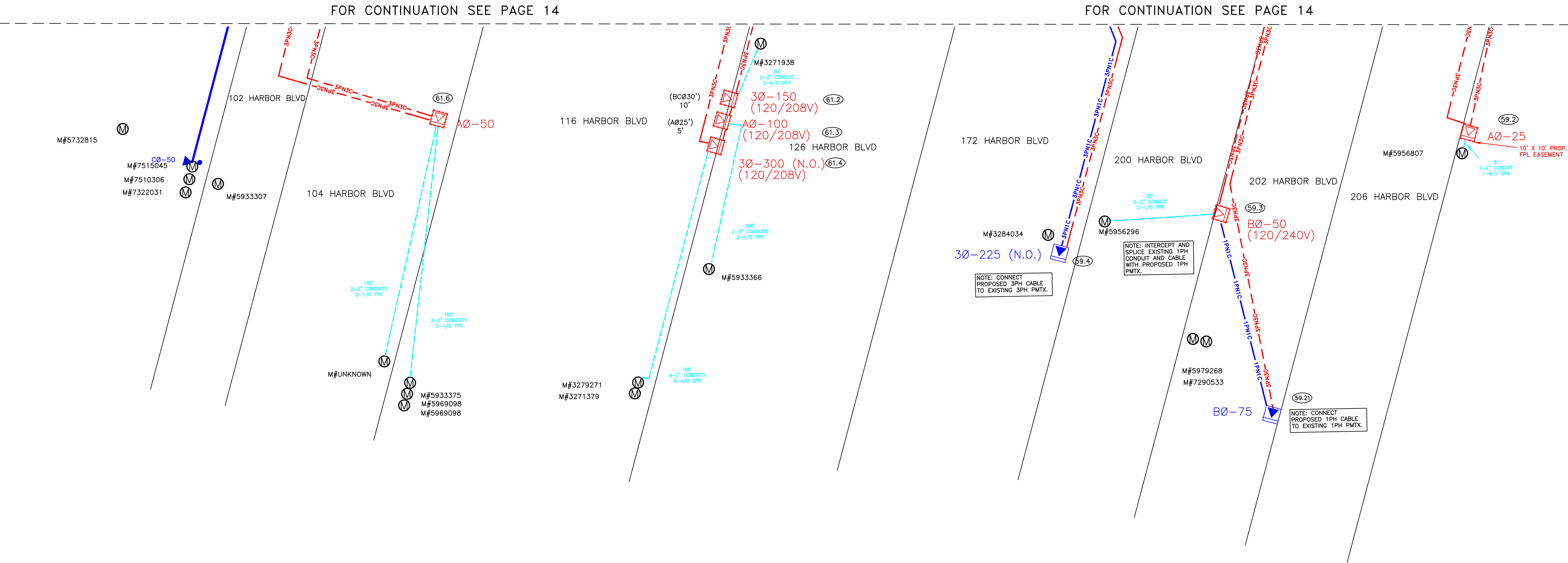
FOR CONTINUATION SEE PAGE 14B

Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)

The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

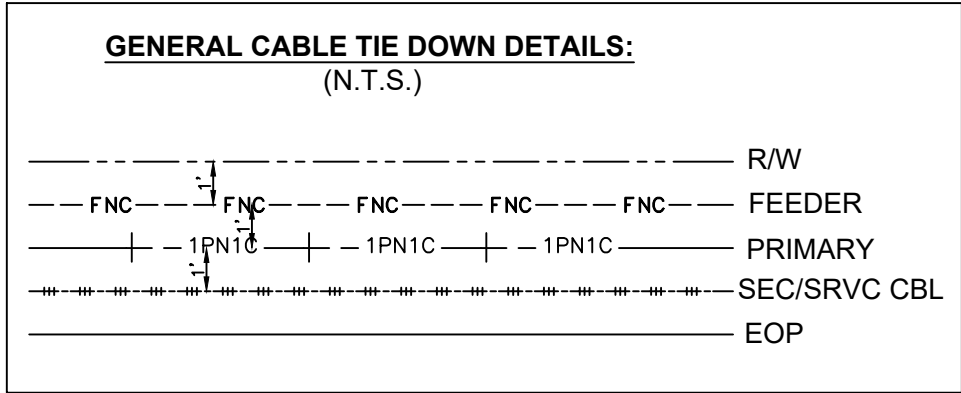
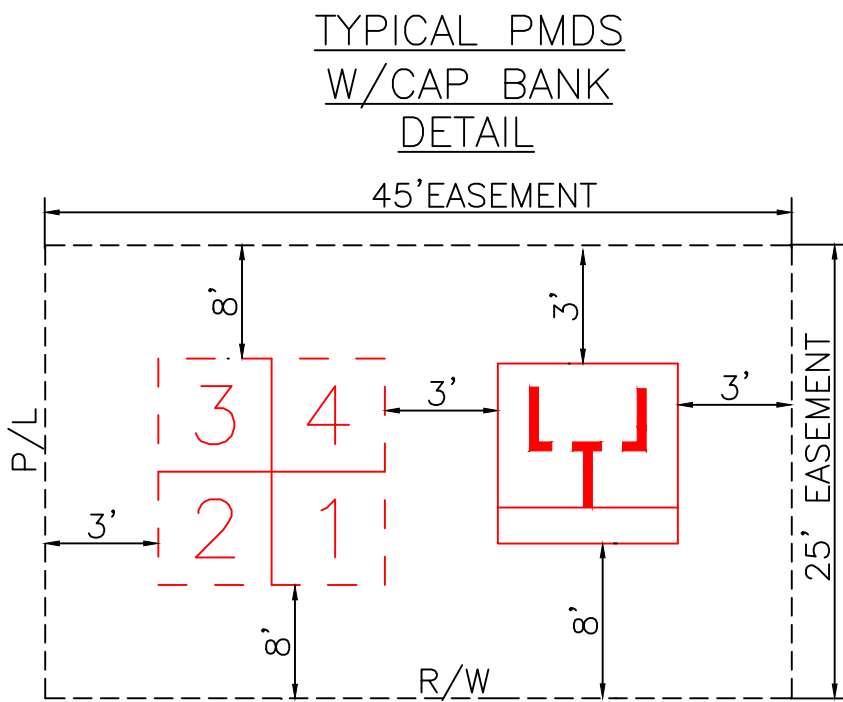
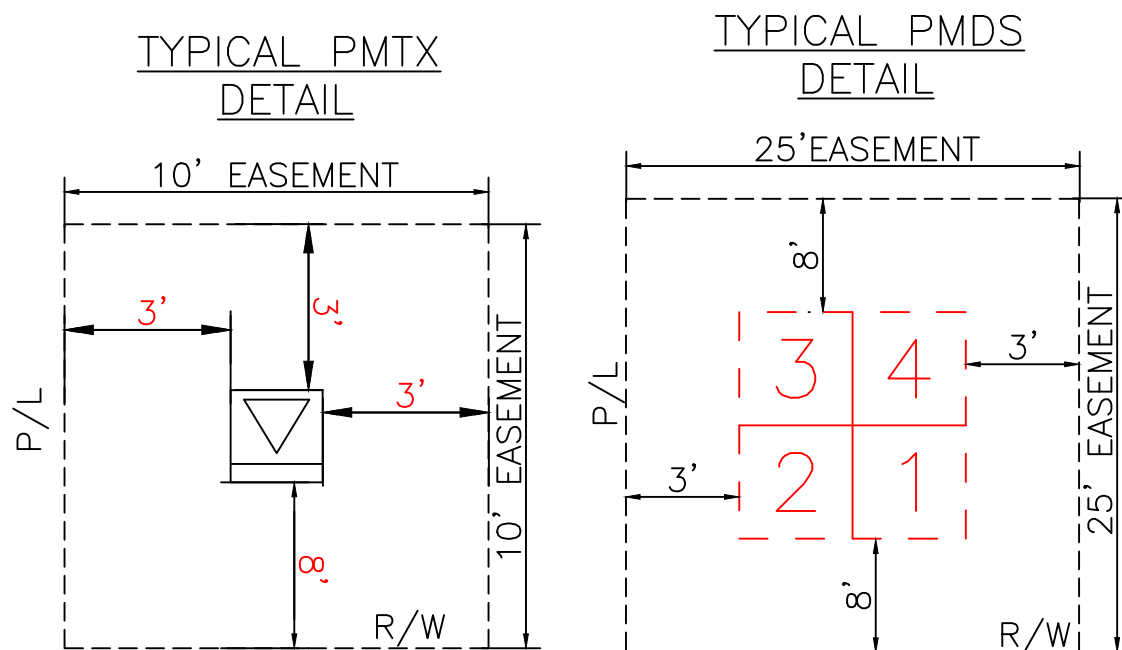
ROW AGREEMENT
EASEMENTS REQUIRED

AS-BUILT COPY		AS-BUILT CREW PRINT		Easement? YES ☐ NO ☐		Survey/Stake? YES ☐ NO ☐		Work with SMO? YES ☐ NO ☐			DESIGNED BY		CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION US HWY-90 DESTIN/OKALOOSA, FL PAGE 14 DWG NO. 11341323 WR: D0113 - 41 - 323
Initials	Cert. Date	Foreman's Signature		Date	Tree Work? YES ☐ NO ☐	Designer/Stake? YES ☐ NO ☐	CT/Special Mtr? YES ☐ NO ☐	Duct Bank Feet	DRAWN BY				
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.		Supervisor's Signature		Date	Map Posting? YES ☐ NO ☐	Trench Feet			DATE				
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.		Foreman's Signature		Date	Posted by	Telephone Request? YES ☐ NO ☐	CATV Request? YES ☐ NO ☐		MAP NO.				



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Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)



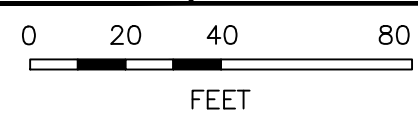
REFERENCE DWG's

EASEMENTS REQUIRED

AS-BUILT COPY	AS-BUILT CREW PRINT	Easement? YES ☐ NO ☐	Survey/Stake? YES ☐ NO ☐	Work with SMO? YES ☐ NO ☐
Initials _____ Cert. Date _____	Foreman's Signature _____ Date _____	Tree Work? YES ☐ NO ☐	Designer/Stake? YES ☐ NO ☐	CT/Special Mtr? YES ☐ NO ☐
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.		Map Posting? YES ☐ NO ☐	Trench Feet _____	Duct Bank Feet _____
Supervisor's Signature _____ Date _____		CITY _____ DR. DIST. _____ COUNTY AIR _____ STATE RD _____ FAA _____		
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.		WMD _____ RR XING _____ COUNTY RD. _____ TRANS. _____		
Foreman's Signature _____ Date _____		Posted by _____	Telephone Request? YES ☐ NO ☐	CATV Request? YES ☐ NO ☐



DESIGNED BY	_____
DRAWN BY	_____
DATE	_____
MAP NO.	_____



TWNP: 00S RNG: 00E SEC: 00 QTR: _____

W/A: **NW**

**CITY OF DESTIN PHASE 1
UG FOR CONSTRUCTION**

US HWY-90
DESTIN/OKALOOSA, FL

DWG NO. **PAGE 14B**

WR: **1134-323** WR: **D0113-41-323**



EASEMENTS REQUIRED	
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The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

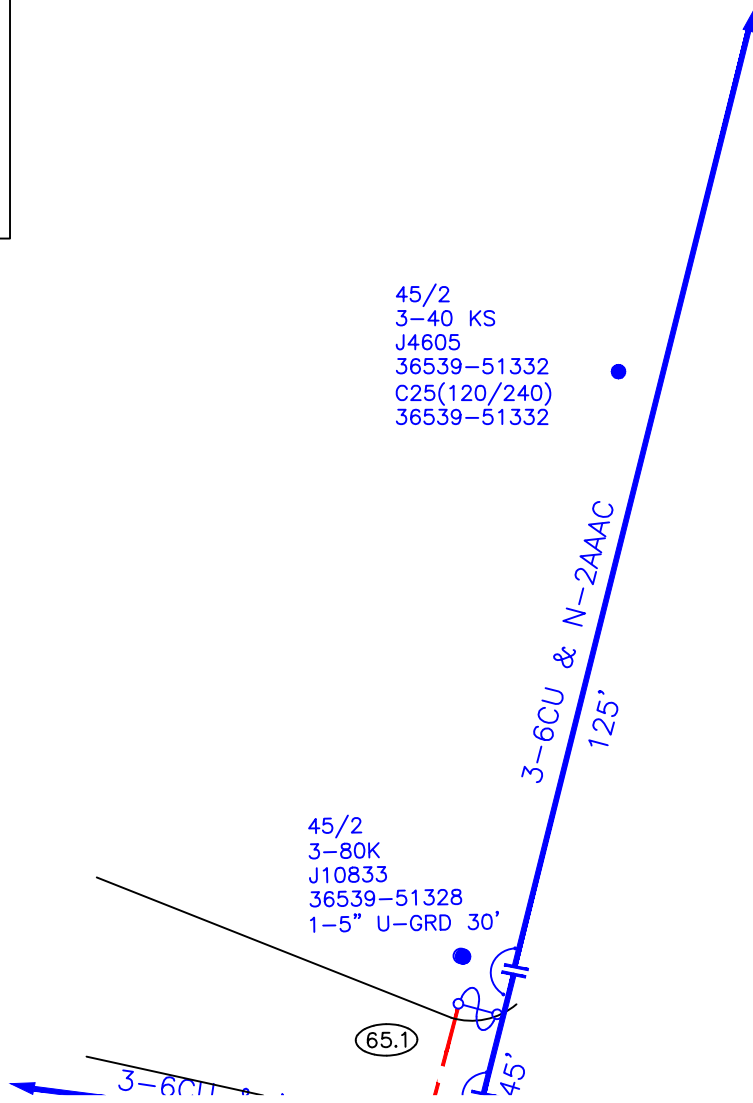
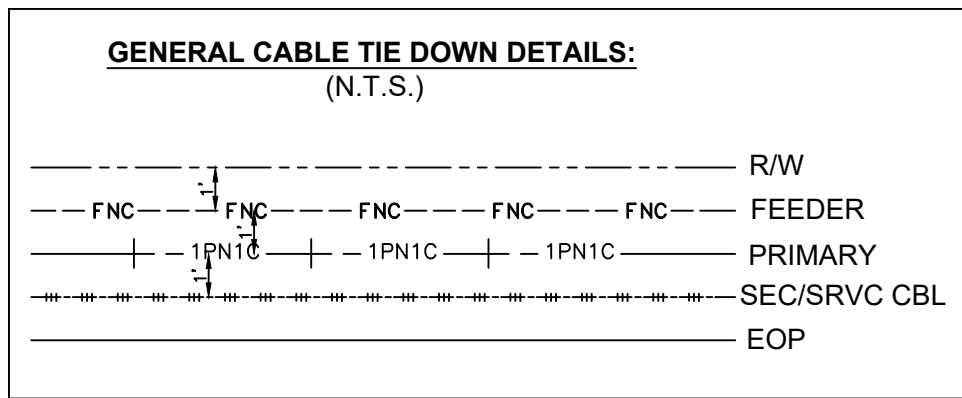
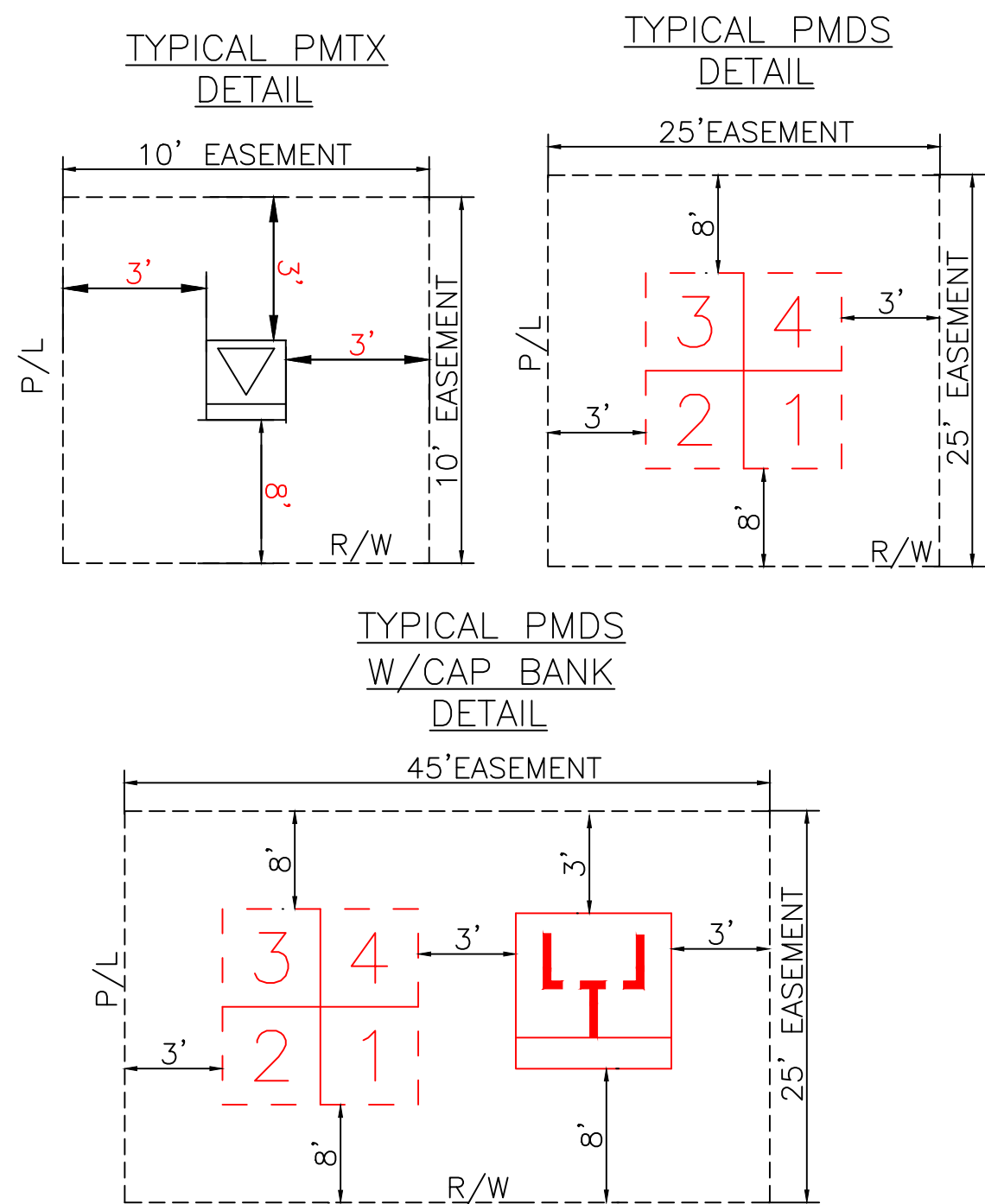
AS-BUILT COPY		AS-BUILT CREW PRINT	
<u>Initials</u>	<u>Cert. Date</u>	<u>Foreman's Signature</u>	<u>Date</u>
Job CERTIFIED COMPLETED as shown on this AS-BUILT print Material changes shown on ROS.			
<u>Supervisor's Signature</u>		<u>Date</u>	
All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.			
<u>Foreman's Signature</u>		<u>Date</u>	



M/A: NW	
CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION	
US HWY-90 DESTIN/OKALOOSA, FL	
DWG. NO.	PAGE 15
WR: 11341323	WR: D0113 - 41 - 323

ROW AGREEMENT

EASEMENTS REQUIRED



Ground Rod Information		
Location	Feet of Ground Rod Installed	Resistance (Ohms)

The location and existence of any facilities may not be relied upon by the supplier in responding to a bid or in complying with any contract. Supplier is responsible for evaluating site conditions both above and below ground including underground facility locations.

AS-BUILT COPY		AS-BUILT CREW PRINT		Easement? YES ☐ NO ☐		Survey/Stake? YES ☐ NO ☐		Work with SMO? YES ☐ NO ☐			DESIGNED BY				CITY OF DESTIN PHASE 1 UG FOR CONSTRUCTION US HWY-90 DESTIN/OKALOOSA, FL DWG NO. PAGE 15A WR: 11341323 WR: D0113 - 41 - 323							
Initials		Cert. Date		Foreman's Signature		Date		Tree Work? YES ☐ NO ☐			Designer/Stake? YES ☐ NO ☐		CT/Special Mtr? YES ☐ NO ☐				DRAWN BY					
Job CERTIFIED COMPLETED as shown on this AS-BUILT print. Material changes shown on ROS.		Map Posting? YES ☐ NO ☐		Trench Feet		Duct Bank Feet		PERM REC'D			CITY		DR. DIST.				COUNTY AIR		STATE RD		FAA	
Supervisor's Signature		Date		All required ground rods Have been driven & verified to be within FPL standards. Values are shown at all locations.		Foreman's Signature		Date			Telephone Request? YES ☐ NO ☐		CATV Request? YES ☐ NO ☐				0 20 40 80 FEET					

FOR CONTINUATION SEE PAGE 14



REQUEST FOR PROPOSALS

RFP NO. 24-01-ENG

PHASE I

UTILITY UNDERGROUND CONVERSION

FEBRUARY 22, 2024



Proposed By:
Accurate Drilling Systems, Inc.
49 N. Industrial Loop
Labelle, Florida 33935
Mr. Juan Martinez

ORIGINAL



Proposed To:
City of Destin, Florida
Mr. Rey Bailey, City Clerk

REQUEST FOR PROPOSALS

RFP NO. 24-01-ENG

PHASE I

UTILITY UNDERGROUND CONVERSION

FEBRUARY 22, 2024



Proposed By:

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49 N. Industrial Loop

Labelle, Florida 33935

Mr. Juan Martinez



Proposed To:

City of Destin, Florida

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Tab 1

LETTER OF INTEREST



We know how to build complicated projects for our clients and have a long track record of success.



TAB 1 – LETTER OF INTEREST

February 22, 2024

Mr. Rey Bailey, City Clerk
4200 Indian Bayou Trail
Destin, Florida 32541

Re: RFP #24-01-ENG Phase 1 Utility Underground Conversion

Dear Mr. Bailey and Bid Committee Members,

Accurate Drilling Systems, Inc. (ADS) is honored for the opportunity to present our unique qualifications for the City of Destin Phase 1 Utility Underground Conversion project. You will find within our proposal our unwavering commitment to our clients, the coastal communities we have the privilege of working for, and our ability to partner with FPL's PM Hau Tran to successfully perform underground conversion projects.

There are some key points that we would like to present;

- ✓ We hope that you reach out to all of our clients where we have performed similar coastal FPL underground conversions to hear directly from them of our ability to provide quality work while providing cost efficiency.
- ✓ Additionally, you will find that we are very schedule driven to exceed our client's expectations with project completion time frames. Being familiar with working in coastal communities performing underground conversion projects, it's important to be mindful of seasonality and the impacts the work may have on residents & businesses - we do this very well!
- ✓ We are successfully working with the CITY of GULF BREEZE's FPL underground conversion project. We believe we are the only one working on an FPL underground conversion project that involves the compatibility between the old Gulf Power and the new FPL infrastructure – basically, the old Gulf Power infrastructure has differences when installing the new FPL system and has to be accounted for. No learning curve!
- ✓ We also believe we are the only one working an FPL underground conversion project here locally that involves the same Utility Communications companies that will be involved on your undergrounding project. We have already built great relationships with them and have an understanding of what their expectations are – no learning curve!

We have hand-selected our team to provide the City the strongest and most experienced team for this project. Juan and our team have decades of experience working on both coastal and inland public projects with FPL. There is no learning curve for our team as we have worked with FPL, we understand the requirements and how these projects are built, including but not limiting the Carrier's involvement. We communicate extremely well with our clients' staff to make sure we understand their needs and expectations are always being met. ADS has a proud relationship with our clients, as well as valuable relationships with all of our subcontractors. We believe our team's past experience, stellar communication, detailed quality control and our intense safety program combined with our history of working within coastal 'boutique' communities makes the ADS team the best team **to deliver this project on-time and under budget.**

We truly care about what we do and what that means for you!

WE BELIEVE YOUR DEDICATED PM WILL BE AN EXTREMELY CRITICAL POSITION TO COMPLETING A SUCCESSFUL PROJECT! THE PM SHOULD BE AVAILABLE AND ON-SITE. THEY SHOULD BE VERY FAMILIAR WITH HAU TRAN WITH FPL EXPECTATIONS. THE PM SHOULD HAVE A RESUME REFLECTING THEY HAVE BEEN INVOLVED WITH NUMEROUS SUCCESSFUL FPL UNDERGROUND PROJECTS. WE HOPE YOU CONSIDER OUR PROPOSED PM FOR THIS PROJECT AGAINST ANY OTHERS THAT SUBMIT TO ENSURE YOU HAVE THE RIGHT FIT FOR YOUR PROJECT.

Our team will be led by Juan Martinez of JM Underground, LLC who will remain your project manager throughout pre-construction, logistics planning, carrier communication and the entire construction process from start to finish. Juan will be your single point of contact throughout the entire process from this RFP proposal to the finish line. Mario Acevedo, the Vice President of Accurate Drilling Systems, Inc. will be the signatory to any contractual documents.

Understanding.

ADS understands the City undergrounding conversion is divided into seven phases with this specific RFP being Phase 1 of the project. We understand Phase 1 project services will include construction of all required FPL, Cox Communication, Century Link and UnitFiber underground infrastructure, design and coordination services associated with the installation of Phase 1, FPL street light conduit system, including final certifications and as-built drawings. The entirety of this Phase 1 has an 18-month completion goal of all proposed infrastructure from the City-issued NTP. This underground conversion project has numerous similarities as your neighboring community of "Gulf Breeze" that it involves most of the same utility owners, scope, and working along a commercial section of US 98. We put a lot of thought into Phase 1's approach to determine a plan to construct the project in a manner that has a very minimal impact on residents, visitors, business, and traffic flow. We want the community to be excited about the project's progress so we will do our part to ensure we successfully manage it similar to Gulf Breeze and will approach the project within the City of Destin to make sure the community work is successfully completed as we do with all of our projects.

Working with FPL.

ADS, J&M Undergrounding, and most of our staff for this project have all been involved with numerous FPL underground conversions projects. In fact, we are often asked by some of the major undergrounding companies across the state to be sub-contractor to perform some of the most challenging components of these type projects. Most of our team members enjoy working with FPL's PM, Mr. Hau Tran, and try to create a strong partnership so we can be extremely efficient for our clients.

Your dedicated Project Manager, Juan Martinez, has 16 years of experience working on several FPL underground conversions projects. Mr. Martinez has established a successful and positive working relationship with Mr. Hau Tran. **Mr. Martinez has developed an exceptional familiarity with Mr. Tran and has successfully met the stellar expectations set by him and FPL.** Mr. Martinez most recent experience comes from constructing the underground conversion for the City of Gulf Breeze, Bradenton Beach, and the Town of Longboat Key with a past employer. These communities have similar, unique challenges as the City of Destin and both of these projects were under the exclusive management of Mr. Martinez.

Unlike most contractors, ADS visually inspects what calls to be converted. We do not assume the design from FPL is 100% accurate. **We work with FPL and their teams to ensure its correct the first time thus eliminating change orders and a potential increase to the City.** This type of working relationship

We truly care about what we do and what that means for you!

is imperative for an on-time and under budget project. ADS is that contractor to bring this already established relationship with FPL to the City.

Working with Carriers.

Just as critical, working with the respective Carriers is extremely important for schedule and cost efficiencies. We coordinate extremely well with the Carriers to ensure that their work is reviewed and considered during the overall planning. By working closely with them we can help identify some things they may have missed. We understand their work and the differences between their routes and termination points versus FPL's. If carefully planned we can eliminate any need to go back to a previously worked area to address something that otherwise could have been missed.

For instance, in our Bradenton Beach underground conversion project we were able to identify multiple connection points that were overlooked in the design and made the adjustments in the field. This helped us manage our time and complete the project on time and without any additional cost to the city.

We are doing the same approach with Gulf Breeze. By understanding their needs upfront and communicating with both the PM's, their design team, and the field experts we can be very efficient. Additionally, we have worked with most of the same Carriers and their PM's that will be involved with this project. We feel this is very key!

Working with Existing Utilities.

In addition to the many things we try and plan to save the City cost and time we feel this is one of our strongest assets!!!

What can cause delays? Utility locators wrongly identify their facilities. However, this happens a lot. Rather than solely rely on that data and locate marks we go many steps further. 1) We build strong communication lines with the locators in the field 2) As we stated above, we work with the Carriers, as well as others (Water, Sewer, Gas, Etc.) to best understand what critical infrastructure they have in the corridor 3) We constantly locate the existing utilities ourselves to confirm the markings rather than assuming they are correct!!! We take a ton of pride in this approach and we have very little utility damage as a result. ASK OUR CLIENTS!!

Our field crews tap on to the existing systems and use our own locator devices to see if there are any differences or concerns. We open manholes and trace the gravity laterals to ensure they are identified. We don't just rely on the locates as our primary identifier and hope for the best. Although this cannot avoid any damage, it will significantly reduce damages!!!

We do not want to hit any existing utilities so we go above and beyond. We know from the underground conversion projects that this goes along way with our clients. It goes extremely along way with the residents and businesses that heavily rely on constant service. We boast a very good track record, especially considering the tight corridors that we work in!

OUR ULTIMATE GOAL IS TO MINIMIZE THE DISTURBANCE TO THE COMMUNITY WHILE MAXIMIZING THE EFFORTS TO PROVIDE A SEAMLESS TRANSITION AND OFFERING OUR SERVICE TO SUCCESSFULLY DELIVER THIS JOB TO THE CITY OF DESTIN.

What separates ADS from the rest?

Because of our extensive coastal work, **we are experienced in effectively working alongside the vested public, residents, and businesses and fielding issues before they become problems.** We also have experience combining our systems and procedures into a customized, effective and timely approach to meet all of your unique undergrounding needs.

We truly care about what we do and what that means for you!

- We don't bring a learning curve to this area since we are currently working in neighboring Gulf Breeze!
- Our clients will speak extremely high of our customer service, understanding of the work. More importantly, our cost, our speed of completion, our willingness to work with the client and their valued community - we truly care about what we do and what that means for you!
- Roughly 60% or more of the major part of the project involves boring - we are the one of largest boring contractors in the State of Florida
- We don't rely on subcontractors for a large majority of the work, eliminating issues that can often be created as a result, having more control and responsibility, and being able to provide better cost to the client

(3) FPL UNDERGROUND CONVERSION PROJECTS	PM W/FPL UNDERGROUND CONVERSION EXPERIENCE	GOOD STANDING WITH FPL'S HAU TRAN	FAMILIAR WITH THE ENTIRE SCOPE OF FPL UNDERGROUND PROJECTS	COMPLETED AN FPL UNDERGROUND CONVERSION PROJ. SUCCESSFULLY
				
WORKED WITH SAME UTILITY CARRIERS INVOLVED HERE IN DESTIN	INSTALLED FPL STREETLIGHTING AS PART OF UNDERGROUND CONVERSION	PERFORMED AN UNDERGROUND CONVERSION PROJECT WITHIN A CRA	UNDERGROUND CONVERSION PROJ. ALONG A MAJOR FDOT CORRIDOR	ALREADY FAMILIAR WITH THE FPL & GULF POWER COMPATABILITY
				

Making it a reality.

Commitment.

Our commitment to the City of Destin is steadfast and unwavering. It is of utmost importance the City will walk away with a successful underground conversion project that was performed at the highest standards possible. We strive to be your undergrounding team in order to make this much needed project a success.

As you may know, a majority of the FPL undergrounding projects are in the southern portion of the State. We bring the City the familiarity of already working up here, working with FPL and counterparts of the former Gulf Power group, and the local Carriers with great success.

We can assure that we can provide the highest level of quality while adhering to our core values of honor, integrity and trust. Given the opportunity, we commit that we will do everything to make this project not only successful but hopefully a fun experience and build future relationships! Thank you for the opportunity to propose on your project and we look forward to further presenting to you.

Sincerely,

Mario Acevedo, Vice President
Accurate Drilling Systems, Inc.
PO Box 3035
Labelle, Florida 33975
863.517.4124

We truly care about what we do and what that means for you!

Tab 2

CONTRACTOR QUALIFICATION, ABILITY AND EXPERIENCE



Our team's experience working in coastal communities is extensive.

ADS
Accurate Drilling Systems, Inc.



TAB 2 – CONTRACTOR QUALIFICATION, ABILITY AND EXPERIENCE

Project Approach.

Our approach is to make sure that we listen to the city and bring our experience working with FPL to ensure the approach provides you with an extremely successful final product – and headache free. We understand that in most instances staff carry heavy workloads and you will find that we do everything possible to make sure that this project will be a positive working experience and not a stressful one for you. We will bring an experienced construction team to deliver this project and exceed the City's expectations.

The majority of our **FPL projects** are performed on coastal communities in Florida just like yours.

- ✓ City of Gulf Breeze
- ✓ City of Bradenton Beach
- ✓ City of Sarasota

These projects do not only include underground conversion within coastal communities but also includes these similarities;

- ✓ CRA Districts
- ✓ Compatibility with converting FPL & Gulf Power – we believe we are the only one that has been involved with this.
- ✓ FDOT corridor
- ✓ Most of the same Utility Carriers for the City of Destin.

Additionally, the projects that we are including for this proposal do not include other projects that we do for other power companies outside of FPL. We are just focusing on your request for FPL projects. We have a number of these additional projects that solidify our overall company portfolio of successful projects in addition to just FPL.

We are very familiar with FPL's policies and procedures. **We have a strong relationship with Mr Hau Tran which will be the FPL project manager for this project.** This relationship has been built in our ability to effectively communicate and deliver successful projects. We fully understand his design intent and have the ability to field review and make changes to bring to him that offers solutions. This is why we have been able to work well with him on these projects.

In the City of Gulf Breeze, we have had a great relationship and working understanding with Mr. Tran. We have worked through some adjustments that are related to the differences in FPL's proposed equipment and infrastructure and the old Gulf Power system. Because of this, **we have already been able to better understand some compatibility issues that we can bring to the City of Destin.**



Another critical step, which we have already spent time in the field reviewing ahead of this proposal, is to identify where some of the equipment is proposed and form a constructability approach. We understand that City staff has already initiated some of the easement conversations and field reviewed the locations. Because we are so intimately familiar with this process, we are ready to jump in and assist City staff. During our field review, we noted that most of the equipment seems to have been designed reasonably well for installation. We can immediately review the locations, if selected, to further explore the ground so the easements can be completed and to avoid any delays.

Our similar projects bring a wealth of experiences with undergrounding sections in tight corridors surrounded by businesses, CRA Districts, residents, restaurants, numerous beach access, condominiums, and seasonal traffic. All

these considerations are part of our approach to the City's project.

Our overall approach, construction management, and project management will be above and beyond your expectations and deliver a project that the City will be proud to be part of.

Critical components for success.

Directional Bore Operations.

Most of the work will be directional bored to install not only FPL's conduit infrastructure, but the carriers and FPL's streetlights. During our field review, we observed a tight corridor with very limited right-of-way. We absolutely shine with this type of work and **we will exceed your expectations with how efficient and careful are team is.** We exceeded the expectations of the City of Gulf Breeze as well as most of our clients with how quickly we move with minimal impacts and careful consideration to the adjacent properties. This will minimize your community or your City Councils voicing concerns.

We carefully plan all activities, we white line the area, and we spend a significant amount of effort upfront to make sure we a very well planned. That's what creates a very quick and efficient approach.

Equipment Installations.

Another critical component is the FPL equipment installation. We understand the FPL requirements for spacing, off-sets, and other key factors. We work closely assuring this effort with FPL and City staff to ensure the location is clear and everything is in order. We are very familiar with this portion of the work and **confident in our ability to efficiently install the equipment** as we have done on similar projects.

Switch Order Requests.

We understand the significance of the FPL switching process and work closely

with Hau Tran with FPL in this process.

Throughout the proposal we speak to this and how critical steps throughout the project are done for this to be successful and efficient as possible.

We will keep up with the as-builts during the project so this can quickly be prepared and delivered to FPL. During boring operations, we will GPS the route and depths, we will update the plans as we go and be prepared to work with Mr. Tran for the switching request.

We are currently almost complete with the last switching order in the City of Bradenton Beach and familiar with FPL requirements.

Another consideration with our approach is the FDOT effort and coordination. In the City of Gulf Breeze, we worked with FPL and City staff to help coordinate with FDOT permitting, as well as the carriers. There will be FDOT permit requirements and standards required for this project. We are familiar with this and are already carrying through with a similar effort in the City of Gulf Breeze that will help in Destin.

What we have learned overall is that every job is different and we have the ability to communicate well with everyone which is a major component of the project's success.

Coordination Efforts for Effective Constructability.

In addition to FPL, we are familiar with the carriers involved with this project. In fact, we are currently working with most of them within the City of Gulf Breeze. Here we are eliminating the learning curve and bringing in our already built relationships to carry over into your project. This work is vastly different, and we understand those differences and how it impacts our approach. **We know what the individual expectations are for this project** and what is preferred and what is not.

We understand that every city we have contracted with would like to ensure when the poles are ready to come down, the carriers are not still attached to the poles. We will work to do everything on our part to ensure this doesn't happen.

For example, the City of Bradenton Beach undergrounding project involved several carriers that needed to be quickly in position to removal their aerial attachments ahead of the FPL wreck out. We vigorously worked with them and stayed in constant communication to ensure they were informed of our schedule, and **we knew what they needed and when they needed it.**

This project was a huge success and it is reflected as such in the Surveys of Past Performance along with a Letter of Recommendation from the Mayor of the City of Bradenton Beach in Tab 4.

Our current efforts in the City Gulf Breeze brings an enormous advantage to the City because of the lessons learned, established relationships and cost savings due to ease of mobilization.

Existing Utilities.

We hope in our writing this proposal that we strongly demonstrate our ability to protect and go well above & beyond expectations of avoiding utility damage. We spend a lot of upfront planning and resources to prevent hits. We know this can be a very frustrating part of a project if it is not handled correctly. LET OUR PAST AND CURRENT PROJECTS SPEAK VOLUMES ON THIS! We ask that you please ask our clients when you talk to them about our extra steps and limited impacts to utilities on some of the most heavily involved utility corridors with extremely tight rights-of-way.

Throughout our proposal we hope that you will see the pride we take with avoiding utility damage to existing utilities. We truly feel our approach sets us far apart from most contractors. It begins with understanding that

utilities sometimes have limited information on their facilities.

1) Utility Owners.

Due to no fault of their own, they are relying on old as-builts or limited information on older facilities. Additionally, sometimes as-built information will get lost or misplaced. Even with the most honest intentions they sometimes are just unaware of some existing facilities.

2) Utility Locators.

We often find that locators are stretched thin, especially in this newer environment with so many projects and limited staff. We sometimes find that they will locate with minimal effort so they can keep up with everything. Sometimes they also have older as-builts that are not the most reliable giving them limited information.

3) What Usually Happens.

The utilities get located off from where they actually are. If we were to just assume that the information is correct, utilities would get impacted at no fault of ours if its outside the 2' marking. They also sometimes don't tap onto the existing system and trace the actual line.

4) Overcoming these issues.

At the start of the project, we work closely with these critical partners. We try and build bonds and offer to do our part to help them. We ask for any background knowledge of their facilities.

We don't assume that what they marked is always going to be accurate.

We utilize some of our own locating equipment to double check the route(s)

We open manholes and trace the laterals.

We carry COAX kits so that we can splice back any damaged COAX cables.

Again, our clients will confirm we rarely hit existing utilities.

UNDERGROUND CONVERSION PROJECT – CITY OF GULF BREEZE, FL.



The City of Gulf Breeze was a complex project and completed successfully by your dedicated project manager, Juan Martinez.

The scope of work performed for the City of Gulf Breeze include numerous similar characteristics to the City of Destin.

- Seasonality
- High tourism
- Has a CRA District
- High commercial viability
- Extremely tight corridor
- Careful consideration working around existing utilities within such a limited right-of-way corridor
- Careful consideration to ingress/egress
- FDOT coordination
- Heavy Carrier communications
- Feeder, Primary, and services to both business and residential properties
- Setting/Installing Equipment
- Pulling Wire
- Installing Carrier conduit
- FPL streetlighting
- Switching
- Coordination with Hau Tran (FPL)

Name and location of project:
City of Gulf Breeze, Florida
Underground Conversion,
Gulf Breeze, Fl.

Cost of the Project:
\$3,444,695.00

Project Owners
Representative Name:
Thomas Lambert
1070 Shoreline Dr., Gulf
Breeze Fl.
850.934.4094
Tlambert@gulfbreezefl.gov

Date Project was Completed:
On-Going

UNDERGROUND CONVERSION PROJECT – CITY OF BRADENTON BEACH, FL.



The City of Bradenton Beach Project was a full of tight corridors, extremely populated streets and sidewalks and surrounded by residential homes and commercial properties.

This was completed successfully by your dedicated project manager, Juan Martinez.

The scope of work performed for the City of Bradenton included:

- Coastal community
- Seasonality
- High tourism
- Has a CRA District
- Extremely commercial
- Extremely tight corridor
- Careful consideration working around existing utilities within such a limited right-of-way corridor
 - FDOT coordination
 - Heavy Carrier communications
 - Installation of Carrier conduit
 - Streetlight Conduit
- Feeder, Primary, and services to both business and residential properties
 - Setting/Installing Equipment
 - Switching
- Coordination with Hau Tran (FPL)

Name and location of project:
City of Bradenton Beach
Underground Conversion,
Bradenton Beach, Fl.

Cost of the Project:
\$1, 200,000.00

Project Owners
Representative Name:
Ricinda Perry
107 Gulf Drive, Bradenton
Beach Fl.
941.526.6468
Ricinda@Verizon.net

Date Project was Completed:
November 2023

UNDERGROUND CONVERSION PROJECT – BIRD KEY



ADS was selected as the contractor to perform a complex underground conversion for Bird Key located within the City of Sarasota. This project was managed by your dedicated project manager, Juan Martinez.

This project is similar in all aspects to the scope of work for the City of Destin.

- Coastal project
- Seasonality
- High tourism and heavy vehicle traffic
- Carrier communications
- Feeder, Primary, and services to both business and residential properties
- Setting/Installing Equipment
- Coordination with FPL

Name and location of project:
Underground Conversion
Bird Key
Sarasota, Florida

Cost of the Project:
\$1 million+

Project Owners
Representative Name:
Joe Wlofe
Retired FPL Engineer

Date Project was
Completed:
June 2023

Tab 3

CONTRACTOR PERSONNEL QUALIFICATION & EXPERIENCE



Our background and experience bring valuable lessons learned for the underground conversion project.

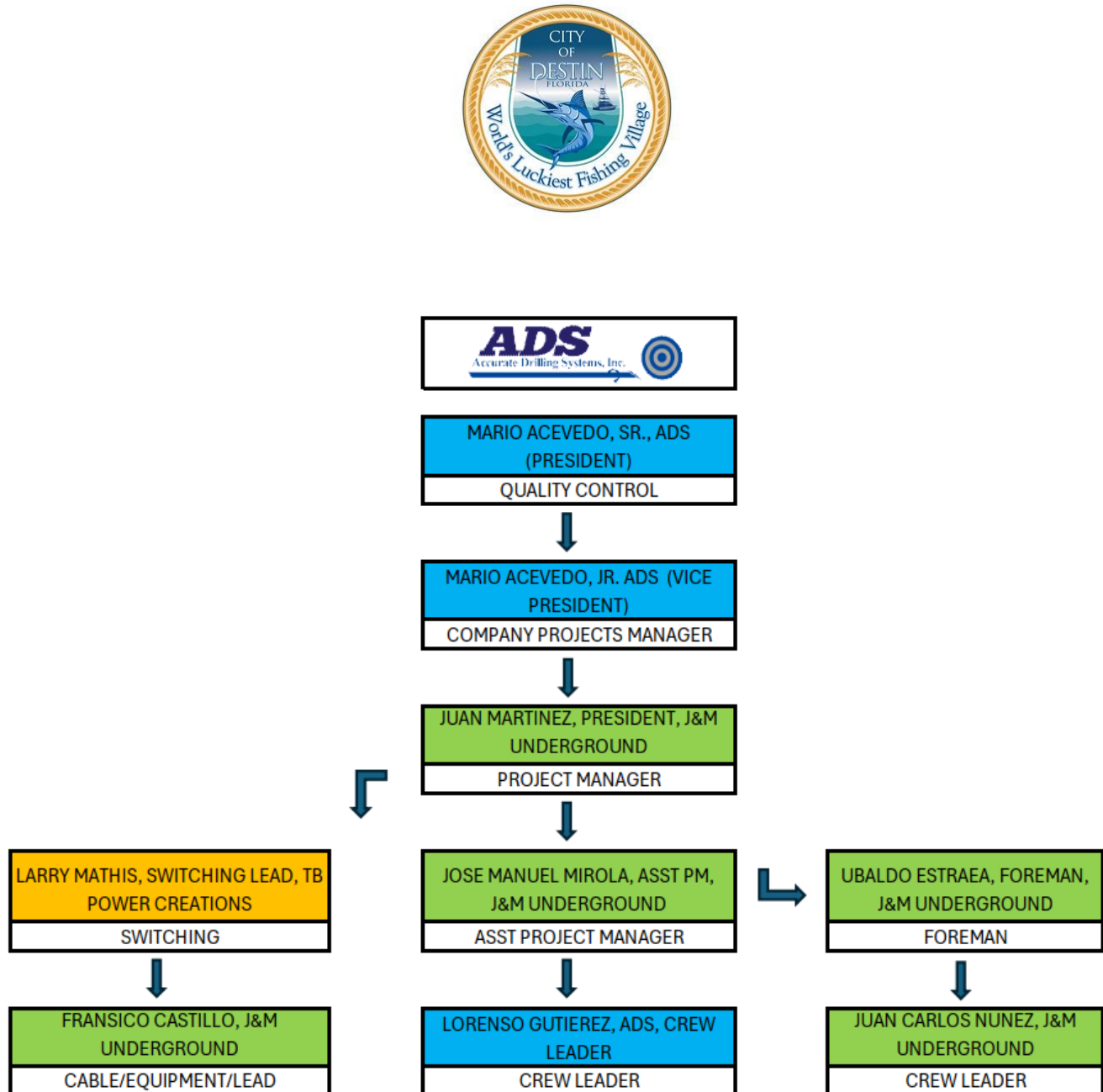
ADS
Accurate Drilling Systems, Inc.



TAB 3 - CONTRACTOR PERSONNEL QUALIFICATION AND EXPERIENCE

The ADS team members assembled for this project was constructed to ideally suit the needs of the City. The collective experience includes successful construction and underground conversion experience throughout the State of Florida. Our teams skills, experience and knowledge will aid in successfully delivering the project within the City's schedule, budget and expectations of quality and service.

The organizational chart below provides an overview of how the team will function during all phases of the project.



Team Highlights.

Juan Martinez

Project Manager

Owner, JM Underground, LLC

Juan is the owner and operator of JM Underground, LLC. He will serve as the Project Manager to our team, providing day-to-day operations, field coordination, oversight and guidance throughout the entire project. Having a dual role, this allows him to make on-the-spot decisions for this project. Juan will have 100% dedication to this project.

Juan has recent experience working for the City of Gulf Breeze, a neighbor, similar in attributes as the City of Destin. Juan would encourage City Staff and City Council to drive through the Gulf Breeze community to see it first-hand. Juan also has recent coastal community underground conversion experience with the City of Bradenton Beach and the Town of Longboat Key. Having this experience will be one of the many advantages to having Juan as your Project Manager for this project in addition to his 16 years of experience working with FPL underground conversion projects.

Mario E. Acevedo

Field Supervisor

Vice President, Accurate Drilling Systems, Inc.

Mario currently serves as the Vice President of Accurate Drilling Systems, Inc. For the City's project, he will serve as a field supervisor. Mario will be responsible for the supervision on his job site activities, including the coordination of the project field crews, subcontractors and field construction activities. Mario will have 40% dedication to this project.

Jose Manuel Mirola

Field Supervisor

Jose will serve as a field supervisor and will be responsible for the supervision on his job site activities, including the coordination of the project field crews, subcontractors and field construction activities. He will work in conjunction with Juan to ensure the work is performed to the highest quality possible and to ensure all deadlines are met and the project stays on track. Jose has 8 years of experience working with FPL underground conversion projects and he will have 100% dedication to this project.

TB Power Creation

FPL Switching Coordination

TB Power Creation is the approved FPL contractor for this project. They will be a subcontractor for all of the FPL switching coordination. TB Power Creation has provided services to FPL under that name for the past 3 years. Under a former company name, there was 15 years of FPL provided services.

JUAN MARTINEZ

CONTACT

 Juan@jmunderground.net

SKILLS

- Specialize in coastal communities
- Regulatory Compliance
- Labor Relations
- Administrative Oversight
- Relationship Building
- Project Management
- Cost Reduction
- Partnership Development
- Budget Development
- Financial Management

LANGUAGES

- **Spanish**
Native

PROFESSIONAL SUMMARY

Seasoned leader for J&M Underground Utilities, adept in utility underground conversion project management and regulatory compliance, with a proven track record in driving operational excellence and fostering robust partnerships. Demonstrates expert oversight in utility coordination and directional drilling, ensuring cost-effective practices and cultivating fruitful relationships across coastal communities, utility agency owners, utility carriers, and local and regulatory agencies..

EXPERIENCE

December 2022 - Present

Owner, Proprietor

J&M Underground Utilities, LLC

- Manages the daily operations related to utility underground project management, utility coordination, directional drilling, budget management, and scheduling.
- Maintained a high standard of customer service through quality assurance checks.
- Negotiated contracts and agreements with business partners, vendors, and customers.

June 2020 - December 2022

Construction Project Manager

Wilco Electrical

- Managed multiple construction projects, ensuring that all deadlines were met and budgets stayed on track.
- Ensured compliance with safety regulations and quality assurance standards during the construction process.
- Resolved conflicts between contractors or other stakeholders by facilitating constructive dialogue among parties involved.
- Provided coordination between all stakeholders, utility carriers, regulatory agencies to ensure project success.
- Reviewed design and construction scopes of work, plans, and budgets for internal approvals and external communications.
- Coordinated resources including personnel, materials, equipment and subcontractors to meet project objectives.
- Monitored progress of projects to identify potential problems and develop solutions in a timely manner.
- Provided technical guidance to team members in order to ensure successful completion of tasks within allocated timeframes.

- Supervised construction and related workers.

September 2015 - September 2019

Utility Construction Foreman

Ivy H. Smith

- Managed various utility underground projects.
- Responsible for managing construction crews and equipment operators installing utility equipment related to phone communications, utility manholes, coax cable, fiber optic cable.
- Performed trenching and directional boring for utility conduit installation, weekly safety meetings, and reporting pay quantities.

February 2011 - September 2015

Groundman and Overhead Lineman

Pike Electric

- Installed and maintained overhead and underground electrical distribution systems, including poles, cross-arms, transformers, and wiring.
- Operated bucket trucks, digger derricks, trenchers and other heavy equipment in a safe manner.
- Installed, tested and performed maintenance on transformers, regulators and other electrical equipment.
- Ensured that all safety procedures were followed while working at heights or near energized circuits.
- Upheld safety regulations by strictly following operating standards for each assigned job.

CERTIFICATIONS

- ABC Institute, Inc., Apprenticeship - Certified Line Erector
- OSHA , 30-hour completion for Construction Industry

Mario E. Acevedo

PO Box 3035 LaBelle, FL 33975 ♦ ace@accuratedrilling.com ♦ Phone (863)517-4124

VICE PRESIDENT – PROJECT MANAGER – OPERATIONS DIRECTOR

Strategic planning • Directional Boring • Underground Utility

An accomplished Vice President, Project Manager and Operations Director for Accurate Drilling Systems, Inc. achieving extensive experience in operational coordination, underground utility contracts, and strategic planning. An Executive thinker skilled at navigating complex situations, identifying efficient improvements, and next level success growth.

Professional Experience

ACCURATE DRILLING SYSTEMS

2015-PRESENT

Project Manager & Operations Director

Project Manager and Operations Director of directional utility contracts and bids

- Supervisor
- Job Coordinator
- CDL Driver
- Vermeer Machine Operator
- Locate for underground utility tickets

LABELLE TIRE CENTER, LLC.

2015-PRESENT

Manager

Operational Director that trained personnel, coordinated sales, and inventory

- 6 years' experience in business management
- CDL Driver
- QuickBooks POS
- Sales

Certifications & Training

- Underground Utility Contractor License
- ITE Training with Sunshine State One Call of Florida
- OSHA-30
- First-Aid & CPR
- Job Safety Training
- Weather & Fire Hazards
- Intermediate Maintenance of Traffic (MOT)
- (PPE) Personal Protection Equipment
- DOT Safety & Compliance Training Seminar
- HDPE Fusion Training
 - ASTM F2620-19 Medium Diameter 2" IPS-20" IPS
- Supervisor Reasonable Suspicion Training
- QuickBooks Pro & POS
- Microsoft Office

References

Available upon request



JOSE MANUEL MIROLA

158 S. Elm st Fellsmere FL. 32948/ 5594299542

OBJECTIVE

Seeking a challenging and responsible position that will challenge my skills and grow professionally along with the company.

EXPERIENCE

JM Underground

Field Supervisor March 2023- present

- Supervise job site and employees
- Manage expenses
- Operate heavy machines
- Dig, drill, locate
- Comply with city regulations, communicate with inspectors and other city officials

Wilco Electrical LLC

Field Supervisor June 2017-March 2023

- Locate, drill, dig
- Operate heavy machinery
- CDL driver

Pike electric

Labor Hand- July 2012-June 2017

- CDL driver
- Assisted in locating underground utilities,
- Set manholes and clean up after jobs

Edwin Brasil Dairy

Ranch hand July 2007- June 2012

- Milker
- Assisting in veterinary procedures such as injecting, birthing and caring for sick livestock
- Feeder and transporter of calf
- Operating machinery to aid in daily tasks such as forklift

EDUCATION

Escuela Preparatoria "Jose Rodriguez Elias"

High School Diploma-2008

AWARDS AND ACKNOWLEDGEMENTS

- CDL Drivers License
 - Cpr certified
-

SKILLS

- Bilingual
- Rig operator
- Problem solving
- Team building
- Leadership skills



Terrell Bridges
7551 Wiles Rd, Ste 203
Coral Springs, FL 33067

10-20-23

Mario Acevedo
Accurate Drilling Systems Inc
49 N Industrial Loop
LaBelle, FL 33935

This letter is to inform that TB Power Creation LLC will be a subcontractor for Accurate Drilling Systems Inc for all the of the FPL switching coordination involved in the City of Destin Underground Project. TB Power Creation LLC is an approved vendor for FPL and certified for switching.

Sincerely,

Terrell Bridges
Chief Executive Officer
TB Power Creation LLC

Cost and Time Efficiency Capabilities.

Our team has been very successful in reviewing the FPL scope of work, considerations to the carriers involvement, streetlight infrastructure, and other incidentals to develop a schedule that will work for the project. For example, we white line the site with all of the proposed work before any work takes place to identify any unforeseen issues that may not be accounted for. Those, if any, are quickly adjusted and we mobilize the crews to advance our operations.

We have already field reviewed the City's project site to determine a schedule based on the current information. We know there are other considerations that may be needed but since we are extremely familiar with these projects, we know the carriers designs come in late sometimes but we can assess their involvement based on the aerial sections we verified in the field.

Between the City's project pre-bid, the information included in the RFP, our team is confident that everything appears to be aligned.

We are currently working with FPL's streetlight group in our current project for the City of Gulf Breeze so we have a good understanding with their needs as well. Although the photometrics probably are not 100% complete we can look at the corridor and determine the overall plan they will more than likely decide on installing.

Understanding the above information, our field review, and based on our experience with these coastal undergrounding projects, we are confident in our ability to commit to an 18-month schedule or less.

FPL Switching, As-Builts and Bore Logs.

This approach is a critical phase during the project and we have a complete understanding. All of our projects that we have identified throughout the proposal require these same efforts.

SWITCHING. Although the switching is towards the tail end of the project, a lot of the process really starts during the boring operation. This is because we GPS the conduit runs as they are being installed rather than waiting until the end. This ensures that we are collecting the data as we go and compiling the redlines rather than waiting until the end.

During this stage we are already working with our surveyor to establish the points for the project so as the data is coming in daily it is being sent and uploaded to the survey so the prints can be updated weekly. This provides a very quick and efficient approach to delivering Mr Tran (with FPL) the redlines he requires for the switching.

AS-BUILTS. Similar to what we stated above, the as-builts go hand-in-hand with the switching process. However, as-builts also include the work of others, such as the carriers and FPL's streetlighting work. As we stated, since we collect the live field data as we go, these updates are being put together throughout the project rather than waiting until the end.

BORE LOGS. This aspect of the project also goes hand-in-hand with the above. As we are boring and collecting the GPS data the bore logs an integral part of that process.

We know this is a truly unique aspect of the project and we have the familiarity required for these components as they are required on all of our projects.

Tab 4

INTERACTIONS WITH CITY & REGULATORY AGENCY STAFF



We have hand selected our team to provide the City with a stellar team.



TAB 4 – INTERACTIONS WITH TOWN AND REGULATORY AGENCY STAFF

City and Regulatory Agency Staff Interactions.

Close coordination between our project manager, Mr. Martinez, and the City's staff is essential for successful project coordination and completion. Mr. Martinez will be responsible for identifying the appropriate personnel for each task and coordinating subcontractor activities.

Mr. Martinez is an expert in his respective realm of expertise, and has extensive experience working with local municipalities and organizations.

He has the prior experience and familiarity with all of the entities and agencies that may be associated with this project, including the City of Bradenton Beach, Belleair Beach, and Gulf Breeze. Mr. Martinez also has an established relationship with the City's project manager, Utility Consultants of Florida.

Mr. Martinez has a comprehensive understanding of the various local, state and federal agency criteria.

Mr. Martinez has long-term relationships with regulatory agencies and their decision makers. This rich network of interpersonal relationships enables us to provide expeditious services relative to reviews and approvals. **Our team understands agency procedures and their expectations, removing delays and that need to rework submittals that would come with a lack of familiarity.**

Our success in permitting is attributed to four distinct aspects: knowledge of the criteria; early agency coordination; proper documentation; and relationships that are built on years of trust. Our pre-planning efforts allow us to tailor our solutions to the issues most important.

The most critical part of success and timeliness is early, upfront coordination with the respective agencies. Once the existing conditions are evaluated at the inception of a task, we hold early meetings to discuss the intent and to gain early feedback from the agency to tailor the task to meet the requirements. Meetings are then followed up using meeting minutes to ensure clear understanding of all parties involved. Outside meetings will also be noted on the agenda of the established bi-weekly undergrounding meeting with FPL, all carriers and utilities.

Residents. Businesses. Condominium's and HOA's.

Mr. Martinez and his team have the experience and lessons learned for recent similar projects with stakeholder interactions.

We understand how important it is to have minimal impacts on everyone in the community. We want the entire community to be invested and excited about the project and its success. To ensure a seamless transition, our strategy is communication, communication, communication. This process will begin as soon as the team is under contract with the City.

The team has used these processes before with proven success for interactions with its public clients residents, businesses, community condominiums and HOA's and we would propose to the City to consider the following:

- Hold City Hall type meetings with businesses and commercial tenants coordinated with the City's Chamber of Commerce.
- Hold City Hall type meetings for residents coordinated through City Hall or HOA's.

- Door hanger distribution. They are a physical reminder of upcoming events. Provide a QR Code that would direct to dedicated web page.
- Door to door communication. This allows everyone to feel invested and gives us increased accountability.
- Dedicated City email. Questions and concerns can be submitted and forwarded to Mr. Martinez for response/attention within 24 hours
- Dedicated undergrounding web page on the City's main web site to provide the latest project status.

We are confident in our process for communicating and interacting within the community we are working in.

Our crews understand that appearance is truth and its equally important so our crews are consistently being trained on how to interact with residents and business owners that may approach. We demand a high level of professionalism and a smile. City staff will find that we are an excellent steward on your behalf in the field.

We are extremely mindful throughout the lifecycle of the project that we respect owners property while during our work. We strive to properly and professionally communicate the needs and include the project manager with all discussions.

We also provide a well thought out plan for allowing ingress and egress thru the corridor. An excellent example of this would be the similar corridor in the City of Gulf Breeze and how we really worked well with the city and the consultant to achieve this - the business owners would also agree.

November 9, 2023

To Whom it May Concern:

I would like to commend Juan Martinez of JM Underground, LLC for an outstanding job for the City of Bradenton Beach. In my experience, Mr. Martinez and JM Underground, LLC. Have proven to be an excellent, full-service electrical contractor in distribution of power and delivery, including overhead line work, underground distribution power, directional boring and conduit duct banks. On our public projects, I worked closely with Mr. Martinez, who has led the projects efficiently and without issues. On a number of occasions, I received compliments from residents in the community who expressed their positive experience with JM Underground, LLC.

Submittals were produced quickly and completely, most field changes were made to the financial benefit of the City, and requisitions were produced on time and without revision. From manpower to materials, the schedule was managed effectively throughout the projects, and as a result, our undergrounding projects were delivered on time and within budget. Mr. Martinez brings a teamwork mentality to the field and proactively seeks to find prompt and effective solutions to any issues.

In closing, I am confident that given the opportunity, JM Underground, LLC will provide the same high degree of professionalism and commitment to your project. Bradenton Beach looks forward to the opportunity to work with Mr. Martinez and JM Underground, LLC again.

Sincerely,
John Chappie
Mayor, City of Bradenton Beach

Letter of Recommendation

Joe Wolfe

941-809-0626

joseph.wolfe@fpl.com

October 4, 2023

Mario Acevedo

Accurate Drilling Systems, Inc (ADS)

49 N. Industrial Loop

LaBelle, FL 33935

To Whom It May Concern:

I am Joe Wolfe, a retired electrical engineer who worked for Florida Power and Light Co. for 44 years. After a 5-month retirement I was asked to return to FPL as a contractor to work on a special project in an exclusive subdivision surrounded by Sarasota Bay.

My first encounter with ADS and Mario was over 20 years ago on a project to bore under the Upper Manatee River. We had contracted another bore company to make this 2400' bore of 8" HDPE flexible duct. After this contractor was on site for 3 weeks and 3 failed attempts to install the bore, they pulled off the job. We contacted ADS and met Mario in the field. He analyzed the soil conditions from the rods that were left in the ground by the original contractor. He removed those rods and started the bore. If I remember correctly, it was less than a week and ADS had the rods installed to the receiving bore pit.

In Nokomis, ADS was contracted to install a 510' bore of 6" HDPE flexible duct under a canal. There was a lot of elevation change from the ground level to the water level. On this bore rock was encountered. ADS made some adjustments and completed the bore. It did take a little longer due to the rock but the bore was completed successfully within the scheduled timeframe.

ADS recently took over a project that the original contractor had started. This project was to replace an existing duct and manhole system in a 60 year old developed subdivision. The new system would be a URD system with pad mounted transformers. This required installing 2" and 6" bore pipe. The original contractor started boring July 30th 2020. Due to a number of factors and over 2 years later the original contractor said they could not be complete the project within the time constraints required. The original contractor had installed 8,000 linear feet of bore pipe in that time period. ADS took over the project and completed the installation of the bore pipe. They installed over 13,000 linear feet of 2" and 6" bore pipe in 5 weeks and one day. All this with very little foreign utility/property damage.

I would recommend ADS for all ranges of your boring requirements. Please feel free to contact me regarding my experiences with ADS. ADS and Mario consistently deliver on projects that require all types of boring.

Sincerely,

Joe Wolfe

Electrical Engineer, (Retired PE)

Tab 5

TIMELY COMPLETION OF PROJECTS



We are committed to providing a quality product on time and under budget.



TAB 5 – TIMELY COMPLETION OF PROJECTS

Our team has made the commitment to place the City project at the top of its priority.

This means we will ensure to the City that we will provide the necessary resources to complete this project on time.

We are near completion in our current project for the City of Gulf Breeze. By the time the City's project is slated to start, our team will be ready to seamlessly transition to Destin. **This will provide a cost savings to the City as reflected in the Mobilization line item in the bid proposal.**

Recently completed FPL projects.

- **City of Bradenton Beach**, 2nd Phase, is now final and complete. NO OVERRUNS and NO CHANGE ORDERS. We worked with Hau Tran your PM for this project and hope you will ask him how well we worked with him. This also included us working with UCoF's Project Team.
- **City of Gulf Breeze** is not complete but is expected to be complete by March 2024. However, we are already complete with most of the items of work. We are also working with Hau Tran your PM for this project and UCoF's Project Team. We ask that you confirm with them our working relationship and ability to work within the same environment as this project. **Also, we are successfully working with the same Utility Carrier's that will be involved with your project which we believe to be a huge advantage.**
- St Armand's Circle, located within the City of Sarasota undergrounding

- project located along the east span of the Circle.

Schedule Communication.



The City of Bradenton Beach.

The City of Bradenton Beach is one example of our teams ability to work within their schedule and deliver a project in what would be considered by most as unachievable.

The City of Bradenton Beach advertised a bid without a specific timeline but once awarded, the schedule they proposed was extremely aggressive. Our team met with city staff and the mayor to develop an approach that would work for their seasonality concerns and another project they wanted to start but needed our work completed ahead of time.

We were able to achieve that goal and finished well before the completion date. Our performance was well received and appreciated as reflected in the attached Letter of Recommendation from Mayor John Chappie.

The City of Gulf Breeze.

For the City of Gulf Breeze, the team was able to mobilize and plan our work during their busy season. We felt confident in our ability to work with minimal impact to the businesses that rely on access and work around the heavy traffic. **The City was pleasantly surprised with our efforts** and understanding of how we truly minimized disruptions and yet still completed the work timely.



Accomplishing the Scope of Work.

Our teams capabilities encompass all planning, permitting, preconstruction and construction required from the onset of a project through the approval process to completion. **Our team has worked closely with public clients staff, utilities, carriers and stake holders** and has the experience to successfully accomplish the task by planning, coordinating and a wealth of preplanning and communication.

Estimating and pricing in the current market.
In this post-COVID and Hurricane Ian world, we have seen a large influx in cost and significant delays on materials on FPL's side. While our proven methods of sequencing do work, our team has a pulse on the current market conditions and examples of how we have mitigated material delays that ultimately could have cost the project extreme delays. We are constantly bidding projects and have a very good idea of the items that would be considered long lead times including: conduit, concrete items, and transformers.



We will work to ensure we work with materials that have the least amount of lead time possible all while accomplishing the goals of this Project

for the City. This is very common for us and yet we have still been able to accomplish this without extra cost to our clients.

Contractors Daily Ability.

Our team consisting of Mr. Juan Martinez and Mr. Jose Manuel Mirola will be dedicated to this project 100%. Your dedicated Project Manager, Mr. Martinez, has 16 years of experience working on several FPL underground conversions projects. Mr. Martinez has already established a successful and positive working relationship with the FPL, the carriers and the utilities. Communication is the key for day-to-day success.

Completing the project on time.

Our continued success is based upon the fact that we complete our projects on-time. The team we have assigned to this project are being proposed for their proven success in meeting completion times and they are dedicated employees. Our dedication is reflected in the attached Letter of Recommendation from Mr. Joe Wolfe, a retired electrical engineer who worked for FPL for 44 years.

ADS and JM Underground, LLC have a long history of partnering and create a great working environment. Our staff means everything so we take that seriously by showing our appreciation and constantly engaging with them. We are proud of our team and they are all excited about this project.

It's rare that you find an owner of the company right in the mix of the crew but you frequently find Mr. Martinez side-by-side with his crew.

The Team is also the same team that was assigned to the City of Bradenton Beach and the City of Gulf Breeze.

Tab 6

SURVEYS OF PAST PERFORMANCE



We always strive to exceed our clients expectations.



PERFORMANCE SURVEY QUESTIONNAIRE



CITY OF DESTIN

RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION

Contractor Information		Client/Reference Information	
From:	Juan Martinez	To:	Thomas Lambert
Company:	Accurate Drilling Systems, Inc	Company:	City of Gulf Breeze
Phone:	772.224.0399	Phone:	850.934.40094
Email:	Juan@jmunderground.net	Email:	tlambert@gulfbreezefl.gov

Performance Survey of (project name):	
Cost of Services: \$3,444,695	Date Completed: In progress - March2024 Completion

Client:

Rate each of the criteria on a scale of 1 to 10, with 1 representing that you were very unsatisfied (and would never hire the company again) and 10 representing that you were very satisfied (and would hire the company again). Please rate each of the criteria to the best of your knowledge. If you do not have sufficient knowledge of past performance in a particular area, leave it blank. Once completed, return survey to the Contractor.

Criteria	Unit	Score
1. Ability to manage cost	(1 – 10)	10
2. Ability to maintain project schedule (complete/on-time/early)	(1 – 10)	10
3. Quality of workmanship	(1 – 10)	9
4. Professionalism and ability to manage	(1 – 10)	10
5. Close out process	(1 – 10)	N/A
6. Ability to communicate with all staff & applicable parties	(1 – 10)	8
7. Ability to resolve issues promptly	(1 – 10)	8
8. Ability to follow protocol	(1 – 10)	9
9. Ability to maintain proper documentation	(1 – 10)	9
10. Ability to offer solid recommendations & solutions	(1 – 10)	9
11. Had proper resources and personnel by which to get the project done	(1 – 10)	10
12. Overall client satisfaction and comfort level in hiring	(1 – 10)	9

Thomas E. Lambert

Printed Name of Reference

Thomas E.
Lambert

Signature of Reference

Digitally signed by Thomas E.
Lambert
Date: 2023.10.30 12:43:15 -05'00'

PERFORMANCE SURVEY QUESTIONNAIRE



CITY OF DESTIN

RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION

Contractor Information		Client/Reference Information	
From: Juan Martinez		To: RICINDA PERRY, ESQ	
Company: Jim Underground LLC		Company: CITY OF BRADENTON BEACH, FL	
Phone: 772.224.0399		Phone: (941) 526-6468	
Email: Juan@jmunderground.net		Email: RICINDA@VERIZON.NET	

Performance Survey of (project name): 3 million dollar underground/conversion	
Cost of Services: \$ 3,000,000	Date Completed: ~ 7/30/2023

Client:

Rate each of the criteria on a scale of 1 to 10, with 1 representing that you were very unsatisfied (and would never hire the company again) and 10 representing that you were very satisfied (and would hire the company again). Please rate each of the criteria to the best of your knowledge. If you do not have sufficient knowledge of past performance in a particular area, leave it blank. Once completed, return survey to the Contractor.

Criteria	Unit	Score
1. Ability to manage cost	(1 - 10)	10
2. Ability to maintain project schedule (complete/on-time/early)	(1 - 10)	10
3. Quality of workmanship	(1 - 10)	10
4. Professionalism and ability to manage	(1 - 10)	10
5. Close out process	(1 - 10)	10
6. Ability to communicate with all staff & applicable parties	(1 - 10)	10
7. Ability to resolve issues promptly	(1 - 10)	10
8. Ability to follow protocol	(1 - 10)	10
9. Ability to maintain proper documentation	(1 - 10)	10
10. Ability to offer solid recommendations & solutions	(1 - 10)	10
11. Had proper resources and personnel by which to get the project done	(1 - 10)	10
12. Overall client satisfaction and comfort level in hiring	(1 - 10)	10

Ricinda H. Perry
Printed Name of Reference

[Signature]
Signature of Reference

PERFORMANCE SURVEY QUESTIONNAIRE



CITY OF DESTIN

RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION

Contractor Information		Client/Reference Information	
From: MARIO ACEVEDO		To: FLORIDA POWER & LIGHT Co	
Company: ADS		Company: JOE WOLFE	
Phone: 239-564-3307		Phone: 941-809-0626	
Email: ADSINC.SWFLA@GMAIL.COM		Email: JOSEPH.WOLFE@FPL.COM	

Performance Survey of (project name): BIRD KEY	
Cost of Services: NA	Date Completed: 7-26-23

Client:

Rate each of the criteria on a scale of 1 to 10, with 1 representing that you were very unsatisfied (and would never hire the company again) and 10 representing that you were very satisfied (and would hire the company again). Please rate each of the criteria to the best of your knowledge. If you do not have sufficient knowledge of past performance in a particular area, leave it blank. Once completed, return survey to the Contractor.

Criteria	Unit	Score
1. Ability to manage cost	(1 - 10)	NA
2. Ability to maintain project schedule (complete/on-time/early)	(1 - 10)	10
3. Quality of workmanship	(1 - 10)	10
4. Professionalism and ability to manage	(1 - 10)	10
5. Close out process	(1 - 10)	NA
6. Ability to communicate with all staff & applicable parties	(1 - 10)	8
7. Ability to resolve issues promptly	(1 - 10)	10
8. Ability to follow protocol	(1 - 10)	10
9. Ability to maintain proper documentation	(1 - 10)	NA
10. Ability to offer solid recommendations & solutions	(1 - 10)	10
11. Had proper resources and personnel by which to get the project done	(1 - 10)	10
12. Overall client satisfaction and comfort level in hiring	(1 - 10)	10

J.C. Wolfe
 Printed Name of Reference

J.C. Wolfe
 Signature of Reference

Tab 7 PRICE PROPOSALS SCHEDULE OF VALUES



Our committment is unwavering to make this project a success for the City.



Price Proposal/Schedule-of-Values					
City of Destin - Phase 1 Undergrounding					
No.	Description	Qty.	Units	Unit Price	Total
I. GENERAL					
57-7	Survey, Stakeout & Record Drawings	1	LS	\$80,000.00	\$80,000.00
101-1	Mobilization	1	LS	\$150,000.00	\$150,000.00
102-1	Maintenance of Traffic	1	LS	\$275,000.00	\$275,000.00
				SUBTOTAL	\$505,000.00
II. CLEARING, GRUBBING, RESTORATION, AND SIDEWALK					
104-10-3	Sediment Barrier	5,500	LF	\$3.00	\$16,500.00
110-1-1	Clearing & Grubbing	1	LS	\$150,000.00	\$150,000.00
120-6	Sidewalk Restoration	12,000	SF	\$26.00	\$312,000.00
				SUBTOTAL	\$478,500.00
III. FPL INFRASTRUCTURE					
FPL-630-1-12	FPL Conduit 1PN1C DIRECTIONAL BORE	4,900	LF	\$20.00	\$98,000.00
FPL-630-2-12	FPL Conduit 2PN2C DIRECTIONAL BORE	4,000	LF	\$24.00	\$96,000.00
FPL-630-3-12	FPL Conduit 3PN3C DIRECTIONAL BORE	33,550	LF	\$28.00	\$939,400.00
FPL-630-4-12	FPL Conduit 4PN4C DIRECTIONAL BORE	100	LF	\$32.00	\$3,200.00
FPL-630-6-12	FPL Conduit 6PN6C DIRECTIONAL BORE	16,500	LF	\$36.00	\$594,000.00
FPL-FNC-6-12	FPL Conduit FNC DIRECTIONAL BORE	30,300	LF	\$34.35	\$1,040,805.00
FPL-630-SECNDRY	FPL Secondary Conduit	18,175	LF	\$22.85	\$415,298.75
FPL-635-SB-1	FPL Splice Box (Feeder)	15	EA	\$3,500.00	\$52,500.00
FPL-635-SB-2	FPL Splice Box (Primary)	70	EA	\$1,400.00	\$98,000.00
FPL-635-HH-1	FPL 30" Handhole / Above ground Pedestals	55	EA	\$700.00	\$38,500.00
FPL-FEEDER CBL	FPL Feeder Cable pull (Wire)	36,000	LF	\$8.00	\$288,000.00
FPL-PRMRY-CBL	FPL Primary cable pull (Wire)	193,000	LF	\$5.85	\$1,129,050.00
FPL SERV CABL	FPL Secondary Cable (Wire)	19,000	LF	\$6.00	\$114,000.00
FPL-635-SWC-1	FPL PME 9/PME 11/Switch Cabinet Installation	54	EA	\$4,000.00	\$216,000.00
FPL-635-TSF-1	FPL Transformer & Pad (SINGLE PHASE)	64	EA	\$1,575.00	\$100,800.00
FPL-635-TSF-1	FPL Transformer & Pad (3-PHASE)	20	EA	\$2,000.00	\$40,000.00
FPL-635-TSF-1	FPL Transformer & Pad (OPEN DELTA)	13	EA	\$2,175.00	\$28,275.00
FPL-635-CAP-1	FPL Capacitor Bank Installation	4	EA	\$4,000.00	\$16,000.00
FPL - PED-1	FPL 3-Phase Pedestals	14	EA	\$1,000.00	\$14,000.00
FPL-635-WH-1	FPL Meter Box Connections	275	EA	\$400.00	\$110,000.00
FPL-UG-CONV	CONVERSION OF CURRENTLY UNDERGROUNDED SERVICES	275	EA	\$600.00	\$165,000.00
FPL-UG-COM CONV	CONVERSION OF COMMERCIAL UNDERGROUNDED SERVICES	155	EA	\$900.00	\$139,500.00
FPL-EASEMENT	COORDINATION OF EASEMENTS	126	EA	\$400.00	\$50,400.00
FPL-EASEMENT SUR	EASEMENT SURVEY	85	EA	\$500.00	\$42,500.00
FPL-OH-CONV	CONVERSION OF AERIAL SERVICES	300	EA	\$1,500.00	\$450,000.00
FPL-UG-CONV	CONVERSION OF UG SERVICES	55	EA	\$1,300.00	\$71,500.00
FPL-MISC/COORD	INCIDENTALS/COORDINATION/MANAGEMENT	1	LS	\$250,000.00	\$250,000.00
FPL-SWITCHING	SWITCHING/FPL COORDINATION	1	LS	\$160,000.00	\$160,000.00
				SUBTOTAL	\$6,760,728.75
IV. CARRIERS					
CARRIER C-01	(4) 2" Conduit DIRECTIONAL BORE "COX" (Install)	18,500	LF	\$32.00	\$592,000.00
CARRIER C-02	(3) 2" Conduit DIRECTIONAL BORE Uniti Fiber (Install)	17,000	LF	\$28.75	\$488,750.00
CARRIER C-03	(3) 2" Conduit DIRECTIONAL BORE Century Link (Install)	17,000	LF	\$28.75	\$488,750.00
CONDUIT-01	(1) 2" Conduit HDPE (Furish)	18,500	LF	\$2.50	\$46,250.00
CONDUIT-02	(2) 2" Conduit HDPE (Furnish)	18,500	LF	\$4.00	\$74,000.00
CARRIER-COORD	COORDINATION	1	LS	\$40,000.00	\$40,000.00
BOND-001	BONDING OPTIONAL ITEMS	1	LS	\$40,000.00	\$40,000.00
				SUBTOTAL	\$1,769,750.00
V. CARRIERS					
FPL-SL-001	FPL STREETLIGHT (1) 2" Conduit DIRECTIONAL BORE	32,000	LF	\$20.00	\$640,000.00
FPL-SL-002	FPL STREETLIGHT (2) 2" Conduit DIRECTIONAL BORE	32,000	LF	\$5.00	\$160,000.00
FPL-SL-SB	Install 24"x16" Splice Box	150	EA	\$400.00	\$60,000.00
FPL-SL-COORD	COORDINATION	1	LS	\$40,000.00	\$40,000.00
				SUBTOTAL	\$900,000.00
VI. BOND					
BOND-001	BONDING	1	LS	\$100,000.00	\$100,000.00
				SUBTOTAL	\$100,000.00
SUMMARY					
I. GENERAL					\$505,000.00
II. CLEARING, GRUBBING, RESTORATION, AND SIDEWALK					\$478,500.00
III. FPL INFRASTRUCTURE					\$6,760,728.75
IV. CARRIERS					\$1,769,750.00
V. FPL STREETLIGHT INFRASTRUCTURE					\$900,000.00
VI. BOND					\$100,000.00
SUBTOTAL					\$10,513,978.75
AWARD: Base Bid Total =					\$10,513,978.75
THOUSAND, NINE HUNDRED SEVENTY-EIGHT DOLLARS AND SEVENTYSEVENTY-FIVE CENTS. _____					

					\$

Tab 8 FORMS



Our staff prides itself on responsiveness to clients and the ability to clearly communicate.

ADS
Accurate Drilling Systems, Inc.



CITY OF DESTIN FLORIDA

SUBMITTED PROPOSAL FORM

RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION

The undersigned Contractor declares that the only person or parties interested in this RFP as principals are those named herein, that this proposal is made without any understanding, contract, or connection with any other person, firm, or corporation providing a proposal for the same purpose and that this proposal is in all respects fair and without collusion or fraud. The Contractor understands that this proposal must be manually signed in ink, otherwise it will be considered unresponsive and subject to rejection.

The undersigned Contractor represents that the Contractor accepts, and that this proposal complies with the RFP Documents and that the Contractor has carefully examined the RFP Documents for the designated Services. The Contractor affirms that Contractor is satisfied as to the general nature of the Services; the general character, general quality, and the quantity of the possible materials that may be required; the kind and extent of equipment that generally may be required and other facilities that may be needed for the performance of the Services; the possible conditions and the common difficulties that may be encountered, and all other general and common items which may, in any way, affect the Services or its performance.

The undersigned Contractor proposes, and agrees if this proposal is accepted, that it will contract with the City to provide all necessary machinery, tools, software, labor, apparatus, and other means necessary to do all the Services, and furnish all the materials and equipment specified or referred to in the RFP Documents in the manner and time herein prescribed, and according to the requirements of the City as therein set forth.

Under provisions of Chapter 112, F.S., Contractor must disclose with proposal the name of any officer, director, or agent who is also an employee of the CITY OF DESTIN. Contractor must disclose on an attachment entitled "Submitted Bid Conflict of Interest" the name of any City employee who owns, directly or indirectly, a five percent (5%) or more interest in the Contractor's firm or any of its branches, or in the firm of any subcontractor to this proposal. Absence of such an attachment represents Contractor's certification of no such employee.

Contractor acknowledges receipt of the following addenda issued during the solicitation period; the cost of which, if any, is included in proposal pricing. If an addendum is issued, the Addendum Acknowledgement sheet must be signed and submitted with the proposal package at the time and due date of the proposal.

ADDENDUM #	ADDENDUM DATE	ADDENDUM #	ADDENDUM DATE
1	2/15/2024		

The undersigned Contractor understands that the City reserves the right to reject any or all proposals and to waive any informalities and minor irregularities in any proposal. The Contractor agrees that this proposal shall be good and may not be withdrawn for a period of at least one hundred twenty (120) days after the scheduled RFP opening.

Having carefully examined the RFP Documents, Contractor agrees to the terms contained therein and proposes to furnish all labor, material, and equipment for the entire services (including mobilization and demobilization), and to execute an agreement for services and any and all bonds, insurance certifications, and other instruments or documents as specified or included in the RFP Documents and will completely perform the services in strict accordance with the terms of the RFP Documents.

The undersigned Contractor acknowledges that services to be performed shall conform to all City codes and regulations. Services must be accomplished in a professional manner and meet all standards of any professional trade requiring a license and or permit. Hours of operation that services can be performed on site, excluding emergency issues and special exceptions, begin at 6:00 a.m. and run through 5:00 p.m. Monday through Saturday in accordance with City Code, Chapter 120.



(Signature of Contractor)

Mario Acevedo

(Typed name of Contractor)

Doing Business As: Accurate Drilling Systems

Business Address: PO Box 3035

City: Labelle State: FL Zip: 33975

Phone: 863.517.4124 Fax: _____

Email: Ace@accuratedrilling.com

**RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION
ATTACHMENT NO. 3
PUBLIC ENTITY CRIMES STATEMENT**

SWORN STATEMENT UNDER SECTION 287.133 (3) (A)

FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted with Bid, Proposal or Contract _____
RFP 24-01 ENG - PHASE 1 UTILITY UNDERGROUND CONVERSION

2. This sworn statement is submitted by Accurate Drilling Systems whose
business address is PO Box 3035, Labelle, FL. 33935

and (if applicable) Federal Employer Identification Number (FEIN) is 59-3456452 (If the entity has no
FEIN, include the Social Security Number of the individual signing this sworn statement:

3. My name is Mario Acevedo, Jr and my relationship to the entity
named above is Vice President

4. I understand that a "public entity crime" as defined in Paragraph 287.133(a)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or any agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

5. I understand that "convicted" or "conviction" as defined in paragraph 287.133(a)(b), Florida Statutes, means finding of guilt or a conviction of a public entity crime with or without an adjudication of guilt, in any federal or state trial court of records relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, non-jury trial, or entry of a plea of guilty or nolo contendere.

6. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means:

1. A predecessor or successor of a person convicted of a public entity crime; or

2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one of shares constituting a controlling income among persons when not for fair interest in another person, or a pooling of equipment or income among persons when not for fair market value under a length agreement, shall be a prima facie case that one person controls another person.

A person who was knowingly convicted of a public entity crime, in Florida during the preceding 36 months shall be considered an affiliate.

7. I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statutes, means any natural person or entity organized under the laws of the state or of the United States with the legal power to enter into a binding contract for provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

8. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies)

 Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

 The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. (please attach a copy of the final order)

 The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in public interest to remove the person or affiliate from the convicted vendor list. (please attach a copy of the final order)

 The person or affiliate has not been placed on the convicted vendor list. (Please describe any action taken by, or pending with, the Department of General Services.)


(Signature)

Date: 22FEB2022

STATE OF FLORIDA
COUNTY OF Hendry

PERSONALLY APPEARED BEFORE ME, the undersigned authority, who, after first being sworn by me, affixed his/her signature at the space provided above on this 22nd day of November, 2022, and is personally known to me, or has provided driver license as identification.



SAN JUANA MENGUELA
Commission # HH 027429
Expires August 3, 2024
Bonded Thru Budget Notary Services


Notary Public

My Commission expires:

END OF SECTION

RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION
ATTACHMENT NO. 4
DRUG-FREE WORKPLACE CERTIFICATION

The below signed submitter certifies that it has implemented a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling rehabilitation and employee assistance programs and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection 1.
4. In the statement specified in subsection 1., notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation occurring in the workplace no later than five (5) working days after such conviction.
5. Impose a sanction on or require the satisfactory participation in drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign this statement, I certify that this firm complies fully with the above drug-free workplace requirements.

COMPANY: Accurate Drilling Systems, Inc.

ADDRESS: PO Box 3035

CITY: Labelle STATE: FL ZIP CODE: 33975

TELEPHONE NUMBER: 863.517.4124

SIGNATURE:  DATE: 22FEB2024

NAME (TYPED OR PRINTED): MARIO ACEVEDO

TITLE: VICE PRESIDENT

END OF SECTION

**RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION
ATTACHMENT NO. 5
CONFLICT OF INTEREST DISCLOSURE FORM**

Does any City employee acting as a purchasing agent, or City public officer acting in official or private capacity or his/her spouse, or child own more than 5% of the bidder/proposer's interest?

YES _____

NO X

Does any City employee acting as a purchasing agent, or City public officer acting in official or private capacity hold any employment or contract with the bidder/proposer?

YES _____

NO X

If either question number 1 or 2 above has been answered YES, does the bidder/proposer assert any exemptions related to prohibited employment & business relationships?

YES _____

NO _____

If YES, please describe:

FIRM NAME: Accurate Drilling Systems, Inc.

BY (PRINTED): Mario Acevedo

BY (SIGNATURE): 

TITLE: Vice President

ADDRESS: PO Box 3035, Labelle, FL 33975

PHONE NUMBER 863.517.4124

EMAIL: Ace@accuratedrilling.com

**RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION
ATTACHMENT NO. 6
LIABILITY & INDEMNIFICATION FORM**

To the fullest extent permitted by law, CONTRACTOR shall indemnify and hold harmless CITY, its officers and employees from liabilities, damages, losses, and costs including but not limited to reasonable attorney fees, to the extent caused by the negligence, recklessness, or intentional wrongful conduct of the CONTRACTOR and other persons employed or utilized by the CONTRACTOR in the performance of this Agreement.

Accurate Drilling Systems, Inc.

Contractor's Company Name

49 N Industrial Loop, Labelle, FL 33935

Physical Address

PO Box 3035 Labelle, FL 33975

Mailing Address

813.517.4124

Phone Number

813.517.4124

Cellular Number

Ace@accuratedrilling.com

Email address



Authorized Signature – Manual

Mario Acevedo

Authorized Signature – Typed

Vice President

Title

FAX Number

813.517.4124

After-Hours Number(s)

22FEB2024

DATE

RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION
ATTACHMENT NO. 7
CERTIFICATION OF INDEPENDENCE AND NO CONFLICT OF INTEREST

By submitting a proposal in response to the REQUEST FOR QUALIFICATIONS for RFQ No. 24-01-ENG.
- PHASE I UTILITY UNDERGROUND CONVERSION, the undersigned certifies the following:

1. The proposal has been developed independently, without consultation, communication or agreement with any employee or contractor to the City who has worked on the development of this RFQ, or with any person serving as a member of the evaluation committee.

2. The proposal has been developed independently, without consultation, communication or agreement with any other firm or parties for the purpose of restricting competition.

3. Unless otherwise required by law, the information found in the proposal has not been knowingly disclosed and will not be knowingly disclosed prior to the award of the contract, directly or indirectly, to any other firm.

4. No attempt has been made or will be made by Accurate Drilling Systems (Name of Firm) to induce any other firm to submit or not to submit a proposal for the purpose of restricting competition.

5. No relationship exists or will exist during the contract period between Accurate Drilling Systems (Name of Firm) and the City that interferes with fair competition or is a conflict of interest.

Sincerely,

Mario Acevedor, Jr., Vice President

Name and Title

**RFP 24-01-ENG PHASE 1 UTILITY UNDERGROUND CONVERSION
ATTACHMENT NO. 8
SCHEDULE OF SUB-CONTRACTORS**

The Undersigned CONTRACTOR proposes the following major sub-contractors for the major areas of work for the Project. The Bidder is further notified that all sub-contractors shall be properly licensed, bondable and shall be required to furnish the City with a Certificate of Insurance in accordance with the contract general conditions. This page may be reproduced for listing additional sub-contractors, if required.

<u>Name of Sub- Contractor</u>	<u>Address of Sub- Contractor</u>	<u>License No.:</u>	<u>Task</u>	
JM Underground, LLC	59 S. Oak St., Fellesmere. Fl.		Underground conversion construction and project management	
TB Power Creation LLC	7551 Wiles Rd. Coral Springs, Fl.		FPL Switching Coordination	

Signature: _____



Date: 22FEB2024

Title/Company: Mario Acevedo, Jr, Vice President

The City reserves the right to reject any sub-contractor who has previously failed in the proper performance of an award or failed to deliver on time contracts in a similar nature, or who is not responsible (financial capability, lack of resources, etc.) to perform under this award. The City reserves the right to inspect all facilities of any sub-contractor in order to make a determination as to the foregoing.

**AGREEMENT BETWEEN THE CITY OF DESTIN, FLORIDA
AND ACCURATE DRILLING SYSTEMS, INC., FOR
PHASE I UTILITY UNDERGROUND CONVERSION PROJECT**

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- 5. Federal E-Verify Compliance Certification**
- 6. Procurement Code Acknowledgment ITB**
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APPENDIX I CITY’S REQUEST FOR PROPOSALS NO. 24-01-ENG, PHASE I UTILITY UNDERGROUND CONVERSION

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**AGREEMENT BETWEEN CITY OF DESTIN, FLORIDA
AND
ACCURATE DRILLING SYSTEMS, INC.**

FOR

UTILITIES UNDERGROUND CONVERSION

THIS AGREEMENT (the “Agreement” or “Contract”), effective as of the _____ day of _____, 2024 ("Effective Date"), between the **City of Destin, Florida**, a municipal corporation of the State of Florida ("City"), with its principal place of business at **4200 Indian Bayou Trail, Destin, Florida 32541**, and **Accurate Drilling Systems, Inc** with its principal place of business located at **49 N. Industrial Loop Building B, LaBelle, Florida, 33935** ("Contractor").

WHEREAS, Contractor responded to City's Request for Proposals No. 24-01-ENG, PHASE I UTILITY UNDERGROUND CONVERSION for the City's Utilities Underground Conversion Phase I project; and,

WHEREAS, the City Council selected ADS’s proposal as being in the best interests of the City of Destin, its residents, businesses, and visitors and in the public interest and accordingly directed City procurement staff to negotiate a definitive agreement with ADS for the work described in the City’s RFP; and,

WHEREAS, the Parties have negotiated the terms and conditions set forth in this Agreement in order to establish their agreements and covenants as set forth herein;

NOW, THEREFORE, it is agreed that the City shall and does hereby employ Contractor to perform the services and work as hereinafter specified; and that, for and in consideration of the mutual covenants hereinafter stipulated to be kept and performed, it is agreed by and between the parties as follows:

SUMMARY

Project Name: City of Destin Utilities Underground Conversion Phase I Project

General Project Description: The Project is to perform the complete conversion of existing overhead utility facilities to underground facilities located on and along U.S. Highway 98 between Airport Road and the western Destin City Limits at the Marler Bridge, including certain utility facilities connected to and extending from the facilities on U.S. 98 into adjacent areas as depicted on the plans included in the City’s Request for Proposals No. 24-01-ENG, and including, without being limited to, construction of all required Florida Power & Light (“FPL”) infrastructure, CenturyLink conduit infrastructure, Cox Communication

conduit infrastructure, Mediacom conduit infrastructure, and Uniti Fiber conduit infrastructure; coordination with the City, FPL, CenturyLink, Cox, Mediacom, Uniti Fiber, and other similar utility entities and installations; coordination with easements and as-builts; successful coordination with FPL switching orders for the Project, required as-builts and/or final certifications; and coordination with the FPL proposed street lighting system.

Contract Price: \$10,513,978.75

Contract Time: 18 months (560 days) from Notice to Proceed

Liquidated Damages: \$1,500.00 per day

Notices: Any notices ("Notice") to be sent pursuant to this Agreement shall be to the following designated individuals:

For the City:

Louis Zunguze, City Manager
4200 Indian Bayou Trail
Destin, FL 32541
850-837-4242
lzunguze@cityofdestin.gov

With copies to:

Jeffrey Cozadd, Contract Administrator
4200 Indian Bayou Trail
Destin, FL 32541
850-837-4242
jcozadd@cityofdestin.gov

For Contractor:

Name & Title: Mario Acevedo, President
Address: 49 N. Industrial Loop Bldg B Labelle, FL 33935
Phone: 863-674-0803
Email: adsinc.swfla@gmail.com

All Notices, requests, and other communications required or desired hereunder shall be in writing and shall be delivered by (i) personal delivery, (ii) "next business day" delivery by a nationally recognized overnight delivery service with evidence of delivery, or (iii) electronically, addressed to the individuals identified above.

ARTICLE 1
DEFINITIONS AND INTERPRETATION OF CONTRACT DOCUMENTS

1.1. Definitions. The definitions included in this Section are not exhaustive of all definitions used in the Contract Documents. Additional terms may be defined in other Contract Documents. The following terms shall have the meanings specified herein, as follows:

“Applicable Laws” means, without limitation, all existing and future state and national laws and municipal ordinances and regulations in any manner affecting those engaged or employed in the Project, or the materials used in the Project, or in any way affecting the conduct of the Project; all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same; and all provisions required by law to be made a part of this Agreement; all of which provisions are hereby incorporated by reference and made a part hereof.

“Application for Payment” means the detailed itemized documentation, including all supporting documentation, in a form and substance satisfactory to the City, submitted by the Contractor on a monthly basis in order to obtain the City’s approval for payment for Work performed pursuant to the Contract Documents.

“Carriers” shall mean providers of telecommunications, cable television, broadband, and similar services whose conduit will be placed in the City’s rights-of-way as part of the Project; the Carriers shall include, but not be limited to, Cox Communications, Uniti Fiber, Century Link, Mediacom, and any other Carriers whose conduit is to be placed in the City’s rights-of-way as part of, or in conjunction with, the Project.

“Change Order” means a written document ordering a change in the Contract Price and/or Contract Time or a material change in the Work (as defined herein). A Change Order must comply with the requirements of the Contract Documents and the City’s Procurement Manual.

“City” means the City of Destin, a Florida municipal corporation, having its principal offices at 4200 Indian Bayou Trail, Destin, FL 32541. In all respects hereunder, City’s obligations and performance are pursuant to City’s position as the owner of the Project acting in its proprietary capacity. In the event City exercises its regulatory authority as a governmental body including, but not limited to, its regulatory authority for code inspections and issuance of any and all applicable permits within its jurisdiction, the exercise of such regulatory and the enforcement of any rules, regulations, laws and ordinances shall be deemed to have occurred pursuant to City’s regulatory authority as a governmental body and shall not be attributable in any manner to City as a Party to this Contract.

“City Council” means the governing and legislative body of the City.

“City Manager” means the Chief Administrative Officer of the City. The City Manager shall be construed to include the Contract Administrator and any duly authorized representatives of the City as the City Manager may designate in writing at any time with respect to any specific matter(s) concerning the Project and/or the Contract Documents (exclusive of those authorizations reserved to the City Council or regulatory or administrative bodies having jurisdiction over any matter(s) related to the Project and/or the Contract Documents).

“Claim” means a demand or assertion by one of the parties seeking, as a matter of right, adjustment or interpretation of the Contract Documents, payment of money, extension of time or other relief with respect to the Contract Documents or Project. The term “Claim” also includes other disputes and matters in question between the City and Contractor arising out of or relating to the Contract Documents. Claims must be initiated by written notice in strict accordance with the Contract Documents. The responsibility for substantiating Claims shall rest with the Party making the Claim.

“Competitive Solicitation Package” means the City’s Request for Proposals No. 24-01-ENG, PHASE I UTILITY UNDERGROUND CONVERSION issued on January 23, 2024 (“City’s RFP” or “RFP”), and all information provided by Contractor to City in response for the purpose of Contractor securing a Project from the City, include any proposal and price information submitted by Contractor for a business opportunity involving products or services. Forms required to be executed by Contractor are attached hereto as Exhibit A and copies of the City’s RFP and Contractor’s response are attached hereto as Appendices I and II.

“Consultant” means any firm named by the City as a “Consultant,” that has entered into a separate agreement with the City to perform architectural, engineering, or other design and construction administration services for the Project. A Consultant may serve as the "architect of record" and/or "engineer of record" for the Project if so designated. Wherever the word "Architect" or “Engineer” or “Consultant” appears in the Contract Documents, it shall be deemed to refer to a Consultant and/or the design professionals engaged by Consultant. In the event that the City engages more than one Consultant, for example, an engineering consultant to serve as “engineer of record,” the separate agreement with such Consultant shall designate the Consultant’s area of expertise, e.g., “Engineering Consultant” or “Architect Consultant.” All communications, directives, instructions, interpretations and actions required of Consultant shall be issued or taken only by or through Consultant's authorized representative(s).

“Contract” means the written agreement between the City and the Contractor for the performance of the Work in accordance with the requirements of the Contract Documents, and for the payment of the agreed consideration.

“Contract Administrator” means the individual appointed by the City Manager who shall be the City's authorized representative to coordinate, direct, and review on behalf of the City, all matters related to the Project. The Contract Administrator for the Project will be separately designated prior to the first Application for Payment.

“Contract Documents” means all of the documents setting forth bidding information, requirements and contractual obligations for the Project, Contractor’s response to the Competitive Solicitation Package, the Contract, and the Plans and Specifications, together with all addenda to any of the foregoing, Change Orders, Work Orders, Field Orders, schedules and shop drawings, and all other documents required for the completion of the Project.

“Contract Price” means the amount established in the Contract Documents as the total amount the City is obligated to pay for full and complete performance of all of the Work required by the Contract Documents (including, but not limited to, all labor, equipment and materials to administer, coordinate, provide related certifications, install and otherwise construct and complete the Project within the Contract Time), and as may be amended by Change Order.

“Contract Time” means the number of days allowed for completion of all Work, as stipulated in the Contract Documents, and as may be amended by Change Order.

“Contractor” means the individual or firm that is accepted and enters into the Contract with the City to construct the Project pursuant to the Contract Documents and that is liable for the acceptable performance of the Work and payment of all debts pertaining to the Work. Unless otherwise specified in this Agreement, including in any valid amendment hereto, Contractor shall mean Accurate Drilling Systems, Inc.

“Days” means all references to numbers of days in the Contract Documents, shall be construed to mean calendar days, unless specifically noted otherwise. The term "business days" means a day other than a Saturday, Sunday, or Federal holiday.

“Field Order” or **“Field Directive”** means a written order that further describes details or provides interpretations necessary to complete the Work required pursuant to the Contract Documents but which does not involve a change in the Contract Price or Contract Time.

“Final Completion” means the date upon which all of the following have occurred: (a) all conditions and requirements of the Contract Documents, permits and regulatory agencies have been satisfied; (b) any documents required by the Contract Documents have been received by the City; (c) any other documents required to be provided have been received by City; and (d) the Work has been fully completed in accordance with the Contract Documents.

“Notice(s) to Proceed” or **“NTP”** means a written letter or directive issued by the Contract Administrator to Contractor to commence and proceed on a date certain, which shall be the Project initiation date, with the Work, or portions thereof as specified therein or a specific task of the Project, and stating any further limitations on the extent to which Contractor may commence and proceed with the Work. Unless otherwise approved by the City at its sole discretion, City’s issuance of a Notice to Proceed for construction or portions thereof shall be

contingent upon Contractor obtaining all appropriate permits and satisfying all requirements of agencies having jurisdiction. However, the City is not obligated to immediately issue NTP on the date Contractor obtains all requisite permits and/or satisfies the specified conditions precedent for issuance of NTP. The date of issuance of NTP shall be determined at the City's sole discretion once Contractor has obtained all required permits and otherwise satisfied all conditions precedent to issuance of NTP.

"Parties" means City and Contractor, and "Party" is a reference to either City or Contractor, as the context may indicate or require.

"Plans" means the drawings or reproductions thereof prepared by the Consultant, by FPL, by any other Consultant engaged for the purpose of preparing such drawings or reproductions, which show the location, character, dimensions and details of the Work to be done, and which are a part of the Contract Documents.

"Project" means the improvements described in the Contract Documents and all Work that is contemplated thereby or reasonably inferable therefrom and more particularly described as the City of Destin Utilities Underground Conversion Phase I Project.

"Project Area" means the area on and along U.S. Highway 98 between Airport Road and the western Destin City Limits at the Marler Bridge, including adjacent areas in which certain utility facilities connected to and extending from the facilities on U.S. 98 are located, as depicted on the plans included in the City's Request for Proposals No. 24-01-ENG, and including, without being limited to, construction of all required Florida Power & Light ("FPL") infrastructure, Century Link conduit infrastructure, Cox Communication conduit infrastructure, Mediacom conduit infrastructure, Uniti conduit infrastructure, coordination with other similar installations, coordination with easements, as-builts, successful coordination with FPL switching orders for the Project, required as-builts and/or final certifications, and coordination with the FPL proposed street lighting system.

"Project Manager" means, as applicable in the circumstances, either (a) the Contractor's Project Manager as identified in the Contractor's proposal submitted in response to the City's RFP or as subsequently designated by Contractor subject to the City's approval, who is the authorized individual who is the representative of Contractor and who will administer and manage the prosecution of all Work on behalf of the Contractor; or (b) the City's Project Manager, who shall be the specific individual designated (subject to the City's approval) by Utility Consultants of Florida, Inc. ("UCoF"), the corporation with whom the City has contracted to provide project management services and who shall be responsible for coordinating and supervising the Work on behalf of the City.

"Punch List" means the list or lists prepared by Contractor, incorporating input provided by the City, identifying matters that remain to be completed to achieve Substantial Completion

and to be completed between achievement of Substantial Completion and Final Completion in order that Final Completion can be declared by City to have occurred. Punch List procedures and requirements are further specified in the terms of this Agreement at Article 8.4.6.

“Purchase Order” means the written document issued by the City to the Contractor indicating types, quantities, and/or agreed prices for products or services to be provided to the City.

“Responsible Bidder” means an offeror who has the capability in all respects to perform fully the contract requirements, and the integrity and reliability which will assure good faith performance, including, without limitation, the factors identified in the City Code or Florida Law.

“Schedule of Values” means a written schedule setting forth the detailed and itemized cost breakdown, inclusive of labor, material, and taxes of all elements comprising the Contract Price.

“Specifications” means the general term comprising all of the written directions, provisions and requirements contained in the Contract Documents, as amended, describing the work required to be performed, including detailed technical requirements as to labor, materials, supplies, equipment and standards to which such work is to be performed.

“Subcontractor” means any person or entity supplying the Contractor with labor, materials, supplies or equipment used directly or indirectly by the Contractor in the prosecution of the Work.

“Substantial Completion” means the date when the Work, as determined by the City in its sole discretion, has been developed, designed, engineered and constructed in accordance with the Contract Documents such that all conditions of permits and regulatory agencies have been satisfied and the Project is ready for occupancy, utilization and continuous commercial operation for the uses and purposes intended by the City, without material interference from incomplete or improperly completed Work and with only minor punch list items remaining to be completed, all as reasonably determined by the City and evidenced by (1) the issuance of a Certificate of Occupancy or Certificate of Completion by the authority having jurisdiction; (2) the issuance and acceptance of a Certificate of Substantial Completion by the City pursuant to the Contract Documents.

“Surety” means the surety company or individual which is bound by the bid bond, or by the performance bond or payment bond with and for Contractor who is primarily liable, and which surety company or individual is responsible for Contractor's satisfactory performance of the work under the contract and for the payment of all debts pertaining thereto in accordance with Section 255.05, Florida Statutes.

“Warranty Period” means the time frame set forth in Section 3.5 of this Agreement.

“Work” means all construction and services required by or reasonably inferable from the Contract Documents for the completion of the Project, including the provision of all labor, materials, equipment, supplies, tools, machinery, utilities, procurement, fabrication, transportation, boring, trenching, construction, erection, demolition, restoration, installation, insurance, bonds, permits and conditions thereof, building code changes and governmental approvals, testing and inspection services, quality assurance and/or quality control inspections and related certifications, training, surveys, studies, supervision, and administration services to be provided by the Contractor; coordination and cooperation with the City, FPL, CenturyLink, Cox, Uniti Fiber, Mediacom, and any other entities who may be involved, either directly or indirectly, with the Project and the Work; and other items, work and services that are necessary or appropriate for the total construction, installation, furnishing, equipping, and functioning of the completed Project, together with all additional, collateral and incidental items, work and services required to achieve Final Completion in accordance with the Contract Documents; provided, that the materials and supplies necessary to install the FPL facilities have been purchased by the City from FPL, and provided further, that the conduit, materials, and supplies necessary to accomplish the conversion of Carriers’ existing overhead facilities to underground facilities are to be supplied pursuant to separate agreements between such Carriers and the City.

1.2. Interpretation of the Contract Documents.

- 1.2.1.** As used in the Contract Documents, (i) the singular shall include the plural, and the masculine shall include the feminine and neutral, as the context requires; (ii) “includes” or “including” shall mean “including, but not limited to” and “including, without limitation;” and (iii) all definitions of agreements shall include all amendments thereto in effect from time to time.
- 1.2.2.** Whenever it shall be provided in the Contract Documents that the Contractor is required to perform a service or obligation "at its sole cost and expense" or words of substantially similar meaning, the Contractor shall not be entitled to reimbursement for such item and the cost of such service or obligation shall not be included in any Application for Payment except to the extent provided for in the payments agreed upon by the City and the Contractor in this Agreement.
- 1.2.3.** Contract Documents shall be construed in a harmonious manner, whenever possible. The general intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Project by the Contractor.
- 1.2.4.** The Contract Documents shall be taken as a whole and are complementary, and any item

of Work called for in any Contract Document shall be as binding as if called for by all, so that any part of the Work shown or described in any of the Contract Documents, though not specifically referred to in other Contract Documents, shall be executed by Contractor and binding as a part of the Contract Documents, as well as any Work which, in the sole opinion of City, may be fairly inferred from the Contract Documents or by normal industry practice.

- 1.2.5.** Detailed plans shall take precedence over general plans for the same part of the Work. Specifications and detailed plans which may be prepared or approved by City after the execution of the Contract and which may be fairly inferred from the original specifications and plans are to be deemed a part of such specifications and plans, and that portion of the Work shown thereby shall be performed without any change in the Contract Price or Project schedule. With respect to conflicts between large-scale drawings and small-scale drawings, the larger scale drawing shall govern, unless otherwise dictated by the City.
- 1.2.6.** Where compliance with two or more requirements is indicated in any of the enumerated Contract Documents and where these requirements within the Contract Documents conflict in quantity or quality, the Contractor shall comply with the most stringent requirement as determined by the City, unless specifically indicated otherwise in the Contract Documents.
- 1.2.7.** As used in the Contract Documents, unless specifically indicated otherwise, references to an Article include all Sections, Subsections, and items within that Article; references to a Section include all Subsections and items within that Section; and references to a Subsection include all items within that Subsection.
- 1.2.8.** Words that have a well-known technical or trade meaning are used herein in accordance with such recognized or well-known meaning unless the Contract Documents otherwise specifically define such word.
- 1.2.9.** The Recitals, Summary, Exhibits, Appendices, and Schedules attached hereto are expressly incorporated in and made a part of the Contract Documents as if fully set forth herein.

ARTICLE 2

INTENTION AND PRIORITY OF CONTRACT DOCUMENTS

- 2.1. Intention of City and Contractor.** It is the intent of City and the understanding of the Parties to describe in the Contract Documents the Work comprising a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents and in accordance with all codes and regulations governing construction of

the Project. Any work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result shall be supplied by Contractor whether or not specifically called for in this Agreement. City shall have no duties other than those duties and obligations expressly set forth within the Contract Documents.

- 2.2. Priority of Contract Documents.** In the event of conflict or inconsistency among the Contract Documents, the following order of precedence shall govern the interpretation of the Contract Documents: a. Change Orders or Amendments to this Contract (excluding the Plans and Specifications); b. the Contract Documents (excluding the Plans and Specifications); c. modifications or changes to the completed Plans and Specifications, as approved by the City; d. the completed Plans and Specifications, as approved by the City; and, e. the City's Request for Proposals No. 24-01-ENG, PHASE I UTILITY UNDERGROUND CONVERSION (a copy of this RFP is attached as Appendix I hereto and the Contractor's proposal submitted in response to the City's RFP (a copy of which is attached as Appendix II hereto).

ARTICLE 3 CONTRACTOR'S DUTIES AND RESPONSIBILITIES

- 3.1. Performance of the Work.** The Contractor covenants and warrants that it shall be responsible for performing and completing, and for causing all Subcontractors to perform and complete, the Work in accordance with the Contract Documents and all Applicable Laws relating to the Project. Accordingly, Contractor shall furnish all of the labor, materials, equipment services and incidentals necessary to perform all of the Work described in the Contract Documents and as the Work is defined hereinabove, and all Work that is contemplated thereby or reasonably inferable therefrom. As part thereof, Contractor shall achieve Substantial Completion within the time period specified in the schedule submitted by Contractor and included in the Competitive Solicitation Package for Substantial Completion, as such date may be extended pursuant to the terms of the Contract Documents, and shall achieve Final Completion of the Project by the date established in the Contract Documents for Final Completion, as such date may be extended pursuant to the terms of the Contract Documents. Unless otherwise provided in the Contract Documents, or as agreed to in writing between City and Contractor, the form and content of all reports, forms and regular submittals by Contractor to City shall be subject to prior approval of the City, and Contractor shall submit such materials to the City for City's approval prior to implementation. City's approval thereof shall not limit City's right to thereafter require reasonable changes or additions to approved systems, reports, forms and regular submittals by Contractor to City.
- 3.2. Standard of Care.** The Work shall be performed in accordance with the professional standards applicable to projects, buildings, or work of complexity, quality and scope comparable to the Work and the Project. More specifically, in the performance of the professional services under this Contract, Contractor shall provide the care and skill

ordinarily used by members of its profession practicing under similar conditions for projects of similar type, size and complexity at the same time and locality of the Project. Work shall be performed by the Contractor, Subcontractors, and specific personnel referred to in the Contract Documents in accordance with their respective degrees of participation provided and represented to the City by the Contractor from time to time. The Contractor may add Subcontractors as it deems necessary or appropriate in order to carry out its obligations under the Contract Documents, provided such entity shall be suitably qualified and shall be subject to the prior approval of the City. Nothing contained in the Contract Documents shall be construed to create any obligation or contractual liability running from the City to any such persons or entities, including to any Subcontractors, Sub-Subcontractors, Materialmen, Suppliers, etc.

- 3.3. Notices to Proceed.** Contractor shall be instructed to commence the Work by written instructions in the form of a Notice to Proceed and Purchase Order issued by the City. The Notice to Proceed and Purchase Order will not be issued until Contractor's submission to City of all required documents, including but not limited to, Payment Bond, Performance Bond, and Insurance Certificate(s), and after execution of the Contract by both parties, which shall occur no later than ten (10) calendar days after the City issues the Notice of Award.
- 3.4. Conditions Precedent to Proceeding With Construction of the Work.** The following are conditions precedent to the Contractor mobilizing on the Project Site and commencing with physical construction of the Work: (1) the receipt of all necessary permits by Contractor; (2) City's acceptance of the Contractor's full progress schedule in accordance with the Contract Documents, Contractor's submittal schedule, Contractor's Schedule of Values, and list of Subcontractors; (3) Contractor's Hurricane Preparedness Plan; and, (4) Contractor's submission to the City of any other documents required by the Contract Documents. The Contractor shall submit all necessary documents required to proceed with construction of the Work within **twenty-one (21)** calendar days of the issuance of the first Notice to Proceed.
- 3.5. Warranty.** Contractor warrants to the City that all materials and equipment furnished under the Contract Documents shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturers, fabricators, suppliers or processors except as otherwise provided for in the Contract Documents. If, within one (1) year after final completion (the "Warranty Period"), any Work is found to be defective or not in conformance with the Contract Documents, Contractor shall correct it promptly after receipt of written notice from the City. Contractor shall also be responsible for and pay for replacement or repair of adjacent materials or Work which may be damaged as a result of such replacement or repair. These warranties are in addition to those implied warranties to which City is entitled as a matter of law.

- 3.6. Licenses and Permits.** The Contractor shall be responsible for obtaining all necessary licenses and permits not being provided by the City or otherwise being obtained by FPL or the Carriers, and for complying with Applicable Laws in connection with the prosecution of the Work.
- 3.7. Indemnification.** The Contractor shall protect, indemnify and hold harmless the Federal, State, County, City, and any other municipal governments and their members, officers, agents and employees against claims and liabilities arising from or based on the violation of requirements of law or permits, whether by the Contractor, its employees, agents or subconsultants and subcontractors or any derivative thereof. No extensions of time will be granted to Contractor for delays in obtaining the permits that are the responsibility of Contractor. Contractor shall not be responsible for delays in obtaining permits that are the responsibility of the City unless Contractor has contributed to such delays through any action or inaction of Contractor. The Contractor's indemnification of the City shall survive the completion of the Work by five (5) years.
- 3.8. Certificates of Competency.** It is the Contractor's responsibility to have and maintain appropriate Certificate(s) of Competency, valid for the Work to be performed and for all persons working on the Project for whom a Certificate of Competency is required or to make certain that all construction activity is undertaken by properly licensed persons or subcontractors.
- 3.9. Contractor Responsibility.** The Contractor shall be fully responsible for the actions of all persons (individual and corporate) working in conjunction with the construction of the Project.
- 3.10. Quality, Accuracy of Work.** The Contractor is responsible for the professional quality, technical accuracy, completeness, performance and coordination of all Work required under the Contract Documents (including the services performed by Contractor's subconsultants), within the specified time period and for the specified Contract Price. The Contractor shall perform the Work utilizing the skill, knowledge and judgment ordinarily possessed and used by a proficient consulting architect/engineer with respect to the disciplines required for the performance of the Work in the State of Florida. The Contractor is responsible for and represents that the Work will conform to the City's requirements, as set forth in the Contract Documents (and including, without limitations, the design criteria).
- 3.11. Failure to Perform.** The Contractor shall be and remain liable to the City for all damages caused by the Contractor's negligent acts or errors or omissions in the performance of the Work. In addition to all other rights and remedies which the City may have, the Contractor shall, at its sole expense, re-perform the Work to correct any deficiencies which result from the Contractor's failure to perform in accordance the Contract Documents. The Contractor

shall also be liable for the replacement or repair of any defective Work materials and equipment, and re-performance of any non-conforming design and construction services resulting from the Contractor's deficiencies, for a period from the commencement of this Agreement until twelve (12) months following the Substantial Completion Date and for the period of liability required by Applicable Law. The City shall notify the Contractor in writing of any deficiencies and shall approve the method and timing of the corrections.

- 3.12. No Waiver.** Neither the City's inspection, review, approval or acceptance of, nor payment for, any of the Services or Work required under the Agreement shall be construed to relieve the Contractor (or any sub-consultant or subcontractor) of its obligations and responsibilities under the Agreement, nor constitute a waiver of any of the City's rights under the Agreement, or of any cause of action arising out of the performance of the Agreement. The Contractor (and its sub-consultants or subcontractors) shall be and remain liable to the City in accordance with Applicable Laws for all damages to City caused by any failure of the Contractor (or its subconsultants or subcontractors) to comply with the terms and conditions of the Agreement or by the Contractor's (or its subconsultants' or subcontractors') misconduct, unlawful acts, negligent acts, errors or omissions, in the performance of the Agreement. With respect to the performance of Work by subconsultants or subcontractors, the Contractor shall, in approving and accepting such Work, ensure the professional quality, completeness, and coordination of such subconsultants' or subcontractors' work. The Contractor shall be responsible for deficient or defective services and any resulting deficient or defective construction services re-performed within twelve (12) months following the Substantial Completion date, and shall be subject to further re-performance, repair and replacement for twelve (12) months from the date of initial re-performance, not to exceed twenty-four months (24) from Final Completion.
- 3.13. Subcontractors and Subconsultants.** The Contractor agrees to bind specifically every subcontractor and subconsultant to the applicable terms and conditions of this Agreement for the benefit of the City. The Contractor agrees to incorporate all terms of this Agreement, as applicable to subcontractors and subconsultants, into any and all subcontracts.
- 3.14. Provision of Services, Materials, and Facilities.** The Contractor shall provide and pay for all geotechnical, concrete and material testing, land surveying services, materials, labor, water, tools, equipment, light, power, transportation and other facilities and services necessary for the proper execution and completion of the Project, whether temporary or permanent, and whether or not incorporated or to be incorporated in the Project.
- 3.15. Discipline and Good Order.** The Contractor shall at all times enforce strict discipline and good order among its employees, sub-consultants, and subcontractors at the Project site and shall not employ on the Project any unfit person or anyone not skilled in the work assigned to him or her.

- 3.16. Safety.** The Contractor shall maintain, at its sole cost, suitable and sufficient guards, barriers and, at night, suitable and sufficient lighting for the prevention of accidents and thefts.
- 3.17. Compliance with Applicable Laws.** The Contractor shall keep itself fully informed of, and shall take into account and comply with, all Applicable Laws. If any requirement or term of the Agreement for this Project is in violation of Applicable Laws, the Contractor shall forthwith report the same to the Contract Administrator, in writing, and come into compliance with Applicable Laws as soon as reasonably practicable. The Contractor shall cause all its agents, employees, subconsultants and subcontractors to observe and comply with all Applicable Laws.
- 3.18. Change in Applicable Laws.** In the event of a change after the Effective Date of this Agreement in any Applicable Laws which in any manner affects the Project, the Contractor shall advise the Contract Administrator, in writing, and the City may initiate a Change Order to bring the Project into compliance with such Applicable Law(s), as amended or enacted.
- 3.19. Sales Taxes.** The Contractor shall pay all applicable sales, consumer, use and other taxes required by law. The Contractor is responsible for reviewing the pertinent federal, state and local statutes involving taxes and complying with all requirements. City shall provide tax exempt status certification to Contractor if sales taxes are not to be collected, and Contractor shall be entitled to rely upon the validity of such certification.
- 3.20. Adjoining Areas.** The Contractor, before commencing Work at the Site, shall verify all governing dimensions at the Site, and shall examine all adjoining areas, facilities, utilities, and other related conditions upon which the Work is in any way dependent for its quality and functional performance according to the intent of the Contract Documents, and specifically the design criteria set forth in the Contract Documents, and no disclaimer of responsibility for defective or non-conforming adjoining work will be considered unless notice of same has been filed by the Contractor, and agreed in writing by City before the Contractor begins any part of the Work.
- 3.21. Design Criteria.** The Contractor shall satisfy itself by personal investigation and by such other means as the Contractor may think necessary or desirable, in its sole discretion, as to the conditions affecting the proposed Work and the cost thereof. No information derived from maps, drawings, specifications, or soil conditions tests included in the design criteria set forth in the Contract Documents shall relieve the Contractor from any risk or from fulfilling all terms of the Agreement. The Contractor shall be responsible for any additional soil tests and / or geotechnical investigations required to support the design and construction approach in executing the Project. In the pricing of the design and construction, the Contractor shall consider the cost for removal, disposal, replacement and compaction of material, if necessary.

- 3.22. Underground Utilities.** The locations of existing Utilities and structures within the Project site, as may be shown on the Contract drawings or the design criteria set forth in the Contract Documents, are taken from existing records and from available information. However, it is expected that there may be some discrepancies and omissions in the locations and quantities of utilities and structures shown. **Those shown are for the convenience of the Contractor only, and no responsibility is assumed by the City, for their accuracy or completeness.** (No request for additional compensation or time resulting from encountering Utilities or structures not shown, or differing in location or elevation from that shown, will be considered). **Contractor shall comply with Chapter 556, Florida Statutes, the Florida Underground Facility Damages Prevention and Safety Act, including the rules and procedures of the Sunshine State One-Call of Florida, Inc. requirements, to verify locations of underground utilities.** Contractor shall explore sufficiently ahead of the Work to allow time for any necessary adjustments without delay to the progress of the Work. Any and all costs including, but not limited to, costs of delays occasioned by encountering underground utilities or structures which could have or should have been discovered by timely exploration ahead of the Work shall rest solely with the Contractor.
- 3.23. Compliance with Contract.** All Work shall be performed by the Contractor in compliance with the Contract Documents, to the satisfaction of the City.
- 3.24. Personnel Requirements.**
- 3.24.1.** The orders of City are to be given through Contract Administrator or their designee, which instructions are to be strictly and promptly followed in every case. Contractor shall keep on the Project during its progress, a full-time competent English speaking Construction Superintendent and any necessary assistants, all satisfactory to City. The Construction Superintendent shall not be changed except with the written consent of City, unless the Construction Superintendent proves to be unsatisfactory to Contractor and ceases to be in its employ. The Construction Superintendent shall represent Contractor and all directions given to the Construction Superintendent shall be as binding as if given to Contractor and will be confirmed in writing by City upon the written request of Contractor. Contractor shall give efficient supervision to the Work, using its best skill and attention.
- 3.24.2.** The Construction Superintendent shall be responsible for management of the Project site and tasks, including, but not limited to, organization and coordination of the Work of Subcontractor employees; exercising control over rate of construction progress to assure completion of the Project within the Project schedule; inspecting or observing the Work to enforce conformity to the Contract Documents and supervising trades, subcontractors, clerical staff, and other

personnel employed in the construction of the Project. On a daily basis, Contractor's Construction Superintendent shall record, at a minimum, the following information in a bound log: the day; date; weather conditions and how any weather condition affected progress of the Work; time of commencement of work for the day; the work being performed; materials, labor, personnel, equipment and subcontractors at the Project site; visitors to the Project site, including representatives of Consultant; regulatory representatives; any special or unusual conditions or occurrences encountered; and the time of termination of work for the day. All information shall be recorded in the daily log in ink. The daily log shall be kept on the Project site and shall be available at all times for inspection and copying by City.

- 3.24.3.** The Contract Administrator and Contractor shall meet at least weekly or as determined by the Contract Administrator, during the course of the Work to review and agree upon the work performed to date and to establish the critical path activity or Work for the next two weeks. The Contractor shall publish, keep, and distribute minutes and any comments thereto of each such meeting.
- 3.24.4.** If Contractor, in the course of prosecuting the Work, finds any discrepancy between the Contract Documents and the physical conditions of the locality, or any errors, omissions, or discrepancies in the Contract Documents, it shall be Contractor's duty to immediately inform the City, in writing, and City will promptly review the same. Any work done after such discovery, until authorized, will be done at Contractor's sole risk.
- 3.24.5.** Contractor shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences and procedures of construction.
- 3.24.6.** The Construction Superintendent must have at least five (5) years of experience in projects of similar design, scope, size and complexity. The Project Manager must have at least five (5) years of experience in projects of similar design, scope, size and complexity.
- 3.24.7.** As a condition precedent to entering into this Agreement, and in accordance with section 448.095, F.S., Contractor and its Subconsultants shall register with and use the E-Verify system to verify the work authorization status of all employees hired on or after January 1, 2021.
 - a. Contractor shall require each of its Subcontractors to provide Contractor with

an affidavit stating that the Subcontractor does not employ, contract with, or subcontract with an unauthorized alien. Contractor shall maintain a copy of such affidavit for the duration of this Agreement.

- b. City, Contractor or any Subcontractor who has a good faith belief that a person or entity with which it is contracting has knowingly violated section 448.09(1), F.S. or these provisions regarding employment eligibility shall terminate the contract with the person or entity.
- c. City, upon good faith belief that a Subcontractor knowingly violated these provisions regarding employment eligibility, but that Contractor otherwise complied, shall promptly notify Contractor and Contractor shall immediately terminate the contract with the Subcontract.
- d. City and Contractor hereby acknowledge and mutually agree that a contract terminated pursuant to these provisions regarding employment eligibility is not a breach of contract and may not be considered as such. Any contract terminated pursuant to these provisions regarding employment eligibility may be challenged in accordance with section 448.095(2)(d), F.S.
- e. Contractor acknowledges that, in the event City terminates this Agreement for Contractor's breach of these provisions regarding employment eligibility, then Contractor may not be awarded a public contract for at least one (1) year after such termination. Contractor further acknowledges that Contractor is liable for any additional costs incurred by City as a result of termination of this Agreement for breach of these provisions regarding employment eligibility.
- f. Contractor shall incorporate in all subcontracts made pursuant to this Agreement the provisions contained herein regarding employment eligibility.

3.25. Subcontracts.

- 3.25.1.** Contractor shall not employ any subcontractor against whom City may have a reasonable objection. Contractor shall not be required to employ any Subcontractor against whom Contractor has a reasonable objection.
- 3.25.2.** Contractor shall be fully responsible for all acts and omissions of its Subcontractors and of persons directly or indirectly employed by its subcontractors and of persons for whose acts any of them may be liable to the same extent that Contractor is responsible for the acts and omissions of persons directly employed by it. Nothing in the Contract Documents shall create any contractual relationship between any Subcontractor and City or any obligation on the part of City to pay or to see the payment of any monies due any Subcontractor. City may furnish to any

Subcontractor evidence of amounts paid to Contractor on account of specific work performed.

3.25.3. Contractor agrees to bind specifically every Subcontractor to the terms and conditions of the Contract Documents for the benefit of City. All of the Contractor's agreements with the Subcontractors shall contain the following provisions (or shall incorporate the following provisions by reference) and shall state:

- a. that the Subcontractor irrevocably submits itself to the original and exclusive jurisdiction and venue in Okaloosa County, Florida, with regard to any controversy in any way relating to the award, execution or performance of the Contract Documents and/or such Subcontractor's agreement, and whereby the Subcontractor agrees that service of process on it may be made to the person or entity designated in the subcontract;
- b. that the City shall not be in privity of contract with the Subcontractor and shall not be liable to any Subcontractor under the Contract Documents or any such subcontract, except for the payments of amounts due to the Subcontractor under its subcontract in the event that the City exercises its rights under any assignment of the subcontract and requests or directs the Subcontractor to perform the portion of the Work covered by its subcontract;
- c. that the City is a third-party beneficiary of the subcontract, entitled to enforce any rights thereunder for their respective benefits, and that, subject to the terms of the applicable subcontract, the City shall have the same rights and remedies vis-à-vis such Subcontractors that Contractor shall have, including the right to be compensated for any loss, expense or damage of any nature whatsoever incurred by the City resulting from any breach of such subcontract by Subcontractor, any breach of representations and warranties, if any, implied or expressed, arising out of such agreements and any error, omission or negligence of such subcontractor in the performance of any of its obligations under such Subcontract;
- d. that the Subcontractor shall indemnify and hold harmless the City, its officers, agents, directors, and employees, and instrumentalities to the fullest extent permitted by Section 725.06 of the Florida Statutes;
- e. that such subcontract shall be terminable for default or convenience upon ten (10) days prior written notice by Contractor, or, if the subcontract has been assigned to the City, by the City or its designee;
- f. that Subcontractor shall promptly notify the City (with a copy to Contractor) of any default of Contractor under the Subcontract, whether as to payment or

otherwise;

- g.** that Contractor and Subcontractor acknowledge that
 - (i)** they are each entering into a contract for the construction of a public facility or public works project as contemplated in Chapter 255, Florida Statutes, and
 - (ii)** each have no right to file a construction lien against the Work or the Project, and further agree to include a similar requirement in any purchase order or subcontract entered into by Subcontractor; and,
 - (iii)** the payment bond provided by Contractor pursuant to this Agreement is a substitute for the right to claim a lien on the Project, and that any claims for nonpayment shall be made against the bond in accordance with Section 255.05, Florida Statutes.
- h.** that Subcontractor shall comply with all Applicable Laws (including prompt payment) and the City requirements as set forth in the Contract Documents and maintain all files, records, accounts of expenditures for Subcontractor's portion of the Work to the standards set forth in the Contract Documents.
- i.** that the City may, at reasonable times, contact Subcontractor, after notice to Contractor, to discuss, or obtain a written report of, Subcontractor's services, with Contractor entitled to be present during any such discussions; provided that in no event, prior to any assignment of the subcontract to the City, shall Subcontractor take instructions directly from the City;
- j.** that Subcontractor promptly disclose to the City and Contractor any defect, omission, error or deficiency in the Contract Documents or the Work about which it has knowledge no later than ten (10) days following discovery of such defect, omission, error or deficiency;
- k.** that Subcontractor assign all warranties directly to the City;
- l.** that the Contract Documents provide a limitation of remedies and NO DAMAGES FOR DELAY against the City as delineated in Article 18 hereof;
- m.** that in the event of a change in the Work the Subcontractor's Claim for adjustments in the subcontract price shall be limited exclusively to its actual costs for such changes.

- n. that each subcontract shall require the Subcontractor to expressly agree that the foregoing constitutes the sole and exclusive remedies for delays and changes in the Work and thus eliminate any other remedies for claim for increase in the subcontract price, damages, losses or additional compensation.
- o. that each subcontract shall require that any claims by Subcontractor for delay or additional cost must be submitted to Contractor within the time and in the manner in which the Contractor must submit Claims to the City, and that failure to comply with the conditions for giving notice and submitting claims shall result in the waiver of such claims in the same manner as provided for in the Contract Documents.

3.25.4. Performance of Work. Contractor shall perform the Work with its own forces, in an amount not less than the percentage of the Work specified in the Competitive Solicitation Package summary.

3.26. Plans and Working Drawings.

3.26.1. Contractor to Check Plans, Specifications and Data. Contractor shall verify all dimensions, quantities and details shown on the plans, specifications or other data received from City and shall notify City of all errors, omissions and discrepancies found therein within three (3) calendar days of discovery. Contractor shall not be allowed to take advantage of any error, omission or discrepancy. Contractor shall not be liable for damages resulting from errors, omissions or discrepancies in the Contract Documents unless Contractor recognized such error, omission or discrepancy and failed to report it to City, or unless Contractor should have recognized such error, omission or discrepancy upon reasonable investigation.

3.26.2. Supplementary Drawings. When, in the opinion of City, it becomes necessary to explain the Work to be done more fully, or to illustrate the Work further, or to show any changes which may be required, supplementary drawings, with specifications pertaining thereto, will be prepared by City. The supplementary drawings shall be binding upon Contractor and shall be considered as part of the Contract Documents. Where such supplementary drawings require either less or more than the original quantities of work, appropriate adjustments shall be made by Change Order. In case of disagreement between the written and graphic portions of the Contract Documents, the written portion shall govern.

3.27. Shop Drawings.

3.27.1. Contractor shall submit shop drawings as required by the technical specifications included in the Contract Documents. The purpose of the shop drawings is to show

the suitability, efficiency, technique of manufacture, installation requirements, details of the item and evidence of its compliance or noncompliance with the Contract Documents.

- 3.27.2.** Within ten (10) calendar days after the date specified in the Notice to Proceed, Contractor shall submit to City a complete list of preliminary data on items for which shop drawings are to be submitted and shall identify the critical items. Submission of such documents is a condition precedent to proceeding with the construction. Approval of this list by City shall in no way relieve Contractor from submitting complete shop drawings and providing materials, equipment, etc., fully in accordance with the Contract Documents. This procedure is required in order to expedite final approval of shop drawings.
- 3.27.3.** After the approval of the list of items required herein, Contractor shall promptly request shop drawings from the various manufacturers, fabricators, and suppliers. Contractor shall include all shop drawings and other submittals in its certification.
- 3.27.4.** Contractor shall thoroughly review and check the shop drawings and each and every copy shall show this approval thereon.
- 3.27.5.** If the Shop Drawings show or indicate departures from the Contract requirements, Contractor shall make specific mention thereof in its letter of transmittal. Failure to point out such departures shall not relieve Contractor from its responsibility to comply with the Contract Documents.
- 3.27.6.** The City shall review and approve shop drawings within seven (7) calendar days from the date received, unless said shop drawings are rejected by City for material reasons. City's approval of shop drawings will be general and shall not relieve Contractor of responsibility for the accuracy of such shop drawings, nor for the proper fitting and construction of the work, nor for the furnishing of materials or work required by the Contract Documents and not indicated on the shop drawings. No work called for by shop drawings shall be performed until the said shop drawings have been approved by City. Approval shall not relieve Contractor from responsibility for errors or omissions of any sort on the shop drawings.
- 3.27.7.** No approval will be given to partial submittals of shop drawings for items which interconnect and/or are interdependent where necessary to properly evaluate the design. It is Contractor's responsibility to assemble the shop drawings for all such interconnecting and/or interdependent items, check them and then make one submittal to City along with its comments as to compliance, noncompliance, or features requiring special attention.

3.27.8. If catalog sheets or prints of manufacturers' standard drawings are submitted as shop drawings, any additional information or changes on such drawings shall be typewritten or lettered in ink.

3.27.9. Contractor shall submit the number of copies required by City. Resubmissions of shop drawings shall be made in the same quantity until final approval is obtained. Contractor shall keep one set of shop drawings marked with City's approval at the job site at all times.

3.28. Field Layout of the Work and Record Drawings. The entire responsibility for establishing and maintaining line and grade in the field lies with Contractor.

3.28.1. Contractor shall maintain an accurate and precise record of the location and elevation of all pipe lines, conduits, structures, maintenance access structures, handholes, fittings and the like and shall prepare record or "as-built" drawings of the same which are sealed by a Professional Surveyor. Contractor shall deliver these records in good order to City as the Work is completed. The cost of all such field layout and recording work is included in the prices bid for the appropriate items. All record drawings shall be delivered to City prior to Substantial Completion, in accordance with the Contract Documents.

3.28.2. Contractor shall maintain in a safe place at the Project site one record copy of all drawings, plans, specifications, addenda, written amendments, Change Orders, Field Orders and written interpretations and clarifications in good order and annotated to show all changes made during construction. These record documents together with all approved samples and a counterpart of all approved shop drawings shall be available at all times to City for reference. Upon Final Completion of the Project and prior to Final Payment, these record documents, samples and shop drawings shall be delivered to the Contract Administrator.

3.28.3. Prior to, and as a condition precedent to Final Payment, Contractor shall submit to City, Contractor's record drawings or as-built drawings acceptable to City.

3.29. Compliance with Requirements for Federally Funded Projects. If the Project is funded wholly or in part through Federal grants, including Federal Emergency Management Agency ("FEMA") grants, disaster mitigation and reimbursement programs. Contractor shall comply with all applicable Contract provisions required under 2 CFR Part 200, as set forth on Exhibit B attached hereto, and shall provide the City with all verifications and certifications required thereunder.

ARTICLE 4

CITY'S DUTIES AND RESPONSIBILITIES

4.1. City's Participation.

THE CITY HAS NO OBLIGATION TO ASSIST, FACILITATE AND/OR PERFORM IN ANY WAY THE CONTRACTOR'S OBLIGATIONS UNDER THE AGREEMENT OR OTHER CONTRACT DOCUMENTS. THE CITY'S PARTICIPATION, FACILITATION AND/OR ASSISTANCE TO THE CONTRACTOR SHALL BE AT ITS SOLE DISCRETION AND SHALL NOT, IN ANY WAY, BE CONSTRUED, INTERPRETED AND/OR CONSTITUTE AN ASSUMPTION BY THE CITY OF CONTRACTOR'S OBLIGATIONS, A WAIVER OF CONTRACTOR'S OBLIGATIONS AND/OR EXCUSE ANY BREACH BY CONTRACTOR OF ITS OBLIGATIONS UNDER THE CONTRACT DOCUMENTS. THE CITY'S PARTICIPATION IN THE PERFORMANCE OF ANY OF CONTRACTOR'S OBLIGATIONS SHALL NOT PRECLUDE THE CITY FROM DECLARING CONTRACTOR IN DEFAULT FOR CONTRACTOR'S FAILURE TO PERFORM SUCH OBLIGATION, NOR SHALL IT LIMIT, IN ANY WAY, THE CITY'S RIGHTS AND REMEDIES IN CONNECTION THEREWITH. THE CONTRACTOR EXPRESSLY ACKNOWLEDGES AND AGREES NOT TO RAISE OR ASSERT AS DEFENSE TO ANY CLAIM, ACTION, SUIT AND/OR OTHER PROCEEDING OF A SIMILAR NATURE, THE CITY'S PARTICIPATION, ASSISTANCE AND/OR FACILITATION IN THE PERFORMANCE OF CONTRACTOR'S OBLIGATIONS, INCLUDING, WITHOUT LIMITATION, ASSISTING WITH OBTAINING PERMITS OR WITH COORDINATION WITH UTILITIES, OR OTHER MATTERS RELATED TO THE PROJECT. IN THE EVENT OF ANY CONFLICT BETWEEN THIS SECTION AND/OR ANY OTHER PROVISION OF THIS AGREEMENT OR OTHER CONTRACT DOCUMENTS, THIS SECTION SHALL GOVERN.

- 4.2 City's Information.** Except for any tests or studies that the City provides as part of the Competitive Solicitation Package, any information provided by the City to the Contractor relating to the Project and/or other conditions affecting the Project site, is provided only for the convenience of the Contractor and does not relieve the Contractor of the due diligence necessary to independently verify local conditions and site conditions. The City makes no representation or warranty as to, and assumes no responsibility whatsoever with respect to, the sufficiency, completeness or accuracy of any such test, studies or other information and makes no guarantee, either express or implied, that the conditions indicated in such information or independently found by the Contractor as a result of any examination, exploration or testing, are representative of those existing throughout the performance of the Work or the Project site, and there is no guarantee against unanticipated or undisclosed conditions.

ARTICLE 5

TEAM RELATIONSHIP AND REPRESENTATIVES

- 5.1** The City and Contractor shall proceed on the basis of trust, good faith, and fair dealing, and shall take such actions as are reasonably necessary to complete the Project within the contract time and contract price. Contractor shall designate and authorize an employee of Contractor to act as its agent for all purposes under this Agreement; who shall be available at all times to the representatives of the City for the purpose of notification and consultation; who shall be designated as the individual having overall responsibility for all phases of Contractor's participation in the Project; and who shall be designated as Contractor's Project Manager under this Agreement.
- 5.2** By signing this Agreement, the Contractor accepts a fiduciary duty with the City. The Contractor warrants to City that it will furnish its best skill and judgment in performing the Work required under the Contract Documents and shall always act to further the interest of the City in the expeditious completion of the Project at the lowest cost to the City and in strict accordance with the Contract Documents. Contractor further warrants to the City the following:
- 5.2.1** That Contractor is financially solvent, able to pay its debts as they mature, and possessed of sufficient working capital to complete the Work and perform the obligations required by the Contract Documents, including, but not limited to, its indemnity obligations to the City under this Agreement;
 - 5.2.2** That Contractor is able to furnish the tools, materials, supplies, equipment, labor, supervision, and management required to complete the Work and perform the obligations required by the Contract Documents, and shall employ and/or retain only employees, principals, consultants, contractors, subconsultants, and subcontractors with sufficient experience and competence to perform the Work required for the Project;
 - 5.2.3** That Contractor is authorized to do business in the State of Florida and has all licenses and certifications required under Applicable Laws required for the Work, and the Project, and that all such licenses and certifications are, and shall at all times remain, current and in good standing;
 - 5.2.4** That Contractor's execution and performance of this Agreement is within Contractor's duly authorized powers;
 - 5.2.5** That Contractor shall perform all Work in strict compliance with Applicable Laws and the standard of care required by the Contract Documents;
 - 5.2.6** That Contractor agrees that if there is any conflict between Applicable Laws,

Contractor will notify the City of the conflict and identify the particular code, standard, rule, order, or regulation which is the more stringent requirement, so long as it satisfies the requirements of the Applicable Laws;

- 5.2.7** That Contractor represents and warrants that no officer, director, employee or agent of the City has been or will be employed, retained or paid a fee, or otherwise has received or will receive, any personal compensation or consideration, by or from Contractor or any of Contractor's officers, directors, employees, or agents, in connection with the obtaining, arranging or negotiation of the Agreement, or other documents entered into or executed in connection with the Agreement; and that no employee or affiliate of Contractor, including all Subcontractors and suppliers, at any tier, has/have been convicted of a public entity crime, fraud, theft and/or a property damage crime within the preceding thirty-six (36) months from the time this Agreement is executed, pursuant to Section 287.133, Florida Statutes. In the event of Contractor's non-compliance, the Agreement may be cancelled, terminated, or suspended, in whole or in part, and the City may pursue all rights and remedies that the law or the Contract Documents provide;
- 5.2.8** That Contractor is engaged in an independent business and will perform all obligations under this Agreement as an independent contractor and not as the agent or employee of the City. Contractor's employees, consultants, contractors, subconsultants, and/or subcontractors performing Work under the Agreement shall be considered solely the employees or agents of Contractor, and not employees or agents of the City. Contractor agrees not to hold itself out to the public or to any third party as an apparent agent who is authorized to take or perform any authorized actions on behalf of the City. Contractor has and retains the right to exercise full control of and supervision over the performance of the Work, and full control over the employment, direction, assignment, compensation, and discharge of all personnel performing the Work. Contractor is solely responsible for all matters relating to compensation and benefits of all Contractor's personnel who perform Work; and,
- 5.2.9** Contractor will not discriminate against any employee or applicant for employment because of race, color, national origin, religion, sex, gender identity, sexual orientation, marital and familial status, age, or disability. Contractor will take affirmative action to ensure that employees are treated during employment without regard to their religion, sex, gender identity, sexual orientation, marital and familial status, age, or disability. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor agrees to post in conspicuous places, available to employees and applicants for

employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

5.2.10 Contractor agrees that the warranties in this Article shall survive the termination or expiration of the Agreement.

ARTICLE 6
COMPENSATION FOR CONTRACTOR'S WORK

6.1. The City shall pay the Contractor the Contract Price in current funds for the Contractor's performance of the Contract. The Contract Price shall be one of the following:

[X] Stipulated Sum, in accordance with Section 6.2 below

[] Cost of the Work plus the Contractor's Fee, in accordance with Section 6.3 below

[] Cost of the Work plus the Contractor's Fee in accordance with Section 6.4 below

6.2. Stipulated Sum

6.2.1. The Stipulated Sum shall be \$10,513,978.75 (Ten Million, Five Hundred Thirteen Thousand, Nine Hundred Seventy-eight and 75/100ths U.S. Dollars), subject to additions and deductions as provided in the Contract Documents.

6.2.2. The Stipulated Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:

6.3. Cost of the Work Plus Contractor's Fee

The Contractor's Fee: NOT APPLICABLE _____

6.4. Cost of the Work

6.4.1. The Cost of the Work is defined in Exhibit C, Determination of the Cost of the Work.

6.4.2. The Contractor's Fee:

6.5 Non-Reimbursable Costs. The following shall not be deemed as Costs of the Work:

6.5.1 Compensation for Contractor's personnel stationed at Contractor's principal or branch offices, except as provided in the General Conditions.

6.5.2 Overhead and general expenses, except as otherwise provided herein, or which may be recoverable for changes to the Work.

6.5.3 The cost of Contractor's capital used in the performance of the Work.

6.5.4 Contractor's defective work.

6.5.5 General Allowances.

6.5.6 General Conditions and Pre-Construction Lump Sum Costs.

6.5 General Conditions. General Conditions shall include the necessary management labor and site-based construction supervision labor, site services, and office materials/consumables to manage and control all construction work for the period of time from execution of this Agreement through Final Completion and demobilization. General Conditions shall be stated as a lump sum amount shall be included as a line item under the Stipulated Sum. The General Conditions is inclusive of all fees and no fee shall be earned on the lump sum.

6.6 The General Conditions Lump Sum shall include the following cost categories:

6.6.1 Wages of direct employees of Contractor performing the Work at the site or, with the City's agreement, at locations off the site.

6.6.2 Wages or salaries of Contractor's supervisory and administrative personnel engaged in the performance of the Work and who are located at the site or working off-site to assist in the production or transportation of material and equipment necessary for the Work.

6.6.3 Costs incurred by Contractor for employee benefits, premiums, taxes, insurance, contributions and assessments required by law, collective bargaining agreements, or which are customarily paid by Contractor, to the extent such costs are based on wages, fringe, and salaries paid to employees of Contractor. Fringe benefits shall include costs paid to, or on behalf of, workers by reason of health and welfare benefits, pension fund benefits or other benefits, when such amounts are required by collective bargaining agreements or other employment contracts generally applicable to the class of labor employed to perform the Work. Fringe benefits on non-union employees shall not include discretionary pensions and/or bonuses and any other fringe benefit that is discretionary or based on profit sharing, including employee stock option plans. In addition to the above Contractor shall receive the actual cost of social security tax, workers' compensation and state and federal unemployment insurance. No other markups or allocations as a percentage of labor shall be allowed. Overtime will only be paid if authorized in writing by the City. Contractor shall provide the City with an auditable listing of actual wages, fringe

benefits, social security tax, workers' compensation and state and federal unemployment insurance for all labor being utilized in the Work prior to the agreement of a lump sum amount. Certificates from the issuing agencies shall be provided to support actual workers' compensation and state and federal unemployment insurance rates.

6.6.4 The reasonable portion of the cost of travel, accommodations and meals for Contractor's personnel necessarily and directly incurred in connection with the performance of the Work.

6.6.5 The reasonable costs and expenses incurred in establishing, operating and demobilizing the Site office, including, but not limited to the cost of trailers, furniture, facsimile transmissions, long-distance telephone calls, postage and express delivery charges, telephone service, photocopying, office supplies, trash removal, dumpsters, storage, janitorial services, office utilities, and reasonable petty cash expenses.

6.7 Out-of-Scope (Additional) Services. Contractor shall not perform out-of-scope Work (Additional Work), or incur any expenses which are not required by this Agreement, and the City shall not be obligated to pay for such Additional Work until the following conditions have been satisfied:

6.7.1 Submittal by Contractor to Contract Administrator of written notice prior to the initiation of such Additional Work, including an estimate of cost and schedule implications and a detailed scope of such Work;

6.7.2 If the Additional Work increase the total compensation under this Agreement, prior approval by the City Manager or the City Council, as required;

6.7.3 A written modification to the Agreement; and,

6.7.4 Written notification to Contractor from the Contract Administrator directing Contractor to perform such Additional Work prior to commencement of same.

6.8 General Condition funds shall not be utilized without prior written authorization from the Contract Administrator (prior to commencement of same).

6.9 Any costs which are paid by the City and are determined by a final audit or subsequent audit to be non-allowable in accordance with generally accepted cost accounting principles shall be refunded to the City. The City is exempt from all sales, use, and excise taxes and the City shall not be obligated to pay for such taxes. Upon request by Contractor, the City shall provide a copy of the City's certificate of tax exemption.

- 6.10** Contractor shall assist City in preparing any required permits required to complete the Work; provided, however, that City shall be responsible for paying for such required permits.

ARTICLE 7 METHOD OF PAYMENT

- 7.1. The City agrees that it will pay Contractor in accordance with the provisions of the Florida Prompt Payment Act and related statutes (Sections 255.0705 - 255.078, 218.70 – 218.80, Florida Statutes, as same may be amended from time to time). The Contractor shall submit its Application for Payment to the Contract Administrator monthly, unless otherwise expressly agreed to by the Parties, in a form acceptable to City, which may be electronic or hard copy. Contractor's Application for Payment shall set forth the costs incurred to the date of such Application for Payment, allocated among the categories set forth in the Schedule of Values approved by the City. Each Application for Payment shall be accompanied by: 1) a cover letter listing all documents transmitted; 2) a signed Application for Payment form; 3) back-up documentation for each pay item billed; 4) an updated Schedule of Values showing status of each item billed for that Application for Payment; 5) spreadsheets showing status of each General and Specific Allowance item; 6) if applicable, certified prevailing wage reports demonstrating that the minimum and/or prevailing wages required by the Contract Documents have been paid and are in compliance with such rates; 7) an updated submittal schedule; and 8) consent of surety and release of liens. As a further condition for approval of a progress payment, Project as-built documents will be updated monthly and submitted in CAD file format. Each Application for Payment shall contain an allocation of the percentage of completion of each portion of Work as of the end of the period covered by the Application for Payment.
- 7.2. **No Payments for Stored Materials.** Payments for Stored Materials will not be made without approval by the City. If the delivered material is stolen, destroyed or damaged by casualty before being used, Contractor shall replace the delivered material at its own cost and expense.
- 7.3. **Payments Withheld.** The Contract Administrator may decline to approve an Application for Payment, in whole or in part, to the extent reasonably necessary to protect the City's interests, or if the representations by Contractor cannot be reasonably accepted and will notify Contractor of the City's determination. If agreement cannot be reached on a revised amount, the Contract Administrator will process the Application for Payment for such amount, as he/she reasonably deems appropriate. The City may elect to withhold payment, in full or in part, on an Application for Payment when the Contract Administrator subsequently discovers evidence, or subsequent inspections of the Work covered under a previous Application for Payment reveal that, in the Contract Administrator's reasonable opinion, it may be necessary to protect the City from loss because of:
- 7.3.1. Defective work not remedied;

- 7.3.2. Failure of Contractor to make payments properly to Subcontractors for labor, professional services, materials, or equipment;
 - 7.3.3. Damage to the City or another contractor working at the Project;
 - 7.3.4. Failure to submit any required supporting documentation with Contractor's Application for Payment;
 - 7.3.5. Persistent failure to carry out the Work in accordance with the Contract Documents;
 - 7.3.6. The existence of a material breach by Contractor of any material provision of the Contract Documents and/or Applicable Laws;
 - 7.3.7. Damage to another Subcontractor, supplier, material person as provided for in Chapter 713, Florida Statutes, party, or person not remedied which are attributable to Contractor, its agents, servants, employees, subcontractors and sub-subcontractors, material person and suppliers;
 - 7.3.8. Liquidated damages; or,
 - 7.3.9. As-built drawings not being in a current and acceptable state.
- 7.4. **Final Payment.** Final payment shall be made by the City to Contractor when:
- 7.4.1. The Work required by the Contract Documents has been fully performed by Contractor, except for Contractor's obligations during the Warranty Period;
 - 7.4.2. A final Application for Payment and a final accounting have been submitted by Contractor, and reviewed and approved by the Contract Administrator;
 - 7.4.3. A final Certificate for Payment has been approved by the Contract Administrator;
 - 7.4.4. Contractor has submitted a final affidavit (certificate of completion form) attesting that Contractor has fully completed all Work required by the Contract Documents (including meeting all permit conditions/closeout) and setting forth the name, address and amounts owed to any unpaid subcontractors or material/equipment suppliers ("Affidavit of Contractor"); Contractor has submitted notarized lien waivers and Affidavit of Contractor forms executed by its subcontractor(s) and its (or their) material and equipment suppliers;
 - 7.4.5. Contractor has executed and submitted a release of all claims against the City arising under or by virtue of this Agreement, except claims which are specifically excepted by Contractor as set forth therein in this Agreement;

7.4.6. Contractor has obtained and delivered to City a consent of the Surety to final payment;

7.4.7. All warranties, guarantees, operational manuals, and instructions in operation required by the Contract Documents have been delivered to City;

7.4.8. As-built drawings, signed and sealed by a registered land surveyor, licensed in the State of Florida (three (3) full-size (24"x36") and three (3) half-size (11"x17"), to-scale, and three (3) CDs non-compressed formatted in the latest version of AutoCAD, shall submit a completed as-built drawings package have been delivered to City and approved by the City Public Works Department (no later than at the time of receiving final payments); and,

7.4.9. As applicable, and if required by the Contract Administrator, a Certificate of Occupancy, and/or Certificate of Completion, has been issued.

7.5. If after the Project has been substantially completed, final completion thereof is delayed through no fault of Contractor, or by issuance of Change Orders affecting final completion, and the Contract Administrator so certifies, City shall, upon certification of the Contract Administrator, and without terminating the Agreement, make payment of the balance due for that portion of the Project fully completed and accepted. Such payment shall be made as required by law under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

7.6 Neither City's acceptance of the Work, nor payments for Work, or any part of the Work, nor any possession of the Project by City, shall operate as a waiver of rights or obligations under any portion of the Contract Documents or Applicable Laws. Nor shall City's waiver of any breach of the Contract Documents by Contractor constitute a waiver of any other or any subsequent breach of contract.

7.7 Contractor shall remain liable for Subcontractors' work and for any unpaid laborers, material suppliers or subcontractors in the event it is later discovered that said work is deficient or that any subcontractors, laborers, or material suppliers did not receive payments due them on the Project. Contractor shall promptly notify City if any payments due to any sub-contractor or sub-contractors have not been paid timely, and of any pending payment disputes with any sub-contractor.

7.8. The Contractor shall use the sums advanced to it solely for the purpose of performance of the Work and the provision, construction, furnishing and equipping of the Work in accordance with the Contract Documents and payment of bills incurred by the Contractor in performance of the Work.

- 7.9** All accounting and financial matters relating hereto shall be processed by the City's Finance Department. Payments shall be made by the City on the monthly statements only after they have been certified by the City's representatives and approved by the Contract Administrator. Provided the City receives the required backup documentation and receipts with the monthly statement, the City shall make payment to the Contractor in accordance with the Florida Prompt Payment Act.

Payment will be made to:

**Accurate Drilling Systems, Inc.
49 N. Industrial Loop Bldg B
Labelle, Florida 33935**

- 7.10** No approval or payment made under this Agreement shall be conclusive evidence of the acceptance of performance under this Agreement either wholly or partially, and no payment made hereunder shall be construed to be an acceptance of deficient or unsatisfactory Work.
- 7.11 Right to Inspect: Right to Audit Books.** The Contractor and all subconsultants and subcontractors shall maintain books, records, documents, and other evidence directly pertinent to the performance of this Agreement, in accordance with generally accepted accounting principles. Any authorized representative of the City shall, at all reasonable times and with reasonable notice, have the right to inspect and examine the Contract Documents at Contractor's office during the period of their preparation. Further, any authorized representative of the City shall, at all reasonable times and with reasonable notice, have the right to audit, inspect and examine the Contractor's accounting books and financial records for the Project, including, but not limited to, records of hours expended, personnel utilized, payments of employee salaries and benefits, and records of payments made to subconsultants and subcontractors.

ARTICLE 8 TERM AND SCHEDULE

- 8.1. Time for Completion.** Time is of the essence throughout this Contract. Contractor shall perform the Work so as to achieve Substantial Completion as specified in the Competitive Solicitation Package, and the Project shall be completed and ready for final payment as set forth herein within five hundred sixty (560) days as specified for Final Completion in the Competitive Solicitation Package Summary, with such Final Completion date calculated from the date of the Notice to Proceed.
- 8.2. Project Schedule; Preliminary Matters.** As a condition of issuance of a Notice to Proceed for the construction of the Work, Contractor shall submit to City for City's review and acceptance:
- 8.2.1.** A Project base line schedule, one (1) electronic copy and one (1) hard copy (activities arranged in "waterfall"), in the indicated form for final review and approval. (CPM shall be interpreted to be generally as outlined in the Association of General Contractors (AGC) publication, "The Use of CPM in Construction.")

Contractor agrees to attend weekly progress meetings and provide a two (2) week look ahead schedule for review and discussion and monthly be prepared to discuss

any:

- 1) Proposed changes to the base line schedule logic;
- 2) Explain and provide a narrative for reasons why logic changes should be made;
- 3) Update to individual subcontractor activities; and,
- 4) Integration of changes into the schedule.

The Project schedule shall be the basis of the Contractor's Work and shall be complied with in all respects.

- 8.2.2.** If requested by the City, Contractor shall provide additional breakdowns as to any line item, to show labor, equipment, materials and overhead and profit.
- 8.2.3.** Throughout the Project Term, the Contract Administrator or their designee, the City's Project Manager, and Contractor shall meet with all utility owners and secure from them a schedule of utility relocation, provided, however, that by facilitating Contractor's efforts to coordinate with such utilities, City is not assuming the obligation to coordinate any necessary relocations and Contractor shall be solely responsible for such coordination.
- 8.2.4.** At a time specified by City but before Contractor starts the work at the Project Site, a conference attended by Contractor, City and others as deemed appropriate by Contract Administrator will be held to discuss the schedules, procedures for handling shop drawings and other submittals, and for processing Applications for Payment, and to establish a working understanding among the parties as to the Work.
- 8.2.5.** Within five (5) days from the Project initiation date as set forth in the Notice to Proceed, a pre-construction meeting attended by Contractor, City and others, as appropriate, will be held to finalize the schedules submitted. Within ten (10) days after the Project initiation date set forth in Notice to Proceed, the Contractor shall revise the original schedule submittal to address all review comments from the CPM review conference and resubmit for City review. The finalized progress schedule will be accepted by City only as providing an orderly progression of the Work to completion within the Contract Time, but such acceptance shall not constitute acceptance by City of the means or methods of construction or of the sequencing or scheduling of the Work, and such acceptance will neither impose on City responsibility for the progress or scheduling of the Work nor relieve Contractor

from full responsibility therefor. The finalized schedule of shop drawing submissions must be acceptable to City as providing a workable arrangement for processing the submissions. The finalized Schedule of Values must be acceptable to City as to form and substance.

8.3. Recovery Schedule.

- 8.3.1.** If Contractor's Work, or any portion of the Work, becomes more than (30) days behind schedule, if the Work on any critical path item or activity delineated in the Project schedule is delayed for a period which exceeds 5% of the days remaining until a completion deadline for an item in the Project schedule, or if the reasonably appears that the Contractor will be unable to meet the deadlines of the Project schedule, the City may notify Contractor of same, and in such case, the Contractor shall submit a proposed recovery plan to regain lost schedule progress and to achieve any Project milestones, Substantial Completion, and Final Completion in accordance with the Contract Documents, after taking into account excusable delays and permitted extensions of the Project for review and acceptance within seven (7) days following notification from the City, so as to ensure Contractor makes up lost time.
- 8.3.2.** City shall notify Contractor within five (5) business days after receipt of each Recovery Schedule, whether the recovery plan schedule is deemed accepted or rejected. Within five (5) business days after City's rejection of any recovery plan schedule, Contractor will resubmit a revised recovery plan schedule incorporating City's comments. If the City accepts Contractor's recovery plan schedule, Contractor shall, within five (5) business days after City's acceptance, incorporate and fully include the recovery plan schedule into the Project schedule and deliver same to City.
- 8.3.3.** If the Contractor fails to provide an acceptable recovery plan schedule, as determined by City in its sole discretion, that demonstrates Contractor's ability to timely follow the Project schedule, the City may, without prejudice to any other rights and remedies available to the City hereunder or otherwise, declare an event of default or order the Contractor to employ such extraordinary measures, including acceleration of the Work, and other measures, including substantially increasing manpower and/or necessary equipment, as may be necessary to bring the Work into conformity with the Project schedule.

8.4. Substantial Completion. As a condition of Substantial Completion, all of the following must occur:

- 8.4.1.** All Work affecting the operability of the Project or safety has been completed in accordance with the Contract Documents;

- 8.4.2.** If applicable, all pre-commissioning activities, including alignment, balancing, lubrication and first-fill, have been completed;
- 8.4.3.** The Work may be operated within manufacturers' recommended limits (with all installation instructions, operations and maintenance manuals or instructions for equipment furnished by Contractor, catalogs, product data sheets for all materials furnished by Contractor and similar information provided), in compliance with Applicable Laws, and without damage to the Work or to the Project;
- 8.4.4.** Contractor has corrected all defects, deficiencies and/or discrepancies to the entire Work as identified by the City, and the City confirms such corrections have been made in writing;
- 8.4.5.** The most recent updated set of "as-built" drawings reflecting the progress of the Work through Substantial Completion (in native file format, such as AutoCAD);
- 8.4.6.** When Contractor believes it has achieved Substantial Completion, Contractor shall request an inspection by the City, and shall provide the City with evidence supporting its assessment of Substantial Completion, including any specific documents or information requested by the City to assist in its evaluation thereof. Contractor shall, prior to said inspection, develop its preliminary Punch List for input and comment by the City. Once the preliminary Punch List is submitted to the City, the City and its representatives shall then schedule a walk-through of the Project with Contractor. Following the walk-through, Contractor shall develop and provide City with the list of all remaining items of Work to be completed or corrected, and which incorporates items and comments identified or provided by the City and is certified for completeness and accuracy by the City ("Substantial Completion Punch List"), provided, however, that failure to include any items on such Substantial Completion Punch List does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents;
- 8.4.7.** Any and all appurtenances, utilities, transportation arteries and any other items required under the Contract Documents and necessary to serve that portion of the Work are sufficiently completed, a temporary certificate of completion or Certificate of Occupancy, as applicable, is issued for the Work for which a Certificate of Substantial Completion is being sought and/or all conditions or requirements of authorities having jurisdiction are complied with, to permit the City to utilize and occupy that portion for its intended use in accordance with the Contract Documents without material interference from any incomplete or improperly completed items of Work; and,
- 8.4.8.** With respect to any Project for which a right-of-way permit is required from the

City's Public Works Department or which includes a final lift of asphalt as part of the Work, in no event shall Substantial Completion occur prior to the final lift of asphalt and acceptance thereof by the agencies having jurisdiction (including, without limitation, the City's Public Works Department).

8.5. Certificate of Substantial Completion. Any determination by the City and the Contractor of Substantial Completion shall not be binding on the City, and the ultimate determination of Substantial Completion shall rest with the City and shall be evidenced by the City's executing and returning to the Contractor its Certificate of Substantial Completion (or Partial Substantial Completion, as applicable).

8.5.1. When the City, on the basis of an inspection, determines that the Work or designated portion thereof is substantially complete, and when the Contractor has complied with all other conditions precedent to Substantial Completion provided for in the other Contract Documents, the City will then prepare a Certificate of Substantial Completion which shall establish the Substantial Completion Date, shall state the responsibilities of Contractor, if any, for security, maintenance, heat, utilities, damage to the Work, and insurance, and shall fix the time within which the Contractor shall complete the items listed in the Substantial Completion Punch List. If the City issues a Certificate of Substantial Completion on the basis of partial completion of the Project, or upon the basis of a partial or temporary certificate of occupancy or certificate of completion, as applicable, City may include such additional conditions, as it deems appropriate to protect its interests pending substantial completion of the entire Project or issuance of a permanent certificate of occupancy or certificate of completion, as applicable.

8.5.2. The City shall not unreasonably withhold or condition acceptance and execution of a Certificate of Substantial Completion (or a Notice of Partial Substantial Completion); provided, however, the Project shall not be deemed Substantially Complete and the City shall not execute a Certificate of Substantial Completion until all of the criteria for achieving Substantial Completion as identified in the Contract Documents have been satisfied, and (2) in the case of a portion of the Project, the conditions set forth this Article 9 relating to Partial Substantial Completion shall have been satisfied.

8.6. Partial Substantial Completion. Partial Substantial Completion of the Work shall occur when the City determines that a portion of the Work, as defined in the Contract Documents and/or otherwise by logical boundaries, is Substantially Complete in accordance with the Contract Documents. The City may (but shall not be obligated to) agree that a portion or component of the Work, acceptable to the City in its sole discretion, may be certified as Substantially Complete provided that:

8.6.1. The requirements provided in this Article 9 for issuance of a Certificate of

Substantial Completion are complied with for the portion of the Work for which a Notice of Partial Substantial Completion is being sought;

- 8.6.2.** Such portion and any and all appurtenances, utilities, transportation arteries and any other items required under the Contract Documents and necessary to serve that portion of the Work are sufficiently completed, a temporary certificate of completion or Certificate of Occupancy, as applicable, is issued for the portion of the Work for which a Certificate of Partial Substantial Completion is being sought and/or all conditions or requirements of authorities having jurisdiction are complied with, to permit the City to utilize and occupy that portion for its intended use in accordance with the Contract Documents without material interference from any incomplete or improperly completed items of Work;
- 8.6.3.** The City is fully able to use and occupy the portion of the Work for the purposes intended and the Contractor separates the portion of the Work which is Substantially Complete from non-complete areas of the Project in order to prevent noise, dust and other construction disturbances which would materially interfere with the use of such portion for its intended use in accordance with the Contract Documents and to assure the safety of those entering, exiting and occupying the Substantially Completed portion of the Work; and,
- 8.6.4.** Partial Substantial Completion shall not constitute Final Completion of the Work or Substantial Completion of the Project, nor shall it relieve the Contractor of any responsibility for the correction of Work (whether or not included in portion of Work Substantially Complete) or for the performance of Work not complete at the time of Partial Substantial Completion.

8.7. Liquidated Damages.

- 8.7.1.** Upon failure of Contractor to achieve Substantial Completion within the time period specified in the Contract Documents for Substantial Completion, as such date may be extended pursuant to the terms of the Contract Documents, Contractor shall pay to City the sum of one thousand, five hundred dollars (\$1,500.00) per day in "Liquidated Damages" for each calendar day after the time specified herein for Substantial Completion, plus any approved time extensions, for Substantial Completion. Partial Substantial Completion shall not relieve Contractor of any responsibility for Liquidated Damages for failure to timely achieve Substantial Completion.
- 8.7.2.** Contractor agrees that the Liquidated Damages set forth herein are not penalties and have been set based on an evaluation by City of damages to City and the public caused by untimely performance. Such damages may include loss of revenues to the City, and additional costs of administering this Agreement, including Project

staff, legal, accounting, consultants and overhead and other administrative costs. Contractor acknowledges that the amounts established for Liquidated Damages are fair and commercially reasonable. Contractor and City have agreed to the Liquidated Damages in order to fix Contractor's costs and to avoid later disputes over which items are properly chargeable to Contractor as a consequence of Contractor's delays.

- 8.7.3** The above-stated Liquidated Damages shall apply separately to each portion of the Project for which a time for completion is given. City is authorized to deduct liquidated damages from monies due to Contractor for the Work under this Contract or as much thereof as City may, in its sole discretion, deem just and reasonable.
- 8.7.4** Liquidated Damages shall apply, whether or not the City terminates Contractor for cause and whether or not Surety completes the Project after a Default by Contractor. Liquidated Damages shall apply solely to claims arising from delay in meeting any milestone for which the right to assess Liquidated Damages is specified, including, without limitation, Substantial Completion, and Final Completion, and shall be the City's sole remedy for delay, and are not intended to, and do not, liquidate Contractor's liability under any other provision of the Contractor Documents for other events not specifically referenced in this Article 9. Liquidated Damages shall not liquidate Contractor's liability under the indemnification provisions of this Agreement.
- 8.7.5** Contractor, in addition to reimbursing City for Liquidated Damages or other damages for untimely performance as provided herein, shall reimburse City for all costs incurred by City to repair, restore, or complete the Work, as may be provided by the Contract Documents, including, without limitation, any additional design fees that may be due to a Consultant related thereto. All such costs shall be deducted from the monies otherwise due Contractor for performance of Work under this Agreement by means of unilateral credit or deductive Change Orders issued by City.
- 8.7.6** In the event a court of competent jurisdiction determines that any Liquidated Damages amount herein is unenforceable notwithstanding Contractor's agreement herein that such amounts are fair and reasonable, Contractor shall not be relieved of its obligations to the City for the actual damages resulting from the failure to timely achieve Substantial Completion or Final Completion in accordance with the requirements of the Contract Documents. Without limiting the foregoing, City and Contractor covenant not to bring any action in a court of competent jurisdiction that would ask the court to rule that the Liquidated Damages amounts are not fair and reasonable.

8.8. Beneficial Occupancy. Beneficial Occupancy shall occur when the City determines that a

portion of the Work may be occupied prior to Substantial Completion. City may take Beneficial Occupancy in accordance with the provisions of the Contract Documents.

8.8.1. Prior to the anticipated date of Beneficial Occupancy, Contractor shall separate the portion of the Work to be occupied from non-complete areas of the Project in order to prevent noise, dust and other construction disturbances which would materially interfere with the use of such portion for its intended use in accordance with the Contract Documents and to assure the safety of those entering, exiting and occupying the completed portion to be occupied.

8.8.2. Beneficial Occupancy shall not constitute Substantial Completion or Final Completion of the Work, nor shall it relieve the Contractor of any responsibility for the correction of Work (whether or not included in the portion of Work to be occupied) or for the performance of Work not complete at the time of Beneficial Occupancy.

8.8.3. After Beneficial Occupancy and as conditions of Substantial Completion, the Contractor shall deliver to the City complete as-built drawings, all approved shop drawings, maintenance manuals, pamphlets, charts, parts lists and specified spare parts, operating instructions and other necessary documents required for all installed materials, equipment, or machinery, all applicable warranties and guarantees, and the appropriate certificate of occupancy or certificate of completion that are related to the portion of the Work being occupied.

8.8.4. Contractor's insurance on the unoccupied or unused portion or portions of the Project Site shall not be canceled or lapsed on account of such Beneficial Occupancy.

8.8.5. Contractor shall be responsible to maintain all utility services to areas occupied by the City until Final Completion.

8.9. Final Completion. Final Completion of the Project shall be deemed to have occurred if all the following have occurred:

8.9.1. Substantial Completion of the entire Project has occurred;

8.9.2. The Work can be used and operated in accordance with Applicable Laws bearing on the performance of the Work and applicable permits;

8.9.3. All spare parts, special tools and attic stock purchased by Contractor as part of Vendor supplies shall have been delivered to City and clear of all Liens;

- 8.9.4.** All items on the Substantial Completion Punch List shall have been completed by Contractor to City's satisfaction and all final inspections have been performed;
- 8.9.5.** Contractor has satisfied the additional conditions prescribed by the City in conjunction with a Certificate of Substantial Completion issued on the basis of partial completion of the Project, or a partial or temporary Certificate of Occupancy or Certificate of Completion, as applicable;
- 8.9.6.** Contractor has delivered evidence to the City that all permits that are Contractor's responsibilities as specified under the Contract Documents have been satisfied and closed, and that a Certificate of Completion or Certificate of Occupancy (as applicable) has been issued by the authority having jurisdiction, and the Project or designated portion thereof is sufficiently complete in accordance with the Contract Documents and can be used for its intended purpose for uninterrupted operation, including, without limitation, acceptance of completed as-builts, if required by the agency having jurisdiction;
- 8.9.7.** Contractor shall have provided to City final releases and complete and unconditional waivers of liens for all Work performed by Contractor and each Subcontractor or Suppliers, and a Consent of Surety to Final Payment;
- 8.9.8.** Contractor shall have delivered to the City a certification identifying all outstanding Claims (exclusive of any Liens or other such encumbrances which must have been discharged) of Contractor (and of its Subcontractors, Suppliers and any other party against Contractor) with written documentation reasonably sufficient to support and/or substantiate such Claims;
- 8.9.9.** Contractor shall have delivered to the City a written assignment of all warranties or guaranties which Contractor received from Subcontractors or Suppliers to the extent Contractor is obligated to do so;
- 8.9.10.** Contractor shall have delivered to City a complete set of as-built documents and Project Records prepared in accordance with the Contract Documents;
- 8.9.11.** Contractor has delivered to City all other submittals required by the Contract Documents, including all installation instructions, operations and maintenance manuals or instructions for equipment furnished by Contractor, catalogs, product data sheets for all materials furnished by Contractor and similar information;
- 8.9.12.** All rubbish and debris have been removed from the Project Site;
- 8.9.13.** All Construction aids, equipment and materials have been removed from the Project site;

- 8.9.14.** Contractor has delivered to the City all executed warranties and guarantees required by the Contract Documents, all of which shall be in the name of the City and run to the benefit of the City;
- 8.9.15.** If applicable, certificates of insurance indicating that any insurance required of the Contractor or Subcontractors by the Contract Documents shall remain in full force and effect for the required period of time; and,
- 8.9.16.** Any other documentation establishing payment or satisfaction of obligations, including receipts, releases and final waivers of lien from the Contractor and all Subcontractors, to the extent and in such form as may be required by the City.
- 8.17.** Final Completion is a condition precedent to City's final payment to Contractor and issuance of the Final Certificate for Payment. Final payment shall be made only after the City Manager or his designee has reviewed a written evaluation of the performance of Contractor prepared by the Contract Administrator and approved the final payment.
- 8.18. Waiver of Claims.** The release by the City and acceptance of the final payment by Contractor shall operate as and shall be a release to the City from all present and future Claims or liabilities, of whatever kind or nature, arising under, relating to or in connection with this Contract for anything done or furnished or relating to the Work or the Project, or from any act or omission of the City relating to or connected with the Contract Documents, the Work or the Project, except those Claims or liabilities, if any, for which the Contractor has provided the City with written notice pursuant to and in strict compliance with the "Claims" and notice requirements set forth in the Contract Documents, and containing a detailed reservation of rights that identifies the precise nature of the dispute, all facts in support of Contractor's Claim, the particular scope of Work giving rise to the Claim, and the maximum amount and/or time sought in connection with the Claim.

ARTICLE 9

BONDS

- 9.1. Performance and Payment Bond.** Contractor shall, on or before ten (10) days after execution of this Agreement, and prior to commencing the Work, furnish or cause to be furnished the following:
- 9.1.1.** A performance bond and payment bond of the form and containing all the provisions attached hereto and made a part hereof. Payment and Performance bonds may be in the form of dual obligee bonds from the Contractor in the amount of the contract between the Contractor and the Contractor, naming the City and Contractor as dual obligee. Contractor shall provide payment and performance bonds in the

remaining amount of the contract price naming the City as the obligee on those bonds.

- 9.1.2. The bonds shall be in the amount of one hundred percent (100%) of the contract amount guaranteeing to City the completion and performance of the Project covered in this Agreement as well as full payment of all suppliers, material persons, laborers, or subcontractors employed pursuant to this Project. Such bonds shall be with a surety company which is qualified pursuant to this Section.
- 9.1.3. Such bonds shall continue in effect for one year after completion and acceptance of the Project with liability equal to one hundred percent (100%) of the contract price, or an additional bond shall be conditioned that Contractor will, upon notification by City, correct any defective or faulty work or materials which appear within one year after completion and acceptance of the Project.

ARTICLE 10 INSURANCE AND WAIVER OF SUBROGATION

10.1. Insurance. Contractor shall furnish to the City Certificate(s) of Insurance which indicate that insurance coverage has been obtained which meets the requirements as outlined below:

- a. **Worker's Compensation Insurance** for all employees, as required by Florida Statutes 440, and, if applicable, worker's compensation required by federal law, including but not limited to, the Jones Act and/or United States Longshoreman & Harbor Workers Compensation Act (USLH).
- b. **Commercial General Liability** on a comprehensive basis, including Contractual Liability, Products/Completed Operations, XCU, and Pollution in an amount not less than \$1,000,000 combined single limit per occurrence for bodily injury and property damage. **Coverage must include a Waiver of Subrogation in favor of the City. The City must be an additional insured with respect to this coverage.**
- c. **Excess/Umbrella Liability**, in amount not less than \$5,000,000 combined single limit, per occurrence for bodily injury and property damage. The umbrella coverage must be as broad as the primary General Liability coverage.
- d. **Automobile Liability Insurance** covering all owned, non-owned and hired vehicles used in connection with the work, in an amount not less than \$1,000,000 combined single limit per occurrence for bodily injury and property damage.

- e. **Professional (Design Errors & Omissions) Liability Insurance**, including wrongful acts, errors, and/or omissions, including design errors of architect and/or engineer for damage sustained by reason of or in the course of operations under this contract, in an amount not less than \$1,000,000 with the deductible per claim, if any, not to exceed 10% of the limit of liability.

10.2. The Professional Liability policy/coverage shall be amended to include the following:

10.2.1. Description of operations on the declaration describing the scope of professional services shall include all aspects of the services performed under this contract, including events arising out of Contractor's operations or any subcontractors and sub-tier contractors.

10.2.2. Amendment of any contractual liability exclusion to state: "This exclusion does not apply to any liability of others, which you assume under a written contract provided such liability is caused by your wrongful acts."

10.2.3. Coverage for claims alleging improper supervision of subcontractors and sub-tier contractors.

10.2.4. Deletion of any exclusions pertaining to design/build liability.

10.2.5. Coverage shall apply for three (3) years after Project is complete.

10.2.6. The policy must be endorsed to provide coverage for up to three (3) years after Project completion. This policy shall be on a primary basis if other professional liability is carried.

10.3. Builders Risk or Installation Floater Insurance covering 100% of the construction value (building & material) including such perils as fire, hail, flood, and Named Windstorm. City shall be included as a Named Insured on this policy, as its insurable interest may appear. This policy shall remain in force until acceptance of the project by the City.

10.4. The insurance coverage required shall include those classifications, as listed in standard liability insurance manuals, which most nearly reflect the operations of the vendor.

10.5. All deductibles for insurance required in this Agreement are the sole responsibility of the Contractor.

10.6. All insurance policies required above shall be issued by companies authorized to do business under the laws of the State of Florida, with the following qualifications – The company must be rated no less than "B" as to management, and no less than "Class V" as to financial strength, by the latest edition of Best's Insurance Guide, published by A.M. Best Company,

Oldwick, New Jersey, or its equivalent, subject to the approval of the City Risk Management Division.

- 10.7.** Certificates will indicate no modification or change in insurance shall be made without thirty (30) days in advance notice to the certificate holder.

CERTIFICATE HOLDER MUST READ:

City of Destin

Compliance with the foregoing requirements shall not relieve the Contractor of its liability and obligation under this Article or under any other Article of this Agreement.

**ARTICLE 11
INDEMNITY**

- 11.1.** In consideration of Twenty-five Dollars (\$25.00), separately acknowledged by Contractor, and other valuable consideration, Contractor shall indemnify and save harmless City, its officers, agents and employees, from or on account of any injuries or damages, received or sustained by any person or persons during or on account of any construction activities of Contractor or any subcontractors, consultants, subconsultants, agents, servants, or employees connected with the Project; or by or in consequence of any negligence of Contractor, or any subcontractors, subconsultants, agents, servants, or employees (excluding negligence of City), in connection with the construction activities of the Contractor or any subcontractors, subconsultants, agents, servants, or employees connected with the Project; or by use of any improper materials; or by or on account of any act, error or omission of Contractor or any subcontractor, consultants, subconsultants, agents, servants or employees, except to the extent caused by the negligence of the City. Contractor agrees to indemnify and save harmless City against any claims or liability arising from or based upon the violation of any Federal, State, County or City laws, bylaws, ordinances or regulations by Contractor, its consultants, contractors, Subcontractors, subconsultants, agents, servants or employees (excluding negligence of City). Contractor further agrees to indemnify and save harmless City from all such claims and fees, and from any and all suits and actions of every name and description that may be brought against City on account of any claims, fees, royalties, or costs for any invention or patent, and from any and all suits and actions that may be brought against City for the infringement of any and all patents or patent rights claimed by any person, firm, or corporation. This consideration is separate and distinct from any other consideration received by Contractor.
- 11.2.** Contractor further agrees to indemnify, save harmless and defend City, its agents, servants and employees, from and against any claim, demand or cause of action of whatever kind

or nature arising out of any negligent conduct or misconduct of Contractor, and for which City, its agents, servants or employees, are alleged to be liable.

- 11.3. The indemnifications provided above shall obligate Contractor to defend, at its own expense, to and through appellate, supplemental or bankruptcy proceeding, or to provide for such defense, at City's option, any and all claims of liability and all suits and actions of every name and description that may be brought against City which may result from the operations and activities under this Agreement, whether the services or construction operations be performed by Contractor, its contractors, consultant, Subcontractors, subconsultants, or by anyone directly or indirectly employed by any of the above.
- 11.4. Notwithstanding any provision herein to the contrary, the Contractor agrees and recognizes that the City and its officers, employees, agents and instrumentalities shall not be held liable or responsible for any claims, which may result from any actions, errors or omissions of the Contractor. In reviewing, approving or rejecting any submissions by the Contractor or other acts of the Contractor, the City in no way assumes or shares any responsibility or liability of the Contractor or subcontractors, the registered professionals (consultants, architects and/or engineers) and subcontractors under this Contract.
- 11.5. The execution of this Agreement by Contractor shall obligate Contractor to comply with the foregoing indemnification provisions.
- 11.6. The obligations under this Section shall survive termination and/or other expiration of this Agreement.

ARTICLE 12

ADMINISTRATION OF THE CONSTRUCTION WORK

Contractor shall provide administration of its own work forces and of all subcontractors in cooperation with the City as set forth below.

- 12.1. **Unforeseen Conditions.** If Unforeseen Conditions are encountered at the Site, Contractor shall provide City prompt notice before conditions are disturbed and in no event later than seven (7) Calendar Days after first observance of the conditions. City will promptly conduct a review and, if they constitute Unforeseen Conditions (as defined in the Contract Documents) and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the cost or a time extension, or both. If the City determines that the conditions at the Site do not constitute Unforeseen Conditions (as defined in the Contract Documents) and that no change in the terms of the Agreement is justified, the City shall so notify Contractor in writing, stating the reasons. Claims by the Contractor in opposition to City's determination must be made within fourteen (14) Calendar Days after the City has given Contractor notice

of the City's decision. Any timely opposition to the City's decision shall be subject to the dispute resolution provisions of this Agreement.

- 12.2. Contractor shall supervise, inspect and direct the Work, using Contractor's best skill and attention. Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Agreement, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures.
- 12.3. Contractor shall be responsible to the City for acts and omissions of Contractor's employees, subcontractors and their agents and employees, and other persons or entities performing portions of the Work for or on behalf of Contractor or any of its subcontractors.
- 12.4. Contractor shall not be relieved of its obligations to perform the Work strictly in accordance with the Contract Documents by the performance or non-performance of the services or determinations of the City, or by tests, inspections or approvals required or performed by persons other than Contractor or its subcontractors.
- 12.5. Contractor shall be responsible to inspect portions of the Work performed under this Agreement or any other Agreement to determine that such portions are in proper condition to receive subsequent Work pursuant to this Agreement. Contractor assumes the full responsibility for the cost and expense to correct any deficient Work caused by its failure to properly inspect the Work for suitability prior to performing Contractor's Work.
- 12.6. Contractor shall provide proper facilities, take all necessary precautions and assume the entire cost for protecting the Work against adverse weather conditions and for handling all storm and flood water, sewage, or seepage, that may be encountered up to the date of Final Completion of the Work subject to the Contract Documents.
- 12.7. **Labor and Materials.** Unless otherwise provided in the Contract Documents, Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
- 12.8. **Substitutions.** Wherever materials, products, articles, equipment, systems or similar items are identified by reference to proprietary terms or similar reference, it is intended to establish the minimum standard or measure of quality that has been determined as requisite or intended for the Work. Competition is encouraged from subcontractors, suppliers, manufacturers and producers whose products, systems, reputations, performance and

service warrant acceptance for the conditions, intent of design, requirements and other considerations of the Work. The determination of products for use may be based on the construction, design, function, type, size, capacity, performance, strength, durability, efficiency, sound level, finish, aesthetic quality, service, matching existing work, the City's standards for repair, replacement and maintenance or other characteristics and criteria.

Acceptance or rejection of proposed alternate or similar products, equipment or system that are equal to those specified in the design criteria may be based on any of the foregoing factors and criteria. The final decision on acceptance or rejection of proposed alternate or similar products, equipment or system that are equal to those specified in the Contract Documents shall be vested in the City and its determination may or may not express the reason for the decision, at City's option.

- 12.9.** The product, equipment, system, or manufacturer used as the basis for the design or specification shall generally set the criteria. It shall be expressly understood that any product, equipment, system or manufacturer listed in the design criteria as acceptable shall meet and be in full compliance with the requirements and criteria, including those established by the product, equipment, system or manufacturer used as the basis for the specification. The City shall have the right to reject any proposed deviations from specified criteria or characteristics, or deviations from the criteria and characteristics of the product, system or manufacturer used as the basis of the design criteria.
- 12.10.** Following issuance of the Notice to Proceed, only specified items will be used for the Project. If, however, an alternate or substitution is to be used during construction, it will only be approved by City under the following circumstances:
- 12.10.1 The required product, material or method cannot be provided in a timely fashion, but not as a result of Contractor's failure to pursue the work promptly or coordinate various activities; or
 - 12.10.2 The required product, material or method cannot be provided in a manner which is compatible with other materials of the Work, or cannot be properly coordinated with the Work; or
 - 12.10.3 The required product, material or method has not received required approval by a governing authority, and the requested substitution can be approved; or,
 - 12.10.4 Contractor establishes the substitution will provide substantial advantage to the City, in terms of cost, time or other valuable considerations.
- 12.11.** All substitution requests will be made via written request which shall be attached to a shop drawing and/or Change Order which shall be attached to a detailed description of the specified item and a detailed description of the proposed substitution. A comparison letter

itemizing all deviations from specified items must be included for the Contract Administrator to properly evaluate substitution. Failure to provide the deviation comparison sheet shall automatically deny the request.

- 12.12.** If the substitution is approved, Contractor shall certify to City that the proposed substitution is equal to or better than the required product, material or method, that the proposed substitution is suitable for the intended purpose at the intended location and that Contractor warrants the substituted design.
- 12.13.** If the substitution is not approved by City, Contractor shall use the material, article, or piece of equipment specified in the Contract Documents.
- 12.14.** If the City does not require defective Work to be removed or corrected by Contractor, an equitable reduction in the cost shall be made as reasonably determined by the City. All reductions in the cost shall be evidenced by a written Change Order signed by the City.
- 12.15.** If Contractor does not fully perform its obligations under this warranty section within a reasonable time following written notice by the City to Contractor then, in addition to, and not in lieu of any other right or remedy available to the City pursuant to this Agreement, at law or in equity, the City may perform or cause such obligations to be performed at the sole cost and expense of Contractor. The amount of such cost and expense shall be deducted from the cost or, at the City's option, shall be due and payable by Contractor to the City on demand.
- 12.16.** Nothing contained in this warranty section shall be construed to establish a period of limitation with respect to any other obligation which Contractor might have under the Contract Documents. The Warranty Period relates only to the obligation of the Contractor to correct the Work following Substantial Completion of the Project.
- 12.17** Contractor will collect all written guaranties, warranties and equipment manuals and deliver them to City prior to Substantial Completion of the Project.
- 12.18** Contractor, with the assistance of City's maintenance personnel, will direct the checkout of those utilities and operations of systems and equipment supplied and/or installed by Contractor, for readiness, and will perform the initial training, start-up and testing.
- 12.19.** The City may elect to take beneficial use of completed portions of the Project prior to Substantial Completion. Upon completion of all items listed above, a Certificate of Partial Substantial Completion shall be executed by the City and Contractor with a mutually agreed date of acceptance that will start the Warranty Period for the particular portions of the Project. Any outstanding punchlist items shall be noted on the Certificate of Partial Substantial Completion and remain the responsibility of the Contractor to complete within

the specified time limit. Contractor shall undertake all punch list work expeditiously upon Substantial Completion of the Project in the manner and fashion set forth in the Contract Documents, Certificate of Partial Substantial Completion and as directed by City.

12.20. Taxes. Contractor shall pay sales, consumer, use and similar taxes for the Work provided by Contractor, which are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect. To the extent that the Work is exempt from sales, consumer, use and similar taxes, the City shall provide to Contractor, a certificate of exemption.

12.21. Permits, Fees, and Notices. Unless otherwise provided in the Contract Documents, Contractor shall secure and pay for the building permit and other permits and governmental fees, licenses and inspections necessary for proper execution and completion of the Work which are customarily secured after execution of the Agreement between City and Contractor and which are legally required when bids are received or negotiations concluded. Contractor shall comply with and give notices required by Applicable Laws during the performance of the Work.

12.22. Responsibility for Completion. Contractor shall furnish such manpower, materials, facilities and equipment and shall work such hours, including night shifts and premium time operations with the City's prior approval, as may be necessary to ensure the prosecution and Substantial and Final Completion of the Work within the number of days specified in the Contract for completion of the Work, as adjusted. If the City reasonably finds the corrective action not acceptable, City may require Contractor to submit revisions until acceptable to City. Failure of Contractor to substantially comply with the requirements of this paragraph shall be considered grounds for a determination by the City that Contractor is failing to prosecute the Work with such diligence as will ensure its completion within the time specified and grounds for termination of this Agreement for cause.

12.23. Protection and Safety of Persons and Property.

12.23.1. Contractor agrees that, between the City and Contractor, the prevention of accidents to workmen engaged upon or in the vicinity of its Work and to any employee or invitee to the Project Site is Contractor's responsibility. Contractor shall be solely responsible for initiating, maintaining and supervising safety precautions and programs in connection with the Work in accordance with all Applicable Laws, including, but not limited to, the OSHA requirements, OSHA's Permit- Required Confined Space Entry (CSE) and Control of Hazardous Energy (Lockout/Threat) requirements. Contractor shall maintain at the Project Site a sufficient number of safety hats and other appropriate personal protection equipment for the use of employees and invitees to the Project Site.

- 12.23.2.** Prior to Contractor's performance of any Work at the Project Site, Contractor shall provide City with the phone number(s) of the individuals who may be contacted at any time 24 hours per day/7 days per week in the event of an emergency related to the Work required by the Contract Documents. Should any emergency condition arise out of whatever nature as a result of the Work, Contractor will be notified by telephone and corrective action shall be immediately implemented. In the event Contractor cannot be reached at the designated number(s) or Contractor fails to take immediate corrective action, the City may take such corrective action as it deems necessary and reasonable to mitigate or alleviate the emergency and will deduct the cost of such corrective action from payments due Contractor and/or demand payment from Contractor. Contractor shall be responsible for reimbursing City for all damages resulting from taking such corrective action to mitigate or alleviate the emergency, including but not limited to, damage to the City's property and, equipment, or new Work of Contractor or its subcontractors. Failure of the City to notify Contractor of any emergency conditions as a result of any Work related to the Project shall not relieve Contractor from any liability for any damage or loss resulting from the emergency conditions.
- 12.23.3.** To assist the general public, emergency agencies, law enforcement or other entities in notifying the responsible party best able to respond to Site emergencies, Contractor will erect at each active construction site or at a location as directed by the City a sign, which will be approved by the City, and containing the Project name, Project address, City Project number, Contractor's name, Contractor's address and phone number, name and phone number of Contractor's site safety officer, and name and phone number of City's construction supervisor.
- 12.23.4.** Contractor shall maintain at the Site a current Materials Safety Data Sheet ("MSDS") Manual for all MSDS received from the manufacturer or supplier of all Hazardous Materials/Regulated Substances. If an MSDS is not received by Contractor, Contractor shall contact the manufacturer or supplier to request one or contact OSHA for assistance in obtaining the MSDS. Contractor shall maintain the MSDS Manual in the format required by City and shall ensure that the MSDS form for each Hazardous Material/Regulated Substance contains the information required by the current OSHA Hazard Communication Standard. Contractor's MSDS Manual shall be made readily available, upon request, to City and to OSHA representatives.
- 12.23.5.** Contractor shall take all necessary precautions for safety of, and shall provide all reasonable protection to prevent damage, injury or loss to: (1) all persons engaged by Contractor, its subcontractors, suppliers and vendors in performance of the Work on the Site and other persons who may be affected thereby; (2) the Work

and materials and equipment to be incorporated therein, whether in storage on or off the Site under the care and custody of Contractor and/or its subcontractors, suppliers and vendors; and (3) other property within Contractor's care, custody or control at or adjacent to the Site.

12.23.6. Prior to commencement of any Work at the Project Site, Contractor shall submit to the City a copy of Contractor's Project Specific Safety Program. The Project Specific Safety Program shall include, but not be limited to, the following:

- a. The identification of Contractor's Project Specific Safety Coordinator whose duty shall be overseeing the implementation of contractor's Specific Safety Program;
- b. The procedures for the identification and enforcement of all OSHA, NFPA, federal, state and local laws, rules, standards and requirements;
- c. The procedures for the preparation and submission, prior to the start of each Work activity, of a hazard analysis report for each Work activity which identifies the applicable safety requirements and precautions to be taken while performing each Work activity;
- d. The rules and regulations applicable to the type, use and application of all safety equipment and the condition and demeanor of Contractor's employees while at the Project Site;
- e. The procedures for reporting to the City and all applicable federal, state and local authorities, all accidents or "near" accidents involving the actual or potential for personal injury or property damage at or adjacent to the Project Site;
- f. The Project specific safety and disciplinary rules and regulations; and,
- g. The procedures for training Contractor's employees and its Subcontractor's and supplier's employees of Contractor's Project Specific Safety Program and disciplinary rules and regulations.

12.23.7. Contractor shall give notices required by and comply with Applicable Laws of all authorities with jurisdiction bearing on the safety of persons and property and their protection from damage, injury, or loss. Contractor shall notify the City of any adjacent utilities when prosecution of the Work may affect them. Fire hydrants and stop valves adjacent to the Work shall be kept readily accessible to fire-fighting apparatus and shall not be obstructed.

12.23.8. When so ordered, Contractor shall stop any part of the Work which the City deems unsafe until corrective action satisfactory to City has been taken, and Contractor agrees that it shall not have nor make any claim for adjustment in either contract time or the contract price arising out of such Work stoppage. The failure of Contractor to implement its own Project Specific Safety Program and/or abide by, follow, properly implement or supervise any safety standards established during the progress of the Work by Applicable Law shall constitute a breach of this Agreement by Contractor and shall entitle City to seek indemnity from Contractor to the full extent permitted by law and as further identified and described in this Agreement.

12.23.9. Contractor shall promptly remedy damage or loss (other than damage or loss to property insured under property insurance provided by City pursuant to this Agreement) to property at the Site, adjacent to the Site, or stored in other locations caused in whole or in part by Contractor, its subcontractors, or anyone directly or indirectly employed by either of them, or by anyone whose acts they may be liable, except damage or loss caused solely by the acts or omissions of City.

12.24. Hazardous Materials/Regulated Substances/Hazardous Conditions.

12.24.1 In the event that Contractor encounters on the Site material reasonably believed to be Hazardous Materials/Regulated Substances, as those terms are generally defined by law, which has not been identified in the Contract Documents and has not been rendered harmless, Contractor shall immediately stop Work in the area affected and immediately report the condition to the City in writing. Work in the affected area shall resume when such Hazardous Materials/Regulated Substances has been rendered harmless or removed as determined by City.

12.24.2 If Hazardous Materials/Regulated Substances of a type of which an employer is required by law to notify its employees are being used on the Site by Contractor, its subcontractors, or anyone directly or indirectly employed by them, Contractor shall, prior to harmful exposure of any employees on the Site to such substances, give written notice of the chemical composition to the City in sufficient detail and time to permit compliance with all Applicable Laws.

12.24.3 The City shall not be responsible for materials and substances brought to the Site by Contractor and its subcontractors unless such materials or substances were required by the Contract Documents.

12.24.4 Hazardous Conditions. Unless otherwise expressly provided in the Contract Documents to be part of the Work, Contractor is not responsible for any pre-existing hazardous conditions encountered at the Site. Upon encountering any hazardous conditions, Contractor will stop Work immediately in the affected area

and duly notify City and, if required by legal or regulatory requirements, all government or quasi-government entities with jurisdiction over the Project or Site.

12.24.5 Upon receiving notice of the presence of suspected hazardous conditions, City shall take the necessary measures required to ensure that the hazardous conditions are remediated or rendered harmless. Such necessary measures shall include City retaining qualified independent experts to (i) ascertain whether hazardous conditions have actually been encountered, and, if they have been encountered, (ii) prescribe the remedial measures that City must take to either remove the hazardous conditions or render the hazardous conditions harmless. The methods of rendering the hazardous conditions harmless may include having the Contractor construct through or remove the hazardous material as a part of the Project work. In such instance the work involved will be considered as extra work and treated with the methods provided in Article 5.14.2.5.1 Extra Work and Payment therefor.

12.24.6 Contractor shall be obligated to resume Work at the affected area of the Project only after City's expert provides it with written certification that (i) the hazardous conditions have been removed or rendered harmless and (ii) all necessary approvals have been obtained from all government and quasi- government entities having jurisdiction over the Project or Site.

12.24.7 Contractor will be entitled to an adjustment in its contract time(s) to the extent Contractor's time(s) of performance has been adversely impacted by the presence of hazardous conditions

12.24.8 Notwithstanding the preceding paragraph, City is not responsible for hazardous conditions introduced to the Site by Contractor, subcontractors, or anyone for whose acts they may be liable. Contractor shall indemnify, defend and hold harmless City and City's officers, employees and agents from and against all claims, losses, damages, liabilities and expenses, including attorneys' fees and expenses, arising out of or resulting from those hazardous conditions introduced to the Site by Contractor, subcontractors, or anyone for whose acts they may be liable.

12.24.9 Emergencies. In an emergency affecting safety of persons or property, Contractor shall act to prevent threatened damage, injury or loss.

12.24.10 Use of the Site. Existing Utilities have been shown in the Contract Documents insofar as information is reasonably available; however, it will be Contractor's responsibility to verify such information and to preserve all existing Utilities, whether shown in the Contract Documents or not. If utility conflicts are encountered by Contractor during construction, it is anticipated that Contractor shall re-design its proposed improvements at its cost to avoid utility conflicts and/or provide sufficient notice to the owners of the utilities and compensate owners of the Utilities so that they may make the necessary adjustments.

- 12.24.11** Contractor shall exercise care, comply with all applicable laws, and take all precautions during excavation and construction operations to prevent damage to any existing facilities, equipment, or Utilities, including damage to facilities, equipment, or Utilities of third parties. Any damage caused by Contractor shall be reported immediately to the Contract Administrator and any such damaged facilities, equipment, or Utilities shall be repaired and/or replaced by Contractor in a manner approved by City. As between the City and Contractor, all costs to repair and/or replace any damage to existing facilities, equipment, or Utilities shall be the sole responsibility of Contractor, and such repair or replacement shall be performed expeditiously without cost to City.
- 12.24.12** Contractor shall provide that type of required protection for finished work at all times and protect adjacent work during cleaning operations and make good any damage resulting from neglect of this precaution.
- 12.24.13** Protection of work shall include protection of work that is factory finished, during transportation, storage, during and after installation. Where applicable and as required, Contractor shall close off spaces of areas where certain work has been completed to protect it from any damages caused by others during their operations.
- 12.24.14** Contractor shall store materials and shall be responsible for and shall maintain partly or wholly finished work during the continuance of the contract and until the final acceptance of the structure. If any materials or part of the work should be lost, damaged, or destroyed by any cause or means whatsoever, the Contractor shall satisfactorily repair and replace the same at Contractor's own cost. The Contractor shall maintain suitable and sufficient guards, if necessary, and barriers, and at night, suitable and sufficient lighting for the prevention of accidents.
- 12.24.15** To all applicable sections where preparatory work is part of work thereon, Contractor shall carefully examine surfaces over which finished work is to be installed, laid or applied, before commencing with the work. Contractor shall not proceed with said work until defective surfaces on which work is to be applied are corrected to the satisfaction of the Contract Administrator. Commencement of work shall be considered acceptance of surfaces and conditions.
- 12.24.16** It will be the Contractor's responsibility to preserve all existing Utilities within the Project limits or as otherwise effected by Contractor. If utility conflicts are encountered by the Contractor during construction, it is anticipated that Contractor shall re- design its proposed improvements at its cost as to avoid utility conflicts and/or provide sufficient notice to their owners and compensate owners of the Utilities from its funds so that they may make the necessary adjustments. Damage to any Utilities, which in the sole reasonable opinion of

the City is caused by negligence on the part of the Contractor, shall be repaired at the Contractor's expense.

- 12.24.17** If applicable to the Work specified in the Contract Documents, Contractor's Work shall minimize erosion and sediment run-off and shall assume the entire cost of handling any sewage, seepage, storm, surface and flood flows which may be encountered at any time during the construction work. Contractor shall be responsible for obtaining any required permits as per Applicable Law and shall be liable for any fines and penalties assessed by any authority with jurisdiction over the Project due to noncompliance or violation of such requirements. Contractor shall limit both area and duration of bare soil exposure, employ appropriate erosion control through staged clearing, grading and excavating procedures, soil-pile protection, mulching and temporary vegetation. Groundwater, storm water and sediment bearing drainage from dewatering operations shall be filtered or impounded to allow removal of silt, sediment, debris, and other pollutants in an acceptable, stabilized location prior to disposal.
- 12.24.18** Contractor shall confine operations and storage of materials, equipment, tools and debris at the Site to areas secured by the Contractor and previously approved by the City, permitted by Applicable Laws and the Contract Documents, and shall not unreasonably encumber the Site with any materials, equipment, tools or debris. All excavated materials, construction equipment and materials and equipment to be incorporated into the Work shall be placed so as not to unreasonably disturb and/or affect the quality of life of the surrounding neighborhood, injure any part of the Work or existing facilities, to provide free access to all parts of the Work, and to all public utility installations in the vicinity of the Work. The City makes no arrangements for staging. Contractor shall request approval from City's representative of the proposed staging site prior to commencement of construction activity.
- 12.24.19** The location of all temporary roadways and similar facilities shall be subject to City's review. Contractor shall keep temporary Work from blocking access to completed Work or from interfering with other work being performed by City, other contractors or other public entities. If, however, conflict with normal traffic access occurs, Contractor shall provide temporary bypass routing until such temporary Work is completed. Contractor shall remove all temporary Work from the Project Site after it is no longer needed, and before completion of the Work.
- 12.24.20** City shall have the authority to limit the number of Contractor and subcontractor employee vehicles present at the Project site. Contractor shall enforce all such limitations. In cases of a dispute between City and Contractor regarding vehicle limitations at the Project Site, the City's determination shall govern and be binding on Contractor.

12.24.21 Cleaning Up and Backcharges. Contractor shall keep the premises, the surrounding area and surrounding streets, lawns, and sidewalks free from accumulation of waste materials, rubbish, dirt, mud, vegetation and construction debris caused by Project operations. Before Final Completion, the Work, including stream channels and banks at drainage structures and all borrow and waste areas, storage sites, temporary plant sites, haul roads, and other grounds occupied by Contractor in connection with the Work, shall be cleaned of all waste materials, rubbish, temporary structures, Contractor's tools, construction equipment, machinery, and surplus materials. These areas shall have suitable vegetative cover established by seeding and mulching or by other approved methods and all parts of the Work shall be left in an acceptable condition, as determined by the City. When sewers are built in paved or unpaved streets, Contractor shall remove dirt, mud, vegetation, and construction debris accumulating from its operations upon all streets, intersecting streets, lawns, or sidewalks, as often as ordered by City.

12.24.22 If Contractor fails to clean up as provided in the Contract Documents, use the streets, lawns, and sidewalks at and adjacent to the Project Site as provided in the Contract Documents, creates a nuisance, causes or contributes to water or air pollution, creates a health hazard, or violates Applicable Laws, the City may implement the corrective action it deems appropriate and the reasonable cost of performing the corrective action shall be charged to Contractor and the cost adjusted accordingly or, at City's option, paid by Contractor to City. City shall have the right to allocate the reasonable cost of the corrective action among any or all entities performing Work on Site on a pro rata basis. If the unpaid balance of the cost is insufficient to pay the full cost of the corrective action performed by City on behalf of Contractor, then Contractor shall pay the difference to City upon written demand.

12.24.23 Access to Work. Contractor shall provide the City and all authorities with jurisdiction over the Project with safe and reasonable access to the Work in preparation and progress wherever located.

ARTICLE 13 TERMINATION OF AGREEMENT

13.1. By City for Convenience: The City may terminate, for the City's convenience, and without cause, performance of Work under this Agreement, in whole or in part by, giving a written Notice of Cancellation to the Contractor and its Surety at least ten (10) calendar days prior to the effective date of such termination. The City shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of the termination and the effective date. Such Notice of Termination will not be deemed a breach of this Agreement and may be issued without cause. Upon such Notice of Termination, the Contractor shall

be entitled to receive only costs incurred as of the date of the Notice of Termination, as further provided below. The Contractor shall immediately provide the City with all drawings, plans and specifications, and any and all other documentation related to the Project, which delivery shall be a condition precedent to City's payment to Contractor under this Section. Upon payment thereof, the City will have no further obligation or liability to the Contractor under this Agreement. The Contractor shall not be entitled to any other compensation under this Agreement.

- 13.2.** In the event of termination by City, the Contractor will be paid for all labor performed, all materials and equipment furnished by the Contractor and its subcontractors, material men and suppliers and manufacturers of equipment less all authorized partial payments made prior to the date of cancellation. Specific work shall be paid for as follows:

13.2.1. The value of all items of work completed under the Contract based upon the unit prices and/or the approved Schedule of Values (the Schedule of Values being the detailed cost breakdown) satisfactory to the Contract Administrator.

13.2.2. The actual cost, as verified by invoice, of acceptable materials and equipment delivered to the site or irrevocably ordered prior to the date of receipt of the Notice of Cancellation. Said irrevocably ordered materials or equipment must be actually delivered to a City as designated by the Contract Administrator prior to payment being authorized. City may opt to pay restocking fees for materials and equipment delivered to the Project site that can be returned.

13.2.3. Items from the Schedule of Values or unit price items which are partially completed will be paid as specified below in this Section. In the event of termination or under this Section, the Contractor shall not be entitled to any anticipated profits or for extended general conditions, for any work not performed due to such cancellation. No claims for loss of anticipated profits or for any other reason in connection with the cancellation of the Agreement will be considered, nor shall the Contractor be entitled to any consequential damages.

13.2.4. City shall have the right to cancel those portions of the Agreement relating to the Work of any item provided for therein. Where that portion of the Work contains completed payment items as called out in the Schedule of Values or unit price items which have been completed, they will be paid for as specified above in this Section. Where items of work are not complete the Contractor will be allowed a profit percentage on the materials used and on construction work actually performed, at the same rates as provided for "Extra Work", but, as above, no allowance will be made for future anticipated profits on the balance of such work.

- 13.3. By the City for Cause:** If the Contractor fails to begin the Work under the Agreement

within the time specified; or fails to perform the Work with sufficient workmen and equipment or with sufficient materials to insure the prompt completion of the Work; or performs the Work unsatisfactorily; or neglects or refuses to remove materials or to perform anew such Work as shall be rejected as defective and unsuitable; or shall discontinue the prosecution of the Work; or shall become insolvent or be declared bankrupt; or shall commit any act of bankruptcy or insolvency; or shall make an assignment for the benefit of creditors; or from any other cause whatsoever shall not carry on the Work in an acceptable manner; or otherwise fails to comply with any term or provision of this Agreement then, in addition to any other right specified herein or held by the City, the Contract Administrator may declare the Contractor in default and shall give notice, in writing, to the Contractor and to its Surety, of such default, specifying the conditions pertaining thereto and directing the Contractor to correct same. This notification shall be a formal Notice to Cure provided to the Contractor and its Surety by Certified mail or FedEx.

- 13.4.** If the Contractor or the Surety does not react and correct such conditions or fails to provide to the Contract Administrator an acceptable plan of action for correction of same within a period of five (5) days after receipt of such notice to cure, the City Manager shall, upon written certificate from the Contract Administrator reciting the facts of such default and the failure of the Contractor to comply with the directions given in such Notice to Cure, provide the Contractor and its surety with a formal Notice of Default by certified mail and shall have full power and authority three (3) days after receipt of the certified Notice of Default, without violating the Agreement, to take the prosecution of the Work out of the hands of the Contractor, to appropriate or use any or all materials or equipment on site as may be suitable and acceptable, to enter into an Agreement with another Contractor for the completion of the Project, or to use such other methods as, in the opinion of the City Manager, shall be required for the completion of the Project in an acceptable manner. All costs and charges incurred by the City, together with all costs of completing the Work under contract, shall be deducted from any moneys due, or which may become due, to the Contractor. In the event that the expense so incurred by the City shall be less than the sum which would have been payable under the Agreement if the Work had been completed by the Contractor, the Contractor shall be entitled to receive the difference, less additional costs for liquidated damages if applicable and documented. In case such expense shall exceed the sum which would have been payable under the Agreement, the Contractor and the Surety shall be liable and shall pay to the City the amount of such excess.
- 13.5.** Nothing contained herein shall limit the availability of any other remedy the City may have in the event of a default, whether such remedy arises by contract or by operation of law, and the choice by the City to proceed with one remedy shall not limit the ability of the City to pursue additional remedies.

SUSPENSION BY THE CITY FOR CONVENIENCE

- 13.6.** The City may, at the City's convenience and without cause, order Contractor in writing to

suspend, delay or interrupt the Work, in whole or in part, for such period of time as the City may determine. If the City suspends, delays or interrupts the Work for the City's convenience, the City shall pay to Contractor the actual cost of such suspension, delay, or interruption, as documented by Contractor to the satisfaction of the City and a time extension may be granted the period of such suspension, delay, or interruption plus a reasonable period for re-mobilization. No adjustment shall be made, in the City's sole discretion, to the extent:

13.6.1. That performance is, was or would have been so suspended, delayed or interrupted by another cause for which Contractor is responsible in whole or in part; or

13.6.2. That an equitable adjustment is made under another provision of the Contract Documents.

- 13.7.** If the Project is suspended by the City for more than one hundred twenty (120) consecutive Calendar Days, Contractor shall be compensated for Work performed prior to notice of such suspension. When the Project is resumed, Contractor's compensation shall be equitably adjusted to provide reimbursement for actual costs incurred in the interruption and resumption of Contractor's Work.

UNFINISHED OR INCOMPLETE WORK.

- 13.8.** If at any time before Final Completion of the Project the Contract Administrator finds there is unmanned or unfinished or incomplete Work, or Work delay or Work stoppages, it shall notify the Contractor in writing to finish or complete the Work at its expense forthwith using whatever labor, materials and equipment necessary to perform the Work in accordance with the Plans and Specifications.

- 13.9.** When the activity duration for any items shown on the approved baseline construction progress schedule submitted exceed fifty percent (50%) of the duration days indicated on the schedule, or if the Contract Administrator otherwise determines that the Work is not progressing in a timely manner towards completion, and the Contractor fails to make good for any of the above Work as specified, the Contract Administrator shall give notice to the Contractor, in writing, specifying the conditions pertaining thereto and directing the Contractor to perform the Work. If the Contractor shall not begin to correct such conditions within five (5) days of such notice, it shall be sufficient grounds for the Contract Administrator to place the Contractor in default and notify its Surety of same.

PROJECT SUSPENSION OR AMENDMENT

- 13.10.** If the Project is suspended for the convenience of the City for more than six (6) months, or abandoned in whole or in part for the convenience of the City under any Phase, the City shall give seven (7) days' notice to the Contractor of such Project abandonment or

suspension. If it is known that the Project is to be suspended for less than six (6) months, then the Contractor shall remain on the Project under this Agreement and compensated as agreed by Contractor and the City for direct labor, equipment and materials, and rates for overhead and profit as applicable for extra work. The City will not be liable for stand-by, overhead cost for work or services not performed or not yet required to be performed, or any other costs direct or indirect, that the Contractor may incur outside of any direct costs associated with this Project. If the Project is to be suspended for the convenience of the City for more than six (6) months, or abandoned in whole or in part for the convenience of the City during any Phase, the Contractor shall be paid for work which was performed prior to such suspension or abandonment, and any specific work as directed by the City to secure and/or abandon the work, and the City shall have no further obligation or liability to the Contractor under this Agreement. If the Project is resumed after having been suspended for more than six (6) months, the Contractor's compensation to complete the Project may be renegotiated due to the suspension delay, but the City will have no obligation to complete the Project under this Agreement and may hire or contract with another Contractor to complete the Project. The City will have no further obligation or liability to the Contractor.

ARTICLE 14 ASSIGNMENT OF AGREEMENT

- 14.1.** The City and Contractor bind themselves and their successors, administrators and assigns to the other party of this Agreement and to the successors, administrators and assigns of the other party of this Agreement, in respect to all covenants of this Agreement. Except as stated above, neither the City nor Contractor shall assign, sublet or transfer its interest in this Agreement without the written consent of the other. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of any public body which may be a party hereto.

ARTICLE 15 DISPUTE RESOLUTION

- 15.1.** To attempt to prevent all disputes and litigation, it is agreed by the parties hereto that the Contract Administrator or their designee shall first decide all questions, claims, difficulties and disputes of whatever nature which may arise relative to the Contract Documents and fulfillment of this Agreement as to the character, quality, amount and value of any work done and materials furnished, or proposed to be done or furnished under or, by reason of, the Contract Documents, and Contract Administrator's estimates and decisions upon all claims, questions, difficulties and disputes shall be final and binding to the extent provided in this Section. Any claim, question, difficulty or dispute which cannot be resolved by mutual agreement of City and Contractor shall be submitted to Contract Administrator in writing within ten (10) calendar days of the discovery of the occurrence. Unless a different period of time is set forth herein, Contract Administrator shall notify Contractor in writing

of the decision within twenty-one (21) calendar days from the date of the submission of the claim, question, difficulty or dispute, unless Contract Administrator requires additional time to gather information or allow the parties to provide additional information. All nontechnical administrative disputes shall be determined by the Contract Administrator pursuant to the time periods provided herein. During the pendency of any dispute and after a determination thereof, Contractor and City shall act in good faith to mitigate any potential damages including utilization of construction schedule changes and alternate means of construction.

- 15.2. In the event the determination of a dispute under this Section is unacceptable to either party hereto, the party objecting to the determination must notify the other party in writing within twenty-one (21) calendar days of receipt of the written determination. The notice must state the basis of the objection and must be accompanied by a statement that any contract price or contract time adjustment claimed is the entire adjustment to which the objecting party has reason to believe it is entitled to as a result of the determination. Within sixty (60) calendar days after receipt of written determination as provided in this Section, the parties shall participate in mediation to address all objections to any determinations hereunder and to attempt to avoid litigation. The mediator shall be mutually agreed upon by the parties. The mediation shall be non-binding.
- 15.3. Pending final resolution of a claim, including mediation, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Contract and the City shall continue to make payments in accordance with the Contract Documents.
- 15.4. Any mediator used shall be certified in accordance with Florida law. Mediation will be conducted in Okaloosa County unless otherwise agreed.

ARTICLE 16

CHANGED OR ADDITIONAL WORK

- 16.1. In the case of any required additional Work required and directed by City, by the Florida Department of Transportation, or by any other entity with lawful authority to impose such requirement, the City shall issue written authorizations to proceed to the Contractor for the added Work to be performed. In case of emergency, the City reserves the right to issue oral authorizations to the Contractor. The written confirmation shall follow in a reasonable time thereafter.
- 16.2. The Contract Administrator shall act on behalf of City in all matters pertaining to this Contract as authorized by City and shall issue written authorizations to proceed to the Contractor for any approved changed or additional Work to be performed hereunder. These authorizations are referred to as Change Orders. In case of emergency, the City reserves

the right to issue oral authorizations to the Contractor with the understanding that written confirmation to proceed shall follow immediately thereafter. Change Orders that require approval by the City Council are not binding and effective until approved by the City Council.

ARTICLE 17 OWNERSHIP AND RE-USE OF DOCUMENTS

- 17.1.** All notes, correspondence, documents, designs, drawings, renderings, calculations, specifications, models, photographs, reports, surveys, investigations, plans, specifications and any other documents and copyrights thereto for Work performed or produced in the performance of this Contract, whether in paper or other hard copy medium or in electronic medium, except with respect to copyrighted standard details and designs owned by the Contractor or owned by a third party and licensed to the Contractor for use and reproduction, shall become the property of the City. Contractor shall not disclose, release, or make available any document to any third party, without prior written approval from the City. The Contractor shall warrant to the City that it has been granted a license to use and reproduce any copyrighted standard details and designs owned by a third party and used or reproduced by the Contractor in the performance of this Contract. Nothing contained herein shall be deemed to exclude any document from Chapter 119 of the Florida Statutes.
- 17.2.** If the City elects to re-use the Plans and Specifications for other sites and/or purposes other than those for which it was prepared, it shall be at the City's sole risk and holds the Contractor harmless for any liability arising out of any reuse of documents.
- 17.3.** The Contractor shall bind all subconsultants and subcontractors to the Agreement requirements for re-use of Plans and Specifications.
- 17.4.** All notes, correspondence, documents, designs, drawings, renderings, calculations, specification, models, photographs, reports, surveys, investigations, computer files, plans and specifications, that have "read" and "write" capability, data and any other documents and copyrights thereto for Work performed or produced in the performance of this Agreement, and paid for by the City, whether in paper or other hard copy medium, or in electronic medium, shall become the property of the City. The Contractor shall not disclose, release, or make available any document to any third party without written approval from City. Nothing contained herein shall be deemed to exclude any document from Chapter 119 of the Florida Statutes.

ARTICLE 18 MISCELLANEOUS

- 18.1. Remedies.** The parties agree that all claims, counter-claims, disputes and other matters in

question between the City and Contractor arising out of or relating to this Agreement, or the breach thereof, will be decided at law. This Agreement shall be governed by and interpreted according to the law of the State of Florida.

- 18.2. Defective Pricing.** Contractor warrants to City that cost and pricing data submitted for evaluation with respect to negotiated agreements, lower tier subagreements, and change orders is based on current, accurate, and complete data supported by their books and records. If the City determines that any price (including profit) negotiated in connection with this Agreement, any lower tier subagreement or any amendment thereunder was increased by any significant sums because the data provided was incomplete, inaccurate, or not current at the time of submission, then such price or cost or profit shall be reduced accordingly; and the Agreement shall be modified in writing to reflect such action.
- 18.3. Contingent Fees.** Contractor warrants to City that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees. For breach or violation of this warranty, the City shall have the right to annul this Agreement without liability or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fees.
- 18.4. Gratuities.** If the City finds after a notice and hearing that Contractor, or any of Contractor's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts, or otherwise), to any official, employee, or agent of the City in an attempt to secure an Agreement or favorable treatment in awarding, amending, or making any determination related to the performance of this Agreement, the City may, by written notice to the Contractor, terminate this Agreement. The City may also pursue other rights and remedies that the law or this Agreement provides.
- 18.5.** Contractor shall retain all records relating to this Agreement and the Work performed for a period of ten (10) years after its termination.
- 18.6. Force Majeure.** For the purpose of delay and events of force majeure, an event of "Force Majeure" is defined to include an event beyond the control of the Party claiming Force Majeure, which prevents such Party from fulfilling its obligations, and includes, without limitation, acts of God (including floods, hurricanes and other adverse weather), war, riot, civil disorder, acts of terrorism, disease, epidemic, strikes and labor disputes, actions or inactions of government or other authorities, law enforcement actions, curfews, closure of transportation systems or other unusual travel difficulties, or inability to provide a safe working environment for employees. The Contractor shall not be liable for any delays due to a Force Majeure event, provided that Contractor verbally notifies the City within 48 hours of such Force Majeure event and provides the City written notice that includes justification

for extension of the Agreement within 10 days of such force majeure event. Such events of Force Majeure will be considered under the Change Order provisions of the Agreement.

- 18.7. Time Extensions and Delay.** Where the progress of the Contractor is delayed, and such delay is beyond the control of the Contractor, and if such delay affects the critical path of the Project, based on the approved Project schedule, Contractor shall, within five (5) days of the start of the delay, notify the Contract Administrator in writing of the delay and, if justified, requesting an extension of the contract time. Said notice shall specifically detail the nature and cause of the delay, and shall include sufficient, credible and complete documentation to include, but not limited to, approved schedules and analysis to allow the Contract Administrator to evaluate the impact of the delay on the Contractor's schedule critical path. If the Contract Administrator finds that the delay is beyond the control of the Contractor and affects the schedule critical path of the Project, based on the approved base line Project schedule the Contract Administrator will grant the Contractor a non-compensable time extension as approved by the Contract Administrator.
- 18.8. Proper and timely notification to the Contract Administrator of the delay, as provided for above, is a condition precedent to any obligation on the part of the City to grant a non-compensable time extension and/or associated change order, and the failure of the Contractor to properly and timely render such notice shall serve as a bar on the maintenance or litigation of any claim related for additional time arising out of the delay and shall serve as a waiver by the Contractor of any and all such claims.
- 18.9.** A non-compensable time extension shall be the sole remedy available to the Contractor for delays beyond the control of the Contractor. **UNLESS OTHERWISE PROVIDED HEREIN, IN NO EVENT SHALL A CLAIM FOR DAMAGES OR ANY CLAIM OTHER THAN FOR AN EXTENSION OF TIME BE MADE OR ASSERTED AGAINST THE CITY BY REASON OF ANY DELAYS.** The Contractor shall not be entitled to an increase in the contract sum of payment of compensation of any kind from the City for direct, indirect, consequential, impact or other costs, expenses or damages, including but not limited to costs of acceleration or inefficiency, arising because of delay, disruption, interference or hindrance from any cause whatsoever; provided, however, that this provision shall not preclude recovery or damages by the Contractor as available in law through a court of competent jurisdiction for hindrances of delays caused solely by the bad faith, fraud, or active interference of the City or its agents. Otherwise, the Contractor shall be entitled only to non-compensable extension of the Contract Time as the sole and exclusive remedy for such resulting delay, in accordance with and to the extent specifically provided above. The specific application of this Article to other provisions of this Agreement shall not be construed as a limitation of any sort upon the further application of this Article. Twenty-Five Dollars (\$25.00) of Contractor's fee is acknowledged as separate and independent consideration for the covenants contained in this Article.

- 18.10.** If the Contractor contends that it is entitled to a compensable time extension the Contractor shall within three (3) days of the start of the action alleged to furnish justification for the compensable time extension, notify the Contract Administrator in writing of the delay. Said notice shall specifically detail the nature and cause of the delay, the specific action of the City which renders this delay compensable, and shall include sufficient and credible documentation, to include but not limited to approved schedules, to allow the City's Representative to evaluate the impact of the delay on the Contractor's critical path. **Proper and timely notification to the Contract Administrator of the delay, as provided above, is a condition precedent to any obligation on the part of the City to grant a compensable time extension, and failure of the Contractor to properly and timely render such notice shall serve as a bar on any litigation related to any claim for time or damages of any sort, including acceleration damages, arising out of the delay and serve as a waiver by the Contractor of any and all such claims.**
- 18.11.** The Contractor shall maintain for the duration of the alleged compensable delay, daily records. The maintenance of said records is a condition precedent to any obligation on the part of the City as to any compensable time extension. For each day for which said, confirmed, records are lacking, the City shall have no obligation to the Contractor as to extra time or compensation, and the lack of such records shall preclude the Contractor from maintaining any action for damages of any sort or extra time with respect to such delay.
- 18.12.** In the event the Contract Administrator shall grant any time extension, the Contractor shall submit a revised schedule; said revised schedule shall reflect all delays which previously impacted the work, including delays as may have been caused by the Contractor, and will reflect all time extensions granted to the date of the revised schedule.
- 18.13.** Where a delay for which the Contractor would be entitled to compensation occurs concurrently with a delay for which the Contractor would not be entitled to any time extension, the Contractor shall be entitled to no compensation for the period of such concurrent delay.
- 18.14.** The Contractor shall have no cause of action for the following items, and such items shall neither form the basis of any claim nor be included in compensation by the City, except insofar as the Contractor may be due liquidated damages for delay due to the Contractor pursuant to this Article, and this Article shall be the sole vehicle for recovery of the following items:
- a.** Home office expenses of any direct costs allocated from the headquarters of the Contractor.
 - b.** Loss of anticipated profits on this or any other project.
 - c.** Loss of bonding capacity.
 - d.** Losses due to projects not bid on.

- e. Loss of business opportunities.
- f. Loss of productivity on this or another project.
- g. Loss of interest on funds not paid.
- h. Costs to prepare, negotiate, or prosecute claims.
- i. Costs spent to achieve compliance with Applicable Laws.
- j. Increased bonding or insurance costs.
- k. Loss of efficiency.
- l. Acceleration costs.
- m. Loss of opportunity.
- n. All other indirect costs not listed herein.

18.15. Site Conditions. The City makes no representations or warranties as to Site conditions, including but not limited to the nature or amount of any kind of soil material, the location of any onsite utilities or structures, the fitness of any material for use as fill, or the amount of water to be expected. Any information provided herein relating to Site conditions is provided as advisory only and is the City's best estimate of conditions at a particular location. Please note that underground conditions may vary from those observed by the City, and that the City cannot guarantee that the Contractor will encounter Site conditions similar to those observed by the City. The Contractor shall, prior to beginning design and construction activities, make whatever Site investigations the Contractor deems diligent or prudent, and shall take into account all Site conditions which are known to the Contractor, or which could be known to the Contractor with reasonable, diligent, investigation, in planning or executing the work.

18.16. No equitable adjustment to the Contract shall be allowed for Contractor and no change to Contract Price or Contract Time, in the event that during the course of the Work Contractor encounters an existing condition that was not shown on the Contract Documents; or subsurface or concealed conditions at the Site which differ materially from those shown on the Contract Documents and from those ordinarily encountered and generally recognized as inherent in work of the character called for in the Contract Documents; or unknown physical conditions of the Site, of an unusual nature, which differ materially from that ordinarily encountered and generally recognized as inherent in work of the character called for in the Contract Documents.

18.17. Notice of Potential Claim. The Contractor will not be entitled to additional compensation otherwise payable for any act or failure to act by the City, the happening of any event or occurrence, or any other cause, unless he shall have given the City a written notice of potential claim therefore as specified in this Section. The Contractor understands and agrees that the filing of a notice of potential claim in accordance with this article is a condition precedent to recovery of any additional time and/or money as a result of any alleged act or omission of the City and that the failure of the Contractor to strictly comply is deemed a waiver of all claims.

18.18. The Contractor shall provide immediate verbal notification with written confirmation within forty-eight (48) hours of any potential claims and of the anticipated time and/or cost impacts resulting thereof. The written notice of potential claim shall set forth the reasons for which the Contractor believes additional compensation and/or time will or may be due, the nature of the costs involved and the approximate amount of the potential claim. If based on an act or failure to act by the City, such notice shall be given to the City's Representative prior to the time that the Contractor has started performance of work giving rise to the potential claim for additional compensation.

It is the intention of this Article, that differences between the parties arising under and by virtue of the Agreement shall be brought to the attention of the Contract Administrator at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken.

The notice requirements of this Section are in addition to those required in other Section of this Agreement.

The Contractor shall segregate all costs associated with each claim. Failure to segregate costs will be grounds for the City's rejection of the claim.

If the City decides to pay all or part of a claim for which notice was not timely made, the City does not waive the right to enforce the notice requirements in connection with any other claim.

18.19. Inspection and Testing Materials. The inspection and testing of materials and finished articles to be incorporated in the Work shall be made by bureaus, laboratories or agencies experienced in such services. The Contractor shall submit such samples or such special or test pieces of materials as the Contract Administrator may require. The cost of the materials or finished articles which may become damaged or destroyed in making the necessary tests to determine whether or not Specification requirements are met shall be borne by the Contractor. The Contractor shall not incorporate any material or finished article into the Work until the results of the inspections or tests are known and he has been notified by the Contract Administrator that the material or finished article is accepted. All materials must be of the specified quality and be equal to the approved sample, if a sample has been submitted. Materials or finished articles rejected by the Contract Administrator shall be promptly removed from the site of the work.

18.20. Contractor's Compliance with Florida Public Records Law. To the extent that **Contractor** is acting on behalf of the City, as provided under Section 119.011(2), Florida Statutes, this Agreement shall be subject to Florida Public Records Law including, without limitation, Chapter 119, Florida Statutes, as same may be amended from time to time.

As required pursuant to Section 119.0701, Florida Statutes, Contractor shall comply with

public records law, specifically to:

- a. keep and maintain public records that ordinarily and necessarily would be required by the public agency in order to perform the service;
- b. provide the public with access to public records on the same terms and conditions that the public agency would provide the records and at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes or as otherwise provided by law;
- c. ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law; and,
- d. meet all requirements for retaining public records and transfer, at no cost, to the public agency all public records in possession of the contractor upon termination of the contract, and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the public agency in a format that is compatible with the information technology systems of the public agency.

e. IF CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTRACTOR SHOULD CONTACT THE CUSTODIAN OF PUBLIC RECORDS, CITY OF DESTIN, (850) 837-4242, RBAILEY@CITYOFDESTIN.COM

18.21. Contractor's failure to comply with this Section, or to comply with a public records request brought pursuant to this Section or in accordance with the following procedures may be deemed by the City to be an event of default under this Agreement:

- a. A request to inspect or copy public records relating to a city contract for services must be made directly to the City. If the City does not possess the requested records, the City shall immediately notify Contractor of the request, and Contractor must provide the records to the City or allow the records to be inspected or copied within a reasonable time.
- b. If Contractor does not comply with the City's request for records, the City shall enforce these Contract provisions in accordance with the Contract.

A Contractor who fails to provide the public records to the City within a reasonable time may be subject to penalties under s. 119.10.

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IN WITNESS WHEREOF, the parties have set their hands and seal the day and year first above written.

CITY OF DESTIN, FLORIDA

By: _____

ATTEST:

By: _____ (SEAL)
Clerk of the City of Destin, Florida

APPROVED AS TO FORM AND LEGALITY

City Attorney, City of Destin, Florida

CONTRACTOR

By: _____

Printed Name: _____

Title: _____

EXHIBIT A REQUIRED FORMS EXECUTED BY CONTRACTOR

- 1. Anti-Collusion Affidavit**
- 2. Anti-Lobbying Certification**
- 3. Conflict of Interest Form**
- 4. Confirmation of Drug-Free Workplace**
- 5. Federal E-Verify Compliance Certification**
- 6. Procurement Code Acknowledgment ITB**
- 7. Public Entities Crimes Affidavit**
- 8. Truth in Negotiation Certification**

EXHIBIT B CONTRACT CLAUSES FOR FEDERALLY FUNDED PROJECTS

EXHIBIT C COST OF WORK/SCHEDULE OF VALUES

APPENDICES

**APPENDIX I CITY’S REQUEST FOR PROPOSALS RFP NO. 24-01-ENG, PHASE I
UTILITY UNDERGROUND CONVERSION**

**APPENDIX II CONTRACTOR’S PROPOSAL SUBMITTED IN RESPONSE TO CITY’S
RFP NO. 24-01-ENG**

ANTI-COLLUSION AFFIDAVIT

Being first duly sworn deposes and says that:

1. He is the authorized representative of (Company) _____'s attached submittal;
2. He is fully informed respecting the preparation and contents of the attached submittal and of all pertinent circumstances respecting such respondent;
3. Such submittal is genuine and is not collusive or sham bid;
4. Neither the said respondent, nor any of its officers, partners, owners agents, representatives, employees or parties in interest, including this affidavit, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other respondent, firm or person to submit collusive or sham submittal in connection with the contract for which the attached submittal has been submitted or to refrain from responding in connection with such contract, or has in any manner, directly or indirectly sought by agreement or collusion or communication or conference with any other respondent, firm or person to fix any overhead, profit, or cost element of the submittal price of any other respondent to secure through collusion, conspiracy, connivance or unlawful agreement any advantage against City of Destin, or any person interested in the proposed contract; and
5. The submittal in the attached is fair and proper and is not contained by any collusion, conspiracy, connivance, or unlawful agreement on the part of the respondent or any of its agents, representatives, owners, employees, or parties, in interest, including this affiant.

Legal Name of Respondent: _____

Authorized Signature: _____

Name (print or type): _____

Title: _____

Florida Notary Acknowledgment

STATE OF FLORIDA

COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this ____ day of ____, _____, by _____ (Name) as _____ (type of authority, e.g. officer, trustee, attorney in fact) for _____ (name of party on behalf of whom instrument was executed).

Signature of Notary Public - State of Florida

Print, Type, or Stamp Commissioned Name of Notary Public

Personally Known OR Produced Identification

Type of Identification Produced

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents of all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, United States Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Company: _____

Legal Name of Respondent: _____

Authorized Signature: _____

Name (print or type): _____

Title: _____

CITY OF DESTIN CONFLICT OF INTEREST DISCLOSURE FORM

Project: _____

The award of this contract is subject to the provisions of Chapter 112, Florida Statutes. All respondents must disclose within their submittal: the name of any officer, director, or agent who is also an employee of the City of Destin. Furthermore, all respondents must disclose the name of any City employee who owns, directly or indirectly, an interest of more than five percent (5%) in the respondent's firm or any of its branches.

The purpose of this disclosure statement is to give the City the information needed to identify potential conflicts of interest for screening evaluation team members and other key personnel involved in the award of this contract.

The term "conflict of interest" refers to situations in which financial or other personal considerations may adversely affect, or have the appearance of adversely affecting, an employee's professional judgment in exercising any duty or responsibility. The bias such conflicts could conceivably impart may inappropriately affect the goals and policies of City as well as statutory requirements for fair and open procurement of goods and services.

The mere appearance of a conflict may be as serious and potentially damaging as an actual breach of public trust. Reports of conflicts based on appearances can undermine public trust in ways that may not be adequately restored even when the mitigating facts of a situation are brought to light. Apparent conflicts, therefore, should be disclosed and evaluated with the same vigor as actual conflicts.

Please check one of the following statements and attach necessary documents if necessary:

_____ To the best of our knowledge, the undersigned firm has no potential conflict of interest due to any other clients, contracts, or property interest for this project.

_____ The undersigned firm, by attachment to this form, submits information which may be a potential conflict of interest due to other clients, contracts, or property interest for this project.

Legal Name of Respondent: _____

Authorized Signature: _____

Name (print or type): _____

Title: _____

DRUG-FREE WORKPLACE FORM

The undersigned vendor in accordance with the requirements set forth within

Project: _____ Dated: _____

hereby certifies that (Company) _____ does:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are proposed a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

Legal Name of Respondent: _____

Authorized Signature: _____

Name (print or type): _____

Title: _____

FEDERAL E-VERIFY COMPLIANCE CERTIFICATION

In accordance with Executive Order Number 11-116 from the Office of the Governor of the State of Florida, Proposer hereby certifies that the U.S. Department of Homeland Security's E-Verify system will be used to verify the employment eligibility of all new employees hired by the respondent during the contract term, and shall expressly require any subcontractors performing work or providing services pursuant to the contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term; and shall provide documentation such verification to the City upon request.

As the person authorized to sign this statement, I certify that this company complies/will comply fully with the above requirements.

Legal Name of Respondent

Date

Authorized Signature

Title

Company

Phone No.

Street Address

Fax No.

City, State, Zip

Email

**PUBLIC ENTITIES CRIMES AFFIDAVIT
PROCUREMENT CODE ACKNOWLEDGMENT FORM**

As written in the **City of Destin Purchasing Policies and Procedures, Policy 5.2 Section I**: Evaluation of Bids shall take the following into consideration when selecting the Lowest Responsive and Responsible Bidder:

- The character, integrity, reputation, judgment, experience, previous performance, and efficiency of the bidder
- The ability, equipment capacity, financial strength, personnel resources, and skill of the bidder to perform the contract
- The quality, availability, and adaptability of the supplies or contractual services to the particular and required
- The ability of the bidder to provide future maintenance and service for the use of the subject of the contract
- The quality of performance of previous contracts and whether the bidder can perform within the time specified, without delay or interference
- Whether the bidder is a certified minority business enterprise as defined by the Florida Small and Minority Business Assistance Act
- Whether the bidder has a drug free workplace policy in place
- Whether available budgeted funding, as certified by the Finance Director, would cover the amount of the bid
- Whether the bidder holds a valid Business Tax Receipt (BTR) issued by the City of Destin to do business in the City
- Any changes to the contract terms and conditions proposed by the bidder
- And any other factors specified in this ITB

The above criteria will be used by the City's designated Project manager to evaluate all bids. Please acknowledge your understanding of the above evaluation criteria.

Legal Name of Respondent: _____

Authorized Signature: _____

Name (print or type): _____

Title: _____

PUBLIC ENTITIES CRIMES AFFIDAVIT

Sworn statement under section 287.133(3)(a), Florida statutes, on public entity crimes

This form must be signed in the presence of a notary public or other officer authorized to administer oaths.

1. This sworn statement is submitted with a proposal to the Human Services Department.
2. This sworn statement submitted by _____.
(Name of entity submitting sworn statement)

whose business address is _____

and (if applicable) its Federal Employer Identification Number is _____.
3. My name is _____ and my relationship to the entity
(Print name of individual signing)
Named above is _____.
4. I understand that a “public entity crime” as defined in paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
5. I understand that “convicted” or “conviction” as defined in paragraph 287.133(1)(b), Florida Statutes means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1989, because of a jury verdict, non-jury trial, or entry of a plea of guilty or nolo contendere.
6. I understand that an “affiliate” as defined in paragraph 287.133(1)(a), Florida Statutes means:
 - a. A predecessor or successor of a person convicted of a public entity crime; or
 - b. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of public entity crime. The term “affiliate” includes those officers, directors, executives, partners, shareholders, employees, members and agents who are active in the management of the affiliate. The ownership by one person of shares constituting a controlling interest in another person, or pooling of equipment of income among persons when not for fair market value under an arm’s length agreement, shall be prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.
7. I understand that a “person” as defined in paragraph 287.133(1)(e), Florida Statutes means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bids on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term “person” includes those officers, directors, executives, partners, shareholders, employees, members and agents who are active in the management of an entity.

PUBLIC ENTITIES CRIMES AFFIDAVIT (CONTINUED),

8. Based on information and belief, the statement that I have marked below is true in relation to the entity submitting this sworn statement. *(Please indicate which statement below applies).*

- ☐ Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members and agents who are active in the management of the entity, or an affiliate of the entity have been charged with and convicted of a public entity crime after July 1, 1989.
- ☐ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members and agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime after July 1, 1989, AND
(Indicate which additional statement below applies).
- ☐ There has been proceeding concerning the conviction before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. *(Please attach a copy of the final order).*
- ☐ The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. *(Please attach a copy of the final order).*
- ☐ The person or affiliate has not been placed on the convicted vendor list. *(Please attach a written description of an action taken by or pending with the Department of General Services).*

Legal Name of Respondent

Date

Authorized Signature

Title

Florida Notary Acknowledgment

STATE OF FLORIDA

COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this ____ day of ____, _____, by _____ (Name) as _____ (type of authority, e.g. officer, trustee, attorney in fact) for _____ (name of party on behalf of whom instrument was executed).

Signature of Notary Public - State of Florida

Print, Type, or Stamp Commissioned Name of Notary Public

Personally Known OR Produced Identification

Type of Identification Produced

TRUTH IN NEGOTIATION CERTIFICATION

Pursuant to Section 287.055(5)(a), Florida Statutes, for any lump-sum or cost-plus-a-fixed fee professional services contract over the threshold amount provided in Section 287.017, Florida Statutes for CATEGORY FOUR, the City of Destin (City) requires the Consultant to execute this certificate and include it with the submittal of the Technical Proposal, or as prescribed in the contract advertisement.

The Consultant hereby certifies, covenants, and warrants that wage rates and other factual unit costs supporting the compensation for this project's agreement are accurate, complete, and current at the time of contracting.

The Consultant further agrees that the original agreement price and any additions thereto shall be adjusted to exclude any significant sums by which the City determines the agreement price was increased due to inaccurate, incomplete, or noncurrent wage rates and other factual unit costs. All such agreement adjustments shall be made within (1) year following the end of the contract. For purposes of this certificate, the end of the agreement shall be deemed to be the date of final billing or acceptance of the work by the City, whichever is later.

Legal Name of Respondent: _____

Authorized Signature: _____

Name (print or type): _____

Title: _____

EXHIBIT B

CONTRACT CLAUSES FOR FEDERALLY FUNDED PROJECTS

This Exhibit B is incorporated by this reference into the Agreement between Contractor and City (hereafter collectively the “Contract”) and shall be applicable to Work performed under the Contract that is funded in whole or in part through Federal programs, including but not limited to Federal Emergency Management Agency (“FEMA”) grants, and disaster mitigation and reimbursement programs. To the extent of any conflict between the Contract clauses set forth in this Exhibit B and other clauses set forth in the Contract, the clauses of this Exhibit B shall control. Unless otherwise defined below, capitalized terms shall have the meaning assigned to them in the Contract.

1. Equal Employment Opportunity.

a. Race, Color, Creed, National Origin, Sex, Sexual Orientation, Political Affiliation.

Contractor shall comply with U.S. Executive Order 11246 entitled, “Equal Employment Opportunity” as amended by Executive Order 11375 and as supplemented in Department of Labor regulations (41 C.F.R., part 60) and applicable State of Florida regulations as may now exist or be amended in the future. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, national origin, sex, sexual orientation, or political affiliation.

b. Age. In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. §§623, Contractor agrees to refrain from discrimination against present and prospective employees for reasons of age.

c. Disabilities. In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, Contractor agrees that it will comply with the requirements of the U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance.

2. Compliance with the Copeland “Anti-Kickback” Act.

a. Applicability. This section applies to all contracts and subcontracts in excess of \$2,000 for construction or repair.

b. Contractor. Contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. Part 3 as may be applicable, which are incorporated by reference into this Contract. Specifically, Contractor is prohibited from inducing, by any means, any

person employed in the construction, completion, or repair of public works, to give up any part of the compensation to which he or she is otherwise entitled.

c. Subcontracts. Contractor or Subcontractor shall insert in any subcontracts the clause above and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The Contractor shall be responsible for the compliance by any Subcontractor or lower tier Subcontractor with all of these contract clauses.

d. Breach. A breach of the Contract clauses in subsections (b) and (c) above may be grounds for termination of the Contract, and for debarment as a contractor and Subcontractor as provided in 29 C.F.R. § 5.12.

3. Compliance with the Contract Work Hours and Safety Standards Act.

a. Applicability. This section applies to all contracts in excess of \$100,000 that involve the employment of mechanics or laborers as provided in 40 U.S.C. § 3701.

b. Overtime Requirements. No Contractor or Subcontractor contracting for any part of the Work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such Work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

c. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b) of this section Contractor and any Subcontractor responsible, therefore, shall be liable for the unpaid wages. In addition, such Contractor and Subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b) of this section.

d. Health and Safety Standards. Pursuant to 40 U.S.C. § 3704, no contractor or Subcontractor contracting for any part of the Work shall require any laborer or mechanic employed in the performance of the Work to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous to health or safety.

- e. **Withholding for unpaid wages and liquidated damages.** City shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of Work performed by Contractor or Subcontractor under any such Contract or any other Federal contract with the same prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or Subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (c) of this section.
- f. **Subcontracts.** Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b) through (f) of this section and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. Contractor shall be responsible for compliance by any Subcontractor with the clauses set forth in paragraphs (b) through (f) of this section.

4. Environmental Compliance.

- a. Contractor agrees to comply with all applicable standards, orders, regulations, or requirements issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. and the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
- b. Contractor agrees to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to the State of Florida, Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
- c. Contractor further agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FEMA.

5. Compliance with Debarment and Suspension Regulations

- a. This Contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such the Contractor is required to verify that Contractor and none of its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935) or listed on the Office of Federal Contract Compliance (“OFCC”) debarment list. If the status verified hereunder changes during the term of this Contract, or at any time prior to Final Completion, Contractor shall immediately notify City.

- b. Contractor must at all times throughout the period of any Contract comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- c. By executing the Contract, Contractor certifies its compliance with 2 CFR pt 180 subpart C and 2 C.F.R. pt. 3000. Such certification is a material representation of fact relied upon by City. If it is later determined that Contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the State of Florida and City, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. 2 C.F.R. Part 1532.

6. Compliance with Uniform Administrative Requirements.

- a. **Domestic Preferences (2 C.F.R. pt 200.322).** As appropriate and to the greatest extent practicable and consistent with law, Contractor shall provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). “Produced in the United States” means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States. Contractor further agrees to include a provision requiring compliance with such domestic preference in its lower tier covered transactions.
- b. Contractor will comply with all uniform administrative requirements, cost principles, and audit requirements for Federal awards as described in 2 C.F. R. Part 200.
- c. Contractor will comply with the prohibition on Certain Telecommunications and Video Surveillance Services or Equipment pursuant to a 2 C.F.R. pt. 200.216.

7. Compliance with the Byrd Anti-Lobbying Amendment.

Contractors who apply or bid for an award of \$100,000 or more shall file the required certification set forth in Appendix A to 44 C.F.R. Part 18. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non- Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

8. Access to Records.

The following access to records requirements apply to this Contract:

- a. Contractor agrees to provide City, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of Contractor which are directly pertinent to this Contract for the purposes of making audits, examinations, excerpts, and transcriptions.
- b. Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- c. Contractor agrees to provide the FEMA Administrator or his/her authorized representatives' access to construction or other work sites pertaining to the Work being completed under the Contract.
- d. In compliance with the Disaster Recovery Act of 2018, the City and Contractor acknowledge and agree that no language in this Contract is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.

9. Procurement of Recovered Materials.

- a. In the performance of this Contract, Contractor shall make maximum use of products containing recovered materials that are EPA- designated items unless the product cannot be acquired:
 - i. Competitively within a timeframe providing for compliance with the contract performance schedule;
 - ii. Meeting contract performance requirements; or
 - iii. At a reasonable price.
- b. Information about this requirement, along with the list of EPA-designated items, is available at EPA's Comprehensive Procurement Guidelines website, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.

10. DHS Seal, Logo, and Flags.

The Contractor shall not use the Department of Homeland Security (DHS) seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

11. Compliance with Federal Law, Regulations, and Executive Orders.

The Contractor acknowledges that FEMA financial assistance will be used to fund all or a portion of the Work. The Contractor will comply with all applicable federal laws,

regulations, executive orders, DHS and/or FEMA policies, procedures, requirements and directives.

12. No Obligation by Federal Government.

The Federal Government is not a party to this Contract and is not subject to any obligations or liabilities to the non-Federal entity, Consultant, or any other party pertaining to any matter resulting from the Contract.

13. Fraud and False or Fraudulent or Related Acts.

The Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Consultant's actions pertaining to this Contract.

14. DHS Seal, Logo, and Flags.

Contractor shall not use the Department of Homeland Security's ("DHS") or FEMA's or City's seal(s), logos, crests, or reproductions of flags or likenesses of any DHS agency officials without specific FEMA or City's prior written approval.

15. Compliance with the Davis-Bacon Act, (40 U.S.C. §§ 3141-3144 and 3146-3148) as supplemented by Department of Labor regulations at 29 C.F.R. Part 5 (Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction)). See 2 C.F.R. Part 200, Appendix II, ¶ D.

- a. The Davis-Bacon Act only applies to the emergency Management Preparedness Grant Program, Homeland Security Grant Program, Nonprofit Security Grant Program, Tribal Homeland Security Grant Program, Port Security Grant Program, and Transit Security Grant Program. It does not apply to other FEMA grant and cooperative agreement programs, including the Public Assistance Program.
- b. If applicable, in accordance with the statute, the Contractor must pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, the Contractor must pay wages not less than once a week.

Price Proposal/Schedule-of-Values City of Destin - Phase 1 Undergrounding					
No.	Description	Qty.	Units	Unit Price	Total
I. GENERAL					
57-7	Survey, Stakeout & Record Drawings	1	LS	\$80,000.00	\$80,000.00
101-1	Mobilization	1	LS	\$150,000.00	\$150,000.00
102-1	Maintenance of Traffic	1	LS	\$275,000.00	\$275,000.00
				SUBTOTAL	\$505,000.00
II. CLEARING, GRUBBING, RESTORATION, AND SIDEWALK					
104-10-3	Sediment Barrier	5,500	LF	\$3.00	\$16,500.00
110-1-1	Clearing & Grubbing	1	LS	\$150,000.00	\$150,000.00
120-6	Sidewalk Restoration	12,000	SF	\$26.00	\$312,000.00
				SUBTOTAL	\$478,500.00
III. FPL INFRASTRUCTURE					
FPL-630-1-12	FPL Conduit 1PN1C DIRECTIONAL BORE	4,900	LF	\$20.00	\$98,000.00
FPL-630-2-12	FPL Conduit 2PN2C DIRECTIONAL BORE	4,000	LF	\$24.00	\$96,000.00
FPL-630-3-12	FPL Conduit 3PN3C DIRECTIONAL BORE	33,550	LF	\$28.00	\$939,400.00
FPL-630-4-12	FPL Conduit 4PN4C DIRECTIONAL BORE	100	LF	\$32.00	\$3,200.00
FPL-630-6-12	FPL Conduit 6PN6C DIRECTIONAL BORE	16,500	LF	\$36.00	\$594,000.00
FPL-FNC-6-12	FPL Conduit FNC DIRECTIONAL BORE	30,300	LF	\$34.35	\$1,040,805.00
FPL-630-SECDNDY	FPL Secondary Conduit	18,175	LF	\$22.85	\$415,298.75
FPL-635-SB-1	FPL Splice Box (Feeder)	15	EA	\$3,500.00	\$52,500.00
FPL-635-SB-2	FPL Splice Box (Primary)	70	EA	\$1,400.00	\$98,000.00
FPL-635-HH-1	FPL 30" Handhole / Above ground Pedestals	55	EA	\$700.00	\$38,500.00
FPL-FEEDER-CBL	FPL Feeder Cable pull (Wire)	36,000	LF	\$8.00	\$288,000.00
FPL-PRMRY-CBL	FPL Primary cable pull (Wire)	193,000	LF	\$5.85	\$1,129,050.00
FPL SERV CABL	FPL Secondary Cable (Wire)	19,000	LF	\$6.00	\$114,000.00
FPL-635-SWC-1	FPL PME 9/PME 11/Switch Cabinet Installation	54	EA	\$4,000.00	\$216,000.00
FPL-635-TSF-1	FPL Transformer & Pad (SINGLE PHASE)	64	EA	\$1,575.00	\$100,800.00
FPL-635-TSF-1	FPL Transformer & Pad (3-PHASE)	20	EA	\$2,000.00	\$40,000.00
FPL-635-TSF-1	FPL Transformer & Pad (OPEN DELTA)	13	EA	\$2,175.00	\$28,275.00
FPL-635-CAP-1	FPL Capacitor Bank Installation	4	EA	\$4,000.00	\$16,000.00
FPL - PED-1	FPL 3-Phase Pedestals	14	EA	\$1,000.00	\$14,000.00
FPL-635-WH-1	FPL Meter Box Connections	275	EA	\$400.00	\$110,000.00
FPL-UG-CONV	CONVERSION OF CURRENTLY UNDERGROUNDED SERVICES	275	EA	\$600.00	\$165,000.00
FPL-UG-COM CONV	CONVERSION OF COMMERCIAL UNDERGROUNDED SERVICES	155	EA	\$900.00	\$139,500.00
FPL-EASEMENT	COORDINATION OF EASEMENTS	126	EA	\$400.00	\$50,400.00
FPL-EASEMENT SUR	EASEMENT SURVEY	85	EA	\$500.00	\$42,500.00
FPL-OH-CONV	CONVERSION OF AERIAL SERVICES	300	EA	\$1,500.00	\$450,000.00
FPL-UG-CONV	CONVERSION OF UG SERVICES	55	EA	\$1,300.00	\$71,500.00
FPL-MISC/COORD	INCIDENTALS/COORDINATION/MANAGEMENT	1	LS	\$250,000.00	\$250,000.00
FPL-SWITCHING	SWITCHING/FPL COORDINATION	1	LS	\$160,000.00	\$160,000.00
				SUBTOTAL	\$6,760,728.75
IV. CARRIERS					
CARRIER C-01	(4) 2" Conduit DIRECTIONAL BORE "COX" (Install)	18,500	LF	\$32.00	\$592,000.00
CARRIER C-02	(3) 2" Conduit DIRECTIONAL BORE Unit Fiber (Install)	17,000	LF	\$28.75	\$488,750.00
CARRIER C-03	(3) 2" Conduit DIRECTIONAL BORE Century Link (Install)	17,000	LF	\$28.75	\$488,750.00
CONDUIT-01	(1) 2" Conduit HDPE (Furish)	18,500	LF	\$2.50	\$46,250.00
CONDUIT-02	(2) 2" Conduit HDPE (Furnish)	18,500	LF	\$4.00	\$74,000.00
CARRIER-COORD	COORDINATION	1	LS	\$40,000.00	\$40,000.00
BOND-001	BONDING OPTIONAL ITEMS	1	LS	\$40,000.00	\$40,000.00
				SUBTOTAL	\$1,769,750.00
V. CARRIERS					
FPL-SL-001	FPL STREETLIGHT (1) 2" Conduit DIRECTIONAL BORE	32,000	LF	\$20.00	\$640,000.00
FPL-SL-002	FPL STREETLIGHT (2) 2" Conduit DIRECTIONAL BORE	32,000	LF	\$5.00	\$160,000.00
FPL-SL-SB	Install 24"x16" Splice Box	150	EA	\$400.00	\$60,000.00
FPL-SL-COORD	COORDINATION	1	LS	\$40,000.00	\$40,000.00
				SUBTOTAL	\$900,000.00
VI. B					

LIMITED NOTICE TO PROCEED

via electronic mail
juan@jmunderground.net

TO: Accurate Drilling Systems Inc.
FROM: City of Destin, FL
DATE: June 4, 2024
SUBJECT: RFP 24-01-ENG Utility Undergrounding Phase 1
Contract by and Between City of Destin, Florida and Accurate Drilling Systems Inc. dated June 4, 2024 (the Contract).

On June 4, 2024, Accurate Drilling Systems Inc. (ADS) received its executed Contract with the City of Destin for the project listed above.

ADS is hereby notified to establish site control of the material laydown yard at 108 Sibert Ave. Destin Florida to receive and secure materials, and may begin work on survey, stakeout, record drawings and mobilization.

The total cost of work performed under this LNTP shall not exceed \$230,000 and shall be billed from Line Item 57-7 Survey, Stakeout & Record Drawings and 101-1 (Mobilization) in the Schedule of Values which is Exhibit C in the Contract.

The Full Notice to Proceed will follow once all other necessary contracts and permits have been obtained.

Please acknowledge receipt of this LNTP by completing and signing the space below and returning a copy to this office. Please advise if there are any questions.

Sincerely,

Louis Zunguze
City Manager
City of Destin, FL

Acceptance of Notice/Receipt of the above Notice to Proceed is hereby acknowledged by:

ADS

this _____ day of _____, 2024.

BY: _____
Juan Martinez, Project Manager

CITY OF DESTIN



AGENDA ITEM

COUNCIL MEETING DATE: June 3, 2024

TYPE OF AGENDA ITEM: City Manager Report

AGENDA OUTLINE NUMBER: 4.F.

TO: City Council

THRU: Kimberly Kopp, City Attorney
Louis Zunguze, City Manager

FROM: Lisa Firth, Parks & Rec Director
Krystal Strickland, Finance Director

DATE: May 28, 2024

SUBJECT: Parks and Recreation Cost Recovery Policy

I. BACKGROUND: The Cost Recovery Policy is a customized method for determining fees associated with programs and services provided by the City, through the Parks & Recreation Department. The most widely accepted model being used across the United States by public Parks & Recreation providers and endorsed by the National Recreation and Parks Association is the cost recovery methodology. To be clear, cost recovery does not imply that the goal is to recuperate all expenses associated with the delivery of programs and services; rather, it is a method that establishes recovery targets from zero to 100% recovery rates based on several considerations (filters) that are deemed to be important to the citizenry. In other words, programs and services that primarily benefit the community of Destin as a whole are heavily subsidized by the citizens through ad valorem property taxes.

	FY 2018 ACTUALS	FY 2019 ACTUALS	FY 2020 ACTUALS	FY 2021 ACTUALS	FY 2022 ACTUALS	FY2023 ACTUALS	2024 PROJECTION	FY 2025 PROPOSED BUDGET	FY 2026 PROJECTION
ANNUAL AMOUNT COVERED BY PROPERTY TAXES	\$ 1,136,369	\$ 1,139,645	\$ (805,936)	\$ 334,704	\$ 2,223,288	\$ 2,107,302	\$ 2,848,163	\$ 5,997,227	\$ 3,844,450
TOTAL PROPERTY TAXES COLLECTED	6,939,210	7,377,569	7,883,186	8,260,575	8,722,578	9,960,090	11,023,809	12,013,620	12,373,800
% OF PROPERTY TAXES	16%	15%	-10%	4%	25%	21%	26%	50%	31%

Attached is a trend report showing revenues and expenditures for major park and recreation categories from FY 2018 to FY 2029. Personnel (especially benefit) costs have nearly doubled over the past three years. Operating expenses have also increased significantly, primarily due to property insurance increases.

II. DISCUSSION: Cost recovery policy is used to determine the amount charged for programs, rentals and services provided by the Parks and Recreation Department. The current policy recommends fees set to collect 50% of direct costs for children and senior programs for residents

and to charge a fee 50% higher for non-residents. Preliminary analysis shows that 90% of the programs at Morgan's, and the Community Center (including Buck Destin), are for children and seniors. In addition, the current policy recommends fees to collect 100% of direct costs for adult programs for residents, and to charge a fee 100% higher for non-resident adults.

Staff is asking for directions about any changes the council would like to make to this policy. Listed are fees that are inconsistent with the policy:

* Joe's Bayou Services in the policy reads
Residents' Annual Launch Pass is \$30. Additional passes \$50 each for residents. Fees charged are free to residents for the first pass. The non-Residents Annual Pass reads \$200, fees charged are \$205.
The daily fee reads \$15 per launch, fees charged are \$25.

* Senior programs are listed in the policy to recover 50%.
The Destin Seniors that join our senior program at Buck Destin are 100% covered by the city.

Staff request clarification from the Council if we should include allocable costs, such as utilities and property insurance for adult programs and rentals in the fee calculations.

A. Link to Strategic Goals / Objectives: I. Financially sound city providing service excellence

II. Enhanced quality of life and safety for families

B. Effect on Budget (EOB): Increase of revenue.

C. Level of Service (LOS):

D. Legislative Sponsor:

III. CONCLUSION: The Approved policy is attached

IV. RECOMMENDED MOTION: Council to direct staff of any changes

Attachments:

1. Cost Recovery
2. Cost Recovery Attachment
3. Parks and Recreation Trend

CITY OF DESTIN COST-RECOVERY POLICY

The following policy, effective October 1, 2014, is a guide for identifying subsidy and fee levels for each program and service provided by the Destin Parks & Recreation Department. Cost recovery levels are based on the perceived amount of community benefit that each program or service provides to our community as a whole.

1) **Public Interest** – The public has an interest in the availability of a broad range of public recreation programs and services that encourage good health, lifelong learning, respect for the environment, and a sense of community.

2) **Balance of benefits** – Benefits of participation in public recreation accrue to both the participant and to the community as a whole therefore, it is appropriate that recreation programs and services be funded by a balance of participant/user fees and public resources.

3) **General Cost recovery goals** – The cost recovery goals express a balance of public and personal benefits and are segmented into the broad demographic groups that follow:

- **Individual Benefit Level: 100% of costs borne by the user/participant:**

Program and Services that primarily benefit the participant, user or sponsoring organization shall be designed to recover at least 100% of the total costs.

- **Merit Level: 50% of direct costs borne by the participant:**

Programs and services that provide shared community and individual benefit including all youth and senior programs shall be designed to recover at least 50% of their direct costs.

- **Community Benefit Level: All costs borne by the City:**

Programs and services that substantially benefit the community as a whole shall not recover costs.

3b) **Specific Cost recovery goals** – Specific goals for this program include:

1. **Youth:** Pricing for youth programs shall be set to recover at least 50% of the direct costs.
 - a. Nonresident youth fees shall be 50% higher than the resident fee for each program.
2. **Seniors:** Pricing for senior programs shall be set to recover at least 50% of the direct costs.

- a. Nonresident senior fees shall be 50% higher than the resident fee for each program.
- 3. **Adults:** Pricing for adult programs shall be set to recover 100% of the total costs.
 - a. Nonresident adult fees shall be double the resident fee for each program.
- 4. **Rentals:** Pricing for commercial rentals shall be set to recover at least 100% of total costs.
- 5. **Services:** Pricing for services that primarily benefit the individual users shall be set to recover 100% of the total costs. Effective January 1, 2015 the following fees for services will be implemented at Joe's Bayou Launch and Recovery facility:
 - a. Residents: Annual Launch Pass \$30. Additional passes \$50 each.
 - b. Nonresidents: Annual Launch Pass \$200 each.
 - c. Daily Fee: \$15 per launch

4) **Inclusion** – Destin Parks & Recreation Department shall provide reasonable accommodation to individuals with special needs that enables them to participate in programs. Inclusive services may prevent programs from achieving their cost recovery goal because of the associated costs.

5) **Financial assistance for youth and seniors** - Destin Parks & Recreation Department shall adhere to the cost recovery goals outlined herein, while seeking to ensure that economically challenged youth and senior wishing to participate in core programs are afforded that opportunity by cultivating volunteerism, partnerships, sponsorships, philanthropic programs and scholarships programs.

6) **Updating of goals** – Cost recovery goals shall be evaluated annually, and revised as needed.

7) **Compliance with budget** – Notwithstanding the policy goals for cost recovery described above, the department's first responsibility in organizing and pricing recreation programs and services is to operate within the budget approved by the City Council.

**ACTION AGENDA; REGULAR MEETING; DESTIN CITY COUNCIL; AUGUST 4, 2014;
ANNEX COUNCIL CHAMBERS; 6:00 PM (EXCERPT)**

20. Cost recovery – Parks and Recreation

Motion to approve the cost recovery policy as outlined, and direct the City Manager to incorporate the policy into the Fee Resolution passed 6-0.



Parks & Recreation Department

4200 Indian Bayou Trail | Destin, FL 32541 | Phone: 850-837-4242 | Fax: 850-650-9250 | www.cityofdestin.com

Cost Recovery, Executive Summary

Authority

Authority to establish recreation fees is stated in Ordinance 15-7-B which states:

The city shall levy fees for recreational activities that utilize public property including, but not limited to, arts and crafts, league/team activities, adult field sports, field usage, and specialty activities (video games, board games, etc.). The amount of the recreation fee required is calculated per participant and/or area/facility, and as established by resolution of the city council.

Purpose

1. Consistency, Transparency and Sustainability:
 - a. Memorializing a process that consistently calculates resident and non-resident user fees will enable the City to consistently apply/explain the process and will help the City to sustain its core recreational programs and services.
2. Equitability:
 - a. By segmenting programs & services into three groups based on the degree to which each benefits the community as a whole the City can equitably determine how much of the associated costs, if any, should be borne by the users/participants . (highest community benefit = lowest fees)
 - i. **Community Benefit Segment (the foundation of the pyramid) Costs borne by the City:**
 1. Programs/services that provide benefit to the community as a whole.
 - ii. **Merit Segment (the center of the pyramid) Costs shared by the city & the participant:**
 1. Programs/services that provide substantial community and some individual benefit or
 2. Provide programs/services to targeted segments such as youth and/or seniors.
 - iii. **Individual Benefit Segment (the top of the pyramid) Costs borne by the user/participant :**
 1. Program/Services that primarily benefit the individual participants or sponsoring organizations.

GENERAL COMMUNITY BENEFIT COST RECOVERY MODEL



Recommended Destin-Customized Cost-Recovery Model

LEVEL 3: INDIVIDUAL BENEFIT PROGRAMS/SERVICES

Recover All Related Expenses*

All Adult Sports Leagues: Softball, Football, Kickball, Basketball...

All Adult Recreation Programs

All Trip/Travel Programs

All Non-Introductory Adult Lessons: Golf, Tennis...

All Commercial (For-Profit) Rentals

All Specialized Services That Primarily Benefit Individual Users: Boat Launch & Recovery (see p3)

**Minimally, cost-recovery could exceed 100% for some events such as commercial rentals.*

Non-Resident Fees for City run Level 3 programs will be twice the Resident Fee

LEVEL 2: MERIT PROGRAMS/SERVICES

Recover at least 50% of Direct Expenses

All Senior Recreational & Educational Programs.

All Senior Sports Activities Except Individual Lessons.

All Youth Recreational & Educational Programs.

All Youth Sports Programs Except Specialized Camps/Lessons.

**Staff expenses for travel programs will be determined on an individual program basis.*

Non-Resident Fees for City run youth & senior programs will be 50% higher than Resident Fees

LEVEL 1: COMMUNITY BENEFIT PROGRAMS/SERVICES

No Recovery of Expenses Required

All Community Special Events* Including: Holiday Tree Lighting Ceremony, Holiday Decorating Contest, Christmas Parade, Community Easter Egg Hunt, Family Independence Day Celebration, Independence Day Fireworks.

Non-supervised, non-organized personal use of a park during normal operating hours for recreation purposes such as: picnicing, jogging/walking tracks, family gatherings of less than 20, non-commercial beach use.

Age appropriate use of playgrounds under adult supervision.

**Sponsorships and private donations will continue to be solicited for these events.*

Level 3 Services

Input obtained during council briefings was overwhelmingly in favor of recovering more of the costs associated with operating our launch and recovery facility (a level 3 service) while maintaining a significant benefit for resident users of the service. The following changes summarize the comments received and are being recommended for inclusion into the city's fee resolution taking effect on October 1, 2014.

- 1st Resident Annual Launch Pass: Increase fee from \$0.00/per year to \$30.00/per calendar year. 50.00
- Additional Resident Launch Pass: Increase from \$30/per year to \$50/per calendar year. 50.00
- Non-Resident Annual Pass (each): Increase from \$100/per year to \$200/per calendar year. increase
- Daily Launch Fee: Increase from \$10/per day to \$15/per day. 25.

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	2024	FY 2025 PROPOSED	FY 2026	FY 2027	FY 2028	FY 2029
	ACTUALS	ACTUALS	ACTUALS	ACTUALS	ACTUALS	ACTUALS	PROJECTION	BUDGET	PROJECTION	PROJECTION	PROJECTION	PROJECTION
COMMUNITY CENTER FEES	112,326	101,985	59,823	84,187	114,775	150,374	173,405	160,000	163,250	166,560	169,950	173,400
TOTAL COMMUNITY CENTER REVENUE	112,326	101,985	59,823	84,187	114,775	150,374	173,405	160,000	163,250	166,560	169,950	173,400
COMMUNITY CENTER PERSONNEL	327,412	386,153	368,582	375,210	463,748	455,766	606,338	786,323	816,990	848,860	882,010	916,490
COMMUNITY CENTER CONTRACTS	24,897	24,818	20,370	15,613	28,101	14,188	18,767	30,300	31,490	32,740	34,030	35,370
COMMUNITY CENTER OPERATIONS	94,562	92,826	83,563	122,660	159,570	218,725	242,412	257,987	258,604	265,230	272,040	279,050
*TOTAL COMMUNITY CENTER EXPENDITURES	446,872	503,797	472,516	513,483	651,419	688,679	867,516	1,074,610	1,107,084	1,146,830	1,188,080	1,230,910
COMMUNITY CENTER NET (REV - EXP)	(334,546)	(401,813)	(412,692)	(429,295)	(536,644)	(538,305)	(694,111)	(914,610)	(943,834)	(980,270)	(1,018,130)	(1,057,510)
% EXP COVERED BY REV	25%	20%	13%	16%	18%	22%	20%	15%	15%	15%	14%	14%
*community center expenditures include programs at Buck Destin Senior Center												

MORGANS SPORTS COMPLEX FEES	135,721	123,514	120,731	127,405	151,039	123,894	184,778	125,000	128,750	132,610	136,590	140,680
MORGANS SPORTS COMPLEX DONATIONS	21,715	21,625	-	-	-	-	-	-	-	-	-	-
TOTAL MORGANS REVENUES	157,436	145,139	120,731	127,405	151,039	123,894	184,778	125,000	128,750	132,610	136,590	140,680
MORGANS PERSONNEL	299,962	265,644	256,186	254,822	281,105	391,152	512,596	629,922	654,520	680,100	706,710	734,360
MORGANS CONTRACTS	13,588	21,645	12,076	21,735	20,173	6,329	32,959	55,100	56,750	58,460	60,210	62,020
MORGANS OPERATIONS	126,698	150,554	113,136	153,432	170,570	245,759	324,732	318,794	322,173	330,410	338,900	347,650
MORGANS CAPITAL EQUIPMENT	-	-	-	-	-	-	-	-	50,000	-	-	-
MORGANS CAPITAL INFRA/LAND	-	-	-	-	-	-	200,000	26,000	450,000	150,000	2,000,000	140,000
TOTAL MORGANS EXPENDITURES	440,248	437,843	381,398	429,988	471,849	643,240	1,070,287	1,029,816	1,533,443	1,218,970	3,105,820	1,284,030
MORGANS NET (REV - EXP)	(282,812)	(292,705)	(260,667)	(302,583)	(320,809)	(519,345)	(885,510)	(904,816)	(1,404,693)	(1,086,360)	(2,969,230)	(1,143,350)
% EXP COVERED BY REV	36%	33%	32%	30%	32%	19%	17%	12%	8%	11%	4%	11%

PARKS FEES (JOE'S)	93,773	103,905	122,460	104,346	95,441	116,792	119,011	54,200	104,480	106,570	108,710	110,880
PARKS FEES (HENDERSON)	13,770	12,780	12,840	18,624	17,905	17,802	16,915	17,000	17,170	17,340	17,510	17,690
PARKS IMPACT FEES	-	-	-	120,162	29,629	64,869	39,858	20,000	20,000	20,000	20,000	20,000
PARKS DONATIONS	7,238	4,834	2,078,058	591	6,426	1,662	5,341	2,200	2,200	2,200	2,200	2,200
PARKS OP GRANTS	290,754	322,944	348,531	433,746	509,146	588,973	1,034,737	795,131	819,572	847,320	874,560	879,070
PARKS CAPITAL GRANTS	19,223	27,188	50,117	9,249,744	826,442	8,030,248	1,491,175	5,430,450	562,600	562,600	562,600	562,600
TOTAL PARKS REVENUES	424,757	471,650	2,612,006	9,927,213	1,484,988	8,820,346	2,707,038	6,318,981	1,526,022	1,556,030	1,585,580	1,592,440
PARKS PERSONNEL	602,283	648,564	727,222	840,164	959,886	1,015,237	1,319,323	1,674,056	1,738,090	1,804,610	1,873,740	1,945,570
PARKS CONTRACTS	4,070	28,244	28,867	32,025	15,425	21,140	162,466	66,720	68,360	70,050	71,790	73,570
PARKS OPERATIONS	251,104	172,457	154,358	406,971	468,620	639,259	585,395	507,912	512,267	526,270	540,730	555,620
PARKS CONTRACTS (HENDERSON)	-	-	-	30,220	25,236	22,594	20,834	30,000	30,900	31,830	32,780	33,760
PARKS - CONTRIBUTIONS (EXP)	-	-	-	25,000	2,272	-	-	-	-	-	-	-
PARKS CAPITAL EQUIPMENT	14,674	27,188	35,232	53,598	27,230	28,900	117,082	80,000	-	-	-	-
PARKS CAPITAL INFRA/LAND	14,899	-	144,876	8,039,413	1,298,097	8,080,146	1,536,482	7,859,993	385,948	647,390	754,216	681,835
SPECIAL EVENTS CONTRACTS	26,090	26,032	27,109	25,617	30,338	31,678	50,160	206,000	212,180	218,540	225,090	231,840
SPECIAL EVENTS OPERATIONS	6,547	14,293	11,646	20,058	23,719	29,794	18,186	72,100	74,200	76,370	78,590	80,880
RECREATION CAPITAL INFRA/LAND	-	-	-	-	-	-	-	1	-	-	-	-
COMMUNITY CENTER INFRA/LAND	-	-	-	-	-	-	115,501	-	-	-	-	-
RECREATION INFRA/LAND	24,100	-	-	-	-	1,250	50,150	-	-	-	-	-
DALTON THREADGILL INFRA/LAND	-	-	3,400	56,975	-	-	-	-	-	-	-	-
TOTAL PARKS EXPENDITURES	943,768	916,778	1,132,710	9,530,039	2,850,822	9,869,999	3,975,579	10,496,782	3,021,945	3,375,060	3,576,936	3,603,075
PARKS NET (REV - EXP)	(519,010)	(445,128)	1,479,295	397,174	(1,365,834)	(1,049,652)	(1,268,542)	(4,177,802)	(1,495,923)	(1,819,030)	(1,991,356)	(2,010,635)
% EXP COVERED BY REV	45%	51%	231%	104%	52%	89%	68%	60%	50%	46%	44%	44%

ANNUAL AMOUNT COVERED BY												
PROPERTY TAXES	\$ 1,136,369	\$ 1,139,645	\$ (805,936)	\$ 334,704	\$ 2,223,288	\$ 2,107,302	\$ 2,848,163	\$ 5,997,227	\$ 3,844,450	\$ 3,885,660	\$ 5,978,716	\$ 4,211,495
TOTAL PROPERTY TAXES COLLECTED	6,939,210	7,377,569	7,883,186	8,260,575	8,722,578	9,960,090	11,023,809	12,013,620	12,373,800	12,744,900	13,127,000	13,520,700
% OF PROPERTY TAXES	16%	15%	-10%	4%	25%	21%	26%	50%	31%	30%	46%	31%

CITY OF DESTIN



AGENDA ITEM

COUNCIL MEETING DATE: June 3, 2024

TYPE OF AGENDA ITEM: City Manager Report

AGENDA OUTLINE NUMBER: 4.G.

TO: City Council

THRU: Krystal Strickland, Finance Director
Kimberly Kopp, City Attorney
Louis Zunguze, City Manager

FROM: Lisa Firth, Parks & Rec Director

DATE: May 28, 2024

SUBJECT: Parks and Recreation Fee Schedule

I. BACKGROUND: Fee changes to the Parks and Recreation fee schedule to align with the cost recovery policy

II. DISCUSSION: Fee changes to approve are:

Special Event permits increased.

Park rentals Non-refundable /deposit fee changed to a range. (deposit fee is a fee charged to hold the event date and to cover cleaning fees)

Non-resident rentals increased by double the resident rate

Alcoholic beverage permit fee increased. (permit for Clement Taylor Park only)

Weddings fee increased to \$500 per 2 hours (Shore at Crystal Beach only)

A range added for field prep

Batting Cage light fee added

Joe's Bayou fee of \$50 and \$30 added for a resident

Employee per hour fee increased to \$30.

A. Link to Strategic Goals / Objectives: I. Financially sound city providing service excellence

II. Enhanced quality of life and safety for families

B. Effect on Budget (EOB): Increase in revenue

C. Level of Service (LOS):

D. Legislative Sponsor:

III. CONCLUSION: Fees are updated to align with the increase of direct costs. Fee schedule attached to show fees at this time and recommended new fees.

IV. RECOMMENDED MOTION: Approve the changes to the parks and recreation fee schedules

Attachments:

1. Fee Schedule

ATTACHMENT A - Schedule of Fees

Section 1 Culture and Recreation: Library, Parks, Sports Complex, Community Center

Section 2 Building and Developers: Building Permits, Developer fees, Impact fees, Right-of-Way permits, Engineering, and Map fees

Section 3 Licenses and Permits: Business Tax Receipts (aka business licenses), Rental Registration (LTR/STR), Livery Permits, Vendor Permits, Marine Application Fees, Code Violations

Section 4 Miscellaneous: Parking Fees and Fines, Clerk's Office, Cemetery, Election Qualifying Fees

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Section 1 Culture and Recreation

Fees to utilize specific recreational facilities to continue the operations and improvements of the park area. Fees are established for reservations and permits of recreational and park facilities to provide a user fee for programs wherever applicable within the City and to establish procedures for the collection of such fees.

347100 LIBRARY SERVICE FEES

Fees collected for library membership and services

Responsible Department: Library

MEMBERSHIP FEES (RESOLUTION 01-27)

Okaloosa County Residents	No charge
In-network, non-resident*	\$40 per family per year
6-month out-of-network, non-resident	\$30 per person
12-month out-of-network, non-resident	\$60 per person

*In-network areas include the other 15 counties in the Panhandle Library Access Network (PLAN) <https://www.plan.lib.fl.us/about-us/>

SERVICE FEES

Lost items	Replacement cost
Sand in book/damaged cover	\$3 re-wrap fee
Local fax	\$1 per page
Long-distance fax	\$2 per page
Printing – black and white	\$0.15 per page
Printing – color	\$0.25 per page
Replacement video case	\$1.00
Replacement audiobook case	\$3.00

347200 PARK AND RECREATION FEES

Fees collected for any type of program open to the public that is not athletic.

Code Reference: Florida Statutes 166.201

Responsible Department: Parks & Recreation

SPECIAL EVENT PERMITS (ALL PARKS)

Ordinance 15-40 § (c-h) requires all groups of 20 or more wishing to hold events in City parks to obtain a permit from the City in advance of the event.

<u>Number in Party</u>	<u>Resident Fee / Non-Resident Fee</u>
Groups less than 20	No fee required
Groups 21-49	\$100 50 fee per day / \$200 fee per day
Groups 50-99	\$2100 fee per day / \$400 fee per day
Groups 100-499	\$500 250 fee per day / \$1,000 fee per day
Groups 500+	\$1,000 500 fee per day / \$2,000 fee per day

DEWEY "BUCK" DESTIN PARK

Non-profit groups and resident family gatherings (per four-hour increment)

Building use, groups 1-25	\$30 + \$25 <u>to \$100 non-refundable</u> cleaning fee
Building use, groups 26-50	\$55 + \$50 <u>40</u> + \$50 <u>to \$100 non-refundable</u> cleaning fee
Instructional classes	\$2 <u>to</u> \$40 per participant, per course <u>up to 12 weeks</u>

Private groups or organizations or non-resident gatherings (per four-hour increment)

Building use, groups 1-25	\$30-60 + \$25 <u>to \$100 non-refundable</u> cleaning fee, <u>per event</u>
Building use, groups 26-50	\$55-80 + \$50 <u>to \$100 non-refundable</u> cleaning fee, <u>per event</u>
Instructional classes	\$4 <u>to</u> \$80 per participant, per course

CLEMENT TAYLOR PARK

Pavilion rental limited to groups of 100 or less

Alcoholic beverage permit	\$200 <u>150.00</u> per day <u>+ \$50 cleaning fee</u>
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Non-profit groups and resident family gatherings (per four-hour increment)

Groups 1-25	\$20-40 + \$25 <u>to \$100 non-refundable</u> cleaning fee
Groups 26-100	\$30-50 + \$50 <u>to \$200 non-refundable</u> cleaning fee

Private groups or organizations or non-resident gatherings (per four-hour increment)

Groups 1-25	\$30-80 + \$25 <u>to \$100 non-refundable</u> cleaning fee
Groups 26-100	\$60-100 + \$50 <u>to \$200 non-refundable</u> cleaning fee

LEONARD DESTIN PARK

Pavilion rental limited to groups of 20 or less, per four hour increment

Groups 1-20, Resident	\$50 <u>per 4 hours</u> + \$50 cleaning fee <u>\$25 to \$100 non-refundable cleaning fee</u>
Groups 1-20, Non-Resident	\$100 <u>per 4 hours</u> + \$25 to \$100 non-refundable cleaning fee <u>\$50 cleaning fee</u>

WEDDINGS

Shore at Crystal Beach	\$500 per 2 hours + \$100 <u>non-refundable</u> cleaning fee <u>(non-refundable)</u>
------------------------	--

Section 1: Culture and Recreation

347260 JOE'S BAYOU RECREATION FEES

Fees collected for boating activities.

Code Reference: Florida Statutes 166.201

Responsible Department: Parks & Recreation

Residential daily launch/recovery fee	\$25 per trailer
Commercial daily launch/recovery fee	\$25 per trailer
Resident/non-commercial annual launch/recovery fee	\$0-50 per household (1 pass)
	\$0-30 per senior household, 65+ (1 pass)
	\$50 per additional pass
Non-resident/non-commercial	\$205 per household per year
Destin based commercial launch	\$1,030 per year
Commercial launch, non-Destin	\$2,060 per year
Pump out fee, Destin resident	No charge
Pump out fee, non-resident	\$55 -per usage

347265 HENDERSON BEACH STATE PARK FEES

Fees for the use of Henderson Beach State Park

Code Reference: Florida Statutes 166.201

Responsible Department: Parks & Recreation

Daily entrance pass	\$30 per household (1 per household)
	\$25 per senior household, 65+ (1 per household)

347550 MORGAN'S SPORTS CENTER CHILDREN'S PARKS

Monies collected for events held at the children's park.

Responsible Department: Parks & Recreation

PICNIC AREA

~~Non-profit groups and resident family gatherings (per four hour increment)~~

Groups 1-25	\$15 + \$25 cleaning fee
Groups 26-100	\$30 + \$50 cleaning fee

~~Private groups or organizations or non-resident gatherings (per four hour increment)~~

Groups 1-25	\$30 + \$25 cleaning fee
Groups 26-100	\$55 + \$50 cleaning fee

PAVILION AREA

Non-profit groups and resident family gatherings (per four-hour increment)

Groups 1-25	\$30-40 + \$25 to \$100 non-refundable cleaning fee
Groups 26-100	\$55-60 + \$50 to \$200 non-refundable cleaning fee

Section 1: Culture and Recreation

Commercial, private groups or organizations or non-resident gatherings (per four-hour increment)

Groups 1-25	\$ 55-80 + \$25 to \$100 non-refundable cleaning fee
Groups 26-100	\$ 85-120 + \$50 to \$200 non-refundable cleaning fee

347220 MORGAN'S SPORTS ~~COMPLEX-CENTER/DESTIN SPORTS COMPLEX (DESTIN ELEMENTARY SCHOOL)/DALTON THREADGILL~~

Fees collected for a variety of sporting activities such as football, soccer, cheerleading, softball.

Code Reference: Florida Statutes 166.201

Responsible Department: Parks & Recreation

Group activities and special events outside the athletic fields

Single-day event, no concessions	\$50 - \$515 to \$2,000
Single-day event, with concessions	\$50 - \$515
Alcoholic beverages permit	\$150.00 per vendor/per day
Vendor fee for tournaments and special event vendors	\$30-50 per vendor/per day, no hookups
Special event application fee	\$25 non-refundable
Gate/admission fee	15% of gross paid to the city

City Programs – Resident ~~League activities, camps, and / instructional classes~~ ~~(residents)~~

City – adult activities programs	\$15 to- \$100 200
City – youth programs activities	\$15 to- \$100 200
Adult instructional classes	\$5 - \$35 per participant (max 10 hours)
Youth instructional classes	\$5 - \$20 per participant (max 10 hours)
Senior programs	\$2 to- \$100
Daily user fee	\$2-\$20

League activities/instructional classes (non-residents)

City – adult programs activities	\$30 to- \$200
City – youth programs activities	\$20 to- \$150
Adult instructional classes	\$10 - \$70 per participant (max 10 hours)
Youth instructional classes	\$5 - \$35 per participant (max 10 hours)
Daily user fee	\$3-5 to- \$40

Section 1: Culture and Recreation

EXPERT INSTRUCTORS (Services the City cannot offer)

RECREATIONAL/INSTRUCTIONAL CLASSES – CONTRACTUAL LEADERSHIP

FEES RECEIVED FROM INDIVIDUALS PARTICIPATING IN CITY SPONSORED PROGRAMS, ACTIVITIES or CLASSES THAT ARE FACILITATED BY NON-CITY EMPLOYEES WITH EXPERTISE IN THAT PARTICULAR AREA. (EG. AEROBICS, FLY-FISHING, DANCE...) PERCENTAGE BASED ON SKILL LEVEL OF THE INSTRUCTOR, ASSISTANCE REQUIRED FROM CITY STAFF AND FACILITY/EQUIPMENT/SUPPLIES MAY BE FURNISHED BY THE CITY. THIS STRUCTURING WILL ALLOW THE DEPARTMENT TO EXPAND PROFESSIONALLY LEAD PROGRAMMING FOR YOUTH, TEENS, ADULTS AND SENIORS WHILE GENERATING ADDITIONAL REVENUES FOR THE CITY. THE INCREASE IN REVENUES WILL BE DEPENDENT ON THE NUMBER OF PROGRAMS OFFERED AND THE PERCENTAGE AGREED UPON. THIS IS A WIDELY USED MODEL IN PARKS & RECREATION AGENCIES NATIONWIDE THAT TAPS INTO COMMUNITY RESOURCES THAT COULD OTHERWISE NOT BE AFFORDABLE TO THE AGENCY.

Options	Percentage of fees retained by the city	Percentage of fees retained by the facilitator
Split 1 – City provides material	60%	40%
Split 2 – Instructor only	50%	50%
Split 3 – Instructor provides material	40%	60%
Split 4 – School Fundraiser	20%	80%

~~DESTIN ELEMENTARY SCHOOL~~ SPORTS FIELD FEES Administrative charges

Personnel cost for hours other than normal hours of operations	\$20-30 per hour per employee
League/activity sponsorship	\$30 to \$1,000
Holiday/holiday weekend hours	\$30 per hour per employee
Application fee	\$25 per event

FIELD RENTALS (~~Non-profit/Resident~~)(~~NON-TOURNAMENT PLAY~~) Non-profit

Field rental 1-25 users	\$20-25 per field per hour w/o lights
Field rental 1-25 users	\$35-45 per field per hour with lights
Lining Additional field prep/set up 1-25 users	\$20 to- \$50 per field per occurrence
Field rental 26+ users	\$40-45 per field per hour w/o lights
Field rental 26+ users	\$55-65 per field per hour with lights
Lining/set up 26+ users Sports equipment usage	\$20-\$50 per field per occurrence \$25 to \$40
Non-refundable deposit/cleaning fee	\$25 -to \$500 per field per day
Batting Cage Electricity	\$10 per hour

COMMERCIALField Rentals (commercial/Non-Resident)

Field rental 1-25 users	\$35-50 per field per hour w/o lights
Field rental 1-25 users	\$50-90 per field per hour with lights
Lining/set up 1-25 users	\$20 to- \$50 per field per occurrence
Field rental 26+ users	\$70-90 per field per hour w/o lights
Field rental 26+ users	\$95-130 per field per hour with lights
Lining/set up 26+ users	\$25 to \$40 \$20-\$50 per field per occurrence
Non-refundable deposit/cleaning fee	\$25 -to \$500 per field per day
Batting Cage Electricity	\$20 per hour

FIELD RENTALS (TOURNAMENT FUNCTIONS)—UP TO 12 HOURS Non-profit/Resident

First (one) field	\$100 per day without lights
Each additional field	\$80
Each additional hour	\$20
Lights	\$15-20 per hour per field
Additional field preparation	\$20-\$50 <u>\$25 to \$100</u> per field, per occurrence
Gate fee	15%
Center utilization fee (parking lot, track, etc.)	Up to \$550 <u>\$1,000</u>
Sports equipment usage Fee (EG., temporary mounds, goals, fence)	Up to \$25-50 per item per day
Vendor permit fee	\$30 per vendor per day
Non-refundable deposit/cleaning fee	\$25 -to \$500 per field per day

COMMERCIAL FIELD RENTALS (TOURNAMENT FUNTIONS) – UP TO 12 HOURS Commercial/Non-Resident

First (one) field	\$170-200 per day without lights
Each additional field	\$110 <u>160</u>
Each additional hour	\$30
Lights	\$25-40 per hour per field
Additional field preparation	\$20-\$50 <u>\$25 to \$100</u> per field per occurrence
Gate fee	15%
Center utilization fee (parking lot, track, etc.)	Up to \$1,550 <u>\$2,000</u>
Sports equipment usage fee (e.g.: temporary mounds, goals, fence)	Up to \$25-50 per item per day
Vendor permit fee	\$50 per vendor per day
Non-refundable deposit/cleaning fee	\$25 - \$500 per field per day

347520 COMMUNITY CENTER

The City shall levy fees for the rental of the Community Center facilities for activities including, but not limited to arts and crafts, league/team activities, adult sports, theatre productions, concerts, and specialty activities (card games, board games, etc.) for both commercial and noncommercial use. The amount of the rental fee will be assessed as per facility required and/or participation.

Code Reference: City Resolution 01-05

Responsible Department: Recreation Department/Community Center

Administrative charges/~~non-residents~~

Personnel cost for hours other than normal hours of operation or holidays	\$20-30 per hour per employee
<u>League/activity Sponsorship</u>	<u>\$30 to \$1,000</u>

Section 1: Culture and Recreation

Non-commercial-Profit use/~~#~~Resident

Entire facility	\$80 per hour, min 4 hours
Meeting room	\$20 per hour
Each additional room	\$15 per hour
Kitchen, with gym or room rental only	\$30 per hour, min 4 hours
Gymnasium	\$30 + 15% gate charge
Non-refundable deposit/cleaning fee	\$25 - \$500 per day
<u>Vendor Fee</u>	<u>\$25</u>
<u>Equipment Usage Fee</u>	<u>\$30</u>

Commercial/~~Non-Resident/Instructional Classes-Use~~

Entire facility	<u>\$150-160</u> per hour, min 4 hours
Meeting room	<u>\$30-40</u> per hour
Each additional room	<u>\$20-30</u> per hour
Kitchen, with gym or room rental only	\$50 per hour, min 4 hours
Gymnasium	<u>\$60-80</u> + 15% gate charge
Non-refundable deposit/cleaning fee	\$25 - \$500 per day
<u>Vendor Fee</u>	<u>\$50</u>
<u>Equipment Usage Fee</u>	<u>\$60</u>

Non-profit play or instructional classes

<u>Per meeting room</u>	<u>\$15 per hour</u>
<u>Gymnasium</u>	<u>\$25 per hour</u>
<u>Administration Fee</u>	<u>\$15 + cost of rental fee</u>

347540 COMMUNITY CENTER PROGRAMS

Monies received for camps, programs that are sponsored by the Community Center.

Responsible Department: Recreation Department/Community Center

League activities/instructional classes (residents)

City Programs – Resident (league activities, camps, instructional classes)

City – adult activities	<u>\$10—\$1055 to \$100</u>
City – youth activities	<u>\$10—\$1055 to \$100</u>
<u>Adult instructional classes</u>	<u>\$3—\$50 per participant (max 10 hours)</u>
<u>Youth instructional classes</u>	<u>\$3—\$50 per participant (max 10 hours)</u>
Senior programs	\$2 <u>to</u> \$100
<u>Daily User Fee</u>	<u>\$0</u>
<u>Destin Seniors</u>	<u>\$0</u>

Section 1: Culture and Recreation

City Programs – Non- Resident (league activities, camps, instructional classes)

City – adult activities	\$30-10 to- \$200
City – youth activities	\$20-10 to \$150.00
Adult instructional classes	\$5–\$70 per participant (max 10 hours)
Youth instructional classes	\$5–\$70 per participant (max 10 hours)
Daily user fee	\$2-5 to \$40
Senior programs	\$3–\$404 to \$100
League/activity sponsorship	\$30–\$1,000

RECREATIONAL/INSTRUCTIONAL CLASSES – CONTRACTUAL LEADERSHIP

FEES RECEIVED FROM INDIVIDUALS PARTICIPATING IN CITY SPONSORED PROGRAMS, ACTIVITIES OR CLASSES THAT ARE FACILITATED BY NON-CITY EMPLOYEES WITH EXPERTISE IN THAT PARTICULAR AREA. (EG. AEROBICS, FLY-FISHING, DANCE...) PERCENTAGE BASED ON SKILL LEVEL OF THE INSTRUCTOR, ASSISTANCE REQUIRED FROM CITY STAFF AND FACILITY/EQUIPMENT/SUPPLIES MAY BE FURNISHED BY THE CITY. THIS STRUCTURING WILL ALLOW THE DEPARTMENT TO EXPAND PROFESSIONALLY LEAD PROGRAMMING FOR YOUTH, TEENS, ADULTS AND SENIORS WHILE GENERATING ADDITIONAL REVENUES FOR THE CITY. THE INCREASE IN REVENUES WILL BE DEPENDENT ON THE NUMBER OF PROGRAMS OFFERED AND THE PERCENTAGE AGREED UPON. THIS IS A WIDELY USED MODEL IN PARKS & RECREATION AGENCIES NATIONWIDE THAT TAPS INTO COMMUNITY RESOURCES THAT COULD OTHERWISE NOT BE AFFORDABLE TO THE AGENCY.

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CITY OF DESTIN



AGENDA ITEM

COUNCIL MEETING DATE: June 3, 2024**TYPE OF AGENDA ITEM:** Action Item**AGENDA OUTLINE NUMBER:** 4.H.

TO: City Council

THRU: Louis Zunguze, City Manager
Kimberly Kopp, City Attorney

FROM: Steve O'Connor, Principal Planner

DATE: May 28, 2024

SUBJECT: Land Development Code Rewrite Update

I. BACKGROUND: After a little over two and a half years working on drafting the articles of the proposed new **Land Development Code (LDC)**, the first drafts are ready for City Council review. The purpose of this update is to

A) Provide the Council with a sense of what to expect in the new LDC and

B) To seek guidance on the process for the new LDC review when the draft Articles are ready for review.

There will be a total of eleven (11) proposed draft articles for City Council's consideration along with a newly developed and proposed **Destin Design Manual**. Due to the large effort of development, review, and approval processes required for this project, Staff is requesting guidance from City Council on how to proceed with these reviews.

II. DISCUSSION:

A. What to expect in the New LDC: Staff have been working with the City's selected consultant, 3TP Ventures, LLC, to get this effort to the finish line. Efforts from both sides have been critical in getting this project to this point. As council members and other individuals review these draft articles there may be several instantly recognizable changes, compared to the current LDC and some that may not be readily recognized, but the main areas of change include **Language, Format, Organization, and Consolidation**.

Language: Currently, the main challenge with the LDC is that it is cumbersome to read, which has often led to inconsistent interpretations and challenges in enforcement. One of the main purposes of the LDC rewrite project was to make the LDC easier to read and interpret. Therefore, the proposed language of the new LDC has been rewritten in manner that allows the vast majority of users, to read and understand the regulations without having to ask Staff

to interpret or have an attorney involved.

Format: At first glance you will notice a significant deviation from the current LDC format and in general an easier to read and interpret document. The multi-sentence run-on paragraphs have been eliminated to the extent possible while maintaining the integrity of the regulations. Further, when using online, the hyperlinks within the use charts will take you to the sections referenced for ease of reference.

Also, newly included, is the use of graphics as much as possible and where appropriate, to reinforce the regulations and visually represent the minimum standards of the LDC.

Organization: Another major shift for the LDC is an overhaul of the organization. The current organization is not exactly the easiest to work with and takes quite some time for users, new staff and even seasoned staff to filter through and find specific regulations. For example, there are currently three different locations, in three different articles on what is allowed when building a fence. Also, the zoning districts are buried in Article 7, with a litany of other regulations that are not appropriately placed in Article 7. Organization is one of the larger issues that has been addressed in the new Code.

Consolidation: Another proposed change is the consolidation of twenty (20) LDC articles to eleven (11) Articles plus a **Design Manual**. Some of the consolidation is due to the proposed relocation of some current regulations from the LDC to the **Code of Ordinances (CoO)** when the **CoO** is the more suitable home. An example of this is many of the regulations that involve post-development regulations in the Marina Siting. It is also due to removal of redundancies, such as the current *Article 20 - Building Regulations* which is appropriately located in the Code of Ordinances.

B. Approval Process: Since this is such a big effort that requires time and patience, Staff are proposing the following process for review and approval of the new LDC, to be as transparent as possible while being efficient and diligent. In the interest of openness and meeting State requirements for approval, Staff recommends each individual Article be adopted by ordinance individually with an effective date in the future so that all approvals occur simultaneously . Once all articles are approved, one ordinance may be adopted at the end to establish the effective date of the entire Code. Further, due to the sheer amount of information and the impact upon the community Staff recommends having Council Workshops to discuss each of the combined articles before any final decision is made. Staff specifically recommends that the following Articles be subject to Council Workshops before adoption due to their impact and complexities, but if the Council wishes, Staff will bring more for workshops.

- Article 2 - Administration
- Article 4 - Zoning Regulations, Overlays, and On-site Regulations
- Article 6 - General Development Regulations
- Article 7 - Resource Conservation and Protection
- Article 8 - Sign Regulations
- Destin Design Manual

Staff will provide the Draft Article being discussed each month at the City Council meeting prior to the workshop date, to allow Council members and the public sufficient

time to review the Article prior to discussion. The Final Draft Article, based on the workshop, will be brought to City Council for Public Hearing.

Staff is therefore requesting approval for the following City Council Workshop Calendar:

July 29

August 26

September 23

October 28

November 14

December 9

If the above process and dates are agreed upon, we could get through the six articles listed above by the end of December 2024. Staff could bring the remaining articles, not listed above, to regularly scheduled City Council meetings for discussion and potential 1st/2nd reading as appropriate.

- A. **Link to Strategic Goals / Objectives:** #2. A green and sustainable environment
#3. Improve mobility and connectivity
#4. Enhanced quality of life and safety for families
#5. Economic development and revitalization
#6. Effective, efficient, and aesthetically pleasing infrastructure
- B. **Effect on Budget (EOB):** Budget for this work is already approved.
- C. **Level of Service (LOS):** Develop and implement processes for consistent and streamlined application of codes and procedures.
- D. **Legislative Sponsor:**

III. CONCLUSION: Staff is asking for Council's approval of the presented process and workshop schedule for the adoption of the new proposed Land Development Code.

IV. RECOMMENDED MOTION: I move that City Council approve the proposed LDC approval process and workshop calendar as presented by staff.

ALTERNATIVE MOTIONS:

I move that City Council approve the LDC approval process and workshop calendar as discussed with Council's changes and recommendations.

Attachments:

None

CITY OF DESTIN



AGENDA ITEM

COUNCIL MEETING DATE: June 3, 2024**TYPE OF AGENDA ITEM:** Action Item**AGENDA OUTLINE NUMBER:** 4.I.

TO: City Council

THRU: Louis Zunguze, City Manager
Kimberly Kopp, City Attorney

FROM: Ryan Scott, City Engineer
Lisa Firth, Parks & Rec Director

DATE: May 29, 2024

SUBJECT: Pickleball Courts 90% Plans Update

I. BACKGROUND: At the August 21, 2023, City Council meeting, Council directed Staff to engage Jenkins Engineering, Inc. (JEI) to design a pickleball area located on Indian Bayou Trail between the City Hall Annexation Building and the Public Works Buildings. It was determined by City Council on February 5, 2024, that Option 1 of the design would consist of four courts and a bathroom and all associated infrastructure when the 30% plans were presented. The City Council also directed staff to work with JEI to bring 60% plans to the Parks and Recreation Committee and back to City Council. That was done on March 5, 2024, and March 18, 2024, respectively.

II. DISCUSSION: Staff presented the 90% plans on May 28, 2024, to the Parks and Recreation Committee and discussed the overall progress and updated the permitting status. The following motion was made and passed with a 5-0 vote:

Committee Motion: *“Motion by member Isaac Birch for the Parks and Recreation Committee recommend City Council accept the 90% plans with the recommended addition to 1A and 1B for a gravel parking lot to be added for temporary parking during construction of Phase 1, with member Nikki Johnson providing the second.”*

Reference “1A” & “1B” on drawing sheet C04 – Phasing Plan temporary gravel parking and the two shade structures respectively.

A. Link to Strategic Goals / Objectives: II. Enhance quality of life and safety for families.

III. Economic development and revitalization.

IV. Effective, efficient, and aesthetically pleasing infrastructure.

B. Effect on Budget (EOB): Project approved for FY24 Budget.

C. Level of Service (LOS): Level of service will be increased.

D. Legislative Sponsor:

III. CONCLUSION: Staff and JEI have included comments made during the 30% and 60% reviews in this plan set in order to move forward to the 100% Construction Documents along with a Draft RFP for construction.

IV. RECOMMENDED MOTION: I move to direct the City Manager to work with Staff and Jenkins Engineering to move forward to 100% Construction Documents, obtain the necessary permits, and bring back a Draft RFP to City Council at a future meeting.

ALTERNATE MOTION:

I move to direct the City Manager to work with Staff and Jenkins Engineering to move forward to 100% Construction Documents, obtain the necessary permits, and bring back a draft RFP to City Council at a future meeting with the following revisions:

Attachments:

1. 23-58 Design-COMBINED SET

LEGAL DESCRIPTION

A parcel of land in unsectionalized Township 2 South, Range 22 West, Okaloosa County, Florida described as commencing at the Southeast corner of Lot 4, Block 6, Silver Beach Subdivision, as recorded in Plat Book 1, Page 16 % of the Official Records; thence North 03°58'04" East along a projection of the East line of said Lot 4, a distance of 127.73 feet to a point on the Northern right of way line of State Road 30 (U.S. 98 bypass, R/W varies) and the Southerly right of way line of a 100 foot Gulf Power easement; thence North 86°02'36" West (North 86°02'07" West measured) along said Northerly and Southerly lines, a distance of 435.96 feet; thence North 83°19'06" West along said Northerly and Southerly lines, a distance of 176.83 feet; thence departing said Northerly right of way line and continuing along said Southerly line of Gulf Power easement North 83°19'06" West, 373.07 feet to a concrete monument #3724 on the Easterly right of way line of Two Trees Road (100' R/W); thence continue North 83°19'06" West along said Southerly line, a distance of 407.82 feet to a concrete monument #3724 along the South line of Destin City Hall parcel; thence continuing along said South line of Destin City Hall parcel and power easement, North 77°53'46" East, 947.63 feet (North 77°53'02" East, 947.59 feet measured) to a concrete monument #3724 and the point of beginning; thence continuing along the last described course, 10.72 feet; thence continuing along said South line of Gulf Power easement, North 75°09'47" East, 413.87 feet; thence departing said South line, North 01°17'21" East, 953.11 feet to the Southerly right of way line of Indian Bayou Trail (100' R/W); thence North 67°29'32" East along said Southerly line, a distance of 42.67 feet to the Southerly right of way line of Two Trees Road (80' R/W); thence Southeasterly along said right of way of Two Trees Road, 180.13 feet along the arc of a curve, concave Northeasterly, having a radius of 200.00 feet, a central angle of 51°36'10" and a chord bearing South 48°24'53" East, 174.10 feet; thence continuing along said right of way of Two Trees Road, South 74°13'04" East, 433.23 feet; thence departing said right of way line, South 15°46'56" East, 363.00 feet; thence South 74°13'04" East, 300.00 feet; thence North 15°46'56" East 363.00 feet to said Southerly right of way line of Two Trees Road; thence South 74°13'04" East along said Southerly line, a distance of 312.37 feet; thence continuing along said right of way line, 93.41 feet along the arc of a curve, concave Southwesterly, having a radius of 149.08 feet, a central angle of 35°54'03", and a chord bearing South 56°14'53" East, 91.85 feet to a concrete monument #3724 marking the Northerly line of Destin City Hall site, said line also being the Northerly right of way line of future extension of Comprehensive Plan Road (100' R/W); thence along said Northerly line, 398.06 feet along the arc of a curve, concave Northwesterly, having a radius of 1902.87 feet, a central angle of 11°59'02", and a chord bearing South 62°31'39" West, 397.33 feet to a concrete monument #3724; thence continuing along said Northerly line, 454.76 feet along the arc of a curve, concave Northwesterly, having a radius of 1804.18 feet, a central angle of 14°26'31", and a chord bearing South 75°41'03" West, 453.56 feet to a concrete monument #3724, thence departing said Northerly line and continuing along the West line of said Destin City Hall Site, South 12°07'37" East, 338.55 feet to the point of beginning, containing 12.99 acres, more or less all in Okaloosa County, Florida.

A parcel of land in undivided Township 2 South, Range 22 West, Okaloosa County, Florida, described as commencing at the Southeast corner of Lot 4, Block 6, Silver Beach Subdivision, as recorded in Plat Book 1, Page 16 1/2 of the Official Records; thence North 03°58'52" East, 1277.09 feet to the North right-of-way line of State Road 30 and the Southerly right-of-way line of a 100 foot wide Gulf Power Easement; thence North 86°02'07" West (reference bearing) along said North right-of-way line, 434.71 feet to a point of divergence of said right-of-way lines; thence North 83°18'37" West along said Southerly Gulf Power Easement right-of-way line, 657.81 feet to the West right-of-way line of Comprehensive Road a 100 foot right-of-way; thence North 13°56'03" West, 346.03 feet; to a point of curvature, thence 339.42 feet along the arc of a curve, concave southwesterly having a radius of 993.92 feet, a central angle of 19°33'58", and a chord bearing North 23°43'02" West, 337.77 feet; thence North 33°30'00" West, 245.99 feet to a point of curvature; thence 105.95 feet along the arc of a curve concave Southwesterly, having a radius of 149.08 feet, a central angle of 40°43'09", and a chord bearing North 53°51'32" West, 103.73 feet to a point of tangency; thence North 74°13'04" West, 312.54 feet to the point of beginning, thence South 15°46'56" West, 363.00 feet, then North 74°13'04" West, 300.00 feet, thence North 15°46'56" East, 363.00 feet to the South right-of-way line of Two Trees Road and 80 foot right-of-way, thence South 74°13'04" East, 300.00 feet to the point of beginning; all in undivided Township 2 South, Range 22 West, Okaloosa County, Florida.

A parcel of land in undivided Township 2 South, Range 22 West, Okaloosa County, Florida, described as commencing at the Southeast corner of Lot 4, Block 6, Silver Beach Subdivision, as recorded in Plat Book 1, Page 16 1/2 of the official records; thence North 03°58'52" East, 1277.09 feet to the North right-of-way line of State Road 30 and the Southerly right-of-way line of a 100 foot wide Gulf Power easement; thence North 86°02'07" West (reference bearing) along said North right-of-way line, 434.71 feet to a point of divergence of said right-of-way lines; thence North 83°18'37" West to along said Southerly Gulf Power easement right-of-way line, 657.61 feet to the West right-of-way line of comprehensive road a 100 foot right-of-way; thence North 13°58'03" West, 346.03 feet, to a point of curvature, thence 339.42 feet along the arc of a curve, concave Southwesterly having a radius of 993.92 feet, a central angle of 19°33'58", and a chord bearing North 23°43'02" West, 337.77 feet; thence North 33°30'00" West, 245.99 feet to a point of curvature; thence 105.95 feet along the arc of a curve concave Southwesterly, having a radius of 149.08 feet, a central angle of 40°43'09" and a chord bearing North 53°51'32" West, 103.73 feet to a point of tangency; thence North 74°13'04" West, 312.54 feet to the point of beginning, thence continuing along last described course North 74°13'04" West, 733.07 feet to a point of curvature; thence 180.08 feet along the arc of a curve, concave Northeasterly having a radius of 200.00 feet, a central angle of 51°35'17", and a chord bearing North 42°25'25" West, 174.05 feet to a point on the Southern right-of-way line of Indian Bayou Trail; thence North 67°29'32" East, 80.00 feet along the South right-of-way of Indian Bayou Trail (100' r/w) to a point of curvature; thence 107.88 feet along the arc of a curve concave Northeasterly having a radius of 120.00 feet, a central angle of 51°30'24" and a chord bearing South 45°27'51" East, 104.28 feet; thence South 74°13'04" East, 733.07 feet; thence South 15°46'56" West, 80.00 feet to the Point of Beginning; all in undivided Township 2 South, Range 22 West, Okaloosa County, Florida.

#	TITLE
01	COVER SHEET
02	EXISTING CONDITIONS
03	MASTER SITE PLAN
04	MASTER GRADING PLAN
05	PHASE 1 SITE & UTILITY PLAN
06	PHASE 1 GRADING & DRAINAGE PLAN
07	PHASE 1 LANDSCAPE PLAN
08	GRINDER STATION DETAILS
09	DWU UTILITY DETAILS I
10	DWU UTILITY DETAILS II
11	SPECIFICATIONS I
12	SPECIFICATIONS II

NOT TO SCALE

(WATER/SEWER)	(TELEPHONE)
DESTIN WATER USERS	CENTURYLINK
218 MAIN STREET	411 MARY ESTHER CUTOFF
DESTIN, FL 32541	FT. WALTON BEACH, FL 32548
(850) 837-4930	(850) 244-1150

ELECTRIC)	(GAS)
FLORIDA POWER & LIGHT	OKALOOSA GAS DISTRICT
40 HOLLYWOOD BLVD SW	20 HUGHES STREET NE
FT. WALTON BEACH, FL 32548	FT. WALTON BEACH, FL 32548
(800) 225-5797	(850) 729-4700

CITY OF DESTIN
POC: RYAN SCOTT, P.E. - CITY ENGINEER
DESTIN CITY HALL ANNEX
4100 INDIAN BAYOU TRAIL
DESTIN, FL 32541
PHONE: (850) 654-1119
EMAIL: RSCOTT@CITYOFDESTIN.COM

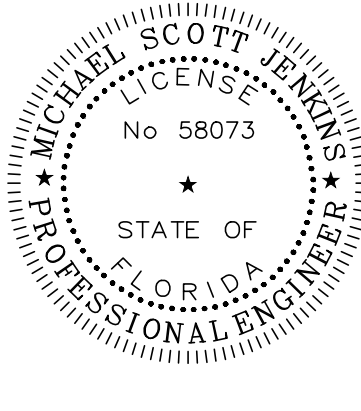
USE LATEST CITY OF DESTIN AND/OR
F.D.O.T. TECHNICAL SPECIFICATIONS AND
DETAILS UNLESS OTHERWISE NOTED.

THE CONTRACTOR SHALL DEFEND, INDEMNIFY, KEEP AND SAVE HARMLESS THE OWNER AND ENGINEER AND THEIR RESPECTIVE MEMBERS, REPRESENTATIVES, AGENTS AND EMPLOYEES, IN BOTH INDIVIDUAL AND OFFICIAL CAPACITIES, AGAINST ALL SUITS, CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES, CAUSED BY, GROWING OUT OF, OR INCIDENTAL TO THE PERFORMANCE OF THE WORK UNDER THE CONTRACT BY THE CONTRACTOR OR ITS SUBCONTRACTORS TO THE FULL EXTENT AS ALLOWED BY THE LAWS OF THE STATE OF FLORIDA AND NOT BEYOND ANY EXTENT WHICH WOULD RENDER THESE PROVISIONS VOID OR UNENFORCEABLE. IN THE EVENT OF ANY SUCH INJURY (INCLUDING DEATH) OR LOSS OR DAMAGE OR CLAIMS THEREFORE, THE CONTRACTOR SHALL GIVE PROMPT NOTICE TO THE OWNER.

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TREE TABLE		
SYMBOL	DESCRIPTION	TOTAL
	PINE TREE	35
	OAK TREE	10
	PALM TREE	3
	CEDAR TREE	1
	MAGNOLIA TREE	1
	UNKNOWN TREE	1



BY
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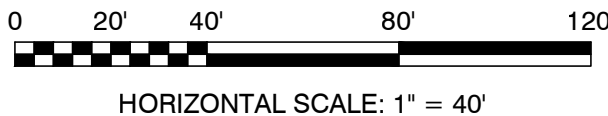
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EXISTING CONDITIONS

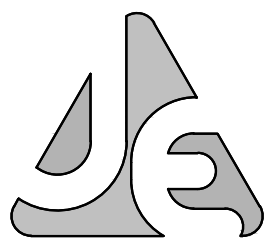
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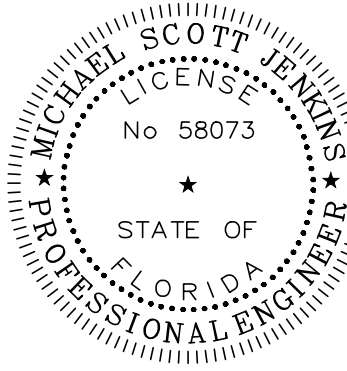
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PH1A	TEMPORARY GRAVEL PARKING
PH1B	TWO SHADE STRUCTURES
PH2	4 PICKLEBALL COURTS & REMAINING SITE STORMWATER
PH3	2 PICKLEBALL COURTS
PH4	2 PICKLEBALL COURTS & PLAYGROUND AREA
PH5	MULTI-USE
PH6	MULTI-USE
PH7	PARKING IMPROVEMENTS



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M. SCOTT JENKINS, P.E.
FL. REGISTRATION NO. 58073

REV	DATE	DESCRIPTION	BY
1	2/6/2024	REVISIONS PER CITY COUNCIL MEETING 2/5/2024	MSJ
2	5/10/2024	REVISIONS PER CITY 90% REVIEW	MSJ
3	5/15/2024	REVISIONS PER CITY 100% REVIEW	MPP

CITY OF DESTIN

CITY OF DESTIN PICKLEBALL COURTS
DESTIN, FLORIDA

MASTER SITE PLAN

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JOB: 23-58
DATE: 10-2023
DESIGNED: MSJ
DRAWN: MPF

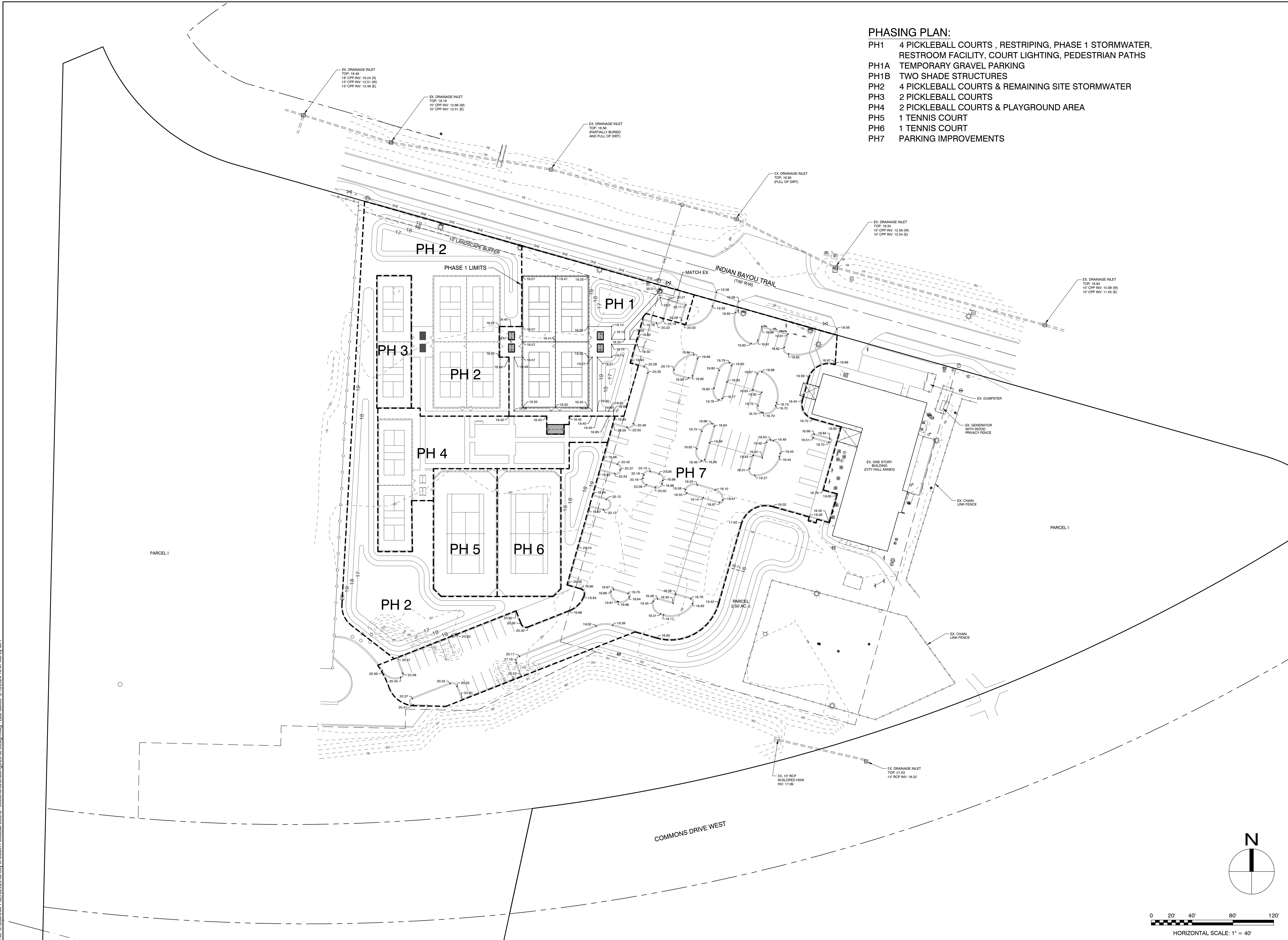
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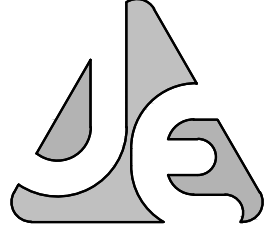
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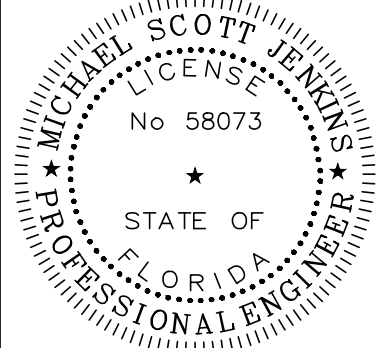
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- PHASING PLAN:**
- PH1 4 PICKLEBALL COURTS , RESTRIPIING, PHASE 1 STORMWATER, RESTROOM FACILITY, COURT LIGHTING, PEDESTRIAN PATHS
 - PH1A TEMPORARY GRAVEL PARKING
 - PH1B TWO SHADE STRUCTURES
 - PH2 4 PICKLEBALL COURTS & REMAINING SITE STORMWATER
 - PH3 2 PICKLEBALL COURTS
 - PH4 2 PICKLEBALL COURTS & PLAYGROUND AREA
 - PH5 1 TENNIS COURT
 - PH6 1 TENNIS COURT
 - PH7 PARKING IMPROVEMENTS



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M. SCOTT JENKINS, P.E.
FL REGISTRATION NO. 58073

REV	DATE	DESCRIPTION
1	2/8/2024	REVISIONS PER CITY COUNCIL MEETING (2/5/2024) DIRECTION
2	5/10/2024	REVISIONS PER CITY 80% REVIEW
3	5/15/2024	REVISIONS PER CITY 100% REVIEW

CITY OF DESTIN

CITY OF DESTIN PICKLEBALL COURTS
DESTIN, FLORIDA

MASTER GRADING PLAN

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JOB: 23-58

DATE: 10-2023

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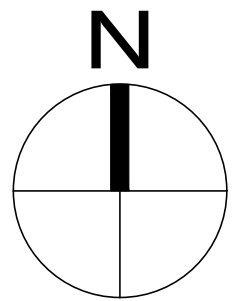
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SHEET NUMBER
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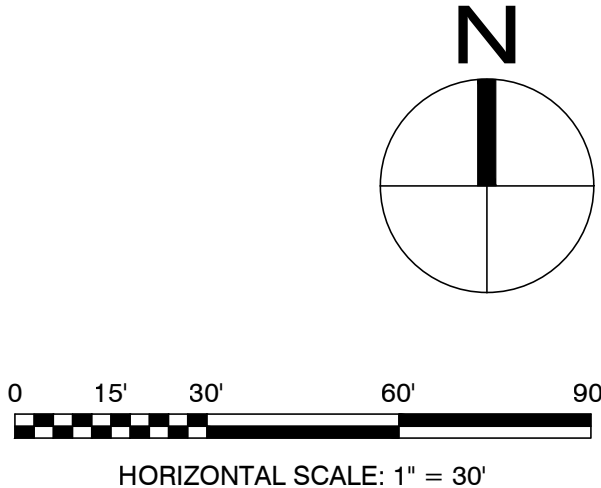
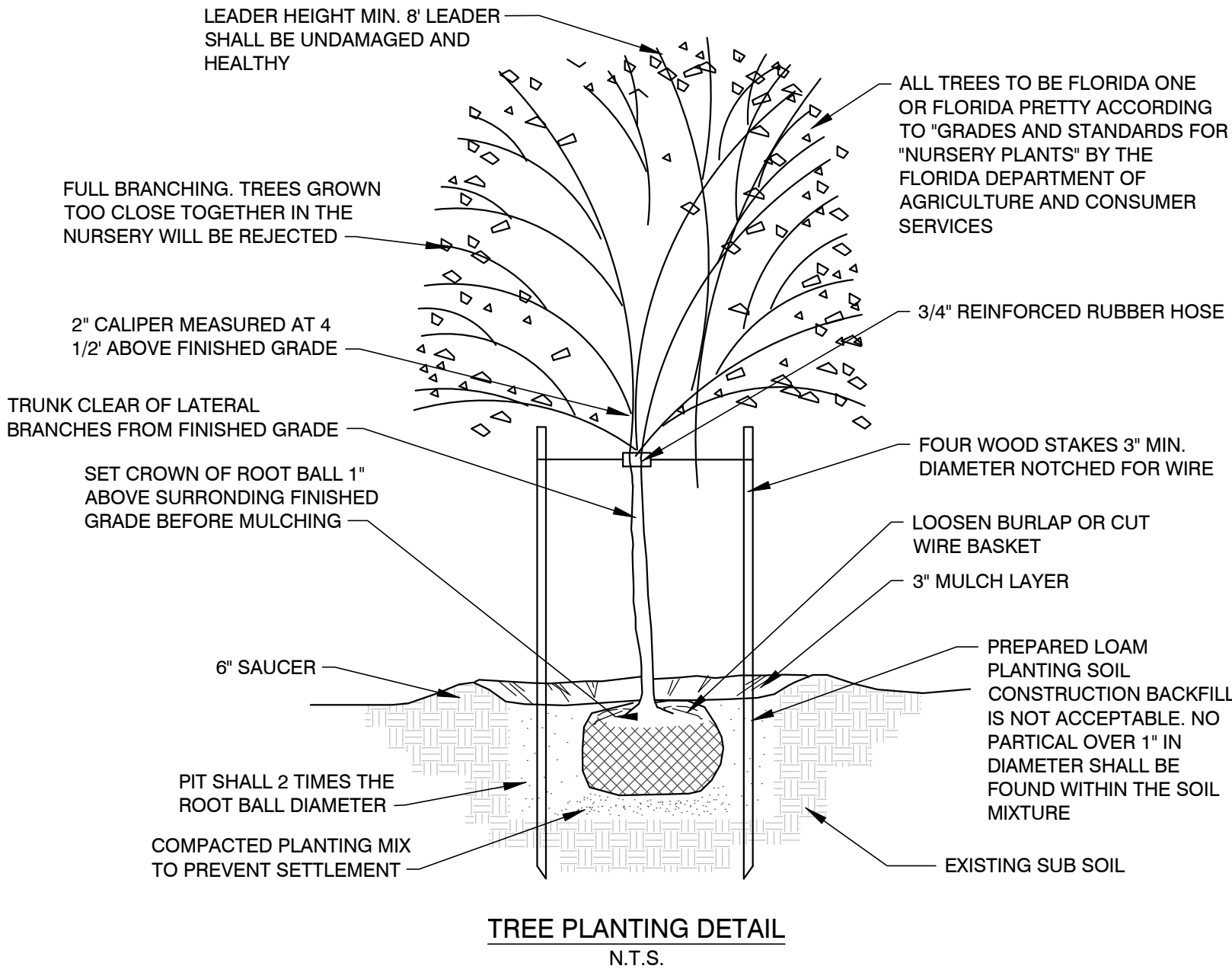
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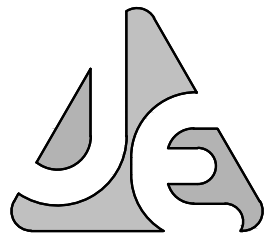
LEGEND								
SYM	TYPE	COMMON NAME	SCIENTIFIC NAME	HT.	CAL.	ROOT	REMARKS	COUNT
	CANOPY	LIVE OAK	Quercus virginiana	6'	3"	B&B	FULL, WELL SHAPED	6

BUFFER REQUIREMENTS:
10' FRONT LANDSCAPE BUFFER: 1 CANOPY TREE PER 25 L.F. (145.0 L.F. / 25) = 5.8
PROVIDED: 6 CANOPY TREES

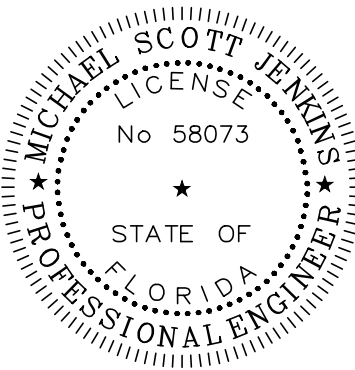
- LANDSCAPE NOTES**
- ALL PRICES OF PLANT MATERIAL SHALL INCLUDE PINE MULCH, TREE STAKING AND BED PREPARATION.
 - LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING OF ALL PLANT MATERIAL DURING THE CONSTRUCTION OF THE PROJECT, UNTIL SUCH TIME AS SUBSTANTIAL COMPLETION. AT THAT TIME, IT SHALL BECOME THE RESPONSIBILITY OF THE MAINTENANCE CONTRACTOR SELECTED BY THE OWNER.
 - WHERE SOD OR SEED IS SHOWN GOING DIRECTLY UP TO THE BUILDING, CONTRACTOR SHALL LEAVE A 8" MULCH BORDER BETWEEN THE SOD AND THE BUILDING FOR EASY MAINTENANCE.
 - THE ENGINEER RESERVES THE RIGHT TO REJECT ANY AND ALL PLANT MATERIAL WHICH DOES NOT MEET THE SPECIFICATIONS IN SIZE OR SHAPE.
 - ALL LANDSCAPING WITHIN THE CLEAR VISIBILITY TRIANGLE SHALL COMPLY WITH SIGHT REQUIREMENTS.
 - TREES SHALL HAVE A MINIMUM INSTALLED HEIGHT OF 6' AT THE TIME OF PLANTING.
 - ALL PLANT MATERIAL SHALL BE DROUGHT AND SALT TOLERANT.



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M. SCOTT JENKINS, P.E.
FL REGISTRATION NO. 58073

BY	MSJ	MSJ	MPF	DESCRIPTION
	1	2/6/2024		REVISIONS PER CITY COUNCIL MEETING (2/5/2024) DIRECTION
	2	5/10/2024		REVISIONS PER CITY 80% REVIEW
	3	5/15/2024		REVISIONS PER CITY 100% REVIEW

CITY OF DESTIN
CITY OF DESTIN PICKLEBALL COURTS
DESTIN, FLORIDA
PHASE 1 LANDSCAPE PLAN
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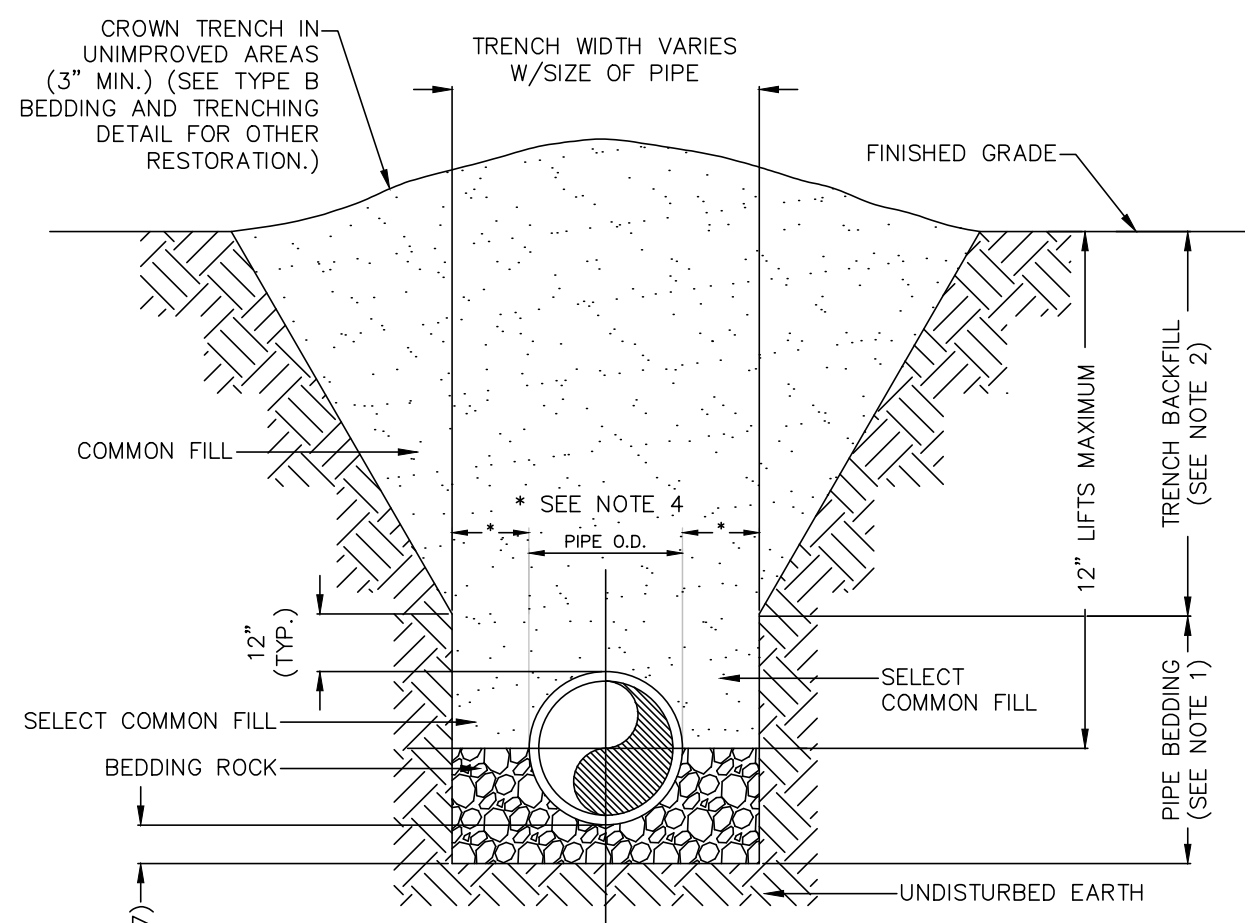
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DATE: 10-2023
DESIGNED: MSJ
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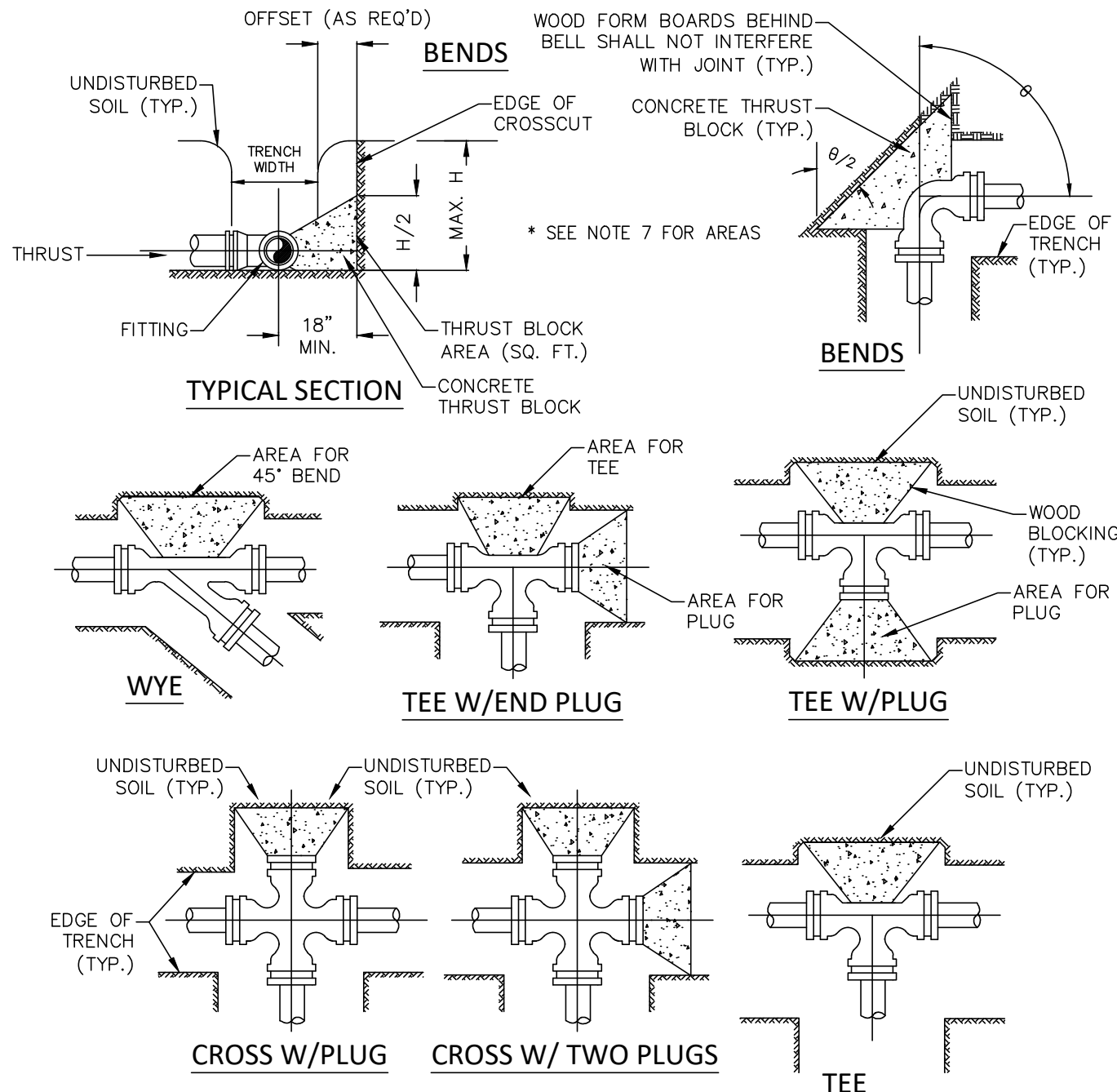
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- NOTES:
- 1.) PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
 - 2.) TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
 - 3.) USE TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY DESTIN WATER USERS.
 - 4.) (*): 15\"/>
 - 5.) ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
 - 6.) GRAVITY SEWERS SHALL UTILIZE TYPE A BEDDING, IF REQUIRED BY DESTIN WATER USERS. BEDDING DEPTH SHALL BE 4\"/>
 - 7.) DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. DESTIN WATER USERS SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.

TRENCH DETAIL (TYPE A BEDDING)
N.T.S.



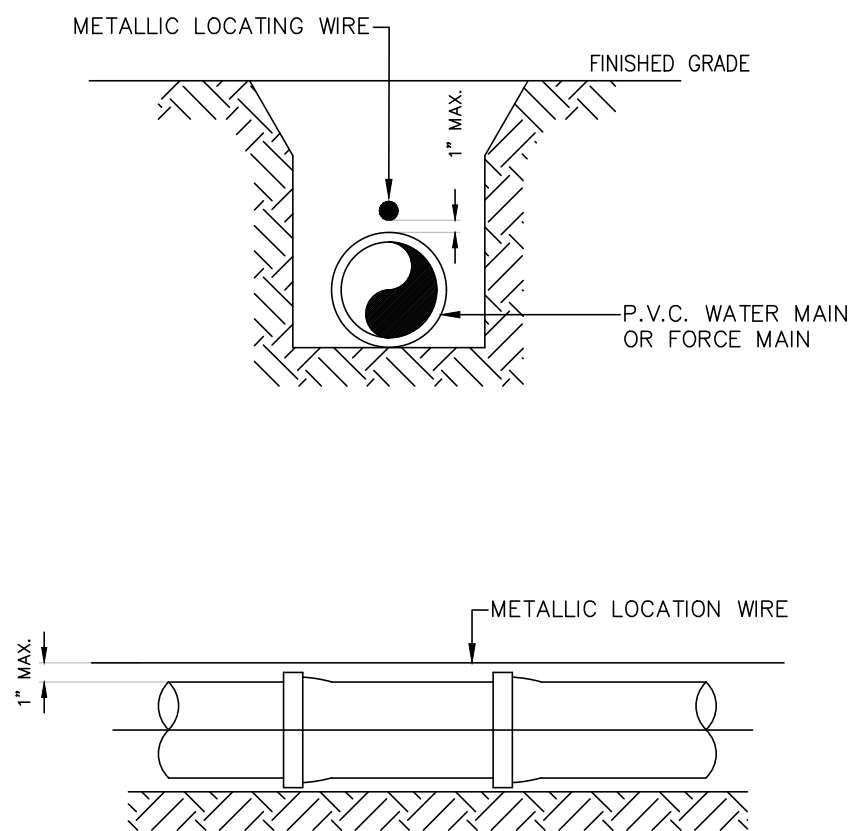
- NOTES:
- 1.) THRUST BLOCK BEARING AREAS SHALL BE POURED AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE ALL LOOSE MATERIAL AND EXTEND TO UNDISTURBED MATERIAL.
 - 2.) EXTEND THRUST BLOCK FULL LENGTH OF FITTINGS. JOINTS SHALL NOT BE COVERED BY THRUST BLOCKS. FITTINGS SHALL BE PROTECTED BY POLYETHYLENE FILM (6 MIL.) PRIOR TO PLACING CONCRETE THRUST BLOCK.
 - 3.) ROUGH BLOCKING FORMS SHALL BE USED ALONG SIDES OF THRUST BLOCKS, AS REQUIRED.
 - 4.) THRUST BLOCKS SHALL BE USED IN COMBINATION, AS REQUIRED, TO SUITE THE SPECIFIC FITTING ARRANGEMENT.
 - 5.) ALTERNATE DESIGNED RESTRAINING SYSTEMS SHALL BE PROVIDED WERE STANDARD THRUST BLOCKING IS NOT SUITABLE AND/OR SOIL RESISTANCE BEARING IS LESS THAN 1,500 PSF.
 - 6.) ALL WOOD BLOCKING SHALL BE PRESSURE TREATED WITH PRESERVATIVE.
 - 7.) FOR THRUST BLOCK AREAS SEE RESTRAINED PIPE TABLE.

THRUST BLOCK DETAILS
N.T.S.

SCHEDULE FOR THRUST BLOCK AREAS *								
PIPE SIZE (INCHES)	90 BEND (SQ. FT)	45 BEND (SQ. FT)	22-1/2 BEND (SQ. FT)	11-1/4 BEND (SQ. FT)	TEE & PLUG (SQ. FT)	CROSS (SQ. FT)	WYE (SQ. FT)	DESIGN PRESS (PSI)
4	3,840	2,087	1,059	533	2,715	N/A	N/A	150
6	7,932	4,293	2,189	1,100	5,609	N/A	N/A	150
8	13,644	7,385	3,754	1,892	9,648	N/A	N/A	150
10	20,528	11,111	5,663	2,846	14,516	N/A	N/A	150
12	29,030	15,711	8,009	4,025	20,528	N/A	N/A	150
16	50,442	27,300	13,914	6,992	35,669	N/A	N/A	150
18	59,111	31,922	16,305	8,782	41,798	N/A	N/A	150
NOTE: THRUST BLOCK AREAS TO BE COMPUTED ON BASIS OF LBS. PER SQ. FT. SOIL RESTRAINT BEARING. * TO BE COMPLETED BY ENGINEER.						3,000 (1,500 MIN) SEE NOTE 5		

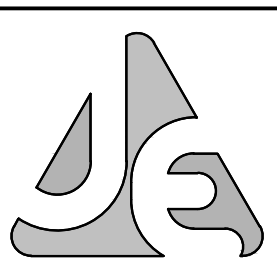
- NOTES:
- 1.) FITTINGS SHALL BE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
 - 2.) INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN SHOWN IN THE TABLE.
 - 3.) IN LINE VALVES AND THROUGH RUN OF TEES OUTSIDE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE OF RESTRAINED JOINTS FROM OTHER FITTINGS RESTRAINED UNLESS OTHERWISE INDICATED.
 - 4.) LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY DIPRA.
 - 5.) FOR PIPE ENCASED IN POLYETHYLENE, USE VALUES GIVEN IN PARENTHESES OR INCREASE THE GIVEN VALUE BY A FACTOR OF 1.5. * TO BE COMPLETED BY THE ENGINEER.

THRUST BLOCK
SCHEDULE
N.T.S.

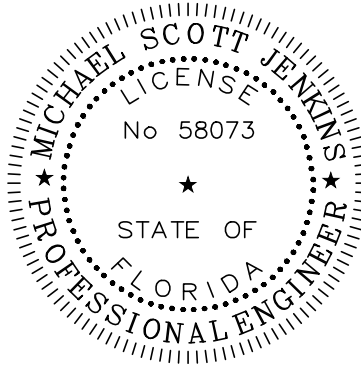


- NOTES:
- 1.) PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (12 GAUGE COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE.
 - 2.) LOCATING WIRE SHALL TERMINATE AT THE TOP OF EACH VALVE BOX AND BE CAPABLE OF EXTENDING 12\"/>
 - 3.) USE DUCT TAPE AS NECESSARY TO HOLD WIRE ON THE TOP OF THE PIPE.
 - 4.) ALL SPLICES SHALL BE MADE USING A WATER-TIGHT SEALING METHOD APPROVED BY DESTIN WATER USERS.

PVC PIPE LOCATING WIRE
DETAIL
N.T.S.



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M. SCOTT JENKINS, P.E.
FL REGISTRATION NO. 58073

REV	DATE	DESCRIPTION	BY	MPF
3	5/15/2024	REVISIONS PER CITY 100% REVIEW		

CITY OF DESTIN

CITY OF DESTIN PICKLEBALL COURTS
DESTIN, FLORIDA

DWU UTILITY DETAILS I

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JOB: 23-58

DATE: 10-2023

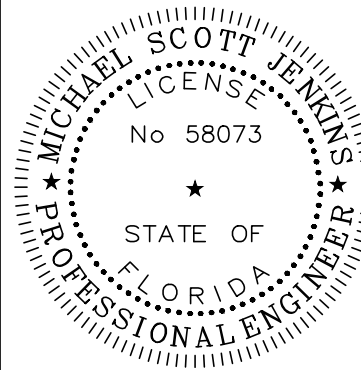
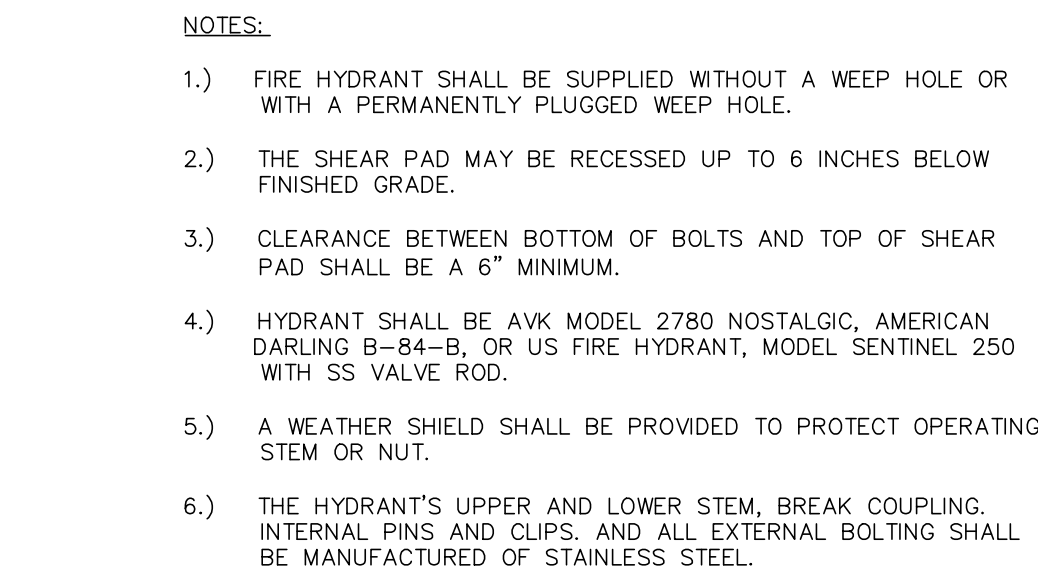
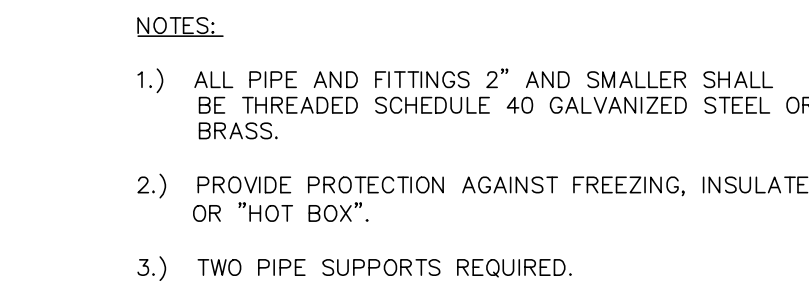
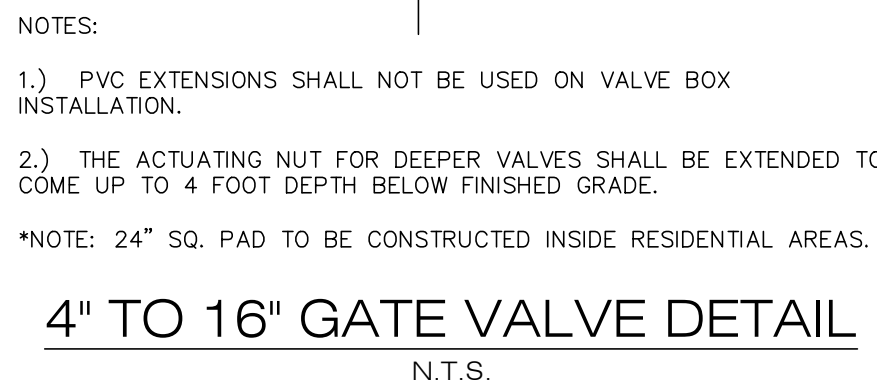
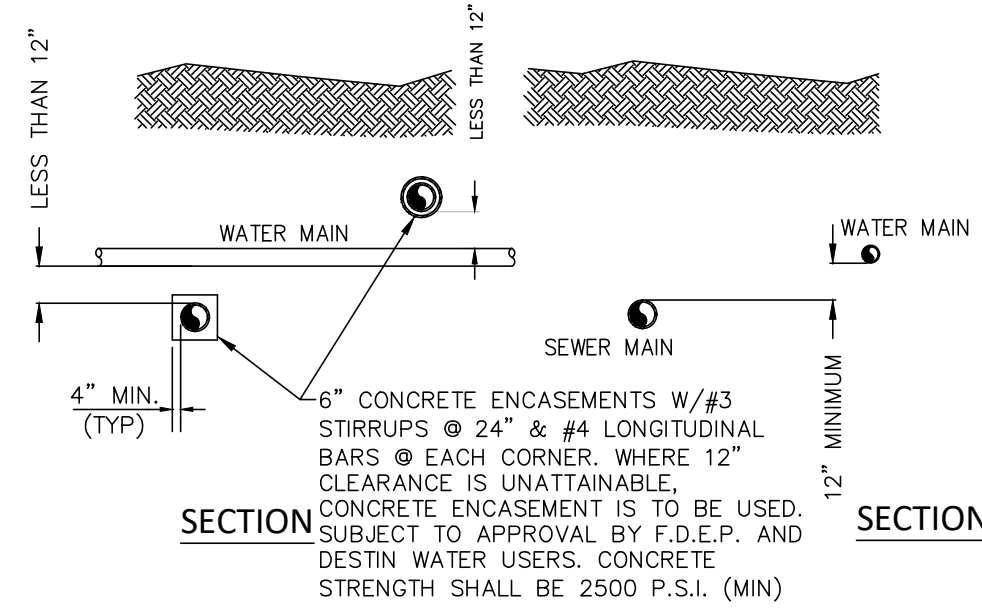
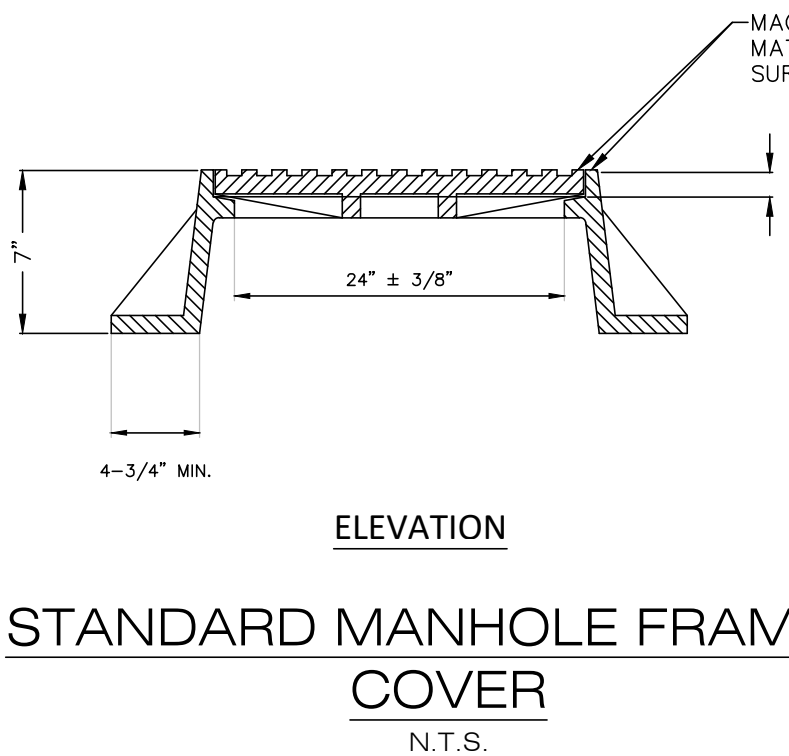
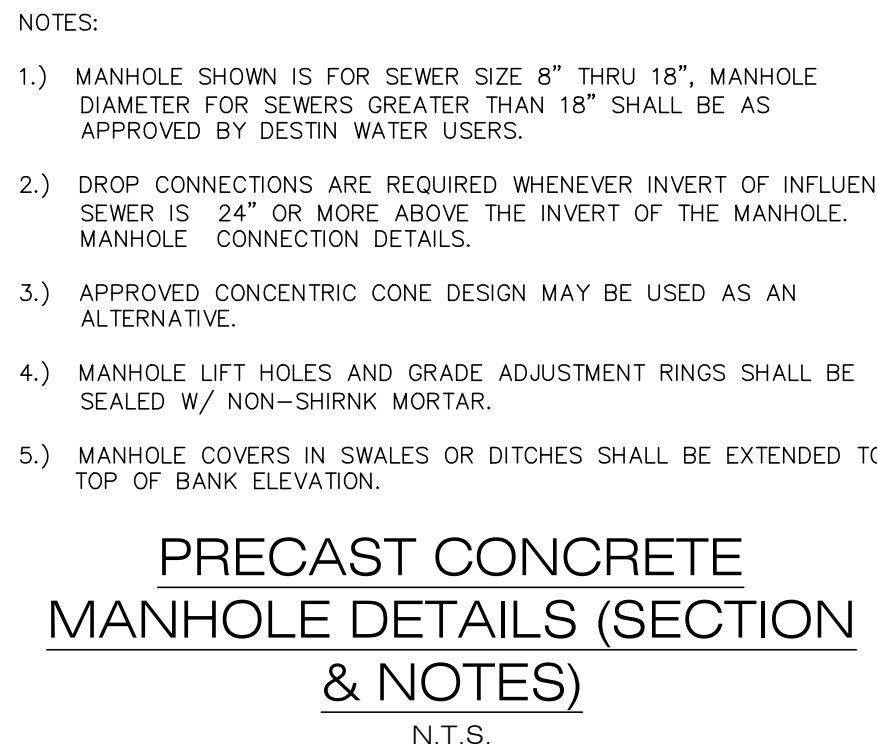
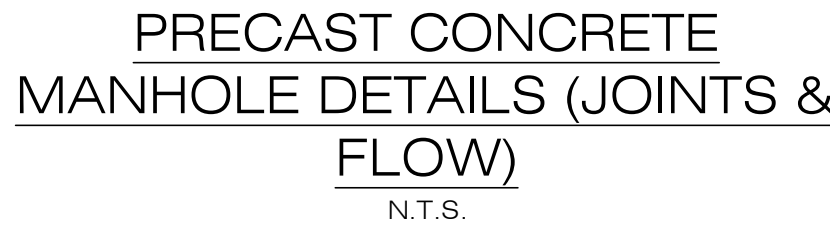
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09 OF 12

SHEET NUMBER
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M. SCOTT JENKINS, P.E.
FL. REGISTRATION NO. 58073

REV	DATE	DESCRIPTION	MPF
3	5/15/2024	REVISIONS PER CITY 10% REVIEW	

CITY OF DESTIN

CITY OF DESTIN PICKLEBALL COURTS
DESTIN, FLORIDA

DWU UTILITY DETAILS II

JOB: 23-58
DATE: 10-2023
DESIGNED: MS
DRAWN: MPP

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SHEET NUMBER
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1 SPECIFICATION: CLEARING AND GRUBBING

All site Clearing and Grubbing shall be in accordance with section 110 of the "Florida Department of Transportation Specifications for Road and Bridge Construction" unless modified herein. This work shall be performed in the following areas:

- All street rights-of-way.
- All areas where excavation or embankment are to take place.
- Detention areas.

In addition, certain other areas where underground utilities are to be installed are to be cleared and grubbed to the extent necessary to properly install the utilities. Such work shall be incidental to the contract unit price for the utility to be installed.

1.1 SCOPE:

Site clearing work includes, but is not limited to:

- Removal of trees and other vegetation.
- Topsoil stripping.
- Clearing and grubbing.
- Removing above grade improvements.
- Removing below grade improvements.

1.2 JOB CONDITIONS:

Traffic: Conduct site clearing operations to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities. Do not close or obstruct streets, walks, or other occupied or used facilities without permission from the Owners and/or Local approving authority.

Clearing and Protection in Construction Areas: Preserve trees 6 inches or larger measured breast height (6"dbh) where possible within construction area.

Protection of Existing Improvements: Provide protection necessary to prevent damage to existing improvements indicated to remain in place.

Protect improvements on adjoining properties and on project site.

Restore damaged improvements to original condition as acceptable to the Owner.

1.3 LIMITATIONS:

Clearing will be limited to the extent necessary to allow for construction of the proposed improvements as a result of:

- Need for access to the project site for construction equipment.
- Essential grade changes.
- Surface water drainage and utility installation.
- Location of driveways, buildings, and required parking.

1.4 CLEARING AND GRUBBING:

Remove trees, shrubs, grass, other vegetation, improvements, or obstructions interfering with the installation of new construction. Removal includes digging out stumps and roots. Do not remove items elsewhere on site or premises unless specifically indicated. Disposal of trees, limbs, stumps, and debris shall be the responsibility of the Contractor.

Strip topsoil to whatever depths encountered to prevent intermingling with underlying subsoil or other objectionable material. Cut heavy growths of grass from areas before stripping.

Stockpile topsoil in storage piles in areas shown or where directed by the Owner. Construct storage piles to freely drain surface water. Cover storage piles if required to prevent windblown dust.

Dispose of unsuitable or excess topsoil same as specified for waste material.

1.5 FILLING:

Fill depressions caused by clearing and grubbing operations with satisfactory soil material, unless further excavation or earthwork is indicated.

Place fill material in horizontal layers not exceeding 6" loose depth, and thoroughly compact to density equal to adjacent ground, unless otherwise shown on the plans.

1.6 REMOVAL OF IMPROVEMENTS:

Remove existing above and below grade improvements and abandoned underground piping or conduit necessary to permit construction and other work.

1.7 DISPOSAL OF WASTE MATERIALS:

No burning of any material, debris, or trash will be allowed.

Remove waste materials from project site on a daily basis, and dispose of off-site in an approved area.

2 SPECIFICATION: EXCAVATION, EMBANKMENT AND SUBGRADE

2.1 EXCAVATION, EMBANKMENT AND SUBGRADE:

Section 120 of the Florida D.O.T. Specification. All subgrade fill material, and the top 12 inches in cut area, shall be compacted to 100 percent of maximum density as determined to AASHTO T-99. The Subgrade Compaction (Stabilization) shall conform to Section 160 of the Florida D.O.T. Specifications. In most cases this will consist of compacting existing cleaned soil. However, it is the Contractor's responsibility to assure that the finished roadbed section meets bearing value requirements, regardless of the quantity of stabilizing materials to be added. One field density test shall be taken for each 5000 square feet or fraction thereof.

Where required subgrade density cannot be obtained, unsuitable material shall be removed so that the road base will be constructed on a minimum of 3 feet of suitable, properly compacted material. This work shall be included in the contract lump sum price for earth excavation.

2.2 SOIL CEMENT BASE:

The detailed specifications of the soil cement base course are to be determined by an independent testing laboratory after testing of the material the Contractor proposes to use. Moisture and cement content will be specified by the laboratory. However, as a guide for bid purposes, estimate 12% cement by weight and include a price reduction schedule if tests show less cement is required. The soil cement mix will be at optimum moisture content, i.e., neither mushy nor dry, but containing sufficient moisture to make a firm case when squeezed in the hand. Water should not appear on the hand when so squeezed. This requires 5 to 6 gallons per square yard but actual quantity of water to be added will depend on latent moisture in the base material. From a practical standpoint, the highest moisture content should be maintained that permits packing and finishing without surface checking, showing or rutting during compaction and finishing operations.

The freshly compacted and finished soil-cement mix must be adequately cured. An application of bituminous material such as RC-2, MC-3, RT-5 or asphaltic emulsion at a rate of 0.15 to 0.20 gal per square yard is preferred as the curing medium. Waterproof paper or moist hay is acceptable if properly maintained.

2.3 SAND-CLAY BASE COURSE:

The following tests shall be performed prior to placing the material on the roadbed:

Composition and gradation	Percent of material passing the 10-mesh sieve
• Clay (material smaller than 0.005mm)	8 to 21
• Silt (material from 0.005 to 0.005mm)	0 to 10
• Combined clay and silt	8 to 25
• Limerock Bearing Ration Value (LBR)	Of at least 75
• Liquid Limit	Not greater than 25
• Plasticity Index	Not greater than 6

The results of these tests shall be submitted to the engineer for approval. The base course shall be compacted to not less than 98 percent of the maximum density as determined by AASHTO T-180. One density test shall be taken for each 5000 square feet or fraction thereof.

Note: Sand Clay base material shall not be used in areas where the seasonal high groundwater table is within two (2) feet of the bottom of the base material.

2.4 LIMEROCK BASE COURSE:

Shall be constructed in accordance with Section 200 of the Florida D.O.T. Specifications for Road and Bridge Construction. The material shall meet the requirements of Section 911 of the Specifications. Tests necessary to determine compliance with Section 911 shall be performed prior to placing the material on the subgrade. These tests include:

Test	Requirement
• Liquid Limit	Less than 35
• Plastic Index	Non-Plastic
• Gradation	97% passing 3.5 inch sieve
• Limerock Bearing Ratio	Not less than 100

The results of these tests shall be submitted to the engineer for approval. After approval of the material, the limerock base course shall be placed in accordance with Section 200. The base course shall be compacted to not less than 98 percent of the maximum density as determined by AASHTO T-180. A minimum of three density tests shall be made on each days compaction operations. More frequent tests shall be made as deemed necessary by the Engineer. The base shall be installed to a compacted thickness as shown on the plans, plus or minus one half inch. Deviations from this specification shall be corrected as indicated in the State Specifications.

2.5 GRADED AGGREGATE BASE COURSE:

Shall comply with the requirements of Section 204 of the Florida D.O.T. Specifications. Tests necessary to determine compliance with Section 204 shall be performed prior to placing the material. These tests include:

- Soundness Loss, Sodium Sulfate: AASHTO T-104.
- Percent Wear: AASHTO T-96 (Grading A).
- Sieve Analysis.
- Limerock Bearing Ratio Value.

The results of these tests shall be submitted to the engineer for approval. After the approval of the material, the graded aggregate base course shall be placed in accordance with Section 204. The base course shall be compacted to a density of not less than 100 percent of the maximum density as determined by AASHTO T-180. At least three density tests shall be made on each day's final compaction operation of each course, and the density determinations shall be made at more frequent intervals if deemed necessary by the Engineer.

2.6 ASPHALT BASE COURSE:

Shall comply with the requirements of Sections 280, 330, 331 and 916 of the Florida D.O.T. Specifications. The design mix for Asphaltic Base Course Type 3 shall conform to the requirements in Tables 331-1 and 331-2. The minimum Marshall stability shall be 1000 lbs./sq. in. as indicated in Table 331-2. Percent bitumen by weight of total mix: 5.0 (minimum). Two copies each of the actual design mix shall be submitted to the Engineer. Written approval of the Asphalt base course design mix must be obtained from the engineer prior to commencing base course construction. Once the design mix has been approved by the engineer, sieve analysis tolerances indicated in Table 331-5 are allowable during construction. If sieve analysis values fall outside these tolerances, design mix must be resubmitted for acceptance. After the approval of the mix design, the Asphalt base course shall be placed in accordance with Section 280 and compacted in accordance with Section 330-10.

NOTE: STORMWATER DRAINAGE SHALL BE CONTROLLED DURING ALL PHASES OF CONSTRUCTION.

3 SPECIFICATION: ASPHALT CONCRETE PAVING

3.1 SCOPE:

This section includes materials and work required for installation of flexible asphaltic concrete pavement for parking and drive areas shown on the plans.

3.2 APPLICABLE PUBLICATIONS:

The publications listed below form a part of this specification to the extent referenced. The publications shall be the most current issue and are referred to in the text by the basic designation only. The following are minimum requirements and shall govern except that all local, state, and/or federal codes and ordinances shall govern when their requirements are in excess hereof. All asphalt construction shall be in accordance with applicable sections of the "Florida Department of Transportation Specifications for Road and Bridge Construction" unless modified herein.

Florida Department of Transportation Specifications:	
• Section 901	Course Aggregate
• Section 902	Fine Aggregate
• Section 916	Bituminous Materials
• Section 917	Mineral Filler
• Section 300	Bituminous Treatments, Surface Courses and Concrete Pavement
• Section 331	Type S Asphalt Concrete

American Society for Testing and Materials (ASTM) Publications:	
• D 1557	Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10 lb (4.54 kg) Rammer and 18-in. (457mm) Drop.
• D 1557	Marshall Stability Mix Design

3.3 SUBMITTALS:

Asphalt Design Mix: Before any asphalt surface is constructed, submit two copies of each of the actual design mix to the Engineer and Owner.

Written approval of the asphaltic concrete design mix must be obtained from the Engineer and Owner prior to commencing asphalt pavement construction.

Material Certificates: Furnish copies of materials certificates signed by material producer and Contractor, certifying that each material item complies with, or exceeds specified requirements.

Asphalt extraction tests.

Aggregate gradation tests.

Marshall stability tests.

3.4 JOB CONDITIONS:

Weather limitations: Apply prime and tack coats when ambient temperature is above 40 degrees, and when temperature has not been below 35 degrees for 12 hours prior to application. Do not apply when base is wet or contains excess moisture.

3.5 MATERIALS:

Mineral Filler: Rock dust, hydraulic cement, or other inert material complying with Section 917 of the Florida D.O.T. Specification.

Asphalt Cement: The bituminous material shall be AC-20, viscosity grade and comply with Section 916 of the Florida D.O.T. Specification.

Course Aggregate: Comply with Section 901 of the Florida D.O.T. Specification.

Fine Aggregate: Comply with Section 902 of the Florida D.O.T. Specification.

Prime Coat and Tack Coat: The bituminous material for the Prime Coat shall be MC-70. The bituminous material for the Tack Coat shall be AC-20, or Emulsified asphalt, grade RS-2 and comply with the requirements in Section 300 and 916 of the Florida D.O.T. Specifications.

Asphaltic Concrete Design Mixes: Asphalt shall conform to the requirements for Type S Asphalt as indicated in Section 331 of the Florida D.O.T. Specifications.

Mix shall be within sieve analysis and bitumen range given in Section 331 of the Florida D.O.T. Specifications.

Minimum Marshall stability shall be in 1500 lbs./sq. in. as indicated in Table 331-2 of the Florida D.O.T. Specifications.

Percent bitumen by weight of total weight mix: 5.0 - 8.5.

Once design mix has been accepted by Engineer and Owner, sieve analysis tolerances indicated in Table 331-5 are allowable during construction. If sieve analysis values fall outside these tolerances, design mix must be resubmitted for acceptance.

Provide asphalt-aggregate mixture as recommended by local or state paving authorities to suit project conditions. Use locally available materials and graduations which meet Florida D.O.T. Specifications and exhibit satisfactory record on previous installations.

3.6 BASE COURSE PREPARATION:

Prior to construction of the base course, the top 12 inches of subgrade shall be compacted to a minimum soil density of 98% of the Modified Proctor Test Density (ASTM 1557). The subgrade shall be sterilized by a borate or chlorate sterilant containing not less than 25% sodium chlorate and shall be mixed thoroughly with water at the rate of 1-1/2 lbs. of sterilant per gallon of water. The sterilant shall be applied evenly at the rate of 0.2 gallons per square yard to subgrades that are less than 12" below original grades. If prepared base course will not be immediately covered with asphalt on the same day and wind-blown seeds will contaminate the base course surface, the sterilants shall be applied to the base course contaminate the base course.

Remove loose material from compacted base material surface immediately before applying prime coat.

Proof roll prepared base material surface to ensure unstable areas have been corrected and are ready to receive paving.

Prime Coat:

- Apply bituminous prime coat to base material surfaces where asphaltic concrete paving will be constructed.
- Apply bituminous prime coat in accordance with Section 300 of Florida D.O.T. Specifications.
- Apply at minimum rate of not less than 0.15 gal./sq. yd. over compacted base material. Apply material to penetrate and seal, but not flood, surface.
- Cure and dry as long as necessary to attain penetration and evaporation of volatile.

Tack Coat:

- Tack coat shall be applied in accordance with Section 300 of Florida D.O.T. Specifications. Apply to contact surfaces of previously constructed asphalt or portland cement and concrete and surfaces abutting or projecting into asphalt concrete pavement.
- Apply tack coat to full depth asphalt base course and sand asphalt base course. Apply emulsified asphalt tack coat between each lift or later of full depth asphalt and sand asphalt bases and on surface of such bases where asphaltic concrete paving will be constructed.
- Distribute at rate of 0.08 ga./sq. yd. of surface.
- Allow to dry until at proper condition to receive paving.

3.7 PLACING ASPHALT MIX:

Place asphalt concrete mixture on prepared surface, spread, and strike off. Spread mixture at the following minimum temperatures:

- When ambient temperature is between 40 degrees F and 50 degrees F: 285 degrees F.
- When ambient temperature is between 50 degrees F and 60 degrees F: 280 degrees F.
- When ambient temperature is higher than 60 degrees F: 275 degrees F.

Place inaccessible and small areas by hand. Place each course to required grade, cross-section, and compacted thickness.

Paver Placing:

- Place in strips not less than 10'-0" wide, unless otherwise acceptable to the Contracting Officer.
- After first strip has been placed and rolled, place succeeding strips and extend rolling to overlap previous strips.

Joints:

- Construct joints between old and new pavements as detailed in the plans.
- Joints between successive days work shall be constructed to ensure continuous bond between adjoining work.
- Construct joints to have same texture, density, and smoothness as other sections of asphalt concrete course.
- Clean contact surfaces and apply tack coat.

3.8 COMPACTION:

Each lift of asphalt shall be compacted to a minimum of 98% of the Marshall test ASTM D1559. Begin rolling when mixture will bear roller weight without excessive displacement. Compact mixture with hot hand tampers or vibrating plate compactors in areas inaccessible to rollers.

Breakdown Rolling:

- Accomplish breakdown or initial rolling immediately following rolling of joints and outside edge.
- Check surface after breakdown rolling, and repair displaced areas by loosening and filling, if required, with hot material.
- Second Rolling:
- Follow breakdown rolling as soon as possible, while mixture is hot.
- Continue second rolling until mixture has been thoroughly compacted.

Finish Rolling:

- Perform finish rolling while mixture is still warm enough for removal of roller marks.
- Continue rolling until roller marks are eliminated and course has attained maximum density.

Patching:

- Remove and replace paving areas mixed with foreign materials and defective areas.
- Cut out such areas and fill with fresh, hot asphalt concrete.
- Compact by rolling to maximum surface density and smoothness.

Protection:

- After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.
- Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

3.9 FIELD QUALITY CONTROL:

An independent Testing Laboratory, selected and paid by the contractor shall be retained to perform construction testing of in-place asphalt courses for Asphalt Extraction, Aggregate gradation, Marshall Stability, thickness and surface smoothness.

Thickness: In-place compacted thickness shall not be less than thickness specified on the drawings.

Surface Smoothness: Testing shall be performed on the finished surface of each asphalt concrete course for smoothness, using 10'-0" straightedge applied parallel with, and at right angles to centerline of paved area. The variation of the surface from the edge of the straight edge between any two contact points shall not exceed 1/4". Check surface areas at intervals necessary to eliminate ponding areas. Repair or remove and replace unacceptable paving as directed by the Contracting Officer.

Asphalt content, Aggregate gradation, and Marshall Stability shall be as specified in Section 331 of the Florida D.O.T. Specifications.

4 SPECIFICATION: PORTLAND CEMENT CONCRETE PAVING

4.1 SCOPE:

This section includes sidewalks, curbs, and miscellaneous concrete pavement.

4.2 APPLICABLE PUBLICATIONS:

The publications listed below form a part of this specification to the extent referenced. The publications shall be the most current issue and are referred to in the text by the basic designation only. The following are minimum requirements and shall govern except that all local, state, and/or federal codes and ordinances shall govern when their requirements are in excess hereof. All concrete construction shall be in accordance with applicable sections of the "Florida Department of Transportation Specifications for Road and Bridge Construction" unless modified herein.

Florida Department of Transportation Specifications:	
• Section 345	Portland Cement Concrete
• Section 350	Cement Concrete Pavement
• Section 520	Concrete Gutter, Curb Elements and Traffic Separator
• Section 931	Metal Accessory Materials for Concrete Pavement and Concrete Structures

American Society for Testing and Materials (ASTM) Publications:

- A 615 Deformed and Plain Billet Steel Bars for Concrete Reinforcement
- D 1557 Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10-lb. (4.54 kg) Rammer and 18-in. (457mm) Drop.
- D 1751 Preformed Expansion Joint Filler for Concrete Paving and Structural Construction. (Nonextruding and Resilient Bituminous Types)

4.3 SUBMITTALS:

Material Certifications: Furnish copies of materials certificates signed by material producer and Contractor, certifying that each material item complies with, or exceeds, specified requirements.

4.4 MATERIALS:

Forms:

- Steel, wood, or other suitable material of size and strength to retain horizontal and vertical alignment until removed.
- Use straight forms, free of distortion and defects.
- Use flexible spring steel forms or laminated boards to form radius bends as required.

Form Release Agent:

- Coat forms with nonstaining type coating that will not discolor or deface surface of concrete.

Welded Wire Mesh:

- Welded plain cold-drawn steel wire fabric. Furnish in flat sheets, not rolls, unless otherwise acceptable to Contracting Officer. Welded wire mesh shall be free from rust, dirt, foreign matter and shall not be stored directly on the ground. Wire fabric shall comply with Sections 931 of the Florida D.O.T. Specifications.

Reinforcing Bars:

- Deformed steel bars, ASTM A 615, Grade 40. Reinforcing bars shall be free from rust, dirt, foreign matter and shall not be stored directly on the ground. Deformed steel bars shall comply with Section 931 of the Florida D.O.T. Specifications.

Concrete Materials:

- Comply with requirements of Sections 345 and 350 of the Florida D.O.T. Specifications for concrete materials, admixture, bonding materials, curing materials, and others as required.

Joint Fillers:

- Resilient premolded bituminous impregnated fiberboard units complying with ASTM D 1751. Joint fillers shall comply with Section 932 of the Florida D.O.T. Specifications.

4.5 MIXING:

Design mix to produce normal weight concrete consisting of Portland cement, aggregate, water-reducing or high-range water reducing admixture (super-plasticizer), air-entraining admixture and water to produce following properties:

- Compressive Strength: Minimum 3,000 psi for curb and walkways and 4,000 psi for pavement, at 28 days. In addition, concrete for pavement shall have a minimum modulus of rupture of 600 psi.
- Slump Range: 3" - 5".
- Air Content: 3% to 6%.

4.6 PREPARATION:

Surface Preparation:

- Remove loose material from compacted base material surface immediately before placing concrete.
- Compact the top 12 inches of subgrade to a minimum soil density of 98% for the Modified Proctor Test (ASTM D 1557) to result in a minimum modulus of subgrade reaction (k) of 150 psi/in. Proof-roll prepared base material surface to check for unstable areas. The paving work shall begin after the unsuitable areas have been corrected and are ready to receive paving. Compaction testing for the base material shall be completed prior to the placement of the paving.

4.7 CONCRETE INSTALLATION:

Form Construction:

- Set forms to required grades and lines, rigidly braces and secured. Install sufficient quantity of forms to allow continuous progress of work and so that forms can remain in place at least 24 hours after concrete placement.
- Check completed formwork for grade and alignment to following tolerances:
 - Top of forms not more than 1/8" in 10'-0".
 - Vertical face on longitudinal axis, not more than 1/4" in 10'-0".
 - Clean forms after each use, and coat with form release agent as often as required to ensure separation from concrete without damage.

Reinforcement:

- Locate, place, and support reinforcement to ensure compliance with plans.

Concrete Placement:

- Comply with requirements of Sections 345, 350, and 520 of Florida D.O.T. Specifications for mixing and placing concrete.

Do not place concrete until base material and forms have been checked for line and grade. Moisten base material if required to provide uniform dampened condition at time concrete is placed. Concrete shall not be placed around manholes or other structures until they are at the required finish elevation and alignment.

Place concrete using methods, which prevent segregation of mix. Consolidate concrete along face of forms and adjacent to transverse joints with internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Consolidate with care to prevent dislocation of reinforcing, dowels, and joint devices.

Deposit and spread concrete in continuous operation between transverse joints, as far as possible. If interrupted for more than 1/2 hour place construction joint.

Curbs and Gutters:

Automatic machine may be used for curb and gutter placement at Contractor's option. Machine placement must produce curbs and gutters to required cross section, lines, grades, and jointing as specified for formed concrete. If results are not acceptable, remove and replace with formed concrete as specified.

4.8 JOINT CONSTRUCTION:

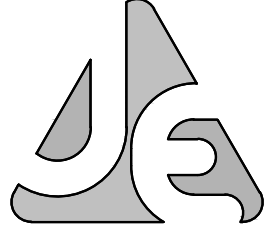
Construct expansion, weakened-plane (Contraction), and construction joints true-to-line with face perpendicular to surface of concrete. Construct transverse joints at right angles to centerline, unless otherwise indicated.

Weakened-Plane (Contraction) Joints:

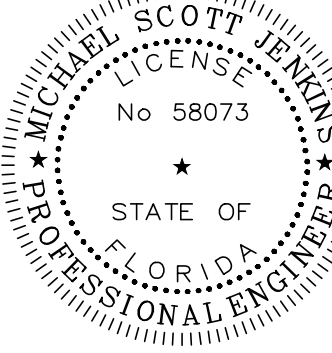
- Provide weakened-plane (contraction) joints, sectioning concrete into areas at 15'-0" o.c. maximum each way.
- Sidewalks shall have contraction joints at 5'-0" o.c.
- Construct weakened-plane joints for depth equal to at least 1/4 concrete thickness.

Tooled Joints:

Form weakened-plane joints in fresh concrete by grooving top portion with recommended cutting tool and finishing edges with jointer.



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M. SCOTT JENKINS, P.E.
FL REGISTRATION NO. 58073

BY	DATE	DESCRIPTION
MPF	5/15/2024	REVISIONS PER CITY 100% REVIEW

CITY OF DESTIN

CITY OF DESTIN PICKLEBALL COURTS
DESTIN, FLORIDA

SPECIFICATIONS 1

JOB: 23-58

DATE: 10-2023

DESIGNED: MSJ

DRAWN: MPF

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ADJUST SCALES ACCORDINGLY

DRAWING NUMBER
11 OF 12

SHEET NUMBER
C11

NOT VALID UNLESS BEARING ENGINEERS ORIGINAL SIGNATURE

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CITY OF DESTIN



AGENDA ITEM

COUNCIL MEETING DATE: June 3, 2024

TYPE OF AGENDA ITEM: Action Item

AGENDA OUTLINE NUMBER: 4.J.

TO: City Council

THRU: Louis Zunguze, City Manager
Kimberly Kopp, City Attorney

FROM: Ryan Scott, City Engineer
Lisa Firth, Parks & Rec Director
Krystal Strickland, Finance Director

DATE: May 28, 2024

SUBJECT: Tarpon Beach Parking- 100% Design Plans

I. BACKGROUND: At the February 28, 2023, Parks & Recreation Committee Meeting, Staff provided the Committee the 30% design plans for the beach access at Tarpon Street, explaining the details of the parking spaces for both cars and low speed vehicles, and pavilion designs, as well as the plans for the view corridors.

The minutes from that meeting were as follows:

“Mr. Warren provided the members with the 30% design plans for the beach access at Tarpon Street, explaining the details of the parking spaces for both cars and low speed vehicles, and pavilion designs, as well as the plans for the view corridors.”

Chairwoman Trammell recommended that they turn the pavilions and the bathroom buildings vertical so that would open up more of the view corridors. She also suggested pavers be put down where the LSV parking is located to allow for better drainage, noting that if there is a significant rain event she doesn't see how the stormwater could be held in what is shown and does not want to risk it overflowing down onto the beach.

Mr. Warren spoke of how that is a great idea, and no one has suggested repositioning the pavilions and bathrooms, which could potentially allow for 20 more feet of the view corridor.

Committee member Johnson asked if the parking would be pay to park. Mr. Warren explained the interlocal agreement the city signed with the county does not allow charging for parking, because county funds are being invested in the project. However, the street pay to park will be maintained and the locals can use their passes for those.”

At the March 6, 2023, City Council meeting, Staff presented the 30% plans, and the following motion was made:

“Motion to accept the plans for Tarpon Beach and The Shore of Crystal Beach and direct the City Manager to work with Okaloosa County to procure a construction contract for the parks passed 6-0.”

Staff worked with the County to bring the plans into compliance with the Land Development Code and went back forth with a couple of different revisions to help accomplish this task. The first revision that the County sent over was on August 8, 2023, Staff responded to the County on August 15, 2023. The County then sent another set of revised plans to the Staff on September 28, 2023. Staff responded to the County on September 29, 2023, stating the following:

“Staff is comfortable with the design and are eagerly awaiting a complete set of plans to start the permitting process. Please let us know when that is expected to be heading our way.”

Staff received 100% plans from the County on December 15, 2023, and took these plans to the Parks & Recreation Committee on January 23, 2024. The following motion was made:

“Motion by Committee member Piper seconded by Committee member Birch to recommend City Council approve the 100% plans for the Tarpon Beach Park with the stipulation that a 10-foot sidewalk be included in the permit requirements, and the city will pay for that portion.”

II. DISCUSSION: The 100% Design Plan Set, as mentioned in the January 23, 2024 Parks and Recreation Committee meeting, is now going through the permitting and Development Order process. With this said, City Council shall see this item again for the final Development Order approval.

Okaloosa County has taken the stance that the County would design the site itself and the City would need to take care of Multimodal Modal Transportation District (MMTD) requirements as we move forward with construction. MMTD requirements including the 10’ wide sidewalk, shall be conditions of the Development Order.

Currently, the Development Order package was submitted through Compass on February 27, 2024, and the completeness review was deemed insufficient (missing information) on March 6, 2024. The County worked on getting the extra documentation/information back to the City. All documentation was resubmitted on April 5, 2024. The Completeness Review was approved on April 15, 2024 at which time the project began the official Development Order Review Process. The County was sent a Correction Report on May 9, 2024. Currently, Staff is waiting for the County to resubmit the requested revisions from the Development Order Review Process.

A. Link to Strategic Goals / Objectives: II. Enhanced quality of life and safety for families

IV. Effective, efficient, and aesthetically pleasing infrastructure

V. Improve mobility and connectivity

B. Effect on Budget (EOB): The estimated construction cost is \$2,168,832. The

Okaloosa County Tourism Development Council (TDC) will pay 50% of this cost and the City of Destin has agreed to reimburse the TDC for the other 50% from the City's annual allotment of "12.5%" funds. We currently anticipate construction to begin in the fall of 2024 (fiscal year 2025), and the encumbrance of the contract against budget will likewise occur at the beginning of FY 2025.

	30557212-565000-	30557237-56500-	
	CM002	CM002	
	12.5% TDC alloc	BOCC Tarpon	TOTAL
FY 25 Proposed Budget*	\$ 1,167,761	\$ 1,167,761	\$ 2,335,522
Previous Expenses/Encumbrances	-	-	-
Available Program Budget	1,167,761	1,167,761	2,335,522
This Agreement +(-)	(1,084,416)	(1,084,416)	(2,168,832)
FY 25 Remaining Program Budget	\$ 83,345	\$ 83,345	\$ 166,690

- C. Level of Service (LOS): Improve mobility and connectivity.
- D. Legislative Sponsor:

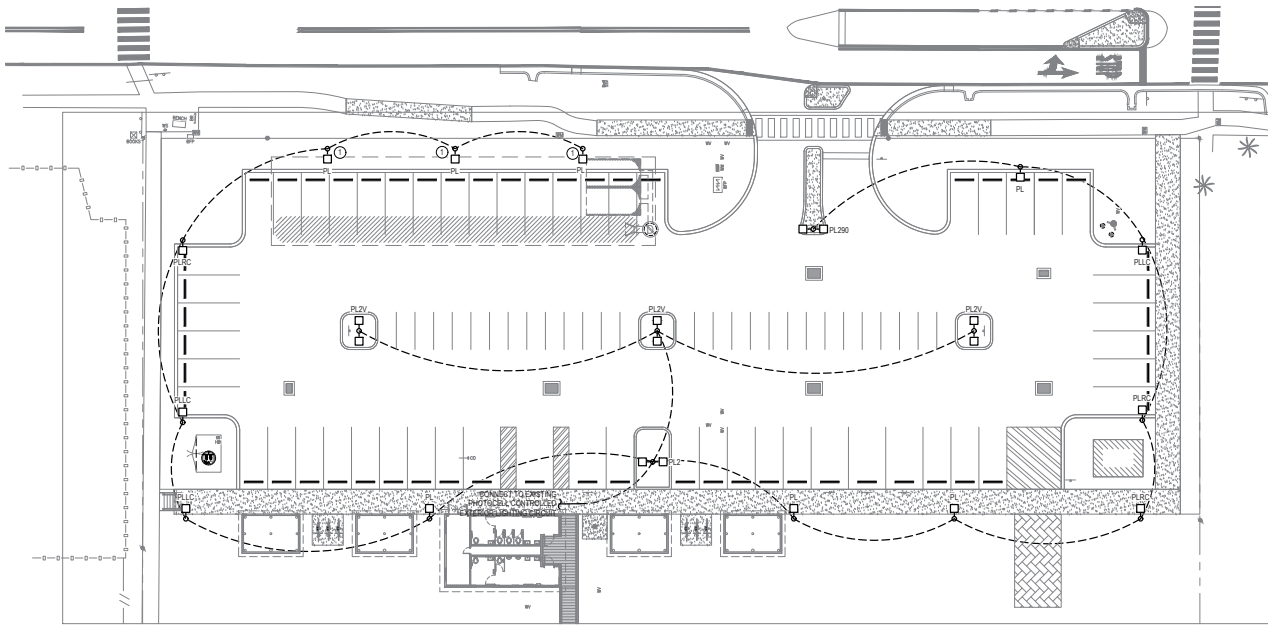
III. CONCLUSION: City Staff are working towards bringing a “completed” Development Order package to the City Council as soon as it is ready.

IV. RECOMMENDED MOTION: This item is informational and intended to provide an update to the City Council. If Council is satisfied with the process, no action is required at this time, and the development order will proceed to Council at a future meeting.

Attachments:

1. Tarpon Beach Lighting-2024-04-15_v1
2. Tarpon Beach Mech-2024-04-15_v1
3. Tarpon Beach Structurals-2024-04-15_v1
4. Tarpon Beach 100% OPCC - 08 Dec 2023_v1
5. Tarpon Beach 100% Specs_v1
6. Tarpon Beach Arch-2024-04-15_v1
7. Tarpon Beach Civil Plans-2024-04-15_v1
8. Tarpon Beach Electricals-2024-04-15_v1
9. Tarpon Beach Landscape-2024-04-15_v1

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LINETYPE LEGEND

--- 200' & 18'10" BELOW GRADE IN 1'

KEYNOTES

- ① COORDINATE POLE LOCATIONS SUCH THAT THEY HAVE NO CONFLICT WITH ADJACENT STORM CHAMBERS AND WATER LINE.



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24012

SHORE AT TARPON BEACH

SEAL:

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signed by
Daniel White
Date:
2024.02.27
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-06'00'

REVISION:

DATE	DESCRIPTION

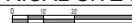
DRAWN BY:	JF
DESIGNED BY:	DW
CHECKED BY:	DW
DATE:	3/27/2024
JOB NUMBER:	24012

ELECTRICAL SITE
LIGHTING PLAN

E-101

ELECTRICAL SITE LIGHTING PLAN

1" = 20'-0"



ENGINEERS

INC.

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24012

SHORE AT
TARPON BEACH

SEAL: 

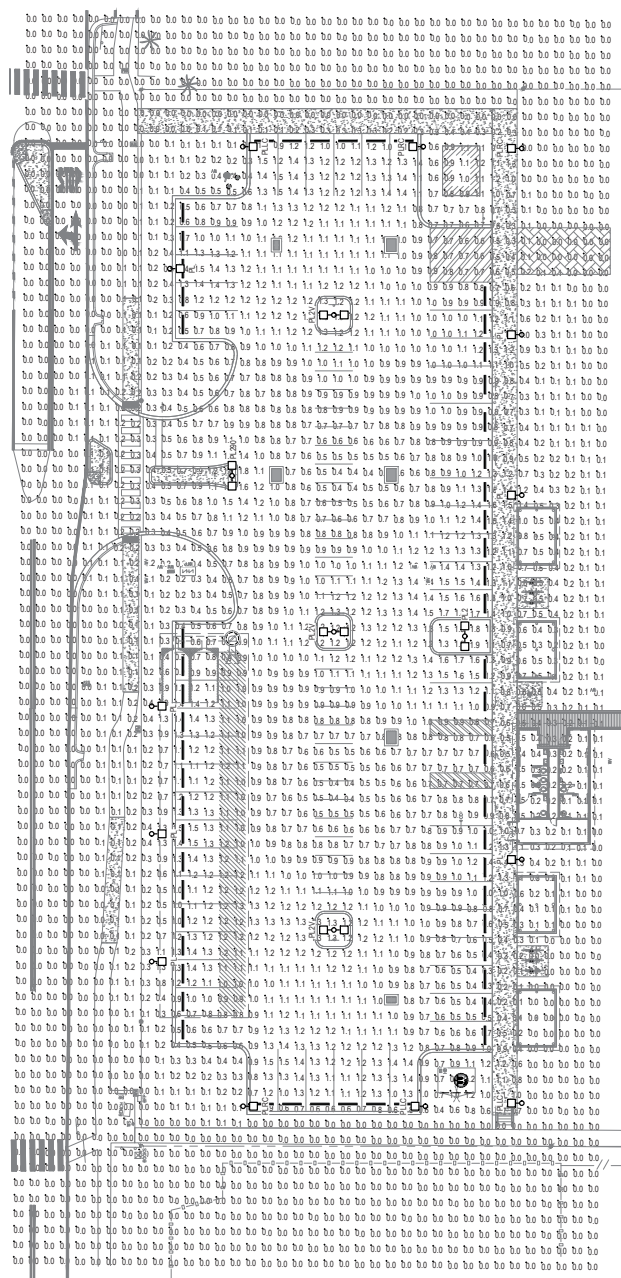
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Signed by
Daniel White
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2024.02.27
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REVISION	DATE	DESCRIPTION

DRAWN BY:	DM
CHECKED BY:	DM
DATE:	2/27/2024
JOINUMBER:	24012

PHOTOMETRIC PLAN

E-102



PHOTOMETRIC PLAN
1"=20'

[illegible]

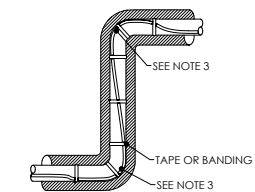
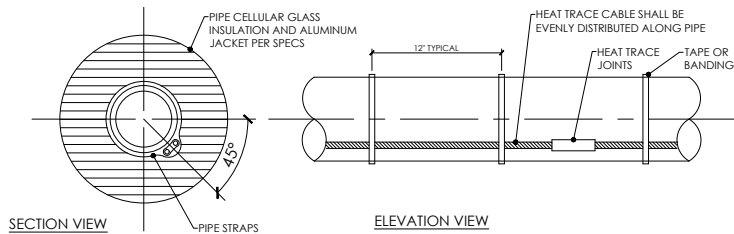
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1 2 3 4 5 6 7 8 9 10

PLUMBING FIXTURE SCHEDULE						
MARK	FIXTURE	BASIS OF DESIGN		CONNECTIONS		
		MANUFACTURER	MODEL/MODEL#	SAN (IN)	DCW (IN)	DHW (IN)
P-1	WATER CLOSET	ZURN	Z5655; Z6000AV	3	1	-
P-1A	WATER CLOSET (ADA)	ZURN	Z5665; Z6000AV	3	1	-
P-2	WALL HUNG SINK	KOHLER	K-2005	1-1/2	1/2	-
		T&S	B-0805			
FD	FLOOR DRAIN	ZURN	Z415B	3	-	-
CO	FLOOR CLEANOUT	ZURN	ZN1400	SEE FLP		ADJUSTABLE FLOOR CLEANOUT WITH BOTTOM OUTLET, CLEANOUT GASKETED PLUG, ROUND TOP AND POLISHED NICKEL BRONZE TOP FINISH, SCORIATED COVER.
WCO	WALL CLEANOUT	ZURN	Z1469-ZS	SEE FLP		WALL CLEANOUT WITH ROUND WALL ACCESS COVER AND POLISHED STAINLESS STEEL COVER.
HB	HOSE BIBB	WOODFORD	24	-	3/4	-
WH	WALL HYDRANT	WOODFORD	65P	-	3/4	-

NOTES:

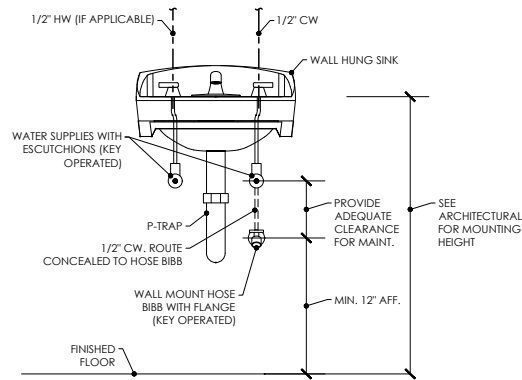
1. PROVIDE WITH ALL REQUIRED ACCESSORIES AND FITTINGS FOR A COMPLETE INSTALLATION.
2. PROVIDE WATER HAMMER ARRESTORS ON COLD AND HOT WATER SUPPLY BRANCHES. REFER TO WATER HAMMER ARRESTOR SCHEDULE.
3. REFER TO ARCHITECTURAL DRAWINGS FOR ALL PLUMBING FIXTURES' MOUNTING HEIGHT. COORDINATE WITH ADA REQUIREMENTS.
4. PROVIDE FULL SIZE WATER AND SANITARY PIPING TO EACH FIXTURE UNLESS NOTED OTHERWISE.
5. PROVIDE BASIS OF DESIGN MANUFACTURER AND MODEL OR APPROVED EQUAL WITH PERFORMANCE, COMPONENTS AND TRIM OPTIONS WHICH EXCEED OR EQUAL TO BASIS OF DESIGN.
6. ALL EXPOSED DOMESTIC WATER AND P-TRAP BELOW SINK SHALL BE CHROME PLATED.



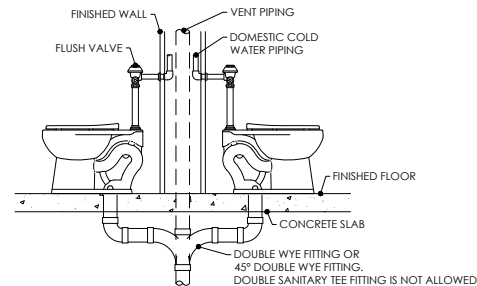
3 PIPE HEAT TRACE TAPE DETAIL
NOT TO SCALE

DETAIL 3 NOTES:

1. PROVIDE SELF REGULATING LOW TEMPERATURE HEAT TRACE CABLE EQUAL TO CHROMALOX MODEL CPR CABLE. PROVIDE WITH UL LISTED NON-INDICATING TEMPERATURE CONTROLLERS MODEL THR. HEAT TRACE SHALL BE ENERGIZED AUTOMATICALLY WHEN AMBIENT TEMPERATURE IS BELOW 40°F FOR FREEZE PROTECTION.
2. PROVIDE WITH ALL REQUIRED ACCESSORIES BUT NOT LIMITED TO TAPE, CABLE TIES, PIPE STRAPS, JUNCTION BOX, HEAT SHRINK SPLICE AND TEE KITS, HEAT SHRINK END CAPS. INSTALL IN STRICT ACCORDANCE TO MANUFACTURER'S INSTALLATION MANUAL.
3. HEATING CABLE IS APPLIED TO THE OUTSIDE (LONG) RADIUS OF THE PIPE ELBOW.
4. CONTRACTOR SHALL PROVIDE AND COORDINATE HEAT TRACE CIRCUITS AND ALL OTHER ELECTRICAL POWER REQUIREMENTS. COORDINATE CURRENT SWITCH INSTALLATION WITH DDC CONTRACTOR.
5. PROVIDE HARDWARE FOR POWER CONNECTIONS. PLUG IN TYPE IS NOT ALLOWABLE.
6. HEAT TRACE SHALL MEET THE FOLLOWING REQUIREMENTS:
 - 6.1. THE HEAT SYSTEM MUST BE SELF-REGULATING AND ENSURE THE SURFACE TEMPERATURE OF THE PIPE AND FITTINGS WILL NOT EXCEED 158°F (70°C).
 - 6.2. THE SYSTEM MUST BE INSTALLED FOLLOWING THE MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION, AND THE PRODUCT/SYSTEM LISTINGS.
 - 6.3. SHALL BE USED IN COMPLIANCE WITH ALL APPLICABLE LOCAL CODES.



1 SINK AND HOSE BIBB DETAIL
NOT TO SCALE



2 BACK TO BACK WC CONNECTION DETAIL
NOT TO SCALE

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ANTON LEE ENGINEERING, LLC
1701 E. 98th AVE. RD. 100, 1. P-200
PENSACOLA, FL 32514
CERTIFICATE OF AUTHORIZATION:
FL 32761-A-16852
ANTON LEE, PE
FL PEP 10247-A-AL PEP 321-014
PROJECT NUMBER 23-100

BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
100 PANAMA CITY BEACH, FL 32413-1890 (204) 650-
1100
PENSACOLA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE

**SHORE AT
TARPOON BEACH**

NO.	DATE	APPR.	REVISION / ACTION TAKEN

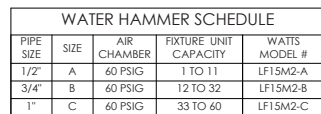
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**NOT RELEASED FOR
CONSTRUCTION**

PROJECT NO.	12107 01
DESIGNED BY: AL	
DRAWN BY: AL	
CHECKED BY: AL	
PROJECT MGR: JOP	
DATE: FEBRUARY 2024	

**MECHANICAL SCHEDULE AND
DETAILS**

M-002



WATER HAMMERS SHALL MEET ASSE 1010 AND BE SIZED PER PDI STANDARDS

DETAIL KEY NOTES:

- ① 1/2" C.W. CONNECT TRAP PRIMER BRANCH OFF THE TOP OF THE SUPPLY LINE TO PREVENT SEDIMENT FROM SETTLING ON TRAP PRIMER VALVE.
- ② MINIMUM 1".
- ③ ISOLATION BALL VALVE.
- ④ DIELECTRIC UNION.
- ⑤ PRESSURE ACTUATED TRAP PRIMER.
- ⑥ DISTRIBUTION UNIT.
- ⑦ 1/2" TRAP PRIMER LINE.
- ⑧ TRAP PRIMER LINE PENETRATE THROUGH FLOOR. SEAL WATER TIGHT. SLOPE HORIZONTAL PIPING AT 1/4" PER FT MINIMUM.
- ⑨ MIN. 12" AFF.
- ⑩ FLOOR DRAIN TRAP PRIMER CONNECTION.

NOTES:

1. PROVIDE TRAP PRIMER ON ALL FLOOR DRAINS, FLOOR SINKS AND HUB DRAINS AS NOTED.
2. PROVIDE DISTRIBUTION UNIT TO SERVE MULTIPLE TRAPS.
3. ACCESS DOOR: PROVIDE MIN 12"x24" LARGE ENOUGH FOR MAINTENANCE AND PARTS REMOVAL. COORDINATE LOCATION WITH ARCHITECTURAL.
4. MECHANICAL ROOM INSTALLATION: ALL PIPING AND PARTS SHALL BE ABOVE, ACCESSIBLE AND NOT REQUIRE SUPPORT PIPING OFF FLOOR WITH GALVANIZED METAL FRAMING CHANNELS WITH PIPE CLAMPS AND SECURE TO FLOOR.
5. INSTALL VERTICALLY AND SUPPORT PER MFR RECOMMENDATION.

The top diagram illustrates a 2-way cleanout connection. A vertical pipe from the floor has a cleanout cap. A horizontal pipe branches off to the right. Labels include: 'FLOOR CLEANOUT, COORDINATE WITH TILE INSTALLATION.' pointing to the cap; 'EXTENSION' pointing to the vertical pipe section; '2-WAY CLEANOUT PROVIDE REDUCER AS REQUIRED.' pointing to the junction; and 'LINE CONTINUATION OR PLUG AS NOTED ON FLOOR PLAN' pointing to the horizontal pipe. The bottom diagram shows a similar setup but with a 'LONG SWEEP 1/4" BEND OR "Y" WITH 1/8" BEND' at the junction, also labeled 'EXTENSION' and '2-WAY CLEANOUT PROVIDE REDUCER AS REQUIRED.'.

Diagram illustrating the assembly of a roof vent. The components shown include:

- VENT CAP
- VENT STACK
- CAULK AND SEAL WATER TIGHT
- ROOFING MATERIALS
- INSULATION
- FLASHING, COORDINATE WITH ARCHITECTURAL
- VENT STACK FLASHING SLEEVE
- CLAMPING COLLAR, SECURE TO STRUCTURE
- VENT STACK

Minimum dimensions are indicated as MIN. 12" for the height of the vent stack above the roof surface and the distance from the roof edge to the vent stack.

FLOOR DRAIN, COORDINATE WITH TILE INSTALLATION WHERE APPLICABLE

INSTALL FLOOR DRAIN - 1/2" BELOW FINISHED FLOOR. GROUT TILE AND ADJUST AS REQUIRED FLUSH WITH DRAIN.

24" AROUND DRAIN

1/2"

The image contains two technical cross-section drawings of pre-fab concrete cleanout adapters. The top drawing is for a 'PAVED' surface, showing layers of asphalt and concrete. The bottom drawing is for an 'UNPAVED' surface, showing a cleanout adapter installed in a concrete slab. Both drawings include labels for components like the cleanout adapter, sweep bend, and plug, along with reference notes.

PAVED

CAST IRON CLEANOUT FRAME & COVER. SEE SECTION A-A'
 18"x18" 3,000 PSI CONCRETE PAD

SEE BELOW FOR ADAPTER AND PLUG DETAILS

ASPHALT

CONCRETE

MATCH DEPTH OF ADJACENT ASPHALT AND BASE IN ASPHALT AREAS

SEE NOTE 2

SEE NOTE 3

PAVED

SWEEPING 90-DEGREE PVC BEND (SIZE VARIES SEE UTILITY PLAN)

PRE-FAB CONCRETE DONUT, (HEIGHT OF DONUT SHALL ALLOW FOR FREE PASSAGE OF A LAWN MOWER).

SCREW TYPE PVC CLEAN-OUT PLUG WITH RAISED SQUARE HEAD

PVC CLEAN-OUT ADAPTER

SEE NOTE 3

UNPAVED

SWEEPING 90-DEGREE PVC BEND (SIZE VARIES SEE UTILITY PLAN)

DETAIL 3 NOTES:

1. CLEAN-OUT PIPE AND FITTINGS TO MATCH SIZE OF LINE INTO WHICH ACCESS IS BEING PROVIDED.
2. MATCH DEPTH OF ADJACENT CONCRETE SIDEWALK OR PAVEMENT IN CONCRETE AREAS (MIN. THICKNESS TO BE AS REQUIRED TO EXTEND 2" BELOW BOTTOM OF CAST IRON FRAME).
3. DEPTH VARIES, MIN. 30". COORDINATE WITH CIVIL.

UNINSULATED PIPE

U-BOLT

INSULATION

INSULATED PIPE

INSULATION SADDLE

2"x2"x1/4" GALVANIZED STEEL ANGLE SUPPORT WELDED AND SECURE TO WALL STRUCTURE. PAINT SUPPORT. COORDINATE COLOR WITH ARCHITECTURAL.

7 PIPE SUPPORT DETAIL

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ANTON LEE ENGINEERING, LLC
1765 E. NINE MILE RD., STE. 1 #220
PENSACOLA, FL 32514

CERTIFICATE OF AUTHORIZATION:
FL 32794 | AL 5685-E

ANTON LEE, PE
FL PE# 82369 | AL PE# 37427-E



SHORE AT
TARPON BEACH

[illegible]

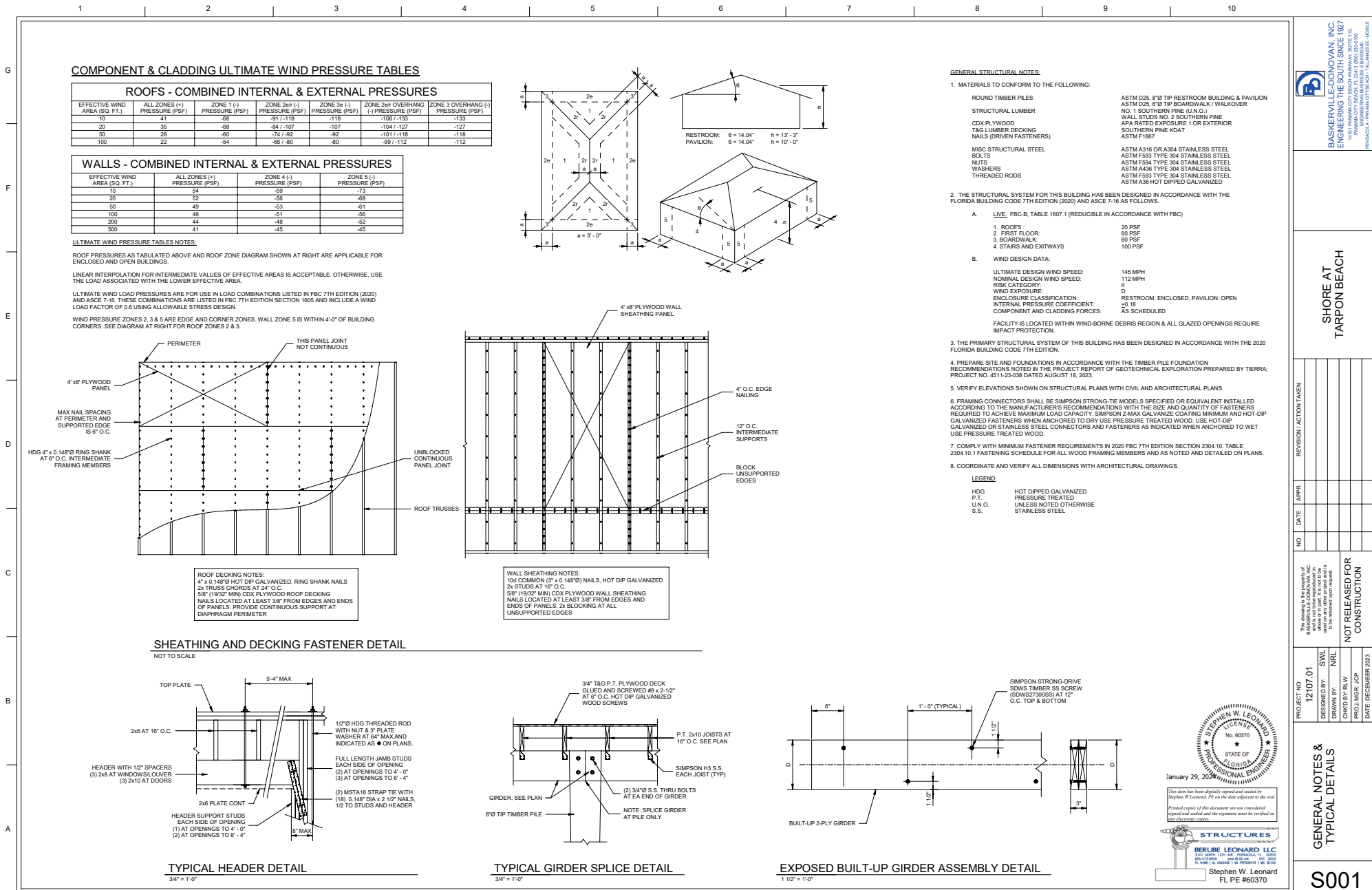
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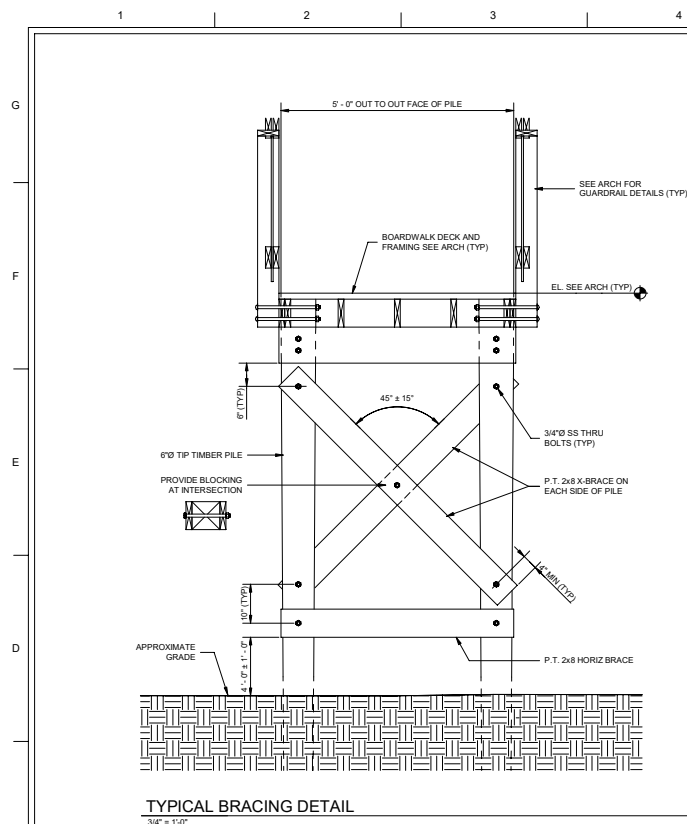
NOT RELEASED FOR CONSTRUCTION

PROJECT NO:	12107.01
DESIGNED BY:	AL
DRAWN BY:	AL
CHECK'D BY:	AL
PROJ. MGR:	JOP
DATE:	FEBRUARY 2024

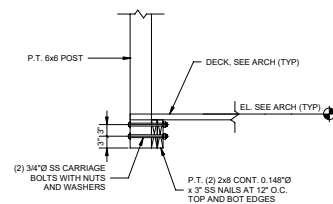
MECHANICAL DETAILS

M-201

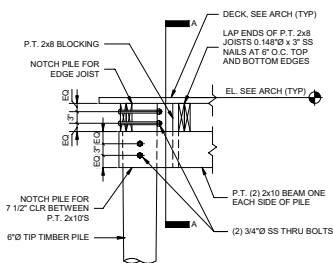




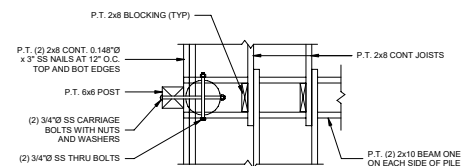
TYPICAL BRACING DETAIL



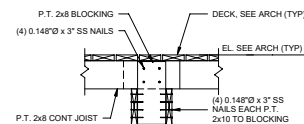
GUARDRAIL POST CONNECTION DETAIL
3/4" = 1'-0"



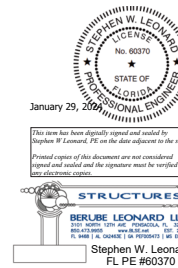
PILE CONNECTION DETAIL

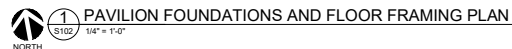


GUARDRAIL POST AT PILE - PLAN VIEW



SECTION A-A

[illegible]

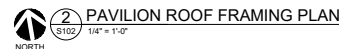


LEGEND:

● PILING CONTINUOUS TO TON CONSTRUCTION

○ PILING TERMINATING AT FLOOR CONSTRUCTION

TIMBER PILE WITH MINIMUM 8" TIP DIAMETER.
+7 TON BEARING AND -2 TON UPLIFT SERVICE LOADS
-6'-0" NAVD 88 TIP ELEVATION
REFER TO TIMBER PILE SPEC FOR ADDITIONAL INFO



 **BASKERVILLE-DONOVAN, INC.**
ENGINEERING THE SOUTH SINCE 1927

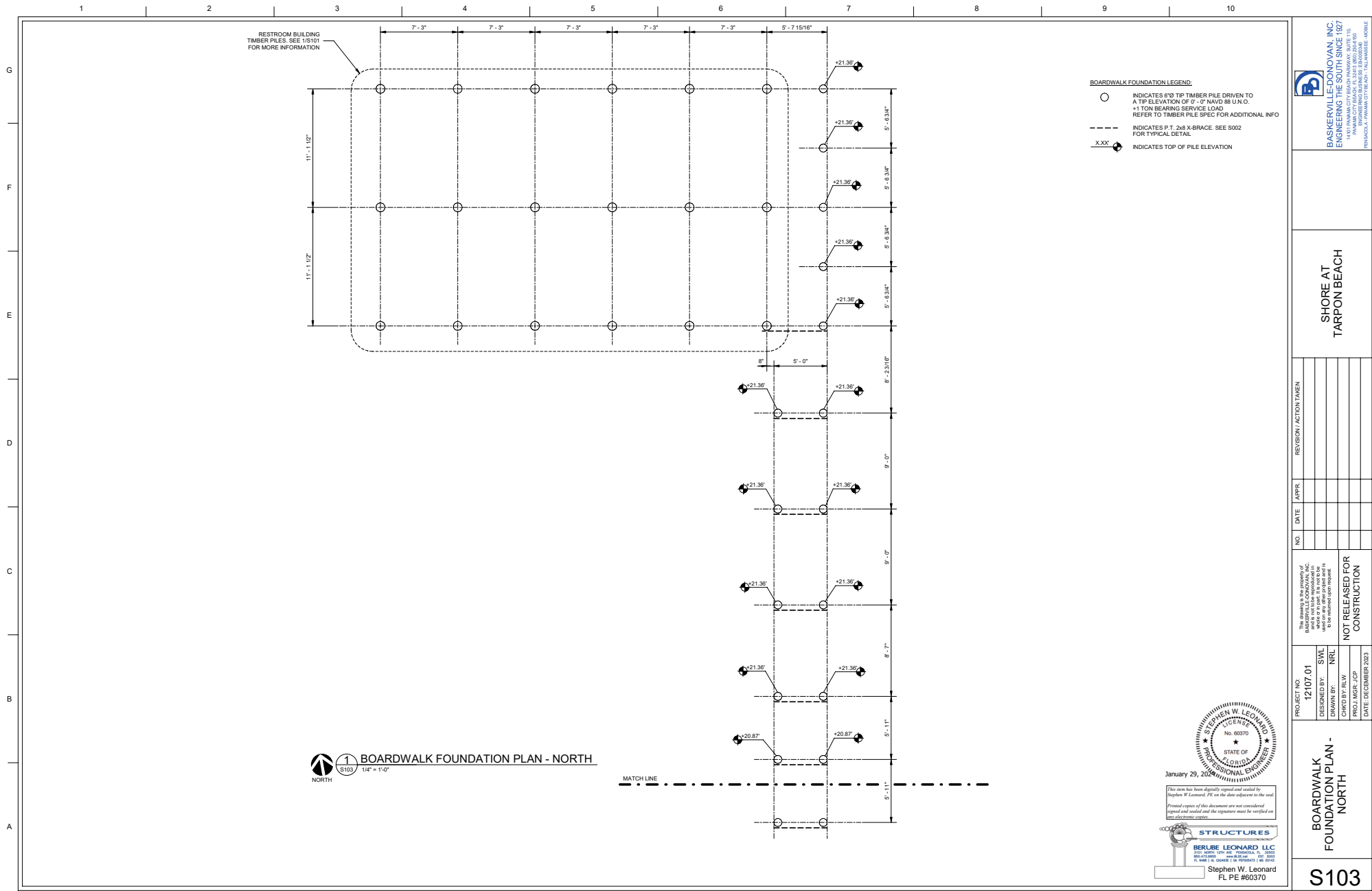
14191 PANAMA CITY BEACH PARKWAY, SUITE 110
PANAMA CITY BEACH, FL 32413 (904) 204-4160
ENGINEERING BUSINESS: EB000303-40
PENINSULA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE

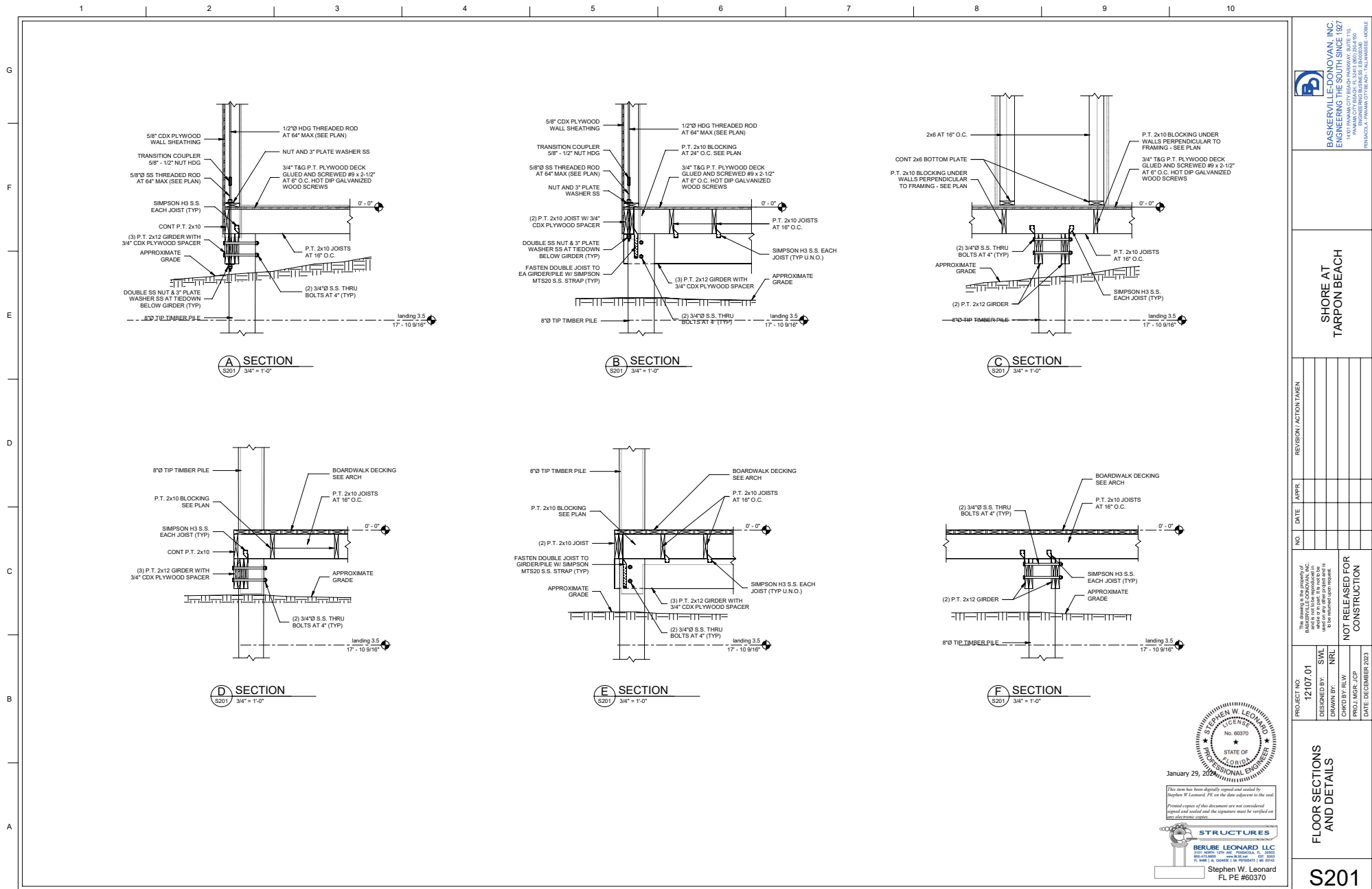
SHORE AT
TARPON BEACH

PROJECT NO. 12/07 01	DESIGNED BY	SWL	NO	DATE	APPROV	REVISION / ACTION / ASN
	DRAWN BY	NRL				
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CHECKED BY RLW PROJ MGR JCP						
DATE: DECEMBER 2023						

PAVILION FLOOR AND
ROOF FRAMING PLAN

S102





BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1000 PANAMA CITY BEACH, FL 32413-8800 (352) 430-8800
PANAMA CITY, FL 32409-1000 (904) 233-8800
TALLAHASSEE, FL 32301-1000 (904) 233-8800

**SHORE AT
TARPON BEACH**

NO.	DATE	APPR.	REVISION / ACTION TAKEN

PROJECT NO: 12107.01
DESIGNED BY: SWL
DRAWN BY: NRL
CHKD BY: RLW
PROJ. MGR.: JCP
DATE: DECEMBER 2023

**FLOOR SECTIONS
AND DETAILS**

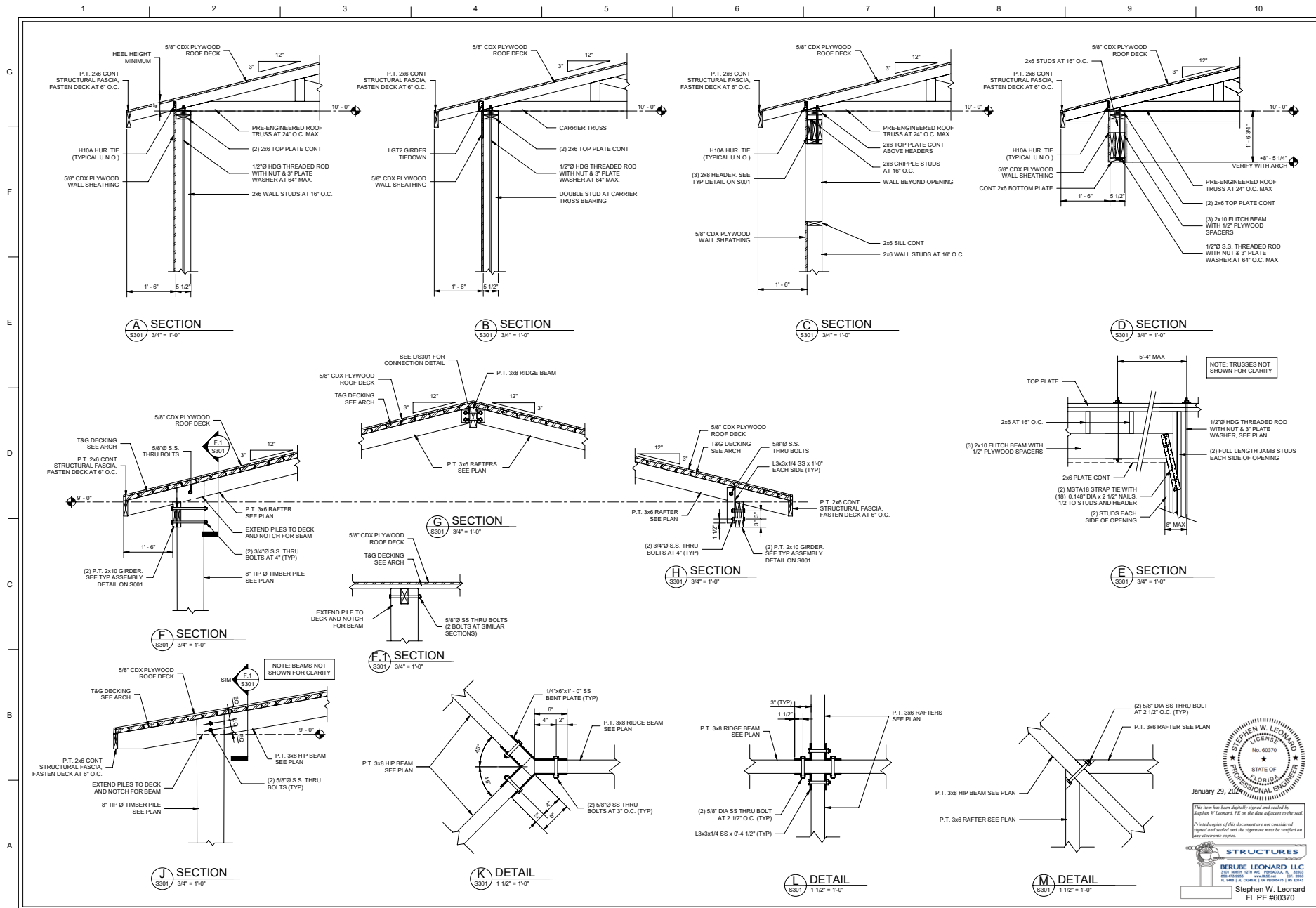
S201

STEPHEN W. LEONARD
No. 60370
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
January 29, 2024

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STRUCTURES
BERUBE LEONARD LLC
2501 NORTH 17TH AVE., SUITE 100, PANAMA CITY, FL 32409
904-233-8800
Stephen W. Leonard
FL PE #60370

FINAL PLANS - RELEASED FOR BID



BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1000 PANAMA CITY BEACH, FL 32413-8800 (354) 890-0000
PANAMA CITY, FL 32409 (904) 234-0000
TALLAHASSEE, FL 32309 (904) 234-0000

**SHORE AT
TARPON BEACH**

NO.	DATE	APPROVED	REVISION / ACTION TAKEN

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**NOT RELEASED FOR
CONSTRUCTION**

PROJECT NO: 12107.01
DESIGNED BY: SWL
DRAWN BY: NRL
CHECKED BY: JLP
PROJECT MANAGER: JLP
DATE: DECEMBER 2023

**ROOF SECTIONS AND
DETAILS**

S301

STEPHEN W. LEONARD
Professional Engineer
No. 60370
STATE OF FLORIDA
January 29, 2024

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BERUBE LEONARD LLC
2501 10th Ave. SE, Panama City, FL 32409
904-234-0000
Stephen W. Leonard
FL PE #60370

FINAL PLANS - RELEASED FOR BID

**ENGINEER'S OPINION
OF PROBABLE CONSTRUCTION COST**



PROJECT NAME: 12107.01 Tarpon Beach Gulf Front Park

CLIENT: Okaloosa County/City of Destin

DATE: 11/8/2023

ESTIMATED BY: SES

REVIEWED BY: JCP

BDI PROJECT NO. 12107.01

SUBMITTAL PHASE: 100%

ITEM	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT
	Mobilization	1	LS	\$100,000.00	\$100,000.00
	Earthwork	1	LS	\$20,000.00	\$20,000.00
	Restroom Building	880	SF	\$420.00	\$369,600.00
	(4) Pavilions	940	SF	\$285.00	\$267,900.00
	Dune Crossover	260	LF	\$620.00	\$161,200.00
	Final Grading and Seal Rolling Prior to Paving	3,400	SY	\$8.50	\$28,900.00
	1 1/2" Type SP 12.5 Asphalt, over 1500sy	3,400	SY	\$8.50	\$28,900.00
	Geotextile Grid, less than 500lf	50	SY	\$6.00	\$300.00
	Remove Existing Asphalt	150	CF	\$3.50	\$525.00
	Sawcut Existing Asphalt	250	LF	\$2.00	\$500.00
	Remove Existing 3' Wood Picket Fence	195	LF	\$7.00	\$1,365.00
	Remove Existing Sign	3	EA	\$62.00	\$186.00
	Remove Existing Roadway Striping, Arrow	1	EA	\$6.50	\$6.50
	12" Stabilized Subgrade, over 1000sy	3,490	SY	\$3.00	\$10,470.00
	Prime Coat	3,400	SY	\$1.00	\$3,400.00
	6" Graded aggregate Base "Min. LBR 100 at 100% Modified Proctor", over 1000sy	3,490	SY	\$16.00	\$55,840.00
	Thermoplastic 6" Solid Stripe, White	1,310	LF	\$1.19	\$1,558.90
	Thermoplastic 6" Dotted Guide Line, White	16	LF	\$1.79	\$28.64
	Thermoplastic 6" Double Solid Stripe, Yellow	190	LF	\$2.50	\$475.00
	Crosswalk	45	LF	\$27.50	\$1,237.50
	Thermoplastic Stop Bar	30	LF	\$8.00	\$240.00
	Thermoplastic Directional Arrow, Single Head (Straight Ahead) 12sf	8	EA	\$75.00	\$600.00
	Thermoplastic Directional Arrow, Single Head (Turn Left/Right)	3	EA	\$90.00	\$270.00
	Thermoplastic Handicap Parking Space with Symbol	3	EA	\$500.00	\$1,500.00
	"Stop" Sign, R1-01	1	EA	\$250.00	\$250.00
	Handicap "Reserved Parking" Sign, R7-08	3	EA	\$200.00	\$600.00
	"One Way" Sign, R6-02R	4	EA	\$225.00	\$900.00
	LSV Parking Only Sign, Custom	2	EA	\$31.00	\$62.00
	"No Parking Any Time" Sign, Double Arrow, R7-01	2	EA	\$19.00	\$38.00
	"Right Turn Only" Sign, R3-05R	1	EA	\$21.00	\$21.00
	"No Parking Loading Zone" Sign, R7-06	3	EA	\$24.00	\$72.00
	"Authorized Vehicles Only" Sign, R5-11	1	EA	\$21.00	\$21.00

1' Ribbon Curb, Per County Detail	560	LF	\$13.00	\$7,280.00
Concrete Vertical Curb, Type D	410	LF	\$20.00	\$8,200.00
Concrete Curb and Gutter, Type F	95	LF	\$22.00	\$2,090.00
5' Fiber Reinforced Concrete Sidewalk, over 80 lf	135	LF	\$28.00	\$3,780.00
8' Fiber Reinforced Concrete Sidewalk, over 100lf	450	LF	\$35.00	\$15,750.00
Concrete Traffic Separator, Type 1, 4' Wide	30	LF	\$87.00	\$2,610.00
Concrete Traffic Separator, Type 1, 6' Wide	15	LF	\$167.00	\$2,505.00
Concrete Traffic Separator, Type 1, 8.5' Wide	25	LF	\$190.00	\$4,750.00
Landscape Areas	7,300	SF	\$15.00	\$109,500.00
Detectable Handicap Warning Mat, FDOT Index 304	22	SF	\$50.00	\$1,100.00
Remove Existing Concrete, up to 6" thick	230	SY	\$6.50	\$1,495.00
Ditch Bottom Inlet, Type C, 6'-12' depth	2	EA	\$3,000.00	\$6,000.00
Ditch Bottom Inlet, Type D, 6'-12' depth	4	EA	\$4,500.00	\$18,000.00
15" RCP Pipe	130	LF	\$50.00	\$6,500.00
18" RCP Pipe	165	LF	\$65.00	\$10,725.00
24" RCP Pipe	110	LF	\$80.00	\$8,800.00
Storm Chambers MC-7200	1	LS	\$130,600.00	\$130,600.00
Storm Manhole with weep hole, Type 8, 6-12 ft deep	1	EA	\$6,000.00	\$6,000.00
Lift Station	1	LS	\$20,000.00	\$20,000.00
6' Wood Fence Enclosure	30	LF	\$25.00	\$750.00
Double Wood Gate, 6' x 5'	1	EA	\$500.00	\$500.00
1.5" PVC Sewer Force Main	130	LF	\$10.00	\$1,300.00
4" PVC Sewer Pipe	110	LF	\$20.00	\$2,200.00
45° PVC Bend for 1.5" Sewer Force Main	2	EA	\$3.00	\$6.00
45° PVC Bend for 4" Sewer Pipe	2	EA	\$15.00	\$30.00
4" Sewer PVC Clean Out	1	EA	\$35.00	\$35.00
8" x 8" x 1.5" PVC Sewer Tee	1	EA	\$90.00	\$90.00
2" PVC Water Main	390	LF	\$110.00	\$42,900.00
6" PVC Water Main	310	LF	\$30.00	\$9,300.00
Fire Hydrant Assembly	1	EA	\$5,000.00	\$5,000.00
90° DI Bend for 2" Water Main	3	EA	\$52.00	\$156.00
90° DI Bend for 6" Water Main	2	EA	\$234.00	\$468.00
6" x 6" x 2" PVC Water Tee	1	EA	\$72.00	\$72.00
2" x 2" x 2" PVC Water Tee	1	EA	\$8.00	\$8.00
6" x 6" x 6" PVC Water Tee	1	EA	\$66.00	\$66.00
Water Meter Box, 2"	1	EA	\$570.00	\$570.00
Backflow Preventor	1	EA	\$1,200.00	\$1,200.00
Public Shower with Foot Wash	3	EA	\$4,000.00	\$12,000.00
Water Hose Bibb	1	EA	\$15.00	\$15.00
2" Water Gate Valves	5	EA	\$100.00	\$500.00
6" Water Gate Valves	4	EA	\$1,500.00	\$6,000.00
Silt Fence Type IV	1,240	LF	\$5.00	\$6,200.00
Temporary Gravel Construction Entrance	120	SY	\$20.00	\$2,400.00
permits, etc.	1	EA	\$800.00	\$800.00

	Synthetic Erosion Control Wattles	6	LF	\$8.00	\$48.00
	Parking Bumpers	55	EA	\$500.00	\$27,500.00
	Bike Rack (3 Bikes)	2	EA	\$2,000.00	\$4,000.00
	Bollards	2	EA	\$1,200.00	\$2,400.00
	Subtotal Construction Costs				\$1,549,166
	Contractors Mark-up and General Conditions		15%		\$232,375
	Bonds and Insurance		5%		\$77,458
	Construction Contingencies		20%		\$309,833
	ESTIMATED TOTAL CONSTRUCTION COSTS				\$2,168,832

Engineer's opinions or estimates of probable construction costs are prepared upon the basis of Engineer's experience and qualifications and represent Engineer's judgment as a professional generally familiar with the industry. However, since Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, over contractor's methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from Engineer's opinions or estimates of probable construction costs.

SHORES AT TARPON BEACH

OKALOOSA COUNTY, FLORIDA

DECEMBER 2023

Prepared for:

OKALOOSA COUNTY

Prepared by:

Raven Roberts, PE
FL License No. 89932



1201 Montlimar Drive, Suite 650
Mobile, AL 36609
EB-0000340

TECHNICAL SPECIFICATIONS

Civil

- *FDOT Standard Specifications for Road and Bridge Construction, Latest Edition*
- Destin Water Users – MISCELLANEOUS WATER AND SANITARY SEWER SPECIFICATIONS – See sheets CU-501 through CU-504
- UNDERGROUND STORMWATER RETENTION CHAMBERS – *See sheet C-505 for underground stormwater retention chamber specifications. The ADS Stormtech MC-7200 chamber is the basis of design only and is not the required product to be used. However, the contractor is responsible for choosing a system that meets all the requirements as identified as part of the specification.*
- OUTDOOR SHOWER TOWER ENGINEERING TECHNICAL SPECIFICATION - *The Outdoor Shower Tower product is the basis of design only and is not the required product to be used. However, the contractor is responsible for choosing a product that meets all the requirements as identified as part of the specification.*
- 32 14 33.13 PERMEABLE PLASTIC PAVING - *The truegridpaver.com product is the basis of design only and is not the required permeable paver product to be used. However, the contractor is responsible for choosing a product that meets all the requirements as identified as part of the specification.*
- SANITARY SEWER LIFT STATION – See sheet CU-513. *The ZOELLER PUMP COMPANY Shark Grinder Model 803 product is the basis of design only and is not the required pump to be used. However, the contractor is responsible for choosing a product that meets all the requirements of this model including the motor, materials, and pump performance.*
- 33 32 16.14 SANITARY SEWER GRINDER PACKAGE PUMP
- 02800 FENCING
- 12931 BIKE RACKS

Architectural, Structural, Mechanical, and Plumbing

02 01 00	SUBSURFACE INVESTIGATION
05 60 00	HANDRAILS
06 10 00	CARPENTRY
06 17 53	SHOP-FABRICATED WOOD TRUSSES
07 21 00	SPRAY FOAM INSULATION
07 41 00	PREFORMED STANDING SEAM METAL ROOF
07 62 00	FLASHING AND SHEET METAL
07 92 00	WATER PROOFING AND SEALANTS
08 16 13	FRP DOORS AND FRAMES
08 43 00	ALUMINUM STOREFRONT
08 71 00	HARDWARE
08 81 00	GLASS AND GLAZING
09 27 00	CEMENT BACKER BOARDS
09 30 13	CERAMIC TILE
09 91 00	PAINTING
10 14 00	INTERIOR AND EXTERIOR SIGNS
10 22 00	TOILET PARTITIONS
10 28 00	TOILET ACCESSORIES

22 00 00	PLUMBING GENERAL
22 05 17	SLEEVES AND SLEEVE SEALS FOR PLUMBING PIPING
22 05 18	ESCUTCHEONS FOR PLUMBING PIPING
22 05 23	GENERAL-DUTY VALVES FOR PLUMBING PIPING
22 05 29	HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT
22 05 53	IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT
22 11 16	DOMESTIC WATER PIPING
22 11 19	DOMESTIC WATER PIPING SPECIALTIES
22 13 16	SANITARY WASTE AND VENT PIPING
22 13 19	SANITARY WASTE PIPING SPECIALITIES
23 00 00	MECHANICAL GENERAL
31 62 19	TIMBER PILES

APPLICABLE PERMITS

FDEP General Sewer Permit

FDEP Notice of Intent to use the General Permit for Construction of Water Main Extensions for PWSs

FDEP Coastal Construction Control Line Permit

FDEP Environmental Resource Permit (ERP)

FDOT Driveway Connection Permit

GEOTECHNICAL INVESTIGATION

Report of Geotechnical Exploration – Tarpon Beach Facilities Okaloosa County, Florida

OUTDOOR SHOWER TOWER ENGINEERING TECHNICAL SPECIFICATION

1. General Description:

1.1 The Outdoor Shower Tower is designed for outdoor use, providing a durable and long-lasting solution for various environments.

2. Dimensions:

2.1 Each shower column measures 81.5 inches in height and has a base diameter of 17.1 inches.

3. Construction Material:

3.1 The shower column is constructed using a tough, non-porous polymer – polyethylene.

3.2 The polyethylene material is UV stabilized and FDA approved, ensuring resistance to sun exposure, salt, water, and chlorine.

4. Durability and Warranty:

4.1 The Outdoor Shower Tower is warranted for a period of 5 years under normal use.

4.2 The warranty covers the product against cracking, rusting, corrosion, fading, or breaking.

4.3 This product has demonstrated longevity in harsh environments, with some installations exceeding 20 years.

5. Material Properties:

5.1 Polyethylene, the unique tower construction material, provides excellent resistance to environmental elements.

5.2 The molded-in color eliminates the need for painting or waterproofing.

6. Vandal Resistance:

6.1 Both the column and fixtures are designed to be vandal-resistant, ensuring the longevity and functionality of the Outdoor Shower Tower in public spaces.

7. Installation:

7.1 The Outdoor Shower Tower is designed for easy installation in outdoor environments.

7.2 Installation instructions are provided with each unit to ensure proper setup and use.

8. Maintenance:

8.1 The product requires minimal maintenance due to its durable and non-porous construction.

8.2 Routine cleaning with mild soap and water is recommended to preserve the appearance and functionality.

9. Compliance:

9.1 The Outdoor Shower Tower complies with relevant industry standards and regulations.

9.2 The product is designed to meet or exceed quality and safety requirements.

10. Safety Considerations:

10.1 The Outdoor Shower Tower is designed with user safety in mind, considering both material selection and construction.

10.2 Users are advised to follow the provided instructions and guidelines for safe and proper use.

11. Conclusion:

11.1 The Outdoor Shower Tower, made from UV stabilized and FDA approved polyethylene, stands as a durable and reliable outdoor shower solution. With a 5-year warranty and a proven track record of longevity in harsh environments, it offers a low-maintenance and vandal-resistant option for outdoor installations.



PRODUCT GUIDE SPECIFICATION

SECTION 32 14 33.13 – PERMEABLE PLASTIC PAVING

REV 11-06-23 v4

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Base material, over sub base prepared by others.
- B. Porous pavement system with S-flexural joints for seasonal expansion and contraction.
- C. Parking, fire lane, and traffic delineation.
- D. Gravel fill.
- E. Grass fill.

1.2 RELATED REQUIREMENTS

- A. Section 31 20 00 – Earth Moving: Subgrade Preparation.
- B. Section 33 41 00 – Subdrainage: Subsurface Drainage.
- C. Section 32 10 00 – Bases, Ballasts, and Paving.
- D. Section 32 80 00 – Irrigation: Irrigation System.
- E. Section 32 30 00 – Site Improvements.
- F. Section 32 92 00 – Turf and Grasses.

1.3 PREINSTALLATION MEETINGS

- A. Convene pre-installation meeting a minimum of two weeks prior to start of porous paving systems Specifier Notes:
- B. Verify project requirements, subbase and base conditions, manufacturer's installation instructions and coordinate with other related work.
- C. Require attendance of parties directly affecting work of this section, including the contractor, architect, engineer, and installer. Manufacturer's representative may attend by phone conference as needed.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01.
- B. Product Data: Submit manufacturer's product data.
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Shop drawings: Submit manufacturer's shop drawings including laying pattern and parking delineation locations.
- D. Samples: Submit two square samples of TRUEGRID Paver units.
- E. LEED and other Sustainable Design Submittals: Provide documentation of how the requirements for credit/certification will be met including, but not limited to: Recycled content, stormwater management, heat-island mitigation, water use reduction, site development, and regional materials.
- F. Manufacturer's Certificates: Certify products meet or specified requirements.
- G. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic fertilizing and maintenance.

1.5 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Manufacturer with a minimum of five years documented experience with products specified.
- B. Installer Qualifications: Installer experienced in performing work of this section that has specialized in installation of work similar to that required for this project. Installer must also be able to provide skilled workman with satisfactory record of performance on landscaping or paving projects of comparable size and quality.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Protect porous paver units from damage during delivery and store under tarp when the time from delivery to installation exceeds 30 days.
- C. Protect materials during handling and installation to prevent damage.

1.7 SEQUENCING

- A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions recommended by manufacturer for desired results. Do not install products under conditions outside manufacturer's absolute limits.
- B. Do not begin installation of porous pavements until all hard surface paving adjacent to porous pavement areas, including concrete walks and asphalt paving, is completed.
- C. Install turf when ambient air temperature is at least 55 degrees F.
- D. In wet weather, do not build on wet, saturated or muddy subgrade.

- E. In cold weather, do not use frozen materials or materials coated with ice or frost, and do not build on frozen base or wet, saturated or muddy subgrade.
- F. Protect partially completed porous paving against damage from other construction traffic when work is in progress.
- G. Protect grass fill / sodded paving areas from traffic until grass root system has matured for at least 3 to 4 weeks. Use barricades to only permit access by emergency and fire equipment.

1.9 WARRANTY

- A. Provide the manufacturer's 10-year limited warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Airlite Plastics Co. DBA TRUEGRID Pavers, 6110 Abbott Dr, Omaha, NE 68110. Phone: 1-855-355-GRID. Email: info@truegridpaver.com Website: www.truegridpaver.com.
- B. Substitutions: Not permitted.

2.2 PRODUCTS

- A. Permeable Pavers, TRUEGRID PRO PLUS for grass or gravel applications.
 - 1. AASHTO H20, HS20 Rated.
 - 2. Manufactured in the USA.
 - 3. High density polyethylene (HDPE): 100 percent post-consumer recycled materials
 - 4. Recycled and recyclable content: 100 percent.
 - 5. S-Flexural joints molded in for soil seasonal expansion and contraction.
 - 6. Color: black- carbon black additive for long-term UV stabilization.
 - 7. Paver size: 24 inches by 24 inches by 1.8 inches.
 - 8. Pre-assembled: 4-foot by 4-foot sections.
 - 9. Cylindrical cell design for column strength.

10. Cell size: 3.30 inch inside diameter.
 11. Co-joined cells at 48 places for strength.
 12. Wall thickness: 0.150 inches / .250-inch nominal.
 13. A minimum of 2 co-joined common walls per cell for structural integrity.
 14. Connections:
 - a. No clips or stakes necessary.
 - b. No additional parts or tools needed.
 - c. Integral male-female three-point locking system.
 - d. Wall thickness at tabs: 0.290 inch.
 15. Molded in X-anchors to stabilize pavers.
 16. Nominal Coverage per Paver: 4 square feet.
 17. Weight per paver: 5.25 lbs.
 18. Permeability of System: 100 percent.
 19. Compressive Strength (filled): 17,729 psi.
 20. Material Safety: Groundwater neutral, 100 percent inert.
 21. Chemical Resistant: Excellent: highly resistant to hydrocarbons, oils.
- B. Parking Delineators: TRUEGRID SuperSpots for grass or gravel applications.
1. H20, HS20 rated.
 2. Domed for high visibility and ribbed for high strength.
 3. 0.90-inch profile above grid.
 4. Long-term UV stabilized.
 5. 3.25-inch diameter.
 6. Available Colors: Yellow, white, blue, and red.
- C. Parking Delineators: TRUEGRID SnowSpots for grass or gravel applications.
1. H20, HS20 rated.
 2. Snow plowable and ADA compliant.
 3. Level (0.00-inch) profile above grid.
 4. Long-term UV stabilized.
 5. 3.25-inch diameter.
 6. Available Colors: Yellow, white, blue, and red
- D. Reflective Parking Delineators: TRUEGRID Reflectors for grass or gravel applications.
1. H20, HS20 rated.

2. Long-term UV stabilized.
 3. 0.90-inch profile above grid.
 4. 3.25-inch diameter.
 5. Available Colors: Translucent yellow, white, and red.
- E. Surface Signage, ADA, Traffic, and Parking Identifiers: TRUEGRID Plates for grass or gravel applications.
1. Durable, long lasting, weather resistant and highly visible.
 2. Snap-fit into TRUEGRID PRO PLUS grid.
 3. 0.20-inch profile above grid
 4. ADA compliant.
- F. Base Material: TRUEGRID PRO PLUS was developed to accept multiple acceptable base materials. Locally sourced angular stone/clean for base material. Crushed granite, sandy gravel material, crushed concrete, and limestone rock are some of the acceptable materials. Common base materials include:
1. Hard, clean, angular, and open-graded (uniform size) drain rock -- from 1" to 1-1/2" (19mm to 38mm). Commonly #4 stone when size limits are met.
 2. Base Course: Graded aggregate base course conforming to the following sieve analysis and requirements:
 - a. Percent Passing: 100 - Sieve Size: 3/4 – 1 inch
 - b. Percent Passing: 85 - Sieve Size: 3/8 inch
 - c. Percent Passing: 60 - Sieve Size: #4
 - d. Percent Passing: 30 - Sieve Size: #40
 - e. Percent Passing: <3 - Sieve Size: #200, or 3 to 8 Percent for Grass Infill
- G. Gravel Fill: Obtain clean, washed angular rock to fill the 1.8-inch-tall TRUEGRID PRO PLUS cells and spaces between. TRUEGRID PRO PLUS should be filled level to the top of the cells or only slightly above for compaction and settling. Fill rock should be 5/8 inch to 3/4-inch diameter.
- H. Base Course for Grass Filled TRUEGRID: Use base course from above *Section 2.2 E 3* or comparable base material suitable for grass growth and traffic loads. Choose materials with neutral pH ranges and avoid sources from recycled/reclaimed concrete or asphalt.

- I. Grass Surface with Soil Fill: A sandy loam or loam soil should be used to fill the empty TRUEGRID PRO PLUS grid. The selection of sandy loam or loam soil should be made based upon the soil requirements of the turf variety selected for the project. Other soils if compatible with type of seed or sod are acceptable.
 - 1. Choose turf grasses with deep-growing vertical roots, high wear capacity, and for the local growing zone and climate.
 - 2. Grass – Choose either sod or seed:
 - a. Seed – The Preferred Method: Hydro-seeding/mulching is recommended with a wood or paper cellulose commercial mulch.
 - b. Sod shall be grown in sand or sandy loam soils only. Sod grown in soils of clay, silt, or high organic materials such as peat, will not be accepted.
- J. Base Course for Sloped Areas Above 3 degrees (5%): Use base course from above *Section 2.2 E 3* or other dense-graded base common for road use.
- K. Geotextile Fabric, Geomembrane, or Geogrid by Others.
 - 1. Choose for properties suitable for soil conditions, loading requirements, and permeability / impermeability requirements.
- L. Anchor Nails by others.
 - 1. 3/8-inch by 10-inch galvanized ring shank nail common for landscape use.
 - a. Choose for high frequency traffic areas, areas with breaking and acceleration, transitions, and areas subject to surface water from other sources.
 - b. For sloped areas above 3 degrees (5%).

PART 3 EXECUTION

3.1 EXAMINATION

- A. Before beginning installation, verify site conditions are as indicated on the drawings. Notify the Architect if site conditions are not acceptable. Do not begin preparation or installation until unacceptable conditions have been corrected.
- B. Ensure that adjacent hard-surfaced paving work is completed before installing porous pavement system.

3.2 PREPARATION

A. Subgrade:

1. Prepare subgrade as specified in Section 33 41 00. Verify subgrade in accordance with porous paving system manufacturer's instructions.
2. Excavate area allowing for unit thickness and the engineered base depth (where required).
3. Provide adequate drainage from excavated area if area has potential to collect water when working with in-place soils that have poor permeability.
4. Ensure in-place soil is relatively dry and free from standing water.
5. Uniformly grade base.
6. Level and clear base of large objects, such as rocks and pieces of wood.
7. Install irrigation, if applicable, in accordance with Section 32 80 00.
8. Install and secure geotextile fabric, geomembrane, or geogrid mesh as needed for soil stabilization and loading requirements.

B. Install Base as specified in Section 32 10 00. Verify engineered base is installed in accordance with porous paving system manufacturer's instructions.

1. Coordinate base installation and preparation with subdrains specified in Section 33 41 00.
2. If required, place a geotextile separation layer between the natural ground and the engineered base.
3. Place base course material over prepared sub base to grades indicated on the drawings or from manufacturer's recommended depths per application type.
4. Place in lifts not to exceed 4 inches, compacting each lift separately to 95 percent Modified Proctor for non-open grade material. Open grade base material to be leveled and heavily compacted in 4-inch lifts to settle and lock in angular stone.
5. If required, install irrigation in accordance with Section 32 80 00.
6. Leave minimum 1.8 inches for Permeable Paver unit for final elevation.

3.3 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Install TRUEGRID PRO PLUS Permeable Paver units by placing cells face up. Sheets are preassembled in 4-foot by 4-foot sheets are connected with friction fit interlocking

connectors. No tooling is required to connect or disconnect units. Sheets may be separated into 4 Individual 24 inch by 24-inch pieces and reconfigured as needed. Cut units around curves and organic shapes with an electrical handsaw. Place units to maintain a 1-inch clearance to any pre-installed object or surface structure. Top of cells shall be level (0.00 inch) to 0.5 inch below the surface of adjacent hard-surface pavements. Utilize TRUEGRID's S-Flexural joints for undulations or grade reversals when required by design or in freeze-thaw climates for expansion and contraction.

- C. Parking, Traffic, and Fire Lane Delineators: Install TRUEGRID SuperSpots, TRUEGRID SnowSpots, TRUEGRID Reflectors, and TRUEGRID Plates as indicated on the drawings or per manufacturer's recommendations.
 - 1. Align SuperSpots, SnowSpots, Reflectors, and Plates locking tabs with grooves in TRUEGRID PRO PLUS grid.
 - 2. Push SuperSpots, SnowSpots, Reflectors, and Plates into TRUEGRID PRO PLUS grid until it locks.
 - 3. All TRUEGRID delineators and markers can be removed and repositioned by disconnecting the locking tabs and pulling out of the grid.
- D. Anchors: Stake TRUEGRID PRO LITE to the base as indicated on the drawings or per manufacturer's recommendations.
 - 1. Pre-drill pilot hole with ¼" (6mm) through a PRO LITE cell containing an X-Anchor.
 - 2. Drive anchor until head makes contact with X-Anchor using a hammer or impact hammer with suitable driver head.
- E. Gravel Surfacing: Install Gravel into TRUEGRID cavities by back dumping directly from dump truck or from buckets mounted to tractors. Hand shoveling fill gravel into the cells is also acceptable for smaller jobs.
 - 1. Direct vehicles to exit the site by driving forward. Avoid sharp turns over unfilled rings.
 - 2. Spread gravel fill using steer loaders, power brooms, blades, flat-bottomed shovels, and/or wide "asphalt rakes" to fill the cells.
 - 3. Place and maintain infill gravel to be level to the top of the cell walls after settling, natural compaction, and use. A rolling compactor, plate compactor, or hand tamper may be used for final leveling of infill aggregate within the TRUEGRID cells.

F. Grass Surfacing:

1. Install soil into TRUEGRID cavities by back dumping directly from dump truck or from buckets mounted to tractors. Hand shoveling soil mix into the cells is also acceptable for smaller jobs.
 - a. For Seeding Applications: Fill soil mix level to the top of the TRUEGRID PRO LITE cell wall, 1.8-inch depth.
 - b. For Sodding Applications: Fill soil mix into cells at 1.8-inch *minus* the root (soil) depth of the sod.
2. Hydroseeding/Hydro-Mulch Surfacing: Provide and place as specified in 32 92 00 – Turf and Grasses. Homogeneously mix a combination of water, seed, and fertilizer in a truck mounted tank. Spray the seed mixture onto the site at specification rates. Coverage should be uniform and complete. Following germination of the seed, areas lacking germination larger than 8-inches by 8-inches must be reseeded immediately. Seeded areas must be fertilized and kept moist during development of the turf.

G. Sod: Provide and place as specified in 32 92 00 – Turf and Grasses.

1. Use sod from a reputable grower. Species should be wear resistant, free from disease, and in excellent condition.
2. Spray the sod rolls until saturated.
3. Use a heavy sod roller over entire sodded area to ensure root contact with the fill soil and TRUEGRID interface.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Gravel fill: Avoid sharp turns or “jack knives” in trailered vehicles when cells are empty. Damage due to buckling can occur. TRUEGRID can be driven on pre-fill by gravel trucks and construction equipment to speed the installation process.
- C. Grass Fill / Seeded: Protect seeded areas from any traffic, other than emergency vehicles, for a period of 4 to 6 weeks, or until the grass is mature to handle traffic. Avoid sharp turns or “jack knives” in trailered vehicles when cells are empty. Damage due to buckling can occur.

- D. Grass Fill / Sodded: Sodded areas must be protected from any traffic, other than emergency vehicles, for a period of 3 to 4 weeks, or until root system has been established.
- E. Dumpster areas: A concrete pad is recommended for dumpster areas due to the drop and drag action. Permeable pavers are not recommended in these areas under and directly around the dumpster.
- F. Repair or replace damaged products before substantial completion.

3.5 MAINTENANCE

- A. For gravel fill surfaces, maintain the stone fill inside the TRUEGRID to be level to the cell wall height - level to the top of the grid. Surface should be inspected from time to time to identify signs of slight cell infill loss.
- B. Maintain grass in accordance with manufacturer's instructions and as specified in Section 32 92 00 – Turf and Grasses.
 - 1. Maintain the soil or growing media inside the TRUEGRID to be level to the cell wall height -- level to the top of the grid. Do not overfill with soil above grid.
- C. Monitor pavement to ensure traffic frequency and loading does not exceed the pavement design.
- D. When snow removal is required, keep a metal edged plow blade from coming in contact with the surface during plowing operations to avoid causing damage to the units. Use a plow blade a minimum of 1 inch above the surface and with a flexible rubber edge or with skids on the lower outside corners so the plow blade does not come in contact with the units.

END OF SECTION

SECTION 33 32 16.14 - SANITARY SEWER GRINDER PACKAGE

PART 1 - GENERAL

1.1 SUMMARY

- A. Simplex Sanitary Sewer Grinder Package
 - 1. Sanitary Sewer Grinder Pump
 - 2. Sanitary Sewer Wet Well
 - 3. Valve and Valve Box
 - 4. Simplex Control Panel with Generator Receptacle

1.2 DESCRIPTION OF WORK

- A. The Contractor shall furnish and install all simplex sanitary sewer grinder packages as shown on the drawings and as specified herein.

1.3 MEASUREMENT AND PAYMENT

- A. Measurement: The simplex sanitary sewer grinder package installed will be measured as an assembly.
- B. Payment: Payment will be made as a unit price for the simplex sanitary sewer grinder pump package, complete and installed.
- C. Includes: Unit price includes, but is not limited to, furnishing and installing sanitary sewer grinder pump, sanitary sewer wet well, valve and valve box, simplex control panel with generator receptacle, electrical power supply service, bedding material, placing bedding and backfill material, fittings, pipe joints, pipe connections; dewatering, testing, and inspection.

1.4 COORDINATION

- A. Coordinate Work of this Section with City of Destin and utilities within construction area. Contractor shall also coordinate location of grinder station with each resident and Owner's representative.
- B. No connection between the grinder station and the collection system shall occur without approval from the city or Destin Water Users representative.

1.5 SUBMITTAL REQUIREMENTS

- A. The following General guidelines shall be used in preparing submittals:

1. Manufacturer's specification or data sheets shall be clearly marked to delineate the options or styles to be furnished. Options or equipment not being provided shall be neatly crossed-out.
 2. Submit only complete systems, not pieces of equipment from various systems.
 3. Submittals shall reference assigned equipment and device tag numbers.
 4. Submittals not following these and related requirements will be returned without review.
- B. Shop Drawings shall be submitted to the engineer for review. These drawings shall include:
1. Suppliers name and model.
 2. Submit detailed dimensions for materials and equipment, including pump basins, pumps, piping, controls including wiring schematics, and accessories.
 3. Submit detailed instructions on installation requirements, including storage and handling procedures, anchoring, and layout.
 4. Outline and foundation plan showing overall dimensions, anchor bolt size and locations, equipment lifting requirements, connection part sizes, locations and other pertinent installation data.
 5. Detailed drawings and specifications for vibration isolators, scroll conveyor drive, automatic differential (torque) control, vibration switch, flexible connections, chutes and similar components.
 6. Static and dynamic loads including location and natural frequency.
 7. Materials of construction.
 8. Component weights.
 9. Power and utility requirements.
 10. Process and instrumentation drawings showing all process and control equipment together with schematic delineation of all piping and wiring links required between equipment for process and control purposes.
 11. Complete wiring diagrams for all electrical and control equipment.
 12. Manufacturers recommended spare parts.
 13. Recommended storage requirement.
 14. Certified calculations for bearing life.
 15. Statement for equipment warranties.
 16. Equipment data book (includes all certificates of test results)
- C. Submittal data to consist of:
1. Pump catalog data
 2. Pump performance curve
 3. SST "Quick Removal System"
 4. Wet Well Cover data
 5. Typical installation drawing
 6. Control panel data
 7. Panel wiring schematic
 8. Accessory data
 9. Installation & Operation Manuals with Parts List
 10. Copy of the five (5) year, 100% parts/shop labor warranty.
- D. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.
- E. Manufacturer Reports: Certify that equipment has been installed according to manufacturer instructions.

F. Qualifications Statements:

1. Submit qualifications for manufacturer and installer.
2. Submit manufacturer's approval of installer.

1.6 CLOSEOUT SUBMITTALS

- A. Project Record Documents: Record actual locations and final orientation of equipment and accessories.

1.7 QUALITY ASSURANCE

- A. Perform Work according to generally accepted construction practices.

1.8 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum three years' documented experience.
- B. Installer: Company specializing in performing Work of this Section with minimum three years' experience and approved by manufacturer.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- B. Handling:
1. Handle materials to prevent damage to interior or exterior surfaces.
 2. Prepare pumps and accessories for shipment in such a manner as to prevent entry of foreign matter into product body.
- C. Storage:
1. Store materials according to manufacturer instructions.
 2. Store products in areas protected from weather, moisture, or possible damage.
 3. Do not store products directly on ground.
- D. Protection:
1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
 2. Provide additional protection according to manufacturer instructions.

PART 2 - PRODUCTS

2.1 SIMPLEX SANITARY SEWER GRINDER PACKAGE

A. Sanitary Sewer Grinder Pump

1. Design:

- a. A centrifugal submersible grinder pump which incorporates a regenerative turbine technology designed to reduce all material found in normal domestic sewage, including plastics, rubber, sanitary napkins, and disposable diapers into a finely ground slurry. The resultant slurry is then pumped through small diameter piping to gravity interceptor or treatment facility. The temperature limitation of the liquid being pumped is 104°F (40°C) continuous and shall be capable of running dry for extended periods.

2. Performance:

- a. In order to ensure proper operation in all conditions, pump(s) must provide, without overheating in continuous operation, maximum head condition required by the system: 19 GPM @ 22ft.TDH. Pump(s) must also be capable of operating at zero or negative heads without damage to the pump(s). At “dead head” or shut valve situation the pumps will recirculate via the ¼” recirculation port in the SST quick removal system until level reaches “high level alarm” float alerting homeowner via control panel “Audio/Visual” alarm of problem so Plumbing Contractor and Destin Water Users can investigate.

3. Construction:

- a. The volute, seal plates and motor housing shall be constructed of high quality ASTM A-48 class 30 cast iron. The pump (s) shall be painted with a water based air dry enamel of 2.0 mil minimum thickness. All exposed hardware shall be 300 series stainless steel. Discharge connection shall be a standard 1.25 inch NPT in the vertical position using a threaded bolt-on discharge flange

4. Impeller:

- a. The pump impeller shall be 316 stainless steel construction, machined and then coated with an HVOF thermal spray.

5. Bearing design:

- a. The pump shall be a two bearing design consisting of an upper angular contact ball bearing carrying both the radial and thrust loads, and lower angular contact ball bearing also carrying both radial and thrust loads. Sleeve bearings for ball bearings will not be considered equal. Bearings shall operate in an oil bath atmosphere for superior life. Permanently lubricated bearings are not acceptable.

6. Grinder:

- a. The grinder mechanism shall be specifically designed for use in a sewage grinder pump. Garbage disposal cutting mechanisms are not acceptable. The mechanism shall consist of a radial cutter threaded and locked on the motor shaft by a washer

in conjunction with a countersunk flat head capscrew, and a shredding ring containing a minimum of fifteen flow passages with cutting edges. Grinding shall be accomplished by a slicing action as opposed to a chopping action. Chopping-type cutter mechanisms will not be allowed. Grinder design shall be able to alternately engage cutters at start and shall exert a minimum cutting force of 30 pounds, thus eliminating the need for excessive motor torque. The shredding ring shall be reversible to provide twice the cutting edge life. All grinding mechanism components, including both the shredding ring and radial cutter, shall be constructed of 440C stainless steel hardened to a minimum Rockwell C55 and shall be finish ground for a fine cutting edge. Two-stage cutter mechanisms and/or those requiring external adjustment for proper clearance are not acceptable.

- b. The grinder shall be placed immediately below the pumping elements and shall be direct-driven by a single, one-piece, 400 series stainless steel motor shaft. The grinding assembly shall operate without objectionable noise or vibration over the entire range of recommended operating pressures. The grinder shall be constructed so as to eliminate clogging and jamming under all normal operating conditions including starting. In order to demonstrate adequate flow velocity and grinding capability, the grinder pump shall be capable of passing a series of stringy type solids (diapers, rags, feminine products, etc.) through the pump without roping or winding the material in or immediately below the pump suction.

7. Electric Motor:

- a. Single-phase motors shall be of the capacitor start, capacitor run design, 115/230 volt, and single phase, 0.5HP. The motor shall meet the performance requirements of the Zoeller Shark Grinder Model 803 performance curve. The motor shall be designed to be non-overloading throughout the entire pump curve. The motor shall be constructed with the open windings operating in a sealed housing, which contains clean dielectric oil for heat dissipation from the windings and for lubrication of the bearings, making it capable of operating in a totally, partially, or non-submerged condition for extended periods of time without damage due to heat being generated. Oil used must be able to be disposed of as non-hazardous waste. Air-filled motors shall not be acceptable. The rotor and stator assembly shall be of the standard frame design and secured to the pump seal plate by four threaded fasteners allowing for easy serviceability. Motor designs incorporating shrink or press fit assemblies between the stator and motor housing shall not be considered acceptable. The motor shaft shall be of 1215 cold rolled steel.
- b. An automatically resetting, heat sensing thermal device that interrupts current flow if excessive temperature and/or current is detected shall provide protection against excessive temperature.
- c. The pumps shall be equipped with 15ft of type UL Listed 3-wire plug power cord. The power cord and motor shall be connected via quick disconnect pin terminals located within the motor housing. Pin receptacles shall be crimped and molded to the power cord in a PVC plug. The plug shall be secured with a stainless steel compression plate to prevent water from entering the motor housing and to provide strain relief at the point of cord entry. A polybutylene terephthalate terminal block with brass pin inserts shall connect the power cord leads with the motor leads. The ground pin shall be longer than the other pins such that the ground connection is the first connection made and the last connection broken when the plug is inserted and removed, respectively. A Buna-N o-ring shall provide isolation sealing between terminal block and the motor housing. The plug assembly shall be

guaranteed by the manufacturer to meet UL approval for submersion. Changing to longer cords as needed can be done simply by “unplugging” old cord and “plugging” in a 50ft, 75ft or up to 100ft cord.

8. Float Switches:

- a. A “GREEN” mechanical float switch must be supplied for pump on and off signalization.
- b. A “BLUE” mercury float level switch must be supplied for high level alarm signalization.
- c. Floats must include external weights. Adjustment of the weight on the float cord will determine how long pump will run and GPM pump will deliver: 1ft pump down equals 53 gallons per foot in the 36” diameter specified fiberglass tank.
- d. Float Switches to be suspended into wet well via 316 series SST cord hook.
- e. Pump on/off float to turn pump off with water level covering pump to prevent “air born corrosion” of the cast iron pump.
- f. Alarm float must activate before water can back up into inlet pipe.

9. Mechanical Seal:

- a. The pump shall be equipped with double floating, self-aligning rotary shaft seal to prevent leakage between the motor and pump. The materials of construction shall be silicon carbide for both the rotating face and for the stationary face, lapped and polished to a tolerance of one light band, with 300 stainless steel hardware and all elastomers of Buna-N.

10. The pump manufacturer shall perform the following inspections and tests:

- a. A check of the motor voltage and frequency shall be made as shown on the name plate.
- b. A motor and cable insulation test for moisture content or insulation defects shall be made per CSA criteria.
- c. The pump shall be completely submerged and run to determine that the unit meets three pre-determined hydraulic performance points.
- d. If certified testing is required, the manufacturer shall offer to perform tests in accordance with Grades B, E and U of Hydraulic Institute standards.

11. Start-Up:

- a. The pump (s) shall be tested at start-up by a qualified representative of the manufacturer. A start-up report as provided by the manufacturer shall be completed before final acceptance of the pump.

12. Documentation:

- a. Electronic Submittal must be provided to the Engineer to confirm compliance. Refer to standard submittal data requirements from SUBMITTAL REQUIREMENTS section.

B. Wet Well

1. Design

- a. The fiberglass wet well shall be 48" diameter with 24" X 12" tall access neck making overall depth of basin 10" and must include quick removal systems with SST components and SST backing plate bent to the 24" radius of the access neck. Note: The radius bent back plate shall be ¼" thick, 10 inch x 10 inch 316 SST. **Wet Wells must include pitched fillet around interior bottom of wet well to push solids towards suction of pumps as settlement occurs.**
- b. The pumps will be suspended 3" above basin floor via "Hang and Bang" quick removal systems. Piping will be 1-1/4" diameter Sch.40 316 SST. All piping and quick removal Hang and Bang apparatus inside the wet well shall be 316 SST.
- c. Wet well covers shall be ¼ inch thick diamond plate aluminum with SST slam locks with PVC plate between cover and lock to prevent galvanic corrosion. Diamond plate hatch shall be gasketed and must be powder coated forest green. Cover will be rated 300 PSF loading.
- d. Hatches must have 3/16th inch SST "stop" chains. One end attached to basin wall via aluminum bracket, other end attached to aluminum bracket welded to hatch. Chain to allow hatch to open at 10 degs past 90 degs.
- e. Each basin must include a 2" adapt-a-flex and 4" adapt-a-flex. 2" is for electrical conduit and the 4" is for inlet pipe.
- f. Anti-Siphon/Air Release Valve will be provided. Assembly will consist of 316 SST ball valve, threaded street 45 degs elbow and pitless adapter. Pitless adapter will have "T" handle for pulling pump.
- g. All hardware and brackets used must be SST. All Piping must be SST. Pitless Adapter must be SST. All to match as indicated in detail on plans.

C. Valve and Valve Box

1. Design

- a. Valve Assembly and 12" valve box will be provided. 316 SST Check/Cleanout/Curb Stop /SST Flex assembly will be as supplied by pump manufacturer to assure single source responsibility and culpability and must be all 316 series SST construction. The cleanout on the SST combo valve must be tapped and a ¼ inch SST ball valve with 0-160psi SST "face up" pressure gauge must be included.
- b. Poly Valve box top must be green and have the word "Sewer" etched or cast.

D. Simplex Control Panel

1. Design

- a. Panel must be provided by pump manufacturer to assure single source responsibility and culpability and shall have 25 amp breaker for pump and 10 amp breaker for alarm light/horn (Audio/Visual)
- b. Enclosure shall be PVC and must have external horn silence button.
- c. Electrical Power Service Supply to panel must be 35 amps with an electrical disconnect as needed per code.
- d. Panel must have a generator receptacle with Automatic Transfer Contactor to prevent backfeed into transmission line(s) and possible injury to Electrical Line Workmen if Generator is plugged into receptacle.

- e. Panel will include contactor for pump and Hand-Off-Auto switch.
- f. Panel will have Terminals to accept pump power wires and GREEN mechanical pump “On/Off” float and BLUE mercury “High Level” alarm float.
- g. Panel will include cord compression glands for floats and pump cords.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify layout and orientation of pumps, accessories, and piping connections.

3.2 INSTALLATION

- A. Coordinate location of pump control panel, pump units and accessories with property Owner.
- B. Trenching: As specified in the FDOT Specifications.
- C. Backfill: As specified in the FDOT Specifications.
- D. Provide and connect piping, accessories, and power and control conduit and wiring to make system operational and ready for startup.
- E. Flush piping with clean water

3.3 FIELD QUALITY CONTROL

- A. Inspection: Check and adjust liquid-level control and alarm settings.
- B. Start-up and Performance Testing:
 - 1. Test each unit on clear water through minimum of four complete cycles under supervision of manufacturer's representative and city and/or county's representative.
 - 2. Demonstrate that system performance, control functions, and alarms meet specified requirements.
- C. Manufacturer Services: Furnish services of manufacturer's representative experienced in installation of products to be placed under this Section for not less than 3 days on-Site for installation, inspection, field testing, startup, and instructing Owner's personnel in maintenance of equipment.
- D. Equipment Acceptance:
 - 1. Adjust, repair, modify, or replace components failing to perform as specified and rerun tests.
 - 2. Make final adjustments to equipment under direction of manufacturer's representative.
- E. Furnish installation certificate from equipment manufacturer's representative attesting that equipment has been properly installed and is ready for startup and testing.

3.4 DEMONSTRATION

- A. Demonstrate equipment startup, shutdown, routine maintenance, alarm condition responses, and emergency repair procedures to Owner's personnel.

3.5 OPERATION AND MAINTENANCE MANUALS

- A. At a minimum, the operation and maintenance manual shall meet the requirements set forth below in B and C.
- B. Operation and maintenance manuals will be provided by the equipment manufacturer at least two weeks prior to shipment of major equipment components. Each manual shall be a bound, indexed binder with drawings and parts lists prepared specifically for this project rather than general instructions that are not designed for this project.
- C. As a minimum the manual shall contain:
 - 1. Certified as-built drawings (general arrangement and general arrangement detail drawings).
 - 2. Erection drawings.
 - 3. A complete bill of materials for the equipment including the weights of all structural steel components.
 - 4. Installation and maintenance instructions for the specific equipment including the erection sequence, maintenance and trouble-shooting check points, and complete lubrication procedures with recommended grades of lubricants.
 - 5. Cut sheets for all equipment items purchased from sub-vendors.
- D. Grinder Pump System Protection
 - 1. Vendor shall provide flyers to system end user indicating proper use of grinder pump station and caution against common mistakes that lead to system failure.
 - 2. Vendor shall provide a maintenance plan for end users that includes (but is not limited to):
 - a. Maintenance schedule and instructions for the specific equipment including cleaning/repair requirements and trouble-shooting check points.
 - b. A list of the equipment manufacturer's spare parts specifically denoting wear items, long delivery items, and all items convenient for stocking as optional replacement items.
 - c. Action to take during abnormal weather. This should include precautions to take before, during and after a storm.

3.6 PROTECTION

- A. Conduct operations as to not interfere with, interrupt, damage, destroy, or endanger integrity of surface structures or utilities in immediate or adjacent areas to the Work.

3.7 WARRANTY

- A. The pump manufacturer shall provide a five (5) year parts and labor warranty (not prorated) for the materials and equipment provided by the manufacturer, including but not limited to the pump, control panel, float switches and valves. In the event a pump, control panel or valve is replaced under warranty, the replacement pump shall have the same manufacturer's warranty for five (5) years from the new install date.
- B. In addition to pump manufacturer's warranty, the entire fiberglass package including pipe, valves, fittings, hatch cover and fiberglass basin shall be warranted for five (5) years.
- C. The supplier will be responsible for providing start-up including provisions of what the warranty covers and does not cover. A notification plate shall be provided on the unit that identifies the company name and an emergency phone number as well as on the instructions pamphlet provided to the owner/operator.
- D. Vendor shall provide a copy of warranty to system end user at each installation site.

END OF SECTION 33 32 16.14

SECTION 02800 - FENCING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.
- B. Florida Department of Transportation, *Standard Specifications for Road and Bridge Construction* (FDOT Specs), *Section 550, Latest Edition, and Design Standard Index 802*. Work shall comply with requirements of FDOT Specs as modified herein.
- C. GENERAL EXCEPTIONS: Any reference to FDOT *Standard Specifications for Road and Bridge Construction*, Latest Edition, *Division I General Requirements & Covenants* shall be excluded and not applicable to any specification referred herein or otherwise listed in this document.

1.2 SUMMARY

- A. This Section includes, but is not limited to, the following:
 - 1. Wood privacy fence

1.3 PROJECT CONDITIONS

- A. Traffic: Conduct fencing operations to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities and to minimize disturbance of the activities of adjacent property owners. Do not close or obstruct streets, walks, or other occupied or used facilities without prior approval.
- B. Security: Do not leave any fence unfinished or incomplete which might allow the access to a private/public equipment without temporary measures in place during construction.

1.4 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver material in manufacturer's original packaging with all tags and labels intact and legible.
- B. Handle and store material in such a manner as to avoid damage.

PART 2 – PRODUCTS

2.1 WOOD PRIVACY FENCE:

- A. Materials shall be of size, type, treatment, etc. as shown in the drawings.
- B. Shall be constructed as per industry standard with proper clearance below fence so as not to impede stormwater flow.

PART 3 – EXECUTION

3.1 WOOD PRIVACY FENCING:

Shall be constructed as per industry standard with proper clearance below fence so as not to impede stormwater flow.

PART 4 - MEASUREMENT/PAYMENT

2.1 METHOD OF MEASUREMENT

2.1.1 GENERAL

The quantities to be paid for will be either the number of gates, the length of each type of fence, the number of corner post assemblies, constructed and accepted or the length of each type of fence with all other items necessary for construction as incidental. In addition, extra payment will be made, for additional lengths of post approved by the Engineer and/or County/CEI.

B. MEASUREMENT OF FENCE LENGTH

The length of fence to be paid for will be measured along the bottom of the panels, out-to-out of end posts, in the completed and accepted fence. Measurement for Resetting Fence will be the actual length of existing fence reset, including gates when applicable.

C. CORNER POST ASSEMBLIES, PULL, AND END POST ASSEMBLIES

The number of corner post assemblies and of pull and end post assemblies to be paid for will be the number of such post assemblies constructed and accepted.

4.2 BASIS OF PAYMENT

A. BASIC ITEMS OF FENCING

The contract unit price will be full compensation for all work and materials necessary for the complete installation, including line posts, but not including the corner, end, and pull posts and the assemblies thereof.

B. ITEMS OF POST ASSEMBLIES

The Contract unit prices for the items of Corner Post Assemblies and Pull and End Post Assemblies will include the posts and the complete assemblies therewith for each such item. Approach posts and brace posts will be considered as part of the assembly of the corner, end, or pull post serves as a brace in more than one horizontal line.

C. PAYMENT RATES FOR EXTRA-LENGTH POSTS

For any length of posts in excess of the standard length for each particular type of post, approved by the Engineer as provided above, payment will be made for each foot in excess of the standard length at the percentage of the Contract unit price per foot for the item of Fencing, as shown in the following schedule.

Additional Payment for Each Foot of Post in Excess of the Standard Length
(in percent of Contract Unit Price for Fencing):

Total Post Length	Timber Posts
Standard up to 14 ft.	60%
Over 14 ft., up to 20 feet	80%
Over 20 ft.*	*

The standard length of timber posts will be the required length as indicated in the plans for each type and case. The above provisions for extra length payment will apply to end, corner and pull posts.

The payment for additional length of post will include the cost of additional concrete to extend concrete bases, as applicable.

D. GATE PAYMENT

The quantities to be paid for will be full compensation for all labor, materials, posts and associated hardware for the complete installation of the type gate specified in the plans and accepted by the Engineer and/or County/CEI.

END OF SECTION 02800

DIVISION 12
FURNISHINGS

SECTION: 12931
BIKE RACKS

PART 1 GENERAL

1.01 RELATED DOCUMENTS:

Drawings and General Provision of the Contract, including General and Supplementary Condition and Division 1 Specification sections, apply to work of this section.

1.02 SCOPE:

This section includes thermoplastic coated, stainless steel, loop type bike racks and all labor, material and equipment required for the proper execution of the work.

1.03 RELATED SECTIONS:

FDOT Standard Specifications for Road and Bridge Construction, Latest Edition: Concrete for the footings for support of bike racks.

1.04 STANDARDS:

A. American Society for Testing and Materials (ASTM) Publications:

1. ASTM B117 - Standard Practice for Operating Salt Spray (Fog) Apparatus.
2. ASTM D822 - Tests on Paint and Related Coatings Using Filtered Open-Flame Carbon-Arc Exposure Apparatus.
3. ASTM D1794 - Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
4. ASTM D3363 - Test Method for Film Hardness by Pencil Test.

1.05 SUBSTITUTIONS.

A. Bike racks are by Park n Pool of Lexington, VA (877) 777-3700. Other similar and equal products will be considered if they meet the requirements of this specification and are submitted in accordance with requirements of the city/county.

1.06 SUBMITTALS:

1. Product data for components and accessories.
2. Shop drawings showing layout, dimensions, spacing of components.
3. Copy of warranty specified in Paragraph 1.4 for review by Architect.

1.07 WARRANTY

5 years warranty for factory finish against cracking, peeling, and blistering under normal use.

PART 2 MATERIALS

A. Loop Style

B. Stainless steel

C. Thermoplastic Coating

D. Grout: Non-shrink type, pre-mixed compound consisting of non-metallic aggregate, cement, and water reducing and plasticizing additives.

E. Provide racks of type and size indicated on Drawings.

1. Construction: 2 3/8" diameter stainless steel bike racks with thermoplastic coating. Provide coated extensions on the racks for setting in a concrete footing.

F. Factory Finish

1. Stainless steel racks are to be coated with 3-coat application of thermoplastic coating.

2. Salt spray resistance tested in accordance with ASTM B117: No undercutting, rusting, or blistering after 500 hours in 5 percent salt spray at 95 degrees F and 95 percent relative humidity and after 1000 hours less than 3/16 inch undercutting.

3. Weather ability tested in accordance with ASTM D822: No film failure and 88 percent gloss retention after 1-year exposure in South Florida with test panels tilted at 45 degrees.

PART 3 INSTALLATION

1. Install racks in a level and plumb fashion. Set in concrete footing and provide bracing which does not penetrate the coating until concrete is set. Concrete will be laid over mounting pipes. Provide thermoplastic coated escutcheons to trim out around concrete paving.

END OF SECTION

Mike Marshall, 12/2023

02 01 00 SUB-SURFACE INVESTIGATION

PART 1 GENERAL

1.01 RELATED DOCUMENTS:

The General Provision of the Contract, including bidding conditions and contractual conditions, apply to the work specified in this section.

1.02 SCOPE:

The geo-technical exploration, boring log and recommendation of the Soil Engineer is made a part of this specification.



REPORT OF GEOTECHNICAL EXPLORATION

**Tarpon Beach Facilities
Okaloosa County, Florida**

Tierra Project No. 4511-23-038

Prepared for:

**Sam Marshall Architects
325 S Palafox Street
Pensacola, Florida 32502
Attn: Mr. Mike Marshall, AIA, CSI**

Prepared by:

**Tierra, Inc.
1300 West Main Street
Pensacola, Florida 32502**

August 18, 2023



**1300 West Main Street • Pensacola, FL 32502
Phone (850) 462-8774 • Fax (850) 462-8784**

TIERRA

August 18, 2023

Sam Marshall Architects
325 S Palafox Street
Pensacola, Florida 32502
Attn: Mr. Mike Marshall, AIA, CSI

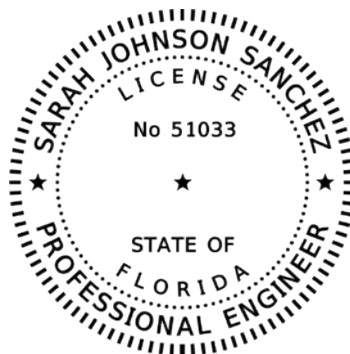
Subject: Tarpon Beach Facilities
Okaloosa County, Florida
Tierra Project No. 4511-23-038

Mr. Marshall:

Thank you for choosing Tierra, Inc. (Tierra) as your Geotechnical consultant. Per your authorization, we have completed the Geotechnical exploration for the subject project. The results of the study are discussed in this report.

Should you have any questions regarding the enclosed report or the project in general, please do not hesitate to contact us at (850) 462-8774.

Sincerely,
TIERRA, INC.



*THIS ITEM HAS BEEN DIGITALLY
SIGNED AND SEALED BY*

ON THE DATE ADJACENT TO THE SEAL

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TIERRA, INC.
1300 WEST MAIN STREET
PENSACOLA, FLORIDA 32502

SARAH JOHNSON SANCHEZ, P.E. NO. 51033

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APPENDIX A

Boring Location Plan and Soil Profiles

Table 1 – Summary of Falling Head Permeability Tests

Falling Head Permeability Test Results

1.0 PROJECT INFORMATION

1.1 Project Authorization

Authorization to proceed on this project was issued by Mr. Mike Marshall, Vice President with Sam Marshall Architects via acceptance of our Geotechnical Engineering Services Proposal 45-22-130 dated October 13, 2022. A formal contract has been executed between Tiera, Inc. and Sam Marshall Architects for these services.

1.2 Project Description

Based on the information provided, we understand that the development will include a new bathroom building on the south side of the site with two connecting pavilions on either side. The new bathroom/pavilions will be lightly loaded, timber pile supported structures established at/near existing site grades. A stormwater management facility (SMF) will be found beneath the paved parking north of the bathroom/pavilion structures.

If any of the project information noted above is incorrect or has changed, please inform Tierra so that we may amend the recommendations presented in this report, if necessary.

1.3 Purpose and Scope of Services

The purpose of this exploration was to evaluate the subsurface conditions present in the subject areas and to render timber pile foundation recommendations as well as parameters for stormwater drawdown analysis for the proposed SMF.

The exploration consisted of two (2) 35-foot deep Standard Penetration Test (SPT) borings to evaluate the subsurface conditions for the restrooms/pavilions and two (2) 7-foot deep auger borings in the proposed SMF area; laboratory soil testing including water content tests, wash #200 sieve tests, and falling head permeability tests; and a site visit, visual classification of the soil samples, and analysis by our engineering staff.

2.0 SITE AND SUBSURFACE CONDITIONS

2.1 Site Location and Description

The gulf front site is located on the south side of Scenic Highway 98 near the intersection of Tarpon Street in Okaloosa County, Florida. An aerial photograph depicting the site location is shown on the Boring Location Plan (Appendix A).

At the time of our exploration, the site was clear and relatively level. Based on review of the topographic survey provided, as well as the survey data on Google Earth, the north portion of the site is relatively level at/near EL +20 feet to EL +22 feet, and the property slopes downward to the south to near EL +7 feet.

2.2 Subsurface Conditions

The Boring Location Plan and the Soil Profiles of the borings drilled for this study can be found in Appendix A. The borings were field located and staked using a Garmin GPSMap 66ST Global Positioning System (GPS) unit with a reported accuracy of ± 1 meter. Therefore, the boring locations should be considered approximate.

We have estimated ground surface elevations at the boring locations using the topographic survey provided, as well as the topographic information provided in Google Earth. The subsurface conditions encountered will be discussed in general terms below.

The restroom/pavilion borings (B-1 and B-2) encountered the following idealized profile:

<u>Elevation (ft.)</u>	<u>Soil Description</u>
+20 to +5	Very loose to loose SAND (SP)
+5 to -20	Medium dense SAND (SP)

The SMF borings (SW-1 and SW-2) generally encountered sand from the ground surface (average EL +22 feet) to the bottom of the 7-foot deep borings.

The above subsurface descriptions are of a generalized nature, provided to highlight the major soil stratum encountered. The Soil Profiles should be reviewed for specific subsurface conditions at each boring location. The stratification shown on the Soil Profiles represents the subsurface conditions at the actual boring locations only, and variations in the subsurface conditions can and

may occur between boring locations and should therefore be expected. The stratification represents the approximate boundary between subsurface materials, and the transitions between strata may be gradual.

2.3 Groundwater Conditions

Groundwater was encountered in SPT borings B-1 and B-2 approximately 18 feet below existing grade at the time of drilling, which was during a period of above-normal seasonal rainfall. Based on the ground surface elevations at the boring locations estimated from the topographic survey and Google Earth, this corresponds to groundwater elevation of approximately +3 feet NAVD 88. Groundwater was not encountered in the SMF borings.

Groundwater levels will fluctuate with rainfall and tides and could vary several feet during typical seasonal fluctuations. Larger fluctuations are possible under severe weather conditions. We recommend that the Contractor determine the actual groundwater levels at the time of construction to determine potential impacts groundwater can/will have on construction procedures.

2.4 Laboratory Soil Testing

Laboratory soil testing consisted of water content tests, wash #200 sieve tests, and falling head permeability tests. The results of the water content and wash #200 sieve tests can be found on the Soil Profiles opposite the samples tested.

Falling head permeability tests were performed on remolded bulk samples of the sand soils encountered in the SMF borings. The densities to which the samples were remolded were based on the N_f values obtained from the nearby SPT borings. The results of the tests are summarized in Table 1 attached in Appendix A. The laboratory permeability test data sheets are attached in Appendix A.

3.0 EVALUATION AND RECOMMENDATIONS

3.1 General Comments

Based on our understanding of the proposed facility, the exploration encountered subsurface conditions that will provide adequate support for the proposed structure provided the recommendations presented in this report are followed.

The subsurface conditions encountered in the SMF borings are suitable for conventional dry treatment. Stormwater design parameters are presented in Section 3.5 below.

3.2 Timber Pile Foundation Recommendations

We have evaluated compression and tension pile capacities for 8-inch and 10-inch tip diameter timber piles to support the proposed restroom facility. Table 2 below shows allowable compression and tension capacities for driven timber piles with a tip elevation of -6 feet NAVD 88 (note – all elevations referenced to NAVD 88). The capacities presented in Table 2 assume a pile butt elevation of +18 feet, a ground surface elevation of +20 feet (assuming no scour), include a Factor of Safety of 2, and assume a pilot hole to elevation +10 feet to aide in standing the piles prior to driving.

TABLE 2 ALLOWABLE TIMBER PILE COMPRESSION & TENSION CAPACITIES		
Pile Size	Allowable Compression Capacity	Allowable Tension Capacity
8-inch Diameter Timber Pile	7 tons	4 tons
10-inch Diameter Timber Pile	10 tons	6 tons

3.3 Pile Group Action

No reductions of the individual pile capacities will be required if piles are spaced center-to-center a minimum of 3 times their width/diameter. If piles are spaced closer, our office should be notified so that pile capacity reductions can be evaluated.

3.4 Settlement

Settlements of driven pile foundations are typically small and should not be a concern on this project provided the piles are embedded as recommended herein. Pile head settlements should be on the order of ½ inch or less. Group settlements are estimated to be on the same order of magnitude for the expected lightly loaded structure.

3.5 Stormwater Management Facility Recommendations

The subsurface conditions encountered in the SMF auger borings are suitable for conventional dry treatment of stormwater runoff. Geotechnical parameters for analysis/design are presented below:

- **Effective Aquifer Thickness:** A confining unit, which would hydrogeologically define the thickness of the surficial aquifer, was not encountered to a depth of 45 feet below existing grade (the deepest boring drilled on the site). For the purposes of modeling, we recommend setting the bottom of the aquifer no deeper than the bottom of the boring elevation (EL -20 feet). Note that a shallower effective aquifer thickness for modeling a shallow SMF may be more appropriate given the expected minimal head, and a sensitivity analysis using this parameter is warranted.
- **Seasonal High Groundwater Level:** Groundwater was encountered at approximately EL +3 feet at the time of drilling. Given that the borings were drilled during a period of above-normal rainfall, we have estimated the “normal” SHWT to be at/near elevation +3 feet.
- **Vertical Permeability:** Vertical flow from the bottom of the SMF will be controlled by the vertical permeability of the soil immediately beneath the bottom of the SMF. Based on the results of the falling head permeability tests (Table 1), an average vertical permeability of 27.4 ft/day for Stratum 1 would be reasonable for modeling.
- **Horizontal Permeability:** Horizontal flow from the pond will be through the Stratum 1 soils. The horizontal permeability of Stratum 1 has been estimated based on the results of the vertical permeability tests and extensive experience with similar soils from field permeability tests. While horizontal permeabilities have generally been found to range from 3 to 10 times higher than vertical permeabilities of regional deposits, we recommend that a multiplier of 3 with a factor of safety of 2 be used for design (effectively, a 1.5 multiplier). Therefore, a K_h

value of 41.1 ft/day would be reasonable for modeling the Stratum 1 materials (27.4 ft/day x 1.5).

- **Effective Porosity:** Based on the fines contents of the soils encountered in the test borings, an effective porosity of 0.30 would be appropriate for modeling the Stratum 1 soils.

4.0 REPORT LIMITATIONS

The recommendations submitted are based on the available soil information obtained by Tierra, Inc. and design details furnished by Baskerville-Donovan for the subject project. If there are any revisions to the plans for this project or if deviations from the subsurface conditions noted in this report are encountered during construction, Tierra should be notified immediately to determine if changes in the foundation, or other, recommendations are required. If Tierra is not retained to perform these functions, we cannot be responsible for the impact of such conditions on the performance of the project.

The findings, recommendations, specifications, and professional advice contained herein have been made in accordance with generally accepted professional Geotechnical engineering practices in the local area.

After the plans and specifications are more complete, the Geotechnical engineer should be provided the opportunity to review the final design plans and specifications to assure our engineering recommendations have been properly incorporated into the design documents. At that time, it may be necessary to submit supplementary recommendations. This report has been prepared for the exclusive use of Sam Marshall Architects for the specific application to the subject project.

APPENDIX A

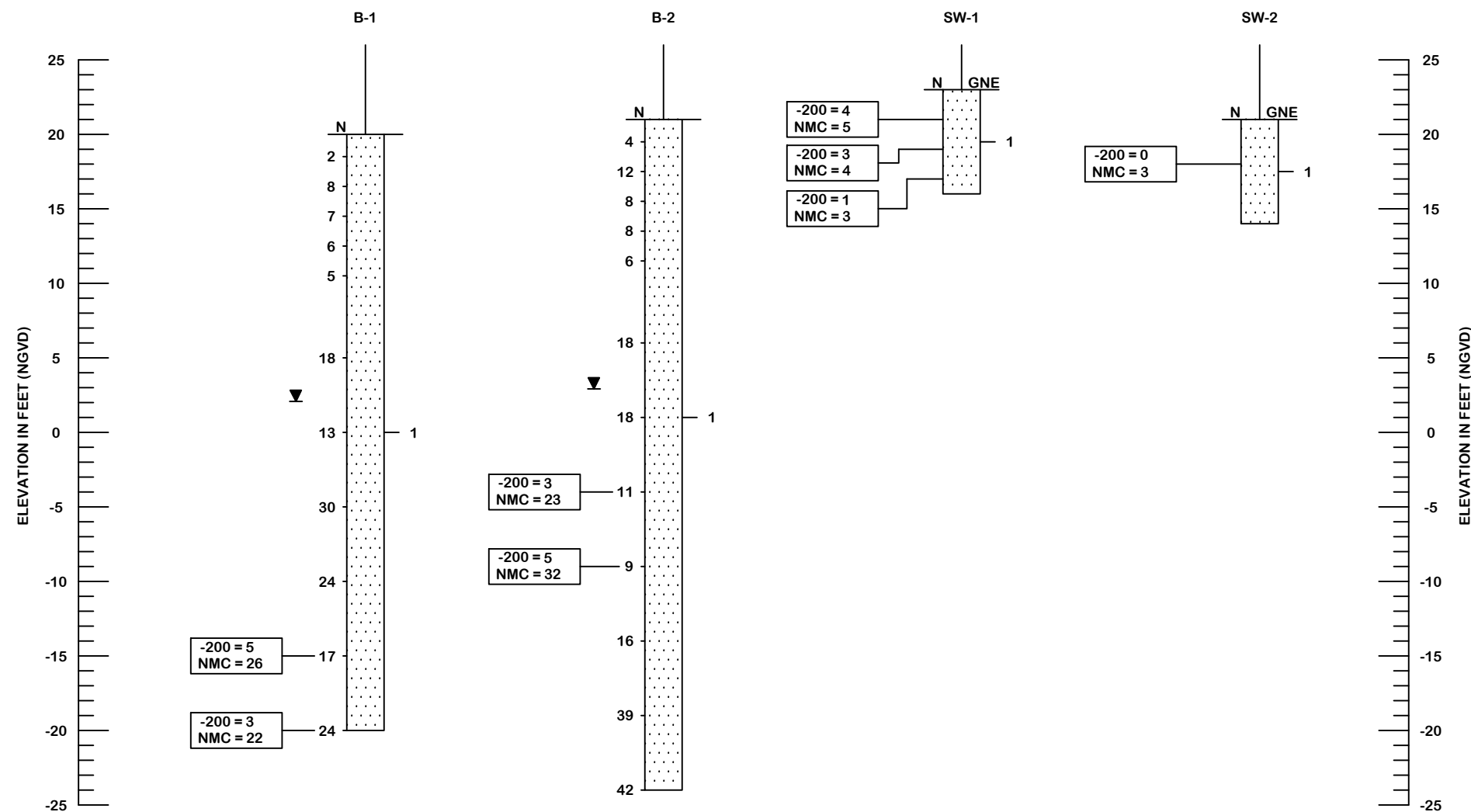
Boring Location Plan and Soil Profiles

Table 1 – Summary of Falling Head Permeability Tests

Falling Head Permeability Test Results

SOIL PROFILES

LEGEND



- 1 [Symbol] WHITE, GRAY, BROWN SAND (SP)
- ▼ GROUNDWATER LEVEL ENCOUNTERED DURING INVESTIGATION
- N SPT N-VALUE IN BLOWS/FOOT FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED)
- SP UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2488) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
- GNE GROUNDWATER TABLE NOT ENCOUNTERED
- 200 PERCENT PASSING #200 SIEVE
- NMC NATURAL MOISTURE CONTENT (%)
- NOTE: ELEVATIONS OBTAINED FROM GOOGLE EARTH

SAFETY HAMMER	
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4
LOOSE	4 TO 10
MEDIUM	10 TO 30
DENSE	30 TO 50
VERY DENSE	GREATER THAN 50
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2
SOFT	2 TO 4
FIRM	4 TO 8
STIFF	8 TO 15
VERY STIFF	15 TO 30
HARD	GREATER THAN 30

DRAWN BY:
SW

CHECKED BY:
SJS

APPROVED BY:
SJS

DATE:
AUG 2023

ENGINEER OF RECORD:
SARAH J. SANCHEZ, P.E.
FLORIDA LICENSE NO.:
51033



SCALE:
NOTED

PROJECT NUMBER:
4511-23-038

GEOTECHNICAL ENGINEERING SERVICES
TARPON BEACH FACILITIES
OKALOOSA COUNTY, FLORIDA

SHEET 2

TABLE 1
SUMMARY OF LABORATORY SOIL PERMEABILITY TESTS (FALLING HEAD METHOD)
TARPON BEACH FACILITIES
WALTON COUNTY, FLORIDA
TIERRA PROJECT NO. 4511-23-038

Soil Stratum Number ⁽¹⁾	Boring	Sample Elevation (ft. NAVD 88) ⁽²⁾	Sample Description	% Fines	Dry Density (pcf)	Vertical Permeability (ft/day)
1	SW-1	21 - 18	White, Gray, Brown SAND (SP)	3	104	15.7
1	SW-1	18 - 16	White, Gray, Brown SAND (SP)	1	102	26.5
1	SW-2	21 - 17	White, Gray, Brown SAND (SP)	0	97	40 ⁽³⁾

Notes: (1) See Soil Profiles (Appendix A).

(2) Ground surface elevations obtained from Google Earth

(3) Permeability value limited to 40 ft/day due to test method recommended limitations

FALLING HEAD PERMEABILITY TEST



Project Name: Tarpon Beach Facilities, Walton County, FL
Project Number: 4511-23-038 **Sample Location:** SW-1 @ 2.5 ft - 5 ft
Sample Description: White, Gray, Brown SAND (Stratum 1)
Remolded Compactive Effort: Standard **No. of Layers:** 3 **Blows Per Layer:** 15
Date: 8/14/2023 **Technician:** BC **Soil Classification:** SP

- Assumes:**
1. Standard Proctor Mold (L = 4.5 in.)
 2. 1/2 Inch Diameter Tubing

$$K_v = \frac{(2.3 \cdot a \cdot L) \log(h_1/h_2)}{(A) (\Delta t)}$$

where a = 1.267 cm (area of tube)
 L = 4.584 in. (height of soil sample)
 = 11.64336 cm (L = 4.5 in. for full mold)
 A = 12.57 sq. in. (area of Proctor mold)
 = 81.1 sq. cm

Head (ft)	Time (sec)		Avg. Time (sec)
	Run #1	Run #2	
7	0	0	0
6	4.5	4.4	4.5
5	10	10	10.0
4	17.4	17	17.2
3	26.9	36.6	31.8
2	40.5	40.1	40.3
1	64.1	63.7	63.9

h1	h2	Delta t (sec)	K _v (cm/sec)
7	1	63.9	5.5E-03
6	1	59.45	5.5E-03
7	2	40.3	5.6E-03

Average K _v =	5.6E-03 cm/sec
	15.7 ft/day

Remolded Test Sample Density

Can #	2R
Wt. Can + Wet Soil, g	416.0
Wt. Can + Dry Soil, g	398.6
Wt. of Water, g	17.4
Wt. of Can, g	259.3
Wt. of Dry Soil, g	139.3
Moisture Content, %	12.5%
Wt. Wet Soil + Mold, lbs.	8.4
Wt. of Mold, lbs.	4.5
Wt. of Wet Soil, lbs.	3.9
Wet Density, pcf	116.4
Dry Density, pcf	103.5

Fines Content of Test Sample

Can #	45
Wt. Can + Wet Soil, g	252.4
Wt. Can + Dry Soil, g	247.3
Wt. of Water, g	5.2
Wt. of Can, g	121.8
Wt. of Dry Soil, g	125.5
Wt. of Dry Sample After Washing + Can, g	243.8
Wt. of Soil Lost During Washing, g	3.4
Moisture Content, %	4.1%
Percent Fines, %	2.7%

FALLING HEAD PERMEABILITY TEST



Project Name: Tarpon Beach Facilities, Walton County, FL
Project Number: 4511-23-038 **Sample Location:** SW-1 @ 5 ft -7 ft
Sample Description: White, Gray, Brown SAND (Stratum 1) **Soil Classification:** SP
Remolded Compactive Effort: Standard **No. of Layers:** 3 **Blows Per Layer:** 15

Date: 8/14/2023

Technician: BC

- Assumes:**
1. Standard Proctor Mold (L = 4.5 in.)
 2. 1/2 Inch Diameter Tubing

$$K_v = \frac{(2.3 \cdot a \cdot L) \log(h_1/h_2)}{(A) (\Delta t)}$$

where a = 1.267 cm (area of tube)
 L = 4.584 in. (height of soil sample)
 = 11.64336 cm (L = 4.5 in. for full mold)
 A = 12.57 sq. in. (area of Proctor mold)
 = 81.1 sq. cm

Head (ft)	Time (sec)		Avg. Time (sec)
	Run #1	Run #2	
7	0	0	0
6	2.9	2.9	2.9
5	6.4	6.3	6.4
4	10.8	10.3	10.6
3	16.6	15.8	16.2
2	24.8	23.8	24.3
1	38.5	37.3	37.9

h1	h2	Delta t (sec)	K _v (cm/sec)
7	1	37.9	9.3E-03
6	1	35	9.3E-03
7	2	24.3	9.4E-03

Average K _v =	9.3E-03 cm/sec
	26.5 ft/day

Remolded Test Sample Density

Can #	1R
Wt. Can + Wet Soil, g	387.5
Wt. Can + Dry Soil, g	367.7
Wt. of Water, g	19.8
Wt. of Can, g	256.3
Wt. of Dry Soil, g	111.4
Moisture Content, %	17.8%
Wt. Wet Soil + Mold, lbs.	8.5
Wt. of Mold, lbs.	4.5
Wt. of Wet Soil, lbs.	4.0
Wet Density, pcf	119.7
Dry Density, pcf	101.6

Fines Content of Test Sample

Can #	46
Wt. Can + Wet Soil, g	243.4
Wt. Can + Dry Soil, g	239.4
Wt. of Water, g	4.0
Wt. of Can, g	120.2
Wt. of Dry Soil, g	119.2
Wt. of Dry Sample After Washing + Can, g	238.5
Wt. of Soil Lost During Washing, g	0.9
Moisture Content, %	3.4%
Percent Fines, %	0.8%

FALLING HEAD PERMEABILITY TEST



Project Name: Tarpon Beach Facilities, Walton County, FL
Project Number: 4511-23-038 **Sample Location:** SW-2 @ 0 ft - 4.25 ft
Sample Description: White, Gray, Brown SAND (Stratum 1)
Remolded Compactive Effort: Standard **No. of Layers:** 3 **Blows Per Layer:** 15
Date: 8/14/2023 **Technician:** BC **Soil Classification:** SP

- Assumes:**
1. Standard Proctor Mold (L = 4.5 in.)
 2. 1/2 Inch Diameter Tubing

$$K_v = \frac{(2.3 \cdot a \cdot L) \log(h_1/h_2)}{(A) (\Delta t)}$$

where a = 1.267 cm (area of tube)
 L = 4.584 in. (height of soil sample)
 = 11.64336 cm (L = 4.5 in. for full mold)
 A = 12.57 sq. in. (area of Proctor mold)
 = 81.1 sq. cm

Head (ft)	Time (sec)		Avg. Time (sec)
	Run #1	Run #2	
7	0	0	0
6	1.5	1.3	1.4
5	3.2	2.9	3.1
4	5.1	4.8	5.0
3	7.5	7.1	7.3
2	11	10.5	10.8
1	17	16.9	17.0

h1	h2	Delta t (sec)	K _v (cm/sec)
7	1	16.95	2.1E-02
6	1	15.55	2.1E-02
7	2	10.75	2.1E-02

Average K _v =	2.1E-02 cm/sec
	59.5 ft/day

Remolded Test Sample Density

Can #	2R
Wt. Can + Wet Soil, g	386.8
Wt. Can + Dry Soil, g	370.5
Wt. of Water, g	16.3
Wt. of Can, g	259.3
Wt. of Dry Soil, g	111.2
Moisture Content, %	14.7%
Wt. Wet Soil + Mold, lbs.	8.2
Wt. of Mold, lbs.	4.5
Wt. of Wet Soil, lbs.	3.7
Wet Density, pcf	111.0
Dry Density, pcf	96.8

Fines Content of Test Sample

Can #	47
Wt. Can + Wet Soil, g	251.0
Wt. Can + Dry Soil, g	246.8
Wt. of Water, g	4.2
Wt. of Can, g	120.4
Wt. of Dry Soil, g	126.4
Wt. of Dry Sample After Washing + Can, g	246.4
Wt. of Soil Lost During Washing, g	0.3
Moisture Content, %	3.4%
Percent Fines, %	0.3%

SECTION 05 60 00 – HANDRAILS

A. General

This section is to cover the fabrication and installation of steel and aluminum hand and guardrails. This section does not pertain to grab bars used in restrooms.

B. Quality Assurance:

1. The design of the rails shall be in accordance with the current revisions of SREF and Florida Accessibility Code for Building Construction.
2. Fabrication: Work shall be performed by experienced and qualified fabricators who have experience in aluminum rail fabrication.
3. Pipe cuts shall square and without burrs. All Welds shall be ground smooth to the surface of the pipe. Curved sections shall be bent with no crimping or flattening of the inside radius. All welded joints in rail-to-rail connections shall be internally reinforced.
4. The rails shall be anchored in such a manor as to meet the guidelines in the Florida Accessibility Code for Building Construction.
5. Prepare shop drawings for the rails at each campus after field measuring each stadium. Submit shop drawings for review.
6. Prepare a physical sample indicating all three methods of attachment for review prior to beginning fabrication. Sample shall demonstrate finish of railing, welds, bolts for connections and separation of dissimilar materials.
7. All welded connections shall be TIG welded.
8. Prepare a sample for approval of the top and bottom corners as shown on the drawings. These corners may be welded or bent.

C. Materials:

1. All aluminum handrail pipes shall be 1-1/2" O.D.- 1 5/8" O.D., Schedule 80 extruded aluminum pipe, alloy 6063-T-6.
2. Finish: All exposed aluminum shall be mill finished aluminum. This is a finished product. Protect in the field.
3. All fasteners shall be type 300 stainless steel.
4. Wall mounting brackets shall be aluminum and fastened as indicated on drawings.

D. Installation:

1. Railings shall be installed as shown on approved shop drawings by mechanics experienced in the installation of aluminum railing.

2. Railings shall be firmly mounted and aligned both vertically and horizontally to the structure installed on.
3. After installation, railings shall be cleaned and protected from damage until final acceptance of the project.
4. Damage to adjacent structures during installation of railing will be required like new at no cost to the owner.

END OF SECTION

06 10 00 CARPENTRY

PART 1: GENERAL

- 1.01 RELATED DOCUMENTS:
Drawings and General Provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this section.
- 1.02 SCOPE:
Includes carpentry work and material necessary for a complete installation.
- 1.03 RELATED WORK:
1. Light Steel Framing
2. Roof and Coping Framing
3. Roofing
- 1.04 STANDARDS:
Each piece of lumber and plywood shall have a grade mark of an agency certified by the board of review of the American Lumber Standards Committee.
- 1.05 SUBMITTALS:
Provide (7) seven copies of manufacturers shop drawings and installation instructions.

PART 2: MATERIALS

- 2.01 Framing and blocking shall be #2 dense SYP of sizes and dimensions shown. Members used on the exterior and in contact with concrete or masonry and where indicated on the drawings shall be pressure treated.
- 2.02 Plywood shall be 3/4" and 1/2" CDX, pressure treated in lower exterior walls. Roofing sheathing shall be 5/8" CDX.
- 2.03 Cement board material is specified under hard tile section, 09 30 00.
- 2.04 Synthetic Siding is 7 1/4" x 5/16" Cedar Mill lap siding with 6" exposure and Cedar Mill vertical sheet panel by James Hardie Building Products.
- 2.05 Corner and edge trim is to be Hardi Trim by James Hardie Building Products in widths and thicknesses shown.
- 2.06 Ceilings are to be 120"x 48" x .312" Hardie Panel Vertical siding.

- 2.07 Soffits are to be 120" x 16" x .25" Hardie Vented Smooth soffit. Similar and equal products by CertainTeed or GAF will be considered equal.
- 2.08 Steps and ramps infill material is to be McNichols 0.105 3"x 3" vinyl coated wire mesh or equal by Parco, Inc. or Josph Fazio, Inc.
- 2.09 Railing caps are to be 2"x8" composite decking similar to Trex or Wear deck, by Owens Corning.
- 2.10 Fasteners for exterior decking, ramps, steps and railing are to be #10 (304) stainless steel decking screws.
- 2.11 Tongue and Groove Wood Decking:
- A. Standard for Solid-Sawn Wood Roof Decking: Comply with AITC 112.
 - B. Roof Decking Species: Southern Pine.
 - C. Roof Decking Nominal Size: 2 by 6. (1-7/16" dressed thickness)
 - D. Roof Decking Grade: S.P.I.B. No. 1 Grade Timber Decking, T&G.
 - E. Grade Stamps: Factory mark each item with grade stamp of grading agency. Apply grade stamp to surfaces that are not exposed to view.
 - F. Moisture Content: Provide wood roof decking with 15 percent maximum moisture content at time of dressing.
 - G. Face Surface: Smooth.
 - H. Edge Pattern: Vee grooved.
 - I. Pressure treat wood roof decking
 - J. Preservative Chemicals: Wolman EraWood as prescribed by the manufacturer.
 - K. Penetrating Sealer: Clear sanding sealer complying with Section 09 91 23 "Painting" and compatible with topcoats specified for use over it.
 - L. Oil Stain: As selected from the manufacturer's line of stains. Factory apply.

PART 3: INSTALLATION

- 3.01 Blocking and grounds shall be installed in a manner to eliminate cupping and warping. Members over 4" nominal width shall be kurfed on downside. Blocking shall be bolted to sub structure or otherwise securely attached to prevent movement. Nails will be double galvanized common nails of appropriate size (or galvanized screw nails). Provide solid blocking in framed partitions for support of door stops, other hardware items mounted to the walls and for light switches, electrical outlets and devices and recessed speakers. Provide 2X blocking in walls for base and upper cabinets.

- 3.02 Apply synthetic lap siding and trim over water resistive barrier (specified in Section 07100) over $\frac{3}{4}$ " plywood attached to wood stud framing. Blind nail attach using stainless steel screws, No. 8-18 x.323" HD x 1 $\frac{5}{8}$ " long. Stainless steel screws must penetrate $\frac{1}{2}$ " into material siding is to be attached to. Screw heads must be flush with the plank face and NOT countersunk. The first course of any wall should be installed over a $\frac{1}{4}$ " lath strip to ensure a consistent plank angle. Install Hardiplank siding in compliance with local building codes for clearance between the bottom edge of plank and the finished grade. Butt ends of planks to trim. Caulk all joints with caulking (specified in Section 07100).

END OF SECTION

06 17 53 SHOP-FABRICATED WOOD TRUSSES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Wood roof trusses.
 - 2. Wood girder trusses.

1.2 ACTION SUBMITTALS

- A. Product Data: For metal-plate connectors, metal truss accessories, and fasteners.
- B. Shop Drawings: Show fabrication and installation details for trusses.
 - 1. Show location, pitch, span, camber, configuration, and spacing for each type of truss required.
 - 2. Indicate sizes, stress grades, and species of lumber.
 - 3. Indicate locations, sizes, and materials for permanent bracing required to prevent buckling of individual truss members due to design loads.
 - 4. Indicate type, size, material, finish, design values, orientation, and location of metal connector plates.
 - 5. Show splice details and bearing details.
- C. Delegated-Design Submittal: For metal-plate-connected wood trusses indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.3 QUALITY ASSURANCE

- A. Metal Connector-Plate Manufacturer Qualifications: A manufacturer that is a member of TPI and that complies with quality-control procedures in TPI 1 for manufacture of connector plates.
 - 1. Manufacturer's responsibilities include providing professional engineering services needed to assume engineering responsibility.
 - 2. Engineering Responsibility: Preparation of Shop Drawings and comprehensive engineering analysis by a qualified professional engineer.
- B. Fabricator Qualifications: Shop that participates in a recognized quality-assurance program, complies with quality-control procedures in TPI 1, and involves third-party inspection by an independent testing and inspecting agency acceptable to Architect and authorities having jurisdiction.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Handle and store trusses to comply with recommendations in SBCA BCSI, "Building Component Safety Information: Guide to Good Practice for Handling, Installing, Restraining, & Bracing Metal Plate Connected Wood Trusses."

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer licensed in the State of Florida to design metal-plate-connected wood trusses.
- B. Structural Performance: Metal-plate-connected wood trusses shall be capable of withstanding design loads within limits and under conditions indicated. Comply with requirements in TPI 1.
- C. Comply with applicable requirements and recommendations of TPI 1, TPI DSB, and SBCA BCSI.
- D. Wood Structural Design Standard: Comply with applicable requirements in AF&PA's "National Design Specifications for Wood Construction" and its "Supplement."

2.2 DIMENSION LUMBER

- A. Lumber: DOC PS 20 and applicable rules of any rules-writing agency certified by the American Lumber Standard Committee (ALSC) Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
 - 1. Provide dry lumber with 19 percent maximum moisture content at time of dressing.
- B. Permanent Bracing: Provide wood bracing that complies with 15% maximum moisture content construction grade southern pine, appearance grade where exposed.

2.3 METAL CONNECTOR PLATES

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Alpine Engineered Products, Inc.; a division of ITW Building Components Group, Inc.
 - 2. MiTek Industries, Inc.
 - 3. Truswal Systems Corporation.

- B. General: Fabricate connector plates to comply with TPI 1.
- C. Hot-Dip Galvanized-Steel Sheet: ASTM A 653/A 653M; Structural Steel (SS), high-strength low-alloy steel Type A (HSLAS Type A), or high-strength low-alloy steel Type B (HSLAS Type B); G60 coating designation; and not less than 0.036 inch thick.

2.4 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
 - 1. Provide fasteners for use with metal framing anchors that comply with written recommendations of metal framing manufacturer.
 - 2. Where trusses are exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Nails, Brads, and Staples: ASTM F 1667.

2.5 METAL FRAMING ANCHORS AND ACCESSORIES

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Simpson Strong-Tie Co., Inc.
 - 2. MiTek Structural Connectors.
- B. Allowable design loads, as published by manufacturer, shall comply with or exceed those of basis-of-design products. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency. Framing anchors shall be punched for fasteners adequate to withstand same loads as framing anchors.
- C. Galvanized-Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 coating designation.

2.6 FABRICATION

- A. Assemble truss members in design configuration indicated; use jigs or other means to ensure uniformity and accuracy of assembly, with joints closely fitted to comply with tolerances in TPI 1. Position members to produce design camber indicated.
 - 1. Fabricate wood trusses within manufacturing tolerances in TPI 1.
- B. Connect truss members by metal connector plates located and securely embedded simultaneously in both sides of wood members by air or hydraulic press.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install wood trusses only after supporting construction is in place and is braced and secured.
- B. If trusses are delivered to Project site in more than one piece, assemble trusses before installing.
- C. Hoist trusses in place by lifting equipment suited to sizes and types of trusses required, exercising care not to damage truss members or joints by out-of-plane bending or other causes.
- D. Install and brace trusses according to TPI recommendations and as indicated.
- E. Anchor trusses securely at bearing points; use metal truss tie-downs or floor truss hangers as applicable. Install fasteners through each fastener hole in metal framing anchors according to manufacturer's fastening schedules and written instructions.
- F. Securely connect each truss ply required for forming built-up girder trusses.
- G. Install and fasten permanent bracing during truss erection and before construction loads are applied. Anchor ends of permanent bracing where terminating at walls or beams.
- H. Install wood trusses within installation tolerances in TPI 1.
- I. Do not alter trusses in field. Do not cut, drill, notch, or remove truss members.
- J. Replace wood trusses that are damaged or do not comply with requirements.

END OF SECTION

SECTION 07 21 00 – SPRAY FOAM INSULATION

1. GENERAL:

- A. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND PERFORM ALL WORK SERVICES FURNISHING AND INSTALLATION, COMPLETE, OF ALL FOAM INSULATION AS SHOWN ON DRAWINGS AND AS SPECIFIED, IN ACCORDANCE WITH PROVISIONS OF THE CONTRACT DOCUMENTS, AND COMPLETELY COORDINATED WITH WORK OF ALL OTHER TRADES.
- B. ALTHOUGH SUCH WORK IS NOT SPECIFICALLY INDICATED, FURNISH AND INSTALL ALL SUPPLEMENTARY OR MISCELLANEOUS ITEMS, APPURTENANCES AND DEVICES INCIDENTAL TO OR NECESSARY FOR A SOUND, SECURE AND COMPLETE INSTALLATION.

2. SUBMITTALS:

- A. INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS FROM MATERIALS MANUFACTURER. INCLUDE CERTIFICATION OR DATA SUBSTANTIATING THAT MATERIALS COMPLY WITH REQUIREMENTS.
- B. ACTUAL SAMPLES WHEN ARCHITECT DIRECTS.

3. SCOPE OF WORK

A. WALL FOAM INSULATION:

- 1) INSTALL 3 1/2" OF CLOSED CELL FOAM INSULATION IN EXTERIOR STUD WALL CAVITY FROM THE INTERIOR WHERE INDICATED ON FLOOR PLAN AND WALL SECTIONS.
- 2) DRILL HOLES IN STUD WALLS FROM THE INTERIOR, PRESSURE INJECT FOAM INTO OPEN CELLS. INSTALL PER MANUFACTURERS INSTALLATION INSTRUCTIONS. CLEAN AND SEAL ALL DRILLED HOLES AFTER INSULATION INSTALLATION IS COMPLETE FOR UNIFORM WALL FINISH. (SEE SECTION 07216) - FOAMED-IN-PLACE INSULATION.
- 3) COMPLETE APPROXIMATELY 20' OF INSULATION AND EXAMINE WITH ARCHITECT AND OBTAIN APPROVAL PRIOR TO PROCEEDING WITH BALANCE OF PROJECT.
- 4) SEE WALL SECTIONS FOR GENERAL INFORMATION.

A. ROOF DECK FOAM INSTALLATION

- 1) INSTALL 3 1/2" OF CLOSED CELL SPRAY FOAM INSULATION ON BOTTOM OF ROOF DECK AS INDICATED ON FLOOR PLAN AND WALL SECTIONS
- 2) INSTALL SPRAY APPLIED INTUMESCENT IGNITION BARRIER TO EXPOSED WALL AND ROOF DECK INSULATION.

- B. PROVIDE PRESCRIPTIVE THERMAL BARRIERS, PRESCRIPTIVE IGNITION BARRIERS AND INTUMESCENT COATINGS WHERE REQUIRED BY CODES OR MANUFACTURERS INSTRUCTIONS

Mike Marshall, 12/2023

4. MATERIALS:

- A. SPRAY FOAM INSULATION SHALL BE: NEXSEAL 2.0 CLOSED CELL SPRAY FOAM INSULATION DEMALAC SPRAY FOAM INSULATION, THERMOSEAL 2000 MEDIUM DENSITY CLOSED CELL SPRAY FOAM OR APPROVED EQUAL.

END OF SECTION

07 41 00 - PREFORMED STANDING SEAM METAL ROOF

1. PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

1. This Section covers the , pre-finished, prefabricated Architectural standing seam roof system. All metal trim, accessories, fasteners, insulation, and sealants indicated on the drawings as part of this section.
2. Related Work Specified Elsewhere:
 1. Refer to all sections in Division 0, CONTRACT REQUIREMENTS, and Division 1, GENERAL REQUIREMENTS.

1.2 QUALITY ASSURANCE

1. **Petersen Aluminum Corporation, Acworth, GA 800-272-4482** products establish a minimum of quality required.
2. The manufacturer and erector shall demonstrate experience of a minimum of ten (10) years in this type of project.

1.3 SUBSTITUTIONS

1. The material, products and equipment specified in this section establish a standard for required function, dimension, appearance and quality to be met by any proposed substitution.

1.4 ROOF SYSTEM PERFORMANCE TESTING

1. Water Penetration: When tested per ASTM E-283/1680 and ASTM E-331/1646 there shall be no uncontrolled water penetration or air infiltration through the panel joints.
2. ***Roof System shall be designed to meet Florida Building Code wind load requirements for the specific project location. The panel shall have been tested to ASTM E-1592 Requirements and shall have a Negative Load Table in the required FBC format with a 2.0 Factor of Safety shown in this Negative Load Table.***
3. Roof System shall be designed to meet a UL Class 90 wind uplift in accordance with UL standard 580 and panel system shall be ASTM 1592 Tested and approved: U. S Army Corps of Engineer requirement. Roof system shall have current FLORIDA BUILDING CODE PRODUCT APPROVAL and shall be supported by ASCE 7 “stamped/sealed” Florida Independent Engineer Calculations from the Roofing System Manufacturer to support the applicable Zone 1, Zone 2 and Zone 3 loads for this particular project. Extrapolations will not be allowed in these calculations, only interpolations by the Engineer to illustrate the clip layout for each Zone listed above.

1.5 WARRANTIES

1. The Manufacturer shall warrant for twenty years (20) from the date of substantial completion of the Work related to this section, that the work is not defective in workmanship or material, and that the roof will be adequate to prevent leaks. This warranty may be provided in the short term by the Contractor/Roof Installer, however must have the backing and assurance of the roof system manufacturer.
2. **Finish Warranty on Aluminum: (Coastal Application)**
Written 20 Year Finish Warranty shall be required for the Aluminum Standing Seam Roof System including Flashings, and related rain-carrying equipment. as supplied by the manufacturer and roofing contractor. This warranty will be for 20 Years and cover: Chalking, Fading and Integrity of the Kynar 500™ paint finish on the Aluminum. Note this is a Coastal Application with exposure to the ocean and Salt Spray. This 20 Year Finish Warranty shall cover this type of Coastal Application and must be signed and executed by the Roofing System manufacturer.

1.6 SUBMITTALS

1. Furnish detailed drawings showing profile and gauge of exterior sheets, location and type of fasteners, location, gauges, shape and method of attachment of all trim locations and type of sealants, and any other details as may be required for a weather-tight installation.
2. Provide finish samples of all colors specified.

2. PART 2 - PRODUCTS

2.1 PANEL DESIGN

1. Roof panels shall be standing seam in 18" widths with 2" high seam, mechanically seamed panels with Factory-supplied & calibrated Mechanical Seamers that form the completed seam to an 180° seamed panel.
2. Gauge specified herein is minimum .040" Aluminum Gauge Thickness.
3. Panels shall be factory manufactured either "with Striations" or "with pencil ribs and with striations" at the selection of the Architect.

2.2 ACCEPTABLE MANUFACTURERS

1. This project is detailed around the roofing product of Petersen Aluminum Corporation, Kennesaw, GA "**TITE-LOC PLUS**" PANEL,
Similar products of the following manufacturers will be considered equal:
IMETCO, Tucker, GA,
MERCHANT & EVANS, Burlington, NJ.
ATAS International, Inc.
2. **Color shall be: "PAC-CLAD" Kynar 500™ color: Silver.**

2.3 MATERIAL AND FINISHES

1. Face Sheet Material: Aluminum Standing Seam Sheet shall be produced from ASTM B-209 quality Aluminum, 3105 H-14 Alloy and Temper material. Aluminum shall be tension leveled (temper passed and stretcher leveled) with camber a maximum of 1/4 inch in 20 feet, manufactured in the USA, and be .040" Thick Aluminum U.S. standard gauge. ***Standards and shall meet applicable Florida Building Code Wind load requirements for this project location. Additionally, Florida Professional Engineer Stamped Calculations will be required for the project to certify the roof panel assembly meets the applicable Building Code wind loads per ASCE 7 standards.***

2. FINISH

1. Finish:
 1. Finish shall be Kynar 500 or Hylar 5000 Fluorocarbon coating with a top side film thickness of 0.70 to 0.90 mil over 0.25 to 0.31 mil prime coat to provide a total dry film thickness of 0.95 to 1.25 mil. Bottom side shall be coated with a primer with a dry film thickness of 0.25 mil. Finish shall conform to all tests for adhesion, flexibility, and longevity as specified by Kynar 500 or Hylar 5000 finish supplier.
 2. If Strippable coating shall be applied on the pre-finished panels to the top side to protect the finish during fabrication, shipping and field handling. This strippable coating shall be removed before installation.
 3. Field protection must be provided by the Contractor at the job site so material is not exposed to weather and moisture.
2. Exposed Flashing and Trim:
 1. Unless otherwise specified, all exposed adjacent flashing and trim shall be of the same material and finish as panel system.
3. Forming: Use continuous end rolling method. No end laps on panels.
The manufacturer may elect to roll panels on the job site due to panel lengths that exceed normal transportation limitations of the trucking industry.
4. Trim: Trim shall be fabricated of the same material and finish to match the profiled sheeting and press broken in lengths of 10 to 12 feet. Trim shall be formed only by the manufacturer or their approved dealer. Trim to be erected in overlapped condition. Use lap strips only as indicated on drawings. Miter conditions shall be factory welded material to match the sheeting.
5. Closures: Use composition or metal profiled closures at the top of each elevation to close ends of the panels. Metal closures to be made of the same material and finish as face sheet.
6. Panel Clips: Shall be Stainless Steel as required by the panel manufacturer in appropriate Gage and ***spacing of Clips to meet the job-specific Wind Load requirements by the Florida Building Code. Necessary engineering documentation of this clip spacing and attachment to be provided in the submittal stage to the Architect.***
7. Fasteners: Fasteners shall be 400 series stainless steel, dished washers stainless steel with bonded neoprene.
8. Zees: Where required by design of primary structural framing system shall be used to span between beams and/or joists. Thermally responsive base and top clips shall

- be fastened to the zees on 12" centers.
9. Insulation: See Section 07210: Building Insulation.

2.4 ROOFING UNDERLAYMENT

1. On all surfaces to be covered with roofing material, furnish and install a 40 Mil "Peel & Stick Membrane" will be required as outlined by the metal panel manufacturer. Membrane to be minimum of 40 MIL Thickness, smooth, non-granular, one of the following manufacturers:
 - a) W.R. Grace "Ice & Water Shield" (High Temperature).
 - b) Carlisle: CCW WIP 300HT.
 - c) Interwrap : Titanium PSU.
 - d) MFM Corp : "Wind & Water Shield".
 - e) MID-STATES Asphalt: Quick Stick HT
 - f) Polyguard: Polyglas HT.
 - g) TAMKO: TW Tile & Metal Underlayment.
2. Underlayment shall be laid in horizontal layers with joints lapped toward the eaves a minimum of 6", and well secured along laps and at ends as necessary to properly hold the felt in place. All underlayment shall be preserved unbroken and whole.

2.5 SEALANTS

1. Exterior grade silicone sealant recommended by roofing manufacturer.

2.6 FABRICATION

1. Comply with dimensions, profile limitations, gauges and fabrication details shown and if not shown and, if not shown, provide manufacturer's standard product fabrication.
2. Fabricate components of the system in the factory, ready for field assembly.
3. Fabricate components and assemble units to comply with fire and performance requirements specified.
4. Apply specified finishes in conformance with manufacturer's standards, and according to manufacturer's instructions.

3. PART 3 - EXECUTION

3.1 INSPECTION

1. Examine alignment of structural steel and related supports prior to installation and do not proceed until the defects are corrected by the responsible contractor.

3.2 FASTENERS

1. Secure units to supports.
2. Place fasteners as indicated in manufacturer's standards.

3.3 INSTALLATION

1. Panels shall be installed plumb and true in proper alignment and relation to the structural framing. The erector must have at least five years' successful experience with similar applications.
2. Install metal panels, fasteners, trim and related sealants in accordance with approved shop drawings and as may be required for a weather-tight installation.
3. Remove all strippable coating and provide a dry wipe-down cleaning of the panels as they are erected.

3.4 DAMAGED MATERIAL

1. Upon determination of responsibility, repair or replace damaged metal panels and trim to the satisfaction of the Architect and Owner.

END OF SECTION

07 62 00 FLASHING AND SHEET METAL

PART 1 - GENERAL

1.01 SUMMARY

- A. Provide flashing and sheet metal components for building construction.
 - 1. Copings.
 - 2. Conductor heads and downspouts.
 - 3. Exposed metal trim units.
 - 4. Miscellaneous sheet metal accessories.

1.02 PERFORMANCE REQUIREMENTS

- A. System Design: Provide flashing and sheet metal components that are identical to systems that have been successfully tested by a qualified testing and inspecting agency to resist uplift pressure calculated according to ASCE 7-98.
 - 1. Design wind velocity shall be as shown on structural Drawings.
 - 2. Design pressures are indicated on structural Drawings.

1.03 SUBMITTALS

- A. Submit for approval samples, shop drawings, product data.
- B. Manufacturer Certificates: Signed by roofing manufacturer certifying that flashing and sheet metal components comply with requirements specified in "Performance Requirements" Article.

1.04 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Copings and other roof flashing, rafter end covers, etc.: Minimum .040 (unless otherwise noted on drawings) formed aluminum with hold-down clips and splice plates
- B. Finish: Kynar 500 2-coat fluoropolymer to match metal roofing.

Mike Marshall, 12/2023

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Follow recommendations of SMACNA "Sheet Metal Manual." Allow for expansion. Isolate dissimilar materials to prevent galvanic corrosion.
- B. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction and with a uniform appearance. Coordinate installation with roofing system and work of other sections to ensure weathertight performance. Anchor securely to structure to withstand inward and outward loads.
- C. Restore damaged components and finishes. Clean and protect work from damage.

END OF SECTION

07 92 00 - WATERPROOFING & SEALANTS

PART 1 GENERAL

1.01 RELATED DOCUMENTS:

Drawings and General Provisions of the Contract including General and Supplementary Conditions and Division 1 Specification Sections, apply to work of this section.

1.02 SCOPE:

This section includes waterproofing and damp proofing of retaining walls below grade, under slabs on grade, below toppings of suspended slabs, under and behind ceramic tile, thru walls and at faces of walls, masonry waterproofing, and sealant caulking, and related items.

1.03 RELATED WORK:

- A. Cast in Place Concrete
- B. Cement Board Siding
- C. Metal Siding / Metal Roofs
- D. Windows and Doors

1.04 SUBMITTALS

Submit technical data on proposed materials, colors if applicable and MSDS sheets. See section 013000 for submittal requirements.

PART 2 MATERIALS

2.01 ADHESIVES: Shall be Nerva-Plast by Rubber and Plastic Compound Company and Bituthane 3000 by W.R. Grace or equal.

2.02 THRU-WALL FLASHING: See section 048000 Unit Masonry Assemblies

2.03 FLUID APPLIED AIR BARRIER: Tyvek Fluid Applied WB. Similar and equal products by Prosoco will be considered equal.

2.04 SEALANT

- A. One-part caulk shall be VLM 150 by BASF or Sherwin Williams Loxon, H1. (See Section 08 43 00 for sealant around perimeter of aluminum storefront and louvers).

2.05 BACKER ROD: Shall be closed cell polyethylene rod.

2.06 PRECOMPRESSED EXPANDING FOAM SEALANT: Emseal joint systems or equal.

PART 3 INSTALLATION

3.01 SEALANT: Apply one-part sealant around perimeter of door frames and as indicated in recesses. Flow on smoothly for even surface. Color will be selected

by the architect from manufacturers standard color palette. Use backer rod to achieve two points of contact between materials. Review minimum sealant joint width at door perimeters of 3/8”.

3.02 UNDER STANDING SEAM METAL ROOFING: See section 074113

3.03 FLUID APPLIED AIR BARRIER: Apply air and water-resistive barrier to a clean, dry substrate within temperature and weather limitations per manufacturer’s written instructions.

A. FLUID-APPLIED AIR & WATER-RESISTIVE BARRIER INSTALLATION:

1. Apply to recommended thickness.
2. Allow product to cure and dry.
3. Inspect membrane before covering. Repair any punctures or damaged areas by applying additional material.
4. Back roll as necessary to ensure there are no pinholes, voids, or gaps in the membrane. Apply fluid applied air and water-resistive barrier per manufacturer’s recommendations.
5. Apply additional coats per manufacturer’s written instructions.

B. AT DOORS AND PENETRATIONS:

1. General: Comply with weather and air barrier manufacturer’s installation instructions, temperature limitations, product data and shop drawings.
2. Apply liquid flashing membrane over surfaces to seal and waterproof rough openings per manufacturer’s written instructions. Spread the wet product to create an opaque, monolithic flashing membrane which surrounds the rough opening and extends 4 to 6 inches over the face of the structural wall. Apply additional coats as needed to achieve void- and pinhole-free surface.

END OF SECTION

08 16 13 – FIBERGLASS REINFORCED PLASTIC (FRP) DOORS AND FRAMES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Fiberglass Reinforced Plastic (FRP) Doors
- B. Fiberglass Reinforced Plastic (FRP) Frames

1.3 RELATED SECTIONS

- A. Section 06105 - Miscellaneous Carpentry
- B. Section 07920 - Joint Sealants
- C. Section 08710 - Finish Hardware
- D. Section 08800 - Glass and Glazing
- E. Section 09911 - Exterior Painting
- F. Section 09912 - Interior Painting

1.4 SUBMITTALS

- A. Submit shop drawings and product data under provisions of Section 01 30 0.
- B. Shop Drawings – Include the following:
 - 1. Elevation of each door type including door size, handing and finish
 - 2. Cutout locations for lites and hardware
 - 3. Internal reinforcement
 - 4. Frame configuration, anchor types and spacing
- C. Product data including manufacturer's literature, fabrication descriptions and installation instructions.
- D. Construction and/or color samples as requested.

1.5 QUALITY ASSURANCE

- A. General Qualifications:
 - 1. Manufacturer Qualifications: A company that specializes in manufacturing FRP doors and frames with a minimum of 30 years' experience.

2. Quality Assurance: Obtain all FRP doors and FRP frames from a single manufacturer to ensure consistent quality.
3. Quality Assurance: Hardware and accessories for all FRP doors and FRP frames shall exactly adhere to the Architect's specification.
4. Quality Assurance: Glass for windows in doors shall be ¼" UL Wire glass.

B. Regulatory Requirements:

1. Flame Spread: All rated FRP component parts, including the finish, shall have a flame spread classification of 25 or less per ASTM E84 and shall be self-extinguishing per ASTM D635, unless operating conditions dictate otherwise.
 2. Resins and coatings to meet with USDA standards for incidental food contact, if applicable to this project.
 3. Products conforming to the Florida Building Code (FBC).
- C. Warranty:
1. To include ten (10) years free from defects in material and workmanship from date of shipment, and lifetime from corrosion from date of shipment, provided that the structural integrity of the doors and frames have not been violated or compromised.

1.6 DELIVERY, STORAGE, HANDLING, AND PROTECTION

- A. Doors and frames will be individually packaged in cardboard cartons. Cartons will be clearly labeled with project information and will include fasteners and installation instructions, if required. Only remove cartons upon arrival if cartons are wet or damaged.
- B. Deliver and store doors and frames at the job site in such a manner as to prevent damage; out of weather and/or extreme temperatures. The doors shall be stored in a vertical position on blocking, clear of the floor and with blocking between the doors to permit air circulation between the doors.
- C. All damaged or otherwise unsuitable doors and frames, when so ascertained, shall be immediately removed from job site.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
- B. Basis of Design Product: Subject to compliance with requirements, provide:
 1. Fiberglass Reinforced Plastic Doors and Frames by CORRIM Company, Oshkosh, Wisconsin 54901. Phone: 920-231-2000 Fax: 920-231-2238 www.corrim.com . Similar and equal products by Tiger Door will be accepted as an equal.

2.2 FRP DOORS

A. Door Fabrication:

1. Total door thickness to be a nominal 1-3/4 inches thick.
2. Lock stiles on non-rated active leaves shall be factory beveled 1/8" in 2".
3. Provide doors with completely seamless construction on all six (6) surfaces.

B. Face Sheets: FRP face sheets shall be manufactured using a corrosion resistant resin system with light stabilizing additives. The resin shall be reinforced with fiberglass, 50% average by weight for enhanced strength. Face sheets shall be a minimum of 0.125-inch-thick fiberglass. Face sheets will be Architect's choice of smooth, pebble or woodgrain seamless finish.

C. Stiles and Rails: Stiles and rails shall be 1-1/2-inch square pultruded fiberglass tubes. Pultrusion is a fiberglass fabrication process that results in a much stronger, more durable product. Non-rated and 20-minute doors will have a full width horizontal 1-1/2-inch square pultruded fiberglass tube every 24 inches in height for internal reinforcement. A 1-1/2-inch square solid fiberglass block shall be used at all hardware reinforcements and corner intersections. A minimum of 1,150 pounds screw withdrawal force shall be required per screw. The bottom rail shall allow for 1-1/4 inches of height alterability without loss of the panel's integrity. Absolutely no metal or wood reinforcements, including #2 SPF (Spruce Pine Fir), will be allowed in any part of the stile and rail configuration. D. Core Options:

1. Polyurethane Foam Core: A 1-1/2-inch-thick rigid block of polyurethane shall be laminated to the interior of the panels. The "R" factor shall be 12. The polyurethane insulation shall be Class A and CFC free. Foam properties comply with ASTM E-84 and The International Building Code (IBC).
2. Balsa Core: 1-1/2 inches thick Balsa core of end grain construction for enhanced strength, shall be laminated to the interior of the panels. The balsa shall have a density of 8.5 – 9.0 lbs./cu. Ft. Compressive strength, perpendicular to the door panel surface shall be 1400 psi.
3. Honeycomb Core: Phenolic impregnated resin paper honeycomb.

E. Hardware Preparations: Doors shall be reinforced and mortised for hardware with 1-1/2 inches x 1-1/2 inches of solid fiberglass to allow application of hinges and locks, in accordance with the hardware schedule, hardware manufacturer's instructions and templates.

1. Reinforcement Blocking: Non-swelling polymer or firestop blocking will be used for all lockset, surface mounted hardware and thru-bolted hardware blocking.
2. Pilot holes for full mortise butt hinges will be pre-drilled by factory.
3. All hardware shall be attached / installed by using pilot hole and stainless-steel wood screws.

F. Door Accessories

1. Louvers: Louvers shall be fabricated with pultruded FRP material of an inverted “V” design and shall be subject to the same performance guarantee as the door panel. The louver opening will be fabricated in the same method as for glazing above.
2. Fasteners: Provide countersunk stainless-steel fasteners as required for glazing openings and louvers.
3. Transoms: All transom panels will be identical to the doors in construction, materials, thickness, color, and reinforcement.
4. Astragals: Astragals for pairs of doors to be fabricated with FRP material of manufacturer’s standard flat design.

2.3 FRP FRAMES

A. Fabrication: FRP frames shall be rigid, neat in appearance, free from defects and the finish shall match the doors. Fabricate FRP doors and frames as shown on the drawings and in accordance with best shop practices. Field measurements shall be taken as required for coordinating with adjoining work.

1. Provide frames for doors, transoms, sidelights and borrowed lites, as required.
2. All frames shall be 100% pultruded fiberglass with an average 50% glass content by weight which results in an industrial fiberglass frame as strong as a 14-gauge hollow metal frame.
3. Non-rated and 20-minute UL labeled: Standard one-piece FRP profile with integral stop: 5-3/4” x 2” equal rabbet
(Optional: 4-inch header)
(Optional: modified depth with equal rabbet)
(Optional: modified depth with un-equal rabbet)
(Optional: single rabbet design)
4. Head and jamb members shall be standard 45-degree miter, providing a neatly mitered corner connection, fabricated for Knocked Down (KD) field assembly.
(Optional: one piece frame, resin bonded and assembled at factory, available on non-rated frames only)

B. Reinforcements and Braces / Supports

1. Frames shall be reinforced and mortised for hardware in accordance with the hardware schedule, manufacturer’s instructions, and templates. Absolutely no metal reinforcements will be allowed in any part of the FRP frame configuration.
2. Corner Reinforcement: 4 inches x 4 inches x 5-3/8 inches x 1/4-inch-thick pultruded fiberglass angle. Attached to head bar at factory using stainless steel screws.

3. Mortise Hinge Reinforcement: 3 inches x 7 inches x 9/16 inch (or 3/8 inch) thick FRP material attached to frame by means of bonding and stainless-steel countersunk screws.
4. Closer Reinforcement: 1-1/2 inches x 19 inches x 3/16-inch thick FRP material attached to frame by means of bonding.
5. Strike Reinforcement: 1-1/2 inches x 9 inches x 3/4-inch thick FRP material attached to frame by means of bonding and stainless-steel countersunk screws.
6. Anchoring Systems - Furnish at least three (3) anchors in each jamb of frames up to 90 inches high and one (1) additional anchor for each 30 inches in height above 90 inches, in shapes, sizes and spacing shown or required for anchorage into adjoining wall construction.
 - a. New Masonry: T-Strap or Wire Anchor (optional: stainless steel T-Strap)
 - b. New Stud (before sheathing): New Stud Anchor
 - c. Butt Existing Wall: Existing Opening Anchor; Masonry, Steel or Wood (Optional: concealed)
 - d. Wrap Existing Wall: Compression Anchor
 - e. Consult factory for additional anchoring options.

2.4 FINISH

- A. Seamless 25 mil matte gelcoat (smooth faces only), selected by Architect, from manufacturer's full range of colors.
Prime finish for field painting; all face options. Finish on door and frame units will match.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Installer shall examine the substrate and conditions under which fiberglass reinforced plastic work is to be installed and notify the General Contractor in writing of any conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the installer.

3.2 INSTALLATION

- A. Doors and frames will be delivered in individual cartons with the identifying mark number listed on each carton.
- B. Install FRP doors, frames, and accessories in accordance with manufacturers printed instructions, final shop drawings and standards for FBC labeled openings.

- C. Provide clearance for doors of 1/8 inch at jambs and heads; 1/4-inch clearance above threshold.

3.3 ADJUSTING

- A. At substantial completion, adjust all operable components to ensure proper installation. Doors shall function smoothly and swing freely without binding. Doors shall remain open at any angle without being affected by gravitational influence.

3.4 CLEANING

- A. Remove dirt and excess sealant from exposed surfaces. Follow the manufacturer's recommended cleaning techniques and procedures for cleaning all surfaces. Only use cleaning products that will not scratch or damage the surfaces and are recommended by the manufacturer.

PART 4 - Material Properties of Fiber Reinforced Plastic (FRP) Profiles

4.1 Door Properties

ASTM D-256:	Notched Izod Impact
ASTM D-638:	Tensile Strength Properties of Plastic
ASTM D-695:	Compressive Strength
ASTM D-732:	Shear Strength
ASTM D-790:	Flexural Strength / Flexural Modulus
ASTM D-2583:	Barcol Hardness
ASTM E-283:	Air Infiltration Test
ASTM E-330:	Static Load Test
ASTM E-331:	Water Infiltration
ASTM E-1886:	Impact by Missiles & Exposed to Cyclic Pressure Differentials
ASTM E-1996:	Impact by Wind Borne Debris
TAS 201:	Large Missile Impact
TAS 202:	Static Load Test
TAS 203:	Cyclic Load Test
SFBC 3603.2:	Forced Entry

4.2 Foam Core Properties

ASTM C-203:	Flexural Modulus
ASTM C-272:	Water Absorption
ASTM C-273:	Shear Strength
ASTM C-518:	K-Factor / R-Factor
ASTM D-1621:	Compressive Modulus

ASTM D-1622:	Density
ASTM D-1623:	Tensile Strength
ASTM D-2126:	Dimensional Stability
ASTM D-2856:	Closed Cell Content
ASTM E-84:	Surface Burning Characteristics
ASTM E-96:	Water Vapor Permeability

4.3 Balsa Core Properties

ASTM C-271:	Apparent Normal Density
ASTM C-273:	Shear Strength
ASTM C-297:	Tensile Strength
ASTM C-365:	Compressive-Strength
ASTM D-177:	Thermal Conductivity
BSS-7238:	Smoke Density & Toxic Gas Generation
CMVSS/FMVSS 302:	Motor Vehicle Flammability Safety Test
MIL-STD-907B:	Fire Resistance Test

4.4 Adhesive Properties: Urethane Adhesive System

ASTM D-570:	Water Absorption
ASTM D-638:	Elongation Percent
ASTM D-638:	Tensile Strength
ASTM D-638:	Young's Modulus
ASTM D-2240:	Shore Hardness, D
ASTM D-3163:	Bond Configuration Lap Shear
ASTM E-132:	Poisson Ratio
ASTM E-1640:	Glass Transition Temperature
ISO MAT-2208:	CLTE@ -30 to 0 deg. C
ISO MAT-2208:	CLTE@ 50 to 100 deg. C
SAE J-1525:	Crosshead Speed

4.5 Resin Properties

ASTM D-256:	Notched Izod Impact
ASTM D-570:	Water Absorption
ASTM D-638:	Tensile Strength Properties of Plastics
ASTM D-638:	Tensile Modulus
ASTM D-638:	Tensile Elongation @ Yield
ASTM D-648:	Heat Deflection Temperature
ASTM D-695:	Compressive Strength / Compressive Modulus
ASTM D-790:	Flexural Strength / Flexural Modulus
ASTM D-2566:	Linear Shrinkage
ASTM D-2583:	Barcol Hardness

END OF SECTION 08220

08 43 00 - ALUMINUM STOREFRONT

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Exterior thermally broken, impact resistant aluminum storefront systems fixed framing-
- B. Related Sections:
 - 1. 08 81 00 "Glass & Glazing"
 - 2. 07 92 00 "Flashing and Sealants"

1.2 SYSTEM DESCRIPTION

- A. General: Provide aluminum storefront systems capable of withstanding loads and thermal and structural movement requirements indicated without failure, based on testing manufacturer's standard units in assemblies similar to those indicated for this Project. Failure includes the following:
 - 1. Air infiltration and water penetration exceeding specified limits.
 - 2. Framing members transferring stresses, including those caused by thermal and structural movement, to glazing units.
 - a. Drawings are diagrammatic and do not purport to identify nor solve problems of thermal or structural movement, glazing, anchorage, or moisture disposal.
 - b. Requirements shown by details are intended to establish basic dimension of units, sight lines and profiles of members.
 - c. Provide concealed fastening whenever possible.
 - d. Provide entrance and storefront systems, including necessary modifications, to meet specified requirements and maintaining visual design concepts.
 - e. Attachment considerations are to take into account site peculiarities and expansion and contraction movements so there is no possibility of loosening, weakening, or fracturing connection between units and building structure or between units themselves.
 - f. Anchors, fasteners and braces shall be structurally stressed not more than 50% of allowable stress when maximum loads are applied.
 - g. Provide for expansion and contraction due to structural movement without detriment to appearance or performance.
 - h. Framing systems shall accommodate expansion and contraction movement due to surface temperature differentials of 180 degrees F without causing buckling, stress on glass, failure of joint seals, excessive stress on structural elements, reduction of performance, or other detrimental effects.
- B. Glazing: Physically and thermally isolate glazing from framing members.
- C. Wind loads: provide framing systems, including anchorage, capable of withstanding wind-load design pressures of (70) lbs./sq. ft. inward and (70) lbs./sq. ft. outward calculated according to requirements of authorities having jurisdiction or the American Society of Civil Engineers' ASCE 7, "Minimum Design Loads for Buildings and Other Structures," 6.4.2, "Analytical Procedure," whichever are more stringent.

1. Design wind velocity shall be 180 mph with a wind load importance factor of 1.0.
 2. Deflection of framing members in a direction normal to wall plane is limited to 1/175 of clear span or 3/4 inch (19 mm), whichever is smaller, unless otherwise indicated.
 3. Static-Pressure Test Performance: Provide storefront systems that do not evidence material failures, structural distress, failure of operating components to function normally, or permanent deformation of main framing members exceeding 0.2 percent of clear span when tested according to ASTM E 330.
 - a. Test Pressure: 150 percent of inward and outward wind-load design pressures.
 - b. Duration: As required by design wind velocity; fastest 1 mile (1.609 km) of wind for relevant exposure category.
 - c. Design pressures for components and cladding shall be as indicated on structural drawings.
- D. Hurricane-Resistance Test Performance: Provide storefront systems that pass large and small missile-impact tests, in accordance with ASTM E 1886, information in ASTM E 1996 and TAS 201/203.
1. Large Missile Impact: All aluminum-framed systems located within 30 feet (9.1M) of grade.
- E. Dead Loads: Provide storefront-system members that do not deflect an amount which will reduce glazing bite below 75 percent of design dimension when carrying full dead load.
1. Provide a minimum 1/8-inch (3.18-mm) clearance between members and top of glazing or other fixed part immediately below.
- F. Air Infiltration: Provide storefront systems with permanent resistance to air leakage through fixed glazing and frame areas of not more than 0.06 cfm/sq. ft. (0.3 L/s/sq. m) of fixed wall area when tested according to ASTM E 283 at a static-air-pressure difference of 1.57 lbf/sq. ft. (75.2 Pa).
- G. Water Penetration: Provide storefront systems that do not evidence water leakage through fixed glazing and frame areas when tested according to ASTM E 331 at minimum differential pressure of 20 percent of inward-acting wind-load design pressure as defined by ASCE 7, "Minimum Design Loads for Buildings and Other Structures," but not less than 6.24 lbf/sq. ft. (299 Pa). Water leakage is defined as follows:
1. Uncontrolled water infiltrating systems or appearing on systems' normally exposed interior surfaces from sources other than condensation. Water controlled by flashing and gutters that is drained back to the exterior and cannot damage adjacent materials or finishes is not water leakage.
- H. Thermal Movements: Provide storefront systems, including anchorage, that accommodate thermal movements of systems and supporting elements resulting from the following maximum change (range) in ambient and surface temperatures without buckling, damaging stresses on glazing, failure of joint sealants, damaging loads on fasteners, and other detrimental effects.
1. Temperature Change (Range): 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.
- I. Structural-Support Movement: Provide storefront systems that accommodate structural movements including, but not limited to, sway and deflection.

- J. Condensation Resistance: Provide storefront systems with condensation resistance factor (CRF) of not less than 59 when tested according to AAMA 1503.1.
- K. Average Thermal Conductance: Provide storefront systems with average U-values of not more than 0.45 Btu/sq. ft. x h x deg F (3.57 W/sq. m x K) when tested according to AAMA 507.
- L. Dimensional Tolerances: Provide storefront systems that accommodate dimensional tolerances of building frame and other adjacent construction.

1.3 SUBMITTALS

- A. Product Data: For each product specified. Include details of construction relative to materials, dimensions of individual components, profiles, and finishes.
- B. Shop Drawings: For storefront systems. Show details of fabrication and installation, including plans, elevations, sections, details of components, provisions for expansion and contraction, and attachments to other work.
- C. Installer Certificates: Signed by manufacturer certifying that installers comply with specified requirements.
- D. Product Test Reports: Based on evaluation of tests performed by manufacturer and witnessed by a qualified independent testing agency, indicate compliance of storefront systems with requirements based on comprehensive testing of current systems.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced installer to assume engineering responsibility and perform work of this Section who has specialized in installing storefront systems similar to those required for this Project and who is acceptable to manufacturer.
 - 1. Engineering Responsibility: Prepare data for storefront systems, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this Project.
- B. Source Limitations: Obtain each type of storefront system through one source from a single manufacturer.

1.5 PROJECT CONDITIONS

- A. Field Measurements: Verify dimensions by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1.6 WARRANTY

- A. General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.

- B. Special Warranty: Submit a written warranty executed by the manufacturer agreeing to repair or replace components of storefront systems that fail in materials or workmanship within the specified warranty period. Failures include, but are not limited to, the following:
 - 1. Structural failures including, but not limited to, excessive deflection.
 - 2. Adhesive sealant failures.
 - 3. Cohesive sealant failures.
 - 4. Failure of system to meet performance requirements.
 - 5. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - 6. Water leakage through fixed glazing and frame areas.
- C. Warranty Period: 2 years from date of Substantial Completion.
- D. Warranty Period for Metal Finishes: 10 years from date of Substantial Completion.
- E. Warranty Period for Insulating Glass: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Product: The design for aluminum storefront systems is based on the following products. Subject to compliance with requirements, provide the named product or an equivalent product by one of the manufacturers listed in paragraph 2.1.B below.
 - 1. Fixed Framing: IR 501 T Impact Framing manufactured by Kawneer
- B. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. YKK AP
 - 2. OldCastle
 - 3. Coral Architectural Products

2.2 MATERIALS

- A. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated, complying with the requirements of standards indicated below.
 - 1. Sheet and Plate: ASTM B 209 (ASTM B 209M).
 - 2. Extruded Bars, Rods, Shapes, and Tubes: ASTM B 221 (ASTM B 221M).
 - 3. Extruded Structural Pipe and Tubes: ASTM B 429.
 - 4. Bars, Rods, and Wire: ASTM B 211 (ASTM B 211M).
 - 5. Welding Rods and Bare Electrodes: AWS A5.10.
- B. Glazing as specified in Division 8 Section "Glazing."
- C. Glazing Gaskets: Manufacturer's standard compression types; replaceable, extruded EPDM rubber.

- D. Spacers, Setting Blocks, Gaskets, and Bond Breakers: Manufacturer's standard elastomeric type for spacers and setting blocks. Bond Breaker Tape, manufacturer's standard TFE-fluorocarbon or polyethylene material to which sealants will not develop adhesion.
- E. Secondary Sealant: For use as weatherseal, compatible with structural silicone sealant and other system components with which it comes in contact, and that accommodates a 50 percent increase or decrease in joint width at the time of application when measured according to ASTM C 719.
 - 1. Color: As selected by Architect from manufacturer's full range of colors.
 - 2. Use neutral-cure silicone sealant with insulating-glass units.
- F. Framing system gaskets, sealants, and joint fillers as recommended by manufacturer for joint type.
- G. Sealants and joint fillers for joints at perimeter of storefront systems as specified in Division 7 Section "Joint Sealants."
- H. Bituminous Paint: Cold-applied asphalt-mastic paint complying with SSPC-Paint 12 requirements, except containing no asbestos, formulated for 30-mil (0.762-mm) thickness per coat.

2.3 COMPONENTS

- A. Brackets and Reinforcements: Provide manufacturer's standard brackets and reinforcements that are compatible with adjacent materials. Provide non-staining, nonferrous shims for aligning system components.
- B. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, non-staining, nonbleeding fasteners and accessories compatible with adjacent materials.
 - 1. Reinforce members as required to retain fastener threads.
 - 2. Do not use exposed fasteners, except for hardware application. For hardware application, use countersunk Phillips flat-head machine screws finished to match framing members or hardware being fastened, unless otherwise indicated.
- C. Concrete and Masonry Inserts: Hot-dip galvanized cast-iron, malleable-iron, or steel inserts complying with ASTM A 123 or ASTM A 153 requirements.
- D. Concealed Flashing: Dead-soft, 0.018-inch- (0.457-mm-) thick stainless steel, complying with ASTM A 666, of type selected by manufacturer for compatibility with system.²

2.4 FABRICATION

- A. General: Fabricate components that, when assembled, will have accurately fitted joints with ends coped or mitered to produce hairline joints free of burrs and distortion. After fabrication, clearly mark components to identify their locations in Project according to Shop Drawings.

- B. Forming: Form shapes with sharp profiles, straight and free of defects or deformations, before finishing.
- C. Prepare components to receive concealed fasteners and anchor and connection devices.
- D. Fabricate components to drain water passing joints and condensation and moisture occurring or migrating within the system to the exterior.
- E. Glazing Channels: Provide minimum clearances for thickness and type of glass indicated according to FGMA's "Glazing Manual."
- F. Metal Protection: Where aluminum will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape recommended by manufacturer for this purpose. Where aluminum will contact concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.
- G. Storefront: Fabricate framing in profiles indicated for flush glazing (without projecting stops). Provide subframes and reinforcing of types indicated or, if not indicated, as required for a complete system. Factory assemble components to greatest extent possible. Disassemble components only as necessary for shipment and installation.

2.6 ALUMINUM FINISHES

- A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations relative to applying and designating finishes.
- B. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- C. Finish designations prefixed by AA conform to the system established by the Aluminum Association for designating aluminum finishes.
- D. Class I, Clear Anodized Finish: AA-M10C21A41/AA-M45C22A41 (Mechanical Finish: non-specular as fabricated; Chemical finish: etched, medium matte; Anodic Coating: Architectural Class I, Clear coating (0.7 mils minimum) complying with AAMA 611.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of storefront systems. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. General: Comply with manufacturer's written instructions for protecting, handling, and installing storefront systems. Do not install damaged components. Fit frame joints to produce hairline joints free of burrs and distortion. Rigidly secure nonmovement joints. Seal joints watertight.
- B. Metal Protection: Where aluminum will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape recommended by manufacturer for this purpose. Where aluminum will contact concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.
- C. Install components to drain water passing joints and condensation and moisture occurring or migrating within the system to the exterior.
- D. Set continuous sill members and flashing in a full sealant bed to provide weathertight construction, unless otherwise indicated. Comply with requirements of Division 7 Section "Joint Sealants."
- E. Install framing components plumb and true in alignment with established lines and grades without warp or rack of framing members.
- F. Install entrances plumb and true in alignment with established lines and grades without warp or rack. Lubricate operating hardware and other moving parts according to hardware manufacturers' written instructions.
 - 1. Install surface-mounted hardware according to manufacturer's written instructions using concealed fasteners to greatest extent possible.
- G. Install glazing to comply with requirements of Division 8 Section "Glazing," unless otherwise indicated.
- H. Install secondary-sealant weatherseal according to sealant manufacturer's written instructions to provide weatherproof joints. Install joint fillers behind sealant as recommended by sealant manufacturer.
- I. Install perimeter sealant to comply with requirements of Division 7 Section "Joint Sealants," unless otherwise indicated.
- J. Erection Tolerances: Install storefront systems to comply with the following maximum tolerances:
 - 1. Variation from Plane: Limit variation from plane or location shown to 1/8 inch in 12 feet (3 mm in 3.7 m); 1/4 inch (6 mm) over total length.
 - 2. Alignment: Where surfaces about in line, limit offset from true alignment to 1/16 inch (1.5 mm). Where surfaces meet at corners, limit offset from true alignment to 1/32 inch (0.8 mm).
 - 3. Diagonal Measurements: Limit difference between diagonal measurements to 1/8 inch (3 mm).

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3.3 ADJUSTING AND CLEANING

- A. Remove excess sealant and glazing compounds, and dirt from surfaces.

3.4 PROTECTION

- A. General Contractor shall provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, which ensure storefront systems are without damage or deterioration at the time of Substantial Completion.

END OF SECTION

08 71 00 - HARDWARE

PART 1 GENERAL

1.01 RELATED DOCUMENTS

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this section.

1.02 WORK INCLUDES

“Finish hardware” includes items known commercially as finish hardware which are required for swing, sliding and folding doors, except special types of unique and non-matching hardware specified in the same section as the door and door frame.

1.03 RELATED WORK

Hardware supplier shall check with other sections of this specification for related work such as aluminum entrances, metal doors and frames, wood doors, toilet partitions and accessories, or any other items that may relate to work in this section.

1.04 QUALITY ASSURANCE

- A. The finish hardware supplier shall furnish to the General Contractor all finishing hardware as hereinafter specified or as obviously required to complete the project. Items not specifically mentioned but necessary to complete the work shall be furnished, matching in quality and finish to the items hereinafter specified or described. Should an opening be omitted, this supplier shall provide finish hardware equal to that specified for similar or adjacent openings and as approved by the architect for function and quality. No extras will be allowed for omitted but required items. Clarify all questions with the architect in writing, prior to bid opening.
- B. Experience: Hardware shall be furnished by those having experience in the builder's hardware field, competent to correctly interpret the plans, specifications; to furnish appropriate technician regularly employed by them to immediately service the job as required. This technician shall operate out of a stocking builders warehouse located within 75 miles of the job site in order to insure immediate servicing of the project. This supplier shall make two scheduled visits to the job site during the application of the finish hardware. Prior to each visit, he shall notify the General Contractor and the Architect in writing of his intention to visit the job so that either or both parties may have representation on the job to discuss any hardware problems that might need to

be discussed. In addition, this supplier shall immediately service the job upon the call of the General Contractor and/or the Architect. Upon the completion of the job and prior to the final construction inspection, this supplier shall lubricate and adjust all hardware according to the manufacturer's recommendations. These service requirements shall be demanded and strictly enforced by the architects.

- C. Product Delivery: All items of finish hardware shall be received at supplier's warehouse, checked for correctness of product, strikes, brackets, screws, and miscellaneous items, etc. Hardware is to be accumulate at supplier's warehouse and as far as practical be delivered in one complete delivery by supplier's own personnel. Contractor shall refuse drop or factory shipments. Supplier is to coordinate delivery with Contractor and Contractor is to check all items of hardware at the time of delivery with personnel from supplier's office.
- D. Product Handling: Provide secure lock-up for hardware delivered to the project, but not yet installed. Control the handling and installation of hardware items which are not completely replaceable so that the completion of the work will not be delayed by hardware losses, both before and after installation.
- E. Fire Rated Openings: Provide hardware for fire-rated openings in compliance with NFPA Standard No. 80 and the Florida Department of Educations Code requirements. Provide only hardware that has been tested and listed by Underwriters Laboratories, Inc. for types and sizes of doors required and complies with requirements of door and doorframe labels.
- F. Adjust and Clean:
 - 1. Adjust and check each operating item of hardware and each door to insure proper operation or function of every unit. Lubricate moving parts with type lubrication recommended by manufacturer (graphite-type if no other recommended). Replace units which cannot be adjusted and lubricated to operate freely and smoothly as intended for the application made.
 - 2. Clean adjacent surfaces soiled by hardware installation.
 - 3. Final Adjustment: Wherever hardware installation is made more than one month prior to acceptance or occupancy of a space or area, return to the work during the week prior to acceptance or occupancy, and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door controls devices to compensate for final operation of heating and ventilating equipment.

PART 2 PRODUCTS

2.01 FASTENINGS

- A. Furnish all finish hardware with all necessary screws, bolts, and other

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fasteners of suitable size and type to anchor the hardware in position for long life under hard use.

- B. Furnish sex bolts for all panic or exit devices and closers.
- C. All fastenings shall harmonize with the hardware as to material and finish.

2.02 ACCEPTABLE MANUFACTURERS

Products Approved: (Subject to the series and design approved by Architect)

Products for Exterior Doors must meet Florida Building Code requirements.

Hinges	McKinney, Hager, and Ives
Locks	Sargent, Corbin and Schlage
Thresholds	Hager, NGP and Pemko
Misc.	Rockwood, Hager, and Ives

2.03

Hardware sets below are for design. Supply locks & seals per manufacturers valid Florida Product Approval for Impact Rating.

HARDWARE SET #1

Doors 1

3 ea. Hinges	TA2314 4.5 x 4.5 NRP	626
1 ea. Classroom Lk	8205 LNL	626
1 ea. Closer	1431 – UO	689
1 ea. Threshold	520S x DW	Alum
1 set Weather-strip	891S x LR	Alum
1 ea. Door Sweep	770S x DW (Nylon Brush)	Alum

HARDWARE SET #2

Door 2

6 ea. Hinges	TA2314 4.5 x 4.5 NRP	626
1 ea. Surface Bolt	SB360 12 in x US2C	US2C
1 ea. Storeroom Lk	L9480 06A	626
2 ea. OH Holder	GJ90H x DW	689
1ea. Threshold	520S x 72"	Alum
2 set Weather-strip	891S x LR	Alum
1ea. Rain Drip	142AA x 76"	Alum
2 ea. Door Sweep	339AA x36"	Alum

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HARDWARE SET #3

Door 3

3 ea. Hinges	TA2314 4.5 x 4.5 NRP	626
1 ea. Storeroom Lk	L9480-06A	626
1 ea. OH Holder	GJ90H x DW	689

END OF SECTION

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SECTION 08 81 00 - GLASS AND GLAZING

PART 1 - GENERAL

1.01 SUMMARY

- A. Provide glass and glazing for all applications, including without limitation, entrances and storefront, windows, glazed doors, transoms, and sidelights.
- B. Glass Schedule:
 - 1. Exterior Windows: 1-5/16" thick insulating unit; tinted 1/4" tempered exterior pane, clear laminated impact-resistant interior unit.

1.02 SUBMITTALS

- A. Submit for approval samples, product data, warranty, and test reports.

1.03 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers, which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Glazing sheets:
 - 1. Primary glass, Fed. Spec DD-G-451:
 - a. Clear and tinted float glass.
 - 2. Heat treated glass products, Fed. Spec DD-G-1403:
 - a. Heat-strengthened glass.
 - b. Tempered glass.
 - c. Spandrel glass.
 - 2. Impact-resistant Glass – Provide at all exterior windows.
- B. Insulating impact glass units. Insulating glass warranty: 10 years.
Note: These are to be obscure glass units
 - 1. Overall Thickness approximately 1 5/16"
 - 2. Exterior Lite: 1/4" Bronze Tempered Substrate
 - 3. Air Space Content: Air, 1/2" thickness
 - 4. Interior Lite: 19/32" Heat Strengthened Impact-Resistant Laminated Glass. Class 1, (clear)
 - 5. Exterior Lite: Solarban 70 Low E on the #2 Surface

- a. Kind FT, (fully tempered)
- 6. Interior Lite: Type I (transparent glass, Laminated).
 - c. (Class 1, (clear both lites)
 - d. Laminate Interlayer .090" DuPont Sentry Glass for windows
 - e. Kind HS, (Heat strengthened)

2.2 ELASTOMERIC GLAZING SEALANTS

- A. General: Provide products of type indicated, complying with the following requirements:
 - 1. Compatibility: Select glazing sealants that are compatible with one another and with other materials they will contact, including glass products, seals of insulating glass units, and glazing channel substrates, under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.
 - 2. Suitability: Comply with sealant and glass manufacturers' written instructions for selecting glazing sealants suitable for applications indicated and for conditions existing at time of installation.
 - 3. Colors of Exposed Glazing Sealants: As selected by Architect from the manufacturer's full range for this characteristic.
- B. Elastomeric Glazing Sealant Standard: Comply with ASTM C 920-05 and other requirements indicated for each liquid-applied, chemically curing sealant in the Glazing Sealant Schedule at the end of Part 3, including those referencing ASTM C 920-05 classifications for type, grade, class, and uses.

2.3 GLAZING TAPES

- A. Black-Bedding Mastic Glazing Tape: Preformed, butyl-based elastomeric tape with a solids content of 100 percent; non-staining and non-migrating in contact with nonporous surfaces; with or without spacer rod as recommended in writing by tape and glass manufacturers for application indicated; packaged on rolls with a release paper backing; and complying with and AAMA 800 for products indicated below:
 - 1. AAMA 807.3 tape, for glazing applications in which tape is not subject to continuous pressure.
- B. Expanded Cellular Glazing Tape: Closed-cell, PVC foam tape; factory coated with adhesive on both surfaces; packaged on rolls with release liner protecting adhesive; and complying with AAMA 800 for the following types:
 - 1. Type 1, for glazing applications in which tape acts as the primary sealant.
 - 2. Type 2, for glazing applications in which tape is used in combination with a full bead of liquid sealant.

2.4 MISCELLANEOUS GLAZING MATERIALS

- A. Provide products of material, size, and shape complying with referenced glazing standard, requirements of manufacturers of glass and other glazing materials for application indicated, and with a proven record of compatibility with surfaces contacted in installation.
- B. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.
- C. Setting Blocks: Elastomeric material with a Shore A durometer hardness of 85, plus or minus 5.
- D. Spacers: Elastomeric blocks or continuous extrusions with a Shore A durometer hardness required by glass manufacturer to maintain glass lites in place for installation indicated.
- E. Edge Blocks: Elastomeric material of hardness needed to limit glass lateral movement (side walking).

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine framing glazing, with Installer present, for compliance with the following:
 - 1. Manufacturing and installation tolerances, including those for size, squareness, and offsets at corners.
 - 2. Presence and functioning of weep system.
 - 3. Minimum required face or edge clearances.
 - 4. Effective sealing between joints of glass-framing members.
- B. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement; weeps are clear, and ready to receive glazing.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean glazing channels and other framing members receiving glass immediately before glazing. Remove coatings not firmly bonded to substrates.
 - 1. Clean contact surfaces with solvent and wipe dry.
 - 2. Seal porous glazing channels or recesses with substrate compatible primer or sealer.
 - 3. Prime surfaces scheduled to receive sealant.
 - 4. Install sealants in accordance with ASTM C 1193 and FGMA Sealant Manual and in accordance with the manufacturer's instructions.

3.3 GLAZING, GENERAL

- A. Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.
- B. Glazing channel dimensions, as indicated on Drawings, provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances. Adjust as required by Project conditions during installation.
- C. Protect glass edges from damage during handling and installation. Remove damaged glass from Product site and legally dispose of off Project site. Damaged glass is glass with edge damage or other imperfections that, when installed, could weaken glass and impair performance and appearance.
- D. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.
- E. Provide edge blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and according to requirements in referenced glazing publications.

3.4 TAPE GLAZING

- A. Position tapes on fixed stops so that, when compressed by glass, their exposed edges are flush with or protrude slightly above sightline of stops.
- B. Install tapes continuously, but not necessarily in one continuous length. Do not stretch tapes to make them fit opening.
- C. Where framing joints are vertical, cover these joints by applying tapes to heads and sills first and then to jambs. Where framing joints are horizontal, cover these joints by applying tapes to jambs and then to heads and sills.
- D. Place joints in tapes at corners of opening with adjoining lengths butted together, not lapped. Seal joints in tapes with compatible sealant approved by tape manufacturer.
- E. Do not remove release paper from tape until just before each glazing unit is installed.
- F. Apply heel bead of elastomeric sealant.
- G. Center glass lites in openings on setting blocks and press firmly against tape by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings.

3.5 SEALANT GLAZING

- A. Install continuous spacers, or spacers combined with cylindrical sealant backing,

between glass lites and glazing stops to maintain glass face clearances and to prevent sealant from extruding into glass channel and blocking weep systems until sealants cure. Secure spacers or spacers and backings in place and in position to control depth of installed sealant relative to edge clearance for optimum sealant performance.

- B. Force sealants into glazing channels to eliminate voids and to ensure complete wetting or bond of sealant to glass and channel surfaces.
- C. Tool exposed surfaces of sealants to provide a substantial wash away from glass.

3.6 PROTECTION AND CLEANING

- A. General Contractor shall provide final protection and maintain conditions in a manner acceptable to manufacturer/fabricator and Installer that ensure glass is without damage or deterioration at the time of Substantial Completion. Protect glass from damage from welding, grinding and polishing compounds, plaster, lime, acid, cement, or other harmful contaminants. General Contractor shall clean installed products in accordance with manufacturer's instructions prior to owner's acceptance.
- B. Protect exterior glass from damage immediately after installation by attaching crossed streamers to framing held away from glass. Do not apply markers to glass surface. Remove nonpermanent labels, and clean surfaces.
- C. Protect glass from contact with contaminating substances resulting from construction operations, including weld splatter. If, despite such protection, contaminating substances do meet glass, remove them immediately as recommended by glass manufacturer.
- D. Examine glass surfaces adjacent to or below exterior concrete and other masonry surfaces at frequent interval during construction, but not less than once a month, for build-up of dirt, scum alkaline deposits, or stains; remove as recommended by glass manufacturer.
- E. Remove and provide new glass that is broken, chipped, cracked, abraded, or damaged in any way, including natural causes, accidents, and vandalism, during construction period.
- F. Clean glass and adjacent surfaces.

END OF SECTION 08800

09 27 00 – CEMENT BACKER BOARDS

PART 1 - GENERAL

1.01 SUMMARY

- A. Provide cement backer boards including metal support systems:
 - 1. Interior walls and partitions to receive thin-set wall tile.

1.02 SUBMITTALS

- A. Submit for approval product data.

1.03 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Tolerances: Not more than 1/16" difference in true plane at joints between adjacent boards before finishing. No gaps or voids between gypsum board units or between drywall and adjacent work, unless detailed otherwise. Not more than 1/8" in 10' deviation from true plane, plumb and level in finished work.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Backer boards: 5/8" thickness, glass mesh reinforced portland cement backer board; DUROCK Cement Board, U.S. Gypsum or approved equal.
- B. Steel studs: ASTM C 645, 20 gage screw-type steel studs, 16 inches o.c., ASTM A 653 G40, hot-dip galvanized.
- D. Joint tape: DUROCK alkali-resistant glass-fiber tape.
- E. Accessories: DUROCK screws, corrosion-resistant, 8-gage, wafer heads with countersinking ribs.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Comply with ASTM C840 and GA 216; except as otherwise indicated, extend fire-rated partitions to underside of deck above ceiling and extend other partitions at least 6" above ceilings.

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- B. Install framing system at 16" o.c., include blocking for grab bars, accessories and similar items.
- C. Provide fire-rated systems where indicated and where required by authorities having jurisdiction.
- D. Install boards vertically (parallel to framing). Do not allow butt-to-butt joints and joints that do not fall over framing members.
- E. Install cement backer board panels with ¼" open space where panels abut other construction or penetrations.
- F. Install trim and joint treatment in strict compliance with manufacturer's instructions and recommendations.

END OF SECTION

09 30 13 - CERAMIC TILE

PART 1 GENERAL

1.01 RELATED DOCUMENTS:

Drawings and General Provision of the Contract, including General and Supplementary Condition and Division 1 Specification sections, apply to work of this section.

1.02 SCOPE:

This section includes ceramic tile surfaces, marble and limestone tiles, covering all labor, material and equipment required for the proper execution of the work.

1.03 STANDARDS: Tile Council of America Quality Standards and Handbook for Tile Installation.

1.04 SUBSTITUTIONS: Ceramic tile specified is as made by American Olean but similar and equal material by United States Tile Company or Dal-Tile Corp. will be considered.

PART 2 MATERIALS

2.01 PORTLAND CEMENT: Shall conform to the requirements for such materials as specified under concrete work.

2.02 SAND: Shall be clean and free from organic matter. All sand shall pass Number 5 sieve; 90% shall pass Number 8 sieve; 30% shall pass Number 50 sieve; 5% permitted to pass Number 100 sieve. Percentages are by weight.

2.03 LATH: Shall be 3.4# galvanized key lath, self furring.

2.04 FLOOR: Shall be 8" x 8" Daltile Quarry Tile on or equal porcelain ceramic mosaic with all purpose edges. Colors will be selected by Architect from price group 1 & 2 tile.

2.05 WALL TILE FOR INTERIOR SPACES: Shall be 4"x 4" Daltile or equal porcelain ceramic mosaic with gloss glazed finish. Provide with coves caps and round outs. Color will be selected by Architect from price group 1 & 2 tile.

2.06 MARBLE THRESHOLDS: Shall be cut to profile from Alabama Cream "A" Marble.

2.07 Cement board ½" thick Durock by USG.

2.08 GROUT: Shall be Laticrete 3701 Joint & Grout Filler mixed to proper consistency. Colors shall be selected by Architect.

2.09 THIN SET GROUT: Laticrete #4237 & 3030 for Porcelain Tile or Mapei, Karabond/Keralastic.

2.10 LEVELING COAT: Laticrete #3701

2.11 SILICONIZED CAULK: Mapei Keracaulk U un-sanded siliconized Acrylic caulk.

2.12 WATERPROOF MEMBRANE

- A. General: Manufacturer's standard product that complies with ANSI A118.10 and is recommended by the manufacturer for the application indicated. Include reinforcement and accessories recommended by manufacturer. Waterproof membrane required at all floor tile in toilet rooms .
- B. Fluid-Applied Membrane: Liquid-latex rubber or elastomeric polymer.
 - 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. C-Cure; Pro-Red Waterproofing Membrane 63.
 - b. Custom Building Products; RedGard Waterproofing and Crack Prevention Membrane.
 - c. Jamo Inc.; Waterproof Membrane.

2.13 CRACK ISOLATION MEMBRANE

- C. General: Manufacturer's standard product that complies with ANSI A118.12 for high performance and is recommended by the manufacturer for the application indicated. Include reinforcement and accessories recommended by manufacturer.
- D. Fabric-Reinforced, Modified-Bituminous Sheet: Self-adhering, modified-bituminous sheet with fabric reinforcement facing; 0.040-inch nominal thickness.
 - 1. Products: Subject to compliance with requirements, Basis of Design:
 - a. Custom Building Products Crack Buster Pro Crack Isolation Membrane.
 - b. C-Cure Crack Isolation Membrane
 - c. Jamo Crack Isolation Membrane

PART 3 INSTALLATION

3.01 FLOOR TILE: Shall be laid floors in pattern directed by the Architect. Tile shall be set, grouted and cleaned in accordance with ATC specification for installation of floor tile with latex portland cement mortar, F113-84.

3.02 WALL TILE: Tile shall be set on cement mortar and metal lath over waterproof membrane applied to metal studs in accordance with ATC specification W231-84 GR applied with thin set grout to ½” cement board and against masonry in accordance with ATC specification W251-84 & on cement backer board or WP

Gypsum with Laticrete 3030.

- 3.03 BACKER BOARD: ½" thick cement board shall be screwed to framing with 1 ¼" screws @ 8"o.c.
- 3.04 TILE GROUT: Grout shall be with Laticrete #3701; joint and grout filler admix. Installation shall be in accordance with ATC Specifications and Directions of the manufacturer. Use 3/8" grout joint for floors and Color shall be selected by Architect. Use 1/16" grout joint for wall tiles.
- 3.05 MEMBRANE WATERPROOFING: Below suspended concrete floor and behind wall tile shall extend up wall 8" and secured.
- 3.06 GROUT JOINTS WITH LATICRETE: Grout with grout admixture.
- 3.07 CAULK JOINTSA: Install caulk at all inside corners and expansion joints.

END OF SECTION

09 91 00 - PAINTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes surface preparation and the application of paint systems on the following exterior substrates:
 - 1. Fiber Cement siding and trim
 - 2. Steel and iron.
 - 3. Galvanized metal.
 - 4. Cotton or canvas insulation covering.
 - 5. ASJ insulation covering.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
 - 1. Include printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.
 - 2. Indicate VOC content.
- B. Product List: Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules. Include color designations.

1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Paint: [5] percent, but not less than 1 gal. Of each material and color applied.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste from storage areas daily.

1.6 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.
- B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

MANUFACTURERS

Use first-line standard products for all systems by Sherwin Williams are the basis of design. Similar and equal products be Coronado and PPG will be accepted as equals.

- A. Products: Subject to compliance with requirements, provide products listed in the Exterior Painting Schedule for the paint category indicated.

2.2 PAINT, GENERAL

- A. Material Compatibility:
 - 1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 - 2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.
- B. Colors: As selected by Architect from manufacturer's full range
- C. Paint schedule:

1. EXTERIOR FIBER CEMENT SIDING AND TRIM

Primer LX02W0050 - Sherwin Williams Loxon Primer
Intermediate Coat: A89W02151 - Super Paint Exterior Satin
Topcoat: A89W02151 - Super Paint Exterior Satin

2. INTERIOR FIBER CEMENT SIDING AND TRIM

Primer: LX02W0050 - Loxon Primer
Intermediate Coat: K46W01151 - PI Precat Semigloss
Topcoat: K46W01151 - PI Precat Semigloss

3. EXTERIOR GALVANIZED METAL

Primer: B66A00310 - Pro Industrial Pro-Cryl® Universal Acrylic Primer
Intermediate Coat: B66W00611 - Pro Industrial High-Performance Acrylic - Gloss
Topcoat: B66W00611 - Pro Industrial High-Performance Acrylic – Gloss

4. INTERIOR CANVAS INSULATION COVERS

Primer LX02W0050 - Sherwin Williams Loxon Primer

Intermediate Coat: A89W02151 - Super Paint Exterior Satin

Topcoat: A89W02151 - Super Paint Exterior Satin

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 - 1. Concrete: 12 percent.
 - 2. Masonry (Clay and CMUs): 12 percent.
 - 3. Portland cement Plaster: 12 percent.
- C. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.
- D. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and comparable items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.
- D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.

- E. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceeds that permitted in manufacturer's written instructions.
- F. Steel Substrates: Remove rust, loose mill scale, and shop primer if any. Clean using methods recommended in writing by paint manufacturer.
- G. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and areas where shop paint is abraded. Paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.
- H. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
- I. Pressure wash exterior of existing buildings prior to painting
- J. Within 48 hours of painting rinse all exterior surfaces with clean fresh water to remove salt.

3.1 APPLICATION

- A. Apply paints according to manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual."
 - 1. Use applicators and techniques suited for paint and substrate indicated.
 - 2. Paint surfaces behind movable items same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed items with prime coat only.
 - 3. Paint both sides and edges of exterior doors and entire exposed surface of exterior door frames.
 - 4. Paint entire exposed surface of window frames and sashes.
 - 5. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
 - 6. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.
- B. Tint undercoats same color as topcoat but tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- E. Painting Fire Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work:

1. Paint the following work where exposed to view:
 - a. Equipment, including panel boards.
 - b. Uninsulated metal piping.
 - c. Uninsulated plastic piping.
 - d. Pipe hangers and supports.
 - e. Metal conduit.
 - f. Plastic conduit.
 - g. Tanks that do not have factory-applied final finishes.

3.2 FIELD QUALITY CONTROL

- A. Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and evaluate paint for dry film thickness.
 1. Contractor shall touch up and restore painted surfaces damaged by testing.
 2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written recommendations, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written recommendations.

3.3 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.7 MILDEWCIDE

Provide mildewcide additive to all exterior paint. Mildewcide additive shall be chemically compatible with paint formulation and shall not adversely affect the color, texture, or durability of the coating.

2. Mildewcide additive shall be EPA registered, non-toxic, low VOC composition, and shall provide complete protection against microbial defacement of painted surfaces.
3. Provide M-1 Advanced Mildewcide as manufactured by The Jomaps Company or approved equal.

END OF SECTION 09 91 00

10 14 00 INTERIOR AND EXTERIOR SIGNS

PART 1 - GENERAL

1.01 SUMMARY

- A. Provide specialty building signage. Note: Exterior building signage is shown on A200. See Allowance Section 012100.

1.02 SUBMITTALS

- A. Submit for approval samples, shop drawings, product data.

1.03 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. All signs shall comply with Florida Accessibility Code for Building Construction. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Panel signs; as manufactured by Mohawk signs or approved equal. Provide one for each room and room number shown on floor plans. Provide exterior grade signs for doors entered from outside. Provide one for each room on the floor plan.
 - 1. Material: Sand carved MP plastic, 1/32" H. raised graphics
 - 2. Size: Minimum 6 inches square, radiused corners
 - 3. Face Finish/Color: Matte finish/Color selected by Architect
 - 4. Number Style: Helvetica Medium
 - 5. Number Size: 1 inch
 - 6. Number Copy Position: Top left
 - 7. Letter Style: Helvetica Medium
 - 8. Letter Size: 3/4" uppercase
 - 9. Letter Copy Position: Bottom left
 - 10. Braille: Grade 2, left justified below number/letter
 - 11. Number/Letter Color: White
 - 12. Mounting: Non-corrosive fasteners and anchors

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Panel signs shall be wall mounted at sixty (60) inches above finished floor to center of sign on latch side of doors. Exact location shall be as directed by Owner.
- B. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction and with uniform appearance.
- C. Install signs level, plumb, and at the height indicated, with sign surfaces free from distortion or other defects in appearance.
- D. Restore damaged finishes. Clean and protect work from damage.

3.02 SIGN SCHEDULE

- A. Space Identification: Provide sign indicating room name and number for each space identified on floor plan.
- B. Accessibility Signage: In addition to room name and number, provide sign with international symbol of accessibility at all toilet rooms.

END OF SECTION

10 22 00 TOILET PARTITIONS

PART 1 GENERAL

1.01 RELATED DOCUMENTS:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this section.

1.02 The Contractor shall furnish all labor, materials, tools, equipment and perform all work and services for toilet partitions as shown on drawings and as specified, in accordance with provisions of the contract documents, and completely coordinate with work of all other trades.

1.03 Verify dimensions by field measurements before fabrication, wherever possible without delaying project.

PART 2 SUBSTITUTIONS

2.01 Toilet partitions specified are by Comtec, but equal and similar products by Santana Products and Sanymetal will be considered.

PART 3 SUBMITTALS

3.01 Shop drawings (7 copies) for fabrication and erection; include plans and elevations. Show all anchorage and accessory items, hardware, and finishes.

PART 4 MATERIALS

4.01 All partitions shall be equal to overhead braced, solid polymer HD by Santana in colors that extend through the entire thickness of the panels. Colors to be selected by the Architect.

4.02 Doors and panels shall be 55" high and mounted at 14" above finished floor.

4.03 Pilasters shall be 82" high and fastened to non-corrosive polymer resin shoes.

4.04 All hardware shall be fabricated from heavy aluminum extrusion (6463-T5 alloy) with clear anodized finish.

4.05 Bumper Coat Hook: Provide rubber tipped combination bumper and coat hook for each compartment.

4.06 Floor shoes shall be non-metallic.

4.06 Paper holders are provided under Section 10 28 00.

PART 5 INSTALLATION

5.01 Install in a rigid, straight, plumb and level manner with layout as indicated. Provide not more than ½" clearance between pilasters and panels, and not more than 1" clearance between panels and walls.

5.02 No evidence of drilling, cutting or patching shall be visible in the finished work.

END OF SECTION

Mike Marshall, 12/2023

SECTION 10 28 00 – TOILET ACCESSORIES

PART 1 - GENERAL

1.01 SUMMARY

- A. Provide toilet accessories at toilet rooms.

1.02 SUBMITTALS

- A. Submit for approval product data, accessory schedule.

1.03 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

PART 2 - PRODUCTS

- 2.01 Furnish and install the following items by Bobrick, ASI or equal:

<u>ITEM</u>	<u>DESCRIPTION</u>
A. Toilet paper roll	2890 Jumbo toilet paper roll
B. Grab Bars	B-6806.99 x 42 peened 1 ½” concealed mounting
C. Mirror	B-293-2346 24”x36” Stainless steel tilt mirror
D. Towel Dispenser	B-5262 Matrix series surface mounted Towel Dispenser
E. Waste Receptacle	B-275 Stainless steel 20-gallon surface mounted
F. Napkin Disposal	B-5270 Matrix series surface mounted napkin disposal
G. Changing Station	Koala Kare B-KB310 Surface mounted horizontal Changing station
H. Soap Dispenser	B-5050 Matrix series surface mounted soap dispenser

Mike Marshall, 12/2023

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction and with uniform appearance. Coordinate with work of other sections.
- B. Install grab bars to withstand a downward load of at least 250 lbs, when tested according to method in ASTM F 446.
- C. Restore damaged finishes and test for proper operation. Clean and protect work from damage.
- D. Install wood blocking in walls at grab bars and changing station.

END OF SECTION

SECTION 22 00 00 – PLUMBING GENERAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract, including general and supplementary conditions and Division 01 specification sections, apply to this section.
- A. This is a basic plumbing requirements section. The provisions of this section apply to work of all Division 22 sections.
- B. Review all other contract documents to be aware of conditions affecting work herein.
- C. All work under Division 22 shall be constructed in accordance with the codes listed herein. The design has been based on the requirements of these codes; and while it is not the responsibility of the contractor to verify that all work called for complies with these codes, he shall be responsible for calling to the architect/engineer's attention any details or specifications that are not in conformance with these or other codes.
- D. Where code conflict exists, generally the most restrictive requirement applies. Comply with current code edition, unless noted.
 - 1. 2020 Florida Building Code.
 - 2. 2020 Florida Plumbing Code.
 - 3. 2020 Fuel Gas Code.
 - 4. National Electric Code (NFPA 70).
 - 5. Life Safety Code (NFPA 101).
 - 6. Air Conditioning and Ventilating Systems (NFPA 90a).
 - 7. Handicapped Accessibility, ANSI A117.1 And Florida Statute Chapter 553, Part V.
- E. All plumbing materials, installation and systems shall meet the requirements of the following standards, including the latest addenda and amendments, to the extent referenced:
 - 1. Underwriters' Laboratories (UL)
 - 2. American National Standards Institution (ANSI)
 - 3. American Society of Testing Materials (ASTM)
 - 4. Air Conditioning and Refrigeration Institute (ARI)
 - 5. National Fire Protection Association (NFPA)
 - 6. National Electrical Manufacturers Association (NEMA)
 - 7. American Society of Plumbing Engineers (ASPE)
- F. Codes or standards applying to a specific part of the work may be included in that section.
- G. Comply with regulations and codes of suppliers of utilities.

- H. Where no specific method or form of construction is called for in the contract documents, the contractor shall comply with code requirements when carrying out such work.

1.2 SUMMARY

A. Related Sections:

1. SECTION 23 00 00 MECHANICAL GENERAL

- a. Contractor shall adhere to all requirements provided by above referenced specification sections (e.g., Summary, Definitions, Field measurements and Coordination, Submittals, Quality Assurance, Coordination with multi-discipline trades, Products and Project execution)

1.3 GENERAL INFORMATION

- A. This section is a Division-22 Basic Plumbing Materials and Methods Section and is part of each Division-22 Section referring to testing and other procedures specified herein.
- B. Notify the Architect/Engineer when system tests are ready to be witnessed at least 24 hours prior to the test.
- C. All materials, test equipment, and devices required for cleaning, testing, sterilizing, or purging shall be provided by the contractor.

1.4 DIVISION 1 GENERAL COORDINATION

- A. Coordinate with the general contractor for all cutting and patching. Contractors performing Division 22 work shall inform the general contractor of all cutting and patching required prior to bidding and shall coordinate installation.

1.5 COORDINATION

- A. Coordinate mechanical equipment installation with other building components.
- B. Arrange for pipe spaces, chases, slots, and openings in building structure during progress of construction, to allow for mechanical installations.
- C. Coordinate installation of required supporting devices and set sleeves in poured-in-place concrete and other structural components as they are constructed.
- D. Sequence, coordinate, and integrate installations of mechanical materials and equipment for efficient flow of the Work. Coordinate installation of large equipment requiring positioning before closing in building.

- E. Coordinate connection of mechanical systems with exterior underground and overhead utilities and services. Comply with requirements of governing regulations, franchised service companies, and controlling agencies.
- F. Coordinate requirements for access panels and doors for mechanical items requiring access that are concealed behind finished surfaces.
- G. Coordinate installation of identifying devices after completing covering and painting, if devices are applied to surfaces. Install identifying devices before installing acoustical ceilings and similar concealment.
- H. Refer to other Division 22 sections and/or drawings for specific requirements of the particular piping system being installed. Where another Division 22 sections or the drawings conflict with requirements of this section, the other Division 22 sections or the drawings shall take precedence over the general requirements herein.
- I. OSHA: Contractor employee worker protection for all trenching and excavation operations shall comply with 29 CFR 1926.650 Subpart P and all current OSHA requirements.

1.6 MULTI-DISCIPLINE COORDINATION

A. DIVISION SITE WORK

- 1. Refer to Division 31, 32 and 33, Sitework for:
 - a. All water, sewer, and storm water piping greater than five feet from the building.
 - b. Manholes and catch-basins.
 - c. Underground tanks and enclosures.
 - d. Site fire protection work.
- 2. The following work is part of Division 22:
 - a. Grease trap.
 - b. All site gas piping.
 - c. All site acid waste piping and neutralization tank.

B. DIVISION 3 CONCRETE

- 1. Refer to Division 3, Concrete for:
 - a. Rough grouting in and around plumbing work.
 - b. Patching concrete cut to accommodate plumbing work.
- 2. The following is part of Division 22 work, complying with the requirements of Division 3
 - a. Curbs, foundations and pads for plumbing equipment.
 - b. Basins, sumps, and vaults of plumbing work.
 - c. Underground structural concrete to accommodate plumbing work.
 - d. Inertia bases.

C. DIVISION 5 METALS

1. Refer to Division 5, Metals for:
 - a. Framing openings for plumbing equipment.
2. The following is part of Division 22 work.
 - a. Supports for plumbing work.

D. DIVISION 6 WOOD AND PLASTIC

1. Refer to Division 6, Wood for:
 - a. Framing openings for plumbing equipment

E. DIVISION 7 THERMAL AND MOISTURE PROTECTION

1. Refer to Division 7, Thermal and Moisture Protection for:
 - a. Installation of all roof curbs and roof supports for plumbing work.
 - b. Caulking and waterproofing of all wall and roof mounted plumbing work.
 - c. Providing all roof curbs and all vent flashing for metal roofs.
2. The following is part of Division 22 work, complying with the requirements of Division 7.
 - a. Fire barrier penetration seals.

F. DIVISION 9 FINISHES

1. Refer to Division 9, Finishes for:
 - a. Painting exposed ductwork, piping, and equipment.
 - b. Painting structural metal and concrete for plumbing work.
 - c. Painting door grilles and access panels.
 - d. Painting color-coded plumbing work indicated for continuous painting. See color schedule in Division 22 section, "Plumbing Identification".
 - e. Installation of access doors in gypsum drywall.
 - f. Colors shall be selected by the Architect for all painting of exposed plumbing work in occupied spaces, unless specified herein. Do not paint insulated or jacketed surfaces.
2. Perform the following as part of Division 22 work:
 - a. Touch up painting of factory finishes.

- b. Painting of all hangers.

G. DIVISION 10 SPECIALTIES

- 1. Refer to Division 10, Specialties for:
 - a. Fire extinguishers and fire extinguisher cabinets and accessories.

H. DIVISION 11 EQUIPMENT

- 1. Refer to Division 11, Equipment for:
 - a. Equipment for all food service equipment to be provided. Unless noted otherwise, this includes the cooking hoods with fire suppression, dishwasher hoods, dishwasher booster heaters, and food preparation/cleanup equipment.
 - b. Equipment for all laboratory equipment including cabinets, casework, student stations, demonstration desks, safety stations, eyewashes, and all related fixtures, fittings, and trim.
- 2. Provide the following as part of Division 22 work:
 - a. All trim including faucets, waste connections, drain traps, vents, valves, piping, flashing, fittings, strainers, and other materials necessary to make equipment operational. Provide rough-in for all equipment. Provide final connections for all equipment.
 - b. All fixtures specified in Contract Documents. See plumbing schedule.
 - c. All automatic gas valves for shutoff of gas to cooking appliances when fire suppression system activates. Div 23 to provide valve. Coordinate type of valve with fire suppression system supplier. Div. 22 to install gas valve. Coordinate power requirements with Div. 26.
 - d. All trim not furnished by Division 11 includes drains, wastes, continuous wastes, tailpieces, traps and similar devices necessary to make fixtures operational. Provide rough-in for all fixtures. Provide final connections for all fixtures. Provide all fixtures specified in Contract Documents.

I. DIVISION 26 ELECTRICAL

- a. The plumbing contractor shall coordinate the exact electrical requirements of all plumbing equipment being provided with the electrical contractor. Where approval submittals are required, this coordination shall be accomplished prior to making the submittals. The electrical design shown on the drawings supports the plumbing equipment basis of design. If plumbing equipment is submitted with different electrical requirements, it is the responsibility of the plumbing contractor to resolve all required electrical design changes (wire and conduit size, type of disconnect or overload protection, point(s) of connection, etc.) and clearly show the new electrical design on the plumbing submittal with a written statement that this design will be provided at no additional cost. Plumbing submittals made with no written reference

to the electrical design will be presumed to work with the electrical design. Any corrections required will be at no additional cost.

- b. Electrical contractors shall provide disconnect switches, starters, and contactors for plumbing equipment unless specifically noted as being furnished as part of plumbing equipment.
- c. Electrical contractors shall provide all power wiring, raceway and devices, and make final electrical connections to all plumbing equipment, switches, starters, contactors, controllers, and similar equipment.

PART 2 - PRODUCTS

2.1 EQUIPMENT AND MATERIALS

- A. See SECTION 23 00 00.

2.2 REQUEST FOR SUBSTITUTION

- A. See SECTION 23 00 00

2.3 EXCAVATION AND BACKFILL MATERIALS

- A. See Section 23 00 00

PART 3 - EXECUTION

3.1 WORKMANSHIP

- A. See Section 23 00 00

3.2 COORDINATION

- A. See Section 23 00 00

3.3 RECORD DRAWINGS

- A. See Section 23 00 00

3.4 ACCEPTANCE

- A. See Section 23 00 00

3.5 PLUMBING DEMOLITION

- A. Refer to Division 1 Sections and Contract Drawings for general demolition requirements and procedures.
- B. Disconnect, demolish, and remove mechanical systems, equipment, and components indicated to be removed.
- C. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
- D. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material.
- E. Equipment to Be Removed: Disconnect and cap services and remove equipment.
- F. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
- G. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.

3.6 PIPING SYSTEMS - COMMON REQUIREMENTS

- A. Install piping according to the following requirements and Division 22 Sections specifying piping systems. Individual Division 22 piping Sections specify unique piping installation requirements.
- B. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated unless deviations to layout are approved on Coordination Drawings.
- C. Install piping in concealed locations, unless otherwise indicated and except in equipment rooms and service areas.
- D. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise.
- E. Install piping such that no piping passes over electrical panels.
- F. Refer to fire protection, plumbing and HVAC specifications for sleeve, sleeve seal system and escutcheon requirements.
- G. Install piping above accessible ceilings to allow sufficient space for ceiling panel removal.
- H. Install piping to permit valve servicing.

- I. Install piping at indicated slopes.
- J. Install piping free of sags and bends.
- K. Install fittings for changes in direction and branch connections.
- L. Install piping to allow application of insulation.
- M. Select system components with pressure rating equal to or greater than system operating pressure.
- N. Verify final equipment locations for roughing-in.
- O. Refer to equipment specifications in other Sections of these Specifications for roughing-in requirements.

3.7 EQUIPMENT INSTALLATION - COMMON REQUIREMENTS

- A. See Section 23 00 00

3.8 PAINTING

- A. See Section 23 00 00

3.9 CONCRETE BASES

- A. See Section 23 00 00

3.10 ERECTION OF METAL SUPPORTS AND ANCHORAGES

- A. See Section 23 00 00

3.11 CUTTING AND PATCHING

- A. See Section 23 00 00

3.12 GROUTING

- A. See Section 23 00 00

3.13 EXCAVATION AND BACKFILL

- A. See Section 23 00 00

3.14 PRESSURE TESTS

- A. General: provide temporary equipment for testing, including pump and gages. Test piping systems before insulation is installed wherever feasible and remove control devices before testing. Test each natural section of each piping system independently but do not use piping system valves to isolate sections where test pressure exceeds valve pressure rating. Fill each section with the indicated medium and pressurize for indicated pressure and time.
- B. The required test period is two hours.
- C. No piping, fixtures, or equipment shall be concealed or covered until they have been tested. The contractor shall apply each test and ensure that it is satisfactory for the period specified before calling the architect/engineer to observe the test. Test shall be repeated upon request to the satisfaction of those making the inspection.
- D. Observe each test section for leakage at the end of the test period. Test fails if leakage is observed or if pressure drop exceeds 5% of the test pressure.
- E. Check of systems during application of test pressures should include visual check for water leakage and soap bubble or similar for air and nitrogen leakage.
- F. Repair piping systems sections which fail required piping test, by disassembly and re-installation, using new materials to extent required to overcome leakage. Do not use chemicals, stop-leak compounds, mastics, or other temporary repair methods.
- G. Pressure test requirements
 - 1. Soil, waste, vent and acid waste and vent: Test all piping within the building with a 10-foot head of water. Test piping in sections so that all joints are tested. Provide test tees as required.
 - 2. Domestic water: Perform hydrostatic test on all piping within the building at twice the normal static pressure at service point, but not less than 100 psig. Once tested, flush out piping and leave under pressure of the supply main or 40 psig for the balance of the construction period.

3.15 CLEANING AND STERILIZATION

- A. Sleeve-seal systems in this article are used, in slabs-on-grade and below grade in exterior concrete walls, for a watertight seal around service piping entries into the building. These systems typically require installation in a sleeve for proper operation.
- B. Install sleeve-seal systems in sleeves in exterior concrete walls and slabs-on-grade at service piping entries into building.
- C. General: clean exterior surfaces of installed piping systems of superfluous materials and prepare for application of specified coatings (if any). Flush out piping systems with clean water before proceeding with required tests. Inspect each run of each system for completion of joints, supports and accessory items.

- D. Flush and drain all water systems at least three times. Replace startup strainers with operating strainers.
- E. Sterilization of domestic water systems
 - 1. Prerequisites: all hot and cold-water piping installed (complete), all fixtures connected, system flushed out, and system filled with water.
 - 2. The shut off valve at the water main shall be closed, all fixture outlets opened slightly, and a sterilizing solution shall be introduced at a manifold connection installed by the contractor at the meter.
 - 3. The solution shall contain 50 parts per million of available chlorine. The chlorinating material shall be either liquid chlorine or calcium hypochlorite. The solution shall be allowed to stand in the system for at least eight hours after which the entire system shall be flushed.
 - 4. After final flushing, all aerators shall be removed, cleaned, and reinstalled. After final flush the residual chlorine shall not exceed 0.2 parts per million.
 - 5. The architect/engineer shall be notified 24 hours prior to the procedure so that it can be witnessed.
 - 6. Provide sampling and certified reports by an independent testing lab. Provide written health department approval of disinfection samples.

END OF SECTION 22 00 00

SECTION 22 05 17 - SLEEVES AND SLEEVE SEALS FOR PLUMBING PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract, including general and supplementary conditions and Division 01 specification sections, apply to this section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Sleeves.
 - 2. Sleeve-seal systems.
 - 3. Grout.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.

PART 2 - PRODUCTS

2.1 SLEEVES

- A. Cast-Iron Wall Pipes: Cast or fabricated of cast or ductile iron and equivalent to ductile-iron pressure pipe, with plain ends and integral water stop unless otherwise indicated.
- B. Galvanized-Steel Wall Pipes: ASTM A 53/A 53M, Schedule 40, with plain ends and welded steel collar; zinc coated.
- C. Galvanized-Steel-Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, zinc coated, with plain ends.
- D. PVC-Pipe Sleeves: ASTM D 1785, Schedule 40.
- E. Galvanized-Steel-Sheet Sleeves: 0.0239-inch minimum thickness; round tube closed with welded longitudinal joint.

2.2 SLEEVE-SEAL SYSTEMS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Advance Products & Systems, Inc.
2. CALPICO, Inc.
3. Metraflex Company (The).
4. Pipeline Seal and Insulator, Inc.
5. Proco Products, Inc.

B. Description: Modular sealing-element unit, designed for field assembly, for filling annular space between piping and sleeve.

1. Sealing Elements: EPDM-rubber interlocking links shaped to fit surface of pipe. Include type and number required for pipe material and size of pipe.
2. Pressure Plates: Carbon steel.
3. Connecting Bolts and Nuts: Carbon steel, with corrosion-resistant coating, of length required to secure pressure plates to sealing elements.

2.3 GROUT

- A. Standard: ASTM C 1107/C 1107M, Grade B, post-hardening and volume-adjusting, dry, hydraulic-cement grout.
- B. Characteristics: Non-shrink; recommended for interior and exterior applications.
- C. Design Mix: 5000-psi, 28-day compressive strength.
- D. Packaging: Premixed and factory packaged.

PART 3 - EXECUTION

3.1 SLEEVE INSTALLATION

- A. Install sleeves for piping passing through penetrations in floors, partitions, roofs, and walls.
- B. For sleeves that will have sleeve-seal system installed, select sleeves of size large enough to provide 1-inch annular clear space between piping and concrete slabs and walls.
 1. Sleeves are not required for core-drilled holes.
- C. Install sleeves in concrete floors, concrete roof slabs, and concrete walls as new slabs and walls are constructed.
 1. Cut sleeves to length for mounting flush with both surfaces.
 - a. Exception: Extend sleeves installed in floors of mechanical equipment areas or other wet areas 2 inches above finished floor level.
 2. Using grout, seal the space outside of sleeves in slabs and walls without sleeve-seal system.
- D. Install sleeves for pipes passing through interior partitions.

1. Cut sleeves to length for mounting flush with both surfaces.
 2. Install sleeves that are large enough to provide 1/4-inch annular clear space between sleeve and pipe or pipe insulation.
 3. Seal annular space between sleeve and piping or piping insulation; use joint sealants appropriate for size, depth, and location of joint. Comply with requirements for sealants specified in Division 07.
- E. Fire-Barrier Penetrations: Maintain indicated fire rating of walls, partitions, ceilings, and floors at pipe penetrations. Seal pipe penetrations with firestop materials. Comply with requirements for firestopping specified in Division 07.

3.2 SLEEVE-SEAL-SYSTEM INSTALLATION

- A. Install sleeve-seal systems in sleeves in exterior concrete walls and slabs-on-grade at service piping entries into building.
- B. Select type, size, and number of sealing elements required for piping material and size and for sleeve ID or hole size. Position piping in center of sleeve. Center piping in penetration, assemble sleeve-seal system components, and install in annular space between piping and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make a watertight seal.

3.3 SLEEVE AND SLEEVE-SEAL SCHEDULE

- A. Use sleeves and sleeve seals for the following piping-penetration applications:
1. Exterior Concrete Walls below Grade:
 - a. Piping Smaller Than NPS 6: Cast-iron wall sleeves with sleeve-seal system.
 - 1) Select sleeve size to allow for 1-inch annular clear space between piping and sleeve for installing sleeve-seal system.
 2. Concrete Slabs-on-Grade:
 - a. Piping Smaller Than NPS 6: Cast-iron wall sleeves with sleeve-seal system.
 - 1) Select sleeve size to allow for 1-inch annular clear space between piping and sleeve for installing sleeve-seal system.
 3. Concrete Slabs above Grade:
 - a. Piping Smaller Than NPS 6: PVC-pipe sleeves.
 4. Interior Partitions:
 - a. Piping Smaller Than NPS 6: PVC-pipe sleeves.

END OF SECTION 22 05 17

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SECTION 22 05 18 - ESCUTCHEONS FOR PLUMBING PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Escutcheons.
 - 2. Floor plates.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.

PART 2 - PRODUCTS

2.1 ESCUTCHEONS

- A. One-Piece, Cast-Brass Type: With polished, chrome-plated finish and setscrew fastener.
- B. One-Piece, Deep-Pattern Type: Deep-drawn, box-shaped brass with chrome-plated finish and spring-clip fasteners.
- C. One-Piece, Stamped-Steel Type: With chrome-plated finish and spring-clip fasteners.

2.2 FLOOR PLATES

- A. One-Piece Floor Plates: Cast-iron flange with holes for fasteners.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install escutcheons for piping penetrations of walls, ceilings, and finished floors.

- B. Install escutcheons with ID to closely fit around pipe, tube, and insulation of piping and with OD that completely covers opening.
 - 1. Escutcheons for New Piping:
 - a. Piping with Fitting or Sleeve Protruding from Wall: One-piece, deep-pattern type.
 - b. Chrome-Plated Piping: One-piece, cast-brass type with polished, chrome-plated finish.
 - c. Insulated Piping: One-piece, stamped-steel type.
 - d. Bare Piping at Wall and Floor Penetrations in Finished Spaces: One-piece, cast-brass type with polished, chrome-plated finish.
 - e. Bare Piping at Wall and Floor Penetrations in Finished Spaces: One-piece, stamped-steel type.
 - f. Bare Piping at Ceiling Penetrations in Finished Spaces: One-piece, cast-brass type with polished, chrome-plated finish.
 - g. Bare Piping at Ceiling Penetrations in Finished Spaces: One-piece, stamped-steel type.
 - h. Bare Piping in Unfinished Service Spaces: One-piece, cast-brass type with polished, chrome-plated finish.
 - i. Bare Piping in Unfinished Service Spaces: One-piece, stamped-steel type.
 - j. Bare Piping in Equipment Rooms: One-piece, cast-brass type with polished, chrome-plated finish.
 - k. Bare Piping in Equipment Rooms: One-piece, stamped-steel type.
- C. Install floor plates for piping penetrations of equipment-room floors.
- D. Install floor plates with ID to closely fit around pipe, tube, and insulation of piping and with OD that completely covers opening.
 - 1. New Piping: One-piece, floor-plate type.

3.2 FIELD QUALITY CONTROL

- A. Replace broken and damaged escutcheons and floor plates using new materials.

END OF SECTION 22 05 18

SECTION 22 05 23 - GENERAL-DUTY VALVES FOR PLUMBING PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

- 1. Brass ball valves.
 - 2. Bronze ball valves.
 - 3. Bronze swing check valves.
 - 4. Bronze gate valves.
 - 5. Bronze globe valves.

- B. Related Sections:

- 1. Section 22 05 53 "Identification for Plumbing Piping and Equipment" for valve tags and schedules.
 - 2. Section 22 11 16 "Domestic Water Piping" for valves applicable only to this piping.
 - 3. Section 22 13 19 "Sanitary Waste Piping Specialties" for valves applicable only to this piping.
 - 4. Section 22 14 23 "Storm Drainage Piping Specialties" for valves applicable only to this piping.

1.3 DEFINITIONS

- A. CWP: Cold working pressure.
- B. EPDM: Ethylene propylene copolymer rubber.
- C. NBR: Acrylonitrile-butadiene, Buna-N, or nitrile rubber.
- D. NRS: Non rising stem.
- E. RS: Rising stem.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of valve indicated.

1.5 QUALITY ASSURANCE

- A. Source Limitations for Valves: Obtain each type of valve from single source from single manufacturer.
- B. ASME Compliance:
 - 1. ASME B16.10 and ASME B16.34 for ferrous valve dimensions and design criteria.
 - 2. ASME B31.1 for power piping valves.
 - 3. ASME B31.9 for building services piping valves.
- C. NSF Compliance: NSF 61 for valve materials for potable-water service.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Prepare valves for shipping as follows:
 - 1. Protect internal parts against rust and corrosion.
 - 2. Protect threads, flange faces, grooves, and weld ends.
 - 3. Set angle, gate, and globe valves closed to prevent rattling.
 - 4. Set ball and plug valves open to minimize exposure of functional surfaces.
 - 5. Set butterfly valves closed or slightly open.
 - 6. Block check valves in either closed or open position.
- B. Use the following precautions during storage:
 - 1. Maintain valve end protection.
 - 2. Store valves indoors and maintain at higher than ambient dew point temperature. If outdoor storage is necessary, store valves off the ground in watertight enclosures.

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS FOR VALVES

- A. Refer to valve schedule articles for applications of valves.
- B. Valve Pressure and Temperature Ratings: Not less than indicated and as required for system pressures and temperatures.
- C. Valve Sizes: Same as upstream piping unless otherwise indicated.
- D. Valve Actuator Types:
 - 1. Gear Actuator: For quarter-turn valves NPS 8 and larger.
 - 2. Handwheel: For valves other than quarter-turn types.
 - 3. Hand lever: For quarter-turn valves NPS 6 and smaller.
- E. Valves in Insulated Piping: With 2-inch stem extensions and the following features:

1. Gate Valves: With rising stem.
2. Ball Valves: With extended operating handle of non-thermal-conductive material, and protective sleeve that allows operation of valve without breaking the vapor seal or disturbing insulation.

F. Valve-End Connections:

1. Grooved: With grooves according to AWWA C606.
2. Solder Joint: With sockets according to ASME B16.18.
3. Threaded: With threads according to ASME B1.20.1.

G. Valve Bypass and Drain Connections: MSS SP-45.

2.2 BRASS BALL VALVES

A. Two-Piece, Full-Port, Brass Ball Valves with Stainless-Steel Trim:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Milwaukee Valve Company.
 - b. NIBCO INC.
 - c. Watts Regulator Co.; a division of Watts Water Technologies, Inc.
2. Description:
 - a. Standard: MSS SP-110.
 - b. SWP Rating: 150 psig.
 - c. CWP Rating: 600 psig.
 - d. Body Design: Two pieces.
 - e. Body Material: Forged brass.
 - f. Ends: Threaded.
 - g. Seats: PTFE or TFE.
 - h. Stem: Stainless steel.
 - i. Ball: Stainless steel, vented.
 - j. Port: Full.

2.3 BRONZE BALL VALVES

A. Two-Piece, Full-Port, Bronze Ball Valves with Stainless-Steel Trim:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Milwaukee Valve Company.
 - b. NIBCO INC.
 - c. Watts Regulator Co.; a division of Watts Water Technologies, Inc.
2. Description:

- a. Standard: MSS SP-110.
- b. SWP Rating: 150 psig.
- c. CWP Rating: 600 psig.
- d. Body Design: Two pieces.
- e. Body Material: Bronze.
- f. Ends: Threaded.
- g. Seats: PTFE or TFE.
- h. Stem: Stainless steel.
- i. Ball: Stainless steel, vented.
- j. Port: Full.

2.4 BRONZE SWING CHECK VALVES

A. Class 150, Bronze Swing Check Valves with Bronze Disc:

- 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Milwaukee Valve Company.
 - b. NIBCO INC.
- 2. Description:
 - a. Standard: MSS SP-80, Type 3.
 - b. CWP Rating: 300 psig.
 - c. Body Design: Horizontal flow.
 - d. Body Material: ASTM B 62, bronze.
 - e. Ends: Threaded.
 - f. Disc: Bronze.

2.5 BRONZE GATE VALVES

A. Class 150, NRS Bronze Gate Valves:

- 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Milwaukee Valve Company.
 - b. NIBCO INC.
 - c. Watts Regulator Co.; a division of Watts Water Technologies, Inc.
- 2. Description:
 - a. Standard: MSS SP-80, Type 1.
 - b. CWP Rating: 300 psig.
 - c. Body Material: ASTM B 62, bronze with integral seat and union-ring bonnet.
 - d. Ends: Threaded.
 - e. Stem: Bronze.
 - f. Disc: Solid wedge; bronze.

- g. Packing: Asbestos free.
- h. Handwheel: Malleable iron, bronze, or aluminum.

2.6 BRONZE GLOBE VALVES

A. Class 150, Bronze Globe Valves with Nonmetallic Disc:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Milwaukee Valve Company.
 - b. NIBCO INC.
 - c. Watts Regulator Co.; a division of Watts Water Technologies, Inc.
2. Description:
 - a. Standard: MSS SP-80, Type 2.
 - b. CWP Rating: 300 psig.
 - c. Body Material: ASTM B 62, bronze with integral seat and union-ring bonnet.
 - d. Ends: Threaded.
 - e. Stem: Bronze.
 - f. Disc: PTFE or TFE.
 - g. Packing: Asbestos free.
 - h. Handwheel: Malleable iron, bronze, or aluminum.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine valve interior for cleanliness, freedom from foreign matter, and corrosion. Remove special packing materials, such as blocks, used to prevent disc movement during shipping and handling.
- B. Operate valves in positions from fully open to fully closed. Examine guides and seats made accessible by such operations.
- C. Examine threads on valve and mating pipe for form and cleanliness.
- D. Examine mating flange faces for conditions that might cause leakage. Check bolting for proper size, length, and material. Verify that gasket is of proper size, that its material composition is suitable for service, and that it is free from defects and damage.
- E. Do not attempt to repair defective valves; replace with new valves.

3.2 VALVE INSTALLATION

- A. Install valves with unions or flanges at each piece of equipment arranged to allow service, maintenance, and equipment removal without system shutdown.

- B. Locate valves for easy access and provide separate support where necessary.
- C. Install valves in horizontal piping with stem at or above center of pipe.
- D. Install valves in position to allow full stem movement.
- E. Install check valves for proper direction of flow and as follows:
 - 1. Swing Check Valves: In horizontal position with hinge pin level.
 - 2. Check Valves: In horizontal or vertical position, between flanges.

3.3 ADJUSTING

- A. Adjust or replace valve packing after piping systems have been tested and put into service but before final adjusting and balancing. Replace valves if persistent leaking occurs.

3.4 GENERAL REQUIREMENTS FOR VALVE APPLICATIONS

- A. If valve applications are not indicated, use the following:
 - 1. Shutoff Service: Ball or globe valves.
 - 2. Throttling Service: Ball or globe valves.
- B. If valves with specified SWP classes or CWP ratings are not available, the same types of valves with higher SWP classes or CWP ratings may be substituted.
- C. Select valves, except wafer types, with the following end connections:
 - 1. For Copper Tubing, NPS 2 and Smaller: Threaded ends except where solder-joint valve-end option is indicated in valve schedules below.
 - 2. For Copper Tubing, NPS 2-1/2 to NPS 4: Flanged ends except where threaded valve-end option is indicated in valve schedules below.
 - 3. For Grooved-End Copper Tubing: Valve ends may be grooved.

3.5 DOMESTIC, HOT- AND COLD-WATER VALVE SCHEDULE

- A. Pipe NPS 3/4 and Larger:
 - 1. Bronze and Brass Valves: May be provided with solder-joint ends instead of threaded ends.
 - 2. Ball Valves: Two-piece, full port, brass, or bronze with stainless-steel trim.
 - 3. Bronze Swing Check Valves: Class 150, bronze disc.
 - 4. Bronze Gate Valves: Class 150, NRS.
 - 5. Bronze Globe Valves: Class 150, bronze disc.

END OF SECTION 22 05 23

SECTION 22 05 29 - HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Metal pipe hangers and supports.
 - 2. Trapeze pipe hangers.
 - 3. Thermal-hanger shield inserts.
 - 4. Fastener systems.
 - 5. Pipe stands.
 - 6. Equipment supports.
- B. Related Sections:
 - 1. Section 05 50 00 "Metal Fabrications" for structural-steel shapes and plates for trapeze hangers for pipe and equipment supports.
 - 2. Section 22 05 48 "Vibration and Seismic Controls for Plumbing Piping and Equipment" for vibration isolation devices.

1.3 DEFINITIONS

- A. MSS: Manufacturers Standardization Society of The Valve and Fittings Industry Inc.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show fabrication and installation details and include calculations for the following; include Product Data for components:
 - 1. Trapeze pipe hangers.
 - 2. Metal framing systems.
 - 3. Pipe stands.
 - 4. Equipment supports.
- C. Delegated-Design Submittal: For trapeze hangers indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
 - 1. Detailed fabrication and assembly of trapeze hangers.
 - 2. Design Calculations: Calculate requirements for designing trapeze hangers.

1.5 INFORMATIONAL SUBMITTALS

- A. Welding certificates.

1.6 QUALITY ASSURANCE

- A. Structural Steel Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
- B. Pipe Welding Qualifications: Qualify procedures and operators according to ASME Boiler and Pressure Vessel Code.

PART 2 - PRODUCTS

2.1 METAL PIPE HANGERS AND SUPPORTS

- A. Carbon-Steel Pipe Hangers and Supports:
 - 1. Description: MSS SP-58, Types 1 through 58, factory-fabricated components.
 - 2. Galvanized Metallic Coatings: Pre-galvanized or hot dipped.
 - 3. Nonmetallic Coatings: Plastic coating, jacket, or liner.
 - 4. Padded Hangers: Hanger with fiberglass or other pipe insulation pad or cushion to support bearing surface of piping.
 - 5. Hanger Rods: Continuous-thread rod, nuts, and washer made of carbon steel.
- B. Copper Pipe Hangers:
 - 1. Description: MSS SP-58, Types 1 through 58, copper-coated-steel, factory-fabricated components.
 - 2. Hanger Rods: Continuous-thread rod, nuts, and washer made of stainless steel.

2.2 TRAPEZE PIPE HANGERS

- A. Description: MSS SP-69, Type 59, shop- or field-fabricated pipe-support assembly made from structural carbon-steel shapes with MSS SP-58 carbon-steel hanger rods, nuts, saddles, and U-bolts.

2.3 THERMAL-HANGER SHIELD INSERTS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Carpenter & Paterson, Inc.
 - 2. Clement Support Services.
 - 3. ERICO International Corporation.
 - 4. National Pipe Hanger Corporation.
 - 5. PHS Industries, Inc.
 - 6. Pipe Shields, Inc.; a subsidiary of Piping Technology & Products, Inc.
 - 7. Piping Technology & Products, Inc.

8. Rilco Manufacturing Co., Inc.
 9. Value Engineered Products, Inc.
-
- B. Insulation-Insert Material for Cold Piping: ASTM C 552, Type II cellular glass with 100-psig or ASTM C 591, Type VI, Grade 1 polyisocyanurate with 125-psig minimum compressive strength and vapor barrier.
 - C. Insulation-Insert Material for Hot Piping: Water-repellent treated, ASTM C 533, Type I calcium silicate with 100-psig or ASTM C 591, Type VI, Grade 1 polyisocyanurate with 125-psig minimum compressive strength.
 - D. For Trapeze or Clamped Systems: Insert and shield shall cover entire circumference of pipe.
 - E. For Clevis or Band Hangers: Insert and shield shall cover lower 180 degrees of pipe.
 - F. Insert Length: Extend 2 inches beyond sheet metal shield for piping operating below ambient air temperature.

2.4 FASTENER SYSTEMS

- A. Powder-Actuated Fasteners: Threaded-steel stud, for use in hardened Portland cement concrete with pull-out, tension, and shear capacities appropriate for supported loads and building materials where used.
- B. Mechanical-Expansion Anchors: Insert-wedge-type, stainless- steel anchors, for use in hardened Portland cement concrete; with pull-out, tension, and shear capacities appropriate for supported loads and building materials where used.

2.5 PIPE STANDS

- A. General Requirements for Pipe Stands: Shop- or field-fabricated assemblies made of manufactured corrosion-resistant components to support roof-mounted piping.
- B. Low-Type, Single-Pipe Stand: One-piece stainless-steel base unit with plastic roller, for roof installation without membrane penetration.
- C. High-Type, Single-Pipe Stand:
 1. Description: Assembly of base, vertical and horizontal members, and pipe support, for roof installation without membrane penetration.
 2. Base: Stainless steel.
 3. Vertical Members: Two or more cadmium-plated-steel or stainless-steel, continuous-thread rods.
 4. Horizontal Member: Cadmium-plated-steel or stainless-steel rod with plastic or stainless-steel, roller-type pipe support.
- D. High-Type, Multiple-Pipe Stand:
 1. Description: Assembly of bases, vertical and horizontal members, and pipe supports, for roof installation without membrane penetration.
 2. Bases: One or more; plastic.

3. Vertical Members: Two or more protective-coated-steel channels.
4. Horizontal Member: Protective-coated-steel channel.
5. Pipe Supports: Galvanized-steel, clevis-type pipe hangers.

- E. Curb-Mounted-Type Pipe Stands: Shop- or field-fabricated pipe supports made from structural-steel shapes, continuous-thread rods, and rollers, for mounting on permanent stationary roof curb.

2.6 EQUIPMENT SUPPORTS

- A. Description: Welded, shop- or field-fabricated equipment support made from structural carbon-steel shapes.

2.7 PIPE POSITIONING SYSTEMS

- A. Description: IAPMO PS 42, positioning system of metal brackets, clips, and straps for positioning piping in pipe spaces; for plumbing fixtures in commercial applications.

2.8 MISCELLANEOUS MATERIALS

- A. Structural Steel: ASTM A 36/A 36M, carbon-steel plates, shapes, and bars; black and galvanized.
- B. Grout: ASTM C 1107, factory-mixed and -packaged, dry, hydraulic-cement, non-shrink and nonmetallic grout; suitable for interior and exterior applications.
1. Properties: Non-staining, noncorrosive, and nongaseous.
 2. Design Mix: 5000-psi, 28-day compressive strength.

PART 3 - EXECUTION

3.1 HANGER AND SUPPORT INSTALLATION

- A. Metal Pipe-Hanger Installation: Comply with MSS SP-69 and MSS SP-89. Install hangers, supports, clamps, and attachments as required to properly support piping from the building structure.
- B. Metal Trapeze Pipe-Hanger Installation: Comply with MSS SP-69 and MSS SP-89. Arrange for grouping of parallel runs of horizontal piping, and support together on field-fabricated trapeze pipe hangers.
1. Pipes of Various Sizes: Support together and space trapezes for smallest pipe size or install intermediate supports for smaller diameter pipes as specified for individual pipe hangers.
 2. Field fabricate from ASTM A 36/A 36M, carbon-steel shapes selected for loads being supported. Weld steel according to AWS D1.1/D1.1M.

- C. Thermal-Hanger Shield Installation: Install in pipe hangers or shield for insulated piping.
- D. Fastener System Installation:
 - 1. Install powder-actuated fasteners for use in lightweight concrete or concrete slabs less than 4 inches thick in concrete after concrete is placed and completely cured. Use operators that are licensed by powder-actuated tool manufacturers. Install fasteners according to powder-actuated tool manufacturer's operating manual.
 - 2. Install mechanical-expansion anchors in concrete after concrete is placed and completely cured. Install fasteners according to the manufacturer's written instructions.
- E. Pipe Stand Installation:
 - 1. Pipe Stand Types except Curb-Mounted Type: Assemble components and mount on smooth roof surface. Do not penetrate roof membrane.
- F. Pipe Positioning-System Installation: Install support devices to make rigid supply and waste piping connections to each plumbing fixture.
- G. Install hangers and supports complete with necessary attachments, inserts, bolts, rods, nuts, washers, and other accessories.
- H. Equipment Support Installation: Fabricate from welded-structural-steel shapes.
- I. Install hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit freedom of movement between pipe anchors, and to facilitate action of expansion joints, expansion loops, expansion bends, and similar units.
- J. Install lateral bracing with pipe hangers and supports to prevent swaying.
- K. Install building attachments within concrete slabs or attach to structural steel. Install additional attachments at concentrated loads, including valves, flanges, and strainers, NPS 2-1/2 and larger and at changes in direction of piping. Install concrete inserts before concrete is placed; fasten inserts to forms and install reinforcing bars through openings at top of inserts.
- L. Load Distribution: Install hangers and supports so that piping live and dead loads and stresses from movement will not be transmitted to connected equipment.
- M. Pipe Slopes: Install hangers and supports to provide indicated pipe slopes and to not exceed maximum pipe deflections allowed by ASME B31.9 for building services piping.
- N. Insulated Piping:
 - 1. Attach clamps and spacers to piping.
 - a. Piping Operating above Ambient Air Temperature: Clamp may project through insulation.
 - b. Piping Operating below Ambient Air Temperature: Use thermal-hanger shield insert with clamp sized to match OD of insert.
 - c. Do not exceed pipe stress limits allowed by ASME B31.9 for building services piping.

2. Install MSS SP-58, Type 39, protection saddles if insulation without vapor barrier is indicated. Fill interior voids with insulation that matches adjoining insulation.
 - a. Option: Thermal-hanger shield inserts may be used. Include steel weight-distribution plate for pipe NPS 4 and larger if pipe is installed on rollers.
3. Install MSS SP-58, Type 40, protective shields on cold piping with vapor barrier. Shields shall span an arc of 180 degrees.
 - a. Option: Thermal-hanger shield inserts may be used. Include steel weight-distribution plate for pipe NPS 4 and larger if pipe is installed on rollers.
4. Shield Dimensions for Pipe: Not less than the following:
 - a. NPS 1/4 to NPS 3-1/2: 12 inches long and 0.048 inch thick.
 - b. NPS 4: 12 inches long and 0.06 inch thick.
5. Thermal-Hanger Shields: Install with insulation same thickness as piping insulation.

3.2 EQUIPMENT SUPPORTS

- A. Fabricate structural-steel stands to suspend equipment from structure overhead or to support equipment above floor.
- B. Grouting: Place grout under supports for equipment and make bearing surface smooth.
- C. Provide lateral bracing, to prevent swaying, for equipment support.

3.3 METAL FABRICATIONS

- A. Cut, drill, and fit miscellaneous metal fabrications for trapeze pipe hangers and equipment supports.
- B. Fit exposed connections together to form hairline joints. Field weld connections that cannot be shop welded because of shipping size limitations.
- C. Field Welding: Comply with AWS D1.1/D1.1M procedures for shielded, metal arc welding; appearance and quality of welds; and methods used in correcting welding work; and with the following:
 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 2. Obtain fusion without undercut or overlap.
 3. Remove welding flux immediately.
 4. Finish welds at exposed connections so no roughness shows after finishing and so contours of welded surfaces match adjacent contours.

3.4 ADJUSTING

- A. Hanger Adjustments: Adjust hangers to distribute loads equally on attachments and to achieve indicated slope of pipe.
- B. Trim excess length of continuous-thread hanger and support rods to 1-1/2 inches.

3.5 PAINTING

- A. Touchup: Clean field welds and abraded areas of shop paint. Paint exposed areas immediately after erecting hangers and supports. Use same materials as used for shop painting. Comply with SSPC-PA 1 requirements for touching up field-painted surfaces.
 - 1. Apply paint by brush or spray to provide a minimum dry film thickness of 2.0 mils.
- B. Galvanized Surfaces: Clean welds, bolted connections, and abraded areas and apply galvanizing-repair paint to comply with ASTM A 780.

3.6 HANGER AND SUPPORT SCHEDULE

- A. Specific hanger and support requirements are in Sections specifying piping systems and equipment.
- B. Comply with MSS SP-69 for pipe-hanger selections and applications that are not specified in piping system Sections.
- C. Use hangers and supports with galvanized metallic coatings for piping and equipment that will not have field-applied finish.
- D. Use nonmetallic coatings on attachments for electrolytic protection where attachments are in direct contact with copper tubing.
- E. Use stainless-steel pipe hangers and stainless-steel attachments for hostile environment applications.
- F. Use copper-plated pipe hangers and stainless-steel attachments for copper piping and tubing.
- G. Use padded hangers for piping that is subject to scratching.
- H. Use thermal-hanger shield inserts for insulated piping and tubing.
- I. Horizontal-Piping Hangers and Supports: Unless otherwise indicated and except as specified in piping system Sections, install the following types:
 - 1. Adjustable, Steel Clevis Hangers (MSS Type 1): For suspension of noninsulated or insulated, stationary pipes NPS 1/2 to NPS 30.
 - 2. Yoke-Type Pipe Clamps (MSS Type 2): For suspension of up to 1050 deg F, pipes NPS 4 to NPS 24, requiring up to 4 inches of insulation.
 - 3. Carbon- or Alloy-Steel, Double-Bolt Pipe Clamps (MSS Type 3): For suspension of pipes NPS 3/4 to NPS 36, requiring clamp flexibility and up to 4 inches of insulation.

4. Steel Pipe Clamps (MSS Type 4): For suspension of cold and hot pipes NPS 1/2 to NPS 24 if little or no insulation is required.
 5. Pipe Hangers (MSS Type 5): For suspension of pipes NPS 1/2 to NPS 4, to allow off-center closure for hanger installation before pipe erection.
 6. Adjustable, Swivel Split- or Solid-Ring Hangers (MSS Type 6): For suspension of noninsulated, stationary pipes NPS 3/4 to NPS 8.
 7. Adjustable, Steel Band Hangers (MSS Type 7): For suspension of noninsulated, stationary pipes NPS 1/2 to NPS 8.
 8. Adjustable Band Hangers (MSS Type 9): For suspension of noninsulated, stationary pipes NPS 1/2 to NPS 8.
 9. Adjustable, Swivel-Ring Band Hangers (MSS Type 10): For suspension of noninsulated, stationary pipes NPS 1/2 to NPS 8.
 10. Split Pipe Ring with or without Turnbuckle Hangers (MSS Type 11): For suspension of noninsulated, stationary pipes NPS 3/8 to NPS 8.
 11. Extension Hinged or Two-Bolt Split Pipe Clamps (MSS Type 12): For suspension of noninsulated, stationary pipes NPS 3/8 to NPS 3.
 12. U-Bolts (MSS Type 24): For support of heavy pipes NPS 1/2 to NPS 30.
 13. Clips (MSS Type 26): For support of insulated pipes not subject to expansion or contraction.
 14. Pipe Saddle Supports (MSS Type 36): For support of pipes NPS 4 to NPS 36, with steel-pipe base stanchion support and cast-iron floor flange or carbon-steel plate.
 15. Pipe Stanchion Saddles (MSS Type 37): For support of pipes NPS 4 to NPS 36, with steel-pipe base stanchion support and cast-iron floor flange or carbon-steel plate, and with U-bolt to retain pipe.
 16. Adjustable Pipe Saddle Supports (MSS Type 38): For stanchion-type support for pipes NPS 2-1/2 to NPS 36 if vertical adjustment is required, with steel-pipe base stanchion support and cast-iron floor flange.
- J. Vertical-Piping Clamps: Unless otherwise indicated and except as specified in piping system Sections, install the following types:
1. Extension Pipe or Riser Clamps (MSS Type 8): For support of pipe risers NPS 3/4 to NPS 24.
 2. Carbon- or Alloy-Steel Riser Clamps (MSS Type 42): For support of pipe risers NPS 3/4 to NPS 24 if longer ends are required for riser clamps.
- K. Hanger-Rod Attachments: Unless otherwise indicated and except as specified in piping system Sections, install the following types:
1. Steel Turnbuckles (MSS Type 13): For adjustment up to 6 inches for heavy loads.
 2. Steel Clevises (MSS Type 14): For 120 to 450 deg F piping installations.
 3. Swivel Turnbuckles (MSS Type 15): For use with MSS Type 11, split pipe rings.
 4. Malleable-Iron Sockets (MSS Type 16): For attaching hanger rods to various types of building attachments.
 5. Steel Weldless Eye Nuts (MSS Type 17): For 120 to 450 deg F piping installations.
- L. Building Attachments: Unless otherwise indicated and except as specified in piping system Sections, install the following types:
1. Steel or Malleable Concrete Inserts (MSS Type 18): For upper attachment to suspend pipe hangers from concrete ceiling.

2. Top-Beam C-Clamps (MSS Type 19): For use under roof installations with bar-joint construction, to attach to top flange of structural shape.
 3. Side-Beam or Channel Clamps (MSS Type 20): For attaching to bottom flange of beams, channels, or angles.
 4. Center-Beam Clamps (MSS Type 21): For attaching to center of bottom flange of beams.
 5. Welded Beam Attachments (MSS Type 22): For attaching to bottom of beams if loads are considerable and rod sizes are large.
 6. C-Clamps (MSS Type 23): For structural shapes.
 7. Top-Beam Clamps (MSS Type 25): For top of beams if hanger rod is required tangent to flange edge.
 8. Side-Beam Clamps (MSS Type 27): For bottom of steel I-beams.
 9. Steel-Beam Clamps with Eye Nuts (MSS Type 28): For attaching to bottom of steel I-beams for heavy loads.
 10. Linked-Steel Clamps with Eye Nuts (MSS Type 29): For attaching to bottom of steel I-beams for heavy loads, with link extensions.
 11. Malleable-Beam Clamps with Extension Pieces (MSS Type 30): For attaching to structural steel.
 12. Welded-Steel Brackets: For support of pipes from below or for suspending from above by using clip and rod. Use one of the following for indicated loads:
 - a. Light (MSS Type 31): 750 lb.
 - b. Medium (MSS Type 32): 1500 lb.
 - c. Heavy (MSS Type 33): 3000 lb.
 13. Side-Beam Brackets (MSS Type 34): For sides of steel or wooden beams.
 14. Plate Lugs (MSS Type 57): For attaching to steel beams if flexibility at beam is required.
 15. Horizontal Travelers (MSS Type 58): For supporting piping systems subject to linear horizontal movement where headroom is limited.
- M. Saddles and Shields: Unless otherwise indicated and except as specified in piping system Sections, install the following types:
1. Steel-Pipe-Covering Protection Saddles (MSS Type 39): To fill interior voids with insulation that matches adjoining insulation.
 2. Protection Shields (MSS Type 40): Of length recommended in writing by manufacturer to prevent crushing insulation.
 3. Thermal-Hanger Shield Inserts: For supporting insulated pipe.
- N. Comply with MSS SP-69 for trapeze pipe-hanger selections and applications that are not specified in piping system Sections.
- O. Comply with MFMA-103 for metal framing system selections and applications that are not specified in piping system Sections.
- P. Use powder-actuated fasteners or mechanical-expansion anchors instead of building attachments where required in concrete construction.
- Q. Use pipe positioning systems in pipe spaces behind plumbing fixtures to support supply and waste piping for plumbing fixtures.

END OF SECTION 22 05 29

SECTION 22 05 53 - IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Equipment labels.
 - 2. Warning signs and labels.
 - 3. Pipe labels.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.

1.4 COORDINATION

- A. Coordinate installation of identifying devices with completion of covering and painting of surfaces where devices are to be applied.
- B. Coordinate installation of identifying devices with locations of access panels and doors.
- C. Install identifying devices before installing acoustical ceilings and similar concealment.

PART 2 - PRODUCTS

2.1 EQUIPMENT LABELS

- A. Material and Thickness: Multilayer, multicolor, plastic phenolic labels for mechanical engraving, 1/8 inch thick, and having predrilled holes for attachment hardware.
- B. Letter Color: White.
- C. Background Color: Black.
- D. Maximum Temperature: Able to withstand temperatures up to 160 deg F.

- E. Minimum Label Size: Length and width vary for required label content, but not less than 2-1/2 by 3/4 inch.
- F. Minimum Letter Size: 1/4 inch for name of units if viewing distance is less than 24 inches, 1/2 inch for viewing distances up to 72 inches, and proportionately larger lettering for greater viewing distances. Include secondary lettering two-thirds to three-fourths the size of principal lettering.
- G. Fasteners: Stainless-steel rivets or self-tapping screws.
- H. Label Content: Include equipment's Drawing designation or unique equipment number, Drawing numbers where equipment is indicated (plans, details, and schedules), plus the Specification Section number and title where equipment is specified.
- I. Equipment Label Schedule: For each item of equipment to be labeled, on 8-1/2-by-11-inch (A4) bond paper. Tabulate equipment identification number and identify Drawing numbers where equipment is indicated (plans, details, and schedules), plus the Specification Section number and title where equipment is specified. Equipment schedule shall be included in operation and maintenance data.

2.2 WARNING SIGNS AND LABELS

- A. Material and Thickness: Multilayer, multicolor, plastic labels for mechanical engraving, 1/8 inch thick, and having predrilled holes for attachment hardware.
- B. Letter Color: White.
- C. Background Color: Red.
- D. Maximum Temperature: Able to withstand temperatures up to 160 deg F.
- E. Minimum Label Size: Length and width vary for required label content, but not less than 2-1/2 by 3/4 inch.
- F. Minimum Letter Size: 1/4 inch for name of units if viewing distance is less than 24 inches, 1/2 inch for viewing distances up to 72 inches, and proportionately larger lettering for greater viewing distances. Include secondary lettering two-thirds to three-fourths the size of principal lettering.
- G. Fasteners: Stainless-steel rivets or self-tapping screws.
- H. Label Content: Include caution and warning information, plus emergency notification instructions.

2.3 PIPE LABELS

- A. General Requirements for Manufactured Pipe Labels: Preprinted, color-coded, with lettering indicating service, and showing flow direction.
- B. Self-Adhesive Pipe Labels: Printed plastic with contact-type, permanent-adhesive backing.

- C. Pipe Label Contents: Include identification of piping service using same designations or abbreviations as used on Drawings, pipe size, and an arrow indicating flow direction.
 - 1. Flow-Direction Arrows: Integral with piping system service lettering to accommodate both directions, or as separate unit on each pipe label to indicate flow direction.
 - 2. Lettering Size: At least 1-1/2 inches high.
 - 3. Designation abbreviations:
 - a. DOMESTIC COLD WATER
 - b. DOMESTIC HOT WATER

PART 3 - EXECUTION

3.1 PREPARATION

- A. Clean piping and equipment surfaces of substances that could impair bond of identification devices, including dirt, oil, grease, release agents, and incompatible primers, paints, and encapsulants.

3.2 EQUIPMENT LABEL INSTALLATION

- A. Install or permanently fasten labels on each major item of plumbing equipment.
- B. Locate equipment labels where accessible and visible.

3.3 PIPE LABEL INSTALLATION

- A. Piping Color-Coding: Painting of piping is specified in Division 9.
- B. Locate pipe labels where piping is exposed or above accessible ceilings in finished spaces; machine rooms; accessible maintenance spaces such as shafts, tunnels, and plenums; and exterior exposed locations as follows:
 - 1. Near each valve and control device.
 - 2. Near each branch connection, excluding short takeoffs for fixtures and terminal units. Where flow pattern is not obvious, mark each pipe at branch.
 - 3. Near penetrations through walls, floors, ceilings, and inaccessible enclosures.
 - 4. At access doors, manholes, and similar access points that permit view of concealed piping.
 - 5. Near major equipment items and other points of origination and termination.
 - 6. Spaced at maximum intervals of 50 feet along each run. Reduce intervals to 25 feet in areas of congested piping and equipment or in concealed spaces.
 - 7. Pipe stenciling or painting of piping identification is not permitted.
- C. Pipe Label Color Schedule:
 - 1. Low-Pressure, Compressed-Air Piping:
 - a. Background Color: Blue.

- b. Letter Color: White.
- 2. Domestic Cold-Water Piping:
 - a. Background Color: Green.
 - b. Letter Color: White.
- 3. Domestic Hot-Water Piping:
 - a. Background Color: Yellow.
 - b. Letter Color: Black.
- 4. Sanitary Waste, Vent, and Storm Piping:
 - a. Background Color: Black.
 - b. Letter Color: White.
- 5. Natural Gas Piping:
 - a. Background Color: Yellow.
 - b. Letter Color: Black.

END OF SECTION 22 05 53

SECTION 22 07 19 - PLUMBING PIPING INSULATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes insulating the following plumbing piping services:
 - 1. Domestic cold-water piping.
 - 2. Domestic hot-water piping.
 - 3. Domestic recirculating hot-water piping.
 - 4. Sanitary waste piping exposed to freezing conditions.
 - 5. Supplies and drains for handicap-accessible lavatories and sinks.
- B. Related Sections:
 - 1. Section 22 07 16 "Plumbing Equipment Insulation."

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
 - 1. Detail application of protective shields, saddles, and inserts at hangers for each type of insulation and hanger.
 - 2. Detail attachment and covering of heat tracing inside insulation.
 - 3. Detail insulation application at pipe expansion joints for each type of insulation.
 - 4. Detail insulation application at elbows, fittings, flanges, valves, and specialties for each type of insulation.
 - 5. Detail removable insulation at piping specialties, equipment connections, and access panels.
 - 6. Detail application of field-applied jackets.

1.4 INFORMATIONAL SUBMITTALS

- A. Field quality-control reports.

1.5 QUALITY ASSURANCE

- A. Surface-Burning Characteristics: For insulation and related materials, as determined by testing identical products according to ASTM E 84 by a testing agency acceptable to authorities having jurisdiction. Factory label insulation and jacket materials and adhesive, mastic, tapes, and cement material containers, with appropriate markings of applicable testing agency.
 - 1. Insulation Installed Indoors: Flame-spread index of 25 or less, and smoke-developed index of 50 or less.
 - 2. Insulation Installed Outdoors: Flame-spread index of 75 or less, and smoke-developed index of 150 or less.
- B. Comply with the following applicable standards and other requirements specified for miscellaneous components:
 - 1. Supply and Drain Protective Shielding Guards: ICC A117.1.

1.6 COORDINATION

- A. Coordinate clearance requirements with piping Installer for piping insulation application. Before preparing piping Shop Drawings, establish and maintain clearance requirements for installation of insulation and field-applied jackets and finishes and for space required for maintenance.
- B. Coordinate installation and testing of heat tracing. Schedule insulation application after pressure testing systems and, where required, after installing and testing heat tracing. Insulation application may begin on segments that have satisfactory test results.

PART 2 - PRODUCTS

2.1 INSULATION MATERIALS

- A. Comply with requirements in "Piping Insulation Schedule, General," "Indoor Piping Insulation Schedule," "Outdoor, Aboveground Piping Insulation Schedule," and "Outdoor, Underground Piping Insulation Schedule" articles for where insulating materials shall be applied.
- B. Products shall not contain asbestos, lead, mercury, or mercury compounds.
- C. Products that come in contact with stainless steel shall have a leachable chloride content of less than 50 ppm when tested according to ASTM C 871.
- D. Insulation materials for use on austenitic stainless steel shall be qualified as acceptable according to ASTM C 795.
- E. Foam insulation materials shall not use CFC or HCFC blowing agents in the manufacturing process.

- F. Cellular Glass: Inorganic, incombustible, foamed or cellulated glass with annealed, rigid, hermetically sealed cells. Factory-applied jacket requirements are specified in "Factory-Applied Jackets" Article.
1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Pittsburgh Corning Corporation; Foamglas.
 - b. Engineer approved equal.
 2. Special-Shaped Insulation: ASTM C 552, Type III.
 3. Preformed Pipe Insulation without Jacket: Comply with ASTM C 552, Type II, Class 1.
 4. Preformed Pipe Insulation with Factory-Applied ASJ: Comply with ASTM C 552, Type II, Class 2.
 5. Factory fabricate shapes according to ASTM C 450 and ASTM C 585.
- G. Flexible Elastomeric Insulation: Closed-cell, sponge- or expanded-rubber materials. Comply with ASTM C 534, Type I for tubular materials.
1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Aeroflex USA, Inc.; Aerocel.
 - b. Armacell LLC; AP Armaflex.
 - c. K-Flex USA; Insul-Lock, Insul-Tube, and K-FLEX LS.
- H. Mineral-Fiber, Preformed Pipe Insulation:
1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Johns Manville; Micro-Lok.
 - b. Knauf Insulation; 1000-Degree Pipe Insulation.
 - c. Owens Corning; Fiberglas Pipe Insulation.
 2. Type I, 850 Deg F Materials: Mineral or glass fibers bonded with a thermosetting resin. Comply with ASTM C 547, Type I, Grade A, with factory-applied ASJ. Factory-applied jacket requirements are specified in "Factory-Applied Jackets" Article.

2.2 INSULATING CEMENTS

- A. Mineral-Fiber, Hydraulic-Setting Insulating and Finishing Cement: Comply with ASTM C 449.
1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Ramco Insulation, Inc.; Ramcote 1200 and Quik-Cote.
 - b. Engineer approved equal.

2.3 ADHESIVES

- A. Materials shall be compatible with insulation materials, jackets, and substrates and for bonding insulation to itself and to surfaces to be insulated, unless otherwise indicated.

- B. Cellular-Glass Adhesive: Two-component, thermosetting urethane adhesive containing no flammable solvents, with a service temperature range of minus 100 to plus 200 deg F.
1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Foster Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; 81-84.
 - b. Engineer approved equal.
 2. For indoor applications, adhesive shall have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- C. Flexible Elastomeric and Polyolefin Adhesive: Comply with MIL-A-24179A, Type II, Class I.
1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Aeroflex USA, Inc.; Aeroseal.
 - b. Armacell LLC; Armaflex 520 Adhesive.
 - c. Foster Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; 85-75.
 - d. K-Flex USA; R-373 Contact Adhesive.
 2. For indoor applications, adhesive shall have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- D. Mineral-Fiber Adhesive: Comply with MIL-A-3316C, Class 2, Grade A.
1. Products: Subject to compliance with requirements, [provide the following] [provide one of the following] [available products that may be incorporated into the Work include, but are not limited to, the following]:
 - a. Childers Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; CP-127.
 - b. Eagle Bridges - Marathon Industries; 225.
 - c. Foster Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; 85-60/85-70.
 - d. Mon-Eco Industries, Inc.; 22-25.
 2. For indoor applications, adhesive shall have a VOC content of 80 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- E. ASJ Adhesive, and FSK Jacket Adhesive: Comply with MIL-A-3316C, Class 2, Grade A for bonding insulation jacket lap seams and joints.
1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Childers Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; CP-82.
 - b. Eagle Bridges - Marathon Industries; 225.

- c. Foster Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; 85-20.
 - d. Mon-Eco Industries, Inc.; 22-25.
2. For indoor applications, adhesive shall have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

F. PVC Jacket Adhesive: Compatible with PVC jacket.

1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Dow Corning Corporation; 739, Dow Silicone.
 - b. Johns Manville; Zeston Perma-Weld, CEEL-TITE Solvent Welding Adhesive.
 - c. P.I.C. Plastics, Inc.; Welding Adhesive.
 - d. Speedline Corporation; Polyco VP Adhesive.
2. For indoor applications, adhesive shall have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

2.4 MASTICS

A. Materials shall be compatible with insulation materials, jackets, and substrates; comply with MIL-PRF-19565C, Type II.

1. For indoor applications, use mastics that have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

B. Vapor-Barrier Mastic: Water based; suitable for indoor use on below-ambient services.

1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Foster Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; 30-80/30-90.
 - b. Vimasco Corporation; 749.
2. Water-Vapor Permeance: ASTM E 96/E 96M, Procedure B, 0.013 perm at 43-mil dry film thickness.
3. Service Temperature Range: Minus 20 to plus 180 deg F.
4. Solids Content: ASTM D 1644, 58 percent by volume and 70 percent by weight.
5. Color: White.

C. Vapor-Barrier Mastic: Solvent based; suitable for outdoor use on below-ambient services.

1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Childers Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; Encacel.
 - b. Eagle Bridges - Marathon Industries; 570.

- c. Foster Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; 60-95/60-96.
 - 2. Water-Vapor Permeance: ASTM F 1249, 0.05 perm at 30-mil dry film thickness.
 - 3. Service Temperature Range: Minus 50 to plus 220 deg F.
 - 4. Solids Content: ASTM D 1644, 33 percent by volume and 46 percent by weight.
 - 5. Color: White.
- D. Breather Mastic: Water based; suitable for indoor and outdoor use on above-ambient services.
- 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Childers Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; CP-10.
 - b. Eagle Bridges - Marathon Industries; 550.
 - c. Foster Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; 46-50.
 - d. Mon-Eco Industries, Inc.; 55-50.
 - e. Vimasco Corporation; WC-1/WC-5.
 - 2. Water-Vapor Permeance: ASTM F 1249, 1.8 perms at 0.0625-inch dry film thickness.
 - 3. Service Temperature Range: Minus 20 to plus 180 deg F.
 - 4. Solids Content: 60 percent by volume and 66 percent by weight.
 - 5. Color: White.

2.5 SEALANTS

A. Joint Sealants:

- 1. Joint Sealants for Cellular-Glass Products: Subject to compliance with requirements, provide one of the following:
 - a. Childers Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; CP-76.
 - b. Eagle Bridges - Marathon Industries; 405.
 - c. Foster Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; 30-45.
 - d. Mon-Eco Industries, Inc.; 44-05.
 - e. Pittsburgh Corning Corporation; Pittseal 444.
- 2. Materials shall be compatible with insulation materials, jackets, and substrates.
- 3. Permanently flexible, elastomeric sealant.
- 4. Service Temperature Range: Minus 100 to plus 300 deg F.
- 5. Color: White or gray.
- 6. For indoor applications, sealants shall have a VOC content of 420 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

B. FSK and Metal Jacket Flashing Sealants:

- 1. Products: Subject to compliance with requirements, provide one of the following:

- a. Childers Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; CP-76.
 - b. Eagle Bridges - Marathon Industries; 405.
 - c. Foster Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; 95-44.
 - d. Mon-Eco Industries, Inc.; 44-05.
 2. Materials shall be compatible with insulation materials, jackets, and substrates.
 3. Fire- and water-resistant, flexible, elastomeric sealant.
 4. Service Temperature Range: Minus 40 to plus 250 deg F.
 5. Color: Aluminum.
 6. For indoor applications, sealants shall have a VOC content of 420 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- C. ASJ Flashing Sealants, and Vinyl, PVDC, and PVC Jacket Flashing Sealants:
1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Childers Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; CP-76.
 - b. Engineer approved equal.
 2. Materials shall be compatible with insulation materials, jackets, and substrates.
 3. Fire- and water-resistant, flexible, elastomeric sealant.
 4. Service Temperature Range: Minus 40 to plus 250 deg F (Minus 40 to plus 121 deg C).
 5. Color: White.
 6. For indoor applications, sealants shall have a VOC content of 420 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

2.6 FACTORY-APPLIED JACKETS

- A. Insulation system schedules indicate factory-applied jackets on various applications. When factory-applied jackets are indicated, comply with the following:
1. ASJ: White, kraft-paper, fiberglass-reinforced scrim with aluminum-foil backing; complying with ASTM C 1136, Type I.
 2. ASJ-SSL: ASJ with self-sealing, pressure-sensitive, acrylic-based adhesive covered by a removable protective strip; complying with ASTM C 1136, Type I.
 3. FSK Jacket: Aluminum-foil, fiberglass-reinforced scrim with kraft-paper backing; complying with ASTM C 1136, Type II.

2.7 FIELD-APPLIED FABRIC-REINFORCING MESH

- A. Woven Polyester Fabric: Approximately 1 oz./sq. yd. with a thread count of 10 strands by 10 strands/sq. in., in a Leno weave, for pipe.
1. Products: Subject to compliance with requirements, provide one of the following:

- a. Foster Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; Mast-A-Fab.
- b. Vimasco Corporation; Elastafab 894.

2.8 FIELD-APPLIED JACKETS

- A. Field-applied jackets shall comply with ASTM C 921, Type I, unless otherwise indicated.
- B. PVC Jacket: High-impact-resistant, UV-resistant PVC complying with ASTM D 1784, Class 16354-C; thickness as scheduled; roll stock ready for shop or field cutting and forming. Thickness is indicated in field-applied jacket schedules.
 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Johns Manville; Zeston.
 - b. P.I.C. Plastics, Inc.; FG Series.
 - c. Proto Corporation; LoSmoke.
 - d. Speedline Corporation; SmokeSafe.
 2. Adhesive: As recommended by jacket material manufacturer.
 3. Color: White.
 4. Factory-fabricated fitting covers to match jacket if available; otherwise, field fabricate.
 - a. Shapes: 45- and 90-degree, short- and long-radius elbows, tees, valves, flanges, unions, reducers, end caps, soil-pipe hubs, traps, mechanical joints, and P-trap and supply covers for lavatories.
- C. Aluminum Jacket: Comply with ASTM B 209, Alloy 3003, 3005, 3105, or 5005, Temper H-14.
 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Childers Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; Metal Jacketing Systems.
 - b. ITW Insulation Systems; Aluminum and Stainless Steel Jacketing.
 - c. RPR Products, Inc.; Insul-Mate.
 2. Sheet and roll stock ready for shop or field sizing.
 3. Finish and thickness are indicated in field-applied jacket schedules.
 4. Moisture Barrier for Indoor Applications: 3-mil- thick, heat-bonded polyethylene and kraft paper.
 5. Moisture Barrier for Outdoor Applications: 3-mil- thick, heat-bonded polyethylene and kraft paper.
 6. Factory-Fabricated Fitting Covers:
 - a. Same material, finish, and thickness as jacket.
 - b. Preformed 2-piece or gore, 45- and 90-degree, short- and long-radius elbows.
 - c. Tee covers.
 - d. Flange and union covers.
 - e. End caps.

- f. Beveled collars.
- g. Valve covers.
- h. Field fabricate fitting covers only if factory-fabricated fitting covers are not available.

2.9 TAPES

- A. ASJ Tape: White vapor-retarder tape matching factory-applied jacket with acrylic adhesive, complying with ASTM C 1136.
 - 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. ABI, Ideal Tape Division; 428 AWF ASJ.
 - b. Avery Dennison Corporation, Specialty Tapes Division; Fasson 0836.
 - c. Compac Corporation; 104 and 105.
 - d. Venture Tape; 1540 CW Plus, 1542 CW Plus, and 1542 CW Plus/SQ.
 - 2. Width: 3 inches.
 - 3. Thickness: 11.5 mils.
 - 4. Adhesion: 90 ounces force/inch in width.
 - 5. Elongation: 2 percent.
 - 6. Tensile Strength: 40 lbf/inch in width.
 - 7. ASJ Tape Disks and Squares: Precut disks or squares of ASJ tape.
- B. FSK Tape: Foil-face, vapor-retarder tape matching factory-applied jacket with acrylic adhesive; complying with ASTM C 1136.
 - 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. ABI, Ideal Tape Division; 491 AWF FSK.
 - b. Avery Dennison Corporation, Specialty Tapes Division; Fasson 0827.
 - c. Compac Corporation; 110 and 111.
 - d. Venture Tape; 1525 CW NT, 1528 CW, and 1528 CW/SQ.
 - 2. Width: 3 inches.
 - 3. Thickness: 6.5 mils.
 - 4. Adhesion: 90 ounces force/inch in width.
 - 5. Elongation: 2 percent.
 - 6. Tensile Strength: 40 lbf/inch in width.
 - 7. FSK Tape Disks and Squares: Precut disks or squares of FSK tape.
- C. PVC Tape: White vapor-retarder tape matching field-applied PVC jacket with acrylic adhesive; suitable for indoor and outdoor applications.
 - 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. ABI, Ideal Tape Division; 370 White PVC tape.
 - b. Compac Corporation; 130.
 - c. Venture Tape; 1506 CW NS.

2. Width: 2 inches.
3. Thickness: 6 mils.
4. Adhesion: 64 ounces force/inch in width.
5. Elongation: 500 percent.
6. Tensile Strength: 18 lbf/inch in width.

D. Aluminum-Foil Tape: Vapor-retarder tape with acrylic adhesive.

1. Products: Subject to compliance with requirements, provide one of the following:
 - a. ABI, Ideal Tape Division; 488 AWF.
 - b. Avery Dennison Corporation, Specialty Tapes Division; Fasson 0800.
 - c. Compac Corporation; 120.
 - d. Venture Tape; 3520 CW.
2. Width: 2 inches.
3. Thickness: 3.7 mils.
4. Adhesion: 100 ounces force/inch in width.
5. Elongation: 5 percent.
6. Tensile Strength: 34 lbf/inch in width.

2.10 SECUREMENTS

- A. Aluminum Bands: ASTM B 209, Alloy 3003, 3005, 3105, or 5005; Temper H-14, 0.020 inch thick, 3/4 inch wide with wing seal or closed seal.
1. Products: Subject to compliance with requirements, provide one of the following:
 - a. ITW Insulation Systems; Gerrard Strapping and Seals.
 - b. RPR Products, Inc.; Insul-Mate Strapping and Seals.

2.11 PROTECTIVE SHIELDING GUARDS

A. Protective Shielding Pipe Covers:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Engineered Brass Company.
 - b. Insul-Tect Products Co.; a subsidiary of MVG Molded Products.
 - c. McGuire Manufacturing.
 - d. Plumberex.
 - e. Truebro; a brand of IPS Corporation.
 - f. Zurn Industries, LLC; Tubular Brass Plumbing Products Operation.
2. Description: Manufactured plastic wraps for covering plumbing fixture hot- and cold-water supplies and trap and drain piping. Comply with Americans with Disabilities Act (ADA) requirements.

B. Protective Shielding Piping Enclosures:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Truebro; a brand of IPS Corporation.
 - b. Zurn Industries, LLC; Tubular Brass Plumbing Products Operation.
2. Description: Manufactured plastic enclosure for covering plumbing fixture hot- and cold-water supplies and trap and drain piping. Comply with ADA requirements.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Surface Preparation: Clean and dry surfaces to receive insulation. Remove materials that will adversely affect insulation application.
- B. Coordinate insulation installation with the trade installing heat tracing. Comply with requirements for heat tracing that apply to insulation.
- C. Mix insulating cements with clean potable water; if insulating cements are to be in contact with stainless-steel surfaces, use demineralized water.

3.2 GENERAL INSTALLATION REQUIREMENTS

- A. Install insulation materials, accessories, and finishes with smooth, straight, and even surfaces; free of voids throughout the length of piping including fittings, valves, and specialties.
- B. Coordinate with heat trace installation.**
- C. Install insulation materials, forms, vapor barriers or retarders, jackets, and thicknesses required for each item of pipe system as specified in insulation system schedules.
- D. Install accessories compatible with insulation materials and suitable for the service. Install accessories that do not corrode, soften, or otherwise attack insulation or jacket in either wet or dry state.
- E. Install insulation with longitudinal seams at top and bottom of horizontal runs.
- F. Install multiple layers of insulation with longitudinal and end seams staggered.
- G. Do not weld brackets, clips, or other attachment devices to piping, fittings, and specialties.
- H. Keep insulation materials dry during application and finishing.
- I. Install insulation with tight longitudinal seams and end joints. Bond seams and joints with adhesive recommended by insulation material manufacturer.
- J. Install insulation with least number of joints practical.

- K. Where vapor barrier is indicated, seal joints, seams, and penetrations in insulation at hangers, supports, anchors, and other projections with vapor-barrier mastic.
 - 1. Install insulation continuously through hangers and around anchor attachments.
 - 2. For insulation application where vapor barriers are indicated, extend insulation on anchor legs from point of attachment to supported item to point of attachment to structure. Taper and seal ends at attachment to structure with vapor-barrier mastic.
 - 3. Install insert materials and install insulation to tightly join the insert. Seal insulation to insulation inserts with adhesive or sealing compound recommended by insulation material manufacturer.
 - 4. Cover inserts with jacket material matching adjacent pipe insulation. Install shields over jacket, arranged to protect jacket from tear or puncture by hanger, support, and shield.
- L. Apply adhesives, mastics, and sealants at manufacturer's recommended coverage rate and wet and dry film thicknesses.
- M. Install insulation with factory-applied jackets as follows:
 - 1. Draw jacket tight and smooth.
 - 2. Cover circumferential joints with 3-inch- wide strips, of same material as insulation jacket. Secure strips with adhesive and outward clinching staples along both edges of strip, spaced 4 inches o.c.
 - 3. Overlap jacket longitudinal seams at least 1-1/2 inches. Install insulation with longitudinal seams at bottom of pipe. Clean and dry surface to receive self-sealing lap. Staple laps with outward clinching staples along edge at 2 inches o.c.
 - a. For below-ambient services, apply vapor-barrier mastic over staples.
 - 4. Cover joints and seams with tape, according to insulation material manufacturer's written instructions, to maintain vapor seal.
 - 5. Where vapor barriers are indicated, apply vapor-barrier mastic on seams and joints and at ends adjacent to pipe flanges and fittings.
- N. Cut insulation in a manner to avoid compressing insulation more than 75 percent of its nominal thickness.
- O. Finish installation with systems at operating conditions. Repair joint separations and cracking due to thermal movement.
- P. Repair damaged insulation facings by applying same facing material over damaged areas. Extend patches at least 4 inches beyond damaged areas. Adhere, staple, and seal patches similar to butt joints.
- Q. For above-ambient services, do not install insulation to the following:
 - 1. Vibration-control devices.
 - 2. Testing agency labels and stamps.
 - 3. Nameplates and data plates.
 - 4. Cleanouts.

3.3 PENETRATIONS

- A. Insulation Installation at Roof Penetrations: Install insulation continuously through roof penetrations.
 - 1. Seal penetrations with flashing sealant.
 - 2. For applications requiring only indoor insulation, terminate insulation above roof surface and seal with joint sealant. For applications requiring indoor and outdoor insulation, install insulation for outdoor applications tightly joined to indoor insulation ends. Seal joint with joint sealant.
 - 3. Extend jacket of outdoor insulation outside roof flashing at least 2 inches below top of roof flashing.
 - 4. Seal jacket to roof flashing with flashing sealant.
- B. Insulation Installation at Underground Exterior Wall Penetrations: Terminate insulation flush with sleeve seal. Seal terminations with flashing sealant.
- C. Insulation Installation at Aboveground Exterior Wall Penetrations: Install insulation continuously through wall penetrations.
 - 1. Seal penetrations with flashing sealant.
 - 2. For applications requiring only indoor insulation, terminate insulation inside wall surface and seal with joint sealant. For applications requiring indoor and outdoor insulation, install insulation for outdoor applications tightly joined to indoor insulation ends. Seal joint with joint sealant.
 - 3. Extend jacket of outdoor insulation outside wall flashing and overlap wall flashing at least 2 inches.
 - 4. Seal jacket to wall flashing with flashing sealant.
- D. Insulation Installation at Interior Wall and Partition Penetrations (That Are Not Fire Rated): Install insulation continuously through walls and partitions.
- E. Insulation Installation at Fire-Rated Wall and Partition Penetrations: Install insulation continuously through penetrations of fire-rated walls and partitions.
 - 1. Comply with requirements in Section 078413 "Penetration Firestopping" for firestopping and fire-resistive joint sealers.
- F. Insulation Installation at Floor Penetrations:
 - 1. Pipe: Install insulation continuously through floor penetrations.
 - 2. Seal penetrations through fire-rated assemblies. Comply with requirements in Section 078413 "Penetration Firestopping."

3.4 GENERAL PIPE INSULATION INSTALLATION

- A. Requirements in this article generally apply to all insulation materials except where more specific requirements are specified in various pipe insulation material installation articles.
- B. Insulation Installation on Fittings, Valves, Strainers, Flanges, and Unions:

1. Install insulation over fittings, valves, strainers, flanges, unions, and other specialties with continuous thermal and vapor-retarder integrity unless otherwise indicated.
 2. Insulate pipe elbows using preformed fitting insulation or mitered fittings made from same material and density as adjacent pipe insulation. Each piece shall be butted tightly against adjoining piece and bonded with adhesive. Fill joints, seams, voids, and irregular surfaces with insulating cement finished to a smooth, hard, and uniform contour that is uniform with adjoining pipe insulation.
 3. Insulate tee fittings with preformed fitting insulation or sectional pipe insulation of same material and thickness as used for adjacent pipe. Cut sectional pipe insulation to fit. Butt each section closely to the next and hold in place with tie wire. Bond pieces with adhesive.
 4. Insulate valves using preformed fitting insulation or sectional pipe insulation of same material, density, and thickness as used for adjacent pipe. Overlap adjoining pipe insulation by not less than two times the thickness of pipe insulation, or one pipe diameter, whichever is thicker. For valves, insulate up to and including the bonnets, valve stuffing-box studs, bolts, and nuts. Fill joints, seams, and irregular surfaces with insulating cement.
 5. Insulate strainers using preformed fitting insulation or sectional pipe insulation of same material, density, and thickness as used for adjacent pipe. Overlap adjoining pipe insulation by not less than two times the thickness of pipe insulation, or one pipe diameter, whichever is thicker. Fill joints, seams, and irregular surfaces with insulating cement. Insulate strainers so strainer basket flange or plug can be easily removed and replaced without damaging the insulation and jacket. Provide a removable reusable insulation cover. For below-ambient services, provide a design that maintains vapor barrier.
 6. Insulate flanges and unions using a section of oversized preformed pipe insulation. Overlap adjoining pipe insulation by not less than two times the thickness of pipe insulation, or one pipe diameter, whichever is thicker.
 7. Cover segmented insulated surfaces with a layer of finishing cement and coat with a mastic. Install vapor-barrier mastic for below-ambient services and a breather mastic for above-ambient services. Reinforce the mastic with fabric-reinforcing mesh. Trowel the mastic to a smooth and well-shaped contour.
 8. For services not specified to receive a field-applied jacket except for flexible elastomeric and polyolefin, install fitted PVC cover over elbows, tees, strainers, valves, flanges, and unions. Terminate ends with PVC end caps. Tape PVC covers to adjoining insulation facing using PVC tape.
 9. Stencil or label the outside insulation jacket of each union with the word "union." Match size and color of pipe labels.
- C. Insulate instrument connections for thermometers, pressure gages, pressure temperature taps, test connections, flow meters, sensors, switches, and transmitters on insulated pipes. Shape insulation at these connections by tapering it to and around the connection with insulating cement and finish with finishing cement, mastic, and flashing sealant.
- D. Install removable insulation covers at locations indicated. Installation shall conform to the following:
1. Make removable flange and union insulation from sectional pipe insulation of same thickness as that on adjoining pipe. Install same insulation jacket as adjoining pipe insulation.

2. When flange and union covers are made from sectional pipe insulation, extend insulation from flanges or union long at least two times the insulation thickness over adjacent pipe insulation on each side of flange or union. Secure flange cover in place with stainless-steel or aluminum bands. Select band material compatible with insulation and jacket.
3. Construct removable valve insulation covers in same manner as for flanges, except divide the two-part section on the vertical center line of valve body.
4. When covers are made from block insulation, make two halves, each consisting of mitered blocks wired to stainless-steel fabric. Secure this wire frame, with its attached insulation, to flanges with tie wire. Extend insulation at least 2 inches over adjacent pipe insulation on each side of valve. Fill space between flange or union cover and pipe insulation with insulating cement. Finish cover assembly with insulating cement applied in two coats. After first coat is dry, apply and trowel second coat to a smooth finish.
5. Unless a PVC jacket is indicated in field-applied jacket schedules, finish exposed surfaces with a metal jacket.

3.5 INSTALLATION OF CELLULAR-GLASS INSULATION

A. Insulation Installation on Straight Pipes and Tubes:

1. Secure each layer of insulation to pipe with wire or bands and tighten bands without deforming insulation materials.
2. Where vapor barriers are indicated, seal longitudinal seams, end joints, and protrusions with vapor-barrier mastic and joint sealant.
3. For insulation with factory-applied jackets on above-ambient services, secure laps with outward clinched staples at 6 inches o.c.
4. For insulation with factory-applied jackets on below-ambient services, do not staple longitudinal tabs. Instead, secure tabs with additional adhesive as recommended by insulation material manufacturer and seal with vapor-barrier mastic and flashing sealant.

B. Insulation Installation on Pipe Flanges:

1. Install preformed pipe insulation to outer diameter of pipe flange.
2. Make width of insulation section same as overall width of flange and bolts, plus twice the thickness of pipe insulation.
3. Fill voids between inner circumference of flange insulation and outer circumference of adjacent straight pipe segments with cut sections of cellular-glass block insulation of same thickness as pipe insulation.
4. Install jacket material with manufacturer's recommended adhesive, overlap seams at least 1 inch, and seal joints with flashing sealant.

C. Insulation Installation on Pipe Fittings and Elbows:

1. Install preformed sections of same material as straight segments of pipe insulation when available. Secure according to manufacturer's written instructions.
2. When preformed sections of insulation are not available, install mitered sections of cellular-glass insulation. Secure insulation materials with wire or bands.

D. Insulation Installation on Valves and Pipe Specialties:

1. Install preformed sections of cellular-glass insulation to valve body.

2. Arrange insulation to permit access to packing and to allow valve operation without disturbing insulation.
3. Install insulation to flanges as specified for flange insulation application.

3.6 INSTALLATION OF FLEXIBLE ELASTOMERIC INSULATION

- A. Seal longitudinal seams and end joints with manufacturer's recommended adhesive to eliminate openings in insulation that allow passage of air to surface being insulated.
- B. Insulation Installation on Pipe Flanges:
 1. Install pipe insulation to outer diameter of pipe flange.
 2. Make width of insulation section same as overall width of flange and bolts, plus twice the thickness of pipe insulation.
 3. Fill voids between inner circumference of flange insulation and outer circumference of adjacent straight pipe segments with cut sections of sheet insulation of same thickness as pipe insulation.
 4. Secure insulation to flanges and seal seams with manufacturer's recommended adhesive to eliminate openings in insulation that allow passage of air to surface being insulated.
- C. Insulation Installation on Pipe Fittings and Elbows:
 1. Install mitered sections of pipe insulation.
 2. Secure insulation materials and seal seams with manufacturer's recommended adhesive to eliminate openings in insulation that allow passage of air to surface being insulated.
- D. Insulation Installation on Valves and Pipe Specialties:
 1. Install preformed valve covers manufactured of same material as pipe insulation when available.
 2. When preformed valve covers are not available, install cut sections of pipe and sheet insulation to valve body. Arrange insulation to permit access to packing and to allow valve operation without disturbing insulation.
 3. Install insulation to flanges as specified for flange insulation application.
 4. Secure insulation to valves and specialties and seal seams with manufacturer's recommended adhesive to eliminate openings in insulation that allow passage of air to surface being insulated.

3.7 INSTALLATION OF MINERAL-FIBER PREFORMED PIPE INSULATION

- A. Insulation Installation on Straight Pipes and Tubes:
 1. Secure each layer of preformed pipe insulation to pipe with wire or bands and tighten bands without deforming insulation materials.
 2. Where vapor barriers are indicated, seal longitudinal seams, end joints, and protrusions with vapor-barrier mastic and joint sealant.
 3. For insulation with factory-applied jackets on above-ambient surfaces, secure laps with outward clinched staples at 6 inches o.c.

4. For insulation with factory-applied jackets on below-ambient surfaces, do not staple longitudinal tabs. Instead, secure tabs with additional adhesive as recommended by insulation material manufacturer and seal with vapor-barrier mastic and flashing sealant.

B. Insulation Installation on Pipe Flanges:

1. Install preformed pipe insulation to outer diameter of pipe flange.
2. Make width of insulation section same as overall width of flange and bolts, plus twice the thickness of pipe insulation.
3. Fill voids between inner circumference of flange insulation and outer circumference of adjacent straight pipe segments with mineral-fiber blanket insulation.
4. Install jacket material with manufacturer's recommended adhesive, overlap seams at least 1 inch, and seal joints with flashing sealant.

C. Insulation Installation on Pipe Fittings and Elbows:

1. Install preformed sections of same material as straight segments of pipe insulation when available.
2. When preformed insulation elbows and fittings are not available, install mitered sections of pipe insulation, to a thickness equal to adjoining pipe insulation. Secure insulation materials with wire or bands.

D. Insulation Installation on Valves and Pipe Specialties:

1. Install preformed sections of same material as straight segments of pipe insulation when available.
2. When preformed sections are not available, install mitered sections of pipe insulation to valve body.
3. Arrange insulation to permit access to packing and to allow valve operation without disturbing insulation.
4. Install insulation to flanges as specified for flange insulation application.

3.8 FIELD-APPLIED JACKET INSTALLATION

A. Where FSK jackets are indicated, install as follows:

1. Draw jacket material smooth and tight.
2. Install lap or joint strips with same material as jacket.
3. Secure jacket to insulation with manufacturer's recommended adhesive.
4. Install jacket with 1-1/2-inch laps at longitudinal seams and 3-inch- wide joint strips at end joints.
5. Seal openings, punctures, and breaks in vapor-retarder jackets and exposed insulation with vapor-barrier mastic.

B. Where PVC jackets are indicated, install with 1-inch overlap at longitudinal seams and end joints. Seal with manufacturer's recommended adhesive.

1. Apply two continuous beads of adhesive to seams and joints, one bead under lap and the finish bead along seam and joint edge.

- C. Where metal jackets are indicated, install with 2-inch overlap at longitudinal seams and end joints. Overlap longitudinal seams arranged to shed water. Seal end joints with weatherproof sealant recommended by insulation manufacturer. Secure jacket with stainless-steel bands 12 inches o.c. and at end joints.

3.9 FINISHES

- A. Do not field paint aluminum or stainless-steel jackets.

3.10 FIELD QUALITY CONTROL

- A. Perform tests and inspections.
- B. Tests and Inspections:
 - 1. Inspect pipe, fittings, strainers, and valves, randomly selected by Architect, by removing field-applied jacket and insulation in layers in reverse order of their installation. Extent of inspection shall be limited to three locations of straight pipe, three locations of threaded fittings, three locations of welded fittings, two locations of threaded strainers, two locations of welded strainers, three locations of threaded valves, and three locations of flanged valves for each pipe service defined in the "Piping Insulation Schedule, General" Article.
- C. All insulation applications will be considered defective Work if sample inspection reveals noncompliance with requirements.

3.11 PIPING INSULATION SCHEDULE, GENERAL

- A. Acceptable preformed pipe and tubular insulation materials and thicknesses are identified for each piping system and pipe size range. If more than one material is listed for a piping system, selection from materials listed is Contractor's option.
- B. Items Not Insulated: Unless otherwise indicated, do not install insulation on the following:
 - 1. Drainage piping located in crawl spaces.
 - 2. Underground piping.
 - 3. Chrome-plated pipes and fittings unless there is a potential for personnel injury.

3.12 INDOOR PIPING INSULATION SCHEDULE

- A. Domestic Cold Water: Insulation shall be one of the following:
 - 1. Flexible Elastomeric: 1 inch thick.
 - 2. Cellular Glass: 1 inch thick.
- B. Domestic Hot and Recirculated Hot Water: Insulation shall be one of the following:
 - 1. Mineral-Fiber, Preformed Pipe Insulation, Type I: 1-1/2 inch thick.

2. Cellular Glass: 1-1/2 inch thick.

C. Stormwater and Overflow: Insulation shall be one of the following:

1. Flexible Elastomeric: 1/2 inch thick.
2. Mineral-Fiber, Preformed Pipe Insulation, Type I: 1/2 inch thick.

D. Roof Drain and Overflow Drain Bodies: Insulation shall be one of the following:

1. Flexible Elastomeric: 1/2 inch thick.
2. Mineral-Fiber, Preformed Pipe Insulation, Type I: 1/2 inch thick.

3.13 INDOOR, FIELD-APPLIED JACKET SCHEDULE

A. Install jacket over insulation material. For insulation with factory-applied jacket, install the field-applied jacket over the factory-applied jacket.

B. If more than one material is listed, selection from materials listed is Contractor's option.

C. Piping, Concealed:

1. None.

D. Piping, Exposed:

1. PVC: 20 mils thick.

3.14 OUTDOOR PIPING INSULATION SCHEDULE

A. Domestic Cold Water: Insulation shall be one of the following:

1. Flexible Elastomeric: 1-1/2 inch thick.
2. Cellular Glass: 1-1/2 inch thick.

B. Domestic Hot and Recirculated Hot Water: Insulation shall be one of the following:

1. Mineral-Fiber, Preformed Pipe Insulation, Type I: 1-1/2 inch thick.
2. Cellular Glass: 1-1/2 inch thick.

C. Stormwater and Overflow: Insulation shall be one of the following:

1. Flexible Elastomeric: 1/2 inch thick.
2. Mineral-Fiber, Preformed Pipe Insulation, Type I: 1/2 inch thick.

D. Roof Drain and Overflow Drain Bodies: Insulation shall be one of the following:

1. Flexible Elastomeric: 1/2 inch thick.
2. Mineral-Fiber, Preformed Pipe Insulation, Type I: 1/2 inch thick.

3.15 OUTDOOR, FIELD-APPLIED JACKET SCHEDULE

- A. Install jacket over insulation material. For insulation with factory-applied jacket, install the field-applied jacket over the factory-applied jacket. Coordinate with heat trace installation. Insulate pipe until 12" below grade.
- B. If more than one material is listed, selection from materials listed is Contractor's option.
- C. Piping, Exposed:
 - 1. Aluminum Jacket, Stucco Embossed: 0.02 inch thick.

END OF SECTION 22 07 19

SECTION 22 11 16 - DOMESTIC WATER PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Under-building-slab and aboveground domestic water pipes, tubes, and fittings inside buildings.

1.3 ACTION SUBMITTALS

- A. Product Data: For transition fittings and dielectric fittings.

1.4 INFORMATIONAL SUBMITTALS

- A. System purging and disinfecting activities report.
- B. Field quality-control reports.

PART 2 - PRODUCTS

2.1 PIPING MATERIALS

- A. Comply with requirements in "Piping Schedule" Article for applications of pipe, tube, fitting materials, and joining methods for specific services, service locations, and pipe sizes.
- B. Potable-water piping and components shall comply with NSF 14 and NSF 61. Plastic piping components shall be marked with "NSF-pw."

2.2 CPVC PIPING

- A. CPVC Pipe: ASTM F 441/F 441M, **Schedule 40.**

- 1. CPVC Socket Fittings: **ASTM F 438 for Schedule 40.**
- 2. CPVC Threaded Fittings: ASTM F 437, Schedule 80.

B. CPVC Piping System: ASTM D 2846/D 2846M, SDR 11, pipe and socket fittings.

C. CPVC Tubing System: ASTM D 2846/D 2846M, SDR 11, tube and socket fittings.

2.3 PEX TUBE AND FITTINGS

A. PEX Distribution System: ASTM F 877, SDR 9 tubing.

B. Fittings for PEX Tube: ASTM F 1807, metal-insert type with copper or stainless-steel crimp rings and matching PEX tube dimensions.

C. Manifold: Multiple-outlet, plastic or corrosion-resistant-metal assembly complying with ASTM F 877; with plastic or corrosion-resistant-metal valve for each outlet.

2.4 PVC PIPE AND FITTINGS

A. PVC Pipe: ASTM D 1785, **Schedule 40.**

B. PVC Socket Fittings: **ASTM D 2466 for Schedule 40.**

C. PVC Schedule 80 Threaded Fittings: ASTM D 2464.

2.5 PIPING JOINING MATERIALS

A. Pipe-Flange Gasket Materials:

1. AWWA C110/A21.10, rubber, flat face, 1/8 inch (3.2 mm) thick or ASME B16.21, nonmetallic and asbestos free unless otherwise indicated.
2. Full-face or ring type unless otherwise indicated.

B. Metal, Pipe-Flange Bolts and Nuts: ASME B18.2.1, carbon steel unless otherwise indicated.

C. Solvent Cements for Joining CPVC Piping and Tubing: ASTM F 493.

1. CPVC solvent cement shall have a VOC content of 490 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
2. Adhesive primer shall have a VOC content of 550 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
3. Solvent cement and adhesive primer shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

D. Solvent Cements for Joining PVC Piping: ASTM D 2564. Include primer according to ASTM F 656.

1. PVC solvent cement shall have a VOC content of 510 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

2. Adhesive primer shall have a VOC content of 550 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
 3. Solvent cement and adhesive primer shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- E. Plastic, Pipe-Flange Gaskets, Bolts, and Nuts: Type and material recommended by piping system manufacturer unless otherwise indicated.

2.6 TRANSITION FITTINGS

A. General Requirements:

1. Same size as pipes to be joined.
2. Pressure rating at least equal to pipes to be joined.
3. End connections compatible with pipes to be joined.

B. Fitting-Type Transition Couplings: Manufactured piping coupling or specified piping system fitting.

C. Plastic-to-Metal Transition Fittings:

1. Manufacturer: Subject to compliance with requirements, provide comparable product by one of the following:
 - a. Charlotte Pipe and Foundry Company.
 - b. Harvel Plastics, Inc.
 - c. Spears Manufacturing Company.
2. Description:
 - a. **CPVC or PVC** one-piece fitting with manufacturer's Schedule 80 equivalent dimensions.

D. Plastic-to-Metal Transition Unions:

1. Manufacturers: Subject to compliance with requirements, provide comparable product by one of the following:
 - a. Colonial Engineering, Inc.
 - b. NIBCO Inc.
 - c. Spears Manufacturing Company.
2. Description:
 - a. **CPVC or PVC** four-part union.
 - b. Solvent-cement-joint **or threaded** plastic end.
 - c. Rubber O-ring.
 - d. Union nut.

PART 3 - EXECUTION

3.1 EARTHWORK

- A. Comply with requirements in Section 31 20 00 "Earth Moving" for excavating, trenching, and backfilling.

3.2 PIPING INSTALLATION

- A. Drawing plans, schematics, and diagrams indicate general location and arrangement of domestic water piping. Indicated locations and arrangements are used to size pipe and calculate friction loss, expansion, and other design considerations. Install piping as indicated unless deviations to layout are approved on coordination drawings.
- B. Install shutoff valve, hose-end drain valve, strainer, pressure gage, and test tee with valve inside the building at each domestic water-service entrance. Comply with requirements for pressure gages in Section 22 05 19 "Meters and Gages for Plumbing Piping" and with requirements for drain valves and strainers in Section 22 11 19 "Domestic Water Piping Specialties."
- C. Install shutoff valve immediately upstream of each dielectric fitting.
- D. Install water-pressure-reducing valves downstream from shutoff valves. Comply with requirements for pressure-reducing valves in Section 22 11 19 "Domestic Water Piping Specialties."
- E. Install domestic water piping level with 0.25 percent slope downward toward drain and plumb.
- F. Install piping concealed from view and protected from physical contact by building occupants unless otherwise indicated and except in equipment rooms and service areas.
- G. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise.
- H. Install piping above accessible ceilings to allow sufficient space for ceiling panel removal, and coordinate with other services occupying that space.
- I. Install piping to permit valve servicing.
- J. Install nipples, unions, special fittings, and valves with pressure ratings the same as or higher than the system pressure rating used in applications below unless otherwise indicated.
- K. Install piping free of sags and bends.
- L. Install fittings for changes in direction and branch connections.
- M. Install thermometers on outlet piping from each water heater. Comply with requirements for thermometers in Section 22 05 19 "Meters and Gages for Plumbing Piping."

- N. Install sleeves for piping penetrations of walls, ceilings, and floors. Comply with requirements for sleeves specified in Section 22 05 17 "Sleeves and Sleeve Seals for Plumbing Piping."
- O. Install sleeve seals for piping penetrations of concrete walls and slabs. Comply with requirements for sleeve seals specified in Section 22 05 17 "Sleeves and Sleeve Seals for Plumbing Piping."
- P. Install escutcheons for piping penetrations of walls, ceilings, and floors. Comply with requirements for escutcheons specified in Section 22 05 18 "Escutcheons for Plumbing Piping."

3.3 JOINT CONSTRUCTION

- A. Ream ends of pipes and tubes and remove burrs.
- B. Remove scale, slag, dirt, and debris from inside and outside of pipes, tubes, and fittings before assembly.
- C. Threaded Joints: Thread pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and restore full ID. Join pipe fittings and valves as follows:
 - 1. Apply appropriate tape or thread compound to external pipe threads.
 - 2. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged.
- D. Flanged Joints: Select appropriate asbestos-free, nonmetallic gasket material in size, type, and thickness suitable for domestic water service. Join flanges with gasket and bolts according to ASME B31.9.
- E. Joint Construction for Solvent-Cemented Plastic Piping: Clean and dry joining surfaces. Join pipe and fittings according to the following:
 - 1. Comply with ASTM F 402 for safe-handling practice of cleaners, primers, and solvent cements. Apply primer.
 - 2. CPVC Piping: Join according to ASTM D 2846/D 2846M Appendix.
 - 3. PVC Piping: Join according to ASTM D 2855.
- F. Joints for PEX Piping: Join according to ASTM F 1807.
- G. Joints for Dissimilar-Material Piping: Make joints using adapters compatible with materials of both piping systems.

3.4 TRANSITION FITTING INSTALLATION

- A. Install transition couplings at joints of dissimilar piping.
- B. Transition Fittings in Underground Domestic Water Piping:
 - 1. Fittings for NPS 1-1/2 and Smaller: Fitting-type coupling.
 - 2. Fittings for NPS 2 and Larger: Sleeve-type coupling.

- C. Transition Fittings in Aboveground Domestic Water Piping NPS 2 and Smaller: Plastic-to-metal transition fittings or unions.

3.5 HANGER AND SUPPORT INSTALLATION

- A. Comply with requirements for pipe hanger, support products, and installation in Section 22 05 29 "Hangers and Supports for Plumbing Piping and Equipment."

- 1. Install stainless-steel pipe hangers for horizontal piping in corrosive environments.

- 2. Install stainless-steel pipe support clamps for vertical piping in corrosive environments.

- 3. Vertical Piping: MSS Type 8 or 42, clamps.

- 4. Individual, Straight, Horizontal Piping Runs:

- a. 100 Feet and Less: MSS Type 1, adjustable, steel clevis hangers.

- b. Longer Than 100 Feet: MSS Type 43, adjustable roller hangers.

- c. Longer Than 100 Feet if Indicated: MSS Type 49, spring cushion rolls.

- 5. Multiple, Straight, Horizontal Piping Runs 100 Feet or Longer: MSS Type 44, pipe rolls. Support pipe rolls on trapeze.

- 6. Base of Vertical Piping: MSS Type 52, spring hangers.

- B. Support vertical piping and tubing at base and at each floor.

- C. Rod diameter may be reduced one size for double-rod hangers, to a minimum of 3/8 inch.

- D. Install vinyl-coated hangers for CPVC piping with the following maximum horizontal spacing and minimum rod diameters:

- 1. NPS 1 and Smaller: 36 inches with 3/8-inch rod.

- 2. NPS 1-1/4 to NPS 2 : 48 inches with 3/8-inch rod.

- 3. NPS 2-1/2 to NPS 3-1/2: 48 inches with 1/2-inch rod.

- 4. NPS 4 and NPS 5: 48 inches with 5/8-inch rod.

- E. Install supports for vertical CPVC piping every 60 inches for NPS 1 and smaller, and every 72 inches for NPS 1-1/4 and larger.

- F. Install vinyl-coated hangers for PEX piping with the following maximum horizontal spacing and minimum rod diameters:

- 1. NPS 1 and Smaller: 32 inches with 3/8-inch rod.

- G. Install hangers for vertical PEX piping every 48 inches.

- H. Install vinyl-coated hangers for PVC piping with the following maximum horizontal spacing and minimum rod diameters:

- 1. NPS 2 and Smaller: 48 inches with 3/8-inch rod.

- 2. NPS 2-1/2 to NPS 3-1/2: 48 inches with 1/2-inch rod.

- 3. NPS 4 and NPS 5: 48 inches with 5/8-inch rod.

- I. Install supports for vertical PVC piping every 48 inches.
- J. Support piping and tubing not listed in this article according to MSS SP-69 and manufacturer's written instructions.

3.6 CONNECTIONS

- A. Drawings indicate general arrangement of piping, fittings, and specialties.
- B. When installing piping adjacent to equipment and machines, allow space for service and maintenance.
- C. Connect domestic water piping to exterior water-service piping. Use transition fitting to join dissimilar piping materials.
- D. Connect domestic water piping to water-service piping with shutoff valve; extend and connect to the following:
 - 1. Water Heaters: Cold-water inlet and hot-water outlet piping in sizes indicated, but not smaller than sizes of water heater connections.
 - 2. Plumbing Fixtures: Cold- and hot-water-supply piping in sizes indicated, but not smaller than that required by plumbing code.
 - 3. Equipment: Cold- and hot-water-supply piping as indicated, but not smaller than equipment connections. Provide shutoff valve and union for each connection. Use flanges instead of unions for NPS 2-1/2 and larger.

3.7 IDENTIFICATION

- A. Identify system components. Comply with requirements for identification materials and installation in Section 22 05 53 "Identification for Plumbing Piping and Equipment."
- B. Label pressure piping with system operating pressure.

3.8 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections:
 - 1. Piping Inspections:
 - a. Do not enclose, cover, or put piping into operation until it has been inspected and approved by authorities having jurisdiction.
 - b. During installation, notify authorities having jurisdiction at least one day before inspection must be made. Perform tests specified below in presence of authorities having jurisdiction:
 - 1) Roughing-in Inspection: Arrange for inspection of piping before concealing or closing in after roughing in and before setting fixtures.

- 2) Final Inspection: Arrange for authorities having jurisdiction to observe tests specified in "Piping Tests" Subparagraph below and to ensure compliance with requirements.
 - c. Re-inspection: If authorities having jurisdiction find that piping will not pass tests or inspections, make required corrections and arrange for re-inspection.
 - d. Reports: Prepare inspection reports and have them signed by authorities having jurisdiction.
2. Piping Tests:
- a. Fill domestic water piping. Check components to determine that they are not air bound and that piping is full of water.
 - b. Test for leaks and defects in new piping and parts of existing piping that have been altered, extended, or repaired. If testing is performed in segments, submit a separate report for each test, complete with diagram of portion of piping tested.
 - c. Leave new, altered, extended, or replaced domestic water piping uncovered and unconcealed until it has been tested and approved. Expose work that was covered or concealed before it was tested.
 - d. Cap and subject piping to static water pressure of 50 psig above operating pressure, without exceeding pressure rating of piping system materials. Isolate test source and allow it to stand for four hours. Leaks and loss in test pressure constitute defects that must be repaired.
 - e. Repair leaks and defects with new materials, and retest piping or portion thereof until satisfactory results are obtained.
 - f. Prepare reports for tests and for corrective action required.
- B. Domestic water piping will be considered defective if it does not pass tests and inspections.
- C. Prepare test and inspection reports.

3.9 ADJUSTING

- A. Perform the following adjustments before operation:
1. Close drain valves, hydrants, and hose bibbs.
 2. Open shutoff valves to fully open position.
 3. Open throttling valves to proper setting.
 4. Adjust balancing valves in hot-water-circulation return piping to provide adequate flow. Manually adjust ball-type balancing valves in hot-water-circulation return piping to provide hot-water flow in each branch. Adjust calibrated balancing valves to flows indicated.
 5. Remove plugs used during testing of piping and for temporary sealing of piping during installation.
 6. Remove and clean strainer screens. Close drain valves and replace drain plugs.
 7. Remove filter cartridges from housings and verify that cartridges are as specified for application where used and are clean and ready for use.
 8. Check plumbing specialties and verify proper settings, adjustments, and operation.

3.10 CLEANING

A. Clean and disinfect potable domestic water piping as follows:

1. Purge new piping and parts of existing piping that have been altered, extended, or repaired before using.
2. Use purging and disinfecting procedures prescribed by authorities having jurisdiction; if methods are not prescribed, use procedures described in either AWWA C651 or AWWA C652 or follow procedures described below:
 - a. Flush piping system with clean, potable water until dirty water does not appear at outlets.
 - b. Fill and isolate system according to either of the following:
 - 1) Fill system or part thereof with water/chlorine solution with at least 50 ppm of chlorine. Isolate with valves and allow to stand for 24 hours.
 - 2) Fill system or part thereof with water/chlorine solution with at least 200 ppm of chlorine. Isolate and allow to stand for three hours.
 - c. Flush system with clean, potable water until no chlorine is in water coming from system after the standing time.
 - d. Repeat procedures if biological examination shows contamination.
 - e. Submit water samples in sterile bottles to authorities having jurisdiction.

3.11 PIPING SCHEDULE

- A. Transition and special fittings with pressure ratings at least equal to piping rating may be used in applications below unless otherwise indicated.
- B. Flanges and unions may be used for aboveground piping joints unless otherwise indicated.
- C. Fitting Option: Extruded-tee connections and brazed joints may be used on aboveground copper tubing.
- D. Under-building-slab, domestic water piping, NPS 2 and smaller, shall be one of the following:

1. PVC, Schedule 40; socket fittings; and solvent-cemented joints.

- E. Aboveground domestic water piping, NPS 2 and smaller, shall be the following:

1. CPVC, Schedule 40; socket fittings; and solvent-cemented joints.

2. CPVC Tubing System: CPVC tube; CPVC socket fittings; and solvent-cemented joints. NPS 1-1/2 and NPS 2 CPVC pipe with CPVC socket fittings may be used instead of tubing.

3. PEX tube, NPS 1 and smaller; fittings for PEX tube; and crimped joints.

4. PVC, Schedule 40; socket fittings; and solvent-cemented joints.

- F. Aboveground domestic water piping, NPS 2-1/2 to NPS 4 shall be the following:

1. CPVC, Schedule 40; socket fittings; and solvent-cemented joints.

2. PVC, Schedule 40; socket fittings; and solvent-cemented joints.

3.12 VALVE SCHEDULE

- A. Drawings indicate valve types to be used. Where specific valve types are not indicated, the following requirements apply:
 - 1. Shutoff Duty: Use ball or gate valves for piping NPS 2 and smaller. Use butterfly, ball, or gate valves with flanged ends for piping NPS 2-1/2 and larger.
 - 2. Throttling Duty: Use ball or globe valves for piping NPS 2 and smaller. Use butterfly or ball valves with flanged ends for piping NPS 2-1/2 and larger.
 - 3. Hot-Water Circulation Piping, Balancing Duty: Memory-stop balancing valves.
 - 4. Drain Duty: Hose-end drain valves.
- B. Use check valves to maintain correct direction of domestic water flow to and from equipment.

END OF SECTION 22 11 16

SECTION 22 11 19 - DOMESTIC WATER PIPING SPECIALTIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Vacuum breakers.
 - 2. Backflow preventers
 - 3. Balancing valves.
 - 4. Temperature-actuated, water mixing valves.
 - 5. Hose bibbs.
 - 6. Wall hydrants.
 - 7. Water-hammer arresters.
 - 8. Trap-seal primer valves.
 - 9. Trap-seal primer systems.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For domestic water piping specialties.
 - 1. Include diagrams for power, signal, and control wiring.

1.4 INFORMATIONAL SUBMITTALS

- A. Field quality-control reports.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For domestic water piping specialties to include in emergency, operation, and maintenance manuals.

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS FOR PIPING SPECIALTIES

- A. Potable-water piping and components shall comply with NSF 61.

2.2 PERFORMANCE REQUIREMENTS

- A. Minimum Working Pressure for Domestic Water Piping Specialties: 125 psig (860 kPa) unless otherwise indicated.

2.3 VACUUM BREAKERS

- A. Pipe-Applied, Atmospheric-Type Vacuum Breakers:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Watts; a division of Watts Water Technologies, Inc.; Watts Regulator Company.
 - b. Zurn Industries, LLC; Plumbing Products Group; Wilkins Water Control Products.
2. Standard: ASSE 1001.
3. Size: NPS 1/4 to NPS 3 (DN 8 to DN 80), as required to match connected piping.
4. Body: Bronze.
5. Inlet and Outlet Connections: Threaded.
6. Finish: Rough bronze.

- B. Hose-Connection Vacuum Breakers:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. MIFAB, Inc.
 - b. Watts; a division of Watts Water Technologies, Inc.; Watts Regulator Company.
 - c. Woodford Manufacturing Company; a division of WCM Industries, Inc.
 - d. Zurn Industries, LLC; Plumbing Products Group; Light Commercial Products.
 - e. Zurn Industries, LLC; Plumbing Products Group; Wilkins Water Control Products.
2. Standard: ASSE 1011.
3. Body: Bronze, nonremovable, with manual drain.
4. Outlet Connection: Garden-hose threaded complying with ASME B1.20.7.
5. Finish: Rough bronze.

2.4 BACKFLOW PREVENTERS

- A. Reduced-Pressure-Principle Backflow Preventers:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Watts; a division of Watts Water Technologies, Inc.; Watts Regulator Company.
 - b. Zurn Industries, LLC; Plumbing Products Group; Wilkins Water Control Products.
2. Standard: ASSE 1013.
3. Operation: Continuous-pressure applications.
4. Pressure Loss: 7 psig maximum, through middle third of flow range.
5. Body: Bronze for NPS 2 and smaller; steel with interior lining that complies with AWWA C550 or that is FDA approved for NPS 2-1/2 and larger.
6. End Connections: Threaded for NPS 2 and smaller; flanged for NPS 2-1/2 and larger.
7. Accessories:
 - a. Valves NPS 2 and Smaller: Ball type with threaded ends on inlet and outlet.
 - b. Valves NPS 2-1/2 and Larger: Outside-screw and yoke-gate type with flanged ends on inlet and outlet.
 - c. Air-Gap Fitting: ASME A112.1.2, matching backflow-preventer connection.

B. Backflow-Preventer Test Kits:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Watts; a division of Watts Water Technologies, Inc.; Watts Regulator Company.
 - b. Zurn Industries, LLC; Plumbing Products Group; Wilkins Water Control Products.
2. Description: Factory calibrated, with gages, fittings, hoses, and carrying case with test-procedure instructions.

2.5 BALANCING VALVES

A. Copper-Alloy Calibrated Balancing Valves:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Armstrong International, Inc.
 - b. Flo Fab Inc.
 - c. ITT Corporation; Bell & Gossett Div.
 - d. NIBCO Inc.
 - e. TAC.
 - f. TACO Incorporated.
 - g. Watts; a division of Watts Water Technologies, Inc.; Watts Regulator Company.
2. Type: Ball valve with two readout ports and memory-setting indicator.
3. Body: Brass.
4. Size: Same as connected piping, but not larger than NPS 2.
5. Accessories: Meter hoses, fittings, valves, differential pressure meter, and carrying case.

- B. Accessories: Meter hoses, fittings, valves, differential pressure meter, and carrying case.
- C. Memory-Stop Balancing Valves:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Milwaukee Valve Company.
 - b. NIBCO Inc.
 - 2. Standard: MSS SP-110 for two-piece, copper-alloy ball valves.
 - 3. Pressure Rating: 400-psig minimum CWP.
 - 4. Size: NPS 2 or smaller.
 - 5. Body: Copper alloy.
 - 6. Port: Standard or full port.
 - 7. Ball: Chrome-plated brass.
 - 8. Seats and Seals: Replaceable.
 - 9. End Connections: Solder joint or threaded.
 - 10. Handle: Vinyl-covered steel with memory-setting device.

2.6 TEMPERATURE-ACTUATED, WATER MIXING VALVES

- A. Primary, Thermostatic, Water Mixing Valves:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Lawler Manufacturing Company, Inc.
 - b. Leonard Valve Company.
 - c. Powers; a division of Watts Water Technologies, Inc.
 - d. Symmons Industries, Inc.
 - 2. Standard: ASSE 1017.
 - 3. Pressure Rating: 125 psig minimum unless otherwise indicated.
 - 4. Type: Exposed-mounted, thermostatically controlled, water mixing valve.
 - 5. Material: Bronze body with corrosion-resistant interior components.
 - 6. Connections: Threaded inlets and outlet.
 - 7. Accessories: Manual temperature control, check stops on hot- and cold-water supplies, and adjustable, temperature-control handle.
 - 8. Tempered-Water Setting: 110 deg F.
 - 9. Valve Finish: Rough bronze.
 - 10. Piping Finish: Copper.

2.7 OUTLET BOXES

- A. Clothes Washer Outlet Boxes:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- a. Acorn Engineering Company.
 - b. Guy Gray Manufacturing Co., Inc.
 - c. IPS Corporation.
 - d. Oatey.
 - e. Symmons Industries, Inc.
 - f. Watts; a division of Watts Water Technologies, Inc.; Watts Regulator Company.
 - g. Zurn Industries, LLC; Plumbing Products Group; Light Commercial Products.
2. Mounting: Recessed.
3. Material and Finish: Plastic box and faceplate.
4. Faucet: Combination valved fitting or separate hot- and cold-water valved fittings complying with ASME A112.18.1. Include garden-hose thread complying with ASME B1.20.7 on outlets.
5. Supply Shutoff Fittings: NPS 1/2 gate, globe, or ball valves and NPS 1/2 copper, water tubing.
6. Drain: NPS 2 standpipe and P-trap for direct waste connection to drainage piping.
7. Inlet Hoses: Two 60-inch- long, rubber household clothes washer inlet hoses with female, garden-hose-thread couplings. Include rubber washers.
8. Drain Hose: One 48-inch- long, rubber household clothes washer drain hose with hooked end.

B. Icemaker Outlet Boxes:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Acorn Engineering Company.
 - b. IPS Corporation.
 - c. Oatey.
2. Mounting: Recessed.
3. Material and Finish: Plastic box and faceplate.
4. Faucet: Valved fitting complying with ASME A112.18.1. Include NPS 1/2 or smaller copper tube outlet.
5. Supply Shutoff Fitting: NPS 1/2 gate, globe, or ball valve and NPS 1/2 copper, water tubing.

2.8 HOSE BIBBS

A. Hose Bibbs:

1. Standard: ASME A112.18.1 for sediment faucets.
2. Body Material: Bronze.
3. Seat: Bronze, replaceable.
4. Supply Connections: NPS 1/2 or NPS 3/4 threaded or solder-joint inlet.
5. Outlet Connection: Garden-hose thread complying with ASME B1.20.7.
6. Pressure Rating: 125 psig.
7. Vacuum Breaker: Integral nonremovable, drainable, hose-connection vacuum breaker complying with ASSE 1011.
8. Finish for Equipment Rooms: Rough bronze, or chrome or nickel plated.

9. Finish for Service Areas: Rough bronze.
10. Finish for Finished Rooms: Chrome or nickel plated.
11. Operation for Equipment Rooms: Wheel handle or operating key.
12. Operation for Service Areas: Wheel handle.
13. Operation for Finished Rooms: Operating key.
14. Include operating key with each operating-key hose bibb.
15. Include wall flange with each chrome- or nickel-plated hose bibb.

2.9 WALL HYDRANTS

A. Nonfreeze Wall Hydrants:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Josam Company.
 - b. MIFAB, Inc.
 - c. Smith, Jay R. Mfg. Co.; Division of Smith Industries, Inc.
 - d. Watts Drainage Products.
 - e. Woodford Manufacturing Company; a division of WCM Industries, Inc.
 - f. Zurn Industries, LLC; Plumbing Products Group; Light Commercial Products.
2. Standard: ASME A112.21.3M for concealed-outlet, self-draining wall hydrants.
3. Pressure Rating: 125 psig.
4. Operation: Loose key.
5. Casing and Operating Rod: Of length required to match wall thickness. Include wall clamp.
6. Inlet: NPS 3/4 or NPS 1.
7. Outlet: Concealed, with integral vacuum breaker and garden-hose thread complying with ASME B1.20.7.
8. Box: Deep, flush mounted with cover.
9. Box and Cover Finish: Polished nickel bronze.
10. Outlet: Exposed, with integral vacuum breaker and garden-hose thread complying with ASME B1.20.7.
11. Nozzle and Wall-Plate Finish: Polished nickel bronze.
12. Operating Keys(s): Two with each wall hydrant.

2.10 WATER-HAMMER ARRESTERS

A. Water-Hammer Arresters:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. AMTROL, Inc.
 - b. Josam Company.
 - c. MIFAB, Inc.
 - d. Sioux Chief Manufacturing Company, Inc.
 - e. Smith, Jay R. Mfg. Co.; Division of Smith Industries, Inc.

- f. Watts Drainage Products.
 - g. Zurn Industries, LLC; Plumbing Products Group; Specification Drainage Products.
- 2. Standard: ASSE 1010 or PDI-WH 201.
- 3. Type: Metal bellows.
- 4. Size: ASSE 1010, Sizes AA and A through F, or PDI-WH 201, Sizes A through F.

2.11 TRAP-SEAL PRIMER DEVICE

A. Supply-Type, Trap-Seal Primer Device:

- 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. MIFAB, Inc.
 - b. Precision Plumbing Products, Inc.
 - c. Sioux Chief Manufacturing Company, Inc.
 - d. Smith, Jay R. Mfg. Co.; Division of Smith Industries, Inc.
 - e. Watts; a division of Watts Water Technologies, Inc.; Watts Regulator Company.
- 2. Standard: ASSE 1018.
- 3. Pressure Rating: 125 psig minimum.
- 4. Body: Bronze.
- 5. Inlet and Outlet Connections: NPS 1/2 threaded, union, or solder joint.
- 6. Gravity Drain Outlet Connection: NPS 1/2 threaded or solder joint.
- 7. Finish: Chrome plated, or rough bronze for units used with pipe or tube that is not chrome finished.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install backflow preventers in each water supply to mechanical equipment and systems and to other equipment and water systems that may be sources of contamination. Comply with authorities having jurisdiction.
 - 1. Locate backflow preventers in same room as connected equipment or system.
 - 2. Install drain for backflow preventers with atmospheric-vent drain connection with air-gap fitting, fixed air-gap fitting, or equivalent positive pipe separation of at least two pipe diameters in drain piping and pipe-to-floor drain. Locate air-gap device attached to or under backflow preventer. Simple air breaks are unacceptable for this application.
 - 3. Do not install bypass piping around backflow preventers.
- B. Install water regulators with inlet and outlet shutoff valves and bypass with memory-stop balancing valve. Install pressure gages on inlet and outlet.
- C. Install balancing valves in locations where they can easily be adjusted.

- D. Install temperature-actuated, water mixing valves with check stops or shutoff valves on inlets and with shutoff valve on outlet.
 - 1. Install cabinet-type units recessed in or surface mounted on wall as specified.
- E. Install outlet boxes recessed in wall or surface mounted on wall. Install 2-by-4-inch fire-retardant-treated-wood blocking, wall reinforcement between studs. Comply with requirements for fire-retardant-treated-wood blocking in Section 06 10 00 "Rough Carpentry."
- F. Install water-hammer arresters in water piping according to PDI-WH 201.
- G. Install supply-type, trap-seal primer valves with outlet piping pitched down toward drain trap a minimum of 1 percent, and connect to floor-drain body, trap, or inlet fitting. Adjust valve for proper flow.
- H. Install drainage-type, trap-seal primer valves as lavatory trap with outlet piping pitched down toward drain trap a minimum of 1 percent, and connect to floor-drain body, trap, or inlet fitting.

3.2 CONNECTIONS

- A. Comply with requirements for ground equipment in Section 26 05 26 "Grounding and Bonding for Electrical Systems."
- B. Fire-retardant-treated-wood blocking is specified in Section 26 05 19 "Low-Voltage Electrical Power Conductors and Cables" for electrical connections.

3.3 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections:
 - 1. Test each pressure vacuum breaker, reduced-pressure-principle backflow preventer according to authorities having jurisdiction and the device's reference standard.
- B. Domestic water piping specialties will be considered defective if they do not pass tests and inspections.
- C. Prepare test and inspection reports.

3.4 ADJUSTING

- A. Set field-adjustable pressure set points of water pressure-reducing valves.
- B. Set field-adjustable flow set points of balancing valves.
- C. Set field-adjustable temperature set points of temperature-actuated, water mixing valves.

END OF SECTION 22 11 19

SECTION 22 13 16 - SANITARY WASTE AND VENT PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Pipe, tube, and fittings.
 - 2. Specialty pipe fittings.

1.3 PERFORMANCE REQUIREMENTS

- A. Components and installation shall be capable of withstanding the following minimum working pressure unless otherwise indicated:
 - 1. Soil, Waste, and Vent Piping: 10-foot head of water.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.

1.5 INFORMATIONAL SUBMITTALS

- A. Field quality-control reports.

1.6 QUALITY ASSURANCE

- A. Piping materials shall bear label, stamp, or other markings of specified testing agency.
- B. Comply with NSF/ANSI 14, "Plastics Piping Systems Components and Related Materials," for plastic piping components. Include marking with "NSF-dwv" for plastic drain, waste, and vent piping and "NSF-sewer" for plastic sewer piping.

PART 2 - PRODUCTS

2.1 PIPING MATERIALS

- A. Comply with requirements in "Piping Schedule" Article for applications of pipe, tube, fitting materials, and joining methods for specific services, service locations, and pipe sizes.

2.2 PVC PIPE AND FITTINGS

- A. Solid-Wall PVC Pipe: Schedule 40, ASTM D 2665, drain, waste, and vent.
- B. PVC Socket Fittings: ASTM D 2665, made to ASTM D 3311, drain, waste, and vent patterns and to fit Schedule 40 pipe.
- C. Adhesive Primer: ASTM F 656.
 - 1. Adhesive primer shall have a VOC content of 550 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
 - 2. Adhesive primer shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- D. Solvent Cement: ASTM D 2564.
 - 1. PVC solvent cement shall have a VOC content of 510 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
 - 2. Solvent cement shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

2.3 SPECIALTY PIPE FITTINGS

- A. Transition Couplings:
 - 1. General Requirements: Fitting or device for joining piping with small differences in OD's or of different materials. Include end connections same size as and compatible with pipes to be joined.
 - 2. Fitting-Type Transition Couplings: Manufactured piping coupling or specified piping system fitting.
 - 3. Shielded, Nonpressure Transition Couplings:
 - a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1) Cascade Waterworks Mfg. Co.
 - 2) Mission Rubber Company; a division of MCP Industries, Inc.
 - b. Standard: ASTM C 1460.

- c. Description: Elastomeric or rubber sleeve with full-length, corrosion-resistant outer shield and corrosion-resistant-metal tension band and tightening mechanism on each end.
- 4. Pressure Transition Couplings:
 - a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1) Cascade Waterworks Mfg. Co.
 - 2) Dresser, Inc.
 - 3) EBAA Iron, Inc.
 - 4) JCM Industries, Inc.
 - 5) Romac Industries, Inc.
 - 6) Smith-Blair, Inc.; a Sensus company.
 - 7) The Ford Meter Box Company, Inc.
 - 8) Viking Johnson.
 - b. Standard: AWWA C219.
 - c. Description: Metal, sleeve-type same size as, with pressure rating at least equal to, and ends compatible with, pipes to be joined.
 - d. Center-Sleeve Material: Manufacturer's standard.
 - e. Gasket Material: Natural or synthetic rubber.
 - f. Metal Component Finish: Corrosion-resistant coating or material.

B. Dielectric Fittings:

- 1. General Requirements: Assembly of copper alloy and ferrous materials with separating nonconductive insulating material. Include end connections compatible with pipes to be joined.
- 2. Dielectric Unions:
 - a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1) Capitol Manufacturing Company.
 - 2) Central Plastics Company.
 - 3) Hart Industries International, Inc.
 - 4) Jomar International Ltd.
 - 5) Matco-Norca, Inc.
 - 6) McDonald, A. Y. Mfg. Co.
 - 7) Watts Regulator Co.; a division of Watts Water Technologies, Inc.
 - 8) Wilkins; a Zurn company.
 - b. Description:
 - 1) Standard: ASSE 1079.
 - 2) Pressure Rating: [125 psig (860 kPa) minimum at 180 deg F (82 deg C)] [150 psig (1035 kPa)] [250 psig (1725 kPa)].
 - 3) End Connections: Solder-joint copper alloy and threaded ferrous.

3. Dielectric Flanges:

- a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- 1) Capitol Manufacturing Company.
- 2) Central Plastics Company.
- 3) Matco-Norca, Inc.
- 4) Watts Regulator Co.; a division of Watts Water Technologies, Inc.
- 5) Wilkins; a Zurn company.

- b. Description:

- 1) Standard: ASSE 1079.
- 2) Factory-fabricated, bolted, companion-flange assembly.
- 3) Pressure Rating: 125 psig (860 kPa) minimum at 180 deg F (82 deg C).
- 4) End Connections: Solder-joint copper alloy and threaded ferrous; threaded solder-joint copper alloy and threaded ferrous.

4. Dielectric-Flange Insulating Kits:

- a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- 1) Advance Products & Systems, Inc.
- 2) Calpico, Inc.
- 3) Central Plastics Company.
- 4) Pipeline Seal and Insulator, Inc.

- b. Description:

- 1) Nonconducting materials for field assembly of companion flanges.
- 2) Pressure Rating: [150 psig (1035 kPa)] <Insert pressure>.
- 3) Gasket: Neoprene or phenolic.
- 4) Bolt Sleeves: Phenolic or polyethylene.
- 5) Washers: Phenolic with steel backing washers.

PART 3 - EXECUTION

3.1 PIPING INSTALLATION

- A. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated unless deviations to layout are approved on coordination drawings.
- B. Install piping in concealed locations unless otherwise indicated and except in equipment rooms and service areas.

- C. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise.
- D. Install piping above accessible ceilings to allow sufficient space for ceiling panel removal.
- E. Install piping at indicated slopes.
- F. Install piping free of sags and bends.
- G. Install fittings for changes in direction and branch connections.
- H. Install piping to allow application of insulation.
- I. Make changes in direction for soil and waste drainage and vent piping using appropriate branches, bends, and long-sweep bends. Sanitary tees and short-sweep 1/4 bends may be used on vertical stacks if change in direction of flow is from horizontal to vertical. Use long-turn, double Y-branch and 1/8-bend fittings if two fixtures are installed back to back or side by side with common drain pipe. Straight tees, elbows, and crosses may be used on vent lines. Do not change direction of flow more than 90 degrees. Use proper size of standard increasers and reducers if pipes of different sizes are connected. Reducing size of drainage piping in direction of flow is prohibited.
- J. Lay buried building drainage piping beginning at low point of each system. Install true to grades and alignment indicated, with unbroken continuity of invert. Place hub ends of piping upstream. Install required gaskets according to manufacturer's written instructions for use of lubricants, cements, and other installation requirements. Maintain swab in piping and pull past each joint as completed.
- K. Install soil and waste drainage and vent piping at the following minimum slopes unless otherwise indicated:
 - 1. Building Sanitary Drain: 2 percent downward in direction of flow for piping NPS 3 and smaller; 2 percent downward in direction of flow for piping NPS 4 and larger.
 - 2. Horizontal Sanitary Drainage Piping: 2 percent downward in direction of flow.
 - 3. Vent Piping: 1 percent down toward vertical fixture vent or toward vent stack.
- L. Install aboveground PVC piping according to ASTM D 2665 and Section 3.1(B) of this Specification.
- M. Install underground PVC piping according to ASTM D 2321.
- N. Do not enclose, cover, or put piping into operation until it is inspected and approved by authorities having jurisdiction.
- O. Install sleeves for piping penetrations of walls, ceilings, and floors. Comply with requirements for sleeves specified in Section 22 05 17 "Sleeves and Sleeve Seals for Plumbing Piping."
- P. Install sleeve seals for piping penetrations of concrete walls and slabs. Comply with requirements for sleeve seals specified in Section 22 05 17 "Sleeves and Sleeve Seals for Plumbing Piping."

- Q. Install escutcheons for piping penetrations of walls, ceilings, and floors. Comply with requirements for escutcheons specified in Section 23 00 00 "Mechanical General."

3.2 JOINT CONSTRUCTION

- A. Plastic, Nonpressure-Piping, Solvent-Cement Joints: Clean and dry joining surfaces. Join pipe and fittings according to the following:
1. Comply with ASTM F 402 for safe-handling practice of cleaners, primers, and solvent cements.
 2. PVC Piping: Join according to ASTM D 2855 and ASTM D 2665 Appendixes.

3.3 SPECIALTY PIPE FITTING INSTALLATION

- A. Transition Couplings:
1. Install transition couplings at joints of piping with small differences in OD's.
 2. In Drainage Piping: Shielded, nonpressure transition couplings.
 3. In Aboveground Force Main Piping: Fitting-type transition couplings.
 4. In Underground Force Main Piping:
 - a. NPS 1-1/2 and Smaller: Fitting-type transition couplings.
 - b. NPS 2 and Larger: Pressure transition couplings.
- B. Dielectric Fittings:
1. Install dielectric fittings in piping at connections of dissimilar metal piping and tubing.
 2. Dielectric Fittings for NPS 2 and Smaller: Use dielectric unions.
 3. Dielectric Fittings for NPS 2-1/2 to NPS 4: Use dielectric flanges.

3.4 HANGER AND SUPPORT INSTALLATION

- A. Comply with requirements for seismic-restraint devices specified in Section 22 05 48 "Vibration and Seismic Controls for Plumbing Piping and Equipment."
- B. Comply with requirements for pipe hanger and support devices and installation specified in Section 22 05 29 "Hangers and Supports for Plumbing Piping and Equipment."
1. Install galvanized-steel pipe hangers for horizontal piping.
 2. Install galvanized-steel pipe support clamps for vertical piping.
 3. Vertical Piping: MSS Type 8 or Type 42, clamps.
 4. Install individual, straight, horizontal piping runs:
 - a. 100 Feet and Less: MSS Type 1, adjustable, steel clevis hangers.
 - b. Longer Than 100 Feet: MSS Type 43, adjustable roller hangers.
 - c. Longer Than 100 Feet if Indicated: MSS Type 49, spring cushion rolls.
 5. Multiple, Straight, Horizontal Piping Runs 100 Feet or Longer: MSS Type 44, pipe rolls. Support pipe rolls on trapeze.

- 6. Base of Vertical Piping: MSS Type 52, spring hangers.
- C. Support horizontal piping and tubing within 12 inches of each fitting, valve, and coupling.
- D. Support vertical piping and tubing at base and at each floor.
- E. Rod diameter may be reduced one size for double-rod hangers, with 3/8-inch minimum rods.
- F. Install hangers for PVC piping with the following maximum horizontal spacing and minimum rod diameters:
 - 1. NPS 1-1/2 and NPS 2: 48 inches with 3/8-inch rod.
 - 2. NPS 3: 48 inches with 1/2-inch rod.
 - 3. NPS 4: 48 inches with 5/8-inch rod.
 - 4. NPS 6 and NPS 8: 48 inches with 3/4-inch rod.
- G. Install supports for vertical PVC piping every 48 inches.
- H. Support piping and tubing not listed above according to MSS SP-69 and manufacturer's written instructions.

3.5 CONNECTIONS

- A. Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Connect soil and waste piping to exterior sanitary sewerage piping. Use transition fitting to join dissimilar piping materials. Coordinate with civil site plans.
- C. Connect drainage and vent piping to the following:
 - 1. Plumbing Fixtures: Connect drainage piping in sizes indicated, but not smaller than required by plumbing code.
 - 2. Plumbing Fixtures and Equipment: Connect atmospheric vent piping in sizes indicated, but not smaller than required by authorities having jurisdiction.
 - 3. Plumbing Specialties: Connect drainage and vent piping in sizes indicated, but not smaller than required by plumbing code.
 - 4. Install test tees (wall cleanouts) in conductors near floor and floor cleanouts with cover flush with floor.
 - 5. Comply with requirements for backwater valves, cleanouts and drains specified in Section 22 13 19 "Sanitary Waste Piping Specialties."
 - 6. Equipment: Connect drainage piping as indicated. Provide shutoff valve if indicated and union for each connection. Use flanges instead of unions for connections NPS 2-1/2 and larger.
- D. Where installing piping adjacent to equipment, allow space for service and maintenance of equipment.
- E. Make connections according to the following unless otherwise indicated:
 - 1. Install unions, in piping NPS 2 and smaller, adjacent to each valve and at final connection to each piece of equipment.

2. Install flanges, in piping NPS 2-1/2 and larger, adjacent to flanged valves and at final connection to each piece of equipment.

3.6 IDENTIFICATION

- A. Identify exposed sanitary waste and vent piping. Comply with requirements for identification specified in Section 22 05 53 "Identification for Plumbing Piping and Equipment."

3.7 FIELD QUALITY CONTROL

- A. During installation, notify authorities having jurisdiction at least 24 hours before inspection must be made. Perform tests specified below in presence of authorities having jurisdiction.
 1. Roughing-in Inspection: Arrange for inspection of piping before concealing or closing-in after roughing-in and before setting fixtures.
 2. Final Inspection: Arrange for final inspection by authorities having jurisdiction to observe tests specified below and to ensure compliance with requirements.
- B. Re-inspection: If authorities having jurisdiction find that piping will not pass test or inspection, make required corrections and arrange for re-inspection.
- C. Reports: Prepare inspection reports and have them signed by authorities having jurisdiction.
- D. Test sanitary drainage and vent piping according to procedures of authorities having jurisdiction or, in absence of published procedures, as follows:
 1. Test for leaks and defects in new piping and parts of existing piping that have been altered, extended, or repaired. If testing is performed in segments, submit separate report for each test, complete with diagram of portion of piping tested.
 2. Leave uncovered and unconcealed new, altered, extended, or replaced drainage and vent piping until it has been tested and approved. Expose work that was covered or concealed before it was tested.
 3. Roughing-in Plumbing Test Procedure: Test drainage and vent piping except outside leaders on completion of roughing-in. Close openings in piping system and fill with water to point of overflow, but not less than 10-foot head of water. From 15 minutes before inspection starts to completion of inspection, water level must not drop. Inspect joints for leaks.
 4. Finished Plumbing Test Procedure: After plumbing fixtures have been set and traps filled with water, test connections and prove they are gastight and watertight. Plug vent-stack openings on roof and building drains where they leave building. Introduce air into piping system equal to pressure of 1-inch wg. Use U-tube or manometer inserted in trap of water closet to measure this pressure. Air pressure must remain constant without introducing additional air throughout period of inspection. Inspect plumbing fixture connections for gas and water leaks.
 5. Repair leaks and defects with new materials and retest piping, or portion thereof, until satisfactory results are obtained.
 6. Prepare reports for tests and required corrective action.

3.8 CLEANING AND PROTECTION

- A. Clean interior of piping. Remove dirt and debris as work progresses.
- B. Protect drains during remainder of construction period to avoid clogging with dirt and debris and to prevent damage from traffic and construction work.
- C. Place plugs in ends of uncompleted piping at end of day and when work stops.
- D. Exposed PVC Piping: Protect plumbing vents exposed to sunlight with two coats of water-based latex paint.

3.9 PIPING SCHEDULE

- A. Flanges and unions may be used on aboveground pressure piping unless otherwise indicated.
- B. Aboveground, soil and waste piping NPS 4 and smaller shall be the following:
 - 1. Solid-wall PVC pipe, PVC socket fittings, and solvent-cemented joints.
 - 2. Dissimilar Pipe-Material Couplings: Shielded, nonpressure transition couplings.
- C. Aboveground, vent piping NPS 4 and smaller shall be the following:
 - 1. Solid-wall PVC pipe, PVC socket fittings, and solvent-cemented joints.
 - 2. Dissimilar Pipe-Material Couplings: Shielded, nonpressure transition couplings.
- D. Underground, soil, waste, and vent piping NPS 4 and smaller shall be the following:
 - 1. Service class, cast-iron soil piping; gaskets; and gasketed joints.
 - 2. Hubless, cast-iron soil pipe and fittings; cast-iron hubless-piping couplings; and coupled joints.
 - 3. Solid wall PVC pipe, PVC socket fittings, and solvent-cemented joints.
 - 4. Dissimilar Pipe-Material Couplings: Shielded, nonpressure transition couplings.

END OF SECTION 22 13 16

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SECTION 22 13 19 - SANITARY WASTE PIPING SPECIALTIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

1. Cleanouts.
2. Floor drains.
3. Trench drains.
4. Air-admittance valves.
5. Roof flashing assemblies.
6. Through-penetration firestop assemblies.
7. Miscellaneous sanitary drainage piping specialties.
8. Flashing materials.

1.3 DEFINITIONS

- A. ABS: Acrylonitrile-butadiene-styrene plastic.
- B. FRP: Fiberglass-reinforced plastic.
- C. HDPE: High-density polyethylene plastic.
- D. PE: Polyethylene plastic.
- E. PP: Polypropylene plastic.
- F. PVC: Polyvinyl chloride plastic.

1.4 ACTION SUBMITTALS

- A. Shop Drawings: Show fabrication and installation details for frost-resistant vent terminals.
 1. Wiring Diagrams: Power, signal, and control wiring.
- B. Field quality-control test reports.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For drainage piping specialties to include in emergency, operation, and maintenance manuals.

1.6 QUALITY ASSURANCE

- A. Drainage piping specialties shall bear label, stamp, or other markings of specified testing agency.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- C. Comply with NSF 14, "Plastics Piping Components and Related Materials," for plastic sanitary piping specialty components.

1.7 COORDINATION

- A. Coordinate size and location of concrete bases. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified in Section 03 30 00 "Cast-in-Place Concrete."
- B. Coordinate size and location of roof penetrations.

1.8 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

PART 2 - PRODUCTS

2.1 CLEANOUTS

- A. Exposed Metal Cleanouts:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Josam Company; Josam Div.
 - b. MIFAB, Inc.
 - c. Smith, Jay R. Mfg. Co.; Division of Smith Industries, Inc.
 - d. Watts Drainage Products Inc.
 - e. Zurn Plumbing Products Group; Specification Drainage Operation.
 - f. Josam Company; Blucher-Josam Div.
 - 2. Standard: ASME A112.36.2M for cast iron for cleanout test tee.

3. Size: Same as connected drainage piping
4. Body Material: As required to match connected piping.
5. Closure: Countersunk brass plug.
6. Closure Plug Size: Same as or not more than one size smaller than cleanout size.
7. Closure: Stainless-steel plug with seal.

B. Metal Floor Cleanouts:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Josam Company; Josam Div.
 - b. Sioux Chief Manufacturing Company, Inc.
 - c. Smith, Jay R. Mfg. Co.; Division of Smith Industries, Inc.
 - d. Watts Drainage Products Inc.
 - e. Zurn Plumbing Products Group; Specification Drainage Operation.
2. Standard: ASME A112.36.2M for threaded, adjustable housing cleanout.
3. Size: Same as connected branch.
4. Type: Heavy-duty, adjustable housing.
5. Body or Ferrule: Cast iron.
6. Closure: Brass plug with straight threads and gasket.
7. Adjustable Housing Material: Cast iron with threads.
8. Frame and Cover Material and Finish: Polished bronze.
9. Frame and Cover Shape: Round.
10. Top Loading Classification: Heavy Duty.
11. Riser: ASTM A 74, Cast-iron drainage pipe fitting and riser to cleanout.
12. Standard: ASME A112.3.1.
13. Size: Same as connected branch.
14. Housing: Stainless steel.
15. Closure: Stainless steel with seal.
16. Riser: Stainless-steel drainage pipe fitting to cleanout.

C. Cast-Iron Wall Cleanouts:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Josam Company; Josam Div.
 - b. MIFAB, Inc.
 - c. Smith, Jay R. Mfg. Co.; d of Smith Industries, Inc.
 - d. Watts Drainage Products Inc.
 - e. Zurn Plumbing Products Group; Specification Drainage Operation.
2. Standard: ASME A112.36.2M. Include wall access.
3. Size: Same as connected drainage piping.
4. Body: As required to match connected piping.
5. Closure: Countersunk brass plug.
6. Closure Plug Size: Same as or not more than one size smaller than cleanout size.
7. Wall Access: Round, flat, chrome-plated brass or stainless-steel cover plate with screw.

8. Wall Access: Round, nickel-bronze, copper-alloy, or stainless-steel wall-installation frame and cover.

2.2 FLOOR DRAINS

A. Cast-Iron Floor Drains:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Josam Company; Josam Div.
 - b. Smith, Jay R. Mfg. Co.; Division of Smith Industries, Inc.
 - c. Watts Drainage Products Inc.
 - d. Zurn Plumbing Products Group; Specification Drainage Operation.
2. Standard: ASME A112.6.3.
3. Pattern: Sanitary drain.
4. Body Material: Gray iron.
5. Outlet: Bottom.
6. Top Loading Classification: Heavy Duty.
7. Trap Features: Trap-seal primer valve drain connection.

2.3 TRENCH DRAINS

A. Trench Drains:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Josam Company; Josam Div.
 - b. Smith, Jay R. Mfg. Co.; Division of Smith Industries, Inc.
 - c. Watts Drainage Products Inc.
 - d. Zurn Plumbing Products Group; Specification Drainage Operation.
2. Standard: ASME A112.6.3 for trench drains.
3. Material: Ductile or gray iron.
4. Flange: Anchor.
5. Outlet: End.
6. Grate Material: Stainless steel.
7. Top Loading Classification: Extra Heavy-Duty.

2.4 AIR-ADMITTANCE VALVES

A. Fixture Air-Admittance Valves:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- a. Oatey.
 - b. Studor, Inc.
2. Standard: ASSE 1051, Type A for single fixture or Type B for branch piping.
3. Housing: Plastic.
4. Operation: Mechanical sealing diaphragm.
5. Size: Same as connected fixture or branch vent piping.

2.5 ROOF FLASHING ASSEMBLIES

A. Roof Flashing Assemblies:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Acorn Engineering Company; Elmdor/Stoneman Div.
 - b. Thaler Metal Industries Ltd.
- B. Description: Manufactured assembly made of 4.0-lb/sq. ft., 0.0625-inch- thick, lead flashing collar and skirt extending at least 6 inches from pipe, with galvanized-steel boot reinforcement and counterflashing fitting.
 1. Open-Top Vent Cap: Without cap.
 2. Low-Silhouette Vent Cap: With vandal-proof vent cap.
 3. Extended Vent Cap: With field-installed, vandal-proof vent cap.

2.6 THROUGH-PENETRATION FIRESTOP ASSEMBLIES

A. Through-Penetration Firestop Assemblies:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. ProSet Systems Inc.
 - b. Engineer approved equal.
2. Standard: UL 1479 assembly of sleeve and stack fitting with firestopping plug.
3. Size: Same as connected soil, waste, or vent stack.
4. Sleeve: Molded PVC plastic, of length to match slab thickness and with integral nailing flange on one end for installation in cast-in-place concrete slabs.
5. Stack Fitting: ASTM A 48/A 48M, gray-iron, hubless-pattern, wye branch with neoprene O-ring at base and gray-iron plug in thermal-release harness. Include PVC protective cap for plug.
6. Special Coating: Corrosion resistant on interior of fittings.

2.7 MISCELLANEOUS SANITARY DRAINAGE PIPING SPECIALTIES

A. Deep-Seal Traps:

1. Description: Cast-iron or bronze casting, with inlet and outlet matching connected piping and cleanout trap-seal primer valve connection.
 2. Size: Same as connected waste piping.
 - a. NPS 2 (DN 50): 4-inch- minimum water seal.
 - b. NPS 2-1/2 (DN 65) and Larger: 5-inch- minimum water seal.
- B. Floor-Drain, Trap-Seal Primer Fittings:
1. Description: Cast iron, with threaded inlet and threaded or spigot outlet, and trap-seal primer valve connection.
 2. Size: Same as floor drain outlet with NPS 1/2 side inlet.
- C. Air-Gap Fittings:
1. Standard: ASME A112.1.2, for fitting designed to ensure fixed, positive air gap between installed inlet and outlet piping.
 2. Body: Bronze or cast iron.
 3. Inlet: Opening in top of body.
 4. Outlet: Larger than inlet.
 5. Size: Same as connected waste piping and with inlet large enough for associated indirect waste piping.
- D. Sleeve Flashing Device:
1. Description: Manufactured, cast-iron fitting, with clamping device, that forms sleeve for pipe floor penetrations of floor membrane. Include galvanized-steel pipe extension in top of fitting that will extend 1 inch (25 mm) above finished floor and galvanized-steel pipe extension in bottom of fitting that will extend through floor slab.
 2. Size: As required for close fit to riser or stack piping.
- E. Stack Flashing Fittings:
1. Description: Counterflashing-type, cast-iron fitting, with bottom recess for terminating roof membrane, and with threaded or hub top for extending vent pipe.
 2. Size: Same as connected stack vent or vent stack.
- F. Vent Caps:
1. Description: Cast-iron body with threaded or hub inlet and vandal-proof design. Include vented hood and setscrews to secure to vent pipe.
 2. Size: Same as connected stack vent or vent stack.
- G. Frost-Resistant Vent Terminals:
1. Description: Manufactured or shop-fabricated assembly constructed of copper, lead-coated copper, or galvanized steel.
 2. Design: To provide 1-inch enclosed air space between outside of pipe and inside of flashing collar extension, with counterflashing.
- H. Expansion Joints:

1. Standard: ASME A112.21.2M.
2. Body: Cast iron with bronze sleeve, packing, and gland.
3. End Connections: Matching connected piping.
4. Size: Same as connected soil, waste, or vent piping.

2.8 FLASHING MATERIALS

- A. Lead Sheet: ASTM B 749, Type L51121, copper bearing, with the following minimum weights and thicknesses, unless otherwise indicated:
 1. General Use: 4.0-lb/sq. ft., 0.0625-inch thickness.
 2. Vent Pipe Flashing: 3.0-lb/sq. ft., 0.0469-inch thickness.
 3. Burning: 6-lb/sq. ft., 0.0938-inch thickness.
- B. Copper Sheet: ASTM B 152/B 152M, of the following minimum weights and thicknesses, unless otherwise indicated:
 1. General Applications: 12 oz./sq. ft.
 2. Vent Pipe Flashing: 8 oz./sq. ft.
- C. Zinc-Coated Steel Sheet: ASTM A 653/A 653M, with 0.20 percent copper content and 0.04-inch minimum thickness, unless otherwise indicated. Include G90 hot-dip galvanized, mill-phosphatized finish for painting if indicated.
- D. Fasteners: Metal compatible with material and substrate being fastened.
- E. Metal Accessories: Sheet metal strips, clamps, anchoring devices, and similar accessory units required for installation; matching or compatible with material being installed.
- F. Solder: ASTM B 32, lead-free alloy.
- G. Bituminous Coating: SSPC-Paint 12, solvent-type, bituminous mastic.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install backwater valves in building drain piping. For interior installation, provide cleanout deck plate flush with floor and centered over backwater valve cover, and of adequate size to remove valve cover for servicing.
- B. Install cleanouts in aboveground piping and building drain piping according to the following, unless otherwise indicated:
 1. Size same as drainage piping up to NPS 4. Use NPS 4 for larger drainage piping unless larger cleanout is indicated.
 2. Locate at each change in direction of piping greater than 45 degrees.
 3. Locate at minimum intervals of 50 feet for piping NPS 4 and smaller and 100 feet for larger piping.

4. Locate at base of each vertical soil and waste stack.
- C. For floor cleanouts for piping below floors, install cleanout deck plates with top flush with finished floor.
- D. For cleanouts located in concealed piping, install cleanout wall access covers, of types indicated, with frame and cover flush with finished wall.
- E. Install floor drains at low points of surface areas to be drained. Set grates of drains flush with finished floor, unless otherwise indicated.
 1. Position floor drains for easy access and maintenance.
 2. Set floor drains below elevation of surrounding finished floor to allow floor drainage. Set with grates depressed according to the following drainage area radii:
 - a. Radius, 30 Inches or Less: Equivalent to 1 percent slope, but not less than 1/4-inch total depression.
 - b. Radius, 30 to 60 Inches: Equivalent to 1 percent slope.
 - c. Radius, 60 Inches or Larger: Equivalent to 1 percent slope, but not greater than 1-inch total depression.
 3. Install floor-drain flashing collar or flange so no leakage occurs between drain and adjoining flooring. Maintain integrity of waterproof membranes where penetrated.
 4. Install individual traps for floor drains connected to sanitary building drain, unless otherwise indicated.
- F. Install trench drains at low points of surface areas to be drained. Set grates of drains flush with finished surface, unless otherwise indicated.
- G. Install fixture air-admittance valves on fixture drain piping.
- H. Install roof flashing assemblies on sanitary stack vents and vent stacks that extend through roof.
- I. Install flashing fittings on sanitary stack vents and vent stacks that extend through roof.
- J. Install deep-seal traps on all floor drains and other waste outlets.
- K. Install floor-drain, trap-seal primer fittings on inlet to all floor drains.
 1. Exception: Fitting may be omitted if trap has trap-seal primer connection.
 2. Size: Same as floor drain inlet.
- L. Install air-gap fittings on draining-type backflow preventers and on indirect-waste piping discharge into sanitary drainage system.
- M. Install sleeve flashing device with each riser and stack passing through floors with waterproof membrane.
- N. Install vent caps on each vent pipe passing through roof.
- O. Install frost-resistant vent terminals on each vent pipe passing through roof. Maintain 1-inch clearance between vent pipe and roof substrate.

- P. Install expansion joints on vertical stacks and conductors. Position expansion joints for easy access and maintenance.
- Q. Install frost-proof vent caps on each vent pipe passing through roof. Maintain 1-inch clearance between vent pipe and roof substrate.
- R. Install wood-blocking reinforcement for wall-mounting-type specialties.
- S. Install traps on plumbing specialty drain outlets. Omit traps on indirect wastes unless trap is indicated.

3.2 CONNECTIONS

- A. Comply with requirements in Section 22 13 16 "Sanitary Waste and Vent Piping" for piping installation requirements. Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Install piping adjacent to equipment to allow service and maintenance.
- C. Ground equipment according to Section 26 05 26 "Grounding and Bonding for Electrical Systems."
- D. Connect wiring according to Section 26 05 19 "Low-Voltage Electrical Power Conductors and Cables."

3.3 FLASHING INSTALLATION

- A. Fabricate flashing from single piece unless large pans, sumps, or other drainage shapes are required. Join flashing according to the following if required:
 - 1. Lead Sheets: Burn joints of lead sheets 6.0-lb/sq. ft, 0.0938-inch thickness or thicker. Solder joints of lead sheets 4.0-lb/sq. ft., 0.0625-inch thickness or thinner.
 - 2. Copper Sheets: Solder joints of copper sheets.
- B. Install sheet flashing on pipes, sleeves, and specialties passing through or embedded in floors and roofs with waterproof membrane.
 - 1. Pipe Flashing: Sleeve type, matching pipe size, with minimum length of 10 inches, and skirt or flange extending at least 8 inches around pipe.
 - 2. Sleeve Flashing: Flat sheet, with skirt or flange extending at least 8 inches around sleeve.
 - 3. Embedded Specialty Flashing: Flat sheet, with skirt or flange extending at least 8 inches around specialty.
- C. Set flashing on floors and roofs in solid coating of bituminous cement.
- D. Secure flashing into sleeve and specialty clamping ring or device.
- E. Install flashing for piping passing through roofs with counterflashing or commercially made flashing fittings, according to Section 07 62 00 "Sheet Metal Flashing and Trim."

- F. Extend flashing up vent pipe passing through roofs and turn down into pipe, or secure flashing into cast-iron sleeve having calking recess.
- G. Fabricate and install flashing and pans, sumps, and other drainage shapes.

3.4 FIELD QUALITY CONTROL

- A. Tests and Inspections:
 - 1. Leak Test: After installation, charge system and test for leaks. Repair leaks and retest until no leaks exist.
 - 2. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

3.5 PROTECTION

- A. Protect drains during remainder of construction period to avoid clogging with dirt or debris and to prevent damage from traffic or construction work.
- B. Place plugs in ends of uncompleted piping at end of each day or when work stops.

END OF SECTION 22 13 19

SECTION 23 00 00 – MECHANICAL GENERAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. This is a Basic Mechanical Requirements Section. Provisions of this section apply to work of all Division 21, 22, and 23 sections (HVAC, Plumbing and Fire Protection).
- C. Review all other contract documents to be aware of conditions affecting work herein.
- D. All work under Division 23 shall be constructed in accordance with the codes listed herein. The design has been based on the requirements of these codes; and while it is not the responsibility of the Contractor to verify that all work called for complies with these codes, he shall be responsible for calling to the Architect/Engineer's attention any details or specifications that are not in conformance with these or other codes.
- E. Where code conflict exists, generally the most restrictive requirement applies. Comply with current code edition, unless noted.
 - 1. 2020 Florida Building Code.
 - 2. National Electric Code (NFPA 70).
 - 3. Life Safety Code (NFPA 101).
 - 4. Air Conditioning and Ventilating Systems (NFPA 90A).
 - 5. Standard for the Installation of Sprinkler Systems (NFPA 13).
 - 6. Handicapped Accessibility, ANSI A117.1 and Florida Statute Chapter 553, Part V.
- F. All mechanical materials, installation and systems shall meet the requirements of the following standards, including the latest addenda and amendments, to the extent referenced:
 - 1. Underwriters' Laboratories (UL)
 - 2. American National Standards Institution (ANSI)
 - 3. American Society of Testing Materials (ASTM)
 - 4. Air Conditioning and Refrigeration Institute (ARI)
 - 5. National Fire Protection Association (NFPA)
 - 6. National Electrical Manufacturers Association (NEMA)
 - 7. Sheet Metal and Air Conditioning Contractors' National Association SMACNA)
 - 8. American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE)
 - 9. Air Movement and Control Association (AMCA)
- G. Codes or standards applying to a specific part of the work may be included in that section.
- H. Comply with regulations and codes of suppliers of utilities.

- I. Where no specific method or form of construction is called for in the contract documents, the Contractor shall comply with code requirements when carrying out such work.

1.2 CONTRACTORS QUALIFICATIONS

- A. General: Wherever the word "mechanical contractor", "sub-contractor" or "firm" is used in these sub-paragraphs, it shall mean the contractor/sub-contractor of record for the installations used for proficiency qualification.
- B. Location: The firm which performs the installation of the work under this section shall be one who maintains an established, experienced organization with a permanent, manned office within 50 miles from the project site location.
- C. HVAC Experience: The firm's proficiency in the installation, start-up, adjustment, and maintenance of air conditioning systems shall have been demonstrated by the successful performance of work as specified herein on at least three systems each with ducted air distribution, and hydronic and refrigerant piping of 25 tons capacity or greater with the school district of Santa Rosa County. The firm shall have been in business performing services as specified herein, for at least 5 years.
- D. Plumbing Experience: The firm's proficiency in the installation and adjustment of plumbing systems shall have been demonstrated by the successful performance of work as specified herein on at least three commercial or institutional buildings, each containing a minimum of 10 plumbing fixtures. The firm shall have been in business performing services as specified herein, for at least 5 years.

1.3 SUMMARY

- A. This Section includes the following:
 1. Piping materials and installation instructions common to most piping systems.
 2. Joining Materials.
 3. Transition fittings.
 4. Dielectric fittings.
 5. Flexible Connectors.
 6. Excavation and backfill.
 7. Mechanical demolition.
 8. Equipment installation requirements common to equipment sections.
 9. Painting and finishing.
 10. Concrete bases.
 11. Supports and anchorages.

1.4 DEFINITIONS

- A. Finished Spaces: Spaces other than mechanical and electrical equipment rooms, furred spaces, pipe and duct shafts, unheated spaces immediately below roof, spaces above ceilings, unexcavated spaces, crawlspaces, and tunnels.

- B. Exposed, Interior Installations: Exposed to view indoors. Examples include finished occupied spaces and mechanical equipment rooms.
- C. Exposed, Exterior Installations: Exposed to view outdoors or subject to outdoor ambient temperatures and weather conditions. Examples include rooftop locations.
- D. Concealed, Interior Installations: Concealed from view and protected from physical contact by building occupants. Examples include above ceilings and in duct shafts.
- E. Concealed, Exterior Installations: Concealed from view and protected from weather conditions and physical contact by building occupants but subject to outdoor ambient temperatures. Examples include installations within unheated shelters.
- F. The following are industry abbreviations for plastic materials:
 - 1. CPVC: Chlorinated polyvinyl chloride plastic.
 - 2. PE: Polyethylene plastic.
 - 3. PVC: Polyvinyl chloride plastic.
- G. The following are industry abbreviations for rubber materials:
 - 1. EPDM: Ethylene-propylene-diene terpolymer rubber.
 - 2. NBR: Acrylonitrile-butadiene rubber.
- H. Provide: Furnish and install, complete and ready for intended use.
- I. Furnish: Supply and deliver to project site, ready for subsequent requirements.
- J. Install: Operations at project site, including unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar requirements.
- K. Permits and Fees: Contractor shall purchase all necessary permits, meters, and pay for any inspections required for his work and pay all fees and charges incidental thereto.
- L. Verification of Owner's Data: Prior to commencing any work the Contractor shall satisfy himself as to the accuracy of all data as indicated in these plans and specifications and/or as provided by the Owner. Should the Contractor discover any inaccuracies, errors, or omissions in the data, he shall immediately notify the Architect/Engineer in order that proper adjustments can be anticipated and ordered. Commencement by the Contractor of any work shall be held as an acceptance of the data by him after which time the Contractor has no claim against the Owner resulting from alleged errors, omissions or inaccuracies of the said data.
- M. Delivery and Storage of Materials: Materials delivered to site shall be inspected for damage, unloaded, and stored with a minimum of handling. All material shall be stored to provide protection from the weather and accidental damage.
- N. Extent of work is indicated by the drawings, schedules, and the requirements of the specifications. Singular references shall not be constructed as requiring only one device if multiple devices are shown on the drawings or are required for proper system operation.

1.5 FIELD MEASUREMENTS AND COORDINATION:

- A. The intent of the drawings and specifications is to obtain a complete and satisfactory installation. Separate divisional drawings and specifications shall not relieve the Contractor or subcontractors from full compliance of work of his trade indicated on any of the drawings or in any section of the specifications.
- B. Verify all field dimensions and locations of equipment to insure close, neat fit with other trades' work. Make use of all contract documents and approved shop drawings to verify exact dimension and locations.
- C. Coordinate work in this division with all other trades in proper sequence to insure that the total work is completed within contract time schedule and with a minimum cutting and patching.
- D. Locate all apparatus symmetrical with architectural elements. Install to exact height and locations when shown on architectural drawings. When locations are shown only on mechanical drawings, be guided by architectural details and conditions existing at job and correlate this work with that of others.
- E. Install work as required to fit structure, avoid obstructions, and retain clearance, headroom, openings and passageways. Cut no structural members without written approval.
- F. Carefully examine any existing conditions, piping, and premises. Compare drawings with existing conditions. Report any observed discrepancies. It shall be the Contractor's responsibility to properly coordinate the work and to identify problems in a timely manner. Written instructions will be issued to resolve discrepancies.
- G. Because of the small scale of the drawings, it is not possible to indicate all offsets and fittings or to locate every accessory. Drawings are essentially diagrammatic. Study carefully the sizes and locations of structural members, wall and partition locations, trusses, and room dimensions and take actual measurements on the job. Locate piping, ductwork, equipment and accessories with sufficient space for installing and servicing. Contractor is responsible for accuracy of his measurements and for coordination with all trades. Contractor shall not order materials or perform work without such verification. No extra compensation will be allowed because field measurements vary from the dimensions on the drawings. If field measurements show that equipment or piping cannot be fitted, the Architect/Engineer shall be consulted. Remove and relocate, without additional compensation, any item that is installed and is later found to encroach on space assigned to another use.
- H. Coordinate with the General Contractor for all cutting and patching. Contractors performing Division 23 work shall inform the General Contractor of all cutting and patching required prior to bidding and shall coordinate installation.

1.6 SUBMITTALS

- A. Coordination Drawings: Detail major elements, components, and systems of mechanical equipment and materials in relationship with other systems, installations, and building components. Drawings shall be prepared by the contractor using AutoCAD 2007 or higher. The Engineer will supply base floor plans only. All other work shall be by the contractor. Show space

requirements for installation and access. Indicate if sequence and coordination of installations are important to efficient flow of the Work. Include the following:

1. Planned piping layout, including valve and specialty locations and valve-stem movement.
 2. Planned ductwork layout, including dampers, elbows, etc.
 3. Clearances for installing and maintaining insulation.
 4. Clearances for servicing and maintaining equipment, accessories, and specialties, including space for disassembly required for periodic maintenance.
 5. Equipment and accessory service connections and support details.
 6. Exterior wall and foundation penetrations.
 7. Fire-rated wall and floor penetrations.
 8. Access panel and door locations.
 9. Sizes and location of required concrete pads and bases.
 10. Scheduling, sequencing, movement, and positioning of large equipment into building during construction.
 11. Floor plans, elevations, and details to indicate penetrations in floors, walls, and ceilings and their relationship to other penetrations and installations.
 12. Reflected ceiling plans to coordinate and integrate installation of air outlets and inlets, light fixtures, communication system components, sprinklers, and other ceiling-mounted items.
- B. Samples: Of color, lettering style and other graphic representation required for each identification material and device.
- C. When approved, the submittal control log and submittals shall be an addition to the specifications herewith, and shall be of equal force in that no deviation will be permitted except with the approval of the Architect/Engineer.
- D. Shop drawings, product literature, and other approval submittals will only be reviewed if they are submitted in full accordance with the General and Supplementary Conditions and Division 1 Specification sections and the following:
1. Submittals shall be properly organized in accordance with the approved submittal control log.
 2. Submittals shall not include items from more than one specification section in the same submittal package unless approved in the submittal control log.
 3. Submittals shall be properly identified by a cover sheet showing the project name, Architect and Engineer names, submittal control number, specification section, a list of products or item names with model numbers in the order they appear in the package, and spaces for approval stamps. A sample cover sheet is included at the end of this section.
 4. Submittals shall have been reviewed and approved by the General Contractor (or Prime Contractor). Evidence of this review and approval shall be an "Approved" stamp with a signature and date on the cover sheet.
 5. Submittals that include a series of fixtures or devices (such as plumbing fixtures or valves) shall be organized by the fixture number or valve type and be marked accordingly. Each fixture must include all items associated with that fixture regardless of whether or not those items are used on other fixtures.
 6. The design shown on the drawings supports the mechanical equipment basis of design specifications at the time of design. If mechanical equipment is submitted with different electrical, physical, capacity, etc. requirements, it shall be the responsibility of the mechanical contractor to resolve all required design changes (wire and conduit size, type

of disconnect or overload protection, point(s) of connection, ductwork modifications, etc.) and clearly show the new design on the mechanical submittal with a written statement that this change will be provided at no additional cost. Mechanical submittals made with no written reference to the electrical design will be presumed to work with the electrical design. Any corrections required will be at no additional cost.

- E. If the shop drawings show variation from the requirements of contract because of standard shop practice or other reasons, the Contractor shall make specific mention of such variation in writing in his letter of transmittal and on the submittal cover sheet in order that, if acceptable, Contractor will not be relieved of the responsibility for executing the work in accordance with the contract.
- F. Review of shop drawings, product literature, catalog data, or schedules shall not relieve the Contractor from responsibility for deviations from contract drawings or specifications, unless he has in writing called to the attention of the Architect/Engineer each such deviation in writing at the time of submission, nor shall it relieve him from responsibility for errors of any sort in shop drawings, product literature, catalog data, or schedules. Any feature or function specified but not mentioned in the submittal shall be assumed to be included per the specification.
- G. Submit shop drawings as called for in other sections after award of the contract and before any material is ordered or fabricated. Shop drawings shall consist of plans, sections, elevations and details to scale (not smaller than 1/4" per foot), with dimensions clearly showing the installation. Direct copies of small scale project drawings issued to the Contractor are not acceptable. Drawings shall take into account equipment furnished under other sections and shall show space allotted for it. Include construction details and materials. NOTE: Failure of the Contractor to provide this information during the shop drawings phase shall make the Contractor responsible for all changes to achieve compliance with the Contract Documents without additional compensation.
- H. Test Reports and Verification Submittals: Submit test reports, certifications and verification letters as called for in other sections. Contractor shall coordinate the required testing and documentation of system performance such that sufficient time exists to prepare the reports, submit the reports, review the reports and take corrective action within the scheduled contract time.
- I. O&M Data Submittals: Submit Operation and Maintenance data as called for in other sections. When a copy of approval submittals is included in the O&M Manual, only the final Approved or Approved as Noted copy shall be used. Contractor shall organize these data in the O&M Manuals tabbed by specification number. Prepare O&M Manuals as required by Division 1 and as described herein. Submit manuals at the Substantial Completion inspection.

1.6 QUALITY ASSURANCE

- A. Steel Support Welding: Qualify processes and operators according to AWS D1.1, "Structural Welding Code-Steel."
- B. Comply with ASME A13.1 for lettering size, length of color field, colors, and viewing angles of identification devices.

- C. Steel Pipe Welding: Qualify processes and operators according to ASME Boiler and Pressure Vessel Code: Section IX, "Welding and Brazing Qualifications."
- D. Comply with provisions in ASME B31 Series, "Code for Pressure Piping."
- E. Certify that each welder has passed AWS qualification tests for welding processes involved and that certification is current.
- F. The design and layout shown on the drawings are based on the Manufacturers listed in the Division 23 specifications. If equipment other than that of the Manufacturers indicated is submitted to the Engineer for consideration as an equal, it shall be the responsibility of the Manufacturer requesting approval to submit with the request a revised drawing(s) of the mechanical equipment layouts acceptable to the Engineer. These revised drawings shall show the proposed location(s) of the alternate unit(s) and the area required for withdrawal space of replacement or serviceable components. These drawings shall also show clearances of adjacent equipment and the service area required by that equipment.
- G. Equipment Selection: Equipment of differing electrical characteristics, physical dimensions and/or weights, capacities, and ratings may be furnished provided such proposed equipment is approved in writing and connecting mechanical, electrical, structural, and architectural services (such as circuit breakers, conduit, motors, bases, equipment pads, and equipment spaces) are adjusted by the contractor accordingly. The additional costs resulting from these modifications shall be the responsibility of the Contractor and no costs resulting from these modifications shall be passed to the Owner. If minimum energy ratings or efficiencies of equipment are specified, equipment must meet design and commissioning requirements.

1.7 COORDINATION

- A. Coordinate mechanical equipment installation with other building components.
- B. Arrange for pipe spaces, chases, slots, and openings in building structure during progress of construction, to allow for mechanical installations.
- C. Coordinate installation of required supporting devices and set sleeves in poured-in-place concrete and other structural components as they are constructed.
- D. Sequence, coordinate, and integrate installations of mechanical materials and equipment for efficient flow of the Work. Coordinate installation of large equipment requiring positioning before closing in building.
- E. Coordinate connection of mechanical systems with exterior underground and overhead utilities and services. Comply with requirements of governing regulations, franchised service companies, and controlling agencies.
- F. Coordinate requirements for access panels and doors for mechanical items requiring access that are concealed behind finished surfaces.
- G. Coordinate installation of identifying devices after completing covering and painting, if devices are applied to surfaces. Install identifying devices before installing acoustical ceilings and similar concealment.

- H. Refer to other Division 23 sections and/or drawings for specific requirements of the particular piping system being installed. Where another Division 23 section or the drawings conflict with requirements of this section, the other Division 23 section or the drawings shall take precedence over the general requirements herein.
- I. OSHA: Contractor employee worker protection for all trenching and excavation operations shall comply with 29 CFR 1926.650 Subpart P and all current OSHA requirements.

1.8 MULTI-DISCIPLINE COORDINATION

A. DIVISION 31, 32, AND 33 SITE WORK

- 1. Refer to Division Sitework for:
 - a. All water, sewer, and storm water piping greater than five feet from the building
 - b. Manholes and catch-basins.
 - c. Underground tanks and enclosures.
 - d. Site fire protection work.
- 2. The following work is part of Division 23:
 - a. All site heating hot water and chilled water piping.
 - b. Grease trap.

B. DIVISION 3 CONCRETE

- 1. Refer to Division 3, Concrete for:
 - a. Rough grouting in and around mechanical work.
 - b. Patching concrete cut to accommodate mechanical work.
- 2. The following is part of Division 23 work, complying with the requirements of Division 3
 - a. Curbs, foundations and pads for mechanical equipment.
 - b. Basins, sumps, and vaults of mechanical work.
 - c. Underground structural concrete to accommodate mechanical work.
 - d. Inertia bases.

C. DIVISION 4 MASONRY

- 1. Refer to Division 4, Masonry for:
 - a. Installation of access doors in walls.

D. DIVISION 5 METALS

- 1. Refer to Division 5, Metals for:

- a. Framing openings for mechanical equipment.
- 2. The following is part of Division 23 work.
 - a. Supports for mechanical work.

E. DIVISION 6 WOOD AND PLASTIC

- 1. Refer to Division 6, Wood for:
 - a. Framing openings for mechanical equipment

F. DIVISION 7 THERMAL AND MOISTURE PROTECTION

- 1. Refer to Division 7, Thermal and Moisture Protection for:
 - a. Installation of all roof curbs and roof supports for mechanical work.
 - b. Caulking and waterproofing of all wall and roof mounted mechanical work.
 - c. Providing all roof curbs and all vent flashing for metal roofs.
- 2. The following is part of Division 23 work, complying with the requirements of Division 7.
 - a. Fire barrier penetration seals.
 - b. Installation of louver and water proofing. Coordinate with architectural.

G. DIVISION 8 DOORS AND WINDOWS

- 1. Refer to Division 8, Doors & Windows for:
 - a. Installation of all door grilles.
 - b. Providing all undercuts

H. DIVISION 9 FINISHES

- 1. Refer to Division 9, Finishes for:
 - a. Painting exposed ductwork, piping, and equipment.
 - b. Painting structural metal and concrete for mechanical work.
 - c. Painting door grilles and access panels.
 - d. Painting color-coded mechanical work indicated for continuous painting. See color schedule in Division 23 section, "Mechanical Identification".
 - e. Installation of access doors in gypsum drywall.
 - f. Colors shall be selected by the Architect for all painting of exposed mechanical work in occupied spaces, unless specified herein. Do not paint insulated or jacketed surfaces.

2. Perform the following as part of Division 23 work:

- a. Touch up painting of factory finishes.
- b. Painting of all hangers.

I. DIVISION 10 SPECIALTIES

1. Refer to Division 10, Specialties for:

- a. Fire extinguishers and fire extinguisher cabinets and accessories.

J. DIVISION 11 EQUIPMENT

1. Refer to Division 11, Equipment for:

- a. Equipment for all food service equipment to be provided. This includes the cooking hoods with fire suppression, dishwasher hoods, dishwasher booster heaters, and food preparation/cleanup equipment.
- b. Equipment for all laboratory equipment including cabinets, casework, student stations, demonstration desks, safety stations, eyewashes, and all related fixtures, fittings, and trim.

2. Provide the following as part of Division 23 work:

- a. All ducts, connections, and related devices to make kitchen hoods operational.
- b. All trim including faucets, waste connections, drain traps, vents, valves, piping, flashing, fittings, strainers, and other materials necessary to make equipment operational. Provide rough-in for all equipment. Provide final connections for all equipment.
- c. All fixtures specified in Contract Documents.
- d. All automatic gas valves for shutoff of gas to cooking appliances when fire suppression system activates. Coordinate type of valve with fire suppression system supplier.
- e. All trim not furnished by Division 11 including drains, wastes, continuous wastes, tailpieces, traps and similar devices necessary to make fixtures operational. Provide rough-in for all fixtures. Provide final connections for all fixtures. Provide all fixtures specified in Contract Documents.

K. DIVISION 26 ELECTRICAL

- 1. Mechanical contractor shall coordinate the exact electrical requirements of all mechanical equipment being provided with the electrical contractor. Where approval submittals are required, this coordination shall be accomplished prior to making the submittals. The electrical design shown on the drawings supports the mechanical equipment basis of design. If mechanical equipment is submitted with different electrical requirements, it is the responsibility of the mechanical contractor to resolve all required electrical design

changes (wire and conduit size, type of disconnect or overload protection, point(s) of connection, etc.) and clearly show the new electrical design on the mechanical submittal with a written statement that this design will be provided at no additional cost. Mechanical submittals made with no written reference to the electrical design will be presumed to work with the electrical design. Any corrections required will be at no additional cost.

2. Mechanical contractor shall provide all HVAC control wiring including the Energy Management Control system sensors, alarms, and input/output signals and all relays, interlocks, warning lights, and control devices, complying with the requirements of Division 26. The intent is for the mechanical contractor to be responsible for the entire HVAC control system, including point-to-point wiring and connections.
3. Electrical contractor shall provide disconnect switches, starters, and contactors for mechanical equipment unless specifically noted as being furnished as part of mechanical equipment.
4. Electrical contractor shall provide all power wiring, raceway and devices, and make final electrical connections to all mechanical equipment, switches, starters, contactors, controllers, and similar equipment.
5. All duct-mounted smoke detectors shall be furnished and wired by the electrical contractor and installed by the mechanical contractor.

PART 2 - PRODUCTS

2.1 EQUIPMENT AND MATERIALS

- A. All materials shall be new or Owner-supplied reused as shown on the drawings, the best of their respective kinds, suitable for the conditions and duties imposed on them at the building and shall be of reputable manufacturers. The description, characteristics, and requirements of materials to be used shall be in accordance with qualifying conditions established in the following sections.
- B. All equipment and materials shall be new and the most suitable grade for the purpose intended. Equipment furnished under this division shall be the product of a manufacturer regularly engaged in the manufacture of such items for a period of three years. Where practical, all of the components shall be products of a single manufacturer in order to provide proper coordination and responsibility. Where required, Contractor shall furnish proof of installation of similar units or equipment.
- C. Each item of equipment shall bear a name plate showing the manufacturer's name, trade name, model number, serial number, ratings and other information necessary to fully identify it. This plate shall be permanently mounted in a prominent location and shall not be concealed, insulated or painted.
- D. The label of the approving agency, such as UL, IBR, ASME, ARI, AMCA, by which a standard has been established for the particular item shall be in full view.

- E. The equipment shall be essentially the standard product of a manufacturer regularly engaged in the production of such equipment and shall be a product of the manufacturer's latest design.
- F. A service organization with personnel and spare parts shall be available within two hours for each type of equipment furnished.
- G. Install in accordance with manufacturer's recommendations. Place in service by a factory trained representative where required.
- H. Materials and equipment are specified herein by a single or by multiple manufacturers to indicate quality, material and type of construction desired. Manufacturer's products shown on the drawings have been used as basis for design; it shall be the Contractor's responsibility to ascertain that alternate manufacturer's products, or the particular products of named manufacturers, meet the detailed specifications and that size and arrangement of equipment are suitable for installation.
- I. Model Numbers: Catalog numbers and model numbers indicated in the drawings and specifications are used as a guide in the selection of the equipment and are only listed for the contractor's convenience. The contractor shall determine the actual model numbers for ordering materials in accordance with the written description of each item and with the intent of the drawings and specifications.

2.2 REQUESTS FOR SUBSTITUTION

- A. Where a particular system, product or material is specified by name, consider it as standard basis for bidding, and base proposal on the particular system, product or material specified.
- B. Requests by Contractor for substitution will be considered only when reasonable, timely, fully documented, and qualifying under one or more of the following circumstances.
 - 1. Required product cannot be supplied in time for compliance with Contract time requirements.
 - 2. Required product is not acceptable to governing authority, or determined to be non-compatible, or cannot be properly coordinated, warranted or insured, or has other recognized disability as certified by Contractor.
 - 3. Substantial cost advantage is offered Owner after deducting offsetting disadvantages including delays, additional compensation for redesign, investigation, evaluation and other necessary services and similar considerations.
- C. All requests for substitution shall contain a "Comparison Schedule" and clearly and specifically indicate any and all differences or omissions between the product specified as the basis of design and the product proposed for substitution. Differences shall include but shall not be limited to data as follows for both the specified and substituted products:
 - 1. Principal of operation.
 - 2. Materials of construction or finishes.
 - 3. Thickness of gauge of materials.
 - 4. Weight of item.
 - 5. Deleted features or items.
 - 6. Added features or items.

7. Changes in other work caused by the substitution.
8. Performance curves.

If the approved substitution contains differences or omissions not specifically called to the attention of the Architect/Engineer, the Owner reserves the right to require equal or similar features to be added to the substituted products (or to have the substituted products replaced) at the Contractor's expense.

2.3 EXCAVATION AND BACKFILL MATERIALS

- A. Sand: Clean, hard, uncoated grains free from organic matter or other deleterious substances. Sand for backfill shall be of a grade equal to mortar sand.
- B. Gravel: Clean, well graded hard stone or gravel, free from organic material. Size range to be from No. 4 screen retentions to 1".
- C. Earth: Fill free of clay, muck, stones, wood, roots or rubbish.
- D. Identification Tape: Polyethylene 6 inches wide, 0.004 inches thick, continuously printed with "CAUTION" in large letters and type of pipe below.
- E. Copper Identification Wire: 12-gauge.

PART 3 - EXECUTION

3.1 WORKMANSHIP

- A. All materials and equipment shall be installed and completed in a first-class workmanlike manner and in accordance with the best modern methods and practice. Any materials installed which do not present an orderly and reasonably neat and/or workmanlike appearance, or do not allow adequate space for maintenance, shall be removed and replaced when so directed by the Architect/Engineer.

3.2 COORDINATION

- A. The Contractor shall be responsible for full coordination of the mechanical systems with shop drawings of the building construction so the proper openings and sleeves or supports are provided for piping, ductwork, or other equipment passing through slabs or walls.
- B. Any additional steel supports required for the installation of any mechanical equipment, piping, or ductwork shall be furnished and installed under the section of the specifications requiring the additional supports.
- C. It shall be the Contractor's responsibility to see that all equipment such as valves, dampers, filters and such other apparatus or equipment that may require maintenance and operation are made easily accessible, regardless of the diagrammatic location shown on the drawings.
- D. All connections to fixtures and equipment shown on the drawings shall be considered diagrammatic unless otherwise indicated by detail. The actual connections shall be made to fully suit the requirements of each case and adequately provide for expansion and servicing.

- E. The contractor shall protect equipment, material, and fixtures at all times. He shall replace all equipment, material, and fixtures which are damaged as a result of inadequate protection.
- F. Prior to starting and during progress of work, examine work and materials installed by others as they apply to work in this division. Report conditions which will prevent satisfactory installation.
- G. Start of work will be construed as acceptance of suitability of work of others.
- H. Before any equipment is shut down for disconnecting or tie-ins, arrangements shall be made with the Architect/Engineer and this work shall be done at the time best suited to the Owner. This will typically be on weekends and/or holidays and/or after normal working hours. Services shall be restored the same day unless prior arrangements are made. All overtime or premium costs associated with this work shall be included in the base bid.
- I. Provide all required temporary valves, piping, ductwork, equipment and devices as required. Maintain temporary services to areas as required. Remove all temporary material and equipment on completion of work unless Engineer concurs that such material and equipment would be beneficial to the Owner on a permanent basis.
- J. Notify General Contractor to do all cutting and patching of all holes, chases, sleeves, and other openings required for installation of equipment furnished and installed under this section. Utilize experienced trades for cutting and patching. Obtain permission from Architect/Engineer before cutting any structural items.
- K. Bolt equipment directly to concrete pads or vibration isolators as required, using hot-dipped galvanized anchor bolts, nuts and washers. Level equipment.
- L. Touch-up factory finishes on equipment located inside and outside shall be done under Division 23. Obtain matched color coatings from the manufacturer and apply as directed. If corrosion is found during inspection on the surface of any equipment, clean, prime, and paint, as required.
- M. Thoroughly clean all exposed parts of apparatus and equipment of cement, plaster, and other materials and remove all oil and grease spots. Repaint or touch up as required to look like new. During progress of work, contractor is to carefully clean up and leave premises and all portions of building free from debris and in a clean and safe condition.
- N. Start each item of equipment in strict accordance with the manufacturer's instructions; or where noted under equipment specification, start-up shall be done by a qualified representative of the manufacturer. Alignment, lubrication, safety, and operating control shall be included in start-up check.
- O. Operate heating and cooling systems as required after initial startup to maintain temperature and humidity conditions to avoid freeze damage and warping or sagging of ceilings and carpet.

3.3 RECORD DRAWINGS

1. During the progress of the work the Contractor shall record on their field set of drawings the exact location, as installed, of all piping, ductwork, equipment, and other systems which are not installed exactly as shown on the contract drawings.
2. Upon completion of the work, record drawings shall be prepared as described in the General Conditions, Supplementary Conditions, and Division 1 sections.

3.4 ACCEPTANCE

1. Punch List: Submit written confirmation that all punch lists have been checked and the required work completed.
2. Instructions: At completion of the work, provide a competent and experienced person who is thoroughly familiar with project, for one day to instruct permanent operating personnel in operation of equipment and control systems. This is in addition to any specific equipment operation and maintenance training.
3. Operation and Maintenance Manuals: Furnish three complete manuals bound in ring binders with Table of Contents, organized, and tabbed by specification section. Manuals shall contain:
 - a. Detailed operating instructions and instructions for making minor adjustments.
 - b. Complete wiring and control diagrams.
 - c. Routine maintenance operations.
 - d. Manufacturer's catalog data, service instructions, and parts lists for each piece of operating equipment.
 - e. Copies of approved submittals.
 - f. Copies of all manufacturer's warranties.
 - g. Copies of test reports and verification submittals.
4. Record Drawings: Submit record drawings.
5. Control Diagrams: Frame under plastic and mount on equipment room wall.

3.5 MECHANICAL DEMOLITION

- A. Refer to Division 1 Sections and Contract Drawings for general demolition requirements and procedures.
- B. Disconnect, demolish, and remove mechanical systems, equipment, and components indicated to be removed.
- C. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
- D. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material.

- E. Ducts to Be Removed: Remove portion of ducts indicated to be removed and plug remaining ducts with same or compatible ductwork material.
- F. Ducts to Be Abandoned in Place: Cap or plug ducts with same or compatible ductwork material.
- G. Equipment to Be Removed: Disconnect and cap services and remove equipment.
- H. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
- I. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.

3.6 PIPING SYSTEMS - COMMON REQUIREMENTS

- A. Install piping according to the following requirements and Division 23 Sections specifying piping systems. Individual Division 23 piping Sections specify unique piping installation requirements
- B. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated unless deviations to layout are approved on Coordination Drawings.
- C. Install piping in concealed locations, unless otherwise indicated and except in equipment rooms and service areas.
- D. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise.
- E. Install piping such that no piping passes over electrical panels.
- F. Refer to fire protection, plumbing and HVAC specifications for sleeve, sleeve seal system and escutcheon requirements.
- G. Install piping above accessible ceilings to allow sufficient space for ceiling panel removal.
- H. Install piping to permit valve servicing.
- I. Install piping at indicated slopes.
- J. Install piping free of sags and bends.
- K. Install fittings for changes in direction and branch connections.
- L. Install piping to allow application of insulation.

- M. Select system components with pressure rating equal to or greater than system operating pressure.
- N. Verify final equipment locations for roughing-in.
- O. Refer to equipment specifications in other Sections of these Specifications for roughing-in requirements.

3.7 EQUIPMENT INSTALLATION - COMMON REQUIREMENTS

- A. Install equipment to allow maximum possible headroom unless specific mounting heights are not indicated.
- B. Install equipment level and plumb, parallel and perpendicular to other building systems and components in exposed interior spaces, unless otherwise indicated.
- C. Install mechanical equipment to facilitate service, maintenance, and repair or replacement of components. Connect equipment for ease of disconnecting, with minimum interference to other installations. Extend grease fittings to accessible locations.
- D. Install equipment to allow right of way for piping installed at required slope.

3.8 PAINTING

- A. Apply paint to exposed uninsulated piping according to the following:
 - 1. Interior, Ferrous Piping: Use semigloss, acrylic-enamel finish. Include finish coat over enamel undercoat and primer.
 - 2. Interior, Galvanized-Steel Piping: Use semigloss, acrylic-enamel finish. Include two finish coats over galvanized metal primer.
 - 3. Interior, Ferrous Supports: Use semigloss, acrylic-enamel finish. Include finish coat over enamel undercoat and primer.
 - 4. Exterior, Ferrous Piping: Use semigloss, acrylic-enamel finish. Include two finish coats over rust-inhibitive metal primer.
 - 5. Exterior, Galvanized-Steel Piping: Use semigloss, acrylic-enamel finish. Include two finish coats over galvanized metal primer.
 - 6. Exterior, Ferrous Supports: Use semigloss, acrylic-enamel finish. Include two finish coats over rust-inhibitive metal primer.
- B. Do not paint piping specialties with factory-applied finish.
- C. Damage and Touchup: Repair marred and damaged factory-painted finishes with materials and procedures to match original factory finish.

3.9 CONCRETE BASES

- A. Construct concrete bases of dimensions indicated, but not less than 4 inches larger in both directions than supported unit. Follow supported equipment manufacturer's setting templates for

anchor bolt and tie locations. Use 3,000-psig, 28-day compressive-strength concrete and reinforcement.

3.10 ERECTION OF METAL SUPPORTS AND ANCHORAGES

- A. Cut, fit, and place miscellaneous metal supports accurately in location, alignment, and elevation to support and anchor mechanical materials and equipment
- B. Field Welding: Comply with AWS D1.1.

3.11 CUTTING AND PATCHING

- A. Cut, channel, chase, and drill floors, walls, partitions, ceilings, and other surfaces necessary for mechanical installations. Perform cutting by skilled mechanics of trades involved.
- B. Repair cut surfaces to match adjacent surfaces.

3.12 GROUTING

- A. Mix and install grout for mechanical equipment base bearing surfaces, pump and other equipment base plates, and anchors.
- B. Clean surfaces that will come into contact with grout.
- C. Provide forms as required for placement of grout.
- D. Avoid air entrapment during placement of grout.
- E. Place grout, completely filling equipment bases.
- F. Place grout on concrete bases and provide smooth bearing surface for equipment.
- G. Place grout around anchors.
- H. Cure placed grout.

3.13 EXCAVATION AND BACKFILL

- A. Ditching and Excavation: Shall be performed by hand wherever there is a possibility of encountering obstacles or any existing utility lines of any nature whatsoever. Where clear and unobstructed areas are to be excavated, appropriate machine excavation methods may be employed. Avoid use of machine excavators within the limits of the building lines.
- B. Bedding: Excavate to bottom grade of pipe to be installed, and shape bed of undisturbed earth to contour of pipe for a width of at least 50% of pipe diameter. If earth conditions necessitate excavation below grade of the pipe, such as due to the presence of clay, muck, or roots, subcut and bring bed up to proper elevation with clean, new sand (as described in paragraph 2.3), de-

posited in 6" layers and tamped. Notify Architect/Engineer if subcut exceeds 12", or if bed is of an unstable nature. In this case a 6" minimum layer of gravel will be required before sand bedding begins. Submit cost proposal if the earth conditions require subcut in excess of 12" or if gravel is required to achieve proper bedding.

- C. Placing: Pipe shall be carefully handled into place. Avoid knocking loose soil from the banks of the trench into the pipe bed. Rig heavier sections with nylon slings in lieu of wire rope to avoid crushing or chipping. Pipe which is handled with insulation in place, coated pipe, and jacketed pipe shall have special handling slings as required to prevent damage to the material.
- D. Backfilling: Deposit clean new sand (as described in paragraph 2.3) to 6" above the pipe and tamp. Then deposit sand or earth carefully in 6" layers, maintaining adequate side support, especially on nonferrous piping materials. Compact fill in 6" layers, using mechanical means, up to the top elevation of the pipe, and in 12" layers to rough or finish grade as required. Fine grade and restore surface to original condition.
- E. Special: Excavations shall be installed and maintained in satisfactory condition during the progress of the work. Subsurface structures are to be constructed in adequately sized excavations. De-watering equipment shall be installed and properly maintained where required. Shoring shall be employed in the event of unstable soil condition, and in all cases where required by OSHA regulations and necessary to protect materials and personnel from injury.
- F. Identification: Install identification tape directly above all underground piping, one tape for each pipe where multiple pipes are installed. Depth of tape shall be at least 6 inches below finished grade and 24" above buried pipe. Install copper wire above non-metallic pipes.
- G. Depth of Cover: Minimum cover for underground piping is two feet unless indicated otherwise.

END OF SECTION 23 00 00

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31 62 19 TIMBER PILES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes round timber piles.

1.2 UNIT PRICES

- A. Contract Sum: Base Contract Sum on number and dimensions of piles indicated from tip to cutoff, plus not less than 12 inches of overlength for cutting piles at cutoff elevations.
- B. Work of this Section is affected as follows:
 - 1. Additional payment for pile lengths in excess of that indicated, and credit for pile lengths less than that indicated, is calculated at unit prices stated in the Contract, based on net addition or deduction to total pile length as determined by Architect and measured to nearest 12 inches.
 - a. Additional payment for splices required to extend pile lengths in excess of that indicated is calculated at unit prices stated in the Contract.
 - 2. Unit prices include labor, materials, tools, equipment, and incidentals for furnishing, driving, cutting off, capping, and disposing of cutoffs.
 - 3. Test piles that become part of permanent foundation system are considered as an integral part of the Work.
 - 4. No payment is made for rejected piles, including piles driven out of tolerance, defective piles, or piles damaged during handling or driving.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For timber piles. Show fabrication and installation details for piles, including details of driving shoes, tips or boots, and pile butt protection.

1.5 INFORMATIONAL SUBMITTALS

- A. Round timber pile treatment data.
- B. Pile-Driving Equipment Data: Include type, make, and rated energy range; weight of striking part of hammer; weight of drive cap; and, type, size, and properties of hammer cushion.
- C. Pile-driving records.
- D. Field quality-control reports.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Handle and store piles at Project site to prevent breaks, cuts, abrasions, or other physical damage and as required by AWWA M4. Do not drill holes or drive spikes or nails into pile below cutoff elevation.

PART 2 - PRODUCTS

2.1 TIMBER PILES

- A. Round Timber Piles: ASTM D 25, unused, clean peeled, one piece from butt to tip; of the following species and size basis:
 - 1. Species: Southern yellow pine.
 - 2. Size Basis: 8-inch tip and 6-inch tip as indicated and natural taper
- B. Pressure-treat round timber piles according to AWWA U1 as follows:
 - 1. Service Condition: UC4C Ground Contact, Extreme Duty
 - 2. Treatment: Waterborne preservative Chromated Copper Arsenate (CCA) must be used. No exceptions taken.

2.2 PILE ACCESSORIES

- A. Driving Shoes: Fabricate from ASTM A 1011/A 1011M, hot-rolled carbon-steel strip to suit pile-tip diameter.

2.3 FABRICATION

- A. Pile Tips: Cut and shape pile tips to accept driving shoes. Fit and fasten driving shoes to pile tips according to manufacturer's written instructions.

- B. Pile Butt: Trim pile butt and cut perpendicular to longitudinal axis of pile. Chamfer and shape butt to fit tightly to driving cap of hammer.
- C. Field-Applied Wood Preservative: Treat field cuts, holes, and other penetrations according to AWWPA M4.
- D. Pile-Length Markings: Mark each pile with horizontal lines at 12-inch intervals; label the distance from pile tip at 60-inch intervals. Maintain markings on piles until driven.

PART 3 - EXECUTION

3.1 DRIVING PILES

- A. General: Continuously drive piles to elevations or penetration resistance indicated. Establish and maintain axial alignment of leads and piles before and during driving.
- B. Heaved Piles: Redrive heaved piles to tip elevation at least as deep as original tip elevation with a driving resistance at least as great as original driving resistance.
- C. Driving Tolerances: Drive piles without exceeding the following tolerances, measured at pile heads:
 - 1. Location: 4 inches from location indicated after initial driving, and 6 inches after pile driving is completed.
 - 2. Plumb: Maintain 1 inch in 48 inches from vertical, or a maximum of 4 inches, measured when pile is aboveground in leads.
 - 3. Batter Angle: Maximum 1 inch in 48 inches from required angle, measured when pile is aboveground in leads.
- D. Withdraw damaged or defective piles and piles that exceed driving tolerances, and install new piles within driving tolerances. Fill holes left by withdrawn piles as directed by Architect.
- E. Cut off butts of driven piles square with pile axis except as indicated and at elevations indicated.
 - 1. Cover cut-off piling surfaces with minimum three coats of preservative treatment according to AWWPA M4.
- F. Pile-Driving Records: Maintain accurate driving records for each pile, compiled and attested to by a qualified professional engineer.

3.2 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.

B. Tests and Inspections:

1. Dynamic Pile Testing: High-strain dynamic monitoring shall be performed and reported according to ASTM D 4945 during initial driving and during restriking on five single piles of each diameter.

END OF SECTION

Mike Marshall, 2023

02 01 00 SUB-SURFACE INVESTIGATION

PART 1 GENERAL

1.01 RELATED DOCUMENTS:

The General Provision of the Contract, including bidding conditions and contractual conditions, apply to the work specified in this section.

1.02 SCOPE:

The geo-technical exploration, boring log and recommendation of the Soil Engineer is made a part of this specification.



REPORT OF GEOTECHNICAL EXPLORATION

**Tarpon Beach Facilities
Okaloosa County, Florida**

Tierra Project No. 4511-23-038

Prepared for:

**Sam Marshall Architects
325 S Palafox Street
Pensacola, Florida 32502
Attn: Mr. Mike Marshall, AIA, CSI**

Prepared by:

**Tierra, Inc.
1300 West Main Street
Pensacola, Florida 32502**

August 18, 2023



**1300 West Main Street • Pensacola, FL 32502
Phone (850) 462-8774 • Fax (850) 462-8784**

TIERRA

August 18, 2023

Sam Marshall Architects
325 S Palafox Street
Pensacola, Florida 32502
Attn: Mr. Mike Marshall, AIA, CSI

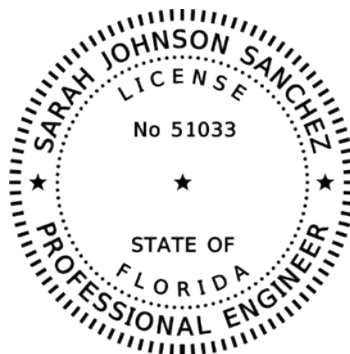
Subject: Tarpon Beach Facilities
Okaloosa County, Florida
Tierra Project No. 4511-23-038

Mr. Marshall:

Thank you for choosing Tierra, Inc. (Tierra) as your Geotechnical consultant. Per your authorization, we have completed the Geotechnical exploration for the subject project. The results of the study are discussed in this report.

Should you have any questions regarding the enclosed report or the project in general, please do not hesitate to contact us at (850) 462-8774.

Sincerely,
TIERRA, INC.



*THIS ITEM HAS BEEN DIGITALLY
SIGNED AND SEALED BY*

ON THE DATE ADJACENT TO THE SEAL

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TIERRA, INC.
1300 WEST MAIN STREET
PENSACOLA, FLORIDA 32502

SARAH JOHNSON SANCHEZ, P.E. NO. 51033

A handwritten signature in blue ink, appearing to read "Mitchell L. Smith".

Mitchell L. Smith, PE
Principal Geotechnical Engineer
Florida License No. 43416

Sarah Johnson Sanchez, PE
Sr. Project Engineer
Florida License No. 51033



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APPENDIX A

Boring Location Plan and Soil Profiles

Table 1 – Summary of Falling Head Permeability Tests

Falling Head Permeability Test Results

1.0 PROJECT INFORMATION

1.1 Project Authorization

Authorization to proceed on this project was issued by Mr. Mike Marshall, Vice President with Sam Marshall Architects via acceptance of our Geotechnical Engineering Services Proposal 45-22-130 dated October 13, 2022. A formal contract has been executed between Tiera, Inc. and Sam Marshall Architects for these services.

1.2 Project Description

Based on the information provided, we understand that the development will include a new bathroom building on the south side of the site with two connecting pavilions on either side. The new bathroom/pavilions will be lightly loaded, timber pile supported structures established at/near existing site grades. A stormwater management facility (SMF) will be found beneath the paved parking north of the bathroom/pavilion structures.

If any of the project information noted above is incorrect or has changed, please inform Tierra so that we may amend the recommendations presented in this report, if necessary.

1.3 Purpose and Scope of Services

The purpose of this exploration was to evaluate the subsurface conditions present in the subject areas and to render timber pile foundation recommendations as well as parameters for stormwater drawdown analysis for the proposed SMF.

The exploration consisted of two (2) 35-foot deep Standard Penetration Test (SPT) borings to evaluate the subsurface conditions for the restrooms/pavilions and two (2) 7-foot deep auger borings in the proposed SMF area; laboratory soil testing including water content tests, wash #200 sieve tests, and falling head permeability tests; and a site visit, visual classification of the soil samples, and analysis by our engineering staff.

2.0 SITE AND SUBSURFACE CONDITIONS

2.1 Site Location and Description

The gulf front site is located on the south side of Scenic Highway 98 near the intersection of Tarpon Street in Okaloosa County, Florida. An aerial photograph depicting the site location is shown on the Boring Location Plan (Appendix A).

At the time of our exploration, the site was clear and relatively level. Based on review of the topographic survey provided, as well as the survey data on Google Earth, the north portion of the site is relatively level at/near EL +20 feet to EL +22 feet, and the property slopes downward to the south to near EL +7 feet.

2.2 Subsurface Conditions

The Boring Location Plan and the Soil Profiles of the borings drilled for this study can be found in Appendix A. The borings were field located and staked using a Garmin GPSMap 66ST Global Positioning System (GPS) unit with a reported accuracy of ± 1 meter. Therefore, the boring locations should be considered approximate.

We have estimated ground surface elevations at the boring locations using the topographic survey provided, as well as the topographic information provided in Google Earth. The subsurface conditions encountered will be discussed in general terms below.

The restroom/pavilion borings (B-1 and B-2) encountered the following idealized profile:

<u>Elevation (ft.)</u>	<u>Soil Description</u>
+20 to +5	Very loose to loose SAND (SP)
+5 to -20	Medium dense SAND (SP)

The SMF borings (SW-1 and SW-2) generally encountered sand from the ground surface (average EL +22 feet) to the bottom of the 7-foot deep borings.

The above subsurface descriptions are of a generalized nature, provided to highlight the major soil stratum encountered. The Soil Profiles should be reviewed for specific subsurface conditions at each boring location. The stratification shown on the Soil Profiles represents the subsurface conditions at the actual boring locations only, and variations in the subsurface conditions can and

may occur between boring locations and should therefore be expected. The stratification represents the approximate boundary between subsurface materials, and the transitions between strata may be gradual.

2.3 Groundwater Conditions

Groundwater was encountered in SPT borings B-1 and B-2 approximately 18 feet below existing grade at the time of drilling, which was during a period of above-normal seasonal rainfall. Based on the ground surface elevations at the boring locations estimated from the topographic survey and Google Earth, this corresponds to groundwater elevation of approximately +3 feet NAVD 88. Groundwater was not encountered in the SMF borings.

Groundwater levels will fluctuate with rainfall and tides and could vary several feet during typical seasonal fluctuations. Larger fluctuations are possible under severe weather conditions. We recommend that the Contractor determine the actual groundwater levels at the time of construction to determine potential impacts groundwater can/will have on construction procedures.

2.4 Laboratory Soil Testing

Laboratory soil testing consisted of water content tests, wash #200 sieve tests, and falling head permeability tests. The results of the water content and wash #200 sieve tests can be found on the Soil Profiles opposite the samples tested.

Falling head permeability tests were performed on remolded bulk samples of the sand soils encountered in the SMF borings. The densities to which the samples were remolded were based on the N_f values obtained from the nearby SPT borings. The results of the tests are summarized in Table 1 attached in Appendix A. The laboratory permeability test data sheets are attached in Appendix A.

3.0 EVALUATION AND RECOMMENDATIONS

3.1 General Comments

Based on our understanding of the proposed facility, the exploration encountered subsurface conditions that will provide adequate support for the proposed structure provided the recommendations presented in this report are followed.

The subsurface conditions encountered in the SMF borings are suitable for conventional dry treatment. Stormwater design parameters are presented in Section 3.5 below.

3.2 Timber Pile Foundation Recommendations

We have evaluated compression and tension pile capacities for 8-inch and 10-inch tip diameter timber piles to support the proposed restroom facility. Table 2 below shows allowable compression and tension capacities for driven timber piles with a tip elevation of -6 feet NAVD 88 (note – all elevations referenced to NAVD 88). The capacities presented in Table 2 assume a pile butt elevation of +18 feet, a ground surface elevation of +20 feet (assuming no scour), include a Factor of Safety of 2, and assume a pilot hole to elevation +10 feet to aide in standing the piles prior to driving.

TABLE 2		
ALLOWABLE TIMBER PILE COMPRESSION & TENSION CAPACITIES		
Pile Size	Allowable Compression Capacity	Allowable Tension Capacity
8-inch Diameter Timber Pile	7 tons	4 tons
10-inch Diameter Timber Pile	10 tons	6 tons

3.3 Pile Group Action

No reductions of the individual pile capacities will be required if piles are spaced center-to-center a minimum of 3 times their width/diameter. If piles are spaced closer, our office should be notified so that pile capacity reductions can be evaluated.

3.4 Settlement

Settlements of driven pile foundations are typically small and should not be a concern on this project provided the piles are embedded as recommended herein. Pile head settlements should be on the order of ½ inch or less. Group settlements are estimated to be on the same order of magnitude for the expected lightly loaded structure.

3.5 Stormwater Management Facility Recommendations

The subsurface conditions encountered in the SMF auger borings are suitable for conventional dry treatment of stormwater runoff. Geotechnical parameters for analysis/design are presented below:

- **Effective Aquifer Thickness:** A confining unit, which would hydrogeologically define the thickness of the surficial aquifer, was not encountered to a depth of 45 feet below existing grade (the deepest boring drilled on the site). For the purposes of modeling, we recommend setting the bottom of the aquifer no deeper than the bottom of the boring elevation (EL -20 feet). Note that a shallower effective aquifer thickness for modeling a shallow SMF may be more appropriate given the expected minimal head, and a sensitivity analysis using this parameter is warranted.
- **Seasonal High Groundwater Level:** Groundwater was encountered at approximately EL +3 feet at the time of drilling. Given that the borings were drilled during a period of above-normal rainfall, we have estimated the “normal” SHWT to be at/near elevation +3 feet.
- **Vertical Permeability:** Vertical flow from the bottom of the SMF will be controlled by the vertical permeability of the soil immediately beneath the bottom of the SMF. Based on the results of the falling head permeability tests (Table 1), an average vertical permeability of 27.4 ft/day for Stratum 1 would be reasonable for modeling.
- **Horizontal Permeability:** Horizontal flow from the pond will be through the Stratum 1 soils. The horizontal permeability of Stratum 1 has been estimated based on the results of the vertical permeability tests and extensive experience with similar soils from field permeability tests. While horizontal permeabilities have generally been found to range from 3 to 10 times higher than vertical permeabilities of regional deposits, we recommend that a multiplier of 3 with a factor of safety of 2 be used for design (effectively, a 1.5 multiplier). Therefore, a K_h

value of 41.1 ft/day would be reasonable for modeling the Stratum 1 materials (27.4 ft/day x 1.5).

- **Effective Porosity:** Based on the fines contents of the soils encountered in the test borings, an effective porosity of 0.30 would be appropriate for modeling the Stratum 1 soils.

4.0 REPORT LIMITATIONS

The recommendations submitted are based on the available soil information obtained by Tierra, Inc. and design details furnished by Baskerville-Donovan for the subject project. If there are any revisions to the plans for this project or if deviations from the subsurface conditions noted in this report are encountered during construction, Tierra should be notified immediately to determine if changes in the foundation, or other, recommendations are required. If Tierra is not retained to perform these functions, we cannot be responsible for the impact of such conditions on the performance of the project.

The findings, recommendations, specifications, and professional advice contained herein have been made in accordance with generally accepted professional Geotechnical engineering practices in the local area.

After the plans and specifications are more complete, the Geotechnical engineer should be provided the opportunity to review the final design plans and specifications to assure our engineering recommendations have been properly incorporated into the design documents. At that time, it may be necessary to submit supplementary recommendations. This report has been prepared for the exclusive use of Sam Marshall Architects for the specific application to the subject project.

APPENDIX A

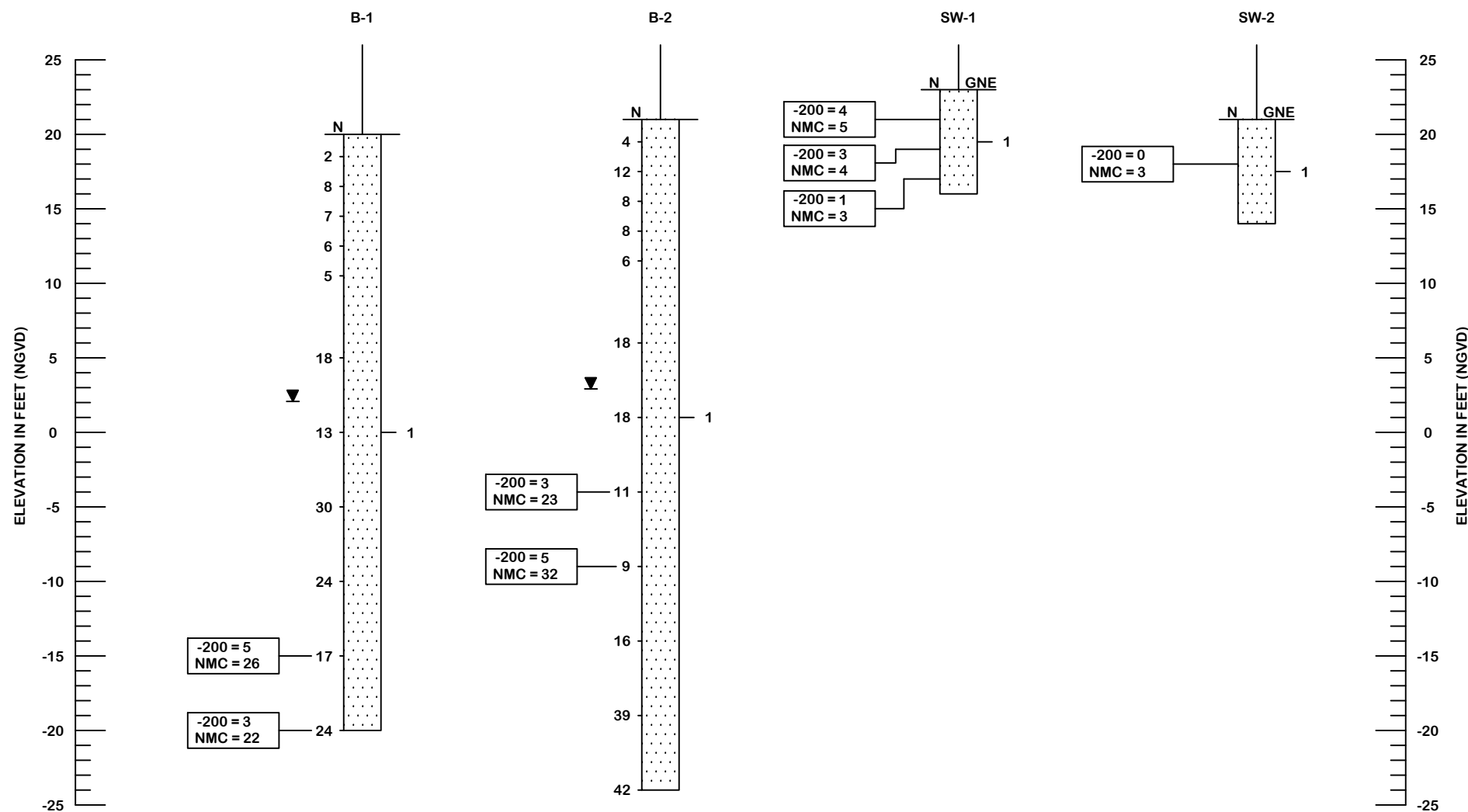
Boring Location Plan and Soil Profiles

Table 1 – Summary of Falling Head Permeability Tests

Falling Head Permeability Test Results

SOIL PROFILES

LEGEND



- 1 WHITE, GRAY, BROWN SAND (SP)
- GROUNDWATER LEVEL ENCOUNTERED DURING INVESTIGATION
- N SPT N-VALUE IN BLOWS/FOOT FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED)
- SP UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2488) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
- GNE GROUNDWATER TABLE NOT ENCOUNTERED
- 200 PERCENT PASSING #200 SIEVE
- NMC NATURAL MOISTURE CONTENT (%)
- NOTE: ELEVATIONS OBTAINED FROM GOOGLE EARTH

SAFETY HAMMER	
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4
LOOSE	4 TO 10
MEDIUM	10 TO 30
DENSE	30 TO 50
VERY DENSE	GREATER THAN 50
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2
SOFT	2 TO 4
FIRM	4 TO 8
STIFF	8 TO 15
VERY STIFF	15 TO 30
HARD	GREATER THAN 30

DRAWN BY:
SW

CHECKED BY:
SJS

APPROVED BY:
SJS

DATE:
AUG 2023

ENGINEER OF RECORD:
SARAH J. SANCHEZ, P.E.
FLORIDA LICENSE NO.:
51033



SCALE:
NOTED

PROJECT NUMBER:
4511-23-038

GEOTECHNICAL ENGINEERING SERVICES
TARPON BEACH FACILITIES
OKALOOSA COUNTY, FLORIDA

SHEET 2

TABLE 1
SUMMARY OF LABORATORY SOIL PERMEABILITY TESTS (FALLING HEAD METHOD)
TARPON BEACH FACILITIES
WALTON COUNTY, FLORIDA
TIERRA PROJECT NO. 4511-23-038

Soil Stratum Number ⁽¹⁾	Boring	Sample Elevation (ft. NAVD 88) ⁽²⁾	Sample Description	% Fines	Dry Density (pcf)	Vertical Permeability (ft/day)
1	SW-1	21 - 18	White, Gray, Brown SAND (SP)	3	104	15.7
1	SW-1	18 - 16	White, Gray, Brown SAND (SP)	1	102	26.5
1	SW-2	21 - 17	White, Gray, Brown SAND (SP)	0	97	40 ⁽³⁾

Notes: (1) See Soil Profiles (Appendix A).

(2) Ground surface elevations obtained from Google Earth

(3) Permeability value limited to 40 ft/day due to test method recommended limitations

FALLING HEAD PERMEABILITY TEST



Project Name: Tarpon Beach Facilities, Walton County, FL
Project Number: 4511-23-038 **Sample Location:** SW-1 @ 2.5 ft - 5 ft
Sample Description: White, Gray, Brown SAND (Stratum 1)
Remolded Compactive Effort: Standard **No. of Layers:** 3 **Blows Per Layer:** 15
Date: 8/14/2023 **Technician:** BC **Soil Classification:** SP

- Assumes:**
1. Standard Proctor Mold (L = 4.5 in.)
 2. 1/2 Inch Diameter Tubing

$$K_v = \frac{(2.3 \cdot a \cdot L) \log(h_1/h_2)}{(A) (\Delta t)}$$

where a = 1.267 cm (area of tube)
 L = 4.584 in. (height of soil sample)
 = 11.64336 cm (L = 4.5 in. for full mold)
 A = 12.57 sq. in. (area of Proctor mold)
 = 81.1 sq. cm

Head (ft)	Time (sec)		Avg. Time (sec)
	Run #1	Run #2	
7	0	0	0
6	4.5	4.4	4.5
5	10	10	10.0
4	17.4	17	17.2
3	26.9	36.6	31.8
2	40.5	40.1	40.3
1	64.1	63.7	63.9

h1	h2	Delta t (sec)	K _v (cm/sec)
7	1	63.9	5.5E-03
6	1	59.45	5.5E-03
7	2	40.3	5.6E-03

Average K _v =	5.6E-03 cm/sec
	15.7 ft/day

Remolded Test Sample Density

Can #	2R
Wt. Can + Wet Soil, g	416.0
Wt. Can + Dry Soil, g	398.6
Wt. of Water, g	17.4
Wt. of Can, g	259.3
Wt. of Dry Soil, g	139.3
Moisture Content, %	12.5%
Wt. Wet Soil + Mold, lbs.	8.4
Wt. of Mold, lbs.	4.5
Wt. of Wet Soil, lbs.	3.9
Wet Density, pcf	116.4
Dry Density, pcf	103.5

Fines Content of Test Sample

Can #	45
Wt. Can + Wet Soil, g	252.4
Wt. Can + Dry Soil, g	247.3
Wt. of Water, g	5.2
Wt. of Can, g	121.8
Wt. of Dry Soil, g	125.5
Wt. of Dry Sample After Washing + Can, g	243.8
Wt. of Soil Lost During Washing, g	3.4
Moisture Content, %	4.1%
Percent Fines, %	2.7%

FALLING HEAD PERMEABILITY TEST



Project Name: Tarpon Beach Facilities, Walton County, FL
Project Number: 4511-23-038 **Sample Location:** SW-1 @ 5 ft -7 ft
Sample Description: White, Gray, Brown SAND (Stratum 1) **Soil Classification:** SP
Remolded Compactive Effort: Standard **No. of Layers:** 3 **Blows Per Layer:** 15

Date: 8/14/2023

Technician: BC

- Assumes:**
1. Standard Proctor Mold (L = 4.5 in.)
 2. 1/2 Inch Diameter Tubing

$$K_v = \frac{(2.3 \cdot a \cdot L) \log(h_1/h_2)}{(A) (\Delta t)}$$

where a = 1.267 cm (area of tube)
 L = 4.584 in. (height of soil sample)
 = 11.64336 cm (L = 4.5 in. for full mold)
 A = 12.57 sq. in. (area of Proctor mold)
 = 81.1 sq. cm

Head (ft)	Time (sec)		Avg. Time (sec)
	Run #1	Run #2	
7	0	0	0
6	2.9	2.9	2.9
5	6.4	6.3	6.4
4	10.8	10.3	10.6
3	16.6	15.8	16.2
2	24.8	23.8	24.3
1	38.5	37.3	37.9

h1	h2	Delta t (sec)	K _v (cm/sec)
7	1	37.9	9.3E-03
6	1	35	9.3E-03
7	2	24.3	9.4E-03

Average K _v =	9.3E-03 cm/sec
	26.5 ft/day

Remolded Test Sample Density

Can #	1R
Wt. Can + Wet Soil, g	387.5
Wt. Can + Dry Soil, g	367.7
Wt. of Water, g	19.8
Wt. of Can, g	256.3
Wt. of Dry Soil, g	111.4
Moisture Content, %	17.8%
Wt. Wet Soil + Mold, lbs.	8.5
Wt. of Mold, lbs.	4.5
Wt. of Wet Soil, lbs.	4.0
Wet Density, pcf	119.7
Dry Density, pcf	101.6

Fines Content of Test Sample

Can #	46
Wt. Can + Wet Soil, g	243.4
Wt. Can + Dry Soil, g	239.4
Wt. of Water, g	4.0
Wt. of Can, g	120.2
Wt. of Dry Soil, g	119.2
Wt. of Dry Sample After Washing + Can, g	238.5
Wt. of Soil Lost During Washing, g	0.9
Moisture Content, %	3.4%
Percent Fines, %	0.8%

FALLING HEAD PERMEABILITY TEST



Project Name: Tarpon Beach Facilities, Walton County, FL
Project Number: 4511-23-038 **Sample Location:** SW-2 @ 0 ft - 4.25 ft
Sample Description: White, Gray, Brown SAND (Stratum 1)
Remolded Compactive Effort: Standard **No. of Layers:** 3 **Blows Per Layer:** 15
Date: 8/14/2023 **Technician:** BC **Soil Classification:** SP

- Assumes:**
1. Standard Proctor Mold (L = 4.5 in.)
 2. 1/2 Inch Diameter Tubing

$$K_v = \frac{(2.3 \cdot a \cdot L) \log (h_1/h_2)}{(A) (\Delta t)}$$

where a = 1.267 cm (area of tube)
 L = 4.584 in. (height of soil sample)
 = 11.64336 cm (L = 4.5 in. for full mold)
 A = 12.57 sq. in. (area of Proctor mold)
 = 81.1 sq. cm

Head (ft)	Time (sec)		Avg. Time (sec)
	Run #1	Run #2	
7	0	0	0
6	1.5	1.3	1.4
5	3.2	2.9	3.1
4	5.1	4.8	5.0
3	7.5	7.1	7.3
2	11	10.5	10.8
1	17	16.9	17.0

h1	h2	Delta t (sec)	K _v (cm/sec)
7	1	16.95	2.1E-02
6	1	15.55	2.1E-02
7	2	10.75	2.1E-02

Average K _v =	2.1E-02 cm/sec
	59.5 ft/day

Remolded Test Sample Density

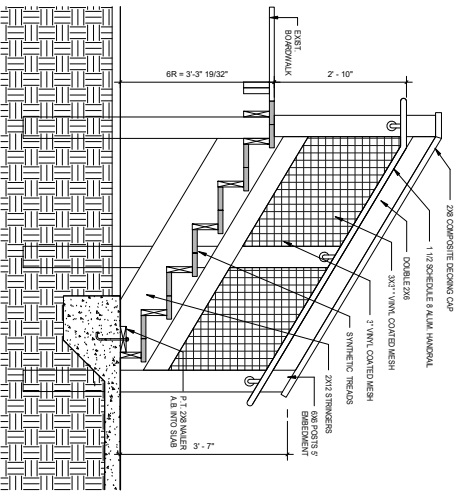
Can #	2R
Wt. Can + Wet Soil, g	386.8
Wt. Can + Dry Soil, g	370.5
Wt. of Water, g	16.3
Wt. of Can, g	259.3
Wt. of Dry Soil, g	111.2
Moisture Content, %	14.7%
Wt. Wet Soil + Mold, lbs.	8.2
Wt. of Mold, lbs.	4.5
Wt. of Wet Soil, lbs.	3.7
Wet Density, pcf	111.0
Dry Density, pcf	96.8

Fines Content of Test Sample

Can #	47
Wt. Can + Wet Soil, g	251.0
Wt. Can + Dry Soil, g	246.8
Wt. of Water, g	4.2
Wt. of Can, g	120.4
Wt. of Dry Soil, g	126.4
Wt. of Dry Sample After Washing + Can, g	246.4
Wt. of Soil Lost During Washing, g	0.3
Moisture Content, %	3.4%
Percent Fines, %	0.3%

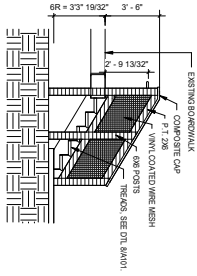
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1/4" = 1'-0"



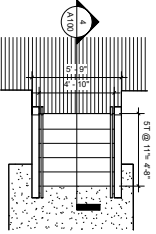
3 STEPS ELEVATION

1/4" = 1'-0"



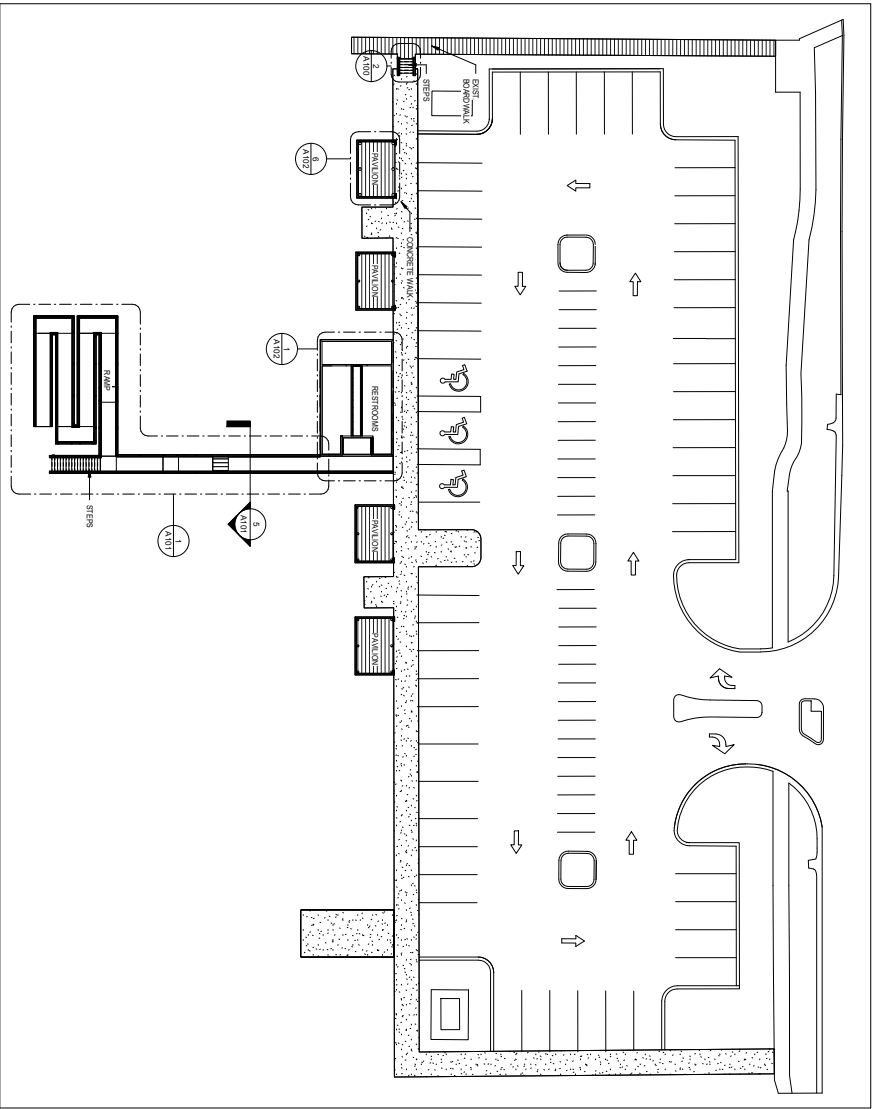
2 STEPS PLAN

1/4" = 1'-0"



1 ARCHITECTURAL SITE PLAN

1" = 25'-0"



Mike J Marshall
Digitally signed by Mike J Marshall
Date: 2024.01.30 16:40:26 -0600

A100

ARCHITECTURAL SITE PLAN

PROJECT NO:	12107.01
DESIGNED BY:	MM
DRAWN BY:	MM
CHK'D BY:	RLW
PROJ. MGR:	JCP
DATE:	FEBRUARY 2024

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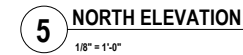
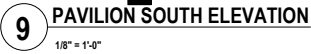
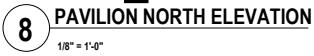
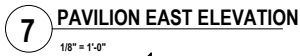
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NO.	DATE	APPR	REVISION / ACTION TAKEN

SHORE AT TARPON BEACH



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14101 PANAMA CITY BEACH PARKWAY, SUITE 110
PANAMA CITY BEACH, FL 32413 (850) 230-4150
ENGINEERING LICENSES: EB-300266
PENSACOLA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE



NOTE: PROVIDE SOFT JOINTS IN CERAMIC TILE AT ALL INSIDE CORNERS

Mike J Marshall Digitally signed by Mike J Marshall
Date: 2024.01.30 16:39:48 -06'00'

BASKERVILLE-DONOVAN, INC.
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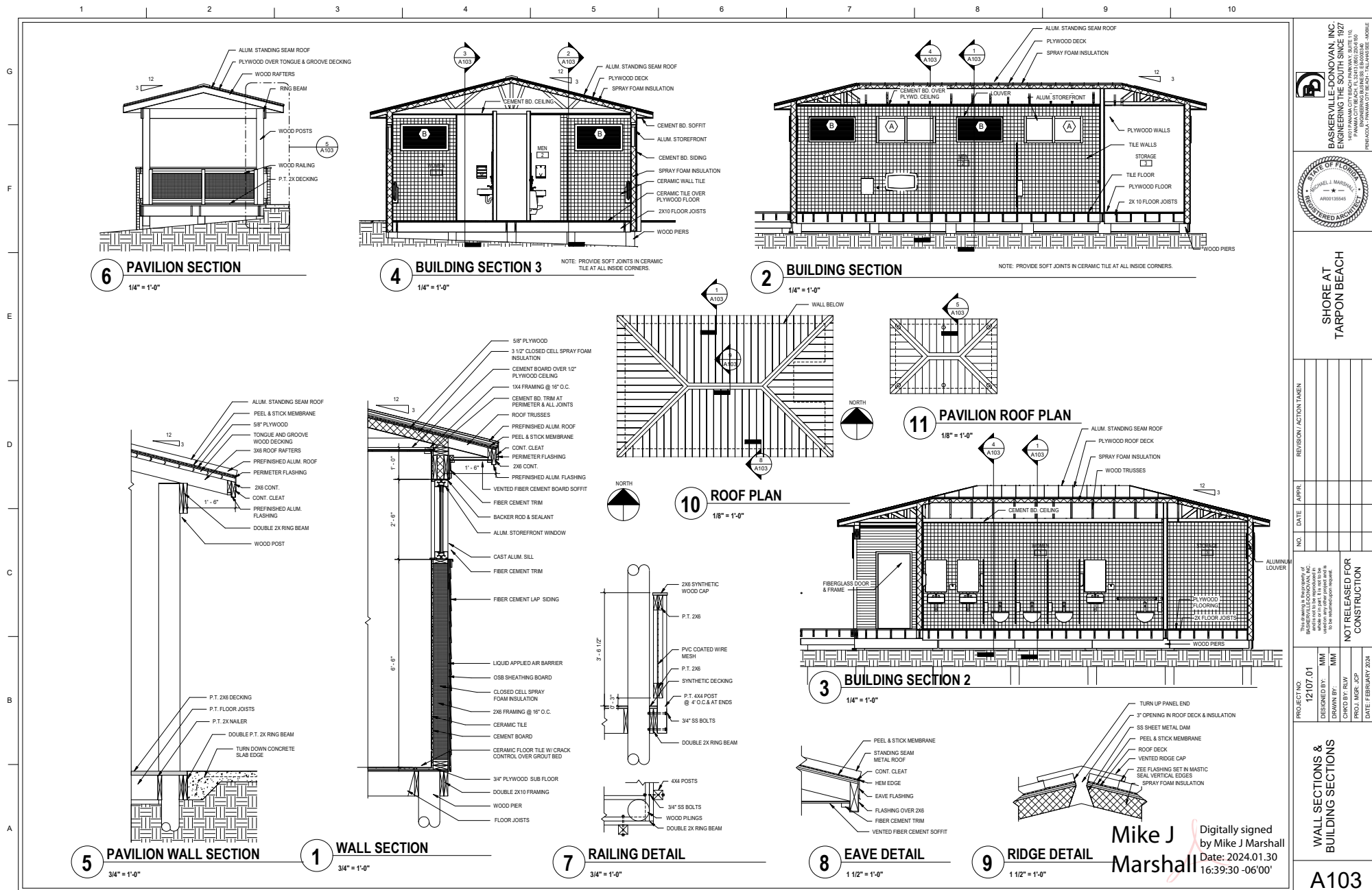
14101 PANAMA CITY BEACH PARKWAY, SUITE 110,
PANAMA CITY BEACH, FL 32413 (850) 200-6150
ENGINEERING BUSINESS (800) 400-0314
PENSACOLA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE

SHORE AT
TARPON BEACH[illegible]

DESIGNED BY: MM	12107.01
DRAWN BY: MM	
CHK'D BY: RLW	
APPROJ. MGR: JCP	
DATE: FEBRUARY 2024	

FLOOR PLANS AND ELEVATIONS

A102



BASKERVILLE-DORVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1000 PANAMA CITY BEACH, FL 32413 (904) 284-8400
PANAMA CITY, FL 32409 (904) 284-8400
PENSACOLA, PANAMA CITY BEACH - PANAMA CITY, MOBILE

**SHORE AT
TARPON BEACH**

NO.	DATE	APPR.	REVISION / ACTION TAKEN

PROJECT NO: 12107.01

DESIGNED BY: MM

DRAWN BY: MM

CHECKED BY: RLW

PROJ. MGR: JCP

DATE: FEBRUARY 2024

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CONSTRUCTION**

**WALL SECTIONS &
BUILDING SECTIONS**

A103

CONSTRUCTION PLANS FOR SHORES AT TARPON BEACH

FEBRUARY 2024

PREPARED FOR:
OKALOOSA COUNTY



OKALOOSA COUNTY
COMMISSIONERS

PAUL MIXON	COMMISSIONER DISTRICT 1
CAROLYN KETCHEL	COMMISSIONER DISTRICT 2
NATHAN BOYLES (VICE CHAIRMAN)	COMMISSIONER DISTRICT 3
TREY GOODWIN	COMMISSIONER DISTRICT 4
MEL PONDER (CHAIRMAN)	COMMISSIONER DISTRICT 5

PREPARED BY:



BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927

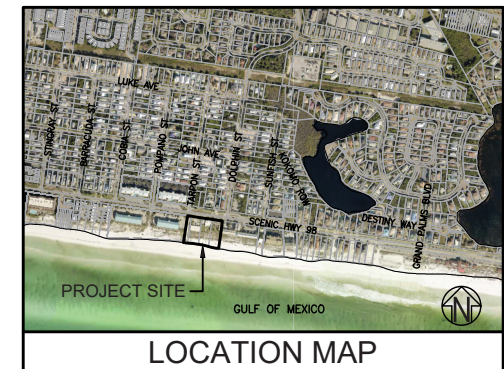
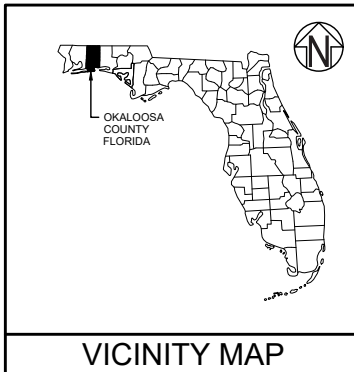
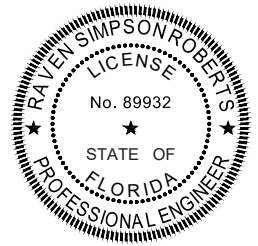
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PANAMA CITY BEACH, FL 32413 (850) 230-6150
ENGINEERING BUSINESS: EB-0000340
PENSACOLA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE

ENGINEER'S PROJECT NO. 12107.01

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DIGITALLY SIGNED AND SEALED BY RAVEN
SIMPSON ROBERTS ON THE DATE ADJACENT
TO THE SEAL. PRINTED COPIES OF THIS
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AND SEALED AND THE SIGNATURE MUST BE
VERIFIED ON ANY ELECTRONIC COPIES.

Raven S Roberts

Digitally signed by Raven S Roberts
DN: cn=Raven S Roberts,
c=Alabama, o=C455
Date: 2024.04.12 16:15:52-05'00'



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FL STATUTE 553.851 (1979) REQUIRES
MIN. OF 2 DAYS AND MAX. OF 3 DAYS
NOTICE BEFORE YOU EXCAVATE.

SHEET REF.		TITLE OF DRAWINGS		SHEET REF.		TITLE OF DRAWINGS		SHEET REF.		TITLE OF DRAWINGS	
COVER		CU-100 EXISTING WATER AND SANITARY SEWER SYSTEM GIS INFORMATION		LP100 LANDSCAPE PLANTING PLAN							
G-001 INDEX OF DRAWINGS		CU-101 WATER AND SANITARY SEWER PLAN		LP500 LANDSCAPE PLANTING DETAILS							
G-002 GENERAL NOTES		CU-102 WATER AND SANITARY SEWER PLAN		U1100 LANDSCAPE IRRIGATION PLAN							
C-100 PROJECT OVERVIEW		CU-103 WATER AND SANITARY SEWER STRUCTURE AND PIPE DATA TABLES		U500 LANDSCAPE IRRIGATION DETAILS							
C-101 EXISTING CONDITIONS AND SURVEY CONTROL PLAN		MISCELLANEOUS WATER AND SANITARY SEWER SPECIFICATIONS		E-100 LEGEND AND NOTES							
C-102 EXISTING CONDITIONS LEGENDS, NOTES AND DATA TABLES		CU-502 MISCELLANEOUS WATER AND SANITARY SEWER SPECIFICATIONS		E-101 ELECTRICAL SITE LIGHTING PLAN							
C-103 DEMOLITION PLAN		OMITTED		E-102 PHOTOGRAPHIC PLAN							
C-104 GEOMETRY PLAN		CU-504 OMITTED									
C-105 GEOMETRY PLAN		MISCELLANEOUS WATER AND SANITARY SEWER DETAILS									
C-106 GEOMETRY ENLARGEMENT PLAN		CU-505 MISCELLANEOUS WATER AND SANITARY SEWER DETAILS									
C-107 GEOMETRIC DATA TABLES		CU-506 MISCELLANEOUS WATER AND SANITARY SEWER DETAILS									
C-108 GEOMETRIC DATA TABLES AND GEOMETRY NOTES		CU-507 MISCELLANEOUS WATER AND SANITARY SEWER DETAILS									
C-109 GRADING AND STORM DRAINAGE PLAN		CU-508 MISCELLANEOUS WATER AND SANITARY SEWER DETAILS									
C-110 GRADING AND STORM DRAINAGE PLAN		CU-509 MISCELLANEOUS WATER AND SANITARY SEWER DETAILS									
C-111 GRADING AND STORM DRAINAGE ENLARGEMENT PLAN		CU-510 MISCELLANEOUS WATER AND SANITARY SEWER DETAILS									
C-112 STORM DRAINAGE DATA TABLES AND NOTES		CU-511 MISCELLANEOUS WATER AND SANITARY SEWER DETAILS									
		CU-512 MISCELLANEOUS WATER AND SANITARY SEWER DETAILS									
C-300 TYPICAL PAVEMENT SECTIONS		CU-513 MISCELLANEOUS WATER AND SANITARY SEWER DETAILS									
		CU-514 MISCELLANEOUS WATER AND SANITARY SEWER DETAILS									
C-501 MISCELLANEOUS DETAILS		CU-515 MISCELLANEOUS WATER AND SANITARY SEWER DETAILS									
C-502 MISCELLANEOUS DETAILS		CU-516 MISCELLANEOUS WATER AND SANITARY SEWER DETAILS									
C-503 BKE ROCK DETAILS		CU-517 MISCELLANEOUS WATER AND SANITARY SEWER DETAILS									
		CU-518 MISCELLANEOUS WATER AND SANITARY SEWER DETAILS									
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C-505 AOS STORM TECH CHAMBER SYSTEM NOTES		S001 GENERAL NOTES & TYPICAL DETAILS									
C-506 AOS STORM TECH CHAMBER SYSTEM DETAILS		S002 TYPICAL DETAILS									
C-507 AOS STORM TECH CHAMBER SYSTEM DETAILS		S101 RESTROOM FLOOR & ROOF FRAMING PLAN									
C-508 AOS STORM TECH CHAMBER SYSTEM DETAILS		S102 PAULON FLOOR AND ROOF FRAMING PLAN									
C-509 AOS STORM TECH CHAMBER SYSTEM DETAILS		S103 BOARDWALK FOUNDATION PLAN - NORTH									
C-510 MISCELLANEOUS STANDARD FOOT DETAILS		S104 BOARDWALK FOUNDATION PLAN - SOUTH									
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C-512 MISCELLANEOUS STANDARD FOOT DETAILS		S301 ROOF SECTIONS AND DETAILS									
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C-514 MISCELLANEOUS STANDARD FOOT DETAILS		A101 PUMP PLAN, ELEVATION & DETAILS									
C-515 MISCELLANEOUS STANDARD FOOT DETAILS		A102 FLOOR PLANS AND ELEVATIONS									
		A103 WALL SECTIONS & BUILDING SECTIONS									
		A104 DOORS & WINDOWS DETAILS AND ELEVATIONS									
C-700 STRIPPING AND SIGNAGE PLAN											
C-701 STRIPPING AND SIGNAGE PLAN AND GEOMETRIC DATA TABLE											
C-702 STRIPPING AND SIGNAGE ENLARGEMENT PLAN											
C-703 MISCELLANEOUS STRIPPING AND SIGNAGE DETAILS		M-001 MECHANICAL LEGEND AND NOTES									
C-704 MISCELLANEOUS STRIPPING AND SIGNAGE DETAILS		M-002 MECHANICAL SCHEDULE AND DETAILS									
C-705 MISCELLANEOUS STRIPPING AND SIGNAGE DETAILS		M-101 MECHANICAL AND PLUMBING PLANS									
C-706 MISCELLANEOUS STANDARD FOOT DETAILS		M-201 MECHANICAL DETAILS									
C-707 MISCELLANEOUS STANDARD FOOT DETAILS											
C-708 MISCELLANEOUS STANDARD FOOT DETAILS											
C-709 MISCELLANEOUS STANDARD FOOT DETAILS		E-001 LEGEND, ABBREVIATIONS, SPECIFICATIONS AND LUMINAIRE SCHEDULE									
C-710 MISCELLANEOUS STANDARD FOOT DETAILS		E-101 SITE PLAN									
		E-211 RESTROOM BUILDING PLAN									
C-800 EROSION CONTROL PLAN											
C-801 BEST MANAGEMENT PRACTICES DETAILS											
C-802 BEST MANAGEMENT PRACTICES DETAILS											

PROJECT NO:
12107.01

DESIGNED BY: RAS

DRAWN BY: RLW

PROJ. MGR: JCP

DATE: FEBRUARY 2024

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NO.

DATE

APPR.

REVISION / ACTION TAKEN

SHORE AT TARPON BEACH

BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
14101 PANAMA CITY BEACH PARKWAY, SUITE 110
PANAMA CITY BEACH, FL 32413 (850) 234-1150
ENGINEERING BUSINESS: (850)555-5565
PENINSULA • PANAMA CITY BEACH • TALLAHASSEE • MOBILE

INDEX OF DRAWINGS

G-001

GENERAL NOTES:

1. THE CONTRACTORS SHALL NOTIFY OKALOOSA COUNTY MANAGER OR DESIGNEE 48 HOURS PRIOR TO CONSTRUCTION.
2. ALL CONDITIONS AND SITUATIONS OF THE CONSTRUCTION PERMITS AND THE APPROVALS ISSUED BY OKALOOSA COUNTY SHALL BE COMPLIED WITH IN EVERY DETAIL.
3. ALL ROADS DAMAGED BY CONSTRUCTION OPERATIONS ARE TO BE PATCHED OR RECONSTRUCTED AS DIRECTED BY OKALOOSA COUNTY MANAGER OR DESIGNEE.
4. THE CONTRACTOR SHALL TAKE STEPS NECESSARY TO PREVENT EROSION AND ANY OFF SITE SEDIMENT TRANSPORT RESULTING FROM UNPAVED ROADS OR CONSTRUCTION OPERATIONS. EROSION CONTROL MEASURES INCLUDING BUT NOT LIMITED TO THE FLORIDA EROSION CONTROL VESIGERS SHALL REMAIN IN PLACE UNTIL ASSOCIATED DISTURBED AREAS ARE STABILIZED AS TO REDUCE SEDIMENT RUNOFF, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR DESIGNEE.
5. THE CONTRACTOR SHALL EMPLOY THE USE OF SILT FENCES, DITCHES OR WHATEVER MEANS NECESSARY TO CONTROL EROSION AND SEDIMENTATION AT ALL TIMES. WATERS OF THE STATE, ADJACENT PROPERTIES, AND ANY NEW DRAINAGE PROTECTION SHALL BE PROTECTED DURING THE CONSTRUCTION PERIOD. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION AND SHALL REMAIN UNTIL THE COMPLETION OF CONSTRUCTION AND ACCEPTANCE BY THE OWNER.
6. ANY NECESSARY PERMITS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. THE CONTRACTOR IS CAUTIONED TO VISIT THE SITE AND FAMILIARIZE HIMSELF WITH THE PROJECT PRIOR TO BIDDING AND/OR CONSTRUCTION.
8. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PRESERVE OR RELOCATE ALL BENCHMARKS (VERTICAL CONTROL), AS NEEDED DURING CONSTRUCTION. ALL PUBLIC OR PRIVATE CORNER MONUMENTATION SHALL BE PROTECTED. IF A PUBLIC OR PRIVATE CORNER MONUMENT IS DAMAGED OR DESTROYED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR DESIGNEE IMMEDIATELY. ANY OKALOOSA COUNTY/CITY HARB/GPS NETWORK MONUMENTS OR BUREAU OF SURVEY AND MAPPING GPS NETWORK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF A HARB/GPS NETWORK MONUMENTS OR BUREAU OF SURVEY AND MAPPING GPS NETWORK MONUMENTS ARE DISTURBED OR DAMAGED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR DESIGNEE IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POSITION DETERMINED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER USING GUIDELINES AS ESTABLISHED BY NATIONAL GEODETIC SURVEY FOR BLUE BOOKING AND APPROVAL.
9. EXISTING DAMAGE FEATURES WITHIN CONSTRUCTION LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED.
10. THE CONTRACTOR SHALL MATCH EXISTING CONDITIONS AT THE BEGINNING AND END OF CONSTRUCTION AS DIRECTED BY THE ENGINEER OR DESIGNEE.
11. EXISTING STREETS AND DRIVES SHALL BE MAINTAINED TO LOCAL TRAFFIC AND PROPERTY OWNERS.
12. ONLY ACCESS TO THE ROAD R/W AS SHOWN IS GUARANTEED BY OKALOOSA COUNTY. PRIVATE R/W REQUIRED BY THE CONTRACTOR TO FACILITATE CONSTRUCTION SHALL BE ACQUIRED BY THE CONTRACTOR WITH NO ADDITIONAL COMPENSATION OR ASSISTANCE FROM THE CITY.
13. VEGETATION ON R/W AND EASEMENTS SHALL BE RESTORED TO ORIGINAL CONDITION UNLESS OTHERWISE NOTED ON THE PLAN SHEETS. COST OF SLO RESTORATION SHALL BE CONSIDERED INCIDENTAL TO OTHER PAY ITEMS.
14. GRADED AGGREGATE BASE SHALL BE REQUIRED WHERE THE SEASONAL HIGH GROUND WATER ENROACHES WITHIN TWO (2) FEET OF THE BOTTOM OF BASE.
15. ALL COMPACTED FILL SHALL BE PLACED IN 4" LIFTS FOR HAND POWERED TAMPERS AND 8" LIFTS FOR HEAVY EQUIPMENT OPERATED TAMPERS.
16. THE CONTRACTOR SHALL, AT A MINIMUM, MATCH EXISTING SIGNING AND PAVEMENT MARKINGS. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE LATEST FOOT DESIGN STANDARDS. THE CONTRACTOR SHALL CONTACT THE COUNTY AND CITY TRAFFIC DEPARTMENT PRIOR TO INSTALLATION OF ANY SIGNING AND PAVEMENT MARKINGS.
17. WHERE UNSUITABLE MATERIAL IS ENCOUNTERED IN THE AREAS PROPOSED FOR PAVING, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COUNTY ENGINEER OR DESIGNEE PRIOR TO ANY EXCAVATION.
18. ALL DISTURBED AREAS WHICH ARE NOT PAVED SHALL BE STABILIZED WITH STACKED SOO, UNLESS NOTED OTHERWISE.
19. CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS DURING CONSTRUCTION WHICH SHOW "AS-BUILT" CONDITIONS OF ALL WORK INCLUDING PAVING, DRAINAGE STRUCTURES, TOPO OF ROUNDS, OUTLET STRUCTURES, DIMENSIONS, ELEVATIONS, GRADING ETC. RECORD DRAWINGS SHALL BE PROVIDED TO THE ENGINEER OF RECORD PRIOR TO REQUESTING FINAL INSPECTION.
20. THE CONTRACTOR SHALL ARRANGE/SCHEDULE WITH OKALOOSA COUNTY A FINAL INSPECTION OF THE DEVELOPMENT UPON COMPLETION AND AN INTERMEDIATE INSPECTIONS. AS-BUILT CERTIFICATION IS REQUIRED PRIOR TO REQUEST FOR FINAL INSPECTION/APPROVAL.
21. ALL ASPECTS OF THE STORMWATER/DRAINAGE COMPONENTS AND/OR TRANSPORTATION COMPONENTS SHALL BE COMPLETED PRIOR TO REQUESTING A FINAL INSPECTION.
22. NO DEVIATIONS OR REVISIONS FROM THESE PLANS BY THE CONTRACTOR SHALL BE ALLOWED WITHOUT PRIOR APPROVAL. FROM BOTH THE DESIGN ENGINEER AND OKALOOSA COUNTY. ANY DEVIATIONS MAY RESULT IN DELAYS OF COUNTY APPROVAL.
23. CONTRACTOR SHALL SAFETY-BARRICADE ALL EXCAVATIONS AND OTHER HAZARDS.
24. CONTRACTOR SHALL PROVIDE ACCESS TO PROPERTIES ADJACENT TO THE CONSTRUCTION AREAS, ADEQUATE BARRICADES, CONSTRUCTION SIGNAGE AND OTHER TRAFFIC CONTROL DEVICES SHALL BE PROVIDED IN ACCORDANCE WITH FOOT CONSTRUCTION STANDARDS. DRIVEWAY ACCESS TO ADJACENT PROPERTY SHALL BE MAINTAINED AT ALL TIMES.
25. ADEQUATE PROVISIONS SHALL BE MADE FOR THE FLOW OF SEWERS, DRAINS, WATER COURSES AND OTHER UTILITIES ENCOUNTERED DURING CONSTRUCTION.
26. ALL NEW CONCRETE FOR SITE WORK SHALL ACHIEVE A 28 DAY STRENGTH OF 3000 PSI (MIN.), UNLESS OTHERWISE SPECIFIED.
27. ALL SEWERLINES, DRAINAGES AND BOARDWALKS MUST BE BUILT TO ADA STANDARDS. LATEST EDITION OF DESIGN STANDARDS AND TRANSIT FACILITY OR SPECIFICATIONS.
28. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE EXACT LOCATIONS AND DEPTHS OF ALL UTILITIES INCLUDING, BUT NOT LIMITED TO, WATER, GAS, FIBER OPTIC, CABLE, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION. CONTRACTOR IS TO COORDINATE WITH UTILITY COMPANIES FOR REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES, AERIAL LINES, BURIED CABLE AND OTHER UTILITIES.

33. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY CONFLICTS BETWEEN CONTRACT DOCUMENTS AND EXISTING CONDITIONS. THESE DRAWINGS REPRESENT KNOWN STRUCTURES AND UTILITIES LOCATED IN THE PROJECT AREA. THE CONTRACTOR IS CAUTIONED THAT OTHER STRUCTURES AND UTILITIES, ABOVE OR BELOW GROUND, MAY BE ENCOUNTERED DURING THE COURSE OF THE PROJECT. THE CONTRACTOR SHOULD NOTIFY THE UTILITY COMPANIES, THEN THE ENGINEER, IMMEDIATELY UPON ENCOUNTERING ANY UNEXPECTED STRUCTURE, UTILITY LINE, OR OTHER UNUSUAL CONDITION. EXISTING CONDITIONS ARE BASED ON SURVEYS BY BASKERVILLE-DONOVAN, INC.
34. ALL CONSTRUCTION RELATED ACTIVITIES SHALL BE CONDUCTED UPWARD OF THE MEAN HIGH WATER LINE. SHOULD THERE BE ANY CONFUSION IN THE ENGINEER IMMEDIATELY OF CONSTRUCTION RELATED ACTIVITIES TO THE ESTABLISHED MEAN HIGH WATER LINE, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
35. ALL PAVEMENT CUTS SHALL BE SAW CUT WITH A WET SAW TO LIMIT DUST.
36. ALL TREES IN THE PROJECT AREA ARE TO REMAIN UNHARMED UNLESS NOTED FOR REMOVAL OR APPROVED BY THE ENGINEER.
37. DIESEL FUEL IS NOT TO BE USED AS A RELEASE FOR HAND TOOLS AND TRUCKS PER FOOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2017-2018. NO RELEASE AGENT SHOULD BE POURED ONTO SOLIS OVER ASPHALT SURFACES.
38. NOTIFY SUNSHINE UTILITIES 48 HOURS IN ADVANCE PRIOR TO DIGGING WITHIN R/W: 1-800-432-4770. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION AND IMMEDIATELY NOTIFY ENGINEER OF CONFLICTS.
39. POWER COMPANY TO REVIEW ALL EXISTING POWER POLES PRIOR TO CONSTRUCTION FOR POSSIBLE RELOCATION/REPLACEMENT.
40. CONTRACTOR SHALL FIELD VERIFY THE CROSS SLOPES OF ALL EXISTING DRIVEWAYS TO ENSURE ADA MAXIMUM CROSS SLOPE COMPLIANCE OF TWO PERCENT (2%).
41. CONTRACTOR SHALL FIELD VERIFY DROP-OFF HEIGHTS AT ALL NOTED PEDESTRIAN HAZARD AREAS AND INSTALL APPROPRIATE MATERIAL AS FOLLOWS:
<5.0 FT DROP-OFF USE GUIDE RAIL FOOT INDEX 515-052 (STEEL)
>5.0 FT DROP-OFF USE PEDESTRIAN/BICYCLE RAILINGS INDEX 515-052 (STEEL)
42. CITY SHALL OBTAIN ANY/ALL TEMPORARY CONSTRUCTION EASEMENTS NECESSARY FOR PRIVATE PROPERTY IMPACTS BEYOND THE RIGHT-OF-WAY.
43. THE CONTRACTOR SHALL EMPLOY THE USE OF SILT FENCES, HAY BALES, DITCHES OR WHATEVER MEANS NECESSARY TO CONTROL EROSION AND SEDIMENTATION AT ALL TIMES. WATERS OF THE STATE, ADJACENT PROPERTIES, AND ANY NEW DRAINAGE CONSTRUCTION SHALL BE PROTECTED DURING THE CONSTRUCTION PERIOD. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION AND SHALL REMAIN UNTIL THE COMPLETION OF CONSTRUCTION AND ACCEPTANCE BY THE OWNER.
44. ALL ON-SITE GRADING, DRAINAGE AND PAVEMENT WORK SHALL BE IN ACCORDANCE WITH FOOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
45. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DUST CONTROL.
46. THE CONTRACTOR SHALL RESTORE ALL DISTURBED RIGHTS-OF-WAY IN ACCORDANCE WITH THE EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
47. THE CONTRACTOR SHALL HIRE A SURVEYOR LICENSED IN THE STATE OF FLORIDA IN ACCORDANCE WITH SECTION 12.0 OF THE GENERAL CONDITIONS.
48. THE CONTRACTOR SHALL ENSURE THAT ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL LAWS.
49. CONTRACTOR SHALL COMPLY FULLY WITH ALL PERMIT REQUIREMENTS IMPOSED BY THE REGULATORY AUTHORITIES.
50. TYPE B STABILIZATION IS INCIDENTAL TO EARTHWORK.

UTILITY NOTES:

1. THE LOCATION SHOWN FOR EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK IN EACH AREA. THE CONTRACTOR AGREES TO BE COMPLETELY RESPONSIBLE FOR ALL DAMAGES WHICH MIGHT OCCUR BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UTILITIES.
2. UTILITY OWNERS SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION SO THAT THE UTILITY OWNER CAN SPOT VERIFY AND/OR EXPOSE THEIR UTILITIES.
3. POWER COMPANY WILL COMPLETE ALL WORK DURING THE HOURS OF 7:30 AM - 4:30 PM, MONDAY THRU FRIDAY. NO NIGHT OR WEEKEND WORK. USING A CELL PHONE.
4. ALL CABLE DAMAGE MUST BE REPORTED TO THE AIT FLORIDA REPAIR SERVICE DEPARTMENT AT 611 FROM A LAND LINE OR 877-737-2478 IF USING A CELL PHONE.
5. CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES AND UNDERGROUND UTILITIES.
6. UTILITIES TO REMAIN AND BE PROTECTED DURING CONSTRUCTION. NECESSARY REPAIRS SHALL BE CONSIDERED INCIDENTAL TO OTHER PAY ITEMS AND SHALL BE TO THE SATISFACTION OF UTILITY OWNERS.
7. AHEAD FLORIDA WILL COMPLETE ALL WORK DURING THE HOURS OF 7:30 AM - 4:30 PM, MONDAY THRU FRIDAY. NO NIGHT OR WEEKEND WORK.

UTILITY CONTACT INFORMATION			
UTILITY	ADDRESS	CONTACT NAME	PHONE NUMBER
WATER AND SANITARY SEWER	P.O. BOX 306, DESTIN, FL 32541	DESTIN WATER USERS	(850) 837-6146
POWER	34854 ENTERED COAST PARKWAY, DESTIN, FL 32541	FLORIDA POWER & LIGHT	(850) 725-5797
NATURAL GAS	364 WILLOWDALE PARKWAY, VALPARAISO, FL 32580	OKALOOSA GAS DISTRICT	(850) 728-4700
TELECOMMUNICATIONS	3403 MCLEMORE DRIVE, PENSACOLA, FL 32514	COX COMMUNICATIONS, INC.	(850) 557-4571

STORMWATER NOTES:

1. CONTRACTOR SHALL OBTAIN A NPDES PERMIT FROM TDEP PRIOR TO COMMENCEMENT WORK.
2. PIPE LENGTHS SHOWN IN THE PLANS INCLUDE THE LENGTH OF PIPE THAT MUST BE INSTALLED WITH THE INTERED END SECTION.
3. ALL PIPE JOINTS, INCLUDING CONNECTIONS TO STRUCTURES, SHALL BE WRAPPED WITH FILTER FABRIC IN ACCORDANCE WITH FOOT DESIGN STANDARDS AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.



BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1405 PANAMA CITY BEACH PARKWAY, SUITE 101
PANAMA CITY BEACH, FL 32413 (850) 234-0100
ENGINEERING THE SOUTH SINCE 1927
PENSACOLA-PANAMA CITY BEACH-TALLAHASSEE-MOBILE

SHORE AT
TARPON BEACH

REVISION / ACTION TAKEN	
NO.	DATE

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NOT RELEASED FOR CONSTRUCTION

PROJECT NO:
12107.01

DESIGNED BY: RAS

DRAWN BY: JJ

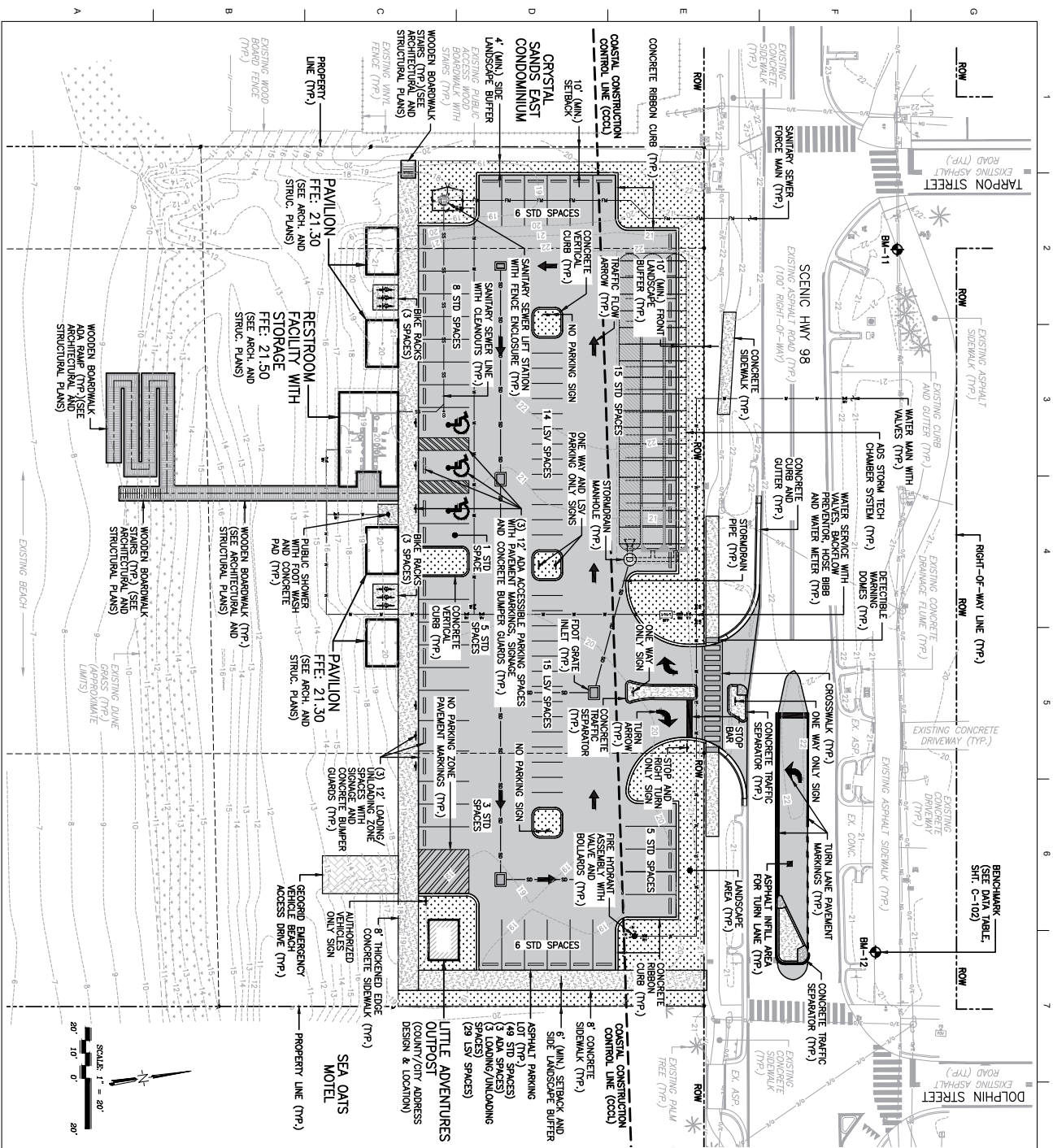
CHCKD BY: RLW

PROJ. MGR: JCP

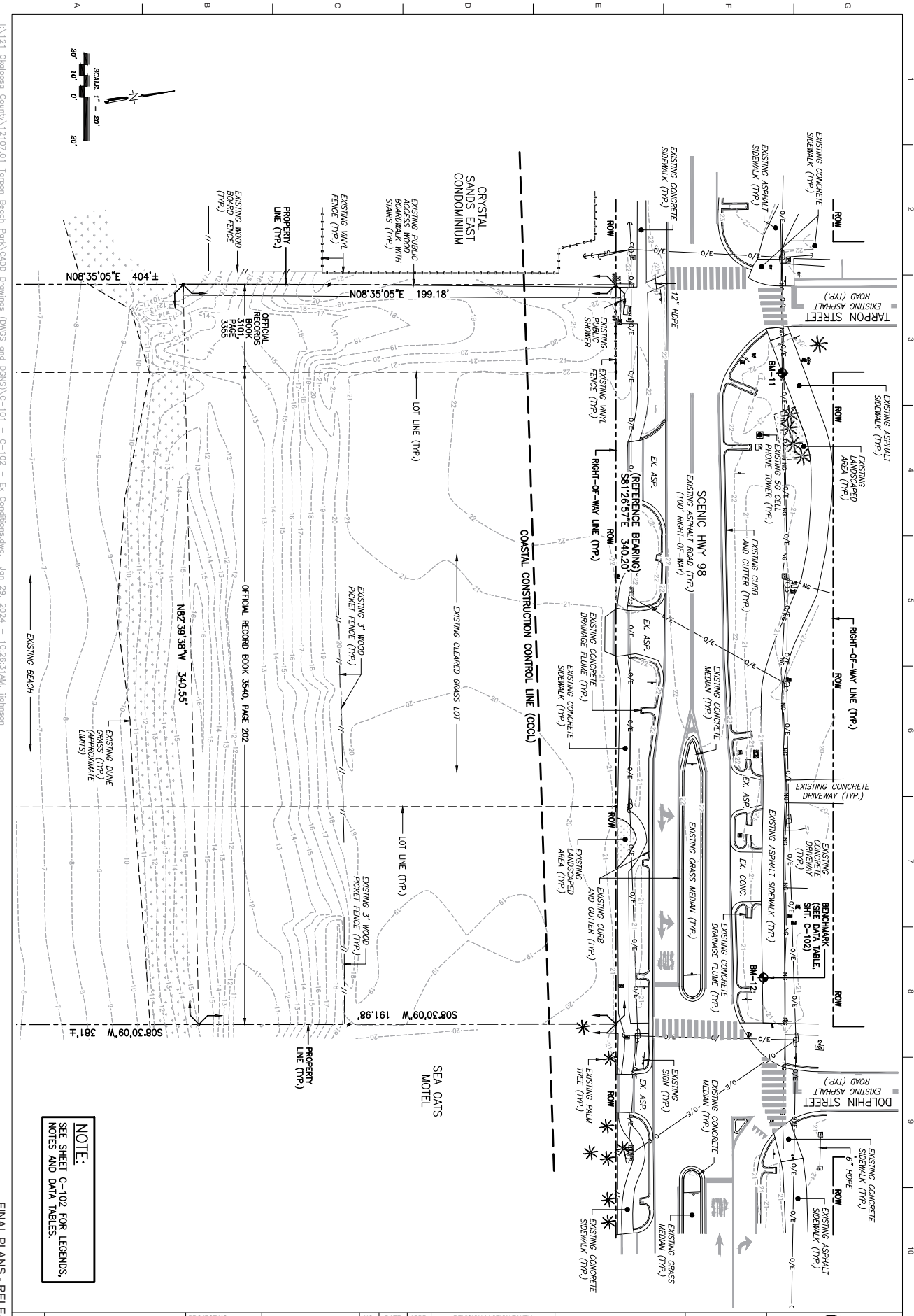
DATE: FEBRUARY 2024

GENERAL NOTES

G-002



C-100	PROJECT OVERVIEW	PROJECT NO: 12107.01	This drawing is the property of BASKERVILLE-DONOVAN, INC. and is not to be reproduced in whole or in part. It is not to be used on any other project and is to be returned upon request.	NO.	DATE	APPR.	REVISION / ACTION TAKEN	 BASKERVILLE-DONOVAN, INC. ENGINEERING THE SOUTH SINCE 1927 14101 PANAMA CITY BEACH PARKWAY, SUITE 110, PANAMA CITY BEACH, FL 32413 (850) 224-1050 ENGINEERING BUSINESS: CROOKED ISLAND PENSACOLA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE
		DESIGNED BY: RAS		SHORE AT TARPON BEACH				
		DRAWN BY: JJ						
		CHK'D BY: RLW						
		PROJ. MGR: JCP						
		DATE: FEBRUARY 2024						
NOT RELEASED FOR CONSTRUCTION	SEAL							



NOTE:
SEE SHEET C-102 FOR LEGENDS,
NOTES AND DATA TABLES.

PROJECT NO:
12107.01

DESIGNED BY: RAS

DRAWN BY: JJ

CHKD BY: RLW

PROJ. MGR: JCP

DATE: FEBRUARY 2024

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NO.	DATE	APPR	REVISION / ACTION TAKEN

SHORE AT TARPON BEACH

SEAL

BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1401 PANAMA CITY BEACH PARKWAY, SUITE 10
PANAMA CITY BEACH, FL 32413 (850) 234-1100
PENINSULA • PANAMA CITY BEACH • TALLAHASSEE • MOBILE

C-101

EXISTING CONDITIONS AND SURVEY CONTROL PLAN

SURVEY SYMBOL LEGEND

OR OR SET CAPPED IRON ROD #0340

OR FOUND IRON ROAD AND CAP

OR FOUND IRON ROD AND CAP

OR FOUND CRAMP TOP PIPE

OR FOUND IRON ROD

FOUND OPEN TOP PIPE

FOUND CONCRETE MONUMENT

SET NAIL AND DISK

GEOTECHNICAL SOIL BORING

RIGHT OF WAY

PROPERTY LOT LINE

MEAN HIGH WATER LINE

COSTAL CONSTRUCTION CONTROL LINE (COCCL)

LANDSCAPE BUFFER SETBACK

EXISTING MAJOR CONTOUR LINE

EXISTING MINOR CONTOUR LINE

SIGN (SINGLE SUPPORT)

SIGN (MULTI SUPPORT)

BOLLARD

DUNE GRASS

UNSCAPED AREA

TREE - PINE

MAIL BOX

BEACH BOOK DEPOSITORY

PARK BENCH

BENCH

BENCH

BENCH

BENCH

FENCE - VINYL FENCE

FENCE - WOOD BOARD FENCE

STORM DRAINAGE PIPE

SANITARY SEWER LINE

SANITARY SEWER MANHOLE

SANITARY SEWER VALVE

SANITARY SEWER CLEANOUT

IRRIGATION CONTROL VALVE

NATURAL GAS LINE

WATER LINE

WATER BACKFLOW PREVENTOR

WATER VALVE

WATER METER

WATER SHOWER STATION

FIRE HYDRANT

OVERHEAD ELECTRICAL LINE

GUYWIRE

ELECTRICAL POWER POLE

ELECTRICAL WIRE PULL BOX

ELECTRICAL SERVICE BOX

ELECTRICAL PEDESTAL

TELEPHONE PEDESTAL

TELEPHONE WIRE PULL BOX

5G CELL PHONE TOWER (POLE)

FIBER OPTIC VAULT

FIBER OPTIC WIRE PULL BOX

FIBER OPTIC UTILITY MARKER POST

CABLE TV WIRE PULL BOX

ABBREVIATION LEGEND

ROW OR R/W INV INVERT EL OR ELEV OFFICIAL RECORDS BOOK PLAT FIELD DEED RADIOS DELTA LENGTH CHORD CHORD BEARING

BENCHMARK DATA TABLE

DESIGNATION	NORTHING	EASTING	ELEVATION	DESCRIPTION
BM-6	507999.39	1361122.74	21.82'	SET CAPPED IRON ROD #0340
BM-7	507994.89	1361279.45	22.13'	SET CAPPED IRON ROD #0340
BM-11	507639.80	1364034.05	21.85'	SET PK NAIL IN DISC #0340
BM-12	507599.90	1364008.02	20.95'	SET PK NAIL IN DISC #0340

SURVEYOR'S NOTES:

1. NORTH AND THE SURVEY DATUM SHOWN HEREIN IS BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83), AND EXISTING FIELD MONUMENTATION.

2. ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 88 DATUM, AND EXISTING FIELD MONUMENTATION.

3. NO TITLE SEARCH, TITLE OPINION, OR ABSTRACT WAS PERFORMED BY NOR PROVIDED TO THIS FIRM FOR THE SUBJECT PROPERTY. THEREFORE, THE SURVEYOR HAS NOT BEEN ADVISED OF ANY INTERESTS, RIGHTS-OF-WAY, BUILDING SETBACKS, RESTRICTIVE COVENANTS, OR OTHER INSTRUMENTS WHICH COULD AFFECT THE BOUNDARIES OR USE OF THE SUBJECT PROPERTY.

4. THE SURVEY SHOWN HEREON AND WAS CONDUCTED BY BASKERVILLE-DONOVAN, INC., 449 WEST MAIN STREET PENSACOLA, FLORIDA 32502, AND WAS PERFORMED FROM OCTOBER 03-08, 2022 AFTER CITY READ SURVEY DATA PREPARED ON MAY 01, 2023, AND THE DATA RECORDED IN FIELD BOOK 22-11, PAGE 62.

5. THE ABOVE GROUND UTILITIES SHOWN HEREON WERE BASED ON VISIBLE FIELD LOCATION. ANY SUBSURFACE UTILITIES SHOWN HEREIN WERE NOT LOCATED AND SHOULD BE VERIFIED BY THE CONTRACTOR. ALL DISTANCES ARE EXPRESSED IN FEET AND DECIMAL PARTS THEREOF.

6. SOIL BORING AND TEST PIT LOGS AND LABORATORY DATA CAN BE FOUND IN THE GEOTECHNICAL REPORT.

7. SOL BORING AND TEST PIT LOGS AND LABORATORY DATA CAN BE FOUND IN THE GEOTECHNICAL REPORT.

PROPERTY DESCRIPTIONS:

(OFFICIAL RECORDS BOOK 3540, PAGE 202)

PARCEL A

THAT PART OF BLOCK A INCLUDED BETWEEN THE SOUTHERLY EXTENSIONS TO THE GULF OF MEXICO OF THE EAST LINE OF BLOCK 3 AND THE WEST LINE OF LOT 5 OF BLOCK 3, TOGETHER WITH THE RIPARIAN RIGHTS HERETO BELONGING, ACCORDING TO THE PLAT OF THE SUBDIVISION KNOWN AS "CRYSTAL BEACH," A SUBDIVISION OF THE TOWNSHIP 2 SOUTH, RANGE 22 WEST, OKALOOSA COUNTY, FLORIDA, AS RECORDED IN PLAY BOOK 1, AT PAGE 17, OF THE PUBLIC RECORDS OF OKALOOSA COUNTY, FLORIDA, Lying BETWEEN THE SOUTHERLY EXTENSION OF THE GULF OF MEXICO OF THE EAST LINE OF BLOCK 3, AND THE EAST LINE OF LOT 4, BLOCK 3, CRYSTAL BEACH SUBDIVISION.

PARCEL B

THAT PORTION OF BLOCK A, CRYSTAL BEACH SUBDIVISION, AS RECORDED IN PLAY BOOK 1, AT PAGE 17, OF THE PUBLIC RECORDS OF OKALOOSA COUNTY, FLORIDA, Lying BETWEEN THE SOUTHERLY EXTENSION OF THE GULF OF MEXICO OF THE EAST LINE OF BLOCK 3, AND THE EAST LINE OF LOT 4, BLOCK 3, CRYSTAL BEACH SUBDIVISION.

AND ALSO:

(OFFICIAL RECORDS BOOK 3101, PAGE 3355)

PARCEL #3:

THE LAST 40 FEET OF THE FOLLOWING DESCRIBED PROPERTY, THAT BEING THE SOUTHERLY EXTENSION OF THE EAST LINE OF BLOCK 4 OF THE DESPIN PENINSULA, TOWNSHIP 2 SOUTH, RANGE 22 WEST, OKALOOSA COUNTY, FLORIDA, ACCORDING TO THE PLAT HEREONAS RECORDED IN PLAY BOOK 1, AT PAGE 17, OF THE PUBLIC RECORDS OF OKALOOSA COUNTY, FLORIDA, SUBJECT TO ANY EASEMENTS GRANTED FOR INGRESS AND EGRESS TO THE GULF OVER A SOUTHERLY EXTENSION OF 4TH STREET ACCORDING TO THE PLAT OF SAID CRYSTAL BEACH, AND THAT PORTION OF BLOCK A, LYING BETWEEN THE SOUTHERLY EXTENSION OF THE GULF OF MEXICO OF THE EAST LINE OF BLOCK 3, IN CRYSTAL BEACH, A SUBDIVISION OF THE WEST MILE OF THE EAST TWO MILES OF THE DESPIN PENINSULA, TOWNSHIP 2 SOUTH, RANGE 22 WEST, OKALOOSA COUNTY, FLORIDA, ACCORDING TO THE PLAT HEREONAS RECORDED IN PLAY BOOK 1, AT PAGE 17, OF THE PUBLIC RECORDS OF OKALOOSA COUNTY, FLORIDA,

EXISTING CONDITIONS
LEGENDS, NOTES AND
DATA TABLES

PROJECT NO:
12107.01

DESIGNED BY: RAS

DRAWN BY: JJ

CHKD BY: RLW

PROJ. MGR: JCP

DATE: FEBRUARY 2024

NOT RELEASED FOR
CONSTRUCTION

SHORE AT
TARPON BEACH

SEAL

BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1401 PANAMA CITY BEACH PARKWAY, SUITE 110
PANAMA CITY BEACH, FL 32413 (850) 234-1100
ENGINEERING LICENSE 85000000
PENACOLA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE

C-102

DEMOLITION NOTES:

1. SEE SHEETS C-101 AND C-102 FOR SURVEY BENCHMARKS, SURVEY SYMBOL, LEGEND AND ABBREVIATION LEGEND.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE ACCURACY OF THE EXISTING SITE INFORMATION SHOWN HERE IN. ANY CHANGED OR ALTERED SITE CONDITION SHALL BE BROUGHT TO THE ATTENTION OF THE COUNTY AND CITY IMMEDIATELY.
3. ALL EXISTING DEBRIS AND DEBRIS FROM CONSTRUCTION OPERATIONS SHALL BE DISPOSED OF OFF-SITE AT THE CONTRACTOR'S EXPENSE.
4. TOPSOIL SUITABLE FOR REUSE SHALL BE STOCKPILED ON-SITE IN AN APPROVED LOCATION AND REDISTRIBUTED OVER ALL DISTURBED AREAS IN ONE 4" LAYER, (LOOSE THICKNESS).
5. ALL WORK ADJACENT TO OR ON EXISTING ROADWAYS SHALL COMPLY WITH CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS FOR TRAFFIC CONTROL AND SAFETY. ALL WORK SHALL BE CONDUCTED IN ACCORDANCE WITH THE CITY OF TALLAHASSEE'S CITY HANDBOOK FOR ANY INCIDENT OCCURRING ON OR ADJACENT TO THE PROJECT SITE.
6. EXISTING TREES SHOWN OUTSIDE THE LIMITS OF TO SITE CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL CLEARLY IDENTIFY THE CLEARING LIMITS.
7. CLEARING AND GRUBBING OF TREES AND STUMPING OF ALL EXISTING TREES SHALL BE REQUIRED FOR ALL NEW CONSTRUCTION. ANY ADDITIONAL CLEARING AND/OR GRUBBING OF TREES SHALL BE COMPLETED AS APPROVED BY THE COUNTY AND CITY.
8. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL LOCATE ALL UTILITIES. ANY UTILITY REQUIRED TO BE COMPLETED PRIOR TO CONSTRUCTION OF THE CONTRACTOR, THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, THE TEMPORARY RELOCATION OF EXISTING OVERHEAD POWER LINES. ALL WORK SHALL CONFORM TO APPLICABLE (LOCAL) SAFETY REQUIREMENTS. THE CONTRACTOR IS TO REPAIR DAMAGES TO EXISTING UTILITIES THAT ARE TO REMAIN IN SERVICE IMMEDIATELY AT NO EXTRA COSTS OR EXPENSE TO THE COUNTY AND CITY.
9. REFER TO ELECTRICAL, COMMUNICATIONS AND OTHER DISCIPLINES FOR UTILITIES REQUIRING REMOVAL, COORDINATION AND/OR RELOCATION.
10. THE CONSTRUCTION CONTRACTOR SHALL INSTALLED MARK AND PROTECT IN PLACE, AS NEEDED, ALL APPLICABLE EXISTING UNDERGROUND UTILITIES THAT ARE TO REMAIN IN PLACE/SERVICE DURING CONSTRUCTION OPERATIONS THAT MAY BE SUBJECT TO DAMAGE.
11. CONTRACTOR SHALL SAW CUT THE LIMITS OF ASPHALT PAVEMENT TO BE REMOVED AND PROTECT EDGE OF ASPHALT FROM DAMAGE. ANY DAMAGE TO THE SAW CUT LINE SHALL REQUIRE THE CONTRACTOR TO RE-SAW CUT A NEW LINE BEFORE PLACEMENT OF NEW ASPHALT PAVEMENT.
12. ACTUAL AMOUNT OF ASPHALT PAVEMENT TO BE REMOVED SHALL BE DETERMINED BY TYPE OF COULMANT AND CONSTRUCTION TECHNIQUE USED BY THE CONTRACTOR FOR INSTALLATION OF THE NEW SITE LAYOUT.
13. THERE ARE STRUCTURES THAT HAVE BEEN PREVIOUSLY DEMOLISHED AS SHOWN ON THE EXISTING DOCUMENT. IT IS NOT KNOWN TO WHAT EXTENT THAT DEMOLITION OCCURRED. REMAINING INTERFER WITH THE CONSTRUCTION OF THE NEW LAYOUT AND MUST BE REMOVED TO THE EXTENT NECESSARY TO ACCOMPLISH THE NEW WORK.
14. CONTRACTOR SHALL RELOCATE ALL PALM TREES WHICH IS ABSOLUTELY REQUIRED FOR NEW CONSTRUCTION. RELOCATION SHALL BE RECORDED AND APPROVED BY THE COUNTY AND CITY.

CONSTRUCTION SCREENING CRITERIA:

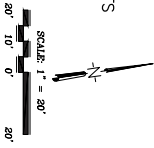
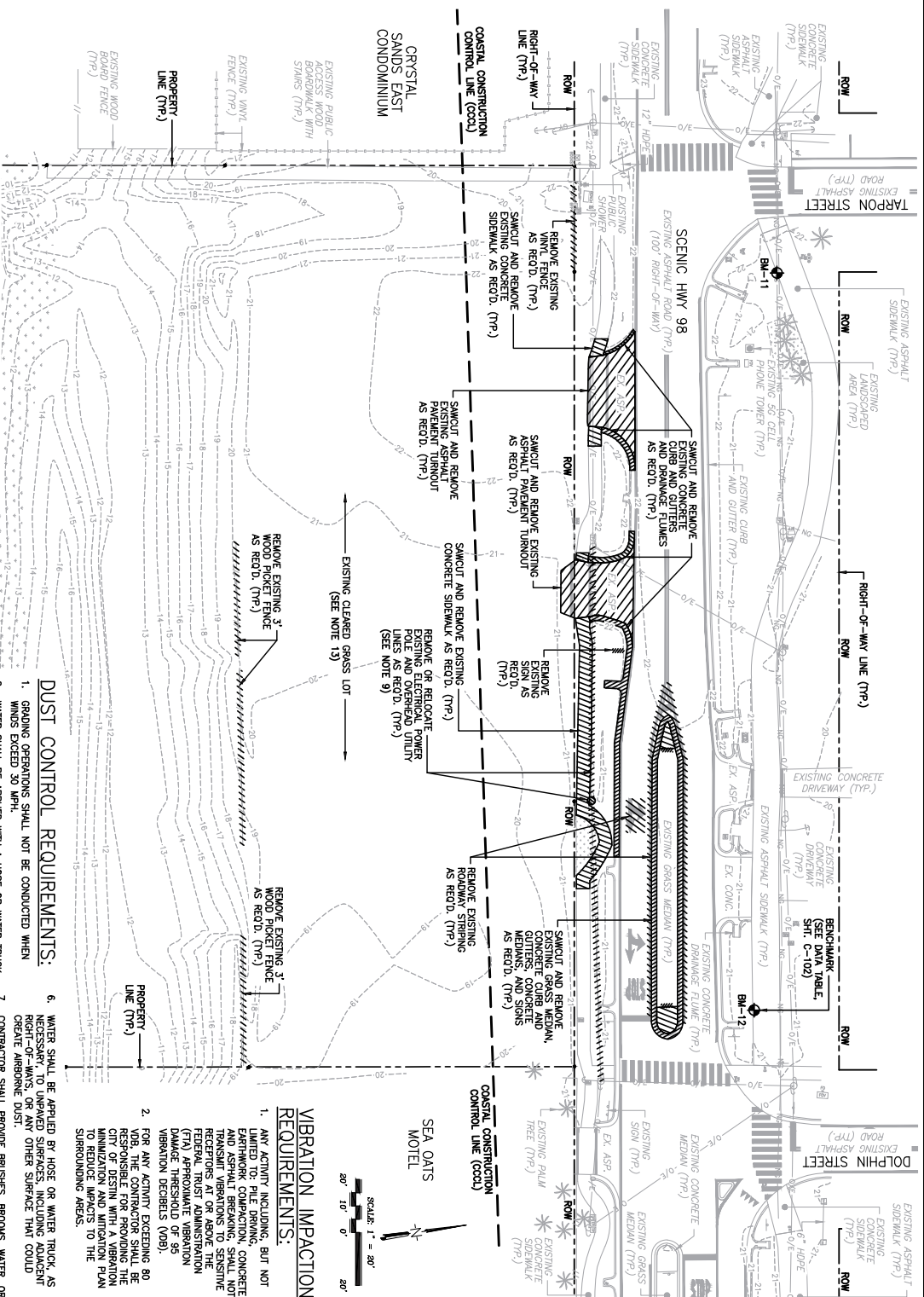
1. CONSTRUCTION SCREENING MATERIAL SHALL BE MADE OF GRADE MATERIAL, CAPABLE OF ALLOWING AIR TO PASS BUT SEMI-IMPERVIOUS TO DUST AND DIRT. THE SCREENING SHALL BE OF A FLEXIBLE SUCH THAT NO MATERIAL OVER ONE-EIGHT (8) INCH IN SIZE SHALL PASS THROUGH THE MESH. SUCH SCREENING SHALL BE SECURELY ATTACHED TO THE CONSTRUCTION FENCE.
2. THE MINIMUM HEIGHT OF THE (8) FEET AND A MAXIMUM HEIGHT OF (10) FEET SHALL BE MAINTAINED THROUGHOUT THE SCREENING. THE SCREENING MUST BE KEPT SECURE FROM ANY WIND ACTION. IN CASES WHERE THE FINISHED GRADE OF THE DEVELOPMENT SITE IS HIGHER BY MORE THAN ONE (1) FOOT OR MORE THAN THE GRADE OF THE ADJACENT PROPERTIES, SAID FENCE SCREENING SHALL BE PLACED AT THE FINISHED GRADE AND NOT THE EXISTING GRADE.

DUST CONTROL REQUIREMENTS:

1. GRADING OPERATIONS SHALL NOT BE CONDUCTED WHEN WINDS EXCEED 30 MPH.
2. WATER SHALL BE APPLIED WITH A HOSE OR WATER TRUCK, AS NECESSARY, DURING DEMOLITION ACTIVITIES.
3. CONTRACTOR SHALL ENSURE THAT ANY OPEN-BODGED PARTICULATE MATTER SHALL BE COVERED OR WETTED TO MINIMIZE DUST GENERATION DURING TRANSPORT.
4. STOCKPILED MATERIAL SHALL BE COVERED OR WETTED, AS REQUIRED, TO MINIMIZE DUST GENERATION DURING HIGH WIND CONDITIONS.
5. CONTRACTOR SHALL MINIMIZE THE HEIGHTS INVOLVED IN OTHER PARTICULATE MATTER TO MINIMIZE DUST EMISSIONS.

VIBRATION IMPACT REQUIREMENTS:

1. ANY ACTIVITY INCLUDING, BUT NOT LIMITED TO: PILE DRIVING, EXCAVATION, CONSTRUCTION, TRANSPORTATION, OR OTHER TRANSPORT VIBRATIONS TO SENSITIVE RECEPTORS AT OR ABOVE THE FEDERAL TRUST ADMINISTRATION (FTA) APPROXIMATE VIBRATION DAMAGE THRESHOLD OF 95 VIBRATION DECIBELS (VDB).
2. FOR ANY ACTIVITY EXCEEDING 80 VIBRATION DECIBELS (VDB), THE CONTRACTOR SHALL ADVISE THE CITY OF DESIGN WITH A VIBRATION MINIMIZATION AND MITIGATION PLAN TO REDUCE IMPACTS TO THE SURROUNDING AREAS.
3. CONTRACTOR SHALL MAINTAIN A ONLY DUST CONTROL CHECKLIST AND COMPLIANCE WITH THESE REQUIREMENTS, AND MAINTAIN AT THE JOBSITE AT ALL TIMES.



VIBRATION IMPACT REQUIREMENTS:

1. ANY ACTIVITY INCLUDING, BUT NOT LIMITED TO: PILE DRIVING, EXCAVATION, CONSTRUCTION, TRANSPORTATION, OR OTHER TRANSPORT VIBRATIONS TO SENSITIVE RECEPTORS AT OR ABOVE THE FEDERAL TRUST ADMINISTRATION (FTA) APPROXIMATE VIBRATION DAMAGE THRESHOLD OF 95 VIBRATION DECIBELS (VDB).
2. FOR ANY ACTIVITY EXCEEDING 80 VIBRATION DECIBELS (VDB), THE CONTRACTOR SHALL ADVISE THE CITY OF DESIGN WITH A VIBRATION MINIMIZATION AND MITIGATION PLAN TO REDUCE IMPACTS TO THE SURROUNDING AREAS.
3. CONTRACTOR SHALL MAINTAIN A ONLY DUST CONTROL CHECKLIST AND COMPLIANCE WITH THESE REQUIREMENTS, AND MAINTAIN AT THE JOBSITE AT ALL TIMES.

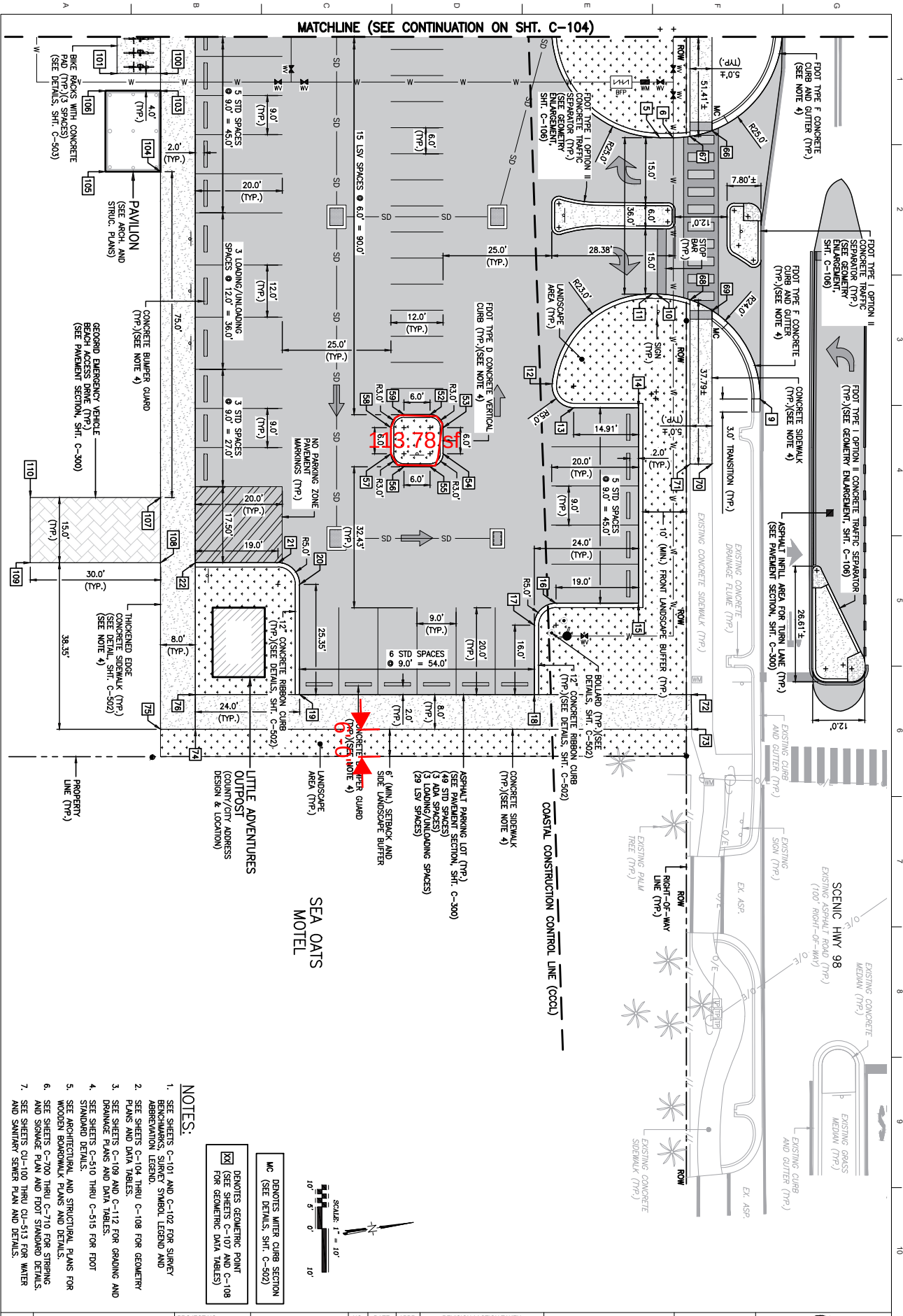
PROJECT NO.	12107.01
DESIGNED BY: RAS	
DRAWN BY: JJ	
CHECKED BY: RLW	
PROJ. MGR: JCP	
DATE: FEBRUARY 2024	

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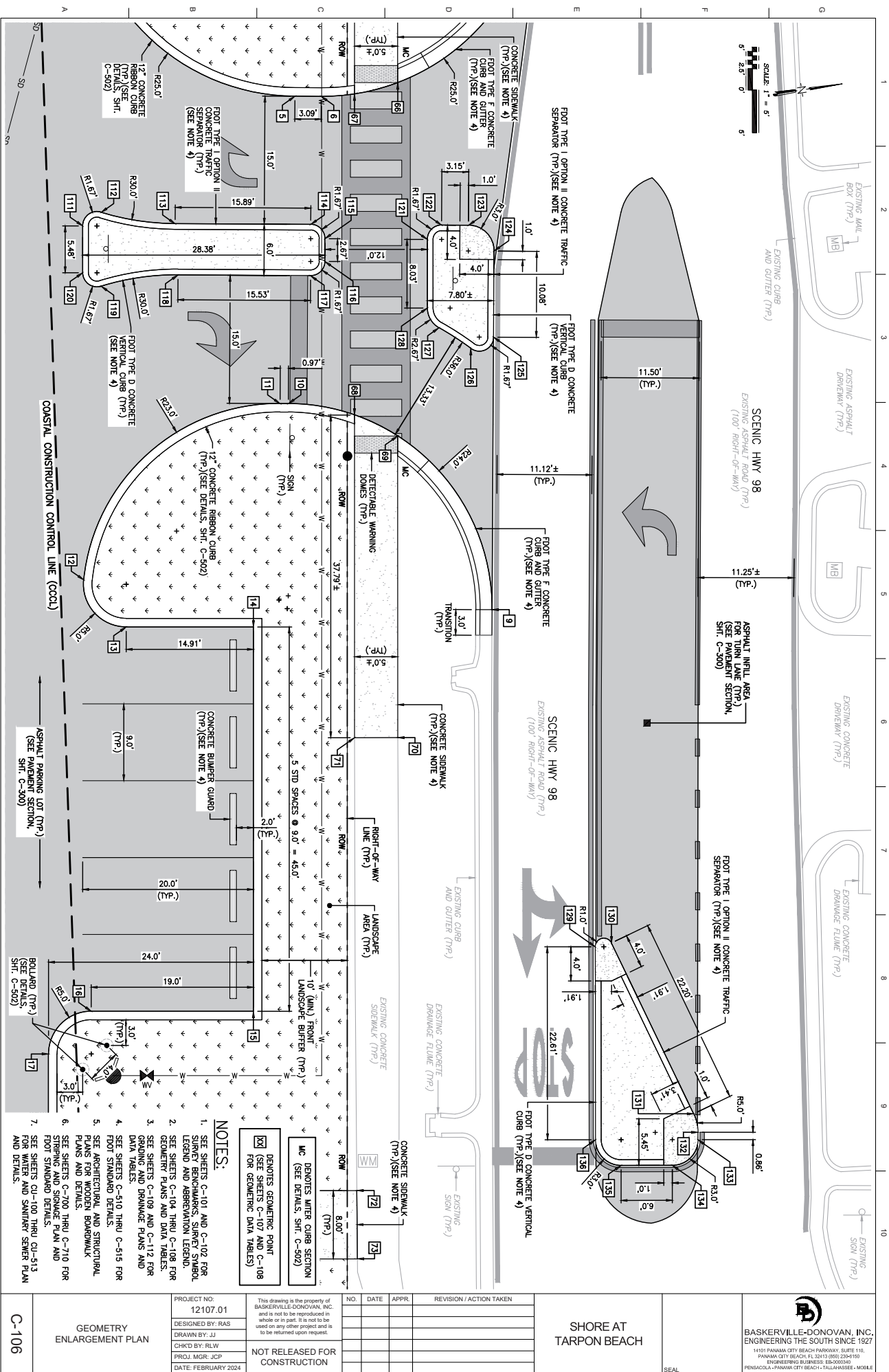
NOT RELEASED FOR CONSTRUCTION

NO.	DATE	APPR	REVISION / ACTION TAKEN





PROJECT NO. 12107.01		DESIGNED BY: RAS		DRAWN BY: JJ		CHKD BY: RLW		PROJ. MGR: JCP		DATE: FEBRUARY 2024	
GEOMETRY PLAN		NOT RELEASED FOR CONSTRUCTION		NO.		DATE		APPR		REVISION / ACTION TAKEN	
C-105		SHORE AT TARPON BEACH									



GEOMETRIC POINT DATA TABLE			
SYMBOL NO.	NORTHING	EASTING	DESCRIPTION
1	507554.29	1364013.59	EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
2	507534.22	1364147.09	EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
3	507519.39	1364144.86	PC/PT OF 5' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
4	507513.70	1364149.10	PC/PT OF 5' RADIUS AND 25' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
5	507534.59	1364177.33	PC/PT OF 25' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
6	507537.64	1364177.81	PC/PT OF 25' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
7	507566.14	1364157.29	PC/PT OF 24' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CURB AND GUTTER, TIE TO EXISTING SCENIC HWY 98 ASPHALT ROAD
8	507571.53	1364125.48	FACE OF CURB AND GUTTER, TIE TO EXISTING SCENIC HWY 98 ASPHALT ROAD
9	507548.49	1364240.22	PC/PT OF 24' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CURB AND GUTTER, TIE TO EXISTING SCENIC HWY 98 ASPHALT ROAD
10	507528.48	1364212.81	PC/PT OF 24' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
11	507527.53	1364212.67	PC/PT OF 23' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
12	507501.70	1364229.66	PC/PT OF 23' RADIUS AND 5' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
13	507505.80	1364235.85	PC/PT OF 5' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
14	507520.54	1364238.07	EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
15	507513.85	1364282.57	EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
16	507495.06	1364279.74	PC/PT OF 5' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
17	507489.38	1364283.94	PC/PT OF 5' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
18	507487.00	1364299.76	EDGE OF ASPHALT PARKING LOT, FACE OF RIBBON CURB AND CONCRETE SIDEWALK
19	507433.60	1364291.73	EDGE OF ASPHALT PARKING LOT, FACE OF RIBBON CURB AND CONCRETE SIDEWALK
20	507437.37	1364266.67	PC/PT OF 5' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
21	507433.16	1364260.98	PC/PT OF 5' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
22	507414.38	1364258.15	EDGE OF ASPHALT PARKING LOT, FACE OF RIBBON CURB AND THICKENED EDGE CONCRETE SIDEWALK
23	507433.04	1364134.05	EDGE OF ASPHALT PARKING LOT, FACE OF VERTICAL CURB AND THICKENED EDGE CONCRETE SIDEWALK
24	507449.85	1364136.57	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
25	507453.28	1364134.05	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
26	507454.15	1364128.12	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
27	507451.63	1364124.71	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
28	507434.82	1364122.18	EDGE OF ASPHALT PARKING LOT, FACE OF VERTICAL CURB AND THICKENED EDGE CONCRETE SIDEWALK
29	507453.70	1363996.59	EDGE OF ASPHALT PARKING LOT, FACE OF RIBBON CURB AND THICKENED EDGE CONCRETE SIDEWALK

GEOMETRIC POINT DATA TABLE			
SYMBOL NO.	NORTHING	EASTING	DESCRIPTION
30	507472.49	1363999.42	PC/PT OF 5' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
31	507478.18	1363995.22	PC/PT OF 5' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
32	507480.41	1363980.38	EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
33	507533.81	1363988.41	EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
34	507531.31	1364005.08	PC/PT OF 5' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
35	507535.51	1364010.76	PC/PT OF 5' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF RIBBON CURB
36	507502.28	1364036.69	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
37	507504.80	1364040.10	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
38	507503.91	1364046.03	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
39	507500.50	1364048.55	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
40	507494.56	1364047.66	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
41	507492.04	1364044.25	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
42	507492.94	1364038.31	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
43	507496.35	1364035.79	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
44	507488.01	1364131.62	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
45	507490.53	1364135.03	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
46	507489.64	1364140.97	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
47	507486.22	1364143.49	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
48	507480.29	1364142.59	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
49	507471.77	1364139.18	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
50	507478.66	1364133.25	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
51	507482.08	1364130.73	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
52	507472.84	1364232.49	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
53	507475.36	1364235.90	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
54	507471.47	1364241.83	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
55	507471.06	1364244.55	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
56	507465.12	1364243.46	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
57	507462.80	1364240.05	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
58	507463.50	1364234.11	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
59	507466.91	1364231.59	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF VERTICAL CURB
60	507568.08	1364048.44	CONCRETE SIDEWALK, TIE TO EXISTING SIDEWALK, TIE TO EXISTING CONCRETE SIDEWALK
61	507572.87	1364049.17	CONCRETE SIDEWALK, TIE TO EXISTING SIDEWALK, TIE TO EXISTING CONCRETE SIDEWALK
62	507564.47	1364088.78	CONCRETE SIDEWALK, TIE TO EXISTING SIDEWALK, TIE TO EXISTING CONCRETE SIDEWALK

GEOMETRIC POINT DATA TABLE			
SYMBOL NO.	NORTHING	EASTING	DESCRIPTION
63	507559.62	1364088.05	CONCRETE SIDEWALK, TIE TO EXISTING CONCRETE SIDEWALK
64	507549.18	1364127.26	CONCRETE SIDEWALK, TIE TO EXISTING CONCRETE SIDEWALK
65	507554.19	1364128.02	CONCRETE SIDEWALK, TIE TO EXISTING CONCRETE SIDEWALK
66	507546.74	1364177.55	EDGE OF ASPHALT PARKING LOT, FACE OF CURB AND GUTTER AND CONCRETE SIDEWALK
67	507541.54	1364178.11	EDGE OF ASPHALT PARKING LOT, FACE OF RIBBON CURB AND CONCRETE SIDEWALK
68	507535.95	1364215.28	EDGE OF ASPHALT PARKING LOT, FACE OF RIBBON CURB AND CONCRETE SIDEWALK
69	507540.59	1364218.47	EDGE OF ASPHALT PARKING LOT, FACE OF CURB AND GUTTER AND CONCRETE SIDEWALK
70	507535.34	1364253.40	CONCRETE SIDEWALK, TIE TO EXISTING CONCRETE SIDEWALK
71	507530.33	1364252.66	CONCRETE SIDEWALK, TIE TO EXISTING CONCRETE SIDEWALK
72	507522.72	1364305.13	CONCRETE SIDEWALK, TIE TO EXISTING CONCRETE SIDEWALK
73	507521.59	1364313.06	CONCRETE SIDEWALK, TIE TO EXISTING CONCRETE SIDEWALK
74	507408.67	1364296.08	CONCRETE SIDEWALK AND THICKENED EDGE CONCRETE SIDEWALK
75	507400.76	1364294.89	THICKENED EDGE CONCRETE SIDEWALK
76	507409.86	1364288.17	CONCRETE SIDEWALK AND THICKENED EDGE CONCRETE SIDEWALK
77	507448.94	1363974.49	THICKENED EDGE CONCRETE SIDEWALK
78	507456.85	1363975.68	THICKENED EDGE CONCRETE SIDEWALK
79	507454.88	1363986.16	PAVILION AND THICKENED EDGE CONCRETE SIDEWALK
80	507442.92	1364014.54	PAVILION AND THICKENED EDGE CONCRETE SIDEWALK
81	507430.39	1364012.66	PAVILION
82	507433.15	1363994.28	PAVILION
83	507442.32	1364018.49	BIKE RACK CONCRETE PAD AND THICKENED EDGE CONCRETE SIDEWALK
84	507440.83	1364028.38	BIKE RACK CONCRETE PAD AND THICKENED EDGE CONCRETE SIDEWALK
85	507430.95	1364026.90	BIKE RACK CONCRETE PAD
86	507432.43	1364017.01	BIKE RACK CONCRETE PAD
87	507404.24	1364032.34	PAVILION AND THICKENED EDGE CONCRETE SIDEWALK
88	507437.48	1364050.72	PAVILION AND THICKENED EDGE CONCRETE SIDEWALK
89	507424.95	1364048.83	PAVILION
90	507427.81	1364030.46	PAVILION
91	507435.99	1364060.60	RESTROOM FACILITY AND THICKENED EDGE CONCRETE SIDEWALK
92	507430.42	1364097.68	RESTROOM FACILITY, THICKENED EDGE CONCRETE SIDEWALK AND WOODEN BOARDWALK
93	507407.19	1364094.18	RESTROOM FACILITY AND WOODEN BOARDWALK
94	507421.76	1364059.11	RESTROOM FACILITY
95	507428.05	1364113.42	PAVILION AND THICKENED EDGE CONCRETE SIDEWALK
96	507425.29	1364131.79	PAVILION AND THICKENED EDGE CONCRETE SIDEWALK
97	507412.76	1364129.91	PAVILION
98	507415.52	1364111.53	PAVILION
99	507424.69	1364135.75	BIKE RACK CONCRETE PAD AND THICKENED EDGE CONCRETE SIDEWALK
100	507423.20	1364145.64	BIKE RACK CONCRETE PAD AND THICKENED EDGE CONCRETE SIDEWALK
101	507413.31	1364144.15	BIKE RACK CONCRETE PAD
102	507414.80	1364134.26	BIKE RACK CONCRETE PAD

12107.01

DESIGNED BY: RAS

DRAWN BY: JJJ

PROJ. MGR: JCP

DATE: FEBRUARY 2024

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DATE

APPR.

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GEOMETRIC DATA TABLES

SHORE AT TARPON BEACH

BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1401 PANAMA CITY BEACH PARKWAY, SUITE 110
PANAMA CITY BEACH, FL 32413 (850) 234-1550
BASKERVILLE-DONOVAN, INC. IS AN EQUAL OPPORTUNITY EMPLOYER

SEAL

PENACOLA / PANAMA CITY BEACH / TALLAHASSEE - MOBILE

GEOMETRIC POINT DATA TABLE			
SYMBOL NO.	NORTHING	EASTING	DESCRIPTION
103	507422.61	1364149.59	PAVILION AND THICKENED EDGE CONCRETE SIDEWALK
104	507419.85	1364167.97	PAVILION AND THICKENED EDGE CONCRETE SIDEWALK
105	507407.32	1364166.09	PAVILION
106	507410.08	1364147.71	PAVILION
107	507408.70	1364242.13	GEOGRID EMERGENCY VEHICLE ACCESS DRIVE AND THICKENED EDGE CONCRETE SIDEWALK
108	507406.46	1364256.96	GEOGRID EMERGENCY VEHICLE ACCESS DRIVE AND THICKENED EDGE CONCRETE SIDEWALK
109	507376.80	1364252.50	GEOGRID EMERGENCY VEHICLE BEACH ACCESS DRIVE
110	507379.03	1364237.67	GEOGRID EMERGENCY VEHICLE BEACH ACCESS DRIVE
111	507307.75	1364188.65	PC/PT OF 1.67' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR
112	507510.12	1364187.39	PC/PT OF 1.67' RADIUS AND 30' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR
113	507516.50	1364190.00	PC/PT OF 30' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR
114	507534.20	1364192.45	PC/PT OF 1.67' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR
115	507535.59	1364194.35	PC/PT OF 1.67' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR
116	507535.19	1364196.98	PC/PT OF 1.67' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR
117	507533.29	1364198.38	PC/PT OF 1.67' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR
118	507517.94	1364195.99	PC/PT OF 30' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR
119	507508.83	1364195.96	PC/PT OF 30' RADIUS AND 1.67' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR
120	507506.93	1364194.06	PC/PT OF 1.67' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR
121	507547.44	1364196.22	PC/PT OF 1.67' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR
122	507549.35	1364194.82	PC/PT OF 1.67' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR
123	507552.46	1364195.30	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR

GEOMETRIC POINT DATA TABLE			
SYMBOL NO.	NORTHING	EASTING	DESCRIPTION
124	507554.96	1364196.73	PC/PT OF 3' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR
125	507553.41	1364208.68	PC/PT OF 1.67' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR, TIE TO EXISTING SCENIC HWY 98 ASPHALT ROAD
126	507550.58	1364209.61	PC/PT OF 1.67' RADIUS AND 30' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR
127	507547.25	1364206.66	PCC OF 36" RADIUS AND 2.67' RADIUS FOR EDGE OF CONCRETE TRAFFIC SEPARATOR AND ASPHALT INTRUSION FACE
128	507546.25	1364204.16	PC/PT OF 2.67' RADIUS FOR EDGE OF ASPHALT PARKING LOT AND FACE OF CONCRETE TRAFFIC SEPARATOR
129	507554.58	1364281.05	PC/PT OF 1' RADIUS FOR FACE OF CONCRETE TRAFFIC SEPARATOR, TIE TO EXISTING SCENIC HWY 98 ASPHALT ROAD
130	507556.53	1364280.91	PC/PT OF 1' RADIUS FOR FACE OF CONCRETE TRAFFIC SEPARATOR AND EDGE OF ASPHALT INTRUSION AREA
131	507563.08	1364302.12	PC/PT OF 5' RADIUS FOR FACE OF CONCRETE TRAFFIC SEPARATOR AND EDGE OF ASPHALT INTRUSION AREA
132	507563.25	1364304.33	PC/PT OF 5' RADIUS FOR FACE OF CONCRETE TRAFFIC SEPARATOR, TIE TO EXISTING SCENIC HWY 98 ASPHALT ROAD
133	507563.12	1364305.18	PC/PT OF 3' RADIUS FOR FACE OF CONCRETE TRAFFIC SEPARATOR, TIE TO EXISTING SCENIC HWY 98 ASPHALT ROAD
134	507559.71	1364307.71	PC/PT OF 3' RADIUS FOR FACE OF CONCRETE TRAFFIC SEPARATOR AND EDGE OF ASPHALT INTRUSION AREA
135	507553.78	1364306.82	PC/PT OF 3' RADIUS FOR FACE OF CONCRETE TRAFFIC SEPARATOR AND EDGE OF ASPHALT INTRUSION AREA
136	507551.25	1364303.41	PC/PT OF 3' RADIUS FOR FACE OF CONCRETE TRAFFIC SEPARATOR, TIE TO EXISTING SCENIC HWY 98 ASPHALT ROAD
137	507453.59	1363970.47	℄ OF WOODEN BOARDWALK STAIRS, TIE TO EXISTING PUBLIC ACCESS BOARDWALK
138	507452.56	1363977.30	℄ OF WOODEN BOARDWALK STAIRS AND CONCRETE SIDEWALK
139	507429.39	1364104.52	PUBLIC SHOWER CONCRETE PAD AND THICKENED EDGE CONCRETE SIDEWALK
140	507428.20	1364112.43	PUBLIC SHOWER CONCRETE PAD AND THICKENED EDGE CONCRETE SIDEWALK
141	507420.29	1364111.24	PUBLIC SHOWER CONCRETE PAD
142	507421.48	1364103.33	PUBLIC SHOWER CONCRETE PAD

NOTES:

1. SEE SHEET C-101 AND C-102 FOR SURVEY
BENCHMARKS, SURVEY SYMBOL, LEGEND AND
ABBREVIATION LEGEND.

2. SEE SHEETS C-104 THRU C-108 FOR GEOMETRY
PLANS AND DATA TABLES.

3. ALL NORTHING AND EASTING FOR GEOMETRIC DATA
POINTS THAT TIE TO EXISTING STRUCTURES,
SIDEWALKS AND ROADWAYS ARE PLUS OR MINUS
(±). CONTRADICTION TO FIELD ADJUST IF NECESSARY.

4. SEE SHEETS C-109 AND C-112 FOR GRADING AND
DRAINAGE PLANS AND DATA TABLES.

5. SEE SHEETS C-510 THRU C-515 FOR FOOT
STANDARD DETAILS.

6. SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR
WOODEN BOARDWALK PLANS AND DETAILS.

7. SEE SHEETS C-700 THRU C-710 FOR STRIPPING
AND SMOKE PLAN AND FOOT STANDARD DETAILS.

8. SEE SHEETS CU-100 THRU CU-513 FOR WATER
AND SANITARY SEWER PLAN AND DETAILS.

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CHKD BY: RLW		
PROJ. MGR: JCP		
DATE: FEBRUARY 2024		

SHORE AT
TARPON BEACH

SEAL



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PANAMA CITY BEACH, FL 32413 (850) 234-1150
ENGINEERING BUSINESS: EB-000000
PENSACOLA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE

C-108

GEOMETRIC DATA TABLES
AND GEOMETRY NOTES

P-X DENOTES STORM DRAINAGE PIPE

ASP: DENOTES PROPOSED ASPHALT PAVEMENT
 TOSM: DENOTES PROPOSED TOP OF
 CONCRETE SIDEWALK
 TOVC: DENOTES PROPOSED TOP OF
 CONCRETE VERTICAL CURB
 TOS: DENOTES PROPOSED TOP OF
 CONCRETE TRAFFIC SEPARATOR

SCALE: 1" = 10'

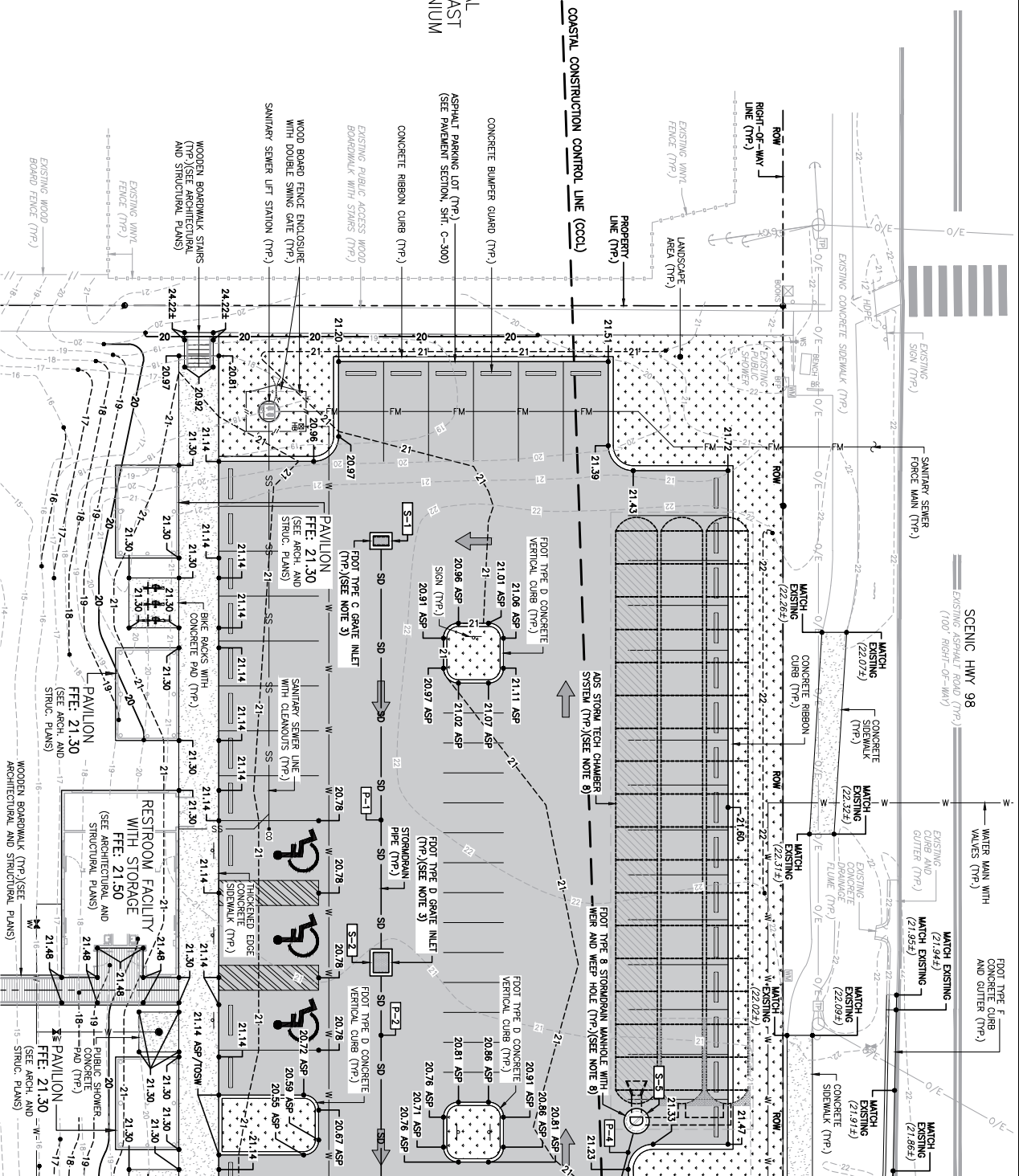
10' 5' 0' 10'

CRYSTAL
SANDS EAST
CONDOMINIUM

COASTAL CONSTRUCTION CONTROL LINE (CCCL)

MC DENOTES MITER CURB SECTION
(SEE DETAILS, SHT. C-502)

1. SEE SHEETS C-101 AND C-102 FOR SURVEY BENCHMARKS, SURVEY SYMBOL, LEGEND AND ABERRATION LEGEND.
2. SEE SHEETS C-109 THRU C-112 FOR GRADING AND DRAINAGE PLANS AND DATA TABLES.
3. SEE SHEETS C-510 THRU C-515 FOR FLOOT STANDARD DETAILS.
4. SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR WOODEN BOARDWALK PLANS AND DETAILS.
5. CONTRACTOR TO USE CAUTION WHEN DIGGING NEAR EXISTING UTILITIES AND MAY BE REQUIRED TO HAND DIG TO TEMPORARILY SUPPORT EXISTING UTILITIES WHILE INSTALLING STORM DRAINAGE PIPES.
6. NORTHING AND EASTING COORDINATES BASED ON CENTER OF INLETS AND CENTER OF MANHOLES.
7. PIPE LENGTHS SHOWN ARE FROM CENTER TO CENTER OF STRUCTURES.
8. CONTRACTOR SHALL PROVIDE FOOT STAIR/DRAINAGE MANHOLE WITH WEIR HOLE AND WEP. STRUCTURE INVERT ELEVATION SHALL BE 10.26' TOP OF WEIR ELEVATION SHALL BE 14.26'. SEE SHEETS C-510 THROUGH C-515 FOR STAIR AND WEIR MANHOLE DETAILS. SEE SHEETS C-509 THRU C-509 FOR AIS STAIR, C-510 CHAMBER STAIR DETAILS, AND AIS STAIR C-510 FOR WEIR HOLE DETAILS.



MATCHLINE (SEE CONTINUATION ON SHT. C-110)

SHORE AT
TARPON BEACH

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GRADING AND STORM DRAINAGE PLAN

C-109

PROJECT NO:	12107.01
DESIGNED BY: RAS	
DRAWN BY: JJ	
CHKD BY: RLW	
PROJ. MGR: JCP	
DATE: FEBRUARY 2024	

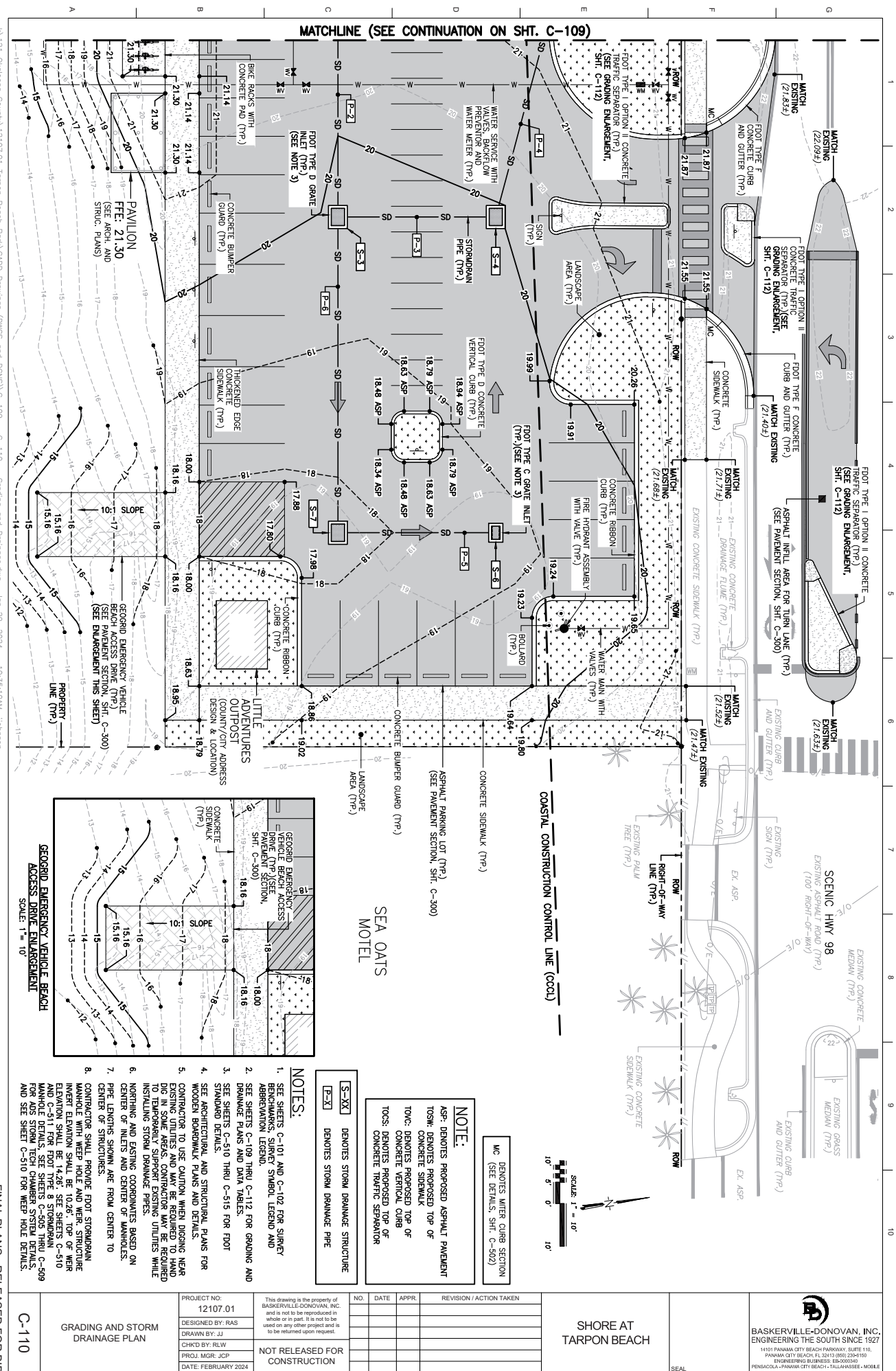
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I:\121 Okaloosa County\12107.01 Tarpon Beach Park\CADD Drawings (DWGS and DGNS)\C-109 - C-110 - Grading and Drainage.dwg, Jan 29, 2024 - 10:34:49AM, jjohnson

FINAL PLANS - RELEASED FOR BID



NOTES:

1. SEE SHEETS C-101 AND C-102 FOR SURVEY BENCHMARKS, SURVEY SYMBOL, LEGEND AND ABBREVIATION LEGEND.
2. SEE SHEETS C-109 THRU C-112 FOR GRADING AND DRAINAGE PLANS AND DATA TABLES.
3. SEE SHEETS C-510 THRU C-515 FOR FOOT STANDARD DETAILS.
4. SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR WOODEN BOARDWALK PLANS AND DETAILS.
5. CONTRACTOR TO USE CAUTION WHEN DIGGING NEAR EXISTING UTILITIES AND MAY BE REQUIRED TO HAND DIG IN SOME AREAS. CONTRACTOR MAY BE REQUIRED TO TEMPORARILY SUPPORT EXISTING UTILITIES WHILE INSTALLING STORM DRAINAGE PIPES.
6. NORTHING AND EASTING COORDINATES BASED ON CENTER OF INLETS AND CENTER OF MANHOLES.
7. PIPE LENGTHS SHOWN ARE FROM CENTER TO CENTER OF STRUCTURES.
8. CONTRACTOR SHALL PROVIDE FOOT STORMDRAIN MANHOLE WITH WEEP HOLE AND WEIR. STRUCTURE INVERT ELEVATION SHALL BE 10.26'. TOP OF WEIR ELEVATION SHALL BE 14.26'. SEE SHEETS C-510 AND C-511 FOR FOOT TYPE 8 STORMDRAIN MANHOLE DETAILS. SEE SHEETS C-505 THRU C-509 FOR AUS STORM TECH CHAMBER SYSTEM DETAILS. AND SEE SHEET C-510 FOR WEEP HOLE DETAILS.
9. TOVC - DENOTES PROPOSED TOP OF CONCRETE VERTICAL CURB.
10. TOSW - DENOTES PROPOSED TOP OF CONCRETE SIDEWALK.
11. TOS - DENOTES PROPOSED TOP OF CONCRETE TRAFFIC SEPARATOR.
12. TOWB - DENOTES PROPOSED TOP OF WOODEN BOARDWALK.
13. ASP - DENOTES PROPOSED ASPHALT PAVEMENT.

[S-X] DENOTES STORM DRAINAGE STRUCTURE (SEE TABLE FOR TYPE AND LOCATION)

[P-X] DENOTES STORM DRAINAGE PIPE (SEE TABLE FOR SIZE, TYPE AND LENGTH)

STORM DRAINAGE PIPE DATA TABLE							
PIPE NO.	SIZE (IN)	TYPE	LENGTH (FT)	SLOPE (%)	INV. US (FT)	INV. DS (FT)	PIPE CLASS
P-1	15	RCP	84.50	0.50	16.18	15.76	III
P-2	18	RCP	84.50	0.50	15.76	15.34	III
P-3	24	RCP	37.00	0.50	12.76	12.58	III
P-4	24	RCP	54.57	0.59	12.58	12.26	III
P-5	15	RCP	37.00	0.50	13.32	13.13	III
P-6	18	RCP	74.00	0.50	13.13	12.76	III

INV. US - DENOTES INVERT UP STREAM

INV. DS - DENOTES INVERT DOWN STREAM

RCP - DENOTES REINFORCED CONCRETE PIPE

STORM DRAINAGE STRUCTURE DATA TABLE

STRUCTURE NO.	TYPE	NORTHING	EASTING	TOP (T), GRADE (G): (FT)	NORTH INV. (FT)	SOUTH INV. (FT)	WEST INV. (FT)	EAST INV. (FT)
[S-X]								
S-1	FOOT TYPE C GRATE INLET	507483.47	1364017.17	(G) 20.68	-	-	-	16.18 (P-1)
S-2	FOOT TYPE D GRATE INLET	507470.91	1364100.23	(G) 20.31	-	-	15.76 (P-1)	15.76 (P-2)
S-3	FOOT TYPE D GRATE INLET	507456.35	1364184.29	(G) 19.91	12.76 (P-3)	-	15.34 (P-2)	12.76 (P-6)
S-4	FOOT TYPE D GRATE INLET	507494.94	1364189.80	(G) 19.99	-	12.58 (P-3)	12.58 (P-4)	-
S-5	FOOT TYPE 8 STORMDRAIN MANHOLE WITH WEEP HOLE AND WEIR	507516.78	1364139.79	(T) 21.334	12.26 (AUS)	-	12.26 (AUS)	12.26 (P-4)
S-6	FOOT TYPE C GRATE INLET	507483.93	1364082.97	(G) 18.75	-	13.32 (P-5)	-	-
S-7	FOOT TYPE D GRATE INLET	507447.34	1364237.47	(G) 17.63	13.13 (P-5)	-	13.13 (P-6)	-

AUS - DENOTES ADVANCED DRAINAGE SYSTEM (AUS) PIPES FOR AUS STORM TECH CHAMBER SYSTEM. SEE DETAILS, SHTS. C-505 THRU C-509.



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SHORE AT
TARPON BEACH

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DRAWN BY: JJ

CHECK BY: RLW

PROJ. MGR: JCP

DATE: FEBRUARY 2024

STORM DRAINAGE DATA
TABLES AND NOTES

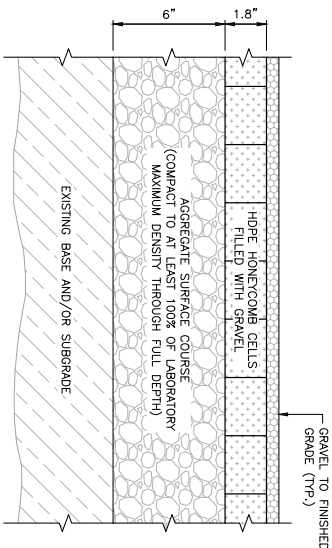
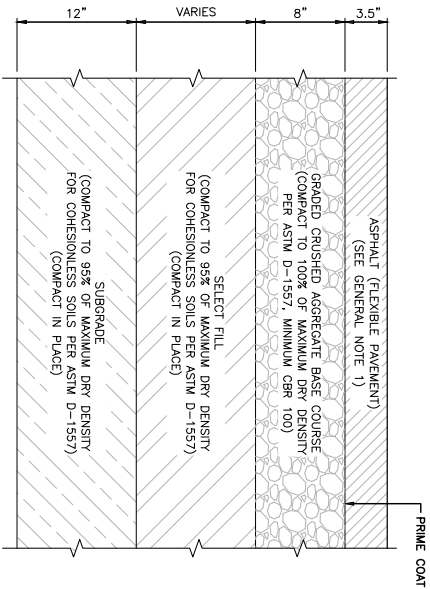
C-112

GENERAL NOTES:

1. ASPHALT (FLEXIBLE PAVEMENT) SHALL BE SP 12.5.

NOTES TO CONTRACTOR:

1. IN THE AREAS OF NEW PAVEMENTS WHERE THERE ARE NO EXISTING PAVEMENTS, CUT AND FILL MUST BE CONSIDERED. VOLUMES OF EXISTING MATERIAL TO BE CUT OR FILLED IN THESE AREAS ARE BASED ON NEW PAVEMENT, BASE COURSE AND COMPACTED SUBGRADE REQUIREMENTS. IF THE AREA IS IN CUT, ADDITIONAL EARTHWORK MATERIAL MUST BE REMOVED EQUAL TO THE NEW PAVEMENT STRUCTURE INCLUDING THE COMPACTED SUBGRADE. IF THE AREA IS IN FILL (BASED ON THE PROFILES AND FINISHED GRADES SHOWN) ADDITIONAL EXCAVATION MAYBE NECESSARY TO REACH THE REQUIRED DEPTH FOR THE NEW PAVEMENT STRUCTURE UNDERCUT REQUIREMENT(S).



NOTES:
1. SEE TRACORPAPER.COM FOR MATERIAL AND INSTALLATION GUIDELINES (PROVIDE PAVEMENTS BASIS OF DESIGN OR APPROVED EQUAL).
N.T.S.



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ENGINEERING BUSINESS: ES-000000
PENSACOLA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE

SHORE AT
TARPON BEACH

NO.	DATE	APPR	REVISION / ACTION TAKEN

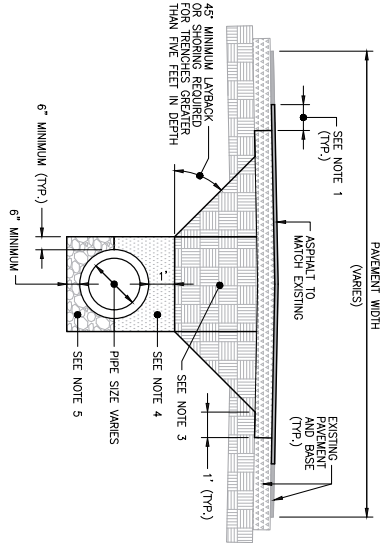
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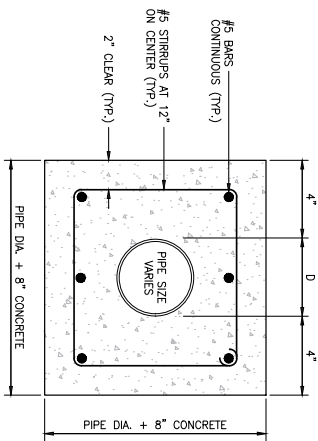
TYPICAL PAVEMENT
SECTIONS

C-300



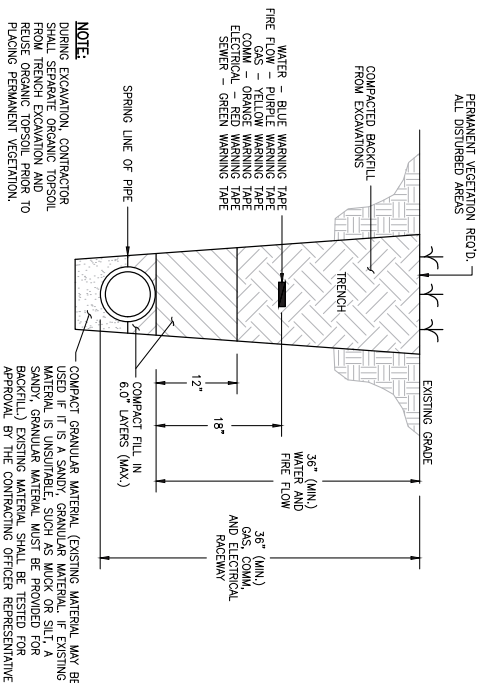
OPEN CUT ROADWAY PATCH DETAIL
N.T.S.

- NOTE(S):**
1. CONTRACTOR SHALL MAKE CLEAN STRAIGHT CUT 12" FROM EDGE OF NEW LIME ROCK BASE PRIOR TO PLACING NEW SURFACE AND INSTALL A FLUSH JOINT.
 2. TRENCH WIDTH AT THE GROUND SURFACE SHALL NOT EXCEED 10' ON EITHER SIDE OF THE PIPE CENTER LINE.
 3. STABILIZED SUBGRADE (LBR 40), COMPACTED 98% MAX DENSITY PER ASTM D1557.
 4. PIPE BACKFILL MATERIALS: CLEAN DRY SAND, FINE LIME ROCK OR LIME ROCK, COMPACTED TO 95% MAX DENSITY PER ASTM D1557.
 5. PIPE BEDDING MATERIAL IN DRY CONDITIONS AND UNDER ANY ROADWAY: #57 STONE OR FINE LIME ROCK, COMPACTED TO 95% MAX DENSITY PER ASTM D1557.
 6. FILL TO BE COMPACTED IN SIX-INCH LIFTS, COMPACTOR DENSITY (ASTM D698), ASSOCIATED CERTIFIED COMPACTION AND CORE TESTING RESULTS SHALL BE REQUIRED TO CONFIRM THESE REQUIREMENTS ARE MET.
 7. PROVIDE THERMOPLASTIC STRIPING TO MATCH EXISTING.



- NOTES:**
1. ALL ENCASEMENTS SHALL EXTEND 3 FEET BEYOND THE EDGE OF ALL ASPHALT SHOULDERS.
 2. FOR PIPE LESS THAN 6" Ø, ADJUST DIMENSIONS OF ENCASEMENT TO ENSURE A MINIMUM OF 4" OF CONCRETE ON ALL SIDES OF PIPE.

REINFORCED CONCRETE ENCASEMENT DETAIL
N.T.S.



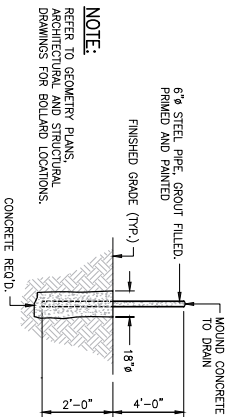
TYPICAL PIPE BEDDING
NON-PAVED AREAS
N.T.S.

NO.	DATE	APPR	REVISION / ACTION TAKEN

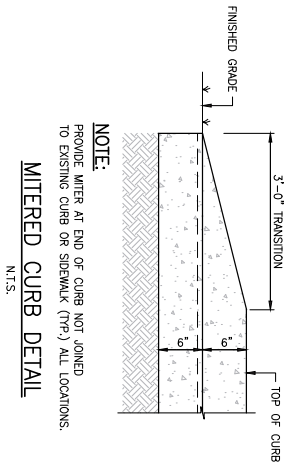
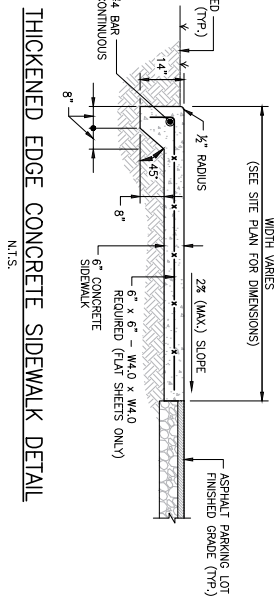
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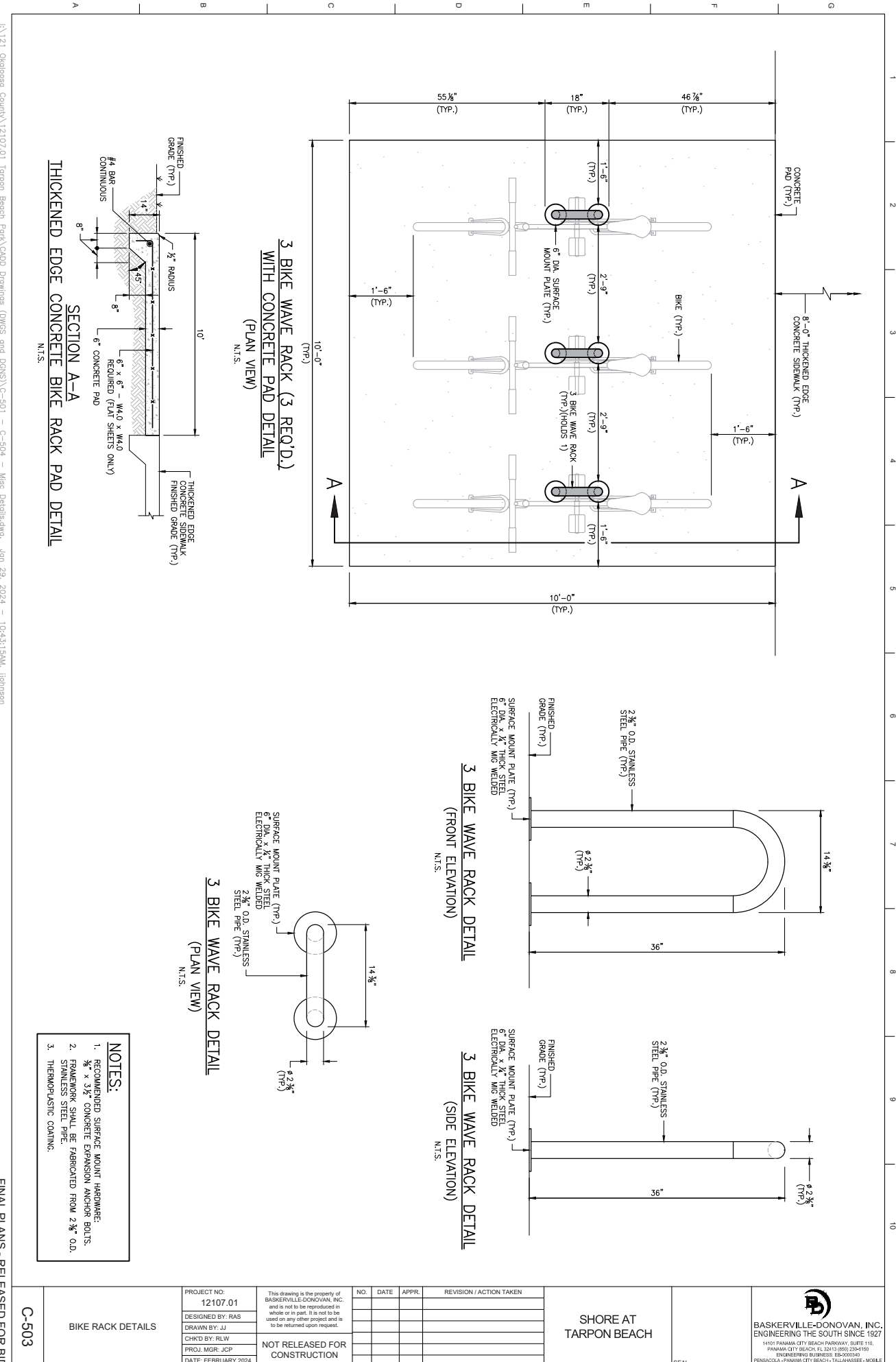


PIPE BOLLARD DETAILS
N.T.S.



CONCRETE RIBBON CURB DETAIL
N.T.S.

C-502	MISCELLANEOUS DETAILS	PROJECT NO: 12107.01	This drawing is the property of BASKERVILLE-DONOVAN, INC. and is not to be reproduced in whole or in part. It is not to be used on any other project and is to be returned upon request.	NO.	DATE	APPR.	REVISION / ACTION TAKEN	SHORE AT TARPON BEACH	SEAL	 BASKERVILLE-DONOVAN, INC. ENGINEERING THE SOUTH SINCE 1927 1401 PANAMA CITY BEACH PARKWAY, SUITE 110 PANAMA CITY BEACH, FL 32413 (850) 234-4100 ENGINEERING BUSINESS: ES-000000 PENSACOLA • PANAMA CITY BEACH • TALLAHASSEE • MOBILE
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		CHKD BY: RLW								
		PROJ. MGR: JCP								
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I:\121 Okaloosa County\12107.01 Tarpon Beach Park\CADD Drawings (DWG and DGN)\C-501 - C-504 - Misc Detail.dwg, Jan 29, 2024 - 10:43:13AM, jjohnson

FINAL PLANS - RELEASED FOR BID

C-503

BIKE RACK DETAILS

PROJECT NO:
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SHORE AT TARPON BEACH

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THE BASIS OF DESIGN FOR THE UNDERGROUND STORMWATER DETENTION SYSTEM IS THE ADS MC-7200 STORMTECH CHAMBER SYSTEM. IF A DIFFERENT UNDERGROUND STORMWATER DETENTION SYSTEM IS SELECTED, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THE OVERALL FUNCTION OF THE SYSTEM.



TARPON BEACH PARK

DESTIN, FL

MC-7200 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-7200.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1. LONG-DURATION DEAD LOADS AND 2. SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT²/IN. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORED.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3.8 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-7200 CHAMBER SYSTEM

1. STORMTECH MC-7200 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE SHALL BE BROUGHT UP EVENLY AROUND CHAMBERS SO AS NOT TO DISTORT THE CHAMBER SHAPE. STONE DEPTHS SHOULD NEVER DIFFER BY MORE THAN 12" (300 mm) BETWEEN ADJACENT CHAMBER ROWS.
10. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
11. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
12. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-7200 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER TIRE LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



StormTech®
Chamber System

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SEAL

SHORE AT
TARPON BEACH[illegible]

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PROJECT NO:	12107.01
DESIGNED BY:	RAS
DRAWN BY:	JJ
CHECK'D BY:	RLW
PROJ. MGR:	JCP
DATE:	FEBRUARY 2024

ADS STORM TECH
CHAMBER SYSTEM NOTES

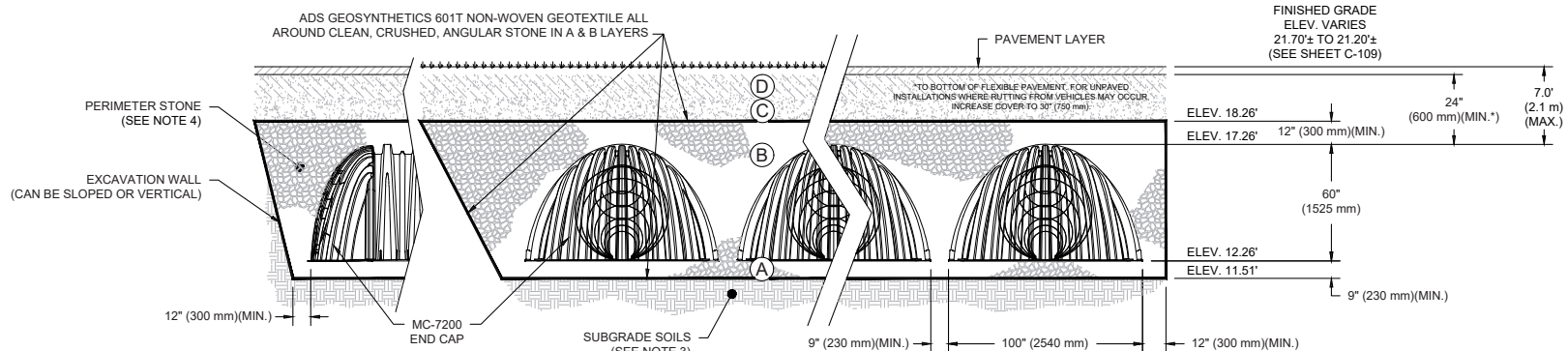
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ACCEPTABLE FILL MATERIALS: STORMTECH MC-7200 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145' A-1, A-2-4, A-3 OR AASHTO M43' 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43' 3, 4	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43' 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

PLEASE NOTE:

- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
- STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
- WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101
- MC-7200 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

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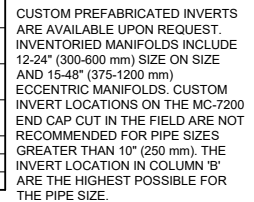
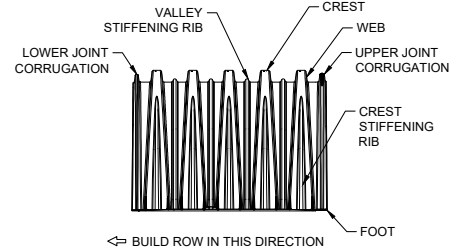
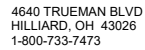
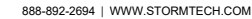
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1100 PARKWAY CITY BEACH, FL 32081 (904) 234-0100
PENINSULA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE

SHORE AT
TARPON BEACH

PROJECT NO:	12107.01
DESIGNED BY:	RAS
DRAWN BY:	JJ
CHK'D BY:	RLW
PROJ. MGR:	JOP
DATE:	FEBRUARY 2024
REVISION / ACTION TAKEN	
APPR.	
DATE	
NO.	
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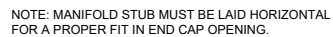
ADS STORM TECH
CHAMBER SYSTEM DETAILS

C-507



NOTE: ALL DIMENSIONS ARE NOMINAL

NTS



NTS

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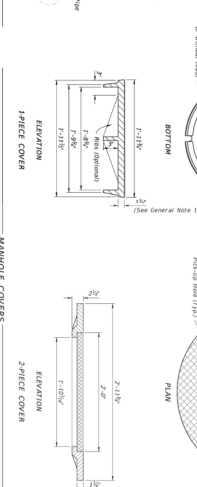
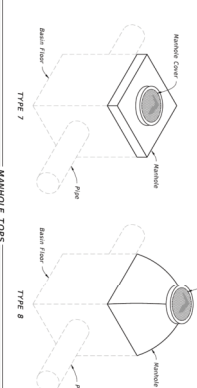
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GENERAL NOTES:

1. All dimensions are in feet and inches. Round up to the next higher inch.
2. Include additional notes on the cover for Type 1 manhole details.
3. For manhole top reinforcement, provide at least 1/2" diameter bars at 18" on center, with a minimum of 4 bars per foot.
4. Use 1/2" diameter bars for reinforcement in concrete walls and slabs.
5. Reinforce all joints and corners with 1/2" diameter bars at 18" on center.
6. Reinforce all openings in concrete walls and slabs with 1/2" diameter bars at 18" on center.
7. Reinforce all openings in concrete walls and slabs with 1/2" diameter bars at 18" on center.
8. Reinforce all openings in concrete walls and slabs with 1/2" diameter bars at 18" on center.

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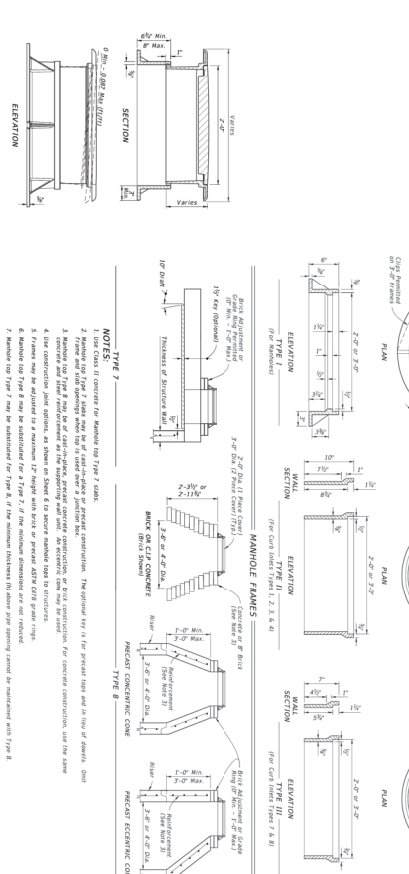


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TABLE 1
WEIGHT OF CASTINGS (lb)

Frame Size (in)	Frame Weight (lb)	Frame Weight (lb)
18"	150	150
24"	250	250
30"	350	350
36"	450	450
42"	550	550
48"	650	650
54"	750	750
60"	850	850
66"	950	950
72"	1050	1050

NOTE: Frame Type 1 in Table 1 includes additional frames.



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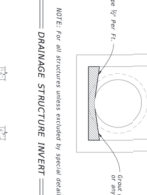
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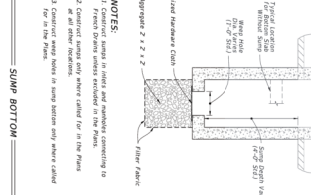
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DRAINAGE STRUCTURE INVERT



NOTE: For all structures, invert is to be maintained.



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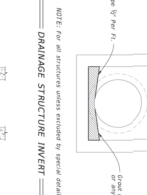
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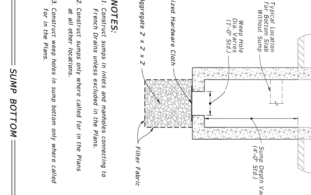
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WALL REINFORCING SPICE DETAILS



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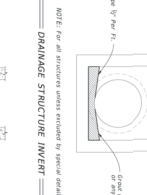
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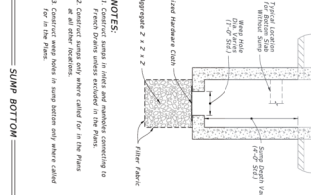
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PIPE OPENING AT CORNER



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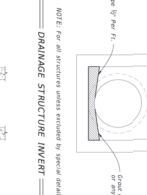
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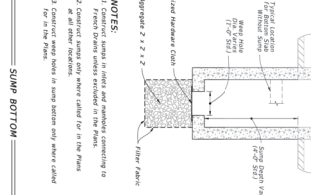
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SKewed PIPE IN RECTANGULAR STRUCTURES



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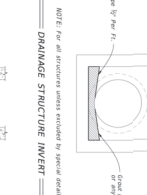
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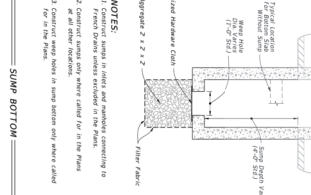
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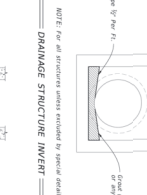
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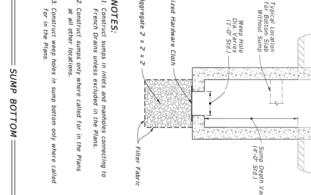
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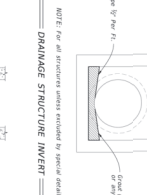
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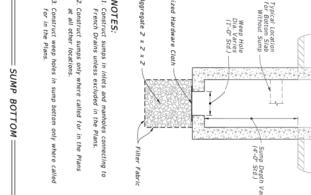
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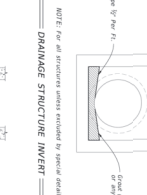
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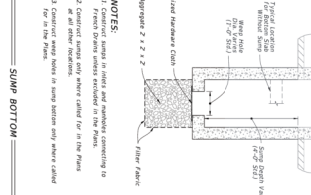
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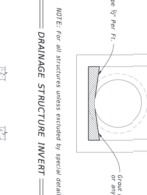
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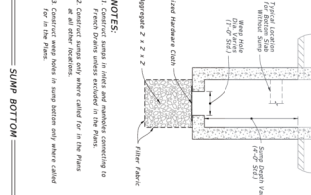
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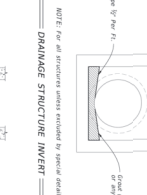
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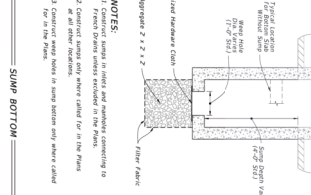
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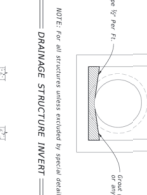
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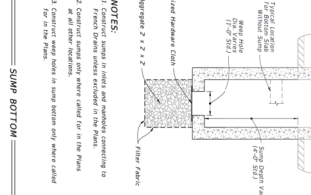
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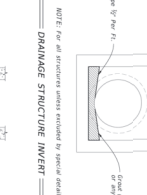
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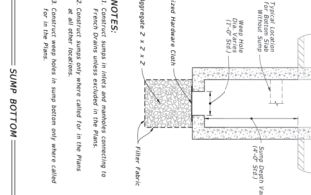
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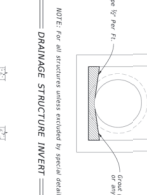
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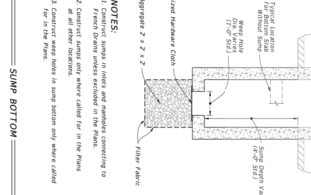
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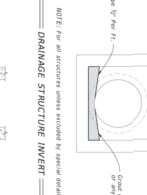
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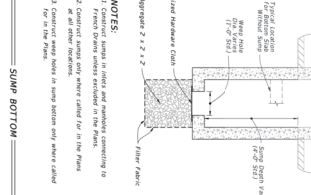
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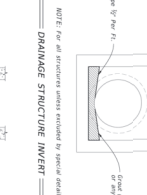
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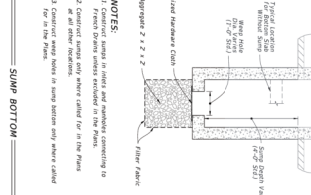
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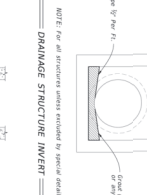
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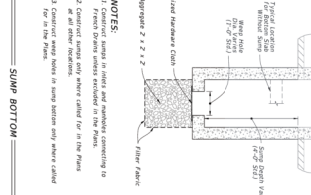
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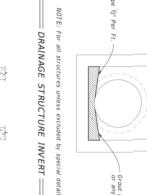
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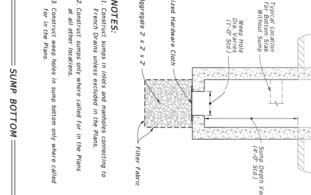
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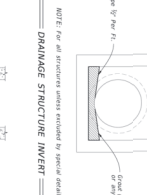
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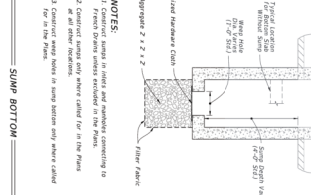
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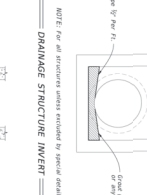
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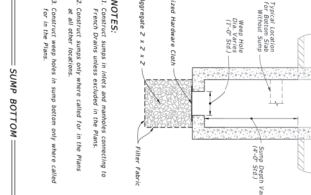
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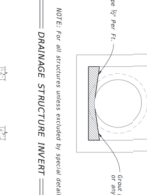
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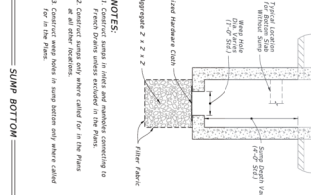
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SKewed PIPE IN RECTANGULAR STRUCTURES



NOTE: For all structures, invert is to be maintained.



LAST REVISION	DESCRIPTION	DATE	BY	CHKD	APPD
1/10/20	STANDARD PLANS FOR DRAINAGE STRUCTURES	4/25/01	7 of 8		

6

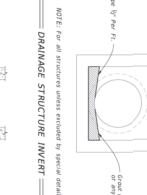
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8

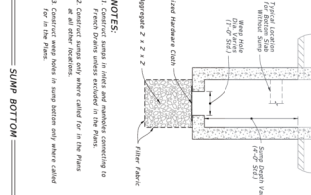
9

10

SKewed PIPE IN RECTANGULAR STRUCTURES



NOTE: For all structures, invert is to be maintained.



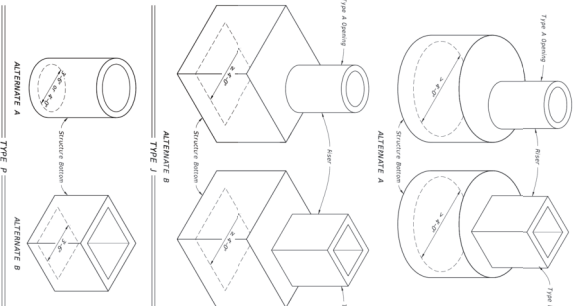
[illegible]

REINFORCEMENT NOTES:

1. List the variables that were used in the experimental investigation as shown in the table in **WALL PAPER CHOICE** (Fig. 1).
2. Provide a possible solution. Write down for each independent variable at least one dependent variable and state for each dependent variable the expected direction of the effect.
3. Additional task: Write down for each independent variable at least one possible confounding variable and state for each confounding variable the expected direction of the effect.
4. Cite the text and underlines in the sample to indicate results.
5. Complete the table of **hypotheses** as far as possible. Write down the expected results and provide a brief explanation of the results.
6. Evaluate the results and state with a brief explanation the expected results of **Significance Tests**.
7. Evaluate the results and state with a brief explanation the expected results of **Significance Tests**.

TABLE OF CONTENTS:	
Sheet	Description
1	General Notes and Comments
2	Dimensional and Reinforcing Details
3	Tables 1, 2, 3, and 4
4	Tables 5 and 6

REVIS 3/01/20



STRUCTURE BOTTOMS TYPE J AND P

425-010 1 of 4

ANNATE A - STRUCTURES

TYPE	STRUCTURE/RISER DIAMETER (mm)	CLASS II CONCRETE			CLASS II CONCRETE			CONCRETE TITERS		
		f_c (N/mm ²)	f_t (N/mm ²)	A_g	f_c (N/mm ²)	f_t (N/mm ²)	A_g	f_c (N/mm ²)	f_t (N/mm ²)	ASTM C684
P	3- ϕ	6	0	0.20	6	0	0.20	6	0	0.20
P	4- ϕ	6	0	0.20	6	0	0.20	6	0	0.20
P	5- ϕ	6	0	0.20	6	0	0.20	6	0	0.20
J	6- ϕ	-	0	0.20	-	0	0.20	6	0	0.20
J	7- ϕ	-	0	0.20	-	0	0.20	7	0	0.20
J	8- ϕ	-	0	0.20	-	0	0.20	8	0	0.20
J	9- ϕ	-	0	0.20	-	0	0.20	10	0	0.20
J	10- ϕ	-	0	0.20	-	0	0.20	12	0	0.20

See Table 4 for Reinforcing Schedule

TYPE	WALL LENGTH (μ m)	WALL DEPTH (μ m)	WALL THICKNESS (μ m)	C- β [μ m/CAT (μ m)]
P	3-6*	40	6 Riser	6
J	4-6*	40	6 Riser	6
J	5-6*	22	6	6
J	6-6*	15	-	6
D	3-6*	40	8	8
J	10-20*	20	8	8
J	10-20*	40	10	9
J	16-20*	40	10	10
J	20-20*	25	-	9
J	20-20*	30	-	10

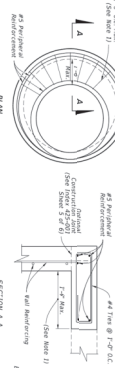
TABLE 4 - WALL DESIGNS - RECTANGULAR STRUCTURES

[illegible]

TABLES 1, 2, 3, AND 4

4. Wall lengths exceeding the dimensions or depths shown in Table 4, or 12'-0" diameter require a special design.

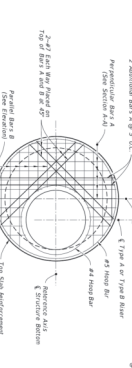
9-84 TIES ©
COPY OF MAR



ALTERNATE A NOTES:

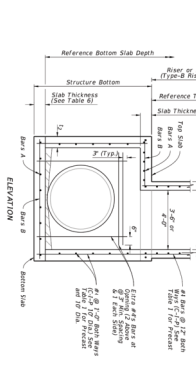
- [illegible]

2 A04
© 5/1



2 A04
© 5/1

-
- 2 Additional Bars
Ø 9" C. (14 dia. bars)
- 1 Bar Splice Permitted
5. Crusture Bottom
- Slab of Slabbing (See Note 3)
- Bars & Spacing (See Elevation)
- TYPE B - SQUARE MITER OPENING PLAN
- Ø 9" C. (14 dia. bars)

$$\begin{array}{c} t_1 \text{ (Type A) or} \\ t_2 \text{ (Type B)} \end{array}$$

$$\begin{array}{c} t_1 \text{ (Type A) or} \\ t_2 \text{ (Type B)} \end{array}$$

- [illegible]

FY 2023-24 STANDARD PLANS STRUCTURE BOTTOMS TYPE J AND P INDEX 425-010	SHEET 2 of 4
--	---

TABLES 5 AND 6

MISCELLANEOUS STANDARD FDOT DETAILS

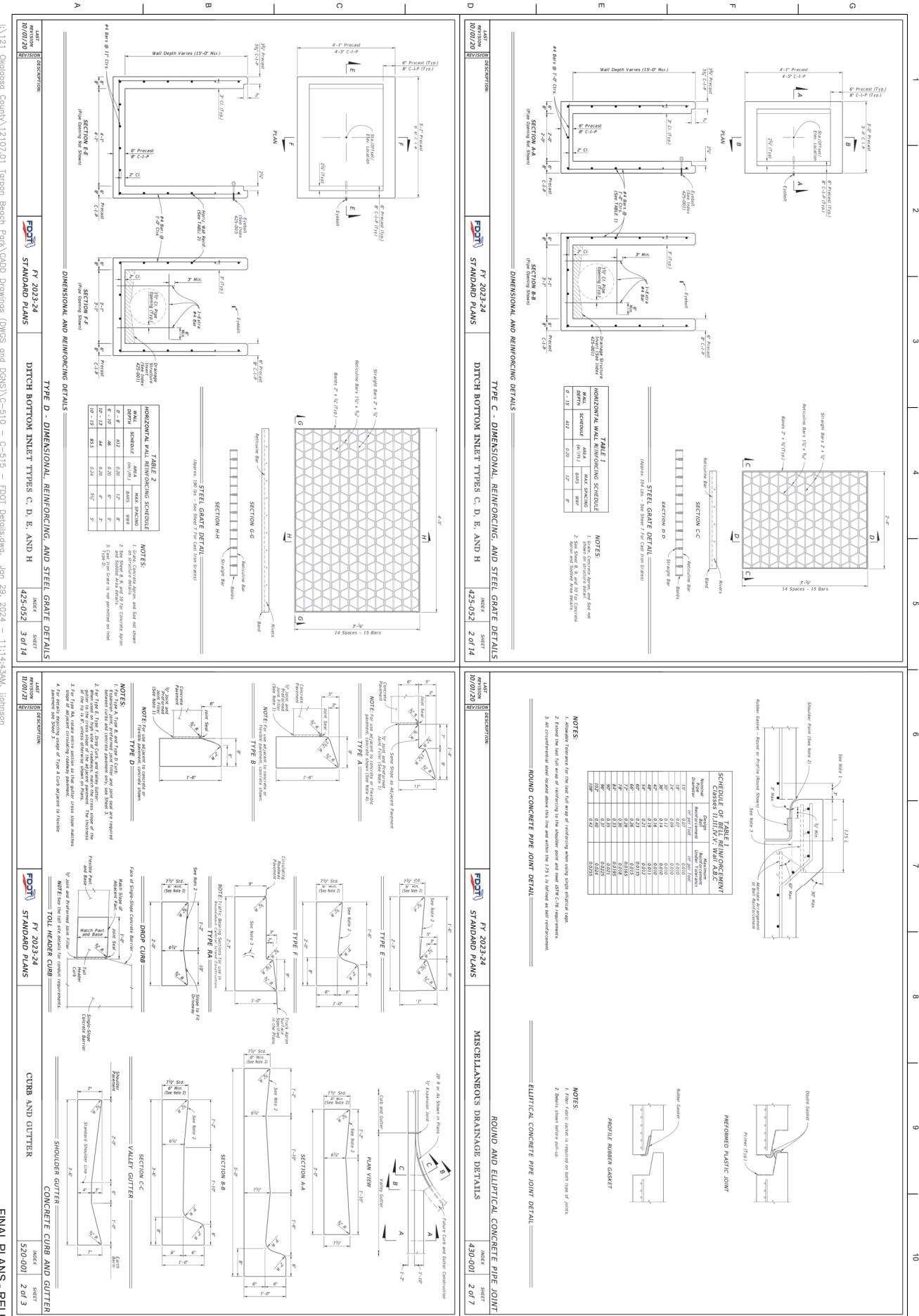
C-511

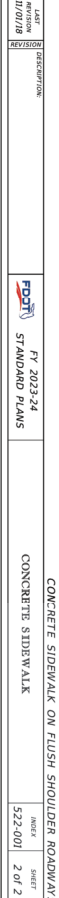
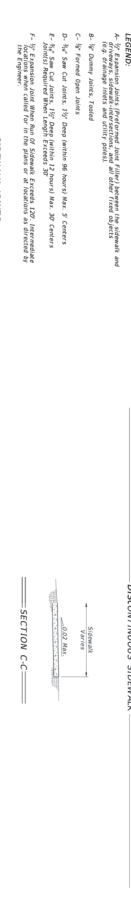
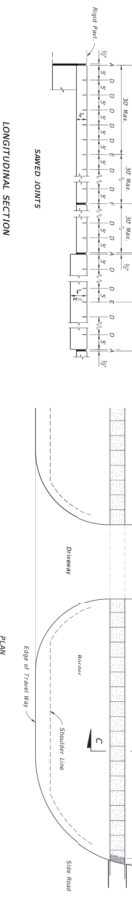
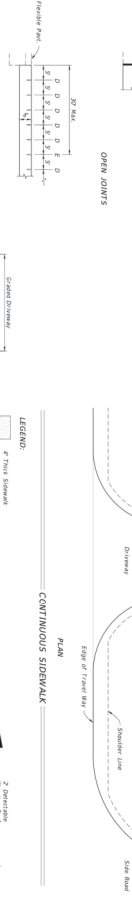
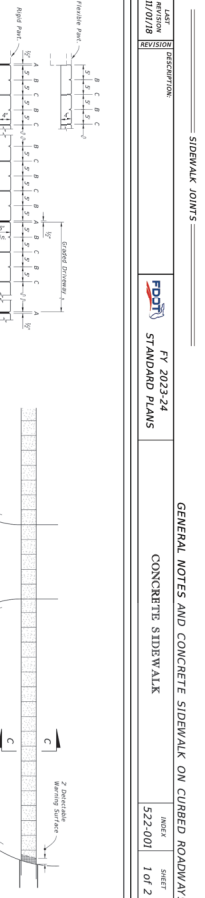
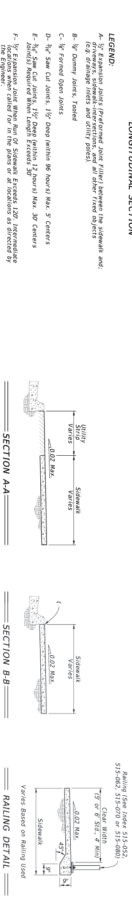
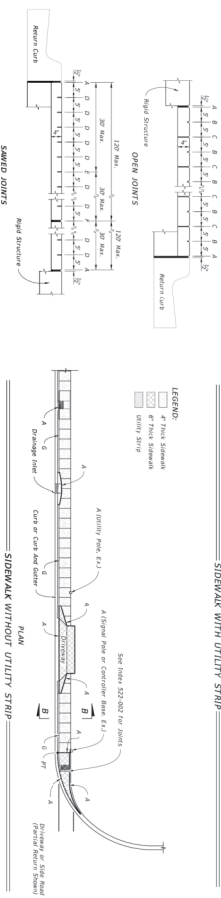
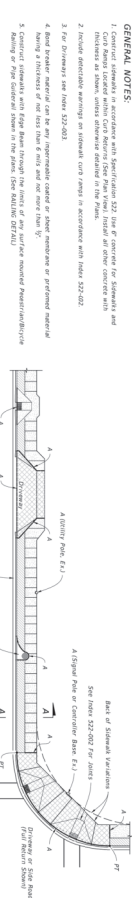
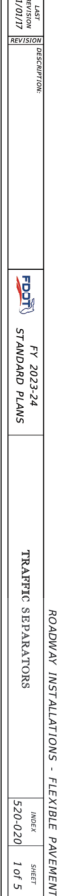
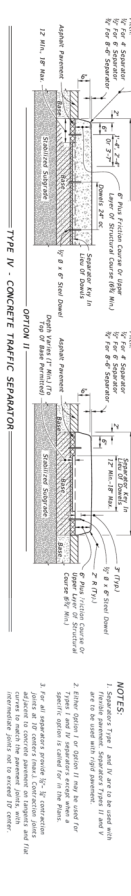
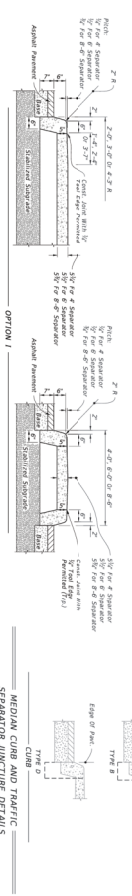
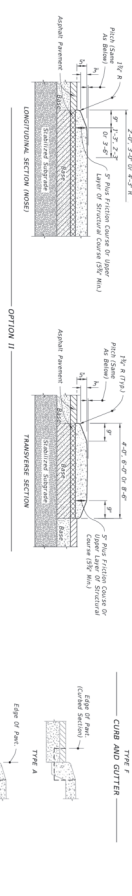
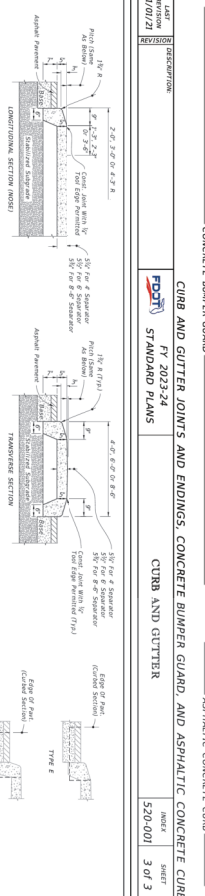
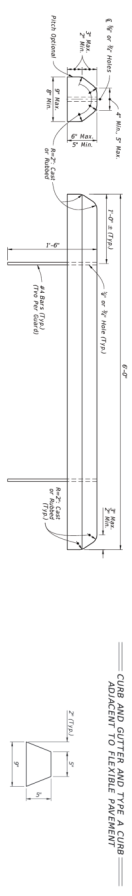
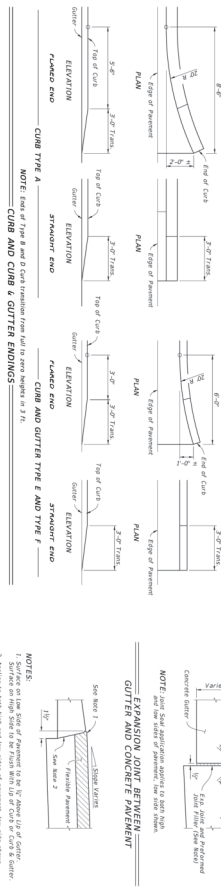
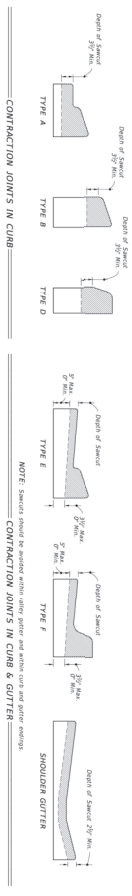
FINAL PLANS - RELEASED FOR BID

NO.	DATE	APPR.	REVISION / ACTION TAKEN

PROJECT NO: 12107.01	This drawing is the property of BASKERVILLE-DONOVAN, INC. and is not to be reproduced whole or in part. It is not to be used on any other project and is to be returned upon request.
DESIGNED BY: RAS	
DRAWN BY: JJ	
CHKD BY: RLW	
PROJ. MGR: JCP	
DATE: FEBRUARY 2024	NOT RELEASED FOR CONSTRUCTION

C-511





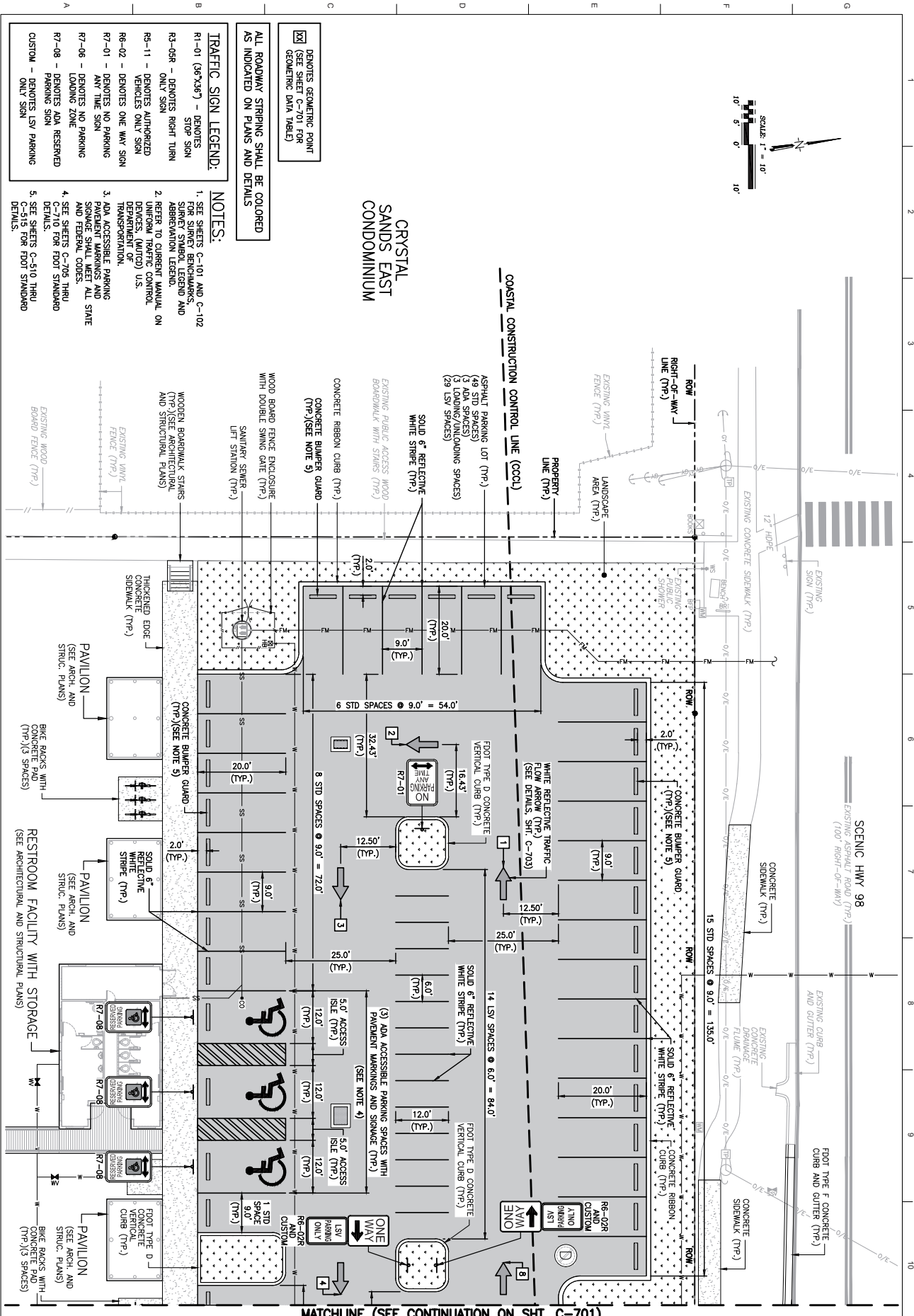
R/VILLE-DONOVAN, INC.
SERVING THE SOUTH SINCE 1954

SHORE AT
TARPON BEACH

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NOT RELEASED FOR CONSTRUCTION

C-513	MISCELLANEOUS STANDARD FDOT DETAILS	PROJECT NO:	12107.01
		DESIGNED BY: RAS	
		DRAWN BY: JJ	
		CHK'D BY: RLW	
		PROJ. MGR: JCP	
		DATE: FEBRUARY 202	



- TRAFFIC SIGN LEGEND:**
- R1-01 (36"x36") - DENOTES STOP SIGN
 - R3-05a - DENOTES RIGHT TURN ONLY SIGN
 - R3-11 - DENOTES AUTHORIZED VEHICLES ONLY SIGN
 - R6-02 - DENOTES ONE WAY SIGN
 - R7-01 - DENOTES NO PARKING ANY TIME SIGN
 - R7-06 - DENOTES NO PARKING LOADING ZONE
 - R7-08 - DENOTES ADA RESERVED PARKING SIGN
 - CUSTOM - DENOTES LIST PARKING ONLY SIGN

NOTES:

- SEE SHEETS C-101 AND C-102 FOR BUILDING FOOTPRINT, SURVEY STATION LEGEND, AND ABBREVIATION LEGEND.
- REFER TO CURRENT MANUAL ON DEVICES (AUTOC) U.S. DEPARTMENT OF TRANSPORTATION.
- ADA ACCESSIBLE PARKING SPACES SHALL MEET ALL STATE AND FEDERAL CODES.
- SEE SHEETS C-705 THRU C-710 FOR FDOT STANDARD DETAILS.
- SEE SHEETS C-510 THRU C-515 FOR FDOT STANDARD DETAILS.

ALL ROADWAY STRIPING SHALL BE COLORED AS INDICATED ON PLANS AND DETAILS

☒ DENOTES GEOMETRIC POINT (SEE SHEET C-701 FOR GEOMETRIC DATA TABLE)

CRYSTAL SANDS EAST CONDOMINIUM

COASTAL CONSTRUCTION CONTROL LINE (CCCL)

PROPERTY LINE (TYP)

EXISTING WIND FENCE (TYP)

LANDSCAPE AREA (TYP)

RIGHT-OF-WAY LINE (TYP)

EXISTING CONCRETE SIDEWALK (TYP)

12" HOPE

EXISTING SIGN (TYP)

SCENIC HWY 98

EXISTING ASPHALT ROAD (TYP) (100' RIGHT-OF-WAY)

CONCRETE SIDEWALK (TYP)

EXISTING CURB (TYP)

EXISTING ASPHALT DRIVE AND CUTTER (TYP)

FOOT TYPE E CONCRETE CURB AND CUTTER (TYP)

PROJECT NO:
12107.01

DESIGNED BY: RAS

DRAWN BY: JJ

CHKD BY: RLW

PROJ. MGR: JCP

DATE: FEBRUARY 2024

NOT RELEASED FOR CONSTRUCTION

NO.	DATE	APPR	REVISION / ACTION TAKEN

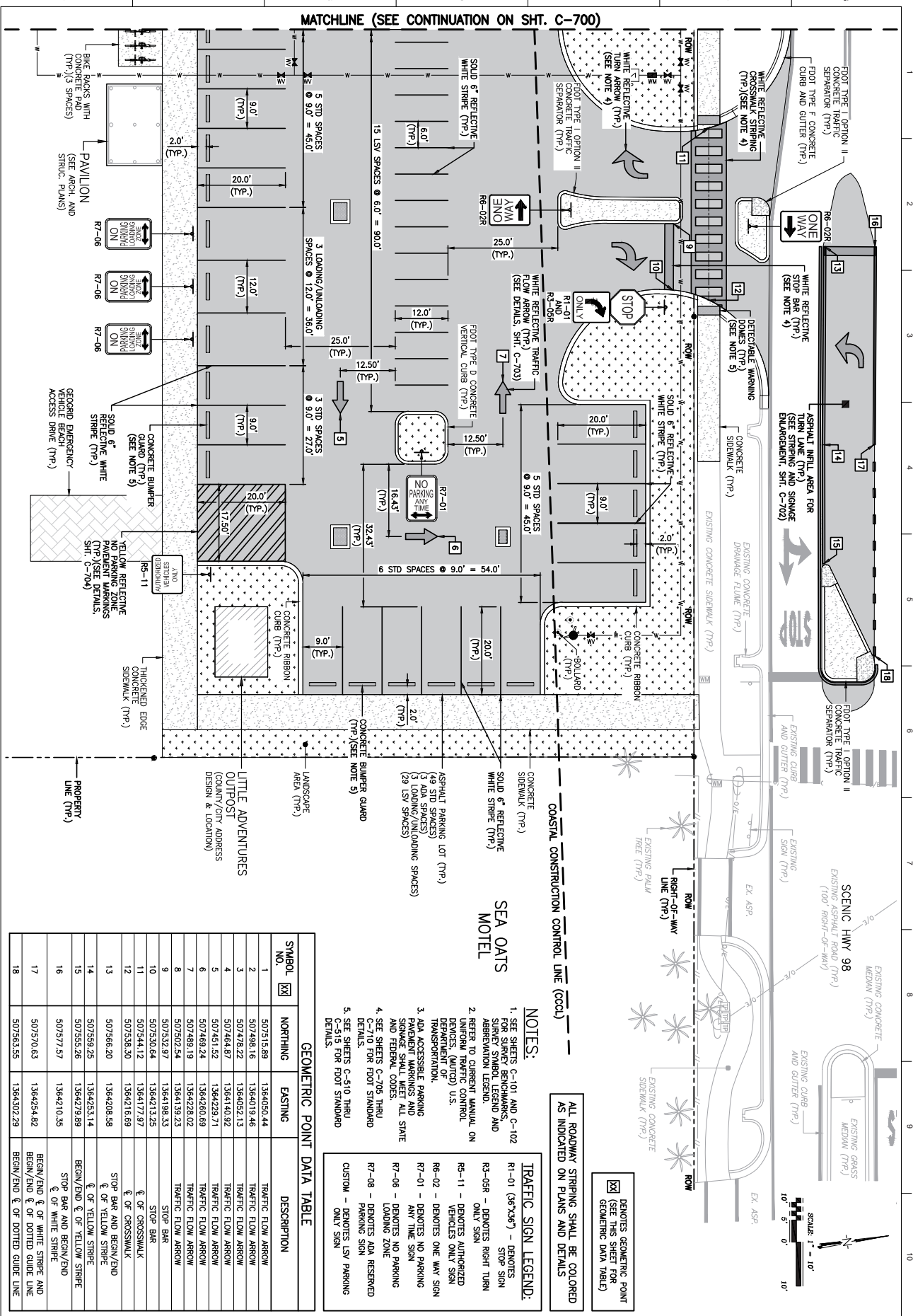
SHORE AT TARPON BEACH

BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1401 PANAMA CITY BEACH BLVD. SUITE 10
PANAMA CITY BEACH, FL 32413 (850) 234-4100
PENINSULA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE

C-700

STRIPING AND SIGNAGE PLAN

SEAL



GEOMETRIC POINT DATA TABLE		
SYMBOL NO.	NORTHING	EASTING
1	507515.89	1364050.44
2	507498.16	1364019.46
3	507478.22	1364002.13
4	507464.87	1364140.92
5	507451.52	1364229.71
6	507469.24	1364260.69
7	507469.19	1364228.02
8	507502.54	1364139.23
9	507532.97	1364198.33
10	507530.64	1364213.25
11	507544.12	1364177.97
12	507538.30	1364216.69
13	507566.20	1364208.98
14	507559.25	1364253.14
15	507555.28	1364279.89
16	507577.57	1364210.35
17	507570.63	1364254.82
18	507563.55	1364302.29

NOTES:

- SEE SHEETS C-101 AND C-102 FOR SURVEY BENCHMARKS, SURVEY POINT LEGEND AND RESECTION LEGEND.
- REFER TO CURRENT MANUAL ON DEVICES (AUTOD) U.S. DEPARTMENT OF TRANSPORTATION.
- ADA ACCESSIBLE PARKING PAVERS SHALL MEET ALL STATE AND FEDERAL CODES.
- SEE SHEETS C-705 THRU C-710 FOR FLOOD STANDARD DETAILS.
- SEE SHEETS C-510 THRU C-515 FOR FLOOD STANDARD DETAILS.

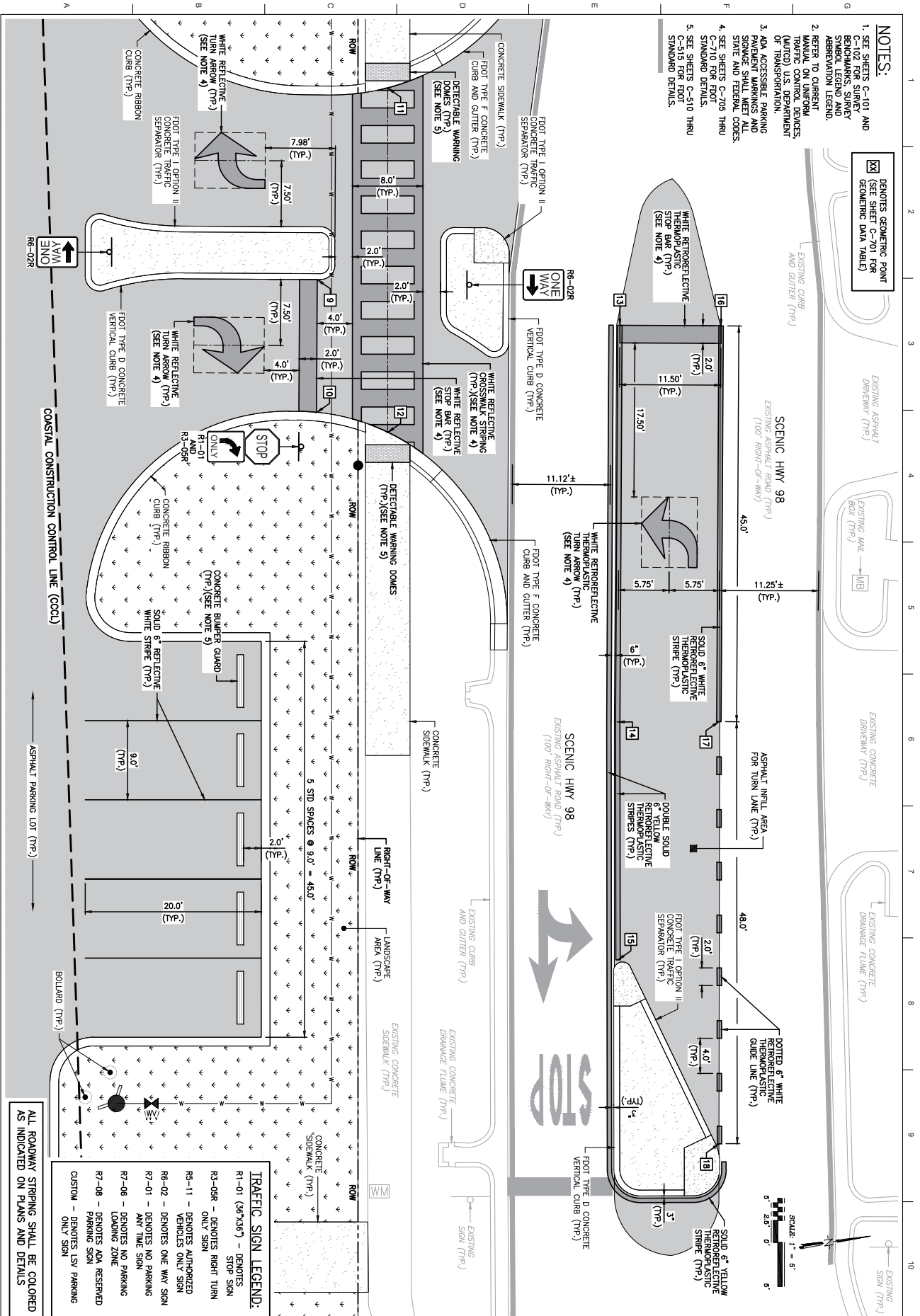
TRAFFIC SIGN LEGEND:

- R1-01 (36"x36") - DENOTES STOP SIGN
- R3-02R - DENOTES RIGHT TURN ONLY SIGN
- R6-11 - DENOTES AUTHORIZED VEHICLES ONLY SIGN
- R7-02 - DENOTES ONE WAY SIGN
- R7-01 - DENOTES NO PARKING ANY TIME SIGN
- R7-06 - DENOTES NO PARKING LOADING ZONE
- R7-08 - DENOTES ADA RESERVED PARKING SIGN
- CUSTOM - DENOTES LSV PARKING ONLY SIGN

NOTES:

1. SEE SHEETS C-101 AND C-102 FOR SURVEY STATIONING, POINT NUMBERS, AND ABBREVIATION LEGEND.
2. REFER TO CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD) U.S. DEPARTMENT OF TRANSPORTATION.
3. ADA ACCESSIBLE PARKING SPACES SHALL MEET ALL STATE AND FEDERAL CODES.
4. SEE SHEETS C-705 THRU C-710 FOR DETAIL STANDARD DETAILS.
5. SEE SHEETS C-510 THRU C-515 FOR FOOT STANDARD DETAILS.

BOX DENOTES GEOMETRIC POINT (SEE SHEET C-701 FOR GEOMETRIC DATA TABLE)



ALL ROADWAY STRIPING SHALL BE COLORED AS INDICATED ON PLANS AND DETAILS

C-702

STRIPING AND SIGNAGE ENLARGEMENT PLAN

PROJECT NO: 12107.01
DESIGNED BY: RAS
DRAWN BY: JJ
CHKD BY: RLW
PROJ. MGR: JCP
DATE: FEBRUARY 2024

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NO.	DATE	APPR	REVISION / ACTION TAKEN

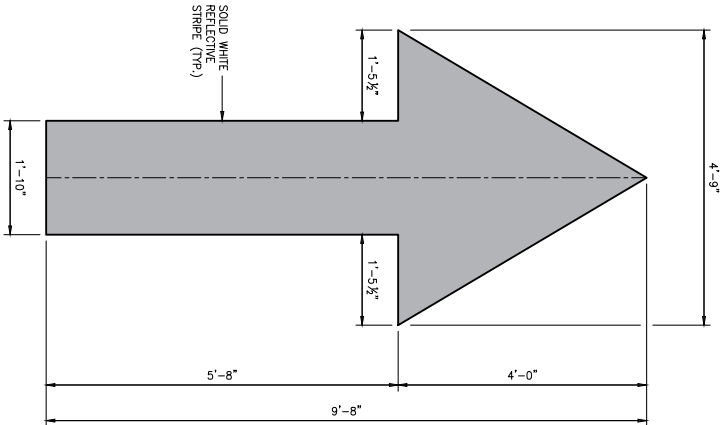
SHORE AT TARPON BEACH

SEAL



BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1401 PANAMA CITY BEACH PARKWAY, SUITE 10
PANAMA CITY BEACH, FL 32413 (850) 234-1100
ENGINEERING NUMBER: BS-000000
PENSACOLA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE

ALL ROADWAY STRIPING SHALL BE COLORED
AS INDICATED ON PLANS AND DETAILS



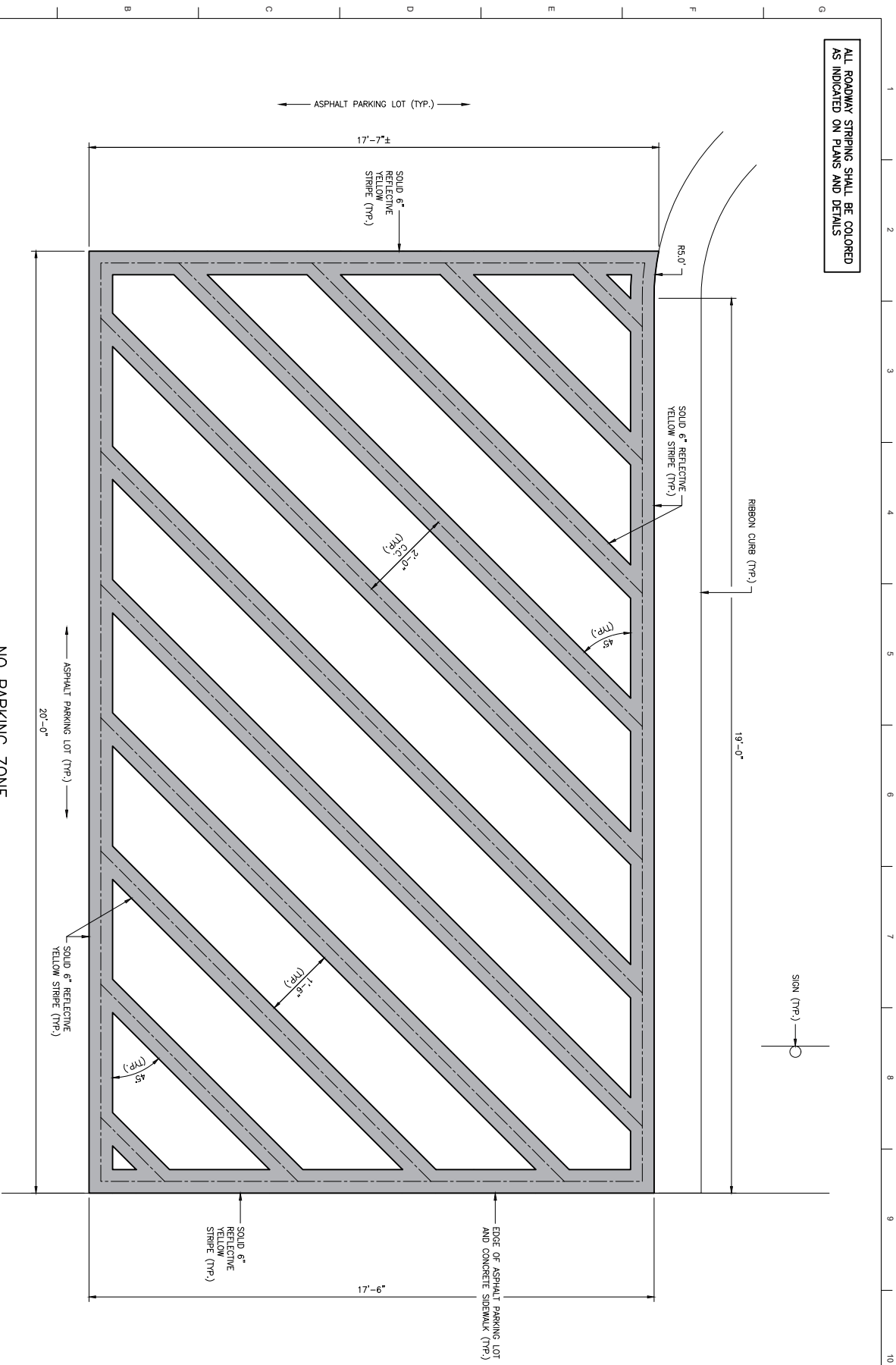
TRAFFIC FLOW ARROW
PAVEMENT MARKING DETAIL
N.T.S.

NOTES:

1. REFER TO CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD) U.S. DEPARTMENT OF TRANSPORTATION.
2. CONTRACTOR TO ADJUST PAVEMENT MARKING IF REQUIRED.

C-703	MISCELLANEOUS STRIPING AND SIGNAGE DETAILS	PROJECT NO: 12107.01	This drawing is the property of BASKERVILLE-DONOVAN, INC. and is not to be reproduced in whole or in part. It is not to be used on any other project and is to be returned upon request.	NO.	DATE	APPR	REVISION / ACTION TAKEN	SHORE AT TARPON BEACH	SEAL	 BASKERVILLE-DONOVAN, INC. ENGINEERING THE SOUTH SINCE 1927 14101 PANAMA CITY BEACH PARKWAY, SUITE 110, PANAMA CITY BEACH, FL 32413 (850) 230-4100 ENGINEERING BUSINESS: ES-000000 PENINSULA-PANAMA CITY BEACH-TALLAHASSEE-MOBILE
		DRAWN BY: RAS								
		CHECKED BY: RLW								
		PROJ. MGR: JCP								
DATE: FEBRUARY 2024		NOT RELEASED FOR CONSTRUCTION								

ALL ROADWAY STRIPING SHALL BE COLORED
AS INDICATED ON PLANS AND DETAILS



NOTES:

1. REFER TO CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD) U.S. DEPARTMENT OF TRANSPORTATION.
2. CONTRACTOR TO ADJUST PAVEMENT MARKING IF REQUIRED.

**NO PARKING ZONE
PAVEMENT MARKING DETAIL**
N.T.S.

I:\121 Okaloosa County\12107.01 Tarpon Beach Park\CADD Drawings (DWGS and DGNs)\C-704 - Misc Striping and Signage Detail.dwg, Jan 29, 2024 - 11:45:27AM, Johnson

FINAL PLANS - RELEASED FOR BID

C-704

MISCELLANEOUS STRIPING
AND SIGNAGE DETAILS

PROJECT NO:
12107.01
DESIGNED BY: RAS
DRAWN BY: JJ
CHKD BY: RLW
PROJ. MGR: JCP
DATE: FEBRUARY 2024

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used on any other project and is
to be returned upon request.

NOT RELEASED FOR
CONSTRUCTION

NO.	DATE	APPR	REVISION / ACTION TAKEN

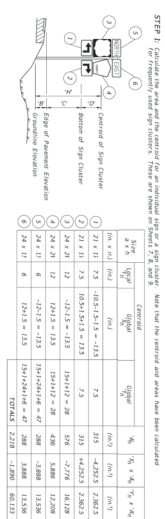
SHORE AT
TARPON BEACH

SEAL


BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1401 PANAMA CITY BEACH PARKWAY, SUITE 110
PANAMA CITY BEACH, FL 32413 (904) 234-4100
ENGINEERING BUSINESS: ES-000000
PENSACOLA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE

GENERAL NOTES:

1. Meet the requirements of Specification 700.
2. This drawing is intended for use as a guide only. It is not to be used as a basis for construction.
3. MATERIALS: Specify materials and quantities. Specify materials and quantities. Specify materials and quantities.
4. Specify materials and quantities. Specify materials and quantities. Specify materials and quantities.
5. Specify materials and quantities. Specify materials and quantities. Specify materials and quantities.
6. Specify materials and quantities. Specify materials and quantities. Specify materials and quantities.
7. Specify materials and quantities. Specify materials and quantities. Specify materials and quantities.
8. Specify materials and quantities. Specify materials and quantities. Specify materials and quantities.
9. Specify materials and quantities. Specify materials and quantities. Specify materials and quantities.
10. Specify materials and quantities. Specify materials and quantities. Specify materials and quantities.



STEP 1: Calculate the area and the required for an individual sign or a sign cluster. Note that the required and area have been calculated for required sign area cluster. These are shown in sheets 7, 8, and 9.

STEP 2: Determine the height of sign panel to the center of the individual sign or sign cluster.

STEP 3: Refer to the Aluminum Column (Post) Selection Table and find the appropriate post. See Sheet 3.

SHEET CONTENTS

1	General Notes
2	Sign Cluster Details
3	Sign Cluster Details
4	Sign Cluster Details
5	Sign Cluster Details
6	Sign Cluster Details
7	Sign Cluster Details
8	Sign Cluster Details
9	Sign Cluster Details
10	Sign Cluster Details

ALUMINUM COLUMN (POST) SELECTION TABLE

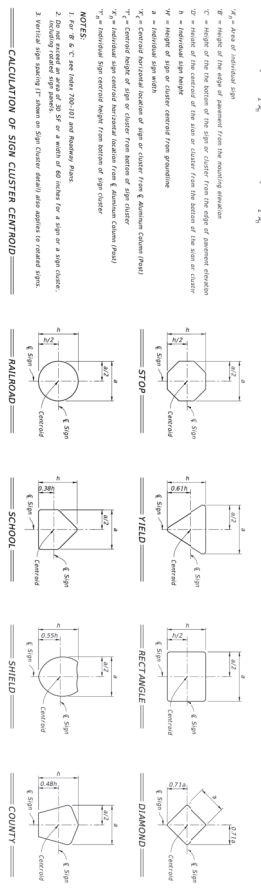
Post Height (ft)	Post Diameter (in)	Post Weight (lb/ft)	Post Area (sq ft)	Post Volume (cu ft)	Post Moment (ft-lb)	Post Capacity (lb)
10	4.5	1.2	15.9	1.6	1.2	1.2
12	4.5	1.2	15.9	1.6	1.2	1.2
14	4.5	1.2	15.9	1.6	1.2	1.2
16	4.5	1.2	15.9	1.6	1.2	1.2
18	4.5	1.2	15.9	1.6	1.2	1.2
20	4.5	1.2	15.9	1.6	1.2	1.2
22	4.5	1.2	15.9	1.6	1.2	1.2
24	4.5	1.2	15.9	1.6	1.2	1.2
26	4.5	1.2	15.9	1.6	1.2	1.2
28	4.5	1.2	15.9	1.6	1.2	1.2
30	4.5	1.2	15.9	1.6	1.2	1.2
32	4.5	1.2	15.9	1.6	1.2	1.2
34	4.5	1.2	15.9	1.6	1.2	1.2
36	4.5	1.2	15.9	1.6	1.2	1.2
38	4.5	1.2	15.9	1.6	1.2	1.2
40	4.5	1.2	15.9	1.6	1.2	1.2
42	4.5	1.2	15.9	1.6	1.2	1.2
44	4.5	1.2	15.9	1.6	1.2	1.2
46	4.5	1.2	15.9	1.6	1.2	1.2
48	4.5	1.2	15.9	1.6	1.2	1.2
50	4.5	1.2	15.9	1.6	1.2	1.2
52	4.5	1.2	15.9	1.6	1.2	1.2
54	4.5	1.2	15.9	1.6	1.2	1.2
56	4.5	1.2	15.9	1.6	1.2	1.2
58	4.5	1.2	15.9	1.6	1.2	1.2
60	4.5	1.2	15.9	1.6	1.2	1.2
62	4.5	1.2	15.9	1.6	1.2	1.2
64	4.5	1.2	15.9	1.6	1.2	1.2
66	4.5	1.2	15.9	1.6	1.2	1.2
68	4.5	1.2	15.9	1.6	1.2	1.2
70	4.5	1.2	15.9	1.6	1.2	1.2
72	4.5	1.2	15.9	1.6	1.2	1.2
74	4.5	1.2	15.9	1.6	1.2	1.2
76	4.5	1.2	15.9	1.6	1.2	1.2
78	4.5	1.2	15.9	1.6	1.2	1.2
80	4.5	1.2	15.9	1.6	1.2	1.2
82	4.5	1.2	15.9	1.6	1.2	1.2
84	4.5	1.2	15.9	1.6	1.2	1.2
86	4.5	1.2	15.9	1.6	1.2	1.2
88	4.5	1.2	15.9	1.6	1.2	1.2
90	4.5	1.2	15.9	1.6	1.2	1.2
92	4.5	1.2	15.9	1.6	1.2	1.2
94	4.5	1.2	15.9	1.6	1.2	1.2
96	4.5	1.2	15.9	1.6	1.2	1.2
98	4.5	1.2	15.9	1.6	1.2	1.2
100	4.5	1.2	15.9	1.6	1.2	1.2

FOOT STANDARD PLANS

SINGLE COLUMN GROUND SIGNS

700-010

1 of 11



FOOT STANDARD PLANS

SINGLE COLUMN GROUND SIGNS

700-010

2 of 11

ALUMINUM COLUMN (POST) SELECTION TABLE (O.D. IN.)

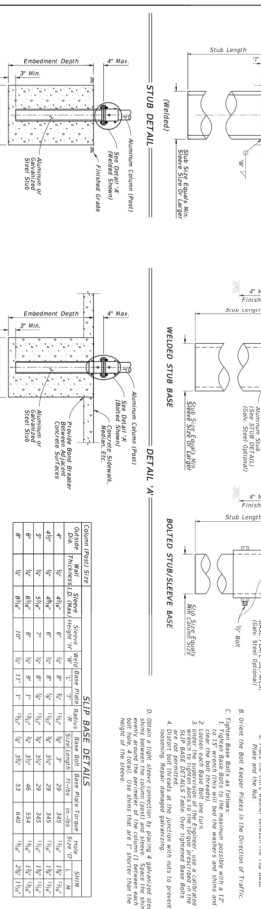
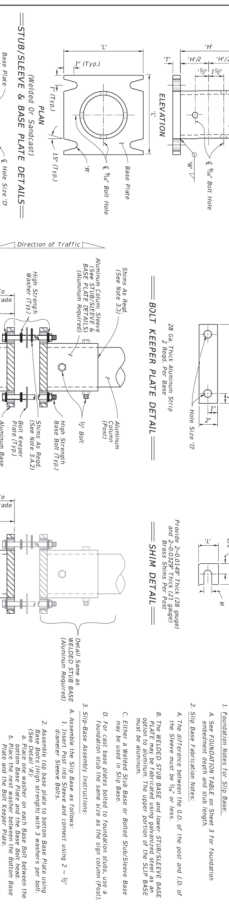
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12	4.5	1.2	15.9	1.6	1.2	1.2
14	4.5	1.2	15.9	1.6	1.2	1.2
16	4.5	1.2	15.9	1.6	1.2	1.2
18	4.5	1.2	15.9	1.6	1.2	1.2
20	4.5	1.2	15.9	1.6	1.2	1.2
22	4.5	1.2	15.9	1.6	1.2	1.2
24	4.5	1.2	15.9	1.6	1.2	1.2
26	4.5	1.2	15.9	1.6	1.2	1.2
28	4.5	1.2	15.9	1.6	1.2	1.2
30	4.5	1.2	15.9	1.6	1.2	1.2
32	4.5	1.2	15.9	1.6	1.2	1.2
34	4.5	1.2	15.9	1.6	1.2	1.2
36	4.5	1.2	15.9	1.6	1.2	1.2
38	4.5	1.2	15.9	1.6	1.2	1.2
40	4.5	1.2	15.9	1.6	1.2	1.2
42	4.5	1.2	15.9	1.6	1.2	1.2
44	4.5	1.2	15.9	1.6	1.2	1.2
46	4.5	1.2	15.9	1.6	1.2	1.2
48	4.5	1.2	15.9	1.6	1.2	1.2
50	4.5	1.2	15.9	1.6	1.2	1.2
52	4.5	1.2	15.9	1.6	1.2	1.2
54	4.5	1.2	15.9	1.6	1.2	1.2
56	4.5	1.2	15.9	1.6	1.2	1.2
58	4.5	1.2	15.9	1.6	1.2	1.2
60	4.5	1.2	15.9	1.6	1.2	1.2
62	4.5	1.2	15.9	1.6	1.2	1.2
64	4.5	1.2	15.9	1.6	1.2	1.2
66	4.5	1.2	15.9	1.6	1.2	1.2
68	4.5	1.2	15.9	1.6	1.2	1.2
70	4.5	1.2	15.9	1.6	1.2	1.2
72	4.5	1.2	15.9	1.6	1.2	1.2
74	4.5	1.2	15.9	1.6	1.2	1.2
76	4.5	1.2	15.9	1.6	1.2	1.2
78	4.5	1.2	15.9	1.6	1.2	1.2
80	4.5	1.2	15.9	1.6	1.2	1.2
82	4.5	1.2	15.9	1.6	1.2	1.2
84	4.5	1.2	15.9	1.6	1.2	1.2
86	4.5	1.2	15.9	1.6	1.2	1.2
88	4.5	1.2	15.9	1.6	1.2	1.2
90	4.5	1.2	15.9	1.6	1.2	1.2
92	4.5	1.2	15.9	1.6	1.2	1.2
94	4.5	1.2	15.9	1.6	1.2	1.2
96	4.5	1.2	15.9	1.6	1.2	1.2
98	4.5	1.2	15.9	1.6	1.2	1.2
100	4.5	1.2	15.9	1.6	1.2	1.2

FOOT STANDARD PLANS

SINGLE COLUMN GROUND SIGNS

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FOOT STANDARD PLANS

SINGLE COLUMN GROUND SIGNS

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FOOT STANDARD PLANS

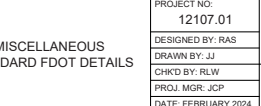
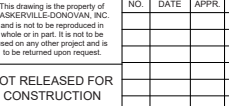


FOOT STANDARD PLANS

SINGLE COLUMN GROUND SIGNS

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FOOT STANDARD PLANS

SINGLE COLUMN GROUND SIGNS

700-010

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FOOT STANDARD PLANS



FOOT STANDARD PLANS

SINGLE COLUMN GROUND SIGNS

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FOOT STANDARD PLANS

SINGLE COLUMN GROUND SIGNS

700-010

8 of 11

FOOT STANDARD PLANS



FOOT STANDARD PLANS

SINGLE COLUMN GROUND SIGNS

700-010

9 of 11

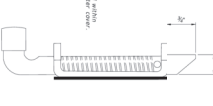
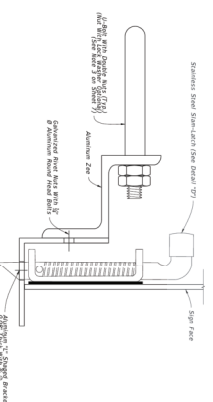
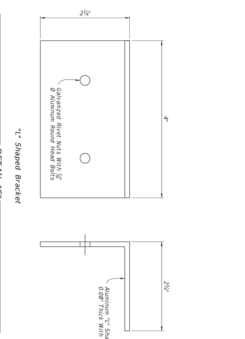
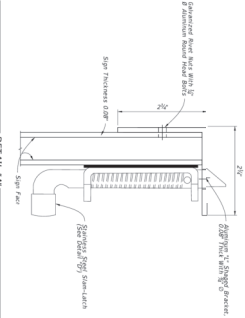
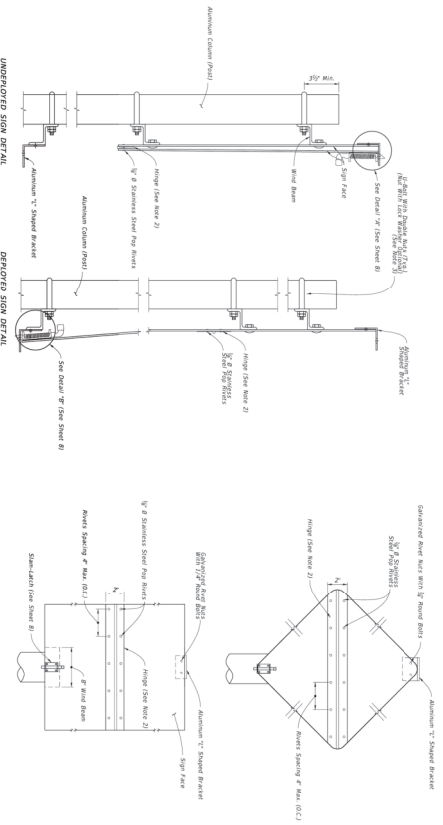
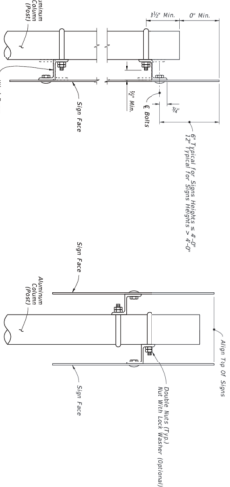
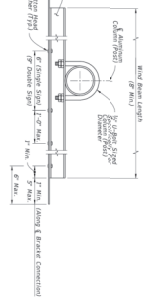
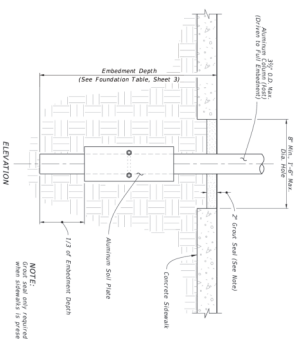
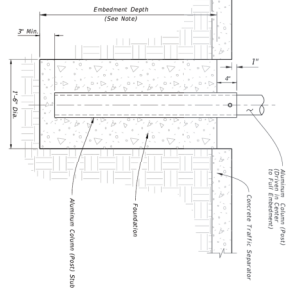
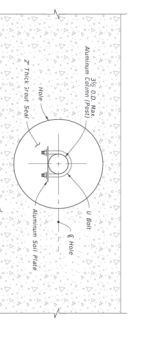
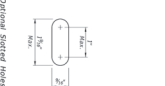
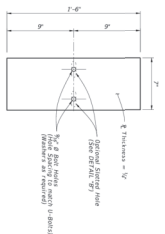


FOOT STANDARD PLANS

SINGLE COLUMN GROUND SIGNS

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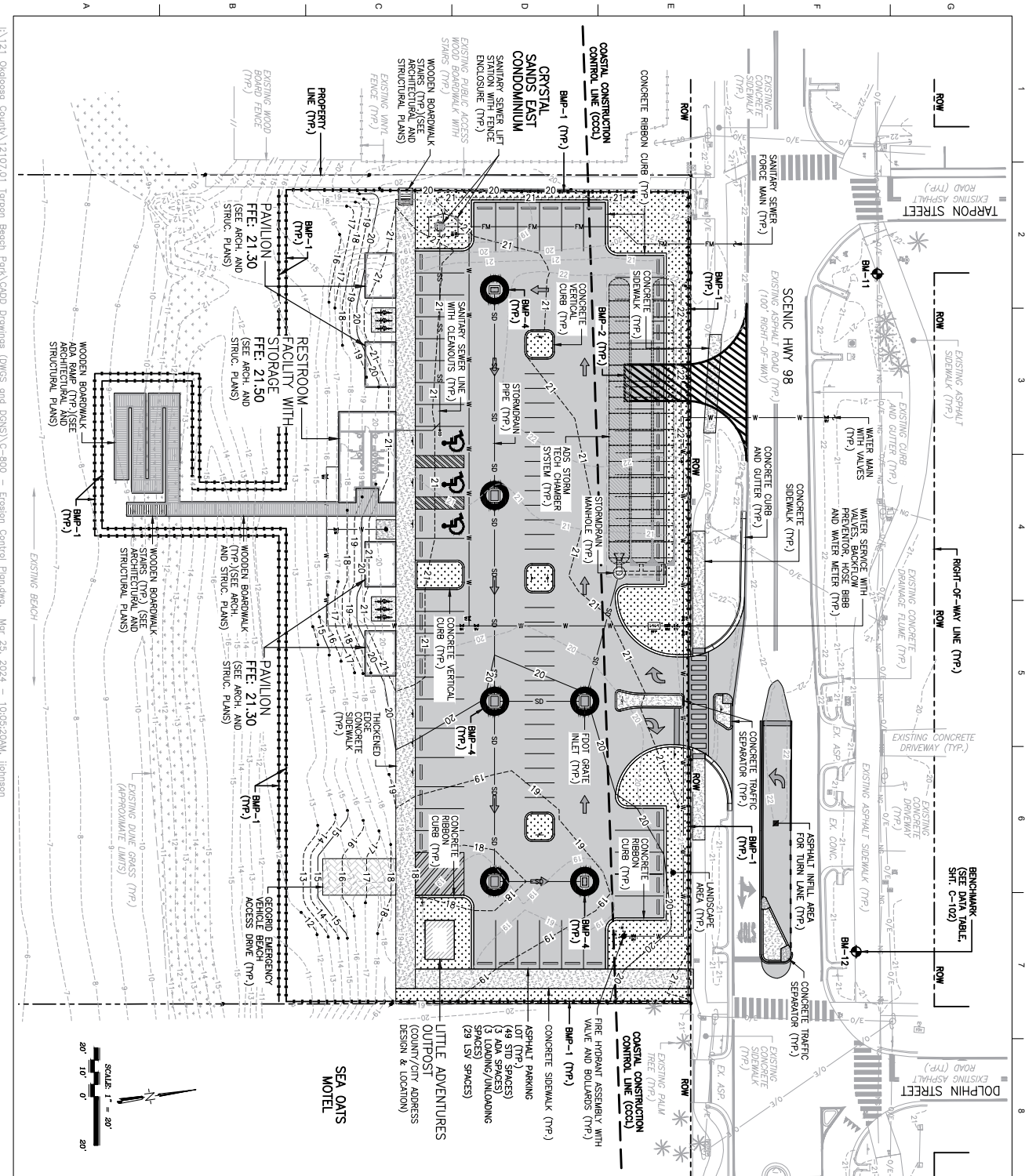
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LAST REVISION	INDEX	SHEET
10/01/22	700-010	5 of 11

LAST REVISION 01/01/22	DESCRIPTION REV 1	INDEX 700-010	SHEET 7 of 11
FY 2023-24  STANDARD PLANS		SINGLE COLUMN GROUND SIGNS	

REVISION:		INDEX	
LIST REVISION 10/01/22	DESCRIPTION: FY 2023-24 STANDARD PLANS SINGLE COLUMN GROUND SIGNS	700-010	SHEET 6 of 11

SLAM-LATCH DETAIL	
DESCRIPTION	INDEX SHEET
FY 2023-24  STANDARD PLANS SINGLE COLUMN GROUND SIGNS	700-010 8 of 11
REVISION LAST REVISION 10/01/22	

FINAL PLANS - RELEASED FOR BID



GENERAL NOTES:

- SEE SHEETS C-101 AND C-102 FOR SURVEY BENCHMARKS, SURVEY SYMBOL, LEGEND AND ABBREVIATION LEGEND.
- SEE SHEETS C-109 AND C-112 FOR GRADING AND DRAINAGE PLANS AND DATA TABLES.
- CONTRACTOR TO USE CAUTION WHEN DIGGING NEAR EXISTING UTILITIES AND MAY BE REQUIRED TO HAND DIG IN SOME AREAS. CONTRACTOR MAY BE REQUIRED TO INSTALL STORM DRAINAGE PRES. UTILITIES WHILE INSTALLING STORM DRAINAGE PRES. STRUCTURE AND PIPE DATA TABLES.
- SEE SHEET C-112 FOR STORM DRAINAGE PRES. STRUCTURE AND PIPE DATA TABLES.

EROSION CONTROL NOTES:

- SEE SHEET G-001 FOR ADDITIONAL EROSION CONTROL NOTES.
- SEE SHEETS G-801 THRU G-802 FOR BEST MANAGEMENT PRACTICES DETAILS.
- EROSION CONTROL SYMBOLS ARE SHOWN EXAGGERATED FOR CLARITY.
- INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE TRACKING ONTO ROADWAY.
- THE EROSION AND SEDIMENT CONTROL PLAN SHOWN HEREIN ARE MINIMUM GUIDELINES. THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE UPDATED AS NECESSARY TO COMPLY WITH BEST MANAGEMENT PRACTICES AND REGULATIONS AS CONSTRUCTION PROGRESSES AND IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL CONSTRUCTION ZONES ADJACENT TO WETLANDS SHALL HAVE A MINIMUM DOUBLE ROW OF SILT FENCE BARRIERS OR STAKED AND STAGGERED GEOTEXTILE WOODS AT WETLAND/CLEARING LIMITS.
- CONTRACTOR IS FULLY RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR SEDIMENT AND EROSION CONTROL INCLUDING BUT NOT LIMITED TO PERMITS FOR CONSTRUCTION SITES FROM LAKE AND SHALL CONSTRUCTION SITES.
- CONTRACTOR SHALL DEPOSE OF ALL DEBRIS OFF-SITE AND SHALL BE IN ACCORDANCE WITH FEDERAL, STATE, AND COUNTY LAWS AND REGULATIONS.
- ALL SOLE SLOPES AND DISTURBED AREAS SHALL BE STABILIZED WITH SOD.

EROSION CONTROL LEGEND

SILT FENCE (BMP-1)	—O—O—O—O—O—
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE (BMP-2)	
STRAW BALE BARRIER (BMP-3)	—O—O—O—O—O—
GEOTEXTILE WOODS (BMP-4)	—O—O—O—O—O—

PROJECT NO: 12107.01

DESIGNED BY: RAS

DRAWN BY: JJ

CHKD BY: RLW

PROJ. MGR: JCP

DATE: FEBRUARY 2024

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NOT RELEASED FOR CONSTRUCTION

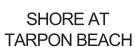
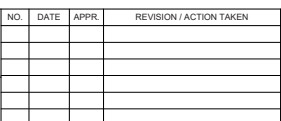
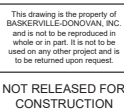
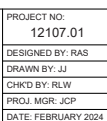
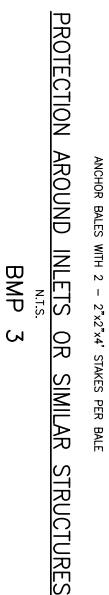
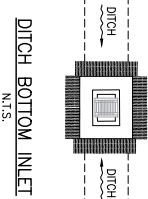
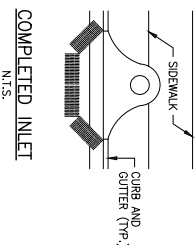
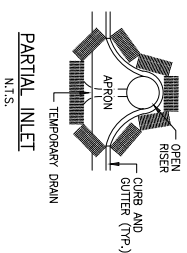
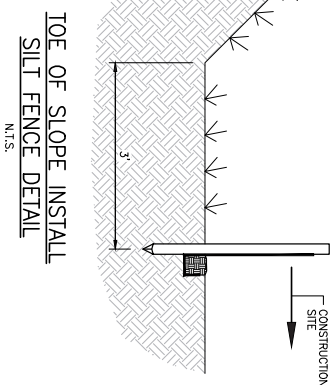
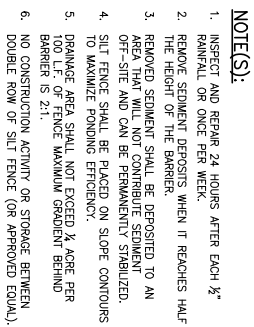
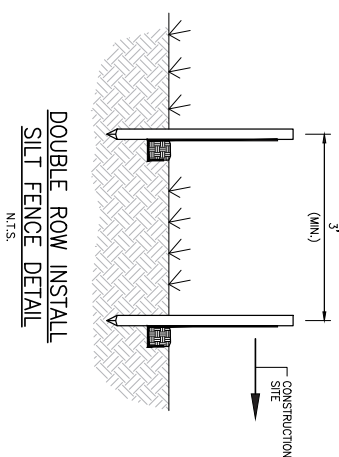
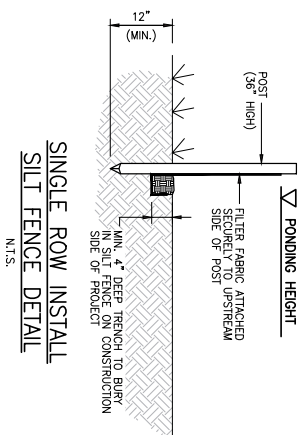
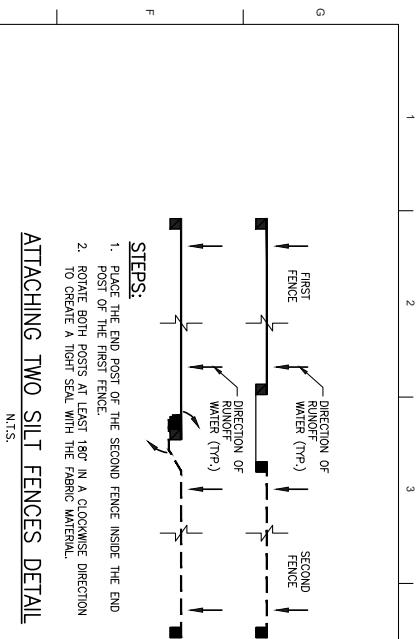
NO.	DATE	APPR	REVISION / ACTION TAKEN

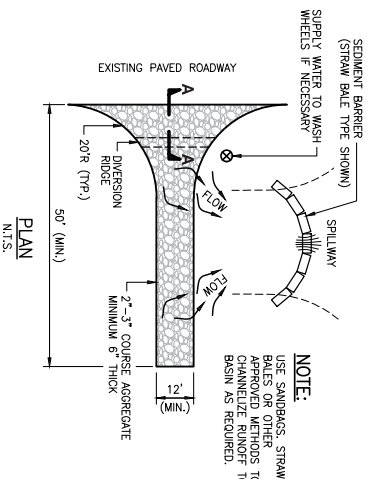
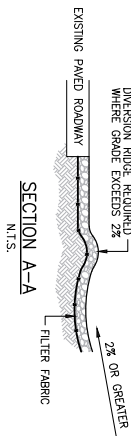
C-800

EROSION CONTROL PLAN

SHORE AT TARPON BEACH

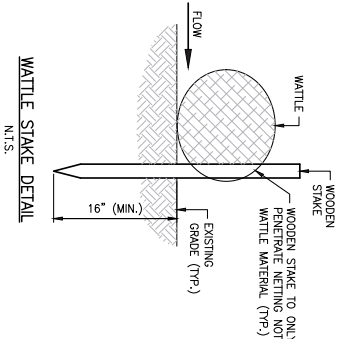
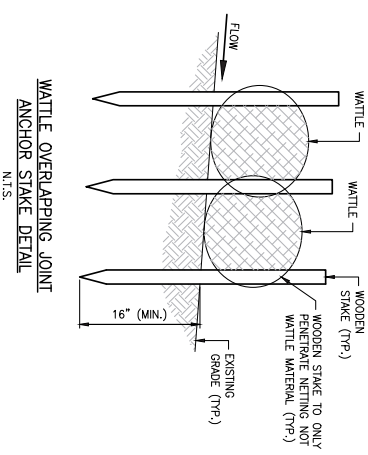
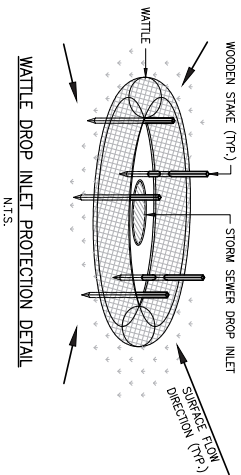
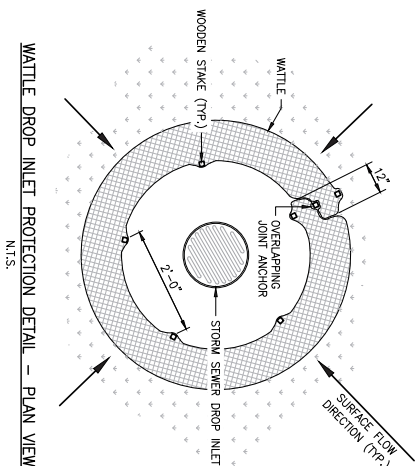
BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1405 PANAMA CITY BEACH PARKWAY, SUITE 10
PANAMA CITY BEACH, FL 32413 (850) 234-1100
ENGINEERING LICENSE #B-000300
PENINSULA-PANAMA CITY BEACH-TALLAHASSEE-MOBILE





- NOTES:**
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKS OR TOWING SCARS FROM FORMING ONTO PUBLIC RIGHTS-OF-WAY. THIS INCLUDES THE USE OF SEDIMENTATION AND/OR CLEANSING MEASURES TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

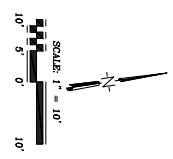
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE DETAIL
N.T.S.
BMP 2



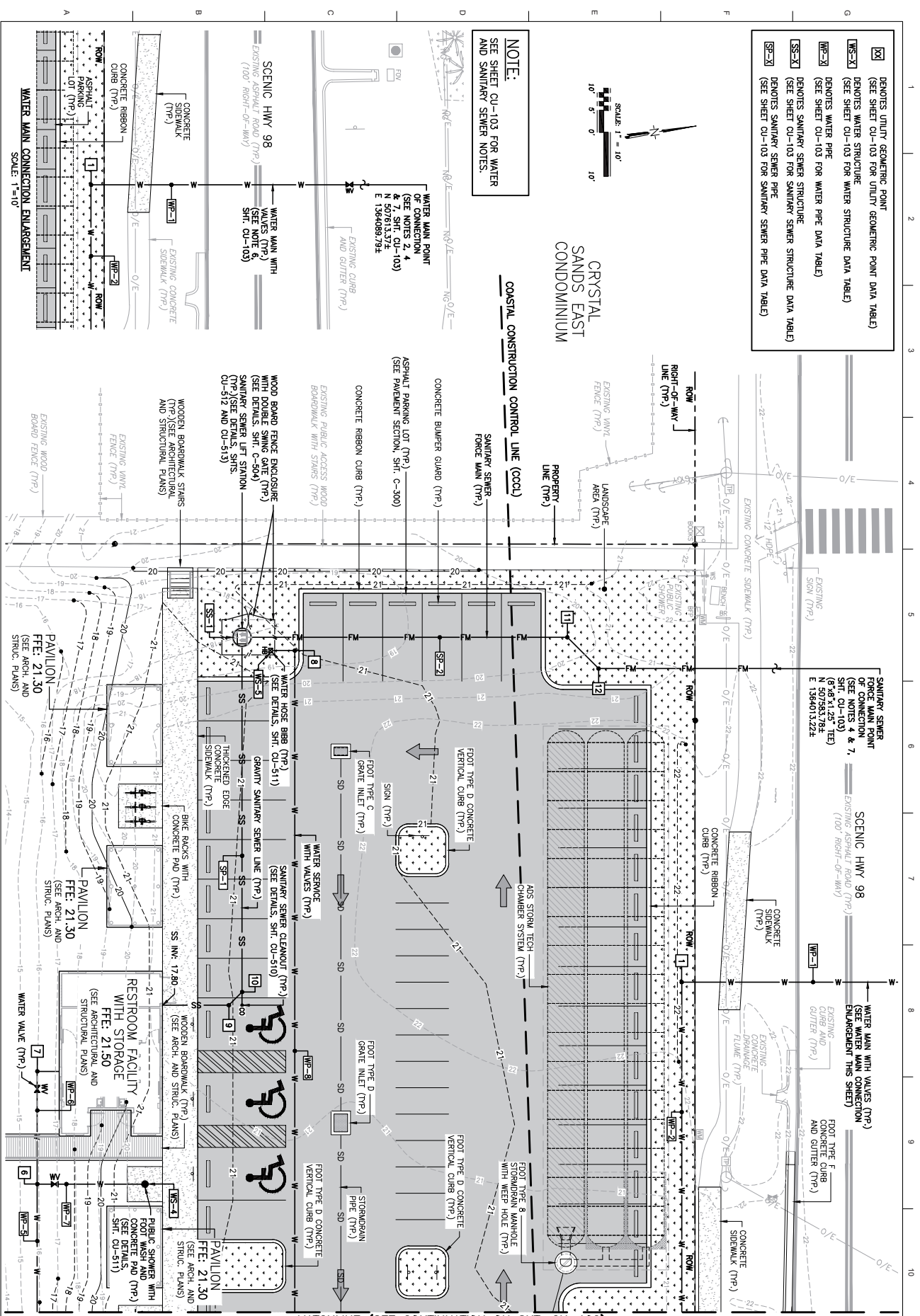
WATTLE DETAILS
N.T.S.
BMP 4

C-802	BEST MANAGEMENT PRACTICES DETAILS	PROJECT NO. 12107.01	This drawing is the property of BASKERVILLE-DONOVAN, INC. and is not to be reproduced in whole or in part. It is not to be used on any other project and is to be returned upon request.	NO.	DATE	APPR.	REVISION / ACTION TAKEN	SHORE AT TARPON BEACH	 BASKERVILLE-DONOVAN, INC. ENGINEERING THE SOUTH SINCE 1927 1401 PANAMA CITY BEACH PARKWAY, SUITE 110 PANAMA CITY BEACH, FL 32413 (850) 234-1000 ENGINEERING BUSINESS: ES-000000 PENSACOLA • PANAMA CITY BEACH • TALLAHASSEE • MOBILE
		DESIGNED BY: RAS							
		DRAWN BY: JJ							
		CHKD BY: RLW							
		PROJ. MGR: JCP							
		DATE: FEBRUARY 2024							
		NOT RELEASED FOR CONSTRUCTION							
SEAL									

- CU** DENOTES UTILITY GEOMETRIC POINT (SEE SHEET CU-103 FOR UTILITY GEOMETRIC POINT DATA TABLE)
- WS-X** DENOTES WATER STRUCTURE (SEE SHEET CU-103 FOR WATER STRUCTURE DATA TABLE)
- WP-X** DENOTES WATER PIPE (SEE SHEET CU-103 FOR WATER PIPE DATA TABLE)
- SS-X** DENOTES SANITARY SEWER STRUCTURE (SEE SHEET CU-103 FOR SANITARY SEWER STRUCTURE DATA TABLE)
- SP-X** DENOTES SANITARY SEWER PIPE (SEE SHEET CU-103 FOR SANITARY SEWER PIPE DATA TABLE)

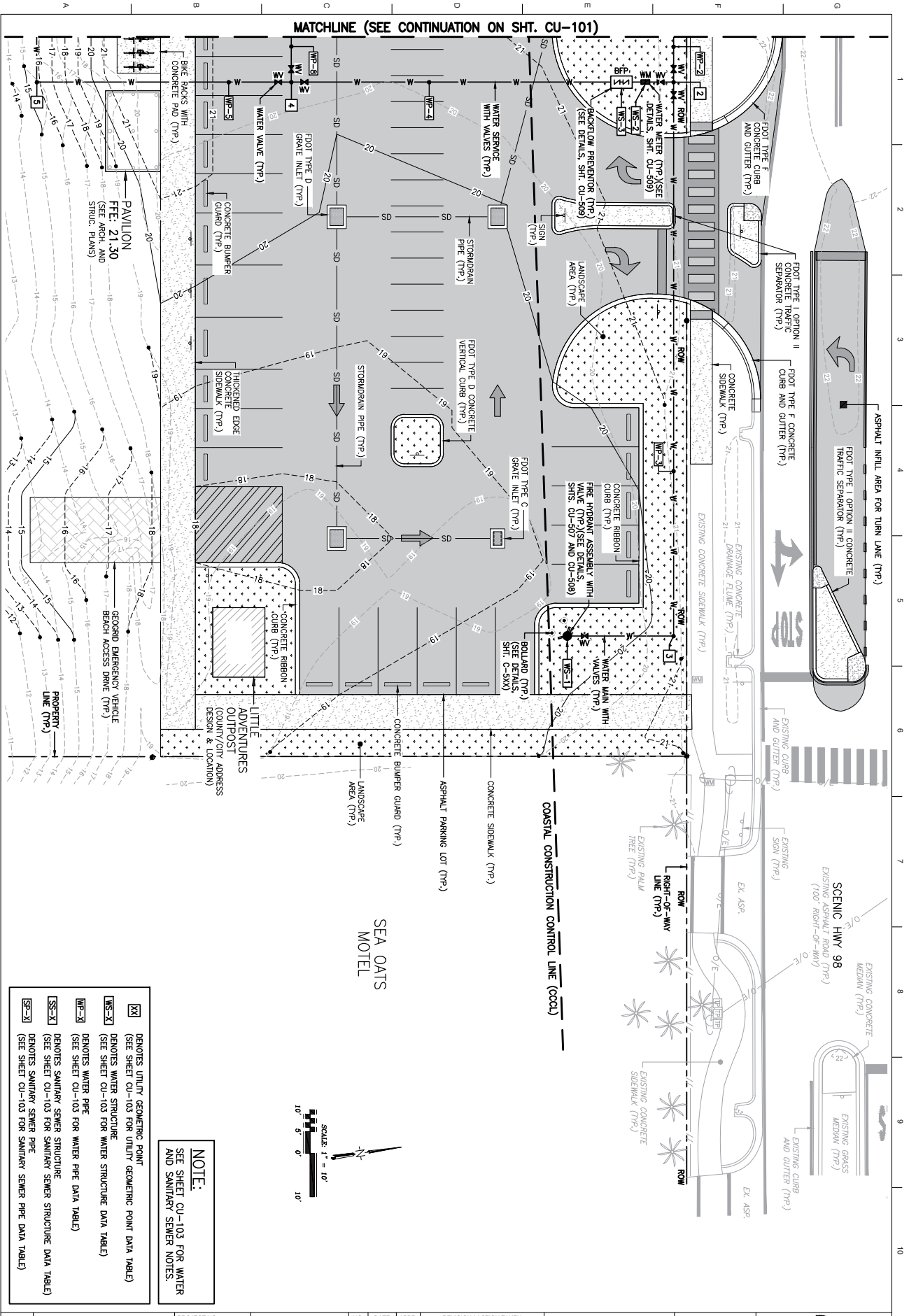


NOTE:
SEE SHEET CU-103 FOR WATER AND SANITARY SEWER NOTES.



MATCHLINE (SEE CONTINUATION ON SHT. CU-102)

CU-101	WATER AND SANITARY SEWER PLAN	PROJECT NO: 12107.01 DESIGNED BY: RAS DRAWN BY: JJ CHECKED BY: RLW PROJ. MGR: JCP DATE: FEBRUARY 2024	This drawing is the property of Baskerville-Donovan, Inc. and is not to be reproduced in whole or in part. It is not to be used on any other project and is to be returned upon request. NOT RELEASED FOR CONSTRUCTION	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">NO.</th> <th style="width: 10%;">DATE</th> <th style="width: 10%;">APPR</th> <th style="width: 70%;">REVISION / ACTION TAKEN</th> </tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>	NO.	DATE	APPR	REVISION / ACTION TAKEN												
	NO.	DATE	APPR	REVISION / ACTION TAKEN																
SHORE AT TARPON BEACH																				
BASKERVILLE-DONOVAN, INC. ENGINEERING THE SOUTH SINCE 1927 1401 PANAMA CITY BEACH PARKWAY, SUITE 10 PANAMA CITY BEACH, FL 32413 (850) 234-4100 ENGINEERING LICENSE NO. ES-200330 PENINSULA-PANAMA CITY BEACH-TALLAHASSEE-MOBILE																				
SEAL																				



- UX** DENOTES UTILITY GEOMETRIC POINT (SEE SHEET CU-103 FOR UTILITY GEOMETRIC POINT DATA TABLE)
- WS-X** DENOTES WATER STRUCTURE (SEE SHEET CU-103 FOR WATER STRUCTURE DATA TABLE)
- WP-X** DENOTES WATER PIPE (SEE SHEET CU-103 FOR WATER PIPE DATA TABLE)
- SS-X** DENOTES SANITARY SEWER STRUCTURE (SEE SHEET CU-103 FOR SANITARY SEWER STRUCTURE DATA TABLE)
- SP-X** DENOTES SANITARY SEWER PIPE (SEE SHEET CU-103 FOR SANITARY SEWER PIPE DATA TABLE)

NOTE:
SEE SHEET CU-103 FOR WATER AND SANITARY SEWER NOTES.

PROJECT NO.
12107.01

DESIGNED BY: RAS

DRAWN BY: JJ

CHD BY: RLW

PROJ. MGR: JCP

DATE: FEBRUARY 2024

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NOT RELEASED FOR CONSTRUCTION

NO.	DATE	APPR	REVISION / ACTION TAKEN

SHORE AT TARPON BEACH

BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1405 PANAMA CITY BEACH PARKWAY, SUITE 10
PANAMA CITY BEACH, FL 32413 (850) 234-4100
ENGINEERING NUMBER: ES-2003046
PENSACOLA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE

WATER AND SANITARY SEWER PLAN

CU-102

SANITARY SEWER STRUCTURE DATA TABLE						
STRUCTURE NO.	TYPE	NORTHING	EASTING	TOP/RAW (FT)	NORTH INV. (FT)	SOUTH INV. (FT)
SS-1	SANITARY SEWER LIFT STATION	507465.14	1363988.20	**20.50±	17.30 (SP-2)	-

** ADJUST TOP TO MATCH FINISHED GRADE
INV. US - DENOTES INVERT UP STREAM
INV. DS - DENOTES INVERT DOWN STREAM

SANITARY SEWER PIPE DATA TABLE					
PIPE NO.	SIZE (IN)	TYPE	LENGTH (FT)	SLOPE (%)	INV. US (FT)
SP-1	4	PVC	99.96	2.0	17.80
SP-2	1.25	PVC (FN)	123.99±	-	17.30

INV. US - DENOTES INVERT UP STREAM
INV. DS - DENOTES INVERT DOWN STREAM

NOTES:

- SEE SHEETS C-101 AND C-102 FOR SURVEY BENCHMARKS, SURVEY SYMBOL LEGEND AND ABBREVIATION LEGEND.
- PROVIDE A STAINLESS STEEL TAPPING SLEEVE AT WATER MAIN CONNECTION POINTS. THIS WORK SHOULD BE COORDINATED WITH DESTINY WATER USERS PRIOR TO BEGINNING WORK. WATER SHUT OFF'S SHOULD BE DONE AFTER WORK HOURS OR ON WEEKENDS.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL NECESSARY GAS SERVICE CONSTRUCTION AND INCLUDING THE METER.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL NECESSARY WATER AND SANITARY SEWER SERVICE CONSTRUCTION WITH DESTINY WATER USERS.
- CONTRACTOR TO TEMPORARILY SUPPORT EXISTING UTILITIES DURING NEW UTILITY TRENCHING AND INSTALLATION.
- WATER LINE CONNECTION SHALL BE INSTALLED VIA DIRECTIONAL DRILL BENEATH SCENIC HWY 98.
- CONTRACTOR SHALL VERIFY LOCATION OF EXISTING UTILITY LINES BEFORE PROCEEDING WITH ANY UTILITY WORK. CHANGES IN LOCATION OR DEPTH SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER AND OKALOOSA COUNTY.
- PIPE LENGTHS SHOWN ARE FROM CENTER TO CENTER OF STRUCTURES.
- NORTHING AND EASTING COORDINATES BASED ON CENTER OF STRUCTURES AND CENTER OF UTILITY PIPE BENDS.
- SEE SHEETS C-109 THRU C-112 FOR GRADING AND DRAINAGE PLANS AND DATA TABLES.
- SEE DETAILS FOR FIRE HYDRANT ON SHEETS CU-507 AND CU-508.
- SEE DETAILS FOR WATER BACKFLOW PREVENTOR ON SHEET CU-509.
- SEE DETAILS FOR WATER HOSE BIBB ON SHEET CU-511.
- SEE DETAILS FOR BOLLARD ON SHEET C-502.
- SEE DETAILS FOR SANITARY SEWER LIFT STATION ON SHEETS CU-512 AND CU-513.
- SEE DETAILS FOR SANITARY SEWER CLEANOUT ON SHEET CU-510.
- SEE DETAILS FOR WOOD BOARD FENCE ENCLOSURE WITH DOUBLE SWING GATE ON SHEET C-504.
- D1 - DENOTES DUCTILE IRON PIPE
T/C - DENOTES POLYVANT CHLORIDE PIPE
T/C - DENOTES TERMOLOTA PIPE
- SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR WOODEN BOARDWALK PLANS AND DETAILS.
- SEE DETAILS FOR PUBLIC SHOWER WITH FOOT WASH AND CONCRETE PAD ON SHEET CU-511.
- ALL NEW UTILITIES SHALL BE INSTALLED UNDERGROUND.

- [X] DENOTES UTILITY GEOMETRIC POINT (SEE TABLE FOR TYPE AND LOCATION)
- [SS-X] DENOTES SANITARY SEWER STRUCTURE (SEE TABLE FOR TYPE AND INVERTS)
- [SP-X] DENOTES SANITARY SEWER PIPE (SEE TABLE FOR TYPE, SIZE, LENGTH, AND INVERT)
- [WS-X] DENOTES WATER STRUCTURE (SEE TABLE FOR TYPE AND LOCATION)
- [WP-X] DENOTES WATER PIPE (SEE TABLE FOR TYPE, SIZE AND LENGTH)

UTILITY GEOMETRIC POINT DATA TABLE			
SYMBOL NO.	NORTHING	EASTING	DESCRIPTION
1	507552.31	1364080.60	90° BEND (6" WATER)
2	507538.59	1364165.16	6.66°/2' TIE (WATER)
3	507520.64	1364291.21	90° BEND (6" WATER)
4	507452.63	1364152.09	2.72°/2' TIE (WATER)
5	507394.73	1364143.36	90° BEND (2" WATER)
6	507400.62	1364104.24	2.72°/2' TIE (WATER)
7	507404.43	1364078.89	90° BEND (2" WATER)
8	507476.56	1363992.95	90° BEND (2" WATER)
9	507449.73	1364070.48	45° BEND (2" WATER)
10	507453.14	1364067.96	45° BEND (4" SEWER)
11	507538.26	1363999.19	45° BEND (1.5" SEWER FN)
12	507544.22	1364007.27	45° BEND (1.5" SEWER FN)

WATER PIPE DATA TABLE			
PIPE NO.	SIZE (IN)	TYPE	LENGTH (FT)
WP-1	6	PVC	61.75±
WP-2	6	PVC	85.51
WP-3	6	PVC	151.93
WP-4	2	PVC	87.94
WP-5	2	PVC	98.13
WP-6	2	PVC	30.63
WP-7	2	PVC	24.49
WP-8	2	PVC	166.48

ALL PIPE LENGTHS ARE ±

WATER STRUCTURE DATA TABLE			
STRUCTURE NO.	TYPE	NORTHING	EASTING
WS-1	FIRE HYDRANT	507496.45	1364497.57
WS-2	WATER METER (WM)	507533.17	1364164.20
WS-3	BACKFLOW PREVENTOR (BFP)	507527.73	1364163.38
WS-4	PUBLIC SHOWER WITH FOOT WASH	507424.84	1364107.85
WS-5	HOSE BIBB (HB)	507471.06	1363992.12



BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1405 PANAMA CITY BEACH PARKWAY, SUITE 10
PANAMA CITY BEACH, FL 32413 (850) 234-1100
ENGINEERING NUMBER: ES-200330
PENINSULA-PANAMA CITY BEACH-TALLAHASSEE-MOBILE

SHORE AT
TARPON BEACH

NO.	DATE	APPR	REVISION / ACTION TAKEN

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PROJECT NO:
12107.01

DESIGNED BY: RAS

DRAWN BY: JJ

CHKD BY: RLW

PROJ. MGR: JCP

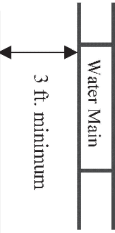
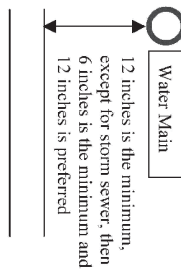
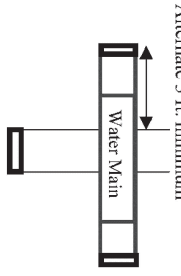
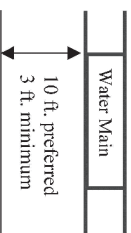
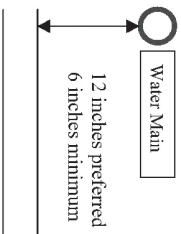
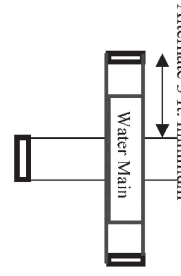
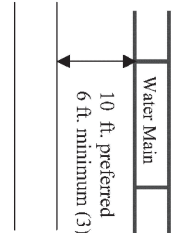
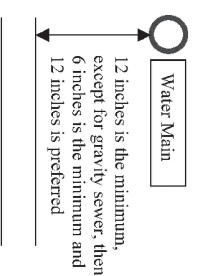
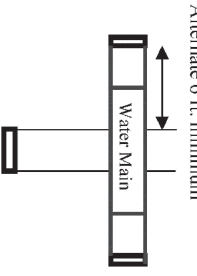
DATE: FEBRUARY 2024

WATER AND SANITARY
SEWER STRUCTURE AND
PIPE DATA TABLES

CU-103

	1	2	3	4	5	6	7	8	9	10																							
G	1-9 AS-BUILT DRAWINGS THE CONTRACTOR SHALL FURNISH THE ENGINEER AT THE CLOSE OF THE PROJECT, WITH ONE (1) SET OF MARKED-UP CONSTRUCTION PLANS DEPICTING AS-BUILT CONDITIONS OF THE POTABLE WATER SYSTEM. THE AS-BUILT PLANS SHALL SHOW THE LOCATION OF WATER SERVICES, WATER VALVES, AND FIRE HYDRANTS. ENGINEERING APPROVAL OF THE POTABLE WATER SYSTEM WILL NOT BE MADE UNTIL ACCURATE AND LEGIBLE AS-BUILT PLANS ARE RECEIVED. END OF SECTION			2-8 AS-BUILT DRAWINGS THE CONTRACTOR SHALL FURNISH THE ENGINEER AT THE CLOSE OF THE PROJECT, WITH ONE (1) SET OF MARKED-UP CONSTRUCTION PLANS DEPICTING AS-BUILT CONDITIONS OF THE RECLAIMED WATER SYSTEM. THE AS-BUILT PLANS SHALL SHOW THE LOCATION OF WATER SERVICES, BENDS AND VALVES. ENGINEERING APPROVAL OF THE RECLAIMED WATER SYSTEM WILL NOT BE MADE UNTIL ACCURATE AND LEGIBLE AS-BUILT PLANS ARE RECEIVED. END OF SECTION			3-4.2 SEWER MANHOLES SANITARY SEWER MANHOLES SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 891. WHERE MANHOLES OCCUR IN PAVEMENTS, SET TOP OF FRAMES AND COVERS FLUSH WITH THE FINISHED SURFACE. ELSEWHERE, SET TOPS 3" ABOVE FINISHED SURFACE, UNLESS OTHERWISE INDICATED. GROUT INVERTS OF MANHOLES TO PROVIDE CONTINUITY OF GRADE AND DIRECTION CHANGE THROUGH MANHOLE. THE EXTERIOR OF THE MANHOLE SHALL BE GIVEN TWO COATS OF KOPPERS 300M, OR EQUAL, BEFORE BACKFILLING OPERATION. SEWER MANHOLES SHALL BE COATED WITH A SELF-PRIMING HEAVY DUTY COLD APPLIED COAL TAR MATERIAL SIMILAR AND EQUAL TO KOPPERS "BITUMASTIC SUPER SERVICE BLACK". PROVIDE A MINIMUM OF TWO (2) COATS AT A RATE OF 50 TO 60 SQUARE FEET PER GALLON PER COAT.			 BASKERVILLE-DONOVAN, INC. ENGINEERING THE SOUTH SINCE 1927 10000 W. BEACH BLVD., SUITE 1000, TARPON BEACH, FL 33541 T: (850) 837-6146 F: (850) 837-6147 P: (850) 837-6148																							
F	SECTION 2 - RECLAIMED WATER DISTRIBUTION SYSTEM (A.K.A. REUSE WATER) SPECIFICATIONS FOR THE RELOCATION OF THE 16" RECLAIM MAIN PER THE DWU COMMONS DRIVE RECLAIMED WATER EXTENSION PHASE III PLANS AND SPECIFICATIONS DATED JANUARY 2011 AND PREPARED BY BASKERVILLE-DONOVAN, INC. 2-1 DESCRIPTION THE WORK SPECIFIED IN THIS SECTION CONSISTS OF THE CONSTRUCTION OF RECLAIMED WATER SERVICES AND OTHER APPURTENANCES, IN CONFORMITY WITH THE PLANS AND IN ACCORDANCE WITH THESE SPECIFICATIONS, OR THE GENERAL UTILITY SPECIFICATIONS OF DESTIN WATER USERS, INC. (UTILITY COMPANY), WHICHEVER IS MORE STRINGENT. 2-2 CODES AND STANDARDS THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 62-604 AND 62-610 OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION RULES, THE APPLICABLE PORTIONS OF THE NATIONAL STANDARD PLUMBING CODE AND TEN STATE STANDARDS PERTAINING TO THE INSTALLATION OF RECLAIMED WATER SYSTEMS, AND THE UTILITY ACCOMMODATION MANUAL OF THE FLORIDA DEPARTMENT OF TRANSPORTATION, LATEST EDITION. THE CONTRACTOR SHALL OBTAIN REQUIRED PERMITS AND INSPECTIONS FROM THE UTILITY COMPANY. 2-3 MATERIALS 2-3.1 DETECTOR WIRE NO. 12 COPPER TRACER WIRE SHALL BE REQUIRED FOR ALL NON-METALLIC SERVICES AND SHALL BE PROTECTED DURING BACKFILLING OPERATIONS TO PREVENT BREAKAGE. 2-3.2 GATE VALVES - SEE BASKERVILLE-DONOVAN PLANS AND SPECIFICATIONS 2-3.3 PIPING AND PIPE FITTINGS - SEE BASKERVILLE-DONOVAN PLANS AND SPECIFICATIONS 2-3.3.1 RECLAIMED WATER MAINS - SEE BASKERVILLE-DONOVAN PLANS AND SPECIFICATIONS 2-3.3.2 RECLAIMED WATER SERVICE PIPING WATER SERVICE PIPING SHALL BE POLYETHYLENE (PE) TUBING CONFORMING TO ASTM D 1248, CLASS 160, WITH BRASS OR BRONZE BARBED FITTINGS WITH 2 STRAP-TYPE STAINLESS STEEL CLAMPS OVER PIPE AT EACH INSERT. ALL RECLAIMED WATER INFRASTRUCTURE (MAINS, SERVICES, ETC.) SHALL BE COLOR CODED USING PANTONE PURPLE 522C USING LIGHT STABLE COLORANTS. 2-3.3.3 RECLAIMED WATER SERVICE CLAMPS AND STOPS 2-3.3.3.1 SERVICE CLAMPS SERVICE CLAMPS SHALL BE CLOW-VEGA MODEL F-6350 AS MANUFACTURED BY CLOW, WICHITA FALLS, TEXAS, OR DRESSER STYLE 194 AS MANUFACTURED BY DRESSER MANUFACTURING CO., BRADFORD, PA., OR APPROVED EQUAL. 2-3.3.3.2 CORPORATION STOPS CORPORATION STOPS SHALL BE FORD MODEL NO. F-1000, OR APPROVED EQUAL. INLETS SHALL HAVE COMPRESSION CONNECTIONS AND OUTLETS SHALL HAVE IRON PIPE THREADS. 2-3.3.3.3 CURB STOPS CURB STOPS SHALL BE AS MANUFACTURED BY FORD, OR APPROVED EQUAL. INLETS SHALL HAVE COMPRESSION CONNECTIONS AND OUTLETS SHALL HAVE IRON PIPE THREADS. 2-3.3.4 VALVE BOXES - SEE BASKERVILLE-DONOVAN PLANS AND SPECIFICATIONS 2-3.4 ANCHORAGES - SEE BASKERVILLE-DONOVAN PLANS AND SPECIFICATIONS 2-5 INSTALLATION - SEE BASKERVILLE-DONOVAN PLANS AND SPECIFICATIONS 2-6 FIELD TESTING - SEE BASKERVILLE-DONOVAN PLANS AND SPECIFICATIONS 2-7 AS-BUILT CERTIFICATION IN ACCORDANCE WITH THE RULES OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, CHAPTER 62-604, THE ENGINEER OF RECORD WILL BE RESPONSIBLE FOR OBSERVATION OF THE CONSTRUCTION OF THE RECLAIMED WATER SYSTEM TO ASSURE COMPLIANCE WITH PLANS AND SPECIFICATIONS, AND SAID ENGINEER WILL REPORT TO DEP UPON COMPLETION OF THE CONSTRUCTION BEFORE THE SYSTEM CAN BE PLACED INTO SERVICE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 24 HOURS BEFORE BEGINNING CONSTRUCTION ON THE RECLAIMED WATER SYSTEM.			SECTION 3 - SANITARY SEWAGE SYSTEM 3-1 DESCRIPTION THE WORK SPECIFIED IN THIS SECTION CONSISTS OF THE CONSTRUCTION OF A GRAVITY SANITARY SEWER COLLECTION SYSTEM, INCLUDING SANITARY SEWER COLLECTION LINES, SERVICE LINES, SANITARY SEWER MANHOLES, AND OTHER APPURTENANCES, IN CONFORMITY WITH THE PLANS AND IN ACCORDANCE WITH THESE SPECIFICATIONS, OR THE SPECIFICATIONS AND REQUIREMENTS OF THE DESTIN WATER USERS, INC. (UTILITY COMPANY), WHICHEVER IS MORE STRINGENT. 3-2 CODES AND STANDARDS THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 62-604 OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION RULES AND THE APPLICABLE PORTIONS OF THE NATIONAL STANDARD PLUMBING CODE AND TEN STATE STANDARDS, PERTAINING TO THE INSTALLATION OF GRAVITY SANITARY SEWER COLLECTION SYSTEMS. THE CONTRACTOR SHALL OBTAIN REQUIRED PERMITS FROM DEP AND INSPECTIONS REQUIRED BY THE UTILITY COMPANY. 3-3 MATERIALS 3-3.1 GRAVITY SEWER COLLECTION LINES AND FITTINGS GRAVITY SEWER COLLECTION LINE PIPING AND FITTINGS (6" THROUGH 12") SHALL BE POLYVINYL CHLORIDE (PVC) CONFORMING TO ASTM D 3034, TYPE PSM, SDR 35. JOINTING SHALL BE ACCOMPLISHED BY MEANS OF ELASTOMERIC GASKET JOINTS CONFORMING TO ASTM D 3212. GASKET MATERIAL SHALL BE SUITABLE FOR USE WITH DOMESTIC SEWAGE AND SHALL CONFORM TO ASTM F 477. 3-3.2 SEWER SERVICE LINES SEWER SERVICE LINE PIPING AND FITTINGS (4" AND SMALLER) SHALL BE POLYVINYL CHLORIDE (PVC) CONFORMING TO ASTM D 2466. EXTEND SEWER SERVICE LINES TO RIGHT-OF-WAY LINE AND BEND UP AT A 45° ANGLE. EXTEND 18" ABOVE GROUND AND CAP. 3-3.3 MANHOLES SANITARY SEWER MANHOLES SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE, SIZED AS INDICATED, AND COMPLYING WITH ASTM C 478. MANHOLE TOPS SHALL BE ECCENTRIC CONE TYPE AND MANHOLE BASES SHALL BE BASE RISER SECTIONS WITH INTEGRAL FLOORS. NO STEPS SHALL BE PROVIDED IN ANY SANITARY SEWER MANHOLES OF ANY DEPTH. SANITARY SEWER MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY-DUTY CAST IRON CONSTRUCTION, SIZED AS INDICATED. THE MANHOLE COVER SHALL BE OF INDENTED TOP DESIGN WITH LETTERING CAST INTO THE TOP READING "SEWER". MANHOLE FRAMES AND COVERS SHALL BE VULCAN FOUNDRY NO. VM-37, NEENAH FOUNDRY NO. R-1600, OR APPROVED EQUAL. MANHOLE FRAMES AND COVERS ARE TO BE COATED WITH COAL-TAR EPOXY. 3-3.4 CLEANOUTS SANITARY SEWER CLEANOUTS SHALL BE CONSTRUCTED OF PVC PIPE EXTENDED TO THE GROUND SURFACE WITH PVC PLUGS. 3-4 INSTALLATION 3-4.1 GRAVITY COLLECTION AND SERVICE LINES EACH SECTION OF PIPE SHALL BE CAREFULLY INSPECTED BEFORE AND AFTER IT IS INSTALLED AND DEFECTIVE PIPE SHALL BE REJECTED AND REMOVED. SEWER LINES SHALL BE LAID BEGINNING AT THE LOW POINT OF THE SYSTEM, TRUE TO THE GRADE AND ALIGNMENT INDICATED, WITH UNBROKEN CONTINUITY OF INVERT. CLEAR INTERIOR OF PIPING OF DIRT AND OTHER SUPERFLUOUS MATERIAL AS WORK PROGRESSES. OPEN ENDS OF PIPE AT THE END OF EACH DAY'S WORK SHALL BE CLOSED TEMPORARILY WITH WOOD BLOCKS OR BULKHEADS. IN ADDITION TO THE ABOVE, PVC GRAVITY SEWER LINES SHALL BE INSTALLED IN ACCORDANCE WITH UNI-B-5. SEWERS SHALL BE LAID AT LEAST 10' HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A TEN FOOT SEPARATION, AND WHEN APPROVED BY D.E.P., DWU, AND THE ENGINEER, THE SEWER MAY BE INSTALLED CLOSER TO THE WATER MAIN, PROVIDED THAT THE WATER MAIN IS IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AT AN ELEVATION SO THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18" ABOVE THE TOP OF THE SEWER. SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18" BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10" BETWEEN ANY TWO JOINTS. ALTERNATIVELY, THE SEWER MAIN MAY BE PLACED IN A SLEEVE OR ENCASED IN CONCRETE TO OBTAIN THE EQUIVALENT OF THE REQUIRED 11" SEPARATION. EXCAVATION OF PIPE TRENCHES SHALL CONFORM TO SECTION 2 OF THESE SPECIFICATIONS.			3-5 BACKFILLING BACKFILL PIPE TRENCHES AND AROUND STRUCTURES IN ACCORDANCE WITH SECTION 2 OF THESE SPECIFICATIONS. 3-6 INSPECTION AND TESTING INSPECT PIPING TO DETERMINE WHETHER LINE DISPLACEMENT OR OTHER DAMAGE HAS OCCURRED. MAKE INSPECTIONS AFTER LINES BETWEEN MANHOLES, OR MANHOLE LOCATIONS, HAVE BEEN INSTALLED AND APPROXIMATELY 2' OF BACKFILL IS IN PLACE, AND AGAIN AT THE COMPLETION OF THE PROJECT. IF INSPECTION INDICATES POOR ALIGNMENT, DEBRIS, DIS- PLACEMENT, OR OTHER DEFECTS, CORRECT SUCH DEFECTS AND REINSPECT. LEAKAGE TESTS MAY INCLUDE APPROPRIATE WATER OR LOW PRESSURE AIR TESTING. THE LEAKAGE OUTWARD OR INWARD (EXFILTRATION OR INFILTRATION) SHALL NOT EXCEED 50 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM. AN EXFILTRATION OR INFILTRATION TEST AS APPROPRIATE SHALL BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2'. THE WATER TEST, IF USED, SHALL BE RUN CONTINUOUSLY FOR A PERIOD OF NOT LESS THAN 3 HOURS, WITH WEIR READING TAKEN AT 20 MINUTE INTERVALS. THE AIR TEST, IF USED, SHALL, AS A MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM F1417-92 (1999) "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING A LOW-PRESSURE AIR TEST". ALL TEST TIMES SHALL BE CALCULATED USING RAMSEIER'S EQUATION $T = 0.085 (DK/Q)$ WHERE T = SHORTEST TIME, IN SECONDS ALLOWED FOR THE AIR PRESSURE TO DROP 1.0 PSIG K = 0.000419 DL, BUT NOT LESS THAN 1.0 Q = 0.015 CUBIC FEET/MINUTE/ SQUARE FEET OF INTERNAL SURFACE D = NOMINAL PIPE DIAMETER IN INCHES L = LENGTH OF PIPE BEING TESTED IN FEET FOR MORE EFFICIENT TESTING OF LONG TEST SECTIONS AND /OR SECTIONS OF LARGER DIAMETER PIPES A TIMED PRESSURE DROP OF 0.5 PSIG MAY BE USED IN LIEU OF THE 1.0 PSIG DROP. IF 0.5 PSIG PRESSURE DROP IS USED, APPROPRIATE REQUIRED TEST TIMES SHALL BE EXACTLY HALF AS LONG AS THOSE OBTAINED USING RAMSEIER'S EQUATION FOR T CITED ABOVE. THE TESTING METHODS PROVIDED SHOULD TAKE INTO CONSIDERATION THE RANGE IN GROUNDWATER ELEVATIONS PROJECTED AND THE SITUATION DURING THE TEST. THE TEST SHALL BE MADE BY THE CONTRACTOR WITH THE UTILITY COMPANY REPRESENTATIVE BEING PRESENT TO VERIFY THE TEST ACCURACY. THE ENGINEER AND THE UTILITY COMPANY SHALL BE NOTIFIED 24 HOURS IN ADVANCE. WHERE INFILTRATION OCCURS IN EXCESS OF THE SPECIFIED AMOUNT, THE DEFECTIVE PIPE OR JOINTS SHALL BE LOCATED AND REPAIRED AT THE EXPENSE OF THE CONTRACTOR. IF THE DEFECTIVE PORTIONS CANNOT BE SO LOCATED, THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL REMOVE AND RECONSTRUCT AS MUCH OF THE ORIGINAL WORK AS NECESSARY TO OBTAIN A SEWER SYSTEM WITHIN THE ALLOWABLE INFILTRATION LIMITS. THE SEWER OR SEWERS SHALL BE PUMPED OUT AND NORMAL INFILTRATION CONDITIONS PREVAIL BEFORE TESTING SHALL BE STARTED. ALL SEWER MAINS AND SERVICES SHALL BE PRESSURE TESTED AS SPECIFIED IN THIS SECTION OR AS REQUIRED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE UTILITY COMPANY. ALL SANITARY SEWER MAINS AND MANHOLES MUST BE VIDEO TAPED AND PROVIDED TO THE UTILITY COMPANY BEFORE ACCEPTED FOR SERVICE. 3-7 AS-BUILT CERTIFICATION IN ACCORDANCE WITH THE RULES OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, CHAPTER 62-604, THE ENGINEER OF RECORD WILL BE RESPONSIBLE FOR OBSERVATION OF THE CONSTRUCTION OF THE SANITARY SEWER COLLECTION SYSTEM TO ASSURE COMPLIANCE WITH THE PLANS AND SPECIFICATIONS, AND SAID ENGINEER WILL REPORT TO DEP UPON COMPLETION OF THE CONSTRUCTION BEFORE THE SYSTEM CAN BE PLACED INTO OPERATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 24 HOURS BEFORE BEGINNING CONSTRUCTION ON THE SEWER COLLECTION SYSTEM. 3-8 AS-BUILT DRAWINGS THE CONTRACTOR SHALL FURNISH THE ENGINEER AT THE CLOSE OF THE PROJECT, WITH THREE (3) SETS OF MARKED-UP CONSTRUCTION PLANS DEPICTING AS-BUILT CONDITIONS OF THE SANITARY SEWER SYSTEM. THE AS-BUILT PLANS SHALL SHOW THE LOCATION OF SANITARY SEWER SERVICES AND THE LOCATION AND ELEVATION OF SANITARY SEWER MANHOLES. ELEVATIONS SHALL BE RELATIVE TO PROJECT DATUM. ENGINEERING APPROVAL OF THE SANITARY SEWER SYSTEM WILL NOT BE MADE UNTIL ACCURATE AND LEGIBLE AS-BUILT PLANS ARE RECEIVED. THE UTILITY COMPANY REQUIRES AN ELECTRONIC CAD FILE IN ADDITION TO CERTIFIED RECORD DRAWINGS. END OF SECTION																										
E										SHORE AT TARPON BEACH	SEAL																						
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C										<table><tr><td>NO.</td><td>DATE</td><td>APPR.</td><td>REVISION / ACTION TAKEN</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>								NO.	DATE	APPR.	REVISION / ACTION TAKEN												
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A										<table><tr><td>PROJECT NO:</td><td>12107.01</td></tr><tr><td>DESIGNED BY:</td><td>RAS</td></tr><tr><td>DRAWN BY:</td><td>JJ</td></tr><tr><td>CHECK BY:</td><td>RLW</td></tr><tr><td>PROJECT MGR:</td><td>JOP</td></tr><tr><td>DATE:</td><td>FEBRUARY 2024</td></tr></table>			PROJECT NO:	12107.01	DESIGNED BY:	RAS	DRAWN BY:	JJ	CHECK BY:	RLW	PROJECT MGR:	JOP	DATE:	FEBRUARY 2024	<table><tr><td colspan="2">This drawing is the property of Baskerville-Donovan, Inc. and is not to be reproduced in whole or in part without the written consent of Baskerville-Donovan, Inc. to be obtained upon request.</td></tr><tr><td colspan="2">NOT RELEASED FOR CONSTRUCTION</td></tr></table>				This drawing is the property of Baskerville-Donovan, Inc. and is not to be reproduced in whole or in part without the written consent of Baskerville-Donovan, Inc. to be obtained upon request.		NOT RELEASED FOR CONSTRUCTION		
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	MISCELLANEOUS WATER AND SANITARY SEWER SPECIFICATIONS									 DESTIN WATER USERS, INC. 14 INDUSTRIAL PARK LANE, DESTIN, FL 32541 (850) 837-6146	CU-502																						

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

Other Pipe	Horizontal Separation	Crossings (1)	Joint Spacing @ Crossings (Full Joint Centered)
Storm Sewer, Stormwater Force Main, Reclaimed Water (2)			
Vacuum Sanitary Sewer			
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water (4)			
On-Site Sewage Treatment & Disposal System	10 ft. minimum	---	---

- (1) Water main should cross above other pipe. When water main must be below other pipe, the minimum separation is 12 inches.
(2) Reclaimed water regulated under Part III of Chapter 62-610, F.A.C.
(3) 3 ft. for gravity sanitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer.
(4) Reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

Disclaimer – This document is provided for your convenience only. Please refer to F.A.C. Rule 62-555.314 for additional construction requirements.

DEP WATER SEPARATION DETAILS
N.T.S.



DESTIN WATER USERS, INC.
14 INDUSTRIAL PARK LANE
DESTIN, FL 32541
(850) 837-5145

CU-506

MISCELLANEOUS
WATER AND SANITARY
SEWER DETAILS

PROJECT NO:
12107.01
DESIGNED BY: RAS
DRAWN BY: JJ
CHKD BY: RLW
PROJ. MGR: JCP
DATE: FEBRUARY 2024

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CONSTRUCTION

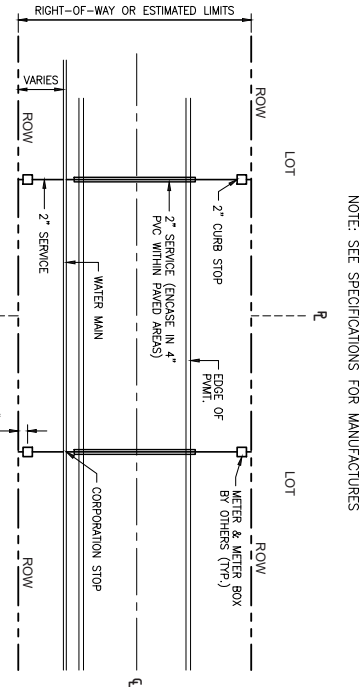
NO.	DATE	APPR	REVISION / ACTION TAKEN

SHORE AT
TARPOON BEACH

SEAL

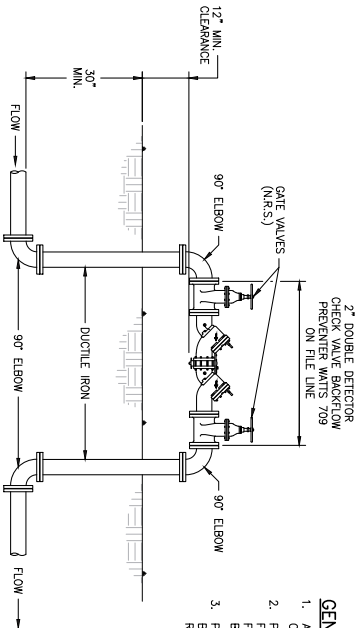


BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1405 PANAMA CITY BEACH PARKWAY, SUITE 10
PANAMA CITY BEACH, FL 32413 (850) 234-1100
ENGINEERING BUSINESS: 850-260-0100
PENINSULA • PANAMA CITY BEACH • TALLAHASSEE • MOBILE



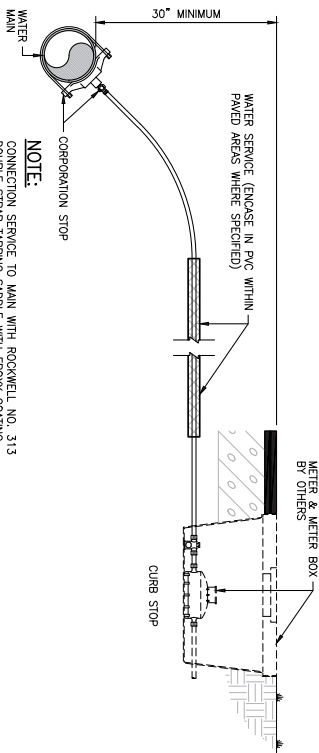
SINGLE WATER SERVICE CONNECTION PLAN

N.T.S.



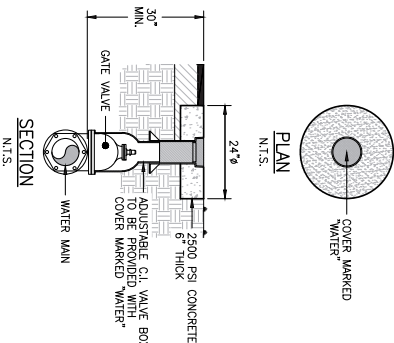
WATER BACKFLOW PREVENTER DETAIL

N.T.S.



WATER SERVICE CONNECTION DETAIL

N.T.S.



WATER GATE VALVE AND VALVE BOX DETAIL

N.T.S.

GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING BACTERIOLOGICAL EXAMINATIONS ON ALL NEW WATER MAINS (AS REQUIRED BY AND TO THE SATISFACTION OF) THE DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES. THESE REQUIREMENTS SHALL BE SUBMITTED TO THE DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES FOR REVIEW AND APPROVAL. THE EXAMINATION IS BY PERSONS OTHER THAN THE LOCAL HEALTH DEPARTMENT, THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERING THE RESULTS OF THE EXAMINATION TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (D.E.P.).
2. INSTALLATION OF WATER MAINS AND SERVICES SHALL COMPLY WITH ALL GOVERNING AUTHORITIES.
3. THE CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS AND REPORT ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
4. ALL PIPS SHALL BE PVC UNLESS OTHERWISE NOTED OR REQUIRED. ALL MAINS TO BE MARKED WITH NO. 14 INSULATED COPPER TRACER WIRE TO FACILITATE THEIR LOCATIONS.
5. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 36" OF COVER OVER WATER MAINS WITHIN PAVED AND UNPAVED AREAS.

NOTE: SEE SPECIFICATIONS FOR MANUFACTURES

GENERAL NOTES:

1. ALL FITTINGS SHALL BE CAST OR DUCTILE IRON.
2. PROVIDE THURST BLOCKS FOR ALL GROUND FITTINGS SET THURST BLOCK DETAIL.
3. PROVIDE SUPPORTS UNDER BACKFLOW PREVENTER AS REQUIRED.

DESTIN WATER USERS, INC.
14 INDUSTRIAL PARK LANE
DESTIN, FL 32107
(850) 857-6146

MISCELLANEOUS
WATER AND SANITARY
SEWER DETAILS

CU-509

SHORE AT
TARPOON BEACH

BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1405 PANAMA CITY BEACH PARKWAY, SUITE 10
PANAMA CITY BEACH, FL 32413 (850) 224-4100
ENGINEERING NUMBER: ES-000000
PENSACOLA • PANAMA CITY BEACH • TALLAHASSEE • MOBILE

NO.	DATE	APPR	REVISION / ACTION TAKEN

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NOT RELEASED FOR CONSTRUCTION

PROJECT NO:
12107.01

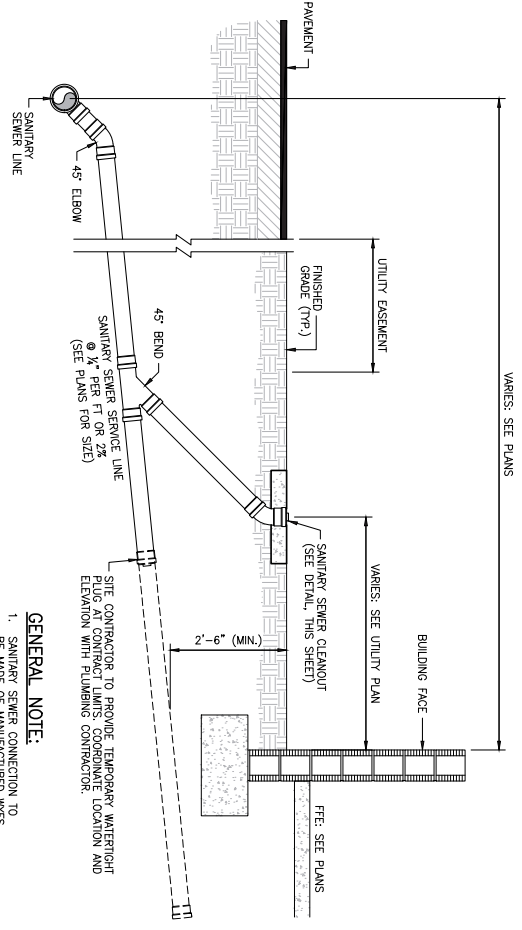
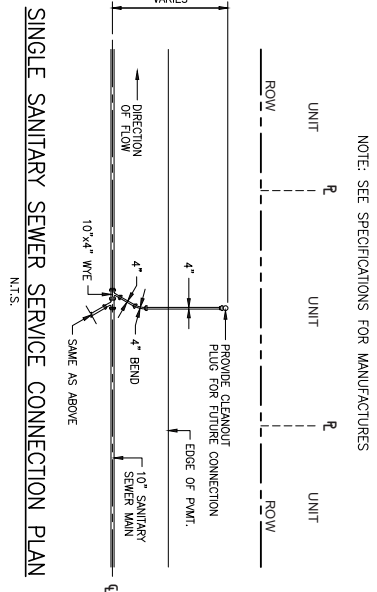
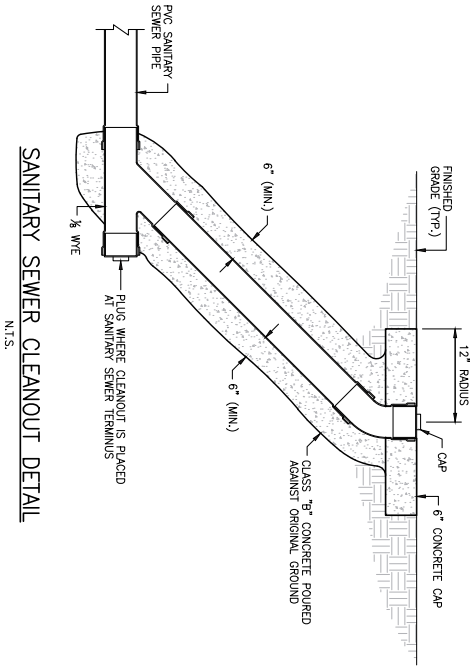
DESIGNED BY: RAS

DRAWN BY: JJ

CHKD BY: RLW

PROJ. MGR: JCP

DATE: FEBRUARY 2024



GENERAL NOTE:
1. SANITARY SEWER CONNECTION TO BE MADE OF MANUFACTURED WTS. INVERT OF CONNECTION TO BE AT ELEVATION OF TOP OF MAIN.



CU-510

MISCELLANEOUS
WATER AND SANITARY
SEWER DETAILS

PROJECT NO:
12107.01
DESIGNED BY: RAS
DRAWN BY: JJ
CHKD BY: RLW
PROJ. MGR: JCP
DATE: FEBRUARY 2024

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CONSTRUCTION

NO.	DATE	APPR	REVISION / ACTION TAKEN

SHORE AT
TARPON BEACH

SEAL

B
BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1401 PANAMA CITY BEACH PARKWAY, SUITE 10
PANAMA CITY BEACH, FL 32413 (850) 234-4100
ENGINEERING BUSINESS: 850-200-0000
PENINSULA-PANAMA CITY BEACH-TALLAHASSEE-MOBILE



HYDRA SERVICE, INC.
SPECIALIST IN FLUID MOVEMENT

WARRIOR, AL
205-647-5326

ROBERTSDALE, AL
251-947-5006

PELAHATCHIE, MS
601-854-5502

EAST, GA
706-807-2383

DEBARY, FL
407-330-3456

BRADENTON, FL
941-567-6941

QUINCY, FL
850-391-6191



BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927

1401 PANAMA CITY BEACH PARKWAY, SUITE 10
PANAMA CITY BEACH, FL 32413 (850) 230-4100
ENGINEERING NUMBER: ES-000300
PENSACOLA • PANAMA CITY BEACH • TALLAHASSEE • MOBILE

SHORE AT
TARPON BEACH

NO.	DATE	APPR	REVISION / ACTION TAKEN

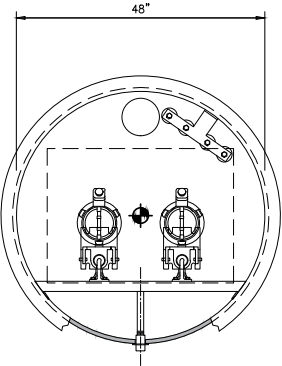
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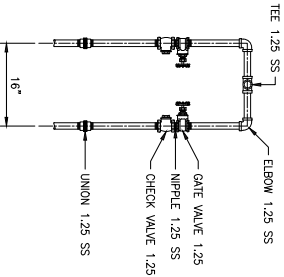
PROJECT NO:	12107.01
DESIGNED BY:	RAS
DRAWN BY:	JJ
CHKD BY:	RLW
PROJ. MGR:	JCP
DATE:	FEBRUARY 2024

MISCELLANEOUS
WATER AND SANITARY
SEWER DETAILS

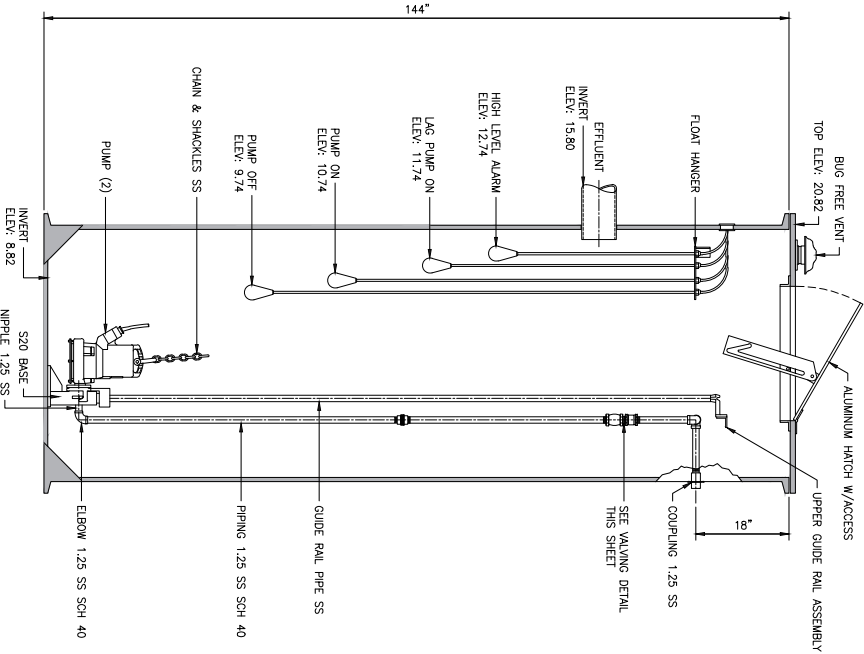
CU-512



WET WELL DETAIL
(PLAN VIEW)
N.T.S.



VALVING DETAIL
N.T.S.

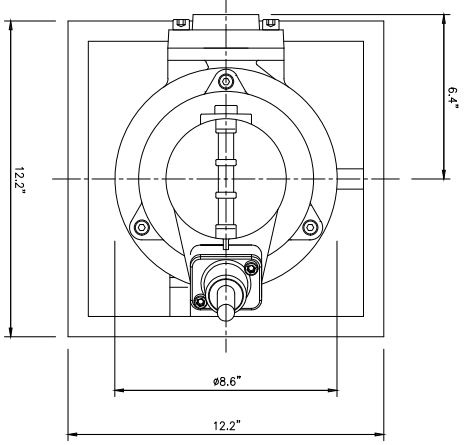


WET WELL DETAIL
(ELEVATION)
N.T.S.

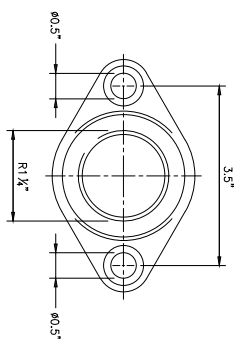
NOTE:
THE BASIS OF DESIGN FOR THE LIFT STATION IS THE HYDRA SERVICE LIFT STATION PACKAGE AS SHOWN. AN APPROVED EQUAL IS ALLOWED GIVEN THE LIFT STATION MEETS ALL CRITERIA REQUIREMENTS SPECIFIED INCLUDING SIZES, MATERIALS, ETC.

NOTE:
THE BASIS OF DESIGN FOR THE PUMPS IS THE SULZER SUBMERSIBLE GRINDER PUMP TYPE ABS PRANHA S20/2W. AN APPROVED EQUAL IS ALLOWED GIVEN THE CHOSEN PUMP MEETS THE SPECIFICATION AND PUMP PERFORMANCE CRITERIA AS REQUIRED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE OVERALL FUNCTION OF THE SYSTEM.

GRINDER PUMP DETAIL
(PLAN VIEW)
N.T.S.



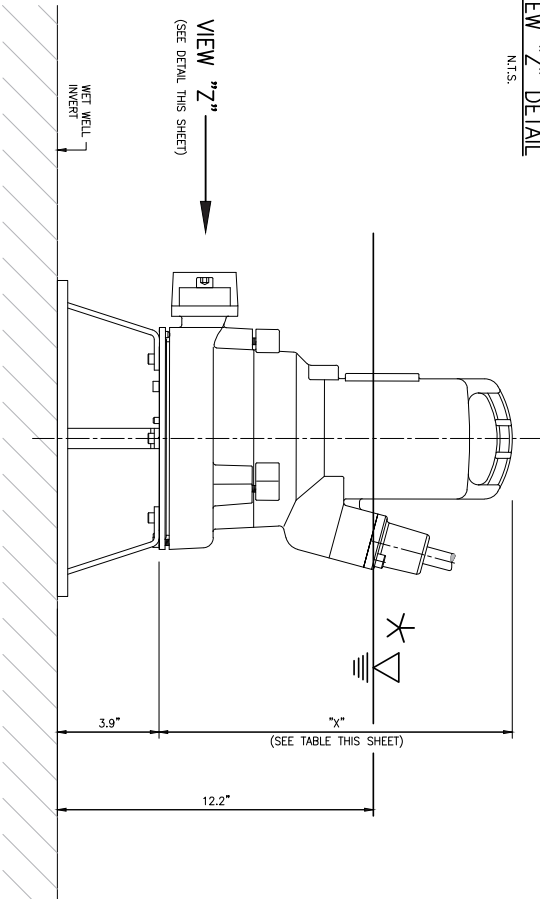
VIEW "Z" DETAIL
N.T.S.



TYPE	DIM "X"
PIR S10/4	13.6"
PIR S20/2	13.6"
PIR S30/2	14.2"

✱ LOWEST SWITCH OFF POINT FOR AUTOMATIC OPERATION

GRINDER PUMP DETAIL
(ELEVATION)
N.T.S.



SULZER

MASSBLATT S10/4 S20/2 S30/2
TRANSPORTABLE

NO. AN-M.12.46-05

CU-513

MISCELLANEOUS
WATER AND SANITARY
SEWER DETAILS

PROJECT NO.
12107.01

DESIGNED BY: RAS

DRAWN BY: JJ

CHKD BY: RLW

PROJ. MGR: JCP

DATE: FEBRUARY 2024

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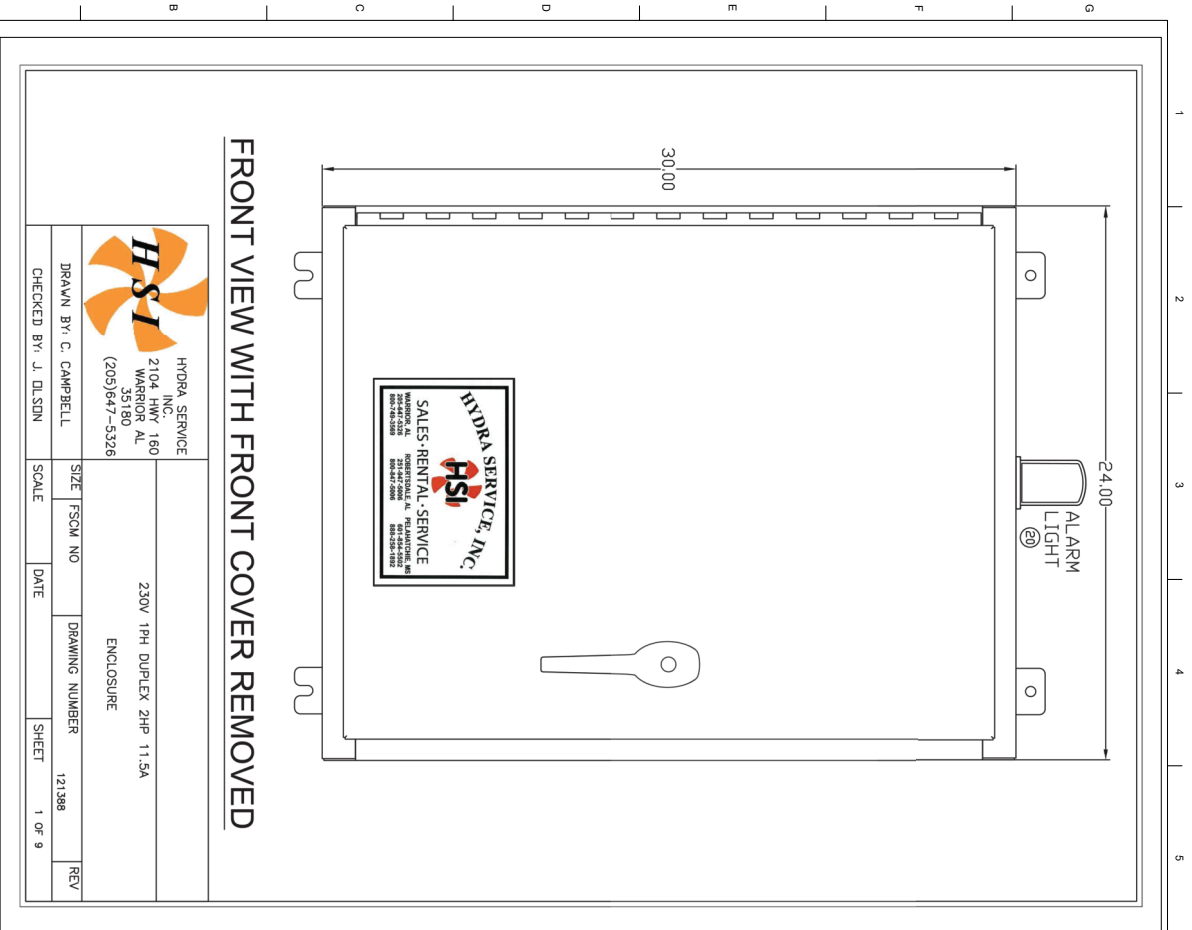
NO.	DATE	APPR	REVISION / ACTION TAKEN

SHORE AT TARPON BEACH

SEAL

BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927

1401 PANAMA CITY BEACH PARKWAY, SUITE 110
PANAMA CITY BEACH, FL 32413 (850) 230-4100
ENGINEERING NUMBER: ES-000300
PENSACOLA • PANAMA CITY BEACH • TALLAHASSEE • MOBILE



LINE	QTY	UOM	WTG	PART NUMBER	DESCRIPTION
1	1	EA		SPANS-302410-1025	30" X 24" X 10" ENCLOSURE, 304SS, NEMA 4X, W/REAR FRONT
2	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
3	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
4	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
5	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
6	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
7	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
8	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
9	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
10	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
11	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
12	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
13	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
14	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
15	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
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21	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
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96	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
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99	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM
100	1	EA		SPR-3024	27" X 21" W/REAR FRONT, ALUMINUM

NOTE:
THE BASIS OF DESIGN FOR THE 230V, 1PH DUPLEX 2HP 11.5A ELECTRICAL ENCLOSURE IS THE HYDRA SERVICE ELECTRICAL PACKAGE AS SHOWN. AN APPROVED EQUAL IS ALLOWED GIVEN THE ELECTRICAL ENCLOSURE MEETS ALL CRITERIA REQUIREMENTS AS SPECIFIED INCLUDING SIZES, MATERIALS, ETC. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE OVERALL FUNCTION OF THE SYSTEM.

CU-514

MISCELLANEOUS
WATER AND SANITARY
SEWER DETAILS

PROJECT NO:
12107.01
DESIGNED BY: RAS
DRAWN BY: JJ
CHKD BY: RLW
PROJ. MGR: JCP
DATE: FEBRUARY 2024

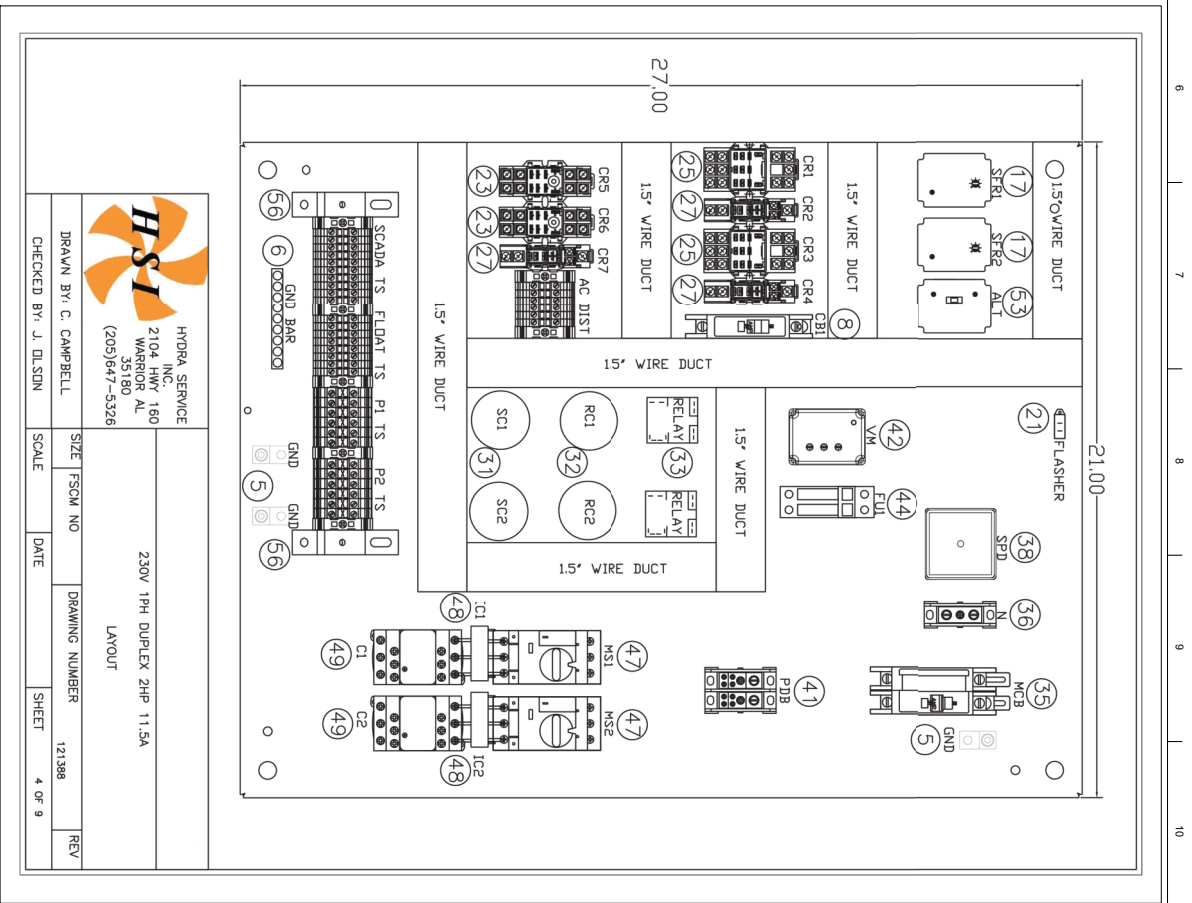
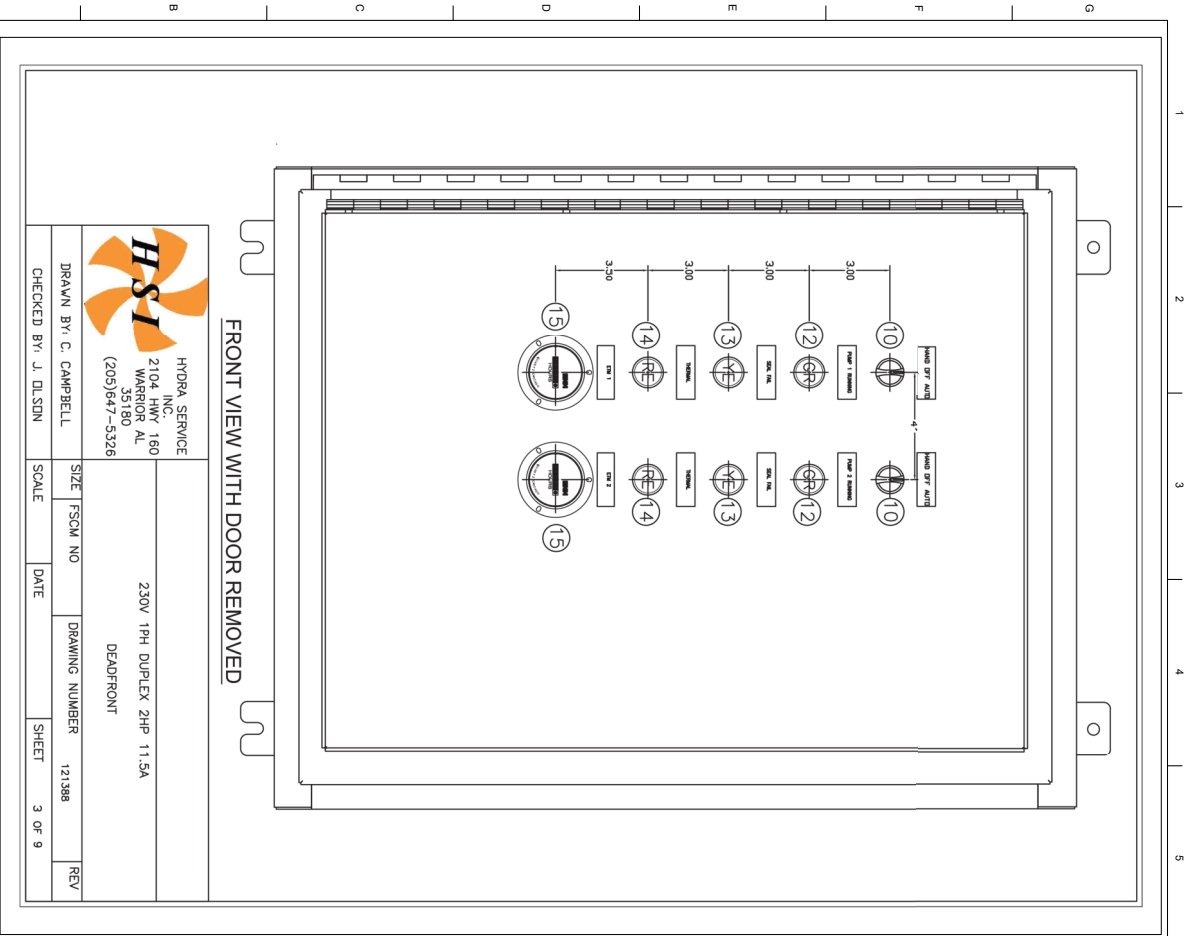
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used on any other project and is
to be returned upon request.

NOT RELEASED FOR
CONSTRUCTION

NO.	DATE	APPR	REVISION / ACTION TAKEN

SHORE AT
TARPOON BEACH

BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1405 PANAMA CITY BEACH PARKWAY, SUITE 100
PANAMA CITY BEACH, FL 32413 (850) 234-0100
PENSACOLA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE



NOTE:
THE BASIS OF DESIGN FOR THE 230V 1PH DUPLEX 2HP 11.5A ELECTRICAL ENCLOSURE IS THE HYDRA SERVICE ELECTRICAL PACKAGE AS SHOWN. AN APPROVED EQUAL IS ALLOWED GIVEN THE ELECTRICAL ENCLOSURE MEETS ALL CRITERIA REQUIREMENTS AS SPECIFIED INCLUDING SIZES, MATERIALS, ETC. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE OVERALL FUNCTION OF THE SYSTEM.

I:\121 Okaloosa County\12107.01 Tarpon Beach Park\CADD Drawings (OWS and DONS)\CU-501 - CU-518 - Misc Water and Sewer Details.dwg, Jan 29, 2024 - 2:45:17PM, Johnson

FINAL PLANS - RELEASED FOR BID

CU-515

MISCELLANEOUS
WATER AND SANITARY
SEWER DETAILS

PROJECT NO.
12107.01
DESIGNED BY: RAS
DRAWN BY: JJ
CHKD BY: RLW
PROJ. MGR: JCP
DATE: FEBRUARY 2024

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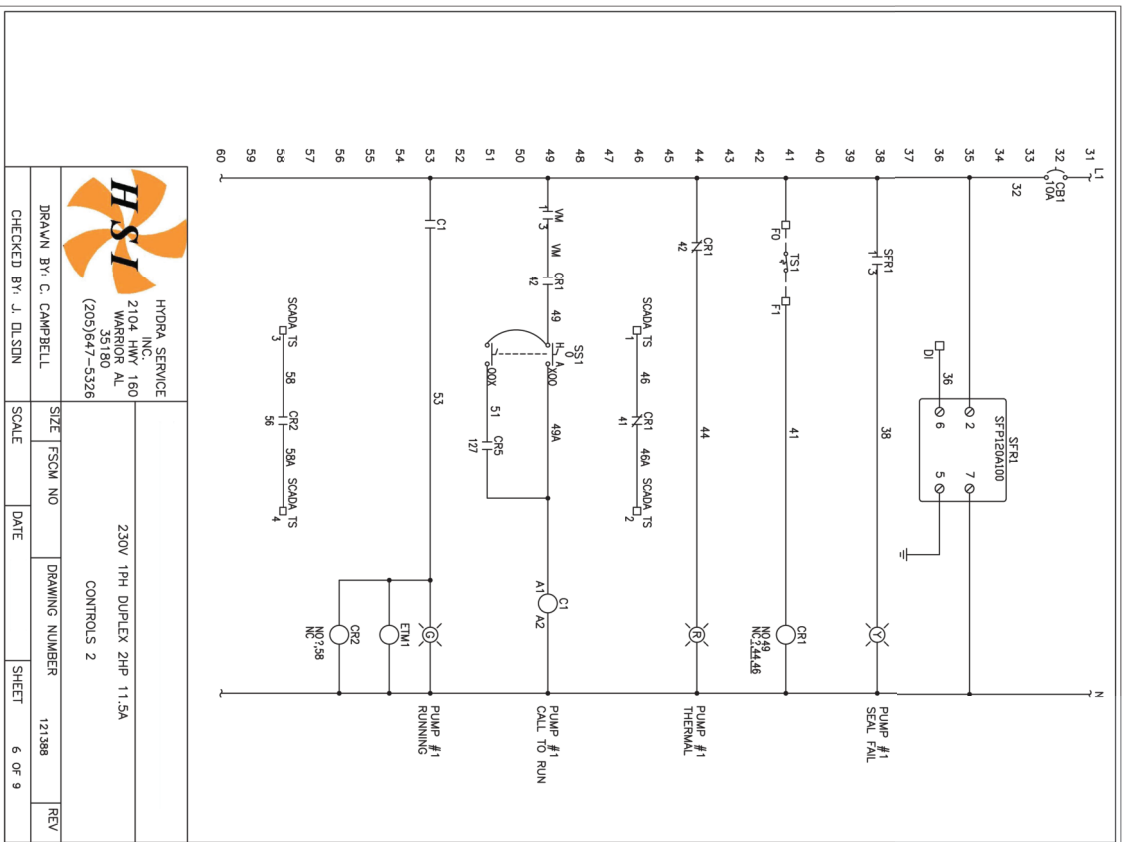
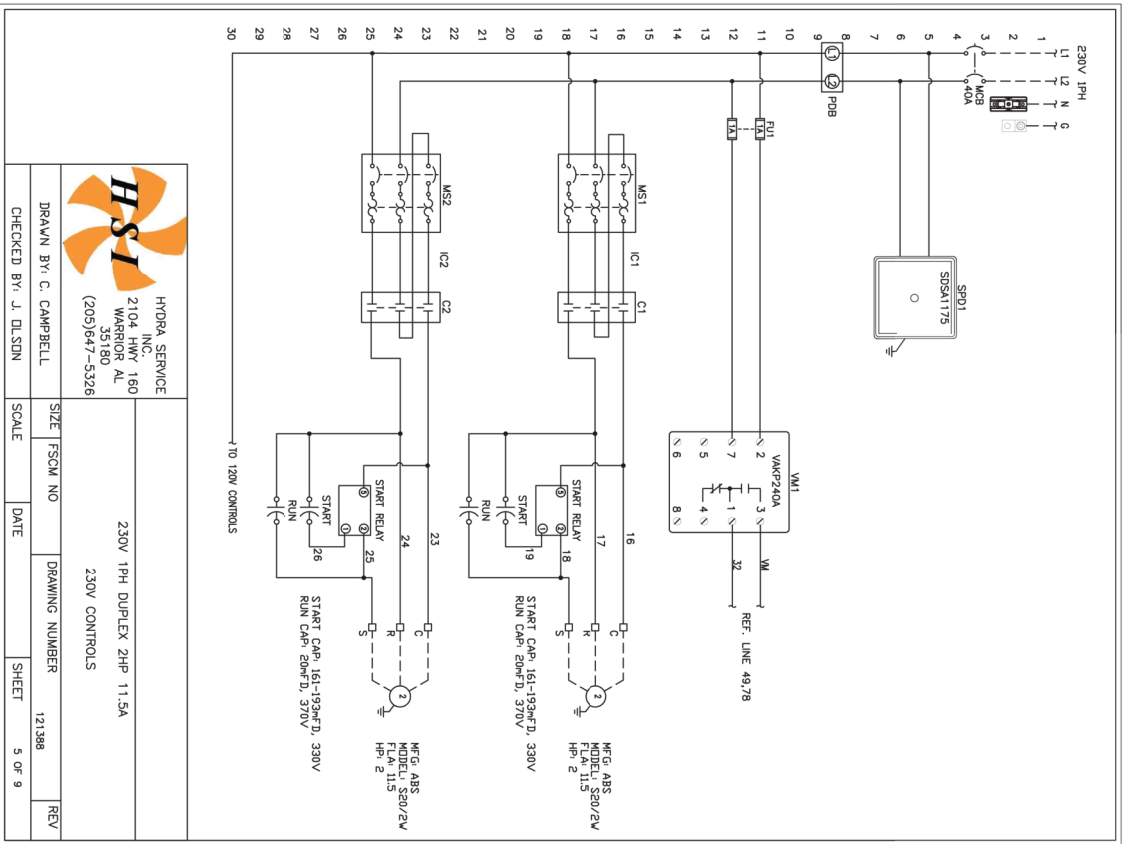
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NO.	DATE	APPR	REVISION / ACTION TAKEN

SHORE AT
TARPON BEACH

SEAL

BASKERVILLE-DONOVAN, INC.
ENGINEERING THE SOUTH SINCE 1927
1405 PANAMA CITY BEACH PARKWAY, SUITE 10
PANAMA CITY BEACH, FL 32413 (850) 234-4100
ENGINEERING LICENSE: ES-260340
PENINSULA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE



NOTE:

THE BASIS OF DESIGN FOR THE 230V 1PH DUPLEX 2HP 11.5A ELECTRICAL ENCLOSURE IS THE HYDRA SERVICE ELECTRICAL PACKAGE AS SHOWN. AN APPROVED EQUAL IS ALLOWED GIVEN THE ELECTRICAL ENCLOSURE MEETS ALL CRITERIA REQUIREMENTS AS SPECIFIED INCLUDING SIZES, MATERIALS, ETC. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE OVERALL FUNCTION OF THE SYSTEM.



HYDRA SERVICE
INC.
2104 HWY 160
WARRIOR AL
35180
(205)647-5326

230V 1PH DUPLEX 2HP 11.5A

230V CONTROLS

DRAWN BY: C. CAMPBELL	SIZE	FSJCW NO.	DRAWING NUMBER	SHEET	REV
CHECKED BY: J. DUNN	SCALE	DATE	121388	5 OF 9	



HYDRA SERVICE
INC.
2104 HWY 160
WARRIOR AL
35180
(205)647-5326

230V 1PH DUPLEX 2HP 11.5A

CONTROLS 2

DRAWN BY: C. CAMPBELL	SIZE	FSJCW NO.	DRAWING NUMBER	SHEET	REV
CHECKED BY: J. DUNN	SCALE	DATE	121388	6 OF 9	

MISCELLANEOUS
WATER AND SANITARY
SEWER DETAILS

CU-516

PROJECT NO:
12107.01
DESIGNED BY: RAS
DRAWN BY: JJ
CHKD BY: RLW
PROJ. MGR: JCP
DATE: FEBRUARY 2024

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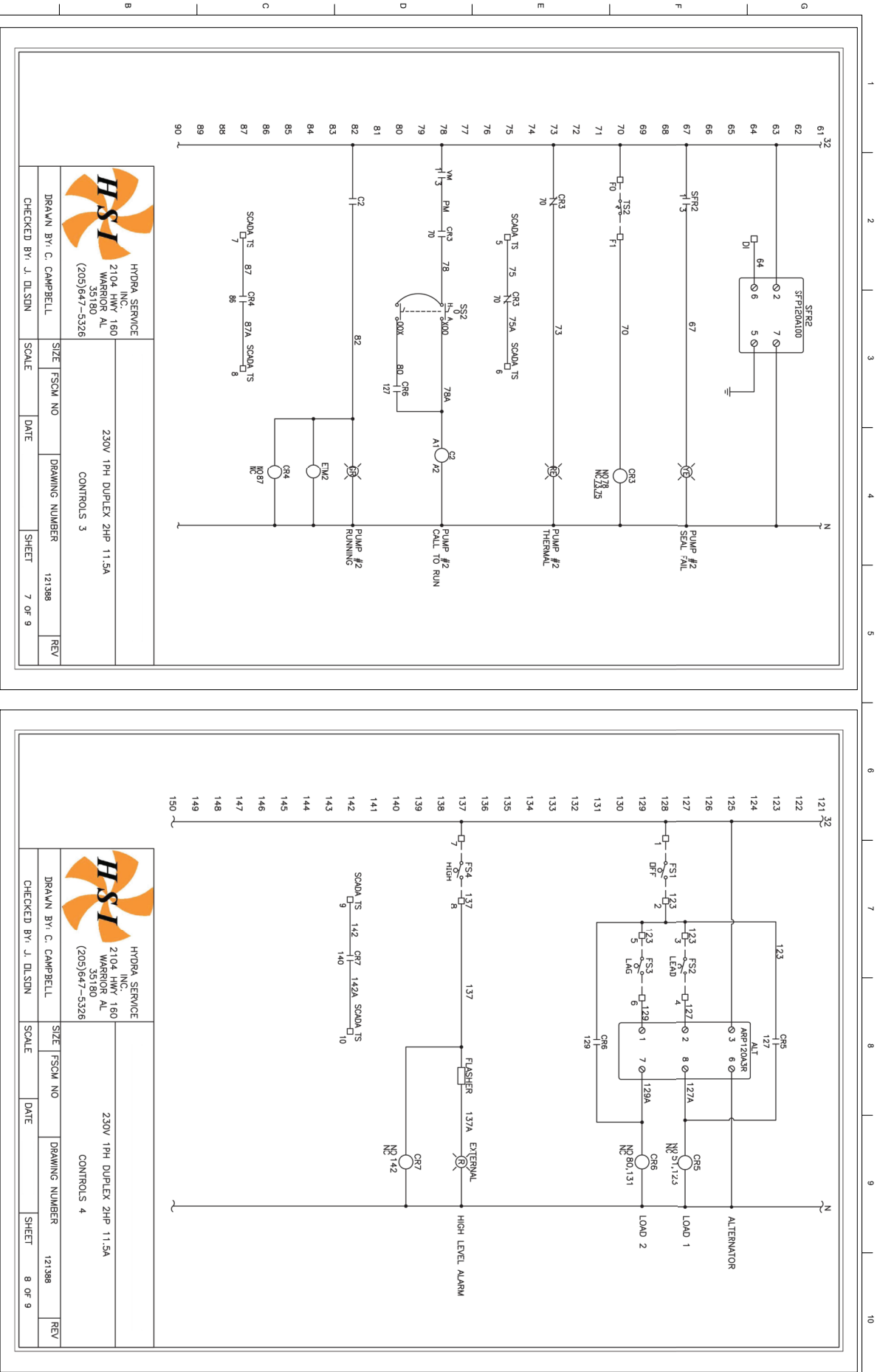
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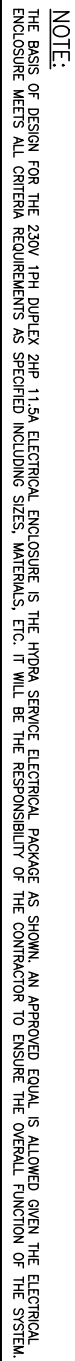
SHORE AT
TARPON BEACH

SEAL

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ENGINEERING THE SOUTH SINCE 1927
1405 PANAMA CITY BEACH PARKWAY, SUITE 10
PANAMA CITY BEACH, FL 32413 (850) 234-4100
ENGINEERING NUMBER: ES-200300
PENSACOLA - PANAMA CITY BEACH - TALLAHASSEE - MOBILE



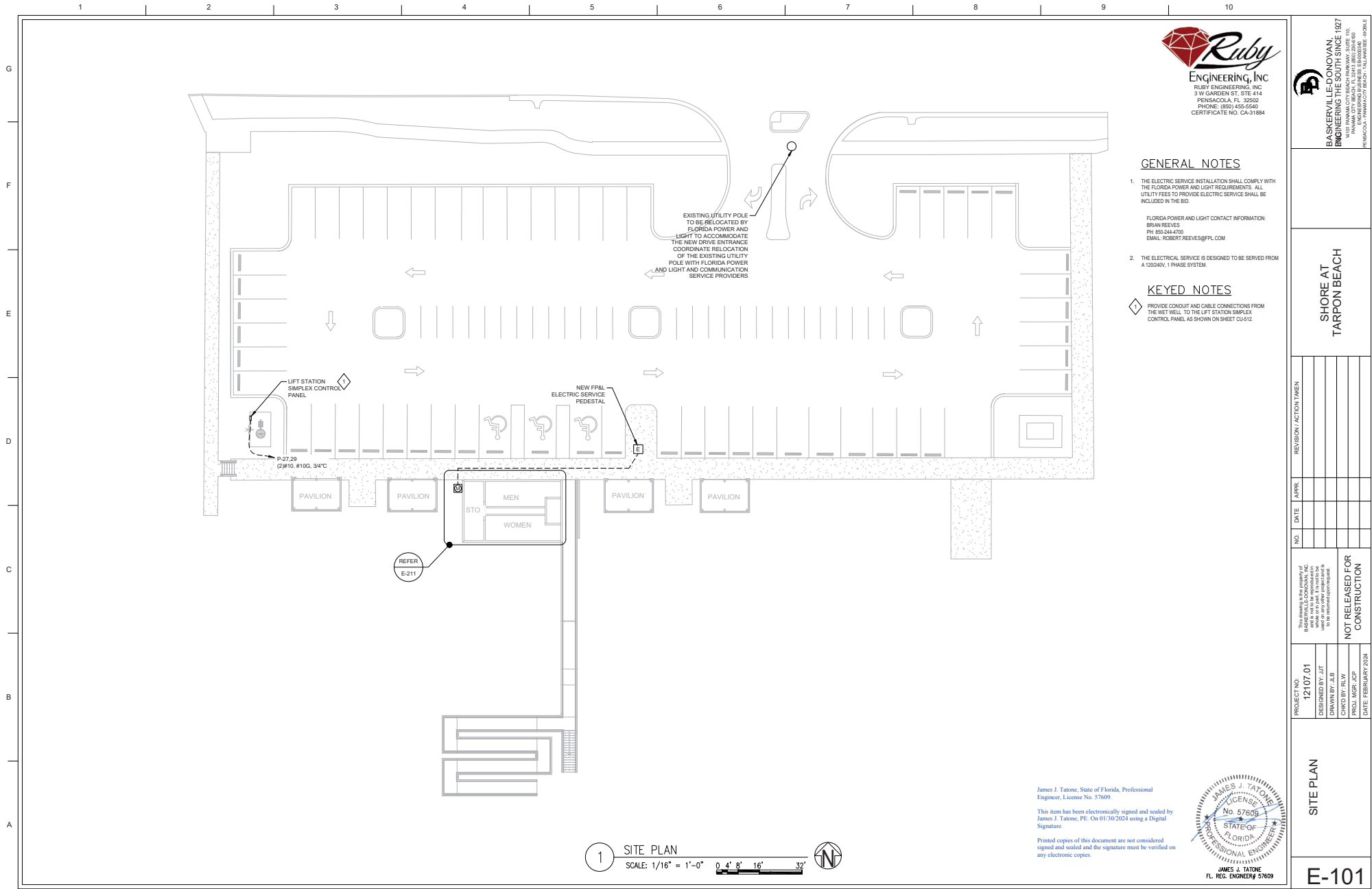
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FINAL PLANS - RELEASED FOR BID

JAMES J. TATONE
FL. REG. ENGINEER # 5760

FINAL PLANS-RELEASED FOR BID



BASKERVILLE-DOONAN
 ENGINEERING THE SOUTH SINCE 1927
 10000 PANAMA CITY BEACH BLVD. SUITE 200
 PENSACOLA, FL 32503
 PENSACOLA, FL 32503 (904) 224-4800

SHORE AT TARPON BEACH

SITE PLAN

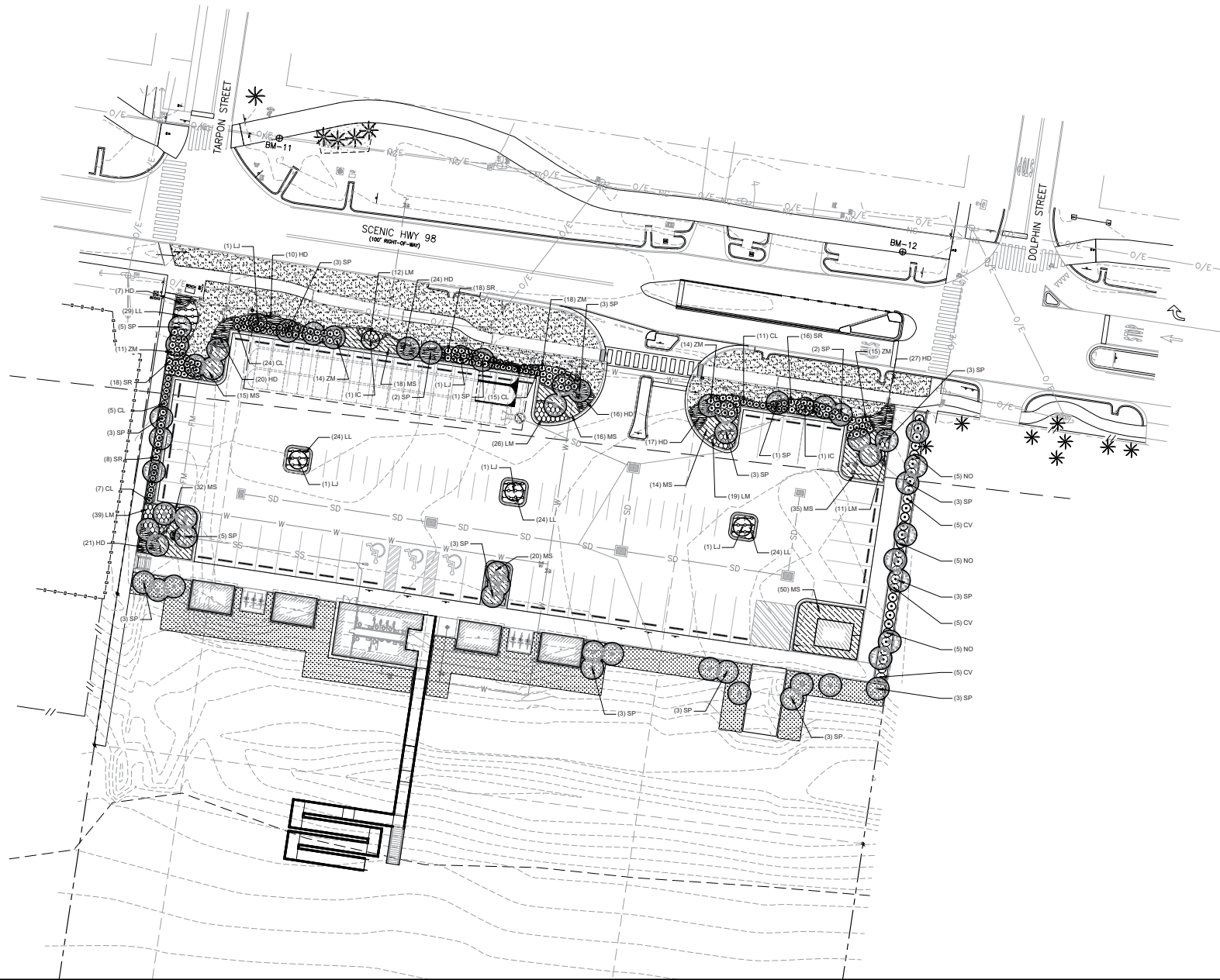
E-101

NO.	DATE	APPR.	REVISION / ACTION TAKEN

PROJECT NO. 12107.01
 DESIGNED BY: J/T
 DRAWN BY: JLB
 CHECKED BY: JLB
 PROJ. MGR: JCP
 DATE: FEBRUARY 2024

NOT RELEASED FOR CONSTRUCTION

James J. Tatone, State of Florida, Professional Engineer, License No. 57609.



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A Landscape Development Plan for
Tarpon Beach Park
Destin, Florida

[illegible]

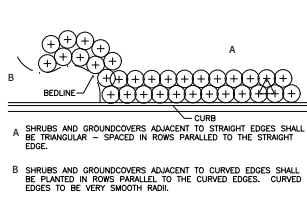
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 DM _____
 Project Manager _____
 CW _____
 Principal _____
 242066-003
 Project No. _____
 02.12.24
 Date _____
 Drawings not valid without seal
 Sheet Title _____

LANDSCAPE PLANTING PLAN

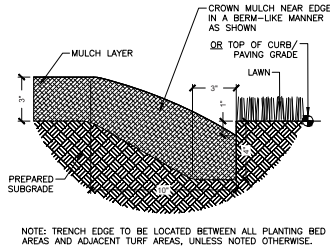
Sheet No. **LP100**

5 TYPICAL PLANT SPACING



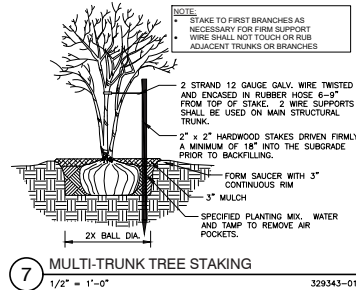
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6 TRENCH EDGE



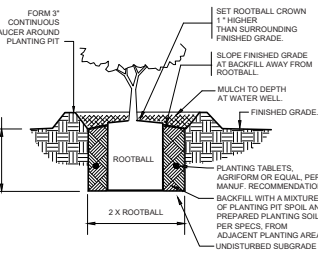
329413.23-02

7 MULTI-TRUNK TREE STAKING



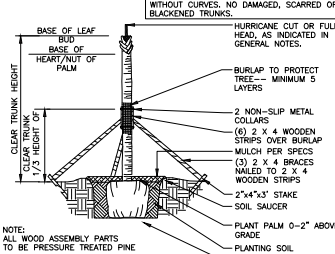
329343-01

1 SHRUB PLANTING



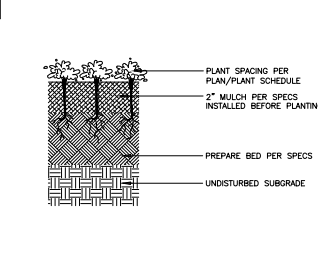
329333.13-01

2 PALM TREE PLANTING



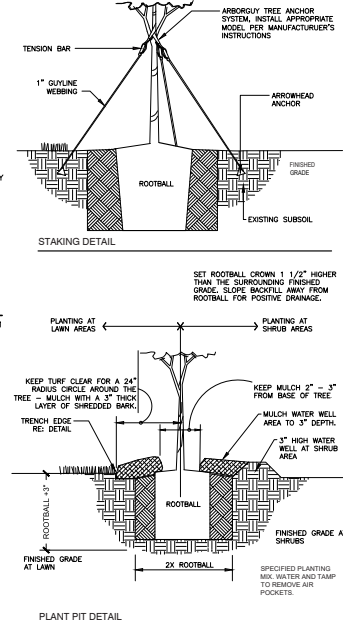
329343-02

3 GROUNDCOVER PLANTING



329313-01

4 TREE PLANTING - GUY STRAP



329343.26-02

PLANT SCHEDULE						
SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	HT
TREES						
	IC	2	ILEX CASSINE / DAHOON HOLLY	3 GAL	2.5\"CAL	10'
	LJ	5	LIGUSTRUM JAPONICUM / WAX LEAF LIGUSTRUM FULL TO GROUND	3 GAL	2.5\"CAL	10'
PALM TREES						
	SP	55	SABAL PALMETTO / SABAL PALM CLEAR-TRUNK HEIGHT NOTED	FG	2.5\"CAL	14-16' H
SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT	HT	W
SHRUBS						
	CV	15	CALLISTEMON VIMINALIS 'LIGHT SHOW' / LIGHT SHOW RED BOTTLEBRUSH	3 GAL		48\"o.c.
	CL	62	CALLISTEMON VIMINALIS 'LITTLE JOHN' / LITTLE JOHN WEEPING BOTTLEBRUSH	3 GAL		36\"o.c.
	NO	15	NERIUM OLEANDER 'HARDY RED' / HARDY RED OLEANDER	3 GAL		48\"o.c.
	SR	60	SERENOA REPENS / SAW PALMETTO	3 GAL		36\"o.c.
	ZM	72	ZAMIA FLORIDANA / COONTIE	3 GAL		36\"o.c.
SHRUB AREAS						
	LL	101	LOMANDRA LONGIFOLIA 'BREEZE' / BREEZE GRASS	3 GAL		24\"o.c.
	MS	200	MISCANTHUS SINENSIS 'ADAGIO' / ADAGIO MAIDEN GRASS	3 GAL		36\"o.c.
SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT	HT	SPACING
GROUND COVERS						
	HD	142	HELIANTHUS DEBILIS / DUNE SUNFLOWER	1 GAL		24\"o.c.
	LM	107	LANTANA MONTEVIDENSIS / PURPLE TRAILING LANTANA	1 GAL		24\"o.c.
	DM	1,141	NATIVE DUNE MIX / DUNE MIX	2\" PLUG		24\"o.c.
SOD/SEED						
	SOD	5,264 SF	CYNODON DACTYLON 'TIFWAY 419' / TIFWAY 419 BERMUDA GRASS	SOD		

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A Landscape Development Plan for
Tarpon Beach Park
Destin, Florida

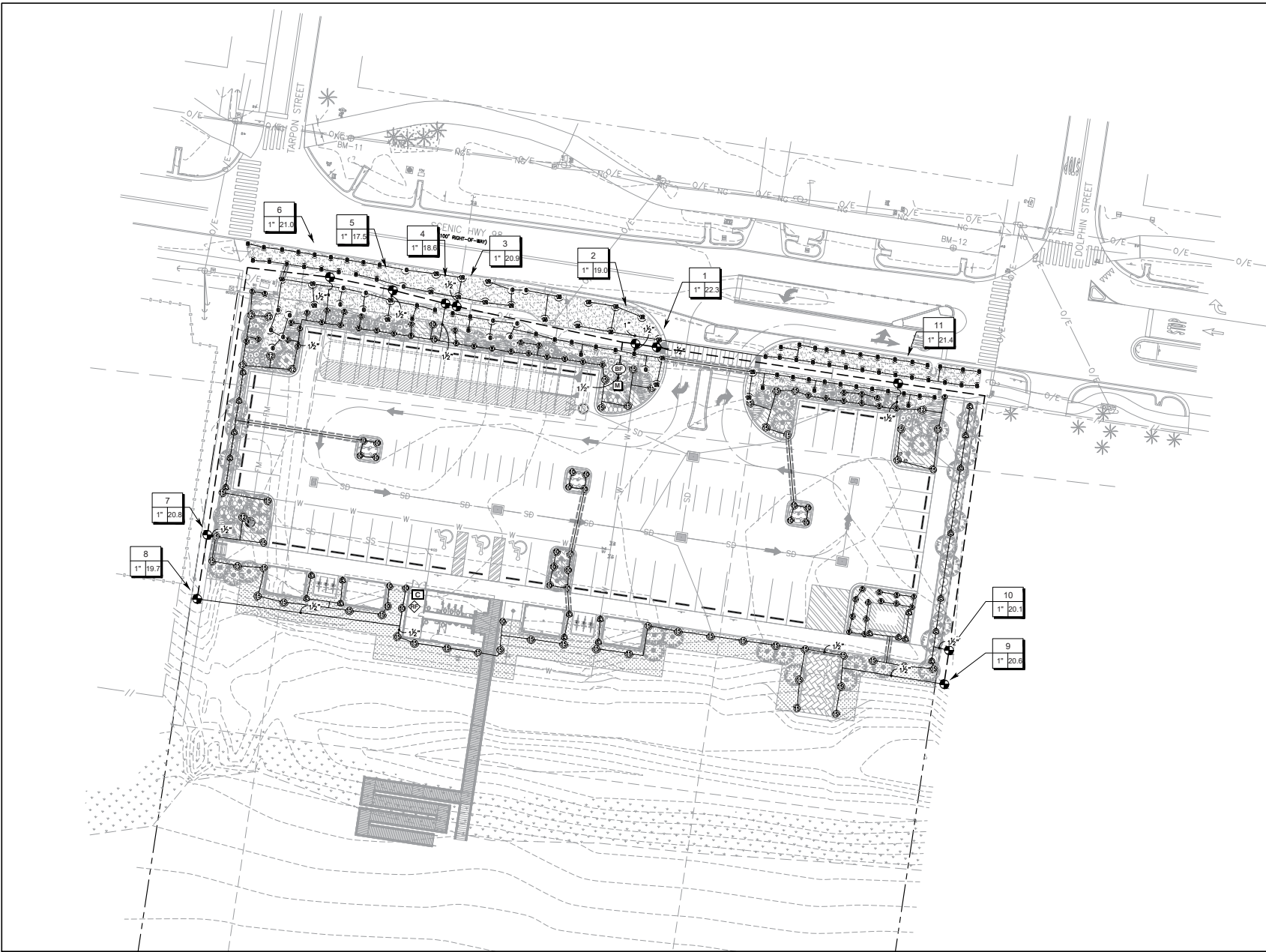
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No.	Date	Revisions / Submissions
04.03.24		100% CONSTRUCTION SET

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CW	
Principal	
242066-003	
Project No.	
02.12.24	
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LANDSCAPE
PLANTING DETAILS

Sheet No.
LP500



1 LANDSCAPE IRRIGATION PLAN
Scale: 1" = 20'

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land planning
placemaking
was
DESIGN
landscape architects
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A Landscape Development Plan for
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Revisions	
No.	Date
04.03.24	100% CONSTRUCTION SET

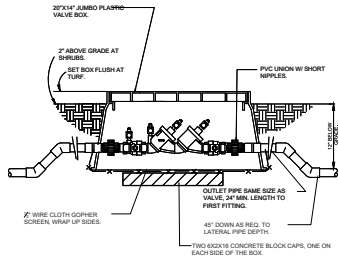
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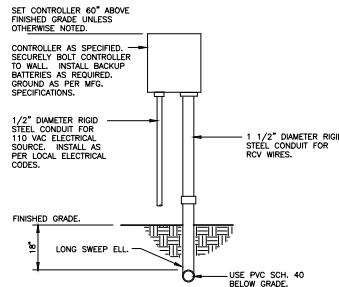
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LANDSCAPE
IRRIGATION PLAN

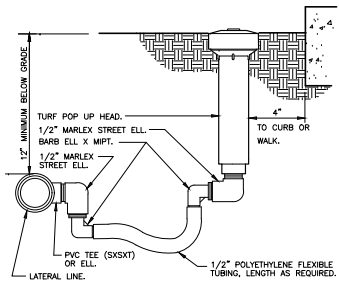
Sheet No.
LI100



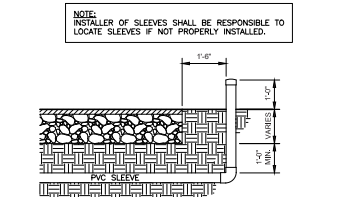
7 DUAL CHECK VALVE IN BOX
1/2" = 1'-0"



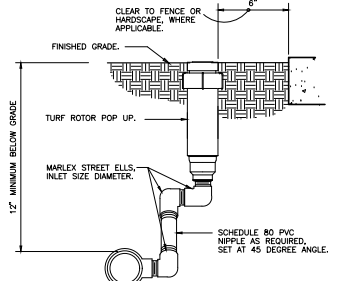
4 WALL MOUNT CONTROLLER
1" = 1'-0"



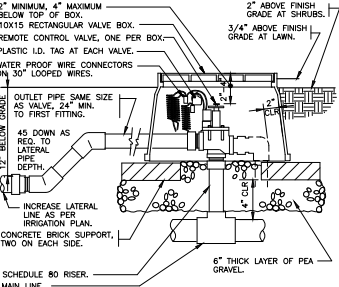
1 TURF SPRAY FLEX ASSEMBLY
3" = 1'-0"



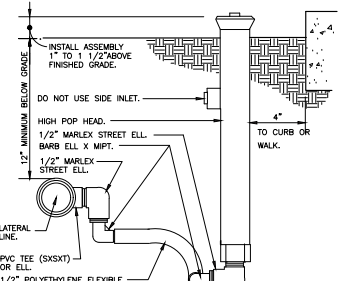
5 SLEEVING DETAIL
1/2" = 1'-0"



2 TURF ROTOR MARLEX ASSEMBLY
3" = 1'-0"



6 ELECTRIC REMOTE CONTROL VALVE
1 1/2" = 1'-0"



3 SHRUB SPRAY HIGHPOP W/ FLEX ASSEMBLY
3" = 1'-0"

IRRIGATION SCHEDULE			
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
	RAIN BIRD 1806-SAM-PRS 8 SERIES MPR	71	30
	RAIN BIRD 1806-SAM-PRS 10 SERIES MPR	18	30
	RAIN BIRD 1806-SAM-PRS 12 SERIES MPR	16	30
	RAIN BIRD 1806-SAM-PRS 15 SERIES MPR	8	30
	RAIN BIRD 1812-SAM-PRS 8 SERIES MPR	54	30
	RAIN BIRD 1812-SAM-PRS 10 SERIES MPR	25	30
	RAIN BIRD 1812-SAM-PRS 12 SERIES MPR	7	30
	RAIN BIRD 1812-SAM-PRS 15 SERIES MPR	49	30
	RAIN BIRD PGA ANGLE 1" 1IN, 1-1/2IN, 2IN, ELECTRIC REMOTE CONTROL VALVE, ANGLE.	11	
	APOLLO VALVES 4N1964AF 1-1/4" DUAL CHECK VALVE BACKFLOW PREVENTER, INLET SIZE 1-1/4", UNION END BALL VALVES, SAE TEST COCKS	1	
	RAIN BIRD ESPLOM2 12 STATION TRADITIONALLY WIRED, COMMERCIAL CONTROLLER, INDOOR/OUTDOOR, PLASTIC WALL-MOUNT ENCLOSURE.	1	
	RAIN BIRD WR2-RFS WIRELESS RAIN FREEZE SENSOR.	1	
	WATER METER 3/4" BASIS OF DESIGN: 30 GPM @ 60 PSI, CONTRACTOR TO VERIFY.	1	
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21 1" ONLY LATERAL TRANSITION PIPE SIZES 1 1/4" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 1" IN SIZE.	2,809 L.F.	
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21 1 1/2" ONLY LATERAL TRANSITION PIPE SIZES 1 1/4" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 1" IN SIZE.	265.6 L.F.	
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21 1 1/2"	645.4 L.F.	
	PIPE SLEEVE: PVC SCHEDULE 40	211.1 L.F.	
	Valve Control		
	Valve Number		
	Valve Flow		
	Valve Size		

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A Landscape Development Plan for
Tarpon Beach Park
Destin, Florida

Revisions		
No.	Date	Revisions / Submissions
04.03.24	1005	CONSTRUCTION SET

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Project No.	02.12.24
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**LANDSCAPE
IRRIGATION DETAILS**

Sheet No. **LI500**

CITY OF DESTIN



AGENDA ITEM

COUNCIL MEETING DATE: June 3, 2024

TYPE OF AGENDA ITEM: City Manager Report

AGENDA OUTLINE NUMBER: 4.K.

TO: City Council

THRU: Louis Zunguze, City Manager
Kimberly Kopp, City Attorney

FROM: Michael Burgess, Public Services Director
Krystal Strickland, Finance Director

DATE: 05/28/2024

SUBJECT: Median & Grounds Maintenance - Draft RFB for Council consideration/comment

I. BACKGROUND: The City has contracted with several landscaping companies to perform median maintenance services in the past. Due to the quality of work received historically, the City Council asked staff to prepare and advertise a new Request for Bids for these services.

At the May 20 meeting, Council requested that this item be brought back with language concerning any potential bidder's failure to perform and the consequences thereof.

II. DISCUSSION: A revised/draft scope of services is presented as ATT1 covering the following areas:

Project Services

1. Mowing and Litter Pickup
2. Hardline Edging
3. Bed Edging
4. Application of Chemicals (fertilizer, weed control, pest control)
5. Irrigation System Inspection and Maintenance
6. Shrub/groundcover trimming, per FDOT standards
6. Tree Trimming along identified project areas, per FDOT standards
7. Application of Pine Straw

Project Locations

Zone 1: US98 (East Pass bridge to Airport Road), will return to City for maintenance in February 2025

Zone 2: US98 (Airport Road to Matthew Blvd)

Zone 3: US98 (Matthew Blvd to Kel-Wen Circle)

Zone 4: US98 (Kel-Wen Circle to Walton County Line)
Zone 5: Mountain Drive (Stahlman Ave to Benning Drive)
Zone 6: Main Street (US98 to median in front of the American Legion)
Zone 7: Legion Drive (Beach Drive to Main Street)
Zone 8: Airport Road (Main Street to US98)
Zone 9: Scenic Highway 98 (Matthew Blvd to Walton County Line)
Zone 10: Commons Drive (Airport Road to Indian Bayou Trail)
Zone 11: Mattie Kelly Arts Property (4323 Commons Drive W)
Zone 12: City Hall (4200 Indian Bayou Trail), City Hall Annex (4100 Indian Bayou Trail),
and Destin History & Fishing Museum (108 Stahlman Ave)
Zone 13: Destin Memorial Cemetery
Zone 14: Destin Public Library (150 Sibert Ave)
Zone 15: Marler Parking Lot (285 Harbor Blvd)

A. Link to Strategic Goals / Objectives: I. Financially Sound City providing Service Excellence

II. Enhanced Quality of Life and Safety for Families

III. Economic Development and Revitalization

IV. Effective, Efficient, and Aesthetically Pleasing Infrastructure

V. Improve Mobility and Connectivity

VI. A Green and Sustainable Environment

B. Effect on Budget (EOB): Issuance of an RFB does not require the City to issue a contract. The effect on budget will be determined when the City compares bid responses to estimates to take the work in-house.

C. Level of Service (LOS): Improved aesthetics along major road corridors and at City owned facilities.

D. Legislative Sponsor:

III. CONCLUSION: The City is in need of a reliable source to provide these services. The FDOT through their vendor, Webber Infrastructure (formerly Ferrovial) partially reimburses the City for these services along the US98 corridor.

IV. RECOMMENDED MOTION: I move that the City Manager be authorized to advertise the attached RFB, Miscellaneous Median Maintenance Services, and once a vendor is selected by the Bid Committee, to bring back the recommended vendor for approval.

ALTERNATE MOTION: I move that the City Manager be authorized to advertise the attached RFB, Miscellaneous Median and Grounds Maintenance with the following changes (TDB by Council), and once a vendor is selected by the Bid Committee, to bring back the recommended vendor for approval and award of a continuing services contract.

Attachments:

1. RFB 24-xx-PW Median and Grounds Maintenance Services for 060324 CC meeting

CITY OF DESTIN, FLORIDA

REQUEST FOR BIDS (RFB) NO. 24-xx-PW

**MISCELLANEOUS RIGHT OF WAY AND GROUNDS MAINTENANCE
CONTINUING SERVICES CONTRACT**



City of Destin, Florida
June 3, 2024

Louis Zunguze
City Manager
Phone (850) 837-4242
4200 Indian Bayou Trail
Destin, Florida 32541

Initials of Bidder: _____

Bid Checklist

The following items must be provided in order for your bid to be considered responsive

- 1. Completed bid form (Exhibit A)**
- 2. Statement of Qualifications, Experience & Availability (narrative)**
- 3. Proof of required Workman's Compensation Insurance documents**
- 4. Completed W-9 [available at: <http://www.irs.gov/pub/irs-pdf/fw9.pdf>]**
- 5. Bid Packet initialed on ALL pages.**
- 6. Proof of adequate liability insurance**
- 7. Copy of State license (if required for job)**
- 8. Copy of City license (if business office is located in Destin)**
- 9. Completed Public Entity Crimes Form (Exhibit B)**
- 10. Completed Drug Free Form (Exhibit C)**
- 11. Addenda (if applicable)**
- 12. Three References - Minimum**
- 13. Other documents as requested in bid package**

Initials of Bidder: _____

NOTICE TO BIDDERS

The City of Destin, Florida, is currently receiving sealed competitive Bids for a Miscellaneous Right-of-Way and Grounds Maintenance Continuing Services Contract for specified City-owned/controlled properties for one year with the option for four additional one-year renewals, not to exceed five years. The Scope of Work will include, but not be limited to miscellaneous right of way and grounds maintenance services for City properties to include: providing all tools, machines, equipment, labor and incidentals necessary to complete the work. The successful Bidder shall be required to supply the City with copies of current Liability Insurance and Workmen's Compensation coverage. Bids must be received by the City Clerk's Office at the City of Destin, 4200 Indian Bayou Trail, Destin, Florida 32541, in a sealed envelope clearly marked **"RFB No. 24-xx-PW, MISCELLANEOUS RIGHT OF WAY AND GROUNDS MAINTENANCE CONTINUING SERVICES CONTRACT"**, along with the name, return address and telephone number of the bidder, no later than 2:00 p.m. CDT, on Thursday, **TBD** at which time they will be opened and read aloud. The City reserves the right to reject any and all Bids or portions thereof, to waive minor defects and informalities in the process, to accept the Bid(s) or take any other actions deemed by the City to be in the City's best interest.

It is the responsive bidder's responsibility to read and understand the requirements of this request for bid. Responsive bidders are required to state exactly what they intend to furnish the City of Destin via this solicitation and must indicate any variances to the terms, conditions and specifications of this proposal, no matter how slight. If variations are not stated in the proposal, it shall be construed that the bid fully complies with all conditions identified.

Before submitting a bid, each responsive bidder will, at bidder's own expenses, make or obtain any additional examinations, investigations and studies, and obtain any additional information and data that may affect costs, permitting, progress, performance of furnishing of the project and that the responsive bidder's deems necessary to determine its proposal.

Responsive bidder will examine all documents included in this Request for Bid (RFB) carefully and shall make a written request to the City's authorized representative for interpretation or correction of any ambiguity, inconsistently, or error herein.

Any interpretation or correction will be issued as an Addendum by the City. Only a written interpretation or correction by Addendum shall be binding. Responsive bidders are cautioned against relying on any interpretation or correction given by any other method.

The submission of a bid shall not be deemed an agreement between the responsive bidder and the City. The bid is a contractual offer by the responsive bidder to perform services in accordance with the Bid Solicitation. The City shall not be obligated to respond to any bid submitted nor be bound in any manner by the submission.

Initials of Bidder: _____

- I. **PURPOSE:** The purpose of RFB No. 24-xx-PW is to secure sealed Bids for providing right of way and grounds maintenance services for city-owned/controlled properties.
- II. **SCOPE OF WORK:** The Scope of Work will include performance of the right of way maintenance services listed in **Exhibit A** of this document for specified City-owned/controlled properties.
- III. **BID REQUIREMENTS:** Each Bid shall indicate, in the following order, the **mandatory** information outlined below:
 - A. Completed Bid Form (Exhibit A)
 - B. Statements of Qualification, Experience and Availability (narrative)
 - C. Copies of required Insurance Documents
 - D. Each Bid shall contain evidence of proper licensing to perform required services in the State, County and City.
 - E. Each Bid shall contain a completed Public Entity Crime Form (Exhibit B)
 - F. Each Bid shall contain a completed Drug Free Workplace Certification (Exhibit C)
 - G. Other documents as required by this Bid Solicitation
 - H. Items identified on the Bid Checklist (page 2)

Failure to provide any of the above-listed mandatory information can result in the elimination of the Bid from consideration.

IV. **INSTRUCTION TO RESPONDENTS**

- A. All RFB's will be publicly opened and recorded for acknowledgement of receipt in the City Hall Boardroom on **TBD no later than 2:00 P.M. (CDT)**. All responsive bidders or their representatives are invited to be present. The City Hall Boardroom is located at Destin City Hall, 4200 Indian Bayou Trail Destin, FL 32541.
- B. Any responses received after the stated time and date will **not** be considered. It shall be the sole responsibility of the responsive bidder to have their RFB submittal **delivered to the City Clerk's Office** for receipt on or before the above stated time and date. RFB responses which arrive after the above stated deadline as a result of delay by the mail service shall not be considered, and arrangements shall be made for their return at the responsive bidder's request and expense. The City reserves the right to consider submittals that have been determined by the City to be received late due solely to mishandling by the City after receipt of the RFB and prior to the award being made.
- C. Respondents may request information regarding the RFB in writing from City Clerk Rey Bailey, clerk@cityofdestin.com. Such a request shall be received in writing at least five (5) days prior

Initials of Bidder: _____

to the submittal deadline.

- D. If any addendums are issued to this Request for Bid, the City will attempt to notify all prospective respondents. It shall be the **responsibility of each respondent, prior to submitting the RFB response**, to contact the City Clerk's Office, at (850) 837-4242 to determine if any addendum(s) were issued and to complete any addendum acknowledgements as part of their RFB response.
- E. Complete and submit all requested documentation and forms. Clearly indicate the **legal name, address and telephone number** of the responsive bidder. Responses shall be **signed** above the **typed or printed name and title** of the signer. The signer shall have the authority to bind the responsive bidder to the submitted RFB. Responsive bidders must note their Federal I.D. number (aka F.E.I.N.) on their RFB submittal.
- F. **Provide One (1) original, so designated, six (5) copies (for a total of seven (6) printed submissions)** and one electronic version on an USB drive the RFB responses. Submissions shall be portrait orientation, 8 ½" X 11" where practical and double-sided. One sheet of paper printed on both sides is considered 2 pages. **Do not use wire spiral bindings, plastic covers, or plastic binding materials for your submittals.**
- G. All expenses for making RFB submittals to the city are to be borne by the responsive bidder.
- H. Responses shall be evaluated by the Bid Committee based on all information submitted and a ranked list of responsive bidders will be submitted to the City Council for approval.
- I. The Bid Committee shall consist of City of Destin staff members.
- J. Each responsive bidder, by submission of an RFB submission, acknowledges that in the event of any legal action challenging the award of the RFB, damages (if any) shall be limited to the actual cost of the preparation of the RFB.
- K. Procurement Schedule:

Tasks	Date
RFB Advertised	TBD
Last Day for Questions to be Submitted	TBD
Due Date/Bid Opening	TBD
Tentative Date - Bid Committee Evaluation	TBD
Tentative Date - City Council Meeting	TBD
Tentative Date- Notice of Award	TBD
Tentative Date -Execution of Contract	TBD
Tentative Date- Notice to Proceed	TBD
Tentative Day 1 of Contract	October 1, 2024

V. **PROJECT CONTRACTOR REQUIREMENTS**

City of Destin is seeking an independent contractor with all applicable licenses for work on this project.

License Requirements

Initials of Bidder: _____

The responsive bidder will provide all applicable contractor licenses: include license name, license numbers and contact information. Contractor must provide business licensure information and/or certificates.

Insurance Requirements

- a. Respondents shall be required to provide proof of General Liability Insurance with a minimum liability insurance requirement of \$1,000,000 for combined single limit and Worker's Compensation Insurance in accordance with the laws of the State of Florida and in amounts sufficient to secure the benefits of the Florida Workmen's Compensation Law for all types of employees, including those of subcontractors.
- b. Respondent shall produce proof of insurance in the types and amounts required by the City, including the foregoing and any additional coverages, including Automobile Liability and or Builder's Risk Insurance, as may be defined at the time of contract. The City shall be named as an additional insured party and all binders, policies or certificates of insurance shall include a provision that such insurance coverage shall not be cancelled or amended without at least thirty days' notice to the City. All coverage shall be with carriers admitted doing business in the State of Florida. Carriers shall be A rated (or better) by AM Best Company. City reserves the right to modify its insurance requirements with 60 days' notice.

SUBMITTAL REQUIREMENTS: Bids shall be submitted as follows:

- A. Bid Form. The Bid Form contained within this RFB (**Exhibit A**) shall precede the **mandatory** information required in **Section III. Bid Requirements**. Any additional information submitted in support of the Bid shall follow the required information.
- B. Public Entity Crimes Form. Each Bid shall contain a completed Public Entity Crime Form (**Exhibit B**) pursuant to Florida Statutes, Section 287.132-133, providing that no public entity shall accept any Bid from or award any contract to, or transact any business in excess of the threshold amount for Category Two (\$25,000) for a period of thirty-six months from the date placed on the convicted vendor list.
- C. Disclosure. Each Bid is subject to the provisions of Florida Statutes, Chapter 112, providing that all Bidders must disclose with the RFB submittal the name of any officer, director, or agent who is also a public officer or an employee of the City of Destin. Further, all Bidders must disclose the name of any City officer or employee who owns, directly or indirectly, an interest of five percent or more in the Bidding firm.
- D. Joint Ventures. Firms submitting Bids as a joint venture shall submit to the City, as part of Bids, a copy of any joint venture agreement.
- E. Drug - Free Workplace Program. Preference may be given by the City of Destin to companies demonstrating a Drug-Free Workplace Program whenever two or more Bids, which are equal in respect to quality and service, are received and rated by the City.

Initials of Bidder: _____

Bidders intending to demonstrate a Drug-Free Workplace Program shall provide a certification form with the RFB submittal (**Exhibit C**).

F. **MAILING AND HAND-DELIVERY ADDRESS:**

City of Destin
ATTN: City Clerk
4200 Indian Bayou Trail
Destin, Florida 32541

G. **Notification.** Questions or requests for Bid documents, plans and specifications regarding RFB No. 24-xx-PW may be directed to the individuals below:

For Technical Questions OR
Michael Burgess, Public Works Dir.
City of Destin
4200 Indian Bayou Trail
Destin, Florida 32541
(850) 837-6869
mburgess@cityofdestin.com

For Administrative Questions
Rey Bailey, City Clerk
City of Destin
4200 Indian Bayou Trail
Destin, Florida 32541
(850) 837-4242
rbailey@cityofdestin.com

I. **Responsive Bids.** Only those Bids fulfilling all requirements outlined in this RFB will be considered.

J. **Bid Evaluations.** The Bid Committee shall evaluate each responsive Bid based on the requirements established herein and recommend the lowest bid by a qualified and responsive contractor to the City Council for award of contract(s). The Bid Committee will evaluate the Bids and quotations from Bids submitted and will ask questions of a clarifying nature, if necessary. The Bid Committee reserves the right to negotiate terms of services with the lowest responsive bidder(s) or recommend awarding the bid to a bidder who did not submit the lowest responsive bid when it serves the best interest of the City.

K. **Final Offer.** The Bid, as submitted, will be considered to be the last and final offer. The Bid shall remain binding ninety (90) calendar days after the closing date of the request.

L. **Reservation of Rights.** The City reserves the right to reject any and all Bids or portions thereof, to waive minor defects and informalities in the process, to re-advertise Bids, to accept the Bid or award multiple Bids or take any other actions deemed by the City to be in the City's best interest.

M. **Insurance.** Contractor shall, during the performance of the contract, maintain Workman's Compensation Insurance sufficient to secure benefits of the Florida Workmen's Compensation Law for all employees and any of the work sublet to any vendor or subcontractor: Comprehensive General Liability insurance in the amount of \$1,000,000 combined single limit and Vehicle Liability Insurance in the amount of \$500,000 combined single limit all with companies and in the form and amounts

Initials of Bidder: _____

acceptable to the City. If any part of the work is sublet, similar insurance shall be provided by and in behalf of any subcontractors. Contractor shall furnish the City Certificates of insurance which shall include a provision that such insurance shall not be cancelled, or coverage reduced, without at least 30 days written notice to the City. The City shall also be listed as "additionally insured" on all Certificates.

N. Public Records

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT (850) 837-4242, CITY CLERK, 4200 INDIAN BAYOU TRAIL, DESTIN, FL 32541.

The successful responsive bidder shall:

1. Keep and maintain public records required by the CITY to perform the service.
2. Upon request from the CITY'S custodian of public records, provide the CITY with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in this FS Chapter 119 or as otherwise provided by law.
3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the CONTRACTOR does not transfer the records to the public agency.
4. Upon completion of the contract, transfer, at no cost, to the CITY all public records in possession of the contractor or keep and maintain public records required by the CITY agency to perform the service. If the GROUP transfers all public records to the CITY upon completion of the contract, the CONTRACTOR shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the CONTRACTOR keeps and maintains public records upon completion of the contract, the GROUP shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the CITY, upon request from the City's custodian of public records, in a format that is compatible with the information technology systems of the CITY.

EXHIBIT A – BID FORM

PART I *Bid submitted by:*

Company: _____

Address: _____

City & State: _____ Zip Code: _____

Telephone: () _____ Fax: () _____

Number of Years in Business: _____ Email: _____

PART II *Bidding RFB No. 24-xx-PW, Miscellaneous Right-of-Way Maintenance Continuing Services Contract:*

Contractor shall provide proper signs and traffic control measures as per Florida Department of Transportation's Manual on Uniform Traffic Control Devices and the Florida Department of Transportation's Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (aka Florida Green Book), current edition.

Contractor will adhere to guidance from resources such as (but not limited to) The FDOT Turf Management Guide, Florida Highway Landscape Guide, FDOT Green Book Chapter 9-Landscape and Community Features and the Florida Green Industries Best Management Practices Guidelines.

THE FOLLOWING GUIDELINES LIST MAINTENANCE REQUIREMENTS FOR ALL LANDSCAPED AREAS:

SERVICE DESCRIPTION AND SPECIFICATIONS

I. TURF MAINTENANCE

A. LITTER REMOVAL

All areas to be maintained as part of this contract shall be policed for litter prior to mowing per the provided schedule in Exhibit A (Monday thru Friday, Saturdays are allowed if weather prevents Monday-Friday service). In addition, all litter will be removed prior to mowing.

B. MOWING

Turf shall be cut on a weekly basis at a height of 2.5-3.0 inches. No more than one third of the grass blade is to be removed when cutting. Turf grasses shall not be cut lower than 2.5 inches. Mowing is to be performed on a bi-weekly basis during the months of November, December, January and February.

Initials of Bidder: _____

Contractor shall be responsible for removing excessive grass clippings within turf or mulched bed areas.

C. EDGING

Contractor shall be responsible for edging all curbs and sidewalks (both edges) on a weekly basis and turf bed lines on bi-weekly basis with a metal blade edger. All completed edges will have a perpendicular appearance between turf/hardlines and turf/bedlines.

Blowers will be used to clean sidewalks, curbs, and streets of organic material caused by mowing and edging.

D. MONOFILAMENT TRIMMING

After each mowing operation, the Contractor shall use a weed eater or similar machine to trim grass and/or weeds that cannot be mowed by standard mowing practices to include vegetation growing in the joints of any concrete.

E. TURF FERTILIZATION

Contractor shall have the full responsibility of determining the proper formulations and rates of all fertilizers to maintain healthy vigorous turf. Contractor shall be expected to apply any minor nutrients necessary to maintain a healthy turf.

F. TURF WEED CONTROL

Weeds are to be controlled in turf areas by mechanical, physical, and/or chemical methods per the mowing schedule to ensure that all turf areas have a maintained weed free appearance. Chemical applications of weed killer shall be quarterly.

G. ANT CONTROL

Contractor shall be responsible for the control of ants throughout maintained areas. Mounds are to be removed and soil leveled to previous grade after ants have been eliminated.

H. pH ADJUSTMENT

Contractor is responsible for adjusting improper soil pHs as needed by applying up to 50 pounds per 1000 square feet of lime or up to 5 pounds of sulfur per 1000 square feet.

I. INSECT & DISEASE CONTROL

Landscape maintenance contractor shall be responsible for weekly inspections of the entire property and treatment of any insect or disease related problems, including mole crickets, armyworms and grubs.

J. WATERING

Contractor shall be responsible for damage to items to include residential and city-owned sprinkler systems, will report damaged items to the City Point of Contact in the weekly report and will be responsible for replacement of these items.

NOTE: See Section VII.

II. SHRUB AND GROUNDCOVER MAINTENANCE

A. PRUNING

All shrubs shall be hand pruned on a regular basis to remove dead and damaged wood to allow for natural development of plant material, and to create the effect intended by the City of Destin. Pruning shall be performed through the growing months to keep the plant material aesthetically pleasing and within its boundaries. If necessary, deep hand pruning and/or structural pruning should be performed annually during the dormant months (winter hard pruning). Structural pruning shall be defined as using hand pruners, hand saws, and/or loppers to prune old/dead wood and prune behind multiple breaks to maintain proper proportions, promote interior growth, and produce an aesthetically pleasing appearance. Removal of up to 50% of the height and foliage of plants may take place during this pruning if conditions present itself and the contractor has received authorization by the City. Contractor will ensure that shrubs and groundcover (flowers, herbaceous plants, etc.) comply with local, State (FDOT) and Federal requirements for height restrictions and sight triangles year-round.

B. FERTILIZATION

Contractor shall have full responsibilities of determining the proper formulations and rates of all fertilizers to maintain healthy vigorous shrubs. Contractor shall be expected to apply any minor nutrients necessary to maintain healthy shrubs following State of Florida Green Industries Best Management Practices guidelines.

C. BED WEED CONTROL

Weeds shall be controlled in bed areas per the mowing schedule by mechanical, physical and/or chemical methods. Bed areas should have a maintained weed free appearance following State of Florida Green Industries Best Management Practices guidelines. Chemical treatment for weeds in beds shall be quarterly.

D. INSECT AND DISEASE CONTROL

Contractor shall be responsible for weekly inspections of the entire property and treatment of any insect or disease related problems.

E. WATER

Initials of Bidder: _____

NOTE: See Section VII, Irrigation Systems.

III. TREE MAINTENANCE

A. PRUNING

Contractor shall be responsible for maintaining all trees such that no branches/limbs will overhang sidewalks and parking areas lower than ten (10) feet from the ground. Lower branches on all trees shall be pruned as needed, to keep them elevated to a uniform height. Maximum height for this pruning shall be no more than fifteen (15) feet. Trees located in natural areas shall be pruned only when their growth habit effects normal maintenance areas. Limbs and branches are to be removed from property. All sucker growth from trunk and bases of trees shall be removed as needed or as required to maintain a clean appearance.

Contractor will be responsible for pruning all ornamental trees such as Wax Myrtles, Crepe Myrtles, Photinias, American Holly, Fosteri Holly, Savannah Holly, Burfordii Holly, Nellie-R-Stevens Holly, Ligustrums, East Palatka Holly, Tree-form Oleanders and others. Pruning will include the shaping of all heads, removal of conflicting branches and removal of interior sucker growth.

Palm Pruning:

All Palms shall be pruned annually (during the dormant season), and pricing for such will be included in this bid proposal. Palms will be shaped as required, removing dead fronds and spent seed pods. Palms will not be severely pruned. All Palms should be pruned at a 90 degree angle with no "carrot topping." Palms are to be thoroughly detailed with all fronds trimmed to lateral position and removal of all seed heads.

B. FERTILIZATION

Contractor shall follow Palm tree fertilization frequencies listed in the State of Florida Green Industries Best Management Practices guidelines. Contractor is required to notify City Point of Contact and make recommendations, in writing, of all other trees that may need supplemental fertilization.

Palms are to be fertilized as called for using fertilizers especially formulated for Palms.

C. pH ADJUSTMENT

If needed the contractor is responsible for adjusting improper pHs (species/variety specific) by applying up to 50 pounds per 1000 square feet of lime or up to 5 pounds of sulfur per 1000 square feet.

D. INSECT AND DISEASE CONTROL

Initials of Bidder: _____

Contractor shall be responsible for weekly inspections of maintenance areas city-wide and will treatment of any insect or disease related problems.

E. WATER

NOTE: See section VII, Irrigation Systems.

IV. MULCHING FOR TREE AND SHRUB BED AREAS

- A.** Contractor will be responsible for one complete application of grade A pine straw mulch which will occur in the month of February. Pine straw is to be spread at a minimum depth of 3 inches, such that none of the old or previously laid mulch is visible. The cost table provided requests pricing for an additional pine straw application that would occur in September.

Contractor is responsible for accurate measurement of all bed areas and tree circles as part of the bid process. Contractor is responsible for spot mulching of any bare soil areas that have resulted due to underestimation of mulch or landscape maintenance performance i.e., mower damage around bedlines, etc.

All bales are to be red in color and free of sticks, pine cones, and other debris when the installation is complete.

B. TRENCHING

Bedline edges shall be trenched and beveled at a depth of three inches along bed areas that are bordered by sidewalks, curbs. All beds bordered by turf shall be defined by creating a 1" beveled trench, with smooth, symmetrical, and parallel bedlines. A 3" deep trench is not required along turf bedlines. Tree well root ball rings within turf areas are to be made uniform in diameter to be consistent with similar varieties within that location.

V. GENERAL SITE MAINTENANCE: TRASH, WEED CONTROL AND DEBRIS DISPOSAL

A. CLEAN UP PROCEDURES

As a part of each maintenance visit, a general clean-up program will occur. The clean-up program shall involve policing of all maintained areas for the removal of paper, cans, bottles, sticks, cigarette butts, leaves, and other debris prior to mowing. Also, a complete sweeping or blowing, by mechanical means, of the entire roadways, curbs, gutters, drains, and sidewalk areas will be performed after mowing and edging have been completed. This will encompass complete removal of weeds at curbs, pavement lines, sidewalks, storm sewer inlets, and any other trash that has settled in these areas. Parking lot areas will be kept clean within fifteen (15) feet of curbs and planted areas. Blowing grass clippings and other debris into roadways or into storm sewer inlets is in violation of City Ordinances and is not allowed under any circumstances.

B. WEED CONTROL

All parking lot areas, roadside curb and gutters, and sidewalks shall be maintained weed free.

C. DISPOSAL OF DEBRIS

All debris shall be disposed of offsite.

D. SEVERE WEATHER CLEAN UP

In the event of a natural disaster, such as a hurricane or tornado, the Contractor shall not be responsible for any clean-up operation outside of the agreed maintenance contract. If City of Destin elects, they either may temporarily suspend maintenance requirements or request that the maintenance contractor utilize dedicated man hours for the purpose of severe weather clean up or may suspend operations in designated areas.

E. TYPICAL WEATHER CLEAN UP

Contractor shall be responsible for debris cleanup deposited by typical weather conditions within the project areas.

VI. PLANT MATERIAL DISPOSAL

A. REMOVAL

Dead plant material, not requiring general tree surgeon practices for removal, shall be removed and disposed of immediately by the Contractor. City properties and City waste containers are not approved areas to dispose of these materials.

B. REPLACEMENT

The Contractor shall contact and advise the City, in writing, of possible replacement needs. Plant replacement necessitated by negligence of the Contractor shall be the sole responsibility of the Contractor.

VII. IRRIGATION SYSTEMS

A. IRRIGATION INSPECTION

Contractor agrees to monitor, adjust and manage all automatic irrigation systems as to proper frequency, duration, and operation of supplemental watering on a monthly basis. Contractor shall be responsible for performing minor adjustments and services such as: flow control, radius adjustment, nozzle cleaning, filter cleaning, sprinkler height, and level adjustment as a part of this contract. Initially all irrigations systems will be set to deliver one-half inch, 3 times per week at hours to be coordinated with the Destin Point of Contact. Any changes to this regime will be coordinated with the Destin Point of Contact.

Initials of Bidder: _____

Contractor shall provide City timely notification of malfunctions or damage to the system's integrity beyond the basic maintenance requirements of the contract. Contractor shall provide a written proposal including cost to the City to restore the system to full functionality. Upon City's approval Contractor shall perform the repairs agreed upon and submit an itemized invoice including staffing hours, quantity, types and costs. The cost of each repair will be billed by the provider and paid directly by the City. Should it be determined that damage is cause of negligence by the Contractor, the Contractor shall pay the cost of such repair. Costs may be paid directly by Contractor or deducted from payments due to the Contractor.

Contractor shall be responsible for performing a complete irrigation evaluation at Commencement of Contract or as needed. Contractor shall be required to furnish City of Destin's Point of Contact with a summary of each clock and zone operation after each monthly inspection. Contractor shall furnish recommendations for repair and improvements to the systems with an itemized cost for proposed work. Irrigation clocks shall have each zone identified within thirty (30) days of Commencement of Contract.

VIII. FERTILIZATION, HERBICIDE AND INSECTICIDE USE

- A.** All pesticides, insecticides, fertilizers, and any other products must be used in strict compliance with the label and instructions. Applications must comply with all state and federal regulations. The specifications are intended to be consistent with current label instructions. In the event the specifications conflict with instructions on the pesticide label, the label instructions shall govern.
- B.** Contractor will be responsible for applying chemicals and fertilizers consistent with Florida Green Industries Best Management Practices guidelines. Contractor is totally responsible for furnishing the City of Destin with healthy, vigorous plant material throughout the term of the contract.
- C.** Contractor will be responsible for controlling any insect, disease, or nutrient problems that may occur during the year.
- D.** The Contractor will be responsible for making any extra visits necessary during the year to correct any problems which may occur during the duration of the contract.
- F.** Contractor will be responsible for applications of any other nutrients that should be applied to maintain a pH and nutrient balanced soil.
- G.** Contractor will take full responsibility for replacing any plant material that is damaged by improper application or lack of timely application of nutrients that are necessary to maintain healthy plant material.

IX. WEEKLY PROGRESS REPORTS

Contractor must email a Weekly Activity Summary Report to the City's Point of Contact each
Initials of Bidder: _____

Monday. The report must specify the date, location, and all routine and non-routine services completed during the previous week. Reports shall also include any issues and/or problems encountered during the previous week and activities scheduled for the current week.

In addition, a monthly property inspection will be conducted jointly by a representative of the bidder and the Destin Point of Contact.

X. SAFETY

All work associated with this bid must be conducted with safety in mind. It is expected that the contractor will provide all necessary personal protective equipment that will be utilized by their staff while performing work for the City of Destin. In addition, the contractor will ensure that all FDOT, OSHA and other applicable State and Federal workplace safety guidelines are adhered to while working on behalf of the City of Destin.

The contractor will ensure that work vehicles, equipment and trailers are properly outfitted with proper, adequate and working signage, lightbars, arrow boards, etc.

XI. QUALITY CONTROL, PENALTIES FOR NON-COMPLIANCE/NON-PERFORMANCE

Report Submission: A weekly report for work completed (M-F and possibly Saturday) will be submitted to the City by 12pm on the first business day of the following week.

City Staff Inspection: During the morning of the first business day of the week, City staff will inspect the project areas and will document, measure and/or photograph any deficiencies (work not completed per the contract schedule or any aspects of the work that do not meet contractual specifications or standards) found and will compare those findings with the contractor's submitted report.

Communication of Inconsistencies: Inconsistencies between staff's field inspection and the submitted report will be communicated to the contractor via email (sent with delivery and read confirmation to all known contractor emails) by the close of business on the first business day (cc'ing the City Manager and City Attorney) or as soon as possible thereafter.

Corrective Actions: The contractor will have 48 hours to complete corrective actions (those activities required to rectify noted deficiencies to contractual standards). Additional time may be provided by the Public Works Department for issues like inclement weather, holidays, etc. Any additional time allotted will be communicated in writing.

Revised Report: Once corrective actions have been completed, a revised weekly report will then be required from the contractor.

Penalties for Non-Compliance: Failure to perform the necessary corrective actions to the satisfaction of the City within 48 hours (unless extended by the City) will result in non-payment for that zone for that week. Additionally, the City may terminate the contract for such failure to take timely corrective action, in the City's sole discretion and without penalty to the City. In the event of such termination, contractor will be paid for work actually performed as of the

Initials of Bidder: _____

termination date.

LANDSCAPE MAINTENANCE ITEMIZED FUNCTIONS, FREQUENCIES, & REQUIREMENTS

<u>FUNCTION</u>	<u>FREQUENCY (PER YEAR)</u>
Mow (weekly for 8 months, bi-weekly for 4 months)	44
Edge (Bed lines), bi-weekly	26
Edge (Hardlines), same as mowing. <i>Must meet FDOT requirements</i> , includes front and back of sidewalks	44
Monofilament Trim, same as mowing	44
Bed Weed Control	Quarterly (Feb, May, August, November)
Shrub/Groundcover Trim <i>Must meet FDOT requirements</i>	Quarterly
Tree Pruning <i>Must meet current FDOT requirements</i>	Annually, per FDOT Requirements
Palm Pruning <i>Must meet current FDOT requirements, no carrot topping</i>	Annually
Debris Policing and Disposal (all Properties)	Same as mowing
Ant Control	As needed
Insect/Disease Control	As needed
Irrigation Inspection	Monthly
Palm Fertilization	As needed
Tree Fertilization	As needed
Shrub Fertilization	As needed
Groundcover Fertilization	As needed
Turf Grass Fertilization	Quarterly (Feb, May, August, November)
Turf Weed Control	Quarterly (Feb, May, August, November)
Overseed	n/a

Initials of Bidder: _____

BID SHEET SUBMITTED BY:

Name of Company Submitting Bid**Section I** *(List your proposed cost (bid) for each of the items listed as well as the total for all.)*

Zone	Zone Description	Annual Cost (bid)
1	HARBOR BLVD (MARLER BRIDGE TO AIRPORT ROAD): aka US98, this includes all landscaped medians and FDOT ROW.	\$ _____
2	US98-Emerald Coast Parkway (AIRPORT RD. TO MATTHEW BLVD.) This includes all landscaped medians and FDOT ROW to include stormwater swales.	\$ _____
3	US98-Emerald Coast Parkway (MATTHEW BLVD. TO KEL-WEN CIRCLE) This includes all landscaped medians and FDOT ROW to include stormwater swales.	\$ _____
4	US98-Emerald Coast Parkway (KEL-WEN CIRCLE TO WALTON COUNTY LINE) This includes all landscaped medians and FDOT ROW to include stormwater swales.	\$ _____
5	MOUNTAIN DRIVE: From Stahlman Avenue to Benning Drive to include all roadside ROWs and the roundabout at the intersection of Mountain Drive and Benning Drive.	\$ _____
6	MAIN STREET: From Harbor Blvd/US 98 to approximately 150 feet north of the Airport Road/Main Street intersection to include the median in front of the American Legion. This includes all medians and all roadside ROWs.	\$ _____
7	LEGION DRIVE: From Main Street to Beach Drive to include the single median and all roadside ROWs.	\$ _____
8	AIRPORT ROAD: From US98 to Main Street to include all medians, and all roadside ROWs.	\$ _____
9	SCENIC HIGHWAY 98: (Crystal Beach) From Matthew Blvd. to the Walton County Line to include all medians, all roadside ROWs, and all City owned parallel and off-street parking areas along Scenic Hwy 98.	\$ _____
10	COMMONS DRIVE: From Airport Road to Indian Bayou Trail. Includes both roadway shoulders and swales.	\$ _____

Initials of Bidder: _____

11	<u>MATTIE KELLY ARTS PROPERTY:</u> 4323 Commons Drive W, approximately 6 acres. Vegetated Parking, Event Area and building surrounds.	\$ _____
12	<u>CITY HALL, CITY HALL ANNEX, & DESTIN HISTORY & FISHING MUSEUM,</u> all grounds.	\$ _____
13	<u>DESTIN CEMETERY,</u> upper and lower lots, includes weed/grass trimming around fence lines and all headstones, monuments, and markers.	\$ _____
14	<u>DESTIN PUBLIC LIBRARY,</u> 150 Sibert Ave	\$ _____
15	<u>MARLER STREET PARKING LOT,</u> 285 Harbor Blvd	\$ _____
	Second Application of Pine Straw in September of each year (all serviced zones)	\$ _____
	Total (to include 2nd Pine Straw Application)	\$ _____

Initials of Bidder: _____

Section II (List your bid for item B and item C below.)

MISCELLANEOUS REQUIREMENTS:

- A. Contractor shall provide the designated City point of contact person with weekly maintenance reports.
- B. Hourly staff charge for miscellaneous Irrigation, Median and Right of way Repairs that is beyond the scope of the general maintenance agreement: *Prior written authorization by the City's designated representative is required prior to any work commencing.*
\$ _____ Per staff hour worked
- C. Materials and supplies will be billed at contractor's wholesale price or contractor's wholesale price plus _____. Preference may be given to contractors providing materials at cost. The contractor shall supply materials invoices for all materials and supplies consumed along with an itemized invoice. The City reserves the right to purchase items if obtainable at a lower cost than can be provided by contractor to perform work. *Prior written authorization by the City's designated representative is required prior to any work commencing.*

Bid Authorized By (Name and Title)

Authorized Signature:

Date: ____ / ____ / ____

END OF EXHIBIT A

Initials of Bidder: _____

EXHIBIT B

SWORN STATEMENT UNDER SECTION 287.133 (3) (A) FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES
THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted with Bid, Proposal or Contract for **RFB 20-05-PS, MISCELLANEOUS RIGHT OF WAY MAINTENANCE.**

2. This sworn statement is submitted by _____ whose business address is: _____
and (if applicable) Federal Employer Identification Number (FEIN) is _____.

If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement:

3. My name is _____ and my relationship to the entity named above is: _____.

4. I understand that a "public entity crime" as defined in Paragraph 287.133(a)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or any agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

5. I understand that "convicted" or "conviction" as defined in paragraph 287.133(a)(b), Florida Statutes, means finding of guilt or a conviction of a public entity crime with or without an adjudication of guilt, in any federal or state trial court of records relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, non-jury trial, or entry of a plea of guilty or nolo contendere.

6. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means:

a. A predecessor or successor of a person convicted of a public entity crime; or

b. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one of shares constituting a controlling income among persons when not for fair interest in another person, or a pooling of equipment or income among persons when not for fair market value under a length agreement, shall be a prima facie case that one person controls another

Initials of Bidder: _____

person. A person who was knowingly convicted of a public entity crime, in Florida during the preceding 36 months shall be considered an affiliate.

7. I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statutes, means any natural person or entity organized under the laws of the state or of the United States with the legal power to enter into a binding contract for provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

8. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies)

☐ Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

☐ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. (Please attach a copy of the final order)

☐ The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in public interest to remove the person or affiliate from the convicted vendor list (please attach a copy of the final order).

☐ The person or affiliate has not been placed on the convicted vendor list. (Please describe any action taken by, or pending with, the Department of General Services.)

Authorized Signature

_____/_____/_____
Date

Initials of Bidder: _____

STATE OF FLORIDA, COUNTY OF _____

PERSONALLY APPEARED BEFORE ME, the undersigned authority, who, after first being sworn by me, affixed his/her signature at the space provided above on this _____ day of _____, 20____, and is personally known to me, or has provided _____ as identification.

Notary Public My Commission expires:

Initials of Bidder: _____

EXHIBIT C
DRUG-FREE WORKPLACE CERTIFICATION

The below-signed bidder certifies that it has implemented a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation and employee assistance programs and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing contractual services that are under this bid a copy of the statement specified in item 1 above.
4. In the statement specified in item 1. above, notify the employees that, as a condition of providing the contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation occurring in the workplace no later than five (5) working days after such conviction.
5. Impose a sanction on or require the satisfactory participation in drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign this statement, I certify that this firm complies fully with the above drug-free workplace requirements.

SIGNATURE: _____

DATE: _____

COMPANY: _____

STREET ADDRESS: _____

CITY, STATE: _____

Initials of Bidder: _____

CITY OF DESTIN



AGENDA ITEM

COUNCIL MEETING DATE: June 3, 2024

TYPE OF AGENDA ITEM: Action Item

AGENDA OUTLINE NUMBER: 5.A.

TO: City Council

THRU: Louis Zunguze, City Manager
Kimberly Kopp, City Attorney

FROM: Steve O'Connor, Principal Planner

DATE: May 28, 2024

SUBJECT: Calhoun Harbor Development Conditional Use

I. BACKGROUND: Innerlight Engineering Corporation, on behalf of Johnny Boswell, is requesting approval of a Conditional Use application (LU-001154-2023), a Major Development Order application (DEV-001146-2023), and a Major Subdivision application (SUB-001165-2023). This project includes the construction of a 54-unit, long-term multi-family attached townhome development and the associated site infrastructure, as well as a public pocket park. The subject project is generally located within the 100 blocks of Sibert and Calhoun Avenue (Parcel IDs: 00-2S-22-0310-000D-0090, 00-2S-22-0310-000D-0080, 00-2S-22-0310-000D-0070, 00-2S-22-0310-000D-0060, 00-2S-22-0310-000D-0050, 00-2S-22-0310-000D-005A, 00-2S-22-0310-000D-072G, 00-2S-22-0310-000D-072E), totaling approximately 5.2 acres.

II. DISCUSSION: COMPREHENSIVE PLAN/LAND DEVELOPMENT CODE

The subject property is within the **Harbor Planning Area**. Also, the property has a Future Land Use Map Designation of **Calhoun Mixed Use – Village (CMU-V)** and a Zoning Designation of **Calhoun Mixed Use – Village (CMU-V)**. The proposed use is consistent with these land use regulations. The project, as required by the Comprehensive Plan and the Land Development Code, has undergone a compatibility review and meets the minimum requirements.

LAND USE

Long-term, multi-family attached dwellings are a Conditional Use within the **CMU-V** future land use designation and within the **CMU-V** zoning district.

CONDITIONAL USE REVIEW

1. COMPREHENSIVE PLAN POLICY ELEMENTS:

As outlined in the City's **Comprehensive Plan (Policy 1-2.4.3)**, the **Calhoun Mixed Use - Village (CMU-V)** zoning district is envisioned as: *a walkable, medium-scale resort-mixed use*

*area. It also provides a transition between the **South Harbor Mixed Use** area and U.S. 98 to the south, the "**Old Destin Area**" to the northeast, and **Clement Taylor Park** to the north. Planned developments that increase pedestrian connectivity, east-west vehicular connectivity, and parks or open space shall be encouraged. Redevelopment of this area is intended to provide a mixed-use area, accommodating primarily medium to high-density long-term and short-term residential uses. Commercial hotels, motels, bed and breakfast establishments, and other commercial transient living accommodations shall be allowed. Permitted nonresidential uses shall include neighborhood retail commercial goods and services not exceeding 5,500 square feet, offices, water-dependent activities, restaurants, and similar activities. This area also permits appropriately scaled institutional uses.*

The proposed use of long-term single-family detached dwellings is in line with the intent of the CMU-V Future Land Use Designation.

2. LAND DEVELOPMENT CODE/ZONING ELEMENTS:

The following includes a review and analysis of the proposed conditional use based on the criteria outlined in **LDC Section 7.12.10**:

3. CONDITIONAL USE ELEMENTS:

The proposed long-term, multi-family attached dwelling residential development is a Conditional Use in CMU-V, as per **LDC Section 7.12.06, Table 7-2**. In accordance with **LDC Section 7.12.10**, the applicant provided a conditional use request based upon the following:

1. Characteristic of Use
2. On and Offsite Improvement Needs
3. On-site Amenities
4. Criteria for Conditional Use

Criteria for Conditional Use, per Article 7.12.10.C, Land Development Code:

1. LAND USE COMPATIBILITY

Applicant Response: The proposed use (multi-family attached dwelling) is listed as a Conditional Use in the Calhoun Avenue Mixed Use – Village (CMU-V) zoning district. Per the LDC, “the area shall redevelop as a mixed-use area, accommodating primarily medium to high density long and short-term residential uses”; with the proposed being long-term residential. The development has been planned to utilize interconnected pathways throughout the development to connect to existing pedestrian pathways off-site. The proposed density of 10.4 DU/AC is in keeping with both existing and newly approved developments. Being as the development is a proposed residential use, similar to surrounding developments, there are no off-site impacts anticipated and mitigation efforts to include landscaping and necessary buffering will be applied.

Staff Comments: The proposed use is a Conditional Use within **Table 7-2, Article 7** of the **Land Development Code (LDC)** and therefore meets this criterion.

Scale and Intensity: Long-term residential attached multi-family dwellings are listed as a Conditional Use within the **Calhoun Mixed Use - Village (CMU-V)** zoning district. The project is proposed on a 5.2-acre site. As stated previously, per the **City's Comprehensive Plan Policy 1-2.4.3: Mixed Use (MU)**, the primary intent of any mixed-use designated area is to allow an intense mixture of residential and commercial activity. Residential uses shall include long-term and short-term residential uses. Additionally, as per **Comprehensive Plan Policy 1-2.4.3.2**, the area shall redevelop as a mixed-use area, accommodating primarily medium to high-density long-term and short-term residential uses. Commercial hotels, motels, bed and breakfast establishments, and other commercial transient living accommodations shall be allowed. Permitted nonresidential uses shall include neighborhood retail commercial goods and services not exceeding 5,500 square feet, offices, water-dependent activities, restaurants, and similar activities as shall be defined in the *LDC*. As proposed, the project would have a density of 10.4 units/acre. The maximum density allowed in this zoning district is 12 units/acre.

Offsite Impacts: There are no anticipated offsite impacts. As proposed, the conditional use meets the intent of **CMU-V zoning district** and is of sufficient size to accommodate all required landscaping and buffering needed to mitigate negative impacts, such as lighting, noise, pollution, etc.

2. SUFFICIENT SIZE, SITE SPECIFICATIONS, AND INFRASTRUCTURE

Applicant Response: The CMU-V zoning district has a maximum density of 12 DU/AC; the proposed density of 10.4 DU/AC for this development does not exceed what is allowable. The 5.2 AC subject parcel is large enough to accommodate all required facilities and infrastructure in relation to the size of the proposed development. Stormwater management consists of a dry retention system, collection swales and a series of interconnected pipes. Two separate accesses to the development will be provided- one at Sibert Avenue and another at Calhoun Avenue, with internal streets within the development connecting the two. Internal sidewalks Page 2 of 2 within the development as well as additional sidewalks being proposed abutting both Calhoun Avenue and Sibert, lend to interconnectivity with the immediate surrounding area.

Staff Comments: The proposed project complies with the dimensional requirements in **Table 7-3, Article 7.12.08** of the **Land Development Code** and therefore meets this criterion.

Size: The proposed project is a 54-unit subdivision of long-term residential, attached multi-family dwellings on a 5.2-acre ($\pm 226,748$ SF) site. This equates to a proposed density of 10.4 units/acre. As previously stated, the maximum density allowed in this zoning district is 12 units/acre. The subject property is large enough in size to accommodate all required facilities and design requirements related to a multi-family subdivision.

Access and Internal Circulation: Vehicular access to the properties will be provided by a two-way drive from the Calhoun Avenue public Right-of-Way (ROW) and the Sibert Avenue public ROW, which link to internal streets within the development. The project shall comply with the design standards per **Article 8.04.00, Access**

Management, Land Development Code. Additionally, the applicant is proposing an internal sidewalk network throughout the development and connecting to the public sidewalk, allowing convenient circulation within the project.

Urban Design Enhancement: The project is to be located on several vacant lots. Currently, the project is proposing to provide a pool amenity for the residents, as well as providing street trees along both the public ROW, as well as the internal development. Per ***LDC 8.06.10, Table 8-6, Number of Vehicle and Bicycle Parking Spaces Required***, each property will be required, and is proposing, to provide four (4) parking spaces per dwelling unit, to exceed the requirements of ***Article 8.06.00, Vehicle and Parking Standards, Land Development Code***. The site is of sufficient size to provide the necessary screening, buffers, sidewalks, landscaping, setbacks, and open space as required by the LDC.

3. PROPER USE OF MITIGATIVE TECHNIQUES

Applicant Response: As previously outlined, stormwater management will occur on-site. Internal street lighting, as provided with the Major Development Project DEV001146-2023, will cause no lighting pollution and will not adversely impact adjacent properties. With 216 residential parking spaces proposed and an additional 3 spaces for the pool amenity, we have far exceeded the required 162 spaces and demonstrated there will be no impact caused by parking outside the immediate development area.

Staff Comments: The project proposes on-site stormwater management requirements per ***LDC 10.03.02., Stormwater Management***, which prevents adverse impacts to adjacent land uses, as well as other applicable mitigative techniques, all of which will be further reviewed by the Technical Review Committee, **therefore meeting this criterion**. The development is also proposing a hammerhead (dead-end street) adjacent to Sibert Avenue. The lack of visibility within the development will discourage nonresidents from cutting through the development; therefore, increasing the safety of the surrounding area.

4. HAZARDOUS WASTE

Applicant Response: No hazardous waste is anticipated to be generated as part of this development.

Staff Comments: No hazardous waste is anticipated to be generated. The project is required to provide sediment, erosion, and pollution control measures in accordance with ***Article 11.09.00, Illicit Discharge Detection and Elimination, Land Development Code*** and **therefore meets this criterion**.

5. OVER PROLIFRATION OF USE

Applicant Response: Multi-family attached dwellings are a Conditional Use within the CMU-V zoning district. Based on a review of surrounding developments, there is a mix of uses with only three multifamily developments in the immediate vicinity.

Staff Comments: Long-term residential attached multifamily dwelling units are a Conditional Use in the **CMU-V zoning district**. Staff has found the current CMU-V zoning district information:

- | | |
|----------------------------|-----|
| • Single-family Properties | 12 |
| • Vacant Properties | 10* |
| • County Properties | 1 |

• Residential Community Properties	1
• Total Multi-family Properties	12
1. Total Multi-family Property Units	20
• Total Acreage	17.17 acres
• Total Properties	36

*The proposed project will occupy 8 of the currently vacant properties

Currently, multi-family properties constitute 33% of the total number of properties in the **CMU-V zoning district**. If approved, there would now be a total of twenty (20) multi-family properties within the zoning district (56%), totaling seventy-four (74) units.

Please see Attachment G (Calhoun Harbor Conditional Use Analysis) for a visual representation of the CMU-V zoning district properties. **Staff defers to the City Council on whether this constitutes an over proliferation of multifamily attached dwellings within the CMU-V district.**

6. COMPLIANCE WITH APPLICABLE LAWS AND ORDINANCES

Applicant Response: As proposed, this Conditional Use application meets development standards outlined in the City of Destin LDC and adheres to the objectives of the Comprehensive Plan.

Staff Comments: The proposed Conditional Use application, as well as the Major Development and Major Subdivision applications meet the land development standards and regulations outlined in the Land Development Code and the policies and objectives of the Comprehensive Plan **and therefore, meet this criterion.**

At the regularly scheduled LPA meeting on Thursday, August 3, 2023, the LPA unanimously voted 5-0 to recommend Conditional Use approval to the City Council.

DENSITY

Maximum allowed: 12 Dwelling Units/Acre
Provided: 10.40 Dwelling Units/Acre

HEIGHT

Maximum allowed: 50' / 4 stories
Provided: <35' / 2 stories

SETBACKS

Front required: 10' minimum – 20' maximum
Front provided: 15'

Side minimum required (east): None
Side provided (east): 10'

Side minimum required (west): None
Side provided (west): 10'

Rear minimum required: 10'
Rear provided: 10'

OPEN SPACE

Minimum required: 25%
Provided: 36%

PLATTING

This project is currently proposing Preliminary Plat approval, to be reviewed concurrently with the Development Order.

CONCURRENCY MANAGEMENT

Concurrency requirements have been met:

Traffic: Signed May 23, 2024

Stormwater Management: Signed May 23, 2024

Potable Water/Sanitary Sewer: Signed August 17, 2023

Solid Waste: Signed October 24, 2023

AIRPORT PROTECTION

As proposed, this project is not affected by nor affects the Destin Executive Airport. The applicant has indicated on the development order application that the proposed project is not within the Airport Expansion Area.

***NOTE:** If construction necessitates the use of a crane, or other obstruction, which exceeds Federal Aviation Administration FAR 77 Standards (normally 200 feet above ground level), the applicant must request a variance from the FAA for temporary encroachment into this restrictive area and a copy of a completed FAA Form 7460, must be placed on file with the City of Destin prior to the crane, or other obstruction, penetrating the restricted airspace.*

TRANSPORTATION ANALYSIS

The traffic analysis, signed and dated October 18, 2023, indicates the proposed development will generate thirty (30) PM peak hour trips. The analysis is consistent with the technical methodology outlined in **LDC 6.05.05**.

RIGHT-OF-WAY DEDICATION

The project does include Private Right-of-Way dedication.

INGRESS/EGRESS

Vehicular access to the property is provided by two-way private access from the Sibert Avenue public right-of-way (ROW), as well as a two-way private access from the Calhoun Avenue public ROW.

PEDESTRIAN NETWORK

The project provides a complete pedestrian network as required in **LDC 8.09.03.A(6)**. A continuous on-site internal sidewalk is provided throughout the development. Additionally, the development is providing a public pocket park on the western side of the development to satisfy the required non-residential component, per **LDC Section 7.12.06.CC.1**.

PARKING

Required vehicle parking spaces: 135 (2.5 spaces per dwelling unit)
Provided vehicle parking spaces: 219 (4 spaces per dwelling unit + 3 for pool amenity)

UTILITIES

All utilities are required to be undergrounded.

STORMWATER

The City Manager’s Stormwater designee approved the stormwater plan on March 5, 2024.

REFUSE COLLECTION

All non-construction related dumpsters, trashcans, and recycling bins shall be placed in a solid waste collection area or inside a building.

WHITE SANDS ZONE

The proposed project site is not located within any White Sand Zones.

LANDSCAPING

Front perimeter/common boundary:	Not applicable
Interior parking landscape:	Provided
Buffer zone:	Provided
Preservation and restoration:	
Reforestation trees required:	53
Protected trees to be removed/replaced:	31
Preserved tree credits:	51
Required parking trees:	2
Required street trees:	20
Total required trees:	54
Total trees provided:	74

***Modification/alteration to any approved species of trees or shrubs shall be reviewed and approved by the Community Development Director or their designee prior to installation. A Development Order (DO) Deviation may be required if the proposed changes do not substantially meet the originally approved landscape plan.**

SIGNS

No signs were reviewed for permitting or compliance with the Development Order application. All proposed signs must be permitted through a sign permit and shall comply with the sign code section of the Destin Land Development Code in effect at the time a Sign Application is submitted.

IMPACT FEES

Impact fee amounts have been developed using the provisions outlined in **LDC 19.03.05.A**. The impact fees identified below are an *estimate*. The actual Impact fees will be calculated and assessed at the time of building permit submittal.

LAND USE	UNITS	PARK	LIBRARY	POLICE	TRANS.	TOTAL
Residential, 2,000 – 2,999 square feet per dwelling	54	\$479.00	\$160.00	\$23.00	\$1,425.00	
Totals		\$25,866	\$8,640	\$1,242	\$76,950	\$112,698

OTHER FEES

Consultant Transportation CEC Review 1: \$145.67 (Paid)

Consultant Transportation CEC Review 2: \$124.86 (Paid)

Consultant Transportation CEC Review 3: \$83.24 (Paid)

PUBLIC COMMENTS

Staff has only received one (1) public comment regarding the proposed project, and it is part of the attachments.

- A. **Link to Strategic Goals / Objectives:** I. Economic development and revitalization
- B. **Effect on Budget (EOB):** There is no anticipated impact on the budget.
- C. **Level of Service (LOS):** The development is estimated to generate thirty (30) PM peak hour trips. Relative to the existing LOS of these corridors, there will be a minimal impact on the surrounding level of service.
- D. **Legislative Sponsor:**

III. CONCLUSION: Innerlight Engineering Corporation, on behalf of Johnny Boswell, is requesting approval of a Conditional Use application (LU-001154-2023), a Major Development Order application (DEV-001146-2023), and a Major Subdivision application (SUB-001165-2024). This project includes the construction of a 54-unit, long-term multi-family attached townhome development and the associated site infrastructure, as well as a public pocket park. The subject project is generally located within the 100 blocks of Sibert and Calhoun Avenue (Parcel IDs: 00-2S-22-0310-000D-0090, 00-2S-22-0310-000D-0080, 00-2S-22-0310-000D-0070, 00-2S-22-0310-000D-0060, 00-2S-22-0310-000D-0050, 00-2S-22-0310-000D-005A, 00-2S-22-0310-000D-072G, 00-2S-22-0310-000D-072E), totaling approximately 5.2 acres.

IV. RECOMMENDED MOTION: I move that the City Council approve Calhoun Harbor, a Conditional Use, Major Development Order, and Major Subdivision, as presented.

ALTERNATIVE MOTION:

I move that the City Council approve with conditions/approve with modifications/deny Calhoun Harbor, a Conditional Use, Major Development Order, and Major Subdivision, as presented.

Attachments:

1. A. Calhoun Harbor Civil Set
2. B. Calhoun Harbor Landscape & Irrigation Plan
3. C. Calhoun Harbor Photometric Plan
4. D. Calhoun Harbor Lighting Distribution Layout

5. E. Calhoun Harbor Conditional Use Criteria
6. F. Calhoun Harbor Preliminary Plat
7. G. Calhoun Harbor Conditional Use Analysis
8. H. Calhoun Harbor Public Comment 8.9.23
9. I. DRAFT DO-24-11_Calhoun Harbor
10. J. August 3, 2023 LPA Minutes

C:\EC DROPBOX\PROJECTS\CALHOUN AVE\3.ENGINEERING\1.CDS\2.SHEETS\100-COVER PAGE.DWG, Calhoun, 4/3/2024 9:46:26 AM

CONSTRUCTION PLANS FOR:
CALHOUN HARBOR
RESIDENTIAL TOWNHOMES

UNSECTIONED, TOWNSHIP 2 SOUTH, RANGE 22 WEST
OKALOOSA COUNTY, FLORIDA

PROJECT DATA

PROJECT NAME:	CALHOUN HARBOR
CLIENT NAME:	JOHNNY BOSWELL CALHOUN ESTATES PROPERTIES, INC. 12889 EMERALD COAST PKWY MIRAMAR BEACH, FL 32550 CONTACT: JOHNNY BOSWELL
PREPARED BY:	INNERLIGHT ENGINEERING CORPORATION 11490 EMERALD COAST PARKWAY, SUITE 2W MIRAMAR BEACH, FLORIDA 32550
ENGINEER OF RECORD:	FLORIN C. LAZAR, P.E. FLORIDA REG. NO. 86404 INNERLIGHT ENGINEERING CORPORATION 11490 EMERALD COAST PARKWAY, SUITE 2W MIRAMAR BEACH, FLORIDA 32550 850.424.5855

BENCHMARK DATA

BENCHMARK #1:	EXISTING STORM INLET NORTHING: 514489.7024 EASTING: 1334354.9868 ELEVATION: 6.38 (NAVD 1988)
BENCHMARK #2:	EXISTING SANITARY SEWER MANHOLE LID NORTHING: 514434.3080 EASTING: 1334323.9270 ELEVATION: 7.46 (NAVD 1988)

UTILITY PROVIDERS

POTABLE WATER PROVIDER:	DESTIN WATER USERS 218 MAIN STREET DESTIN, FLORIDA 32541 850.837.6146
SANITARY SEWER PROVIDER:	DESTIN WATER USERS 218 MAIN STREET DESTIN, FLORIDA 32541 850.837.6146
GAS PROVIDER:	OKALOOSA GAS DISTRICT 14071 EMERALD COAST PARKWAY DESTIN, FLORIDA 32541 850.654.3113
TELEPHONE PROVIDER:	COX COMMUNICATIONS, INC. 320 RACETRACK ROAD NW FORT WALTON BEACH, FLORIDA 32547 850.695.9440
POWER PROVIDER:	GULF POWER 34854 EMERALD COAST PARKWAY DESTIN, FLORIDA 32541 850.244.4701
TV/CABLE PROVIDER:	COX COMMUNICATIONS, INC. 320 RACETRACK ROAD NW FORT WALTON BEACH, FLORIDA 32547 850.695.9440

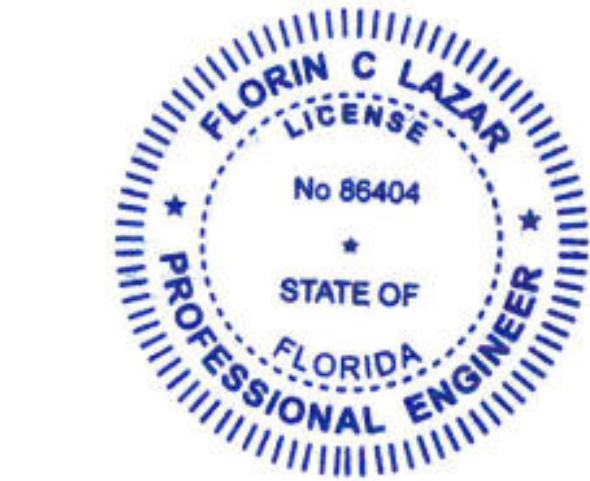
CONSTRUCTION ACTIVITY SCHEDULE

ANTICIPATED START DATE - JUNE 2024						
	MONTH 1	MONTH 2	MONTH 3	MONTH 4	MONTH 5	MONTH 6
INSTALL INITIAL STAGE EROSION CONTROL MEASURES	■					
DEMOLITION / CLEARING & GRUBBING		■				
CONSTRUCT STORM SEWER		■	■			
CONSTRUCT UTILITIES		■	■			
FINE GRADING			■	■		
CONSTRUCT CURB & GUTTER				■		
PAVING (TO BINDER)				■	■	
ESTABLISH PERMANENT LANDSCAPING					■	
REMOVE EROSION CONTROL MEASURES AS PERMANENT VEGETATION IS ESTABLISHED						■
OVERLAY AND RESTRIPIING						■
AS-BUILT CERTIFICATION						■



VICINITY MAP

N.T.S



Digitally signed
by Florin Lazar
Date:
2024.04.03
10:05:12
-05'00'

CONSTRUCTION NOTES

- CONTRACTORS SHALL MAINTAIN PUBLIC ACCESS AT ALL TIMES ALONG OKALOOSA COUNTY RIGHT-OF-WAYS.
- NO PARKING OR UNLOADING OF MATERIALS SHALL OCCUR WITHIN PUBLIC RIGHT-OF-WAY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO STRUCTURES WITHIN THE PUBLIC RIGHT-OF-WAY AND SHALL REPAIR ANY DAMAGE CAUSED BY THE CONSTRUCTION ACTIVITIES TO THE PUBLIC RIGHT-OF-WAY AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOT RELOCATE ANY SIDEWALK OR MULTI-USE PATH WITHIN THE COUNTY RIGHT-OF-WAY WITHOUT WRITTEN PERMISSION FROM THE OKALOOSA COUNTY ENGINEER.
- CONTRACTOR SHALL MARK ALL CROSSWALKS AND MULTI-USE PATH CROSSINGS TO INDICATE THEM AS A PEDESTRIAN PATHWAY AFTER THE FINAL ASPHALT IS IN PLACE.
- ALL LANDSCAPING WITHIN THE COUNTY RIGHT-OF-WAY SHALL CONSIST OF DROUGHT TOLERANT SPECIES.
- NOTHING SHALL BE ERRECTED, PLACED, PARKED, PLANTED, OR ALLOWED TO GROW IN SUCH A MANNER AS TO MATERIALLY IMPEDE VISION BETWEEN A HEIGHT OF TWO FEET AND TEN FEET ABOVE THE GRADE, MEASURED AT THE CENTERLINE OF THE INTERSECTION FOR CLEAR VISIBILITY TRIANGLE.
- PARTY RESPONSIBLE FOR MONITORING CONSTRUCTION: JOHNNY BOSWELL CALHOUN ESTATES PROPERTIES, INC.
- PARTY RESPONSIBLE FOR SUBMITTING TO THE DISTRICT, THE NOTICE OF CONSTRUCTION COMMENCEMENT AND AS-BUILT CERTIFICATIONS FOR PROJECT: JOHNNY BOSWELL CALHOUN ESTATES PROPERTIES, INC.
- MAINTENANCE ENTITY: JOHNNY BOSWELL CALHOUN ESTATES PROPERTIES, INC.

ALWAYS CALL 811 TWO FULL BUSINESS DAYS BEFORE YOU DIG TO
HAVE UNDERGROUND UTILITIES LOCATED AND MARKED.

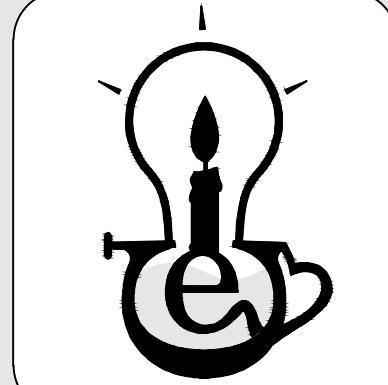


REVISION TABLE

REVISION NUMBER	REVISION DATE	DESCRIPTION
1	08.16.2023	DESTIN WATER USERS COMMENTS (DATED 08.16.2023)
2	08.22.2023	REVISED PROJECT & ROADWAY NAMES (DATED 08.22.2023)
3	10.17.2023	CITY OF DESTIN COMMENTS (DATED 08.24.2023)
4	12.07.2023	CITY OF DESTIN COMMENTS (DATED 11.16.2023)
5	04.03.2024	CITY OF DESTIN COMMENTS (DATED 03.27.2024)

SHEET INDEX

SHEET NUMBER	SHEET TITLE
1 OF 29	COVER PAGE
2 OF 29	GENERAL NOTES (SHEET 1 OF 2)
3 OF 29	GENERAL NOTES (SHEET 2 OF 2)
4 OF 29	EXISTING CONDITIONS
5 OF 29	DEMOLITION PLAN
6 OF 29	PRELIMINARY PLAT
7 OF 29	SITE GEOMETRY PLAN
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GENERAL NOTES:

- THE EXACT LOCATION AND ELEVATION OF EXISTING STRUCTURES, UTILITIES, AND PIPING SHALL BE PHYSICALLY VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE CONSTRUCTION BEGINS. THESE DRAWINGS DO NOT PURPORT TO SHOW IN COMPLETE DETAIL. ALL EXISTING STRUCTURES, UTILITIES, OR PIPING, THE CONTRACTOR SHALL EXAMINE ALL AVAILABLE RECORDS AND MAKE ALL EXPLORATIONS AND EXCAVATIONS AS REQUIRED TO DETERMINE THE LOCATION OF EXISTING STRUCTURES, UTILITIES, AND PIPING, WHENEVER NECESSARY. THE OWNER RESERVES THE RIGHT TO CHANGE LOCATION OF LINES TO AVOID CONFLICT WITH EXISTING STRUCTURES, UTILITIES, OR PIPING.
- THE CONTRACTOR SHALL CHECK PLANS FOR CONFLICTS AND DISCREPANCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNER OR OWNER'S ENGINEER OF ANY CONFLICT, IN WRITING, BEFORE PERFORMING ANY WORK IN THE AFFECTED AREA. ENGINEER WILL HAVE 7 DAYS TO PROVIDE A RESPONSE.
- THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS UTILITY COMPANIES IN ORDER TO PERMIT MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES ABOVE OR BELOW GROUND THAT MAY OCCUR AS A RESULT OF WORK CALLED FOR IN THESE CONTRACT DOCUMENTS. ALL REPAIRS MUST BE MADE TO THE SATISFACTION OF THE RESPECTIVE OWNER.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LEARN, KNOW, AND COMPLY WITH THE REGULATIONS, ORDINANCES, PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW AND COMPLY WITH THE CONDITIONS OF THE VARIOUS PERMITS OF THE GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL SCHEDULE THE REQUIRED INSPECTIONS AND APPROVALS IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMIT CONDITIONS. THE CONTRACTOR SHALL NOTIFY THE NECESSARY AGENCIES OF CONSTRUCTION COMMENCEMENT.
- ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO SHALL BE OF LATEST ISSUE AND SHALL BE CONSIDERED A PART OF THESE DOCUMENTS BY REFERENCE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SETTING OF CONSTRUCTION STAKES TO MARK THE LOCATION, ALIGNMENT, ELEVATION, AND GRADE OF THE WORK. THE STAKES PROVIDED SHALL BE ADEQUATE IN NUMBER, POSITION, AND ELEVATION SO THAT THE PHYSICAL ITEM CAN BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS. THE CONSTRUCTION LAYOUT SURVEY SHALL MEET THE MINIMUM TECHNICAL STANDARDS FOR LAND SURVEYING IN THE STATE OF FLORIDA (CHAPTER 21HH-6, FLORIDA ADMINISTRATIVE CODE), AND SHALL BE PERFORMED BY A PERSON OF ADEQUATE EXPERTISE. FAILURE TO PERFORM THE CONSTRUCTION STAKEOUT IN ACCORDANCE WITH THE CONSTRUCTION PLANS MAY RESULT IN REMOVAL AND REPLACEMENT OF THE IMPROVEMENTS AT NO EXPENSE TO THE OWNER. CONSTRUCTION LAYOUT INFORMATION HAS BEEN PROVIDED IN THE FORM OF DIMENSIONS AND OFFSETS OBTAINED THROUGH COMPUTER GENERATION. THE INFORMATION IS ADEQUATE FOR THE CONSTRUCTION LAYOUT OF THE IMPROVEMENTS USING STANDARD SURVEYING CONSTRUCTION LAYOUT TECHNIQUES. IN NO CASE SHALL THE CONTRACTOR SCALE INFORMATION FROM THE PLANS OR ATTEMPT TO CONSTRUCT IMPROVEMENTS WITHOUT PERFORMING THE CONSTRUCTION LAYOUT IN ACCORDANCE WITH THE INFORMATION CONTAINED HEREIN.
- THE CONTRACTOR SHALL OBTAIN AND HAVE ONSITE ALL PERMITS PRIOR TO CONSTRUCTION, INCLUDING BUT NOT LIMITED TO, F.D.E.P., F.D.O.T., AND THE LOCAL GOVERNMENT. THE CONTRACTOR SHALL OBTAIN ALL OTHER REQUIRED PERMITS.
- PRIOR TO COMMENCING CONSTRUCTION OR DEMOLITION / LAND CLEARING ACTIVITIES, CONTRACTOR SHALL INSTALL ANY REQUIRED SILT FENCING OR BALED HAY BARRIERS (F.D.O.T. INDEX 102) FOR SILT CONTROL. THERE WILL BE NO DIRECT PAYMENT FOR THIS WORK. COST SHALL BE INCLUDED IN OTHER ITEMS OF WORK. LOCATION SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED IN THE FIELD.
- DEWATERING: SHOULD LOWERING OF GROUNDWATER BE NECESSARY FOR THE INSTALLATION OF CONCRETE STRUCTURES, WATER MAIN, ETC., OR TO PREVENT LATERAL MOVEMENT OF MATERIAL UNDER CONCRETE ALREADY PLACED, SUCH LOWERING SHALL BE ACCOMPLISHED BY MEANS OF A WELL POINT SYSTEM OR OTHER APPROVED MEANS, AT CONTRACTOR'S EXPENSE. COMPREHENSIVE PLANS FOR DE- WATERING OPERATIONS, IF USED, SHALL BE SUBMITTED BY THE CONTRACTOR PRIOR TO INSTALLATION. DISCHARGE OF GROUNDWATER TO SURFACE WATERS OF THE STATE REQUIRES A PERMIT UNDER F.A.C. 62-621.300(2). CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AN ANALYSIS OF GROUND WATER IN ACCORDANCE WITH THE GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUND WATER FROM ANY NON-CONTAMINATED SITE ACTIVITY - TABLE I, AND FILING APPROPRIATE NOTIFICATIONS TO THE FDEP INDUSTRIAL WASTEWATER DIVISION.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION UNLESS OTHERWISE DIRECTED.
- CONTRACTOR SHALL OBTAIN, IF AVAILABLE, AND REVIEW ALL AVAILABLE GEOTECHNICAL REPORTS PRODUCED FOR THE SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION. IF NO GEOTECHNICAL REPORTS ARE AVAILABLE, THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING SITE SOIL CONDITIONS PRIOR TO CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING SIGNED AND SEALED RECORD DRAWINGS SHOWING ALL IMPROVEMENTS CONSTRUCTED UNDER THIS CONTRACT. RECORD DRAWINGS SHALL INCLUDE BOTH ABOVE GROUND AND BURIED UTILITIES INCLUDING ANY EXISTING UTILITIES NOT SHOWN ON THESE PLANS BUT ENCOUNTERED DURING THE CONSTRUCTION PROCESS. RECORD DRAWINGS SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR. CONTRACTOR SHALL CONTACT ENGINEER OF RECORD FOR SPECIFIC REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR CONTINUATION OF SERVICE TO OCCUPIED BUILDINGS DURING CONSTRUCTION AND REPAIR OR REPLACEMENT OF ANY EXISTING UTILITIES IMPACTED BY CONSTRUCTION.
- IF WELLS ARE ENCOUNTERED ON SITE, THEY SHALL BE ABANDONED BY A FLORIDA CERTIFIED WELL DRILLER USING ABANDONMENT PROCEDURES AND PERMITTING PROCESS OF THE LOCAL WATER MANAGEMENT DISTRICT OR OTHER APPLICABLE REGULATORY AGENCY.
- IF APPLICABLE, ANY WELLS PROPOSED ONSITE, I.E. IRRIGATION, GEOTHERMAL, ETC. SHALL BE PERMITTED APPROPRIATELY THROUGH THE LOCAL WATER MANAGEMENT DISTRICT. PERMITTING IS THE RESPONSIBILITY OF THE CONTRACTOR UNLESS OTHERWISE ARRANGED.
- CONTRACTOR SHALL CALL BEFORE DIGGING TO SUNSHINE 811 OF FLORIDA.
- PRIOR TO COMMENCEMENT OF DEMOLITION AND CONSTRUCTION ACTIVITIES, CONTRACTOR IS TO INSTALL ADEQUATE BARRIERS TO RESTRICT PUBLIC AREAS. IN AREAS WHERE CONSTRUCTION ACTIVITIES ARE DIRECTLY ADJACENT TO HIGH TRAFFIC ROUTES, MAY RESULT IN THE CREATION OF DUST OR PROJECTILES. SOLID BARRIERS (SUCH AS CANVAS OR PLYWOOD) MUST BE USED.

HANDICAP ACCESSIBILITY:

- HANDICAP RAMPS AND CROSSWALKS PER THE LATEST FLORIDA ACCESSIBILITY CODE, A.D.A. AND FDOT STANDARD INDEX #522-002 ARE REQUIRED AT ALL PEDESTRIAN CROSSING LOCATIONS.

ARCHITECTURAL COORDINATION:

- WHEN APPLICABLE, ARCHITECTURAL PLANS SHALL SUPERSEDE THESE PLANS WITH RESPECT TO ALL BUILDING DIMENSIONS AND BUILDING HARDSCAPE INTERFACE. IN CASE OF CONFLICT AND PRIOR TO CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR CONTACTING BOTH THE ENGINEER AND ARCHITECT IMMEDIATELY.

STRUCTURAL COORDINATION:

- WHEN APPLICABLE, CONTRACTOR SHALL REFER TO THE CONSTRUCTION DETAILS AND SPECIFICATIONS OF THE APPLICABLE STRUCTURAL PLANS FOR ALL SITE RETAINING WALLS AND OTHER STRUCTURAL COMPONENTS.

SIGNAGE:

- PROJECT SIGNS SHALL MEET ALL APPLICABLE REQUIREMENTS BASED ON LOCAL SIGN ORDINANCE.
- CONTRACTOR IS RESPONSIBLE FOR SIGN PERMITTING.

DEMOLITION:

- ALL EXISTING CONCRETE, ASPHALT, TREES, STUMPS, AND OTHER DELETERIOUS MATERIAL AS INDICATED ON THE PLANS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH FLORIDA LAWS.
- WHERE PAVEMENT IS TO BE REMOVED AND REPLACED, AS INDICATED ON THE PLANS OR DIRECTED IN THE FIELD, ALL EXISTING MARKINGS AND TRAFFIC LOOPS SHALL ALSO BE REPLACED. THERE WILL BE NO DIRECT PAYMENT FOR THIS WORK. COST SHALL BE INCLUDED IN RELATED ITEMS OF WORK.
- ALL EXISTING PAVEMENT AND DRIVEWAY PAVEMENT TO BE REMOVED SHALL BE SAW CUT.
- REPAIR ALL EXISTING DRIVEWAYS CROSSED BY UTILITY CONSTRUCTION TO MATCH EXISTING CONSTRUCTION.
- CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT ABUTS.
- ANY DISTURBED MAIL BOXES OR SIGNS MUST BE REINSTALLED TO EXISTING OR ACCEPTABLE CONDITION AT THE CONTRACTOR'S EXPENSE.
- ALL ITEMS NOTED AS "REMOVE AND SALVAGE" ARE TO REMAIN THE PROPERTY OF OWNER. CARE MUST BE TAKEN NOT TO DAMAGE SALVAGED ITEMS. ITEMS ARE TO BE TRANSPORTED TO A STORAGE LOCATION SPECIFIED BY THE OWNER.

SEDIMENTATION AND EROSION CONTROL NOTES:

- CONTRACTOR SHALL STAGE AND TIME CONSTRUCTION TO MINIMIZE THE SIZE OF EXPOSED SOIL AREAS AND THE TIME BETWEEN EXPOSING THE SOIL AREA AND FINISHING THE SOIL AREA.
- AS SOON AS GRADING IS COMPLETE IN AN AREA, THE CONTRACTOR WILL STABILIZE THE SOIL. FOR LONG, NARROW AREAS, THE CONTRACTOR SHALL STABILIZE CONTINUOUSLY DURING GRADING OPERATIONS. ROUGH GRADED AREAS SHOULD BE STABILIZED WITH TEMPORARY EROSION CONTROL. IF FINAL GRADING AND STABILIZATION WILL NOT BE PERFORMED WITHIN FIVE (5) DAYS, FAILURE TO STABILIZE EXPOSED SOIL AREAS IN A TIMELY MANNER AFTER GRADING MAY BE CONSIDERED A VIOLATION OF CHAPTERS 17-3, 17-12, AND/OR 17/25, FLORIDA ADMINISTRATIVE CODE, BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (F.D.E.P.) AND SUBJECT TO CORRECTIVE ACTION, PURSUANT TO SECTION 403.121-403.161 FLORIDA STATUTES.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING A TASK TO PROVIDE EROSION CONTROL UNLESS ANOTHER PARTY HAS BEEN PREVIOUSLY SPECIFIED AS RESPONSIBLE FOR THE EROSION CONTROL ASSOCIATED WITH THAT TASK. IN THE EVENT ANOTHER PARTY IS RESPONSIBLE FOR EROSION CONTROL, THE CONTRACTOR SHALL STILL BE RESPONSIBLE FOR COORDINATION WITH THE PARTY RESPONSIBLE. IN THE EVENT THAT DAMAGE TO THE CONSTRUCTED ITEM RESULTS ARE DUE TO LACK OF EROSION CONTROL, THE CONTRACTOR SHALL REPAIR OR REPLACE THE ITEM AT NO CHARGE TO THE OWNER.
- TEMPORARY EROSION CONTROL SHALL CONSIST OF TEMPORARY GRASS, TEMPORARY MULCH, TEMPORARY SOD, ARTIFICIAL COVERINGS, BALED HAY OR STRAW, SILT FENCES, AND TURBIDITY BARRIERS AS SHOWN ON THE CONSTRUCTION DRAWINGS AND IN ACCORDANCE WITH APPROPRIATE TECHNICAL SPECIFICATIONS. IF TECHNICAL SPECIFICATIONS ARE NOT PROVIDED, THEN TEMPORARY EROSION CONTROL SHALL BE IN ACCORDANCE WITH SECTION 104 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION (F.D.O.T.) STANDARD SPECIFICATIONS.
- PERMANENT EROSION CONTROL SHALL CONSIST OF SEED, SEED AND MULCH, HYDRO-SEEDING, SOD, AND/OR ARTIFICIAL COVERINGS AS SHOWN ON THE CONSTRUCTION DRAWINGS AND IN ACCORDANCE WITH TECHNICAL SPECIFICATION SECTIONS 12 AND 13. IF TECHNICAL SPECIFICATIONS ARE NOT PROVIDED THEN PERMANENT EROSION CONTROL SHALL BE IN ACCORDANCE WITH SECTIONS 570 AND 575 OF THE F.D.O.T. STANDARD SPECIFICATIONS. SEED OR GRASS TYPE SHALL MATCH EXISTING OR BE AS SPECIFIED BY OWNER UNLESS NOTED OTHERWISE.
- GRASS BY SEEDING SHALL BE IN ACCORDANCE WITH SECTIONS 104, 570, 981, 982, AND 983 OF F.D.O.T. STANDARD SPECIFICATIONS. THIS SHALL BE USED ONLY IN AREAS SUBJECT TO LIGHT EROSION SUCH AS FLAT AREAS.

- GRASS BY HYDRO-SEEDING SHALL BE IN ACCORDANCE WITH SECTIONS 104, 570, 981, 982, AND 983 OF F.D.O.T. STANDARD SPECIFICATIONS. HYDRO-SEEDING MAY BE USED FOR FLAT AREAS AND SIDE SLOPES WHICH DO NOT EXCEED 4:1. DRAINAGE DITCHES OR LARGE SWALES MUST HAVE ADDITIONAL PROTECTION BESIDES HYDRO-SEEDING.
- GRASS AND MULCH SHALL BE IN ACCORDANCE WITH SECTIONS 104, 570, 981, 982, AND 983 OF F.D.O.T. STANDARD SPECIFICATIONS. GRASS AND MULCH MAY BE USED IN ALL AREAS EXCEPT LARGE SWALES OR DITCHES. MULCH SHALL BE ANCHORED IN ACCORDANCE WITH SECTION 570.
- SOLID SOD SHALL BE IN ACCORDANCE WITH SECTIONS 104, 575, 981, 982, AND 983 OF F.D.O.T. STANDARD SPECIFICATIONS. SOD MAY BE USED IN ALL AREAS FOR SIDE SLOPES GREATER THAN OR EQUAL TO 2:1. SOD SHALL BE STAGGERED SO AS TO AVOID A CONTINUOUS SEAM. IN AREAS WITH SLOPES 4:1 OR STEEPER, EACH PIECE OF SOD SHALL BE PEGGED WITH SOD PEGS. IN DIFFICULT SOIL CONDITIONS WITH STEEP SLOPES, IT MAY BE NECESSARY TO COVER SOD WITH ARTIFICIAL COVERINGS SUCH AS JUTE MESH UNTIL SOD BECOMES ESTABLISHED.
- TEMPORARY EROSION CONTROL BY ARTIFICIAL COVERINGS SHALL CONSIST OF STRAW BLANKETS, COCONUT FIBER BLANKETS, POLYESTER BLANKETS, JUTE MESH, AND DRAINAGE FABRICS. MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. SEEDING SHALL BE INCLUDED IF MATERIAL REQUIRES VEGETATION TO FUNCTION PROPERLY.
- THE CONTRACTOR IS TO PROVIDE EROSION CONTROL/ SEDIMENTATION BARRIER (HAY BALES, SILT FENCE, TURBIDITY BARRIER, OR AS SPECIFIED IN THE CONSTRUCTION DRAWINGS) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS, WATERWAYS, AND WETLAND OR JURISDICTIONAL AREAS. IF, IN THE OPINION OF THE ENGINEER, AND/OR REGULATORY AUTHORITIES, EXCESSIVE QUANTITIES OF MATERIAL ARE TRANSPORTED OFF- SITE BY EROSION OR STORMWATER RUNOFF, THE CONTRACTOR SHALL IMPROVE CONDITIONS TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES. IN NO CASE SHALL CONSTRUCTION COMMENCE PRIOR TO INSTALLATION OF EROSION CONTROL/SEDIMENTATION BARRIER.
- CONTRACTOR SHALL PLACE STRAW, MULCH, OR OTHER SUITABLE MATERIAL ON GROUND IN ADDITION TO COARSE AGGREGATE IN AREAS WHERE CON- STRUCTION-RELATED TRAFFIC IS TO ENTER AND EXIT SITE.
- IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AREA USING SPRINKLING IRRIGATION OR OTHER ACCEPTABLE METHODS.
- ALL DISTURBED AREAS NOT PAVED, SODDED OR OTHERWISE LANDSCAPED SHALL BE SEEDED, FERTILIZED AND MULCHED PER FDOT SPECIFICATIONS, SECTION 570. SEEDING RATE AND MIX SHALL COMPLY WITH THE SEEDING RATE TABLE OFF DOT STANDARD INDEX 105.
- CONTRACTOR SHALL SOD ALL SLOPES 4:1 AND STEEPER IMMEDIATELY AFTER CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- ALL EXCAVATED SOILS SHALL BE STOCKPILED IN LOCATION(S) INDICATED ON PLANS IF SHOWN. APPROPRIATE SEDIMENTATION AND EROSION CONTROLS SHALL BE INSTALLED AROUND THE STOCKPILE.

MAINTENANCE:

- THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS SECTION 10, 12, AND 13 UNTIL THE PROJECT IS COMPLETED AND ACCEPTED. IF TECHNICAL SPECIFICATIONS ARE NOT PROVIDED, THEN MAINTENANCE SHALL BE IN ACCORDANCE WITH SECTION 104 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION (F.D.O.T.) STANDARD SPECIFICATIONS.
- SILT FENCES AND TURBIDITY BARRIERS SHALL BE CHECKED DAILY FOR EFFECTIVENESS, BREACHES, AND ROUTINE MAINTENANCE.
- ALL DISTURBED AREAS TO BE PERMANENTLY GRASSED AND RETENTION AREAS TO BE SODDED.

SITE GEOMETRY NOTES:

- ALL BUILDING DIMENSIONS ARE TO THE FACE OF BUILDING UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ALONG CURB LINES ARE TO THE BACK OF CURB UNLESS OTHERWISE NOTED.

GENERAL UTILITY NOTES:

- ALL UTILITIES MUST BE INSTALLED PRIOR TO THE CONSTRUCTION OF CURB, BASE AND PAVEMENT. APPROVAL BY LOCAL AUTHORITY MUST BE OBTAINED PRIOR TO FURTHER CONSTRUCTION.
- CONTRACTOR IS TO PROVIDE A SITE ELECTRICAL PLAN TO OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF CONSTRUCTION (EXCLUDING DEMOLITION). CONDUITS FOR ELECTRICAL WORK IN CIVIL PLANS ARE ONLY TO NOTE AN INTENT TO SERVE SPECIFIC AREAS. SITE ELECTRICAL PLAN SHOULD BE DEVELOPED IN COORDINATION WITH OWNER TO ANTICIPATE DEMAND AND ASSURE SUCH WORK MEETS APPLICABLE CODES.
- SITE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH LIGHTING, IRRIGATION AND ELECTRICAL CONTRACTORS REGARDING REQUIRED CONDUITS.
- PIPE LENGTHS SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE LENGTHS ARE MEASURED IN LINEAR FEET (NOTED AS LF).
- ALL MANHOLES, INLETS AND CLEANOUTS SUBJECT TO VEHICULAR LOADING, INCLUDING THOSE AREAS REQUIRING FUTURE MAINTENANCE, SHALL HAVE TRAFFIC BEARING (HS-20) RINGS, COVERS, GRATES, ETC.
- ALL STORM INLETS EQUAL TO OR GREATER THAN 5' DEEP SHALL BE EQUIPPED WITH ACCESS RUNGS.
- ALL STORM SEWER STUB-OUTS TO BE CLOSED W/ MASONRY SEAL AT THE STUB END.
- ALL STORMWATER DRAIN PIPE JOINTS WITHIN 6 FEET OF PAVING SHALL BE WRAPPED WITH FDOT APPROVED FABRIC UNLESS OTHERWISE NOTED OR STATED BY THE ENGINEERS.
- WATER AND WASTEWATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH LOCAL AUTHORITY SPECIFICATIONS, UNLESS OTHERWISE SHOWN ON PLANS.
- A MINIMUM 18" COVER IS REQUIRED ON ALL PROPOSED WATER AND SANITARY LINES AND SERVICES FROM FINISHED GRADES, INCLUDING SWALES AND STORMWATER RETENTION / DETENTION AREAS.
- POTABLE WATER MAINS, SERVICES AND VALVES SHALL BE MARKED BY INSTALLATION OF NO. 14 COPPER INSULATED TRACER WIRE IN TRENCH ABOVE PIPE. TRACER WIRE SHALL BE INSTALLED THROUGHOUT THE ENTIRE SYSTEM.
- CONTRACTOR SHALL INSTALL SANITARY SEWER MAINS AT UNIFORM SLOPE BETWEEN MANHOLES SPECIFIED ON THE UTILITY PLAN. ALIGNMENT OF PIPE BETWEEN MANHOLES SHALL BE STRAIGHT.
- FIRE HYDRANTS SHALL BE PAINTED CHROME YELLOW (SAFETY YELLOW) PER NFPA-291.
- LEAKAGE TESTS SHALL BE PERFORMED ON ALL SEWER PIPES AND MANHOLES.
 - SEWER PIPES SHALL BE TESTED BY EITHER INFILTRATION OR EXFILTRATION, AS APPROPRIATE. SO THAT TEST IS PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET. TEST DURATION SHALL BE A MINIMUM OF 2 HOURS DURATION AND MAXIMUM ALLOWABLE LEAKAGE (IN OR OUT OF PIPE) SHALL NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY [EQUIVALENT TO 0.157 GALLONS PER INCH DIAMETER PER 100 FEET OF PIPE PER HOUR].
 - MANHOLES SHALL BE TESTED BY PLUGGING LINES IN / OUT OF THE MANHOLE AND FILLING MANHOLE TO RIM WITH WATER. AFTER ALLOWING WATER TO STABILIZE FOR ONE HOUR, CONTRACTOR SHALL FILL THE MANHOLE AGAIN, THEN CHECK WATER LEVEL AFTER TWO HOURS. A DROP IN WATER LEVEL OF ONE INCH (1") PER FOOT OF MANHOLE DEPTH PER HOUR IS CONSIDERED ACCEPTABLE.
- IF PIPING OR MANHOLE FAIL LEAKAGE TESTS, CONTRACTOR SHALL TAKE CORRECTIVE ACTION TO RESEAL AND THEN RETEST.
- HYDROSTATIC TESTING OF WATER MAINS AND APPURTENANCES SHALL CONSIST OF BOTH PRESSURE AND LEAKAGE TESTS OF 2 HOUR DURATION EACH AT 150 PSIG.
- PRESSURE TESTS WILL BE CONDUCTED WITH A PRESSURE LOSS OF NOT MORE THAN 2 PSIG REGARDLESS OF PIPE LENGTH TESTED.
- LEAKAGE TESTS WILL BE CONDUCTED AFTER PRESSURE TESTS. PIPE INSTALLATION WILL NOT BE ACCEPTED IF LEAKAGE IS GREATER THAN DETERMINED BY THE FOLLOWING FORMULA FROM ANSI/AWWA C-600-LATEST; L=(SD(P)/1)133200 WHERE L = ALLOWABLE LEAKAGE IN GALLONS PER HOUR; S = LENGTH OF PIPELINE TESTED IN FEET; D = NOMINAL DIAMETER OF PIPE IN INCHES; P = AVERAGE PRESSURE DURING LEAKAGE TEST IN PSIG.
- IF LEAKAGE IS GREATER THAN SPECIFIED LIMIT, CONTRACTOR SHALL TAKE CORRECTIVE ACTION TO LOCATED AND REPAIR DEFECTIVE MATERIAL. VISIBLE LEAKS WILL BE CORRECTED REGARDLESS OF TOTAL LEAKAGE.
- ALL WATER PIPES AND FITINGS WILL BE THOROUGHLY DISINFECTED PRIOR TO BEING PLACED INTO SERVICE. DISINFECTION WILL FOLLOW APPLICABLE PROVISIONS OF PROCEDURES ESTABLISHED IN AWWA C-651-LATEST, RULE 62-555.345, F.A.C. AND WILL BE IN ACCORDANCE WITH BOTH STATE AND LOCAL REQUIREMENTS.
- WHERE IT BECOMES NECESSARY TO TEMPORARILY REMOVE, REPOSITION, OR SUPPORT EXISTING FACILITIES, UTILITY POLES, ETC. THIS WORK SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE AND IN ACCORDANCE WITH REQUIREMENTS OF THE OWNER. OF THE EXISTING FACILITY, UTILITY POLE, ETC., THE CONTRACTOR SHALL GIVE PROPER NOTICE TO THE UTILITIES. THE CONTRACTOR SHALL PHYSICALLY EXAMINE THE ENTIRE PROJECT SITE AND INFORM HIMSELF FULLY IN REGARD TO ALL CONDITIONS PERTAINING TO THE PLACE WHERE THE WORK IS TO BE PERFORMED FOR PURPOSE OF DETERMINING HIS COST TO PERFORM THE WORK.
- THE CONTRACTOR SHOULD PAY SPECIAL ATTENTION TO AREAS INVOLVING CLEARING AND GRUBBING, EXISTING FACILITIES REMOVAL AND REPLACEMENT, SUPPORT ON RELOCATION, AND WORK INVOLVED IN WETLAND AREAS, WHERE IT IS NECESSARY TO CROSS OVER OR UNDER EXISTING FACILITIES. A MINIMUM OF 6' CLEARANCE SHALL BE PROVIDED BETWEEN THE NEW AND EXISTING UTILITY. IT MAY BE NECESSARY AT SUCH LOCATIONS TO PROVIDE DUCTILE IRON PIPE FOR THE NEW UTILITY AND/OR SUPPORT AS SHOWN IN THE PLANS. THIS WORK WILL BE AS DIRECTED IN THE FIELD OR SHOWN ON THE PLANS AND SHALL BE PAID FOR UNDER THE UNIT PRICES BID FOR THE VARIOUS SIZES AND TYPES OF PIPE. THERE SHALL BE NO ADDITIONAL COMPENSATION FOR EXTRA DEPTH REQUIRED TO CROSS UNDER EXISTING FACILITIES.
- WHEN PIPE DEFLECTION IS USED TO CHANGE ALIGNMENT ON GRADE OF PRESSURE PIPE, DEFLECTION SHALL NOT EXCEED 50% OF THE MANUFACTURER'S MAXIMUM RECOMMENDED DEFLECTION. IT SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE AND SCHEDULE THE ACTIVITIES OF THE UTILITY COMPANIES INCLUDING BUT NOT LIMITED TO TV, TELEPHONE, GAS, POWER, ETC., AND PROVIDE IN ACCORDANCE WITH THE UTILITY COMPANY ANY NECESSARY CONDUITS FOR CROSSINGS UNDER PAVEMENT. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR THIS SERVICE.
- ANY DAMAGE CAUSED BY THE UTILITY COMPANY TO THE IMPROVEMENTS OF THE CONTRACTOR SHALL BE REPAIRED IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT REPAIRS ARE PERFORMED, EITHER BY THE CONTRACTOR OR THE UTILITY COMPANY AT NO COST TO THE OWNER.

STORMWATER MANAGEMENT NOTES:

- JUNCTION BOXES OUTSIDE THE RIGHT OF WAY MUST BE CAST IRON CAPABLE OF HANDLING LIVE LOADS AND BE CAST WITH "STORM" ON THE COVER.

PAVING, GRADING & EARTHWORK NOTES:

- IN EXCAVATING STREETS AND DRIVEWAYS THAT HAVE BEEN SURFACED WITH SAND-CLAY, CLAY GRAVEL, OR OTHER BASE COURSE, SUCH BASE MATERIALS SHALL BE EITHER STOCKPILED AND KEPT SEPARATE FROM THE EARTH EXCAVATED OR THE CONTRACTOR SHALL, AT HIS EXPENSE, PROVIDE NEW BASE OF LIKE KIND AND EQUAL QUALITY.
- CONTRACTOR MUST SALVAGE EXISTING TOP SOIL WITHIN PROJECT SITE OR REPLACE AT HIS OWN EXPENSE.
- ANY DEFICIENCY IN THE QUANTITY OF MATERIAL FOR BACKFILLING THE TRENCHES, OR FOR FILLING DEPRESSIONS CAUSED BY SETTLEMENT, SHALL BE SUPPLIED BY THE CONTRACTOR AT NO COST TO THE OWNER. THIS ALSO APPLIES TO BASE COURSE UNDER PAVED STREETS.

- CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. CLEAR AND GRUB SHALL CONSIST OF THE REMOVAL OF ALL DELETERIOUS MATERIAL INCLUDING TREES, ROOTS, TOPSOIL, ETC.
- ORGANIC, UNSUITABLE SOILS BENEATH THE PAVED AREAS SHALL BE REMOVED AND REPLACED WITH CLEAN SAND MATERIAL OF WHICH NOT MORE THAN 15% BY DRY WEIGHT IS FINER THAN THE NUMBER 200 MESH SIEVE. FILL MATERIAL SHALL BE FREE OF ORGANICS, RUBBLE, CLAY, OR OTHER DELETERIOUS MATTER.
- THE PAVEMENT SUBGRADE SHOULD BE STABILIZED TO A MINIMUM LBR OF 40 UNLESS OTHERWISE SPECIFIED. MATERIAL FOR STABILIZATION SHALL BE AS CALLED OUT ON THE PLANS, OR OTHER MATERIAL APPROVED BY THE ENGINEER AND THE GEOTECHNICAL ENGINEER. COMPACTION OF THE SUBGRADE SHALL BE BY A HEAVY VIBRATORY ROLLER (MINIMUM STATIC WEIGHT OF FIVE TONS) WITH A MINIMUM OF 10 PASSES WITH A 20% OVERLAP BETWEEN PASSES. THE VIBRATORY ROLLER SHOULD ALSO BE EQUIPPED WITH A VARIABLE FREQUENCY CONTROL TO OPERATE AT THE RESONANT FREQUENCY OF THE SOILS.
- ALL WASTE MATERIAL SHALL BE DISPOSED OF OFFSITE IN ACCORDANCE WITH APPLICABLE REGULATIONS.
- PROPOSED SPOT ELEVATIONS REPRESENT FLOW LINE OF CURB & GUTTER OR FINISHED PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS.
- CONTRACTOR TO PROVIDE 1/2" TO 1" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE AND OTHER MATERIALS (BUILDINGS, OTHER POURED CONCRETE, ETC.) EXCEPT ASPHALT.
- CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT ABUTS.
- TESTING REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE TESTING SCHEDULE CONTAINED WITHIN THESE PLANS OR PER APPLICABLE LOCAL GOVERNMENT OR REGULATORY AGENCY, WHICHEVER IS MORE STRINGENT. SELECTION AND CONTRACTING WITH THE TESTING FIRMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE AND SCHEDULE ALL TESTS.
- ACCEPTANCE TESTING FOR NEW PAVEMENT, IF APPLICABLE, SHALL CONSIST OF ONE PASS OF A STANDARD 15-FOOT ROLLING STRAIGHT EDGE OPERATED WHILE THE PAVEMENT IS STILL HOT. ALL DEFICIENCIES IN EXCESS OF 3/16 INCH SHALL BE CORRECTED IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATION 330.
- AT THE OPTION OF THE OWNER, THE CONTRACTOR SHALL FLOOD ALL NEW PAVEMENT SURFACES WITH WATER AND INSPECT FOR PONDING. ALL PONDING AREAS SHALL BE CORRECTED IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATION 330.

TRAFFIC, SIGNAGE & STRIPING NOTES:

- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN ADEQUATE TRAFFIC CONTROL AND TO PROVIDE DETOURS AROUND CONSTRUCTION ACTIVITIES UNLESS APPROVED BY THE OWNER. IN WRITING, NO STREET SHALL REMAIN CLOSED TO TRAFFIC OVERNIGHT. IN ADDITION, THE CONTRACTOR SHALL COOPERATE WITH LOCAL RESIDENTS IN GAINING ACCESS TO THEIR HOMES AND BUSINESSES DURING WORKING HOURS AND SHALL ASSIST AT ALL TIMES WHEN VEHICLES EXPERIENCE TROUBLE DUE TO CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL INSTALL ALL TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED FOR THE MAINTENANCE AND PROTECTION OF TRAFFIC DUE TO CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH THE LATEST EDITION OF THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD PART 6), AND/OR IN ACCORDANCE W/ FDOT STD. 600, WHICHEVER IS MORE STRINGENT.
- ALL STRIPING IN THE FLORIDA STATE RIGHT-OF-WAY IS TO BE THERMOPLASTIC.

POLLUTION CONTROL:

- POLLUTION CONTROL MEASURES FOR THE SITE INCLUDE PROPER WASTE DISPOSAL, PROPER MANAGEMENT OF CHEMICAL STORAGE TANKS, EROSION FROM EGRESSES, SANITARY SEWAGE DISPOSAL AND ON-SITE VEHICLE STORAGE AND MAINTENANCE. NO DEBRIS THAT IS GENERATED WILL BE BURIED ON SITE.
 - WASTE DISPOSAL: SOLID MATERIALS, INCLUDING BUILDING MATERIALS, SHALL BE PROPERLY DISPOSED OF OR REMOVED FROM THE SITE TO AN APPROPRIATE LANDFILL, AND SHALL NOT BE DISCHARGED INTO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT. CLEANUP AND DISPOSAL OF ALL WASTE MATERIALS (SOLID OR HAZARDOUS) SHALL BE IN ACCORDANCE WITH ALL RECOGNIZED LOCAL AND FEDERAL REQUIREMENTS. ALL DISPOSAL SHALL BE TO APPROVED OFF-SITE WASTE FACILITIES. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED IN THE APPROPRIATE ON-SITE OR OFF-SITE LOCATION. THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.
 - OFF-SITE VEHICLE TRACKING: OFF-SITE VEHICLE TRACKING OF DIRT, SOILS, AND SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED OR ELIMINATED TO THE MAXIMUM EXTENT PRACTICAL. A STABILIZED CONSTRUCTION ENTRANCE HAS BEEN PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE CLEANED AS NECESSARY TO REMOVE ANY EXCESS MUD, DIRT, OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPULIN ON AN AS NEEDED BASIS. A CONCRETE TRUCK WASHOUT LOCATION SHALL BE IN A TEMPORARY TRUCK WASH AREA LOCATED AT THE SITE ENTRANCE. WASHOUT SHALL BE CONTAINED WITHIN A PIT OR TRENCH WITH NO MATERIAL LEAVING THE SITE OR IMPACTING VEGETATED OR NON-DISTURBED AREAS.
 - SANITARY WASTE: AS SITE CONDITIONS WARRANT, ALL SANITARY WASTE WILL BE MANAGED APPROPRIATELY BY EITHER AN ON-SITE PORTABLE UNIT(S) COLLECTED AT A MINIMUM OF ONCE PER WEEK BY THE LOCAL MUNICIPALITY AND/OR STATE OF GEORGIA LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR, OR WITH A MANAGEMENT PLAN THAT ROUTES INDIVIDUALS TO A LEGAL AND APPROPRIATE SANITARY WASTE FACILITY.
 - SPILL REMEDIATION MANAGEMENT PRACTICES: THE FOLLOWING ARE THE BEST MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES, AS WELL AS A CLEANUP PLAN IF NECESSARY.
- RISK REDUCTION: PETROLEUM, FERTILIZERS AND PAINT PRODUCTS
 - AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
 - PRODUCTS WILL BE STORED IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL, AND MUST BE KEPT OFF THE GROUND IN SECURELY FASTENED LIDS.
 - SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
 - WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED BEFORE DISPOSING OF THE CONTAINER.
 - MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
 - THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.
 - ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS (MSDS) WILL BE RETAINED.
 - IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.
 - ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE.
 - ALL PRODUCTS SHALL BE STORED AND USED IN AN AREA THAT PROVIDES A SECONDARY CONTAINMENT FEATURE, AND SHALL BE LOCATED IN AN AREA WITH THE LEAST FORESEEABLE IMPACT IF A CATASTROPHIC EVENT SHOULD OCCUR. FACILITIES SHOULD BE COVERED AND ACCESS RESTRICTED TO EMPLOYEES ONLY.
 - FERTILIZERS USED WILL BE APPLIED ONLY IN MINIMUM AMOUNTS AS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
 - KEEP FLAMMABLE LIQUIDS IN CLOSED CONTAINERS WHEN NOT IN USE.
 - USE PROPER RECEPTACLES TO DISPOSE OF CONTAMINATED WASTES THAT CANNOT BE RECYCLED IN CONFORMANCE WITH FEDERAL, STATE AND/OR LOCAL REGULATIONS.
 - DO NOT DUMP PETROLEUM PRODUCT WASTE, PESTICIDES, FERTILIZERS, PAINTS OR OTHER CHEMICALS INTO SEWERS, STORM DRAINS OR DRAINAGE CHANNELS.
 - PREVENT SPILLS OF PETROLEUM PRODUCTS FROM OCCURRING BY TAKING SPECIAL CARE WHEN HANDLING, AND KEEP FACILITIES AND EQUIPMENT MAINTAINED.
 - USE SPILL PROOF CONTAINERS AND FUNNELS WHEN TRANSFERRING FLUIDS FROM ONE CONTAINER TO ANOTHER.
 - POST INFORMATIONAL MATERIALS REGARDING CHEMICAL CONTROL.

SPILL CONTROL PLAN: THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

- EMERGENCY CONTACT NUMBERS FOR SPILLS SHALL BE AVAILABLE ON-SITE.
 - MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE ON SITE.
 - MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE AVAILABLE ON-SITE.
 - ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
 - KEEP TRAINED STAFF IN SPILL RESPONSE ON CALL.
 - THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
 - SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE LOCAL OR FEDERAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
 - THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
- THE FOLLOWING MATERIALS OR SUBSTANCES ARE ANTICIPATED TO BE PRESENT ON-SITE DURING CONSTRUCTION: CONCRETE AND ASPHALT; GRADED AGGREGATE BASE AND OTHER AGGREGATES; DETERGENTS; PAINTS (ENAMEL AND LATEX); METAL STUDS; CONCRETE; TAR; FERTILIZERS; PETROLEUM BASED PRODUCTS; CLEANING SOLVENTS; WOOD; MASONRY BLOCK; ROOFING SHINGLES.
 - ALL PETROLEUM PRODUCTS SHALL BE STORED AND USED IN AN AREA THAT PROVIDES A SECONDARY CONTAINMENT FEATURE, AND SHALL BE LOCATED IN AN AREA WITH THE LEAST FORESEEABLE IMPACT IF A CATASTROPHIC EVENT SHOULD OCCUR. EMERGENCY CONTACT NUMBERS AND PROCEDURES FOR SPILLS SHALL BE AVAILABLE ON-SITE.
 - WASTE DISPOSAL: SOLID MATERIALS, INCLUDING BUILDING MATERIALS WILL BE DISPOSED OF OFF SITE AND THEREFORE WILL NOT BE DISCHARGED TO WATERS OF THE STATE FROM THE CONSTRUCTION SITE.
 - ALL POTENTIAL POLLUTION SOURCES WILL BE IDENTIFIED, INCLUDING PETROLEUM PRODUCT STORAGE, CONCRETE HANDLING, HERBICIDES AND ANY OTHER POLLUTANTS WHICH HAVE THE POTENTIAL TO BE EXPOSED TO RAINFALL AND BE DISCHARGED IN THE STORM WATER RUNOFF. PRACTICES WILL BE IMPLEMENTED TO ENSURE THE REDUCTION OF THESE POLLUTANTS IN STORM WATER DISCHARGES.

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RECORD DATA

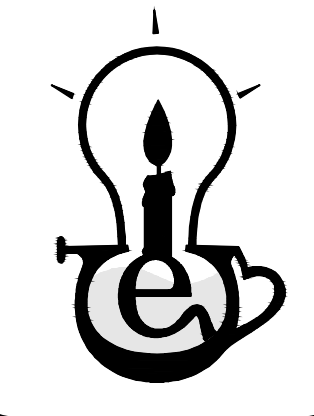
DATE: 04.04.2023

REV. No: 5

REV. DATE: 04.03.2024

DRAWN BY: CRP

REVIEWED BY: FCL



SHEET TITLE

GENERAL
NOTES (SHEET 1
OF 2)

SHEET NUMBER

C:\EC DROPBOX\PROJECTS\CALHOUN AVE\3.ENGINEERING\1.CDS\2.SHEETS\C100-GENERAL NOTES.DWG, Calh. 4/3/2024 9:46:34 AM

GENERAL TESTING NOTES:

1. TESTING REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE TESTING SCHEDULE CONTAINED WITHIN THESE PLANS OR PER APPLICABLE LOCAL GOVERNMENT OR REGULATORY AGENCY, WHICHEVER IS MORE STRINGENT. SELECTION AND CONTRACTING WITH THE TESTING FIRMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE AND SCHEDULE ALL TESTS.
2. COPIES OF THE TEST REPORTS FOR ASPHALT, BASE, SUBGRADE, FILL AND BACKFILL UNDER ROADWAYS AND STRUCTURES, AND UTILITY TRENCHES SHALL BE PROVIDED DIRECTLY TO THE ENGINEER FOR APPROVAL. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE TESTING AND INSURE THAT ALL APPLICABLE TESTS HAVE BEEN PERFORMED. FAILURE TO OBTAIN TEST RESULTS AT ANY POINT OF CONSTRUCTION WILL REQUIRE THE REMOVAL OF THE IMPROVEMENT AND REPLACEMENT BY CONTRACTOR, AT NO ADDITIONAL COST TO THE OWNER. IT SHOULD BE NOTED THAT THE APPLICABLE LOCAL GOVERNMENT MAY REQUIRE COMPACTION TESTING IN ACCORDANCE WITH THE TESTING SCHEDULE FOR UTILITY TRENCH FILL AND BACKFILL OR ACCORDING TO THE LOCAL GOVERNMENTAL STANDARDS, WHICHEVER IS MORE STRINGENT.

TESTING SCHEDULE (FOR ALL WORK OUTSIDE THE FLORIDA STATE DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY)				
ITEM	TEST	TEST IDENTIFICATION	TEST REQUIREMENT	TESTING FREQUENCY
UTILITY TRENCH FILL & BACKFILL	MAXIMUM DENSITY/OPTIMUM MOISTURE CONTENT	AASHTO T-180 ASTM D-1557	N/A	PER SOIL TYPE
	FIELD DENSITY	AASHTO T-191 / AASHTO T-204 ATM D-1556 / ASTM D-2937	95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT	ONE PER 500 L.F. HORIZONTAL OR ONE PER 750 S.Y. WITH A MINIMUM OF 3 TESTS. ALTERNATING 12 IN. LIFTS
	SOIL GRADATION	AASHTO M-92	(15% PASSING NO. 200 SEIVE)	ONE PER SOIL TYPE
FILL & BACKFILL UNDER ROADWAYS AND STRUCTURES	MAXIMUM DENSITY/OPTIMUM MOISTURE CONTENT	AASHTO T-180 ASTM D-1557	N/A	PER SOIL TYPE
	FIELD DENSITY	AASHTO T-191 / AASHTO T-204 ASTM D-1556, D-2937, D2922	98% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT	ONE PER 500 L.F. HORIZONTAL OR ONE PER 750 S.Y. WITH A MINIMUM OF 3 TESTS
	SOIL GRADATION	AASHTO M-92	(15% PASSING NO. 200 SEIVE)	ONE PER SOIL TYPE
SUBGRADE	BEARING VALUES	LBR-FDOT	40 (MIN.)	ONE PER SITE OR AT MATERIAL CHANGES
	MAXIMUM DENSITY/OPTIMUM MOISTURE CONTENT	AASHTO T-180 ASTM D-1557	N/A	PER SOIL TYPE
	FIELD DENSITY & THICKNESS	ASTM D-1556 OR ASTM D-2937	98% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT	ONE PER 500 L.F. HORIZONTAL OR ONE PER 750 S.Y. WITH A MINIMUM OF 3 TESTS
BASE (SAND-ASPHALT)	MARSHALL STABILITY TESTS	FDOT FM 5-511	500 LB. (MIN)	ONE PER SOURCE OR AS MATERIAL CHANGES
	FIELD DENSITY AND THICKNESS	ASTM D-1559	95% OF LAB DENSITY AS DETERMINED BY MARSHALL METHOD	ONE PER 300 L.F. HORIZONTAL OR ONE PER 750 SY WITH A MINIMUM OF 3 TESTS
BASE (SAND-CLAY)	BEARING VALUES	LBR-FDOT	70 (MIN.)	ONE PER SITE OR AS MATERIAL CHANGES
	MAXIMUM DENSITY/OPTIMUM MOISTURE CONTENT	AASHTO T-180 ASTM D-1557	N/A	PER SOIL TYPE
	FIELD DENSITY & THICKNESS	AASHTO T-191 OR AASHTO T-204 ASTM D-1556 OR ASTM D-2937	98% MAXIMUM DENSITY	ONE PER 500 L.F. HORIZONTAL OR ONE PER 750 S.Y. WITH A MINIMUM OF 3 TESTS
ASPHALT	MATERIALS QUALITY, BITUMEN CONTENT, AND GRADATION	AASHTO T-164, 5-30 ASTM D-2172	FDOT SPEC. 330, 331, 916	FDOT SPEC. 331, 916
	FIELD DENSITY & THICKNESS	ASTM D-2950	98% OF LAB DENSITY	ONE PER 500 L.F. HORIZONTAL OR ONE PER 750 S.Y. WITH A MINIMUM OF 3 TESTS
	AGGREGATE CERTIFICATION	N/A	FDOT SPEC. 901,902	ONE PER SUPPLIER
	MARSHALL STABILITY AND DENSITY	ASTM D-1559	FDOT SPEC. 331	ONE PER DAY
CONCRETE (MISC. SITE WORK*)	SLUMP TEST	AASHTO T-119 ASTM C-143	2" TO 3"	AS REQUIRED BY SOILS ENGINEER OR ONE PER SET OF CYLINDERS
	COMPRESSIVE STRENGTH	AASHTO T-23 ASTM C-31	3000 PSI	ONE SET OF 3 CYLINDERS PER 50 CY PER DAY
	AIR CONTENT	AASHTO T-199	3%-6%	ONE PER SET OF CYLINDERS
*NOTE: CONCRETE FOR SITE WORK INCLUDES BUT IS NOT LIMITED TO CURB & GUTTER, SIDEWALKS, ETC., EXCEPT CONCRETE PAVEMENT.				

ABBREVIATIONS:

ABB.	DESCRIPTION
N	NORTH
S	SOUTH
E	EAST
W	WEST
SF	SQUARE FOOT
LF	LINEAR FOOT
AC	ACRE
L1	LINE & NUMBER TO LINE TABLE
C1	CURVE & NUMBER TO LINE TABLE
LB	BUSINESS LICENSE
ID	IDENTIFICATION
NAVD	NORTH AMERICAN VERTICAL DATUM OF 1988
NAD83	NORTH AMERICAN DATUM OF 1983
ORB	OFFICIAL RECORDS BOOK
PG	PAGE
EL/ELEV	ELEVATION
±	MORE OR LESS
^	MINUTES WHEN USED IN BEARING OR ANGLE
'	FEET OF DECIMAL THEREOF WHEN USED IN DIMENSION

ABB.	DESCRIPTION
"	SECONDS WHEN USED IN BEARING OR ANGLE
"	INCHES OF DECIMAL THEREOF WHEN USED IN DIMENSION
°	DEGREE
HDPE	HIGH DENSITY POLYETHYLENE
RCP	REINFORCED CONCRETE PIPE
CMP	CORRUGATED METAL PIPE
EOP	EDGE OF PAVEMENT
FOC	FACE OF CURB
BOC	BACK OF CURB
R	RADIUS
TC	TOP OF CURB
BC	BOTTOM OF CURB
TW	TOP OF WALL
BW	BOTTOM OF WALL
INV	INVERT
CO	CLEANOUT
SSMH	SANITARY SEWER MANHOLE
STMH	STORM MANHOLE
YI	YARD INLET

LINETYPE LEGEND:

LINETYPE DESCRIPTION	LINETYPE
CABLE TELEVISION	CATV CATV CATV CATV CATV CATV CATV CATV CATV
COMMUNICATION	C C C C C C C C C C
OVERHEAD ELECTRIC	OE OE OE OE OE OE OE OE OE OE
UNDERGROUND ELECTRIC	UE UE UE UE UE UE UE UE UE UE
FIBER OPTIC LINE	FO FO FO FO FO FO FO FO FO FO
GAS MAIN	GAS GAS GAS GAS GAS GAS GAS GAS GAS
IRRIGATION LINE	IR IR IR IR IR IR IR IR IR IR
PROPERTY BOUNDARY	
BUFFER	
EASEMENT	
PROPERTY LOT LINE	
PRESERVATION	
RIGHT-OF-WAY	
SETBACK	
BUILDING OUTLINE	
BUILDING OVERHANG	
WETLAND BUFFER	
EDGE OF PAVEMENT	
BACK OF CURB	
FACE OF CURB	
RECLAIM WATER MAIN	RC RC RC RC RC RC RC RC RC
CENTERLINE	
FORCE MAIN	FM FM FM FM FM FM FM FM FM
SANITARY SEWER MAIN	SS SS SS SS SS SS SS SS SS
BARBED WIRE FENCE	X X X X X X X X X X
CHAIN LINK FENCE	
WOOD FENCE	
WOVEN FENCE	
MAJOR CONTOUR	
MINOR CONTOUR	
POTABLE WATER MAIN	W W W W W W W W W W
FIRE LINE	F F F F F F F F F F
STORM PIPE	
STORM POND OUTLINE	
LEFT OFFSET (PROFILE)	L L L L L L L L L L
RIGHT OFFSET (PROFILE)	R R R R R R R R R R
GRADE (PROFILE)	
SAMPLE/SECTION LINE	
SINGLE ROW SILT FENCE	SF SF SF SF SF SF SF SF SF
DOUBLE ROW SILT FENCE	SF SF SF SF SF SF SF SF SF
HEAVY DUTY SILT FENCE	HDSF HDSF HDSF HDSF HDSF HDSF HDSF HDSF HDSF
TREE PROTECTION	TP TP TP TP TP TP TP TP TP
LIMITS OF CLEARING	
LIMITS OF CONSTRUCTION	

HATCH LEGEND:

HATCH DESCRIPTION	HATCH
ASHPALT	
CONCRETE	
GRAVEL	
PAVERS	

HATCH DESCRIPTION	HATCH
SHELL	
WETLAND / CONSERVATION	
BUILDING	
RIP RAP / EXFILTRATION	

SYMBOL LEGEND:

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	FOUND CAPPED IRON PIN		FLARED END SECTION
	SET CAPPED IRON PIN		DITCH BOTTOM INLET
	FOUND NAIL & DISK		CURB INLET
	SET NAIL & DISK		GUTTER INLET
	FOUND CONCRETE MONUMENT		COMBINATION INLET
	SET CONCRETE MONUMENT		NATURAL GAS METER
	FOUND NAIL		NATURAL GAS VALVE (PROPOSED)
	SET NAIL		NATURAL GAS VALVE (EXISTING)
	FOUND PK MAG NAIL		IRRIGATION CONTROL VALVE (PROPOSED)
	SET PK MAG NAIL		IRRIGATION CONTROL VALVE (EXISTING)
	FOUND CHISELED TRIANGLE		POTABLE WATER METER (SINGLE SERVICE)
	FOUND GPS MONUMENT		POTABLE WATER METER (DUAL SERVICE)
	FOUND RAILROAD SPIKE		POTABLE WATER METER BANK
	FOUND AERIAL TARGET		POTABLE WATER VALVE (PROPOSED)
	BENCHMARK		POTABLE WATER VALVE (EXISTING)
	PRIMARY CONTROL POINT (PCP)		BACKFLOW PREVENTER
	MAGNOLIA TREE		POTABLE WATER REDUCER
	HICKORY TREE		TEE
	PALM TREE		CROSS
	OAK TREE		90° BEND
	PINE TREE		45° BEND
	ELECTRIC METER		22.5° BEND
	ELECTRIC PEDESTAL		11.25° BEND
	TELEPHONE PEDESTAL		FIRE HYDRANT (PROPOSED)
	CABLE PEDESTAL		FIRE HYDRANT (EXISTING)
	UTILITY POLE		WATER SPIGOT
	GUY POLE		RECLAIM METER
	FLAG POLE		RECLAIM VALVE (PROPOSED)
	LIGHT POLE		RECLAIM VALVE (EXISTING)
	GROUND LIGHT		AIR RELEASE VALVE
	MAIL BOX		FORCE MAIN VALVE (PROPOSED)
	BOLLARD		FORCE MAIN VALVE (EXISTING)
	WHEEL STOP		SANITARY SEWER MANHOLE
	HANDICAP STRIPING		SANITARY SEWER CLEANOUT
	PAVEMENT ARROW		GREASE TRAP
	SIGNAGE		GREASE TRAP MANHOLE
	MONITORING WELL		SANITARY SEWER HAND HOLE
	POINT OF ANALYSIS		SANITARY SEWER LAMP HOLE
	FLOW ARROWS		CONE (TRAFFIC CONTROL)
	STORMWATER MANHOLE		INLET PROTECTION
	STORMWATER CLEANOUT		DITCH PROTECTION
	NYLOPLAST DRAIN BASIN		SAND BAG
	MITERED END SECTION		DEMOLITION

REFERENCE SOURCES:

REFERENCE ABB.	REFERENCE MATERIAL
ASTM	AMERICAN SOCIETY OF TESTING MATERIALS
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AASHTO	AMERICAN ASSOCIATION OF HIGHWAY AND TRANSPORTATION OFFICIALS
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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RECORD DATA

DATE: 04.04.2023
REV. No: 5
REV. DATE: 04.03.2024
DRAWN BY: CRP
REVIEWED BY: FCL

NOTARY PUBLIC
FLORIDA
No. 86404
APR 03, 2023
STATE OF FLORIDA
PROFESSIONAL ENGINEER
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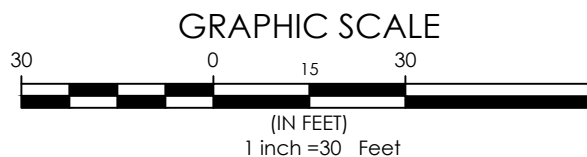
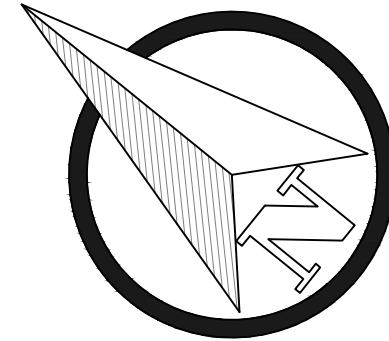
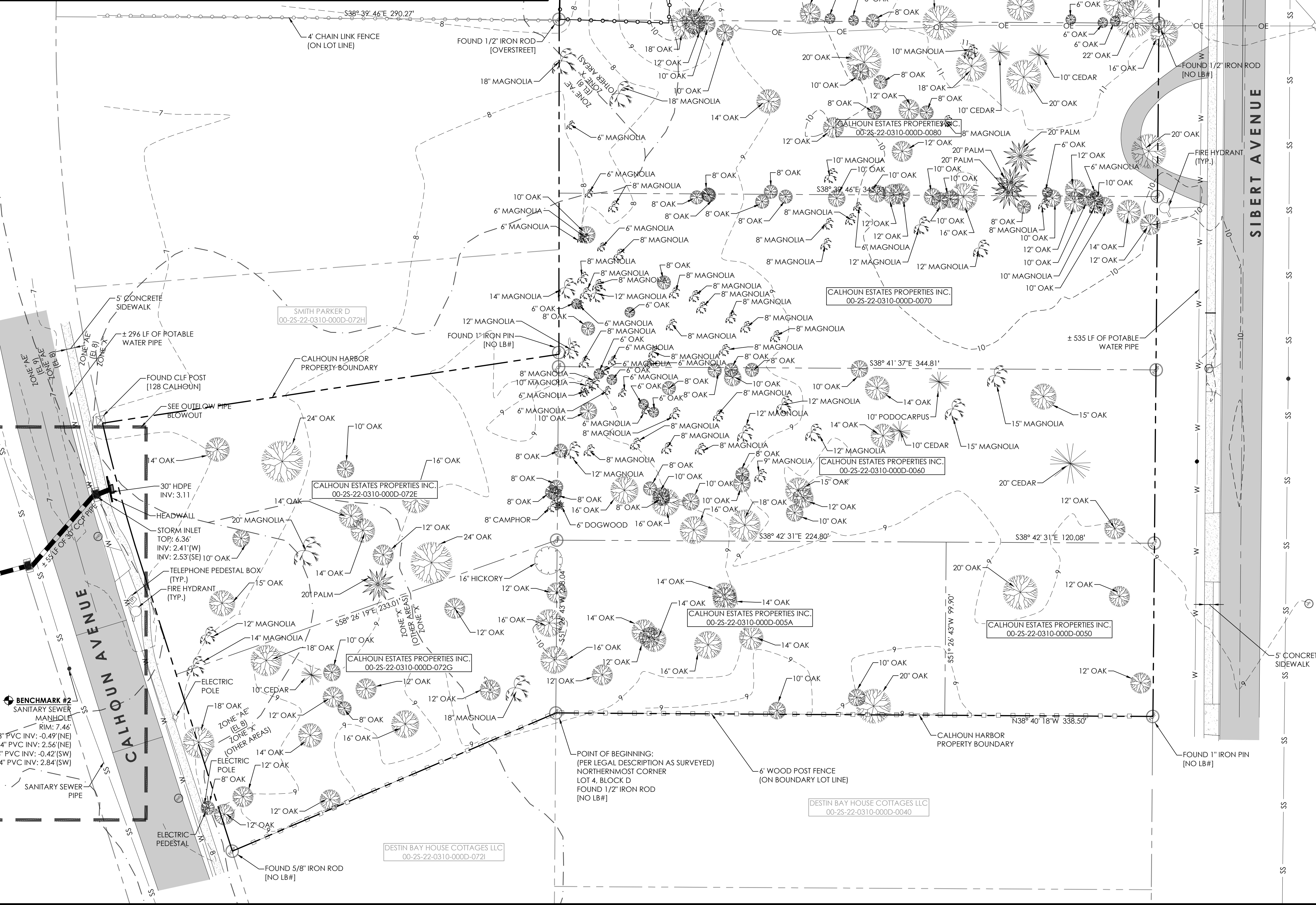
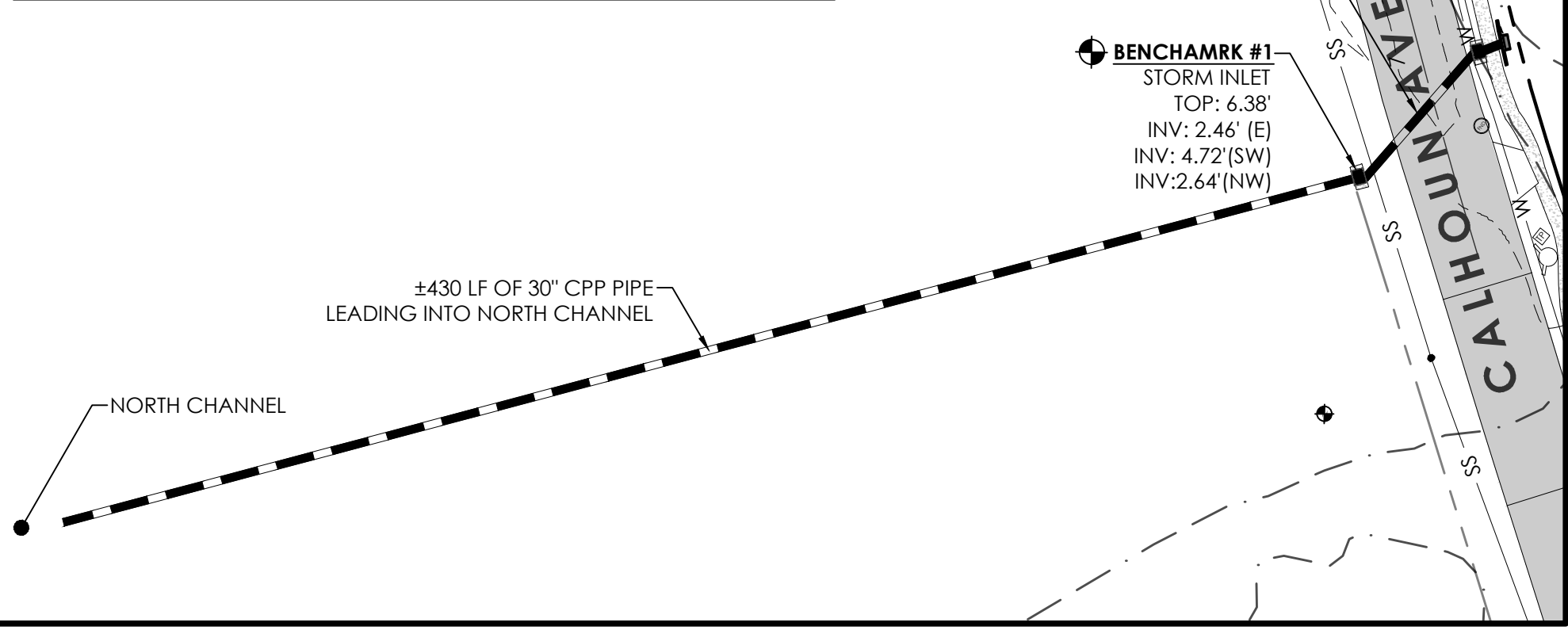
SHEET TITLE

GENERAL
NOTES (SHEET 2
OF 2)

SHEET NUMBER

3 OF 29

OUTFLOW PIPE (SCALE: 1 INCH = 50 FEET)



EXISTING CONDITIONS NOTES

1. SEE BOUNDARY, TOPOGRAPHIC, AND TREE SURVEY NOTES DRAWN BY RARE EARTH SURVEYING AND MAPPING, DATED APRIL 17, 2017.

LEGAL DESCRIPTION:

LEGAL DESCRIPTION:
(AS WRITTEN)
LOTS 5, 6, 7, 8, 9, BLOCK D, SECOND REVISION OF CALHOUNS SUBDIVISION OF ADDITION TO TOWN OF DESTIN FLORIDA, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 2, PAGE 43-A, OF THE PUBLIC RECORDS OF OKALOOSA COUNTY, FLORIDA; MORE PARTICULARLY DESCRIBED AS:

AND

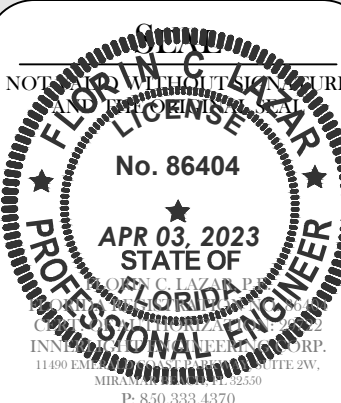
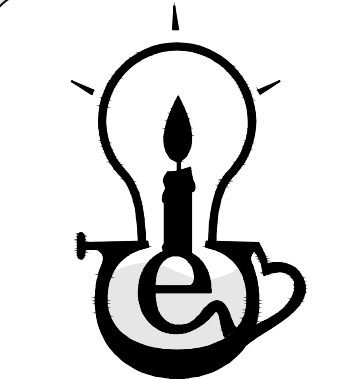
A PORTION OF LOT 72, BLOCK D, SECOND REVISION OF CALHOUNS SUBDIVISION OF ADDITION TO TOWN OF DESTIN FLORIDA, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 2, PAGE 43-A, OF THE PUBLIC RECORDS OF OKALOOSA COUNTY, FLORIDA; THENCE GO N 67°45'33\"/>

BEGINNING AT THE NORTHWEST CORNER OF LOT 5, BLOCK D, SECOND REVISION OF CALHOUNS SUBDIVISION OF ADDITION TO TOWN OF DESTIN FLORIDA, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 2, PAGE 43-A, OF THE PUBLIC RECORDS OF OKALOOSA COUNTY, FLORIDA; THENCE GO N 67°45'33\"/>

CONTAINS 5.21 ACRES OR 226,748.18 SQ. FT. MORE OR LESS.

BENCHMARK DATA

BENCHMARK #1:	EXISTING STORM INLET NORTHING: 514489.7024 EASTING: 1334354.9868 ELEVATION: 6.38 (NAVD 1988)
BENCHMARK #2:	EXISTING SANITARY SEWER MANHOLE LID NORTHING: 514434.3080 EASTING: 1334323.9270 ELEVATION: 7.46 (NAVD 1988)



DEMOLITION & EROSION CONTROL NOTES

1. EROSION CONTROL MEASURES SHALL BE MAINTAINED ON SITE FOR THE DURATION OF CONSTRUCTION. REPAIR AND / OR REPLACE AS NECESSARY.
2. WHERE SILT FENCE IS SHOWN OUTSIDE PROJECT BOUNDARY FOR CLARITY ONLY.
3. ALL EXISTING BUILDING MATERIALS, CONCRETE, ASPHALT, TREES, STUMPS, AND OTHER DELETERIOUS MATERIAL AS INDICATED ON THE PLANS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH FLORIDA LAWS.
4. THE CONTRACTOR SHALL CLEAR AND GRUB ALL AREA WITHIN THE CLEARING LIMITS DEPICTED HEREON INCLUDING DEMOLITION OF EXISTING INFRASTRUCTURE INCLUDING UNDERGROUND UTILITIES WHETHER DEPICTED HEREON OR NOT BUT ONLY AFTER VERIFICATION FROM ENGINEER & RESPECTIVE UTILITY COMPANY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND ACCOUNT FOR IN BID ALL REQUIRED CLEARING, GRUBBING & DEMOLITION NECESSARY TO ACCOMPLISH THIS TASK.
5. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, A PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN SEVEN CALENDAR DAYS ON ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); EMBANKMENTS OF PONDS, BASINS, AND TRAPS; AND WITHIN 14 CALENDAR DAYS ON ALL OTHER DISTURBED OR GRADED AREAS; THE REQUIREMENTS OF SECTION 11.09.03 OF THE DESTIN LAND DEVELOPMENT CODE DO NOT APPLY TO THOSE AREAS WHICH ARE SHOWN ON THE PLAN AND ARE CURRENTLY BEING PERFORMED.
6. ALL BARE GROUND, STRIPPED OF VEGETATION DURING THE CLEARING/GRADING PROCESS, SHALL BE COVERED TO THE MAXIMUM EXTENT PRACTICABLE.
7. ALL DISTURBED AREAS SHALL BE COVERED AND/OR MULCHED WITHIN 12 HOURS, IF THEY ARE TO REMAIN UN-WORKED FOR MORE THAN 2 CALENDAR DAYS.
8. AREAS NOT BEING WORKED FOR 30 CALENDAR DAYS OR MORE SHALL BE VEGETATED, UNLESS THE CITY DETERMINES THAT WINTER WEATHER MAKES VEGETATION ESTABLISHMENT INFEASIBLE. IF THIS IS THE CASE, IT MUST STILL BE MORE PERMANENTLY STABILIZED, USING METHODS SUCH AS BONDED FIBER MATRIX, OR OTHER MORE STABLE BMPs.
9. SLOPES & STOCKPILES 3H:1V OR STEEPER AND MORE THAN 10 FEET OF VERTICAL RELIEF SHALL BE COVERED IF THEY ARE UN-WORKED FOR MORE THAN 48 HOURS.
10. AREAS THAT ARE BEING HYDRO-SEEDED SHALL HAVE A TACKIFIER MIXED INTO THE HYDRO-SEED TO HELP STABILIZE MIXTURE ONTO THE SOIL.
11. ENOUGH COVER MATERIAL TO SUFFICIENTLY PROTECT ALL DISTURBED AREAS SHALL BE STOCKPILED ON THE SITE AT THE BEGINNING OF THE WEST SEASON.
12. ROADS AND PARKING AREAS SHALL BE STABILIZED IMMEDIATELY AFTER THE INITIAL GRADING.
13. ADDITIONAL TECHNIQUES TO REDUCE SOIL TRACKING OFF OF A SITE AND ONTO A ROADWAY SUCH AS WHEEL WASHING STATIONS MAY BE REQUIRED.
14. THE PAVEMENT SHALL NOT BE CLEANED BY WASHING/FLUSHING STREETS.
15. ANY SEDIMENT THAT IS TRACKED ONTO ROAD PAVEMENT SHALL BE REMOVED IMMEDIATELY (PRIOR TO THE END OF THE WORK DAY) BY SWEEPING. THE SEDIMENT COLLECTED BY SWEEPING SHALL BE REMOVED FROM THE ROADWAY AND STABILIZED ON-SITE.

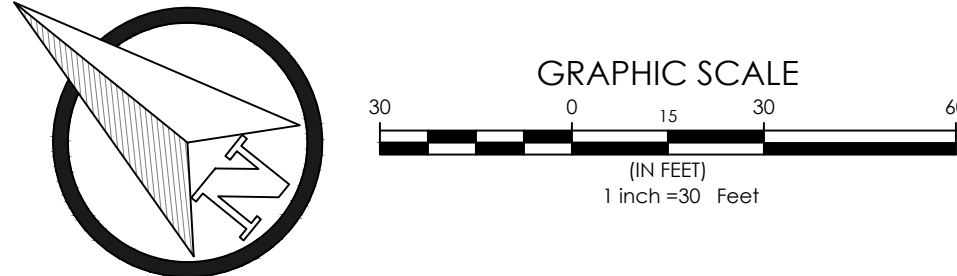
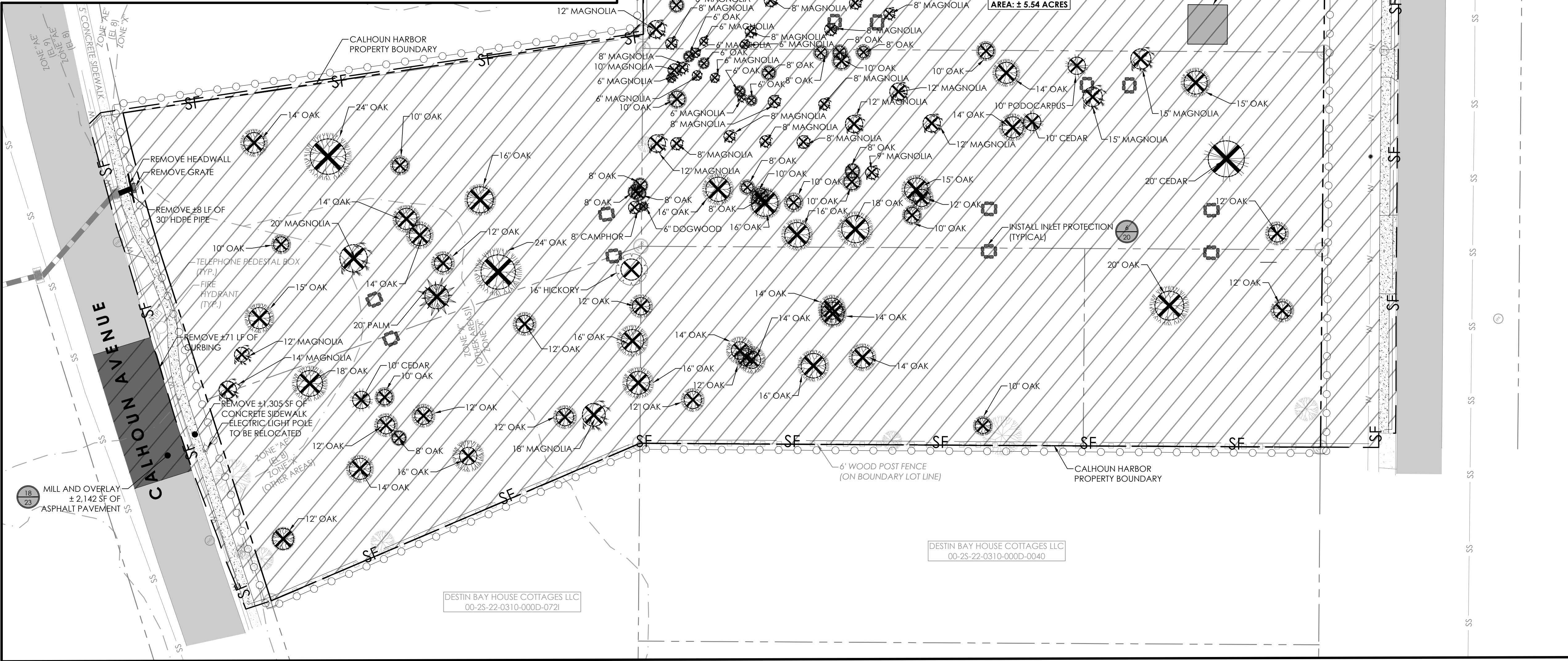
PERIMETER PROTECTION NOTES

1. PERIMETER PROTECTION TO FILTER SEDIMENT FOR SHEET FLOW WASHOUT SHALL BE LOCATED DOWN SLOPE OF ALL DISTURBED AREAS AND BE PROPERLY INSTALLED PRIOR TO UP-SLOPE GRADING.
2. A MINIMUM OF 100 LINEAR FEET OF SILT FENCE PER ACRE AND THE NECESSARY STAKES TO HOLD THE FENCE IN PLACE SHALL BE STOCKPILED ON-SITE.
3. PRIOR TO THE COMMENCEMENT OF DEMOLITION / CONSTRUCTION, CONSTRUCTION SITE SCREENING, MEETING THE REQUIREMENTS OF THE DESTIN CODE OF ORDINANCES, SECTION 6-51 SCREEN CRITERIA, SHALL BE ERECTED AROUND THE ENTIRE PERIMETER OF THE SUBJECT PROPERTY.

LAND DISTURBANCE - CONSTRUCTION SEQUENCE

THE FOLLOWING IS THE PROPOSED CONSTRUCTION SEQUENCE, UNLESS INCLEMENT WEATHER, SITE CONDITIONS, OR REVISIONS DICTATES A DEVIATION FROM THIS SCHEDULE.

1. DEVELOPER TO FILE A NOTICE OF INTENT PRIOR TO LAND DISTURBANCE.
2. SET UP A DAILY INSPECTION LOG FOR THE BMP INSPECTIONS TO BE KEPT IN THE CONSTRUCTION TRAILER OR AT A NEARBY ACCESSIBLE LOCATION (SALES OFFICE, ETC.)
3. CLEARING AND GRUBBING FOR THOSE AREAS NECESSARY FOR INSTALLATION OF PERIMETER EROSION CONTROL DEVICES.
4. INSTALL PERIMETER EROSION CONTROL DEVICES & CHAIN LINK FENCE ADJACENT TO PUBLIC ACCESS AREAS.
5. CLEAR AND GRUB ROUTES TO AREAS FOR TEMPORARY AND PERMANENT STRUCTURAL BEST MANAGEMENT PRACTICES (BMP).
6. INSTALL ALL STRUCTURAL EROSION CONTROL PRACTICES IN CONCENTRATED FLOW AREAS, AS SHOWN ON THE PLANS, WITH MINIMAL DISTURBANCE TO THE ADJACENT AREA.
7. CONSTRUCT ALL REMAINING TEMPORARY AND PERMANENT EROSION CONTROL PRACTICES SHOWN ON THE PHASE-1 ESCP CONCURRENT WITH CLEARING AND GRUBBING OPERATIONS.
8. CONTRACTOR SHALL COMPLETE CLEARING AND GRUBBING FOR REMAINING AREAS OF CONSTRUCTION. IF CLEARING MATERIALS ARE GROUND ON SITE, PLACING GROUND MULCH MATERIALS AT THE TOE OF ANY SLOPES WILL PROVIDE ADDITIONAL PROTECTION FROM EROSION ESCAPING THE SITE.
9. ROAD GRADING & GRADING FOR THE REMAINDER OF SITE.
10. UTILITY INSTALLATION AND WHETHER STORM DRAINS WILL BE USED OR BLOCKED AFTER CONSTRUCTION.
11. BUILDING, PARKING LOT, AND SITE CONSTRUCTION.
12. FINAL GRADING, LANDSCAPING AND/OR STABILIZATION.
13. IMPLEMENTATION AND MAINTENANCE OF FINAL EROSION CONTROL STRUCTURES.
14. REMOVAL OF TEMPORARY EROSION CONTROL DEVICES.



DUST CONTROL METHODS

CONTRACTOR TO USE METHOD OR COMBINATION OF METHODS LISTED BELOW AND TO PREVENT PARTICULATE MATTER FROM BECOMING AIRBORNE AND BEING TRANSPORTED OFF-SITE:

1. PHASING: ONLY DISTURB AREAS LESS THAN ONE ACRE AT ONE TIME. BEGIN CONSTRUCTION ACTIVITIES AT WEST SIDE OF SITE AND PROCEED TO EAST TO PROVIDE BUFFER AREA WHERE SHIFTING SOIL CAN BE ARRESTED.
2. SCHEDULE: DELAY EARTHWORK AND OTHER ACTIVITIES GENERATING PARTICULATE MATTER WHEN WIND VELOCITY IS GREATER THAN 30 MPH.
3. RESTRICTING VEHICLES: USE SIGNS AND OTHER TRAFFIC CONTROLS TO LIMIT SPEED AND ACCESS OF JOB SITE VEHICLES. LIMIT SPEED TO 10 MPH MAXIMUM. RESTRICT VEHICLE TRAFFIC IN DUST STABILIZED AREAS.
4. EXCAVATED MATERIAL: KEEP OUT OF ACTIVE TRAFFIC LANES. IMMEDIATELY REMOVE EXCAVATED MATERIAL DEPOSITED IN ROADWAYS BY EROSION OR SPILLAGE. COVER LOADS TRANSPORTED IN EARTH-MOVING EQUIPMENT.
5. WATERING: USE SPRINKLER SYSTEM OR WATER TRUCK WITH SPRAY BOOM TO WATER DISTURBED AREA, AS NEEDED, TO ADEQUATELY CONTROL DUST.
6. WINDBREAKS: ERECT SNOW FENCES OR SIMILAR WINDBREAKS UPWIND AND WITHIN DISTURBED AREAS. PLACE FENCES PERPENDICULAR TO PREVAILING WINDS AS APPROPRIATE.
7. PALLIATIVES: APPLY DUST PALLIATIVE TO STABILIZE SOILS AFTER EARTHWORK IS COMPLETED AND TO SANDY SOILS WHERE WATERING IS INEFFECTIVE. DO NOT USE PALLIATIVE DETRIMENTAL TO VEGETATION IN AREAS OF FUTURE PLANT LANDSCAPING.
8. OTHER METHODS THAT SUBSTANTIALLY AND EFFECTIVELY REDUCE TRANSPORTED MATERIAL OR EMISSION OF PARTICULATE MATTER INTO ATMOSPHERE.
9. IF WATER TRUCK IS USED TO CONTROL DUST ON DIRT/GRADED AREAS ONLY, WATER TRUCK WILL ONLY DROP ENOUGH WATER TO CONTROL THE DUST OR REACH THE OPTIMUM MOISTURE CONTENT OF THE SOIL FOR COMPACTION. NO RUN-OFF IS TO BE GENERATED.
10. CONTROLLING DUST ON PAVED ROADWAYS WILL BE DONE BY USE OF SWEEPER WITH WATER-JET SPRAYERS. ONLY ENOUGH WATER SHOULD BE APPLIED TO CONTROL DUST WHILE SWEEPING. DO NOT GENERATE RUN-OFF FROM SPRAYERS THAT RUNS INTO CATCH BASINS.

VIBRATION IMPACT MITIGATION METHODS

DESIGN CONSIDERATIONS AND PROJECT LAYOUT:

1. ROUTE HEAVILY LOADED TRUCKS AWAY FROM RESIDENTIAL STREETS, IF POSSIBLE. SELECT STREETS WITH FEWEST HOMES, IF NO ALTERNATIVES ARE AVAILABLE.
2. OPERATE EARTHMOVING EQUIPMENT ON THE CONSTRUCTION LOT AS FAR AWAY FROM VIBRATION-SENSITIVE SITES AS POSSIBLE.

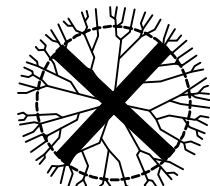
SEQUENCE OF OPERATIONS:

1. PHASE DEMOLITION, EARTHMOVING AND GROUND-IMPACTING OPERATIONS SO AS NOT TO OCCUR IN THE SAME TIME PERIOD. UNLIKE NOISE, THE TOTAL VIBRATION LEVEL PRODUCED COULD BE SIGNIFICANTLY LESS WHEN EACH VIBRATION SOURCE OPERATES SEPARATELY.
2. AVOID NIGHTTIME ACTIVITIES. PEOPLE ARE MORE AWARE OF VIBRATION IN THEIR HOMES DURING THE NIGHTTIME HOURS.

ALTERNATIVE CONSTRUCTION METHODS:

1. SELECT DEMOLITION METHODS NOT INVOLVING IMPACT, WHERE POSSIBLE. FOR EXAMPLE, MILLING GENERATES LOWER VIBRATION LEVELS THAN EXCAVATION USING CLAM SHELL OR CHISEL DROPS.
2. AVOID VIBRATORY ROLLERS AND PACKERS NEAR SENSITIVE AREAS.

LEGEND

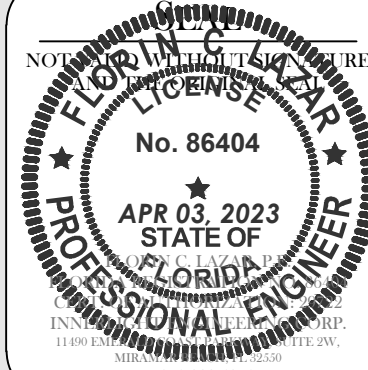
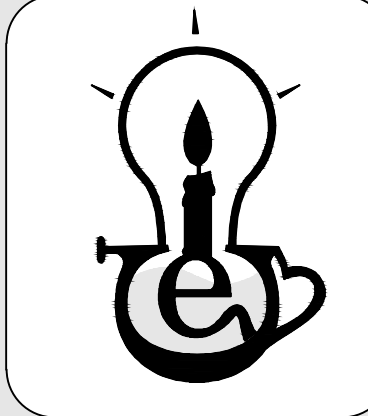


TREE TO BE REMOVED (TYPICAL). SEE LABEL FOR DETAILS

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REV. NO: 5
REV. DATE: 04.03.2024
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REVIEWED BY: FCL

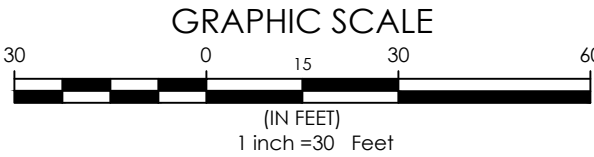
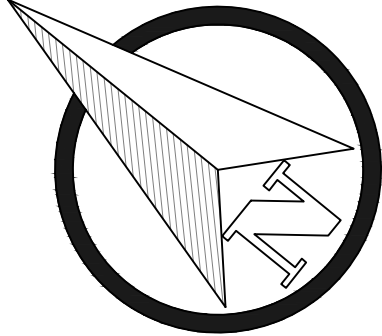
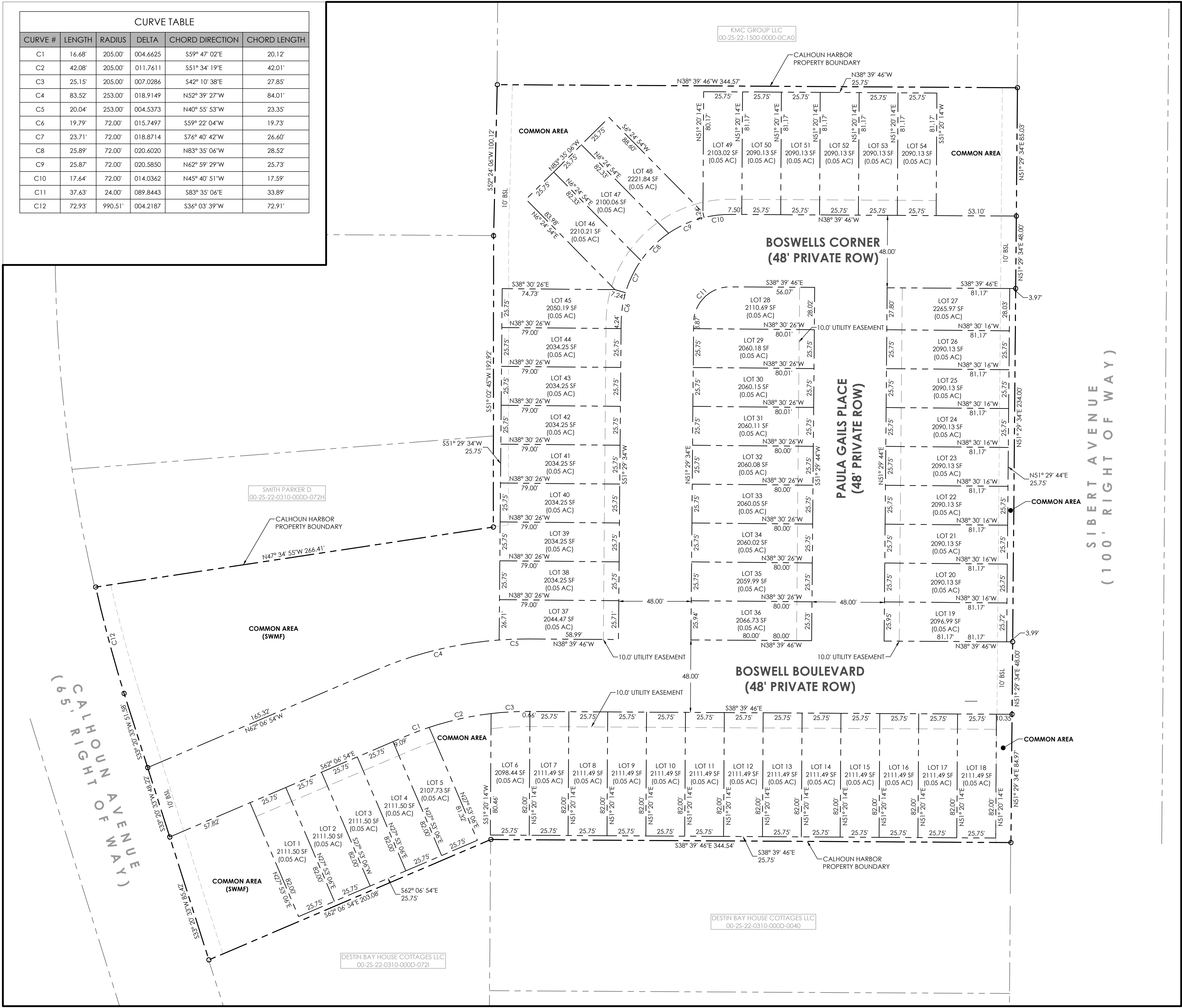


SHEET TITLE
DEMOLITION PLAN

SHEET NUMBER
5 OF 29

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CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD DIRECTION	CHORD LENGTH
C1	16.68'	205.00'	004.6625	S59° 47' 02"E	20.12'
C2	42.08'	205.00'	011.7611	S51° 34' 19"E	42.01'
C3	25.15'	205.00'	007.0286	S42° 10' 38"E	27.85'
C4	83.52'	253.00'	018.9149	N52° 39' 27"W	84.01'
C5	20.04'	253.00'	004.5373	N40° 55' 53"W	23.35'
C6	19.79'	72.00'	015.7497	S59° 22' 04"W	19.73'
C7	23.71'	72.00'	018.8714	S76° 40' 42"W	26.60'
C8	25.89'	72.00'	020.6020	N83° 35' 06"W	28.52'
C9	25.87'	72.00'	020.5850	N62° 59' 29"W	25.73'
C10	17.64'	72.00'	014.0362	N45° 40' 51"W	17.59'
C11	37.63'	24.00'	089.8443	S83° 35' 06"E	33.89'
C12	72.93'	990.51'	004.2187	S36° 03' 39"W	72.91'



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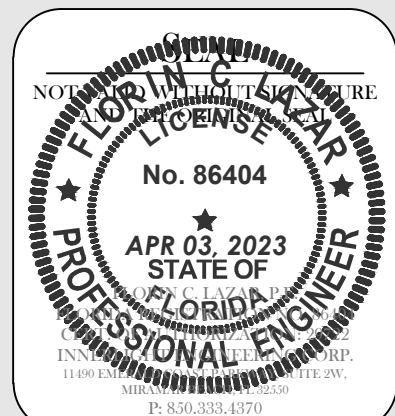
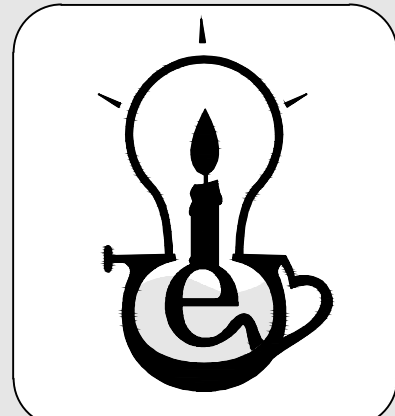
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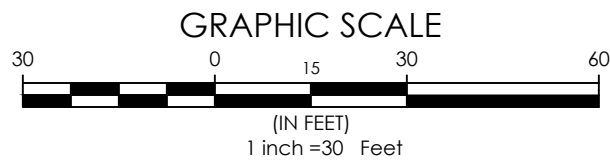
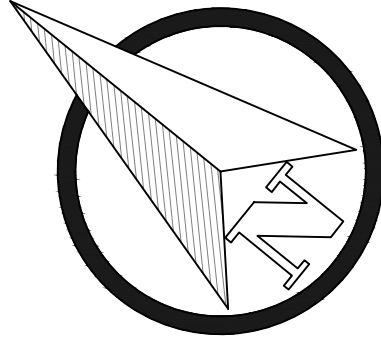
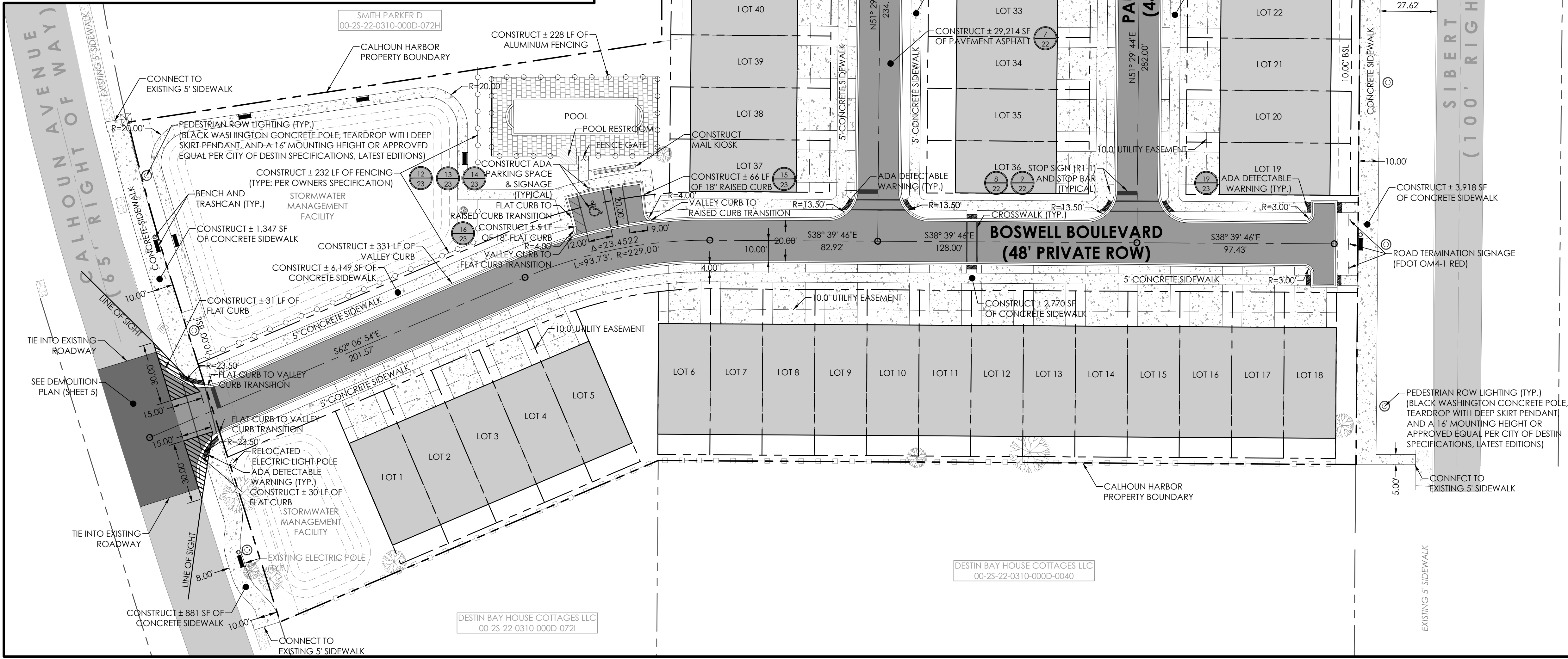
PRELIMINARY PLAT

SHEET NUMBER

6 OF 29

C:\EC DROPBOX\PROJECTS\CALHOUN AVE\3.ENGINEERING\1.CDS\2.SHEETS\C-600-SITE GEOMETRY PLAN.DWG, Calh. 4/3/2024 9:47:15 AM

CALHOUN HARBOR			
MUNICIPALITY:	CITY OF DESTIN, FLORIDA		
TAX PARCEL ID NUMBER:	00-2S-22-0310-000D-0050, 005A, 0060, 0070, 0080, 0090, 072E, 072G		
ZONING:	CALHOUN MIXED USE - VILLAGE		
FUTURE LAND USE:	CALHOUN MIXED USE - VILLAGE		
LOCATION:	THE SITE IS SOUTHEAST OF CALHOUN AVENUE AND NORTHWEST OF SIBERT AVENUE		
SITE DESCRIPTION:	THE SITE IS CURRENTLY VACANT WITH NO IMPROVEMENTS		
PROPOSED USE:	MULTI-FAMILY ATTACHED TOWNHOMES		
ADJACENT FLUM CATEGORIES			
	NORTH	CALHOUN AVENUE / BAY ESTATES	
	SOUTH	SIBERT AVENUE / INSTITUTIONAL	
	EAST	SIBERT AVENUE / ROI-VR	
	WEST	CALHOUN AVENUE / CMU	
OVERALL SITE AREA:	5.20 Acres (226,748.18 SF)		
NUMBER OF LOTS:	54		
OPEN SPACE REQUIREMENT:	25% (56,687.05 SF) (1.3 AC)		
SIDEWALK:	0.25 Acres (10,884.70 SF)		
OPEN SPACE PROVIDED:	1.88 Acres (82081.26 SF)		
TOTAL OPEN SPACE PROVIDED**:	2.13 Acres (92,925.96 SF)		
TOTAL IMPERVIOUS SURFACE PROVIDED**:	3.07 Acres (133,822.22 SF)		
ARTICLE 7.12.08 (TABLE 7-3 - SCHEDULE OF DIMENSIONAL REQUIREMENTS IN ZONING DISTRICT)			
DESCRIPTION	REQUIREMENT	PROVIDED	REQ'MT MET?
MAXIMUM BLDG HEIGHT:	50 FT/4 STORIES	< 35 FT/2 STORIES	YES
MAXIMUM DENSITY	12 Units/Ac	10.4 Units/Ac	YES
MINIMUM OPEN SPACE %:	25.00%	36.18%	YES
SETBACKS			
FRONT:	10 - 20 FT	10 FT	YES
REAR:	10 FT	10 FT	YES
SIDE (WEST):	0 FT	0 FT	YES
SIDE (EAST):	0 FT	0 FT	YES
MINIMUM LOT AREA:	N/A	N/A	N/A
ARTICLE 8.06.10 (TABLE 8-6 - NUMBER OF VEHICLE AND BICYCLE PARKING SPACES REQUIRED)			
DESCRIPTION	REQUIREMENT	PROVIDED	REQ'MT MET?
RESIDENTIAL (3 SPACES PER DU)	162 SPACES	216 SPACES	YES
POOL AMENITY	N/A	3 SPACES	N/A
TOTAL VEHICLE PARKING	162 SPACES	219 SPACES	YES
ARTICLE 12.04.04.B (FRONT BOUNDARY /COMMON BOUNDAY LANDSCAPE - WITHIN OLD DESTIN MMTD SUB-AREA)			
DESCRIPTION	REQUIREMENT	PROVIDED	REQ'MT MET?
LANDSCAPE BUFFER	N/A	N/A	YES
** PER CHAPTER 13 (GLOSSARY) OF THE CITY OF DESTIN COMPREHENSIVE PLAN, THE DEFINITION OF OPEN SPACE IS "That portion of a site which includes pervious greenscape and impervious hardscape that is not occupied by any building coverage or vehicular-use areas." AND THE DEFINITION OF OPEN SPACE, IMPERVIOUS HARDSCAPE IS "That portion of a site which is impervious and enhances pedestrian access, public gathering spaces, recreation and similar uses in excess of the site performance standards required by the LDC."			



SITE GEOMETRY PLAN NOTES

1. CONTRACTORS SHALL MAINTAIN PUBLIC ACCESS AT ALL TIMES ALONG OKALOOSA COUNTY RIGHT-OF-WAYS.
2. NO PARKING OR UNLOADING OF MATERIALS SHALL OCCUR WITHIN PUBLIC RIGHT-OF-WAY.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO STRUCTURES WITHIN THE PUBLIC RIGHT-OF-WAY AND SHALL REPAIR ANY DAMAGE CAUSED BY THE CONSTRUCTION ACTIVITIES TO THE PUBLIC RIGHT-OF-WAY AT THE CONTRACTOR'S EXPENSE.
4. CONTRACTOR SHALL NOT RELOCATE ANY SIDEWALK OR MULTI-USE PATH WITHIN THE COUNTY RIGHT-OF-WAY WITHOUT WRITTEN PERMISSION FROM THE OKALOOSA COUNTY ENGINEER.
5. ALL LANDSCAPING WITHIN THE COUNTY RIGHT-OF-WAY SHALL CONSIST OF DROUGHT TOLERANT SPECIES.
6. NOTHING SHALL BE ERECTED, PLACED, PARKED, PLANTED, OR ALLOWED TO GROW IN SUCH A MANNER AS TO MATERIALLY IMPEDE VISION BETWEEN A HEIGHT OF TWO FEET AND TEN FEET ABOVE THE GRADE, MEASURED AT THE CENTERLINE OF THE INTERSECTION FOR CLEAR VISIBILITY TRIANGLE.
7. DISTANCES AND RADII, WHERE APPLICABLE, ARE MEASURED FROM BACK OF CURB UNLESS OTHERWISE NOTED.
8. ALL ROADS ARE PRIVATE.
9. QUANTITIES SHOWN FOR CONVENIENCE ONLY. CONTRACTOR TO VERIFY QUANTITIES AS PART OF THE BID

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TOWN •

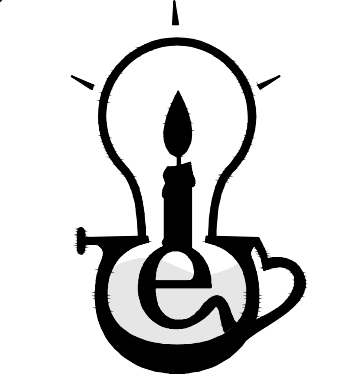
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RESIDENTIAL TOWNHOMES

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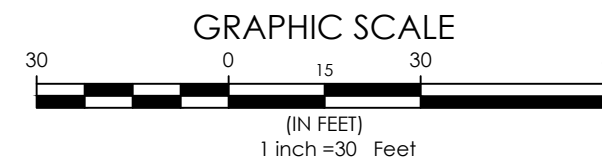
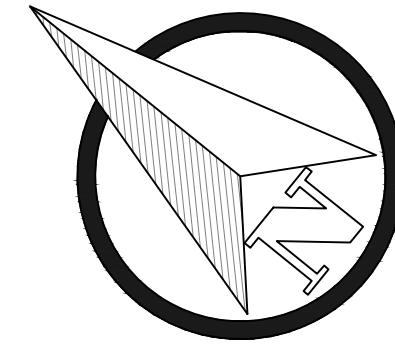
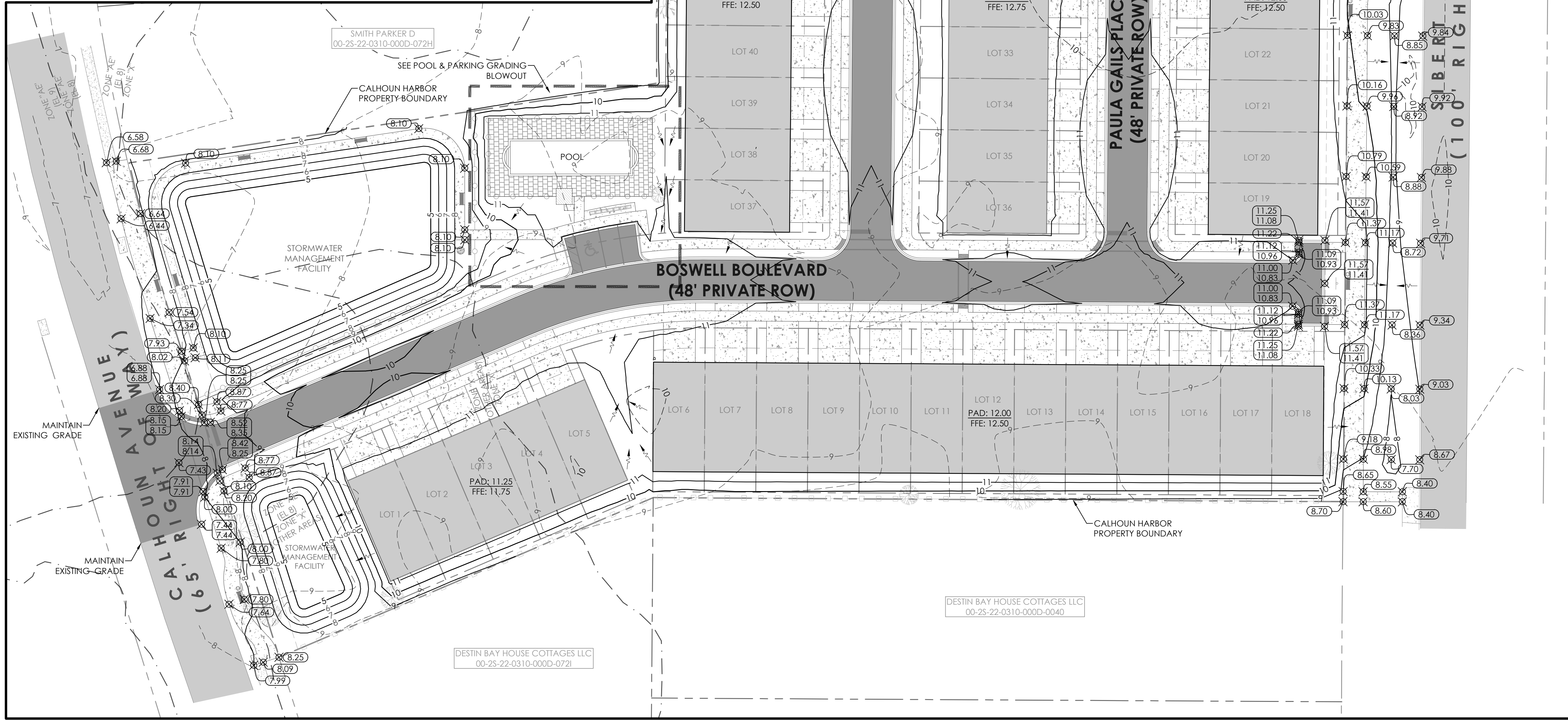
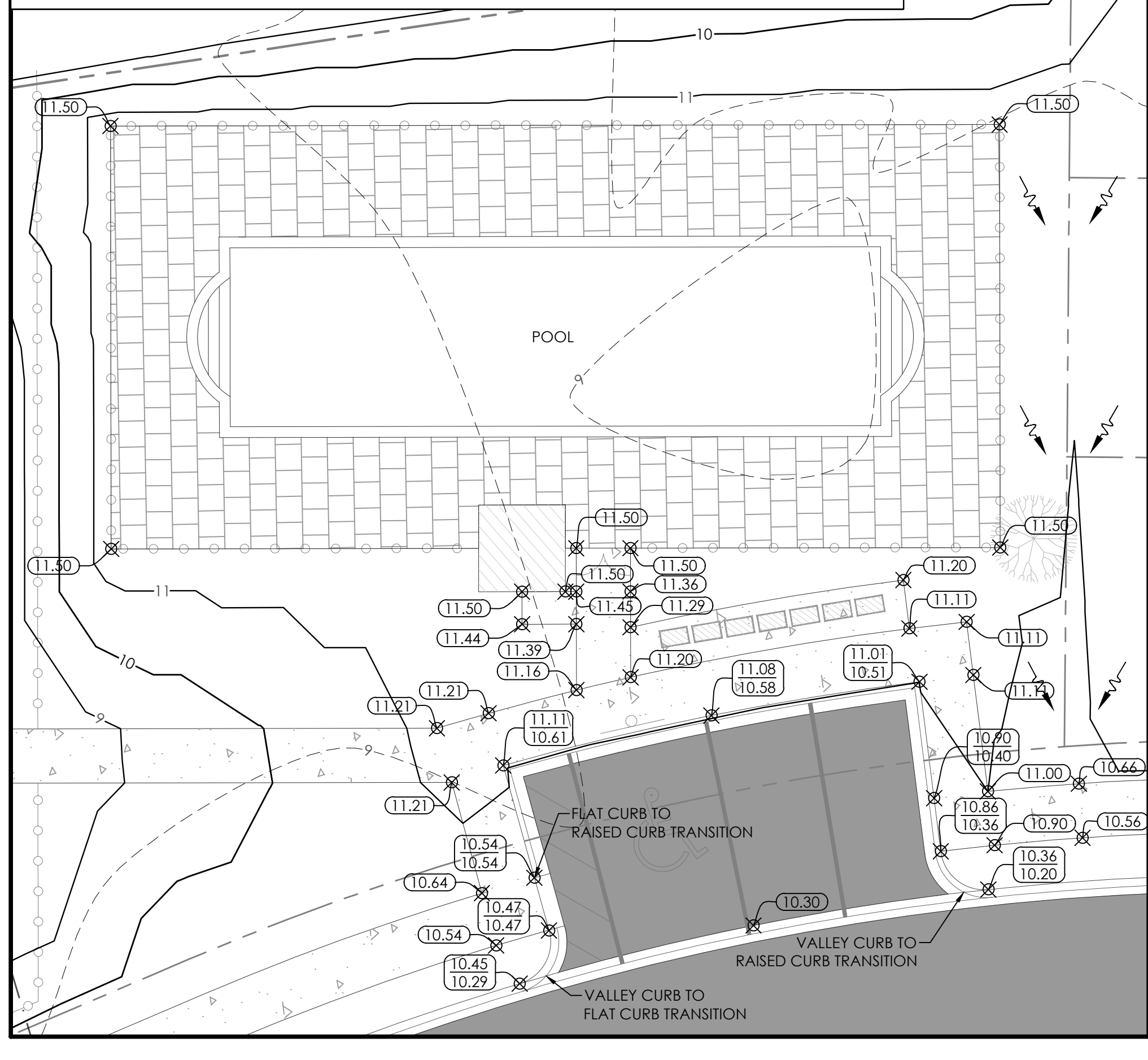
SITE GEOMETRY PLAN

SHEET NUMBER

7 OF 29

C:\EC DROPBOX\PROJECTS\CALHOUN AVE\3.ENGINEERING\1.CDS\2.SHEETS\C500-GRADING PLAN.DWG. Colln. 4/3/2024 9:47:26 AM

POOL & PARKING SPOT GRADING (SCALE: 1 INCH = 10 FEET)

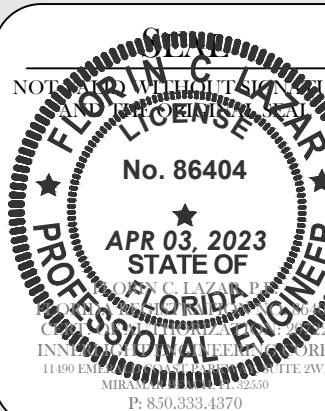
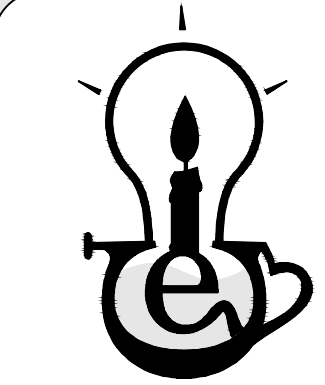


GRADING NOTES

1. ALL DISTURBED AREAS TO BE PERMANENTLY SODDED AND RETENTION AREAS TO BE SODDED AND PINNED. ALL SLOPES 3:1 AND STEEPER SHALL BE SODDED AND PINNED.
2. SODDING GRASS TYPE: ZOYSIA OR APPROVED EQUAL.
3. ALL PROPOSED SWALES TO BE STABILIZED WITH VEGETATION.
4. EROSION CONTROL MEASURES SHALL BE MAINTAINED ON SITE FOR THE DURATION OF CONSTRUCTION.
5. CONTRACTORS SHALL MAINTAIN PUBLIC ACCESS AT ALL TIMES ALONG PRIVATE, CITY AND COUNTY RIGHT-OF-WAYS.
6. NO PARKING OR UNLOADING OF MATERIALS SHALL OCCUR WITHIN RIGHT-OF-WAY.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO STRUCTURES WITHIN THE PUBLIC AND PRIVATE RIGHT-OF-WAY AND SHALL REPAIR ANY DAMAGE CAUSED BY THE CONSTRUCTION ACTIVITIES TO THE PRIVATE AND PUBLIC RIGHT-OF-WAY AT THE CONTRACTOR'S EXPENSE.
8. CONTRACTOR SHALL NOT RELOCATE ANY SIDEWALK OR MULTI-USE PATH WITHIN THE RIGHT-OF-WAY WITHOUT WRITTEN PERMISSION FROM THE CITY OR COUNTY ENGINEER.
9. LOT GRADING DEPICTED HEREON REQUIRED TO PROVIDE POSITIVE DRAINAGE FROM THE DEVELOPED LOT TO THE STORMWATER MANAGEMENT FACILITY (SWMF).
10. ALL PROPOSED FINISH FLOOR ELEVATIONS SHALL BE A MINIMUM OF 12 INCHES ABOVE CROWN OF ROAD.
11. ALL FINISH FLOOR ELEVATIONS DEPICTED REPRESENT MINIMUM FINISH FLOOR ELEVATIONS.

CALHOUN HARBOR
RESIDENTIAL TOWNHOMES
JOHNNY BOSWELL CALHOUN ESTATES PROPERTIES, INC.
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MIRAMAR BEACH, FL 32550

RECORD DATA
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REV. No: 5
REV. DATE: 04.03.2024
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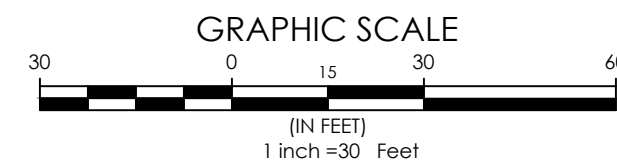
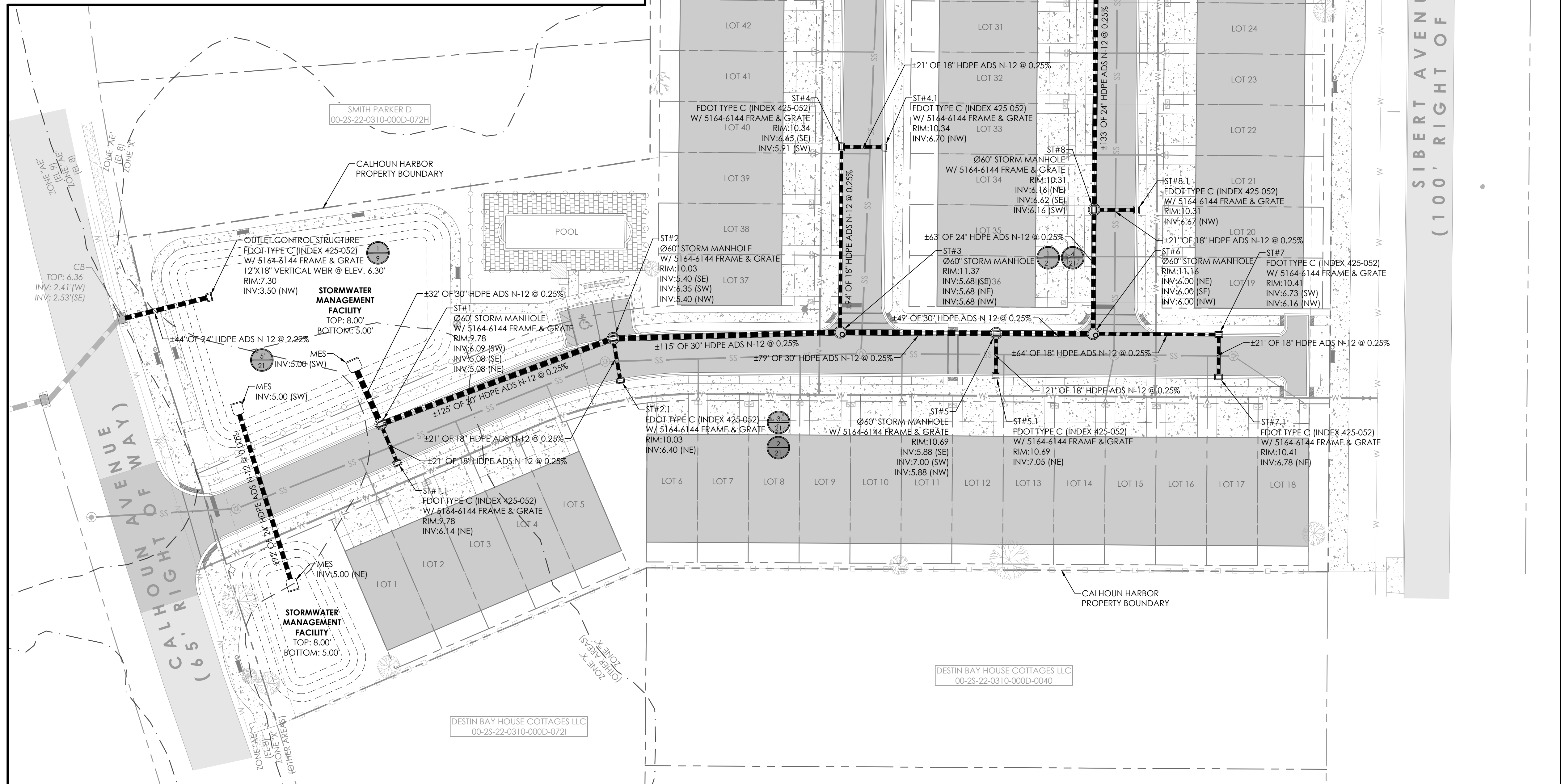


SHEET TITLE

GRADING PLAN

SHEET NUMBER

8 OF 29



1. ALL DISTURBED AREAS TO BE PERMANENTLY SODDED AND RETENTION AREAS TO BE SODDED AND PINNED. ALL SLOPES 3:1 AND STEEPER SHALL BE SODDED AND PINNED.
2. SODDING GRASS TYPE: ZOYSIA OR APPROVED EQUAL.
3. EROSION CONTROL MEASURES SHALL BE MAINTAINED ON SITE FOR THE DURATION OF CONSTRUCTION.
4. CONTRACTORS SHALL MAINTAIN PUBLIC ACCESS AT ALL TIMES ALONG PRIVATE, CITY AND COUNTY RIGHT-OF-WAYS.
5. NO PARKING OR UNLOADING OF MATERIALS SHALL OCCUR WITHIN RIGHT-OF-WAY.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO STRUCTURES WITHIN THE PUBLIC AND PRIVATE RIGHT-OF-WAY AND SHALL REPAIR ANY DAMAGE CAUSED BY THE CONSTRUCTION ACTIVITIES TO THE PRIVATE AND PUBLIC RIGHT-OF-WAY AT THE CONTRACTOR'S EXPENSE.
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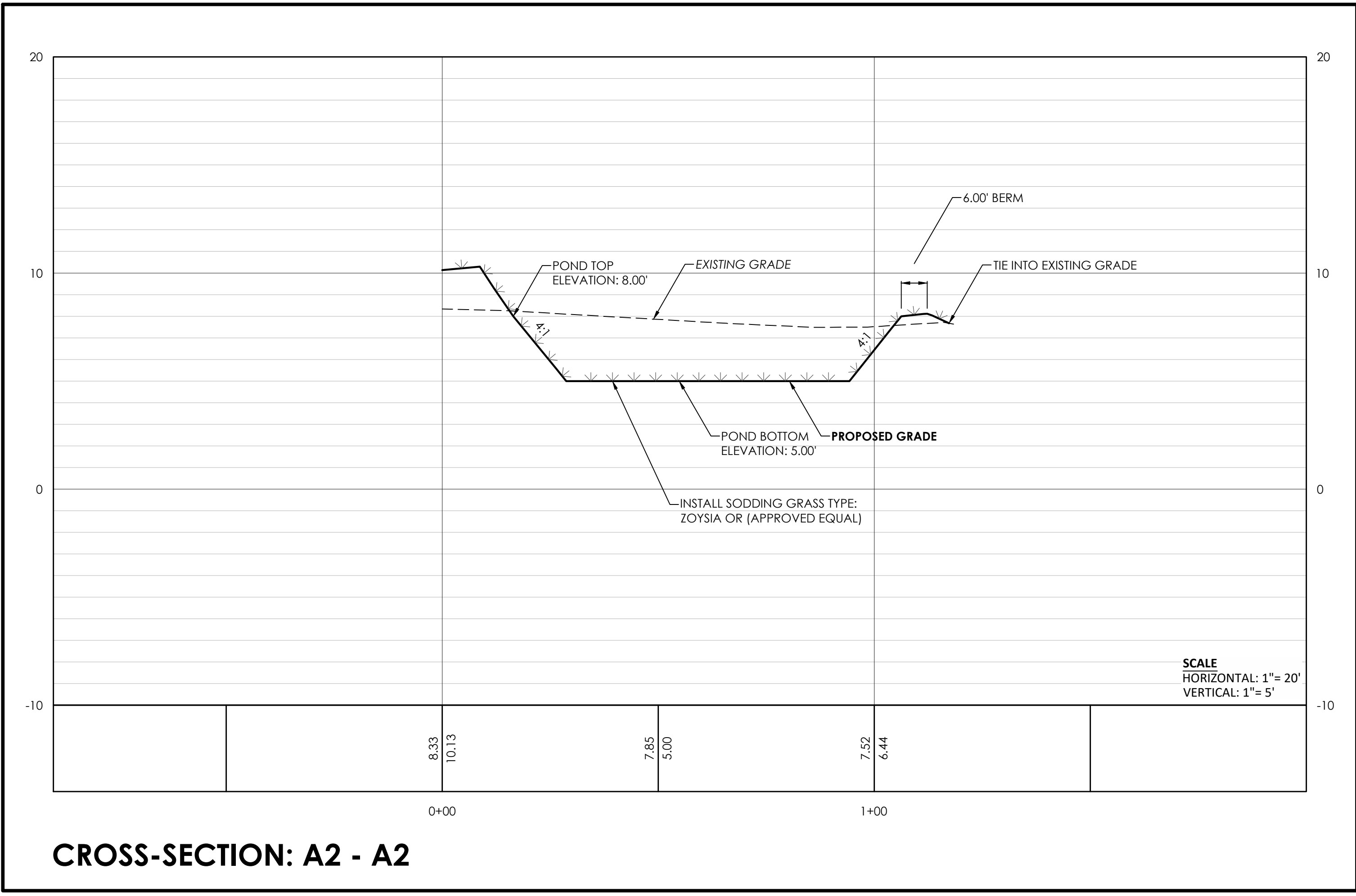
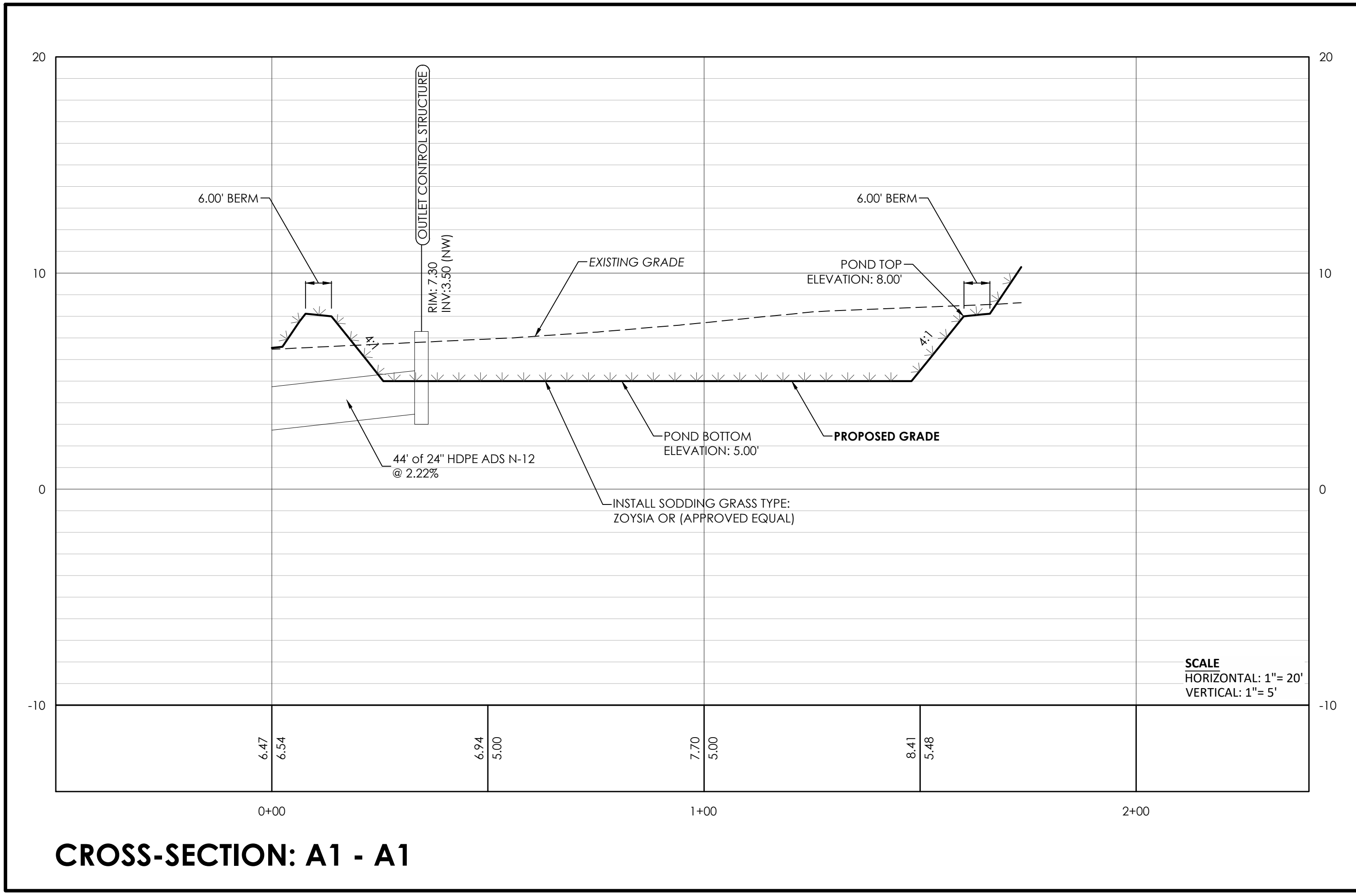
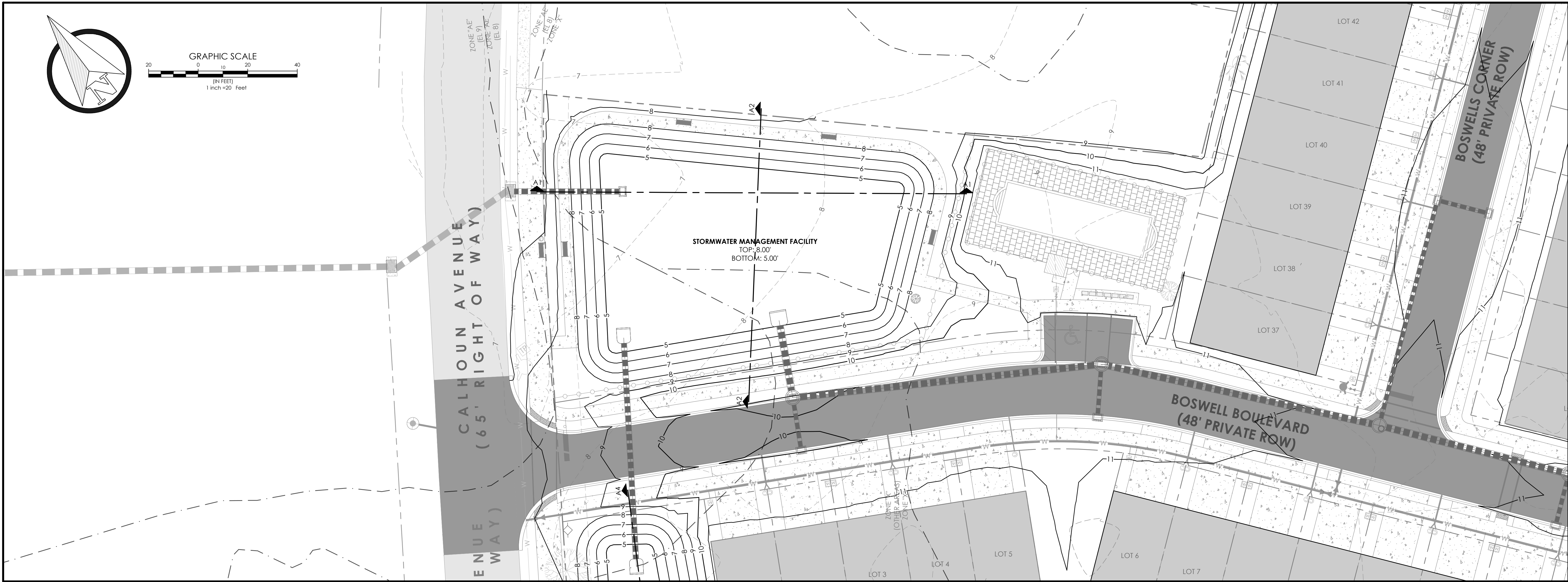
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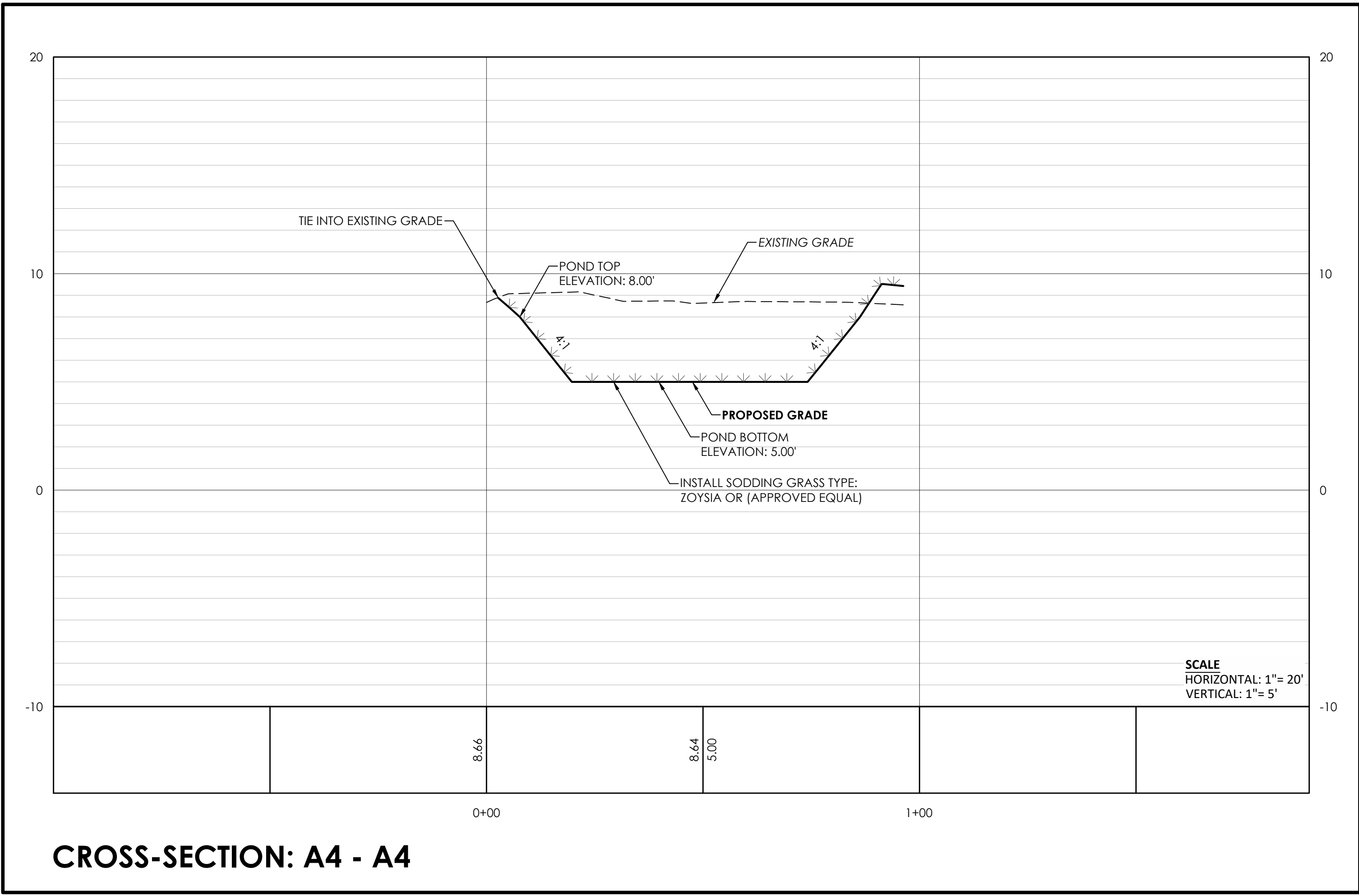
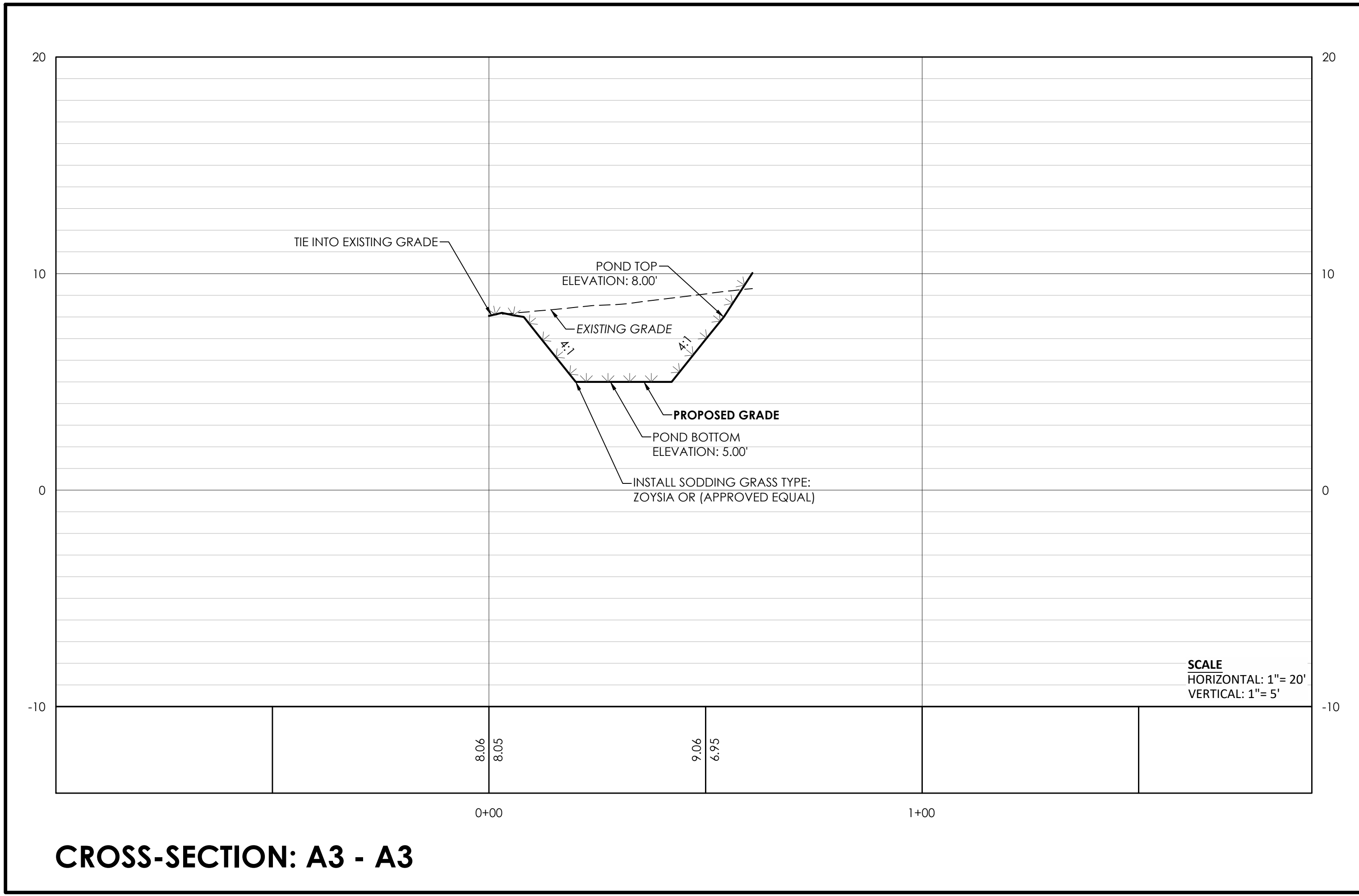
CALHOUN HARBOR
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12889 EVERALD COAST PKWY
MIRAMAR BEACH, FL 32550

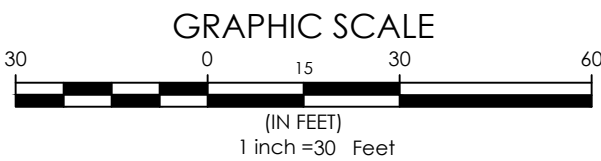
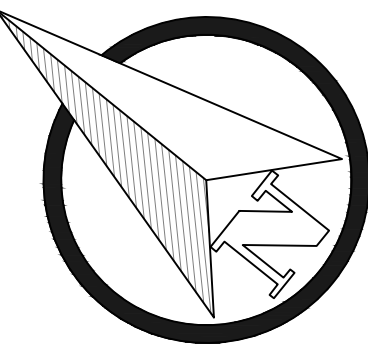
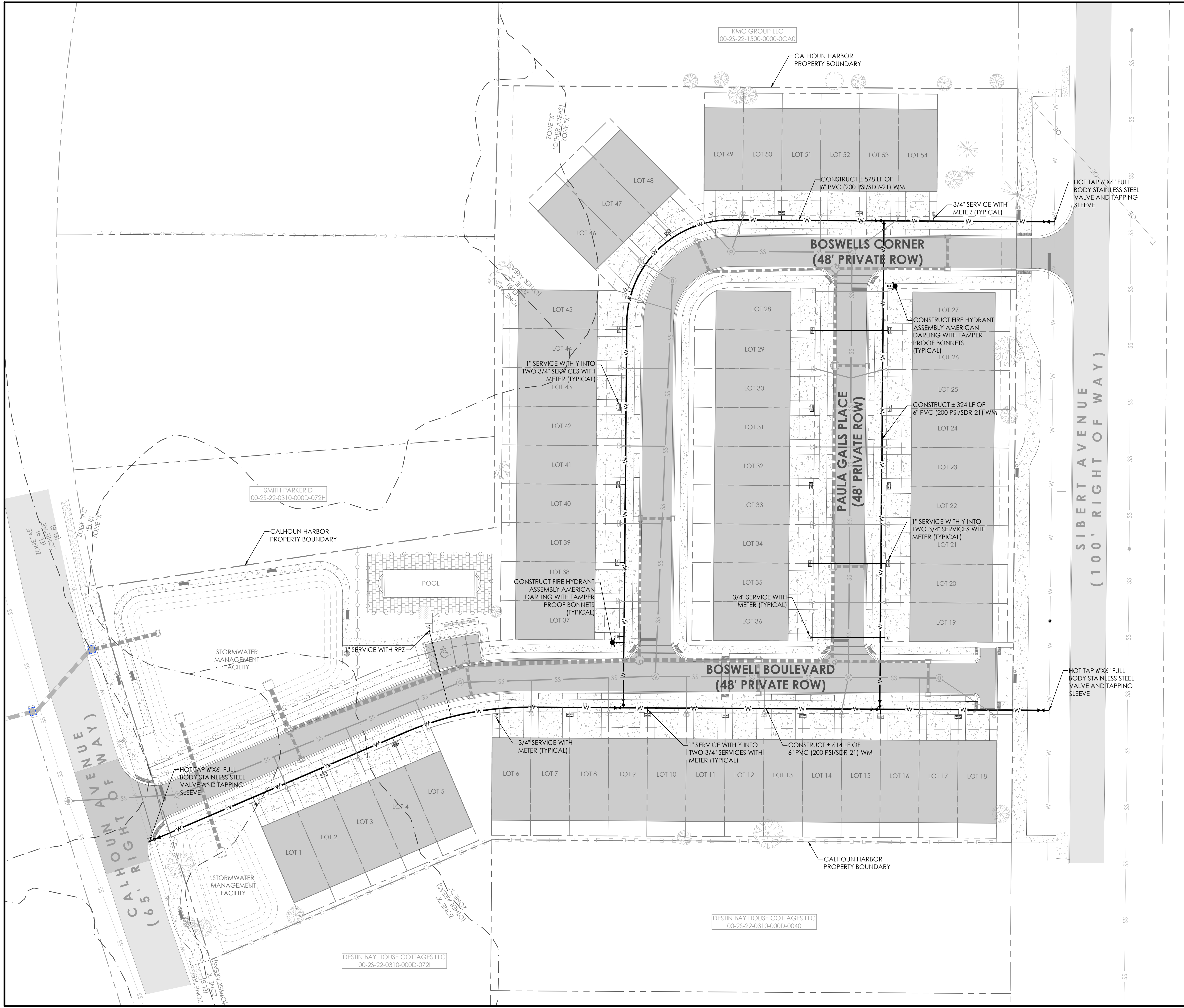
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GENERAL UTILITY PLAN NOTES

1. CONTRACTOR AND OR DEVELOPER SHALL NOTIFY DESTIN WATER USERS AT LEAST 24 HOURS IN ADVANCE TO BE ONSITE DURING THE CONSTRUCTION FOR INSPECTION AND VERIFICATION.
2. A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH THE CONTRACTOR, DEVELOPER, ENGINEER OF RECORD, CITY OF DESTIN, AND DESTIN WATER USERS WHEN FDEP PERMITS HAVE BEEN ISSUED AND PRIOR TO CONSTRUCTION.
3. ALL UTILITIES HEREIN TO BE INSTALLED UNDERGROUND.

GENERAL POTABLE WATER NOTES

1. JOINT RESTRAINTS SHALL BE REQUIRED ON ALL WATERLINES WITHIN THE DEVELOPMENT.
2. ALL WATER METERS DEPICTED ON THESE PLANS ARE SHOWN SCHEMATIC. WATER METERS SHALL BE INSTALLED PER DESTIN WATER USERS' STANDARD DETAILS AND SPECIFICATIONS (LATEST EDITION).
3. WATER MAIN TO BE CONSTRUCTED PER DESTIN WATER USERS' STANDARD SPECIFICATIONS.
4. FIRE HYDRANTS TO BE ASSEMBLED PER DESTIN WATER USERS' SPECIFICATIONS WITH APPROPRIATE 6" DUCTILE IRON LEADER AND 6" GATE VALVES.
5. WATER DETAILS SHOWN ON SHEET #####, FOR INFORMATIONAL PURPOSES. CONTRACTOR TO VERIFY DETAILS AND SPECIFICATIONS WITH DESTIN WATER USERS' DETAILS AND SPECIFICATIONS.
6. CONTRACTOR SHALL COORDINATE WITH DESTIN WATER USERS PRIOR TO MAKING ANY CONNECTIONS.

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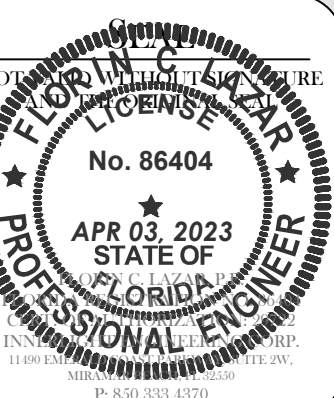
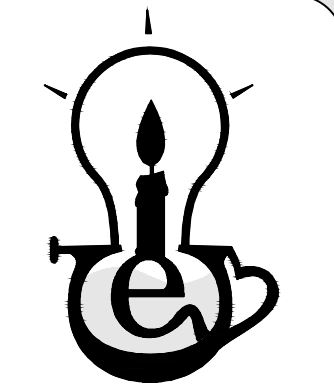
11490 EMERALD COAST PARKWAY, SUITE 2W
MIRAMAR BEACH | FLORIDA | 32550

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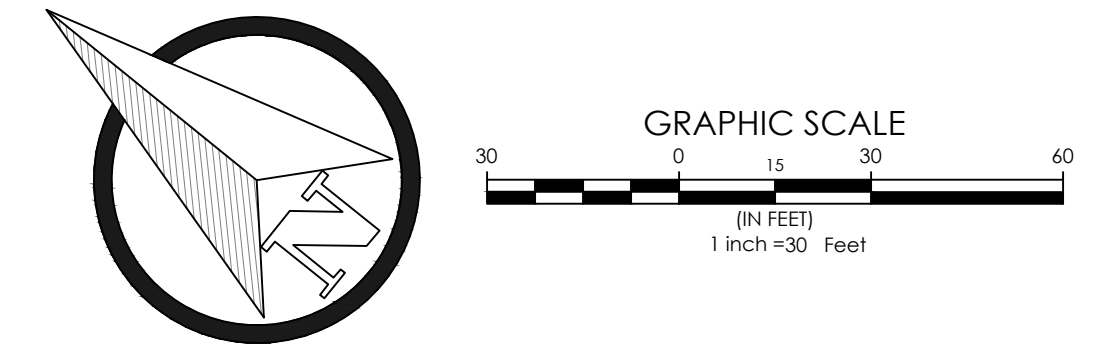
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POTABLE
WATER PLAN

SHEET NUMBER

12 OF 29

EXISTING SEWER SYSTEM (SCALE: 1 INCH = 40 FEET)



GENERAL UTILITY PLAN NOTES

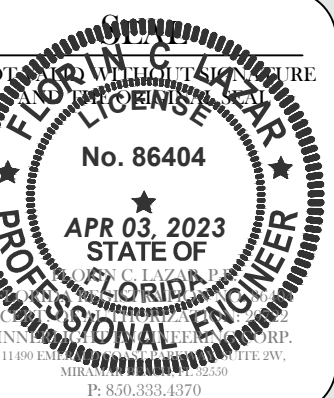
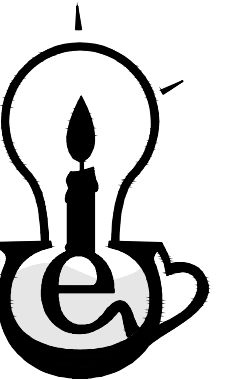
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2. A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH THE CONTRACTOR, DEVELOPER, ENGINEER OF RECORD, CITY OF DESTIN, AND DESTIN WATER USERS WHEN FDEP PERMITS HAVE BEEN ISSUED AND PRIOR TO CONSTRUCTION.
3. ALL UTILITIES HEREIN TO BE INSTALLED UNDERGROUND.

CALHOUN HARBOR
RESIDENTIAL TOWNHOMES

JOHNNY BOSWELL CALHOUN ESTATES PROPERTIES, INC.
12889 EMERALD COAST PKWY
MIRAMAR BEACH, FL 32550

RECORD DATA

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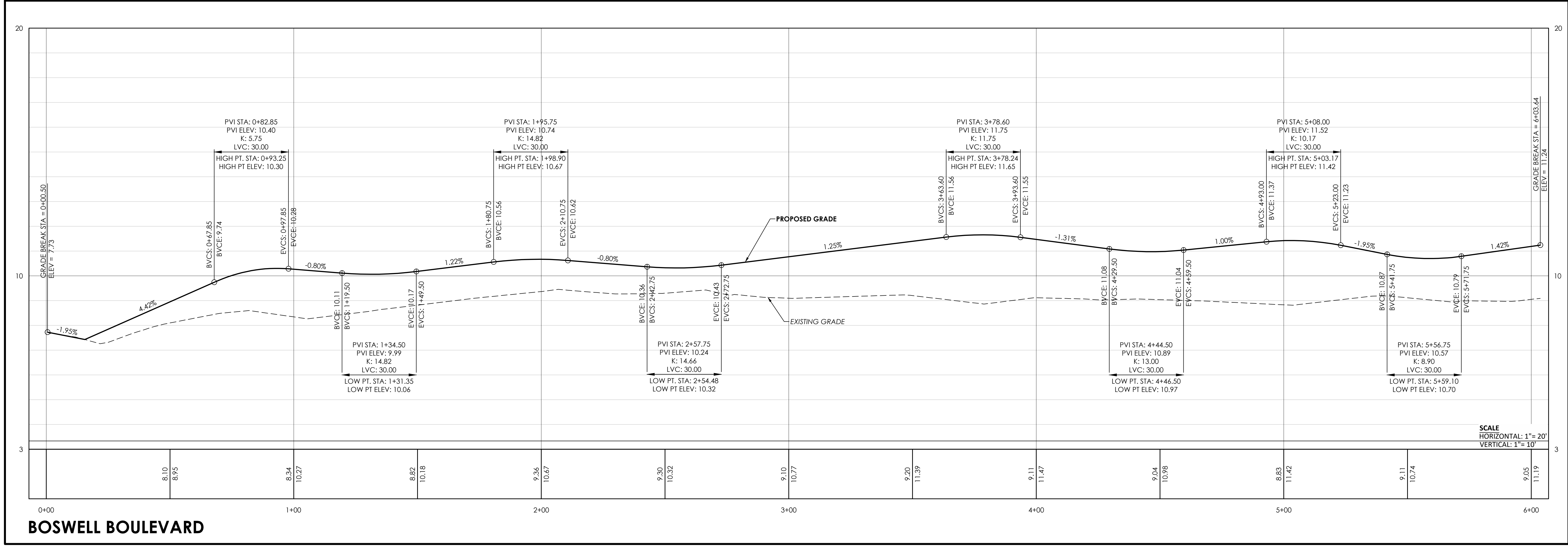
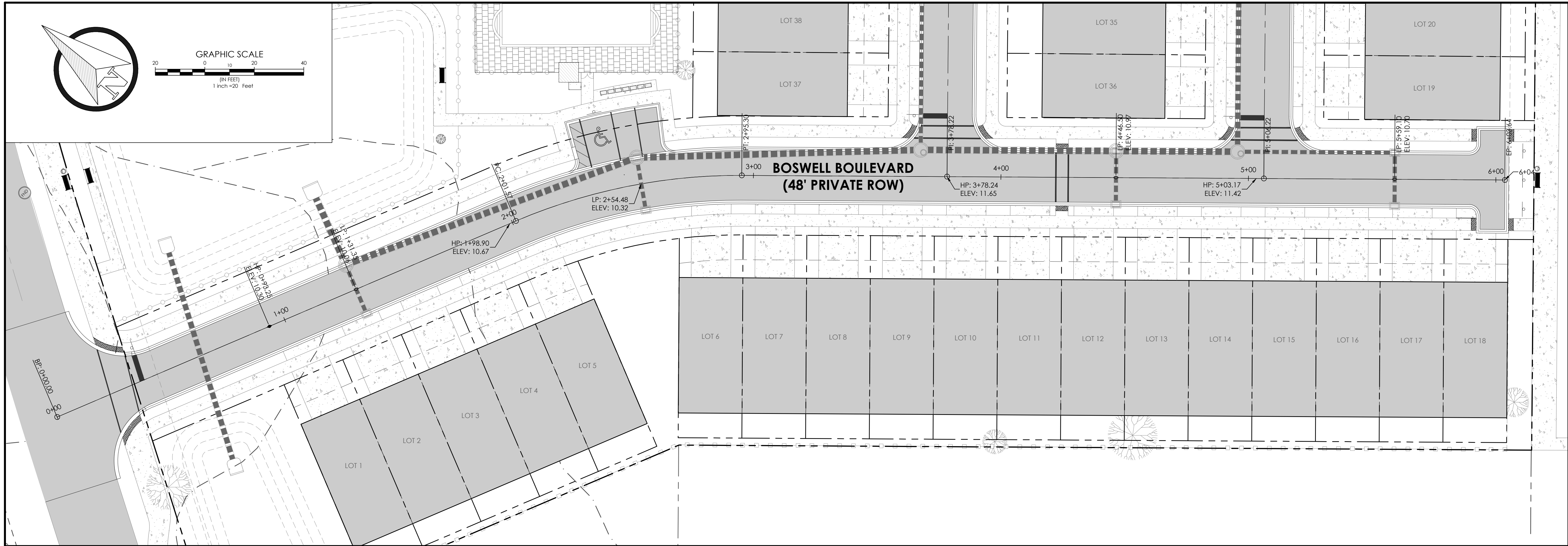
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SANITARY SEWER PLAN

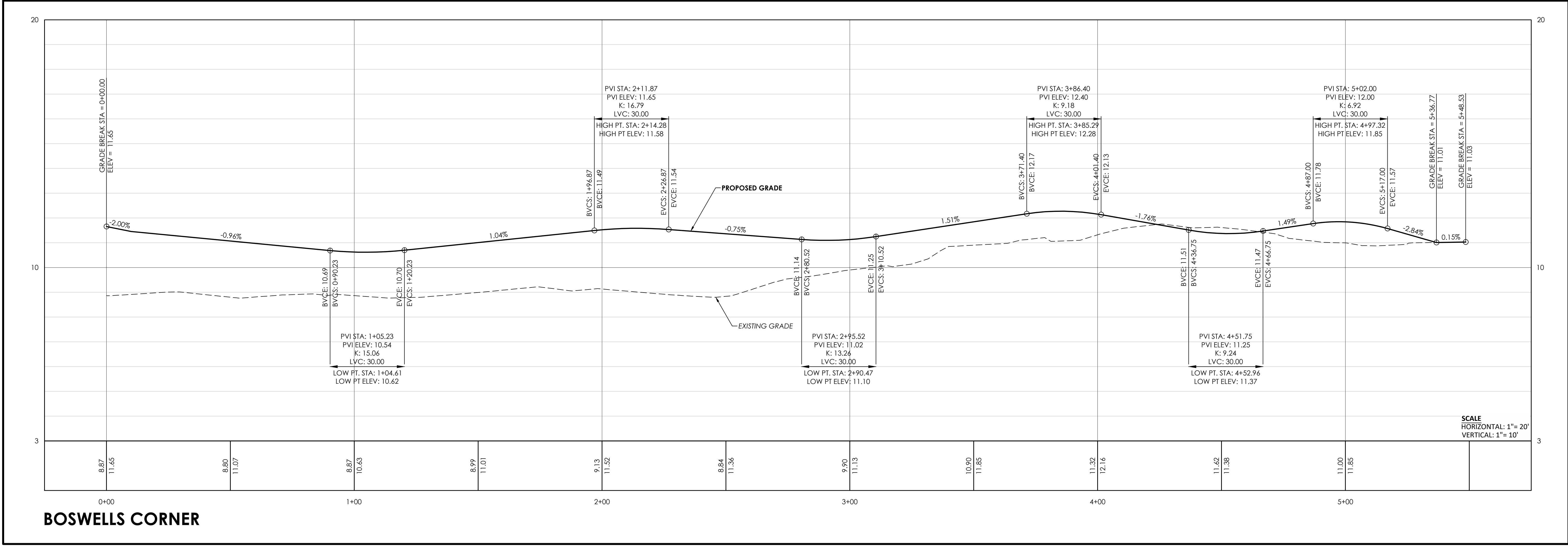
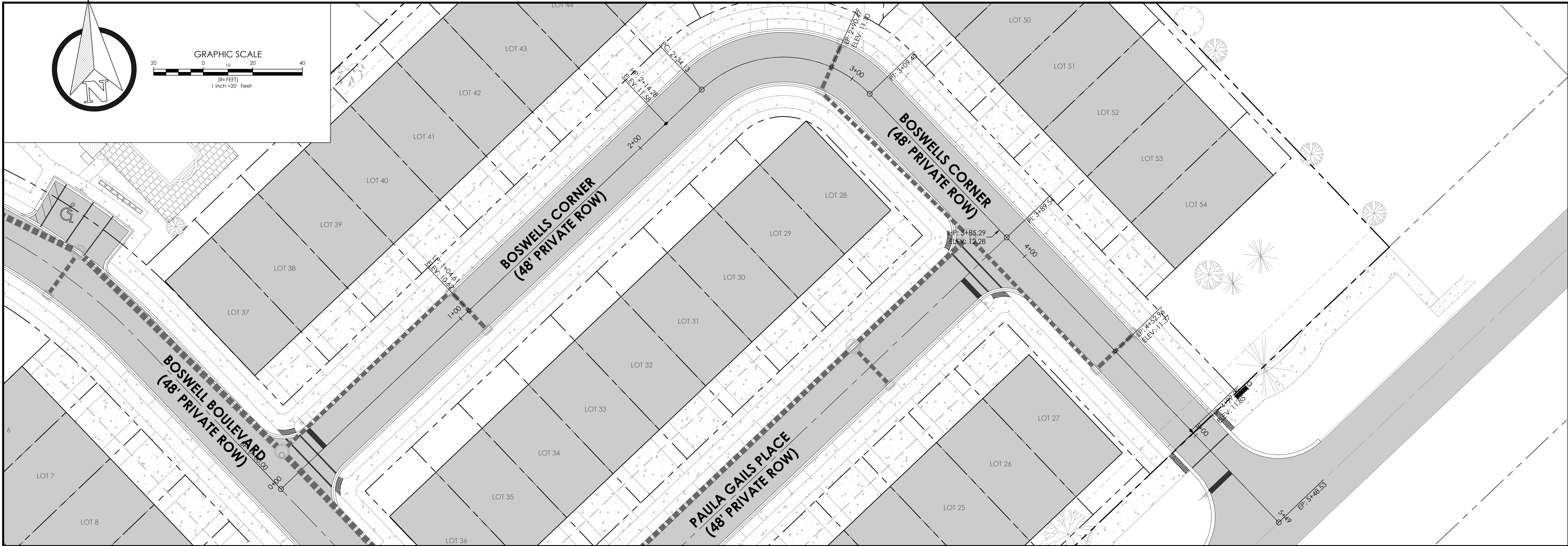
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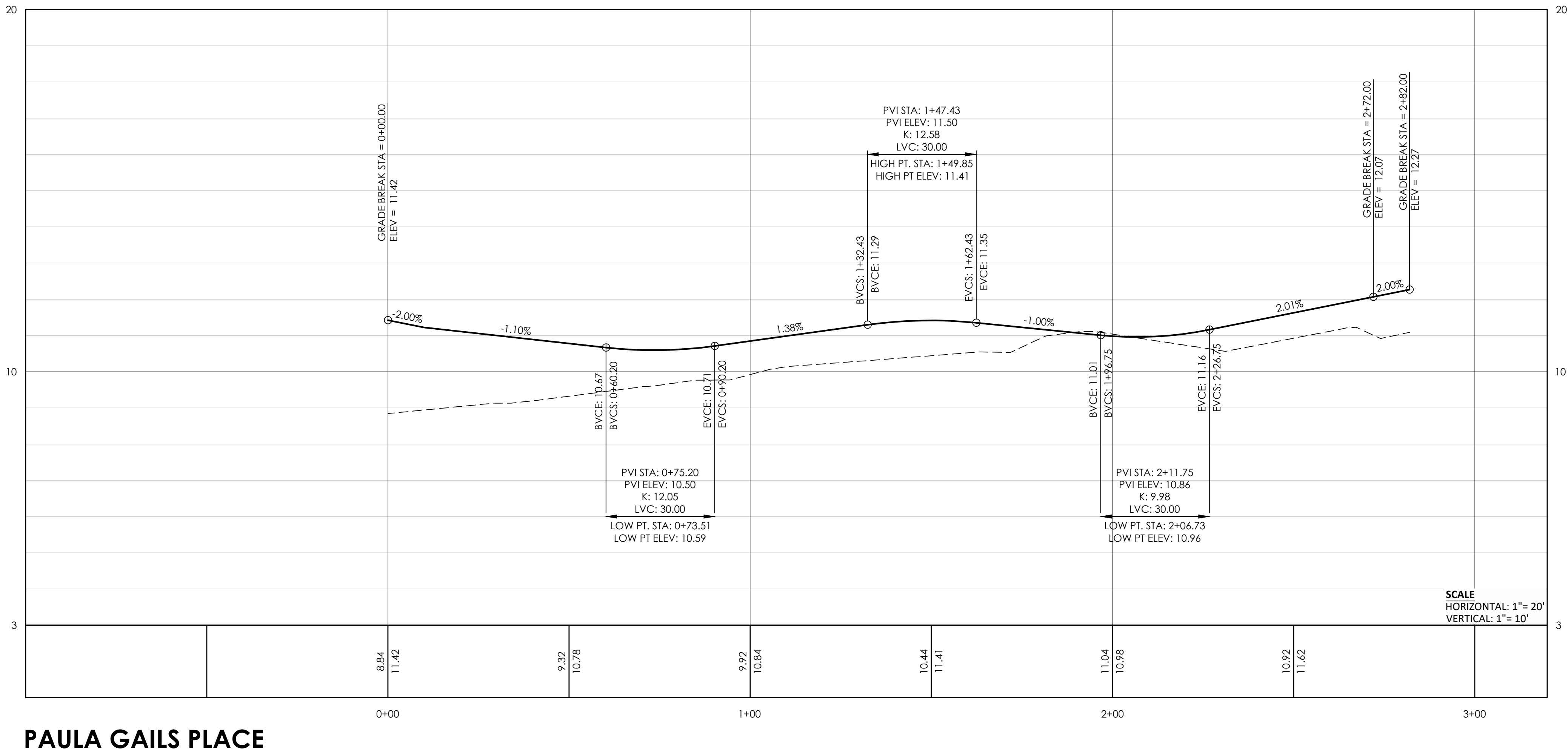
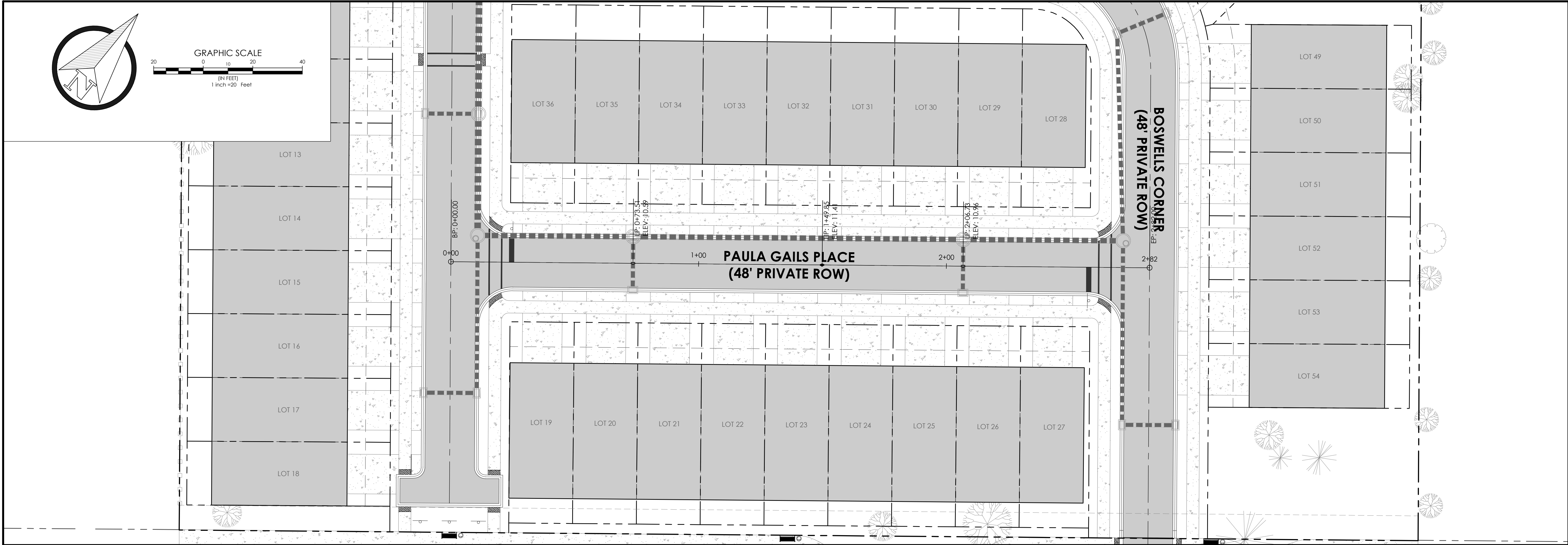
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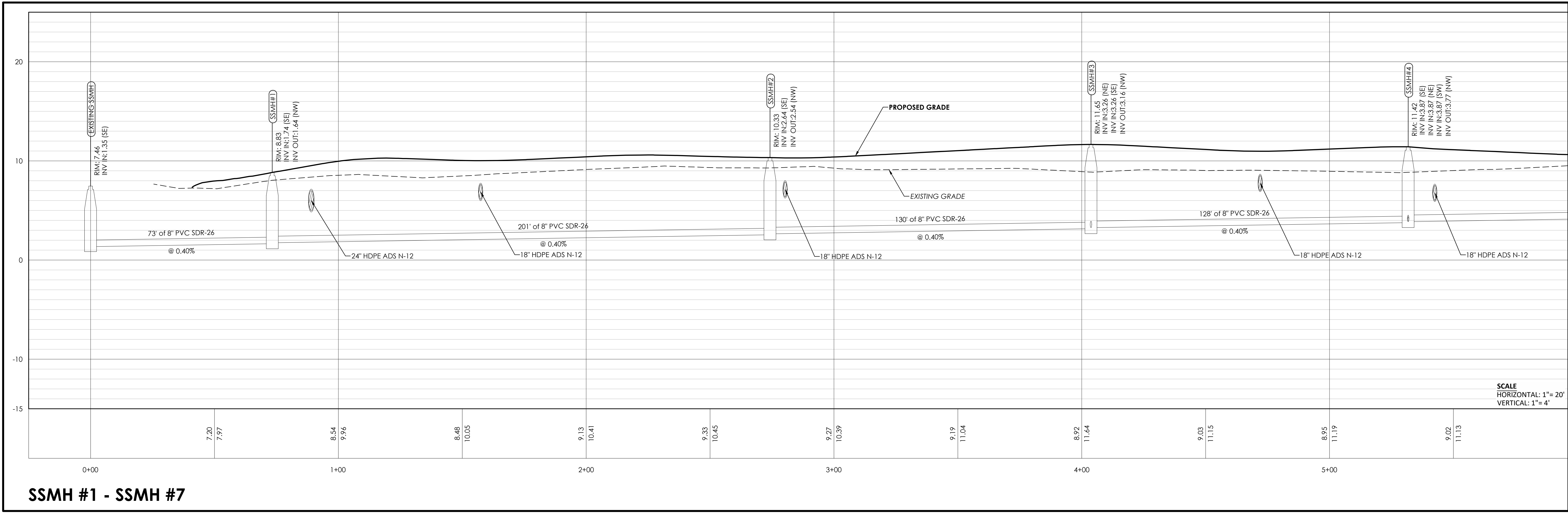
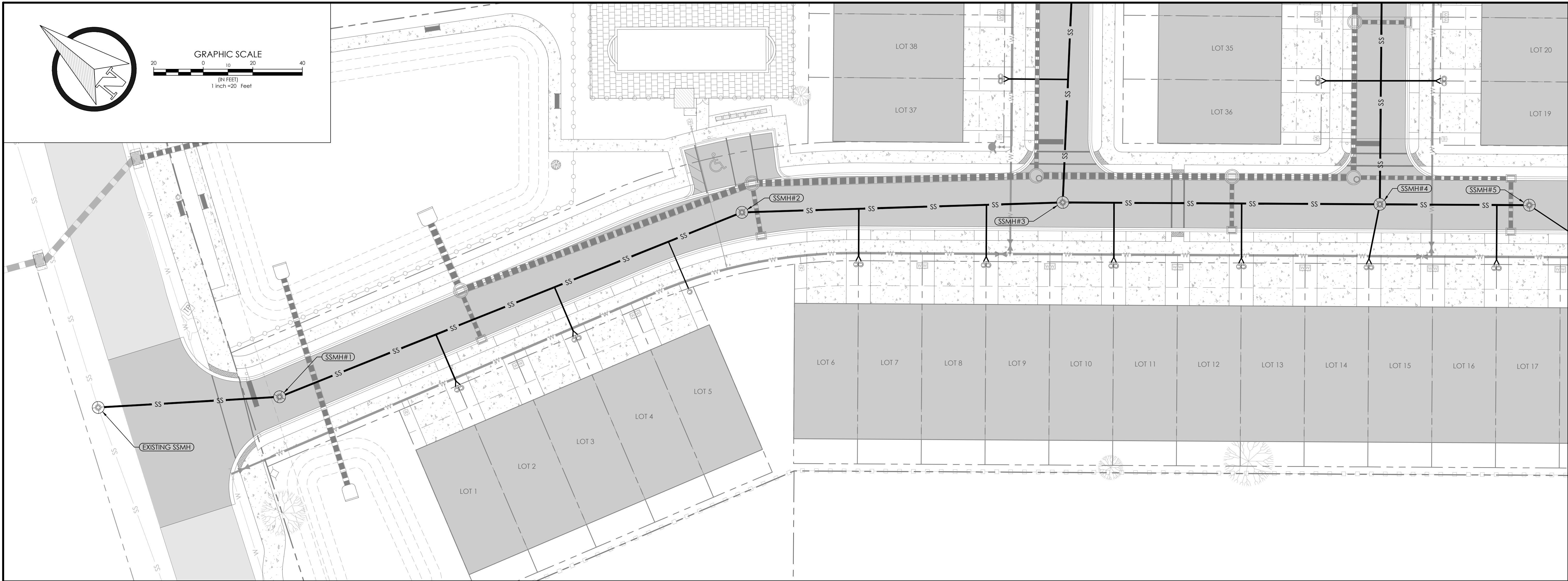
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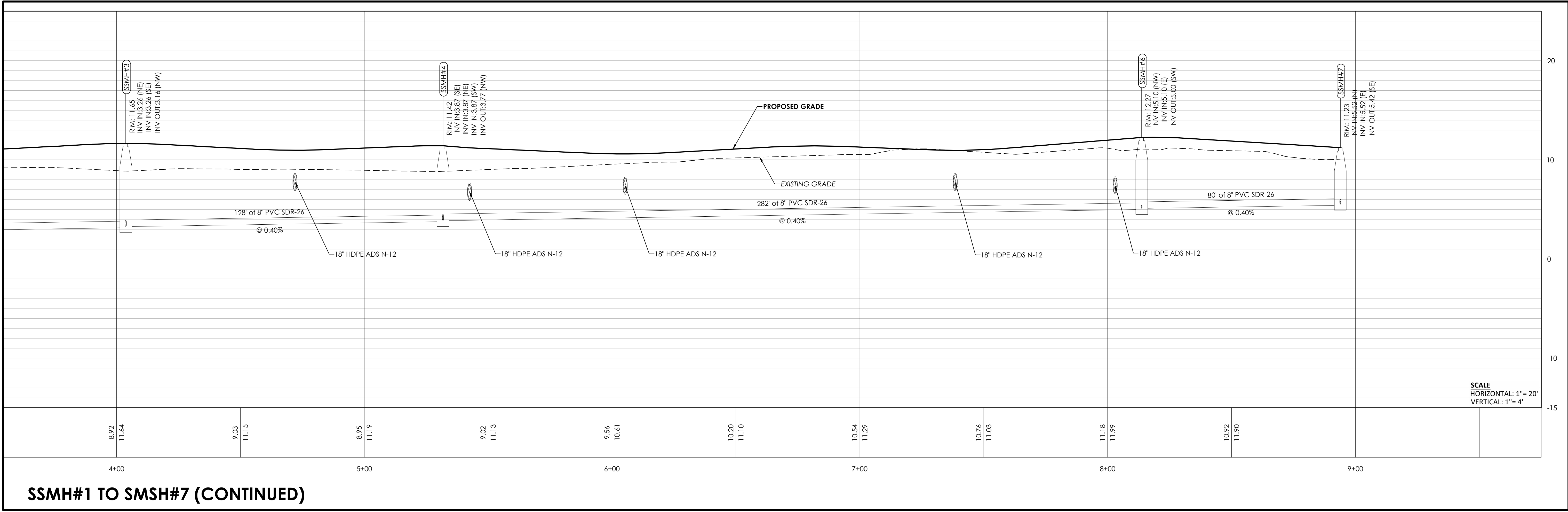
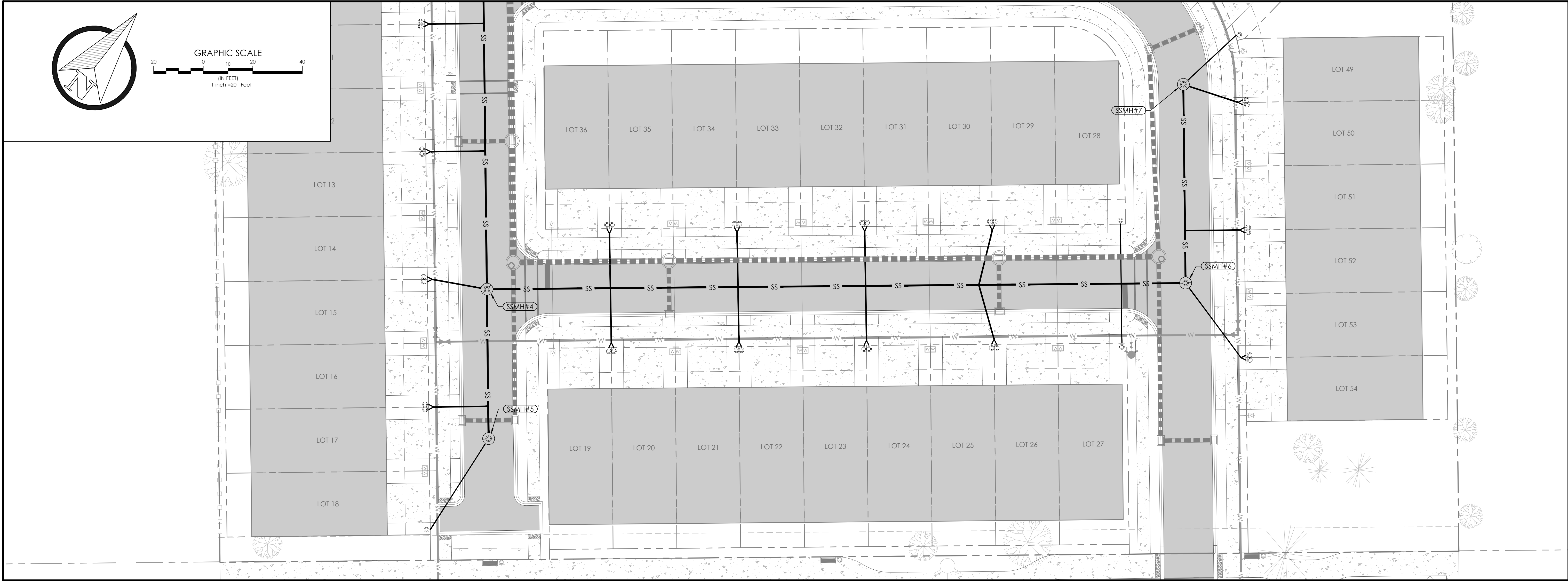
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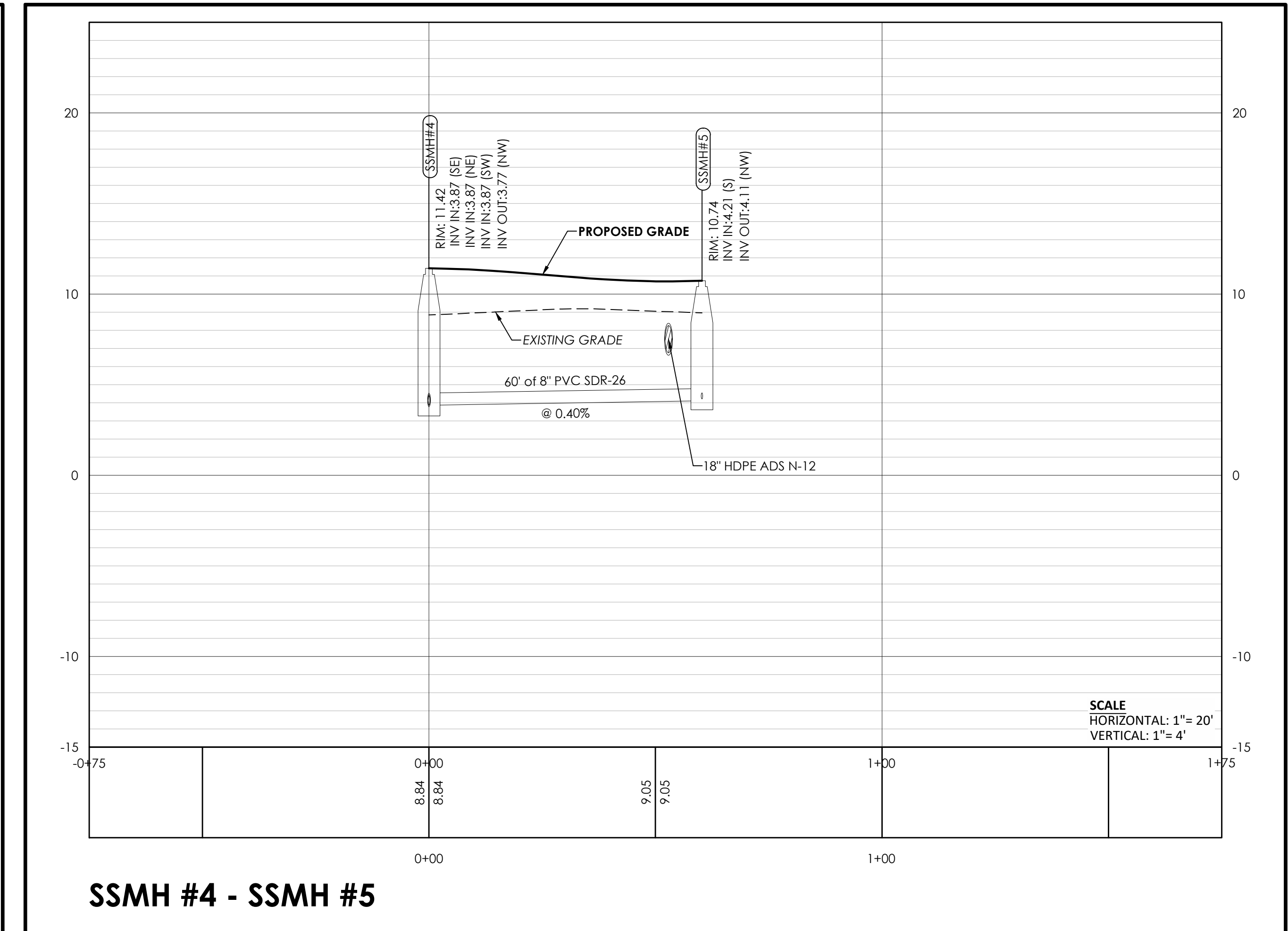
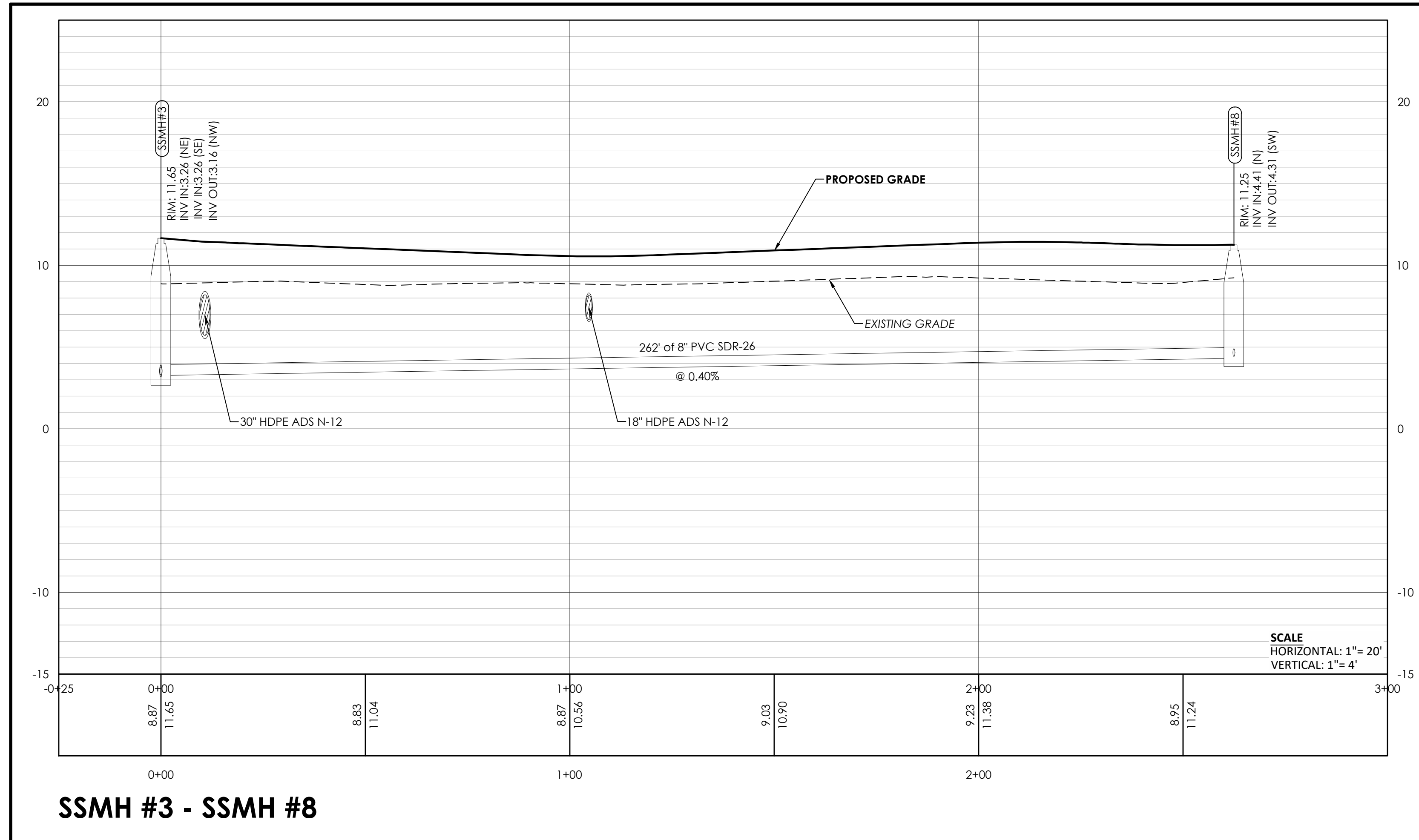
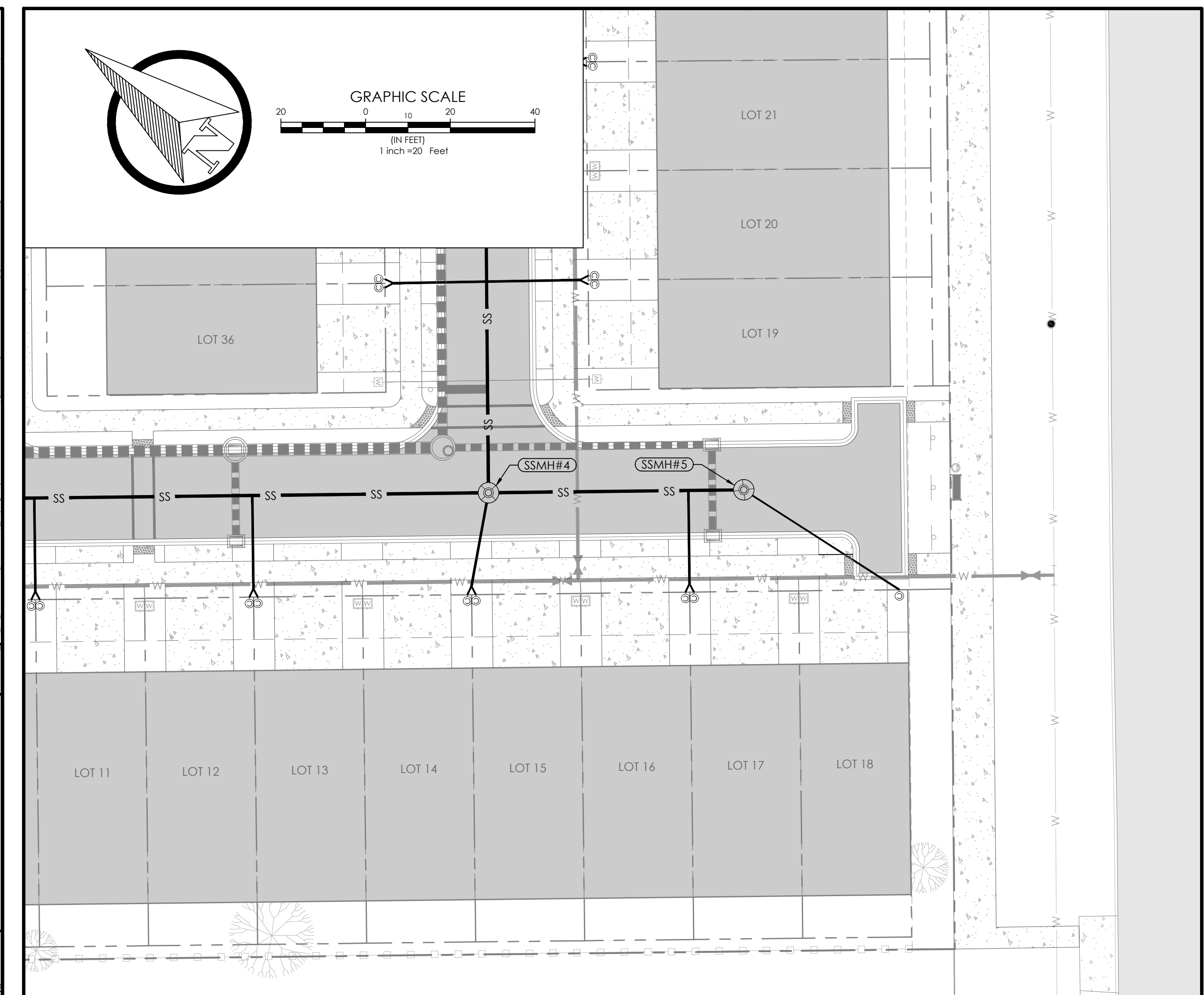
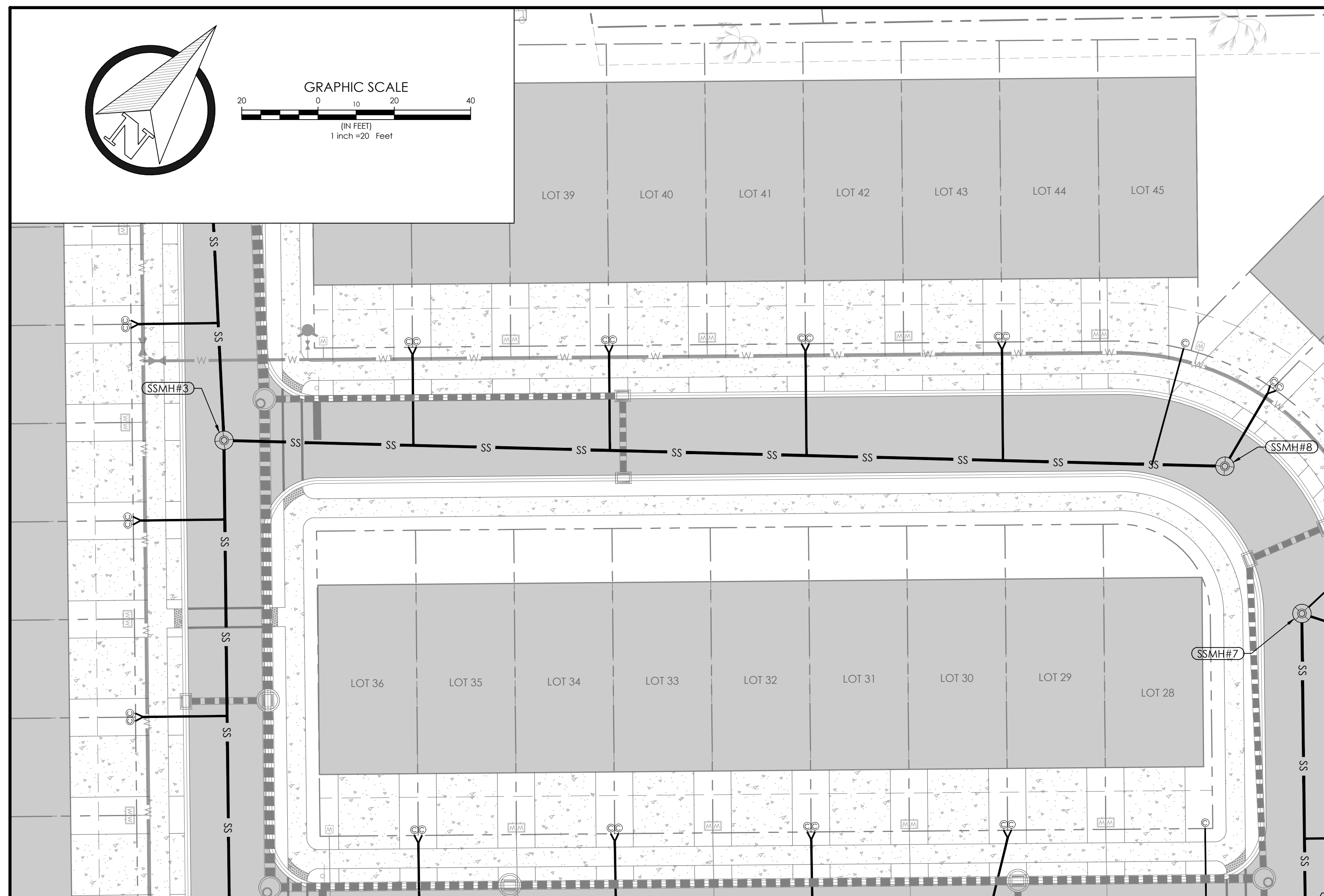


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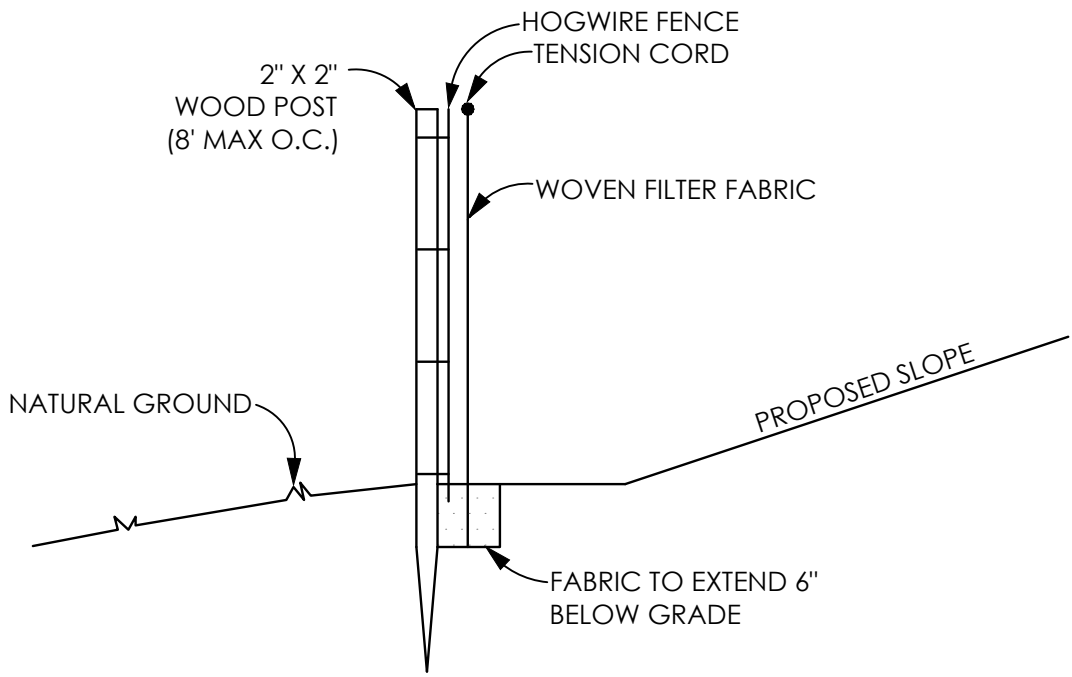
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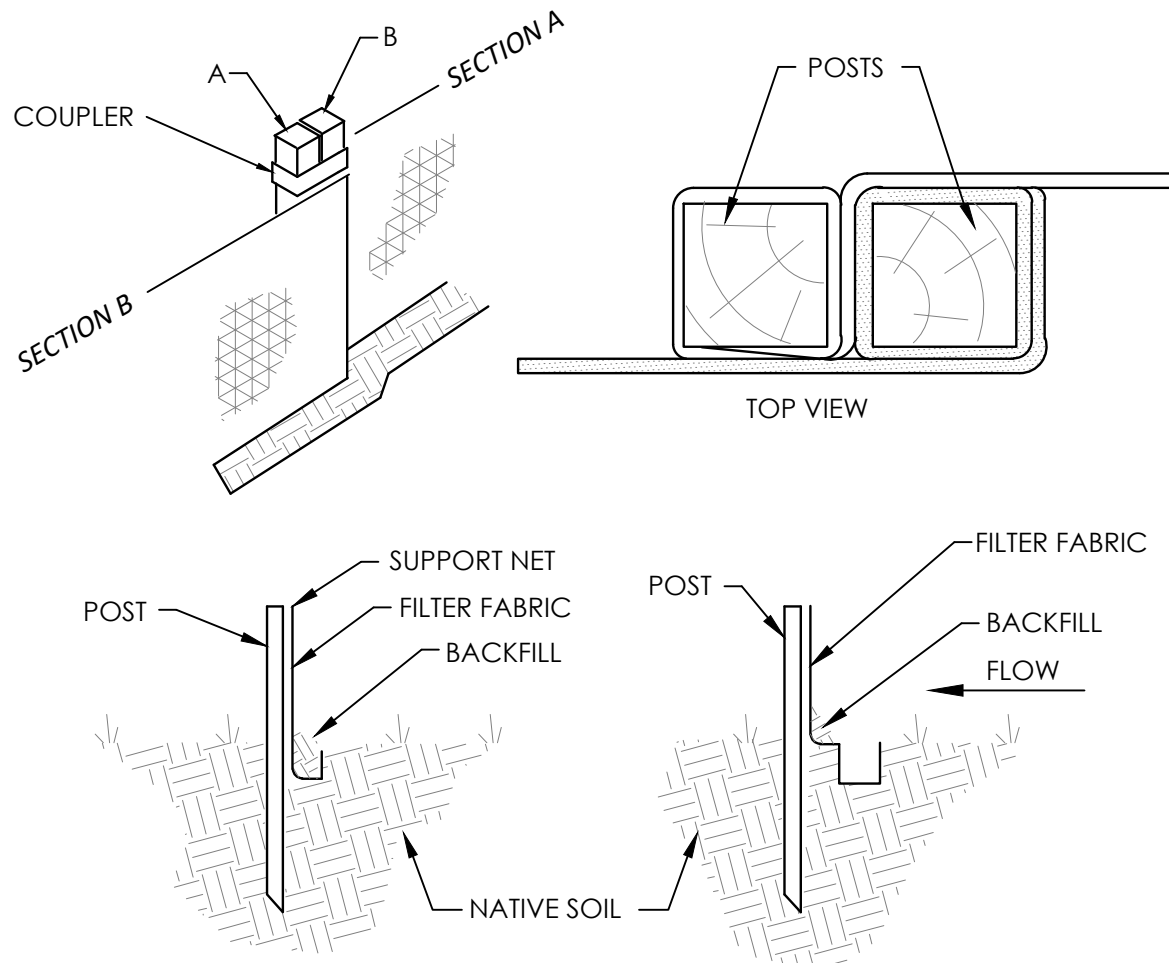


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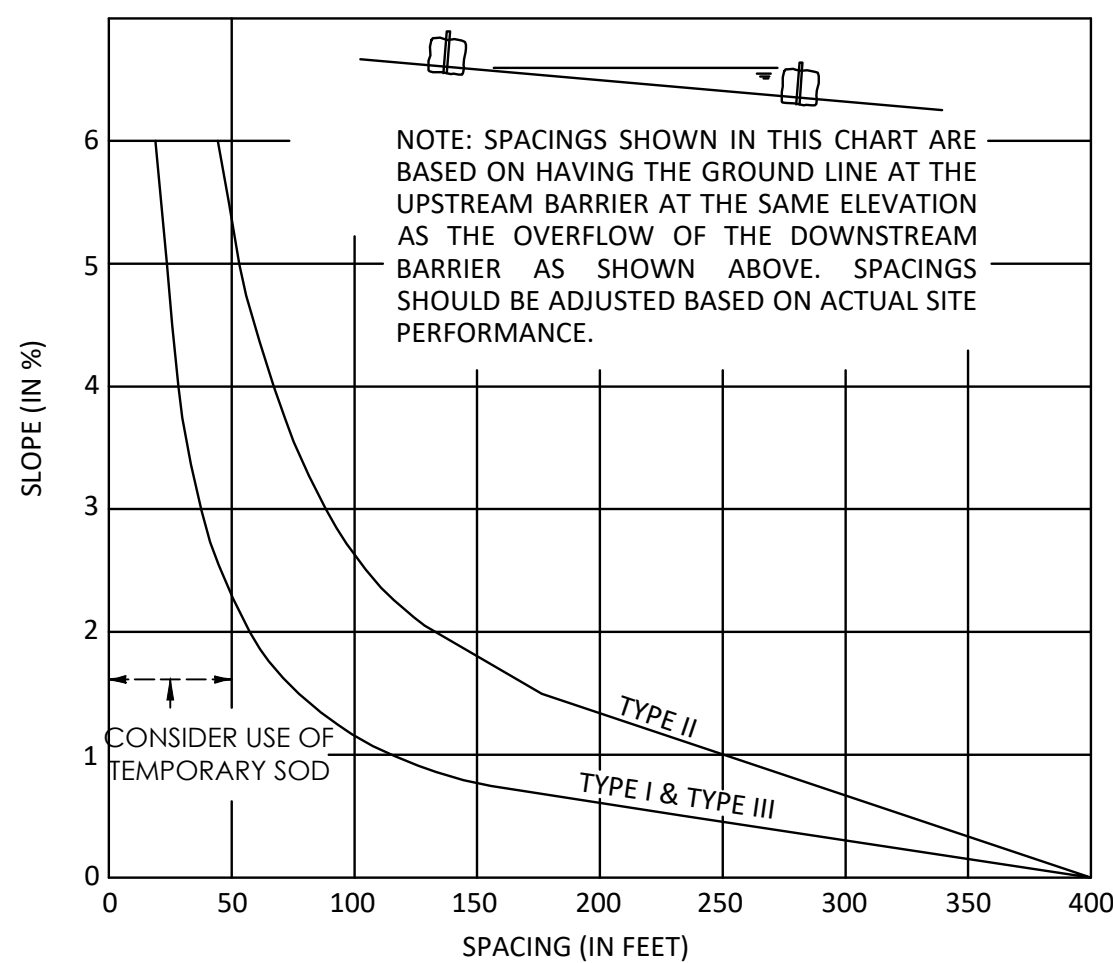
- DIG A 6" X 6" TRENCH AT DESIRED FENCE LOCATION.
- UNROLL SILT FENCE ALONG TRENCH (SILT-LOK, ENVIROFENCE, OR ENGINEER-APPROVED EQUAL).
- DRIVE STAKE IN TO THE DOWNHILL SIDE OF TRENCH W/ FILTER FABRIC FACING UPHILL SIDE.
- STAPLE HOGWIRE TO POSTS, EXTENDING FROM TOP OF POSTS TO BOTTOM OF TRENCH.
- LAY THE BOTTOM 6" OF FABRIC IN TO THE TRENCH AND FILL W/ SOIL FOR PROPER TOE-IN.
- DRAW TENSION CORD AT TOP OF FENCE.



1 **STANDARD SILT FENCE**
NOT TO SCALE



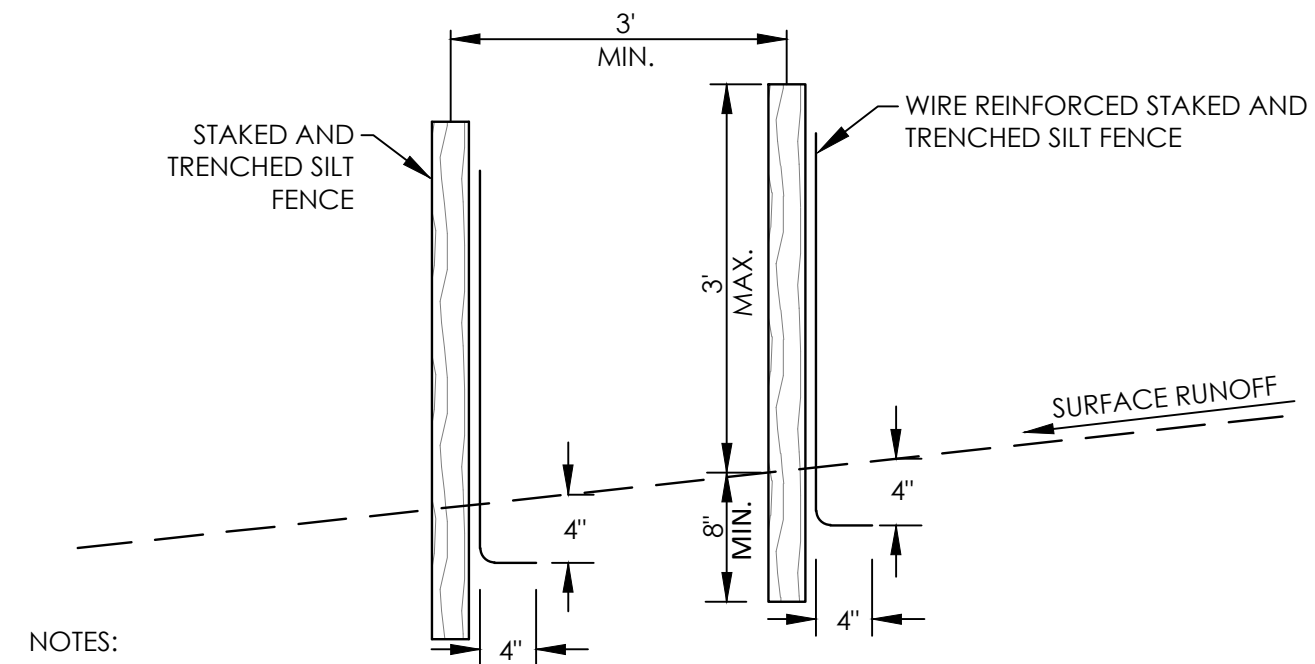
2 **SEDIMENT BARRIER SILT FENCE DETAIL**
NOT TO SCALE



7 **RECOMMENDED SPACING FOR BALED HAY BARRIERS AND TYPE III SILT FENCE**
NOT TO SCALE

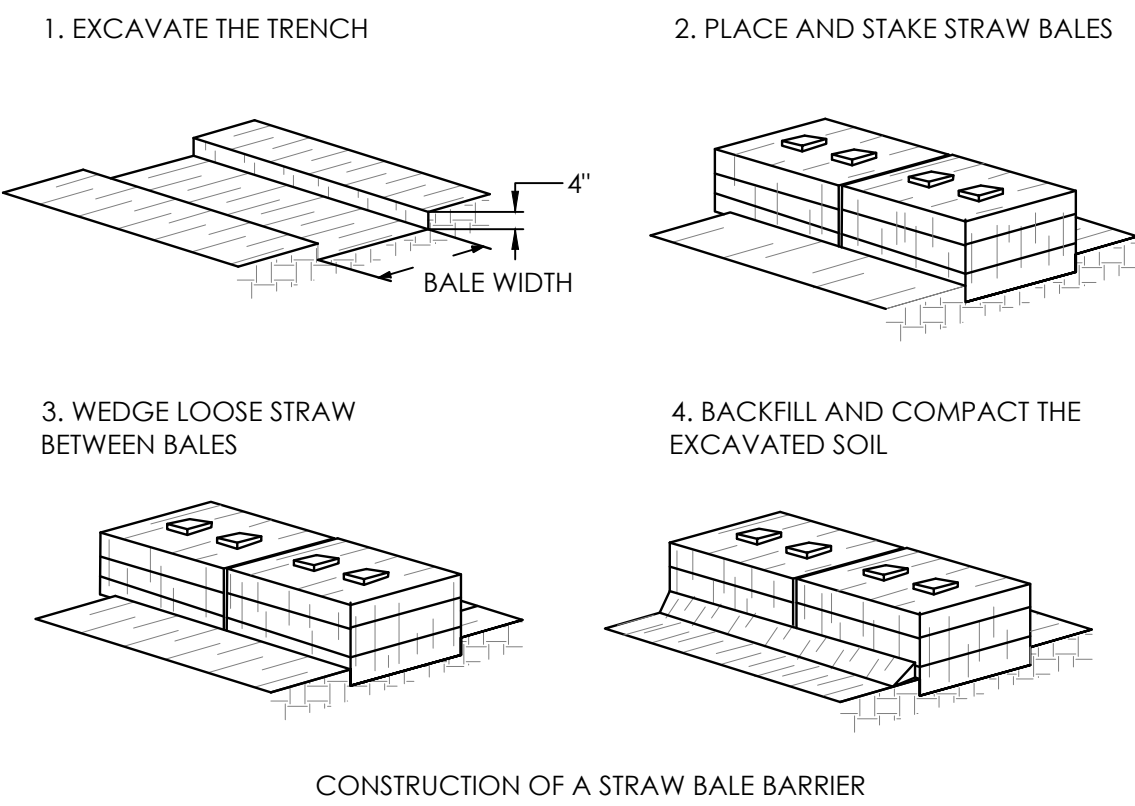
MATERIAL	RATE
STRAW OR HAY	2 - 1/2 TONS/ACRE
WOOD WASTE, CHIPS	2" - 3" DEEP (ABOUT)
SAWDUST OR BARK	6 TO 9 TONS/ACRE
MATTING OR NETTING	ACCORDING TO MANUFACTURER'S RECOMMENDATIONS
CUTBACK ASPHALT	1200 GALLON/ACRE (1/2 GALLON/YD)
POLYETHYLENE FILM	COMPLETELY COVER AREA

11 **DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)**
NOT TO SCALE

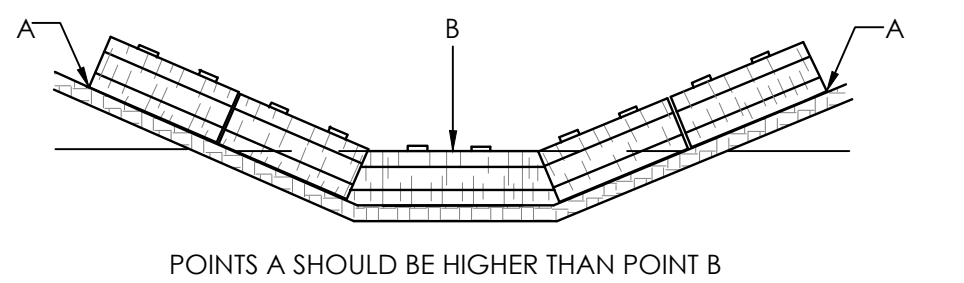


- NOTES:
1. POSTS SHALL BE SPACED A MAXIMUM OF 8 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 12 INCHES. WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6 FEET.
 2. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 4 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
 3. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
 4. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

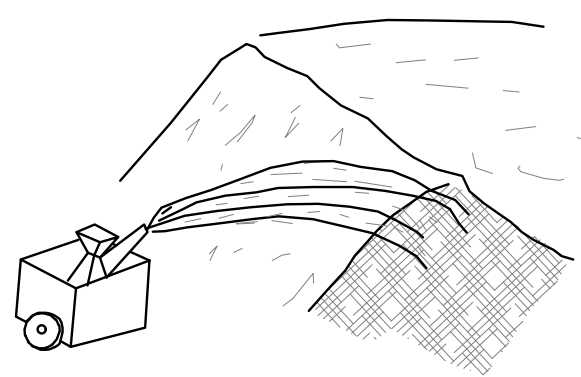
3 **DOUBLE ROW STAKED SILT FENCE**
NOT TO SCALE



CONSTRUCTION OF A STRAW BALE BARRIER



4 **PROPER PLACEMENT OF STRAW BALE BARRIER IN DRAINAGE WAY**
NOT TO SCALE



- ≤ 12 MONTHS OR UNTIL ESTABLISHMENT OF FINISHED GRADE OR PERMANENT VEGETATION
- SITE PREPARATION
 - GRADING AND SHAPING
 - SEEDBED PREPARATION
 - APPLY LIME AND FERTILIZER
 - PLANT SEEDING, SELECT SPECIES BY SEASON AND REGION
 - APPLY MULCHING MATERIAL IF NEEDED
 - IRRIGATE IF NEEDED BUT NOT AT A RATE TO CAUSE EROSION
- PLANTING DATES DEPEND ON SPECIES AND REGION (MOUNTAIN, PIEDMONT, OR COASTAL)

8 **DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDINGS)**
NOT TO SCALE

SPECIES	RATE PER 1,000 SF	RATE PER ACRE	PLANTING DATES ²		
			MTS-L-STONE	PIEDMONT	COASTAL
RYE	3 POUNDS	2-3 BU.	8/1 - 12/1	9/1 - 1/1	10/1 - 3/1
RYEGRASS	1 POUND	40-50 LBS	8/1 - 12/1	8/15 - 1/1	8/15 - 3/1
RYE AND ANNUAL LESPEDEZA	1-1/2 POUNDS	1-1/2 BU.	3/1 - 4/1	3/1 - 4/1	2/1 - 3/1
	1/2 POUND	20-25 LBS	3/1 - 4/1	3/1 - 4/1	2/1 - 3/1
WEEDING LOVEGRASS	0.2 POUNDS	4-6 LBS	3/15 - 8/1	3/1 - 8/15	2/15 - 8/15
SUDANGRASS	1 POUND	35-45 LBS	4/1 - 8/1	4/1 - 7/15	4/1 - 7/15
BROWNTOP MILLET	1 POUND	30-40 LBS	4/1 - 7/1	4/1 - 7/15	4/1 - 7/15
WHEAT	3 POUNDS	2-3 BU.	10/1 - 12/1	10/15 - 1/1	11/1 - 1/15

REFERENCE: DISTURBED AREA STABILIZATION (WITH MULCHING ONLY), PAGE 71

- ¹ UNUSUAL SITE CONDITIONS MAY REQUIRE HEAVIER SEEDING RATES
² SEEDING DATES MAY NEED TO BE ALTERED TO FIT TEMPERATURE VARIATIONS

9 **SEEDING RATES FOR TEMPORARY SEEDINGS**
NOT TO SCALE

ESTABLISHING A PERMANENT VEGETATIVE COVER AS A DISTURBED AREA

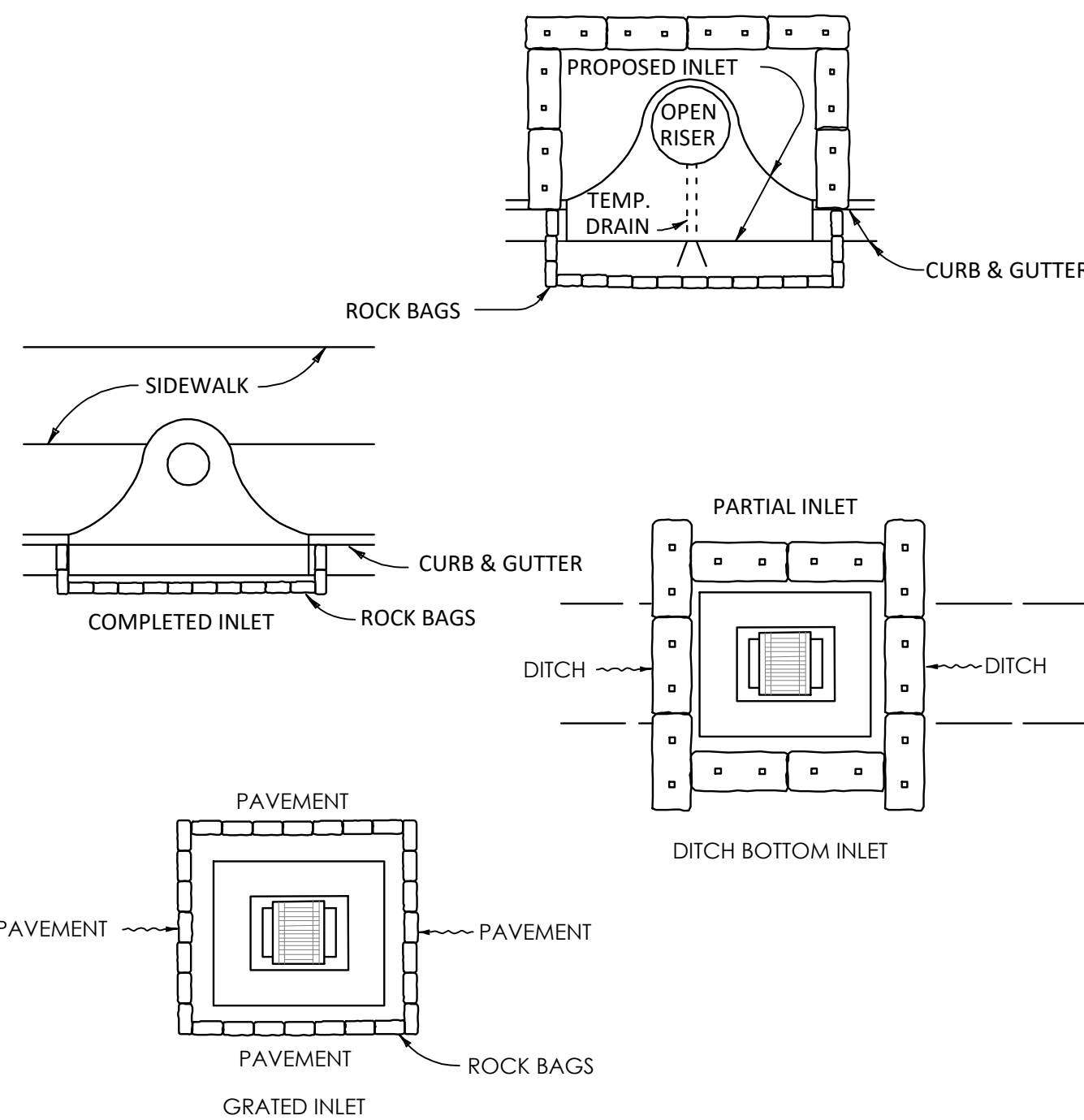


NOTE: HAY BALES SHALL BE TRENCHED 3" TO 4" AND ANCHORED WITH 2 - 1" x 2" (OR 1" DIA.) x 4' WOOD STAKES. STAKES OF OTHER MATERIAL OR SHAPE PROVIDING EQUIVALENT STRENGTH MAY BE USED IF APPROVED BY THE ENGINEER. STAKES OTHER THAN WOOD SHALL BE REMOVED UPON COMPLETION OF THE PROJECT. SEE FDOT INDEX NO. 102 FOR ADDITIONAL INFORMATION.

COMPOST FILTER SOCKS MAY BE USED IN LIEU OF ROCK BAGS PROVIDED THEY MEET THE FOLLOWING SPECIFICATIONS:

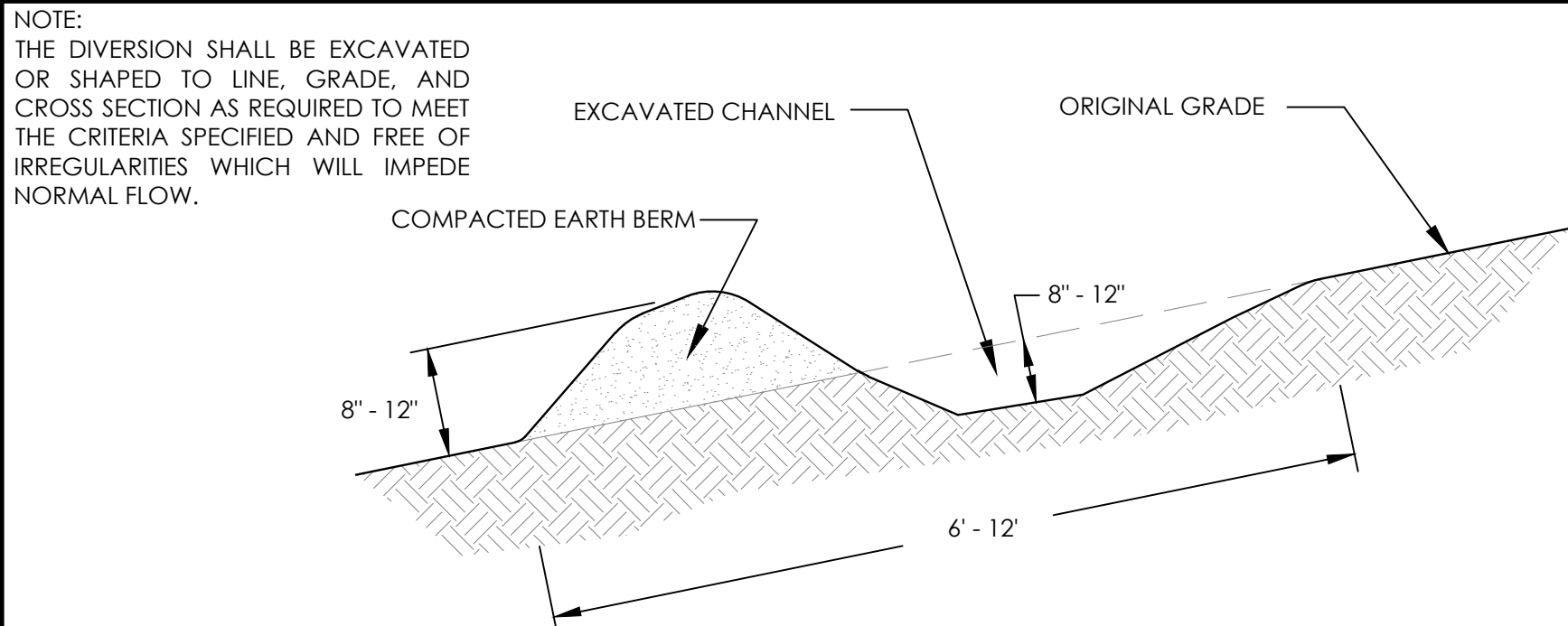
- 1) MUST BE ANCHORED AT 3 FT INTERVALS BY CINDER BLOCKS
- 2) PARTICLE GRADATION: 99% PASSING 2IN. SIEVE, 40% PASSING 3/8" SIEVE
- 3) MATERIAL < 1% DRY UNIT WEIGHT OF INERT FOREIGN MAN-MADE MATERIALS
- 4) FILTREXX SILT SOXX OR EQUIVALENT SHALL BE USED.

6 **PROTECTION AROUND INLETS OR SIMILAR STRUCTURES**
NOT TO SCALE

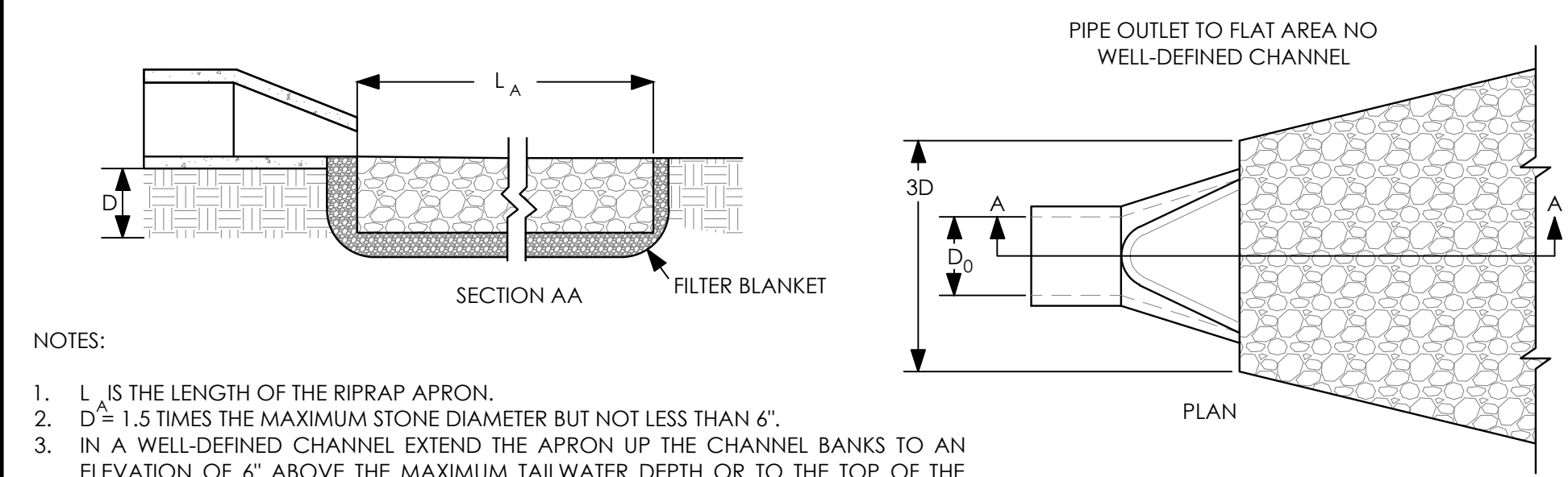


SLOPE	SEEDING
3:1 OR FLATTER.....	≥ 4" DEEP
2:1 TO 3:1.....	1" TO 4" DEEP
2:1 OR STEEPER.....	DEPRESSION EVERY 6"-8" WITH HAND TOOL

10 **DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)**
NOT TO SCALE

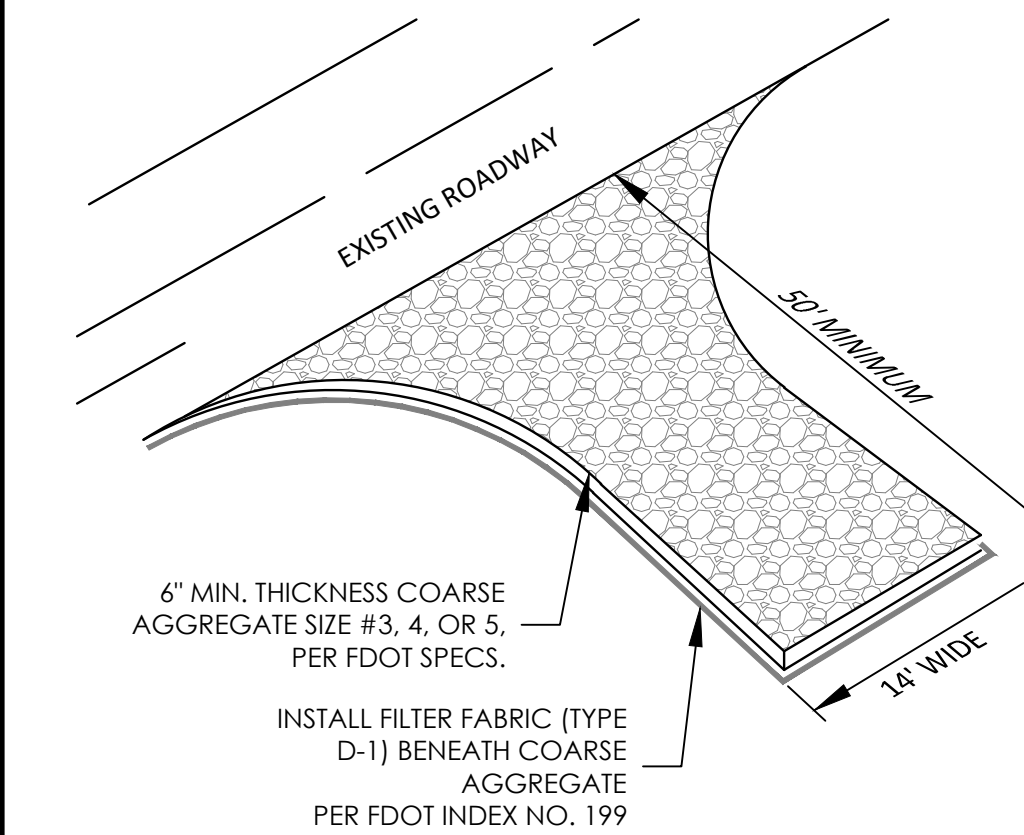


12 **DIVERSION SWALE**
NOT TO SCALE



- NOTES:
1. L_A IS THE LENGTH OF THE RIPRAP APRON.
 2. D ≈ 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
 3. IN A WELL-DEFINED CHANNEL EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
 4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.

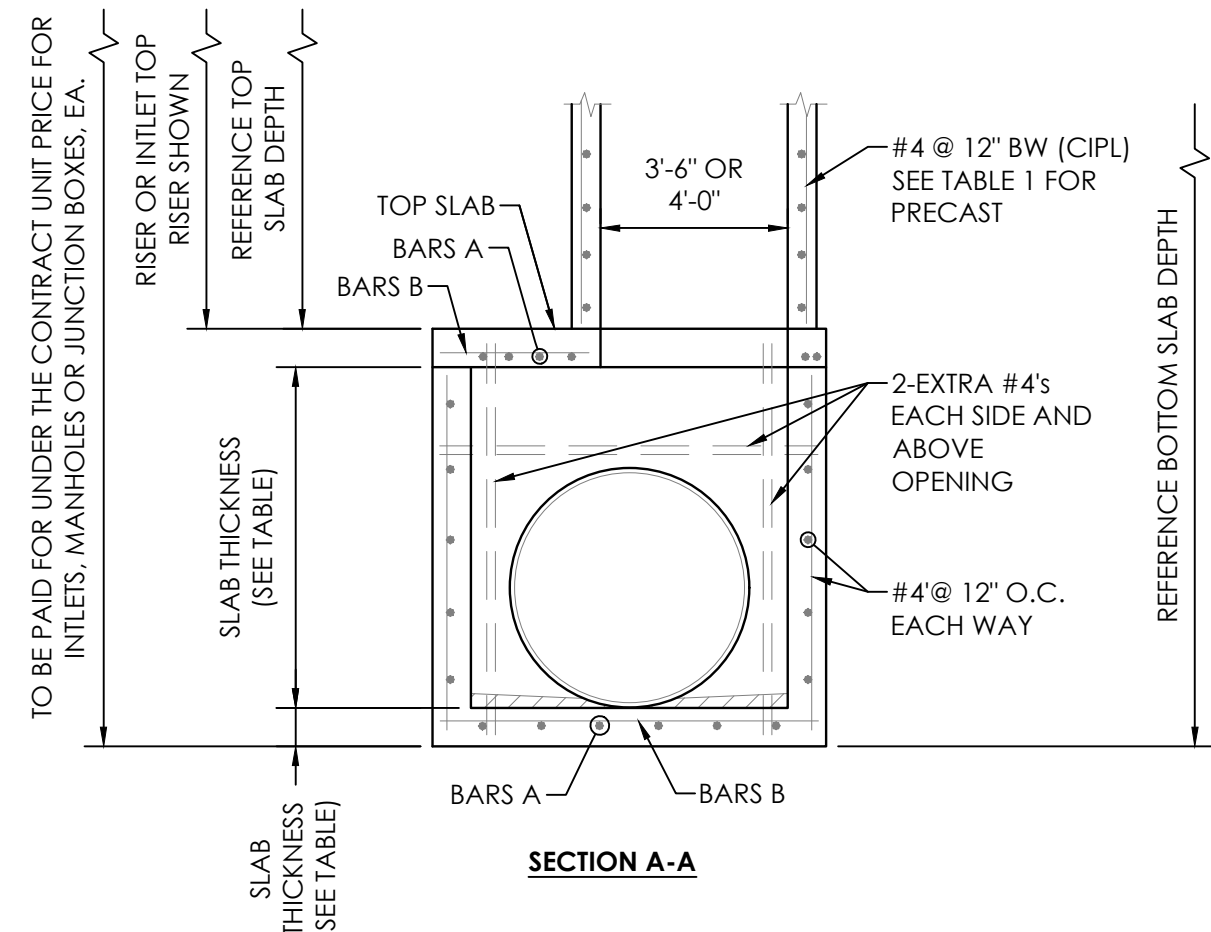
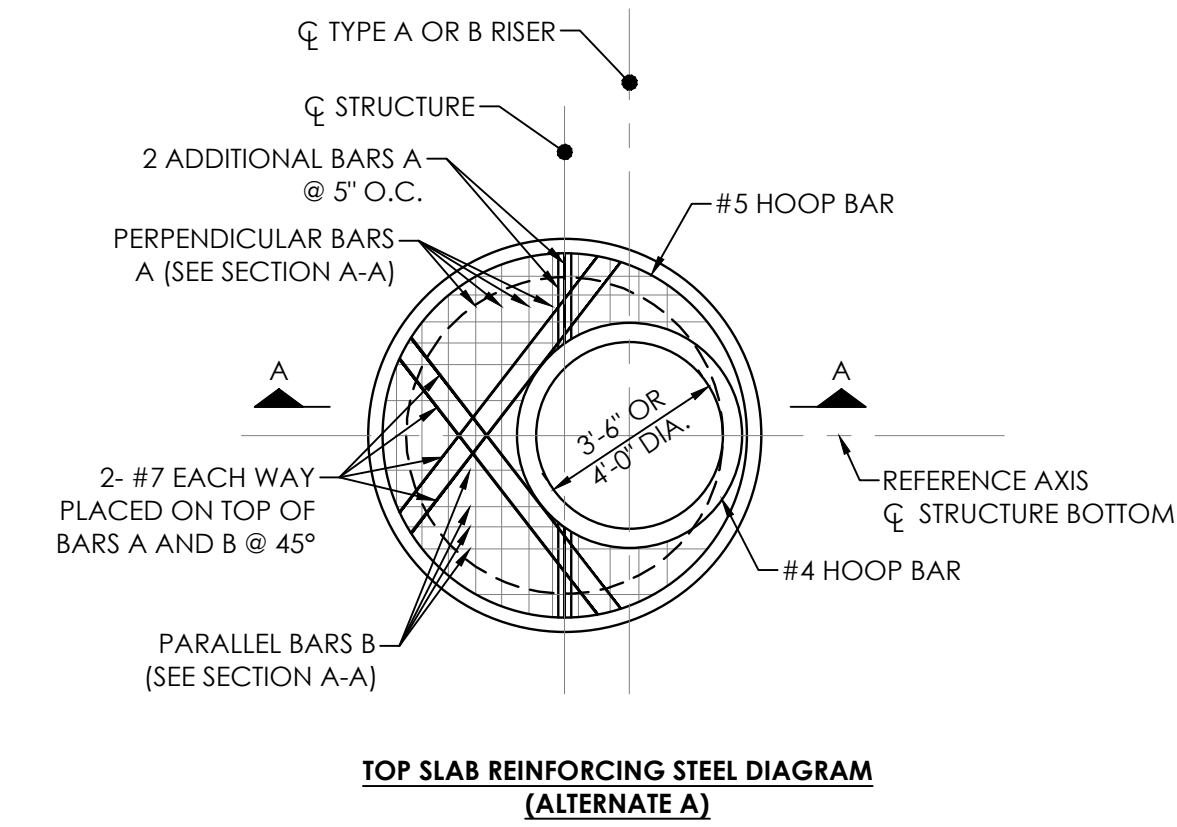
13 **STONE OUTLET PROTECTION DETAIL**
NOT TO SCALE



14 **TEMPORARY GRAVEL CONSTRUCTION ENTRANCE DETAIL**
NOT TO SCALE

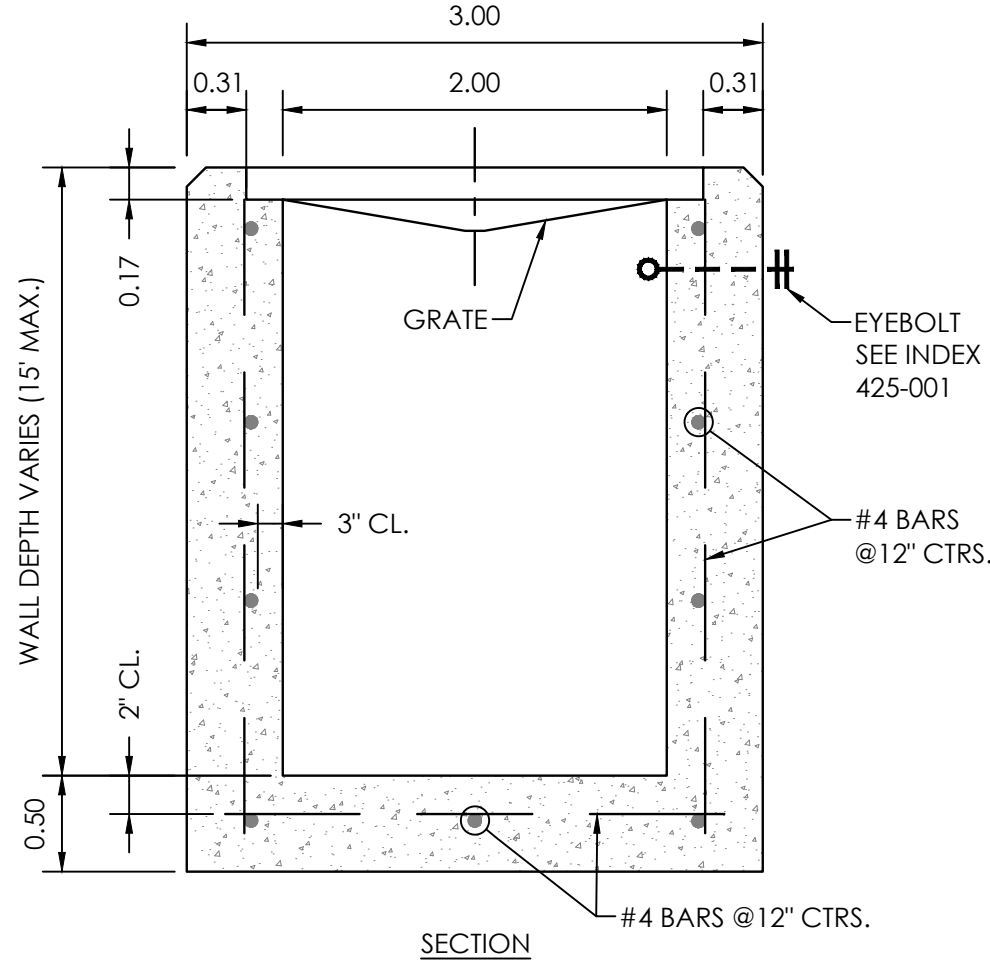
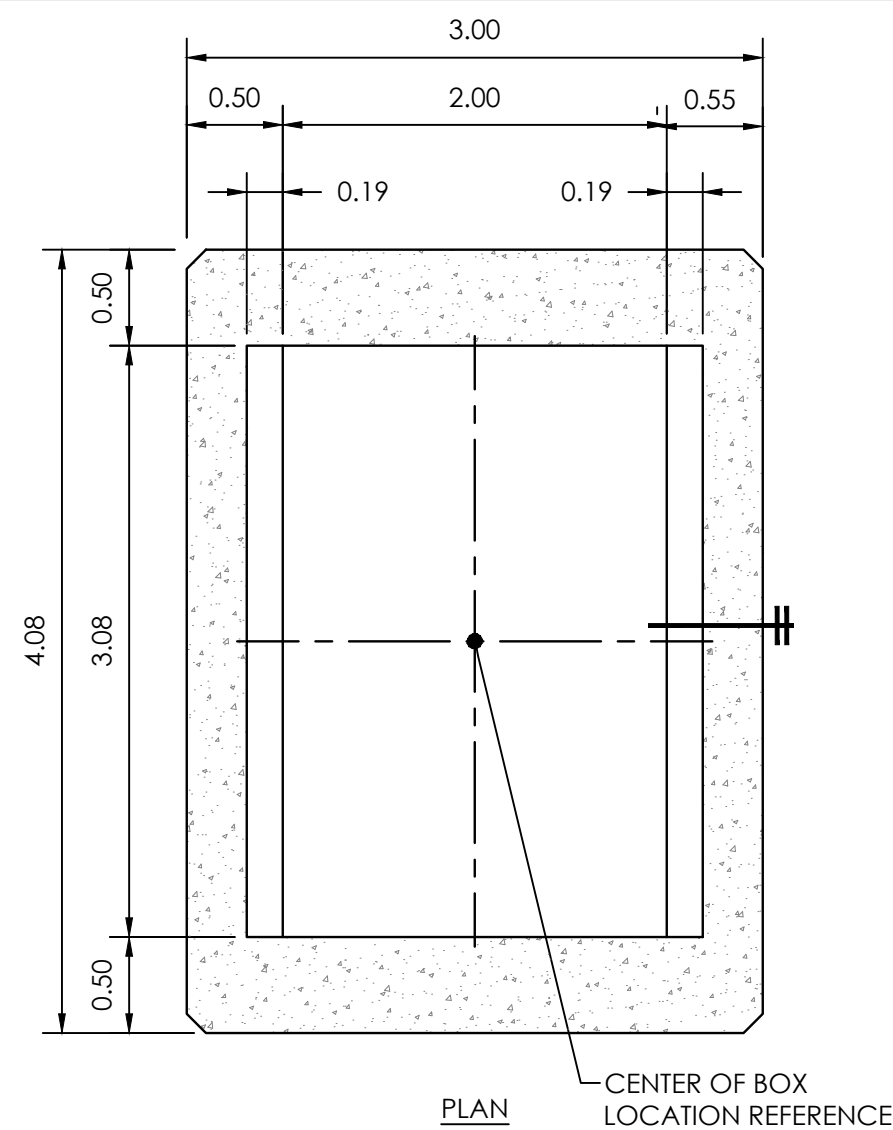
- THE ROAD CONSTRUCTION ACCESS SHALL BE STABILIZED USING 6" MINIMUM THICKNESS OF COARSE AGGREGATE TO REDUCE EROSION CAUSED BY CONSTRUCTION TRAFFIC, AND TO MINIMIZE TRANSPORT OF SEDIMENT ONTO THE EXISTING PAVED ROADWAY.
- AGGREGATE SHALL BE APPLIED IMMEDIATELY AFTER GRADING OR THE COMPLETION OF UTILITY CONSTRUCTION WITHIN THE RIGHT OF WAY.
- THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD AND SEDIMENTS ONTO THE PUBLIC STREETS OR GUTTERS. PERIODIC TOP-DRESSING WITH STONE WILL BE NECESSARY AND AN ADEQUATE SUPPLY SHOULD BE HANDY. ANY SEDIMENTS OR MUD SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS SHALL BE RECOVERED AND CLEANED UP IMMEDIATELY.

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NOTE:
WHEN THE INSIDE DIAMETER OF A ROUND STRUCTURE IS NOT MORE THAN 1'-6" LARGER THAN THE OPENING IN THE RISER OR TOP SLAB, THE TOP OF THE STRUCTURE OR RISER SHALL BE CONSTRUCTED ACCORDING TO THE "SPECIAL TOP SLAB" DETAILS ON THIS SHEET.

1 FDOT STRUCTURE BOTTOMS TYPE J AND P (INDEX 425-010)
NTS

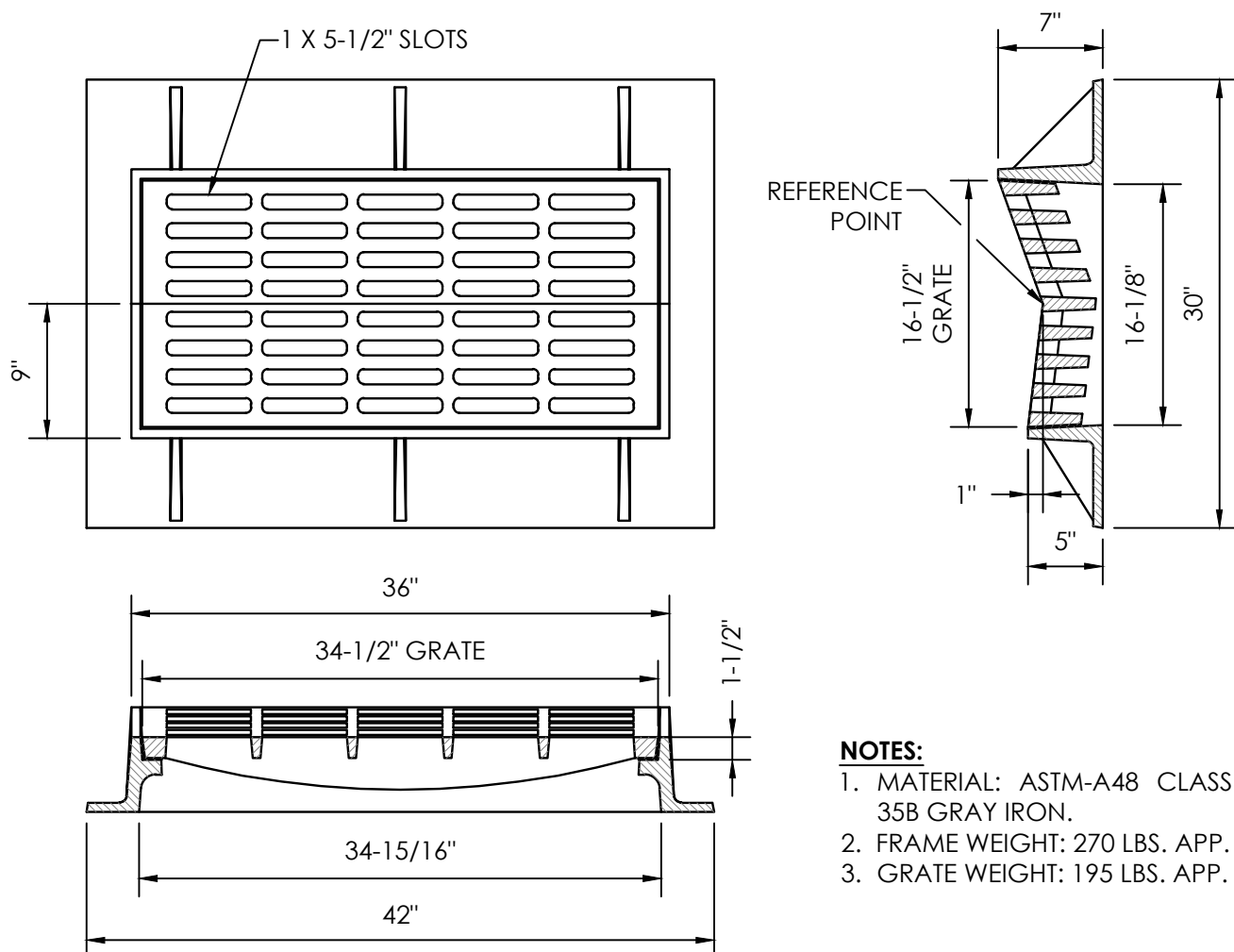


HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 1)				
WALL DEPTH	SCHEDULE	AREA (in. ² /ft.)	MAX. SPACING BARS	WWF
0'-15'	A12	0.20	12"	8"

RECOMMENDED MAXIMUM PIPE SIZE:

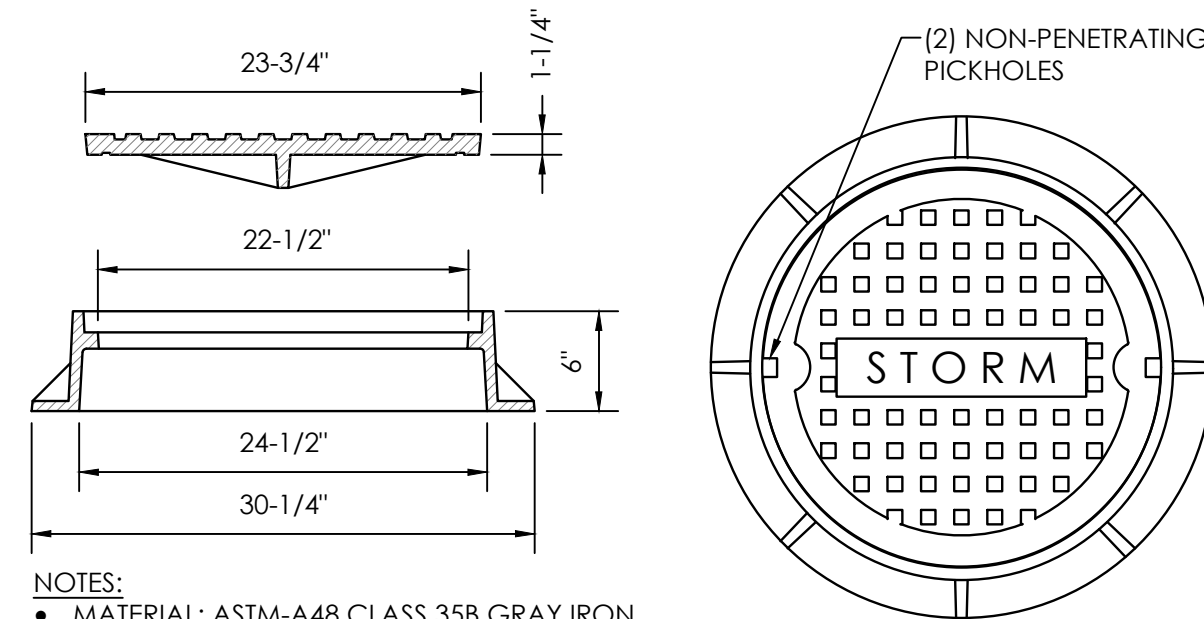
2'-0" WALL - 18" PIPE
3'-1" WALL - 24" PIPE (18" WHERE AN 18" PIPE ENTERS A 2'-0" WALL)

2 FDOT DITCH BOTTOM INLET TYPE C (INDEX 425-052)
NTS



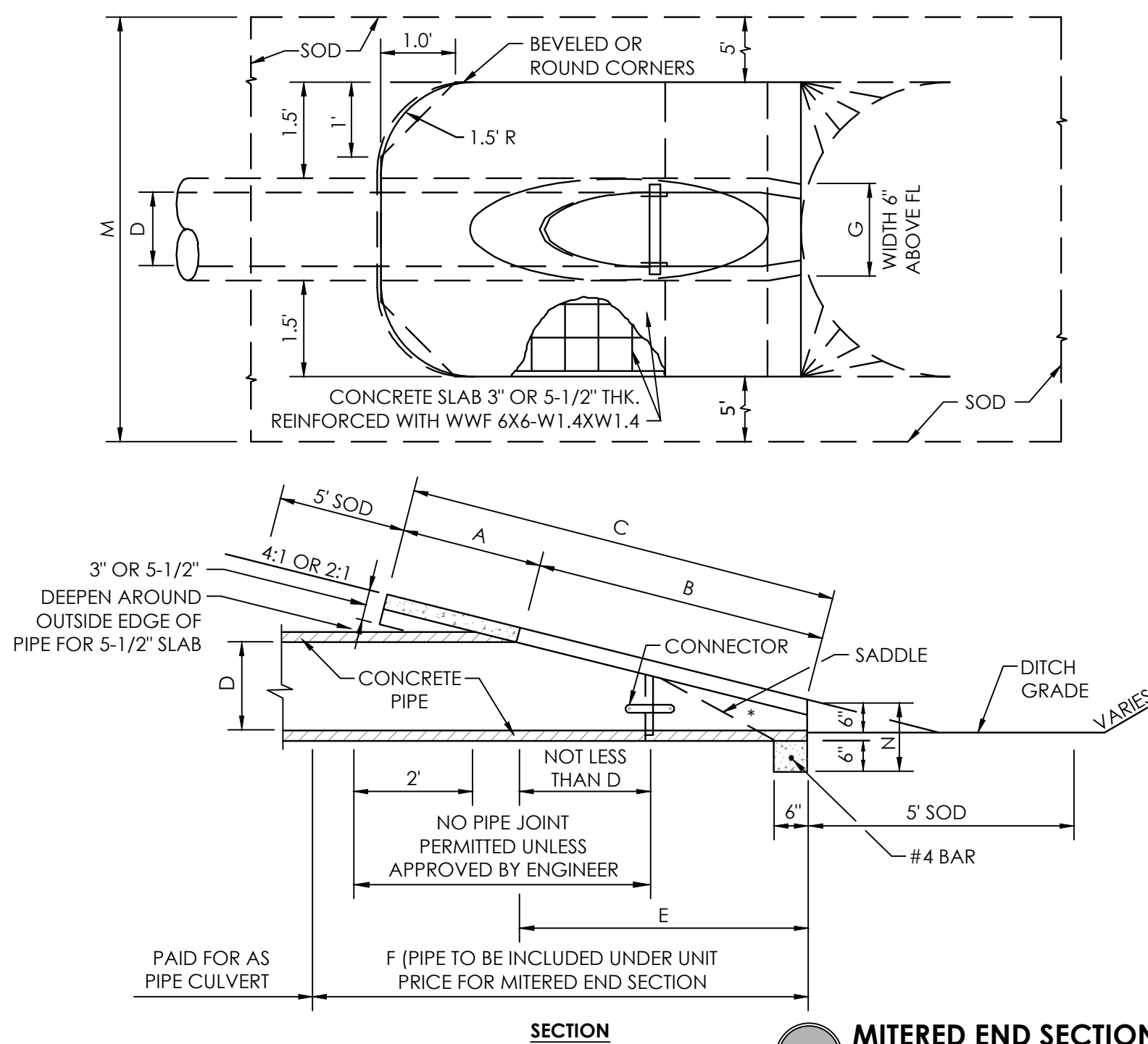
NOTES:
1. MATERIAL: ASTM-A48 CLASS 35B GRAY IRON.
2. FRAME WEIGHT: 270 LBS. APP.
3. GRATE WEIGHT: 195 LBS. APP.

3 USF GRATE 5164-6144 DETAIL
NTS



NOTES:
• MATERIAL: ASTM-A48 CLASS 35B GRAY IRON.
• RING WEIGHT: 150 LBS. APP.
• COVER WEIGHT: 130 LBS. APP.

4 USF 170 RING & 'E' COVER DETAIL
NTS



5 MITERED END SECTION (FDOT INDEX NO. 430-021)
NTS

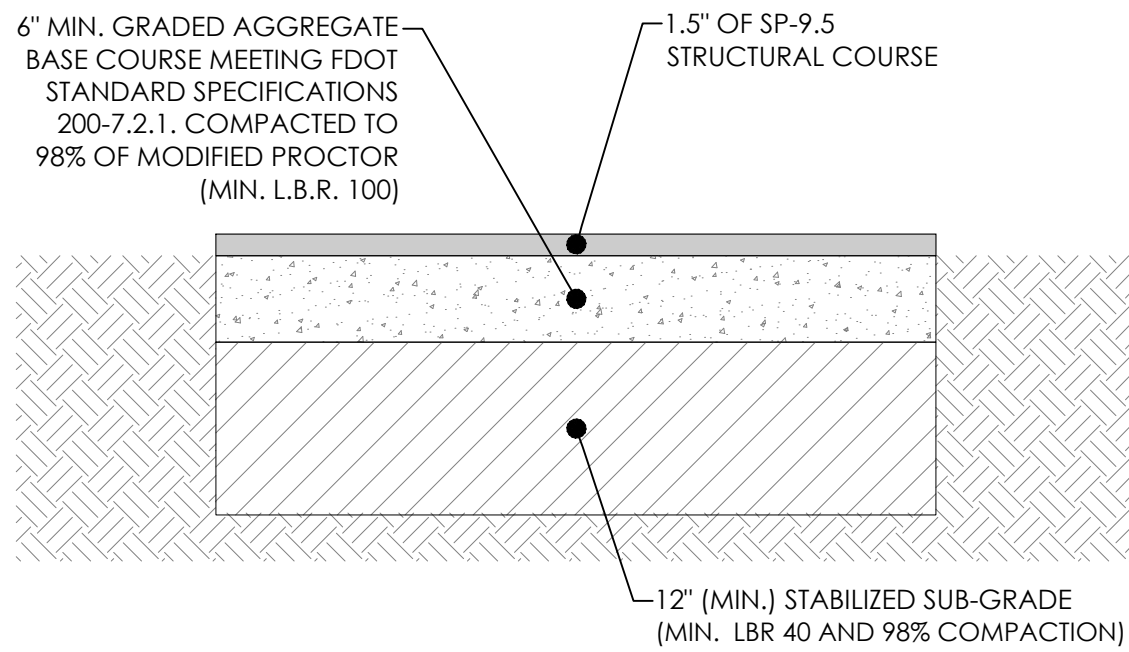
DIMENSIONS AND QUANTITIES												
	D	A	B	C	E	F	G	M				
								SINGLE PIPE	DOUBLE PIPE	TRIPLE PIPE	QUAD. PIPE	
2:1 SLOPE	15"	1.92'	2.18'	4.10'	2.06'	5.0'	1.22'	4.63'	7.21'	9.79'	12.37'	
	18"	1.97'	2.74'	4.71'	2.56'	6.0'	1.41'	4.92'	7.75'	10.58'	13.42'	
	24"	2.06'	3.85'	5.91'	3.56'	7.0'	1.73'	5.50'	8.92'	12.33'	15.75'	
	30"	2.15'	4.95'	7.10'	4.56'	8.0'	2.00'	6.08'	10.33'	14.58'	18.83'	
	36"	2.25'	6.08'	8.33'	5.56'	9.0'	2.24'	6.67'	11.75'	16.83'	21.92'	
	42"	2.34'	7.21'	9.55'	6.56'	10.0'	2.45'	7.25'	13.25'	19.25'	25.25'	
	48"	2.43'	8.33'	10.76'	7.56'	11.0'	2.65'	7.83'	14.58'	21.33'	28.08'	
	54"	2.52'	9.44'	11.96'	8.56'	12.0'	2.83'	8.42'	16.08'	23.75'	31.42'	
	60"	2.62'	10.56'	13.18'	9.56'	14.0'	3.00'	9.00'	17.50'	26.00'	34.50'	
	66"	2.71'	11.68'	14.39'	10.56'	15.0'	3.18'	9.58'	18.75'	27.92'	37.08'	
4:1 SLOPE	72"	2.80'	12.80'	15.60'	11.56'	16.0'	3.30'	10.16'	20.16'	30.16'	40.16'	
	15"	2.27'	4.09'	6.36'	4.03'	8.0'	1.22'	4.63'	7.21'	9.79'	12.37'	
	18"	2.36'	5.12'	7.48'	5.03'	9.0'	1.41'	4.92'	7.75'	10.58'	13.42'	
	24"	2.53'	7.18'	9.71'	7.03'	11.0'	1.73'	5.50'	8.92'	12.33'	15.75'	
	30"	2.70'	9.25'	11.95'	9.03'	13.0'	2.00'	6.08'	10.33'	14.58'	18.83'	
	36"	2.87'	11.31'	14.18'	11.03'	15.0'	2.24'	6.67'	11.75'	16.83'	21.92'	
	42"	3.05'	13.37'	16.42'	13.03'	17.0'	2.45'	7.25'	13.25'	19.25'	25.25'	
	48"	3.22'	15.43'	18.65'	15.03'	19.0'	2.65'	7.83'	14.58'	21.33'	28.08'	
	54"	3.39'	17.49'	20.88'	17.03'	21.0'	2.83'	8.42'	16.08'	23.75'	31.42'	
	60"	3.56'	19.55'	23.11'	19.03'	23.0'	3.00'	9.00'	17.50'	26.00'	34.50'	
	66"	3.73'	21.62'	25.35'	21.03'	25.0'	3.18'	9.58'	18.75'	27.92'	37.08'	
	72"	3.91'	22.68'	26.59'	23.03'	27.0'	3.30'	10.16'	20.16'	30.16'	40.16'	

2:1 FOR PIPES 24" AND LARGER

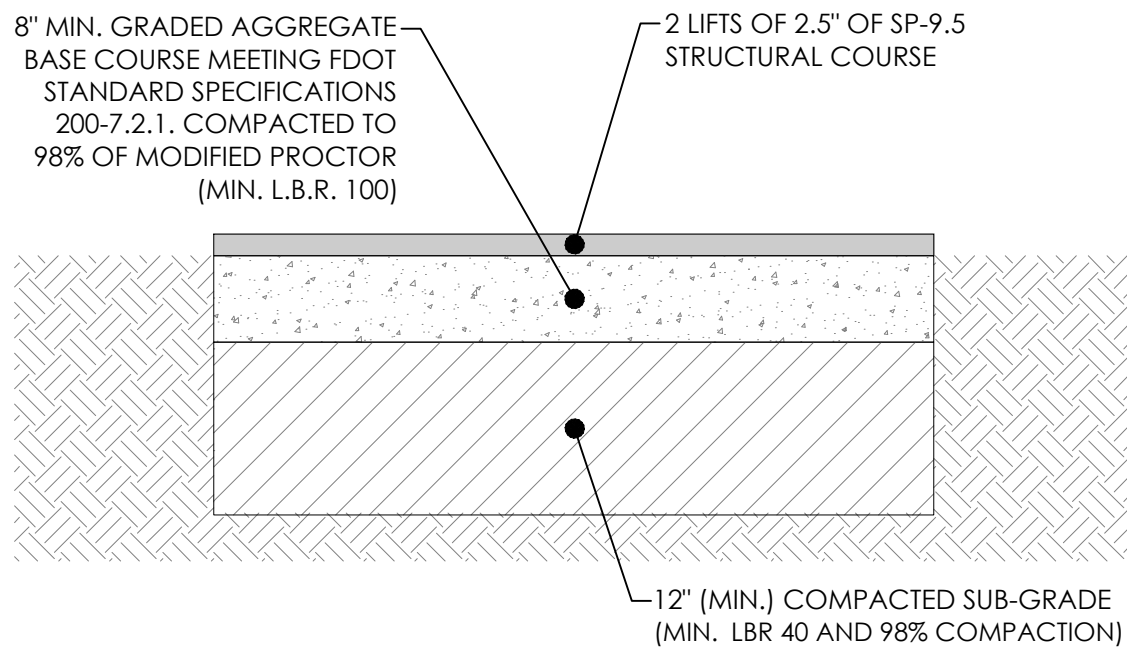
* SLOPE - 4:1 MITER - TO PIPE, FOR PIPES 18" AND SMALLER, 1:1 FOR PIPES 24" AND LARGER

2:1 MITER - TO PIPE FOR PIPES 18" SMALLER

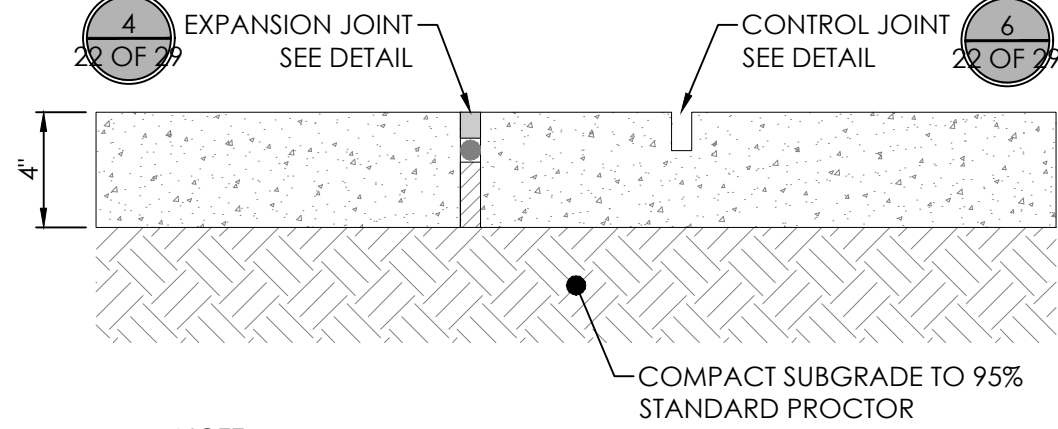
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1 TYPICAL ROADWAY PAVEMENT SECTION
NTS



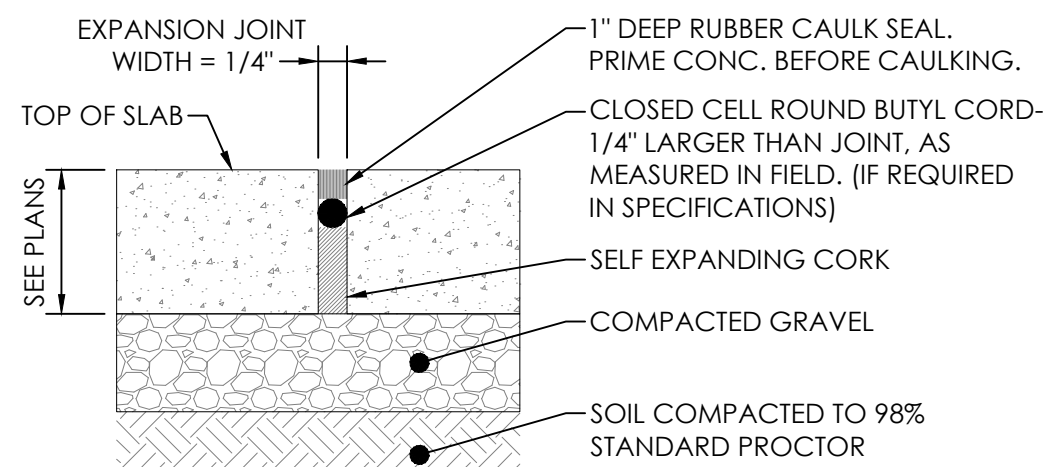
2 TYPICAL ENTRANCE PAVEMENT SECTION
NTS



NOTE:
EXPANSION JOINTS REQUIRED AT ALL STRUCTURES (I.E. WALLS, CURB, ETC.), MAX. SPACING TO BE 25 FT. CONTROL JOINTS TO BE SPACED EVERY 6 FT (SCORE WITHIN 12 HOURS OF POUR). 3000 P.S.I. CONCRETE, 2 INCH SLUMP, WITH BROOM FINISH.

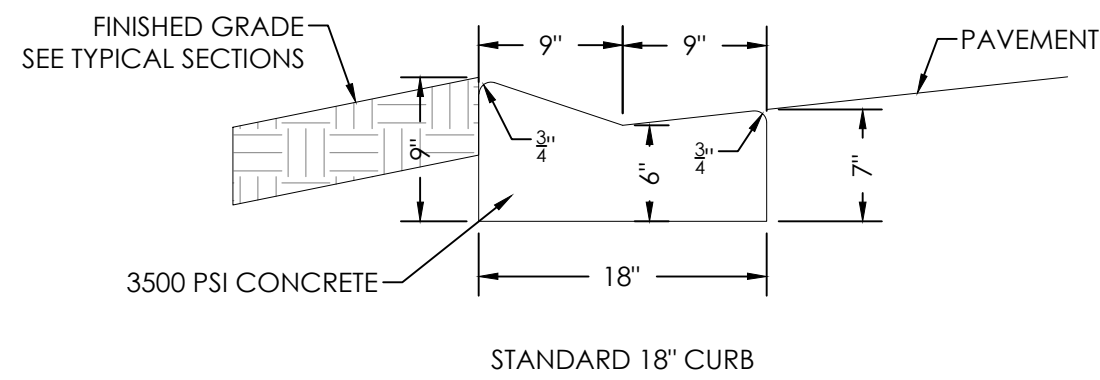
SIDEWALKS THAT ARE GREATER THAN 6 FT. WIDE, LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY ON CALHOUN AND SIBERT AVENUE ARE REQUIRED TO BE CONSTRUCTED WITH 4000 P.S.I. CONCRETE WITH A FIBER AND LIGHT BROOM FINISH.

3 CONCRETE SIDEWALK DETAIL
NTS



INSTALL WHERE PAVEMENT MEETS DOCK, WALLS, & MANHOLES. TO BE INSTALLED AT MAXIMUM 40 FT SPACING

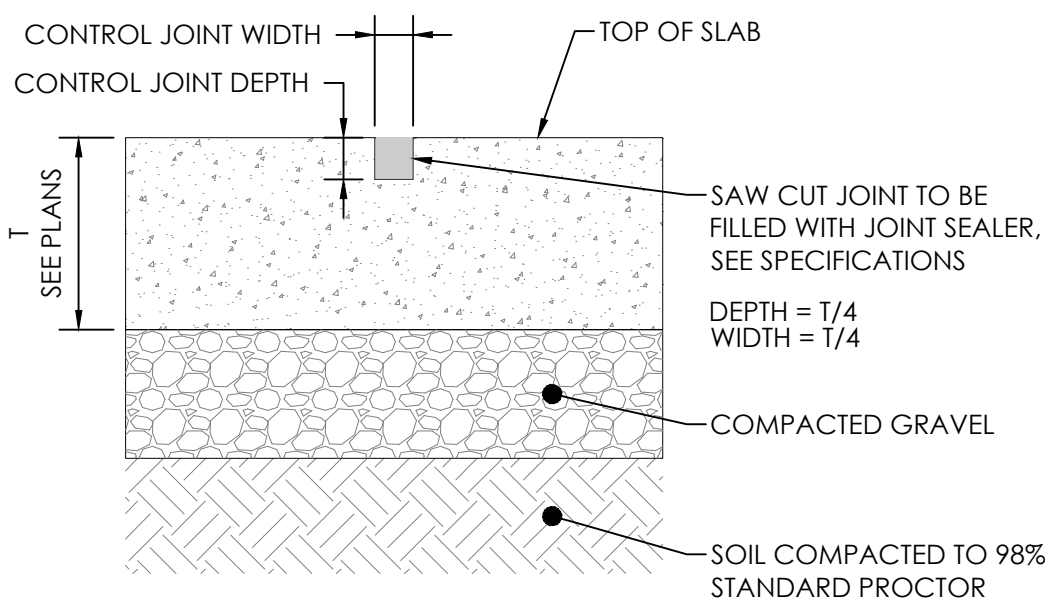
4 EXPANSION JOINT DETAIL
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NOTES:

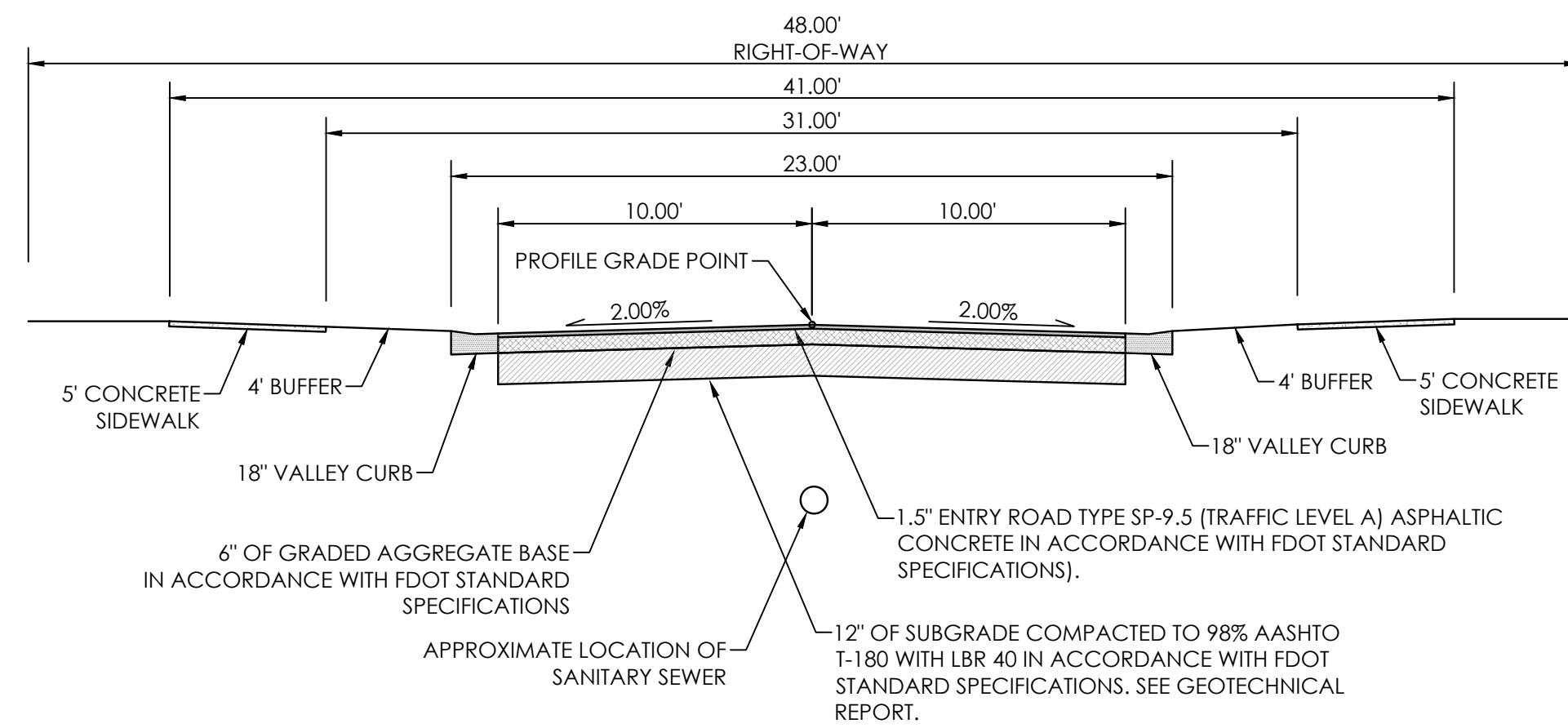
- STANDARD CURB TO BE TYPICALLY USED UNLESS NOTED OTHERWISE. DROP CURB TO BE USED AT LOCATIONS OF RAMPS AND WHERE SHOWN ON DETAILS.
- WHEN ADJACENT TO RIGID PAVEMENT, PROVIDE JOINT FILLER AND SEALANT IN ACCORDANCE WITH DETAILS CONTAINED HEREIN.
- PROVIDE 1/8"-1/4" CONTRACTION JOINTS AT 10' O.C. (MAX). CONTRACTION JOINTS ADJACENT TO CONCRETE PAVEMENT ON TANGENTS AND FLAT CURVES ARE TO MATCH THE PAVEMENT JOINTS, WITH INTERMEDIATE JOINTS NOT TO EXCEED 10' CENTERS.
- PROVIDE 1/2" EXPANSION JOINTS AT 500' O.C., AT THE BEGINNING, MIDDLE, AND END OF CURVES AND AT ALL INLETS.
- ENDS OF CURBS SHALL TRANSITION FROM FULL TO ZERO HEIGHTS IN 3 FT. UNO. COMPACTED SUBGRADE SHALL BE EXTENDED 6" BEYOND BACK OF CURB.
- CURB AND/OR GUTTER TO BE CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX NO. 300 AND FDOT SPECIFICATION SECTION 520.
- WHEN USED ON HIGH SIDE OF PAVEMENT, THE CROSS SLOPE OF GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT.

5 18" VALLEY CURB
NTS

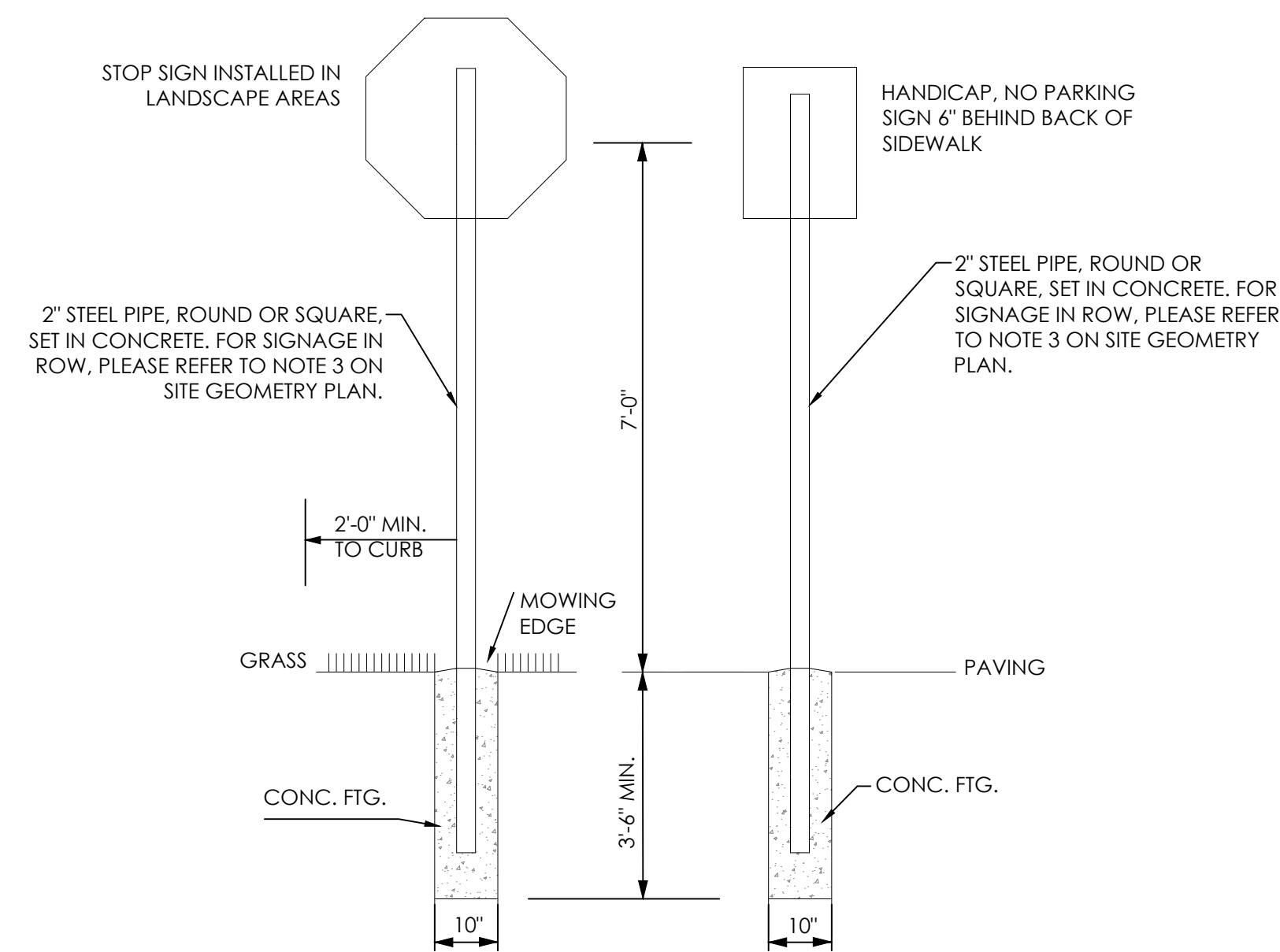


TO BE INSTALLED AT MAXIMUM 15 FT SPACING

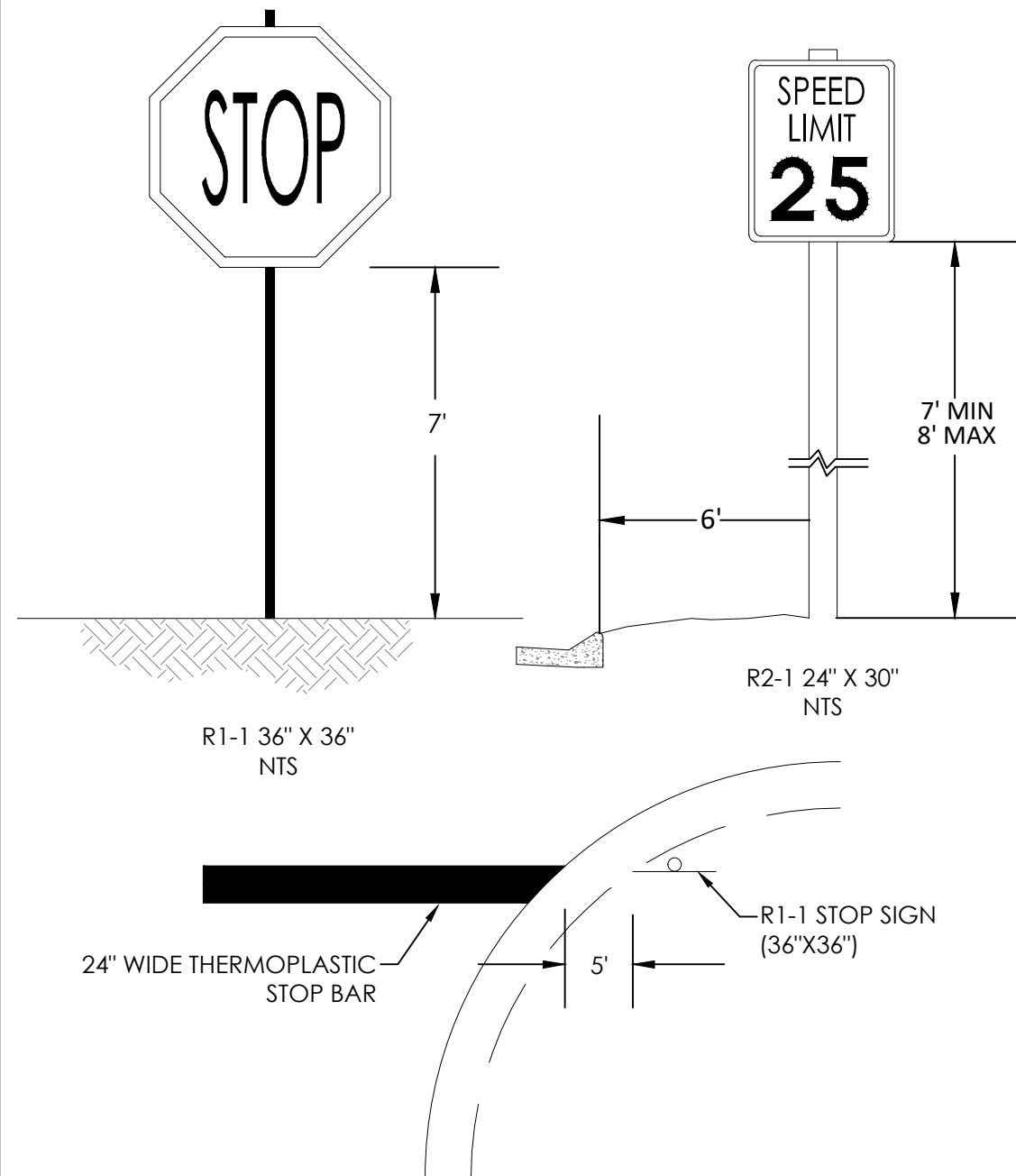
6 CONTROL JOINT DETAIL
NTS



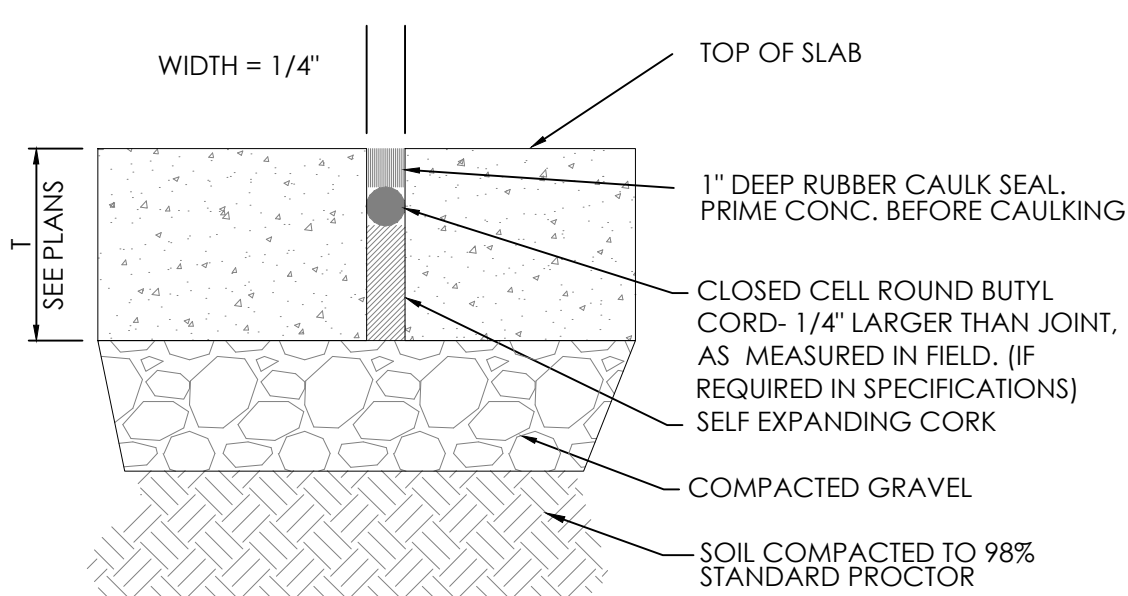
7 ROADWAY SECTION
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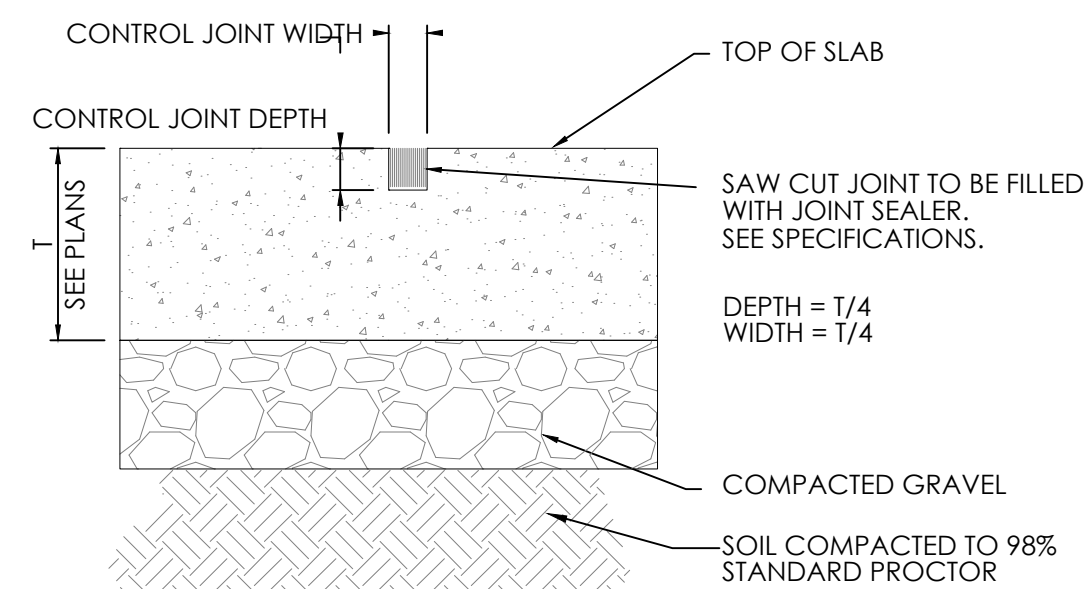
8 TRAFFIC SIGNAGE DETAIL
NTS



9 SIGN PLACEMENT DETAIL
NTS



INSTALL WHERE PAVEMENT MEETS DOCK, WALLS, & MANHOLES. TO BE INSTALLED AT MAXIMUM 40 FT SPACING



TO BE INSTALLED AT MAXIMUM 15 FT SPACING

10 EXPANSION CONTROL JOINT FOR CONCRETE VALLEY CURB DETAIL
NTS

- EXPANSION JOINT NOTES:
- PLACE AGAINST EXISTING CONCRETE PAVEMENT AND STRUCTURES (BUILDINGS, CANOPY COLUMNS, CATCH BASINS, ETC.).
 - CONSTRUCT 1/2" EXPANSION JOINT IN CURB OR COMBINATION CURB AND GUTTER ON 30' CENTERS.
 - CONSTRUCT 1/2" EXPANSION JOINT IN CURB OR COMBINATION CURB AND GUTTER AT POINTS WHERE CURVED AND TANGENT SECTIONS MEET.
 - CONSTRUCT 1/2" EXPANSION JOINT BETWEEN CURB OR COMBINATION CURB AND GUTTER, AND ANY DRAIN INLET, OR SIMILAR STRUCTURE OCCURRING WITHIN THE LIMITS OF THE CURB OR COMBINATION CURB AND GUTTER.
 - CONSTRUCT 1/2" EXPANSION JOINT BETWEEN CURB OR COMBINATION CURB AND GUTTER, AND ANY CONCRETE DRIVEWAY CONNECTION.



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SECTION 1 - POTABLE WATER SYSTEM			
1-1 DESCRIPTION THE WORK SPECIFIED IN THIS SECTION CONSISTS OF THE CONSTRUCTION OF A POTABLE WATER SYSTEM, WHICH INCLUDES THE POTABLE WATER DISTRIBUTION MAINS, VALVING, FIRE HYDRANTS, AND SERVICE PIPING. THE POTABLE WATER SYSTEM SHALL BE CONSTRUCTED IN CONFORMITY WITH THE PLANS AND IN ACCORDANCE WITH THESE SPECIFICATIONS, OR THE SPECIFICATIONS AND REQUIREMENTS OF THE DESTIN WATER USERS, INC. (UTILITY COMPANY), WHICHEVER IS MORE STRINGENT.			
1-2 CODES AND STANDARDS THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 62-555 OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION RULES AND THE APPLICABLE PORTIONS OF THE NATIONAL STANDARD PLUMBING CODE PERTAINING TO THE INSTALLATION OF POTABLE WATER SYSTEMS. ADDITIONALLY, THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE LOCAL FIRE MARSHALL AND UTILITY COMPANY REGULATIONS PERTAINING TO FIRE HYDRANTS, INCLUDING HOSE UNIT THREADING AND SIMILAR MATCHING OF CONNECTIONS. THE CONTRACTOR SHALL OBTAIN REQUIRED PERMITS AND INSPECTIONS AND SHALL COORDINATE TAPPING OF EXISTING WATER MAINS WITH THE UTILITY COMPANY.			
1-3 MATERIALS			
1-3.1 DETECTOR WIRE NO. 12 COPPER TRACER WIRE SHALL BE REQUIRED FOR ALL NON-METALLIC WATER MAINS. TRACER WIRE SHALL BE WELL CONNECTED TO FIRE HYDRANTS AND SHALL BE PROTECTED DURING BACKFILLING OPERATIONS TO PREVENT BREAKAGE.			
1-3.2 PIPING AND PIPE FITTINGS			
1-3.2.1 WATER MAINS WATER MAIN PIPING SHALL BE POLYVINYL CHLORIDE (PVC) PIPE. WATER MAIN PIPING 1-1/2" THROUGH 3" IN SIZE SHALL CONFORM TO ASTM D 2241, SDR 26 (PVC MATERIAL 12454-B) WITH PUSH-ON JOINTS CONFORMING TO ASTM D 3139 AND ELASTOMERIC GASKETS CONFORMING TO ASTM F 477. WATER MAIN PIPING 4" THROUGH 12" IN SIZE SHALL CONFORM TO AWWA C 900-89, DR 18, AND SHALL BE FURNISHED IN CAST-IRON PIPE EQUIVALENT OUTSIDE DIAMETERS WITH RUBBER GASKETED JOINTS AS AWWA C 900 LISTED. ALL WATER MAIN PIPING SHALL BE STAMPED "NSP-PVC". ALL WATER MAIN FITTINGS SHALL BE CONSTRUCTED OF EITHER DUCTILE IRON OR CAST IRON CONFORMING TO AWWA C 110 OR ANSI A 21.10, RESPECTIVELY, BLUE IN COLOR. SUITABLE CONCRETE REACTION OR THRUST BLOCKS (OR APPROVED EQUAL (MEGA LUGS, BELL RESTRAINTS, ETC.) SHALL BE APPLIED ON ALL TEES, PLUGS, CAPS, AND BENDS DEFLECTING 22-1/2 DEGREES OR MORE, OR MOVEMENT SHALL BE PREVENTED BY ATTACHING METAL RODS OR STRAPS APPROVED BY THE ENGINEER. UNLESS OTHERWISE DIRECTED, THE PIPE SHALL BE LAID WITH BELL ENDS FACING IN THE DIRECTION OF LAYING. WHENEVER IT IS NECESSARY TO DEFLECT THE PIPE FROM A STRAIGHT LINE (EITHER IN THE VERTICAL OR HORIZONTAL PLANE) TO AVOID OBSTRUCTION, TO PLUMB STEMS, OR WHERE LONG RADIUS CURVES ARE PERMITTED, THE DEGREE OF DEFLECTION SHALL BE AS RECOMMENDED BY THE MANUFACTURER OF THE PIPE.			
1-3.2.2 WATER SERVICE PIPING ALL WATER SERVICE PIPING SHALL BE POLYETHYLENE (PEMUNICIPLEX AND MANUFACTURED BY REHAU OR APPROVED EQUAL. BLUE IN COLOR.			
1-3.3 VALVES			
1-3.3.1 GATE VALVES GATE VALVES SHALL BE OF CAST IRON BODY, RESILIENT SEAT DESIGN. GATE VALVES SHALL HAVE A MINIMUM WORKING PRESSURE OF 175 PSI, AND SHALL COMPLY WITH AWWA C 500. GATE VALVES SHALL OPEN BY COUNTERCLOCKWISE ROTATION OF THE VALVE STEM AND SHALL BE FITTED WITH HUB-TYPE HAND OPERATORS. GATE VALVES SHALL BE SIZED AND LOCATED AS INDICATED ON THE PLANS. ALL GATE VALVES 4" AND LARGER SHALL BE AMERICAN FLOW CONTROL SERIES 2500 MECHANICAL JOINT DUCTILE IRON OPEN LEFT RESILIENT WEDGE WITH 2"x2" OPERATING NUT OR APPROVED EQUAL.			
1-3.3.2. ARV SEE DETAILS			
1-3.3.3. TAP VALVES ALL TAP VALVES 4" AND LARGER SHALL BE AMERICAN FLOW CONTROL, SERIES 2500 FLANGED X MECHANICAL JOINT DUCTILE IRON FLANGED WATERWORKS TAPPING VALVE, BLUE IN COLOR.			
1-3.3.4 WATER SERVICE CLAMPS AND STOPS			
1-3.3.4.1 TAPPING SLEEVE ALL TAPS OF 4" OR GREATER SHALL BE STAINLESS STEEL TAP-ON PIPE SLEEVE (FAST) MANUFACTURED BY FORD METER BOX CO.			
1-3.3.4.2 TAPPING SADDLE ALL TAPPING SADDLES SHALL BE STAINLESS STEEL IRON PIPE THREADED TAP-ON PIPE (FS 313) AND MANUFACTURED BY FORD METERING, CO.			
1-3.3.4.3 CORPORATION STOPS CORPORATION STOPS SHALL BE FORD MODEL NO. F-1000, OR APPROVED EQUAL. INLETS SHALL HAVE IRON PIPE THREADS AND OUTLETS SHALL HAVE COMPRESSION CONNECTIONS. 2" CORP STOPS SHALL HAVE IRON PIPE INLETS AND OUTLETS SHALL BE DECIDED BY MATERIAL ON PRINTS. ON 2" BALL VALVES NO PVC SCHEDULE 40 MALE OR FEMALE ADAPTERS SHALL BE USED. CONNECTION TO THREADED BALL VALVES SHALL BE BRASS TRANSITIONS TO FPVC.			
1-3.3.4.4 CURB STOPS 1" AND 3/4" CURB STOPS SHALL BE FORD METER BOX GRIP JOINT X METER SWIVEL NUT BRASS STRAIGHT BALL METER VALVE. 2" CURB STOPS SHALL BE FORD METER BOX WITH LOCK WING CONTROL VALVE AND INLETS AND OUTLETS WILL BE DETERMINED BY MATERIALS ON PLANS. NO PVC SCHEDULE 40 MALE OR FEMALE ADAPTERS SHALL BE USED. CONNECTIONS TO THREADED BALL VALVES SHALL BE BRASS TRANSITIONS TO PVC.			
1-3.3.5 VALVE BOXES AN ADJUSTABLE CAST-IRON VALVE BOX OF SUITABLE SIZE SHALL BE PROVIDED AT EACH GATE VALVE. THE HEAD SHALL BE ROUND AND THE LID SHALL HAVE THE WORD "WATER" CAST ON IT. THE LEAST DIMENSION OF THE SHAFT OF THE BOX SHALL BE 5-1/4". A 2-0" DIAMETER BY 6" CONCRETE COLLAR SHALL BE POURED AROUND THE SHAFT AT THE VALVE BOX SURFACE. THE VALVE BOXES SHALL BE CLOW F-2452, OR APPROVED EQUAL.			
1-3.4 FIRE HYDRANTS FIRE HYDRANTS SHALL BE DRY-BARREL TYPE CONFORMING TO AWWA C 502. HYDRANTS SHALL HAVE 6" OUTLET, ONE 5-1/4" PUMPER CONNECTION, AND TWO 2-1/2" HOSE CONNECTIONS. THE SIZE AND SHAPE OF OPERATING NUTS AND THREADS ON HOSE AND PUMPER CONNECTIONS SHALL BE AS REQUIRED BY THE UTILITY COMPANY. THE HYDRANTS SHALL BE AMERICA DARLING, (MODEL B84B-5) WITH TAMPER PROOF BONNET.			
1-3.5 ANCHORAGES THE CONTRACTOR SHALL PROVIDE ANCHORAGES FOR TEES, WYES, CROSSES, PLUGS, CAPS, BENDS, VALVES, AND HYDRANTS AS REQUIRED. AFTER INSTALLATION, ANCHORAGE TYPES ARE AS FOLLOWS: (1) CLAMPS, STRAPS, AND WASHERS: STEEL, ASTM A 506. (2) RODS: STEEL, ASTM A 575. (3) ROD COUPLINGS: MALLEABLE-IRON, ASTM A 197. (4) BOLTS: STEEL, ASTM A 307. (5) THRUST BLOCKS: CONCRETE, 2500 PSI, SIZED AS INDICATED OR APPROVED EQUAL.			
1-3.6 WATER METERS WATER METERS FOR BILLING ARE TO BE PROCURED FROM DESTIN WATER USERS, INC.			
1-4 INSTALLATION			
1-4.1 PIPE LAYING AND JOINTING PIPE, FITTINGS, VALVES AND ACCESSORIES SHALL BE CAREFULLY INSPECTED BEFORE AND AFTER INSTALLATION AND THOSE FOUND DEFECTIVE SHALL BE REJECTED AND REPLACED. BEFORE PLACING IN POSITION, CONTRACTOR TO CLEAN PIPE, FITTINGS, VALVES AND ACCESSORIES AND MAINTAIN IN CLEAN CONDITION. CUT PIPE ACCURATELY TO MEASUREMENTS ESTABLISHED AT THE SITE AND WORK INTO PLACE WITHOUT SPRINGING OR FORCING. SUPPORT PIPE AT ITS PROPER ELEVATION AND GRADE, TAKING CARE TO SECURE FIRM AND UNIFORM SUPPORT. LAY PIPE SO THAT THE FULL LENGTH OF EACH SECTION OF PIPE AND EACH FITTING WILL REST SOLIDLY ON THE PIPE BEDDING; EXCAVATE RECESSES TO ACCOMMODATE BELLS, JOINTS, AND COUPLINGS. PROVIDE ANCHORS AND SUPPORTS WHERE NECESSARY FOR FASTENING WORK INTO PLACE. CONCRETE REACTION, THRUST BLOCKS OR RESTRAINED JOINTS SHALL BE APPLIED FOR ALL TEES, PLUGS, CAPS AND BENDS DEFLECTING 22-1/2 DEGREES OR MORE. KEEP TRENCHES FREE OF WATER UNTIL JOINTS HAVE BEEN PROPERLY MADE. AT THE END OF EACH DAY'S WORK, CLOSE OPEN ENDS OF PIPE TEMPORARILY WITH WOOD BLOCKS OR BULKHEADS. DO NOT LAY PIPE WHEN CONDITIONS OF TRENCH OR WEATHER ARE UNSUITABLE. IN ADDITION TO THE ABOVE, PVC PIPE AND FITTINGS INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF UNI B-3. WATER MAINS SHALL BE LAID AT LEAST 10' HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWER. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A TEN FOOT SEPARATION, AND WHEN APPROVED BY D.E.P., DWJ, AND THE ENGINEER, THE WATER MAIN MAY BE INSTALLED CLOSER TO THE SEWER, PROVIDED THAT THE WATER MAIN IS LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18" ABOVE THE TOP OF THE SEWER. BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE, WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10' BETWEEN JOINTS. ALTERNATIVELY, THE SEWER MAIN BE PLACED IN A SLEEVE OR ENCASED IN CONCRETE TO OBTAIN THE EQUIVALENT OF THE REQUIRED 10' SEPARATION. EXCAVATION AND BACKFILLING OF WATER MAIN TRENCHES SHALL CONFORM TO SECTION 2 OF THESE SPECIFICATIONS. PROVIDE A MINIMUM OF 36" OF COVER OVER WATER MAINS.			
1-4.2 HOT TAPPING TAP SLEEVE SHOULD BE MOUNTED ON CLEAN PIPE WITH TEST HOLE AT THE TOP AND NOT BE ANY CLOSER THAN 1 FOOT FROM ANY JOINT OR FITTING. AFTER SLEEVE IS MOUNTED THEN VALVE CAN BE PLACED ON FACE OF SLEEVE. FACE OF VALVE SHOULD BE LEVEL TO FACILITATE THE TAPPING TOOL FITTING CORRECTLY. TESTING OF SLEEVE AND TAPPING OF PIPE IS TO BE COORDINATED WITH UTILITY 24-48 HOURS IN ADVANCE OF PLACEMENT.			
1-4.3 GATE VALVES INSTALL GATE VALVES IN ACCORDANCE WITH THE REQUIREMENTS OF AWWA C 600 FOR VALVE-AND-FITTING INSTALLATION. VALVE BOXES SHALL BE PLACED CONCENTRICALLY OVER THE VALVE OPERATING NUT.			
1-4.4 FIRE HYDRANTS INSTALL FIRE HYDRANTS IN ACCORDANCE WITH THE REQUIREMENTS OF AWWA C 600 AND AWWA M 17, "INSTALLATION, OPERATION, AND MAINTENANCE OF FIRE HYDRANTS".			
1-4.5 CONNECTION TO EXISTING WATER SYSTEM COORDINATE AND MAKE CONNECTIONS TO THE EXISTING WATER SYSTEM IN A MANNER APPROVED BY THE UTILITY COMPANY, AND WITH A MINIMUM INTERRUPTION OF SERVICE ON THE EXISTING SYSTEM.			
1-5 FIELD TESTING			
1-5.1 GENERAL CONDUCT PIPING TESTS BEFORE JOINTS ARE COVERED, AND AFTER THRUST BLOCKS HAVE SUFFICIENTLY HARDENED. FILL PIPELINE WITH WATER 24 HOURS PRIOR TO TESTING, AND APPLY TEST PRESSURE TO STABILIZED SYSTEM.			
1-5.2 HYDROSTATIC TESTS			
1-5.2.1 PRESSURE DURING TEST AFTER THE PIPE HAS BEEN LAID AND BACKFILLED AS SPECIFIED, EACH VALVED SECTION OF NEWLY LAID PIPE SHALL, UNLESS OTHERWISE SPECIFIED, BE SUBJECTED TO A HYDROSTATIC PRESSURE EQUAL TO 150 PSI. THE CONTRACTOR SHALL RECORD THE TESTING BY THE USE OF A PRESSURE RECORDING GAUGE, AND AFTER ALL TESTING IS COMPLETE, THE RECORDING SHALL BE TURNED OVER TO THE ENGINEER FOR HIS FILES.			
1-5.2.2 DURATION OF PRESSURE TEST THE DURATION OF EACH PRESSURE TEST SHALL BE AT LEAST 2 HOURS.			
1-5.2.3 PROCEDURE EACH SECTION OF PIPE SHALL BE SLOWLY FILLED WITH WATER AND THE SPECIFIED TEST PRESSURE, MEASURED AT THE LOWEST POINT OF THE ELEVATION, SHALL BE APPLIED BY MEANS OF A PUMP CONNECTED TO THE PIPE IN A SATISFACTORY MANNER. THE PUMP, PIPE CONNECTION, GAUGES METER, AND ALL NECESSARY APPARATUS SHALL BE FURNISHED BY THE CONTRACTOR. THE TEST SHALL BE APPLIED TO EACH VALVED SECTION IN ORDER TO CHECK THE LEAKAGE THROUGH ALL VALVES.			
1-5.2.4 EXPELLING AIR BEFORE TEST BEFORE APPLYING THE SPECIFIED TEST PRESSURE, ALL AIR SHALL BE EXPELLED FROM THE PIPE. TO ACCOMPLISH THIS, TAPS SHALL BE MADE, IF NECESSARY, AT POINTS OF HIGHEST ELEVATION AND AFTERWARDS TIGHTLY PLUGGED.			
1-5.2.5 DEFINITION OF LEAKAGE LEAKAGE IS DEFINED AS THE QUANTITY OF WATER TO BE SUPPLIED INTO THE NEWLY LAID PIPE, OR ANY VALVED SECTION OF PIPE, NECESSARY TO MAINTAIN THE SPECIFIED LEAKAGE TEST PRESSURE AFTER THE PIPE HAS BEEN FILLED WITH WATER AND THE AIR EXPELLED.			
1-5.2.6 PERMISSIBLE LEAKAGE SUITABLE MEANS SHALL BE PROVIDED BY THE CONTRACTOR FOR DETERMINING THE QUANTITY OF WATER LOST BY LEAKAGE UNDER NORMAL OPERATING PRESSURE. NO PIPE INSTALLATION WILL BE ACCEPTED UNTIL OR UNLESS THIS LEAKAGE (EVALUATED AT 150 PSI) IS LESS THAN THE FIGURE STATED BELOW: GAL'S/1000'/24 HRS. GAL'S/1000'/1 HR. 2" 3.8 GAL. 0.16 GAL. 3" 5.7 GAL. 0.24 GAL. 4" 7.6 GAL. 0.32 GAL. 6" 11.4 GAL. 0.47 GAL. 8" 15.2 GAL. 0.63 GAL. 10" 18.9 GAL. 0.79 GAL. 12" 22.7 GAL. 0.95 GAL.			
1-5.2.7 VARIATION FROM PERMISSIBLE LEAKAGE SHOULD ANY TEST OF COMBINED SECTIONS OF PIPE LAID DISCLOSE LEAKAGE GREATER THAN THE SPECIFIED LIMIT, THE CONTRACTOR SHALL, AT HIS EXPENSE, LOCATE AND REPAIR THE DEFECTIVE JOINTS UNTIL THE LEAKAGE IS WITHIN THE SPECIFIED ALLOWANCE.			
1-5.2.8 WATER FOR TESTING WATER FOR TESTING SHALL BE PROVIDED BY THE CONTRACTOR AT HIS EXPENSE.			
1-5.2.9 TIME FOR MAKING TEST PIPE MAY BE SUBJECTED TO HYDROSTATIC PRESSURE, INSPECTED, AND TESTED FOR LEAKAGE AT ANY CONVENIENT TIME AFTER PARTIAL COMPLETION OF BACKFILL. THE CONTRACTOR MAY TEST THE SYSTEM WITH JOINTS EXPOSED OR WITH BACKFILLING COMPLETE AT HIS OPTION. THE ENGINEER AND THE UTILITY COMPANY SHALL BE NOTIFIED AT LEAST 24 HOURS BEFORE SCHEDULING TESTING WITH A UTILITY COMPANY REPRESENTATIVE PRESENT.			
1-5.3 OPERATING TESTS OPEN AND CLOSE ALL VALVES AND HYDRANTS UNDER SYSTEM WATER PRESSURE. CHECK DRY BARREL HYDRANTS FOR PROPER DRAINAGE.			
1-6 DISINFECTION FLUSH AND DISINFECT THE NEW POTABLE WATER SYSTEM IN ACCORDANCE WITH AWWA C 601 TO THE SATISFACTION OF THE ENGINEER AND THE UTILITY COMPANY. IN THE PROCESS OF CHLORINATING WATER, ALL VALVES OR OTHER APPURTENANCES SHALL BE OPERATED WHILE THE PIPE LINE IS FILLED WITH THE CHLORINATING AGENT.			
1-7 FINAL FLUSHING AND TESTING FOLLOWING DISINFECTION, ALL TREATED WATER SHALL BE THOROUGHLY FLUSHED FROM THE NEWLY LAID PIPE SYSTEM AT ITS EXTREMITIES UNTIL THE REPLACEMENT WATER THROUGHOUT ITS LENGTH SHALL UPON TEST, BOTH CHEMICALLY AND BACTERIOLOGICALLY, BE APPROVED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING AND PAYING FOR THE TEST SAMPLES.			
1-8 AS-BUILT CERTIFICATION IN ACCORDANCE WITH THE RULES OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, CHAPTER 62-555, THE ENGINEER OF RECORD WILL BE RESPONSIBLE FOR OBSERVATION OF THE CONSTRUCTION OF THE POTABLE WATER SYSTEM TO ASSURE COMPLIANCE WITH PLANS AND SPECIFICATIONS, AND SAID ENGINEER WILL REPORT TO DEP UPON COMPLETION OF THE CONSTRUCTION AND CLEANING AND DISINFECTING DESCRIBED ABOVE BEFORE THE SYSTEM CAN BE PLACED INTO SERVICE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 24 HOURS BEFORE BEGINNING CONSTRUCTION ON THE POTABLE WATER SYSTEM.			
1-9 AS-BUILT DRAWINGS THE CONTRACTOR SHALL FURNISH THE ENGINEER AT THE CLOSE OF THE PROJECT, WITH ONE (1) SET OF MARKED-UP CONSTRUCTION PLANS DEPICTING AS-BUILT CONDITIONS OF THE POTABLE WATER SYSTEM. THE AS-BUILT PLANS SHALL SHOW THE LOCATION OF WATER SERVICES, WATER VALVES, AND FIRE HYDRANTS. ENGINEERING APPROVAL OF THE POTABLE WATER SYSTEM WILL NOT BE MADE UNTIL ACCURATE AND LEGIBLE AS-BUILT PLANS ARE RECEIVED.			
END OF SECTION			
SECTION 2 - RECLAIMED WATER DISTRIBUTION SYSTEM (A.K.A. REUSE WATER)			
2-1 DESCRIPTION THE WORK SPECIFIED IN THIS SECTION CONSISTS OF THE CONSTRUCTION OF RECLAIMED WATER SERVICES AND OTHER APPURTENANCES, IN CONFORMITY WITH THE PLANS AND IN ACCORDANCE WITH THESE SPECIFICATIONS, OR THE GENERAL UTILITY SPECIFICATIONS OF DESTIN WATER USERS, INC. (UTILITY COMPANY), WHICHEVER IS MORE STRINGENT.			
2-2 CODES AND STANDARDS THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 62-604 AND 62-610 OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION RULES, THE APPLICABLE PORTIONS OF THE NATIONAL STANDARD PLUMBING CODE AND TEN STATE STANDARDS PERTAINING TO THE INSTALLATION OF RECLAIMED WATER SYSTEMS, AND THE UTILITY ACCOMMODATION MANUAL OF THE FLORIDA DEPARTMENT OF TRANSPORTATION, LATEST EDITION. THE CONTRACTOR SHALL OBTAIN REQUIRED PERMITS AND INSPECTIONS FROM THE UTILITY COMPANY.			
2-3 MATERIALS			
2-3.1 DETECTOR WIRE NO. 12 COPPER TRACER WIRE SHALL BE REQUIRED FOR ALL NON-METALLIC SERVICES AND SHALL BE PROTECTED DURING BACKFILLING OPERATIONS TO PREVENT BREAKAGE.			
2-3.2 GATE VALVES GATE VALVES SHALL BE OF CAST IRON BODY, RESILIENT SEAT DESIGN. GATE VALVES SHALL HAVE A MINIMUM WORKING PRESSURE OF 175 PSI, AND SHALL COMPLY WITH AWWA C 500. GATE VALVES SHALL OPEN BY COUNTERCLOCKWISE ROTATION OF THE VALVE STEM AND SHALL BE FITTED WITH HUB-TYPE HAND OPERATORS. GATE VALVES SHALL BE SIZED AND LOCATED AS INDICATED ON THE PLANS. ALL GATE VALVES 4" AND LARGER SHALL BE AMERICAN FLOW CONTROL SERIES 2500 MECHANICAL JOINT DUCTILE IRON OPEN LEFT RESILIENT WEDGE WITH 2"x2" OPERATING NUT OR APPROVED EQUAL.			
2-3.3 ARV SEE DETAILS			
2-3.4 PIPING AND PIPE FITTINGS PIPE, FITTINGS, VALVES AND ACCESSORIES SHALL BE CAREFULLY INSPECTED BEFORE AND AFTER INSTALLATION AND THOSE FOUND DEFECTIVE SHALL BE REJECTED AND REPLACED. BEFORE PLACING IN POSITION, CONTRACTOR TO CLEAN PIPE, FITTINGS, VALVES AND ACCESSORIES AND MAINTAIN IN CLEAN CONDITION.			
2-3.4.1 RECLAIMED WATER MAINS WATER MAIN PIPING SHALL BE POLYVINYL CHLORIDE (PVC) PIPE. WATER MAIN PIPING 1-1/2" THROUGH 3" IN SIZE SHALL CONFORM TO ASTM D 2241, SDR 26 (PVC MATERIAL 12454-B) WITH PUSH-ON JOINTS CONFORMING TO ASTM D 3139 AND ELASTOMERIC GASKETS CONFORMING TO ASTM F 477. WATER MAIN PIPING 4" THROUGH 12" IN SIZE SHALL CONFORM TO AWWA C 900-89, DR 18, AND SHALL BE FURNISHED IN CAST-IRON PIPE EQUIVALENT OUTSIDE DIAMETERS WITH RUBBER GASKETED JOINTS AS AWWA C 900 LISTED. ALL WATER MAIN PIPING SHALL BE STAMPED "NSP-PVC". ALL WATER MAIN FITTINGS SHALL BE CONSTRUCTED OF EITHER DUCTILE IRON OR CAST IRON CONFORMING TO AWWA C 110 OR ANSI A 21.10, RESPECTIVELY, PURPLE IN COLOR. SUITABLE CONCRETE REACTION OR THRUST BLOCKS (OR APPROVED EQUAL (MEGA LUGS, BELL RESTRAINTS, ETC.) SHALL BE APPLIED ON ALL TEES, PLUGS, CAPS, AND BENDS DEFLECTING 22-1/2 DEGREES OR MORE, OR MOVEMENT SHALL BE PREVENTED BY ATTACHING METAL RODS OR STRAPS APPROVED BY THE ENGINEER. UNLESS OTHERWISE DIRECTED, THE PIPE SHALL BE LAID WITH BELL ENDS FACING IN THE DIRECTION OF LAYING. WHENEVER IT IS NECESSARY TO DEFLECT THE PIPE FROM A STRAIGHT LINE (EITHER IN THE VERTICAL OR HORIZONTAL PLANE) TO AVOID OBSTRUCTION, TO PLUMB STEMS, OR WHERE LONG RADIUS CURVES ARE PERMITTED, THE DEGREE OF DEFLECTION SHALL BE AS RECOMMENDED BY THE MANUFACTURER OF THE PIPE.			
2-3.4.2 RECLAIMED WATER SERVICE PIPING ALL WATER SERVICE PIPING SHALL BE POLYETHYLENE (PEMUNICIPLEX AND MANUFACTURED BY REHAU OR APPROVED EQUAL. PURPLE IN COLOR.			
2-3.4.3 RECLAIMED WATER SERVICE CLAMPS AND STOPS			
2-3.4.3.1 TAPPING SADDLE ALL TAPPING SADDLES SHALL BE STAINLESS STEEL IRON PIPE THREADED TAP-ON PIPE (FS 313) AND MANUFACTURED BY FORD METERING, CO.			
2-3.4.3.2 CORPORATION STOPS CORPORATION STOPS SHALL BE FORD MODEL NO. F-1000, OR APPROVED EQUAL. INLETS SHALL HAVE IRON PIPE THREADS AND OUTLETS SHALL HAVE COMPRESSION CONNECTIONS. 2" CORP STOPS SHALL HAVE IRON PIPE INLETS AND OUTLETS SHALL BE DECIDED BY MATERIAL ON PRINTS. ON 2" BALL VALVES NO PVC SCHEDULE 40 MALE OR FEMALE ADAPTERS SHALL BE USED. CONNECTION TO THREADED BALL VALVES SHALL BE BRASS TRANSITIONS TO FPVC.			
2-3.4.3.3 CURB STOPS 1" AND 3/4" CURB STOPS SHALL BE FORD METER BOX GRIP JOINT X METER SWIVEL NUT BRASS STRAIGHT BALL METER VALVE. 2" CURB STOPS SHALL BE FORD METER BOX WITH LOCK WING CONTROL VALVE AND INLETS AND OUTLETS WILL BE DETERMINED BY MATERIALS ON PLANS. NO PVC SCHEDULE 40 MALE OR FEMALE ADAPTERS SHALL BE USED. CONNECTIONS TO THREADED BALL VALVES SHALL BE BRASS TRANSITIONS TO PVC.			
2-3.4.4 VALVE BOXES - SEE BASKERVILLE-DONOVAN PLANS AND SPECIFICATIONS AN ADJUSTABLE CAST-IRON VALVE BOX OF SUITABLE SIZE SHALL BE PROVIDED AT EACH GATE VALVE. THE HEAD SHALL BE ROUND AND THE LID SHALL HAVE THE WORD "RECLAIM" CAST ON IT. THE LEAST DIMENSION OF THE SHAFT OF THE BOX SHALL BE 5-1/4". A 2-0" DIAMETER BY 6" CONCRETE COLLAR SHALL BE POURED AROUND THE SHAFT AT THE VALVE BOX SURFACE. THE VALVE BOXES SHALL BE CLOW F-2452, OR APPROVED EQUAL.			
2-3.5 ANCHORAGES - SEE BASKERVILLE-DONOVAN PLANS AND SPECIFICATIONS THE CONTRACTOR SHALL PROVIDE ANCHORAGES FOR TEES, WYES, CROSSES, PLUGS, CAPS, BENDS, VALVES, AND HYDRANTS AS REQUIRED. AFTER INSTALLATION, ANCHORAGE TYPES ARE AS FOLLOWS: (1) CLAMPS, STRAPS, AND WASHERS: STEEL, ASTM A 506. (2) RODS: STEEL, ASTM A 575. (3) ROD COUPLINGS: MALLEABLE-IRON, ASTM A 197. (4) BOLTS: STEEL, ASTM A 307. (5) THRUST BLOCKS: CONCRETE, 2500 PSI, SIZED AS INDICATED OR APPROVED EQUAL.			
2-5 INSTALLATION			
2-5.1 PIPE LAYING AND JOINTING PIPE, FITTINGS, VALVES AND ACCESSORIES SHALL BE CAREFULLY INSPECTED BEFORE AND AFTER INSTALLATION AND THOSE FOUND DEFECTIVE SHALL BE REJECTED AND REPLACED. BEFORE PLACING IN POSITION, CONTRACTOR TO CLEAN PIPE, FITTINGS, VALVES AND ACCESSORIES AND MAINTAIN IN CLEAN CONDITION. CUT PIPE ACCURATELY TO MEASUREMENTS ESTABLISHED AT THE SITE AND WORK INTO PLACE WITHOUT SPRINGING OR FORCING. SUPPORT PIPE AT ITS PROPER ELEVATION AND GRADE, TAKING CARE TO SECURE FIRM AND UNIFORM SUPPORT. LAY PIPE SO THAT THE FULL LENGTH OF EACH SECTION OF PIPE AND EACH FITTING WILL REST SOLIDLY ON THE PIPE BEDDING; EXCAVATE RECESSES TO ACCOMMODATE BELLS, JOINTS, AND COUPLINGS. PROVIDE ANCHORS AND SUPPORTS WHERE NECESSARY FOR FASTENING WORK INTO PLACE. CONCRETE REACTION, THRUST BLOCKS OR RESTRAINED JOINTS SHALL BE APPLIED FOR ALL TEES, PLUGS, CAPS AND BENDS DEFLECTING 22-1/2 DEGREES OR MORE. KEEP TRENCHES FREE OF WATER UNTIL JOINTS HAVE BEEN PROPERLY MADE. AT THE END OF EACH DAY'S WORK, CLOSE OPEN ENDS OF PIPE TEMPORARILY WITH WOOD BLOCKS OR BULKHEADS. DO NOT LAY PIPE WHEN CONDITIONS OF TRENCH OR WEATHER ARE UNSUITABLE. IN ADDITION TO THE ABOVE, PVC PIPE AND FITTINGS INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF UNI B-3. WATER MAINS SHALL BE LAID AT LEAST 10' HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWER. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A TEN FOOT SEPARATION, AND WHEN APPROVED BY D.E.P., DWJ, AND THE ENGINEER, THE WATER MAIN MAY BE INSTALLED CLOSER TO THE SEWER, PROVIDED THAT THE WATER MAIN IS LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18" ABOVE THE TOP OF THE SEWER. BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE, WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10' BETWEEN JOINTS. ALTERNATIVELY, THE SEWER MAIN BE PLACED IN A SLEEVE OR ENCASED IN CONCRETE TO OBTAIN THE EQUIVALENT OF THE REQUIRED 10' SEPARATION. EXCAVATION AND BACKFILLING OF WATER MAIN TRENCHES SHALL CONFORM TO SECTION 2 OF THESE SPECIFICATIONS. PROVIDE A MINIMUM OF 36" OF COVER OVER WATER MAINS.			
2-5.2 HOT TAPPING TAP SLEEVE SHOULD BE MOUNTED ON CLEAN PIPE WITH TEST HOLE AT THE TOP AND NOT BE ANY CLOSER THAN 1 FOOT FROM ANY JOINT OR FITTING. AFTER SLEEVE IS MOUNTED THEN VALVE CAN BE PLACED ON FACE OF SLEEVE. FACE OF VALVE SHOULD BE LEVEL TO FACILITATE THE TAPPING TOOL FITTING CORRECTLY. TESTING OF SLEEVE AND TAPPING OF PIPE IS TO BE COORDINATED WITH UTILITY 24-48 HOURS IN ADVANCE OF PLACEMENT.			
2-5.3 GATE VALVES INSTALL GATE VALVES IN ACCORDANCE WITH THE REQUIREMENTS OF AWWA C 600 FOR VALVE-AND-FITTING INSTALLATION. VALVE BOXES SHALL BE PLACED CONCENTRICALLY OVER THE VALVE OPERATING NUT.			
2-5.4 FIRE HYDRANTS INSTALL FIRE HYDRANTS IN ACCORDANCE WITH THE REQUIREMENTS OF AWWA C 600 AND AWWA M 17, "INSTALLATION, OPERATION, AND MAINTENANCE OF FIRE HYDRANTS".			

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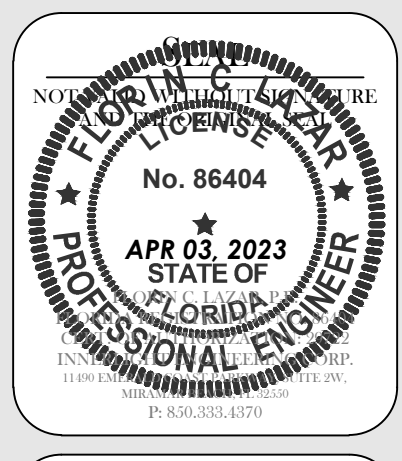
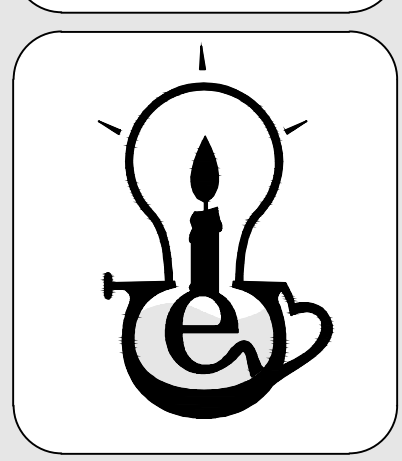
DWU TYPICAL SPECIFICATIONS 1

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INNERLIGHT ENGINEERING CORPORATION
THE APPLIED SCIENCE OF SUCCESS
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11490 EMERALD COAST PARKWAY, SUITE 2W
MIRAMAR BEACH | FLORIDA | 32550

CALHOUN HARBOR
RESIDENTIAL TOWNHOMES
JOHNNY BOSWELL CALHOUN ESTATES PROPERTIES, INC.
12889 EMERALD COAST PKWY
MIRAMAR BEACH, FL 32550

RECORD DATA
DATE: 04.04.2023
REV. NO: 5
REV. DATE: 04.03.2024
DRAWN BY: CRP
REVIEWED BY: FCL



SHEET TITLE

DWU TYPICAL SPECIFICATIONS
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4-9 EASEMENT

A RECORDED EASEMENT SHALL BE REQUIRED FOR ALL LIFT STATIONS AND FORCEMAINS THAT ARE NOT ON RIGHTS OF WAY. ALL COSTS OF RECORDING EASEMENT SHALL BE THE RESPONSIBILITY OF THE OWNER.

4-10 ELECTRICAL SERVICE

OWNER SHALL INITIATE ACCOUNT, PRIOR TO ANY PUMP DOWN TEST OR ACCEPTANCE BY DWU. OWNER SHALL INCUR ANY COST PRIOR TO ACCEPTANCE BY DWU.

4-11 PIPING AND PIPE FITTINGS

4-11.1 CAST IRON PIPE

ALL CAST-IRON SHALL BE CENTRIFUGALLY CAST CONFORMING TO ANSI A21.8, AND MEETING ALL THE QUALITY AND METALLURGICAL PROVISIONS OF ANSI STANDARD SPECIFICATION A 21.10 "THICKNESS DESIGN OF CAST-IRON PIPE". LINING AND COATING SHALL BE P-401 OR APPROVED EQUAL.

4-11.1.1 FLANGED JOINTS

ANSI STANDARD SPECIFICATIONS B16.1, CAST-IRON PIPE FLANGES AND FLANGED FITTINGS, 125 POUNDS, SCREWED ON FLANGES, FACED AND DRILLED TO ANSI CLASS 125 POUND TEMPLATE WITH RED SHEET RUBBER GASKETS.

4-11.1.2 FITTINGS

FITTINGS SHALL MEET ANSI STANDARD SPECIFICATION A21.10, CAST-IRON FITTINGS, 2-INCH THROUGH 48-INCH FOR WATER AND OTHER LIQUIDS. MINIMUM PRESSURE RATING SHALL BE EQUAL TO THAT OF THE PIPE SPECIFIED. ALL FITTINGS SHALL BE COATED ON INSIDE WITH PERMOX OR APPROVED EQUAL.

4-11.2 COATING FOR WASTEWATER LINES

ALL CAST IRON PIPE AND FITTINGS TO BE INSTALLED UNDERGROUND SHALL BE COATED EXTERIOR WITH HOT-DIP COAL-TAR. THE EXTERIOR OF ALL ABOVE GROUND PIPE SHALL RECEIVE A COAT OF RUST INHIBITOR PRIME COMPATIBLE WITH THE FINISH PAINT SCHEDULE. INTERIOR SHALL BE P-401 OR APPROVED EQUAL.

4-11.3 DETECTOR TAPE

ALL NON-METALLIC SEWER FORCE MAIN LINES SHALL BE MARKED WITH DETECTOR TAPE AND 12 GAUGE TRACER WIRE TO ENABLE LOCATION WITH A FERROUS METAL DETECTOR. THE DETECTOR TAPE SHALL BE PLACED APPROXIMATELY 12" ABOVE THE PIPE AND THROUGHOUT THE ENTIRE PIPE LENGTH. CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE DETECTOR TAPE DURING THE BACKFILLING OPERATION.

4-12 INSTALLATION

4-12.1 LIFT STATION AND APPURTENANCES

4-12.1.1 GENERAL

THE LIFT STATION AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS OR THE REQUIREMENTS OF DESTIN WATER USERS, WHICHEVER IS MORE STRINGENT.

4-12.1.2 OPERATION OF SYSTEM

OPERATION OF THE STATION SHALL BE AS FOLLOWS: WATER LEVEL RISES TO LEAD PUMP ON LEVEL; THE LEAD PUMP STARTS AND LOWERS THE LEVEL TO PUMP(S) OFF LEVEL; THE PUMP STOPS AND AUTOMATICALLY ALTERNATES TO POSITION THE SECOND (LAG) PUMP AS LEAD PUMP FOR THE NEXT CYCLE. IF THE LEAD PUMP STARTS AND THE WATER LEVEL CONTINUES TO RISE TO THE LAG PUMP ON LEVEL, THE LAG PUMP WILL THEN START AND BOTH PUMPS WILL OPERATE TOGETHER UNTIL THE WATER LEVEL IS LOWERED TO THE PUMP'S OFF LEVEL. IF THE LEAD PUMP FAILS FOR ANY REASON, AN OVERRIDE CONTROL SHALL BEGIN OPERATING THE LAG PUMP.

4-12.1.3 START-UP, INITIAL OPERATION

THE CONTRACTOR SHALL START UP AND PROVIDE INITIAL TESTING BEFORE OPERATION OF THE COMPLETED PUMPING STATION. THE INITIAL OPERATION SHALL INCLUDE FILLING USING POTABLE WATER, IF NECESSARY, OF THE WET WELL AS NECESSARY, TO CYCLE AND TEST THE PUMPS AND CONTROLS, INCLUDING SIMULATED PUMP FAILURE, AND HIGH WATER ALARM, PUMP ALTERNATION, AND OTHER FEATURES OF THE SPECIFIED EQUIPMENT. TESTING OF THE STATION SHALL BE COORDINATED WITH THE ENGINEER AND THE UTILITY COMPANY.

4-12.2 PRESSURE PIPING

4-12.2.1 GENERAL

FORCE MAIN PIPING SHALL BE POLYVINYL CHLORIDE (PVC) PIPE, FORCE MAIN PIPING 1-1/2" THROUGH 3" IN SIZE SHALL CONFORM TO ASTM D 2241, SDR 26 (PVC MATERIAL 12454-B) WITH PUSH-ON JOINTS CONFORMING TO ASTM D 3139 AND ELASTOMERIC GASKETS CONFORMING TO ASTM F 477. FORCE MAIN PIPING 4" THROUGH 12" IN SIZE SHALL CONFORM TO AWWA C 900-89, DR 18, AND SHALL BE FURNISHED IN CAST-IRON PIPE EQUIVALENT OUTSIDE DIAMETERS WITH RUBBER GASKETED JOINTS AS AWWA C 900 LISTED. ALL FORCE MAIN PIPING SHALL BE STAMPED "NSF-PW". ALL FORCE MAIN FITTINGS SHALL BE CONSTRUCTED OF EITHER DUCTILE IRON OR CAST IRON CONFORMING TO AWWA C 110 OR ANSI A 21.10, RESPECTIVELY, BLUE IN COLOR.

PRESSURE PIPING SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS. THE TRENCH SHALL BE GRADED SO THAT WHEN THE PIPE RESTS ON THE TRENCH BOTTOM IT WILL HAVE A UNIFORM BEARING FOR ITS ENTIRE LENGTH. THE PIPE SHALL BE CAREFULLY EXAMINED FOR DEFECTS AND THE INSIDE CLEANED. AFTER PLACING THE PIPE IN THE TRENCH, THE ENDS SHALL BE WIPED FREE FROM ALL DIRT, SAND AND FOREIGN MATERIAL. THE JOINTS SHALL BE MADE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PIPE MANUFACTURER.

SUITABLE CONCRETE REACTION OR THRUST BLOCKS (OR APPROVED EQUAL (MEGA LUGS, BELL RESTRAINTS, ETC.) SHALL BE APPLIED ON ALL TEES, PLUGS, CAPS, AND BENDS DEFLECTING 22-1/2 DEGREES OR MORE, OR MOVEMENT SHALL BE PREVENTED BY ATTACHING METAL RODS OR STRAPS APPROVED BY THE ENGINEER. UNLESS OTHERWISE DIRECTED, THE PIPE SHALL BE LAID WITH BELL ENDS FACING IN THE DIRECTION OF LAYING. WHENEVER IT IS NECESSARY TO DEFLECT THE PIPE FROM A STRAIGHT LINE (EITHER IN THE VERTICAL OR HORIZONTAL PLANE) TO AVOID OBSTRUCTION, TO PLUMB STEMS, OR WHERE LONG RADIUS CURVES ARE PERMITTED, THE DEGREE OF DEFLECTION SHALL BE AS RECOMMENDED BY THE MANUFACTURER OF THE PIPE.

PRESSURE PIPING CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18" BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER PRESSURE PIPING JOINTS AND WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10" BETWEEN ANY TWO JOINTS. ALTERNATIVELY, THE SEWER PRESSURE PIPING MAY BE PLACED IN A SLEEVE OR ENCLOSED IN CONCRETE TO OBTAIN THE EQUIVALENT OF THE 12" SEPARATION.

EXCAVATION AND BACKFILLING OF SEWER PRESSURE PIPING SHALL CONFORM TO SECTION 2 OF THESE SPECIFICATIONS. PROVIDE A MINIMUM OF 30" OF COVER OVER SEWER PRESSURE PIPING.

4-13 TESTING

TESTING OF THE PRESSURE CONDUIT SHALL CONFORM TO SECTION 1-5 UNDER POTABLE WATER SYSTEM OF THESE SPECIFICATIONS.

4-13 TESTING

TESTING OF THE PRESSURE CONDUIT SHALL CONFORM TO SECTION 1-5 UNDER POTABLE WATER SYSTEM OF THESE SPECIFICATIONS.

4-14 AS-BUILT CERTIFICATION

IN ACCORDANCE WITH THE RULES OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, CHAPTER 62-604, THE ENGINEER OF RECORD WILL BE RESPONSIBLE FOR OBSERVATION OF THE CONSTRUCTION OF THE SANITARY SEWER PUMPING SYSTEM TO ASSURE COMPLIANCE WITH THE PLANS AND SPECIFICATIONS, AND SAID ENGINEER WILL REPORT TO DEP UPON COMPLETION OF THE CONSTRUCTION BEFORE THE SYSTEM CAN BE PLACED INTO OPERATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 24 HOURS BEFORE BEGINNING CONSTRUCTION ON THE SANITARY SEWER PUMPING SYSTEM.

4-15 AS-BUILT DRAWINGS

THE CONTRACTOR SHALL FURNISH THE ENGINEER AT THE CLOSE OF THE PROJECT WITH ONE (1) SET OF MARKED-UP CONSTRUCTION PLANS DEPICTING AS-BUILT CONDITIONS OF THE SANITARY SEWER PUMPING SYSTEM. THE AS-BUILT PLANS SHALL SHOW THE LOCATION AND ELEVATIONS OF THE SANITARY SEWER PUMPING SYSTEM. ELEVATIONS SHALL BE RELATIVE TO PROJECT DATUM. ENGINEERING APPROVAL OF THE SANITARY SEWER PUMPING SYSTEM WILL NOT BE MADE UNTIL ACCURATE AND LEGIBLE AS-BUILT PLANS ARE RECEIVED. THE UTILITY COMPANY REQUIRES AN ELECTRONIC CAD FILE IN ADDITION TO CERTIFIED RECORD DRAWINGS.

END OF SECTION



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DWU TYPICAL SPECIFICATIONS 3

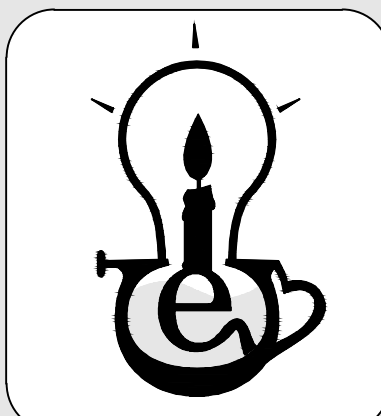
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SHEET:	X OF X				



INNERLIGHT ENGINEERING CORPORATION
• THINK • CREATE • SERVE
THE APPLIED SCIENCE OF SUCCESS
11490 EMERALD COAST PARKWAY, SUITE 2W
MIRAMAR BEACH | FLORIDA | 32550

CALHOUN HARBOR
RESIDENTIAL TOWNHOMES
JOHNNY BOSWELL CALHOUN ESTATES PROPERTIES, INC.
12889 EMERALD COAST PKWY
MIRAMAR BEACH, FL 32550

RECORD DATA
DATE: 04.04.2023
REV. NO: 5
REV. DATE: 04.03.2024
DRAWN BY: CRP
REVIEWED BY: FCL



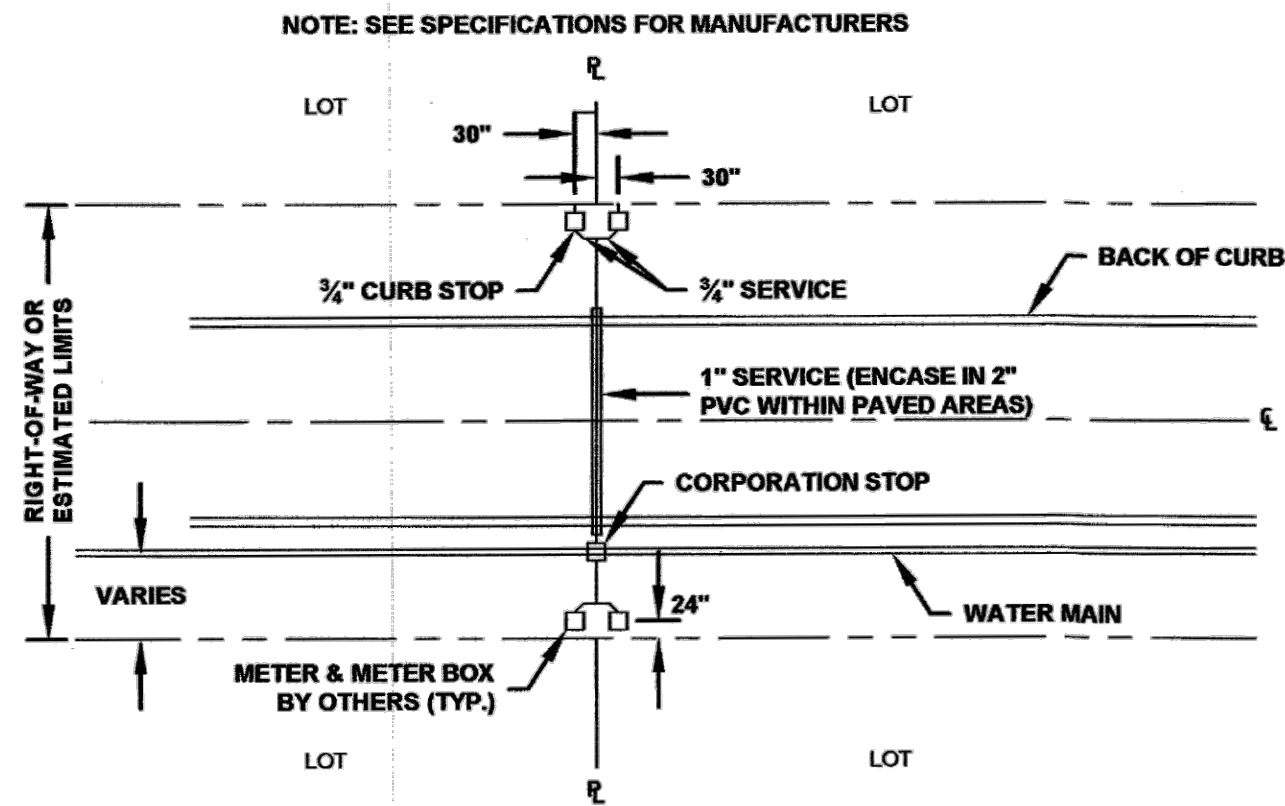
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DWU TYPICAL SPECIFICATIONS 3

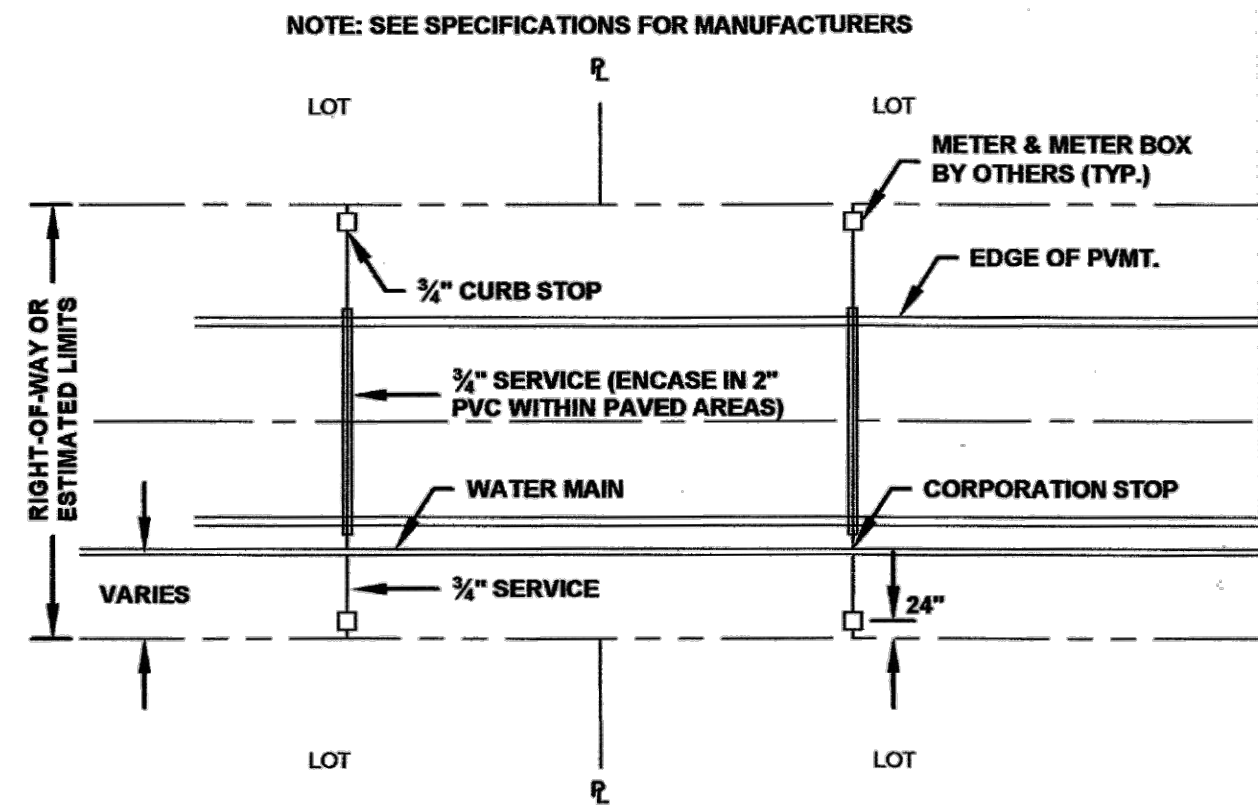
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26 OF 29

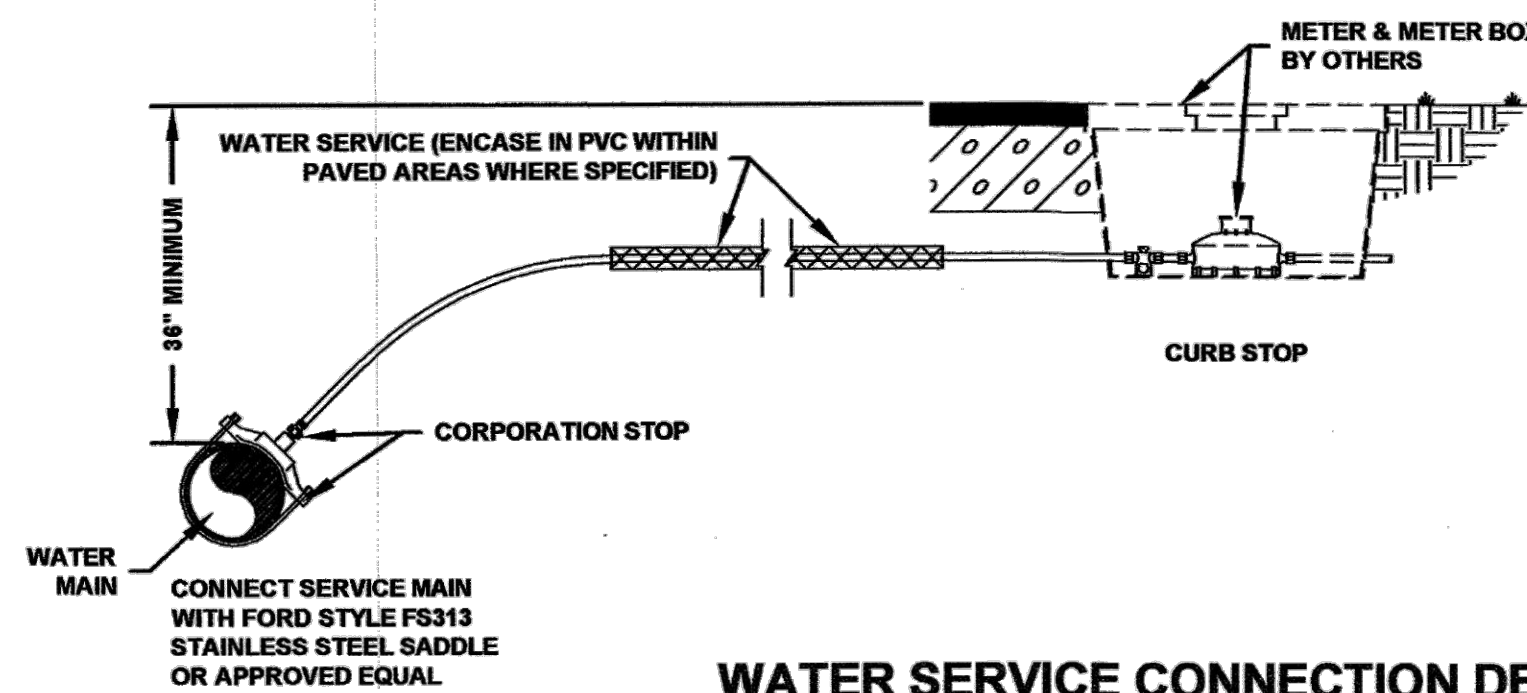
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DOUBLE WATER SERVICE CONNECTION PLAN
SCALE: 1" = 20'



SINGLE WATER SERVICE CONNECTION PLAN
SCALE: 1" = 20'



WATER SERVICE CONNECTION DETAIL
SCALE: N.T.S.

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

Other Pipe	Horizontal Separation	Crossings (1)	Joint Spacing @ Crossings (Full Joint Centered)
Storm Sewer, Stormwater Force Main, Reclaimed Water (2)	Water Main 3 ft. minimum	Water Main 12 inches is the minimum, except for storm sewer, then 6 inches is the minimum and 12 inches is preferred	Alternate 3 ft. minimum
Vacuum Sanitary Sewer	Water Main 10 ft. preferred 3 ft. minimum	Water Main 12 inches preferred 6 inches minimum	Alternate 3 ft. minimum
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water (4)	Water Main 10 ft. preferred 6 ft. minimum (3)	Water Main 12 inches is the minimum, except for gravity sewer, then 6 inches is the minimum and 12 inches is preferred	Alternate 6 ft. minimum
On-Site Sewage Treatment & Disposal System	10 ft. minimum	---	---

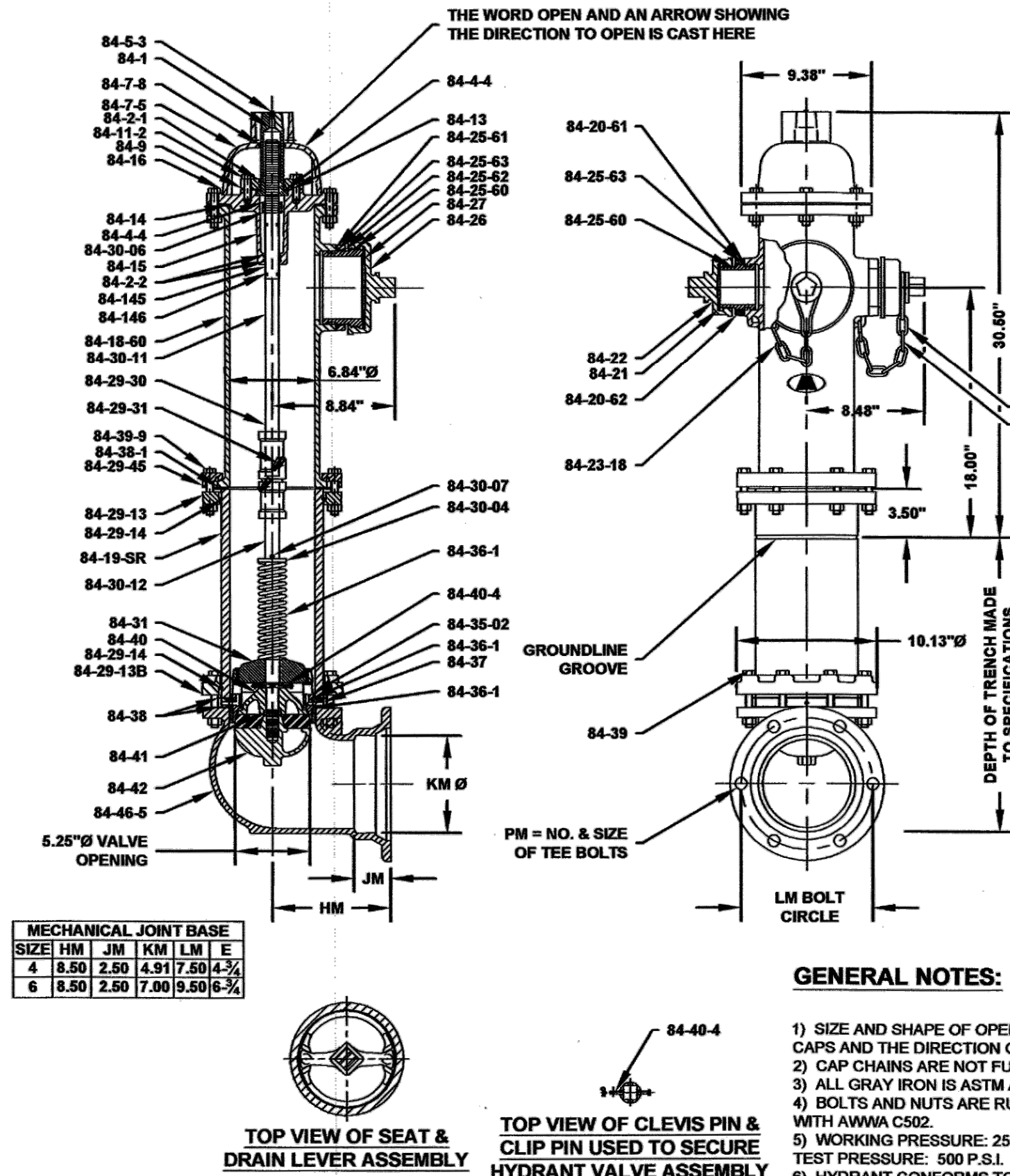
- (1) Water main should cross above other pipe. When water main must be below other pipe, the minimum separation is 12 inches.
(2) Reclaimed water regulated under Part III of Chapter 62-610, F.A.C.
(3) 3 ft. for gravity sanitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer.
(4) Reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

Disclaimer - This document is provided for your convenience only. Please refer to F.A.C. Rule 62-555.314 for additional construction requirements.

DEP WATER SEPARATION DETAILS
SCALE: N.T.S.

GENERAL NOTES:

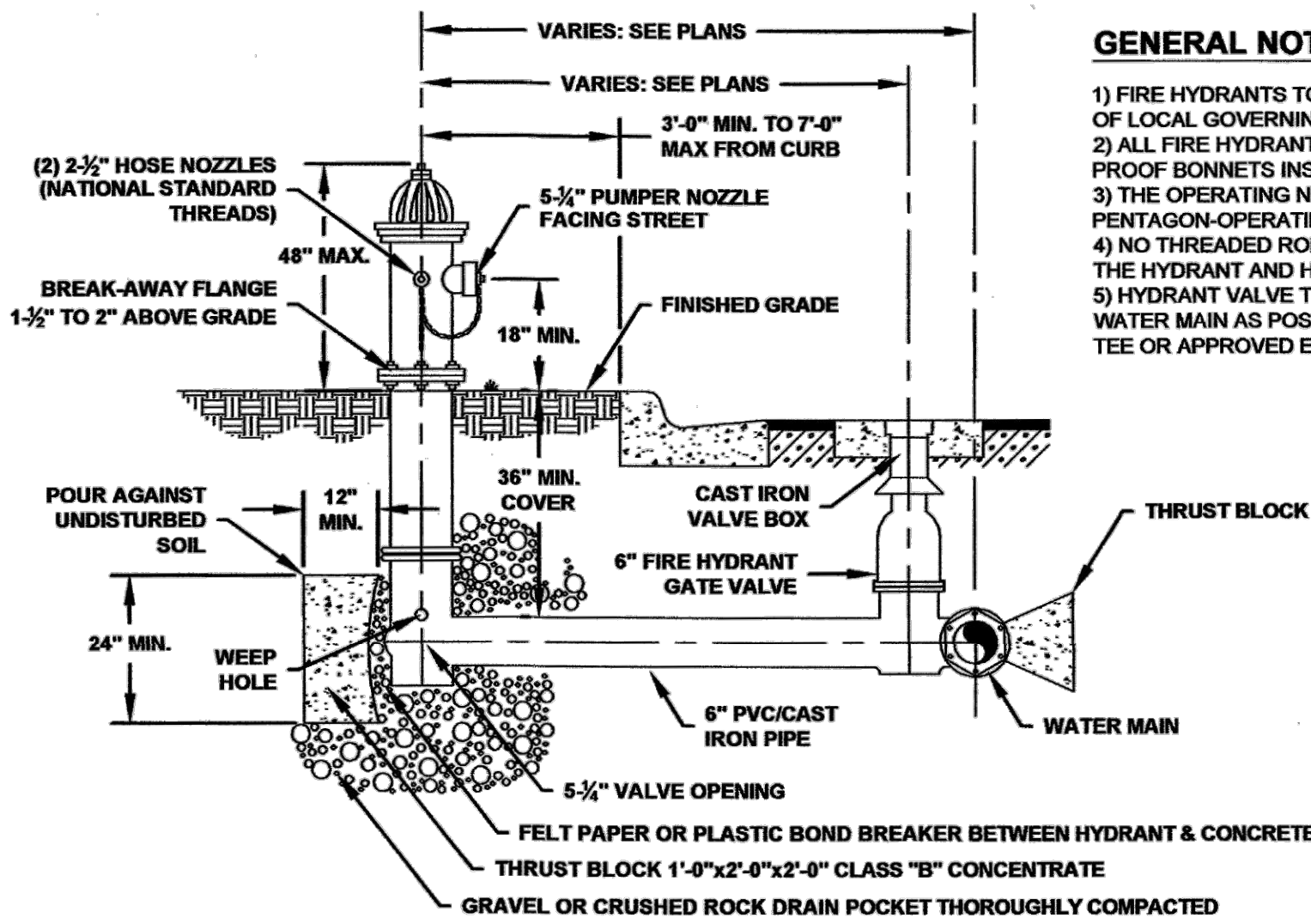
- 1) THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING BACTERIOLOGICAL EXAMINATIONS ON ALL NEW WATER MAINS (AS REQUIRED BY AND TO THE SATISFACTION OF) THE DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES. THESE REQUIREMENTS NECESSITATE A SATISFACTORY SAMPLE AT EACH SAMPLE LOCATION FOR TWO CONSECUTIVE DAYS. IF THE EXAMINATION IS BY PERSONS OTHER THAN THE LOCAL HEALTH DEPARTMENT, THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERING THE LABORATORY REPORTS TO THE ENGINEER FOR SUBMITTAL TO THE STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION (D.E.P.).
- 2) INSTALLATION OF WATER MAINS AND SERVICES SHALL COMPLY WITH ALL GOVERNING AUTHORITIES.
- 3) THE CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS AND REPORT ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
- 4) ALL PIPES SHALL BE PVC UNLESS OTHERWISE NOTED OR REQUIRED. ALL MAINS TO BE MARKED WITH NO. 12 INSULATED COPPER TRACER WIRE TO FACILITATE THEIR LOCATIONS AND METALLIC WARNING TAPE.
- 5) THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 36" OF COVER OVER WATER MAINS WITHIN PAVED AND UNPAVED AREAS.



GENERAL NOTES:

- 1) SIZE AND SHAPE OF OPERATING NUT AND NUT ON CAPS, THREADING ON NOZZLES AND CAPS AND THE DIRECTION OF OPENING MADE TO SPECIFICATIONS.
- 2) CAP CHAINS ARE NOT FURNISHED UNLESS SPECIFIED.
- 3) ALL GRAY IRON IS ASTM A126 CLASS B.
- 4) BOLTS AND NUTS ARE RUSTPROOFED STEEL ASTM A307 OR EQUIVALENT IN ACCORDANCE WITH AWWA C502.
- 5) WORKING PRESSURE: 250 P.S.I. AWWA 200 P.S.I. FACTORY MUTUAL & UNDERWRITERS LAB.
- 6) TEST PRESSURE: 500 P.S.I.
- 7) HYDRANT CONFORMS TO AWWA STANDARD C502.
- 8) UPPER BARREL CAN BE ROTATED 360°.
- 9) FACTORY MUTUAL APPROVED AND UNDERWRITERS LABORATORIES LISTED IF MARKED.

5-1/4" B84B-5 AMERICAN DARLING HYDRANT WITH TAMPER PROOF COVER
SCALE: N.T.S.



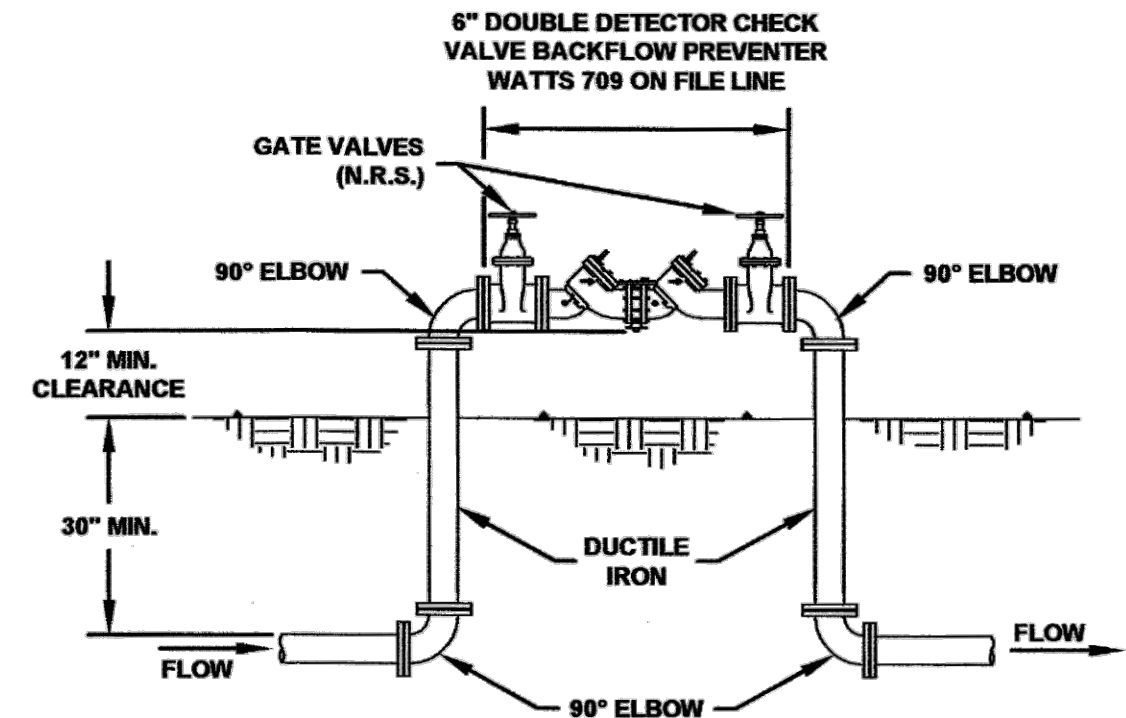
FIRE HYDRANT CONNECTION DETAIL
SCALE: 1" = 2'

GENERAL NOTES:

- 1) FIRE HYDRANTS TO COMPLY TO REQUIREMENTS OF LOCAL GOVERNING AUTHORITY.
- 2) ALL FIRE HYDRANTS MUST HAVE TAMPER PROOF BONNETS INSTALLED.
- 3) THE OPERATING NUT MUST BE A 1.5" PENTAGON-OPERATING NUT.
- 4) NO THREADED RODS ARE ALLOWED BETWEEN THE HYDRANT AND HYDRANT ISOLATION VALVE.
- 5) HYDRANT VALVE TO BE AS CLOSE TO THE WATER MAIN AS POSSIBLE BY USE OF A HYDRANT TEE OR APPROVED EQUAL.

GENERAL NOTES:

- 1) ALL FITTINGS SHALL BE CAST OR DUCTILE IRON.
- 2) PROVIDE THRUST BLOCKS FOR BELOW GROUND FITTINGS, SEE THRUST BLOCK DETAIL.
- 3) PROVIDE SUPPORTS UNDER BACKFLOW PREVENTER AS REQUIRED.



BACKFLOW PREVENTER DETAIL
SCALE: 1" = 2'

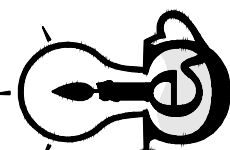
PART NO.	QTY.	PART NAME	MATERIAL & ASTM NO.
84-1	1	OPERATING NUT	BRONZE B763 ALLOY 865
84-2-1	2	COVER O-RING	BUNA N
84-2-2	2	HOUSING O-RING	BUNA N
84-4-4	1	THRUST WASHER	NYLATRON
84-5-3	1	PIPE PLUG	STEEL
84-7-5	1	TAMPER RESISTANT COVER	DUCTILE IRON
84-7-8	1	O-RING	BUNA N
84-9	1	HOUSING COVER	GRAY IRON
84-11-2	4	COVER CAP SCREWS	SEE NOTE 4
84-13	1	COVER GASKET	FIBER
84-14	1	HOUSING GASKET	COMPOSITION RUBBER
84-15	1	HOUSING	DUCTILE IRON
84-16	6	HOUSING BOLTS & NUTS	SEE NOTE 4
84-18-60	1	UPPER BARREL	DUCTILE IRON
84-19-5R	1	LOWER BARREL	DUCTILE IRON A536
84-20-60	2	HOSE NOZZLE	BRONZE B763 ALLOY 876
84-20-61	2	HOSE NOZZLE SEAL	BUNA N
84-20-62	2	HOSE NOZZLE RETAINER	DUCTILE IRON
84-20-63	2	HOSE NOZZLE RETAINER WASHER	TEFLON
84-21	2	HOSE CAPS	GRAY IRON
84-22	2	HOSE CAP GASKETS	RUBBER
84-23-1	2	HOSE CAP CHAINS WITH S-HOOK	STEEL
84-23-2	3	S-HOOK	STEEL
84-23-18	1	PUMPER CAP CHAIN WITH S-HOOK	STEEL
84-25-60	1	PUMPER NOZZLE	BRONZE B763 ALLOY 867
84-25-61	1	PUMPER NOZZLE SEAL	BUNA N
84-25-62	1	PUMPER NOZZLE RETAINER	DUCTILE IRON
84-25-63	1	PUMPER NOZZLE RETAINER WASHER	TEFLON
84-26	1	PUMPER CAP	GRAY IRON
84-27	1	PUMPER CAP GASKET	RUBBER
84-29-13	1	BARREL FLANGE	DUCTILE IRON A536
84-29-13B	1	BASE FLANGE	DUCTILE IRON A536
84-29-14	2	SNAP RINGS	STAINLESS STEEL
84-29-30	1	ROD COUPLING	GRAY IRON
84-29-31	2	COUPLING & CLIP PINS	STAINLESS STEEL
84-29-45	1	BREAKABLE FLANGE	GRAY IRON
84-30-03	1	HYDRANT SPRING	STAINLESS STEEL
84-30-04	1	SPRING PLATE	STAINLESS STEEL
84-30-06	1	TRAVEL STOP NUT	BRONZE B283 ALLOY 377
84-30-07	1	SPRING PLATE PIN	STAINLESS STEEL
84-30-11	1	UPPER ROD	STEEL
84-30-12	1	LOWER ROD	STEEL
84-31	1	DRAIN LEVER	BRONZE B584 ALLOY 922
84-35-02	1	HYDRANT SEAT	BRONZE B584 ALLOY 922
84-36-1	2	SEAT O-RINGS	BUNA N
84-37	1	DRAIN RING	BRONZE B763 ALLOY 876
84-38	2	DRAIN RING GASKETS	COMPOSITION RUBBER
84-38-1	1	BARREL GASKET	COMPOSITION RUBBER
84-39	8	BASE BOLTS & NUTS	STAINLESS STEEL 304
84-39-9	8	BARREL BOLTS & NUTS	SEE NOTE 4
84-40	1	VALVE TOP	GRAY IRON
84-40-4	1	VALVE TOP CLEVIS & CLIP PIN	STAINLESS STEEL
84-41	1	HYDRANT VALVE	RUBBER
84-42	1	VALVE BOTTOM	DUCTILE IRON
84-46-2	1	FLANGED BASE	DUCTILE IRON
84-46-5	1	MECHANICAL JOINT BASE	DUCTILE IRON
84-46-TY	1	TYTON BASE	DUCTILE IRON
84-145	1	ROD SLEEVE	BRONZE
84-146	2	SLEEVE O-RINGS	BUNA N

DESTIN WATER USERS, INC.

14 INDUSTRIAL PARK LANE,
DESTIN, FL 32841
(850) 837-8146



INNERLIGHT ENGINEERING CORPORATION

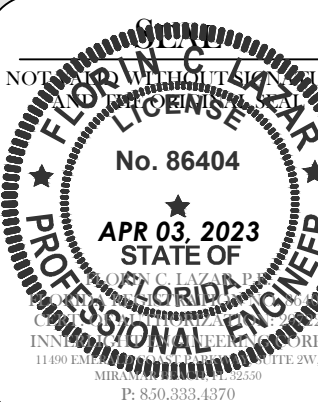
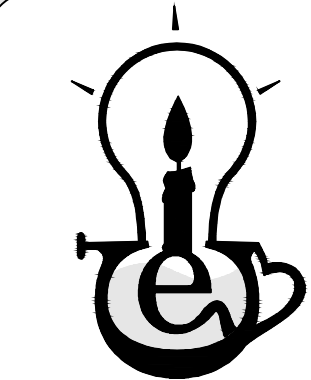


CALHOUN HARBOR
RESIDENTIAL TOWNHOMES

JOHNNY BOSWELL CALHOUN ESTATES PROPERTIES, INC.
12889 EMERALD COAST PKWY
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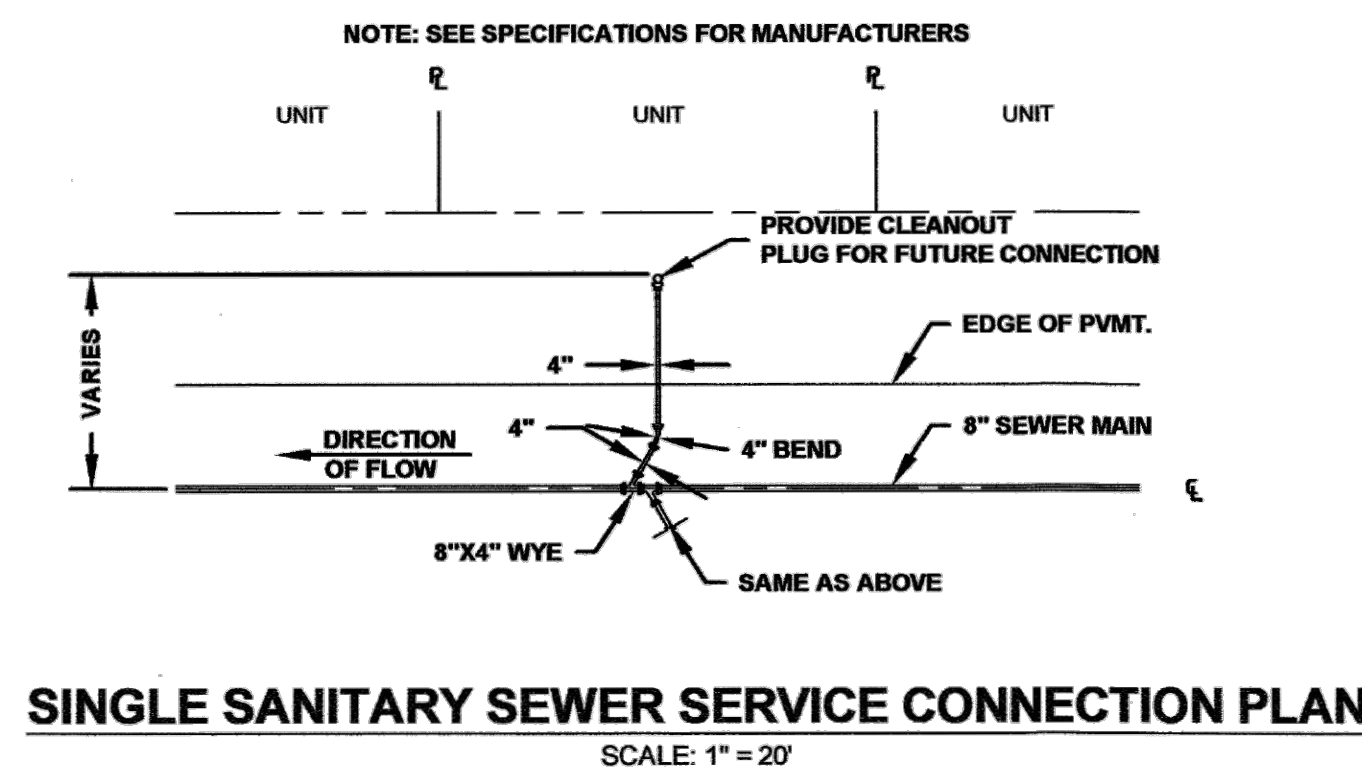
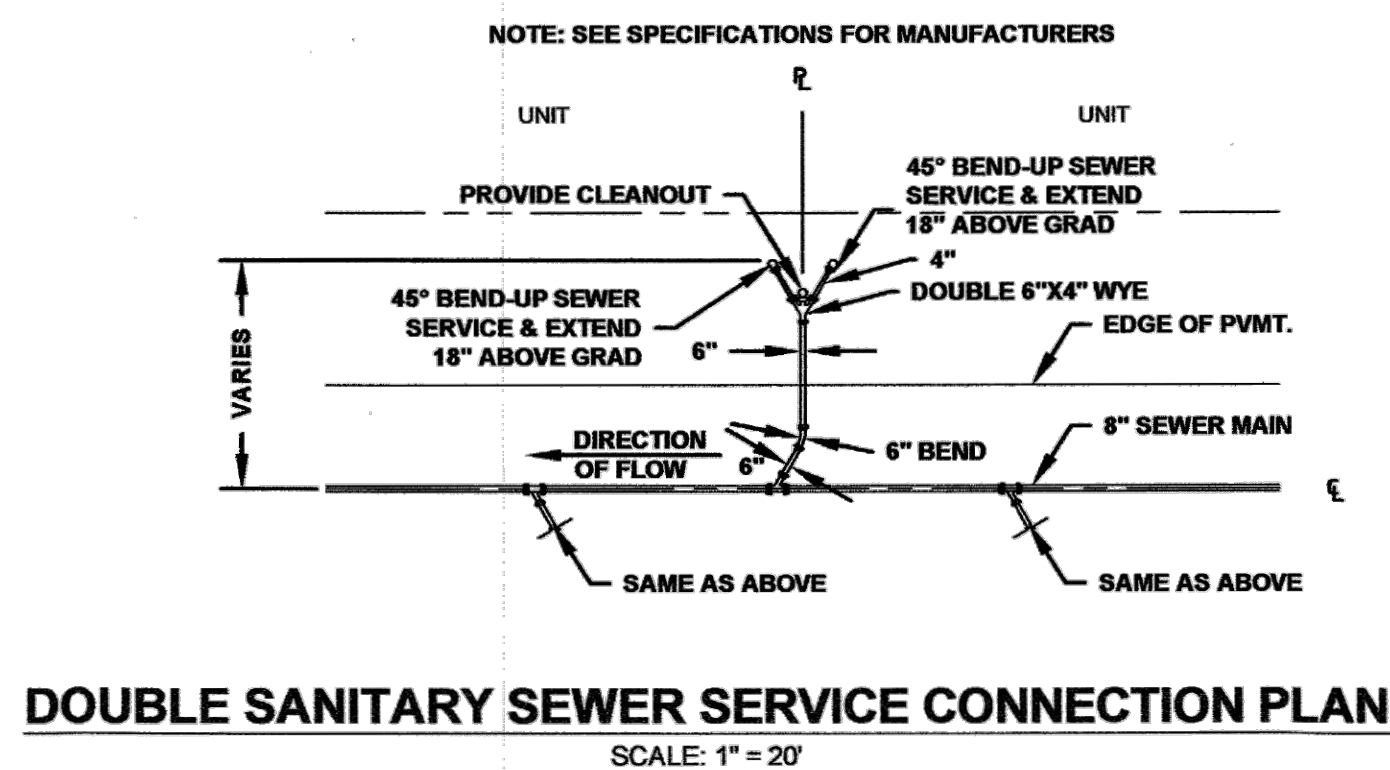
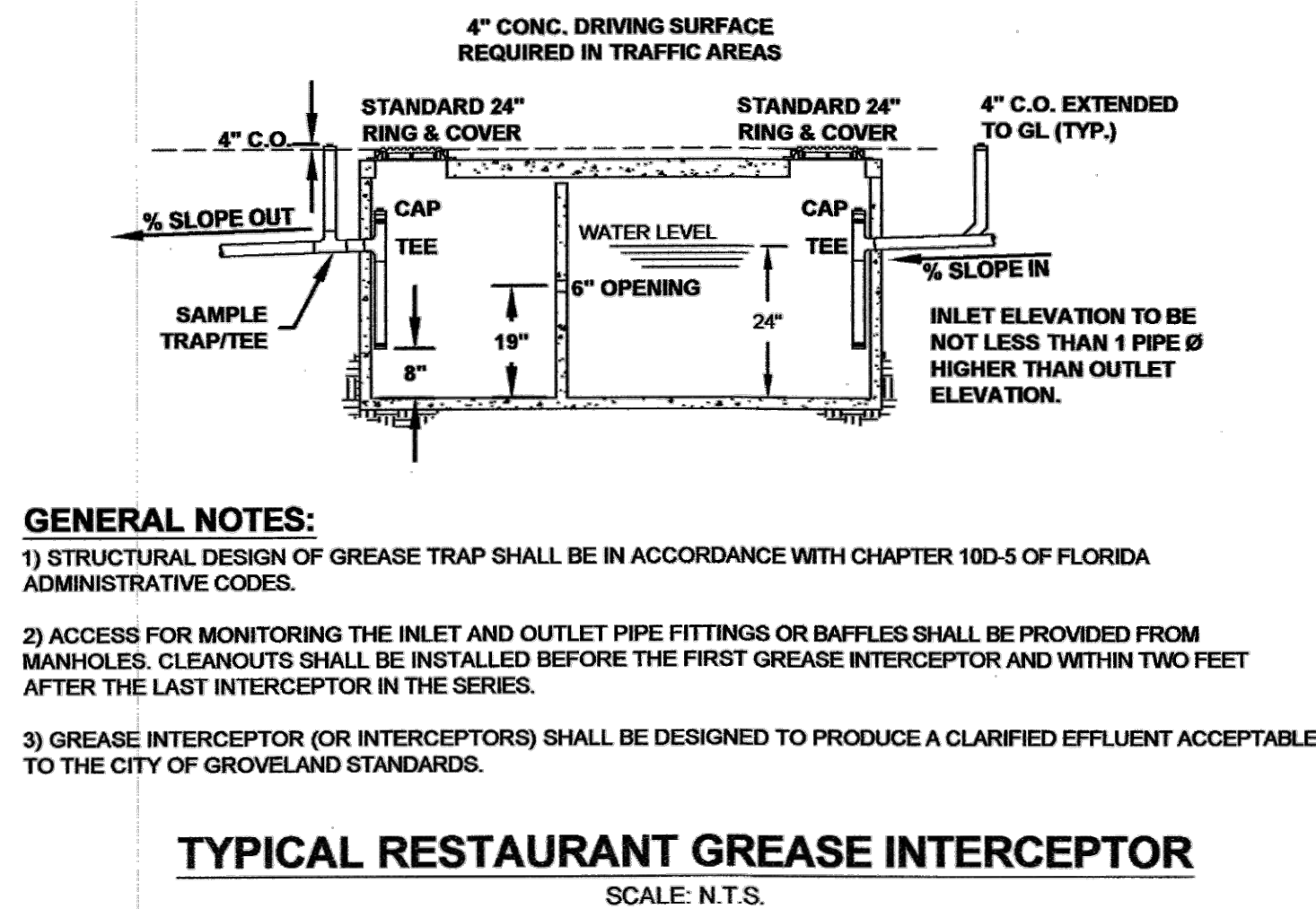
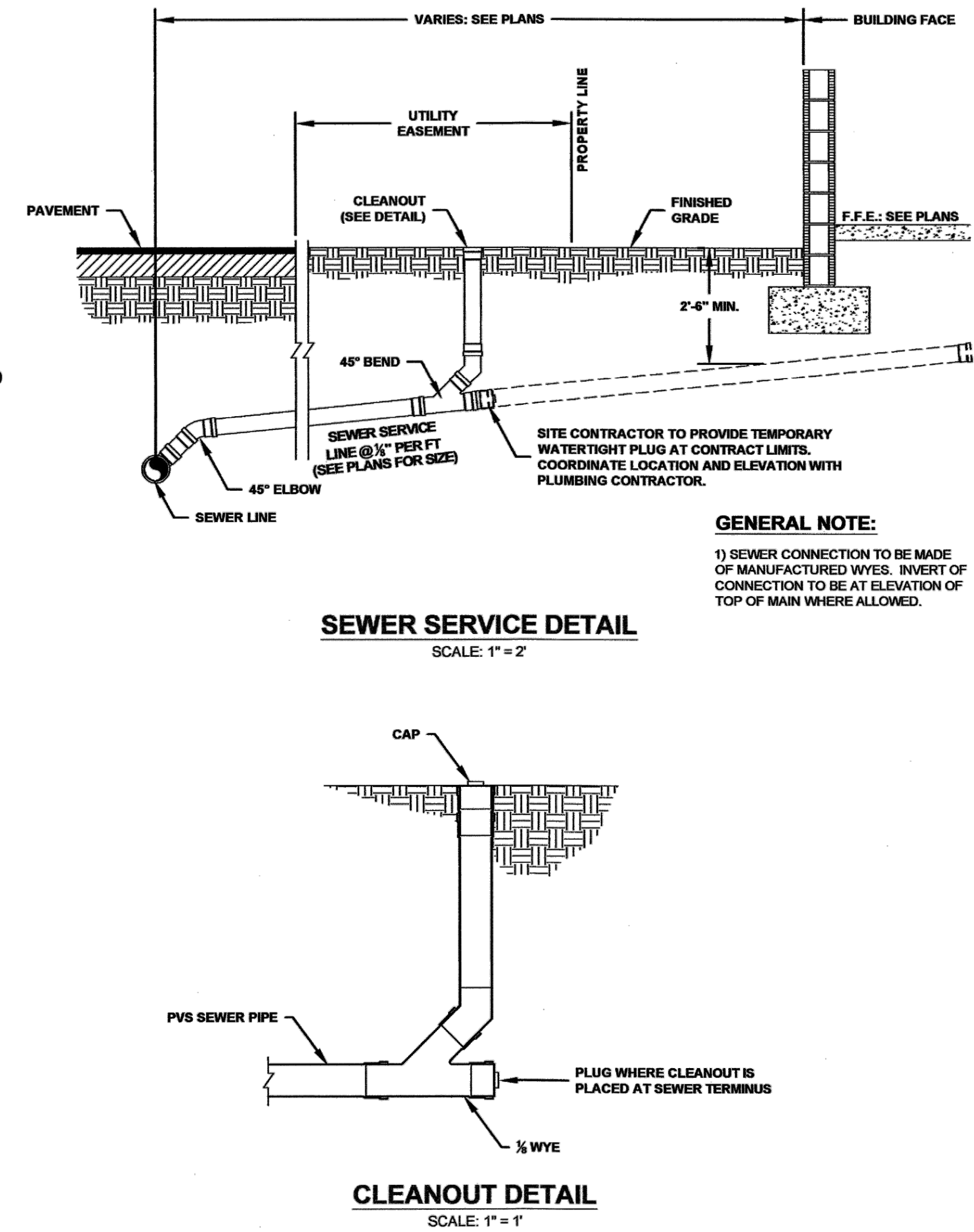
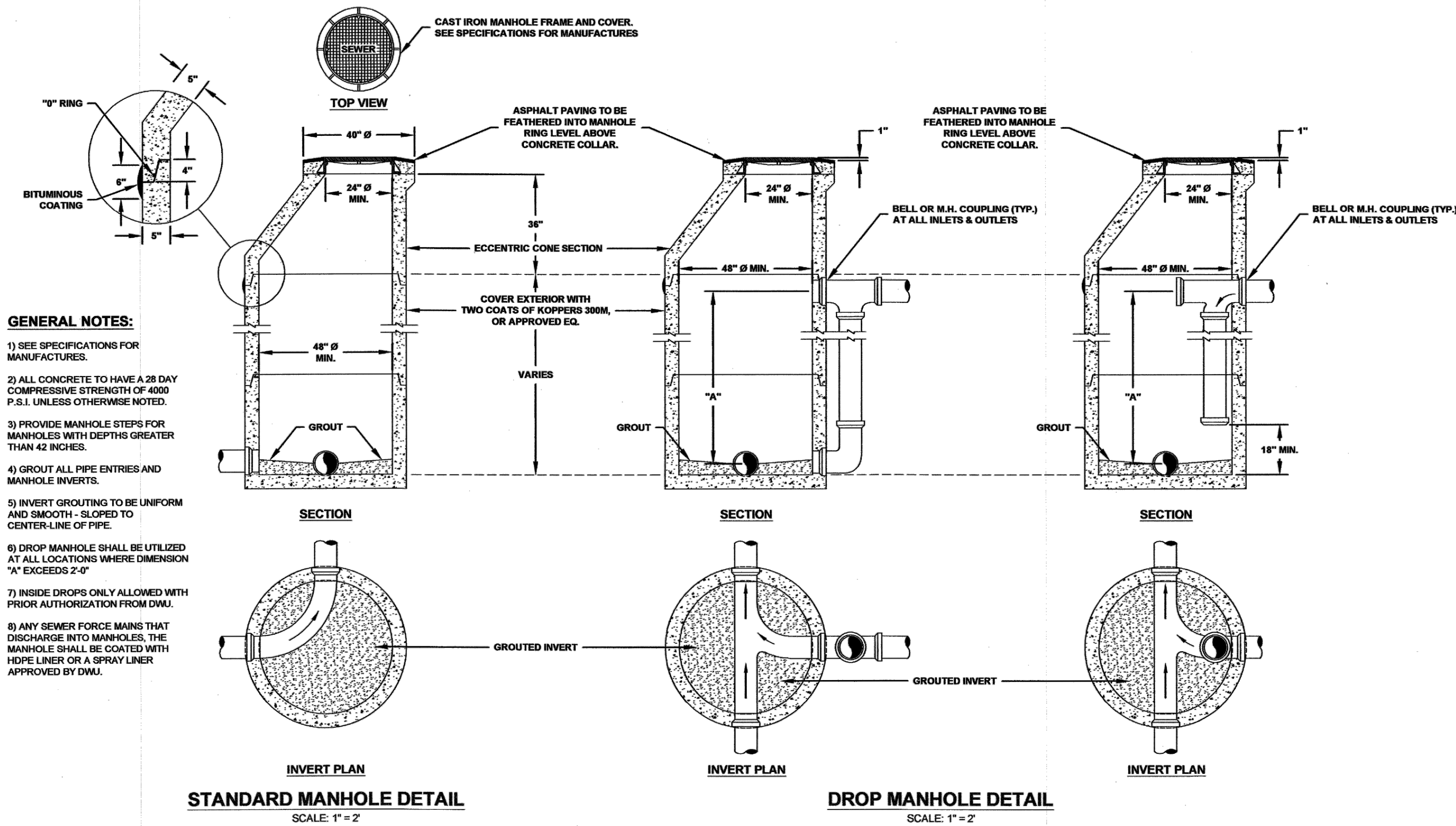
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DWU TYPICAL
POTABLE
WATER DETAILS

SHEET NUMBER

27 OF 29

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MIRAMAR BEACH, FLORIDA 32550
(850) 837-8146

DWU TYPICAL SANITARY SEWER DETAILS

RECORD DATA
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REVIEWED BY: FCL

DATE: July 11, 2023
REVISION DATE: 2023
DRAWN BY: ER
REVIEWED BY: MARS
SHEET: X OF X

CALHOUN HARBOR
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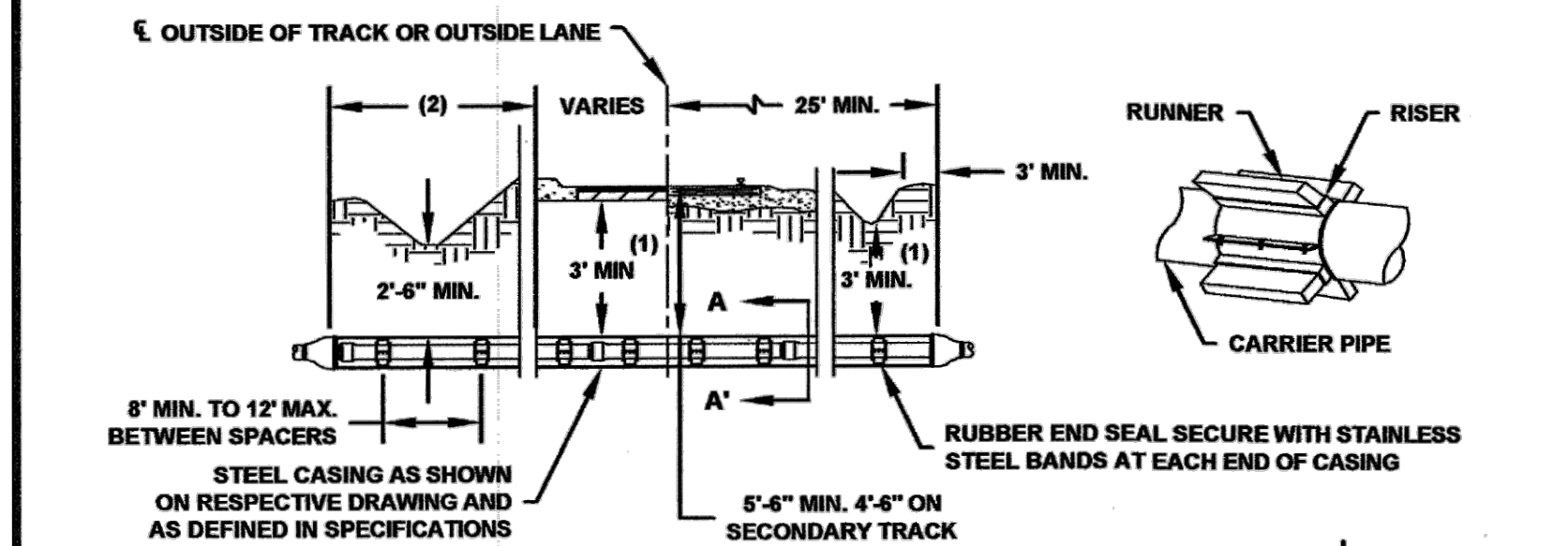
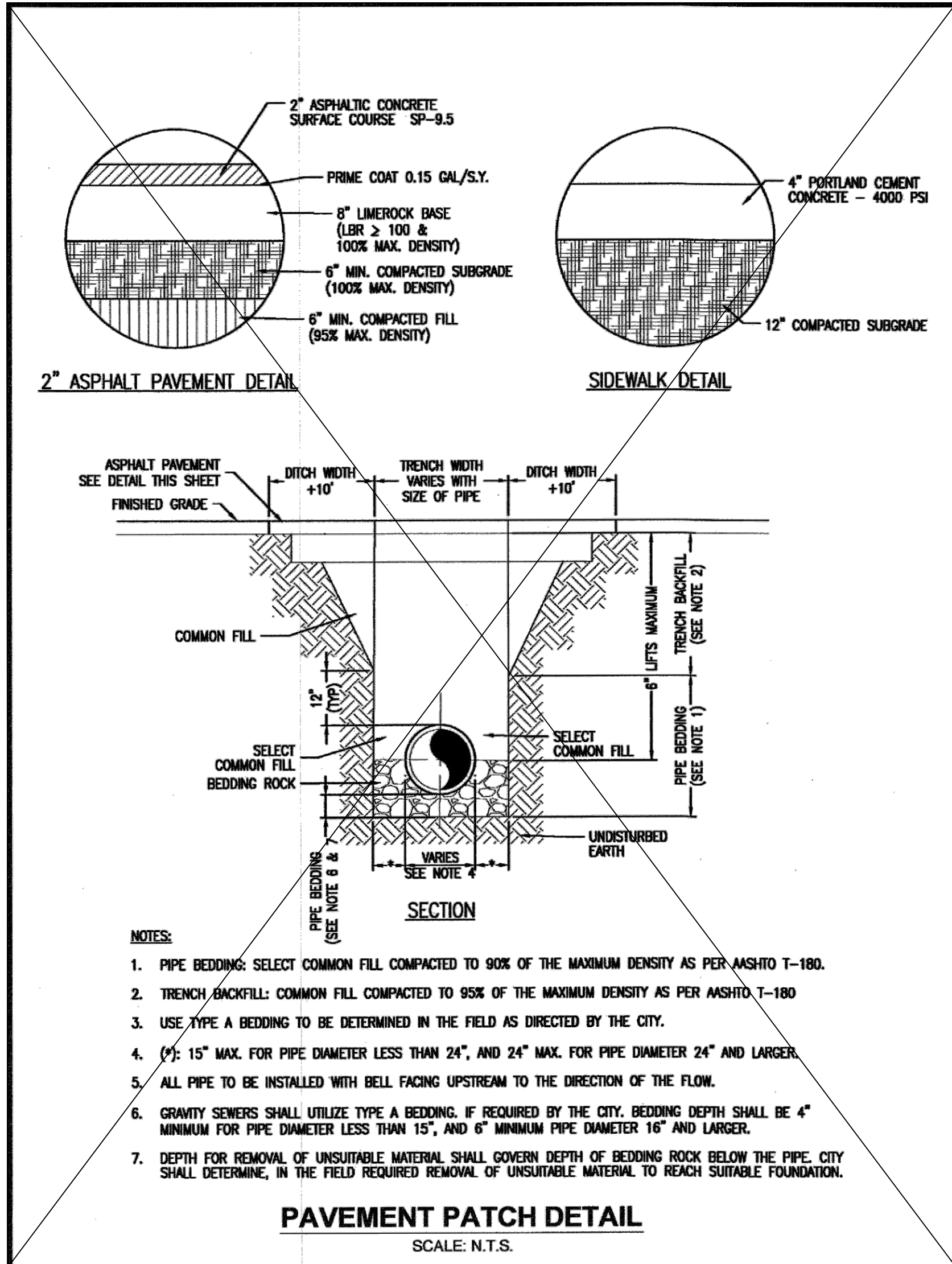
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FLORIDA PROFESSIONAL ENGINEER
No. 86404
APR 03, 2023
STATE OF FLORIDA

SHEET TITLE
DWU TYPICAL SANITARY SEWER DETAILS

SHEET NUMBER
28 OF 29

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GENERAL NOTES:

(1) VERTICAL DIMENSIONS TYPICAL FOR CASINGS

(2) WITH CURB: 6" STATE & 2" CITY ROADS MINIMUM WITHOUT CURB: 8" STATE & 4" CITY ROADS MINIMUM

(3) STEEL CASING PIPE SHALL CONFORM TO THE REQUIREMENTS OF AWWA C-200 AND ASTM-A-139, GRADE B.

(4) WHEN CASING IS INSTALLED WITHOUT BENEFIT OF A PROTECTIVE COATING, AND SAID CASING IS NOT CATHODICALLY PROTECTED, THE WALL THICKNESS SHOWN SHALL BE INCREASED TO THE NEAREST STANDARD SIZE WHICH IS A MINIMUM OF 0.063" GREATER THAN THE THICKNESS SHOWN EXCEPT FOR DIAMETERS LESS THAN 12.75".

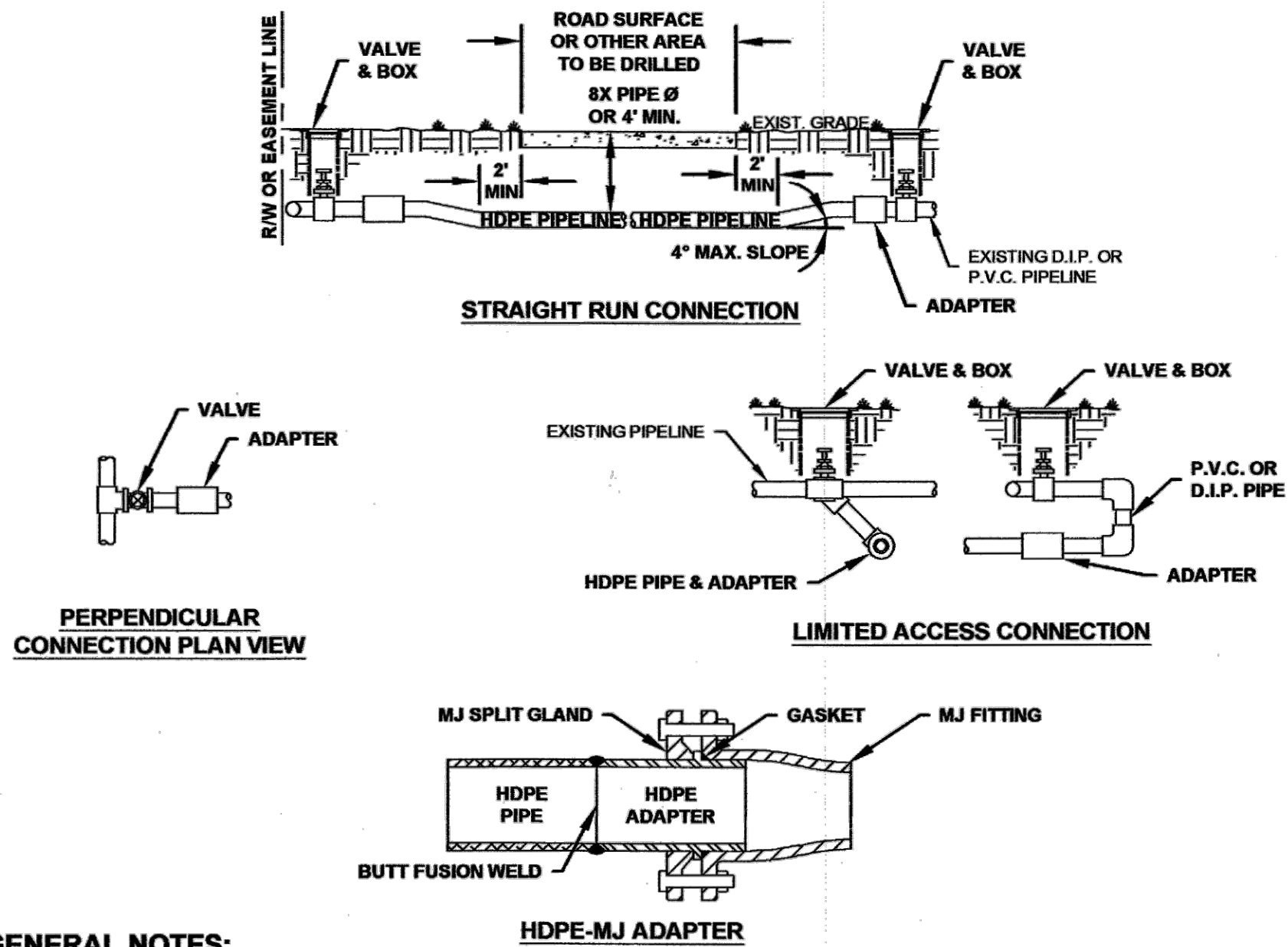
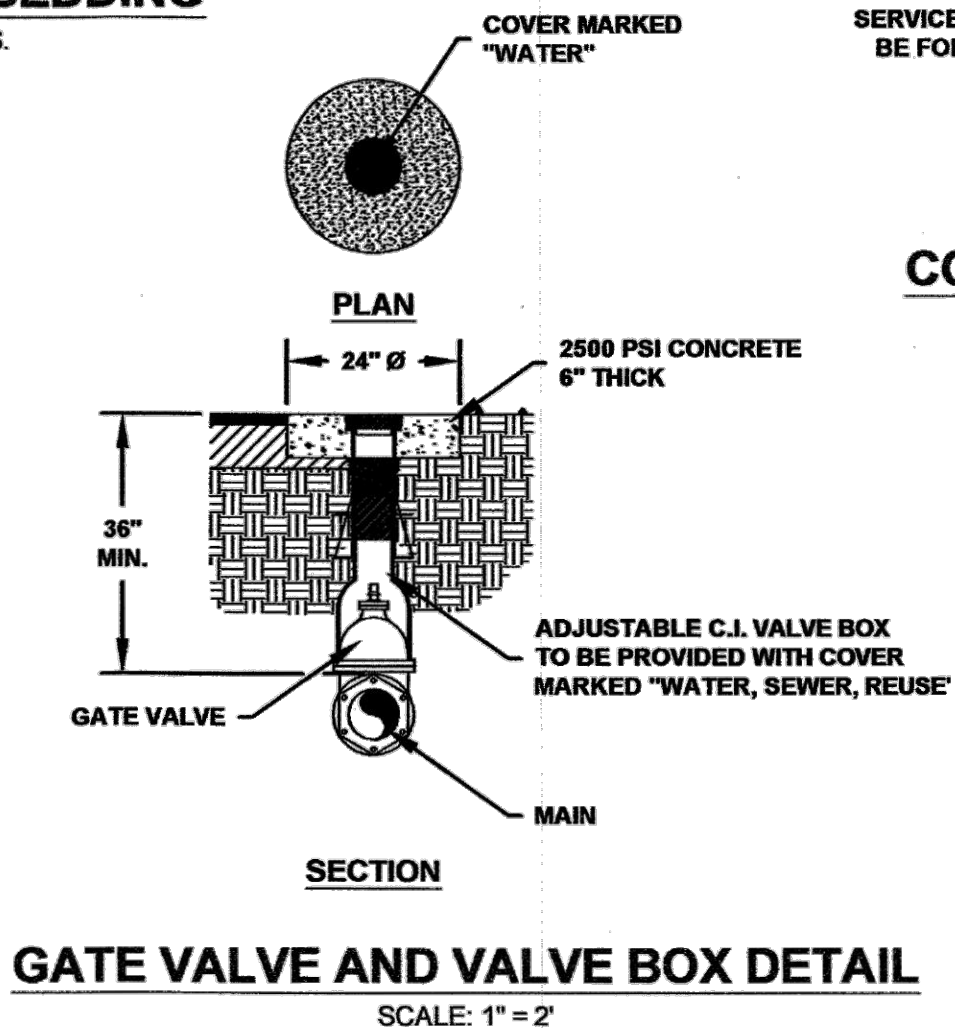
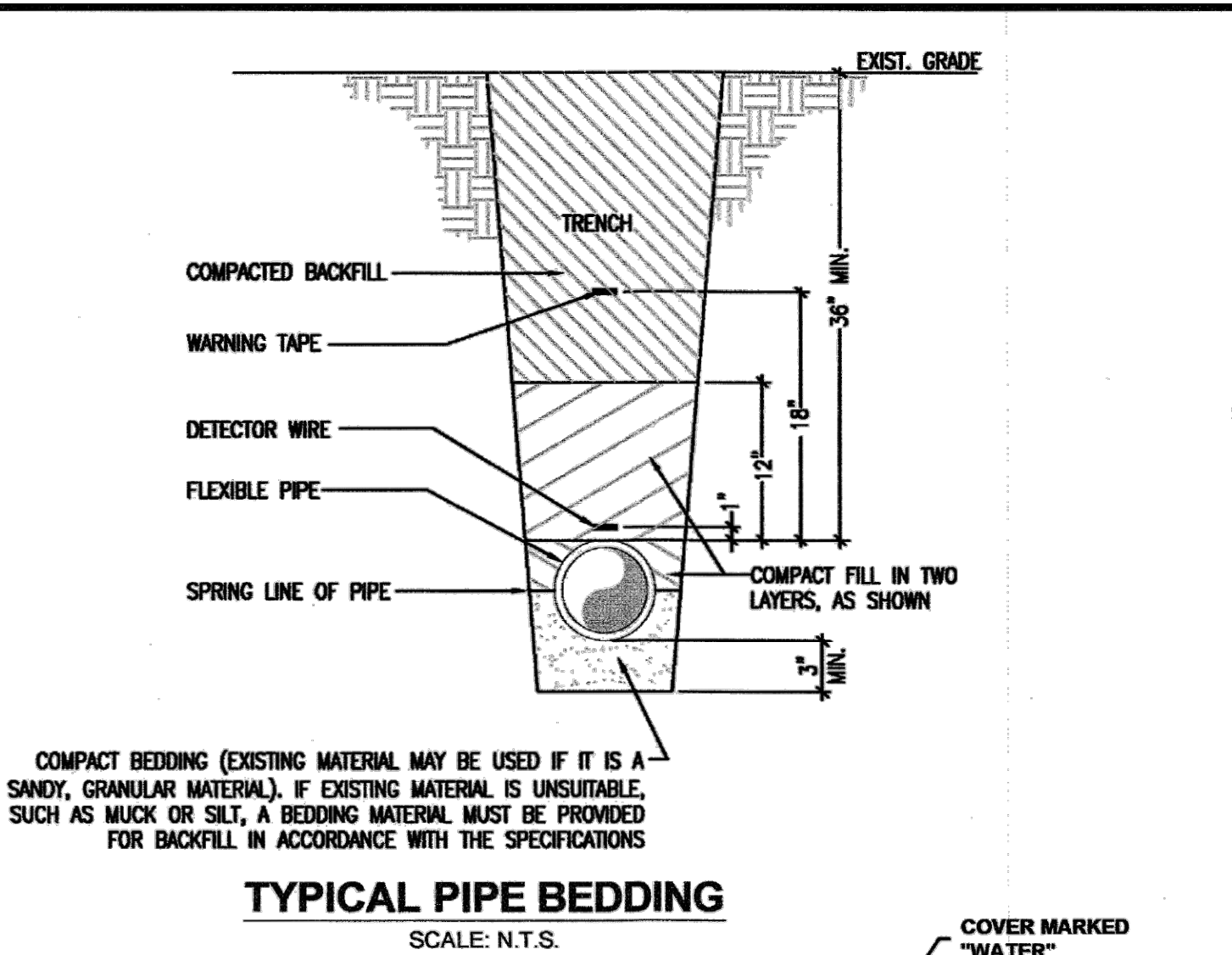
(5) FOR REFERENCE ONLY.

PRESSURE MAIN TO BE RESTRAINED WITH MANUFACTURERS RESTRAINED JOINTS THROUGH CASING. USE (3) SS CASING SPACER SKEDS ON EACH PIPE LENGTH. TIMBER SCIRDS ARE OPTIONAL.

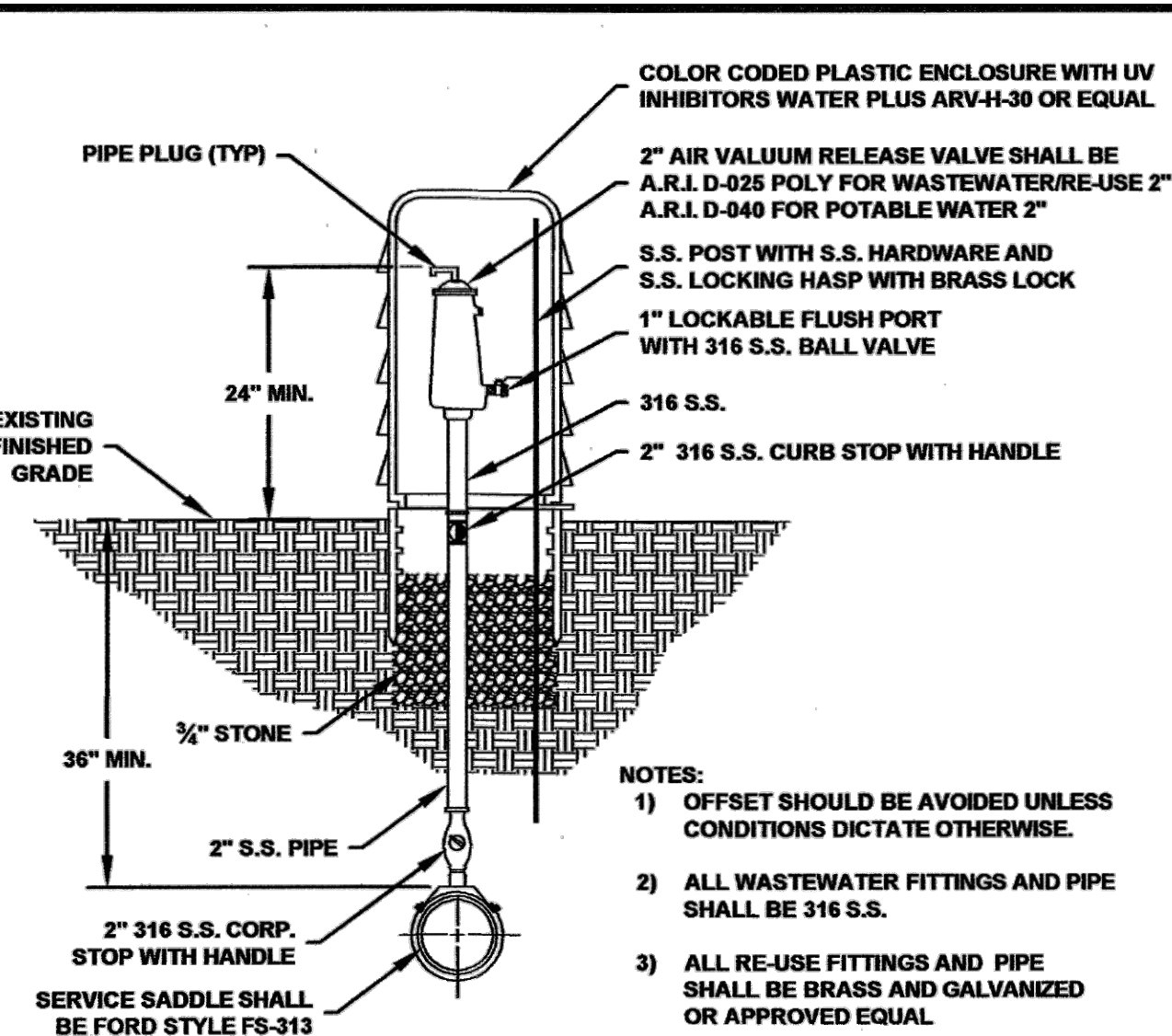
MINIMUM CASING SIZE AND THICKNESS

	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	42"	48"
D.I.P.-M.J.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D.I.P.-P.O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P.V.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(3) STEEL CASING PIPE (D2)	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	42"	48"	60"
WALL THICKNESS (T) ROADS	1.68"	1.68"	1.68"	2.50"	2.50"	2.50"	2.50"	2.50"	2.50"	3.12"	3.12"	3.12"	3.12"	3.12"
WALL THICKNESS (T) R.R.	1.68"	1.68"	1.68"	2.10"	2.10"	2.10"	2.10"	2.10"	2.10"	2.10"	2.10"	2.10"	2.10"	2.10"

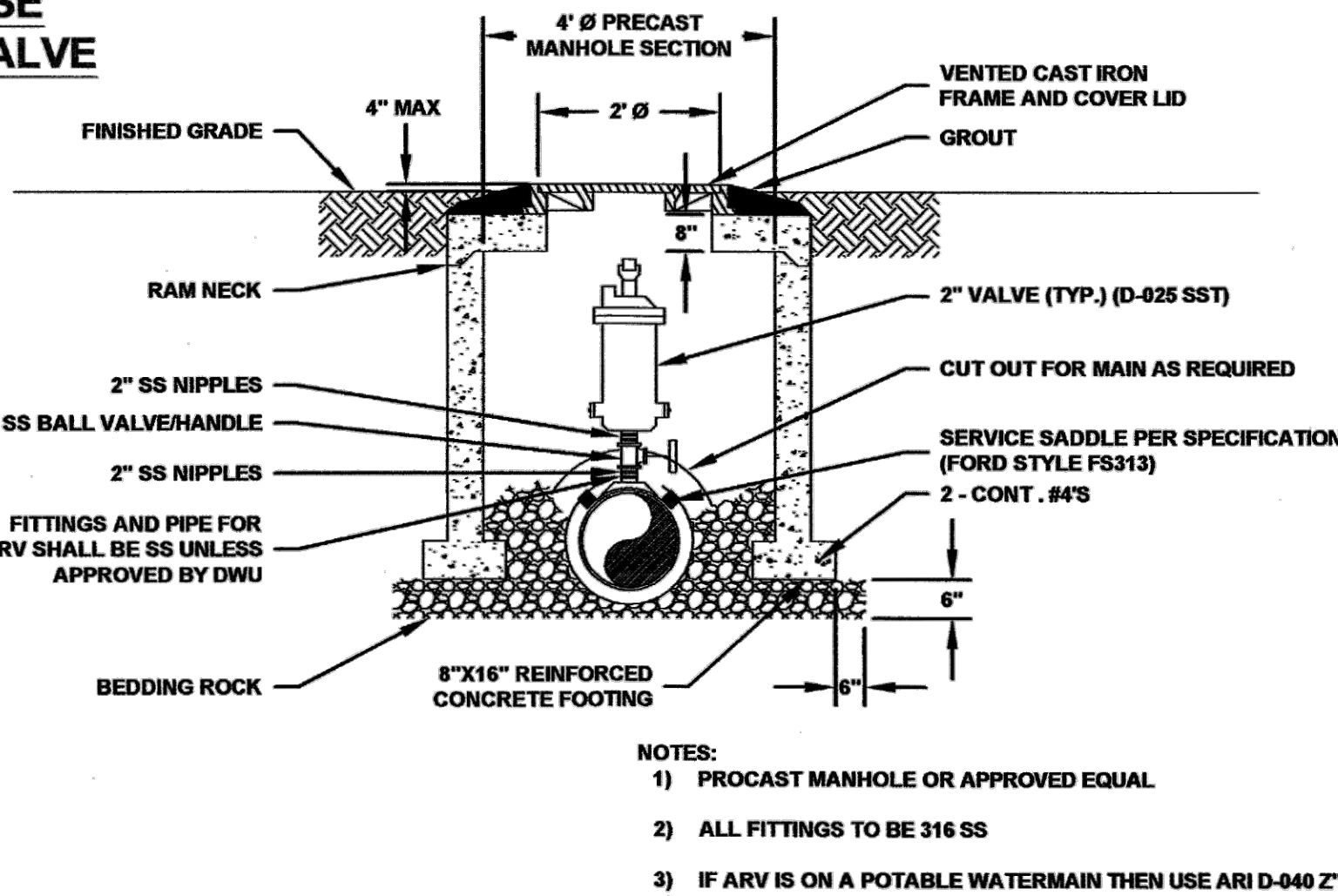
JACK AND BORE DETAIL
SCALE: N.T.S.



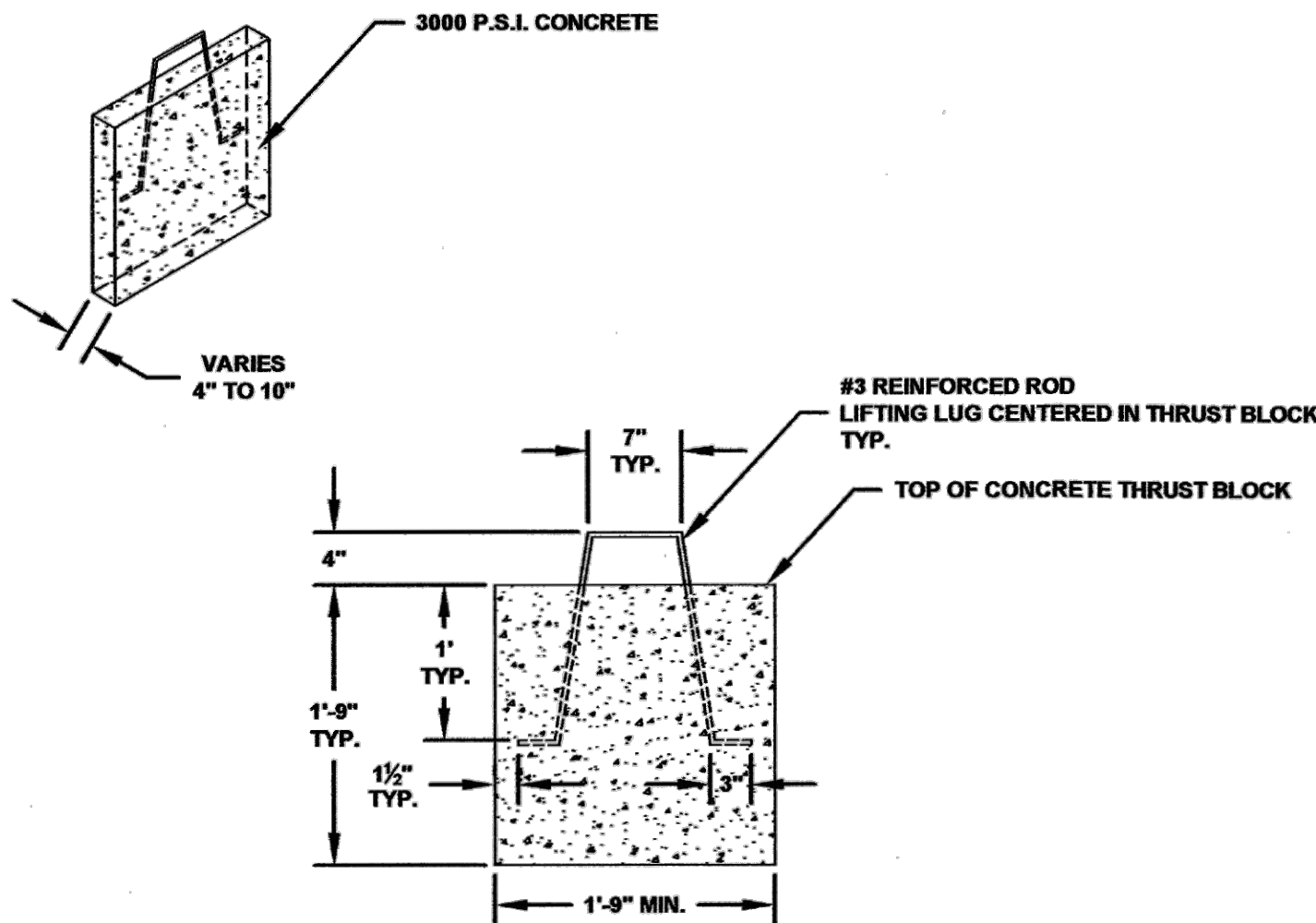
DIRECTIONAL DRILLING DETAIL
SCALE: N.T.S.



ABOVE GROUND WASTEWATER/RE-USE COMBINATION AIR/VACUUM RELEASE VALVE
SCALE: 1" = 2"



GATE VALVE AND VALVE BOX DETAIL
SCALE: 1" = 2"



THRUST BLOCK DETAIL
SCALE: N.T.S.

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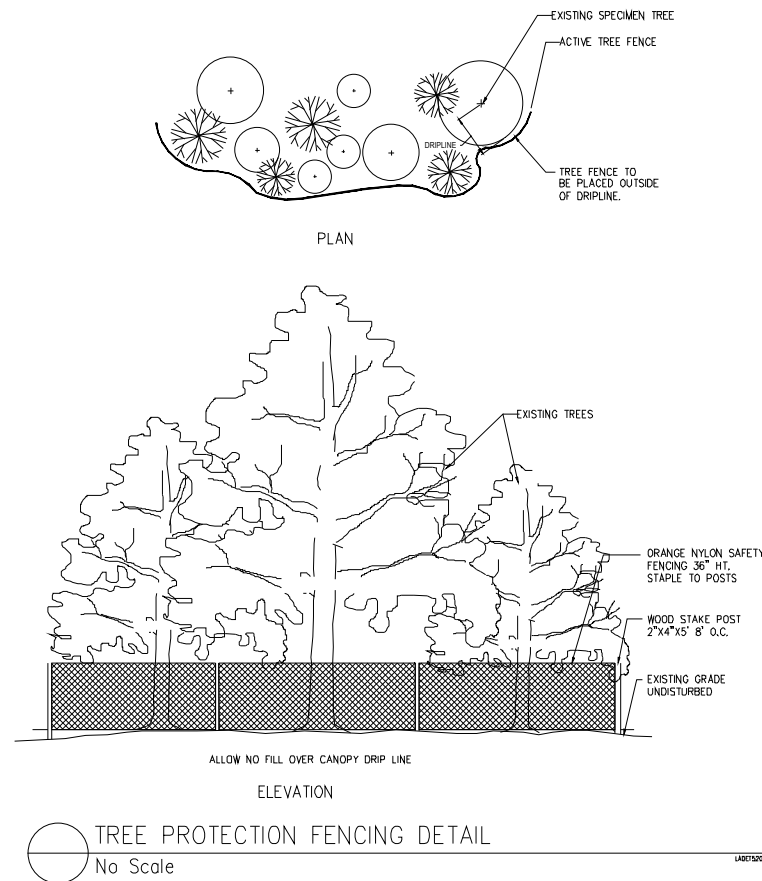
DWU TYPICAL DETAILS

DATE: July 11, 2023
REVISION DATE: 2023
DRAWN BY: ER
REVIEWED BY: MARS
SHEET: X OF X

REASON
BY
DATE
REV #

TREE REQUIREMENTS

CREDITS FOR EXISTING TREES (2" TO 6" DIAMETER) ON SITE	(0 TREES X 2 CREDITS PER TREE):	0
CREDITS FOR EXISTING TREES (7" TO 12" DIAMETER) ON SITE	(8 TREES X 3 CREDITS PER TREE):	24
CREDITS FOR EXISTING TREES (13" TO 19" DIAMETER) ON SITE	(3 TREES X 4 CREDITS PER TREE):	12
CREDITS FOR EXISTING TREES (20" OR 24" DIAMETER) ON SITE	(3 TREES X 5 CREDITS PER TREE):	15
TOTAL REFORESTATION CREDITS FOR EXISTING, PROTECTED OR PRESERVED TREES:		51
REFORESTATION TREES (1 PER ACRE, 5.42 X 10 = 53) REQUIRED ON SITE:		53
REPLACEMENT TREES (REMOVAL OF TREES OVER 12" D.B.H.) REQUIRED ON SITE:		31
REFORESTATION TREE REQUIRED ON SITE:		84
TOTAL REFORESTATION CREDITS FOR EXISTING, PROTECTED OR PRESERVED TREES:		-51
TOTAL REFORESTATION AND REPLACEMENTS FOR, PROTECTED OR PRESERVED TREES:		33
PERIMETER TREES, (1 PER 25'), REQUIRED ON SITE:		0
PERIMETER TREES, (1 PER 30'), REQUIRED ON SITE: 144' / 30' = 5 SMALL TREES		5
PERIMETER TREES, (1 PER 30'), REQUIRED ON SITE: 391' / 30' = 14 SMALL TREES		14
PARKING LOT TREES (1 PER END ROW LANDSCAPE ISLAND) REQUIRED ON SITE:		2
PROTECTED TREES TO BE REPLACED		0
TOTAL TREES REQUIRED:		54
TOTAL TREES PROVIDED:		54



LANDSCAPE NOTES:

ALL 3:1 SWALE SIDESLOPES ARE TO BE STABILIZED WITH EROSION CONTROL FABRIC TO PREVENT EROSION.
ALL PLANT MATERIAL TO BE WATERED WITH AN AN AUTOMATIC IRRIGATION SYSTEM.
IRRIGATION SYSTEM SHALL BE DESIGNED TO AVOID WATER COVERAGE ON SIDEWALKS AND PARKING AREAS.
ALL LANDSCAPING WITHIN THE VISION TRIANGLE SHALL COMPLY WITH DESTIN LDC CHAPTER 8.03.06.
NO TREE PLANTING SHALL OCCUR WITHIN 10' OF ANY EXFILTRATION COMPONENT.
ALL AREAS NOT LANDSCAPED TO BE STABILIZED.
A MINIMUM OF 75 PERCENT OF ALL PLANT MATERIAL USED MUST BE NATIVE TO NORTHWEST FLORIDA. [12.04.05(E)(2)]
ALL SHRUBS TO BE A MINIMUM OF 12" AT THE TIME OF PLANTING, REQUIRED PARKING LOT HEDGE TO BE 36" TALL AT TIME OF PLANTING
75% OF ALL PLANT MATERIAL SHALL BE NATIVE TO NORTHWEST FLORIDA.
****ALL AREAS NOT OPEN SPACE TO BE STABILIZED WITH BERMUDA GRASS.

- REPRESENTS ONE TREE TO BE REMOVED WITHIN THE PRIMARY FOOTPRINT OF THE ROAD OR WITHIN BUILDING SETBACKS.
- REPRESENTS ONE TREE TO BE REMOVED.

PLANTING SCHEDULE

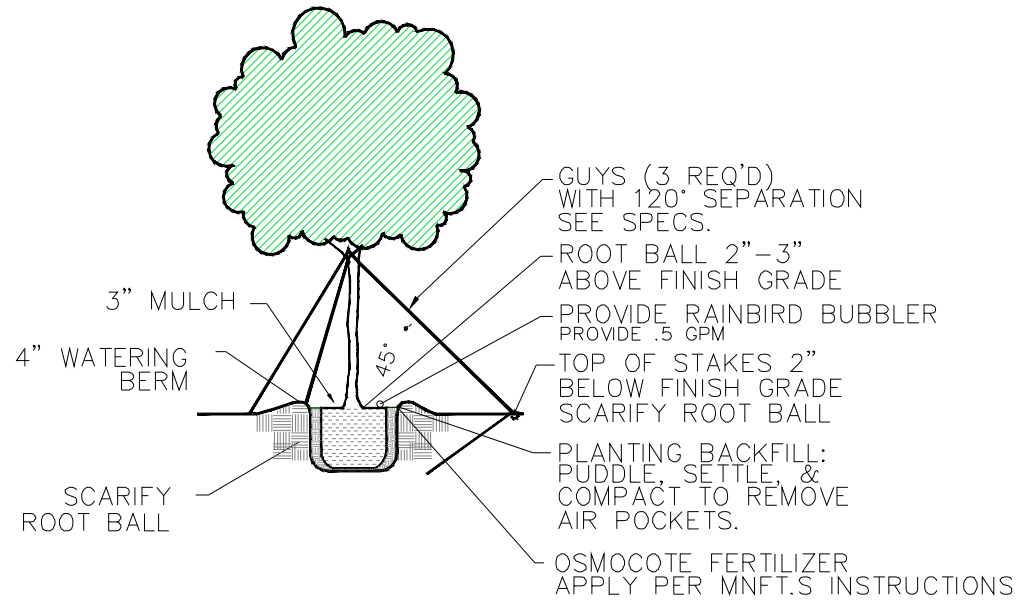
- REPRESENTS ONE, LIVE OAK, Quercus geminata
MINIMUM OF 12' IN HEIGHT AND BE NO LESS THAN 3.5" IN CALIPER AT THE TIME OF PLANTING.
- REPRESENTS ONE, Dahoon Holly, Ilex cassine
MINIMUM OF 12' IN HEIGHT AND BE NO LESS THAN 3.5" IN CALIPER AT THE TIME OF PLANTING.
SPACE AT 40' ON CENTER.

IRRIGATION

**PROVIDE 1" SCHEDULE 40 PVC MAINLINE, PROVIDE A PRESSURE COMPENSATING BUBBLER TO EACH TREE TO PROVIDE 3-4.5 GALLONS PER WATERING.
PROVIDE WELL OR GRAY WATER TAP, CONNECT TO TIMER AND BACK FLOW PREVENTER AS REQUIRED.

5' LANDSCAPE BUFFER

TREE PLANTING DETAIL



5' LANDSCAPE BUFFER

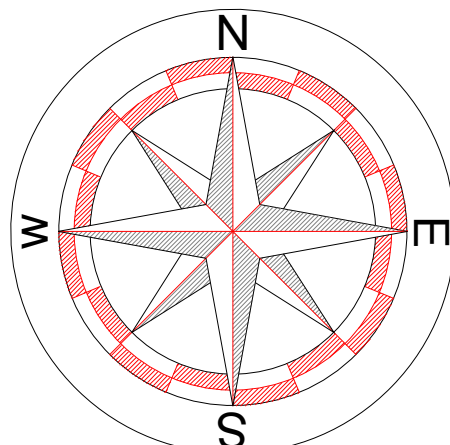
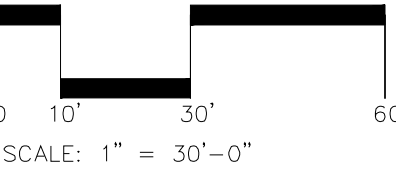
5' LANDSCAPE BUFFER

Digitally signed by
bradford davis
Date:
2023.10.10
08:03:34
-05'00'

5' LANDSCAPE BUFFER

PROVIDE IRRIGATION TO SOD AND TREES IN CITY ROW

5' LANDSCAPE BUFFER



CALHOUN HARBOR
PREPARED FOR INNERLIGHT ENGINEERING
DESTIN, FLORIDA

PERMIT SET
L-1 OF 1
7/14/23

DATE REVISION
9/20/23 UPDATED PLANT SCHEDULE

bradford robert davis
LANDSCAPE ARCHITECT
340 oak avenue
sanita rosa beach, fl 32459
telephone 850.974.0616
bradfordrdavis@gmail.com
www.brda.com
fl 0001730
lc26000474



Calhoun Harbor

Lighting Design Layout

Revision 1

Calhoun Harbor

Drawn By: Gerard Mead

Checked By: Gerard Mead

Date: 2/13/2024

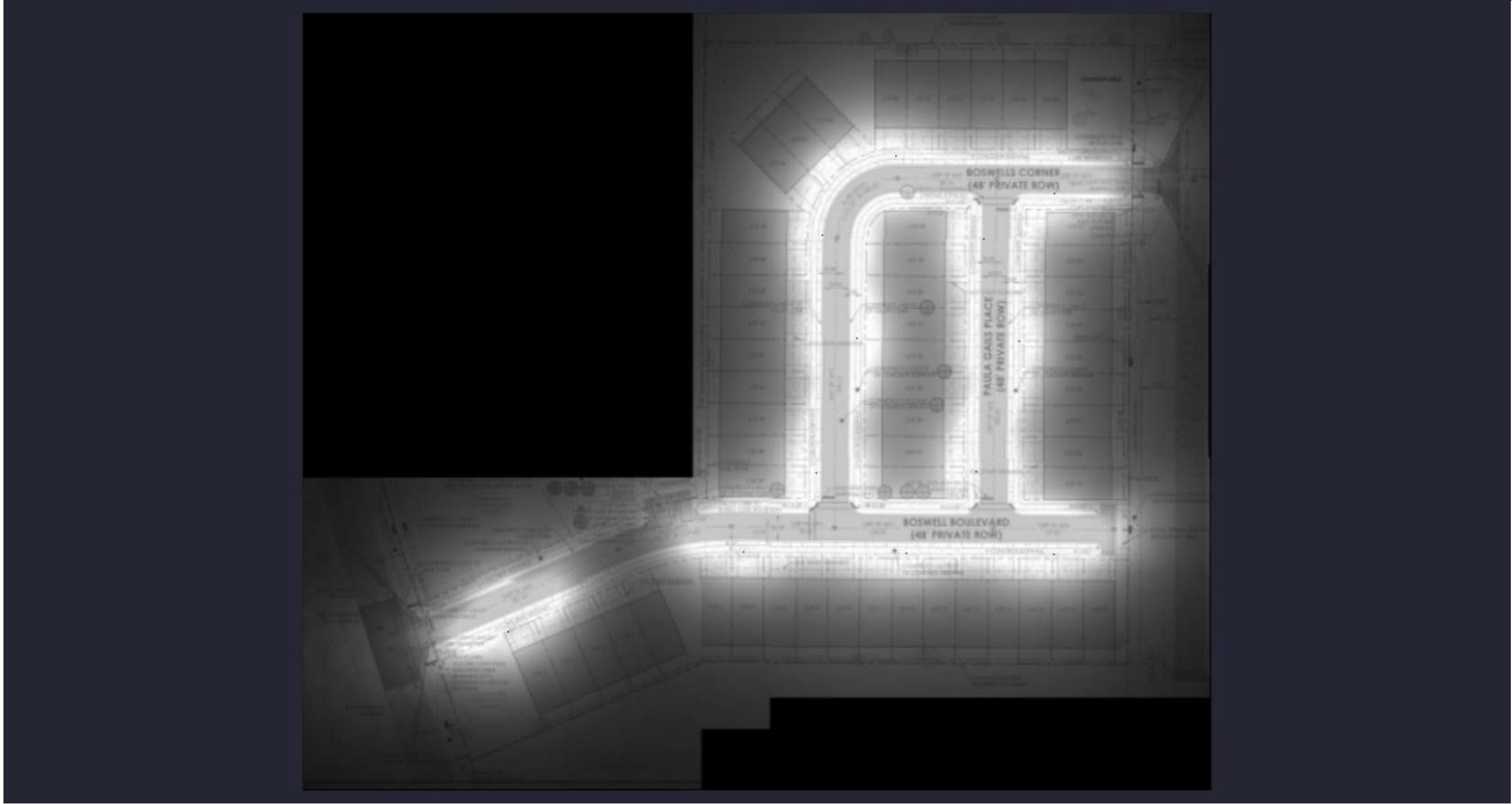
Revision 1

#	Date	Comments

Revisions 1



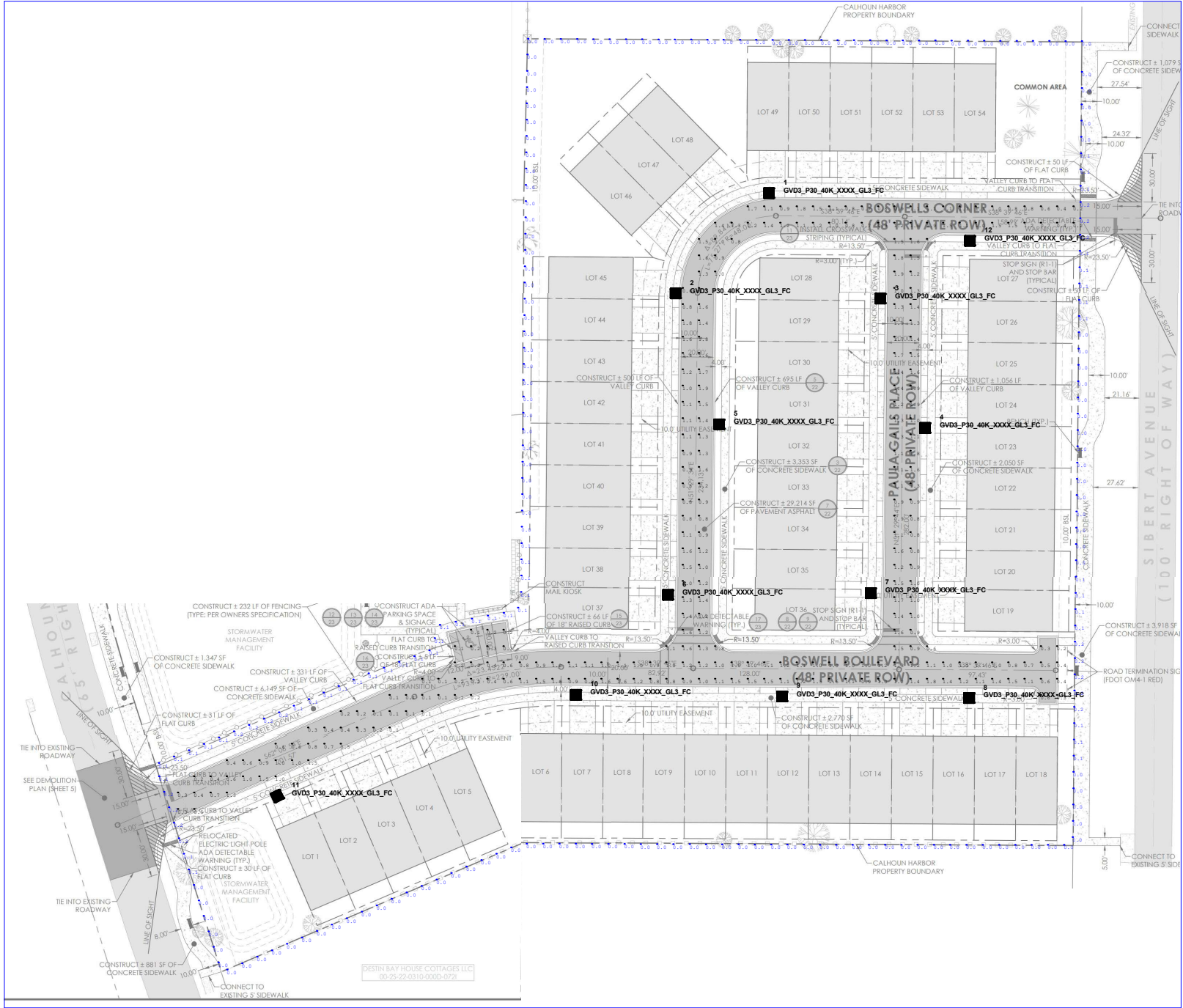
Page 1 of 7



Calhoun Harbor

Drawn By: Gerard Mead
Checked By: Gerard Mead
Date: 2/13/2024
Revision 1

Revisions 1			
#	Date	Comments	

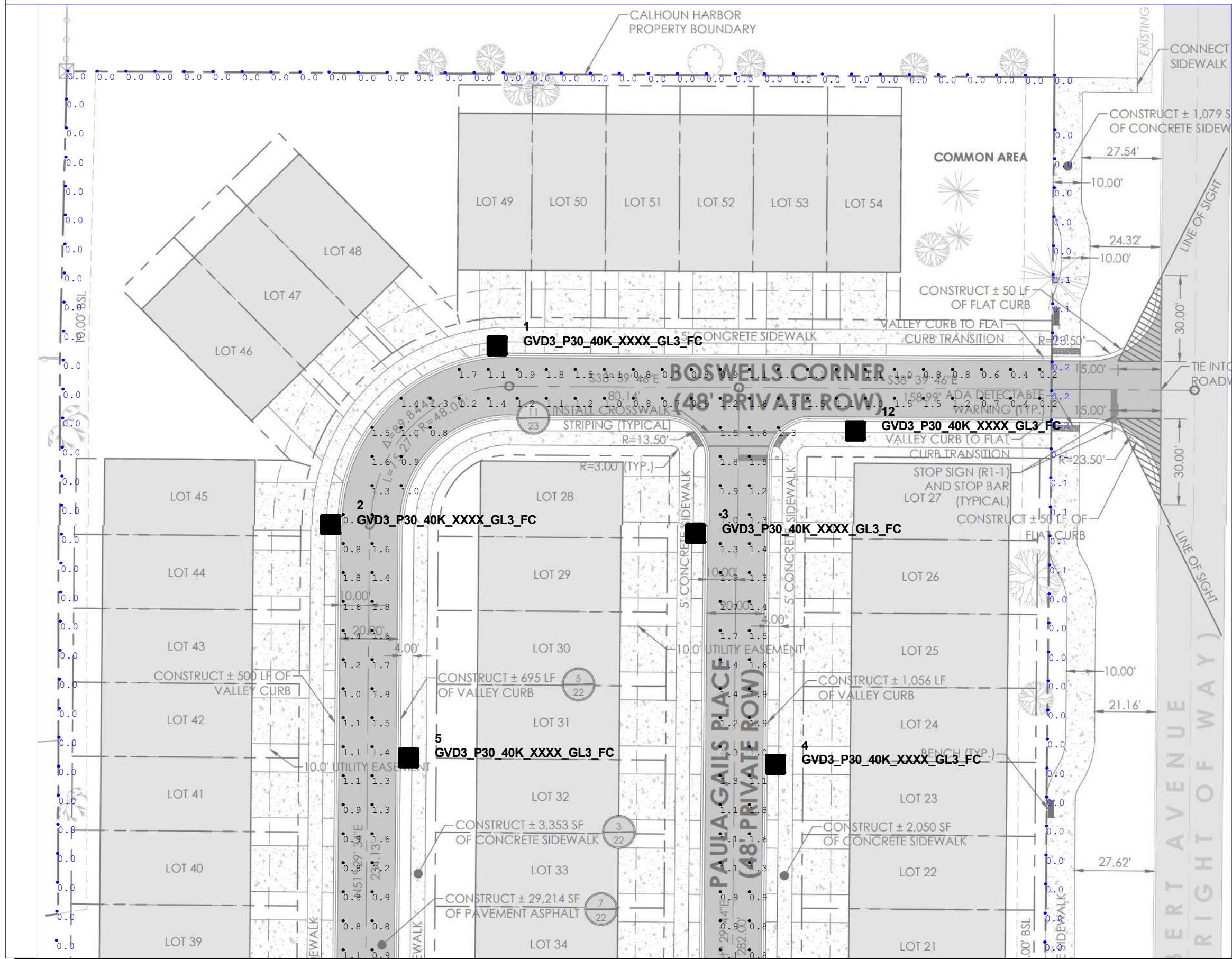


Calhoun Harbor

Drawn By: Gerard Mead
Checked By: Gerard Mead
Date: 2/13/2024
Revision 1

#	Date	Comments
Revisions 1		

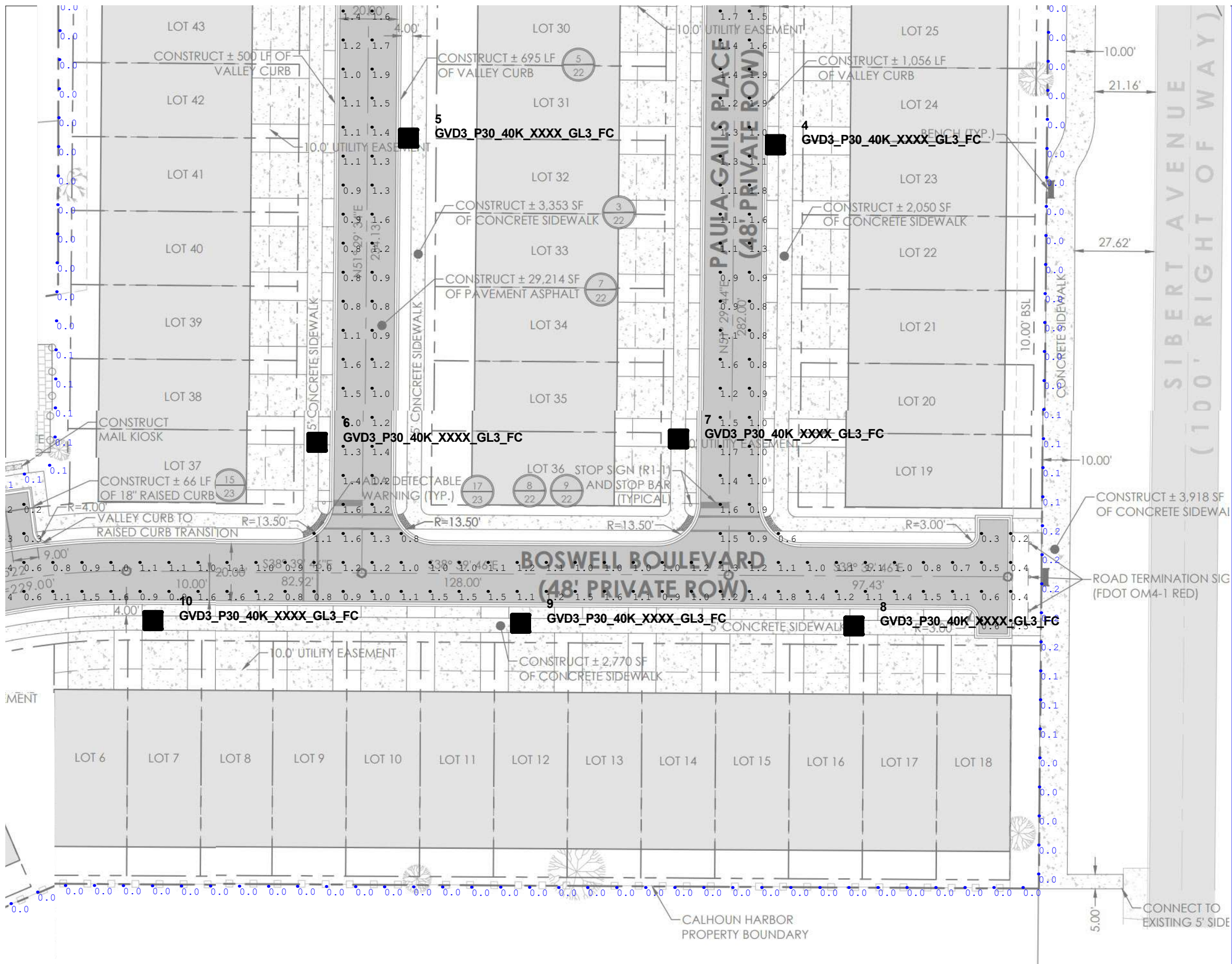




#	Date	Comments
Revisions 1		

Drawn By: Gerard Mead	Checked By: Gerard Mead	Date: 2/13/2024	Revision 1
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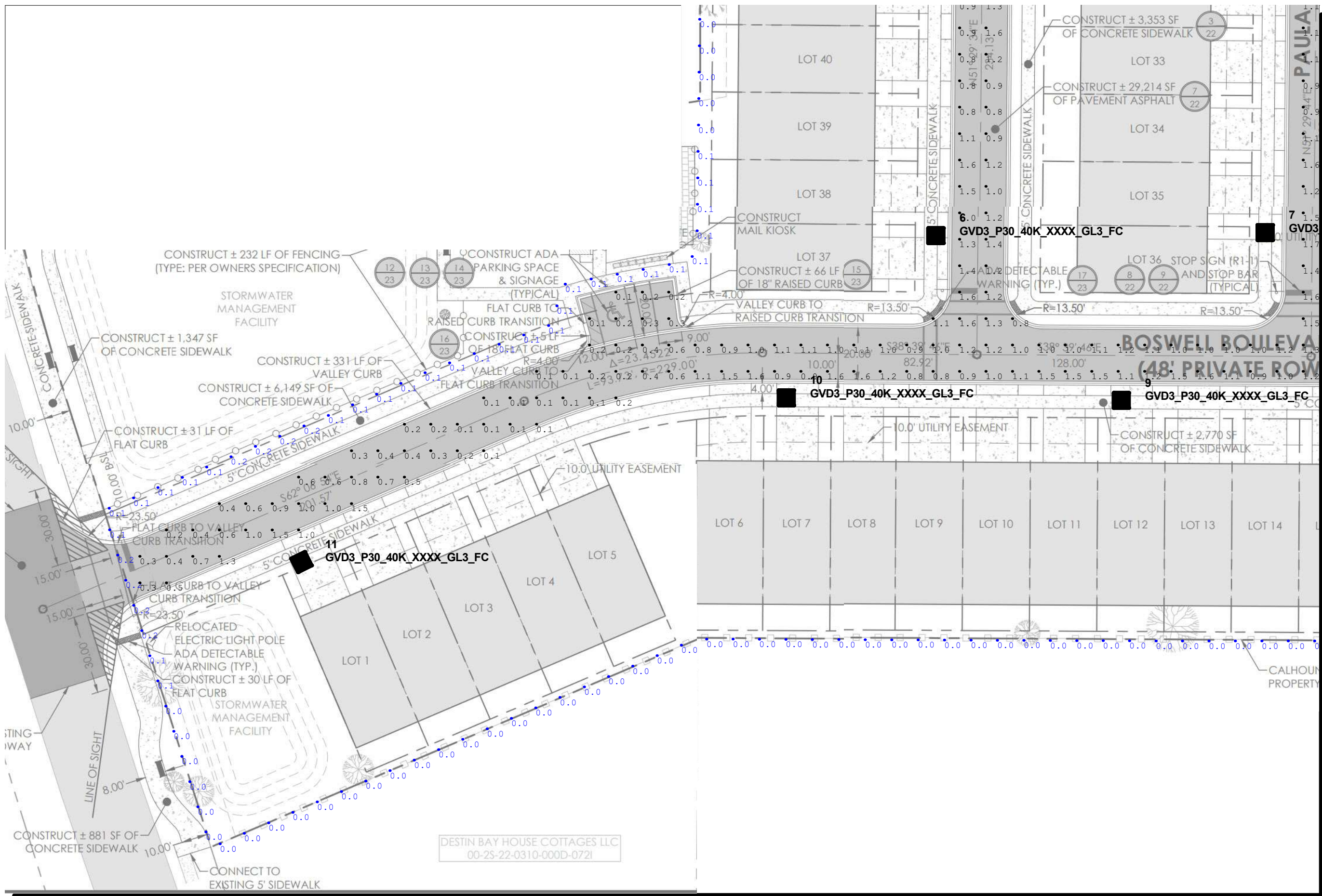
Calhoun Harbor	
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#	Date	Comments
Revisions 1		

Drawn By: Gerard Mead
Checked By: Gerard Mead
Date: 2/13/2024
Revision 1

Calhoun Harbor	
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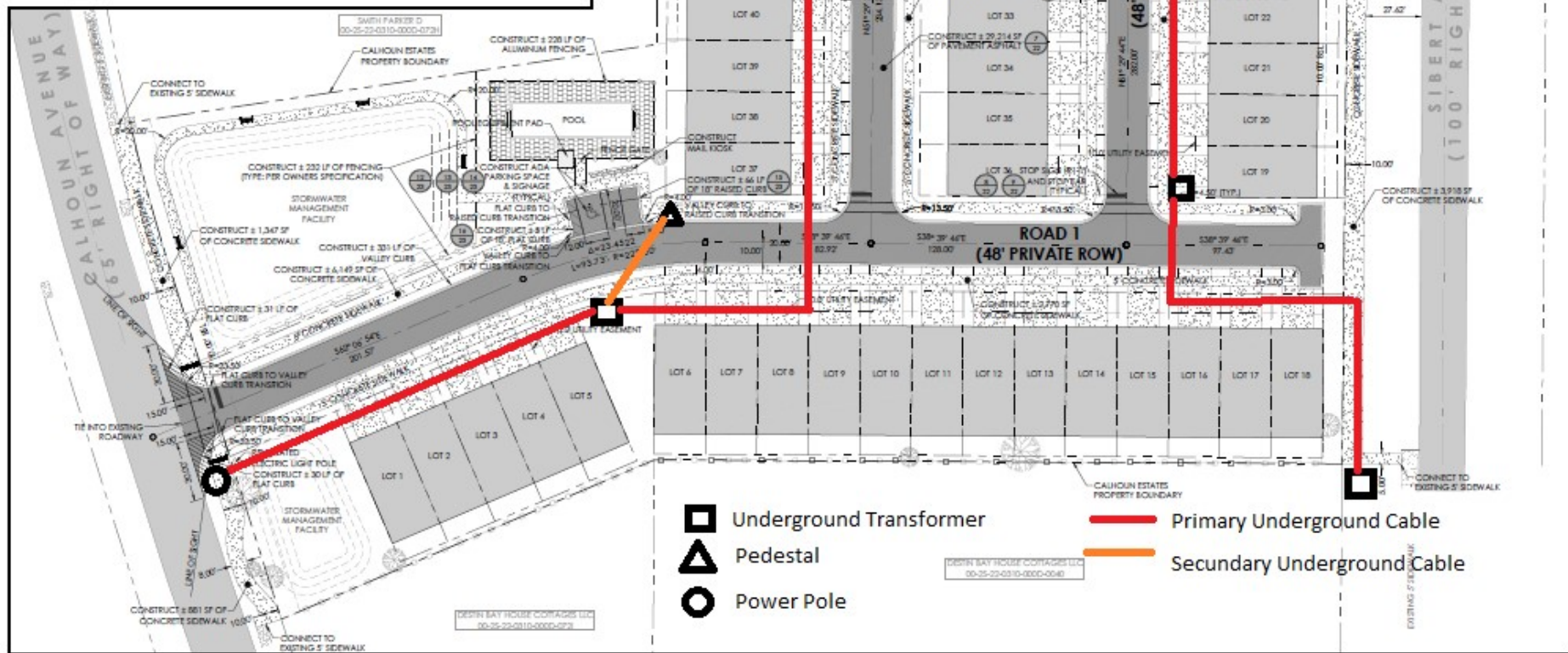
Revisions 1	
#	Comments
Revisions 1	
Drawn By: Gerard Mead	
Checked By: Gerard Mead	
Date: 2/13/2024	
Revision 1	

Calhoun Harbor	

CALHOUN ESTATES BY THE BAY			
MUNICIPALITY:	CITY OF DESTIN, FLORIDA		
TAX PARCEL ID NUMBER:	00-25-23-0110-0000-0050, 005A, 00A, 00B, 00C, 00D, 00E, 00F, 00G		
ZONING:	CALHOUN MIXED USE - VILLAGE		
FUTURE LAND USE:	CALHOUN MIXED USE - VILLAGE		
LOCATION:	THE SITE IS SOUTHEAST OF CALHOUN AVENUE AND NORTHWEST OF SIBERT AVENUE		
SITE DESCRIPTION:	THE SITE IS CURRENTLY VACANT WITH NO IMPROVEMENTS		
PROPOSED USE:	MULTIFAMILY ATTACHED TOWNHOMES		
ADJACENT FIRM CATEGORIES			
NORTH:	CALHOUN AVENUE / BAY ESTATES		
SOUTH:	SIBERT AVENUE / INSTITUTIONAL		
EAST:	SIBERT AVENUE / ROW-R		
WEST:	CALHOUN AVENUE / CMU		
OVERALL SITE AREA:	5.20 Acres (226,745.16 SF)		
NUMBER OF LOTS:	54		
OPEN SPACE REQUIREMENT:	25% (56,687.05 SF) (1.3 AC)		
SIDEWALK:	0.25 Acres (10,894.70 SF)		
OPEN SPACE PROVIDED:	1.00 Acres (50,001.26 SF)		
TOTAL OPEN SPACE PROVIDED**:	2.13 Acres (92,925.94 SF)		
TOTAL IMPERVIOUS SURFACE PROVIDED**:	3.07 Acres (133,822.22 SF)		
ARTICLE 7.12.08 (TABLE 7-3 - SCHEDULE OF DIMENSIONAL REQUIREMENTS IN ZONING DISTRICTS)			
DESCRIPTION	REQUIREMENT	PROVIDED	REQ/MT MET?
MAXIMUM BLDG HEIGHT:	50 FT (4 STORIES)	< 35 FT (3 STORIES)	YES
MAXIMUM DENSITY	12 Units/Ac	10.4 Units/Ac	YES
MINIMUM OPEN SPACE %:	25.00%	36.18%	YES
SETBACKS:			
FRONT:	10 - 30 FT	10 FT	YES
REAR:	10 FT	10 FT	YES
SIDE (WEST):	0 FT	0 FT	YES
SIDE (EAST):	0 FT	0 FT	YES
MINIMUM LOT AREA:	N/A	N/A	N/A
ARTICLE 8.04.10 (TABLE 8-4 - NUMBER OF VEHICLE AND BICYCLE PARKING SPACES REQUIRED)			
DESCRIPTION	REQUIREMENT	PROVIDED	REQ/MT MET?
RESIDENTIAL (3 SPACES PER DU)	162 SPACES	214 SPACES	YES
POOL AMENITY	N/A	3 SPACES	N/A
TOTAL VEHICLE PARKING	162 SPACES	217 SPACES	YES
ARTICLE 12.04.04.3 (FRONT BOUNDARY /COMMON BOUNDARY LANDSCAPE - WITHIN OLD DESTIN MMID SUB-AREA)			
DESCRIPTION	REQUIREMENT	PROVIDED	REQ/MT MET?
LANDSCAPE BUFFER	N/A	N/A	YES

** PER CHAPTER 13 (GLOSSARY) OF THE CITY OF DESTIN COMPREHENSIVE PLAN, THE DEFINITION OF OPEN SPACE IS "that portion of a site which includes previous greenspace and impervious landscape that is not occupied by any building coverage or vehicular-use areas;" AND THE DEFINITION OF OPEN SPACE, IMPERVIOUS HARDSCAPE IS "that portion of a site which is impervious and enhances pedestrian access, public gathering spaces, recreation and similar uses in excess of the site performance standards required by the LOC."

** PER CHAPTER 13 (GLOSSARY) OF THE CITY OF DESTIN COMPREHENSIVE PLAN, THE DEFINITION OF OPEN SPACE IS "that portion of a site which includes pervious green space and impervious hardscape that is not occupied by any building coverage or vehicle-use areas." AND THE DEFINITION OF OPEN SPACE, IMPERVIOUS HARDSCAPE IS "that portion of a site which includes pervious and enhance pedestrian access, public gathering spaces, recreation and similar uses in excess of the site performance standards required by the LDC."





July 7, 2023

Ms. Rachel Hoag

Planner

City of Destin - Community Development

4100 Indian Bayou Trail

Destin, FL 32541

Email: rhoag@cityofdestin.com

Re: Calhoun Harbor Conditional Use

Project# LU-001154-2023

Criteria for Conditional Uses

Dear Ms. Hoag,

Our client is requesting approval of Conditional Use LU-001154-2023, associated with Major Development Project DEV-001146-2023, for the proposed development known as Calhoun Harbor. Calhoun Harbor is a residential development consisting of a 54-unit residential townhome development with associated infrastructure on 5.2 acres. The subject property has a zoning designation of CMU-V. Per LDC 7.12.06, Table 7-2, multi-family attached dwellings are an allowable conditional use for the referenced zoning district.

The Conditional Use Criteria is as follows:

- a) **Land Use Compatibility** The proposed use (multi-family attached dwelling) is listed as a Conditional Use in the Calhoun Avenue Mixed Use – Village (CMU-V) zoning district. Per the LDC, *“the area shall redevelop as a mixed-use area, accommodating primarily medium to high density long and short-term residential uses”*; with the proposed being long-term residential. The development has been planned to utilize interconnected pathways throughout the development to connect to existing pedestrian pathways off-site. The proposed density of 10.4DU/AC is in keeping with both existing and newly approved developments. Being as the development is a proposed residential use, similar to surrounding developments, there are no off-site impacts anticipated and mitigation efforts to include landscaping and necessary buffering will be applied.
- b) **Sufficient site size, adequate site specifications, and infrastructure to accommodate the proposed use** The CMU-V zoning district has a maximum density of 12DU/AC; the proposed density of 10.4DU/AC for this development does not exceed what is allowable. The 5.2AC subject parcel is large enough to accommodate all required facilities and infrastructure in relation to the size of the proposed development. Stormwater management consists of a dry retention system, collection swales and a series of interconnected pipes. Two separate accesses to the development will be provided- one at Sibert Avenue and another at Calhoun Avenue, with internal streets within the development connecting the two. Internal sidewalks

within the development as well as additional sidewalks being proposed abutting both Calhoun Avenue and Sibert, lend to interconnectivity with the immediate surrounding area.

- c) **Proper use of mitigative techniques** As previously outlined, stormwater management will occur on-site. Internal street lighting, as provided with the Major Development Project DEV-001146-2023, will cause no lighting pollution and will not adversely impact adjacent properties. With 216 residential parking spaces proposed and an additional 3 spaces for the pool amenity, we have far exceeded the required 162 spaces and demonstrated there will be no impact caused by parking outside the immediate development area.
- d) **Hazardous waste** No hazardous waste is anticipated to be generated as part of this development.
- e) **Avoid over-proliferation of uses** Multi-family attached dwellings are a Conditional Use within the CMU-V zoning district. Based on a review of surrounding developments, there is a mix of uses with only three multi-family developments in the immediate vicinity.
- f) **Compliance with applicable laws and ordinances** As proposed, we believe this Conditional Use application meets development standards outlined in the City of Destin LDC and adheres to the objectives of the Comprehensive Plan.

Sincerely,

Innerlight Engineering Corporation

SHEET INDEX:

1 - DEDICATIONS, CERTIFICATIONS, DESCRIPTION
2 - BOUNDARY LOCATION INFORMATION

CALHOUN HARBOR
A REPLAT OF LOTS 5, 6, 7, 8, 9, AND 72, BLOCK D, SECOND REVISION OF CALHOUNS
SUBDIVISION OF ADDITION TO TOWN OF DESTIN FLORIDA, PLAT BOOK 2, PAGE 43-A
UNSECTIONALIZED - TOWNSHIP 2 SOUTH - RANGE 22 WEST
CITY OF DESTIN - OKALOOSA COUNTY, FLORIDA

DEDICATION:

KNOW ALL MEN BY THESE PRESENTS THAT CALHOUN ESTATES PROPERTIES, INC., A FLORIDA CORPORATION, UNDER LAWS OF THE STATE OF FLORIDA AND AS OWNER OF THE LANDS HEREON PLATTED AS "CALHOUN HARBOR", DOES DECLARE THAT IT HAS CAUSED THE SAME TO BE SUBDIVIDED AS SHOWN ON THIS PLAT AND DOES HEREBY DEDICATE IN PERPETUITY TO THE THE CALHOUN HARBOR OWNERS' ASSOCIATION, INC. ALL STREETS, PRIVATE RIGHTS OF WAY, EASEMENTS AND THE COMMON AREAS SHOWN HEREON TO BE KEPT AS PRIVATE. CALHOUN ESTATES PROPERTIES, INC., A FLORIDA CORPORATION DOES ALSO HEREBY GRANT NON-EXCLUSIVE EASEMENTS WITHIN ALL STREETS, RIGHTS OF WAY, EASEMENTS, AND THE COMMON AREA AS SHOWN HEREON TO VARIOUS UTILITY COMPANIES FOR THE PURPOSES OF INGRESS, EGRESS, INSTALLATION, REPAIR, AND MAINTENANCE OF UTILITIES, INCLUDING BUT NOT LIMITED TO DESTIN WATER USERS, OKALOOSA GAS DISTRICT, COX COMMUNICATIONS, AND GULF POWER CALHOUN ESTATES PROPERTIES, INC., A FLORIDA CORPORATION, DOES HEREBY REQUEST THAT SAID PLAT OF "CALHOUN HARBOR" BE RECORDED IN THE PUBLIC RECORDS OF OKALOOSA COUNTY, FLORIDA. THE RECORDING OF THIS PLAT DOES NOT DEDICATE ANY PROPERTY TO THE PUBLIC.

MANAGING MEMBER

WITNESS

WITNESS

ACKNOWLEDGMENT TO DEDICATION:

STATE OF FLORIDA, COUNTY OF _____

THIS IF TO CERTIFY THAT ON THE _____ DAY OF _____, BEFORE ME, _____ PERSONALLY APPEARED AND WHO IS PERSONALLY KNOWN TO ME TO BE THE INDIVIDUAL DESCRIBED IN AND WHO EXECUTED THE FOREGOING INSTRUMENT OF DEDICATION AS, OR WHO HAS PRODUCED _____ AS IDENTIFICATION, ACKNOWLEDGED TO AND BEFORE ME THAT SAID INSTRUMENT IS THE FREE ACT AND DEED OF _____.

NOTARY PUBLIC, STATE OF FLORIDA

MY COMMISSION EXPIRES: _____

TITLE OPINION:

IT IS THE OPINION OF THE UNDERSIGNED TITLE EXAMINER, LICENSED IN THE STATE OF FLORIDA, THAT TITLE TO THE LANDS DESCRIBED HEREON IS IN THE NAMES OF THE DEDICATORS AS SHOWN HEREON AND THAT THERE ARE NO UNSATISFIED MORTGAGES ON SAID LAND OTHER THAN AS SHOWN HEREON. OPINION RENDERED ON THE _____ DAY OF _____.

TITLE EXAMINER - SETCO SERVICES, LLC

COMMUNITY DEVELOPMENT DEPARTMENT APPROVAL:

THIS CERTIFIES THAT THIS PLAT WAS PRESENTED TO AND APPROVED BY THE COMMUNITY DEVELOPMENT DIRECTOR OF THE CITY OF DESTIN, FLORIDA, THIS DAY _____ OF _____.

A. LOUIS ZINGUZE, COMMUNITY DEVELOPMENT DIRECTOR



VICINITY MAP
NOT TO SCALE

LEGAL DESCRIPTION (AS FURNISHED):

PARCEL 1:

LOTS 5, AND 6, BLOCK D, CALHOUN'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 2, PAGE(S) 43-A, OF THE PUBLIC RECORDS OF OKALOOSA COUNTY, FLORIDA.

PARCEL 2:

LOT 7, BLOCK D, CALHOUN'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 2, PAGE(S) 43-A, OF THE PUBLIC RECORDS OF OKALOOSA COUNTY, FLORIDA.

PARCEL3:

LOT 8, BLOCK D, CALHOUN'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 2, PAGE(S) 43-A, OF THE PUBLIC RECORDS OF OKALOOSA COUNTY, FLORIDA.

PARCEL 4:

LOT 9, BLOCK D, CALHOUN'S SUBDIVISION. ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 2, PAGE(S) 43-A, OF THE PUBLIC RECORDS OF OKALOOSA COUNTY, FLORIDA.

PARCEL 5:

COMMENCE AT A CONCRETE MONUMENT AT THE MOST NORTHEASTERLY CORNER OF LOT 16, BLOCK D, SECOND REVISION OF CALHOUN'S SUBDIVISION OF ADDITION TO TOWN OF DESTIN, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 2, PAGE 43-A, OF THE PUBLIC RECORDS OF OKALOOSA COUNTY, FLORIDA; THENCE GO NORTH 44°14'00" WEST ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF FOREST STREET, (60' R/W) A DISTANCE OF 345.00 FEET TO A CONCRETE MONUMENT; THENCE GO SOUTH 45°46'00" WEST A DISTANCE OF 993.08 FEET TO A CONCRETE MONUMENT AND THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 45°46'00" WEST A DISTANCE OF 147.92 FEET; THENCE GO NORTH 62°47'00" WEST A DISTANCE OF 220.75 FEET TO A CONCRETE MONUMENT AND THE EASTERLY RIGHT-OF-WAY LINE OF CALHOUN AVENUE (STATE ROAD NO. 30-A, 66' R/W); THENCE GO NORTH 27°40'00" EAST ALONG AFORESAID RIGHT-OF-WAY LINE A DISTANCE OF 111.72 FEET TO POINT OF CURVATURE; THENCE CONTINUE ALONG AFORESAID RIGHT-OF-WAY LINE ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 990.51 FEET, AN ARC DISTANCE OF 76.29 FEET; THENCE GO SOUTH 52°30'58" EAST A DISTANCE OF 267.71 FEET TO THE POINT OF BEGINNING. ALL LYING AND BEING IN LOT 72, BLOCK D, SECOND REVISION OF CALHOUN'S SUBDIVISION OF ADDITION TO TOWN OF DESTIN, OKALOOSA COUNTY, FLORIDA.

PARCEL 6:

COMMENCING AT THE SE CORNER OF LOT 16, BLOCK D, SECOND REVISION OF CALHOUN SUBDIVISION, GO NORTH 44°11' WEST 345.00 FEET; THENCE SOUTH 45°46' WEST 1140.95 FEET TO THE POINT OF BEGINNING; CONTINUE SOUTH 45°46' WEST 29 FEET; THENCE SOUTH 20°57' WEST 21 FEET; THENCE NORTH 67°08' WEST 311.57 FEET; THENCE NORTH 30°17' EAST 73.5 FEET; THENCE SOUTH 62°55' EAST 217.14 FEET TO THE POINT OF BEGINNING, BEING A PART OF LOT 72, BLOCK D, SECOND REVISION OF CALHOUN'S SUBDIVISION OF ADDITION TO TOWN OF DESTIN, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 2, PAGE 43-A, OF THE PUBLIC RECORDS OF OKALOOSA COUNTY, FLORIDA.

SURVEYOR'S CERTIFICATE:

THE UNDERSIGNED HEREBY ACKNOWLEDGES THAT THIS PLAT WAS PREPARED UNDER HIS DIRECTION AND SUPERVISION, PERMANENT REFERENCE MONUMENTS HAVE BEEN SET, AND THAT THIS PLAT WAS PREPARED IN COMPLIANCE WITH THE SURVEY REQUIREMENTS OF CHAPTER 177, PART 1, PLATTING, OF THE FLORIDA STATUTES.

G.A. "JOSH" SMITH, PSM
PROFESSIONAL LAND SURVEYOR
FLORIDA REGISTRATION NUMBER #7186
INNERLIGHT ENGINEERING CORPORATION
CERTIFICATE OF AUTHORIZATION, LICENSED BUSINESS # 7927
11490 EMERALD COAST PARKWAY
MIRAMAR BEACH, FLORIDA 32550
850.424.5855 ~ TELEPHONE

DATE

DESTIN PUBLIC SERVICES APPROVAL:

CITY OF DESTIN
STATE OF FLORIDA

PRESENTED TO AND APPROVED BY THE PUBLIC SERVICES DIRECTOR OF THE CITY OF DESTIN, FLORIDA THIS _____ DAY OF _____.

MICHAEL BURGESS
PUBLIC SERVICES DIRECTOR

CITY OF DESTIN APPROVAL:

THE CITY OF DESTIN, HAVING EXAMINED THE WRITTEN PLAT ON THE _____ DAY OF _____, _____, DOES HEREBY APPROVE THE PLAT FOR RECORDING.

BOBBY WAGNER, MAYOR

LANCE JOHNSON, CITY MANAGER

REY BAILEY, CITY CLERK

TAX COLLECTOR'S CERTIFICATE:

OKALOOSA COUNTY
STATE OF FLORIDA

I, BEN ANDERSON, DO HEREBY CERTIFY THAT THE TAXES HAVE BEEN PAID FOR THE TAX YEAR _____ FOR THE PROPERTY DESCRIBED HEREON TO THE BEST OF MY KNOWLEDGE, AS OF THIS _____ DAY OF _____.

BEN ANDERSON, TAX COLLECTOR
OF OKALOOSA COUNTY, FLORIDA

COUNTY CLERK'S CERTIFICATE OF RECORDING:

OKALOOSA COUNTY
STATE OF FLORIDA

I, J.D. PEACOCK II, CLERK OF THE CIRCUIT COURT, DO HEREBY CERTIFY THAT THIS PLAT WAS FILED FOR RECORD ON THE _____ DAY OF _____, _____, IN PLAT BOOK _____, PAGE _____.

J.D. PEACOCK II, CLERK OF CIRCUIT COURT

CITY OF DESTIN SURVEYOR'S CERTIFICATE:

CITY OF DESTIN
STATE OF FLORIDA

THIS IS TO CERTIFY THAT THIS PLAT WAS REVIEWED BY THE CITY OF DESTIN SURVEYOR IN OKALOOSA COUNTY, FLORIDA, AND MEETS THE REQUIREMENTS OF CHAPTER 177 OF THE FLORIDA STATUTES AND WAS APPROVED BY HIM ON THE _____ DAY OF _____.

ERIC B. STUART - PSM# 6707



INNERLIGHT ENGINEERING CORPORATION

THINK • SOLVE • SERVE

THE APPLIED SCIENCE OF SUCCESS

11490 EMERALD COAST PARKWAY, SUITE 2W
MIRAMAR BEACH | FLORIDA | 32550
LB#7927 | TELEPHONE: 850.424.5855

CALHOUN HARBOR

SHEET INDEX:

1 - DEDICATIONS, CERTIFICATIONS, DESCRIPTION
2 - BOUNDARY LOCATION INFORMATION

CALHOUN HARBOR

A REPLAT OF LOTS 5, 6, 7, 8, 9, AND 72, BLOCK D, SECOND REVISION OF CALHOUNS
SUBDIVISION OF ADDITION TO TOWN OF DESTIN FLORIDA, PLAT BOOK 2, PAGE 43-A
UNSECTIONALIZED - TOWNSHIP 2 SOUTH - RANGE 22 WEST
CITY OF DESTIN - OKALOOSA COUNTY, FLORIDA

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD DIRECTION	CHORD LENGTH
C1	83.91'	205.00'	23°27'08"	S50°23'20"E	83.33'
C2	93.73'	229.00'	23°27'08"	S50°23'20"E	93.08'
C3	103.56'	253.00'	23°27'08"	N50°23'20"W	102.84'
C4	112.90'	72.00'	89°50'39"	N83°35'06"W	101.68'
C5	75.27'	48.00'	89°50'39"	S83°35'06"E	67.79'
C6	37.63'	24.00'	89°50'39"	S83°35'06"E	33.89'

GENERAL NOTES

- THIS PLAT IS BASED UPON A BOUNDARY SURVEY BY THIS FIRM AND WAS PREPARED IN ACCORDANCE WITH THE STANDARDS OF PRACTICE FOR PROFESSIONAL SURVEYORS AND MAPPERS AS DEFINED IN CHAPTER SJ-17.051 OF THE FLORIDA ADMINISTRATIVE CODE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS PURSUANT TO SECTION 472.022 OF THE FLORIDA STATUTES.
- SOURCES OF INFORMATION RELIED UPON FOR THE PREPARATION OF THIS PLAT INCLUDES THE FOLLOWING: FIELD RECOVERED MONUMENTATION AND DEEDS, PLATS AND OTHER DOCUMENTATION AS NOTED HEREON.
- THIS PLAT DOES NOT REFLECT RESEARCH BY INNERLIGHT ENGINEERING CORPORATION REGARDING TITLE OR EASEMENT. THERE MAY EXIST: DEEDS OF RECORD, UNRECORDED DEEDS, PLATS, UNRECORDED PLATS, EASEMENTS, RIGHT-OF-WAYS, OR OTHER INSTRUMENTS THAT MAY AFFECT THIS PARCEL.
- NORTH AND THE BEARINGS DEPICTED HEREON ARE BASED UPON THE STATE PLANE COORDINATE SYSTEM - FLORIDA NORTH ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83) UTILIZING THE TRIMBLE ACCESS GPS NETWORK.
- ALL LOT LINES DEPICTED HEREON ARE NON-RADIAL (N.R.) UNLESS OTHERWISE NOTED.

ABBREVIATIONS

R/W	RIGHT-OF-WAY
N	NORTH
S	SOUTH
E	EAST
W	WEST
LB	LICENSED BUSINESS
MFEE	MINIMUM FINISHED FLOOR ELEVATION
°	DEGREES WHEN USED IN A BEARING OR ANGLE
'	MINUTES WHEN USED IN A BEARING OR ANGLE
"	SECONDS WHEN USED IN A BEARING OR ANGLE
FEET	FEET OR DECIMAL THEREOF WHEN USED IN A DIMENSION
Δ	DELTA
BSL	BUILDING SETBACK LINE
CL	CHORD LENGTH
CB	CHORD BEARING
BFE	BASE FLOOD ELEVATION
SFHA	SPECIAL FLOOD HAZARD AREA
O.R.	OFFICIAL RECORDS
UTE	UTILITY EASEMENT

LEGEND

●	PERMANENT REFERENCE MONUMENT (PRM) FOUND 1/2" IRON PIN (AS NOTED)(STAMPED PRM)
○	PERMANENT CONTROL POINT (PCP) SET NAIL & DISK (PCP 7927)
●	FOUND PERMANENT REFERENCE MONUMENT (PRM) FOUND 1" IRON PIPE
⊙	PERMANENT REFERENCE MONUMENT (PRM) SET 1/2" IRON PIN (PRM 7927)
■	FOUND PERMANENT REFERENCE MONUMENT (PRM) FOUND 4"x4" CONCRETE MONUMENT LB 3293(STAMPED PRM)

NOTICE

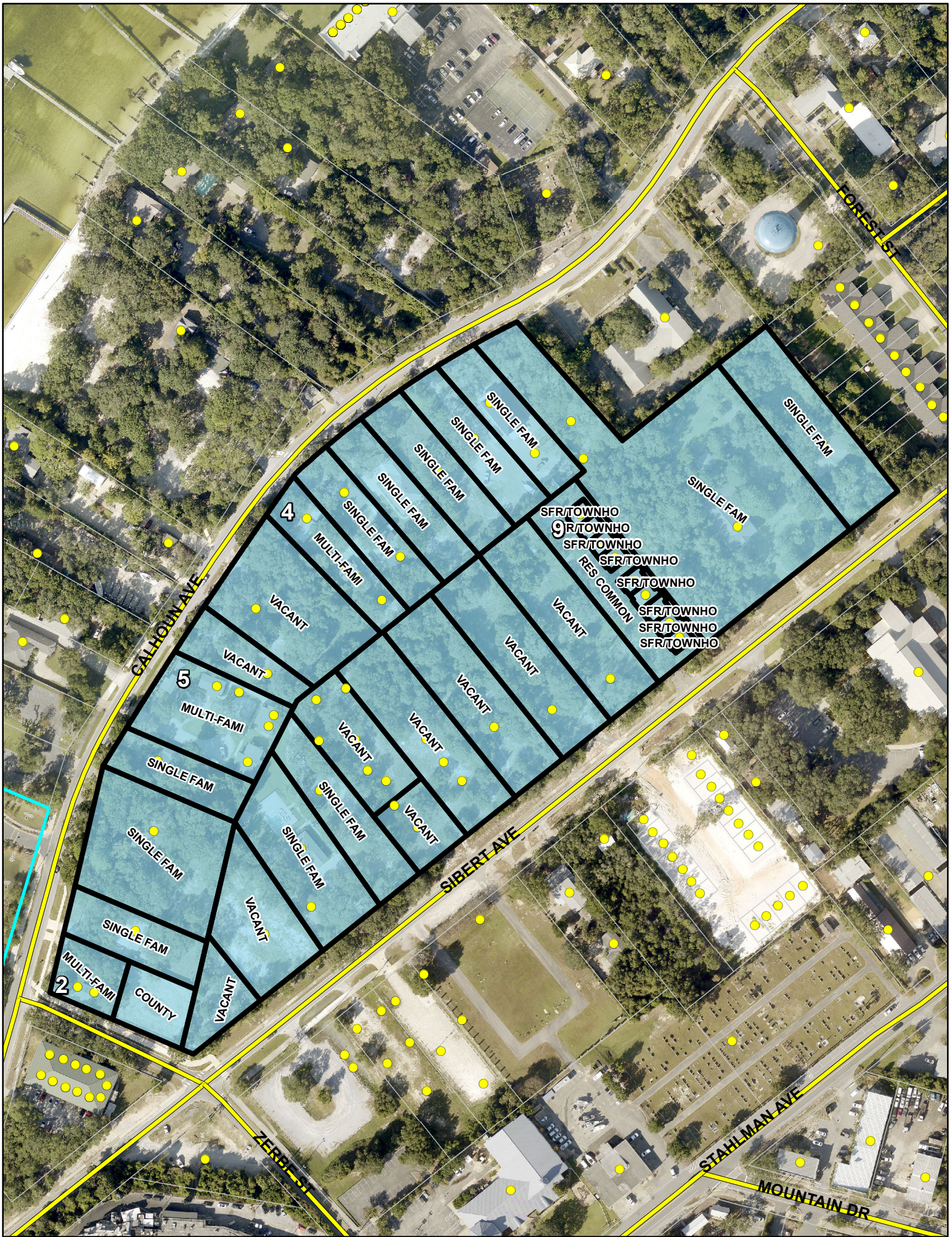
THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THIS PLAT. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.

OKALOOSA COUNTY STATEMENT

ALL PUBLIC AREAS SHOWN ON THIS PLAT, UNLESS OTHERWISE STATED, SHALL BE DEEMED TO HAVE BEEN DEDICATED TO THE PUBLIC FOR THE USES AND PURPOSES HEREON STATED. HOWEVER, NOTHING HEREIN SHALL BE CONSTRUED AS CREATING AN OBLIGATION UPON OKALOOSA COUNTY TO PERFORM ANY ACT OF CONSTRUCTION OR MAINTENANCE WITHIN SUCH DEDICATED AREAS, EXCEPT WHEN THE OBLIGATION IS VOLUNTARILY ACCEPTED BY THE GOVERNING BODY OF OKALOOSA COUNTY, FLORIDA. THE MERE RECORDING OF THIS PLAT DOES NOT CONSTITUTE ACCEPTANCE FOR ANY ACT OF CONSTRUCTION OR MAINTENANCE.

**INNERLIGHT ENGINEERING CORPORATION**
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LB#7927 | TELEPHONE: 850.424.5855

CALHOUN HARBOR



CALHOUN AVE

FOREST ST

SIPERT AVE

STAHLMAN AVE

MOUNTAIN DR

ZERK ST

SINGLE FAM

SINGLE FAM

SINGLE FAM

SINGLE FAM

SINGLE FAM

MULTI-FAM

VACANT

VACANT

MULTI-FAM

SINGLE FAM

SINGLE FAM

SINGLE FAM

MULTI-FAM

COUNTY

VACANT

SINGLE FAM

VACANT

VACANT

VACANT

SFR/TOWNHO

SFR/TOWNHO

SFR/TOWNHO

RES COMMON

VACANT

SFR/TOWNHO

SFR/TOWNHO

SFR/TOWNHO

SFR/TOWNHO

SFR/TOWNHO

SFR/TOWNHO

4

5

2

9

134 Calhoun Avenue
Destin, FL 32541-1504
August 5, 2023

Ms. Rachel Hoag, Principal Planner
Community Development, Planning and Zoning Division
4100 Indian Bayou Trail
Destin, FL 32541

Dear Ms. Hoag

Thank you for your letter notifying those of us living in the area about the development of Land Parcels 122 and 124 and Parcels 119 through 135. This is a similar letter which I wrote when the previous project for the same parcels was under discussion in September 2022.

Addressing my point, I am voicing my concern regarding the impact of this new project on the intersection(s) of Route 98 and Calhoun Avenue, Calhoun Avenue and Zerbe Street, Zerbe Street and Sibert Avenue, Zerbe Street and Stahlman Avenue and Stahlman Avenue and Route 98.

The above-mentioned intersections are dangerous intersections particularly when you add the afternoon departure of workers heading toward Fort Walton Beach. Traffic backs up on Calhoun Avenue as vehicles attempt to access Route 98. The traffic traveling on Zerbe Street from Calhoun Avenue across Sibert Avenue to Stahlman Avenue is stalled on most days as people attempt to turn right to gain access to Route 98 or blindly dart left through traffic to drive down Stahlman Avenue and/or Stahlman Avenue to Mountain Drive. On days when traffic is slowed on Route 98 due to an accident, etc., many people drive the back roads crossing Kelly Street to Calhoun and/or Stahlman Avenue to access Route 98, additionally placing a heavier burden on the above-mentioned intersections. Emergency vehicles, housed at the new fire station on Calhoun Avenue directly across from the proposed 37-lot development, need immediate access to Route 98. Traffic from two busy city parks, which flanks the fire station on Calhoun, further complicates an already congested and dangerous situation. Finally, the programs and services provided at the Destin Community Center adds to the traffic congestion.

Ms. Rachel Hoag

-2-

September 13, 2022

Please understand, I have no problem with the development project. However, it is my hope that appropriate agencies would investigate alternative(s) for traffic flow to ensure the safety of passengers traveling in vehicles, the residents living in the area, others using the parks and the bicycle routes, and those requiring emergency services.

Respectfully



Ted D. Spring

Copy: Louis Zunguze, MURP, Community Development Director, Planning Division

Jed D. Spring
134 Calhoun Avenue
Destin, FL 32541

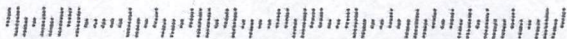
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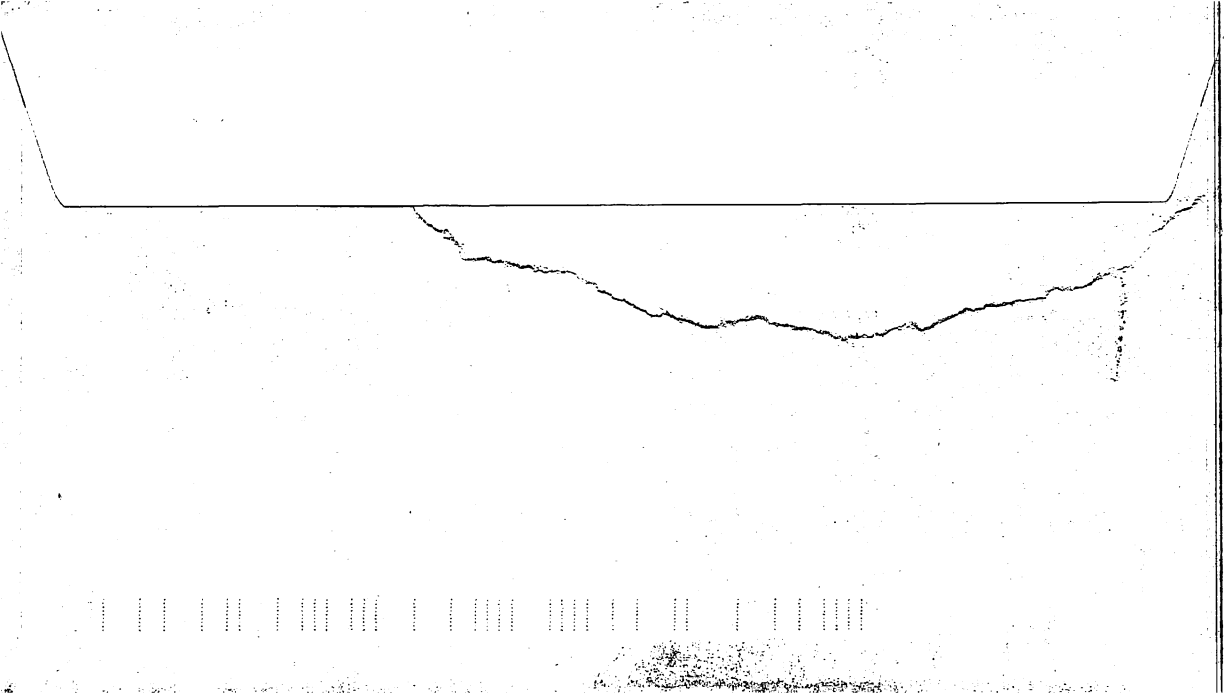
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Ms. Rachel Haag, Planner
Community Development, Planning
and Zoning Division
4100 Indian Bayou Trail
Destin, FL 32541

32541-430300







Community Development Department

Office of the Director

4100 Indian Bayou Trail | Destin, FL 32541 | Phone: 850-654-1119 | Email: planning@cityofdestin.com

June 4, 2024

Development Order No. 24-11

Final Development Order:

CALHOUN HARBOR MAJOR DEVELOPMENT ORDER & MAJOR SUBDIVISION (DEV-001146-2023 & SUB-001165-2023)

Based upon the City's approval and issuance of this Development Order on June 4, 2024, this document will serve as the Final Development Order for the proposed subject project(s), and includes all of the provisions and conditions in the attached Technical Review Committee Report.

The approved project scope includes the construction of a 54-unit long-term multi-family attached townhome development and the associated site infrastructure, as well as a public pocket park. This approved Development Order and Subdivision is for the property located and described below:

Various parcels within the 100 blocks of Sibert and Calhoun Avenue
Destin, FL 32541

Parcel IDs: 00-2S-22-0310-000D-0090, 00-2S-22-0310-000D-0080, 00-2S-22-0310-000D-0070, 00-2S-22-0310-000D-0060, 00-2S-22-0310-000D-0050, 00-2S-22-0310-000D-005A, 00-2S-22-0310-000D-072G, 00-2S-22-0310-000D-072E

DETERMINATIONS:

1. This final development order is in accordance with the approved construction documents, which is inclusive of the Destin Water Users (DWU) approval with conditions (Exhibit A), Destin Fire Control approval with conditions (Exhibit B), Civil Plans (Exhibit C), Landscape Plans (Exhibit D), and Photometric Plans (Exhibit E), dated approved June 4, 2024.
2. All the findings and requirements of the Technical Review Committee report are incorporated herein.

CONDITIONS OF APPROVAL:

SPECIFIC CONDITIONS:

1. Retention area cannot be used as a dog park, the outfall into the City's MS4 and ultimately into the bay is for the release of treated stormwater only.
2. Concrete sidewalk in the City's right-of-way must remain open and in good repair throughout construction for the project. Broken sections of sidewalk must be replaced within 10 days of

completion of work near or at the sidewalk, completed and inspected. The City may cite (with a monetary fine) the contractor and/or property owner for each day the sidewalk is not completed & inspected passed the 10 days.

3. Applicant shall comply with all Destin Water Users (DWU) and Destin Fire Control District conditions of approval outlined in the corresponding approval letters.

GENERAL CONDITIONS:

1. Pursuant to the City of Destin Land Development Code:

Construction of infrastructure must commence within one (1) year of approval date (date from which the Final Development Order is issued by the Community Development Department) of the Final Development Order on **June 4, 2024** (no later than **June 4, 2025**) and must be completed as shown on plans approved by the Technical Review Committee.

WARNING: If the applicant/owner has not obtained a building permit(s) for either the construction of infrastructure or construction of the entire project and that construction has not commenced within one (1) year of issuance of the final development order, the final development order will become null and void and the application for development order approval must be re-initiated (*Land Development Code (LDC) Section 2.21.00*).

NOTE: Construction of infrastructure shall be defined as site work, grading, or other construction activity (not including clearing and grubbing or demolition of existing structures) related to installation of roadways, access drives, parking lots, underground utilities, stormwater or drainage facilities, or building foundations (*LDC Section 2.21.00*).

NOTE: An applicant/owner who desires to extend the twelve (12) month (1 year) deadline for either the construction of infrastructure or construction of the entire project must submit a written request to the Community Development Department, no less than thirty (30) days prior to the expiration of the twelve (12) month deadline to obtain a building permit and commence construction of infrastructure or construction of the entire project. The applicant may receive only one extension, and such extension shall not exceed one year. The applicant/owner should review *LDC Section 2.21.00* for further explanation of the Development Order extension process.

2. If the applicant fully complies with the requirements of Condition No. 1. above, the concurrency capacity allocation status for “Calhoun Harbor” will be protected. **However, the protected concurrency status will be lost and the application for development order approval must be re-initiated if:**
 - A. Construction permit(s) in association with construction of infrastructure or construction of the entire project are not obtained in accordance with *LDC Section 2.10.00* to maintain concurrency, or
 - B. Construction activity ceases for a period of one (1) year after a building permit for construction of infrastructure or construction of the entire project has been issued so that concurrency is not maintained under *LDC Article 6*.

3. The applicant must obtain City of Destin permits for the following activities on and off site (these

may require bonding):

- A. Disturbance of the City's Right-Of-Way.
- B. Pavement cuts.
- C. Construction of any kind.
- D. Clearing, grubbing, or demolition.
- E. Paving, grading, drainage, sidewalks.
- F. Signage.
- G. Installation of utilities.
- H. Construction trailers.
- I. Site Screening.

4. The following items must be addressed in the appropriate order:

- A. **Prior to the issuance of any City Permit**, a sign must be posted on the subject property notifying the public of the emergency contact information of the person responsible for the project. Refer to ***LDC 7.01.02(B)*** for details on the size, location and contents of the sign. Additionally, a posting of emergency contact information sign affidavit must be submitted to the Planning Division prior to the issuance of any permits.
- B. **Prior to the Commencement of Construction**, a fence permit, with a copy of the approved Erosion Control, Staging, and Construction Parking Plan for the site must be submitted and approved by the City. The submitted plan shall also indicate the location of the Construction Site Screening. Said screening must meet the requirements set forth in ***Destin Code of Ordinances, Section 6-51 Screen Criteria***.
- C. **Prior to the issuance of any City Permit**, obtain a Florida Department of Environmental Protection (FDEP) National Pollutant Discharge Elimination System (NPDES) permit and submit a copy to the City Engineer, if applicable. Provide a copy of the Stormwater Pollution Prevention Plan (SWPPP) as required for the NPDES permit for all construction disturbance over 1 acre.
- D. **Prior to the issuance of any City Permit**, a copy of the Northwest Florida Water Management District (NFWFMD) storm water permit and a NPDES storm water construction generic Permit (if applicable) approval shall be provided.
- E. **Prior to the issuance of a Certificate of Occupancy**, the developer/owner, engineer of record and the contractor shall make themselves familiar with ***LDC Article 11.09.00., Illicit Discharge***, and shall comply with the codes, or be subject to enforcement.
- F. **Prior to the issuance of a Certificate of Occupancy**, all applicable Impact Fees and other outstanding costs associated with this project that are owed to the City must be paid in full. The fee below is an ***estimate only*** and represents the Impact Fee rate as currently adopted. The fee will be reevaluated and assessed based on the fees adopted at the time of Building Permit application submittal.

Estimated impact fee total: \$112,698.00

- G. **Prior to the issuance of a Certificate of Occupancy**, the site layout, landscaping, outdoor lighting and architectural design must be inspected and approved by the Community Development Department.
- H. **Prior to the issuance of a Certificate of Occupancy**, all assigned address number(s) for the principal building(s) shall be installed in accordance with ***LDC Section 7.18.04***.

Louis Zunguze
City Manager & Community Development Director
City of Destin

David Smith, P.E. Authorized Agent Innerlight Engineering Corporation	Date
---	------

**TECHNICAL REVIEW COMMITTEE REPORT
CALHOUN HARBOR
MAJOR DEVELOPMENT ORDER & MAJOR SUBDIVISION
(DEV-001146-2023 & SUB-001165-2023)**

Applicant: Johnny Boswell
Agent: Innerlight Engineering Corporation
Location: 100 blocks of Sibert & Calhoun Avenue
Request: Construction of a 54-unit long-term multi-family attached townhome development and the associated site infrastructure, as well as a public pocket park.
Parcel Size: ±5.20 acres, ±226,512 square feet
Future Land Use: Calhoun Mixed Use – Village (CMU-V)
Zoning District: Calhoun Mixed Use – Village (CMU-V)
Density: 12 DU/Acre Allowed; 10.40 DU/Acre Proposed
Intensity: N/A
Application Date: May 17, 2023
Approved Site Plan Date: April 18, 2024

DISCUSSION/FINDINGS

Innerlight Engineering Corporation, on behalf of Johnny Boswell, is requesting approval of a Conditional Use application (LU-001154-2023), a Major Development Order application (DEV-001146-2023), and a Major Subdivision application (SUB-001165-2023). This project includes the construction of a 54-unit, long-term multi-family attached townhome development and the associated site infrastructure, as well as a public pocket park. The subject project is generally located within the 100 blocks of Sibert and Calhoun Avenue (Parcel IDs: 00-2S-22-0310-000D-0090, 00-2S-22-0310-000D-0080, 00-2S-22-0310-000D-0070, 00-2S-22-0310-000D-0060, 00-2S-22-0310-000D-0050, 00-2S-22-0310-000D-005A, 00-2S-22-0310-000D-072G, 00-2S-22-0310-000D-072E), totaling approximately 5.2 acres.

COMPREHENSIVE PLAN/LAND DEVELOPMENT CODE

The subject property is within the **Harbor Planning Area**. Also, the property has a Future Land Use Map Designation of **Calhoun Mixed Use – Village (CMU-V)** and a Zoning Designation of **Calhoun Mixed Use – Village (CMU-V)**. The proposed use is consistent with these land use regulations. The project, as required by the Comprehensive Plan and the Land Development Code, has undergone a compatibility review and meets the minimum requirements.

LAND USE

Long-term, multi-family attached dwellings are a Conditional Use within the **CMU-V** future land use designation and within the **CMU-V** zoning district.

DENSITY

Maximum allowed: 12 Dwelling Units/Acre
Provided: 10.40 Dwelling Units/Acre

HEIGHT

Maximum allowed: 50' / 4 stories
Provided: <35' / 2 stories

SETBACKS

Front required: 10' minimum – 20' maximum
Front provided: 15'

Side minimum required (east): None
Side provided (east): 10'

Side minimum required (west): None
Side provided (west): 10'

Rear minimum required: 10'
Rear provided: 10'

OPEN SPACE

Minimum required: 25%
Provided: 36%

PLATTING

This project is currently proposing Preliminary Plat approval, to be reviewed concurrently with the Development Order.

CONCURRENCY MANAGEMENT

Concurrency requirements have been met:

Traffic: Signed May 23, 2024

Stormwater Management: Signed May 23, 2024

Potable Water/Sanitary Sewer: Signed August 17, 2023

Solid Waste: Signed October 24, 2023

AIRPORT PROTECTION

As proposed, this project is not affected by nor affects the Destin Executive Airport. The applicant has indicated on the development order application that the proposed project is not within the Airport impact area.

NOTE: If construction necessitates the use of a crane, or other obstruction, which exceeds Federal Aviation Administration FAR 77 Standards (normally 200 feet above ground level), the applicant must request a variance from the FAA for temporary encroachment into this restrictive area and a copy of a completed FAA Form 7460, must be placed on file with the City of Destin prior to the crane, or other obstruction, penetrating the restricted airspace.

TRANSPORTATION ANALYSIS

The traffic analysis, signed and dated October 18, 2023, indicates the proposed development will generate thirty (30) PM peak hour trips. The analysis is consistent with the technical methodology outlined in *LDC 6.05.05*.

RIGHT-OF-WAY DEDICATION

The project does include Private Right-of-Way dedication.

INGRESS/EGRESS

Vehicular access to the property is provided by a two-way private access from the Sibert Avenue public right-of-way (ROW), as well as a two-way private access from the Calhoun Avenue public ROW.

PEDESTRIAN NETWORK

The project provides a complete pedestrian network as required in *LDC 8.09.03.A(6)*. A continuous on-site internal sidewalk is provided throughout the development. Additionally, the development is providing a public pocket park on the western side of the development to satisfy the required non-residential component, per *LDC Section 7.12.06.CC.1*.

PARKING:

Required vehicle parking spaces:	135 (2.5 spaces per dwelling unit)
Provided vehicle parking spaces:	219 (4 spaces per dwelling unit + 3 for pool amenity)

UTILITIES:

All utilities are required to be underground.

STORMWATER:

The City Manager’s Stormwater designee approved the stormwater plan on March 5, 2024.

REFUSE COLLECTION:

All non-construction related dumpsters, trashcans, and recycling bins shall be placed in solid waste collection areas or inside a building.

WHITE SANDS ZONE

The proposed project site is not located within any White Sand Zones.

LANDSCAPING*

Front perimeter/common boundary:	Not applicable
Interior parking landscape:	Provided
Buffer zone:	Provided
Preservation and restoration:	
Reforestation trees required:	53
Protected trees to be removed/replaced:	31
Preserved tree credits:	51
Required parking trees:	2
Required street trees:	20
Total required trees:	54
Total trees provided:	74

***Modification/alteration to any approved species of trees or shrubs shall be reviewed and approved by the Community Development Director or their designee prior to installation. A Development Order (DO) Deviation may be required if the proposed changes do not substantially meet the originally approved landscape plan.**

SIGNS

No signs were reviewed for permitting or compliance with the Development Order application. All proposed signs must be permitted through a sign permit and shall comply with the sign code section of the Destin Land Development Code in effect at the time a sign application is submitted.

IMPACT FEES:

Final impact fee amounts have been developed using the provisions outlined in ***LDC 19.03.05.A***. The impact fees identified below are an ***estimate***. The actual Impact fees will be calculated and assessed at time of building permit submittal.

LAND USE	UNITS	PARK	LIBRARY	POLICE	TRANS.	TOTAL
Residential, 2,000 – 2,999 square feet per dwelling	54	\$479.00	\$160.00	\$23.00	\$1,425.00	
<i>Totals</i>		<i>\$25,866</i>	<i>\$8,640</i>	<i>\$1,242</i>	<i>\$76,950</i>	<i>\$112,698</i>

OTHER FEES:

Consultant Transportation CEC Review 1: \$145.67 (Paid)

Consultant Transportation CEC Review 2: \$124.86 (Paid)

Consultant Transportation CEC Review 3: \$83.24 (Paid)

COMMENTS:

Staff has only received one (1) public comment regarding the proposed project.



**LOCAL PLANNING AGENCY
MEETING MINUTES
AUGUST 3, 2023 - 5:30 P.M.
DESTIN CITY HALL BOARDROOM**

1. CALL TO ORDER:

Chairman Wood called the Local Planning Agency Meeting to order on Thursday, August 3, 2023, 2023, at 5:30 p.m., in the Destin City Hall Boardroom; with the Pledge of Allegiance immediately following.

2. ROLL CALL:

Members Present

James T. Wood, Jr.
Karen Hudson
Corey Ledbetter
Jay Purut
Marcie Bell

Members Absent

Todd Buhr

Staff Members Present

Kim Montgomery City Clerk
Steven O'Connor, Principal Planner
Christopher Willis Planner
Rachael Hoag Planner
Louis Zunguze, Community Development Dir.
Kimberly Kopp, City Attorney

3. APPROVAL OF MINUTES:

Motion by Agency member Bell, seconded by Agency member Hudson to approve the minutes of the July 6, 2023, meeting, as written.

4. NEW BUSINESS:

➤ **Conditional Use - (LU-001154-2023) – Calhoun Harbor Townhome Development**

Mr. O'Connor briefly explained the request is for a 54 Unit Long Term Rental Development on 5.2 acres that will include a pocket park for public use. The Conditional Use requirements have been met, except for #5, Over Proliferation of Use noting that there are 10 vacant lots in the zone and this development would encompass 8 of those. The Major Development review is still under way by staff and once it is reviewed by the TRC, it will go forward to Council for final approval.

Mr. Tatum, representative for the applicant explained the request is for 10.4 development units per acre and the requests for single family attached units could primarily be for first time home buyers that work in the harbor district and would be able to walk to work. He added that his development would be providing what is in the details of this zoning district.

Agency member Bell asked staff when this zoning district was created. According to Ms. Kopp, she believes it was in 2019. Agency member Bell then asked if approved, would the project be deed restricted to never allow for short term rentals.

According to Mr. Tatum, if the project is approved without short term status, a change of use would have to come back to this board to seek approval first.

Motion by Agency member Bell to approve the Conditional Use request (LU-001154-2023) – Calhoun Harbor Townhomes, with Agency member Ledbetter providing the second.

In discussion, Agency member Bell stated that she by far prefers this townhouse use than a three or four story motel/hotel type building. She also stated that she feels that its important to take in consideration that there is not anything in the city that is affordable and feels everyone needs to work together to try to get those in the community.

Agency member Purut agreed that something does need to be done and questioned if there is a percentage that can be set aside for that.

Ms. Kopp informed the member that they will be reviewing an ordinance coming up at their next meeting for that very subject.

With no further discussion, Chairman Wood called for the vote and the motion passed 5-0.

➤ **Ordinance 23-10-LC - Luxury Motor Home Resorts as a Conditional Use in TCMU**

Ms. Kopp informed the members that Ordinance 23-10-LC is an ordinance that would amend the Land Development Code to allow an RV Park as a Conditional Use in the Town Center Mixed Use Zoning District. Noting that Luxury Motor Homes are already allowed in other zoning districts of the Code as a Conditional Use. Additionally, the language will allow for this board and Council to authorize certain waivers of the criteria and add additional conditions, as appropriate, for potential projects that may come in and, the requirement also stipulates that the property must be a minimum of 10 acres.

Committee member Bell spoke of being in favor of this use for a property that fronts Highway 98 and feels that it would be a benefit to the city.

Committee member Purut stated that he was not in favor of the ordinance or the potential use in the city and cannot support this ordinance.

Agency member Bell made the recommended motion that City Council approve Ordinance 23-10-LC, with Agency member Ledbetter providing the second. The motion passed with a 4-1 vote with Agency member Purut casting the dissenting vote.

5. DIRECTORS REPORT:

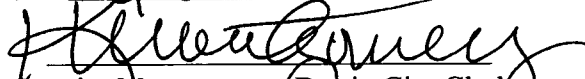
Mr. Zunguze informed the members that staff is still working through the LDC rewrite with Chapters 1-3 now being available. Chapter 4 should be brought before them next month to start reviewing.

6. ADJOURNMENT:

Having no further discussion at the meeting adjourned at 5:50 p.m.

Adopted and approved this 5th day of September 2023.


James Wood, Jr. Chairman


Kim Montgomery Destin City Clerk

TODD Buhr
Co-Chair

05/29/2024

Information for revocation of rental registration for continued noncompliance. Currently, the city does have a code (13-116, see below) that addresses revocation of ANY registration issued by the city. However, it does not specifically address how many violations for rental property would constitute revocation.

With the nature of short-term rentals, many of the complaints are trash cans left out, parking in the right of way, and noise complaints. Additionally, most of these short-term rentals are changing weekly and some renters are not as conforming as others.

That being said, I would want some input on what would constitute a rental revocation whether it's the severity of the offense and/or the number of offenses, and a possible time frame, such as not being able to rent during the following season or remainder of the season.

Sec. 13-116. Enforcement.

The provisions of this article shall be enforced as provided in Chapter 14, Offenses and Miscellaneous Provisions, of the Code Ordinances of the City of Destin, and by such other means as are specified herein below:

- (1) Code enforcement: The code enforcement division may enforce the terms of this article by bringing a case to the code enforcement special magistrate or code enforcement board, whichever is applicable, as provided in Chapter 14, Offenses and Miscellaneous Provisions, Article III, Code Enforcement Board or Special Magistrate, of the Code of Ordinances of the City of Destin and F.S. Ch. 162, Pt. I.
- (2) Civil citation: The code enforcement division, or other duly authorized officer or authority, may enforce the terms of this article through issuance of civil citation as provided in Chapter 14, Offenses and Miscellaneous Provisions, Article III, Code of Enforcement Citation Program and Procedures, of the Code of Ordinances of the City of Destin and F.S. Ch. 162, Pt. II.
- (3) Denial/Suspension/Revocation: Any registration issued pursuant to this article may be administratively denied, revoked, or suspended by the city for failure to satisfy the requirements for registration or for violation by the owner of this article, any City of Destin Ordinance, or state law. Such denial, revocation or suspension is in addition to any penalty provided herein. Any appeal of administrative action taken pursuant to this subsection shall be as provided in City of Destin Land Development Code Section 2.22.00, Appeals.
- (4) Criminal penalties: A violation of this article shall be punishable as a misdemeanor by a fine of up to five hundred dollars (\$500.00) per violation and a definite term of imprisonment of not more than sixty (60) days as provided in F.S. § 162.22.

It is the legislative intent of the city council in enacting this article to provide an additional or supplemental means of obtaining compliance with the requirements stated herein. Nothing contained in this article shall be deemed to prohibit the City of Destin from seeking enforcement by any other means provided by law, including, but not

limited to, filing an action for declaratory and injunctive relief in a court of competent jurisdiction.
(Ord. No. 17-03-CC, § 3, 2-21-17)

Respectfully,

Director Williams



eCORIDER

COUNT ON THIS RIDE



**Comprehensive Operational
Assessment Final Report:
Recommendations and
Implementation**

April 2024

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1.0 Introduction and Background

EC Rider is the transit system operating primarily in Okaloosa County, Florida. It provides service to the Fort Walton Beach-Navarre-Wright Urbanized area, which, as of the 2020 census, has a population of 227,256. The transit service area is located on the Gulf of Mexico in Northwest Florida, a region with a significant tourism industry and several military bases, including the Eglin Air Force Base. The transit agency service area includes the communities of Fort Walton Beach, Destin, Mary Esther, Crestview, Niceville, and Miramar Beach.

EC Rider has requested this Comprehensive Operations Analysis (COA) to review the transit agency's network and operations. A COA is defined as a thorough review of the transit system to determine whether the network has the resources necessary to meet the needs of the community it serves. The goal is to identify systemic or route-level changes to improve the service while at the same time minimizing any adverse impact on current transit users.

This COA consisted of five meetings with the project management committee, two phases of public involvement with the community, field observations and data collection by the project team, and a meeting with EC Rider bus operators to seek feedback on the routes. Since the project commenced in April 2023, the project team has prepared the following technical reports:

- Public Involvement Plan
- Goals and Objectives Technical Memorandum
- System and Route Analysis Technical Memorandum

This final report builds upon both previous technical memorandums, particularly the findings of the System and Route Analysis Technical Memorandum (provided as **Appendix A**). It provides an overview of the scenario planning methodology and scenario analysis results that have been undertaken and concludes with the recommendations and an implementation plan.

1.1 Overview of the Current System

The EC Rider system is comprised of five routes that serve the Fort Walton Beach area, one route serves Okaloosa Island, and the three remaining routes serve the Destin/South Walton areas. Express bus service is also provided to the city of Crestview giving residents access to services in the Niceville and Fort Walton Beach area and connecting to the rest of the transit network. The transit system operates Monday through Friday, from 7:30 AM to 7:00 PM. These routes provide access to major activity centers, such as Walmart, Elder Services, and a Northwest Florida State College campus. The existing transit network is shown in **Figure 1** and **Figure 2**.

Figure 1. Existing EC Rider Transit Routes

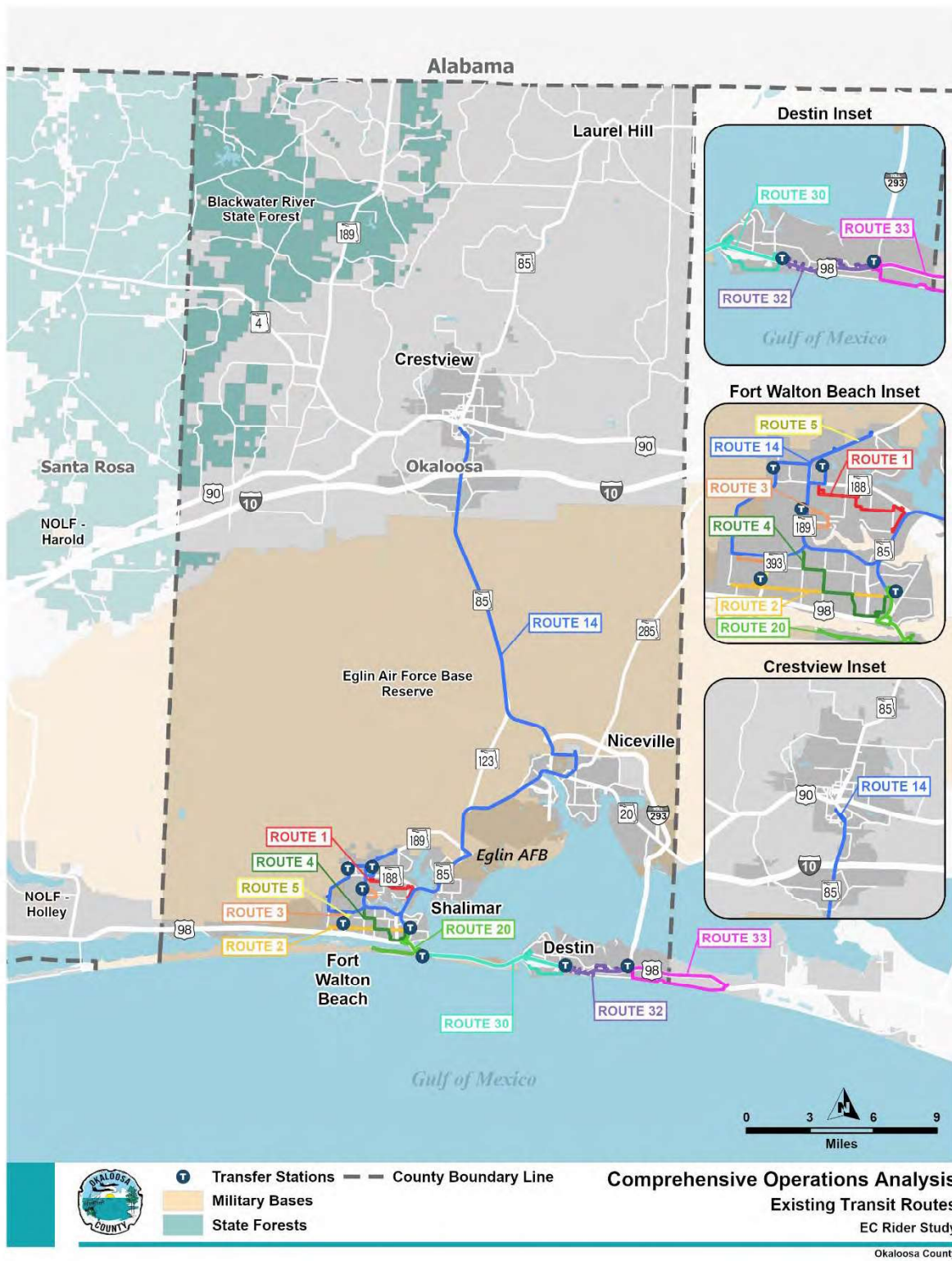
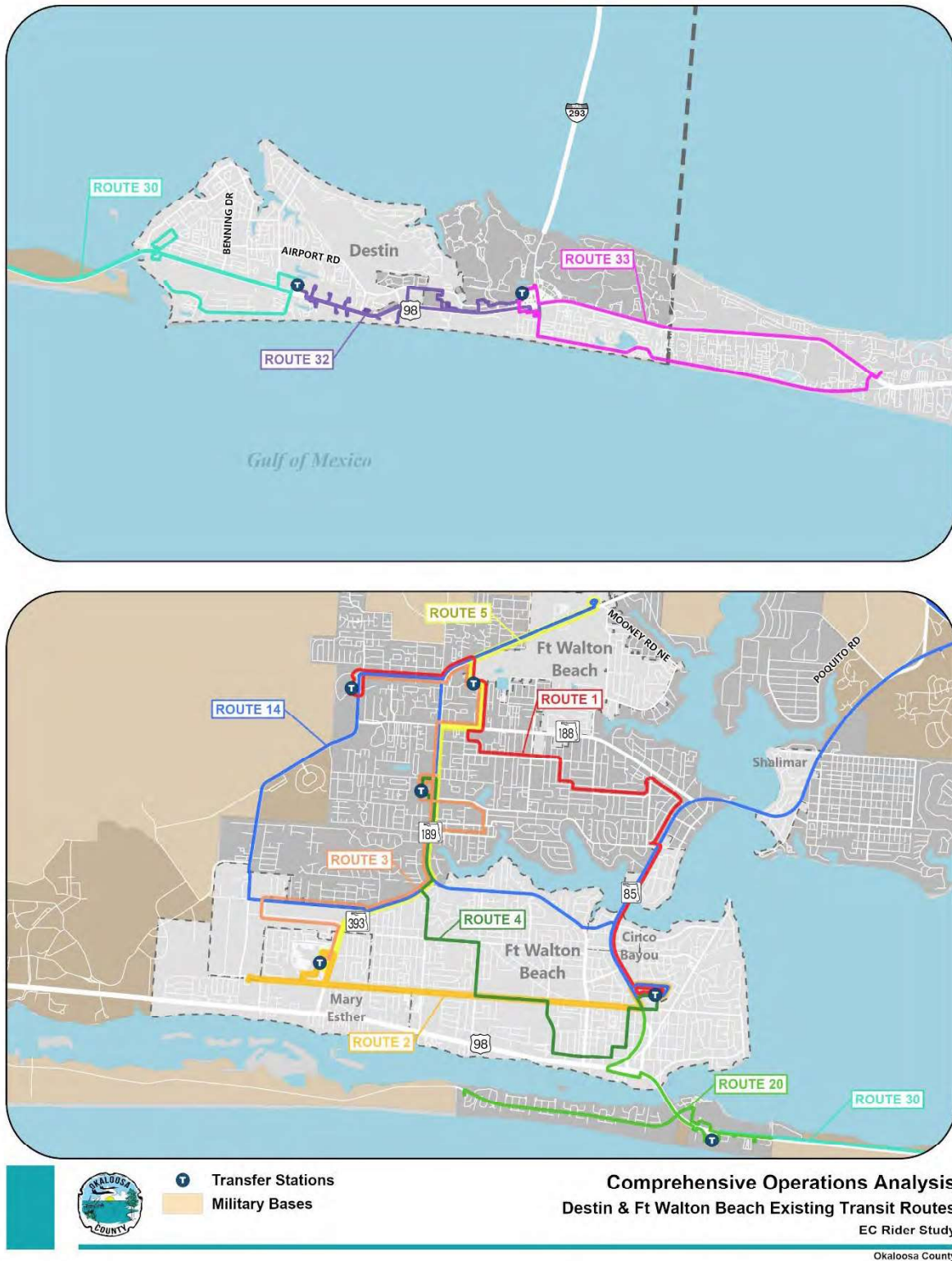


Figure 2. Existing EC Rider Transit Routes within Fort Walton Beach and Destin



1.2 Goals and Objectives

Goals and objectives were established as principles to guide the analysis of the EC Rider system and development of proposed improvements that are quantifiable, measurable, and impactful. Establishing these goals and objectives at the beginning of the update process makes certain the analysis will collect only the data essential to the transit system's critical needs.

The following three goals were established:

- **RIDERSHIP** – Provide service to major areas of activity while implementing policies and procedures that aid in overall safety and reliability for users (**Table 1**).
- **TECHNOLOGIES/SERVICES** – Form the foundation for all-encompassing system growth through the integration of new modes, funding options, and improving the rider experience (**Table 2**).
- **EFFICIENCY** – Prioritize system efficiency by making proper use of both intelligent systems and network design (**Table 3**).

Fulfilling the goals and objectives of the EC Rider transit system is integral to an effective bus system that optimizes available resources and serves the needs of the community. The objectives for each goal must have a proper strategy for fulfilling each Key Performance Indicator (KPI). The KPIs provide the quantifiable measures needed to determine the transit system's performance in meeting the outlined goals and objectives.

Table 1. EC Rider Ridership Goal

GOAL 1: EC Rider shall implement policies, actions, and procedures to increase ridership by providing service to major areas of activity, increase visibility, and improve on-time performance.	
Proposed Objectives	KPI
Objective 1.1: EC Rider shall implement policies, actions, and procedures to increase ridership by providing service to major areas of activity.	Number of major activity centers served.
Objective 1.2: Improve access to key jobs, services, housing, and other activities needed by low-income populations.	Number of jobs, services, housing, and other areas accessible within a 45-minute in-vehicle transit travel time.
Objective 1.3: System visibility and accessibility to be increased through improvements of the EC Rider system.	Perceived level of network awareness as measured through route-miles on major collectors or above.
Objective 1.4: Maximize Reliability by improving On-Time Performance (OTP).	Number of routes averaging at least an 80% OTP.

Table 2. EC Rider Technology Goal

GOAL 2: Establish a foundation for system growth through mode integration, new funding options, and an improved rider experience.	
Proposed Objectives	KPI
Objective 2.1: Add real-time location data or other modes to improve reliability and transit options.	Existence of a smartphone application and/or other data portal that provides real-time bus location.
Objective 2.2: Identify new funding resources EC Rider could leverage.	Number of new funding sources and/or partners beyond federal/state formula funds and local match requirements.
Objective 2.3: Implement app-based fare System to prioritize speed and efficiency at rider onboarding stops.	Existence of a smartphone application which allows for cashless boarding.
Objective 2.4: Improve bus stops to include updated signage and add benches/shelters or other amenities where appropriate.	Percent of bus stops with benches/shelters or other amenities.

Table 3. EC Rider Efficiency Goal

GOAL 3: EC Rider shall prioritize efficiency by making use of intelligent system and network design.	
Proposed Objectives	KPI
Objective 3.1: Decrease transit travel time between the municipalities and major activity centers.	Average in-vehicle travel time between municipalities and major activity centers.
Objective 3.2: Increase system efficiency through effective route design that decreases revenue miles while maintaining/improving overall system coverage	Number of revenue miles.
Objective 3.3: Streamline routes by minimizing deviations, use of low-speed roads, and/or unprotected left turns.	Average speed per route.

1.3 Current System Performance

Based on the review of the EC Rider transit network in Phase I, the following system takeaways were identified.

1.3.1 Route Performance

The system experiences low ridership and high costs per rider. In addition, riders experience a significant difference in travel time by transit. Compared to a car trip, traveling between two

locations on average, the bus takes triple the amount of time. These measures contribute to low performance across the routes.

1.3.2 System Operations

There are deficiencies in system operations, including network delay and safety concerns for routes. Network delays include congestion, route deviation, signal timing, passenger stops, and unplanned operator breaks. Safety concerns on routes involve unprotected left turns, U-turns, speed bumps, and lane changes. These deficiencies contribute to a lack of system reliability for users and raises safety concerns for users and operators alike.

1.3.3 Ridership Experience

Challenges of the ridership experience consist of long trips, lack of frequency, limited-service span, no weekend service, and regional isolation/disconnection. These challenges diminish the rider experience and system reliability while significantly limiting ridership potential.

1.3.4 Scheduling Efficiency

Some services operate with inefficient layover and recovery times that reduce the frequency of service and impact the service time efficiency. For example, Route 2 operates on an hourly frequency; however, the round-trip travel time is only 34 minutes. This means the bus is only in service (service time efficiency) for approximately 57% of the scheduled time. A common industry benchmark for service time efficiency is 75%.

1.4 Mobility on Demand

Mobility on Demand (MoD) is a new concept in the transportation industry and refers to provision of on-demand transportation services that can be either for personal mobility or the movement of goods and freight. In the scope of transit this usually means providing an on-demand door-to-door transit service to customers. MoD differs from traditional demand response services such as paratransit and dial-a-ride operations by enabling real-time requests for transit service. Trip requests are submitted through a smartphone application or website and dispatched by a centralized computer system offering direct services without a fixed route. MoD can also be known as microtransit, and the service model can vary depending on the transit agency's needs.

MoD services can be designed to facilitate system-wide trips or feed into the regular fixed-route transit system and can involve a subsidy of the overall trip cost that is covered by the transit agency. Services often utilize cutaway buses, regular vehicles, or vans (as in **Figure 3**) and can resemble a similar service to that operated by Transportation Network Companies (e.g. Uber & Lyft) with the ability for the transit agency to pool similar trip requests into the one service vehicle.

Figure 3. Example of a MoD vehicle, (Source: SUMC)



Beach communities within Florida have been partnering with MoD providers to develop new services utilizing electric golf cart-type vehicles to transport tourists and visitors within town

Figure 4. Example of MoD Service in Fort Lauderdale, Florida (Source: Circuit)



centers and high demand areas to relieve local traffic congestion; this includes examples such as 'Circuit-By-The-Sea' and 'LauderGo' which operate within the Fort Lauderdale region (**Figure 4**).

The benefits of MoD include improved user experience and travel options for residents, particularly in areas where fixed-route transit service is limited or non-existent. MoD can also expand service coverage and provide transit service in areas where fixed-route transit operations would not traditionally be possible due to low density

or street layout. MoD is increasingly being adopted by transit agencies around the country to address a wide range of challenges ranging from improving service quality and service coverage to serving disadvantaged populations and reducing traffic congestion. As part of this COA, assorted options for MoD service have been considered for implementation within the EC Rider service area. This will be discussed further in the following sections.

2.0 Methodology

2.1 COA Methodology

As shown in **Figure 5**, the COA was an iterative process that included the following tasks:

1. Assessing the Existing System
2. Scenario Development and Modeling
3. Collecting feedback from Project Management Team
4. Identifying Final Recommendation

The Project Management Committee was engaged throughout the COA to offer their input and expertise on EC Rider's service area. The Steering Committee included several public officials and representatives from Destin, Fort Walton Beach, Crestview, and the Okaloosa County Board of Commissioners. Through the Steering Committee meetings, stakeholders were able to provide direction in envisioning EC Rider's future services.

Figure 5. COA Task Flow



2.2 Scenario Modelling Methodology

Scenario development was influenced overall by the COA's Goals and Objectives. The following key areas were considered when revising the system network:

- **RIDERSHIP** – Routes were curated to provide service to major areas of activity while implementing overall safety and reliability for users.
- **TECHNOLOGIES/SERVICES** – Scenarios explored opportunities for Mobility on Demand zones, to form the foundation for system growth and integration of new modes.
- **EFFICIENCY** – Scenarios prioritize system efficiency by making proper use of both intelligent systems and network design.

Remix Transit was used to develop alternative scenarios. The software program Remix Transit,¹ allows users to design, evaluate, and analyze fixed-route systems. Route data gathered from field visits and information provided by the agency were entered into the modeling software to

¹ <https://remix.com/>

evaluate potential changes to routes and determine expected effects. Replica² was another data tool used for internal brainstorming sessions. Replica's data included travel origin/destination models, which were referenced to further understand EC Rider's service area.

After developing the scenarios in Remix, they were modeled to project system performance. The program used to model the scenarios is Transit Boarding Estimating Simulation Tool (TBEST). TBEST³ provides ridership projections by comparing the estimated ridership from the proposed scenarios to the current route network. It also generates projections for costs, revenue hours, revenue miles, and buses needed for the proposed scenarios.

² <https://www.replicahq.com/>

³ <https://tbest.org/>

3.0 Scenario Planning Options

The scenario planning process supports informed decision-making, enables consideration of the benefits, and impacts of a variety of options available to transit agencies. As part of the COA based upon feedback from the project management committee and public engagement, four scenarios have been developed and modeled following the methodology discussed in **Section 3.2**. Each of these scenarios comprises several options that seek to apply similar core transit systems while exploring alternative transit route designs. In total, 14 scenario options were modeled in TBEST, and the scenario analysis results are discussed in **Section 4**.

The four key scenarios developed as part of this COA are outlined below in **Figure 6**.

Figure 6. COA Scenario Summaries

Scenario 1

- Optimize the existing transit network

Scenario 2

- Introduction of Mobility On-Demand Zones

Scenario 3

- High adoption of Mobility On-Demand Zones

Scenario 4

- High investment scenario with a complete network redesign

Each of these scenarios is summarized below and maps of the proposed scenarios are provided in **Appendix B**. All four scenarios aim to achieve two of the primary goals of the transit system - increasing ridership and enhancing network efficiency. The third goal is to offer better services by incorporating advanced technologies and new transportation modes. Scenarios 2 and 3 incorporate MoD services as part of the transit network to provide an integrated system with fixed-route transit network to achieve this third goal.

3.1 Scenario 1

This section provides an overview of how each option of Scenario 1 performs, as modeled in Remix and TBEST. The purpose of Scenario 1 is to address EC Rider's current fixed route system and

identify possible improvements. Options focus on streamlining existing routes, path efficiency, and, in some cases, proposing new route configurations. Scenarios are compared against the current system to show potential changes in performance measures. TBEST models weekday performance estimates, which could differ from the real-world performance of these routes. All performance measures are estimated for weekday service.

3.1.1 Scenario 1A

Scenario 1A was developed to streamline the existing fixed-route system. The scenario was created by reviewing the foundation of the fixed-route system and identifying areas for improvement. Scenario 1A proposes the following:

- Removes unnecessary deviations and eliminates unprotected left turns.
- Improves access management in Fort Walton Beach and Destin.
- Focuses on immediate improvements that can be applied to Routes 1, 2, and 3.

3.1.2 Scenario 1B

Scenario 1B implements improvements in EC Rider's latest Transit Development Plan (TDP). The scenario refers to the TDP's recommended improvements in Fort Walton Beach, Okaloosa Island, and Destin. Scenario 1B proposes the following:

- Improves beach access for routes.
- Increases service to Destin during peak summer.

3.1.3 Scenario 1C

Scenario 1C focuses on reconfiguring Routes 5, the beaches, and 14. Route 5 in EC Rider's current system experiences low ridership and unnecessary deviations. Scenario 1C proposes the following:

- Route 5 is streamlined to the Elder Services Transfer Center and Walmart.
- The beach routes reconfigure access to Okaloosa Island, Destin, and Miramar Beach.
- Route 14 only runs between Elder Services Transfer Center, Shalimar, Niceville, and Crestview.

3.1.4 Scenario 1D

Scenario 1D proposes a complete redesign of the core network. Scenario 1D was designed through understanding the deficiencies of the current system, and developed from a fresh start, maintaining existing transfer points. Scenario 1D proposes the following:

- Re-routes the entirety of Fort Walton Beach.
- Revised approach to accessing Okaloosa Island and Destin.

3.1.5 Scenario 1E

Scenarios 1E & 1F were developed after collecting feedback from the Steering Committee. Scenario 1E maintains improvements of 1D, and incorporates the following suggestions from the committee:

- Added diversion to Route 14 to service the Destin-Fort Walton Beach Airport.
- Added new Route 15 to service north/south Crestview.

3.1.6 Scenario 1F

Similarly, Scenario 1F was developed after collecting feedback from the Steering Committee. Scenario 1F maintains improvements of 1D, and incorporates the following suggestions from the committee:

- Added diversion to Route 14 to service the Destin-Fort Walton Beach Airport.
- Added new Route 15 to service north/south Crestview.
- Added new Route 16 to service east/west Crestview.
- Removed Route 32 (Destin Circulator) to reallocate expanded service to Crestview.

3.2 Scenario 2

Scenario 2 was developed with the intention of introducing MoD zones. To introduce these zones, Scenario 2 proposes the following:

- Increased service coverage in Fort Walton Beach.
- Introduction of MoD Zones in Destin and Miramar Beach.

3.3 Scenario 3

Scenario 3 is an expansion of MoD zones explored in Scenario 2. Scenario 3 proposes the following:

- Improved fixed-route connections to Niceville.
- MoD zones in Destin, Shalimar, Niceville, and Crestview.

3.4 Scenario 4

Scenario 4 was developed as a high-investment option to demonstrate a potential transit network that provides targeted frequency enhancements and high service coverage across the service area. Two options were developed for this Scenario:

- 4A – Large transit network with high coverage across the service area, including Fort Walton Beach, Destin, Niceville, and Crestview.
- 4B – Reduction in the number of transit routes from Scenario 4A with a higher frequency on key transfer routes between Fort Walton Beach, Destin, and Niceville.

These two scenarios have higher costs than other scenario options; however, new connections are added to new locations and areas that are either underserved or lack any existing transit service. The system proposed in Scenarios 4A and 4B includes new connections to the Eglin Air Force Base, Hurlburt Field Air Force Base, and the HCA Florida Twin Cities Hospital in Niceville with new services covering Shalimar, Valparaiso, Blue Water Bay, and Niceville. This scenario originated from a complete transit network redesign starting with a 'blank canvas.' As such, the route numbering structure differs from that of other scenarios. It is noted that Routes 1D, 1E, and 1F have similar service structures within the Fort Walton Beach area, as those scenarios followed a similar approach to route design. **Figure 7** shows the network design for Scenario 4A within Fort Walton Beach, Niceville, and Destin. Full maps of Scenarios 4A and 4B are provided in **Appendix B**. A summary of the routes proposed within Scenario 4 are shown within **Table 4**.

Figure 7. Scenario 4A Transit Network



Table 4. Summary of routes within Scenario 4

Route	Location	4A	4B	Destinations	Notes
1	FWB	Yes	Yes	Elder Services, Walmart, FWB Hospital, UWF	Same as 1E
2	FWB	Yes	Yes	Elder Services, Santa Rosa Mall	Same as 1E
3	FWB	Yes	Yes	Elder Services, FWB Medical Center, UWF	Same as 1E
4	FWB	Yes	Yes	Elder Services, Walmart	Same as 1E
5	FWB	Yes	Yes	Elder Services, FWB Medical Center, Okaloosa County Courthouse	Same as 1E
6	FWB	Yes	Yes	One Hopeful Place, UWF, Walmart	New route in FWB
7	FWB	Yes	No	Hurlburt Field, Santa Rosa Mall, Mary Esther Library	New connection to Hurlburt Field
8	FWB	Yes	Yes	Elder Services, Okaloosa County Administration Building Shalimar	New route servicing Shalimar
9	FWB	Yes	No	Eglin AFB, Elder Services, VA Clinic, Okaloosa County Building Shalimar	New connection to Eglin AFB
10	Okaloosa Island	Yes	Yes	Elder Services, Okaloosa Island Boardwalk, Conference Center	Same as Route 20 in 1E
11	Destin	Yes	Yes	Destin Boardwalk, Destin Library, Palm Plaza, Norriego Point	Similar to Route 32 in 1E 4B merged with 13
13	Miramar Beach	Yes	No	Paradise Key Plaza, Miramar Beach, Silver Sands Outlets	Same as Route 33 in 1E. 4B merged with 11
14	FWB / Crestview via Niceville	No	Yes	Elder Services, FWB Airport Niceville City Hall, NW Florida State College, Crestview City Hall	Route 14 is reinstated in 4B
15	Crestview	Yes	No	Crestview Walmart, North Okaloosa Medical Center, Crestview City Hall	Similar to Route 15 from 1E
16	Crestview	Yes	No	Crestview City Hall, Crestview Library & Community Center	Similar to Route 15 from 1E
17	Niceville	Yes	No	NW Florida State College, Twin Cities Hospital	New Route servicing Niceville
18	Valparaiso	Yes	No	NW Florida State College, Twin Cities Hospital, Valparaiso City Hall, Eglin AFB	New service to Valparaiso
19	Bluewater Bay	Yes	No	Winn Dixie, Niceville Community Center, NW Florida State College	New service to Bluewater Bay
20	FWB/Destin	Yes	Yes	Elder Services, Okaloosa Island Boardwalk, Palm Plaza, Paradise Key	Revised version of Route 30 from 1E
21	FWB/Crestview	Yes	No	Elder Services, Crestview City Hall	New connection replacing Route 14
22	Destin/Crestview via Niceville	Yes	Yes	Paradise Key Plaza, NW Florida State College, Crestview City Hall	4B only from Destin to Niceville
25	FWB/Niceville	Yes	No	Elder Services, FWB Airport, Niceville City Hall, NW Florida State College	New connection replacing Route 14

4.0 Scenario Results

4.1 Overall Results

The results for each scenario have been analyzed and assessed against the current system and each other. This analysis used the following performance metrics:

- Total boardings;
- Number of buses required;
- Total route cost;
- Riders per revenue hour; and
- Total cost per rider.

It is noted that these performance metrics differ from the agency KPIs identified in **Section 1.2** of this report. The performance metrics have been used as an extension of the KPIs to measure and compare the performance and efficiency of each scenario option. The agency KPIs are to be used to measure transit agency performance against the agency's goals. The performance metrics enable analysis based on the financial cost and feasibility of the scenario option. The performance metrics will evaluate improved performance and will assist the agency in meeting the KPIs in **Section 1.2**. In addition, these performance metrics will help achieve the transit system's overall goals of improved ridership and system efficiency.

While the results differed for each scenario option modeled, the general findings concluded that each scenario is projected to increase ridership above that of the existing transit system, with all scenario options apart from 1A also increasing the overall system operating costs. The various options within Scenario 1 had the smallest increases in overall route cost as well as the lowest cost per rider, while Scenario 3 and Scenario 4 had the highest system ridership; however, these scenarios required significantly higher investment into the cost of operating the system. **Table 5** below shows a summary of the high-level findings from the scenario analysis.

Table 5. High-Level Summary of Scenario Results

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Pros	- Optimized fixed route network - Immediate improvements to Routes 1, 2 & 3	- Increased service coverage - Improved connections in Crestview	- High ridership - On-Demand Transit - Improved connections in Niceville	- Highest service coverage - Improved connections in Crestview and Niceville
Cons	- Marginal increases in route costs - Limited increase in service coverage	- Requires larger investment	- Requires significant investment - High costs per rider	- Requires significant investment - Requires purchase of additional buses

Scenario 1 also provides short-term changes aimed at optimizing the existing transit system. These changes will improve performance, requiring the lowest investment while also achieving the lowest cost per rider and highest number of riders per revenue hour as well as enhancing access to key destinations/activity centers and decreasing travel times. While the other scenarios provide options to modernize and expand service coverage, these scenarios require higher investment to meet the long-term needs and goals of the service area. Elements from these scenarios will be considered for medium- to long-term implementation through future Long Range Transportation Plans (LRTPs) and TDPs. **Table 6** shows the results for each scenario option, highlighting the best-performing options for each performance measure. The detailed scenario results are included in **Appendix C**.



Table 6. Scenario Results Comparison

Performance Measure	Current Network	1A	1B	1C	1D	1E	1F	2A	2B	2C	3A	3B	3C	4A	4B
Total Boardings	388	+47%	+178%	+179%	+202%	+228%	+227%	+159%	+194%	+209%	+202%	+190%	+232%	+240%	+173%
Buses Required	13	-15%	-15%	-8%	-8%	0%	0%	-8%	0%	-8%	+15%	+15%	-8%	+92%	+69%
Total Route Cost	\$5,245	-6%	+28%	+26%	+18%	+31%	+31%	+69%	+171%	+201%	+154%	+141%	+282%	+167%	+135%
Riders / Revenue hour	2.8	+46%	+157%	+157%	+157%	+144%	+141%	+57%	+21%	+18%	+36%	+36%	+4%	+41%	+33%
Total Cost / Rider	\$13.40	-49%	-54%	-56%	-65%	-60%	-60%	-34%	-7%	-2%	-16%	-16%	+16%	-21%	-13%

Legend
Best Performing
2 nd Best Performing
3 rd Best Performing

4.2 Scenario 1 Results

The following discussion focuses on the results of the variations included within Scenario 1. As discussed, the six scenario concepts within Scenario 1 had the lowest overall cost, lowest cost per rider, and highest riders per revenue hour when compared with Scenarios 2 and 4. The results from Scenario 1 also included significant growth in transit system ridership despite the lower operating costs. The following analysis considers the comparison between Scenario 1 options 1A-1F rather than against the various options included within Scenarios 2 and 4. **Table 7** shows the performance of Scenario options 1A-1F. **Appendix B** includes maps of each scenario option.

Table 7. Scenario 1 Options Ranking

Performance Measure	1A	1B	1C	1D	1E	1F
Total Boardings	○	◐	◐	●	●	●
Route Cost	●	◐	◐	●	◐	◐
Riders/Revenue Hour	○	●	●	◐	◐	◐
Cost/Rider	◐	◐	◐	●	●	●

● Above Average Performance ◐ Average Performance ○ Low Performance

Of these scenario options, Scenarios 1D, 1E, and 1F are the best performing options. Scenarios 1D-1F all share similar route structures with only minor changes in both Crestview and Destin. Each of these scenario options have above-average ridership, with 1E achieving the highest weekly ridership with an estimated 1,274 riders, an increase of 228% to the current system. These scenario options also achieved the lowest cost per rider, ranging from \$5.26 for 1D to \$5.41 for 1E and 1F, this is a 60% reduction from the current cost per rider of \$13.40. Scenarios 1A-1C also achieved large reductions in cost per rider with costs of \$6.80, \$6.20, and \$6.09, respectively.

Scenario 1A had the lowest overall route cost and is the only scenario option to reduce the current operating cost, with an anticipated 6% savings. The reduction in operating costs for Scenario 1A, however, limits the ability to increase system ridership, with the option achieving a growth rate of only 47% to an estimated ridership of 569 weekly riders. This results in a relatively poor efficiency rate of 4.1 riders per revenue hour.

Scenario options 1B and 1C follow the recommendations included within the previous TDP and share similar network designs and results. These systems record estimated ridership growth of approximately 179% (1,080 riders) and achieve the highest ridership per revenue hour of 7.2,

which is a 157% increase from the existing system. Scenario options 1D-1F record an efficiency rate of 6.6 riders per hour, representing a 144% growth rate from current performance. It is noted that a rate of approximately 7 riders per revenue hour is still considered poor when compared to the peer transit systems; however, it would be a marked improvement to current operations (based upon the TBEST results). The median system performance for this measure in Florida is 10.6, with EC Rider ranking second last to Citrus County Transit, an agency servicing just 31,000 residents (EC Rider services over 196,000). It is noted that the ridership and expense projections are based upon the TBEST modeling results and while actual results are likely to vary during implementation the model provides an important tool for comparison of the options and potential outcomes.

Based on the scenario analysis results, it is recommended that Scenario 1E is implemented as the short-term priority to improve the performance of the EC Rider transit system. **Table 8** shows a comparison between the current transit system and the performance of Scenario 1E. This recommendation is discussed further in the next section.

Table 8. Performance measures for Scenario 1E

Performance Measure	Current System	Scenario 1E	% Change
Total Boardings	388	1,274	+228%
Route Cost	\$5,245	\$6,889	+31%
Riders/Revenue Hour	2.8	6.6	+144%
Cost/Rider	\$13.40	\$5.41	-60%

5.0 Public Engagement

Public engagement efforts were made in accordance with the Okaloosa-Walton TPO's Public Participation Plan (April 2021). The purpose of this public involvement was to collect community feedback on ways to improve transit operations, increase ridership of tourists and residents, and offer a robust, multimodal experience for the EC Rider service area.

A Public Involvement Plan (PIP) was developed for the EC Rider COA, offering a platform for the public, existing riders, and stakeholders to engage in the planning process and obtain information on the progress and findings generated from the project.

Outlined in the PIP, specific branding was developed to help identify the project collateral and outreach items for the COA – "Count on this Ride" (**Figure 8**). The COA built awareness around the "Count on this Ride" brand established during the COA process by incorporating the brand through materials developed and distributed to the community.

Figure 8. EC Rider COA Logo, "Count on this Ride"



5.1 Phase I Public Engagement

Phase I focused on understanding current conditions and desires through customer/potential rider satisfaction surveys and stakeholder engagement and interviews.

5.1.1 Public Engagement Survey Results

Surveys were provided to both current riders and non-riders. Current riders were given the opportunity to express what they value most, and potential riders shared what changes would encourage them to use EC Rider. During the two-week collection, a total of 276 completed online and paper surveys were received. Of these, 195 respondents indicated they had not used the EC Rider system before, while 81 respondents indicated they were existing riders of the EC Rider system.

Positive survey feedback includes:

- "Drivers are pleasant and nice to have the opportunity to get around without a car."
- "Usually pleasant – bus drivers are helpful, courteous, and accommodating."
- "Greeted, pleasant, informative, and a safe way to travel."
- "The people on the bus are friendly, and it is safe."
- "Pleasant and enjoyable."

5.1.2 Stakeholder Engagement and Interviews

Public involvement efforts also included interviewing a variety of key community stakeholders (**Table 9**) to help understand their community's perception of the current EC Rider transit system. A consensus was demonstrated among those interviewed about the lack of awareness and understanding of the transit system. The area's population is growing quickly and younger workers on the outskirts of the city center could benefit from reliable service to the workplace. Tourism was identified as a growth opportunity and that residents who work in the tourism and hospitality industries need reliable and affordable transportation.

Figure 9. Phase I Public Engagement in Destin



Table 9. Stakeholders Interviewed

Stakeholders Interviewed
Destin City Council Mayor Bobby Wagner
Okaloosa County Commissioner Mel Ponder
Greater Ft. Walton Beach Chamber of Commerce – President/CEO Ted Corcoran
Crestview Area Chamber of Commerce – Executive Director Sandra Wilson
Destin Fort Walton Beach Florida – Community + Public Relations Manager Stacey Young

5.2 Phase II Public Engagement

Phase II focused on creating a better transportation system and developing different scenarios for analysis by prioritization surveys. Several communication methods were used to garner public input. These methods included existing rider and potential rider surveys and engaging agency partners/civic organizations.

5.2.1 Public Engagement Survey Results

Surveys were provided to both current riders and non-riders. Current riders were given the opportunity to express what they value most, and potential riders shared what changes would encourage them to use EC Rider. During the two-week collection, a total of 289 completed online and paper surveys were received. Three of the Spanish translated surveys were completed, and 286 English surveys were completed. Of these, 229 respondents indicated they had not used the EC Rider system before, while 60 respondents indicated they were existing riders of the EC Rider system.

Positive survey feedback includes:

- "Great ideas, first of all, and thank you for seeking out the public opinion."
- "I love seeing more accessibility for those who don't have personal transportation."
- "Thanks for asking for our input!"
- "Love it, thanks for these improvements!"
- "Love the public transit initiatives!"

Figure 10. Phase II Public Engagement in Destin



6.0 Recommendations

Based upon the results of the scenario analysis, public engagement, and the stakeholder feedback this COA recommends the following changes to the transit network:

1. Adopt Scenario 1E is for implementation.

2. Explore Mobility on Demand for potential implementation within the Destin and Miramar Beach areas.

3. Expand Transit operations to provide additional evening and new weekend transit services.

Each of these recommendations is discussed in further detail below.

6.1 Recommended Scenario 1E

Scenario 1E has been selected as the recommended transit network design to be implemented based on its performance and consistency with the goals and objectives of the EC Rider transit system. Three goals and associated objectives were established as part of the COA process and relate to three topic areas: ridership (**Goal 1**), technology (**Goal 2**), and system efficiency (**Goal 3**). **Section 2.2** of this report discusses the goals and objectives in further detail.

Scenario 1E involves the re-routing of transit services within Fort Walton Beach to provide more direct paths between key destinations, resulting in faster travel times. Other changes include the introduction of a direct route between Destin and Fort Walton Beach to replace the multiple transfers currently required and the addition of a new local transit route within Crestview.

Scenario 1E directly addresses **Goal 1**. Specifically, this option meets Objectives 1.1 and 1.2 through increasing ridership by providing streamlined service to essential services and activity centers. In addition, it incorporates Objective 1.3 by increasing system visibility and accessibility through improved system operations (increased through movements).

Scenario 1E also advances **Goal 3**, particularly in fulfilling Objectives 3.1 and 3.3. Scenario 1D decreases travel time between Fort Walton Beach, Destin, and Crestview, minimizes unsafe operations, and streamlines access management.

Strategies for achieving **Goal 2** are discussed within the Implementation section (**Section 7**) of this report; however, they are not directly related to this COA. EC Rider can explore these changes in conjunction with the adoption of the recommended Scenario 1E.

The system changes proposed in Scenario 1E are discussed below and broken down into three major regions: Fort Walton Beach, Destin, and Crestview.

6.1.1 Fort Walton Beach - Routes 1-5

The existing five transit routes within Fort Walton Beach are to be retained, with changes in the alignment for some routes. The proposed network serves the same transfer points and destinations as the existing system, with interchanges at the Elder Services Transfer Center, Santa Rosa Mall, Walmart, Fort Walton Beach-Destin Hospital (FWB Hospital), and Northwest Florida State College (NWF State College).

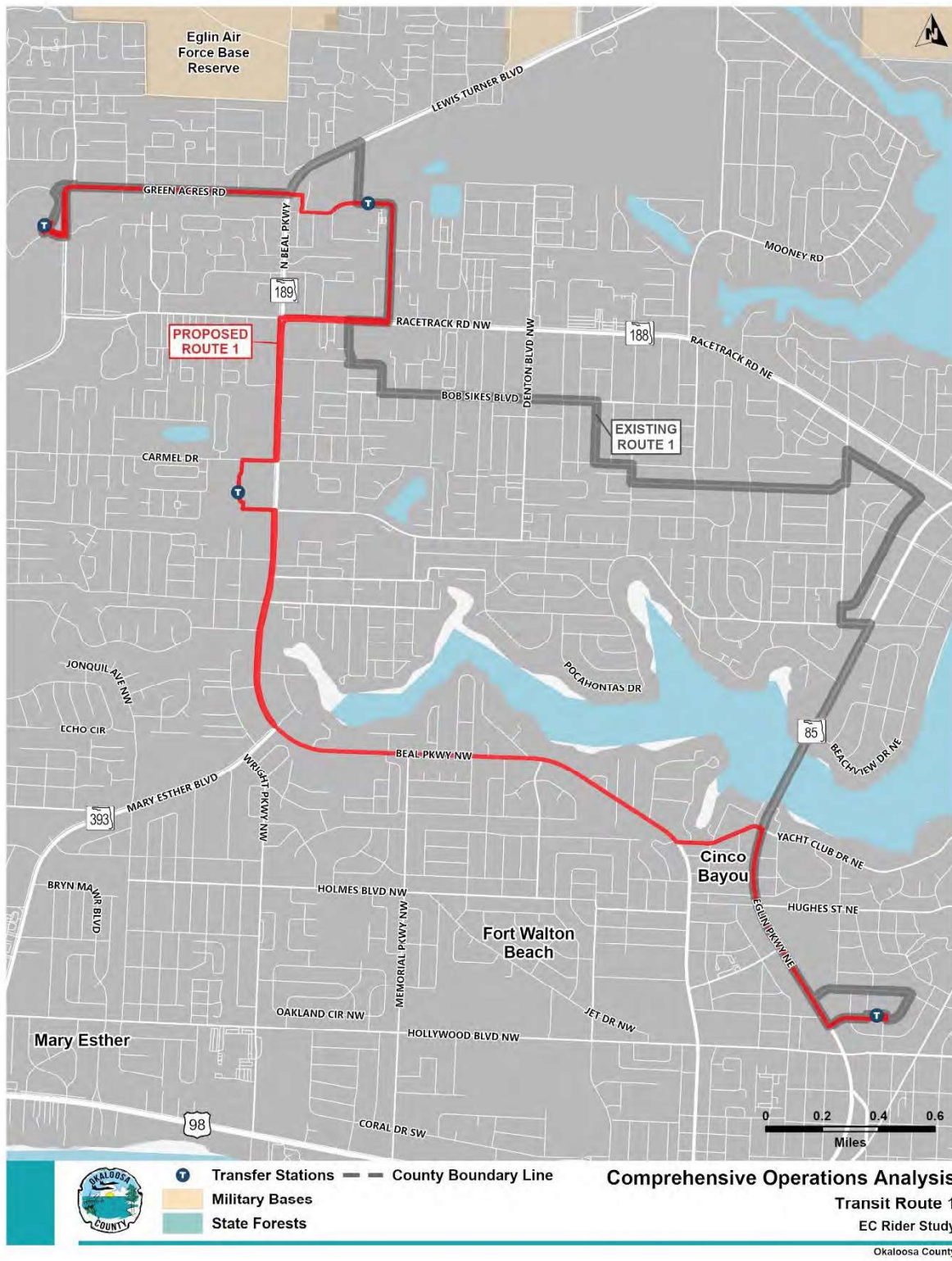
6.1.1.1 Route 1

Route 1 currently operates in between the Elder Services Transfer Center and the NWF State College campus via the FWB Hospital. Proposed Route 1 will still stop at these three destinations while also adding a stop at the Fort Walton Beach Walmart. The route currently travels north from the Elder Services Transfer Center along Eglin Parkway, across Cinco Bayou, then operates through several smaller streets, including Katherine Street, Newcastle Drive, and Bob Sikes Road, before reaching the FWB Hospital.

Under the revised alignment, the bus will travel north along Eglin Parkway, turning west down Yacht Club Drive to link with Beal Parkway. The bus will follow Beal Parkway north until Racetrack Road, where the service will rejoin its previous route between the FWB Hospital and the NWF State College.

The area north of Cinco Bayou will be served by Route 5, which will operate between the Elder Services Transfer Center and the Okaloosa County Courthouse Annex Extension, traveling along Racetrack Road. **Figure 11** below is the proposed revision to Route 1.

Figure 11. Revised Route 1



6.1.1.2 Route 2

Only minor changes are proposed to the existing operation of Route 2. This route operates a direct service along Hollywood Boulevard between the Elder Services Transfer Center and Santa Rosa Mall. The current route then continues further west to connect with the Mary Esther Library and Post Office. It is proposed that Route 2 terminate at the Santa Rosa Mall before returning east to the Elder Services Transfer Center. The library and post office will be served by an extension to Route 3. **Figure 12** below shows the proposed change to Route 2.

Figure 12. Revised Route 2

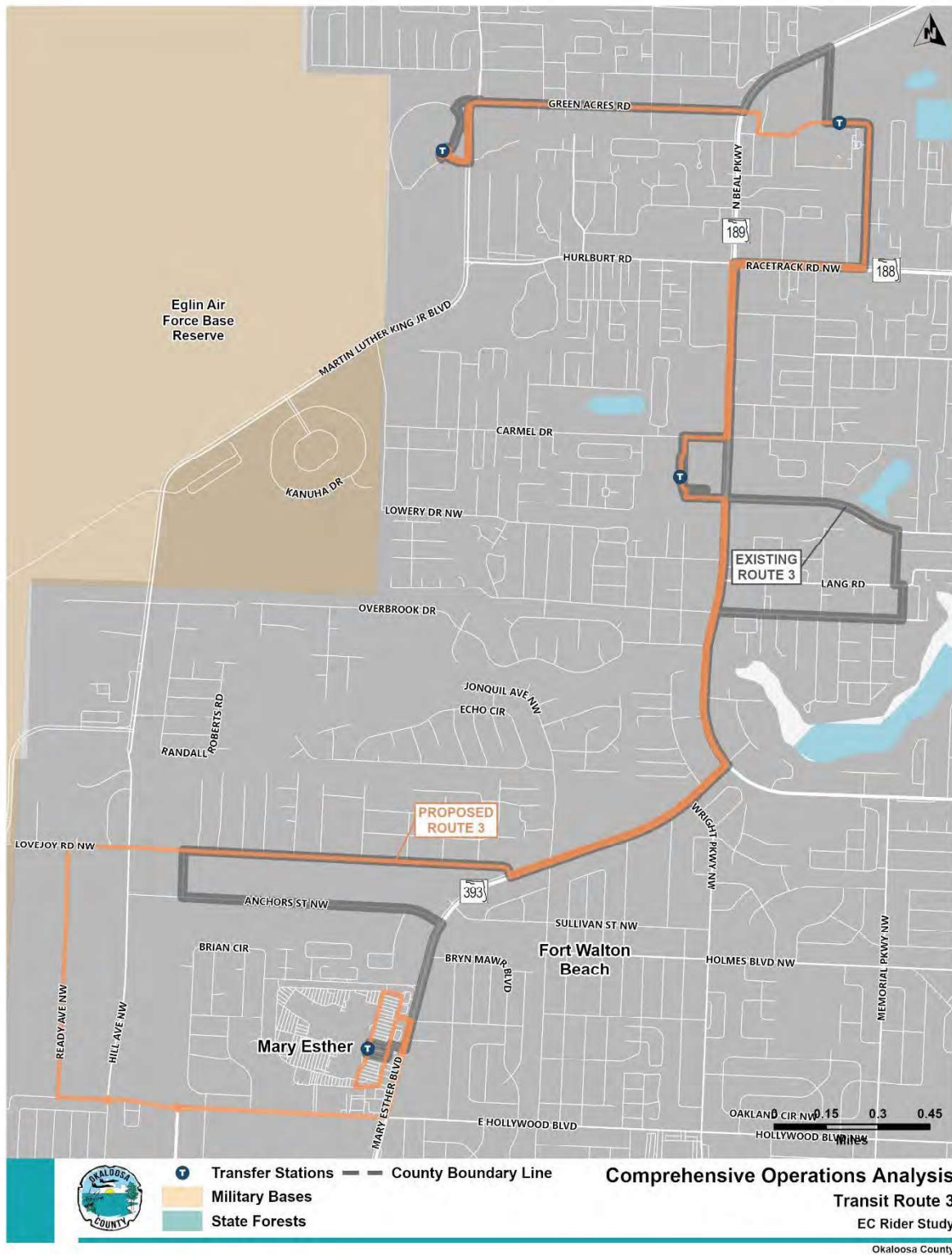


6.1.1.3 Route 3

Route 3 operates on a north-south alignment connecting the Santa Rosa Mall in Mary Esther to the NWF State College to the north along Mary Esther Boulevard and Beal Parkway. This route includes connections to transfer points at the Walmart and FWB Hospital. The proposed revision to Route 3 does not change any of these key destinations. The existing route has two major deviations away from the main road corridors, first the route travels west down Anchors Street and Lovejoy Road, and then a second deviation to the north where the route deviates east down Pelham Road/Lewis Street. These deviations reduce the directness of the route and increase travel time.

The proposed revisions to Route 3 remove the Pelham Road/Lewis Street diversion completely while re-routing the southern portion of the route to add new service along Ready Avenue and connect with the Mary Esther Library and post office before reaching the Santa Rosa Mall. The revised alignment is shown on **Figure 13** below.

Figure 13. Revised Route 3



6.1.1.4 *Route 4*

Route 4 operates between the Elder Services Transfer Center and Walmart. The current route travels along primary local and collector streets and includes a high number of turns as it travels through mostly low-density residential areas. The revised alignment maintains a similar service area in southern Fort Walton Beach; however, it is proposed to travel along Miracle Strip Parkway and Wright Parkway. The new alignment provides services to the many hotels and tourist destinations along Miracle Strip Parkway, as well as a connection to the Greyhound Bus Station, which is located on the corner of Wright Parkway and Miracle Strip Parkway. **Figure 14** shows the proposed revision to Route 4.

6.1.1.5 *Route 5*

Of the routes within Fort Walton Beach, Route 5 has the most significant proposed change. The route currently operates from the Okaloosa County Courthouse Annex Extension in the north to Santa Rosa Mall in the south. The alignment is like Route 3 and includes stops at both the FWB Hospital and Walmart, traveling along Beal Parkway and Mary Esther Boulevard. Route 5 currently provides irregular service along this corridor, with only three timetabled services per day. The current alignment has the lowest ridership and worst performance of any route within the EC Rider system. It is also noted that under the previous TDP, Route 5 is proposed to be removed from service and replaced with higher frequency on Route 3.

Under this COA, it is proposed to retain but redesign Route 5 to connect the Elder Services Transfer Center to the Okaloosa County Courthouse Annex Extension. This new alignment will travel along Beal Parkway and Racetrack Road before reaching the FWB Hospital, where it will then travel north along Hospital Road and join Lewis Turner Road. Increased frequency of service is proposed along this route be increased so that it operates hourly on a schedule like the other transit routes within Fort Walton Beach. The redesigned Route 5 would serve a similar area to the previous alignment of Route 1. The existing and revised alignment of Route 5 is shown in **Figure 15**.

Figure 14. Revised Route 4.

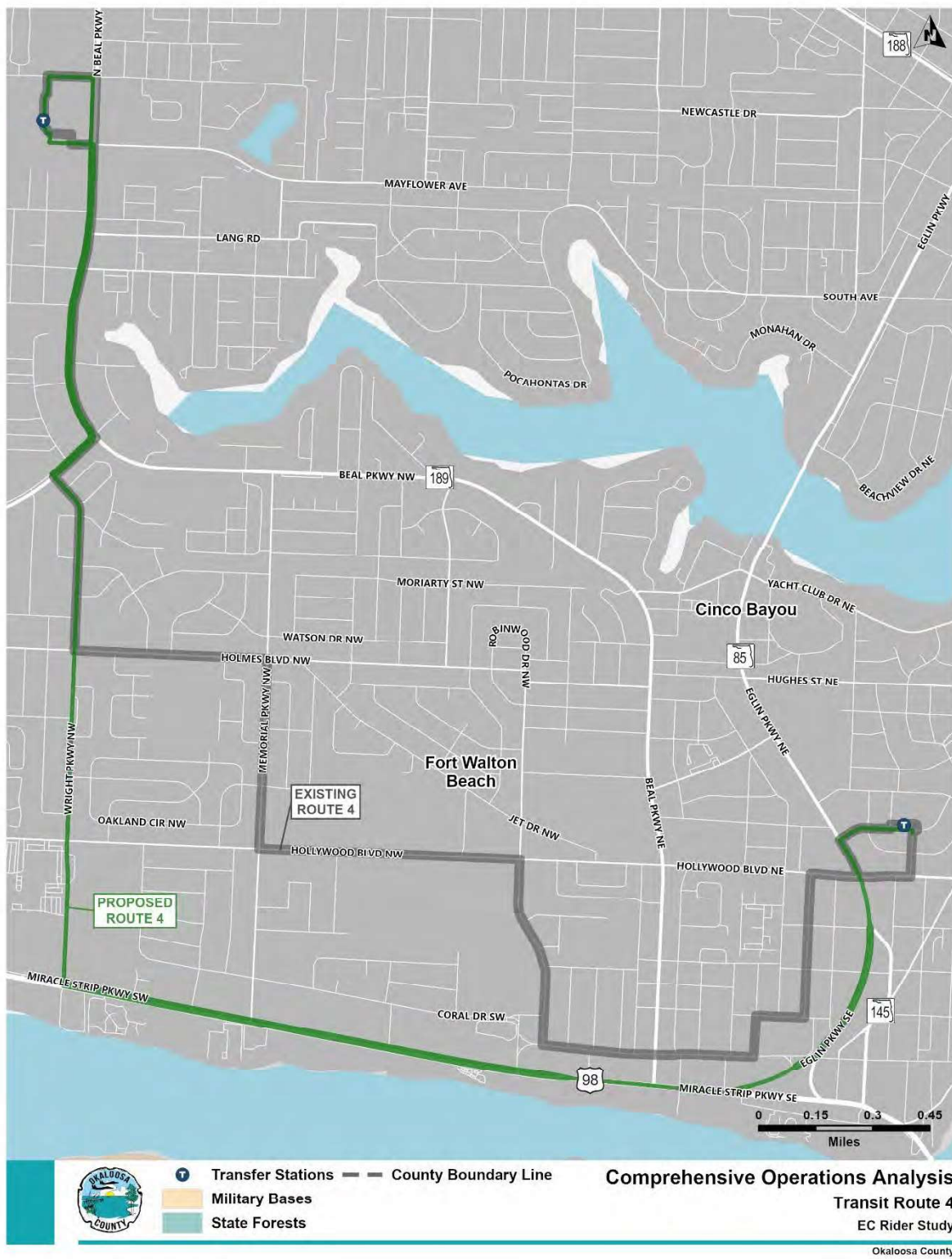
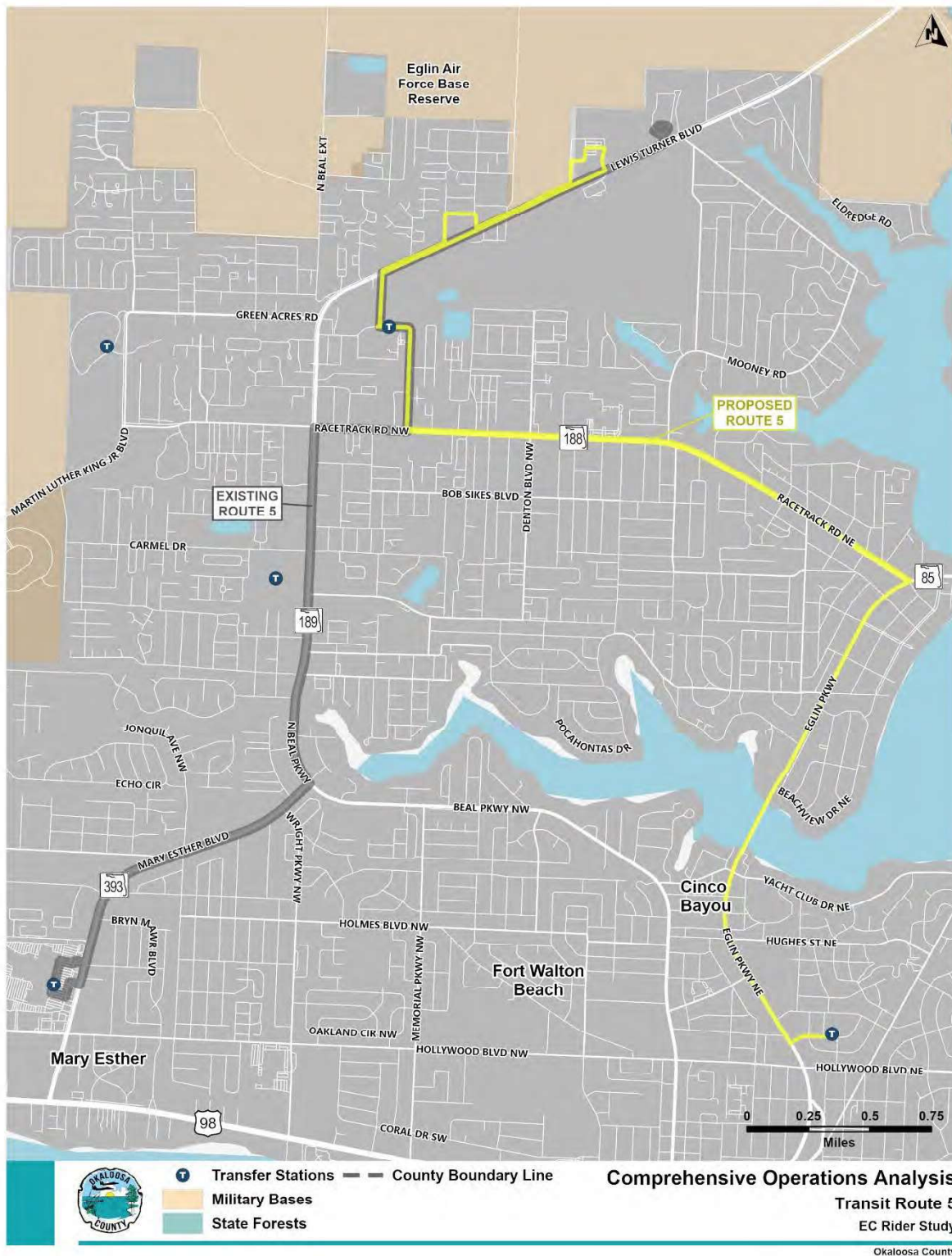


Figure 15. Revised Route 5



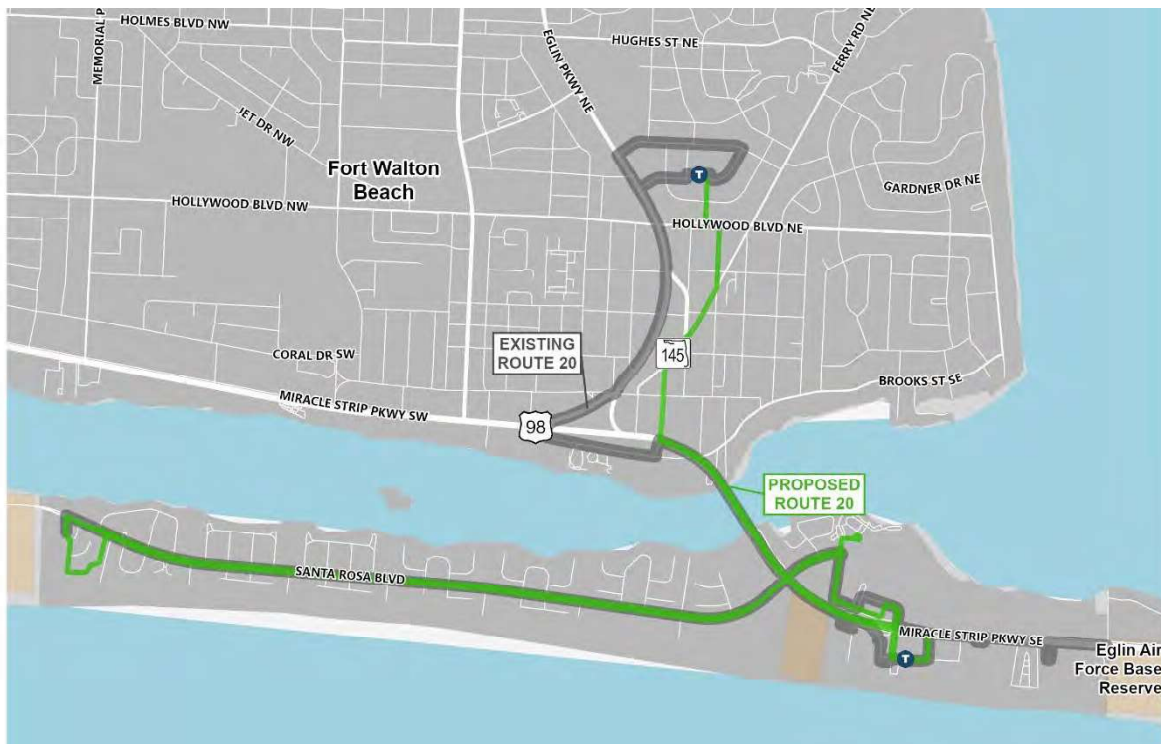
6.1.2 Destin and Beaches Region - Routes 20, 30, 32 & 33

6.1.2.1 Route 20

Route 20 currently serves as a connection between Fort Walton Beach and the beaches region including Destin. The service operates between the Elder Services Transfer Center in Fort Walton Beach and Okaloosa Island. On Okaloosa Island the service provides connections to the Destin-Fort Walton Beach Convention Center, the Destin-Fort Walton Beach Tourist Visitors Center, and the Okaloosa Island Boardwalk, where it connects with Route 30 for travelers to Destin. The bus also travels along Santa Rosa Boulevard servicing the various hotels, housing, and restaurants.

Only minor changes to Route 20 are proposed. It is recommended that the diversion along Brooks Street is removed due to safety issues identified by drivers and the transit operator, with the new alignment operating along a more direct route south from the Elder Services Transfer Center. The bus is no longer proposed to serve the visitors center as this required a U-turn movement on a heavily trafficked highway presenting a significant safety issue. The visitors center will now be served by the extension of Route 30. **Figure 16** below shows the revised alignment of Route 20.

Figure 16. Revised Route 20.



6.1.2.2 Route 30

The proposed changes to Route 30 enable a direct connection between Fort Walton Beach and Destin. Previously travelers were required to make two transfers from the Destin region and three transfers from east Destin to reach Fort Walton Beach. The new alignment combines previous routes 30 and 32 to operate a direct service from the Elder Services Transfer Center along Highway 98 to the Paradise Key Plaza east of Destin where the service will connect to Route 33. The new alignment eliminates most diversions from Highway 98 that existed on Route 32. The only remaining diversion includes service to the Destin Harbor Boardwalk, 98 Palm Plaza Shopping Mall (Winn Dixie), Sundestin Beach Resort, and Shakes Frozen Custard. These diversions remain to service the businesses and accommodations located along Highway 98 without requiring bus stops along the highway due to safety concerns. It is recommended that transit facilities be considered along Highway 98 to provide future stops and allow for the removal of these deviations. The bus route has been realigned to travel along Airport Road and Commons Drive through the eastern portions of Destin to improve safety, reduce the impacts of traffic congestion and to allow additional stop placement. **Figure 17** below shows the proposed alignment of Route 30.

Figure 17. Revised Route 30



6.1.2.3 Route 32

Route 32 would be revised to operate as a local Destin-only Circulator route. The southern terminus of the route remains at the end of Gulf Shore Drive at Norriego Point Beach, servicing the residential and various tourist accommodation along the coast. Route 32 then connects with Route 30 at the 98 Palms Plaza (Winn Dixie) where passengers can transfer to reach Fort Walton Beach or travel east to the Paradise Key Plaza Mall. The route then continues northwest through Destin along Main Street, Legion Drive, Beach Drive, and Kelly Street before reaching the Destin Library and Community Center. The route terminates at the Destin Harbor Boardwalk where it again connects with Route 30. This route enables the revised Route 30 to travel directly through

Destin without having to make the current diversions to Destin Library and Noriego Point. Revised Route 32 presents a new opportunity to provide local transit service within Destin and seeks to reduce the reliance on private vehicles for short local trips within the Destin community. This route could be integrated with or partly replaced by MoD operations at a future date. **Figure 18** below shows the existing and proposed alignment for Route 32.

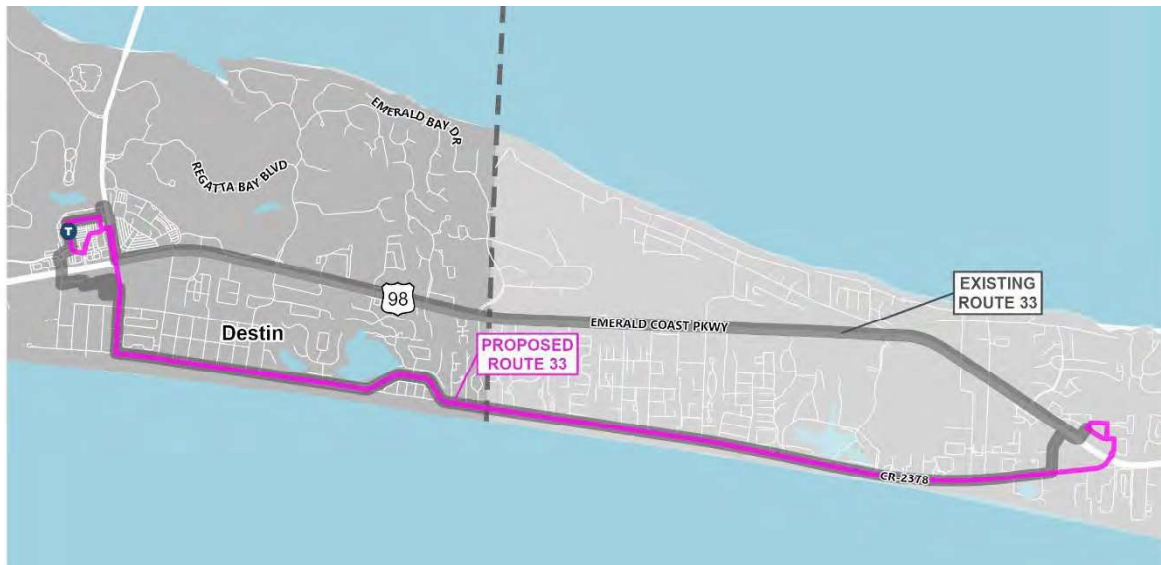
Figure 18. Revised Route 32



6.1.2.4 Route 33

Route 33 would connect the Paradise Key Plaza shopping center to the Silver Sands Premium Outlets. This route currently operates on a loop with eastbound buses taking Scenic Highway 98 along the coast with multiple stops between Paradise Key and the Silver Sands Outlets, while the westbound bus travels directly along US Highway 98. This requires travelers going from any of the stops along Miramar Beach to travel the entire loop to reach the Paradise Key transfer point. The new alignment will travel both directions along Scenic Highway 98 (also known as Scenic Gulf Drive). **Figure 19** shows the proposed alignment for Route 33.

Figure 19. Revised Route 33



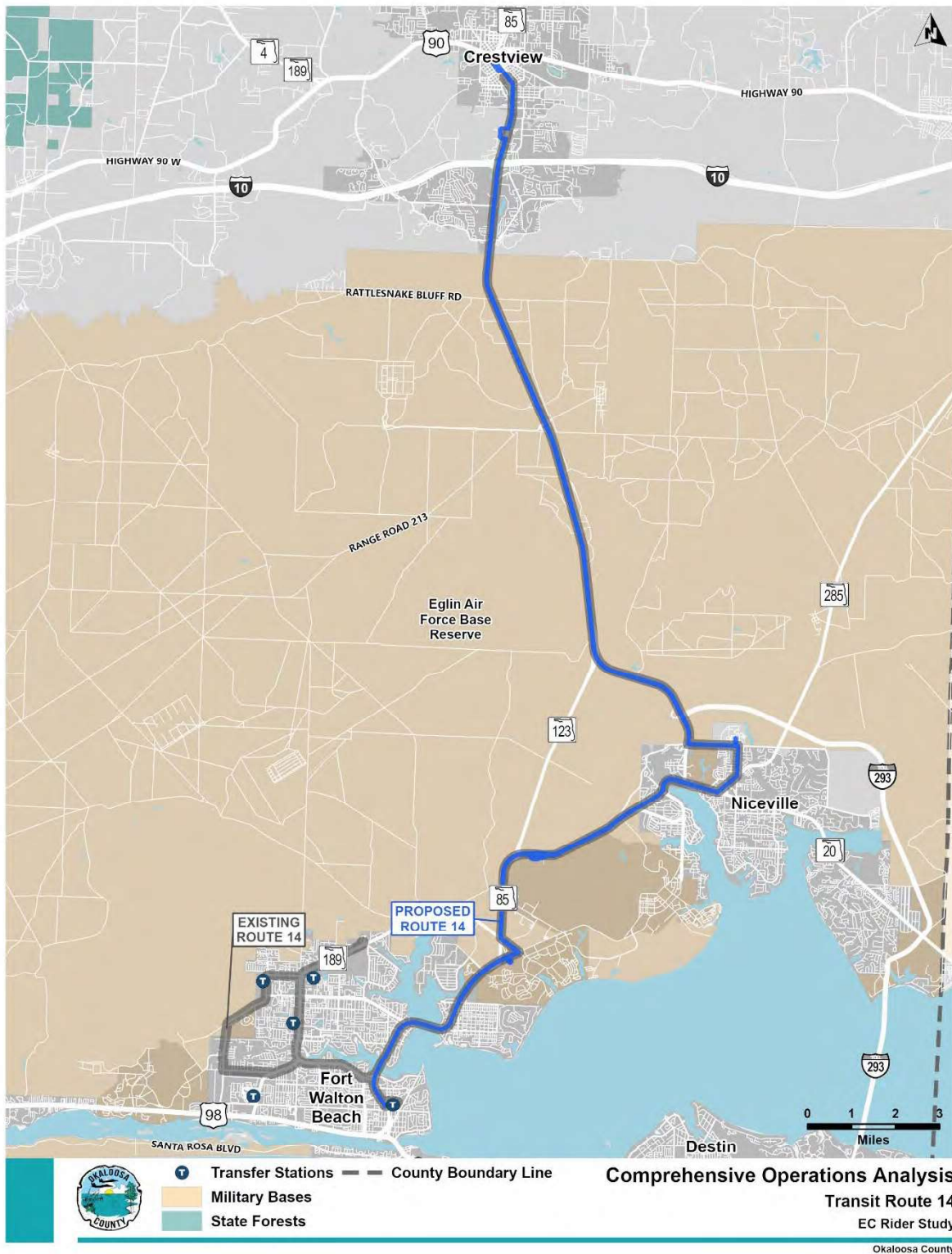
6.1.3 Crestview - Routes 14 and 15

6.1.3.1 Route 14

Route 14 currently operates limited stops service from Fort Walton Beach to Crestview via Niceville. The overall structure of Route 14 is proposed to remain the same as existing; however, the southern terminal point in Fort Walton Beach is proposed to be relocated from the Okaloosa County Courthouse Annex Extension Building to the Elder Services Transfer Center. At this location, the bus will connect with local Fort Walton Beach services as well as the connection to Destin. The current service results in duplication of routes within Fort Walton Beach and impacted the overall performance of Route 14. While some passengers may face an additional transfer within Fort Walton Beach, all locations will maintain transit service because of this change.

Other changes proposed as part of Route 14 include the addition of stops at the Fort Walton Beach – Destin Airport, additional stops within Valparaiso and Niceville, new stops in Crestview to service the South Crestview Publix, and along Main Street. Route 14 will connect with the proposed new route 15 at the South Crestview Publix and at a transfer point within downtown Crestview. This will increase the existing service coverage in Crestview where currently there is only one existing transit stop. **Figure 20** below shows the revised alignment of Route 14.

Figure 20. Revised Route 14

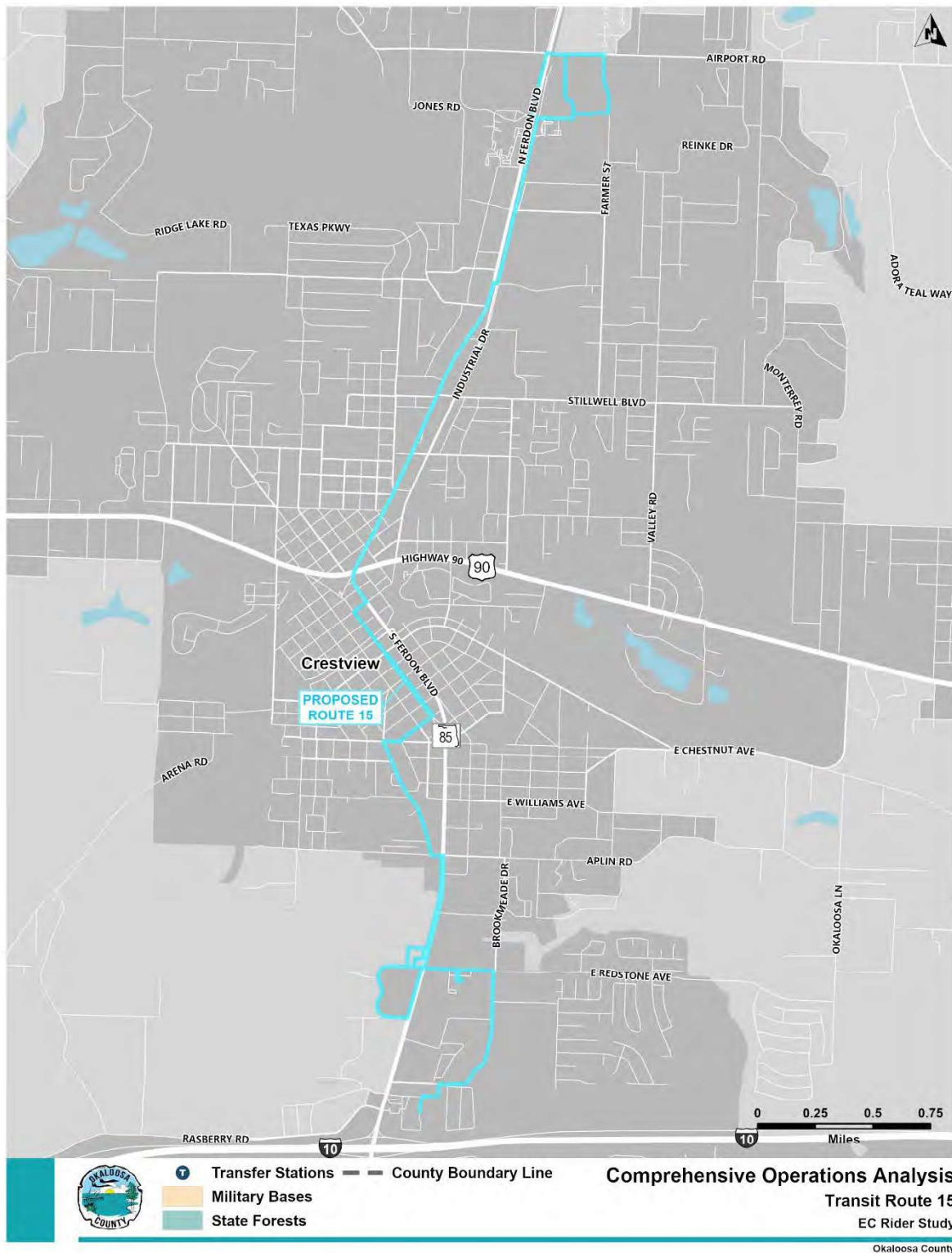


6.1.3.2 *Route 15*

The proposed new Route 15 would provide local service within Crestview. This route would operate on a north-south orientation connecting the Crestview Library to the North Okaloosa Medical Center and Crestview Walmart in the south. It is envisioned that this route will serve a dual purpose by providing local transit services to residents within Crestview while also providing a connection service with Route 14, enabling an easy-to-use connection between Crestview, Niceville, and Fort Walton Beach. **Figure 21** shows the proposed alignment of Route 15. New destinations served by Route 15 will include:

- Downtown Crestview
- Crestview High School
- Crestview Community Center
- Crestview Library
- Northcrest Publix
- Crestview Area shelter for the homeless
- South Crestview Publix
- North Okaloosa Medical Center
- Crestview Walmart

Figure 21. New Route 15

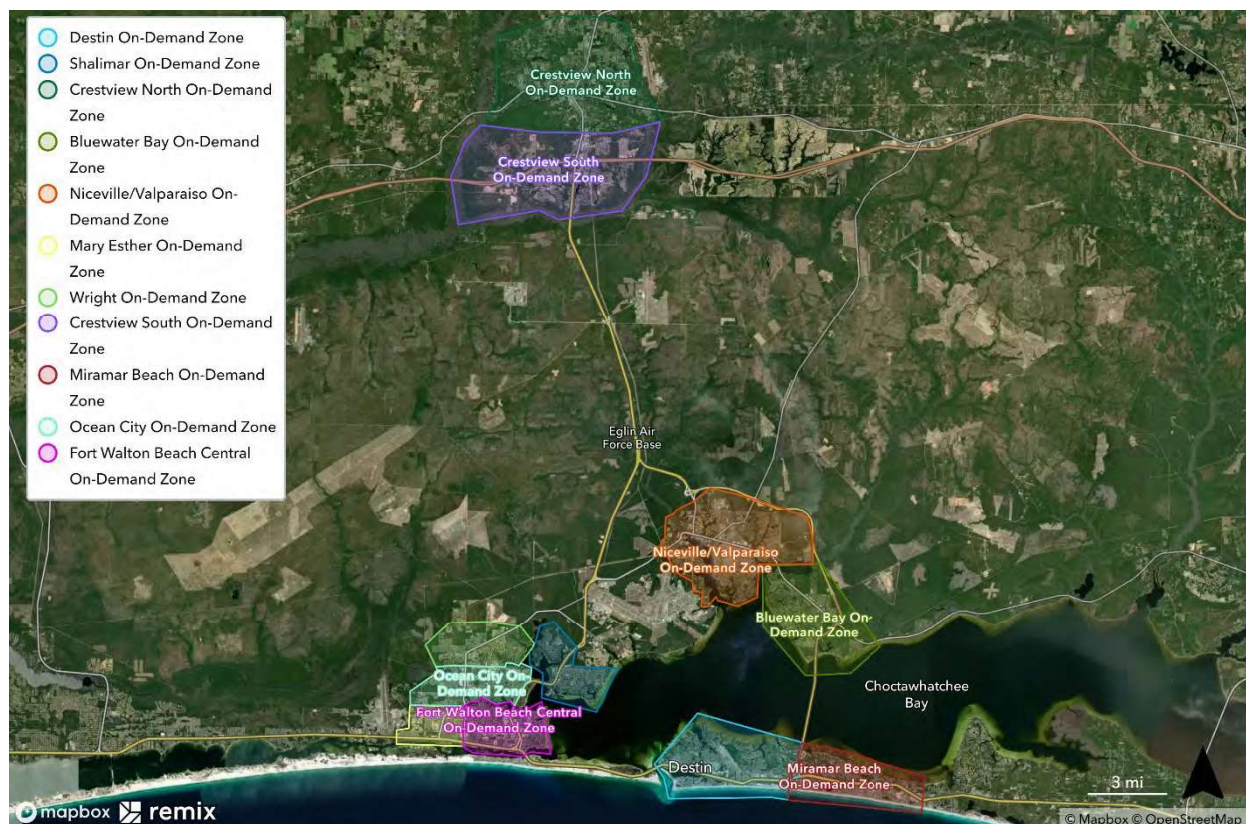


6.2 Mobility on Demand Option

The city of Destin and the Miramar Beach community is the recommended area to start and test out MoD service. The various hotel/condominium complexes, shopping, and tourist attractions gated residential communities, low speed roads, and frequent pedestrian crossings are not suitable for fixed-route service beyond the US 98 or Commons Drive Corridor. This potentially leaves significant portions of this area without access to public transportation, placing additional burden on the already congested roadway network. MoD could potentially fill this gap by providing customized service by going where a fixed-route bus cannot. Additionally, using a unique vehicle allows for branding and private/public partnership opportunities to help fund and market the service.

After the Beach MoD is operational, MoD should then be explored for other parts of the community. **Figure 22** identifies potential zones in Niceville, Shalimar, Valparaiso, and parts of unincorporated Okaloosa County. Each of these zones should be planned around a major destination or activity center to serve as a 'pulse' point to provide access to the fixed-route system and the rest of the community.

Figure 22. Potential Future Mobility on Demand Zones



6.3 Future Considerations

Other service improvements are also recommended to be considered for future implementation. These improvements are either included within the most recent TDP or were identified during the public engagement surveys. These recommendations include increased service hours of operation to include evening weekday service and weekend service.

Transit service schedules currently vary by route with most finishing service between 6:00 PM and 7:00 PM. It is recommended that the service schedule be extended to provide service until 8:00 PM. During the peak summer period sunset is typically between 7:30 PM and 8:00 PM local time with daylight often extending well beyond 8:00 PM. Given the important role that tourism and the associated industries of hospitality and entertainment play within the region's economy, there is likely a demand for trips outside of the traditional 9:00 AM - 5:00 PM. Initial modeling was undertaken for the introduction of evening service till 8:00 PM and with results showing an increase in ridership, a moderate increase in operating costs, and improved riders per revenue hour. To ensure the service offers reliable travel for residents who will use the service to commute to and from work, the evening extension should be provided year-round and not limited to the peak period.

Similarly, weekend service, has the potential to expand the benefits from transit operation including connecting residents who work weekend shifts to jobs, facilitating weekend travel for transit dependent communities, enabling potential mode shift for tourists and residents accessing the beaches or other leisure and entertainment destinations to reduce weekend traffic. Implementation of this recommendation could be staged with services starting on Saturday before extending to also include Sunday. Like the recommendation for extended evening service hours, the implementation of weekend service should be year-round to enable home-work trips. Providing a seasonal weekend service would not meet the demand for home-work trips.

It is noted that service patterns may differ between the standard weekday and what is operated on weekends with some or all routes operating on reduced service schedules. These details should be considered as part of a specific implementation plan.

6.4 Title VI Analysis

6.4.1 Methodology

The Title VI Analysis reviewed various socioeconomic factors of the population based on the American Community Survey (ACS) from the Census Bureau (2020). These include: No Socio-Economic Majority, Majority Poverty Population, Majority Minority Population, and Both Majority Minority and Poverty Populations.

These categories represent a combination of scores created based on the existing ACS (2020) Census Block Group data. The percentage of population that is classified as minorities and the percentage of population that live under the poverty level for each Block Group are calculated. Minority populations in this case equals the total population minus the white non-Hispanic population, which is divided by the total population to create a percentage. Poverty populations are already defined in the census data as the percent of population with income below the poverty level in the past 12 months.

A score of 0 or 1 is calculated for each type on each Block Group to determine its class. A score of 1 are those Block Groups where the calculated percentage of each group (minority or poverty) is greater than the mean percentage of that group. A score of 0 is where the mean percentage is less than the calculated percentage. Therefore, the categories are assigned by the following scores:

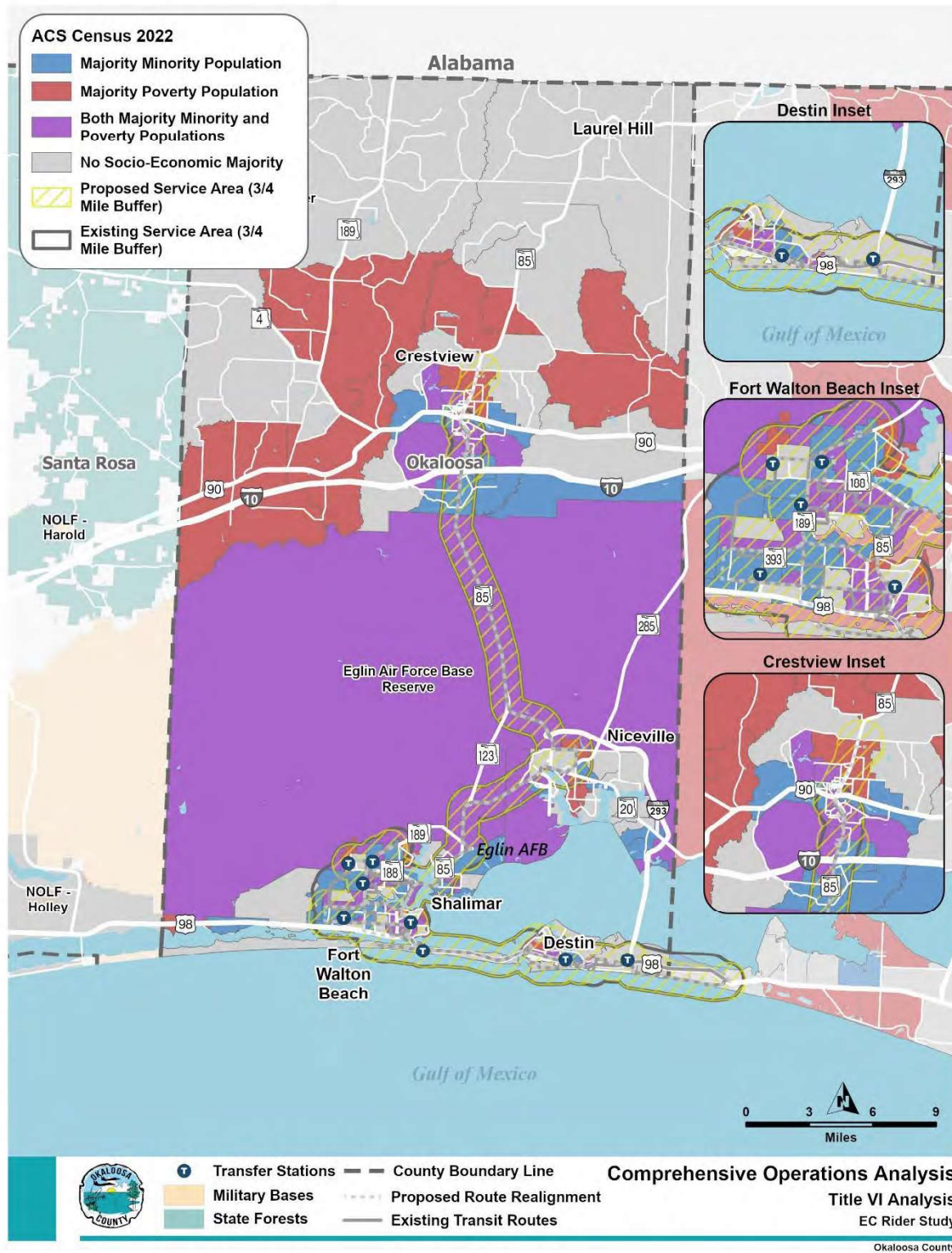
- No Socio-Economic Majority (0 Minority Score, 0 Poverty Score)
- Majority Poverty Population (0 Minority Score, 1 Poverty Score)
- Majority Minority Score (1 Minority Score, 0 Poverty Score)
- Both Majority Minority and Poverty Populations (1 Minority Score, 1 Poverty Score).

6.4.2 Analysis

Scenario 1E was analyzed for its impact on minority and lower income communities in the EC Rider service area. The Title VI analysis compares the census block groups in the county that currently have access to the EC Rider system to the census block groups in the county that will be served by the recommended fixed-route system. The analysis evaluates census block groups within three quarters of a mile from a fixed bus route. 2020 American Community Survey (ACS) 5-year estimates were used.

Figure 23 shows the census block groups in the EC Rider service area and their current and future provision of transit service. Block groups with either a majority minority, majority low-income, or both majority minority and low-income are identified. All census block groups that currently have service will continue to be served following the implementation of Scenario 1E, and the changes are not expected to impact low income or minority communities adversely or disproportionately.

Figure 23: Title VI System Wide Comparison



7.0 Implementation

As part of this COA, Florida Department of Transportation District 3 (FDOT D3) and EC Rider have agreed to a staged implementation of the proposed network changes. The implementation schedule is shown below in **Table 10**. The first stage of implementation will incorporate changes to the transit routes operating in the Destin area, these changes will be implemented in May 2024. The second step is to implement the route changes within Fort Walton Beach; these will occur in September 2024. The third and final stage will involve changes to the routes operating in Crestview, including the addition of the new Crestview local service (Route 15). As Route 14 operates in both Fort Walton Beach and Crestview, the changes to alignment within Fort Walton Beach will be implemented as part of Stage 2, while the additional stop locations in Niceville, Valparaiso, and Crestview will be implemented as part of Stage 3 in mid-2025. Stage 4 is identified for expansion in service hours to include evening and weekend service. The timing of Stage 4 will be determined in the next major TDP update. This section of the report will discuss the implementation plan for the COA recommendations.

Table 10. Proposed Implementation Schedule

Stage	Region	Routes	Timeline
Stage 1	Destin and Miramar Beach	30, 32, 33	May 2024
Stage 2	Fort Walton Beach	1, 2, 3, 4, 5, 14, 20	September 2024
Stage 3	Crestview, and Niceville	14, 15	Mid 2025
Stage 4	Entire Network – evening and weekend service		TBC in next major TDP update

7.1 Operations

The proposed transit network alignment has been designed to optimize efficiency and facilitate transfers between services. All routes, apart from Route 14, are proposed to operate on an hourly timetable. While travel times vary, most routes operate with a 1-hour return trip time for buses to minimize the number of buses needed on the transit system. Route 14 and Route 30 are exceptions to this. Route 14 connects Fort Walton Beach to Crestview and has a return trip time of approximately 140 minutes; this service will be scheduled to run every three hours (an increase from current operations every 4 hours) and require one bus to operate. Route 30 will operate hourly; however, with a return travel time of 110 minutes, it will require two buses. Proposed network operational details are provided in **Table 11** including the estimated travel times, schedule frequency, and estimated number of buses required. Overall, the network is estimated to need 12 buses.

No major changes are proposed to the existing span of service. While service times may differ for some routes, it is anticipated that daily service will commence at 7:00 AM from the Elder Services

Transfer Center. Route 14 will operate an early morning service from Crestview to Fort Walton Beach, like the current timetable; this service will operate to reach the Elder Services Transfer Center by 7:00 AM to enable transfers. Route 30 will commence at 6:00 AM to enable a return service from Destin to Fort Walton to arrive at 8:00 AM. Consideration should be given to starting Routes 1 and 2 at 6:30 AM from the NWF State College and Santa Rosa Mall, respectively, to reduce deadhead of vehicles traveling from the EC Rider depot to the Elder Services Transfer Center. Evening services will conclude between 7:30-8:00 PM Monday to Friday. No weekend service is currently operated; future weekend service will be considered within the next major TDP update.

Table 11. Proposed transit network operational details

Route	Start Point	End Point	Estimated Travel Time (One way)	Schedule	First Service	Estimated Vehicles
1	Elder Services	NWF State College	25 minutes	Hourly	7:00am	1
2	Elder Services	Santa Rosa Mall	18 minutes	Hourly	7:00am	1
3	Santa Rosa Mall	NWF State College	28 minutes	Hourly	7:30am	1
4	Elder Services	Walmart	22 minutes	Hourly	7:00am	1
5	Elder Services	Okaloosa County Courthouse Annex Extension	26 minutes	Hourly	7:00am	1
14	Elder Services	Crestview Courthouse	70 minutes	Every 3 hours	5:40am*	1
15	Crestview Library	Crestview Walmart	27 minutes	Hourly	7:00am	1
20	Elder Services	Okaloosa Island	22 minutes	Hourly	8:00am	1
30	Elder Services	Paradise Key Plaza	52 minutes	Hourly	6:00am	2
32	Destin Harbor	Norriego Point	25 minutes	Hourly	7:00am	1
33	Paradise Key Plaza	Silver Sands Outlets	24 minutes	Hourly	8:00am	1

*First service departs from Crestview at 5:40 AM to reach Fort Walton Beach by 7:00 AM

The timetable is to be developed in greater detail by EC Rider in partnership with the service operator. **Table 12** below shows proof of concept for a return service for each route. This could be repeated for each service hour or be used for inspiration in the development of a full timetable. The timetable design should ensure that all connecting services arriving at the Elder Services Transfer Center arrive before the hour mark each hour and depart shortly after, as shown in the example in **Table 12**. The routes that do not connect at Elder Services need to be designed to connect with either Route 14 or Route 30. These indicative timetables also identify potential time points across the network. The exact time and schedule should be prepared in coordination with the operator to verify travel times. It is noted that Routes 2 and 3 provide an opportunity to interline services and allow sufficient rest times for drivers due to the longer estimated travel time required on Route 3.

Table 12. Indicative Timetable and Time Points

Indicative Timetable Route 1		
Time Point / Stop	Time	Connection
Elder Services – Depart	10:00	Routes 2, 4, 5, 14, 20, 30
Winn Davis Park (Yacht Club)	10:05	N/A
Beal/Memorial Parkway	10:10	N/A
Walmart	10:15	Routes 3 & 4
FWB Medical Center	10:20	Routes 3 & 5
NWF State College – Arrive	10:25	Route 3
NWF State College – Depart	10:30	Route 3
FWB Medical Center	10:35	Routes 3 & 5
Walmart	10:40	Routes 3 & 4
Beal/Memorial Parkway	10:45	N/A
Winn Davis Park (Yacht Club)	10:50	N/A
Elder Services – Arrive	10:55	Routes 2, 4, 5, 14, 20, 30
Indicative Timetable Route 2		
Time Point / Stop	Time	Connection
Elder Services – Depart	10:05	Routes 1, 4, 5, 14, 20, 30
Hollywood & Beal	10:10	N/A
FWB High School	10:15	N/A
Santa Rosa Mall – Arrive	10:22	Route 3
Santa Rosa Mall – Depart	10:35	Route 3
FWB High School	10:42	N/A
Hollywood & Beal	10:47	N/A
Elder Services – Arrive	10:52	Routes 1, 4, 5, 14, 20, 30
Indicative Timetable Route 3		
Time Point / Stop	Time	Connection
Santa Rosa Mall – Depart	10:30	Route 2
Mary Esther Library	10:32	N/A
Lovejoy/Tilden	10:41	N/A

Indicative Timetable Route 3 (cont.)		
Time Point / Stop	Time	Connection
Walmart	10:48	Routes 1 & 4
FWB Hospital	10:53	Routes 1 & 5
NWF State College – Arrive	10:58	Route 1
NWF State College – Depart	11:00	Route 1
FWB Hospital	11:05	Routes 1 & 5
Walmart	11:10	Routes 1 & 4
Lovejoy/Tilden	11:17	N/A
Mary Esther Library	11:26	N/A
Santa Rosa Mall – Arrive	11:28	Route 2
Indicative Timetable Route 4		
Time Point / Stop	Time	Connection
Elder Services – Depart	10:05	Routes 1, 2, 5, 14, 20, 30
FWB City Hall	10:10	N/A
Miracle Strip/Wright	10:15	N/A
Greyhound Station	10:18	N/A
Wright/Marshall	10:21	N/A
Walmart – Arrive	10:24	Routes 1 & 3
Walmart – Depart	10:30	Routes 1 & 3
Wright/Marshall	10:33	N/A
Greyhound Station	10:36	N/A
Miracle Strip/Wright	10:39	N/A
FWB City Hall	10:44	N/A
Elder Services – Arrive	10:50	Routes 1, 2, 5, 14, 20, 30
Indicative Timetable Route 5		
Time Point / Stop	Time	Connection
Elder Services – Depart	10:00	Routes 1, 2, 4, 14, 20, 30
Publix (Eglin Parkway)	10:10	N/A
Choctawhatchee HS	10:15	N/A
FWB Hospital	10:20	Routes 1 & 3
Courthouse Annex – Arrive	10:26	N/A
Courthouse Annex – Depart	10:30	N/A
FWB Hospital	10:36	Routes 1 & 3
Choctawhatchee HS	10:40	N/A
Publix (Eglin Parkway)	10:45	N/A
Elder Services – Arrive	10:55	Routes 1, 2, 4, 14, 20, 30
Indicative Timetable Route 14		
Time Point / Stop	Time	Connection
Elder Services – Depart	10:00	Routes 1, 2, 4, 5, 20, 30
VA Clinic	10:20	N/A
FWB Airport	10:25	N/A
Niceville City Hall	10:30	N/A
Niceville FS College	10:35	N/A
Crestview South Publix	11:00	Route 15

Indicative Timetable Route 14 (cont.)		
Time Point / Stop	Time	Connection
Crestview City Hall – Arrive	11:10	Route 15
Crestview City Hall – Depart	11:40	Route 15
Crestview South Publix	11:50	Route 15
Niceville FS College	12:15	N/A
Niceville City Hall	12:20	N/A
FWB Airport	12:25	N/A
VA Clinic	12:30	N/A
Elder Services – Arrive	12:50	Routes 1, 2, 4, 5, 20, 30
Indicative Timetable Route 15		
Time Point / Stop	Time	Connection
Crestview Walmart – Depart	10:55	N/A
N Okaloosa Medical Center	11:00	N/A
Crestview South Publix	11:05	Route 14
Crestview City Hall	11:15	Route 14
Crestview Police Department	11:20	N/A
Crestview Library – Arrive	11:28	N/A
Crestview Library – Depart	11:30	N/A
Crestview Police Department	11:35	N/A
Crestview City Hall	11:40	Route 14
Crestview South Publix	11:53	Route 14
N Okaloosa Medical Center	11:56	N/A
Crestview Walmart – Arrive	12:00	N/A
Indicative Timetable Route 20		
Time Point / Stop	Time	Connection
Elder Services – Depart	10:10	Routes 1, 2, 4, 5, 14, 30
Okaloosa Island Boardwalk	10:17	Route 30
FWB Conference Center	10:20	N/A
El Matador – Arrive	10:31	N/A
El Matador – Depart	10:35	N/A
FWB Conference Center	10:46	N/A
Okaloosa Island Boardwalk	10:49	Route 30
Elder Services – Arrive	10:55	Routes 1, 2, 4, 5, 14, 30
Indicative Timetable Route 30		
Time Point / Stop	Time	Connection
Elder Services – Depart	10:00	Routes 1, 2, 4, 5, 14, 20
Okaloosa Island Boardwalk	10:07	Route 30
Destin Harbor	10:30	Route 32
98 Palms Plaza	10:40	Route 32
Destin Walmart	10:47	N/A
Paradise Key Plaza – Arrive	10:55	Route 33
Paradise Key Plaza – Depart	11:00	Route 33
Destin Walmart	11:07	N/A
98 Palms Plaza	11:15	Route 32

Indicative Timetable Route 30 (cont.)		
Time Point / Stop	Time	Connection
Destin Harbor	11:25	Route 32
Okaloosa Island Boardwalk	11:45	Route 20
Elder Services – Arrive	11:55	Routes 1, 2, 4, 5, 14, 20
Indicative Timetable Route 32		
Time Point / Stop	Time	Connection
Destin Harbor – Depart	10:30	Route 30
Destin Library	10:35	N/A
Destin Elementary School	10:40	N/A
98 Palms Plaza	10:45	Route 30
Sand Piper Cove	10:50	N/A
Norriego Point – Arrive	10:54	N/A
Norriego Point – Depart	11:00	N/A
Sand Piper Cove	11:05	N/A
98 Palms Plaza	11:10	Route 30
Destin Elementary School	11:15	N/A
Destin Library	11:20	N/A
Destin Harbor – Arrive	11:25	Route 30
Indicative Timetable Route 33		
Time Point / Stop	Time	Connection
Paradise Key Plaza – Depart	10:00	Route 30
James Lee Park	10:10	N/A
Driftwood/Beach Access	10:14	N/A
Surfside Hotel	10:17	N/A
Silver sands Outlet – Arrive	10:22	N/A
Silver Sands Outlet – Depart	10:30	N/A
Surfside Hotel	10:35	N/A
Driftwood/Beach Access	10:38	N/A
James Lee Park	10:42	N/A
Paradise Key Plaza – Arrive	10:52	Route 30

7.2 Bus Stops

Elder Services, Santa Rosa Mall, FWB Walmart, FWB Medical Center, NWF State College, 98 Palms Plaza, and Paradise Key Plaza are to be retained as transfer points within the transit network. New transfer locations will be established at the South Crestview Publix, Crestview Town Hall, and Destin Harbor. It is noted that the existing facilities at each of these transfer locations should be assessed to determine whether they are currently fit for purpose or require further investment. These facilities will be evaluated as part of the next major TDP update.

The changes in route alignment for routes within Fort Walton Beach and Destin will require the removal of bus stops along the roads that are no longer serviced. New bus stops will also be required along the new travel paths. These bus stop locations should be placed approximately ¼

to ½ a mile apart, ideally located at intersections with cross streets or key destinations. Major changes to bus stops and key locations to be served on each route are discussed below.

7.2.1 Route 1 Stops

The new alignment of Route 1 requires stops to be added along Yacht Club Drive and Beal Parkway while maintaining existing stops along Mar Walt Drive and Green Acers Road. Key stops along Route 1 include:

- Elder Services
- Winn Davis Park
- Walmart
- FWB Medical Center
- NWF State College

7.2.2 Route 2 Stops

Route 2 will maintain the existing stop locations along Hollywood Boulevard. It is noted that stops west of Santa Rosa Mall will be transferred to Route 3, including the Mary Esther Library and Post Office. Key stops along Route 2 include:

- Elder Services
- FWB High School
- Santa Rosa Mall

7.2.3 Route 3 Stops

As part of the service changes, Route 3 will no longer travel along Anchors Road, Lewis Street, or Pelham Road, with the stops on those streets to be removed. All stops north of Walmart will be retained along the route. Route 3 will add service west of Santa Rosa Mall, stopping at existing bus stops located at the Mary Esther Library and Post Office, which were formerly serviced by Route 2. New stops will be added along Hill Avenue between Hollywood Boulevard and Lovejoy Road. Key stops along Route 3 include:

- Santa Rosa Mall
- Mary Esther Library
- Mary Esther Post Office
- Sun Plaza
- Walmart
- FWB Hospital
- NWF State College

7.2.4 Route 4 Stops

The new alignment of Route 4 will remove stops along Windam Avenue, 1st Street, 2nd Street, Robinwood Drive, Memorial Parkway, and Holmes Boulevard. Stops along the portion of Hollywood Boulevard no longer serviced by Route 4 will still be retained as they are still serviced by Route 2. New stops will be added along Miracle Strip Parkway and Wright Parkway. Key stops along Route 4 include:

- Elder Services
- FWB City Hall
- FWB Greyhound
- FWB High School
- Silver Sands School
- Walmart

7.2.5 Route 5 Stops

Route 5 has been realigned to connect the Elder Services Transfer Center to the Okaloosa County Annex Extension. As a result, the route will no longer service all stops south of the FWB Medical Center and Mar Walt Drive. However, these stops are all serviced by Route 3 and are to be retained. The new route will require stops to be added along Eglin Parkway and Racetrack Road. All stops north of the FWB Medical Center will be retained along Route 5. Key stops along Route 5 include:

- Elder Services
- Publix Eglin Parkway / Okaloosa CareerSource
- Choctawhatchee High School
- FWB Medical Center
- Liza Jackson Preparatory School
- Okaloosa County Water Department
- Okaloosa County Courthouse Annex Extension

7.2.6 Route 14 Stops

Route 14 has been shortened to service only the Elder Services Transfer Center within Fort Walton Beach with all stops west of this location to no longer be served. New stops are to be added at the Fort Walton Beach Airport and along Government Avenue through Valparaiso. A diversion along Redstone Avenue will be added to Route 14 to provide stops servicing the North Okaloosa Medical Center Outpatient Center and South Crestview Publix. Stops are also proposed to be added approximately ¼ mile north of Robinson Avenue along Ferdon Boulevard and Main Street in Crestview through to the end of the route. Key stops along Route 14 include:

- Elder Services
- Okaloosa County Administration Building Shalimar
- VA Clinic
- FWB Airport
- Niceville Community Center
- NWF State College Niceville
- North Okaloosa Medical Center Outpatient Clinic
- Crestview South Publix
- Crestview City Hall

7.2.7 Route 15 Stops

Route 15 is a new route to be added to the transit network. This route will require new stops to be placed within Crestview. These stops should be added at the Crestview Walmart, every $\frac{1}{4}$ to $\frac{1}{2}$ mile along Brookmead Drive, Redstone Avenue, Bay Street, Field Avenue, Main Street, Ferdon Boulevard, and Industrial Drive. At the northern extent of the route stops should be placed at the North Crestview Publix, Crestview Community Center / Library, and Post Office. A deviation could be considered to provide stops closer to the cinema and the Florida Department of Revenue office on Richbourg Lane. Key stops along Route 15 include:

- Crestview Walmart
- North Okaloosa Medical Center
- North Okaloosa Medical Center Outpatient Clinic
- Crestview South Publix
- Crestview Area shelter for the homeless (Corner of Duggan Ave and Bay St)
- Crestview Police Department
- Crestview City Hall
- Crestview Community Center / Library
- Crestview North Post Office
- Crestview North Publix

7.2.8 Route 20 Stops

Route 20 is largely unchanged from the existing operation; the route no longer travels along Brooks Street, so the existing stops along this street should be removed. With stops to be considered along Ferry Road between Highway 98 and the Elder Services Transfer Center. Key stops along Route 20 include:

- Elder Services
- Okaloosa Island Boardwalk

- FWB Conference Center

7.2.9 Route 30 Stops

Route 30 has been redesigned to provide direct connections between Fort Walton Beach and Destin. This new route no longer travels along Gulf Shore Drive, with those bus stops to now be serviced by Route 32. Stops along Highway 98 are to be considered in further detail by EC Rider prior to implementation of the service. Stops may be possible along Highway 98 in current locations or in places with low safety impacts. Alternatively, a few limited deviations could be made to ensure that coverage is still provided along the corridor. Specific considerations regarding stops and deviations include:

- Whether to provide stops along Harbor Boulevard (Highway 98) between Destin Harbor and Beach Drive or to travel the buses along Mountain Drive with new stops provided every $\frac{1}{4}$ or $\frac{1}{2}$ mile;
- Providing stops or deviations between Palm Street and Airport Drive—it is recommended that at least one stop or deviation be provided along this stretch in each direction; and
- Diverting off Commons Drive to provide stops in front of the Emerald Coast Center and the Destin Walmart, or whether stops could be placed along this stretch of Commons Drive.

The new alignment travels east along Highway 98 until Airport Drive where it will then follow Commons Drive until the Paradise Key Plaza. Stops should be provided along this stretch of Commons Drive every $\frac{1}{4}$ or $\frac{1}{2}$ mile. Key stops along Route 30 include:

- Elder Services
- Okaloosa Island Boardwalk
- Destin Harbor
- 98 Palm Plaza
- Destin Walmart
- Paradise Key Plaza

7.2.10 Route 32 Stops

The changes to Route 32 alter the purpose and destinations of the route. The new alignment extends from Destin Harbor to Norriego Point via the Destin Library and 98 Palms Plaza. Stops along Gulf Shore Drive that previously served Route 30 can be retained, with new stops added every $\frac{1}{4}$ to $\frac{1}{2}$ mile along Main Street, Legion Drive, Beach Drive, Kelly Street, Sibert Avenue, and Stahlman Avenue. Many of the stops previously serviced by Route 32 are to be removed with Route 30 to minimize deviations as it travels through Destin to the Paradise Key Plaza. Key stops along Route 32 include:

- Destin Harbor
- Destin Library
- Destin Elementary School
- 98 Palms Plaza
- Norriego Point

7.2.11 Route 33 Stops

Route 33 will retain all existing stops apart from the Holiday Inn Express, where the stop is to be relocated to Hutchinson Street. As Route 32 will now operate in both directions along Scenic Highway 98, stops will need to be added in the westbound direction. These stop locations should mirror the eastbound stops where possible. To increase service ridership along Route 33, additional stops may be needed along Highway 98 in both directions approximately every ¼ mile. Key stops along Route 33 include:

- Paradise Key Plaza
- Crystal Beach plaza
- Silver Sands Outlets

7.3 Funding Sources

Current transit operations are funded by a mixture of local government funding, fare and advertising revenue, state grant programs, and federal grant programs. The revised network structure may result in higher operating costs than the current system. A comprehensive reevaluation of the agency's finances and the cost of potential service expansion beyond the COA recommendations should be undertaken as part of the next major TDP update.

A FDOT service development grant could be used to cover part of the cost for the implementation of Route 15. The service development grant program provides up to 50% of the operating cost for new transit services (minus fare generation for the route). These grants must be matched with local funds (also excluding fare generation). Under the service development grant program, new services are eligible for up to three years of operating assistance. The next window for applying for service development grants is Q1 State FY2025 (Summer 2024) for State FY2026. The draft implementation schedule delays the commencement of this service to Summer 2025 to use these funds and negotiate the appropriate agreements with the City of Crestview for the 2025 funding cycle.

Estimates of the daily operating costs of the new transit services have been developed using the TBEST modeling software. These figures are estimates only; detailed operational costs should be developed in partnership with the operator. **Table 13** shows the modeled daily operating costs for each route and the entire network. Following full implementation, the estimated daily

operating cost is \$6,889. This represents an increase of approximately 31% over the existing costs. However, given the nature of the modeling tool, this is a conservative estimate based upon assumptions regarding the number of vehicles, and staff hours required. The final service schedule and structure will need to be developed to provide a more accurate estimate of the operating costs. It is noted that approximately half the additional operating costs are related to the new route within the City of Crestview, as discussed earlier this service would be eligible for a service development grant to cover 50% of the operational costs for the first three years of operation, potential partnership opportunities with the City of Crestview could be explored to cover the remaining costs of that route.

Additional ridership resulting from the changes should also provide additional revenue that can offset some of the additional operating costs. The average fare revenue for EC Rider over the past three years, according to NTD, is approximately \$1. It is estimated that the service changes could achieve ridership growth from 388 to 1,274 daily riders, equating to an increase of 886 trips at a fare of \$1 per trip for a total of \$886 extra daily revenue. Excluding the new Crestview Route and accounting for the potential increase in fare revenue, the net increase in daily costs is anticipated to be approximately \$150 per day, an increase of 2.7%.

Table 13. TBEST Estimate Daily Operating Costs

Route	Existing Estimated Cost	Projected Cost	Projected Change %
1	\$446	\$646	+45%
2	\$372	\$394	+6%
3	\$342	\$840	+155%
4	\$427	\$542	+27%
5	\$109	\$364	+233%
14	\$621	\$653	+5%
15	N/A	\$716	N/A
20	\$478	\$439	-8%
30	\$1,289	\$1,279	-1%
32	\$765	\$461	-40%
33	\$393	\$551	+40%
Total	\$5,245	\$6,889	+31%

To fully implement these services, additional local funding will likely be required. It is noted that EC Rider currently has the second lowest operational funding and second lowest funding per resident of any transit agency within Florida. To achieve the potential benefits transit can provide

within the Fort Walton Beach urbanized area, additional funding should be considered. The financial element associated with these route changes and other potential improvements to the EC Rider transit system will be considered further as part of the next major TDP update. There is likely to be a delay between the implementation of the service and the additional ridership and associated increase in fare revenue. This will lead to a short-term shortfall in funding and will require additional local investment to provide the expanded services. This shortfall could be funded through other local sources, including contributions from municipalities, increased county funding, potential increased advertising revenue, and sponsorships or partnerships with other local organizations.

The beach routes, in particular, present opportunities for partnerships with local businesses or organizations, such as the Destin Chamber of Commerce. The Pensacola Beach Trolley is an example of such a partnership, with an agreement between the transit agency and the Santa Rosa Island Authority to fund and operate a transit service (**Figure 24**).

Figure 24: Pensacola Beach's Island Trolley Service



Public Engagement

With any significant service change, effective public engagement is essential. At a minimum, current and potential riders need to be notified of when the changes will begin, what the changes are and how it benefits them, what existing stops are affected, where the new stops will be located, what areas are gaining/losing service, and how navigating the system will change. Establishing the date when the changes will take place and working with Okaloosa County's Public Information Office to develop a public engagement strategy will be critical for a successful public launch.

Here are some suggested tactics for the public engagement strategy:

- Week by Week Calendar with the start date and pre-launch tasks clearly identified;
- Establish key messages and public distribution channels (social media, websites, press releases, etc.) to promote the changes;
- Updated ride guide, links to be included in distribution materials;
- Hold learning sessions (including materials) at strategic locations along the route to reach current transit users;
- Sample trips with travel itineraries to help customers learn how to navigate the system;

- Printed route by route “cheat sheets” containing general information about each route – hours of operation, frequency, and destinations served – to be distributed to each of the operators and other key staff;
- One month prior to launch, bus stop notifications to be placed on each of the stops that are being removed with information on the change and where the customer can go to catch the bus. This information could be accessed via a QR code that links to the EC Rider website;
- Identify ambassadors that can be trained on route changes and deployed on launch day/week to help customers navigate the system; and
- Identify additional staff that can respond via phone & email to customer questions & feedback throughout launch week.

It is recommended that preparation for the launch begin as soon as possible, since many of the elements such as the ride guide and preparing the bus stop notifications can take time to produce.

Marketing should begin at least eight weeks prior to the launch through a comprehensive government/stakeholder approach. Each customer-facing city and county government department should have marketing materials placed in their respective lobbies and/or on selected websites/webpages. Elected officials and other stakeholders should be involved in promoting the changes to their constituents and should be provided with FAQs and other materials. Identified staff should be trained in the proposed changes so they can help assist transit users with navigating the system and answer questions. At least three learning sessions should be held at various locations in the service area to teach the public how to navigate the system prior to launch. These learning sessions should be advertised in key locations prior to the launch.

7.4 Launch and Post Launch

Launch day will be challenging with many customers potentially unaware of the changes and needing help to navigate the system. It is recommended that the first week of the new system be fare-free to compensate for disruption to the network and to encourage potential new transit users to try the system for free. Ambassadors should be available at each of the transfer points for at least the first few days of the new system to answer questions and provide general assistance. Elected and appointed officials should also be made aware of the launch day and provided with materials to assist with customer service inquiries.

The system will likely be in a state of flux for four to six weeks after launch. During this time, unforeseen issues could come up, such as operational concerns, lack of access to critical destinations, or missed connections. An operator working group should be established to offer ‘in-the-field assessments’ and provide ‘ears on the ground’ feedback on the new route alignments.

Based upon customer and operator feedback agency staff should be on standby to quickly assess any issues to see if minor adjustments to the route(s) are needed. It is recommended that after-action reviews be held daily during launch week, and weekly for an additional period of time following the launch. These reviews can help determine whether temporary or permanent changes are needed. An additional after-action review should be completed several weeks after the launch to confirm the system changes are meeting the established goals.

7.5 Relationship with the Transit Development Plan

Florida Statute requires that transit agencies submit a TDP major update to FDOT at least every five years. This TDP is to serve as a strategic plan for the transit agency to review current performance, to set goals and objectives for the transit agency, to identify future action and to implementation items, while also forecasting future expenses and funding sources. Each year the transit agency is also required to submit a TDP Annual Progress Report (APR) to FDOT. These reports are due by September and provide an update on the progress that has been made toward implementing the recommendations of the previous TDP. The next major TDP update for EC Rider is due to be completed in 2026.

Following discussion with FDOT D3 regarding the outcomes of the COA, FDOT indicated that they are seeking immediate implementation of the route changes within the Destin area; these changes are proposed to occur in May 2024. FDOT also expressed support for the staged implementation of the remaining COA route changes with the Fort Walton Beaches changes implemented in September 2024, and the Crestview changes implemented mid-2025.

The TDP APR for 2024 will be prepared to incorporate the immediate implementation of these route changes while revising the implementation schedule of action items from the previous TDP. Due to the significance of the changes proposed as part of the COA, the associated financial implications, and the long-term recommendations (evening and weekend service), it is proposed that EC Rider prepare the TDP Major Update in 2025, one year earlier than required. This will allow for comprehensive financial modeling of the costs from service changes, and analysis of grant funding, while also allowing for the potential identification of action items following the early implementation of the route changes. The TDP Major Update will also allow the financial model to explore funding changes related to the transition to become a Transportation Management Area (TMA) based on the region's population in the 2020 census, increasing above 200,000 residents.



Appendices

Appendix A Route Profiles

Route 1: NWFSC FWB to Elder Services	
Characteristics	
Span of Service	7:00 AM to 7:29 PM
Frequency	Every 75 minutes
Cycle Time	55 minutes
Route Distance	16.4 miles
Avg Operating Speed	17.9 miles per hour
Number of Buses	1 bus
Operating Statistics	
Round Trips per Day	10
Annual Revenue-Miles	41,837
Annual Revenue-Hours	3,143
Annual Deadhead Hours	34.0
Annual Deadhead %	1.07%
Demographic Data	
Population	9,532
Jobs	8,276
Poverty	4,066
Minority	1,452
Service Productivity	
Avg Daily Ridership	65
Riders/Revenue-Hour	5.3
Riders/Revenue-Mile	0.4
Riders/Round Trip	6.5
Financial Performance	
Avg Daily Revenue	\$52.2
Subsidy/Revenue-Hour	\$45.0
Subsidy/Revenue-Mile	\$3.4
Subsidy/Round Trip	\$55.4
Daily Operating Cost	\$642.1
Cost/Rider	\$9.9
Farebox Recovery Ratio	8.6%
Subsidy/Rider	\$8.5

Route 2: Mary Esther Post Office to Elder Services	
Characteristics	
Span of Service	7:10 AM to 6:46 PM
Frequency	Every 60 minutes
Cycle Time	34 minutes
Route Distance	10.3 miles
Avg Operating Speed	18.2 miles per hour
Number of Buses	1 bus
Operating Statistics	
Round Trips per Day	12
Annual Revenue-Miles	31,599
Annual Revenue-Hours	2,980
Annual Deadhead Hours	37.5
Annual Deadhead %	1.24%
Demographic Data	
Population	5,622
Jobs	7,021
Poverty	1,014
Minority	2,082
Service Productivity	
Avg Daily Ridership	29
Riders/Revenue-Hour	2.52
Riders/Revenue-Mile	0.24
Riders/Round Trip	2.45
Financial Performance	
Avg Daily Revenue	\$23.3
Subsidy/Revenue-Hour	\$47.2
Subsidy/Revenue-Mile	\$4.5
Subsidy/Round Trip	\$46.0
Daily Operating Cost	\$582.5
Cost/Rider	\$20.0
Farebox Recovery Ratio	4.1%
Subsidy/Rider	\$19.0

Route 3: Santa Rosa Mall to NWFSC FWB	
Characteristics	
Span of Service	6:30 AM to 7:42 PM
Frequency	Every 80-160 minutes
Cycle Time	64 minutes
Route Distance	16.9 miles
Avg Operating Speed	16 miles per hour
Number of Buses	1 bus
Operating Statistics	
Round Trips per Day	7
Annual Revenue-Miles	30,186
Annual Revenue-Hours	3,628
Annual Deadhead Hours	41.1
Annual Deadhead %	1.12%
Demographic Data	
Population	7,955
Jobs	10,384
Poverty	1,412
Minority	3,103
Service Productivity	
Avg Daily Ridership	23
Riders/Revenue-Hour	1.6
Riders/Revenue-Mile	0.2
Riders/Round Trip	3.3
Financial Performance	
Avg Daily Revenue	\$18.5
Subsidy/Revenue-Hour	\$47.9
Subsidy/Revenue-Mile	\$5.8
Subsidy/Round Trip	\$97.4
Daily Operating Cost	\$653.47
Cost/Rider	\$28.4
Farebox Recovery Ratio	2.6%
Subsidy/Rider	\$29.6

Route 4: Walmart to Elder Services	
Characteristics	
Span of Service	6:50 AM to 7:28 PM
Frequency	Every 70 minutes
Cycle Time	44 minutes
Route Distance	11.1 miles
Avg Operating Speed	15.2 miles per hour
Number of Buses	1 bus
Operating Statistics	
Round Trips per Day	11
Annual Revenue-Miles	31,189
Annual Revenue-Hours	3,273
Annual Deadhead Hours	48.9
Annual Deadhead %	1.47%
Demographic Data	
Population	6,371
Jobs	10,950
Poverty	1,258
Minority	2,560
Service Productivity	
Avg Daily Ridership	45
Riders/Revenue-Hour	3.5
Riders/Revenue-Mile	0.4
Riders/Round Trip	4.1
Financial Performance	
Avg Daily Revenue	\$36.1
Subsidy/Revenue-Hour	\$46.4
Subsidy/Revenue-Mile	\$4.9
Subsidy/Round Trip	\$54.1
Daily Operating Cost	\$615.5
Cost/Rider	\$13.6
Farebox Recovery Ratio	5.7%
Subsidy/Rider	\$13.2

Route 5: Santa Rosa Mall to CHOICE High School	
Characteristics	
Span of Service	7:50 AM to 4:45 PM
Frequency	Every 4 hours
Cycle Time	52 minutes
Route Distance	11.7 miles
Avg Operating Speed	12.8 miles per hour
Number of Buses	1 bus
Operating Statistics	
Round Trips per Day	3
Annual Revenue-Miles	8,941
Annual Revenue-Hours	1,275
Annual Deadhead Hours	0
Annual Deadhead %	0%
Demographic Data	
Population	3,355
Jobs	5,130
Poverty	620
Minority	1,405
Service Productivity	
Avg Daily Ridership	4
Riders/Revenue-Hour	0.8
Riders/Revenue-Mile	0.1
Riders/Round Trip	1.4
Financial Performance	
Avg Daily Revenue	\$3.2
Subsidy/Revenue-Hour	\$48.6
Subsidy/Revenue-Mile	\$6.9
Subsidy/Round Trip	\$80.9
Daily Operating Cost	\$287.4
Cost/Rider	\$71.8
Farebox Recovery Ratio	1.3%
Subsidy/Rider	\$60.7

Route 14: Elder Services to Crestview	
Characteristics	
Span of Service	4:50 AM to 7:00 PM
Frequency	Every 3.5-4 hours
Cycle Time	180 to 205 minutes
Route Distance	63.7 to 85.8 miles
Avg Operating Speed	24.3 miles per hour
Number of Buses	1
Operating Statistics	
Round Trips per Day	4
Annual Revenue-Miles	80,004
Annual Revenue-Hours	3,868
Annual Deadhead Hours	230.2
Annual Deadhead %	5.6%
Demographic Data	
Population	4,664
Jobs	6,659
Poverty	750
Minority	1,542
Service Productivity	
Avg Daily Ridership	16
Riders/Revenue-Hour	1.1
Riders/Revenue-Mile	0.1
Riders/Round Trip	4.2
Financial Performance	
Avg Daily Revenue	\$12.9
Subsidy/Revenue-Hour	\$48.4
Subsidy/Revenue-Mile	\$2.3
Subsidy/Round Trip	\$183.4
Daily Operating Cost	\$886.8
Cost/Rider	\$55.4
Farebox Recovery Ratio	1.7%
Subsidy/Rider	\$45.8

Route 20: Elder Services to Okaloosa Islands	
Characteristics	
Span of Service	7:30 AM to 7:20/7:40 PM
Frequency	Every 30-60 minutes (season-depending)
Cycle Time	39-50 minutes
Route Distance	11 miles
Avg Operating Speed	13.8 miles per hour
Number of Buses	1-2 buses
Operating Statistics	
Round Trips per Day	12-24
Annual Revenue-Miles	47,704
Annual Revenue-Hours	3,876
Annual Deadhead Hours	143.2
Annual Deadhead %	3.7%
Demographic Data	
Population	2,784
Jobs	4,763
Poverty	287
Minority	626
Service Productivity	
Avg Daily Ridership	49
Riders/Revenue-Hour	2.1
Riders/Revenue-Mile	0.2
Riders/Round Trip	2.1
Financial Performance	
Avg Daily Revenue	\$39.4
Subsidy/Revenue-Hour	\$46.6
Subsidy/Revenue-Mile	\$4.2
Subsidy/Round Trip	\$39.4
Daily Operating Cost	\$854.5
Cost/Rider	\$17.4
Farebox Recovery Ratio	5.3%
Subsidy/Rider	\$14.5

Route 30: Okaloosa Islands to 98 Palms	
Characteristics	
Span of Service	8:00 AM to 7:39/8:09 PM
Frequency	Every 30-60 minutes (season depending)
Cycle Time	39 minutes
Route Distance	19.8 miles
Avg Operating Speed	30.4 miles per hour
Number of Buses	1-2 buses
Operating Statistics	
Round Trips per Day	12-24
Annual Revenue-Miles	76,635
Annual Revenue-Hours	4,020
Annual Deadhead Hours	143.9
Annual Deadhead %	3.6%
Demographic Data	
Population	2,347
Jobs	4,636
Poverty	118
Minority	241
Service Productivity	
Avg Daily Ridership	61
Riders/Revenue-Hour	2.6
Riders/Revenue-Mile	0.1
Riders/Round Trip	2.6
Financial Performance	
Avg Daily Revenue	\$49.0
Subsidy/Revenue-Hour	\$46.1
Subsidy/Revenue-Mile	\$2.4
Subsidy/Round Trip	\$40.4
Daily Operating Cost	\$990.6
Cost/Rider	\$16.2
Farebox Recovery Ratio	6.3%
Subsidy/Rider	\$11.9

Route 32: 98 Palms to Paradise Key	
Characteristics	
Span of Service	8:00 AM to 6:50/7:20 PM
Frequency	Every 30-60 minutes (season depending)
Cycle Time	50 minutes
Route Distance	11.3 miles
Avg Operating Speed	13.6 miles per hour
Number of Buses	1-2 buses
Operating Statistics	
Round Trips per Day	11-22
Annual Revenue-Miles	40,210
Annual Revenue-Hours	3,795
Annual Deadhead Hours	242.3
Annual Deadhead %	6.38%
Demographic Data	
Population	1,874
Jobs	10,449
Poverty	304
Minority	707
Service Productivity	
Avg Daily Ridership	48
Riders/Revenue-Hour	2.2
Riders/Revenue-Mile	0.2
Riders/Round Trip	2.2
Financial Performance	
Avg Daily Revenue	\$38.6
Subsidy/Revenue-Hour	\$46.6
Subsidy/Revenue-Mile	\$4.4
Subsidy/Round Trip	\$42.0
Daily Operating Cost	\$814.1
Cost/Rider	\$16.9
Farebox Recovery Ratio	5.3%
Subsidy/Rider	\$14.5

Route 33: 98 Paradise Key to Silver Sands Premium Outlets	
Characteristics	
Span of Service	8:00 AM to 6:50/7:20 PM
Frequency	Every 30-60 minutes (season depending)
Cycle Time	50 minutes
Route Distance	11.3 miles
Avg Operating Speed	13.6 miles per hour
Number of Buses	1-2 buses
Operating Statistics	
Round Trips per Day	11-22
Annual Revenue-Miles	40,210
Annual Revenue-Hours	3,795
Annual Deadhead Hours	242.3
Annual Deadhead %	6.38%
Demographic Data	
Population	1,874
Jobs	10,449
Poverty	304
Minority	707
Service Productivity	
Avg Daily Ridership	48
Riders/Revenue-Hour	2.2
Riders/Revenue-Mile	0.2
Riders/Round Trip	2.2
Financial Performance	
Avg Daily Revenue	\$38.6
Subsidy/Revenue-Hour	\$46.6
Subsidy/Revenue-Mile	\$4.4
Subsidy/Round Trip	\$42.0
Daily Operating Cost	\$814.1
Cost/Rider	\$16.9
Farebox Recovery Ratio	5.3%
Subsidy/Rider	\$14.5



Appendix B Scenario Planning Maps

Figure 25. 1A Fort Walton Beach

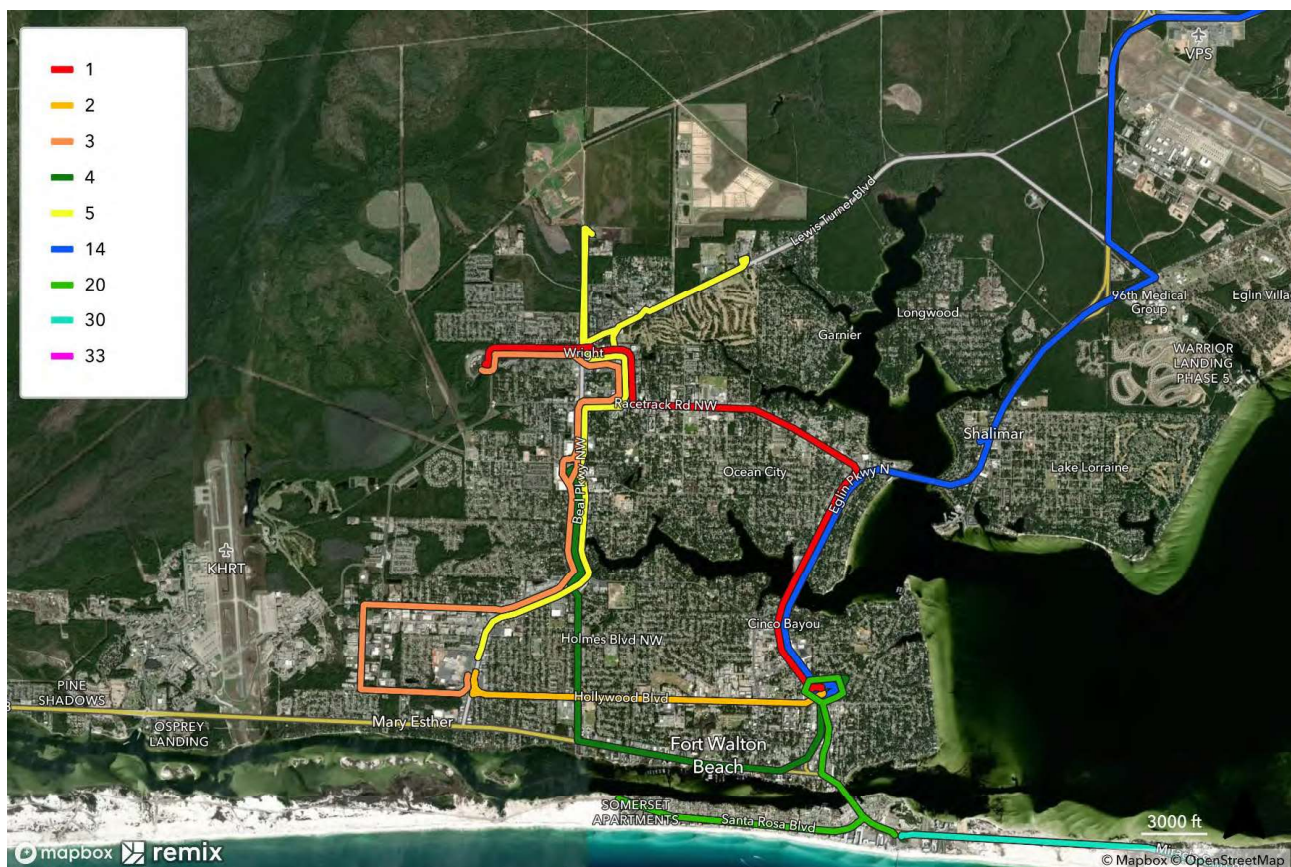


Figure 26. 1A Destin

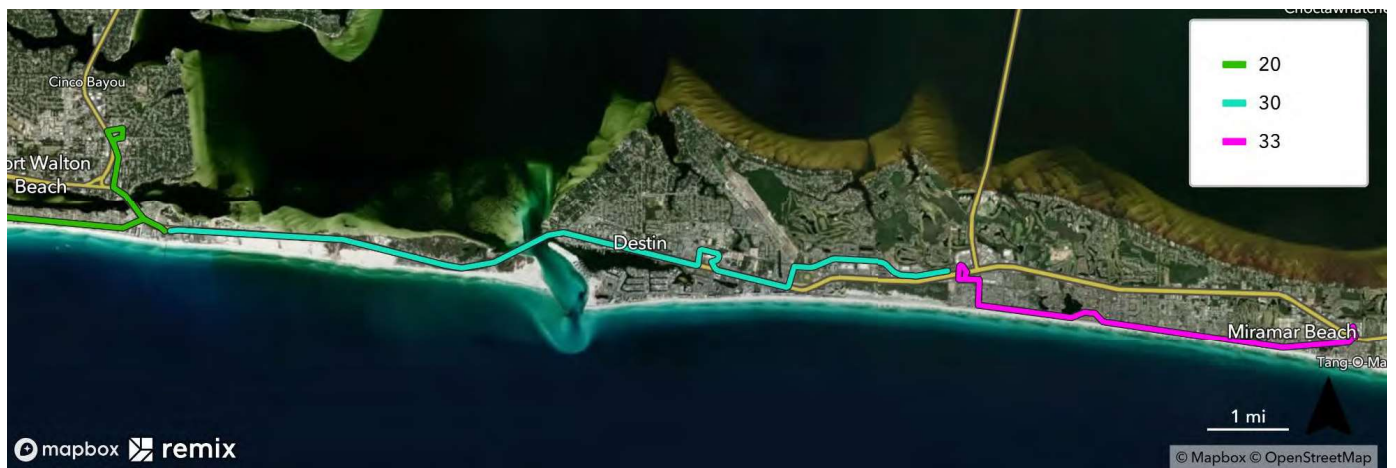


Figure 27. 1B Fort Walton Beach

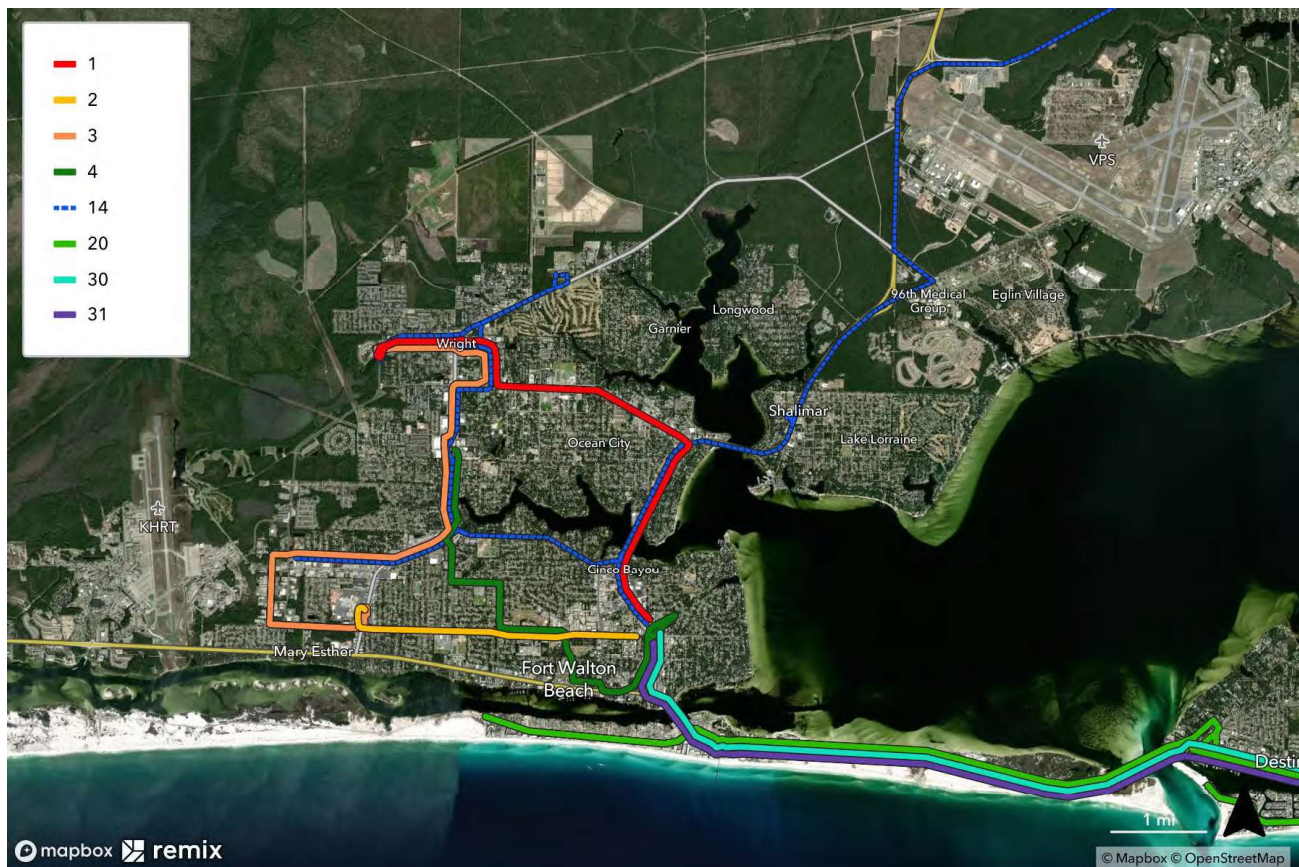


Figure 28. 1B Destin

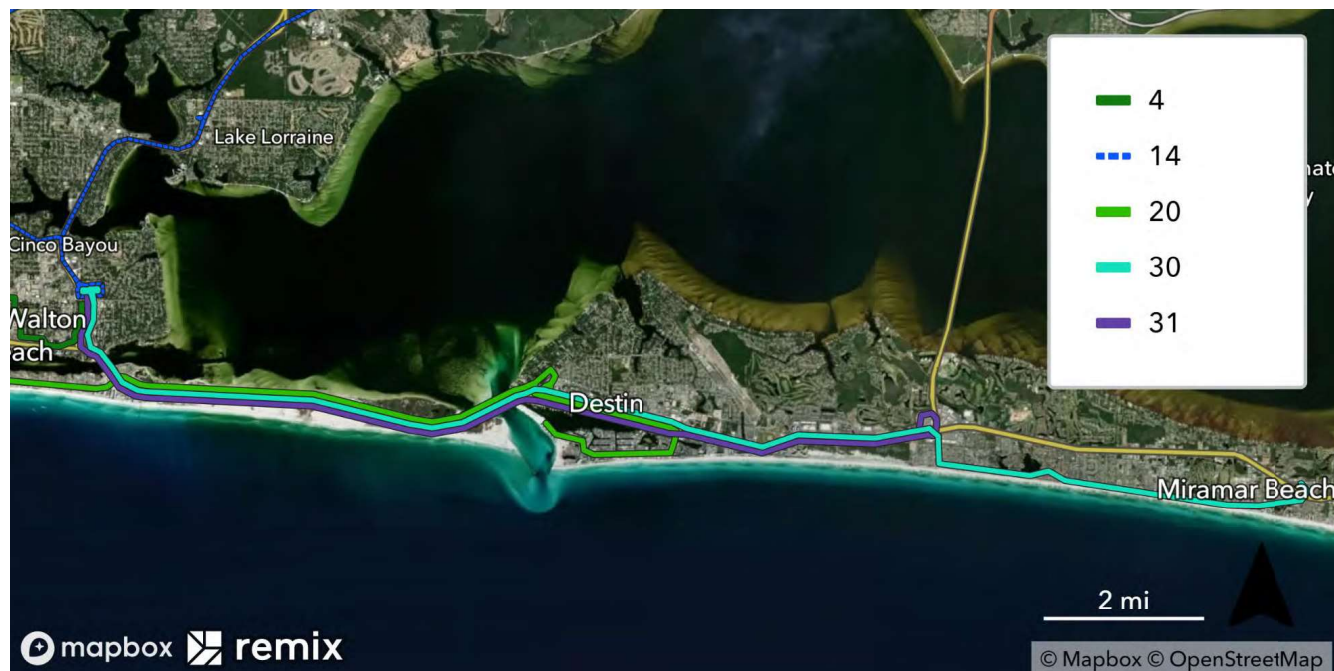


Figure 29. 1C Fort Walton Beach

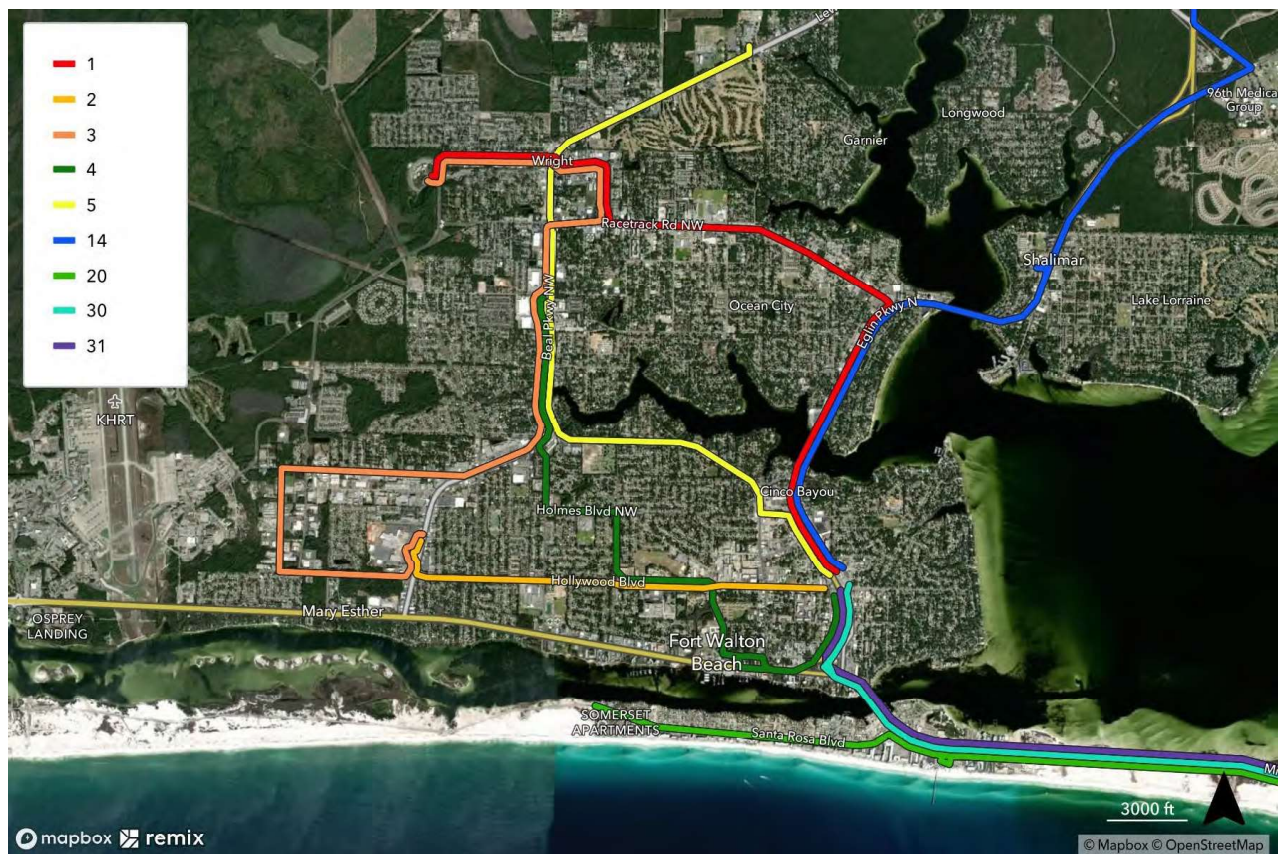


Figure 30. 1C Destin

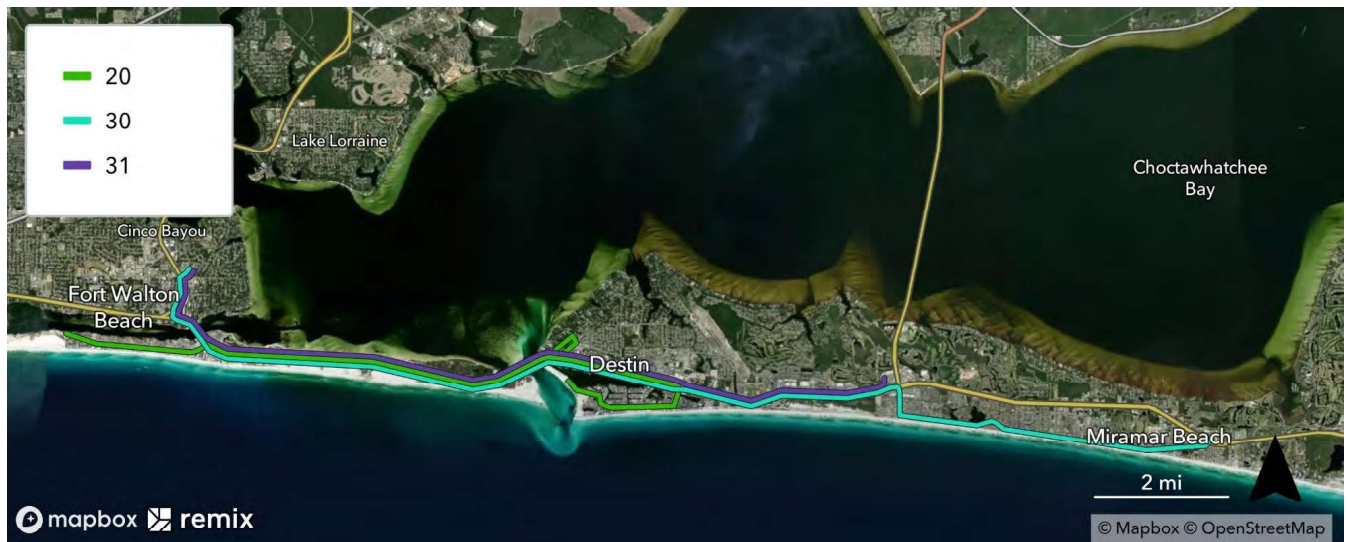


Figure 31. 1D Fort Walton Beach

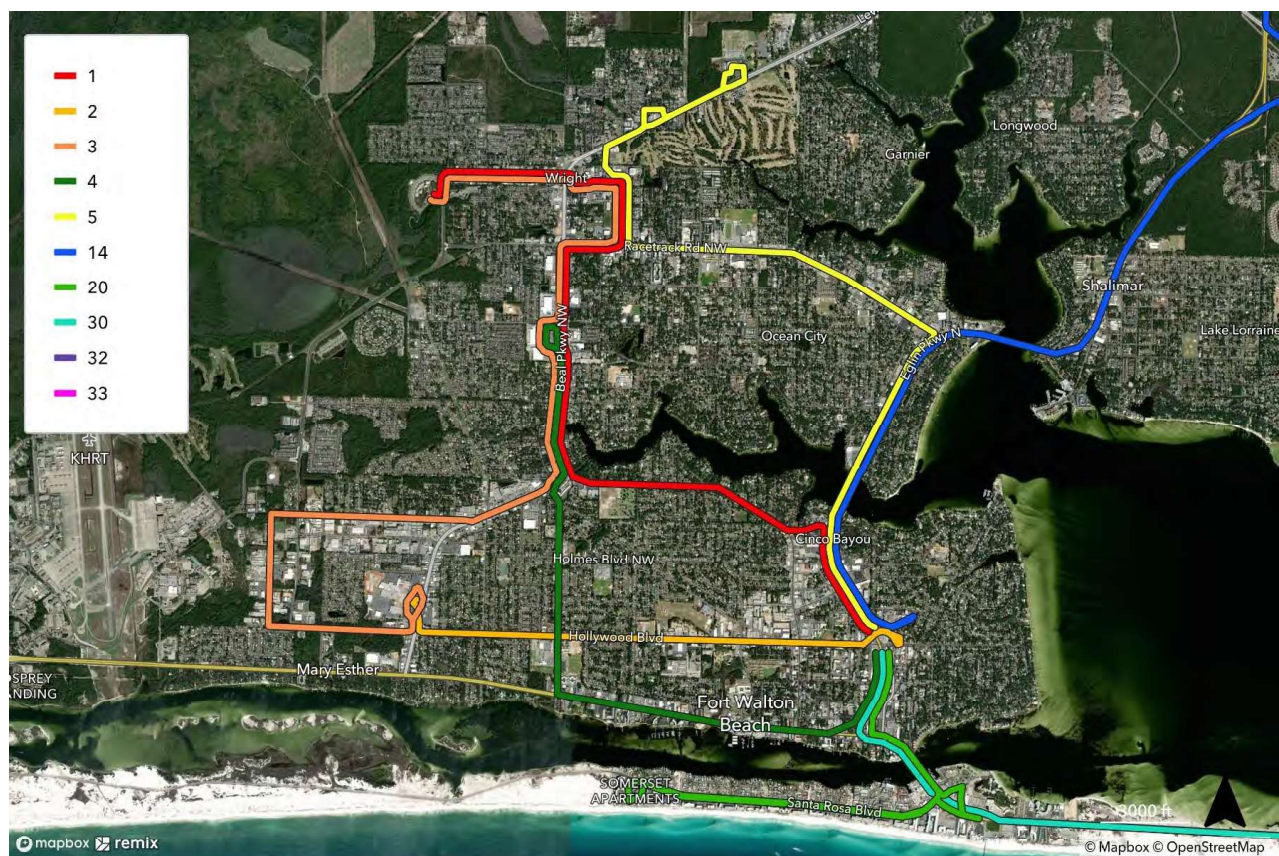


Figure 32. 1D Destin

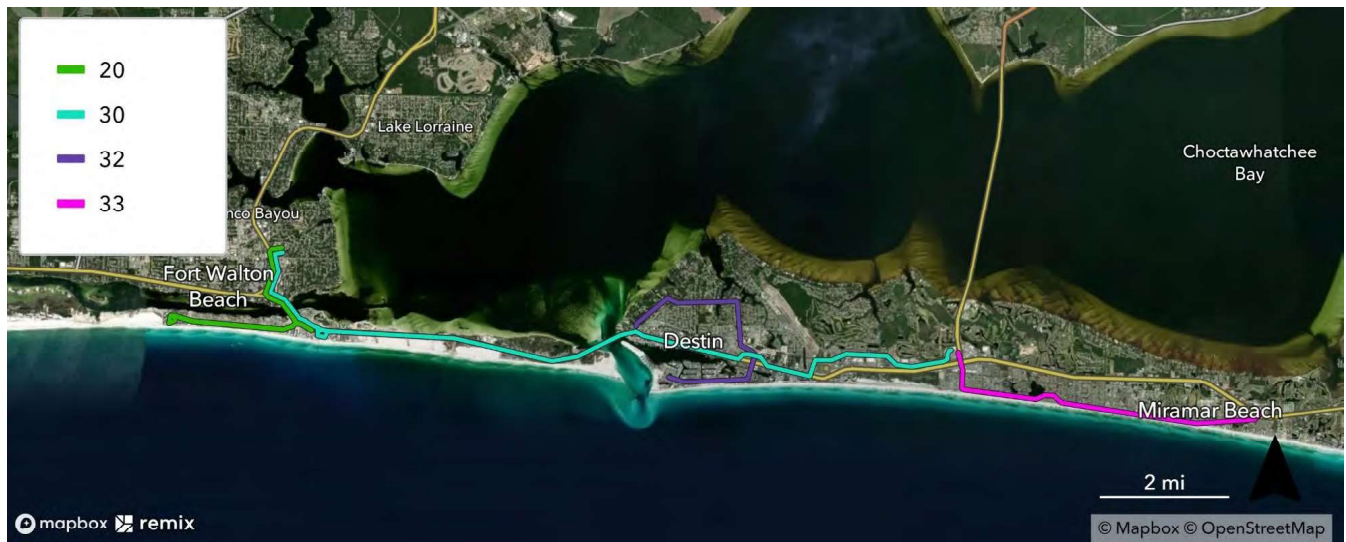


Figure 33. 1E Fort Walton Beach

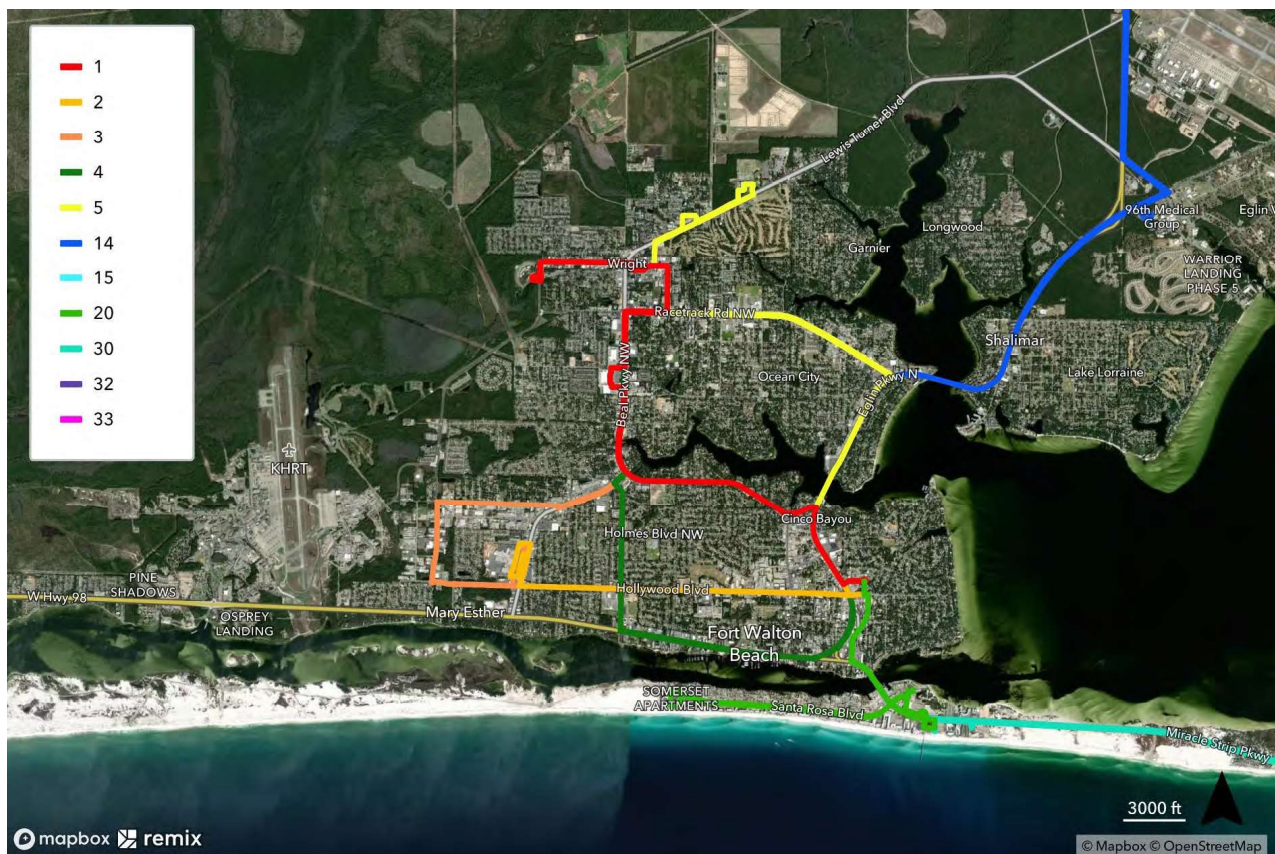


Figure 34. 1E Destin

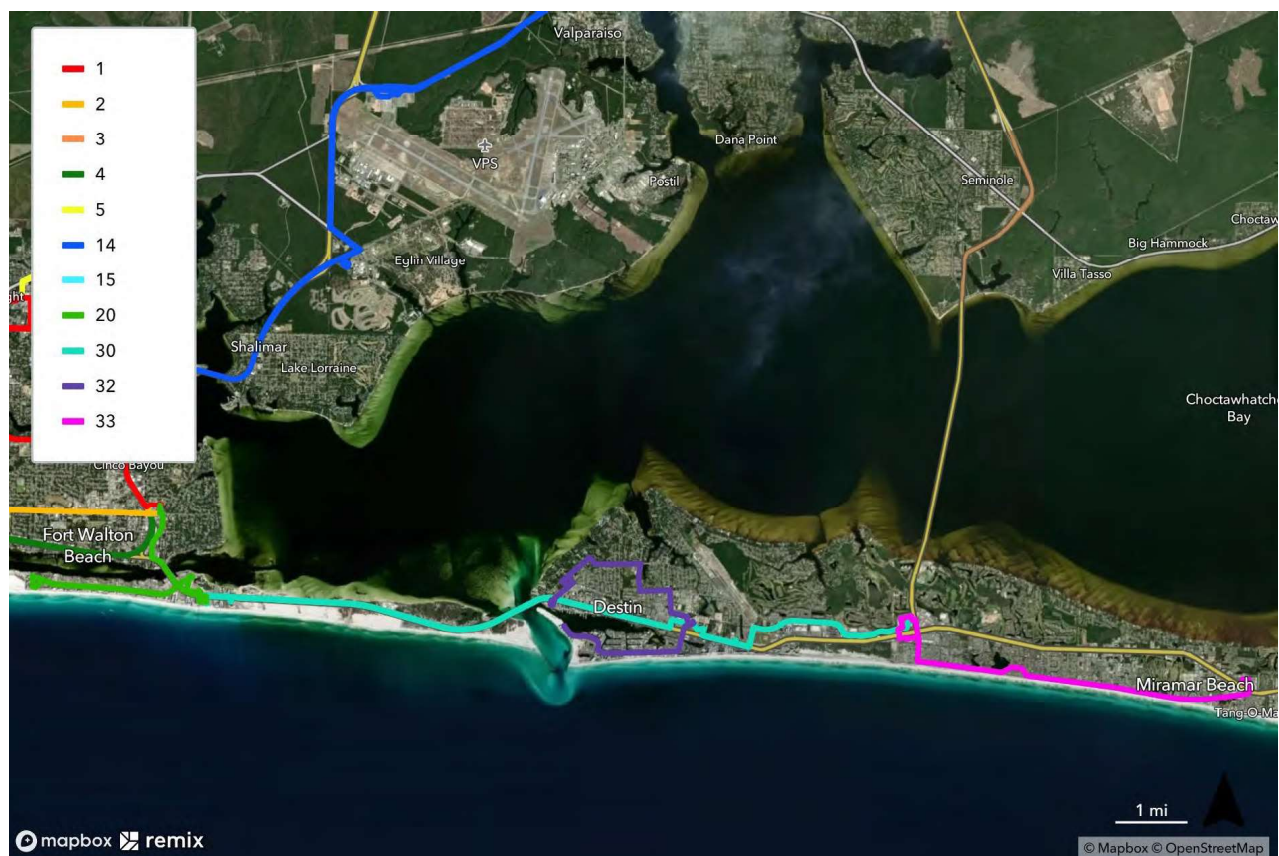


Figure 35. 1E Niceville

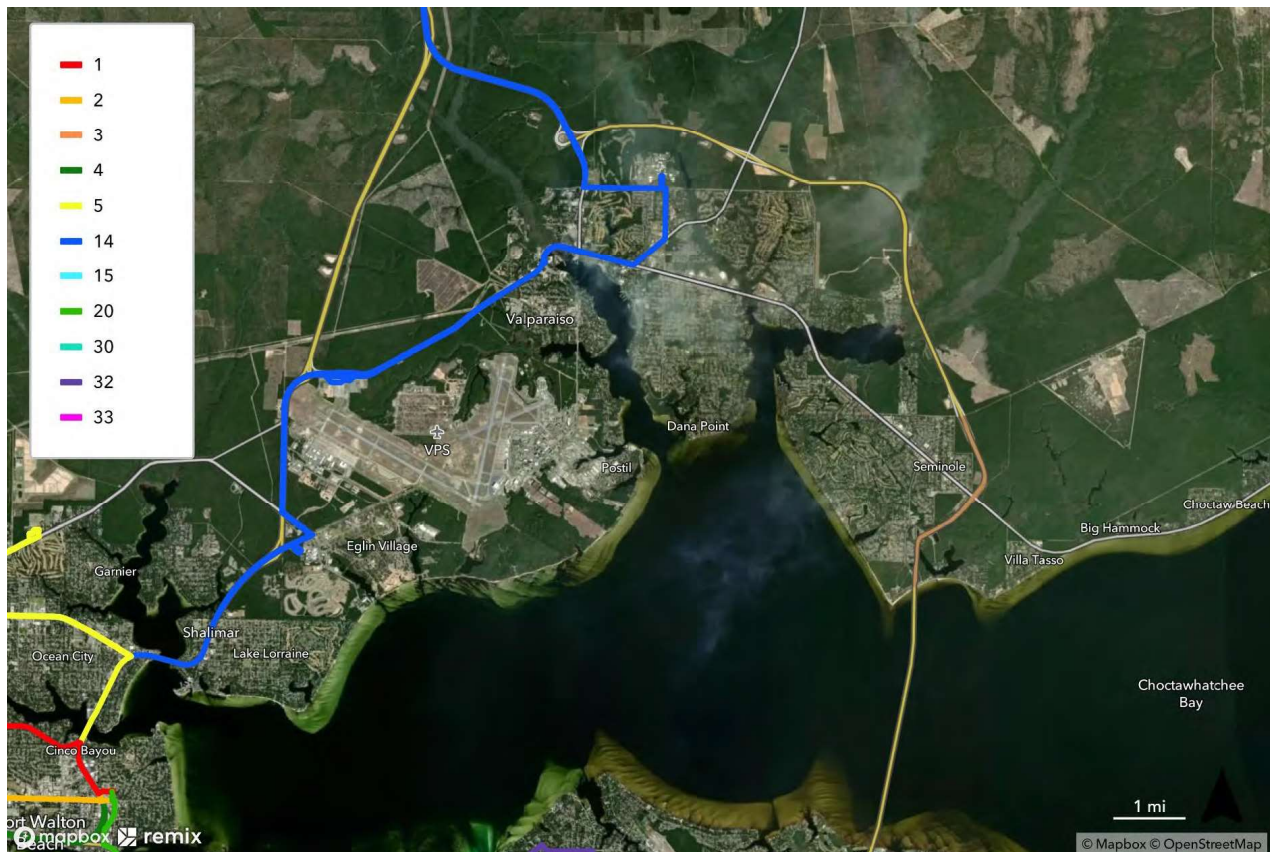


Figure 36. 1E Crestview

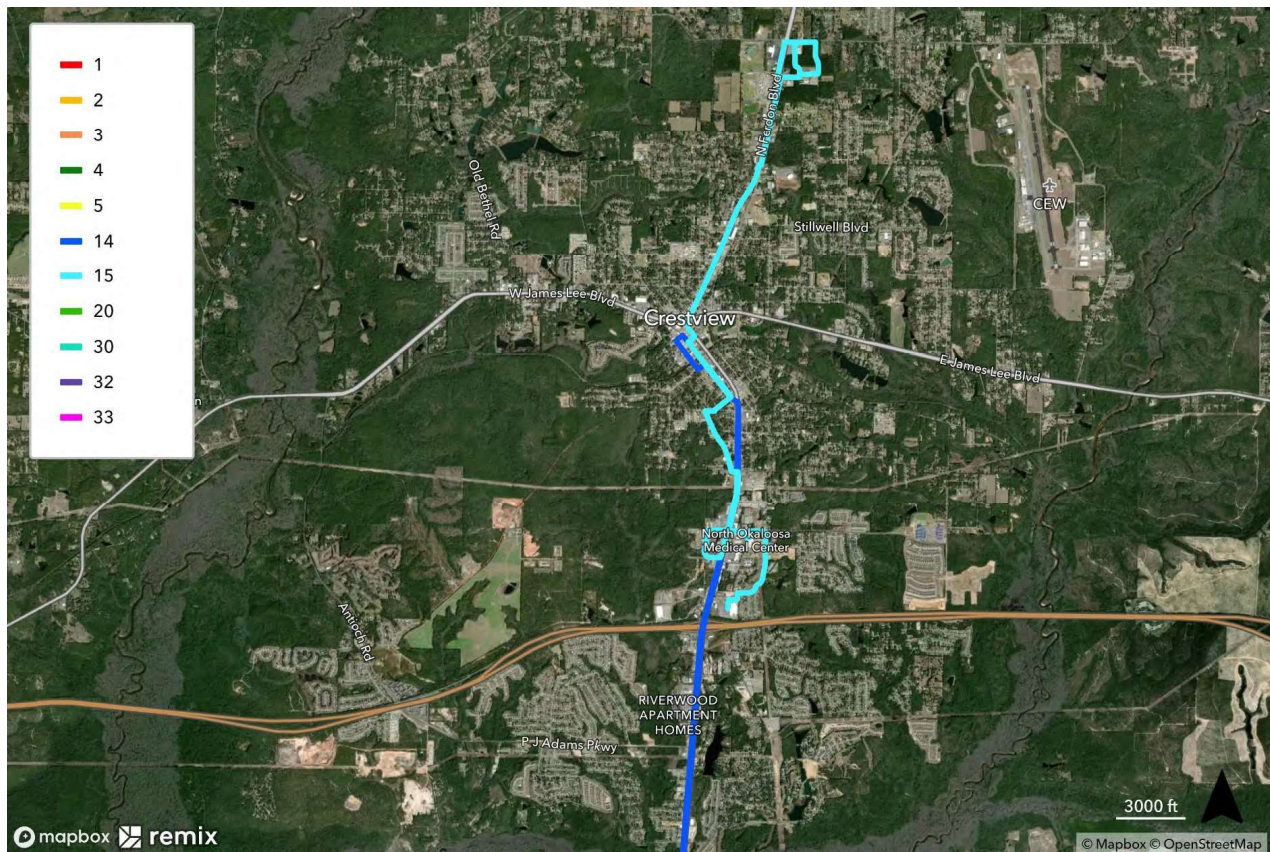


Figure 37. 1F Fort Walton Beach

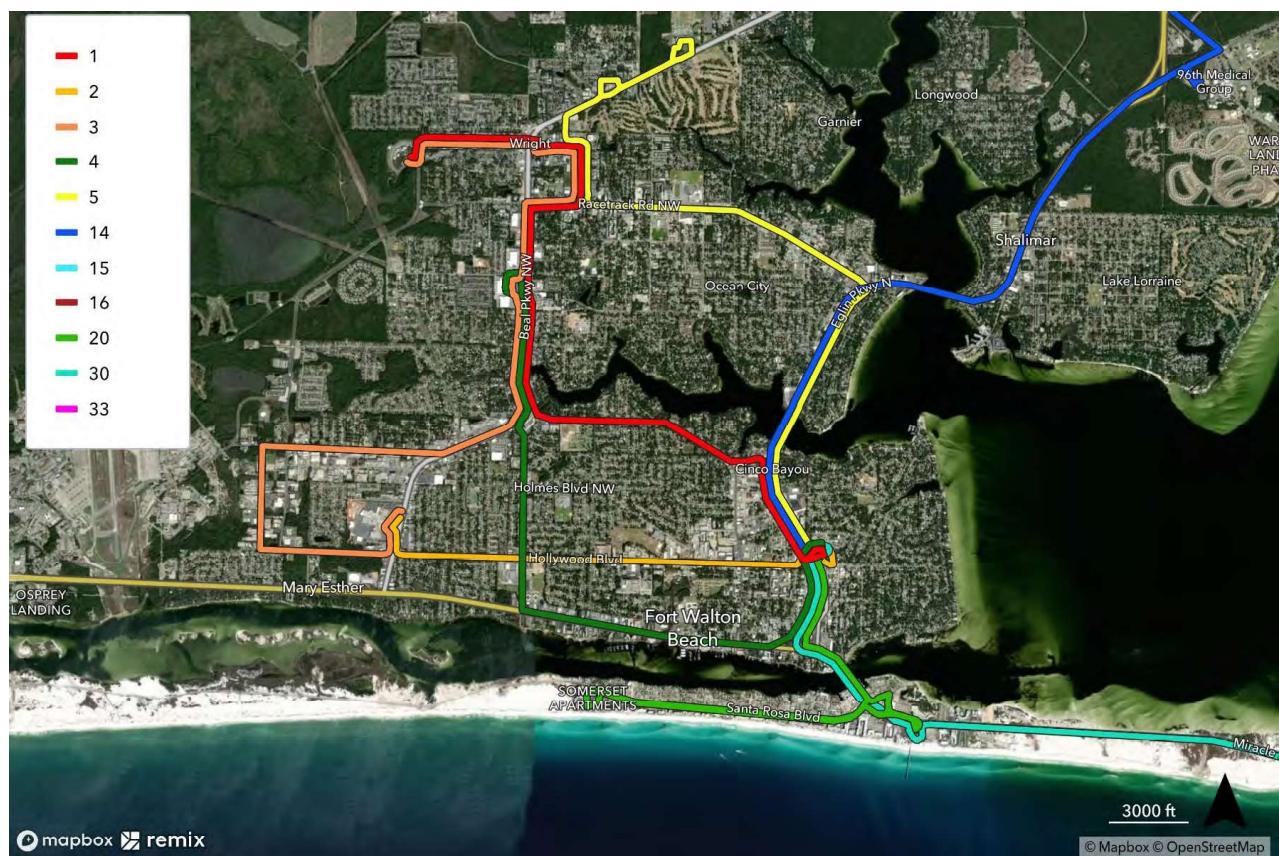


Figure 38. 1F Crestview

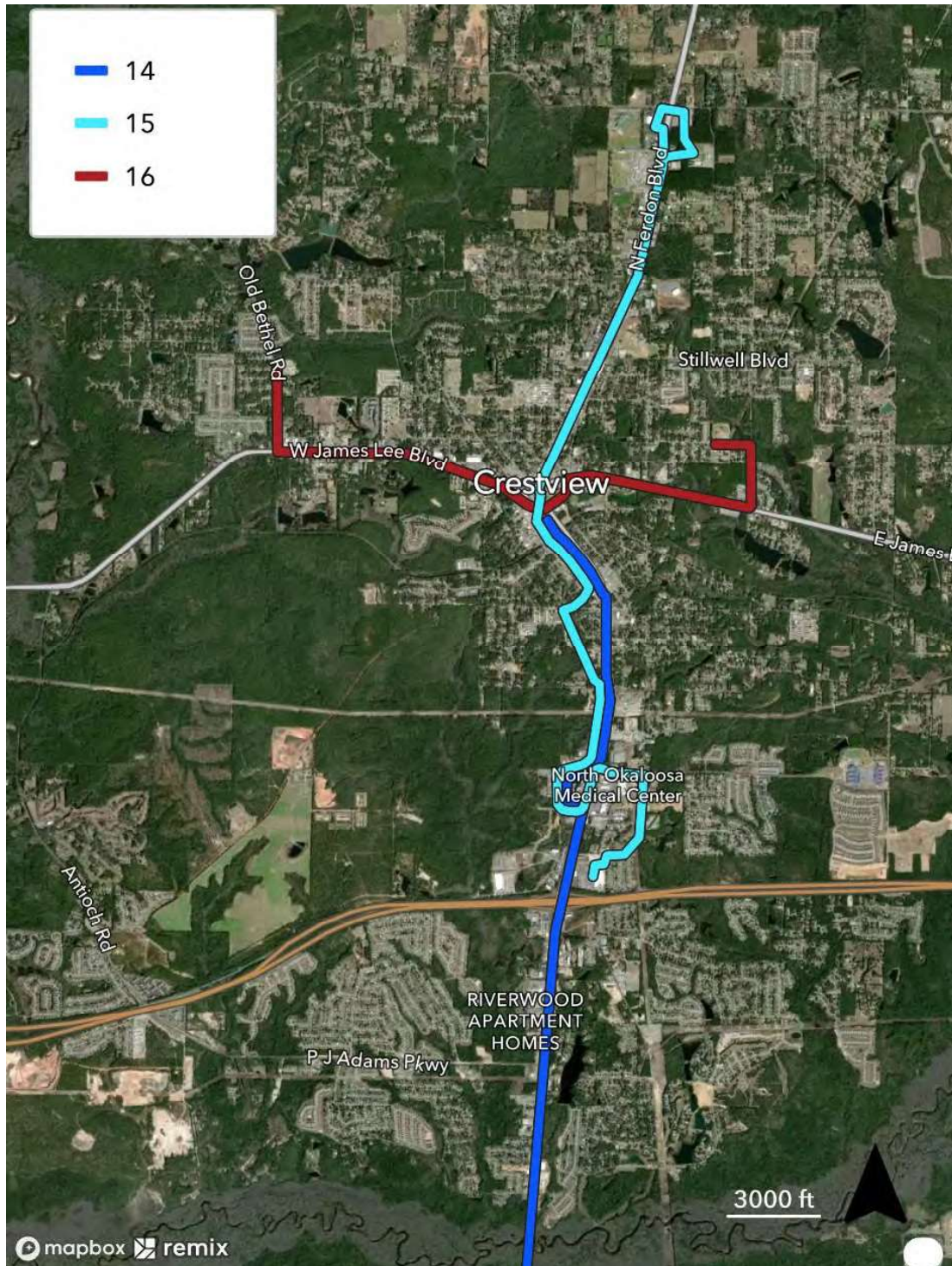


Figure 39. 1F Destin

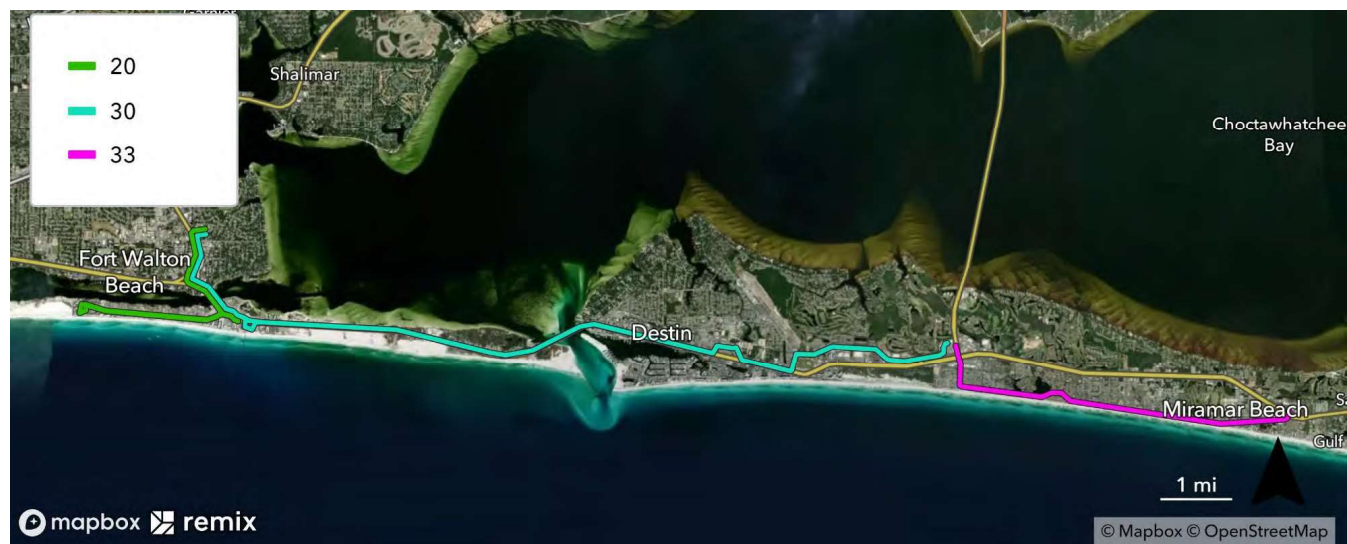


Figure 40. 2A Fort Walton Beach

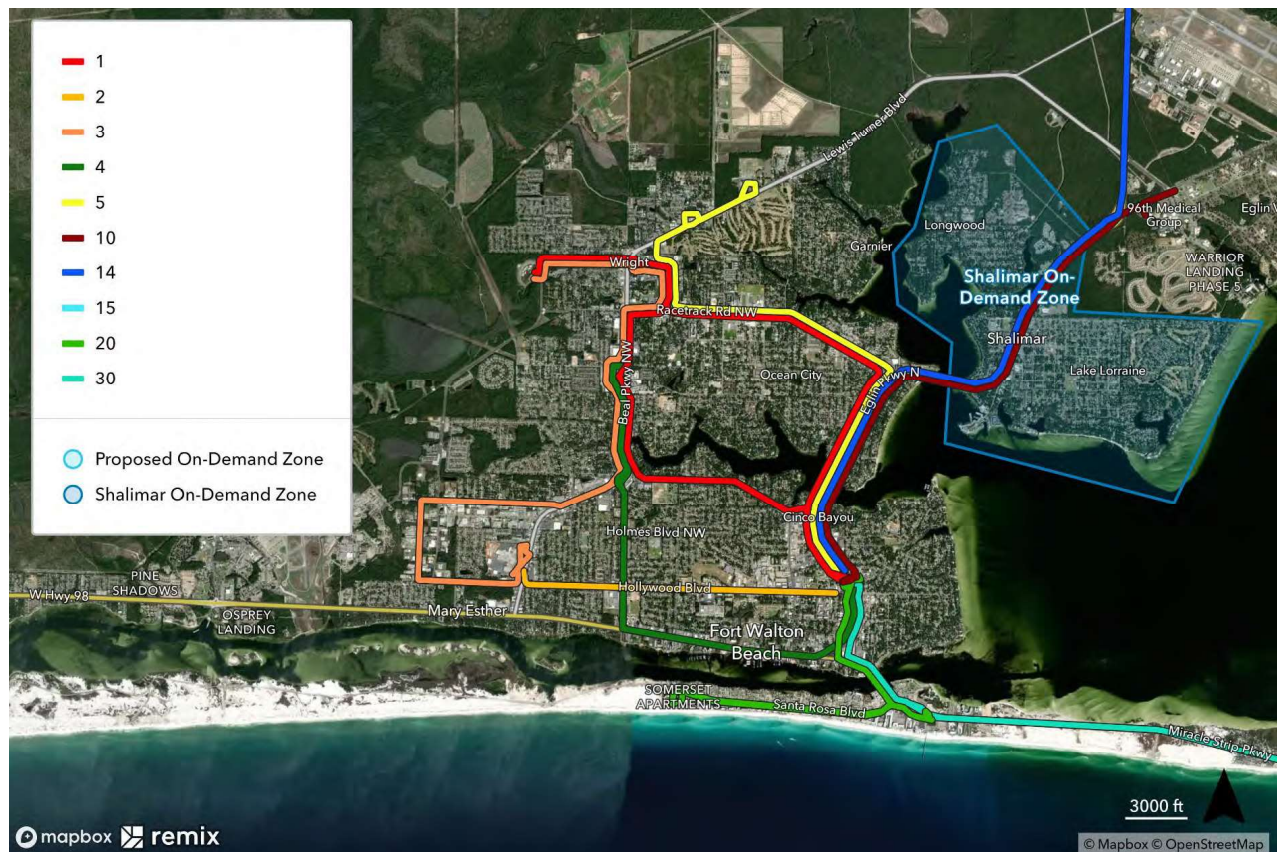


Figure 41. 2A Destin



Figure 42. 2A Crestview

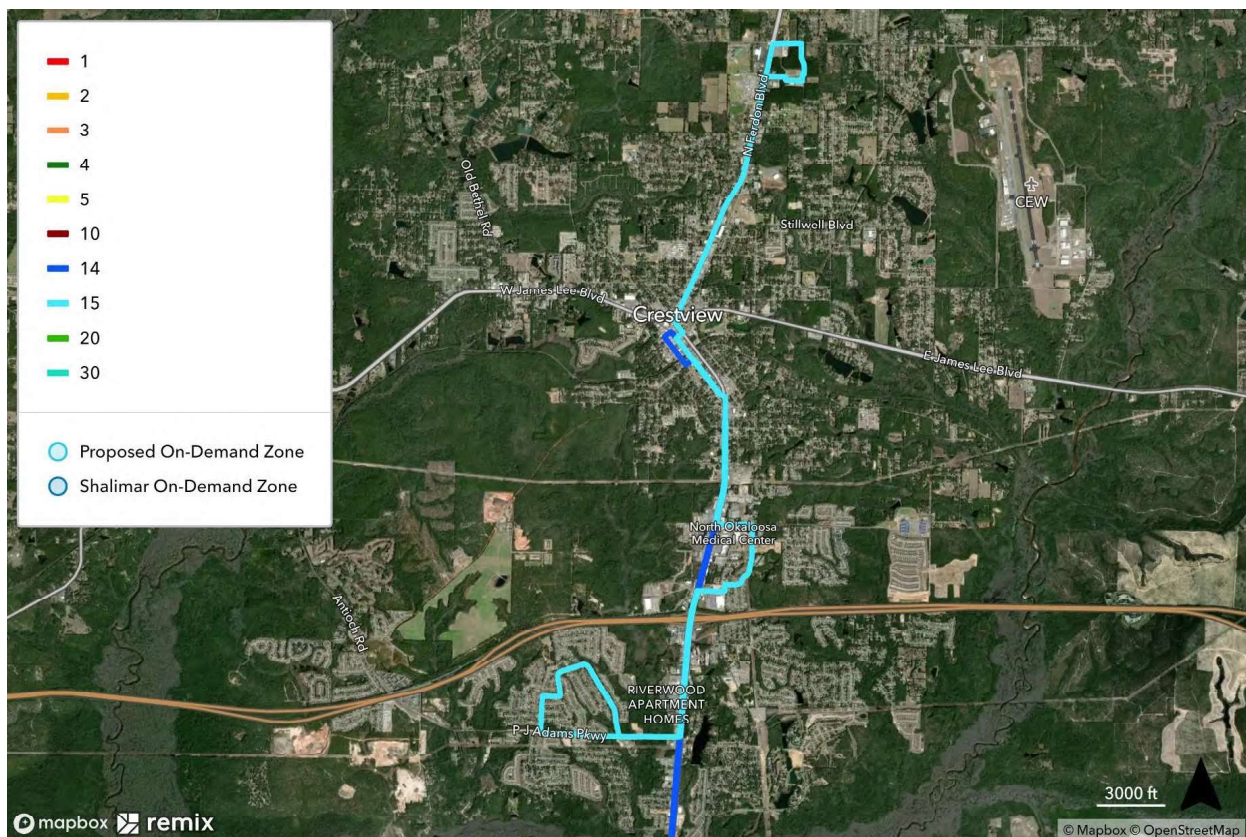


Figure 43. 2B Fort Walton Beach

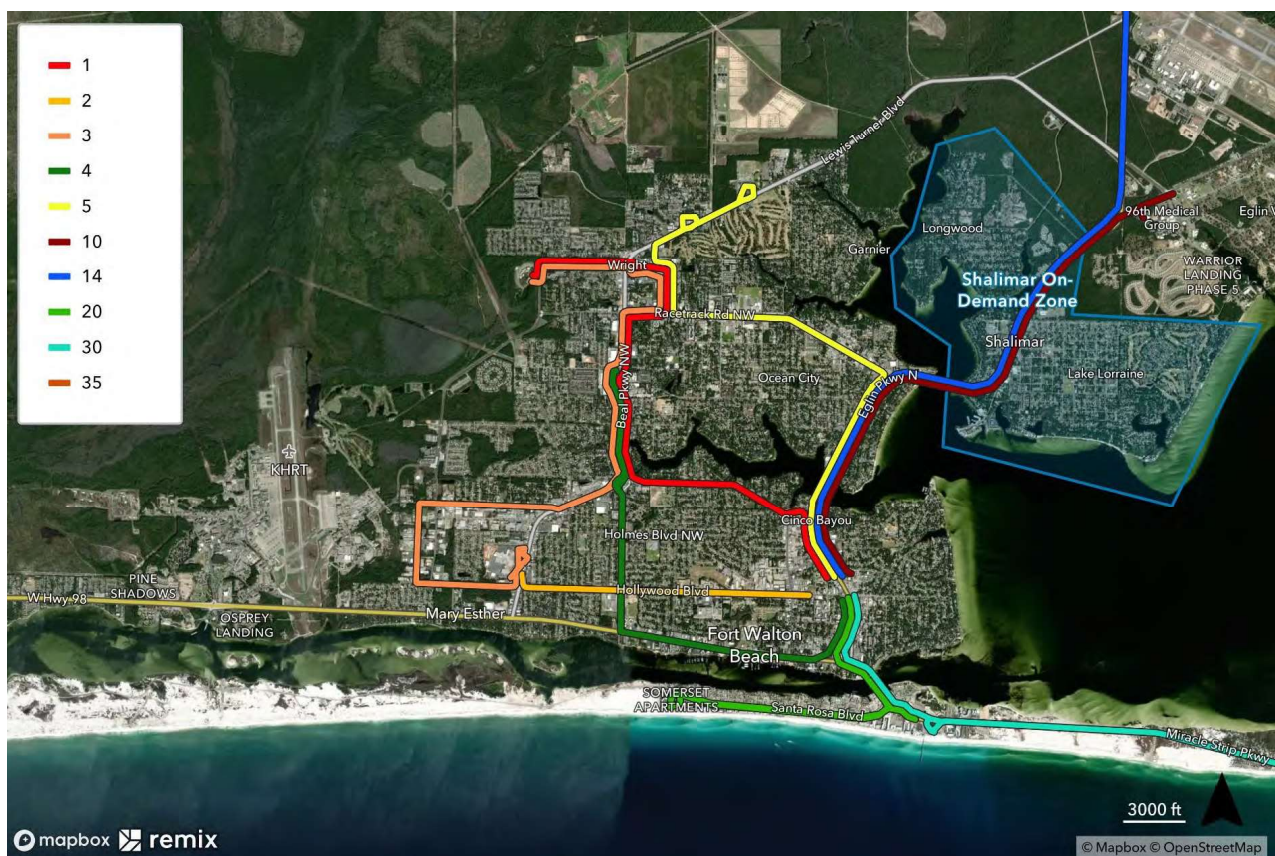


Figure 44. 2B Destin



Figure 45. 2B Niceville



Figure 46. 2B Crestview

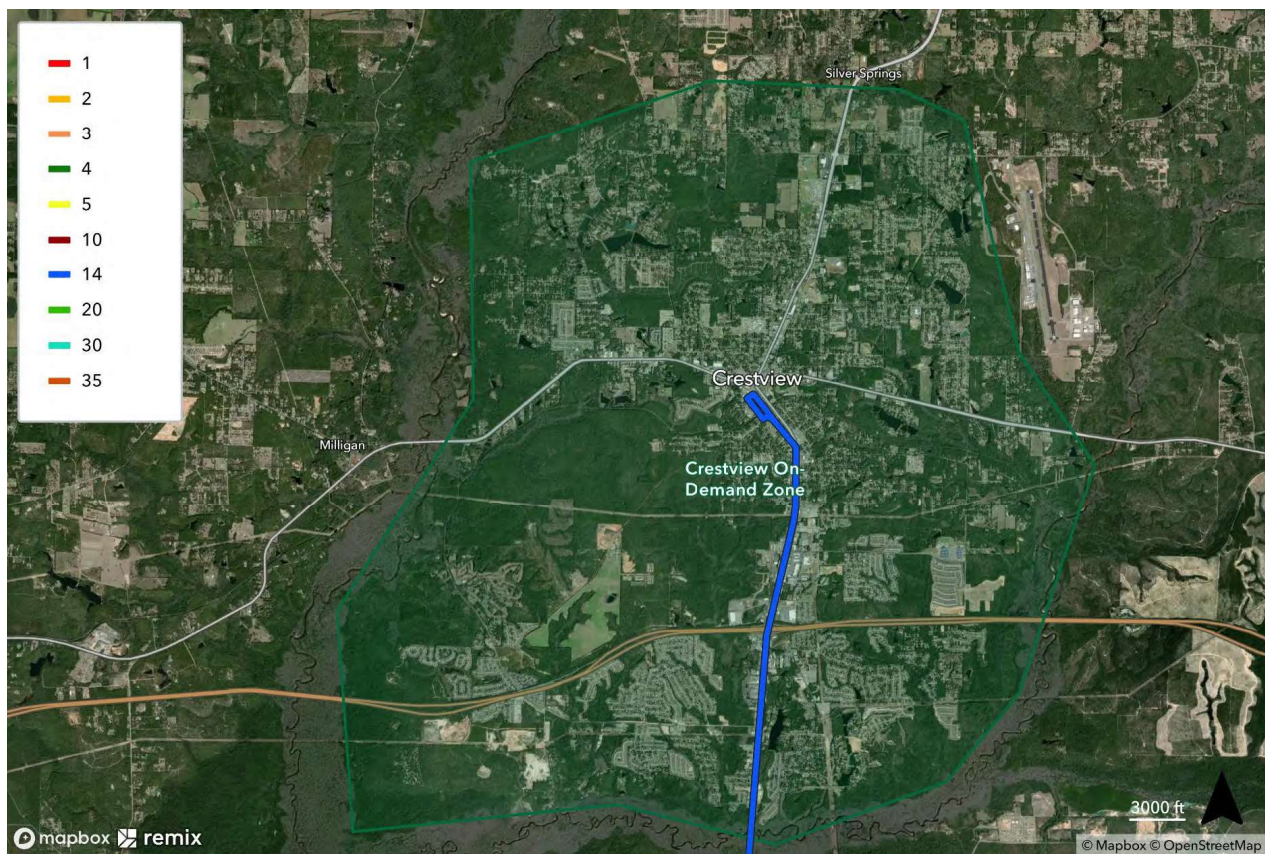


Figure 47. 2C Fort Walton Beach

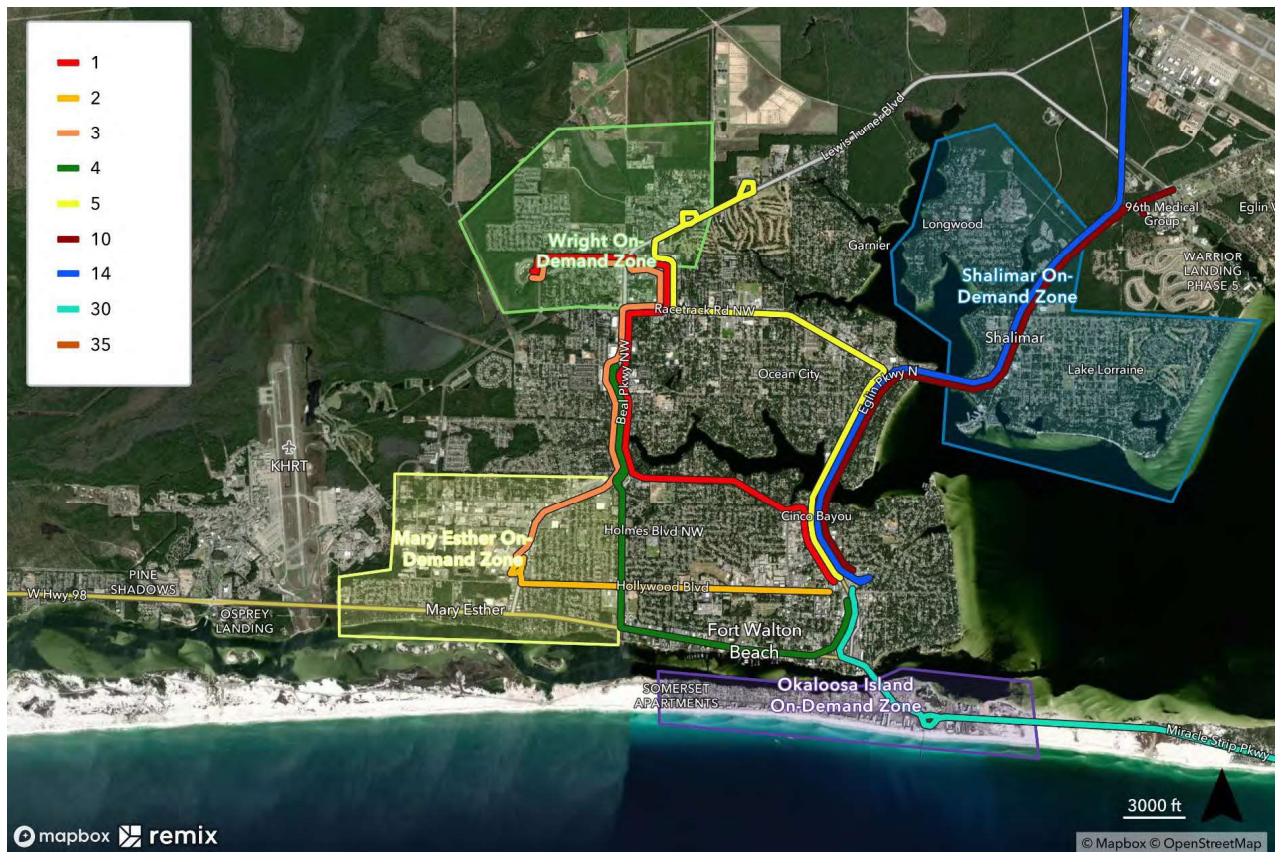


Figure 48. 2C Destin



Figure 49. 2C Niceville



Figure 50. 2C Crestview

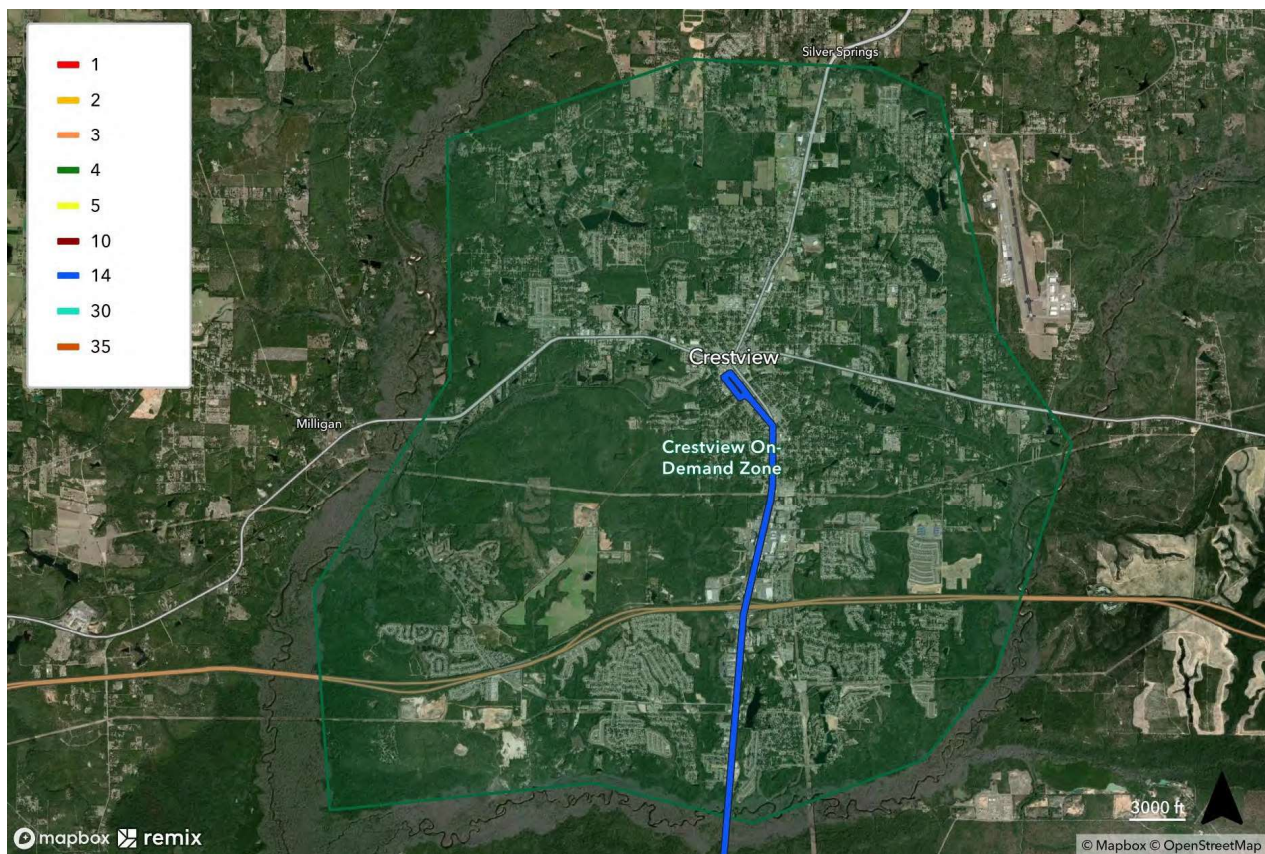


Figure 51. 3A Fort Walton Beach

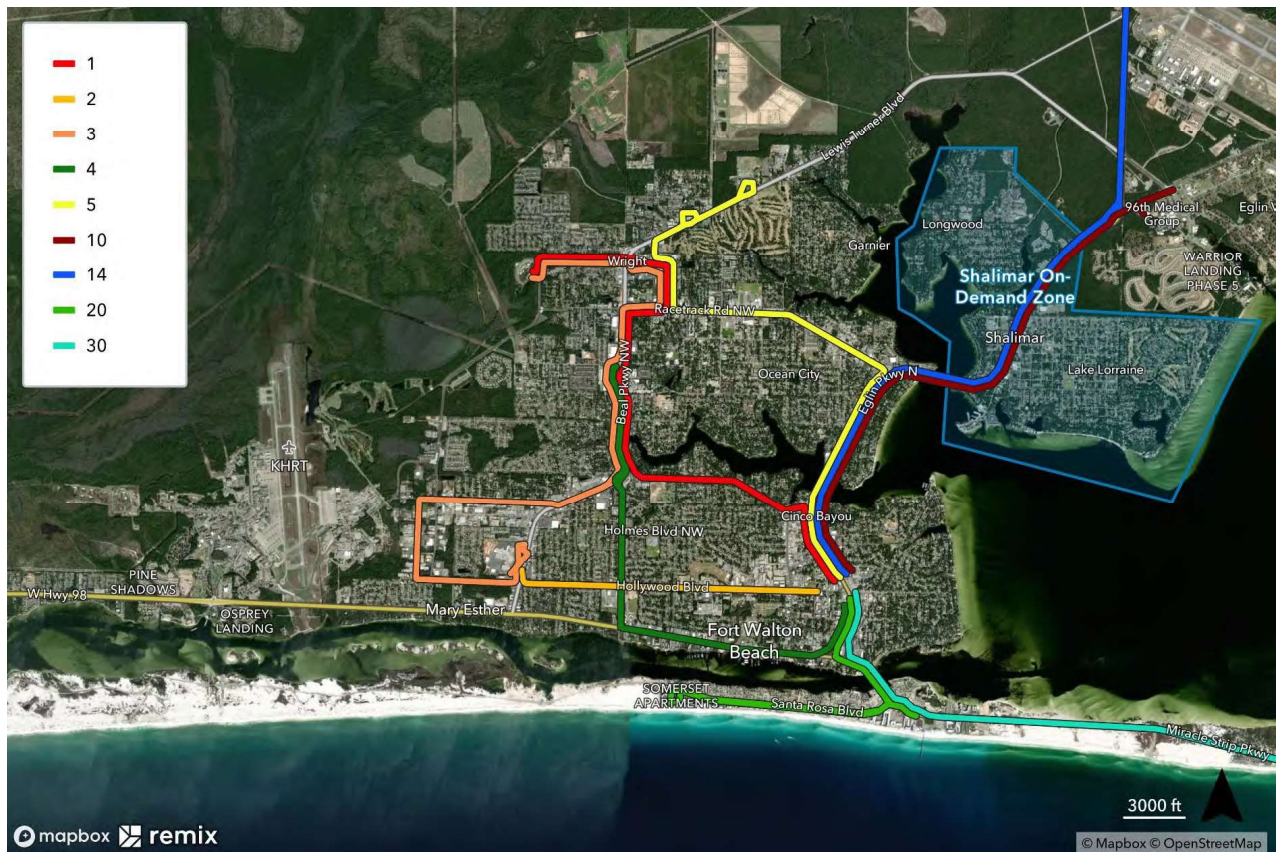


Figure 52. 3A Destin

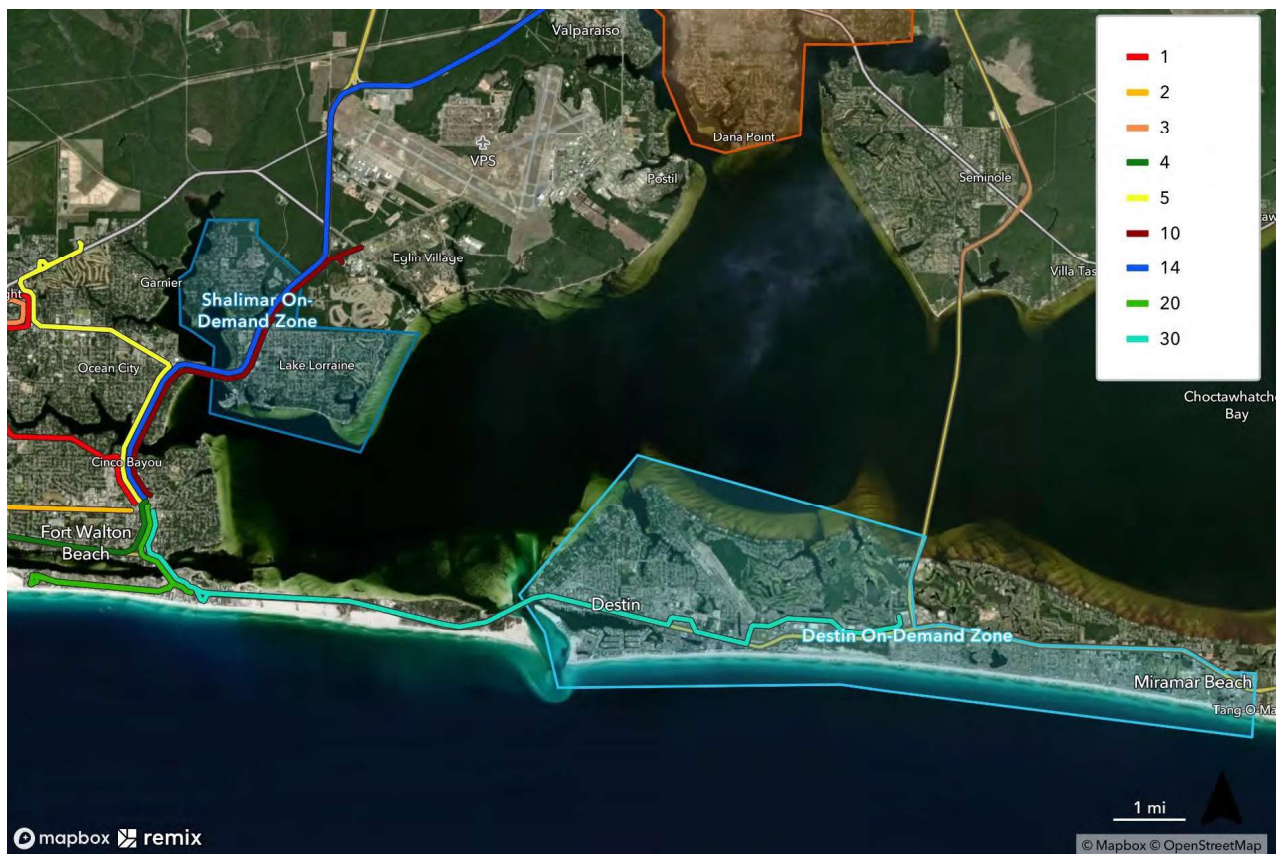


Figure 53. 3A Niceville



Figure 54. 3A Crestview

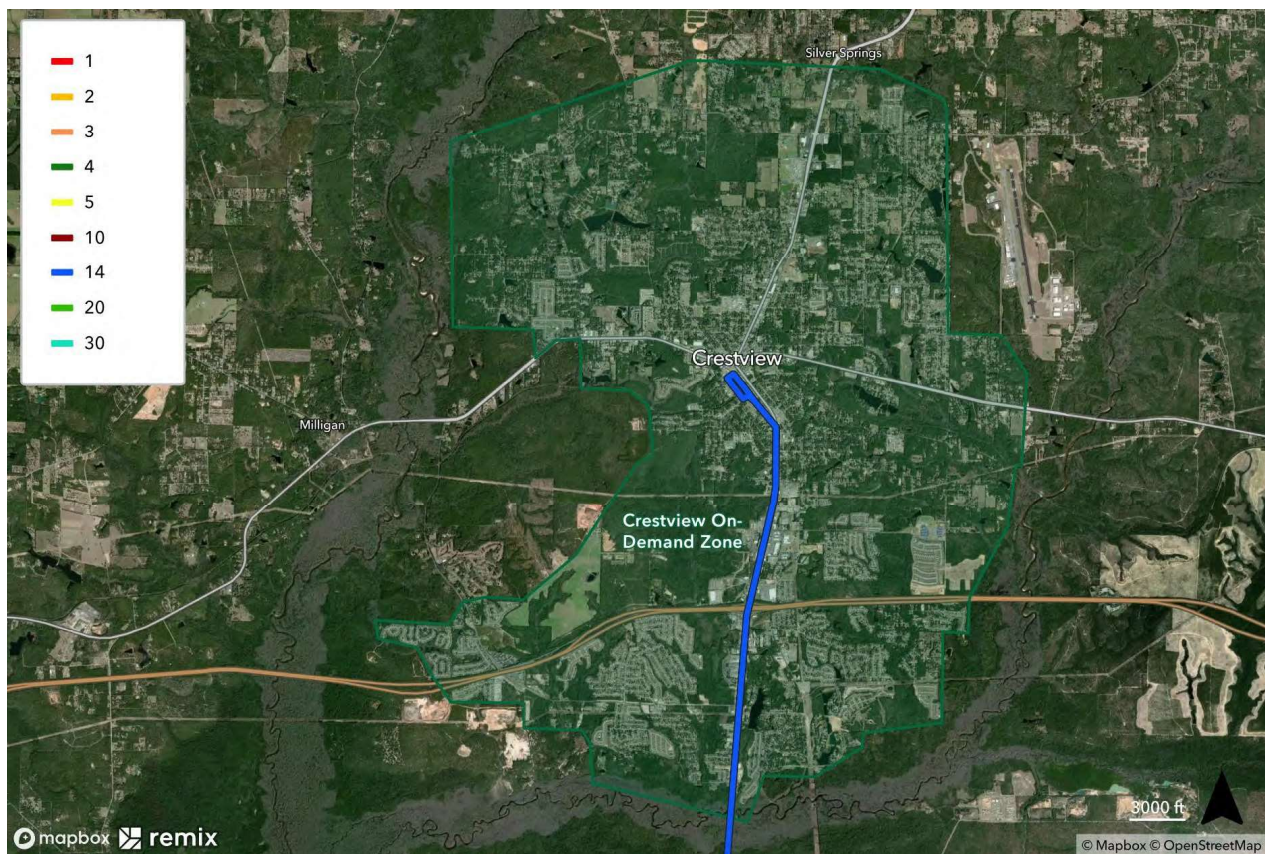


Figure 55. 3B Fort Walton Beach

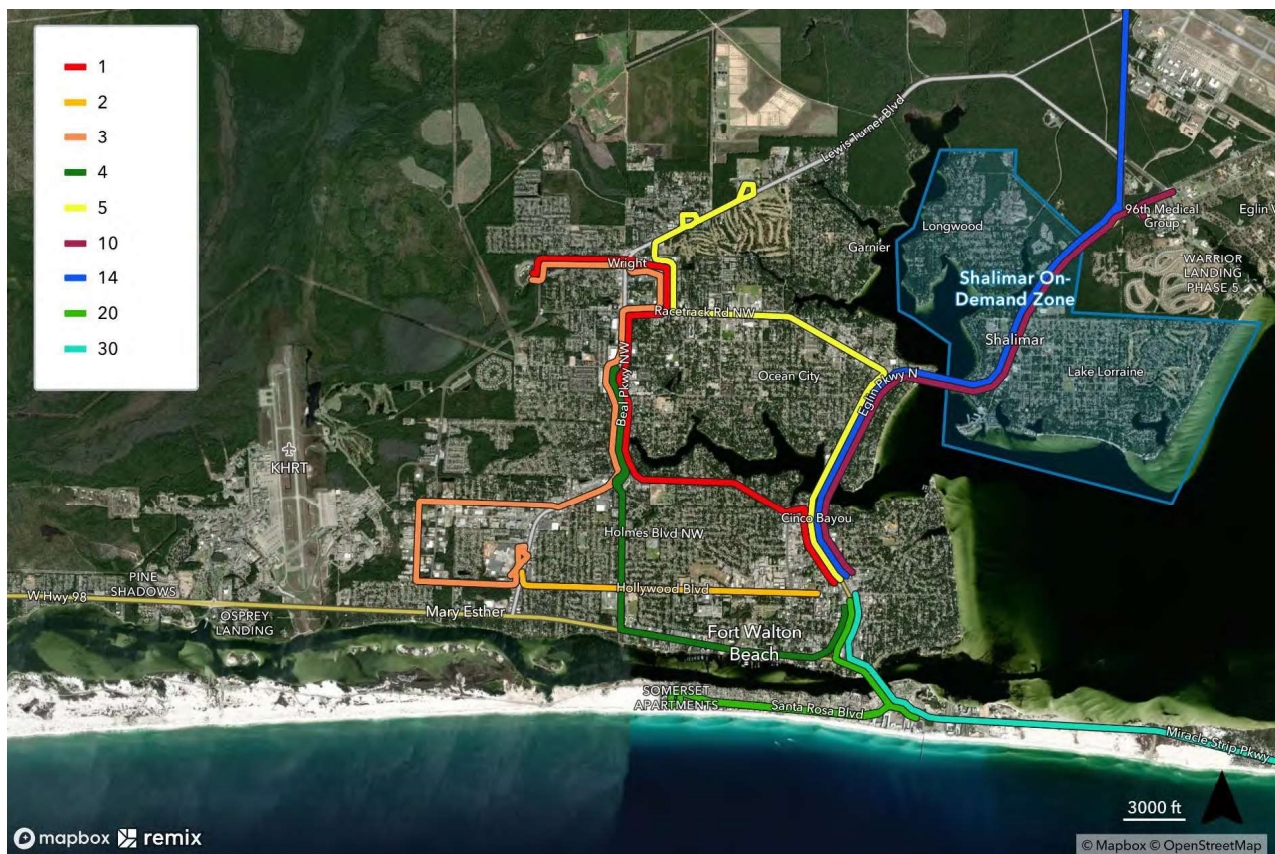


Figure 56. 3B Destin

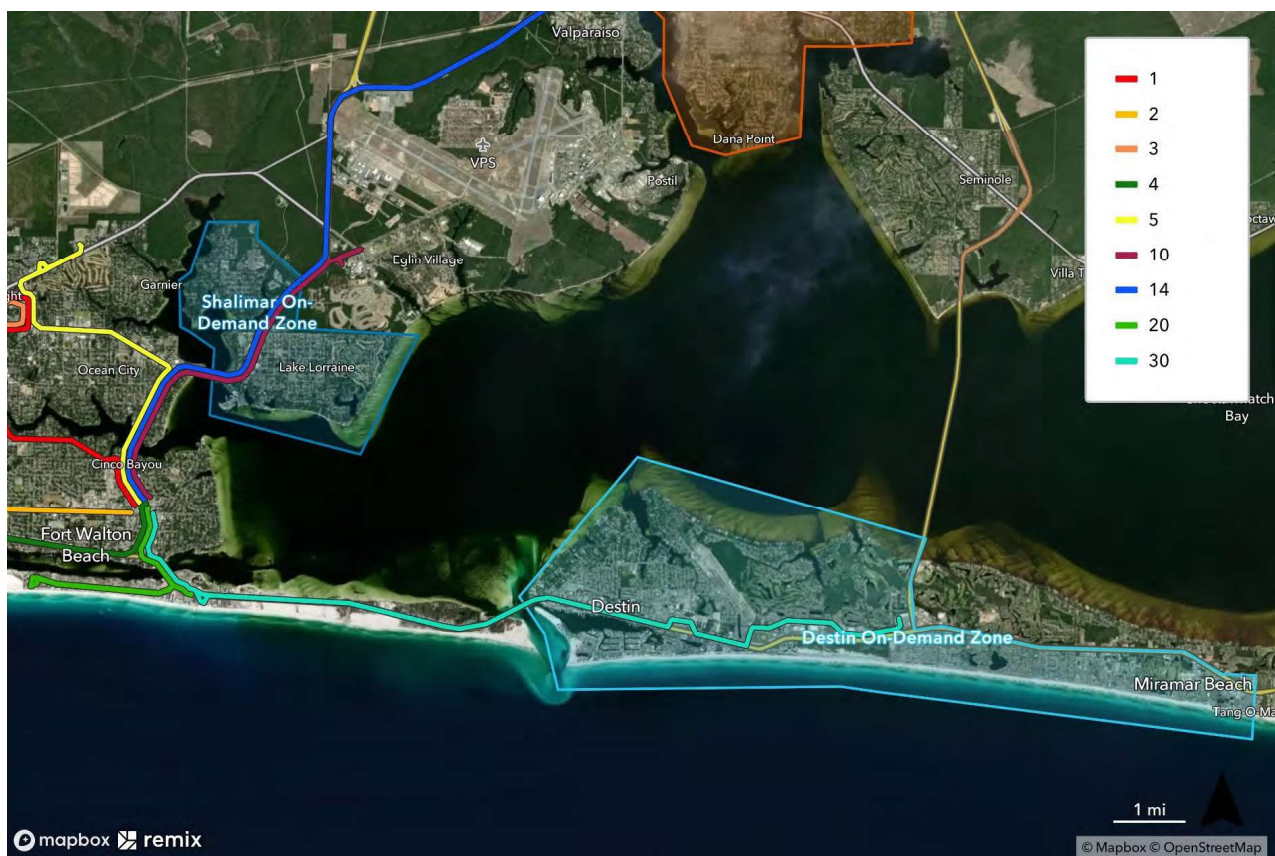


Figure 57. 3B Niceville



Figure 58. 3B Crestview

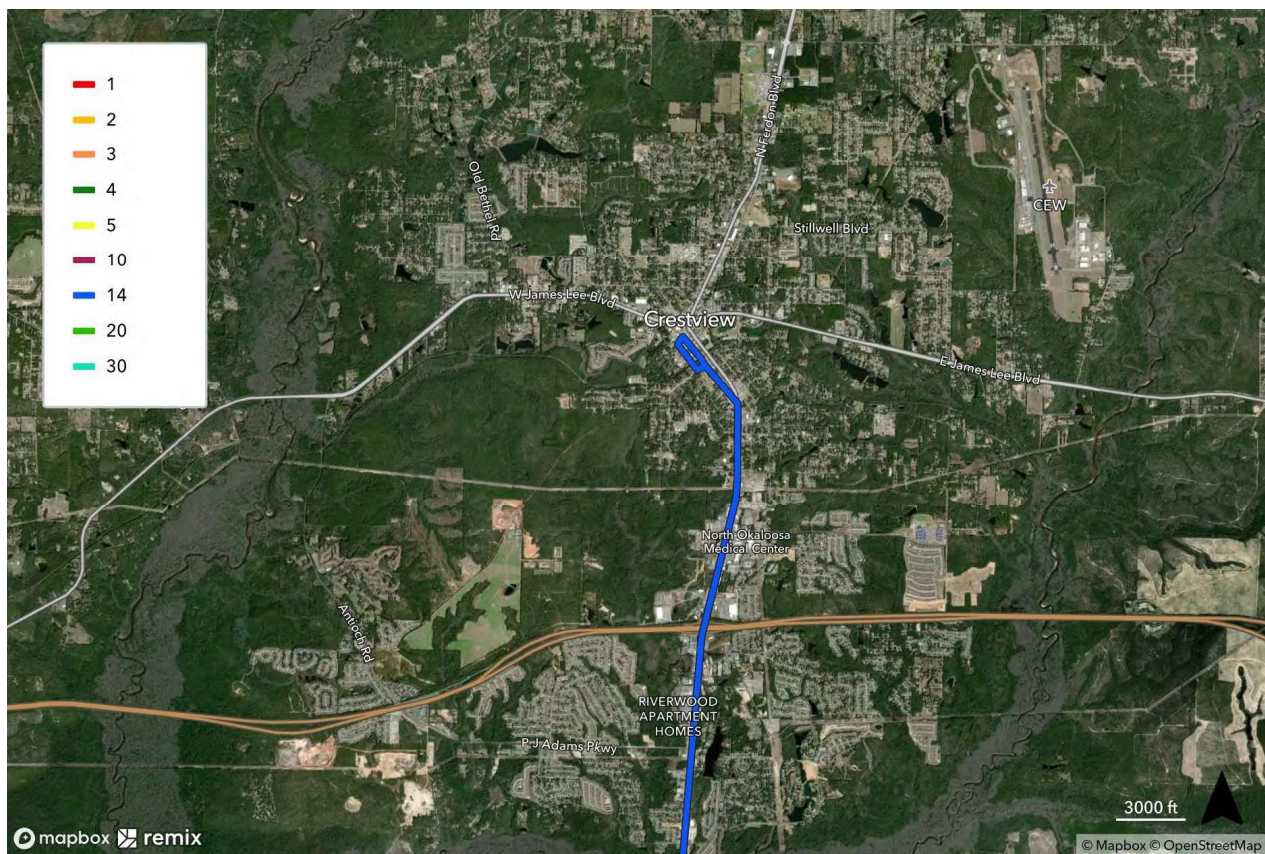


Figure 59. 3C Fort Walton Beach

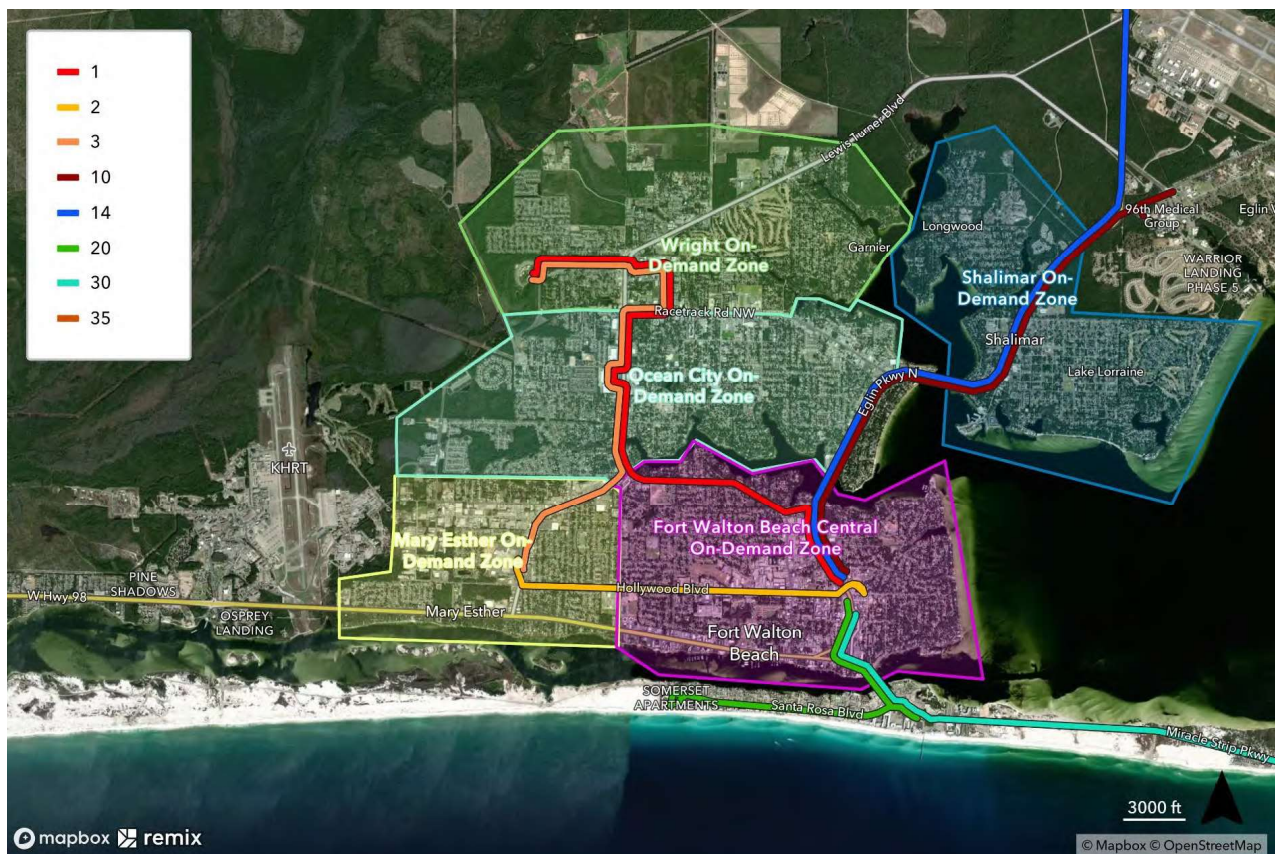


Figure 60. 3C Destin



Figure 61. 3C Niceville

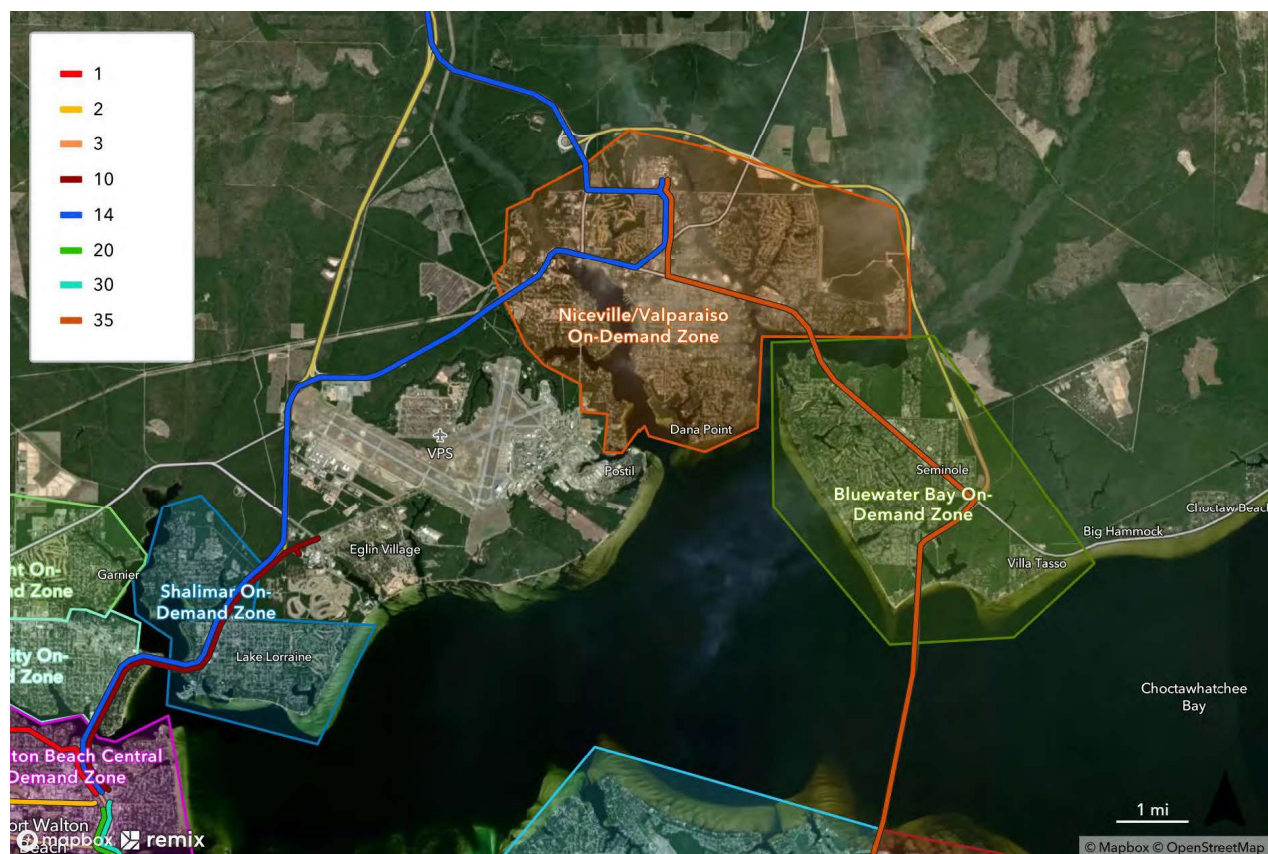


Figure 62. 3C Crestview

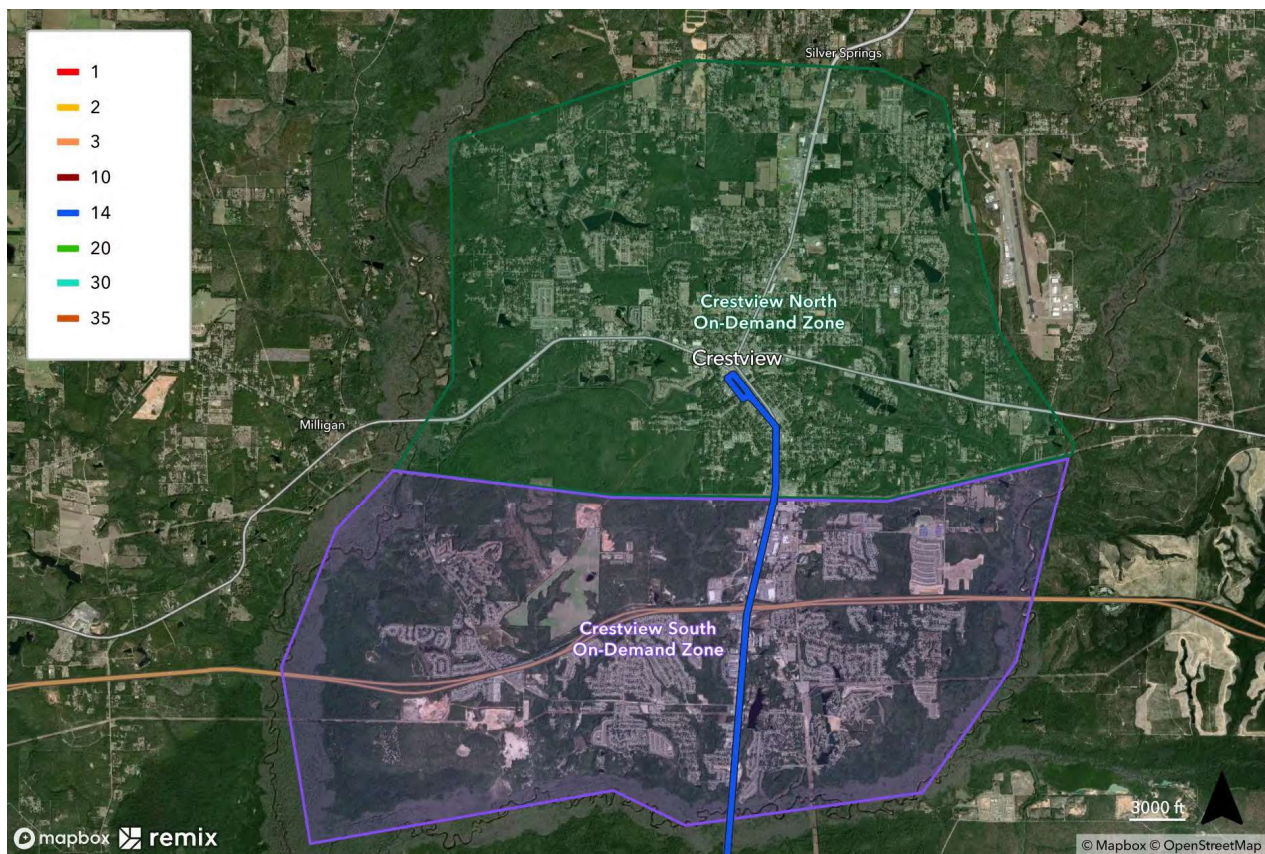


Figure 63. 4A Fort Walton Beach

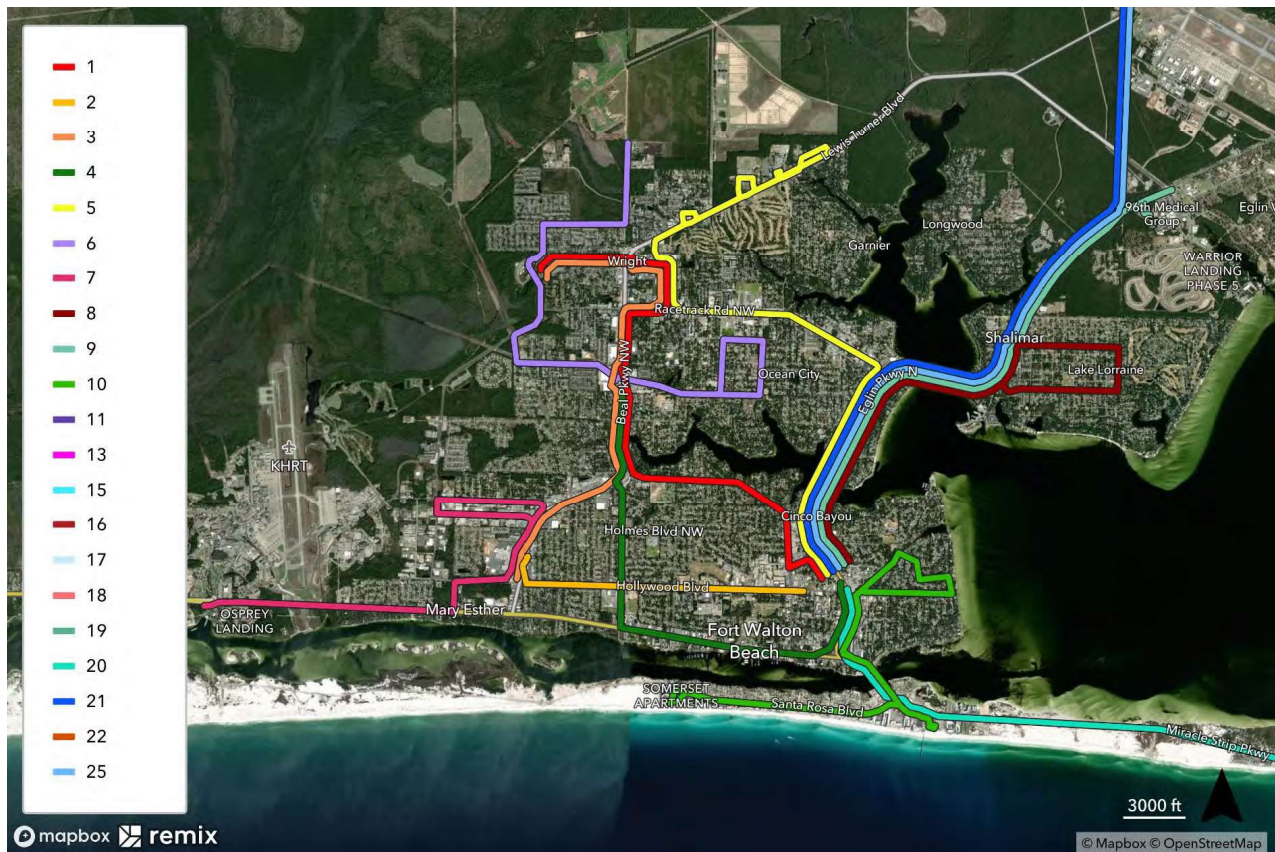


Figure 64. 4A Destin

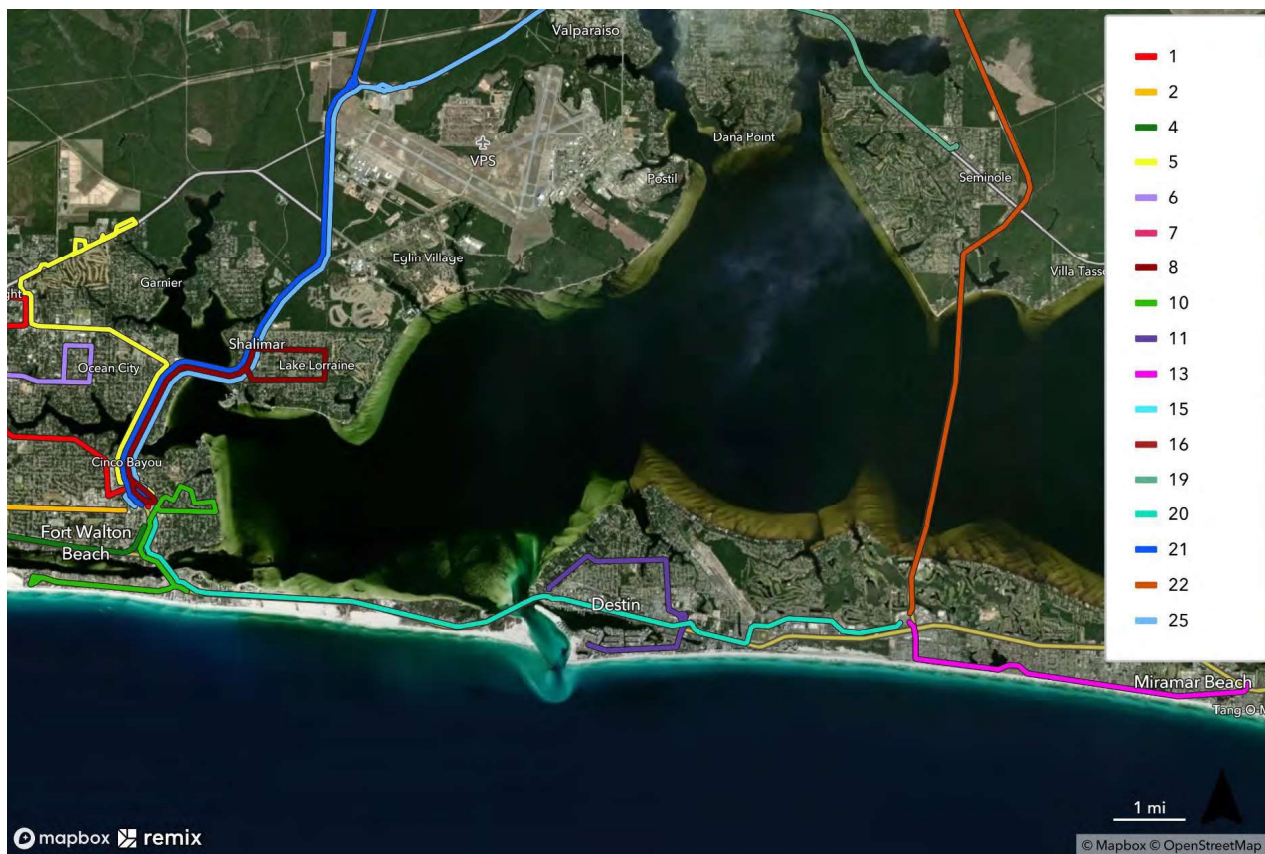


Figure 65. 4A Niceville

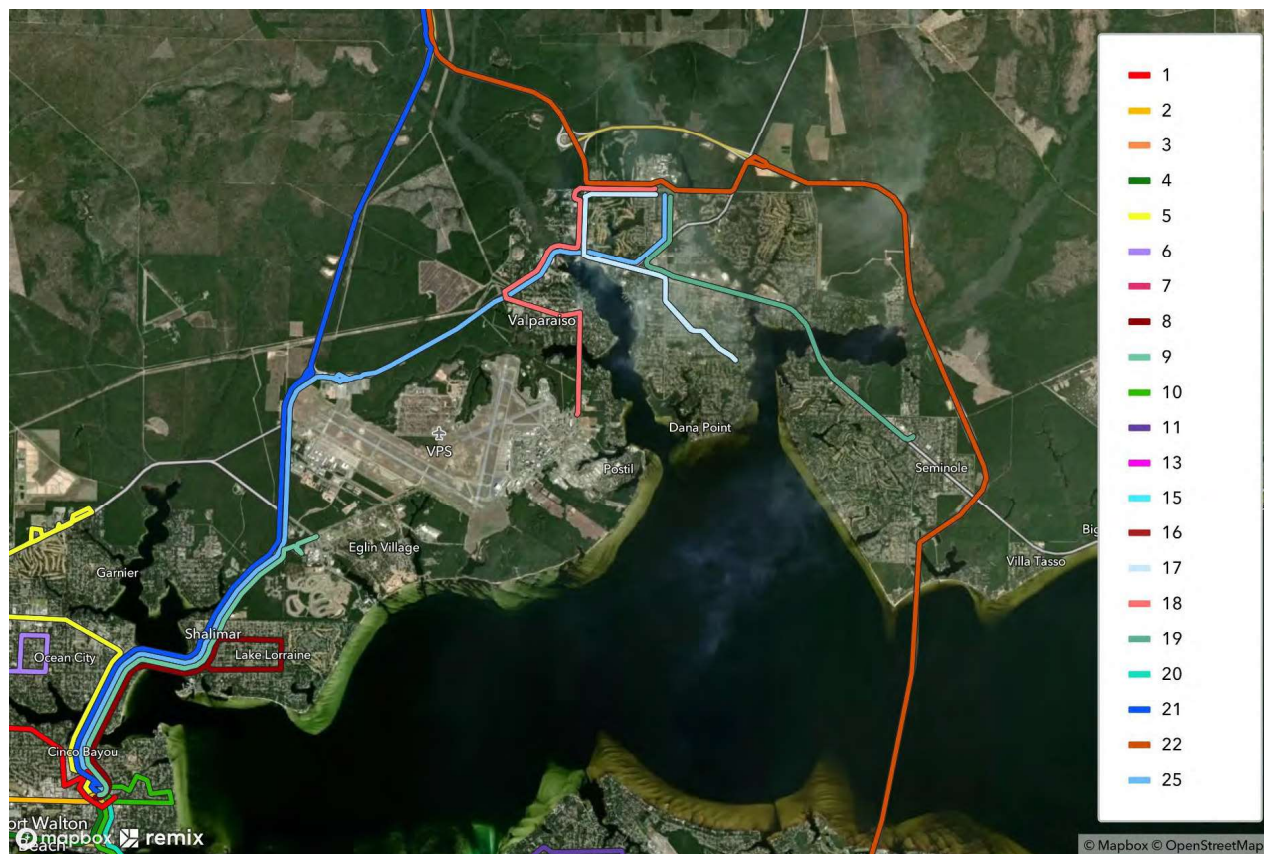


Figure 66. 4A Crestview

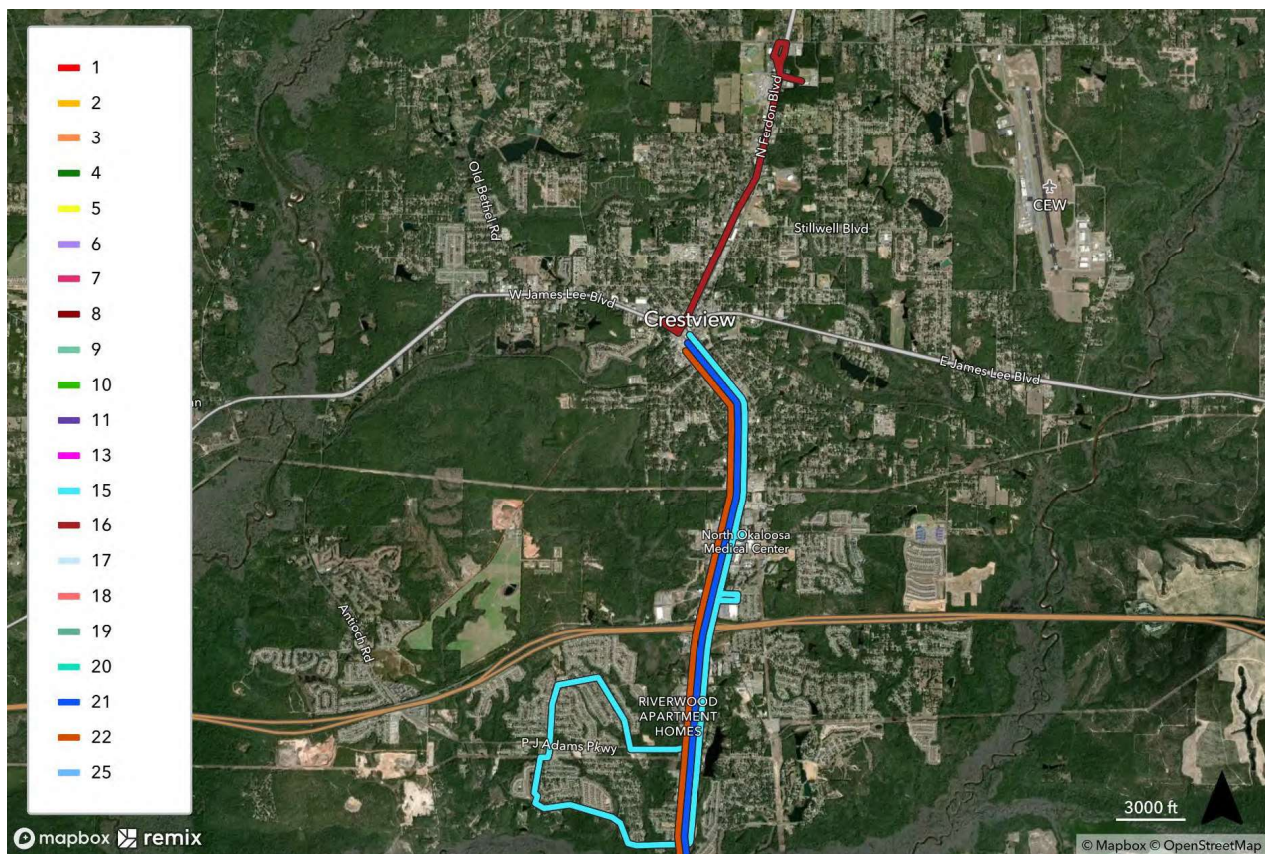


Figure 67. 4B Fort Walton Beach

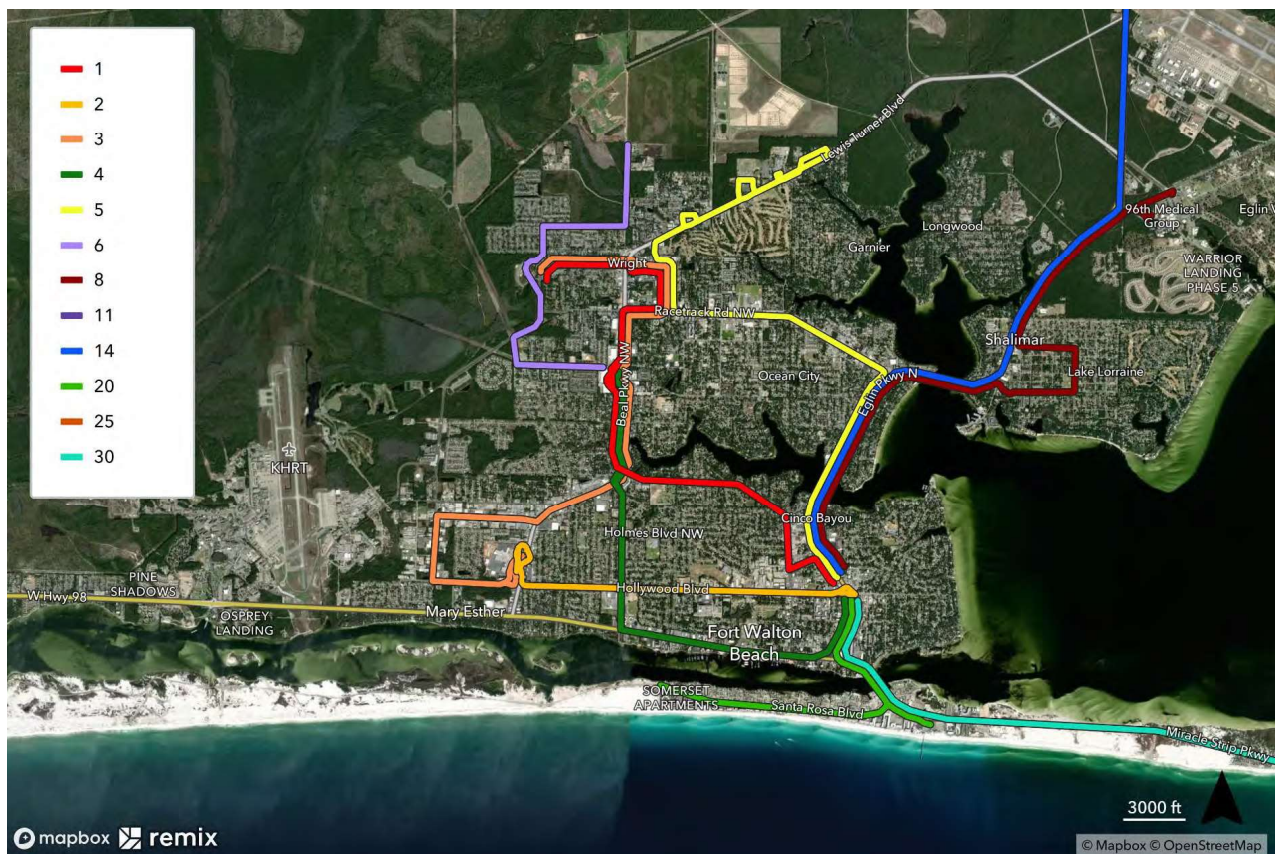


Figure 68. 4B Destin

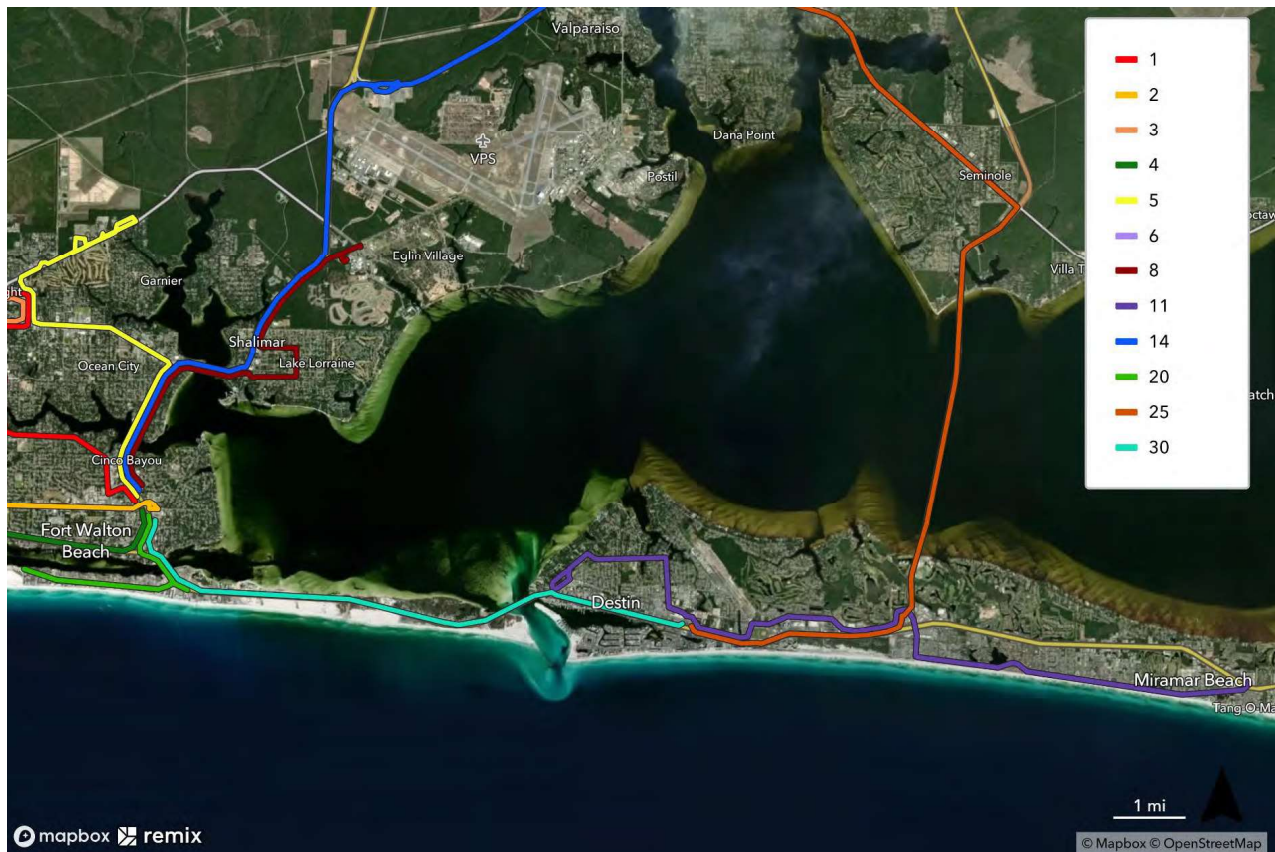


Figure 69. 4B Niceville

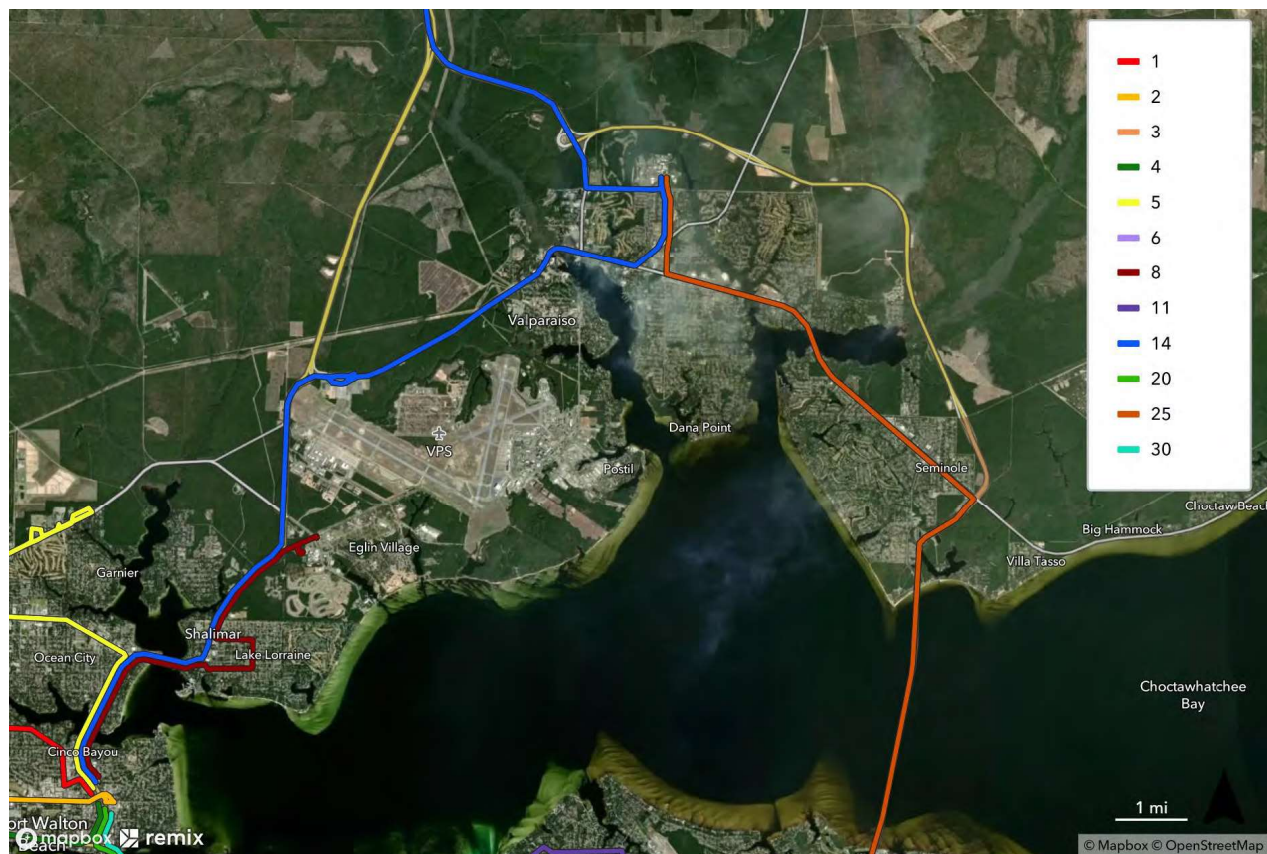
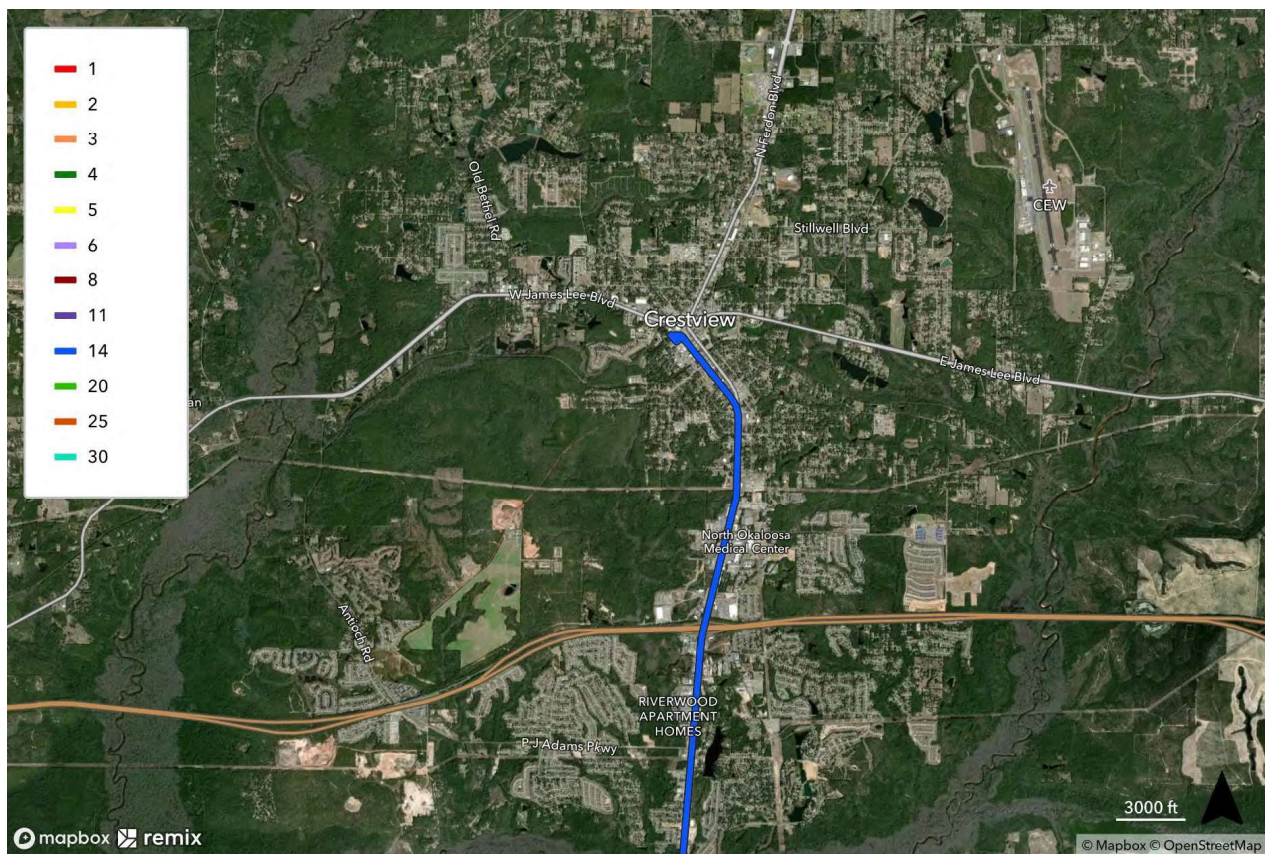


Figure 70. 4B Crestview





Appendix C Scenario Planning TBEST Results

Scenario 1 Results

Scenario	Additional Boardings	Total Boardings	Service Population	Service Area Jobs	Estimated Vehicles	Revenue Service Trips	Revenue Miles	Revenue Hours	Riders per Revenue Hour	Riders per Revenue Mile	Route Cost	Cost per Rider
Existing	N/A	388	35,782	38,404	13	157	1,686	139	2.7	0.2	\$5,245	\$13.52
1A	181	569	29,883	38,981	11	206	1,593	138	4	0.3	\$4,956	\$8.71
1B	690	1,078	34,913	44,316	11	160	2,150	149	7.5	0.5	\$6,687	\$6.20
1C	693	1,081	33,926	39,188	12	178	2,117	150	6.9	0.5	\$6,584	\$6.09
1D	782	1,170	43,145	46,870	12	248	1,985	177	6.6	0.6	\$6,173	\$5.28
1E	886	1,274	45,792	49,241	13	280	2,215	193	6.6	0.6	\$6,889	\$5.41
1F	881	1,269	45,317	48,324	13	280	2,201	193	6.5	0.6	\$6,846	\$5.40

Scenario 2 Results

Scenario	Additional Boardings	Total Boardings	Service Population	Service Area Jobs	Estimated Vehicles	Revenue Service Trips	Revenue Miles	Revenue Hours	Riders / Revenue Hour	Riders / Revenue Mile	Route Cost	Cost per Rider
Existing	N/A	388	35,782	38,404	13	157	1,686	139	2.7	0.2	\$5,245	\$13.52
2A	615	1,003	43,519*	38,404*	17	234*	1,810*	226	4.4	0.4*	\$8,906	\$8.88
2B	752	1,140	41,892*	42,865*	25	234*	2,043*	338	3.4	0.4*	\$14,217	\$12.47
2C	809	1,197	43,918*	47,181*	27	220*	1,920*	366	3.3	0.4*	\$15,798	\$13.20

* Figure does not include MoD services.



Scenario 3 Results

Scenario	Additional Boardings	Total Boardings	Service Population	Service Area Jobs	Estimated Vehicles	Revenue Service Trips	Revenue Miles	Revenue Hours	Riders / Revenue Hour	Riders / Revenue Mile	Route Cost	Cost per Rider
Existing	N/A	388	35,782	38,404	13	157	1,686	139	2.7	0.2	\$5,245	\$13.52
3A	782	1,170	41,458*	46,757*	22	264*	2,800*	306	3.8	0.3*	\$13,296	\$11.36
3B	736	1,124	41,458*	46,757*	21	264*	2,800*	292	3.8	0.3*	\$12,641	\$11.25
3C	901	1,289	40,754*	44,107*	31	224*	2,441*	439	2.9	0.4*	\$20,039	\$15.55

* Figure does not include MoD services.

Scenario 4 Results

Scenario	Additional Boardings	Total Boardings	Service Population	Service Area Jobs	Estimated Vehicles	Revenue Service Trips	Revenue Miles	Revenue Hours	Riders / Revenue Hour	Riders / Revenue Mile	Route Cost	Cost per Rider
Existing	N/A	388	35,782	38,404	13	157	1,686	139	2.7	0.2	\$5,245	\$13.52
4A	932	1,320	79,335	55,289	25	560	4,505	350	3.8	0.3	\$14,009	\$10.61
4B	671	1,059	53,093	51,126	22	388	3,969	304	3.6	0.3	\$12,344	\$11.66

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