



City of Tarpon Springs, Florida

Heritage Preservation Board
324 East Pine Street
Tarpon Spring, Florida 34689
(727) 938-3711

<http://www.ctsfl.us/agenda.htm>

**REGULAR SESSION AGENDA
MONDAY, SEPTEMBER 8, 2025
6:30 PM - CITY HALL AUDITORIUM**

1. CALL TO ORDER

2. ROLL CALL

3. PUBLIC COMMENTS

4. MINUTES

- a. August 4, 2025

5. QUASI-JUDICIAL ANNOUNCEMENT AND SWEARING IN OF SPEAKERS

6. APPLICATION(S)

- a. **Application 25-65;** Certificate of Appropriateness to partially demolish the contributing primary structure for the purpose of constructing a new primary structure.
Location: 226 N Grosse Avenue
- b. **Application 25-64;** Certificate of Appropriateness to create new openings in the contributing outbuilding, construct an access ramp at the contributing primary structure, and for landscaping.
Location: 118 E Orange Avenue

7. BOARD AND STAFF COMMENTS

8. ADJOURNMENT

This meeting is open to the public. Any person who decides to appeal any decision of the Board with respect to any matter considered at this meeting will need a record of the proceedings, and for such purpose may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. The City of Tarpon Springs is committed to providing reasonable accommodation for access for the disabled. Anyone needing assistance regarding this meeting should contact the City Clerk's Office at (727) 938-3711, fax a written request to (727) 942-5619, or email a written request to cityclerk@ctsfl.us at least two days prior to the meeting. For further information regarding this meeting, please contact the Planning and Zoning Department at (727) 942-5611 or clanford@ctsfl.us



**MINUTES
HERITAGE PRESERVATION BOARD
CITY OF TARPON SPRINGS, FLORIDA
AUGUST 4, 2025**

The Heritage Preservation Board of The City of Tarpon Springs, Florida, met In Regular Session in The City Hall Auditorium/Commission Chambers, 324 E. Pine Street, On Monday, August 4, 2025, at 6:30 PM with the following present:

Member Hector Cadena
Member Kathleen Hallett
Vice-Chairperson William Sprecher
Chairperson Philip Mrozinski

ABSENT/EXCUSED: Rita Kaplan

ALSO PRESENT: Caroline Lanford, AICP, CTP, Principal Planner
Andrew Salzman, Board Attorney
Kimberly Creighton, Board Secretary

1. CALL TO ORDER

Chairperson Mrozinski called the meeting to order at 6:30 P.M.

2. ROLL CALL

Board Secretary Creighton called the roll.

3. PUBLIC COMMENTS

There were no members of the public who wished to speak.

4. MINUTES

a. June 2, 2025

MOTION: Vice-Chairperson Sprecher

SECOND: Member Hallett

to approve minutes June 2, 2025, as presented.

Vote on Motion – Upon roll call vote, the motion Passed as follows:

Yes: Member Cadena
Member Hallett
Vice-Chairperson Sprecher
Chairperson Mrozinski

No: None

5. QUASI-JUDICIAL ANNOUNCEMENT AND SWEARING IN OF SPEAKERS

The Board Attorney read the Quasi-Judicial Announcement and swore in all who wished to testify. He asked if there was any ex parte communication; there was none.

6. APPLICATION(S)

- a. **Application 25.50; Certificate of Appropriateness to replace an asbestos roof with a shingle roof on the contributing structure; 26 W Orange Street.**

Ms. Lanford gave background information and indicated that staff recommended approval of the project as presented by the applicant based on interpretation of the review criteria as stated in this staff report. Staff recommended the following conditions be included in the Certificate of Appropriateness:

1. The historic rooflines must be maintained.
2. Chimneys must not be altered.
3. The Certificate of Appropriateness expired in three (3) years if a building permit was not issued for the project.

MOTION: Vice-Chairperson Sprecher
SECOND: Member Cadena

to approve application 25.50 with staff recommended conditions.

Vote on Motion – Upon roll call vote, the motion Passed as follows:

Yes: Member Cadena
Member Hallett
Vice-Chairperson Sprecher
Chairperson Mrozinski
No: None

7. BOARD AND STAFF COMMENTS

There were no comments from the board or staff.

8. ADJOURNMENT

Chairperson _____ Adjourned the meeting at 06:46 PM.

Chairperson

***Secretary's Note:** The preceding are action minutes and are not the official meeting record.



CITY OF TARPON SPRINGS
HERITAGE PRESERVATION BOARD
September 8, 2025

STAFF REPORT, August 19, 2025

Application No. / Project Title: 25.65 / Hanks

Staff: Caroline Lanford, AICP CTP
Principal Planner

Applicant / Owner: Micheal and Patti Hanks / ESTATECO LLC TRE, 226 N Grosse Ave Land Trust

Property Size: 11,901 square feet

Current Zoning: R-70A Single Family Residential District

Future Land Use: Residential Urban

Location / Parcel ID: 226 N Grosse Avenue / 12-27-15-89982-027-0203

Architectural Type/District Status: Frame Vernacular / Contributing

BACKGROUND SUMMARY:

The applicant is seeking a conditional Certificate of Appropriateness to partially demolish the contributing structure at the subject property, a circa 1910 residential frame vernacular structure. The applicant plans to preserve the front exterior wall of the house, demolish the remainder of the structure, and build a new house using the existing front exterior wall and replicate the existing exterior design and footprint of the existing house and wrap-around porch. The applicant is also seeking a Certificate of Appropriateness for landscaping, construction of a garage and accessory dwelling unit at the rear of the lot, and a pool in the center of the lot. The applicant is under contract for the property and is seeking a conditional Certificate of Appropriateness for partial demolition prior to purchase and investment in the development of reconstruction plans to present to the Heritage Preservation Board for review.

Florida Master Site File (FMSF) 8PI1446 notes the two-story cross-gable residence has a T-shaped plan with a one-story separate hipped roof porch that wraps three sides, one side of which has been enclosed. The steep pitched roof has exposed rafter tails and diamond-shaped cut outs in the fascia board. The gable ends feature staggered pattern wood shingles. A low concrete block site wall surrounds the approximately one-quarter acre corner lot. The contributing structure is an example of Spanish-American War-era vernacular architecture and is representative of the development in Tarpon Springs at the time.

PRELIMINARY STAFF RECOMMENDATION:

Staff recommends the HPB review the analysis presented in this staff report to determine if the proposed partial demolition and reconstruction is consistent with review standards.



If the project is approved, staff recommends the following conditions:

1. The parameters of DRGM Guideline 41 will be followed.
2. The demolition permit will not be issued until there is an HPB approved plan for site development.
3. The Certificate of Appropriateness will expire in three (3) years if a building permit has not been issued for the project.

HISTORIC DISTRICT CONSIDERATIONS:

1. When considering this application, the Heritage Preservation Board (HPB) is encouraged to refer to the Historic District Design Review Guidelines Manual (DRGM), especially Chapter 4.13. The DRGM can be accessed at the following link: <https://www.ctsfl.us/wp-content/uploads/2021/03/Historic-District-Design-Review-Guidelines-Manual.pdf>
2. The guidelines state that “the decision to demolish a historic structure is a measure of last resort and shall be based on the demonstration that there is no other feasible alternative.”
3. Guideline 41 provides for actions to be implemented should a demolition be approved. It is recommended that the Heritage Preservation Board (HPB) include these actions as conditions should they render a favorable decision on the demolition.

REVIEW STANDARDS / STAFF ANALYSIS – CERTIFICATE OF APPROPRIATENESS

Pursuant to Section 110 - Demolition, states in Section (B), “When authorizing a Certificate of Appropriateness for the issuance of a demolition permit, the Board shall consider the following criteria:

(1) The historic, architectural or cultural significance of the building or structure;

ANALYSIS: The building and property have no known special significance beyond the fact that it is contributing to the National Register of Historic Places District in the historic downtown and the local historic district. See further discussion of the property in the context of the district (see item 2 below) and in the context of the architectural type (see item 4 below).

(2) The importance of the building or structure to the ambiance of a district or to the patterns of land uses reflecting cultural traditions of the community or local ethnic group;

ANALYSIS: The subject building has no known, documented significance beyond contributing to the National Register and local historic districts. It is located on the northeastern-most parcel in the National Register district north of the downtown core. The area includes a range of architectural styles and periods of significance. The parcel to the south of the subject property contains a contributing circa 1910 Craftsman; to the east, a circa 1956 Ranch residence that contributes to the local historic district; and to the west there are two circa 1920 Craftsman residences that contribute to the national and local districts. Other contributing structures in the immediate vicinity include frame vernacular and craftsman residences dating from 1910’s to the late 1920’s, a circa 1910 masonry vernacular residence contemporary to the subject structure, three colonial revival structures dating between 1913 and 1919, and a 1957 masonry vernacular residence. The block is largely intact, with only 2 of the 18 structures considered to be non-contributing to the local historic district.

Partial demolition of the structure would alter the streetscape. Demolition and redevelopment would alter the historic streetscape, but redevelopment plans would require conformance with guidelines and HPB approval. Although the structure has no known individual significance, the building



contributes to the historic ambiance of the neighborhood, and the demolition of any contributing structure degrades the integrity of the district. The HPB should determine if these alterations are significantly adverse.

(3) The difficulty or impossibility of reproducing such a building or structure because of its design, texture, material, detail, or unique location;

ANALYSIS: The building would not be difficult to reproduce including the design, texture, material and detail. The location/setting is not unique to a residential frame vernacular structure.

(4) Whether the building or structure is one of the last remaining examples of its kind in the district or in the city;

ANALYSIS: Frame vernacular is the most common architectural style in the local historic district, with 147 of the 371 structures (39.6%) identified in the *Historic Resources Survey of Tarpon Springs* (2009) as frame vernacular. Typically, these structures were designed and constructed by nonprofessionals (often the occupants) without imitating a particular style. Frame vernacular structures tend to be simple and constructed out of readily available materials. The 2009 survey notes:

While examples of Frame Vernacular buildings cover all periods of development in the Tarpon Springs survey area, the majority were constructed prior to 1915, with the earliest built around 1883. Generally, these early Frame Vernacular resources in the survey area are one- or two-stories, constructed of wood structural frames set on pier foundations made of brick, concrete or rusticated concrete block. Gable roofs are most common, followed by hip roofs, and tend to have steep slopes in the earliest examples. The exterior cladding is most often wood drop siding with corner boards. Metal shingles are the most common original roofing material, but composition shingles are seen on many today as well. Windows are typically wood double-hung sashes, most often with 1/1 or 2/2 configurations. Nearly all have front porches typically supported by wood posts. Detailing tends to be simple and typically includes items such as decorative shingle patterns in front facing gables or simple ornamental railing designs.

(5) The future utilization of the site and/or group occupancy of the structure;

ANALYSIS: The site is located in the R-70A Single Family Residential District. The applicant has stated that they plan to preserve the front exterior wall of the house, demolish the remainder of the structure, and build a new house using the existing front exterior wall and replicate the existing exterior design and footprint of the existing house and wrap-around porch. It is recommended that the HPB condition any approval to require an HPB approved plan for the site prior to the issuance of a demolition permit.

(6) Whether reasonable measures can be taken to save the building, structure or traditional cultural property; and



ANALYSIS: The applicant has not provided detailed evidence that the structure is damaged beyond the point of repair. However, staff notes that photographic evidence of damage to the structure has been provided and included in the presentation accompanying this staff report.

(7) Whether the building, structure or traditional cultural property is capable of earning a reasonable economic return on its value and whether the perpetuation of the building or structure, considering its physical condition, its location and the anticipated expense of rehabilitation would be economically feasible.

ANALYSIS: This standard compels the Heritage Preservation Board to compare the current property to the value of the restored property and analyze whether the cost of restoration is justified. The applicant's initial intention was to restore the contributing structure and consulted a qualified contractor with preservation experience. A detailed restoration cost has not been provided, but an order of magnitude estimate of \$700,000 for restoration has been provided by the applicant.

The Pinellas County Property Appraiser (PCPA) sets the January 2024 just market value of the property at \$233,394. Staff cannot render an expert opinion regarding reasonable economic return and/or economic feasibility, however; the entitlements available for this property allow for the development of a new single-family home that could exceed its present value.

PUBLIC CORRESPONDENCE:

The property owners within 500 feet were sent written notification in accordance with Section 109.00(B) of the City of Tarpon Springs Comprehensive Zoning and Land Development Code. Staff has not received any responses to these notices.

ATTACHMENTS:

1. Slide Presentation
2. Florida Master Site File Form #8PI1446
3. Application

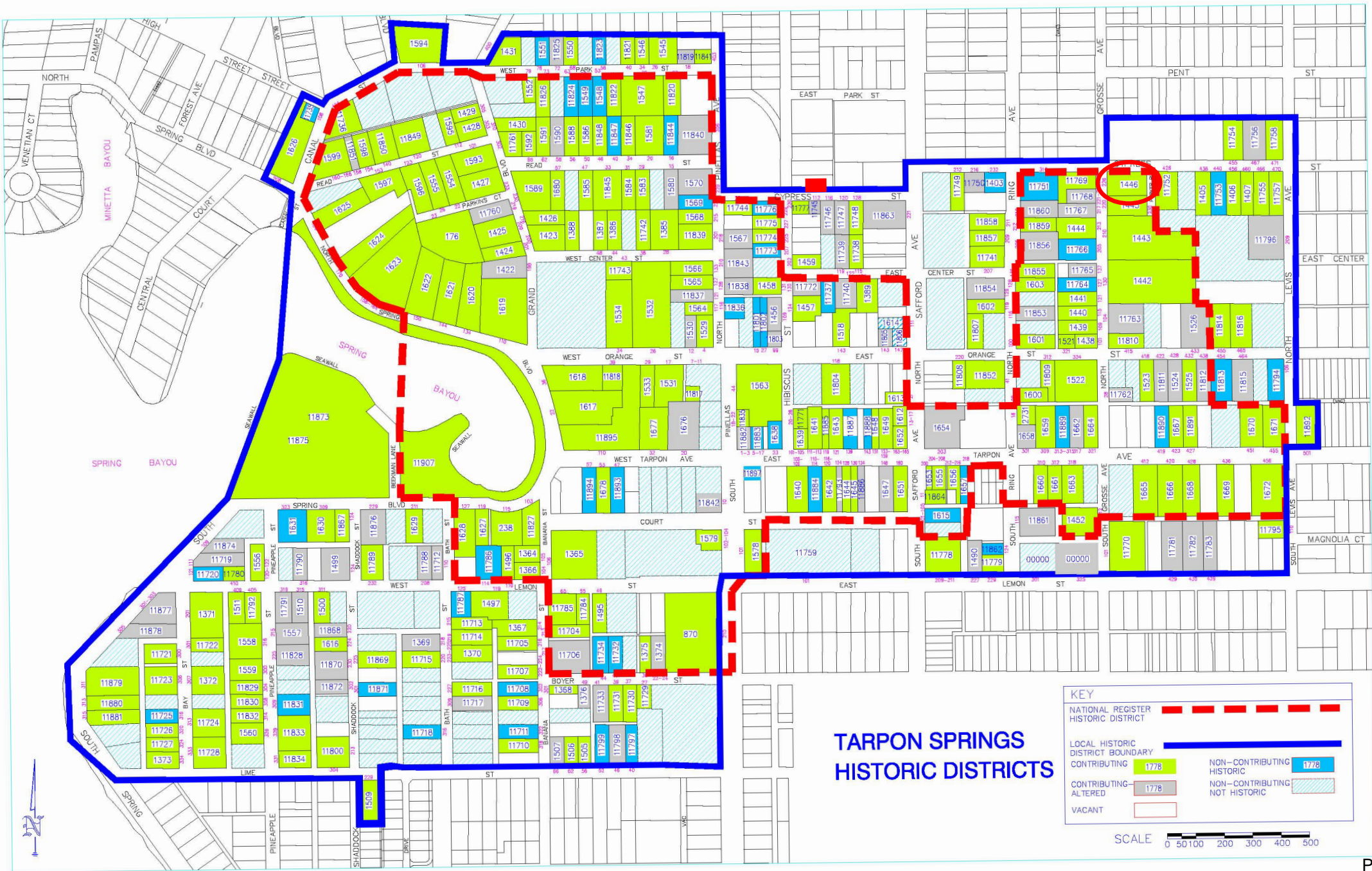
HANKS APPLICATION #25-65

Heritage Preservation Board, September 8, 2025



LOCATION AND CONTEXT





**TARPON SPRINGS
 HISTORIC DISTRICTS**

KEY

- NATIONAL REGISTER HISTORIC DISTRICT
- LOCAL HISTORIC DISTRICT BOUNDARY
- CONTRIBUTING
- CONTRIBUTING-ALTERED
- VACANT
- NON-CONTRIBUTING HISTORIC
- NON-CONTRIBUTING NOT HISTORIC

SCALE 0 50 100 200 300 400 500

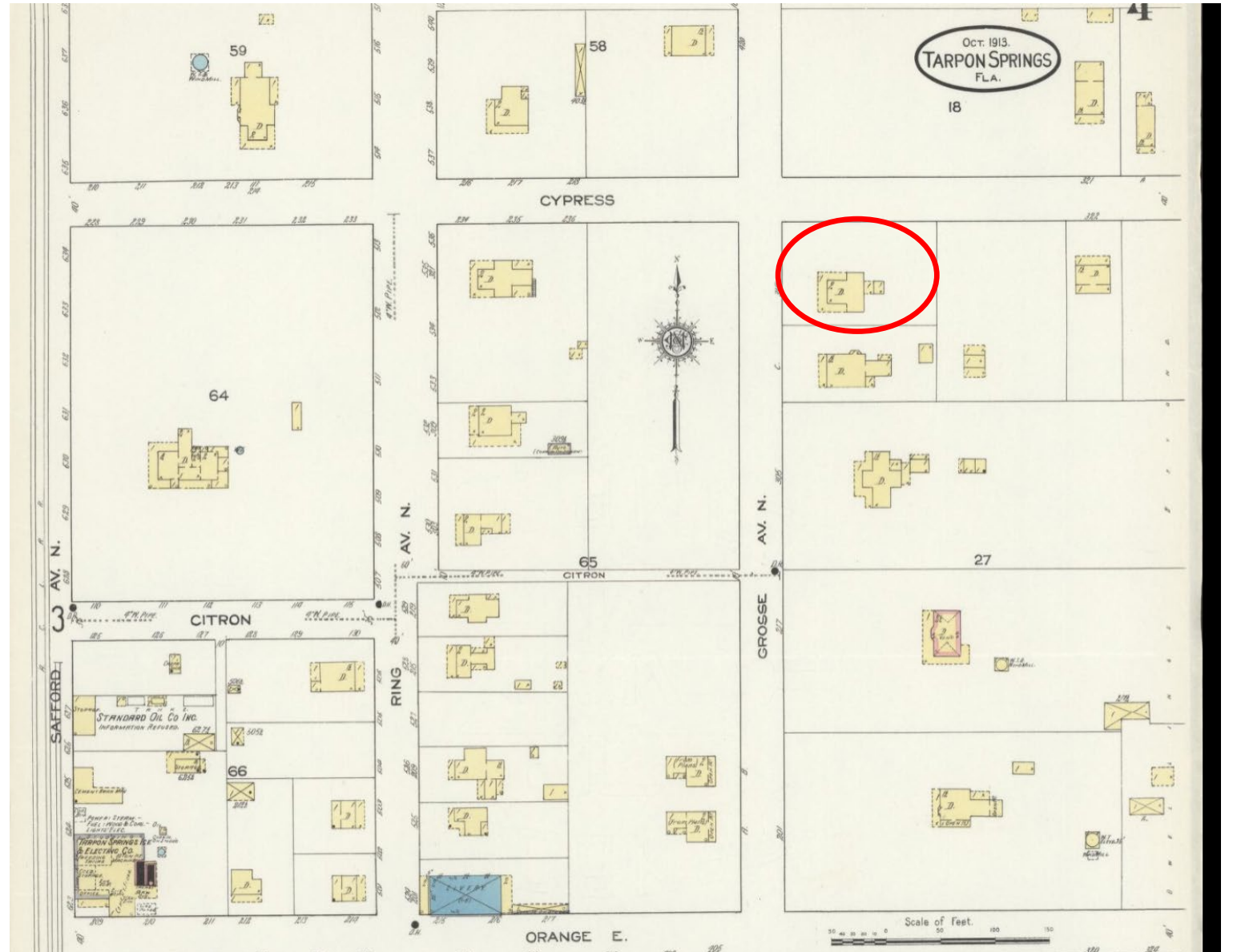
REQUEST

- Conditional Certificate of Approval for:
 - Partial demolition, reconstruction, landscaping, construction of a garage, and construction of a pool
- Lot Size: 11,901 square feet
- Current Zoning: R-70A Single Family Residential District
- Location / Parcel ID: 226 N Grosse Avenue / 12-27-15-89982-027-0203
- Architectural Type/Style: Frame Vernacular
- District Status: Contributing
- Florida Master Site File: 8PI1446
- Applicant / Owner: Micheal and Patti Hanks / ESTATECO LLC TRE, 226 N Grosse Ave Land Trust

226 N Grosse Avenue – FLORIDA MASTER SITE FILE



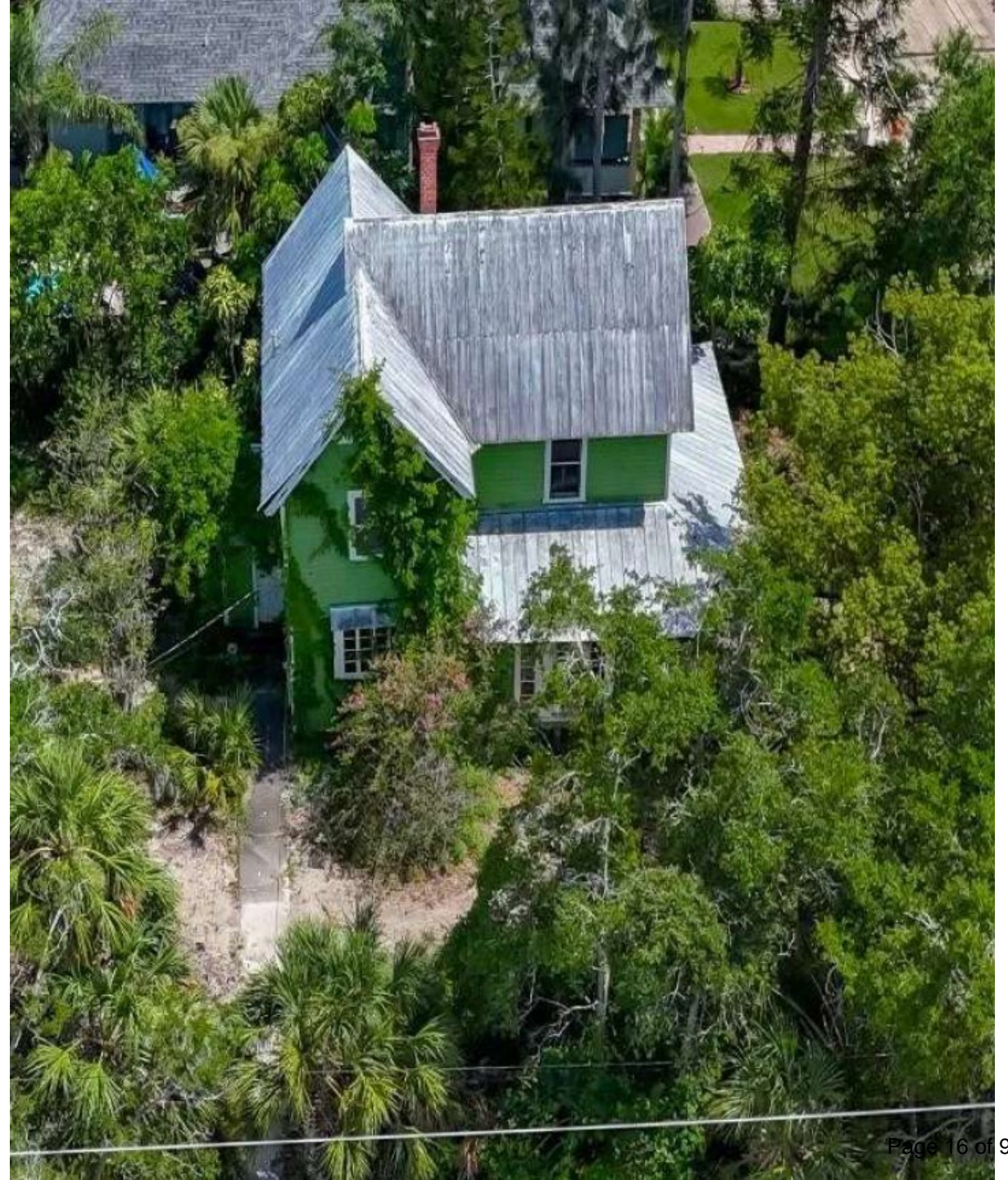
1913 SANBORN



FAÇADE

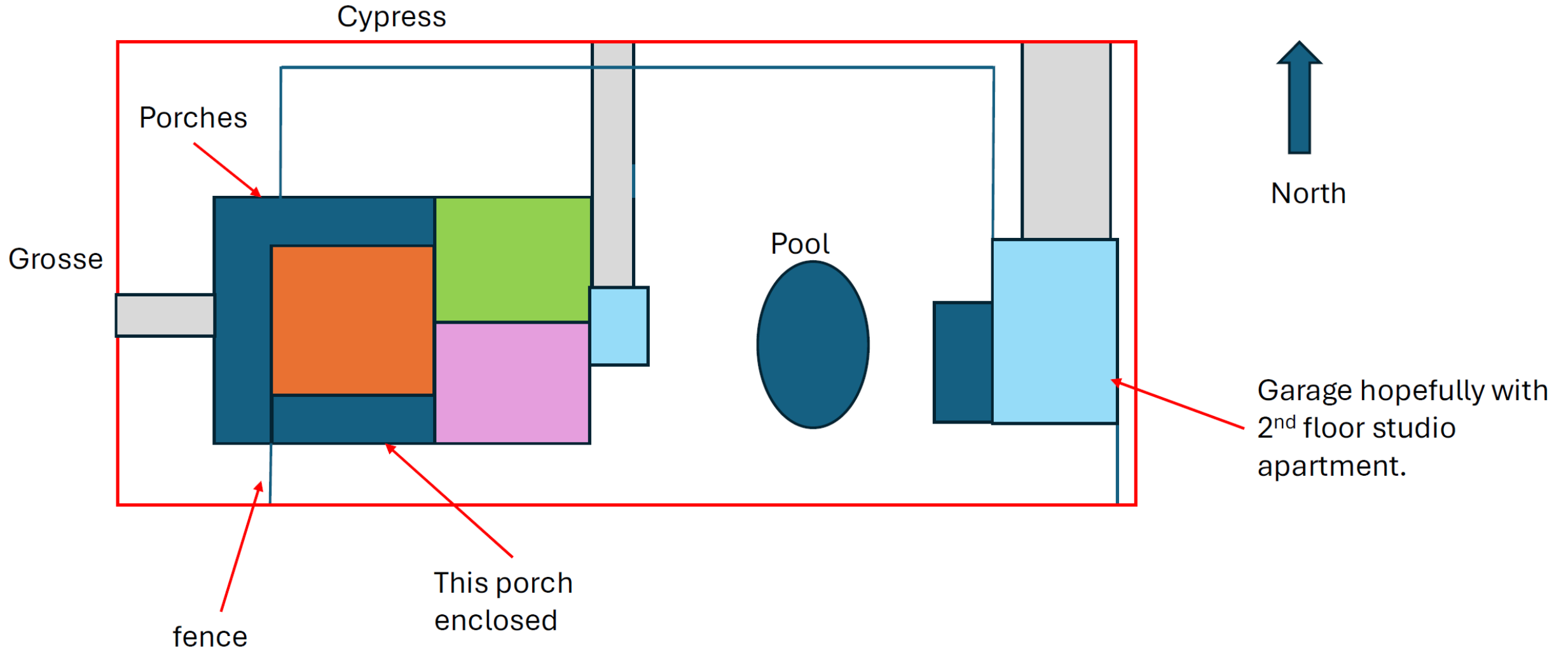








PROPOSED PROJECT



PROPOSED PROJECT



DESIGN GUIDELINES REVIEW MANUAL

4.13 Universal Guidelines for Demolition

Historic buildings throughout the Tarpon Springs Historic District contribute to the overall historical and physical significance of the district; the loss of any one of these historic buildings could have a negative impact on the integrity of the district as a whole. As such, demolition is strongly discouraged for any historic building within the historic district. Demolition results in a loss of architectural and historical integrity and can dramatically change the character of a block or historic district. Demolition is generally discouraged; however, it may be approved in certain situations.

The decision to demolish a historic structure is a measure of last resort and shall be based on the demonstration that there is no other feasible alternative. Demolition can have a significant impact on the historic context of the district. Many older buildings offer character and quality that cannot be economically replicated today. Older buildings can be retrofitted to provide modern amenities.

The City of Tarpon Springs Heritage Preservation ordinance sets the following criteria to be considered in the review of demolitions:

- The historic, architectural or cultural significance of the building or structure,
- The importance of the building or structure to the ambiance of a district or to the patterns of land uses reflecting cultural traditions of the community or local ethnic group,
- The difficulty or impossibility of reproducing such a building or structure because of its design, texture, material, detail or unique location,
- Whether the building or structure is one of the last remaining examples of its kind in the district or in the city,
- The future utilization of the site and/or group occupancy of the structure,
- Whether reasonable measures can be taken to save the building, structure or traditional cultural property, and,
- Whether the building, structure, or traditional cultural property is capable of earning a reasonable economic return and whether the perpetuation of the building or structure, considering its physical condition, its location, and anticipated expense of rehabilitation would be economically feasible.

If the demolition is denied, then the property owner can apply for an economic hardship exception. The hardship exception requires information regarding the cost of the proposed construction, additional cost incurred to comply with recommendations of the Heritage Preservation Board, structural soundness, market value of the property before and after demolition, the economic feasibility of rehabilitation, and, for income-producing property, the capitalization rate based on net operating income.

Guideline 41. Guidelines for Demolition of Historic Properties

- a. Establish a permanent record of the property prior to demolition. The level of documentation and the person responsible for producing the documentation will be determined by the Tarpon Springs HPB.
- b. Identify salvageable building materials and potential buyers or recipients of salvaged material before demolition.
- c. Protect historic site features, including mature trees and potential archaeological resources.
- d. Ensure the safety of the adjacent properties and historic resources.
- e. The site must be cleared of debris, reseeded, and properly maintained until it is reused. If the site is to remain vacant for over one year, it must be improved to reflect an appearance consistent with other open space areas in the district.

PRELIMINARY STAFF RECOMMENDATION

Staff recommends the HPB review the analysis presented in the staff report and presentation to determine if the proposed partial demolition and reconstruction is consistent with review standards. If Application #25-65 is approved, staff recommends the following conditions:

1. The parameters of DRGM Guideline 41 will be followed.
2. The demolition permit will not be issued until there is an HPB approved plan for site development.
3. The Certificate of Appropriateness will expire in three (3) years if a building permit has not been issued for the project.

The project was publicly noticed. No responses to the notices have been received.



HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

Consult Guide To Historical Structure Forms for detailed instructions

Site # 8P11446Recorder # 14Recorder Date 1/26/09Original Update Site Name 226 N Grosse Avenue Other Names _____Project Name Historic Resources Survey of Tarpon SpringsHistoric Contexts Spanish-American War National Register Category Building

LOCATION and IDENTIFICATION

Address 226 N Grosse AvenueVicinity of SE corner of Grosse Ave and Cypress St.City Tarpon Springs County PinellasOwnership Private-individual Subdivision _____ Block # _____ Lot # _____

MAPPING

USGS Map TARPON SPRINGS Township 27S Range 15E Section 13Quarter _____ Qtr Qtr _____ Irregular Section UTM Zone 17Easting 327898 Northing 3114486 Land Grant UnknownLatitude _____ Longitude _____ Plat or Other Map Aerial Photographs

HISTORY

Architect/Builder Unknown Construction Date 1910 Circa Alterations Date Unknown Type/Location some windows replaced (N side casements), N side porch enclosedAdditions Date _____ Type/Location _____Moved Original Location _____Use Original Private residence Use Present Private residence

DESCRIPTION

Style Frame Vernacular Exterior Plan T-shaped Interior Plan Unknown Stories 2Structural System Wood frame Exterior Fabric Drop sidingFoundation Piers Foundation Materials Poured concrete Foundation Infill Wood LatticeNo. of Porches 1 Locations/Features separate 1 story hipped roof, wraps 3 sides (N side now enclosed)

Main Entrance (stylistic details): _____

Outbdgs. Number 1 Nature/Location (Describe below)metal shed to rear, not historicRoof Type Cross-gabled Roofing Materials 5V-Sheet metalSecondary Structures Comments Not applicable Location _____Chimneys Number 1 Orientation South Location Slope/Interior Material BrickWood Windows Type DHS; Casement Light # 1/1; 4 lightMetal Windows Type _____ Light # _____Exterior Ornament Cornerboards, rafter tails, vents, wood surrounds, triangle wood louvres in gable endCondition Fair Surroundings Residential

Narrative (general, interior, landscape, context; 3 lines only)

this two-story cross-gable residence has a T-shaped plan with a one-story separate hipped roof porch that wraps three sides. The steep pitched roof has exposed rafter tails and diamond-shaped cut outs in the fascia board. The gable ends feature staggered pattern wood shingles. A low concrete block wall surrounds the corner lot.

Archaeological Remains Present FMSF Archaeological Site Form Completed (if yes, attach)

Consult Guide To Historical Structure Forms for detailed instructions

RECORDER'S EVALUATION OF SITE

Individually Eligible for National Register? Yes No Likely, Need Information Insufficient Information Potential Contributor to Nat. Reg. District? Yes No Likely, Need Information Insufficient Information

Areas of Significance

Community planning & development

Summary of Significance

This resource is an example of residential architecture in Tarpon Springs during the Spanish-American War-era and is representative of the development of the City of Tarpon Springs. Although this building has undergone some minor alterations, the majority of architectural details remain and the overall historic massing is retained. Therefore, this building would be considered a contributing resource to the NRHP and Local Tarpon Springs Historic District.

DHR USE ONLY		OFFICIAL EVALUATIONS	DHR USE ONLY	
NR DATE ____/____/____	KEEPER-NR ELIGIBILITY <input type="checkbox"/> yes <input type="checkbox"/> no		Date	____/____/____
DELIST DATE ____/____/____	SHPO-NR ELIGIBILITY: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> potentially elig. <input type="checkbox"/> insufficient info		Date	____/____/____
	LOCAL DESIGNATION: _____		Date	____/____/____
	Local office _____			
National Register Criteria for Evaluation <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (See National Register Bulletin 15, p. 2)				

DOCUMENTATION

Research Methods Florida Site File for past architectural surveys; Florida Site File search; Local library; Tax records; Pedestrian; Sanborn maps

Bibliographic References Olausen, Stephen A. FMSF form for 8PI1446. on file, Florida Department of State, Division of Historic Resources, Tallahassee, Florida.

Location of Negatives Janus Research **Negative Numbers** Roll 2885, #23, Facing NE

RECORDER INFORMATION

Recorder Name Janus Research

Recorder Affiliation JANUS RESEARCH, 1107 N. Ward Street, Tampa, Florida 33607 Telephone 813-636-8200

- REQUIRED:**
1. USGS 7.5' MAP WITH STRUCTURES PINPOINTED IN RED
 2. LARGE SCALE STREET OR PLAT MAP
 3. PHOTO OF MAIN FACADE, PREFERABLY B&W, AT LEAST 3x5



SKETCH MAP



Certificate of Appropriateness Form



CITY OF TARPON SPRINGS
PLANNING & ZONING DEPARTMENT
324 E. Pine Street, Tarpon Springs, FL 34689
(727) 942-5611 / planning@ctsfl.us

INSTRUCTIONS

Please complete this form fully and **DOWNLOAD (print button)** to submit with the associated development application. Applications must be submitted **DIGITALLY** through the [Planning and Zoning goPost portal](#).

Project Name*

Project Location*

Michael and Patti Hanks	226 N Grosse Ave
-------------------------	------------------

Type of Activity (Check all that apply)*

- | | |
|--|---|
| <input type="checkbox"/> Awnings | <input type="checkbox"/> Relocation* |
| <input type="checkbox"/> Deck/Patio | <input checked="" type="checkbox"/> Renovation |
| <input checked="" type="checkbox"/> Demolition | <input type="checkbox"/> Roof |
| <input type="checkbox"/> Driveway | <input type="checkbox"/> Signs |
| <input type="checkbox"/> New Construction | <input type="checkbox"/> Structural Addition |
| <input type="checkbox"/> Parking Lot | <input type="checkbox"/> Windows/Doors/Solar Panels |

***If Relocation, provide the following information:**

New Address / Location

Address / General Location

New Tax Parcel ID

New Land Use

New Zoning

Parcel ID from Pinellas County Property Appraiser	-- Select One -- <i>Choices are Alphabetized</i> Lookup Land Use	-- Select One -- <i>Choice are Alphabetized</i> Lookup Zoning
---	--	---

[Lookup Parcel ID](#)

Year Built*

Architctural Style*

Porches*

1900	Frame vernacular, T shape	<input checked="" type="radio"/> Yes <input type="radio"/> No
------	---------------------------	--

Original Use*

Residential

Present Use*

Vacant

Proposed Use*

Residential

Roof Type*

Gable

Roof Material*

metal

Exterior Siding Material*

wood

Previous Additions or Modifications*

Not known. It appears at some point one side of the wrap-around porch was enclosed.

Description of Proposed Work*

Our plan is to preserve the front exterior wall of the house but demolish the remainder of the structure, then build a new house using the existing front exterior wall and the same exterior design and footprint as the existing house including the wrap-around porch. We also plan to do significant landscaping and add a garage/ADU at the rear of the lot and a pool in the middle. If we receive contingent approval for this plan, we will go ahead with purchasing the property, develop the building and site plan and then submit them to the board for full approval for the demolition and rebuilding plan.

For Relocation or Demolition

The house is in poor condition. The rear half of the house has separated from and is tilted away from the front half. The flooring is rotted with holes through the floor throughout the house. Significant wood rot and termite damage visible throughout the inside and outside of the house. The porch deck is in poor condition. Water damage is visible (from leaking roof and windows) in multiple rooms. The walls are in visibly poor condition throughout. Our contractor believes the metal roofing is well beyond its useful life.

Any steps taken in the past to save the property are unknown to us.

Our contractor's estimate of the potential cost of attempting to renovate the house is beyond our budget. We have made an offer to buy the property contingent on HPB conditional approval for partial demolition of the house. For us to proceed with purchasing this property we need contingent approval for partial demolition to be reasonably certain we will be able to afford to get the house and property into the condition we envision.

Describe the property's physical condition, steps taken to save the property and whether renovation would be economically feasible.

Heritage Preservation Board (HPB) Review Standards

Please note, in reviewing an application for a Certificate of Appropriateness, the Board must consider the standards outlined in LDC Section 109.01(B).

Electronic Signature Agreement*

By checking the "I Agree" box below, you agree and acknowledge that **1)** this form will not be signed in the sense of a traditional paper document, **2)** by signing in this alternate manner, you authorize your signature on this form to be valid and binding to the same force and effect as a handwritten signature, and **3)** the information included in and with this form is completely true and correct to the best of your knowledge.

I Agree

Electronic Signature*

Date*

Michael L Hanks

8/7/2025

Steps to Download Form

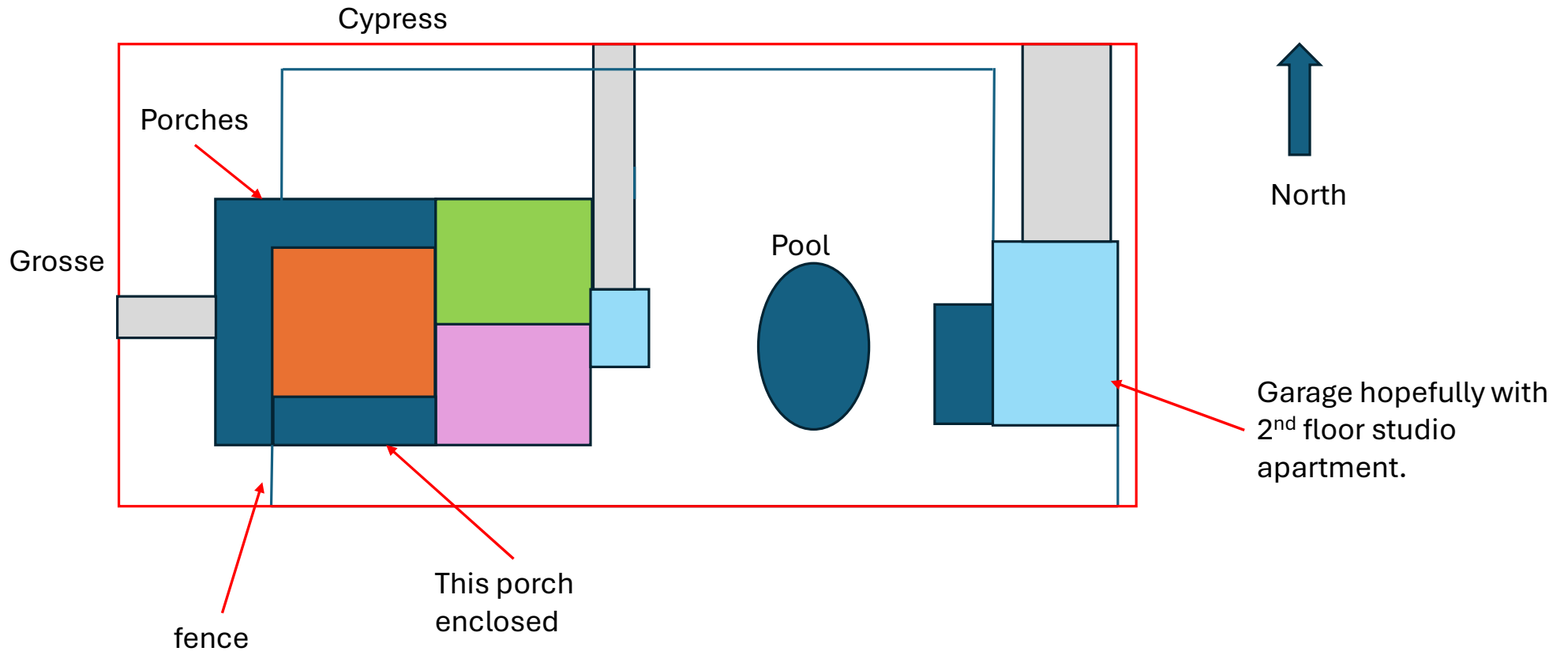
1. Click the '**Print Only**' button below.
2. Your form will open in a new tab.
3. **Right click** on your mouse and **select 'Print'**.
4. Choose to print to '**PDF**'.
5. Save the form in your desired location.

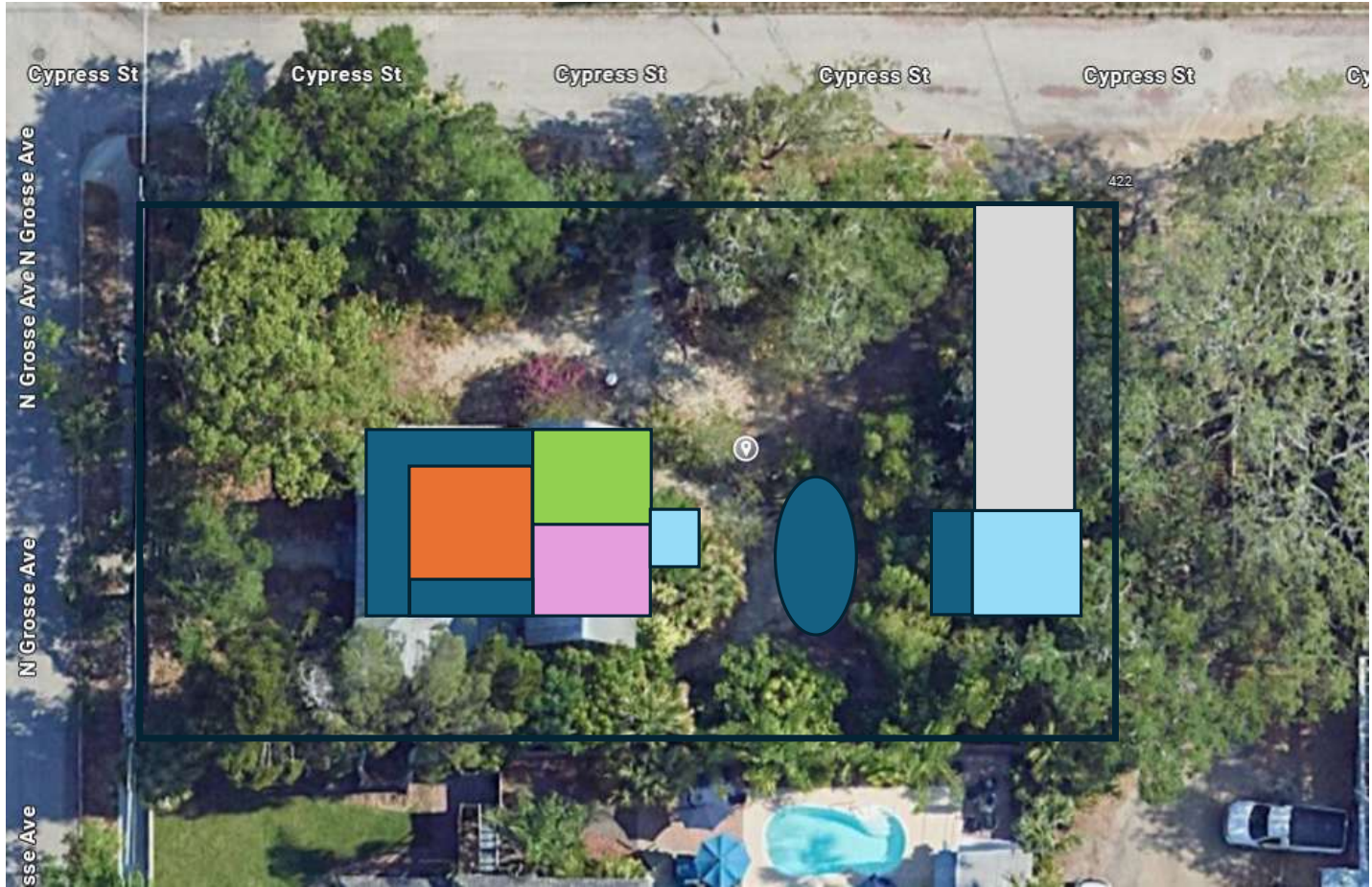
Need help? Give the Planning Department a call at [727-942-5611](tel:727-942-5611).

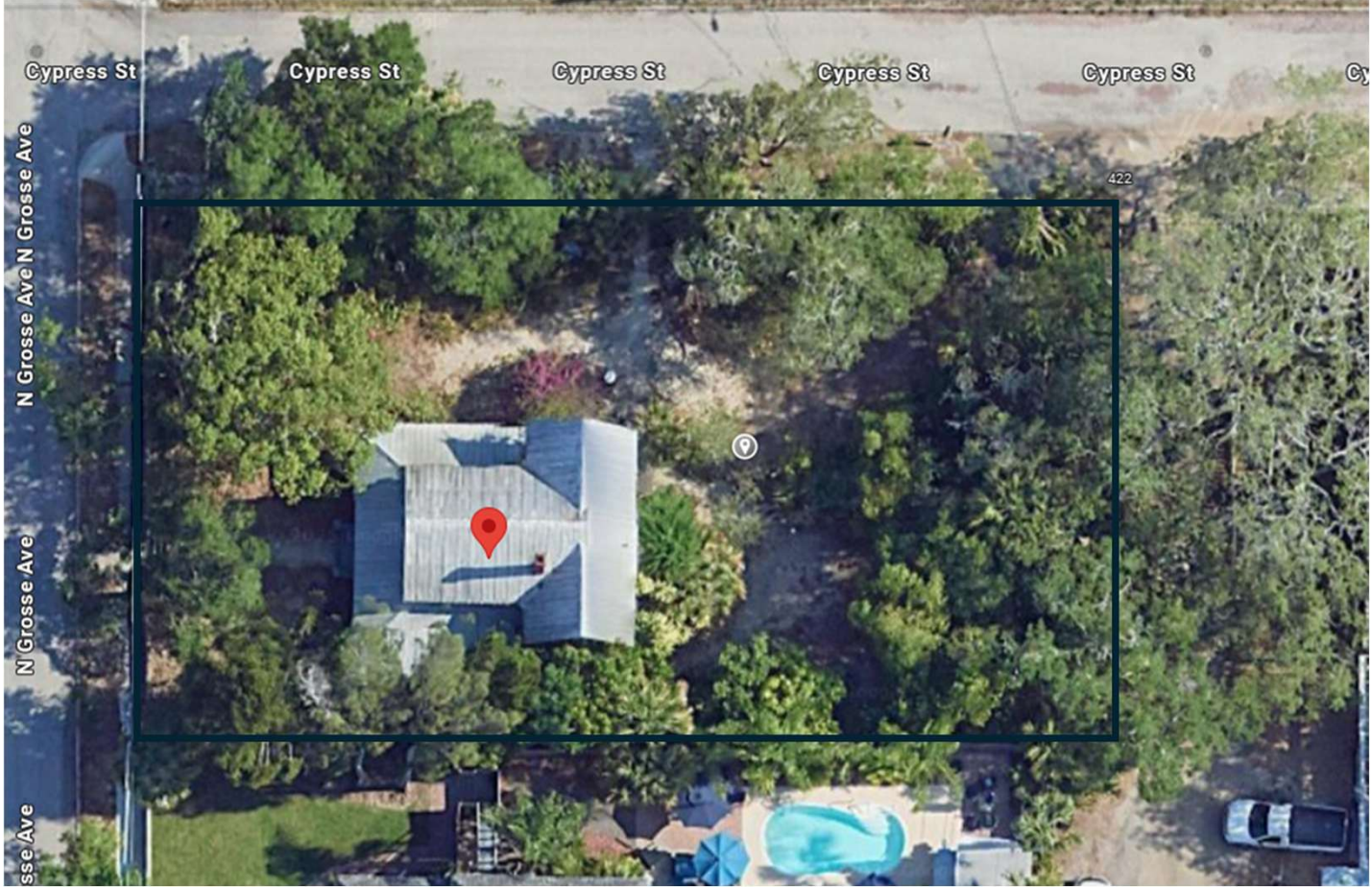
Conceptual plans for new building and other items:
Build a new structure that looks like this.







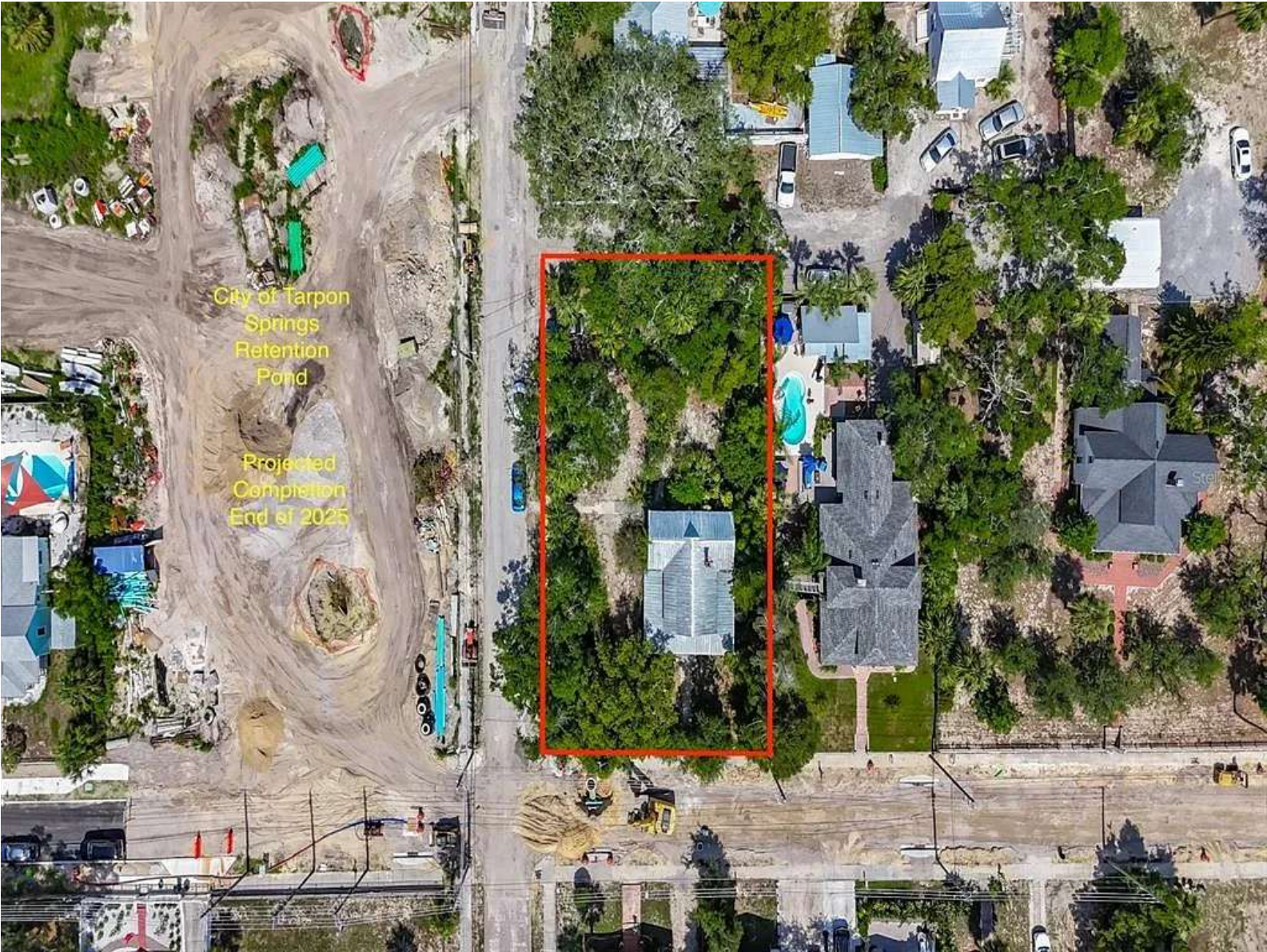












City of Tarpon
Springs
Retention
Pond

Projected
Completion
End of 2025





































CITY OF TARPON SPRINGS
HERITAGE PRESERVATION BOARD
September 7, 2025

STAFF REPORT, SEPTEMBER 2, 2025

Application No. / Project Title: 25-64 / Tea House

Staff: Caroline Lanford, AICP CTP
Principal Planner

Applicant / Owner: Matthew Housh

Property Size: 14,250 square feet

Current Zoning: T4a Residential + Retail/Office

Current Land Use: Community Redevelopment District

Location / Parcel ID: 118 East Orange Street / 12-27-15-64998-000-0050

Architectural Type/District Status: Masonry Vernacular / Contributing

BACKGROUND SUMMARY:

The applicant is seeking a Certificate of Appropriateness to create new openings in the contributing outbuilding, construct an ADA access ramp on the west side at the contributing primary structure, and landscaping at the subject contributing property. The principal building is a contributing two-story masonry vernacular building constructed in approximately 1925 with a shed-roof, single-story, 1960s addition on the rear. The outbuilding is a contributing cottage constructed in about 1950. The Florida Master Site File (FMSF) form for this property (FMSF 8PI11804) lists the principal building as a masonry vernacular structure originally built as a residence. The Design Review Guidelines Manual (DRGM) notes this as a masonry vernacular structure with both Greek Revival and French Creole style elements added (See Figure 32). The building has most recently been known as the “Oxford Tea House.” The property is not currently being used or occupied.

PRELIMINARY STAFF RECOMMENDATION:

Staff recommends **approval** of the project as presented by the applicant with the following conditions:

1. The Certificate of Appropriateness will expire in three (3) years if a building permit has not been issued for the project.

HISTORIC DISTRICT CONSIDERATIONS:

1. When considering this application, the Heritage Preservation Board (Board) is encouraged to refer to the Historic District Design Review Guidelines Manual (DRGM), especially Guidelines 6, 18 and 22. The DRGM can be accessed at the following link: <https://www.ctsfl.us/wp-content/uploads/2021/03/Historic-District-Design-Review-Guidelines-Manual.pdf>



2. The project proposes to initiate repairs and maintenance that will begin to arrest apparent ongoing deterioration of the property and will continue the commercial use of this original masonry residence.

REVIEW STANDARDS / STAFF ANALYSIS – CERTIFICATE OF APPROPRIATENESS

Pursuant to Section 109.01, Standards for Review:

- (A) It shall be the intent of this Article to promote maintenance, restoration, adaptive reuses appropriate to the property, and compatible contemporary designs that are harmonious with the exterior and landscape features of neighboring buildings, sites, and streetscapes.
- (B) In reviewing an application for a Certificate of Appropriateness, the Board shall consider the following criteria:

(1) The height and width of any proposed alteration or new construction shall be consistent with that of adjacent contributing structures and with those structures of similar character and architectural style found throughout the immediate neighborhood or the district.

ANALYSIS: The addition of an ADA ramp on the west side of the primary contributing structure will minimally increase the footprint of the building. This impact is not considered to be significantly adverse when balanced with the increased access and the impermanence of the alteration.

(2) The width and height of windows, doors, and entries shall be consistent with the character of the building's original architectural style. Repair or replacement of missing architectural features such as windows, mullions, doors, entries, hand rails, etc., should be based on accurate duplications, substantiated by historic, physical or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

ANALYSIS: Contributing Outbuilding: The outbuilding is a one-story masonry structure. It had three door openings on the front facade and one door opening on the rear façade, and five window openings on the façade when a previous CA was issued to replace all of the doors with solid fiberglass doors and change one existing window opening to a new door. The fenestration pattern was altered to convert one window to a door and enlarge window openings on the façade.

This is an accessory/outbuilding structure not visible from the street, and, it serves a subordinate functional nature on the property. The proposed changes to fenestration are not considered to have a significant adverse impact on the property as a whole. These alterations will likely affect the contribution of the outbuilding to the historic district.

(3) The relationship of a structure within an historic or cultural preservation district to the open space between it and the street and to other buildings or scenic views, vistas or streetscapes characterizing the area, shall be protected through a site plan review process addressing setbacks, roof lines, garage placement, parking and access analysis and the use of landscaping.

ANALYSIS: ADA Ramp (Primary Structure): The addition of the proposed ADA ramp would minimally impact the relationship of the primary structure to the street and alter the streetscape. These impacts are not considered significantly adverse.



New Window Openings (Contributing Outbuilding): These openings are not visible from the public right-of-way and would not affect the streetscape.

Landscaping: The proposed new landscaping would alter the streetscape. These impacts are not considered to be adverse.

(4) The shape and texture of the roof shall replicate the shape, texture and type of roof distinguishing the building's original architecture and on structures of similar style and age within the Historic and Cultural Preservation District.

ANALYSIS: Not applicable to this project.

(5) The size and mass (or shape) of the building after alteration shall be reflective of the building's original architectural style. The size and mass (or shape) of a proposed structure (new construction) should reflect the character of contributing buildings within the District as well as those immediately surrounding the subject property and shall include review of architectural elements such as roof lines, fenestration, and other components of facade design.

ANALYSIS: ADA Ramp (Primary Structure): The addition of the proposed ADA ramp would minimally impact the mass of the primary structure. These impacts are not considered significantly adverse.

(6) Landscaping shall be utilized as a means to enhance the architectural character and appearance of the structure or traditional cultural property and to protect and define open spaces and pedestrian ways within Historic and Cultural Preservation Districts.

ANALYSIS: The proposed new landscaping is considered complimentary to the architectural character of the structure.

(7) Distinctive architectural features shall be repaired rather than replaced, wherever possible. Architectural details, including color, materials, texture, and site lighting shall be treated so as to make the building, structure, or traditional cultural property consistent with the property's original architectural style and character. New materials should replicate the material being replaced in composition, design, color, texture and other visual qualities.

ANALYSIS: New Window Openings (Contributing Outbuilding): The new window openings at the contributing outbuilding remove historic materials from the structure and alter its appearance. The alteration is not visible from the street.

(8) All buildings, structures, sites and traditional cultural properties shall be recognized as products of their own time. Alterations, modifications or other changes to a structure or traditional cultural property shall not attempt to create an earlier appearance than the original date of construction. Changes that may have taken place in the course of time are evidence of the history and development of the subject property and may have acquired significance in their own right. This significance shall be recognized and respected.

ANALYSIS: Not applicant to this project.



(9) The renovation of contributing structures in an historic or cultural district or designated sites shall meet the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.

ANALYSIS: The project generally meets the Secretary's standards.

(10) The proposed project shall conform to other requirements of this Code and be in compliance with the applicable goals, objectives, and policies of the Comprehensive Plan.

ANALYSIS: The project is in compliance with the Land Development Code and the City's Comprehensive Plan.

(11) The impact upon archaeological sites shall preserve the integrity of the site.

ANALYSIS: No archaeological sites will be impacted.

PUBLIC CORRESPONDENCE:

The property owners within 500 feet were sent written notification in accordance with Section 109.00(B) of the City of Tarpon Springs Comprehensive Zoning and Land Development Code. Staff has not received any responses to these notices.

ATTACHMENTS:

1. Slide Presentation
2. Florida Master Site File Form #8PI11804
3. Application and supporting materials

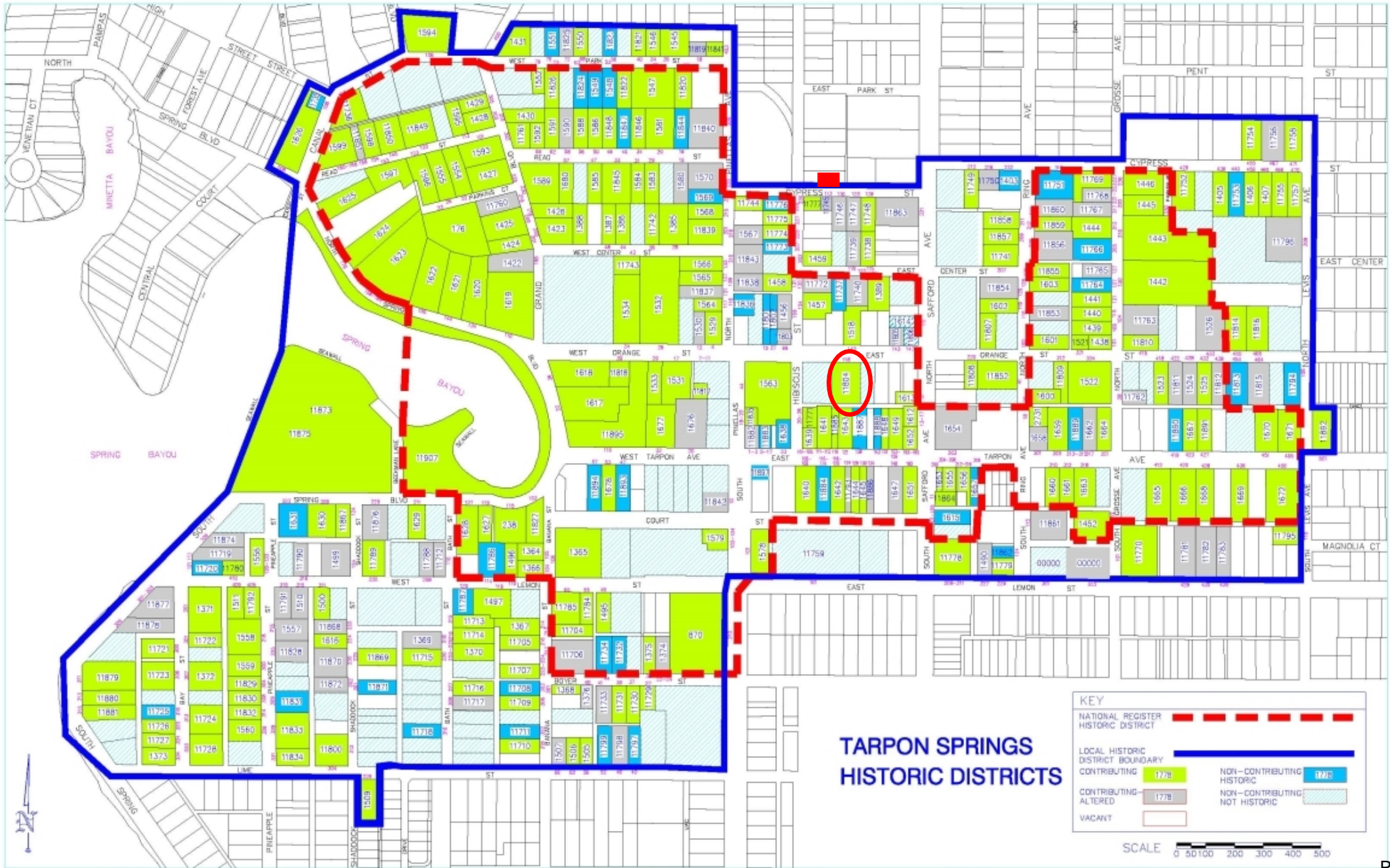
TEA HOUSE APPLICATION #25-64

Heritage Preservation Board, September 8, 2025



LOCATION AND CONTEXT





REQUEST

- Certificate of Approval for:
 - ADA Ramp (Primary Structure)
 - New Window Openings (contributing outbuilding)
 - Landscaping
- Lot Size: 14,250 square feet
- Current Zoning: Special Area Plan – T4a Residential + Retail/Office
- Location / Parcel ID: 12-27-15-64998-000-0050
- Architectural Type/Style: Masonry Vernacular
- District Status: Contributing
- Florida Master Site File: 8PI11804
- Applicant: Matthew Housh

118 E ORANGE STREET – FLORIDA MASTER SITE FILE



FAÇADE – JULY 2025



SOUTHEAST ELEVATION – JULY 2025

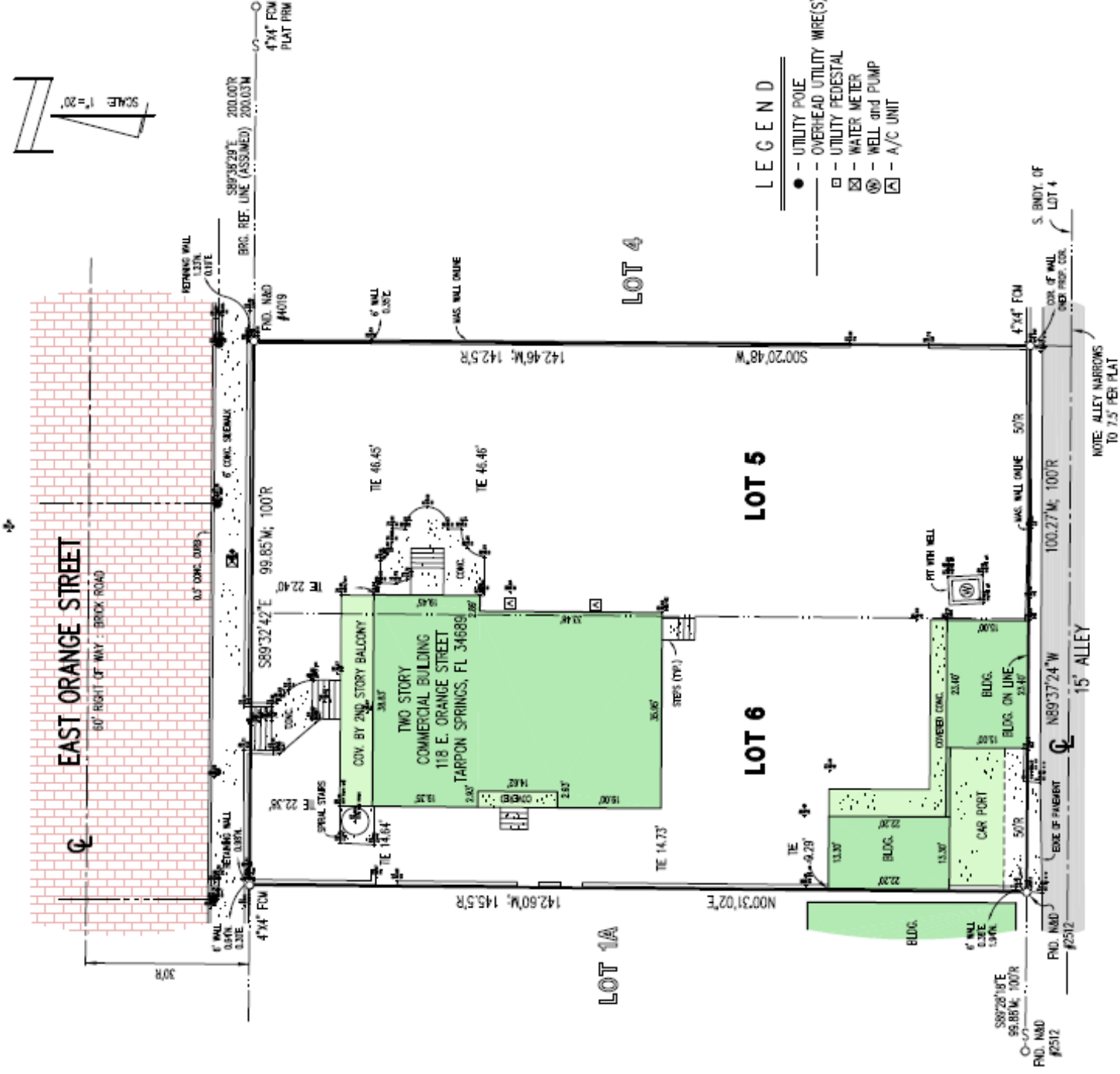


OUTBUILDING – JULY 2025



SURVEY

SECTION . . . 12 . . . TOWNSHIP . . . 27 . . . SOUTH, RANGE . . . 15 . . . EAST, . . . PINELLAS . . . COUNTY, FLORIDA
BOUNDARY SURVEY



PROPOSED PROJECT



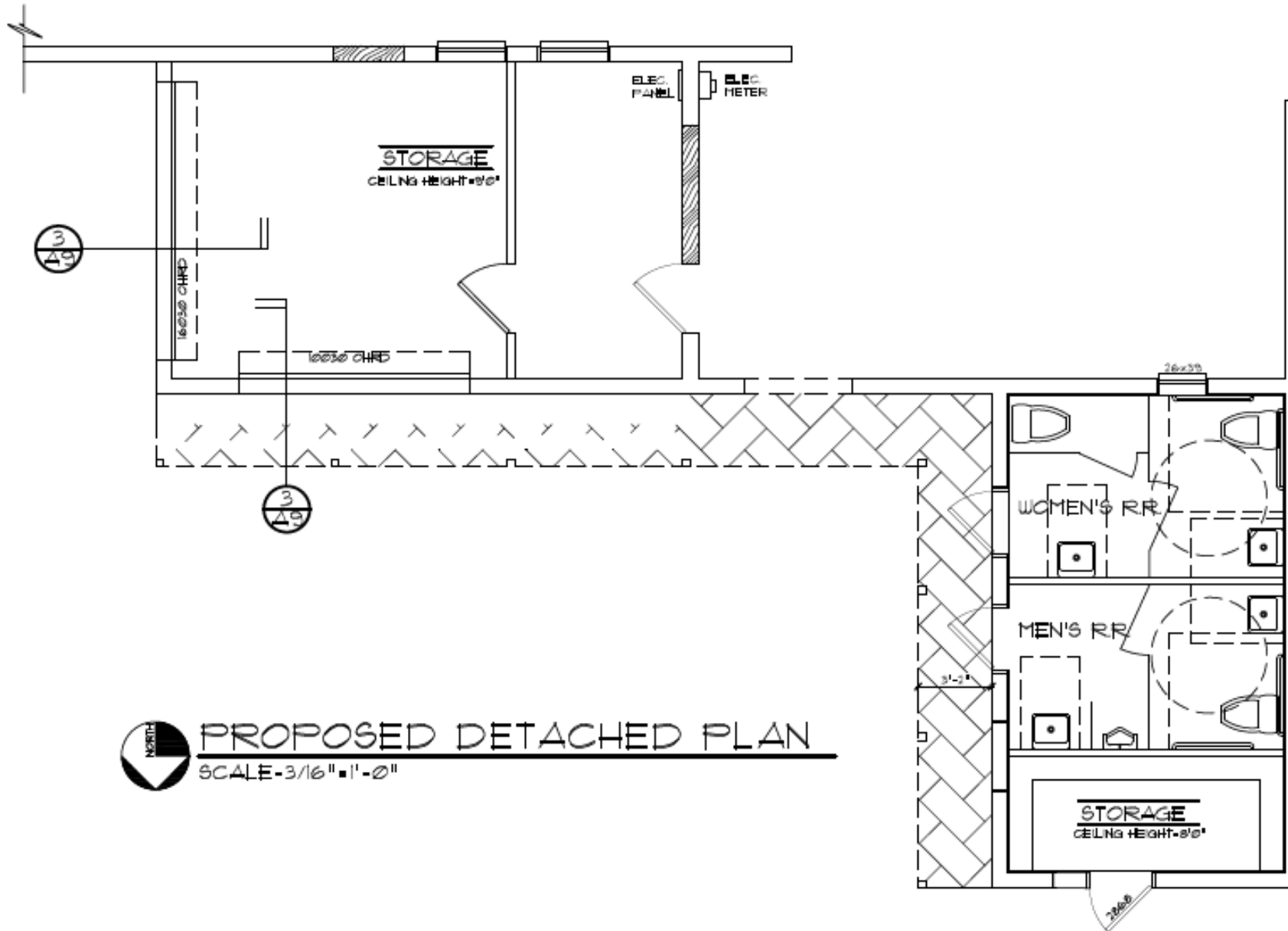
PHOTOS FROM APPLICANT - OUTBUILDING



PHOTOS FROM APPLICANT - OUTBUILDING

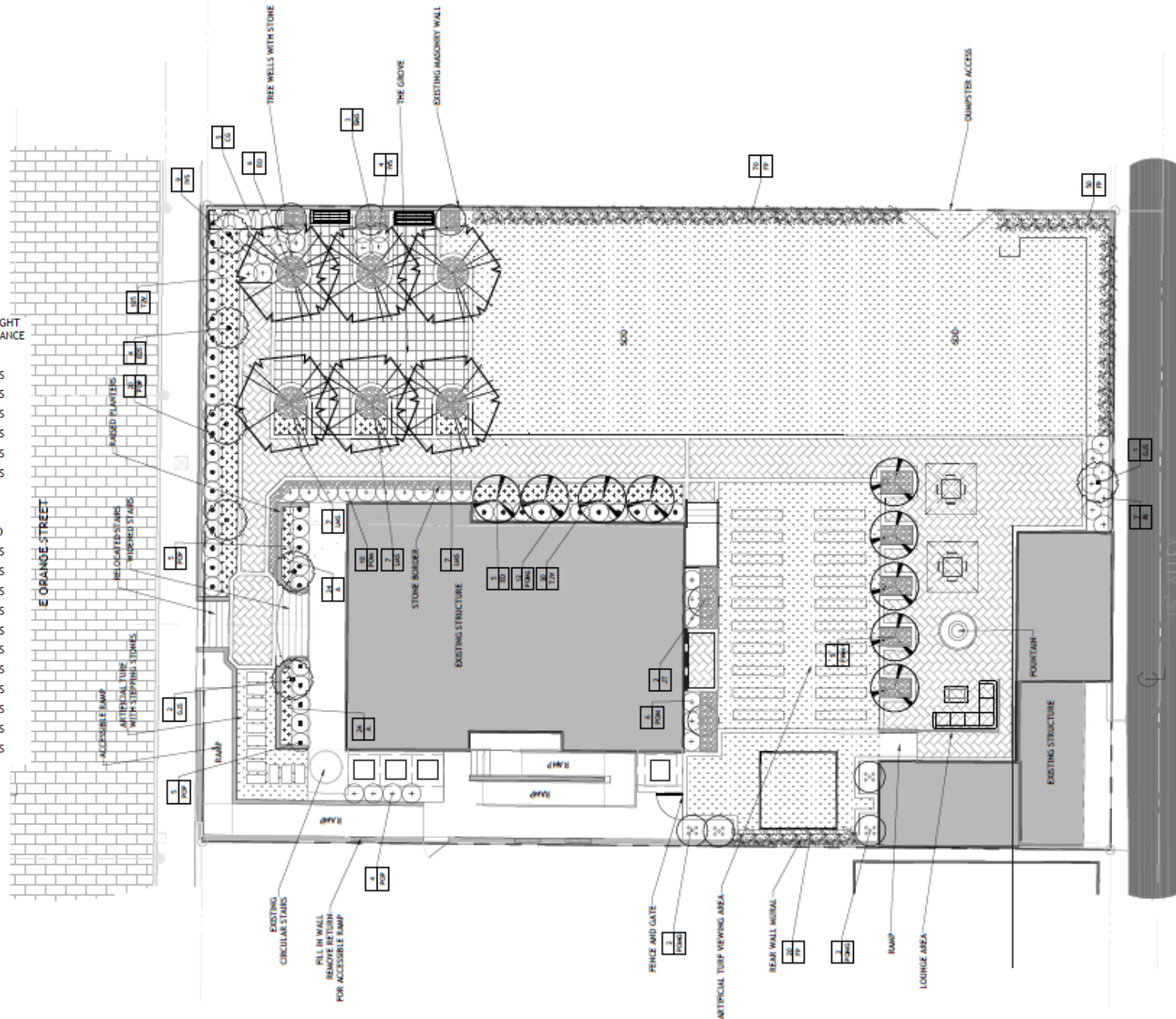


PROPOSED PROJECT - OUTBUILDING



PROPOSED PROJECT - LANDSCAPING

QTY	CODE	BOTANICAL NAME	COMMON NAME	SPECIFICATION	NATIVE	DROUGHT TOLERANCE
TREES & PALMS						
5	ED	ELAEOCARPUS DECIPIENS	JAPANESE BLUEBERRY	10' HT. X 4' SPD., 2.5" CAL., FULL TO BASE	NO	YES
4	EDS	ELAEOCARPUS DECIPIENS STANDARD	TREE FORM JAPANESE BLUEBERRY	12' HT. X 4' SPD., 3" CAL.	NO	YES
6	EO	OLEA EUROPAEA	EUROPEAN OLIVE	16' O.A., 13-15' SPD., 7 C.T.	NO	YES
2	GJS	GARDENIA JASMINODIES 'MIAMI SUPREME'	TREE FORM GARDENIA	15 GAL., 4' C.T. STANDARD	NO	YES
2	JT	JUNIPERUS CHINENSIS 'TORULOSA'	HOLLYWPPD JUNIPER	15 GAL., 6' HT. x 24" SPR., DENSE	NO	YES
5	PMM	PODOCARPUS MACROPHYLLUS 'MAKI'	JAPANESE YEW	14' O.A., 7 C.T.	NO	YES
SHRUBS & GROUNDCOVER						
48	A	ANNUALS	ANNUALS	6" POT, FULL	NO	NO
5	CG	CLUSIA GUTTIFERA	SMALL LEAF CLUSIA	3 GAL., 24" HT. x 14" SPR.	NO	YES
3	EMS	SYZYGIIUM PANICULATUM	BRUSH CHERRY	7 GAL., 5' HT., 2 SPHERES	YES	YES
140	FP	FICUS PUMILA REPEHS	CREEPING FIG	1 GAL., 10" HT. x 10" SPD.	NO	YES
13	IVS	ILEX VOMITORIA 'STOKES DWARF'	DWARF YAUPON HOLLY	3 GAL., 16" HT. x 12" SPD.	YES	YES
21	LMS	LIRIOPE MUSCARI 'SUPER BLUE'	SUPER BLUE LIRIOPE	1 GAL., 12" HT. x 12" SPD.	YES	YES
16	POM	PODOCARPUS MACROPHYLLA	PODOCARPUS	7 GAL., 28" HT. x 16" SPD., DENSE	NO	YES
4	POMG	PODOCARPUS MACROPHYLLA	PODOCARPUS	8' HT. x 3-3.5' SPR., DENSE	NO	YES
12	POML	PODOCARPUS MACROPHYLLA	PODOCARPUS	6' HT. x 30" SPR., DENSE	NO	YES
34	POP	PODOCARPUS MACROPHYLLA 'PRINGLES'	DWARF PODOCARPUS	3 GAL., 16" HT. x 12" SPD., DENSE	NO	YES
7	RI	RAPHIOLEPIIS IINDICA 'WHITE'	DWARF INDIAN HAWTHORN	3 GAL., 16" HT. x 18" SPD., DENSE	YES	YES
135	TJV	TRACHELOSPERMUM JAS. VARIEGATED	VARIEGATED CONFEDERATE JASMINE	1 GAL., 10-12" SPD.	NO	YES



STANDARDS FOR REVIEW – CERTIFICATE OF APPROVAL

- 1) New construction consistency.
- 2) Windows, doors and entries.
- 3) Neighborhood and district context.
- 4) Roof shape and texture.
- 5) Size and massing / shape.
- 6) Landscaping.
- 7) Architectural features.
- 8) Adherence to period of construction.
- 9) Adherence to Secretary's Guidelines.
- 10) Conformance with other City code requirements.
- 11) Impact upon archeological sites.

DESIGN GUIDELINES REVIEW MANUAL

Guideline 6. Safety Codes and Accessibility

It is important that all buildings comply with City and State safety codes and that buildings provide handicapped access to residents or visitors, as needed. This can be achieved without compromising the significance or integrity of historic buildings.

- a. Compliance with health and safety codes and handicapped access requirements must be carried out with minimum impact on the historic character of buildings.
- b. When permitted by law, fire escapes or fire towers shall be placed at the rear of buildings as a secondary means of egress.
- c. Construction of ramps, lifts, fire escapes, and similar accessibility features should be constructed in an area that is hidden from public view as much as possible. If this is not possible, the equipment should be on a secondary elevation of the structure and shall not be installed on the primary facade.
- d. Provide barrier-free access that promotes independence for the disabled to the highest degree practicable, while preserving significant historic features.
- e. Ramps should have little to no visual impact or should be designed to be as unobtrusive as possible.
- f. Install ramps and other accessibility features in a manner that is reversible and does not permanently impact the historic building.
- g. Access ramps should be placed behind or on the side of a building. This is preferred.
- h. Access ramps shall be in scale and visually compatible in design and materials with the building.

Best Choice

Constructing an access ramp on the rear or side, rather than at the front entrance of a property

Good Alternative

Constructing an access ramp which is removable and does not damage existing historic features

Not Appropriate

Demolishing an existing historic porch or entry steps and installing a permanent ramp in its place

DESIGN GUIDELINES REVIEW MANUAL

Guideline 22. Maintain and Preserve Historic Outbuildings

- a. Repair or replacement of garages and porte-cochères shall match the original.
- b. Preserve the building's overall form and style. Avoid altering the shape, form, height, materials, and architectural elements.
- c. Preserve, maintain, and repair as necessary distinctive features and characteristics such as wood cladding and trim, ornaments, original windows, and other character-defining details.
- d. Restore missing or altered features based on pictorial evidence, or in keeping with buildings of the same type, style, and period. If no evidence or precedent exists, create a design that is complementary to the existing primary building that does not convey a false sense of history by utilizing arbitrary stylistic details not associated with the subject property's style.

Guideline 18. Landscaping and Site Features

- a. In general, historic landscaping features should be maintained and preserved like any other historic feature on the property. The removal of historic landscaping features, including front lawns and hedgerows, should be avoided.
- b. Removal of trees may require a tree removal permit. Please consult with the City staff and reference the City's Tree Protection and Preservation Ordinance.

PRELIMINARY STAFF RECOMMENDATION

Staff recommends **approval** of Application #25-64, with the following recommended condition:

1. The Certificate of Approval will expire in three (3) years if a building permit has not been issued for the project.

The project was publicly noticed. No responses to the notices have been received.



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Consult Guide To Historical Structure Forms for detailed instructions

Site # 8P111804Recorder # 132Recorder Date 1/29/09Original Update Site Name 118 E Orange Street Other Names _____Project Name Historic Resources Survey of Tarpon SpringsHistoric Contexts Boom Times National Register Category Building

LOCATION and IDENTIFICATION

Address 118 E Orange StreetVicinity of S side of Orange St. in between Safford Ave and Hibiscus St.City Tarpon Springs County PinellasOwnership Private-individual Subdivision _____ Block # _____ Lot # _____

MAPPING

USGS Map TARPON SPRINGS Township 27S Range 15E Section 12Quarter _____ Qtr Qtr _____ Irregular Section UTM Zone 17Easting 327630 Northing 3114745 Land Grant UnknownLatitude _____ Longitude _____ Plat or Other Map Aerial Photographs

HISTORY

Architect/Builder Unknown Construction Date 1925 Circa Alterations Date 2008 Type/Location windows blocked inAdditions Date c.1960 Type/Location rear 2 story shed roof with 1 story behind (appear to have been built simultaneously)Moved Original Location _____Use Original Private residence Use Present Vacant

DESCRIPTION

Style Masonry Vernacular Exterior Plan Irregular Interior Plan Unknown Stories 2Structural System Brick Exterior Fabric Weatherboard; BrickFoundation Continuous Foundation Materials Brick Foundation Infill N/ANo. of Porches 1 Locations/Features full width, 2 story, integral, ornate cast iron supports and railings, concrete deck on first floor, wood deck on secondMain Entrance (stylistic details): center entry with fluted pilasters under main porchOutbldgs. Number 1 Nature/Location (Describe below)
rear "L-shaped" cottage, 1 story, concrete block, c.1950 (contributing)Roof Type Gable Roofing Materials Composition shinglesSecondary Structures Comments Not applicable Location _____Chimneys Number 0 Orientation N/A Location N/A Material Not applicableWood Windows Type _____ Light # _____Metal Windows Type Awning Light # 5Exterior Ornament vents, concrete sills, large wood louvre in gable endCondition Fair Surroundings Commercial

Narrative (general, interior, landscape, context; 3 lines only)

This structure features ornate colonial door surrounds on the first and second level as well as an open, metal, spiral stair at the west end of the porch. The property also has a concrete block retaining wall along the front and a tall concrete block wall with a diamond pattern along the sides and rear.

Archaeological Remains Present FMSF Archaeological Site Form Completed (if yes, attach)

Consult Guide To Historical Structure Forms for detailed instructions

RECORDER'S EVALUATION OF SITE

Individually Eligible for National Register? Yes No Likely, Need Information Insufficient Information Potential Contributor to Nat. Reg. District? Yes No Likely, Need Information Insufficient Information

Areas of Significance

Community planning & development

Summary of Significance

This resource is an example of residential architecture in Tarpon Springs during the Boom Times-era and is representative of the development of the City of Tarpon Springs. Although this building has undergone some minor alterations, the majority of architectural details remain and the overall historic massing is retained. Therefore, this building would be considered a contributing resource to the NRHP and Local Tarpon Springs Historic District.

DHR USE ONLY		OFFICIAL EVALUATIONS	DHR USE ONLY	
NR DATE ____/____/____	KEEPER-NR ELIGIBILITY <input type="checkbox"/> yes <input type="checkbox"/> no		Date	____/____/____
DELIST DATE ____/____/____	SHPO-NR ELIGIBILITY: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> potentially elig. <input type="checkbox"/> insufficient info		Date	____/____/____
	LOCAL DESIGNATION: _____		Date	____/____/____
	Local office _____			
National Register Criteria for Evaluation <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (See National Register Bulletin 15, p. 2)				

DOCUMENTATION

Research Methods Florida Site File for past architectural surveys; Florida Site File search; Local library; Tax records; Pedestrian; Sanborn maps

Bibliographic References

Location of Negatives Janus Research **Negative Numbers** Roll 2885, #272, Facing SW

RECORDER INFORMATION

Recorder Name Janus Research

Recorder Affiliation JANUS RESEARCH, 1107 N. Ward Street, Tampa, Florida 33607 Telephone 813-636-8200

- REQUIRED:**
1. USGS 7.5' MAP WITH STRUCTURES PINPOINTED IN RED
 2. LARGE SCALE STREET OR PLAT MAP
 3. PHOTO OF MAIN FACADE, PREFERABLY B&W, AT LEAST 3x5



SKETCH MAP





Location of 8PI11804
USGS Quadrangle: Tarpon Springs (1973 PR 1987)

Certificate of Appropriateness Form



CITY OF TARPON SPRINGS
PLANNING & ZONING DEPARTMENT
324 E. Pine Street, Tarpon Springs, FL 34689
(727) 942-5611 / planning@ctsfl.us

INSTRUCTIONS

Please complete this form fully and **DOWNLOAD (print button)** to submit with the associated development application. Applications must be submitted **DIGITALLY** through the [Planning and Zoning goPost portal](#).

Project Name*

Tea House Renovation

Project Location*

118 East Orange Street, Tarpon Springs, FL 34689

Type of Activity (Check all that apply)*

- | | |
|---|---|
| <input type="checkbox"/> Awnings | <input type="checkbox"/> Relocation* |
| <input type="checkbox"/> Deck/Patio | <input checked="" type="checkbox"/> Renovation |
| <input type="checkbox"/> Demolition | <input type="checkbox"/> Roof |
| <input type="checkbox"/> Driveway | <input type="checkbox"/> Signs |
| <input type="checkbox"/> New Construction | <input type="checkbox"/> Structural Addition |
| <input type="checkbox"/> Parking Lot | <input type="checkbox"/> Windows/Doors/Solar Panels |

***If Relocation, provide the following information:**

New Address / Location

n/a

New Tax Parcel ID

12-27-15-64998-000-0050

New Land Use

AC (Activity Center) ▾

Choices are Alphabetized

[Lookup Land Use](#)

New Zoning

-- Select One -- ▾

Choice are Alphabetized

[Lookup Zoning](#)

[Lookup Parcel ID](#)

Year Built*

1925

Architectural Style*

Victorian "New Orleans"

Porches*

Yes

No

Original Use*	Present Use*	Proposed Use*
Residential	Restaurant / Public Gathering / Event	Restaurant / Public Gathering / Event

Roof Type*	Roof Material*	Exterior Siding Material*
Gable	Shingle	Brick & Siding

Previous Additions or Modifications*

Unknown

Description of Proposed Work*

Full Landscape Plan:

The most notable change is the relocation of the ADA ramp to the west side of the building, flanking the existing wall(s). The ADA entrance will now also be located on the west side of the property, entering through an existing doorway. This proposal was made to preserve the integrity of the original center portion of the historic wall. The new location minimizes the visual impact and maintains the original look and character of the building elevations.

Floor Plan & Photos of Rear Detached Building:

I've attached the floor plan along with photos of the rear detached structure. We sincerely apologize for the misunderstanding regarding the scope—work began under the assumption that this structure was included. That said, the work completed thus far focused solely on stabilization and repairs to bring the building up to code, address safety issues, and visually harmonize it with the main structure. The building is being used for storage, and Jonathan is preparing elevation drawings to share prior to the meeting.

atercolor Rendering of Main Building:

For visual reference, we've attached a rendering of the completed main building. Our intent is to preserve and restore the building as closely as possible to its original period-correct condition. As one example, the original railings have been removed, repaired by welding, powder-coated to stabilize the castings, and will be reinstalled to maintain the historic integrity.

For Relocation or Demolition

n/a

Describe the property's physical condition, steps taken to save the property and whether renovation would be economically feasible.

Heritage Preservation Board (HPB) Review Standards

Please note, in reviewing an application for a Certificate of Appropriateness, the Board must consider the standards outlined in LDC [Section 109.01\(B\)](#).

Electronic Signature Agreement*

By checking the "I Agree" box below, you agree and acknowledge that **1)** this form will not be signed in the sense of a traditional paper document, **2)** by signing in this alternate manner, you authorize your signature on this form to be valid and binding to the same force and effect as a handwritten signature, and **3)** the information included in and with this form is completely true and correct to the best of your knowledge.

I Agree

Electronic Signature*

Date*

Matthew B Housh

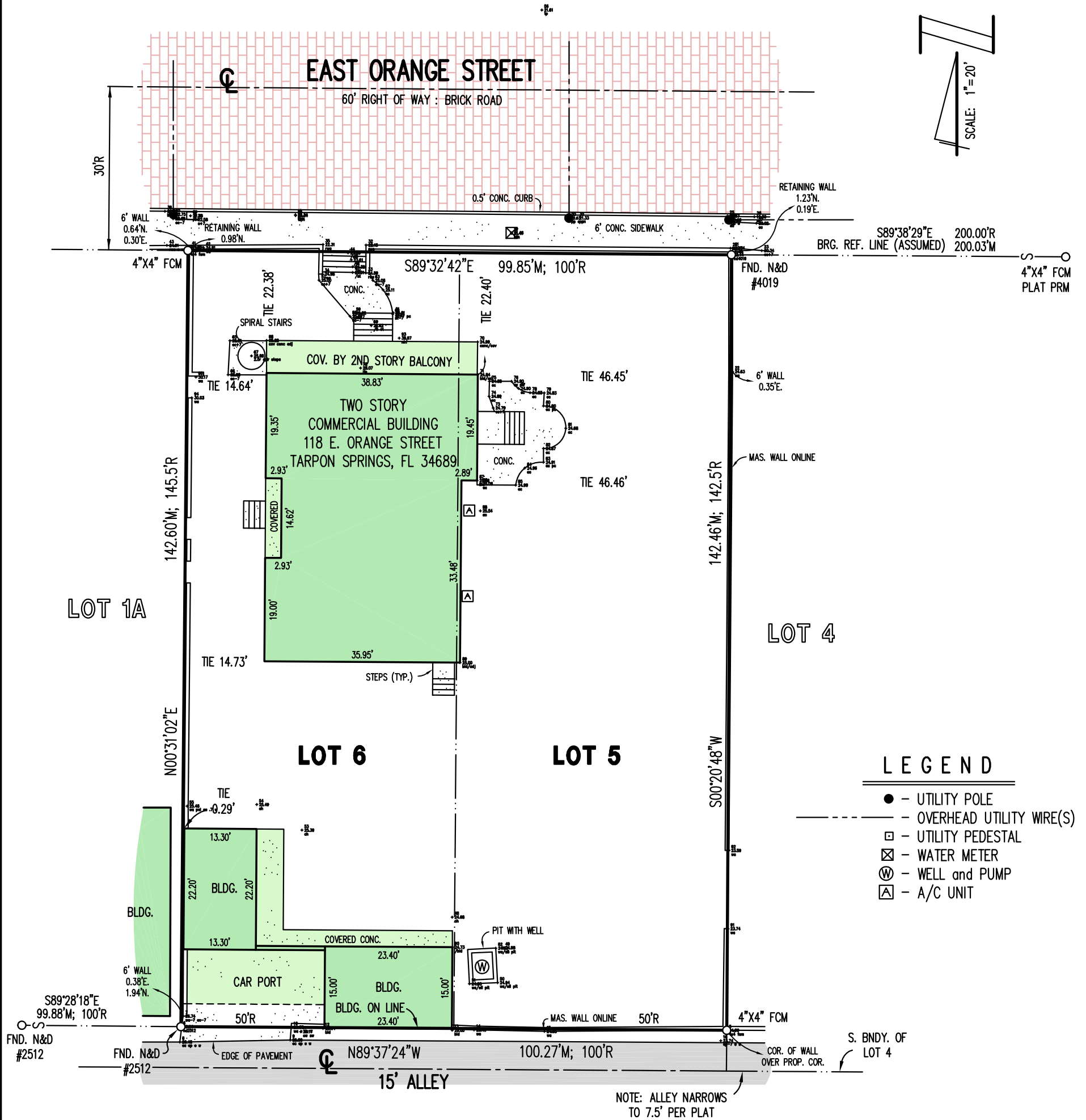
8/8/2025

Steps to Download Form

1. Click the '**Print Only**' button below.
2. Your form will open in a new tab.
3. **Right click** on your mouse and **select 'Print'**.
4. Choose to print to '**PDF**'.
5. Save the form in your desired location.

Need help? Give the Planning Department a call at [727-942-5611](tel:727-942-5611).

BOUNDARY SURVEY



PROPERTY DESCRIPTION:

LOTS 5 AND 6, OWNERS DIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 19, PAGE 77, OF THE PUBLIC RECORDS OF PINELLAS COUNTY, FLORIDA.

FLOOD ZONE:

THE ABOVE DESCRIBED PROPERTY APPEARS TO BE IN ZONE X, IN ACCORDANCE WITH THE FIRM MAP OF PINELLAS COUNTY, FLORIDA, MAP NUMBER 12103C 0019 H, REVISED AUGUST 24, 2021.

PREPARED FOR:

KDA PROPERTIES, LLC

CERTIFICATION: I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE SURVEY SHOWN HEREON SUBSTANTIALLY MEETS THE MINIMUM TECHNICAL STANDARDS FOR LAND SURVEYING DESCRIBED IN THE STATE OF FLORIDA RULE 5J-17, F.A.C. FURTHERMORE, THIS CERTIFICATION SHALL NOT EXTEND TO ANY OTHER PERSONS OR PARTIES OTHER THAN THOSE NAMED ON THIS SURVEY AND SHALL NOT BE VALID AND BINDING AGAINST THE UNDERSIGNED SURVEYOR WITHOUT THE ORIGINAL RAISED SEAL AND SIGNATURE OF THE FLORIDA LICENSED SURVEYOR AND MAPPER.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY A. SHIMP, PSM6161
 GREGORY A. SHIMP, PROFESSIONAL SURVEYOR & MAPPER No. 6161
 THIS SURVEY IS NOT COMPLETE OR VALID UNLESS ATTACHED TO SURVEYOR'S REPORT.

JOB NUMBER: 210308

DRAWING FILE: 210308.DWG

LAST REVISION: N/A

DATE SURVEYED: 12/15/2021

DATE DRAWN: 12/19/2021

X REFERENCE: N/A



LB 7981

GREGORY A. SHIMP, PSM, LLC
 PROFESSIONAL SURVEYOR & MAPPER

8237 CRESCENT MOON DRIVE., NEW PORT RICHEY, FLORIDA, 34655

PHONE (727) 859-2161

www.gregshimp.com

gregshimp@gmail.com

SURVEY ABBREVIATIONS

A = ARC LENGTH	FPP = FOUND PINCHED PIPE	PROP = PROPERTY
A/C = AIR CONDITIONER	FRM = FRAME	PSM = PROFESSIONAL SURVEYOR & MAPPER
AF = ALUMINUM FENCE	FZL = FLOOD ZONE LINE	PT = POINT OF TANGENCY
ALUM = ALUMINUM	GAR = GARAGE	PVCF = PVC FENCE
APPROX = APPROXIMATELY	GPS = GLOBAL POSITIONING SYSTEM	RAD = RADIUS
BFE = BASE FLOOD ELEVATION	HWF = HOG WIRE FENCE	R = RECORD
BLDG = BUILDING	HWL = HIGH WATER LINE	REF = REFERENCE
BLK = BLOCK	INV = INVERT	RES = RESIDENCE
BM = BENCH MARK	LB = LAND SURVEYING BUSINESS	RL = RADIAL LINE
BNDY = BOUNDARY	LFE = LOWEST FLOOR ELEV	RLS = REGISTERED LAND SURVEYOR
BRG = BEARING	LHSM = LOWEST HORIZONTAL SUPPORTING MEMBER	RND = ROUND
BWF = BARBED WIRE FENCE	LS = LAND SURVEYOR	RNG = RANGE
C = CALCULATED	M = MEASURED	RRS = RAIL ROAD SPIKE
CB = CHORD BEARING	MAS = MASONRY	R/W = RIGHT-OF-WAY
CBS = CONCRETE BLOCK STRUCTURE	MES = MITERED END SECTION	SCM = SET CONCRETE MONUMENT
CHD = CHORD	MH = MANHOLE	S/E = SCREENED ENCLOSURE
CL = CENTERLINE	MHWL = MEAN HIGH WATER LINE	SEC = SECTION
CLF = CHAIN LINK FENCE	MSL = MEAN SEA LEVEL	SET N&D = SET NAIL AND DISK PSM #6161
CLOS = CLOSURE	N&B = NAIL AND BOTTLE CAP	SIR = SET 1/2" IRON ROD PSM #6161
COL = COLUMN	N&D = NAIL AND DISK	SQ = SQUARE
CONC = CONCRETE	N&T = NAIL AND TAB	SRF = SPLIT RAIL FENCE
CR = COUNTY ROAD	NAVD = NORTH AMERICAN VERTICAL DATUM	SR = STATE ROAD
COR = CORNER	NO = NUMBER	STY = STORY
CORS = GPS REFERENCE STATION	O/A = OVERALL	SUB = SUBDIVISION
COV = COVERED AREA	OHW = OVERHEAD WIRE(S)	S/W = SIDEWALK
D = DEED	OR = OFFICIAL RECORDS	TB = "T" BAR
DOT = DEPARTMENT OF TRANSPORTATION	O/S = OFFSET	TBM = TEMPORARY BENCH MARK
DRNG = DRAINAGE	P&E = PEBBLE & EPOXY	TC = TOP OF CURB
D/W = DRIVEWAY	PB = PLAT BOOK	TOB = TOP OF BANK
EL OR ELEV = ELEVATION	PC = POINT OF CURVE	TOS = TOE OF SLOPE
EOP = EDGE OF PAVEMENT	PCC = POINT OF COMPOUND CURVE	TRANS = TRANSFORMER
EOW = EDGE OF WATER	PCP = PERMANENT CONTROL POINT	TWP = TOWNSHIP
ESM'T = EASEMENT	PG = PAGE	TYP = TYPICAL
FCM = FOUND CONCRETE MONUMENT	PK = PARKER KALON	UG = UNDERGROUND
FES = FLARED END SECTION	PL = PROPERTY LINE	UTIL = UTILITY
FIP = FOUND IRON PIPE	POB = POINT OF BEGINNING	WD = WOOD
FIR = FOUND IRON ROD	POC = POINT OF COMMENCEMENT	WF = WOOD FENCE
FL = FLOW LINE	POL = POINT ON LINE	WIF = WROUGHT IRON FENCE
FLD = FIELD	PP = POWER POLE	WIT = WITNESS
FND = FOUND	PRC = POINT OF REVERSE CURVATURE	WRF = WIRE FENCE
FOP = FOUND OPEN PIPE	PRM = PERMANENT REFERENCE MONUMENT	WV = WATER VALVE
FPC = FLORIDA POWER CORP.		

*** ABBREVIATIONS MAY ALSO BE CONCATENATED AS REQUIRED.

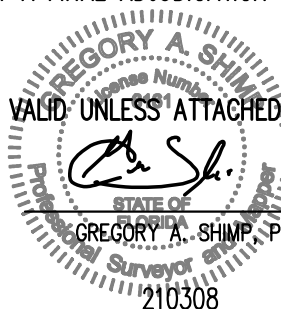
*** OTHER COMMONLY RECOGNIZED AND/OR ACCEPTED ABBREVIATIONS ARE ALSO UTILIZED BUT NOT SPECIFIED HEREON.

GENERAL NOTES

1. UNDERGROUND IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO BUILDING FOUNDATIONS, HAVE NOT BEEN LOCATED EXCEPT AS SHOWN HEREON.
2. INACCESSIBLE ABOVE GROUND IMPROVEMENTS (E.G. BUILDING OVERHANGS, THOSE WITHIN SECURED AREAS, ETC.), HAVE NOT BEEN LOCATED EXCEPT AS SHOWN HEREON.
3. UNLESS OTHERWISE STATED, THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE SEARCH AND MAY BE SUBJECT TO ADDITIONAL EASEMENTS, RIGHT-OF-WAYS, AND OTHER MATTERS OF RECORD.
4. THERE ARE NO VISIBLE ENCROACHMENTS, EXCEPT AS SHOWN HEREON.
5. BASIS OF BEARINGS IS PLAT, UNLESS OTHERWISE SHOWN OR STATED.
6. "TIE" INDICATES THE SHORTEST DISTANCE FROM A BUILDING OR STRUCTURE CORNER AS MEASURED PERPENDICULAR TO ADJACENT BOUNDARY LINES, UNLESS OTHERWISE STATED.
7. FLOOD ZONE DESIGNATION AND/OR FLOOD ZONE LINES (IF ANY) SHOWN HEREON HAVE BEEN SCALED FROM THE REFERENCED MAP AND ARE APPROXIMATE.
8. THIS SURVEY DOES NOT DETERMINE OR IMPLY OWNERSHIP.
9. THERE MAY BE ADDITIONAL RESTRICTIONS, EASEMENTS OR OTHER MATTERS OF RECORD THAT ARE NOT SHOWN HEREON THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.
10. FOR SURVEYS THAT DEPICT RIPARIAN RIGHTS, A BINDING DETERMINATION OF RIPARIAN BOUNDARIES CAN ONLY BE MADE BY AGREEMENTS OF THE AFFECTED PARTIES OR BY A FINAL ADJUDICATION OF A COURT OF COMPETENT JURISDICTION.

NOTE: THIS SURVEYOR'S REPORT IS NOT COMPLETE OR VALID UNLESS ATTACHED TO THE SURVEY.

SURVEYOR'S REPORT



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GREGORY A. SHIMP, PSM6161

GREGORY A. SHIMP, PROFESSIONAL SURVEYOR AND MAPPER #6161

210308

12/15/2021

JOB NUMBER

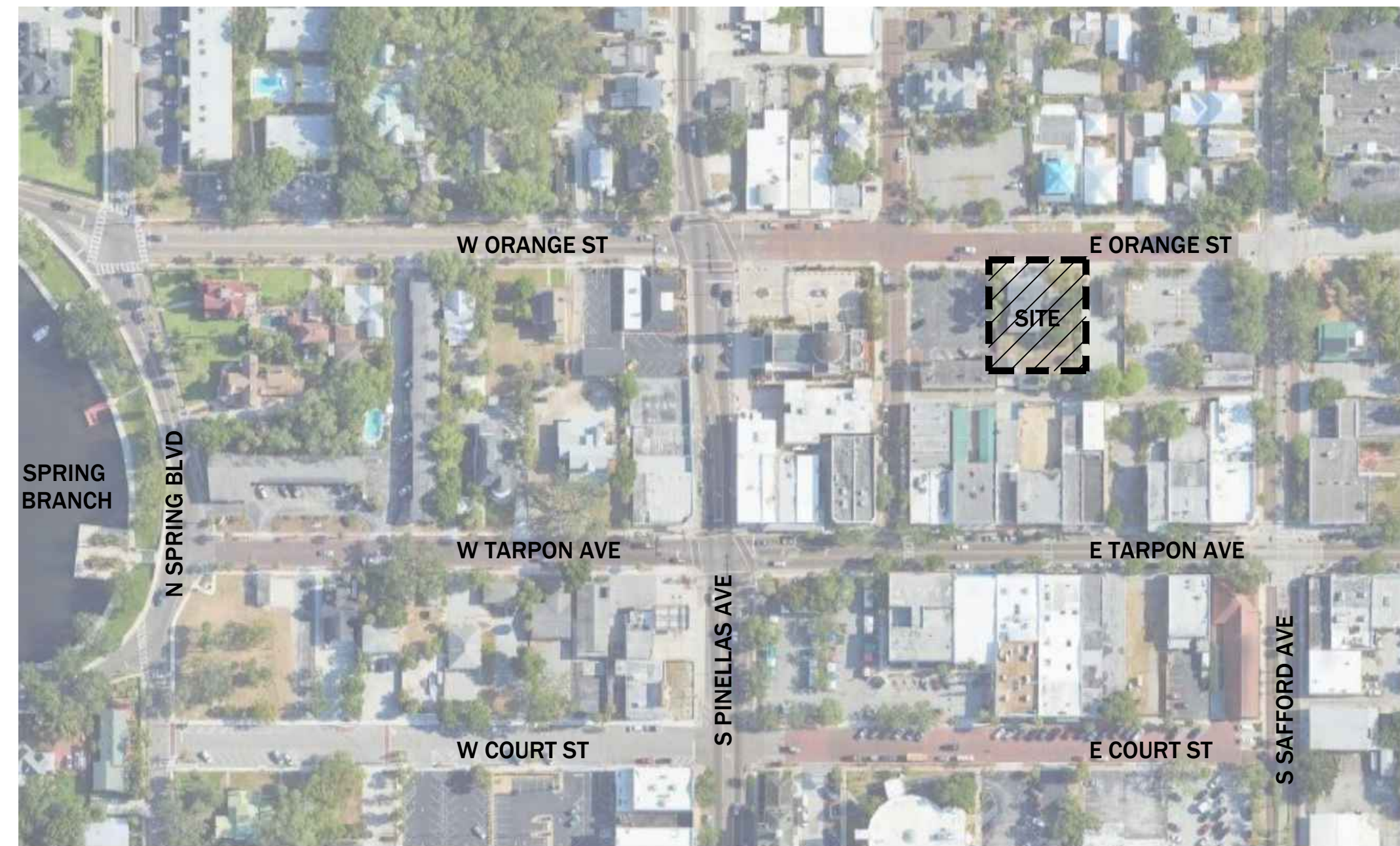
DATE

HOUSH HOUSE

LANDSCAPE DEVELOPMENT PLANS

TARPON SPRINGS | FLORIDA

PROJECT SITE VICINITY MAP



INDEX OF DRAWINGS

DRAWING	DRAWING TITLE	DATE
COVER	COVER	08.06.2025
L2.00	LANDSCAPE DEVELOPMENT PLAN	08.06.2025
LD-1	LANDSCAPE DETAILS	08.06.2025
LD-2	LANDSCAPE SPECIFICATIONS	08.06.2025
LD-3	IRRIGATION DETAILS	08.06.2025
LD-4	IRRIGATION SPECIFICATIONS	08.06.2025



PLANT MATERIAL SCHEDULE

PLANT MATERIAL NOTES:
 1. THE CONTRACTOR SHALL BID AND BE RESPONSIBLE FOR THE PLANT SIZE AND NOT SOLELY BY THE CONTAINER. CONTAINER IS PROVIDED AS A MIN. SIZE
 2. THE GENERAL CONTRACTOR/LANDSCAPE CONTRACTOR SHALL PERFORM A MIN. OF 3 SOIL TEST FROM VARIOUS LOCATION AROUND SITE AFTER FILL HAS BEEN COMPLETED. TEST SHALL BE SUBMITTED TO OWNER/LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO ANY PLANTS BEING INSTALLED. SITES LARGER THEN 10 ACRES SHALL HAVE A MIN. OF 5 SOILS SAMPLES TESTED.
 3. IN A CONFLICT BETWEEN THE PLANS AND THE SPECIFICATIONS/PLANT MATERIAL SCHEDULE, THE PLANS SHALL GOVERN.

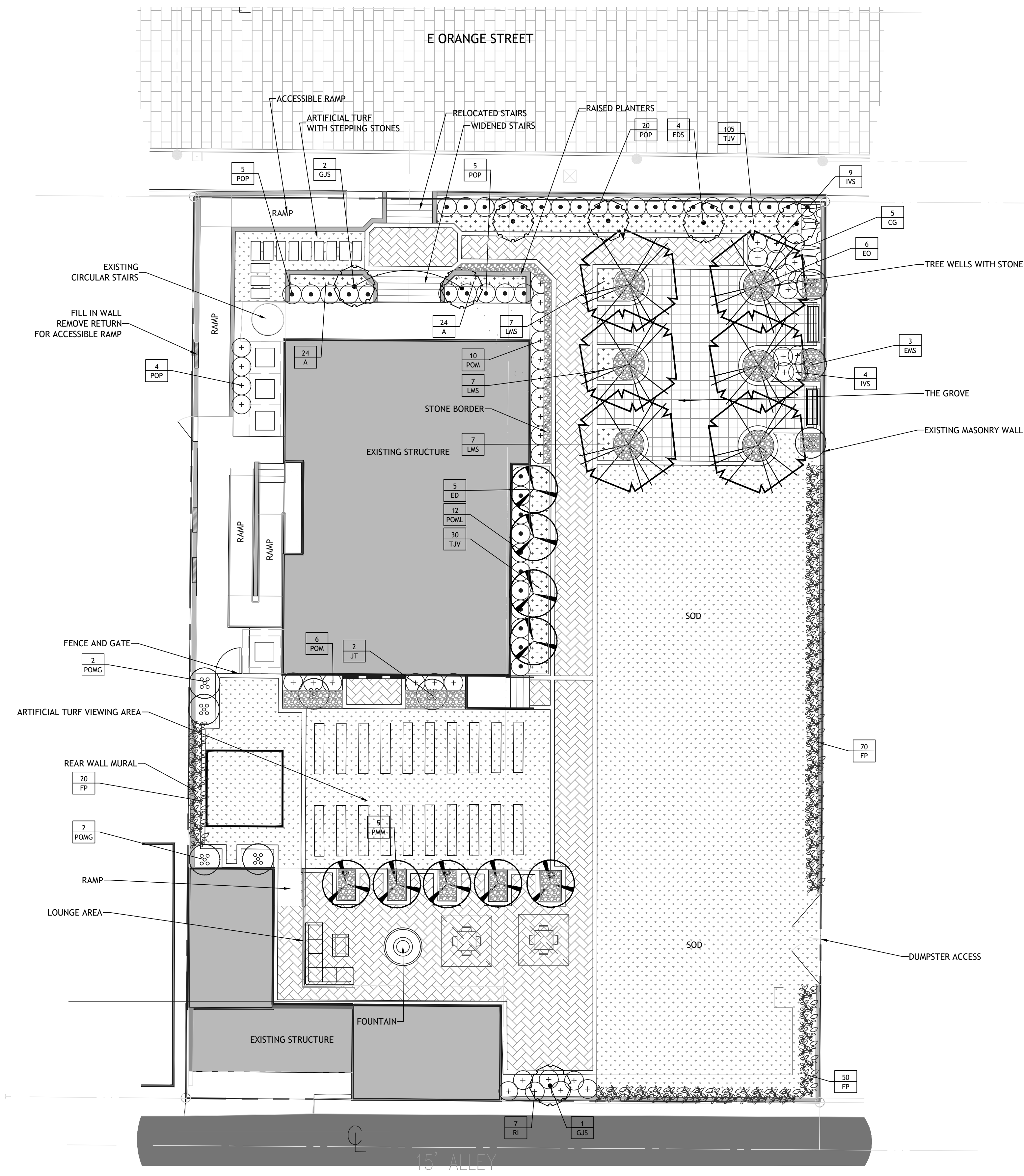
QTY	CODE	BOTANICAL NAME	COMMON NAME	SPECIFICATION	NATIVE	DROUGHT TOLERANCE	NOTES
TREES & PALMS							
5	ED	ELAEOCARPUS DECIPENS	JAPANESE BLUEBERRY	10' HT. X 4' SPD., 2.5' CAL., FULL TO BASE NO		YES	NOTES
4	EDS	ELAEOCARPUS DECIPENS STANDARD	TREE FORM JAPANESE BLUEBERRY	12' HT. X 4' SPD., 3" CAL.	NO	YES	
6	EO	OLEA EUROPAEA	EUROPEAN OLIVE	16' O.A., 13-15' SPD., 7' C.T.	NO	YES	
2	GJS	GARDENIA JASMINODIES 'MIAMI SUPREME'	TREE FORM GARDENIA	15 GAL., 4' C.T. STANDARD	NO	YES	
2	JT	JUNIPERUS CHINENSIS 'TORULOSA'	HOLLYWPPD JUNIPER	15 GAL., 6' HT. X 24' SPR., DENSE	NO	YES	
5	PMM	PODOCARPUS MACROPHYLLUS 'MAKI'	JAPANESE YEW	14' O.A., 7' C.T.	NO	YES	
SHRUBS & GROUND COVER							
48	A	ANNUALS	ANNUALS	6" POT, FULL	NO	NO	
5	CG	CLUSIA GUTTIFERA	SMALL LEAF CLUSIA	3 GAL., 24" HT. X 14" SPR.	NO	YES	
3	EMS	SYZGIUM PANICULATUM	BRUSH CHERRY	7 GAL., 5' HT., 2 SPHERES	YES	YES	TOPIARY, 2 SPHERES
140	FP	FICUS PUMILA REPENS	CREeping FIG	1 GAL., 10" HT. X 10" SPD.	NO	YES	
13	IVS	ILEX VOMITORIA 'STOKES DWARF'	DWARF YAUPON HOLLY	3 GAL., 16" HT. X 12" SPD.	YES	YES	
21	LMS	LIRIOPE MUSCARI 'SUPER BLUE'	SUPER BLUE LIRIOPE	1 GAL., 12" HT. X 12" SPD.	YES	YES	
16	POM	PODOCARPUS MACROPHYLLA	PODOCARPUS	7 GAL., 28" HT. X 16" SPD., DENSE	NO	YES	
4	POMG	PODOCARPUS MACROPHYLLA	PODOCARPUS	8' HT. X 3-3.5' SPR., DENSE	NO	YES	
12	POML	PODOCARPUS MACROPHYLLA	PODOCARPUS	6' HT. X 30' SPR., DENSE	NO	YES	
34	POP	PODOCARPUS MACROPHYLLA 'PRINGLES'	DWARF PODOCARPUS	3 GAL., 16" HT. X 12" SPD., DENSE	NO	YES	
7	RI	RAPHIOLEPIS INDICA 'WHITE'	DWARF INDIAN HAWTHORN	3 GAL., 16" HT. X 18" SPD., DENSE	YES	YES	
135	TJV	TRACHELOSPERMUM JAS. VARIEGATED	VARIEGATED CONFEDERATE JASMINE	1 GAL., 10-12" SPD.	NO	YES	

GENERAL NOTES

- CONTRACTOR SHALL VISIT THE SITE AND INFORM HIMSELF FULLY AS TO CONDITIONS THEREON AND OF ADJACENT SITES WHICH WILL BE AFFECTED BY THE WORK.
- DO NOT FULLY INSTALL OR CONSTRUCT ITEMS AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, EXISTING TREE CANOPIES, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE DESIGN/ENGINEERING. SUCH OBSERVATIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT/OWNERS REPRESENTATIVE. IN THE EVENT THIS NOTIFICATION IS NOT REPORTED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
- THE DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. ALL BRACING, TEMPORARY SUPPORTS, SHORING, ETC. ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. OBSERVATION VISITS TO THE JOB SITE BY THE LANDSCAPE ARCHITECT/OWNERS REPRESENTATIVE DOES NOT INCLUDE INSPECTION OF CONSTRUCTION METHODS AND FOR SAFETY CONDITIONS AT THE WORK SITE. THESE VISITS SHALL NOT BE CONSTRUED AS CONTINUOUS AND DETAILED INSPECTIONS.
- CONTRACTOR SHALL CHECK AND VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO STARTING CONSTRUCTION AND BE RESPONSIBLE FOR SAME. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.
- NO CONTRACTOR IDENTIFICATION SIGNS SHALL BE PERMITTED ON THE PROJECT, EXCEPT AS APPROVED BY THE OWNER.
- ALL PERMITS NECESSARY ARE TO BE PROVIDED BY THE INSTALLING CONTRACTOR INCLUDING ALL COSTS. THE CONTRACTOR SHALL NOT KNOWINGLY VIOLATE CONDITIONS OF THE PERMITS. ALL CONFLICTS WITH THE PERMIT CONDITIONS AND THE PLANS, DETAILS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT REPRESENTATIVE. THE CONTRACTOR SHALL FAMILIARIZE AND SHALL COMPLY WITH ALL TERMS AND CONDITIONS OF THE APPROVED FDEP PERMIT.
- ALL UTILITIES TO REMAIN IN PLACE, EXCEPT AS INDICATED ON THE DRAWINGS. CONTACT 'ONE-CALL' AT 811 AT LEAST 48 TO 72 HOURS PRIOR TO EXCAVATION FOR VERIFICATION OF EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATIONS. NOT ALL UTILITIES ARE MEMBERS OF THE 'ONE-CALL' SYSTEM; THEREFORE, DIRECT CONTACT WITH THE UTILITY COMPANY MAY BE REQUIRED. CONTRACTOR SHALL CONTACT CITY OF TREASURE ISLAND FOR LOCATION OF UNDERGROUND STORM WATER, SEWER AND WATER UTILITIES AND LATERAL LINES THAT MIGHT BE PRESENT. ALL UTILITIES TO REMAIN IN PLACE, EXCEPT AS INDICATED ON THE PLANS.
- LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING HIS WORK PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL MAKE ALL EFFORTS TO LIMIT THE "TRACKING" OF SOIL ONTO CITY/COUNTY STREETS FROM HAULING ACTIVITIES. CONTRACTOR SHALL REMOVE ALL SOIL FROM CITY/COUNTY STREETS RESULTING FROM CONSTRUCTION ACTIVITIES.
- CAREFULLY REVIEW THE PLANS AND THE SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ITEMS CONTAINED HEREIN. IF THERE IS A CONFLICT BETWEEN THE PLANS AND THE SPECIFICATIONS, CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY FOR CLARIFICATION.
- IN A CONFLICT BETWEEN THE PLANS AND THE SPECIFICATIONS, THE PLANS SHALL GOVERN.
- THE CONTRACTOR SHALL PROVIDE A SUBMITTAL LOG FOR APPROVAL BY THE PROJECT REPRESENTATIVE. ALL SUBMITTALS ARE TO INCLUDE THE NUMBERING SYSTEM DEVELOPED IN THE SUBMITTAL LOG.
- THE CONTRACTOR SHALL PROVIDE A 24 HOUR EMERGENCY CONTACT PERSON AT THE PRE-CONSTRUCTION MEETING.
- UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE LANDSCAPE ARCHITECT IN WRITING, AND REQUEST A FINAL INSPECTION. ANY ITEMS THAT ARE JUDGED INCOMPLETE OR UNACCEPTABLE BY THE OWNER OR THE LANDSCAPE ARCHITECT SHALL BE PROMPTLY CORRECTED BY THE CONTRACTOR.
- SIDEWALK / PAVING LAYOUT SHALL BE FIELD-STAKED USING G.P.S. BY THE CONTRACTOR AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO FORM WORK AND INSTALLATION. THE CONTRACTOR MUST NOTIFY THE L.A. AT LEAST FORTY EIGHT HOURS IN ADVANCE OF THE REQUIRED REVIEW. ALL OF THE PROPOSED LOCATIONS SHALL BE MARKED FOR A SPECIFIC PHASE OF WORK PRIOR TO CALLING FOR A REVIEW. COORDINATES THAT DO NOT RESULT IN THE GEOMETRY SHOWN ON THE PLANS SHALL BE CHECKED BY THE CONTRACTOR'S SURVEY CREW. CORRECTIONS OF TRAIL SHALL BE VERIFIED BY THE LANDSCAPE ARCHITECT. LAYOUT MUST COMPLY WITH FDEP PERMIT
- ALL CONCRETE WALKS SHALL NOT EXCEED A SLOPE OF 1:20, AND CROSS SLOPES ON ALL CONCRETE SIDEWALKS SHALL NOT EXCEED 2%. IF THE SIDEWALK DOES EXCEED THIS SLOPE, ADA COMPLIANT HANDICAP RAMPS WILL BE REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING AND THE COST OF ALL REQUIRED CONCRETE TESTING. TESTING SHALL INCLUDE BUT NOT BE LIMITED TO MATERIALS FOR PAVING SUB-BASE, ASPHALT PAVING, STRUCTURAL AND PAVING CONCRETE.
- CONTRACTOR TO MAINTAIN EXISTING BENCH MARKS, MONUMENTS, AND OTHER REFERENCE POINTS WITHIN AND ADJACENT TO THE PROJECT LIMITS. CONTRACTOR TO CONTACT ALL RESPONSIBLE PARTIES IF RELOCATION IS REQUIRED OF BENCH-MARKS AND OTHER REFERENCE POINTS.
- CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE CITY'S ARCHEOLOGICAL EXPERT IF DURING THE EXCAVATION PROCESS ARTICLES OF SIGNIFICANCE ARE UNCOVERED.
- ANY CHANGES MADE IN THE FILED BY THE CONTRACTOR OR OWNER REGARDING THE HARDSCAPE PLACEMENT SHALL BE FULLY RECORDED WITH AS-BUILTS AND PROVIDED TO THE OWNER AND L.A.
- DESIGN, MATERIALS, EQUIPMENT AND PRODUCTS OTHER THAN THOSE DESCRIBED BELOW OR INDICATED ON THE DRAWINGS MAY BE CONSIDERED FOR USE, PROVIDED PRIOR APPROVAL IS OBTAINED FROM THE OWNER, OWNER'S REPRESENTATIVE AND THE APPLICABLE GOVERNING CODE AUTHORITY.
- DAMAGE TO EXISTING FACILITIES CAUSED BY THE CONTRACTORS OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

GENERAL IRRIGATION NOTES

- AN AUTOMATIC IRRIGATION SYSTEM WILL BE INSTALLED ON SITE. THE IRRIGATION SYSTEM SHALL BE TIED INTO A RECLAIMED WATER SOURCE IF AVAILABLE. IF A RECLAIMED SOURCE IS NOT AVAILABLE, THE IRRIGATION SYSTEM SHALL BE CONNECTED TO A SEPARATE LANDSCAPE WATER METER.
- AN AUTOMATIC CONTROLLER SHALL BE INSTALLED TO CONTROL THE IRRIGATION SYSTEM AND SHALL BE INSTALLED WITH A RAIN SENSOR.
- DRIP AREAS SHALL BE INSTALLED ON SEPARATE ZONES FROM HIGH WATER USE TURF AREAS.



SITE AREA CALCULATIONS		
AREA	PERCENTAGE	DESCRIPTION
14,265 SF	100%	TOTAL SITE AREA
3,095 SF	22%	IMPERVIOUS AREA (BUILDINGS)
5,524 SF	38%	IMPERVIOUS AREA (HARDSCAPE AND SYNTHETIC TURF)
5,641 SF	40%	PERVIOUS AREA



146 SECOND ST. N. STE. 302
 ST. PETERSBURG, FL 33701
 772.821.5699
 OWNER AND CONSULTANTS

HOUSH HOUSE
 118 E. ORANGE STREET
 TARPON SPRINGS | FLORIDA

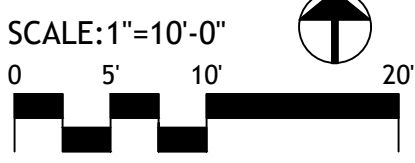
SIGNATURE & SEAL

Fl. Registration: LC26000471

CONSTRUCTION DOCS.

ISSUE DATE	NO.	COMMENTS	DATE
	1	PERMIT SET	08-06-2025

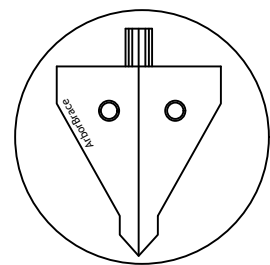
SHEET INFORMATION
 JOB NUMBER 25011
 DRAWN BY STAFF
 CHECKED BY HB



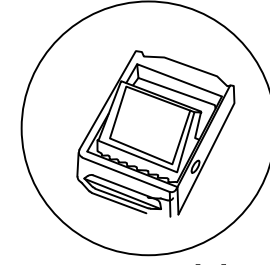
LANDSCAPE DEVELOPMENT PLAN

L2.00

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ArborAnchor
ArborAnchor driven below grade to necessary depth (determined by soil). (1.5 to 2.5 feet as required)



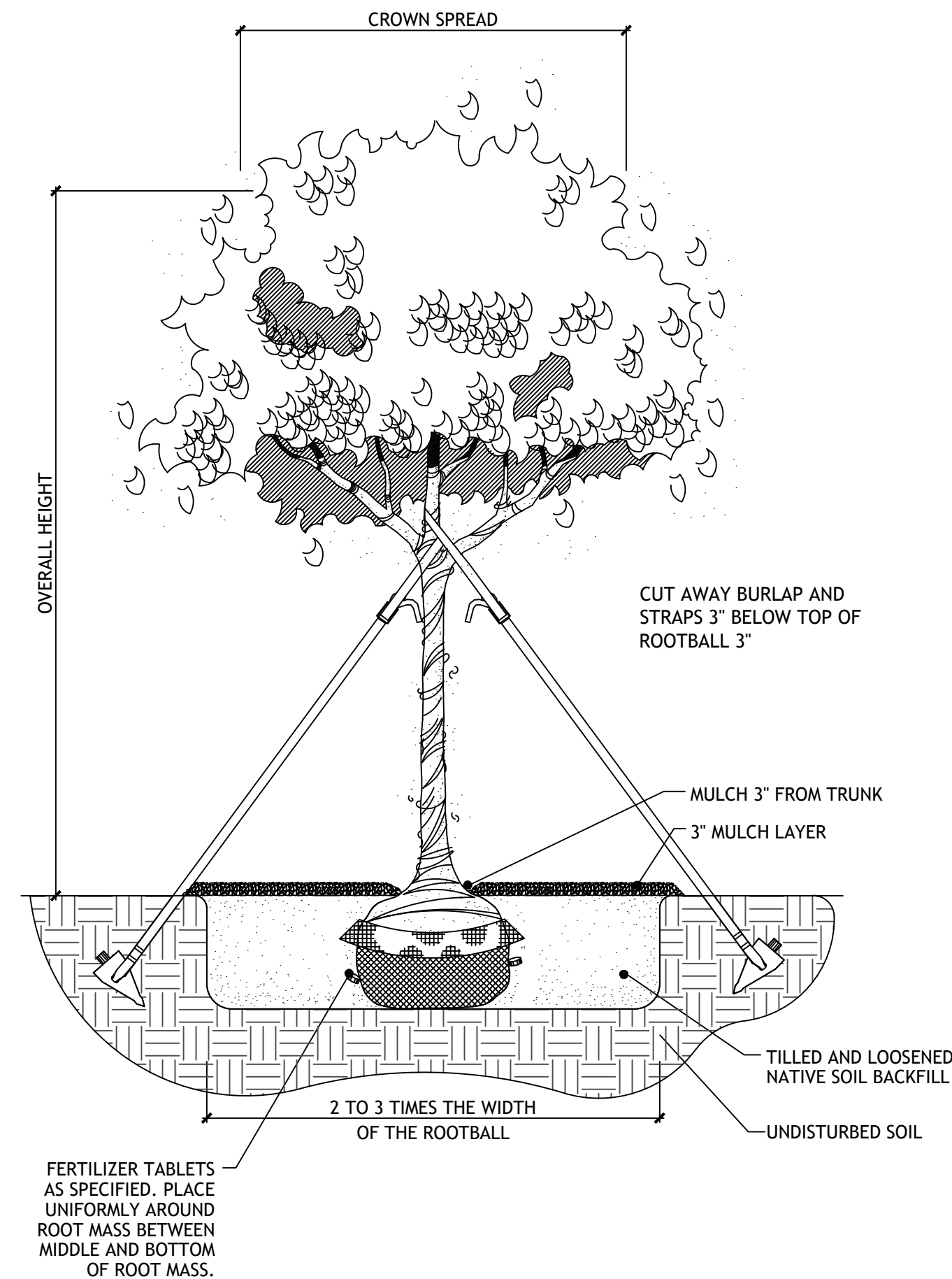
Tension Buckle
Loop loose end of webbing around leading branch of tree. Tie 1/2 knot onto backside of buckle. Pull buckle towards ArborAnchor to tension line.

Arborbrace Tree Guying Specifications:
ATG-R/ATG-HD
For up to 4" Caliper Trees
(3) Polypropylene guylines 3/4" X 12'-800 lb test, olive drab, UV resistant.
(3) Nickel plated spring cam-lock tension clips
(3) Arrowhead Nylon Anchors (4" X 3-3/4") or
(3) Arrowhead Metal Anchors for hard soil (4" X 3-3/4")

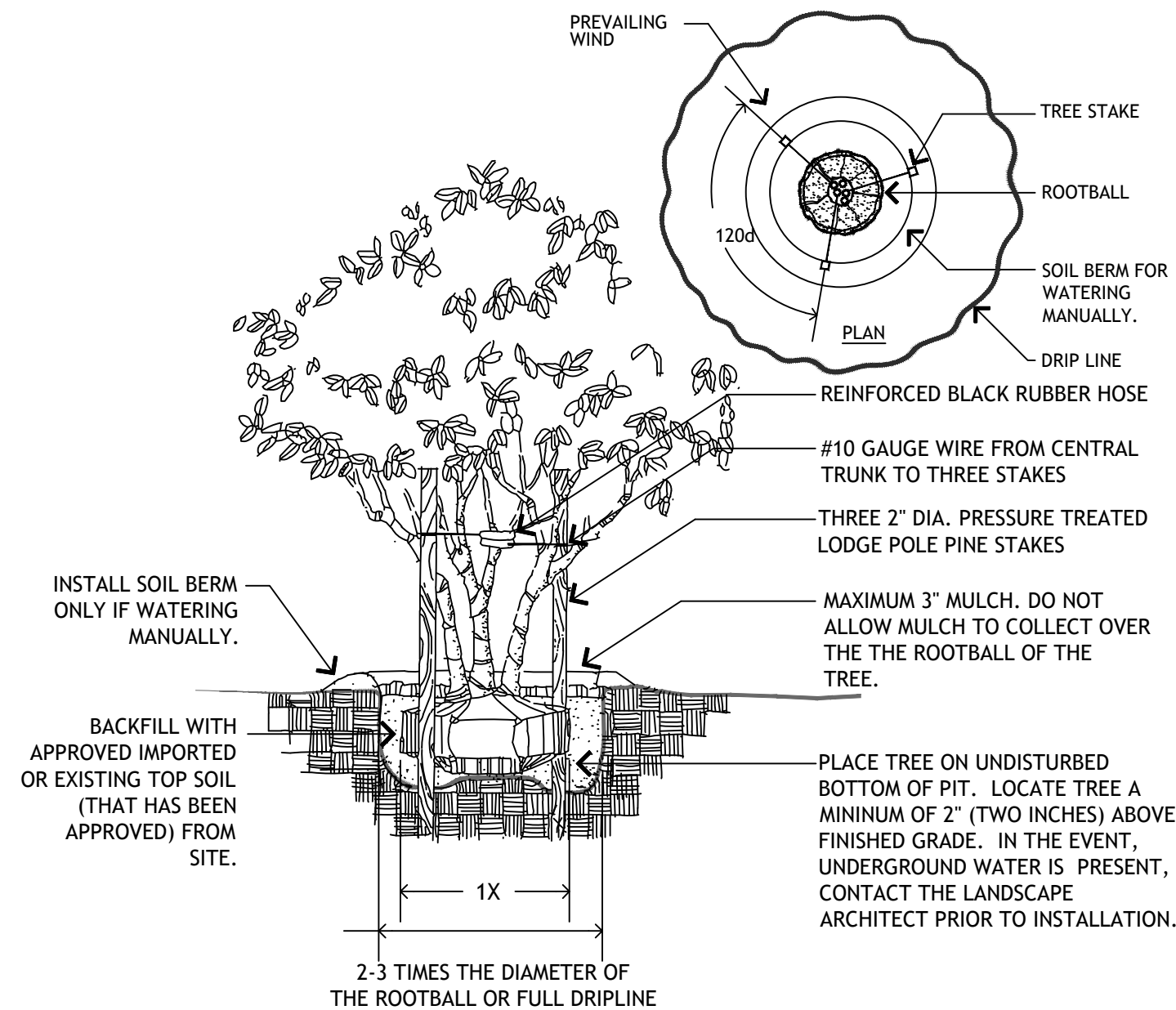
Arborbrace Tree Guying Specifications:
ATG-J
For up to 7" Caliper Trees
(3) Polypropylene/Polyester guylines 1" X 12'-1,000 lb test, olive drab, UV resistant
(3) 1-1/4" Nickel plated, non-rusting spring cam-lock tension clips (1,500 lb break strength)
(3) Arrowhead Aluminum Anchors for any soil type (5-1/2" X 4-1/2")

OTHER TREE STAKING SYSTEMS MAY BE ACCEPTABLE IF APPROVED

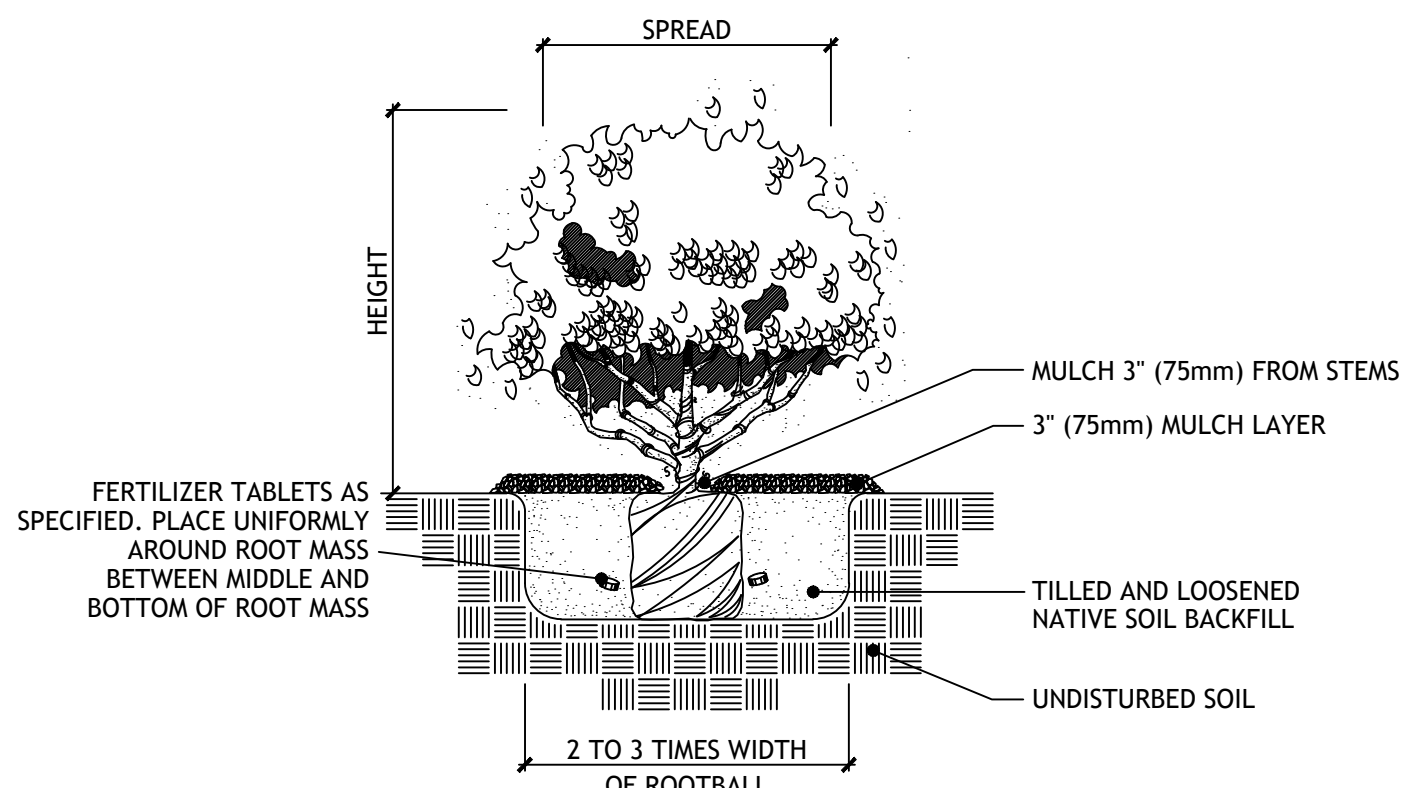
THIS DETAIL IS A MINIMUM GUIDE. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE BRACING TO MAINTAIN THE TREE IN A SAFE, PLUMB AND UPRIGHT CONDITION FOR A PERIOD OF 1 YEAR. CONTRACTOR MUST ACCOUNT FOR PEDESTRIAN AND PROPERTY HAZARDS WHEN STAKING TREES. CONTRACTOR TO MAINTAIN BRACING FOR THE WARRANTEE PERIOD UNLESS OTHERWISE AGREED UPON.



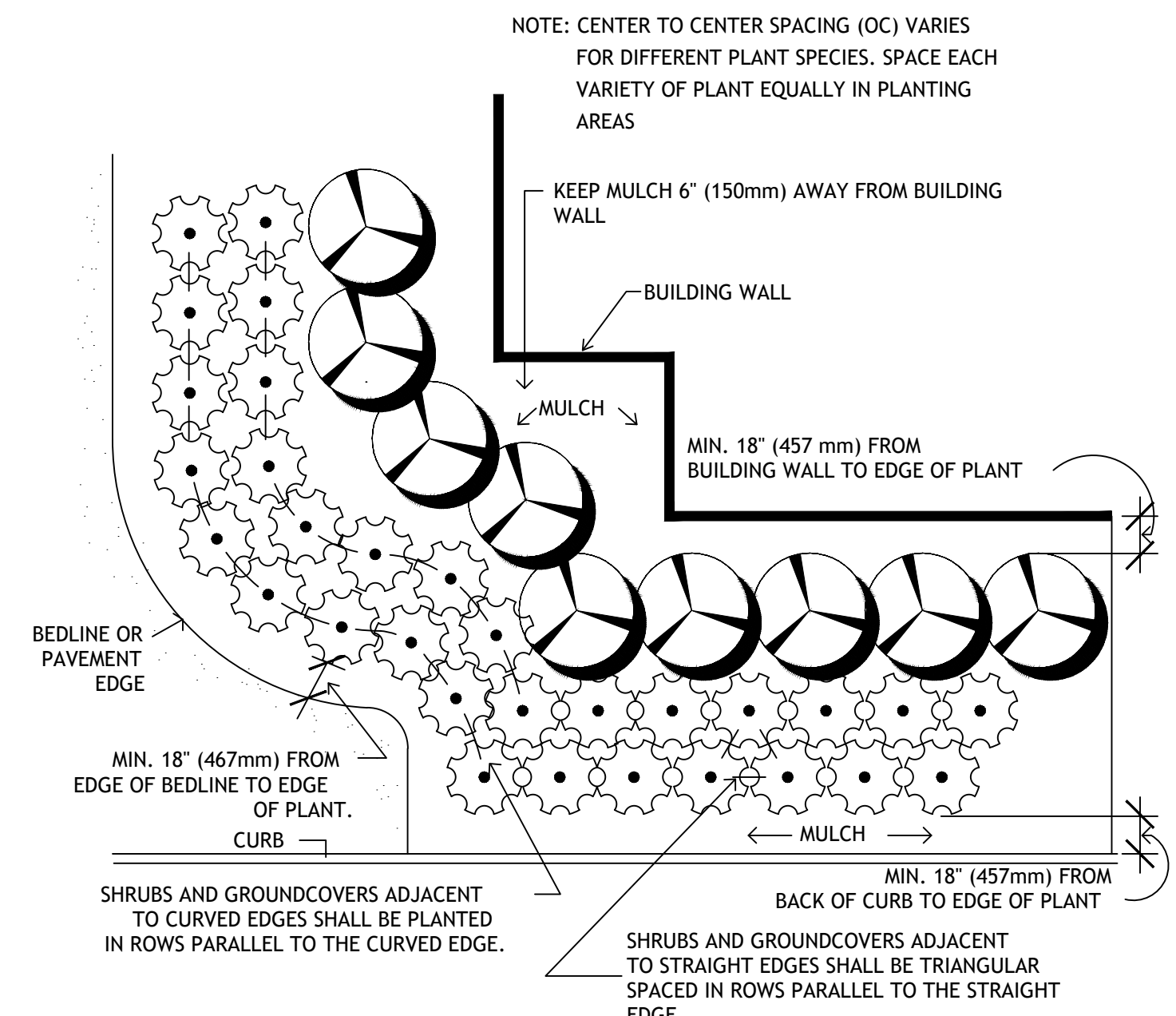
1 ARBOR BRACE TREE PLANTING DETAIL
SCALE: N.T.S.



2 MULTI-TRUNK TREE PLANTING DETAIL



3 SHRUB PLANTING DETAIL



4 SHRUB AND GROUNDCOVER LAYOUT DETAIL



146 SECOND ST. N. STE. 302
ST. PETERSBURG, FL 33701
772.821.5699

OWNER AND CONSULTANTS

HOUSH HOUSE

118 E. ORANGE STREET
TARPON SPRINGS | FLORIDA

SIGNATURE & SEAL

FL Registration: LC26000471

CONSTRUCTION DOCS.

ISSUE DATE

NO.	COMMENTS	DATE
1	PERMIT SET	08-06-2025

SHEET INFORMATION

JOB NUMBER 25011

DRAWN BY STAFF

CHECKED BY HB

LANDSCAPE DETAILS

LD-1

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1.00 GENERAL

1.01 RELATED DOCUMENTS

A. The Contract Documents shall include the Plans, Details, Specifications, Bid Proposal, Contract Agreement, all Addenda, Special Conditions, and Installation Schedule (when required).

1.02 REQUIREMENTS OF REGULATORY AGENCIES

A. Comply with Federal, State, Local, and other duly constituted authorities and regulatory agencies, without additional cost to the Owner in matters pertaining to codes, safety, and environmental matters.

B. Any permits for the installation or construction of any of the work included under the contract, which are required by any of the legally constituted authorities having jurisdiction, shall be arranged for by the Contractor and paid for directly by the Contractor, unless otherwise agreed upon in writing.

1.03 SCOPE OF WORK

A. All provisions of Contract, including General and Special Provisions and Plans, apply to the work specified in this Section. The Scope of Work includes everything for and incidental to executing and completing all landscape work shown on the Plans, Schedules, Notes and as specified herein.

B. Furnish and provide all labor, plants and materials, tools and equipment necessary to prepare the soil for plantings, to install and care for all plant materials (including finish grading if necessary); to remove and/or transplant existing plants if indicated; to furnish, plant, fertilize, guy and brace, water, mulch and prune all new plant materials; and to execute all other Work as described herein or indicated on the Plans.

C. Work under this Section shall include labor and materials for final grading and raking to prepare the site for sodding, sprigging, or seeding, so finished lawn or playing field will appear even and uniform, will grow adequately, and will comply with the intent of the landscape drawings.

D. Initial maintenance of landscape materials as specified in this document.

1.04 QUALITY ASSURANCE

A. Landscape work shall be contracted to a single firm specializing in landscape work, who shall in turn subcontract no more than 40% of the work specified. All subcontractors under the control of the Contractor involved in the completion of the landscape work, shall be made known to the Owner and the Landscape Architect prior to their commencement of work on the project.

B. All work of this Section shall conform to the highest standard of landscape practices.

C. The Plant Material Schedule included with these Plans is provided only for the Contractor's convenience. It shall not be construed as to conflict or predominate over the Plans. If conflict between the Plans and the Specifications exists, the Plan shall predominate and be considered the controlling document.

D. During this work, the Contractor shall be responsible for maintaining safety among persons in his employ in accordance with the standards set by the Occupational Safety and Health Act of 1970 (and all amendments) and the Florida Department of Labor. The Contractor shall be held harmless from any accident, injury or any other incident resulting from compliance or non-compliance with these standards.

E. The Contractor shall cooperate with and coordinate with all other trades whose work is built into or affects work shown in this Section.

F. All appropriate utility companies and agencies shall be contacted 72 hours prior to excavation. Call "Sunshine" at 1-800-432-4770.

G. The Contractor shall carefully examine the site and all existing conditions affecting the work, such as: soil, obstructions, existing trees, utilities, etc. Report any conditions in conflict with the work to the Landscape Architect.

1.05 SUBMITTALS

A. The Contractor is required to submit two copies of typewritten instructions recommending procedures to be followed by the Owner for maintenance of landscape work. These instructions must be submitted prior to the expiration of the required maintenance period and must cover maintenance procedures over a one year period.

B. Furnish unit prices for all plant and inert materials, including labor for all specified work.

1.06 ALTERNATES, ADDITIONS, DELETIONS, SUBSTITUTIONS

A. If there are additions/alternates included in these Plans and Specifications, the Contractor must propose prices to accomplish the work stated as additions/alternates at the time of bidding.

B. The Owner, through his Project Representative, reserves the right to add or deduct any of the work stated herein without rendering the Contract void.

C. The Contractor must have written approval by the Project Representative for any substitutions not previously agreed in the purchase agreement; installation without approval is entirely at the Contractor's risk.

D. All material acquired through additions or substitutions shall be subject to all conditions and warranties stated herein in this Section.

1.07 ABBREVIATIONS/DEFINITIONS

A. O.A. or H.T.: The over-all height of the plant measured from the ground to the natural, untied state of the foliage, not including extreme leaves, branches or fronds.

B. C.T.: Clear trunk is measured from the ground to the bottom of the first leaf or frond stem with no foliage from ground to specified height. For example, on Canary Island Date Palms or similar, the clear trunk measurement includes the "nut" at the base of the fronds.

C. C.W.: Clear wood is measured from the ground to the bottom of the base of the lowest leaf sheath or bud, trimmed in a natural manner. For example, on Canary Island Date Palms or similar, the clear wood measurement does not include the "nut" at the base of the fronds.

D. SP: Spread, branches measured in natural untied position to the average crown diameter, not including extreme leaves, branches, or fronds.

E. ST.TR.: Straight trunk.

F. MIN.: Minimum.

G. GAL.: Gallon container size, i.e., 1 gallon (3.8 liters), 3 gallon (11.4 liters), 7 gallon (26.5 liters), etc.

I. O.C.: On center, distance between plant centers.

J. DIA.: Diameter.

K. LVS.: Leaves.

L. D.B.H.: Diameter or caliper of main trunk of tree as measured at breast height at 4 - 1/2 feet (1.37 meters) above grade.

M. CAL.: Caliper, the outside diameter of up to a four inch (100 millimeter) tree is measured six inches (150 millimeters) above grade; larger trees are measured at 12 inches (300 millimeters) above grade.

N. B&B: Balled and burlapped in accordance with horticultural standards of the American Association of Nurserymen.

O. PPP: Plants per sq.

P. FG: Field grown.

Q. STD.: Standard, single, straight trunk.

R. Owner: To be known as that entity which holds title or control to the premises on which the work is performed.

S. Owner's Representative: Owner's on-site representative shall be responsible for approval of quantity and quality of materials specified and execution of installation.

T. Contractor: Shall refer to that person or enterprise commonly known as the Landscape Contractor.

U. Landscape Architect: This person or firm is the responsible representative of the Owner who produces the landscape Plans and Specifications.

1.08 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Plant Materials:

1. Provide container grown or, if appropriate, freshly dug trees and shrubs. Do not prune prior to delivery. Do not bend or bind trees or shrubs in such a manner as to damage bark, break branches or destroy natural shape. Provide protective covering during delivery. If plant delivery is made in open vehicles, the entire load shall be suitably covered.

2. All plants are to be handled at all times so that roots or root balls are adequately protected from sun, cold or drying winds. No root balls for trees and container plants that have been cracked or broken shall be planted except upon special approval. Plants shall not be pulled by the tops or stems, nor handled in a rough or careless manner at any time.

3. Balled and burlapped plants shall be moved with firm, natural balls of soil, not less than 1 foot diameter of ball to every 1 inch (25 millimeter) caliper of trunk; root ball depth shall not be less than 2/3 of root ball diameter. B & B plants which cannot be planted upon delivery shall have their root balls covered with moist soil or mulch.

4. Trees shall be dug with adequate balls, burlapped, and wire banded if needed. Root pruning to be done a minimum of 4 weeks before removal from the field and planting at the site. Root balls may not be encased in "grow bags" or other synthetic material, except plastic shrink wrap for transport only.

5. Remove all fronds from sabal palms prior to planting, but leave a minimum of 12 inches (300 millimeters) of new frond growth above the bud. Do not damage bud. On all other palms, only a minimum of palm fronds shall be removed from crown to facilitate moving and handling. Clear trunk shall be determined after minimum fronds have been removed. Bolls shall be removed from trunk unless otherwise specified. Palms shall be planted within 24 hours of delivery.

6. Deliver trees and shrubs after preparations for planting have been completed and plant immediately. If planting is delayed more than 8 hours after delivery, set trees and shrubs in shade, protect from weather and mechanical damage, and cover to keep roots moist.

7. Label at least one tree and one shrub of each variety with a securely attached waterproof tag bearing legible designation of botanical and common name.

8. Sod: Time delivery so that sod will be placed within twenty four (24) hours after strapping. Protect sod against drying and breaking by covering pallets of sod or placing in a shaded area.

1.09 JOB CONDITIONS

A. Acceptance of Job Conditions

1. The Contractor shall examine the sub-grade, verify elevations, observe the conditions under which work is to be performed and notify the Landscape Architect or Project Representative in writing of unsatisfactory conditions prior to beginning work. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Landscape Architect. Start of work shall indicate acceptance of conditions and full compliance with the Specifications.

2. Proceed with and complete the landscape work as rapidly as portions of the site become available, working within the seasonal limitations for each kind of landscape work and following the approved schedule. If seasonal limitations apply, notify the Landscape Architect for adjustments to the Schedule.

3. Determine locations of all underground utilities and review for conflicts with planting procedures.

4. When adverse conditions to plant growth are encountered, such as rubble fill, drainage conditions or obstruction, the Contractor shall notify the Landscape Architect in writing prior to planting.

5. Plant trees and shrubs after final grades are established and prior to the planting of lawns, protecting lawn areas and promptly repairing damages from planting operations.

B. Scheduling of Work

1. The work shall be carried out to completion with the utmost speed. Immediately upon award of contract, the Contractor shall prepare a construction schedule and furnish a copy to the Owner's Representative and/or the Landscape Architect for approval. The Contractor shall carry out the work in accordance with the approved schedule.

2. If the Contractor incurs unforeseen costs, such as overtime hours, holidays, etc. in order to complete the work within the time stated in the Contract, and/or to maintain the progress schedule, all said costs shall be borne by the Contractor at no additional cost to the Owner.

3. The Owner's Representative, may request work stoppage. Upon written request from the Owner's Representative, the Landscape Contractor shall suspend delivery of material and stop all work for such a period as deemed necessary by the Owner's Representative. Upon receipt of such notice, the Landscape Contractor shall immediately confer with the Owner, the Owner's Representative, or the General Contractor with respect to any additional costs which may result from work stoppage.

C. Utilities

1. The Contractor shall perform work in a manner which will avoid conflicts with utilities. Hand excavate, as necessary, to minimize possibility of damage to underground utilities. Maintain grade stakes set by others until removal is mutually agreed upon by all parties concerned.

2.00 PRODUCTS

2.01 MATERIALS

A. Plant Materials: Nomenclature

1. Plant species, sizes, etc. shall be per Plans and Specifications on Plant Material Schedule. Nomenclature is per Hortus Thridus, L.H. Bailey and E.Z. Bailey, 1976 (or latest edition) or the American Horticultural Society's Standard Plant Names of the American Joint Committee of Horticultural Nomenclature, and as conforms with names accepted in the nursery trade.

B. Plant Materials: Quality Assurance

1. Provide healthy, vigorous stock grown under climatic conditions similar to conditions in the locality of the project. Plants shall have a habit of growth that is normal for the species and be sound, healthy, vigorous and free from insect pests or their eggs, plant diseases, defects, and injuries. Plants shall be well-branched and densely foliated when in leaf and shall have healthy, well-developed root systems.

2. Trees shall be heavily branched or, in the case of palms, be heavily feath. Some plant materials may be collected stock with the approval of the Landscape Architect. Provide tree species that have a single main trunk (control leader), unless otherwise stated. Trees that have the main trunk forming a Y, shape or parallel branching are not acceptable.

3. Plant materials shall be as specified and shall be Florida #1 or better as to shape and quality for the species as outlined in Grades and Standards for Nursery Plants Parts I and II, Florida Department of Agriculture and Consumer Services (latest edition).

4. The Owner or Landscape Architect reserves the right to inspect plant materials either at the place of growth or at the project site prior to planting for compliance with requirements for name variety, size, quality, or designated area.

5. Landscape materials shall be shipped with certificates of inspection as required by governmental authorities. The Contractor shall comply with all governing regulations that are applicable to landscape materials.

6. Do not make substitutions. If specified landscape material is not available, submit Landscape Architect proof of it being non-available. In such event, if the Landscape Architect approves an alternate source, the Contractor shall submit a written request for approval. When authorized, a written change order for substitute material will be prepared, as well as any required adjustments to the Contract amount.

7. Height and/or width of trees shall be measured from ground up, with measurement shall be normal crown spread of branches with plants in the normal position. This measurement shall not include immediate terminal growth. All measurements shall be taken after pruning for specified sizes. All trees and shrubs shall conform to measurements specified in the plant material schedule, except that material larger than that specified may be used with the approval of the Owner or Landscape Architect; with no increase to the Contract price. Plant materials shall not be pruned prior to delivery.

8. Plant Material shall be symmetrical, typical for variety and species. Plants used where symmetry is required shall be matched as nearly as possible.

9. Balled and burlapped plants shall have firm, natural balls of earth of sufficient diameter and depth to encompass the feeding root system necessary for full development of the plant and to conform with the standards of the American Association of Nurserymen. Root balls and tree trunks shall not be damaged by improper binding and/or baling & burlapping.

10. Container-grown plants may be substituted for balled and burlapped plants or vice-versa provided the quality is equal or better than specified and the Landscape Architect approves of the substitution.

11. Container grown stock shall have been grown in containers for at least four months, but not over two years. If requested, samples must be shown to prove no root bound condition exists.

C. Grasses: Sod or Seed

1. Sod or seed (as/if specified) shall be of a species as stated on the Plan. Solid sod shall be of even thickness and with a good root structure, 95% free of noxious weed, freshly mowed before cutting, and in healthy condition when laid. It must not be stacked more than 24 hours before laying and it must be grown in soil compatible to that in which it will be installed. Sod must be kept moist prior to and after installation.

2. Seed shall be delivered to the site in unopened bags with certification tags in place. Purity, germination and weed content shall be as certification requirements.

D. Mulch:

1. Mulch shall be 100% recycled wood mulch, thoroughly mixed with a pre-emergence weed killer according to the label directions. If recycled mulch is not specified, the Contractor shall install pine bark, or other as specified on the plans

2. Install mulch to an even depth of 3 inches (75 millimeters) before compaction.

E. Fertilizer:

1. Granular fertilizer shall be uniform in composition; free flowing and suitable for application with approved equipment; received at the site in full, labeled, unopened bags bearing the name, trade name or trademark and warranty of the producer; fully conforming to State of Florida fertilizer laws.

2. All fertilizer shall bear the manufacturer's statement of analysis and shall contain the appropriate minimum amounts of elements for the type of use specified herein.

3. Agriform 20-10-5 fertilizer tablets or approved equal, shall be placed in planting pit for all plant materials at time of installation and prior to completion of pit backfilling.

4. Ground cover and annual areas shall receive fertilization with Osmocote Time Release Fertilizer according to product instructions and rate.

5. For sod and seeded areas, fertilize with a complete granular fertilizer on Bahia and St. Augustine grass at the rate of one (1) pound (453.6 kilogram) of nitrogen per one thousand (1,000) square feet (92.9 square meters). Fertilizer shall be commercial grade, mixed granules, with 30%-50% of the nitrogen being in slow or controlled release form. The ratio of nitrogen to potash will be 1:1 or 2:1 for complete fertilizer formulations. Phosphorus shall be no more than 1/4 the nitrogen level. They shall also contain magnesium and micronutrients (i.e. manganese, iron, zinc, copper, etc.)

F. Tree Staking Materials

1. For hardwood trees, approved below-grade staking shall be used with the rootball, per the planting detail. Metal strand guy wire shall not be used.

2. For single trunk palms, stakes shall be cut from 2 inch (50 millimeter) x 4 inch (100 millimeter) pressure treated (p.t.) stock, with a minimum of 3 stakes per palm. Batten consisting of 5 layers of burlap and 5 - 2 inch (50 millimeter) x 4 inch (100 millimeter) by 16 inch (400 millimeter) wood connected with two - 3/4 inch (19 millimeter) steel bands shall be used around the palm trunk.

3. Other tree staking systems may be acceptable if approved.

G. Planting Soil

1. Unless stated on the plans or in the specifications, install plant material in tilled and loosened native soil backfill. It is the responsibility of the Landscape Contractor to test, prior to planting and at no additional cost to the Contract, any soils which may be unsuitable for the vigorous growth of plants. Unsuitable conditions shall be reported to the Landscape Architect immediately in writing.

2. When required, planting soil media shall be provided by the Contractor and shall consist of 1/3 peat and 2/3 sandy loam, with no lumps over 1 inch (25 millimeters).

3. Backfill and clean fill dirt provided by the Contractor shall be in a loose, friable soil. There must be slight acid reaction to the soil with no excess of calcium or carbonate, and it shall be free from excess weeds, clay lumps, stones, stumps, roots and toxic substances or any other materials that might be harmful to plant growth or a hindrance to grading, planting, and maintenance procedures and operations.

4. Bed preparation for annual beds under 1 gallon (3.785 liters) container size shall consist of 3 inches (75 millimeters) of Florida peat or other approved organic soil amendment spread over full length and width of planting area. Rotolift organic layer 6 inches (150 millimeters) to 8 inches (200 millimeters) into native soil.

H. Soil Amendments

1. Terra-Sorb AG or approved equal, soil amendment shall be mixed with native or planting soil for all trees, shrubs, ground cover, and annuals according to manufacturer's recommended application rates and methods, if specified on the Plans.

I. Tree Protection

1. Wood fencing shall be 2 inch (50 millimeter) x 4 inch (100 millimeter) pressure treated (p.t.) stock with flanging (on horizontal members). Space vertical members 6 feet (1.83 meters) to 8 feet (2.44 meters) on center. The barricade shall be placed so as to protect the critical protection zone area, which is the area surrounding a tree within a circle described by a radius of one foot for each inch (25 millimeter) of the tree's diameter at breast height DBH at 4 - 1/2 feet (1.37 meters) above grade.

J. Root Barrier System

1. Root barrier fabric shall be installed when specified in the plans and/or specifications for protection of adjacent surfaces according to specific product name or equal, install as directed by the manufacturer.

K. Packaged Materials:

1. Deliver packaged materials in containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and while stored at the site.

L. Pesticides

1. Pesticides shall be only approved, safe brands applied according to manufacturer's directions.

3.00 EXECUTION

3.01 PREPARATION

A. Obstructions Below Ground:

1. It shall be the responsibility of the Contractor to locate and mark all underground utilities, irrigation lines and wiring prior to commencement of the work.

2. If underground construction, utilities or other obstructions are encountered in excavation of planting areas or pits, the Landscape Architect shall be immediately notified to select a relocated position for any materials necessary.

B. Grading and Preparation for Plant Materials

1. All proposed landscape areas containing existing turf grass or weeds shall be treated with Monsanto's "Round-Up" per manufacturer's specifications. All proposed landscape areas adjacent to water bodies shall be treated with Monsanto's "Rodeo" per the manufacturer's specifications.

2. New plant materials will not be installed until a 98% weed/turf eradication has been achieved. Areas where one application may be required to produce an acceptable planting bed.

3. A pre-emergent herbicide may be applied, but it is not a substitute for spray treatment of "Round-Up" or "Rodeo".

4. Should any plant material in the same, or adjacent beds be damaged by these chemicals, the same size, quantity and quality of plants shall be immediately replaced by the Contractor at no cost to the Owner.

5. Any necessary corrections or repairs to the finish grades shall be accomplished by the Contractor. All planting areas shall be carefully graded and raked to smooth, even finish grade, free from depressions, lumps, stones, sticks or other debris and such that they will conform to the required finish grades and provide uniform and satisfactory surface drainage without puddling.

6. The contractor shall remove debris (sticks, stones, rubbish) over 1 - 1/2 inches (38 millimeters) in any dimension from individual tree, shrub and hedge pits and dispose of the excavated material off the site.

C. Preparation for Annual Bed Planting

1. Prepare native subgrade by rototilling or loosening by hand methods. Spread 3 inches of Florida peat (1/3), sandy loam (1/3), or other approved organic soil amendment over the full length and width of planting area for annuals. Rotolift organic layer 6 inches (150 millimeters) to 8 inches (200 millimeters) into the native soil. Grade the planting bed by "crowning" to insure that surface drainage, permeation and retention occur at proper rates. Add Osmocote time release fertilizer according to product instructions and rate.

2. Limit preparation to areas which will be planted promptly after preparation. Loosen sub-grade of seed and sod areas to a minimum depth of 4 inches (100 millimeters).

3. Immediately prior to any turf Work, the Contractor shall finish grade the soil to a smooth, even surface assuring positive drainage away from buildings and the subsequent turf flush to the tops of adjacent curbs and sidewalks. The surface shall be sloped to existing yard drains.

4. A complete fertilizer shall be applied to St. Augustine or Bahia grass at a rate of one (1) pound (453.6 kilogram) of nitrogen per 1000 square feet (92.9 square meters). Fertilizer shall be commercial grade, mixed granules, with 30%-50% of the nitrogen being in slow or controlled release form. Thoroughly work fertilizer into the top 4 inches (100 millimeters) of soil.

5. Moist prepared seed and sod areas before planting if soil is dry. Water thoroughly and allow surface moisture to dry before planting lawns. Do not create a muddy soil condition.

3.02 INSTALLATION

A. Berm Construction (if specified)

1. Install berms at location and design shown on Plans and at the height and slope indicated. Height stated is for finished berm with soil at natural compaction.

2. Exact location and configuration of berms may require modification to allow proper drainage; such changes will be coordinated with the Landscape Architect.

3. If shown on the Plans, contract berms using clean sandy loam fill dirt which is well-drained, free of rocks, roots, or other debris, with a soil pH of an acid nature (about 6.5 to 7.0). No heavily organic soil, such as muck or peat shall be used in berm construction.

B. Layout of Plant Materials:

1. Unless otherwise stipulated, plant materials shall be approximately located per the plans by scale measurements using established building, corners, curbs, screen walls, etc. as the measuring reference point. Slight shifting may be required to clear wires, prevent blockage of signage, etc.

2. Shrubs and ground covers shall be located and spaced as noted on the plant material schedule (if provided), otherwise plants will be placed in the planting beds at the normally accepted spacing for each species.

3. Leave a minimum 18 inch (450 millimeters) border of mulched space between outer leaves of installed plant material and the bed line, curb, or building foundation wall for all plant sizes.

4. Any necessary "minor" adjustments in the layout of planting shall be made by the Contractor in accordance with the specifications of the Landscape Architect in order to conform as nearly as possible to the intent of the plans.

K. Repair of Damages

1. The Contractor shall repair all damage caused by his operations to other materials, property, or trades to a level equal in quality to the existing condition prior to damage.

2. The Contractor shall be held responsible for all damage done by his work or employees to other materials or trades' work. Patching and replacement of damaged work may be done at the Owner's discretion, but the cost of some shall be paid by the Contractor who is responsible for the damage.

C. Planting Procedures:

1. All shrubs, trees and ground covers or vines shall be planted in pits having vertical sides and being circular in outline. Planting pit shall be 3 to 5 times the width of the root ball and no deeper than the height of the root ball.

2. Plants shall be set straight or plumb, in the locations shown, at such level that after settlement normal or natural relationship of the top of the root ball with the ground surface will be established. With regards to proper nursery practices, plants under certain conditions (i.e. low and wet areas) will benefit from being planted "high" with the root ball about 1 inch (25 millimeters) higher than the surrounding grade.

3. All plant materials shall be fertilized with Agriform 20-10-5 planting tablets, or approved equal, at time of installation and prior to completion of pit backfilling. Agriform planting tablets shall be placed uniformly around the root mass at a depth that is between the middle and the bottom of the root ball.

a. Application rate:
1 gallon (3.8 liter) 1 - 21 gram tablet
1 gallon (11.4 liter) 2 - 21 gram tablet
5 gallon (18.9 liter) 3 - 21 gram tablet
10 gallon (26.5 liter) 3 tablets each 1/2 inch (12 millimeters) caliper

4. Native soil shall be used in back-filling plant pits or as specified. The Contractor shall be responsible for providing additional soil for building free saucers.

5. When balled and burlapped plants are set, undisturbed native soil shall be left under the base of the root ball to prevent voids. Backfill tilled and loosened native soil around the sides of the root ball. Remove the top 4 inches (100 millimeters) of backfill up to the proper grade. Roots of bare plants shall be properly spread out, and planting soil carefully worked in among them. Failure to comply is cause for rejection.

6. Containerized plants shall be installed with undisturbed native soil left under the base of the root ball to prevent voids. Planting pit shall be 3 to 5 times the width of the root ball and no deeper than the height of the root ball. Backfill tilled and loosened native soil around the sides of the root ball. Thoroughly water-in before bringing the backfill up to the proper grade.

7. Plant spacing shall be "on center" and varies with the different plant species. Space each variety of plant equally in the planting areas. Shrubs and ground covers adjacent to straight or curved edges shall be triangular-spaced in rows parallel to the adjacent edge with a minimum of 18 inches (450 millimeters) from the back of the curb to the outside edge of the plant.

8. All azaleas shall be placed into a prepared bed of amended soil containing 50% weed-free Florida peat or approved equivalent. Root balls shall be scorified vertically at 120 degree angles in a triangular pattern.

9. Sabal palms may be planted deeper than normal if conditions warrant and if approved.

D. Sodding

1. During periods of drought, sod shall be watered sufficiently at its origin to moisten the soil adequately to the depth to which it is to be cut.

2. An application of 6-6-6, 40% organic, slow or controlled release fertilizer shall be made to all lawn areas just prior to the laying of the sod at a rate of one (1) pound of nitrogen (453.6 kilogram) per 1,000 square feet (92.9 square meters). The ground shall be wet down before the sod is laid in place.

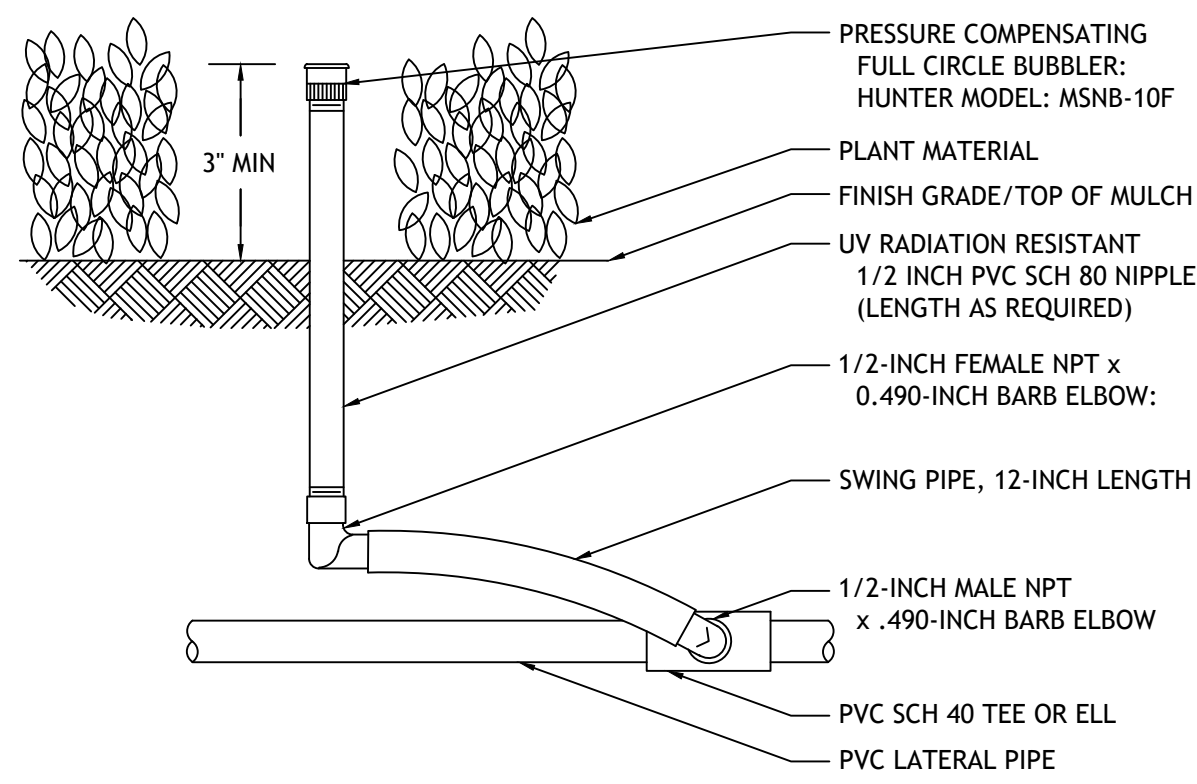
3. Solid sod shall be laid lightly with closely abutting staggered joints with an even surface edge and sod edge, in a neat and clean manner to the edge of all the paving and shrub areas. Cut down soil level to 1 inch (25 millimeters) to 1 - 1/2 (38 millimeters) inches below top of walks prior to laying sod.

4. Within 2 hours after installing sod and prior to rolling, irrigate the sod. Sufficient water shall be applied to wet the sod thoroughly and to wet the sod to a depth of 2 inches (50 millimeters) below the surface. The sod shall be rolled in a manner that will avoid erosion due to the application of excessive quantities, and the watering equipment shall be of a type that will prevent water to the finished soil surface. Watering shall be repeated as necessary to keep sod moist until contact to subgrade.

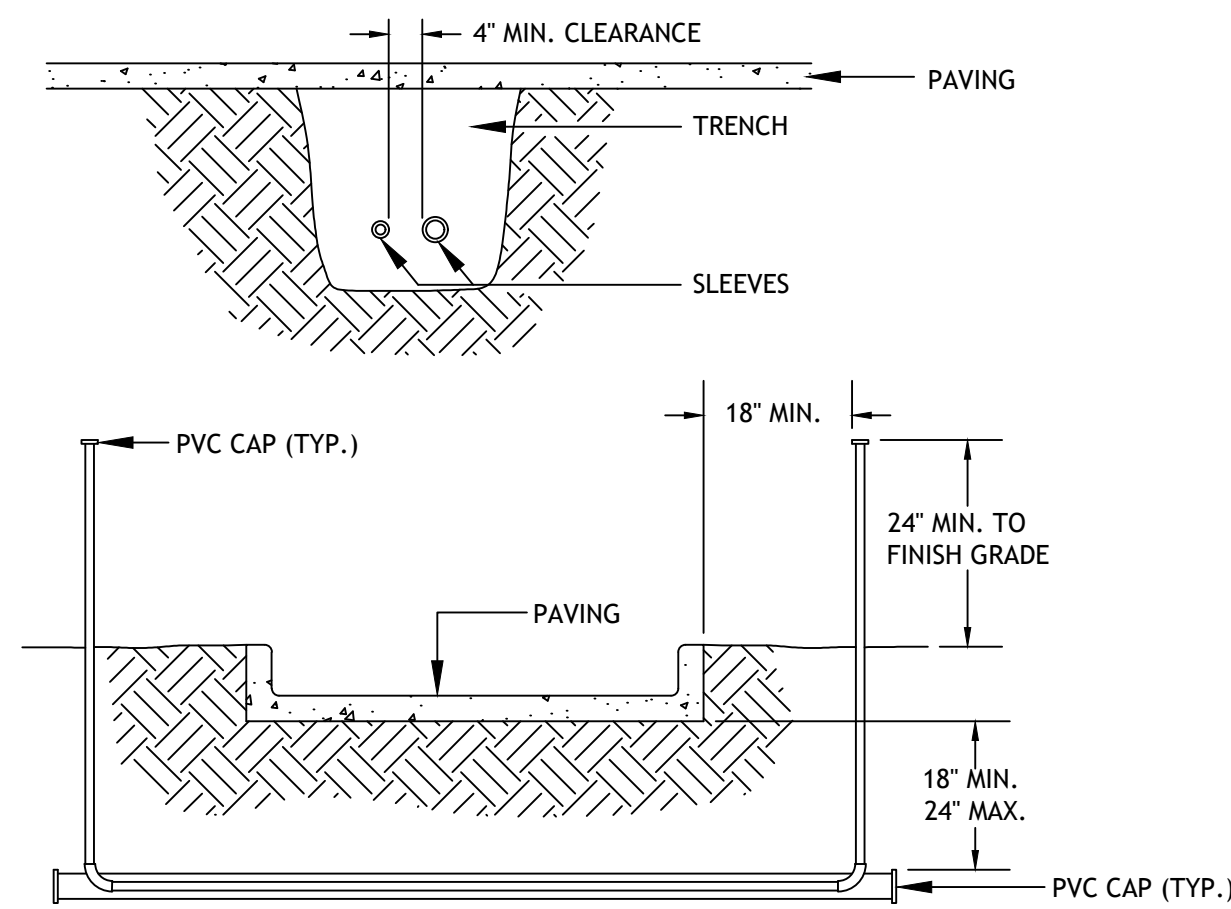
5. The sod shall be pressed firmly into contact with the sod bed using a turf roller or other approved equipment so as to eliminate air pockets, provide a true and even surface and insure knitting without any displacement of the sod or deformation of the surfaces of sodded areas. After the sodding operation has been completed, the edges of the area shall be smooth and shall conform to the grades indicated.

6. If, in the opinion of the Landscape Architect, top dressing is necessary after rolling, clean silica sand shall be used to fill voids. Evenly apply sand over the entire surface to be leveled, filling-in dips and voids and thoroughly washing into the sod areas.

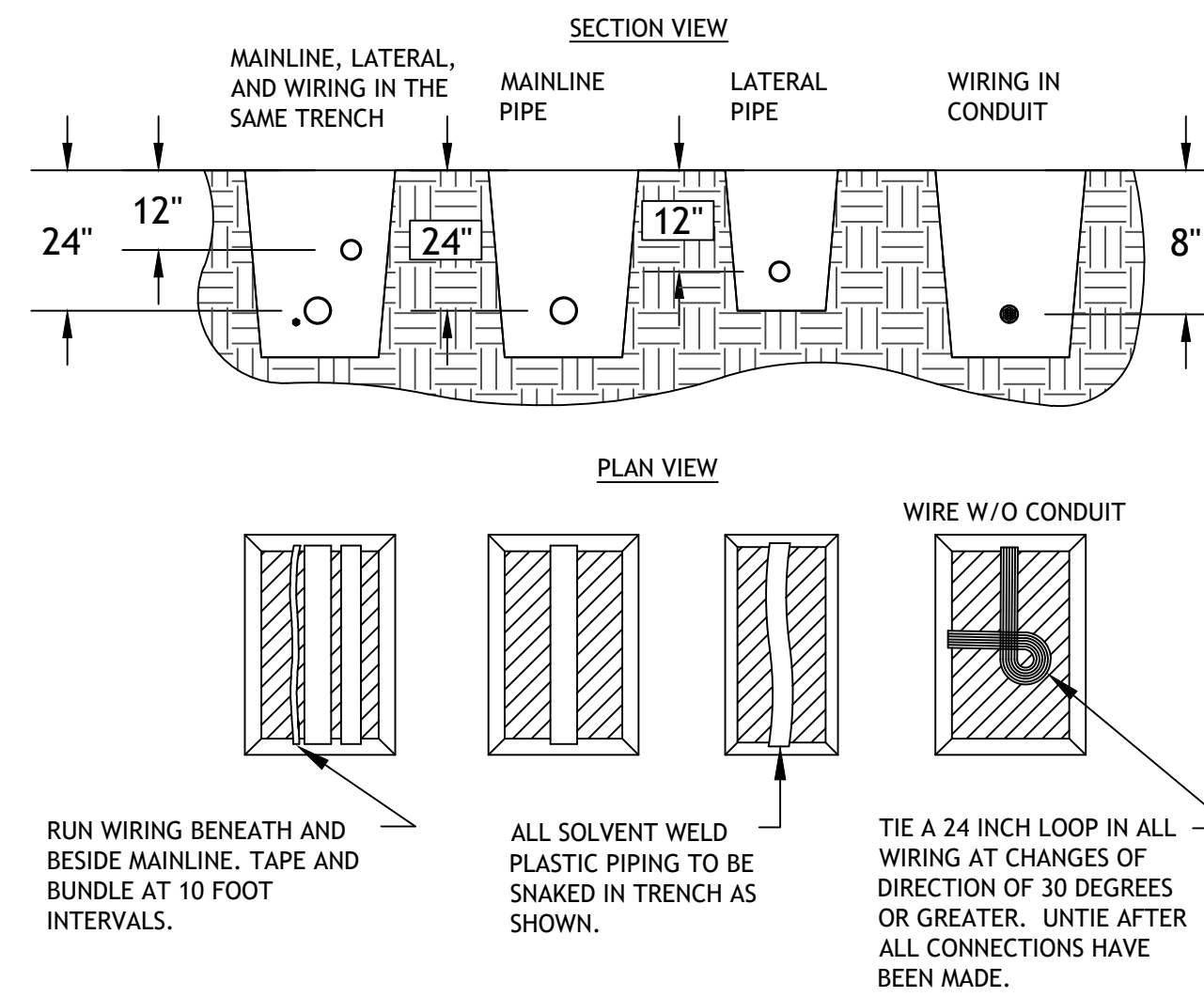
7. On slopes st



1
LD-3 BUBBLER DETAIL

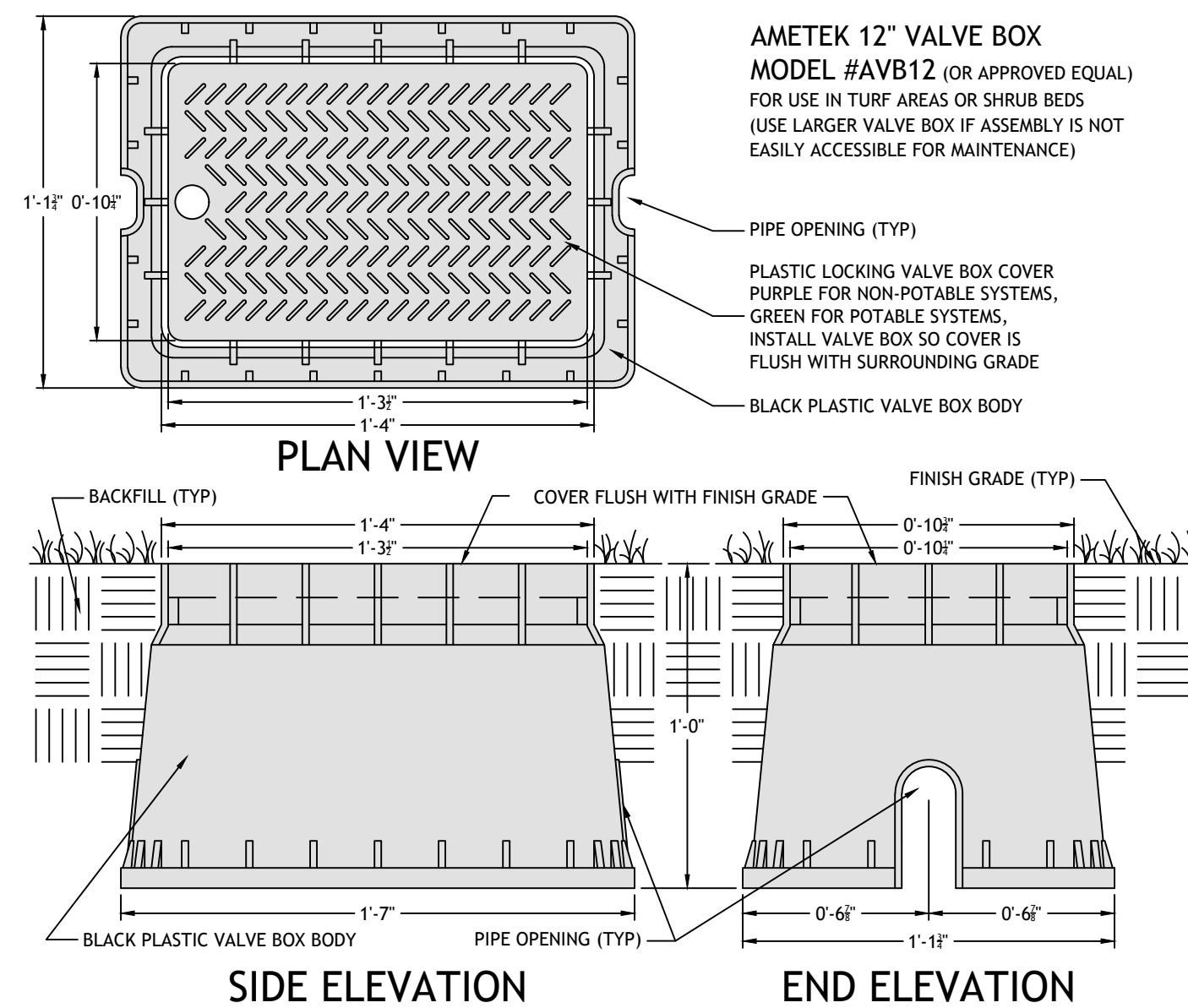


2
LD-3 I-CORE IRRIGATION CONTROLLER DETAIL

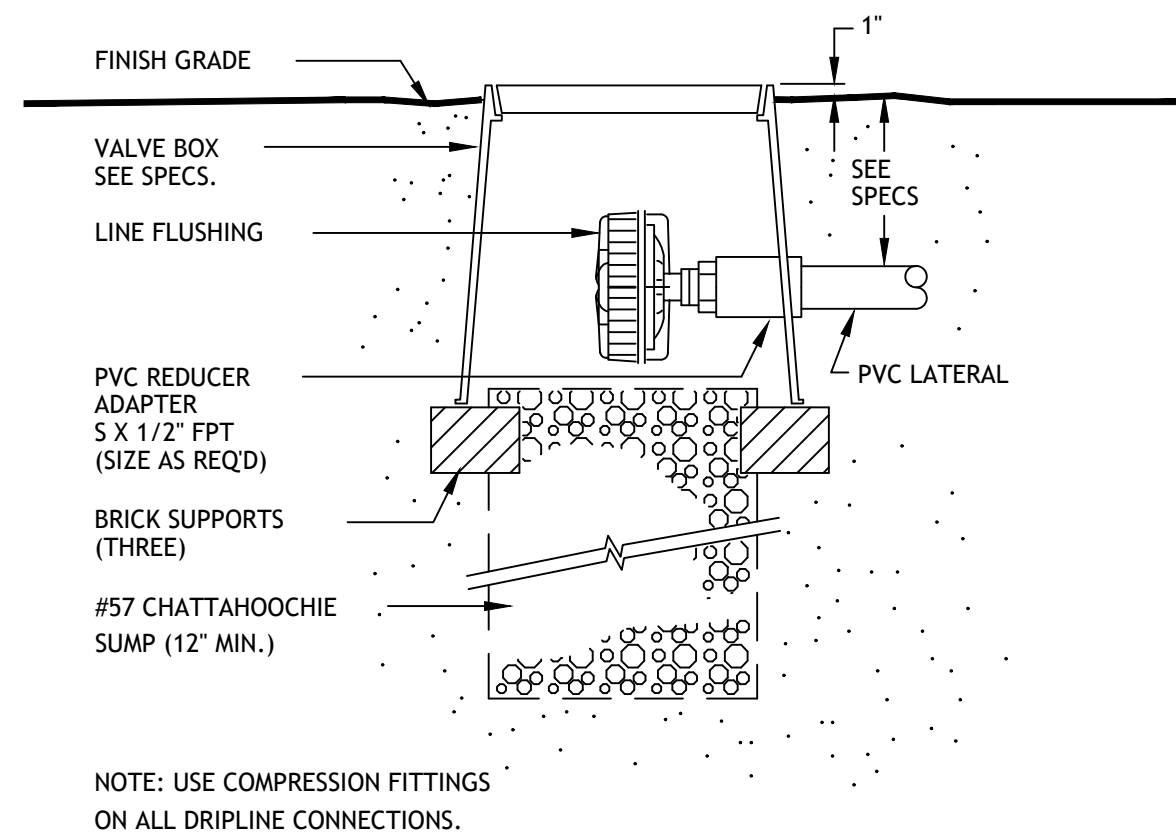


NOTES:
1. SLEEVE BELOW ALL HARDSCAPE ELEMENTS WITH CLASS 200 PVC TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.
2. FOR PIPE AND WIRE BURIAL DEPTHS SEE SPECIFICATIONS.

3
LD-3 PIPE AND WIRE TRENCHING DETAIL

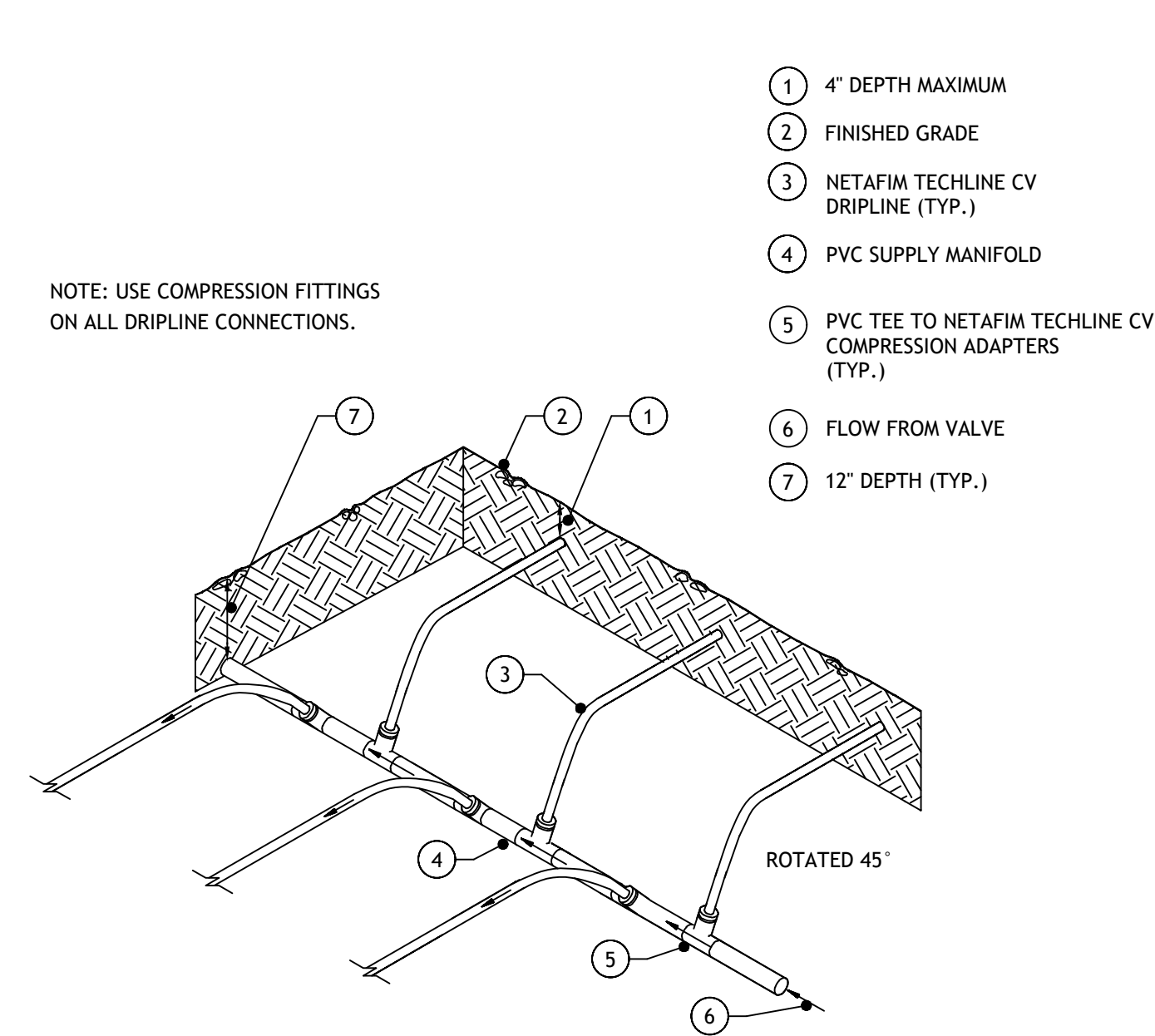


5
LD-3 VALVE BOX DETAIL

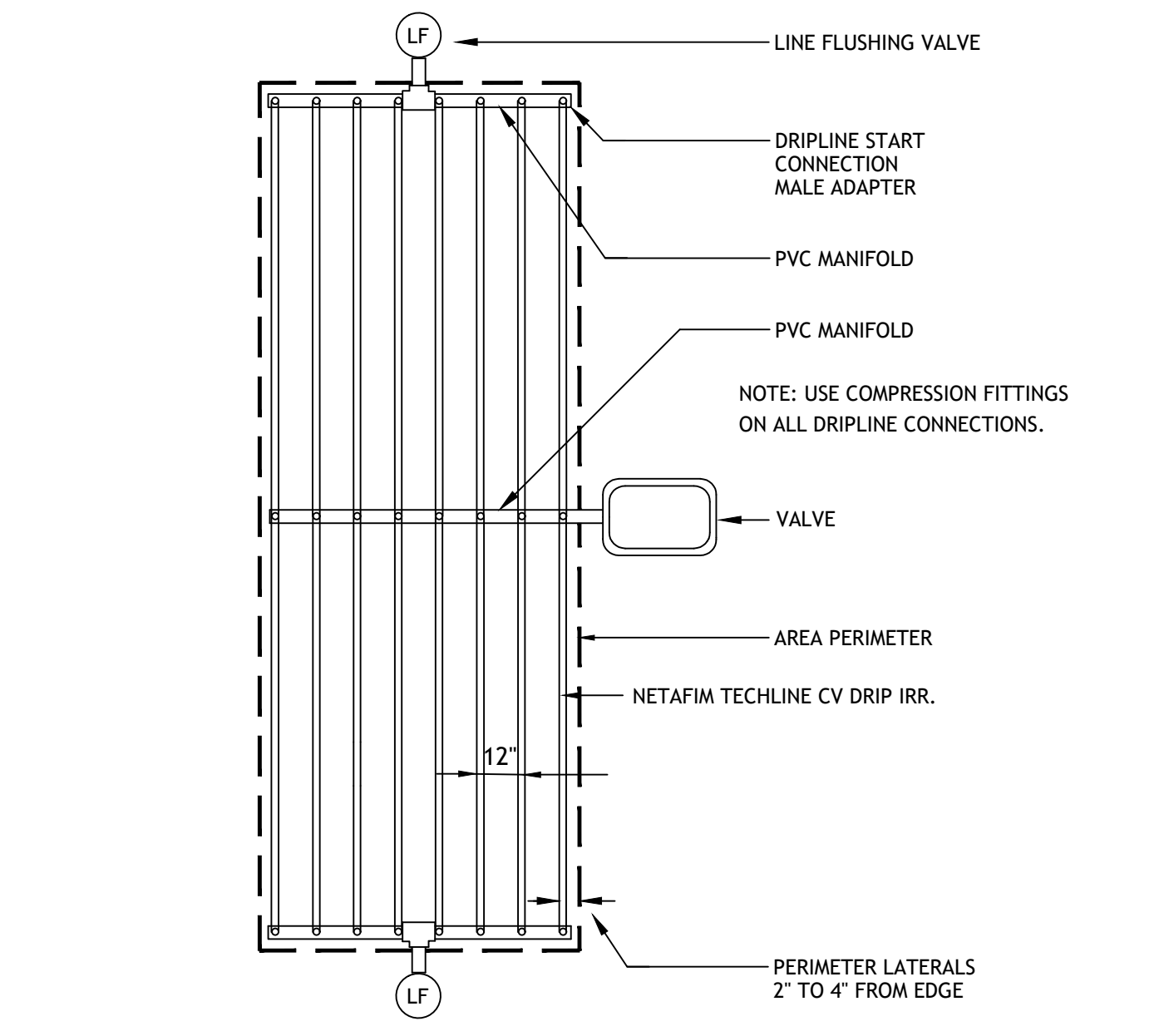


6
LD-3 EMITTER LINE FLUSHING VALVE

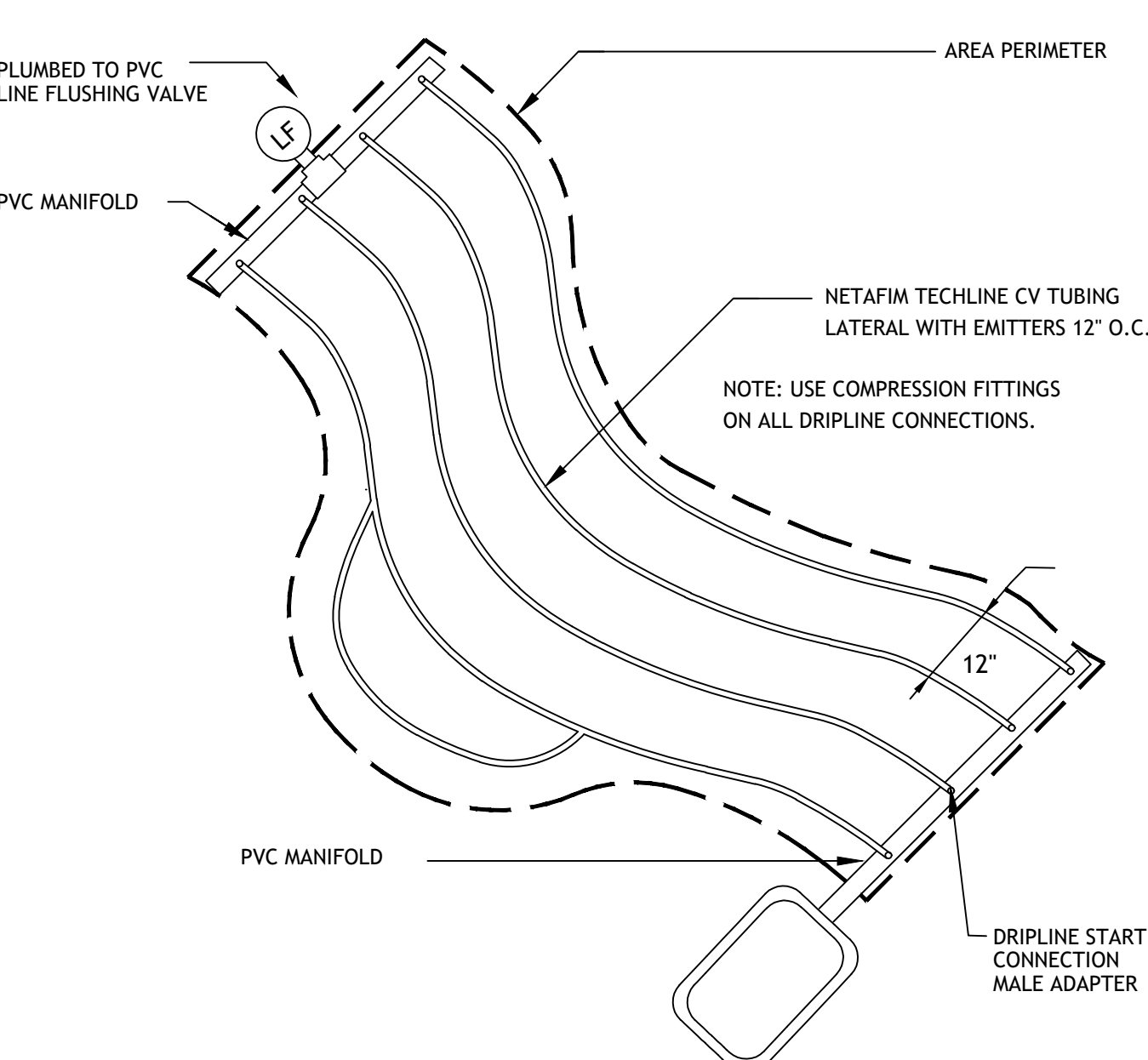
4
LD-3 SLEEVING DETAIL



7
LD-3 EMITTER CENTER FEED SUPPLY MANIFOLD



8
LD-3 EMITTER CENTER FEED LAYOUT



9
LD-3 EMITTER LAYOUT - IRREGULAR AREA/CURVES

GENERAL IRRIGATION NOTES

- The Contractor shall provide a 100% overlapping coverage automatic irrigation system PLAN-OR-SPEC for all required and other landscape materials. The irrigation system shall be provided and maintained as a fully functioning system in order to preserve the landscape in a healthy growing condition. In all cases comply with the written Irrigation Specifications and the General Irrigation Notes.
- All questions concerning specifications are to be directed to the Landscape Architect (727) 821-5699.
- Shrub risers shall only be installed in hedges or mass plantings not to extend more than 3" above the installed height of the shrub. In no case shall shrub risers be installed directly adjacent to curbs, walks or other vehicular access ways. If risers are to be used in hedges abutting parking areas, they must be placed a minimum of 30" away from back of curb and embedded in the hedge so as not to be seen or damaged by vehicular overhang. All shrub risers shall be painted black or dark green.
- All planted groundcover areas, including mass plantings of dwarf shrubs not exceeding 22", shall be irrigated with 12" pop-up spray heads (unless otherwise noted) and extenders (if required).
- All sodded areas shall be irrigated with 6" pop-up sprays (or pop-up rotors where appropriate), unless otherwise noted.
- Pipe, valves and other irrigation equipment may be shown in buildings, drives and walks for clarity only. Locate all valves and other irrigation equipment in plant bed areas for best concealment and accessibility.
- Valves are to be installed in valve boxes large enough to accommodate maintenance and operation of valves. Valve pit shall be free from mud or other debris which may cover valve. Provide 1/2" diameter river gravel sump 3" thick at the bottom of valve pit.
- All irrigation materials and installation shall meet federal, state and local codes, regulations and ordinances concerning irrigation construction.
- Flexible polyethylene swing joints shall be used for all pop-up spray heads. Rotor heads shall have rigid PVC swing joints. Concrete donuts shall be installed at all head locations adjacent to or in vehicular use areas.
- All sleeves are to be schedule 40 PVC located a minimum of 14" below finish grade.
- Adjust all heads to provide maximum coverage and minimum overthrow. The irrigation system shall be installed to minimize overspray on any impervious surface, such as sidewalks and paved areas.
- Contractor shall adjust heads as needed in vehicular areas to insure that parked vehicles do not interfere with the operation of the irrigation system. Notify the Landscape Architect and obtain written approval prior to adjusting irrigation head layout so that 100% coverage is not compromised.
- Equipment and heads shall be manufactured by "Rainbird" or "Hunter" or as otherwise stated on the plans.
- Contractor shall field verify capability of water source to deliver proper pressure per square inch (PSI) and gallons per minute (GPM) as required by the irrigation system. Notify the Landscape Architect prior to contract if there is any discrepancy.
- Irrigation water source to be reclaimed water, if available oWATER-SOURCE Coordinate new irrigation work with existing irrigation to remain.
- All permits necessary are to be provided by the installing contractor unless otherwise specifically stated.
- Refer to the Landscape Drawings when locating all irrigation equipment. Allow ample room near pipe, valves and other equipment for the planting of trees and hedges.
- All wires shall be installed in wire sleeves under walks and drives.
- If there is a conflict between the Irrigation Plan and Specifications, contact the Landscape Architect immediately.
- Carefully review the Irrigation Specifications. The Contractor shall be responsible for all items contained therein.
- Contractor shall furnish owner with 2 copies of operation manuals and water scheduling times as required to sustain the plant material. Contractor shall instruct the owner as to the proper operation and maintenance of the entire irrigation system prior to final acceptance.
- The irrigation system shall include a rain sensor/shut-off device to avoid irrigation during periods of sufficient rainfall.
- The irrigation system, if connected to the potable water supply system will include a backflow preventer at the service connection.
- Underground irrigation will not be installed within the driplines of existing trees unless root protection measures are provided.
- Underground irrigation lines and spray heads will be installed 12 inches or more from all structures.



146 SECOND ST. N. STE. 302
ST. PETERSBURG, FL 33701
77.727.821.5699
OWNER AND CONSULTANTS

HOUSH HOUSE
118 E. ORANGE STREET
TARPOON SPRINGS | FLORIDA

SIGNATURE & SEAL

FL Registration: LC26000471

CONSTRUCTION DOCS.

ISSUE DATE

NO.	COMMENTS	DATE
1	PERMIT SET	08-06-2025

SHEET INFORMATION

JOB NUMBER 25011
DRAWN BY STAFF
CHECKED BY HB

IRRIGATION DETAILS

LD-3

SECTION 02441 – IRRIGATION

PART 1 –GENERAL

1.01 RELATED DOCUMENTS

A. The Bidding, Contractual and Special Conditions apply to all work hereunder.

B. Related work specified or as shown elsewhere:

1. SECTION 02900 – LANDSCAPE

1.02 SCOPE OF WORK

A. Provide all labor, materials to install the specified Irrigation System as shown on the drawings and stated in the Technical Specifications.

B. Connection to existing water source on property at location shown on the drawings.

1.03 QUALITY ASSURANCE

A. Comply with Federal, State, County, Local and other duly constituted authorities and regulatory agencies.

B. Installation and materials shall conform to the Standards and Specifications for Turf and Landscape Irrigation Systems, Florida Irrigation Society, and the current Uniform Plumbing Code, Uniform Mechanical Code, state statutes and prevailing county and/or municipal ordinances.

1.04 JOB CONDITIONS

A. Responsibility to the Owner: The Contractor shall not willfully install the plumbing irrigation system as specified in the Contract Documents when it is obvious in the field that there are obstructions, grade differences and/or discrepancies in area dimensions until such conditions are brought to the attention of the Landscape Architect.

B. Utilities and Structures: Attention is directed to the fact that overhead, underground and surface utilities, structures and vegetation are in the area of the work and must be protected against damage during the progress of the work.

C. Protection and Safety: The Contractor shall be responsible and liable for the protection and safety against injury of property and persons on or about the project site during the term of his work. The Contractor shall provide and properly maintain necessary warning signs and lights, barricades, railings and other safeguards. The Contractor shall conform with the current Occupational Safety and Health Standards.

D. Site Familiarity: The Contractor shall visit the project site to examine such conditions as soils, vegetation, utilities, structures, water supply, etc., as they will influence the work pursuant to bid submission and/or contract execution.

E. Utility Connections: Location of utility connections shall be shown on the plans or as shown by the utility company. The Contractor shall include in his bid all costs for such utility connections.

1.05 SUBMITTALS

A. Submit the following:

1. Submit proposed work schedule.

2. Product Data: Submit six (6) copies of manufacturer's technical data and installation instructions for underground sprinkler system. Submit samples of all materials and equipment to be installed on the project.

3. Equipment: Submit a schedule of equipment to be installed, to include: automatic controller, zone control valves, gate valves, vacuum breaker valves, pressure throttle valves, direct burial wire, pop-up rotor heads, pop-up spray heads, fixed shrub heads, bubbler heads, special purpose heads, emitter pipe, filters, fittings and valve boxes.

4. Design Data: Submit any all design data required under these specifications for all areas not shown on the irrigation plans that need irrigation rework of the existing system

1.06 DEFINITIONS AND ABBREVIATIONS

A. The Definitions and abbreviations given here below shall be considered a part of these specifications and shall apply to the interpretation and execution hereof.

1. P.S.I.: Static water pressure shall be given as pounds per square inch, abbreviated P.S.I., and where (1) P.S.I. shall equal 2.31 feet of head.

2. G.P.M.: Volume of water shall be given as gallons per minute abbreviated G.P.M.

3. Zone: A zone shall be defined as a group of heads or emitter pipes operating at the same time downstream under a common control valve. A zone shall be defined as further described hereinafter on the basis of available water pressure and volume and physical location/orientation.

4. P.V.C.: P.V.C. shall denote the abbreviation for polyvinyl chloride (schedule 40) material used in the manufacture of pipe and fittings as further specified hereafter.

5. Polypipe and Polyconnectors: A flexible polyethylene pipe and fittings used in swing joints, head and pipe connectors and emitter systems.

6. Owner: That entity which holds title or control to the premises on which the work is performed.

7. Landscape Architect: This person or firm is the responsible representative of the Owner who produces the landscape and/or irrigation plans and specifications.

8. Contractor: In reference to these specifications, the "Contractor" shall mean the irrigation contractor bidding on and/or being awarded the contract for the work stipulated. Said Contractor shall be duly licensed and insured as an irrigation supplier/contractor to perform necessary water supply and distribution functions in the state, county and municipality where the work is to be executed.

9. Project: The project as referenced herein shall be that tract of real property where the irrigation system is to be installed.

10. Contract Documents: For the purposes of bid submission, contract agreement and execution of the work, the contract documents shall be binding upon all parties and shall include but not be limited to applicable plans, details, schedules, specifications and bidder instructions.

11. Equivalency: Relevant to manufacturer product lines specified herein, equivalents shall be of like type, manufacture, design, material, operation and performance. They shall be approved by the Landscape Architect.

12. The Plans: Design drawings and specifications provided by the Landscape Architect. In the event of conflict between the plans and the written specifications, the plans shall prevail.

PART 2 – MATERIALS

2.01 PRODUCTS

A. All material shall be of new stock and best grade of its kind. It shall be as specified unless otherwise specifically approved by the Landscape Architect. Materials not named shall be subject to approval or rejection by the Landscape Architect. In all cases, workmanship and material shall conform to the local plumbing code having jurisdiction. Materials shall be installed as recommended by the Manufacturer.

B. Available Manufacturers:

1. Subject to compliance with requirements, manufacturers offering products which may be incorporated in the work include the following:

a. Rain Bird Sprinkler Mfg. Corp.

b. Hunter Industries

c. Netamir Irrigation

d. The Toro Co., Irrigation Division

C. Products the contractor wishes to substitute as an "Approved Equivalent" must be submitted to the Landscape Architect, in writing, a minimum of ten (10) days prior to the bid date. The Landscape Architect will provide either an approval or rejection of all products submitted in this fashion.

D. Plastic pipe shall be rigid, high impact, Type I, un-plasticized polyvinyl chloride. The pipe shall be homogeneous throughout and free from visible cracks, holes, foreign materials, blister, deleterious wrinkles or dents and shall conform to the following dimensions and physical properties:

1. All plastic pipe shall be continuously and permanently marked with manufacturer's name, kind of pipe, material size, IPS, NSF approval, schedule and type.

2. Plastic pipe shall be as manufactured by Losco, Colanese, Pacific Western, Johns Manville, Colonial, Universal, or as by specific emitter manufacturer.

3. Polyethylene pipe to be used for swing joints (for spray heads only), connectors or emitters, at appropriate P.S.I. ratings.

E. All main and lateral line piping used on this project shall be Schedule 40 P.V.C. unless otherwise approved in writing by the Landscape Architect and the Owner.

F. Pipe Fittings:

1. Plastic pipe fittings to be installed shall be medium weight injection molded for virgin Type II high impact un-plasticized rigid polyvinyl chloride (P.V.C.) molding compound. All plastic slip couplings shall be extruded fittings from some material as specified for plastic piping herein, unless otherwise approved by the Landscape Architect. Plastic pipe cement and lubricant shall be as recommended by pipe manufacturer.

2. Galvanized pipe and fittings: Where indicated, or required by code, use galvanized steel pipe ASA schedule 40 mild steel screwed pipe. Fittings shall be medium galvanized screwed, beaded malleable iron. Galvanized couplings may be a merchant coupling.

3. Under Pavement Lines: All piping under concrete and asphalt vehicle pavement, curbs, unpaved areas subject to other than normal loads shall be rigid P. V. C. Schedule 40.

G. Sprinkler Risers and Connectors:

1. Shrub risers are to be Schedule 40.

2. Pop-up spray connectors (from tee to head base) are to be threaded, flexible polyethylene.

3. Pop-up rotor connectors (from tee to head base) are to be rigid 1" Schedule 80 PVC or Marlex swing joints.

H. Valves:

1. Manufacturer's standard, of type and size required, and as herein further specified, clearly identified with purple markings or labels for Reclaimed Waste Water.

2. Automatic Circuit Valves: Globe or angle configuration valves operated by low-power solenoid, normally closed, manual flow adjustment. All electric/hydraulic control valves shall be fully compatible with the automatic controller with respect to the type of control, voltage, amperage or pressure specifications and "normal" sequence positioning.

3. Quick Coupling Valves (if specified): Shall have a brass two-piece body designed for working pressure of 150 P.S.I. operable with a quick coupler. Key size and type shall be as shown on the plans or presented in the equipment schedule. Cover to be clearly identified by purple markings for Reclaimed Waste Water.

I. Sprinkler Heads:

1. Manufacturer's standard unit designed to provide uniform coverage over entire area of spray shown on drawings at available water pressure. Top of head to be clearly identified with purple markings for Reclaimed Waste Water.

2. Pop-Up Spray: Fixed or adjustable pattern, with screw-type flow adjustment and stainless steel retraction spring.

3. Pop-up Rotary Sprays: Gear driven, full circle and part circle.

J. Valve Boxes:

1. All gate and control valves shall be set in valve boxes with snap lock covers flush with finished grade. Valve boxes shall be "Nelson 8500 or "Ametek".

K. Automatic Control System:

1. The automatic controllers shall be as specified on the Plans or shall be of a capacity as required to efficiently operate the zones throughout the building and parking lot sites. The 120 volt electrical power to the automatic controllers location is to be furnished by the Owner (See Facilities Manager for exact controller location). Irrigation Sub-Contractor shall make all connections in the low-voltage system between the automatic controller and the valves.

2. Schedule the controller time clocks to operate the system control as nearly as possible between the hours of 11:00 P.M. and 7:00 A.M. and on the days required by local watering guidelines for deep well water source systems.

L. Sleeves and Conduits:

1. All pipe and wiring under paving shall be placed in separate Schedule 40 P.V.C. sleeves and conduit determined for the sleeve pavement covered length. Sleeves and conduit are to be installed as shown on the Irrigation Plan or respectively in the field. Sleeves and conduit shall be of adequate diameter to accommodate the pipe(s)/wire(s) with sufficient free play to allow removal and reinstallation without binding.

M. Control Wiring:

1. Connections between the automatic controllers and the electric control valves shall be made with direct burial wire AWG_U.F. #14-800 volt. Use red for pilot wire and white for common wire. Install in accordance with valve manufacturer's specifications and wire chart. Wiring shall occupy the same trench and shall be installed along the same route as pressure supply or lateral lines wherever possible. Place wire under water lines. Where more than one (1) wire is placed in a trench, the wiring shall be taped together at intervals of ten (10) feet. Tape to the bottom of the mainline at (8) foot intervals when in common trench. When wire only is placed in a trench, place under a continuous strip of subgrade: use pressure-treated southern yellow pine, 1" x 2", and attach to board at (8) foot intervals. An expansion curl shall be provided within three (3) feet of each wire connection and at least every one hundred (100) feet in length. Expansion curls shall be formed by wrapping at least five (5) turns of wire around a pipe 1" (or more) in diameter, then withdrawing pipe. All splices shall be made with pet-ite fasteners. All control wiring or tubing routed beneath or through pavements, walks, curbs and/or other structural elements shall be run through P.V.C. Schedule 40 conduit of sufficient diameter for the wiring. All conduit and sleeves for irrigation pipes and control wiring shall be installed by the irrigation sub-contractor. The 120 volt electrical power to the controller location to be furnished by the Owner.

N. Valves:

1. General: Manufacturer's standard, of type and size required, and/or as specified on the Plans.

2. Gate Valves shall conform to federal specification WW 54, Type I, Class A, with all brass or bronze body, non-raising stem, "Kennedy #427" or "NIBCO #T_113".

3. Valves shall be clearly identified with purple markings and labels when Reclaimed Waste Water is used.

4. Automatic Circuit Valves: Globe or angle configuration valves operated by low-power solenoid, normally closed, manual flow adjustment. All electric/hydraulic control valves shall be fully compatible with the automatic controller with respect to the type of control, voltage, amperage or pressure specifications and "normal" sequence positioning.

5. Quick Coupling Valves: When specified, shall have a brass two-piece body designed for working pressure of 150 P.S.I. operable with a quick coupler. Key size and type shall be as shown on the plans or presented in the equipment schedule.

6. Other Valves: shall be as stated on the Plans.

O. Filters:

1. A Vu-Flow 60 mesh filter is required on all emitter systems. One filter will be required for each source of supply. Filters shall be located underground in an appropriately-sized meter box.

P. Backflow Prevention: (if applicable)

1. Backflow prevention shall be as approved by the local governing body.

Q. Emitter Pipe:

1. Emitter pipe shall be manufactured by one of the aforementioned suppliers for the express purpose of subsurface irrigation.

2. Pipe shall have prefabricated irrigation orifices placed 12 inches on center.

3. Emitter pipe, if different than those stated herein, must be approved in writing by the Landscape Architect.

PART 3 – EXECUTION

3.01 SYSTEM DESIGN

A. General:

1. The Contractor shall provide any additional irrigation design data required to complete the Contract Documents. All Contractor submitted design data must provide for a 100% coverage to all planting and sodded areas to be irrigated as shown on the plans.

B. Design Liability:

1. All irrigation design data provided by Contractor shall be the full liability of the Contractor. All such design data shall be consistent with manufacturer's materials and installation methods, code compliance, coverage, application, distribution and operation and the provided plans and technical specifications.

C. Design Pressures:

1. Design Pressures should be as recommended by the pipe and fitting manufacturer type of pipe selected, or as indicated on drawings.

D. Emitter Pipe Locations:

1. If design data is required, the Contractor is to provide final layout plans of the emitter system specified to reflect the zone and valve locations, and specified coverage.

2. The application rate shall not exceed the intake rate of the soil, and as recommended by the Manufacturer.

3. The system shall provide the capability of accomplishing complete watering of the entire area or areas, for the particular combination of soil type and vegetation being irrigated, within a period of time no greater than that currently being recommended by recognized authorities.

4. Friction losses for pipe will be determined by the Hazen-Williams Formula. The retardance coefficient for P.V.C. pipe shall be 150 and for galvanized steel pipe 100. "C" factors for other products shall be determined from Marks Mechanical Engineers Handbook or other comparable friction loss tables. Maximum water velocity shall not exceed 5 feet per second in any part of the system.

3.02 INSTALLATION

A. Comply with all requirements of the Uniform Plumbing Code.

B. Layout

1. The locations of heads are approximate. Make minor adjustments as necessary to avoid plantings and other obstructions and to obtain coverage. Pipe may be shown in building, concrete, and/or asphalt areas for clarity only. Locate all pipe in planting areas where appropriate.

2. Emitter lines shall be installed as shown on the Plans.

C. Excavation/Trenching

1. Trenches shall be dug straight. Trench bottoms shall be at true gradient providing support to pipe through its entire length and shall be free from rocks, clods, debris and sharp-edged objects. The minimum depth of lines measured to top of pipe, unless otherwise indicated on plans, shall be:

a. Main lines and quick coupler lines shall be 18".

b. Lateral sprinkler lines shall be 12".

c. Non-pressure rotor head lines shall be 15".

d. Emitter lines shall be 6" below finish grade.

e. Provide minimum cover of 18" for all control wiring.

2. Where required or indicated on the plans, existing sod shall be removed where trenches are to be dug, and shall be protected from drying and replaced within 48 hours. Sod shall be cut in such a manner that a minimum of 2" of soil remains on the roots. The soil should be moist, but not wet, to prevent excessive loss due to crumbling. This Irrigation Sub-Contractor shall have all the responsibilities to maintain sodding and grass, trees, shrubs, and plants; as required by Section 02900. This Irrigation Sub-Contractor may, at his option, contract with the Landscape, sodding and grass Sub-Contractor to handle this responsibility.

3. Back-fill shall not be placed until the installed irrigation system has been thoroughly inspected and tested by the Contractor (the Landscape Architect may request an inspection by his own personnel prior to back-filling of trenches). Back-fill material shall be approved soil, free from large rocks, debris or sharp objects. In general, the material removed from excavation may be used. Excavated rocky material shall be removed from the site and suitable fill material obtained for back-fill. Back-filling shall be done when pipe is not in an expanded or contracted condition due to temperature extremes. Coaling of the pipe can be accomplished by operation of the system for a short time before back-fill, or by back-filling in the early part of the morning before the heat of the day. Long runs of P. V. C. pipe shall be "snaked" in the trench to allow for contraction. Back-fill shall follow excavation with the least possible delay. Open trenches shall be adequately protected to cause the least possible hazard to and interference with people and animals. Back-fill shall be compacted in compliance with Earthwork Section. The operation shall be repeated until finished grade of back-filled trenches matches that of adjacent soil.

D. Water Connection:

1. Connect irrigation system to existing source on site. Connection shall include but may not be limited to the installation of appropriate gate valves, shut-off valves, and concrete meter box as required. Coordinate time of connection with affected persons in order to minimize irrigation downtime. Required modifications and/or relocations of equipment associated with the existing well shall be included in the irrigation work.

2. Municipal and County regulations must be adhered to during this and all other portions of work in this section.

E. Circuit Valves:

1. Provide union on downstream side.

2. Adjust automatic control valves to provide flow rate of rated operating pressure required for each sprinkler circuit.

3. Wherever possible, locate valves in plant bed areas for best concealment and accessibility.

4. Valves are to be installed in "Ametek" valve boxes, large enough to accommodate maintenance and operation of valves. Provide a 1/2" diameter river gravel sump 3" thick at bottom of valve pit.

F. Piping

1. Pipe shall be handled and stored in a manner to prevent damage. The plastic pipe and fittings shall be stored under cover, and shall be transported in a vehicle with a bed long enough to allow the length of pipe to lie flat so as not to be subject to undue bending or concentration of stress at any point. Any plastic pipe that has been dented or damaged shall not be used unless such damage has been cut and pipe is rejoined with a coupling.

2. Clean interior of pipe thoroughly and remove all dirt or foreign matter before lowering pipe into trench. Keep pipe clean during operations by plugs or other approved methods. The ends of all threaded pipe shall be reamed out full size with a long taper reamer so as to be partially bell-mouthed and perfectly smooth. All offsets shall be made with fittings. All water lines shall be thoroughly flushed out before heads are installed.

3. Lay pipe on solid sub_base, uniformly sloped without humps or depressions.

4. Install P.V.C. pipe in dry weather when temperature is above 40 degrees Fahrenheit in strict accordance with manufacturer's instructions. Allow joints to cure at least 24 hours at temperature above 40 degrees Fahrenheit before testing, unless otherwise recommended by manufacturer.

5. Welded joints shall be given at least 15 minutes set-up curing time before moving or handling. Pipe shall be partially center loaded to prevent arching and whipping under pressure. Plastic pipe shall be cut with a hand saw, hacksaw or other tool approved for such use in a manner so as to insure square ends. Burrs at cut ends shall be removed prior to installation so that a smooth unobstructed flow will be obtained. All plastic-to-plastic joints shall be solvent_weld joints. Only the solvent recommended by the pipe manufacturer shall be used. The solvent_weld joints shall be made in the following manner:

a. Thoroughly clean the mating pipe and fitting with a clean dry cloth.

b. Apply primer to all connections prior to applying solvent. Use only compatible primer following manufacturer's specifications.

c. Apply a uniform coat of solvent to outside of the pipe with a non-synthetic bristle brush. Apply solvent to the fitting in a similar manner.

d. Reapply a light coat of solvent to pipe and quickly insert it into the fitting. Give the pipe or fitting a quarter turn to insure even distribution of the solvent and make sure that the pipe is inserted to the full depth of the fitting socket.

e. Hold in position for 15 seconds. Wipe off excess solvent that appears at the outer shoulder of the fittings.

f. Care shall be taken so as not to use an excess amount of solvent thereby causing a burr or obstruction to form on the inside of the pipe. The joints shall be allowed to set at least 24 hours before pressure is applied to the system.

E. Pipe jointing, in general, shall be performed by competent tradesmen specially trained in the type of work required and using tools and equipment recommended by the manufacturers of the pipe, fittings or equipment.

F. Galvanized Steel Pipe and Fittings: Threads shall be sound, clean cut, and well fitting. Threaded joints shall be made up with the best quality pure joint compound or lead paste, carefully and smoothly placed on the male threads only, throughout the system. Any leaky joints shall be remade with new material. Use of thread cement or caulking to make joints tight will not be permitted. All cut ends shall be remade to full bore before assembly.

G. Plastic to Steel Connections: Male thread plastic to female thread steel shall be used. The same shall apply to plastic and brass or other metal. In no case shall metal be screwed into a plastic fitting. A non-hardening pipe dope such as "Permatex No. 2", or equal, shall be used on threaded plastic to metal joints, and light wrench pressure should be used.

H. Hose Bibs:

1. If specified, shall be installed up stream of the electric valve in the same meter box. (Hose bibs may be used with a pressure gauge to check operating pressure.)

I. Miscellaneous Emitter Equipment:

1. Pressure gauges and other miscellaneous equipment may be required by the manufacturer for ideal operation of the emitter system. The Contractor shall provide all necessary equipment for the full operation of the emitter system as recommended by the manufacturer.

J. Sprinkler Heads and Adjustment:

1. Sprinkler heads shall be installed in a plumb position at intervals not to exceed the maximum spacing specified by the manufacturer for project conditions, or as indicated on the drawings.

2. Heads in turf areas shall be installed 2" minimum to 6" maximum away from the edge of the curb or walk, and shall be set 3/8" below the edge of the curb or walk. All heads shall be installed on flexible connectors or swing joints and shall allow for vertical adjustment of heads. 6" pop-up spray heads or pop-up rotors (where appropriate) shall be used in turf areas.

3. All groundcover areas, including mass plantings of dwarf shrubs not exceeding 22", shall be irrigated with 12" pop-up spray heads and extenders.

4. Shrub risers shall only be installed in hedges or mass plantings of large shrubs and are not to extend more than 3" above the installed height of the shrub. If risers are used in hedges abutting parking areas, they must be placed a minimum of 30" away from back of curb and imbedded in hedges so as not to be seen or damaged by vehicle overhang. All risers and other above-ground piping and fixtures shall be painted with a permanent flat black enamel paint. Stake all risers over 2" with 1/4" reinforcing rod fastened securely to riser.

5. Provide swing joints on all pop-ups and rotors located adjacent to vehicular and pedestrian ways. Flexible polypipe may be used as swing joints for spray heads only. All rotor heads shall be installed with rigid 1" Schedule 40 PVC swing joints.

6. Pop-up heads adjacent to vehicle pavement that is not curbed shall be installed with concrete donut protectors set flush with the top of the heads. Heads installed adjacent to pedestrian curbs or walks shall be installed 6" away from the curb or walk. Where adjacent to buildings, fences or similar structures, heads shall be installed 6" away from the structure.

7. Install no multiple assemblies on plastic lines. Provide each assembly with its own outlet.

8. Adjustable sprinklers shall be adjusted by fully opening the sprinkler farthest from the control valve. The manual adjustment of the control valve shall be opened slightly to obtain a 12" high spray at the sprinkler mentioned above. After this condition has been met, all other sprinklers in the section shall be adjusted for equal height sprays, regulating the control valve as required maintaining this condition. With pressure gauge on the sprinkler first opened, the control valve shall be adjusted to obtain the catalog rated pressure for the sprinkler installed. Individual heads shall be rotated as required to keep sprays within the areas of lawn or shrubbery. If it is determined that adjustments in the irrigation equipment will provide proper and more adequate coverage, make such adjustments prior to planting. Adjustments may also include changes in nozzle sizes and degrees of arcs as required.

3.03 SYSTEM CHECK

A. In no event shall the Contractor cover up or otherwise remove from view any work under this contract that has not been thoroughly inspected and tested. The Owner and/or Landscape Architect shall be present at time of inspection and testing. Any work covered prior to being inspected shall be opened to view by the Contractor at his expense. Notify the Owner and Landscape Architect when testing will be conducted.

B. Pressure Testing: All pressure lines shall be tested prior to back-fill of joints. As soon as lines are connected, flushed out, and valves are attached, cap all outlets and hydrostatically test at available pressure for a continuous 4 hour period, at the end of which the lines and joints shall be inspected. If leaks develop, the joint or joints shall be replaced, and the tests repeated until leaks are repaired. Any covered pipe found to leak, shall be excavated and repaired at the Contractor's expense.

C. Operational Testing: The entire installation shall be placed in operation by the Contractor and tested in the presence of the Owner or his Representative for proper functioning as a whole. Location and arc of heads shall be adjusted if required to eliminate any dry spots, over-water or spillage on adjacent areas and to prevent over-spray onto walks, roadways and buildings as much as possible.

3.04 AS BUILT RECORDS AND ADDITIONAL EQUIPMENT

A. Furnish record drawings of "as built" conditions as follows:

1. Location of water supply.

2. Tie_in and Owner furnished electrical service and disconnects.

3. Location of valve controllers and other control equipment.

4. Routing and sizing of sprinkler pipe.

5. Location and type of sprinkler heads.

6. Location and size of gate and zone control valves.

7. Routing of zone control valve electrical wiring.

8. The location of all "as built" conditions different from the original drawing shall be to scale from permanent points of reference. Exact location of main lines, control cables, and control valves shall be shown.

B. The Contractor shall provide as part of this contract two sets of sprinkler wrenches for adjusting, cleaning or disassembling each type of sprinkler. Two each of any special tools required for any other equipment shall also be furnished.

C. Six (6) service manuals for all equipment used shall be furnished to the Owner. Manuals may be loose_leaf and should show drawings or exploded views of equipment and catalog number. Operation instructions for all equipment shall be furnished.

3.05 WARRANTY

A. The Irrigation Sub-Contractor and Contractor shall Warranty all materials employed in the irrigation installation, are installed as specified and is in accordance with best trade practices. The Warranty shall also state there are no unauthorized substitutions of materials.

B. The Irrigation Sub-Contractor and Contractor shall warrant the work for a period of one (1) year.

C. The Contractor shall be responsible to replace all joint materials which have declined in health or have died due to a defective irrigation system. The contractor shall replace affected plants with plants of some variety and value within ten days of notice.

D. Corrections: Should any trouble develop within the specified warranty period which in the opinion of the Owner is due to inferior or faulty materials and/or workmanship, the trouble shall be corrected without delay by the Contractor, to the satisfaction of and at no expense to the Owner.

E. Liability: Any and all damage to rain water drains, water supply lines, gas lines and/or other service lines, shall be repaired and made good by the Contractor at no extra cost to the Owner. It is the responsibility of the Contractor to be aware of the location of all utilities or other permanent or non-permanent installations and to protect these installations from any damage whatsoever.

END OF SECTION



146 SECOND ST., N. STE. 302
ST. PETERSBURG, FL 33701
77.272.821.5699

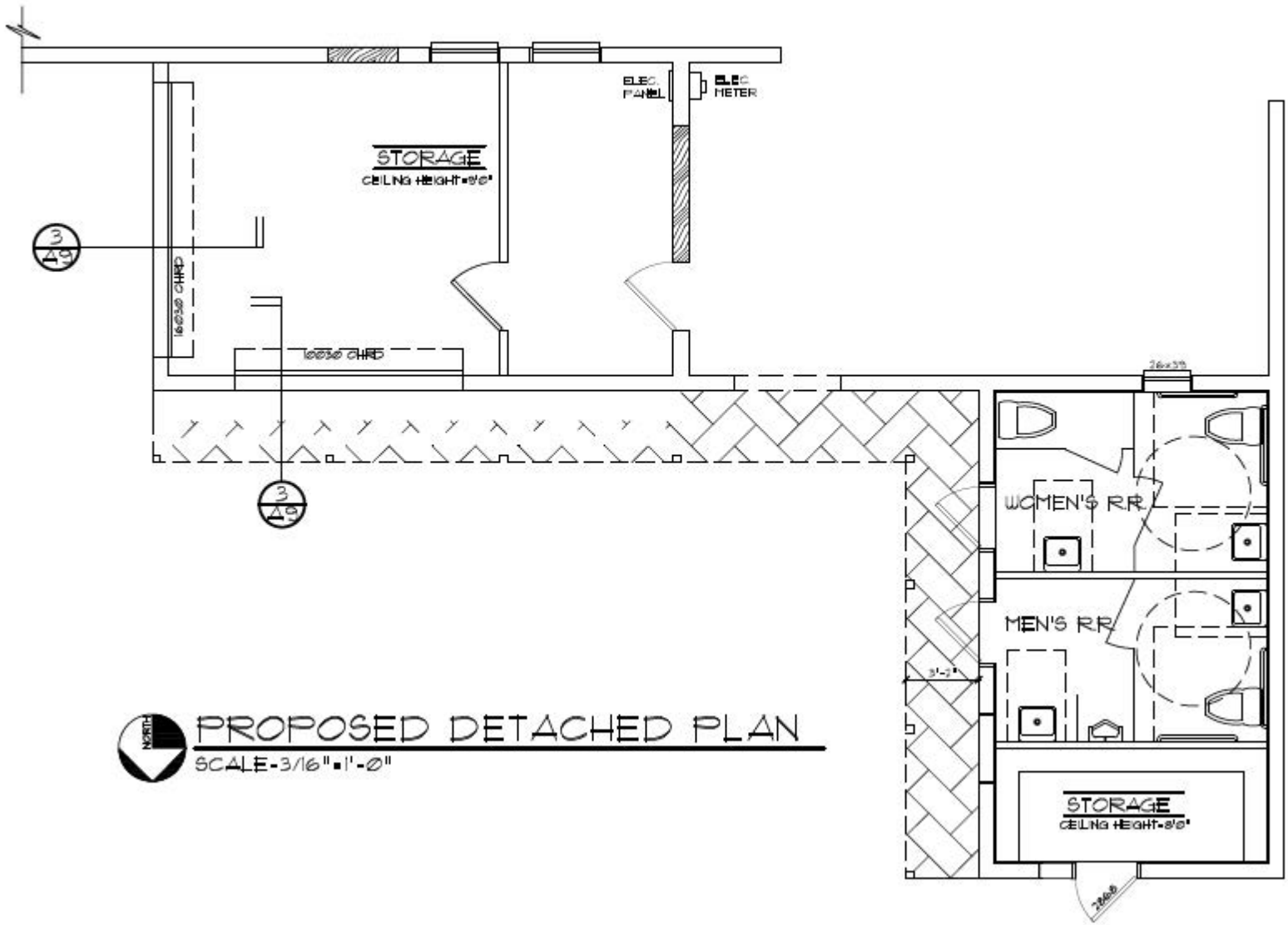
OWNER AND CONSULTANTS

HOUSH










PROPOSED DETACHED PLAN
 SCALE-3/16" = 1'-0"



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