



AGENDA
PLANNING COMMISSION
CITY OF PORT ORANGE

Meeting Date: Thursday, January 26, 2023

Time: 5:30 PM

Location: Council Chambers, City Hall
1000 City Center Circle
Port Orange

A. CALL TO ORDER

1. Pledge of Allegiance
2. Roll Call
3. Election of Officers

B. DISCUSSION/ACTION

4. Consideration of Minutes - December 15, 2022
5. APPLICATION: REZONING / 662 HERBERT STREET
CASE NO.: REZONING-22-0001
APPLICANT: Elliot Meadows
STAFF CONTACT: Gwen Perney, Principal Planner (386) 506-5673/gperney@port-orange.org

A request by the Applicant to rezone $\pm$ 2.1 acres, located at 662 Herbert Street, from Two-Family Residential (R-2D) to Single-Family Residential (R-10SF).

6. APPLICATION: MADELINE COMMONS SUBDIVISION PLAT & PLANS
CASE NO.: 22-50000003
APPLICANT: Cody Bogart, P.E., Newkirk Engineering, Inc.
STAFF CONTACT: Gwen Perney, Principal Planner (386) 506-5673/gperney@port-orange.org

A request by the Applicant for approval of the Madeline Commons Subdivision Plat and Plans to subdivide a $\pm$ 34.6-acre property, located north of Charles Street, east of Madeline Avenue and McDonald Road, west of 5th Street, into 149 single-family lots, along with tracts for tree preservation, stormwater retention, and open space.

C. OTHER BUSINESS

7. Commissioner Comments
8. Staff Comments

D. PUBLIC COMMENTS

E. ADJOURNMENT

NOTICES – PURSUANT TO SECTION 286.0105 OF THE FLORIDA STATUTES, IF ANY PERSON DECIDES TO APPEAL ANY DECISION MADE BY THE PLANNING COMMISSION WITH RESPECT TO ANY MATTER CONSIDERED AT THIS PUBLIC MEETING OR HEARING, SUCH PERSON WILL NEED A RECORD OF THE PROCEEDINGS, AND THAT, FOR SUCH PURPOSE, SUCH PERSON 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 DOES NOT PREPARE OR PROVIDE SUCH A RECORD.



FOR SPECIAL ACCOMMODATIONS, PLEASE NOTIFY THE CITY CLERK'S OFFICE (PHONE: 386-506-5563) AS FAR IN ADVANCE AS POSSIBLE, BUT PREFERABLY WITHIN 2 WORKING DAYS OF YOUR RECEIPT OF THIS NOTICE OR 5 DAYS PRIOR TO THE MEETING OR HEARING DATE.



HELP FOR THE HEARING IMPAIRED IS AVAILABLE THROUGH THE ASSISTIVE LISTENING SYSTEM RECEIVERS CAN BE OBTAINED FROM THE CITY CLERKS' OFFICE.

IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA), IF YOU ARE A PERSON WITH A DISABILITY WHO NEEDS AN ACCOMMODATION IN ORDER TO PARTICIPATE IN THIS PROCEEDING, YOU ARE ENTITLED, AT NO COST TO YOU, THE PROVISION OF CERTAIN ASSISTANCE. PLEASE CONTACT THE CITY CLERK FOR THE CITY OF PORT ORANGE, 1000 CITY CENTER CIRCLE, PORT ORANGE, FLORIDA 32129, TELEPHONE NUMBER 386-506-5563, CITYCLERK@PORT-ORANGE.ORG, AS FAR IN ADVANCE AS POSSIBLE, BUT PREFERABLY WITHIN 2 WORKING DAYS OF YOUR RECEIPT OF THIS NOTICE OR 5 DAYS PRIOR TO THE MEETING OR HEARING DATE. IF YOU ARE HEARING OR VOICE IMPAIRED, CONTACT THE RELAY OPERATOR AT 7-1-1 or 1-800-955-8771.

UPON REQUEST BY A QUALIFIED INDIVIDUAL WITH A DISABILITY, THIS DOCUMENT WILL BE MADE AVAILABLE IN AN ALTERNATE FORMAT. IF YOU NEED TO REQUEST THIS DOCUMENT IN AN ALTERNATE FORMAT, PLEASE CONTACT THE CITY CLERK WHOSE CONTACT INFORMATION IS PROVIDED ABOVE.

REGULAR PLANNING COMMISSION MEETING MINUTES
COUNCIL CHAMBERS – CITY HALL
1000 CITY CENTER CIRCLE
PORT ORANGE, FLORIDA
DECEMBER 15, 2022

THE REGULAR PLANNING COMMISSION MEETING of the City of Port Orange was called to order by Chairman Stan Schmidt at 5:30 p.m.

Pledge of Allegiance

Roll Call	Present:	Member Maria Mills-Benat Member Darrel "Bo" Bofamy Member Thomas Jordan Member John Junco Lance Green, Vice Chair Stan Schmidt, Chairman
	Absent:	Member Newton White
	Also Present:	Shannon Balmer, Assistant City Attorney Tracee Cody, Assistant City Clerk

DISCUSSION/ACTION

3. Consideration of Minutes

Motion to approve the November 17, 2022 meeting minutes was made by Member Thomas Jordan and Seconded by Member Maria Mills-Benat. Motion carried unanimously by voice vote.

4. APPLICATION: Variance/412 Grant Street
CASE NO.: VARC-22-0001
APPLICANT: Joseph Carrasquillo
STAFF CONTACT: Gideon Smith, Senior Planner (386) 506-5676/gidsmith@port-orange.org

A request from the applicant for a variance from Chapter 17, Section 27 of the Land Development Code, to reduce the minimum side and rear building setbacks for a property in the Commercial Industrial zoning district.

Motion to approve Case No.: VARC-22-0001 was made by Member Thomas Jordan and Seconded by Member Maria

Mills-Benat.

Gideon Smith, Senior Planner, provided details of the request and answered questions from the Commissioners.

Joseph Carrasquillo, Applicant, spoke about his decision for this request and that he hopes to build up his business.

Neighbors spoke to the Commissioners and expressed no objection to the applicant's request.

Motion carried unanimously by roll call vote.

5. APPLICATION: Subdivision Plat/Flagship Commons
CASE NO.: 22-50000004
APPLICANT: Philip C. Hollis, Flagship Companies Group LLC
STAFF CONTACT: Gwen Perney, Principal Planner (386) 506-5673/gperney@port-orange.org

A request from the applicant to subdivide ±8.35 acres into two (2) commercial lots.

Motion to approve Case No.: 22-50000004 was made by Member John Junco and Seconded by Member Thomas Jordan.

Gwen Perney, Principal Planner, provided details of the request and answered questions from the Commissioners. There was further discussion regarding tree preservation easements.

Philip Hollis, Applicant, discussed his design and answered questions from the Commissioners.

Kristine Cunningham, nearby resident and Chair of the Environmental Advisory Board, addressed her concern for the traffic pattern around the property and tree preservation.

Robert Reinhausen, citizen, requested clarification on how the retention pond and conservation area would be calculated from one lot into two lots.

Motion carried unanimously by roll call vote.

OTHER BUSINESS

6. Commissioner Comments

Commissioners wished residents a happy holiday season and look forward to the new year. They also thanked the staff for all of their efforts. Commissioner Lance Green expressed his concerns about code violations by businesses. He would like the City and staff to enforce the rules particularly within the first year of the business being established.

7. Staff Comments

There were none.

PUBLIC COMMENTS

There were none.

ADJOURNMENT – 6:10 p.m.

Chairman Stan Schmidt



STAFF REPORT

REZONING / 662 HERBERT STREET

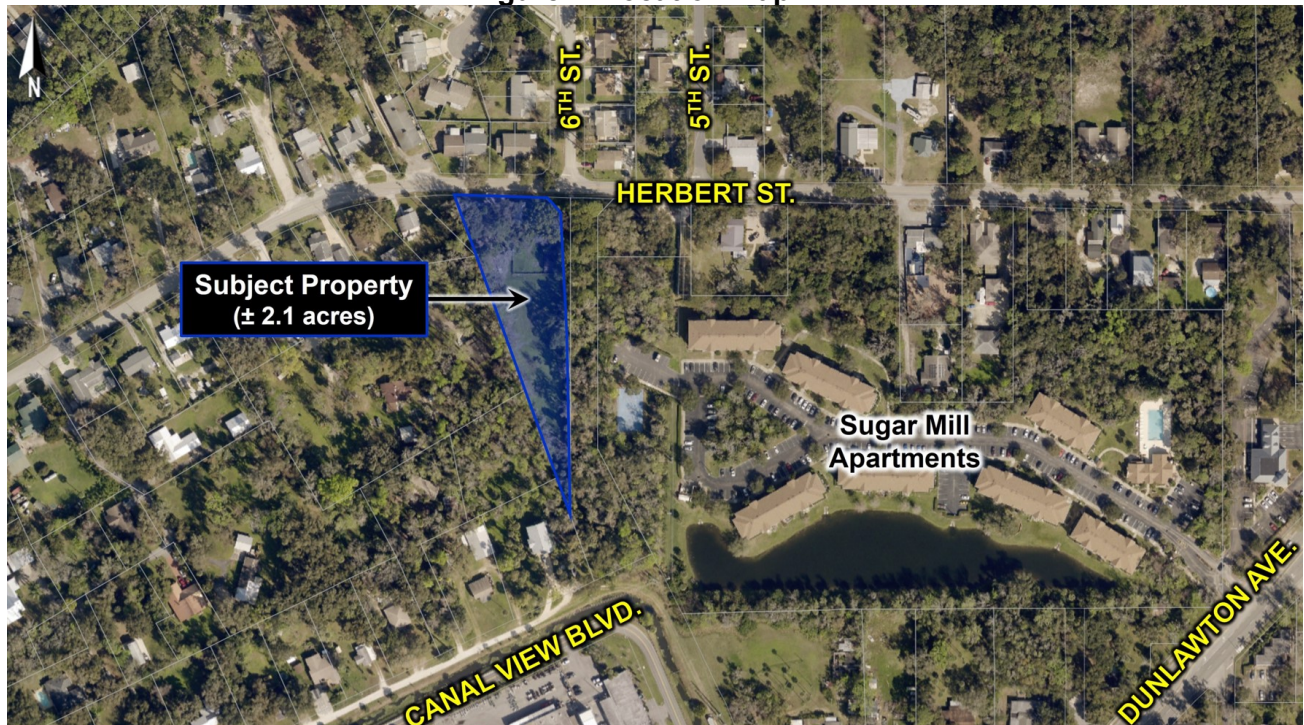
CASE NO. REZONING-22-0001

REQUEST:	Rezone $\pm$ 2.1 acres from Two-Family Residential (R-2D) to Single-Family Residential (R-10SF)
LOCATION:	662 Herbert St. (Figure 1 – Location Map)
OWNER/APPLICANT:	Elliot Meadows
STAFF CONTACT:	Gwen Perney, Principal Planner (386) 506-5673
STAFF RECOMMENDATION:	Approval
PLANNING COMMISSION:	January 26, 2023

Property Overview

The property owner and applicant, Elliot Meadows, is requesting to rezone $\pm$ 2.1 acres from Two-Family Residential (R-2D) to Single-Family Residential (R-10SF). The subject property is located on the south side of Herbert Street between Jackson Street and 6th Street (Figure 1 – Location Map). If the rezoning is approved, the applicant intends to subdivide the $\pm$ 2.1-acre subject property into two single-family lots.

Figure 1. Location Map



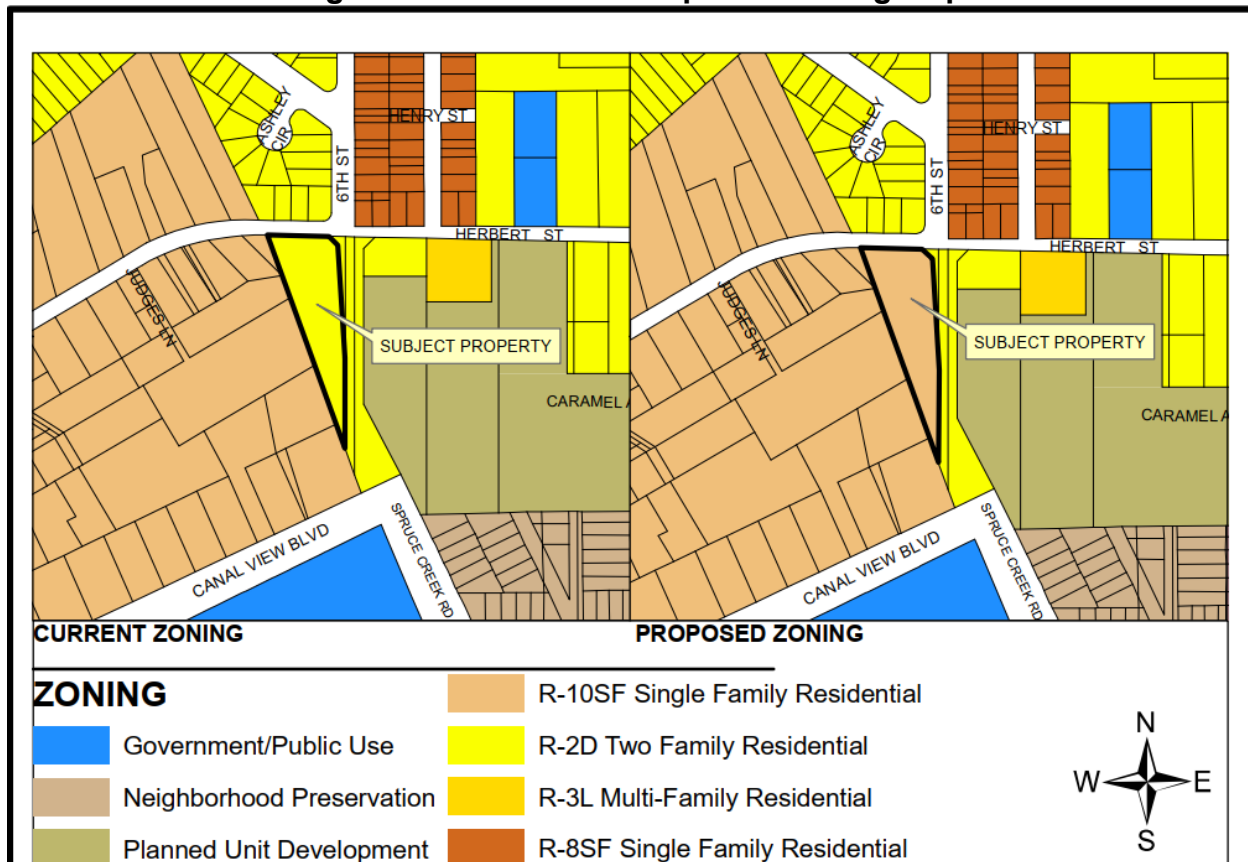
Discussion

According to the applicant, if the rezoning is approved, the applicant intends to submit a minor subdivision application to subdivide the subject property into two lots: Lot #1 will include the existing single-family home on the subject property, and Lot #2 will be a vacant lot that the applicant plans to construct a new home on. The proposed minor subdivision will be required to be reviewed by staff to ensure the dimensional and service (water, sewer, and access) requirements of the Land Development Code (LDC) are met.

The subject property currently has a Future Land Use (FLU) designation of *Suburban Residential (2-4 units per acre)* and is zoned R-2D (Two-family Residential). In 1985 when the new zoning categories were established, the zoning of the property was changed by the City administratively to R-2D, which only permits two-family dwellings. Before the City administratively rezoned the subject property to R-2D in 1985, the subject property was zoned R-2 (Residential). The previous R-2 zoning district allowed both single and two-family dwellings.

For the applicant to subdivide the property and construct a new single-family home on the subject property, it must be rezoned from a zoning district that only allows duplexes to a zoning district that allows single-family residences. The most compatible single-family zoning district for the adjacent area is R-10SF (Single-Family Residential) which permits single-family dwellings on 10,000-square-foot minimum lots (See Figure 2). The proposed rezoning will not change the conformity of the existing single-family home, which can remain on the property until it is demolished.

Figure 2. Current and Proposed Zoning Map



The proposed rezoning would not increase the number of dwellings that could be developed on the subject property. Under the current zoning, due to the unique lot shape and width of the lot at the front building setback along Herbert Street, the subject property could only be subdivided into two lots and allow the construction of one duplex (two dwelling units). If the rezoning to R-10SF is approved, the lot could be subdivided into two lots, with a single-family home on each lot.

If the rezoning and proposed minor subdivision are approved, the applicant will be required to submit a building permit before constructing a new single-family home. The building permit will be required to meet the requirements of the Florida Building Code and the LDC for the construction of a new single-family house, including building setbacks, tree preservation, and lot grading and drainage. Access to the property is available along Herbert Street.

Compatibility with Surrounding Uses and Zoning

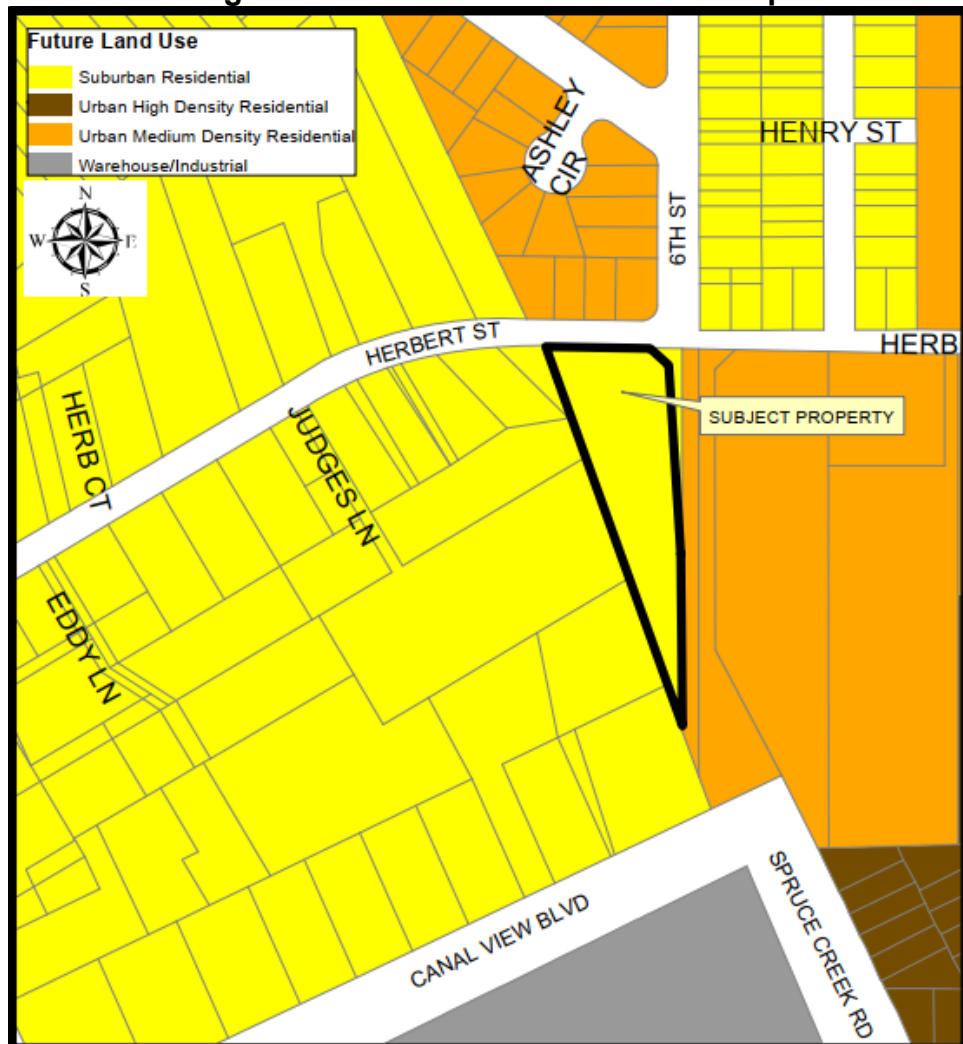
The rezoning request was reviewed according to the criteria established in Chapter 3, Section 7 of the Land Development Code (LDC) in terms of consistency with the Comprehensive Plan and compatibility with the surrounding land uses and zoning.

The proposed R-10SF zoning district is appropriate for this location and is compatible with the surrounding properties. Table 1 summarizes the land use and zoning of the adjacent properties. Based on compatibility with adjacent uses and the availability of infrastructure, the requested R-10SF zoning is appropriate for this location and is consistent with the existing FLU designation. (See Figure 2 – Current and Proposed Zoning Map and Figure 3 – Existing Future Land Use Map).

Table 1. Surrounding Land Uses and Zoning

Direction	Existing Land Use	FLU Designation	Zoning District
North	Two-family residential (Amber Village)	<i>Urban Medium Density Residential (4-8 units/acre)</i>	Two-Family Residential (R-2D)
South	Single-Family Residential	<i>Suburban Residential (2-4 units/acre)</i>	Single-Family Residential (R-10SF)
East	Single Family Residential	<i>Suburban Residential (2-4 units/acre)</i>	Single-Family Residential (R-10SF)
West	Vacant City-owned property	<i>Urban Medium Density Residential (4-8 units/acre)</i>	Two-Family Residential (R-2D)

Figure 3. Current Future Land Use Map



Consistency with Comprehensive Plan

The proposed rezoning is consistent with the Goals, Objectives, and Policies of the City's Comprehensive Plan and is compatible with adjacent properties.

The proposed R-10SF zoning district is consistent with the *Suburban Residential* (2-4 units/acre) FLU designation (Figure 3 – Future Land Use Map). The *Suburban Residential* (2-4 units/acre) FLU designation is generally characterized by detached or attached single-family homes on lots one quarter-acre in size or more. Based on consistency with the current FLU designation of the subject property, compatibility with adjacent uses, and availability of infrastructure, the requested zoning is appropriate at this location.

Public Notice

The property was posted by Staff on January 4, 2023, as required by the LDC, notifying the public of the proposed rezoning. As of the time this agenda item was prepared, there have been no phone calls or general inquiries on the proposed rezoning.

Staff Recommendation

Staff recommends approval of the request to rezone ±2.1 acres from Two-Family Residential (R-2D) to Single-Family Residential (R-10SF).

Attachment

Exhibit 1 – Dimensional Requirements and List of Permitted Uses

Exhibit 1 Dimensional Requirements and Permitted Uses

District	Minimum Living Area/D.U. (Sq. Ft.)	Minimum Lot Area (Sq. Ft.)	Minimum Lot Width (Ft.)	Maximum Building Coverage	Minimum Open Space	Minimum Building Setback (Ft.)			Maximum Height (Ft.)
						Front	Side	Rear	
R-10SF	1,200	10,000 SF	90	35%	45%	30	10	25	35
R-2D	900	5,000 SF	50/DU	40%	35%	30	10	25	35

Requested Zoning District for Subject Property:

R-10SF single-family residential district [LDC, Ch. 17, Sec. 8]

(a) Purpose and intent. The R-10SF single-family residential district is intended to protect existing suburban development and provide for future development of a similar nature, where locations away from urban activity centers suggest suburban densities.

(b) Permitted uses.

(1) Single-family detached dwellings.

(bb) Permitted uses with special development requirements (chapter 18, section 4).

(1) Community gardens (subsection 5.1).

Current Zoning District on Subject Property:

Two-family residential (R-2D) district [LDC, Ch. 17, Sec. 10]

(a) Purpose and intent. The two-family residential (R-2D) district is intended to provide relatively affordable, urban density housing, and it is intended to serve as a transitional zone between multifamily and single-family residential uses.

(b) Permitted uses.

(1) Two-family dwellings.

(bb) Permitted uses with special development requirements (chapter 18, section 4).

(1) Community gardens (subsection 5.1).

(2) Single-family dwellings (subsection 15.6).

(c) Single-family attached dwelling subdivision regulations.

(1) Utility easements allowing service to each unit shall be provided.

(2) Access easements for maintenance of common walls and other facilities shall be provided.

(3) Legal covenants, restrictions and similar provisions for the joint maintenance of structure shall be submitted to the department to be recorded contemporaneously with the plat.

(4) Where two-family dwelling development is proposed, plans shall be presented for both units simultaneously.



STAFF REPORT

MADELINE COMMONS SUBDIVISION PLAT & PLANS

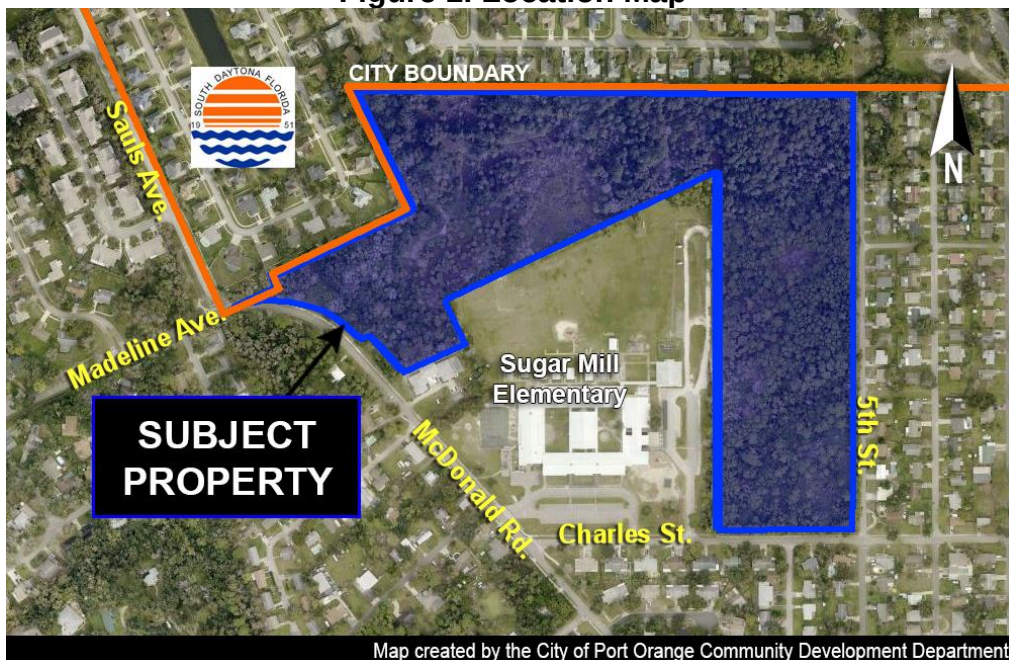
CASE NO. 22-50000003

REQUEST:	Approval of the Madeline Commons Subdivision Plat and Plans
LOCATION:	North of Charles Street, east of Madeline Avenue and McDonald Road, west of 5th Street (Figure 1)
APPLICANT:	Cody Bogart, P.E., Newkirk Engineering, Inc.
OWNER:	Madeline Commons, LLC
STAFF CONTACT:	Gwen Perney, Principal Planner (386) 506-5673
STAFF RECOMMENDATION:	Approval
PLANNING COMMISSION:	January 26, 2023

DEVELOPMENT PROPOSAL

The applicant requests approval of the Madeline Commons Subdivision Plat and Plans. If approved, the applicant intends to subdivide a ± 34.6 -acre property into 149 single-family lots, along with tracts for tree preservation, stormwater retention, and open space. The review of a subdivision plat is a ministerial review in that the approving body must only consider the technical criteria and lot dimensional requirements in the Madeline Commons Planned Unit Development (PUD) Master Development Agreement (MDA). The subject property is located north of Charles Street, east of Madeline Avenue and McDonald Road, and west of 5th Street (Location Map – Figure 1).

Figure 1. Location Map



The subject property is currently vacant, zoned Planned Unit Development (PUD), and has a Future Land Use designation of *Urban Medium Density Residential (4-8 units/acre)*. In October 2021, the City Council approved the Madeline Commons PUD Master Development Agreement (MDA), which provides the framework for developing 149 single-family home lots.

The plat and subdivision plans have been designed according to the requirements of the Madeline Commons PUD Master Development Agreement (MDA) and the City's Land Development Code (LDC). The proposed subdivision layout maintains the same lot and street layout and the number of lots (149) shown on the approved Conceptual Development Plan (CDP) in the Madeline Commons MDA. The subdivision will have access from McDonald Road, Charles Street, and 5th Street (See Figure 2 – Subdivision Plan). The following subdivision improvements will be constructed:

- Pavement resurfacing of 5th Street and piping of the open section of the ditch along the west side of 5th Street
- A round-about at the intersection of McDonald Road and the subdivision entrance at Commons Way
- A dedicated right-turn lane along Charles Street into the Sugar Mill Elementary school parent drop-off driveway
- 50-foot-wide lots along 5th Street and 40-foot-wide lots internal to the subdivision
- Public streets within the subdivision (travel lanes, 5-foot sidewalks, and streetlights)
- Stormwater drainage infrastructure, including dry ponds and swales
- Water, sewer, and irrigation infrastructure
- 20'-wide right-of-way landscape buffer along Charles Street and McDonald Road and a 10'-wide perimeter landscape buffer along the north boundary of the subdivision and adjacent to the school property
- Open space and Common Areas with Tree Conservation Easements for the preservation of trees
- 80% of all specimen trees on site will be preserved, including all three (3) historic live oaks and 16% overall tree preservation area
- 6-foot-tall privacy fence between the PUD property and the school property as requested by the Volusia County School District for security purposes.
- Compliance with all City, County, State, or Federal regulations that pertain to protected wildlife species and wetland protection and mitigation.

Figure 2. Subdivision Plan for Madeline Commons



CONCURRENCY REVIEW

Public facilities and services such as roads, public infrastructure, schools, and recreational facilities are currently available to serve the proposed 149 single-family residential lots (Table 1). The following discussion summarizes the proposed development's impacts on these public facilities and services.

Table 1 - Infrastructure Impact Assessment for 149 Single-Family Lots

DEVELOPMENT VARIABLE	IMPACTS
Population ¹	357
A.M./P.M./Daily Peak Hour Trips ²	107 / 149 / 1,456 trips
Sanitary Sewer (gallons per day) ³	23,840 gallons
Potable Water (gallons per day) ⁴	26,820 gallons
Solid Waste (lbs. Per day) ⁵	1,146 pounds
Stormwater Drainage ⁶	See Note
Recreation & Open Space ⁷	2.5 acres

Notes:

1. **Population:** 2.39 persons per household (per 2020 Census)
2. **Transportation:** ITE Trip Generation Manual, 11th Edition – Land Use Code 210
3. **Sanitary Sewer:** 160 gallons per day per Equivalent Residential Unit
4. **Potable Water:** 180 gallons per day per Equivalent Residential Unit
5. **Solid Waste:** 3.21 pounds per person per day
6. **Stormwater Drainage:** LOS standard = 25-year, 24-hour event. The drainage system will be designed to meet the requirements of the Land Development Code.
7. **Rec. & Open Space:** 7 acres per 1,000 persons (0.007 acres/person)

Water and Sewer

The City has available potable water and sanitary sewer capacity to accommodate the proposed 149-lot subdivision. All lots will be provided with stub-outs for utilities. The developer will construct potable water and sanitary sewer lines and a lift station in accordance with the approved utility plan for this project. Reclaimed water is not available in this area. A private well on the site will provide irrigation water for the subdivision.

Stormwater Drainage

The City's adopted level-of-service standard for stormwater drainage requires that all new retention/detention facilities be able to treat and convey the runoff from the 25-year, 24-hour storm event without causing flooding or pollution of receiving water bodies. In addition, there must be no net loss of stormwater retention function because of development; therefore, the subdivision property must have the same ability to store and discharge water after development as it does before development occurs. The proposed subdivision design provides stormwater retention for the 149 single-family lots and complies with all current City stormwater design requirements and standard Construction details.

The interior lots within the subdivision are designed to drain toward the streets within the subdivision (Commons Way and Bluet Drive), and the streets then drain to the retention areas throughout the subdivision. The lots along 5th Street are designed to drain to the front corners of the property where drains are connected to the retention area within the subdivision. The overall drainage system is connected to existing drainage collection points in the adjacent rights-of-way which flow to the Halifax River.

Transportation

According to the Institute of Transportation Engineers (ITE) Trip Generation Manual, the trip generation rate for 149 single-family lots is anticipated to generate 107 AM peak-hour trips, 149 PM peak-hour trips, and 1,456 daily trips. The roadways within the general area of the proposed subdivision are operating within the adopted level of service standards, and the traffic generated from the 149-lot single-family lot subdivision will not exceed the level of service standards for these roadways. Capacity exists for the estimated trips to be generated by the proposed development.

The Institute of Transportation Engineers (ITE) Trip Generation Manual is nationally recognized by transportation professionals, including transportation engineers, transportation planners, consultants, educators, technologists, and researchers for conducting vehicle trip generation rate analysis studies, determining on-site circulation patterns, performing access management studies, and determining traffic signal timing.

According to the latest traffic counts on the surrounding roadways (Charles Street, McDonald Road, and Madeline Avenue), there is capacity for vehicular traffic estimated to be generated by the 149-lot single-family lots (Table 2).

Although roadway capacity exists along the adjacent roadways, it has been observed that during the school year, cars stack within the travel lanes along Charles Street during parent pick-up and drop-off times. To minimize on-street stacking along westbound Charles Street, the subdivision plans provide additional right-of-way along Charles Street for a right-turn lane into the parent pick-up/drop-off loop on the east side of the school property to be constructed as part of the subdivision improvements. The MDA requires that this work is only done when school is not in session.

Table 2. Roadway Capacity for Adjacent Roadways (Charles St., McDonald Rd., Madeline Ave., and Nova Rd.)

Roadway Segment	Roadway Classification Per City Comp Plan	Maximum Capacity Vehicles Per Day	2021 Volume Per Day	2022 Volume Per Day	Remaining Capacity Vehicles Per Day	V/C Ratio****
Charles St. (US1 to FEC Railroad)	Local Collector*	12,744	1,408	1,615	11,129	12.67%
Charles St. (FEC Railroad to McDonald Rd.)	Local Collector*	12,744	2,158	2,239	10,505	17.57%
McDonald Rd. (Charles St. to Madeline Ave.)	Local Collector*	12,744	2,924	2,979	9,765	23.38%
Madeline Ave. (Sauls Rd. to Nova Rd.)	Minor Arterial**	14,040	4,414	5,059	8,981	36.03%
Nova Rd. (N. City Limits to Dunlawton Ave.)	Principal Arterial ***	39,800	18,000	--	21,800	45.23%

Source: The City of Port Orange, Traffic counts conducted by Traffic Engineering Data Solutions, Inc. (TEDS), 2022 and Volusia County Traffic Engineering, 2021

* Local Collector Roadway – A route that provides primary access to or through a subdivision or subdivisions and connects those developments to the major collector and arterial system.

** Minor Arterial Roadway – A route that generally interconnects with principal arterial routes and provides service to trips of shorter length and a lower level of travel mobility.

*** Principal Arterial Roadway - A route that generally serves the major centers of activity of an urban area, the highest traffic volume corridors, and the longest trip purpose and carries a high proportion of the total urban area travel on a minimum of mileage.

****Volume/Capacity (V/C) Ratio - Volume-Demand-to-Capacity Ratio compares roadway demand (vehicle volumes) with roadway supply (carrying capacity). A V/C ratio of 1.00 indicates the roadway is operating at its capacity.

Recreation and Open Space

According to the City's 2022 Concurrency Management Report, the City is not deficient in any recreational facilities categories and has sufficient facilities to support the additional population from the 149 single-family lot subdivision.

School Capacity

The Volusia County School District determined that the adopted level of service will be met, and capacity exists in the schools for the estimated 41 students that could be generated by the proposed subdivision (Exhibit B).

CONSISTENCY WITH THE COMPREHENSIVE PLAN

The proposed subdivision is consistent with the Madeline Commons PUD Master Development Agreement and Conceptual Development Plan, which have already been determined to be consistent with the City's Comprehensive Plan. The subject property has a Future Land Use (FLU) designation of *Urban Medium Density Residential (4-8 units/acre)* on the City's Future Land Use Map. According to the Comprehensive Plan, the maximum gross residential density for the 34.6-acre subject property is 276 units. The proposed development of 149 single-family lots or 4.3 units per acre on the 34.6-acre subject property is consistent with the allowable density for the current FLU designation on the subject property.

RECOMMENDATION

A review of a subdivision plat is a ministerial review in that the approving body must consider the technical criteria of the Madeline Commons PUD MDA and the Land Development Code (LDC). The plat will be approved if the technical requirements are met. Staff recommends approval of the Subdivision Plat and Plans for Madeline Commons, as all technical requirements in the Madeline Commons PUD MDA and LDC are met.

ATTACHMENTS:

1. Exhibit A – Madeline Commons Subdivision Plat and Plans
2. Exhibit B – Volusia County School Board Letter

**School Concurrency Determination
Concurrency Approval Letter**

May 6, 2022

Mr. Mark Goldshmidt
Madeline Commons, LLC
36 Charming Way
Lakewood, NJ 08701

RE : Madeline Commons – City of Port Orange
School Concurrency Case #22-04-25-001-R

Dear Mr. Goldshmidt:

District staff reviewed the information regarding the residential project known as Madeline Commons associated with 34.602 +/- acres of property. The property is located at or near the intersection of S Nova Rd and Madeline Av within Port Orange city limits. Information provided in the school concurrency application indicates the development activity will consist of one hundred and forty-nine (149) single family dwelling units.

The district uses a county wide Student Generation Rate (SGR) of (0.273) per single family dwelling unit to calculate projected students. By applying the SGR to the use types in Table 1 below, the project could generate forty-one (41) full time students.

Table 1

UNIT TYPE	SGR	UNIT COUNT	STUDENTS GENERATED
Single Family Dwelling Unit	0.273	149	41
Multi Family Dwelling Unit	0.127	0	0
Mobile/ Manufactured Home Dwelling Unit	0.047	0	0
Total		149	41

The Concurrency Analysis (Table 2, next page) adjusts for impacts to the Concurrency Service Areas (CSAs) by accounting for current school year enrollments, existing reservations at the impacted schools, and the projected students generated by the applicant. These factors give an associated utilization or Level of Service (LOS) percentage for each CSA.

The schools impacted by this development are Sugar Mill Elementary School, Silver Sands Middle School, and Spruce Creek High School.

Concurrency Analysis

Table 2

Schools	Adopted LOS	SY 2021/22 Enrollment	Active Reservations	Existing LOS w/ Res	Students Generated by Request	Result LOS
Sugar Mill Elementary	115%	594	45	100%	18	103%
Silver Sands Middle	115%	1,262	24	110%	11	111%
Halifax CSA (Spruce Creek High)	120%	2,481	35	100% (120%)	12	100% (121%)
Other					4	

The adopted LOS standard for elementary and middle school is (115%) of permanent student stations, and (120%) for high school CSAs. This projected increase in students will not exceed the adopted LOS at the elementary and middle school levels; additionally, it will exceed the adopted LOS for the high school level at 121% utilization for Spruce Creek High. However, when evaluating based on the Halifax concurrency service area, the average utilization is below 120%, the threshold requiring mitigation. Therefore, the school district does not have an objection to the proposed site plan.

It is noted that through the City Planned Development process, the Applicant has agreed to build a right turn lane on Charles Street to serve Sugar Mill Elementary. Minimum planning considerations should also include pedestrian and vehicular access, safety, connectivity, and buffering.

Please note that the School Board has the right to adjust the attendance boundaries to balance the student enrollment populations at these area schools. Therefore, students generated from this project may not attend the current assigned schools.

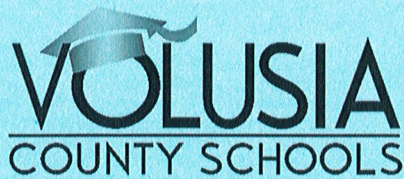
Should you need additional information, please contact me at (386) 947-8786, ext. 50709.

Sincerely,



Stephanie B. Doster
Coordinator, Planning

CC: Rachel B. Hazel, Interim Superintendent of Schools
Steven Grube, Director, Planning and Construction
Gwen Perney, Principal Planner, City of Port Orange
Lisa V. Divina, Volusia County School Board Project File



Certificate of School Concurrency

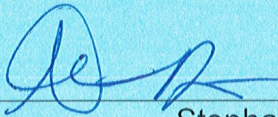
VOLUSIA COUNTY SCHOOL BOARD

Project Information	
Project Name	Madeline Commons
VCSB Project #	22-04-25-001-R
Jurisdiction Project #	
Parcel ID Numbers	6304-02-22-0010; 6304-00-00-0021; 6337-01-13-0010; 6337-01-13-0017;
Project Location	S Nova Rd and Madeline Av
# of Residential Units	149
Residential Unit Type	Single Family Homes
Property Owners	Madeline Commons, LLC
Applicant/Agent Name	Mark Goldshmidt

This School Concurrency Certificate shall reserve student stations for the above referenced project and shall confirm that said project meets the School Concurrency requirements of the adopted Interlocal Agreement for Public School Facility Planning.

School Concurrency Analysis					
School Levels	Elementary	Middle	High	Other	Total Student Stations Reserved
Students Generated	18	11	12	4	41
<u>Comments:</u> This certificate is required to be included with the building permit submittal(s) as proof of school concurrency.					

This concurrency reservation shall expire two (2) years from the date of issuance of this certificate.


Stephanie B. Doster
Coordinator, Planning

May 6, 2022
Issue Date

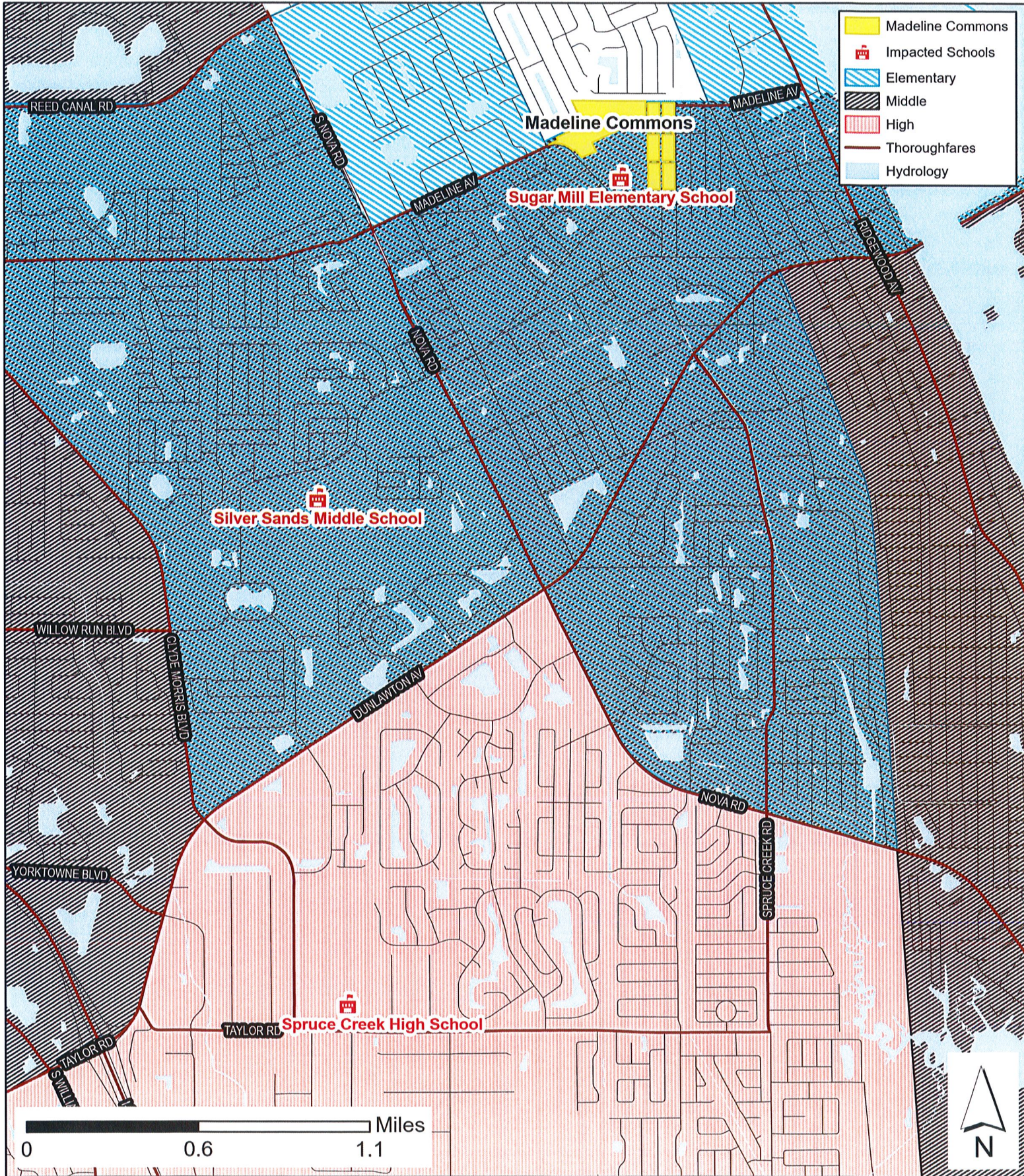
VCSB Schools Impacted by Development

School Concurrency Review -

Madeline Commons



Created by Facilities Services
May 2022



MADELINE COMMONS

A REPLAT OF ALL OF BLOCKS 22-27 AND THOSE PLATTED, UNIMPROVED RIGHTS-OF-WAYS, LYING NORTH OF BLOCKS 24 AND 25, WEST OF BLOCKS 25-27, BETWEEN BLOCKS 24-25, 23-26, 22-27, 22-23, 26-27, 23-24, AND 25-26, PORTANA PLAT NO. 1, MAP BOOK 10, PAGE 107, AND A PORTION OF GOVERNMENT LOT 2 OF SECTION 4, TOWNSHIP 16 SOUTH, RANGE 33 EAST, AND A PORTION OF LOT 2, BLOCK 12, MAP OF DUNLAWTON, MAP BOOK 14, PAGE 83. SITUATED IN SECTION 04, TOWNSHIP 16 SOUTH, RANGE 33 EAST, CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA.

LEGAL DESCRIPTION:

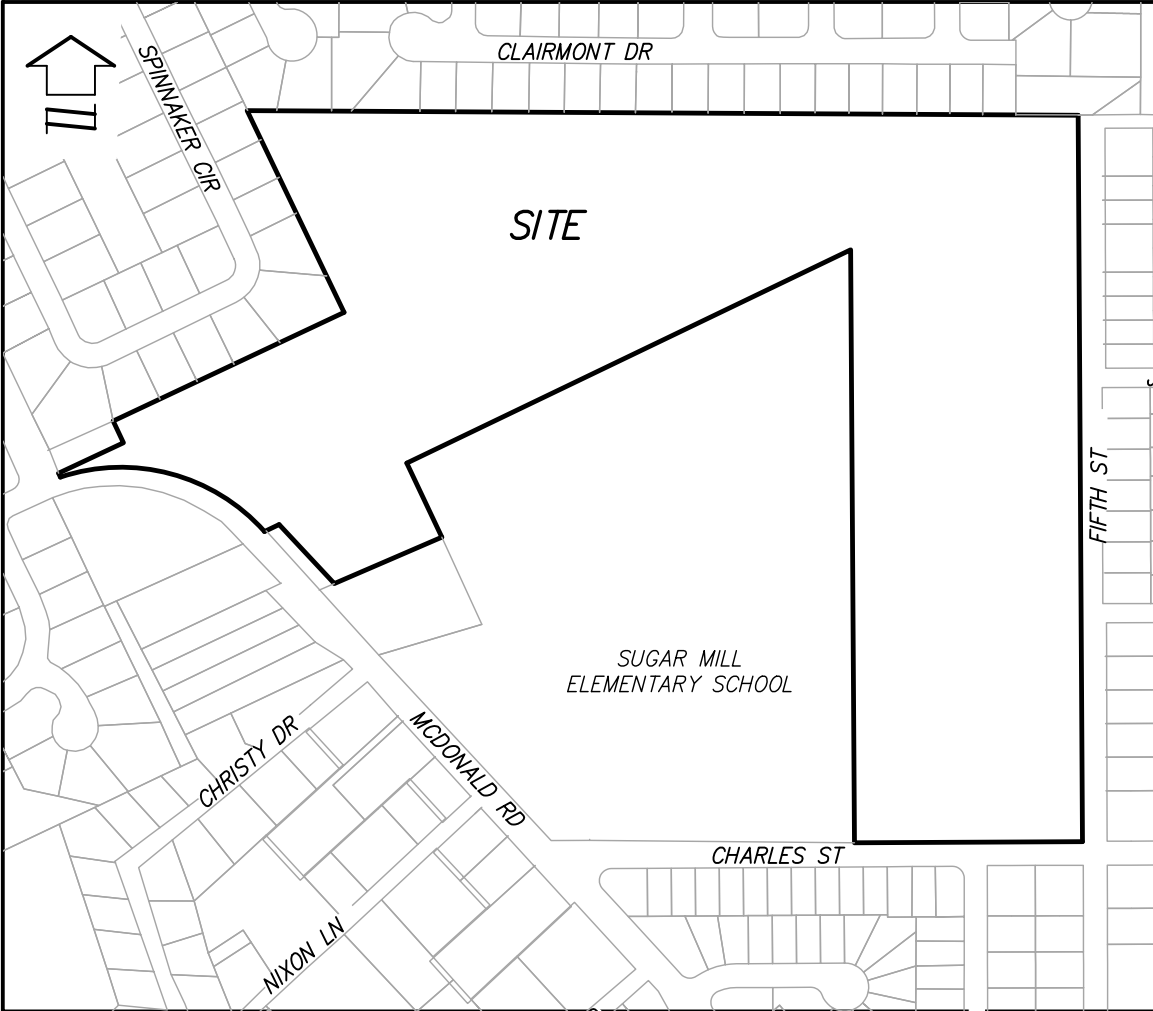
ALL OF BLOCKS 22-27 AND THOSE PLATTED UNIMPROVED RIGHTS-OF-WAYS LYING NORTH OF BLOCKS 24 AND 25, WEST OF BLOCKS 25-27, BETWEEN BLOCKS 24-25, 23-26, 22-27, 22-23, 26-27, 23-24, AND 25-26, PORTANA PLAT NO. 1, ACCORDING TO THE PLAT THEREOF RECORDED IN MAP BOOK 10, PAGE 107, OF THE PUBLIC RECORDS VOLUSIA COUNTY, FLORIDA, AND A PORTION OF GOVERNMENT LOT 2 OF SECTION 4, TOWNSHIP 16 SOUTH, RANGE 33 EAST, AND A PORTION OF LOT 2, BLOCK 12, MAP OF DUNLAWTON, ACCORDING TO THE PLAT THEREOF RECORDED IN MAP BOOK 14, PAGE 83, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS.

COMMENCE AT THE NORTHEAST CORNER OF SECTION 4, TOWNSHIP 16 SOUTH, RANGE 33 EAST; THENCE RUN N89°39'35"W ALONG THE NORTH LINE OF SAID SECTION 4, A DISTANCE OF 1463.48 FEET TO THE POINT OF BEGINNING; THENCE RUN S00°20'37"E, A DISTANCE OF 1513.02 FEET TO THE NORTH RIGHT-OF-WAY OF CHARLES STREET; THENCE RUN S89°43'49"W ALONG SAID NORTH RIGHT-OF-WAY, A DISTANCE OF 476.00 FEET; THENCE DEPARTING SAID NORTH RIGHT-OF-WAY, RUN N00°22'27"W, A DISTANCE OF 1234.90 FEET; THENCE S64°20'18"W, A DISTANCE OF 1025.66 FEET; THENCE S25°18'45"E, A DISTANCE OF 170.50 FEET; THENCE S66°38'02"W, A DISTANCE OF 243.77 FEET; THENCE N43°03'47"W, A DISTANCE OF 168.44 FEET; THENCE S64°20'18"W, A DISTANCE OF 33.99 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY OF MCDONALD ROAD AND A POINT ON A NON-TANGENT CURVE CONCAVE SOUTHERLY HAVING A RADIUS OF 400.03 FEET, A CENTRAL ANGLE OF 66°41'22", A CHORD BEARING OF N75°05'16"W AND A CHORD DISTANCE OF 439.78 FEET; THENCE RUN WESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 465.32 FEET TO THE INTERSECTION OF THE NORTH RIGHT-OF-WAY OF SAULS STREET AND THE NORTHEASTERLY RIGHT-OF-WAY OF SAULS STREET; THENCE RUN N25°19'35"W ALONG THE NORTHERLY RIGHT-OF-WAY SAULS STREET, A DISTANCE OF 9.09 FEET; THENCE DEPARTING SAID NORTHERLY RIGHT-OF-WAY, RUN N64°49'03"E, A DISTANCE OF 149.27 FEET; THENCE N25°10'57"W, A DISTANCE OF 50.00 FEET TO THE SOUTH LINE OF HARBORSIDE VILLAGE SUBDIVISION PHASE IV, MAP BOOK 47, PAGE 166; THENCE N64°49'03"E ALONG SAID SOUTH LINE, A DISTANCE OF 531.53 FEET TO THE EAST LINE OF SAID HARBORSIDE VILLAGE SUBDIVISION PHASE IV; THENCE N25°40'32"W ALONG SAID EAST LINE, A DISTANCE OF 466.30 FEET TO A POINT ON THE SOUTH LINE OF LANTERN PARK UNIT 2, MAP BOOK 32, PAGE 113, AND COVENTRY FOREST ON THE HILL PHASE IV, MAP BOOK 47, PAGE 176, AND COVENTRY FOREST ON THE HILL PHASE VI, MAP BOOK 36, PAGE 198, AND COVENTRY FOREST SUB SECTION SEVEN, MAP BOOK 42, PAGE 68, AND COVENTRY FOREST ON THE HILL PHASE I, MAP BOOK 44, PAGE 116, THENCE RUN S89°40'58"E ALONG SAID SOUTH LINES, A DISTANCE OF 1731.11 FEET TO THE POINT OF BEGINNING;

CONTAINING 1507262 SQUARE FEET OR 34.60 ACRES MORE OR LESS.

GENERAL NOTES:

- BEARINGS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 WITH 2011 ADJUSTMENT DERIVING A BEARING OF S89°40'58"E ALONG THE SOUTH LINE OF LANTERN PARK UNIT 2, MB. 32, PG. 113, AND COVENTRY FOREST ON THE HILL PHASE IV, MB. 47, PG. 176, AND COVENTRY FOREST ON THE HILL PHASE VI, MB. 36, PG. 198, AND COVENTRY FOREST SUB SECTION SEVEN, MB. 42, PG. 68, AND COVENTRY FOREST ON THE HILL PHASE I, MB. 44, PG. 116
- ALL LOT LINES INTERSECTING CURVES ARE RADIAL UNLESS NOTED OTHERWISE.
- ALL PLATTED UTILITY EASEMENTS, EXCLUSIVE OF PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY, SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES. PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES PURSUANT TO SECTION 177.091(28), FLORIDA STATUTES. SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE AND OPERATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL SAFETY CODE AS ADOPTED BY THE FLORIDA PUBLIC SERVICE COMMISSION.
- ALL DRAINAGE EASEMENTS SHOWN HEREON ARE DEDICATED TO THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC., AND THE CITY OF PORT ORANGE.
- TRACTS "D", "E", AND "F", DEPICTED HEREON AS COMMON OPEN SPACE AND TREE PRESERVATION AREAS WILL BE OWNED AND MAINTAINED BY MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC. ITS SUCCESSORS AND/OR ASSIGNS FOR THE PURPOSE OF COMMON OPEN SPACE AND TREE PRESERVATION.
- TRACT C (LIFT STATION), IS TO BE OWNED AND MAINTAINED BY THE CITY OF PORT ORANGE AS DEEDED IN FEE SIMPLE BY SEPARATE INSTRUMENT.
- TRACT A (BIO-RETENTION POND) AND TRACT B (BIO-RETENTION POND/ PRESERVATION EASEMENT), ARE TO BE OWNED AND MAINTAINED BY THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC., WITH ACCESS EASEMENTS RIGHTS IN FAVOR OF THE CITY OF PORT ORANGE.
- LANDSCAPE BUFFERS SHOWN WITHIN TRACTS A, B, D, E AND F ARE TO BE CONTROLLED AND MAINTAINED BY THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC. THERE WILL BE NO CLEARING OR ALTERATION UNLESS OTHERWISE SHOWN ON APPROVED PLANS BY THE CITY OF PORT ORANGE.
- TREE PRESERVATION EASEMENTS OVER THE SPECIMEN AND HISTORIC TREES WITHIN THE SITE AND SHOWN HEREON ARE HEREBY GRANTED TO THE CITY OF PORT ORANGE.
- THIS PLAT IS SUBJECT TO ALL EASEMENTS OF RECORD AND RESERVATIONS OF EASEMENTS, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITY, AND ACCESS EASEMENTS DEDICATED OR GRANTED HEREON WHICH SHALL BE LOCATED AS FOLLOWS EXCEPT AS OTHERWISE NOTED ON THE PLAT:
ENTIRE STREET FRONTAGES OF LOTS AND COMMON OPEN SPACE AREAS: 12.00 FEET WIDE
- THIS PLAT IS SUBJECT TO DECLARATION OF COVENANTS AND RESTRICTIONS AS RECORDED IN OFFICIAL RECORDS BOOK____, PAGE____, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.
- THIS PLAT IS SUBJECT TO MADELINE COMMONS PLANNED UNIT DEVELOPMENT MASTER DEVELOPMENT AGREEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 8154, PAGE 833, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.
- THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC., A FLORIDA NOT-FOR-PROFIT CORPORATION SHALL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE DRAINAGE SYSTEM SERVING THE AREA WITHIN THE BOUNDARIES OF THIS PLOT, AS DEPICTED ON THE STORMWATER MANAGEMENT PLAN APPROVED FOR THE DEVELOPMENT BY THE CITY OF PORT ORANGE, FLORIDA. SHOULD THE ASSOCIATION FAIL TO PERFORM THE MAINTENANCE OF THE DRAINAGE AND STORMWATER MANAGEMENT SYSTEMS, THE CITY OF PORT ORANGE SHALL BE ENTITLED TO ENTER UPON THE COMMON AREAS AND DESIGNATED EASEMENT AREAS TO PERFORM MAINTENANCE, REPAIR, OR REPLACE THE FACILITIES; AND, SHALL HAVE THE RIGHT TO LIEV ALL OWNERS OF RECORD IN PROPERTY FOR THE COST OF SUCH MAINTENANCE, REPAIR, AND REPLACEMENT, AS DEEMED BY THE CITY TO BE NECESSARY. IN THE EVENT OF TERMINATION, DISSOLUTION, OR FINAL LIQUIDATION OF THE ASSOCIATION, THE RESPONSIBILITY FOR THE OPERATION AND MAINTENANCE OF THE SURFACE WATER OR STORMWATER MANAGEMENT SYSTEM WILL BE TRANSFERRED TO AND ACCEPTED BY AN ENTITY WHICH COMPLIES WITH SECTION 40C-42.027, F.A.C. AND BE APPROVED BY THE SAINT JOHNS RIVER WATER MANAGEMENT DISTRICT PRIOR TO SUCH TERMINATION, DISSOLUTION, OR LIQUIDATION.
- ALL OTHER EASEMENTS ARE SUBORDINATE TO ANY PRESERVATION EASEMENTS DEDICATED HEREON. THERE SHALL BE NO REMOVAL OR DISTURBANCE OF ANY VEGETATION WITHIN SUCH PRESERVATION EASEMENTS. ANY PROPOSED CONSTRUCTION OR OTHER USE WITHIN A PRESERVATION EASEMENT MUST BE REVIEWED AND APPROVED BY THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE PRESERVATION EASEMENT.
- TREE PRESERVATION EASEMENT AS DEFINED ON THIS PLOT IS FOR THE EXPRESS PURPOSE OF THE PRESERVATION AND LONGEVITY OF THE TREES THEREIN. ACTIONS DETRIMENTAL TO TREE HEALTH SURVIVAL WITHIN THE BOUNDARIES OF THE DRIPLINE ARE PROHIBITED WITHOUT THE EXPRESS PERMISSION OF THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE PRESERVATION EASEMENT. NOTHING HEREIN SHALL, HOWEVER, BE CONSTRUCTED TO PREVENT NATURAL VEGETATION WITHIN THE EASEMENT AREA FROM BEING CLEARED BY HAND TO PROVIDE A NEAT, MANICURED APPEARANCE. IN ADDITION, NOTHING HEREIN SHALL BE CONSTRUED TO PREVENT THE PLACEMENT OF SOIL, IRRIGATION AND LANDSCAPE PLANTS OR TO PREVENT NORMAL LAWN MAINTENANCE SUCH AS MOWING, EDGING AND WEEDING NOT HARMFUL TO THE OBJECTIVE OF TREE PRESERVATION WITHIN THE EASEMENT AREA. ANY PROPOSED CONSTRUCTION OR OTHER USE WITHIN A PRESERVATION EASEMENT MUST BE REVIEWED AND APPROVED BY THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE PRESERVATION EASEMENT.
- THE NON-VEHICULAR ACCESS EASEMENTS LOCATED ON LOTS 39, 70, 125 AND 127 ARE TO BE GRANTED TO AND CONTROLLED BY THE CITY OF PORT ORANGE.
- PLANTINGS AND IRRIGATION SYSTEM IN THE ROUND-ABOUT WILL BE OWNED AND MAINTAINED BY THE DEVELOPMENT AND THEIR HOA.



VICINITY MAP
1"=400'

LEGEND AND ABBREVIATIONS:

LB	LICENSED BUSINESS	U.E.	UTILITY EASEMENT
NO.	NUMBER	A.E.	ACCESS EASEMENT
LS	LAND SURVEYOR	MB	MAP BOOK
I.D.	IDENTIFICATION	ORB	OFFICIAL RECORDS BOOK
ORB	OFFICIAL RECORDS BOOK	PG(S)	PAGE(S)
E	CENTERLINE	R/W	RIGHT OF WAY
R	RADIUS	ESMT	EASEMENT
L	ARC LENGTH	SEC	SECTION
Δ	DELTA (CENTRAL ANGLE)	RLS	REGISTERED LAND SURVEYOR
C.D.	CHORD LENGTH	CMF	CONCRETE MONUMENT FOUND
C.B.	CHORD BEARING	IRC	IRON ROD AND CAP
R	RADIUS	IR	IRON ROD
POC	POINT ON CURVE	IP	IRON PIPE
POL	POINT ON LINE	PLS	PROFESSIONAL LICENSED SURVEYOR
PCC	POINT OF COMPOUND CURVATURE	N.R.	NON-RADIAL LINE
PRC	POINT OF REVERSE CURVATURE	N.V.A.	NON-VEHICULAR ACCESS EASEMENT
PC	POINT OF CURVATURE	H.O.A.	HOMEOWNERS ASSOCIATION
PT	POINT OF TANGENCY	(M)	MEASURED DISTANCE
PNT	POINT OF NON-TANGENCY	□	FOUND CONCRETE MONUMENT AS NOTED
PI	POINT OF INTERSECTION	⊙	FOUND NAIL & DISK AS NOTED
P.O.C.	POINT OF COMMENCEMENT	⊙	SET NAIL & DISK (LB 8011)
P.O.B.	POINT OF BEGINNING	●	FOUND IRON ROD & CAP AS NOTED
O.A.	OVERALL	●	FOUND IRON ROD AS NOTED
D.E.	DRAINAGE EASEMENT	○	SET 5/8" IRON ROD & CAP (LB 8011)
P.U.E.	PUBLIC UTILITY EASEMENT		
D.U.E.	DRAINAGE AND UTILITY EASEMENT		

SHEET INDEX

SHEET 1	COVER SHEET, LEGAL DESCRIPTION, NOTES
SHEET 2	KEY SHEET
SHEET 3-7	DETAILS SHEET
SHEET 8	DRAINAGE EASEMENT DETAILS SHEET

PLANNING COMMISSION CERTIFICATE OF APPROVAL:

THIS STATEMENT HEREBY CERTIFIES THAT THE PLAT ENTITLED "MADELINE COMMONS" WAS APPROVED BY THE PORT ORANGE PLANNING COMMISSION ON _____.

BY: _____

CHAIRMAN OF THE PORT ORANGE PLANNING COMMISSION

CITY COUNCIL CERTIFICATE OF APPROVAL

THIS STATEMENT HEREBY CERTIFIES THAT THE PLAT ENTITLED "MADELINE COMMONS" WAS APPROVED BY THE PORT ORANGE CITY COUNCIL ON _____.

BY: _____
MAYOR OF THE CITY OF PORT ORANGE, FLORIDA

ATTEST: _____
CITY CLERK OF THE CITY OF PORT ORANGE, FLORIDA

MAP BOOK:

PAGE:

MADELINE COMMONS DEDICATION

KNOW ALL MEN BY THESE PRESENTS, THAT MADELINE COMMONS, LLC BEING THE OWNER IN FEE SIMPLE OF THE LANDS SHOWN AND DESCRIBED HEREON AS THE PLAT ENTITLED MADELINE COMMONS, LOCATED IN THE CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA, HEREBY DEDICATES THE SAID LANDS AND PLAT FOR THE USES AND PURPOSES HEREIN EXPRESSED. ALL STREET AND ROAD RIGHTS OF WAY SHOWN ON THE PLAT ARE, UNLESS OTHERWISE INDICATED, DEDICATED TO THE CITY OF PORT ORANGE. ALL POTABLE WATER, RECLAIMED WATER, AND SANITARY SEWER MAINS CONSTRUCTED WITHIN THE AREA ENCOMPASSED WITHIN THE PLAT ARE DEDICATED TO THE CITY OF PORT ORANGE. ALL TREE PRESERVATION, DRAINAGE, MAINTENANCE, UTILITY & ACCESS EASEMENTS SHOWN OR DESCRIBED ON THE PLAT ARE, UNLESS OTHERWISE INDICATED, GRANTED TO THE CITY OF PORT ORANGE FOR THE PURPOSES DESCRIBED IN THE GENERAL NOTES. ALL DRAINAGE AND MAINTENANCE EASEMENTS ARE GRANTED TO MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC. FOR THE PURPOSES DESCRIBED IN THE GENERAL NOTES. TRACTS A, B, D, E, AND F ARE ALL GRANTED TO MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC. FOR THE PURPOSES DESCRIBED IN THE GENERAL NOTES. IN WITNESS WHEREOF, THE OWNER HAS CAUSED THESE PRESENTS TO BE SIGNED BY THE OFFICER NAMED BELOW ON _____, A.D. 2022.

BY: MADELINE COMMONS, LLC, A FLORIDA LIMITED LIABILITY COMPANY

NAME: MOISHE GOLDSCHMIDT

SIGNED: _____

TITLE: MANAGER

WITNESS (SIGNATURE)

WITNESS (PRINTED)

WITNESS (SIGNATURE)

WITNESS (PRINTED)

STATE OF FLORIDA, COUNTY OF VOLUSIA

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____, 2022, BY MOISHE GOLDSCHMIDT AS MANAGER OF MADELINE COMMONS LLC, A FOREIGN LIMITED LIABILITY COMPANY ON BEHALF OF THE COMPANY. SAID PERSON ACKNOWLEDGED BEFORE ME BY MEANS OF [_____] PHYSICAL PRESENCE OR [_____] ONLINE NOTARIZATION AND [_____] IS PERSONALLY KNOWN TO ME OR [_____] HAS PRODUCED [_____] AS IDENTIFICATION.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND SEAL ON THE ABOVE DATE.

SIGNATURE OF NOTARY _____

NOTARY PRINTED NAME _____

MY COMMISSION EXPIRES _____

MY COMMISSION NO. _____

QUALIFICATION STATEMENT OF SURVEYOR AND MAPPER

KNOW ALL MEN BY THESE PRESENTS, THAT THE UNDERSIGNED BEING A PROFESSIONAL SURVEYOR AND MAPPER HAS PREPARED THE FOREGOING PLAT AND IT WAS MADE UNDER MY DIRECTION AND SUPERVISION; AND THAT THIS PLAT COMPLIES WITH ALL OF THE SURVEY REQUIREMENTS AS REQUIRED BY CHAPTER 177, FLORIDA STATUTES; AND THAT SAID LAND IS LOCATED IN ORANGE COUNTY, FLORIDA.

WILLIAM P. HINKLE _____

DATE _____

FLORIDA REGISTRATION NUMBER: 4633

(SEAL)

DEWBERRY

131 WEST KALEY STREET

ORLANDO, FLORIDA 32806

CERTIFICATE OF AUTHORIZATION NUMBER LB 8011

REVIEW BY SURVEYOR AND MAPPER FOR THE CITY

I HEREBY CERTIFY TO THE CITY, THAT I HAVE REVIEWED THE FOREGOING PLAT FOR COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 177, PART I FLORIDA STATUTES, AND THAT I HAVE PROVIDED BOTH THE CITY AND THE SURVEYOR AND MAPPER OF RECORD A LIST OF DEVIATIONS, IF ANY, FROM SUCH REQUIREMENTS.

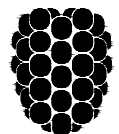
(SIGNATURE) _____ DATE: _____

PRINT NAME/REGISTRATION NUMBER _____

CERTIFICATE OF CLERK

I HEREBY CERTIFY THAT I HAVE EXAMINED THE FOREGOING PLAT AND FIND THAT IT COMPLIES IN FORM, WITH ALL THE REQUIREMENTS OF CHAPTER 177, PART I FLORIDA STATUTES, AND THAT IT WAS FILED FOR RECORD ON _____ AT _____ A.M./P.M.

CLERK OF CIRCUIT COURT
VOLUSIA COUNTY, FLORIDA



Dewberry

110 WEST INDIANA AVENUE, SUITE 202
DELAND, FLORIDA 32720
PHONE: 386.785.0468 FAX: 386.785.0715
WWW.DEWBERRY.COM

CERTIFICATE OF AUTHORIZATION NO. LB 8011

NOTICE

THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT.

THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.

MADELINE COMMONS

MAP BOOK:

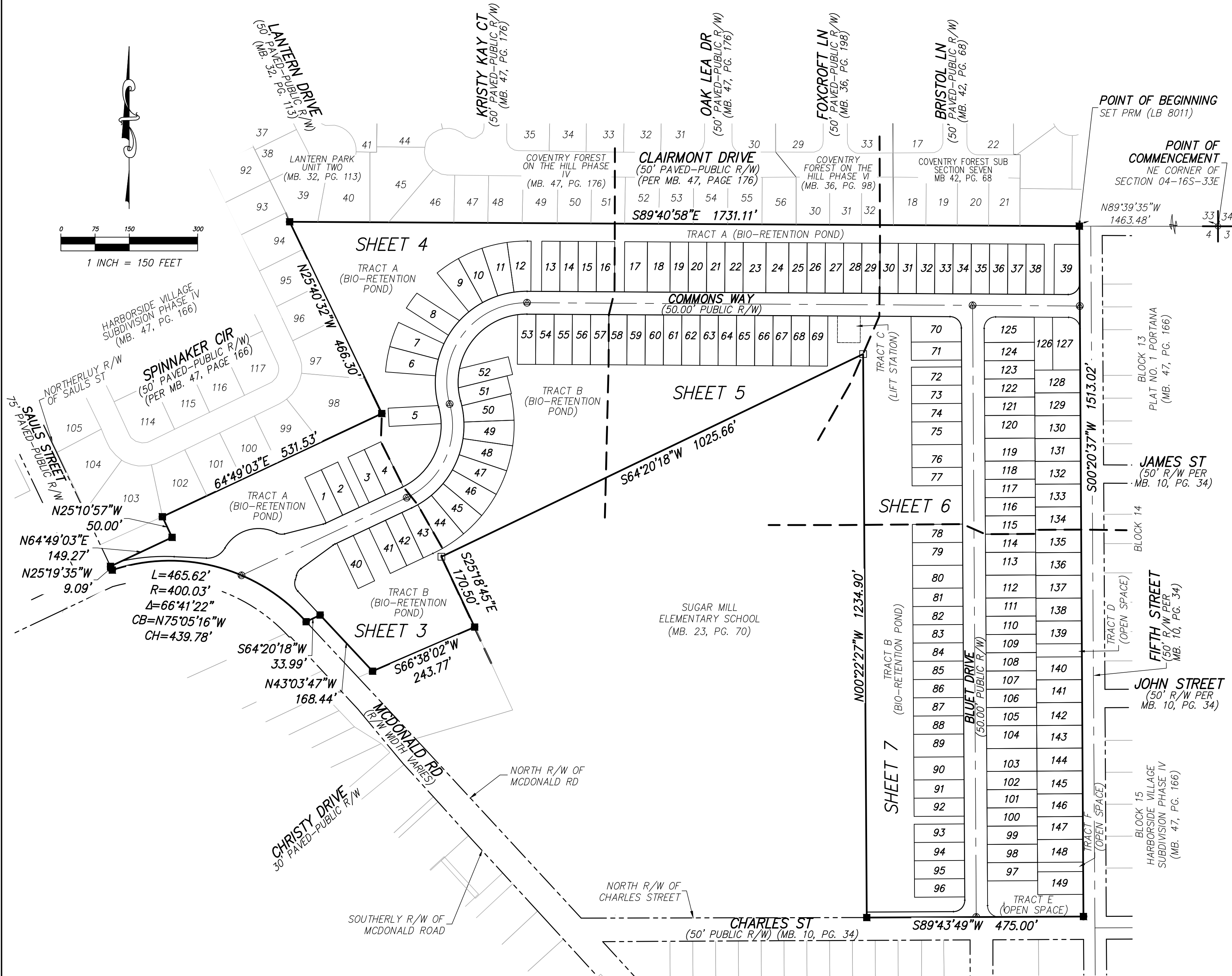
PAGE:

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SITUATED IN SECTION 04, TOWNSHIP 16 SOUTH, RANGE 33 EAST, CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA.

GENERAL NOTES:

1. BEARINGS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 WITH 2011 ADJUSTMENT DERIVING A BEARING OF S89°40'58"E ALONG THE SOUTH LINE OF LANTERN PARK UNIT 2, MB. 32, PG. 113, AND COVENTRY FOREST ON THE HILL PHASE IV, MB. 47, PG. 176, AND COVENTRY FOREST ON THE HILL PHASE VI, MB. 36, PG. 198, AND COVENTRY FOREST SUB SECTION SEVEN, MB. 42, PG. 68, AND COVENTRY FOREST ON THE HILL PHASE 1, MB. 44, PG. 116
2. ALL LOT LINES INTERSECTING CURVES ARE RADIAL UNLESS NOTED OTHERWISE.
3. ALL PLATTED UTILITY EASEMENTS, EXCLUSIVE OF PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY, SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES PURSUANT TO SECTION 177.091(28), FLORIDA STATUTES. SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE AND OPERATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL SAFETY CODE AS ADOPTED BY THE FLORIDA PUBLIC SERVICE COMMISSION.
4. ALL DRAINAGE EASEMENTS SHOWN HEREON ARE DEDICATED TO THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC., AND THE CITY OF PORT ORANGE.
5. TRACTS "D", "E", AND "F", DEPICTED HEREON AS COMMON OPEN SPACE AND TREE PRESERVATION AREAS WILL BE OWNED AND MAINTAINED BY MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC. ITS SUCCESSORS AND/OR ASSIGNS FOR THE PURPOSE OF COMMON OPEN SPACE AND TREE PRESERVATION.
6. TRACT C (LIFT STATION), IS TO BE OWNED AND MAINTAINED BY THE CITY OF PORT ORANGE AS DEEDED IN FEE SIMPLE BY SEPARATE INSTRUMENT.
7. TRACT A (BIO-RETENTION POND) AND TRACT B (BIO-RETENTION POND/ PRESERVATION EASEMENT) ARE TO BE OWNED AND MAINTAINED BY THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC. WITH ACCESS EASEMENTS RIGHTS IN FAVOR OF THE CITY OF PORT ORANGE.
8. LANDSCAPE BUFFERS SHOWN WITHIN TRACTS A, B, D, E AND F ARE TO BE CONTROLLED BY THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC. THERE WILL BE NO CLEARING OR ALTERATION UNLESS OTHERWISE SHOWN ON APPROVED PLANS BY THE CITY OF PORT ORANGE.
9. TREE PRESERVATION EASEMENTS OVER THE SPECIMEN AND HISTORIC TREES WITHIN THE SITE AND SHOWN HEREON ARE HEREBY GRANTED TO THE CITY OF PORT ORANGE.
10. THIS PLAT IS SUBJECT TO ALL EASEMENTS OF RECORD AND RESERVATIONS OF EASEMENTS, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITY, AND ACCESS EASEMENTS DEDICATED OR GRANTED HEREON WHICH SHALL BE LOCATED AS FOLLOWS EXCEPT AS OTHERWISE NOTED ON THE PLAT:

ENTIRE STREET FRONTS OF LOTS AND COMMON OPEN SPACE AREAS:
12.00 FEET WIDE
11. THIS PLAT IS SUBJECT TO DECLARATION OF COVENANTS AND RESTRICTIONS AS RECORDED IN OFFICIAL RECORDS BOOK _____, PAGE _____, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.
12. THIS PLAT IS SUBJECT TO MADELINE COMMONS PLANNED UNIT DEVELOPMENT MASTER DEVELOPMENT AGREEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 8154, PAGE 833, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.
13. THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC., A FLORIDA NOT-FOR-PROFIT CORPORATION, SHALL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE DRAINAGE SYSTEM SERVING THE AREA WITHIN THE BOUNDARIES OF THIS PLOT, AS DEPICTED ON THE STORMWATER MANAGEMENT PLAN APPROVED FOR THE DEVELOPMENT BY THE CITY OF PORT ORANGE, FLORIDA. SHOULD THE ASSOCIATION FAIL TO PERFORM THE MAINTENANCE OF THE DRAINAGE AND STORMWATER MANAGEMENT SYSTEMS, THE CITY OF PORT ORANGE SHALL BE ENTITLED TO ENTER UPON THE COMMON AREAS AND DESIGNATED EASEMENT AREAS TO PERFORM MAINTENANCE, REPAIR, OR REPLACE THE FACILITIES; AND, SHALL HAVE THE RIGHT TO LIEN ALL OWNERS OF RECORD IN PROPERTY FOR THE COST OF SUCH MAINTENANCE, REPAIR, AND REPLACEMENT AS DEEMED BY THE CITY TO BE NECESSARY IN THE EVENT OF TERMINATION, DISSOLUTION, OR FINAL LIQUIDATION OF THE ASSOCIATION. THE RESPONSIBILITY FOR THE OPERATION AND MAINTENANCE OF THE SURFACE WATER OR STORMWATER MANAGEMENT SYSTEM WILL BE TRANSFERRED TO AND ACCEPTED BY AN ENTITY WHICH COMPLIES WITH SECTION 400-42.027, F.A.C. AND BE APPROVED BY THE SAINT JOHN'S RIVER WATER MANAGEMENT DISTRICT PRIOR TO SUCH TERMINATION, DISSOLUTION, OR LIQUIDATION.
14. ALL OTHER EASEMENTS ARE SUBORDINATE TO ANY PRESERVATION EASEMENTS DEDICATED HEREON. THERE SHALL BE NO REMOVAL OR DISTURBANCE OF ANY VEGETATION WITHIN SUCH PRESERVATION EASEMENTS. ANY PROPOSED CONSTRUCTION OR OTHER USE WITHIN A PRESERVATION EASEMENT MUST BE REVIEWED AND APPROVED BY THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE PRESERVATION EASEMENT.
15. TREE PRESERVATION EASEMENT AS DEFINED ON THIS PLOT IS FOR THE EXPRESS PURPOSE OF THE PRESERVATION AND LONGEVITY OF THE TREES THEREIN. ACTIONS DETRIMENTAL TO TREE HEALTH SURVIVAL WITHIN THE BOUNDARIES OF THE DRIPLINE ARE PROHIBITED WITHOUT THE EXPRESS PERMISSION OF THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE PRESERVATION EASEMENT. NOTHING HEREIN SHALL, HOWEVER, BE CONSTRUED TO PREVENT NATURAL VEGETATION WITHIN THE EASEMENT AREA FROM BEING CLEARED BY HAND TO PROVIDE A NEAT, MANICURED APPEARANCE. IN ADDITION, NOTHING HEREIN SHALL BE CONSTRUED TO PREVENT THE PLACEMENT OF SOD, IRRIGATION AND LANDSCAPE PLANTS OR TO PREVENT NORMAL LAWN MAINTENANCE, SUCH AS MOWING, EDGING AND WEEDING NOT HARMFUL TO THE OBJECTIVE OF TREE PRESERVATION WITHIN THE EASEMENT AREA. ANY PROPOSED CONSTRUCTION OR OTHER USE WITHIN A PRESERVATION EASEMENT MUST BE REVIEWED AND APPROVED BY THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE PRESERVATION EASEMENT.
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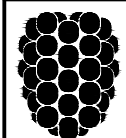
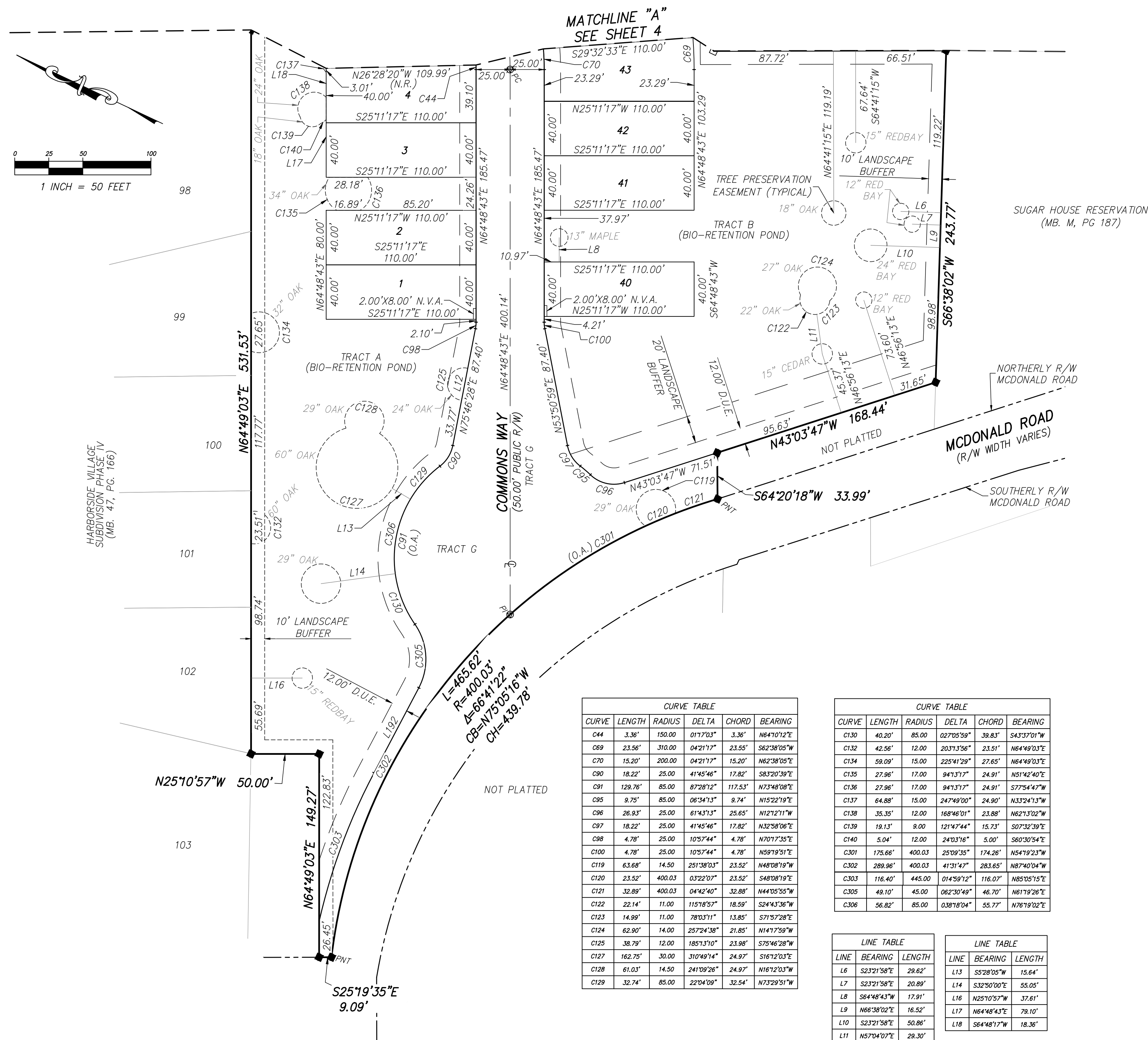
MAP BOOK:

PAGE:

GENERAL NOTES:

1. BEARINGS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 WITH 2011 ADJUSTMENT DERIVING A BEARING OF S89°40'58"E ALONG THE SOUTH LINE OF LANTERN PARK UNIT 2, MB. 32, PG. 113, AND COVENANTY FOREST ON THE HILL PHASE IV, MB. 47, PG. 176, AND COVENANTY FOREST ON THE HILL PHASE VI, MB. 36, PG. 198, AND COVENANTY FOREST SUB SECTION SEVEN, MB. 42, PG. 66, AND COVENANTY FOREST ON THE HILL PHASE I, MB. 44, PG. 116
2. ALL LOT LINES INTERSECTING CURVES ARE RADIAL UNLESS NOTED OTHERWISE.
3. ALL PLATTED UTILITY EASEMENTS, EXCLUSIVE OF PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY, SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES. HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES PURSUANT TO SECTION 177.091(28), FLORIDA STATUTES. SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE AND OPERATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL SAFETY CODE AS ADOPTED BY THE FLORIDA PUBLIC SERVICE COMMISSION.
4. ALL DRAINAGE EASEMENTS SHOWN HEREON ARE DEDICATED TO THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC., AND THE CITY OF PORT ORANGE.
5. TRACTS "D", "E", AND "F", DEPICTED HEREON AS COMMON OPEN SPACE AND TREE PRESERVATION AREAS WILL BE OWNED AND MAINTAINED BY MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC. ITS SUCCESSORS AND/OR ASSIGNS FOR THE PURPOSE OF COMMON OPEN SPACE AND TREE PRESERVATION.
6. TRACT C (LIFT STATION), IS TO BE OWNED AND MAINTAINED BY THE CITY OF PORT ORANGE AS DEEDED IN FEE SIMPLE BY SEPARATE INSTRUMENT.
7. TRACT A (BIO-RETENTION POND) AND TRACT B (BIO-RETENTION POND/ CONSERVATION EASEMENT), ARE TO BE OWNED AND MAINTAINED BY THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC., WITH ACCESS EASEMENTS RIGHTS IN FAVOR OF THE CITY OF PORT ORANGE.
8. LANDSCAPE BUFFERS SHOWN WITHIN TRACTS A, B, D, E AND F ARE TO BE CONTROLLED AND MAINTAINED BY THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC. THERE WILL BE NO CLEARING OR ALTERATION UNLESS OTHERWISE SHOWN ON APPROVED PLANS BY THE CITY OF PORT ORANGE.
9. TREE PRESERVATION EASEMENTS OVER THE SPECIMEN AND HISTORIC TREES WITHIN THE SITE AND SHOWN HEREON ARE HEREBY GRANTED TO THE CITY OF PORT ORANGE.
10. THIS PLAT IS SUBJECT TO ALL EASEMENTS OF RECORD AND RESERVATIONS OF EASEMENTS, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITY, AND ACCESS EASEMENTS DEDICATED OR GRANTED HEREON WHICH SHALL BE LOCATED AS FOLLOWS EXCEPT AS OTHERWISE NOTED ON THE PLAT:

ENTIRE STREET FRONTS/AGES OF LOTS AND COMMON OPEN SPACE AREAS:
12.00 FEET WIDE
11. THIS PLAT IS SUBJECT TO DECLARATION OF COVENANTS AND RESTRICTIONS AS RECORDED IN OFFICIAL RECORDS BOOK _____, PAGE _____, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.
12. THIS PLAT IS SUBJECT TO MADELINE COMMONS PLANNED UNIT DEVELOPMENT MASTER DEVELOPMENT AGREEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 8194, PAGE 833, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.
13. THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC., A FLORIDA NOT-FOR-PROFIT CORPORATION, SHALL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE DRAINAGE SYSTEM SERVING THE AREA WITHIN THE BOUNDARIES OF THIS PLAT, AS DEPICTED ON THE STORMWATER MANAGEMENT PLAN APPROVED FOR THE DEVELOPMENT BY THE CITY OF PORT ORANGE, FLORIDA. SHOULD THE ASSOCIATION FAIL TO PERFORM THE MAINTENANCE OF THE DRAINAGE AND STORMWATER MANAGEMENT SYSTEMS OF THE CITY OF PORT ORANGE, IT SHALL BE ENTITLED TO ENTER UPON THE COMMON AREAS AND DESIGNATED EASEMENT AREAS TO PERFORM MAINTENANCE, REPAIR, OR REPLACE THE FACILITIES; AND, SHALL HAVE THE RIGHT TO LIEN ALL OWNERS OF RECORD IN PROPERTY FOR THE COST OF SUCH MAINTENANCE, REPAIR, AND REPLACEMENT. ANY DEEMED BY THE CITY TO BE NECESSARY. IN THE EVENT OF TERMINATION, DISSOLUTION, OR FINAL LIQUIDATION OF THE ASSOCIATION, THE RESPONSIBILITY FOR THE OPERATION AND MAINTENANCE OF THE SURFACE WATER OR STORMWATER MANAGEMENT SYSTEM WILL BE TRANSFERRED TO ANY ACCEPTED BY AN ENTITY WHICH COMPLIES WITH SECTION 40C-42.027, F.A.C. AND BE APPROVED BY THE SAINT JOHNS RIVER WATER MANAGEMENT DISTRICT PRIOR TO SUCH TERMINATION, DISSOLUTION, OR LIQUIDATION.
14. "ALL OTHER EASEMENTS ARE SUBORDINATE TO ANY CONSERVATION EASEMENTS DEDICATED HEREON. THERE SHALL BE NO REMOVAL OR DISTURBANCE OF ANY VEGETATION WITHIN SUCH CONSERVATION EASEMENTS, ANY PROPOSED CONSTRUCTION OR OTHER USE WITHIN A CONSERVATION EASEMENT MUST BE REVIEWED AND APPROVED BY THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE CONSERVATION EASEMENT.
15. "TREE CONSERVATION EASEMENT AS DEFINED ON THIS PLAT IS FOR THE EXPRESS PURPOSE OF THE PRESERVATION AND LONGEVITY OF THE TREES THEREIN. ACTIONS RETAINING THE TREES WITHIN SURVIVAL WITHIN THE BOUNDARIES OF THE DRIPLINE ARE PROHIBITED WITHOUT THE EXPRESS PERMISSION OF THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE CONSERVATION EASEMENT. NOTHING HEREIN SHALL, HOWEVER, BE CONSTRUED TO PREVENT NATURAL VEGETATION WITHIN THE EASEMENT AREA FROM BEING CUT OR HARMED TO PROVIDE A NEAT, MANICURED APPEARANCE. IN ADDITION, NOTHING HEREIN SHALL BE CONSTRUED TO PREVENT THE PLACEMENT OF SOD, IRRIGATION AND LANDSCAPE PLANTS OR TO PREVENT NORMAL LAWN MAINTENANCE SUCH AS MOWING, EDGING AND WEEDING NOT HARMFUL TO THE EFFECTIVE TREE PRESERVATION WITHIN THE EASEMENT AREA. ANY PROPOSED CONSTRUCTION OR OTHER USE WITHIN A CONSERVATION EASEMENT MUST BE REVIEWED AND APPROVED BY THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE CONSERVATION EASEMENT.
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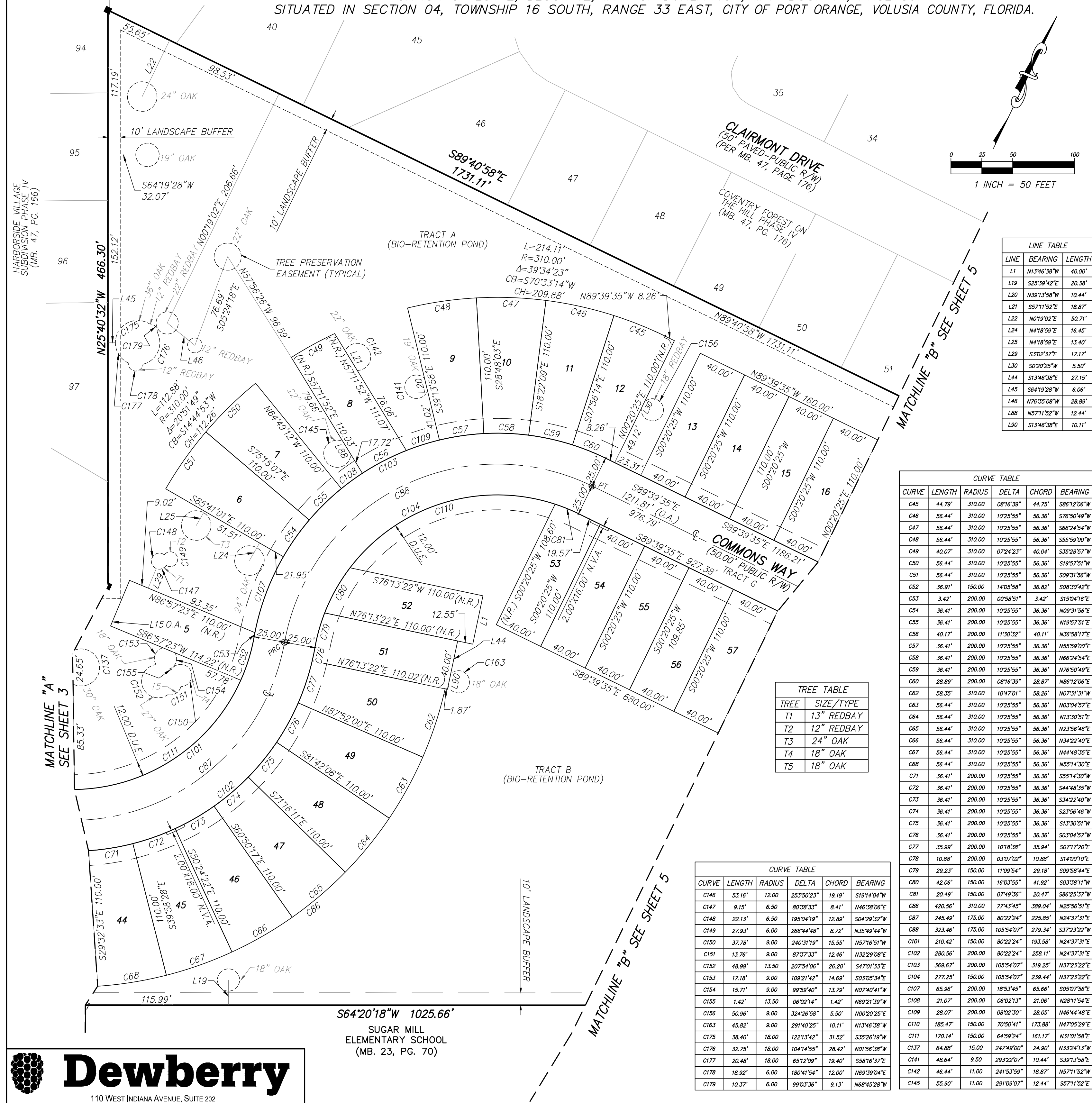
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MADELINE COMMONS

A REPLAT OF ALL OF BLOCKS 22-27 AND THOSE PLATTED, UNIMPROVED RIGHTS-OF-WAYS, LYING NORTH OF BLOCKS 24 AND 25, WEST OF BLOCKS 25-27, BETWEEN BLOCKS 24-25, 23-26, 22-23, 22-27, 23-24, AND 25-26, PORTANA PLAT NO. 1, MAP BOOK 10, PAGE 107, AND A PORTION OF GOVERNMENT LOT 2 OF SECTION 4, TOWNSHIP 16 SOUTH, RANGE 33 EAST, AND A PORTION OF LOT 2, BLOCK 12, MAP OF DUNLAWTON, MAP BOOK 14, PAGE 83.

SITUATED IN SECTION 04, TOWNSHIP 16 SOUTH, RANGE 33 EAST, CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA.



LINE	BEARING	LENGTH
L1	N13°46'38"W	40.00'
L19	S25°39'44"E	20.38'
L20	N39°13'58"W	10.44'
L21	S57°11'52"E	18.87'
L22	N07°19'02"E	50.71'
L24	N41°18'59"E	16.45'
L25	N41°18'59"E	13.40'
L29	S32°02'37"E	12.17'
L30	S02°02'25"W	5.50'
L44	S13°46'38"E	27.15'
L45	S64°19'28"W	6.08'
L46	N76°32'08"E	28.89'
L88	N57°11'52"W	12.44'
L90	S13°46'38"E	10.11'

CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C45	44.79'	310.00'	08°16'39"	44.75'	S86°12'08"W
C46	56.44'	310.00'	10°25'55"	56.36'	S76°30'49"W
C47	56.44'	310.00'	10°25'55"	56.36'	S66°24'54"W
C48	56.44'	310.00'	10°25'55"	56.36'	S55°59'00"W
C49	40.07'	310.00'	07°24'23"	40.04'	S39°28'57"W
C50	56.44'	310.00'	10°25'55"	56.36'	S19°57'51"W
C51	56.44'	310.00'	10°25'55"	56.36'	S09°31'56"W
C52	36.91'	150.00'	14°05'58"	36.82'	S08°30'42"E
C53	3.42'	200.00'	00°58'51"	3.42'	S15°04'16"E
C54	36.41'	200.00'	10°25'55"	36.36'	N09°31'56"E
C55	36.41'	200.00'	10°25'55"	36.36'	N19°57'51"E
C56	40.17'	200.00'	11°30'32"	40.11'	N36°58'17"E
C57	36.41'	200.00'	10°25'55"	36.36'	N55°59'00"E
C58	36.41'	200.00'	10°25'55"	36.36'	N66°24'54"E
C59	36.41'	200.00'	10°25'55"	36.36'	N76°30'49"E
C60	28.89'	200.00'	08°16'39"	28.87'	N86°12'08"E
C62	58.35'	310.00'	10°47°01"	58.26'	N07°31'31"W
C63	56.44'	310.00'	10°25'55"	56.36'	N03°04'33"E
C64	56.44'	310.00'	10°25'55"	56.36'	N13°30'31"E
C65	56.44'	310.00'	10°25'55"	56.36'	N23°56'46"E
C66	56.44'	310.00'	10°25'55"	56.36'	N34°22'40"E
C67	56.44'	310.00'	10°25'55"	56.36'	N44°48'35"E
C68	56.44'	310.00'	10°25'55"	56.36'	N55°14'30"E
C71	36.41'	200.00'	10°25'55"	36.36'	S55°14'30"W
C72	36.41'	200.00'	10°25'55"	36.36'	S44°48'35"W
C73	36.41'	200.00'	10°25'55"	36.36'	S34°22'40"W
C74	36.41'	200.00'	10°25'55"	36.36'	S23°56'46"W
C75	36.41'	200.00'	10°25'55"	36.36'	S13°30'31"W
C76	36.41'	200.00'	10°25'55"	36.36'	S03°04'57"W
C77	35.99'	200.00'	10°16'38"	35.94'	S07°17'20"E
C78	10.88'	200.00'	03°07'02"	10.88'	S14°00'10"E
C79	29.23'	150.00'	11°09'54"	28.18'	S09°58'44"E
C80	42.06'	150.00'	16°03'55"	41.92'	S03°36'11"W
C81	20.49'	150.00'	07°49'36"	20.47'	S86°25'37"W
C86	420.56'	310.00'	77°43'45"	399.04'	N25°56'51"E
C87	245.49'	175.00'	80°22'24"	225.85'	N24°37'37"E
C88	323.46'	175.00'	105°54'07"	279.34'	S37°23'22"W
C101	210.42'	150.00'	82°22'24"	193.58'	N24°37'37"E
C102	280.56'	200.00'	80°22'24"	258.11'	N24°37'37"E
C103	369.67'	200.00'	105°54'07"	319.25'	S37°23'22"E
C104	271.25'	150.00'	105°54'07"	239.44'	S37°23'22"E
C107	65.96'	200.00'	18°53'45"	65.66'	S05°07'56"E
C108	21.07'	200.00'	06°02'13"	21.06'	N08°11'54"E
C109	28.07'	200.00'	08°02'30"	28.05'	N46°44'46"E
C110	185.47'	150.00'	70°50'41"	173.88'	N47°05'59"E
C111	170.14'	150.00'	64°59'24"	161.17'	S31°01'56"E
C137	64.88'	15.00'	24°48'00"	24.90'	N32°41'37"W
C141	48.64'	9.50'	29°52'07"	10.44'	S39°15'58"E
C142	46.44'	11.00'	24°15'35"	18.87'	N57°11'52"W
C145	55.90'	11.00'	29°19'07"	12.44'	S57°11'52"E

TREE	SIZE/TYPE
T1	13" REDBAY
T2	12" REDBAY
T3	24" OAK
T4	18" OAK
T5	18" OAK

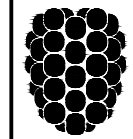
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C146	53.16'	12.00'	253°50'21"	19.19'	S19°14°04"W
C147	9.15'	6.50'	80°38'31"	8.41'	N46°38'06"E
C148	22.11'	6.50'	195°04'18"	12.89'	S04°29'32"W
C149	27.83'	6.00'	266°44'46"	8.72'	N35°48'44"W
C150	37.78'	9.00'	240°31'18"	15.55'	N57°16'51"W
C151	13.76'	9.00'	87°37'33"	12.46'	N32°29'08"E
C152	48.89'	13.50'	207°54'08"	26.20'	S47°01'37"E
C153	17.18'	8.00'	109°21'42"	14.69'	S23°05'34"E
C154	15.77'	8.00'	99°59'40"	13.79'	N07°40'41"W
C155	1.42'	13.50'	06°02'14"	1.42'	N89°21'30"W
C156	50.86'	9.00'	324°28'58"	5.50'	N09°20'25"E
C163	45.62'	9.00'	291°40'25"	10.11'	N13°46'38"W
C175	38.40'	18.00'	122°13'42"	31.52'	S39°28'19"W
C176	32.75'	18.00'	104°14'35"	28.42'	N01°56'38"W
C177	20.48'	18.00'	65°12'09"	18.40'	S58°16'37"E
C178	18.82'	6.00'	180°41'54"	12.00'	N69°39'04"E
C179	10.37'	6.00'	99°03'36"	8.13'	N68°45'28"W

MAP BOOK:

PAGE:

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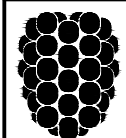
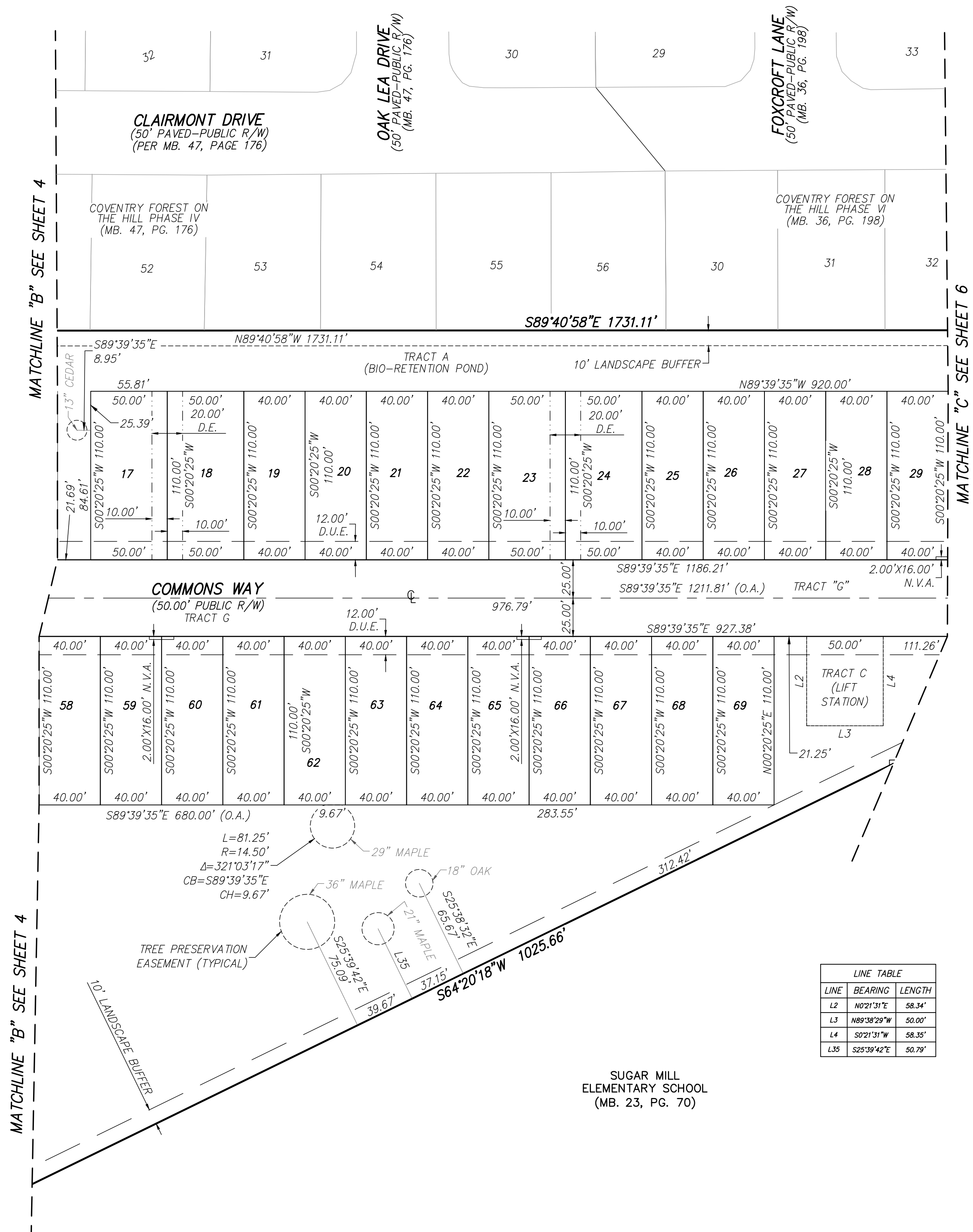
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CERTIFICATE OF AUTHORIZATION NO. LB 8011

1. BEARINGS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 WITH 2011 ADJUSTMENT DERIVING A BEARING OF S89°40'58"E ALONG THE SOUTH LINE OF LANTERN PARK UNIT 2, MB. 32, PG. 113, AND COVENTRY FOREST ON THE HILL PHASE IV, MB. 47, PG. 176, AND COVENTRY FOREST ON THE HILL PHASE V, MB. 36, PG. 198, AND COVENTRY FOREST SUB SECTION SEVEN, MB. 42, PG. 68, AND COVENTRY FOREST ON THE HILL PHASE 1, MB. 44, PG. 116

2. ALL LOT LINES INTERSECTING CURVES ARE RADIAL UNLESS NOTED OTHERWISE.
3. ALL PLATTED UTILITY EASEMENTS EXCLUSIVE OF PRIVATE EASEMENTS TO AND FROM OR BY A PARTIAL ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES PURSUANT TO SECTION 177.091(28), FLORIDA STATUTES. SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL SAFETY CODE AS ADOPTED BY THE FLORIDA PUBLIC SERVICE COMMISSION.
4. ALL DRAINAGE EASEMENTS SHOWN HEREON ARE DEDICATED TO THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC., AND THE CITY OF PORT ORANGE.
5. TRACTS "D", "E", AND "F", DEPICTED HEREON AS COMMON OPEN SPACE AND TREE PRESERVATION AREAS WILL BE OWNED AND MAINTAINED BY MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC. ITS SUCCESSORS AND/OR ASSIGNS FOR THE PURPOSE OF COMMON OPEN SPACE AND TREE PRESERVATION.
6. TRACT C (LIFT STATION), IS TO BE OWNED AND MAINTAINED BY THE CITY OF PORT ORANGE AS DEEDED IN FEE SIMPLE BY SEPARATE INSTRUMENT.
7. TRACT A (BIO-RETENTION POND) AND TRACT B (BIO-RETENTION POND/ PRESERVATION AREA) ARE TO BE OWNED AND MAINTAINED BY THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC., WITH ACCESS EASEMENTS RIGHTS IN FAVOR OF THE CITY OF PORT ORANGE.
8. LANDSCAPE BUFFERS SHOWN WITHIN TRACTS A, B, D, E AND F ARE TO BE CONTROLLED AND MAINTAINED BY THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC. THERE WILL BE NO CLEARING OR ALTERATION UNLESS OTHERWISE SHOWN ON APPROVED PLANS BY THE CITY OF PORT ORANGE.
9. TREE PRESERVATION EASEMENTS OVER THE SPECIMEN AND HISTORIC TREES WITHIN THE SITE AND SHOWN HEREON ARE HEREBY GRANTED TO THE CITY OF PORT ORANGE.
10. THIS PLAT IS SUBJECT TO ALL EASEMENTS OF RECORD AND RESERVATIONS OF EASEMENTS, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITY, AND ACCESS EASEMENTS DEDICATED OR GRANTED HEREON WHICH SHALL BE LOCATED AS FOLLOWS EXCEPT AS OTHERWISE NOTED ON THE PLAT:

ENTIRE STREET FRONTAGES OF LOTS AND COMMON OPEN SPACE AREAS: 12.00 FEET WIDE
11. THIS PLAT IS SUBJECT TO DECLARATION OF COVENANTS AND RESTRICTIONS AS RECORDED IN OFFICIAL RECORDS BOOK _____, PAGE _____, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.
12. THIS PLAT IS SUBJECT TO MADELINE COMMONS PLANNED UNIT DEVELOPMENT MASTER DEVELOPMENT AGREEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 8154, PAGE 833, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.
13. THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC., A FLORIDA NOT-FOR-PROFIT CORPORATION, SHALL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE DRAINAGE SYSTEM SERVING THE AREA WITHIN THE BOUNDARIES OF THIS PLOT, AS DEPICTED ON THE STORMWATER MANAGEMENT PLAN APPROVED FOR THE DEVELOPMENT BY THE CITY OF PORT ORANGE, FLORIDA. SHOULD THE ASSOCIATION FAIL TO PERFORM THE MAINTENANCE OF THE DRAINAGE AND STORMWATER MANAGEMENT SYSTEMS, THE CITY OF PORT ORANGE SHALL BE ENTITLED TO ENTER UPON THE COMMON AREAS AND DESIGNATED EASEMENT AREAS TO PERFORM MAINTENANCE, REPAIR, OR REPLACE THE FACILITIES, AND, SHALL HAVE THE RIGHT TO OBTAIN A LIEN ALL OWNERS OF RECORD IN PROPERTY FOR THE COST OF SUCH MAINTENANCE, REPAIR, AND REPLACEMENT, AS DEEMED BY THE CITY TO BE NECESSARY. IN THE EVENT OF TERMINATION, DISSOLUTION, OR FINAL LIQUIDATION OF THE ASSOCIATION, THE LIABILITY FOR THE OPERATION AND MAINTENANCE OF THE SURFACE WATER OR STORMWATER MANAGEMENT SYSTEM WILL BE TRANSFERRED TO AND ACCEPTED BY AN ENTITY WHICH COMPLIES WITH SECTION 40C-42.027, F.A.C. AND BE APPROVED BY THE SAINT JOHNS RIVER WATER MANAGEMENT DISTRICT PRIOR TO SUCH TERMINATION, DISSOLUTION, OR LIQUIDATION.
14. ALL OTHER EASEMENTS ARE SUBORDINATE TO ANY PRESERVATION EASEMENTS DEDICATED HEREON. THERE SHALL BE NO REMOVAL OR REDUCTION OF ANY VEGETATION WITHIN SUCH PRESERVATION EASEMENTS, ANY PROPOSED CONSTRUCTION OR OTHER USE WITHIN A PRESERVATION EASEMENT MUST BE REVIEWED AND APPROVED BY THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE PRESERVATION EASEMENT.
15. TREE PRESERVATION EASEMENT AS DEFINED ON THIS PLOT IS FOR THE EXPRESS PURPOSE OF THE PRESERVATION AND LONGEVITY OF THE TREES THEREIN. ACTIONS DETRIMENTAL TO TREE HEALTH SURVIVAL WITHIN THE BOUNDARIES OF THE ORIGINALE ARE PROHIBITED WITHOUT THE WRITTEN PERMISSION OF THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE PRESERVATION EASEMENT. NOTHING HEREIN SHALL, HOWEVER, BE CONSTRUCTED TO PREVENT NATURAL VEGETATION WITHIN THE EASEMENT AREA FROM BEING CLEARED BY HAND OR MEANS. THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE PRESERVATION EASEMENT SHALL BE CONSTRUCTED TO PREVENT THE PLACEMENT OF SOD, IRRIGATION AND LANDSCAPE PLANTS OR TO PREVENT NORMAL LAWN MAINTENANCE SUCH AS MOWING, EDGING AND WEEDING NOT HARMFUL TO THE OBJECTIVE OF TREE PRESERVATION WITHIN THE EASEMENT AREA. ANY CONSTRUCTION OR OTHER USE WITHIN A PRESERVATION EASEMENT MUST BE REVIEWED AND APPROVED BY THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE PRESERVATION EASEMENT.
16. THE NON-VEHICULAR ACCESS EASEMENTS LOCATED ON LOTS 39, 70, 125 AND 127 ARE TO BE GRANTED TO AND CONTROLLED BY THE CITY OF PORT ORANGE.
17. PLANTINGS AND IRRIGATION SYSTEM IN THE ROUND-ABOUT WILL BE OWNED AND MAINTAINED BY THE DEVELOPMENT AND THEIR HOA.

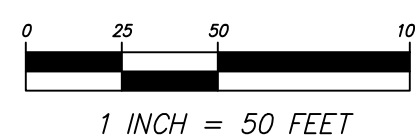


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CERTIFICATE OF AUTHORIZATION No. LB 8011

SITUATED IN SECTION 04, TOWNSHIP 16 SOUTH, RANGE 33 EAST, CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA.



MATCHLINE "C" SEE SHEET 5

SUGAR MILL
ELEMENTARY SCHOOL
(MB. 23, PG. 70)

TRACT B
BIO-RETENTION POND)

10' LANDSCAPE BUFFER

TRAC

MATCHLINE "D" SEE SHEET 7

POINT OF BEGINNING

POINT OF
COMMENCEMENT
NE CORNER OF
SECTION 04-16S-33E

HARBORSIDE VILLAGE
SUBDIVISION PHASE IV
(MB. 47, PG. 166)

JAMES STREET
(50' R/W PER
MB. 10, PG. 34)

HARBORSIDE VILLAGE
SUBDIVISION PHASE IV
(MB. 47, PG. 166)

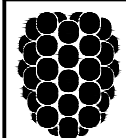
1. BEARINGS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 WITH 2011 ADJUSTMENT DERIVING A BEARING OF S89°40'58"E ALONG THE SOUTH LINE OF LANTERN PARK UNIT 2, MB. 32, PG. 113, AND COVENTRY FOREST ON THE HILL PHASE IV, MB. 47, PG. 176, AND COVENTRY FOREST ON THE HILL PHASE VI, MB. 36, PG. 198, AND COVENTRY FOREST SUB SECTION SEVEN, MB. 42, PG. 68, AND COVENTRY FOREST ON THE HILL PHASE I, MB. 44, PG. 116

3. ALL LOT LINES INTERSECTING CURVES ARE RADIAL, UNLESS NOTED OTHERWISE.
4. ALL PLATTED UTILITY EASEMENTS, EXCLUSIVE OF PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY, SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES. PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES PURSUANT TO SECTION 172.091(2)(b), F.S. THE CITY OF PORT ORANGE ASSUMES NO RESPONSIBILITY FOR CONSTRUCTION AND OPERATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL SAFETY CODE AS ADOPTED BY THE FLORIDA PUBLIC SERVICE COMMISSION.
5. ALL DRAINAGE EASEMENTS SHOWN HEREON ARE DEDICATED TO THE MADELINE COMMONS HOMEOWNERS ASSOCIATION, INC., AND THE CITY OF PORT ORANGE.
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ENTIRE STREET FRONTS/AGES OF LOTS AND COMMON OPEN SPACE AREAS: 12.00 FEET WIDE
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15. ALL OTHER EASEMENTS ARE SUBORDINATE TO ANY PRESERVATION EASEMENTS DEDICATED HEREON. THERE SHALL BE NO REMOVAL OR DISTURBANCE OF ANY VEGETATION WITHIN SUCH PRESERVATION EASEMENTS. ANY PROPOSED CONSTRUCTION OR OTHER USE WITHIN A PRESERVATION EASEMENT MUST BE REVIEWED AND APPROVED BY THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE PRESERVATION EASEMENT.
16. TREE PRESERVATION EASEMENT AS DEFINED ON THIS PLOT IS FOR THE EXPRESS PURPOSE OF THE PRESERVATION AND LONGEVITY OF THE TREES THEREIN. ACTIONS DETRIMENTAL TO TREE HEALTH SUBVARIANT WITHIN THE BOUNDARIES OF THE DIPLINE ARE PROHIBITED WITHOUT THE EXPRESS PERMISSION OF THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE PRESERVATION EASEMENT. NOTHING HEREIN SHALL, HOWEVER, BE CONSTRUCTED TO PREVENT NATURAL VEGETATION WITHIN THE EASEMENT AREA FROM BEING CLEARED BY HAND TO PROVIDE A NEAR MANICURED APPEARANCE. IN ADDITION, NOTHING HEREIN SHALL BE CONSTRUED TO PREVENT THE PLACEMENT OF SOIL, PLANTATION OF TREES OR PLANTS OR TO PREVENT NORMAL LAWN MAINTENANCE SUCH AS MOWING, EDGING AND WEEDING NOT HARMFUL TO THE OBJECTIVE OF TREE PRESERVATION WITHIN THE EASEMENT AREA. ANY PROPOSED CONSTRUCTION OR OTHER USE WITHIN A PRESERVATION EASEMENT MUST BE REVIEWED AND APPROVED BY THE CITY OF PORT ORANGE AND ANY OTHER AUTHORITY HAVING JURISDICTION OVER THE PRESERVATION EASEMENT.
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CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	BEARING
C01	28.17'	25.00'	66°30'57"	N33°04'32"E
C03	28.81'	25.00'	66°01'26"	N32°40'07"E
C158	48.15'	8.00'	306°32'37"	N10°49'47"W
C159	28.81'	8.00'	273°08'53"	S10°49'47"W
C160	20.36'	8.00'	149°23'44"	N02°20'25"E
C161	38.65'	8.00'	276°48'02"	N00°20'25"E
C161	38.97'	25.00'	89°18'50"	S45°00'06"W
C162	38.97'	25.00'	89°18'50"	N45°00'06"E
C308	15.28'	28.00'	031°36'34"	N08°05'53"E
C309	15.28'	28.00'	031°36'34"	S08°47'06"E

LINE TABLE		
LINE	BEARING	LENGTH
L5	N89°39'35"W	21.93'
L32	N89°39'23"E	3.36'
L33	S0°20'25"W	10.62'
L34	N0°20'25"E	11.91'



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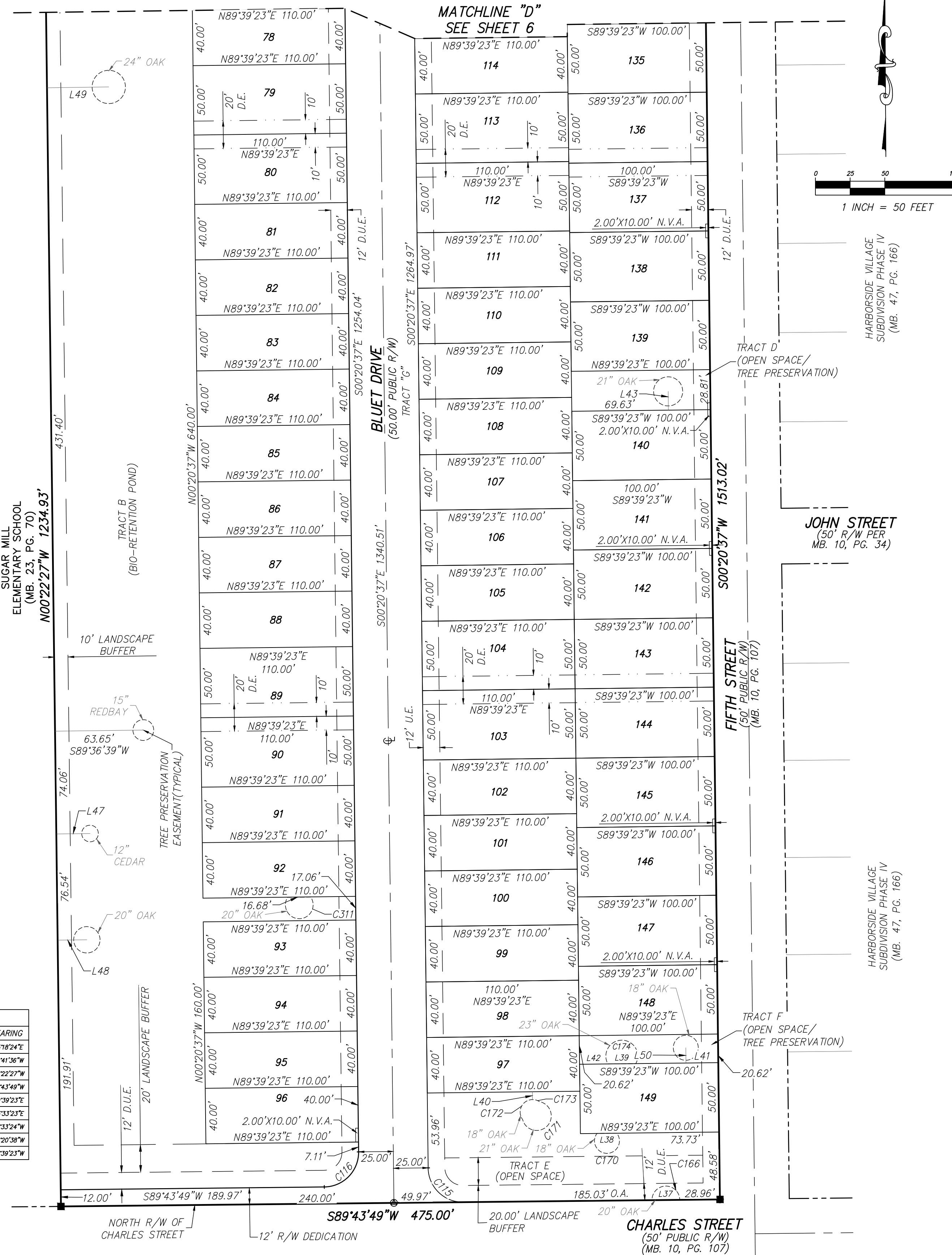
CERTIFICATE OF AUTHORIZATION No. LB 8011

GENERAL NOTES:

- | LINE TABLE | | | CURVE TABLE | | | | | |
|------------|-------------|--------|-------------|--------|--------|------------|--------|-------------|
| LINE | BEARING | LENGTH | CURVE | LENGTH | RADIUS | DELTA | CHORD | BEARING |
| L37 | N89°44'49"E | 20.00' | C115 | 39.24' | 23.00 | 89°53'34" | 35.33' | S45°18'24"E |
| L38 | S89°39'23"W | 14.36' | C116 | 39.30' | 25.00 | 90°07'26" | 35.38' | S44°10'30"E |
| L39 | S89°39'23"W | 20.17' | C164 | 35.51' | 8.00 | 254°07'15" | 12.74' | N02°02'27"W |
| L40 | N20°32'37"W | 5.63' | C166 | 31.50' | 10.00 | 187°04'40" | 20.00' | S88°43'49"W |
| L41 | N89°39'23"E | 23.31' | C170 | 39.86' | 8.00 | 264°04'26" | 14.36' | S89°39'23"E |
| L42 | N89°39'23"E | 20.42' | C171 | 44.86' | 10.00 | 244°17'21" | 17.73' | N44°13'37"E |
| L43 | S02°02'37"E | 13.53' | C172 | 18.82' | 8.00 | 128°19'58" | 16.06' | S26°33'24"E |
| L47 | S89°35'43"E | 24.30' | C173 | 5.34' | 8.00 | 339°58'58" | 5.26' | N73°02'30"W |
| L48 | S89°36'03"W | 21.06' | C174 | 47.66' | 11.50 | 237°27'59" | 20.17' | S89°39'23"W |
| L49 | S02°04'34"W | 44.53' | | | | | | |
| L50 | S02°04'34"W | 10.98' | | | | | | |



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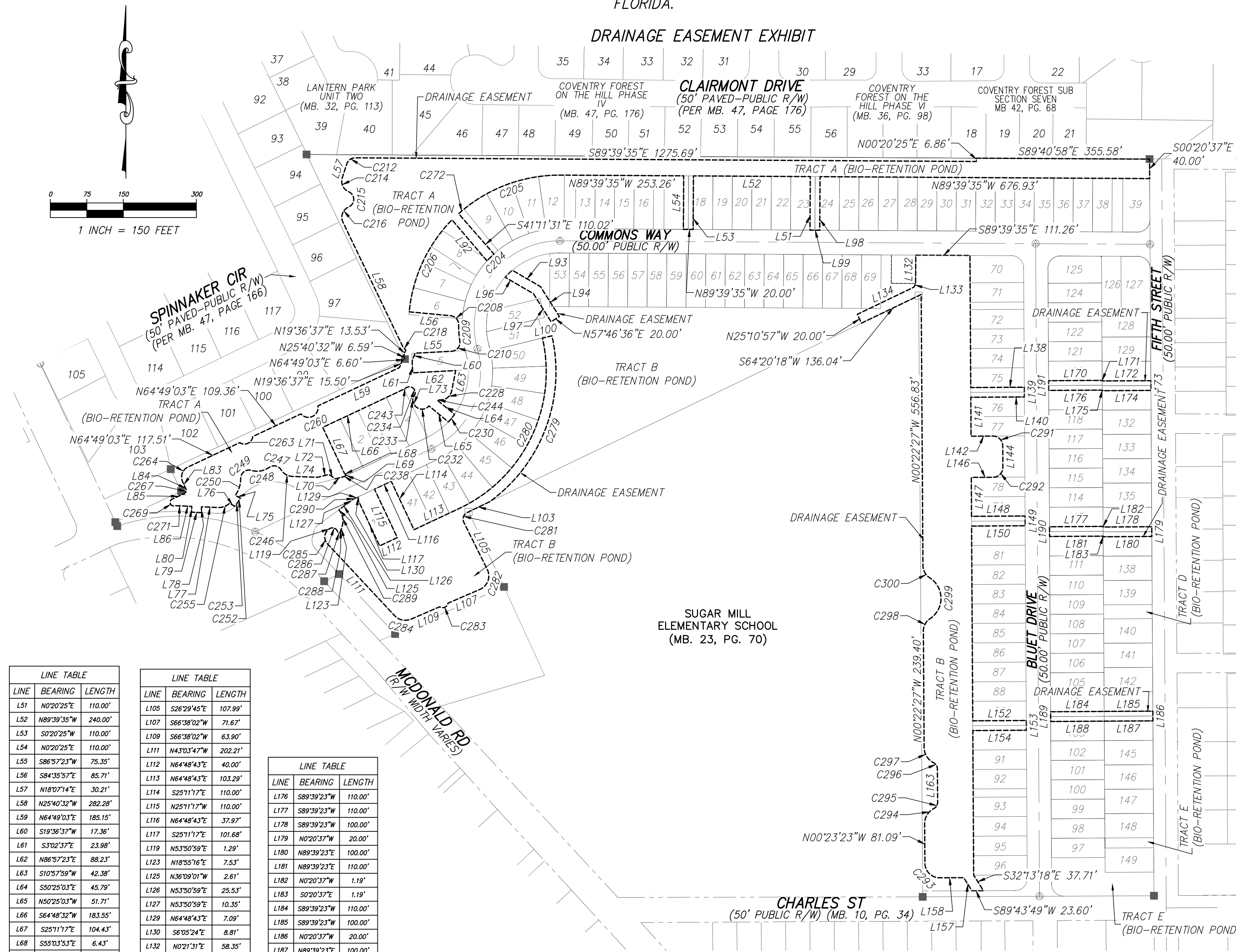
MADELINE COMMONS

MAP BOOK:

PAGE:

A REPLAT OF ALL OF BLOCKS 22-27 AND THOSE PLATTED, UNIMPROVED RIGHTS-OF-WAYS, LYING NORTH OF BLOCKS 24 AND 25, WEST OF BLOCKS 25-27, BETWEEN BLOCKS 24-25, 23-26, 22-27, 22-23, 26-27, 23-24, AND 25-26, PORTANA PLAT NO. 1, MAP BOOK 10, PAGE 107, AND A PORTION OF GOVERNMENT LOT 2 OF SECTION 4, TOWNSHIP 16 SOUTH, RANGE 33 EAST, AND A PORTION OF LOT 2, BLOCK 12, MAP OF DUNLAWTON, MAP BOOK 14, PAGE 83.
SITUATED IN SECTION 04, TOWNSHIP 16 SOUTH, RANGE 33 EAST, CITY OF PORT ORANGE, VOLUSIA COUNTY, FLORIDA.

DRAINAGE EASEMENT EXHIBIT



LINE TABLE		
LINE	BEARING	LENGTH
L51	N02°02'25"E	110.00'
L52	N89°39'35"W	240.00'
L53	S02°02'25"W	110.00'
L54	N02°02'25"E	110.00'
L55	S85°52'37"W	75.35'
L56	S84°35'52"E	85.71'
L57	N18°02'14"E	30.21'
L58	N25°40'32"W	282.28'
L59	N64°49'03"E	185.15'
L60	S19°36'33"W	17.36'
L61	S70°32'37"E	23.98'
L62	N86°52'23"E	88.23'
L63	S10°52'59"W	42.36'
L64	S50°52'03"E	45.79'
L65	N50°52'03"W	51.71'
L66	S84°48'32"W	183.55'
L67	S25°11'17"E	104.43'
L68	S55°03'53"E	6.43'
L69	S84°48'43"W	3.20'
L70	S75°46'28"W	15.21'
L71	N55°03'53"W	15.86'
L72	S75°46'28"W	23.66'
L73	N26°28'20"W	3.64'
L74	N88°04'53"W	52.40'
L75	S80°39'52"E	12.10'
L76	N60°39'52"W	12.45'
L77	N87°25'09"W	33.71'
L78	S2°34'51"W	12.00'
L79	N87°25'09"W	20.00'
L80	N2°34'51"E	12.00'
L81	N25°10'57"W	13.91'
L82	N06°42'42"W	1.68'
L83	N64°49'03"E	26.15'
L84	N87°25'09"W	16.96'
L85	N40°27'08"W	111.07'
L86	N59°49'03"W	66.92'
L87	N32°13'24"E	72.65'
L88	S59°49'03"E	67.23'
L89	S32°13'24"E	68.12'
L90	S02°02'25"W	110.00'
L91	N89°39'35"W	20.00'
L92	N77°04'38"E	20.00'
L93	S64°20'18"W	51.62'

LINE TABLE		
LINE	BEARING	LENGTH
L105	S36°29'45"E	107.89'
L106	S86°38'02"W	71.67'
L107	S86°38'02"W	63.80'
L108	S86°38'02"W	202.21'
L109	N64°48'43"E	40.00'
L110	N64°48'43"E	103.29'
L111	S25°11'17"E	110.00'
L112	N25°11'17"W	110.00'
L113	N64°48'43"E	37.92'
L114	N02°03'37"E	101.68'
L115	N53°50'59"E	1.29'
L116	N18°55'16"E	7.53'
L117	N36°09'01"W	2.61'
L118	N02°03'37"W	1.19'
L119	N53°50'59"E	25.53'
L120	N64°48'43"E	7.09'
L121	S8°05'24"E	8.81'
L122	N02°31'31"E	58.35'
L123	N23°09'53"E	7.89'
L124	N64°20'18"E	129.35'
L125	N89°39'23"E	110.00'
L126	S02°03'37"E	20.00'
L127	S89°39'23"W	110.00'
L128	S02°03'37"E	80.00'
L129	N89°39'23"E	45.00'
L130	S02°03'37"E	44.57'
L131	S89°39'23"W	45.00'
L132	S02°04'41"E	80.00'
L133	N89°39'23"E	110.00'
L134	S02°03'37"E	20.00'
L135	S89°39'23"W	110.00'
L136	S02°03'37"E	20.00'
L137	S89°39'23"E	109.99'
L138	S02°03'37"E	20.00'
L139	S02°03'37"E	109.99'
L140	S89°39'23"W	110.00'
L141	S02°03'37"E	31.85'
L142	N32°19'27"W	31.85'
L143	S89°44'23"W	49.50'
L144	N02°04'46"W	67.73'
L145	N89°39'23"E	110.00'
L146	S02°03'37"E	1.19'
L147	N89°39'23"E	100.00'
L148	S02°03'37"E	20.00'
L149	S89°39'23"W	100.00'
L150	N02°03'37"E	1.19'
L151	N02°03'37"E	1.19'
L152	N02°03'37"E	1.19'
L153	N02°03'37"E	1.19'
L154	N02°03'37"E	1.19'
L155	N02°03'37"E	1.19'
L156	N02°03'37"E	1.19'
L157	N02°03'37"E	1.19'
L158	N02°03'37"E	1.19'
L159	N02°03'37"E	1.19'
L160	N02°03'37"E	1.19'
L161	N02°03'37"E	1.19'
L162	N02°03'37"E	1.19'
L163	N02°03'37"E	1.19'
L164	N02°03'37"E	1.19'
L165	N02°03'37"E	1.19'
L166	N02°03'37"E	1.19'
L167	N02°03'37"E	1.19'
L168	N02°03'37"E	1.19'
L169	N02°03'37"E	1.19'
L170	N02°03'37"E	1.19'
L171	N02°03'37"E	1.19'
L172	N02°03'37"E	1.19'
L173	N02°03'37"E	1.19'
L174	N02°03'37"E	1.19'
L175	N02°03'37"E	1.19'
L176	N02°03'37"E	1.19'
L177	N02°03'37"E	1.19'
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L179	N02°03'37"E	1.19'
L180	N02°03'37"E	1.19'
L181	N02°03'37"E	1.19'
L182	N02°03'37"E	1.19'
L183	N02°03'37"E	1.19'
L184	N02°03'37"E	1.19'
L185	N02°03'37"E	1.19'
L186	N02°03'37"E	1.19'
L187	N02°03'37"E	1.19'
L188	N02°03'37"E	1.19'
L189	N02°03'37"E	1.19'
L190	N02°03'37"E	1.19'
L191	N02°03'37"E	1.19'
L192	N02°03'37"E	1.19'
L193	N02°03'37"E	1.19'
L194	N02°03'37"E	1.19'
L195	N02°03'37"E	1.19'
L196	N02°03'37"E	1.19'
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L199	N02°03'37"E	1.19'
L200	N02°03'37"E	1.19'
L201	N02°03'37"E	1.19'
L202	N02°03'37"E	1.19'
L203	N02°03'37"E	1.19'
L204	N02°03'37"E	1.19'
L205	N02°03'37"E	1.19'
L206	N02°03'37"E	1.19'
L207	N02°03'37"E	1.19'
L208	N02°03'37"E	1.19'
L209	N02°03'37"E	1.19'
L210	N02°03'37"E	1.19'
L211	N02°03'37"E	1.19'
L212	N02°03'37"E	1.19'
L213	N02°03'37"E	1.19'
L214	N02°03'37"E	1.19'
L215	N02°03'37"E	1.19'
L216	N02°03'37"E	1.19'
L217	N02°03'37"E	1.19'
L218	N02°03'37"E	1.19'
L219	N02°03'37"E	1.19'
L220	N02°03'37"E	1.19'
L221	N02°03'37"E	1.19'
L222	N02°03'37"E	1.19'
L223	N02°03'37"E	1.19'
L224	N02°03'37"E	1.19'
L225	N02°03'37"E	1.19'
L226	N02°03'37"E	1.19'
L227	N02°03'37"E	1.19'
L228	N02°03'37"E	1.19'
L229	N02°03'37"E	1.19'
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L249	N02°03'37"E	1.19'
L250	N02°03'37"E	1.19'
L251	N02°03'37"E	1.19'
L252	N02°03'37"E	1.19'
L253	N02°03'37"E	1.19'
L254	N02°03'37"E	1.19'
L255	N02°03'37"E	1.19'
L256	N02°03'37"E	1.19'
L257	N02°03'37"E	1.19'
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L263	N02°03'37"E	1.19'
L264	N02°03'37"E	1.19'
L265	N02°03'37"E	1.19'
L266	N02°03'37"E	1.19'
L267	N02°03'37"E	1.19'
L268	N02°03'37"E	1.19'
L269	N02°03'37"E	1.19'
L270	N02°03'37"E	1.19'
L271	N02°03'37"E	1.19'
L272	N02°03'37"E	1.19'
L273	N02°03'37"E	1.19'
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L277	N02°03'37"E	1.19'
L278	N02°03'37"E	1.19'
L279	N02°03'37"E	1.19'
L280	N02°03'37"E	1.19'
L281	N02°03'37"E	1.19'
L282	N02°03'37"E	1.19'
L283	N02°03'37"E	1.19'
L284	N02°03'37"E	1.19'
L285	N02°03'37"E	1.19'
L286	N02°03'37"E	1.19'
L287	N02°03'37"E	1.19'
L288	N02°03'37"E	1.19'
L289	N02°03'37"E	1.19'
L290	N02°03'37"E	1.19'
L291	N02°03'37"E	1.19'
L292	N02°03'37"E	1.19'
L293	N02°03'37"E	1.19'
L294	N02°03'37"E	1.19'
L295	N02°03'37"E	1.19'
L296	N02°03'37"E	1.19'
L297	N02°03'37"E	1.19'
L298	N02°03'37"E	1.19'
L299	N02°03'37"E	1.19'
L300	N02°03'37"E	1.19'

LINE TABLE		
LINE	BEARING	LENGTH
L105	S36°29'45"E	107.89'
L106	S86°38'02"W	71.67'
L107	S86°38'02"W	63.80'
L108	S86°38'02"W	202.21'
L109	N64°48'43"E	40.00'
L110	N64°48'43"E	103.29'
L111	S25°11'17"E	110.00'
L112	N25°11'17"W	110.00'
L113	N64°48'43"E	37.92'
L114	N02°03'37"E	101.68'
L115	N53°50'59"E	1.29'
L116	N18°55'16"E	7.53'
L117	N36°09'01"W	2.61'
L118	N02°03'37"W	1.19'
L119	N53°50'59"E	25.53'
L120	N64°48'43"E	7.09'
L121	S8°05'24"E	8.81'
L122	N02°31'31"E	58.35'
L123	N23°09'53"E	7.89'
L124	N64°20'18"E	129.35'
L125	N89°39'23"E	110.00'
L126	S02°03'37"E	20.00'
L127	S89°39'23"W	110.00'
L128	S02°03'37"E	80.00'
L129	N89°39'23"E	45.00'
L130	S02°03'37"E	44.57'
L131	S89°39'23"W	45.00'
L132	S02°04'41"E	80.00'
L133	N89°39'23"E	110.00'
L134	S02°03'37"E	20.00'
L135	S89°39'23"W	110.00'
L136	S02°03'37"E	20.00'
L137	S89°39'23"E	109.99'
L138	S02°03'37"E	20.00'
L139	S02°03'37"E	109.99'
L140	S89°39'23"W	110.00'
L141	S02°03'37"E	31.85'
L142	N32°19'27"W	31.85'
L143	S89°44'23"W	49.50'
L144	N02°04'46"W	67.73'
L145	N89°39'23"E	110.00'
L146	S02°03'37"E	1.19'
L147	N89°39'23"E	100.00'
L148	S02°03'37"E	20.00'
L149	S89°39'23"W	100.00'
L150	N02°03'37"E	1.19'
L151	N02°03'37"E	1.19'
L152	N02°03'37"E	1.19'
L153	N02°03'37"E	1.19'
L154	N02°03'37"E	1.19'
L155	N02°03'37"E	1.19'
L156	N02°03'37"E	1.19'
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L158	N02°03'37"E	1.19'
L159	N02°03'37"E	1.19'
L160	N02°03'37"E	1.19'
L161	N02°03'37"E	1.19'
L162	N02°03'37"E	1.19'
L163	N02°03'37"E	1.19'
L164	N02°03'37"E	1.19'
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L186	N02°03'37"E	1.19'
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L188	N02°03'37"E	1.19'
L189	N02°03'37"E	1.19'
L190	N02°03'37"E	1.19'
L191	N02°03'37"E	1.19'
L192	N02°03'37"E	1.1

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
01	COVER
02	BOUNDARY, TOPO, AND TREE SURVEY
03	DEVELOPMENT INFORMATION AND CONSTRUCTION NOTES_1
04	DEVELOPMENT INFORMATION AND CONSTRUCTION NOTES_2
05	DEVELOPMENT INFORMATION AND CONSTRUCTION NOTES_3
06	DEMOLITION AND SWPPP PLAN_1
07	DEMOLITION AND SWPPP PLAN_2
08	SWPPP DETAILS
09	SWPPP NOTES
10	OVERALL DEVELOPMENT PLAN
11	GEOMETRY, PAVEMENT, STRIPING AND SIGNAGE PLAN_1
12	GEOMETRY, PAVEMENT, STRIPING AND SIGNAGE PLAN_2
13	GEOMETRY, PAVEMENT, STRIPING AND SIGNAGE PLAN_3
14	CHARLES STREET RIGHT-OF-WAY IMPROVEMENTS
15	TURN LANE GRADING AND DRAINAGE
16	GRADING_1
17	GRADING_2
18	GRADING_3
19	OVERALL DRAINAGE PLAN
20	STORMWATER POND 1 PLAN
21	STORMWATER POND 2 PLAN
22	STORMWATER POND 3A PLAN
23	STORMWATER POND 3B PLAN
24	STORMWATER POND 4A PLAN
25	STORMWATER POND 4B PLAN
26	OVERALL UTILITY PLAN
27	UTILITY DETAILS AND NOTES
28	PLAN AND PROFILE - COMMONS WAY_1
29	PLAN AND PROFILE - COMMONS WAY_2
30	PLAN AND PROFILE - COMMONS WAY_3
31	PLAN AND PROFILE - BLUET DR_1
32	PLAN AND PROFILE - BLUET DR_2
33	PLAN AND PROFILE - 5TH STREET_1
34	PLAN AND PROFILE - 5TH STREET_2
35	PLAN AND PROFILE - LIFT STATION
36	UTILITY CONFLICT DETAILS
37	LIFT STATION DETAILS
38	LIFT STATION DETAILS
39	CITY DETAILS
40	CITY DETAILS
41	CITY DETAILS
42	MISCELLANEOUS DETAILS AND NOTES
43	FDOT DETAILS
44	FDOT DETAILS
45	FDOT DETAILS
46	FDOT DETAILS
47	FDOT DETAILS
48	MAINTENANCE OF TRAFFIC AND FDOT DETAILS
49	MAINTENANCE OF TRAFFIC
50	TREE REMOVAL PLAN
51	TREE PRESERVATION PLAN
52	COMMON OPEN SPACE PLAN
53	ADJACENT PROPERTY OWNERS EXHIBIT
54	WETLAND IMPACT PLAN
55	AUTOTURN TRUCK PLAN
56	TREE PROTECTION AND ROOT PRUNING PLAN_1
57	TREE PROTECTION AND ROOT PRUNING PLAN_2
58	TREE PROTECTION AND ROOT PRUNING PLAN_3
TP1	TREE PROTECTION PLAN
TP2	TREE PROTECTION PLAN
TP3	TREE PROTECTION PLAN
L1	LANDSCAPE PLAN
L2	LANDSCAPE PLAN
L3	LANDSCAPE PLAN
L4	ENLARGEMENT LANDSCAPE PLANS AND DETAILS
L5	LANDSCAPE DETAILS AND NOTES
IR1	OVERALL IRRIGATION PLAN
IR2	IRRIGATION ENLARGEMENT PLAN
IR3	IRRIGATION ENLARGEMENT PLAN
IR4	IRRIGATION DETAILS AND NOTES

THE GENERAL CONTRACTOR SHALL ENSURE THAT ANY SUBCONTRACTOR HAS A COMPLETE SET OF CONSTRUCTION DRAWINGS FOR ITS RESPECTIVE WORK. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR SUBCONTRACTORS ONLY UTILIZING INDIVIDUAL DRAWINGS FOR ITS WORK WHERE ADDITIONAL INFORMATION MAY BE CONTAINED ON OTHER DRAWINGS WITHIN THE SET.

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LEGAL DESCRIPTION

PARCEL 1: ALL OF BLOCKS 22 THROUGH 27, INCLUSIVE, PORTONA, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN MAP BOOK 10, AT PAGE 107, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA

PARCEL 2: LOT 2 (EXCEPT ONE-HALF ACRE NORTH OF CANAL ON WEST LINE OF LOT 2 AND EXCEPT THE EAST 625 FEET), SECTION 4, TOWNSHIP 16 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA. AND LESS AND EXCEPT ANY PORTION OF LOT 2 LYING WEST OF MCDONALD ROAD. AND LESS AND EXCEPT THAT PORTION OF LOT 2 CONVEYED IN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 2317, PAGE 1472, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA. AND LESS AND EXCEPT ALL OF THAT PORTION PLATTED AS AMBER VILLAGE, ACCORDING TO PLAT THEREOF RECORDED IN PLAT BOOK 40, PAGE 61, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

PARCEL 3: NORTH 290 FEET OF THE EAST 660 FEET, EAST OF MCDONALD ROAD OF SUGAR HOUSE RESERVATION AND EAST 500 FEET OF SOUTH 50 FEET OF LOT 2, BLOCK 12, DUNLAWTON, PORT ORANGE, FLORIDA. LYING AND BEING IN VOLUSIA COUNTY, FLORIDA.

PARCEL 4: THE NORTH 170 FEET OF THE SOUTH 370 FEET OF THE NORTH 660 FEET OF THE EAST 660 FEET, EAST OF MCDONALD ROAD OF DUNLAWTON SUGAR HOUSE RESERVATION, ACCORDING TO THE MAP RECORDED IN DEED BOOK "M", PAGE 187, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

CONTAINING 1,507,262.61 SQUARE FEET (34.602 ACRES±)

PROJECT STATEMENT

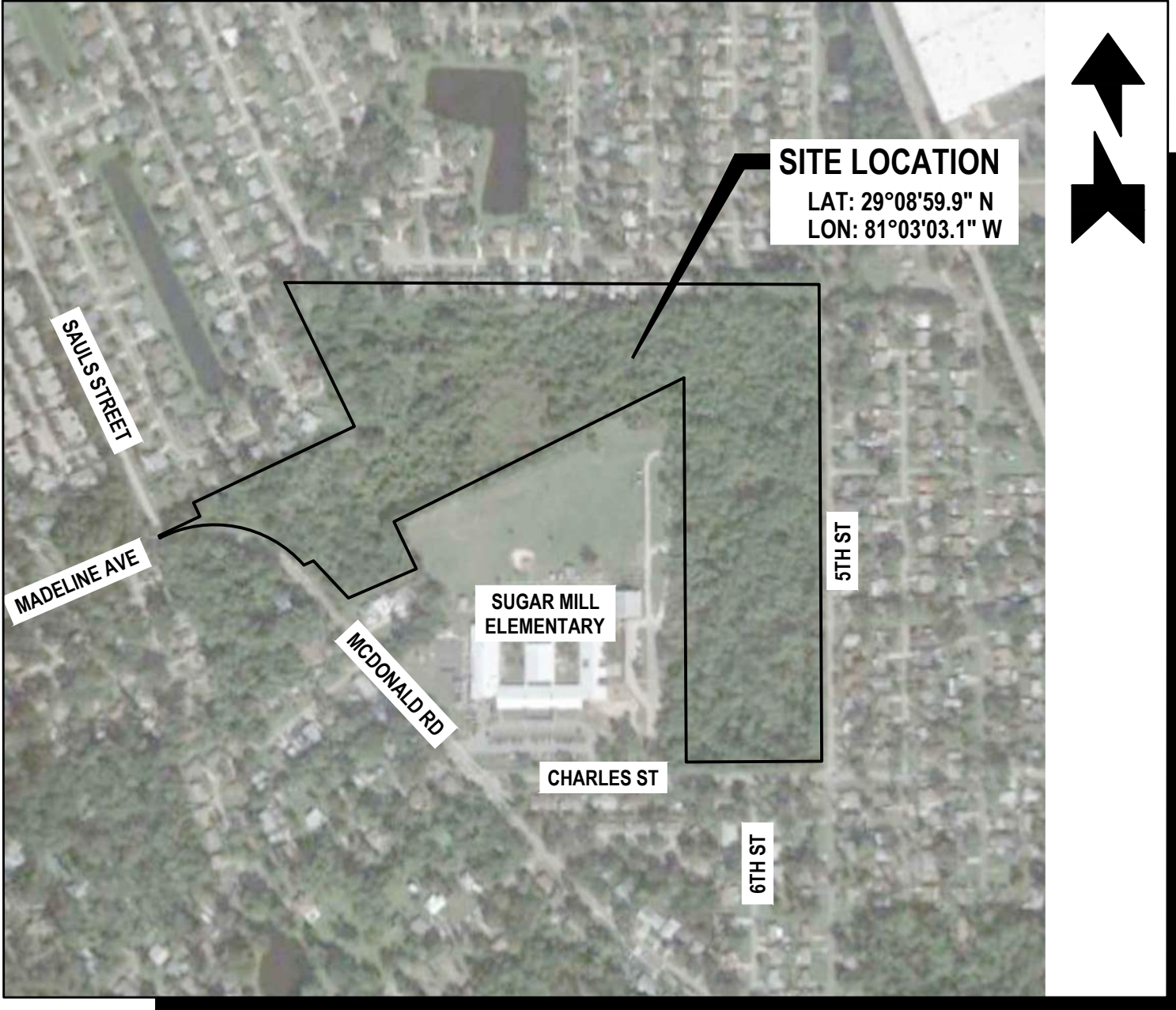
PROPOSE A PLANNED UNIT DEVELOPMENT TO BE KNOWN AS "MADELINE COMMONS" CONSISTING OF 149 SINGLE FAMILY DETACHED DWELLING UNITS ON 34.60 ACRES ± (4.31 UNITS PER ACRE).

JURISDICTIONAL AGENCY

CITY OF PORT ORANGE (DEVELOPMENT ORDER)	22-50000003
FDEP (WASTEWATER)	.
FDEP (NPDES NOI)	FLR10VE03
SJRWMD (STORMWATER)	184120-1
VOLUSIA COUNTY HEALTH DEPARTMENT (WATER)	.
VOLUSIA COUNTY SCHOOLS - BUILDING PERMIT	.

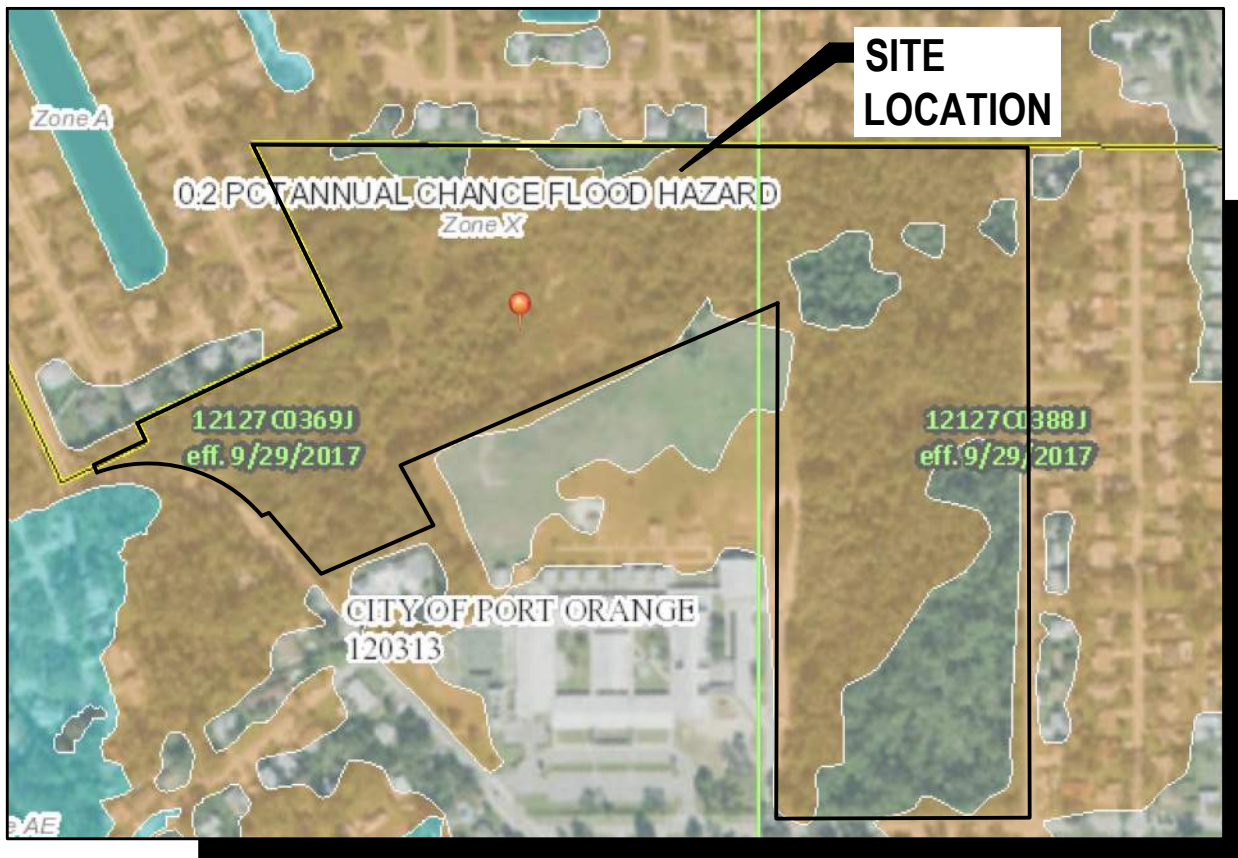
CITY OF PORT ORANGE NOTE

PURSUANT TO CHAPTER 13, SECTION 9, APPROVAL OF THIS PLAN INCLUDES AN ADMINISTRATIVE VARIANCE TO STANDARD CONSTRUCTION DETAIL ST-8 TO NOT REQUIRE A 10 FEET MINIMUM MAINTENANCE BERM AND DRAINAGE EASEMENT FROM THE TOP OF BANK DUE TO THE DEPTH OF THE POND'S BEING LESS THAN 2.5 FEET PER LDC, CH. 5, SEC. 6(D)(1)(D).



AERIAL MAP

SCALE: 1" = 500'



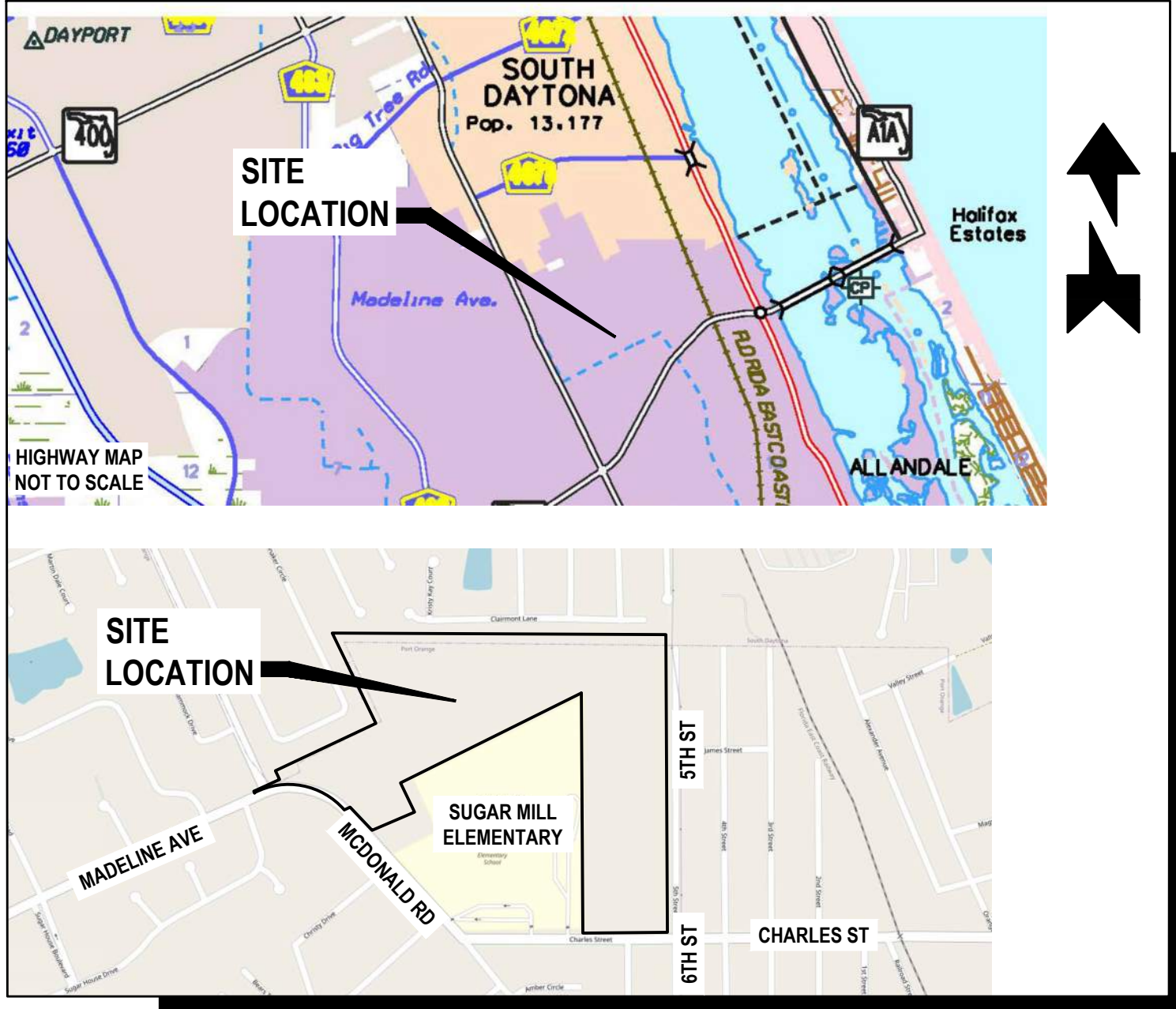
FLOOD ZONE MAP

SCALE: 1" = 500'

FLOOD ZONE "X" & "SHADED X"
PANEL No. 12127C0369J, EFF. 2/29/2017
PANEL No. 12127C0388J, EFF. 9/29/2017

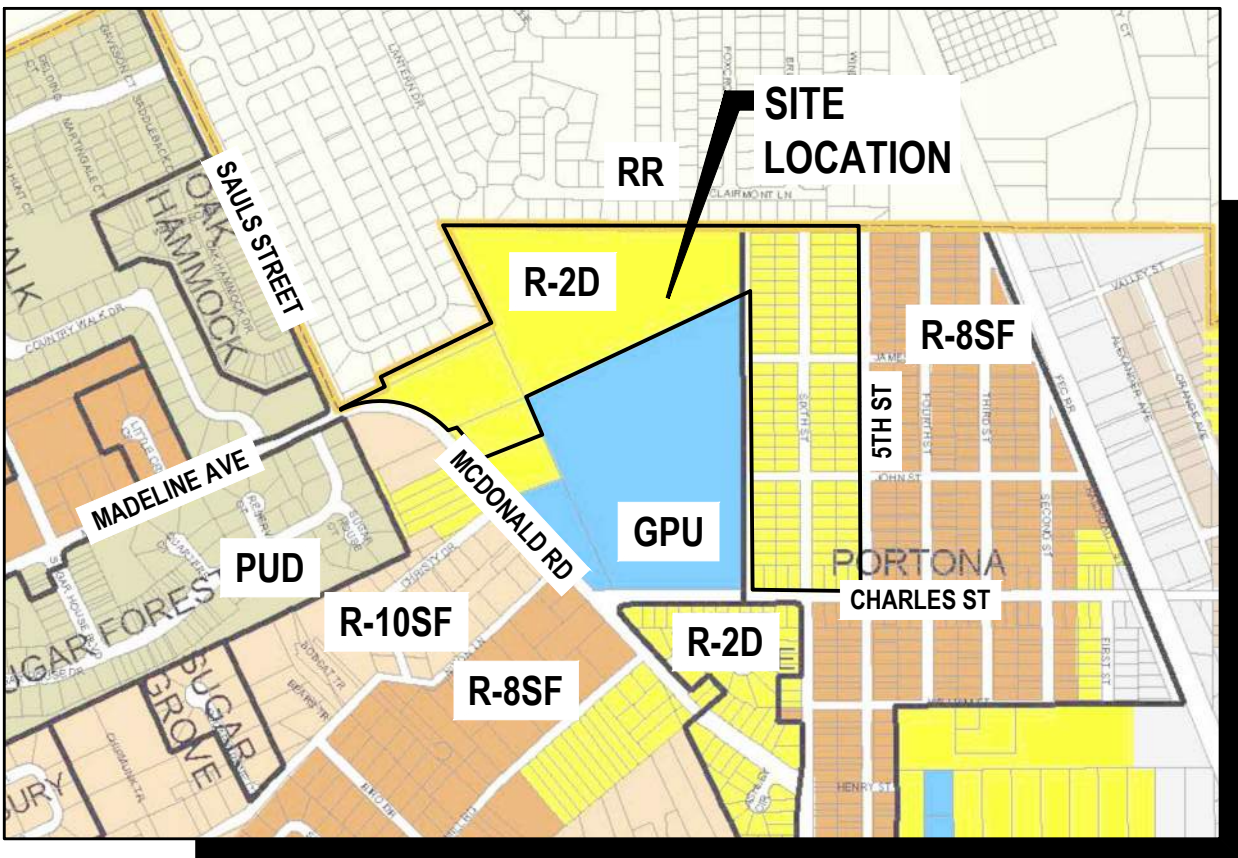
SUBDIVISION PLAN DRAWINGS FOR MADELINE COMMONS

SECTIONS 04 AND 37, TOWNSHIP 16S, RANGE 33E
16-33-04-02-22-0010, 16-33-04-00-0021,
16-33-37-01-13-0010 AND 16-33-37-01-13-0017
975 MCDONALD ROAD
PORT ORANGE, FL 32129
JULY 2022
REVISED NOVEMBER 2022



LOCATION MAP

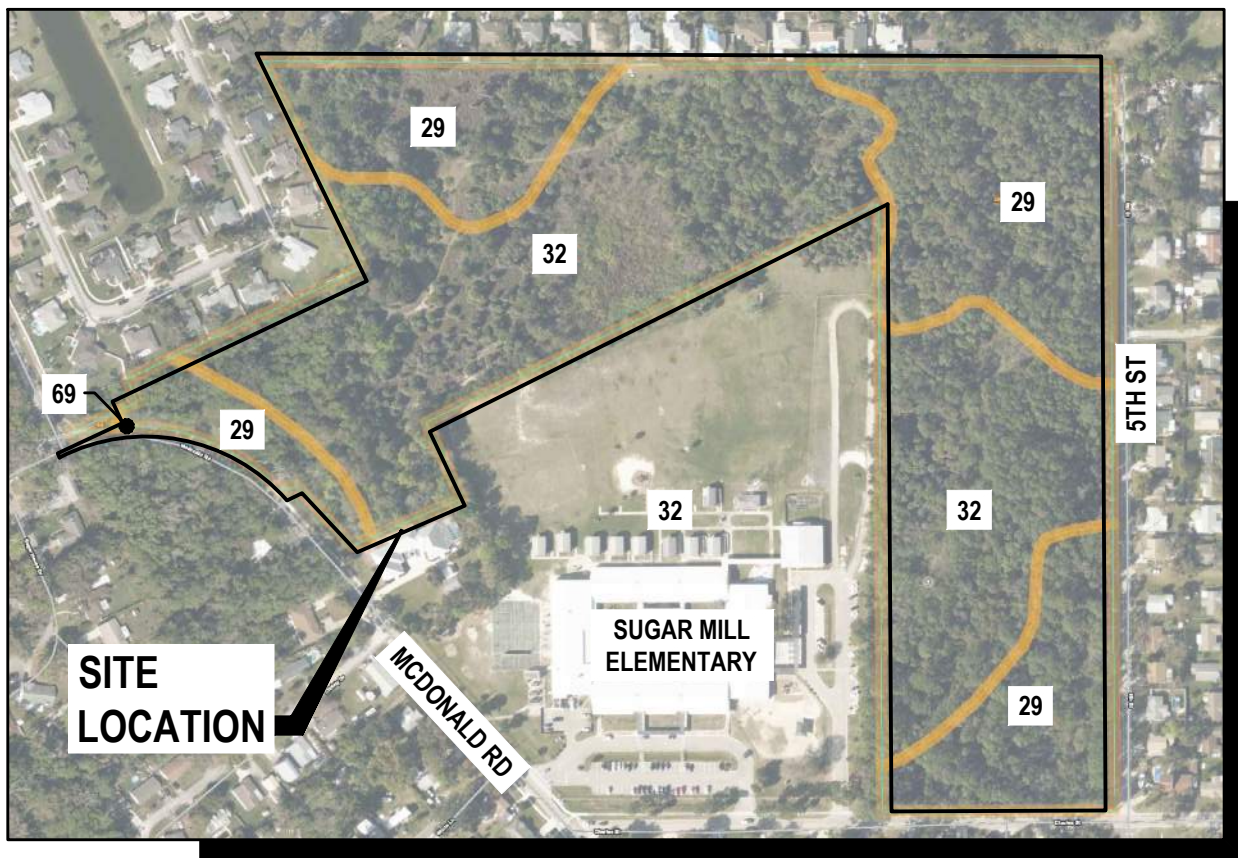
SCALE: 1" = 800'



ZONING MAP

SCALE: 1" = 800'

ZONING : (PUD) PLANNED UNIT DEVELOPMENT



SOILS MAP

SCALE: 1" = 400'

SOIL TYPE:(29) IMMOKALEE SAND
(32) MYAKKA-MYAKKA, WET, FINE SANDS,
0 TO 2 PERCENT SLOPES
(69) TUSCAWILLA FINE SAND

PROJECT TEAM

PROPERTY OWNER/APPLICANT: MADELINE COMMONS, LLC
36 CHARMING WAY
LAKEWOOD, NJ 08701
PHONE: (437) 922-5793
EMAIL: FIDDLERSHOLDINGS@GMAIL.COM

ENGINEER/ LANDSCAPE ARCHITECT/ AGENT: NEWKIRK ENGINEERING, INC.
1230 NORTH US1, SUITE 3
ORMOND BEACH, FL 32174
PHONE: (386) 872-7794
EMAIL: CODY@NEWKIRK-ENGINEERING.COM

SURVEYOR: DEWBERRY
131 WEST KALEY STREET
ORLANDO, FL 32806
PHONE: (321) 354-9826
EMAIL: MDICHIARA@DEWBERRY.COM

GEOTECHNICAL: UNIVERSAL ENGINEERING SCIENCES
911 BEVILLE ROAD, SUITE 3
SOUTH DAYTONA BEACH, FL 32119
PHONE: (386) 756-1105
FAX: (386) 760-4067
EMAIL: BPOHL@UNIVERSALENGINEERING.COM

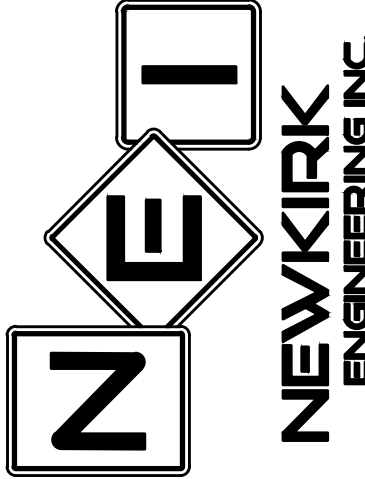
ENVIRONMENTAL: ECOLOGICAL CONSULTING SOLUTIONS, INC
235 N. HUNT CLUB BLVD., SUITE 202
LONGWOOD, FL 32779
PHONE: (407) 869-9434
FAX: (407) 869-9436
EMAIL: CKRACK@ECSFL.CC

CONTACT NUMBERS

PLANNING DIVISION - CITY OF PORT ORANGE (386) 506-5600
BUILDING SERVICES - CITY OF PORT ORANGE (386) 506-5600
WATER - CITY OF PORT ORANGE UTILITY DIVISION (386) 506-5770
WASTEWATER - CITY OF PORT ORANGE UTILITY DIVISION (386) 506-5750
GAS - TECO PEOPLES GAS - (386) 672-2232
ELECTRIC - FLORIDA POWER & LIGHT (386) 322-3400
TELEPHONE/CABLE - AT&T (386) 304-1175

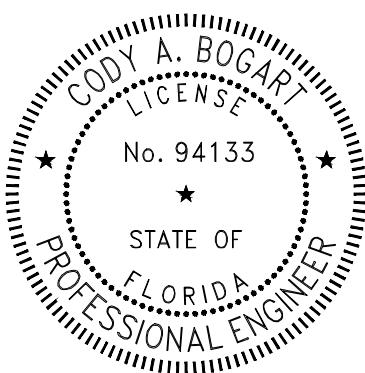
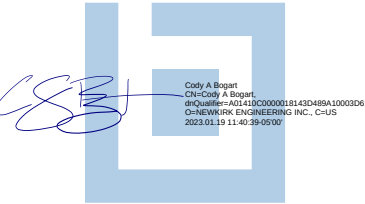


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Ormond Beach, Florida 32174
Phone (386) 872-7794
www.newkirk-engineering.com
C.A. # 30209
L.C. # 2600084
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Civil Engineering,
Transportation, CEI &
Landscape Architecture



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THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
CODY A. BOGART, PE # 94133 ON

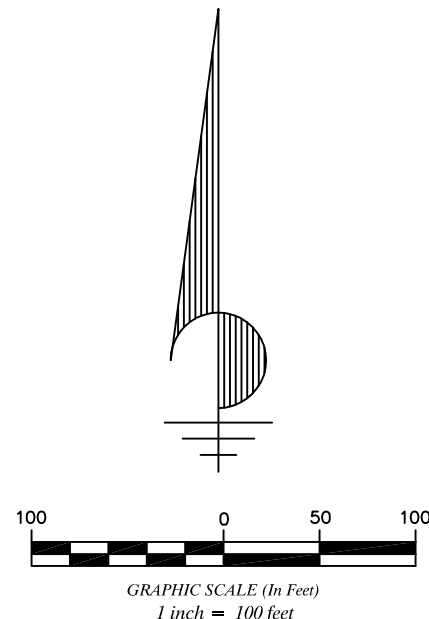


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DRAWING NUMBER

01

ALTA/NSPS LAND TITLE SURVEY
BOUNDARY / TOPOGRAPHIC SURVEY
MADELINE COMMONS
PORT ORANGE, VOLUSIA COUNTY, FLORIDA



LEGAL DESCRIPTION -per Schedule A

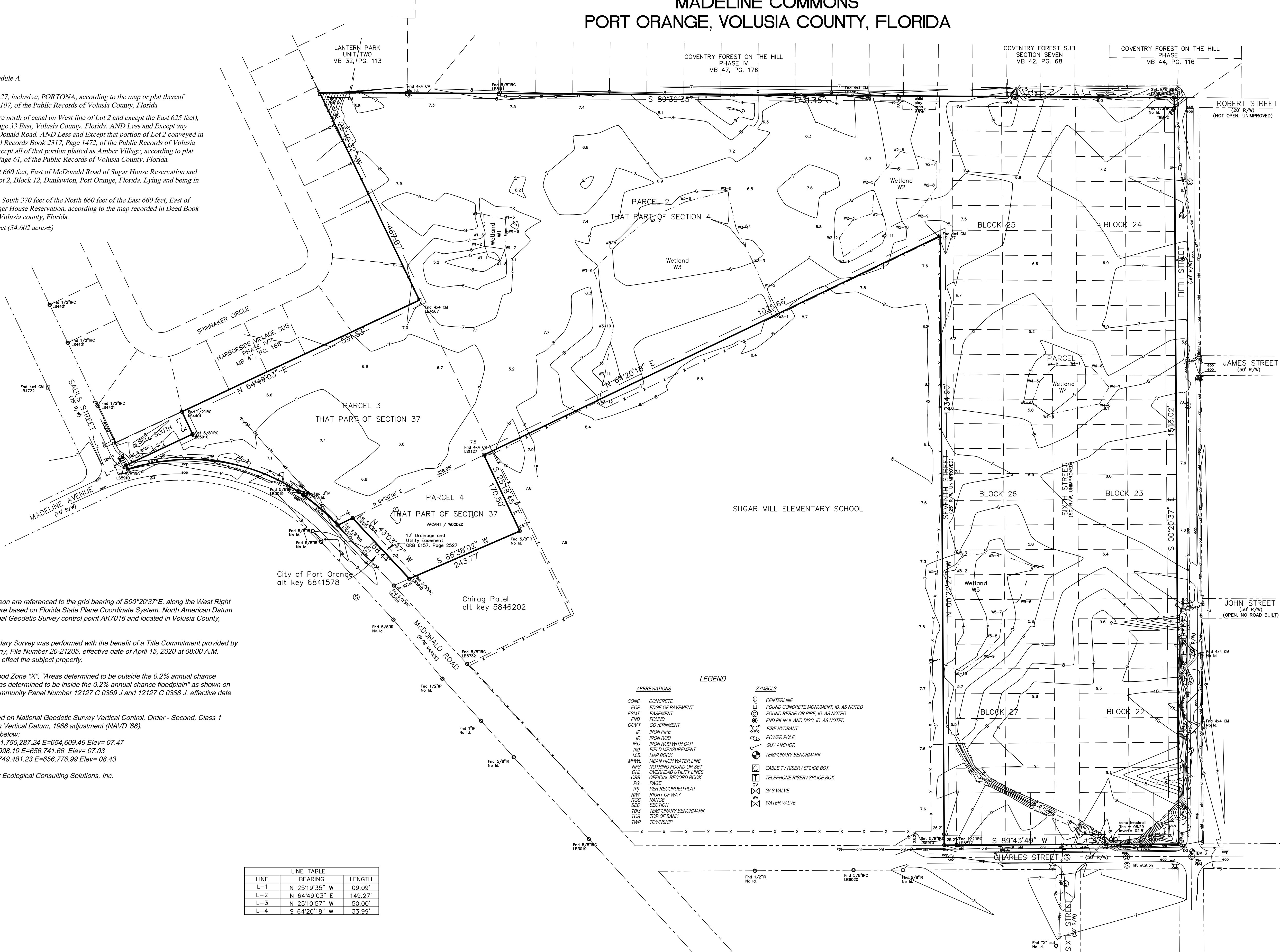
Parcel 1: All of Blocks 22 through 27, inclusive, PORTONA, according to the map or plat thereof recorded in Map Book 10, at Page 107, of the Public Records of Volusia County, Florida

Parcel 2: Lot 2 (except one-half acre north of canal on West line of Lot 2 and except the East 625 feet), Section 4, Township 16 South, Range 33 East, Volusia County, Florida. AND Less and Except any portion of Lot 2 lying West of McDonald Road. AND Less and Except that portion of Lot 2 conveyed in Warranty Deed recorded in Official Records Book 2317, Page 1472, of the Public Records of Volusia County, Florida. AND Less and Except all of that portion platted as Amber Village, according to plat thereof recorded in Plat Book 40, Page 61, of the Public Records of Volusia County, Florida.

Parcel 3: North 290 feet of the East 660 feet, East of McDonald Road of Sugar House Reservation and East 500 feet of South 50 feet of Lot 2, Block 12, Dunlawton, Port Orange, Florida. Lying and being in Volusia County, Florida.

Parcel 4: The North 170 feet of the South 370 feet of the North 660 feet of the East 660 feet, East of McDonald Road of Dunlawton Sugar House Reservation, according to the map recorded in Deed Book "M", Page 187, Public Records of Volusia county, Florida.

Containing 1,507,262.61 square feet (34.602 acres±)



- 1 - North and the bearings shown hereon are referenced to the grid bearing of S00°20'37"E, along the West Right of Way of Fifth Street. Grid bearings are based on Florida State Plane Coordinate System, North American Datum 1983/1999, East Zone, utilizing National Geodetic Survey control point AK7016 and located in Volusia County, Florida.
- 2 - This ALTA/NSPS Land Title Boundary Survey was performed with the benefit of a Title Commitment provided by Westcor Land Title Insurance Company, File Number 20-21205, effective date of April 15, 2020 at 08:00 A.M. There are no Schedule B II items that effect the subject property.
- 3 - The subject property lies within Flood Zone "X". "Areas determined to be outside the 0.2% annual chance floodplain" AND Flood Zone "X" "Areas determined to be inside the 0.2% annual chance floodplain" as shown on FEMA Flood Insurance Rate Map, Community Panel Number 12127 C 0369 J and 12127 C 0388 J, effective date September 29, 2017.
- 4 - Elevations shown hereon are based on National Geodetic Survey Vertical Control, Order - Second, Class 1 control point AQ1370, North American Vertical Datum, 1988 adjustment (NAVD '88).
Temporary Benchmarks are as listed below:
TBM-1 top of concrete storm inlet N=1,750,287.24 E=654,609.49 Elev= 07.47
TBM-2 top of 1/2"IR No Id. N=1,750,998.10 E=656,741.66 Elev= 07.03
TBM-3 top of sanitary manhole N=1,749,481.23 E=656,776.99 Elev= 08.43
- 5 - Wetland lines are as delineated by Ecological Consulting Solutions, Inc.

LINE TABLE			
LINE	BEARING	ARC LENGTH	LENGTH
L-1	N 25°19'35" W	09.09'	
L-2	N 64°49'03" E	149.27'	
L-3	N 25°10'57" W	50.00'	
L-4	S 64°20'18" W	33.99'	

CURVE TABLE				
CURVE	RADIUS	CENTRAL ANGLE	ARC LENGTH	CHORD
C-1	400.03'	66°41'22"	465.62'	439.78'

- ABBREVIATIONS
- CONC CONCRETE
 - EDP EDGE OF PAVEMENT
 - ESMT EASEMENT
 - FND FOUND
 - GOVT GOVERNMENT
 - IP IRON PIPE
 - IR IRON ROD
 - RC IRON ROD WITH CAP
 - MI FIELD MEASUREMENT
 - M.B. MAP BOOK
 - MHWL MEAN HIGH WATER LINE
 - NFS NOTHING FOUND OR SET
 - OHL OVERHEAD UTILITY LINES
 - ORB OFFICIAL RECORD BOOK
 - PG PAGE
 - PI PER RECORDED PLAT
 - R/W RIGHT OF WAY
 - RCE RANGE
 - SEC SECTION
 - TBM TEMPORARY BENCHMARK
 - TOS TOP OF BANK
 - TWP TOWNSHIP
- LEGEND
- SYMBOLS
- CENTERLINE
 - ⊙ FOUND CONCRETE MONUMENT, ID. AS NOTED
 - ⊙ FOUND REBAR OR PIPE, ID. AS NOTED
 - ⊙ FND PK NAIL AND DISC, ID. AS NOTED
 - ⊙ FIRE HYDRANT
 - ⊙ POWER POLE
 - ⊙ GUY ANCHOR
 - ⊙ TEMPORARY BENCHMARK
 - ⊙ CABLE TV RISER / SPLICE BOX
 - ⊙ TELEPHONE RISER / SPLICE BOX
 - ⊙ GAS VALVE
 - ⊙ WATER VALVE

CERTIFIED TO:
MARK GOLDSCHMIDT
NEWKIRK ENGINEERING, INC

Leon Hampton, PSM
Leon@lhpsm.com
www.lhpsm.com

I CERTIFY THAT THIS SURVEY MEETS THE STANDARDS OF PRACTICE AS SET FORTH BY THE BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17.05, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027 FLORIDA STATUTES.

11/02/2020 STATE OF FLORIDA
LEON L. HAMPTON, P.S.M. PROFESSIONAL SURVEYOR & MAPPER NO. 5910

THIS MAP IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF THIS FLORIDA LICENSED SURVEYOR AND MAPPER.

LEON HAMPTON, PSM
LAND SURVEY and CONSULTING
203 SHERIDAN AVENUE
LONGWOOD, FLORIDA 32750
PHONE: (321) 231-4874
Leon@lhpsm.com
www.lhpsm.com

CITY OF PORT ORANGE
VOLUSIA COUNTY, FLORIDA
MADELINE COMMONS
PORT ORANGE, FLORIDA

BOUNDARY /
TOPOGRAPHIC
SURVEY

REVISIONS
06/04/20 Original release
07/24/20 Revised boundary
11/02/20 Added Topography
01/23/21 Added Benchmarks

CREW CHIEF: B.H.
DRAWN BY: BAT
CHECKED BY: L.H.

SCALE:
1" = 100'

LAST FIELD DATE
10/28/20

JOB NUMBER
20-0428

ing to the map or plat thereof
Volusia County, Florida
Lot 2 and except the East 625 feet),
Florida. AND Less and Except any
cept that portion of Lot 2 conveyed in
of the Public Records of Volusia
Amber Village, according to plat
Volusia County, Florida.
and of Sugar House Reservation and
Orange, Florida. Lying and being in
feet of the East 660 feet, East of
to the map recorded in Deed Book

LANIER PARK
UNIT TWO
MB 32, PG. 113

COVENTRY FOREST ON THE HILL
PHASE IV
MB 47, PG. 176

COVENTRY FOREST SUB
SECTION SEVEN
MB 42, PG. 68

COVENTRY FOREST ON THE HILL
PHASE I
MB 44, PG. 116

ROBERT STREET
(20' R/W)
(NOT OPEN, UNIMPROVED)

JAMES STREET
(50' R/W)

JOHN STREET
(50' R/W)
(OPEN, NO ROAD BUILT)

CHARLES STREET
(50' R/W)

SPINNAKER CIRCLE

HARBORSIDE VILLAGE SUB
PHASE IV
MB 47, PG. 166

PARCEL 2
THAT PART OF SECTION 4

Wetland W1

Wetland W2

Wetland W3

Wetland W4

Wetland W5

PARCEL 3
THAT PART OF SECTION 3

PARCEL 4
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City of Port Orange
alt key 6841578

Chirag Patel
alt key 5846202

McDONALD ROAD
(9' R/W)

LEGEND

ABBREVIATIONS

CONC CONCRETE
EOP EDGE OF PAVEMENT
ESMT EASEMENT
FND FOUND
GOVT GOVERNMENT
IP IRON PIPE
IR IRON ROD
IRC IRON ROD WITH CAP
M FIELD MEASUREMENT
M.B. MAP BOOK
MHWL MEAN HIGH WATER LINE
NFS NOTHING FOUND OR SET
OHL OVERHEAD UTILITY LINES
ORB OFFICIAL RECORD BOOK
PG PAGE
(P) PER RECORDED PLAT
R/W RIGHT OF WAY
RSE RANGE
SEC SECTION
TBM TEMPORARY BENCHMARK
TOB TOP OF BANK
TOWNSHIP

SYMBOLS

C CENTERLINE
C FOUND CONCRETE MONUMENT, ID. AS NOTED
C FOUND REBAR OR PIPE, ID. AS NOTED
C FND IN WALL AND DISC, ID. AS NOTED
C FIRE HYDRANT
C POWER POLE
C GUY ANCHOR
C TEMPORARY BENCHMARK
C CABLE TV RISER / SPLICE BOX
C TELEPHONE RISER / SPLICE BOX
C GAS VALVE
C WATER VALVE

LINE TABLE

LINE	BEARING	LENGTH
L-1	N 251°9'35" W	09.09'
L-2	N 64°49'03" E	149.27'
L-3	N 251°0'57" W	50.00'
L-4	S 64°20'18" W	33.99'

ABBREVIATIONS		SYMBOLS	
ABC	CONCRETE	①	CENTERLINE
ONC	EDGE OF PAVEMENT	②	FOUND CONCRETE MONUMENT. ID. AS NOTED
EGP	SEASMENT	③	FOUND REBAR OR PIPE. ID. AS NOTED
FND	IRON PIPE	④	FND PK NAL AND DISC. ID. AS NOTED
GOV	GOVERNMENT	⑤	FREE HYDRANT
R	ROAD	⑥	POWER POLE
IRC	IRON ROD WITH CAP	⑦	GUY ANDCHOR
(M)	FIELD MEASUREMENT	⑧	TEMPORARY BENCHMARK
MBS	MAP BOOK	⑨	CABLE TV RISER / SERVICE BOX
MEAN	MEAN HIGH WATER LINE	⑩	TELEPHONE RISER / SERVICE BOX
NFS	NOTHING FOUND OR SET	⑪	
OH	OVERHEAD UTILITY LINES	⑫	
OR	OFFICIAL RECORD BOOK	⑬	
PG	PAGE	⑭	
(P)	PER RECORDED PLAT	⑮	
RWR	RIGHT OF WAY	⑯	
RANGE	RANGE	⑰	
SEC	SECTION	⑱	
TEMP	TEMPORARY BENCHMARK	⑲	
TOP	TOP OF BANK	⑳	
TWP	TOWNSHIP	㉑	

CURVE TABLE					
CURVE	RADIUS	CENTRAL ANGLE	ARC LENGTH	CHORD	CHORD BEARING
C-1	400.03'	66°41'22"	465.62'	439.78'	N 75°05'16" W


 Leon Hampton, PSM
 Leon@Lhpsm.com
 www.Lhpsm.com

11/09/2020
LEON L. HAMPTON P.S.M. STATE OF FLORIDA
PROFESSIONAL SURVEYOR & MAPPER NO. 5910
THIS MAP IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL
RAISED SEAL OF THIS FLORIDA LICENSED SURVEYOR AND MAPPER.

	REVISIONS
Δ	06/04/20 Original release
Δ	07/24/20 Revised boundary
Δ	11/02/20 Added Topography
Δ	11/09/20 Added Trees
Δ	07/15/21 Adjusted some trees
Δ	
Δ	

19-0613

Drawing name: C:\Users\mdchiora\AppData\Local\Temp\1501450145742_Madeline Commons_surftopo_Main.dwg SHEET 1 Mar 24, 2022 6:50am by: mdchiora

TOPOGRAPHIC SURVEY
-FOR-
MADELINE COMMONS LLC.
LOCATED IN SECTION 04, TOWNSHIP 16 SOUTH, RANGE 33 EAST

LEGEND AND ABBREVIATIONS:

±	MORE OR LESS
EL.	ELEVATION
LB	LICENSED BUSINESS
NO.	NUMBER
LS	LAND SURVEYOR
I.D.	IDENTIFICATION
ORB	OFFICIAL RECORDS BOOK
CL	CENTERLINE
R	RADIUS
L	ARC LENGTH
Δ	DELTA (CENTRAL ANGLE)
C.D.	CHORD LENGTH
C.B.	CHORD BEARING
PCC	POINT ON CURVE
POL	POINT ON LINE
PCC	POINT OF COMPOUND CURVATURE
PRC	POINT OF REVERSE CURVATURE
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PI	POINT OF INTERSECTION
P.O.C.	POINT OF COMMENCEMENT
P.O.B.	POINT OF BEGINNING
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY
DIP	DUCTILE IRON PIPE
PVC	POLYVINYL CHLORIDE
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
NAVD	NORTH AMERICAN VERTICAL DATUM
NGVD	NATIONAL GEODETIC VERTICAL DATUM
MB	MAP BOOK
ORB	OFFICIAL RECORDS BOOK
PG(S)	PAGE(S)
RW	RIGHT OF WAY
ESMT	EASEMENT
SEC	SECTION
FND	FOUND
REC	RECOVERED
COR	CERTIFIED CORNER RECORD
RLS	REGISTERED LAND SURVEYOR
CM	CONCRETE MONUMENT
IRC	IRON ROD AND CAP
IR	IRON ROD
IP	IRON PIPE
CLF	CHAIN LINK FENCE
□	FOUND CONCRETE MONUMENT AS NOTED
○	FOUND NAIL AS NOTED
⊙	FOUND NAIL & DISK AS NOTED
⊙	SET NAIL & DISK (LB 8011)
●	FOUND IRON ROD & CAP AS NOTED
●	FOUND IRON ROD AS NOTED
⊙	SET 5/8" IRON ROD & CAP (LB 8011)
⊙	CONTROL/BENCHMARK AS DESCRIBED
⊙	CURB INLET GRATE
⊙	CATCH BASIN
⊙	STORM MANHOLE
⊙	SANITARY MANHOLE
⊙	SANITARY CLEANOUT
⊙	ELECTRIC MANHOLE
⊙	ELECTRIC METER
⊙	ELECTRIC RISER BOX
⊙	CABLE TELEVISION RISER BOX
⊙	TELEPHONE RISER BOX
⊙	UTILITY RISER
⊙	WIRE PULLBOX
⊙	WELL
⊙	WATER SPIGOT
⊙	IRRIGATION CONTROL VALVE
⊙	WATER METER
⊙	WATER VALVE
⊙	RECLAIM WATER VALVE
⊙	FIRE HYDRANT
⊙	AIR CONDITIONER PAD
⊙	GAS VALVE
⊙	GAS METER
⊙	GAS LINE MARKER
⊙	CONCRETE UTILITY POLE
⊙	METAL UTILITY POLE
⊙	WOOD UTILITY POLE
⊙	UTILITY POLE GUY ANCHOR
⊙	LIGHT POLE
⊙	SPOT/GROUND LIGHT
⊙	ELECTRIC TRANSFORMER
⊙	WETLAND FLAG
⊙	SIGN
⊙	BOLLARD
⊙	FLAG POLE
⊙	MAILBOX
⊙	TREE LINE
⊙	LINE BREAK
⊙	FENCE LINE AS NOTED
⊙	OVERHEAD UTILITY LINE
⊙	1/8" APPROXIMATE TOP OF BANK
⊙	1/5" APPROXIMATE TOE OF SLOPE
⊙	100' EXISTING CONTOUR



VICINITY MAP/KEY MAP:
(SCALE: 1"=400')

SURVEY NOTES:

- COORDINATES SHOWN HEREON ARE REFERENCED TO FLORIDA STATE PLANE COORDINATES, EAST ZONE, NAD 1983/2011, U.S. SURVEY FEET, ESTABLISHED WITH SPECTRA PRECISION EPOCH 80 GNSS RTK GPS SYSTEM, TOGETHER WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION PERMANENT REFERENCE NETWORK (FPRN).
- LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHTS-OF-WAY, EASEMENTS, ADJOINERS OR OTHER INSTRUMENTS OF RECORD BY THIS FIRM.
- NORTH-SOUTH AND EAST-WEST TIES TO FOUND MONUMENTATION AND IMPROVEMENTS ARE BASED ON CARDINAL DIRECTION.
- THIS IS NOT A BOUNDARY SURVEY.
- WETLAND AREAS, IF EXISTING, WERE NOT ADDRESSED AS A PART OF THIS SURVEY.
- THIS ROUTE MAY BE SUBJECT TO ADDITIONAL EASEMENTS, COVENANTS, AND RESTRICTIONS NOT SHOWN HEREON, BUT FOUND IN THE PUBLIC RECORDS OF MANATEE COUNTY, FLORIDA.
- THE RIGHT-OF-WAY SHOWN HEREON WAS DERIVED FROM THE FOLLOWING:
*GIS PARCEL DATA OBTAINED FROM VOLUSIA COUNTY PROPERTY APPRAISER.
*PREVIOUS SURVEY OBTAINED BY - LEON HAMPTON, PSM, LAND SURVEYING CONSULTANTS.
- THE ACCURACY OF THE SURVEY MEASUREMENTS USED FOR THIS SURVEY MEETS OR EXCEEDS THE EXPECTED USE OF THE PROPERTY DESCRIBED HEREON. (COMMERCIAL/HIGH RISK) 1 FOOT IN 10,000 FEET.
- UNDERGROUND UTILITIES HAVE BEEN LOCATED BY ABOVE GROUND VISIBLE EVIDENCE AND AS DETAILED ACCESSIBLE STRUCTURES AND MANHOLES. OTHER BURIED FACILITIES MAY EXIST THAT WERE NOT LOCATED AS A PART OF THIS SURVEY.
- ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), AS DERIVED BY FROM CITY OF SOUTH DAYTONA BENCHMARK 19. DESCRIBED AS BEING A BRASS DISC SET IN CONCRETE SIDEWALK STAMPED "CITY BM-19", HAVING AN ELEVATION OF 7.43'.
- ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY'S (FEMA) FLOOD INSURANCE RATE MAP (FIRM) PANEL NO. 1217C0369J AND 1217C0368J, VOLUSIA COUNTY, FLORIDA, EFFECTIVE DATE OF 09/29/2017, THE PROPERTY DESCRIBED HEREON LIES WITHIN ZONES "X", "AE", AND "A".
- ALL FEMA LINES SHOWN HEREON LIE WITHIN ZONE "X", UNLESS OTHERWISE NOTED.
- THE ELECTRONIC SIGNATURE HEREON IS IN COMPLIANCE WITH FLORIDA ADMINISTRATIVE CODE (FAC) 5J-17.062(3).
- THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY WILLIAM D. DONLEY, PSM 5381, ON 03/24/2022 PER FAC 5J-17.062(2).

CERTIFIED TO:
MADELINE COMMONS, LLC.

SURVEYOR'S CERTIFICATE:
I HEREBY CERTIFY THIS SURVEY MEETS THE APPLICABLE "STANDARDS OF PRACTICE" AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN RULE 5J17.050-.052, FLORIDA ADMINISTRATIVE CODE.

WILLIAM D. DONLEY
FLORIDA LICENSED SURVEYOR & MAPPER NO. LS 5381

DATE

THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

REVISIONS				
FB/PG	DATE	DRAWN	REVISION	CKD

Dewberry
131 WEST KALEY STREET
ORLANDO, FLORIDA 32806
PHONE: 321.354.9826 FAX: 407.648.9104
WWW.DEWBERRY.COM
CERTIFICATE OF AUTHORIZATION No. LB 8011

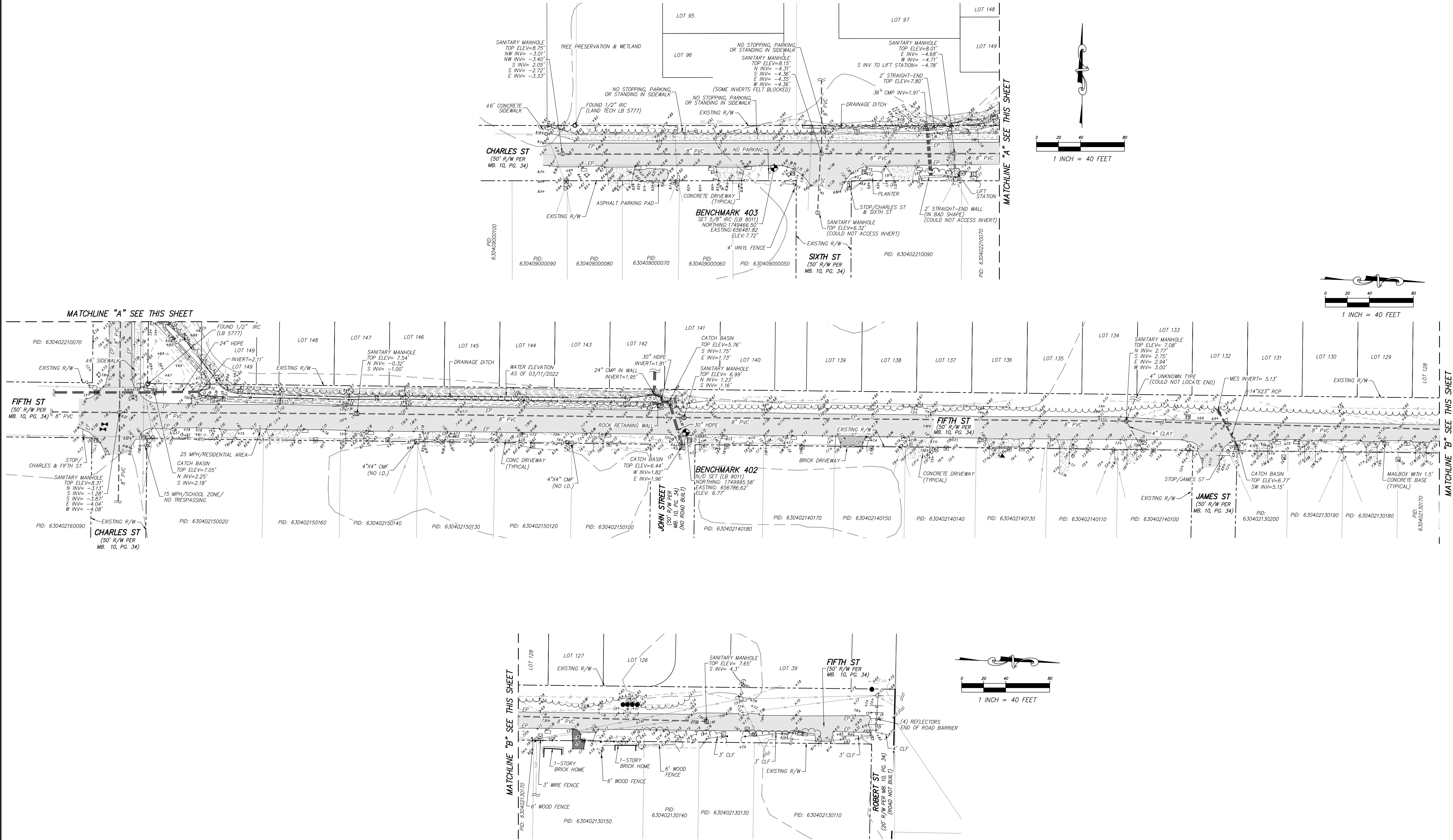
LOCATED IN SECTION 04, TOWNSHIP 16
SOUTH, RANGE 33 EAST

VOLUSIA COUNTY, FLORIDA

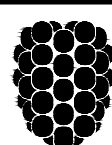
TOPOGRAPHIC SURVEY
-FOR-
MADELINE COMMONS, LLC.

FB/PG		FIELD DATE		PROJECT NO. 50149742	1 OF 3
PORT ORANGE #1/ 1-14		03/16/2022			
DRAWING DATE	BY	APPROVED		SCALE 1"=400'	
03/24/2022	MCD	WDD			

Drawing name: C:\Users\michalora\AppData\Local\Temp\15104150148742_Madeline Commons_surftopo_Mch.dwg SHEET 2 Mar 24, 2022 6:50am by: michalora



REVISIONS				
FB/PG	DATE	DRAWN	REVISION	CKD



Dewberry

131 WEST KALEY STREET
ORLANDO, FLORIDA 32806
PHONE: 321.354.9826 FAX: 407.648.9104
WWW.DEWBERRY.COM
CERTIFICATE OF AUTHORIZATION No. LB 8011

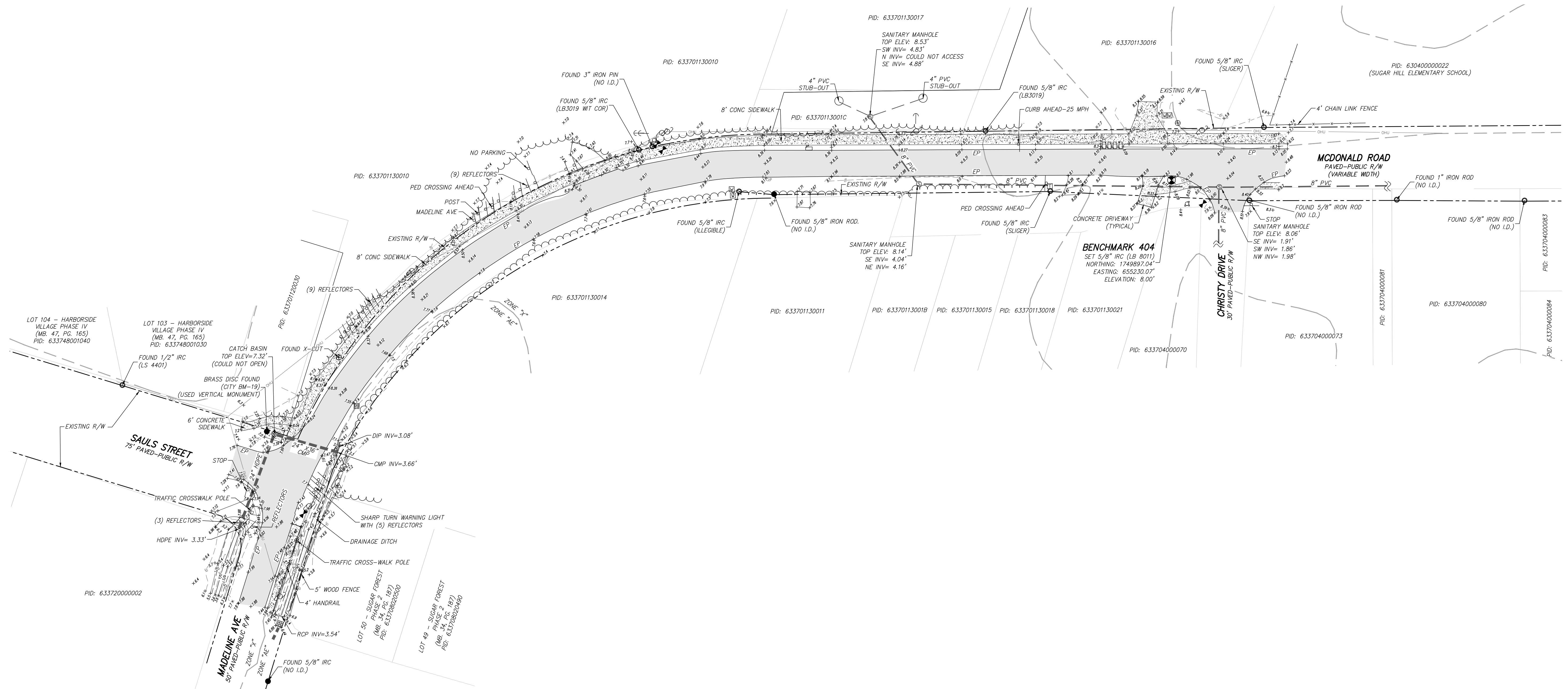
LOCATED IN SECTION 04, TOWNSHIP 16
SOUTH, RANGE 33 EAST

VOLUSIA COUNTY, FLORIDA

PLAT OF BOUNDARY SURVEY
-FOR-
MADELINE COMMONS, LLC.

FB/PG		FIELD DATE	PROJECT NO. 50149742
PORT ORANGE #1/ 1-14		03/16/2022	
DRAWING DATE	BY	APPROVED	SCALE 1"=40'
03/24/2022	MCD	WDD	

2
OF
3



Dewberry

131 WEST KALEY STREET
ORLANDO, FLORIDA 32806
PHONE: 321.354.9826 FAX: 407.648.9104
WWW.DEWBERRY.COM

CERTIFICATE OF AUTHORIZATION NO. LB 8011

PLAT OF BOUNDARY SURVEY
-FOR-
MADELINE COMMONS, LLC.

Page 35 of

GENERAL CONSTRUCTION NOTES

- GOVERNING SPECIFICATIONS: CITY OF PORT ORANGE LAND DEVELOPMENT CODE, CITY OF PORT ORANGE STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS, CURRENT EDITION, CITY OF PORT ORANGE STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS, CURRENT EDITION.
- ALL CONSTRUCTION WITHIN THE CITY RIGHT-OF-WAY SHALL CONFORM TO THE 2022 / 2023 EDITION OF THE FDOT STANDARD PLANS, THE 2022 EDITION OF THE FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AND THE 2017 EDITION OF THE FDOT UTILITY ACCOMMODATIONS MANUAL.
- ALL UTILITY MATERIAL, CONSTRUCTION AND TESTING COVERED BY THESE DRAWINGS SHALL COMPLY WITH THE CITY OF PORT ORANGE STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS, LATEST EDITION. ALL UTILITY WORK AND CONNECTIONS SHALL BE COORDINATED WITH THE CITY OF PORT ORANGE INSPECTORS.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL REQUIRED PERMITS. THE CONTRACTOR SHALL MAINTAIN COPIES OF ALL PERMITS AVAILABLE ON THE JOB SITE AT ALL TIMES.
- THE CONTRACTOR SHALL MAINTAIN AT THE JOB SITE A RECORD COPY OF ALL CONSTRUCTION DRAWINGS AND SPECIFICATIONS ON WHICH ALL FIELD CHANGES ARE TO BE SHOWN. ALL CHANGES TO PLANS SHALL BE INCORPORATED IN THE "AS-BUILT" RECORD DRAWINGS PROVIDED BY CONTRACTOR FOR REVIEW AND APPROVAL FROM ENGINEER OF RECORD.
- THE CITY OF PORT ORANGE WILL OWN AND MAINTAIN ALL WATER SEWER LINES LOCATED WITHIN THE RIGHT-OF-WAY.
- THE CONTRACTOR SHALL PAY FOR AND OBTAIN A SITE ENGINEERING BUILDING PERMIT. THE ENGINEER WILL SCHEDULE THE PRE-CONSTRUCTION CONFERENCE BEFORE THE CONTRACTOR'S START OF WORK. THE CONTRACTOR SHALL CONTACT THE BUILDING DEPARTMENT AT (386) 506-5602 FOR INFORMATION ON ISSUANCE OF CITY PERMITS AND / OR OTHER REQUIREMENTS.
- SEPARATE BUILDING PERMIT APPLICATIONS ARE REQUIRED FOR: NEW BUILDINGS, CLUBHOUSE, TRASH COMPACTOR, RETAINING WALL, FENCE, SWIMMING POOL, GAZEBO, PLAYGROUND, LIGHT POLES AND SIGNS. CONTACT THE PORT ORANGE BUILDING DEPARTMENT AT (386) 506-5602..
- ALL WATER SERVICE CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF PORT ORANGE UTILITY SPECIFICATIONS AND STANDARD UTILITY DETAILS, CURRENT EDITION.
- ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH "DESIGN AND CONSTRUCTION STANDARDS", CITY OF PORT ORANGE UTILITIES DEPARTMENT, CURRENT EDITION.
- ALL RECLAIMED WATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH "DESIGN AND CONSTRUCTION STANDARDS", CITY OF PORT ORANGE UTILITIES DEPARTMENT, CURRENT EDITION.
- ALL ROADWAY SIGNAGE AND MARKINGS SHALL BE IN CONFORMANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
- THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- LAND CLEARING OF THE PROJECT IS NOT ALLOWED UNTIL THE CITY ENGINEER AND/OR PLANNING DEPARTMENT ISSUES A LAND CLEARING PERMIT.
- SHOP DRAWINGS AND CERTIFICATIONS FOR ALL MATERIALS AND STRUCTURES ARE REQUIRED. THE CONTRACTOR SHALL REVIEW AND SIGN ALL SHOP DRAWINGS. THE CONTRACTOR TO SUBMIT REVIEWED SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING THE MATERIALS REQUIRED FOR CONSTRUCTION.
- THE LOCATION OF EXISTING UTILITIES HAS BEEN OBTAINED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THIS INFORMATION IS NOT GUARANTEED AND IT SHALL BE EACH CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT NATURE OF ALL UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION AND TO NOTIFY NEWKIRK ENGINEERING, INC. AS TO DISCREPANCIES, IF ANY EXIST.
- ALL SURVEY AND TOPOGRAPHICAL INFORMATION BASED ON SURVEY INFORMATION PROVIDED BY DEWBERRY; CONTRACTOR TO COORDINATE WITH SURVEYOR FOR ALL CONSTRUCTION AND RECONSTRUCTION INFORMATION.
- ALL SURVEY AND TOPOGRAPHICAL INFORMATION IS BASED ON THE NAVD 1988 DATUM. ALL PROPOSED CONSTRUCTION ELEVATIONS ARE BASED ON THE NAVD 1988 DATUM. ALL PROPOSED ELEVATIONS REFER TO FINISH GRADES.
- THESE DRAWINGS AND THE PROJECT MANUAL ARE COMPLEMENTARY, AND ANY REQUIREMENT OF ONE SHALL BE A REQUIREMENT OF THE OTHER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS AND TO COMPARE THE REQUIREMENTS OF EACH DIVISION AND ENSURE THAT EACH TRADE OR SUBCONTRACTOR IS MAKING THE ALLOWANCES NECESSARY TO PROVIDE THE OWNER A COMPLETE FACILITY, OPERATIONAL IN ALL RESPECTS, UNLESS OTHERWISE SPECIFICALLY STATED IN THE DRAWINGS.
- THE ENGINEER ASSUMES NO RESPONSIBILITY FOR INSTRUCTING THE CONTRACTOR IN THE METHODS OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE METHOD TO CONSTRUCT THE IMPROVEMENTS AS SHOWN ON THE PLANS.
- ANY CHANGES TO THE APPROVED PLANS REQUIRE COMPLETION OF THE CHANGE ORDER PROCESS.
- LITTER CONTROL MEASURES TO PREVENT WIND-DRIVEN DEBRIS SHALL BE IMPLEMENTED THROUGHOUT THE DURATION OF CONSTRUCTION. ALL DEBRIS SHALL BE REMOVED AND THE PROJECT SITE CLEANED WITHIN 30 DAYS OF COMPLETION OF CONSTRUCTION.
- AT NO TIME SHALL EXCAVATIONS BE LEFT UNCOVERED AFTER WORKING HOURS. CONTRACTOR SHALL SECURE THE WORK AREA AT THE END OF EACH DAY'S WORK.
- AT ALL TIMES, THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT UNDERGROUND UTILITIES, STRUCTURES AND OTHER ASSOCIATED FACILITIES FROM DAMAGE DURING CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE MEASURES OF PROTECTION. ANY DAMAGED FACILITIES SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE CITY OR ENGINEER AT THE CONTRACTOR'S EXPENSE.
- THERE SHALL BE NO DEVIATIONS FROM THESE PLANS UNLESS APPROVED IN WRITING BY THE ENGINEER AND THE OWNER.
- ALL DISTURBED AREAS SHALL BE FULLY SODDED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF THE RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS MUST INCLUDE, BUT MAY NOT BE LIMITED TO, DENSITIES FOR SUBGRADE AND BASE DENSITIES AT UTILITY CROSSINGS, MANHOLES, INLETS, STRUCTURES, TEST SLOTS, INLETS, AND OTHER STRUCTURES. CONCRETE CIPWORKS, WATER MAIN TESTING, SANITARY SEWER TESTING, RECLAIM MAIN TESTING, ETC.
- A MINIMUM OF 13'-6" OF VERTICAL CLEARANCE IS TO BE PROVIDED AND MAINTAINED FOR ALL ROADWAYS.
- ALL ROADWAYS MUST HAVE A MINIMUM 25-FEET INSIDE AND 50-FOOT OUTSIDE TURNING RADII.
- WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.
- PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.
- IF ANY MUCK-LIKE MATERIAL IS DISCOVERED, IT WILL BE REQUIRED TO BE REMOVED, BACKFILLED WITH APPROPRIATE FILL, COMPACTED, AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
- FILL MATERIAL IS TO BE PLACED IN ONE FOOT LIFTS AND COMPACTED TO THE APPROPRIATE DENSITY (98% FOR PAVED AREAS AND 95% FOR BUILDING PADS AND ALL OTHER AREAS AS PER AASHTO T-180).
- ROAD CLOSURES ARE SEPARATE FROM THE PERMIT AND REQUIRE PLAN REVIEW AND APPROVAL WITH 7 DAY ADVANCE NOTICE FROM THE OWNER OF THE AFFECTED RIGHT-OF-WAY PRIOR TO ANY ROAD CLOSURES. A MAINTENANCE OF TRAFFIC PLAN IS REQUIRED FOR ALL SITE CONSTRUCTION JOBS.
- DURING CONSTRUCTION, AN H-20 LOAD RATED ALL WEATHER ACCESSIBLE ROADWAY SHALL BE MAINTAINED AT ALL TIMES FOR FIRE ACCESS AND EMERGENCY SERVICES.
- ALL REQUIRED FIRE MAINS AND HYDRANTS SHALL BE INSTALLED AND OPERATIONAL PRIOR TO THE START OF VERTICAL BUILDING CONSTRUCTION.
- NO BURYING OF ANY ORGANIC MATERIALS ALLOWED.
- THERE WILL BE NO PROPOSED OVERHEAD UTILITY AND SERVICE LINES ASSOCIATED WITH THIS PROJECT. ALL UTILITY LINES AND SERVICES WILL BE INSTALLED UNDERGROUND.

EROSION CONTROL AND DEMOLITION CONSTRUCTION NOTES:

- CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING AT THE CITY PRIOR TO COMMENCE OF CONSTRUCTION.
- LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE SWPPP DURING CONSTRUCTION OPERATIONS.
- NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL DEVICES HAVE BEEN INSTALLED.
- ALL REASONABLE EFFORT SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIAL TO INLETS, SURFACE DRAINS, WETLAND AND LAKE AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED.
- THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.
- THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE, WHILE SANDY MATERIAL MAY NEED ONLY SILT SCREENS TO PREVENT EROSION. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORMWATER RUNOFF FROM BEING DISCHARGED TO OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES, AND OTHER EROSION/TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT.
- THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL BARED SOIL STABILIZED. SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF THE DEPTH OF THE SILTATION CONTROL BARRIER SHALL BE IMMEDIATELY REMOVED AND REPLACED IN UPLAND AREAS.
- THE CONTRACTOR SHALL SWEEP ALL ADJACENT ROADWAYS AND PARKING AREAS THAT ARE AFFECTED BY THE CONSTRUCTION PROCESS ON A DAILY BASIS OR AS REQUIRED.
- THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT AND MAINTAIN ALL EROSION CONTROL DEVICES AND KEEP THEM IN GOOD CONDITION. ANY IMPACTS DUE TO EROSION OR FAILURE OF ANY EROSION CONTROL DEVICES SHALL BE REPORTED TO THE ENGINEER OF RECORD IMMEDIATELY. CORRECTIVE MEASURES WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- ANY DISCHARGE OF STORMWATER RUNOFF FROM THIS SITE SHALL BE THROUGH A CONTROL DEVICE TO CONTROL TURBIDITY AND SEDIMENT TRANSPORT. THIS INCLUDES THE DISCHARGE FROM ANY DEWATERING OPERATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING ALL CRITERIA AS SET FORTH UNDER THE NPDES PERMITTING PROGRAM FOR CONSTRUCTION SITES OF THIS SIZE INCLUDING BUT NOT LIMITED TO THE ADHERENCE TO THE APPROVED POLLUTION PREVENTION CONTROL PLAN, TIMELY INSPECTIONS, PROJECT REPORTING AND DOCUMENTATION.
- NO DEBRIS SHALL BE ALLOWED TO ENTER THE EXISTING STORM OR SANITARY SEWER SYSTEMS.
- THE CONTRACTOR SHALL BECOME FAMILIAR WITH AND COMPLY WITH ALL REQUIREMENTS OF THE STATE PERMITS FOR THIS PROJECT. THE CONTRACTOR SHALL COMPLY WITH THE STORMWATER POLLUTION PREVENTION PLAN OF BOTH ON-SITE AND OFF-SITE IMPROVEMENTS. A SIGNED COPY OF THE STORMWATER POLLUTION PREVENTION PLAN IS TO BE KEPT ON THE PROJECT PREMISES AT ALL TIMES.
- NO WORK WITHIN THE CITY RIGHT-OF-WAY, VOLUSIA COUNTY OR FLORIDA DEPARTMENT OF TRANSPORTATION SHALL BE COMMENCED WITHOUT 48 HOURS ADVANCE NOTICE TO THE CITY, COUNTY OR FDOT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE CITY OF PORT ORANGE PUBLIC WORKS / UTILITY DEPARTMENT, "311" AND EMERGENCY SERVICES FOR RESPECTIVE UTILITY LOCATIONS AND "NOTICE" OF CONSTRUCTION ACTIVITY.
- THE CONTRACTOR SHALL POST "NO TRESPASSING" SIGNAGE AT ALL SITE ENTRANCES PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN A TREE REMOVAL PERMIT FROM THE LOCAL JURISDICTION PRIOR TO REMOVING ANY TREES FROM THIS PROJECT.
- ALL REMOVED MATERIAL SHALL BE HAULED OFF-SITE TO AN APPROVED LANDFILL. TREES MAY BE LOGGED OR MULCHED FOR OFF-SITE DISPOSAL AT THE CONTRACTOR'S DISCRETION.
- THE CONTRACTOR SHALL NOT ALLOW DEBRIS AND RUBBISH TO ACCUMULATE ON THE SITE.
- THE CONTRACTOR SHALL CLEAN UP THE JOB SITE IN AREAS WHERE NO WORK IS TO BE PERFORMED UNDER THIS CONTRACT FOLLOWING DEMOLITION. THE CONTRACTOR SHALL REMOVE ALL DEBRIS, RUBBISH, TEMPORARY FACILITIES, AND EQUIPMENT. THE CONTRACTOR SHALL LEVEL SURFACE IRREGULARITIES AND LEAVE THE WORK IN A NEAT AND PRESENTABLE CONDITION.
- CONTRACTOR SHALL ROUGH GRADE STORMWATER SWALES AND RETENTION PONDS PRIOR TO CONSTRUCTION OF SITE IMPROVEMENTS.
- SITE PREPARATION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND RECOMMENDATIONS.
- EXISTING STORM DRAINAGE TO REMAIN IN OPERATION AT ALL TIMES. CONTRACTOR TO MAINTAIN THE EXISTING, NEW OR TEMPORARY PIPING.
- RELOCATION OF UTILITY POLES AND LINES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL WORK SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY AND SHALL BE INCLUDED AS PART OF THE PROJECT SCOPE AND COST.
- ALL ASPHALT PAVEMENT REMOVALS SHALL BE VERTICAL SAWCUT. ALL CONCRETE PAVEMENT REMOVALS SHALL BE EITHER AT EXISTING JOINTS OR VERTICAL SAWCUT. ACTIVE SERVICES SHALL BE SEVERED WITH PROPER NOTICE GIVEN TO LOCAL UTILITY COMPANIES HAVING JURISDICTION.
- THE CONTRACTOR SHALL PROVIDE THE ENGINEER, CITY A MOT PLAN AT THE PRECONSTRUCTION MEETING. TRAFFIC SHALL BE ALLOWED TO CONTINUE DURING WORK. PROVIDE MEASURES TO DETOUR TRAFFIC AROUND OPEN EXCAVATION WITH ADEQUATE BARRICADES, SIGNAGE AND FLAGPERSON TO DIRECT TRAFFIC. EMERGENCY SERVICES SHALL BE NOTIFIED 48 HOUR IN ADVANCE.
- IF ANY DEWATERING IS TO OCCUR DURING ANY PHASE OF CONSTRUCTION THEN DEWATERING ACTIVITY SHALL ADHERE TO CHAPTER 40C-22 FAC MORE SPECIFICALLY AS FOLLOWS, PER 40C-22.03(3) A "NOTICED GENERAL SHORT-TERM DEWATERING PERMIT" IS REQUIRED "ONLY IF" DEWATERING EXCEEDS 4 MILLION GALLONS PER DAY, EXCEPT DURING THE FIRST 120 HOURS OF DEWATERING WHEN THE DAILY AND INSTANTANEOUS PUMPAGE RATES SHALL NOT EXCEED 6 MILLION GALLONS PER DAY. AVERAGE DAILY WITHDRAWAL SHALL NOT EXCEED 2 MILLION GALLONS PER DAY FOR THE FIRST 60 DAYS OF THE DEWATERING ACTIVITY AND SHALL NOT EXCEED ONE MILLION GALLONS PER DAY OF A 180 DAY DURATION. EACH SPECIFIC DEWATERING PROJECT SHALL NOT EXCEED 180 DAYS. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE ANY DEWATERING ACTIVITY IS BELOW THE SPECIFIED THRESHOLD, OTHERWISE A PERMIT WILL BE REQUIRED AT THE EXPENSE OF THE CONTRACTOR. THE CONTRACTOR SHALL FAMILIARIZE ITSELF WITH CHAPTER 40C-22 FAC AND BE SOLELY RESPONSIBLE FOR OBTAINING AND SUBMITTING FORM RDS-50 TO SJRWMD A MINIMUM OF 10 DAYS PRIOR TO ANY DEWATERING ACTIVITY. SUBMITTAL OF FORM RDS-50 IS NOT REQUIRED IF DEWATERING IS 300,000 GALLONS PER DAY OR LESS AND WILL NOT EXCEED 30 DAYS IN DURATION.

SWPPP INSPECTIONS AND RECORD KEEPING:

INSPECTIONS ARE REQUIRED AT LEAST EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS FOLLOWING A RAINFALL EVENT OF ONE-HALF (½) OF AN INCH OF RAINFALL OR GREATER AND SHALL CONTINUE UNTIL THE SITE COMPLIES WITH FINAL STABILIZATION (NOTICE OF TERMINATION). INSPECTIONS MUST BE CONDUCTED BY A "QUALIFIED" INSPECTOR. "QUALIFIED" IS DEFINED AS A PERSON THAT A) HAS SUCCESSFULLY COMPLETED AND MET ALL REQUIREMENTS NECESSARY TO BE FULLY CERTIFIED THROUGH THE FDEP STORMWATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR TRAINING PROGRAM; B) HAS SUCCESSFULLY COMPLETED AN EQUIVALENT FORMAL TRAINING PROGRAM; OR C) THAT IS QUALIFIED BY OTHER TRAINING OR PRACTICAL EXPERIENCE IN THE FIELD OF STORMWATER POLLUTION PREVENTION AND EROSION AND SEDIMENTATION CONTROL. EACH INSPECTION MUST BE FOLLOWED UP BY A REPORT DOCUMENTING THE INSPECTOR'S FINDINGS AND REQUEST THE REQUIRED MAINTENANCE AND/OR REPAIR FOR THE EROSION AND SEDIMENTATION CONTROL MEASURES. THESE RECORDS ARE USED TO PROVE THAT THE REQUIRED INSPECTION AND MAINTENANCE WERE PERFORMED AND SHALL BE PLACED IN THE SWPPP LEDGER. IN ADDITION TO INSPECTION AND MAINTENANCE RECORDS, RECORDS SHOULD BE KEPT OF CONSTRUCTION ACTIVITIES THAT OCCUR ON THE SITE. THE CONTRACTOR SHALL RETAIN COPIES OF THE SWPPP, ALL REPORTS AND DATA FOR A MINIMUM OF FIVE (5) YEARS AFTER THE PROJECT IS COMPLETE IN PAPER AND CD FORMAT.

SITE CLEARING AND GRADING CONSTRUCTION NOTES:

THE FOLLOWING MEASURES REPRESENT MINIMUM STANDARDS TO BE ADHERED TO BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION OF A PROJECT. THE CITY RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO BE EMPLOYED WHEN WARRANTED BY EXTREME CONDITIONS AND/OR THE FAILURE OF THE CONTRACTOR TO EMPLOY THE APPROPRIATE EROSION CONTROL BEST MANAGEMENT PRACTICES. FAILURE TO COMPLY WITH THESE PROVISIONS SHALL RESULT IN THE ISSUANCE OF A "STOP WORK ORDER".

- 6-FEET TALL SCREENED CONSTRUCTION FENCING TO BE INSTALLED ALONG NORTH TYMBER CREEK ROAD PRIOR TO SITE CLEARING.
- NO DISTURBANCE OF PROPOSED CONSERVATION EASEMENTS, NATURAL BUFFERS, OR WATER BODIES IS PERMITTED. THE CONTRACTOR SHALL LOCATE THESE AREAS ON SITE AND BARRICADE THEM TO AVOID ANY UNAUTHORIZED CLEARING, BARRICADES AND OTHER PROTECTIVE FENCING ARE TO BE LOCATED AT THE DRIP LINE OF EXISTING NATIVE TREES OR AT THE EDGE OF THE NATIVE UNDER-STORY HABITAT, WHICHEVER IS NEAREST TO THE CONSTRUCTION ACTIVITY.
- SPECIMEN AND HISTORIC TREES, CONSERVATION EASEMENTS, NATURAL VEGETATION BUFFERS, AND SIMILAR AREAS MUST BE PROTECTED BY BARRICADES OR FENCING PRIOR TO CLEARING. BARRICADES ARE TO BE SET AT THE DRIP LINE OF THE TREES AND MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. BARBED WIRE IS NOT PERMITTED AS A PROTECTIVE BARRIER.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL PROTECTIVE VEGETATION BARRICADES AND EROSION CONTROL STRUCTURES AND MEASURES IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK, INCLUDING PRELIMINARY GRUBBING. THESE MEASURES INCLUDE, BUT ARE NOT LIMITED TO, TEMPORARY CONSTRUCTION FENCES, SYNTHETIC JUTE BALES, SILT FENCES, FLOODING TURBIDITY BARRIERS AND OTHER APPROVED BEST MANAGEMENT PRACTICES (BMPs). FURTHER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION CONTROL DEVICES THROUGHOUT THE DURATION OF THE ENTIRE PROJECT. MAINTENANCE SHALL INCLUDE PERIODIC INSPECTION AND REMOVAL OF DEBRIS ABUTTING EROSION CONTROL DEVICES.
- PRIOR TO THE INSTALLATION OF ANY FILL MATERIALS ON SUBJECT SITE, SILT FENCES SHALL BE INSTALLED (1) ALONG SUBJECT SITE BOUNDARY AND PROPERTY LINES, (2) AT THE EDGE OF CONSERVATION EASEMENTS AND WETLANDS, (3) ADJACENT TO NATURAL LANDSCAPE BUFFERS, (4) AROUND THE PERIMETER OF EXISTING STORM WATER TREATMENT FACILITIES. THESE CONDITIONS SHALL APPLY IN ALL INSTANCES WHERE FILL MATERIAL IS BEING INSTALLED WITHIN 25 FEET OF ANY OF THE AFOREMENTIONED LOCATIONS.
- WHERE FILL MATERIAL IS INTENDED TO BE INSTALLED ADJACENT TO EXISTING VEGETATION WHICH IS INTENDED TO REMAIN NATURAL, THE CONTRACTOR MAY INSTALL SILT FENCING AS A TREE PROTECTION MEASURE, IN LIEU OF INSTALLING EITHER WOOD BRACING OR ORANGE MESH FENCING. THIS PRACTICE IS ENCOURAGED BY THE CITY. IF THE SILT FENCE FAILS TO PROVIDE ADEQUATE PROTECTION FROM IMPACT DUE TO CONSTRUCTION, THEN ADDITIONAL CONSTRUCTION FENCING OR WOOD BRACING SHALL BE REQUIRED.
- AT A MINIMUM, THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS. SUFFICIENT GRASS COVERAGE IS TO BE ESTABLISHED WITHIN TWO WEEKS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THROUGH SCHEDULING, TO MINIMIZE THE DISTURBANCE OF SITE AREAS THAT HAVE BEEN BROUGHT TO THEIR PROPOSED FINAL GRADE. WITHIN SEVEN (7) DAYS OF BRINGING A SUBJECT AREA TO ITS FINAL GRADE OR INACTIVITY IN CONSTRUCTION, THE CONTRACTOR SHALL INSTALL SEED AND MULCH OR SOD, AS REQUIRED.
- ONCE AN AREA IS SEEDDED OR SODDED, IT MUST BE MAINTAINED BY THE CONTRACTOR TO ALLOW THE GRASS TO BECOME ESTABLISHED. IF THE GRASS IS NOT ESTABLISHED WITHIN TWO WEEKS THE CITY MAY REQUIRE THE CONTRACTOR TO RE-SEED OR A NON-VEGETATIVE OPTION MAY BE EMPLOYED.
- ABSOLUTELY NO BURYING OF CLEARED MATERIALS IS PERMITTED.
- THE REMOVAL OF ALL VEGETATION AND TOPSOIL ON THE FUTURE ROADWAY, PARKING AND BUILDING LOT AREAS IS REQUIRED TO BE COMPLETED PRIOR TO THE PLACEMENT OF FILL ON THOSE AREAS. THE TOPSOIL MAY BE TEMPORARILY STOCKPILED AND USED AS TOPSOIL OVER OTHER PROPOSED GREEN AREAS SUCH AS PLANT BEDS, SODDED AREAS, AND WHERE TREES ARE TO BE INSTALLED OR RELOCATED.
- A SIGNED, DATED, AND SEALED LETTER FROM A SOLS ENGINEER OR THE ENGINEER OF RECORD CERTIFYING THAT THE AREAS TO BE FILLED HAVE BEEN STRIPPED OF ORGANIC MATERIALS, MUST BE SUBMITTED TO THE CITY PRIOR TO FILLING.
- FILL MATERIAL IS TO BE PLACED IN ONE FOOT LIFTS AND COMPACTED TO THE APPROPRIATE DENSITY 98% FOR PAVED AREAS AND 95% FOR BUILDING PADS AND ALL OTHER AREAS AS PER AASHTO T-180).
- IF ANY MUCK MATERIAL IS DISCOVERED, IT SHALL BE REQUIRED TO BE REMOVED AND REPLACED WITH A SUITABLE MATERIAL THAT IS PROPERLY BACKFILLED, COMPACTED AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
- STOCKPILING IS NOT GENERALLY PERMITTED BY THE CITY. WHEN ALLOWED, STOCKPILES SHALL NOT EXCEED SIX FEET IN HEIGHT MEASURED FROM THE ORIGINAL GRADE. AT A MINIMUM, STOCK PILES THAT WILL REMAIN IN PLACE IN EXCESS OF TWENTY DAYS SHOULD BE SEEDDED AND MULCHED IMMEDIATELY UPON PLACEMENT OF THE FINAL FILL.
- SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION AND THE IMPACT TO NEIGHBORING COMMUNITIES. ADEQUATE WATERING METHODS SHOULD BE EMPLOYED TO ALLOW DAILY COVERAGE OF THE ENTIRE LIMITS OF ALL AREAS THAT DO NOT HAVE AN ESTABLISHED VEGETATIVE COVER. METHODS TO BE EMPLOYED INCLUDE, BUT ARE NOT LIMITED TO, WATER TRUCKS, PERMANENT IRRIGATION SYSTEMS, TEMPORARY SPRINKLER SYSTEMS OPERATED BY PUMPING UNITS CONNECTED TO WET RETENTION Ponds, WATER CANNONS, TEMPORARY IRRIGATION SYSTEMS MOUNTED AT TOP STOCKPILE AREAS, AND OTHER METHODS AS DEEMED NECESSARY BY THE CITY.
- ALL FILL MATERIALS LOCATED BENEATH STRUCTURES AND PAVEMENT SHALL CONSIST OF CLEAN GRANULAR SAND FREE FROM ORGANICS AND SIMILAR MATERIAL THAT COULD DECOMPOSE.
- FILL TO BE PLACED IN LANDSCAPED AREAS SHALL HAVE A Ph RANGE BETWEEN 5.5 AND 7.5, BE ORGANIC IN NATURE, FREE OF ROCKS AND DEBRIS, OR MATCH NATIVE EXISTING SOILS.
- A 6" TALL CONSTRUCTION FENCING WITH FABRIC SCREEN TO BE INSTALLED ALONG MAJOR ROADWAYS (TYMBER CREEK ROAD), THE CONSTRUCTION FENCING NEEDS TO BE INSTALLED PRIOR TO SITE CLEARING.

TEMPORARY SEEDING SPECIFICATION:

GENERAL

SEEDING CAN BE USED FOR TEMPORARY STABILIZATION. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS CEASED FOR MORE THAN 7 DAYS SHALL BE TEMPORARILY SEEDDED AND WATERED. AREAS WHERE FINAL GRADING HAS BEEN COMPLETED FOR MORE THAN 7 DAYS SHALL BE TEMPORARILY SEEDDED. TEMPORARY SEED MIXTURE IS SPECIFIED BELOW.

SEEDING MIXTURES

SEED MIXTURE SHALL BE BERMUDA COMMON 90 LB PURE LIVE SEED PER ACRE, FIBER 2000 LB PER ACRE, STABILIZER 120 LB PER ACRE AND FERTILIZER 300 LB PER ACRE.

ALL SLOPES AND FLAT GRADE

APPLY 6-20-20 COMMERCIAL ORGANIC FERTILIZER AT A RATE OF 300 LB PER ACRE AND SEED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

PLANTING DATES	SEED VARIETY	APPLICATION RATE
MARCH 15 - OCTOBER 15	PENSACOLA BAHIA (SCARIFIED)	90
	BERMUDA COMMON (50% HULLED)	25
OCTOBER 16 - MARCH 14	PENSACOLA BAHIA (SCARIFIED)	100
	BERMUDA COMMON (50% HULLED)	35
	ANNUAL RYE GRASS	10
	RYE GRAIN	30

MULCH SEEDED AREA WITH 2 TONS PER ACRE CLEAN GRAIN STRAW. ANCHOR STRAW WITH HYDRAULIC WOOD FIBER MULCH AT THE RATE OF 1000 LB PER ACRE, OR 150-200 POUNDS OF ORGANIC MULCH TACKIFIER PER ACRE, OR USE NETTING.

HYDRO FIBER MULCH MIXTURE SHALL BE PERFORMED IN A TANK WITH A CONTINUOUS AGITATION AND RECIRCULATION SYSTEM WITH SUFFICIENT OPERATING CAPACITY TO PRODUCE A HOMOGENEOUS SLURRY AND DISCHARGE SYSTEM WHICH WILL APPLY THE SLURRY AT A CONTINUOUS AND UNIFORM RATE. MIXTURE SHALL CONTAIN A GREEN FUGITIVE DYE AS AN APPLICATION INDICATOR.

CITY RIGHT-OF-WAY GENERAL NOTES:

- MAINTENANCE OF TRAFFIC TO BE SUPERVISED BY A CERTIFIED PERSON (ON SITE).
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT A MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
- ALL WORK PERFORMED WITHIN THE CITY RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE 2022 EDITION OF THE FDOT DESIGN STANDARDS & SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, 2017 EDITION OF THE FDOT UTILITY ACCOMMODATION MANUAL AND FDOT STANDARD PLANS FY 2022-2023.
- IT IS THE RESPONSIBILITY OF THE PERMITTEE TO REPAIR ANY DAMAGE TO CITY FACILITIES CAUSED BY THE CONSTRUCTION OF THIS PROJECT.
- ANY TEST RESULTS TAKEN DURING CONSTRUCTION OF THE PERMITTED WORK SHALL BE PROVIDED TO THE DEPARTMENT UPON REQUEST.
- ALL CONCRETE TO BE REMOVED SHALL BE SAW CUT TO NEAREST JOINT IN GOOD CONDITION, SO A CONNECTION THAT IS FREE OF CRACKS, DEFORMITIES OR VOIDS & IRREGULARITIES ARE NOT DEFECTIVE.
- ALL STRIPING WITHIN THE CITY RIGHT-OF-WAY SHALL BE PREFORMED THERMOPLASTIC.
- ALL CONCRETE SHALL BE AN APPROVED CITY MIX DESIGN OF 3,000 PSI.
- ALL MATERIALS INSTALLED INSIDE CITY RIGHT-OF-WAY SHALL BE ON THE QUALIFIED PRODUCTS LIST OR APPROVED PRODUCTS LIST.
- ALL CONSTRUCTION SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR'S RISK.
- THE CONTRACTOR SHALL SUBMIT A MAINTENANCE OF TRAFFIC AND BARRICADE PLAN TO THE ENGINEER FOR APPROVAL WITH THE BID. INCLUDE THE MOT PLAN AT THE PRECONSTRUCTION MEETING.
- ALL TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO CONSTRUCTION AND THE CITY INSPECTOR NOTIFIED FOR APPROVAL.
- ALL BARRICADES AND POSTED SIGNAGE SHALL REMAIN IN PLACE UNTIL PAVING WORK IS COMPLETE. ALL BARRICADES SHALL BE VERIFIED IN PLACE BY THE CONTRACTOR AT THE END OF EACH WORK DAY.
- SOD ALL DISTURBED AREAS IN RIGHT-OF-WAY WITH BAHIA.
- THE CONTRACTOR SHALL ENSURE THAT ALL SIDEWALKS AND CROSSWALKS CONFORM TO THE CURRENT REQUIREMENTS OF THE AMERICANS WITH DISABILITY ACT (ADA).
- ALL SIGNS AND PAVEMENT MARKINGS THAT ARE REMOVED OR DAMAGED BY CONSTRUCTION ACTIVITIES RELATED TO THIS PROJECT ARE TO BE REPLACED TO THEIR PRECONSTRUCTION CONDITIONS.
- ALL SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO FDOT STANDARD INDEX NO. 711-101.
- IN THE EVENT PERMANENT VEHICLE DETECTION IS DISRUPTED, PROVIDE AN ALTERNATIVE MEANS OF DETECTION TO ALL LANES APPROACHING THE INTERSECTION, SEPARATING EACH MOVEMENT WHICH PREVIOUSLY HAD DETECTION. THE TYPE OF DETECTOR SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. EQUIPMENT SHALL ONLY DETECT THE INTENDED MOVEMENT.
- THERE SHALL BE NO WORK WITHIN THE VICINITY OF THE SIGNALIZED INTERSECTION DURING 7 A.M. TO 7 P.M. MONDAY TO SUNDAY.
- CONTRACTOR TO PROVIDE TEMPORARY VIDEO DETECTION FOR SIGNAL WHILE LOOPS ARE DISTURBED DURING MILLING AND RESURFACING.
- SITE-SPECIFIC MOT PLAN WILL NEED TO BE PROVIDED BY THE CONTRACTOR A MINIMUM OF TWO WEEKS IN ADVANCE FOR REVIEW BY PUBLIC WORKS AND COMMUNITY DEVELOPMENT AND TO PROVIDE PUBLIC NOTICE. THIS WILL ENSURE THE ROADWAYS WILL REMAIN ACCESSIBLE.

FDEP WASTEWATER NOTES

- APPROPRIATE DEFLECTION TEST ARE SPECIFIED FOR ALL FLEXIBLE PIPE. TESTING IS REQUIRED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL PIPE SYSTEM. TESTING REQUIREMENTS SPECIFY: 1) NO PIPE SHALL EXCEED A DEFLECTION OF 5%; 2) USING RIGID BALL OR MANDEREL FOR THE DEFLECTION TEST WITH A DIAMETER NOT LESS THAN 85% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE, DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATIONS, INCLUDING THE APPENDIX, TO WHICH THE PIPE IS MANUFACTURE; AND 3) PERFORMING THE TEST WITHOUT MECHANICAL PULLING DEVICES.
- LEAKAGE TEST ARE SPECIFIED REQUIRING THAT: 1) THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM; 2) EXFILTRATION OR INFILTRATION TEST BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET; AND 3) AIR TEST, AS A MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-828 FOR CLAY PIPE, ASTM C-924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE, AND OTHER MATERIAL APPROPRIATE TEST PROCEDURES.
- MANHOLE INSPECTION AND TESTING FOR WATERTIGHTNESS OR DAMAGE PRIOR TO PLACING INTO SERVICE ARE REQUIRED. AIR TESTING SPECIFIED FOR CONCRETE SEWER MANHOLES, SHALL CONFORM TO THE TEST PROCEDURES DESCRIBED IN ASTM C-1244.
- SUITABLE COUPLINGS COMPLYING WITH ASTM SPECIFICATIONS ARE REQUIRED FOR JOINING DISSIMILAR MATERIALS.
- CONCRETE MANHOLES SHALL HAVE THE FOLLOWING: 1) MANHOLE LIFT HOLES AND GRADE ADJUSTMENT RINGS SEALED WITH NON-SHRINK MORTAR OR OTHER APPROPRIATE MATERIAL; 2) INLET AND OUTLET PIPES BE JOINED TO THE MANHOLE WITH A GASKETED FLEXIBLE WATERTIGHT CONNECTION OR ANOTHER WATERTIGHT CONNECTION ARRANGEMENT THAT ALLOWS DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE WALL; 3) WATERTIGHT MANHOLE COVERS BE USED WHEREVER THE TOPS MAY BE FLOODED BY STREET RUNOFF OR HIGH WATER.

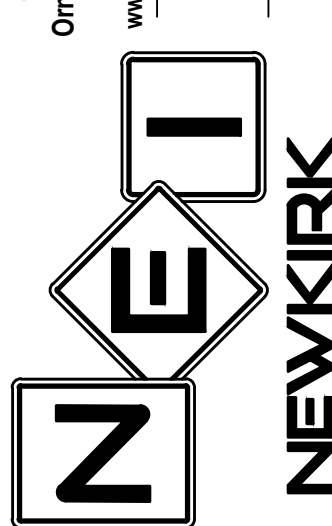
FDEP WATER NOTES

- ALL PIPE, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT WILL CONFORM TO APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS.
- ALL PUBLIC WATER SYSTEM COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT WILL BE INSTALLED UNDER THIS PROJECT AND THAT WILL COME INTO CONTACT WITH DRINKING WATER WILL CONFORM TO NSF INTERNATIONAL STANDARD 61.
- ALL PROPOSED WATER MAINS SHALL BE FLUSHED, DISINFECTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE IN ACCORDANCE WITH AWWA SPECIFICATIONS C-651 AND THE FDEP PROTECTION REQUIREMENTS.
- POTABLE WATER PIPES SHALL BE HYDROSTATICALLY TESTED FOR PRESSURE AND LEAKAGE IN ACCORDANCE WITH AWWA STANDARD C600 FOR DUCTILE IRON PIPES AND C605 FOR PVC PIPES, RESPECTIVELY.
- ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE LEAD FREE, AND ANY SOLDER OR FLUX USED IN THIS PROJECT WILL CONTAIN NO MORE THAN 0.2% LEAD.
- ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(B)3, F.A.C. USING BLUE AS A PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE WILL BE SOLID-WALL BLUE PIPE, WILL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR WILL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL, AND UNDERGROUND METAL OR CONCRETE PIPE WILL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPES DURING MANUFACTURING OF THE PIPE WILL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT WILL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPE WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT WILL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE WILL BE PAINTED BLUE OR WILL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.)
- POTABLE WATER PIPES MUST BE MANUFACTURED IN ACCORDANCE WITH THE FOLLOWING AWWA SPECIFICATIONS:
 - DUCTILE IRON PIPE (3 INCHES TO 54 INCHES) - AWWA C150 AND AWWA C151;
 - PVC PIPE
 - AWWA C900/ASTM 1784 (1 INCH TO 12 INCHES)
 - AWWA C905 (14 INCHES TO 48 INCHES);
- ALL FIRE HYDRANTS THAT WILL BE INSTALLED UNDER THIS PROJECT AND THAT WILL HAVE UNPLUGGED, UNDERGROUND DRAINS WILL BE LOCATED AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, PIPELINE CONVEYING RECLAIMED WATER OR VACUUM TYPE SANITARY SEWER; AT LEAST SIX FEET FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-10, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM."
- NEW OR ALTERED WATER MAINS INCLUDED IN THIS PROJECT WILL BE INSTALLED IN ACCORDANCE WITH APPLICABLE AWWA STANDARDS OR IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDED PROCEDURES.
- A CONTINUOUS AND UNIFORM BEDDING WILL BE PROVIDED IN TRENCHES FOR UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT; BACKFILL MATERIAL WILL BE TAMPED IN LAYERS AROUND UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT AND TO A SUFFICIENT HEIGHT ABOVE THE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE; AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURERS' RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES WILL BE REMOVED FOR A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT.
- ALL WATER MAIN TEES, BENDS, PLUGS, AND HYDRANTS INSTALLED UNDER THIS PROJECT WILL BE PROVIDED WITH THRUST BLOCKS OR RESTRAINED JOINTS TO PREVENT MOVEMENT.
- NEW OR ALTERED WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL BE CONSTRUCTED OF ASBESTOS-CEMENT OR POLYVINYL CHLORIDE PIPE WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C603 OR C605, RESPECTIVELY, AND ALL OTHER NEW OR ALTERED WATER MAINS INCLUDED IN THIS PROJECT WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C600.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT WILL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER, STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-10, F.A.C.; A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER OR A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER (IF THE BOTTOM OF THE WATER MAIN WILL BE LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER); A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-10, F.A.C.; AND A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM."
- NEW OR RELOCATED, UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES ABOVE THE OTHER PIPELINE OR AT LEAST 12 INCHES BELOW THE OTHER PIPELINE; AND NEW OR RELOCATED, UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OTHER PIPELINE.
- AT THE UTILITY CROSSINGS DESCRIBED ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE WILL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE OR THE PIPES WILL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-10, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-10, F.A.C.
- IF CONNECTION OF THE PROPOSED ACTIVITY TO THE WATER MAIN WILL RESULT IN A DEPRESSURIZATION OF THE EXISTING SYSTEM BELOW 20 POUNDS PER SQUARE INCH, ONE OF THE FOLLOWING MUST OCCUR:
 - PRECAUTIONARY BOIL WATER NOTICES MUST BE ISSUED IN CASES OF PLANNED DISTRIBUTION INTERRUPTIONS, WHICH ARE DEEMED AN IMMINENT PUBLIC HEALTH THREAT BY THE FDEP CENTRAL DISTRICT OR WILL AFFECT THE BACTERIOLOGICAL QUALITY OF THE DRINKING WATER UNLESS THE PUBLIC WATER SYSTEM CAN DEMONSTRATE, BY SOUND ENGINEERING JUDGMENT, THAT THE INTEGRITY OF THE WATER SYSTEM HAS BEEN MAINTAINED; OR
 - IN CASE OF BRIEF INTERRUPTION IN SERVICE, ADVISORIES (NOT BOIL WATER NOTICES) SHOULD BE ISSUED IF TEMPORARY CHANGES IN WATER QUALITY ARE EXPECTED TO OCCUR AND NOT DEEMED AN IMMINENT PUBLIC HEALTH RISK.

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS

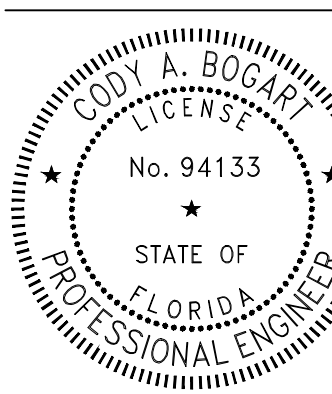
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DEVELOPMENT INFORMATION
AND CONSTRUCTION NOTES
MADLINE COMMONS
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PORT ORANGE, FL 32129

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PROJECT No:	2021-
DATE:	JULY 2
DESIGN BY:	C
DRAWN BY:	D
CHECKED BY:	H
SCALE:	

LEGEND

NOTE: NOT ALL SYMBOLS SHOWN HERE MAY BE APPLICABLE TO THESE DRAWINGS, ALSO THERE MAY BE ADDITIONAL SYMBOLS WITHIN PLANS NOT SHOWN HERE, SEE INDIVIDUAL DRAWING LEGEND WHERE APPLICABLE.

#3	BENCHMARK ID	■	FOUND 4" BY 4" CONCRETE MONUMENT L.B. #3724
B24	BORING ID	---	EXISTING EASEMENT
IV	EXISTING CABLE TV PEDESTAL	FOC	EXISTING UNDERGROUND FIBER OPTIC CABLE
⌈	EXISTING CAP OR PLUG	#M	EXISTING FORCE MAIN (# INDICATES SIZE)
⊙	EXISTING CLEAN OUT	GAS	EXISTING GAS MAIN
⊗	EXISTING CONDUIT RISER/ MARKER	OHE	EXISTING OVERHEAD ELECTRIC CABLES
E	EXISTING ELECTRIC METER	OHT	EXISTING OVERHEAD TRAFFIC SIGNAL CABLE
+11.7	EXISTING ELEVATION (SOFT)	RAW	EXISTING RAW WATER MAIN (# INDICATES SIZE)
5.0±	PROPOSED ELEVATION (SOFT)	REC	EXISTING RECLAIM WATER MAIN (# INDICATES SIZE)
+11.75	EXISTING ELEVATION (HARD)	SAN	PROPOSED SANITARY SEWER (# INDICATES SIZE)
5.00	PROPOSED ELEVATION (HARD)	WM	PROPOSED WATER MAIN (# INDICATES SIZE)
⊕	EXISTING FIRE HYDRANT	12	EXISTING CONTOUR
⊕	PROPOSED FIRE HYDRANT	10	PROPOSED CONTOUR (SOFT)
↶	EXISTING FLOW DIRECTION	10	PROPOSED CONTOUR (HARD)
↶	PROPOSED FLOW DIRECTION	UTEL	EXISTING UNDERGROUND TELEPHONE CABLE
⊗	EXISTING GAS METER	UTV	EXISTING UNDERGROUND TELEVISION CABLE
⊗	EXISTING GAS VALVE	UGC	EXISTING UNDERGROUND ELECTRICAL POWER CABLE
←	EXISTING GUY WIRE & ANCHOR PIN	---	JURISDICTIONAL WETLAND LINE
⌈	EXISTING MAIL BOX	BSAN	EXISTING SANITARY SEWER (# INDICATES SIZE)
○	EXISTING MANHOLE (UNKNOWN)	BWM	EXISTING WATER MAIN (# INDICATES SIZE)
⊙	PROPOSED MANHOLE	---	EXISTING PIPE OR CONDUIT (TYPE SPECIFIED)
⊙	EXISTING SANITARY SEWER CLEANOUT	---	EXISTING SWALE OR CENTER OF DITCH
⊙	EXISTING SANITARY SEWER MANHOLE	---	PROPOSED SWALE OR CENTER OF DITCH
⊕	EXISTING ROAD SIGNS AND POSTS	---	EXISTING TOP OF DITCH BANK
⊕	PROPOSED SIGN AND POST	---	EXISTING BOTTOM OF DITCH BANK
⊕	EXISTING TEE	11 11 11	EXISTING WOOD FENCE
○	EXISTING UTILITY POLE	×	EXISTING WIRE OR CHAIN LINK FENCE
⊗	EXISTING VALVE IRRIGATION	+	PROPOSED WIRE OR CHAIN LINK FENCE
⊗	EXISTING VALVE WATER	---	PROPOSED SILT/SEDIMENT FENCE
⊕	PROPOSED WATER VALVE	~~~~~	PROPOSED COIR ROLL OR WATTLE
⊗	EXISTING WATER METER	○	PROPOSED FLOATING TURBIDITY BARRIER
⊕	EXISTING STORM SEWER WITH INLET	TP	PROPOSED TREE PROTECTION
⊕	PROPOSED STORM SEWER WITH INLET		
●	FOUND 1/2" CAPPED IRON ROD L.B. #3724		
⊗	FOUND 1/2" IRON ROD (NO I.D.)		

VOLUSIA COUNTY IRRIGATION NOTES:

1. AUTOMATIC IRRIGATION CONTROLLERS, WHEN UTILIZED, SHALL CONTAIN A FUNCTIONAL RAIN SENSOR DEVICE, CAPABLE OF BEING SET TO ONE MINUTE RUN TIMES, AND BATTERY BACKUP CAPABILITY TO RETAIN PROGRAMMING IN THE EVENT OF A POWER FAILURE.
2. A RAIN SENSOR PLACED ON A STATIONARY STRUCTURE, FREE AND CLEAR OF ANY OVERHEAD OBSTRUCTIONS AND ABOVE THE HEIGHT OF THE SPRINKLER COVERAGE.
3. EQUIPMENT WITH CHECK VALVES USED IN LOW-LYING AREAS TO PREVENT LOW HEAD DRAINAGE.
4. BACKFLOW PREVENTION METHODS AND OTHER PROVISIONS PRESCRIBED IN SECTION 74-42.
5. IRRIGATION DESIGN WITH THE APPROPRIATE UNIFORMITY FOR THE TYPE OF PLANT BEING GROWN AND FOR THE TYPE OF SOIL.
6. IRRIGATION SYSTEM EQUIPMENT INSTALLED AS DESIGNED.
7. IRRIGATION ZONES DIVIDED ACCORDING TO: AVAILABLE FLOW RATE, VEGETATED GROUPINGS (I.E., TURF, SHRUBS, NATIVE PLANTS, ETC.), SPRINKLER TYPES (I.E., SPRINKLERS WITH MATCHING PRECIPITATION RATES) AND SOIL CHARACTERISTICS.
8. SPRAY HEADS AND ROTORS NOT MIXED IN SAME ZONE.
9. DISTRIBUTION EQUIPMENT IN A GIVEN ZONE HAVING MATCHED PRECIPITATION RATES.
10. APPLICATION RATES THAT AVOID RUNOFF AND PERMIT UNIFORM WATER INFILTRATION INTO THE SOIL, CONSIDERING LAND SLOPE, SOIL HYDRAULIC PROPERTIES, VEGETATIVE GROUND COVER AND PREVAILING WINDS.
11. A MINIMUM SEPARATION OF FOUR INCHES BETWEEN DISTRIBUTION EQUIPMENT AND PAVEMENT.
12. A MINIMUM SEPARATION OF 12 INCHES BETWEEN DISTRIBUTION EQUIPMENT AND BUILDINGS AND OTHER VERTICAL STRUCTURES.
13. NO DIRECT SPRAY ONTO WALKWAYS, BUILDINGS, ROADWAYS AND DRIVES.
14. LAWN SPRAY PATTERNS PROVIDING HEAD TO HEAD COVERAGE.
15. WATER CONVEYANCE SYSTEMS WITH A FLOW VELOCITY OF FIVE FEET PER SECOND OR LESS.
16. PIPELINES DESIGNED TO PROVIDE THE SYSTEM WITH THE APPROPRIATE PRESSURE REQUIRED FOR MAXIMUM IRRIGATION UNIFORMITY.
17. PRESSURE REGULATING HEADS.
18. A MAINTENANCE CHECKLIST PROVIDED TO THE PROPERTY OWNER BY THE IRRIGATION CONTRACTOR ACCOMPANIED BY A RECOMMENDED MAINTENANCE SCHEDULE, PROPER IRRIGATION SYSTEM SETTINGS ACCORDING TO SEASON, RECOMMENDATIONS FOR CHECKING RAIN SENSOR DEVICE, FILTER CLEANING RECOMMENDATIONS AND INFORMATION ON THE CURRENT WATER RESTRICTIONS.
19. IRRIGATION SYSTEM DESIGN WILL BE PERMITTED THROUGH VOLUSIA COUNTY.

VOLUSIA COUNTY LANDSCAPE REQUIREMENTS:

1. A HIGH VOLUME IRRIGATION AREA SHALL NOT EXCEED 50 PERCENT OF THE LANDSCAPED AREA. LOW OR MEDIUM VOLUME IRRIGATION AREAS MAY BE UTILIZED IN LIEU OF ANY HIGH VOLUME IRRIGATION AREA.
2. A MEDIUM VOLUME IRRIGATION AREA SHALL NOT EXCEED 25 PERCENT OF THE LANDSCAPED AREA. HOWEVER, THE LANDSCAPED AREA MAY CONTAIN UP TO 75 PERCENT MEDIUM VOLUME IRRIGATION AREA, IF NO HIGH VOLUME IRRIGATION AREA IS UTILIZED ON SITE.
3. A LOW VOLUME IRRIGATION AREA MAY BE UTILIZED FOR AN ENTIRE LANDSCAPED AREA WITH THE EXCEPTION OF NATIVE VEGETATION AREAS REGULATED BY SECTION 50-373(b)(4).
4. IN THE ALTERNATIVE TO (1), (2), AND (3) ABOVE, IF 25 PERCENT OF THE PRE-EXISTING NATIVE VEGETATION IS RETAINED ON SITE, THE REMAINING 75 PERCENT OF THE LANDSCAPED AREA MAY BE A HIGH VOLUME IRRIGATION AREA. FOR ALL PRE-EXISTING NATIVE VEGETATION RETAINED ON A PARCEL:
 - NO SUPPLEMENTAL WATER SHALL BE APPLIED TO THE NATIVE VEGETATION AREA.
 - ONLY HAND PRUNING OF NATIVE VEGETATION IS ALLOWED.
 - MECHANICAL MOWING OR CLEARING IS PROHIBITED.

VOLUSIA COUNTY CONTRACTOR LICENSE REQUIREMENTS:

NO PERSON MAY INSTALL OR REPAIR AN IRRIGATION SYSTEM IN VOLUSIA COUNTY UNLESS THEY POSSESS A VALID IRRIGATION CERTIFICATE OF COMPETENCY FROM THE DEPARTMENT. THE FOLLOWING PERSONS ARE EXEMPTED FROM HAVING TO POSSESS A CERTIFICATE OF COMPETENCY:

- LICENSED FLORIDA WATER WELL CONTRACTORS AND FLORIDA STATE CERTIFIED PLUMBING CONTRACTORS.
- FLORIDA STATE REGISTERED PLUMBING CONTRACTORS.
- PROPERTY OWNERS WHO PERSONALLY PERFORM CONSTRUCTION, MAINTENANCE OR REPAIRS ON AN IRRIGATION SYSTEM THAT SERVES HIS OR HER OWNER-OCCUPIED SINGLE FAMILY RESIDENCE.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS - 2022 / 2023 AND QUALIFIED PRODUCTS LIST

INDEX NO.	DESCRIPTION	INDEX NO.	DESCRIPTION
102	TEMPORARY EROSION AND SEDIMENT CONTROL	514	OPTIONAL BASE GROUP AND STRUCTURAL NUMBERS
425-010	STRUCTURE BOTTOMS - TYPES J AND P	330-001	TURNOUTS
205	PIPE BACKFILL	546	SIGHT DISTANCE AT INTERSECTIONS
425-021	CURB INLET TOPS - TYPES 5 & 6	102-600	GENERAL INFORMATION FOR TRAFFIC CONTROL
425-024	CURB INLET TOP - TYPE 9		THROUGH WORK ZONES
425-052	DITCH BOTTOM INLETS - TYPES C, D, E AND H	102-602	TWO-LANE, TWO-WAY, WORK ON SHOULDER
430-022	SIDE DRAIN MITERED END SECTION	102-603	TWO-LANE, TWO-WAY, WORK WITHIN THE TRAVEL WAY
520-001	CURB & CURB AND GUTTER	102-660	PEDESTRIAN CONTROL FOR CLOSURE OF SIDEWALKS
522-002	PUBLIC SIDEWALK CURB RAMPS	700-101	TYPICAL SECTIONS FOR PLACEMENT OF SINGLE & MULTIPLE-COLUMN SIGNS
350-001	CONCRETE PAVEMENT JOINTS		SPECIAL MARKING AREAS
522-001	CONCRETE SIDEWALK	711-001	
120-001	EMBANKMENT UTILIZATION		

ABBREVIATIONS

AWWA	AMERICAN WATER	H/C	HANDICAP	SAN	SANITARY
WORKS	ASSOCIATION	HDPE	HIGH DENSITY	SH	SEASONAL HIGH
CMP	CORRUGATED METAL		POLYETHYLENE	SJRWMD	ST. JOHNS RIVER WATER
	PIPE	INV	INVERT		MANAGEMENT DISTRICT
CPP	CORRUGATED PLASTIC	K _h	HORIZONTAL	SMH	SANITARY MANHOLE
	PIPE		PERMEABILITY	SS	SANITARY SEWER
CTV	CABLE TELEVISION	K _v	VERTICAL PERMEABILITY	SWPPP	STORMWATER POLLUTION
DIP	DUCTILE IRON PIPE	KO	KNOCK OUT		PREVENTION PLAN
ESMT	EASEMENT	LF	LINEAL FEET	TSB	TEMPORARY SEDIMENT
EXIST	EXISTING	MB	MAP BOOK		BASIN
FAC	FLORIDA ADMINISTRATIVE	MES	MITERED END SECTION	TYP	TYPICAL
	CODE	MJ	MECHANICAL JOINT	UGE	UNDERGROUND ELECTRIC
FACBC	FLORIDA ACCESSIBILITY	N/A	NOT APPLICABLE	UGT	UNDERGROUND
	CODE FOR BUILDING	NIC	NOT IN CONTRACT		TELEPHONE
	CONSTRUCTION	NGVD	NATIONAL GEODETIC	USACOE	UNITED STATES ARMY
FDEP	FLORIDA DEPARTMENT OF		VERTICAL DATUM		CORP OF ENGINEERS
	ENVIRONMENTAL	OHE	OVERHEAD ELECTRIC	W	WATER (POTABLE)
	PROTECTION	OR	OFFICIAL RECORD		
FDOT	FLORIDA DEPARTMENT OF	PG	PAGE		
	TRANSPORTATION	PSI	POUNDS PER SQUARE		
FEMA	FEDERAL EMERGENCY		INCH		
	MANAGEMENT AGENCY	PVC	POLYVINYL CHLORIDE		
FH	FIRE HYDRANT	PVMT	PAVEMENT		
FOC	FIBER OPTIC CABLE	R	RADIUS		
FF EL	FINISH FLOOR ELEVATION	RCP	REINFORCED CONCRETE		
FM	FORCE MAIN		PIPE		
FPD	FEET PER DAY	RPM	REFLECTIVE PAVEMENT		
G	GAS		MARKER		
GW	GROUND WATER	R/W	RIGHT-OF-WAY		

SITE AND GENERAL INFORMATION

1. THE PROPERTY AREA BOUNDARY CONSISTS OF 1,506,788 SF OR 34.591 ACRES. FOR BOUNDARY AND TOPOGRAPHIC SURVEY REFER TO THE SURVEY PERFORMED BY DEWBERRY (SEE SHEET SU-1 THROUGH SU-3 OF THESE PLANS).
2. THE EXISTING ZONING IS PUD (PLANNED UNIT DEVELOPMENT).
3. THE FLUM IS URBAN MEDIUM DENSITY RESIDENTIAL (4-8 UNITS / ACRE).
4. THE TAX PARCEL NUMBERS ARE 16-33-04-02-22-0010, 16-33-04-00-0021, 16-33-37-01-13-0010 AND 16-33-37-01-13-0017.
6. THE EXISTING SITE CONDITION IS UNDEVELOPED. THE FLUCFCS LAND USE IS (191) UNDEVELOPED LAND WITHIN URBAN AREAS.
7. PER THE USDA NATURAL RESOURCES CONSERVATION SERVICE FOR VOLUSIA COUNTY, THE SCS SOILS MAP INDICATES THE SITE CONSISTS OF (29) IMMOKALEE SAND, (32) MYAKKA - MYAKKA, WET, FINE SANDS, 0 TO 2 PERCENT SLOPES, AND (69) TUSCAWILLA FINE SAND.
8. THE SITE IS LOCATED WITHIN ZONE "X" & SHADED "X" PER FEMA MAP PANEL No. 12127C0369J, DATED. 2/29/2017 AND 12127C0388J, DATED. 9/29/2017.
9. ELECTRICAL UTILITY SERVICE WILL BE PROVIDED BY FLORIDA POWER & LIGHT. NATURAL GAS WILL BE PROVIDED BY TECO PEOPLES GAS COMPANY. TELEPHONE, CABLE AND INTERNET SERVICE WILL BE PROVIDED BY AT&T. CABLE TV AND INTERNET CAN ALSO BE PROVIDED BY SPECTRUM.
10. SOLID WASTE WILL BE COLLECTED AND DISPOSED OF BY WASTE PRO, INC.
11. THE SITE IS NOT LOCATED WITHIN THE LIMITS OF A WELLHEAD PROTECTION ZONE AND THERE IS NO ORDINARY HIGH WATER (OHW) LINE WITHIN THE SITE.
12. STORMWATER WILL BE PROVIDED BY INTERCONNECTED DRY RETENTION POND SYSTEM.
13. POTABLE WATER AND WASTEWATER UTILITIES PROVIDED BY CITY OF PORT ORANGE.
14. IRRIGATION SERVICE WILL BE PROVIDED BY PRIVATE WELL FOR HOA PLANTINGS AND PRIVATE WELLS FOR INDIVIDUAL LOTS PER SJRWMD, VOLUSIA COUNTY, AND CITY OF PORT ORANGE.
15. ACCESS WILL BE PROVIDED FROM ENTRANCES ON Mc DONALD ROAD AND CHARLES STREET.

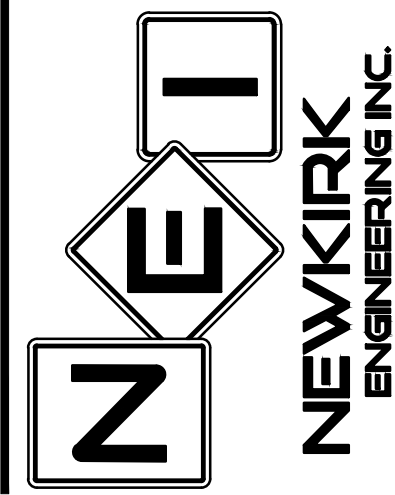
LOT AREAS CHART:

LOT NUMBERS	SQUARE FEET	ACRES	LOT NUMBERS	SQUARE FEET	ACRES	LOT NUMBERS	SQUARE FEET	ACRES	LOT NUMBERS	SQUARE FEET	ACRES	LOT NUMBERS	SQUARE FEET	ACRES	LOT NUMBERS	SQUARE FEET	ACRES
LOT 1	4,400	0.101	LOT 26	4,400	0.101	LOT 51	4,462	0.102	LOT 76	5,500	0.126	LOT 101	4,400	0.101	LOT 126	4,638	0.106
LOT 2	4,400	0.101	LOT 27	4,400	0.101	LOT 52	4,692	0.108	LOT 77	4,400	0.101	LOT 102	4,400	0.101	LOT 127	6,791	0.156
LOT 3	4,400	0.101	LOT 28	4,400	0.101	LOT 53	4,391	0.101	LOT 78	4,400	0.101	LOT 103	5,500	0.126	LOT 128	5,000	0.115
LOT 4	4,536	0.104	LOT 29	4,400	0.101	LOT 54	4,400	0.101	LOT 79	5,500	0.126	LOT 104	5,500	0.126	LOT 129	5,000	0.115
LOT 5	4,519	0.104	LOT 30	4,400	0.101	LOT 55	4,400	0.101	LOT 80	5,500	0.126	LOT 105	4,400	0.101	LOT 130	5,000	0.115
LOT 6	5,107	0.117	LOT 31	4,400	0.101	LOT 56	4,400	0.101	LOT 81	4,400	0.101	LOT 106	4,400	0.101	LOT 131	5,000	0.115
LOT 7	5,107	0.117	LOT 32	4,400	0.101	LOT 57	4,400	0.101	LOT 82	4,400	0.101	LOT 107	4,400	0.101	LOT 132	5,000	0.115
LOT 8	4,412	0.101	LOT 33	4,400	0.101	LOT 58	4,400	0.101	LOT 83	4,400	0.101	LOT 108	4,400	0.101	LOT 133	5,000	0.115
LOT 9	5,107	0.117	LOT 34	4,400	0.101	LOT 59	4,400	0.101	LOT 84	4,400	0.101	LOT 109	4,400	0.101	LOT 134	5,000	0.115
LOT 10	5,107	0.117	LOT 35	4,400	0.101	LOT 60	4,400	0.101	LOT 85	4,400	0.101	LOT 110	4,400	0.101	LOT 135	5,000	0.115
LOT 11	5,107	0.117	LOT 36	4,400	0.101	LOT 61	4,400	0.101	LOT 86	4,400	0.101	LOT 111	4,400	0.101	LOT 136	5,000	0.115
LOT 12	4,961	0.114	LOT 37	4,400	0.101	LOT 62	4,400	0.101	LOT 87	4,400	0.101	LOT 112	5,500	0.126	LOT 137	5,000	0.115
LOT 13	4,400	0.101	LOT 38	4,400	0.101	LOT 63	4,400	0.101	LOT 88	4,400	0.101	LOT 113	5,500	0.126	LOT 138	5,000	0.115
LOT 14	4,400	0.101	LOT 39	5,984	0.137	LOT 64	4,400	0.101	LOT 89	5,500	0.126	LOT 114	4,400	0.101	LOT 139	5,000	0.115
LOT 15	4,400	0.101	LOT 40	4,400	0.101	LOT 65	4,400	0.101	LOT 90	5,500	0.126	LOT 115	4,400	0.101	LOT 140	5,000	0.115
LOT 16	4,400	0.101	LOT 41	4,400	0.101	LOT 66	4,400	0.101	LOT 91	4,400	0.101	LOT 116	4,400	0.101	LOT 141	5,000	0.115
LOT 17	5,500	0.126	LOT 42	4,400	0.101	LOT 67	4,400	0.101	LOT 92	4,400	0.101	LOT 117	4,400	0.101	LOT 142	5,000	0.115
LOT 18	5,500	0.126	LOT 43	4,694	0.108	LOT 68	4,400	0.101	LOT 93	4,400	0.101	LOT 118	4,400	0.101	LOT 143	5,000	0.115
LOT 19	4,400	0.101	LOT 44	5,107	0.117	LOT 69	4,400	0.101	LOT 94	4,400	0.101	LOT 119	5,500	0.126	LOT 144	5,000	0.115
LOT 20	4,400	0.101	LOT 45	5,107	0.117	LOT 70	5,992	0.138	LOT 95	4,400	0.101	LOT 120	5,500	0.126	LOT 145	5,000	0.115
LOT 21	4,400	0.101	LOT 46	5,107	0.117	LOT 71	4,400	0.101	LOT 96	4,400	0.101	LOT 121	4,400	0.101	LOT 146	5,000	0.115
LOT 22	4,400	0.101	LOT 47	5,107	0.117	LOT 72	4,400	0.101	LOT 97	4,400	0.101	LOT 122	4,400	0.101	LOT 147	5,000	0.115
LOT 23	5,500	0.126	LOT 48	5,107	0.117	LOT 73	4,400	0.101	LOT 98	4,400	0.101	LOT 123	4,400	0.101	LOT 148	5,000	0.115
LOT 24	5,500	0.126	LOT 49	5,107	0.117	LOT 74	4,400	0.101	LOT 99	4,400	0.101	LOT 124	4,400	0.101	LOT 149	5,000	0.115
LOT 25	4,400	0.101	LOT 50	5,188	0.119	LOT 75	5,500	0.126	LOT 100	4,400	0.101	LOT 125	5,985	0.137	TOTALS	703,824	16.154

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS
11/8/22	CITY COMMENTS

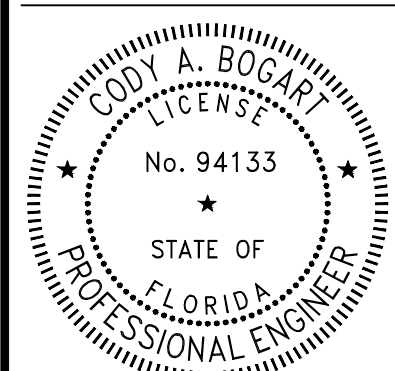
1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.NewKirk-Engineering.com
C.A. # 30209
L.C. # 2600584
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DEVELOPMENT INFORMATION
AND CONSTRUCTION NOTES
MADELINE COMMONS
975 McDONALD ROAD
PORT ORANGE, FL 32129

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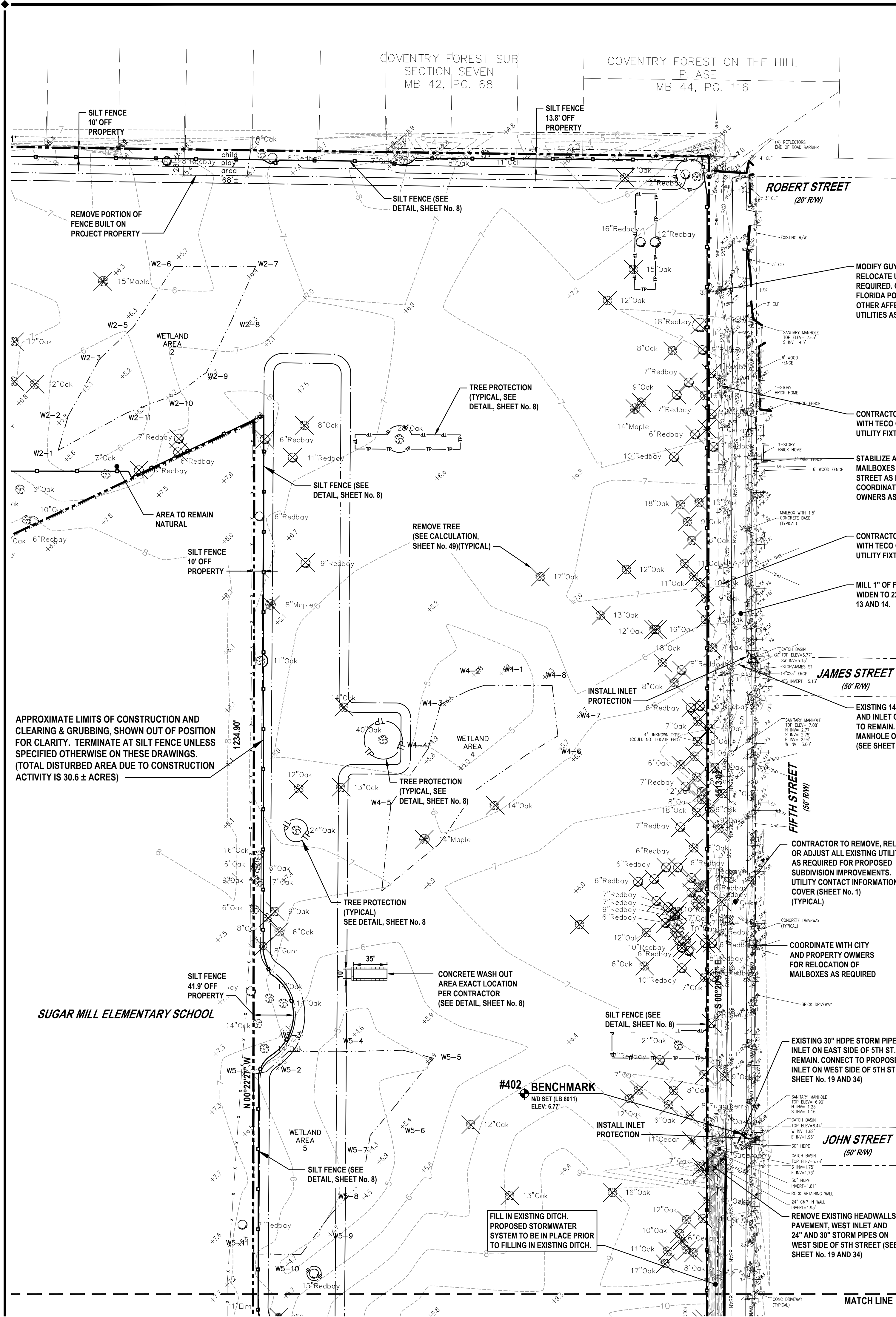
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CODY A. BOGART, PE # 94133 ON



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PROJECT No:	2021-309
DATE:	JULY 2022
DESIGN BY:	CAB
DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	
DRAWING NUMBER	

05



LEGEND:

- PROPOSED SILT FENCE (SEE DETAIL, SHEET No. 8 & 9)
- PROPOSED TREE PROTECTION (SEE DETAIL, SHEET No. 8 & 9)
- PROPOSED AGGREGATE
- CONCRETE SIDEWALK REMOVAL
- ASPHALT PAVEMENT REMOVAL
- PAVEMENT TO BE MILLED AND OVERLAID (SEE SHEET No. 11)
- AREA TO REMAIN NATURAL (5.19 REQUIRED, 5.539 PROVIDED)
- OPEN CUT FOR 5TH STREET WATER SERVICE CONNECTIONS
- EXISTING TREE (No. INDICATES SIZE)
- TREE TO BE REMOVED (SEE SHEETS No. 6, 7, 50)
- INLET PROTECTION

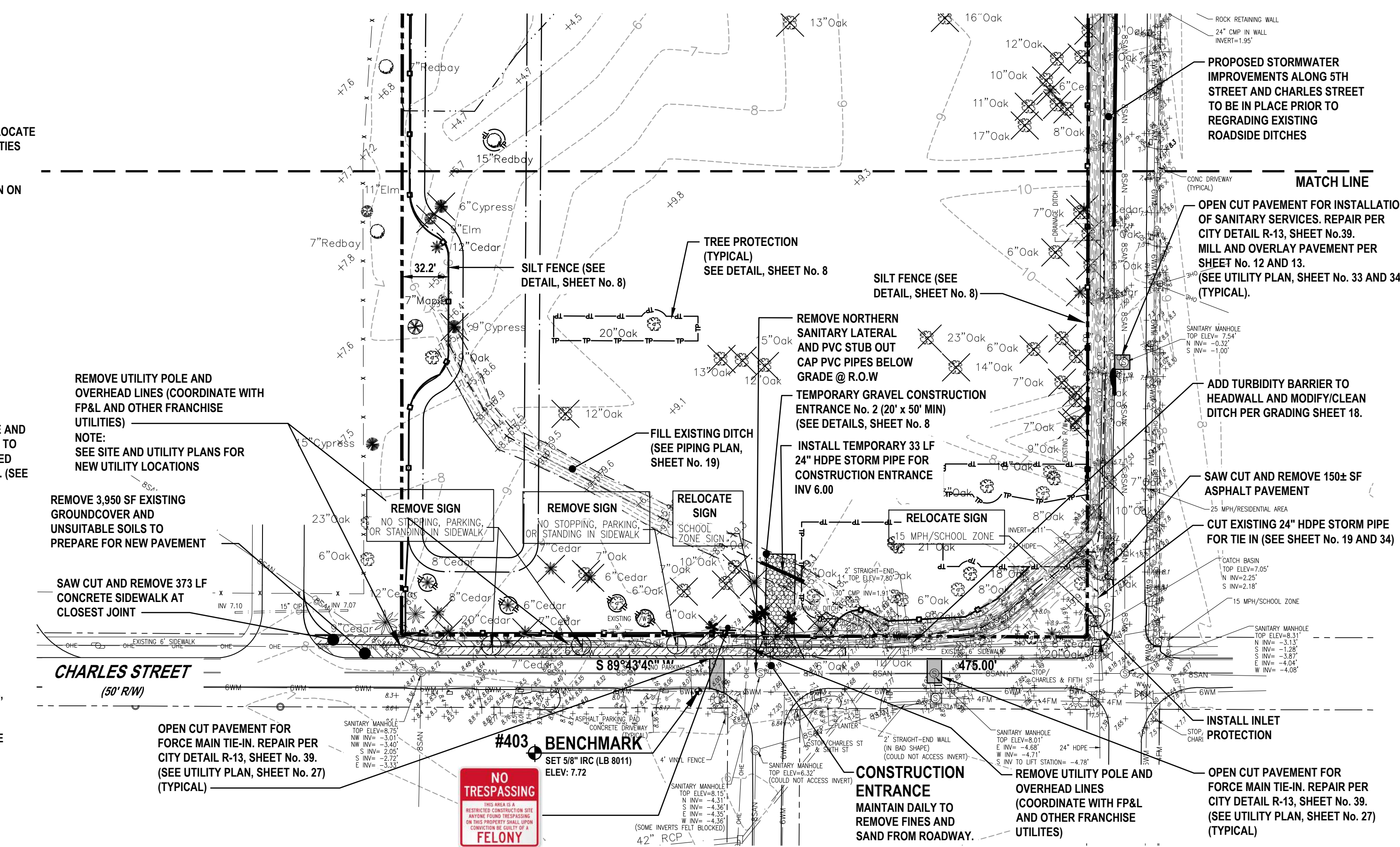
BENCHMARK INFORMATION:

- #402 SET NAIL AND DISK (LB 801) ELEVATION = 6.77
- #403 SET 5/8" IRON ROD AND CAP ELEVATION = 7.72
- #404 SET 5/8" IRON ROD AND CAP ELEVATION = 8.00

VERTICAL DATA: ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), AS DERIVED BY FROM CITY OF SOUTH DAYTONA BENCHMARK 19, DESCRIBED AS BEING A BRASS DISC SET IN CONCRETE SIDEWALK STAMPED "CITY BM-19", HAVING AN ELEVATION OF 7.43'.

WARNING !!

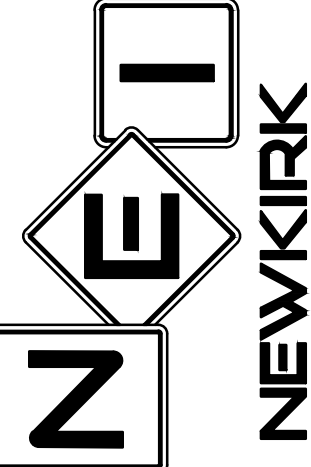
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES, GAS MAINS, UNDERGROUND ELECTRIC AND FIBER OPTIC LINES IN THE RIGHT-OF-WAY.



REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS
11/8/22	CITY COMMENTS

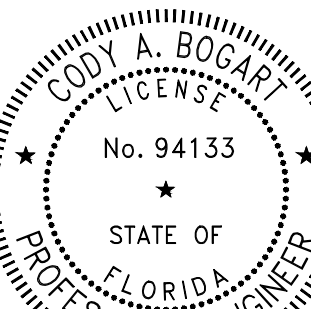
1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 2600584
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DEMOLITION AND SWPPP PLAN
MADELINE COMMONS
975 McDONALD ROAD
PORT ORANGE, FL 32129

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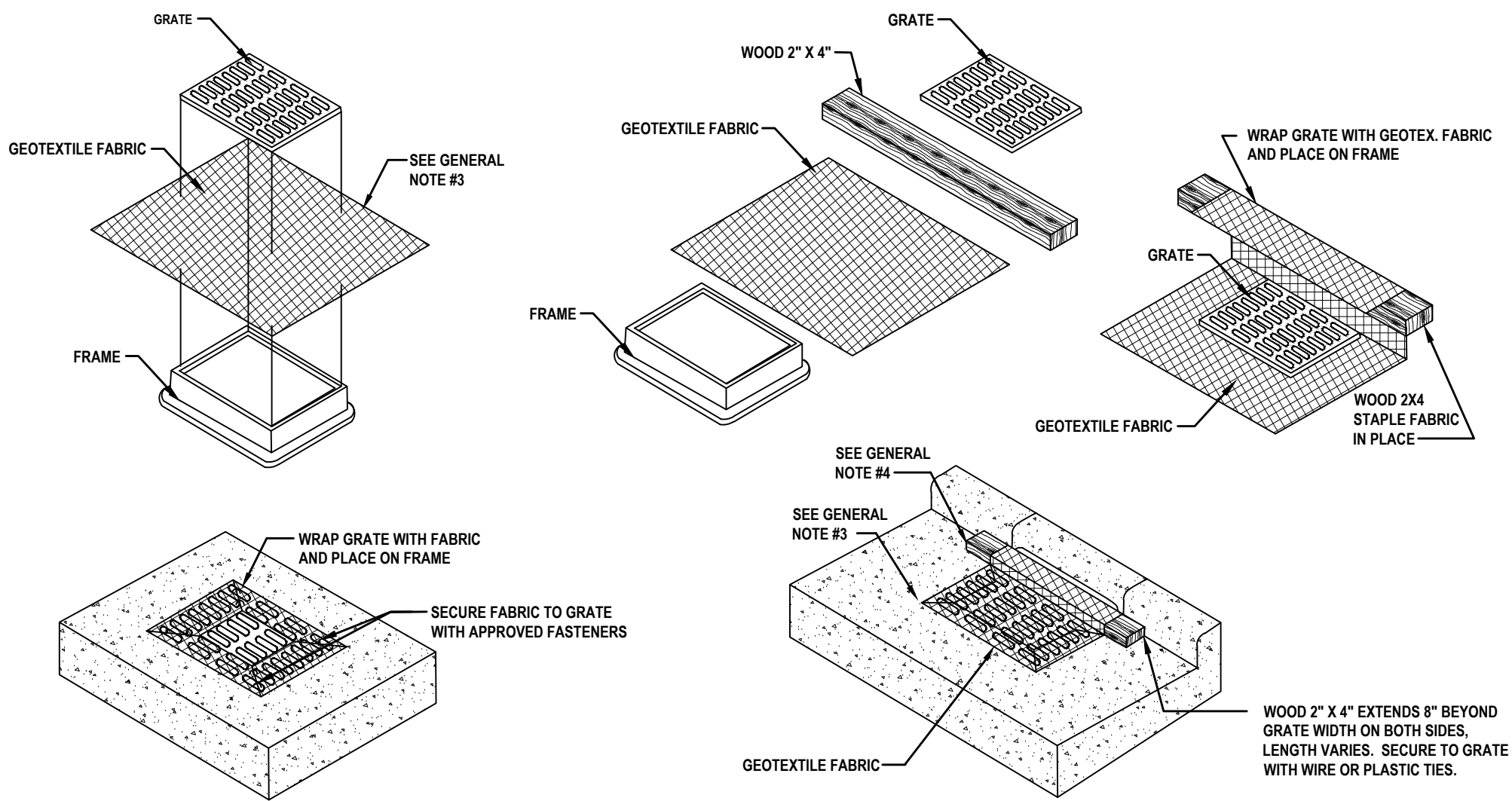
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CODY A. BOGART, PE # 94133 ON



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PROJECT No: 2021-309
DATE: JULY 2022
DESIGN BY: CAB
DRAWN BY: DAB
CHECKED BY: HHN
SCALE: 1"=60'
DRAWING NUMBER

07



YARD INLET PROTECTION
(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)

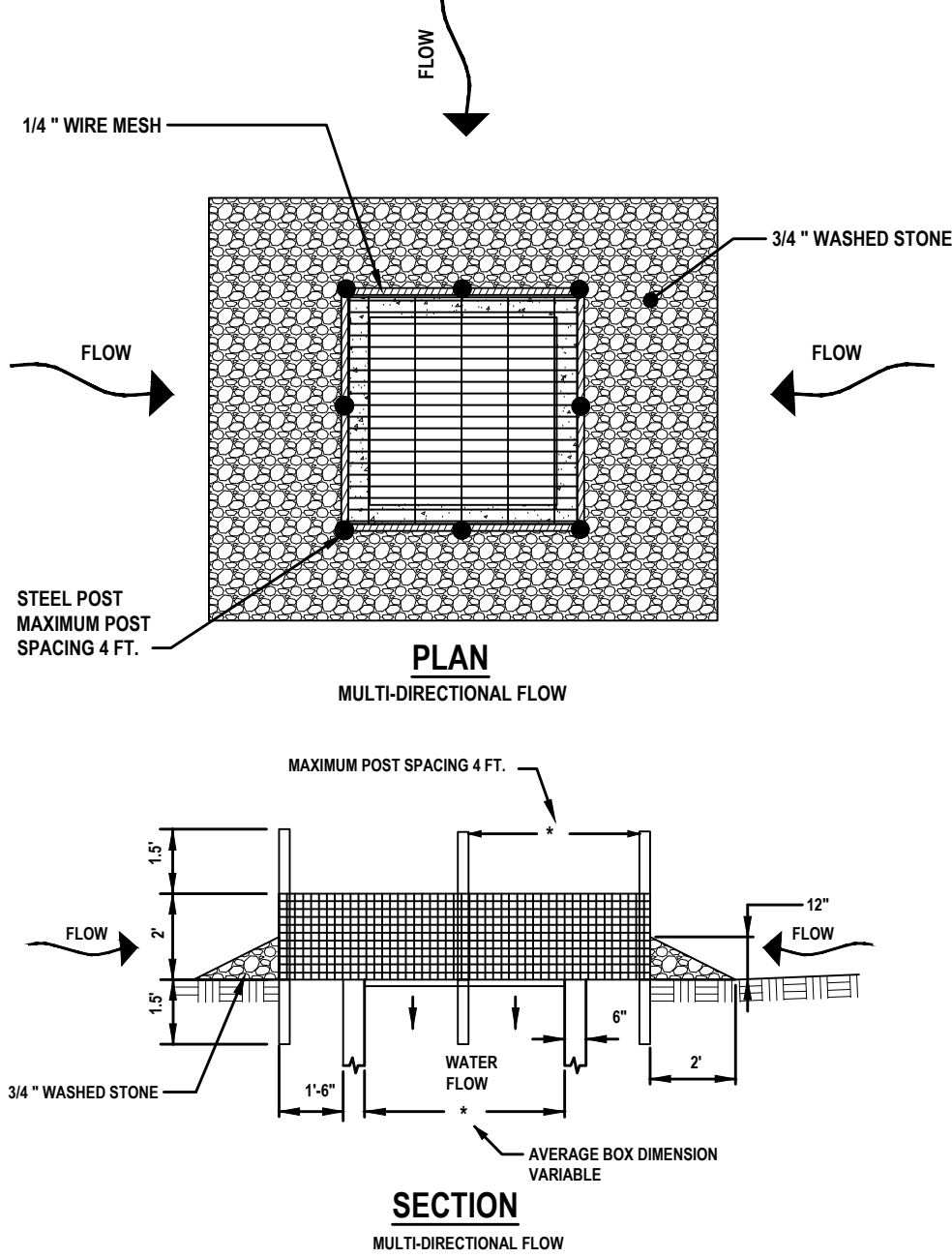
CURB INLET PROTECTION

GENERAL NOTES:

1. GEOTEXTILE TO BE MIRAFI FILTERWEAVE 402 OR GEOTEX 111F. ALTERNATIVES INCLUDE APPROVED EQUAL ASTM D4491 OR 100 TO 150 GALLON PER MINUTE PER SQUARE FOOT.
2. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.
3. FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
4. FOR CURB INLET PROTECTION AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
5. TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.
6. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS, OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

GEOTEXTILE FABRIC INLET PROTECTION

NOT TO SCALE

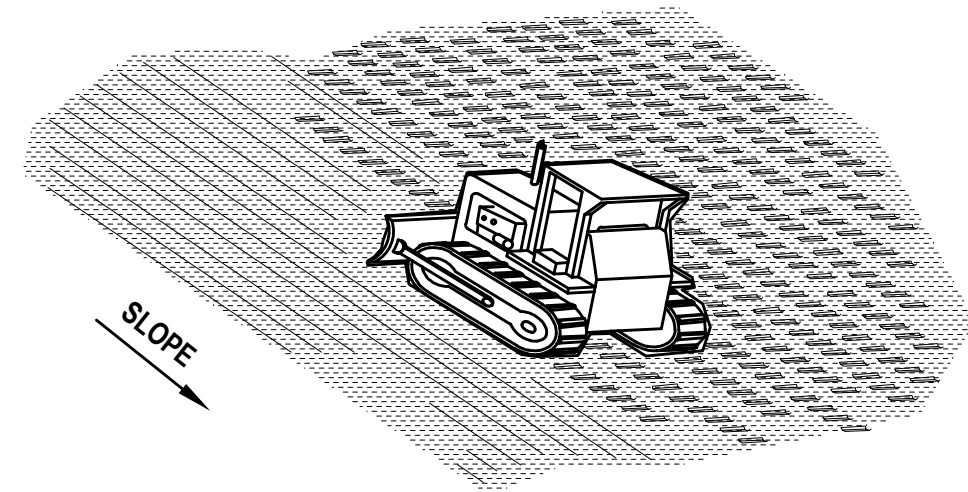


NOTE:

1. SEDIMENT CONTROL STONE SHALL BE 3/4" WASHED STONE.
2. WIRE MESH SHALL BE HARDWARE CLOTH 23 GAUGE MIN. AND SHALL HAVE 1/4 INCH MESH
3. TOP OF WIRE MESH SHALL BE A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.
4. STEEL POST SHALL BE 5 FT. IN LENGTH, BE INSTALLED 1.5 FT. DEEP MINIMUM, AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
5. WOOD POST SHALL BE 5 FT. IN HEIGHT, BE INSTALLED TO 1.5 FT. DEEP MINIMUM, AND BE 3 INCHES IN DIAMETER.
6. POST SPACING SHALL BE A MAXIMUM OF 4 FT.

HARDWARE CLOTH INLET PROTECTION

NOT TO SCALE

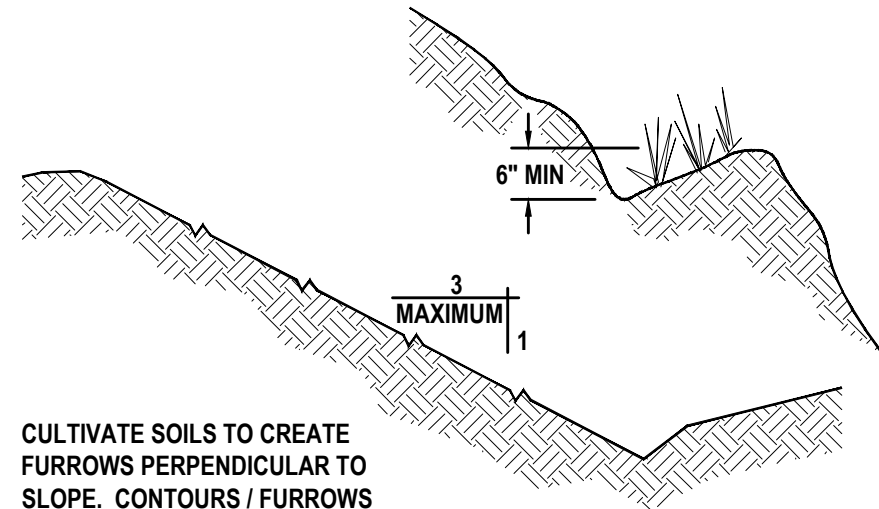


NOTE:

USE DOZER TRACKS TO CREATE GROOVES PERPENDICULAR TO THE SLOPE. GROOVES WILL CATCH SEED, FERTILIZER, MULCH, RAINFALL AND DECREASE SEDIMENT IN RUNOFF.

TRACKING DETAIL

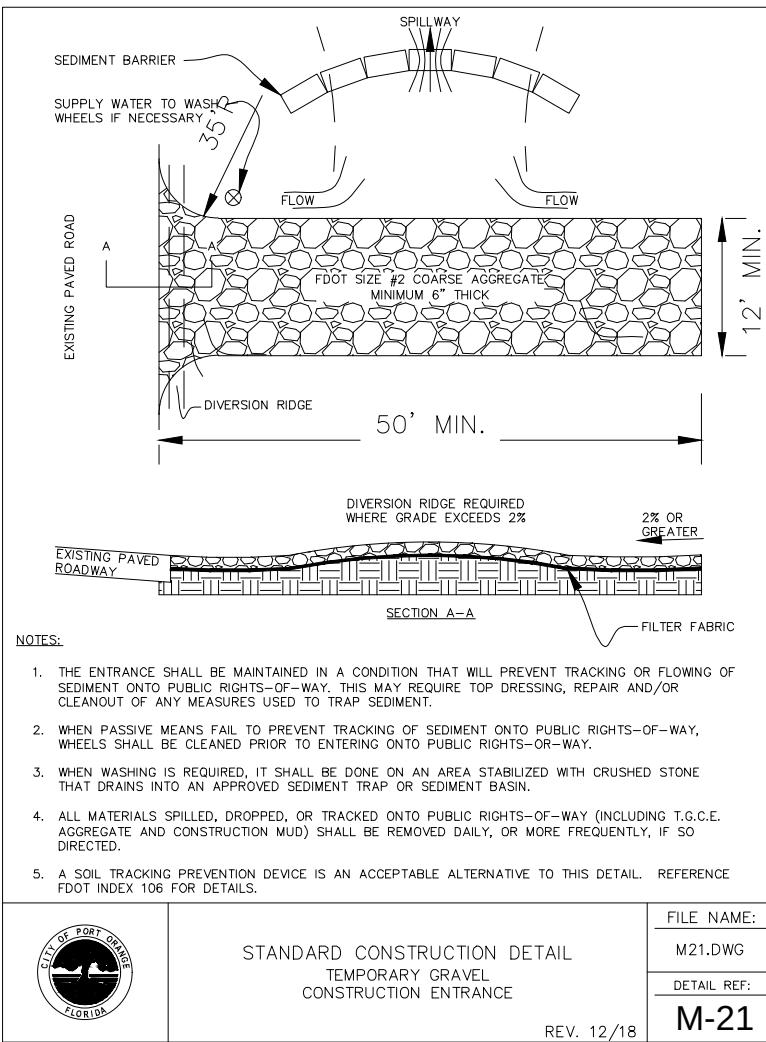
NOT TO SCALE



CULTIVATE SOILS TO CREATE FURROWS PERPENDICULAR TO SLOPE. CONTOURS / FURROWS WILL CATCH SEED, FERTILIZER, MULCH, RAINFALL AND DECREASE RUNOFF.

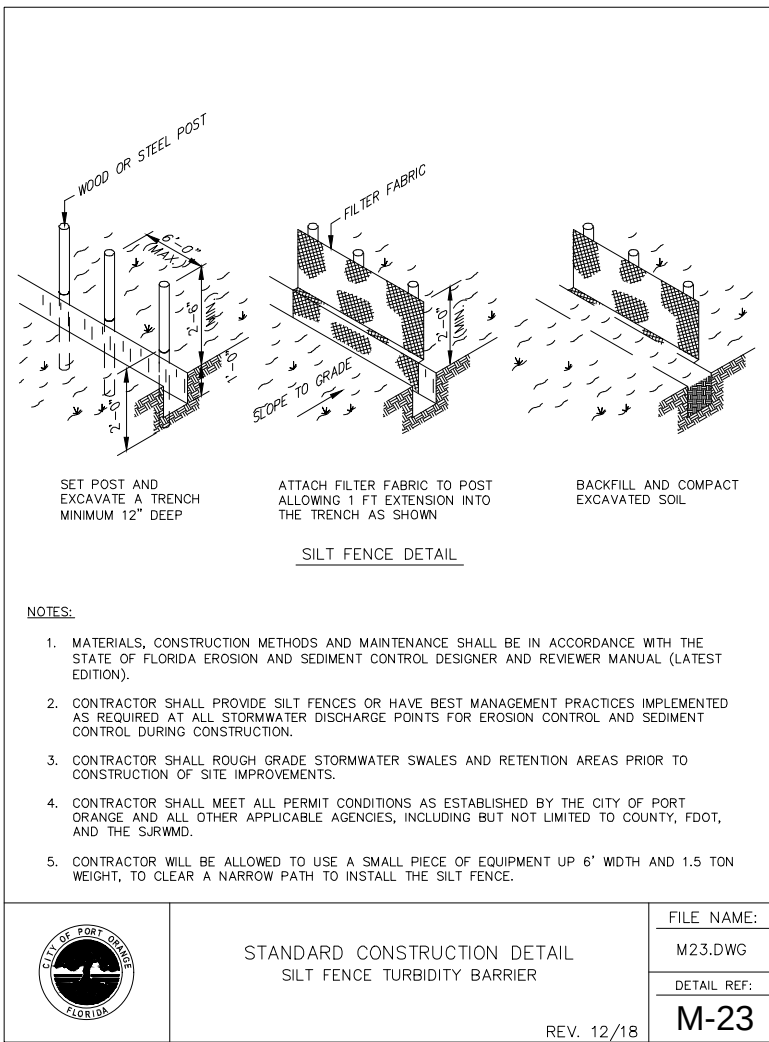
SURFACE ROUGHENING

(NOT TO SCALE)



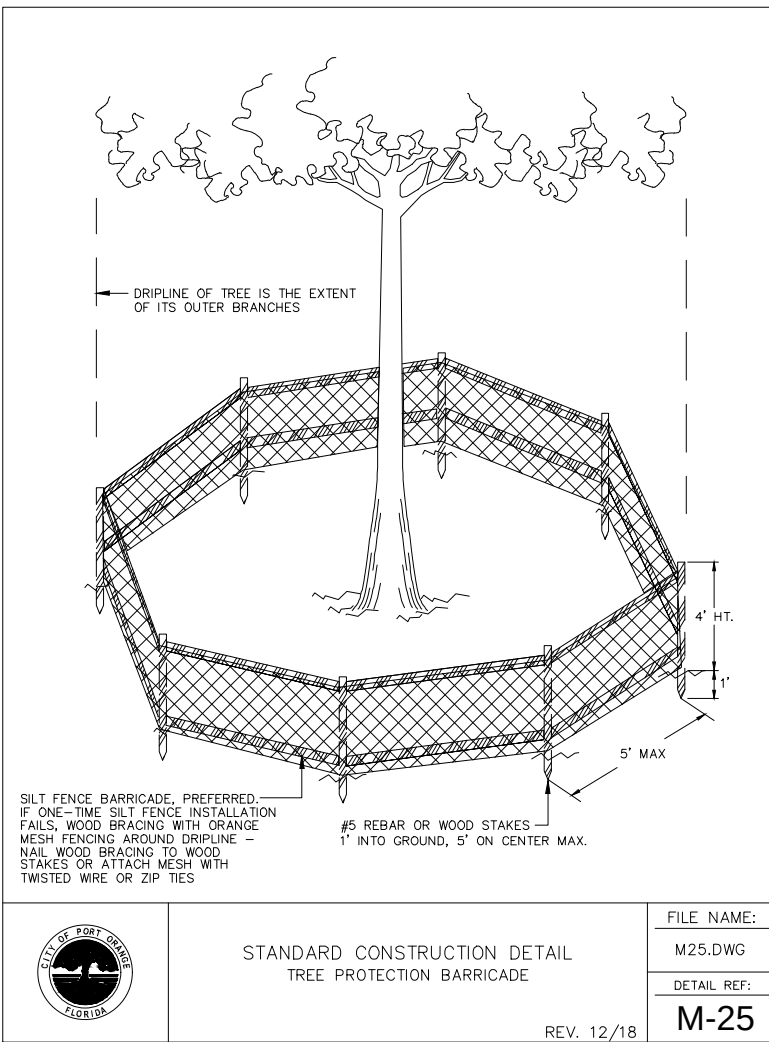
THE FOLLOWING MEASURES REPRESENT MINIMUM STANDARDS TO BE ADHERED TO BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION OF A PROJECT. THE CITY RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO BE EMPLOYED, WITHIN REASONABLE LIMITS, TO PROTECT AND MAINTAIN THE QUALITY OF THE ENVIRONMENT TO SUPPORT THE CITY'S GOALS AND OBJECTIVES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THESE PROVISIONS SHALL RESULT IN THE ISSUANCE OF A "STOP WORK ORDER".

1. NO DISTURBANCE OF PROPOSED CONSERVATION EASEMENTS, NATURAL BUFFERS, OR WATER BODIES IS PERMITTED. THE CONTRACTOR SHALL LOCATE THESE AREAS ON PLANS AND IN THE FIELD AND AVOID ANY UNAUTHORIZED CLEARING, BARRENCING, OR OTHER PROTECTIVE FENCING ARE TO BE LOCATED AT THE EDGE LINE OF EXISTING NATIVE TREES OR AT THE EDGE OF THE NATURAL/SCENERY HABITAT.
2. SPECIMENS AND HISTORIC TREES, CONSERVATION EASEMENTS, NATURAL VEGETATION BUFFERS, AND SIMILAR AREAS MUST BE PROTECTED BY BARRENCING OR FENCING PRIOR TO CLEARING. BARRENCING AND FENCING SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED THROUGHOUT THE PROJECT. BARRENCING SHALL BE REMOVED IMMEDIATELY UPON COMPLETION OF THE PROJECT.
3. WHERE A CHANGE OF GRADE OCCURS WITHIN THE DRP LINE OF A SPECIMEN TREE, SILT FENCES WILL BE REQUIRED DURING CONSTRUCTION AND RETAINING WALLS MUST BE INSTALLED PRIOR TO FINAL COMPLETION OF THE PROJECT.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL PROTECTIVE VEGETATION BARRENCING AND EROSION CONTROL MEASURES IN PLACE PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REPAIR OF ALL PROTECTIVE FENCING, BARRENCING, AND EROSION CONTROL MEASURES THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REPAIR OF ALL PROTECTIVE FENCING, BARRENCING, AND EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
5. PRIOR TO THE INSTALLATION OF ANY FILL MATERIALS ON SUBJECT SITE, SILT FENCES SHALL BE INSTALLED (1) ALONG SUBJECT SITE BOUNDARY AND/OR PROPERTY LINES, (2) AT THE EDGE OF CONSERVATION EASEMENTS AND WETLANDS, (3) ADJACENT TO NATURAL LANDSCAPE BUFFERS, (4) AROUND THE PERIMETER OF EXISTING STORM WATER TREATMENT FACILITIES, AND (5) AT ANY OTHER LOCATION WHERE THE CONTRACTOR DETERMINES THAT PROTECTIVE FENCING IS NECESSARY TO MAINTAIN ALL EROSION CONTROL DEVICES AND MEASURES THROUGHOUT THE DURATION OF THE PROJECT. MAINTENANCE SHALL INCLUDE, BUT NOT LIMITED TO PERIODIC INSPECTION AND REMOVAL OF SEDIMENT ACCUMULATING ON EROSION CONTROL DEVICES AS SPECIFICALLY IDENTIFIED IN LDC, CH 10, ARTICLE 1, SEC. 5.
6. PRIOR TO THE INSTALLATION OF ANY FILL MATERIALS ON SUBJECT SITE, SILT FENCES SHALL BE INSTALLED (1) ALONG SUBJECT SITE BOUNDARY AND/OR PROPERTY LINES, (2) AT THE EDGE OF CONSERVATION EASEMENTS AND WETLANDS, (3) ADJACENT TO NATURAL LANDSCAPE BUFFERS, (4) AROUND THE PERIMETER OF EXISTING STORM WATER TREATMENT FACILITIES, AND (5) AT ANY OTHER LOCATION WHERE THE CONTRACTOR DETERMINES THAT PROTECTIVE FENCING IS NECESSARY TO MAINTAIN ALL EROSION CONTROL DEVICES AND MEASURES THROUGHOUT THE DURATION OF THE PROJECT. MAINTENANCE SHALL INCLUDE, BUT NOT LIMITED TO PERIODIC INSPECTION AND REMOVAL OF SEDIMENT ACCUMULATING ON EROSION CONTROL DEVICES AS SPECIFICALLY IDENTIFIED IN LDC, CH 10, ARTICLE 1, SEC. 5.
7. AT A MINIMUM, THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS SUFFICIENT GRASS COVERAGE IS TO BE ESTABLISHED WITHIN TWO WEEKS.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THROUGH SCHEDULING, TO MINIMIZE THE DISTURBANCE OF THE AREAS THAT HAVE BEEN IDENTIFIED AS PROTECTED NATURAL GRASS. WITHIN SEVEN (7) DAYS OF BRINGING A SUBJECT AREA TO ITS FINAL GRADE OR INACTIVITY IN CONSTRUCTION, THE CONTRACTOR SHALL INSTALL SEED AND MULCH OR SOIL AS REQUIRED.



FOR INDIVIDUAL CONSTRUCTION PROJECTS INVOLVING MULTIPLE PHASES, (PHASING IS REQUIRED FOR SITES 50 ACRES AND LARGER) UPON COMPLETION OF EACH PHASE OF THE PROJECT, SEEDING AND MULCHING AND / OR SOODING IS TO BE PERFORMED PRIOR TO COMMENCING THE NEXT PHASE OF CONSTRUCTION.

1. CONTRACTOR SHALL PROVIDE SILT FENCES OR HAVE BEST MANAGEMENT PRACTICES IMPLEMENTED AS REQUIRED AT ALL STORMWATER DISCHARGE POINTS FOR EROSION CONTROL, AND SEDIMENT CONTROL, DURING CONSTRUCTION.
2. CONTRACTOR SHALL MAINTAIN GRADE STORMWATER SWALES AND RETENTION AREAS PRIOR TO CONSTRUCTION OF SITE IMPROVEMENTS.
3. CONTRACTOR SHALL MEET ALL PERMIT CONDITIONS AS ESTABLISHED BY THE CITY OF PORT ORANGE. ALL SILT FENCE INSTALLATION SHALL BE PERFORMED PRIOR TO COMMENCING THE NEXT PHASE OF CONSTRUCTION.
4. CONTRACTOR SHALL BE ALLOWED TO USE A SMALL PIECE OF EQUIPMENT UP TO 6" WIDE AND 1.5 TON WEIGHT, TO CLEAR A NARROW PASS TO WITHIN THE SILT FENCE.



SCOPE OF WORK: FURNISH AND INSTALL SOIL OR SEED AND MULCH. THE LIMITS CALLED FOR ON THE CONSTRUCTION DRAWINGS. AT A MINIMUM, ALL WORK SHALL MEET THE MINIMUM STANDARDS OF SECTION 10.0 OF THE CITY STANDARD SPECIFICATIONS FOR ROAD AND BROOK CONSTRUCTION, LATEST EDITION, AND MINIMUM REQUIREMENTS OF THE CITY, AS OUTLINED BELOW.

SEED: PENNSYLVANIA BAHIA (USE SOIL SCANNING SEED) 20% MULCH: BROWN TOP MULCH 20%

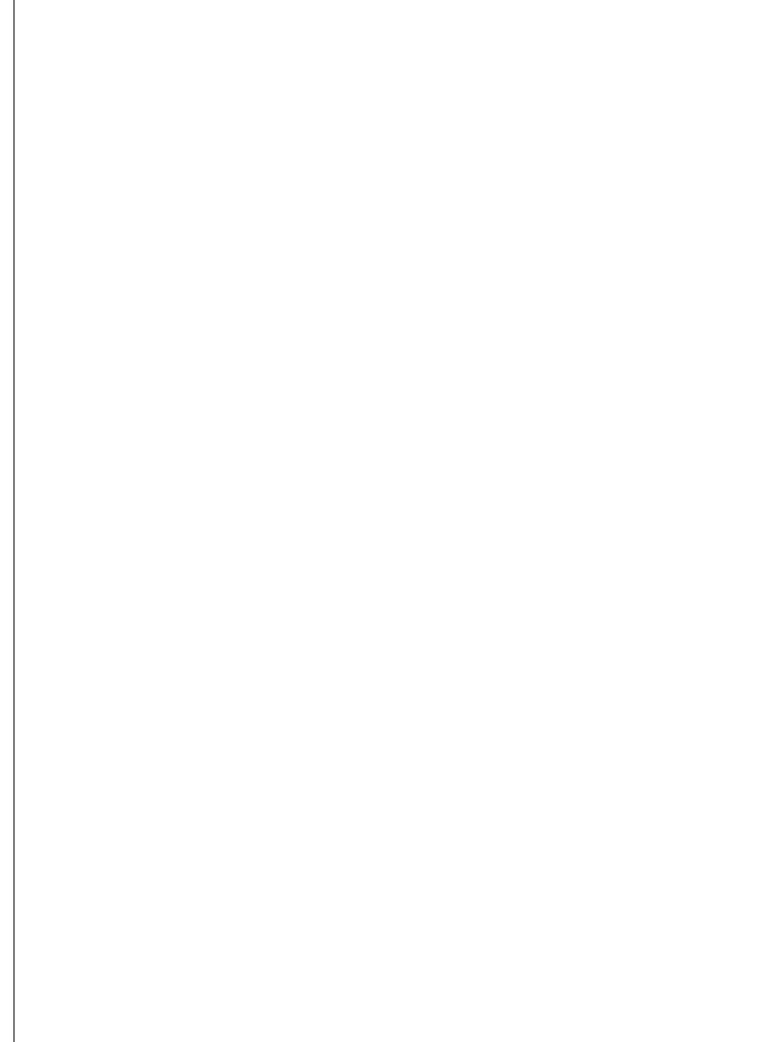
NOTE: IN THE FALL AND WINTER MONTHS, AND WITH THE APPROVAL OF THE CITY, ANNUAL RYE GRASS SHALL BE SUBSTITUTED IN EQUAL AMOUNTS FOR THE BROWN TOP MULCH.

METHOD: STRAW OR HAY CONSISTING OF CATS, RYE, OR WHEAT STRAW, OR OF PANOLA, PENALT, CRANAL, BARKER, OR BARK GRASS MAY MULCH SHALL BE FREE FROM WEEDS AND OTHER UNDESIRABLE GRASSES. APPROXIMATELY ONE INCH (1") LOOSE THICKNESS OF MULCH MATERIAL SHALL BE APPLIED UNIFORMLY OVER THE SEEDED AREAS (APPROXIMATELY ONE AND ONE-HALF (1-1/2) BALES PER 1000 SQUARE FEET). THE MULCH MATERIAL SHALL BE CUT INTO THE SOIL WITH A RAKE, AND WATER SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING. THE CONTRACTOR SHALL HAVE THE OPTION TO INSTALL WOOD-SEEDING, SUBJECT TO THE APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT AND THE CITY.

GRASSING SHALL BE DONE IMMEDIATELY UPON COMPLETION OF THE FINE GRADING OPERATION. HOWEVER, NO SEEDING SHALL BE DONE WHEN THE GRASS IS FROZEN OR UNUSUALLY WET. THE RATE OF SPREAD FOR THE SEED MATERIAL SHALL BE ONE HUNDRED AND THIRTY (130) POUNDS PER ACRE.

ALL FILL MATERIALS LOCATED BREAKIN STRUCTURES AND PAVEMENT SHALL CONSIST OF CLEAN GRANULAR SAND FREE FROM ORGANICS AND SIMILAR MATERIAL THAT COULD DECOMPOSE.

ALL FILL TO BE PLACED IN LAYERS WITH A MINIMUM RANGE BETWEEN 3.0 AND 7.5, BE ORGANIC IN NATURE, FREE OF ROCKS AND DEBRIS, OR MATCH NATIVE EXISTING SOILS.



SCOPE OF WORK: FURNISH AND INSTALL SOIL OR SEED AND MULCH. THE LIMITS CALLED FOR ON THE CONSTRUCTION DRAWINGS. AT A MINIMUM, ALL WORK SHALL MEET THE MINIMUM STANDARDS OF SECTION 10.0 OF THE CITY STANDARD SPECIFICATIONS FOR ROAD AND BROOK CONSTRUCTION, LATEST EDITION, AND MINIMUM REQUIREMENTS OF THE CITY, AS OUTLINED BELOW.

SEED: PENNSYLVANIA BAHIA (USE SOIL SCANNING SEED) 20% MULCH: BROWN TOP MULCH 20%

NOTE: IN THE FALL AND WINTER MONTHS, AND WITH THE APPROVAL OF THE CITY, ANNUAL RYE GRASS SHALL BE SUBSTITUTED IN EQUAL AMOUNTS FOR THE BROWN TOP MULCH.

METHOD: STRAW OR HAY CONSISTING OF CATS, RYE, OR WHEAT STRAW, OR OF PANOLA, PENALT, CRANAL, BARKER, OR BARK GRASS MAY MULCH SHALL BE FREE FROM WEEDS AND OTHER UNDESIRABLE GRASSES. APPROXIMATELY ONE INCH (1") LOOSE THICKNESS OF MULCH MATERIAL SHALL BE APPLIED UNIFORMLY OVER THE SEEDED AREAS (APPROXIMATELY ONE AND ONE-HALF (1-1/2) BALES PER 1000 SQUARE FEET). THE MULCH MATERIAL SHALL BE CUT INTO THE SOIL WITH A RAKE, AND WATER SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING. THE CONTRACTOR SHALL HAVE THE OPTION TO INSTALL WOOD-SEEDING, SUBJECT TO THE APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT AND THE CITY.

GRASSING SHALL BE DONE IMMEDIATELY UPON COMPLETION OF THE FINE GRADING OPERATION. HOWEVER, NO SEEDING SHALL BE DONE WHEN THE GRASS IS FROZEN OR UNUSUALLY WET. THE RATE OF SPREAD FOR THE SEED MATERIAL SHALL BE ONE HUNDRED AND THIRTY (130) POUNDS PER ACRE.

ALL FILL MATERIALS LOCATED BREAKIN STRUCTURES AND PAVEMENT SHALL CONSIST OF CLEAN GRANULAR SAND FREE FROM ORGANICS AND SIMILAR MATERIAL THAT COULD DECOMPOSE.

ALL FILL TO BE PLACED IN LAYERS WITH A MINIMUM RANGE BETWEEN 3.0 AND 7.5, BE ORGANIC IN NATURE, FREE OF ROCKS AND DEBRIS, OR MATCH NATIVE EXISTING SOILS.



SCOPE OF WORK: FURNISH AND INSTALL SOIL OR SEED AND MULCH. THE LIMITS CALLED FOR ON THE CONSTRUCTION DRAWINGS. AT A MINIMUM, ALL WORK SHALL MEET THE MINIMUM STANDARDS OF SECTION 10.0 OF THE CITY STANDARD SPECIFICATIONS FOR ROAD AND BROOK CONSTRUCTION, LATEST EDITION, AND MINIMUM REQUIREMENTS OF THE CITY, AS OUTLINED BELOW.

SEED: PENNSYLVANIA BAHIA (USE SOIL SCANNING SEED) 20% MULCH: BROWN TOP MULCH 20%

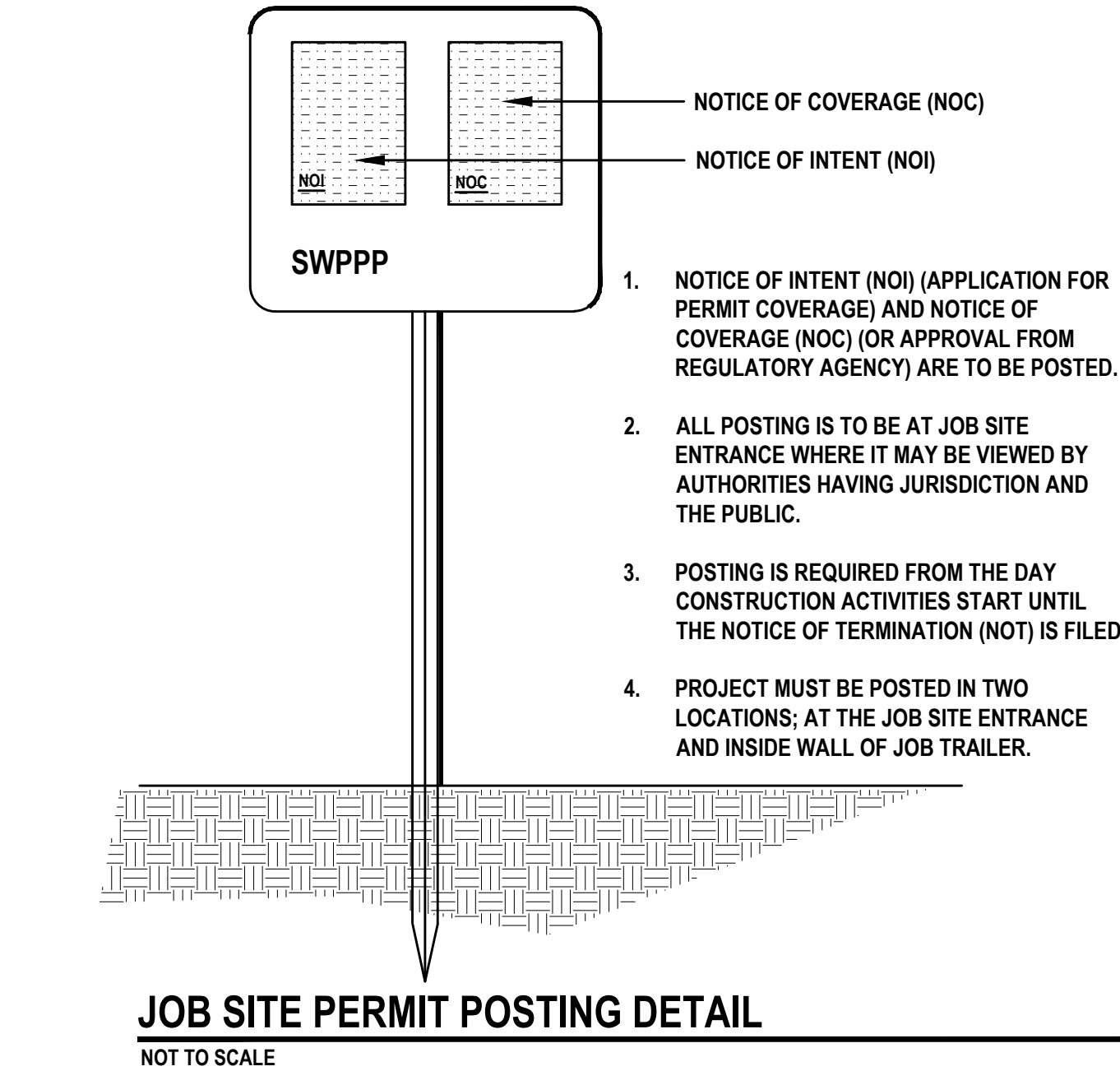
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JOB SITE PERMIT POSTING DETAIL

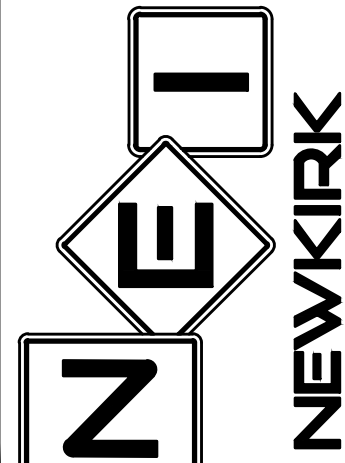
NOT TO SCALE

1. NOTICE OF INTENT (NOI) (APPLICATION FOR PERMIT COVERAGE) AND NOTICE OF COVERAGE (NOC) (OR APPROVAL FROM REGULATORY AGENCY) ARE TO BE POSTED.
2. ALL POSTING IS TO BE AT JOB SITE ENTRANCE WHERE IT MAY BE VIEWED BY AUTHORITIES HAVING JURISDICTION AND THE PUBLIC.
3. POSTING IS REQUIRED FROM THE DAY CONSTRUCTION ACTIVITIES START UNTIL THE NOTICE OF TERMINATION (NOT) IS FILED.
4. PROJECT MUST BE POSTED IN TWO LOCATIONS: AT THE JOB SITE ENTRANCE AND INSIDE WALL OF JOB TRAILER.

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS

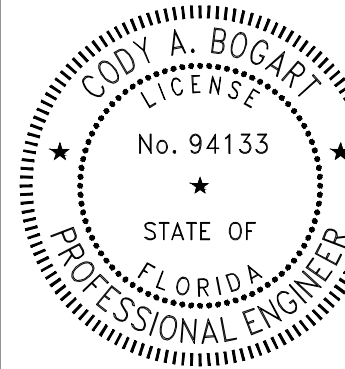
1230 North US1, Suite 3
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C.A. # 2600584
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SWPPP DETAILS
MADELINE COMMONS
975 McDONALD ROAD
PORT ORANGE, FL 32129

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PROJECT No:	2021-309
DATE:	JULY 2022
DESIGN BY:	CAB
DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	DRAWING NUMBER

08

DEMOLITION AND SWPPP NOTES:

- ALL EROSION CONTROL DEVICES AND VISIBLE BARRICADES SHALL BE INSTALLED AND APPROVED BY THE ENGINEER PRIOR TO THE START OF CLEARING AND GRUBBING.
- THE CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING WITH THE CITY AS SPECIFIED PRIOR TO START OF CONSTRUCTION.
- THE SITE SHALL BE CLEARED AND GRUBBED OF ALL VEGETATION AND DEBRIS WITHIN THE APPROXIMATE LIMITS OF CLEARING AS INDICATED ON THE DRAWING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE CITY OF PORT ORANGE UTILITY DEPARTMENT, FLORIDA SUNSHINE AND EMERGENCY SERVICES FOR RESPECTIVE UTILITY LOCATIONS AND "NOTICE" OF CONSTRUCTION ACTIVITY.
- ALL REMOVED MATERIAL SHALL BE HAULED OFF-SITE TO AN APPROVED LANDFILL. TREES MAY BE LOGGED OR MULCHED FOR OFF-SITE DISPOSAL AT THE CONTRACTOR'S DISCRETION.
- ALL EROSION CONTROL DEVICES SHALL BE PLACED PRIOR TO THE START OF WORK AND REMAIN IN PLACE UNTIL ALL WORK IS COMPLETE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PERIODIC INSPECTION AND REMOVAL OF DEBRIS AND SILT BEHIND EROSION CONTROL DEVICES.
- ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY INLET PROTECTION MEASURES TO PREVENT SILTATION IN THE DRAINAGE SYSTEM (SEE DETAILS THIS DRAWING). THE ENTIRE DRAINAGE SYSTEM SHALL BE CLEANED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.
- ALL OFF-SITE AREAS DISTURBED DURING CONSTRUCTION ACTIVITY SHALL BE IMMEDIATELY RESTORED TO PRIOR CONDITION UPON COMPLETION OF WORK.
- SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION, BLOWING SAND AND THE IMPACT TO NEIGHBORING PROPERTIES.
- THE CONTRACTOR SHALL PROVIDE THE ENGINEER, CITY A MOT PLAN AT PRECONSTRUCTION MEETING. TRAFFIC SHALL BE ALLOWED TO CONTINUE DURING WORK. PROVIDE MEASURES TO DETOUR TRAFFIC AROUND OPEN EXCAVATION WITH ADEQUATE BARRICADES, SIGNAGE AND FLAGPERSON TO DIRECT TRAFFIC. EMERGENCY SERVICES SHALL BE NOTIFIED 48 HOUR IN ADVANCE.
- EXISTING DRIVEWAYS SHOWN ADJACENT TO OR OUTSIDE LIMITS OF CONSTRUCTION SHALL REMAIN IN-SERVICE. EXISTING UTILITIES AND DRIVEWAYS SHALL NOT BE REMOVED UNLESS OTHERWISE NOTED.
- IF ANY DEWATERING IS TO OCCUR DURING ANY PHASE OF CONSTRUCTION THEN DEWATERING ACTIVITY SHALL ADHERE TO CHAPTER 40C-22 FAC MORE SPECIFICALLY AS FOLLOWS. PER 40C-22.030(3) A "NOTICED GENERAL SHORT-TERM DEWATERING PERMIT" IS REQUIRED "ONLY IF" DEWATERING EXCEEDS 4 MILLION GALLONS PER DAY, EXCEPT DURING THE FIRST 120 HOURS OF DEWATERING WHEN THE DAILY AND INSTANTANEOUS PUMPAGE RATES SHALL NOT EXCEED 6 MILLION GALLONS PER DAY. AVERAGE DAILY WITHDRAWAL SHALL NOT EXCEED 2 MILLION GALLONS PER DAY FOR THE FIRST 60 DAYS OF THE DEWATERING ACTIVITY AND SHALL NOT EXCEED ONE MILLION GALLONS PER DAY OF A 180 DAY DURATION. EACH SPECIFIC DEWATERING PROJECT SHALL NOT EXCEED 180 DAYS. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE ANY DEWATERING ACTIVITY IS BELOW THE SPECIFIED THRESHOLD. OTHERWISE A PERMIT WILL BE REQUIRED AT THE EXPENSE OF THE CONTRACTOR. THE CONTRACTOR SHALL FAMILIARIZE ITSELF WITH CHAPTER 40C-22 FAC AND BE SOLELY RESPONSIBLE FOR OBTAINING AND SUBMITTING FORM RDS-50 TO SJRWMD A MINIMUM OF 10 DAYS PRIOR TO ANY DEWATERING ACTIVITY. SUBMITTAL OF FORM RDS-50 IS NOT REQUIRED IF DEWATERING IS 300,000 GALLONS PER DAY OR LESS AND WILL NOT EXCEED 30 DAYS IN DURATION.

EROSION CONTROL NOTES:

- LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE SWPPP DURING CONSTRUCTION OPERATIONS.
- NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL DEVICES HAVE BEEN INSTALLED.
- THE CONTRACTOR SHALL POST "NO TRESPASSING" SIGNAGE AT ALL SITE ENTRANCES PRIOR TO CONSTRUCTION.
- MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN AND AT LEAST ONCE A WEEK.
- THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
- GENERAL CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
- NO TURBID WATER SHALL BE DISCHARGED OFF-SITE FROM THE DEWATERING OPERATION. CONTRACTOR SHALL TAKE MEASURES TO CONTROL TURBIDITY.
- IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OF NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
- PROVIDE DUST CONTROL FOR ALL EARTHWORK OPERATIONS. COVER AREA WITH LIGHT COATING OF WATER OR OTHER APPROVED METHOD.

SWPPP INSPECTIONS AND RECORD KEEPING:

INSPECTIONS ARE REQUIRED AT LEAST EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS FOLLOWING A RAINFALL EVENT OF ONE-HALF (½) OF AN INCH OF RAINFALL OR GREATER AND SHALL CONTINUE UNTIL THE SITE COMPLIES WITH FINAL STABILIZATION (NOTICE OF TERMINATION). INSPECTIONS MUST BE CONDUCTED BY A "QUALIFIED" INSPECTOR. "QUALIFIED" IS DEFINED AS A PERSON THAT A). HAS SUCCESSFULLY COMPLETED AND MET ALL REQUIREMENTS NECESSARY TO BE FULLY CERTIFIED THROUGH THE FDEP STORMWATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR TRAINING PROGRAM; B). HAS SUCCESSFULLY COMPLETED AN EQUIVALENT FORMAL TRAINING PROGRAM; OR C). THAT IS QUALIFIED BY OTHER TRAINING OR PRACTICAL EXPERIENCE IN THE FIELD OF STORMWATER POLLUTION PREVENTION AND EROSION AND SEDIMENTATION CONTROL. EACH INSPECTION MUST BE FOLLOWED UP BY A REPORT DOCUMENTING THE INSPECTOR'S FINDINGS AND REQUEST THE REQUIRED MAINTENANCE AND/OR REPAIR FOR THE EROSION AND SEDIMENTATION CONTROL MEASURES. THESE RECORDS ARE USED TO PROVE THAT THE REQUIRED INSPECTION AND MAINTENANCE WERE PERFORMED AND SHALL BE PLACED IN THE SWPPP LEDGER. IN ADDITION TO INSPECTION AND MAINTENANCE REPORTS, RECORDS SHOULD BE KEPT OF CONSTRUCTION ACTIVITIES THAT OCCUR ON THE SITE. THE CONTRACTOR SHALL RETAIN COPIES OF THE SWPPP, ALL REPORTS AND DATA FOR A MINIMUM OF FIVE (5) YEARS AFTER THE PROJECT IS COMPLETE IN PAPER AND CD FORMAT.

LAND ALTERATION / TREE PRESERVATION NOTES:

- ALL TREES TO REMAIN MUST BE PROTECTED BY TREE PRESERVATION BARRICADES MEETING THE MINIMUM STANDARDS. PROTECTIVE BARRICADES SHALL REMAIN IN PLACE UNTIL LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE COMPLETED.
- ALL TRIMMING SHALL BE UNDERTAKEN ON A TREE PROTECTED BY THE PROVISIONS OF THE LAND DEVELOPMENT CODE SHALL BE IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A-300 PRUNING STANDARDS.
- OAK TREES LARGER THAN 36-INCHES AND ABOVE (HISTORIC) PRUNING SHALL BE PERFORMED BY AN ARBORIST CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE OR A REGISTERED CONSULTING ARBORIST WITH THE AMERICAN SOCIETY OF CONSULTING ARBORISTS. THE ARBORIST SHALL UNDERSTAND THAT THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A300 PRUNING STANDARDS IS A STANDARD OF DIVISION 4.0.
- ALL TREE ROOTS EXISTING WITHIN APPROVED IMPROVEMENT AREAS AND ORIGINATING FROM A PROTECTED TREE, SHALL BE SEVERED CLEAN AT THE LIMITS OF THE PRESERVED AREA WHERE INDICATED ON THIS PLAN.
- SEE TREE PROTECTION DETAIL M-25, SHEET No. 6.

BENCHMARK INFORMATION:

#402 SET NAIL AND DISK (LB 8011)
ELEVATION = 6.77

#403 SET 5/8" IRON ROD AND CAP
ELEVATION = 7.72

#404 SET 5/8" IRON ROD AND CAP
ELEVATION = 8.00

VERTICAL DATA:
ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), AS DERIVED BY FROM CITY OF SOUTH DAYTONA BENCHMARK 19. DESCRIBED AS BEING A BRASS DISC SET IN CONCRETE SIDEWALK STAMPED "CITY BM-19", HAVING AN ELEVATION OF 7.43'.

NOTE !!!

ALL EARTHWORK, UNSUITABLE MATERIAL REMOVAL AND REPLACEMENT AND FILL DIRT TO BE CONSTRUCTED IN ACCORDANCE WITH GEOTECHNICAL SPECIFICATIONS PROVIDED BY UNIVERSAL ENGINEERING SCIENCES, INC. REPORT No. 136730, DATED NOVEMBER 16, 2020.

ONSITE EXISTING TREE LEGEND :

	EXISTING	REMOVED	
CYPRESS TREE		2	2
REDBAY TREE		76	48
MAGNOLIA TREE		2	2
CEDAR TREE		17	8
ELM TREE		1	1
OAK TREE		282	157
MAPLE TREE		15	7
PALM TREE		4	4
PINE TREE		2	2
SUGARBERRY TREE		1	1
SWEETGUM TREE		1	1
	403	233	170 (42.4%)

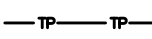
R.O.W. TREE REMOVAL:

	REMOVED
REDBAY TREE	7
OAK TREE	13
SUGARBERRY TREE	1
	21

ONSITE SPECIMEN TREE LEGEND :

TYPE (ALL SPECIES)		EXISTING	REMOVED	REMAIN
OAK TREE		56	10	46
REDBAY		21	4	17
CEDAR		4	1	3
MAPLE		4	1	3
		85	16	69 (81%)

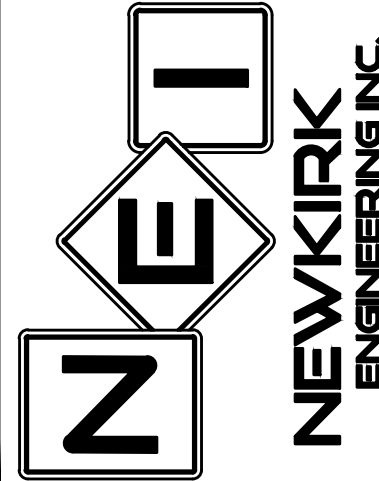
LEGEND:

	PROPOSED SILT FENCE (SEE DETAIL, SHEET No. 8 & 9)
	PROPOSED TREE PROTECTION (SEE DETAIL, SHEET No. 8 & 9)
	PROPOSED AGGREGATE
	CONCRETE SIDEWALK REMOVAL
	ASPHALT PAVEMENT REMOVAL
	PAVEMENT TO BE MILLED AND OVERLAID (SEE SHEET No. 11)
	AREA TO REMAIN NATURAL (5.19 REQUIRED, 5.539 PROVIDED)
	OPEN CUT FOR 5TH STREET WATER SERVICE CONNECTIONS
	EXISTING TREE (No. INDICATES SIZE)
	TREE TO BE REMOVED (SEE SHEETS No. 6, 7, 50)
	INLET PROTECTION

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 2600584
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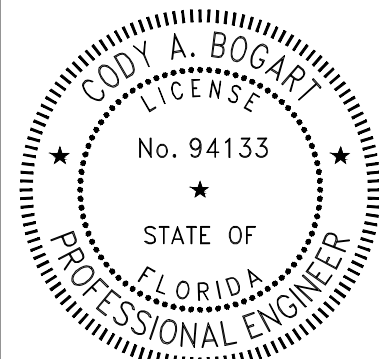
SWPPP NOTES

MADELINE COMMONS

975 McDONALD ROAD
PORT ORANGE, FL 32129

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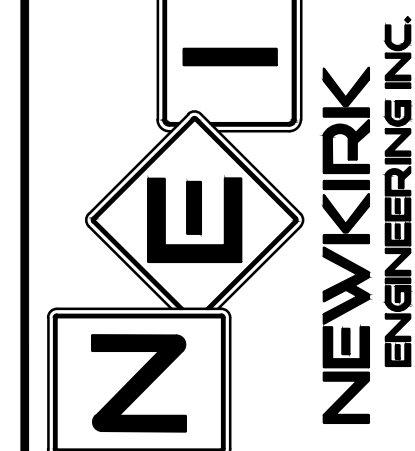
PROJECT No:	2021-309
DATE:	JULY 2022
DESIGN BY:	CAB
DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	
DRAWING NUMBER	

09

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
7/18/22	SURVMD SITE VISIT
8/26/22	CITY COMMENTS
10/3/22	CITY COMMENTS
11/8/22	CITY COMMENTS
12/20/22	CITY COMMENTS

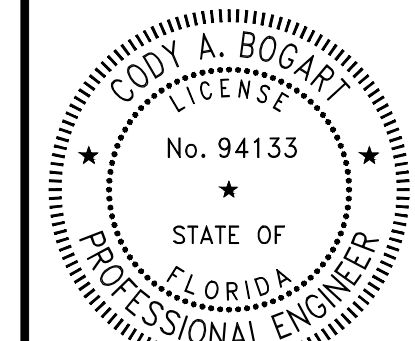
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OVERALL DEVELOPMENT PLAN MADELINE COMMONS 975 McDONALD ROAD PORT ORANGE, FL 32129

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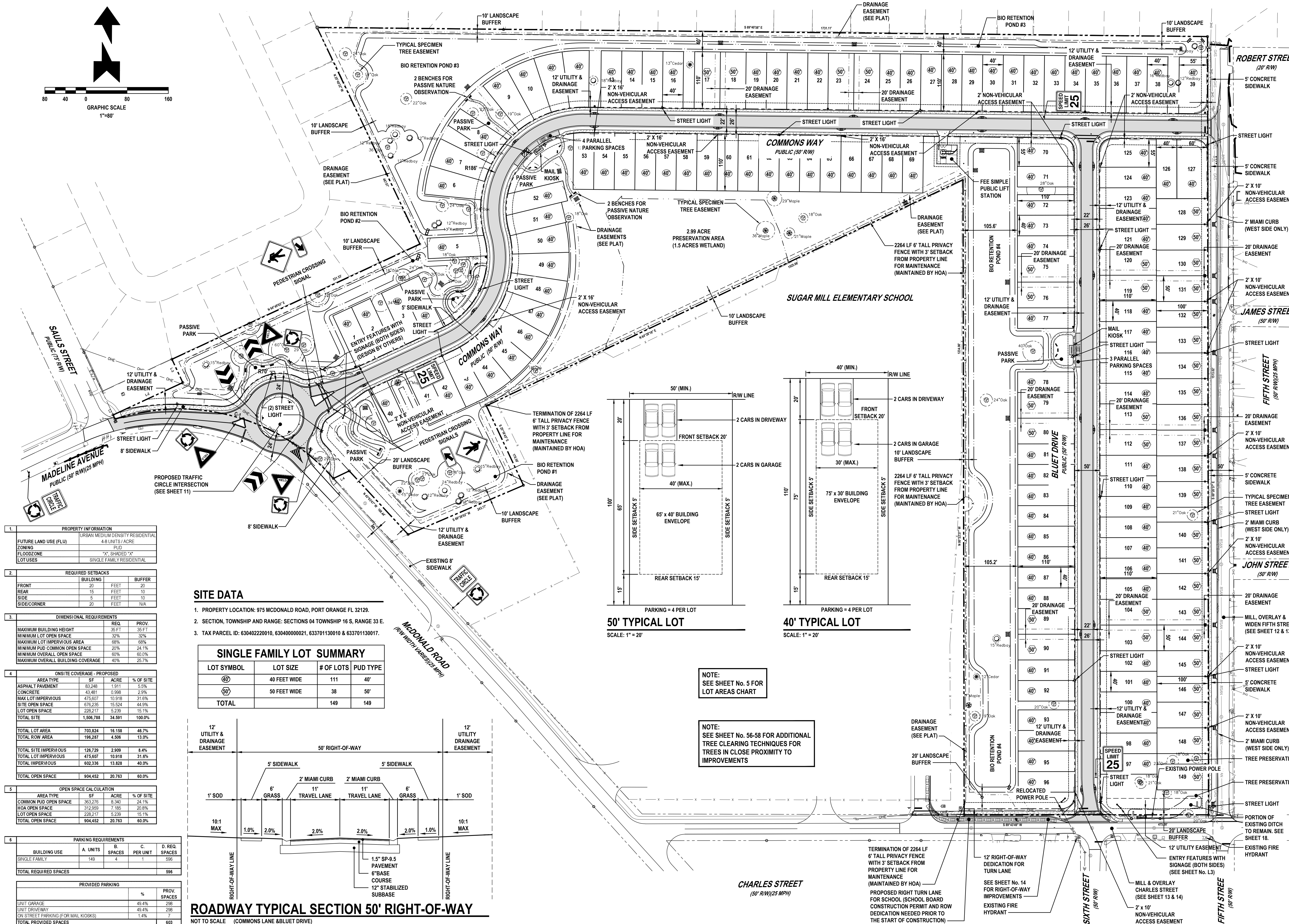
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PROJECT No: 2021-309
DATE: JULY 2022
DESIGN BY: CAB
DRAWN BY: CRA
CHECKED BY: HHN
SCALE: 1" = 80'
DRAWING NUMBER

10



1. PROPERTY INFORMATION	
FUTURE LAND USE (FLU)	URBAN MEDIUM DENSITY RESIDENTIAL
ZONING	PUD
FLOODZONE	"X", SHADED "X"
LOT USES	SINGLE FAMILY RESIDENTIAL

2. REQUIRED SETBACKS	
	BUILDING
FRONT	20 FEET
REAR	15 FEET
SIDE	5 FEET
SIDE/CORNER	20 FEET

3.	DIMENSIONAL REQUIREMENTS		
	REQ.	PROV.	
MAXIMUM BUILDING HEIGHT	35 FT	35 FT	
MINIMUM LOT OPEN SPACE	32%	32%	
MAXIMUM LOT IMPERVIOUS AREA	68%	68%	
MINIMUM PUD COMMON OPEN SPACE	20%	24.1%	
MINIMUM OVERALL OPEN SPACE	60%	60.0%	
MAXIMUM OVERALL BUILDING COVERAGE	40%	25.7%	

4	ONSITE COVERAGE - PROPOSED			
	AREA TYPE	SF	ACRE	% OF SITE
	ASPHALT PAVEMENT	83,248	1.911	5.5%
	CONCRETE	43,461	0.998	2.9%
	MAX LOT IMPERVIOUS	475,607	10.918	31.8%
	SITE OPEN SPACE	676,230	15.524	44.0%
	LOT OPEN SPACE	228,217	5.239	15.1%
	TOTAL SITE	1,506,788	34.591	100.0%
	TOTAL LOT AREA	703,824	16.158	48.7%
	TOTAL ROW AREA	196,287	4.506	13.0%
	TOTAL SITE IMPERVIOUS	126,729	2.909	8.4%
	TOTAL LOT IMPERVIOUS	475,607	10.918	31.8%
	TOTAL IMPERVIOUS	602,336	13.828	40.0%
	TOTAL OPEN SPACE	904,452	20.763	60.0%

5	OPEN SPACE CALCULATION			
	AREA TYPE	SF	ACRE	% OF SITE
	COMMON PUD OPEN SPACE	363,276	8.340	24.1%
	HOA OPEN SPACE	312,959	7.185	20.8%
	LOT OPEN SPACE	228,217	5.239	15.1%
	TOTAL OPEN SPACE	904,452	20.763	60.0%

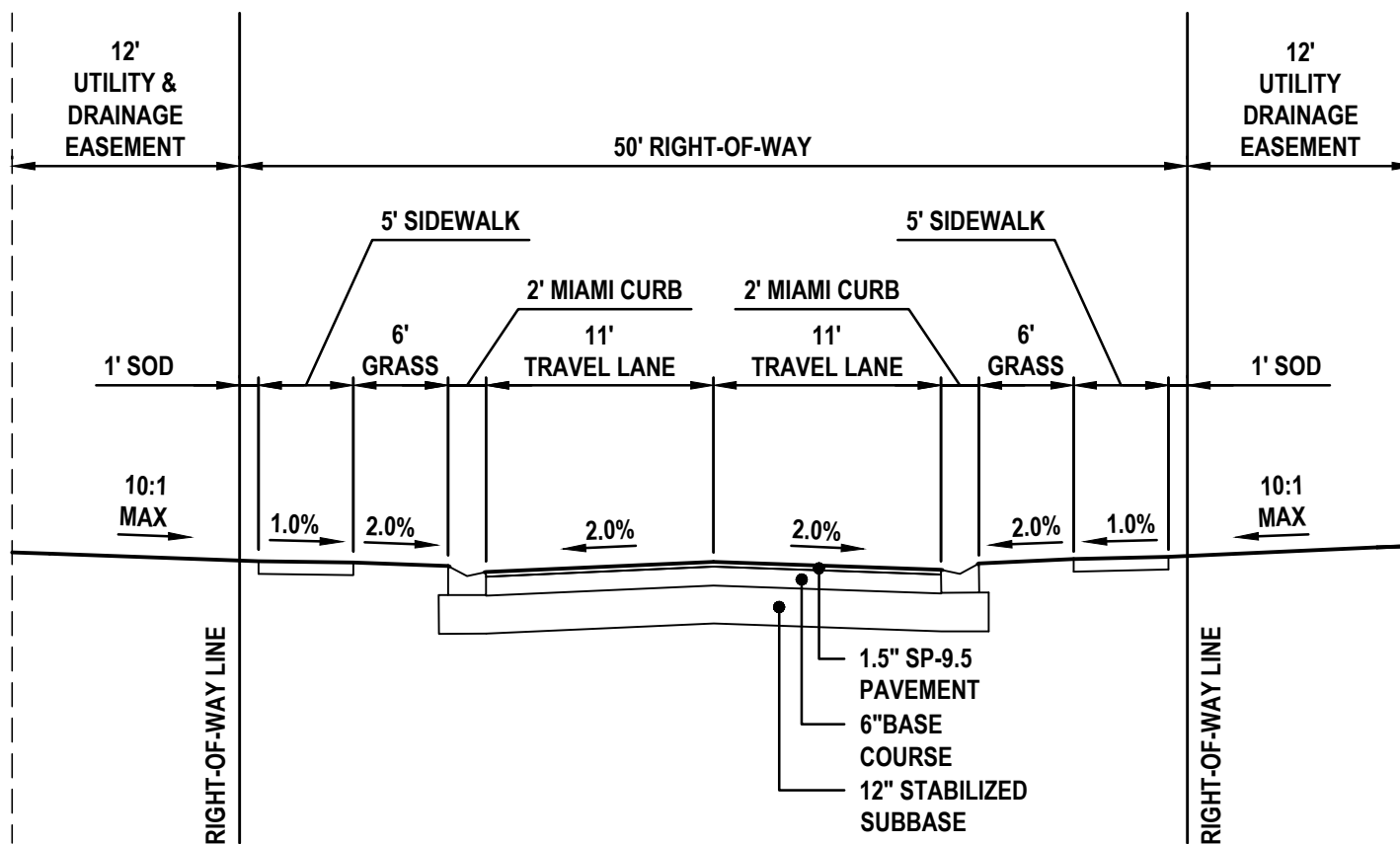
6	PARKING REQUIREMENTS			
	BUILDING USE	A. UNITS	B. SPACES	C. PER UNIT
	SINGLE FAMILY	149	4	1
	TOTAL REQUIRED SPACES			

PROVIDED PARKING	
	%
UNIT GARAGE	49.4%
UNIT DRIVEWAY	49.4%
ON STREET PARKING (FOR MAIL KIOSKS)	1.4%
TOTAL PROVIDED SPACES	

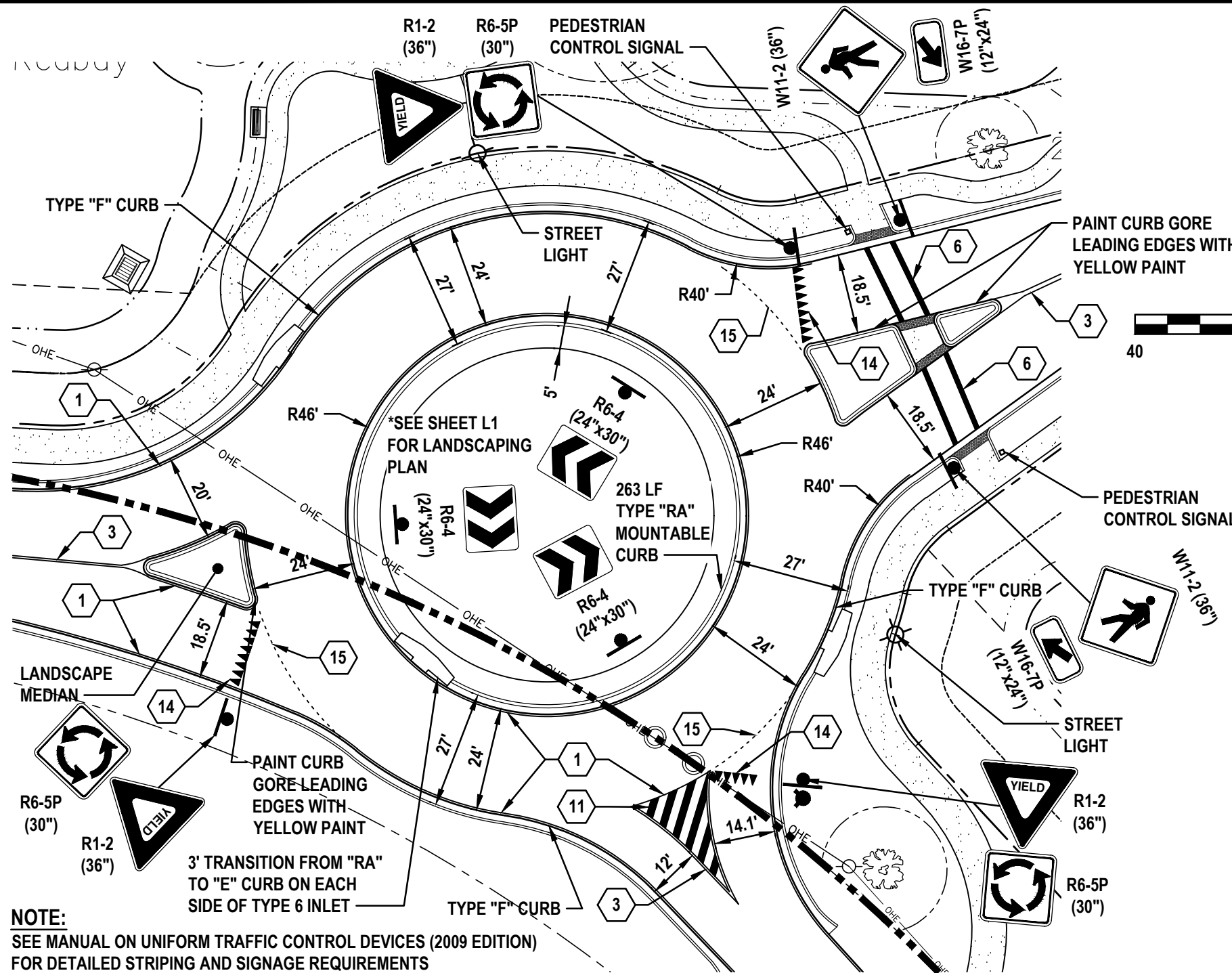
SITE DATA

- PROPERTY LOCATION: 975 McDONALD ROAD, PORT ORANGE FL 32129.
- SECTION, TOWNSHIP AND RANGE: SECTIONS 04 TOWNSHIP 16 S, RANGE 33 E.
- TAX PARCEL ID: 630402220010, 630400000021, 633701130010 & 633701130017.

SINGLE FAMILY LOT SUMMARY			
LOT SYMBOL	LOT SIZE	# OF LOTS	PUD TYPE
40	40 FEET WIDE	111	40'
50	50 FEET WIDE	38	50'
TOTAL		149	149



ROADWAY TYPICAL SECTION 50' RIGHT-OF-WAY
NOT TO SCALE (COMMONS LANE & BLUET DRIVE)



TRAFFIC CIRCLE STRIPING AND SIGNAGE DETAIL

SCALE: 1" = 30'

GENERAL NOTES:

- CITY OF PORT ORANGE BUILDING PERMITS ARE REQUIRED FOR BUILDING, DUMPSTER ENCLOSURE, LIGHT POLES, AND SIGNS. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING APPROPRIATE INFORMATION (ENGINEERING, SPECIFICATIONS, ETC.) FOR LIGHT POLES AND FIXTURES AT TIME OF PERMIT.
- PERMITS ARE REQUIRED FOR CONSTRUCTION OF NEW BUILDING, MONUMENT AND ART SIGNS; AND, DUMPSTER ENCLOSURE. CONTACT THE BUILDING DIVISION IF THERE ARE QUESTIONS OR CONCERNS ABOUT PERMIT REQUIREMENTS FOR WORK NOT SPECIFICALLY MENTIONED HEREIN.
- ALL DIMENSIONS AND TIES ARE TO THE EDGE OF PAVEMENT AND OUTSIDE FACE OF BUILDING.
- ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION OR GPS. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR'S RISK.
- THE CONTRACTOR SHALL COORDINATE WITH THE EXISTING ADJACENT BUSINESSES TO ENSURE THERE IS NO DISRUPTION TO THEIR RESPECTIVE OPERATIONS.
- THE CONTRACTOR AT ITS OWN DISCRETION SHALL MAINTAIN THE CONSTRUCTION SITE SECURE FROM TRESPASS.
- SOD ALL DISTURBED AREAS IN RIGHT-OF-WAY WITH BAHIA SOD.
- ALL CURB RAMPS SHALL COMPLY WITH SECTION 406 OF FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC).
- ALL PAVEMENT EDGE SHALL HAVE TYPE "F1" CURBING UNLESS OTHERWISE NOTED ON THESE PLANS.
- ALL MATERIALS, MACHINERY AND VEHICLES SHALL BE STORED ON-SITE IN AN ORDERLY ORGANIZED FASHION.
- CONTRACTOR TO PROVIDE PREMISE IDENTIFICATION FOR BUILDING DURING CONSTRUCTION.
- SITE LIGHTING MUST NOT SHINE DIRECTLY UPON ANY ADJACENT RESIDENCE AND MUST NOT PRODUCE EXCESSIVE GLARE. GLARE GUARDS WILL BE INSTALLED IF NEEDED.
- THERE MUST BE AN 8 FOOT SEPARATION BETWEEN AIR-CONDITIONING UNITS, DOOR STOOPS, GENERATORS, GAS TANKS OR OTHER MECHANICAL EQUIPMENT PER THE MDA.
- THE REQUIRED FENCING AND PERIMETER LANDSCAPING IS REQUIRED TO BE INSTALLED WITH THE FIRST PHASE OF HOMES.

LEGEND

- MIAMI CURB
- TYPE "RA" MOUNTABLE CURB (SEE DETAIL SHEET 47)
- TYPE "F1" SPILLOUT CURB
- TYPE "F" CURB
- TYPE "E" CURB
- SITE LIGHT POLES
- MAIL KIOSK
- TRANSITION FROM TYPE "F" CURB TO MIAMI CURB
- 24" DETECTABLE WARNING MAT

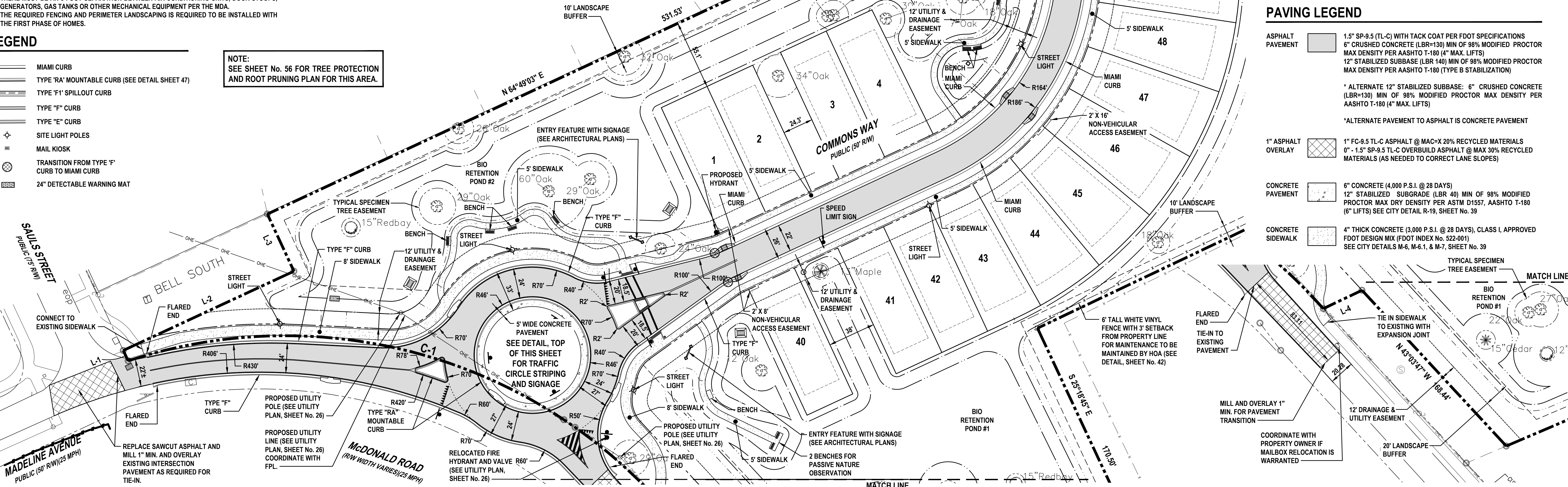
NOTE:
SEE SHEET No. 56 FOR TREE PROTECTION
AND ROOT PRUNING PLAN FOR THIS AREA.

PAVEMENT MARKING NOTES:

- PAINTED PAVEMENT MARKINGS SHALL BE APPLIED AFTER PAVEMENT SURFACE HAS CURED. SURFACE SHALL BE FREE OF FINE SAND AND DEBRIS PRIOR TO APPLICATIONS.
- APPLY PAINTED PAVEMENT MARKINGS AT LAST STAGE OF CONSTRUCTION AFTER LANDSCAPE PLANTINGS ARE INSTALLED.
- PAINT SHALL BE SHERWIN WILLIAMS LOW-VOC ACRYLIC PRO PARK PAINT, APPLY PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DRAWINGS FOR LOCATIONS OF SPECIFIC COLORS.
- ALL STOP BARS SHALL BE THERMOPLASTIC.
- ALL REFLECTIVE PAVEMENT MARKERS ARE TO BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 17352.
- ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH INDEX NO. 17301 AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
- LOCATION OF SIGNS IS APPROXIMATE ONLY AND IS SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER.
- FOR ADDITIONAL DETAILS SEE INDEX NO. 700-010, 11863, 700-101, 17344 AND 706-001.
- ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED USING 3M BRAND "SCOTCHLITE" SHEETING (ENGINEER GRADE) ON MINIMUM .08 GA ALUMINUM BLANKS. ALL 36"x48" SIGNS SHALL BE .100 GA MINIMUM AND SHALL BE INSTALLED USING 3"x12" ROUND ALUMINUM POST. ALL STOP SIGNS SHALL BE 36" OCTAGON INSTALLED ON 123 LBS/FT "U" CHANNEL POST RAIL STEEL ONLY OR 3"x12" ROUND ALUMINUM POSTS. "U" CHANNEL POSTS MAY BE USED FOR SIGNS SMALLER THAN 36"x36". ALL SPEED LIMIT SIGNS SHALL BE 24"x30".

KEY MAP

NOT TO SCALE



STRIPING KEYNOTES: (PER FDOT INDEX No. 711-001, ONLY THERMOPLASTIC IN R/W)

- | | |
|---|---|
| 1 6" SOLID WHITE LINE | 9 6" WHITE SKIP LINE (10' - 30') |
| 2 6" SOLID YELLOW LINE | 10 6" WHITE DOTTED LANE DROP LINE (3' - 9') |
| 3 6" SOLID DOUBLE YELLOW LINE | 11 18" YELLOW LINE @ 45° SPACED 5' ON CENTER |
| 4 24" WHITE STOP BAR | 12 18" WHITE LINE @ 45° SPACED 10' ON CENTER |
| 5 WHITE DIRECTIONAL ARROW | 13 18" YELLOW LINE @ 45° SPACED 10' ON CENTER |
| 6 STANDARD CROSSWALK | 14 WHITE "SHARK-TOOTH" YIELD LINE |
| 7 SPECIAL EMPHASIS CROSSWALK | 15 6" WHITE SKIP LINE (2' - 4') |
| 8 24" DETECTABLE WARNING MAT (PER FDOT INDEX No. 522-002) | 16 18" WHITE LINE @ 45° SPACED 3' ON CENTER |

SEE SHEET No. 48 FOR FDOT INDEX No. 711-001

PAVING LEGEND

- ASPHALT PAVEMENT
- 1.5" SP-9.5 (TL-C) WITH TACK COAT PER FDOT SPECIFICATIONS
 - 6" CRUSHED CONCRETE (LBR=130) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" MAX. LIFTS)
 - 12" STABILIZED SUBBASE (LBR 140) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (TYPE B STABILIZATION)

* ALTERNATE 12" STABILIZED SUBBASE: 6" CRUSHED CONCRETE (LBR=130) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" MAX. LIFTS)

*ALTERNATE PAVEMENT TO ASPHALT IS CONCRETE PAVEMENT

- 1" ASPHALT OVERLAY
- 1" FC-9.5 TL-C ASPHALT @ MAC=X 20% RECYCLED MATERIALS
 - 0" - 1.5" SP-9.5 TL-C OVERBUILD ASPHALT @ MAX 30% RECYCLED MATERIALS (AS NEEDED TO CORRECT LANE SLOPES)

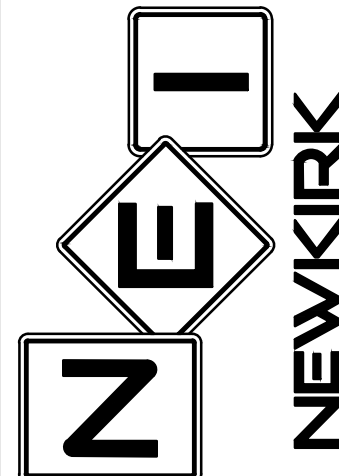
- CONCRETE PAVEMENT
- 6" CONCRETE (4,000 P.S.I. @ 28 DAYS)
 - 12" STABILIZED SUBGRADE (LBR 40) MIN OF 98% MODIFIED PROCTOR MAX DRY DENSITY PER ASTM D1557, AASHTO T-180 (6" LIFTS) SEE CITY DETAIL R-19, SHEET No. 39

- CONCRETE SIDEWALK
- 4" THICK CONCRETE (3,000 P.S.I. @ 28 DAYS), CLASS I, APPROVED FDOT DESIGN MIX (FDOT INDEX No. 522-001)
 - SEE CITY DETAILS M-6, M-6.1, & M-7, SHEET No. 39

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
7/18/22	SURVMD SITE VISIT
8/28/22	CITY COMMENTS
11/8/22	CITY COMMENTS
12/20/22	CITY COMMENTS

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C.A. # 30209
L.C. # 2600584
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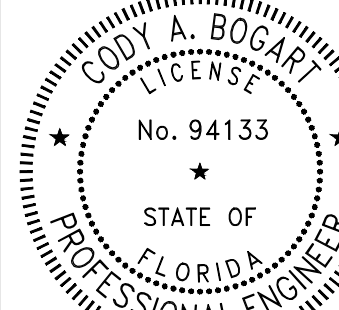
GEOMETRY, PAVEMENT STRIPING AND SIGNAGE PLAN

MADELINE COMMONS

975 McDONALD ROAD
PORT ORANGE, FL 32129

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THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
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PROJECT No: 2021-309

DATE: JULY 2022

DESIGN BY: CAB

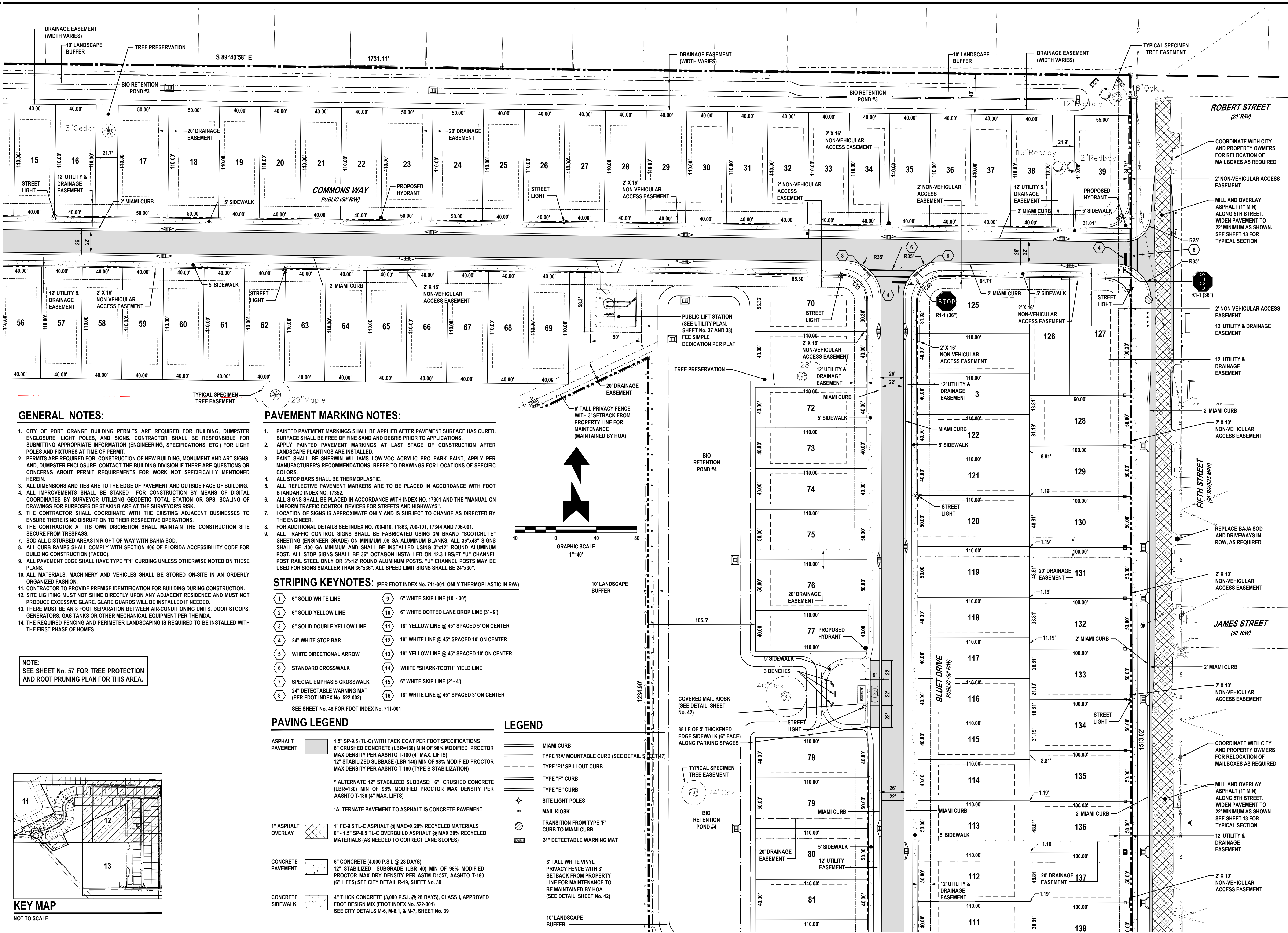
DRAWN BY: CRA

CHECKED BY: HHN

SCALE: 1" = 40'

DRAWING NUMBER

11



GENERAL NOTES:

- CITY OF PORT ORANGE BUILDING PERMITS ARE REQUIRED FOR BUILDING, DUMPSTER ENCLOSURE, LIGHT POLES, AND SIGNS. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING APPROPRIATE INFORMATION (ENGINEERING, SPECIFICATIONS, ETC) FOR LIGHT POLES AND FIXTURES AT TIME OF PERMIT.
- PERMITS ARE REQUIRED FOR: CONSTRUCTION OF NEW BUILDING; MONUMENT AND ART SIGNS; AND, DUMPSTER ENCLOSURE. CONTACT THE BUILDING DIVISION IF THERE ARE QUESTIONS OR CONCERNS ABOUT PERMIT REQUIREMENTS FOR WORK NOT SPECIFICALLY MENTIONED HEREIN.
- ALL DIMENSIONS AND TIES ARE TO THE EDGE OF PAVEMENT AND OUTSIDE FACE OF BUILDING.
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- THE CONTRACTOR SHALL COORDINATE WITH THE EXISTING ADJACENT BUSINESSES TO ENSURE THERE IS NO DISRUPTION TO THEIR RESPECTIVE OPERATIONS.
- THE CONTRACTOR AT ITS OWN DISCRETION SHALL MAINTAIN THE CONSTRUCTION SITE SECURE FROM TRESPASS.
- SOD ALL DISTURBED AREAS IN RIGHT-OF-WAY WITH BAHIA SOD.
- ALL CURB RAMPS SHALL COMPLY WITH SECTION 406 OF FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC).
- ALL PAVEMENT EDGE SHALL HAVE TYPE "F1" CURBING UNLESS OTHERWISE NOTED ON THESE PLANS.
- ALL MATERIALS, MACHINERY AND VEHICLES SHALL BE STORED ON-SITE IN AN ORDERLY ORGANIZED FASHION.
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- THE REQUIRED FENCING AND PERIMETER LANDSCAPING IS REQUIRED TO BE INSTALLED WITH THE FIRST PHASE OF HOMES.

NOTE:
SEE SHEET No. 57 FOR TREE PROTECTION
AND ROOT PRUNING PLAN FOR THIS AREA.

PAVEMENT MARKING NOTES:

- PAINTED PAVEMENT MARKINGS SHALL BE APPLIED AFTER PAVEMENT SURFACE HAS CURED. SURFACE SHALL BE FREE OF FINE SAND AND DEBRIS PRIOR TO APPLICATIONS.
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STRIPING KEYNOTES: (PER FDOT INDEX NO. 711-001, ONLY THERMOPLASTIC IN R/W)

- | | | | |
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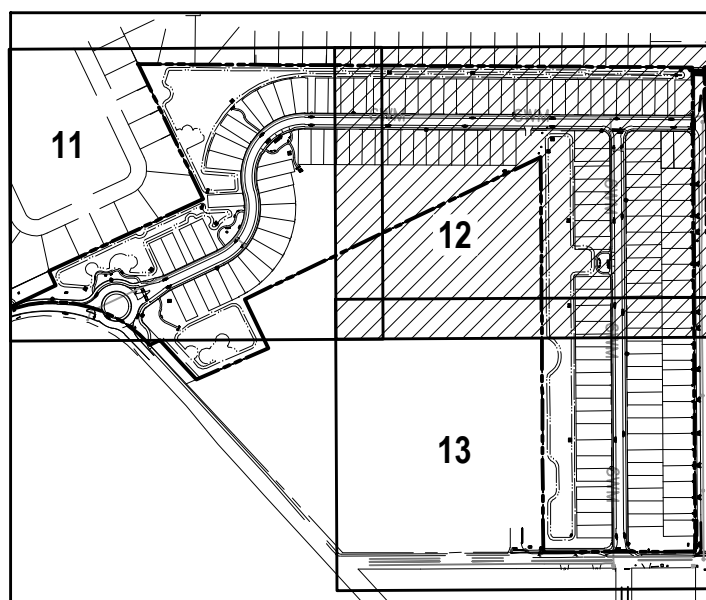
SEE SHEET No. 48 FOR FDOT INDEX NO. 711-001

PAVING LEGEND

- | | |
|--------------------|---|
| ASPHALT PAVEMENT | 1.5" SP-9.5 (TL-C) WITH TACK COAT PER FDOT SPECIFICATIONS |
| | 6" CRUSHED CONCRETE (LBR=130) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" MAX. LIFTS) |
| | 12" STABILIZED SUBBASE (LBR 140) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (TYPE B STABILIZATION) |
| | * ALTERNATE 12" STABILIZED SUBBASE: 6" CRUSHED CONCRETE (LBR=130) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" MAX. LIFTS) |
| | *ALTERNATE PAVEMENT TO ASPHALT IS CONCRETE PAVEMENT |
| 1" ASPHALT OVERLAY | 1" FC-9.5 TL-C ASPHALT @ MAC=X-20% RECYCLED MATERIALS |
| | 0" - 1.5" SP-9.5 TL-C OVERBUILD ASPHALT @ MAX 30% RECYCLED MATERIALS (AS NEEDED TO CORRECT LANE SLOPES) |
| CONCRETE PAVEMENT | 6" CONCRETE (4,000 P.S.I. @ 28 DAYS) |
| | 12" STABILIZED SUBGRADE (LBR 40) MIN OF 98% MODIFIED PROCTOR MAX DRY DENSITY PER ASTM D1557, AASHTO T-180 (6" LIFTS) SEE CITY DETAIL R-19, SHEET No. 39 |
| CONCRETE SIDEWALK | 4" THICK CONCRETE (3,000 P.S.I. @ 28 DAYS), CLASS I, APPROVED FDOT DESIGN MIX (FDOT INDEX NO. 522-001) |
| | SEE CITY DETAILS M-6, M-6.1, & M-7, SHEET No. 39 |

LEGEND

- | | |
|---|---|
| MIAMI CURB | MIAMI CURB |
| TYPE 'RA' MOUNTABLE CURB (SEE DETAIL SHEET 47) | TYPE 'RA' MOUNTABLE CURB (SEE DETAIL SHEET 47) |
| TYPE 'F1' SPILLOUT CURB | TYPE 'F1' SPILLOUT CURB |
| TYPE 'F' CURB | TYPE 'F' CURB |
| TYPE 'E' CURB | TYPE 'E' CURB |
| SITE LIGHT POLES | SITE LIGHT POLES |
| MAIL KIOSK | MAIL KIOSK |
| TRANSITION FROM TYPE 'F' CURB TO MIAMI CURB | TRANSITION FROM TYPE 'F' CURB TO MIAMI CURB |
| 24" DETECTABLE WARNING MAT | 24" DETECTABLE WARNING MAT |
| 6" TALL WHITE VINYL PRIVACY FENCE WITH 3" SETBACK FROM PROPERTY LINE FOR MAINTENANCE TO BE MAINTAINED BY HOA (SEE DETAIL, SHEET No. 42) | 6" TALL WHITE VINYL PRIVACY FENCE WITH 3" SETBACK FROM PROPERTY LINE FOR MAINTENANCE TO BE MAINTAINED BY HOA (SEE DETAIL, SHEET No. 42) |
| 10' LANDSCAPE BUFFER | 10' LANDSCAPE BUFFER |

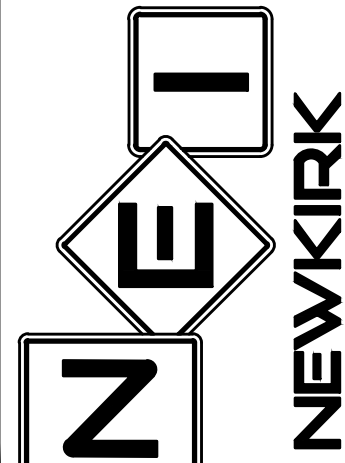


KEY MAP
NOT TO SCALE

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
7/18/22	SJRWMD SITE VISIT
8/26/22	CITY COMMENTS
10/3/22	CITY COMMENTS
11/8/22	CITY COMMENTS

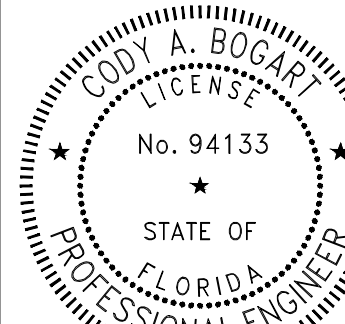
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Civil Engineering,
Transportation, CEI &
Landscape Architecture



GEOMETRY, PAVEMENT,
STRIPING AND SIGNAGE PLAN
MADELINE COMMONS
975 McDONALD ROAD
PORT ORANGE, FL 32129

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PROJECT No: 2021-309
DATE: JULY 2022
DESIGN BY: CAB
DRAWN BY: CRA
CHECKED BY: HHN
SCALE: 1" = 40'
DRAWING NUMBER

12

GENERAL NOTES:

- CITY OF PORT ORANGE BUILDING PERMITS ARE REQUIRED FOR BUILDING, DUMPSTER ENCLOSURE, LIGHT POLES, AND SIGNS. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING APPROPRIATE INFORMATION (ENGINEERING, SPECIFICATIONS, ETC.) FOR LIGHT POLES AND FIXTURES AT TIME OF PERMIT.
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NOTE:
SEE SHEET No. 58 FOR TREE PROTECTION
AND ROOT PRUNING PLAN FOR THIS AREA.

PAVEMENT MARKING NOTES:

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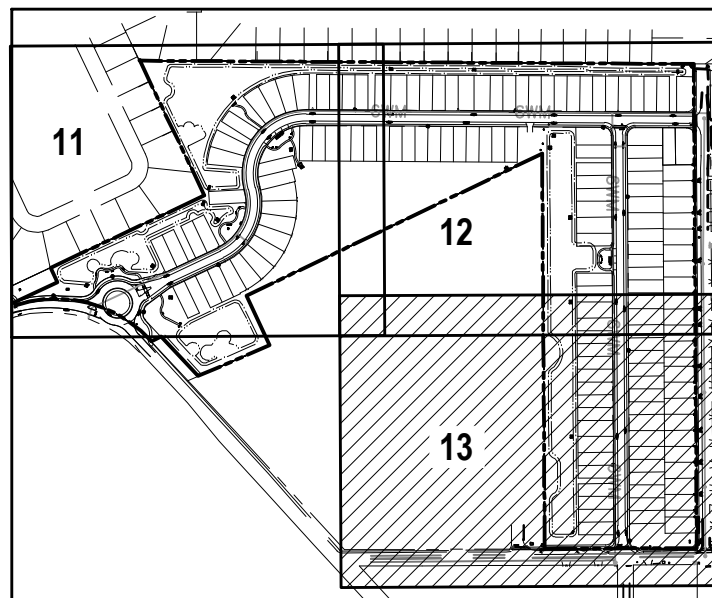
SEE SHEET No. 48 FOR FDOT INDEX NO. 711-001

PAVING LEGEND

- | | |
|--------------------|---|
| ASPHALT PAVEMENT | 1.5" SP-9.5 (TL-C) WITH TACK COAT PER FDOT SPECIFICATIONS |
| | 6" CRUSHED CONCRETE (LBR-130) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" MAX. LIFTS) |
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| CONCRETE SIDEWALK | 4" THICK CONCRETE (3,000 P.S.I. @ 28 DAYS), CLASS I, APPROVED FDOT DESIGN MIX (FDOT INDEX NO. 522-001) |
| | SEE CITY DETAILS M-6, M-6.1, & M-7, SHEET No. 39 |

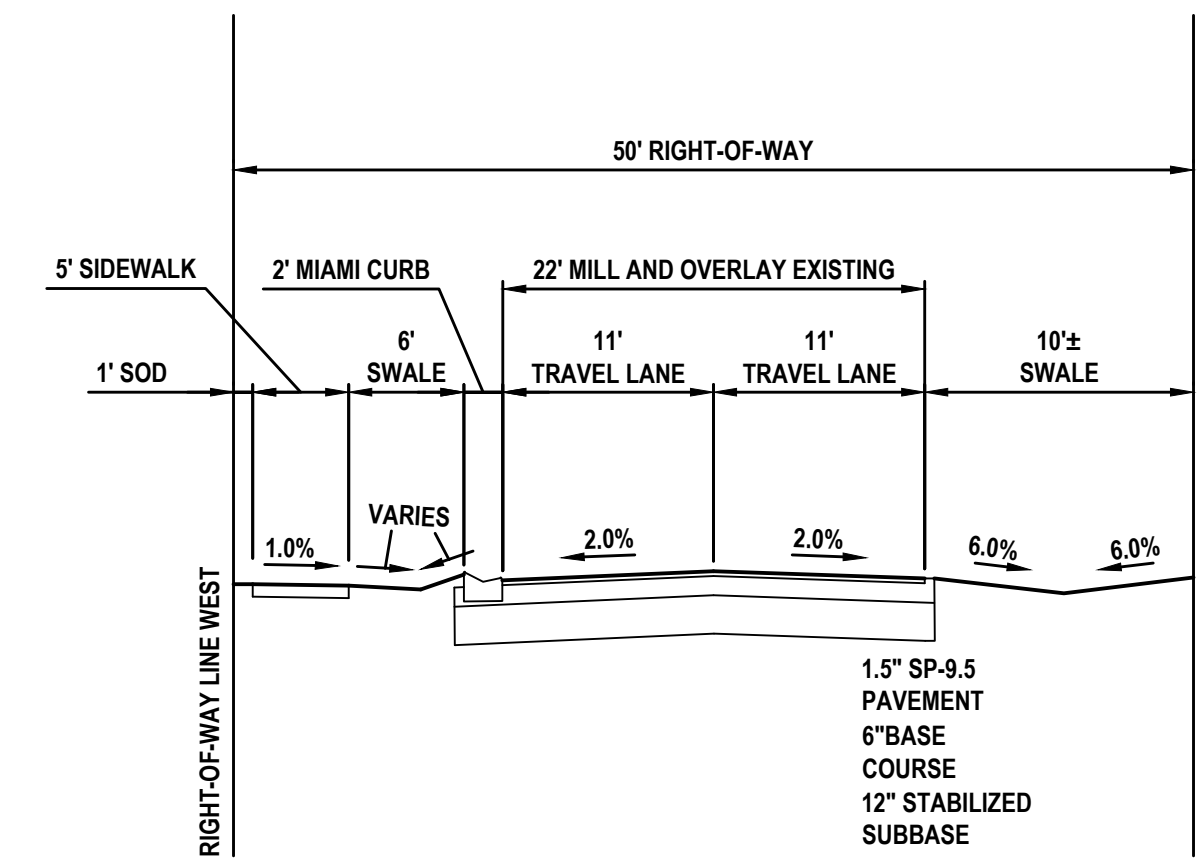
LEGEND

- | |
|--|
| MIAMI CURB |
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| TYPE "E" CURB |
| SITE LIGHT POLES |
| MAIL KIOSK |
| TRANSITION FROM TYPE "F" CURB TO MIAMI CURB |
| 24" DETECTABLE WARNING MAT |



KEY MAP

NOT TO SCALE



TYPICAL SECTION 5th STREET 50' RIGHT-OF-WAY

NOT TO SCALE

SUGAR MILL ELEMENTARY SCHOOL

RIGHT-OF-WAY DEDICATION AND VOLUSIA COUNTY SCHOOLS CONSTRUCTION PERMIT REQUIRED PRIOR TO CONSTRUCTION OF TURN LANE AND STORM STRUCTURES

6" TALL WHITE VINYL PRIVACY FENCE WITH 3' SETBACK FROM PROPERTY LINE FOR MAINTENANCE TO BE MAINTAINED BY HOA (SEE DETAIL, SHEET No. 42)

10' LANDSCAPE BUFFER

20' LANDSCAPE BUFFER

12' DRAINAGE & UTILITY EASEMENT

6" CONCRETE SIDEWALK

12' ROW DEDICATION

SEE SHEET No. 14 FOR RIGHT-TURN LANE PLAN, STRIPING AND SIGNAGE. RESTRIPE CENTER AND EDGE OF LANE YELLOW AND WHITE LINES WITH THERMOPLASTIC STRIPING PER SHEET No. 14 AND EXISTING CONDITIONS.

PROPOSED UTILITY LINE (SEE UTILITY PLAN, SHEET No. 26)

ENTRY FEATURE WITH SIGNAGE (SEE SHEET No. L3)

PROPOSED UTILITY POLE

PROPOSED UTILITY LINE (SEE UTILITY PLAN, SHEET No. 26)

CONNECT TO EXISTING SIDEWALK WITH EXPANSION JOINT

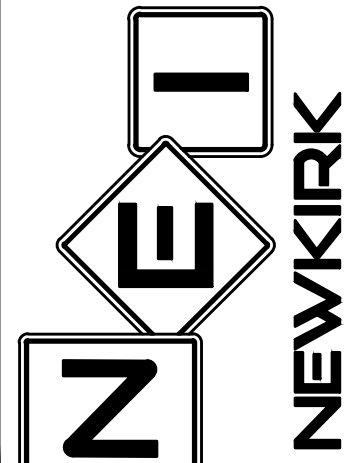
121 LF 3" VALLEY GUTTER

RECONFIGURED DITCH WITH 108 LF± ALUMINUM HANDRAIL PER FDOT INDEX NO. 515-062 (SEE SHEET No. 14)

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
7/18/22	SJRWMD SITE VISIT
8/26/22	CITY COMMENTS
11/8/22	CITY COMMENTS

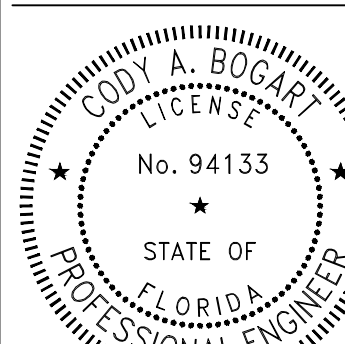
1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
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GEOMETRY, PAVEMENT,
STRIPING AND SIGNAGE PLAN
MADELINE COMMONS
975 McDONALD ROAD
PORT ORANGE, FL 32129

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PROJECT No: 2021-309

DATE: JULY 2022

DESIGN BY: CAB

DRAWN BY: CRA

CHECKED BY: HHN

SCALE: 1" = 40'

DRAWING NUMBER

13

PAVING LEGEND

ASPHALT PAVEMENT 1.5" SP-9.5 (TL-C) WITH TACK COAT PER FDOT SPECIFICATIONS
6" CRUSHED CONCRETE (LBR=130) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" MAX. LIFTS)
12" STABILIZED SUBBASE (LBR 140) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (TYPE B STABILIZATION)

* ALTERNATE 12" STABILIZED SUBBASE: 6" CRUSHED CONCRETE (LBR=130) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" MAX. LIFTS)

* ALTERNATE PAVEMENT TO ASPHALT IS CONCRETE PAVEMENT

1" ASPHALT OVERLAY 1" FC-9.5 TL-C ASPHALT @ MAC=X 20% RECYCLED MATERIALS
0" - 1.5" SP-9.5 TL-C OVERBUILD ASPHALT @ MAX 30% RECYCLED MATERIALS (AS NEEDED TO CORRECT LANE SLOPES)

CONCRETE PAVEMENT 6" CONCRETE (4,000 P.S.I. @ 28 DAYS)
12" STABILIZED SUBGRADE (LBR 40) MIN OF 98% MODIFIED PROCTOR MAX DRY DENSITY PER ASTM D1557, AASHTO T-180 (6" LIFTS) SEE CITY DETAIL R-19, SHEET No. 39

CONCRETE SIDEWALK 4" THICK CONCRETE (3,000 P.S.I. @ 28 DAYS), CLASS I, APPROVED FDOT DESIGN MIX (FDOT INDEX No. 522-001)
SEE CITY DETAILS M-6, M-6.1, & M-7, SHEET No. 39

STRIPING KEYNOTES: (PER FDOT INDEX No. 711-001, ONLY THERMOPLASTIC IN R/W)

- | | | | |
|---|---|----|--|
| 1 | 6" SOLID WHITE LINE | 9 | 6" WHITE SKIP LINE (10' - 30') |
| 2 | 6" SOLID YELLOW LINE | 10 | 6" WHITE DOTTED LANE DROP LINE (3' - 9') |
| 3 | 6" SOLID DOUBLE YELLOW LINE | 11 | 18" YELLOW LINE @ 45° SPACED 5' ON CENTER |
| 4 | 24" WHITE STOP BAR | 12 | 18" WHITE LINE @ 45° SPACED 10' ON CENTER |
| 5 | WHITE DIRECTIONAL ARROW | 13 | 18" YELLOW LINE @ 45° SPACED 10' ON CENTER |
| 6 | STANDARD CROSSWALK | 14 | WHITE "SHARK-TOOTH" YIELD LINE |
| 7 | SPECIAL EMPHASIS CROSSWALK | 15 | 6" WHITE SKIP LINE (2' - 4') |
| 8 | 24" DETECTABLE WARNING MAT (PER FDOT INDEX No. 522-002) | | |

SEE SHEET No. 48 FOR FDOT INDEX No. 711-001

LEGEND

- MIAMI CURB
TYPE 'RA' MOUNTABLE CURB (SEE DETAIL SHEET 47)
TYPE 'F1' SPILLOUT CURB
TYPE 'F' CURB
TYPE 'E' CURB
SITE LIGHT POLES
MAIL KIOSK
TRANSITION FROM TYPE 'F' CURB TO MIAMI CURB
24" DETECTABLE WARNING MAT

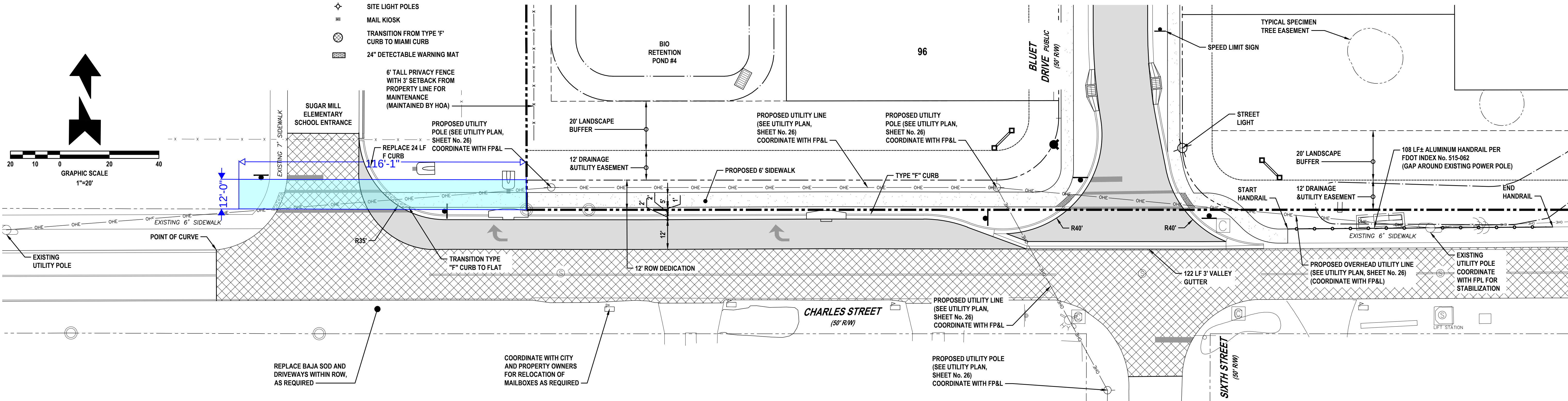
PAVEMENT MARKING NOTES:

- PAINTED PAVEMENT MARKINGS SHALL BE APPLIED AFTER PAVEMENT SURFACE HAS CURED. SURFACE SHALL BE FREE OF FINE SAND AND DEBRIS PRIOR TO APPLICATIONS.
- APPLY PAINTED PAVEMENT MARKINGS AT LAST STAGE OF CONSTRUCTION AFTER LANDSCAPE PLANTINGS ARE INSTALLED.
- PAINT SHALL BE SHERWIN WILLIAMS LOW-VOC ACRYLIC PRO PARK PAINT, APPLY PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DRAWINGS FOR LOCATIONS OF SPECIFIC COLORS.
- ALL STOP BARS SHALL BE THERMOPLASTIC.
- ALL REFLECTIVE PAVEMENT MARKERS ARE TO BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 17352.
- ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH INDEX NO. 17301 AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
- LOCATION OF SIGNS IS APPROXIMATE ONLY AND IS SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER.
- FOR ADDITIONAL DETAILS SEE INDEX NO. 700-010, 11863, 700-101, 17344 AND 706-001.
- ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED USING 3M BRAND "SCOTCHLITE" SHEETING (ENGINEER GRADE) ON MINIMUM .08 GA ALUMINUM BLANKS. ALL 36"x48" SIGNS SHALL BE .100 GA MINIMUM AND SHALL BE INSTALLED USING 3"x12" ROUND ALUMINUM POST. ALL STOP SIGNS SHALL BE 36" OCTAGON INSTALLED ON 12.3 LBS/FT "U" CHANNEL POST RAIL STEEL ONLY OR 3"x12" ROUND ALUMINUM POSTS. "U" CHANNEL POSTS MAY BE USED FOR SIGNS SMALLER THAN 36"x36". ALL SPEED LIMIT SIGNS SHALL BE 24"x30".

GENERAL NOTES:

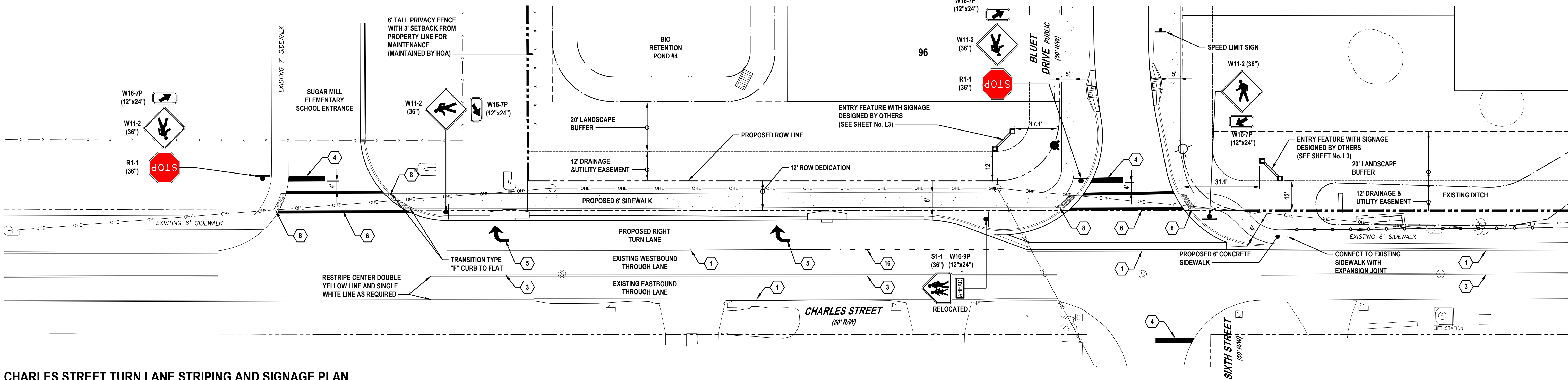
- CITY OF PORT ORANGE BUILDING PERMITS ARE REQUIRED FOR BUILDING, DUMPSTER ENCLOSURE, LIGHT POLES, AND SIGNS. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING APPROPRIATE INFORMATION (ENGINEERING, SPECIFICATIONS, ETC.) FOR LIGHT POLES AND FIXTURES AT TIME OF PERMIT.
- PERMITS ARE REQUIRED FOR: CONSTRUCTION OF NEW BUILDING; MONUMENT AND ART SIGNS; AND, DUMPSTER ENCLOSURE. CONTACT THE BUILDING DIVISION IF THERE ARE QUESTIONS OR CONCERNS ABOUT PERMIT REQUIREMENTS FOR WORK NOT SPECIFICALLY MENTIONED HEREIN.
- ALL SERVICE AREAS AND MECHANICAL EQUIPMENT (GROUND, WALL OR ROOF) INCLUDING, BUT NOT LIMITED TO AIR CONDITIONING CONDENSERS, HEATING UNITS, SATELLITE DISHES, IRRIGATION PUMPS, AND PROPANE TANKS, DISPLAYS AND REFILLING AREAS, SHALL BE SCREENED USING ARCHITECTURAL FEATURES CONSISTENT WITH THE STRUCTURE, OR LANDSCAPING OF SUFFICIENT DENSITY AND MATURITY AT PLANTING TO PROVIDE OPAQUE SCREENING.
- EXTERNAL DOWNSPOUTS VISIBLE FROM ANY RIGHTS-OF-WAY ARE NOT PERMITTED, UNLESS THEY ARE DECORATIVE. IN LOCATIONS THAT ARE CLEARLY VISIBLE FROM A PUBLIC RIGHT-OF-WAY, DOWNSPOUTS MAY BE INSTALLED EXTERNALLY ONLY IF THEY HAVE A HIGH-QUALITY, DECORATIVE DESIGN AND APPEARANCE OF COPPER, STEEL, TIN, OR SILVER OR SIMILAR NATURAL METALLIC MATERIAL. IN LOCATIONS THAT ARE MOSTLY OR COMPLETELY SCREENED FROM A PUBLIC RIGHT-OF-WAY, EXTERNAL DOWNSPOUTS ARE NOT REQUIRED TO BE DECORATIVE AS ABOVE BUT MUST BE PAINTED TO MATCH THE BUILDING EXTERIOR ON WHICH THEY ARE MOUNTED.
- ALL DIMENSIONS AND TIES ARE TO THE EDGE OF PAVEMENT AND OUTSIDE FACE OF BUILDING.
- ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION OR GPS. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR'S RISK.

- THE CONTRACTOR SHALL COORDINATE WITH THE EXISTING ADJACENT BUSINESSES TO ENSURE THERE IS NO DISRUPTION TO THEIR RESPECTIVE OPERATIONS.
- THE CONTRACTOR AT ITS OWN DISCRETION SHALL MAINTAIN THE CONSTRUCTION SITE SECURE FROM TRESPASS.
- SOD ALL DISTURBED AREAS IN RIGHT-OF-WAY WITH BAHIA SOD.
- ALL CURB RAMPS SHALL COMPLY WITH SECTION 406 OF FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC).
- ALL PAVEMENT EDGE SHALL HAVE TYPE "F1" CURBING UNLESS OTHERWISE NOTED ON THESE PLANS.
- ALL WALL-MOUNTED EQUIPMENT SUCH AS ELECTRICAL METERS, IRRIGATION METERS, PHONE/CABLE BOXES, EXTERNAL VENTS AND LOUVERS, ETC., SHALL BE PAINTED TO MATCH THE WALL ON WHICH IT IS MOUNTED OR OTHERWISE CONSISTENT WITH THE COLOR(S) OF THE BUILDING.
- ALL MATERIALS, MACHINERY AND VEHICLES SHALL BE STORED ON-SITE IN AN ORDERLY ORGANIZED FASHION.
- COMMERCIAL IMPACT FEE SHALL BE CALCULATED, DUE AND PAYABLE WITHIN 30 DAYS OF INITIATION OF PERMANENT ELECTRIC SERVICE.
- CONTRACTOR TO PROVIDE PREMISE IDENTIFICATION FOR BUILDING DURING CONSTRUCTION.
- SITE LIGHTING MUST NOT SHINE DIRECTLY UPON ANY ADJACENT RESIDENCE AND MUST NOT PRODUCE EXCESSIVE GLARE. GLARE GUARDS WILL BE INSTALLED IF NEEDED.



CHARLES STREET TURN LANE LAYOUT AND PAVEMENT PLAN

SCALE: 1" = 20'



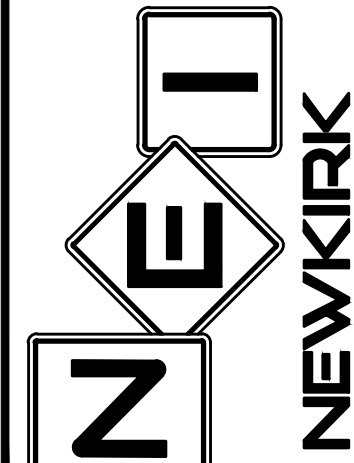
CHARLES STREET TURN LANE STRIPING AND SIGNAGE PLAN

SCALE: 1" = 20'

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
7/18/22	SJRWMD SITE VISIT
8/26/22	CITY COMMENTS
11/8/22	CITY COMMENTS

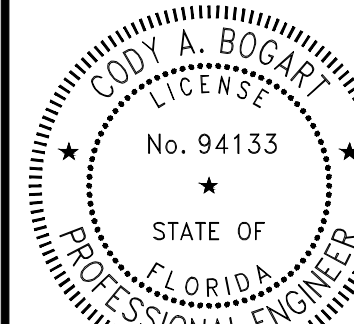
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CHARLES STREET
RIGHT-OF-WAY IMPROVEMENTS
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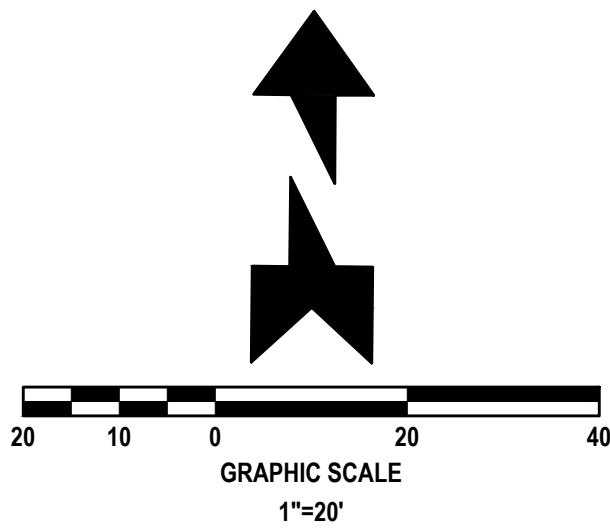


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PROJECT No: 2021-309
DATE: JULY 2022
DESIGN BY: CAB
DRAWN BY: CRA
CHECKED BY: HHN
SCALE: 1" = 20'

DRAWING NUMBER

14



WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES, GAS MAINS, UNDERGROUND ELECTRIC AND FIBER OPTIC LINES IN THE RIGHT-OF-WAY.

BENCHMARK INFORMATION:

- #1** RAILROAD SPIKE
ELEVATION = 21.20
- #2** NAIL & DISK IN DRIVEWAY
ELEVATION = 15.02
- VERTICAL DATA
ELEVATIONS REFER TO (NAVD) NORTH AMERICAN VERTICAL DATUM 1988. FEET AND DECIMAL PART THEREOF. BENCHMARK REFERENCE NAVD DATUM OF 1988.

GRADING LEGEND:

- 22--- EXISTING CONTOUR
- 22--- PROPOSED CONTOUR
- >--- DRAINAGE FLOW ARROW
- 6.6 EXISTING SPOT ELEVATION
- 25.00 PROPOSED SPOT ELEVATION
- MEG MATCH EXISTING GRADE

GENERAL GRADING NOTES:

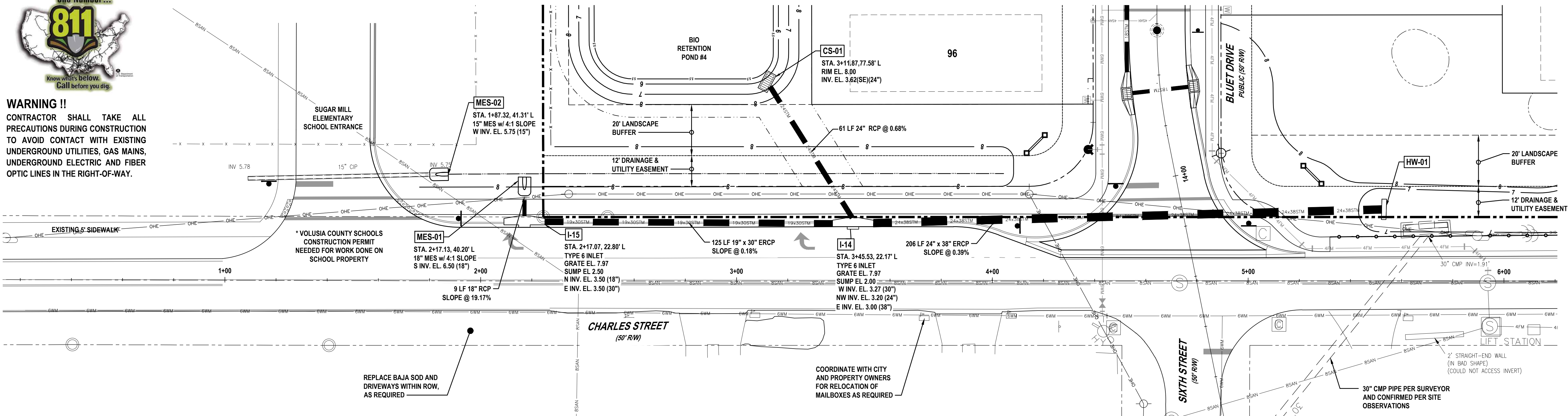
- CROSS SLOPES OF ACCESSIBLE PARKING SPACES AND ACCESS AISLE SHALL NOT EXCEED 1:48 IN ACCORDANCE WITH SECTION 502.4 OF FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC).
- ALL SIDEWALKS SHALL HAVE A 1.0% CROSS SLOPE (2.0% MAXIMUM).
- ALL CURB RAMP SHALL COMPLY WITH SECTION 406 OF FACBC.
- ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEY OR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR.

GENERAL EARTHWORK NOTES:

- REMOVE ALL ORGANIC OR UNSUITABLE MATERIALS. IF ANY MUCK OR MUCK-LIKE MATERIAL IS DISCOVERED, IT WILL BE REQUIRED TO BE REMOVED, BACKFILLED WITH APPROPRIATE FILL, COMPACTED, AND TESTED USING AASHTO T-160 MODIFIED PROCTOR METHOD.
- ALL FILLING IS TO BE PERFORMED IN ONE-FOOT LIFTS. THE COMPACTION REQUIREMENT IS 98% FOR PAVED AREAS AND 95% FOR UNPAVED AREAS PER AASHTO T-160 MODIFIED PROCTOR TEST.
- TEMPORARY FILL STOCKPILING IS NOT PERMITTED IN LIFTS GREATER THAN SIX FEET.
- SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION AND THE IMPACT TO NEIGHBORING COMMUNITIES.
- ONCE AN AREA IS SEEDED OR SODDED, IT MUST BE MAINTAINED TO ALLOW THE GRASS TO GROW.
- ALL NON-PAVED AREAS MUST BE PLANTED, GRASSED, OR MULCHED.

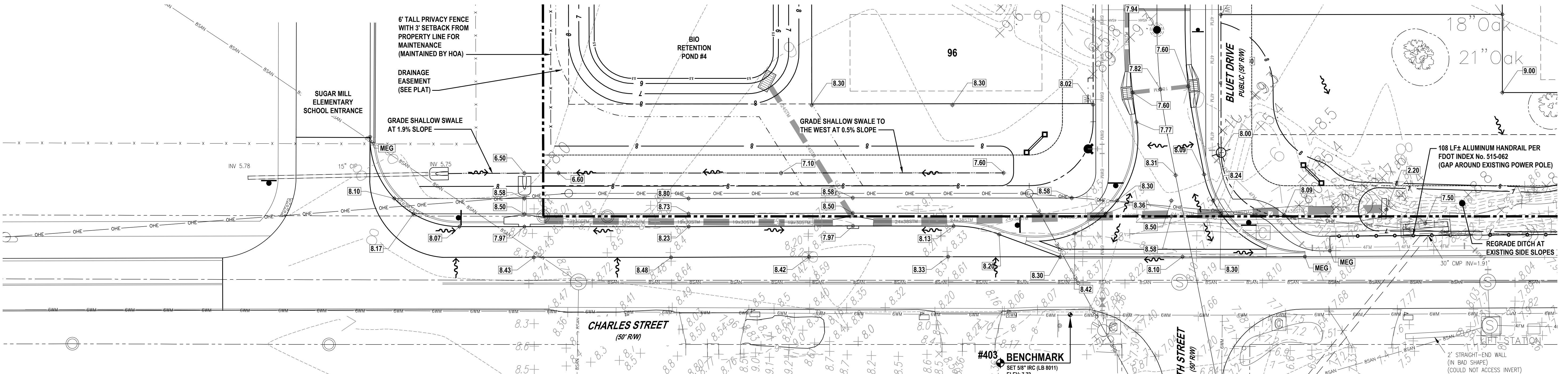
KEYNOTES:

- SIDEWALK CURB RAMP C (SEE DETAIL, SHEET No. 46)
- SIDEWALK CURB RAMP E (SEE DETAIL, SHEET No. 46)
- SIDEWALK CURB RAMP G (SEE DETAIL, SHEET No. 46)



CHARLES STREET TURN LANE DRAINAGE PLAN

SCALE: 1" = 20'



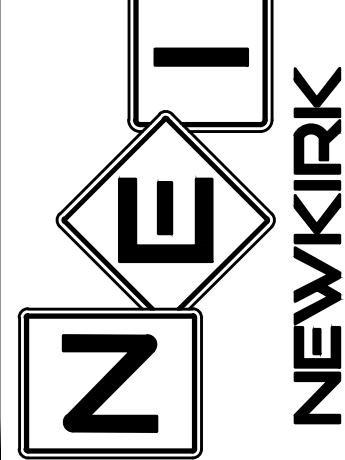
CHARLES STREET TURN LANE GRADING PLAN

SCALE: 1" = 20'

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS
11/8/22	CITY COMMENTS

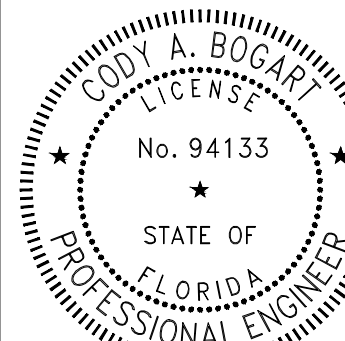
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TURN LANE DRAINAGE
AND GRADING PLAN
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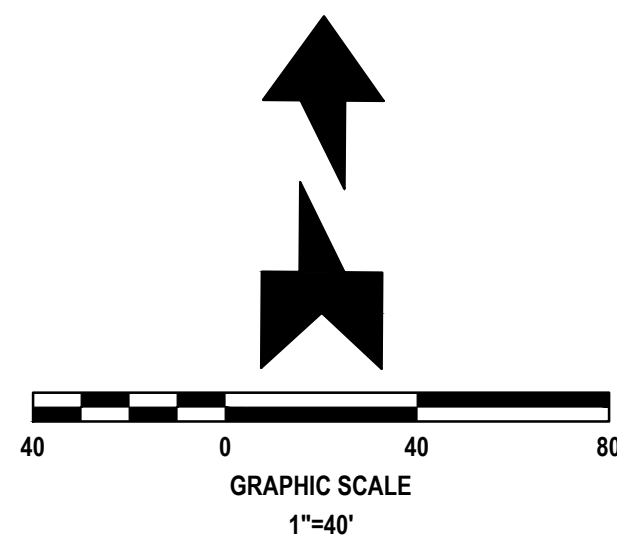


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PROJECT No: 2021-309
DATE: APRIL 2022
DESIGN BY: CAB
DRAWN BY: DAB
CHECKED BY: HHN
SCALE: 1"=20'

DRAWING NUMBER

15

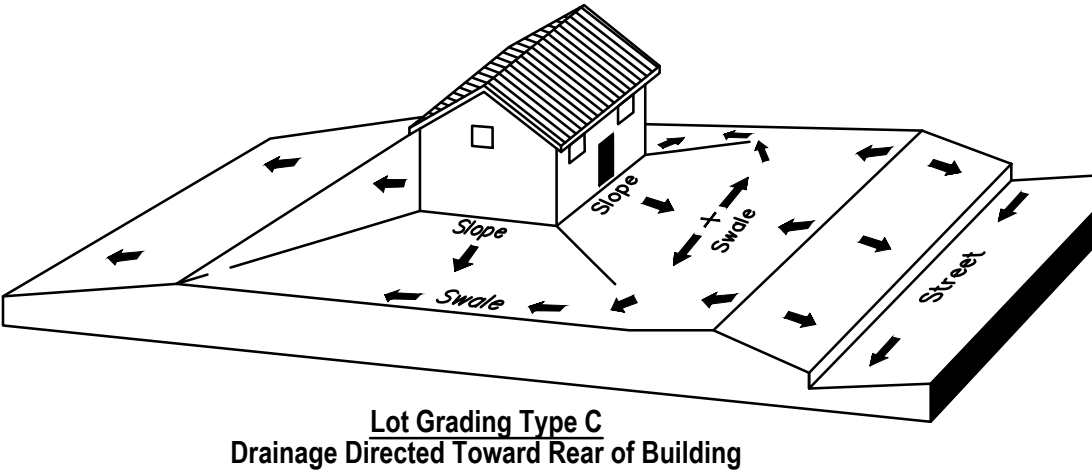
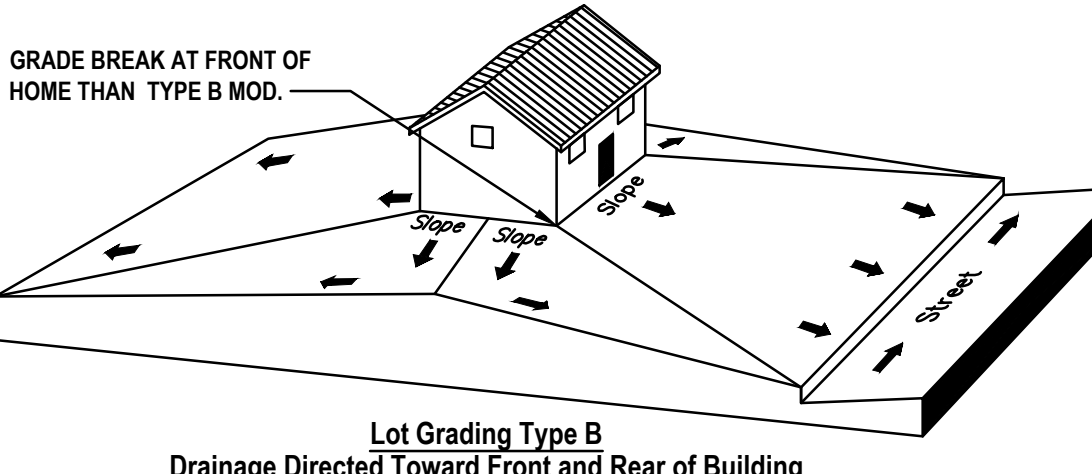
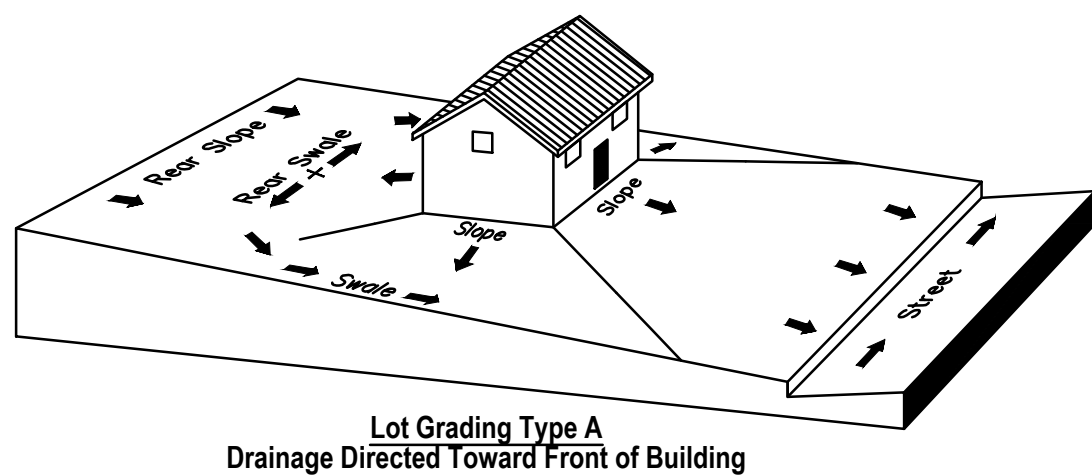


GENERAL EARTHWORK NOTES:

- REMOVE ALL ORGANIC OR UNSUITABLE MATERIALS. IF ANY MUCK OR MUCK-LIKE MATERIAL IS DISCOVERED, IT WILL BE REQUIRED TO BE REMOVED, BACKFILLED WITH APPROPRIATE FILL, COMPACTED, AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
- ALL FILLING IS TO BE PERFORMED IN ONE-FOOT LIFTS. THE COMPACTION REQUIREMENT IS 98% FOR PAVED AREAS AND 95% FOR UNPAVED AREAS PER AASHTO T-180 MODIFIED PROCTOR TEST.
- TEMPORARY FILL STOCKPILING IS NOT PERMITTED IN LIFTS GREATER THAN SIX FEET.
- SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION AND THE IMPACT TO NEIGHBORING COMMUNITIES.
- ONCE AN AREA IS SEED OR SODDED, IT MUST BE MAINTAINED TO ALLOW THE GRASS TO GROW.
- ALL NON-PAVED AREAS MUST BE PLANTED, GRASSED, OR MULCHED.

GENERAL GRADING NOTES:

- CROSS SLOPES OF ACCESSIBLE PARKING SPACES AND ACCESS AISLE SHALL NOT EXCEED 1:48 IN ACCORDANCE WITH SECTION 502.4 OF FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC).
- ALL SIDEWALKS SHALL HAVE A 1.0% CROSS SLOPE (2.0% MAXIMUM).
- ALL CURB RAMPS SHALL COMPLY WITH SECTION 406 OF FACBC.
- ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEY OR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR.

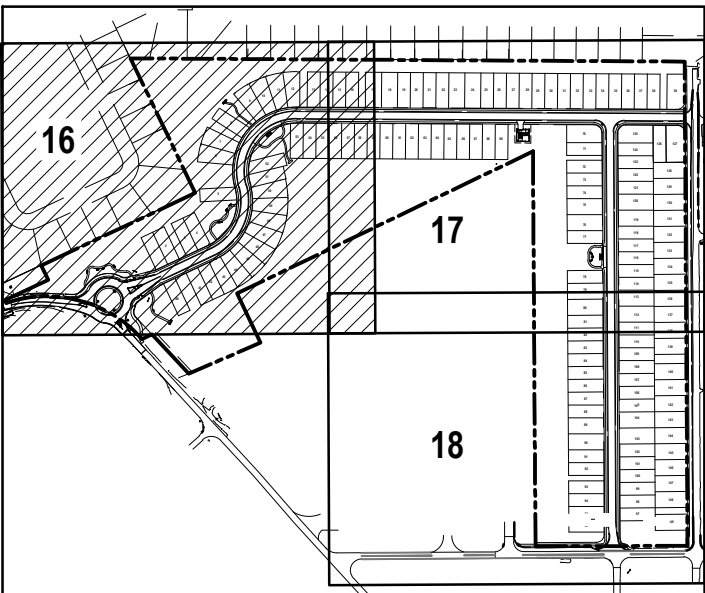


NOTE:

- ALL FINISHED FLOOR ELEVATIONS SHALL BE SET A MINIMUM OF 16 INCHES ABOVE THE CENTERLINE OF THE ADJACENT ROADWAY.
- ALL FINISHED FLOOR ELEVATIONS ARE A MINIMUM OF 1 FOOT ABOVE THE BASE FLOOD ELEVATION AND/OR 1 FOOT ABOVE THE 100-YEAR DESIGN HIGH WATER LEVEL OF THE ADJACENT DETENTION AREA.
- SIDE YARD SWALE SHALL BE CENTERED ON THE COMMON PROPERTY LINE.

TYPICAL LOT GRADING DETAILS

NOT TO SCALE



KEY MAP

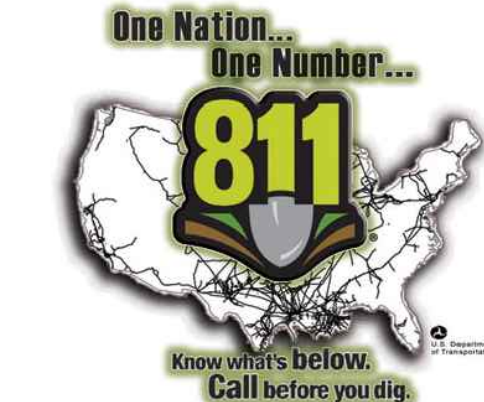
NOT TO SCALE

GRADING LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DRAINAGE FLOW ARROW
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- MATCH EXISTING GRADE

KEYNOTES:

- SIDEWALK CURB RAMP C (SEE DETAIL, SHEET No. 46)
- SIDEWALK CURB RAMP E (SEE DETAIL, SHEET No. 46)
- SIDEWALK CURB RAMP G (SEE DETAIL, SHEET No. 46)

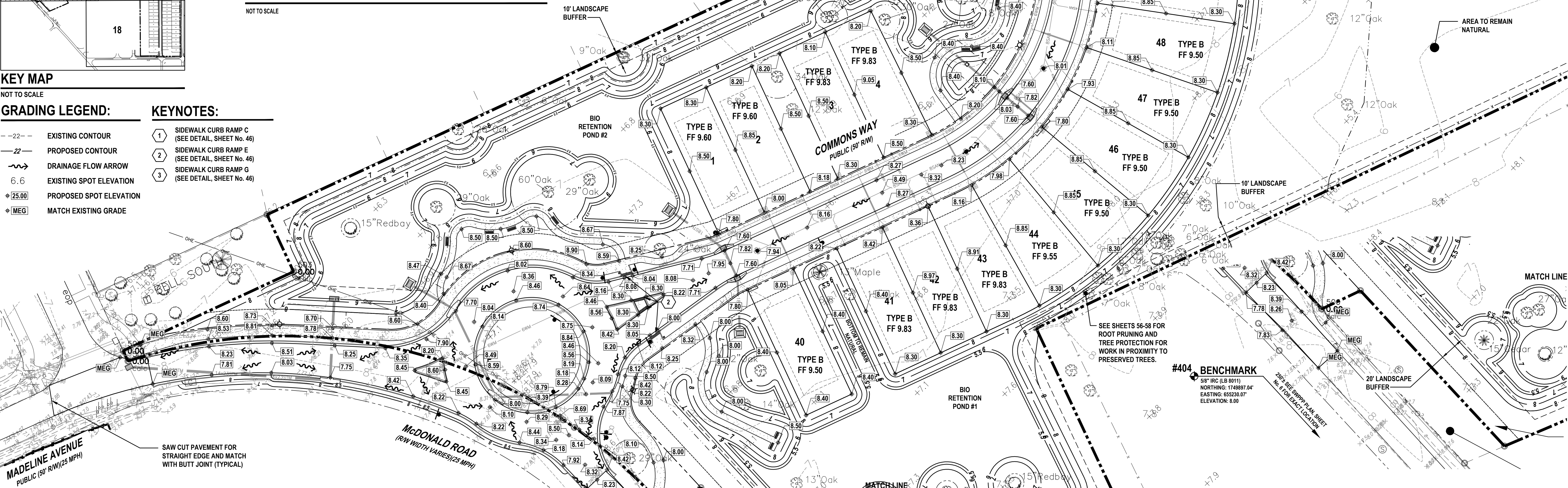


WARNING !!
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BENCHMARK INFORMATION:

- #402 SET NAIL AND DISK (LB 8011)
ELEVATION = 6.77
- #403 SET 5/8" IRON ROD AND CAP
ELEVATION = 7.72
- #404 SET 5/8" IRON ROD AND CAP
ELEVATION = 8.00

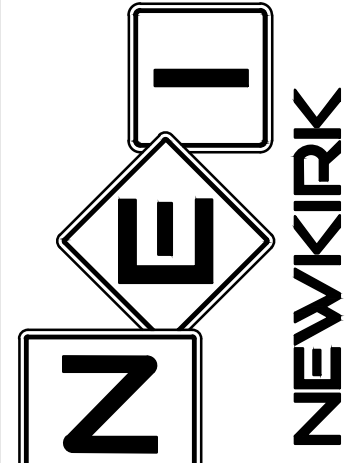
VERTICAL DATA:
ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), AS DERIVED BY FROM CITY OF SOUTH DAYTONA BENCHMARK 19, DESCRIBED AS BEING A BRASS DISC SET IN CONCRETE SIDEWALK STAMPED "CITY BM-19", HAVING AN ELEVATION OF 7.43.



REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS
11/8/22	CITY COMMENTS
12/20/22	PARKING GRADING

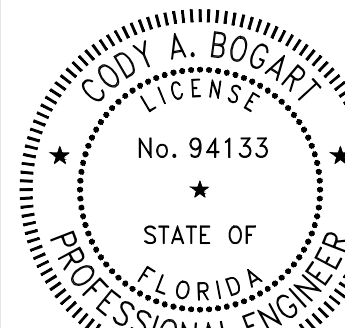
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GRADING PLAN (1 OF 3)
MADELINE COMMONS
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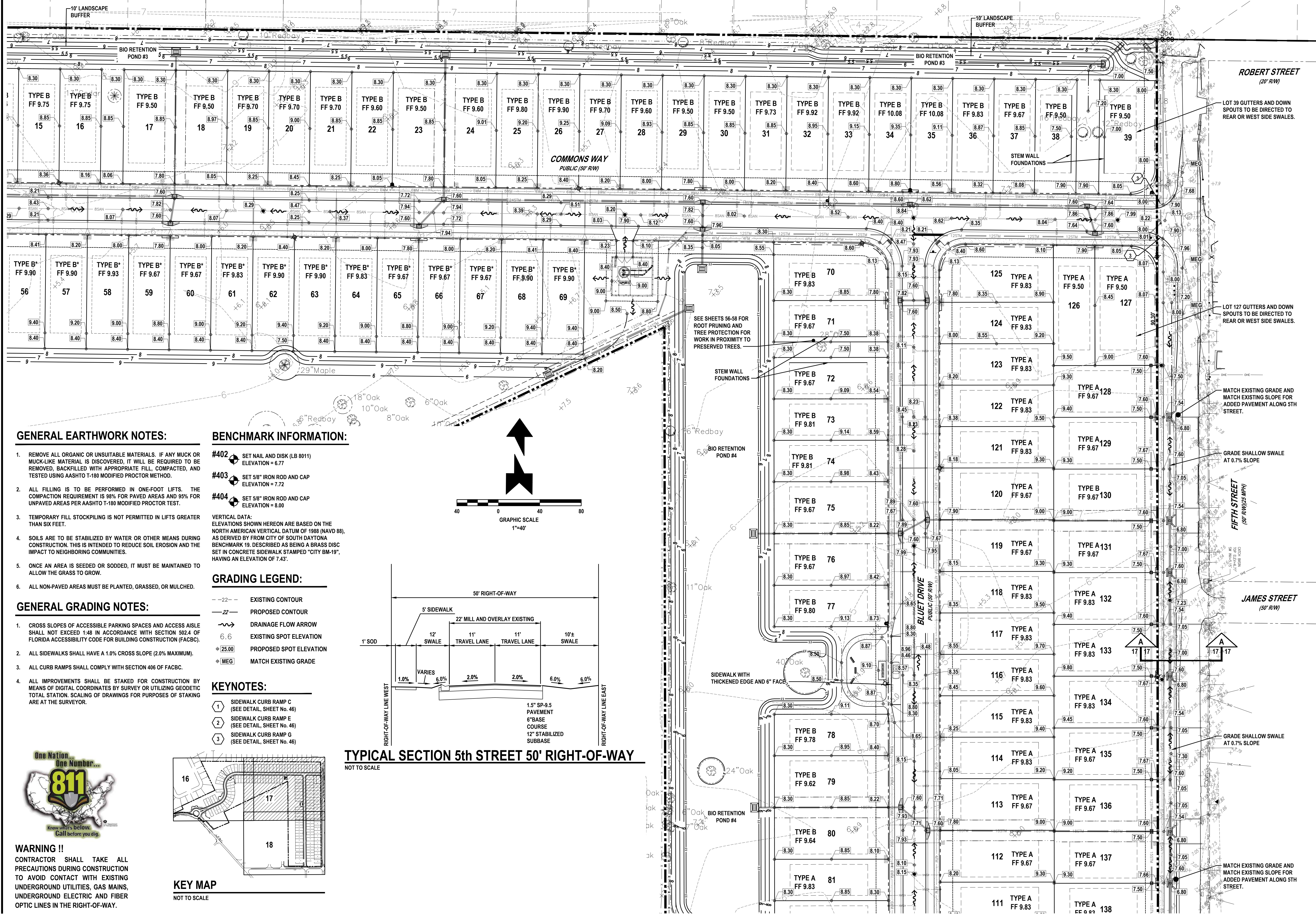
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SCALE: 1"=40'
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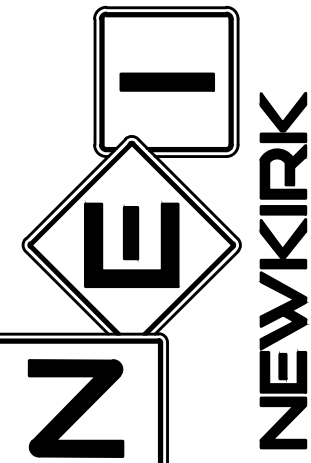
16



REVISIONS

DATE	DESCRIPTION
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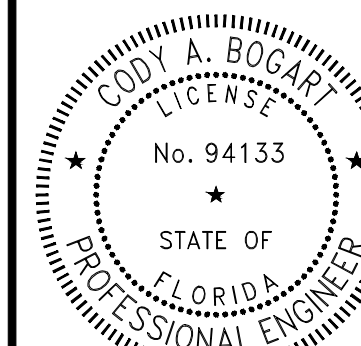
GRADING PLAN (2 OF 3)

MADELINE COMMONS

975 McDONALD ROAD
PORT ORANGE, FL 32129

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THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
CODY A. BOGART, PE #94133 ON



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PROJECT No: 2021-309

DATE: APRIL 2022

DESIGN BY: CAB

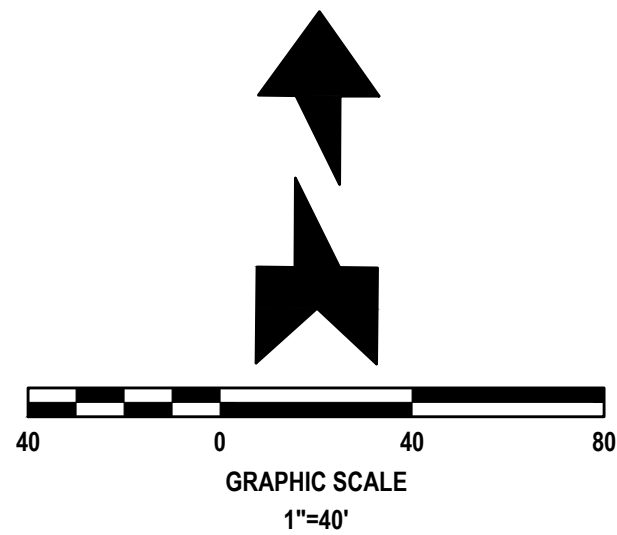
DRAWN BY: DAB

CHECKED BY: HHN

SCALE: 1"=40'

DRAWING NUMBER

17



GENERAL EARTHWORK NOTES:

- REMOVE ALL ORGANIC OR UNSUITABLE MATERIALS. IF ANY MUCK OR MUCK-LIKE MATERIAL IS DISCOVERED, IT WILL BE REQUIRED TO BE REMOVED, BACKFILLED WITH APPROPRIATE FILL, COMPACTED, AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
- ALL FILLING IS TO BE PERFORMED IN ONE-FOOT LIFTS. THE COMPACTION REQUIREMENT IS 98% FOR PAVED AREAS AND 95% FOR UNPAVED AREAS PER AASHTO T-180 MODIFIED PROCTOR TEST.
- TEMPORARY FILL STOCKPILING IS NOT PERMITTED IN LIFTS GREATER THAN SIX FEET.
- SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION AND THE IMPACT TO NEIGHBORING COMMUNITIES.
- ONCE AN AREA IS SEEDDED OR SODDED, IT MUST BE MAINTAINED TO ALLOW THE GRASS TO GROW.
- ALL NON-PAVED AREAS MUST BE PLANTED, GRASSED, OR MULCHED.

GENERAL GRADING NOTES:

- CROSS SLOPES OF ACCESSIBLE PARKING SPACES AND ACCESS AISLE SHALL NOT EXCEED 1:48 IN ACCORDANCE WITH SECTION 502.4 OF FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC).
- ALL SIDEWALKS SHALL HAVE A 1.0% CROSS SLOPE (2.0% MAXIMUM).
- ALL CURB RAMPS SHALL COMPLY WITH SECTION 406 OF FACBC.
- ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEY OR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR.

BENCHMARK INFORMATION:

- #402 SET NAIL AND DISK (LB 8011)
ELEVATION = 6.77
- #403 SET 5/8" IRON ROD AND CAP
ELEVATION = 7.72
- #404 SET 5/8" IRON ROD AND CAP
ELEVATION = 8.00

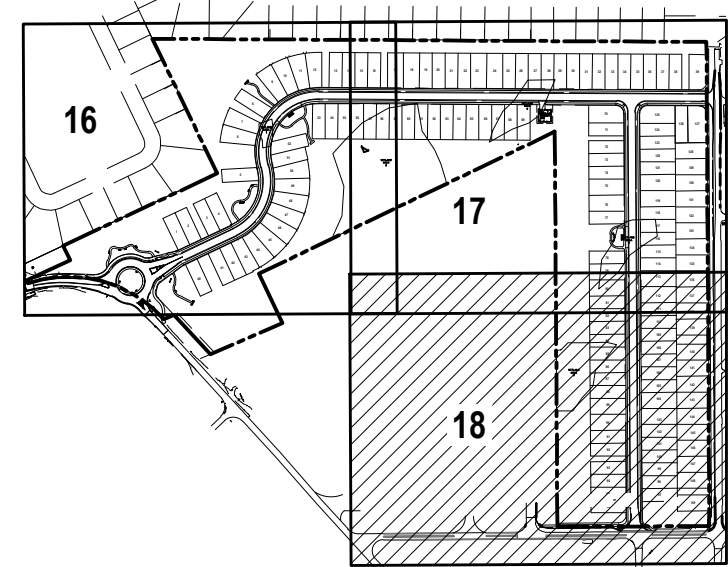
VERTICAL DATA:
ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), AS DERIVED FROM CITY OF SOUTH DAYTONA BENCHMARK 19. DESCRIBED AS BEING A BRASS DISC SET IN CONCRETE SIDEWALK STAMPED "CITY BM-19", HAVING AN ELEVATION OF 7.43'.

GRADING LEGEND:

- EXISTING CONTOUR
--- PROPOSED CONTOUR
--- DRAINAGE FLOW ARROW
6.6 EXISTING SPOT ELEVATION
25.00 PROPOSED SPOT ELEVATION
MEG MATCH EXISTING GRADE

KEYNOTES:

- 1 SIDEWALK CURB RAMP C (SEE DETAIL, SHEET No. 46)
2 SIDEWALK CURB RAMP E (SEE DETAIL, SHEET No. 46)
3 SIDEWALK CURB RAMP G (SEE DETAIL, SHEET No. 46)



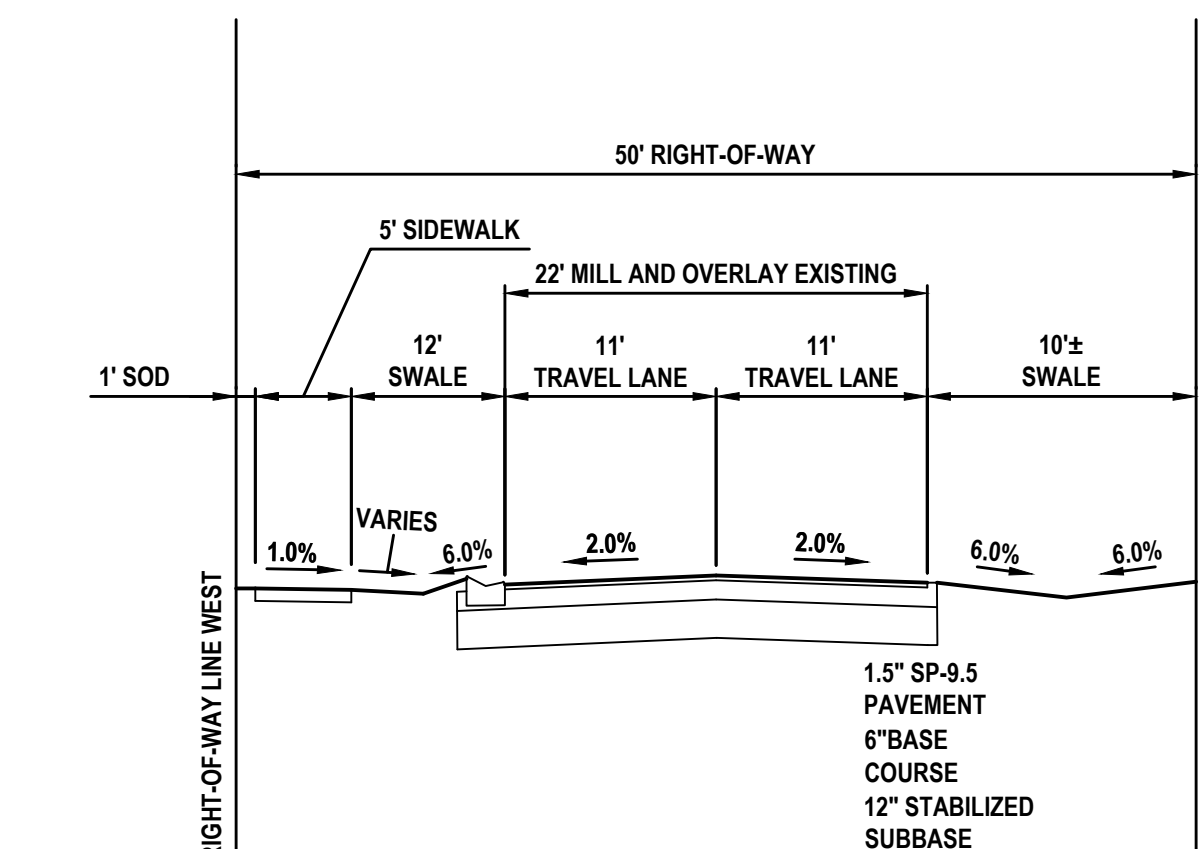
KEY MAP
NOT TO SCALE



WARNING !!

CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES, GAS MAINS, UNDERGROUND ELECTRIC AND FIBER OPTIC LINES IN THE RIGHT-OF-WAY.

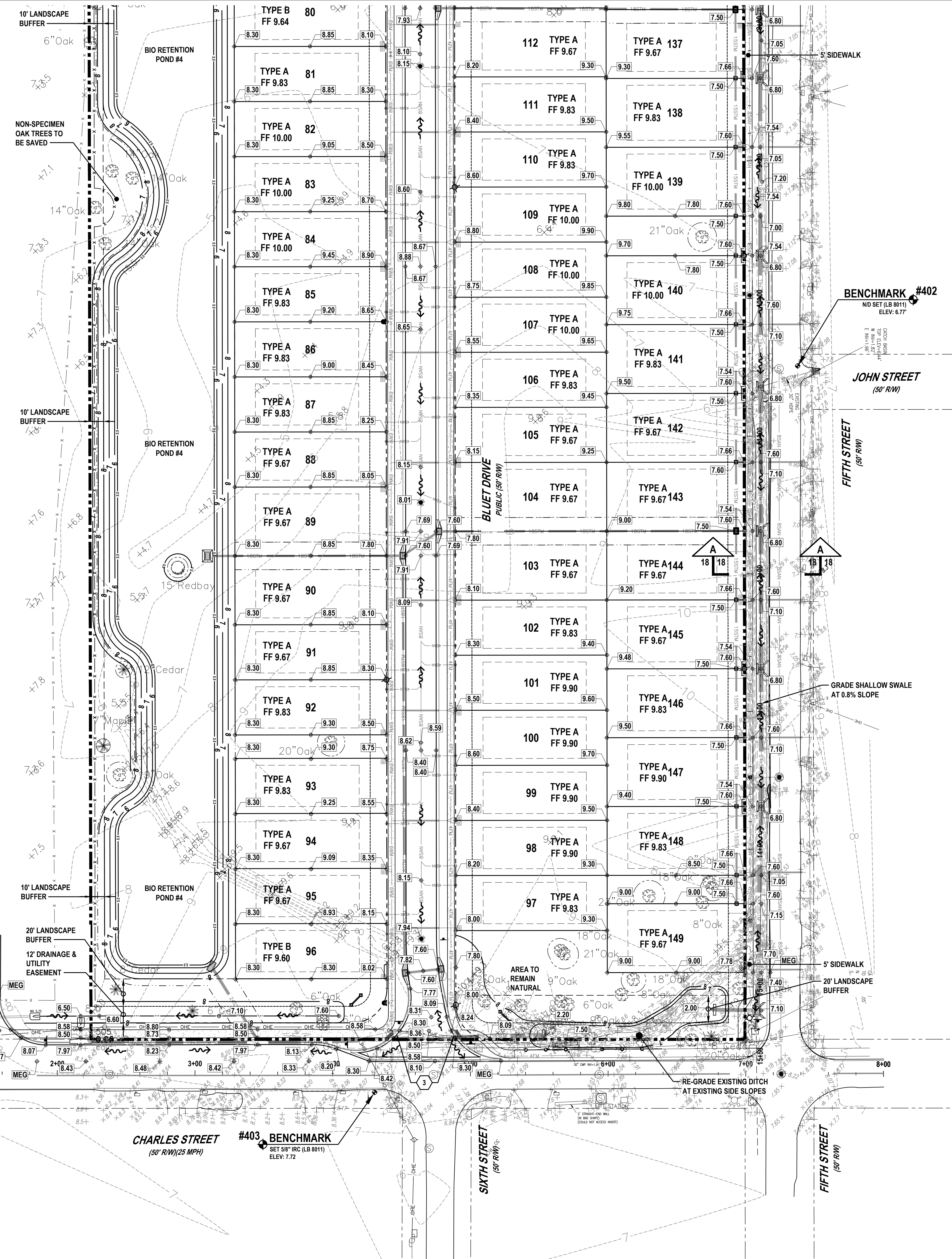
SUGAR MILL ELEMENTARY SCHOOL



TYPICAL SECTION 5th STREET 50' RIGHT-OF-WAY

NOT TO SCALE

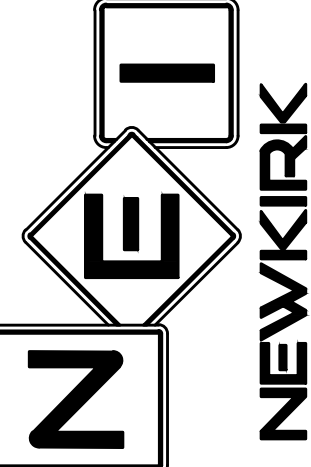
SEE SHEET 15 FOR
ADDITIONAL GRADING AND
DRAINAGE INFORMATION
FOR THE RIGHT TURN LANE



REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS
11/8/22	CITY COMMENTS

1230 North US1, Suite 3
Ormond Beach, Florida 32174
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C.A. # 30209
L.C. # 2600584
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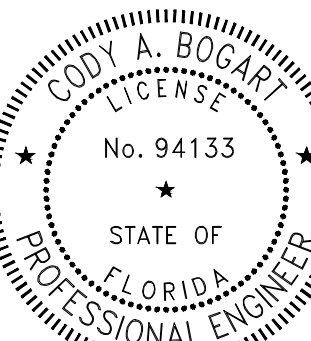
GRADING PLAN (3 OF 3)

MADELINE COMMONS

975 McDONALD ROAD
PORT ORANGE, FL 32129

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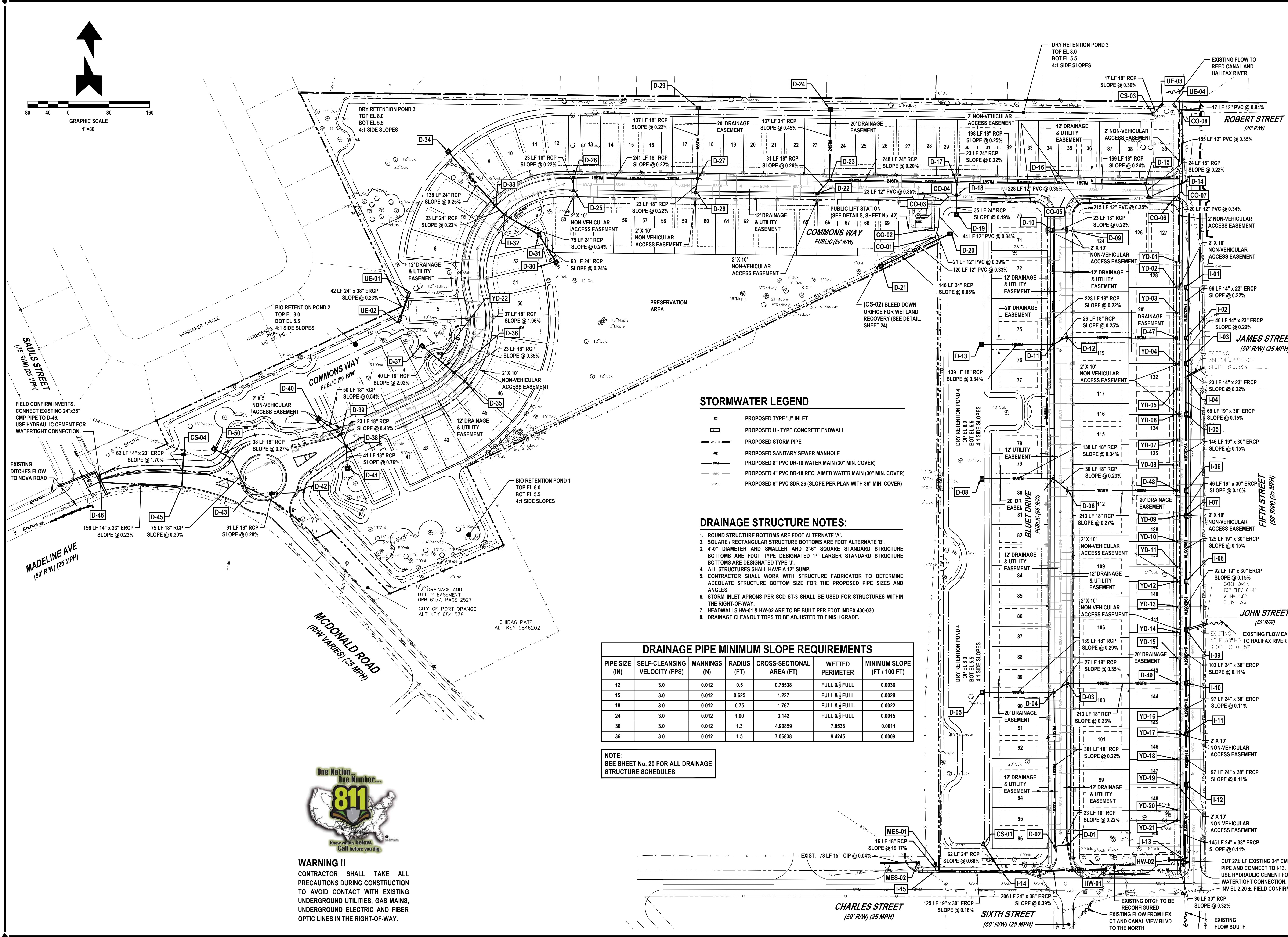
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PROJECT No: 2021-309
DATE: APRIL 2022
DESIGN BY: CAB
DRAWN BY: DAB
CHECKED BY: HHN
SCALE: 1"=40'
DRAWING NUMBER

18



REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS
10/3/22	CITY COMMENTS
11/8/22	CITY COMMENTS

1230 North US1, Suite 3
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Landscape Architecture

NEWKIRK
ENGINEERING INC.

OVERALL DRAINAGE PLAN
MADELINE COMMONS

975 McDONALD ROAD
PORT ORANGE, FL 32129

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CODY A. BOGART, PE #94133 ON

CODY A. BOGART
No. 94133
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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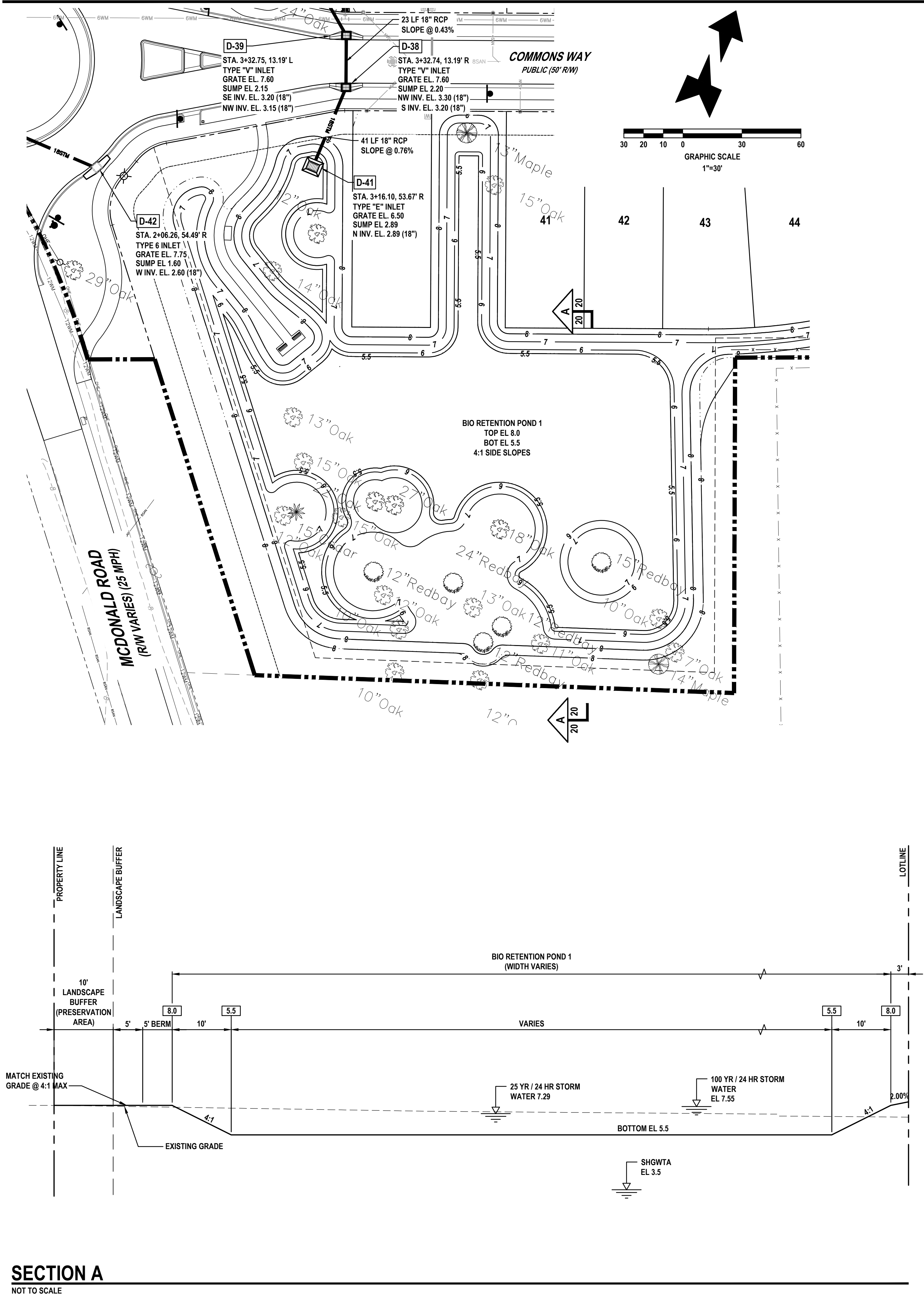
PROJECT No:	2021-309
DATE:	APRIL 2022
DESIGN BY:	CAB
DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	1"=80'
DRAWING NUMBER	19

DRAINAGE PIPE MINIMUM SLOPE REQUIREMENTS						
PIPE SIZE (IN)	SELF-CLEANSING VELOCITY (FPS)	MANNINGS (N)	RADIUS (FT)	CROSS-SECTIONAL AREA (FT ²)	WETTED PERIMETER	MINIMUM SLOPE (FT / 100 FT)
12	3.0	0.012	0.5	0.78538	FULL & 1/2 FULL	0.0036
15	3.0	0.012	0.625	1.227	FULL & 1/2 FULL	0.0028
18	3.0	0.012	0.75	1.767	FULL & 1/2 FULL	0.0022
24	3.0	0.012	1.00	3.142	FULL & 1/2 FULL	0.0015
30	3.0	0.012	1.3	4.90859	7.8538	0.0011
36	3.0	0.012	1.5	7.06838	9.4245	0.0009

NOTE:
SEE SHEET No. 20 FOR ALL DRAINAGE
STRUCTURE SCHEDULES



WARNING !!
CONTRACTOR SHALL TAKE ALL
PRECAUTIONS DURING CONSTRUCTION
TO AVOID CONTACT WITH EXISTING
UNDERGROUND UTILITIES, GAS MAINS,
UNDERGROUND ELECTRIC AND FIBER
OPTIC LINES IN THE RIGHT-OF-WAY.



DRAINAGE STRUCTURE SCHEDULE						
I.D.	STA. OFF.	ROAD	STRUCTURE TYPE	TOP EL	SUMP EL	CONNECTIONS
CS-01	3+11.87 77.58' L	CHARLES STREET	TYPE "H" INLET	8.00	2.62	24" RCP - SE INV 3.62
CS-03	22+44.94 150.58' L	COMMONS WAY	TYPE "H" INLET	8.00	3.55	18" RCP - NE INV 4.55
CS-04	0+35.32 106.84' L	COMMONS WAY	TYPE "H" INLET	8.00	4.00	14"X23" ERCP - S INV 5.00
D-01	13+65.88 13.12' L	BLUET DRIVE	TYPE "V" INLET	7.60	3.02	18" RCP - W INV 4.02
D-02	13+65.87 13.12' R	BLUET DRIVE	TYPE "V" INLET	7.60	2.57	18" RCP - E INV 3.97 18" RCP - N INV 3.57
D-03	10+46.62 13.13' L	BLUET DRIVE	TYPE "V" INLET	7.60	2.00	18" RCP - SW INV 3.00 18" RCP - E INV 3.00
D-04	10+64.28 13.12' R	BLUET DRIVE	TYPE "V" INLET	7.60	1.90	18" RCP - S INV 2.90 18" RCP - NE INV 2.90 18" RCP - W INV 2.90
D-05	10+64.28 154.97' R	BLUET DRIVE	TYPE "E" INLET	6.50	1.50	18" RCP - E INV 2.50
D-06	6+66.62 13.13' L	BLUET DRIVE	TYPE "V" INLET	7.60	2.43	18" RCP - NW INV 3.43 18" RCP - E INV 3.43
D-07	6+44.28 13.12' R	BLUET DRIVE	TYPE "V" INLET	7.60	2.36	18" RCP - W INV 3.36 18" RCP - SE INV 3.36
D-08	6+44.28 154.30' R	BLUET DRIVE	TYPE "E" INLET	6.50	1.88	18" RCP - E INV 2.88
D-09	1+54.71 13.13' L	BLUET DRIVE	TYPE "V" INLET	7.60	2.90	18" RCP - W INV 3.90
D-10	1+54.71 13.12' R	BLUET DRIVE	TYPE "V" INLET	7.60	2.85	18" RCP - S INV 3.85 18" RCP - E INV 3.85
D-11	3+79.71 13.12' R	BLUET DRIVE	TYPE "V" INLET	7.60	2.35	18" RCP - NE INV 3.35 18" RCP - W INV 3.35 18" RCP - N INV 3.35
D-12	3+66.62 13.13' L	BLUET DRIVE	TYPE "V" INLET	7.60	2.42	18" RCP - SW INV 3.42 18" RCP - E INV 3.42
D-13	3+79.71 154.97' R	BLUET DRIVE	TYPE "E" INLET	6.50	1.87	18" RCP - E INV 2.87
D-14	22+38.66 13.14' R	COMMONS WAY	TYPE "V" INLET	7.60	1.91	18" RCP - N INV 2.91
D-15	22+30.79 13.11' L	COMMONS WAY	TYPE "V" INLET	7.60	1.85	18" RCP - S INV 2.85 18" RCP - W INV 2.85
D-16	20+59.82 13.06' L	COMMONS WAY	TYPE "V" INLET	7.60	1.45	18" RCP - W INV 2.45 18" RCP - E INV 2.45
D-17	18+59.82 13.11' L	COMMONS WAY	TYPE "V" INLET	7.60	0.95	18" RCP - E INV 1.95 24" RCP - W INV 1.95 24" RCP - S INV 1.95
D-18	18+59.82 13.14' R	COMMONS WAY	TYPE "V" INLET	7.60	0.90	24" RCP - N INV 1.90 24" RCP - S INV 1.90
D-19	18+59.82 51.48' R	COMMONS WAY	TYPE "E" INLET	6.50	0.83	24" RCP - N INV 1.83
D-20	18+47.80 89.71' R	COMMONS WAY	TYPE "E" INLET	7.50	1.00	24" RCP - SW INV 2.00
D-21	2+25.48 352.53' R	BLUET DRIVE	TYPE "E" INLET	6.17	2.00	24" RCP - NE INV 3.00
D-22	15+86.13 13.13' R	COMMONS WAY	TYPE "V" INLET	7.60	1.52	18" RCP - NE INV 2.52
D-23	16+09.82 13.12' L	COMMONS WAY	TYPE "V" INLET	7.60	1.44	24" RCP - E INV 2.44 24" RCP - N INV 2.44 18" RCP - SW INV 2.44
D-24	16+09.85 152.79' L	COMMONS WAY	TYPE "E" INLET	6.50	0.83	24" RCP - S INV 1.83
D-25	11+06.13 13.13' R	COMMONS WAY	TYPE "V" INLET	7.60	2.25	18" RCP - N INV 3.25
D-26	11+06.13 13.12' L	COMMONS WAY	TYPE "V" INLET	7.60	2.20	18" RCP - E INV 3.20 18" RCP - S INV 3.20
D-27	13+49.82 13.12' L	COMMONS WAY	TYPE "V" INLET	7.60	1.67	18" RCP - S INV 2.67 18" RCP - N INV 2.67 18" RCP - W INV 2.67
D-28	13+46.13 13.13' R	COMMONS WAY	TYPE "V" INLET	7.60	1.72	18" RCP - N INV 2.72
D-29	13+49.82 152.80' L	COMMONS WAY	TYPE "E" INLET	6.50	1.37	18" RCP - S INV 2.37
D-30	9+88.29 149.99' R	COMMONS WAY	TYPE "E" INLET	6.22	2.05	24" RCP - NW INV 3.05
D-31	9+87.57 86.25' R	COMMONS WAY	TYPE "E" INLET	6.80	2.53	24" RCP - SE INV 2.90 24" RCP - NW INV 2.90
D-32	9+47.02 13.20' R	COMMONS WAY	TYPE "V" INLET	7.60	1.72	24" RCP - NW INV 2.72 24" RCP - SE INV 2.72
D-33	9+47.08 13.06' L	COMMONS WAY	TYPE "V" INLET	7.60	1.67	24" RCP - SE INV 2.67 24" RCP - NW INV 2.67
D-34	9+52.41 153.45' L	COMMONS WAY	TYPE "E" INLET	6.50	1.33	24" RCP - SE INV 2.33
D-35	5+94.67 13.06' R	COMMONS WAY	TYPE "V" INLET	7.60	3.02	18" RCP - NW INV 4.02
D-36	5+94.61 13.20' L	COMMONS WAY	TYPE "V" INLET	7.60	2.94	18" RCP - SE INV 3.94 18" RCP - NW INV 3.94
D-37	5+94.65 95.50' L	COMMONS WAY	TYPE "E" INLET	6.50	1.33	18" RCP - SE INV 2.33
D-38	3+32.74 13.19' R	COMMONS WAY	TYPE "V" INLET	7.60	2.20	18" RCP - NW INV 3.30 18" RCP - S INV 3.20
D-39	3+32.75 13.19' L	COMMONS WAY	TYPE "V" INLET	7.60	2.15	18" RCP - SE INV 3.20 18" RCP - NW INV 3.15
D-40	3+06.24 59.20' L	COMMONS WAY	TYPE "E" INLET	6.50	1.88	18" RCP - SE INV 2.88
D-41	3+16.10 53.67' R	COMMONS WAY	TYPE "E" INLET	6.50	2.89	18" RCP - N INV 2.89
D-42	2+06.26 54.49' R	COMMONS WAY	TYPE 6 INLET	7.75	1.60	18" RCP - W INV 2.60
D-43	1+19.09 18.22' R	COMMONS WAY	TYPE 6 INLET	8.00	1.34	18" RCP - E INV 2.34 18" RCP - NW INV 2.34
D-44	1+18.01 59.63' L	COMMONS WAY	TYPE 6 INLET	7.70	1.11	18" RCP - SE INV 2.11 18" RCP - NW INV 2.11
D-45	0+05.05 49.48' L	COMMONS WAY	TYPE 6 INLET	7.76	2.93	14"X23" ERCP - W INV 3.95 14"X23" ERCP - N INV 3.95
D-46	7+71.58 2127.80' R	5TH STREET	TYPE "E" INLET	8.00	2.59	14"X23" ERCP - E INV 3.59 24"X38" ERCP - SE INV 3.59 24"X38" ERCP - NW INV 3.59

DRAINAGE STRUCTURE SCHEDULE						
I.D.	STA. OFF.	ROAD	STRUCTURE TYPE	TOP EL	SUMP EL	CONNECTIONS
D-47	4+89.99 10.26' R	5TH STREET	TYPE "C" INLET	7.50	2.88	18" RCP - W INV 3.88 12" HDPE - N INV 4.42 12" HDPE - S INV 4.37
D-48	7+90.10 10.16' R	5TH STREET	TYPE "C" INLET	7.50	2.90	18" RCP - W INV 4.00 12" HDPE - N INV 4.37 12" HDPE - S INV 3.90
D-49	11+68.83 10.02' R	5TH STREET	TYPE "C" INLET	7.50	2.50	18" RCP - W INV 3.50 12" HDPE - N INV 3.85 12" HDPE - S INV 3.50
D-50	0+94.61 92.38' L	COMMONS WAY	TYPE "E" INLET	5.50	1.00	18" RCP - SE INV 2.00
I-01	3+90.01 7.70' L	5TH STREET	TYPE "E" INLET	6.80	2.50	14"X23" ERCP - S INV 2.84
I-02	4+90.01 7.74' L	5TH STREET	TYPE "E" INLET	6.80	0.85	14"X23" ERCP - N INV 2.62 14"X23" ERCP - S INV 2.62
I-03	5+40.01 7.75' L	5TH STREET	TYPE "E" INLET	6.80	0.57	14"X23" ERCP - N INV 2.51 14"X23" ERCP - S INV 2.51
I-04	5+66.87 7.76' L	5TH STREET	TYPE J8 48" DIA J BOT	7.23	0.50	14"X23" ERCP - NE INV 4.92 14"X23" ERCP - N INV 2.45 19"X30" ERCP - S INV 2.45
I-05	6+40.01 7.79' L	5TH STREET	TYPE "E" INLET	6.80	-2.70	19" X 30" PIPE - S INV 2.34 19"X30" ERCP - N INV 2.34
I-06	7+90.01 7.85' L	5TH STREET	TYPE "E" INLET	6.80	0.24	19"X30" ERCP - S INV 2.11 19" X 30" PIPE - N INV 2.11
I-07	8+40.01 7.86' L	5TH STREET	TYPE "E" INLET	6.80	0.09	19"X30" ERCP - S INV 2.03 19"X30" ERCP - N INV 2.03
I-08	9+68.82 7.91' L	5TH STREET	TYPE "E" INLET	6.80	2.40	19"X30" ERCP - S INV 1.84 19"X30" ERCP - N INV 1.84
I-09	10+63.97 7.94' L	5TH STREET	TYPE "E" INLET	6.80	0.76	24"X38" ERCP - S INV 1.70 19"X30" ERCP - N INV 1.70 30" HDPE - E INV 1.76
I-10	11+68.82 7.98' L	5TH STREET	TYPE "E" INLET	6.80	1.60	24"X38" ERCP - S INV 1.82 24"X38" ERCP - N INV 1.82
I-11	12+68.82 8.01' L	5TH STREET	TYPE "E" INLET	6.80	1.80	24"X38" ERCP - S INV 1.93 24"X38" ERCP - N INV 1.93
I-12	13+68.82 8.05' L	5TH STREET	TYPE "E" INLET	6.80	1.40	24"X38" ERCP - S INV 2.04 24"X38" ERCP - N INV 2.04
I-13	7+08.31 45.93' L	CHARLES STREET	TYPE "E" INLET	7.10	1.10	24"X38" ERCP - N INV 2.20 30" RCP - W INV 2.10 24" CMP - S INV 2.20
I-14	3+45.53 22.17' L	CHARLES STREET	TYPE 6 INLET	7.97	2.00	19"X30" ERCP - W INV 3.27 24" RCP - NW INV 3.20 24"X38" ERCP - E INV 3.00
I-15	2+17.07 22.80' L	CHARLES STREET	TYPE 6 INLET	7.97	2.50	19"X30" ERCP - E INV 3.50 18" RCP - N INV 3.50

YARD DRAIN STRUCTURE SCHEDULE					
I.D.	STA. OFF.	ROAD	STRUCTURE TYPE	GRATE EL	CONNECTIONS
YD-01	3+40.02 10.32 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - S INV 5.02
YD-02	3+90.02 10.30 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - S INV 4.82 12" HDPE - N INV 4.82
YD-03	4+40.02 10.28 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.62 12" HDPE - S INV 4.62
YD-04	5+40.02 10.24 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.57 12" HDPE - S INV 4.57
YD-05	5+90.02 10.22 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.77 12" HDPE - S INV 4.77
YD-06	6+40.02 10.20 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.97 12" HDPE - S INV 4.97
YD-07	6+90.02 10.19 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.77 12" HDPE - S INV 4.77
YD-08	7+40.06 10.18 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.57 12" HDPE - S INV 4.57
YD-09	8+40.02 10.14 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.10 12" HDPE - S INV 4.10
YD-10	8+90.02 10.12 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.30 12" HDPE - S INV 4.30
YD-11	9+40.02 10.09 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.50 12" HDPE - S INV 4.50
YD-12	9+68.83 10.08 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.65 12" HDPE - S INV 4.65
YD-13	10+18.83 10.07 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.45 12" HDPE - S INV 4.45
YD-14	10+68.83 10.06 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - S INV 4.25 12" HDPE - N INV 4.25
YD-15	11+18.83 10.03 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.05 12" HDPE - S INV 4.05
YD-16	12+18.83 10.00 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 3.70 12" HDPE - S INV 3.70
YD-17	12+68.83 9.99 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 3.90 12" HDPE - S INV 3.90
YD-18	13+18.83 9.96 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.10 12" HDPE - S INV 3.95
YD-19	13+68.83 9.95 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.10 12" HDPE - S INV 4.10
YD-20	14+18.83 9.93 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.30 12" HDPE - S INV 4.30
YD-21	14+39.44 9.93 R	5TH STREET	24" YARD DRAIN	7.50	12" HDPE - N INV 4.40
YD-22	5+94.65 52.52 L	COMMONS WAY	24" YARD DRAIN	6.00	18" RCP - SE INV 3.20 18" RCP - NW INV 3.20

CLEANOUT STRUCTURE SCHEDULE				
I.D.	STA. OFF.	ROAD	STRUCTURE TYPE	CONNECTIONS
CO-01	18+18.26 96.49' R	COMMONS WAY	6" CLEANOUT	12" PVC - N INV 6.10 12" PVC - SW INV 6.10
CO-02	18+24.93 76.86' R	COMMONS WAY	6" CLEANOUT	12" PVC - N INV 6.03 12" PVC - S INV 6.02
CO-03	18+27.59 32.78' R	COMMONS WAY	6" CLEANOUT	12" PVC - NE INV 5.88 12" PVC - S INV 5.88
CO-04	18+43.54 16.77' R	COMMONS WAY	6" CLEANOUT	12" PVC - E INV 5.80 12" PVC - SW INV 5.80
CO-05	20+71.97 16.76' R	COMMONS WAY	6" CLEANOUT	12" PVC - W INV 5.00 12" PVC - E INV 5.00
CO-06	22+87.07 16.77' R	COMMONS WAY	6" CLEANOUT	12" PVC - W INV 4.25 12" PVC - NE INV 4.25
CO-07	23+01.89 2.79' R	COMMONS WAY	6" CLEANOUT	12" PVC - N INV 4.18 12" PVC - SW INV 4.18
CO-08	23+00.05 152.36' L	COMMONS WAY	6" CLEANOUT	12" PVC - S INV 3.64 12" PVC - NW INV 3.64

OUTFALL STRUCTURE SCHEDULE				
I.D.	STA. OFF.	ROAD	STRUCTURE TYPE	PIPES
HW-01	14+28.83 77.41' L	BLUET DRIVE	STRAIGHT ENDWALL	24"X38" ERCP W INV 2.20
HW-02	15+16.51 25.88' R	5TH STREET	STRAIGHT ENDWALL	30" RCP E INV 2.00
MES-01	2+17.13 46.20' L	CHARLES STREET	18" MES W/ 4:1 SLOPE	18" RCP S INV 6.50
MES-02	1+87.32 41.31' L	CHARLES STREET	15" MES W/ 4:1 SLOPE	15" CIP W INV 5.75
UE-01	7+88.55 128.47' L	COMMONS WAY	24"X38" U ENDWALL (4:1) WITH BAFFLE	24" X 38" PIPE S INV 5.10
UE-02	6+55.60 159.70' L	COMMONS WAY	24"X38" U ENDWALL (4:1) WITH BAFFLE	24" X 38" PIPE N INV 5.00
UE-03	22+63.76 170.54' L	COMMONS WAY	18" U ENDWALL (4:1) WITH BAFFLE	18" RCP SW INV 4.50
UE-04	22+84.33 170.37' L	COMMONS WAY	15" U ENDWALL (4:1) WITH BAFFLE	12" PVC SE INV 3.50

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS
10/3/22	CITY COMMENTS
11/8/22	CITY COMMENTS

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STORMWATER POND 1 PLAN

MADELINE COMMONS

975 McDONALD ROAD
PORT ORANGE, FL 32129

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CODY A. BOGART
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No. 94133
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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PROJECT No: 2021-309

DATE: APRIL 2022

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DRAWN BY: DAB

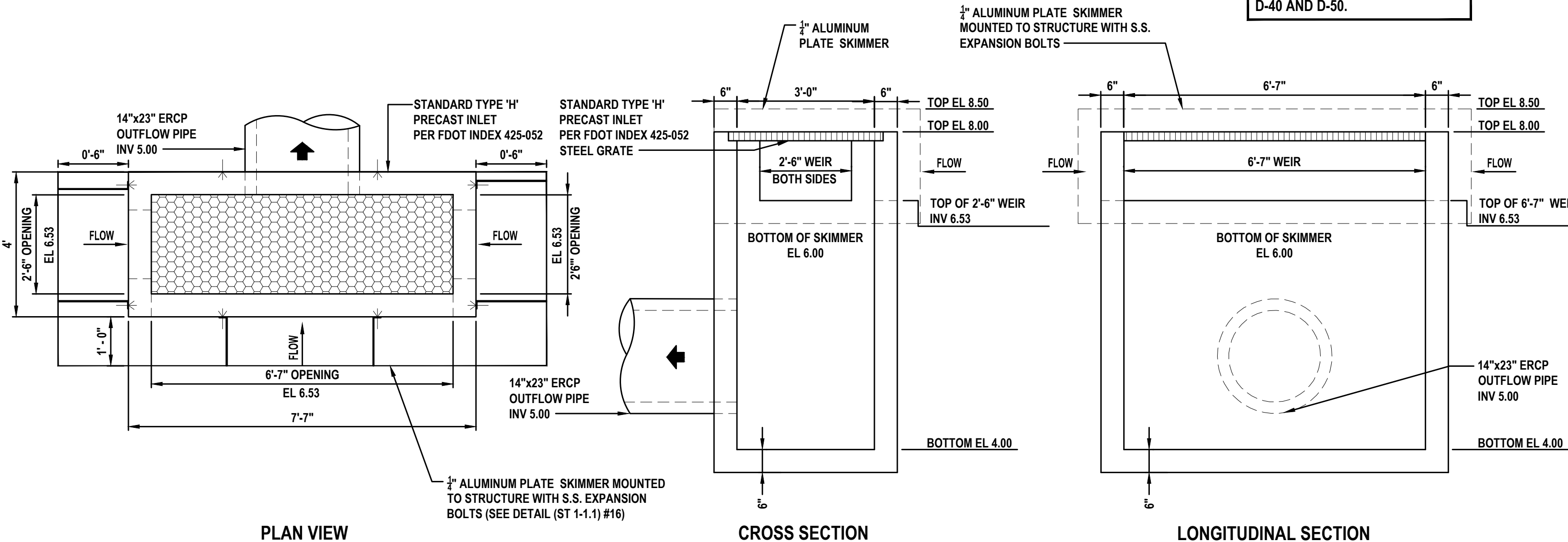
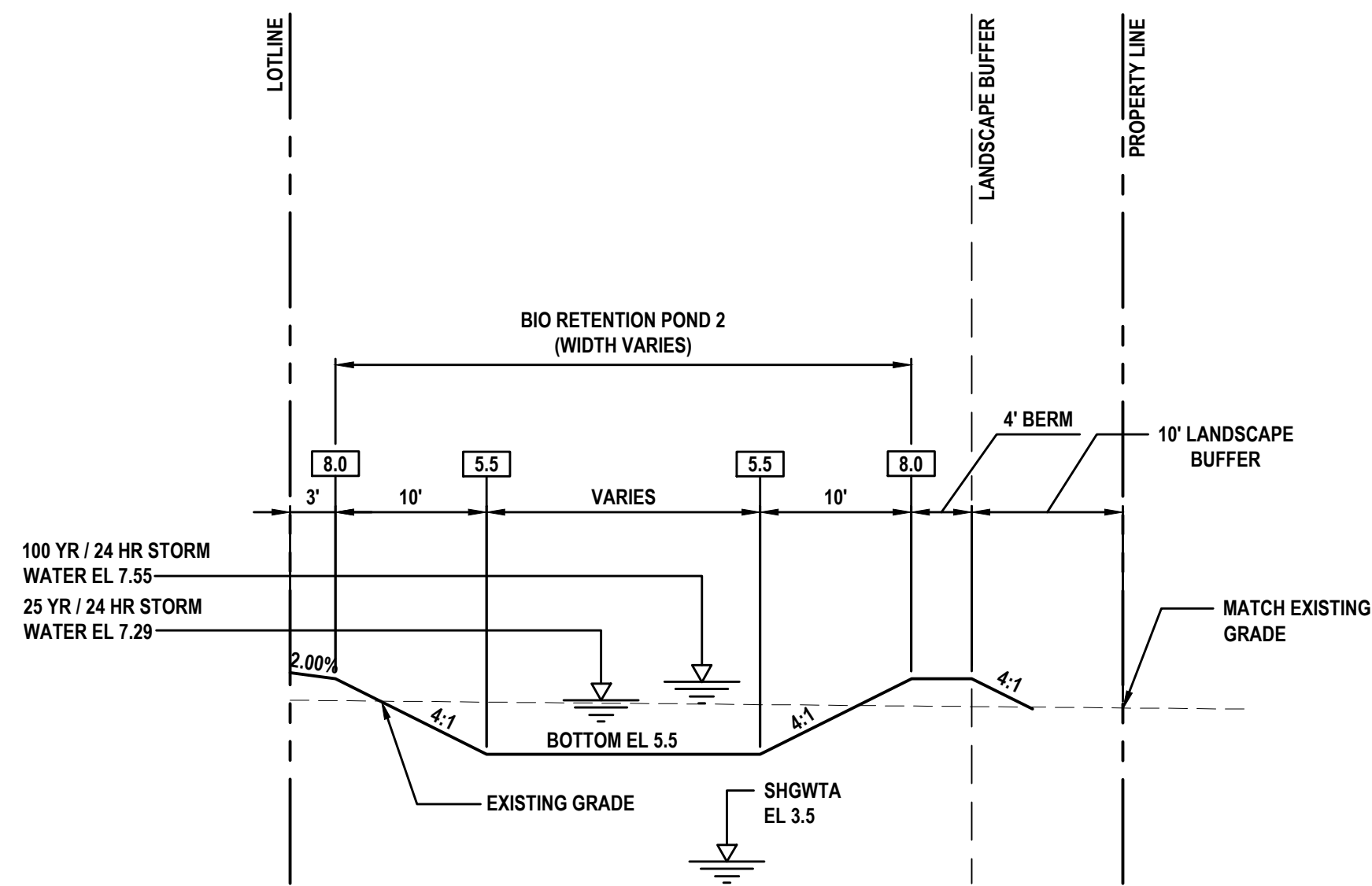
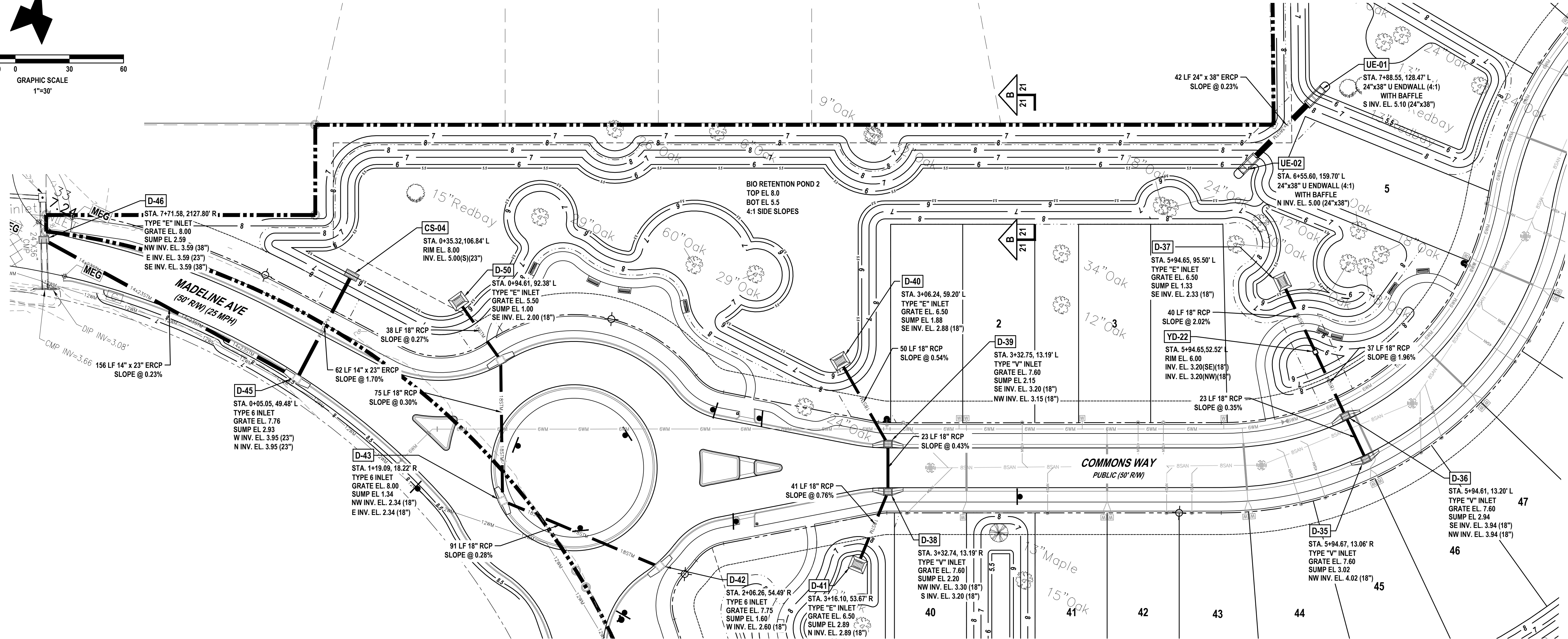
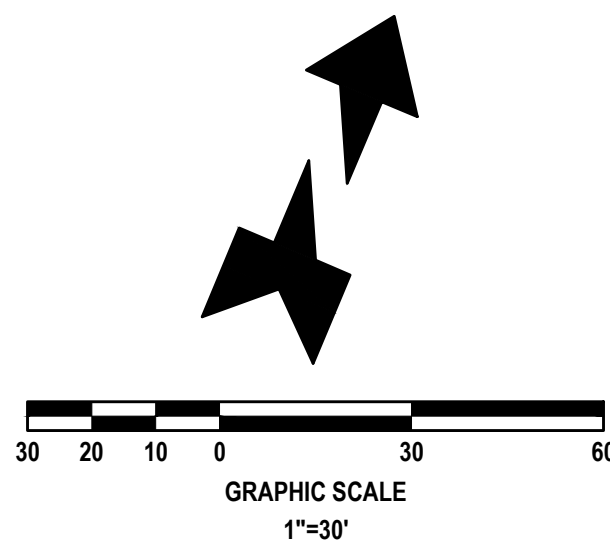
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SCALE: 1"=30'

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20

Page 53 of



NOTE:
SEE SHEET No. 22 FOR TYPICAL
DETAILS FOR STRUCTURES D-37,
D-40 AND D-50.

SECTION B

NOT TO SCALE

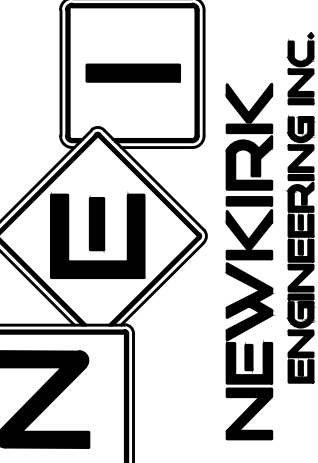
CONTROL STRUCTURE CS-04 DETAIL

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REVISIONS

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8/26/22	CITY COMMENTS
10/3/22	CITY COMMENTS
11/8/22	CITY COMMENTS

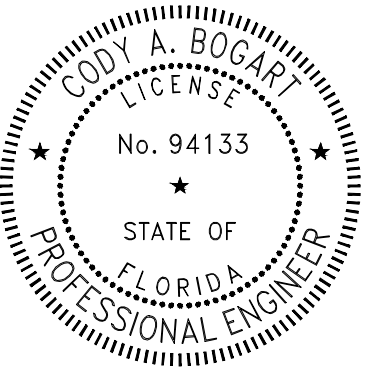
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STORMWATER POND 2 PLAN
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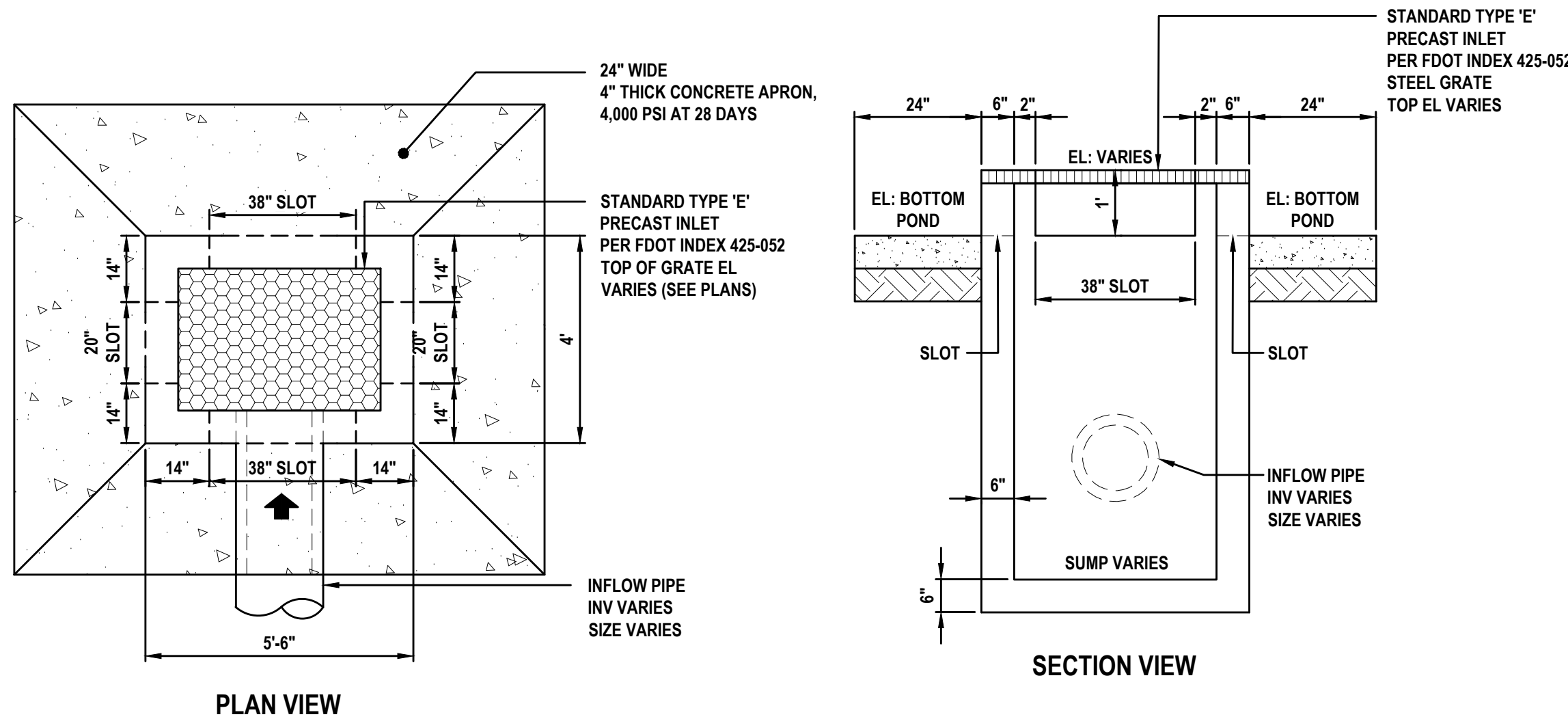
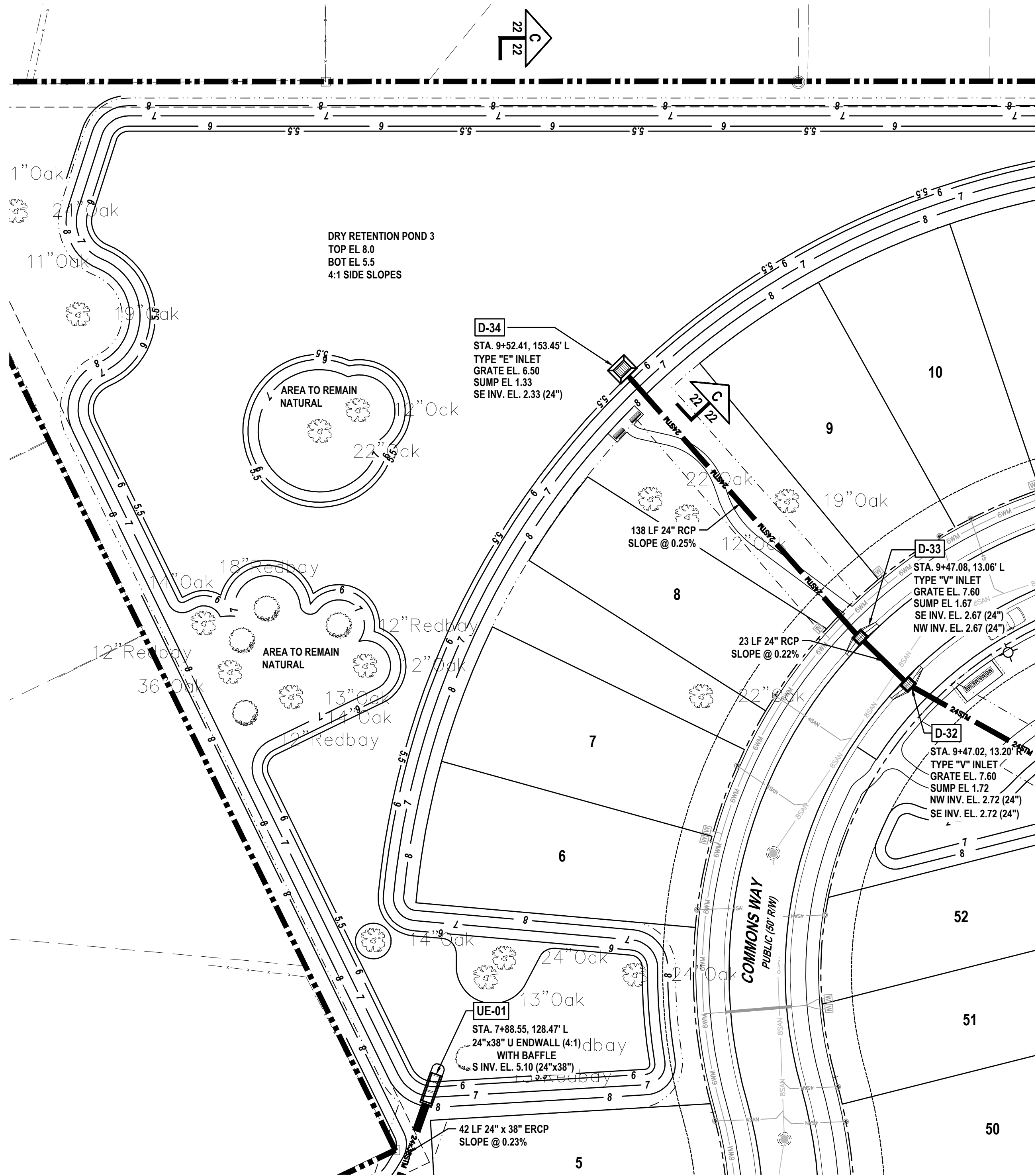
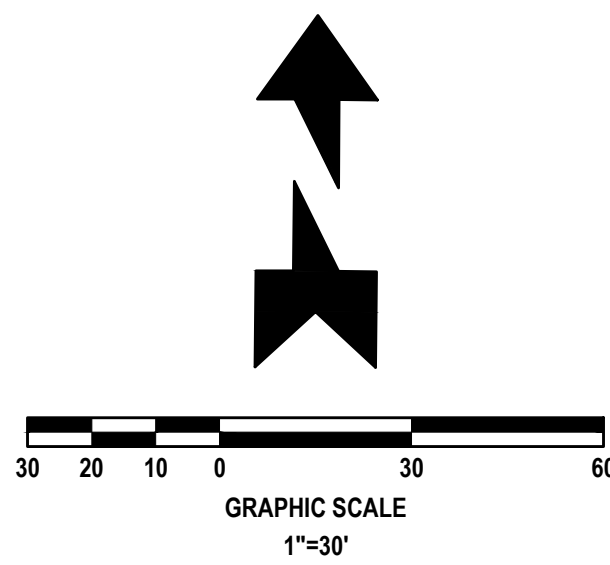


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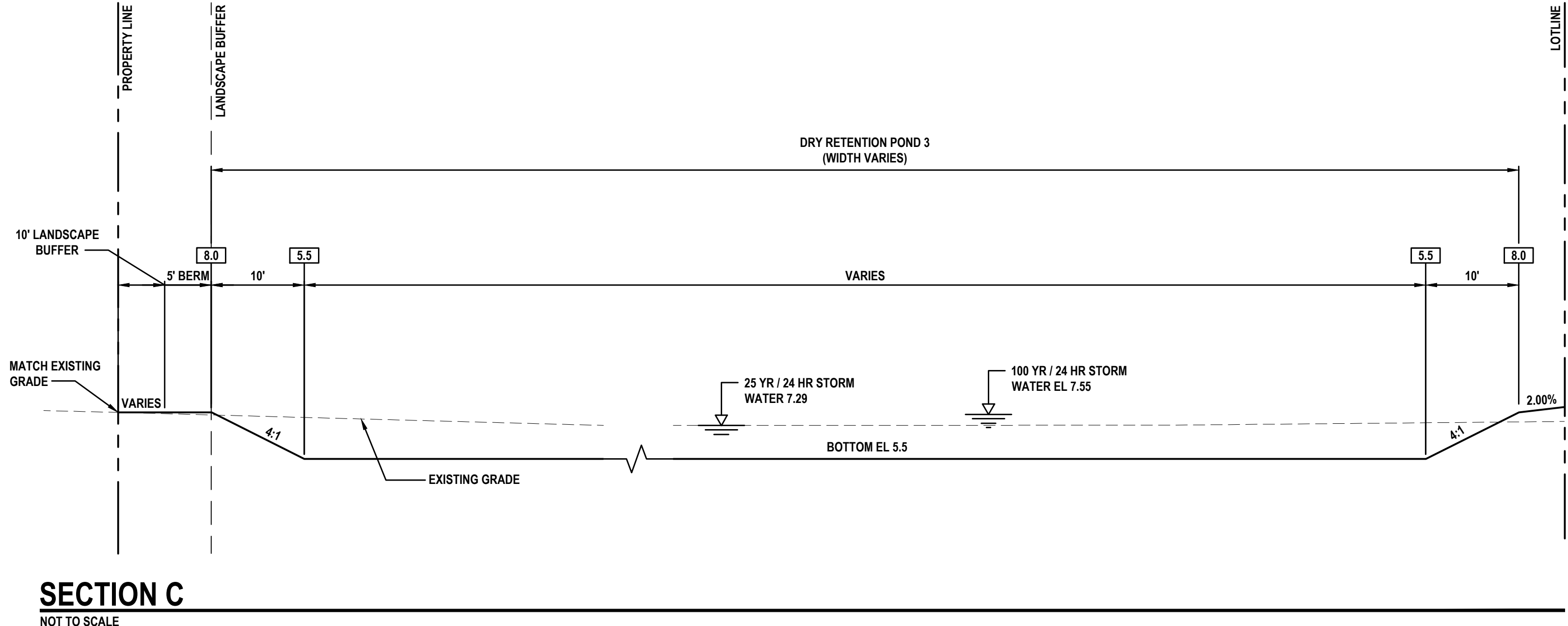
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21



TYPICAL BUBBLE - UP STRUCTURE DETAIL (SEE INLET LABELS FOR INVERTS) (TYPICAL IN ALL DRY RETENTION PONDS)
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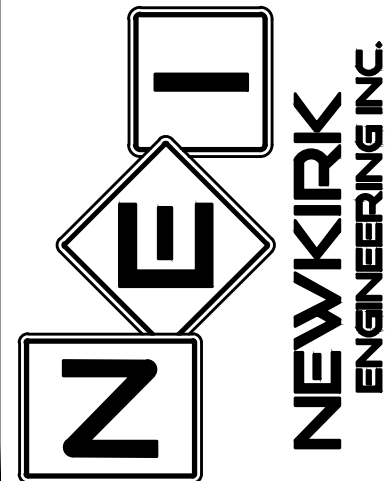


SECTION C
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REVISIONS

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7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS
11/8/22	CITY COMMENTS

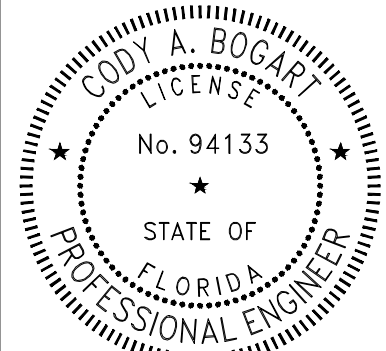
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STORMWATER POND 3A PLAN
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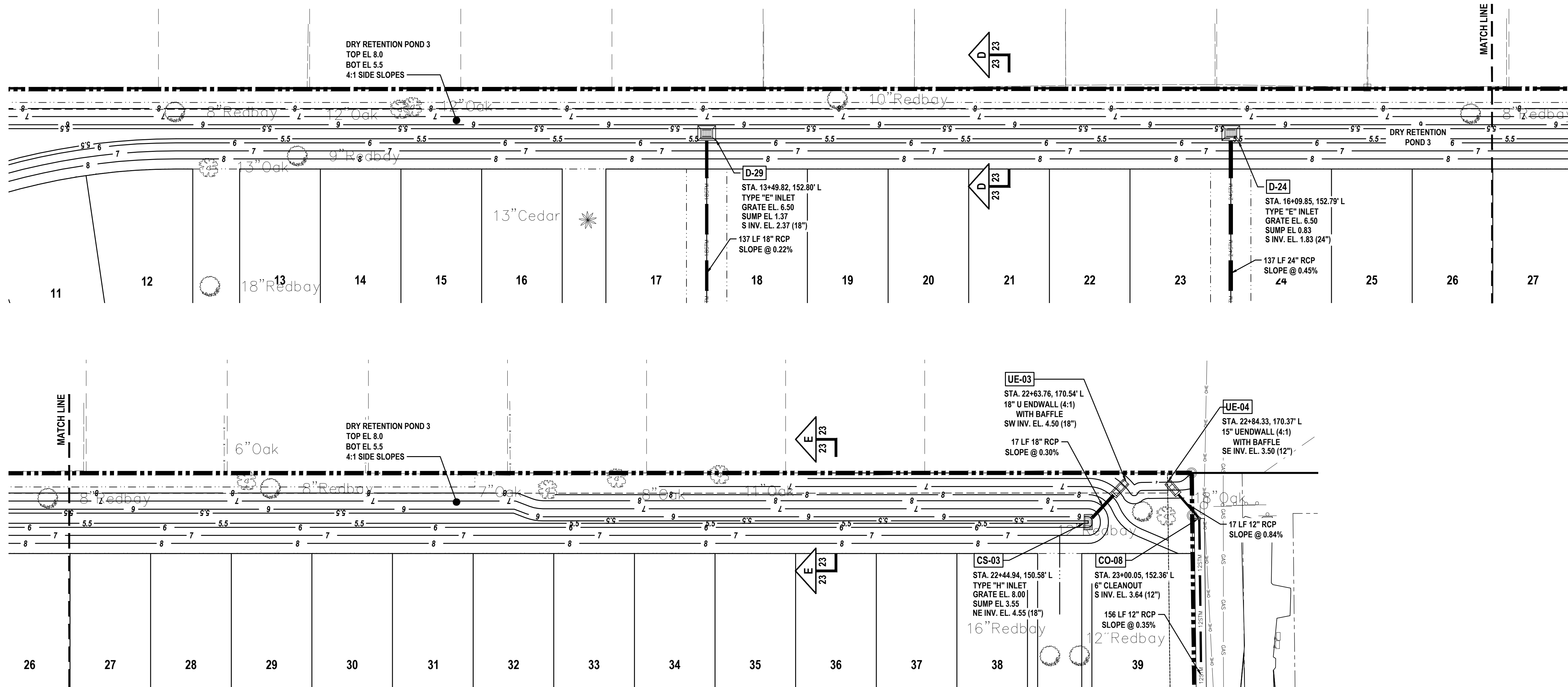
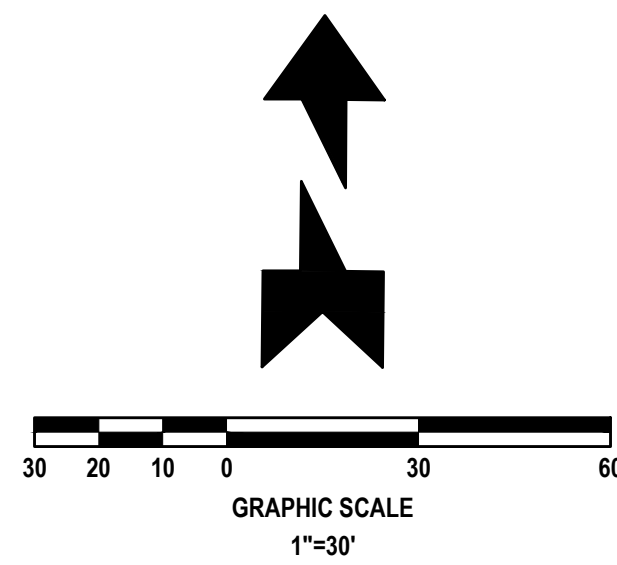


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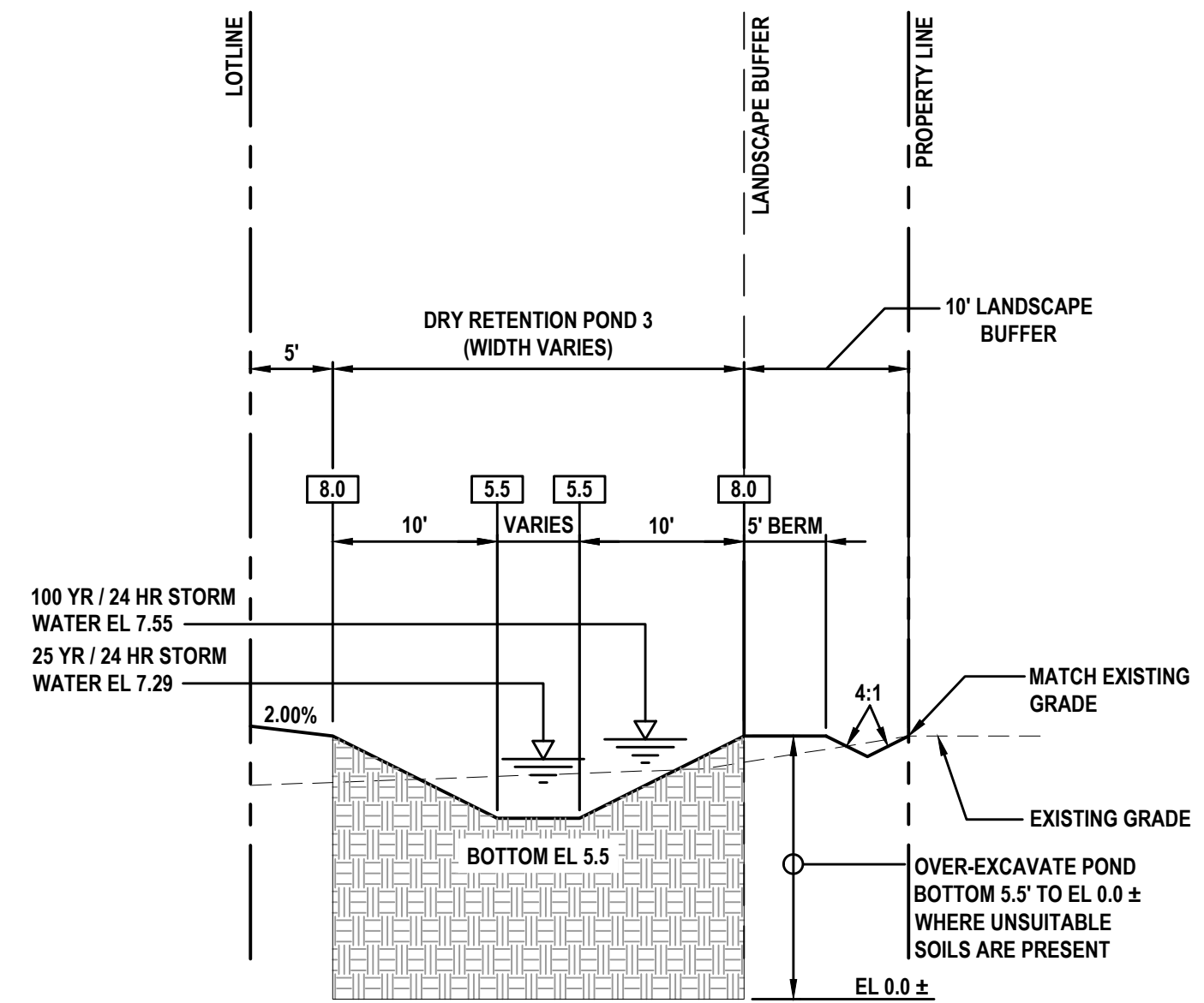
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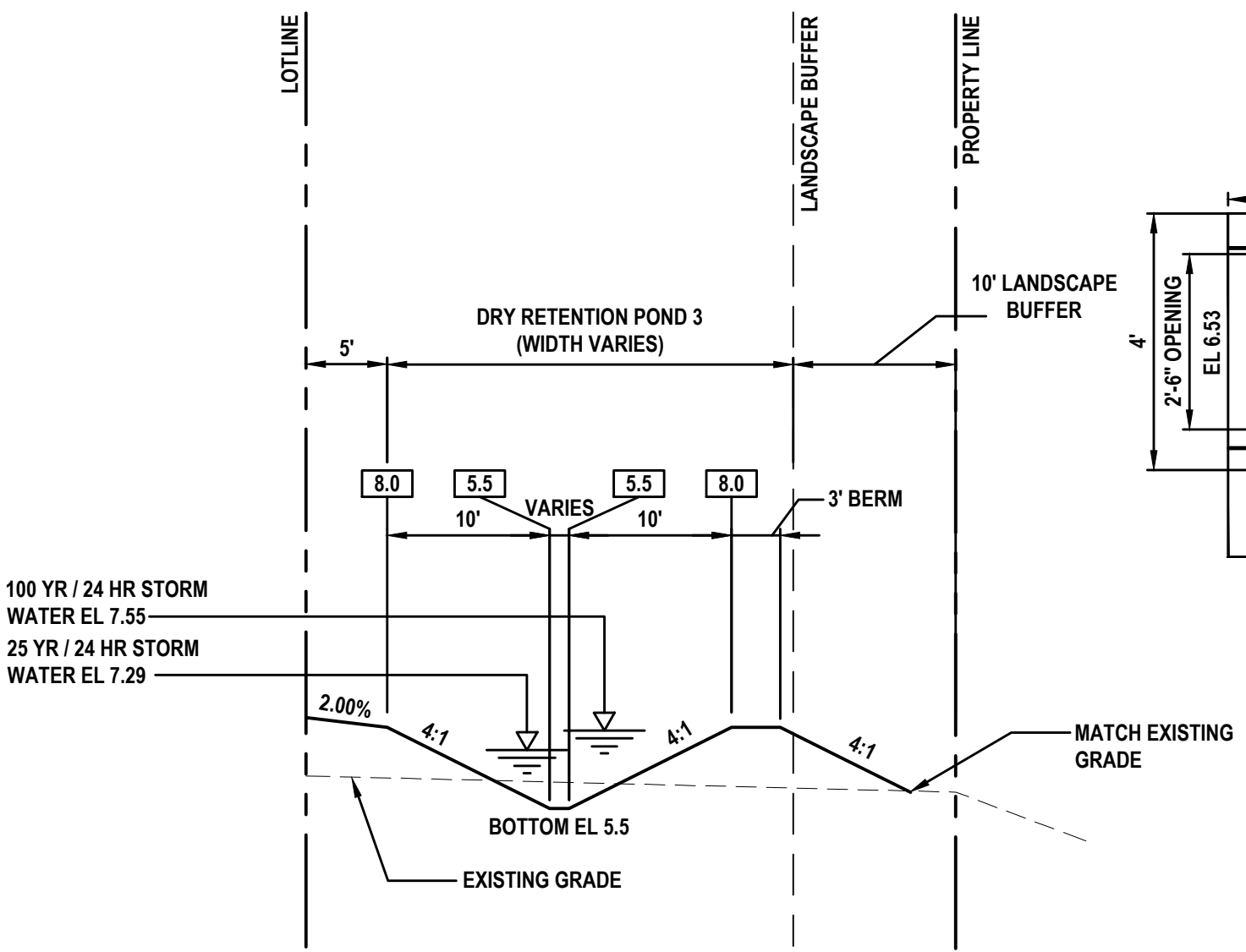
DRY RETENTION POND FILL NOTES:

- 1. PERCENT FINE SAND PASSING THROUGH #200 SIEVE SHALL BE 8-10%
- 2. VERTICAL PERMEABILITY RATE OF FILL MATERIAL SHALL BE 5.0 FT/DAY.
- 3. HORIZONTAL PERMEABILITY RATE OF THE FILL MATERIAL SHALL BE 10.0 FT/DAY.
- 4. FILL MATERIAL MUST BE NATIVE SAND, NOT PROCESSED OR WASHED.
- 5. EXCAVATION AND FILL MATERIALS SHALL INCLUDE THE ENTIRE FOOTPRINT OF THE DRY RETENTION POND.
- 6. ADEQUACY OF FILL MATERIAL MUST BE APPROVED BY PROFESSIONAL ENGINEER OR GEOTECHNICAL ENGINEER AT TIME OF PLACEMENT.

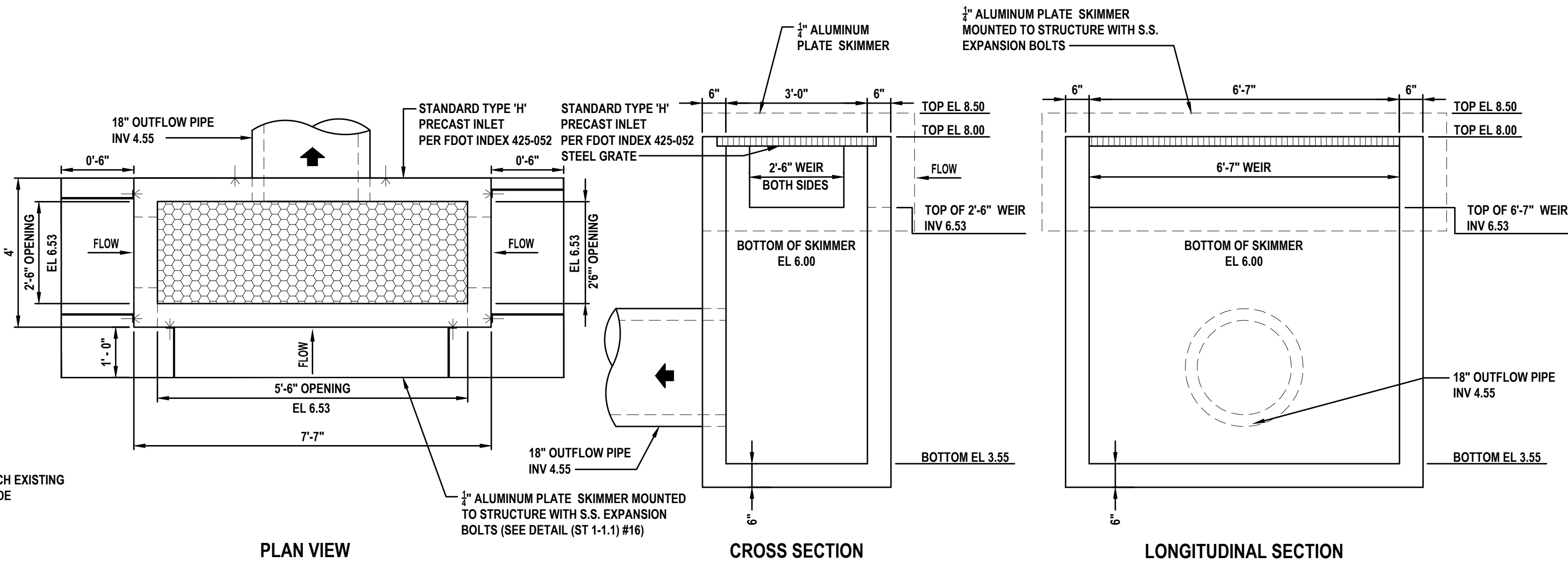
NOTE:
SEE SHEET No. 22 FOR TYPICAL
DETAILS FOR STRUCTURES D-24
AND D-29.



SECTION D
NOT TO SCALE



SECTION E
NOT TO SCALE

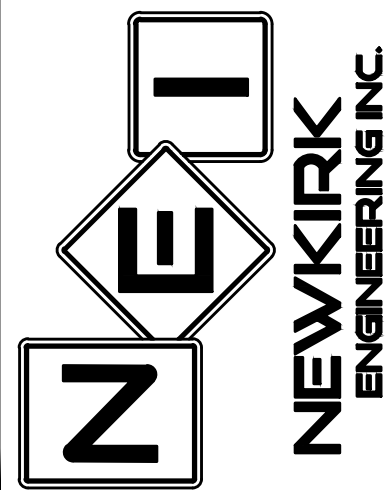


CONTROL STRUCTURE CS-03 DETAIL
NOT TO SCALE

REVISIONS

DATE	DESCRIPTION
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8/26/22	CITY COMMENTS
10/3/22	CITY COMMENTS
11/8/22	CITY COMMENTS

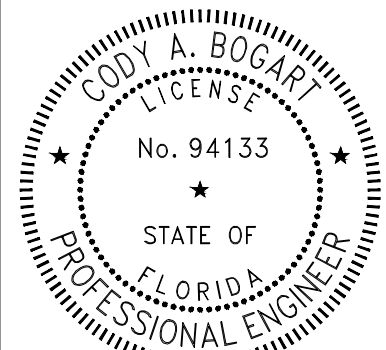
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STORMWATER POND 3B PLAN
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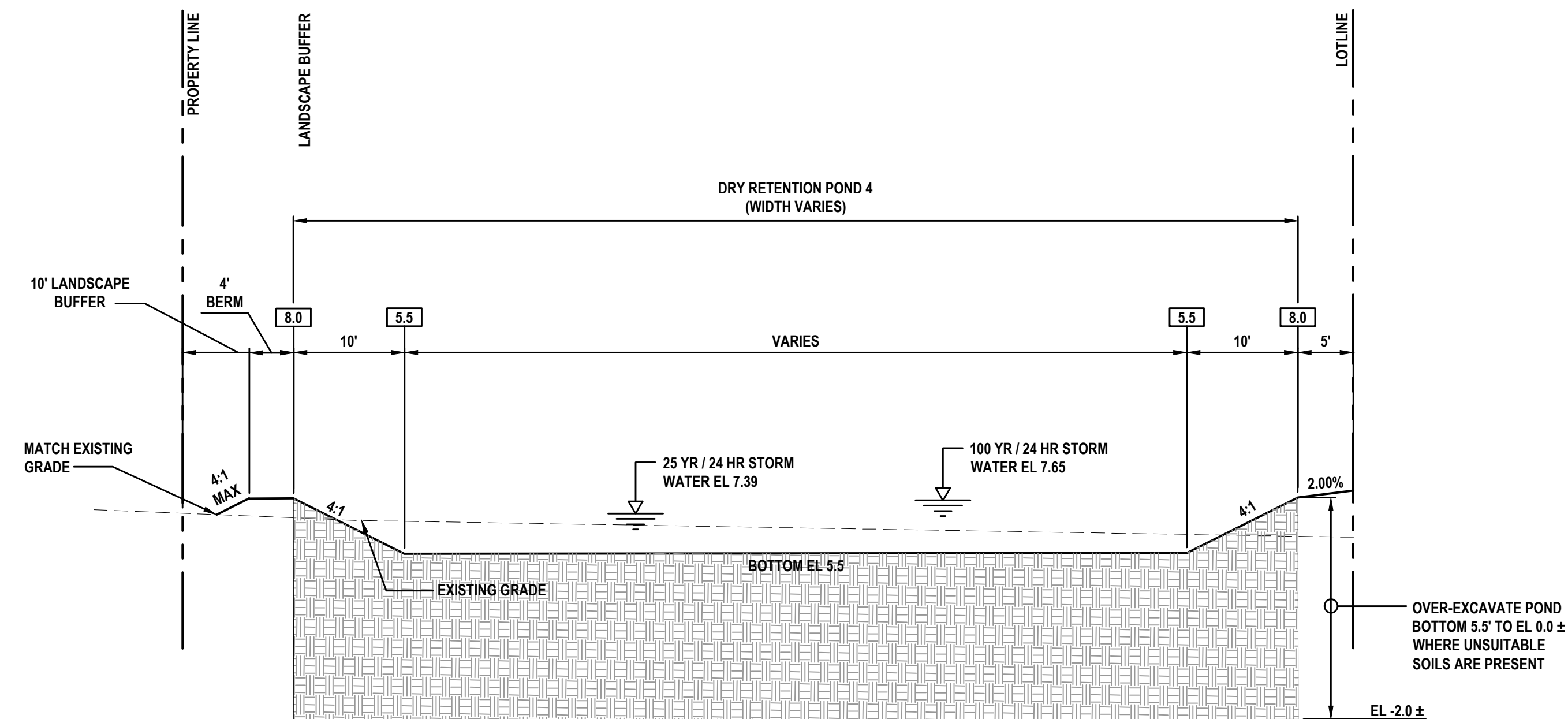
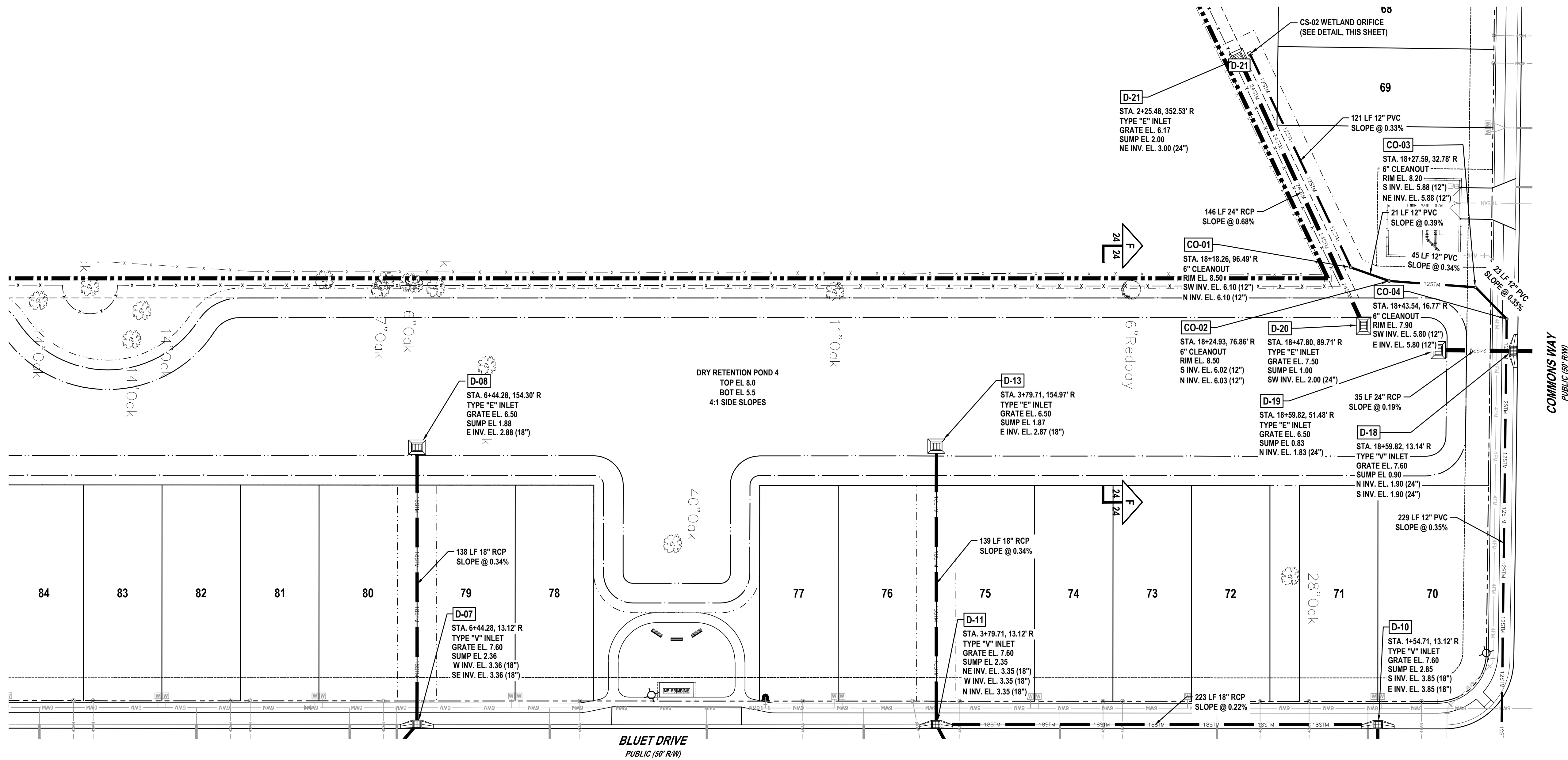
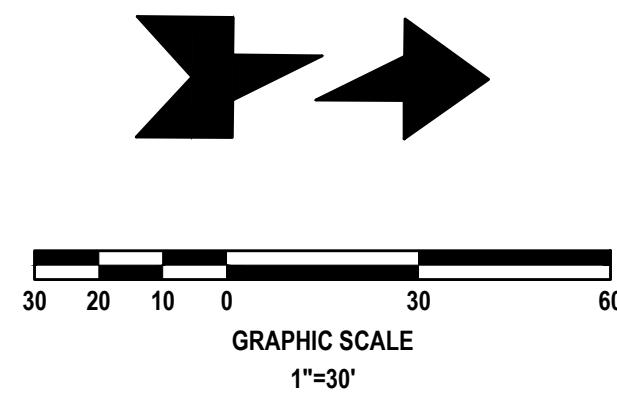
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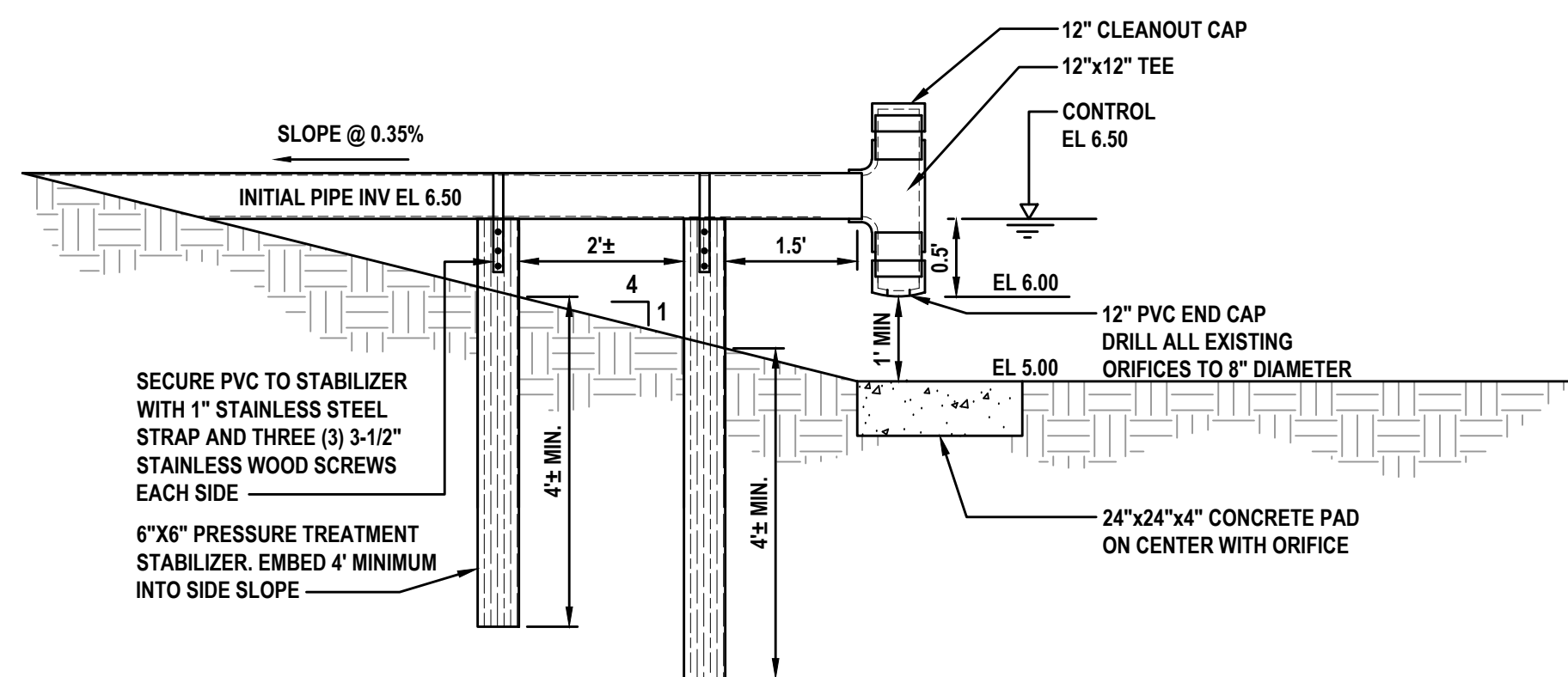


SECTION F
NOT TO SCALE

DRY RETENTION POND FILL NOTES:

- PERCENT FINE SAND PASSING THROUGH #200 SIEVE SHALL BE 8-10%.
- VERTICAL PERMEABILITY RATE OF FILL MATERIAL SHALL BE 5.0 FT/DAY.
- HORIZONTAL PERMEABILITY RATE OF THE FILL MATERIAL SHALL BE 10.0 FT/DAY.
- FILL MATERIAL MUST BE NATIVE SAND, NOT PROCESSED OR WASHED.
- EXCAVATION AND FILL MATERIALS SHALL INCLUDE THE ENTIRE FOOTPRINT OF THE DRY RETENTION POND.
- ADEQUACY OF FILL MATERIAL MUST BE APPROVED BY PROFESSIONAL ENGINEER OR GEOTECHNICAL ENGINEER AT TIME OF PLACEMENT.

NOTE:
SEE SHEET No. 22 FOR TYPICAL
DETAILS FOR STRUCTURES D-08
AND D-13.

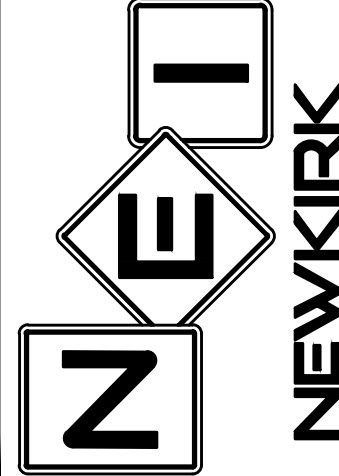


CS-02 WETLAND ORIFICE DETAIL
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REVISIONS

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8/26/22	CITY COMMENTS
11/8/22	CITY COMMENTS

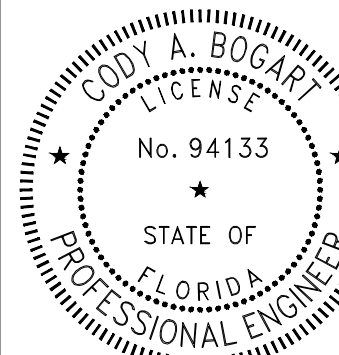
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STORMWATER POND 4A PLAN
MADELINE COMMONS
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PORT ORANGE, FL 32129

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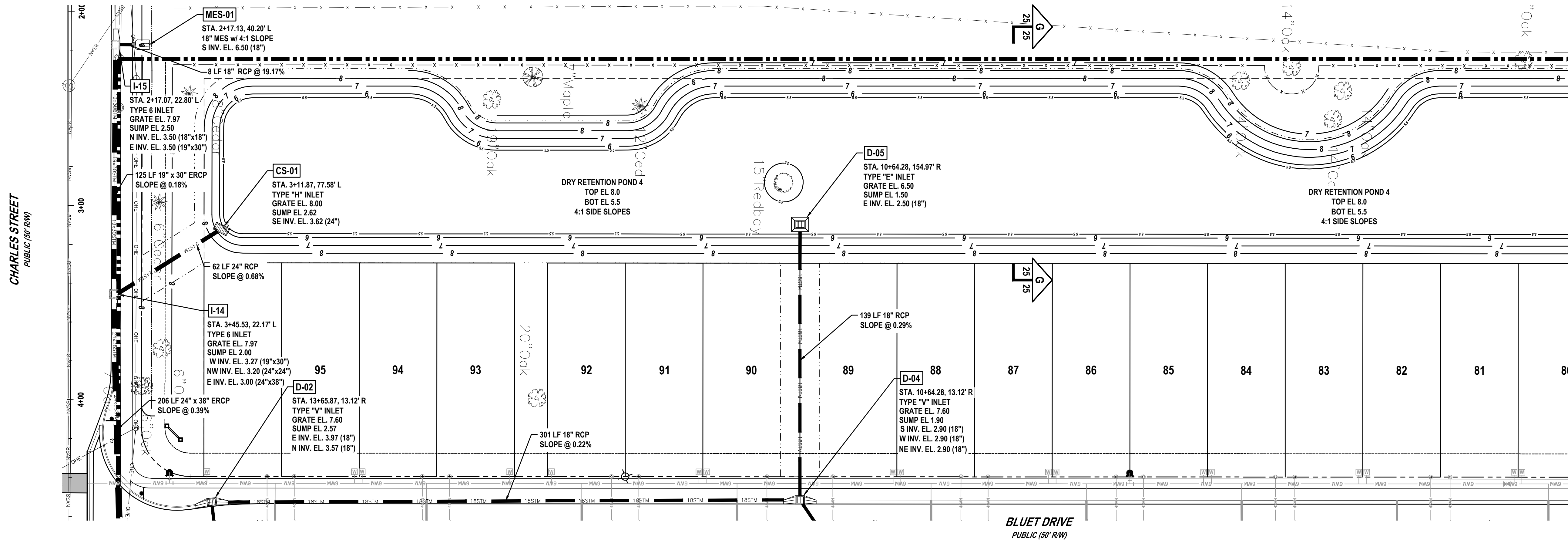
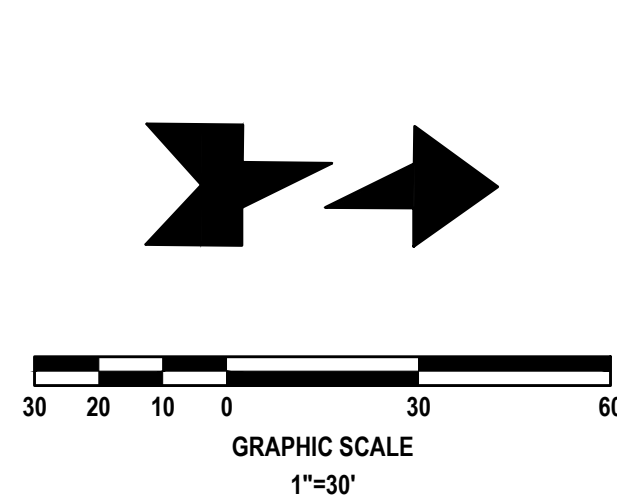
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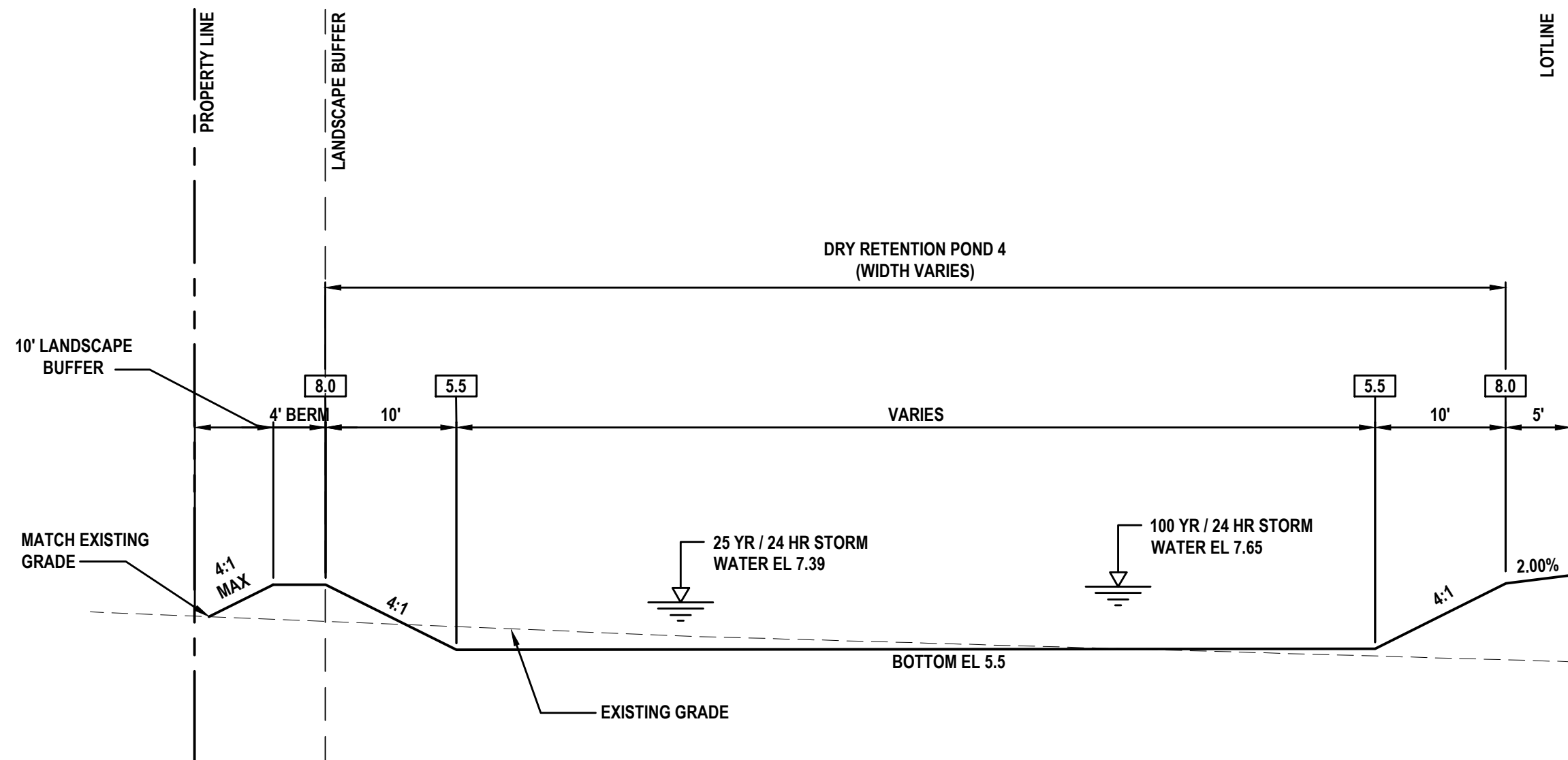
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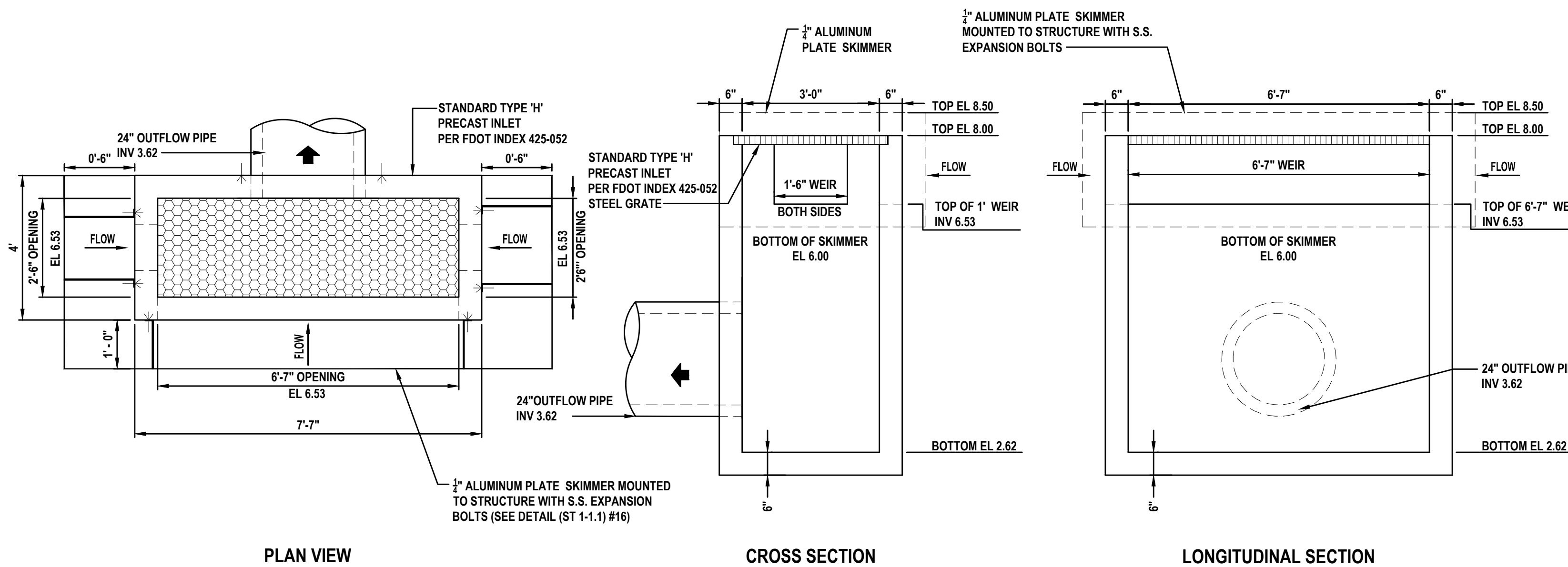
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NOTE:
SEE SHEET No. 22 FOR TYPICAL
DETAILS FOR STRUCTURE D-05



SECTION G
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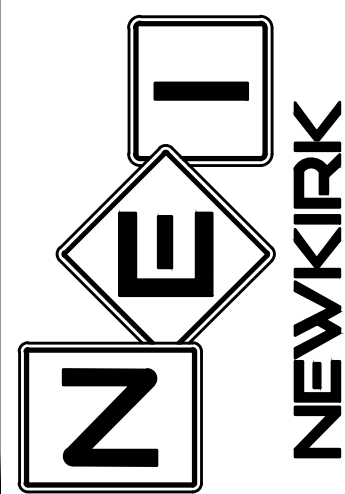


CONTROL STRUCTURE CS-01 DETAIL
NOT TO SCALE

REVISIONS

DATE	DESCRIPTION
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8/26/22	CITY COMMENTS
10/3/22	CITY COMMENTS
11/8/22	CITY COMMENTS

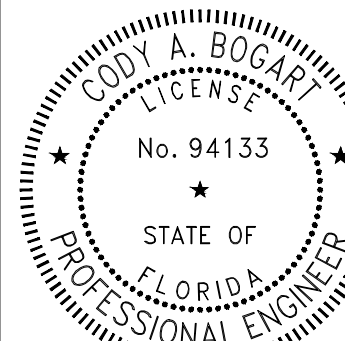
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STORMWATER POND 4B PLAN
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UTILITY LEGEND

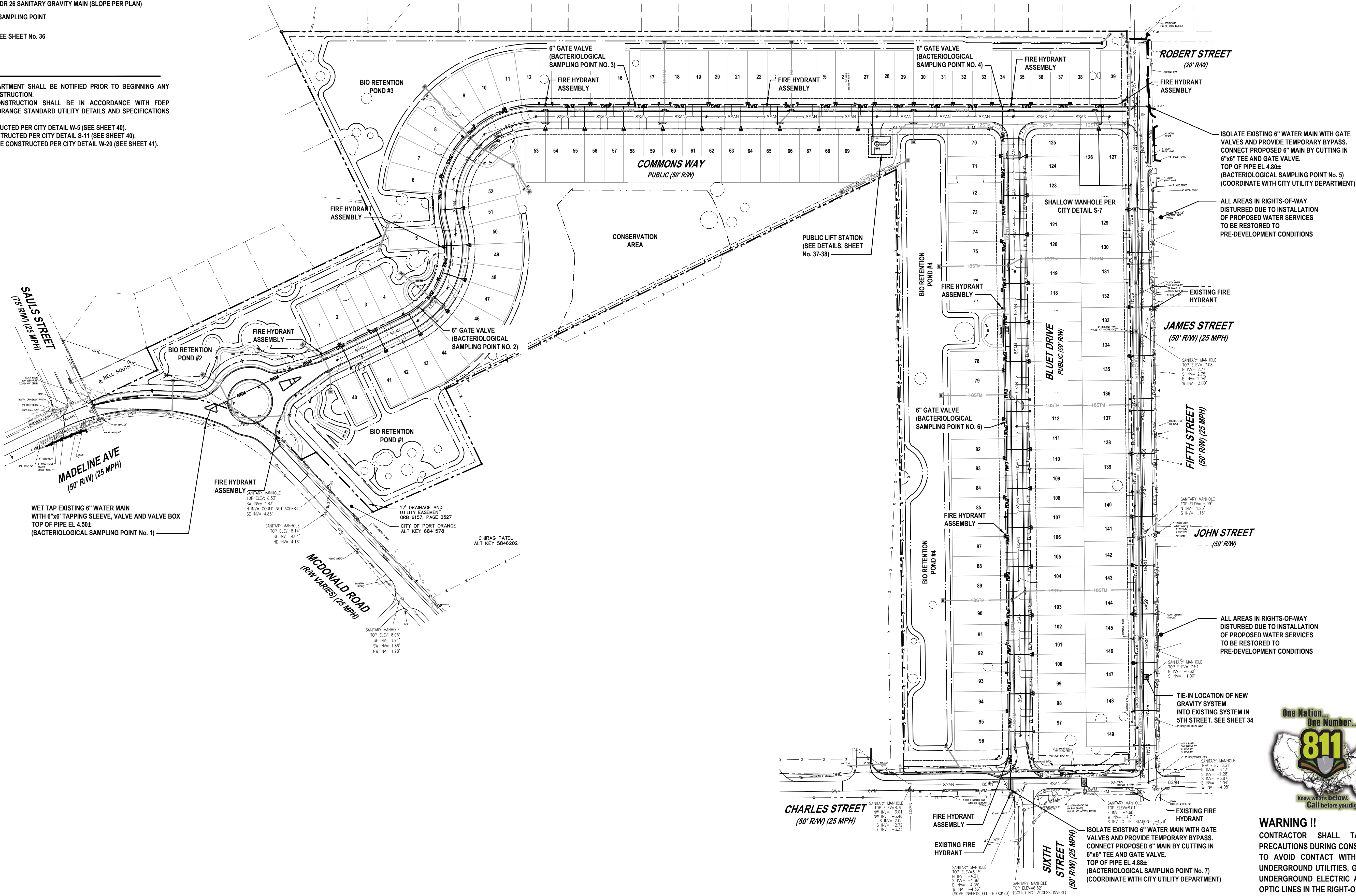
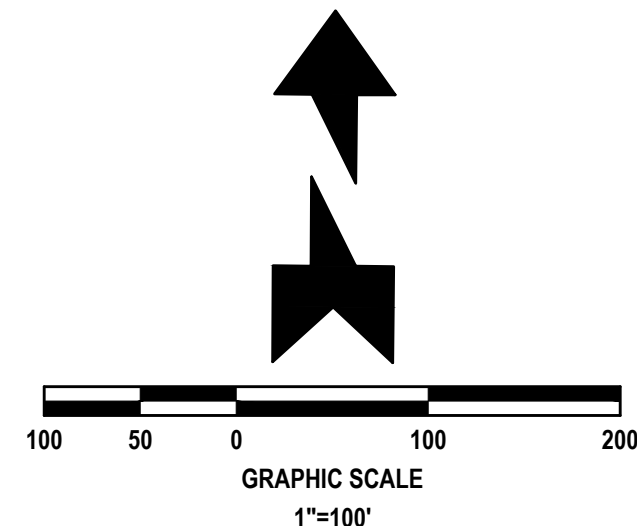
	PROPOSED 11.25° BEND
	PROPOSED 22.5° BEND
	PROPOSED 45° BEND
	PROPOSED 90° BEND
	PROPOSED TEE
	PROPOSED GATE VALVE
	PROPOSED CAP AND 2" BLOW OFF ASSEMBLY
	PROPOSED FIRE HYDRANT ASSEMBLY
	PROPOSED SHORT SIDE 1" BLUE PE 3408 (SDR 9) WATER SERVICE
	PROPOSED LONG SIDE 1" BLUE PE 3408 (SDR 9) WATER SERVICE
	PROPOSED 4" PVC SDR-26 SANITARY SEWER LATERAL (SLOPE @ 2.0% MIN.)
	PROPOSED SANITARY SEWER MANHOLE
	PROPOSED 6" PVC DR-18 WATER MAIN (36" MIN. COVER)
	PROPOSED 4" PVC DR-25 SANITARY FORCE MAIN (36" MIN. COVER)
	PROPOSED 8" PVC SDR 26 SANITARY GRAVITY MAIN (SLOPE PER PLAN)
	BACTERIOLOGICAL SAMPLING POINT
	CONFLICT DETAIL, SEE SHEET No. 36

UTLITY NOTES:

- CITY OF PORT ORANGE UTILITIES DEPARTMENT SHALL BE NOTIFIED PRIOR TO BEGINNING ANY WATER, SEWER AND REUSE SYSTEM CONSTRUCTION.
- ALL WATER, SEWER AND REUSE CONSTRUCTION SHALL BE IN ACCORDANCE WITH FDP REGULATIONS AND THE CITY OF PORT ORANGE STANDARD UTILITY DETAILS AND SPECIFICATIONS (LATEST EDITION).
- ALL WATER SERVICES SHALL BE CONSTRUCTED PER CITY DETAIL W-5 (SEE SHEET 40).
- ALL SANITARY SERVICES SHALL BE CONSTRUCTED PER CITY DETAIL S-11 (SEE SHEET 40).
- ALL FIRE HYDRANT ASSEMBLIES SHALL BE CONSTRUCTED PER CITY DETAIL W-20 (SEE SHEET 41).

GRAVITY SEWER STRUCTURE TABLE			GRAVITY SEWER STRUCTURE TABLE			GRAVITY SEWER STRUCTURE TABLE			GRAVITY SEWER STRUCTURE TABLE		
NAME:	DETAILS:	INVERTS	NAME:	DETAILS:	INVERTS	NAME:	DETAILS:	INVERTS	NAME:	DETAILS:	INVERTS
EXSAN-4	48" DIA RIM = 7.54	8" S INV EL = -1.00 8" W INV EL = -0.90	SAN-04	48" DIA RIM = 7.97	8" SW INV EL = -0.45 8" E INV EL = -0.55	SAN-10	48" DIA RIM = 8.84	8" E INV EL = -2.75 8" W INV EL = -2.85 8" S INV EL = -2.75	SAN-16	60" DIA RIM = 7.53	8" S INV EL = 3.52
EXSAN-5	48" DIA RIM = 8.31	8" N INV EL = -3.13	SAN-05	48" DIA RIM = 8.30	8" S INV EL = 0.08 8" NE INV EL = -0.02	SAN-11	48" DIA RIM = 8.18	8" W INV EL = -1.98	SAN-17	48" DIA RIM = 7.61	8" N INV EL = 2.28 8" S INV EL = 2.18
LS-01	96" DIA RIM = 9.00	10" N INV EL = -4.30	SAN-06	48" DIA RIM = 8.63	8" S INV EL = 0.61 8" N INV EL = 0.51	SAN-12	48" DIA RIM = 7.95	8" S INV EL = -1.40 8" N INV EL = -1.50	SAN-18	48" DIA RIM = 7.59	8" N INV EL = 0.78 8" S INV EL = 0.68
SAN-01	48" DIA RIM = 8.20	8" W INV EL = -3.95 8" E INV EL = -3.95 10" S INV EL = -4.05	SAN-07	48" DIA RIM = 8.00	8" SW INV EL = 1.14 8" N INV EL = 1.04	SAN-13	48" DIA RIM = 8.15	8" S INV EL = -0.05 8" N INV EL = -0.15	SAN-19	48" DIA RIM = 7.59	8" N INV EL = -0.72 8" E INV EL = -0.82 8" S INV EL = -0.72
SAN-02	48" DIA RIM = 8.29	8" W INV EL = -2.47 8" E INV EL = -2.57	SAN-08	48" DIA RIM = 8.10	8" SW INV EL = 1.59 8" NE INV EL = 1.49	SAN-14	48" DIA RIM = 8.01	8" S INV EL = 1.30 8" N INV EL = 1.20	SAN-20	48" DIA RIM = 7.64	8" N INV EL = -0.31
SAN-03	48" DIA RIM = 7.92	8" W INV EL = -0.99 8" E INV EL = -1.09	SAN-09	48" DIA RIM = 7.94	8" NE INV EL = 2.31	SAN-15	48" DIA RIM = 7.94	8" N INV EL = 2.55			

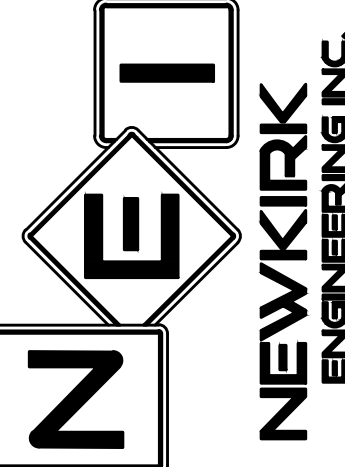
SHALLOW MANHOLE PER
CITY DETAIL S-7



REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS
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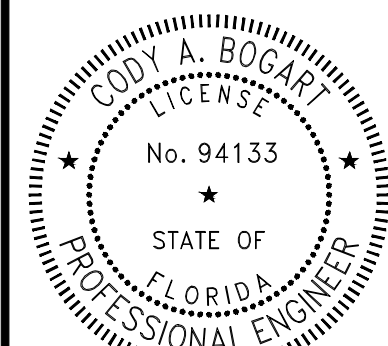
OVERALL UTILITY PLAN

MADELINE COMMONS

975 McDONALD ROAD
PORT ORANGE, FL 32129

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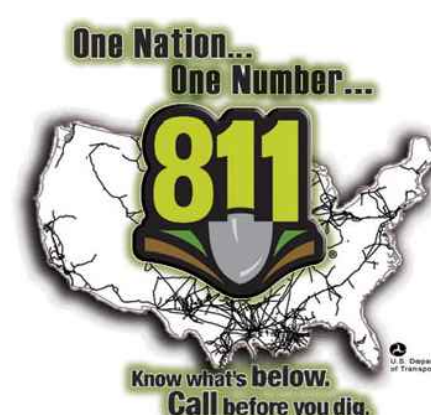
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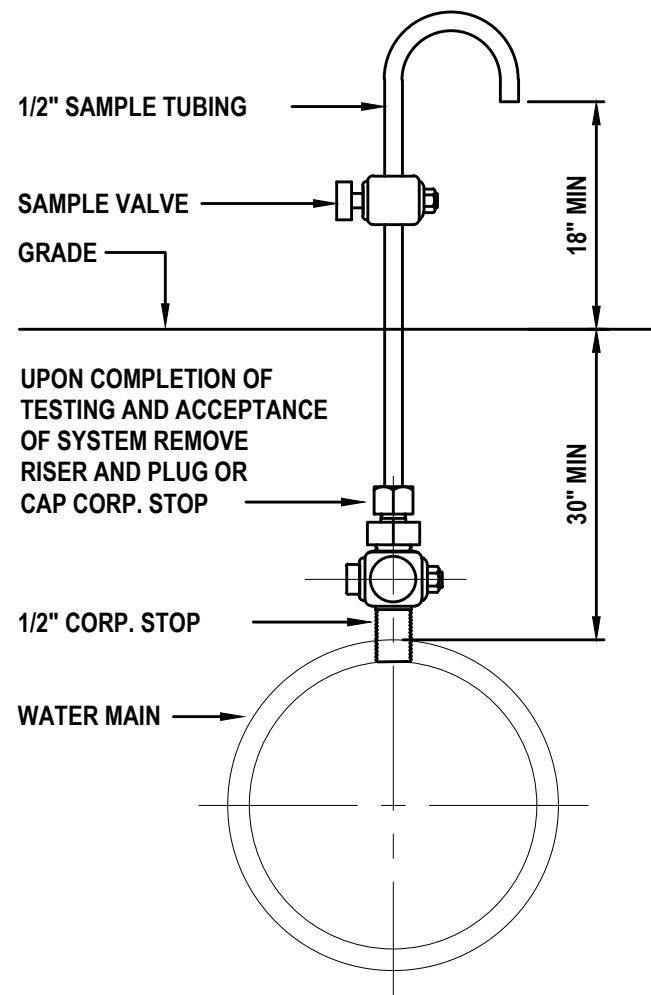
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SCALE:	1"=80'
DRAWING NUMBER	

26

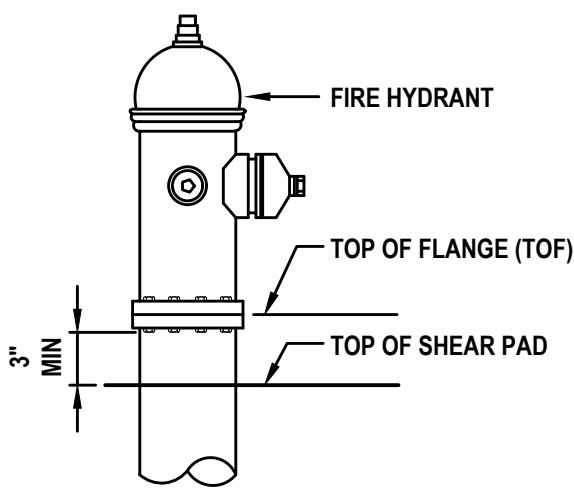


WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES, GAS MAINS, UNDERGROUND ELECTRIC AND FIBER OPTIC LINES IN THE RIGHT-OF-WAY.



BACTERIOLOGICAL SAMPLE POINT DETAIL

NOT TO SCALE



TOP OF FLANGE REFERENCE POINT DETAIL

NOT TO SCALE

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING AT CROSSINGS (FULL JOINT CENTERED)
STORM SEWER, STORMWATER FORCE MAIN, RECLAIMED WATER (2)			
VACUUM SANITARY SEWER			
GRAVITY OR PRESSURE SANITARY SEWER, SANITARY SEWER FORCE MAIN, RECLAIMED WATER (4)			
ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM	10 FT MINIMUM (3)	—	—

- (1) WATER MAIN SHOULD CROSS ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
(2) RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
(3) 3 FT FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
(4) RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

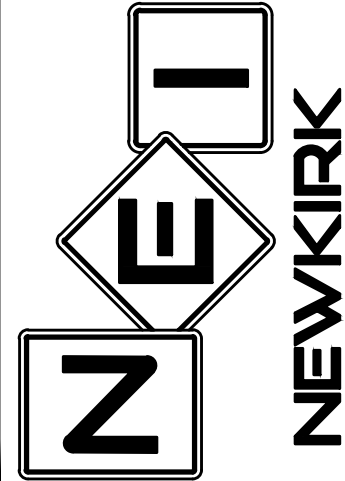
TABLE 1: CLASSES OF EMBEDMENT AND BACKFILL MATERIALS

ASTM D 2321 MATERIAL CLASS	ASTM D 2487 USCS SOIL GROUP	MATERIAL TYPE	% PASSING			ATTERBERG LIMITS	
			1 1/2 IN.	NO. 4	NO. 200	LL	PI
IA	NONE	MANUFACTURED OPEN GRADED AGGREGATES	100%	≤10%	<5%	NON PLASTIC	
IB	NONE	MANUFACTURED DENSE GRADED AGGREGATES	100%	≤50%	<5%	NON PLASTIC	
II	GW	COARSE-GRAINED SOILS, CLEAN	100%	<50% OF "COARSE FRACTION"	<5%	NON PLASTIC	
	GP			>50% OF "COARSE FRACTION"			
	SW						
	SP						
III	GM	COARSE-GRAINED SOILS W/ FINES	100%	<50% OF "COARSE FRACTION"	12% TO 50%		<4 OR <"A" LINE
	GC			>50% OF "COARSE FRACTION"			<7 OR >"A" LINE
	SM						>4 OR <"A" LINE
	SC						>7 OR >"A" LINE
IV-A	ML	FINE-GRAINED SOILS	100%	100%	>50%	<50	<4 OR <"A" LINE
	CL						>7 OR >"A" LINE

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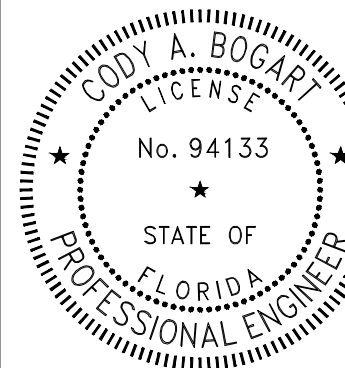
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**UTILITY
DETAILS AND NOTES**
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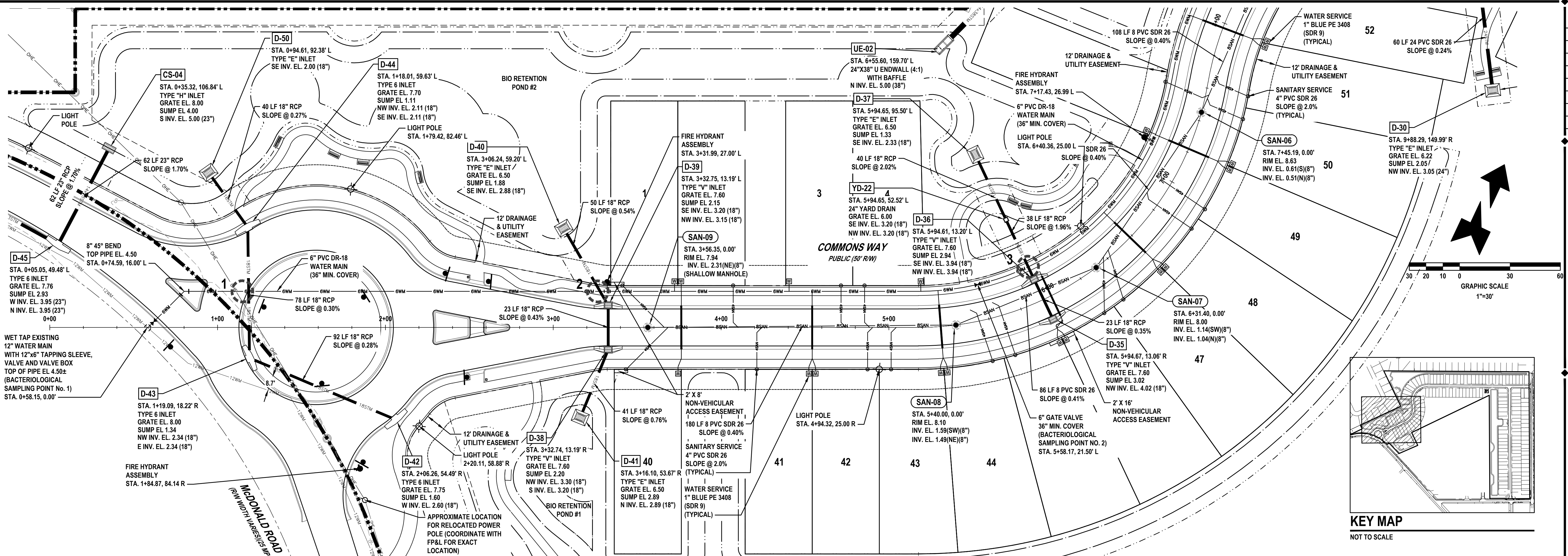


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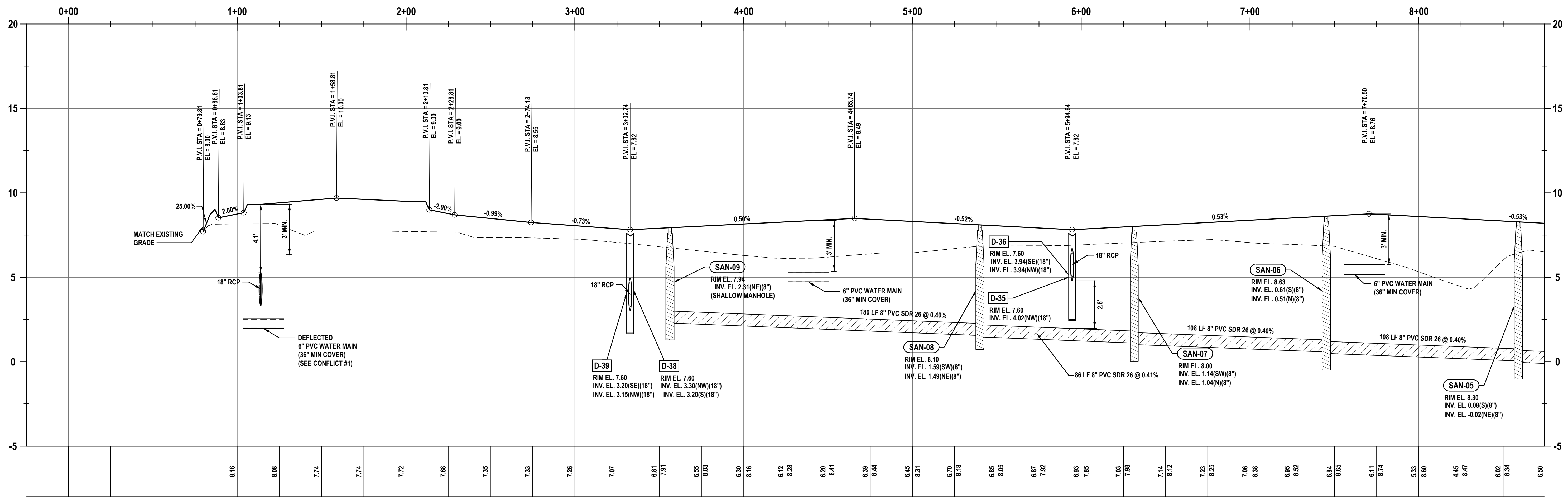
SCALE:
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27



HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

STATION 0+00 TO STATION 8+00



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11/8/22	CITY COMMENTS

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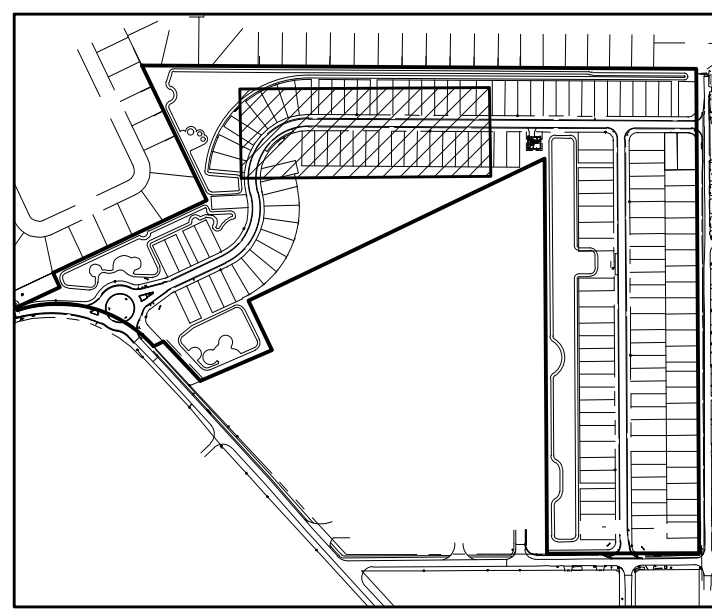
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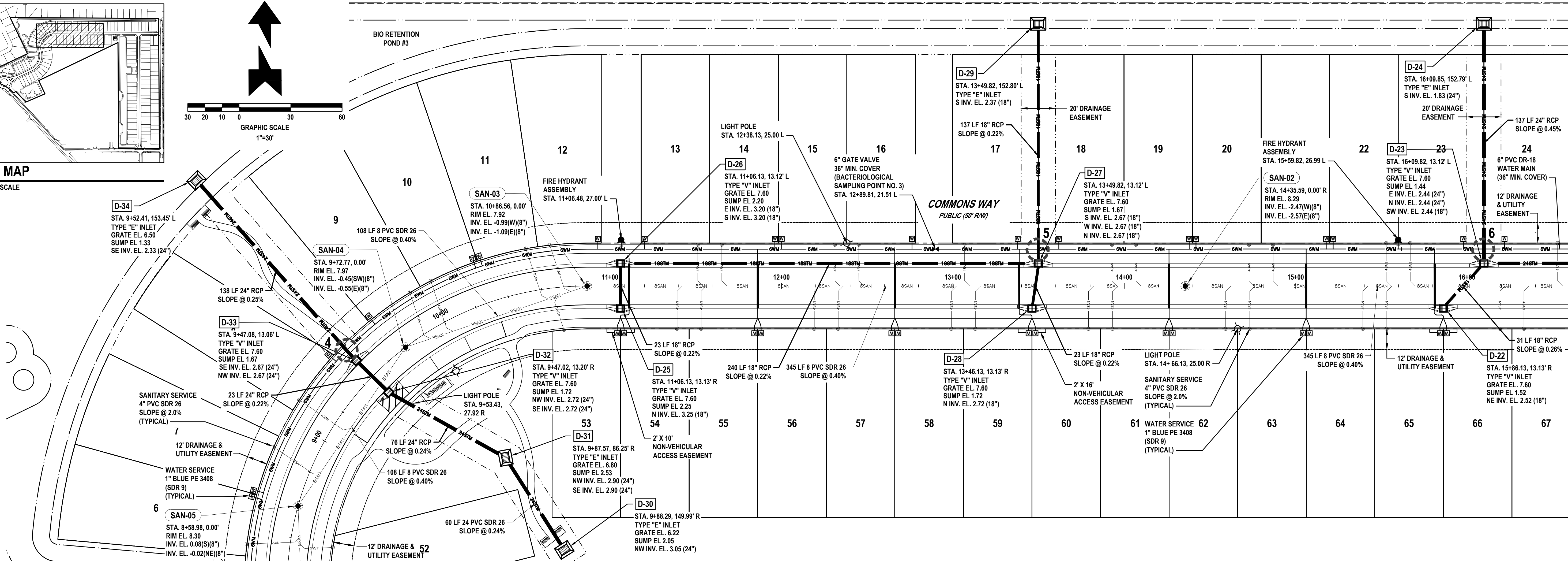
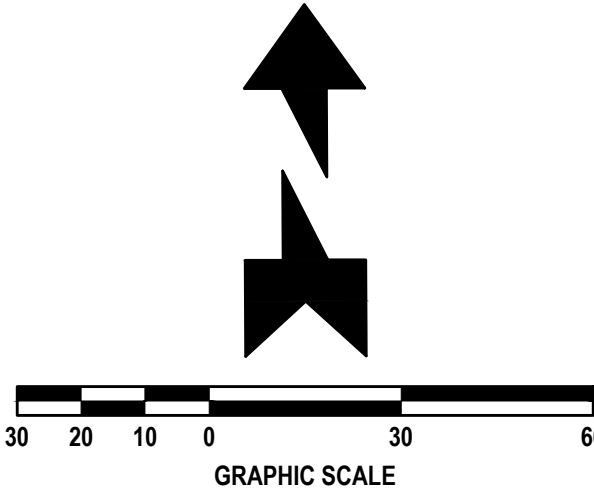
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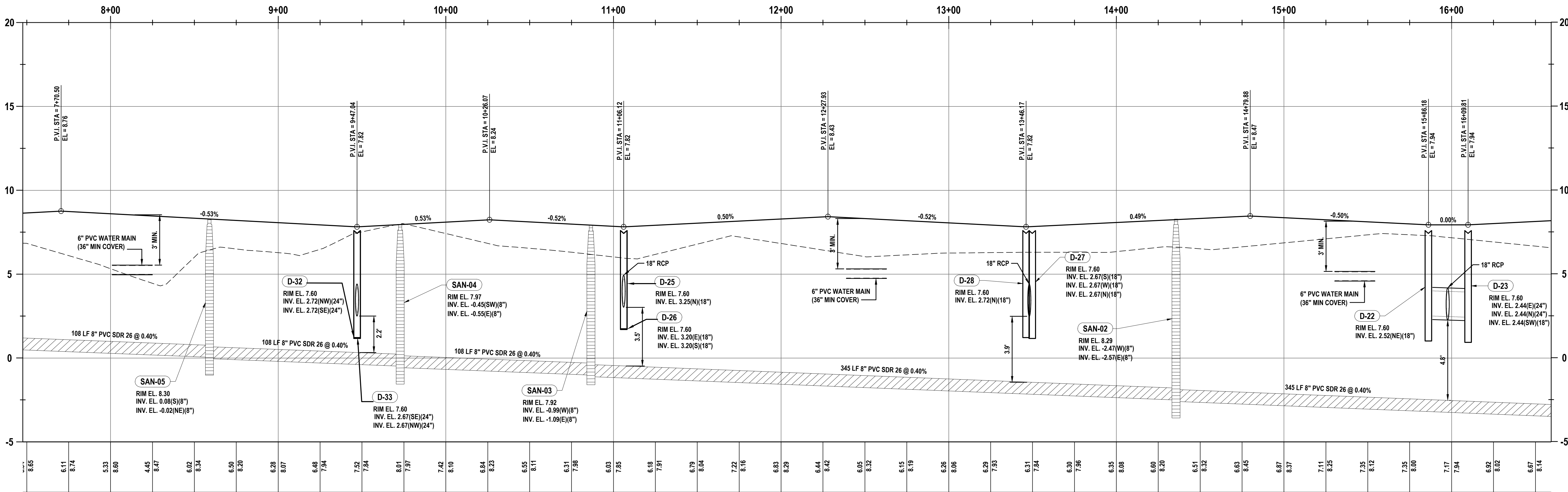
Page 61 of



KEY MAP
NOT TO SCALE



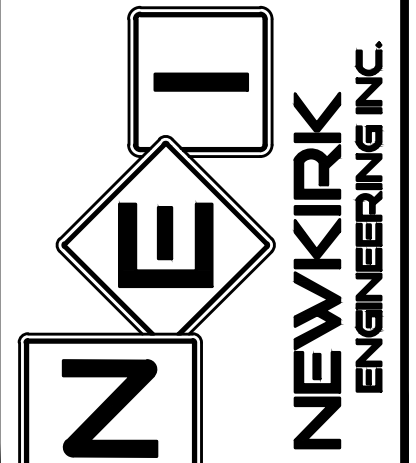
STATION 8+00 TO STATION 16+00



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11/8/22	CITY COMMENTS

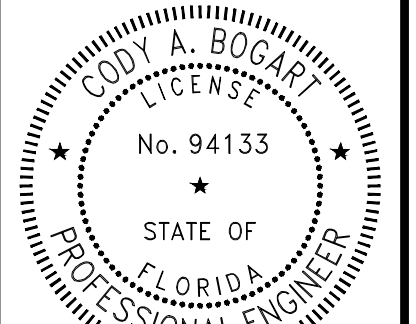
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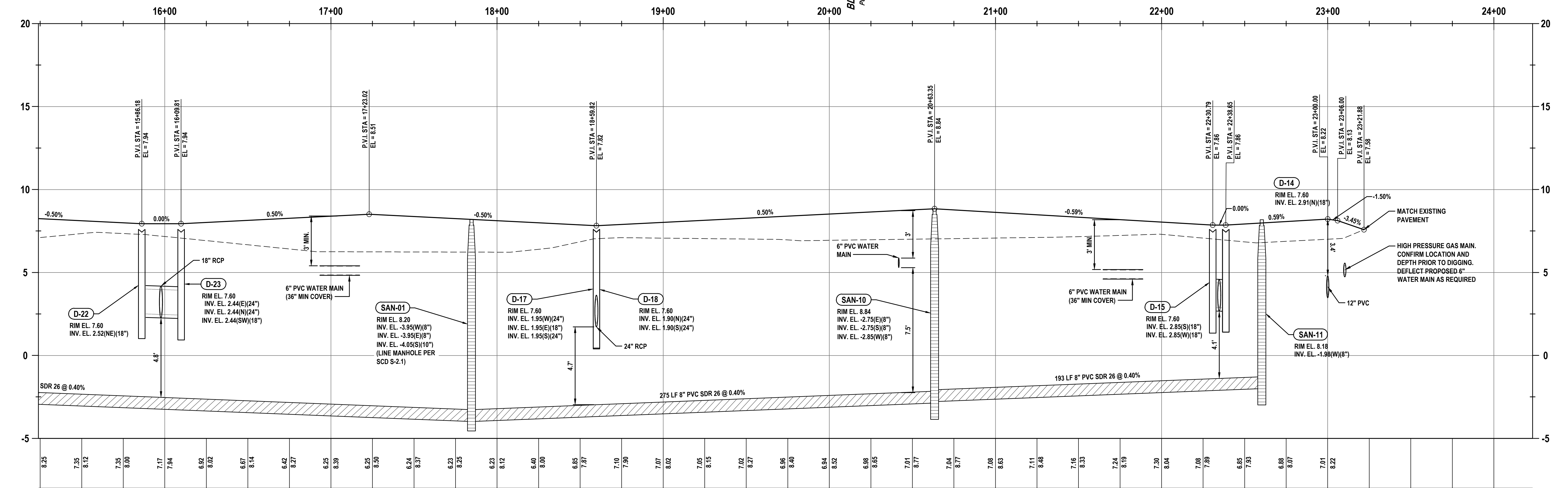
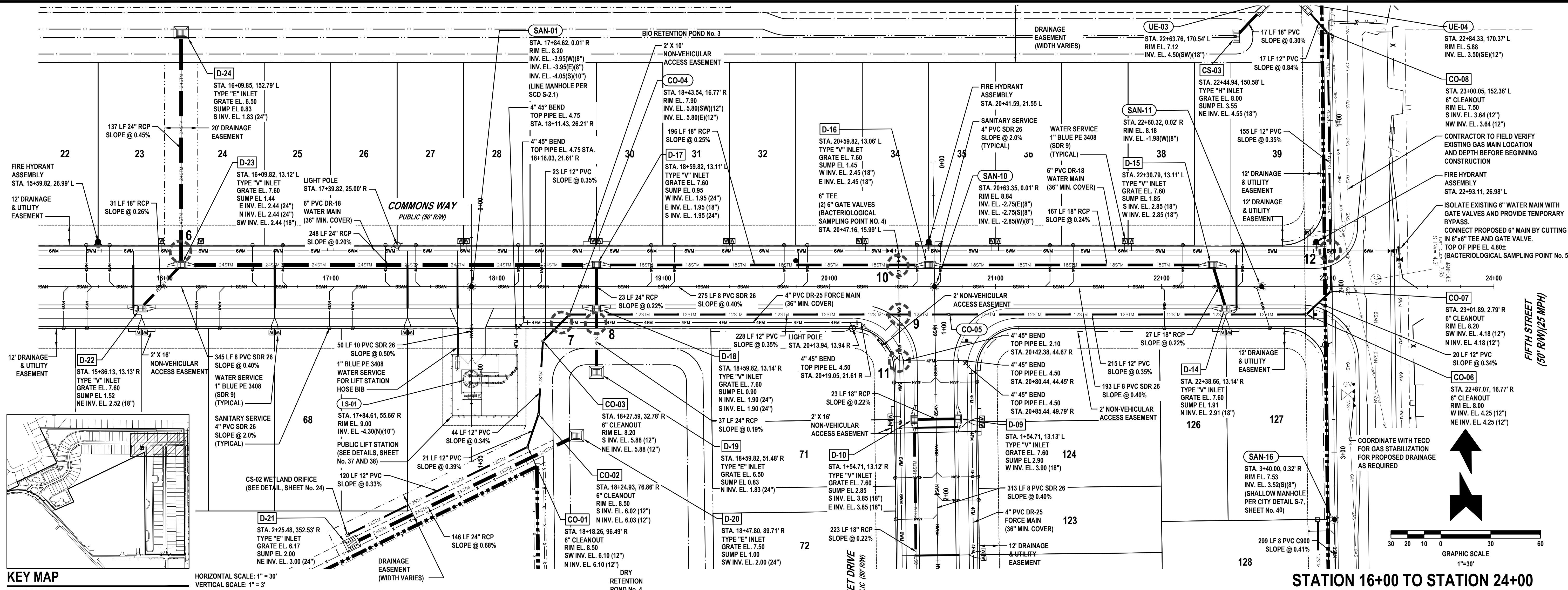


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11/8/22	CITY COMMENTS

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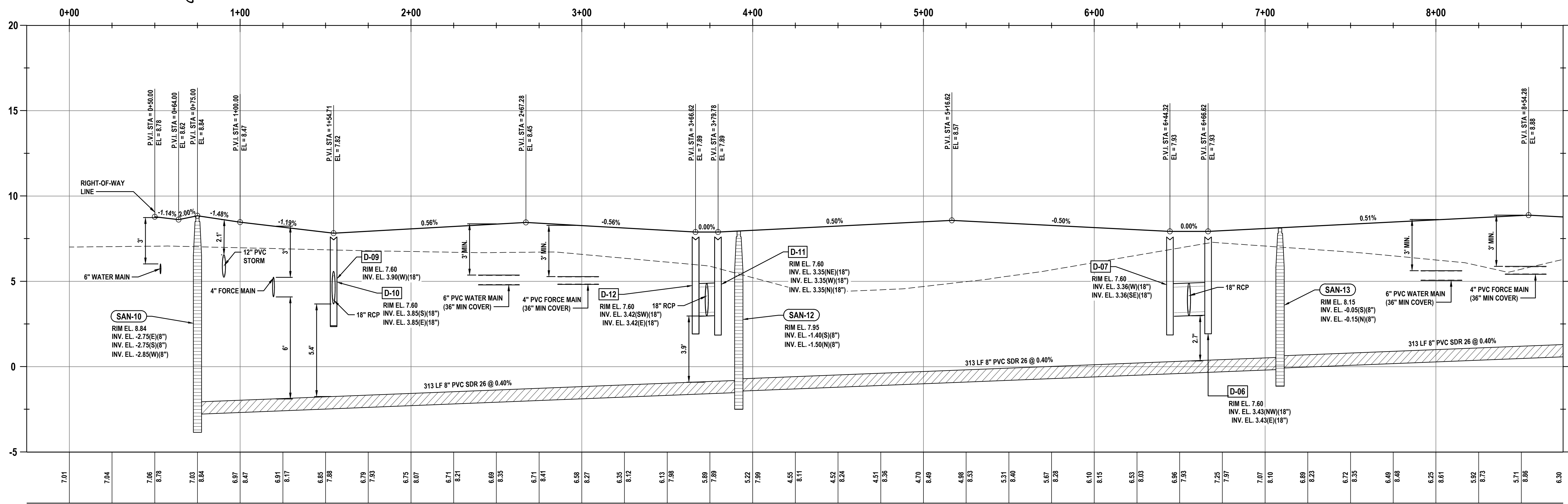
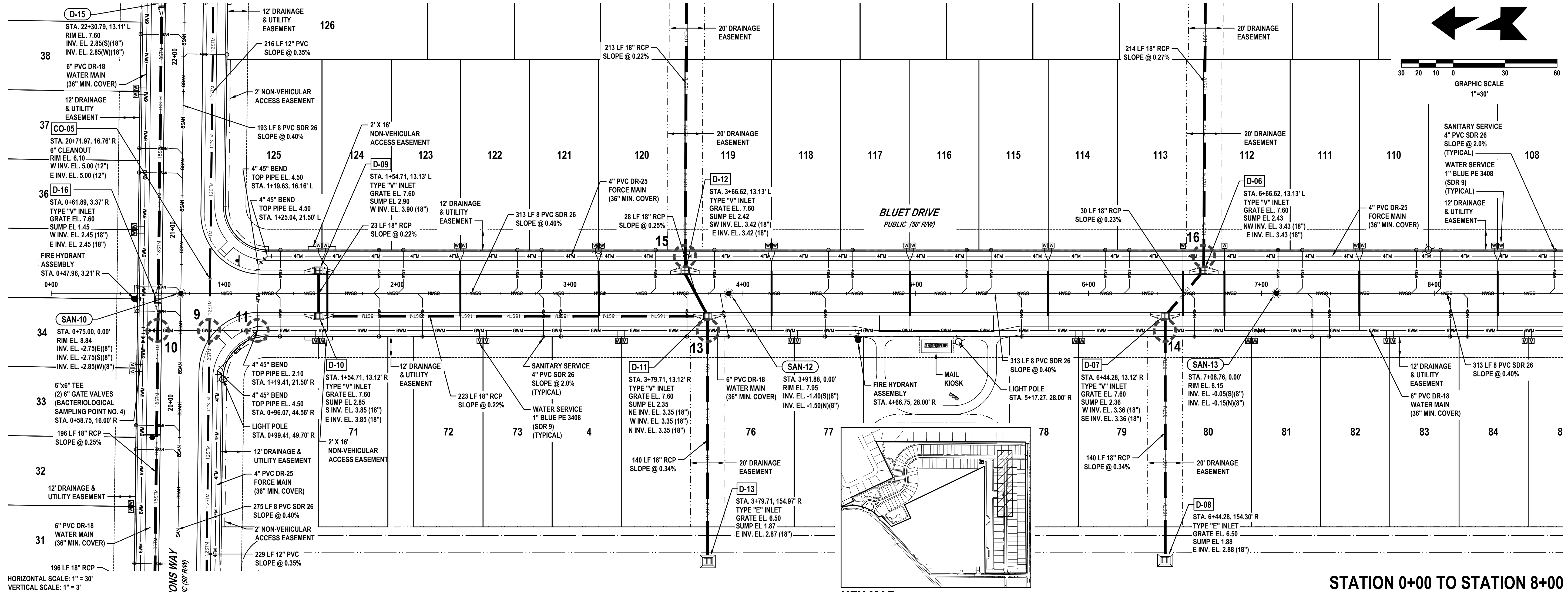
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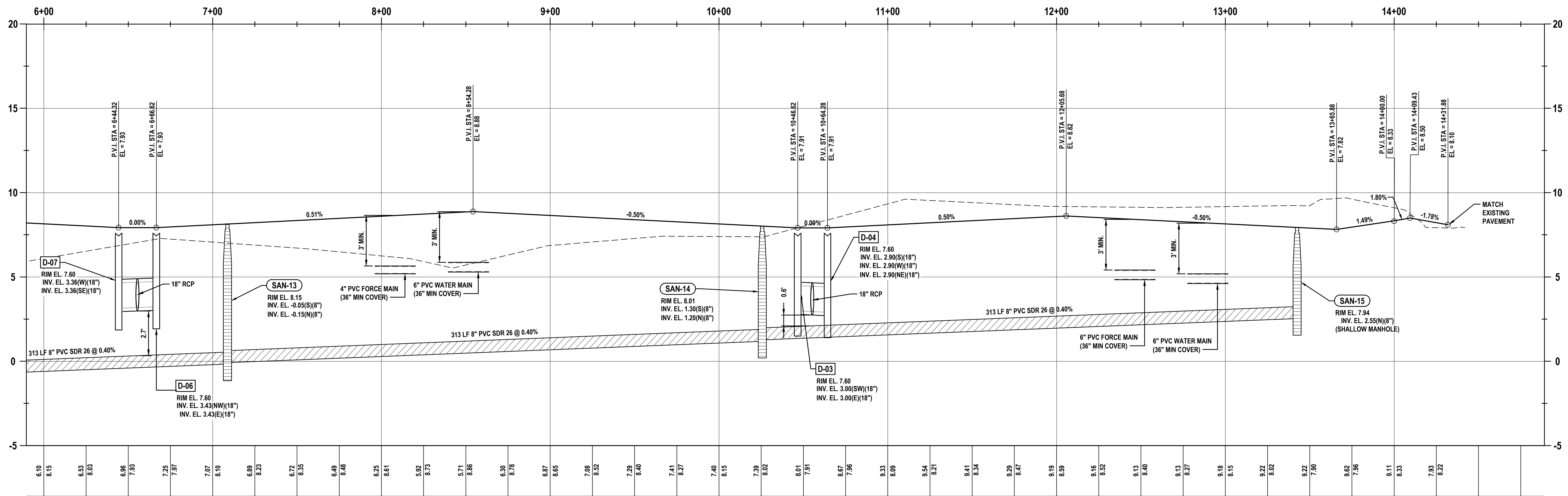
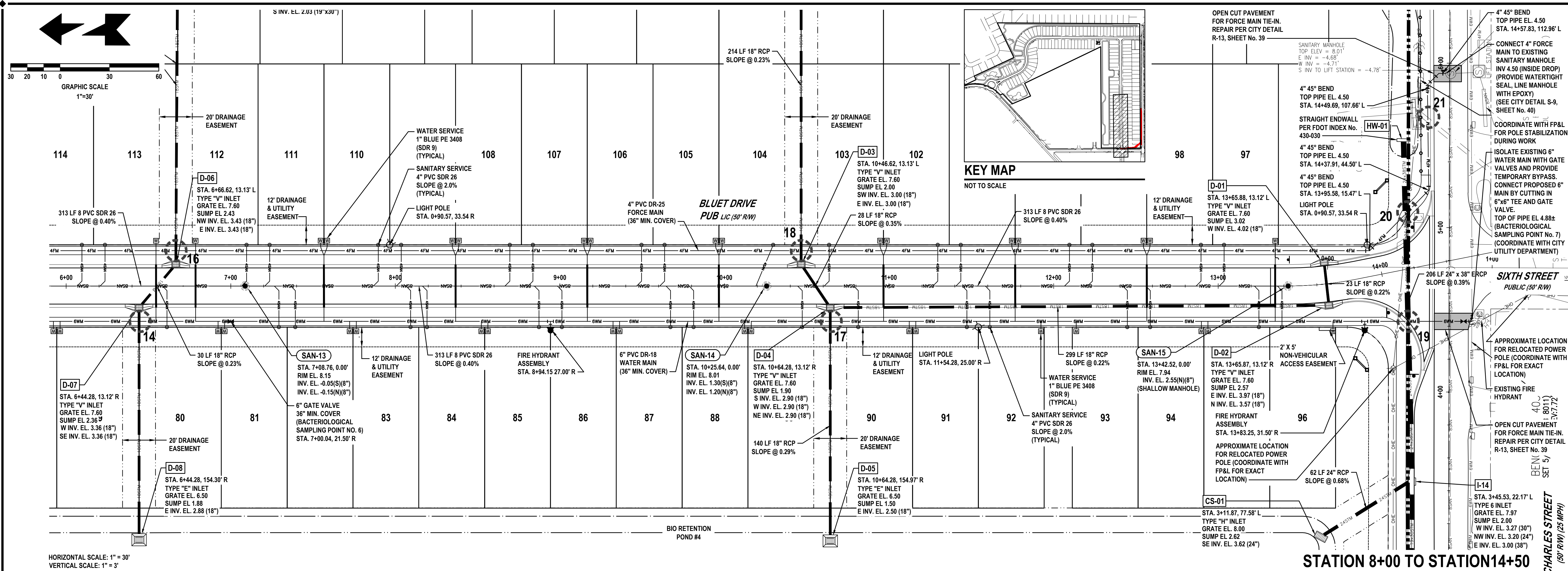
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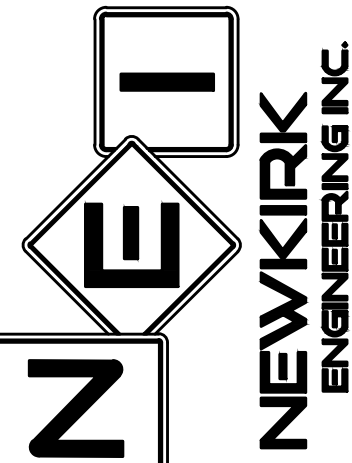
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11/8/22	CITY COMMENTS

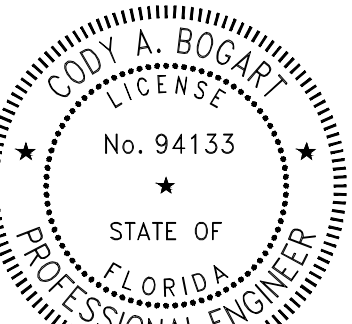
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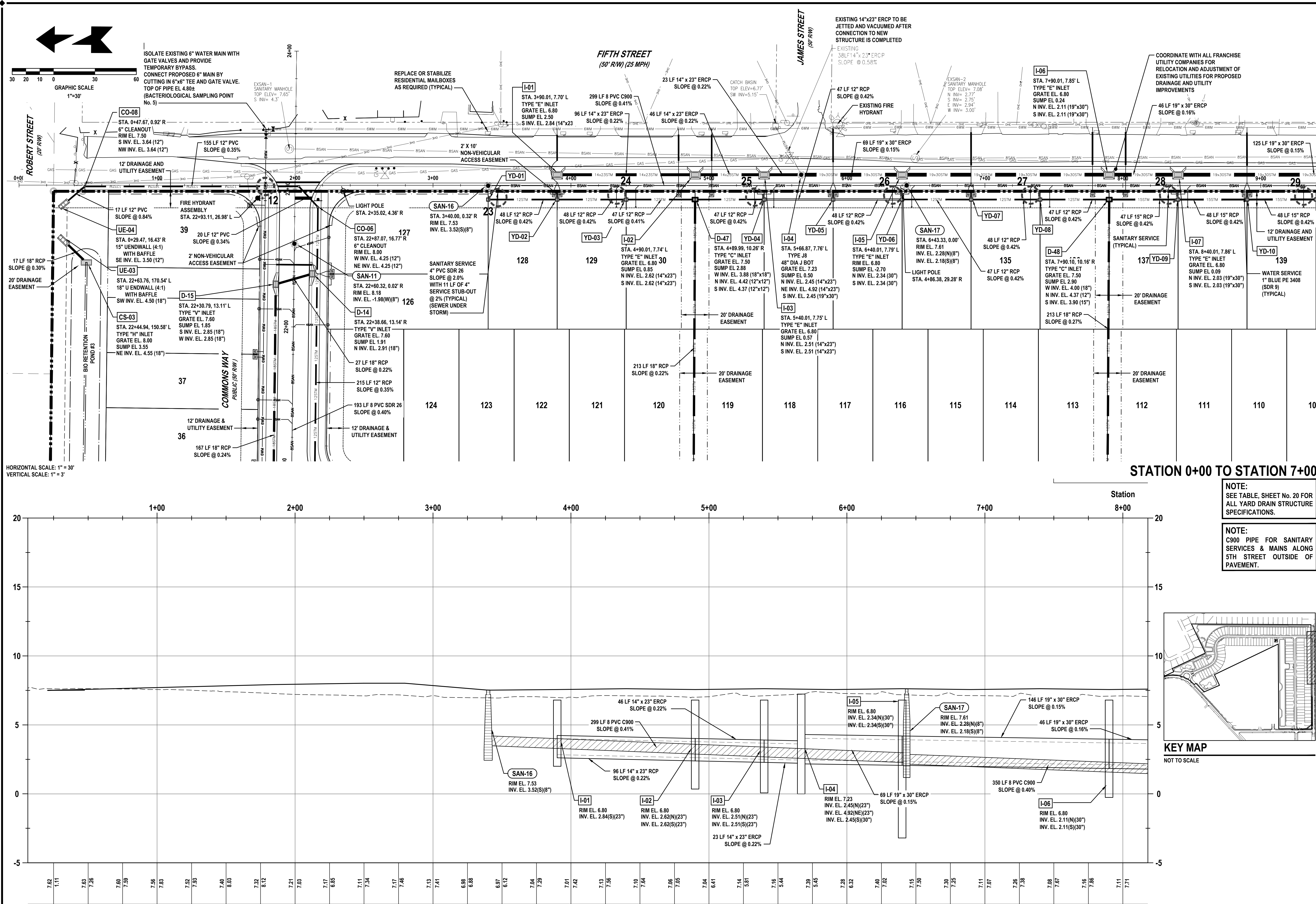


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PLAN / PROFILE - 5TH STREET
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PORT ORANGE, FL 32129

NOTE:
SEE TABLE, SHEET No. 20 FOR
ALL YARD DRAIN STRUCTURE
SPECIFICATIONS.

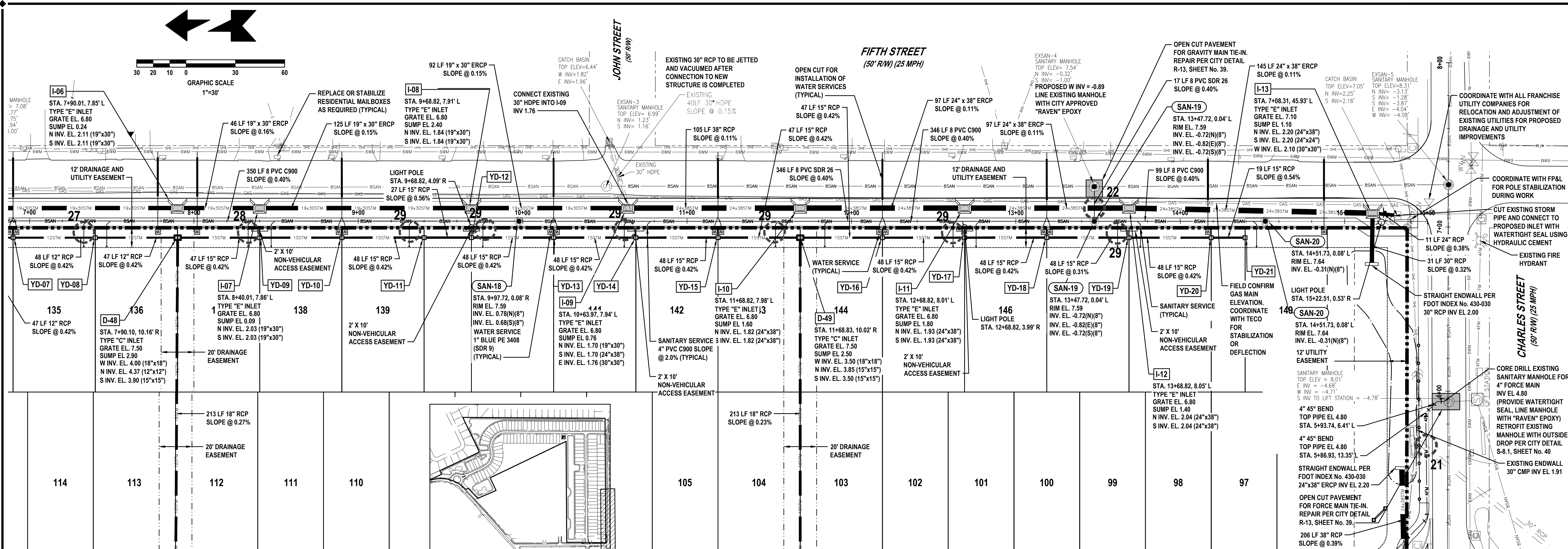
NOTE:
C900 PIPE FOR SANITARY
SERVICES & MAINS ALONG
5TH STREET OUTSIDE OF
PAVEMENT.

KEY MAP
NOT TO SCALE

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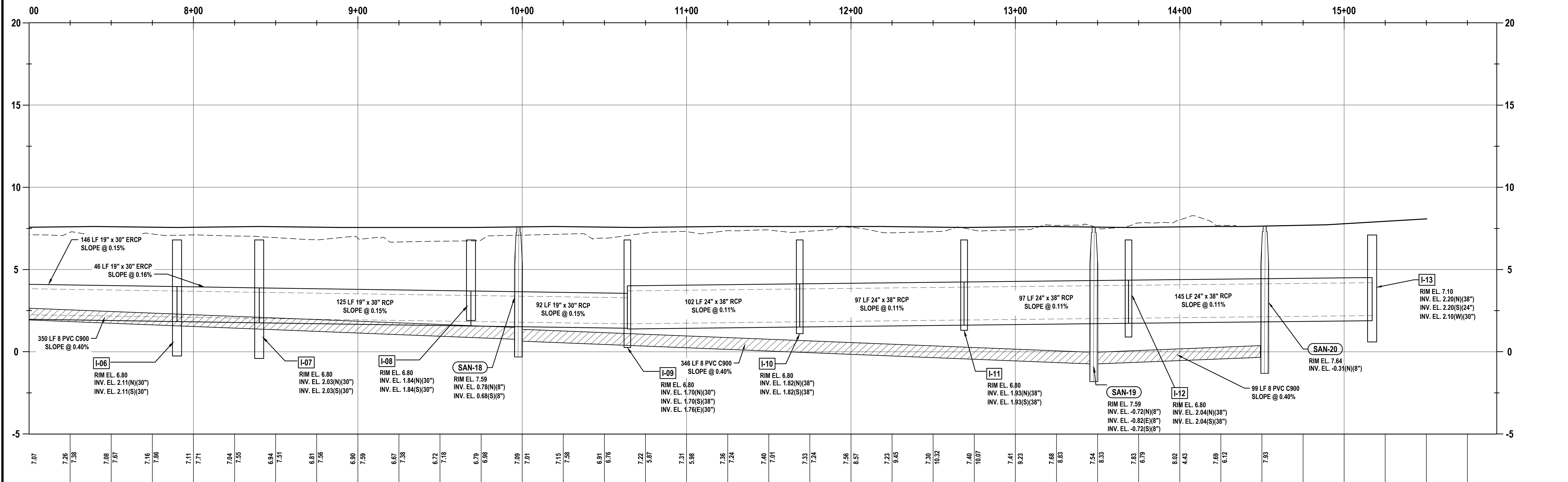


HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

KEY MAP
NOT TO SCALE

NOTE:
C900 PIPE FOR SANITARY
SERVICES & MAINS ALONG
5TH STREET OUTSIDE OF
PAVEMENT.

NOTE:
SEE TABLE, SHEET No. 20 FOR
ALL YARD DRAIN STRUCTURE
SPECIFICATIONS.



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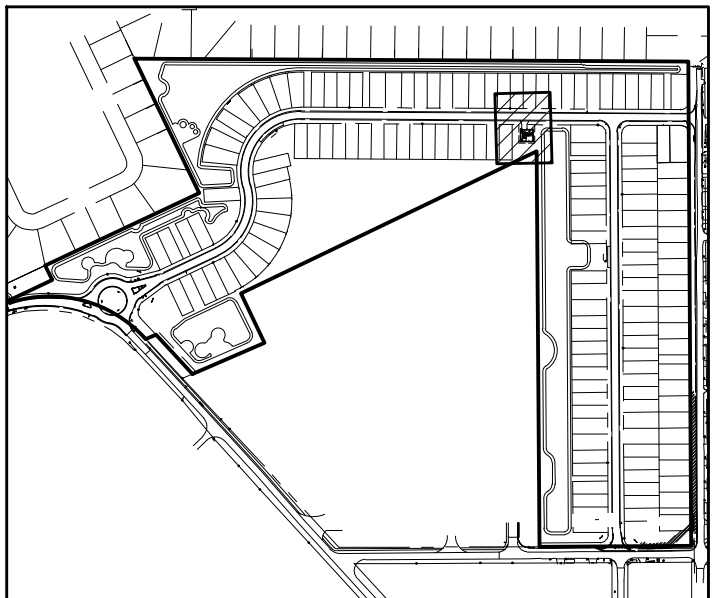
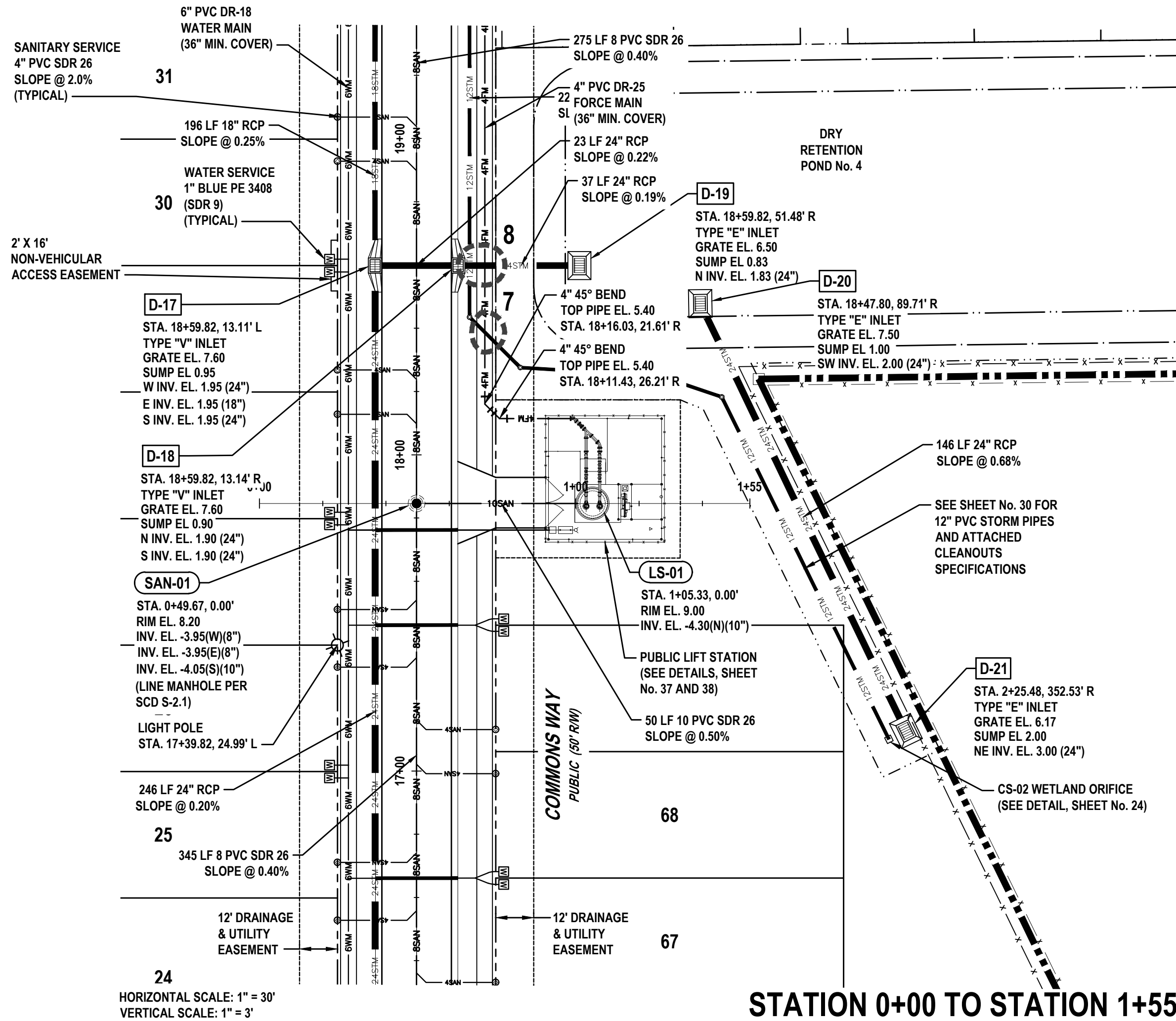
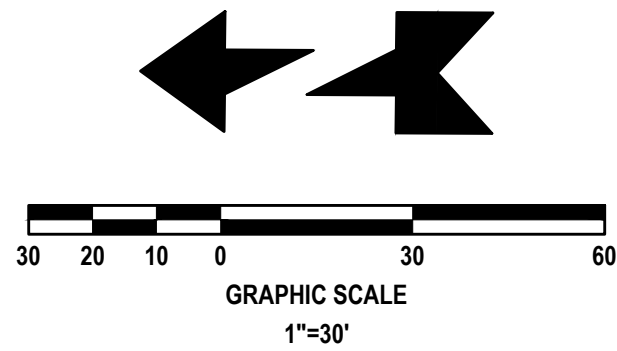
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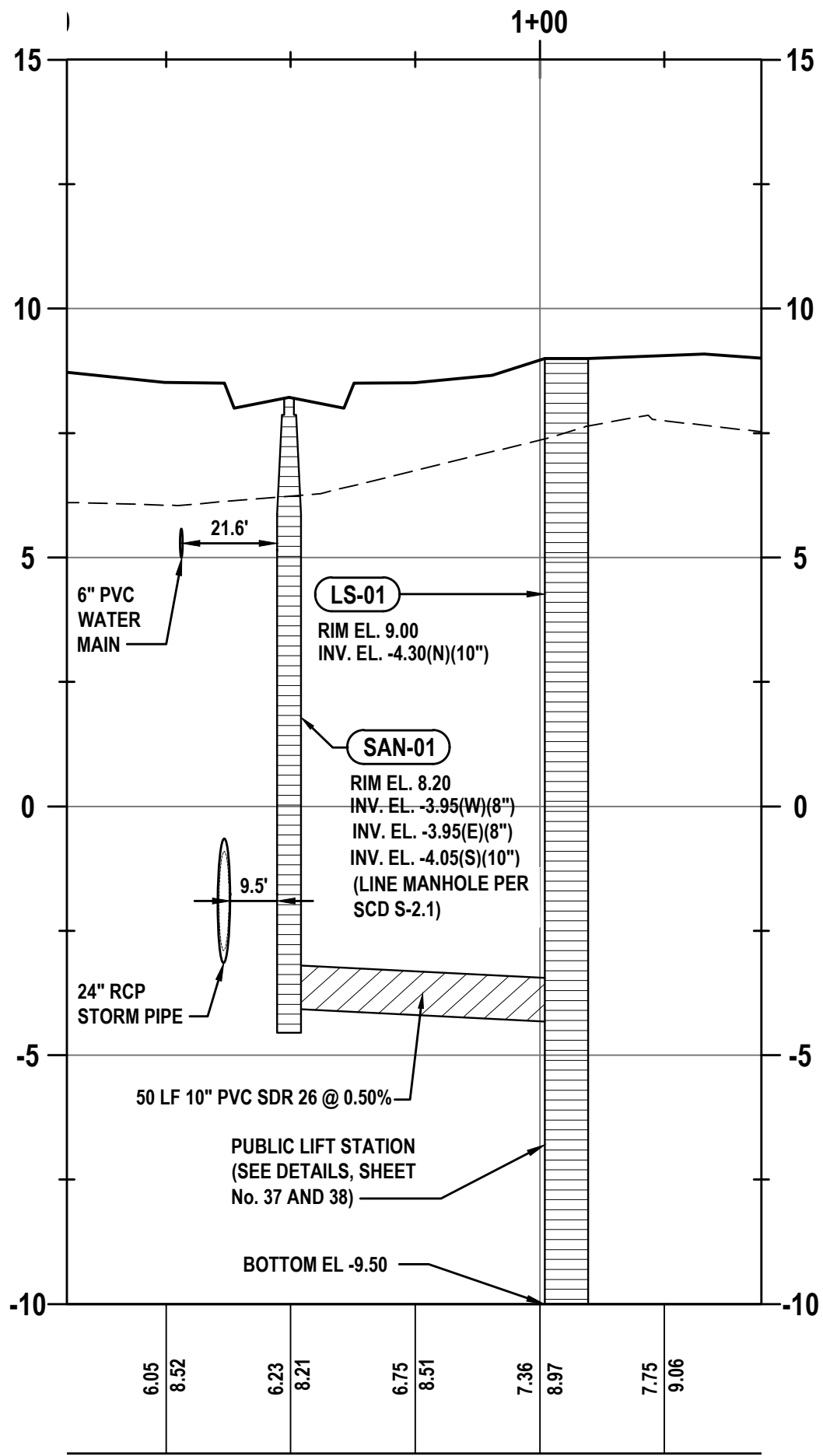
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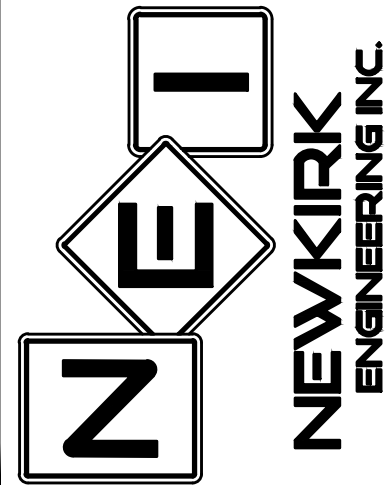
KEY MAP
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10/3/22	CITY COMMENTS
11/8/22	CITY COMMENTS

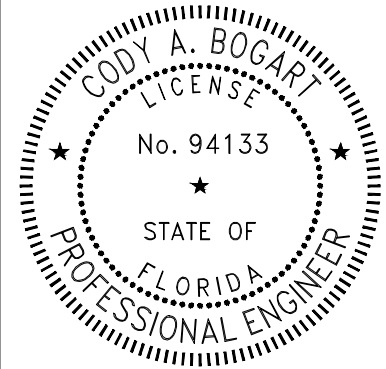
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PLAN / PROFILE - LIFT STATION
STA. 0+00 TO 1+55
MADELINE COMMONS
975 McDONALD ROAD
PORT ORANGE, FL 32129

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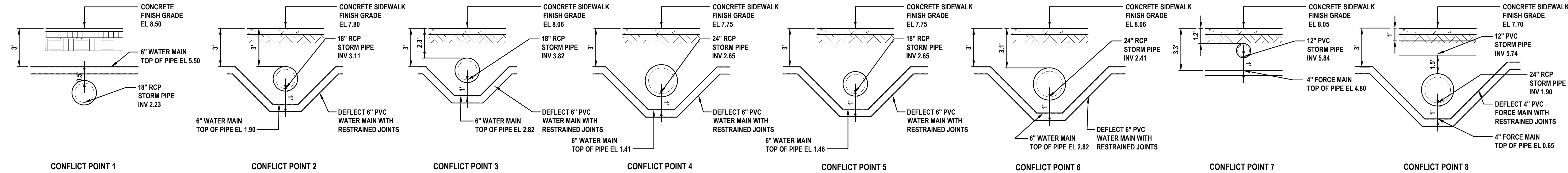


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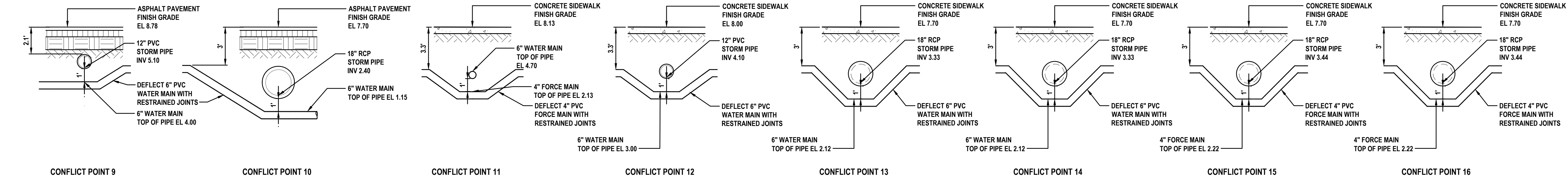
PROJECT No:	2021-309
DATE:	JULY 2022
DESIGN BY:	CAB
DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	1" = 30'

DRAWING NUMBER

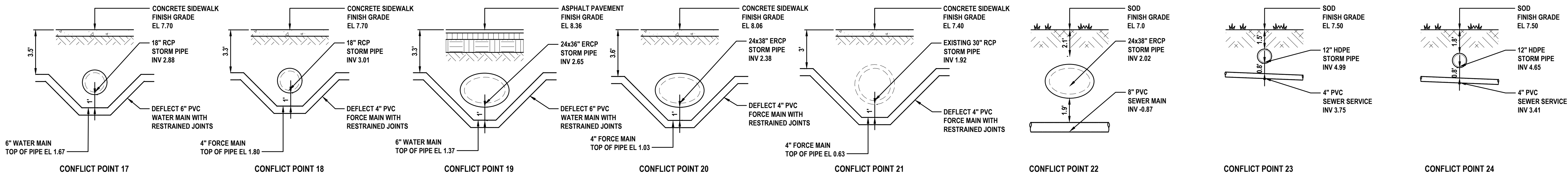
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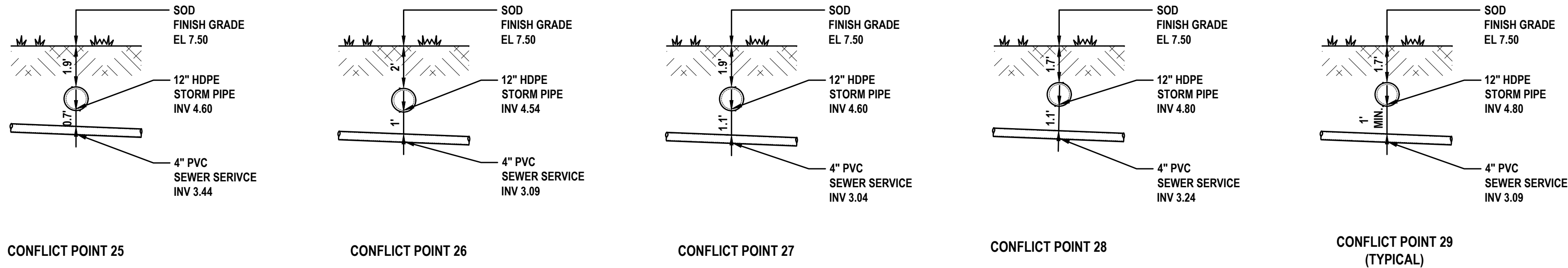
UTILITY CONFLICT DETAIL
NOT TO SCALE



UTILITY CONFLICT DETAIL
NOT TO SCALE



UTILITY CONFLICT DETAIL
NOT TO SCALE

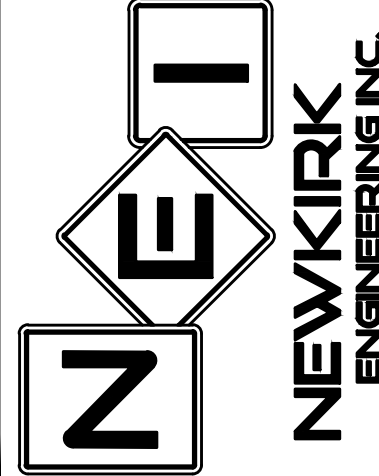


UTILITY CONFLICT DETAIL
NOT TO SCALE

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS
10/3/22	CITY COMMENTS

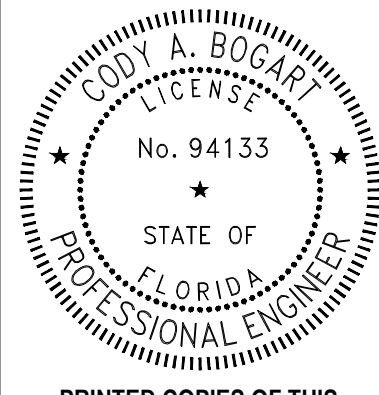
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PORT ORANGE, FL 32129

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TECHNICAL DATA

SULZER

Submersible Sewage Pump Type ABS XFP

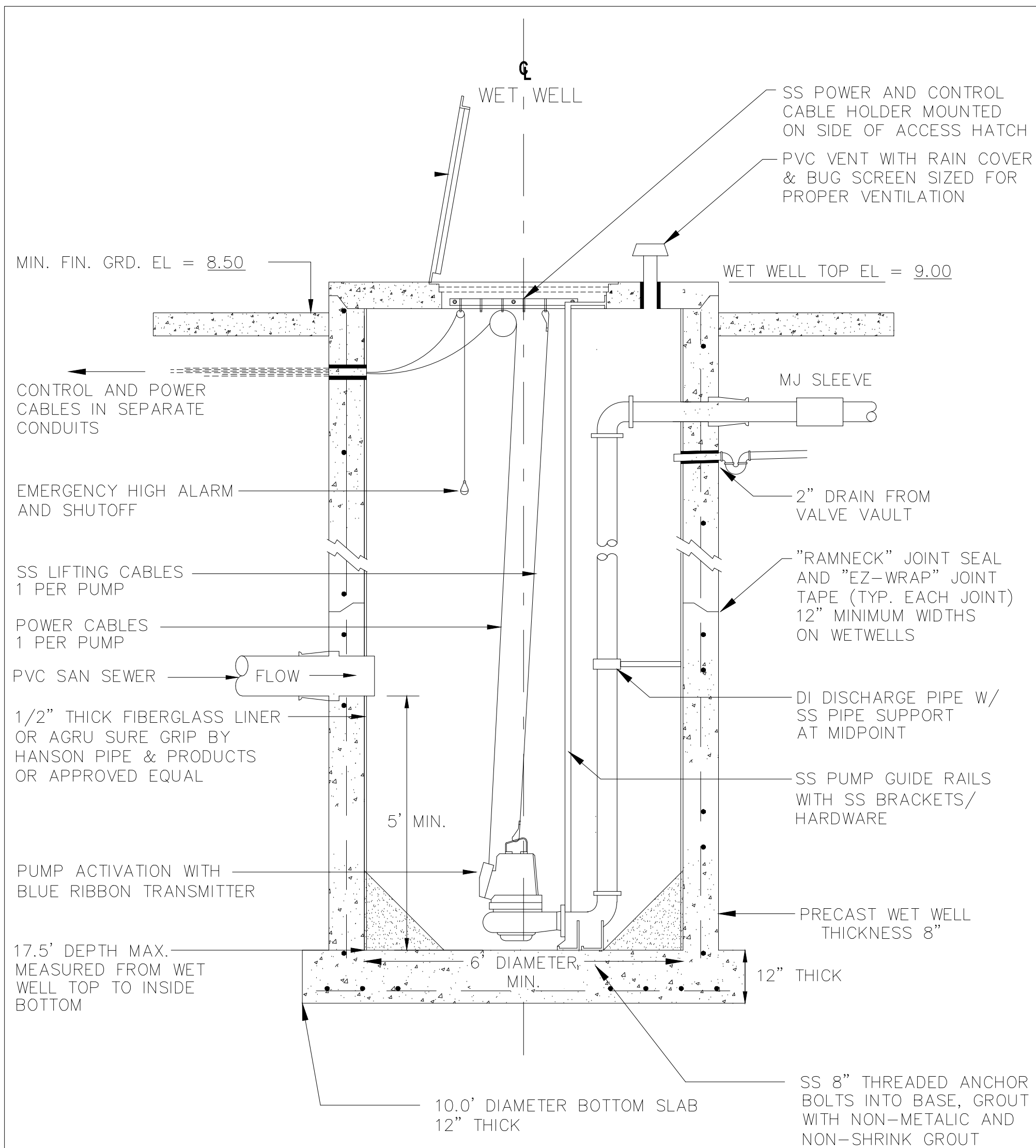
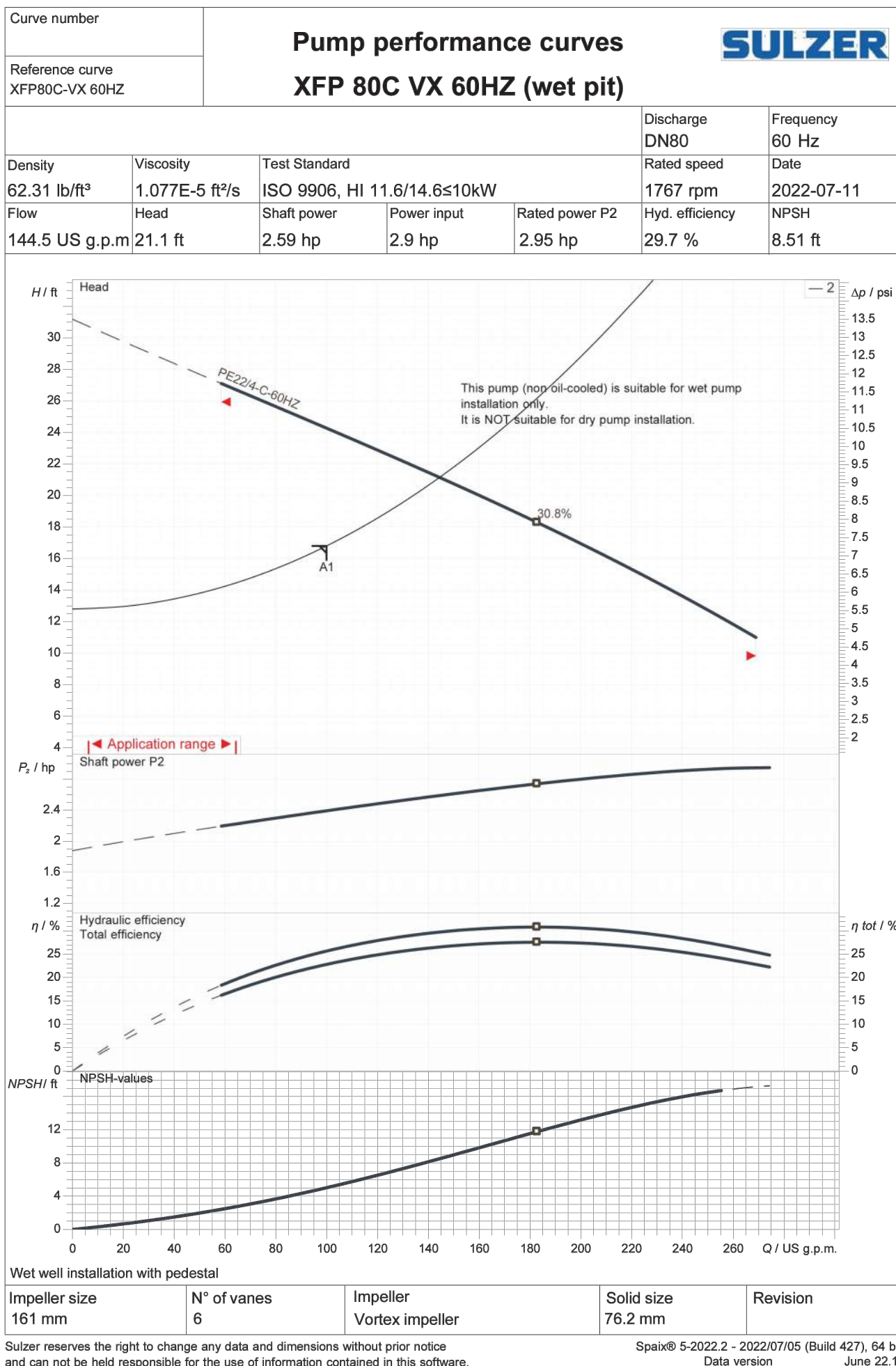
XFP 80C-VX | 3", 4 Pole, 3-Phase, 60 Hz, PE1

Submersible Motor Specifications, PE1 Frame	
Motor Design	NEMA design B, squirrel cage induction
Motor Type	Fully enclosed Premium Efficiency submersible, IP68 protection rating
Motor Efficiency Standard and Rating	IEC 60034-30, IE3 rating
Motor Efficiency Test Protocol	IEC 60034-3-1
Insulation Material	Class H, 180°C (350°F), copper windings
Motor Filling Medium	AP
Temperature Rise	Class A, Class B with optional cooling system
Maximum Fluid Temperature	40°C (104°F) continuous, 50°C (122°F) intermittent
Cooling System	OPT
Thermal	Environmentally safe, nontoxic, oil-filled motor, no cooling jacket required
Motor Protection	Normally closed bimetallic switch in each phase, connected in series, 140°C (284°F) at 5°C (41°F) opening temperature
Leakage	Moisture detection probe in seal sensing chamber (for use with appropriate relay)
Sensing Chamber Filling Medium	Environmentally safe, nontoxic oil
Bearing Type	Upper: Single row deep groove ball bearing, permanently lubricated Lower: Double row angular contact ball bearing, permanently lubricated
Motor Starter Types	Suitable for use with direct-on-line (DOL), electronic soft starters, and PWM type Variable Frequency Drives
Maximum Starts per Hour	15, evenly spaced
Inverter Duty Rating	Motors meet NEMA MG1, part 31 requirements
Maximum Submergence	20 meters (65 feet)
Available Voltages	208, 230, 460, 600 (consult factory for other voltages)
Voltage Tolerance from Rated	+/-10%
Agency Approvals	Factory Mutual, CSA
Explosion Proof Rating	NEC 500 Class 1, Division 1, Group C & D, Class T3C max surface temp



*Output filters may be required on VFDs. See document DS-E60-001 for details.

Motor Ratings, PE1 Frame														
Motor Model	Input Power (P1)	Rated Power Output (P2)	Nominal RPM	Rated Voltage	Full Load Amps	Locked Rotor Amps	NEMA Code Letter	NEMA Service Factor	Motor Efficiency at % Load			Power Factor at % Load		
									100	75	50	100	75	50
PE 22/4	2.5 kW	2.2 kW 3.0 HP	1762	208	10.1	92	M	1.3	89.7	88.4	84.6	.677	.579	.449
				230	9.1	83								
				460	4.6	42								
				600	3.5	32								
PE 35/4	3.9 kW	3.5 kW 4.7 HP	1731	208	13.7	92	H	1.3	89.5	91.3	92.5	.790	.721	.582
				230	12.4	83								
				460	6.2	41								
				600	4.8	32								



STANDARD CONSTRUCTION DETAIL
SUBMERSIBLE LIFT STATION LAYOUT -
WET WELL
MODIFIED BY NEI FOR PROJECT

REV. 12/18

FILE NAME:

S17.DWG

DETAIL REF:

S-16.1

SEE DETAILS FOR LIFT STATION ON SHEET 38

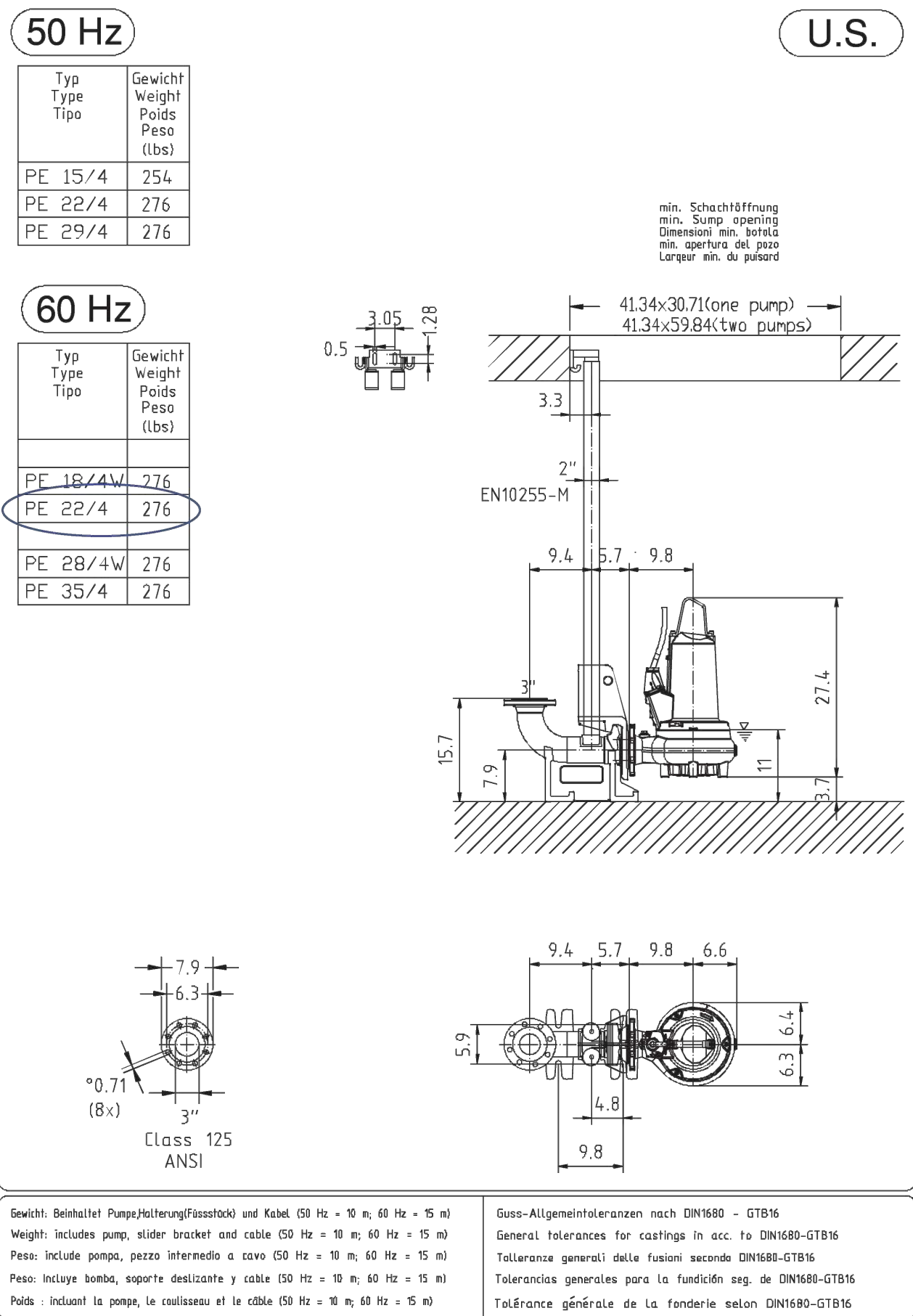
	STAGE (EL)	
ELEV. OF TOP WET WELL	9.00	FT
FORCE MAIN DISCHARGE ELEV.	4.75	FT
ELEV. OF INFLUENT PIPE INVERT	-4.30	FT
HIGH WATER ALARM	-4.80	FT
LAG PUMP ON	-5.50	FT
LEAD PUMP ON	-6.50	FT
PUMP OFF	-8.00	FT
BOTTOM	-9.50	FT

LIFT STATION PUMP DATA:

SULZER
MODEL NUMBER = XFP 80C XV 60HZ
IMPELLER DIA. = 161 mm
DISCHARGE DIA. = 4"
SUCTION DIA. = 4"
R.P.M. = 1760 HORSEPOWER = 2.95 HP
G.P.M. = 144.5 T.D.H. = 21.1
ELECTRICAL REQUIREMENTS = 230 VOLTS, 3 PHASE

*CONFIRM WITH PUMP DETAIL ABOVE

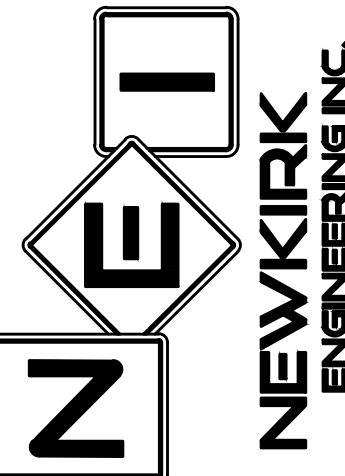
SULZER	Massblatt XFP 80C-VX Twin Guide Rail Dimension Sheet XFP 80C-VX Twin Guide Rail Dimensioni installazione sommersa Hoja de dimensiones instalación sumergida Plan d'encastrement installation noyée	No. AN-M22610-06 Drawn: 11/08/10 / 3rd Revision Issue Date: 09/05/2013 Änderungen vorbehalten Technical changes reserved Con réserve de modification Sous réserve de modification
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REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS

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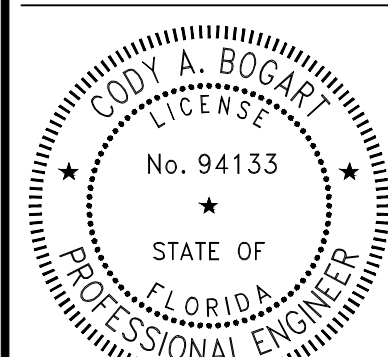
LIFT STATION DETAILS

MADELINE COMMONS

975 McDONALD ROAD
PORT ORANGE, FL 32129

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PROJECT No: 2021-309

DATE: JULY 2022

DESIGN BY: CAB

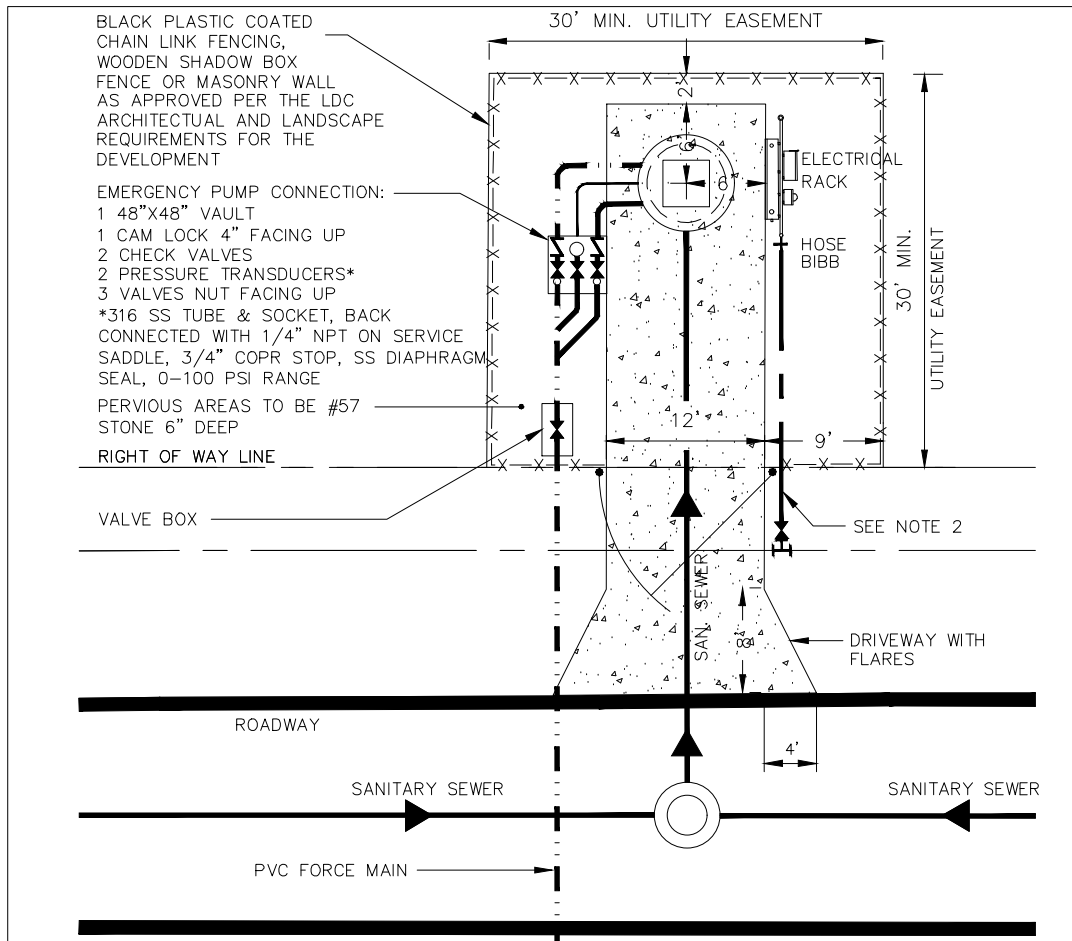
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SCALE: AS SHOWN

DRAWING NUMBER

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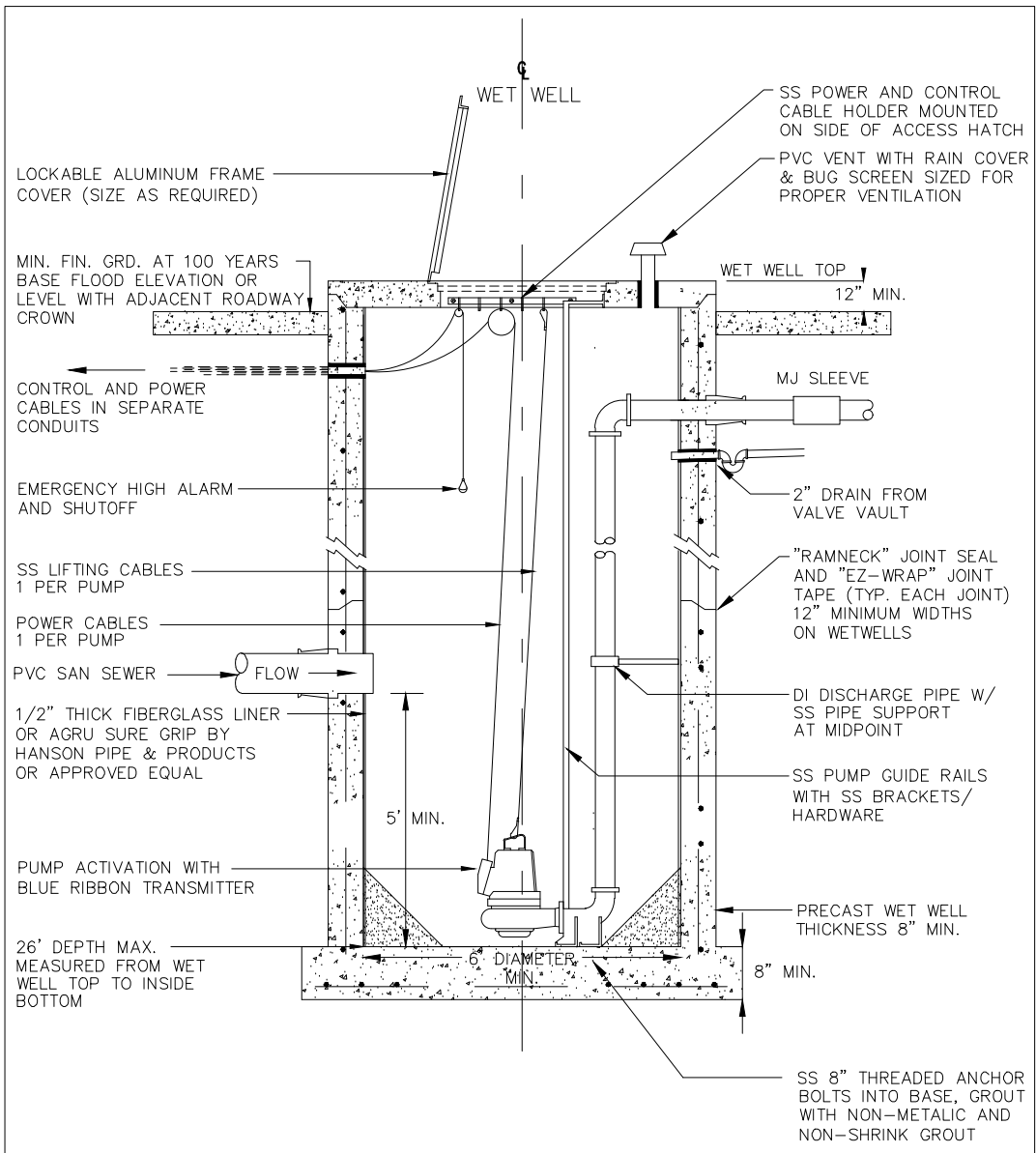
- NOTES:**
1. DRIVEWAY TO BE 6" THICK 3,000 PSI CONCRETE AT 28 DAYS WITH 6X6 10/10 WW MESH. BASE TO BE COMPACTED AND TESTED TO 98% DENSITY WITH MINIMUM LBR 40 BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.
 2. SERVICE WITH HOSE BIB. IF RECLAIMED WATER IS UNAVAILABLE FOR LIFT STATION WATER SERVICE, CONTRACTOR SHALL CONNECT TO POTABLE WATER WITH BPF DEVICE.
 3. 12" HAMMERHEAD DRIVEWAY OUTSIDE FENCE MAY BE REQUIRED DEPENDS ON SITE CONDITION.
 4. FENCE MAY BE RELOCATED INTERNALLY WITHIN SITE TO CREATE A 25' X 25' SITE IF LANDSCAPING MATERIALS ARE INSTALLED AROUND THE PERIMETER. ANY FENCE MATERIAL OTHER THAN BLACK PLASTIC COATED CHAIN LINK OR WOODEN SHADOW BOX SHALL BE MAINTENANCE BY DEVELOPER OR HOA.
 5. SITE FINISH GRADE SHALL BE EQUAL TO OR GREATER THAN THE C/L ELEVATION OF ADJACENT ROADWAY. PROVIDE POSITIVE DRAINAGE AWAY FROM CENTER AND SITE SURROUNDINGS.

STANDARD CONSTRUCTION DETAIL
SUBMERSIBLE LIFT STATION LAYOUT

FILE NAME:
S16.DWG

DETAIL REF:
S-16

REV. 12/18

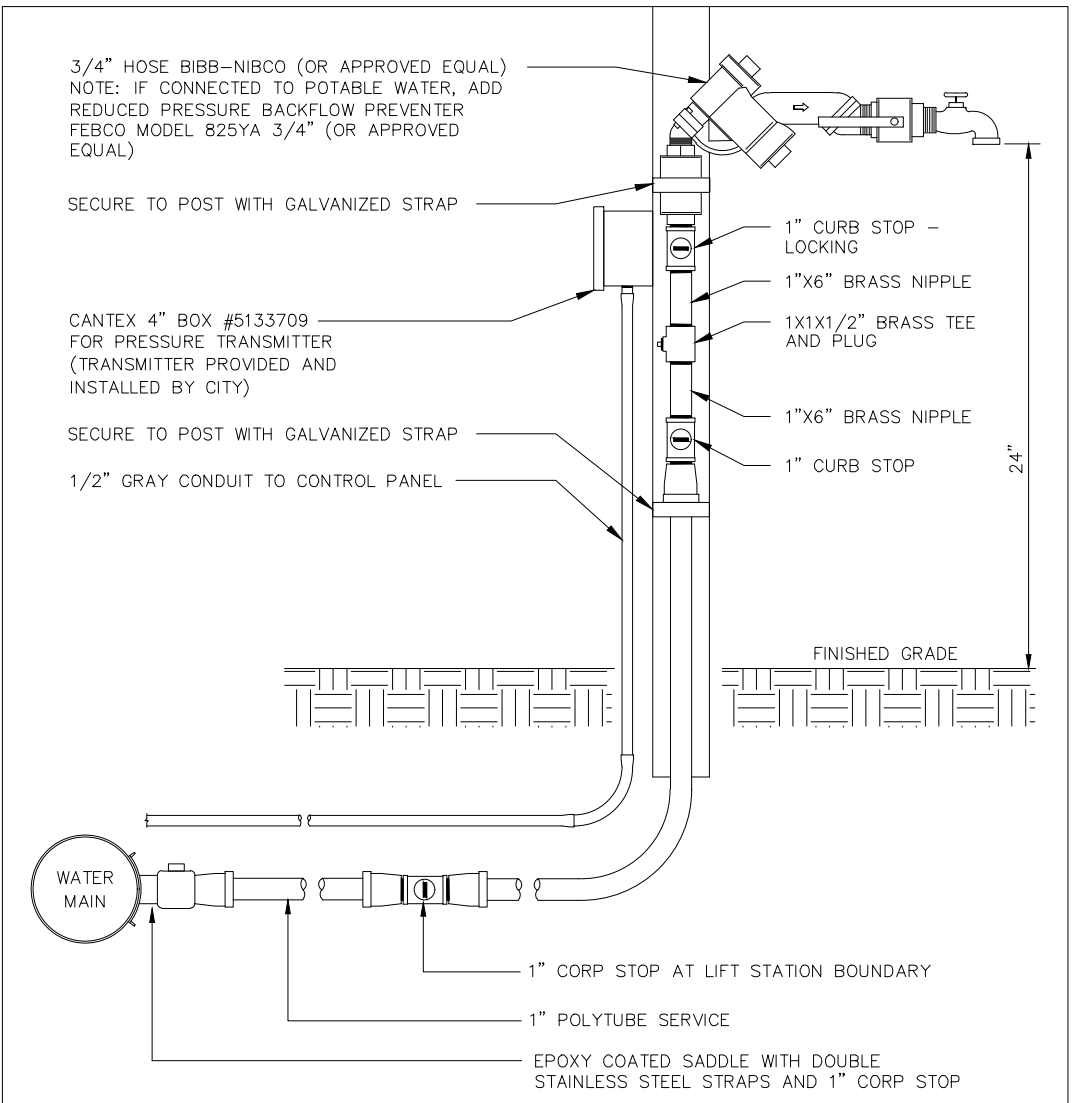


STANDARD CONSTRUCTION DETAIL
SUBMERSIBLE LIFT STATION LAYOUT - WET WELL

FILE NAME:
S17.DWG

DETAIL REF:
S-16.1

REV. 12/18



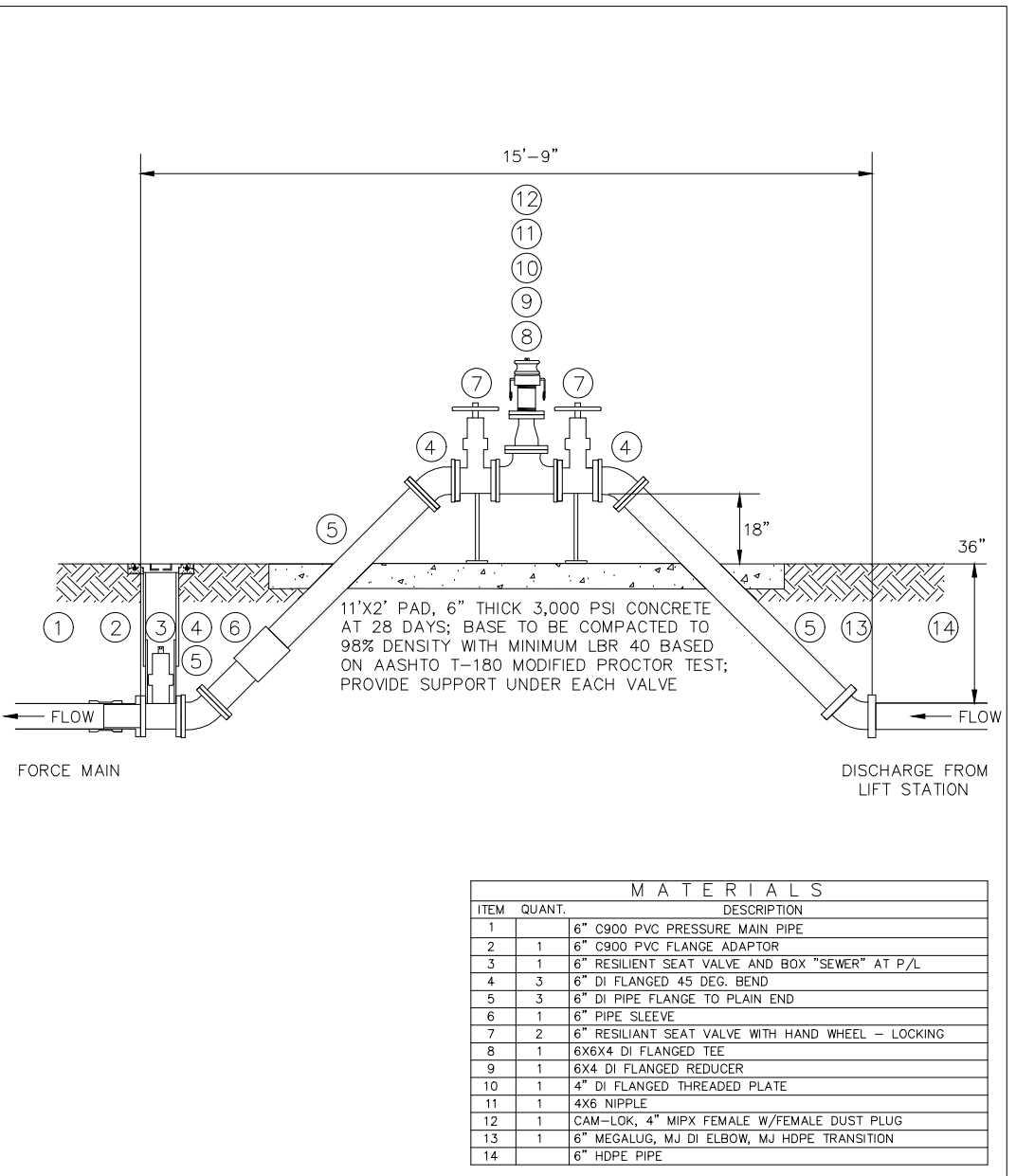
- NOTE:**
1. RECLAIM WATER TO BE USED AT LIFT STATIONS.
 2. WHERE RECLAIM WATER IS NOT AVAILABLE, POTABLE WATER TO BE USED WITH REDUCED PRESSURE BACKFLOW PREVENTER.

STANDARD CONSTRUCTION DETAIL
LIFT STATION WATER SERVICE

FILE NAME:
S17.DWG

DETAIL REF:
S-17

REV. 12/18

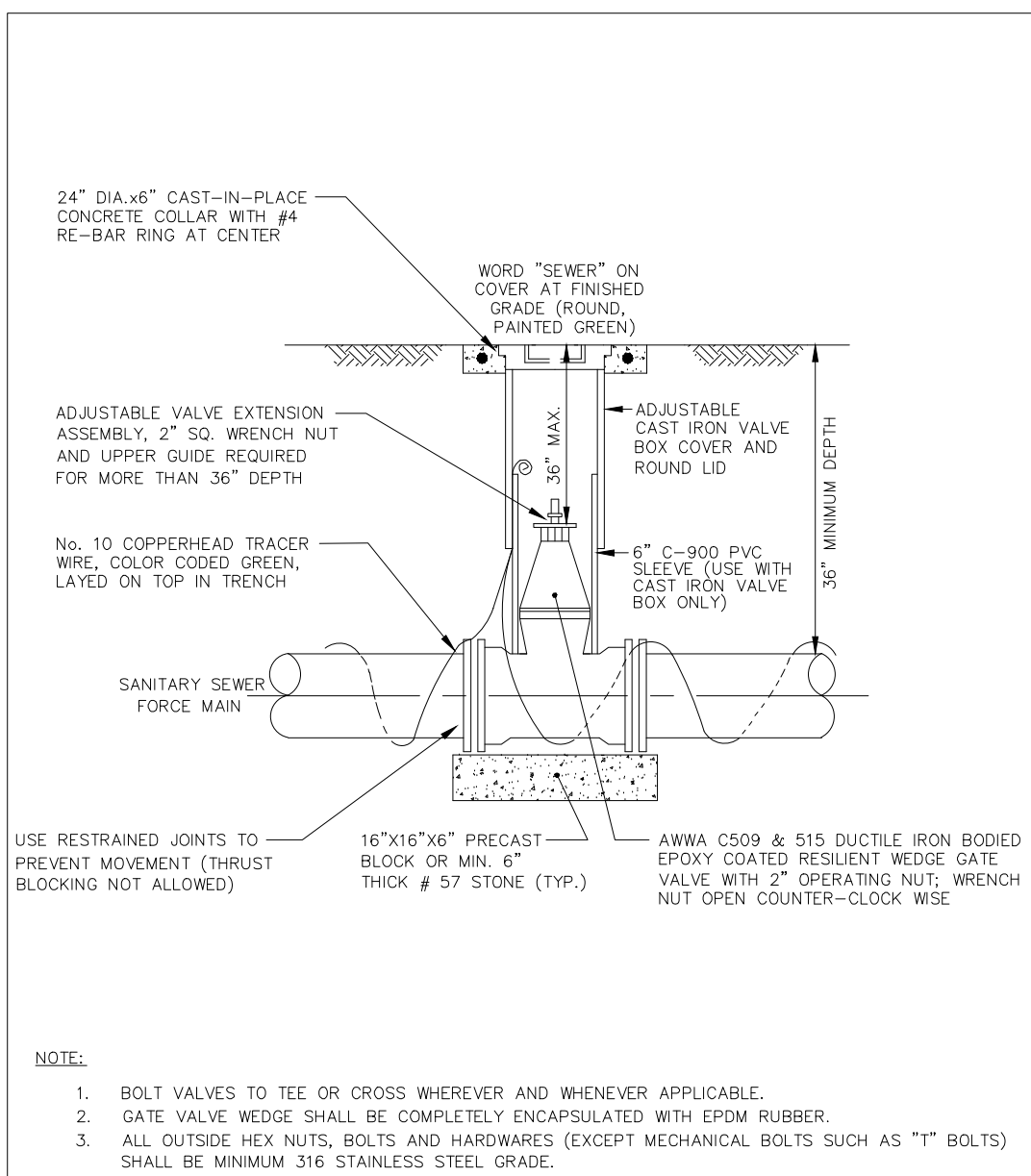


STANDARD CONSTRUCTION DETAIL
LIFT STATION EMERGENCY PUMP CONNECTION - ABOVEGROUND

FILE NAME:
S18.DWG

DETAIL REF:
S-18

REV. 12/18



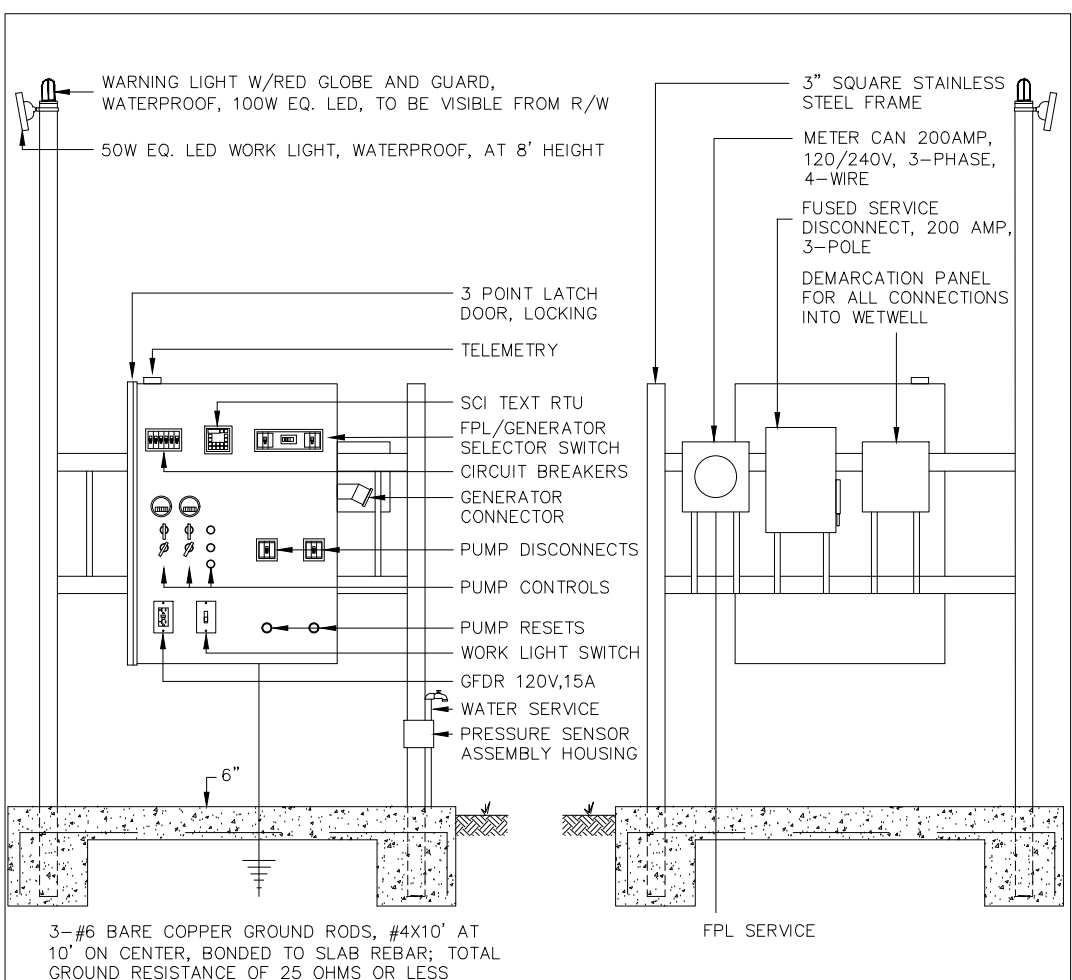
- NOTE:**
1. BOLT VALVES TO TEE OR CROSS WHEREVER AND WHENEVER APPLICABLE.
 2. GATE VALVE WEDGE SHALL BE COMPLETELY ENCAPSULATED WITH EPDM RUBBER.
 3. ALL OUTSIDE HEX NUTS, BOLTS AND HARDWARES (EXCEPT MECHANICAL BOLTS SUCH AS "T" BOLTS) SHALL BE MINIMUM 316 STAINLESS STEEL GRADE.

STANDARD CONSTRUCTION DETAIL
SANITARY SEWER FORCE MAIN VALVE AND VALVE BOX

FILE NAME:
S19.DWG

DETAIL REF:
S-19

REV. 12/18



- NOTE:**
1. ALL FRAME MATERIAL (BEAMS, STRAPS, NUTS, AND BOLTS) TO BE STAINLESS STEEL. FPL METER CAN MAY BE ALUMINUM. ALL PANELS/DOORS TO BE 316 SS, NEMA 4X RATED, GASKETED DOOR; PROVIDE NEOPRENE PAD AND/OR FIBER WASHERS BETWEEN DISSIMILAR METALS.
 2. ALL I/O ENTERING THE WELL NEED TO BE INTRINSICALLY SAFE.
 3. MINIMUM PANEL CONTROLS AND LAYOUT SHOWN. ENGINEER/CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR REVIEW BY CITY OF PORT ORANGE BEFORE ORDERING. PANEL SIZE 36"(W) X 48" (H) X 12" (D).

STANDARD CONSTRUCTION DETAIL
LIFT STATION ELECTRICAL EQUIPMENT RACK

FILE NAME:
S20.DWG

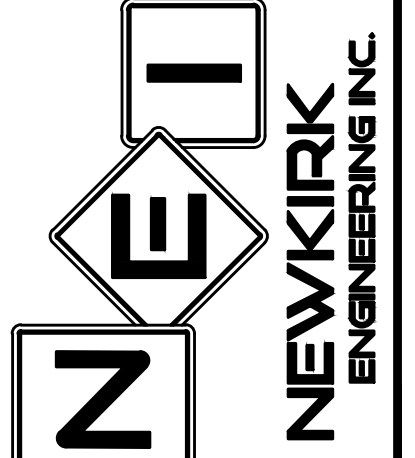
DETAIL REF:
S-20

REV. 12/18

REVISIONS

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8/26/22	CITY COMMENTS

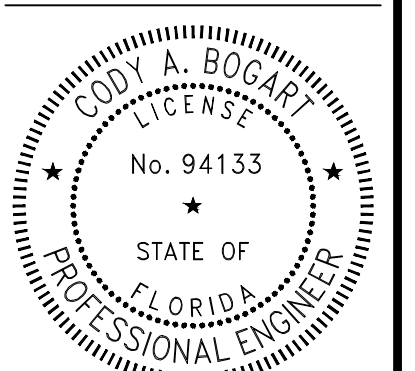
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7. MANHOLE RIMS SHALL MATCH FLUSH WITH THE FINISH GRADE ELEVATION IN PAVED AREAS AND A MINIMUM OF 0.3' AND MAXIMUM OF 0.5' ABOVE GRADE ELEVATION IN UNPAVED AREAS.
8. ALL SANITARY SEWER MANHOLE COVERS SHALL HAVE THE WORDS "PORT ORANGE SANITARY SEWER" CAST INTO THEM.
9. THE CONTRACTOR SHALL CONSTRUCT SANITARY SEWER MANHOLES IN SUCH A WAY THAT SEWER LINES DO NOT INTERSECT SEALED JOINTS BETWEEN SECTIONS OF THE MANHOLE.
10. NO BUG HOLES OR HONEYCOMBS WILL BE ACCEPTED.
11. INDIVIDUAL SANITARY SERVICE ON NEW CONSTRUCTION SHALL NOT BE CONNECTED DIRECTLY INTO MANHOLES. THE SERVICE CONNECTION WILL BE BY USE OF WYE CONNECTIONS, UNLESS OTHERWISE APPROVED BY THE CITY.
12. RUBBER BOOTS WITH 316 STAINLESS STEEL BANDS SHALL BE UTILIZED IN THE CONNECTION OF THE SEWER MAIN TO THE MANHOLES. COMPLETELY COVER RUBBER BOOTS AT OUTSIDE CONNECTION AND SEAL INSIDE PROTRUSION WITH HYDRAULIC CEMENT.
13. EZ-WRAP PLASTIC, AS MANUFACTURED BY PRESS SEAL GASKET CORPORATION, SHALL BE USED ON THE OUTSIDE OF ALL MANHOLE AND WET WELL JOINTS. APPLY ONE LAYER OF 9" WRAP CENTERED ON EACH JOINT. A CITY INSPECTOR SHALL PERSONALLY INSPECT ALL JOINT SEALS PRIOR TO BACKFILLING OPERATIONS.
- TESTING:**
1. ALL TESTING REQUIRED BY THE CITY SHALL BE PAID FOR BY THE CONTRACTOR / DEVELOPER. THE CONTRACTOR SHALL EMPLOY AN INDEPENDENT TESTING LABORATORY AT HIS OWN EXPENSE.
2. TO ENSURE THAT COMPACTION OF ALL FILL MATERIAL IS COMPLETED PROPERLY, TESTS SHALL BE DONE 12" ABOVE THE PIPE AND THEN AT 12" VERTICAL INTERVALS UNTIL FINAL GRADE IS REACHED.
3. ALL TRENCHES SHALL BE BACKFILLED WITH ACCEPTABLE MATERIAL AND COMPACTED TO MINIMUM 95% IN UNPAVED AREAS AND 98% IN PAVED AREAS OF THE MAXIMUM DENSITY BASED ON ASTM D-1557 MODIFIED PROCTOR TEST.
4. TEST RESULTS SHALL BE SUBMITTED TO THE CITY AT A MINIMUM FREQUENCY OF ONE SET OF TESTS BETWEEN EACH MANHOLE AND ONE ADDITIONAL SET OF TESTS AT EVERY MANHOLE. IDENTIFICATION OF TEST LOCATIONS SHALL BE CLEARLY INDICATED ON TEST REPORTS. TEST RESULTS SHALL BE FORWARDED PROMPTLY TO THE CITY'S DESIGNATED SITE INSPECTOR.
- CLOSE-OUT:**
1. ALL SEWER MAINS, PRIOR TO FINAL ACCEPTANCE BY THE CITY AND PRIOR TO ANY FINAL PAVING OPERATIONS, SHALL BE RELEASED AND SUBMITTED TO THE CITY USING A "PAN AND TILT CAMERA" WITH DEPTH GAUGE IN FRONT OF THE CAMERA BY A CITY APPROVED CONTRACTOR. THE CAMERA SHALL RUN FROM DOWN STREAM MANHOLE TO UP STREAM MANHOLE. CITY INSPECTOR SHALL BE NOTIFIED IN ADVANCE AND BE PRESENT DURING THE TELEVISION OF THE SEWER SYSTEM. THE VIDEO SHALL BE NON-STOP WITH AUDIO DESCRIBING WHAT IS BEING REVIEWED. WRITTEN VIDEO LOGS DESCRIBING THE CONDITION OF THE LINES SHALL ACCOMPANY THE VIDEO SUBMISSION TO THE CITY 48 HOURS PRIOR TO COMMENCING ANY INSTALLATION OF ASPHALT OR CONCRETE PAVEMENT. THE CITY MAY REQUIRE ADDITIONAL VIDEO TAPING, VIDEO TAPING OF LATERALS, AND/OR INFILTRATION/EXFILTRATION TESTS IF DEFECTS ARE APPARENT OR WORKMANSHIP IS QUESTIONABLE. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT SHALL BE THE DESIGN ENGINEER'S RESPONSIBILITY TO PROPERLY CERTIFY AND AS-BUILTS ARE PROVIDED TO THE CITY PRIOR TO ANY USE OF THE SYSTEM.

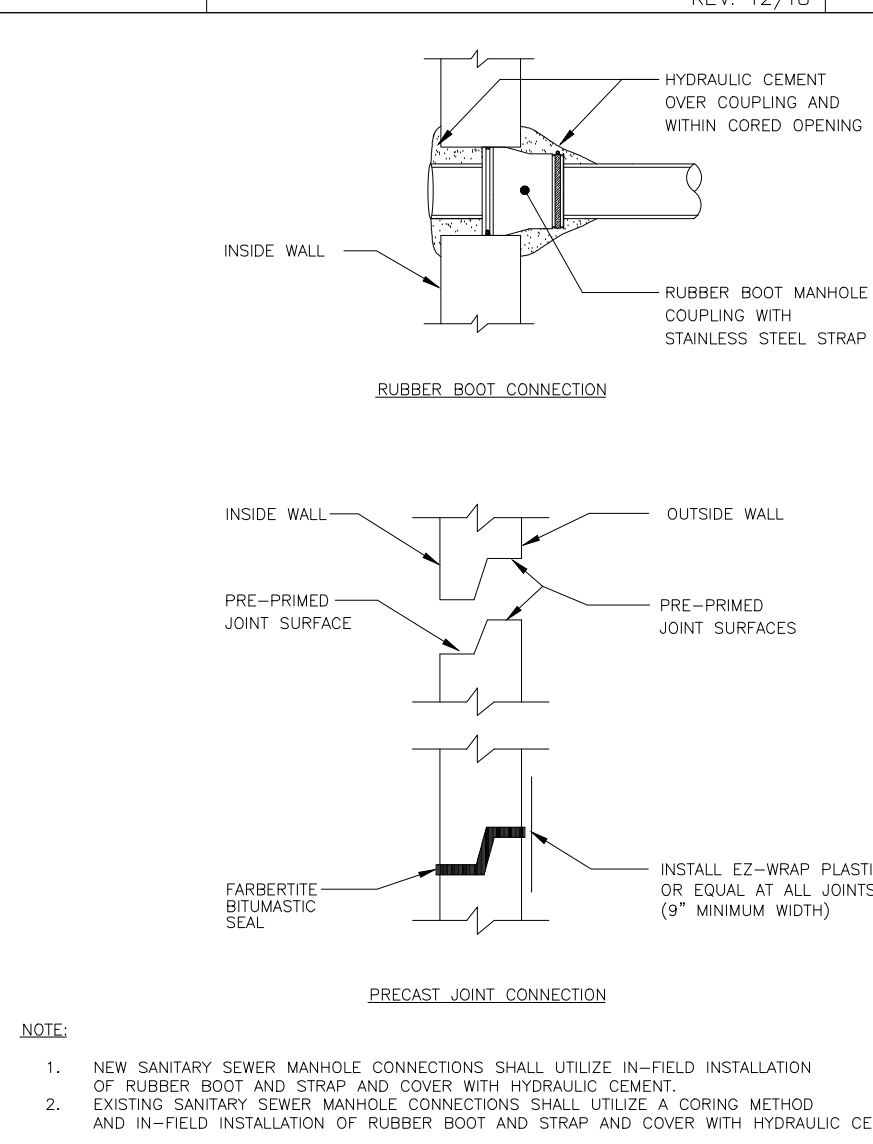
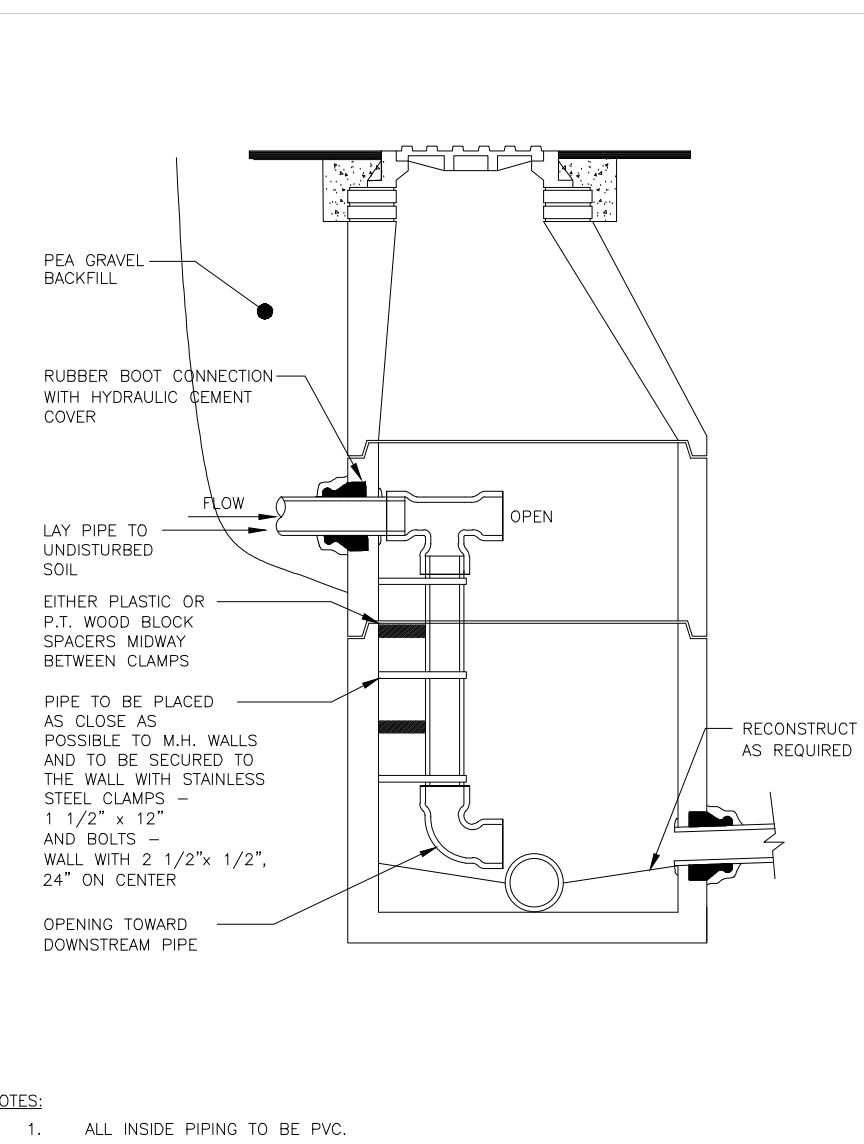
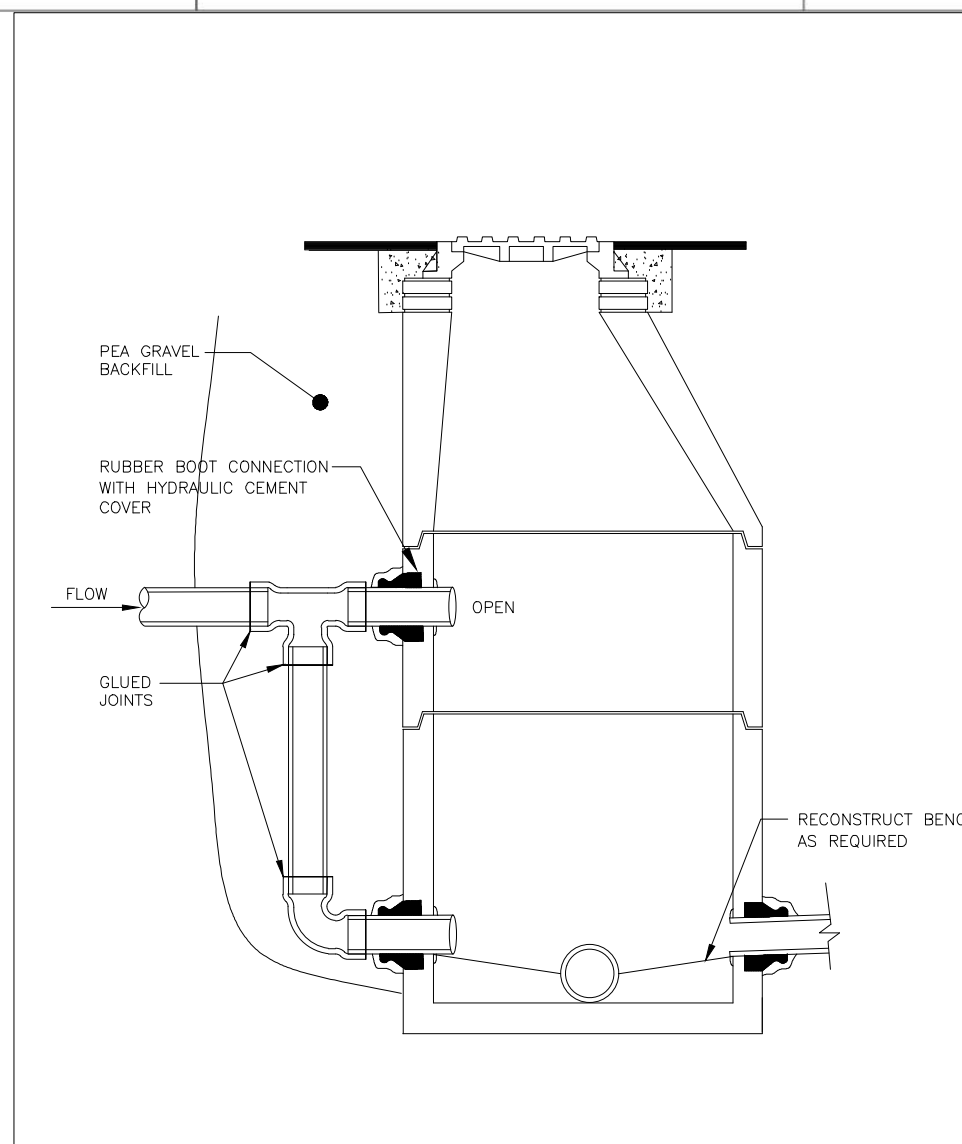
7. WET WELL CONSTRUCTION SHALL BE REINFORCED CONCRETE IN ACCORDANCE WITH A.S.T.M. C-76, 4,000 PSI AT 28 DAYS. ALTERNATE CONSTRUCTION SHALL BE PRECAST MONOLITHIC WITH BASE SLAB IN ACCORDANCE WITH ASTM C-478.
8. LIFT STATION AND THE LAST MANHOLE CONNECTING TO THE WET WELL SHALL BE FIBERGLASS UNFIBRED, AGRI-SURE GIMP 15MM STUD HEIGHT, PI YELLOW, 3.0 MIN THICKNESS, OR OTHER MATERIAL AS APPROVED BY THE CITY OF PORT ORANGE.
9. PIPE AND FITTINGS IN WET WELLS TO BE ASSEMBLED USING 316 STAINLESS STEEL BOLTS AND NUTS ONLY.
10. ALL DISCHARGE FITTINGS TO BE PVC INSTALLED JOINT.
11. ALL SEWER LINES ENTERING AND EXITING MANHOLES SHALL BE SEALED UTILIZING RUBBER BOOTS WITH 316 STAINLESS STEEL STRAP AND COVERED WITH HYDRAULIC CEMENT OR OTHER CITY APPROVED INFILTRATION LIMITING METHOD.
12. ELECTRICAL PERMIT TO BE OBTAINED FROM CITY OF PORT ORANGE (OR APPROPRIATE JURISDICTION) PRIOR TO BEGINNING WORK ON ANY ELECTRICAL WIRING, EQUIPMENT, ETC. ALL ELECTRICAL WIRING TO COMPLY WITH NATIONAL ELECTRICAL CODE.
13. NO SPICES OR UNION BOXES ARE ALLOWED FOR WALL FIGHT CORO INSTALLATION.
14. LINKABLE FUSED ELECTRICAL DISCONNECT REQUIRED.
15. ALL LIFT STATION WIRING SHALL BE STANDARD COPPER. THREE PHASE POWER AND MOTORS REQUIRED.
16. DEMARCATION PANEL REQUIRED FOR ALL CONNECTIONS INTO WET WELL.
17. EMERGENCY "HIGH LEVEL" WET WELL SOLID ALARM LIGHT REQUIRED. NO HOON OR AUDIBLE ALARM REQUIRED.
18. EMERGENCY ELECTRICAL RECEIPT REQUIRED TO BE INSTALLED ON ELECTRICAL EQUIPMENT BACK.
19. DEVELOPER/CONTRACTOR TO PAY ALL INITIAL ELECTRICAL CONNECTION CHARGES, ETC. ON THE DAY OF FINAL ACCEPTANCE BY THE CITY. ALL FUTURE MONTHLY ELECTRICAL BILLS TO BE TAKEN OVER BY THE CITY OF PORT ORANGE PUBLIC UTILITIES DEPT. PLEASE CONTACT THE PUBLIC UTILITIES DEPARTMENT AT (386) 506-5750 TO TRANSFER POWER BILL OVER TO THE CITY.
20. LIFT STATION ENCLOSURE SHALL BE 8" HIGH BLACK PLASTIC COATED CHAIN LINK FENCE, WOODEN SHADOW BOX FENCE, OR MASONRY WALL AS APPROVED BY THE CITY OF PORT ORANGE COMMUNITY DEVELOPMENT DEPARTMENT. THE MASONRY WALL SHALL BE IN COMPLIANCE WITH THE ARCHITECTURAL AND LANDSCAPE REQUIREMENTS OF THE LOC. ANY SPECIAL FENCING APPROVED AND INSTALLED SHALL BE MAINTAINED BY THE PRIVATE ENTITY RESPONSIBLE. THE ENCLOSURE SHALL BE INSTALLED WITH A MINIMUM OF 36" CLEARANCE FROM ALL ELECTRICAL / MECHANICAL EQUIPMENT.
21. ALL GROUND SURROUNDING THE LIFT STATION MUST BE GRADED IN 80% STONE. FINAL ACCEPTANCE OF THE LIFT STATION WILL NOT BE GIVEN UNTIL EFFECTIVE DROSGO AND POSITIVE DRAINAGE CONTROL HAVE BEEN PROVIDED.
22. LIFT STATION INSPECTIONS SHALL BE SCHEDULED AND COORDINATED THROUGH THE CITY'S SITE INSPECTOR 48 HOURS IN ADVANCE. IF DETERMINED BY THE CITY'S INSPECTOR THAT ALL WORK IS COMPLETE AND READY, THE CONTRACTOR MAY SCHEDULE THE STATION START-UP.
23. THE CONTRACTOR WILL NOTIFY, AT A MINIMUM, THE CITY UTILITIES ENGINEER, ENGINEER OF RECORD, POWER COMPANY, REMOTE TELEPHONE PROVIDER, AND PUMP SUPPLIER OF THE OFFICIAL START-UP DATE AND TIME.

- NOTES:**
1. COVER - 125 LBS.
 2. RING - 80 LBS.
 3. MATERIAL: ASTM-A48 GRAY IRON CLASS 35B
 4. BL COVER AND USF 117 BASE BY US FOUNDRY & MFG. CORP., OR EQUAL
 5. GREASE INTERCEPTOR COVERS TO BE MARKED WITH "GREASE" INSTEAD OF "SANITARY SEWER"

	STANDARD CONSTRUCTION DETAIL SANITARY SEWER NOTES (CONTINUED)	FILE NAME: S1.DOC
		DETAIL REF: S-1.5
		REV. 12/18

	STANDARD CONSTRUCTION DETAIL SANITARY SEWER LIFT STATION NOTES (CONTINUED)	FILE NAME: S2.DOC
		DETAIL REF: S-2.1
		REV. 12/18

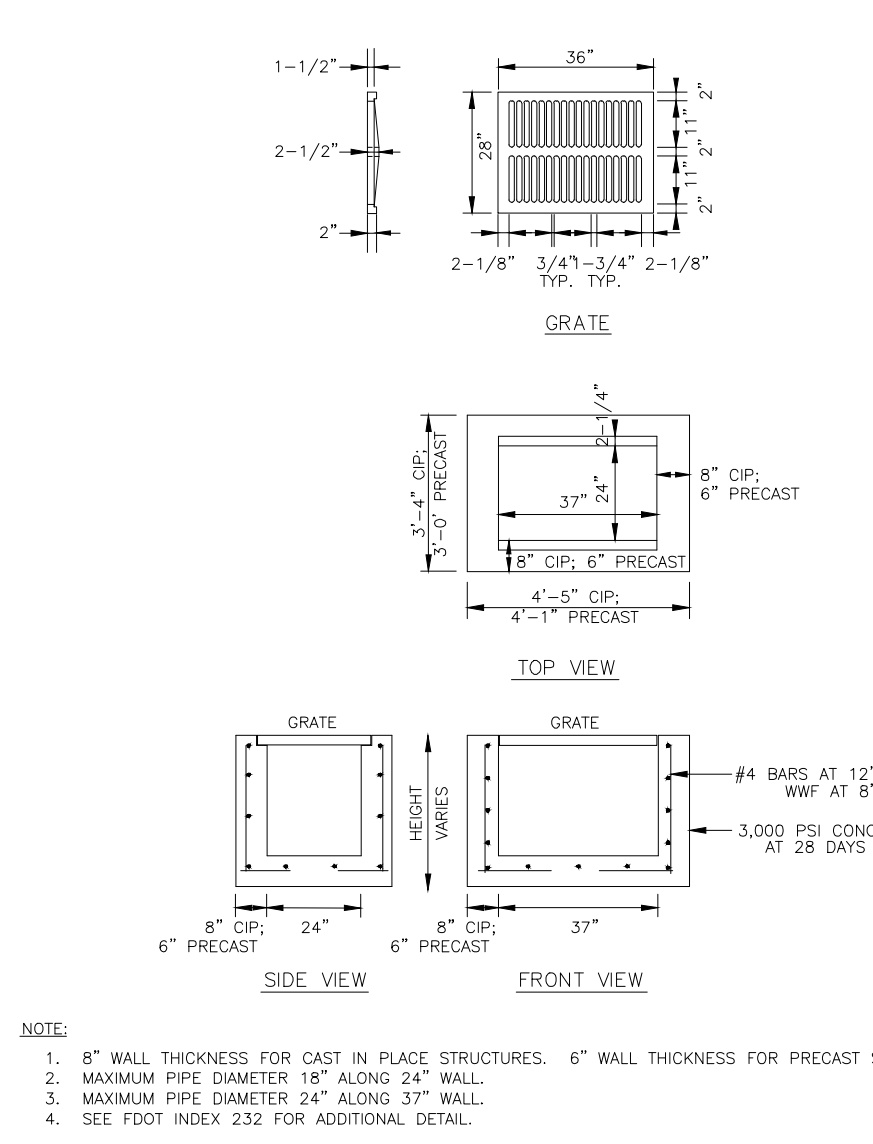
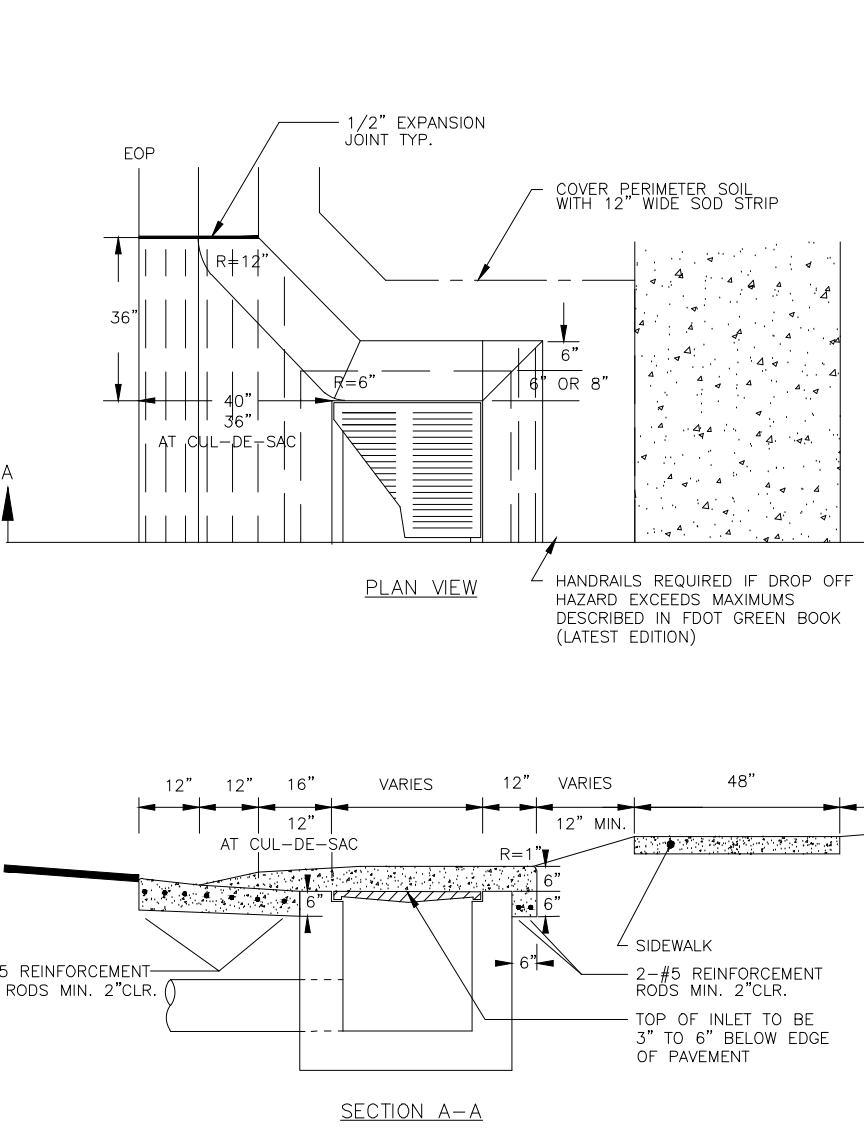
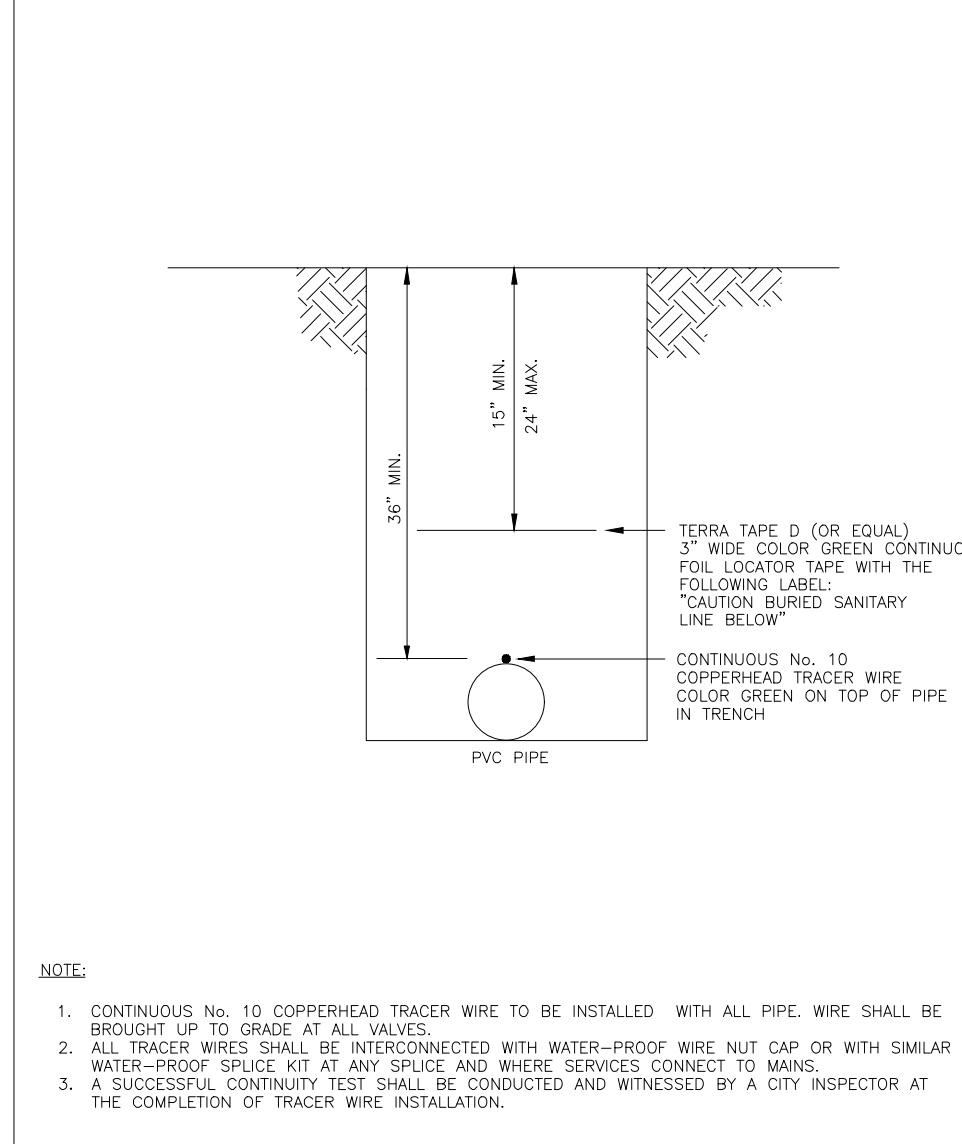
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		DETAIL REF: S-4
		REV. 12/18



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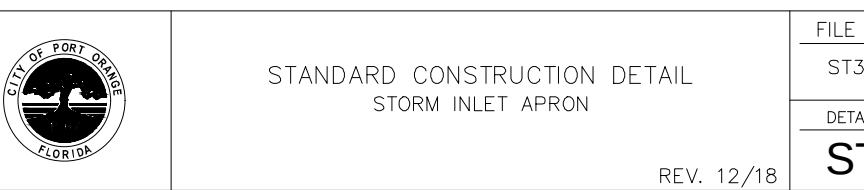
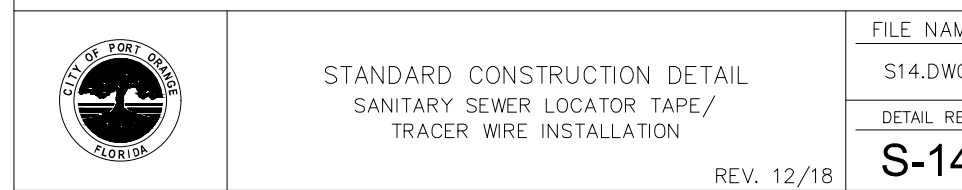
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	STANDARD CONSTRUCTION DETAIL STORM INLET APRON	FILE NAME: ST3.DWG
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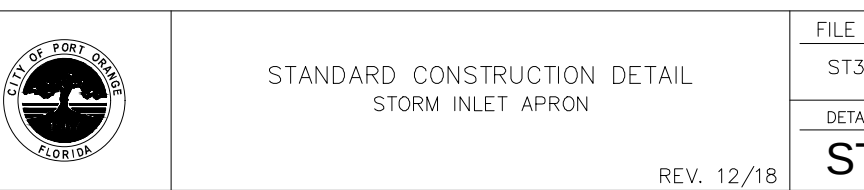
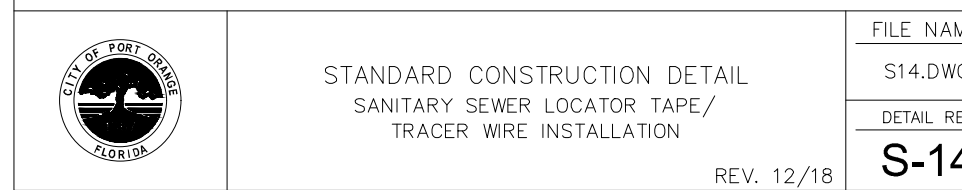
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	STANDARD CONSTRUCTION DETAIL STORM SEWER MANHOLE COVER	FILE NAME: ST6.DWG
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	STANDARD CONSTRUCTION DETAIL DRY POND	FILE NAME: ST8.DWG
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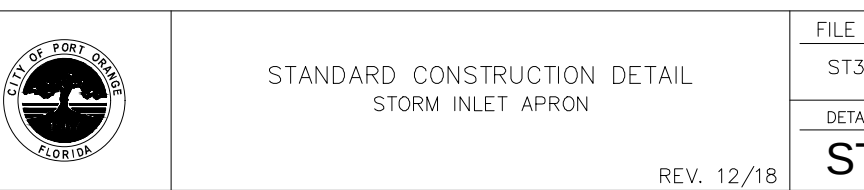
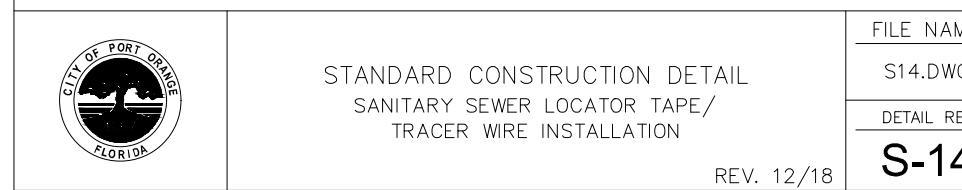
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		REV. 12/18



	STANDARD CONSTRUCTION DETAIL SANITARY SEWER LOCATOR TAPE / TRACER WIRE INSTALLATION	FILE NAME: S14.DWG
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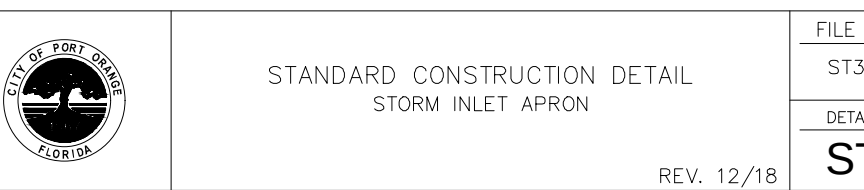
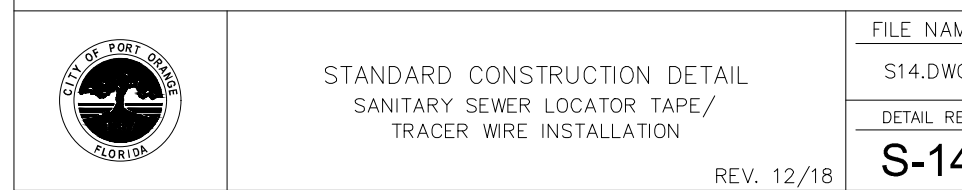
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		DETAIL REF: ST-6
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	STANDARD CONSTRUCTION DETAIL DRY POND	FILE NAME: ST8.DWG
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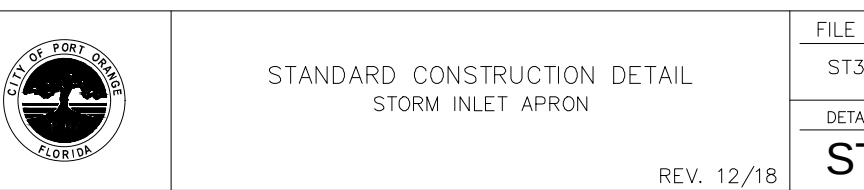
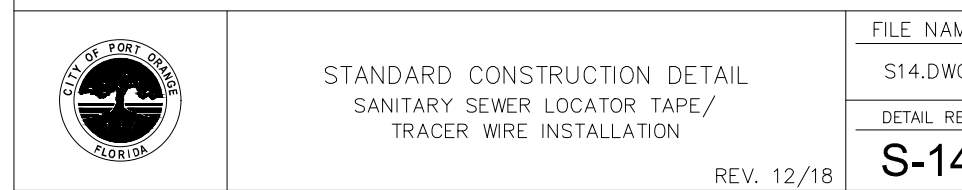
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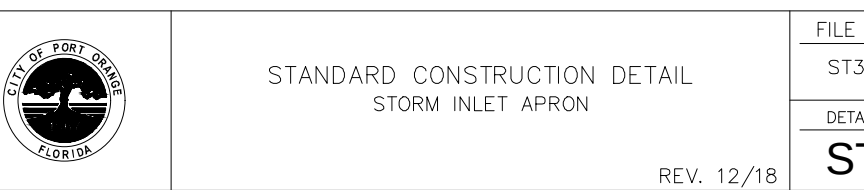
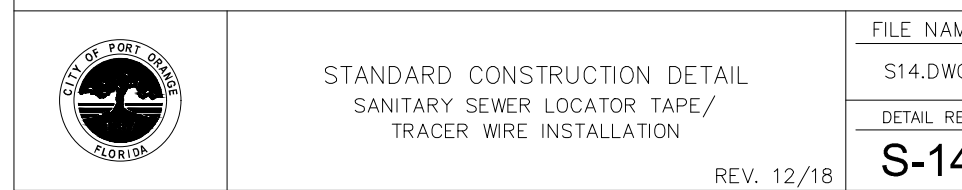
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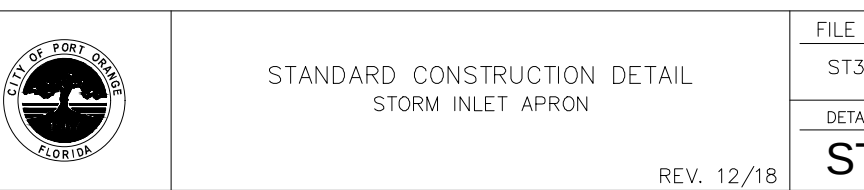
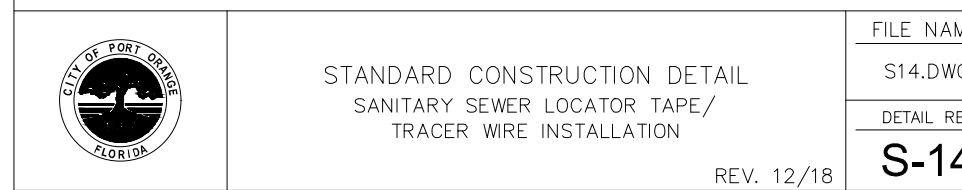
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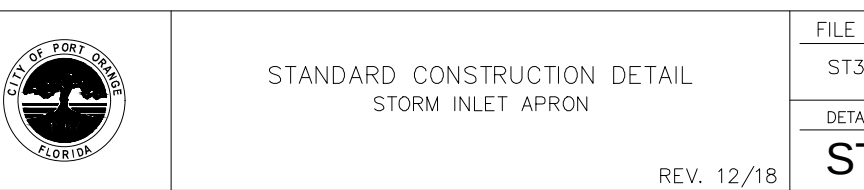
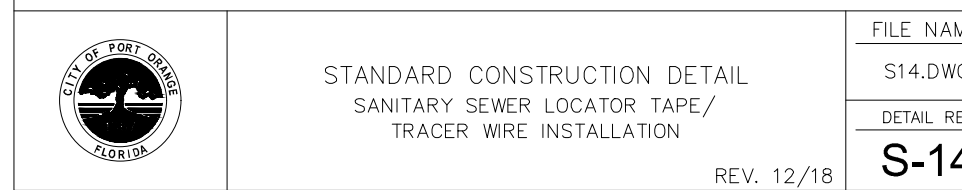
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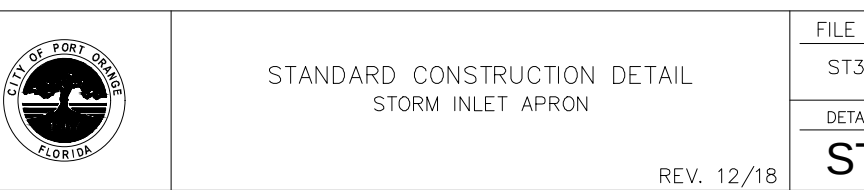
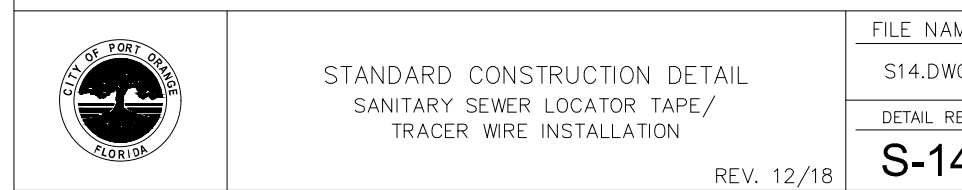
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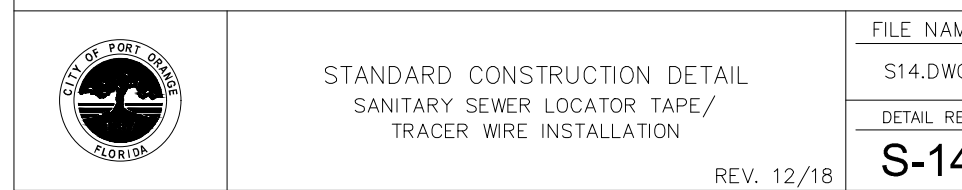
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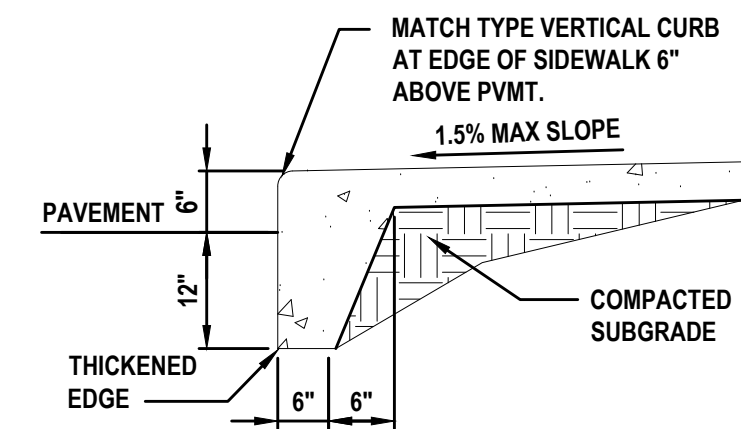


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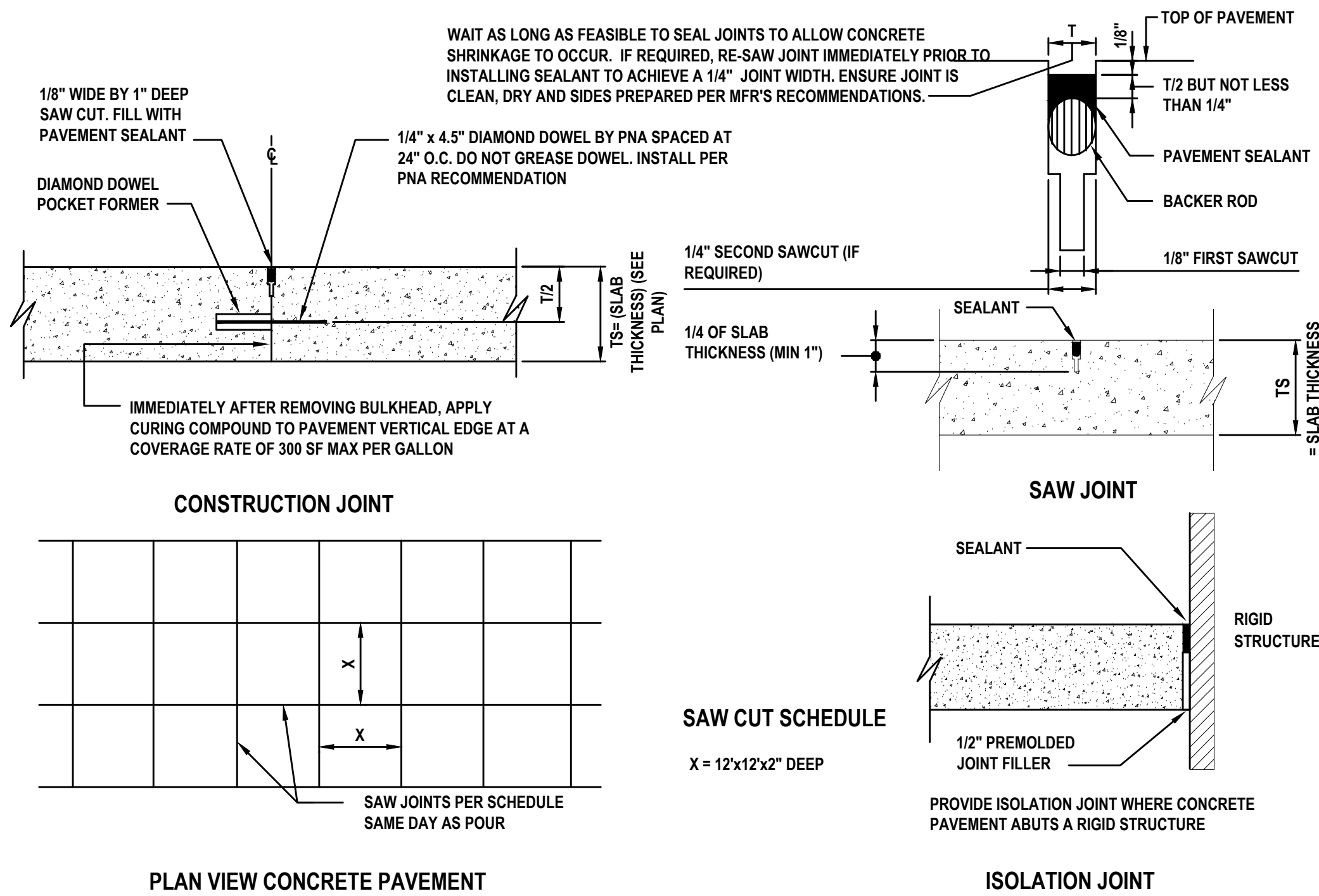




SEE CITY OF PORT ORANGE SIDEWALK DETAILS, SHEET No. 39

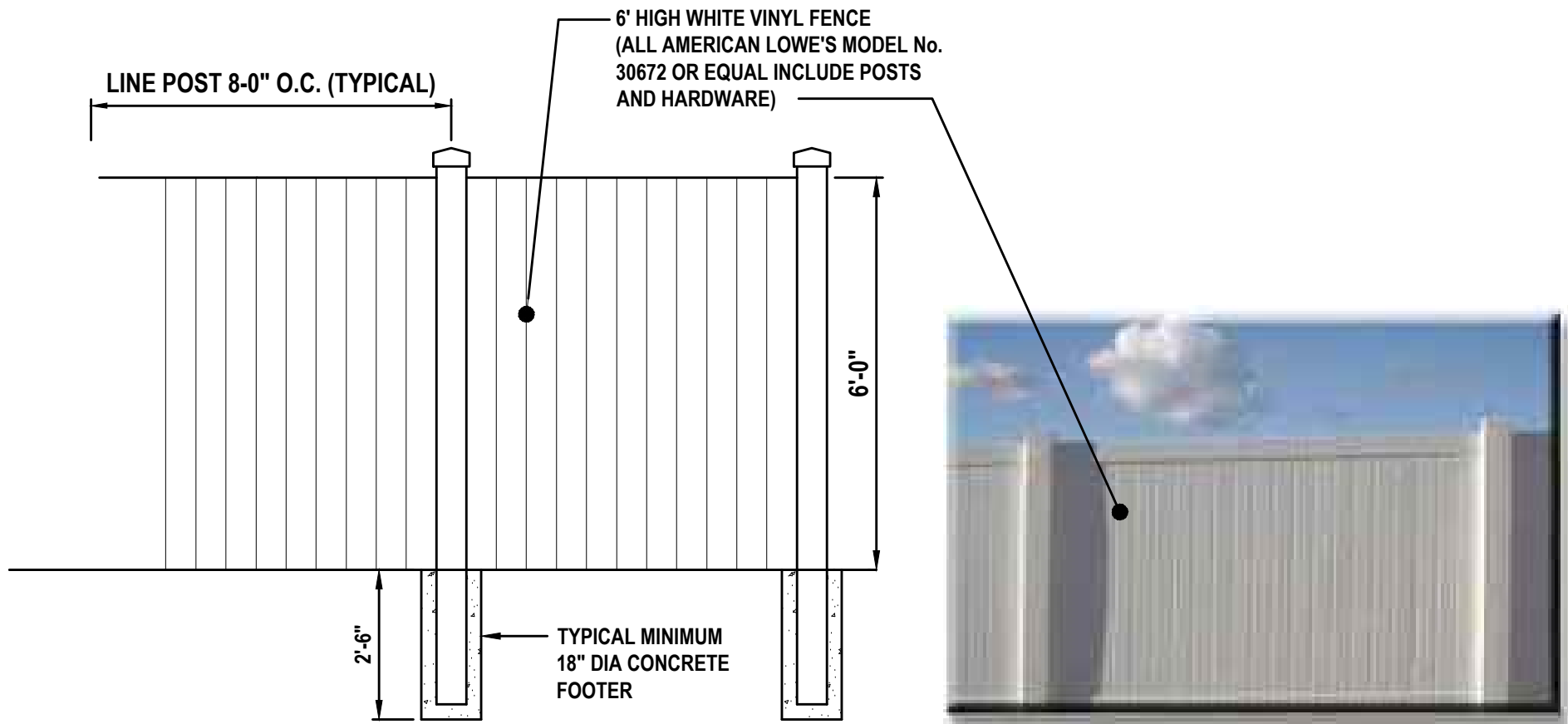
THICKENED EDGE SIDEWALK DETAIL

NOT TO SCALE



CONCRETE PAVEMENT JOINT DETAILS

NOT TO SCALE



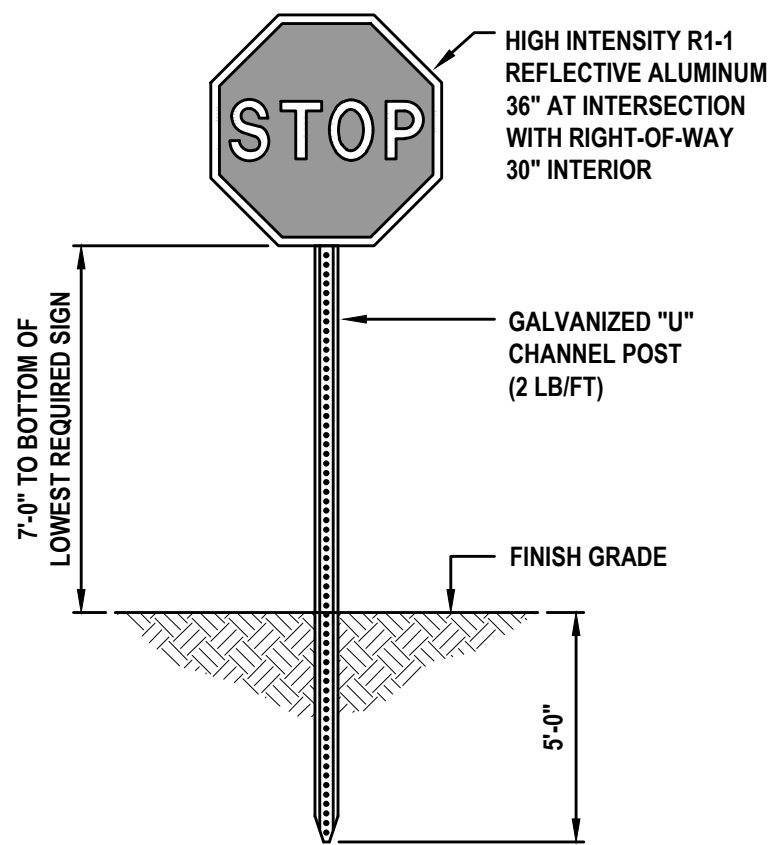
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NOT TO SCALE



MAIL KIOSK DETAIL

NOT TO SCALE



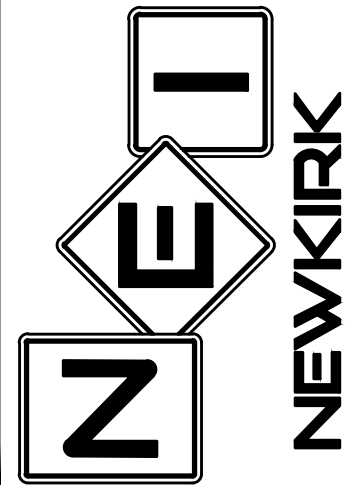
STOP SIGN DETAIL

NOT TO SCALE

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS

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MISCELLANEOUS DETAILS

AND NOTES

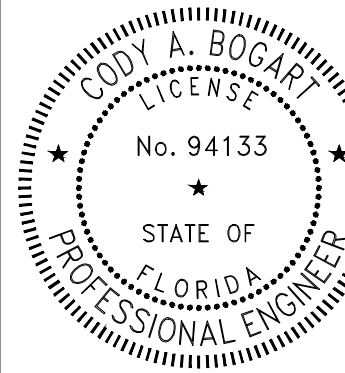
MADELINE COMMONS

975 McDONALD ROAD

PORT ORANGE, FL 32129

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PROJECT No: 2021-309

DATE: JULY 2022

DESIGN BY: CAB

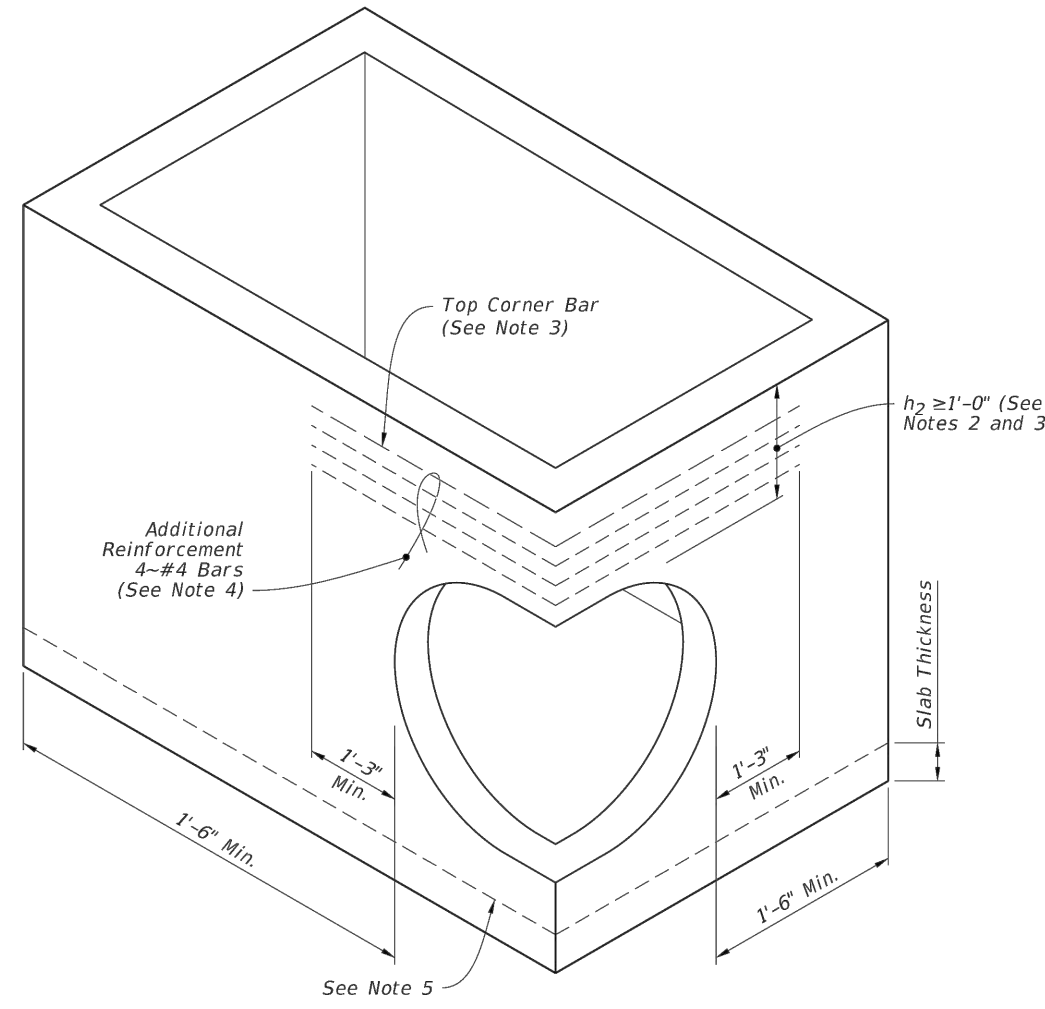
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CHECKED BY: HHN

SCALE:

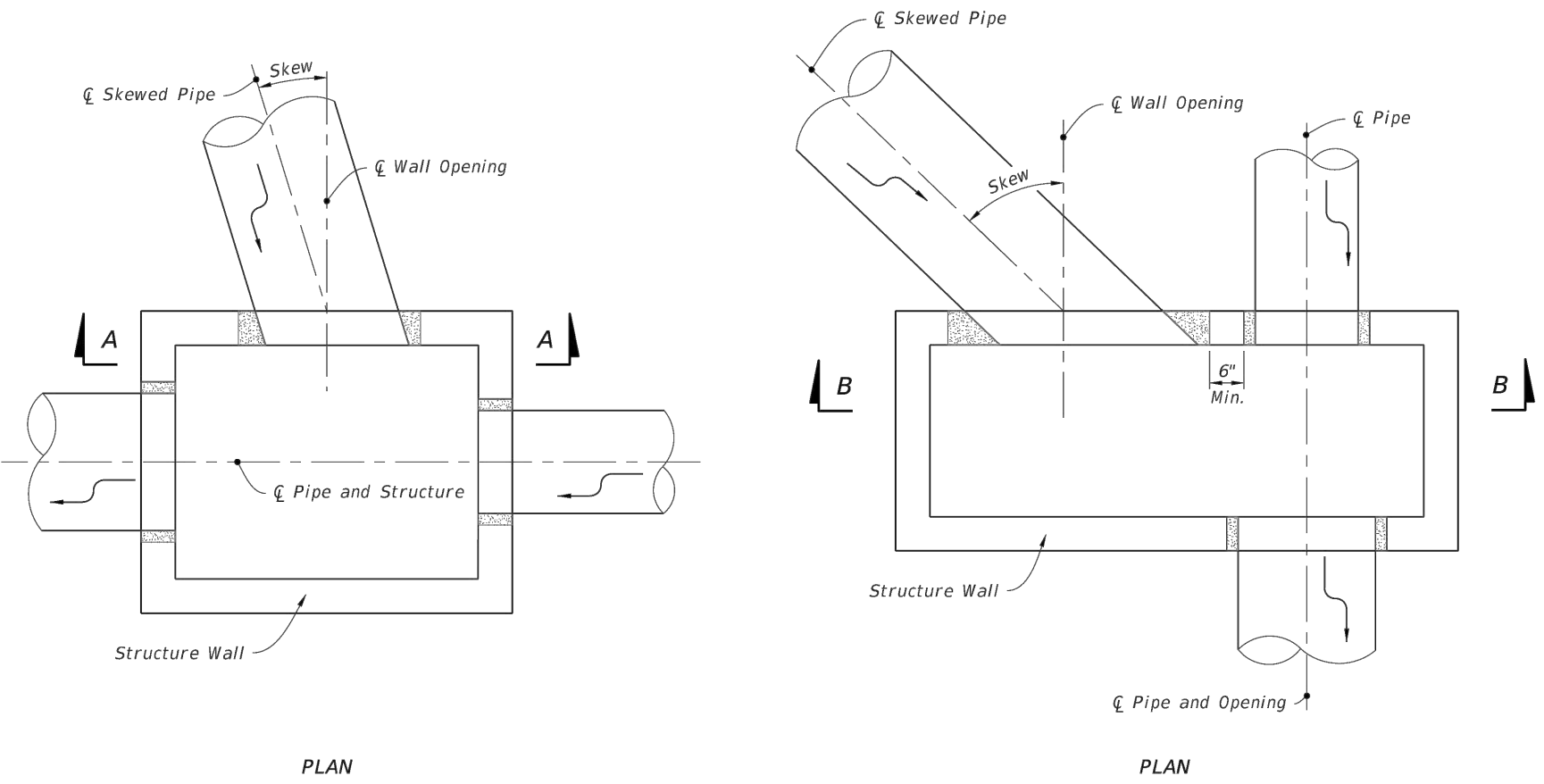
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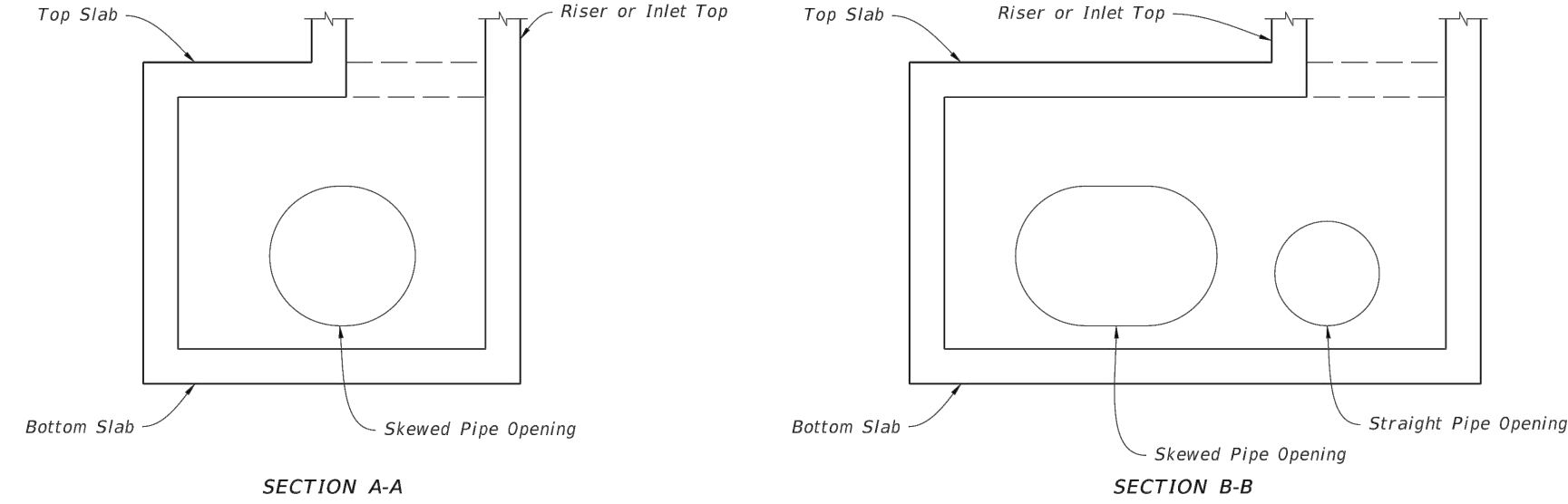


- NOTES:**
1. Submit Shop Drawings of corner openings for approval by the Engineer.
 2. h_2 may be less than 1'-0" when a minimum 1'-0" deep segment, 8" slab or curb inlet is provided above the corner opening.
 3. For inlet segments at finish grade elevation, substitute a #8 Bar for the top corner bar when 1'-0" $\leq h_2 < 2$ -0".
 4. Install bars continuously around corner and evenly spaced. Tie additional reinforcement to the outside of vertical wall reinforcement.
 5. Dowel construction joint or monolithically cast wall and slabs.

PIPE OPENING AT CORNER

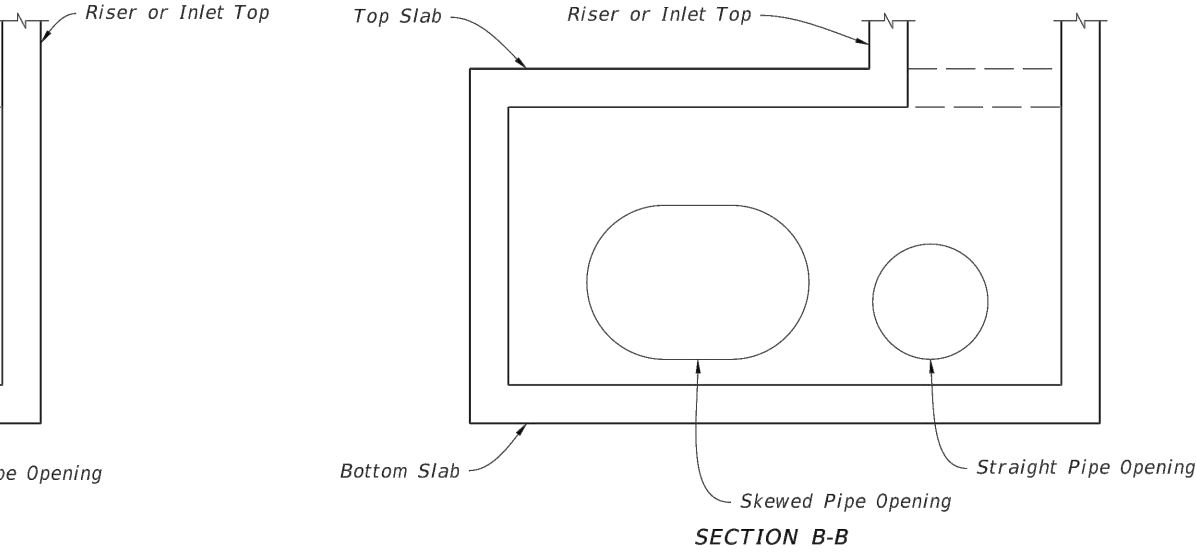


PLAN



SECTION A-A

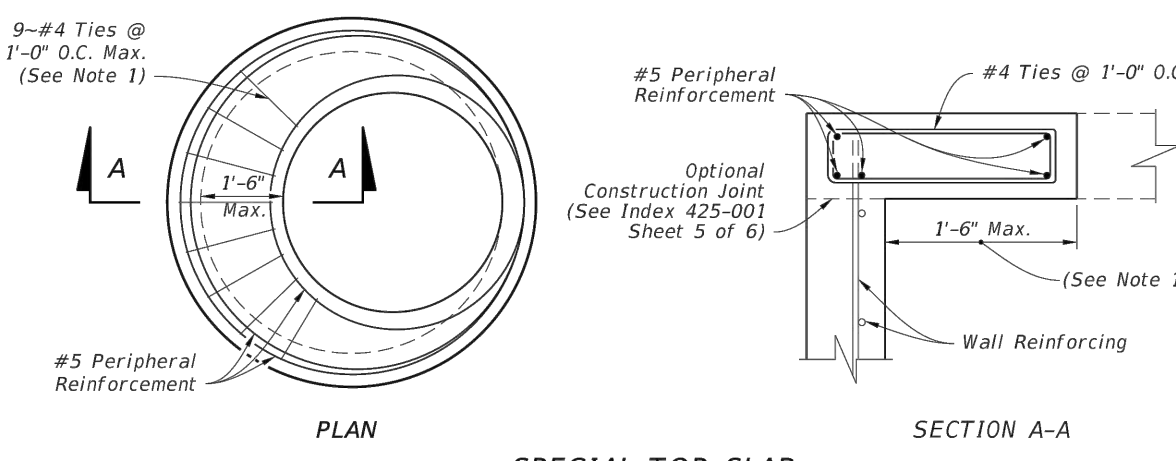
SKEDS $\leq 45^\circ$
(Not Centered)



SKEDS $> 45^\circ$
(Not Centered)

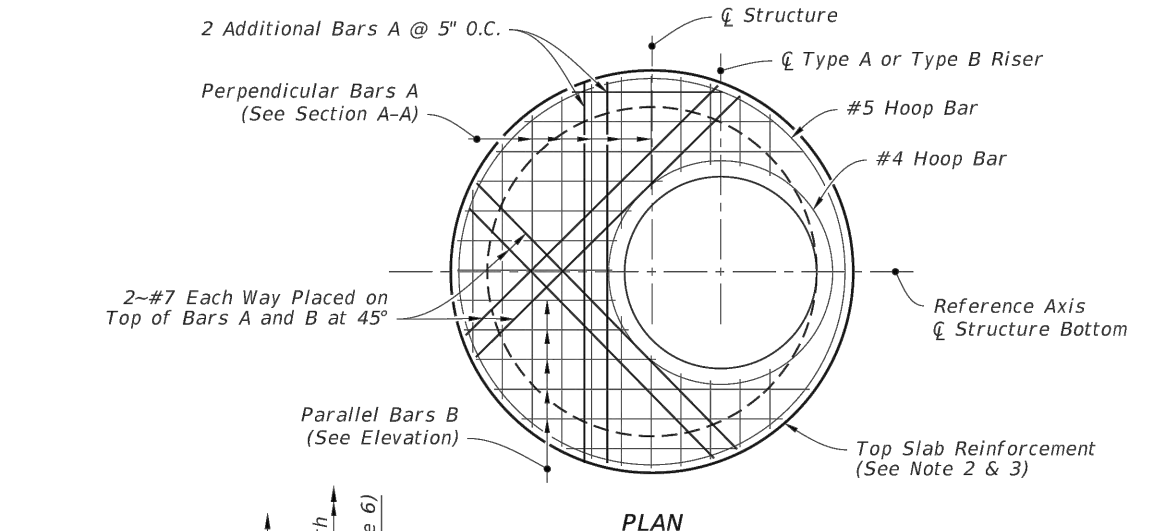
SKEDS PIPE IN RECTANGULAR STRUCTURES
(See Table 4 on Sheet 8)

SKEDS PIPE IN RECTANGULAR STRUCTURES

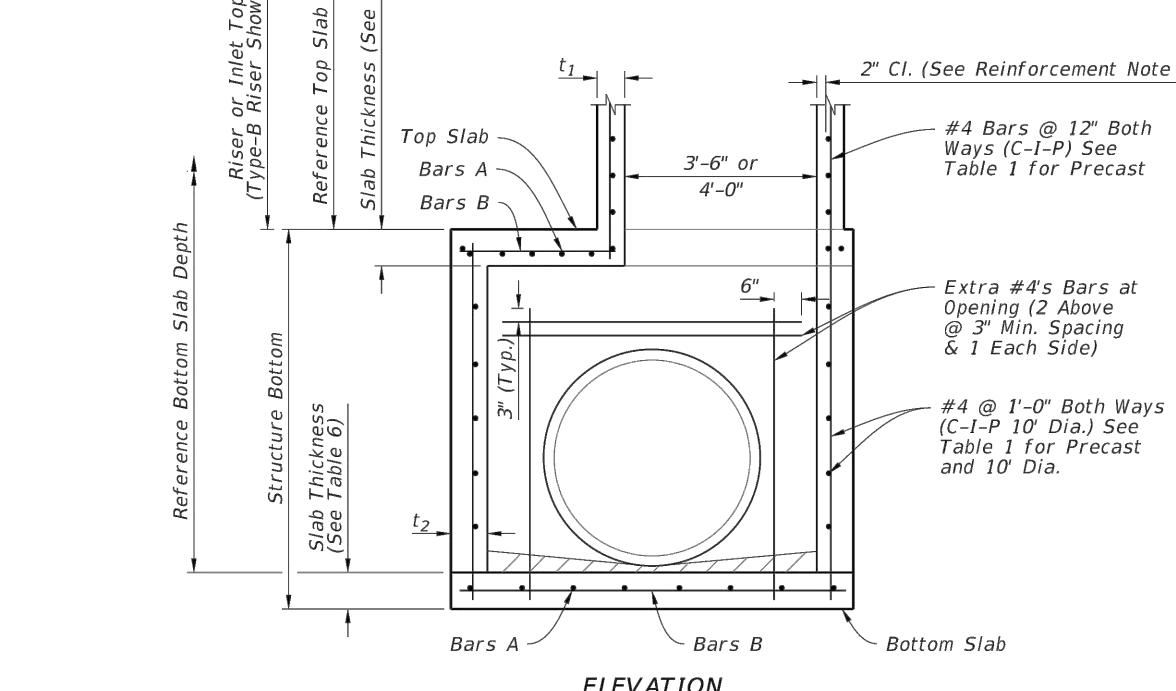


PLAN

SECTION A-A



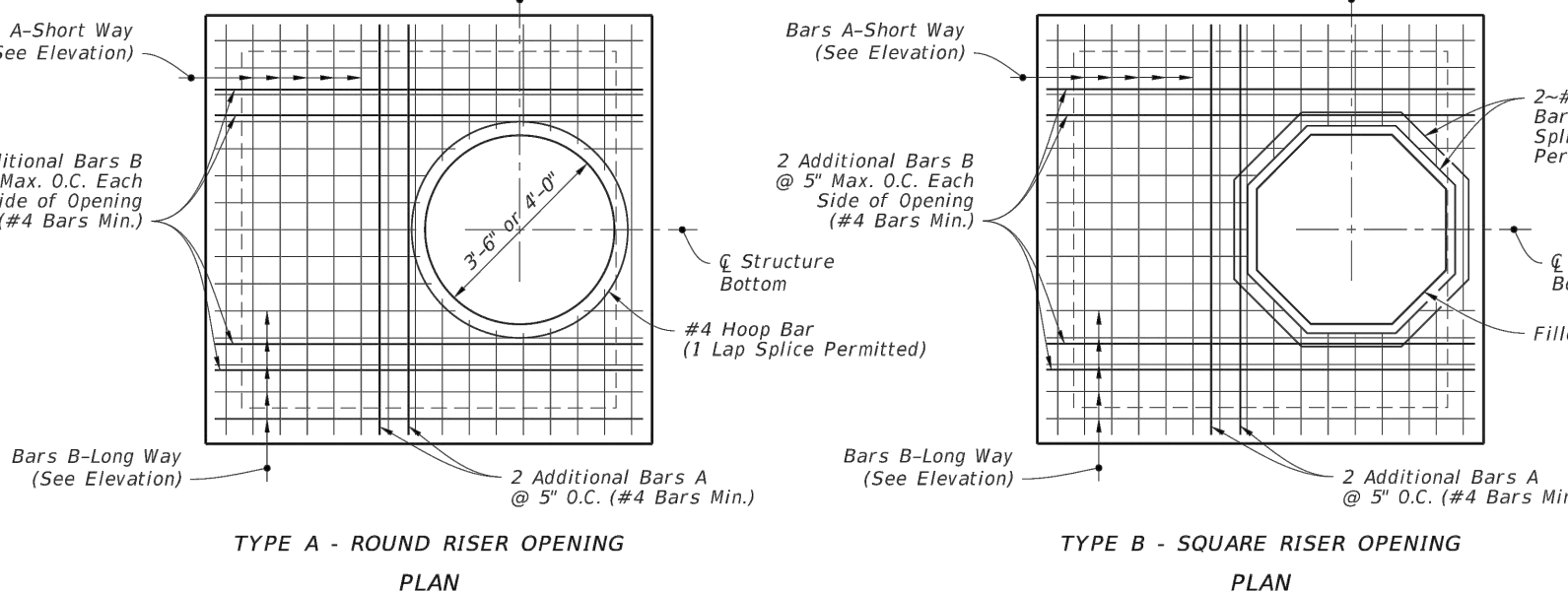
PLAN



ELEVATION

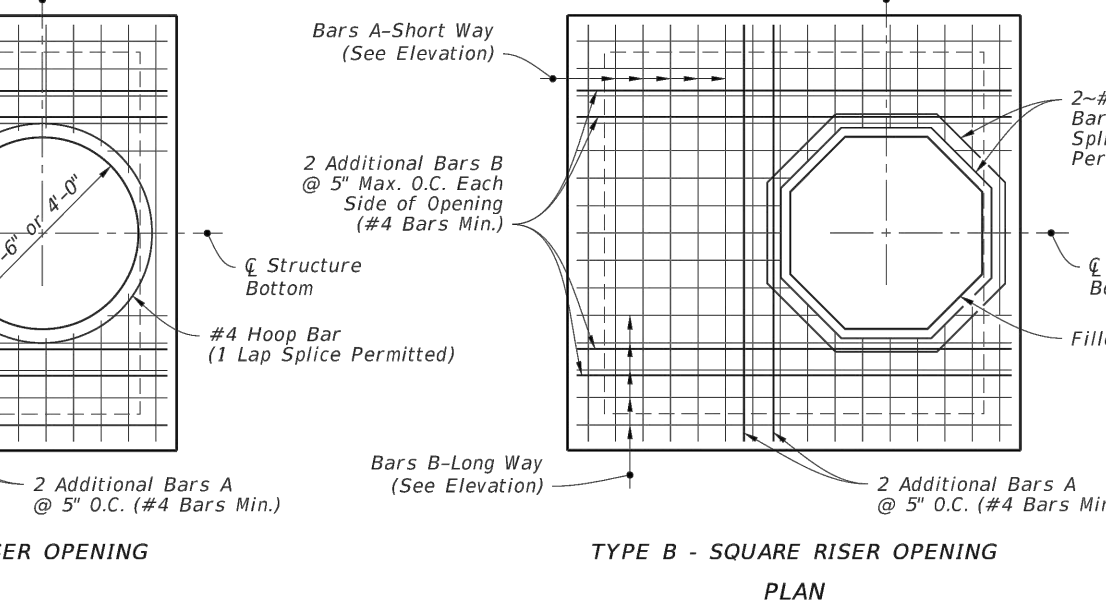
TYPE J BOTTOM - ALTERNATE A

- ALTERNATE A NOTES:**
1. Rotate #4 Bars as required to maintain cover.
 2. Construct the top or riser of the structure according to the top slab to the "Special Top Slab" details, when the inside diameter of a round structure is not more than 1'-0" larger than the opening in the riser or top slab.
 3. Alternate A slab reinforcing not applicable for Type A, B, C, D & E Ditch Bottom Inlets or Type S & V gutter inlets. See Indexes 425-040, 425-041, 425-050, 425-051, and 425-052.



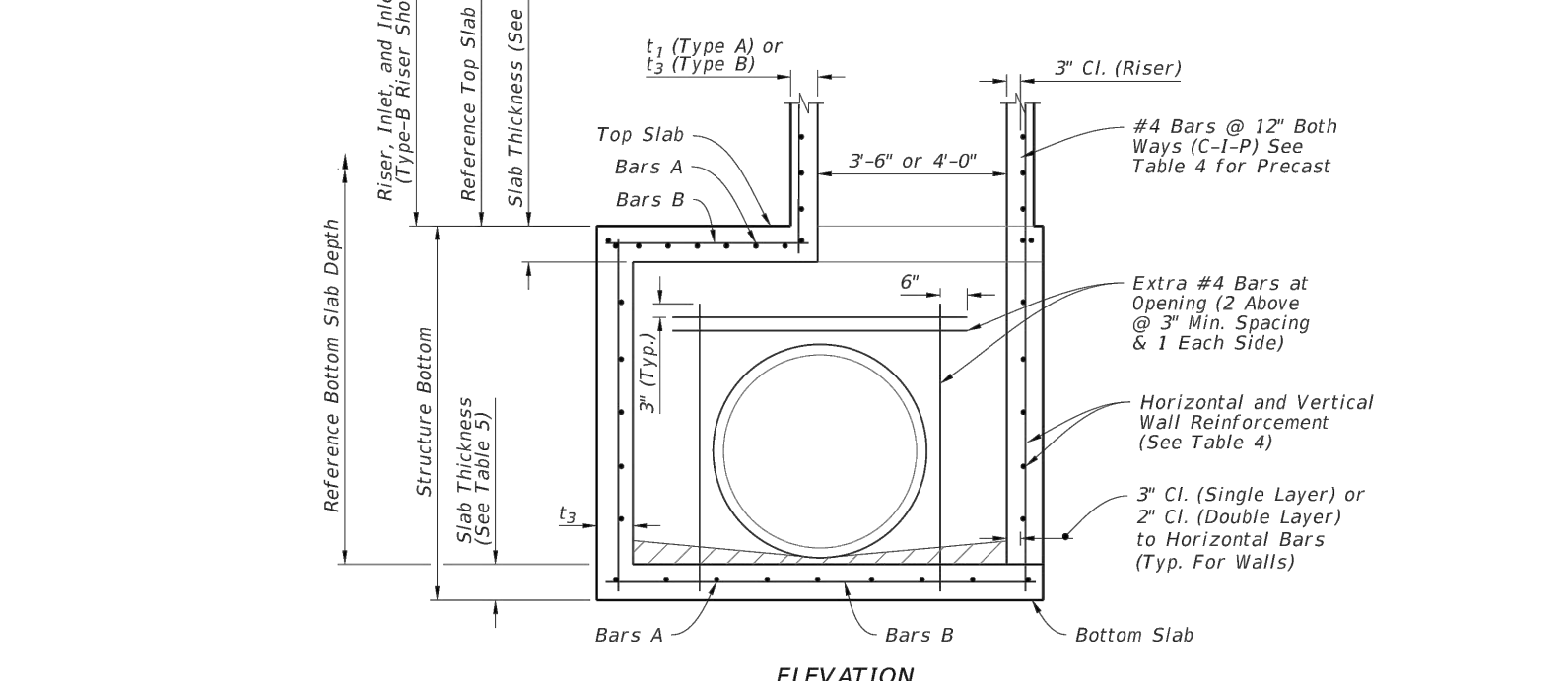
PLAN

TYPE A - ROUND RISER OPENING



PLAN

TYPE B - SQUARE RISER OPENING



ELEVATION

TYPE J BOTTOM - ALTERNATE B

DIMENSIONAL AND REINFORCING DETAILS

LAST REVISION	DESCRIPTION:	FY 2022-23 STANDARD PLANS	INDEX	SHEET	LAST REVISION	DESCRIPTION:	FY 2022-23 STANDARD PLANS	INDEX	SHEET
11/01/20			425-001	7 of 8	11/01/20			425-010	2 of 4

TABLE 1 - ALTERNATE A - STRUCTURES									
TYPE	STRUCTURE/RISER DIAMETER (ft)	CAST-IN-PLACE ITEMS CLASS II CONCRETE				PRECAST ITEMS ASTM C478			
		t ₁ (in.)	t ₂ (in.)	A _s (in ² /ft.)	A _s (in ² /ft.)	t ₁ (in.)	t ₂ (in.)	A _s (in ² /ft.)	A _s (in ² /ft.)
P	3'-6"	6	8	0.20	6	8	0.20	4**	0.105
P	4'-0"	6	8	0.20	6	8	0.20	5**	0.120
J	5'-0"	-	8	0.20	-	8	0.20	6**	0.150
J	6'-0"	-	8	0.20	-	8	0.20	6	0.180
J	7'-0"	-	8	0.20	-	8	0.20	7	0.210
J	8'-0"	-	8	0.20	-	8	0.20	8	0.240
J	10'-0"	-	10	0.40**	-	10	0.40**	10	0.300
J	12'-0"	-	10	0.40**	-	12	0.40**	12	0.360

t₁ and t₂ - Wall Thickness.
A_s - Vertical and horizontal areas of reinforcement.
**Provide 0.20 sq. in./ft. at each face, 12" max. bar spacing.
***Modified minimum wall thickness.
***Min. total circumferential reinforcement for continuous steel hoops.
A_s = 0.40 sq. in. for riser section height equal or less than 2'-0" (2 hoop min.)
A_s = 0.60 sq. in. for riser section height more than 2'-0" up to 4'-0" (3 hoop min.)
Areas of reinforcing for precast items are based on Grade 60 reinforcing.
No reduction in the area of reinforcement is allowed for welded wire fabric in Table 1.
Area of vertical reinforcing may be reduced in accordance with ASTM C478.

TABLE 3 - REINFORCING SCHEDULE				
SCHEDULE	GRADE 60 AREA (in ² /ft.)	MAXIMUM SPACING		
		GR 60 BARS (in.)	65 KSI (in.)	70 KSI (in.)
A12	0.20	12	8	8
A6	0.20	6	5	4 1/2
B10	0.24	10	8	7 1/2
B5.5	0.24	3 1/2	5	4
C6.5	0.37	6 1/2	6	5
C3.5	0.37	3 1/2	3	2 1/2
D7	0.53	7	6	5
D4.5	0.53	4 1/2	4	3 1/2
E5	0.73	5	4	4
E3	0.73	3	3	3
F5	1.06	5	4	4
F3.5	1.06	3 1/2	3	3
G5	1.45	5	4	4
G3.5	1.45	3 1/2	3	3
H4	1.75	4	3	3

TABLE 2 - ALTERNATE B SQUARE AND RECTANGULAR STRUCTURES					
TYPE	WALL LENGTH (FT)	MAX DEPTH (FT)	WALL THICKNESS (t ₂) C-I-P (in.)	PRECAST (in.)	
P	≤ 3'-6"	40	6 Riser 8 Bottom	6	
J	4'-0"	40	8	6	
J	5'-0"	22	-	6	
J	6'-0"	15	-	6	
J	5'-0" to 9'-0"	40	8	8	
J	10'-0"	26	8	8	
J	10'-0" to 12'-0"	40	10	9	
J	16'-0"	35	-	9	
J	16'-0"	40	10	10	
J	20'-0"	25	-	9	
J	20'-0"	30	10	10	

See Table 4 for Reinforcing Schedule.

See Table 4 for Reinforcing Schedule.

TABLE 4 - WALL DESIGNS - RECTANGULAR STRUCTURES													
VERTICAL REINFORCING		HORIZONTAL REINFORCING		WALL THICKNESS	VERTICAL REINFORCING		HORIZONTAL REINFORCING		WALL THICKNESS				
WALL DEPTH	SCHEDULE	SCHEDULE	SCHEDULE		WALL DEPTH	SCHEDULE	WALL DEPTH	SCHEDULE					
SIZE: 3'-6" & RISER					SIZE: 10'-0" (Precast Only)								
≥1.17' - 40"	A12	≥1.17' < 10"	B10	6"/8"	26" - 40"	D7	D7	26" - 40"	F5	F5	9"		
		10" < 18"	B5.5	6"/8"			Inside/Outside	Inside/Outside					
		18" < 29"	C6.5	6"/8"									
		29" - 40"	C3.5	6"/8"									
SIZE: 4'-0"					SIZE: 12'-0"								
≥1.17' - 40"	A12	≥1.17' < 6"	B10	6"/8"	≥1.17' < 14"	B10	B10	≥1.17' < 10"	C6.5	C6.5	10"		
		6" < 10"	B5.5	6"/8"			10" < 17"	D7	D7	10"			
		10" < 20"	C6.5	6"/8"			17" < 24"	E5	E5	9"			
		20" < 28"	C3.5	6"/8"			24" - 40"	F5	F5	10"			
SIZE: 5'-0"					SIZE: 12'-0" (Precast Only)								
≥1.17' - 40"	A12	≥1.17' < 5"	B5.5	6"/8"	≥1.17' < 12"	B10	B10	≥1.17' < 10"	D7	D7	9"		
		5" < 9"	C6.5	6"/8"			10" < 17"	D7	D7	9"			
		9" < 15"	C3.5	6"/8"			17" < 23"	E5	E5	9"			
		15" < 22"	D4.5	6"/8"			23" < 32"	F5	F5	9"			
SIZE: 6'-0"					SIZE: 16'-0"								
≥1.17' < 26"	A12	≥1.17' < 9"	C3.5	6"/8"	≥1.17' < 21"	C6.5	C6.5	≥1.17' < 13"	D7	D7	10"		
		9" < 15"	D4.5	6"/8"			13" < 20"	E5	E5	10"			
		15" < 26"	E3	8"			20" < 28"	E5	E5	10"			
		26" - 40"	F5	10"			28" - 40"	F5	F5	10"			
SIZE: 7'-0"					SIZE: 16'-0" (Precast Only)								
26" - 40"	A12	A12	26" - 40"	D7	D7	8"	≥1.17' < 10"	C6.5	C6.5	≥1.17' < 9"	D7	D7	9"
		Inside/Outside	Inside/Outside	10" < 18"	D7	D7			9" < 13"	D4.5	D4.5	9"	
		18" < 25"	E5	E5	13" < 19"	E5			E5	9"			
		25" < 35"	F5	F5	19" < 27"	F5			F5	9"			
SIZE: 8'-0"					SIZE: 20'-0"								
≥1.17' < 20"	A12	A12	≥1.17' < 6"	B5.5	B5.5	8"	≥1.17' < 10"	C6.5	C6.5	≥1.17' < 8"	D7	D7	10"
		6" < 13"	C6.5	C6.5	8" < 12"	E5			E5	10"			
		13" < 23"	D7	D7	8" < 12"	F5			F5	10"			
		23" < 31"	E5	E5	8"								
SIZE: 9'-0"					SIZE: 20'-0" (Precast Only)								
≥1.17' < 12"	A12	A12	≥1.17' < 9"	C6.5	C6.5	8"	8" < 13"	C6.5	C6.5	8" < 12"	E5	E5	9"
		9" < 12"	C6.5	C6.5	12" < 19"	F5			F5	9"			
		12" < 28"	D7	D7	19" < 25"	G5			G5	9"			
		28" - 40"	D7	D7	25" < 35"	F5			F5	9"			
SIZE: 10'-0"					SIZE: 20'-0" (Precast Only)								
≥1.17' < 10"	A12	A12	≥1.17' < 10"	D7	D7	8"	≥1.17' < 10"	C6.5	C6.5	≥1.17' < 8"	D4.5	D4.5	9"
		10" < 21"	E5	E5	8" < 12"	E5			E5	9"			
		21" < 26"	D7	D7	12" < 19"	F5			F5	9"			
		26" - 40"	C6.5	C6.5	19" < 25"	G5			G5	9"			

TABLE 4 NOTES:

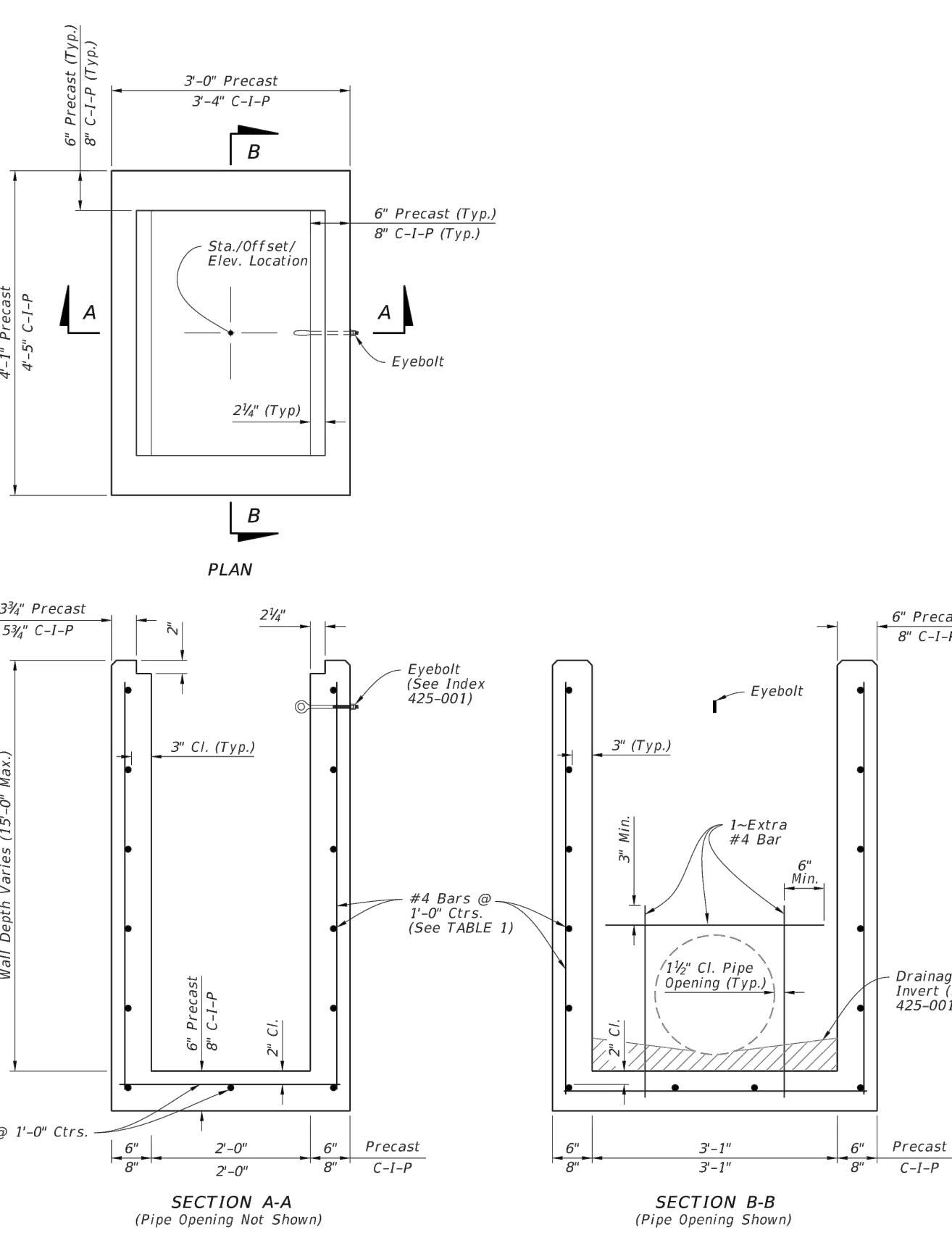
1. Wall depth is measured to the top of the bottom slab for braced walls and to the top of the intermediate slab for risers.

2. Wall height is the distance between top of lower slab to bottom of upper slab. Maximum wall height is 12' for wall lengths exceeding 5, or 10' for wall lengths exceeding 12.

3. Wall heights exceeding 10'-0" require two layers of reinforcement. (See Table 4 with 2' increase in the horizontal bars for each layer.)

- TABLE 4 NOTES:**
1. Wall depth is measured to the top of the bottom slab for boxes and to the top of the intermediate slab for risers.
 2. Wall height is the distance between top of lower slab to bottom of upper slab. Maximum wall height is 12' for wall lengths exceeding 5', or 10' for wall lengths exceeding 12'.
 3. Wall lengths exceeding 6'-0" require two layers of reinforcing (See Table 4) with 2" of cover from the horizontal bars to the inside and outside faces for each layer.
 4. Wall lengths exceeding the dimensions or depths shown in Table 4, or 12'-0" diameter require a special design.
 5. Wall thickness and reinforcing for rectangular structures is based on the longer wall length.

TABLES 1, 2, 3, AND 4

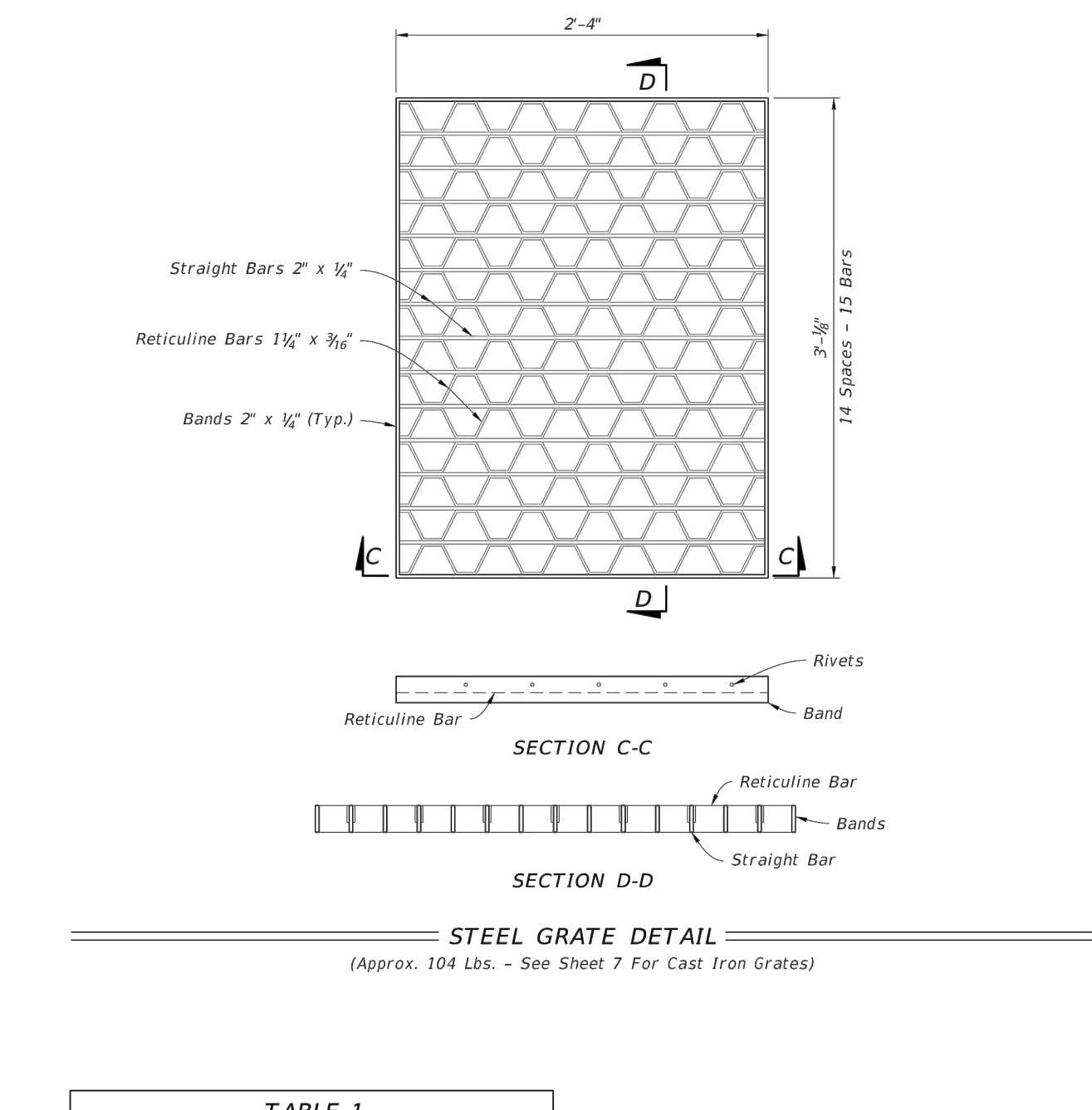


SECTION A-A
(Pipe Opening Not Shown)

SECTION B-B
(Pipe Opening Shown)

DIMENSIONAL AND REINFORCING DETAILS

TYPE C - DIMENSIONAL, REINFORCING, AND STEEL GRATE DETAILS



SECTION C-C

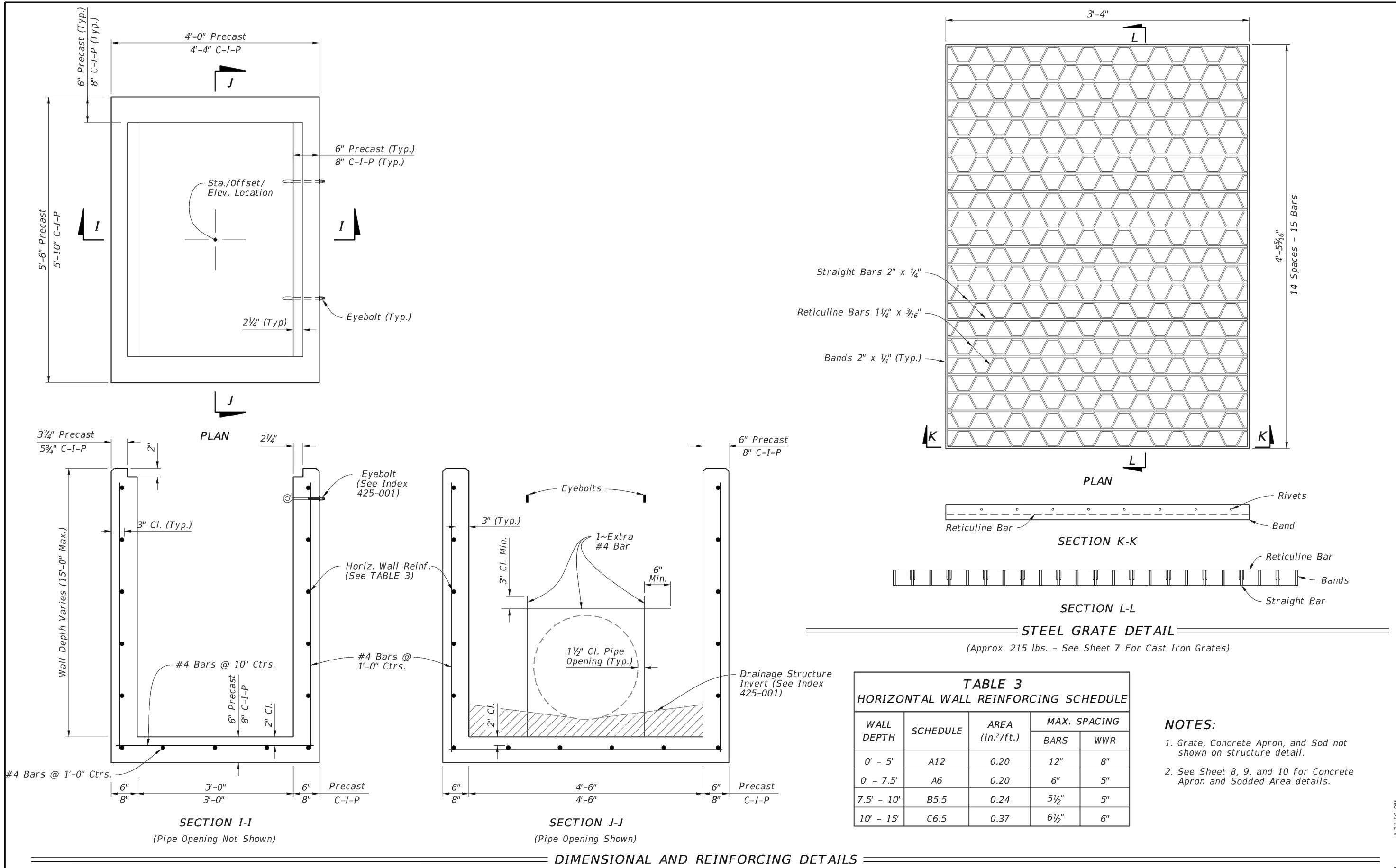
SECTION D-D

STEEL GRATE DETAIL
(Approx. 104 Lbs. - See Sheet 7 For Cast Iron Grates)

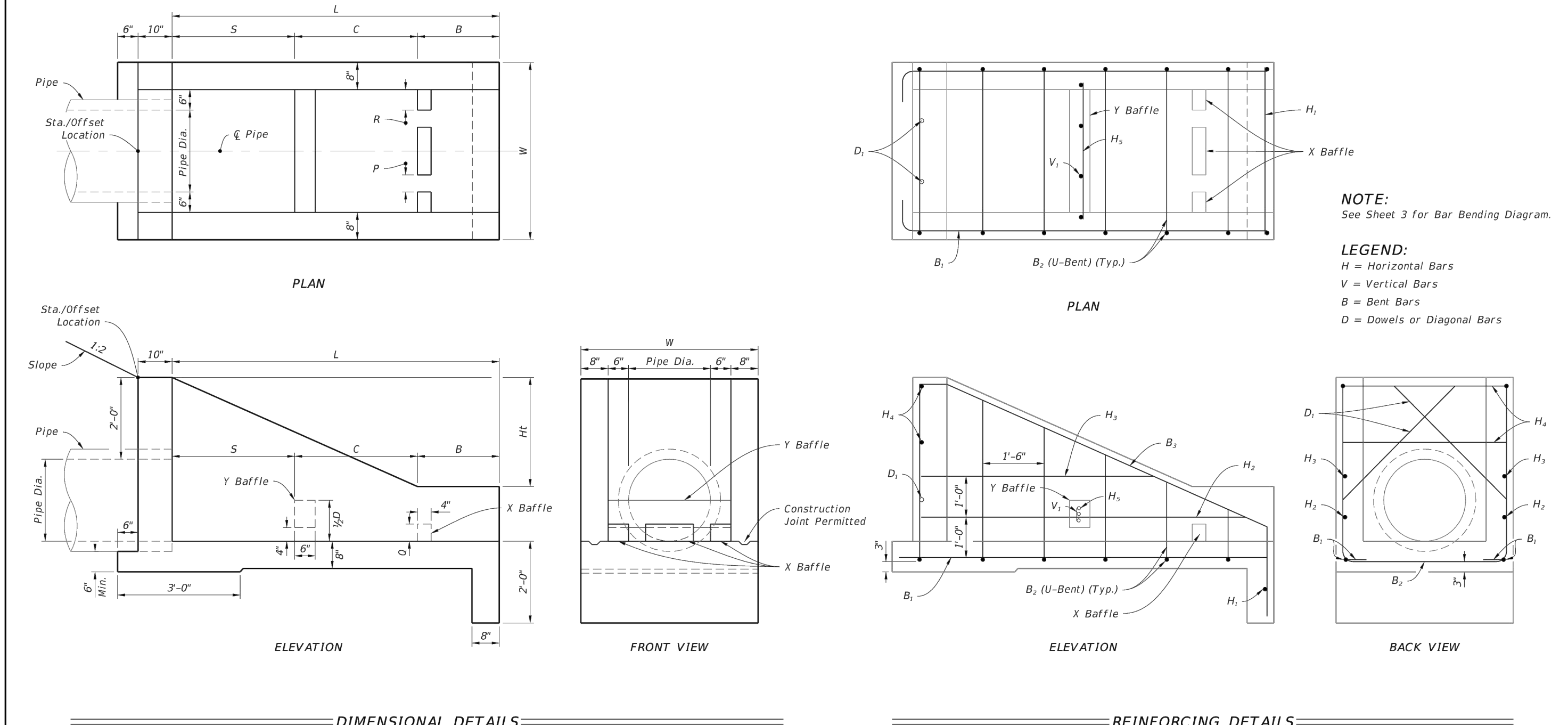
TABLE 1 HORIZONTAL WALL REINFORCING SCHEDULE				
WALL DEPTH	SCHEDULE	AREA (in ² /ft.)	MAX. SPACING BARS	WVF
0' - 15'	A12	0.20	12"	8"

- NOTES:**
1. Grate, Concrete Apron, and Sod not shown on structure detail.
 2. See Sheet 8, 9, and 10 for Concrete Apron and Soded Area details.

LAST REVISION 11/01/20		DESCRIPTION:	FY 2022-23 STANDARD PLANS		STRUCTURE BOTTOMS TYPE J AND P		INDEX 425-010	SHEET 3 of 4	LAST REVISION 11/01/20	DESCRIPTION:	FY 2022-23 STANDARD PLANS		DITCH BOTTOM INLET TYPE C, D, E, AND H		INDEX 425-052	SHEET 2 of 14
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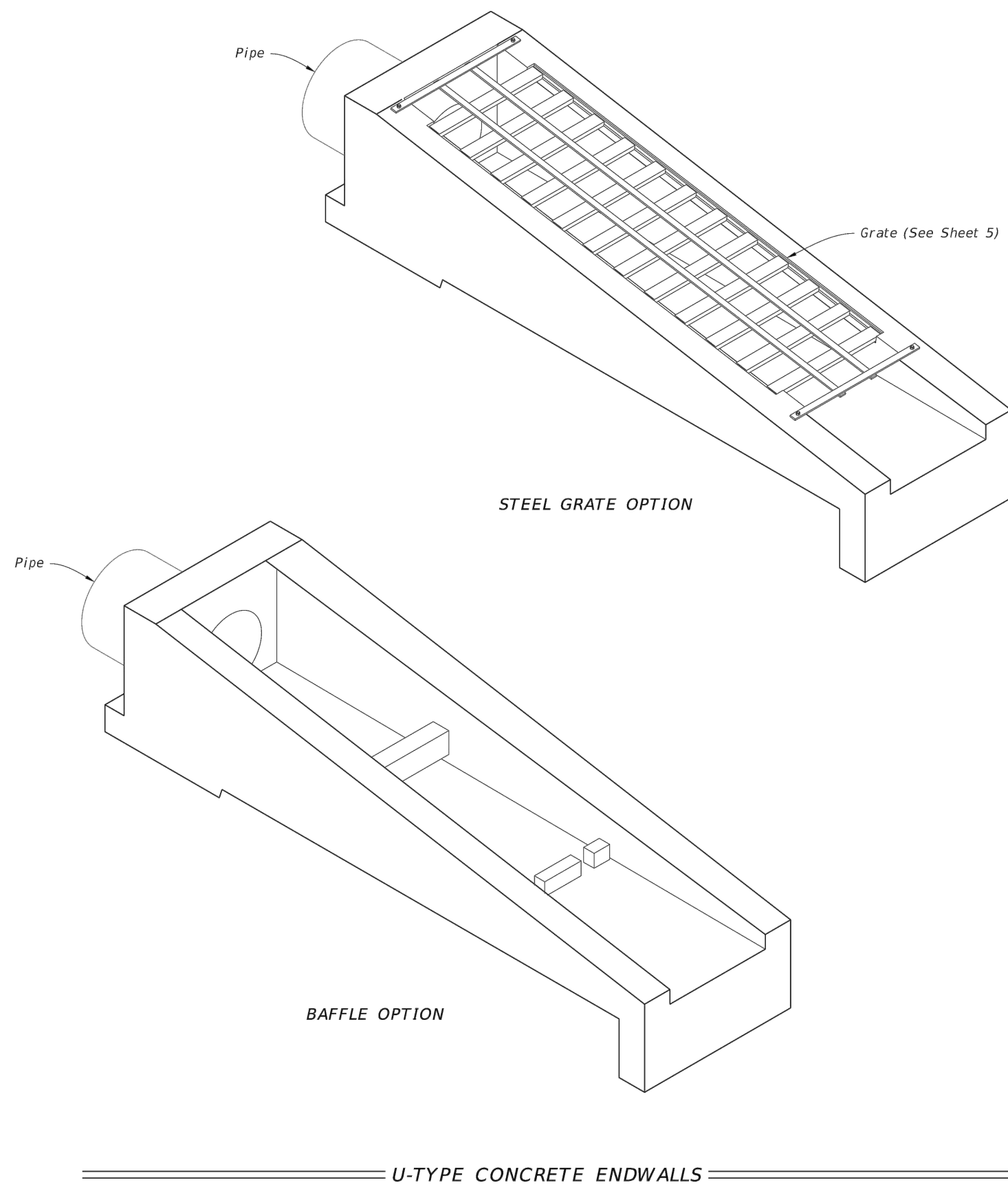
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11/01/20					425-052	4 of 14



LAST REVISION	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	U-TYPE CONCRETE ENDWALLS BAFFLES & GRATE OPTIONAL 15" TO 30" PIPE	INDEX	SHEET
11/01/21					430-011	2 of 5

- GENERAL NOTES:**
1. Use Class II concrete.
 2. Construct Baffles only when called for in Plans.
 3. See Sheet 5 when steel grating is required on endwall.
 4. All reinforcing #4 bars with 2" clearance except as noted.
 5. Channel section C 3x6 may be substituted for C 4x5.4 channel.
 6. Endwall may be cast in place or precast concrete. Construct precast units to dimensions shown, or as shown in approved shop drawings. Submit requests for shop drawing approvals to the Engineer. Use Index 425-001 for opening and grouting details.
 7. Quantities shown are for estimating purposes only.

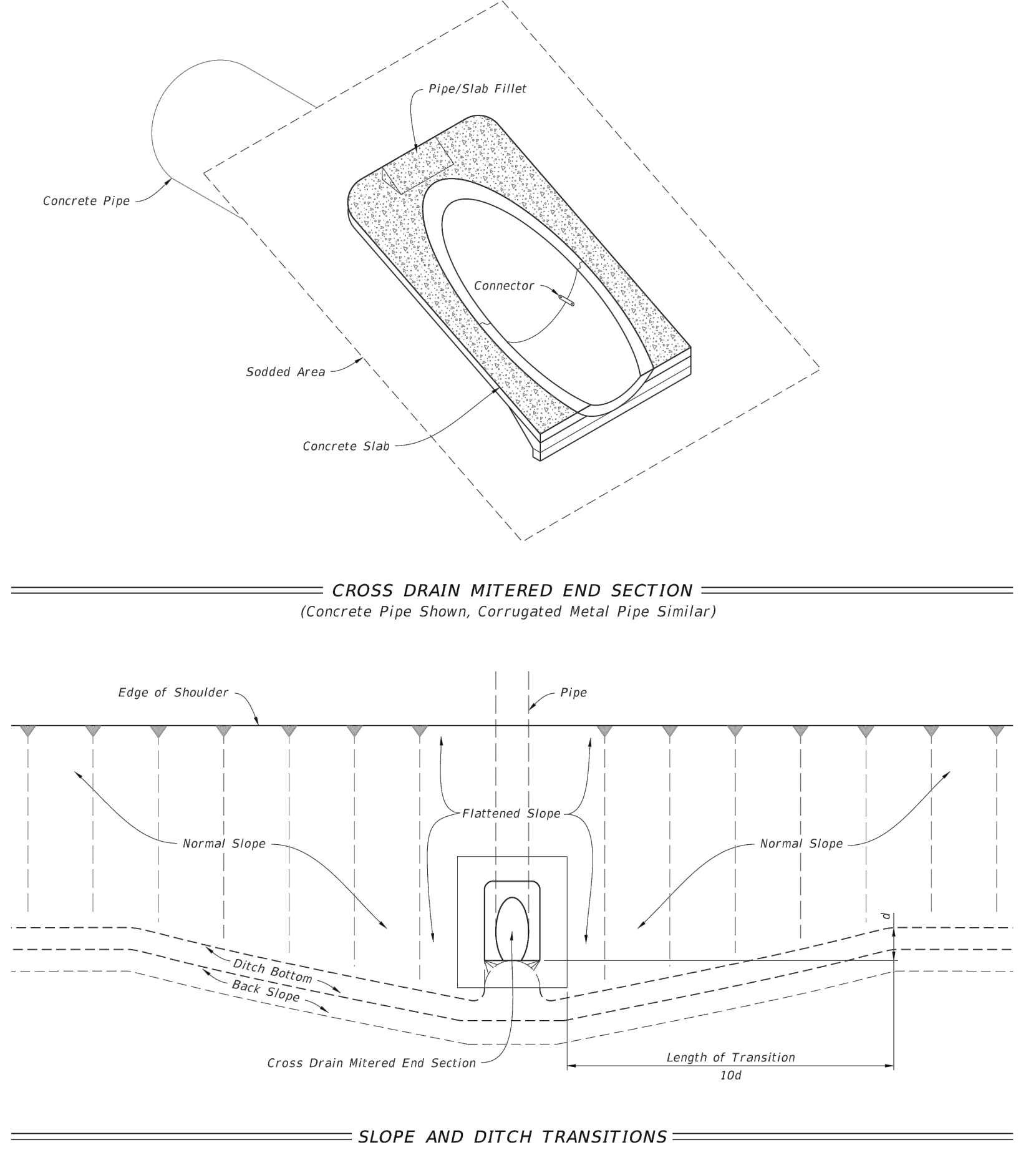
Sheet	Description
1	General Notes and Contents
2	Endwalls for 1:2 Slopes With Baffles
3	Endwalls for 1:2 Slopes Without Baffles and Bending Bar Diagram
4	Endwalls for 1:3, 1:4, and 1:6 Slopes
5	Steel Grate Option



LAST REVISION	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	U-TYPE CONCRETE ENDWALLS BAFFLES & GRATE OPTIONAL 15" TO 30" PIPE	INDEX	SHEET
11/01/21					430-011	1 of 5

- GENERAL NOTES:**
1. Unless otherwise designated in the plans, concrete pipe mitered end sections may be used with any type of cross drain pipe; corrugated steel pipe mitered end sections may be used with any type of cross drain pipe except aluminum pipe; and, corrugated aluminum mitered end sections may be used with any type of cross drain pipe except steel pipe. When bituminous coated metal pipe is specified for cross drain pipe, construct the mitered end sections with like pipe or concrete pipe. When the mitered end section pipe is dissimilar to the cross drain pipe, construct a concrete jacket in accordance with Index 430-001.
 2. Use either corrugated metal or concrete mitered end sections for corrugated polyethylene pipe (HDPE), polyvinyl-chloride pipe (PVC), steel reinforced polyethylene pipe (SRPE), and polypropylene pipe (PP). When used in conjunction with corrugated mitered end sections, make connection using either a formed metal band specifically designated to join HDPE, PVC, SRPE, or PP pipe, with metal pipe. When used in conjunction with a concrete mitered end sections, construct concrete jacket in accordance with Index 430-001.
 3. Class NS concrete cast-in-place reinforced slabs are required for all sizes of cross drain pipes. Construct slabs at 5 1/2" thick, unless 3" thickness is called for in the Plans.
 4. Select lengths of concrete pipe that avoid excessive connections in the assembly of the mitered end section.
 5. Repair corrugated metal pipe galvanizing that is damaged during beveling and perforating.
 6. When existing multiple cross drain pipes are spaced other than the dimensions shown in this Index, have nonparallel axes, or non-uniform sections, either construct the mitered end sections separately as single pipe or collectively as multiple pipe end sections as directed by the Engineer.
 7. Saddle Slope:
 - 1:4 Miter - Slope to centerline of pipe for round pipes less than or equal to 18" diameter and 1:1 for round pipes greater than or equal to 24" diameter.
 - Slope to the major axis for elliptical pipes 24"x38" or smaller and 1:2 for pipes 29"x45" or larger.
 - Slope to the span line for pipe arch 28"x20" or smaller and 1:2 for pipe arch 35"x24" or larger.
 - 1:2 Miter - Slope to centerline of pipe for round pipes less than or equal to 18" diameter and 1:2 for round pipes greater than or equal to 24" diameter.
 - Slope to the major axis for elliptical pipes 29"x45" or smaller and 1:1 for pipes 34"x53" or larger.
 - Slope 1:1 for all pipe arch sizes.
 8. Quantities shown are for estimating purposes only.

Sheet	Description
1	General Notes and Contents
2	Single and Multiple Concrete Pipe
3	Concrete Pipe Dimensions and Quantities
4	Single and Multiple Corrugated Metal Pipe
5	Corrugated Metal Pipe Dimensions and Quantities
6	Concrete Pipe Connections and Corrugated Metal Pipe (CMP) Anchor Detail

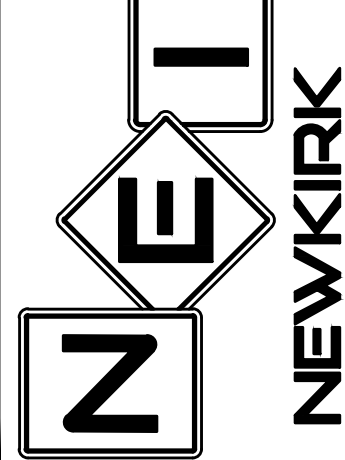


LAST REVISION	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	CROSS DRAIN MITERED END SECTION	INDEX	SHEET
11/01/19					430-021	1 of 6

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS

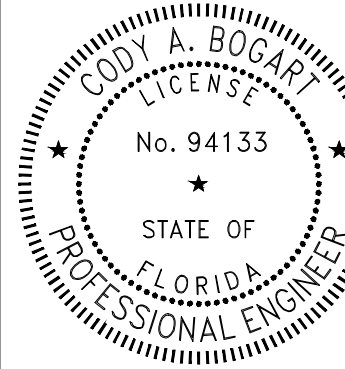
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CHECKED BY:	HHN
SCALE:	
DRAWING NUMBER	

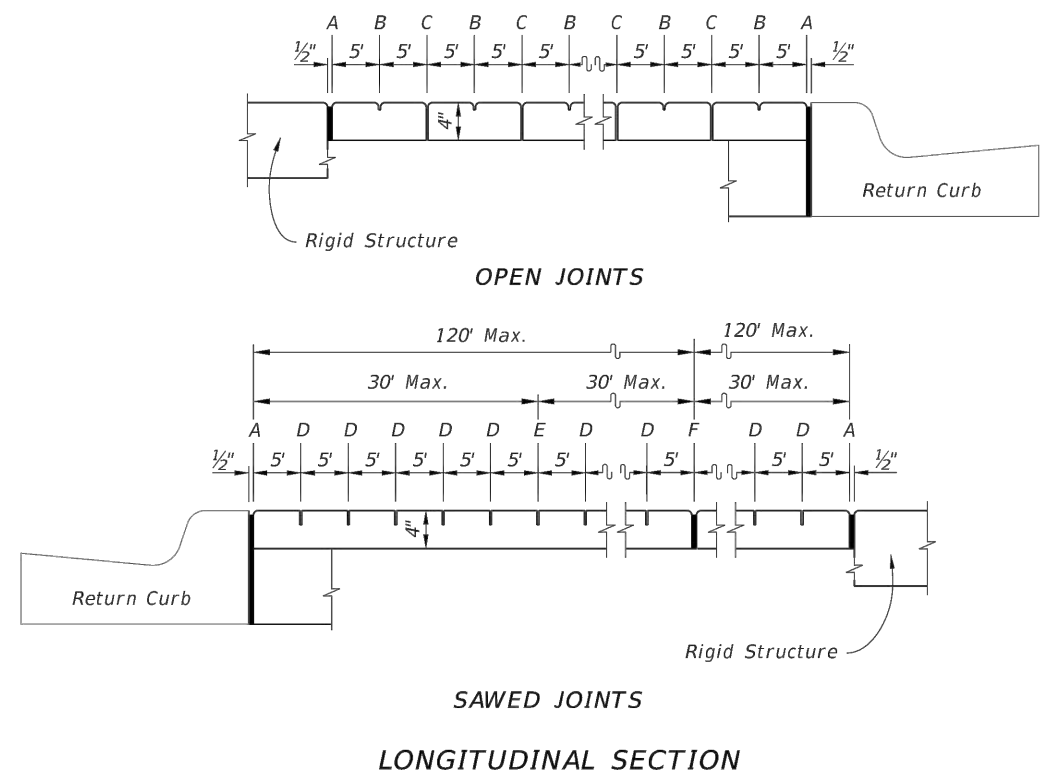
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9/22/2021 8:50:36 AM

GENERAL NOTES:

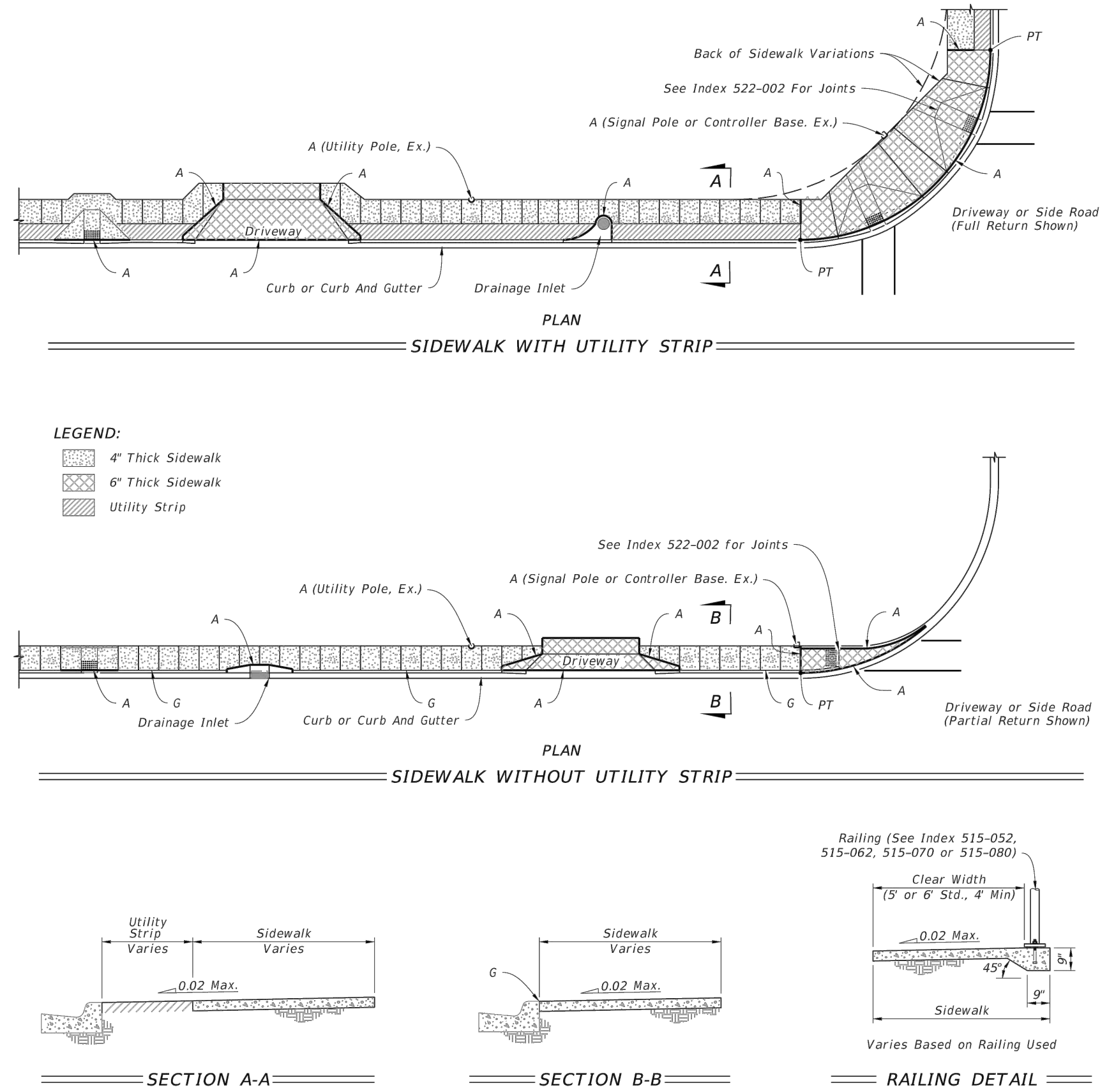
- Construct sidewalks in accordance with Specification 522. Use 6" concrete for Sidewalks and Curb Ramps Located within Curb Returns (See Plan View). Install all other concrete with thickness as shown, unless otherwise detailed in the Plans.
- Include detectable warnings on sidewalk curb ramps in accordance with Index 522-002.
- For Driveways see Index 522-003.
- Bond breaker material can be any impermeable coated or sheet membrane or preformed material having a thickness of not less than 6 mils and not more than 1/2".
- Construct sidewalks with Edge Beam through the limits of any surface mounted Pedestrian/Bicycle Railing or Pipe Gutterall shown in the plans. (See RAILING DETAIL)



LEGEND:

- A- 1/2" Expansion Joints (Preformed Joint Filler) between the sidewalk and; driveways, sidewalk-intersections, and all other fixed objects (e.g. drainage inlets and utility poles).
- B- 1/8" Dummy Joints, Tooled
- C- 1/2" Formed Open Joints
- D- 3/8" Saw Cut Joints, 1 1/2" Deep (within 96 hours) Max. 5' Centers
- E- 3/8" Saw Cut Joints, 1 1/2" Deep (within 12 hours) Max. 30' Centers Joint(s) Required When Length Exceeds 30'
- F- 1/2" Expansion Joint When Run Of Sidewalk Exceeds 120'. Intermediate locations when called for in the plans or at locations as directed by the Engineer.
- G- Cold Joint With Bond Breaker, Tooled

SIDEWALK JOINTS



LEGEND:

- 4" Thick Sidewalk
- 6" Thick Sidewalk
- Utility Strip

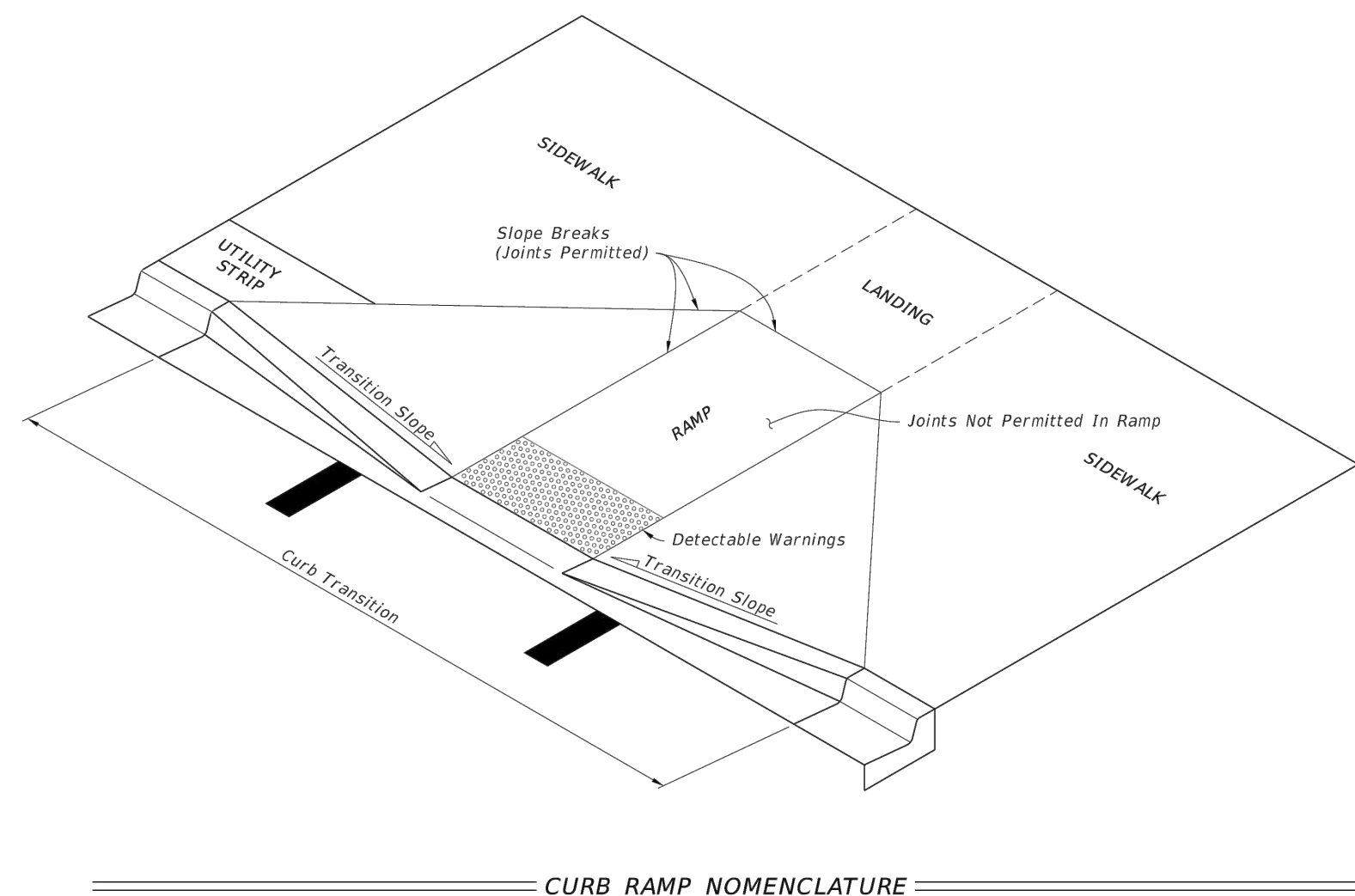
GENERAL NOTES AND CONCRETE SIDEWALK ON CURBED ROADWAYS

8/50/21 AM

LAST REVISION	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	CONCRETE SIDEWALK	INDEX	SHEET
11/01/18					522-001	1 of 2

GENERAL NOTES:

- Cross Slopes and Grades:
 - A. Sidewalk, ramp, and landing slopes (i.e. 0.02, 0.05, and 1:12) shown in this Index are maximums. With approval of the Engineer, provide the minimum feasible slope where the requirements cannot be met.
 - B. Landings must have cross-slopes less than or equal to 0.02 in any direction.
 - C. Maintain a single longitudinal slope along each side of the curb ramp. Ramp slopes are not required to exceed 15 feet in length.
 - D. Joints permitted at the location of Slope Breaks; Otherwise locate joints in accordance with Index 522-001. No joints are permitted within the ramp portion of the Curb Ramp.
- Curb, Curb and Gutter and/or Sidewalk:
 - A. Refer to Index 522-001 for concrete thickness and sidewalk details.
 - B. Remove any existing curb, curb and gutter, or sidewalk to the nearest joint beyond the curb transition or to the extent that no remaining section is less than 5 feet long.
 - C. Width of Curb Ramp is 4'-0" minimum. Match sidewalk or Shared Use Path width as shown in the Plans.
- Curb Ramp Alpha-Identification:
 - A. Sidewalk curb ramp alpha-identifications (e.g. CR-A) are provided for reference purposes in the Plans.
 - B. Alpha-identifications CR-I and CR-J are intentionally omitted.
- Detectable Warnings:
 - A. Install detectable warnings in accordance with Specification 527.
 - B. Place detectable warnings across the full width of the ramp or landing, to a minimum depth of 2 feet measured perpendicular to the curb line and no greater than 5 feet from the back of the curb or edge of pavement.
 - C. If detectable warnings are shown in the Plans on slopes greater than 5%, align the truncated domes with the centerline of the ramp; otherwise, the truncated domes are not required to be aligned.

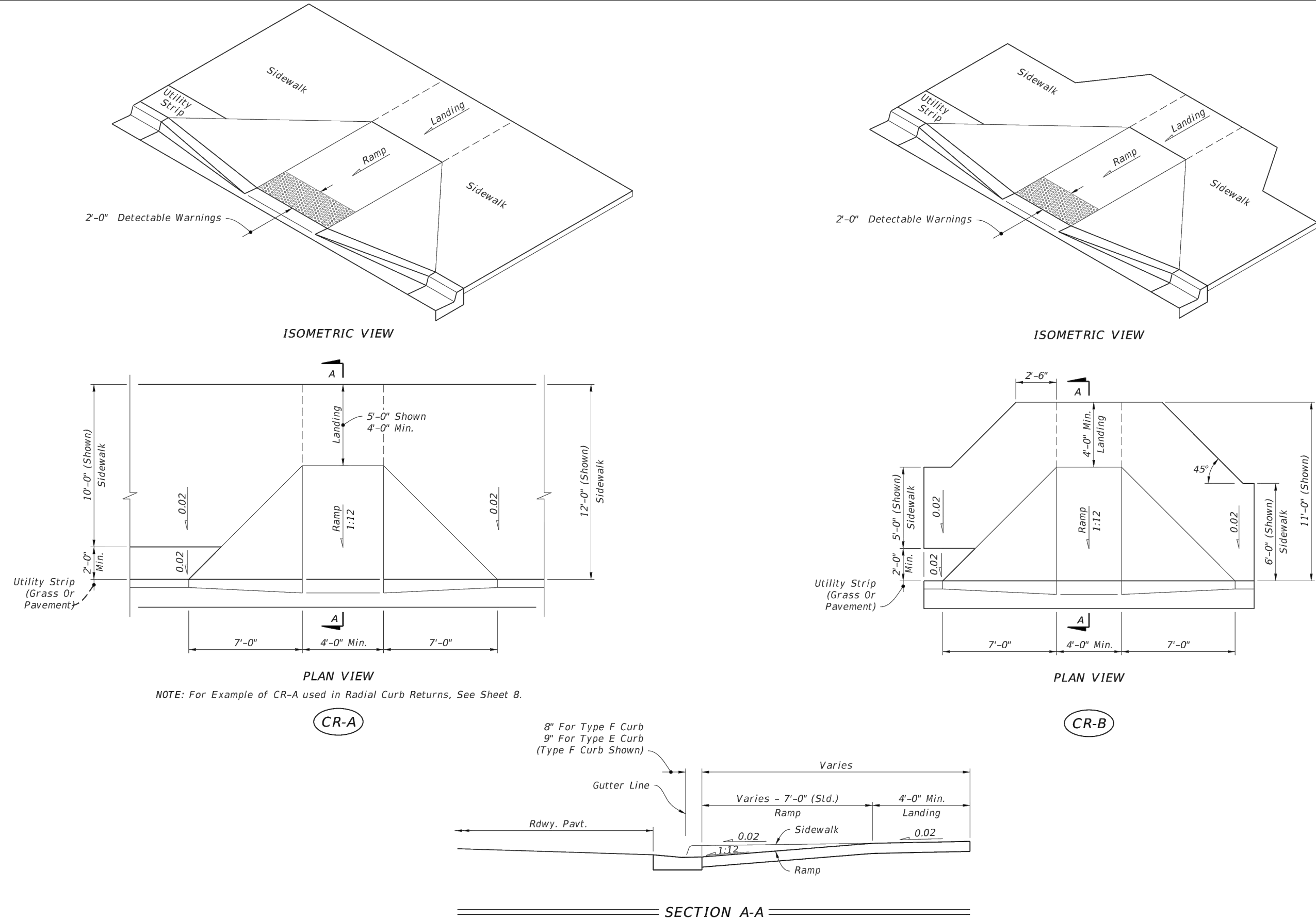


CURB RAMP NOMENCLATURE

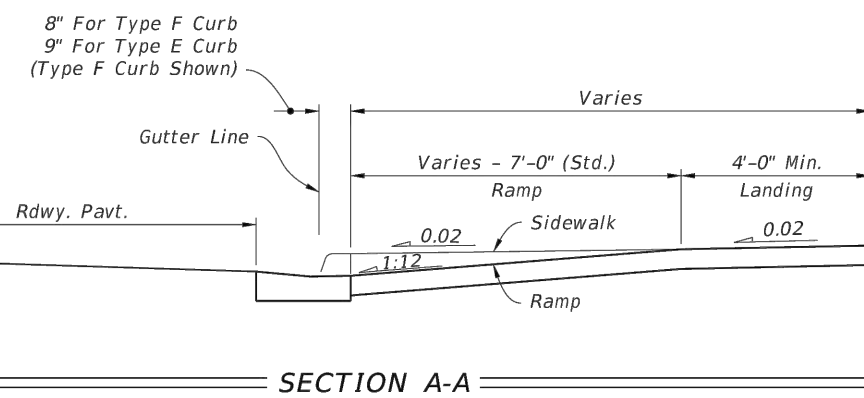
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11/01/21					522-002	1 of 7

LAST REVISION	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	CONCRETE SIDEWALK	INDEX	SHEET
11/01/18					522-001	2 of 2



NOTE: For Example of CR-A used in Radial Curb Returns, See Sheet 8.



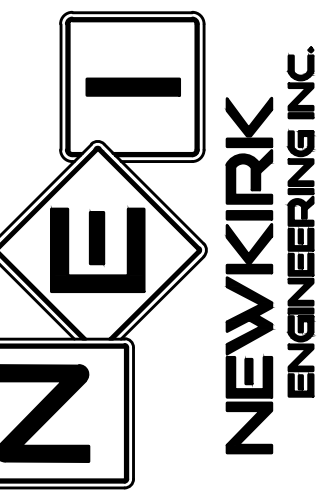
SIDEWALK CURB RAMPS CR-A AND CR-B

LAST REVISION	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX	SHEET
11/01/20					522-002	2 of 7

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS

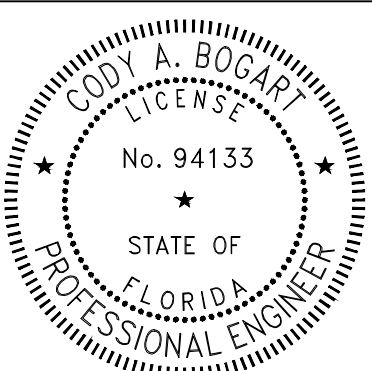
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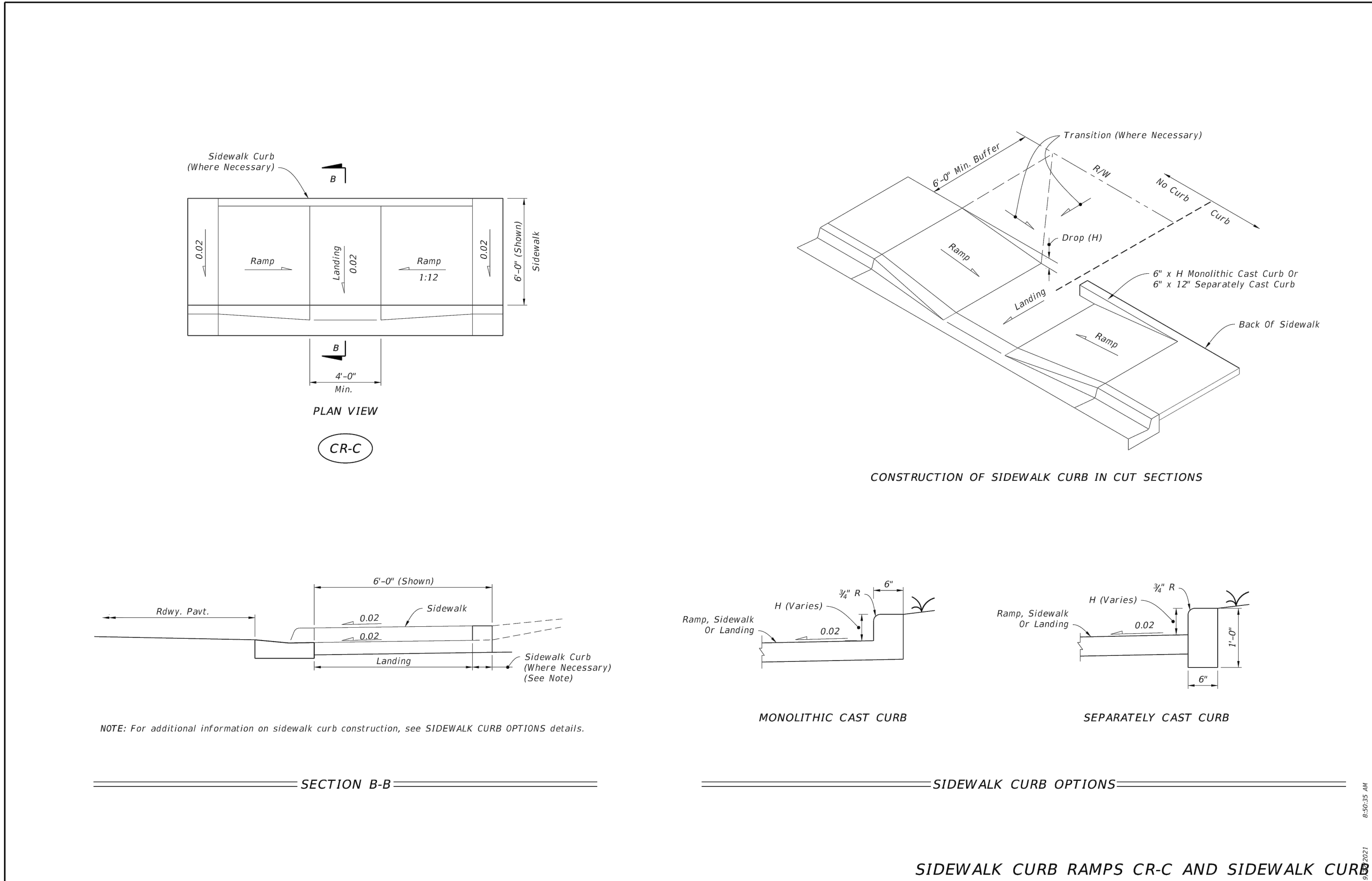


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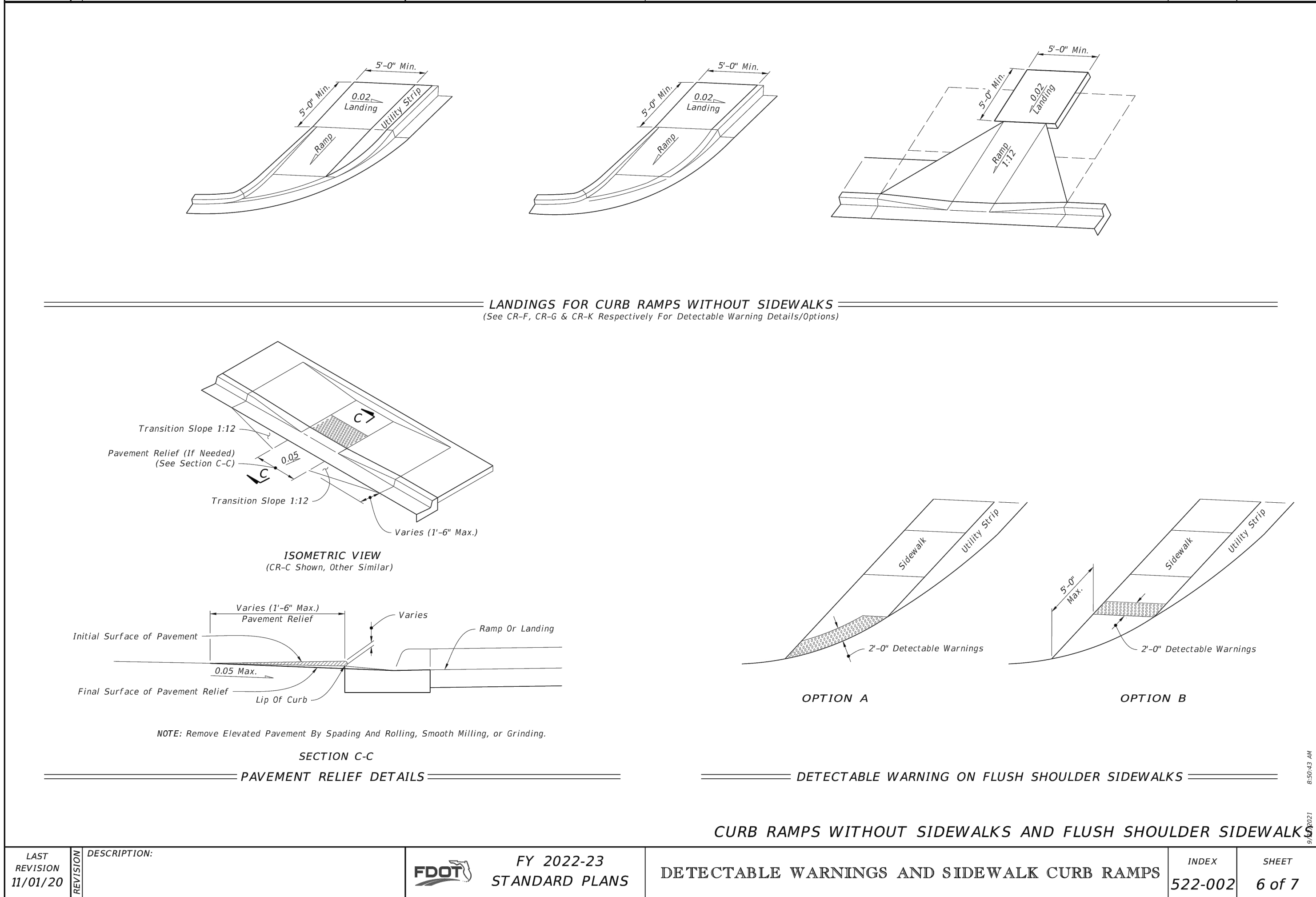
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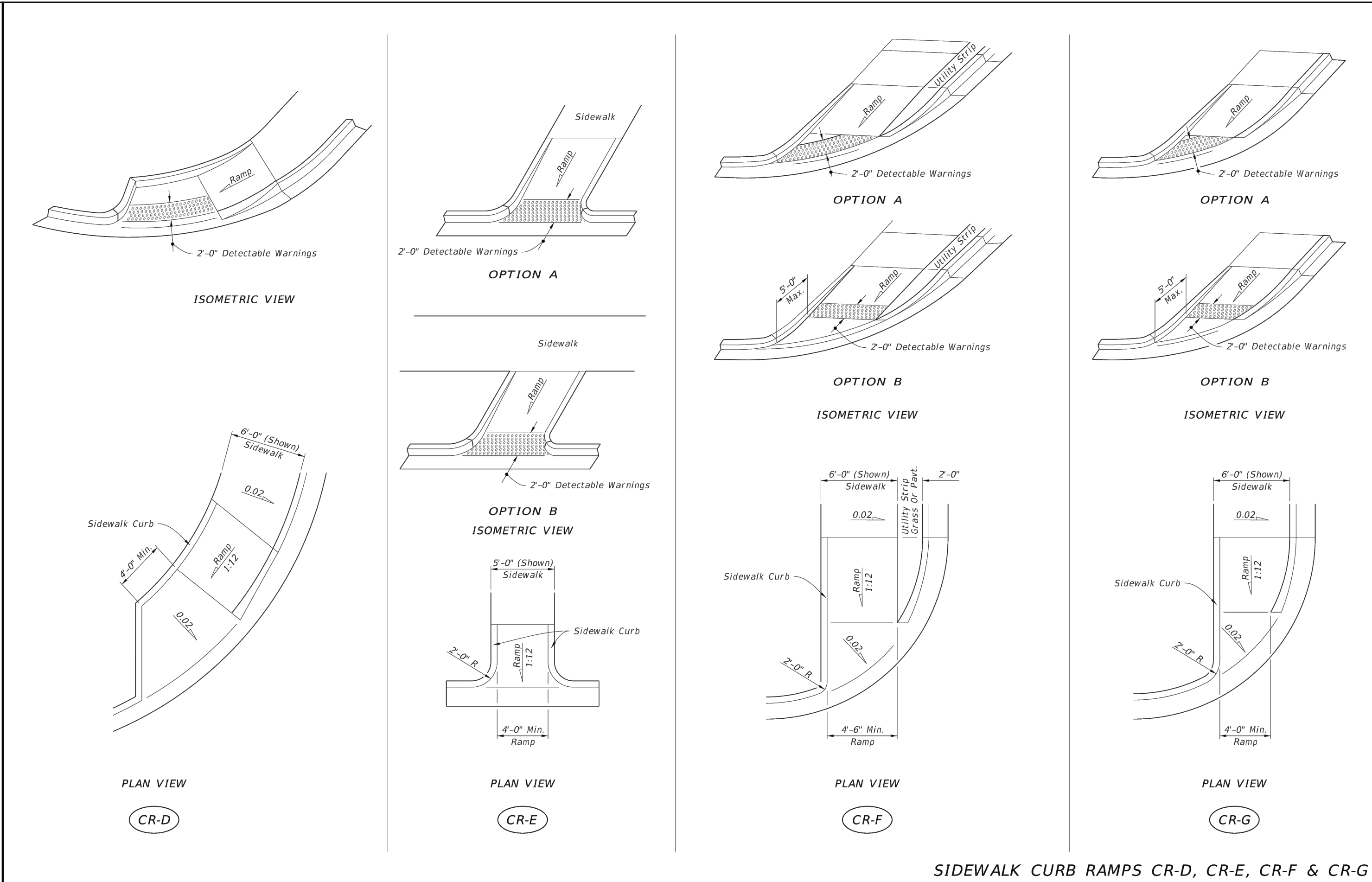
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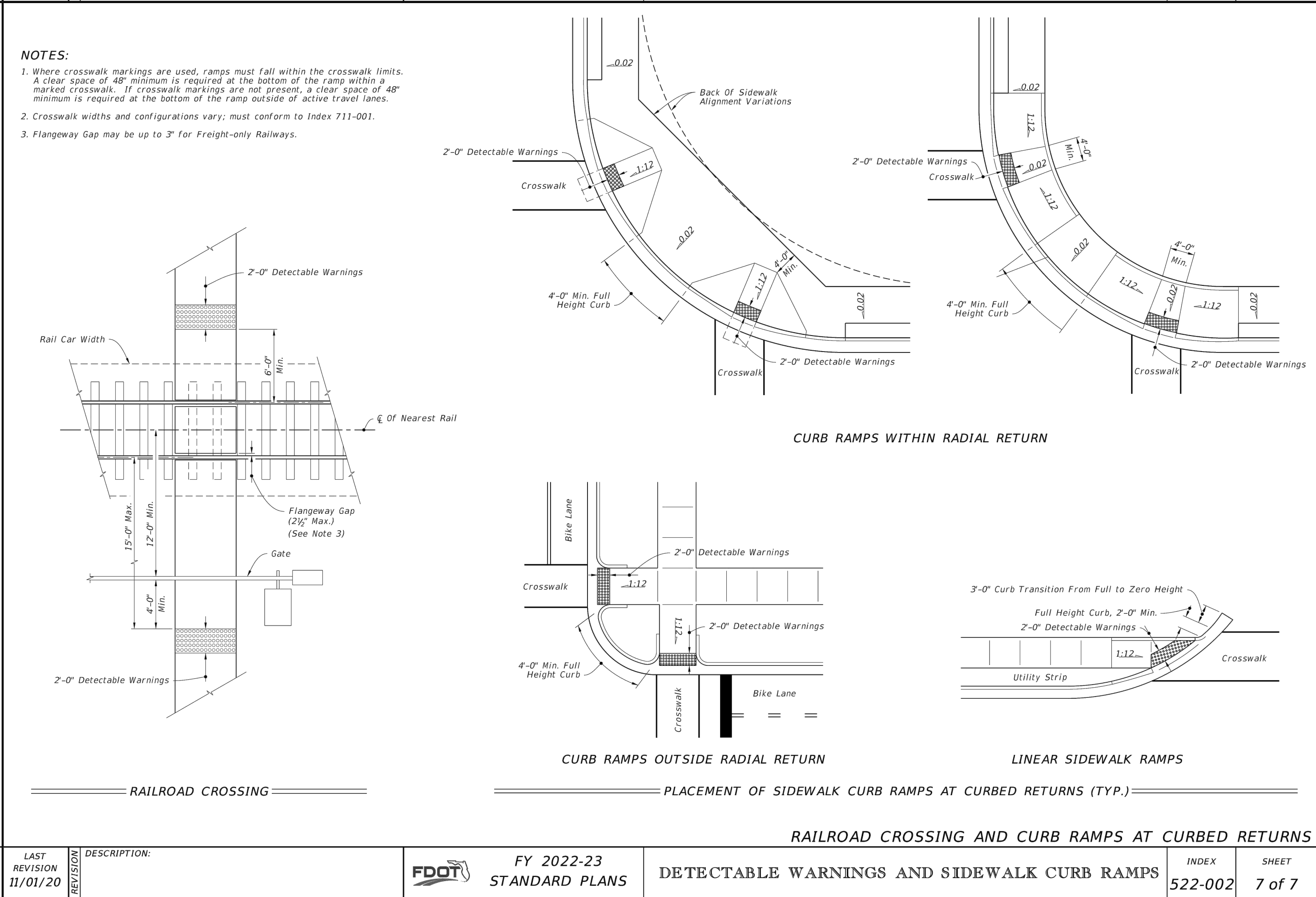
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11/01/20					522-002	3 of 7



LAST REVISION	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX	SHEET
11/01/20					522-002	6 of 7



LAST REVISION	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX	SHEET
11/01/21					522-002	4 of 7

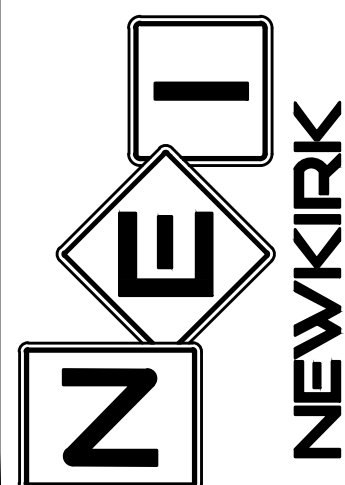


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11/01/20					522-002	7 of 7

REVISIONS

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7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS

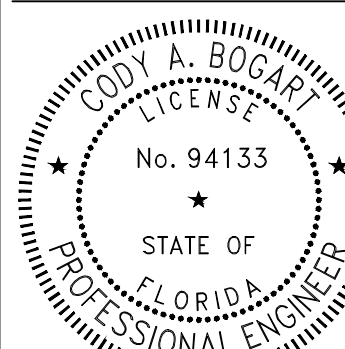
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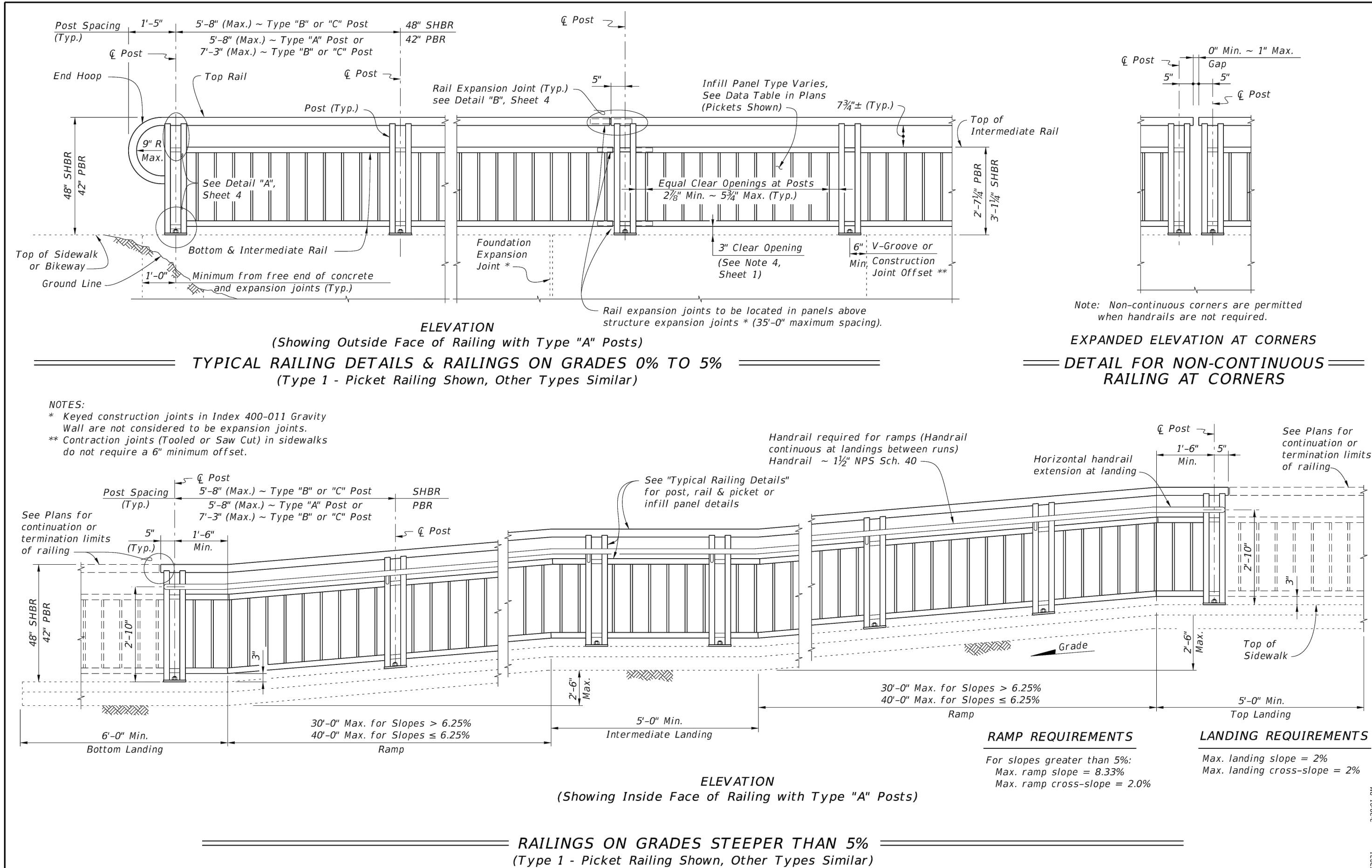


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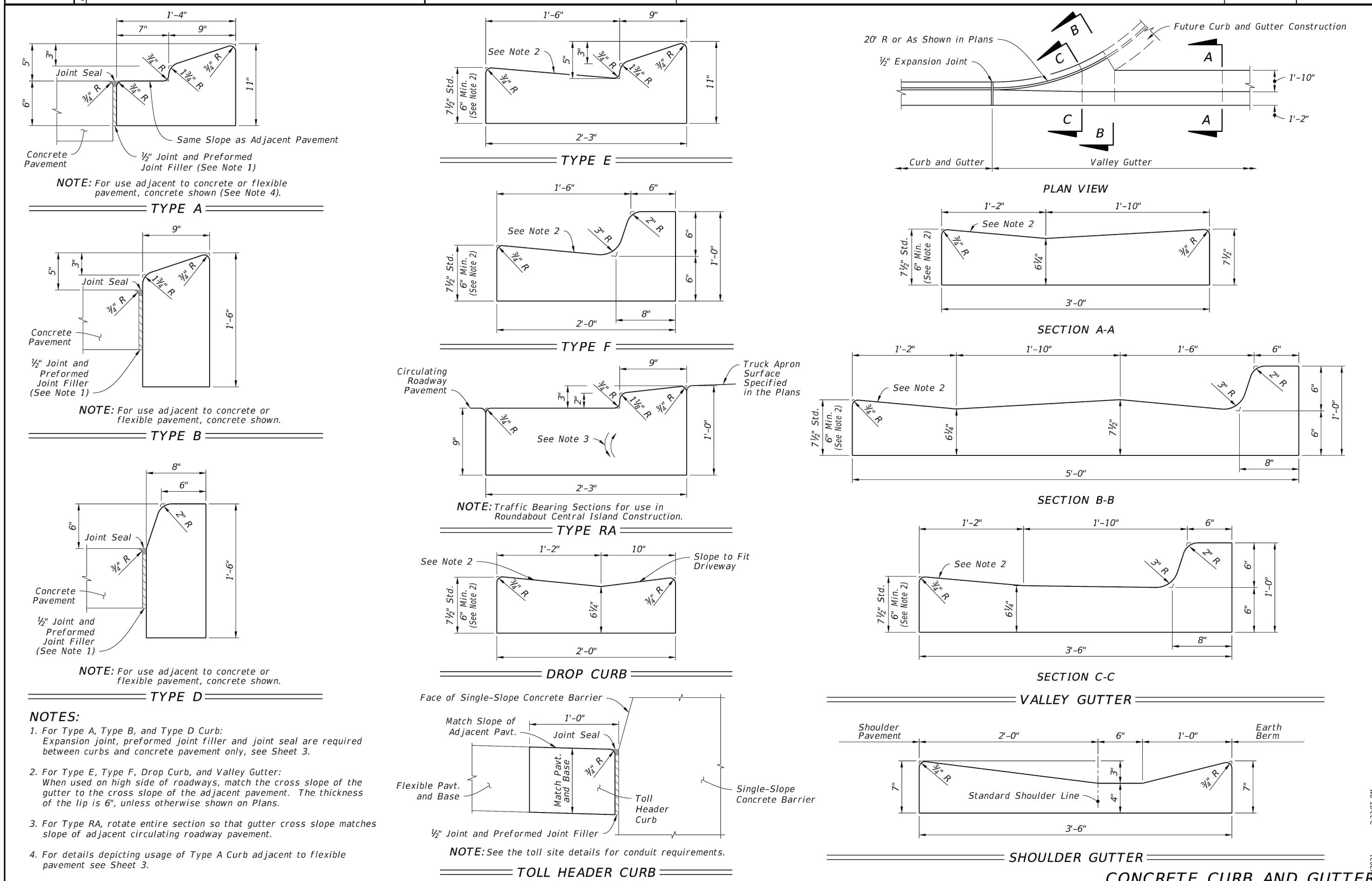
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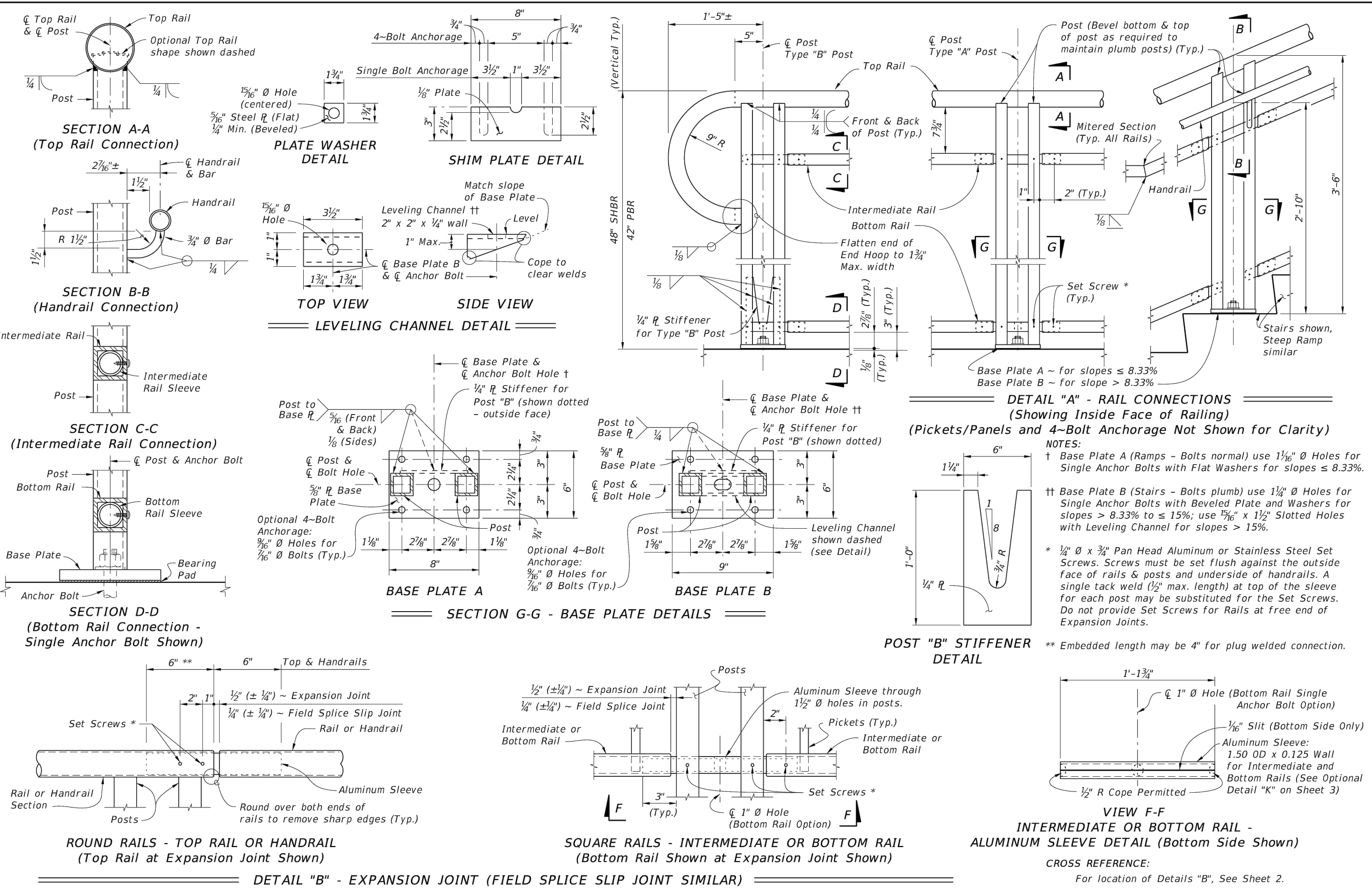
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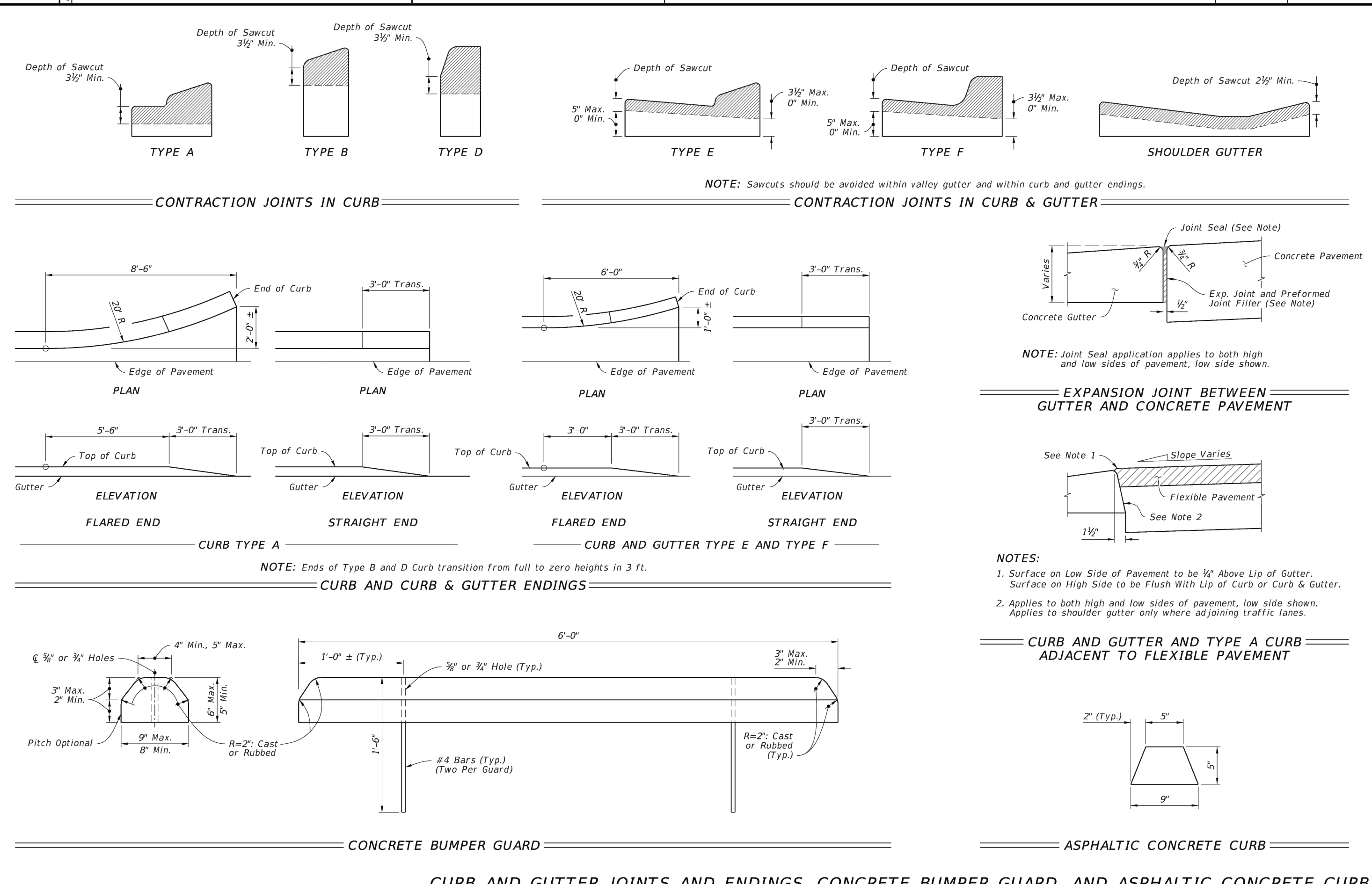
LAST REVISION	DESCRIPTION:	INDEX	SHEET
07/01/15		515-062	2 of 9



LAST REVISION	DESCRIPTION:	INDEX	SHEET
11/01/21		520-001	2 of 3



LAST REVISION	DESCRIPTION:	INDEX	SHEET
11/01/16		515-062	4 of 9

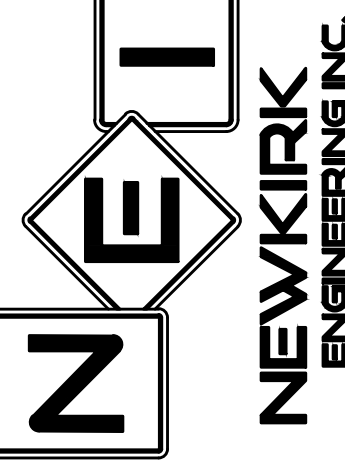


LAST REVISION	DESCRIPTION:	INDEX	SHEET
11/01/21		520-001	3 of 3

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
11/8/22	CITY COMMENTS

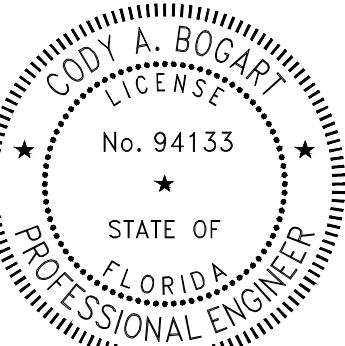
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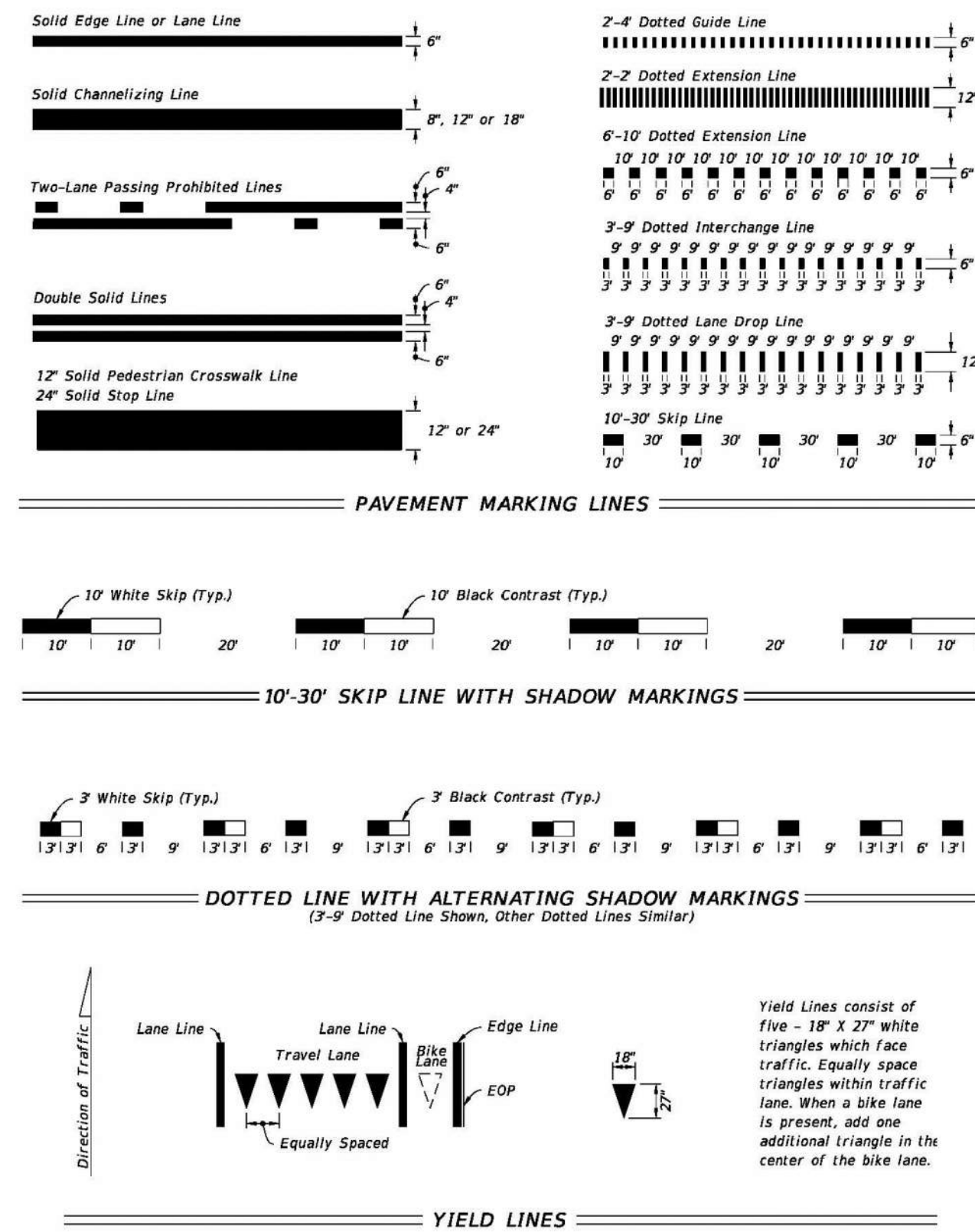
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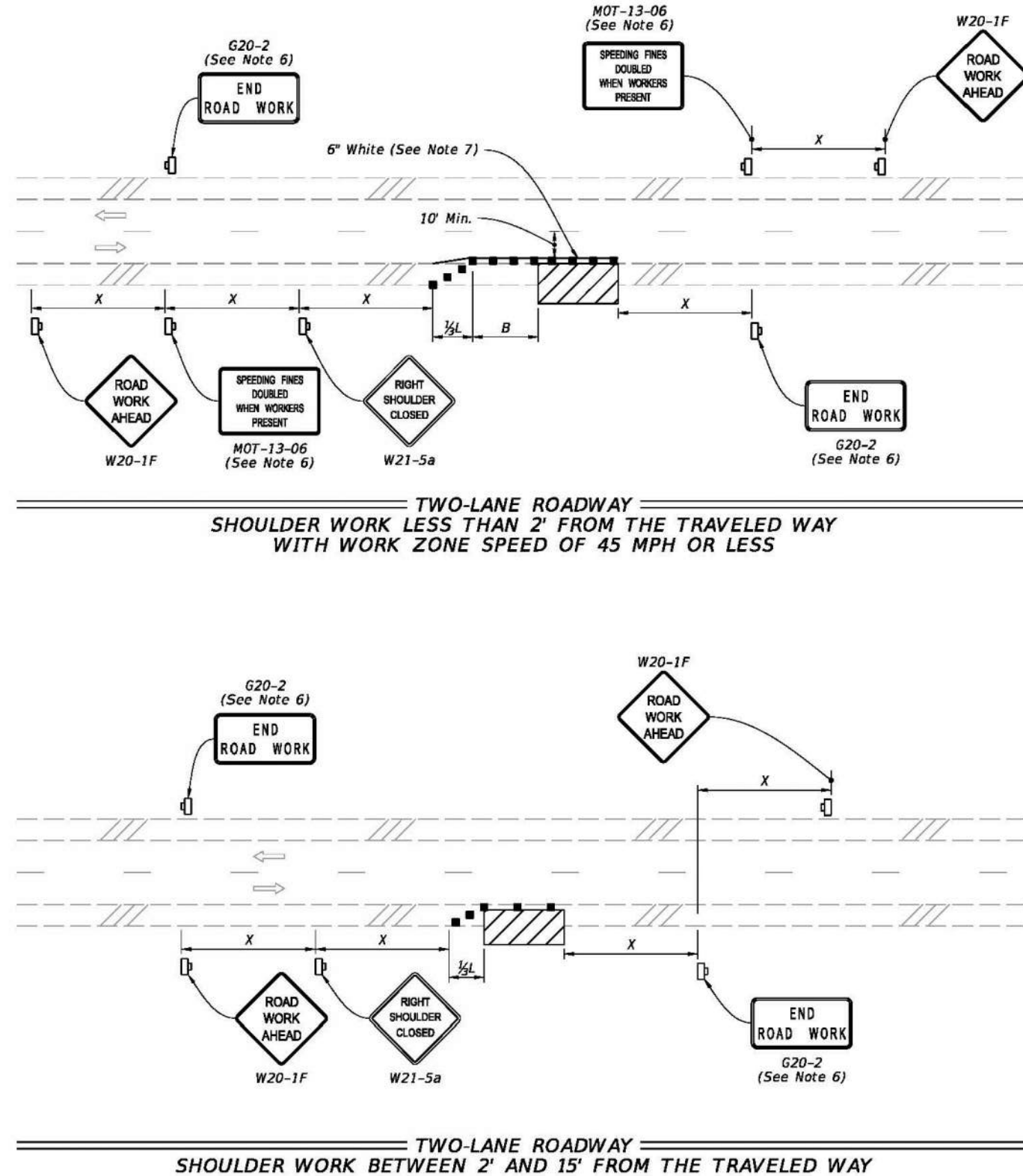
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LAST REVISION	DESCRIPTION:	FY 2021-22	PAVEMENT MARKINGS	INDEX	SHEET
02/05/21	Added railroad pavement marking details.	STANDARD PLANS		711-001	2 of 14

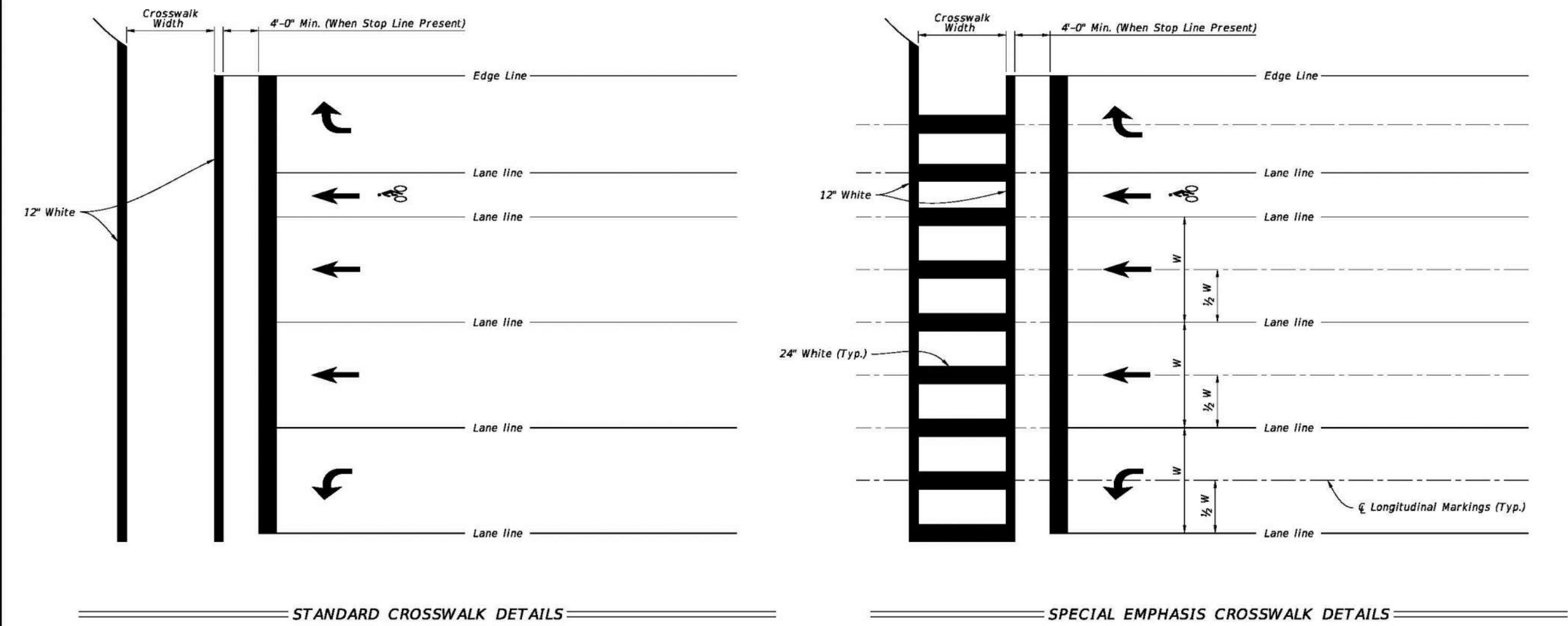
- NOTES:**
1. This Index applies to Two-Lane, Two-Way and Multilane Roadways, including Medians of divided roadways, with work on the shoulder.
 2. L = Taper Length
X = Work Zone Sign Spacing
B = Buffer Length
See Index 102-600 for "L", "X", "B", and channelizing device spacing values.
 3. For incidental work (e.g. mowing or litter removal), only the Road Work Ahead sign is required.
 4. When four or more work vehicles enter the through traffic lanes in a one hour period (excluding establishing and terminating the work area), use a flagger or lane closure to accommodate work vehicle ingress and egress.
 5. For work less than two feet from the traveled way and work zone speed is greater than 45 MPH, use a lane closure.
 6. The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" Signs (G20-2) along with the associated work zone sign spacing distances may be omitted when the temporary condition is in place for 24 hours or less.
 7. Temporary pavement markings may be omitted when the work zone is in place for 3 days or less.
 8. If the work encroaches on a marked bicycle lane or rideable shoulder, close the lane or shoulder in accordance with the Plans.
 9. Omit "Shoulder Closed" signs (W21-5a) along with associated work zone sign spacing distances for work on the median.
- SYMBOLS:**
- Work Area
 - Channelizing Device (See Index 102-600)
 - Work Zone Sign
 - Lane Identification and Direction of Traffic



LAST REVISION	DESCRIPTION:	FY 2021-22	TWO-LANE AND MULTILANE, WORK ON SHOULDER	INDEX	SHEET
11/01/20		STANDARD PLANS		102-602	1 of 2

25/05/2021 11:53:37 AM

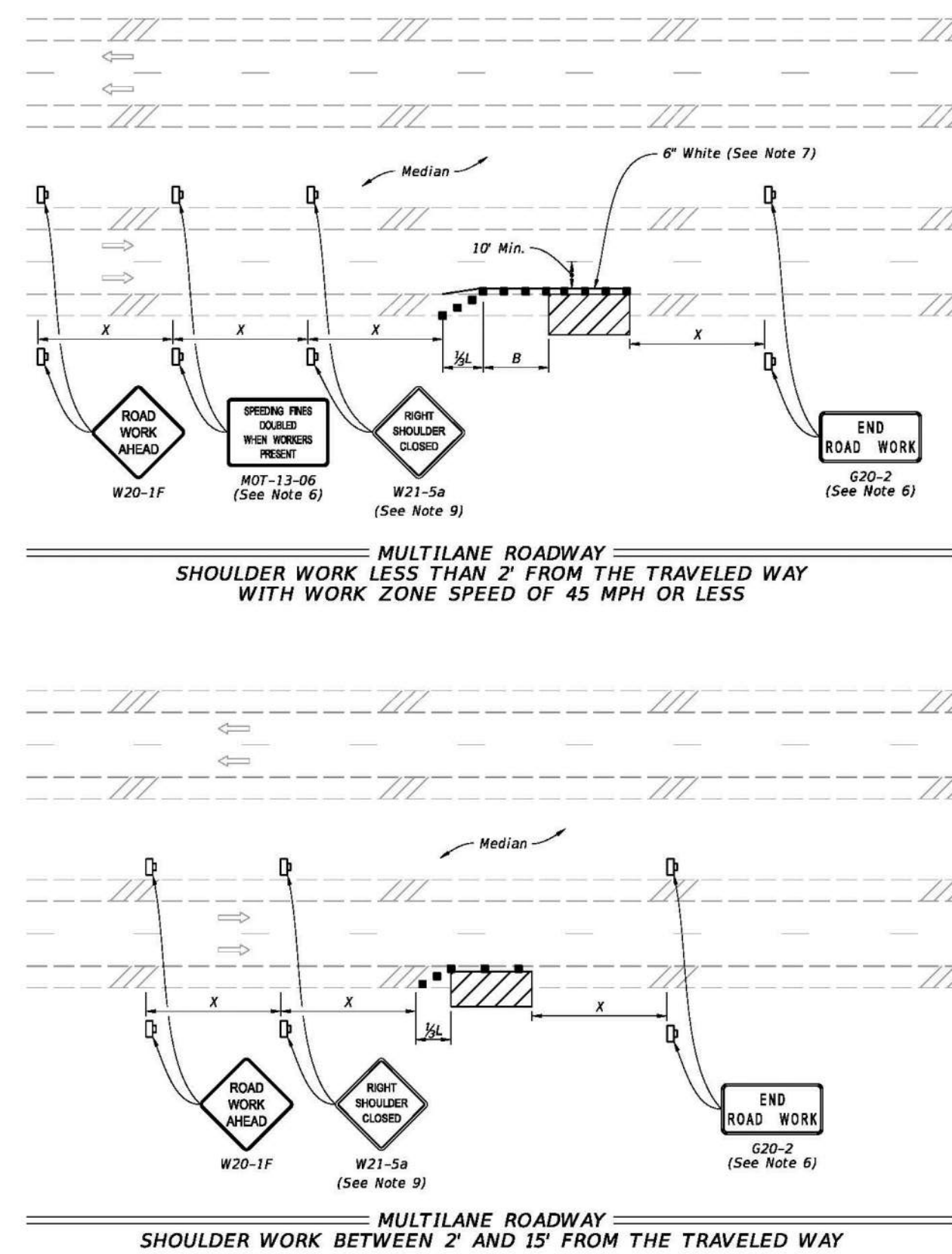
10/05/2022 1:18:37 PM



- NOTES:**
1. For crosswalk width, exceed width of the adjacent sidewalk, but do not make width less than 6' for intersection crosswalks and 10' for midblock crosswalks. Measure width from the inside of the transverse crosswalk markings.
 2. When the Special Emphasis Crosswalk is not perpendicular to the lane lines, make the longitudinal markings parallel to the lane lines.
 3. Refer to Index 522-002 when Curb Ramps are present.

LAST REVISION	DESCRIPTION:	FY 2021-22	PAVEMENT MARKINGS	INDEX	SHEET
02/05/21	Added railroad pavement marking details.	STANDARD PLANS		711-001	10 of 14

- SYMBOLS:**
- Work Area
 - Channelizing Device (See Index 102-600)
 - Work Zone Sign
 - Lane Identification and Direction of Traffic

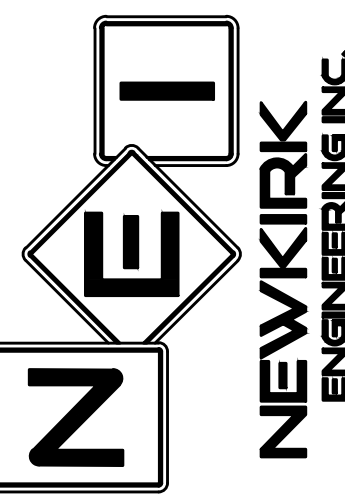


LAST REVISION	DESCRIPTION:	FY 2021-22	TWO-LANE AND MULTILANE, WORK ON SHOULDER	INDEX	SHEET
11/01/20		STANDARD PLANS		102-602	2 of 2

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS

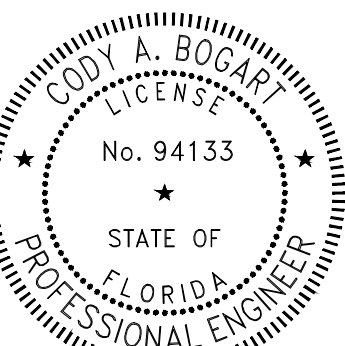
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MAINTENANCE PF TRAFFIC & FDOT DETAILS
MADELINE COMMONS
975 McDONALD ROAD
PORT ORANGE, FL 32129

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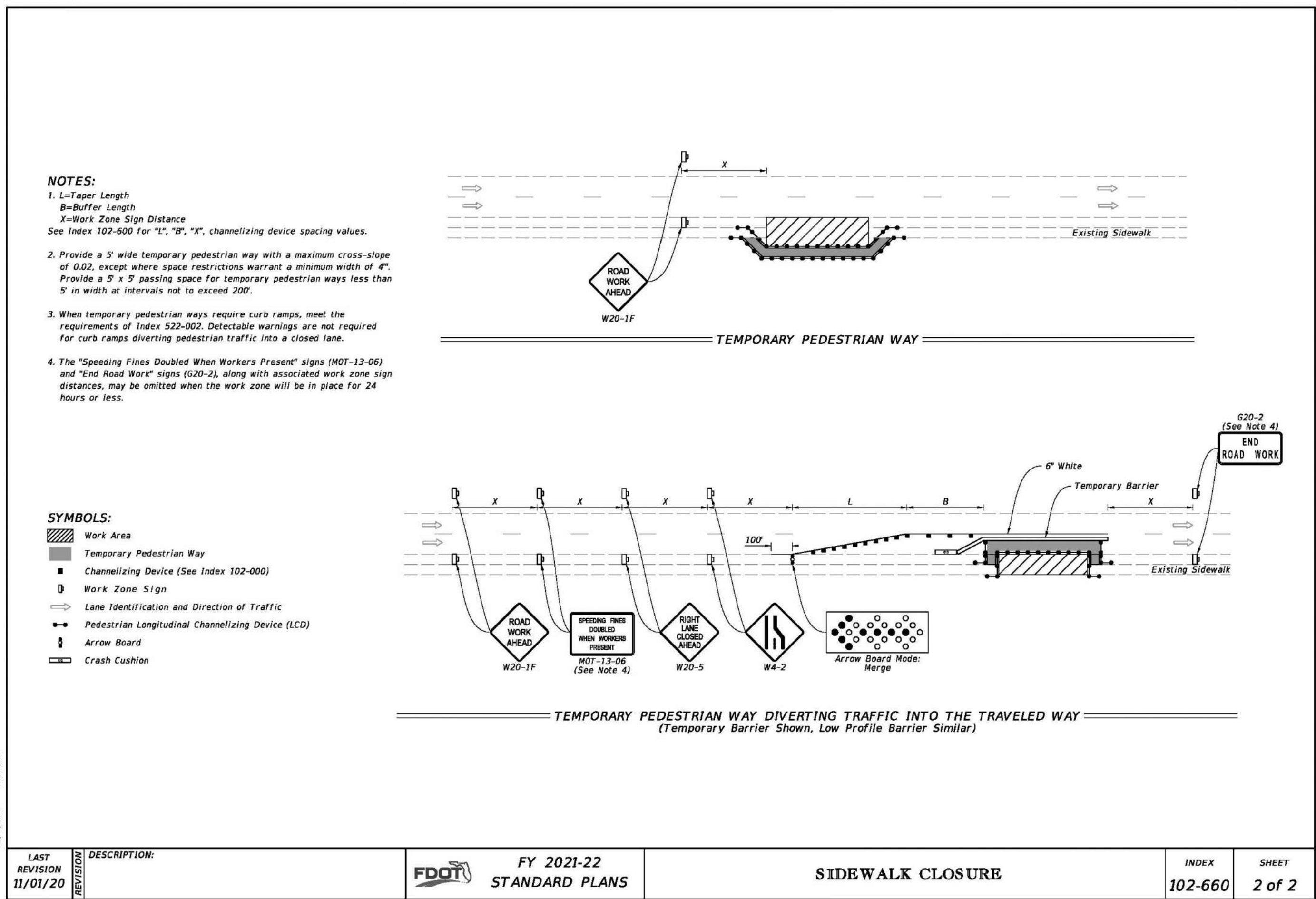
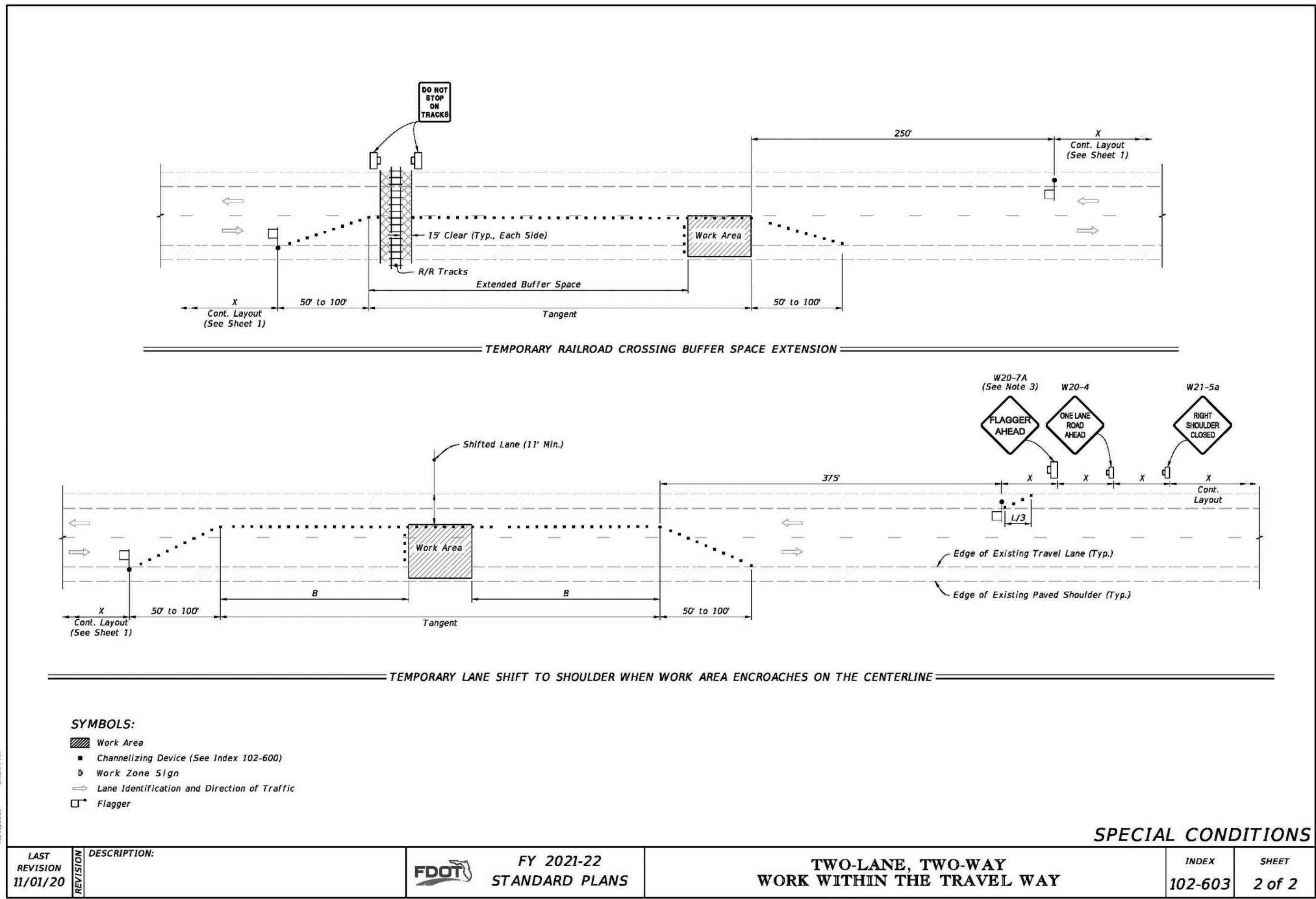
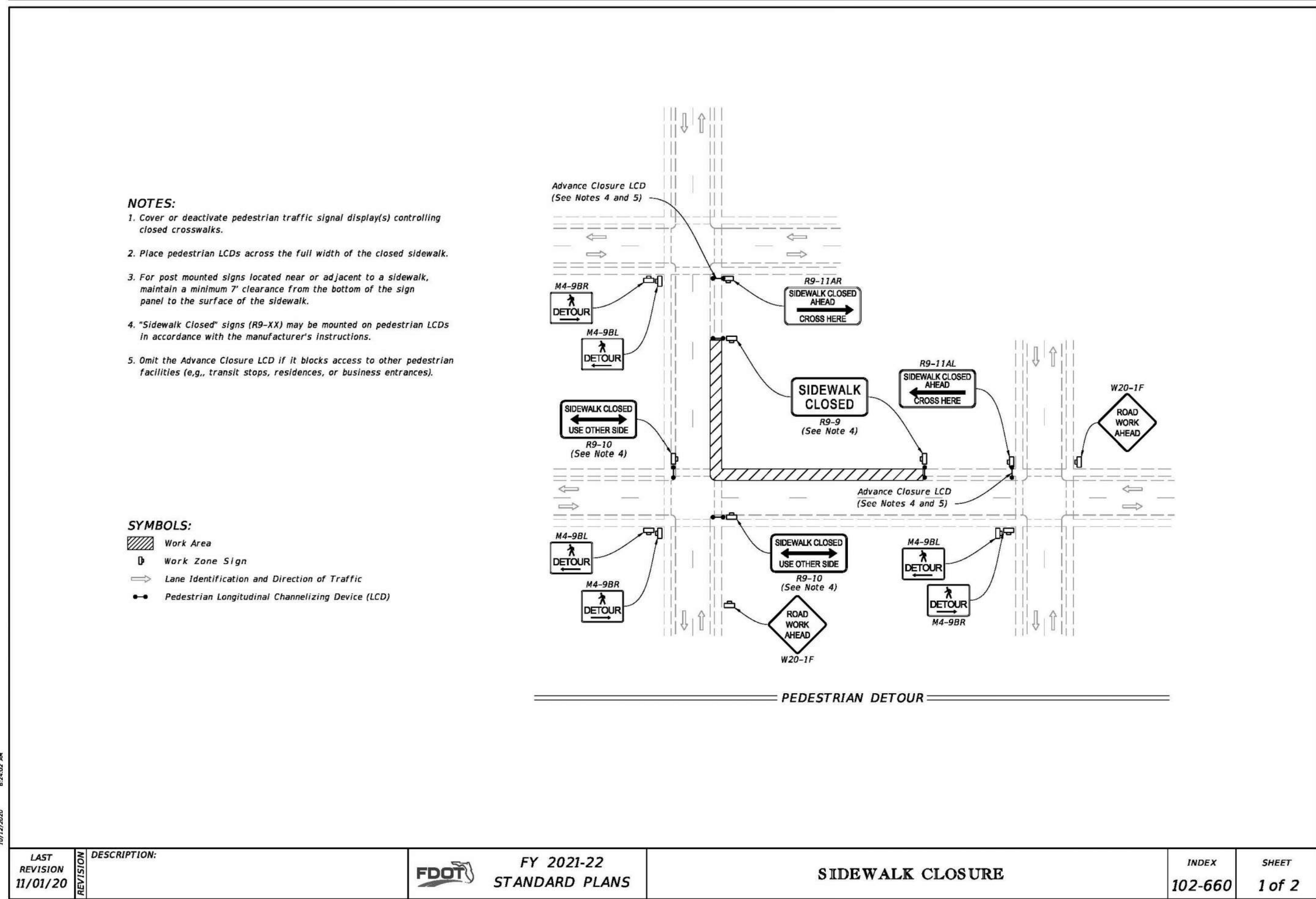
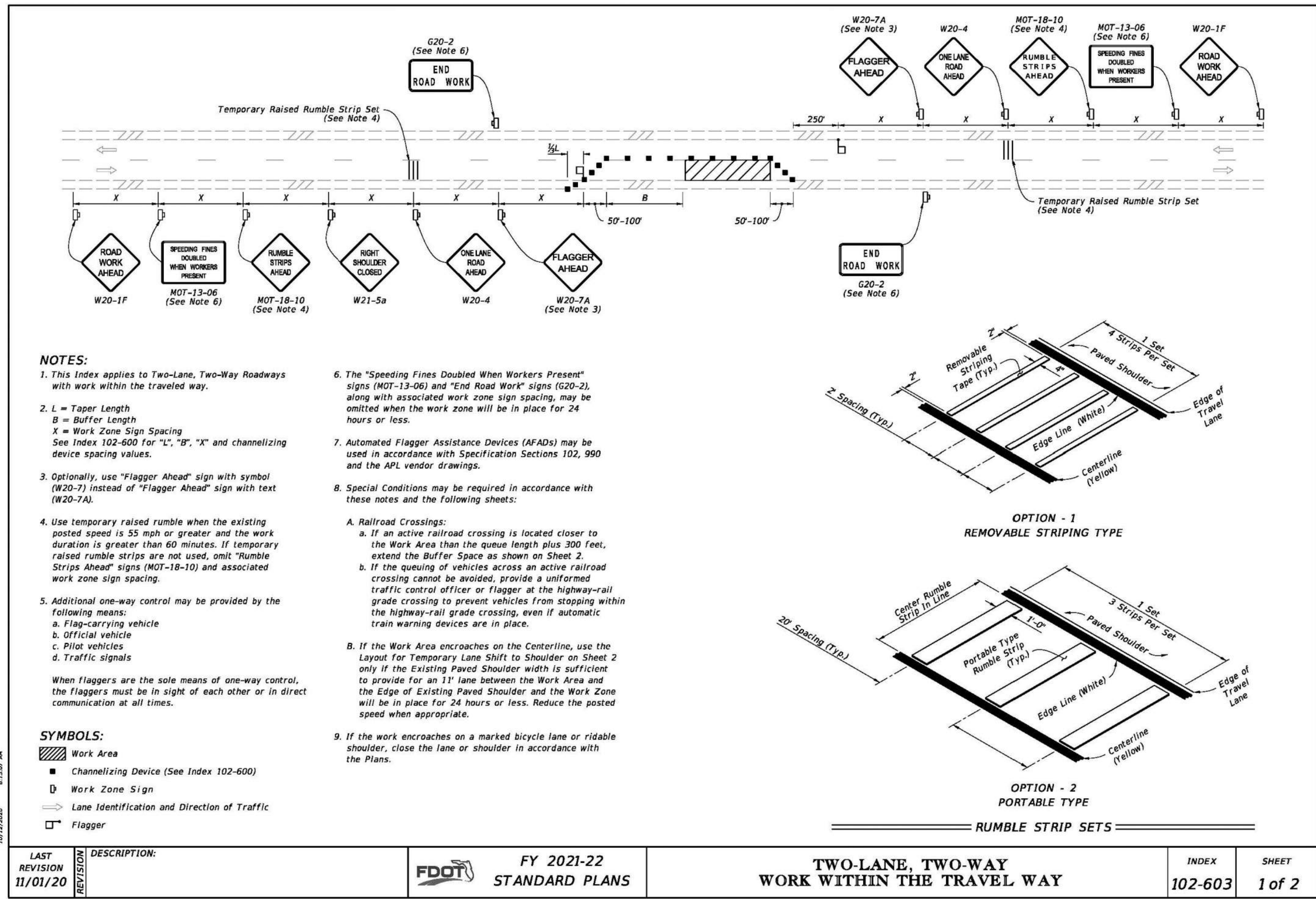
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CHECKED BY:	HHN
SCALE:	
DRAWING NUMBER	

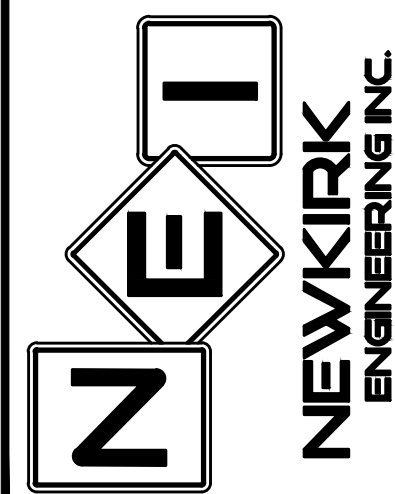
48



REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS

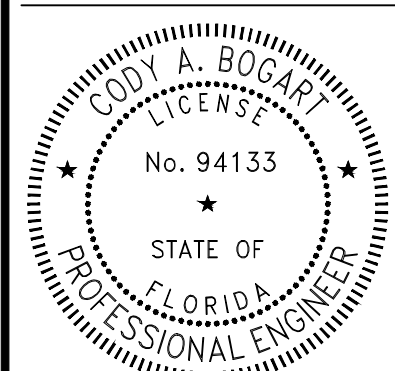
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MAINTENANCE OF TRAFFIC
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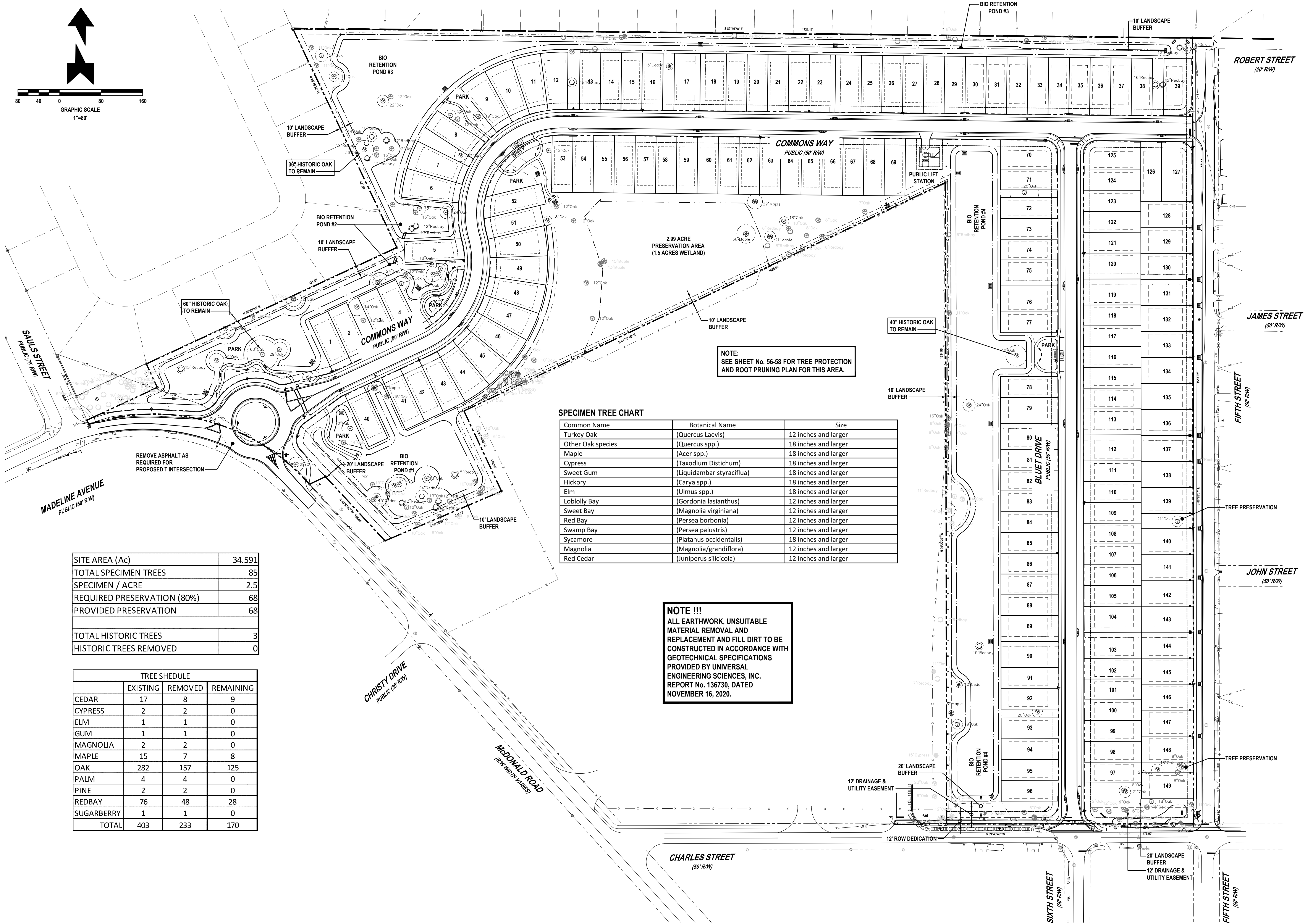
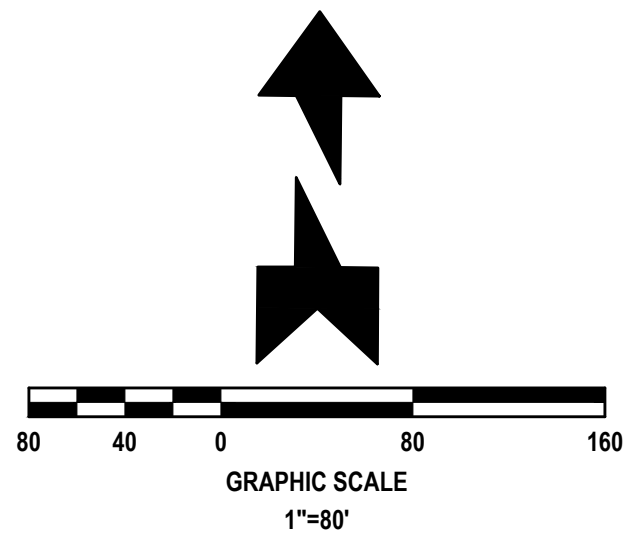
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PROJECT No: 2021-309
DATE: JULY 2022
DESIGN BY: CAB
DRAWN BY: DAB
CHECKED BY: HHN
SCALE:
DRAWING NUMBER

49



SITE AREA (Ac)	34.591
TOTAL SPECIMEN TREES	85
SPECIMEN / ACRE	2.5
REQUIRED PRESERVATION (80%)	68
PROVIDED PRESERVATION	68
TOTAL HISTORIC TREES	3
HISTORIC TREES REMOVED	0

TREE SCHEDULE			
	EXISTING	REMOVED	REMAINING
CEDAR	17	8	9
CYPRESS	2	2	0
ELM	1	1	0
GUM	1	1	0
MAGNOLIA	2	2	0
MAPLE	15	7	8
OAK	282	157	125
PALM	4	4	0
PINE	2	2	0
REDBAY	76	48	28
SUGARBERRY	1	1	0
TOTAL	403	233	170

SPECIMEN TREE CHART

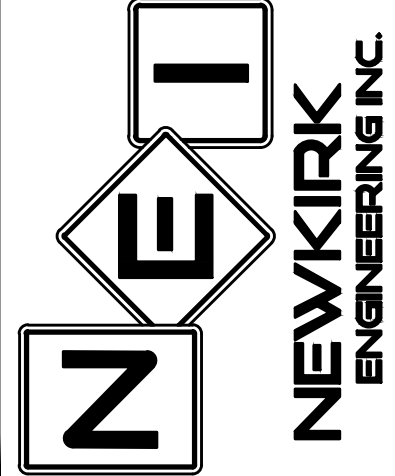
Common Name	Botanical Name	Size
Turkey Oak	(Quercus laevis)	12 inches and larger
Other Oak species	(Quercus spp.)	18 inches and larger
Maple	(Acer spp.)	18 inches and larger
Cypress	(Taxodium distichum)	18 inches and larger
Sweet Gum	(Liquidambar styraciflua)	18 inches and larger
Hickory	(Carya spp.)	18 inches and larger
Elm	(Ulmus spp.)	18 inches and larger
Loblolly Bay	(Gordonia lasianthus)	12 inches and larger
Sweet Bay	(Magnolia virginiana)	12 inches and larger
Red Bay	(Persea borbonia)	12 inches and larger
Swamp Bay	(Persea palustris)	12 inches and larger
Sycamore	(Platanus occidentalis)	18 inches and larger
Magnolia	(Magnolia grandiflora)	12 inches and larger
Red Cedar	(Juniperus silicicola)	12 inches and larger

NOTE !!!
ALL EARTHWORK, UNSUITABLE MATERIAL REMOVAL AND REPLACEMENT AND FILL DIRT TO BE CONSTRUCTED IN ACCORDANCE WITH GEOTECHNICAL SPECIFICATIONS PROVIDED BY UNIVERSAL ENGINEERING SCIENCES, INC. REPORT NO. 136730, DATED NOVEMBER 16, 2020.

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
7/18/22	SJRWMD SITE VISIT
8/28/22	CITY COMMENTS

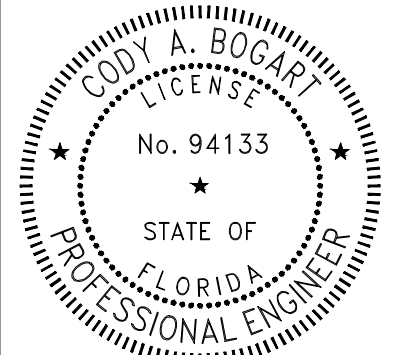
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TREE REMOVAL PLAN
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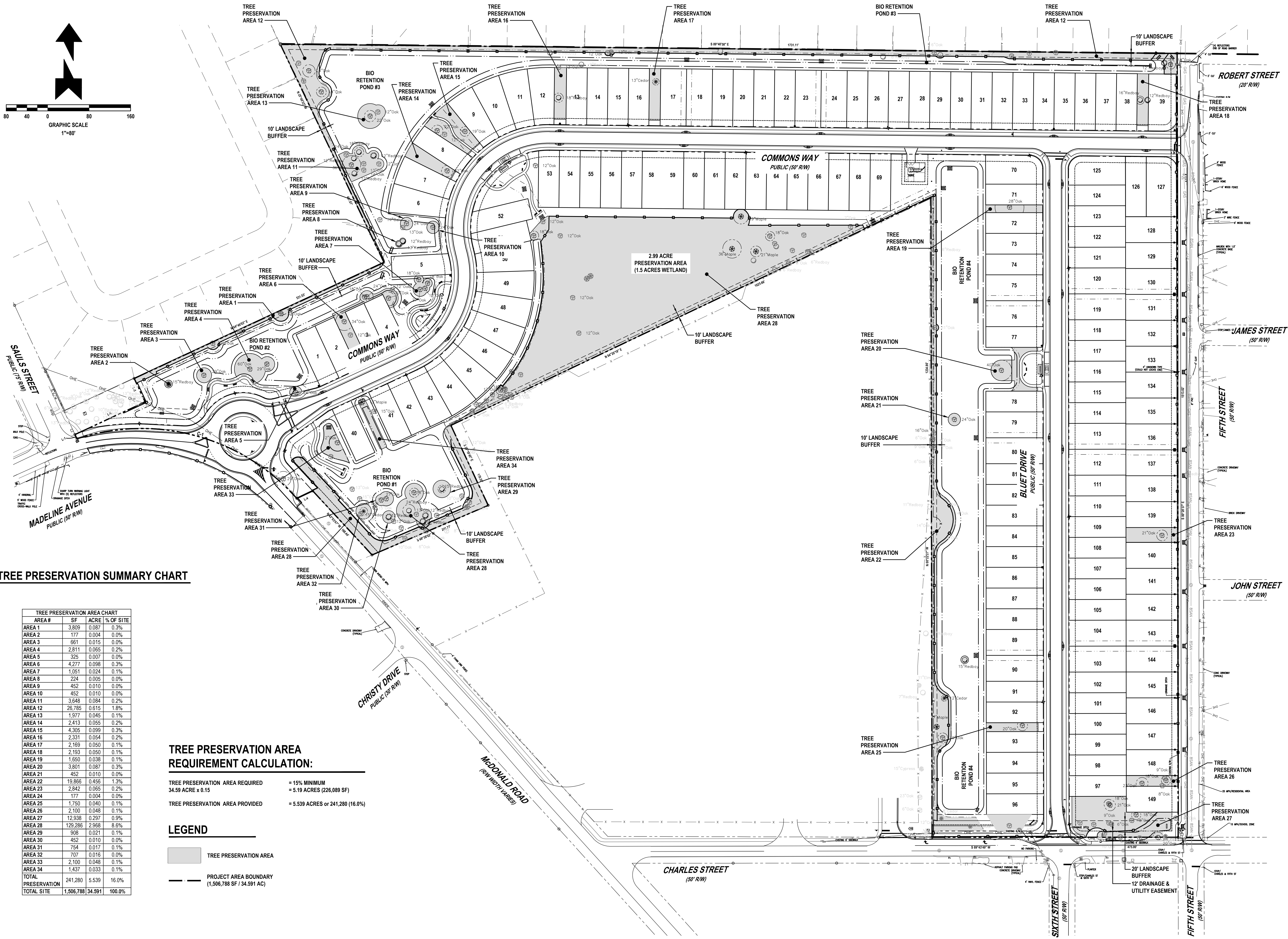


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SCALE:	1" = 80'

DRAWING NUMBER

50



TREE PRESERVATION SUMMARY CHART

TREE PRESERVATION AREA CHART			
AREA #	SF	ACRE	% OF SITE
AREA 1	3,809	0.087	0.3%
AREA 2	177	0.004	0.0%
AREA 3	661	0.015	0.0%
AREA 4	2,811	0.065	0.2%
AREA 5	325	0.007	0.0%
AREA 6	4,277	0.098	0.3%
AREA 7	1,051	0.024	0.1%
AREA 8	224	0.005	0.0%
AREA 9	452	0.010	0.0%
AREA 10	452	0.010	0.0%
AREA 11	3,648	0.084	0.2%
AREA 12	26,785	0.615	1.8%
AREA 13	1,977	0.045	0.1%
AREA 14	2,413	0.055	0.2%
AREA 15	4,305	0.099	0.3%
AREA 16	2,331	0.054	0.2%
AREA 17	2,169	0.050	0.1%
AREA 18	2,193	0.050	0.1%
AREA 19	1,850	0.038	0.1%
AREA 20	3,801	0.087	0.3%
AREA 21	452	0.010	0.0%
AREA 22	19,805	0.456	1.3%
AREA 23	2,842	0.065	0.2%
AREA 24	177	0.004	0.0%
AREA 25	1,750	0.040	0.1%
AREA 26	2,100	0.048	0.1%
AREA 27	12,938	0.297	0.9%
AREA 28	129,286	2.968	8.6%
AREA 29	908	0.021	0.1%
AREA 30	452	0.010	0.0%
AREA 31	754	0.017	0.1%
AREA 32	707	0.016	0.0%
AREA 33	2,100	0.048	0.1%
AREA 34	1,437	0.033	0.1%
TOTAL PRESERVATION	241,280	5.539	16.0%
TOTAL SITE	1,506,788	34.591	100.0%

TREE PRESERVATION AREA REQUIREMENT CALCULATION:

TREE PRESERVATION AREA REQUIRED = 15% MINIMUM
34.59 ACRE x 0.15 = 5.19 ACRES (226,089 SF)

TREE PRESERVATION AREA PROVIDED = 5.539 ACRES or 241,280 (16.0%)

LEGEND

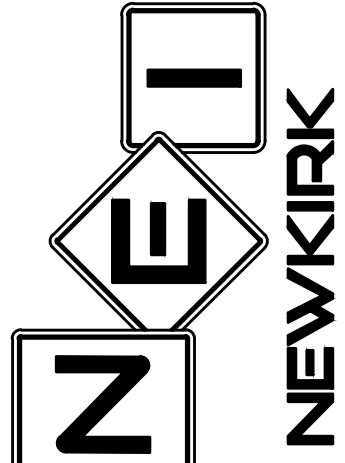
TREE PRESERVATION AREA

PROJECT AREA BOUNDARY (1,506,788 SF / 34.591 AC)

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
7/18/22	SJRWMD SITE VISIT
8/26/22	CITY COMMENTS
11/8/22	CITY COMMENTS

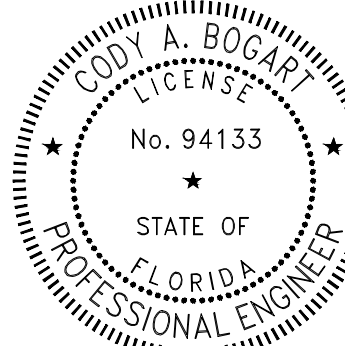
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TREE PRESERVATION PLAN
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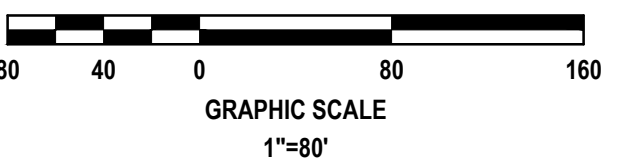
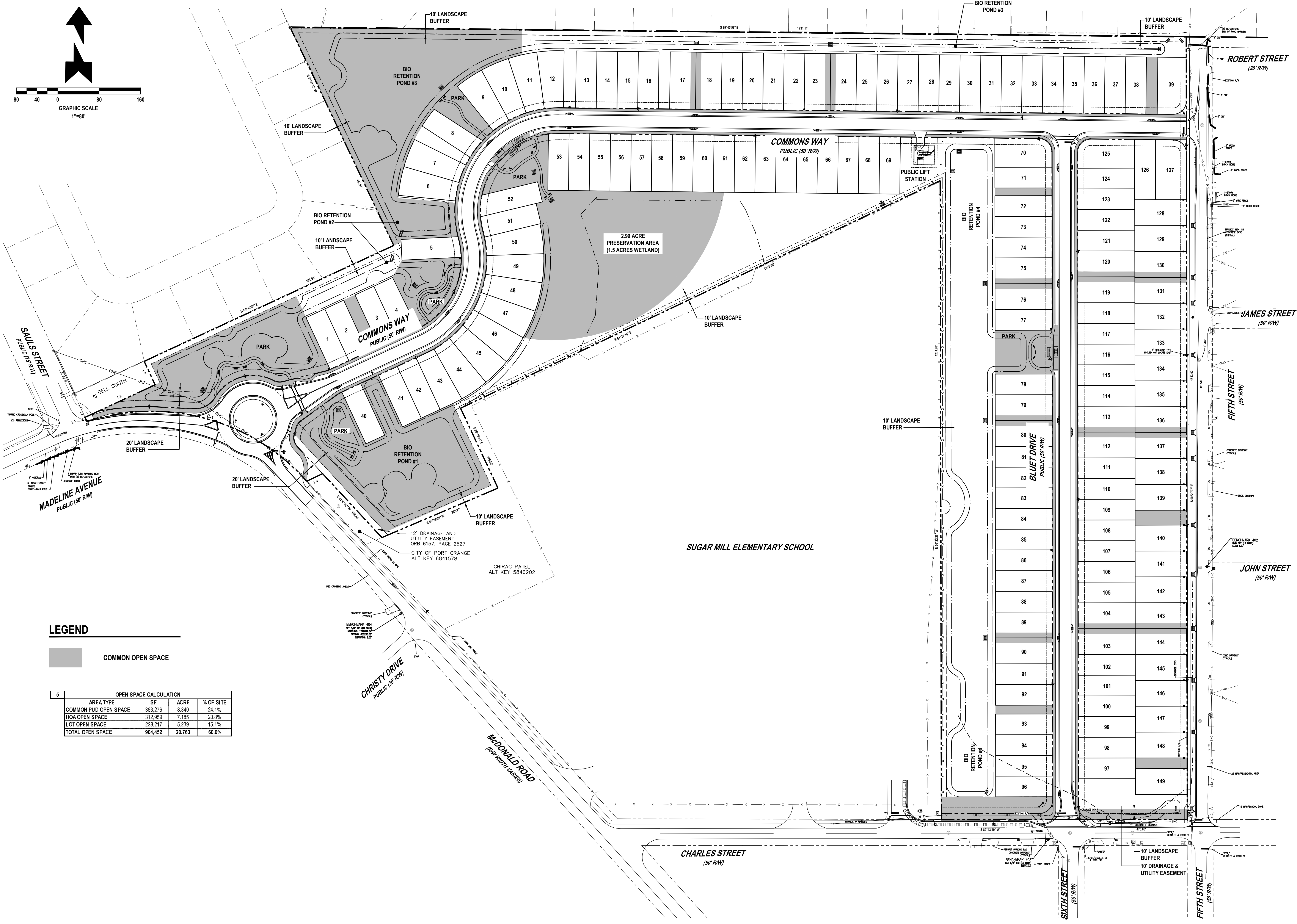


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SCALE: 1" = 80'

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LEGEND

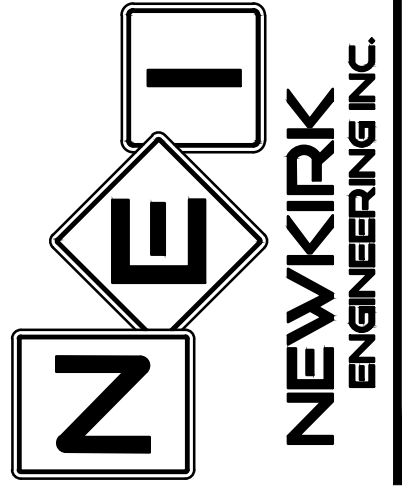
COMMON OPEN SPACE

OPEN SPACE CALCULATION			
AREA TYPE	SF	ACRE	% OF SITE
COMMON PUD OPEN SPACE	363,276	8.340	24.1%
HOA OPEN SPACE	312,959	7.185	20.8%
LOT OPEN SPACE	228,217	5.239	15.1%
TOTAL OPEN SPACE	904,452	20.763	60.0%

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
7/18/22	SURVMD SITE VISIT
8/26/22	CITY COMMENTS
12/20/22	CITY COMMENTS

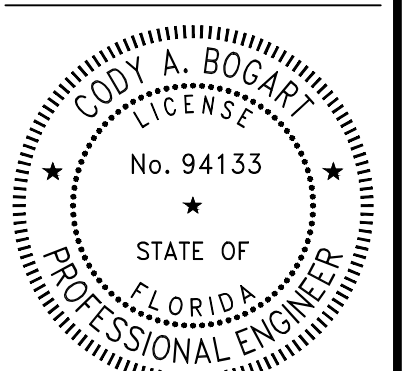
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COMMON OPEN SPACE PLAN
MADELINE COMMONS
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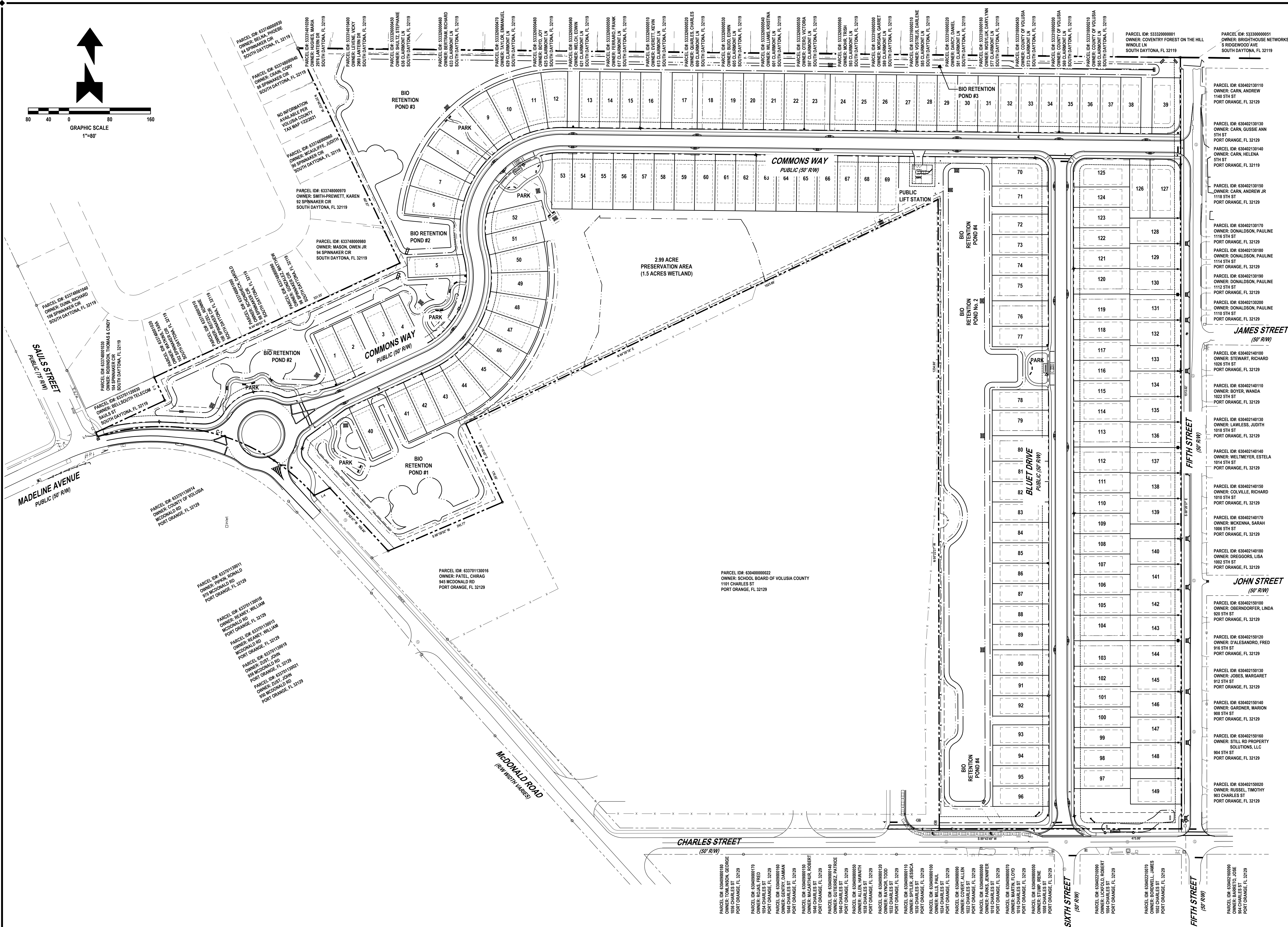
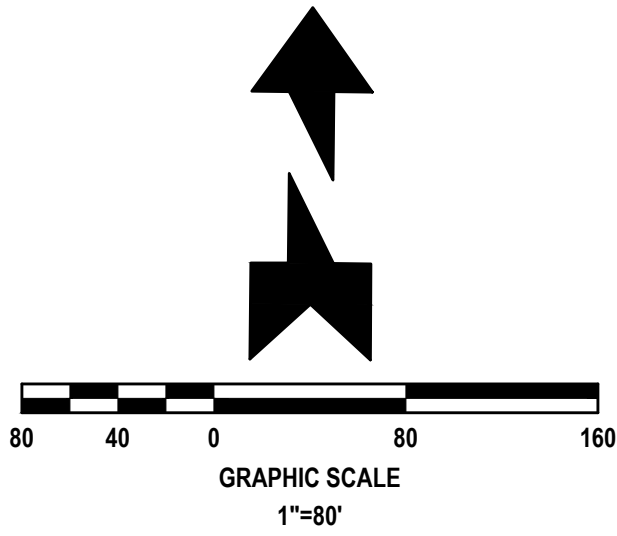


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REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
7/18/22	SJRWMD SITE VISIT
8/26/22	CITY COMMENTS

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STATE OF
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PROFESSIONAL ENGINEER

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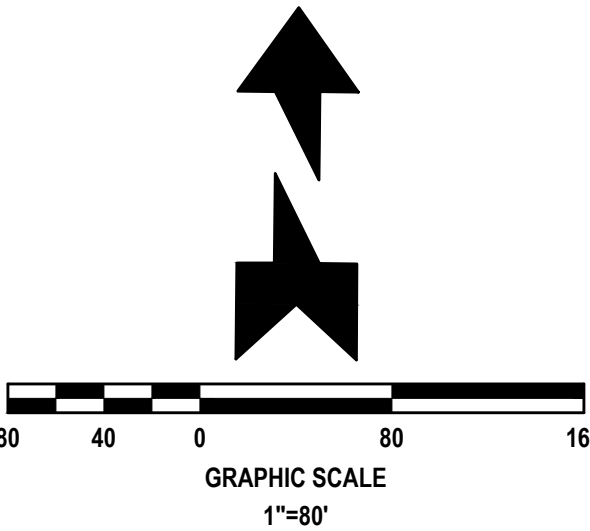
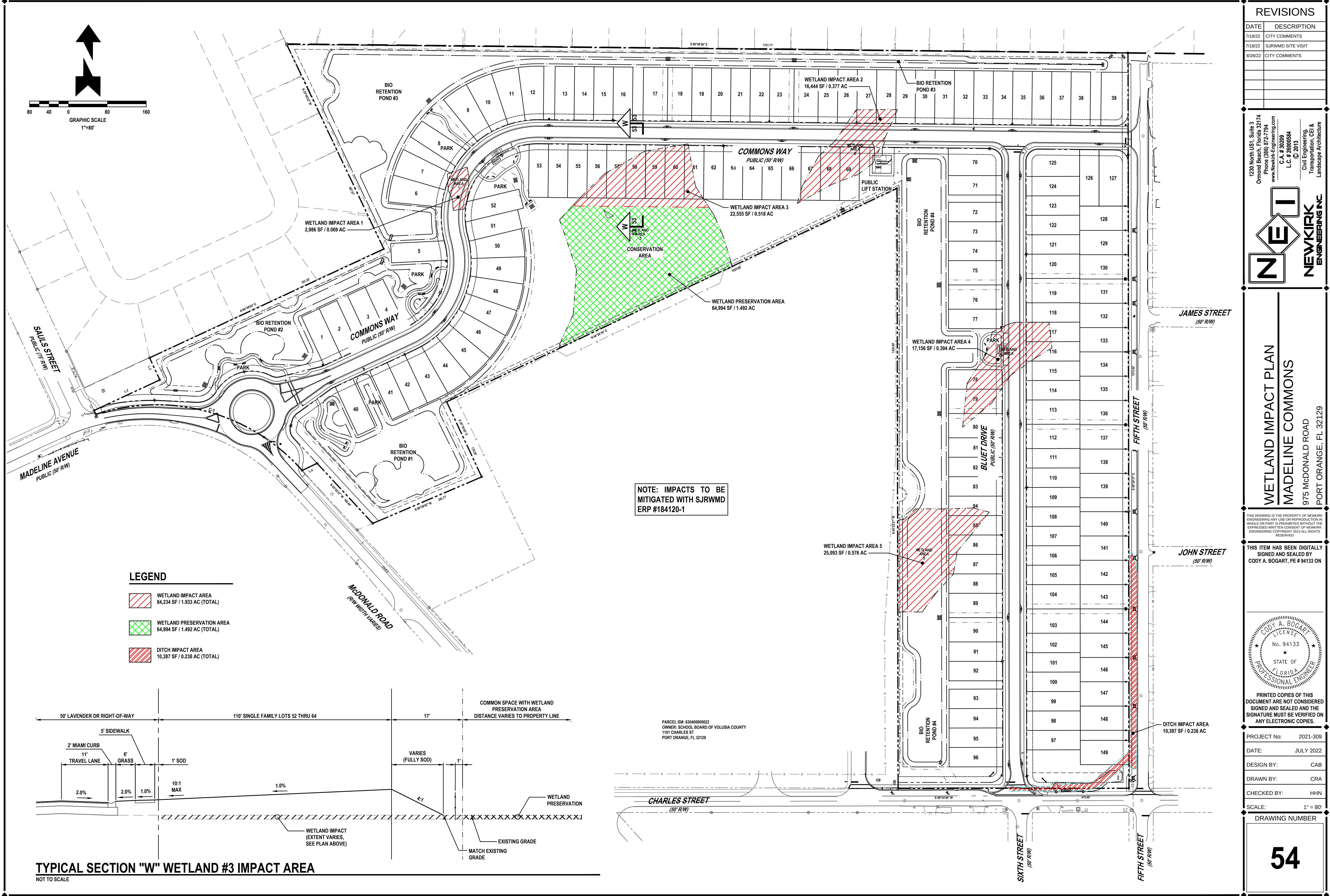
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SCALE: 1" = 80'

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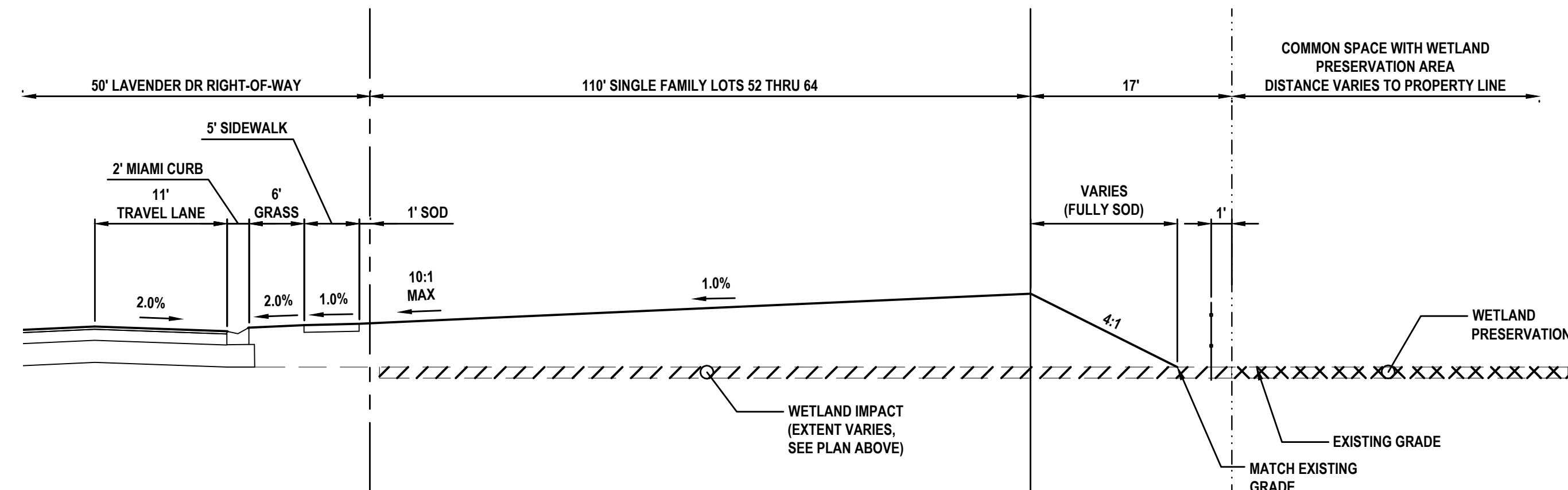
53

Page 86 of



LEGEND

- WETLAND IMPACT AREA
84,234 SF / 1.933 AC (TOTAL)
- WETLAND PRESERVATION AREA
64,994 SF / 1.492 AC (TOTAL)
- DITCH IMPACT AREA
10,387 SF / 0.238 AC (TOTAL)



TYPICAL SECTION "W" WETLAND #3 IMPACT AREA
NOT TO SCALE

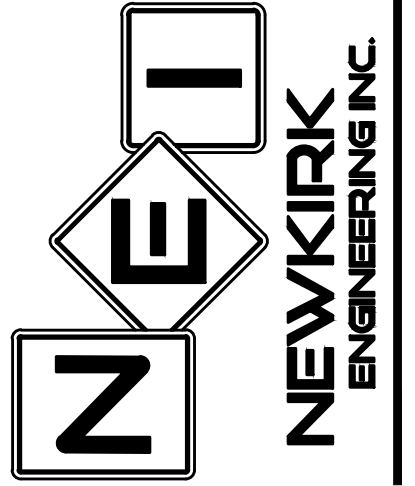
NOTE: IMPACTS TO BE
MITIGATED WITH SJRWMD
ERP #184120-1

PARCEL ID# 63840000022
OWNER: SCHOOL BOARD OF VOLUSIA COUNTY
1181 CHARLES ST
PORT ORANGE, FL 32129

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
7/18/22	SJRWMD SITE VISIT
8/26/22	CITY COMMENTS

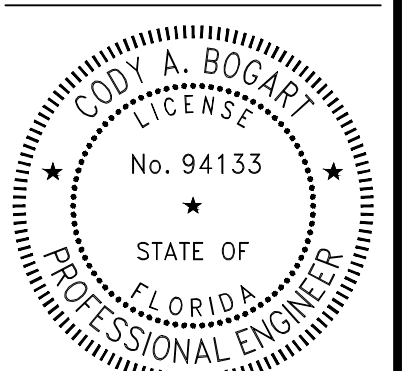
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WETLAND IMPACT PLAN
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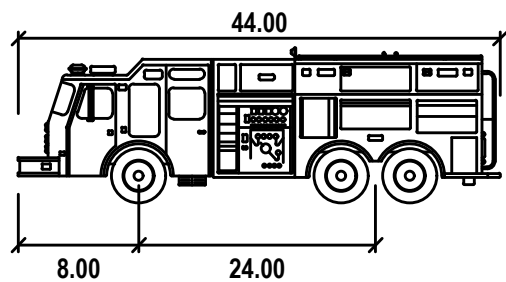


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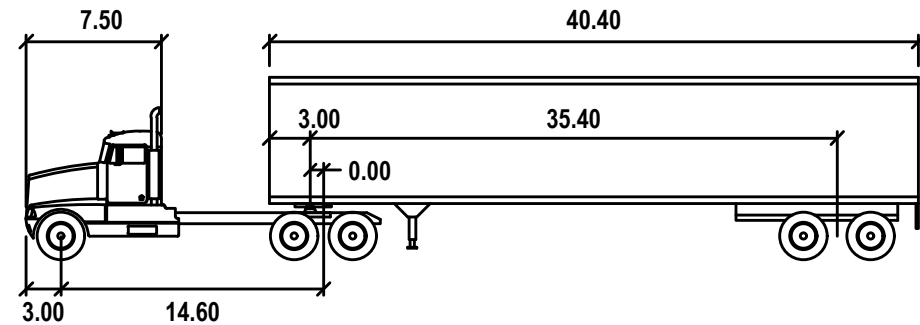
DRAWING NUMBER

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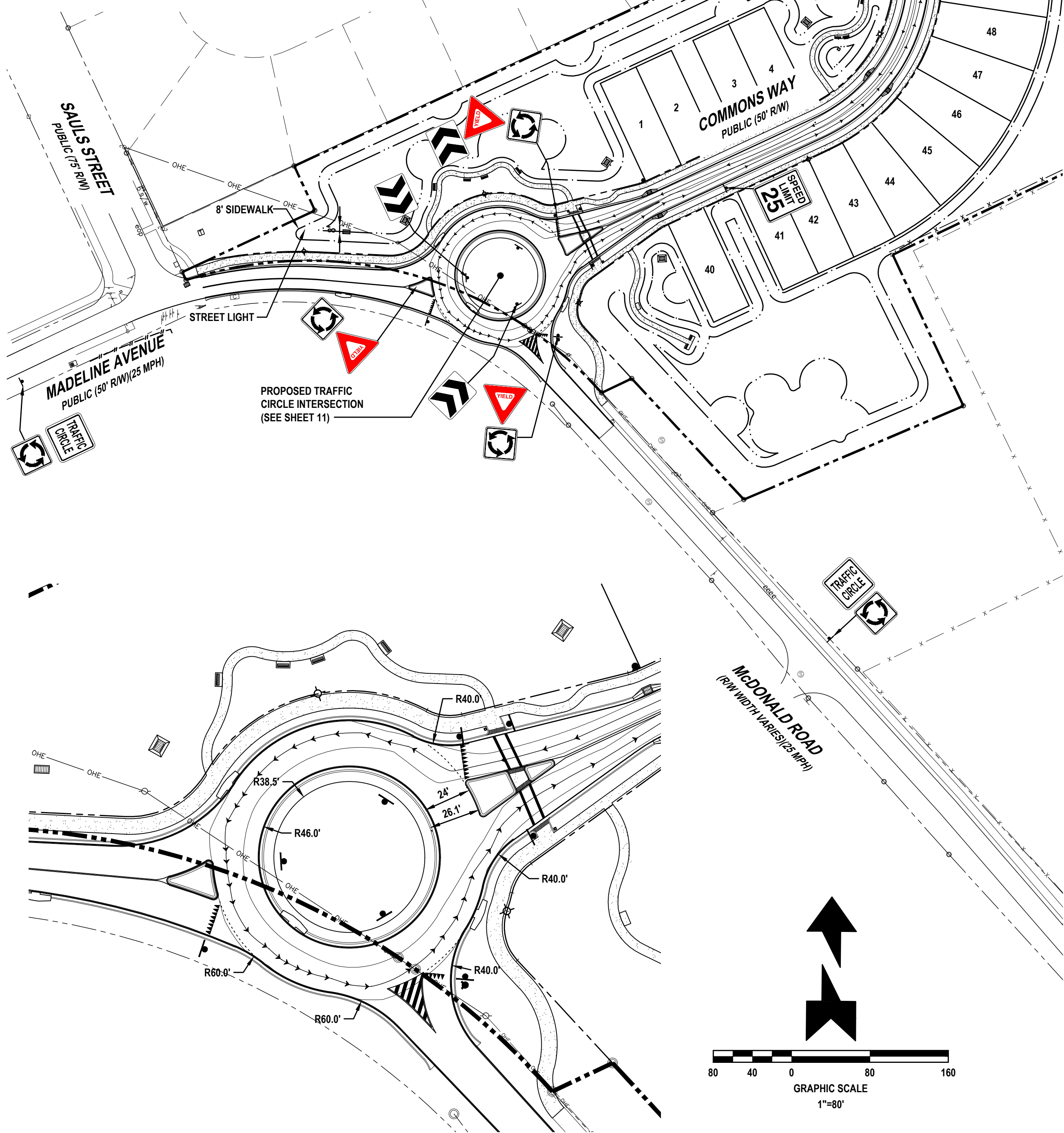
Pumper Fire Truck

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 37.8



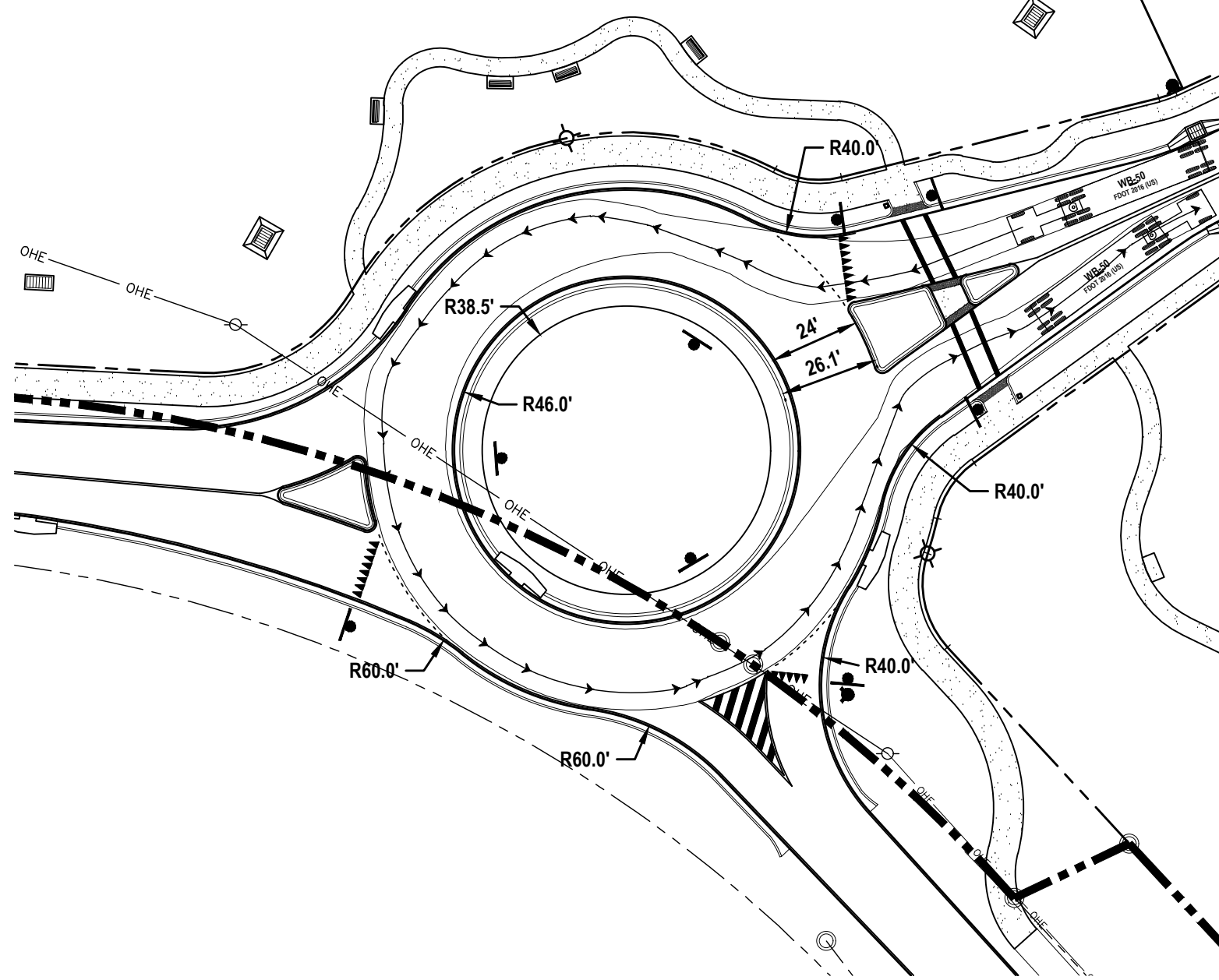
WB-50

	feet
Tractor Width	: 8.00
Trailer Width	: 8.50
Tractor Track	: 8.00
Trailer Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 20.8
Articulating Angle	: 70.0



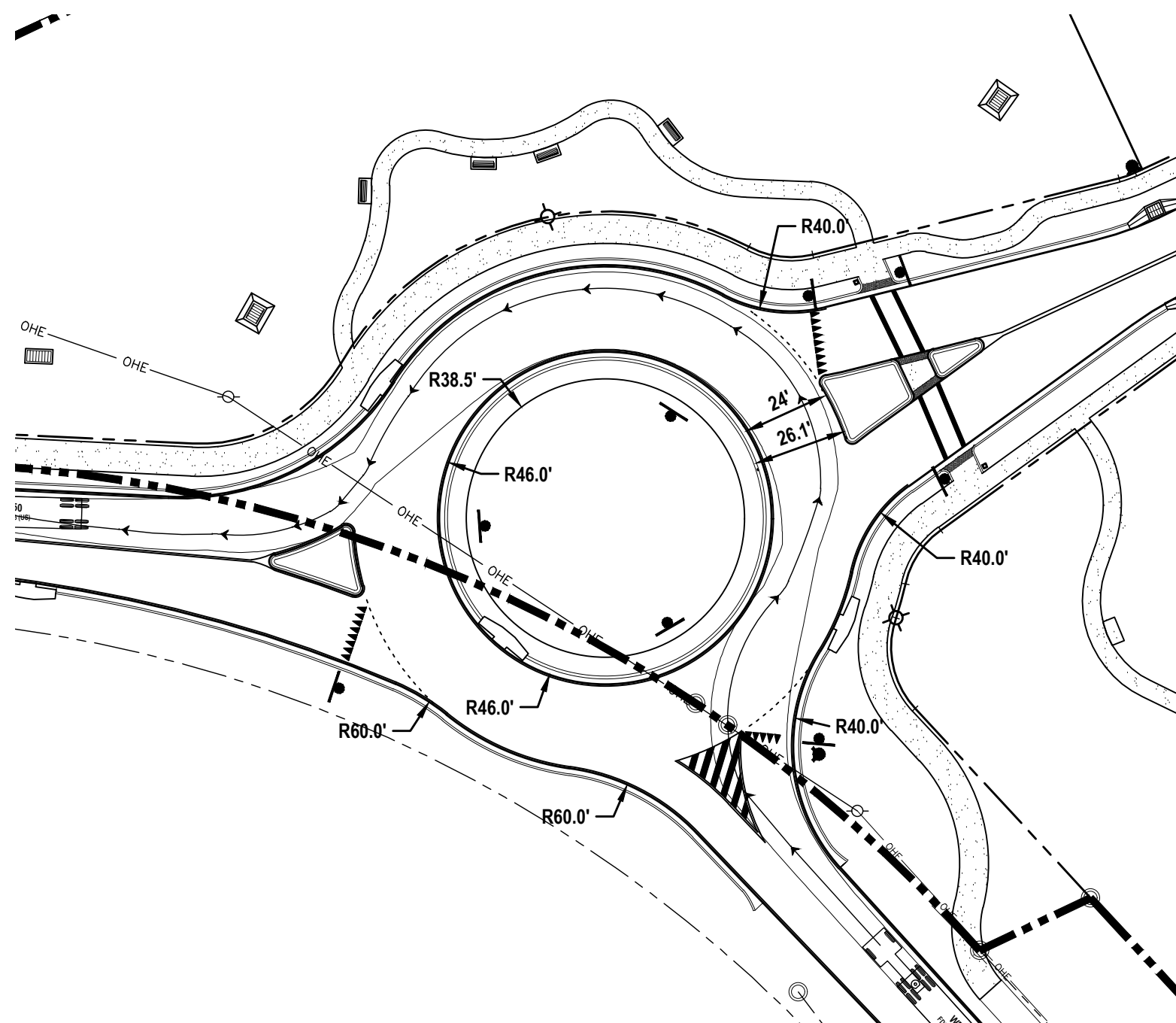
TRAFFIC TRUCK TURN DETAIL (PUMPER FIRE TRUCK)

SCALE: 1" = 40'



TRAFFIC TRUCK TURN DETAIL (WB-50)

SCALE: 1" = 40'



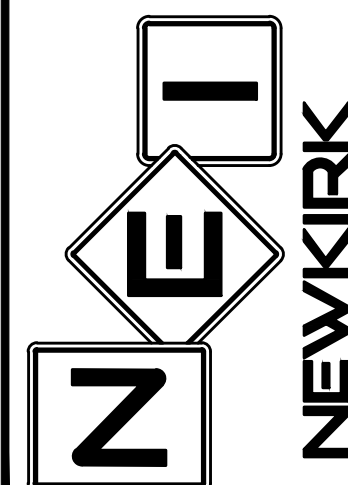
TRAFFIC TRUCK TURN DETAIL (WB-50)

SCALE: 1" = 40'

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
7/18/22	SJRWMD SITE VISIT
8/26/22	CITY COMMENTS
11/8/22	CITY COMMENTS

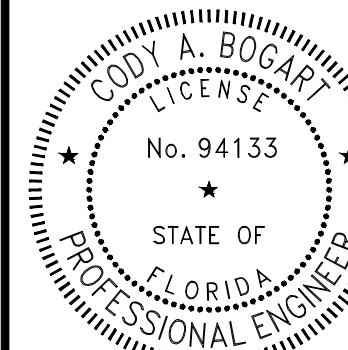
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AUTOTURN TRUCK PLAN
MADELINE COMMONS
975 McDONALD ROAD
PORT ORANGE, FL 32129

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SCALE:	1" = 80'

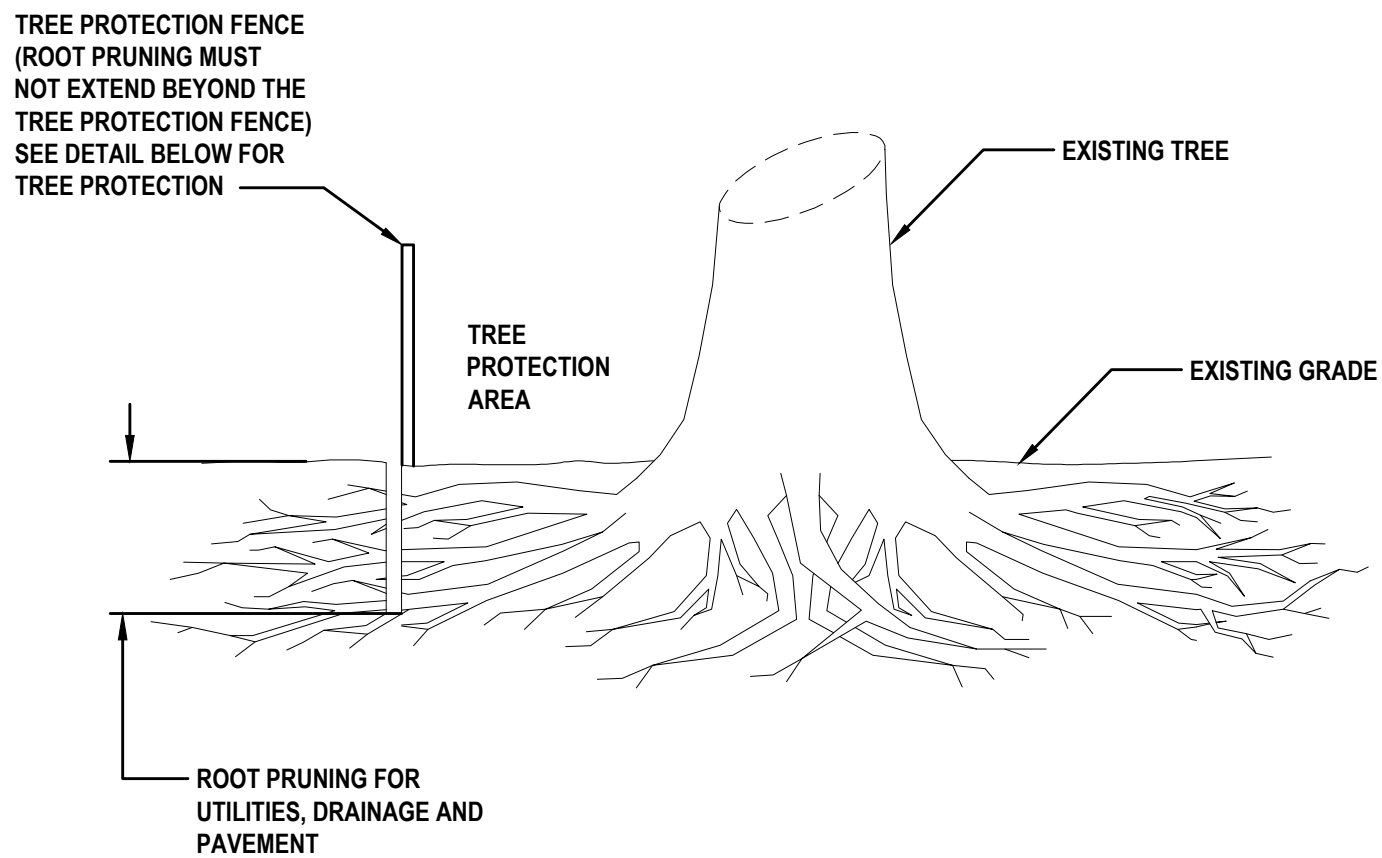
DRAWING NUMBER

55



CONTRACTOR TO USE DOSKO OR VERMEER MECHANICAL ROOT PRUNER EQUIPMENT WHEN WITHIN CRITICAL ROOT ZONE OR TREE PROTECTION AREA FOR INSTALLATION OF 4" CONDUITS FOR ELECTRICAL, CABLE, TELECOMMUNICATIONS AND IRRIGATION SERVICES

MECHANICAL ROOT PRUNER EQUIPMENT DETAIL
NOT TO SCALE

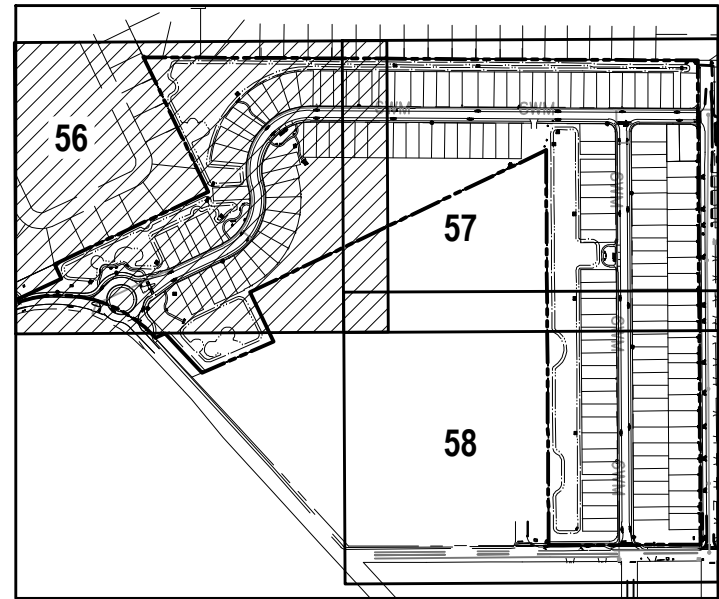
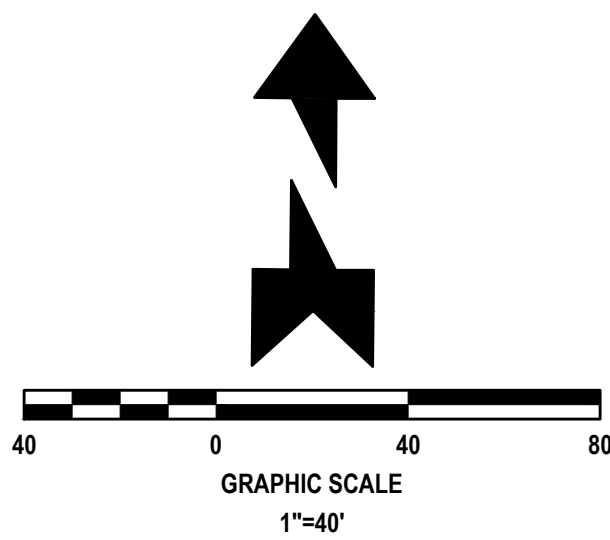


1. INSTALL ALL TREE PROTECTION BARRIERS PRIOR TO CONSTRUCTION. LOCATION OF ALL TREE PROTECTION MUST BE APPROVED BY ISA CERTIFIED ARBORIST AND CITY OF NEW SMYRNA BEACH PRIOR TO CONSTRUCTION.
2. ROOT PRUNING METHODS AND MEANS MUST BE IN ACCORDANCE WITH ANSI A300.
3. ROOT PRUNING SHALL BE CONDUCTED WITH THE SUPERVISION OF AN ISA CERTIFIED ARBORIST.
4. ALL ROOT PRUNING MUST BE MADE CLEANLY WITH A SHARP ROOT PRUNING TOOL (SUCH AS A DOSKO OR VERMEER ROOT MECHANICAL ROOT PRUNER EQUIPMENT).
4. ROOTS OVER 1.5" DIAMETER SHALL HAVE A CLEAN CUT MADE BY A CLEAN SAW ON THE SURFACE OF THE ROOT, WHICH IS STILL ATTACHED TO THE TREE. DO NOT PAINT THE CUT ROOT END. IF EXCAVATION IS FOR INSTALLATION OF UNDERGROUND UTILITIES AND DRAINAGE AND ROOTS ARE BROKEN OR CHOPPED; THEN ALL ROOTS SHALL BE CLEANED SAW AT CHOPPED OR BROKEN POINT.

ROOT PRUNING DETAIL
NOT TO SCALE

LEGEND

TREE ROOT PRUNING ZONE
(SEE DETAILS THIS SHEET)



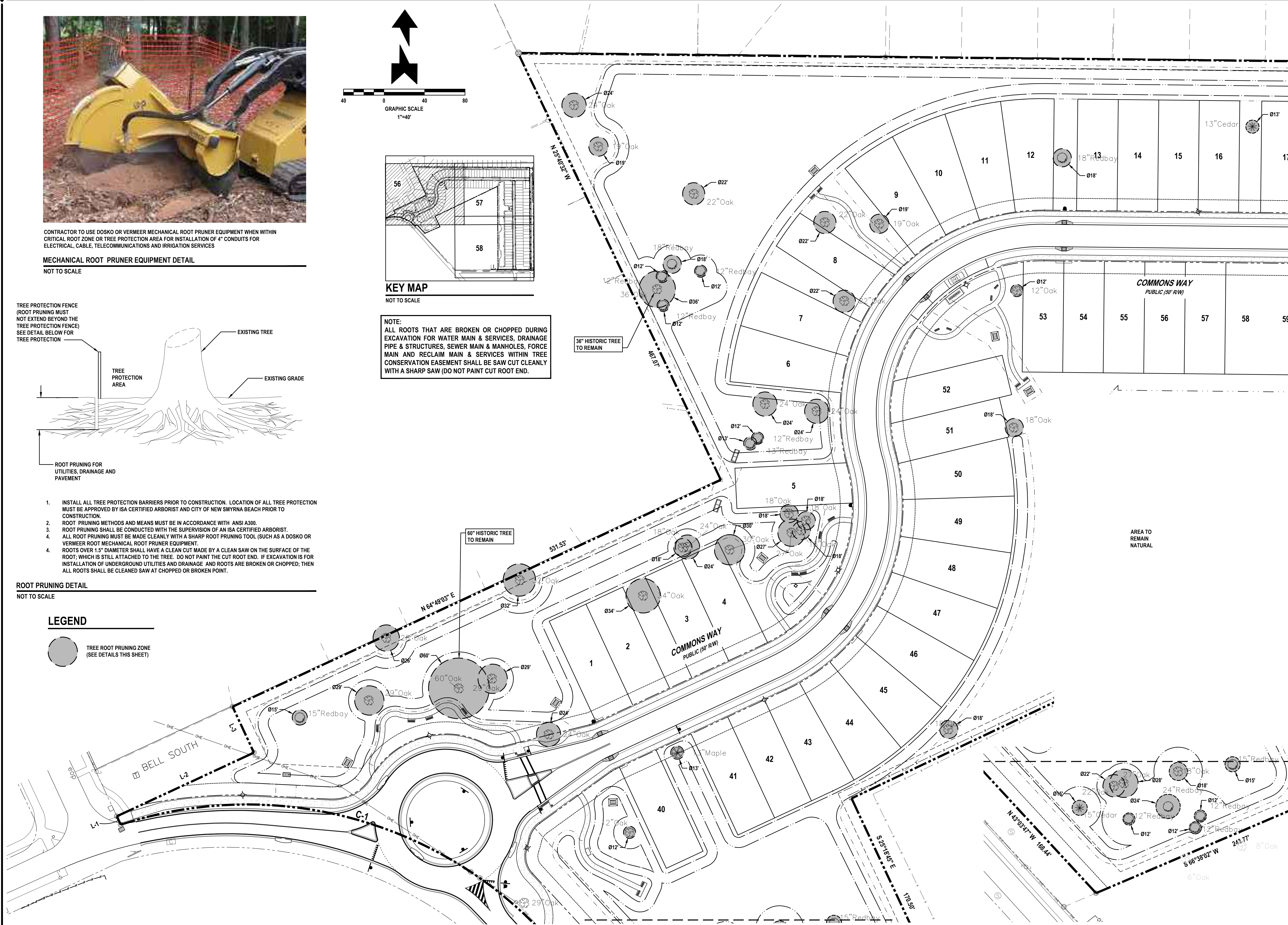
KEY MAP
NOT TO SCALE

NOTE:
ALL ROOTS THAT ARE BROKEN OR CHOPPED DURING EXCAVATION FOR WATER MAIN & SERVICES, DRAINAGE PIPE & STRUCTURES, SEWER MAIN & MANHOLES, FORCE MAIN AND RECLAIM MAIN & SERVICES WITHIN TREE CONSERVATION EASEMENT SHALL BE SAW CUT CLEANLY WITH A SHARP SAW (DO NOT PAINT CUT ROOT END.

36" HISTORIC TREE TO REMAIN

60" HISTORIC TREE TO REMAIN

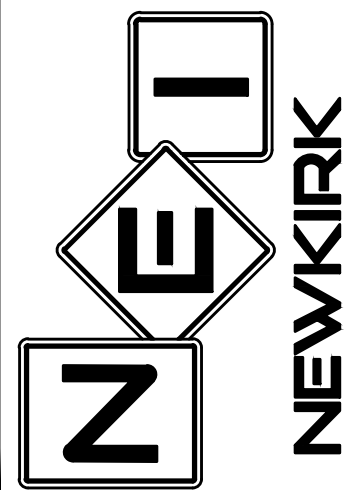
AREA TO REMAIN NATURAL



REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
7/18/22	SJRWMD SITE VISIT
8/26/22	CITY COMMENTS

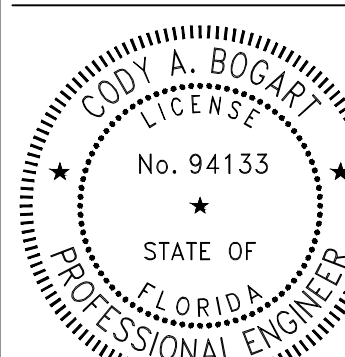
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TREE PROTECTION AND
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MADELINE COMMONS
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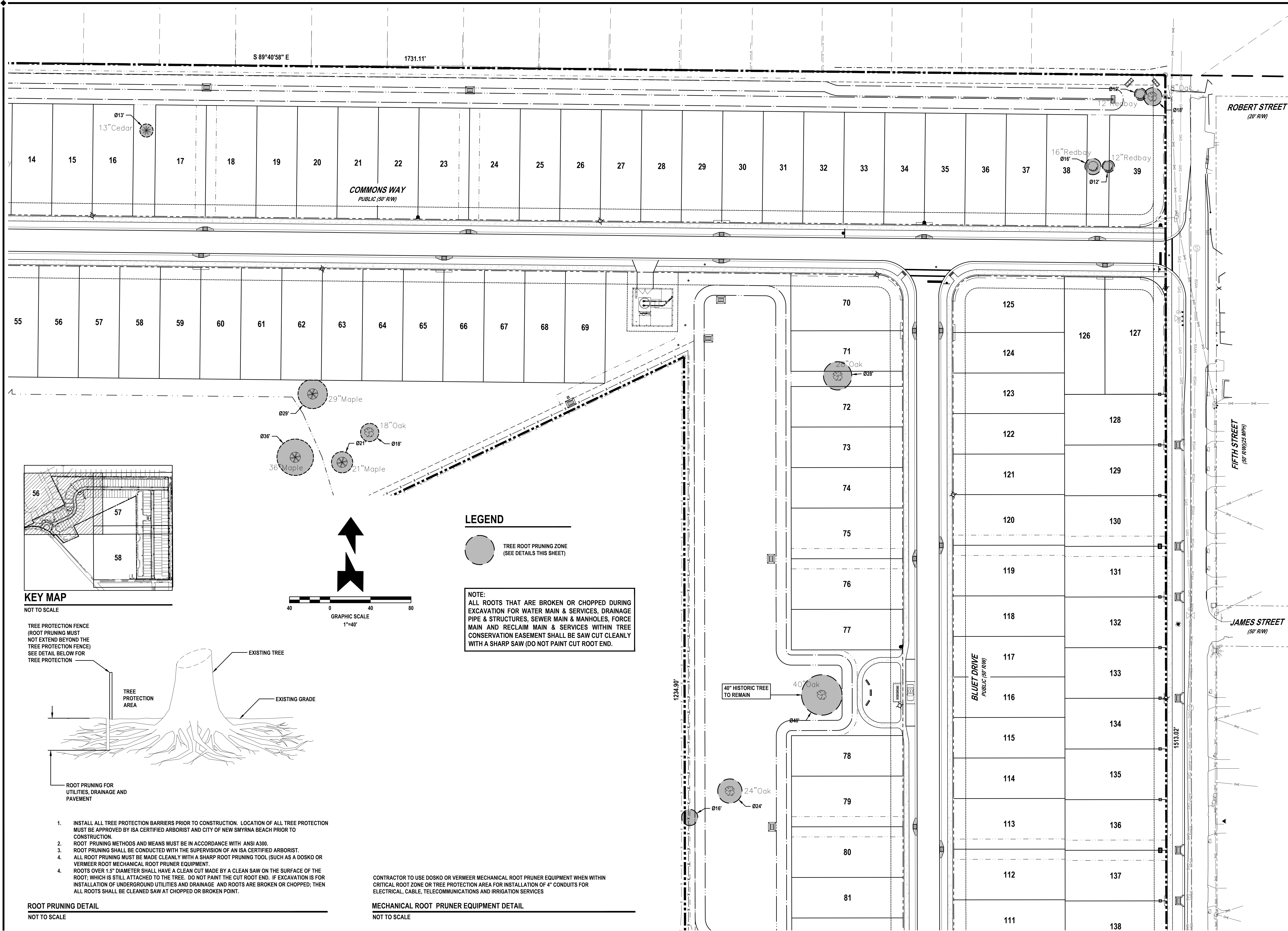
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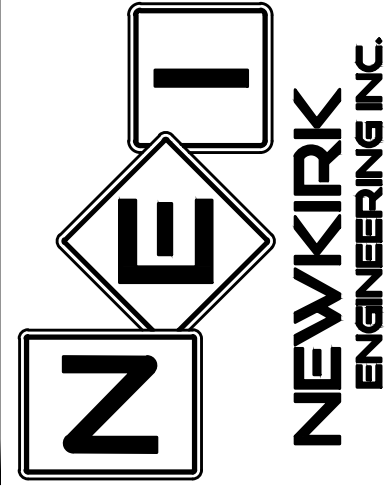
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REVISIONS

DATE	DESCRIPTION
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7/18/22	SJRWMD SITE VISIT
8/26/22	CITY COMMENTS

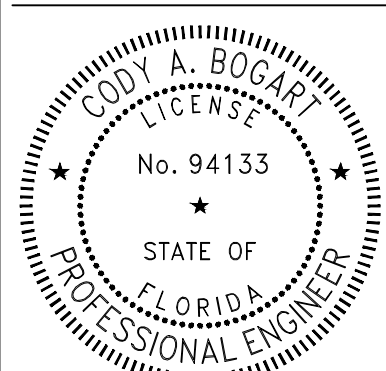
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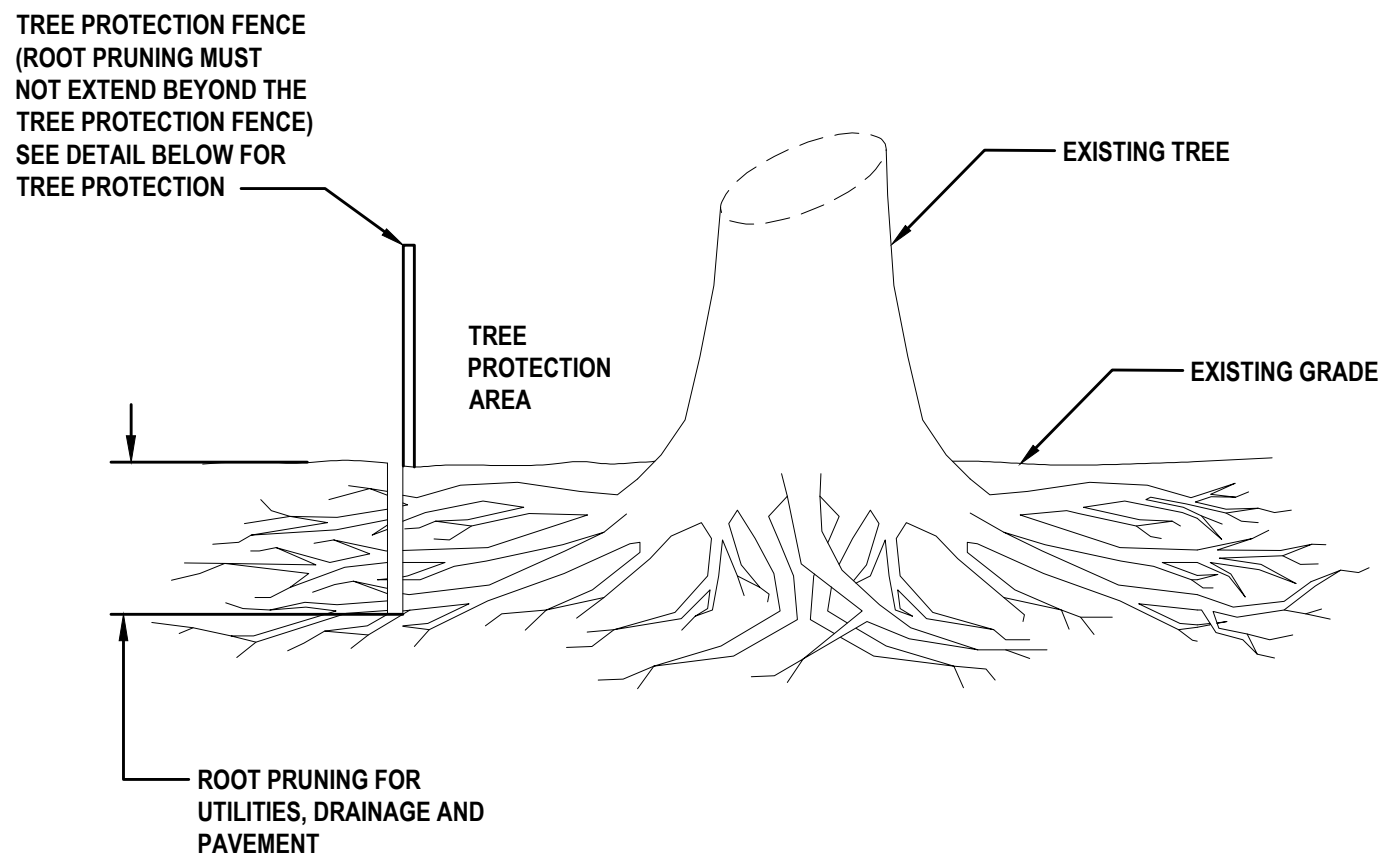
PROJECT No:	2021-309
DATE:	JULY 2022
DESIGN BY:	CAB
DRAWN BY:	CRA
CHECKED BY:	HNN
SCALE:	1" = 40'
DRAWING NUMBER	

57



CONTRACTOR TO USE DOSKO OR VERMEER MECHANICAL ROOT PRUNER EQUIPMENT WHEN WITHIN CRITICAL ROOT ZONE OR TREE PROTECTION AREA FOR INSTALLATION OF 4" CONDUITS FOR ELECTRICAL, CABLE, TELECOMMUNICATIONS AND IRRIGATION SERVICES

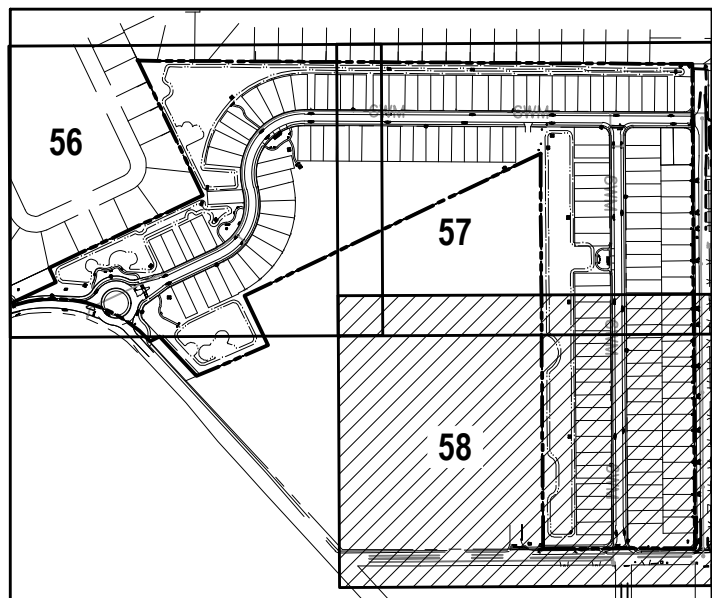
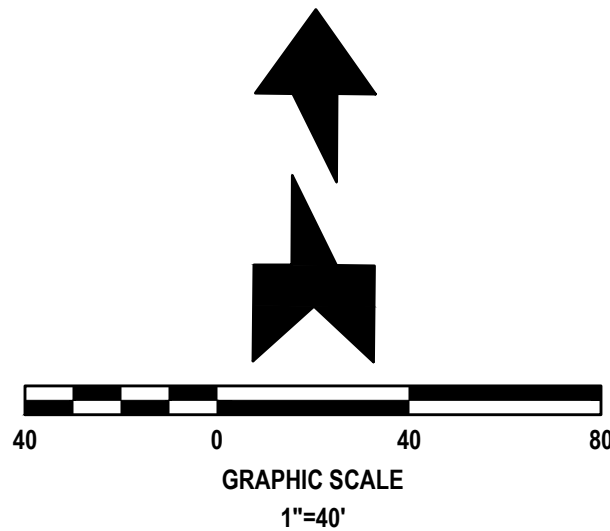
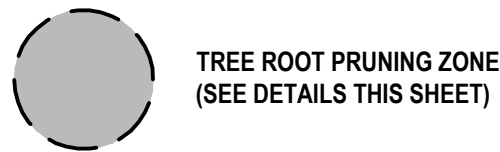
MECHANICAL ROOT PRUNER EQUIPMENT DETAIL
NOT TO SCALE



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ROOT PRUNING DETAIL
NOT TO SCALE

LEGEND



KEY MAP
NOT TO SCALE

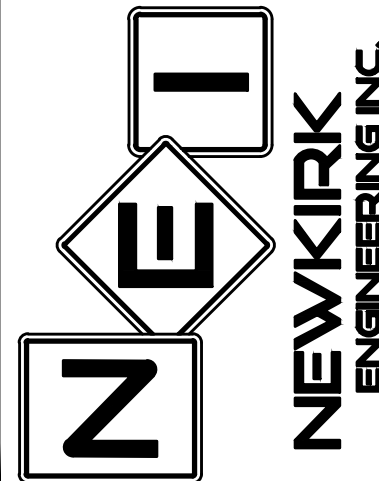
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REVISIONS

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7/18/22	SJRWM SITE VISIT
8/26/22	CITY COMMENTS

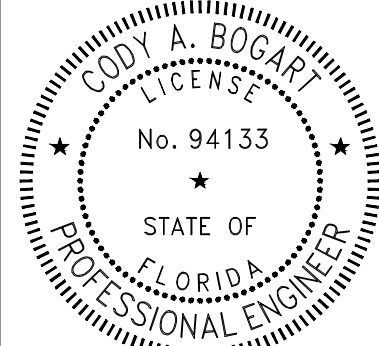
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TREE PROTECTION AND
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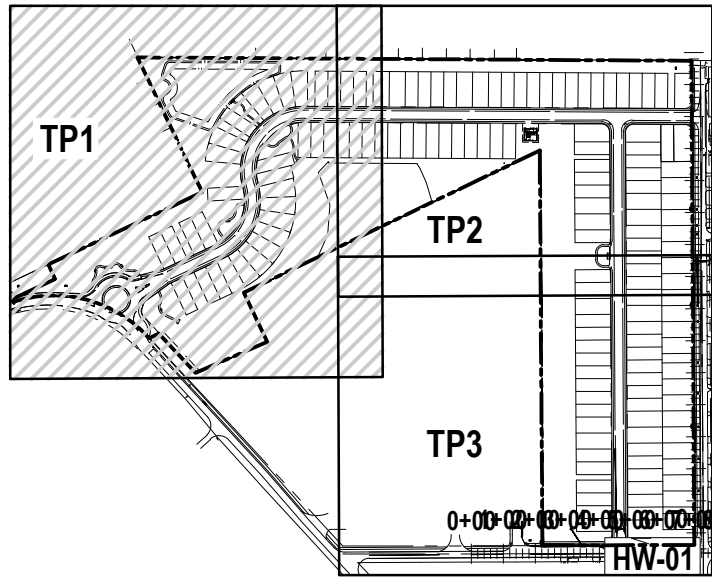


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CHECKED BY: HHN
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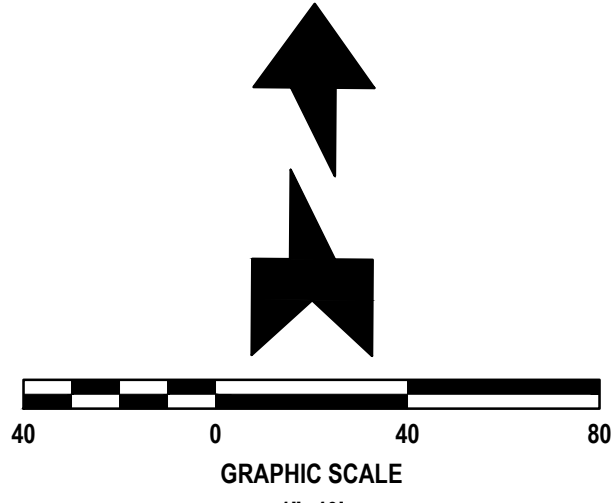
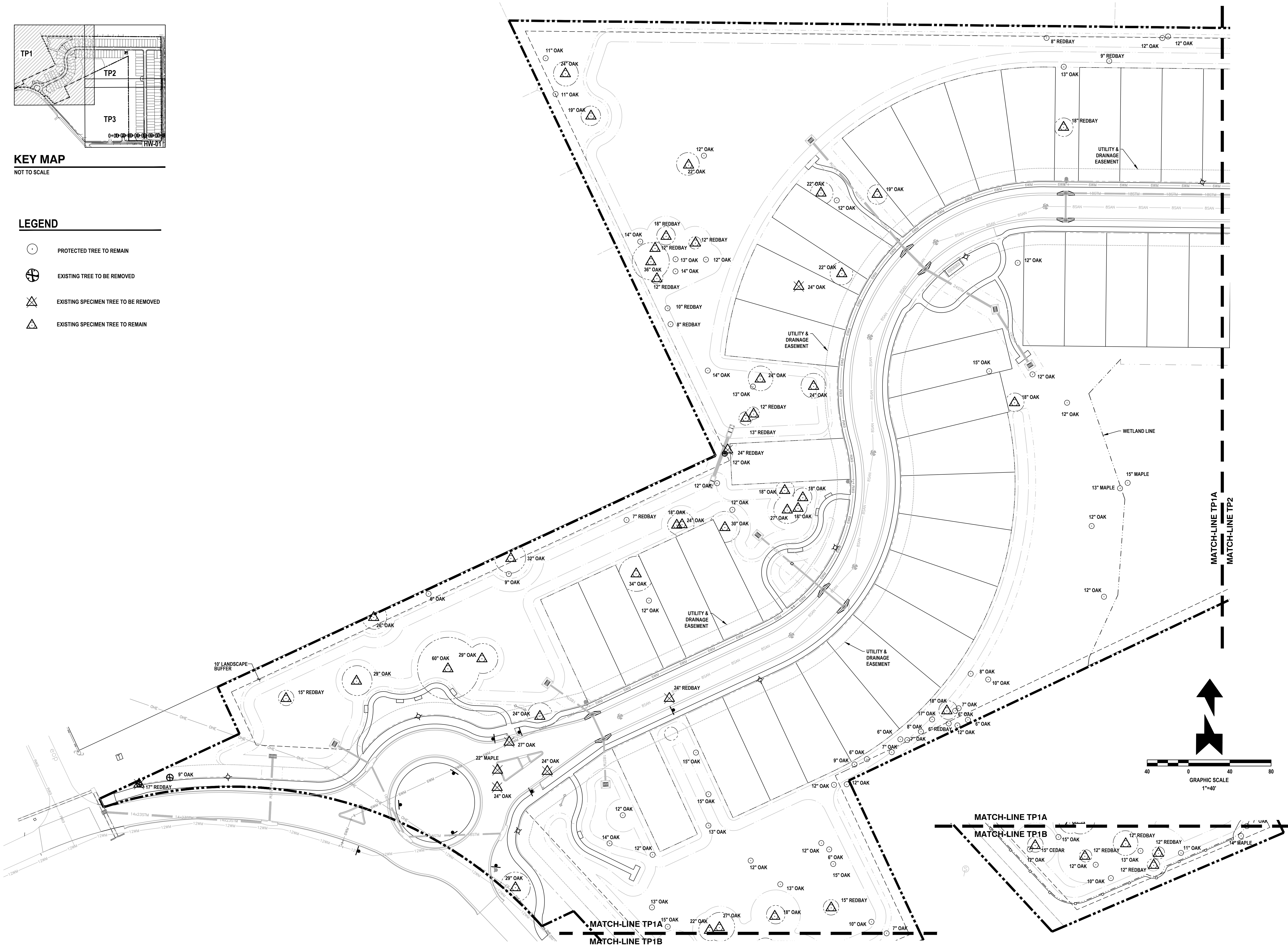
DRAWING NUMBER

58



KEY MAP
NOT TO SCALE

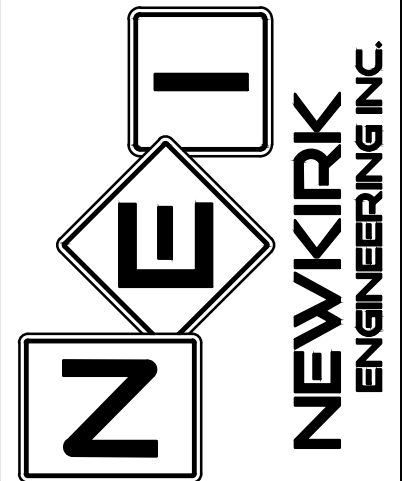
- LEGEND**
- PROTECTED TREE TO REMAIN
 - EXISTING TREE TO BE REMOVED
 - EXISTING SPECIMEN TREE TO BE REMOVED
 - EXISTING SPECIMEN TREE TO REMAIN



REVISIONS

DATE	DESCRIPTION
8/26/22	CITY COMMENTS
10/18/22	CITY COMMENTS
11/8/22	CITY COMMENTS
12/23/22	CITY COMMENTS

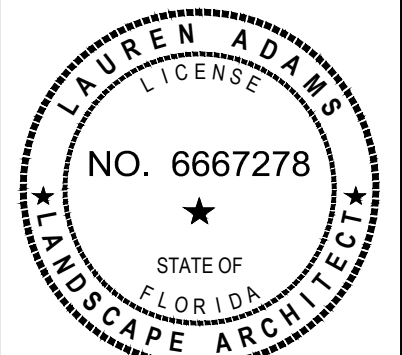
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TREE PROTECTION PLAN
MADELINE COMMONS
975 McDONALD ROAD
PORT ORANGE, FL 32128

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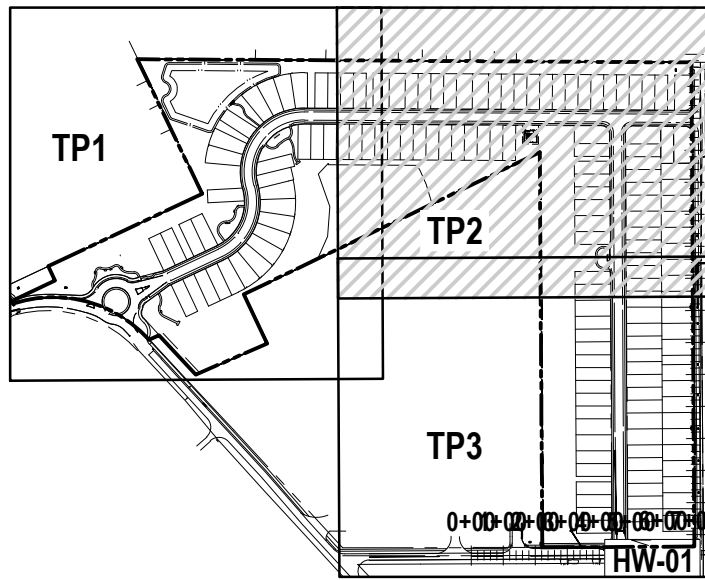
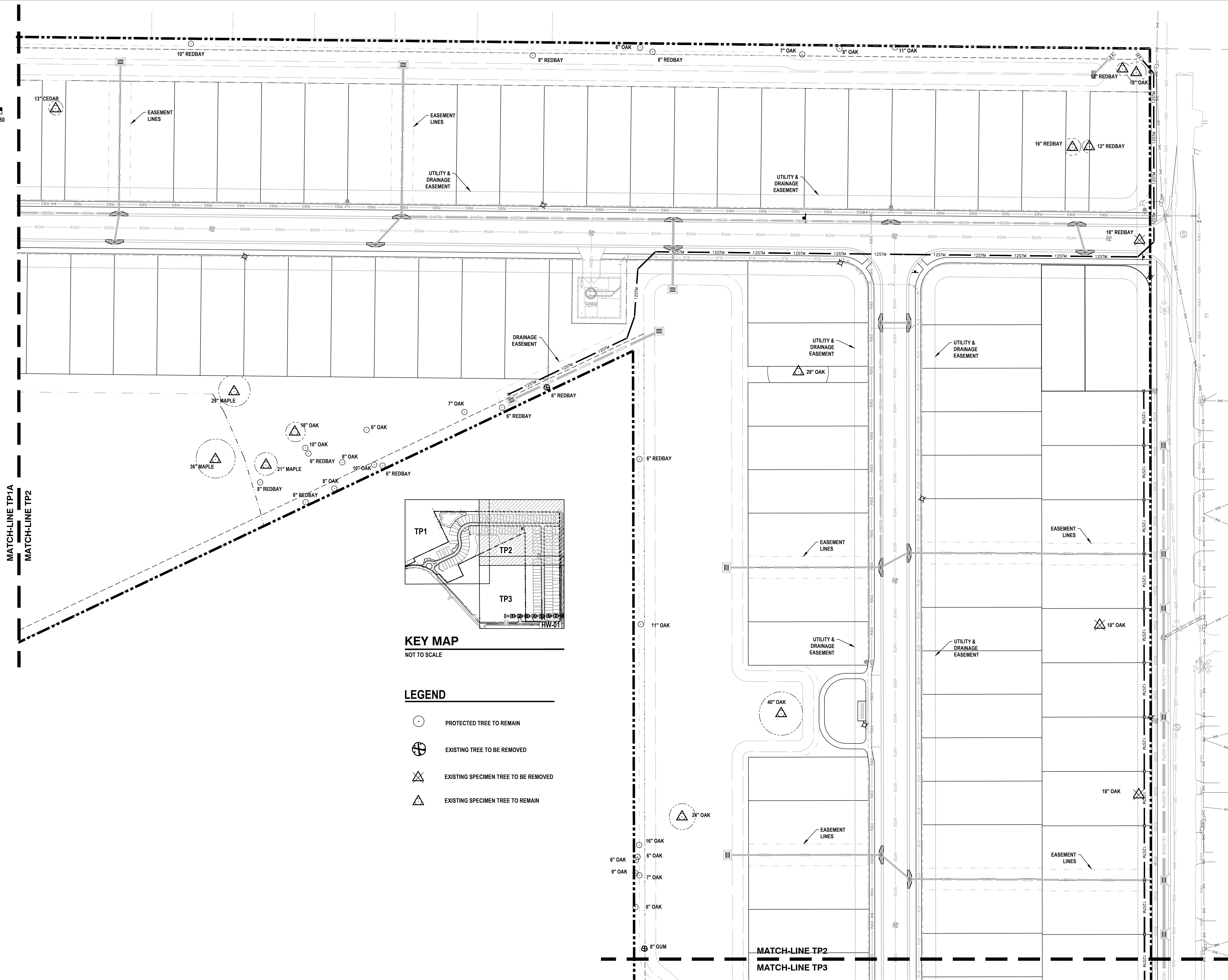
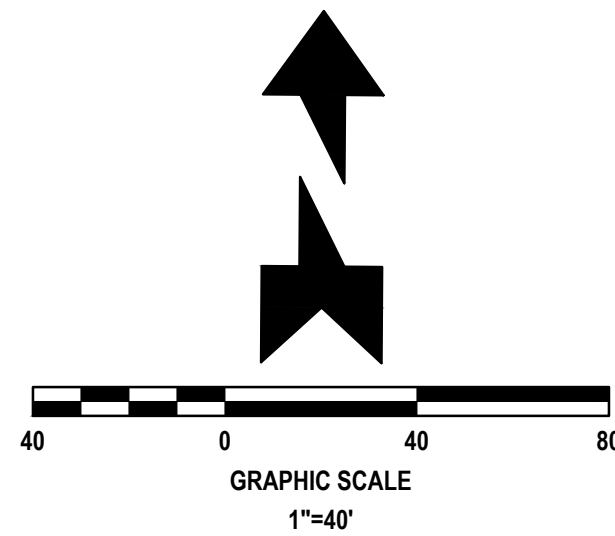
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Digitally signed by Lauren A Adams
Date: 2022.12.27
13:22:01 -05'00'



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TP1



KEY MAP
NOT TO SCALE

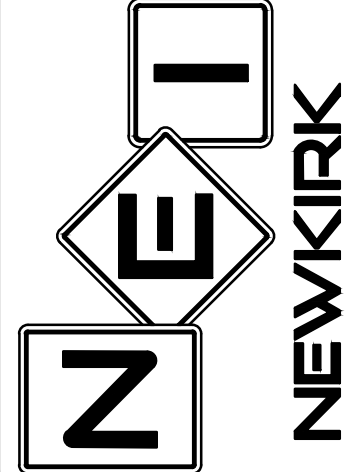
LEGEND

- PROTECTED TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- EXISTING SPECIMEN TREE TO BE REMOVED
- EXISTING SPECIMEN TREE TO REMAIN

REVISIONS

DATE	DESCRIPTION
8/26/22	CITY COMMENTS
10/18/22	CITY COMMENTS
11/8/22	CITY COMMENTS
12/23/22	CITY COMMENTS

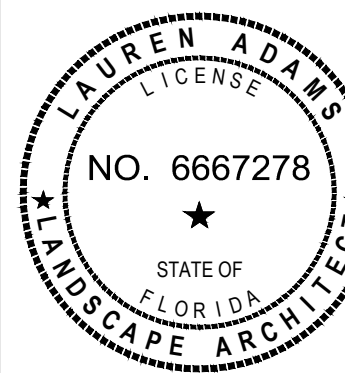
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TREE PROTECTION PLAN
MADELINE COMMONS
975 McDONALD ROAD
PORT ORANGE, FL 32128

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Lauren Adams
Digitally signed by Lauren A Adams
Date: 2022.12.27 13:22:46 -05'00'

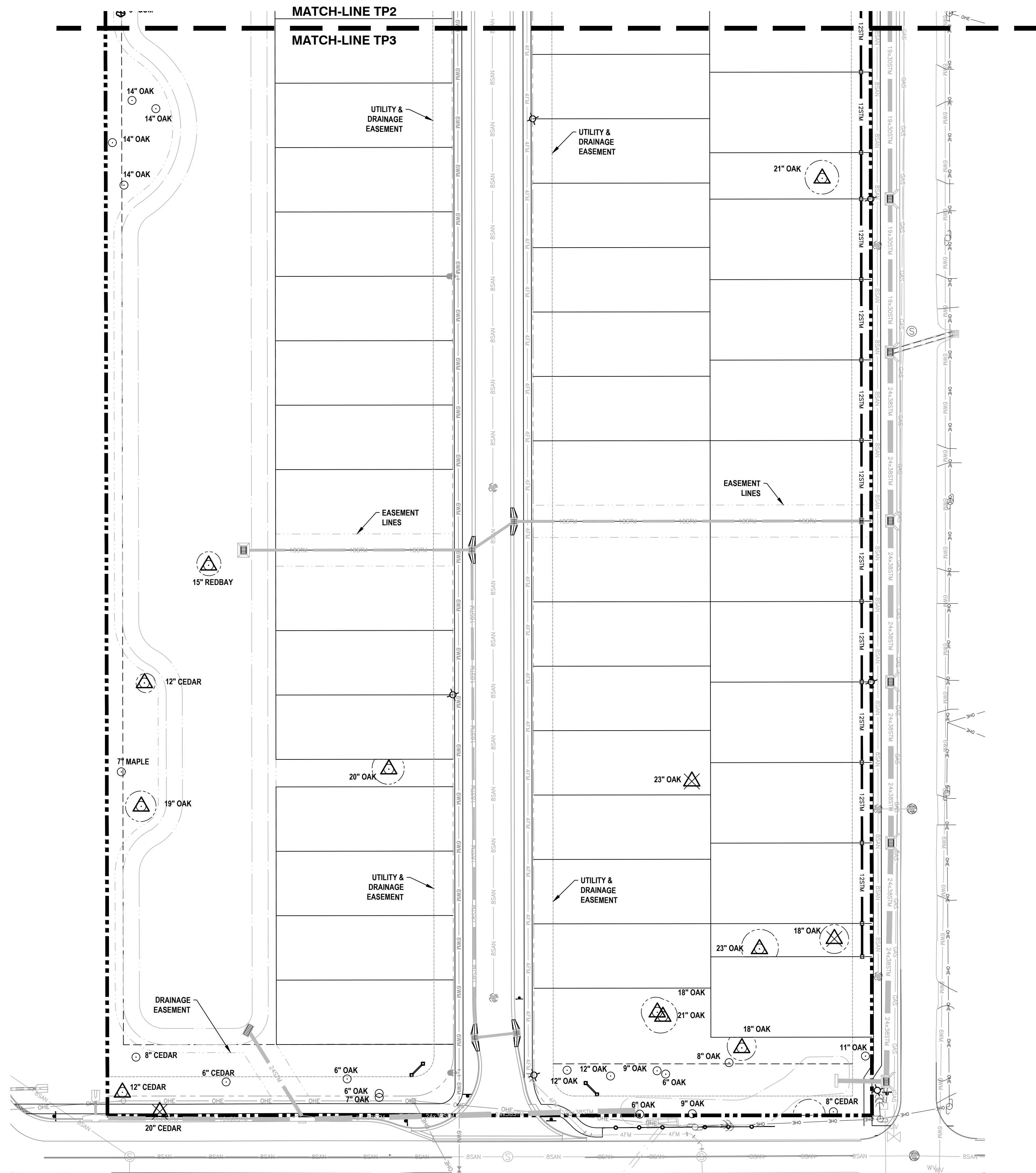


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DATE: MARCH 2022
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DRAWN BY: BWV
CHECKED BY: LAA
SCALE: 1" = 40'

DRAWING NUMBER

TP2



Mitigation Tabulation Charts

Section A: Mitigation for All trees 6" or greater from Buffer

Qty. for removal	Size	# Replacement Trees	Subtotal		
3	6-8"	1	3	or	\$ 1,018.17
1	9-16"	2	2	or	\$ 678.78
1	17-24"	3	3	or	\$ 1,018.17
	25-32"	4	0	or	\$ -
	33-40"	5	0	or	\$ -
	41" +	6	0	or	\$ -
Total A replacement trees =			8		\$ 2,715.12

Section B: Administrative replacement for diseased or dead Specimen trees

Qty. for removal	Size	# Replacement Trees	Subtotal		
	12-16"	2	0	or	\$ -
	17-24"	3	0	or	\$ -
	25-32"	4	0	or	\$ -
	33-40"	5	0	or	\$ -
	41" +	6	0	or	\$ -
Total B replacement trees =			0		\$ -

Section C: Mitigation for healthy Specimen trees

Qty. for removal	Size	# Replacement Trees	Subtotal		
	12-16"	2	0	or	\$ -
13	17-24"	3	39	or	\$ 13,236.21
1	25-32"	4	4	or	\$ 1,357.56
	33-40"	5	0	or	\$ -
	41" +	6	0	or	\$ -
Total B replacement trees =			43		\$ 14,593.77

Section D: Mitigation for diseased Historic trees (5% cross sectional area, Res. 20-46)

Qty. for removal	Size	Replacement sq. inches	# Replacement trees		
	36	0.00	0	or	\$0
	50	0.00	0	or	\$ -
	75	0.00	0	or	\$ -
Total C replacement trees =			0		\$ -

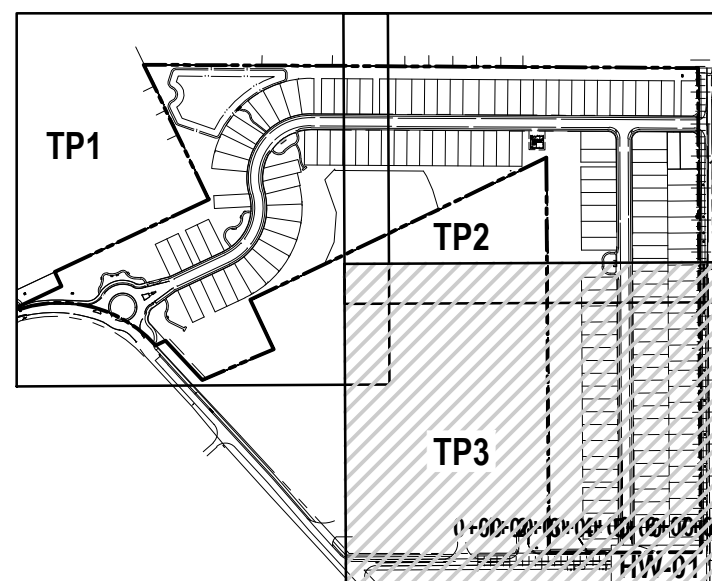
Section E: Mitigation for healthy Historic trees (15% cross sectional area, Res. 20-46)

Qty. for removal	Size	Replacement inches	# Replacement trees		
	52	0.00	0	or	\$ -
	65	0.00	0	or	\$ -
	75	0.00	0	or	\$ -
Total D replacement trees =			0		\$ -

Total replacement trees = 51 or \$ 17,308.89

Replacement trees shall be minimum four-inch caliper, 14 feet high

MITIGATION SUMMARY	QTY	FUND CONTRIBUTION
REPLACEMENT TREES REQUIRED	51	\$17,308.89
REPLACEMENT TREES PROVIDED	51	\$17,308.89
REMAINDER REQUIRED	0	\$0.00

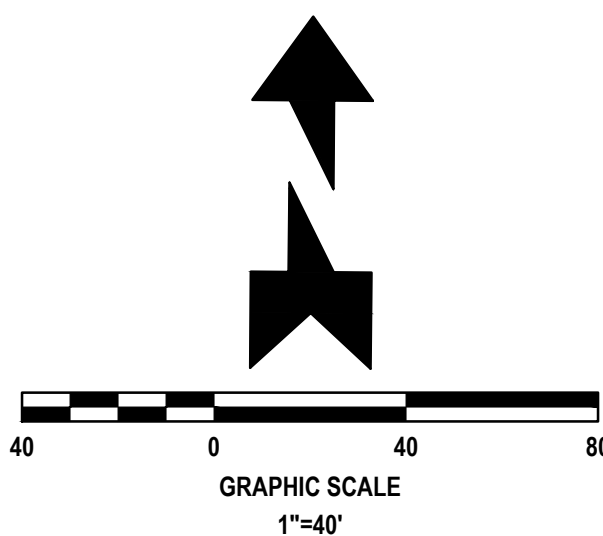


KEY MAP

NOT TO SCALE

LEGEND

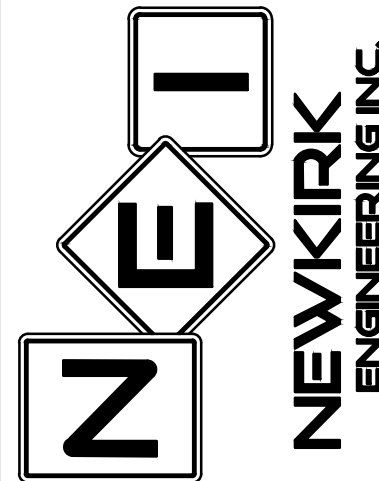
- PROTECTED TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- EXISTING SPECIMEN TREE TO BE REMOVED
- EXISTING SPECIMEN TREE TO REMAIN



REVISIONS

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10/18/22	CITY COMMENTS
11/8/22	CITY COMMENTS
12/23/22	CITY COMMENTS

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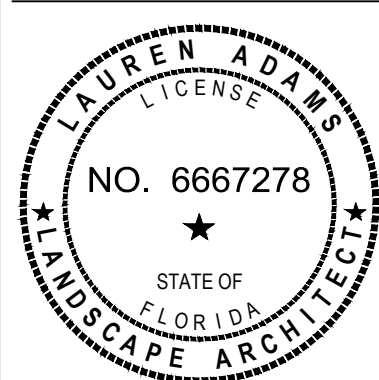


TREE PROTECTION PLAN
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Digitally signed by Lauren A Adams
Date: 2022.12.27 13:23:23 -05'00'

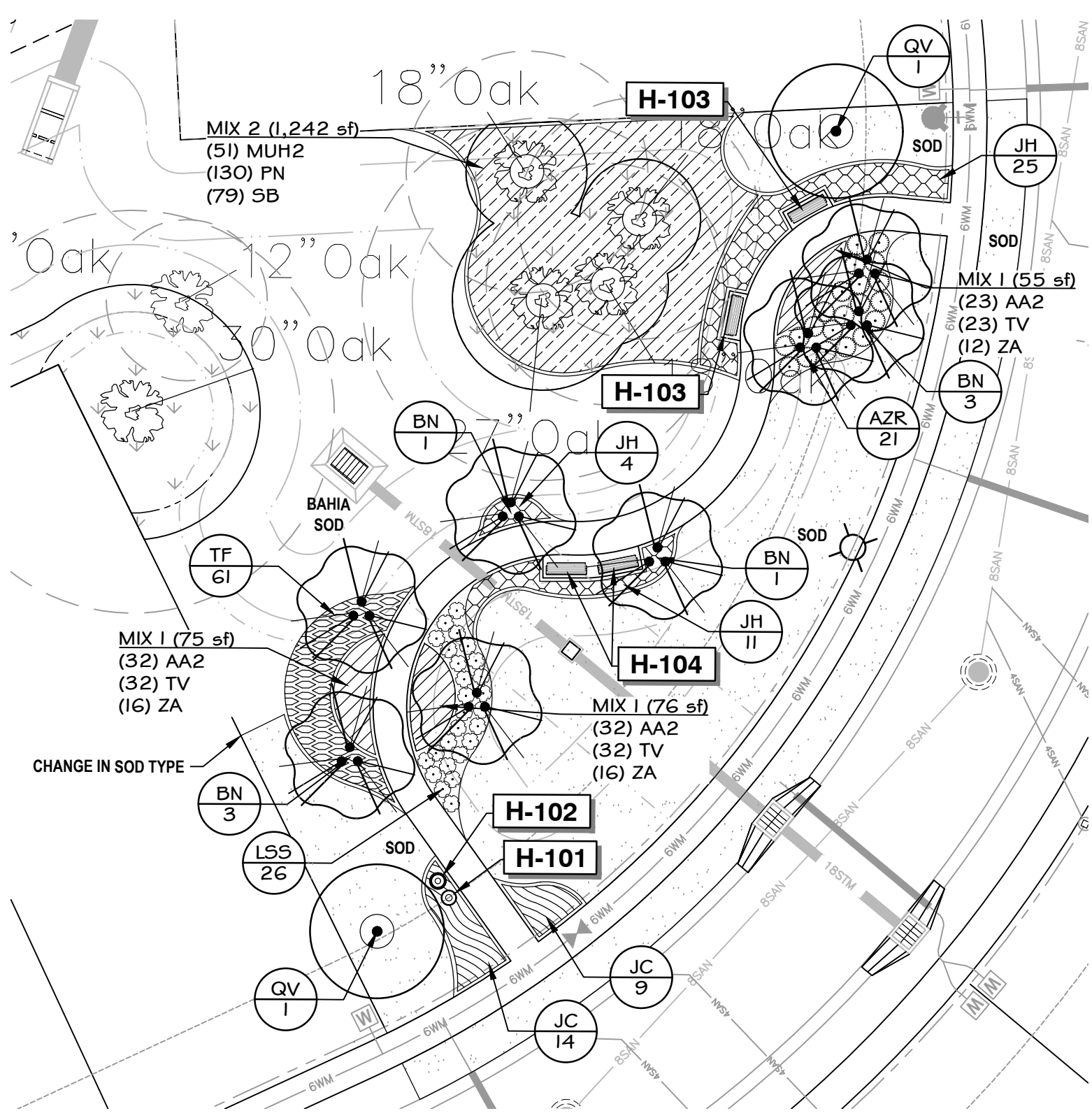


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CHECKED BY: LAA
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TP3



PARK ENLARGEMENT 1

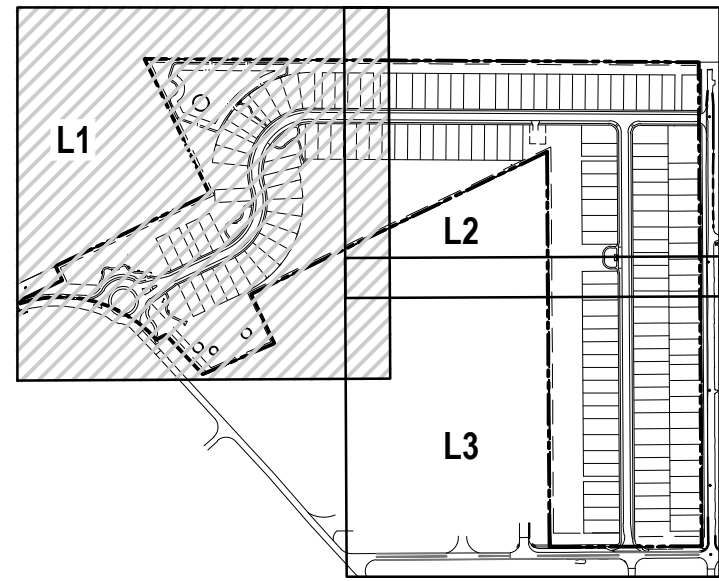
SCALE: 1" = 20'

HARDSCAPE SCHEDULE

SYMBOL	HARDSCAPE DESCRIPTION	QTY
H-101	TRASH CAN MODEL: YAHARA WITH COVERED SQUARE LID MANUFACTURER: THOMAS STEELE MATERIAL: RECYCLED PLASTIC WALNUT/BLACK POWDER COAT FINISH METAL FRAME	5
H-102	COMPLETE PET WASTE STATION MODEL: 3278 ET&T DISTRIBUTORS, INC.	5
H-103	BENCH WITH BACK MODEL: 6 YAHARA (YHB-6) MANUFACTURER: THOMAS STEELE MATERIAL: RECYCLED WALNUT WITH BLACK POWDER COAT METAL FRAME	8
H-104	BACKLESS BENCH MODEL: 6 YAHARA MANUFACTURER: THOMAS STEELE MATERIAL: RECYCLED PLASTIC WALNUT WITH BLACK POWDER COAT METAL FRAME	15
H-105	5' BENCH WITH BACK MODEL: 5 YAHARA (YHB-5) MANUFACTURER: THOMAS STEELE MATERIAL: RECYCLED WALNUT WITH BLACK POWDER COAT METAL FRAME	20

PLANTING NOTES SCHEDULE

SYMBOL	DESCRIPTION
L-101	EXISTING TREE TO REMAIN, SEE EXISTING TREE NOTES SHEET L5 AND TREE PROTECTION DETAIL, CIVIL SHEET 08
L-102	AREA TO REMAIN NATURAL. SEE NOTE 27, SHEET L5

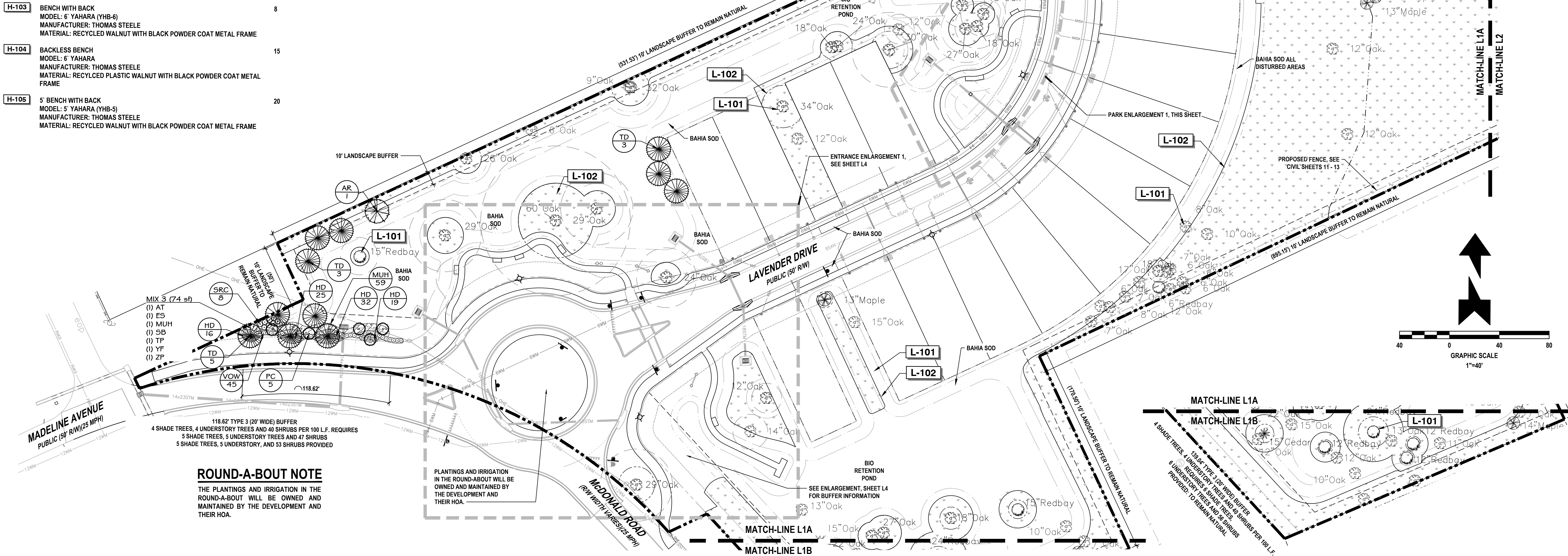


KEY MAP

NOT TO SCALE

LEGEND

	BAHIA SOD
	ST. AUGUSTINE SOD
	AREA TO REMAIN NATURAL, SEE NOTE 27, SHEET L5
	EXISTING TREE TO REMAIN



ROUND-A-BOUT NOTE

THE PLANTINGS AND IRRIGATION IN THE ROUND-A-BOUT WILL BE OWNED AND MAINTAINED BY THE DEVELOPMENT AND THEIR HOA.

PLANTINGS AND IRRIGATION IN THE ROUND-ABOUT WILL BE OWNED AND MAINTAINED BY THE DEVELOPMENT AND THEIR HOA.

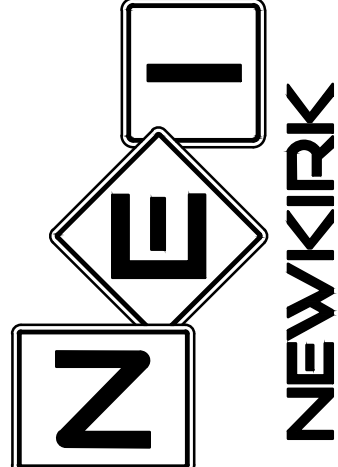
118.62' TYPE 3 (20' WIDE) BUFFER
4 SHADE TREES, 4 UNDERSTORY TREES AND 40 SHRUBS PER 100 L.F. REQUIRES
5 SHADE TREES, 5 UNDERSTORY TREES AND 47 SHRUBS
5 SHADE TREES, 5 UNDERSTORY, AND 53 SHRUBS PROVIDED

MATCH-LINE L1A
MATCH-LINE L1B

REVISIONS

DATE	DESCRIPTION
7/18/22	CITY COMMENTS
8/26/22	CITY COMMENTS
10/18/22	CITY COMMENTS
11/8/22	CITY COMMENTS
12/23/22	CITY COMMENTS

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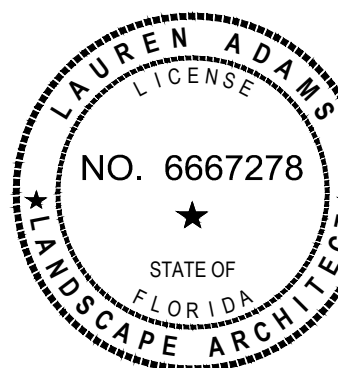


LANDSCAPE PLAN
MADELINE COMMONS
975 McDONALD ROAD
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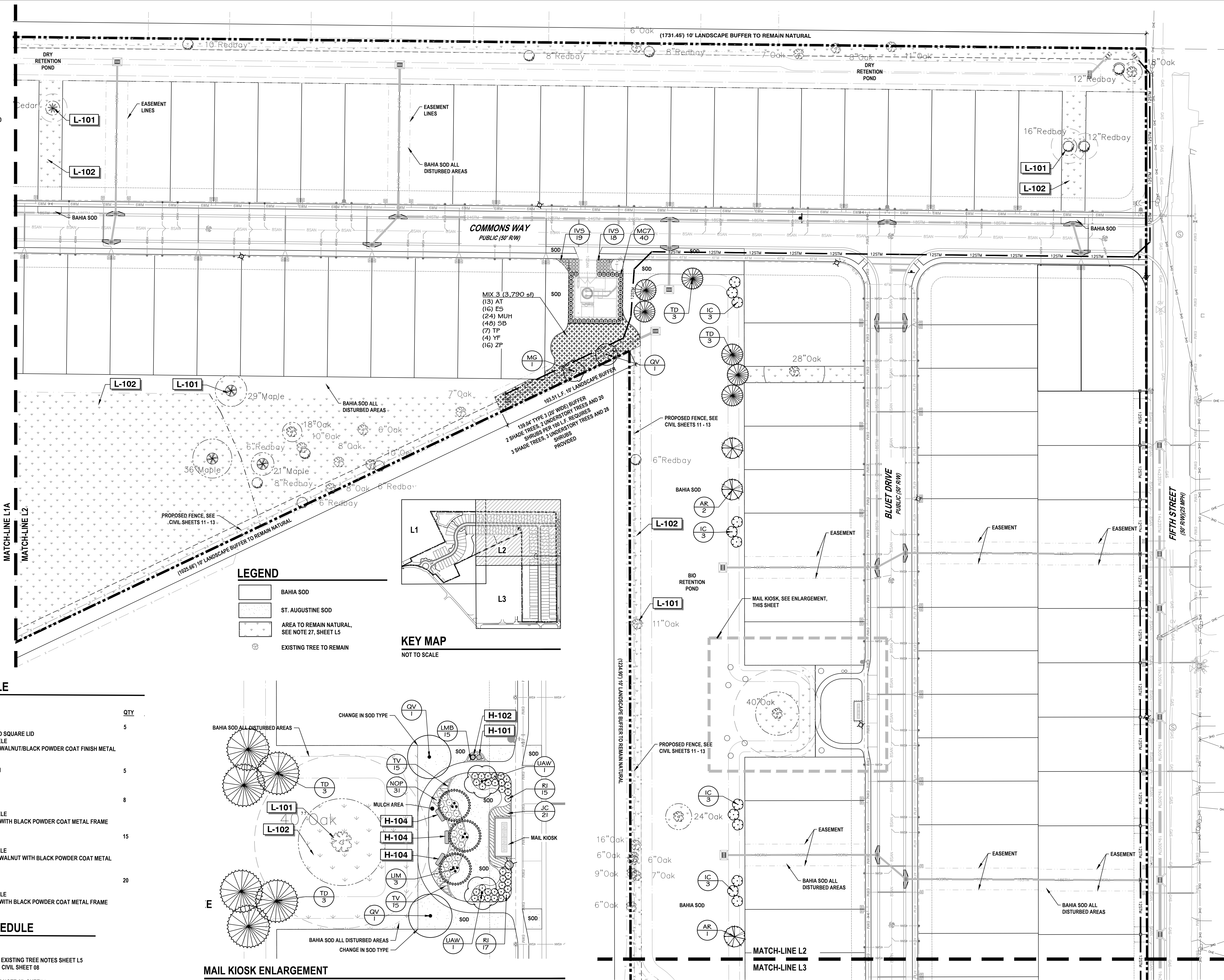


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PROJECT No: 2021-309
DATE: MARCH 2022
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DRAWN BY: BWV
CHECKED BY: LAA
SCALE: 1" = 40'

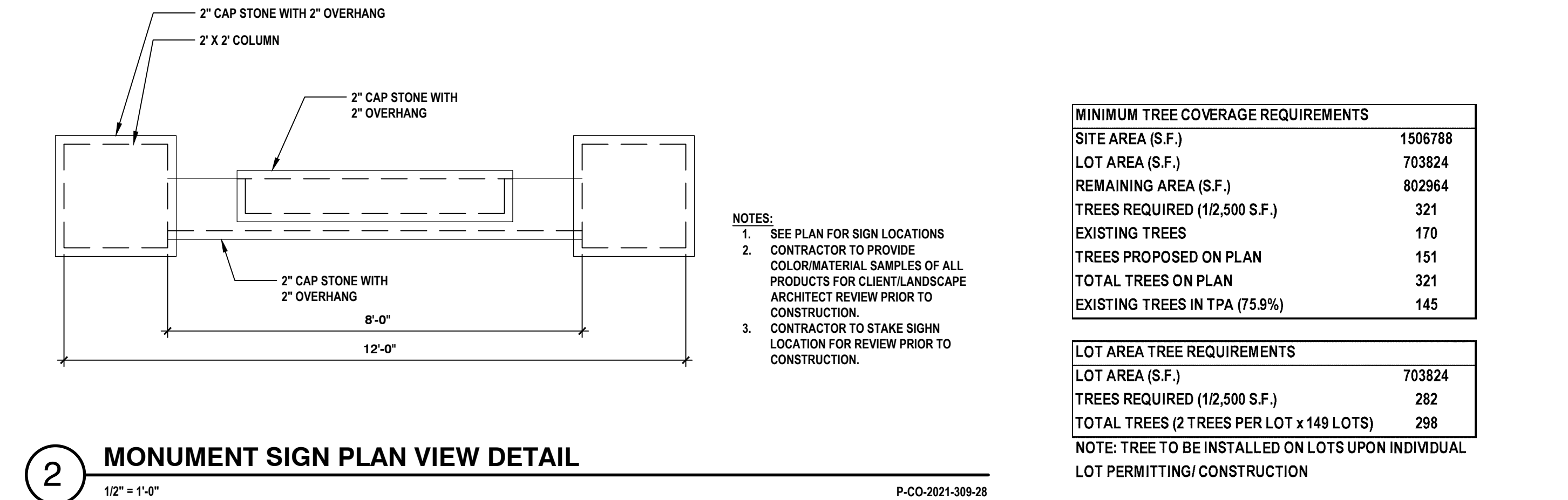
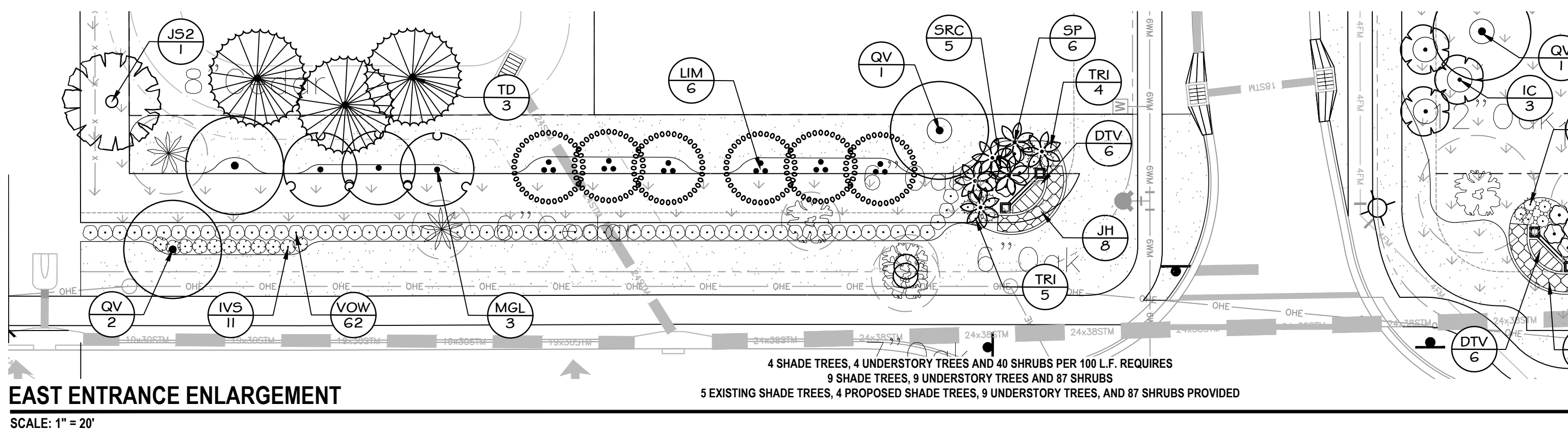
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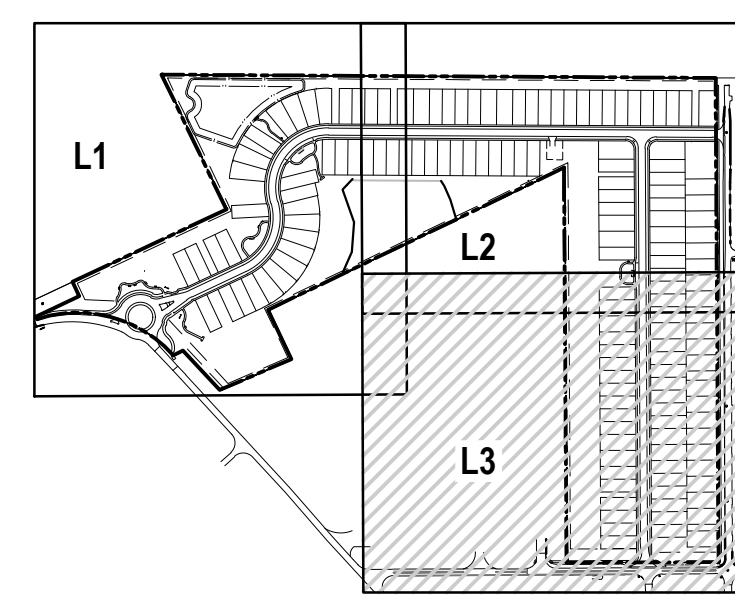
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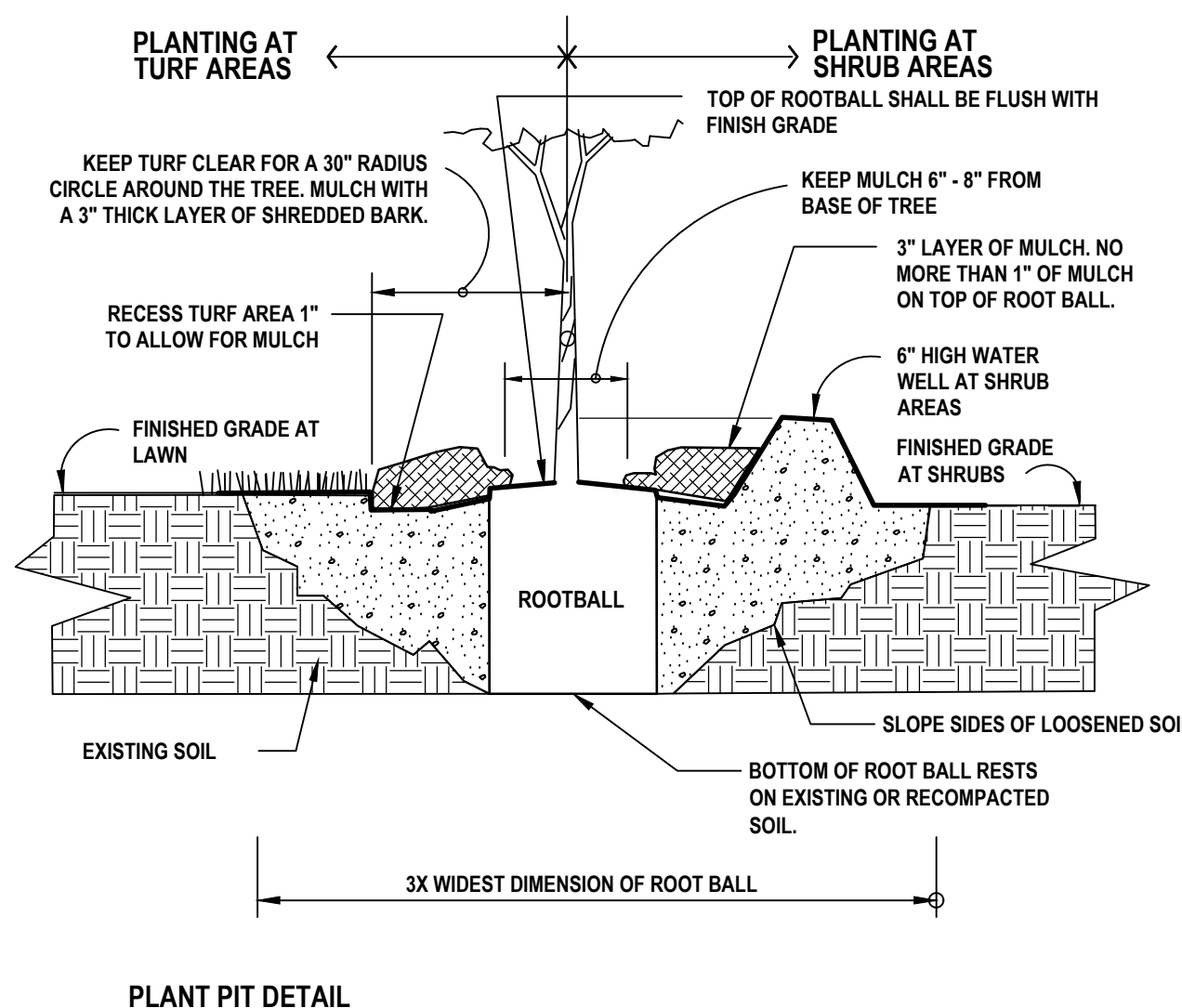
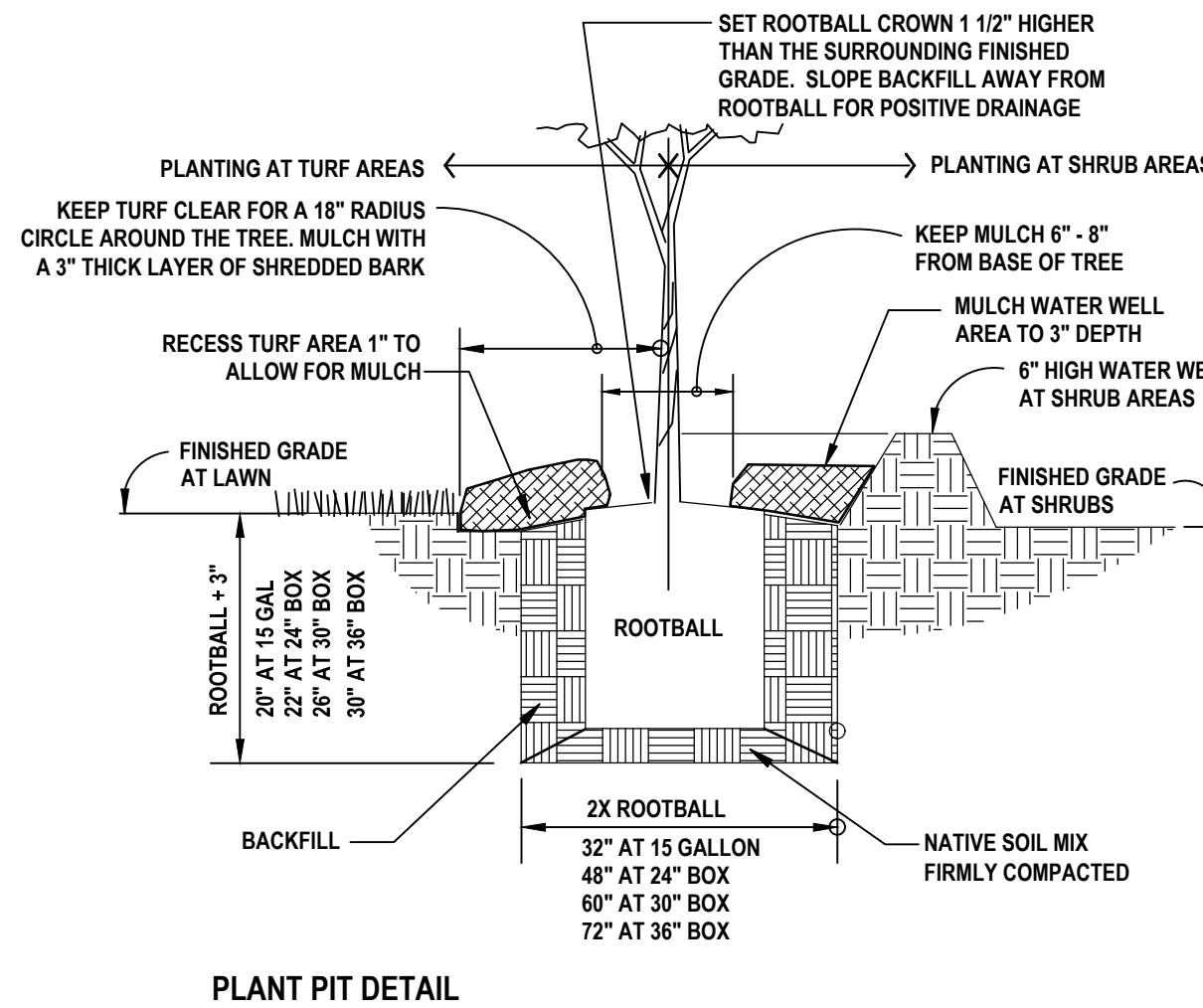
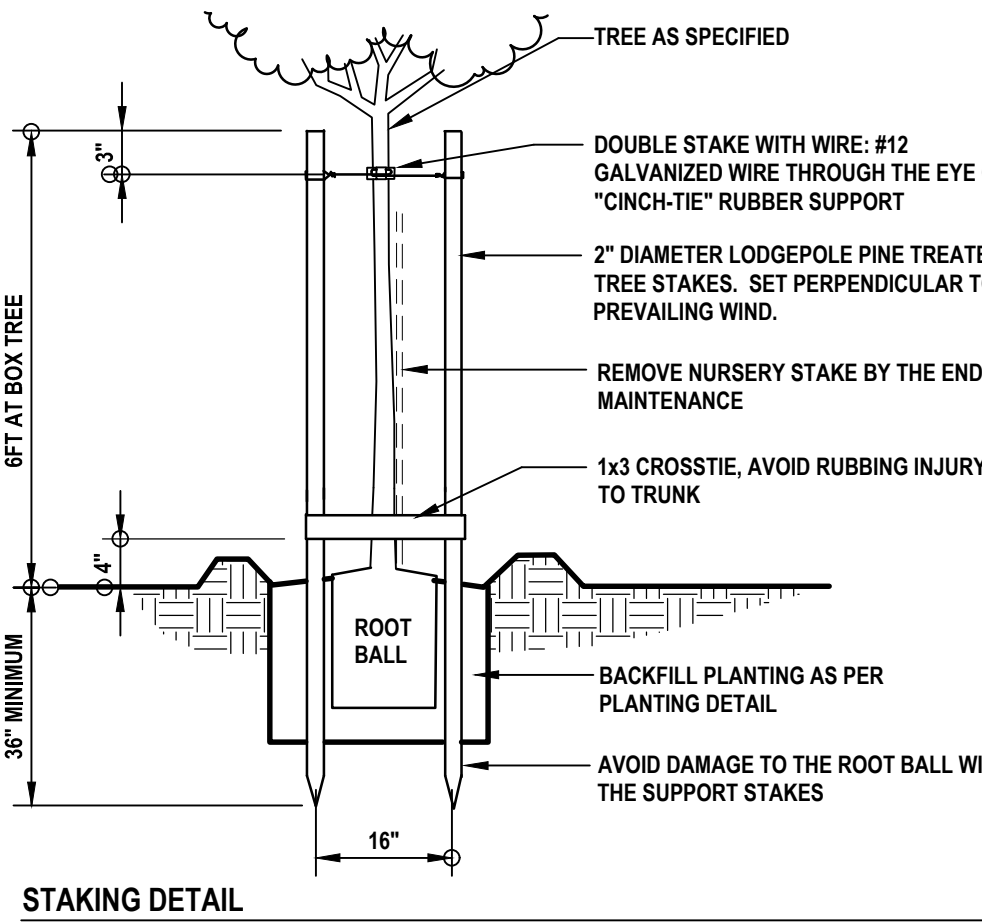
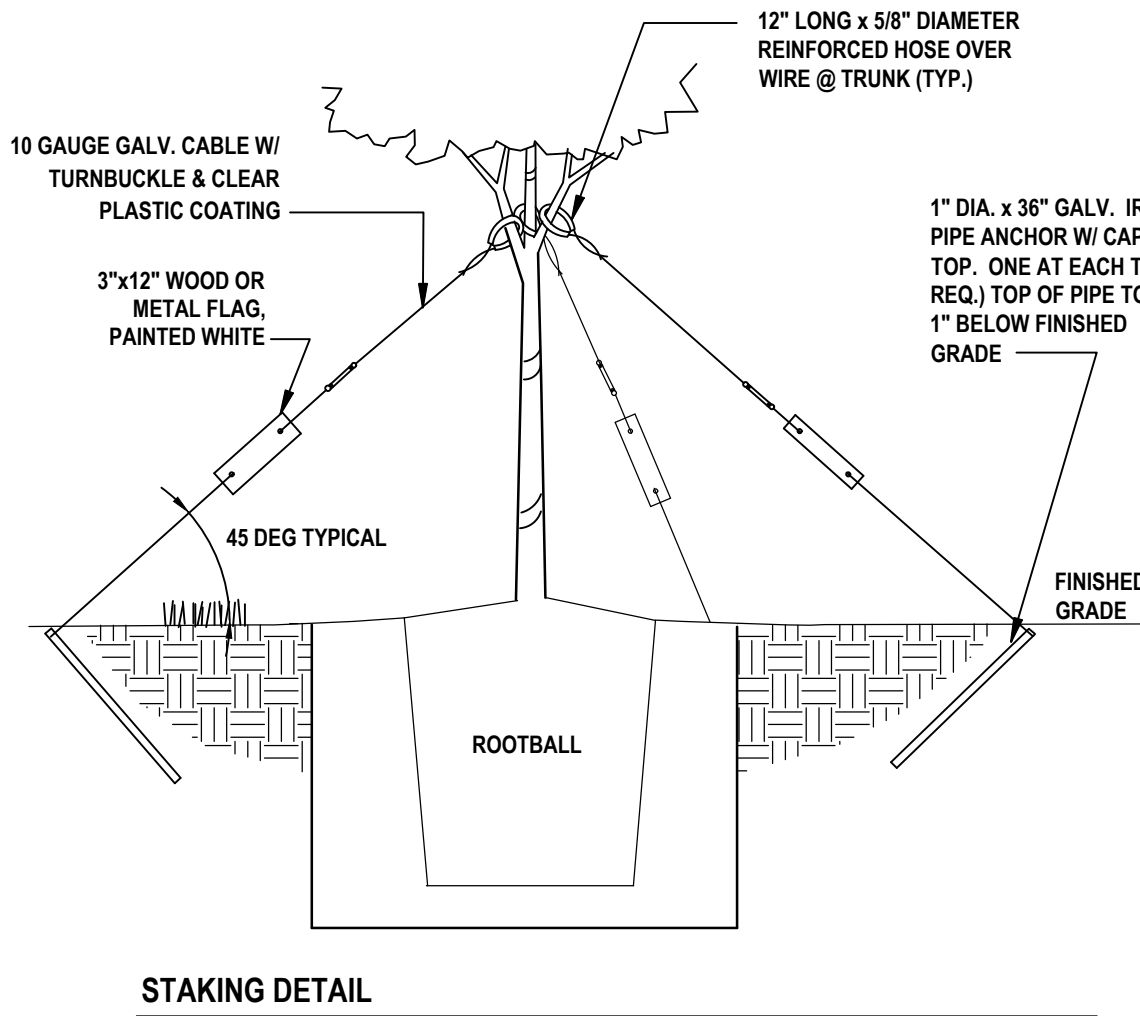


<u>SYMBOL</u>	<u>DESCRIPTION</u>	<u>QTY</u>
H-101	TRASH CAN MODEL: YAHARA WITH COVERED SQUARE LID MANUFACTURER: THOMAS STEELE MATERIAL: RECYCLED PLASTIC WALNUT/BLACK POWDER COAT FINISH METAL FRAME	5
H-102	COMPLETE PET WASTE STATION MODEL: 3278 ET&T DISTRIBUTORS, INC.	5
H-103	BENCH WITH BACK MODEL: 6' YAHARA (YHB-6) MANUFACTURER: THOMAS STEELE MATERIAL: RECYCLED WALNUT WITH BLACK POWDER COAT METAL FRAME	8
H-104	BACKLESS BENCH MODEL: 6' YAHARA MANUFACTURER: THOMAS STEELE MATERIAL: RECYCLED PLASTIC WALNUT WITH BLACK POWDER COAT METAL FRAME	15
H-105	5' BENCH WITH BACK MODEL: 5' YAHARA (YHB-5) MANUFACTURER: THOMAS STEELE MATERIAL: RECYCLED WALNUT WITH BLACK POWDER COAT METAL FRAME	20

<u>SYMBOL</u>	<u>DESCRIPTION</u>
L-101	EXISTING TREE TO REMAIN, SEE EXISTING TREE NOTES SHEET L5 AND TREE PROTECTION DETAIL, CIVIL SHEET 08
L-102	AREA TO REMAIN NATURAL. SEE NOTE 27, SHEET L5



L3

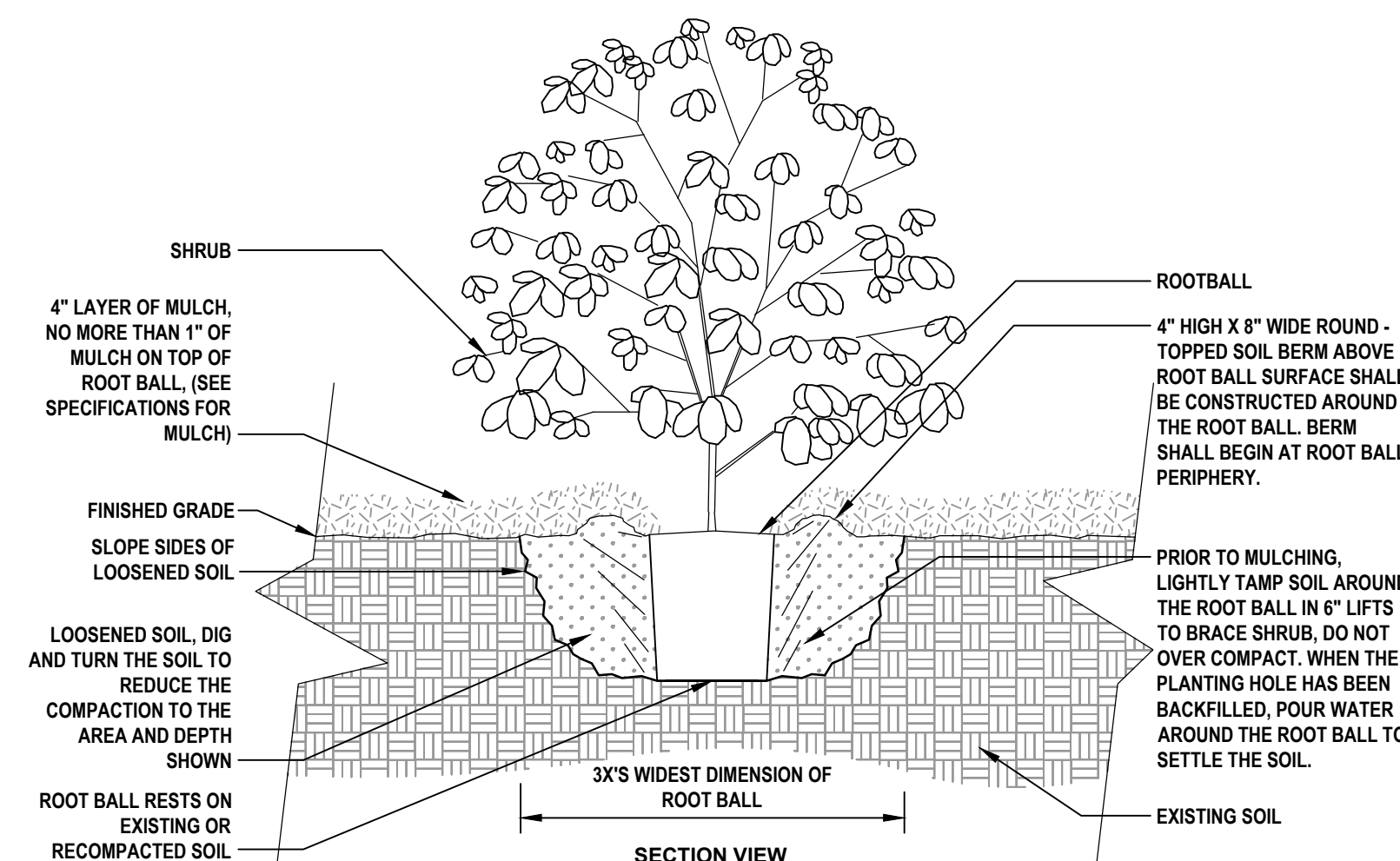


3 TREE PLANTING DETAIL

1" = 1'-0"

4 SMALL TREE PLANTING DETAIL

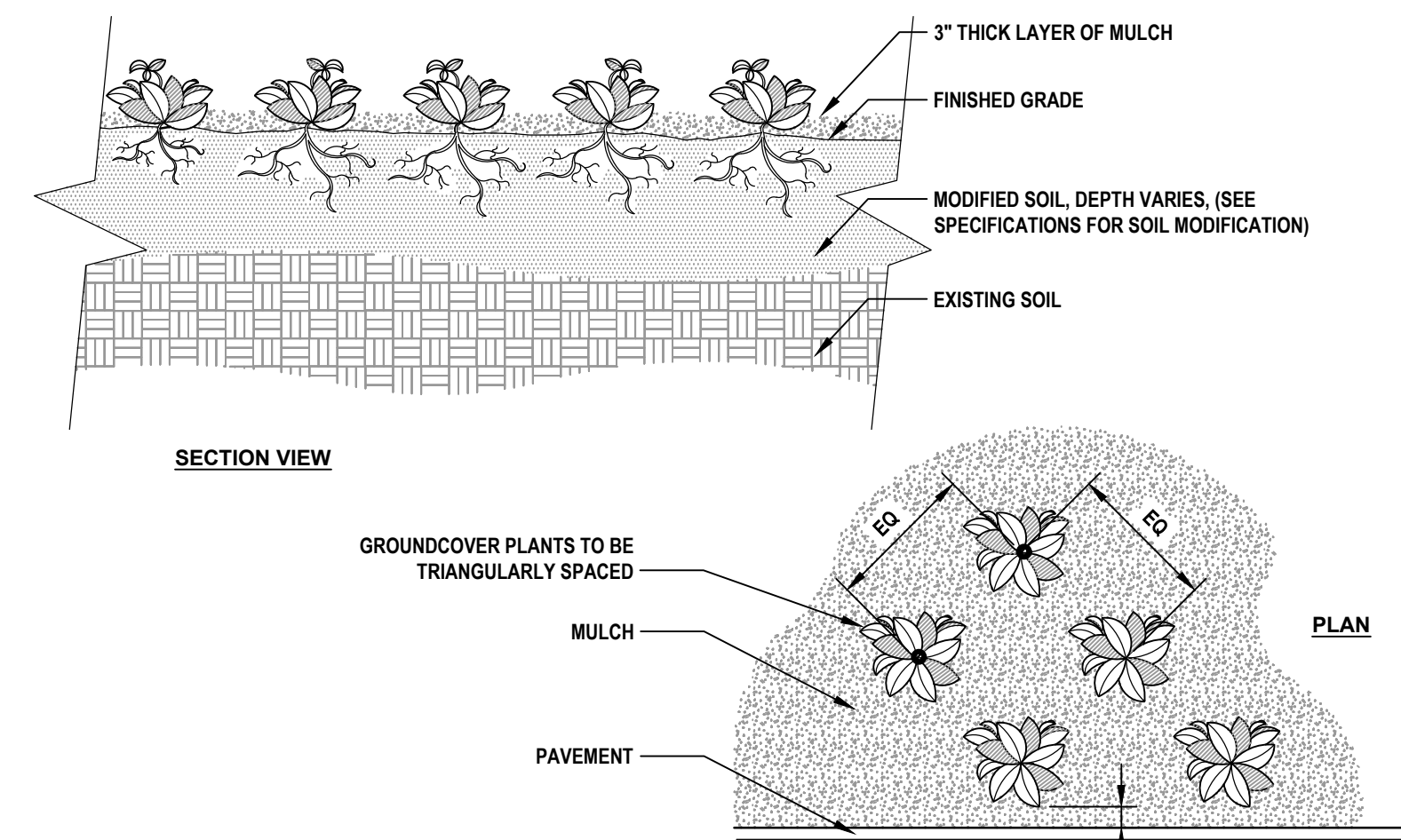
1" = 1'-0"



- NOTES:
- SHRUBS SHALL BE OF QUALITY PRESCRIBED IN THE ROOT OBSERVATIONS DETAIL AND SPECIFICATIONS.
 - SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.

5 SHRUB PLANTING DETAIL

NTS



- NOTES:
- SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION.
 - SMALL ROOTS (1/2" OR LESS) THAT GROW AROUND, UP, OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE HOWEVER THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE PERIPHERY CAN BE REMOVED AT THE TIME OF PLANTING. (SEE ROOT BALL SHAVING CONTAINER DETAIL).
 - SETTLE SOIL AROUND ROOT BALL OF EACH GROUNDCOVER PRIOR TO MULCHING.

6 GROUNDCOVER LAYOUT

1/16" = 1'-0"

LANDSCAPE NOTES

- ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS FOR FLORIDA #1 OR BETTER AS DESCRIBED IN THE CURRENT "GRADES AND STANDARDS FOR NURSERY PLANTS", STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE, TALLAHASSEE, OR THEIR EQUAL AS DETERMINED BY THE LANDSCAPE ARCHITECT.
- ALL MULCH SHALL BE PINE BARK AND INSTALLED 3" DEEP. TREES IN SOD TO BE IN A 5' MINIMUM-MULCHED RING. ALL PALMS TO BE IN A 3" MULCH RING. MULCH TO BE INSTALLED 6" FROM TRUNK.
- SOD SHALL BE ST. AUGUSTINE "FLORITAM" UNLESS OTHERWISE NOTED ON THE PLAN AND SHALL BE 95% WEED-FREE. WHERE SPECIFIED, BAHIA SOD SHALL BE 85% WEED-FREE. ALL SOD SHALL BE INSTALLED WITH TIGHT JOINTS, ROLLED AND FERTILIZED.
- SEED, IF ANY, TO MEET SOUTHERN SEED CERTIFICATION ASSOCIATION.
- ALL DIMENSIONS SHALL BE FIELD-CHECKED BY THE LANDSCAPE CONTRACTOR PRIOR TO CONSTRUCTION, WITH ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT.
- THE PLANT MATERIALS SCHEDULE IS PROVIDED FOR THE CONVENIENCE OF THE LANDSCAPE CONTRACTOR; SHOULD THERE BE ANY DISCREPANCY BETWEEN THE PLAN AND THE PLANT LIST, THE PLAN WILL PREVAIL.
- ALL MATERIALS MUST BE AS SPECIFIED ON THE LANDSCAPE PLAN. IF MATERIALS OR LABOR DO NOT ADHERE TO THE SPECIFICATIONS, THEY WILL BE REJECTED AT NO ADDITIONAL COST TO THE OWNER.
- PLANTING BEDS MAY BE TREATED WITH CHEMICAL HERBICIDE AS NEEDED. USE AS DIRECTED BY MANUFACTURERS.
- NO SUBSTITUTIONS OR CHANGES OF ANY KIND WILL BE ALLOWED AT THE TIME OF BIDDING SO AS TO PROVIDE FOR FAIR COMPARISON.
- THE CONTRACTOR SHALL VERIFY EXISTENCE AND LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND CONDITIONS PRIOR TO HIS COMMENCEMENT OF THE ANY WORK.
- ALL BUILDING MATERIALS AND LABOR SHALL CONFORM TO THE FLORIDA BUILDING CODE AND ALSO TO ALL LOCAL CODES THAT HAVE JURISDICTION.
- ALL PERMIT AND VARIANCE APPLICATIONS SHALL BE MADE BY THE CONTRACTOR.
- PRIOR TO CONSTRUCTION OF PLANTING BEDS, ALL AREAS ARE TO HAVE SOIL TESTS CONDUCTED TO DETERMINE pH AND SOIL FERTILITY. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO AMEND THE SOIL TO MEET ADEQUATE FERTILITY AND pH FOR CORRESPONDING PLANT MATERIAL. ALL TEST RESULTS SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT.
- EQUIPMENT SHALL BE OPERATED IN A MANNER AS NOT TO INJURE OR DESTROY ANY TREES SHOWN TO REMAIN. CONTRACTOR SHALL NOT CAUSE OR ALLOW THE CLEANING OF EQUIPMENT OR MATERIAL WITHIN THE DRIP LINE OF ANY TREE OR GROUPS OF TREES TO BE RETAINED OR THOSE PROPOSED. NOR SHALL THE CONTRACTOR ALLOW THE DISPOSAL OF WASTE MATERIAL, SUCH AS PAINT, OIL, SOLVENTS, ASPHALT, CONCRETE, MORTAR OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF A TREE WITHIN THE DRIP LINE OF ANY TREE OR GROUP OF TREES. NO ATTACHMENT, WIRES (OTHER THAN PROTECTIVE GUY WIRES), SIGNS, OR PERMITS MAY BE FASTENED TO A TREE.
- ANY EXISTING TREES CREDITED TOWARDS REQUIRED BUFFERS OR LANDSCAPE REQUIREMENTS REMOVED FOR ANY REASON SHALL BE REPLACED WITH TREES MEETING CITY APPROVAL WITH REGARDS TO SPECIES AND SIZE.
- ALL QUESTIONS CONCERNING THE PLAN AND/OR SPECIFICATIONS SHALL BE DIRECTED TO THE LANDSCAPE ARCHITECT (386) 872-7794.
- ALL TREES AND PALMS MUST BE STAKED USING THE DETAILS PROVIDED OR ARBOGUY STAKING SYSTEMS. ANY STAKING SYSTEM NOT INCLUDED MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.
- ALL UNIMPROVED AREA NOT OTHERWISE PLANTED OR MULCHED SHALL BE SODDED WITH BAHIA UNLESS OTHERWISE NOTED ON THE LANDSCAPE PLAN.
- PLANT MATERIAL SHALL BE CLEARLY IDENTIFIED AS FLORIDA #1 OR BETTER ON EITHER LABELS OR INVOICES.
- ALL PLANT MATERIAL SHALL BE GUARANTEED ONE YEAR AFTER ACCEPTANCE BY OWNER.
- TREES SHALL BE PLANTED SO THAT THE TRUNK FLARE IS EXPOSED AND TOPMOST ROOT IN THE ROOTBALL ORIGINATING FROM THE TRUNK IS AT SOIL SURFACE OR WITHIN THE TOP INCH OF SOIL ON THE ROOTBALL.
- ALL PLANT SPECIFICATIONS MUST BE MET OR EXCEEDED - SIZES IN PLANT SCHEDULE ARE MINIMUMS AND EACH MUST BE MET. CONTAINERS MAY NEED TO BE UPSIZED TO MEET ALL SPECIFICATIONS.
- PLANT TREE SO THAT ROOTBALL IS 1"-2" ABOVE FINISH GRADE.
- REMOVAL OF ALL CONSTRUCTION DEBRIS, LIMEROCK, EXCESS OF BUILDERS SAND, CONCRETE AND MORTAR DEBRIS, EXISTING WEEDS AND GRASS, AND ALL FOREIGN MATERIALS IN THE PLANTING BED AND SOD AREAS SHALL BE REMOVED AND A MINIMUM OF 3' OF CLEAN SAND WITH A pH 5.5-6.5 SHALL BE INSTALLED PRIOR TO ANY INSTALLATION OF PLANTS OR TREES.
- FOR ALL NEW DEVELOPMENT, OR REDEVELOPMENT OF EXISTING PROPERTY, THE APPLICANT SHALL BE REQUIRED TO REMOVE ALL INVASIVE NONNATIVE PLANT SPECIES FROM THE PROPERTY PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
- ALL EXISTING TREES AND PALMS WILL BE PROPERLY PRUNED AND CLEANED OF DEADWOOD, BROKEN BRANCHES, DEAD FROND AND VINES AS NEEDED.
- ALL NOXIOUS OR EXOTIC VEGETATION THAT DETRACTS FROM THE APPEARANCE OF THE EXISTING OR PLANTED VEGETATION WITHIN THE TREE PROTECTION AREA OR BUFFERS SHALL BE REMOVED. THE EDGE OF THE AREAS TO REMAIN NATURAL SHALL BE MULCHED 5' IN AND CURVILINEAR BED LINE SHALL BE CREATED ADJACENT TO SODDED AREAS.

EXISTING TREE NOTES

- PRUNE ALL TREES TO REMAIN IN ACCORDANCE WITH ANSI A 300 PRUNING STANDARDS AS PERFORMED BY AN ARBORIST CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) OR A REGISTERED CONSULTING ARBORIST WITH THE AMERICAN SOCIETY OF CONSULTING ARBORISTS (ASCA).
- REMOVE ALL EXISTING MULCH AND ENSURE ONE OR TWO LARGE ROOTS ARE EXPOSED. ADD NEW MULCH TO A DEPTH OF 3" TO BED SURROUNDING TREES. KEEP MULCH 6" FROM TRUNK. DO NOT PILE MULCH AGAINST TRUNK.

LANDSCAPE SOIL SPECIFICATIONS

- CONTRACTOR WILL BE RESPONSIBLE FOR ANY REQUIRED EXCAVATION AND FOR RAKING AND SMOOTHING OF GRADE. IT IS RECOMMENDED THAT LANDSCAPE CONTRACTOR COORDINATE WITH GRADING CONTRACTOR TO ESTABLISH SUBGRADES FOR PLANTING AREAS AS REQUIRED BELOW.
- LANDSCAPE SOIL REFERS TO STOCKPILED TOPSOIL OR THE PLANTING MIXTURE AS SPECIFIED BELOW. STRUCTURAL SOIL OR FILL DIRT SHALL NOT BE USED IN PLANTED AREAS.
- TOPSOIL SHALL BE STOCKPILED IF THE SITE CONSISTS OF NATIVE PLANT COMMUNITIES. IF NOXIOUS AND/OR INVASIVE PLANT SPECIES ARE PRESENT, TOPSOIL SHALL NOT BE STOCKPILED AND THE PLANTING MIXTURE BELOW SHALL BE USED.
- IF STOCKPILED, THE TOPSOIL SHALL BE SALVAGED TO A DEPTH OF 4 TO 6 INCHES AND STOCKPILED NO HIGHER THAN 3 FEET IN HEIGHT.
- TOPSOIL SHALL BE STORED FOR AS SHORT A DURATION AS POSSIBLE TO ENSURE SURVIVAL OF SEEDS AND SOIL ORGANISMS.
- IF TOPSOIL HAS NOT BEEN STOCKPILED, PLANTING MIXTURE FOR TREES AND SHRUBS SHALL CONSIST OF 1/3 "COMPOST", 1/3 COARSE SAND, AND 1/3 EXISTING SOIL, THOROUGHLY MIXED. IF THE EXISTING SOIL IS NOT NATIVE AND FREE OF INVASIVES, THEN TOPSOIL SHALL BE IMPORTED FOR THIS COMPONENT.
- MIXTURE FOR PALMS SHALL BE 50 PERCENT COARSE SAND AND 50 PERCENT EXISTING SOIL. MIX THOROUGHLY WITH EXISTING SOIL.
- LANDSCAPE SOIL SHALL BE USED IN ALL PLANT BEDS CONSISTING OF SHRUBS AND GROUNDCOVER TO A DEPTH OF 6" AND MULCH TO A DEPTH OF 3".
- LANDSCAPE SOIL SHALL BE FREE OF DEBRIS, WEEDS, PARTICLES LARGER THAN 0.50 INCHES AND RINSATE CONTAINING LIME OR TOXIC MATERIALS.
- EXISTING SOIL SHOULD NOT BE CONTINUOUSLY EXCAVATED BENEATH THE DRIP LINE OF EXISTING TREES. IN THIS CASE, IF SHRUBS OR GROUNDCOVER ARE PROPOSED, THEY SHOULD BE PLANTED IN NATIVE SOIL WITHOUT AMENDMENT.

REFER TO LANDSCAPE DETAILS FOR MINIMUM PLANTING PIT DIMENSIONS.

PLANT MIX SCHEDULE

MIX	FLOWER MIX	465 SF			
MIX 1	AGAPANTHUS AFRICANUS / AFRICAN LILY	194	1 GAL.	40% @ 12" oc	
	TULBAGHIA VIOLACEA / SOCIETY GARLIC	194	12" HT	40% @ 12" oc	
	ZEPHYRANTHES ATAMASCO / ATAMASCO LILY	97	3" HT, X 3" SPRD	20% @ 12" oc	
MIX 2	BIORETENTION MIX	1,473 SF			
	MUHLENBERGIA CAPILLARIS / PINK MUHLY GRASS	60	1 GAL.	35% @ 36" oc	
	PHYLLOPODIFLORA / FROGFRUIT	154	1 GAL.	10% @ 12" oc	
	SPARTINA BAKERI / SAND CORDGRASS	94	1 GAL.	55% @ 36" oc	
MIX 3	SIMPLE NATIVE MIX	3,864 SF			
	ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED	13	1 GAL.	5% @ 48" oc	
	ERAGROSTIS SPECTABILIS / PURPLE LOVE GRASS	17	1 GAL.	10% @ 60" oc	
	MUHLENBERGIA CAPILLARIS / PINK MUHLY GRASS	25	3 GAL.	15% @ 60" oc	
	SPARTINA BAKERI / SAND CORDGRASS	49	1 GAL.	30% @ 60" oc	
	THELYPTERIS PALUSTRIS / EASTERN MARSH FERN	7	4" POT, 6"-8" HT	10% @ 96" oc	
	YUCCA FILAMENTOSA / ADAM'S NEEDLE	4	1 GAL.	5% @ 96" oc	
	ZAMIA PUMILA / COONTIE CYCAD	17	3 GAL.	10% @ 60" oc	

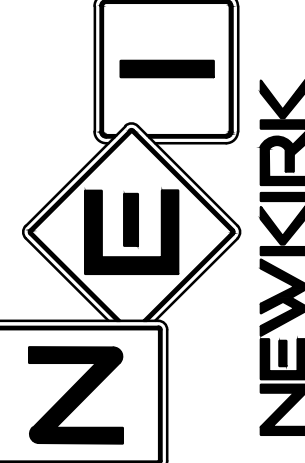
PLANT SCHEDULE

PALM TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
SP	9	SABAL PALMETTO	CABBAGE PALMETTO	10', 14', 18' HT.	STAGGERED HEIGHTS
SPC	5	SABAL PALMETTO	CABBAGE PALMETTO	14' - 18' C.T., MIXED	CLEAN TRUNK, 2/3 CURVED
SHADE TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
AR	6	ACER RUBRUM	RED MAPLE	4" CAL., 14' HT.	
BN	8	BETULA NIGRA	RIVER BIRCH	10' HT, 30 GAL.	
JS2	1	JUNIPERUS SILICICOLA	SOUTHERN RED CEDAR	2.5" CAL., 10' HT.	6" CAL. COMBINED, 3 STEM. M.T.
MG	1	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	2.5" CAL., 10' HT.	
MV	2	MAGNOLIA VIRGINIANA	SWEET BAY MAGNOLIA	2.5" CAL., 10' HT.	
QV	14	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	2.5" CAL., 10' HT.	
QV2	1	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	9" CAL., 20' HT, 13' SPRD.	ROOTS PLUS GROWER
TD	47	TAXODIUM DISTICHUM	BALD CYPRESS	4" CAL., 14' HT.	
UNDERSTORY TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
IC	21	ILEX CASSINE	DAHOON HOLLY	2" CAL., 6' HT.	3 C.T.
IAE	21	ILEX X ATTENUATA 'EAGLESTON'	EAGLESTON HOLLY	2" CAL., 10' HT.	
LIM	19	LAGERSTROEMIA INDICA X FAURIEI 'MUSKOGEE'	MUSKOGEE CRAPPE MYRTLE	30 GAL., 10' HT.	6" CAL. COMBINED, 3 STEM. M.T.
LT	13	LAGERSTROEMIA INDICA X FAURIEI 'TUSCARORA'	TUSCARORA CRAPPE MYRTLE MULTI-TRUNK	30 GAL., 10' HT.	6" CAL. COMBINED, 3 STEM. M.T.
MGL	3	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	DWARF SOUTHERN MAGNOLIA	2" CAL., 10' HT.	
PC	5	PRUNUS CAROLINIANA	CAROLINA LAUREL CHERRY	2" CAL., 6' HT.	
UAW	4	ULMUS ALATA	WINGED ELM	2" CAL., 10' HT.	
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
AE2	24	ASPIDISTRA ELATIOR	CAST IRON PLANT	3 GAL.	36" O.C.
AZR	40	AZALEA X 'RED RUFFLES'	RED RUFFLES AZALEA	3 GAL., 24" HT, X 18" SPRD.	36" O.C.
CSG	38	CAMELLIA SASANKUA 'SHISHI GASHIRA'	SHISHI GASHIRA CAMELLIA	3 GAL.	36" O.C.
CVS	213	ILEX VOMITORIA 'STOKES DWARF'	STOKES DWARF YAUPOH HOLLY	3 GAL., 12" HT, X 18" SPRD.	36" O.C.
LSS	26	LIGUSTRUM SINESSE 'SUNSHINE'	SUNSHINE LIGUSTRUM	3 GAL., 12" HT, X 12" SPRD.	30" O.C.
MC7	40	MYRICIA CERIFERA	WAX MYRTLE	7 GAL., 36" HT, X 12" SPRD.	48" O.C., FTG
NOP	31	NERIUM OLEANDER 'PETITE PINK'	PETITE PINK OLEANDER	3 GAL.	36" O.C.
RI	89	RHAPHIOLEPIS INDICA	INDIAN HAWTHORN	3 GAL., 15" HT, X 15" SPRD.	36" O.C.
SRC	28	SERENOA REPENS 'CINEREA'	SILVER SAW PALMETTO	7 GAL.	48" O.C.
TRI	55	TRIPSACUM DACTYLOIDES	FAKACHATCHEE GRASS	1 GAL, 24" HT.	36" O.C.
VOW	107	VIBURNUM OBOVATUM 'WHORLED CLASS'	WHORLED CLASS DWARF WALTER'S VIBURNUM	3 GAL., 18" HT, X 9" SPRD.	
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
DTV	52	DIANELLA TASMANICA 'VARIEGATA'	VARIATED FLAX LILY	1 GAL.	24" O.C.
EG	70	EVOLVULUS GLOMERATUS 'BLUE DAZE'	BRAZILIAN DWARF MORNING GLORY	1 GAL.	18" - 24" O.C.
HD	101	HELIANTHUS DEBILIS	DUNE SUNFLOWER	1 GAL.	24" O.C.
JC	96	JUNIPERUS CONFERTA	SHORE JUNIPER	1 GAL.	30" O.C.
JH	129	JUNIPERUS HORIZONTALIS 'BLUE RUG'	BLUE RUG JUNIPER	3 GAL.	36" O.C.
LMB	160	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILYTURF	1 GAL.	12" O.C.
MUH	195	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	3 GAL.	36" O.C.
TRP	20	TRADESCANTIA PALLIDA 'PURPLE HEART'	PURPLE QUEEN SPIDERWORT	1 GAL.	18" O.C.
TF	61	TRIPSACUM FLORIDANUM	FLORIDA GAMAGRASS	1 GAL.	24" O.C.
TV	176	TULBAGHIA VIOLACEA	SOCIETY GARLIC	12" HT	12" O.C.

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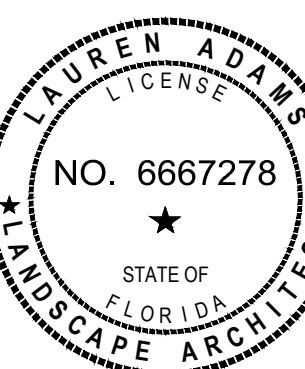


LANDSCAPE DETAILS
AND NOTES
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Lauren Adams
Digitally signed by Lauren A Adams
Date: 2022.12.27 13:19:43 -05'00'



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PROJECT No: 2021-309

DATE: MARCH 2022

DESIGN BY: LAA

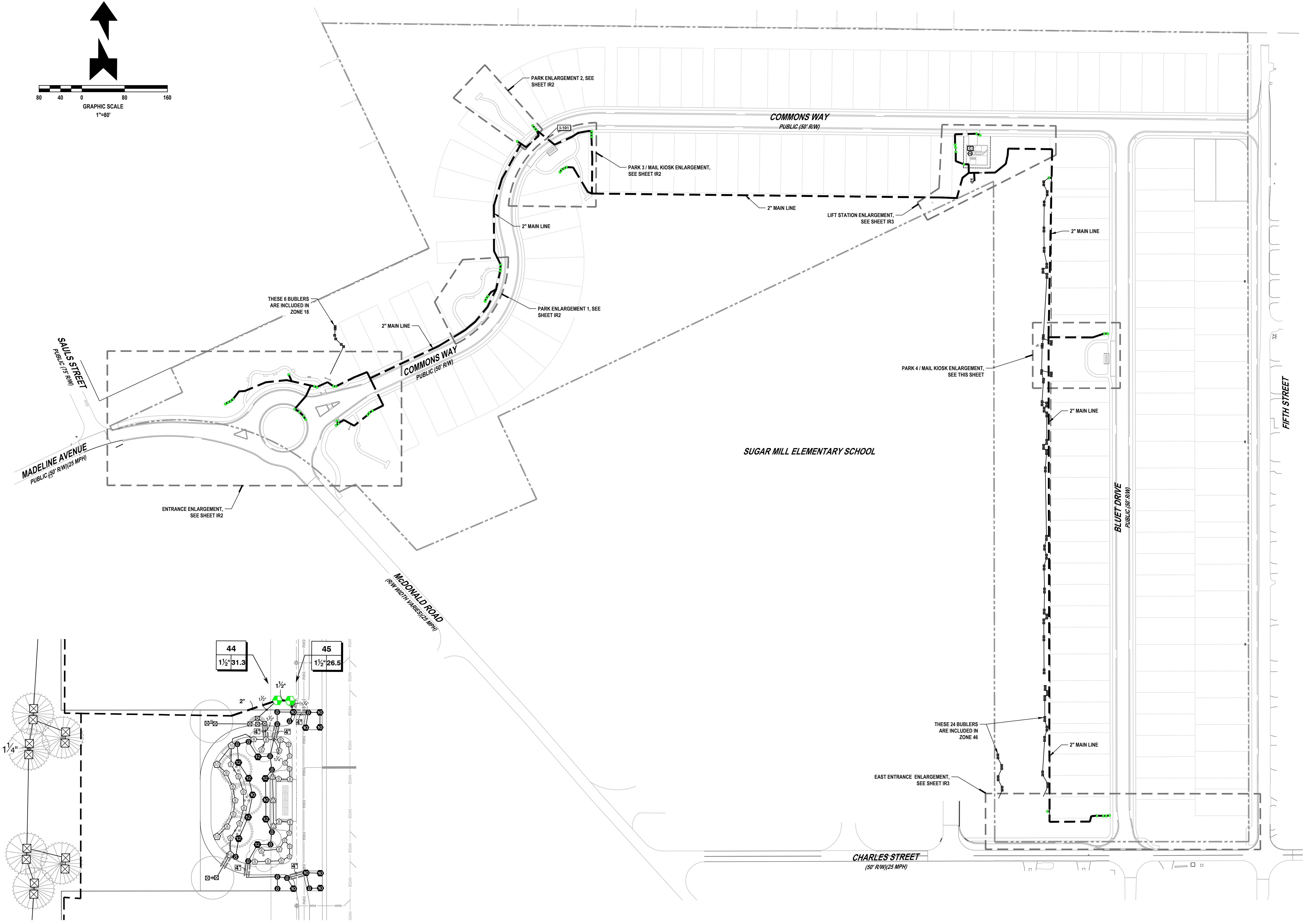
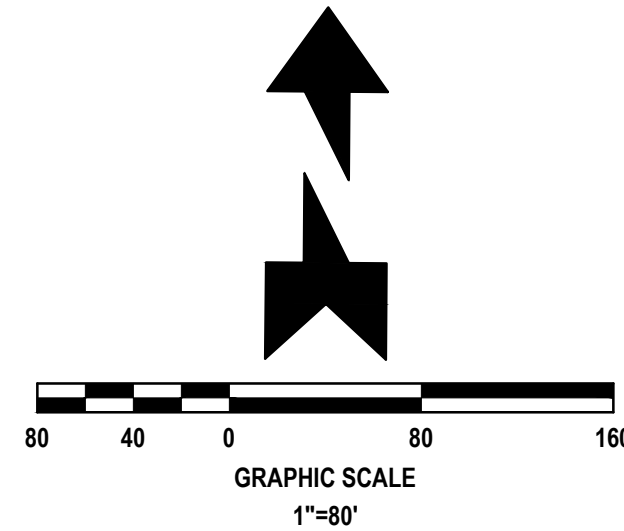
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CHECKED BY: LAA

SCALE: AS SHOWN

DRAWING NUMBER

L5



PARK 4 / MAIL KIOSK ENLARGEMENT
SCALE: 1" = 20'

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OVERALL IRRIGATION PLAN

MADLINE COMMONS

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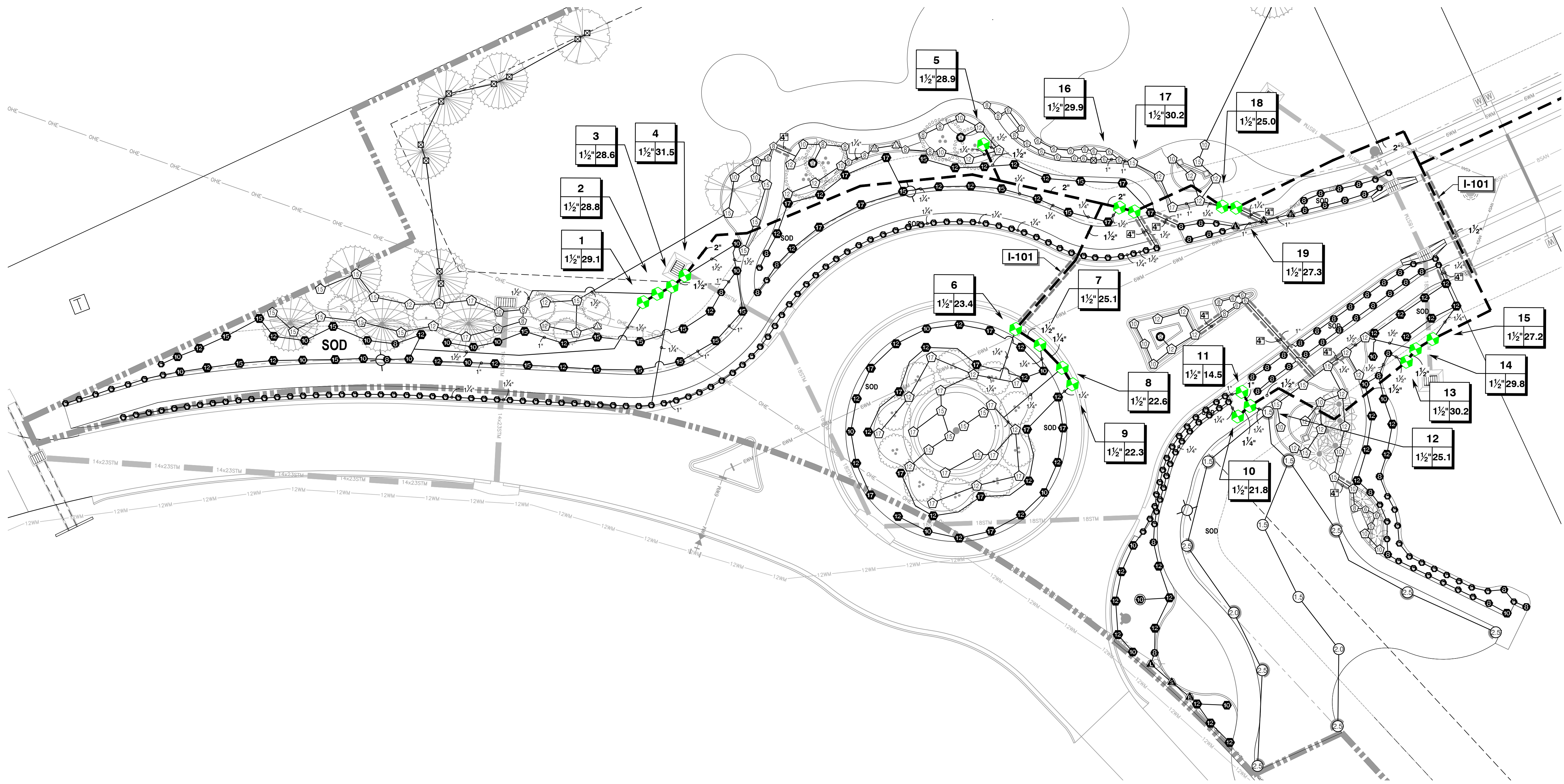
Lauren
A
Adams

Digitally signed by Lauren A Adams
Date: 2022.12.27 13:16:42 -05'00'

LAUREN ADAMS
LICENSE
NO. 6667278
STATE OF FLORIDA
LANDSCAPE ARCHITECT

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PROJECT No:	2021-309
DATE:	MARCH 2022
DESIGN BY:	LAA
DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	1" = 80'
DRAWING NUMBER	IR1



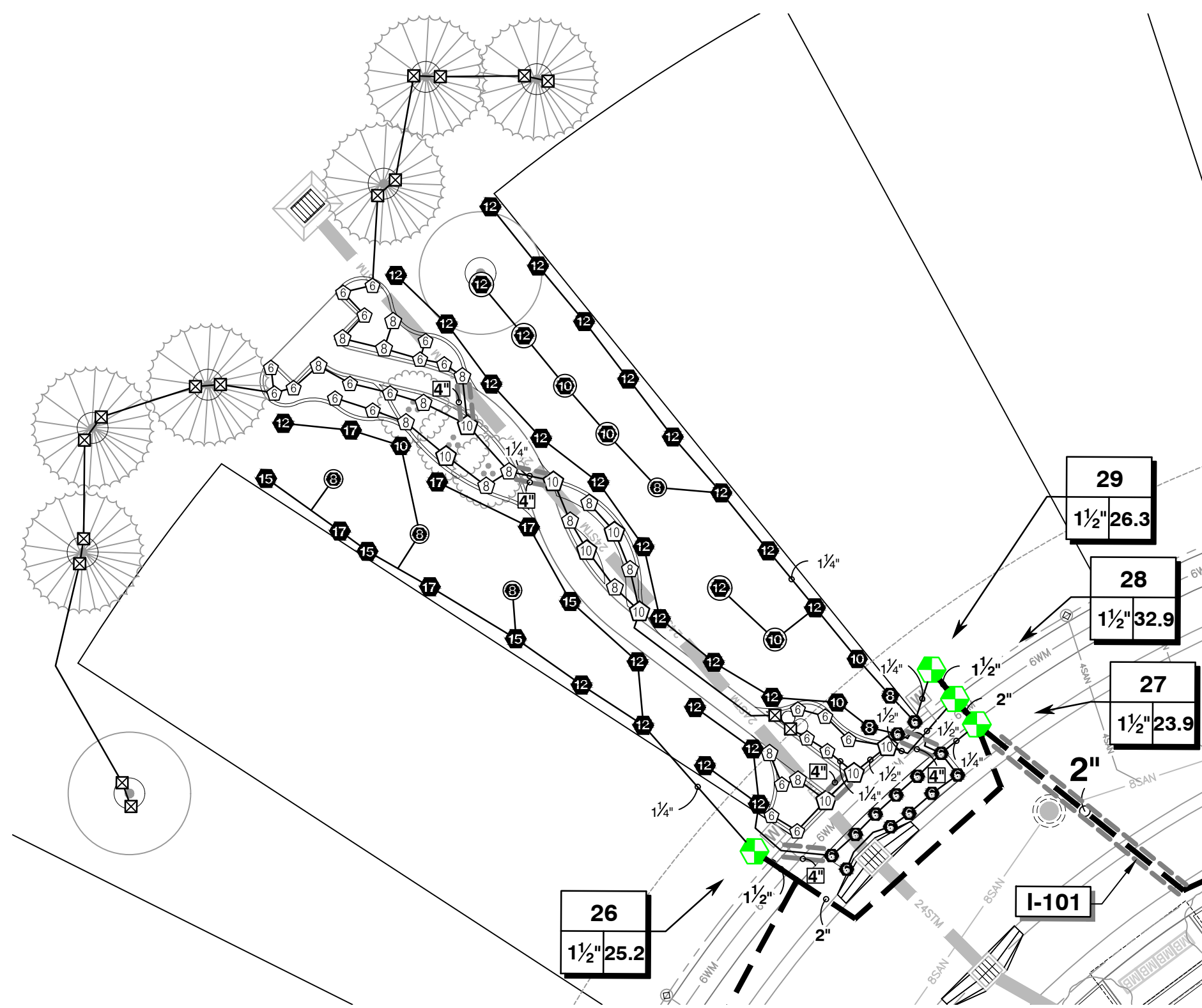
ENTRANCE ENLARGEMENT

SCALE: 1" = 20'



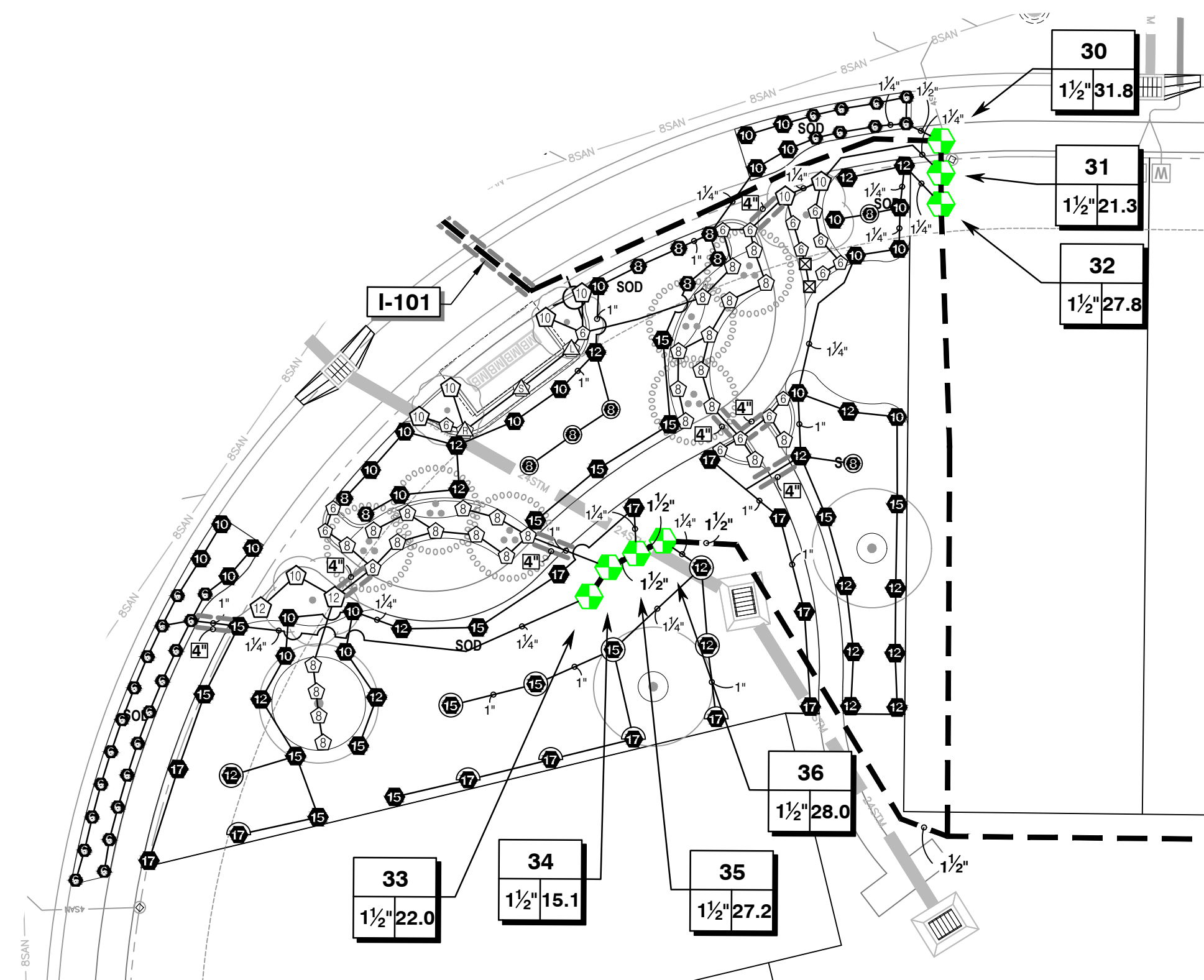
PARK ENLARGEMENT 1

SCALE: 1" = 20'



PARK ENLARGEMENT 2

SCALE: 1" = 20'



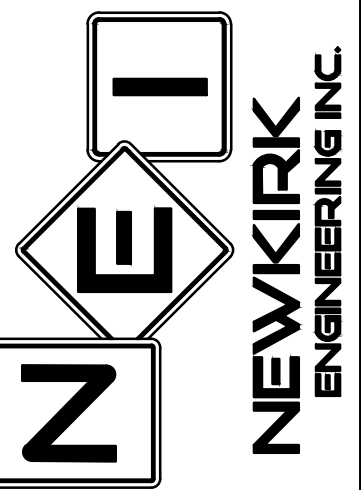
PARK 3 / MAIL KIOSK ENLARGEMENT

SCALE: 1" = 20'

REVISIONS

DATE	DESCRIPTION
8/26/22	CITY COMMENTS
10/18/22	CITY COMMENTS
12/23/22	CITY COMMENTS

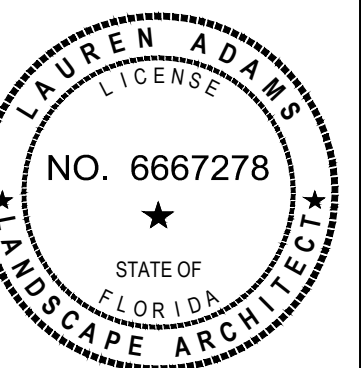
1230 North US1, Suite 3
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Phone (386) 872-7794
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IRRIGATION ENLARGEMENT
MADELINE COMMONS
975 McDONALD ROAD
PORT ORANGE, FL 32129

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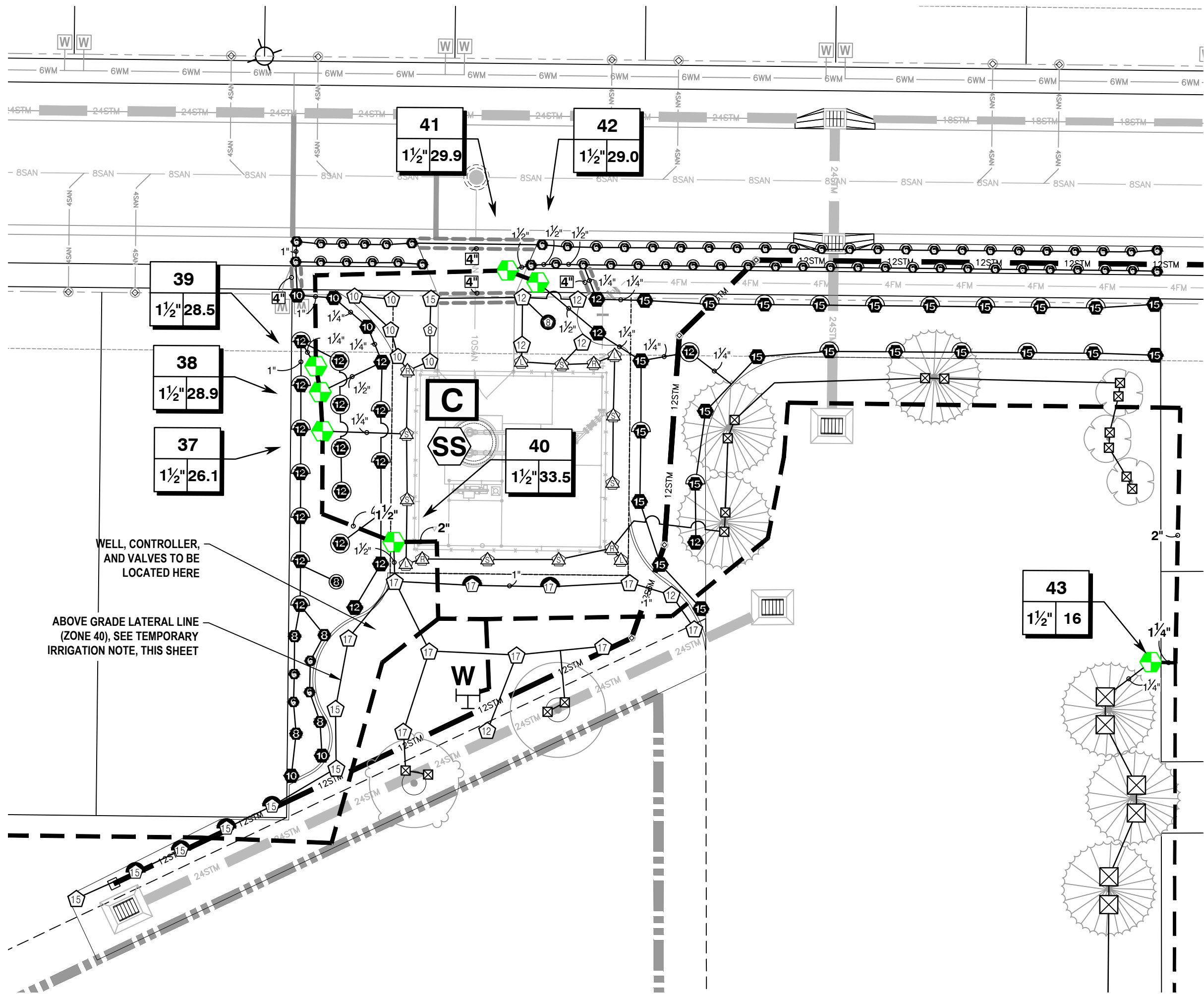
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IR2

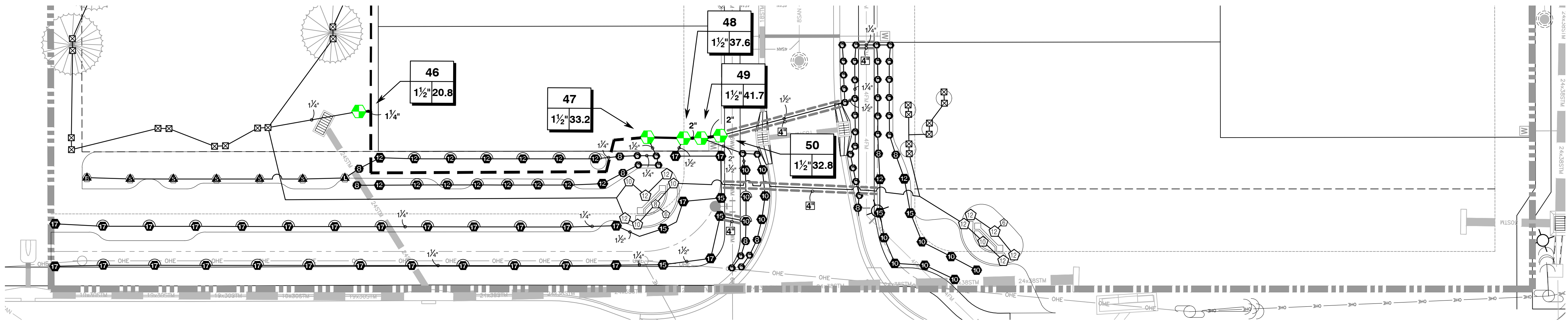


LIFT STATION ENLARGEMENT

SCALE: 1" = 20'

TEMPORARY IRRIGATION NOTE

1. LATERAL LINE TO BE RUN ON TOP OF GRADE AND SHALL BE PAINTED HUNTER GREEN.
2. TEMPORARY ZONE SHALL BE REMOVED AFTER A 2 (TWO) YEAR WATERING IN PERIOD.
3. TEMPORARY ZONE IS ZONE 40
4. ALL HEADS SHOULD BE INSTALLED WITH A HUNTER MP STAKE KIT.

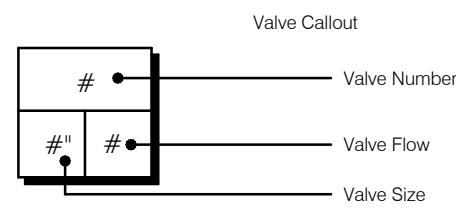


EAST ENTRANCE ENLARGEMENT

SCALE: 1" = 20'

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	PSI
	HUNTER PROS-06-PRS30-CV-F SHORT RADIUS NOZZLES	51	30
	HUNTER PROS-06-PRS30-CV-F 5' STRIP SPRAY	13	30
	HUNTER PROS-06-PRS30-CV-F 8' RADIUS	11	30
	HUNTER PROS-06-PRS30-CV-F 10' RADIUS	8	30
	HUNTER PROS-06-PRS30-CV-F 12' RADIUS	37	30
	HUNTER PROS-06-PRS30-CV-F 15' RADIUS	19	30
	HUNTER PROS-06-PRS30-CV-F 17' RADIUS	26	30
	HUNTER PROS-06-PRS30-CV-F ADJUSTABLE ARC	732	30
	HUNTER PROS-12-PRS30-CV-F 5' STRIP SPRAY	28	30
	HUNTER PROS-12-PRS30-CV-F 8' RADIUS	4	30
	HUNTER PROS-12-PRS30-CV-F 15' RADIUS	4	30
	HUNTER PROS-12-PRS30-CV-F 17' RADIUS	2	30
	HUNTER PROS-12-PRS30-CV-F ADJUSTABLE ARC	371	30
	HUNTER PCB 10	170	30
SYMBOL	MANUFACTURER/MODEL	QTY	PSI
	HUNTER PGP-04-PRB 1.5	5	35
	HUNTER PGP-04-PRB 2.0	2	35
	HUNTER PGP-04-PRB 2.5	7	35
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	
	HUNTER ICV-G-FS 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE. WITH FILTER SENTRY.	50	
	HUNTER I2C-5400-MICC-PED 54 STATION OUTDOOR MODULAR CONTROLLER. WITH FOUR ICM-800 & ONE ICM-2200 MODULES. METAL PEDESTAL.	1	
	HUNTER SOLAR-SYNC SOLAR, RAIN FREEZE SENSOR WITH OUTDOOR INTERFACE, CONNECTS TO HUNTER PGC, PRO-C, AND I-CORE CONTROLLERS, INSTALL AS NOTED. INCLUDES 10 YEAR LITHIUM BATTERY AND RUBBER MODULE COVER, AND GUTTER MOUNT BRACKET. WIRED.	1	
	POINT OF CONNECTION 4" WELL WITH SUBMERSIBLE PUMP, SEE NOTES SHEET L9	1	
	IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26	14,403 L.F.	
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21	4,163 L.F.	
	PIPE SLEEVE: PVC SCHEDULE 40	442.2 L.F.	



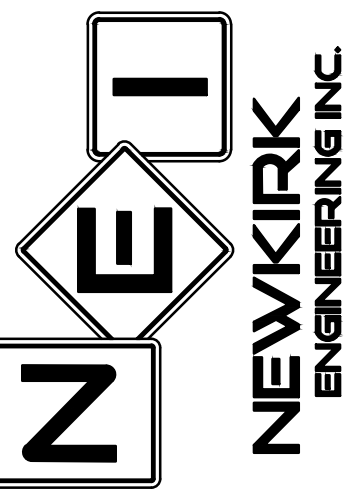
IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION
	4" SLEEVE PIPE
	2" SLEEVE WIRE

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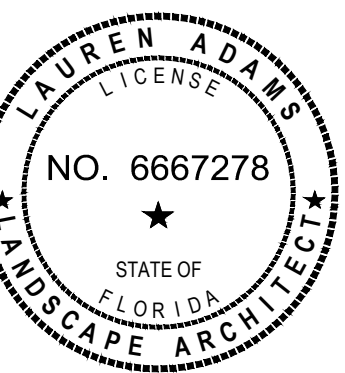
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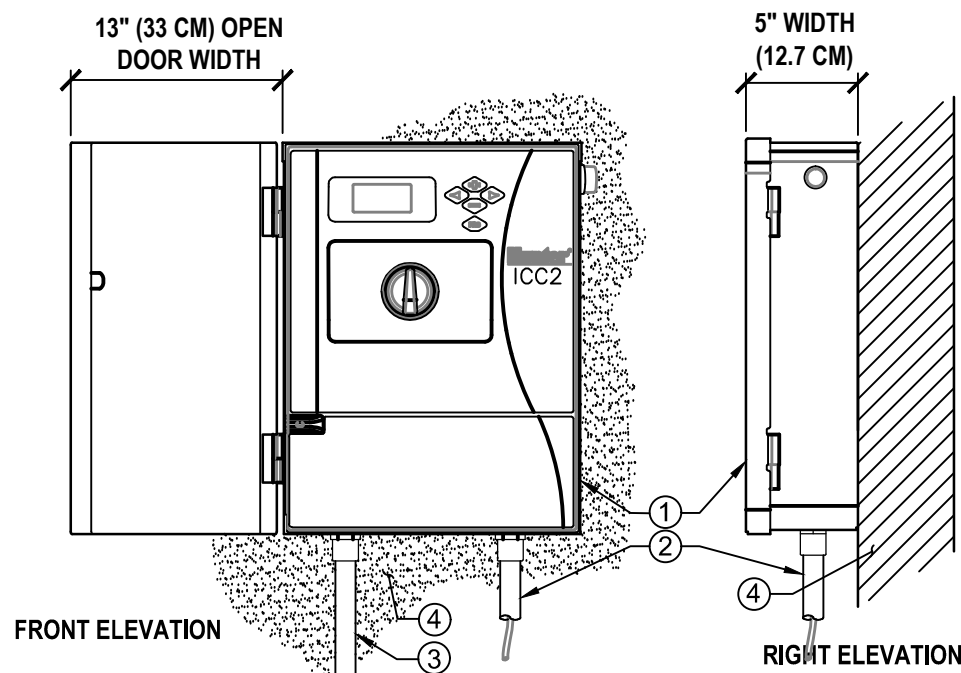
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IR3



NOTE:
MOUNT CONTROLLER LCD SCREEN AT EYE
LEVEL, CONTROLLER SHALL BE
HARD-WIRED TO GROUNDED 110 VAC
POWER SOURCE

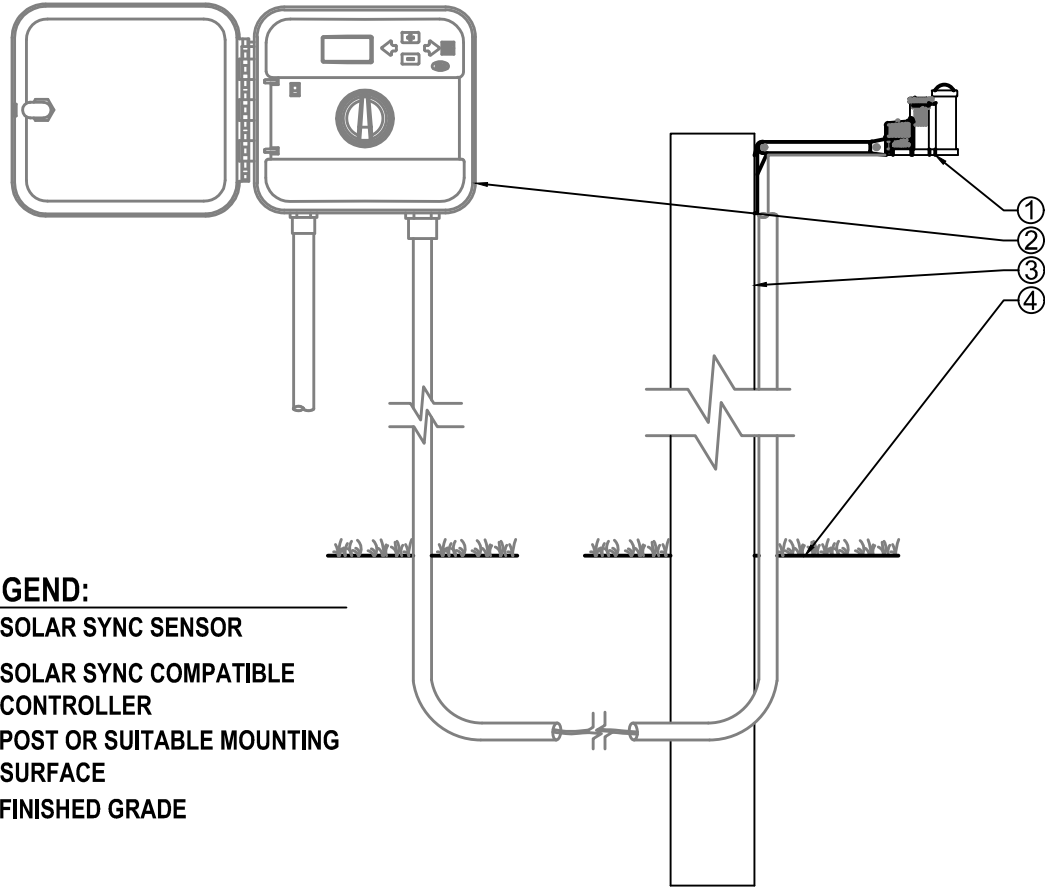
LEGEND:

- 1 IRRIGATION CONTROLLER (12C-800-M) PER PLAN
- 2 IRRIGATION CONTROL WIRE IN CONDUIT SIZE AND TYPE PER LOCAL CODES
- 3 ELECTRICAL SUPPLY CONDUIT CONNECT TO POWER SOURCE, J-BOX INSIDE CONTROLLER
- 4 ADJACENT SURFACE TO MOUNT CONTROLLER PER PLAN

1 HUNTER ICC2 CONTROLLER

1/8" = 1'-0"

P-CO-2021-309-21



LEGEND:

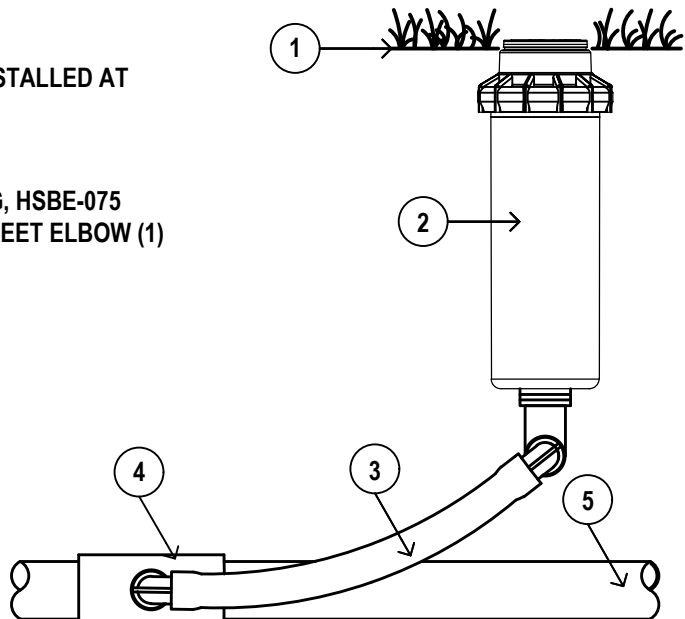
- 1 SOLAR SYNC SENSOR
- 2 SOLAR SYNC COMPATIBLE CONTROLLER
- 3 POST OR SUITABLE MOUNTING SURFACE
- 4 FINISHED GRADE

2 HUNTER SOLAR SYNC SENSOR

1/8" = 1'-0"

P-CO-2021-309-22

- 1 FINISH GRADE
- 2 SPRAY OR ROTOR HEAD INSTALLED AT FINISH GRADE
- 3 SWING JOINT: HUNTER 'PRO-FLEX' TUBING, HSBE-075 ELBOWS (2), & MARLEX STREET ELBOW (1)
- 4 LATERAL TEE OR ELL
- 5 LATERAL PIPE

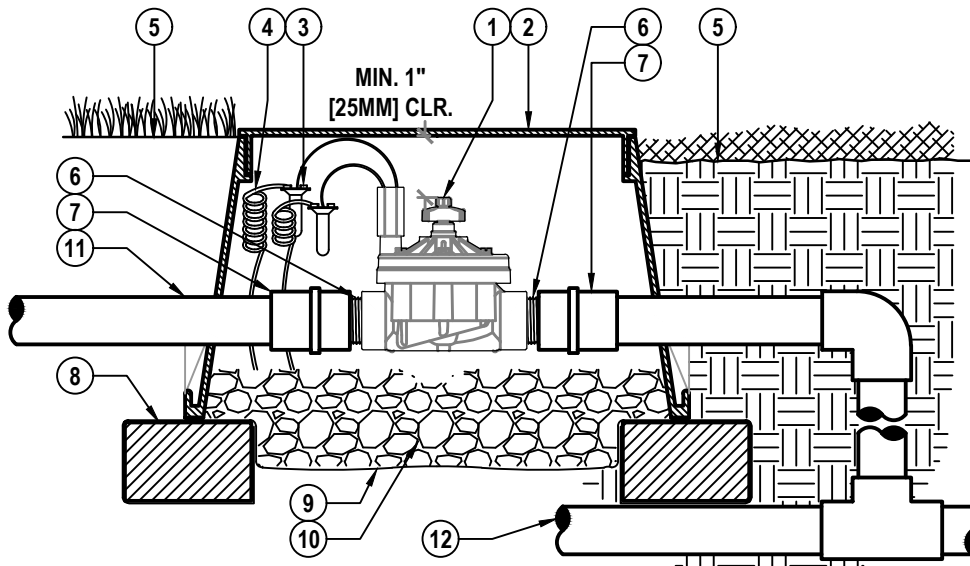


3 SPRAY HEAD AND ROTOR DETAIL

1/4" = 1'-0"

P-CO-2021-309-17

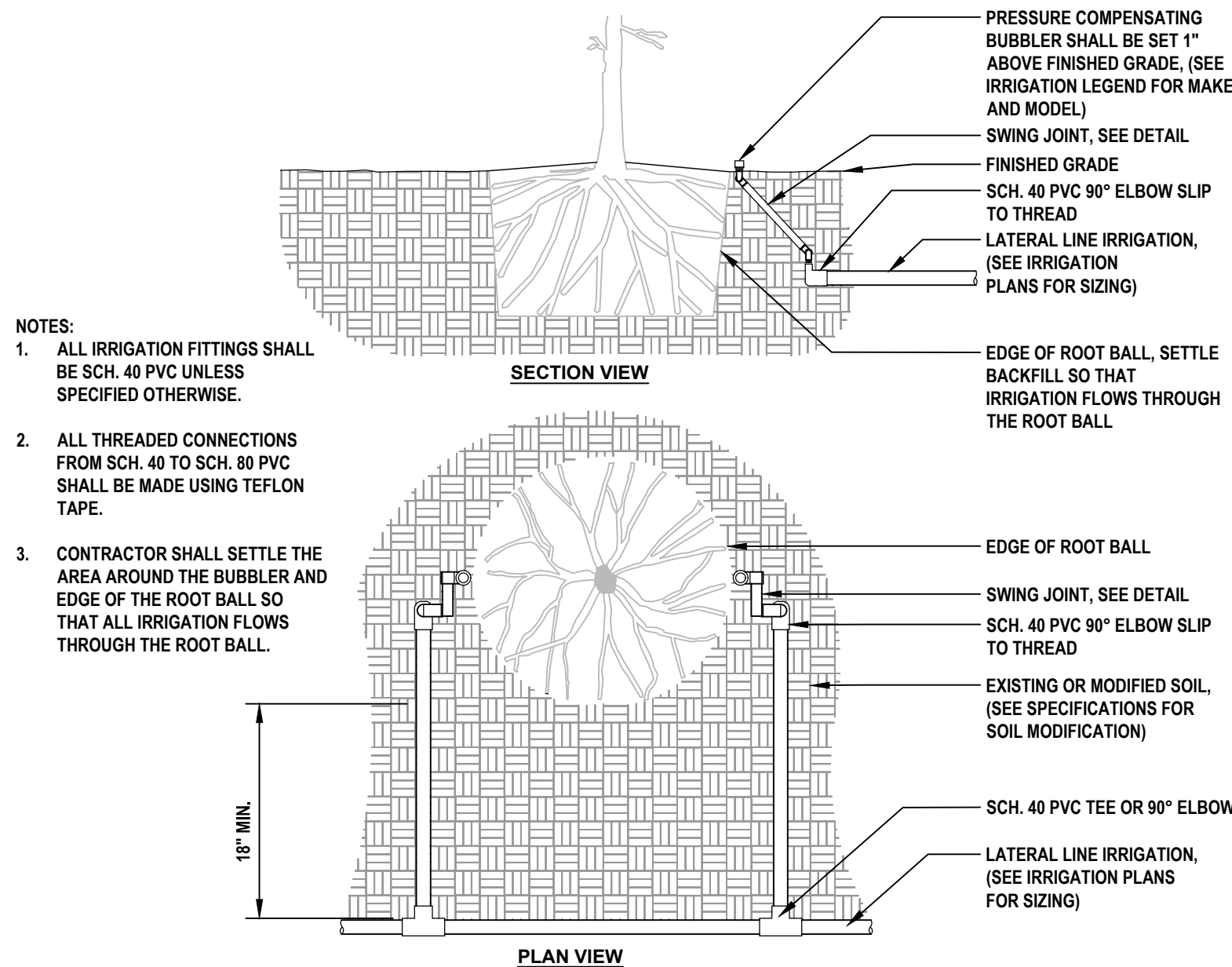
- LEGEND
- 1 HUNTER REMOTE CONTROL VALVE (ICV) WITH FLOW CONTROL
 - 2 IRRIGATION VALVE BOX: HEAT STAMP LID WITH 'RCV' IN 2" LETTERS
 - 3 WATERPROOF CONNECTORS (2)
 - 4 18"-24" COILED WIRE TO CONTROLLER
 - 5 FINISH GRADE AT ADJACENT SURFACE (TURF OR MULCH)
 - 6 SCH. 80 CLOSE NIPPLE, SIZE PER RCV
 - 7 PVC SLIP X FPT ADAPTOR
 - 8 BRICK SUPPORTS (4)
 - 9 FILTER FABRIC - WRAP TWICE AROUND BRICK SUPPORTS
 - 10 3/4" WASHED GRAVEL - 4" MIN. DEPTH
 - 11 IRRIGATION LATERAL
 - 12 MAINLINE AND FITTINGS



4 HUNTER REMOTE CONTROL VALVE (ICV)

1 1/2" = 1'-0"

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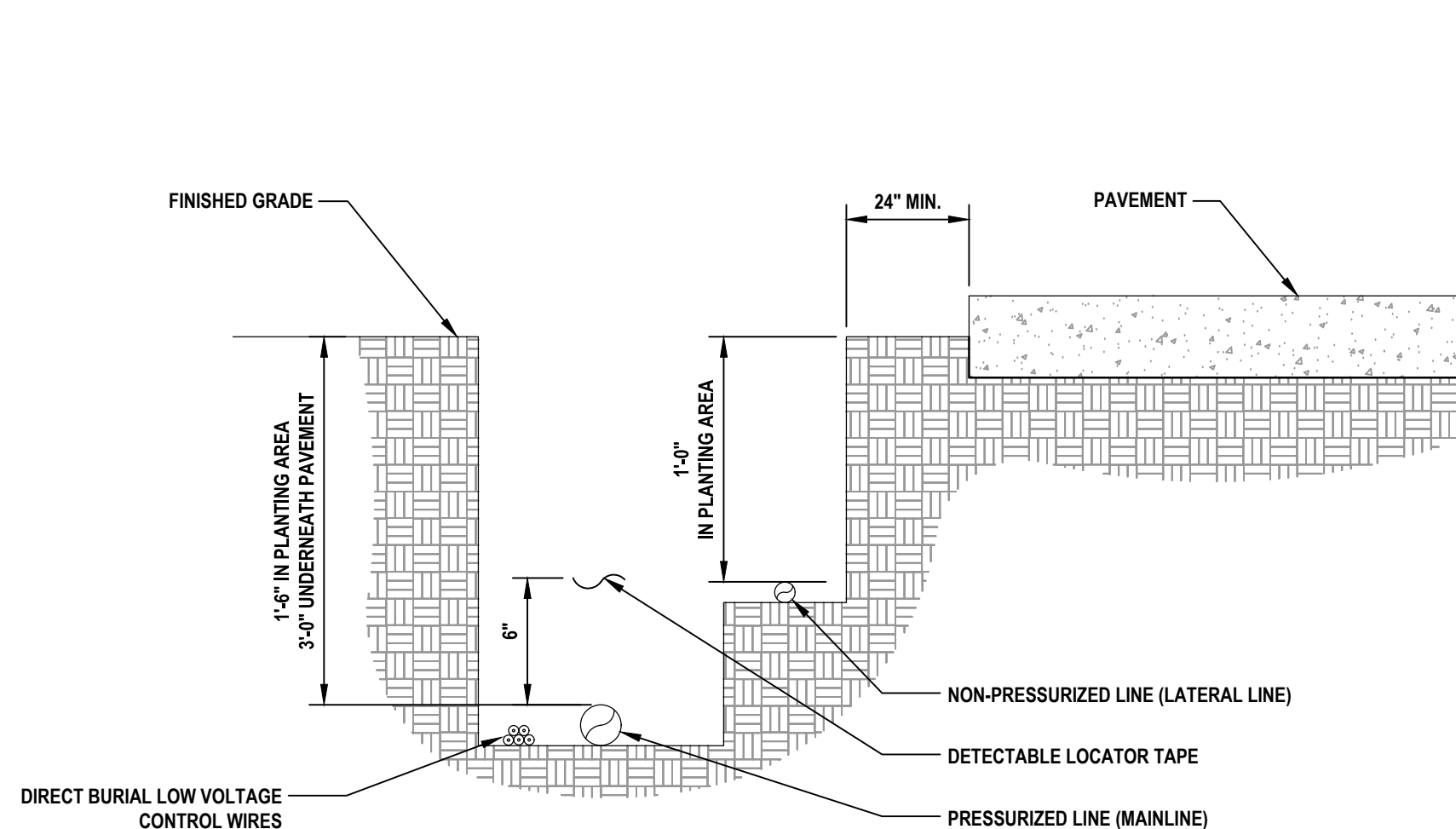


5 IRRIGATION BUBBLER (2) W/ LAYOUT

3/4" = 1'-0"

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6 IRRIGATION TRENCHING

1 1/2" = 1'-0"

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IRRIGATION NOTES

1. THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL EXISTING UTILITIES AND CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
2. THE PLAN IS SCHEMATIC ONLY. THE CONTRACTOR SHALL INSTALL PIPING IN A MINIMUM NUMBER OF TRENCHES AND SHALL INSTALL PIPE IN A MINIMUM LENGTH.
3. IRRIGATION LINES ARE SHOWN DIAGRAMMATICALLY AND ARE INTENDED TO SHOW DISTRIBUTION ZONES ONLY. LINES LOCATED UNDER PAVEMENT SHALL BE KEPT TO A MINIMUM AND ALL PIPING UNDER PAVED AREAS SHALL BE SLEEVED.
4. WHEN INSTALLING IRRIGATION PIPING IN ISLAND AND OTHER NARROW PLANTING AREAS RUN PIPING CLOSE TO CURB AND NOT DOWN THE MIDDLE OF THE PLANTING AREA. (BEFORE DOING IRRIGATION GET A COPY OF THE LANDSCAPE PLAN AND KEEP IRRIGATION LINES OUT OF PLANTING AREAS WHERE POSSIBLE.)
5. QUANTITIES FOR IRRIGATION MATERIALS MAY BE ESTIMATES. CONTRACTOR SHALL DO THEIR OWN TAKEOFF.
6. INSTALL SLEEVE PIPING WHERE SHOWN ON THE DRAWINGS AT THE PROPER DEPTH. ALL SLEEVE PIPE SHALL BE SCHEDULE 40 PVC PIPE INSTALLED A MINIMUM OF 20" BELOW FINISHED PAVING GRADES. ALL SLEEVES WHEN PLACED IN FIELD ARE TO BE LOCATED BY A METAL PIPE AT EACH END AND LOCATED FROM TWO STATIONARY POINTS BY TAPE MEASUREMENTS.
7. ALL LATERAL PIPE SHALL BE INSTALLED A MINIMUM OF 12" BELOW GRADE.
8. ALL TRENCHING SHALL BE KEPT OUT OF THE DRIP LINE AREA OF ALL EXISTING TREES. USE RADIAL LINES OR TUNNELING WHEN NECESSARY TO ENCROACH INTO THE DRIP LINE AREA OF TREES.
9. LOCATE ALL VALVES AND OTHER IRRIGATION EQUIPMENT IN PLANT BED AREAS WITHIN THE PROJECT LIMITS FOR CONCEALMENT PURPOSES.
10. RISERS ARE TO BE HIDDEN COMPLETELY IN SHRUBBERY OR PAINTED BLACK AND IN NO CASE BE HIGHER THAN THE SHRUBBERY INSTALLED.
11. ALL VALVES SHALL BE INSTALLED IN VALVE BOXES. PROVIDE A 6" GRAVEL SUMP AT THE BOTTOM OF ALL VALVE BOXES AND INSTALL 1/2" TO 1" DIAMETER GRAVEL AT THE BOTTOM OF THE VALVE PIT.
12. IRRIGATION SHALL MEET ALL APPLICABLE CURRENT MUNICIPAL, COUNTY, STATE OR FEDERAL CODES, ORDINANCES AND REGULATIONS THAT HAVE JURISDICTION.
13. THERE SHALL BE A MINIMUM OF FOUR (4) INCHES BETWEEN THE IRRIGATION EQUIPMENT AND PAVEMENT.
14. THERE SHALL BE A MINIMUM OF TWELVE (12) INCHES BETWEEN THE IRRIGATION EQUIPMENT AND STRUCTURES.
15. THERE SHALL BE NO DIRECT SPRAY ON WALKWAYS, BUILDINGS, DRIVES OR ROADWAYS.
16. ALL TURF IRRIGATION HEADS SHALL PROVIDE 100% HEAD TO HEAD COVERAGE.
17. ALL FITTINGS SHALL BE SCHEDULE 40 PVC.
18. ALL SPRAY HEADS ARE TO BE A MINIMUM OF 6" POP-UP AND ALL HEADS IN PLANTING AREAS TO BE 12" POP-UP OR RISERS. RISERS SHALL BE PAINTED HUNTER GREEN.
19. ALL DRIP ZONES SHALL INCLUDE AN AIR RELIEF VALVE INSTALLED IN A VALVE BOX AT OPTIMAL HIGHEST POINT FROM THE CONTROL ZONE KIT. MULTIPLE AIR RELIEF VALVES MAY BE NEEDED TO ACCOMMODATE DIFFERENCES IN GRADE. ECO-INDICATOR TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT IN CLEAR VIEW WHEN POPPED UP. FLUSH POINT TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT TO ALLOW FOR MAXIMUM DEBRIS FLUSH IN SYSTEM.
20. ALL DRIP ROWS SHALL BE SPACED A MINIMUM OF 12" APART AND A MAXIMUM OF 18" APART.
21. ELECTRICAL TO CONTROLLER SHALL BE SUPPLIED BY ELECTRICAL CONTRACTOR (NOT IRRIGATION CONTRACTOR).
22. TREE PROTECTION AREA. HAND TRENCH ALL PIPING IN THESE AREAS TO AVOID IMPACTING THE CRITICAL PROTECTION ZONE OF THE EXISTING TREES TO REMAIN (TYP).

PLANT ESTABLISHMENT

1. IRRIGATE EVERY DAY FOR ONE MONTH.
2. IRRIGATE EVERY OTHER DAY FOR ONE ADDITIONAL MONTH.
3. IRRIGATE TWICE A WEEK THEREAFTER OR MORE OFTEN DURING DRY PERIODS IF PLANTS ARE SHOWING SIGNS OF DISTRESS SUCH AS WILTING OR BROWNING.
4. ENSURE RAIN SENSOR IS OPERATING CORRECTLY AND SYSTEM IS NOT WATERING ON DAYS WHEN IT RAINS.

WELL & PUMP NOTE

1. PUMP SPECIFICATIONS:

PUMP MUST PROVIDE A MINIMUM OF 50 GALLONS PER MINUTE @ 65 PSI AT HEAD.
2. THE WELL SHALL BE CAPABLE OF PROVIDING REQUIRED WATER QUANTITY WITH FOLLOWING WATER QUALITY:
 - A. AT THE REQUIRED FLOW WATER SHALL BE CLEAR AND FREE OF SAND AND OTHER DEBRIS LARGER THAN .030" IN DIAMETER.
 - B. WATER SHALL BE CONSIDERED SAND FREE WHEN NO SAMPLE, TAKEN DURING TEST PUMPING, CONTAINS MORE THAN 2 PARTS PER MILLION OF SUSPENDED SOLID WEIGHT.
 - C. MAXIMUM IRON ALLOWED IN THE WELL WATER SHALL BE LESS THAN 0.3 PARTS PER MILLION.
 - D. MAXIMUM SALT CONTENT SHALL BE LESS THAN 300 PARTS PER MILLION.



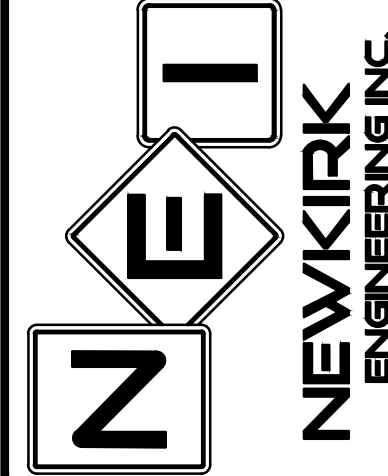
WARNING !!

CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES, GAS MAINS AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.

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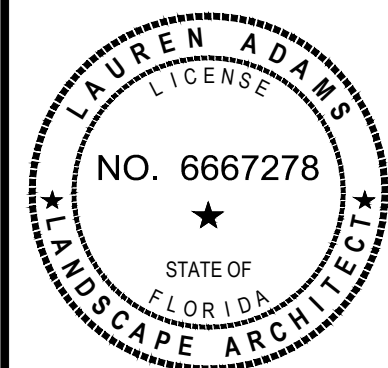


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AND NOTES
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