

City of Florence

BID PROPOSAL, CONTRACT DOCUMENTS, AND SPECIFICATIONS FOR:

Rhododendron Drive Realignment City Project No. ST 02-2023

Volume I of II – Contract Specifications

RH2 Project No. FLO 1013.113

Winter 2023



City of Florence
250 Highway 101 North
Florence, Oregon 97439

Contact: Mike Miller
Phone: (541) 997-4106



RH2 Engineering, Inc.
3553 Arrowhead Drive, Suite 200
Medford, OR 97504

Contact: Kris Lillie, PE
Phone: (541) 326-4375

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City of Florence

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Rhododendron Drive Realignment City Project No. ST 02-2023

Volume I of II – Contract Specifications

RH2 Project No. FLO 1013.113

Winter 2023



EXPIRES: 12/31/2024

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VOLUME II OF II – CONTRACT PLANS

GENERAL SPECIFICATIONS

DEFINITIONS

CONSULTANT – RH2 Engineering, Inc.

CITY – City of Florence, State of Oregon

STANDARD SPECIFICATION – Means the Oregon Department of Transportation, Oregon Standard Specifications for Construction, 2021 Edition, produced by the Oregon Department of Transportation and the American Public Works Association. The Oregon Standard Specifications for Construction, along with current updates, are hereby incorporated by reference as if fully set forth herein. Information on how to obtain copies of these documents is available on the Oregon Department of Transportation website:

[HTTP://WWW.OREGON.GOV/ODOT/HWY/SPECS/](http://www.oregon.gov/odot/hwy/specs/)

Wherever state agencies, department or officers are referred to therein, the comparable City Departments or Officers are substituted for the purpose of these documents. Specified definitions are outlined in the Section 00110.20 of the Contract Special Provisions.

CITY OF FLORENCE CONSTRUCTION DETAIL STANDARDS – The City of Florence utilizes a set of construction detail standards that have been adopted by City Council for contractor services, and which are hereby incorporated by reference. The terms "Standard Details" or "Standard Drawings" generally used in the Plans and Specifications shall refer to the City of Florence Construction Detail Standards, unless otherwise noted. Information on the City of Florence Construction Detail Standards shall be used when not in conflict with the 2021 Oregon APWA Standard Construction Specifications. Copies of the City of Florence Construction Detail Standards can be viewed or obtained at City Hall or Public Works.

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WORK TO BE DONE

GENERAL

This work involves the reconstruction of Rhododendron Drive from near 35th Street to the North, and Wild Winds Street to the South. The project includes sewer system improvements, waterline replacement, retaining walls, stormwater facilities and structures, construction of a multi-use path, ADA ramps, road base reconstruction, realignment of road, road widening, pavement markings, vegetation, irrigation and road signage.

1. Implement temporary traffic control and erosion control measures.
2. Removal of existing vegetation, asphalt, road base and sub-base, including grinding and saw cutting.
3. Removal of existing signage, and utility infrastructure; including water, sewer, storm, communication, and power structures and lines.
4. Abandonment of existing utility infrastructure.
5. Relocation of signage and utilities.
6. Install sanitary sewer manholes, sewer mains, sewer laterals, cleanouts, and appurtenances.
7. Install water mains, water services, including all valves, fittings, hydrants and appurtenances.
8. Install storm drainage manholes, catch basins, ditch inlets, pipe, culverts, swales, and appurtenances.
9. Install multiple retaining walls, including several modular block retaining walls, and a large soil nail wall.
10. Provide asphalt concrete overlay and road widening.
11. Provide complete road section reconstruction and realignment.
12. Minor concrete work including ADA curb ramps and gutters.
13. Plant trees and other vegetation as directed by the City.
14. Install irrigation system including, controls, valves, piping, sprinklers, and dripline system as needed to establish and sustain vegetation.
15. Striping, including longitudinal, standard crosswalk bars, and continental crosswalk bars.
16. Installation of rectangular rapid flashing beacon.
17. Perform additional and incidental Work as called for by the Specifications and Plans.

AUTHORITY OF CONSULTANT

The consultant will be directly in charge of the Project. However, their authority on this Project is as designated in the official "Consultant Agreement" for this Project, and as designated by the City. This does include authority to approve contract changes or semifinal and final inspection of the Project.

APPLICABLE SPECIFICATIONS

The work on this project shall be accomplished in accordance with the Technical Specifications, the Special Provisions, and the Oregon Standard Specifications for Construction, 2021 edition, as issued by the Oregon Department of Transportation (ODOT) and the American Public Works Association (APWA), Oregon State Chapter (hereafter "Standard Specifications"). The Standard Specifications, as modified or supplemented by Amendments to the Standard Specifications, the Special Provisions, and the Technical Specifications, all of which are made a part of the Contract Documents, shall govern all of the Work.

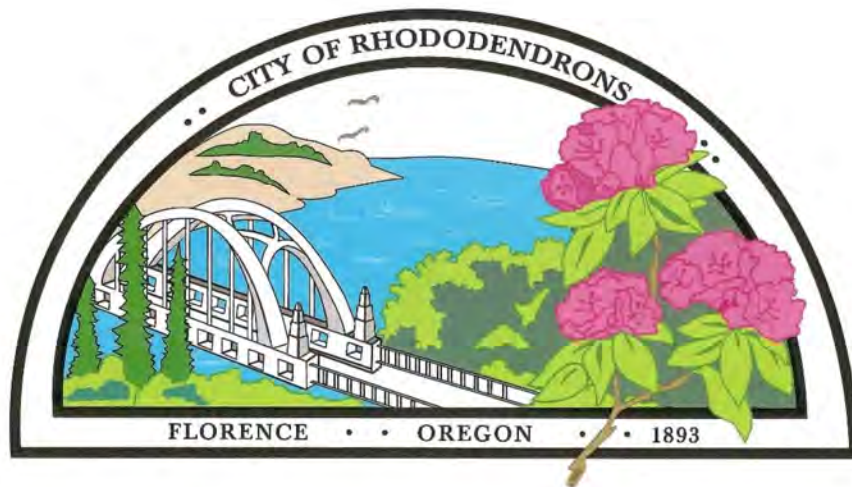
Also incorporated into the Contract Documents by reference are:

- Manual on Uniform Traffic Control Devices for Streets and Highways, currently adopted edition, with Oregon State modifications, if any
- Oregon Standard Drawings, 2021 edition as issued by the Oregon Department of Transportation
- City of Florence Construction Detail Standards, currently adopted edition

The Contractor shall obtain copies of these publications, at the Contractor's own expense.

CLASS OF PROJECT

This is a City of Florence funded project.



BID REQUEST / BID DOCUMENTS

City of Florence
Rhododendron Drive Realignment
City Project No. ST 02-2023

Specifications & Bid/ Proposal Package

City of Florence
2675 Kingwood Street, Florence, Oregon 97439

Bid Date: November 30th, 2023

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City of Florence
2675 Kingwood Street
Florence, Oregon 97439

INVITATION FOR BIDS

November 13th, 2023

NOTICE IS HEREBY GIVEN that sealed bids will be accepted by the City Public Works Director or Directors' designee at the City of Florence, 2675 Kingwood Street, Florence, Oregon 97439; the time of the bid receipt will be recorded by either official. Acceptance of bids will be officially closed at **2:00 PM** Pacific Time: **November 30th, 2023** and immediately thereafter the bids will be publicly opened and read in the conference room of the Public Works Operations Center.

The City of Florence is requesting qualified Contractors to submit bids on the CITY OF FLORENCE RHODODENDRON DRIVE REALIGNMENT. The project generally consists of the following work: 6500 Tons of Asphalt Concrete Pavement, 14,000 Tons of Aggregate Base, 11,000 Square Feet of Modular Block Retaining Wall, 10,800 Square Feet of Soil Nail Retaining Wall, 1300 Lineal Feet of 18-inch Sewer Main including Six (6) 48-inch manholes, 309 Lineal Feet of Storm Sewer Pipe including two (2) 48-inch manholes and 10 inlet structures, 2600 Lineal Feet of 8-inch Water Main, 2800 Lineal Feet of Concrete Curbs, 1500 Square Feet of concrete sidewalks, 20,000 Lineal Feet of thermoplastic striping, planting 24 street trees, design and installation of drip irrigation system for street trees.

The schedule for the work is time-sensitive and the Contractor is expected to be prepared to begin construction by January 15th, 2024. The work shall be substantially complete by March 31st, 2025.

The bid proposal shall be submitted under sealed cover and marked with the Contractor's name and following project:

**CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT
CITY PROJECT NO. ST 02-2023**

All proposals must be submitted on the regular forms furnished and shall be accompanied by an unconditional certified check or bidder's bond in an amount equivalent to five (5) percent of the total amount of the bid. The award will be made to the lowest responsible bidder who will be asked to furnish a **separate** 100% Corporate Surety Performance Bond and a **separate** 100% Payment Bond for the faithful performance of the contract. ***The Contractors may be asked to have their Surety furnish a letter certifying they have currently reviewed the Contractor's financial statement and that the Contractor is financially sound prior to award.***

Complete digital contract documents are available at <http://www.rh2.com> under the Bidding tab. The complete digital contract documents may be downloaded for a \$22.00 non-refundable fee by inputting the QuestCDN project **#8833795** on the website. Please contact QuestCDN.com at 952-233-1632 or info@questcdn.com for assistance in free membership registration, downloading, and working with this digital project information. An informational copy of the contract documents is on file for inspection at the City of Florence office. All prospective bidders must provide a valid e-mail address and be added to the Plan Holders List by downloading the documents from www.questcdn.com. Notification of Addenda issuance will be issued via e-mail to the addresses listed on the Plan Holders List. Bid results will be made available on the city's website.

Technical questions regarding the project should be directed to Kris Lillie, PE at 541-326-4375, klillie@rh2.com.

This is for public work and therefore subject to prevailing wage requirements of ORS 279C.800 thru 279C.870. A subcontractor listing **is required and shall be** submitted with the bid. If the subcontractor listing is not submitted with the bid, it must be received within two (2) hours after the bid closing time and date at the City of Florence, 2675 Kingwood Street, Florence, OR 97439 to the attention of Mike Miller (facsimile is acceptable at 541-590-4017). Failure to supply a correct subcontractor listing will result in bid rejection.

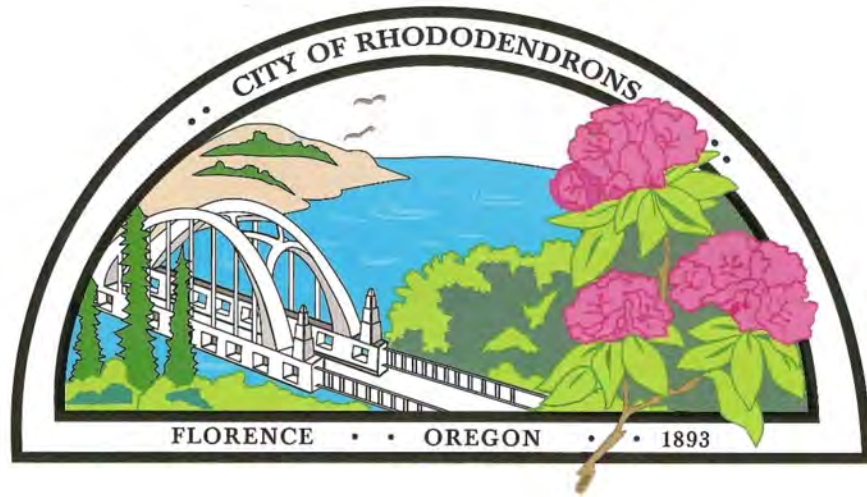
Request for specification changes must be made a minimum of ten (10) days prior to the proposal receipt date. Protests of bid results must be in writing, must be made within five (5) days of the posted award date, and must otherwise be in accordance with City Public Contracting Rule 137-049-0260.

The City may reject any bid not in compliance with all prescribed public bidding procedures and requirements, and may, for good cause, reject all bids upon a finding by the City of Florence if it is in the public interest to do so in accordance with **ORS 279C.395**.

Published

Date: November 13th, 2023

By Mike Miller, Public Works Director



INSTRUCTIONS TO BIDDERS

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INSTRUCTION TO BIDDERS

1. BID FORMS

These Contract Documents include a complete set of bidding and contract forms that are to be filled out and executed.

2. EXPLANATION TO BIDDERS

Requests for changes or clarifications shall be submitted in accordance with City Public Contracting Rule 137-049-0260. Any explanation regarding the meaning or interpretation of contract drawings, specifications or other Contract Documents must be requested in writing, with sufficient allowance of time for receipt of reply before the time of bid opening. Addenda will be issued in accordance with City Public Contracting Rule 137-049-0250. Oral explanations and interpretations made prior to the bid opening shall not be binding.

3. BIDDERS' UNDERSTANDING

Bidders should visit the work site to ascertain by inspection, pertinent local conditions such as location, character and accessibility of the site, availability of facilities, location and character of existing work within or adjacent thereto, labor conditions, etc. The City of Florence, hereinafter called City, shall make available to all prospective bidders, previous to the receipt of bids, information that they may have as to subsoil conditions and surface topography at the work site. Such information shall be given, however, as the best factual information available without the assumption of responsibility for its accuracy or for any conclusions that the Contractor might draw therefrom.

4. BID REQUIREMENTS

To be considered responsive, the following documents must be submitted with the bid proposal as a minimum requirement for a complete bid proposal:

- Schedule of Bid Items – This must be completed and signed.
- Five percent Bid Bond – A Bid Bond/Bid Security shall be submitted with this proposal and shall be not less than five percent of the total amount bid and may be shown in dollars or on a percentage basis. The bidder, at his option, shall furnish a bid bond, postal money orders, certified check, or may deposit in accordance with Treasury Department Regulation, bond, or notes of the United States (at par value) as security in the amount required.
- Addenda Certifications – Signed by Contractor with number and date of addenda noted.
- Contract Certification – Signed by Contractor.
- ORS Statutory (ORS) Certifications – Signed by Contractor including CCB Number.
- Bidder Qualification Certificate - Completed and signed by Contractor and provided with the bid proposal.

- First-Tier Subcontractor Disclosure Form – For bids over \$100,000, the First-Tier Subcontractor Disclosure Form must be submitted within two (2) hours of the specified bid closing time. This form may be furnished with the bid in the same envelope, in a separate envelope or may be faxed to Mike Miller at 541-997-4106.

5. PREPARATION OF BIDS

- Bids shall be submitted as required in these instructions. Where more than one schedule is given in the Schedule of Bid Items, the bidder may bid on any combination of schedules. If a bidder does not wish to bid on a schedule, they should check "No Bid" in the space provided on that schedule.
- Bids shall be submitted on the forms provided or copies thereof; and must be signed by the bidder or authorized representative. Any corrections to entries made on bid forms should be initialed by the person signing the bid.
- Bidders must quote on all items appearing on the bid forms, unless specific directions in the advertisement, on the bid form, or in the special specification allowing for partial bids. Failure to quote on all items may disqualify the bid. When quotations on all items are not required, bidders shall insert the words "No Bid" where appropriate.
- Alternative bids will not be considered unless specifically called for.
- Telephone Facsimile (FAX) bids will **not** be accepted (with the exception of the First Tier Subcontractor form).

6. SUBMISSION OF BIDS

Bids must be submitted as directed in the Invitation for Bids. Pricing will be firm and irrevocable for Ninety (90) days after the bid opening.

7. RECEIPT AND OPENING OF BIDS

Bids shall be submitted prior to the time fixed in the Invitation for Bids. Bids received after the time so indicated shall be returned unopened.

8. WITHDRAWAL OF BIDS

Bids may be withdrawn upon written request of the Bidder at any time prior to opening. Request must be received and acknowledged by the City prior to the time of opening. Requests should be delivered via certified mail or telephone facsimile (FAX). Verbal or electronic mail (e-mail) requests will **not** be accepted.

9. PRESENCE OF BIDDERS AT OPENING

At the time and place fixed for opening bids, the contents of all bids will be made public for the information of all bidders and other interested parties, who may be present in person or by representative.

10. BIDDERS INTERESTED IN MORE THAN ONE BID

If more than one bid is offered by one party, or by any person or persons representing a party, all such bids shall be rejected. A party who has quoted prices to a bidder is not thereby disqualified from quoting prices to other bidders, or from submitting a direct bid on his own behalf.

11. AWARD OF CONTRACT FOR CONSTRUCTION

- The low bidder(s) will be determined on the basis of the sum of the lowest prices for each appropriate Schedule or as specified in the Contract Document.
- The Contract for Construction shall be awarded to the lowest responsible Bidder(s) as soon as practicable after the bid opening. The City reserves the right to waive any informality in bids at City's discretion.
- The City reserves the right to wait until the protest period (5 days) has elapsed before entering into a written contract. In the event a protest is made; the City will not enter into a written contract until the protest is resolved.
- Notice of Award, announcement of apparent low bidder is not a binding contract. Only a signed written contract will be binding to the City.

12. REJECTION OF BIDS

The City reserves the right to reject any and all bids. The City reserves the right to reject any contractor who has not performed acceptably on past projects with the City in accordance with ORS 279C.375(3)(b)(F) or with others (this includes sub-contractor relationships); And reserves the right to reject any Contractor who the City determines that they cannot do the project within the project timeline or does not have the resources and financial stability to complete the project.

13. RESPONSIBILITY

The City may make such investigations as deemed necessary to determine the ability of the bidder to perform work. In determining the lowest responsible bidder, City shall check the list created by the Construction Contractor's Board under ORS 701.227 for bidders who are not qualified to hold a public improvement contract and determine whether the bidder has met the standards of responsibility. City shall also consider the following factors and may disqualify any person as a bidder if it finds the bidder:

- (a) Does not have available the appropriate financial, material, equipment, facility and personnel resources and expertise, or the ability to obtain the resources and expertise, necessary to meet all contractual responsibilities;
- (b) Does not have a satisfactory record of performance. The contracting agency shall document the record of performance of a bidder if the contracting agency finds the bidder not to be responsible under this subparagraph;
- (c) Does not have a satisfactory record of integrity. The contracting agency shall document the record of integrity of a bidder if the contracting agency finds the bidder not to be responsible under this subparagraph;

- (d) Is not qualified legally to contract with the contracting agency; or
- (e) Has not supplied all necessary information in connection with the inquiry concerning responsibility.

Each bidder shall promptly supply information as requested by the City pursuant to such investigation. If a bidder fails to promptly supply information requested by the contracting agency concerning responsibility, the contracting agency shall base the determination of responsibility upon any available information or may find the bidder not to be responsible. Failure to supply such information may be grounds for disqualification.

14. CONTRACT, BONDS, AND INSURANCE

- The Bidder to whom award is made shall enter into a written Contract for Construction with the City within the time specified in the Contractor's Proposal.
- Payment and Performance Bond shall be furnished at the time of signing the Contract for Construction.
- The insurance required by this Contract shall be written for not less than any limits of liability specified in the Contract Documents or required by law, whichever is greater.

15. WAGES AND SALARIES

Attention of bidders is particularly called to the requirements concerning the payment of not less than the prevailing wage and salary rates specified in the Contract Documents and the conditions of employment with respect to certain categories and classifications of employees.

16. SUBCONTRACTORS

Bidders are required to disclose information about certain first-tier subcontractors when the contract value for a Public Improvement is greater than \$100,000 in accordance with ORS 279C.370 – See also Contract bid documents which includes form required.

17. PROTESTS

Award and solicitation protests shall be submitted in accordance with City Public Contracting Rules 137-049-0260 and 137-049-0450, respectively. The deadline for such protests is altered in this invitation for bids to five (5) calendar days.

18. ANTICIPATED PROJECT SCHEDULE AND COMPLETION TIME

The Contractor agrees to perform execute the contract and complete the contract work according to the City's proposed schedule as outlined below.

Bids Closed / Opened & Read:

November 30th, 2023 at 2:00 PM
City of Florence,
2675 Kingwood Street,
Florence, Oregon 97439

Projected City Council Approval Date:	December 11th, 2023
Projected Award Date:	December 27th, 2023
Projected Notice to Proceed Date:	January 15th, 2024
Project Completion Date:	March 31st, 2025

19. USE OF RECYCLED MATERIALS

Whenever possible, the Contractor is encouraged to endeavor to use recycled products in the best interest of the Contractor and the City. Please do not use recycled products if the integrity of the project is compromised. Recycled products must meet the full specification requirements if proposed for use. The City's engineer or designated Owner's Representative shall be responsible for reviewing and approving all recycled products and materials which are to be installed as part of the Work.

20. SUBSTITUTES AND "OR-EQUALS"

Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review.

Requests for substitution and "or-equal" review for major equipment shall be submitted with a letter of compliance to the specifications or a letter outlining any and all deviations. The request shall be specific to this project and shall be signed by an officer of the manufacturer. No general requests or requests from local representatives will be considered.

21. CONTRACTOR DRUG TESTING REQUIREMENTS

As of January 1, 1996, all Contractors whose employees are required to have a Commercial Driver's License (CDL) must comply with Oregon Department of Transportation Controlled Substance and Alcohol Program and testing rules. Bidders must certify that an employee drug-testing program is in place per ORS 279C.505(2).

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BID DOCUMENT PACKAGE

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PROPOSAL

Contractor: _____

City: _____, Oregon

Date: _____, 20____

The City Council

City of Florence
2675 Kingwood Street
Florence, OR 97439

Pursuant to and in compliance with your invitation for bids and all other documents relating thereto, the undersigned bidder, having familiarized himself with the terms of the contract, the local conditions affecting the performance of the contract, the cost of the work at the place where the work is to be done, proposes and agrees to perform, within the time stipulated, the contract, if this project is accepted, including all its component parts and everything required to be performed, and to provide and furnish any and all labor, materials, tools, expendable equipment, and all utility and transportation services necessary to perform the contract, complete, in a workmanlike manner, of all the work covered by the contract in connection with City of Florence's project, designated as Rhododendron Drive Realignment (City Project No. ST 02-2023) all as required by and in strict conformance with the specifications, contract plans and the standard plans for the following unit prices.

The proposal, together with the Agreement, Contract Documents, Standard Specifications, Special Provisions, Technical Specifications, Addenda and Plans, when endorsed by the City of Florence shall become a contract binding on both parties thereto, whereby the Contractor agrees to perform the complete contract work, as specified, and the City of Florence agrees to make payment to the Contractor, as specified, for said completed and accepted work.

Note: Prices of all items, all extensions and total amount of bid must be shown. Show prices in both words and figures and, where conflict occurs, the written or typed words prevail. Bidders shall bid on all bid schedules set forth in the bid forms. The Bidder authorizes the City to correct any obvious mathematical errors that may appear on this Bid Proposal.

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SCHEDULE OF BID ITEMS

Owner: City of Florence

Project: Rhododendron Drive Realignment (City Project No. ST 02-2023)

The undersigned proposed to furnish all labor, materials, equipment, and services of all kinds required for this project, including all appurtenant work, all as required by the Plans and Specifications, and these Bid Forms for the prices in accordance with the completed Schedule of Bid Items as follows:

ITEM NO. / SPEC NO.	ITEM DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL
200 - TEMPORARY FEATURES AND APPURTENANCES					
10 - 00210	MOBILIZATION	LS	1		
20 - 00225	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	LS	1		
30 - 00280	EROSION AND SEDIMENT CONTROL	LS	1		
300 - ROADWORK					
40 - 00305	CONSTRUCTION SURVEY WORK	LS	1		
50 - 00310	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1		
60 - 00320	CLEARING AND GRUBBING	LS	1		
70 - 00330	GENERAL EXCAVATION	CY	10,000		
80 - 00350	SUBGRADE GEOTEXTILE	SY	25,000		
400 - DRAINAGE AND SEWERS					
90 - 00445	12-INCH STORM SEWER PIPE, 10 FT DEPTH	LF	282		
100 - 00445	18-INCH STORM SEWER PIPE, 10 FT DEPTH	LF	27		
110 - 00445	4-INCH SANITARY SEWER PIPE, 5 FT DEPTH	LF	450		

ITEM NO. / SPEC NO.	ITEM DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL
400 – DRAINAGE AND SEWERS (CONT.)					
120 – 00445	18-INCH SANITARY SEWER PIPE, 5 FT DEPTH	LF	135		
130 – 00445	18-INCH SANITARY SEWER PIPE, 10 FT DEPTH	LF	1,162		
140 - 00445	PIPE TEES, 18-INCH	EA	14		
150 - 00445	CLEANOUT ASSEMBLY, 6-INCH	EA	14		
160 – 00470	CONCRETE STORM SEWER MANHOLES	EA	2		
170 – 00470	CONCRETE INLETS, CURB INLET	EA	3		
180 – 00470	CONCRETE INLETS, TYPE D	EA	5		
190 – 00470	CONCRETE INLETS, BEEHIVE STYLE	EA	2		
200 – 00470	CONCRETE SANITARY SEWER MANHOLES	EA	5		
210 – 00470	CONCRETE SANITARY SEWER MANHOLES, FLAT TOP	EA	1		
220 – 00490	EXTRA FOR MANHOLES OVER EXISTING SEWERS	EA	3		
230 – 00490	FILLING ABANDONED STRUCTURES	EA	4		
240 – 00490	BYPASS PUMPING	LS	1		
250 – 00490	CONNECTION TO EXISTING WETWELL	LS	1		
260 – 00490	MINOR ADJUSTMENT OF MANHOLES	EA	2		
270 – 00490	ADJUST VALVES, CLEANOUTS	EA	16		
500 – BRIDGES					
280 – 00596B	RETAINING WALLS, PREFABRICATED MODULAR GRAVITY	LS	1		
290 – 00596B	RETAINING WALLS, THICKENED CONCRETE EDGE	SF	1233		
300 – 00596D	SOIL NAILS – EPOXY COATED, 12 FT	EA	215		

ITEM NO. / SPEC NO.	ITEM DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL
500 – BRIDGES (CONT.)					
310 – 00596D	SOIL NAILS – EPOXY COATED, 20 FT	EA	230		
320 – 00596D	SOIL NAILS – EPOXY COATED, 26 FT	EA	180		
330 – 00596D	SOIL NAIL VERIFICATION TEST NAILS	EA	30		
340 – 00596D	SOIL NAIL WALL – PREFABRICATED DRAINAGE MAT	SY	1,200		
350 – 00596D	SOIL NAIL WALL – REINFORCED SLOPE, INITIAL FACING AND DRAINAGE	SF	10,760		
360 – 00596D	SOIL NAIL WALL – FINAL SHOTCRETE FACING	SF	10,760		
600 – BASES					
370 – 00641	AGGREGATE BASE	TON	14,400		
700 – WEARING SURFACES					
380 – 00744	LEVEL 3, 1/2 INCH ACP MIXTURE	TON	5,600		
390 – 00744	LEVEL 2, 1/2 INCH ACP MIXTURE	TON	1,000		
400 – 00748	14 INCH ASPHALT CONCRETE PAVEMENT REPAIR	SY	600		
410 – 00759	CONCRETE CURBS, STANDARD CURB	LF	2,800		
420 – 00759	CONCRETE CURBS, CURB AND GUTTER	LF	154		
430 – 00759	CONCRETE WALKS	SF	1,530		
440 – 00759	CONCRETE VALLEY GUTTER SURFACING	SF	415		
450 – 00759	EXTRA FOR NEW SIDEWALK RAMPS	EA	8		
460 – 00759	TRUNCATED DOMES ON NEW SURFACES	EA	8		
800 – PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES					
470 – 00865	THERMOPLASTIC, EXTRUDED, SURFACE, NON-PROFILED	LF	20,077		

ITEM NO. / SPEC NO.	ITEM DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL
800 – PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES (CONT.)					
480 – 00867	PAVEMENT LEGEND, TYPE B-HS: CONTINENTAL CROSSWALK 2' WHITE BAR	EA	5		
490 – 00867	PAVEMENT LEGEND, TYPE B-HS: TSUNAMI ZONE	EA	2		
500 - 00867	PAVEMENT LEGEND, TYPE B-HS: LEFT TURN ARROW	EA	2		
510 – 00867	PAVEMENT LEGEND, TYPE B-HS: STRAIGHT ARROW	EA	2		
520 – 00867	PAVEMENT BAR, TYPE B-HS: TRANSVERSE STOP BAR	SF	47		
900 – PERMANENT TRAFFIC CONTROL AND ILLUMINATION DEVICES					
530 – 00905	REMOVE AND REINSTALL EXISTING SIGNS	LS	1		
540 – 00990	RECTANGULAR RAPID FLASHING BEACON SYSTEM	LS	1		
1000 – RIGHT OF WAY DEVELOPMENT AND CONTROL					
550 – 01040	PLANTING – TREES	EA	24		
560 – 01069	METAL HANDRAIL, TWO RAILS	LF	140		
570 – 01069	METAL HANDRAILS, THREE RAILS	LF	1040		
580 – 01070	SINGLE MAILBOX SUPPORTS	EA	5		
590 – 01070	MULTIPLE MAILBOX SUPPORTS	EA	1		
1140 – WATER SUPPLY SYSTEMS					
600 – 01120	IRRIGATION SYSTEM	LS	1		
610 – 01140	6 INCH POTABLE WATER, PIPE, FITTINGS AND COUPLINGS WITH RESTRAINED JOINTS AND CLASS C BACKFILL	LF	22		
620 - 01140	8 INCH POTABLE WATER, PIPE, FITTINGS AND COUPLINGS WITH CLASS C BACKFILL	LF	2,397		
630 – 01140	8 INCH POTABLE WATER, PIPE, FITTINGS AND COUPLINGS WITH RESTRAINED JOINTS AND CLASS C BACKFILL	LF	256		

ITEM NO. / SPEC NO.	ITEM DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL
1140 – WATER SUPPLY SYSTEMS (CONT.)					
640 – 01140	8 INCH CONNECTION TO 6 INCH EXISTING MAIN	EA	1		
650 – 01140	8 INCH CONNECTION TO 8 INCH EXISTING MAIN	EA	2		
660 – 01140	DUCTILE IRON PIPE TEES, 8 INCH	EA	4		
670 – 01140	DUCTILE IRON PIPE BENDS, 8 INCH	EA	6		
680 – 01140	DUCTILE IRON PIPE COUPLINGS	EA	2		
690 – 01150	6 INCH GATE VALVE	EA	3		
700 – 01150	8 INCH GATE VALVE	EA	4		
710 – 01160	HYDRANT ASSEMBLIES	EA	3		
720 – 01170	1 INCH WATER SERVICE CONNECTION PIPING	LF	53		
730 – 01170	2 INCH WATER SERVICE CONNECTION PIPING	LF	10		
740 – 01170	RECONNECTING EXISTING WATER SERVICES, 1 INCH	EA	3		
750 – 01170	1 INCH WATER METER ASSEMBLY	EA	2		
760 – 01170	2 INCH WATER METER ASSEMBLY	EA	1		

Total Amount of Bid \$ _____

Total Bid Amount in Words:

Note: All Unit Price Bids should be considered as "Furnished and Installed".

Billing is to be as complete units and partial bills will not be paid.

To Be Considered Responsive, the following must be signed and completed by your firm:

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We hereby certify to do the work as specified and at the price as quoted in conformance to all the City, State and Federal Regulations that are applicable and will indemnify the 'City of Florence' against all claims arising out of any actions caused by our company during the performance of this contract.

We hereby certify that we will comply with the provisions of ORS 279C.840 (BOLI Wage Requirements) and certify that we will comply with the Oregon tax laws as provided in ORS 305.385.

Company _____

Address _____

By _____

(Signature of Authorized Official)

Date _____

By _____

(Type or Print Name)

Phone _____

Federal I.D. # _____

Fax _____

Surety Company (Performance Bond) _____

Contact at Surety _____ Phone _____

CCB# _____ No. Years Registered w/CCB _____

Are there any outstanding claims against your firm: Yes _____ No _____

**Protest of Contractor Selection/Notice of Award must be made by
Written Notice within Five (5) Days of the Posted Award Date
in accordance with City Public Contracting Rule 137-049-0450**

All the prospective bidders will have specific line items to bid on and the award will be made on the lowest responsible bid on the total bid items. The City will reserve the right to add or delete items as the project goes forward.

- 1. Liquidated Damages: See Specification Sections 00180.85(b) and 00220.40(g).**
- 2. Please invoice referencing the above exact line item numbers and line items. All quantities must be approved by the Project Engineer before invoicing.**

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BID BOND FORMAT

(Requirements for bid bond – please use your own Surety's format)

Herewith find a deposit in the form of a certified check, cashier's check, cash, or bid bond in the amount of \$_____, an amount which is not less than five percent (5%) of the total bid.

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, as Principal, and _____, as Surety, are held and firmly bound unto the City of Florence, Oregon, as obligee, hereinafter called City, in the penal sum of _____ Dollars, for the payment of which the Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by these presents.

The condition of this obligation is such that if City shall make any award to the Principal for _____ according to the terms of the proposal or bid made by the Principal therefore, and the Principal shall duly make and enter into a contract with City in accordance with the terms of said proposal or bid and award and shall give bond for the faithful performance thereof, with Surety or Sureties approved by City; or if the Principal shall, in case of failure so to do, pay and forfeit to City the penal amount of the deposit specified in all the bids, then this obligation shall be null and void; otherwise it shall be and remain in full force and effect and the Surety shall forthwith pay and forfeit to City, as penalty and liquidated damages, the amount of this bond.

SIGNED, SEALED, AND DATED THIS _____ DAY OF _____, 20_____.

Principal _____

Surety _____

Received return deposit in the sum of \$ _____

_____ 20 _____

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ADDENDA CERTIFICATIONS

ADDENDA: We hereby certify that we did receive the following Addenda to these specifications:

#_____ dated: _____.

#_____ dated: _____.

#_____ dated: _____.

#_____ dated: _____.

#_____ dated: _____.

#_____ dated: _____.

CONTRACTOR

DATE

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CONTRACTOR CERTIFICATIONS

(Must be signed and included with Bid Proposal)

We hereby certify that we have carefully examined the Contract Documents for the activity required by the specifications and will, if a trade contract, furnish all machines, tools, apparatus, and other means of construction and do the work and furnish all the materials necessary to complete the work in the manner, in the time, and according to the methods as specified in the Contract Documents.

We hereby certify that if our Proposal is accepted, we will within seven (7) calendar days after Contract award, sign the Contract and will, at that time, deliver to the City of Florence the Performance and Payment Bond (if required).

NON-COLLUSION AFFIDAVIT

We hereby certify that the bid submitted is genuine and not a sham or collusive bid, or made in the interest or on behalf of any person not therein named; and we further certify that we have not directly or indirectly induced or solicited any bidder or suppliers to put in a sham bid, or any other person or corporation to refrain from bidding; and that we have not in any manner sought by collusion to secure an advantage over any other bidder or bidders.

We hereby agree to furnish the City of Florence, before commencing the work under this Contract, the certificates of insurance, if specified, in these documents.

We hereby certify that we will represent and warrant all work done by our subcontractors and that the work will be done in a good workmanlike manner under our direct supervision. We will notify the City of Florence, prior to any subcontract work being done, the name of the subcontractor or subcontractors to be used and the percentage of work that each subcontractor will perform.

Contractor _____
(Authorized Official)

Date _____

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OREGON STATUTORY (ORS) CERTIFICATIONS

(MUST BE SIGNED AND INCLUDED WITH BID PROPOSAL)

WE HEREBY CERTIFY to comply with Title VI of the Civil Rights Act of 1964, with Section V of the Rehabilitation Act of 1973, and with all applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations. **WE CERTIFY** also that we shall comply with the Americans with Disabilities Act of 1990 (Pub L No. 101-336), ORS 659A.142, and all regulations and administrative rules established pursuant to those laws.

WE CERTIFY also to nondiscrimination against any minority, women or emerging small business enterprises in obtaining any required subcontracts.

WE HEREBY CERTIFY that we will and that our subcontractors will, acknowledging that our employers will be subject employers under the Oregon Workers' Compensation Law, comply with ORS 656.017, which requires contractors to provide all workers with compensation coverage.

WE HEREBY CERTIFY that we are or are not (circle one) a "Resident Bidder", as defined in **ORS 279A.120**

ORS 279A.120(1)(b) Resident Bidder defined: *A bidder that has paid taxes or income taxes in Oregon during the 12 calendar months immediately preceding a submission of the bid/proposal and has a business address in Oregon.*

WE HEREBY CERTIFY that we accept all the terms and conditions contained herein and in the event of a forthcoming contract containing these same terms and conditions we would agree without exception. Any exception to these terms and conditions will be made a minimum of five (5) days before the proposal deadline.

Whereas, State and Federal law **prohibits discrimination** in employment on the basis of race, color, religion, sex, disability, familial status, or national origin, and whereas the City of Florence supports and has set-forth a policy of equal employment opportunities for all, the following certification is required: **WE HEREBY CERTIFY**, in the performance of any contract issued from any proposal related to these documents, we will in all respects adhere to the City of Florence policy of non-discrimination.

Contractor _____

Date _____

(Authorized Official)

PRIME CONTRACTOR NAME _____

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BIDDER'S QUALIFICATION CERTIFICATE

The City of Florence requires a statement as to financial ability, equipment, and experience to be completed and submitted by prospective contractors bidding on the **Rhododendron Drive Realignment** project.

To qualify for this project the Prime Bidder must at least:

1. Shall have successfully completed heavy civil construction projects specific to municipal sewer and water systems.
2. Shall have successfully completed at least three (3) heavy civil projects, similar in scope to the City's project, under their current contracting license involving the construction of municipal sewer systems with final construction cost of at least \$100,000.
3. Shall have successfully completed at least one (1) of these projects in the last 5 years.
4. The Superintendent shall have performed satisfactory work in similar capabilities for sufficient length of time to be fully qualified to perform their duties. The Superintendent shall have more than 4,000 hours of demonstrated experience in similar projects. The Superintendent shall be on the project site in responsible charge, full time, during all construction activity.

PRIME BIDDER INFORMATION

Submitted By: _____
(CONTRACTOR)
Type of Work: _____
Principal Office: _____

A Corporation
A Partnership
An Individual

CONTRACTOR'S Surety: _____

CONTRACTOR'S Bank and Local Contact: _____

CONTRACTOR'S State of Oregon Registration No. and Expiration: _____

PRIME BIDDER EXPERIENCE QUESTIONNAIRE

1. Name the principal types of construction work performed by your company.

2. How many years has your organization been in business as a contractor under your present business name?

3. How many years of experience in the proposed type and size of construction work has your organization has as a general contractor? _____

4. List at least 3 similar projects each with a final construction cost of at least \$100,000 and at least one completed within the last 5 years (Provide an attachment if additional space is required.)

Project Name	Contract Amount	When Completed	Name & Address of Owner Contact Person and Phone Number

5. Have you ever failed to complete any work awarded to you? _____
If so, where and why? _____

6. Name the Surety Company, and the name and address of the local agent you expect to use in the event this Contract is awarded to you:

7. What is the gross amount of contracts that you currently have in hand?

8. Bank references:

9. What is the construction experience of the principal individuals of your organization?

Individual's Name	Present Position or Office	Years of Construction Experience	Magnitude & Type of Work	In What Capacity?

10. Name the field superintendent who will be in direct charge if awarded this Contract and state his relevant, successful experience. Indicate the OWNER of projects referenced with his experience.

11. List the major items of equipment which you own or which will be available for use on the proposed work:

12. List below the contracts which you, or your company, or corporation were party, during the previous 10 years which contracts were involved in litigation of any type:

The information submitted for Prime Bidder will be regarded as confidential to the extent of the law.

The undersigned hereby declares that the foregoing statements are true and that the foregoing financial statement is a true and accurate statement of the financial condition of said firm.

Dated at _____ this ____ day of _____, 20__

By: _____

Title: _____

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FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM

(For Project Over \$100,000.00 per ORS 279C.370)

When the contract amount of a first-tier subcontractor (**furnishing labor or labor and materials**) is greater than or equal to: (i) 5% of the project bid, but at least \$15,000, or (ii) \$350,000 regardless of the percentage, you must separately disclose the following information about that Subcontractor Listing within two (2) hours of bid closing:

- (1) The subcontractor's name and address,
- (2) The subcontractor's Construction Contractor Board registration number, if one is required,
- (3) Dollar amount of work, and
- (4) Category of work.

If you will not be using any subcontractors that are subject to the above disclosure requirements, you are required to indicate "NONE" on the accompanying form.

THE AGENCY MUST REJECT A BID IF THE BIDDER FAILS TO SUBMIT THE DISCLOSURE FORM WITH THIS INFORMATION BY THE STATED DEADLINE. THE BIDDER MAY SUBMIT THE DISCLOSURE FORM WITHIN THE BID PACKAGE, BY SEPARATE ENVELOPE OR BY FACSIMILE.

Owner: City of Florence

Project: Rhododendron Drive Realignment (City Project No. ST 02-2023)

Bid Closing Date: November 30th, 2023 **Time:** 2:00 PM

Contractor Name & Address	Work Type	CCB Number	Amount

If you will not be using any subcontractors that are subject to the above disclosure requirements, you are required to indicate "None" on the above contractor listing.

THE CITY OF FLORENCE MUST REJECT A BID IF THE BIDDER FAILS TO SUBMIT THIS DISCLOSURE FORM WITHIN TWO (2) HOURS OF THE BID CLOSING.

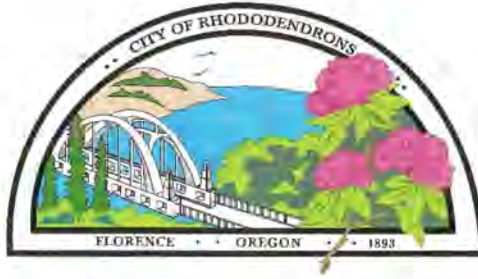
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SAMPLE CONTRACT

TERMS & CONDITIONS APPLICABLE TO THIS PROJECT

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**CITY OF FLORENCE
PUBLIC IMPROVEMENT CONTRACT**

**PROJECT: RHODODENDRON DRIVE REALIGNMENT
PROJECT NO. ST 02-2023**

This Contract is between the City of Florence, an Oregon Municipal Corporation ("City") and _____
_____("Contractor").

Recital

City of Florence selected contractor to perform work for the City by a competitive bid process.
Contractor submitted the lowest qualified bid for the Project.

Contractor Information

Address: _____ Phone: _____

Fax: _____ Contact: _____ E-Mail: _____

CCB No.: _____ Fed ID (Tax) No. _____

This page is intentionally blank

TERMS & CONDITIONS OF CONTRACT

TERM – DURATION OF CONTACT

This Contract shall be effective when signed by both parties. It shall remain in effect until the work on the Project has been completed, the improvement accepted by the City, and the warranty period has expired. The expiration of the term does not affect any right that arose prior to expiration, and terms that by their nature survive expiration shall remain in effect after expiration.

- Work shall commence as stated in the notice to proceed from City to Contractor
- Work shall be substantially complete as defined by the 2nd and 3rd notices in the Oregon Standard Specifications for Construction.

SCOPE OF WORK

Contractor shall construct **City of Florence Project No. ST 02-2023 – Rhododendron Drive Realignment** (the "Project"). The Project is described in more detail in the attached Contractor's Proposal "Exhibit A" and as detailed in the City's specifications and drawings for this Project. Contractor hereby agrees to furnish all of the materials, labor, water, tools, equipment, light, power, transportation, and other work needed to construct the Project. Collectively all documents herein, plans, referenced laws, statutes, codes, procedures, material specifications, and schedules are applicable to the scope of Work.

PAYMENT

City shall pay Contractor according to the schedules and unit prices as quoted by Contractor in the Schedule of Bid Items bid proposal form. The maximum total payment under this Contract without approved written change orders is \$_____.

Application for Payment

Contractor shall invoice the City monthly for work performed, based on an estimate of the amount of work completed and the value of the completed work. Contractor will direct the application for payment or invoice to the City of Florence, attention Public Works Director, 250 Highway 101 North, Florence, Oregon 97439. City shall make progress payment equal to the value of the completed work, less amounts previously paid, less retainage of five percent, less any deduction for claims and damages paid by the City of Florence due to acts or omissions of the Contractor and for which he/she is liable under this Contract within 15 days of receipt of the invoice and the prevailing wage certificates certifying that he/she has paid not less than the prevailing rate of wages as required by ORS 279C.840.

Application Free of Encumbrances

Contractor warrants and guarantees that all work, materials, and equipment covered by any application for payment, will pass to City of Florence at the time of payment free and clear of liens, claims, security interests and encumbrances.

Engineer Review & Approval of Application for Payment

City Engineer will, after receipt of each application for payment, either indicate in writing his/her approval of payment and present the application to the City of Florence, or return the application to Contractor indicating in writing his/her reasons for refusing to approve payment. In the latter case, Contractor may make the necessary corrections and resubmit for application.

Payment on Estimated Quantities

Nothing contained in this contract shall be construed to affect the right, hereby reserved, to reject the whole or any part of the aforesaid work should such work be later found not to comply with any of the provisions of this Contract document. All estimated quantities of work for which progress payments have been made are subject to review and correction on the final estimate. Acceptance by the Contractor of progress payments based on periodic estimates of quantities of work shall not, in any way, constitute acceptance of the estimated quantities used as the basis for computing the amounts of the progress payments.

Final Payment

Final payment shall be made in accordance with Section 00195 of the Oregon Standard Specifications for Construction.

COMPLIANCE WITH LAW

Contractor shall comply with applicable federal, state and local laws, ordinances, and regulation. When multiple standards apply, Contractor shall comply with the more stringent standard. Contractor shall comply with Title VI of the Civil Rights Act of 1964, with Section V of the Rehabilitation Act of 1973, and will all applicable requirements of federal, state and City civil rights and rehabilitation statutes, ordinances, rules and regulations. Contractor also shall comply with the Americans with Disabilities Act of 1990 (Pub L No. 101-336), ORS 659A.142, and all regulations and administrative rules established pursuant to those laws. Contractor agrees to comply with ADA in its employment practices, and that it shall perform its contractual obligations consistently with ADA requirements and regulations, state law, and applicable regulations.

ENVIRONMENTAL

Contractor shall comply with federal, state and local agencies ordinances, rules and regulations dealing with the prevention of environmental pollution and the preservation of natural resources that affect the performance of the Contract. The City reserves the right if environmental requirements (either new or existing ordinances) must be met after the award of the Contract, City, in accordance with ORS 279C.525, may (a) Terminate the Contract; (b) Complete the work itself; (c) Use non-City forces already under contract with the City; (d) Require that the underlying property owner be responsible for cleanup; (e) Solicit bids for a new Contractor; and (f) Issue the awarded Contractor a change order setting forth the additional work that must be undertaken. In addition, (a) City must make known environmental conditions at the construction site that may require Contractor to comply with environmental ordinances in their bid documents; (b) If not known at the time of award, Contractor shall immediately give notice of the discovered environmental condition to the City; (c) If an environmental emergency exists, City & Contractor shall follow the rules (4), (5), (6), (7) & (8) under ORS 279C.525. If the City chooses to terminate the contract under this subsection, Contractor, if no negligence or omission on his/her part, shall be entitled to all costs and expenses incurred to the date of termination, including overhead and reasonable profits, on the percentage of work completed. If City causes work to be done by another entity, Contractor may not be held liable for actions or omissions of the other entity.

OREGON STATE PUBLIC CONTRACT PROVISIONS

Contractor shall comply with all applicable provisions of ORS Chapters 279A and 279C as if fully set out herein. Without limiting the generality of the preceding sentence, the following specific provisions apply.

Contractor Shall:

- Make payment promptly, as due to all persons supplying to the contractor labor or material for the performance of the work provided for the Contract.
- Pay all contributions or amounts due the Industrial Accident Fund from the Contractor or Subcontractor incurred in the Contract.
- Not permit any lien or claim to be filed or prosecuted against the City.
- Pay to the Department of Revenue all sums withheld from employees under ORS 316.167.
- Demonstrate that an employee drug testing program is in place. City has the right to audit and/or monitor the program. On request by the City, Contractor shall furnish a copy of the employee drug-testing program.
- Salvage or recycle construction and demolition debris, if feasible and cost-effective.

Prompt Payment/Contractor Refusal to Make Payment:

- If Contractor fails, neglects or refuses to make prompt payment of any claim for labor or services furnished to the Contractor or a Subcontractor by any person in connection with the public improvement contract as the claim becomes due, the City may pay the claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to become due the Contractor by reason of the contract.
- If Contractor or first-tier Subcontractor fails, neglects or refuses to make payment to a person furnishing labor or materials in connection with this contract within 30 days after receipt of payment from the City (or in a case of Subcontractor, from Contractor), Contractor or first-tier Subcontractor shall owe the person the amount due plus interest charges commencing at the end of the 10-day period that payment is due under ORS 279C.580 (4) and ending upon final payment, unless payment is subject to a good faith dispute as defined in ORS 279C.580. The rate of interest charged to the Contractor or first-tier Subcontractor on the amount due shall equal three times the discount rate on 90-day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve district that includes Oregon on the date that is 30 days after the date when payment was received from the contracting agency or from the Contractor, but the rate of interest may not exceed 30 percent. The amount of interest may not be waived.
- If Contractor or a Subcontractor fails, neglects or refuses to make payment to a person furnishing labor or material in connection with, the person may file a complaint with the Construction Contractor Board (CCB), unless payment is subject to a good faith dispute as defined in ORS 279C.580.
- The payment of a claim in the manner authorized in this section does not relieve the Contractor or the Contractor's surety from obligation with respect to any unpaid claims.

Hours of Labor – Posting Hours of Labor:

- For work under this contract, a person may not be employed for more than 10 hours in any one day, or 40 hours of work in any one week, except in cases of necessity,

emergency or when the public policy absolutely requires it, and in those cases, the employee shall be paid at least time and a half pay:

- a. For all overtime in excess of eight hours in any one day or 40 hours in any one week when the work week is five consecutive days, Monday through Friday; and
 - b. For all overtime in excess of 10 hours in any one day or 40 hours in any one week when the work week is four (4) consecutive days, Monday through Friday; and
 - c. For all work performed on Saturday and on any legal holiday specified in ORS 279C.540.
- Contractor is not required to pay overtime if the request for overtime pay is not filed within 30 days of completion of the Contract if Contractor has posted and maintained in place a circular with the information contained in ORS 279C.545 as required by ORS 279C.545(1).
 - Contractors and Subcontractors must give notice in writing to employees who perform work under this contract, either at the time of hire or before commencement of work on the contract, or by posting a notice in a location frequented by employees, of the number of hours per day and days per week that the employees may be required to work.

Medical Coverage to Employees:

- Contractor shall promptly, as due, make payment to any person, co-partnership, association or corporation furnishing medical, surgical and hospital care services or other needed care and attention, incident to sickness or injury, to the employees of Contractor, of all sums that Contractor agrees to pay for the services and all moneys and sums that the Contractor collected or deducted from the wages of employees under any law, contract or agreement for the purpose of providing or paying for the services.

Worker's Compensation:

- All employers, including Contractor, that employ subject workers who work under this Contract in the State of Oregon shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless exempt under ORS 656.126. Contractor shall insure that each of its Subcontractors comply with these requirements.

Recycle Materials:

- Contractor will utilize where applicable, recycled materials if (a) The recycled product is available; (b) The recycled product meets applicable standards; (c) The recycled product can be substituted for a comparable non-recycled product; and (d) The recycled product's cost do not exceed the costs of non-recycled products by more than five percent (5%).

Obligation to Pay Subcontractor & Suppliers within 10 Days:

- Contractor shall include in each first-tier subcontract, including contracts with material suppliers, a clause that obligates Contractor to pay the first-tier Subcontractor for satisfactory performance under its subcontract within 10 days out of the amounts paid to Contractor by City under this contract, and if payment is not made within 30 days after receipt of payment from City, to pay an interest penalty as specified in ORS 279C.515(2) to the first-tier Subcontractor. The interest penalty does not apply if the only reason the delay in payment is due to a delay in payment by City to Contractor. Contractor shall include in each of Contractor's subcontracts, a provision requiring the first-tier

Subcontractor to include a similar payment and interest penalty clause and shall require Subcontractors to include similar clauses with each lower-tier Subcontractor or supplier.

Certifications:

- By signing the Contract, Contractor will certify that all Subcontractors performing construction work will be registered by the Construction Contractors Board (CCB) or licensed by the State Landscape Contractors Board before the Subcontractor starts work on the Project.
- By signing the Contract, Contractor will certify that it will comply with Oregon tax laws.

In addition: Contractor will be solely responsible for payment of any federal or state taxes required as a result of this Contract/Agreement.

INDEMNITY – HOLD HARMLESS

Contractor shall defend, indemnify, and hold the City, its officers, agents and employees, harmless against all liability, loss, or expenses, including attorney's fees, and against all claims, actions or judgments based upon or arising out of damage or injury (including death) to persons or property caused by or resulting from any act or omission sustained in connection with Contractor's performance of the Contract/Agreement or by conditions created thereby, or based upon Contractor's violation of any statute, ordinance or regulation.

INSURANCE

General Liability

- Contractor shall purchase and maintain commercial general liability insurance with minimum coverage of \$1.5 million per occurrence and \$2 million aggregate. The policy shall name the City as an additional insured and cover acts and omissions of Contractor and its Subcontractors of any level. Contractor shall be liable for the full amount of any claims resulting from negligence or intentional misconduct of Contractor, its subcontractors, and their officials, agents and employees in the performance of this Contract, even if not covered by or in excess of insurance. In addition, Sections 104.3.00, 104.4.00 and 104.5.00 of the General Conditions are applicable to this Contract.

Workers Compensation

- Workers compensation insurance as required by ORS Chapter 656. Contractor shall ensure that each subcontractor obtains workers compensation insurance. The Contractor shall ensure that its insurance carrier files a guaranty contract with the Oregon Workers' Compensation Division before performing Work. In addition, Section "Oregon State Public Contract Provisions" – subsection "Workers' Compensation" and section "Independent Contractor – Non-Partnership" of this Contract is applicable.

Builder's Risk

- Contractor shall provide builder's risk insurance on an all risks of direct physical loss basis, including, without limitation, earthquake and flood damage, for amount equal to at least the value of the amount installed. Any deductible shall not exceed \$50,000 for each loss, except that the earthquake and flood deductible shall not exceed 5% of each loss or \$50,000, whichever is greater. The policy shall include the City of Florence as loss payee.

Automobile Insurance

- If required, the combined single limit per occurrence shall be in an amount at least equal to the State/DMV requirements.

BONDS

Payment and Performance Bonds

- Contractor shall provide a separate Performance Bond and a separate Payment bond in a form acceptable to the City of Florence. Each bond shall be equal to 100% of the Contract amount. The Performance Bond and Payment Bond must be signed by the Surety's Attorney-in-fact, and the Surety's seal must be affixed to each bond. Bonds shall not be canceled without the City of Florence's consent, nor will the City release them prior to Contract completion. Bonds must be originals – faxed or photocopied bond forms will not be accepted.

Public Works Bond

- Contractor will file with the Construction Contractors Board (CCB) a Public Works Bond with a corporate surety authorized to do business in the State of Oregon in the amount of \$30,000 prior to starting work on this contract. Contractor is aware of the provisions of ORS 279C.600 and 279C.605 relating to notices of claim and payment of claims on public works bonds.

IMPACT ON TRAFFIC AND PROPERTY

Contractor shall adopt reasonable means and comply with all laws, ordinances, and regulation in order to minimize interference to traffic and damage to both public and private property; And in accordance with Section 00220 of the Specifications, shall provide a traffic plan, maintain two-way traffic unless approved otherwise by the City of Florence, and make every effort to maintain public safety and convenience. Contractor shall provide adequate noise control and shall control all obstructions to traffic in accordance with the manual on uniform traffic control devices if applicable.

PREVAILING WAGE

Basic Requirement

- In accordance with ORS 279C.840, Contractor shall pay to workers in each trade or occupation the current, applicable State prevailing rate of wage as established by the Oregon State Bureau of Labor and Industries (BOLI). The wage rates applicable are those in effect at the time Project was first advertised.

Posting of Prevailing Wage Rates

- Contractor, Subcontractor shall post the prevailing wage rates and fringe benefits in the locality where the labor is performed.

Certifications of Wage Rates to City of Florence

- Contractor shall furnish weekly to the City of Florence certified statements, in writing on a form prescribed by the Commissioner of the Bureau of Labor, certifying: (a) The hourly rate of wage paid each worker whom the Contractor or Subcontractor has employed upon the public works improvement; and (b) That no worker employed upon the public works has been paid less than the prevailing rate of wage or less than the minimum hourly rate of wage specified in the Contract.

- If the Contractor has not filed the certified statements as required under this contract, the City of Florence is required by law to retain 25% of any amount earned by the Contractor until the Contractor has complied. Final payment cannot be made without all applicable wage rates on file with the City.

Applicability of both Federal (Davis-Bacon) and State (BOLI) Prevailing Wage Rates

- When a public works project is subject to the Davis Bacon Act (40 U.S.C.3141 et seq.), the Contractor and every Subcontractor shall pay the higher of the two (BOLI and Davis Bacon) prevailing wage rates.

Access to Wage Rate Records – Worker Interview Verification

- Contractor shall allow the Bureau of Labor and Industries (or Federal Officials) to enter the office or business establishment of Contractor at any reasonable time to determine whether the prevailing rate of wage and or the higher of the State prevailing wage rate and the Davis-Bacon wage rate is actually being paid and shall make payment records available to BOLI or Federal Officials on request. Contractor shall require Subcontractors to provide the same right of entry and inspection. In addition, shall allow interviews with persons with each discipline (trade) to determine if the correct wage rate is actually being paid.

All BOLI Requirements Applicable

- Contractor must comply with all laws and regulations relating to prevailing wages, whether or not set out in this Contract. Further information regarding prevailing wages, including requirements applicable to Contractor, is available at: <http://www.oregon.gov/BOLI/WHI/PWR/index.shtml>. And available by contacting the Bureau of Labor & Industries at 971-673-0839. The prevailing wage rates effective November 1, 2023 are applicable to this contract.

WARRANTIES

All work shall be guaranteed for a period of one (1) year against defects in materials and workmanship. Contractor unconditionally warrants all work and materials for this Project, including additional work authorized under change orders, against any defects whatsoever, for one (1) year from the date of acceptance by the City of Florence, except that manufacturers' warranties and extended manufacturer warranties as specified in the contract documents or otherwise is a standard manufacturer product warranty shall not be abridged. In addition to its right to proceed on the warranty, the City may recover for breach of contract or negligence even if defects do not become evident during the warranty period. The Contractor also agrees to hold the City of Florence harmless from claims of any kind arising from damage due to said defects.

LIQUIDATED DAMAGES

Contractor agrees to pay liquidated damages in accordance to Sections 00180.85(b) and 00220.40(g) of the Specifications. The City of Florence is authorized to deduct the amount of the liquidated damages from any amounts due and the Contractor and its Surety shall be liable for any excess. If the Contract is terminated for default (see following "Termination") and if the Work has not been completed by other means on or before the expiration of Contract time or adjusted Contract time, liquidated damages will be assessed against the Contractor for the duration of time reasonably required to complete the work.

TERMINATION OF CONTRACT AND SUBSTITUTED PERFORMANCE

Termination for Default – Termination of the Contract for default may result if the Contractor:

- Violates any material provision of the Contract;
- Disregards applicable laws and regulations or the Engineer's instructions;
- Refuses or fails to supply enough materials, equipment, or skilled workers for the prosecution of the Work in compliance to the Contract;
- Fails to make prompt payment to Subcontractors;
- Makes an unauthorized general assignment for the benefit of the Contractor's creditors;
- Has a receiver appointed because of the Contractor's insolvency;
- Is adjudged bankrupt and the court consents to the Contract termination; or
- Otherwise fails or refuses to faithfully perform the Contract according to its terms and conditions.

If the Contract is terminated by the City, upon demand the Contractor and Contractor's Surety shall provide the Engineer with immediate and peaceful possession of the Project Site, and of all materials and equipment to be incorporated into the Work, whether located on and off the Project Site, for which the Contractor received progress payments.

If the Contract is terminated for default, neither the Contractor nor its Surety shall be:

- Relieved of liability for damages or losses suffered by the City because of the Contractor's breach of Contract; or
- Entitled to receive any further progress payments until the Work is completed. However, progress payments for completed Work that remain due and owing at the time of Contract termination may be made according to the City's payment terms, except that the Engineer will be entitled to withhold sufficient funds to cover costs incurred by the City as a result of the termination. Final payment to the Contractor will be made according to the City's payment terms.

If a termination under this provision is determined by a court of competent jurisdiction to be unjustified, the termination shall be deemed a termination of public convenience.

Termination for Public Convenience

- The Engineer may terminate the Contract in whole or in part whenever the Engineer determines that termination of the Contract is in the best interest of the public.
- Notice: The Engineer will provide the Contractor and the Contractor's Surety seven (7) calendar days' written notice of termination for public convenience. After such notice, the Contractor and the Contractor's Surety shall provide the Engineer with immediate and peaceful possession of the Project Site, and of materials and equipment to be incorporated into the Work, whether located on and off the Project Site, for which the Contractor received progress payments.
- Compensation: Compensation for Work terminated by the Engineer under this provision will be determined by the amount of Work completed/installed and materials and equipment furnished and the status of payment (paid/un-paid) for such Work, materials, and equipment; less any outstanding labor or material claims against the Contractor.

Substituted Performance

According to the City's procedures, and upon the Engineer's recommendation that sufficient cause exists, the City, without prejudice to any of its other rights or remedies and after giving the Contractor and the Contractor's Surety ten (10) calendar days' written notice may:

- Terminate the Contract;
- Substitute the Contractor with another Entity to complete the Contract;
- Take possession of the Project Site;
- Take possession of materials on the Project Site;
- Take possession of materials not on the Project Site, for which the Contractor received progress payments;
- Take possession of equipment on the Project Site that is to be incorporated into the Work;
- Take possession of equipment not on the Project Site that is to be incorporated into the Work, and for which the Contractor received progress payments; and
- Finish the Work by whatever method the City deems expedient. If within the ten (10) calendar days' notice period provided above, the Contractor and/or its Surety corrects the basis for declaration of default to the satisfaction of the Engineer, or if the Contractor's Surety submits a proposal for correction that is acceptable to the Engineer, the Contract will not be terminated.

ASSIGNMENT

Contractor shall not assign or transfer its interests in this contract without prior written consent of City, which consent may be withheld in the City's sole, subjective discretion; nor shall the Contractor assign any monies due or to become due hereunder without the prior written consent of the City of Florence.

INDEPENDENT CONTRACTOR – NON-PARTNERSHIP

The Contractor shall perform all work under this Project as an Independent Contractor or Independent Agent and shall not be considered as an agent of the City of Florence, nor shall the Contractor's Subcontractors or employees be sub-agents of the City of Florence. In addition:

- The Work to be rendered under this Project is that of Independent Contractor. Contractor is not an officer, employee, or agent of the City under ORS 30.265 or ORS 30.287, and Contractor is not to be considered an officer, employee, or agent of the City for any purpose. Contractor shall be solely and entirely responsible for its act and for the acts of its subcontractors, agents, or employees during the performance of this Project. Contractor is an Independent Contractor for the Oregon Workers' Compensation Law (ORS Chapter 656) and is solely liable for workers' compensation coverage under any Contract/Agreement applicable to the Project.
- No Agency, Partnership, or Joint Venture – Neither the City nor Contractor by virtue of any Agreement applicable to this Project, is a partner or joint venture with the other party in connection with the activities carried out under this Project.
- Any Contract/Agreement applicable to this Project is not intended to entitle the Contractor or any of its Subcontractors to any benefits generally granted to City Employees. **Contractor shall be responsible for all federal or state taxes** applicable to

compensation or payment paid to Contractor under any Contract/Agreement applicable to this Project.

FORCE MAJEURE

Contractor shall not be held responsible for delay or default caused by fire, riot, act of God and war which is beyond Contractor's reasonable control. Contractor shall, however, make all reasonable efforts to remove or eliminate such a cause of delay or default and shall, upon the cessation of the cause, diligently pursue performance of its obligations under the Contract.

SEVERABILITY

In the event any of the provisions or portion of the Contract/Agreement are held to be unenforceable or invalid by any court of competent jurisdiction for any reason, such invalid or unenforceable provision shall in no way effect the validity or enforceability of the remaining provisions or portions.

WAIVERS

No term or condition of this Contract/Agreement shall be deemed to have been waived by any Party, unless such waiver is in writing signed by the Party charged with such waiver. Any waiver of any provision of the Contract, or any right or remedy, given on any one or more occasions shall not be deemed a waiver with respect to any other occasion. The failure of either Party to enforce any provision of the project documents shall not constitute a waiver by the City of that or any other provision.

MERGER

No waiver, consent, modification or change of terms of this Contract shall bind either party unless in writing and signed by both parties. A waiver, consent, modification, or change, if made shall be effective only in the specific instance and for the specific purpose given. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this Contract. Contractor by signature of its authorized representative hereby acknowledge that Contractor understands the Contract and agrees to be bound by its terms and conditions.

LIMITATION OF AUTHORITY

City retains its authority to execute all applications, contracts and other documents relating to the Project. Contractor has no right or authority, express or implied, to commit or otherwise obligate City or any of its partners, except as permitted by the express terms of this Contract, or as authorized in writing.

ATTORNEY FEES AND GOVERNING LAW

In the event an action, suit or proceeding, including appeal, is brought for failure to observe any of the terms of this Contract, each party shall be responsible for that party's own attorney fees, expenses, costs and disbursements for the action, suit, proceeding or appeal. The provisions of this Contract shall be construed in accordance with the provisions of the laws of the State of Oregon. Any action or suits involving any question arising under this Contract must be brought in the appropriate court of the State of Oregon.

REMEDIES

The remedies provided for in the Contract are cumulative, and in addition to other remedies available at law. Contractor agrees that, due to the health, safety and welfare issues that relate to timely and acceptable completion of the Project to be constructed under this Contract, the City may not have an adequate remedy at law in the event of a breach of this Contract by Contractor, and that the City may obtain injunctive relief at the sole election of the City.

COUNTERPARTS

The Contract may be signed in one or more counterparts (including change orders), each of which shall be an original and all of which, when taken together, shall constitute one and the same instrument.

GENDER: SINGULAR - PLURAL

Whenever masculine, feminine, neuter, singular, plural, conjunctive, or disjunctive terms are used in the Contract, they shall be construed to read in whatever form is appropriate to make the Contract applicable to all the Parties and all circumstances, except where the context of the Contract clearly dictates otherwise.

INTERCHANGEABLE TERMS IN CONTRACT AND RELATED DOCUMENTS

- Contract and Agreement are interchangeable;
- City and Owner are interchangeable; and,
- Engineer, City Engineer are interchangeable – this can be further construed to include Project Manager and Public Works Director and or the designee of the City Engineer and Public Works Director (collectively, an authorized official of the City of Florence).

NOTICES

All notices of a legal nature shall be in writing and shall be served upon the other party by personal service, by facsimile transmission, E-Mail followed by mail delivery of the original of such notice, by overnight courier with proof of receipt, or by certified mail, return receipt requested, postage prepaid, addressed as follows: City of Florence, 250 Highway 101 North, Florence, Oregon 97439, Attn: City Manager, Phone: 541-997-3436. Service by mail shall be deemed complete on the date of actual delivery or three (3) business days after being sent via certified mail. Service by facsimile transmission or E-Mail shall be deemed served up receipt of the facsimile or E-Mail, followed by mail delivery.

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**THE PARTIES SIGNING BELOW WARRANT, REPRESENT, AND AGREE THAT THEY
HAVE AUTHORITY TO SIGN THIS AGREEMENT AND AGREE TO ALL TERMS**

CONTRACTOR: _____

BY: _____

TITLE: _____

DATE: _____

CITY OF FLORENCE, OREGON

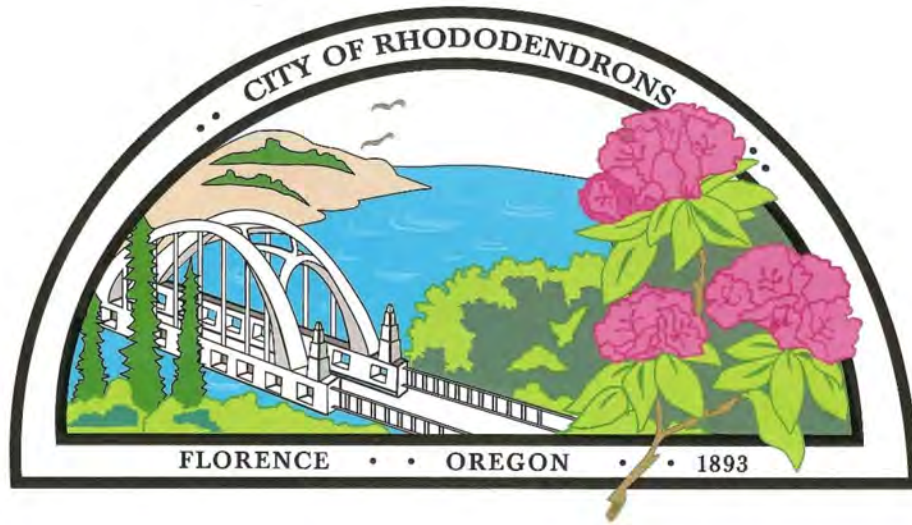
BY: _____

TITLE: CITY MANAGER

DATE: _____

Memo

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SPECIAL PROVISIONS

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SECTION 00110 – ORGANIZATION, CONVENTIONS, ABBREVIATIONS AND DEFINITIONS

Comply with Section 00110 of the Standard Specifications supplemented and/or modified as follows:

00110.20 Definitions – Add the following definition:

City - The City of Florence, Oregon, acting through its designated representative(s)

SECTION 00120 – BIDDING REQUIREMENTS AND PROCEDURES

Comply with Section 00120 of the Standard Specifications supplemented and/or modified as follows:

00120.05 Request for Solicitation Documents – Replace this subsection with the following:

Complete digital contract documents are available at <http://www.rh2.com> under the Bidding tab. The complete digital contract documents may be downloaded for a \$22.00 non-refundable fee by inputting the QuestCDN project #8833795 on the website. Please contact QuestCDN.com at 952-233-1632 or info@questcdn.com for assistance in free membership registration, downloading, and working with this digital project information. An informational copy of the contract documents is on file for inspection at the City of Florence office. All prospective bidders must provide a valid e-mail address and be added to the Plan Holders List by downloading the documents from www.questcdn.com. Notification of Addenda issuance will be issued via e-mail to the addresses listed on the Plan Holders List. Bid results will be made available on the city's website

The Plans, which are applicable to the Work to be performed under the Contract, bear title and date as follows:

CITY OF FLORENCE

RHODODENDRON DRIVE REALIGNMENT

CITY PROJECT NO. ST 02-2023

00120.30 Changes to Plans, Specifications, or Quantities before Opening of Bids –

Replace this subsection with the following:

The Agency reserves the right to issue Addenda making changes to the Plans, Specifications, or quantities. The Agency will provide Addenda via email to contractors shown on the Plan Holders List only.

Bidders, not the Agency, shall be responsible for failure of Bidders to obtain Addenda.

00120.40 Preparation of Bids – Modify this subsection as follows:

(a) General – Replace this subsection with the following:

Bidders shall not alter, in any manner the documents within the Bid Section. Bidders shall complete the certifications and statements included in the Bid Section of the Bid Booklet according to the instructions. Signature of the Bidder's authorized representative thereon constitutes the Bidder's confirmation of and agreement to all certifications and statements contained in the Bid Booklet. Entries on paper documents in the Bid Section shall be in ink or typed. Signatures and initials shall be in ink.

(c) Bid Schedule Entries – Delete subsection **(2) "Electronic Bid Schedule Entries"**. Electronic bids are not permitted.

(e) Bid Guaranty – Replace the first sentence with the following:

All Bids shall be accompanied by a Bid guaranty in the amount of 5% of the total amount of the Bid.

Delete subsection (2) **"Bid Guaranty with Electronic Bids"**. Electronic bids are not permitted.

00120.45 Submittal of Bids – Replace this subsection with the following:

Bids shall be submitted in person, or by mail or parcel delivery service, to Mike Miller, Public Works Director, City of Florence, 2675 Kingwood Street, Florence, Oregon 97439, in a sealed envelope marked with the name of the Bidder, Project Name, and Project Number and the words "Sealed Bid for City of Florence Highway 126 Utility Extensions City Project No. WA 17-01 / WW 17-01." If a delivery or courier service is used, the Bidder shall place the sealed envelope containing the Bid inside the delivery or courier service's envelope. Bids may not be submitted by fax.

Bids may be submitted until 2:00 PM PST on the day of Bid Opening. Bids submitted after that time will not be opened or considered. The Agency assumes no responsibility for the receipt and return of late Bids. First Tier Disclosure forms may be submitted until 4:00 PM on the day of bid opening.

00120.60 Revisions or Withdrawals of Bids – In the paragraph that begins "(a) Paper Bids - Information entered into the ...", replace "ODOT Procurement Office-Construction" with "City Engineer".

Replace the bullet that begins..."Changes are received at the same..."with the following bullet:

- "Changes are received by Mike Miller, Public Works Director, City of Florence, 2675 Kingwood Street, Florence, Oregon 97439, before 2:00 PM PST on the day of the Bid Opening,"

In the paragraph that begins "A Bidder may withdraw...", replace "ODOT Procurement Office-Construction" With "City Engineer".

Replace the bullet that begins "The request is received at the same..." with the following bullet:

- "The request is received Mike Miller, Public Works Director, City of Florence, 2675 Kingwood Street, Florence, Oregon 97439, before 2:00 PM PST on the day of the Bid Opening,"

Delete "(b) Electronic Bids"....Electronic bids are not permitted

SECTION 00130 – AWARD AND EXECUTION OF CONTRACT

Comply with Section 00130 of the Standard Specifications.

SECTION 00140 – SCOPE OF WORK

Comply with Section 00140 of the Standard Specifications.

SECTION 00150 – CONTROL OF WORK

Comply with Section 00150 of the Supplemental Specifications supplemented and/or modified as follows:

00150.15(a) General – Replace this subsection, except for the subsection number and title, with the following:

The Contractor shall perform no Work until the Contractor establishes field controls. Work performed without field controls will be subject to removal at the Contractor's expense.

00150.15(b) Agency Responsibilities – Replace this subsection, except for the subsection number and title, with the following:

The Engineer will:

Provide vertical and horizontal alignment data that is sufficient for the Contractor to complete survey work as needed.

00150.15(c) Contractor Responsibilities – Replace this subsection, except for the subsection number and title, with the following:

The Contractor shall:

Perform, or have performed, surveying work sufficient to accomplish the Work including as built.

00150.40 Cooperation and Superintendence by the Contractor – Add the following section:

(c) Use of Consultants - When indicated by Special Provision, the Contractor is advised that the availability of Agency personnel on this Project is limited and the Agency may hire consultants to perform some of its responsibilities for Material testing, Material weighing and checking, and/or surveying. The Contractor shall provide the Engineer with a written notification that such personnel are needed a minimum of 72 hours before performing Work requiring Material testing, Material weighing and checking, and/or surveying. If the Contractor suspends Work for more than three days on Work items requiring Material testing, Material weighing and checking, and/or surveying by the Agency, the Contractor shall again provide notice as set forth above. The Agency will not be responsible for delays occasioned by the Contractor's failure to provide the required written notice. The Contractor shall provide such notice whether or not the Agency hires a consultant to perform the required services.

00150.50 Cooperation with Utilities - Add the following Subsection:

(f) Utility Information:

Contact those Utilities having buried facilities and request that they locate and mark them for their protection prior to construction.

This Project is located within the Oregon Utility Notification Center area which is a Utility notification system for notifying owners of Utilities about Work being performed in the vicinity of their facilities. The Utilities notification system telephone number is 1-800-332-2344.

00150.91 Post-Construction Review – Replace this Subsection with the following:

The Contractor or the Engineer may request a Post-Construction Review meeting, to be held prior to issuance of Second Notification. The meeting may be held if agreed to by both parties. The party making the request will conduct the meeting and will announce the time and place of the meeting at least 15 days prior to the meeting date. The purpose of this meeting is to examine the Project for possible process improvements that may benefit future projects.

SECTION 00160 – SOURCE OF MATERIALS

Comply with Section 00160 of the Standard Specifications.

SECTION 00170 – LEGAL RELATIONS AND RESPONSIBILITIES

Comply with Section 00170 of the Standard Specifications supplemented and/or modified as follows:

Add the following Subsection:

00170.10(f) Notice of Claim Against Bond - Replace this Subsection with the following Subsection:

00170.10(f) Notice of Claim Against Bonds – An Entity claiming not to have been paid in full for labor or Materials supplied for the prosecution of the Work may have a right of action first on the Contractor's public works bond and then, for any amount of a claim not satisfied by the public works bond, on the Contractor's bond, cashier's check, or certified check as provided in ORS 279C.600 and ORS 279C.605.

00170.70 Insurance – The following insurance coverage and dollar amounts are required on this Project:

Insurance Coverages	Combined Single Limit per Occurrence	Annual Aggregate Limit
Commercial General Liability	\$1,500,000	\$2,000,000
Commercial Automobile Liability	\$1,000,000	n/a

00170.70(c) Additional Insured – add the following paragraph and bullets to the end of this Subsection:

Add the following as Additional Insured's under the Contract:

The City of Florence and its officers, agents, and employees
City Council
RH2 Engineering, Inc.

00170.72 Indemnity/Hold Harmless – Add the following paragraph and bullets to the end of this Subsection:

Extend indemnity and hold harmless to the Agency and the following:

The City of Florence and its officers, agents, and employees
City Council
RH2 Engineering, Inc.

SECTION 00180 – PROSECUTION AND PROGRESS

Comply with Section 00180 of the Standard Specifications supplemented and/or modified as follows:

Add the following Subsection:

00180.40(c) Specific Limitations – Limitations of operations specified in these Special Provisions include, but are not limited to, the following:

Limitations	Subsection
Cooperation with Utilities	00150.50
Interim Completion	00180.50
Final Completion Time.....	00180.50
Traffic Restrictions.....	00220.40
Noise Control.....	00290.32

Be aware of and subject to schedule limitations in the Standard Specifications that are not listed in this Subsection.

00180.41 Project Work Schedules – A type B schedule as detailed in the Standard Specifications is required on this Contract. ***A preliminary schedule is required at the submission of bids based on a Projected Notice to Proceed Date as specified in the Instructions to Bidders.***

Add the Following Subsection:

00180.50(h) Contract Time – Complete all work to be done under the Contract, not later than the Project Completion Date specified in the Instructions to Bidders.

00180.85(b) Liquidated Damages – Add the following paragraph:

The liquidated damages for failure to complete the Work on time are \$500 per Calendar Day*.

*Calendar Day amounts are applicable when the Contract time is expressed on the Calendar day or fixed date basis.

SECTION 00190 – MEASUREMENT OF PAY QUANTITIES

Comply with Section 00190 of the Standard Specifications supplemented and/or modified as follows:

00190.20(f-2) Scale Without Automatic Printer - Add the following sentence after the first paragraph:

Pay costs for the weigh witness at \$35.00 per hour.

00190.20(g) Agency – Provided Weigh Technician – Add the following paragraph after the bullet list:

Pay costs for the weigh technician at \$35.00 per hour.

SECTION 00195 – PAYMENT

Comply with Section 00195 of the Standard Specifications.

00195.50(b) Retainage – Replace the first paragraph of this subsection with the following:

The Agency reserves the right in its sole discretion to withhold retainage from progress payments or to begin withholding retainage at any time. If the Agency withholds retainage from progress payments, the amount to be retained from progress payments will be 5 percent of the value of the Work accomplished, and will be retained in the Cash, Alternate A form. No retainage will be withheld from Work performed as Force Account Work, escalation/de-escalation, bonuses, or other items decided by the agency.

SECTION 00196 – PAYMENT FOR EXTRA WORK

Comply with Section 00196 of the Standard Specifications.

SECTION 00197 – PAYMENT FOR FORCE ACCOUNT WORK

Comply with Section 00197 of the Standard Specifications.

SECTION 00199 – DISAGREEMENTS, PROTESTS, AND CLAIMS

Comply with Section 00199 of the Standard Specifications.

SECTION 00210 – MOBILIZATION

Comply with Section 00210 of the Standard Specifications.

SECTION 00220 – ACCOMMODATIONS FOR PUBLIC TRAFFIC

Comply with Section 00220 of the Standard Specifications supplemented and/or modified as follows:

00220.02 Public Safety and Mobility – Add the following bullets to the end of this subsection:

- Maintain access to all driveways within the work zone at all times.
- When a project restricts the width, length, height, or weight of trucks through a work zone, submit written notification on the Highway Restriction Notice Size and /or Weight form (Form No. 734-2357) to the MCTD Freight Mobility coordinator and the Engineer at least 28 days before the restriction takes effect.
- When construction requires the closure of a sidewalk or sidewalk ramp, place a Type "W1" SIDEWALK CLOSED" (OR22-12-21) sign at each point of closure.
- When construction requires the closure of a sidewalk, notify, in writing, the City of Florence at least 14 days in advance of the closure. Do not close the sidewalk until the City provides written approval. After approval, provide 48-hour public notification prior to closing the sidewalk.
- Obtain permission from the City of Florence before closing any city street. No city street closure will be permitted until the Engineer approves it and the area is signed according to Section 00225.
- Notify the Engineer, in writing, of all affected emergency services, school districts, and U.S. Postal Service at least 14 days in advance of the street closure. Notification list can be obtained from the City of Florence Public Works offices.
- Businesses must be notified no later than (5) working days prior to construction within their zone of traffic to accommodate necessary changes or shut-down.

00220.40(e)(1) Closed Lanes – Replace this subsection with the following:

One or more traffic lanes may be closed when allowed, shown, or directed during the following periods of time except as indicated in 00220.40(e-2):

- Daily, Monday through Friday between 7:00 AM and 7:00 PM

Add the following subsection:

00220.40(e)(3) Additional Lane Restrictions

- Do not close any traffic lanes on any street prior to receiving notice to proceed.
- Traffic Control Plans must be approved by Engineer and ODOT prior to beginning construction.
- Roadways shall be free of barricades or other objects and all lanes opened to traffic during all the restrictive periods listed above.
- Closures shall allow 1-way traffic at all times unless approved by Engineer, City and/or ODOT during construction.

Add the following subsection:

00220.40(g) Liquidated Damages – Lane closures not in compliance with the limits listed in 00220.40(e) would inconvenience the traveling public and would be a cost to the Agency.

It is impractical to determine the actual damages which the Agency would sustain in the event a traffic lane is closed. Therefore, the Contractor shall pay to the Agency, not as a penalty, but as liquidated damages, \$500 per day, or any portion thereof, per lane, for any lane closure not in compliance with the limits listed in 00220.40(e). In addition to the liquidated damages, any added cost for traffic control measures, including flagging, required to maintain the lane closures beyond the permitted time limits, shall be at the Contractor's expense. The required traffic control measures will be as determined by the Engineer.

The Engineer will determine when it is safe to reopen a lane to traffic. Assessment of liquidated damages will stop when the lane has been safely reopened. Any liquidated damages assessed under these provisions will be in addition to those under 00180.85(b).

SECTION 00221 – COMMON PROVISIONS FOR WORK ZONE TRAFFIC CONTROL

Comply with Section 00221 of the Standard Specifications supplemented and/or modified as follows:

00221.06 Traffic Control Plan – Delete subsections **(a) Agency Traffic Control Plan** and **(b) Contractor Modified Traffic Control Plan** and replace with:

Submit the following, for approval, five calendar days prior to the preconstruction conference:

(a) Contractor TCP – Provide working drawings according to 00150.35 that include the following:

- Proposed TCP showing all TCM and quantities of TCD
- Proposed order and duration of the TCM
- A detailed temporary striping plan, if applicable

If additional modifications are made to the Contractor's TCP, submit working drawings, according to 00221.06(a), at least 14 Calendar Days before the beginning of construction activities that require the TCP changes.

Utilize Method "B" for payment as described in **00221.98 Payment, Method "B" – Lump Sum Basis**.

00221.07(c)(1) Paving - Replace this subsection, except subsection number and title, with the following:

When the longitudinal joint is greater than 1 inch in height, install additional TCD according to 00221.03. Complete the placing of ACP and construction of paving joints according to 00735.48, 00735.49, 00743.45, 00744.44, 00744.45, 00745.47, and 00745.48, as applicable.

00221.90(b) Temporary Protection and Direction of Traffic - Delete the bullet that begins "Moving temporary barrier to and from Contractor's stockpile areas".

Replace the bullet that begins "When the Schedule of Items does not include ..." with the following bullet:

- Preparing and signing the daily "Traffic Control Inspection Report", when a TCS is not included in the Schedule of Items or when a TCS is not onsite for a work shift.

SECTION 00222 – TEMPORARY TRAFFIC CONTROL SIGNS

Comply with Section 00222 of the Standard Specifications supplemented and/or modified as follows:

Delete the Measurement and Payment subsections in their entirety and replace with the following:

Measurement

00222.80 Measurement – No measurement of quantities will be made for Work performed under this Section.

Payment

00222.90 Payment – Payment for all traffic control work, including all work described in this Section will be paid for at the Contract lump sum amount for the item “Temporary Work Zone Traffic Control, Complete”.

SECTION 00223 – WORK ZONE TRAFFIC CONTROL LABOR AND VEHICLES

Comply with Section 00223 of the Standard Specifications supplemented and/or modified as follows:

Delete the Measurement and Payment subsections in their entirety and replace with the following:

Measurement

00223.80 Measurement – No measurement of quantities will be made for Work performed under this Section.

Payment

00223.90 Payment – Payment for all traffic control work, including all work described in this Section will be paid for at the Contract lump sum amount for the item “Temporary Work Zone Traffic Control, Complete”.

SECTION 00224 – TEMPORARY TRAFFIC CHANNELIZING DEVICES

Comply with Section 00224 of the Standard Specifications supplemented and/or modified as follows:

00224.46 Pavement Edge Delineation - Replace the paragraph that begins “Place tubular or conical markers...” with the following paragraph:

Place tubular or conical markers to delineate the edge of Pavement immediately after construction Work or paving operations create an abrupt or sloped edge drop-off greater than 1 inch in height along the right-hand or left-hand Shoulder.

Delete the Measurement and Payment subsections in their entirety and replace with the following:

Measurement

00224.80 Measurement – No measurement of quantities will be made for Work performed under this Section.

Payment

00224.90 Payment – Payment for all traffic control work, including all work described in this Section will be paid for at the Contract lump sum amount for the item “Temporary Work Zone Traffic Control, Complete”.

SECTION 00225 – TEMPORARY PAVEMENT MARKING

Comply with Section 00225 of the Standard Specifications supplemented and/or modified as follows:

00225.42(b) Wearing Course - Replace the bullet that begins "For left hand solid lines..." with the following bullet:

- For left hand solid lines and skip lines striping, use temporary removable tape or pavement markers.

Delete the Measurement and Payment subsections in their entirety and replace with the following:

Measurement

00225.80 Measurement – No measurement of quantities will be made for Work performed under this Section.

Payment

00225.90 Payment – Payment for all traffic control work, including all work described in this Section will be paid for at the Contract lump sum amount for the item "Temporary Work Zone Traffic Control, Complete".

SECTION 00226 – TEMPORARY ROADSIDE BARRIERS AND IMPACT ATTENUATORS

Comply with Section 00226 of the Standard Specifications supplemented and/or modified as follows:

Delete the Measurement and Payment subsections in their entirety and replace with the following:

Measurement

00226.80 Measurement – No measurement of quantities will be made for Work performed under this Section.

Payment

00226.90 Payment – Payment for all traffic control work, including all work described in this Section will be paid for at the Contract lump sum amount for the item "Temporary Work Zone Traffic Control, Complete".

SECTION 00228 – TEMPORARY PEDESTRIAN AND BICYCLIST ROUTING

Comply with Section 00228 of the Standard Specifications supplemented and/or modified as follows:

00228.00 Scope - Replace this subsection, except subsection number and title, with the following:

In addition to the requirements of Section 00221, this Work consists of furnishing, installing, operating, maintaining, inspecting, and removing temporary devices for accommodating pedestrians and bicyclists through a work zone.

00228.13 Temporary Curb Ramps - Add the following sentence to the end of this subsection:

Furnish truncated dome detectable warning surface for temporary curb ramps from the QPL according to 00759.12.

00228.43 Temporary Curb Ramps - Add the following paragraph to the end of this subsection:

Install a minimum 2-foot-wide truncated dome detectable warning surface on temporary curb ramps at pedestrian street crossings. Omit truncated dome detectable warning surfaces on temporary curb ramps that are not at a pedestrian street crossing.

Delete the Measurement and Payment subsections in their entirety and replace with the following:

Measurement

00228.80 Measurement – No measurement of quantities will be made for Work performed under this Section.

Payment

00228.90 Payment – Payment for all traffic control work, including all work described in this Section will be paid for at the Contract lump sum amount for the item "Temporary Work Zone Traffic Control, Complete".

SECTION 00270 – TEMPORARY FENCES

Comply with Section 00270 of the Standard Specifications supplemented and/or modified as follows:

Delete the Measurement and Payment subsections in their entirety and replace with the following:

Measurement

00227.80 Measurement – No measurement of quantities will be made for Work performed under this Section.

Payment

00227.90 Payment – Payment for all traffic control work, including all work described in this Section will be paid for at the Contract lump sum amount for the item "Temporary Work Zone Traffic Control, Complete".

SECTION 00280 – EROSION AND SEDIMENT CONTROL

Comply with Section 00280 of the Standard Specifications.

SECTION 00290 – ENVIRONMENTAL PROTECTION

Comply with section 00290 of the Standard Specifications supplemented and/or modified as follows:

00290.20(c)(3)(d) Concrete and Masonry – Replace this subsection with the following:

Concrete and masonry shall be disposed of off-site by the contractor.

00290.30(a) Pollution Control Measures – Add the following subsections and bullets:

(7) Water Quality:

- Do not discharge contaminated or sediment-laden water, including drilling fluids and waste, or water contained within a work area isolation, directly into any waters of the State or U.S. until it has been satisfactorily treated (for example: bio swale, filter, settlement pond, pumping to vegetated upland location, bio-bags, dirt-bags). Treatment shall meet the turbidity requirements below.
- Do not cause turbidity in waters of the State or U.S. greater than 10% above background reading (up to 100 feet upstream of the Project), as measured 100 feet downstream of the Project.

- During construction, monitor in-stream turbidity and inspect all erosion controls daily during the rainy season and weekly during the dry season, or more often as necessary, to ensure the erosion controls are working adequately meeting treatment requirements.
- If construction discharge water is released using an outfall or diffuser port, do not exceed velocities more than 4 feet per second, and do not exceed an aperture size of 1 inch.
- If monitoring or inspection shows that the erosion and sediment controls are ineffective, mobilize work crews immediately to make repairs, install replacements, or install additional controls as necessary.
- Underwater blasting is not allowed.
- Implement containment measures adequate to prevent pollutants or construction and demolition materials, such as waste spoils, fuel or petroleum products, concrete cured less than 24 hours, concrete cure water, silt, welding slag and grindings, concrete saw cutting by-products and sandblasting abrasives, from entering waters of the state or U.S.
- End-dumping of riprap within the waters of the state or U.S. is not allowed. Place riprap from above the bank line.
- Cease project operations under high flow conditions that may result in inundation of the project area, except for efforts to avoid or minimize resource damage.
- The Project Manager retains the authority to temporarily halt or modify the Project in case of excessive turbidity or damage to natural resources,

00290.90 Payment – Replace this subsection with the following:

Payment

00290.90 Payment – Work under this Subsection is incidental to one or more bid items.

SECTION 00305 – CONSTRUCTION SURVEY WORK

If contractor does not have surveyors on staff, contact the Engineer for a list of surveyors previously used on local contracts.

Comply with Section 00305 of the Standard Specifications supplemented and/or modified as follows:

Add the following and replace Chapter 1.5 and 1.6 of the Construction Surveying Manual for Contractors:

00305.01 Agency Responsibilities:

- Provide copies of plans and specifications
- Provide horizontal and vertical alignment data
- Perform measurements and calculations for pay quantities

00305.02 Contractor Responsibilities:

- Prior to beginning any work on the project conduct potholing as necessary or as specified in the plans. If utility elevations differ from the plan set substantial notify the engineer.
- Establish initial horizontal and vertical control stations in the proximity of the Project.
- Perform final "as constructed" measurements. "As constructed" measurements shall include horizontal alignment of any installed pipe and horizontal location of above ground facilities including vaults, hydrants, valves, meters, etc.
- Make calculations, field notes and survey drawings for the layout and control of the work as are necessary to construct the Project as specified.
- Provide original or copies of notes, calculations and drawings as requested.
- Preserve survey monuments and control stations as governed by applicable law.
- Replace damaged right-of-way monumentation.
- Replace and augment control stations as necessary to control the Project.
- Establish additional control stations as necessary to control the Project.
- Set stakes to define construction centerline, centerline offsets, detour lines, or other lines necessary for control of the Project work.
- Set stakes to define the work, that may include but is not limited to the following:
 - Roadway location and grade.
 - Fences and gates
 - Guardrail, barrier, barricades, and associated features.
 - Traffic delineators, reflectors, and guide devices.
 - Temporary and permanent pavement striping and pavement marking devices.
 - Temporary and permanent signing.*
 - Poles and footings, cabinets, junction boxes, sensors, and other features associated with illumination and signal facilities.*
 - Curbs, walks, stairs, walls, mailboxes, and other miscellaneous structures.*
 - Pipes, manholes, inlets, weirs, settlement basins and other drainage and water quality structures and facilities.*
 - *This includes field verification of fit and functionality or as instructed by the Engineer.
 - Landscaping items.
 - Earthwork features including guardrail flares and mounds, berms, and mounds
 - Buildings and other structures and facilities.
 - Environmental impact mitigation features.
 - Remove and dispose of all flagging, lath, stakes and other temporary staking material after the Project is completed.

00305.90 Payment – Add the following to the end of the second paragraph:

Payment includes all temporary protection and direction of traffic measures including flaggers and signing necessary for the performance of the construction survey work.

Add the following paragraphs after the fourth paragraph:

The amount to be allowed for "Construction Survey Work" in the progress payments will not be in excess of the reasonable value of the surveying work performed under this specification as said reasonable value is estimated by the Engineer.

Costs incurred as a result of survey errors will be borne by the Contractor. Such costs include price adjustments for failure to meet requirements of the construction specifications, repair or removal and replacement of deficient product, and over-run of material.

SECTION 00310 – REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Comply with Section 00310 of the Standard Specifications supplemented and/or modified as follows:

00310.91 Lump Sum Basis – Add the following to the end of this subsection:

Item (a) also includes asphalt pavement saw cutting, no additional or separate payment will be made for saw cutting.

SECTION 00320 – CLEARING AND GRUBBING

Comply with Section 00320 of the Standard Specifications.

SECTION 00350 – GEOSYNTHETIC INSTALLATION

Comply with Section 00350 of the Standard Specifications.

SECTION 00405 – TRENCH EXCAVATION, BEDDING, AND BACKFILL

Comply with Section 00405 of the Standard Specifications supplemented and/or modified as follows:

00405.14 Trench Backfill – Modify this subsection as follows:

(a) **Class A Backfill** – Will be allowed only if native material is clean sand. Inspector or Engineer may require imported sand or Class B backfill if material is not suitable to be placed back into the trench as specified under section 00405.14a.

(b) **Class B Backfill** – Replace this subsection with the following:

(b) **Class B Backfill** – Use granular material consisting of gravel or crushed rock meeting the requirements of Section 00641. Designated size shall be 1-inch.

00405.42 Rock Excavation – Modify this subsection as follows:

Delete the second paragraph in its entirety, and replace with the following:

No blasting shall be allowed on this project without express written consent by the Agency.

00405.46 Backfilling – Modify this subsection as follows:

(a) **General** – Directly after "Test for density according to 00330.43," add the following:

All testing costs shall be **paid for by the Contractor** and considered within the scope of general services provided by the Contractor. Tests shall be performed by an ODOT-Certified Density Technician (CDT) according to the frequencies and methods described in the ODOT Field Tested Material Acceptance Guide. In addition to the testing requirements described in Section 00330.43, the Engineer may, at its discretion, require the Contractor's CDT to perform additional compaction

tests at the depth(s) and horizontal location(s) selected by the Engineer, and such work shall be paid for by the Contractor, at no additional cost to the Agency.

00405.90 Payment – Add the following at the end of the “No separate or additional payment will be made for” list:

- Compaction testing

SECTION 00440 – COMMERCIAL GRADE CONCRETE

Comply with Section 00440 of the Standard Specifications.

SECTION 00442 – CONTROLLED LOW STRENGTH MATERIALS

Comply with Section 00442 of the Standard Specifications.

SECTION 00445 – SANITARY, STORM, CULVERT, SIPHON AND IRRIGATION PIPE

Comply with Section 00445 of the Standard Specifications supplemented and/or modified as follows:

00445.74 Video Inspection of Sanitary and Storm Sewers – Delete this section in its entirety.

00445.80 Measurement – Add the following:

(k) Cleanout Assemblies – The quantities of cleanout assemblies shall be measured on the unit basis. Item (k) includes all materials and labor required to construct a cleanout per City of Florence Standard Drawing F-310, including the wye fitting at the end of the sewer lateral, all fittings and pipe riser shown in Detail 2/D02 on the Plans.

(l) Laterals – The quantities of laterals shall be measured on the unit basis. Item (l) includes all materials and labor required to construct a lateral per detail on the Plans, including pipe, fittings, appurtenances, trenching, trench restoration, and surface restoration.

00445.91 Payment – Modify this subsection as follows:

Add the following:

(m) Cleanout Assembly, _____ inch Each

In item (m), the nominal pipe diameter will be inserted in the blank.

(n) Lateral, _____ inch Each

In item (n), the nominal pipe diameter will be inserted in the blank.

Delete the following in its entirety:

Video pipe inspection will be paid for according to 00415.90.

Trench resurfacing will be paid for according to 00495.90.

Add the following to the “No separate or additional payment will be made for:” list:

- Earthwork
- Trench Excavation
- Trench resurfacing

SECTION 00470 – MANHOLES, CATCH BASINS, AND INLETS

Comply with Section 00470 of the Standard Specifications supplemented and/or modified as follows:

00470.90 Payment – Add the following to the “No separate or additional payment will be made for:” list:

- Earthwork
- Trench resurfacing

SECTION 00490 – WORK ON EXISTING SEWERS AND STRUCTURES

Comply with Section 00490 of the Standard Specifications supplemented and/or modified as follows:

00490.90 Payment – Modify this subsection as follows:

Add the following:

(j) Bypass Pumping..... Lump Sum

(k) Connection to Existing Wetwell.....Lump Sum

Item (j) includes the complete cost of materials and labor to provide, install, staff, manage, and remove all temporary wastewater bypasses and bypass pumping. This price shall include pipeline plugs and all labor necessary to transfer wastewater flow to the bypass system. Price shall include all material and labor costs to furnish and install temporary pipe protection where bypass lines cross the road or driveways and to restore these areas back to original condition once temporary bypass pipelines are removed. Price shall include labor costs for planning and logistical coordination with the City for the transfer of wastewater flow into the bypasses and then back to the permanent system. Price shall also include labor costs for planning, notification, logistical coordination for the timing of when services are not connected to the permanent system and service is briefly interrupted. Costs for preparation of submittal for temporary bypass plans shall be included in this pay item.

Item (k) shall include payment in full for furnishing and installing all materials, and for furnishing all equipment, labor and incidentals necessary to complete the work as specified. No separate or additional payment will be made for excavation or backfill. Bypass pumping will be paid at the lump sum contract price for “Bypass Pumping.”

SECTION 00495 – TRENCH RESURFACING

Comply with Section 00495 of the Standard Specifications supplemented and/or modified as follows:

00495.90 Payment – Replace this subsection in its entirety except for the subsection number and title, with the following:

No separate or additional payment will be made for Trench Resurfacing. Payment will be included in payment made for the appropriate items under which this work is required.

SECTION 00596B – PREFABRICATED MODULAR RETAINING WALLS

Comply with Section 00596B of the Standard Specifications modified as follows:

00596B.80 Measurement - Add the following to the end of this subsection:

The estimated quantities of retaining walls are:

Station Limits	Area
“Wall 1” - Sta. 20+90 to Sta. 22+19 Lt.	769 sq. ft.
“Wall 2” - Sta. 23+76 to Sta. 25+16 Lt.	869 sq. ft.

"Wall 3" - Sta. 34+75 to Sta. 35+75 Lt.
"Wall 4a" - Sta. 41+22 to Sta. 51+71 Lt.
"Wall 5" - Sta. 57+63 to Sta. 58+55 Rt.

732 sq. ft.
8000 sq. ft.
650 sq. ft.

SECTION 00596D – SOIL NAIL RETAINING WALLS

Section 00596D, which is not a Standard Specification, is included in this Project by Special Provision.

DESCRIPTION

00596D.00 Scope - This work consists of constructing a permanent soil nailed wall as specified herein, and as shown on the plans. Temporary soil nail walls and the final facing are not covered in this specification. The work includes:

- Excavating staged lifts in accordance with the plans and approved submittals.
- Drilling soil nail holes to the diameter and length required to develop the specified capacity as shown on the plans.
- Installing soil nails including placement and grouting.
- Performing soil nail testing and providing test results to the Engineer.
- Providing and installing the specified drainage features.
- Providing and installing bearing plates, washers, nuts, couplers, and other required miscellaneous materials.
- Constructing the initial shotcrete face.

CONSTRUCTION

Refer to Section 1.00 and Section 2.00 of "Technical Specifications for Soil Nail Wall" in the Contract Documents.

MEASUREMENT

Refer to Section 3.00 of "Technical Specifications for Soil Nail Wall" in the Contract Documents.

PAYMENT

Refer to Section 3.00 of "Technical Specifications for Soil Nail Wall" in the Contract Documents.

SECTION 00641 – AGGREGATE SUBBASE, BASE AND SHOULDERS

Comply with Section 00641 of the Standard Specifications.

SECTION 00730 – EMULSIFIED ASPHALT TACK COAT

Comply with Section 00730 of the Standard Specifications supplemented and/or modified as follows:

00730.90 Payment – Replace with the following:

00730.90 Payment – No separate or additional payment will be made for emulsified asphalt tack coat. Emulsified asphalt tack coat is incidental to one or more bid items.

SECTION 00744 – ASPHALT CONCRETE PAVEMENT

Comply with Section 00744 of the Standard Specifications.

SECTION 00745 – ASPHALT CONCRETE PAVEMENT – STATISTICAL ACCEPTANCE

Comply with Section 00745 of the Standard Specifications supplemented and/or modified as follows:

00745.80 Measurement – Add the following:

No separate or additional payment will be made for emulsified asphalt tack coat. Emulsified asphalt tack coat is incidental to ACP.

00745.95 Price Adjustments – Add the following to the end of this subsection:

The maximum CPF for any case will be 1.0.

SECTION 00748 – ASPHALT CONCRETE PAVEMENT REPAIR

Comply with Section 00748 of the Standard Specifications modified as follows:

00748.80 Measurement – Delete the sentence that begins "EAC and ACP will be measured..."

00748.90 Payment – Replace the sentence that begins "EAC and ACP will be paid for..." with the following:

EAC and ACP are incidental to asphalt concrete pavement repair.

Add the following sentence:

No separate or additional payment will be made for EAC or ACP.

SECTION 00759 – MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES

Comply with Section 00759 of the Standard Specifications supplemented and/or modified as follows:

Add the following subsection:

00759.55 Correction of Deficient Structures - Unless otherwise approved, notify the Engineer before performing corrective action. Correct deficiencies at no additional cost to the Agency. Perform corrective actions as directed, according to the approved corrective action plan, and according to the following:

(a) **Minor Corrective Action** - Submit Equipment and procedure for minor corrective action to the Engineer for approval. Minor corrective action can be performed to correct a deficiency up to 1 square foot per panel. Corrective action exceeding 1 square foot per panel requires removal and replacement according to 00150.25. Perform minor corrective action according to the following:

(1) **Concrete Grinding** - Grinding to correct high area deficiencies is limited to 3/16 inch. Use equipment meeting the requirements of 00759.23. Resurface all ground concrete surfaces according to 00759.55(a)(2).

(2) **Concrete Resurfacing** - Resurfacing to correct low area deficiencies is limited to 3/16 inch depth. Existing concrete is to be at least 7 Days old prior to resurfacing. Resurface repair areas according to the following:

a. **Keyway** - Sawcut a keyway at the boundaries of repair areas that are not already defined by panel control joints. Sawcut shall be 1/8 inch wide and 1/4 inch deeper than the edge of the repair area. Bevel inside edge of keyway at a 45 degree angle.

b. **Surface Preparation** - Prepare limits of repair area by grinding using Equipment from 00759.23. After grinding, sandblast the surface of the repair area. Clean the surface using a low pressure washer, less than 5,000 psi.

c. **Presoak** - Presoak the repair area for a minimum of 30 minutes to saturated surface dry. Prior to resurfacing, ensure there is no ponding water on the surface.

d. **Resurface** - Provide concrete resurfacer from the QPL according to 02015.60; refer to QPL remarks to select an appropriate material based on allowable installation depths. Furnish resurfacer in a color that closely matches the color of surrounding concrete surfaces. Mask boundaries of the repair area. Use hand tools to work resurfacer into keyways and match existing grade at boundaries. Apply a light broom-finish to achieve non-slip surface.

e. **Curing and Return to Traffic** - Wet cure for a minimum of 1 hour or per the manufacturer's recommendation, whichever is more restrictive. Follow manufacturer's recommendation for return to traffic time.

(3) **ACP Grinding** - Taper grind to match existing Pavement with a minimum grinding width of 1 foot for each 1/4 inch of ACP removed.

(b) **Acceptance of Structures** - Once the corrective work or replacement has been completed, acceptance will be based on the Engineer's inspection and approval of the Structure.

SECTION 00850 – COMMON PROVISIONS FOR PAVEMENT MARKINGS

Comply with Section 00850 of the Standard Specifications.

SECTION 00865 – LONGITUDINAL PAVEMENT MARKINGS - DURABLE

Comply with Section 00865 of the Standard Specifications supplemented and/or modified as follows:

00865.45 Installation – Replace the bullet that begins, "Method AB: Non-Profiled Markings..." with the following bullet:

Method AB: Non-Profiled Markings – Apply with extrusion or ribbon type process. Sprayer applications will not be allowed.

SECTION 00867 – TRANSVERSE PAVEMENT MARKINGS – LEGENDS AND BARS

Comply with Section 00867 of the Standard Specifications.

SECTION 00905 – REMOVAL AND REINSTALLATION OF EXISTING SIGNS

Comply with Section 00905 of the Standard Specifications.

SECTION 00910 – WOOD SIGN POSTS

Comply with Section 00910 of the Standard Specifications supplemented and/or modified as follows:

00910.90 Payment – Replace this subsection in its entirety except for the subsection number and title, with the following:

No separate or additional payment will be made for Wood Sign Posts. Payment will be included in payment made for the appropriate items under which this work is required.

SECTION 00920 – SIGN SUPPORT FOOTINGS

Comply with Section 00920 of the Standard Specifications supplemented and/or modified as follows:

00920.90 Payment – Replace this subsection in its entirety except for the subsection number and title, with the following:

No separate or additional payment will be made for Sign Support Footings. Payment will be included in payment made for the appropriate items under which this work is required.

SECTION 00930 – METAL SIGN SUPPORTS

Comply with Section 00930 of the Standard Specifications supplemented and/or modified as follows:

00930.90 Payment – Replace this subsection in its entirety except for the subsection number and title, with the following:

No separate or additional payment will be made for Metal Sign Supports. Payment will be included in payment made for the appropriate items under which this work is required.

SECTION 00940 – SIGNS

Comply with Section 00940 of the Standard Specifications.

SECTION 00990 – TRAFFIC SIGNALS

Comply with Section 00990 of the Standard Specifications modified as follows:

00990.90 Payment - Add the following pay item:

Pay Item	Unit of Measurement
(h) Solar Rectangular Rapid Flashing Beacon Installation	Each

Add the following notes to the end of this subsection:

Item (h) includes furnishing and installing all items of the rectangular rapid flashing beacon system.

No separate payment will be made for signs, sign supports, footings, electrical systems, or any other materials required for installation of item (h) as shown on the Plans.

SECTION 01040 - PLANTING

Comply with Section 01040 of the Standard Specifications supplemented and/or modified as follows:

01040.90 Payment – Replace with the following:

01040.90 Payment – The accepted quantities of planting and associated Work performed under this Section will be paid for according to the following:

Pay Item	Unit of Measurement
(a) Planting - Trees	Each

Bid Item (a) includes payment for all plants, topsoil, mulch, fertilizers, amendments, and planting materials. Payment will be payment in full for furnishing and placing all Materials, and for furnishing all labor, equipment, incidentals, and other Work required to install, establish, and sustain plant life complete, and in-place according to these Special Provisions, and the Plans.

No separate or additional payment will be made for:

- Topsoil
- Mulch
- Soil amendments
- Soil bio-amendments
- Fertilizers
- Herbicides
- Anti-transpirants
- Game repellent
- Browsing protectors
- Pesticides
- Water
- Pressure moisture stress sensors
- Corrective Work during the plant Establishment Period

SECTION 01069 – METAL HANDRAIL AND PEDESTRIAN FENCE

Section 01069, which is not a Standard Specification, is included in this Project by Special Provision.

Description

01069.00 Scope - This Work consists of furnishing and installing metal handrails and pedestrian rail units as shown or directed.

Materials

01069.10 Materials - Furnish Materials meeting the following requirements:

Commercial Grade Concrete.....	00440
Metal Handrail.....	02830
Pedestrian Fence.....	02831

Construction

01069.40 Metal Handrail and Pedestrian Fence:

(a) **Handrail** - Fabricate and install imbedded and bolted down metal handrail as shown.

(b) **Pedestrian Fence** - Fabricate and install pedestrian fence units as shown.

01069.41 Welding - Welding, welder qualifications, prequalification of weld details and inspection of welds shall conform to AWS D1.1 or AWS D1.2. Submit all welding procedure specifications 7 Days prior to fabrication to the Engineer for approval.

01069.42 Concrete Footings - Dimensions of footings shall not be less than shown and shall fill the excavated areas. Place the concrete with contact against firm Soil at the sides and bottom and tamp around the posts and brace ends after the posts and braces have been brought to and firmly held in proper position. Strike off, slope or crown and smooth the surface of the concrete at the ground level to shed water. Allow to cure for at least 5 Calendar Days before subjecting the posts to strain.

Excavate for concrete footings to reasonably Neat Lines, but not less than the specified dimensions in Soil, or not less than 18 inches deep in Rock. Prevent disturbance of original ground at the sides and bottom of the excavation.

Dispose of Materials removed under these provisions, including excess excavation, in a satisfactory manner.

01069.43 Bolt Holes:

(a) Punched Holes - Use a die with a diameter not exceeding the diameter of the punch by more than 1/16 inch. Ream holes that are required to be enlarged to admit the anchor bolts. Make clean cut holes without torn or ragged edges.

(b) Accuracy of Punched Holes - After punching the holes in the plate, stack the plates with the edges even and insert a cylindrical pin, 1/8 inch smaller in diameter than the nominal size of the punched hole, through the punched holes perpendicular to the face of the plate. No drifting of the rod while passing through each of the punched holes in the stack is allowed. Ensure that the edges of the stack stay in alignment. Non-conforming pieces will be rejected.

Measurement

01069.80 Measurement - The quantities of Work performed under this Section will be measured according to the following:

- **Length Basis** - Metal handrail will be measured on the length basis, by measuring along the top rail member, from center of end post to center of end post.
- **Unit Basis** - Pedestrian fence will be measured on the unit basis. Pedestrian fence will be counted for each 62 inch long unit.

Payment

01069.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	Unit of Measurement
(a) Metal Handrail, _____ Rails.....	Foot
(b) Pedestrian Fence	Each

In item (a), the number of rails will be inserted in the blank.

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

SECTION 01070 – MAILBOX SUPPORTS

Comply with Section 01070 of the Standard Specifications supplemented and/or modified as follows:

01070.90 Payment – Replace this subsection in its entirety except for the subsection number and title, with the following:

The accepted quantities of work permitted under this section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	Unit of Measurement
(a) Mailbox Removal, Storage, and Reinstallation.....	Lump Sum
Payment will be payment in full for furnishing and placing all materials, and for furnishing all equipment, labor, and incidentals necessary to complete the work as specified.	
No separate or additional payment will be made for:	
<ul style="list-style-type: none">• Removing existing mailbox supports• Providing temporary installations• Storing removed mailboxes• Installing new supports in permanent locations• Installing owner-furnished supports, mailboxes, and newspaper boxes	

SECTION 01120 – IRRIGATION SYSTEMS

Comply with Section 01120 of the Standard Specifications.

SECTION 01140 – POTABLE WATER PIPE AND FITTINGS

Comply with Section 01140 of the Standard Specifications supplemented and/or modified as follows:

01140.48 Maintaining Services – Add the following:

Any water shutdowns require forty-eight (48) hours of notification to all affected water customers supplying them with time water will be shut off and the time that the water will be turned back on. City of Florence Public Works will notify affected water customers. Notifications shall be distributed by the City of Florence Public Works

01140.49 Backfilling – Add the following:

All pipe joints, fittings, and valves shall be inspected before pipe is backfilled. Any pipe covered before inspection will be uncovered, visually inspected and backfilled at the contractors expense.

01140.90 Payment – Modify this subsection as follows:

Remove the sentence that begins "Trench resurfacing will be paid...."

Add the following bullets to the paragraph that begins "No separate or additional payment..."

- Trench resurfacing
- Repair and/or restoration of areas outside of the paved roadway including, but not limited to, landscaping, surfacing, and structures

SECTION 01150 – POTABLE WATER VALVES

Comply with Section 01150 of the Standard Specifications.

SECTION 01160 – HYDRANTS AND APPURTENANCES

Comply with Section 01160 of the Standard Specifications supplemented and/or modified as follows:

01160.10 Materials – Add the following:

Contractor shall utilize Fluorocarbon Bolts (Blue Bolts) on all new hydrants to be installed. See Section **02475.10**.

SECTION 01170 – POTABLE WATER SERVICE CONNECTIONS, 2 INCH AND SMALLER

Comply with Section 01170 of the Standard Specifications supplemented and/or modified as follows:

01170.40(b) Installation – add the following paragraph:

The Contractor is responsible for furnishing and installation of service connections to the water main from the main to the right of way; including, but not limited to, excavation, backfill, service line, meter box, and appurtenances. City of Florence forces will furnish new water meters and radio units (MXUs) as needed. The Contractor shall install service connection materials on the customer side of the right of way. In addition, contractor will make connections to existing service lines on the customer side of the meter.

01170.90 Payment: - Add the following paragraph to the end of this subsection:

Item (a) also includes restoration and/or repair of any disturbed areas including, but not limited to, landscaping, surfacing, and structures. No separate or additional payment will be made for restoring disturbed areas to their pre-construction condition. In addition, item (a) includes removal of the existing water meter box, service line as necessary, and appurtenances to enable restoration work.

SECTION 02415 – PLASTIC PIPE

Comply with Section 02415 of the Standard Specifications supplemented and/or modified as follows:

02415.50 Polyvinyl Chloride Pipe

Add the following to the end of this subsection:

Furnish PVC sanitary, storm, culvert, siphon and irrigation pipe and fittings with less than 2-feet but at least 1-foot cover meeting the requirements of AWWA C900 or AWWA C905 with DR 18.

SECTION 02450 – MANHOLE AND INLET MATERIALS

Comply with Section 02450 of the Standard Specifications.

SECTION 02470 – POTABLE WATER PIPE MATERIALS

Comply with Section 02470 of the Standard Specifications.

SECTION 02475 – POTABLE WATER FITTING MATERIALS

Comply with Section 02475 of the Standard Specifications supplemented and/or modified as follows:

SECTION 02475.10 General – Replace this subsection with the following:

Bolts, Nuts and washers used for securing fittings shall be of similar materials. All bolts on fittings, valves and other bolted pipe joints shall be Cor-Blue or equivalent fluorocarbon resin coated and shall be in compliance with ANSI/AWWA C111/A21.11 (Current Revision).

All materials in contact with potable water shall conform to ANSI/NSF Standard 61, Drinking water System Components – Health Effects, or equivalent, and ANSI/NSF Standard 372, Drinking Water System Components – Lead Content.

SECTION 02480 – POTABLE WATER VALVE MATERIALS

Comply with Section 02480 of the Standard Specifications supplemented and/or modified as follows:

02480.20 Gate Valves: Add the following to this subsection:

02480.20 (c) – Only gate valves manufactured by the Mueller Company or the Kennedy Valve Company will be accepted that meets AWWA standards with epoxy coated inside and out. Check with the City Public Works Department prior to ordering to verify preferred valve type meets current city standard.

SECTION 02485 – HYDRANT AND APPURTENANCE MATERIALS

Comply with Section 02485 of the Standard Specifications supplemented and/or modified as follows:

02485.10 Fire Hydrants: Add the following to this subsection:

02485.10(a) – Fire Hydrants shall be: Mueller – Mueller Super Centurion or approved equal.

SECTION 02490 – POTABLE WATER SERVICE CONNECTION MATERIALS, 2 INCH AND SMALLER

Comply with Section 02490 of the Standard Specifications supplemented and/or modified as follows:

02490.40 (b) Polyethylene Tubing Service Pipe: Replace this subsection with the following:

Polyethylene tubing service pipe shall meet the requirements of AWWA C901, and ASTM D-2239. Tubing shall be high molecular mass with a 200 psi rating. Tubing used for ¾ inch and 1 inch shall be SDR 7 and shall be blue in color.



TECHNICAL SPECIFICATIONS FOR SOIL NAIL WALL CONSTRUCTION

1.00 Soil Nailing

Part 1 - General

Summary

This Section specifies the material and construction requirements for the permanent soil nail wall systems indicated in the Contract Documents. This Section also specifies requirements for any design modifications to be made to the proposed permanent soil nail wall systems.

References

This Section incorporates by reference the latest revisions of the following documents.

A. American Concrete Institute (ACI)

1. ACI 318 Building Code Requirements for Structural Concrete and Commentary

B. American Society for Testing and Materials (ASTM)

1. ASTM A36/A36M Standard Specification for Carbon Structural Steel
2. ASTM A123/A123M Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
3. ASTM A307 Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60,000 PSI Tensile Strength
4. ASTM A563 Standard Specification for Carbon and Alloy Steel Nuts
5. ASTM A615/A615M Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
6. ASTM A722/A722M Standard Specification for Uncoated High-Strength Steel Bars for Prestressing Concrete
7. ASTM A767/A767M Standard Specification for Zinc-Coated (Galvanized) Steel Bars for Concrete Reinforcement
8. ASTM C33/C33M Standard Specification for Concrete Aggregates
9. ASTM C109/C109M Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50-mm] Cube Specimens)
10. ASTM C150/C150M Standard Specification for Portland Cement
11. ASTM D1248 Standard Specification for Polyethylene Plastics Extrusion Materials for Wire and Cable
12. ASTM D1784 Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds

13. ASTM D1785 Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120
14. ASTM D3350 Standard Specification for Polyethylene Plastics Pipe and Fitting Materials
15. ASTM D4716 Standard Test Method for Determining the (In-plane) Flow Rate per Unit Width and Hydraulic Transmissivity of a Geosynthetic Using a Constant Head

C. Federal Highway Administration (FHWA)

1. FHWA NHI-14-007 Geotechnical Engineering Circular No. 7 - Soil Nail Walls

D. Oregon State Department of Transportation (ODOT)

1. Geotechnical Design Manual, Version 2.0
2. Standard Specifications for Construction.

Definitions

- A. Closure time: The duration of time between excavation to the neat line and the application of the shotcrete.
- B. Drill bench: Temporary bench created for purposes of installing soil nails.
- C. Nail declination: declination of soil nail below horizontal; measured in degrees.
- D. Nail splay: Angle of soil nail deflection from perpendicular to the wall face, when viewed in plan; measured in degrees.
- E. Neat line: Excavated surface corresponding to final wall excavation face limits as indicated in the Contract Documents.
- F. Soil Nail System: Excavation support system that occurs in staged lifts, consisting of soil nails and shotcrete facing. The excavation in the vicinity of the wall requires special care and effort compared with general earthwork excavation.

Submittals

- A. Product Data: Manufacturer's product data for products indicated.
- B. Soil Nail Construction Work Plan:
1. Prior to initiating the work.
 2. In accordance with quality assurance/quality control requirements as stated elsewhere in the Contract Documents.
- C. Qualifications.
- D. Certifications.
- E. Soil Nail Installation Records.

F. Soil Nail Test Results.

G. As-Built Information: As-built documents showing location, orientation, length, declination, splay angle, bar type, and shotcrete strength; and elevations of the top and bottom of the constructed wall.

Quality Assurance

A. Qualifications:

1. Contractor: Demonstrate completion of at least three (3) soil nail retaining wall projects of similar size and complexity and in similar soil conditions in the past three (3) years.
2. Onsite supervisors and drill operators: Demonstrate completion of at least three (3) similar soil nail walls in similar soil conditions in the past three (3) years.

B. Certifications:

1. Certified mill test for steel nail bars demonstrating the grades and physical and chemical properties of the steel.
2. Certified calibration records from an Independent Testing Laboratory for each test jack and pressure gage pair and load cell to be used. Include the following items on calibration records: device identification numbers, date tested, and calibration test results to be certified for accuracy within 2 percent of the applied loads within 1 year at the time of submittal.
3. Manufacturer certification for bearing plates, nuts and washers, nail couplers, and bar centralizers.

Delivery, Storage, and Storage

A. Store cement to prevent moisture degradation and partial hydration. Discard cement that has become caked or lumpy.

B. Soil Nail Steel:

1. Keep soil nail bars free of dirt, rust, and other deleterious material prior to installation.
2. Handle soil nail bars in such a manner so as not to overstress the bar.
3. Damage to the soil nail bar because of overstressing, abrasion, cuts, nicks, welds, and weld splatter shall be cause for rejection by the Resident Engineer or Designer of Record.
4. Grounding of welding leads to the soil nail steel is not allowed.
5. Heavy corrosion shall be cause for rejection by the Resident Engineer or Designer of Record.

C. Drainage Matting:

1. Provide drainage matting in rolls wrapped with a protective covering.
2. Store in a manner that protects the fabric from dust, debris, and shotcrete rebound.

3. Do not remove protective wrapping until immediately before the drainage matting is installed.
4. Avoid extended exposure to ultraviolet light.

Soil Nail Construction Work Plan

- A. Design Calculations: If modifications are made to the soil nail system indicated in the Contract Documents, provide calculations in accordance with design criteria specified herein. Design calculations and updated drawings shall be prepared under the direction of and sealed by a Professional Engineer licensed in the State of Oregon.
- B. Shop Drawings: If modifications are made to the soil nail system indicated in the Contract Documents or any additional soil nail wall systems are designed by the Contractor, provide Shop Drawings with the following information.
 1. Consistent with layout indicated in the Contract Documents, except in limited areas where adjustments to soil nail declination or splay angle are necessary to maintain required clearances.
 2. Indicate for each soil nail: Horizontal and vertical position, length, diameter, declination, bar size and material, splay angle, and design bond strength.
 3. Show location of existing utilities within a distance of the wall face equal to the length of the soil nails plus 10 feet.
 4. Indicate locations of drainage matting, drain grates, and other appurtenances.
 5. Indicate shotcrete thickness and reinforcement.
- C. Site Drainage Plan: Address all elements necessary to divert, control, and dispose of surface and subsurface water during construction of the soil nail wall, coordinated with other requirements indicated. Control of surface water behind retaining walls may be accomplished by sloping to promote runoff away from the excavation, trenches and sumps, or shotcrete gutters. Grade the excavation to promote drainage away from the toe of the retaining walls.
- D. Excavation Plan: Detail how excavation will proceed for each lift. Provide a list of equipment that will be used. Provide the sequence that will be used and duration that each cut face will be exposed. Provide bench heights, extents, and methods for removing protrusions and backfilling voids. Provide contingency methods that will be used to stabilize cut face if the cut face ravel, slides, or is otherwise not stable.
- E. Proposed Drilling Methods and Equipment: Including drill rig type, use of cased or open-hole methods, proposed drill hole diameter, drill bench heights and extents, method of cuttings removal, and methods for removing protrusions and backfilling voids.
- F. Soil Nail Installation Details:
 1. Nail grout mix design including: brand and type of Portland cement and admixtures, quality and gradation of aggregates, proportion of mix by weight, and compressive strength test results verifying the specified minimum 3-day and 28-day grout strength.

2. Nail grout placement procedures and equipment.
3. Nail testing methods and equipment including: details of jacking frame and appurtenant bracing, methods of maintaining the hole sidewalls in the unbonded zone, methods of isolating test soil nails during shotcrete application, and methods of grouting the unbonded length of test nails after testing.
4. Bearing plates and nuts used.
5. Drainage matting installation procedures.
6. Shotcrete installation procedures, in accordance with requirements for shotcrete for excavation wall facings as stated elsewhere in the Contract Documents, Specifications 2.00.

Design Criteria

A. The following design criteria are provided if modifications are made to the soil nail system indicated in the Contract Documents. Design calculations and updated drawings shall be prepared under the direction of and sealed by a Professional Engineer licensed in the State of Oregon following the criteria outlined below.

B. Soil Nail System:

1. Design in accordance with the following:
 - a. ODOT Geotechnical Design Manual (GDM), Version 2.0
 - b. Publication No. FHWA NHI-14-007.
2. Be responsible for the stability of the interim temporary face cuts that exist prior to installation of the wall facing.

C. Applicable Design Methods:

1. Snail
2. GOLDNAIL
3. Other approved methods.

D. Soil Parameters:

1. Dense Dune Sand:
 - a. Unit Weight: 120 pounds per cubic foot (pcf)
 - b. Cohesion: 0 pounds per square foot (psf)
 - c. Ultimate Bond Strength: 50 pounds per square foot (psf)
2. Loose to Medium Dense Sand (above Dense Dune Sand unit):
 - a. Unit Weight: 120 pcf

- b. Cohesion: 21 psf
- c. Ultimate Bond Strength: 50 psf

E. Minimum Clearance:

1. Minimum Utility Clearance: 3 feet or distance required by authority having jurisdiction, whichever is greater
2. Minimum Clearance between Soil Nails: Center-to-center clearance between soil nails shall be at least 3.5 feet at the nail head and shall not be less than 2.5 feet over the length of the soil nails.
3. If necessary, adjust declination or splay angle of soil nails to meet clearance requirements.

F. Adjustments to soil nail declination and splay angle:

1. Adjustments to soil nail declination or splay angle from the scheduled values in the Contract Documents shall be indicated on the As-built Drawings.
2. Adjustment of each soil nail shall be either by adjustment of declination or adjustment of splay angle, but not adjustment of both declination and splay angle.
3. Adjustments to declination and splay angle shall be compatible with Contractor's means and methods such that integrity and performance of the soil nail wall is not impaired.
4. If adjusted declination is greater than 15 degrees below horizontal or splayed more than 5 degrees from perpendicular to the face of the wall, adjust the nail length so that the nail extends the same horizontal distance behind the wall face as it would if inclined 15 degrees and perpendicular to wall face.

G. Facing:

1. For shotcrete facing:
 - a. Design in accordance with FHWA NHI-14-007, ACI 318, and requirements for shotcrete for excavation wall facings as stated elsewhere in the Contract Documents, Technical Specifications 2.00.
 - b. Minimum thickness requirements: As indicated in the Contract Documents.

Soil Nail Installation and Test Records

A. Installation records shall include:

1. Date and time of installation.
2. Head location.
3. Soil conditions at the excavated wall face during drilling.
4. Drill hole diameter.

5. Length of installed nail.
6. Declination of installed nail.
7. Bar type.
8. Grout mix, pressure, and volume.

B. Test records shall include:

1. Testing procedures.
2. Testing measurements and results.
3. Shotcrete strength test data.
4. Grout strength test data.

Part 2 - Products

Materials

- A. Use construction materials for the soil nail walls that are new and without defect.
- B. Shotcrete: Refer to requirements for shotcrete for excavation wall facings as stated elsewhere in the Contract Documents.
- C. Soil Nail Grout: Neat or sand/cement mixture with:
1. Cement: ASTM C150/C150M, Type I, Type II, or Type I/II.
 2. Aggregates: ASTM C33/C33M and requirements for Portland cement concrete as stated elsewhere in the Contract Documents.
 3. Minimum 3-day compressive strength of 1500 psi.
 4. Minimum 28-day compressive strength of 4000 psi.
- D. Soil Nail Bars:
1. Steel: ASTM A615/A615M, grade 75.
- E. Bar Couplers: Provide 125 percent of the full tensile strength of the steel bar and the same corrosion protection characteristics as certified by the manufacturer.
- F. Headed Studs: ASTM A307, automatically end welded.
- G. Bearing Plates: ASTM A36/A36M.
- H. Nuts and Washers: ASTM A563, grade B, hexagonal-fitted, with beveled washer or spherical seat to provide uniform bearing.
- I. Corrosion Protection for Bars and Accessories: Provide corrosion protection for all steel soil nail bars and accessories where indicated by class in the Contract Documents.

1. Soil Nails: Galvanized in accordance with ASTM A767 Class 1.
2. Accessories: Hot dipped galvanized in accordance with ASTM A123.

J. Bar Centralizers:

1. Schedule 40 polyvinyl chloride (PVC) material securely attached to the soil nail bar.
2. Size centralizers to position the soil nail bar within 1 inch of center of the drill hole, to allow tremie pipe insertion to the bottom of the drill hole, and to allow the grout to flow freely up the drill hole.

K. Drainage Matting:

1. Manufactured with a drainage core (i.e., geonet) and a drainage geotextile attached to or encapsulating the core.
2. The drainage core shall have a minimum compressive strength of 15,000 psf covered with filter fabric capable of maintaining drainage void.
3. The drainage core with the geotextile fully encapsulating the core shall have a minimum flow rate of 20 gallons per minute per foot width tested in accordance with ASTM D4716.
4. Minimum 18 inches wide.

L. Weep Pipes and Drain Pipes: Polyvinyl chloride (PVC), solid and perforated wall, meeting ASTM D1785 Schedule 40.

Equipment

A. Drilling:

1. Select drilling equipment and method suitable for anticipated ground conditions.
2. In caving ground, use cased or augercast drilling methods to support the sides of the drill hole. Self-drilling-bar drilling methods shall not be used for permanent soil nails.

B. Grouting:

1. Use a continuously agitating type mixer capable of producing a uniformly mixed grout, free of lumpy and undispersed cement. Select the size of the grout mixer to allow the full length of the soil nail to be grouted in one continuous operation.
2. Use positive displacement grout pumps. Equip grout pump with a pressure gage that can measure at least twice, but no more than three times, the intended grout pressure.

C. Soil Nail Testing:

1. Dial gages:
 - a. A minimum of two dial gages capable of measuring to 0.001 inch available at the site to measure the soil nail movement.

- b. Minimum travel sufficient to allow the test to be performed without resetting the gages.
 - c. Align the dial gages within 5 degrees of the axis of the soil nail and support it independent of the jack setup.
- 2. Jack with pressure gage:
 - a. Calibrated as a unit by an Independent Testing Laboratory within the last 12 months prior to submittal.
 - b. Pressure gage graduated in 100 pounds per square inch increments or smaller.
 - c. Range for the pressure gage not more than twice the maximum anticipated pressure during the testing.
 - d. Ram travel for the jack is sufficient to enable the test to be performed without resetting the jack.
 - e. Capable of applying each increment load in less than one minute.
- 3. Reaction frame:
 - a. Sufficiently rigid and of adequate dimensions such that excessive deformation of the test apparatus requiring repositioning of any component does not occur during testing.
 - b. Where the reaction frame bears directly on the shotcrete facing, design the reaction frame to prevent fracture or significant cracking of the shotcrete.

Part 3 - Execution

General

- A. Sequence construction in accordance with the approved Soil Nail Construction Work Plan. Make no excavation steeper or higher than those specified on the approved Soil Nail Construction Work Plan above or below the soil nail wall.
- B. Visit the site prior to starting construction activities for the purpose of observing and documenting the preconstruction condition of existing structures, sidewalks, roadways, and the other infrastructure within or adjacent to the work area.
- C. The utilities referenced in the Contract Documents are for informational purposes only. Field locate all utilities shown and not shown in the Contract Documents prior to starting the work. Notify the Resident Engineer and Designer of Record of utility conflicts, and seek approval to shift soil nail locations, if required.
- D. Visual inspection should be performed daily during construction to identify signs of any movement at or behind the wall including movement and/or cracks developing in any of the existing structures behind the wall. Notify Resident Engineer if any movement is observed. If the Resident Engineer determines that movements warrant intervention, take all necessary corrective actions to stop the movement, and perform repairs to the impacted structures.

Preparation

Hold a readiness review meeting prior to the start of work to clarify the construction requirements for the work and to coordinate construction activities in accordance with requirements as stated elsewhere in the Contract Documents. Meeting shall be attended by: the Resident Engineer, the Contractor, the approved Subcontractors for the excavation, soil nailing, and shotcreting and the Designer of Record who will be observing the construction activities.

Soil Nail Wall Installation and Test Records

Document and maintain accurate records of soil nail installation and testing.

Excavation

- A. Do not excavate beneath a preceding shotcrete lift closer than 5 feet (horizontal) until:
 - 1. Nail grout and shotcrete on the preceding lift has reached 50 percent of their respective 28-day compressive strengths.
 - 2. Installation of connection hardware and soil nail testing for the preceding lift are complete and have been approved by the Resident Engineer.
- B. Perform any excavation closer than 5 feet (horizontal) to the shotcrete face in accordance with the drill bench requirements described below and as shown on the approved Soil Nail Construction Work Plan.
 - 1. During excavation of the drill bench for the next row of nails, maintain a bench to serve as a platform for the drilling equipment. Establish drill bench not more than 2 feet below the row of nails to be installed. Extend the bench out from the wall face a minimum distance to provide a safe working width for equipment and workers.
 - 2. Leave a stabilizing berm against the final wall excavation face neat line until commencement of wall excavation.

Wall Excavation

- A. Excavate to the neat line using procedures that:
 - 1. Prevent ground loss, swelling, air slaking, loosening of the soil face, and ground freezing.
 - 2. Minimize degradation of soil bearing support below the overlying portions of the soil nail wall and below the soil nails currently being installed.
 - 3. Minimize soil moisture loss.
- B. Do not excavate the ground beyond the neat line. Restore inadvertent over-excavation beyond the neat line using methods approved by the Resident Engineer. Increasing the thickness of shotcrete to fill large voids due to overexcavation or "overbreak" shall be approved by the Resident Engineer prior to commencement of such work.
- C. Maximum closure time:
 - 1. First lift wall face: 8 hours or as approved by the Resident Engineer.

2. Subsequent lifts: 16 hours, unless ground conditions are suitable for longer duration closure times, as approved by the Resident Engineer.
- D. For approval of extensions of the closure time, construct a test cut and demonstrate for each anticipated soil type that the unsupported final excavation face wall is stable throughout the proposed closure time.
- E. Boulders, cobbles or other intrusions that are encountered at the soil face are the responsibility of the Contractor. Construct shotcrete facing to the minimum specified thickness, and to the line and grade as shown in the Contract Documents, regardless of such intrusions.

Temporary End of Wall Conditions

Where the construction sequence results in discontinuous lifts along any soil nail row, extend the ends of the lifts beyond the end of next lower lift by at least 10 feet. Construct slopes or berms immediately beneath these stepped lifts to prevent sloughing or failure that would result in loss of face support provided by the slopes or berms.

Drilling

- A. Select drill hole diameter to provide the minimum specified grout cover over the soil nail bar and to develop the specified load carrying capacity presented in approved submittals.
- B. Water, mud drilling, or any other fluids used to assist in drilling are not permitted.
- C. Locate all nails within tolerance prior to drilling under the supervision of a Professional Land Surveyor.
- D. Immediately cease drilling operations if there is evidence either of ground movement such that soil nail wall is being adversely affected or of adjacent structures being damaged as a result of drilling operations. Take steps to stabilize the condition immediately and notify the Resident Engineer.

Soil Nail Bar Installation

- A. Install soil nails prior to the application of shotcrete at the location and to the length indicated on the approved Soil Nail Construction Work Plan, and in accordance with the Contract Documents. Remove bars that cannot be easily inserted to their full design length. After the drill holes have been cleaned sufficiently to allow unobstructed installation of the bar, reinstall bars.
- B. Centralizers are required for all soil nail bars, including bars installed using cased methods.

Grouting

- A. Leave no drill hole open for more than one hour prior to grouting. Grout drill hole after the installation of the soil nail bar. Grouting prior to the installation of the soil nail bar may be allowed upon demonstration, to the satisfaction of the Resident Engineer, that insertion of the soil nail bar can be achieved without difficulty after the grouting. If the Resident Engineer allows grouting prior to insertion of the soil nail bar, use neat cement grout.
- B. Inject grout at the lowest point of each drill hole through a tremie pipe casing, hollow stem auger, or drill rods. Fill drill hole in one, continuous operation. Keep end of conduit that delivers the grout below the surface of grout as the conduit is withdrawn. Withdraw grouting conduit in a manner to prevent the creation of voids.

- C. Continually monitor the grout level during withdrawal of casing such that level is adequate to prevent caving of the drill hole.

Wall Drainage

- A. Install drainage matting as shown in the Contract Documents. Secure drainage matting to the face of the excavation with the geotextile side against the ground surface.
- B. Use the shingle method of splicing with a minimum overlap of 6 inches to make drainage matting continuous, such that the flow of water is not impeded.
- C. Connect weep pipes to the drainage matting per the manufacturer's recommendations. Seal the weep pipe during application of shotcrete to prevent shotcrete intrusion. Remove the seal after application of shotcrete.
- D. Weep pipes shall extend beyond the final wall face.

Wall Facing Installation

Install shotcrete facing as indicated in the Contract Documents and conforming to requirements for shotcrete for excavation wall facings as stated elsewhere in the Contract Documents, Technical Specifications 2.00.

Connection to Wall Facing

Set soil nail bearing plates while wall facing shotcrete is plastic.

Hand-tighten retention nut such that full bearing is achieved without excessive squeezing of shotcrete from behind the bearing plate.

Grout Testing

Test the nail grout in accordance with ASTM C109/C109M at a frequency of no less than one test per every 25 cubic yards of grout placed, or once every week, whichever comes first.

Soil Nail Testing

- A. Perform verification and proof tests at locations selected by the Designer of Record and approved by the Resident Engineer. Perform soil nail pull-out tests when grout reaches at least 50 percent of its specified 28-day compressive strength.
- B. Tests shall be witnessed and documented by the Designer of Record. Submit results of all testing to the Resident Engineer.
- C. When temporary casing of the unbonded length of test nails is provided, install the casing to prevent any reaction between the casing and the grout bond length of the soil nail and the stressing apparatus.
- D. Independently support the jack and center it over the soil nail so that the nail does not carry the weight of the jack. Place the stressing equipment over the soil nail in such a manner that the jack, bearing plate, and the stressing anchorage are in alignment. Position the jack at the beginning of the test such that unloading and repositioning of jack during the test will not be required.

- E. Align the dial gages within 5 degrees of the axis of the soil nail and support independent of the jacking set-up and the wall.
- F. Provide an unbonded length of at least 3 feet for each test soil nail. Isolate test soil nail bar from shotcrete facing and the reaction frame during testing. Isolation of the test soil nail through the shotcrete facing shall not affect the location of the reinforcing steel under the bearing plate.
- G. Provide a bonded length of at least 4 feet for each test soil nail.
- H. Use bar size and grade such that allowable test load of bar is not exceeded during the test. Allowable test load shall be 80 percent of the steel tensile strength for ASTM A722 bars, 90 percent of the yield stress for ASTM A615 bars.
- I. Determine the Design Test Load (DTL) by multiplying the bond length of the nail by 50% of the ultimate bond strength provided in the Design Criteria of this specification or the applicable bond strength if modifications to the soil nail system indicated in the contract documents were made and approved.
- J. Maintain each increment of the test load within 5 percent of the intended test load during the indicated hold time.

Verification Testing

- A. Verification tests shall be performed prior to installation of production nails to verify installation methods, soil nail pullout capacity, and design assumptions. The soil nails used for the verification tests will be sacrificial. Do not incorporate these soil nails into permanent soil nail walls.
 - 1. Perform at least one verification test at each permanent soil nail wall within each soil or rock unit that the soil nails are bonded in.
- B. Construct verification test soil nails using the same methods and hole diameter as planned for the production soil nails. Additional verification testing is required for all changes in drilling equipment or installation methods. Provide additional verification testing at no additional cost to the Owner.
- C. During Verification testing, incrementally load test soil nails in accordance with the following schedule:

Load	Hold Time
Alignment Load (AL)	1 Minute
0.25 DTL	10 Minutes
0.50 DTL	10 Minutes
0.75 DTL	10 Minutes
1.00 DTL	10 Minutes
1.25 DTL	10 Minutes
1.50 DTL	60 Minutes
1.75 DTL	10 Minutes

2.00 DTL	10 Minutes
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- D. For the alignment load (AL), the minimum load required to align the testing apparatus, do not exceed 0.05 DTL. Reset dial gauges to zero after the alignment load has been applied.
- E. Monitor load with load cell and record the measured value at each increment.
- F. Monitor the verification test nail for creep for 60 minutes at 1.50 DTL load increment. Measure nail movement during the creep portion of the test and record at 1, 2, 3, 5, 6, 10, 20, 30, 50, and 60 minutes. Monitor load during the creep test using load cell and re-pump the jack as necessary to maintain a constant load.

Proof Testing

- A. Perform proof testing on approximately 5 percent of the production soil nails in each shotcrete lift, or one nail per row per wall, whichever is greater.
- B. Incrementally load soil nail in 0.25 DTL increments to a maximum load of 1.50 DTL. Hold each load increment until the dial gage reading is stable.
- C. For the alignment load (AL), the minimum load required to align the testing apparatus, do not exceed 0.05 DTL. Reset dial gauges to zero after the alignment load has been applied.
- D. Monitor load with pressure gage or load cell and record the measured value at each increment.
- E. Depending on performance, perform either a 10-minute or 60-minute creep test at 1.50 DTL. Measure nail movement and record at 1, 2, 3, 5, 6, and 10 minutes. Where the nail movement between 1 minute and 10 minutes exceeds 0.04 inch, maintain the maximum load an additional 50 minutes and record the movements at 20, 30, 50, and 60 minutes.
- F. At the Contractor's option, successful proof test nails meeting the acceptance criteria may be incorporated as production nails, provided that (1) the unbonded test length of the nail hole has not collapsed during testing, (2) the minimum required hole diameter has been maintained, and (3) the test nail length and bar size are equal to or greater than the scheduled production nail length and bar size. Grout the test nail unbonded length for test soil nails incorporated as production soil nails.

Test Nail Acceptance Criteria

- A. Test nails will be considered acceptable when:
 - 1. For verification tests, creep movement less than 0.08 inch between the 6 and 60 minute readings is observed, and the rate is linear or decreasing throughout the creep test load hold period.
 - 2. For proof tests, creep movement rate less than 0.04 inch between the 1 and 10 minute readings is observed, or creep movement less than 0.08 inch between the 6 and 60 minute readings, and the creep rate is linear or decreasing throughout the creep test load hold period.

3. The total movement at the maximum test load exceeds 80 percent of the theoretical elastic elongation of the test nail unbonded length.
4. A pullout failure does not occur during testing. Pullout failure is defined as the load at which attempts to increase the test load result in continued pullout movement of the test nail.

Inadequate Soil Nail Performance

- A. The Designer of Record will evaluate the results of each verification test. Installation methods that do not result in satisfactory testing results will be considered inadequate. Propose alternate methods and perform additional replacement verification tests if the installation methods are deemed inadequate. Install replacement test soil nails and test at no extra cost to the Owner.
- B. The Designer of Record may require that the Contractor replace some or all of the production soil nails represented by an inadequate proof test soil nail. Alternatively, the Designer of Record may require additional proof test soil nails to be installed and tested to verify the adequacy of the previously installed soil nails.

Soil Nail Tolerance

- A. Do not extend soil nails beyond indicated right-of-way or easement limits, unless approved otherwise by the Resident Engineer.
- B. Center bars within 1 inch of the center of the drill hole.
- C. Position individual soil nails within 6 inches of the locations shown on approved Soil Nail System Plan.
- D. Install nails at a declination angle of plus or minus 3 degrees of the angle shown in the Contract Documents.
- E. Install nails at a nail splay angle of plus or minus 3 degrees of angle shown on approved submittals.
- F. Relocate nails that encounter unanticipated obstructions or remove obstructions.

2.00 Shotcrete for Soil Nail Wall Facing

Part 1 - General

Submittals

Mix design shall be submitted to the Engineer for approval.

Quality Assurance

Shotcrete Crew Qualifications: Shotcrete crew foreman and nozzleman shall meet the following requirements.

- Furnish proof that each shotcrete crew foreman has at least five (5) years of experience in shotcrete application on projects of a similar character to this Contract along with

three references from persons responsible for supervision of these projects. Include name, address and telephone number for all references.

- Furnish proof that all nozzlemen have current ACI Shotcrete Nozzleman Certifications for application of shotcrete to vertical and overhead surfaces for both wet- and dry-mix shotcrete. Furnish proof that nozzlemen have successfully completed two projects of similar character to this Contract. All nozzlemen must shoot test panels that fulfill the requirements of Article 1.05B herein.

Preconstruction Testing

Test Panels: Prepare preconstruction test panels for examination by the Resident Engineer prior to job shotcrete placement. Place shotcrete for test panels in the presence of the Resident Engineer or designated special inspector. Preparation and testing shall comply with ASTM C1140, except as modified below:

- Test panel size shall be 24 inches by 24 inches minimum, with a minimum depth of 4-1/2 inches. Panels shall be made with sloped sides.
- Coring and testing shall be in compliance with ASTM C42, except that minimum core size shall be 4-inch diameter by 4-1/2 inches deep, trimmed to 4 inches long. Apply ASTM C42 length-to-diameter correction factors to the compressive strength results.
- Cores shall not be taken closer than 4 inches from any edge of the panel.

Shotcrete Mix Testing; Produce test panels for each proposed mix.

- Provide test panels without reinforcing. Obtain at least six test specimens from each panel.
- Test the nonreinforced specimens for compliance with the specified physical properties in accordance with ASTM C42.
- Test admixtures for compatibility with cement in accordance with ASTM C1141.
- Confirm design slump for each wet-mix shotcrete mix.

Nozzleman Qualification; Produce test panel for each proposed nozzleman and each anticipated shooting orientation.

- Provide test panels with reinforcing that reproduces the thickest and most congested area specified for the structure as identified by the Engineer.
- Test panels shall be shot using the same nozzleman, assistant, and equipment that will be used under the Contract, and with each of the approved concrete mix designs and at orientations to be used under the Contract.
- Shotcrete used shall be within $\pm 1/2$ inch of the design slump.
- Test panels for nozzleman qualification shall not be shot until the Shotcrete mix is approved.

When the prequalification test panel is rejected, a second panel may be shot. When the second test panel is rejected, the nozzleman will not be permitted to shoot on the Contract.

Construction Testing

Produce a material test panel for each mix and each work day. Test panel shall be kept moist and at 70 degrees Fahrenheit plus or minus 10 degrees Fahrenheit until moved to an Independent Testing Laboratory. Test specimens from test panels in compliance with ASTM 01140, except as modified below:

- Test panel size shall be 24 inches by 24 inches minimum, with a minimum depth of 4-1/2 inches. Panels shall be made with sloped sides.
- Test panels shall be shot at the same orientation and in the same manner as the work.
- Test panels shall be marked for later identification (mix, location, date, nozzleman).

Test specimens from core drilling of in-place shotcrete:

- Coring and testing shall be in compliance with ASTM C42, except that minimum core size shall be 4-inch diameter by 4-1/2 inches deep, trimmed to 4 inches long. Apply ASTM C42 length-to-diameter correction factors to the compressive strength results.
- Perform core sampling and testing at locations determined by the Engineer up to a maximum of fifty 3-core sets.
- Fill all core holes with non-shrink grout that has a 28-day compressive strength of 5,000 psi minimum. Prepare hole in accordance with grout manufacturer's instructions and finish flush with the surrounding shotcrete.
- In-place coring of permanent shotcrete shall not penetrate nor come within 4 inches of the geocomposite drainage board.
- Cores shall be clearly marked for later identification (mix, location, date, nozzleman).

The mean compressive strength of a set of three cores shall equal or exceed 0.85 f'_c with no individual cores less than 0.75 f'_c

Acceptance

The Contractor's Quality Assurance Manager is the primary person responsible to accept or reject shotcrete work with the concurrence from the Engineer. Shotcrete which does not conform to these Specifications may be rejected either during the shotcrete application process, or on the basis of tests from either test panels or the completed work.

Deficiencies observed during the shotcrete application process such as, but not limited to, the following constitute a cause for shotcrete rejection:

- Failure to properly control and remove build-up of overspray and rebound;
- Incomplete consolidation of shotcrete behind and around reinforcing steel, mesh and anchors;
- Incorporation of sand lenses, excessive voids, delaminations, sags or sloughing;
- Failure to apply shotcrete to the required line, grade, and tolerance.

Wherever possible perform remedial work to correct deficiencies while shotcrete is still plastic.

If the results of compliance tests from shotcrete test panels, or assessment of the plastic or hardened shotcrete indicate non-conformance of the shotcrete, the Contractor's Quality Assurance Manager will implement a program with oversight from the Engineer of evaluation of the in-place shotcrete. Such evaluation shall include, but not be limited to:

- Extraction of cores from in-place shotcrete at locations selected by the Resident Engineer and testing of such cores for compliance.
- Checking for delaminations using sounding or other appropriate non-destructive testing procedures.
- Bond pull-off testing.
- Diamond saw cutting or coring to check adequacy of encasement of reinforcing steel and anchors.

Part 2 – Products

Reinforcement

Deformed steel reinforcement: ASTM A615

Welded wire fabric: ASTM A1064

Admixtures

Accelerating additives shall be compatible with cement used, be noncorrosive to steel and shall not promote other detrimental effects such as cracking and excessive shrinkage and shall not contain calcium chloride. They are to be used in accordance with manufacturers' recommendations.

Liquid, non-aggressive type accelerator.

Provide a signed statement from certified Independent Testing Laboratory or cement manufacturer that proposed accelerator and dosing is compatible with cement used.

Cement

Portland cement: ASTM C150, Type II

Aggregate

Normal weight aggregate: ASTM C33. Aggregate not meeting ASTM C33 may be used provided preconstruction tests demonstrate the shotcrete meets all other specified requirements.

Lightweight aggregate: not permitted.

Maximum aggregate size: 3/4 inch.

Additional requirements for permanent shotcrete: Potential reactivity of aggregates: Use only aggregates classified as innocuous in accordance with ASTM C289.

Part 3 - Execution

Hot Weather Shotcreting

Do not place shotcrete when shotcrete material temperature is above 90 degrees Fahrenheit for wet-mix; 100 degrees Fahrenheit for dry mix. Lower temperature of reinforcement and receiving surfaces below 100 degrees Fahrenheit prior to placing shotcrete.

Cold Weather Shotcreting

Placing shotcrete may proceed when ambient temperature is 40 degrees Fahrenheit and rising. Placing shotcrete shall be discontinued when ambient temperature is 40 degrees Fahrenheit and falling unless protective measures are taken to protect shotcrete. Shotcrete material temperature, when placed, shall not be less than 50 degrees Fahrenheit. Applicable procedures used for cold weather concreting may be used for cold weather shotcreting. Protection against frost shall be maintained until the shotcrete has developed a compressive strength of 2,000 psi.

Protection

Protect surfaces not intended for shotcrete placement from deposit of rebound and overspray or impact from nozzle stream.

Remove rebound and hardened overspray from final shotcrete surfaces and from areas not intended for shotcrete placement.

3.00 Measurement and Payment

Part 1 – General

- A. Payment for the various items outlined in the Schedule of Prices that is included in the Bid Forms, as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary, to complete the various items of the Work all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs for compliance with the regulations of public agencies having jurisdiction, including Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor. No separate payment will be made for any item that is not specifically set forth in the Bid Schedules, and all costs therefore shall be included in the prices named in the Bid Schedules for the various appurtenant items of Work.
- B. The Owner shall not pay for material quantities which exceed the actual measured amount used and approved by the Engineer.
- C. It is the intention of these Technical Specifications that the performance of all Work under the bid for each item shall result in the complete construction, in an accepted operating condition, of each item.
- D. Work and material not specifically listed in the proposal but required in the Plans, Specifications, and general construction practice, shall be included in the bid price. No separate payment will be made for these incidental items.

Bid Item No. 300 - Soil Nails, Epoxy Coated, 12-Feet

The unit price shown shall cover the complete cost of providing all submittals, labor, tools, equipment and materials necessary for providing and installing permanent and approved soil nails in accordance with the Plans and detailed in the contract specifications. Price shall include: drilling, casing, nails, centralizer, grout, bearing plates, studs.

Payment shall be per each nail as determined to be necessary by the Owner and Engineer following verification testing. There shall be no price change for quantity change.

Bid Item No. 310: Soil Nails, Epoxy Coated, 20-Feet

The unit price shown shall cover the complete cost of providing all submittals, labor, tools, equipment and materials necessary for providing and installing permanent and approved soil nails in accordance with the Plans and detailed in the contract specifications. Price shall include: drilling, casing, nails, centralizer, grout, bearing plates, studs.

Payment shall be per each nail as determined to be necessary by the Owner and Engineer following verification testing. There shall be no price change for quantity change.

Bid Item No. 320: Soil Nails, Epoxy Coated, 26-Feet

The unit price shown shall cover the complete cost of providing all submittals, labor, tools, equipment and materials necessary for providing and installing permanent and approved soil nails in accordance with the Plans and detailed in the contract specifications. Price shall include: drilling, casing, nails, centralizer, grout, bearing plates, studs.

Payment shall be per each nail as determined to be necessary by the Owner and Engineer following verification testing. There shall be no price change for quantity change.

Bid Item No. 330: Soil Nail Verification Test Nails

The unit price shown shall cover the complete cost of providing all design, submittals, labor, tools, equipment and materials to perform verification testing in accordance with the Plans and detailed in the contract specifications. Item includes, but is not limited to, verification nail drilling, casings, bonding, nails, cribbing, bearing plates, jack hydraulic ram, hydraulic pumps, pressure gauges, and dial gauges.

Payment shall be per each verification nail. There shall be no price change for quantity change.

Bid Item No. 340: Soil Nail Wall – Prefabricated Drainage Mat

The unit price shown shall cover the complete cost of providing all work necessary for providing submittals, labor, tools, equipment and materials and any incidentals necessary to construct the soil nail drainage mat in accordance with the Plans and as detailed in the contract specifications.

Payment shall be per square yard. Drainage mat will be measured as the surveyed and exposed face of the reinforced slope. The top of soil nail reinforced slope is defined as the top of concrete facing. The bottom of soil nail reinforced slope is defined as construction grade as shown on the plans and no payment will be made for portions of drainage mat below construction grade elevations.

Bid Item No. 350: Soil Nail Wall - Reinforced Slope Facing and Drainage, Initial Facing

The unit price shown shall cover the complete cost of providing all work necessary for providing submittals, labor, tools, equipment and materials and any incidentals necessary to construct the soil nail reinforced slope including work plan, reinforcing, shotcrete facing, joints and drainage system in accordance with the Plans and as detailed in the contract specifications.

Payment shall be per square foot. Facing will be measured as the surveyed and exposed face of the reinforced slope. The top of soil nail reinforced slope is defined as the top of concrete facing. The bottom of soil nail reinforced slope is defined as construction grade as shown on the plans and no payment will be made for portions of soil nail reinforced slope below construction grade elevations.

The unit price shown shall cover the complete cost of providing all design.

Bid Item No. 360: Soil Nail Wall - Reinforced Slope Facing and Drainage, Final Facing

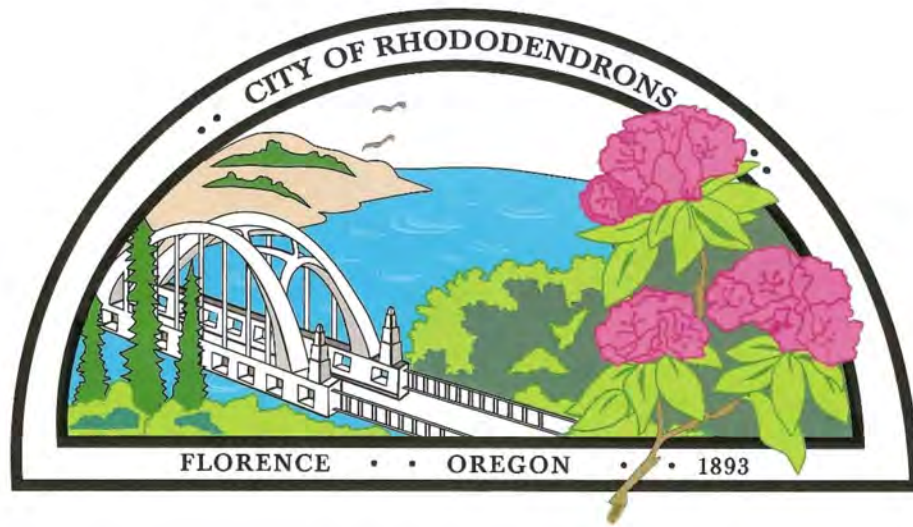
The unit price shown shall cover the complete cost of providing all work necessary for providing submittals, labor, tools, equipment and materials and any incidentals necessary to construct the soil nail reinforced slope including work plan, reinforcing, shotcrete facing and dye, joints and drainage system in accordance with the Plans and as detailed in the contract specifications.

Payment shall be per square foot. Facing will be measured as the surveyed and exposed face of the reinforced slope. The top of soil nail reinforced slope is defined as the top of concrete facing. The bottom of soil nail reinforced slope is defined as construction grade as shown on the plans and no payment will be made for portions of soil nail reinforced slope below construction grade elevations.

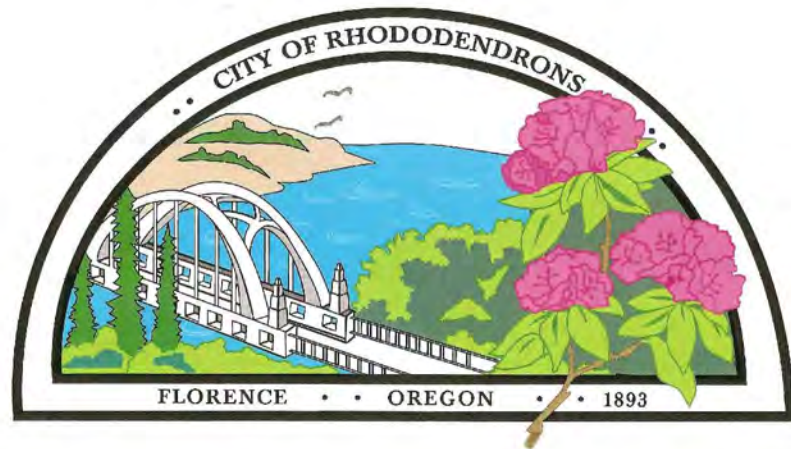
The unit price shown shall cover the complete cost of providing all design.



APPENDIX A – GEOTECHNICAL REPORT



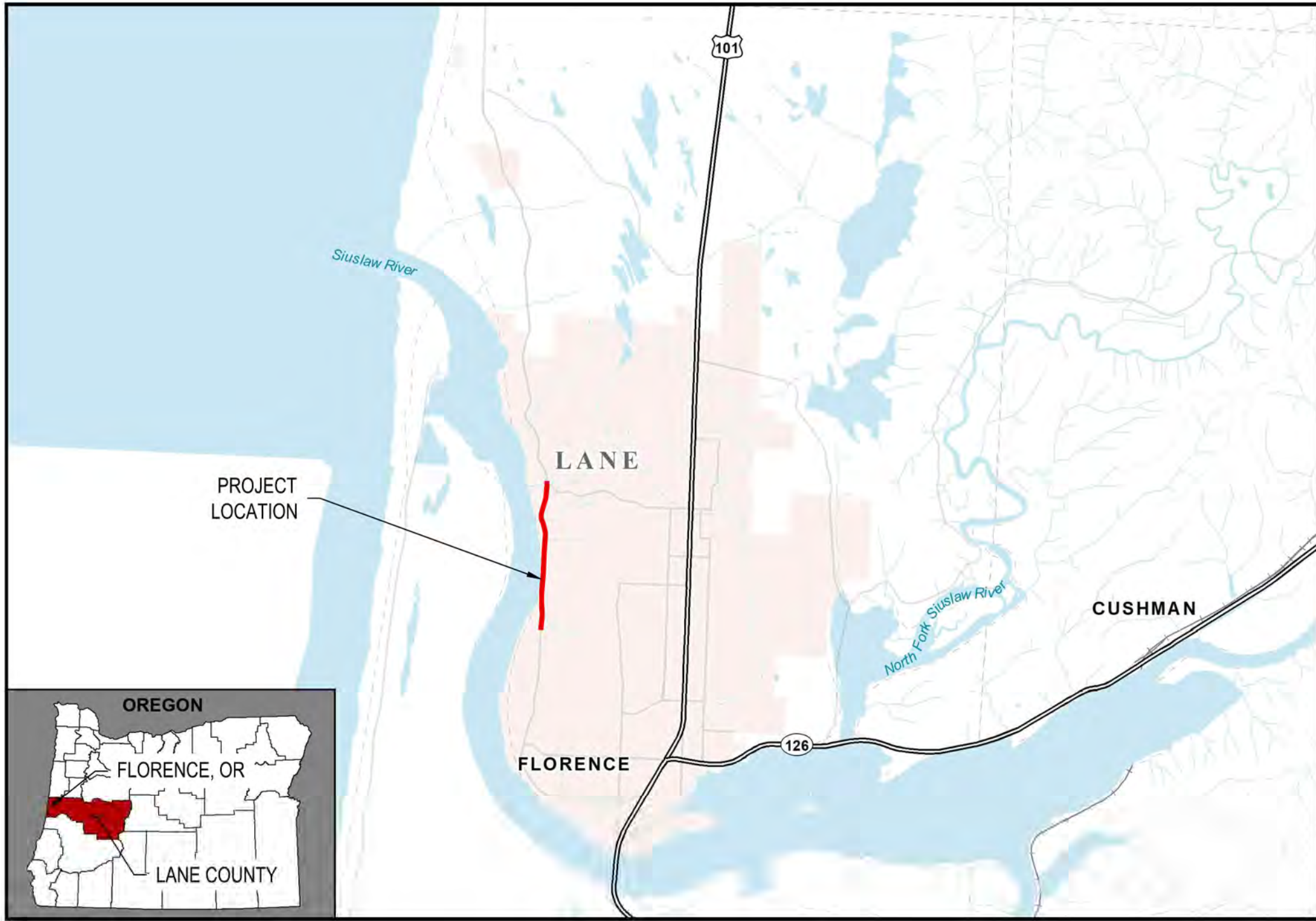
VOLUME II OF II – CONTRACT PLANS



CITY OF FLORENCE

RHODODENDRON DRIVE REALIGNMENT

PROJECT VICINITY MAP



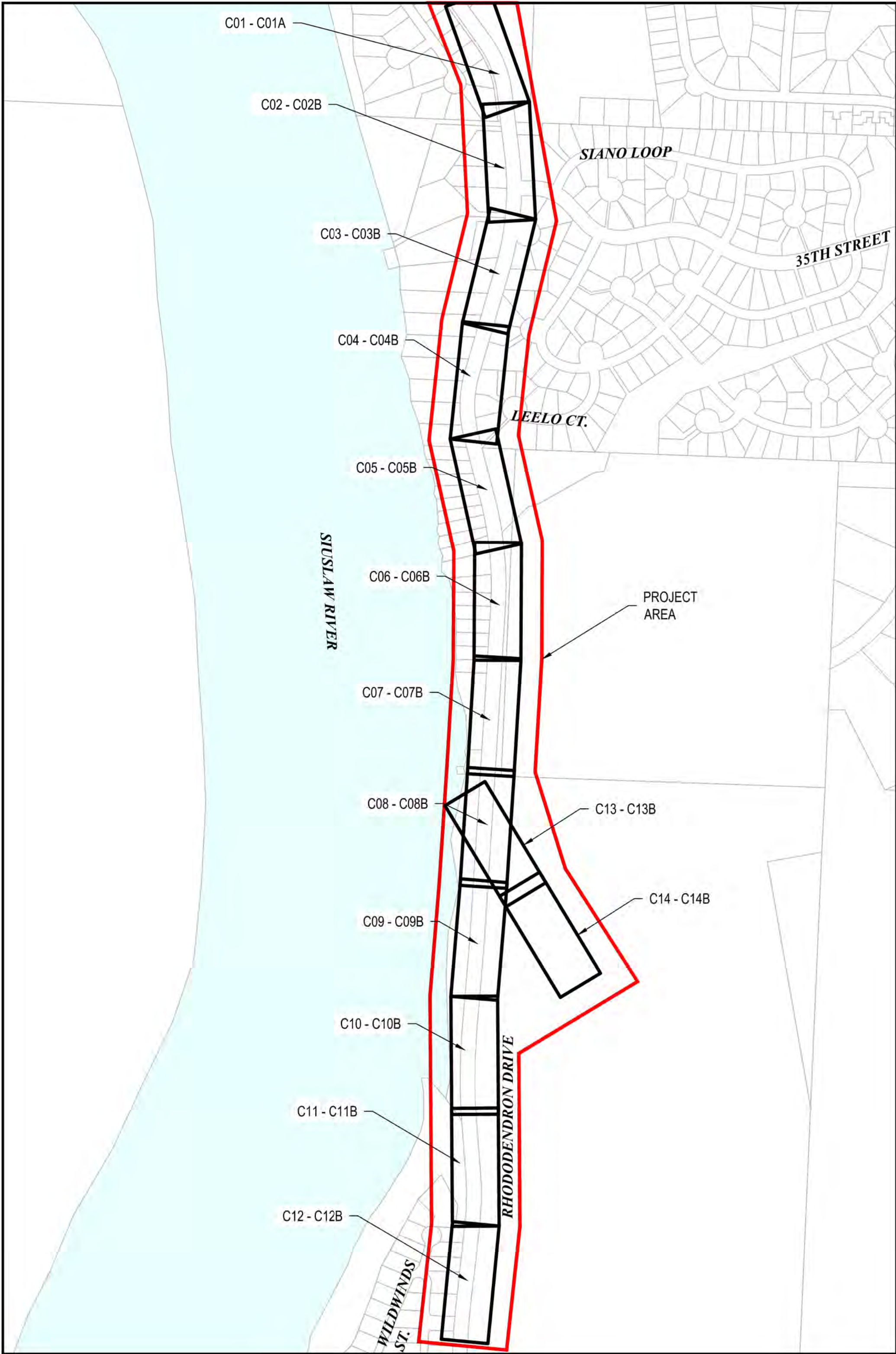
CONTACT PERSONNEL

CONTACT	AGENCY	PHONE
KRIS LILLIE, P.E. MIKE MILLER (PUBLIC WORKS DIRECTOR)	RH2 ENGINEERING CITY OF FLORENCE	(541) 326-4375 (541) 997-4106
MEGAN WILKINS JOHN PILON LYNN LUNDQUIST	CENTRAL LINCOLN P.U.D. CENTURYLINK SPECTRUM	(541) 997-5627 (541) 991-9048 (458) 802-9835

CALL 48 HOURS BEFORE YOU DIG
ONE CALL 1-800-332-2344

ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER AT 503-232-1978

PROJECT LOCATION MAP



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CONSTRUCTION NOTES

General Notes

1.

CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THIS PROJECT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS INCLUDING SUCH INCIDENTALS AS MAY BE NECESSARY TO MEET THE INTENT OF THE PROJECT CONTRACT DOCUMENTS, APPLICABLE AGENCY REQUIREMENTS AND OTHER WORK AS NECESSARY TO PROVIDE A COMPLETE PROJECT.
2.

THE WORK ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ODOT'S STANDARD SPECIFICATIONS, THE CITY'S STANDARD SPECIFICATIONS, ORS CHAPTER 333, AND AWWA AND APWA STANDARDS.
3.

IN THE EVENT THAT STANDARD CONSTRUCTION NOTES ARE FOUND TO BE IN CONFLICT WITH PROJECT SPECIFIC NOTES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY. WHERE CONFLICTS ARISE, THE CONTRACTOR SHALL ASSUME THAT THE MORE RESTRICTIVE CONDITION SHALL APPLY.
4.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS BEFORE START OF WORK. THE CONTRACTOR SHALL TAKE ALL NECESSARY FIELD MEASUREMENTS AND OTHERWISE VERIFY ALL DIMENSIONS AND EXISTING CONSTRUCTION CONDITIONS INDICATED AND/OR SHOWN ON THE PLANS. SHOULD ANY ERROR OR INCONSISTENCY EXIST, THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK AFFECTED UNTIL REPORTED TO THE PROJECT ENGINEER FOR CLARIFICATION OR CORRECTION.
5.

ANY INSPECTION BY THE CITY, COUNTY, STATE, FEDERAL AGENCY OR PROJECT ENGINEER SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN COMPLIANCE WITH APPLICABLE CODES, REGULATIONS, CITY STANDARDS AND PROJECT CONTRACT DOCUMENTS.
6.

CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY REQUIRED PERMITS IN ADDITION TO PERMITS PROVIDED BY OWNER. THE CONTRACTOR SHALL OBTAIN THE APPROPRIATE UTILITY PERMIT(S) FROM THE CITY, STATE, OR COUNTY WITH JURISDICTION FOR THE STREETS OR ROADS WITHIN THE PROJECT WORK AREA PRIOR TO CONSTRUCTION OF SYSTEM IMPROVEMENTS. A CITY BUSINESS PERMIT IS REQUIRED.
7.

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES REQUIRED TO PERFORM THE WORK. CONTRACTORS SHALL ABIDE BY ALL OSHA AND OTHER APPLICABLE SAFETY REGULATIONS.
8.

CONTRACTOR SHALL MAINTAIN AND COORDINATE ACCESS TO ALL AFFECTED PROPERTIES.
9.

THE CONTRACTOR SHALL GIVE THE CITY A MINIMUM OF 72 HOURS NOTICE IN ADVANCE OF START OF WORK AND CONNECTION TO EXISTING SYSTEM AND PRIOR TO SHUTTING DOWN ANY EXISTING WATER MAIN OR SERVICE.
10.

CONTRACTOR SHALL CALL 1-800-332-2344 FOR UTILITY LOCATES BEFORE CONSTRUCTION. THE CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED BY THE APPROPRIATE UTILITY LOCATING PROFESSIONALS, PRIOR TO AND DURING CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE UTILITY COMPANY WHEN A CONFLICT OCCURS.
11.

THE CONTRACTOR SHALL MAKE PROVISIONS TO KEEP ALL EXISTING UTILITIES IN SERVICE AND PROTECT THEM DURING CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY DAMAGED UTILITIES USING MATERIAL AND METHODS APPROVED BY THE UTILITY OWNER. NO SERVICE INTERRUPTIONS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN AGREEMENT WITH THE UTILITY PROVIDER.
12.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING AND MAINTAINING ALL ALIGNMENT STAKES, SLOPE STAKES, AND GRADES NECESSARY FOR THE CONSTRUCTION OF THE WATER MAINS, SANITARY SEWER LINES, SIDE SEWERS, TRENCHING, UTILITIES, STORM DRAINAGE, ROADBED, SURFACING, PAVING, SIGNING, ILLUMINATION, SIGNALS, AND STRIPING IF SUCH CONSTRUCTION IS INCLUDED IN THIS PROJECT. EXCEPT FOR THE SURVEY CONTROL DATA FURNISHED BY THE OWNER, CALCULATIONS, SURVEYING, AND MEASURING REQUIRED FOR SETTING AND MAINTAINING THE NECESSARY LINES AND GRADES SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
13.

THE CONTRACTOR SHALL PRESERVE ALL EXISTING SURVEY MONUMENTS IN AND AROUND THE WORK AREA INCLUDING MARKERS FOR FRONT PROPERTY CORNERS. IF ANY SURVEY MONUMENT OR MARKERS WILL BE DISTURBED BY CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HIRE A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF OREGON TO CONDUCT A PRE-CONSTRUCTION SURVEY AND TO REPLACE THE AFFECTED MONUMENTS AND MARKERS IN ACCORDANCE WITH STATE LAWS.
14.

THE CONTRACTOR SHALL CLEAN UP ALL AREAS AFFECTED BY CONSTRUCTION ACTIVITY TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT THE END OF EACH WORKING DAY OR MORE FREQUENTLY IF REQUIRED. THIS INCLUDES REMOVAL OF ALL DUST, MUD, ROCKS, ASPHALT DEBRIS, AND REFUSE FROM STREETS, SIDEWALKS, DRIVEWAYS, AND ANY OTHER AREAS AFFECTED BY THE CONSTRUCTION ACTIVITIES. THE OWNER'S REPRESENTATIVE CAN SHUTDOWN THE PROJECT IF CLEAN UP IS NOT PERFORMED TO THEIR SATISFACTION. WORK WILL RESUME ONCE THE PROJECT SITE IS CLEAN AND ORDERLY AS DETERMINED BY THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL ADHERE TO ALL APPLICABLE EROSION CONTROL REQUIREMENTS.
15.

PROTECTION OF THE ENVIRONMENT: NO CONSTRUCTION RELATED ACTIVITY SHALL CONTRIBUTE TO THE DEGRADATION OF THE ENVIRONMENT, ALLOW MATERIAL TO ENTER SURFACE OR GROUND WATERS, OR ALLOW PARTICULATE EMISSIONS TO THE ATMOSPHERE, WHICH EXCEED STATE OR FEDERAL STANDARDS. ANY ACTIONS THAT POTENTIALLY ALLOW DISCHARGE TO STATE WATERS MUST HAVE PRIOR APPROVAL.
16.

CONSTRUCTION VEHICLES SHALL PARK ON THE CONSTRUCTION SITE, OR AT A LOCATION INDICATED ON THE APPROVED PLAN. HOURS OF CONSTRUCTION SHALL BE 7:00 AM TO 6:00 PM, MONDAY THROUGH FRIDAY UNLESS SPECIFICALLY NOTED ELSEWHERE. WORK ON SATURDAY OR SUNDAY IS NOT PERMITTED FROM MAY 15TH – OCTOBER 15TH. WORK ON HOLIDAYS IS NOT PERMITTED. EXCEPTIONS TO THESE GUIDELINES REQUIRE APPROVAL FROM ODOT AND THE CITY. CONSTRUCTION ACTIVITIES INCLUDE ALL FIELD MAINTENANCE OF EQUIPMENT, REFUELING, PICKUP AND DELIVERY OF EQUIPMENT AS WELL AS ACTUAL CONSTRUCTION ACTIVITY.
17.

THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT OR REPLACE ANY EXISTING ABOVE GRADE STRUCTURES (INCLUDING THOSE NOT SHOWN ON PLANS) SUCH AS MAILBOXES, SIGNS, FENCES, OR RETAINING WALLS.
18.

CONTRACTOR SHALL RESTORE ALL ROADS, DRIVEWAYS, AND OTHER TRENCHED OR DISTURBED AREAS TO THEIR EXISTING CONDITION OR BETTER AND PER CITY STANDARDS AND THESE PLANS AND SPECIFICATIONS.
19.

OPEN TRENCHES SHALL BE LIMITED TO A MAXIMUM OF 100 FEET WITHIN STREET RIGHT-OF-WAYS UNLESS LIMITED TO A LESSER AMOUNT BY PERMIT. ALL TRENCHES SHALL BE BACKFILLED AND, IF IN THE PAVED ROADWAY, TEMPORARILY PAVED WITH HOT OR COLD AC MIX EVERY DAY. NO TRENCH SHALL REMAIN OPEN OVERNIGHT. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND WARNING SIGNS IN ACCORDANCE WITH THE MUTCD, CITY, AND ODOT REQUIREMENTS. TEMPORARY PAVEMENT SHALL BE MAINTAINED UNTIL WORK IS COMPLETED.
20.

CONTRACTOR SHALL RESTORE TRAFFIC LOOPS DAMAGED OR REMOVED DURING CONSTRUCTION AND SHALL RESTRIPE PARKING AND TRAFFIC LINES AND MARKINGS DAMAGED OR REMOVED DURING CONSTRUCTION FOLLOWING PAVEMENT RESTORATION. PAINT SHALL BE TRAFFIC RATED, 2 COAT MINIMUM APPLIED AND MATCH EXISTING COLOR. PAYMENT SHALL BE INCIDENTAL TO SURFACE RESTORATION BID ITEMS.
21.

ANY ALTERATION OR VARIANCE FROM THESE PLANS, EXCEPT MINOR FIELD ADJUSTMENTS NEEDED TO MEET EXISTING FIELD CONDITIONS, SHALL FIRST BE SUBMITTED TO THE OWNER IN WRITING FOR APPROVAL PRIOR TO IMPLEMENTATION. ANY ALTERATION OR VARIANCE FROM THESE PLANS SHALL BE DOCUMENTED ON CONSTRUCTION FIELD PRINTS AND TRANSMITTED TO THE PROJECT ENGINEER.
22.

CONTRACTOR MUST KEEP (1) COPY OF APPROVED PLANS ON-SITE WHENEVER CONSTRUCTION IS IN PROGRESS. UPON COMPLETION OF CONSTRUCTION AND PRIOR TO CLOSEOUT, THE CONTRACTOR SHALL SUBMIT "REDLINE DRAWINGS" TO THE CITY FOR PREPARATION OF RECORD DRAWINGS. THE "REDLINE DRAWINGS" ARE TO DOCUMENT ALL DEVIATIONS AND REVISIONS TO THE APPROVED PLANS.
23.

ALL TRENCHES CROSSING VEHICLE TRAVEL LANES SHALL BE BACKFILLED WITH CLSM/CLF ABOVE THE PIPE ZONE.

Existing Utilities

1.

ALL UTILITIES: UTILITIES SHOWN ARE BASED ON UNDERGROUND UTILITY LOCATE MARKINGS AS PROVIDED BY OTHERS. THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND LOCATES REPRESENT THE ONLY UTILITIES IN THE AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS AND THE SIZE OF ALL UTILITIES SHOWN TO AVOID DAMAGE AND/OR DISTURBANCE TO SUCH UTILITIES, AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN HEREON WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN. CONTRACTOR SHALL PRESERVE, PROTECT AND SUPPORT ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION. REPAIR, OR REPLACE ALL EXISTING STRUCTURES DAMAGED DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO STORM SEWERS, CATCH BASINS, AND CULVERTS.
2.

POWER, TELEPHONE, GAS AND CABLE: WHERE THESE UTILITIES CROSS THE PROPOSED WATER MAIN, THE DEPTH OF EACH IS SHOWN ON THE PROFILES AND IS BASED ON TYPICAL LAYING DEPTHS FOR EACH OF THESE UTILITIES. ACTUAL DEPTHS ARE UNKNOWN AND MAY VARY SIGNIFICANTLY. CONTRACTOR SHALL NOTIFY THE CITY IMMEDIATELY IF UTILITY CROSSING DEPTH CONFLICTS ARISE.
3.

WATER: THE VERTICAL AND HORIZONTAL LOCATIONS OF THE EXISTING WATER MAIN SHOWN ON THE PLANS ARE APPROXIMATE. DEVIATIONS FROM THESE PLANS MAY EXIST, IN LOCATIONS WHERE THE EXISTING WATER MAIN IS EXPOSED IN ORDER TO CONSTRUCT THE NEW WATER MAIN, THE AMOUNT OF OPEN TRENCH SHALL BE MINIMIZED TO AVOID EXPOSING MORE THAN ONE EXISTING WATER MAIN PIPE JOINT WHERE THE EXISTING PIPE IS TO REMAIN. THE CONTRACTOR SHALL CONDUCT THE WORK IN A MANNER THAT PREVENTS DAMAGE TO THE EXISTING WATER MAIN DURING THE CONSTRUCTION OF THE NEW WATER MAIN.
4.

MAINTAIN A MINIMUM OF 6 INCHES OF CLEARANCE WHEN CROSSING OTHER UTILITIES. PROVIDE STYROFOAM CUSHION BETWEEN PIPING AT PIPE CROSSINGS WHERE PIPES CROSS WITH LESS THAN 12 INCHES OF VERTICAL SEPARATION. A SAND CUSHION MAY BE USED IN AREAS WHERE ADEQUATE COMPACTION CAN BE ACHIEVED AND AS APPROVED BY THE ENGINEER.
5.

THE CONTRACTOR SHALL MAINTAIN WATER SERVICE TO ALL EXISTING CUSTOMERS AT ALL TIMES, EXCEPT WHEN CONNECTION TO THE EXISTING SYSTEM IS MADE. NO SERVICE SHALL BE SHUT OFF WITHOUT PRIOR WRITTEN APPROVAL FROM THE CITY.
6.

OPERATION OF VALVES IN THE CITY'S WATER SYSTEM BY ANYONE OTHER THAN A CITY EMPLOYEE IS STRICTLY PROHIBITED. CONTRACTORS SHALL NOT OPEN OR CLOSE VALVES, OR TAKE ANY OTHER ACTION THAT MAY AFFECT THE OPERATION OF THE EXISTING WATER SYSTEM, EXCEPT AS SPECIFICALLY REQUIRED BY THE PLANS AND SPECIFICATIONS, AND ONLY WITH PRIOR APPROVAL BY THE CITY.
7.

CONFLICTS WHICH MAY OCCUR DURING CONSTRUCTION OF THE PROPOSED WATER MAIN OR SERVICE LINES SHALL BE RESOLVED IN THE FOLLOWING MANNER, OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL SUBMIT PROPOSED CHANGES, AS MARK-UPS ON THE PLANS, TO THE ENGINEER FOR REVIEW:

A.

IF THE PROPOSED WATER MAIN CONFLICTS WITH A MAJOR UTILITY SUCH AS A 2" OR GREATER DIAMETER GAS MAIN OR STORM WATER MAIN, THE WATER LINE SHALL BE DEFLECTED WITHIN MANUFACTURER'S STANDARDS OR REALIGNED USING VERTICAL OR HORIZONTAL BENDS AS APPROVED BY THE ENGINEER.

B.

IF THE PROPOSED WATER MAIN CONFLICTS WITH A MINOR UTILITY SUCH AS POWER, CABLE, GAS SERVICE AND TELEPHONE LINES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND PROPOSE ANY NECESSARY CHANGES REQUIRED. IF NECESSARY, THE ENGINEER SHALL CONTACT THE UTILITY COMPANY AND COORDINATE WITH THE UTILITY COMPANY TO REALIGN THE CONFLICTING UTILITY.

Site

1.

IF STORAGE IS NEEDED, THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM THE OWNER AND ADJACENT PROPERTY OWNERS.
2.

CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO EXISTING OR BETTER CONDITION UNLESS OTHERWISE STATED ON THE PLANS.
3.

ALL VEHICLES ARE TO BE CLEANED OF ALL EXCESS CONCRETE AND DIRT PRIOR TO LEAVING THE SITE. PROTECT ROADWAYS FROM DAMAGE OR SEDIMENT TRANSPORT DURING CONSTRUCTION. ANY DAMAGE OR CLEANUP SHALL BE SOLELY AT THE CONTRACTOR'S EXPENSE AND BE COMPLETED TO THE SATISFACTION OF THE OWNER.
4.

CONTRACTOR IS RESPONSIBLE FOR MEETING ALL REQUIREMENTS FOR OFF SITE DISPOSAL INCLUDING ONLY DISPOSING OF WASTE MATERIAL AT APPROVED SITES.
5.

AT THE END OF EACH WORKING WEEK, THE OWNER WILL, AT THEIR DISCRETION INSPECT ALL TEMPORARY RESTORATION. IF THE TEMPORARY RESTORATION DOES NOT PROVIDE AN ADEQUATE DRIVING SURFACE, AS DETERMINED BY THE OWNER, THEN THE CONTRACTOR SHALL IMMEDIATELY PROCEED WITH THE PERMANENT RESTORATION AS DESCRIBED IN THE SPECIFICATIONS.

Sewer Abandonment Notes

1.

THE CITY SHALL BE SOLE DETERMINER OF APPROPRIATE ABANDONMENT PROCEDURES AND METHODS. RESTORE ALL DISTURBED SURFACES TO ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY.
2.

ABANDONMENT OF SEWER LINES AND MANHOLES/STRUCTURES SHALL NOT OCCUR UNTIL ALL EXISTING SANITARY SEWER SERVICES HAVE BEEN TRANSFERRED TO ANOTHER LINE AND DIRECTED BY THE CITY INSPECTOR.

SEWER MAINS

1.

ABANDONED SANITARY SEWER MAINS 15 INCHES OR LARGER SHALL BE FILLED WITH A CEMENTIOUS LOW STRENGTH MATERIAL.
2.

ABANDONED SANITARY SEWER MAINS THAT ARE SMALLER THAN 15 INCHES IN DIAMETER ARE GENERALLY NOT REQUIRED TO BE GROUTED UNLESS SPECIFIED IN PLANS.
3.

ABANDONMENT OF SANITARY SEWER LINES SHALL BE ACCOMPLISHED BY INSTALLING THE GROUT MATERIAL WITH SUFFICIENT PRESSURE AND IN NUMEROUS LOCATIONS. THE METHOD OF INSTALLATION SHALL BE ABLE TO MEET THE REQUIREMENT OF COMPLETELY FILLING THE EXISTING SANITARY SEWER MAIN AND ANY VOIDS ADJACENT TO IT.

SEWER STRUCTURES

1.

SEWER STRUCTURES TO BE ABANDONED SHALL BE REMOVED TO A DEPTH OF TWO FEET BELOW FINISH GROUND ELEVATION, UNLESS NOTED OTHERWISE.
2.

ABANDONED SANITARY SEWER STRUCTURES SHALL BE FILLED TO THE TOP OF REMAINING CONCRETE STRUCTURE WITH THE SAME CEMENTIOUS MATERIAL USED TO ABANDON SEWER MAINS. THE SURFACE SHALL BE RESTORED PER THE TYPICAL TRENCH DETAIL SHOWN IN THESE PLANS.
3.

MANHOLE FRAMES, COVERS, ADJUSTMENT RINGS, ETC.. TO BE REMOVED SHALL NOT BE REUSED ON NEW MANHOLES AND SHALL BECOME PROPERTY OF THE CONTRACTOR TO DISPOSE OF.

Sewer Main Construction Notes

1.

ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH CITY OF FLORENCE STANDARDS AND THE MOST CURRENT COPY OF THE STATE OF OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION.
2.

CONTRACTOR TO POTHOLE ALL UTILITY CROSSINGS PRIOR TO BEGINNING CONSTRUCTION OF SEWER MAIN. NOTIFY THE ENGINEER IMMEDIATELY OF ANY CONFLICTS. NO PAYMENT WILL BE MADE FOR EXTRA WORK TO AVOID CONFLICTS IF CONTRACTOR DOES NOT POTHOLE UTILITY CONFLICT PRIOR TO BEGINNING CONSTRUCTION.
3.

PRIOR TO BACKFILL, ALL MAINS AND APPURTENANCES SHALL BE INSPECTED AND APPROVED BY THE CITY OF FLORENCE CONSTRUCTION INSPECTOR. APPROVAL SHALL NOT RELIEVE THE CONTRACTOR FROM CORRECTION OF ANY DEFICIENCIES AND/OR FAILURES AS DETERMINED BY SUBSEQUENT TESTING AND INSPECTIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF FLORENCE FOR THE REQUIRED INSPECTIONS.
4.

GRAVITY SEWER MAIN, UNLESS SPECIFIED OTHERWISE ON THE PLANS, SHALL BE PVC, ASTM D3034 SDR 35, WITH JOINTS AND RUBBER GASKETS CONFORMING TO ASTM D3212 AND ASTM F477.
5.

C900 PVC PIPE SHALL BE DR18, AND GREEN IN COLOR.
6.

PRECAST MANHOLES SHALL MEET THE REQUIREMENTS OF ASTM C478. MANHOLES SHALL BE A STANDARD PRE-CAST 48" MANHOLE PER CITY OF FLORENCE STANDARD DRAWINGS, UNLESS OTHERWISE SPECIFIED ON THE PLANS. JOINTS SHALL BE RUBBER GASKETED CONFORMING TO ASTM C443 AND SHALL BE GROUTED FROM THE INSIDE. LIFT HOLES SHALL BE GROUTED FROM THE OUTSIDE AND THE INSIDE OF THE MANHOLE.

Sewer Main Construction Notes (Cont.)

7.

ALL SEWER MAINS SHALL BE FIELD STAKED FOR GRADES AND ALIGNMENT BY A LICENSED ENGINEERING OR SURVEYING FIRM QUALIFIED TO PERFORM SUCH WORK.
8.

BEDDING OF THE SEWER MAIN AND COMPACTION OF THE BACKFILL MATERIAL SHALL BE REQUIRED IN ACCORDANCE WITH ODOT/APWA STANDARDS & CITY OF FLORENCE STANDARD DRAWINGS.
9.

ANY CHANGES TO DESIGN SHALL FIRST BE REVIEWED AND APPROVED BY THE PROJECT ENGINEER AND THE CITY OF FLORENCE.
10.

ALL LINES SHALL BE HIGH VELOCITY CLEANED AND PRESSURE TESTED IN CONFORMANCE WITH ODOT/APWA STANDARDS. TESTING OF THE SANITARY SEWER MAIN SHALL INCLUDE A VIDEO INSPECTION AND RECORDING OF THE MAIN BY THE CONTRACTOR. IMMEDIATELY PRIOR TO VIDEO INSPECTION, ENOUGH WATER SHALL BE RUN DOWN THE LINE SO IT COMES OUT OF THE LOWER MANHOLE. A COPY OF THE VIDEO INSPECTION SHALL BE SUBMITTED TO THE CITY OF FLORENCE. ACCEPTANCE OF THE LINE WILL BE MADE AFTER THE VIDEO INSPECTION HAS BEEN REVIEWED AND APPROVED BY THE INSPECTOR.
11.

TRENCH RESTORATION SHALL BE PER CITY OF FLORENCE STANDARD DRAWINGS.
12.

GROUNDWATER IS LIKELY TO BE ENCOUNTERED, ANY DE-WATERING IS TO BE AT THE CONTRACTORS EXPENSE.

Water Main Abandonment Notes

1.

THE CITY SHALL BE SOLE DETERMINER OF APPROPRIATE ABANDONMENT PROCEDURES AND METHODS. RESTORE ALL DISTURBED SURFACES TO ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY. RETURN ALL REMOVED FACILITIES (HYDRANTS, FITTINGS, VALVES, ETC.) TO THE CITY AT THE DISCRETION OF THE CITY. UNUSABLE EQUIPMENT SHALL BECOME PROPERTY OF AND BE DISPOSED OF BY THE CONTRACTOR. THE FOLLOWING METHODS ARE APPROVED ABANDONMENT PROCEDURES FOR TERMINATED FACILITIES.
2.

ABANDONED HYDRANTS, SERVICES, BRANCH MAINS, ETC. ARE TO BE ABANDONED AND PHYSICALLY SEPARATED FROM THE MAINLINE AND ARE NOT TO BE LEFT STUBBED OUT FROM THE MAINLINE.

VALVES

1.

REMOVE VALVE BOXES. CLOSE, PLUG OR BLIND FLANGE THE WATER MAIN. CUT OFF OPERATING NUTS.

WATER MAINS

1.

CUT AND DRAIN THE ABANDONED WATER MAIN WHERE EXPOSED DURING CONSTRUCTION.
2.

REMOVE ANY MAINS IN THE WAY OF NEW CONSTRUCTION. SAW CUT AND REMOVE SHORT SECTIONS OF PIPE. MAINS SHALL NOT BE FORCIBLY REMOVED WITH HEAVY EQUIPMENT DUE TO POTENTIAL DAMAGE TO SURROUNDING UTILITIES.
3.

REMOVE ALL VALVE BOXES.
4.

MAINS NOT ENCOUNTERED DURING NEW TRENCHING MAY BE LEFT IN PLACE, BUT VALVES MUST BE ABANDONED AS DESCRIBED UNDER "VALVES".
5.

PLUG ENDS OF ABANDONED MAINS EXPOSED DURING CONSTRUCTION WITH GROUT PLUG, BLIND FLANGE, OR CAP AS DIRECTED BY THE CITY.

WATER SERVICES

1.

REMOVE ALL VAULTS, SETTERS AND MISCELLANEOUS FITTINGS. BACKFILL WITH CRUSHED ROCK AND COMPACT.
2.

AT THE DISCRETION OF THE CITY, THE SERVICE LINE MAY REMAIN IN PLACE, BUT MUST BE TERMINATED AT THE MAINLINE.

HYDRANTS

REMOVE ENTIRE HYDRANT AND ABANDON MAINLINE VALVE AS DETAILED ABOVE. REMOVE ANY BOLLARDS

Water Main Construction Notes

1.

WATER MAIN PIPE SHALL BE AWWA C900 PVC. FITTINGS SHALL HAVE MECHANICAL JOINTS WITH MEGALUG JOINT RESTRAINTS OR APPROVED EQUAL WHERE RESTRAINED JOINTS ARE SHOWN.
2.

ALL BOLTS ON FITTINGS, VALVES AND OTHER BOLTED PIPE JOINTS SHALL BE COR-BLUE OR EQUIVALENT FLUOROCARBON RESIN COATED, AND SHALL BE IN COMPLIANCE WITH ANSI/AWWA C11/A21.11 (CURRENT REVISION).
3.

MAINTAIN JOINT DEFLECTION WITHIN MANUFACTURER'S ALLOWABLE LIMITS.
4.

POTHOLE ALL UTILITY CROSSINGS, INCLUDING SERVICES, A MINIMUM OF 100 FEET AHEAD OF INSTALLED MAIN. ADJUST LINE AND GRADE TO AVOID CONFLICTS AND PROVIDE VERTICAL CLEARANCE. NOTIFY ENGINEER IMMEDIATELY OF ANY CONFLICTS. NO PAYMENT WILL BE MADE FOR EXTRA WORK TO RE-LAY MAIN OR FOR EXTRA FITTINGS TO AVOID CONFLICTS IF CONTRACTOR DOES NOT POTHOLE UTILITY CONFLICT 100 FEET AHEAD OF WATERLINE.
5.

COMPACTION TESTING IS REQUIRED FOR ALL OPEN CUTS AND/OR CROSSINGS WITHIN PAVED OR TRAVELED AREAS OF PUBLIC AND PRIVATE RIGHT-OF-WAYS. WATER MAIN TRENCH SECTION AND ALL EXCAVATED AREAS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS AND THE CITY STANDARD DETAILS. COMPACTION TESTING SHALL BE REQUIRED DURING BACKFILLING OPERATIONS PER THE SPECIFICATIONS AND AT THE DISCRETION OF THE CITY AT THE CONTRACTOR'S EXPENSE. IF TRENCH BACKFILL DOES NOT MEET COMPACTION REQUIREMENTS, CONTRACTOR SHALL EXCAVATE, RE-COMPACT AND RE-TEST MATERIAL AT CONTRACTOR'S EXPENSE.
6.

ALL NEW WATER PIPELINES UNDER CONSTRUCTION SHALL BE PHYSICALLY DISCONNECTED FROM THE CITY'S EXISTING SYSTEM. CONNECTION TO THE EXISTING DISTRIBUTION SYSTEM SHALL BE MADE AFTER PASSING HYDROSTATIC AND BACTERIOLOGICAL TESTING AND ACCEPTANCE BY CITY OF FLORENCE PUBLIC WORKS DEPARTMENT. HYDROSTATIC TESTING SHALL BE MONITORED BY CITY STAFF. BACTERIOLOGICAL TESTS SHALL BE TAKEN BY CITY STAFF CERTIFIED AS DISTRIBUTION OPERATORS BY OREGON DEPARTMENT OF HUMAN SERVICES, DRINKING WATER PROGRAM. CONNECTION OF NEW PIPELINES TO THE EXISTING SYSTEM SHALL BE OBSERVED BY CITY STAFF.
7.

HYDROSTATIC TESTS: THE TEST SHALL CONFORM WITH AWWA C600. THE TEST PRESSURE SHALL BE 150 PSI AT THE HIGHEST POINT OF ELEVATION IN ANY SECTION. THE DURATION SHALL BE 120 MINUTES AND SHALL BE MONITORED BY CITY STAFF.
8.

DISINFECTION: PIPELINES SHALL BE FLUSHED AND DISINFECTED BEFORE PLACING INTO SERVICE. DISINFECTION SHALL CONFORM WITH AWWA C651. TWO CONSECUTIVE SETS OF BACTERIOLOGICAL SAMPLES, TAKEN AT LEAST 24 HOURS APART, SHALL BE COLLECTED FROM THE NEW PIPELINE. HIGHLY CHLORINATED WATER USED FOR DISINFECTION SHALL NOT BE DISCHARGED INTO THE CITY'S MUNICIPAL SEPARATE STORM SEWER SYSTEM OR SURFACE WATERS. APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS CONCERNING DISCHARGE SHALL BE FOLLOWED.
9.

THE CONTRACTOR SHALL PERFORM PRESSURE TESTING IN ACCORDANCE WITH THE SPECIFICATIONS, UNLESS OTHERWISE APPROVED. MAINLINE SHALL BE TESTED IN SECTIONS OF NO MORE THAN 1,000 FEET. THE CITY INSPECTOR HAS DISCRETION TO MODIFY THE TESTING REQUIREMENTS AS S/HE DEEMS APPROPRIATE.



EXPIRES: 12/31/2024

CITY OF FLORENCE

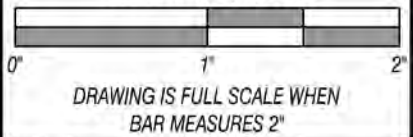
RHODODENDRON DRIVE REALIGNMENT

CONSTRUCTION NOTES



ENGINEER: KAL	SAFE DATE: Nov 13, 2023	CLIENT: FLO	JOB NO.: 1013-113
REVIEWED: JAB	PLT DATE: Nov 13, 2023	FILE NAME: RHOD-P-COV.DWG	
REVISIONS			

SCALE: SHOWN








DWG NO.	SHEET NO.
GI01	2




























LEGEND

EXISTING LEGEND






SURVEY CONTROL LEGEND

	BENCH MARK
	IRON PIPE
	REBAR CAP
	MAG NAIL CONTROL POINT
	SURFACE INVESTIGATION CORE







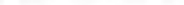







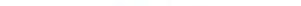
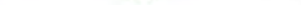

SURVEY UTILITY LEGEND

	WATER METER
	FIRE HYDRANT
	WATER GATE VALVE
	STORM DRAIN MANHOLE
	CATCH BASIN (RECTANGULAR)
	CULVERT DAYLIGHT
	SANITARY SEWER MANHOLE
	FORCEMAIN VALVE
	TELEPHONE PEDESTAL
	TELEPHONE VAULT
	POWER POLE
	POWER GUY ANCHOR
	POWER PAD MOUNT TRANSFORMER
	POWER JUNCTION BOX
	UNDERGROUND CABLE
	UNDERGROUND TELEPHONE
	UNDERGROUND FIBER OPTICS
	NATURAL GAS
	UNDERGROUND POWER
	OVERHEAD POWER
	SANITARY SEWER
	SEWER FORCEMAIN
	STORM DRAIN CULVERT
	STORM DRAIN DITCH
	STORM DRAIN LINE
	WATER LINE
	WATER SERVICE LINE

SURVEY SURFACE LEGEND

-  TREE (CONIFER)
-  TREE (DECIDUOUS)
-  SHRUB
-  DECORATIVE PLANTINGS
-  BOLLARD

 FENCE GATE POST

	MAILBOX
	MAJOR CONTOUR
	MINOR CONTOUR
	ROADWAY CURB
	DIRT ROAD EDGELINE
	GRAVEL ROAD EDGELINE
	FENCE
	TOPO DITCH
	TOPO FLOWLINE
	TOPO TOE OF SLOPE
	TOPO TOP OF SLOPE
	ROADWAY ASPHALT AREA
	ROADWAY CONCRETE AREA
	DIRT ROADWAY
	GRAVEL ROADWAY
	SIDEWALK ASPHALT
	SIDEWALK CONCRETE

SURVEY CONTROL LINETYPES







	EASEMENT
	ACCESS EASEMENT
	RIGHT OF WAY EASEMENT
	PROPOSED EASEMENT
	PROPERTY LINE
	RIGHT OF WAY CENTERLINE
	RIGHT OF WAY LINE

PROPOSED LEGEND

DEMOLITION LEGEND

- - - - - SAWCUT LINE
 ASPHALT REMOVAL
 CONCRETE REMOVAL
 VEGETATION REMOVAL AREA
 INLET PROTECTION

UTILITY LEGEND

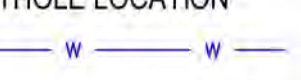



	SEWER GRAVITY
	SEWER MANHOLE
	SEWER CLEANOUT
	STORMWATER PIPE
	CATCH BASIN
	STORMWATER MANHOLE

ROADWAY LEGEND

	MAJOR CONTOUR
	MINOR CONTOUR
	CUT LIMITS
	FILL LIMITS
	SIDEWALK
	ASPHALT OVERLAY
	ASPHALT (TYP. NEW SECTION)
	PEDESTRIAN RAMP AREA
	DETECTABLE WARNING/LANDING
	PEDESTRIAN CURB
	NATIVE BACKFILL
	IRRIGATION LINE

SUBSURFACE UTILITY LEGEND

THE CLASSIFICATIONS FOR SUBSURFACE UTILITIES ARE OUTLINED AND EXPLAINED IN THE FOLLOWING LIST:



<p>UTILITY QUALITY LEVEL A.</p> <p>POTHOLE LOCATION</p> 	<p>- PRECISE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES OBTAINED BY THE ACTUAL EXPOSURE OF (OR VERIFICATION OF PREVIOUSLY EXPOSED AND SURVEYED UTILITIES) AND SUBSEQUENT MEASUREMENT OF SUBSURFACE UTILITIES, USUALLY AT A SPECIFIC POINT. UNLESS OTHERWISE NOTED, QUALITY LEVEL A IS ONLY APPLICABLE AT POTHOLED LOCATIONS ON THE PLANS. AT ALL OTHER AREAS, THE UTILITY SHOULD BE ASSUMED TO BE QUALITY LEVEL B.</p>
<p>UTILITY QUALITY LEVEL B.</p> 	<p>- INFORMATION OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES.</p>
<p>UTILITY QUALITY LEVEL C.</p> 	<p>- INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES</p>
<p>UTILITY QUALITY LEVEL D.</p> 	<p>- INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS</p>

NOTE: THE USE OF THE LINE TYPES PROVIDED ABOVE WAS A PRIMARY METHOD FOR INDICATING THE ACCURACY OF THE UTILITIES SHOWN WITHIN THESE PLANS. WHEN THE SOURCE OF THE INFORMATION WAS UNKNOWN OR THE METHOD FOR LOCATING THE UTILITIES WAS UNAVAILABLE, QUALITY LEVEL D WAS USED AS THE DEFAULT.

SECTION AND DETAIL REFERENCES

THE FOLLOWING CONVENTIONS HAVE BEEN USED WITHIN THESE DRAWINGS TO REFER THE READER BETWEEN THE SECTION/DETAIL AND THE PLAN FROM WHICH IT IS REFERENCED.

REFERENCE BUBBLES

	<p>PLAN REFERENCE BUBBLE - REFERS READER BACK TO THE PLAN FROM WHICH THE DETAIL OR SECTION ORIGINATED.</p>
	<p>DETAIL/SECTION REFERENCE BUBBLE - REFERS READER TO THE DRAWING ON WHICH THE DETAIL OR SECTION IS LOCATED.</p>

WHERE, ID = SECTION/DETAIL REFERENCE NUMBER
= DRAWING NUMBER ON WHICH DETAIL ORIGINATED OR RESIDES

SECTION/DETAIL REFERENCE NUMBER CONVENTIONS:
SECTIONS OR ELEVATIONS SHOULD HAVE A LETTER REFERENCE NUMBER
(A THROUGH ZZ).

ABBREVIATIONS

CB.	CATCH BASIN	N	NORTHING
CONC	CONCRETE	PE	POLYETHYLENE
CL	CENTERLINE	PROP	PROPOSED
CPEP	CORRUGATED POLYETHYLENE	PVC	POLYVINYL CHLORIDE
CSBC	CRUSHED SURFACING BASE COURSE	R	RIGHT
CSTC	CRUSHED SURFACING TOP COURSE	RT	RIGHT
DIAM	DIAMETER	ROW	RIGHT-OF-WAY
DI	DUCTILE IRON	SPEC	SPECIFICATIONS
DWG	DRAWING	SS	SANITARY SEWER
E	EASTING	SSMH	SANITARY SEWER MANHOLE
ELEV	ELEVATION	ST	STORM
EOP	EDGE OF PAVEMENT	STA	STATION LINE
EX	EXISTING	STD	STANDARD
HMA	HOT MIXED ASPHALT	SY	SQUARE YARDS
L	LEFT	TYP	TYPICAL
LT	LEFT	W	WATER
LF	LINEAR FEET		

Landscaping Notes

1. CONTRACTOR TO DESIGN PROPOSED IRRIGATION SYSTEM. CONTRACTOR SHALL BE RESPONSIBLE FOR OPERATION OF THE IRRIGATION SYSTEM UNTIL PROJECT SUBSTANTIAL COMPLETION. THE OWNER SHALL ASSUME RESPONSIBILITY FOR OPERATION OF THE IRRIGATION SYSTEM FOLLOWING SUBSTANTIAL COMPLETION.
2. LANDSCAPING AND IRRIGATION WORK SHALL BE PERFORMED BY A LANDSCAPE CONTRACTOR LICENSED AND BONDED IN THE STATE OF OREGON. PERFORM WORK IN ACCORDANCE WITH BEST-PRACTICE INDUSTRY STANDARDS SUCH AS THOSE ADOPTED BY THE OREGON LANDSCAPE CONTRACTOR'S BOARD (OLCB). CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH CODE REQUIREMENTS, EXISTING SITE CONDITIONS, AND ALL ASPECTS OF SITE WORK NECESSARY FOR THE FULL COMPLETION OF THE PROJECT.
3. PLANT LEGENDS AND SITE FURNISHINGS ARE SHOWN TO CLARIFY DESIGN LAYOUT. CONTRACTOR IS RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH THE SITE AND EXISTING CONDITIONS AND FOR VERIFYING PLANT, MATERIAL, AND FURNISHING QUANTITIES PRIOR TO BIDDING AND CONSTRUCTION. IF DISCREPANCIES OCCUR, DESIGN INTENT PREVAILS OVER QUANTITIES LISTED.
4. CONTRACTOR SHALL FIELD ADJUST PLANTINGS ON SITE AS NECESSARY TO AVOID CONFLICTS WITH ABOVE AND BELOW GROUND UTILITIES, METERS, DRIVEWAY LOCATIONS, EXISTING VEGETATION TO REMAIN, ETC.
5. PLANT MATERIALS SHALL BE HEALTHY, EVENLY BRANCHED, AND TYPICAL FOR THEIR SPECIES. ALL PLANT MATERIAL SHALL CONFORM TO THE SIZE AND QUALITY GRADE OF THE AMERICAN STANDARD FOR NURSERY STOCK, CURRENT EDITION. CONTAINERIZED STOCK SHALL BE FULLY ROOTED IN THE CONTAINER IN WHICH THEY ARE DELIVERED, BUT SHALL NOT BE ROOT BOUND. TREES SHALL MEET THE REQUIREMENTS OF THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS FOR NURSERY STOCK (ANSI Z60.2) FOR GRADE NO. 1 OR BETTER.
6. CONTRACTOR SHALL REMOVE, AND PROPERLY DISPOSE OF ALL ORGANIC AND/OR UNSUITABLE MATERIALS INCLUDING TREES, STUMPS, ROOTS, BRUSH AND GRASS OFF-SITE.
7. ALL LANDSCAPE MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED BY THE LANDSCAPE CONTRACTOR FOR A PERIOD OF ONE YEAR TO SURVIVE IN GOOD CONDITION. LANDSCAPE CONTRACTOR SHALL GUARANTEE REPLACEMENT OF DEAD OR DYING PLANT MATERIALS, AT NO ADDITIONAL COST TO THE OWNER, EXCEPT IN CASES OF GROSS NEGLIGENCE OR VANDALISM.

SURVEY NOTES

1. TOPOGRAPHIC AND MONUMENT RECOVERY SURVEY WAS COMPLETED BY PARIANI LAND SURVEYING, LLC. AUGUST 8TH, 2020.
2. HORIZONTAL BASIS OF BEARING: OREGON STATE PLANE, SOUTH ZONE NAD83 (CORS96) EPOCH 2010.00.
3. VERTICAL DATUM: NAVD88, DERIVED FROM RTK, GPS OBSERVATIONS.
4. UTILITY LOCATES WERE PROVIDED PER TICKET NO. 20190670 & 20190662

Traffic Control Notes

1. CONTRACTOR SHALL ERECT AND MAINTAIN TRAFFIC CONTROL PER THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), PART VI, CONSTRUCTION AND MAINTENANCE, AS ADOPTED AND MODIFIED BY ODOT. SHOULD WORK BE IN AN EXISTING PUBLIC RIGHT OF WAY THAT IS OPEN TO TRAFFIC, THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (TCP) TO THE APPROPRIATE CITY, COUNTY, AND STATE PERSONNEL FOR APPROVAL. APPROVALS SHALL BE OBTAINED PRIOR TO START OF WORK.
2. CONTRACTOR TO PROVIDE A WRITTEN AND DRAWN PLAN WITHIN THE TCP THAT IDENTIFIES REQUIREMENTS FOR PROVIDING SAFE, EFFECTIVE AND ACCESSIBLE ROUTES FOR PEDESTRIANS THROUGH OR AROUND THE WORK ZONE, INCLUDING TEMPORARY PEDESTRIAN ACCESSIBLE ROUTE (TPAR) DETAILS, ADVANCE PUBLIC NOTIFICATION; AND, CONSTRUCTION AND MAINTENANCE RESPONSIBILITIES. THE DEFINITION OF A TPAR IS - AN AREA WITHIN A WORK ZONE, MARKED BY SIGNING, DELINEATION AND TRAFFIC CONTROL DEVICES (TCD), FOR THE USE OF PEDESTRIANS TO NAVIGATE THROUGH OR AROUND THE WORK ZONE. THE TPAR SHALL BE INCLUDED AS PART OF THE TCP.
3. CONTRACTOR SHALL USE EVERY REASONABLE PRECAUTION TO SAFEGUARD THE PERSONS AND PROPERTY OF THE TRAVELING PUBLIC. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FURNISH, PLACE, AND MAINTAIN THE BARRICADES, BARRIERS, LIGHTS, SIGNAGE, AND FLAGGERS NECESSARY TO PROTECT THE TRAVELING PUBLIC AND THEIR PROPERTY. ALL TCD SHALL MEET MUTCD STANDARDS. ALL BARRICADES AND OBSTRUCTIONS SHALL BE PROTECTED AT NIGHT BY SIGNAL LIGHTS, WHICH SHALL BE SUITABLY DISTRIBUTED AND OPERATED FROM SUNSET TO SUNRISE.
4. WHEN CONSTRUCTION ACTIVITIES BLOCK OR INTERFERE WITH NORMAL PEDESTRIAN ROUTING, PROVIDE SAFE PASSAGE FOR PEDESTRIANS EITHER THROUGH THE CONSTRUCTION, OR ROUTED AROUND THE CONSTRUCTION, UTILIZING ODOT STANDARD DRAWING TM844 AND THE REQUIREMENTS OF THE 2018 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, SUBSECTION 00220.02(B).
5. WHEN CONSTRUCTION ACTIVITIES BLOCK OR INTERFERE WITH NORMAL OPEN STATE HIGHWAY SHOULDER CONDITIONS, AND THESE IMPACTS LAST LONGER THAN 72 HOURS, FOLLOW THE TEMPORARY SIGNING AND DELINEATION REQUIREMENTS OF ODOT STANDARD DRAWINGS TM800, TM843, TM851 AND TM852.
6. ANY ABRUPT EDGE GREATER THAN 2 INCHES IN DEPTH, CLOSER THAN 4 FEET FROM AN ACTIVE TRAVEL LANE, AND HAVING A DURATION LONGER THAN 72 HOURS, SHALL BE REQUIRED TO FOLLOW THE "TYPICAL ABRUPT EDGES SIGNING DETAIL" ON ODOT STANDARD DRAWING TM800.
7. WHEN CONSTRUCTION ACTIVITIES BLOCK OR INTERFERE WITH SHOULDERS OR BIKE LANES, INSTALL A 48 INCH "BICYCLES ON ROADWAY " (CW11-1) SIGN IN ADVANCE OF EACH SHOULDER OR BIKE LANE CLOSURE AT SIGN SPACING "A" FROM THE "TCD SPACING TABLE" SHOWN ON ODOT STANDARD DRAWING TM800.
8. THE CONTRACTOR SHALL PROVIDE FOR EMERGENCY VEHICLE ACCESS TO ALL PROPERTIES ADJACENT TO THE PROJECT. THE OWNER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY ACTIONS BY THE CONTRACTOR THAT MAY AFFECT THE FUNCTIONS OR DRIVEWAY ACCESS OF THE OWNER.

TESC General Notes

1. CONTRACTOR SHALL ADHERE TO ALL APPLICABLE EROSION CONTROL REQUIREMENTS AND SHALL PROVIDE EROSION AND SEDIMENTATION CONTROL MEASURES AND FACILITIES AS REQUIRED TO PREVENT EROSION.
2. IN THE EVENT OF ANY EROSION CONTROL MEASURE FAILURE, IMMEDIATE ACTION SHALL BE TAKEN TO REPAIR, REPLACE, OR CONSTRUCT ADDITIONAL MEASURES AS REQUIRED TO ENSURE ADEQUATE EROSION CONTROL PROTECTION.
3. ANY DISCHARGE OF SEDIMENT-LADEN RUN-OFF OR OTHER POLLUTANTS TO WATERS OF THE STATE IS SUBJECT TO ENFORCEMENT ACTION, THE COST FOR WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
4. DURING CONSTRUCTION, ALL RELEASES OF OILS, HYDRAULIC FLUIDS, FUELS, OTHER PETROLEUM PRODUCTS, PAINTS, SOLVENTS, AND OTHER DELETERIOUS MATERIALS MUST BE CONTAINED AND REMOVED IN A MANNER THAT WILL PREVENT THEIR DISCHARGE TO WATERS AND SOILS. THE CLEANUP OF SPILLS SHALL TAKE PRECEDENCE OVER OTHER WORK ON THE PROJECT. BARRELS, PETROPHILIC PADS, TARPS, AND OTHER EQUIPMENT NECESSARY FOR CAPTURING, CONTROLLING, AND DISPOSING OF HAZARDOUS FLUIDS SHALL BE AVAILABLE ON-SITE AT ALL TIMES.
5. OWNER REPRESENTATIVES MAY DIRECT MAINTENANCE AND REPAIR OF TESC MEASURES AND/OR FACILITIES AS THE HIGHEST PRIORITY WORK AT ANY TIME THE TESC MEASURES AND/OR FACILITIES DO NOT MEET THE PERMIT, CITY AND PLAN REQUIREMENTS. TESC MEASURES AND FACILITIES ARE NOT SHOWN ON THE PLANS, BUT SHALL BE PROVIDED BASED ON WEATHER CONDITIONS AND CONSTRUCTION PRACTICES AT THE DISCRETION OF THE OWNER.
6. FILTER FABRIC INLET BARRIERS ARE TO BE CONSTRUCTED AROUND ALL STORM SYSTEM INLETS WHICH ARE DOWNSTREAM FROM THE CONSTRUCTION SITE AND SUBJECT TO RECEIVING SEDIMENT OR SEDIMENT LADEN WATER AS A RESULT OF THE CONSTRUCTION OPERATIONS.
7. DUST CONTROL MUST BE PROVIDED BY THE CONTRACTOR. THE CONTRACTOR SHALL USE A VACUUM STREET SWEEPER TO REMOVE DUST AND DEBRIS FROM PAVEMENT AREAS AS DIRECTED BY THE ENGINEER OR OWNER'S REPRESENTATIVE. FLUSHING OF STREETS SHALL NOT BE PERMITTED WITHOUT PRIOR CITY AND COUNTY APPROVAL. POWER BROOMS SHALL NOT BE USED, NOR PERMITTED ON SITE.

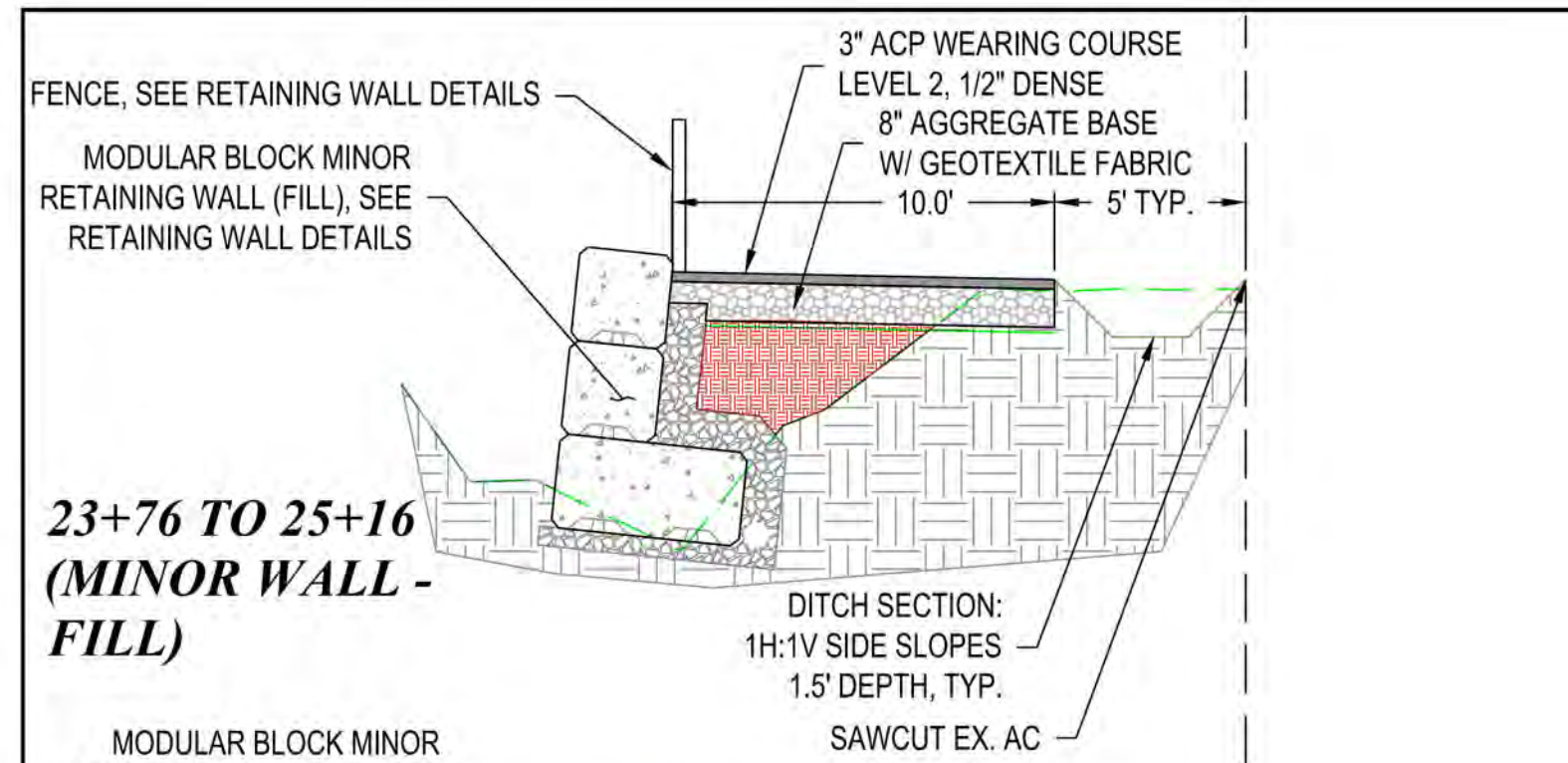


EXPIRES: 12/31/2024

CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

LEGENDS AND GENERAL NOTES

[illegible]



SAWCUT EX. ACP

MAINTAIN EX. ACP

VARIES

MIN. 1' WIDE GRAVEL SHOULDER
SLOPING AWAY FROM ACP

VARIES

12" CRUSHED AGGREGATE
BASE COURSE

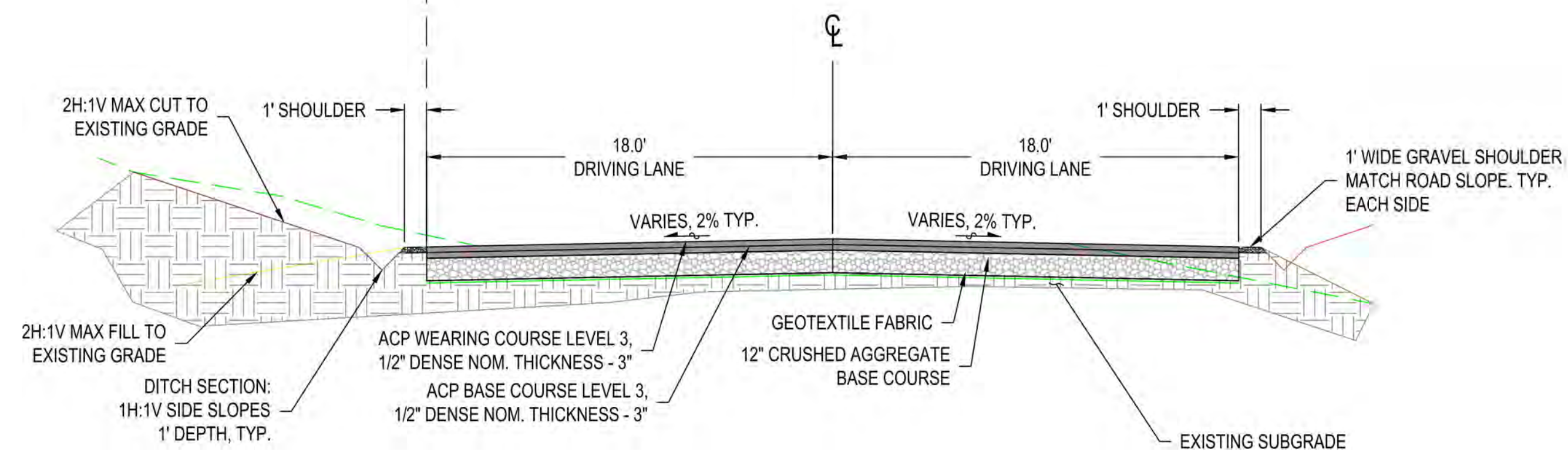
The diagram shows a cross-section of a road structure. At the bottom is a thick, textured layer labeled '12" CRUSHED AGGREGATE BASE COURSE'. Above this is a thinner, stippled layer labeled 'VARIES'. The top of this layer is a dashed green line. To the right of the 'VARIES' layer is a gravel shoulder labeled 'MIN. 1' WIDE GRAVEL SHOULDER SLOPING AWAY FROM ACP'. The shoulder slopes downwards from the base course towards the right edge of the diagram.

SEE RHODODENDRON
DRIVE SECTION FOR
PATH CONTINUATION

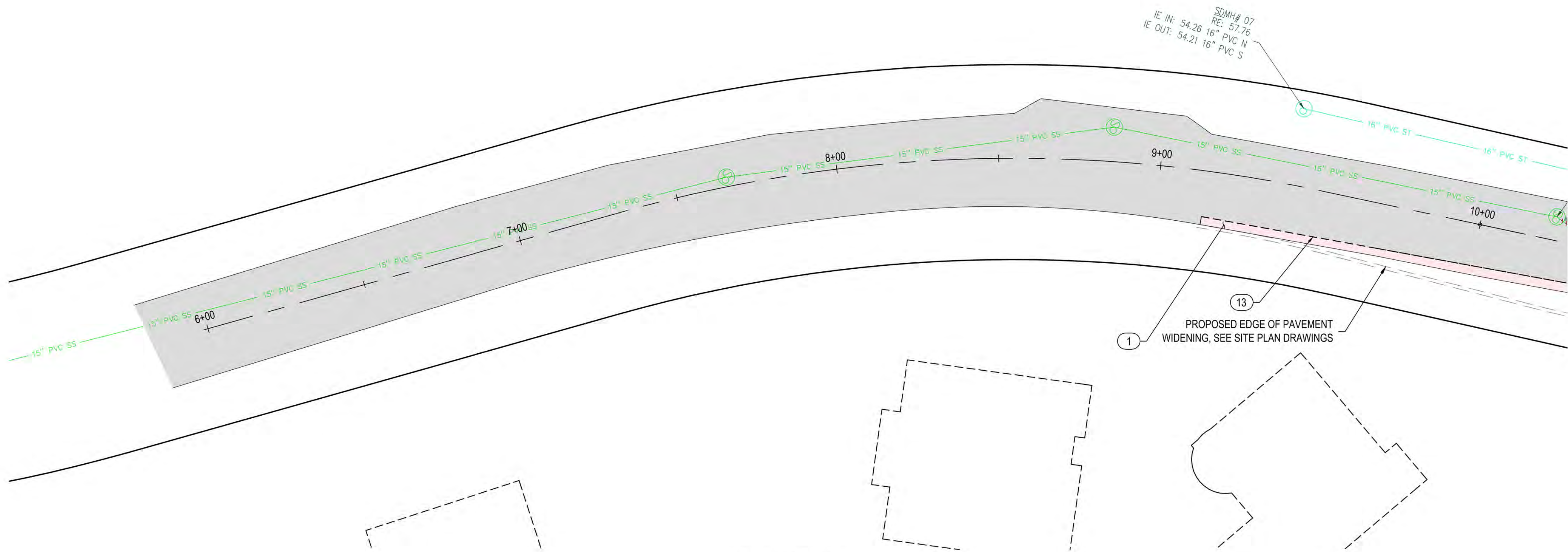
VARIES

SIDEWALK PER CITY OF
FLORENCE SD #F-205

CURB & GUTTER PER CITY
OF FLORENCE SD #F-203

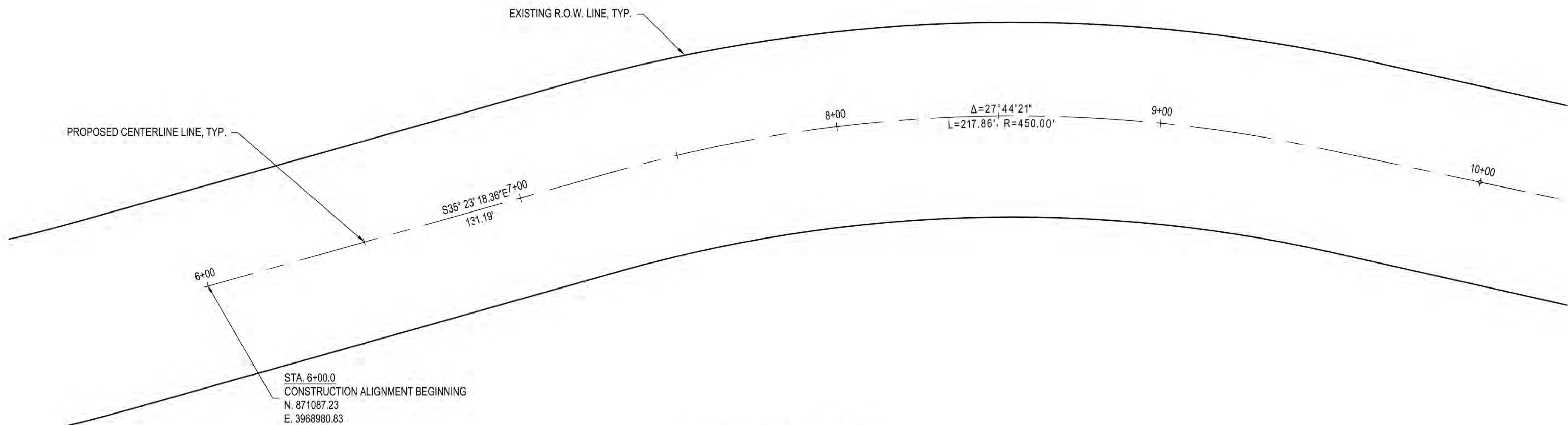


DWG NO.:	SHEET NO.:
S02	5



PLAN VIEW

1" = 20'



ALIGNMENT CONTROL

1" = 20'



GENERAL NOTES

- 1) PROPOSED FEATURES SHOWN IN GRAY ARE FOR CONTRACTOR'S CONVENIENCE IN IDENTIFYING IMPROVEMENT LIMITS.
- 2) REFER TO CONSTRUCTION NOTES, DWG NO. GI-01 FOR UTILITY ABANDONMENT PROCEDURES.



EXPIRES: 12/31/2024

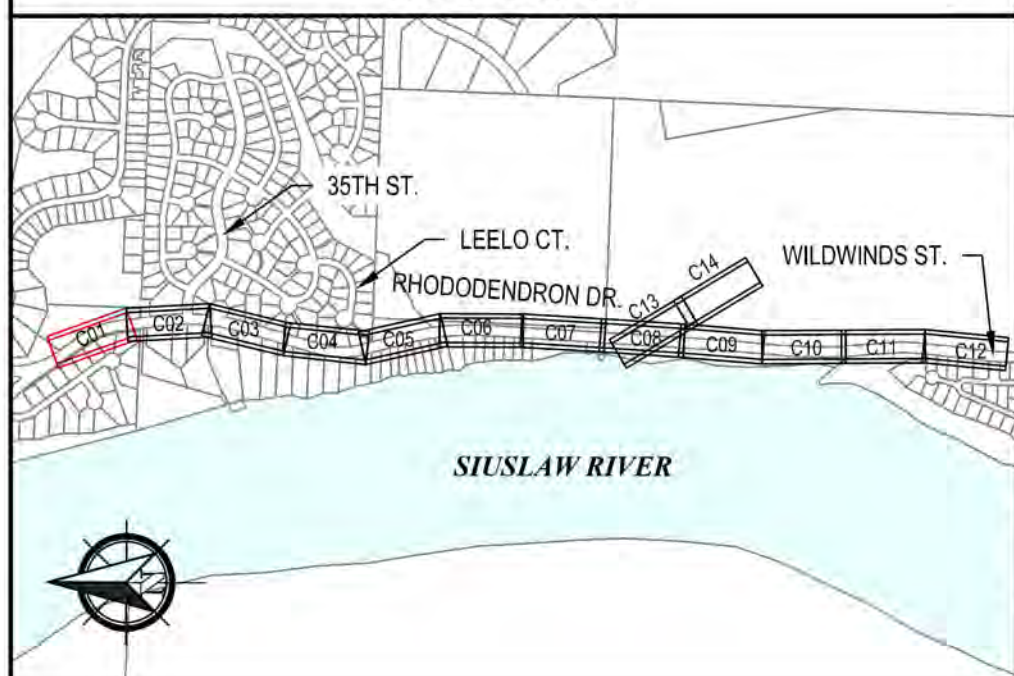
CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT
SITE PREPARATION AND SURVEY
CONTROL



DEMOLITION NOTES

- | | | |
|----|----------|---------------------------------|
| 1 | REMOVE | ASPHALT |
| 2 | REMOVE | VEGETATION |
| 3 | REMOVE | SIGN TEMPORARILY AND REPLACE |
| 4 | REMOVE | CATCH BASIN |
| 5 | RELOCATE | POWER POLE (BY OTHERS) |
| 6 | RELOCATE | TELEPHONE PEDESTAL (BY OTHERS) |
| 7 | RELOCATE | MAILBOX |
| 8 | RELOCATE | FENCE |
| 9 | ADJUST | SEWER MANHOLE |
| 10 | REPLACE | VALVE BOXES PER COF #F-403 |
| 11 | ABANDON | SEWER MANHOLE |
| 12 | ABANDON | SEWER LINE AND APPURTENANCES |
| 13 | PROPOSED | ACP SAWCUT LINE |
| 14 | PROVIDE | SILT FENCE |
| 15 | PROVIDE | INLET PROTECTION |
| 16 | RELOCATE | UTILITY (SEE UTILITY PLANS) |
| 17 | RELOCATE | SIGN (SEE GENERAL CONST. PLANS) |

KEY PLAN



REVISIONS		NO.	DATE	DESCRIPTION	BY	REVIEW
DATE	NOV 13, 2023	NOV 13, 2023				
ENGINEER	KAL	JAB				
REVIEWED						
DATE	NOV 13, 2023					
NO.						
DATE						
DESCRIPTION						
BY						
REVIEW						

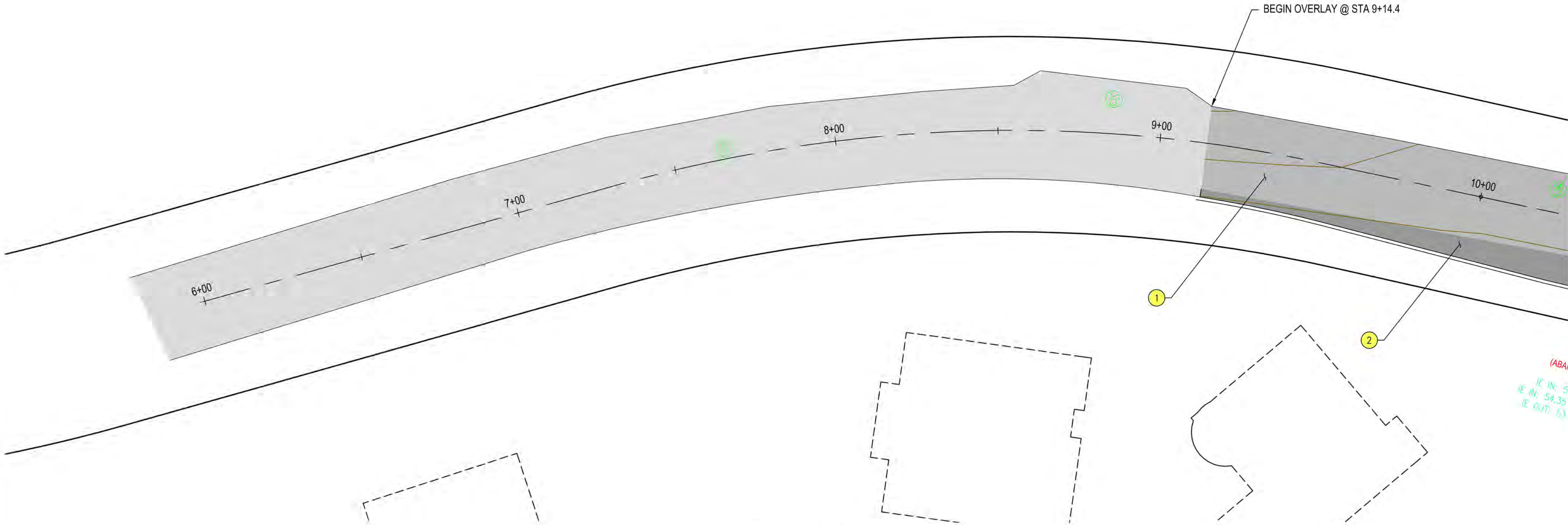
SCALE: SHOWN

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

DWG NO.: C01

SHEET NO.: 6

71



PLAN VIEW
1" = 20'



GENERAL NOTES

- 1) EOP ELEVATIONS REFERENCED IN THE PROFILE VIEWS REPRESENT THE ASPHALT ELEVATION AT THE EDGE OF PAVEMENT. ELEVATIONS ARE PROJECTED THROUGH INTERSECTIONS.
- 2) PROPOSED ADA RAMPS ARE TO BE CONTRACTOR DESIGNED PER THE SPECIFICATIONS. PROPOSED RAMP CONFIGURATIONS AS SHOWN ON THE PLANS ARE FOR ILLUSTRATION ONLY, AND THE CONTRACTOR DESIGNED LAYOUT MAY VARY.
- 3) ANY PROPOSED CURBS, RAMPS, AND/OR SIDEWALK SHALL BE PROVIDED PER ODOT STANDARD DRAWINGS, RD700 SERIES.

CONSTRUCTION NOTES

- 1 2" ACP OVERLAY
(FOR DETAIL, SEE DWG NO. S01)
- 2 ACP WIDENING
(FOR DETAIL, SEE DWG NO. S01)



CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

GENERAL CONSTRUCTION



REVISIONS		NO.	DATE	DESCRIPTION	BY	REVIEW
PRELIMINARY REVIEW						
DRAWINGS						

LOG NO.: 1013-113

CLIENT: FLO
FILENAME: RHOD-P-CIV.DWG

ENGINEER: KAL
REVIEWED: JAB

DATE: Nov 13, 2023
PLOT DATE: Nov 13, 2023

SCALE: SHOWN

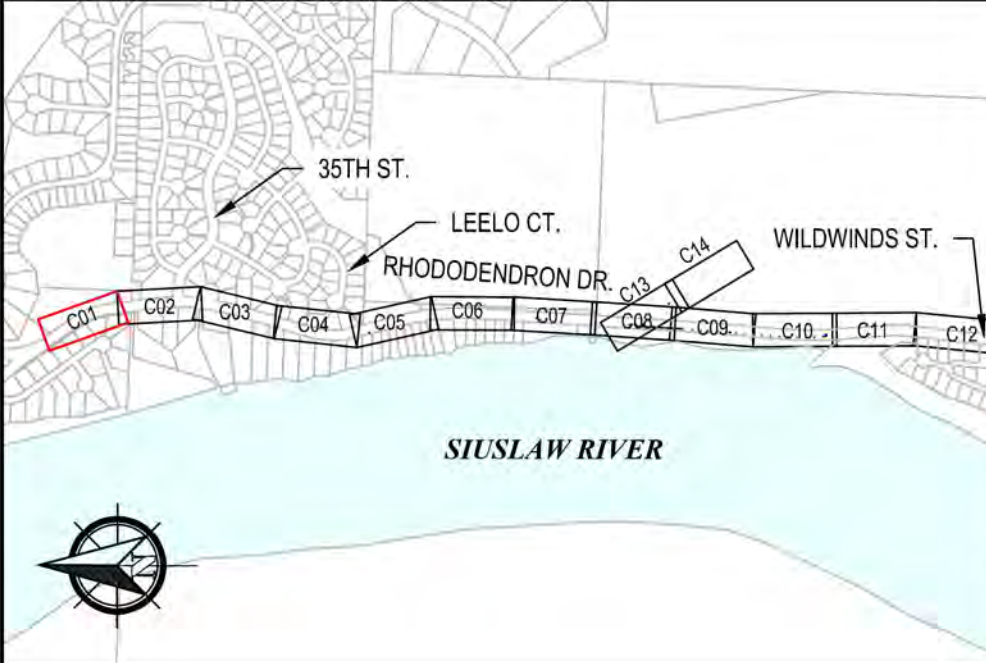
DRAWING IS FULL SCALE WHEN
BAR MEASURES 2"

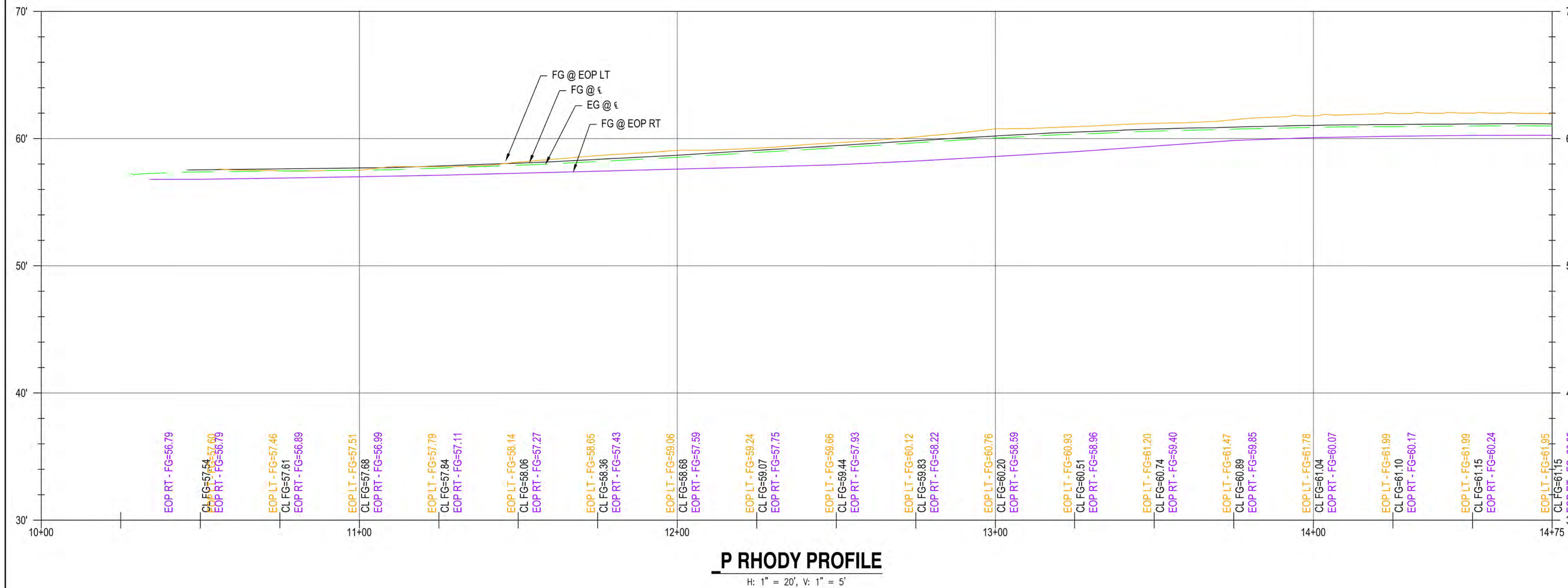
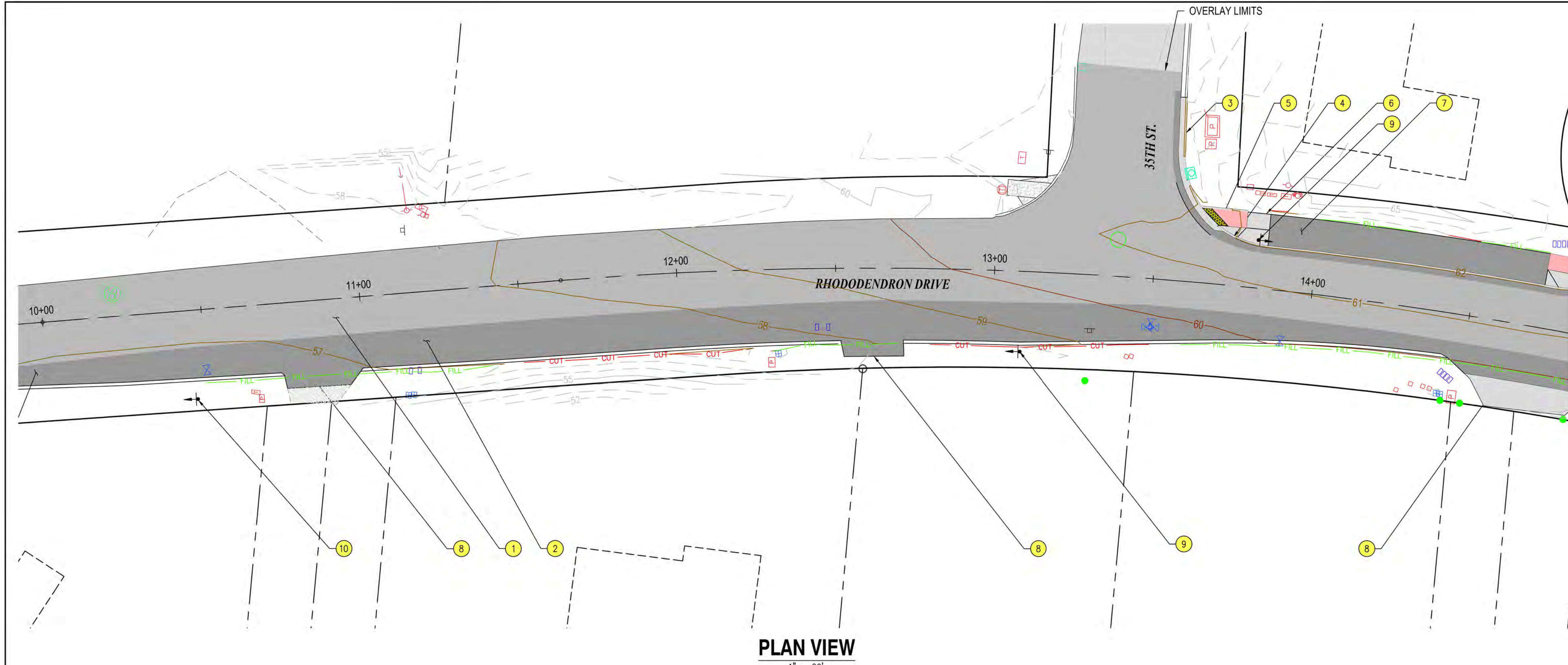
DWG NO.: C01A

SHEET NO.: 7

71

KEY PLAN





GENERAL NOTES

1) EOP ELEVATIONS REFERENCED IN THE PROFILE VIEWS REPRESENT THE ASPHALT ELEVATION AT THE EDGE OF PAVEMENT. ELEVATIONS ARE PROJECTED THROUGH INTERSECTIONS.

2) PROPOSED ADA RAMPS ARE TO BE CONTRACTOR DESIGNED PER THE SPECIFICATIONS. PROPOSED RAMP CONFIGURATIONS AS SHOWN ON THE PLANS ARE FOR ILLUSTRATION ONLY, AND THE CONTRACTOR DESIGNED LAYOUT MAY VARY.

3) ANY PROPOSED CURBS, RAMPS, AND/OR SIDEWALK SHALL BE PROVIDED PER ODOT STANDARD DRAWINGS, RD700 SERIES.

CONSTRUCTION NOTES

1) 2" ACP OVERLAY (FOR DETAIL, SEE DWG NO. S01)

2) ACP WIDENING (FOR DETAIL, SEE DWG NO. S01)

3) CONSTRUCT CURB AND GUTTER

4) CONSTRUCT STANDARD CURB

5) CONSTRUCT CURB RAMP, SEE DETAILS DWG NO. D01

6) CONSTRUCT CONC. S/W

7) CONSTRUCT ACP PATH (FOR DETAIL, SEE DWG NO. S01)

8) CONSTRUCT ACP DRIVEWAY, TRANSITION TO EX. DRIVEWAY APPROX. 5' BEYOND EDGE OF ROADWAY

9) INSTALL "STOP" SIGN ASSEMBLY

10) RELOCATE EX. SIGN OUTSIDE ROADWAY WIDENING

KEY PLAN

GENERAL CONSTRUCTION

NO.	DATE	DESCRIPTION	BY	REVIEW
1	10/13/23	REVISIONS		
2	10/13/23	PRELIMINARY REVIEW		
3	10/13/23	DRAWINGS		

REVISIONS

ENGINEER	DATE	NO.	DATE	DESCRIPTION
KAL	Nov 13, 2023	1		
JAB	Nov 13, 2023	2		

SCALE: SHOWN

0' 1' 2'

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

DWG NO.: C02A

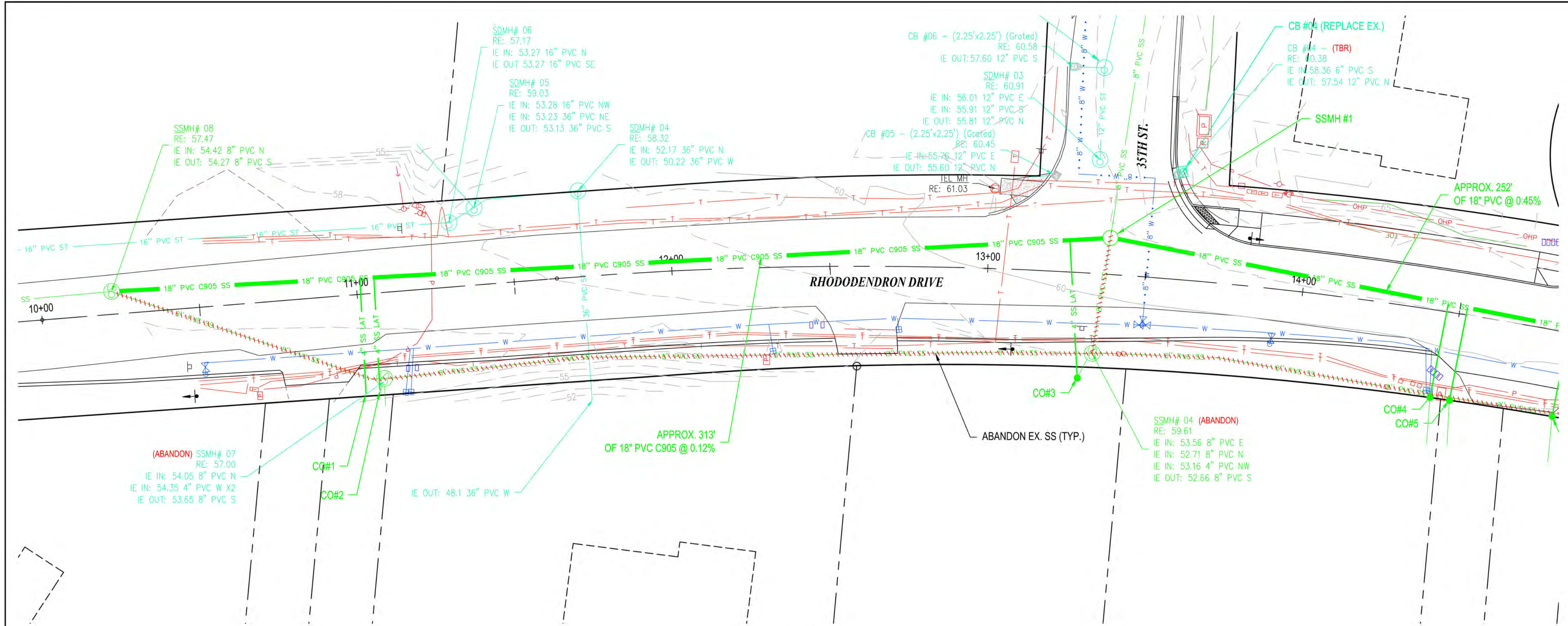
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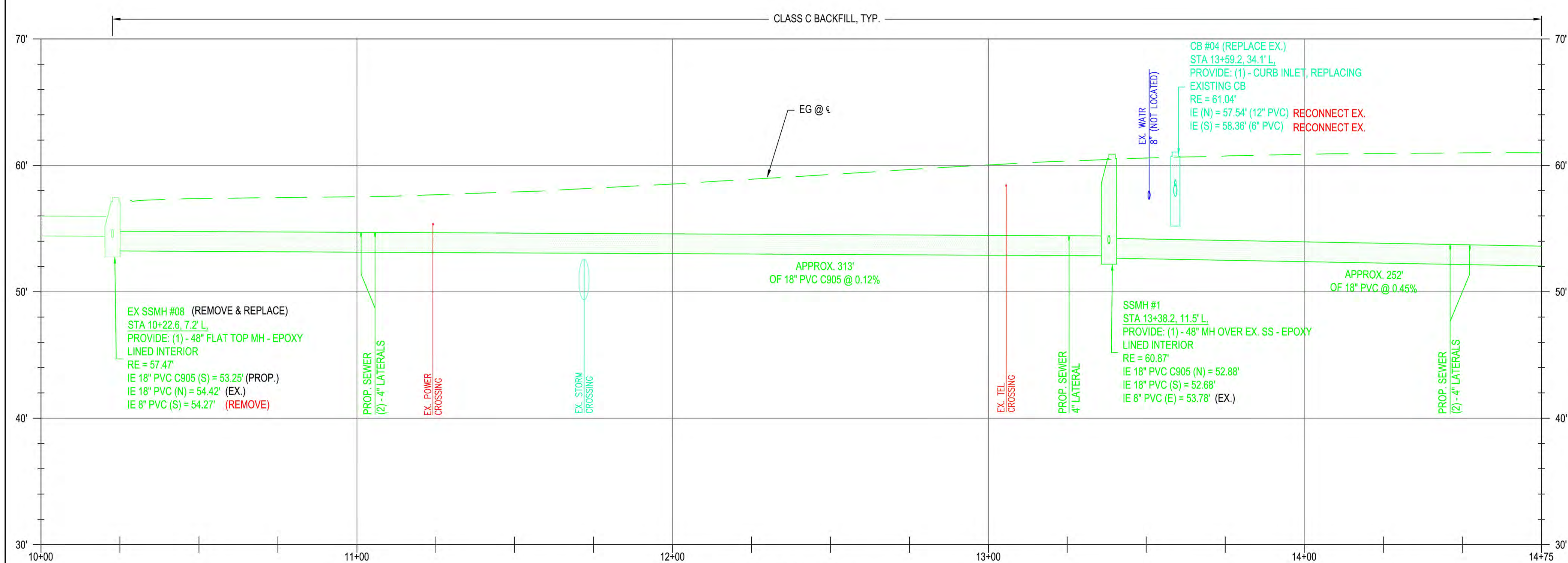
CITY OF FLORENCE

RHODODENDRON DRIVE REALIGNMENT

GENERAL CONSTRUCTION



PLAN VIEW
1" = 20'



PROFILE VIEW
H: 1" = 20' V: 1" = 5'



UTILITY NOTES



CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

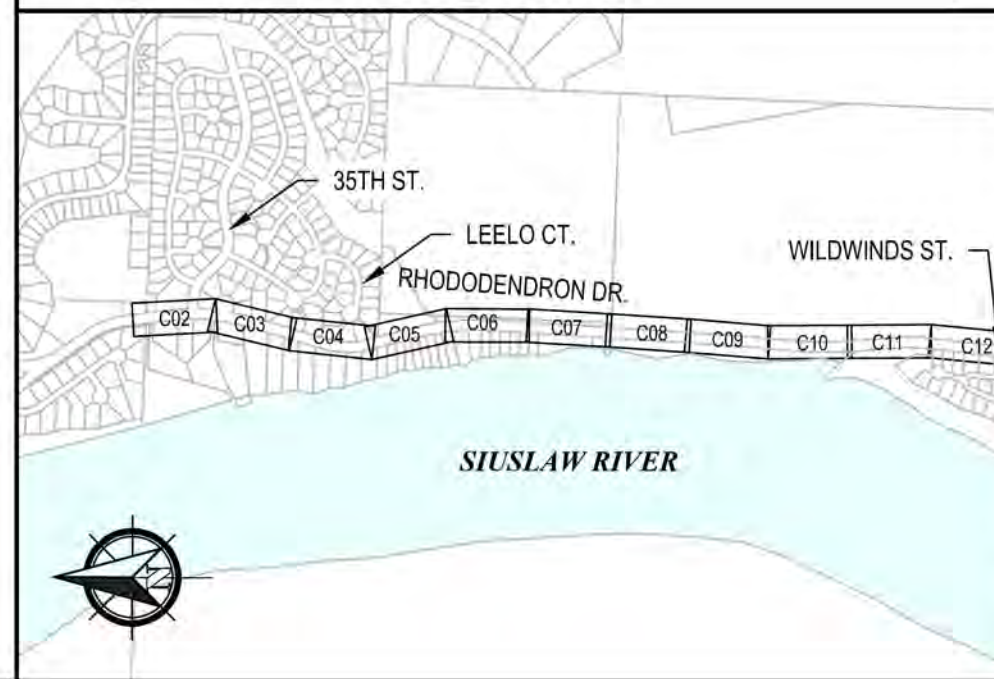
UTILITY PLAN



SEWER MAIN CONSTRUCTION NOTES

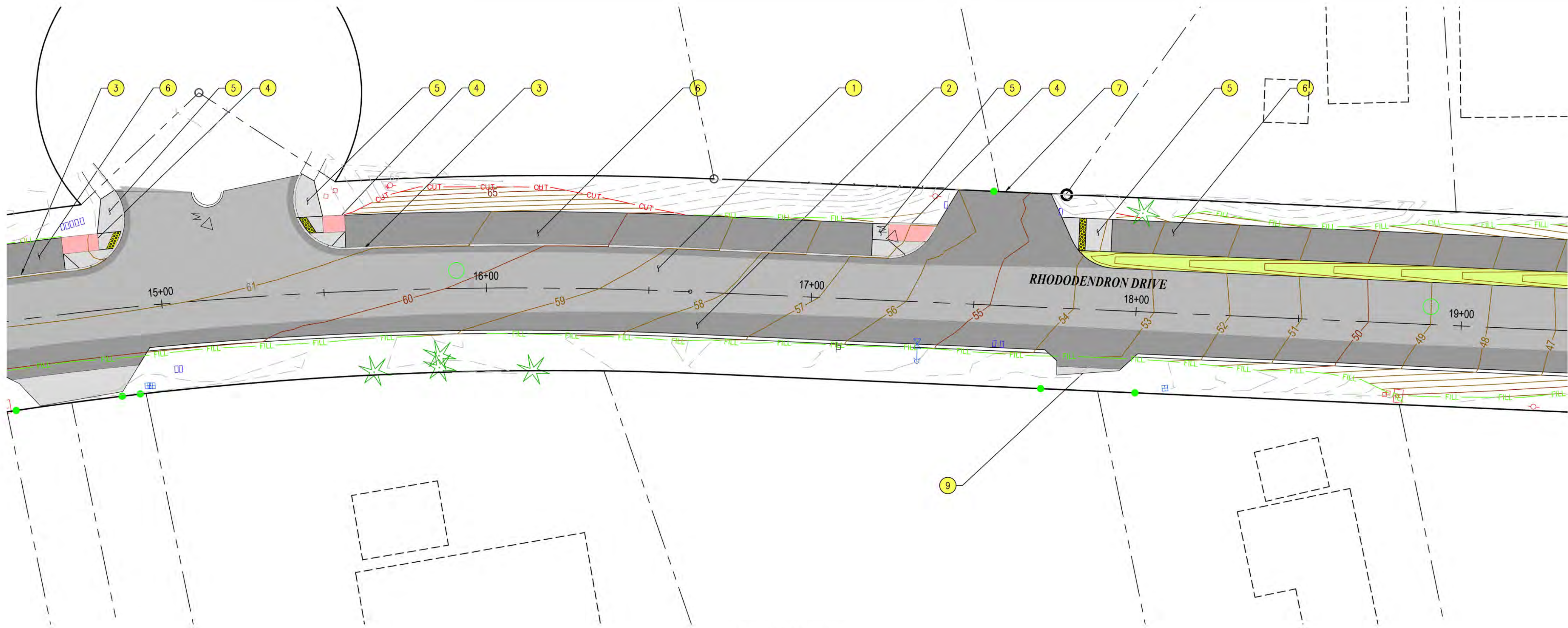
SEWER CLEANOUT TABLE				
NAME	SIZE	STATION	RIM	PIPES IN
CO#1	4"	11+00.3B, 31.4 R	ELEV. 56.42	I.E. 54.45, E
CO#2	4"	11+04.8B, 30.8 R	ELEV. 56.37	I.E. 54.44, E
CO#3	4"	13+30.4B, 33.3 R	ELEV. 59.00	I.E. 54.20, E
CO#4	4"	14+44.9B, 27.7 R	ELEV. 58.95	I.E. 53.39, E
CO#5	4"	14+51.3B, 27.6 R	ELEV. 59.10	I.E. 53.37, E

KEY PLAN



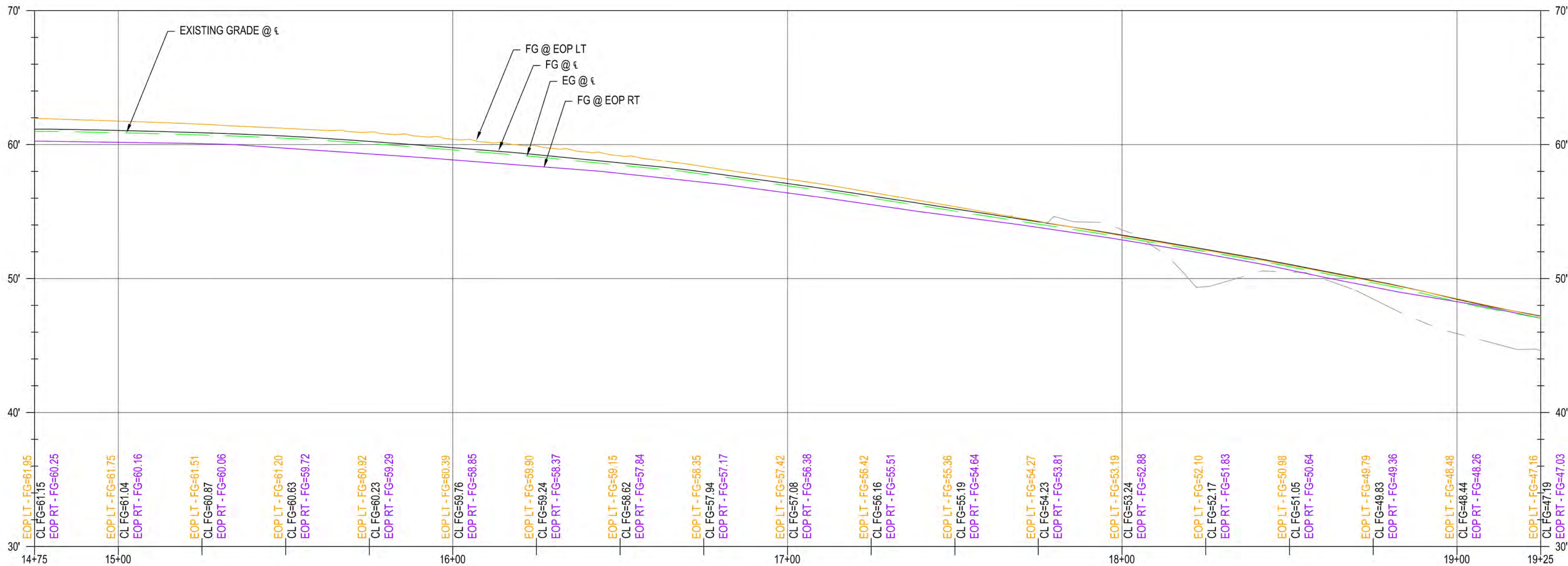
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REVIEWED	JAB	NOV 13, 2023				
DWG NO.	C02B					
SHEET NO.	10					
						71

SCALE: SHOWN
DRAWING IS FULL SCALE WHEN
BAR MEASURES 2"
1" = 20'



PLAN VIEW

1" = 20'



P RHODY PROFILE

H: 1" = 20', V: 1" = 5'



GENERAL NOTES

- EOP ELEVATIONS REFERENCED IN THE PROFILE VIEWS REPRESENT THE ASPHALT ELEVATION AT THE EDGE OF PAVEMENT. ELEVATIONS ARE PROJECTED THROUGH INTERSECTIONS.
- PROPOSED ADA RAMP ARE TO BE CONTRACTOR DESIGNED PER THE SPECIFICATIONS. PROPOSED RAMP CONFIGURATIONS AS SHOWN ON THE PLANS ARE FOR ILLUSTRATION ONLY, AND THE CONTRACTOR DESIGNED LAYOUT MAY VARY.
- ANY PROPOSED CURBS, RAMP, AND/OR SIDEWALK SHALL BE PROVIDED PER ODOT STANDARD DRAWINGS, RD700 SERIES.

CONSTRUCTION NOTES

- 2" ACP OVERLAY (FOR DETAIL, SEE DWG NO. S01)
- ACP WIDENING (FOR DETAIL, SEE DWG NO. S01)
- CONSTRUCT STANDARD CURB
- CONSTRUCT CURB RAMP, SEE DWG NO. D01 FOR DETAIL
- CONSTRUCT CONC. S/W
- CONSTRUCT ACP PATH (FOR DETAIL, SEE DWG NO. S01)
- CONSTRUCT ACP DRIVEWAY APPROACH (FOR DETAIL, SEE DWG NO. D01)
- CONSTRUCT DRAINAGE SWALE (FOR DETAIL, SEE DWG NO. S01)
- CONSTRUCT ACP DRIVEWAY, TRANSITION TO EX. DRIVEWAY APPROX. 5' BEYOND EDGE OF ROADWAY



EXPIRES: 12/31/2024

CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

GENERAL CONSTRUCTION



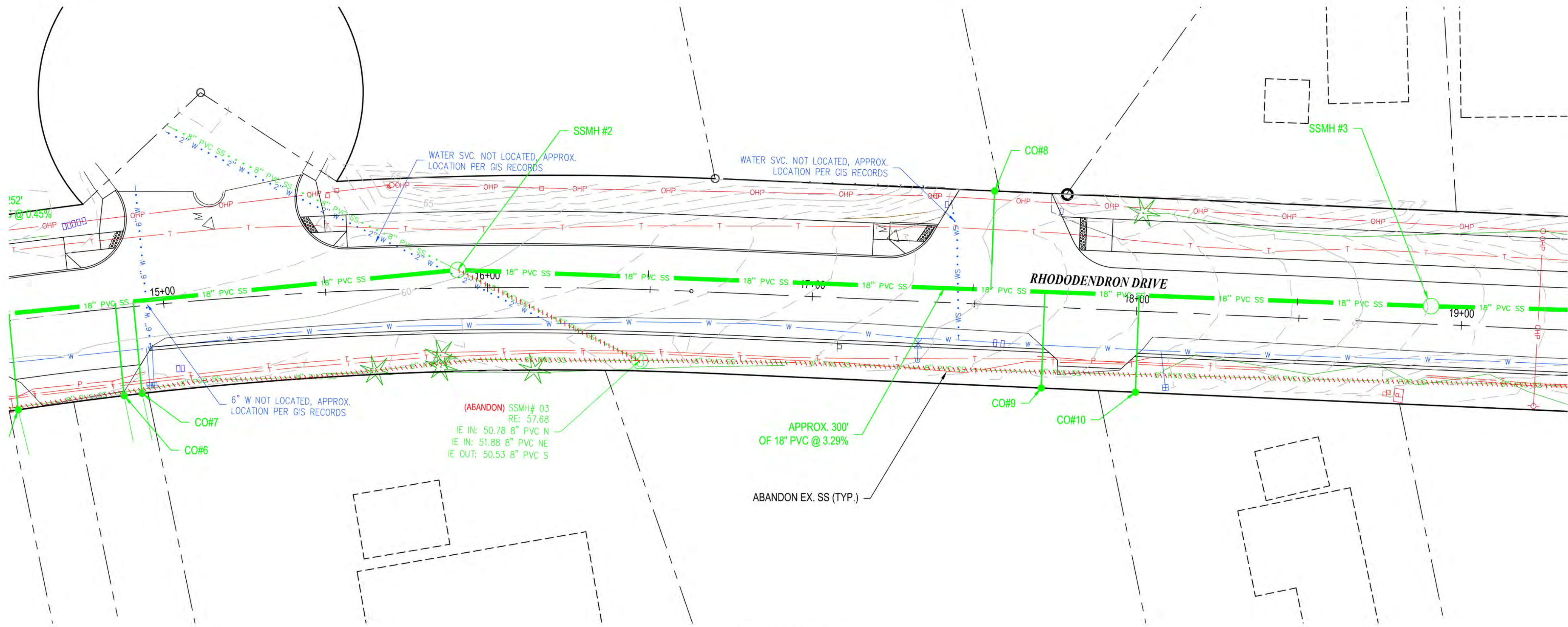
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REVISIONS

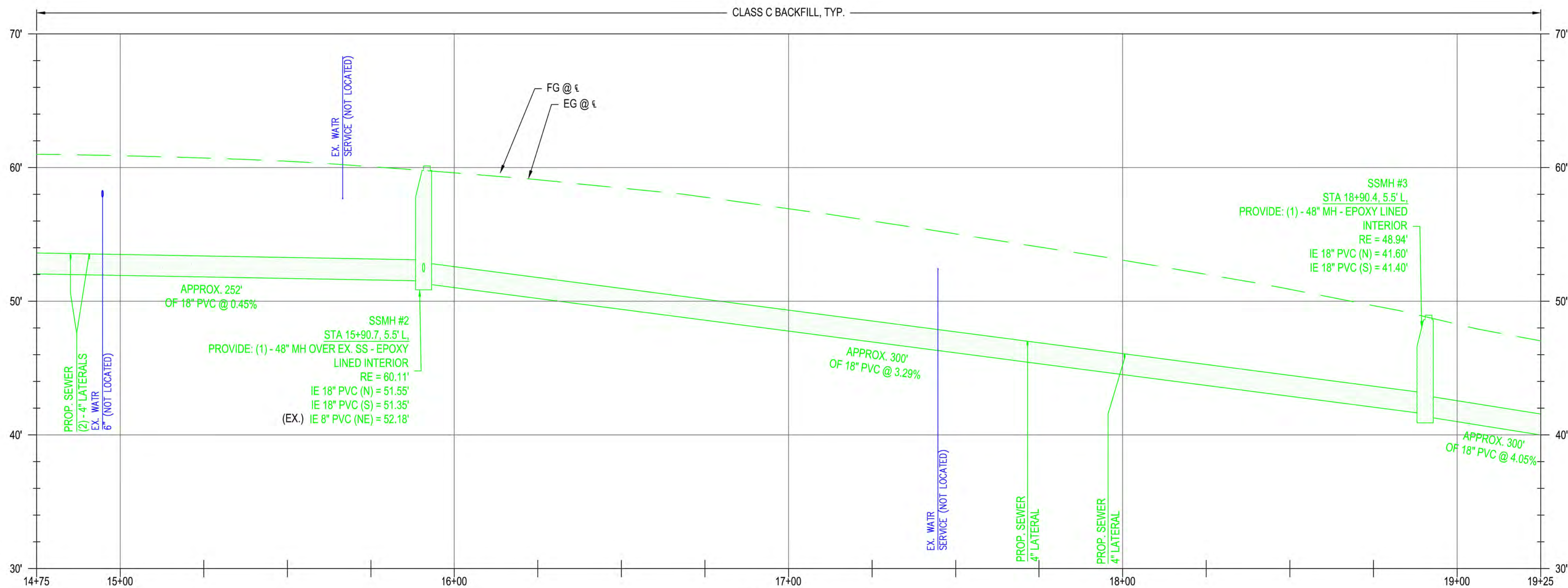
PRELIMINARY REVIEW
DRAWINGS

SCALE: SHOWN

DWG NO.: C03A
SHEET NO.: 12



PLAN VIEW
1" = 20'



PROFILE VIEW
H: 1" = 20' V: 1" = 5'



UTILITY NOTES



CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

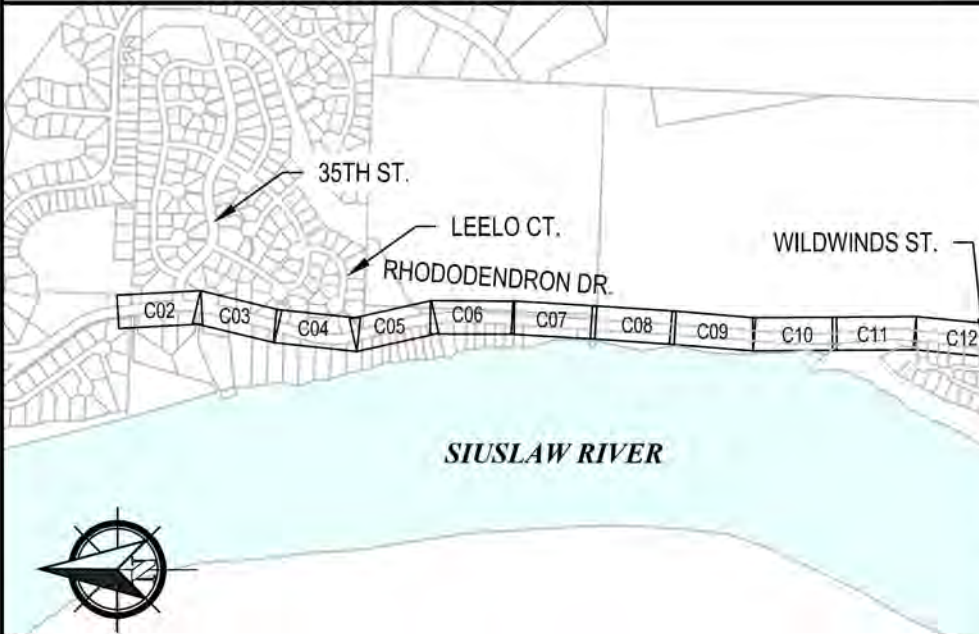
UTILITY PLAN



SEWER MAIN CONSTRUCTION NOTES

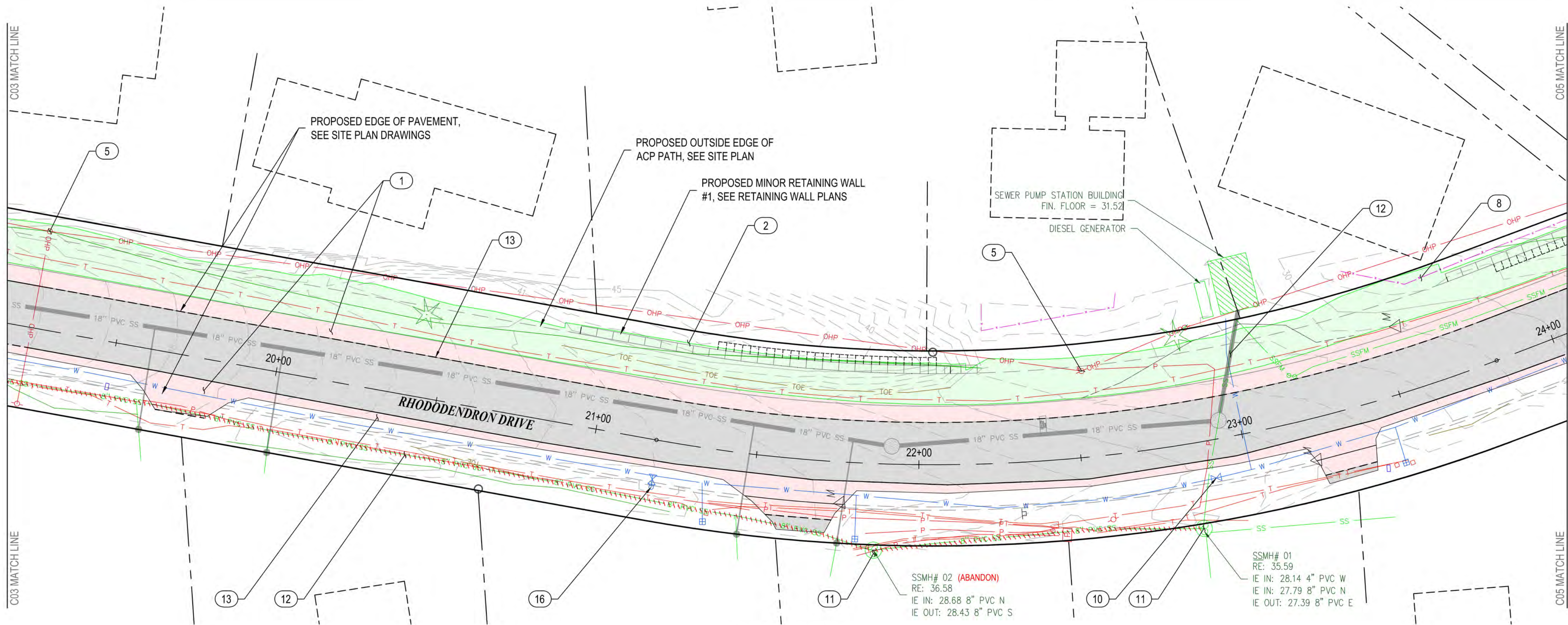
SEWER CLEANOUT TABLE				
NAME	SIZE	STATION	RIM	PIPES IN
CO#6	4"	14+84.9B, 27.0 R	ELEV. 59.11	I.E. 53.10, E
CO#7	4"	14+90.7B, 26.9 R	ELEV. 59.11	I.E. 53.11, E
CO#8	4"	17+54.6B, 35.0 L	ELEV. 55.51	I.E. 47.18, W
CO#9	4"	17+71.8B, 25.0 R	ELEV. 57.86	I.E. 46.59, E
CO#10	4"	18+00.8B, 25.0 R	ELEV. 57.86	I.E. 45.62, E

KEY PLAN

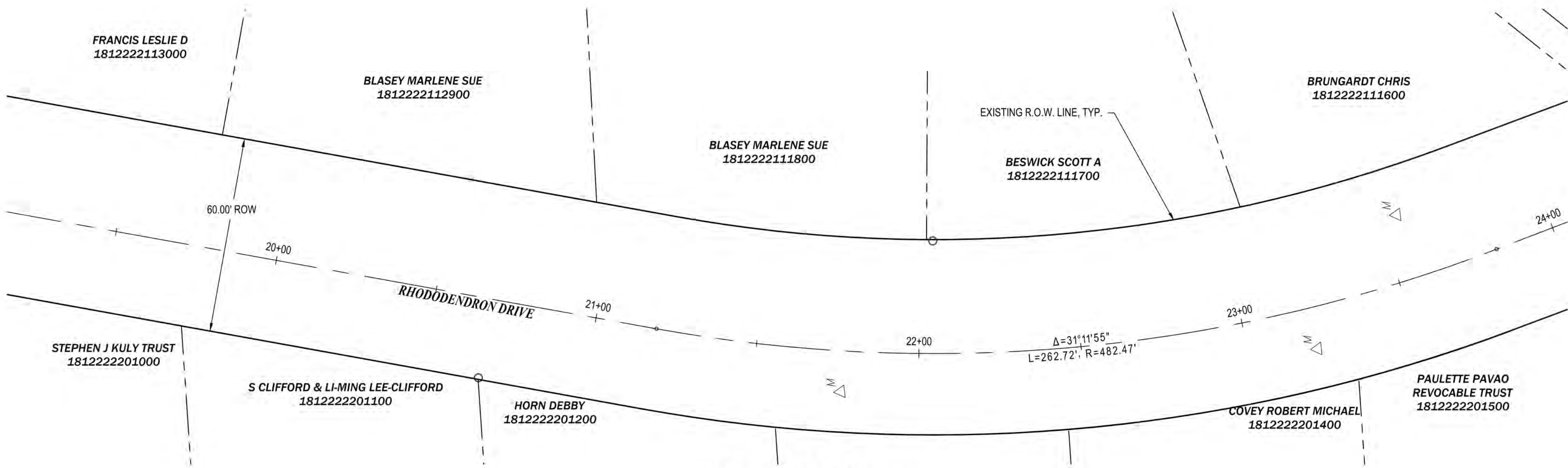


REVISIONS

NO.	DATE	DESCRIPTION	BY	REVIEW



PLAN VIEW
1" = 20'



ALIGNMENT CONTROL
1" = 20'



GENERAL NOTES

- 1) PROPOSED FEATURES SHOWN IN GRAY ARE FOR CONTRACTOR'S CONVENIENCE IN IDENTIFYING IMPROVEMENT LIMITS.
- 2) REFER TO CONSTRUCTION NOTES, DWG NO. GI-01 FOR UTILITY ABANDONMENT PROCEDURES.



EXPIRES: 12/31/2024

CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

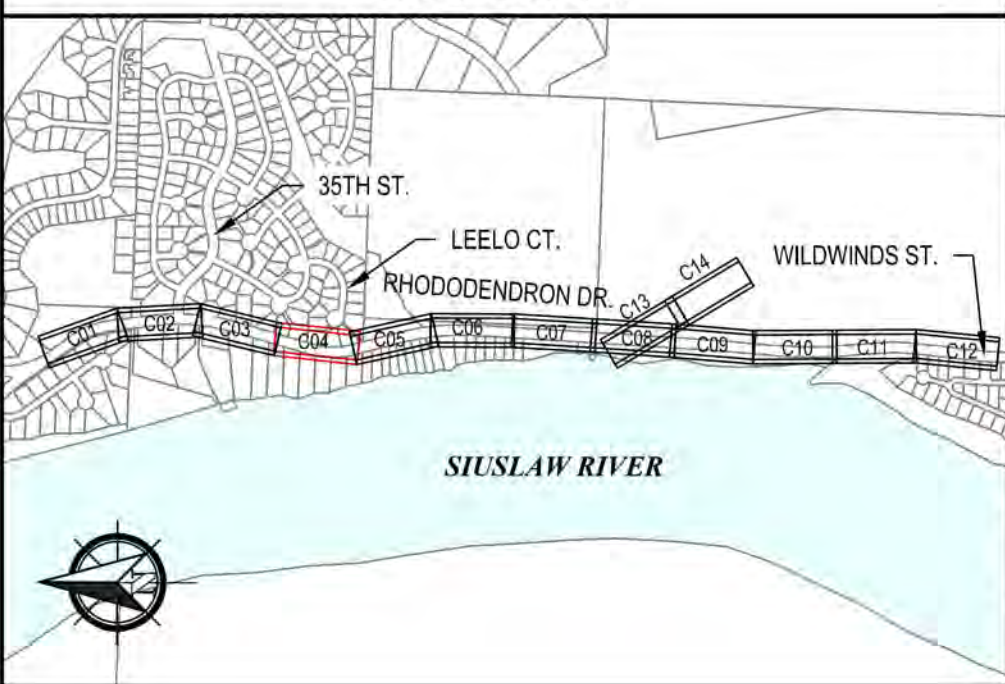


SITE PREPARATION AND SURVEY
CONTROL

DEMOLITION NOTES

- | | | |
|----|----------|---------------------------------|
| 1 | REMOVE | ASPHALT |
| 2 | REMOVE | VEGETATION |
| 3 | REMOVE | SIGN TEMPORARILY AND REPLACE |
| 4 | REMOVE | CATCH BASIN |
| 5 | RELOCATE | POWER POLE (BY OTHERS) |
| 6 | RELOCATE | TELEPHONE PEDESTAL (BY OTHERS) |
| 7 | RELOCATE | MAILBOX |
| 8 | RELOCATE | FENCE |
| 9 | ADJUST | SEWER MANHOLE |
| 10 | REPLACE | VALVE BOXES PER COF #F-403 |
| 11 | ABANDON | SEWER MANHOLE |
| 12 | ABANDON | SEWER LINE AND APPURTENANCES |
| 13 | PROPOSED | ACP SAWCUT LINE |
| 14 | PROVIDE | SILT FENCE |
| 15 | PROVIDE | INLET PROTECTION |
| 16 | RELOCATE | UTILITY (SEE UTILITY PLANS) |
| 17 | RELOCATE | SIGN (SEE GENERAL CONST. PLANS) |

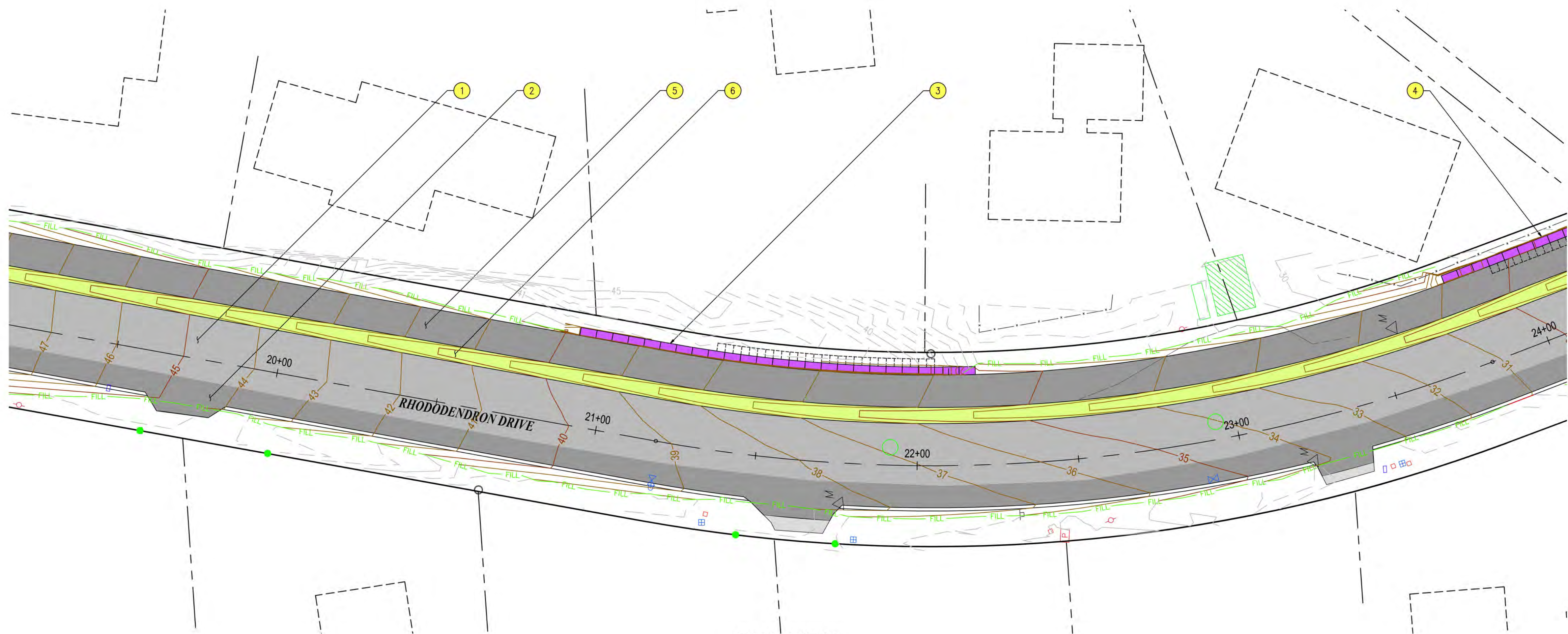
KEY PLAN



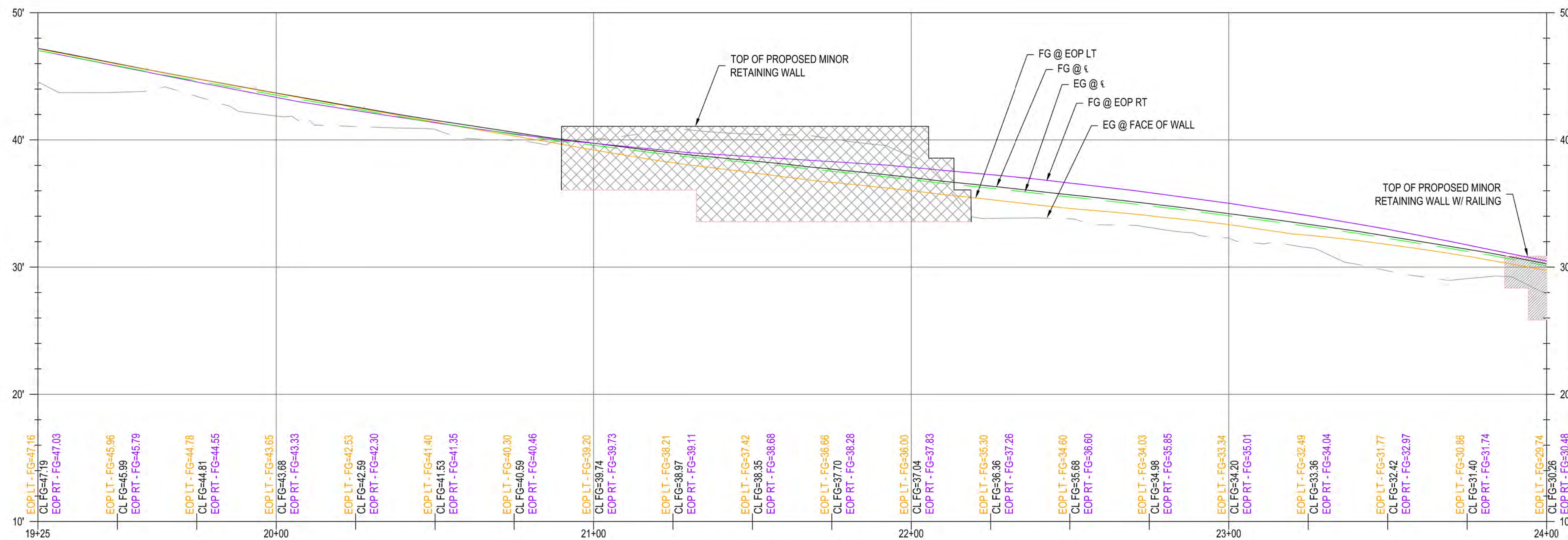
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ENGINEER	KAL	NOV 13, 2023	FLO	RHOD-P-PREP.DWG	NOV 13, 2023					
REVIEWED	JAB									
DWG NO.	C04	SHEET NO.	14							
										71

SCALE: SHOWN

DRAWING IS FULL SCALE WHEN
BAR MEASURES 2"



PLAN VIEW
1" = 20'



P RHODY PROFILE
H: 1" = 20', V: 1" = 5'



GENERAL NOTES

- EOP ELEVATIONS REFERENCED IN THE PROFILE VIEWS REPRESENT THE ASPHALT ELEVATION AT THE EDGE OF PAVEMENT. ELEVATIONS ARE PROJECTED THROUGH INTERSECTIONS.
- PROPOSED ADA RAMP ARE TO BE CONTRACTOR DESIGNED PER THE SPECIFICATIONS. PROPOSED RAMP CONFIGURATIONS AS SHOWN ON THE PLANS ARE FOR ILLUSTRATION ONLY, AND THE CONTRACTOR DESIGNED LAYOUT MAY VARY.
- ANY PROPOSED CURBS, RAMP, AND/OR SIDEWALK SHALL BE PROVIDED PER ODOT STANDARD DRAWINGS, RD700 SERIES.

CONSTRUCTION NOTES

- 2" ACP OVERLAY (FOR DETAIL, SEE DWG NO. S01)
- ACP WIDENING (FOR DETAIL, SEE DWG NO. S01)
- STA. 20+90 TO STA 22+19 CONSTRUCT WALL #1 - MODULAR BLOCK WALL (FOR DETAILS, SEE RETAINING WALL PLANS)
- STA. 23+76 TO STA. 25+16 CONSTRUCT WALL #2 - MODULAR BLOCK WALL (FOR DETAILS, SEE RETAINING WALL PLANS)
- CONSTRUCT ACP PATH (FOR DETAIL, SEE DWG NO. S01)
- CONSTRUCT DRAINAGE SWALE (FOR DETAIL, SEE DWG NO. S01)

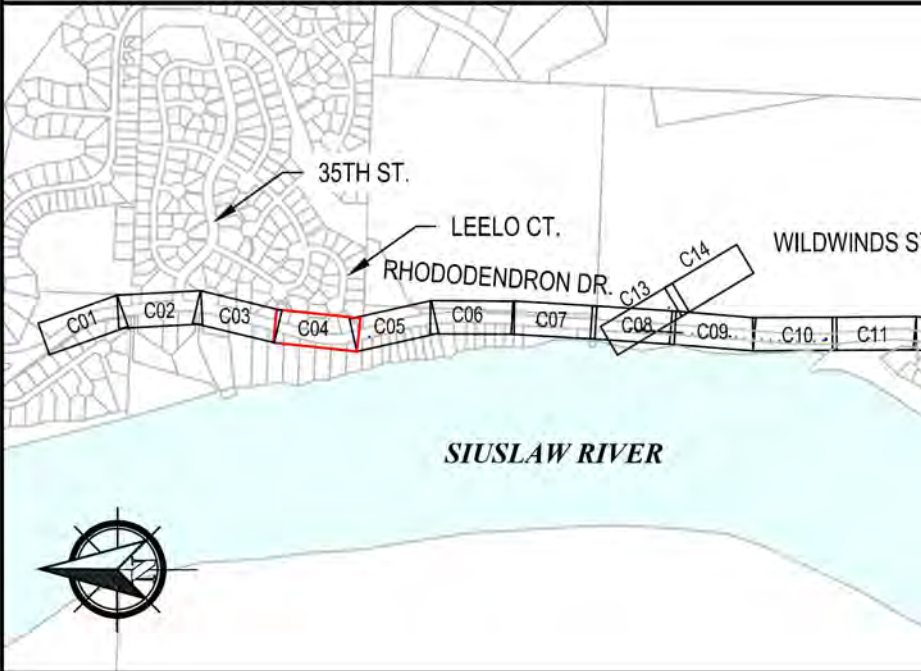


CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

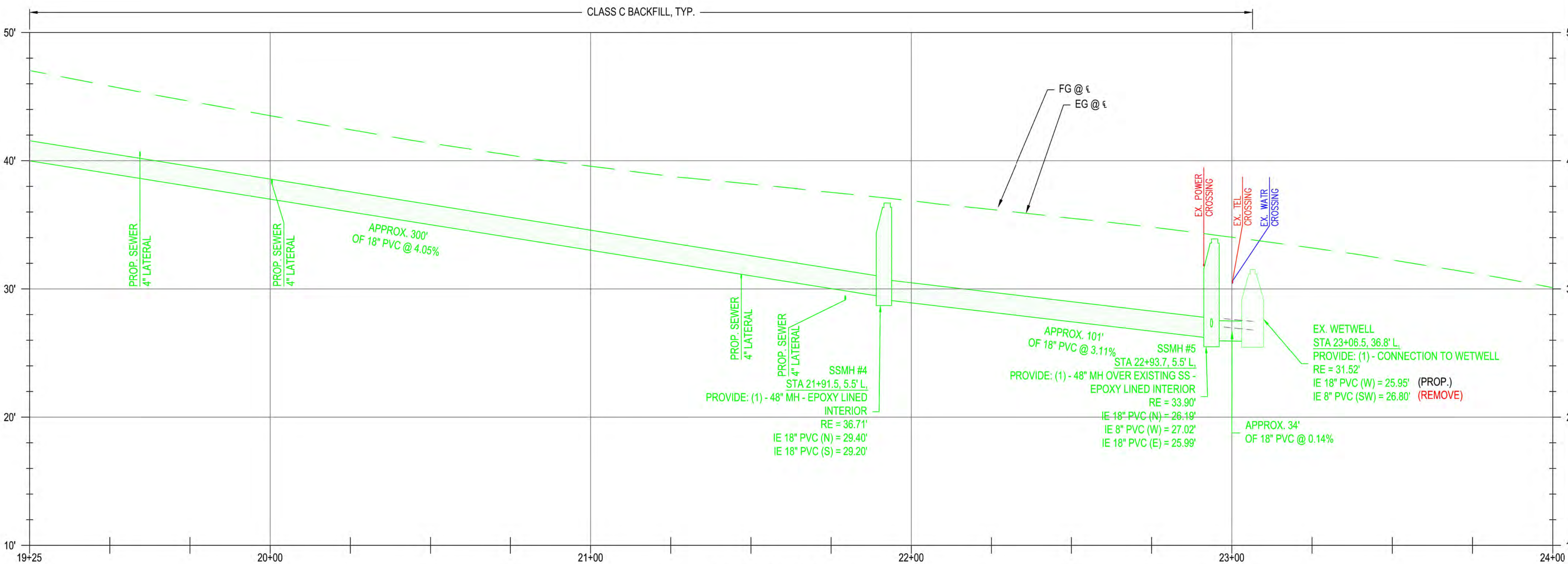
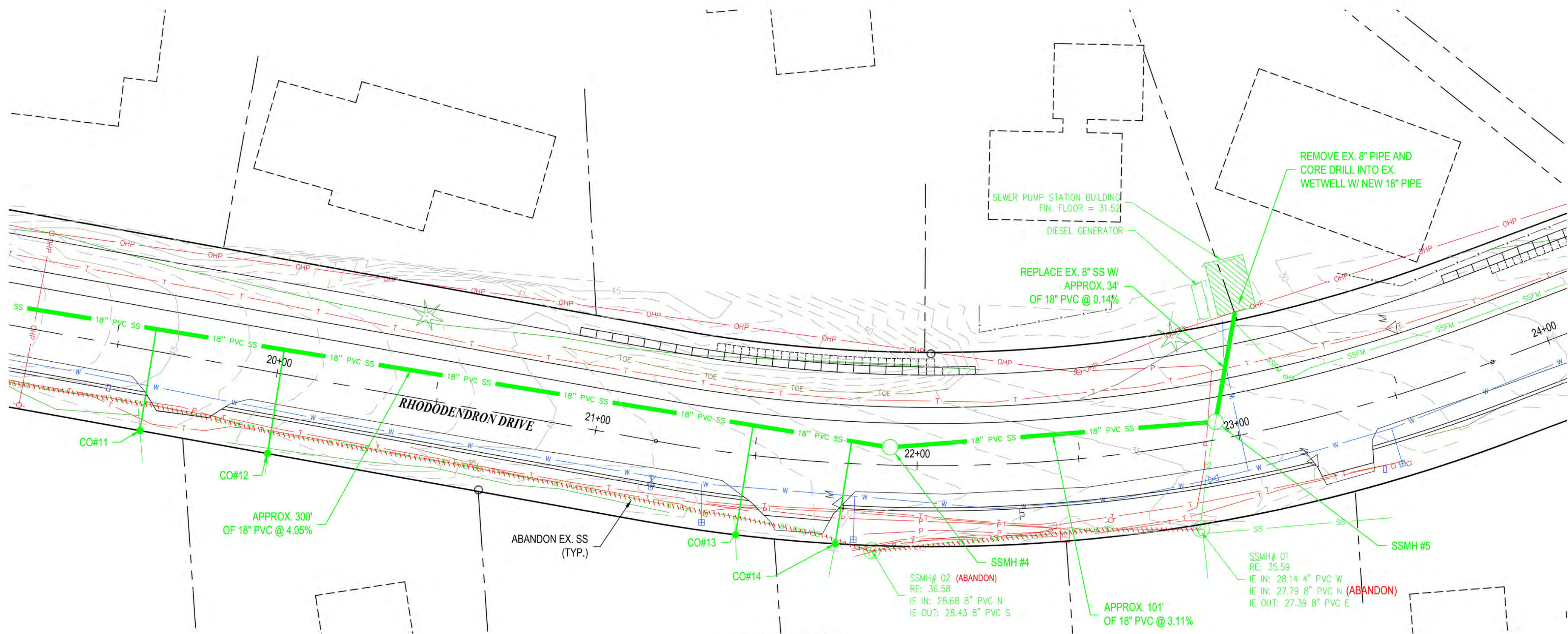
GENERAL CONSTRUCTION

NO.	DATE	DESCRIPTION	BY	REVIEW
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KEY PLAN



SCALE: SHOWN
0' 1' 2'
DRAWING IS FULL SCALE WHEN BAR MEASURES 2"
DWG NO.: C04A
SHEET NO.: 15
71



UTILITY NOTES

- 1) CORE DRILL INTO EXISTING PUMP STATION WET WELL TO PROVIDE FOR SNUG, LEAK-PROOF, WATERTIGHT SEAL AT CONNECTION OF NEW 18" PIPE AND WET WELL BARREL SECTION.
- 2) INSTALL SEWER FLOW BYPASS OPERATIONS AS REQUIRED FOR CONNECTION TO WETWELL. CONTRACTOR TO COORDINATE WITH CITY FOR TEMPORARY BYPASS PUMPING, AND LIFT STATION OPERATION.



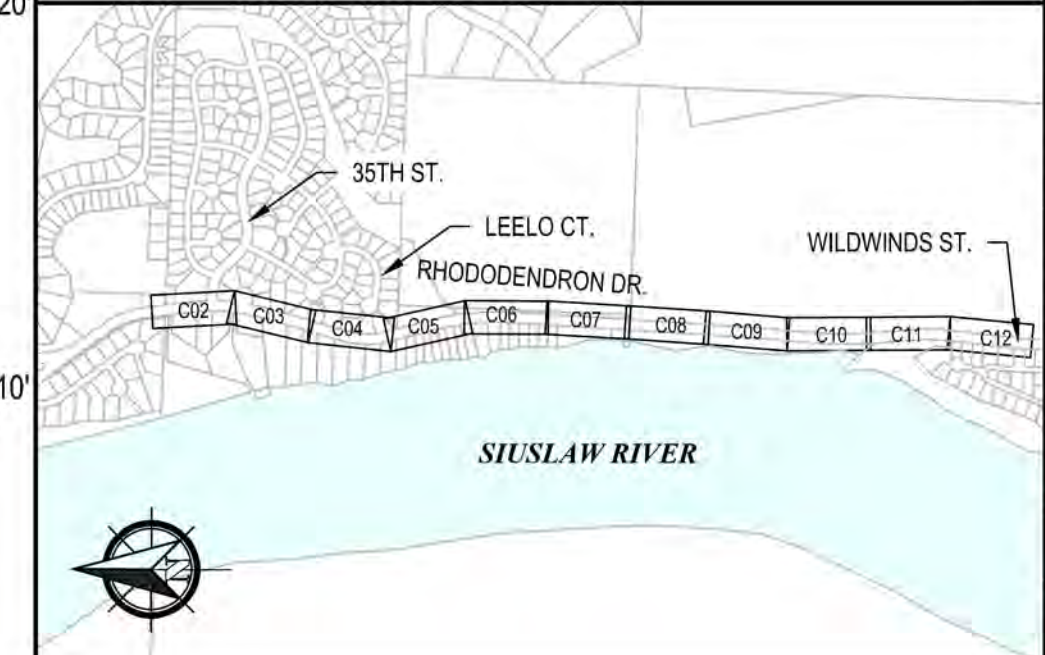
CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

UTILITY PLAN

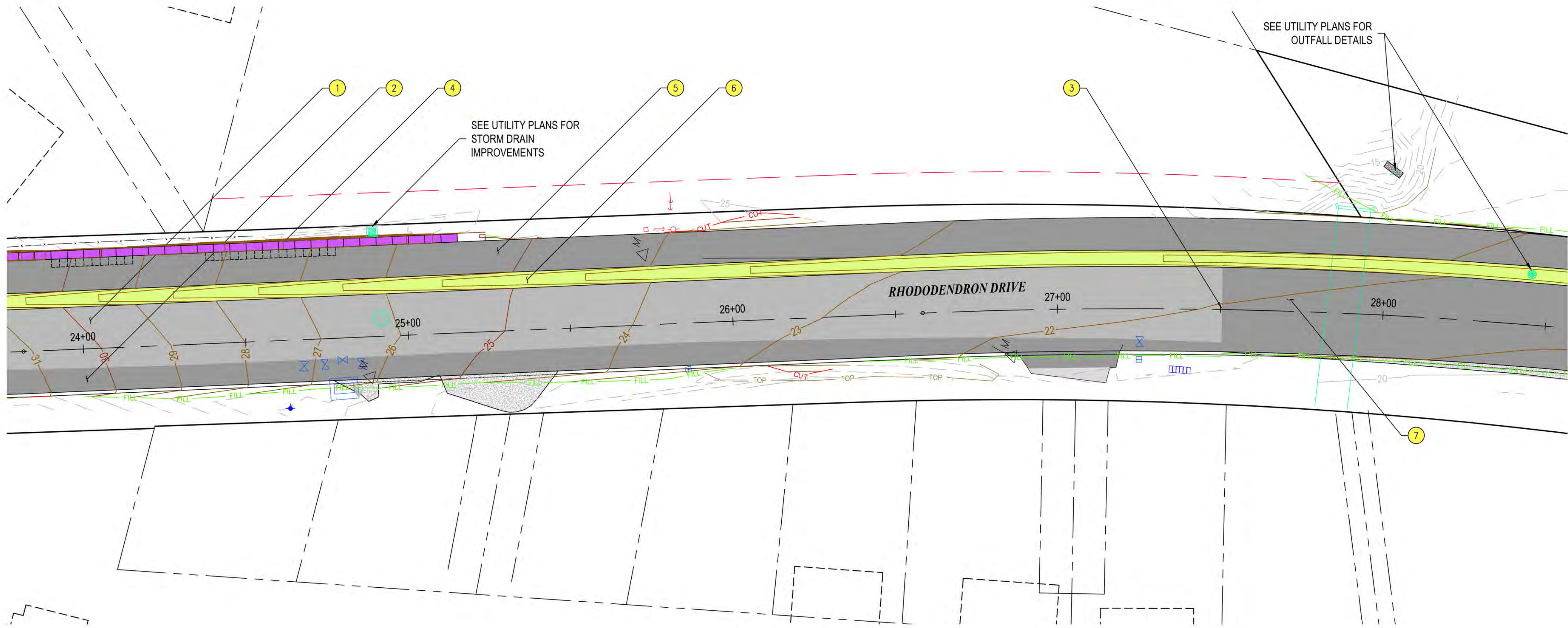
SEWER MAIN CONSTRUCTION NOTES

SEWER CLEANOUT TABLE				
NAME	SIZE	STATION	RIM	PIPES IN
CO#11	4"	19+61.4B, 25.0 R	ELEV. 41.16	I.E. 39.81, E
CO#12	4"	20+01.5B, 25.0 R	ELEV. 39.54	I.E. 38.19, E
CO#13	4"	21+46.8B, 25.0 R	ELEV. 33.71	I.E. 32.36, E
CO#14	4"	21+76.1B, 25.0 R	ELEV. 37.30	I.E. 31.09, E

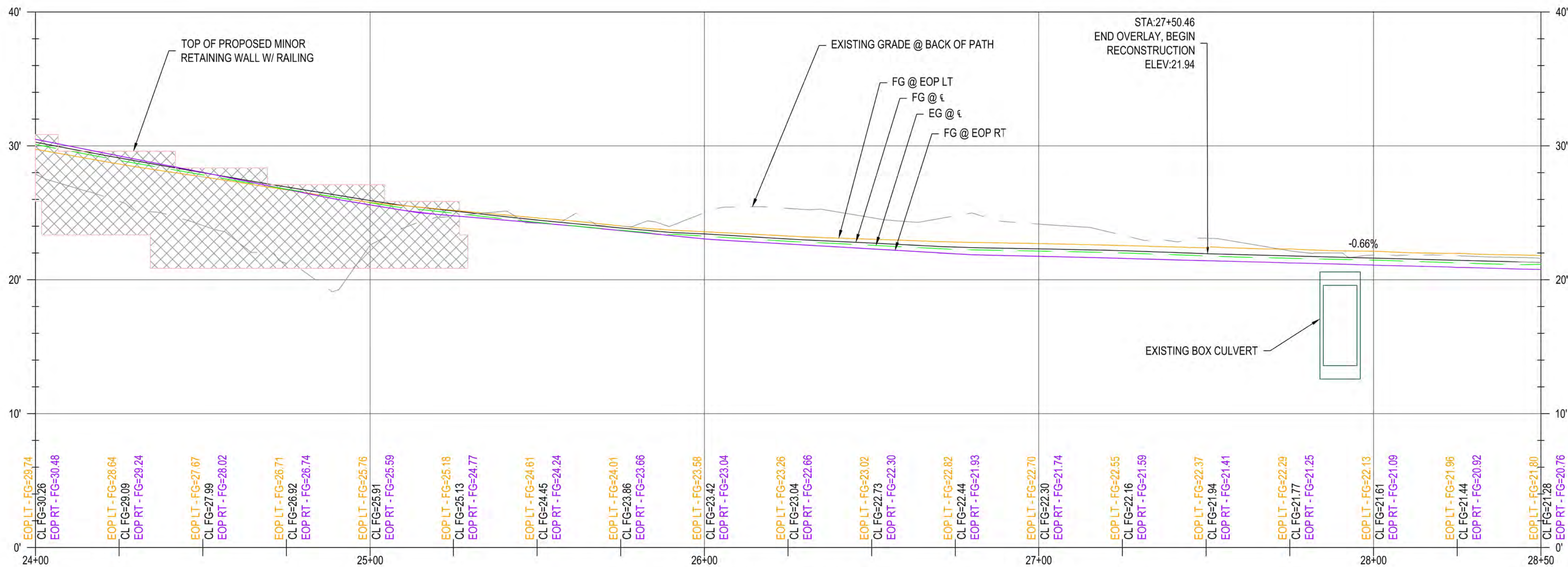
KEY PLAN



REVISIONS		NO.	DATE	DESCRIPTION	BY	REVIEW
ENGINEER	KAL	NOV 13, 2023	NOV 13, 2023			
REVIEWED	JAB					
DWG NO.: C04B		SHEET NO.: 16		71		



PLAN VIEW
1" = 20'



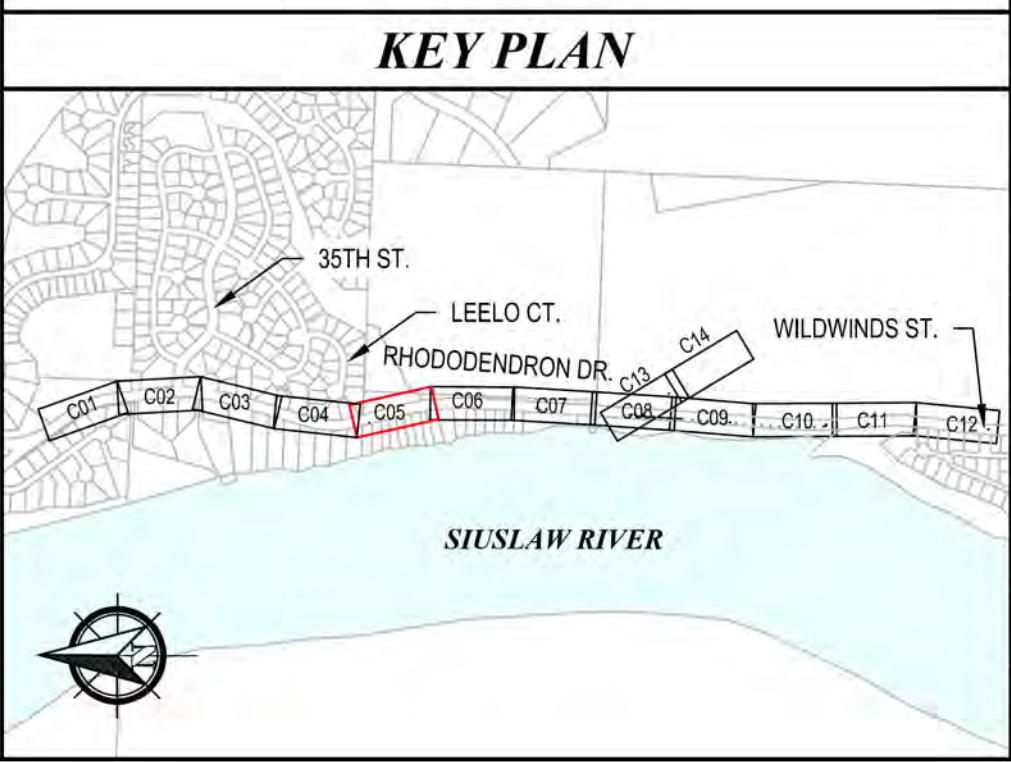
P RHODY PROFILE
H: 1" = 20', V: 1" = 5'

GENERAL NOTES

- EOP ELEVATIONS REFERENCED IN THE PROFILE VIEWS REPRESENT THE ASPHALT ELEVATION AT THE EDGE OF PAVEMENT. ELEVATIONS ARE PROJECTED THROUGH INTERSECTIONS.
- PROPOSED ADA RAMP ARE TO BE CONTRACTOR DESIGNED PER THE SPECIFICATIONS. PROPOSED RAMP CONFIGURATIONS AS SHOWN ON THE PLANS ARE FOR ILLUSTRATION ONLY, AND THE CONTRACTOR DESIGNED LAYOUT MAY VARY.
- ANY PROPOSED CURBS, RAMP, AND/OR SIDEWALK SHALL BE PROVIDED PER ODOT STANDARD DRAWINGS, RD700 SERIES.

CONSTRUCTION NOTES

- 2" ACP OVERLAY (FOR DETAIL, SEE DWG NO. S01)
- ACP WIDENING (FOR DETAIL, SEE DWG NO. S01)
- STA. 27+50.46
END OVERLAY SECTION, BEGIN FULL SECTION REPLACEMENT (FOR DETAIL, SEE DWG NO. S01)
- STA. 23+76 TO STA. 25+16
CONSTRUCT WALL #2 - SEGMENTED BLOCK WALL (FOR DETAILS, SEE RETAINING WALL PLANS)
- CONSTRUCT ACP PATH (FOR DETAIL, SEE DWG NO. S01)
- CONSTRUCT DRAINAGE SWALE (FOR DETAIL, SEE DWG NO. S01)
- FULL SECTION REPLACEMENT (FOR DETAIL, SEE DWG NO. S01)



REGISTERED PROFESSIONAL ENGINEER
85045
KRISTOPHERA LILLE
OREGON
EXPIRES: 12/31/2024

CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

GENERAL CONSTRUCTION

NO.	DATE	DESCRIPTION	BY	REVIEW

ENGINEER: KAL
REVIEWED: JAB

DATE: Nov 13, 2023
PLOT DATE: Nov 13, 2023

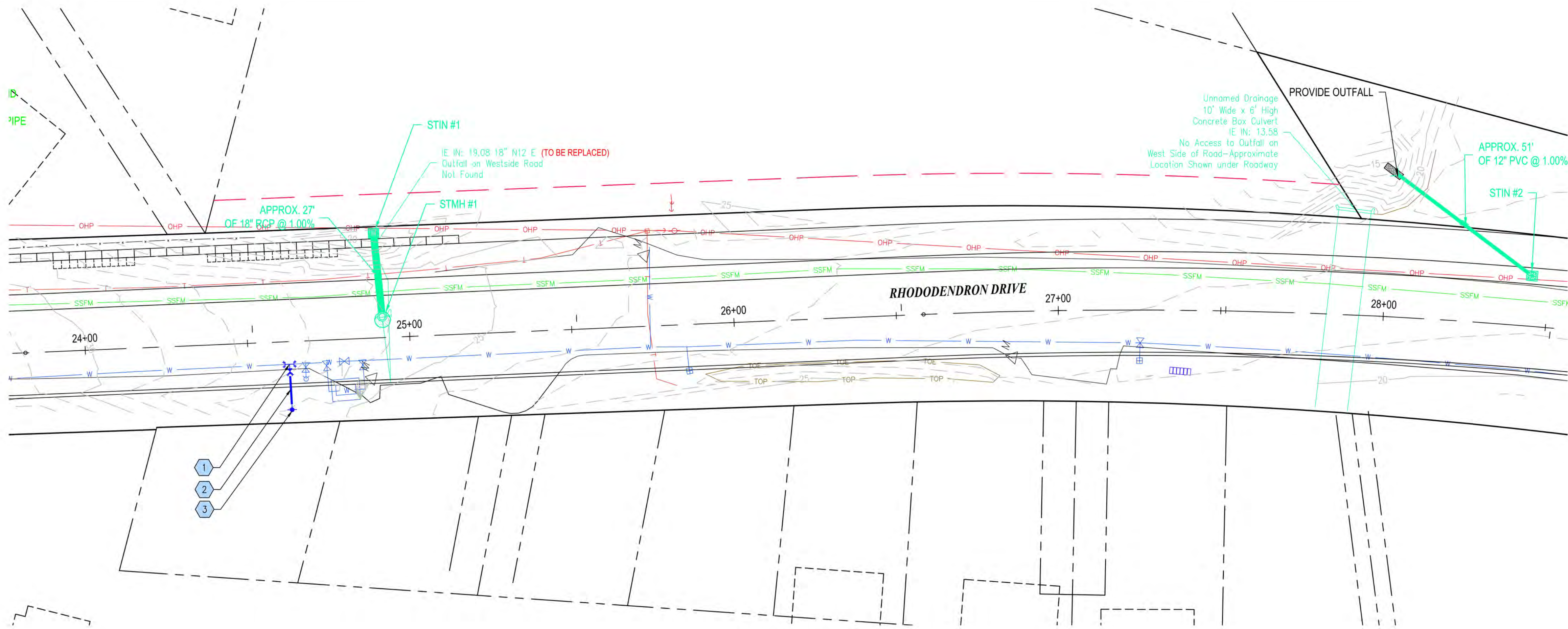
CLIENT: FLO
FILE NAME: RHOD-P-CIV.DWG

LOG NO.: 1013-113

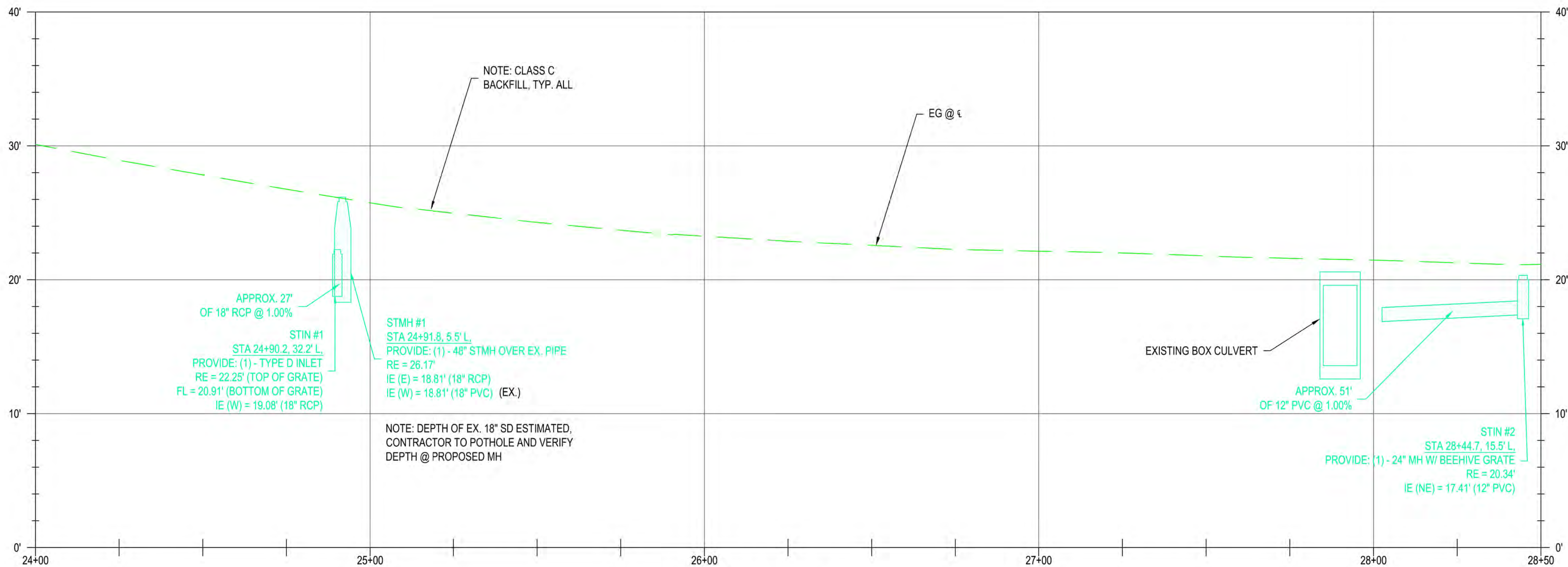
SCALE: SHOWN

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

DWG NO.: C05A
SHEET NO.: 18



PLAN VIEW
1" = 20'



PROFILE VIEW
H: 1" = 20' V: 1" = 5'



UTILITY NOTES WATER MAIN PIPE AND FITTING NOTES

- APPROX. STA 24+62.6, 7.0' R, PROVIDE:
(1) - 8" x 6" DI TEE (R&FL)
- PROVIDE APPROX 5 LF OF 6" RJ C900 PIPE
- APPROX. STA 24+62.9, 21.0' R, PROVIDE:
(1) - FIRE HYDRANT ASSEMBLY

CONSTRUCTION NOTES

- EXISTING WATER MAIN AND SERVICES TO BE ABANDONED. PER NOTES IN GENERAL INFORMATION SHEETS
- MAINTAIN 6" MIN. VERTICAL SEPARATION FROM ALL UTILITIES SHOWN.



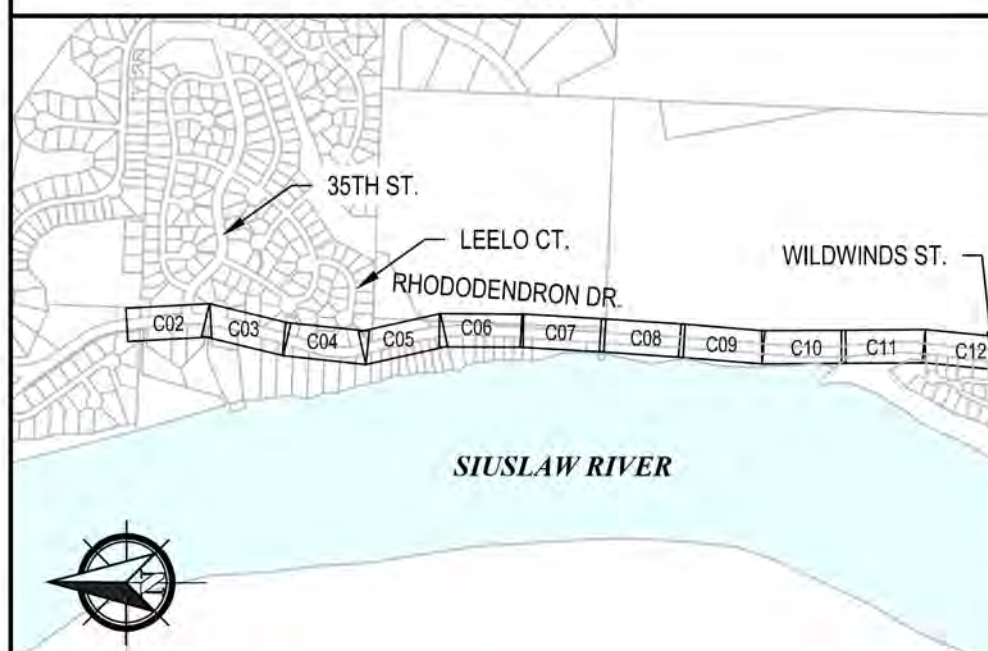
CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

UTILITY PLAN

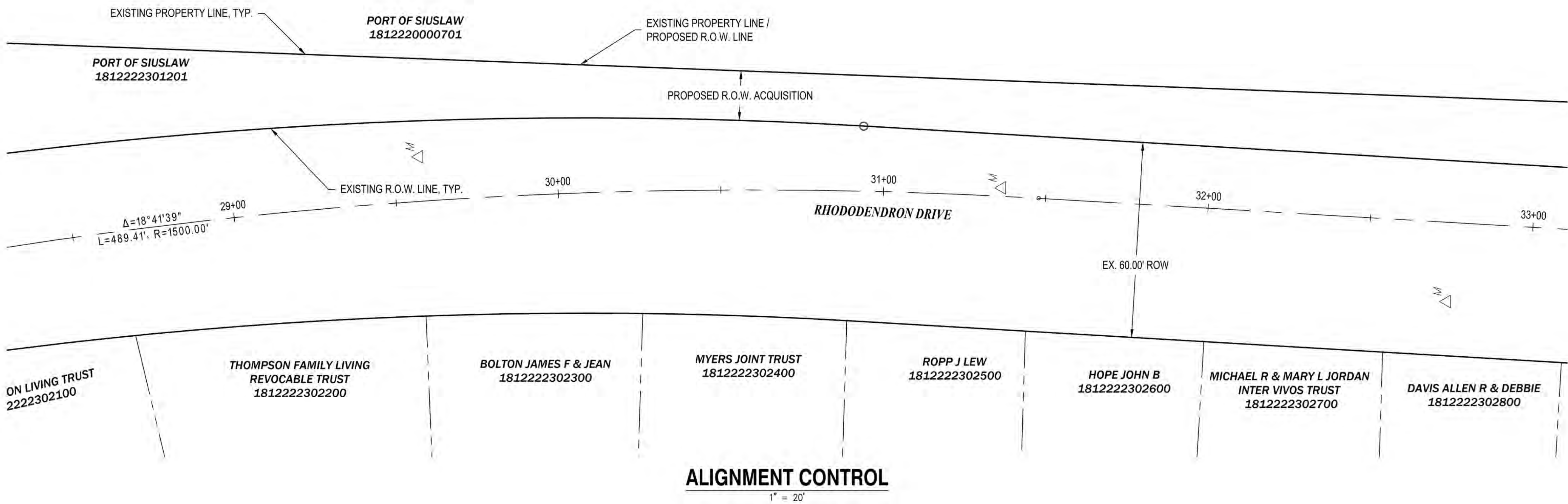
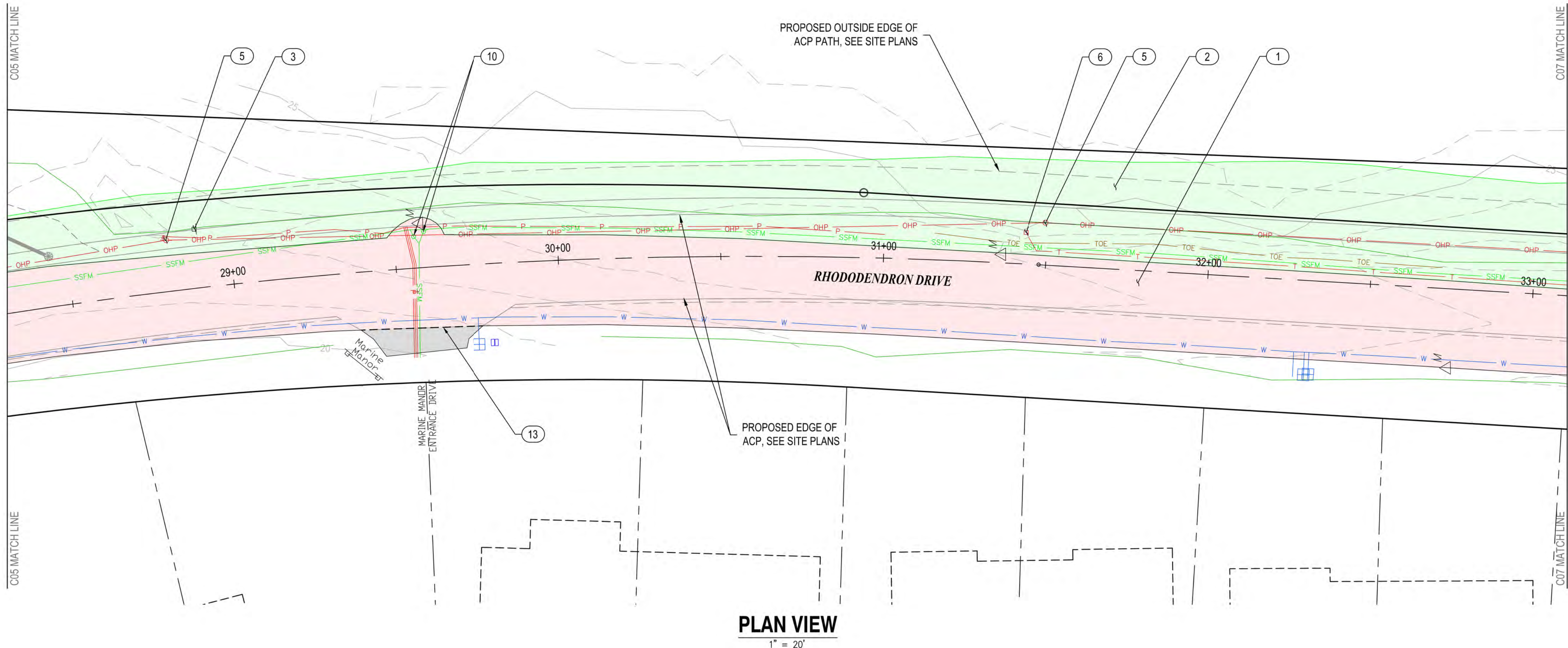


REVISIONS				NO.	DATE	DESCRIPTION	BY	REVIEW
LOG NO.	1013-113	CLIENT	FLO					
ENGINEER	KAL	SAFETY DATE	Nov 13, 2023					
REVIEWED	JAB	PLOT DATE	Nov 13, 2023					
FILE NAME	RHOD-P-UTILP.DWG							

KEY PLAN



SCALE: SHOWN
DRAWING IS FULL SCALE WHEN BAR MEASURES 2"
DWG NO.: C05B
SHEET NO.: 19
71



GENERAL NOTES

- 1) PROPOSED FEATURES SHOWN IN GRAY ARE FOR CONTRACTOR'S CONVENIENCE IN IDENTIFYING IMPROVEMENT LIMITS.
- 2) REFER TO CONSTRUCTION NOTES, DWG NO. GI-01 FOR UTILITY ABANDONMENT PROCEDURES.



EXPIRES: 12/31/2024

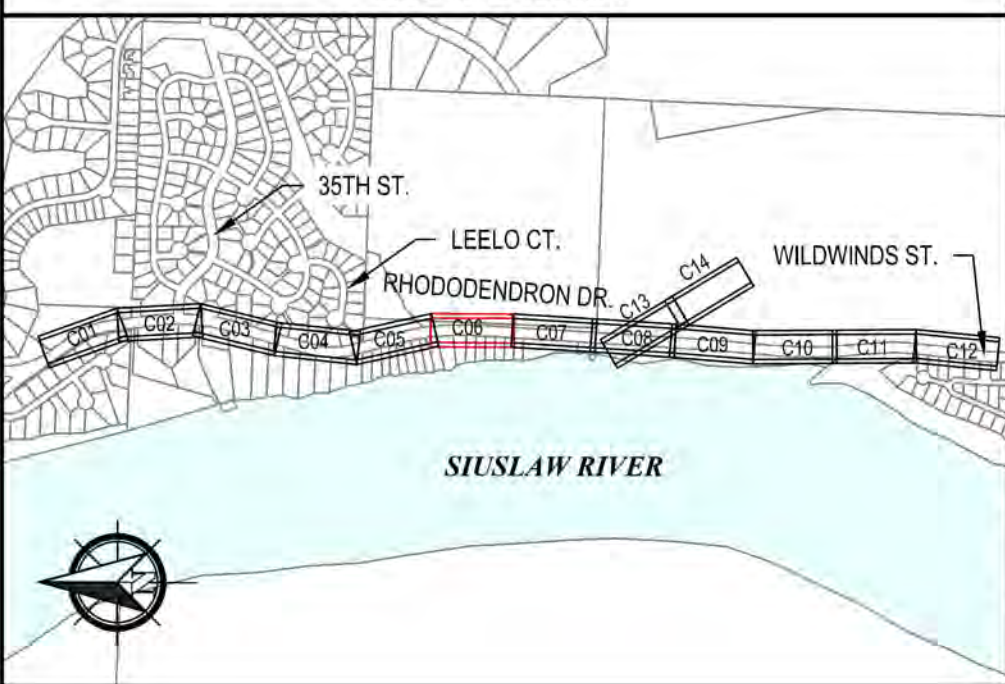
CITY OF FLORENCE RHODODENDRON DRIVE REALIGNMENT SITE PREPARATION AND SURVEY CONTROL



DEMOLITION NOTES

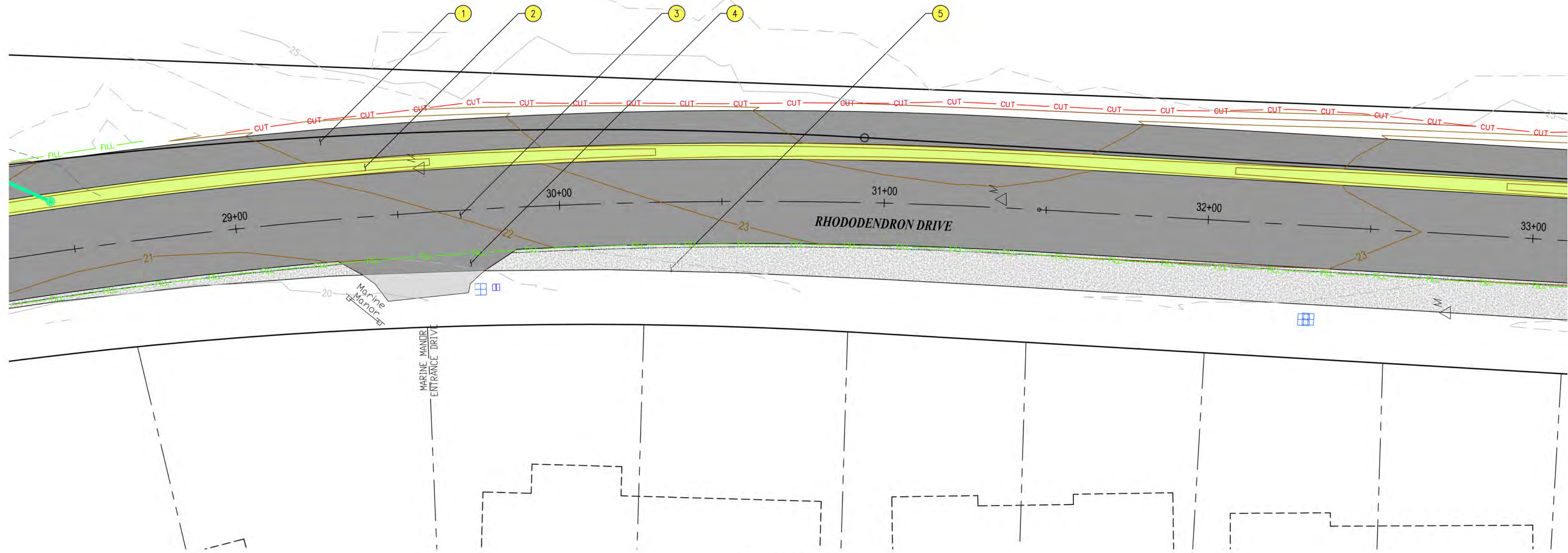
- | | | |
|----|----------|---------------------------------|
| 1 | REMOVE | ASPHALT |
| 2 | REMOVE | VEGETATION |
| 3 | REMOVE | SIGN TEMPORARILY AND REPLACE |
| 4 | REMOVE | CATCH BASIN |
| 5 | RELOCATE | POWER POLE (BY OTHERS) |
| 6 | RELOCATE | TELEPHONE PEDESTAL (BY OTHERS) |
| 7 | RELOCATE | MAILBOX |
| 8 | RELOCATE | FENCE |
| 9 | ADJUST | SEWER MANHOLE |
| 10 | REPLACE | VALVE BOXES PER COF #F-403 |
| 11 | ABANDON | SEWER MANHOLE |
| 12 | ABANDON | SEWER LINE AND APPURTENANCES |
| 13 | PROPOSED | ACP SAWCUT LINE |
| 14 | PROVIDE | SILT FENCE |
| 15 | PROVIDE | INLET PROTECTION |
| 16 | RELOCATE | UTILITY (SEE UTILITY PLANS) |
| 17 | RELOCATE | SIGN (SEE GENERAL CONST. PLANS) |

KEY PLAN



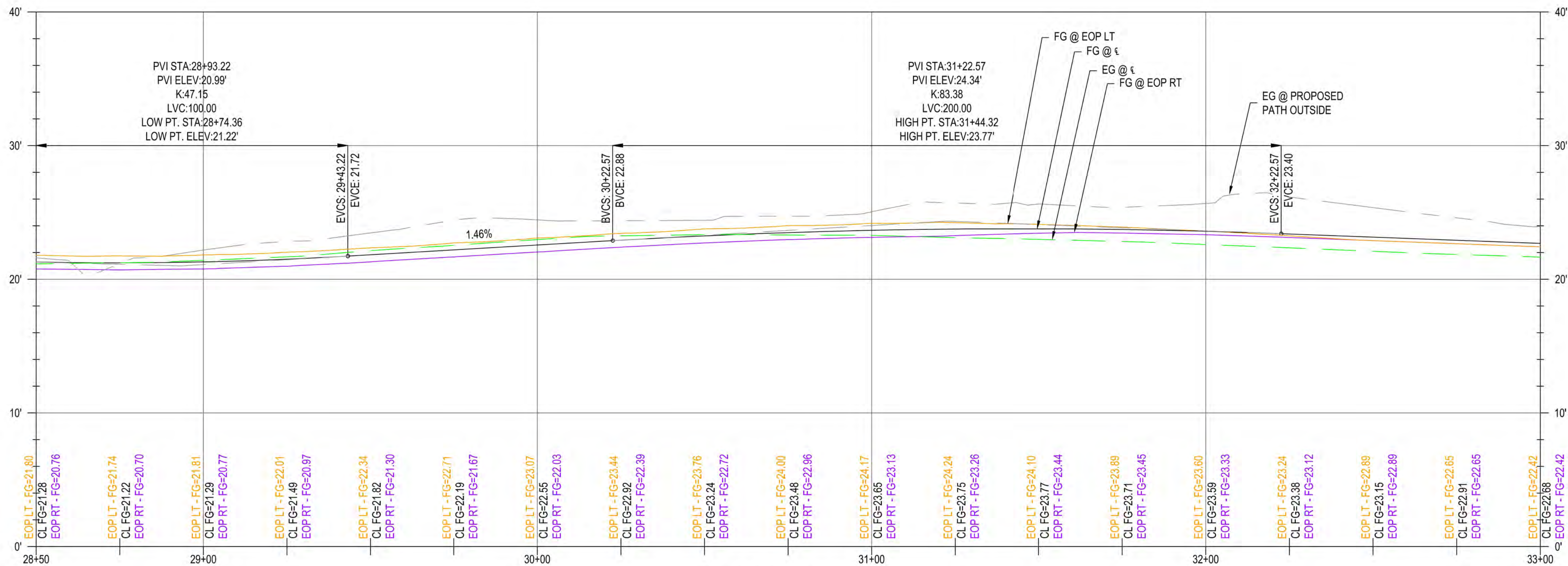
ENGINEER: KAL		SAFE DATE: Nov 13, 2023	CLIENT: FLO	489-NO. 1013-113
REVIEWER: JAB		PLOT DATE: Nov 13, 2023	FILENAME: RHOD-P-PREF DWG	
REVISIONS				
				</

SCALE: SHOWN
DRAWING IS FULL SCALE WHEN BAR MEASURES 2"
DWG NO.: C06
SHEET NO.: 20
71



PLAN VIEW

1" = 20'



P RHODY PROFILE

H: 1" = 20', V: 1" = 5'



GENERAL NOTES

- 1) EOP ELEVATIONS REFERENCED IN THE PROFILE VIEWS REPRESENT THE ASPHALT ELEVATION AT THE EDGE OF PAVEMENT. ELEVATIONS ARE PROJECTED THROUGH INTERSECTIONS.
- 2) PROPOSED ADA RAMP ARE TO BE CONTRACTOR DESIGNED PER THE SPECIFICATIONS. PROPOSED RAMP CONFIGURATIONS AS SHOWN ON THE PLANS ARE FOR ILLUSTRATION ONLY, AND THE CONTRACTOR DESIGNED LAYOUT MAY VARY.
- 3) ANY PROPOSED CURBS, RAMP, AND/OR SIDEWALK SHALL BE PROVIDED PER ODOT STANDARD DRAWINGS, RD700 SERIES.

CONSTRUCTION NOTES

- 1) CONSTRUCT ACP PATH (FOR DETAIL, SEE DWG NO. S01)
- 2) CONSTRUCT DRAINAGE SWALE (FOR DETAIL, SEE DWG NO. S01)
- 3) FULL SECTION REPLACEMENT (FOR DETAIL, SEE DWG NO. S01)
- 4) CONSTRUCT ACP DRIVEWAY, TRANSITION TO EX. DRIVEWAY APPROX. 5' BEYOND EDGE OF ROADWAY
- 5) BACKFILL REMOVED ACP SECTION WITH NATIVE MATERIAL TO CREATE SHOULDER (FOR DETAIL, SEE DWG NO. S01)



CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

GENERAL CONSTRUCTION



LOG NO.: 1013-113

CLIENT: FLO

ENGINEER: KAL

REVIEWED: JAB

DATE: Nov 13, 2023

DWG NO.: C06A

SHEET NO.: 21

71

REVISIONS

PRELIMINARY REVIEW
DRAWINGS

NO.

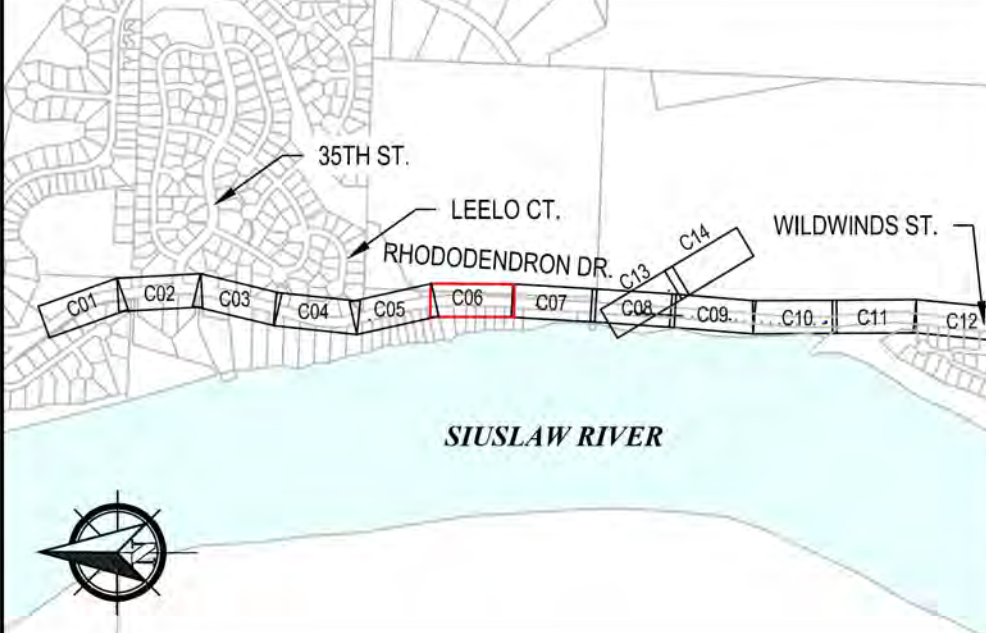
DATE

DESCRIPTION

BY

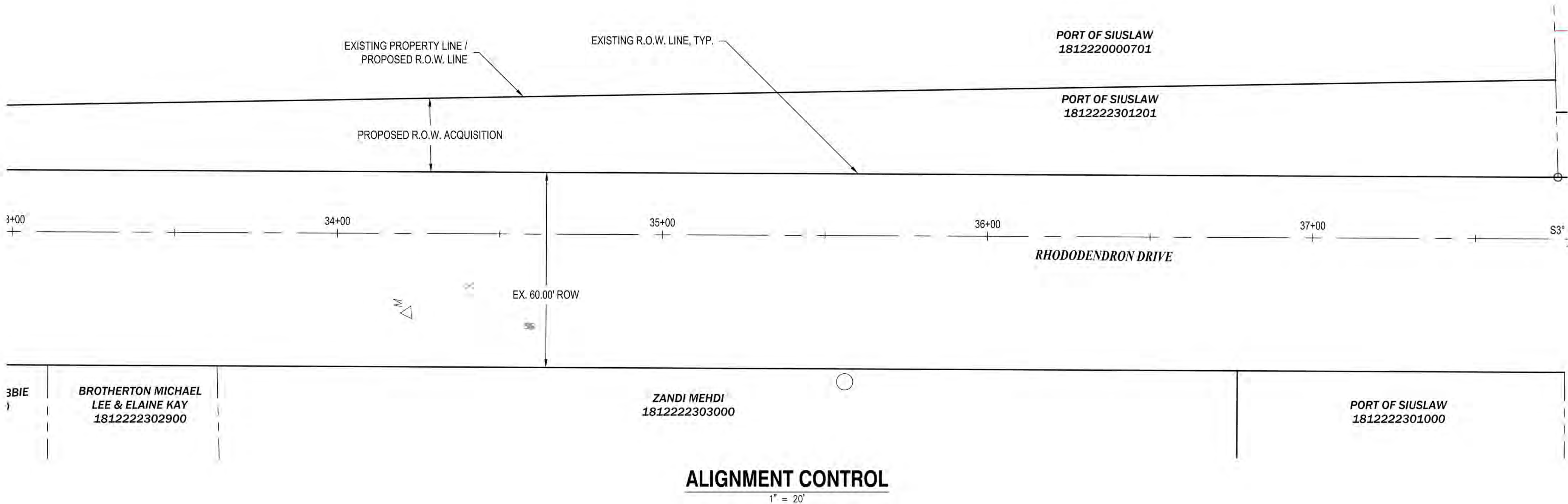
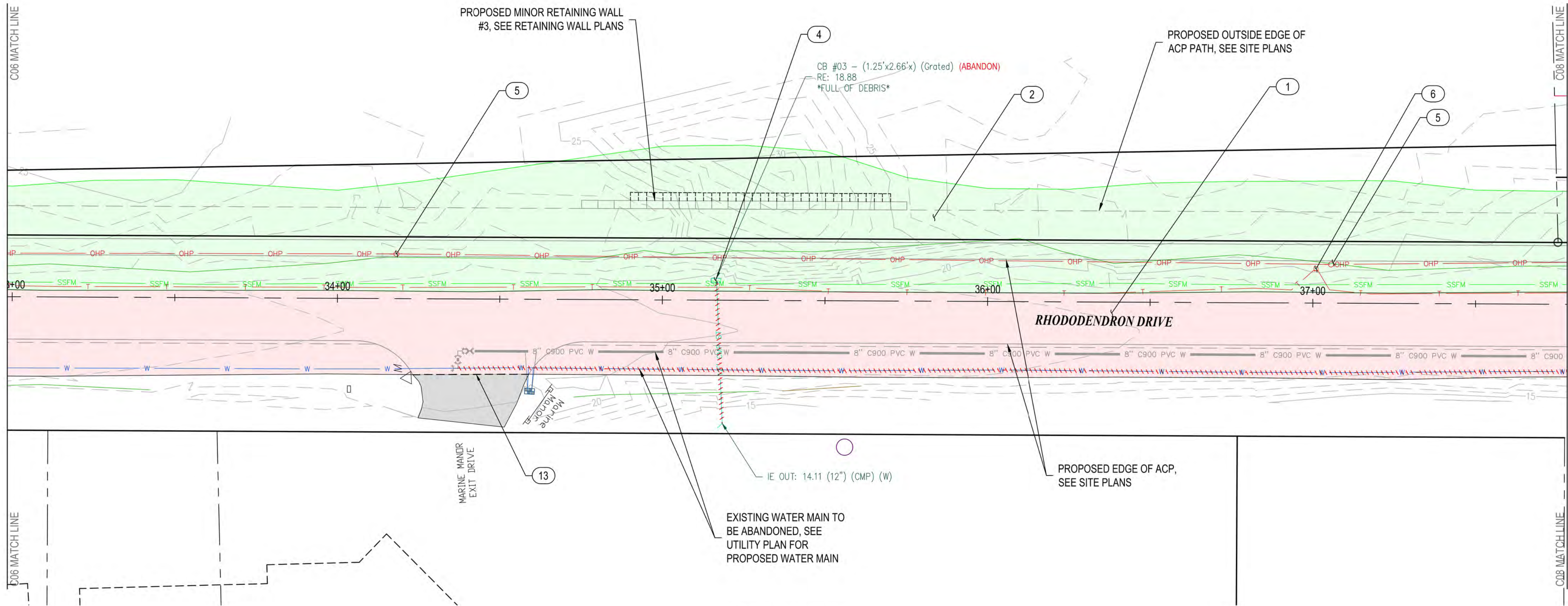
REVIEW

KEY PLAN



SCALE: SHOWN

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"



GENERAL NOTES

- 1) PROPOSED FEATURES SHOWN IN GRAY ARE FOR CONTRACTOR'S CONVENIENCE IN IDENTIFYING IMPROVEMENT LIMITS.
- 2) REFER TO CONSTRUCTION NOTES, DWG NO. GI-01 FOR UTILITY ABANDONMENT PROCEDURES.



EXPIRES: 12/31/2024

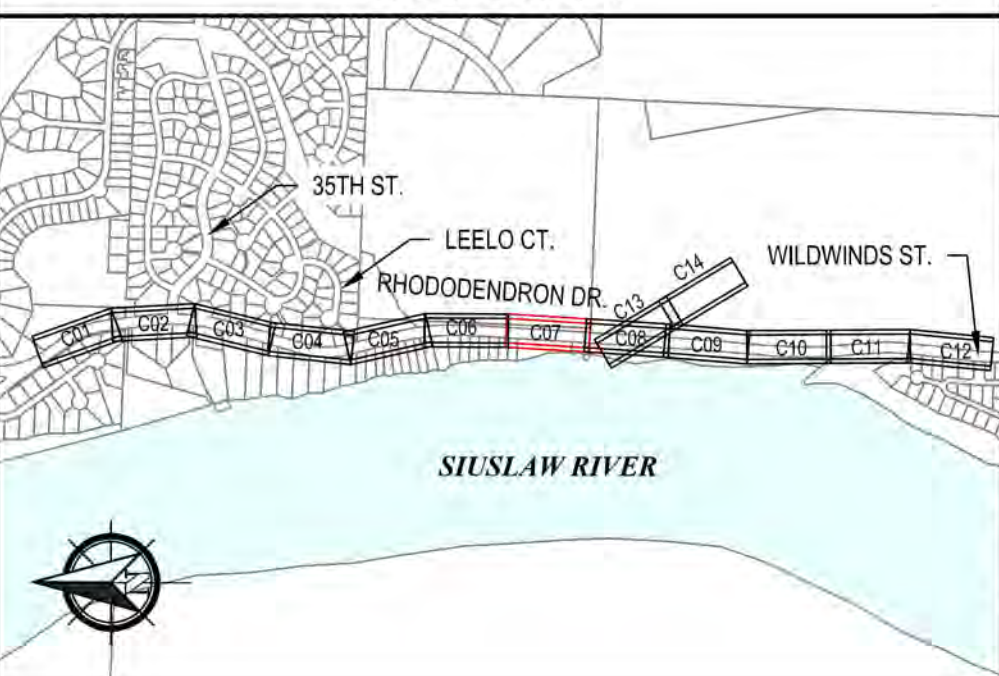
CITY OF FLORENCE RHODODENDRON DRIVE REALIGNMENT SITE PREPARATION AND SURVEY CONTROL



DEMOLITION NOTES

- | | | |
|----|----------|---------------------------------|
| 1 | REMOVE | ASPHALT |
| 2 | REMOVE | VEGETATION |
| 3 | REMOVE | SIGN TEMPORARILY AND REPLACE |
| 4 | REMOVE | CATCH BASIN |
| 5 | RELOCATE | POWER POLE (BY OTHERS) |
| 6 | RELOCATE | TELEPHONE PEDESTAL (BY OTHERS) |
| 7 | RELOCATE | MAILBOX |
| 8 | RELOCATE | FENCE |
| 9 | ADJUST | SEWER MANHOLE |
| 10 | REPLACE | VALVE BOXES PER COF #F-403 |
| 11 | ABANDON | SEWER MANHOLE |
| 12 | ABANDON | SEWER LINE AND APPURTENANCES |
| 13 | PROPOSED | ACP SAWCUT LINE |
| 14 | PROVIDE | SILT FENCE |
| 15 | PROVIDE | INLET PROTECTION |
| 16 | RELOCATE | UTILITY (SEE UTILITY PLANS) |
| 17 | RELOCATE | SIGN (SEE GENERAL CONST. PLANS) |

KEY PLAN



REVISIONS

NO.	DATE	DESCRIPTION	BY	REVIEW

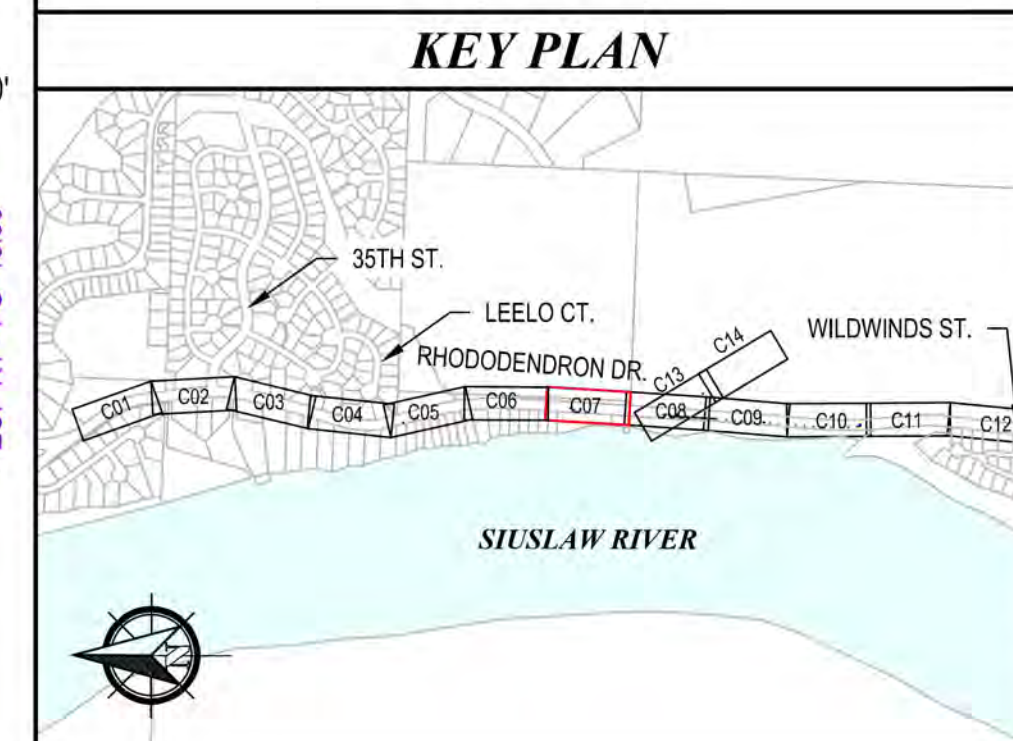
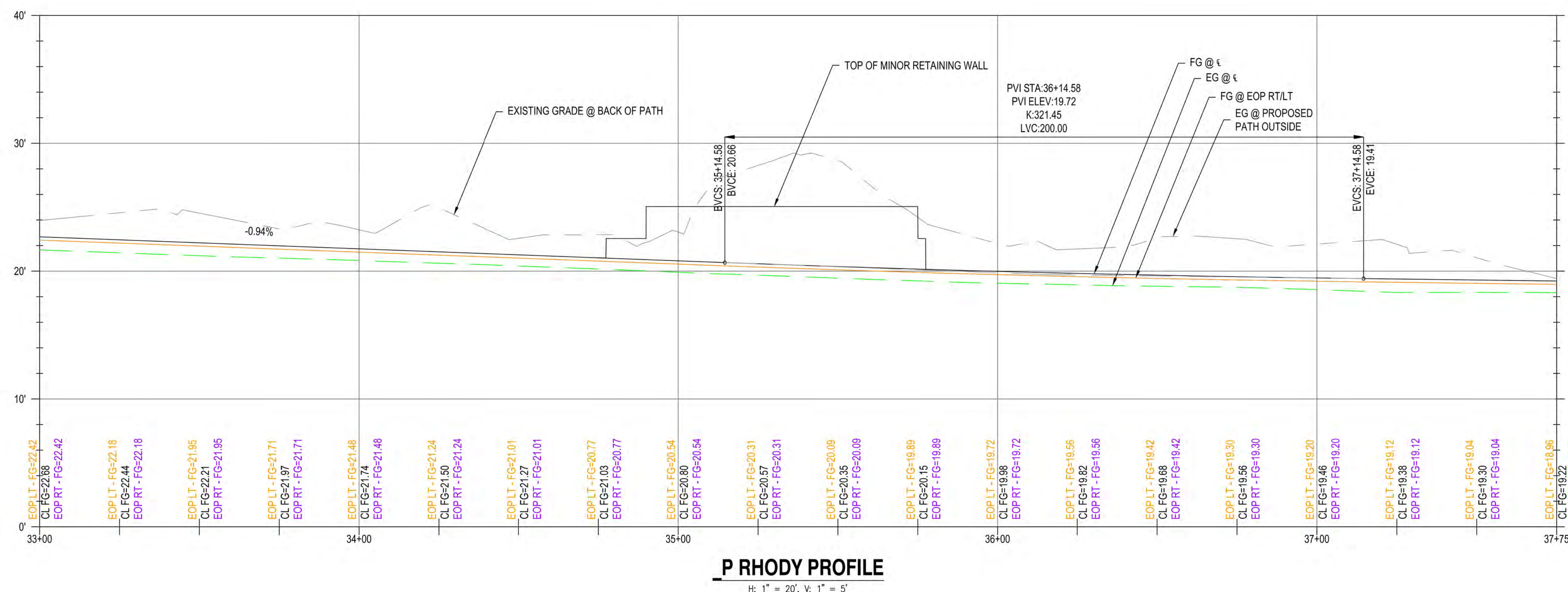
ENGINEER: KAL
REVIEWED: JAB
DATE: Nov 13, 2023
PLOT DATE: Nov 13, 2023
CLIENT: FLO
FILENAME: RHOD-PREP.DWG
JOB NO.: 1013-113

DWG NO.: C07
SHEET NO.: 22
71

SCALE: SHOWN

DRAWING IS FULL SCALE WHEN
BAR MEASURES 2"

DWG NO.: C07
SHEET NO.: 22
71



GENERAL NOTES

- 1) EOP ELEVATIONS REFERENCED IN THE PROFILE VIEWS REPRESENT THE ASPHALT ELEVATION AT THE EDGE OF PAVEMENT. ELEVATIONS ARE PROJECTED THROUGH INTERSECTIONS.
- 2) PROPOSED ADA RAMPS ARE TO BE CONTRACTOR DESIGNED PER THE SPECIFICATIONS. PROPOSED RAMP CONFIGURATIONS AS SHOWN ON THE PLANS ARE FOR ILLUSTRATION ONLY, AND THE CONTRACTOR DESIGNED LAYOUT MAY VARY.
- 3) ANY PROPOSED CURBS, RAMPS, AND/OR SIDEWALK SHALL BE PROVIDED PER ODOT STANDARD DRAWINGS, RD700 SERIES.

CONSTRUCTION NOTES

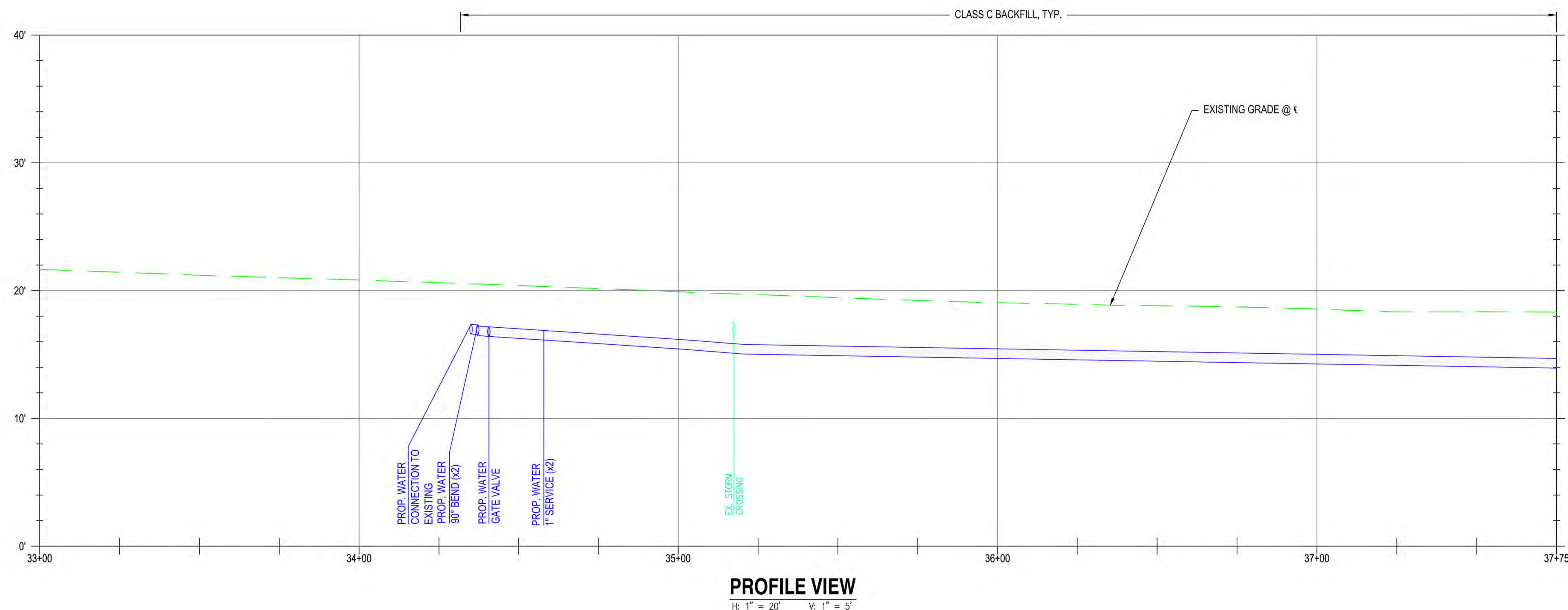
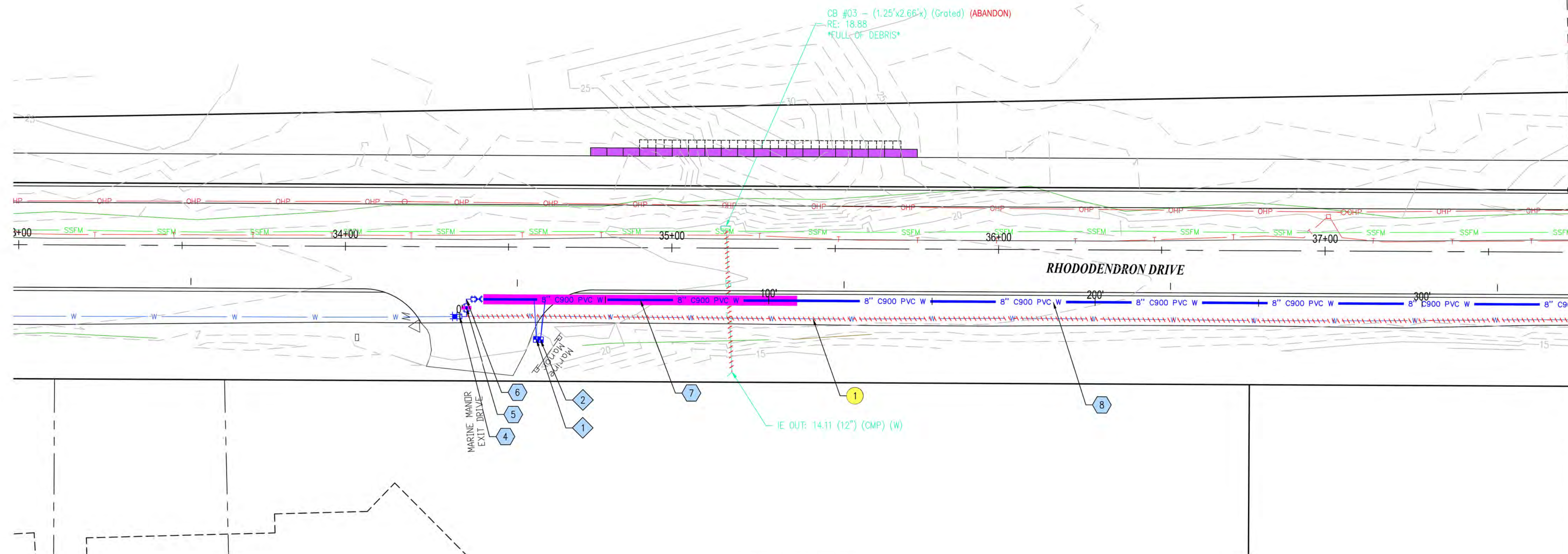
- 1 CONSTRUCT ACP PATH
(FOR DETAIL, SEE DWG NO. S01)
- 2 CONSTRUCT DRAINAGE SWALE
(FOR DETAIL, SEE DWG NO. S01)
- 3 FULL SECTION REPLACEMENT
(FOR DETAIL, SEE DWG NO. S01)
- 4 CONSTRUCT ACP DRIVEWAY, TRANSITION TO EX. DRIVEWAY
APPROX. 5' BEYOND EDGE OF ROADWAY
- 5 BACKFILL REMOVED ACP SECTION WITH NATIVE
MATERIAL TO CREATE SHOULDER
(FOR DETAIL, SEE DWG NO. S01)
- 6 STA. 34+75 TO STA. 35+75
CONSTRUCT WALL #3 - MODULAR BLOCK WALL
(FOR DETAILS, SEE RETAINING WALL PLANS)



CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

GENERAL CONSTRUCTION

[illegible]



CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

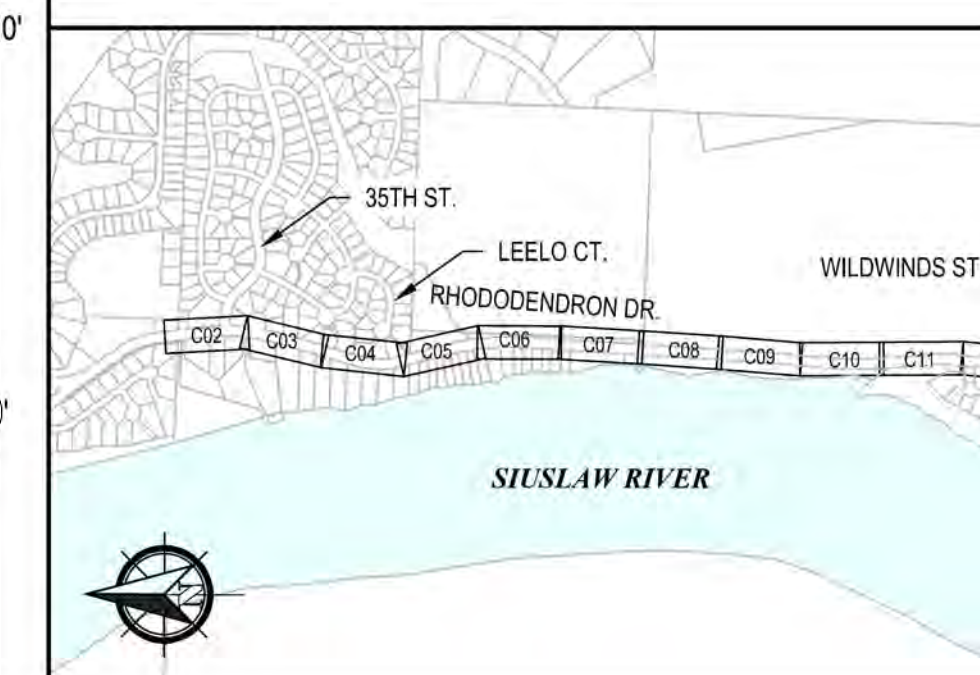
UTILITY PLAN

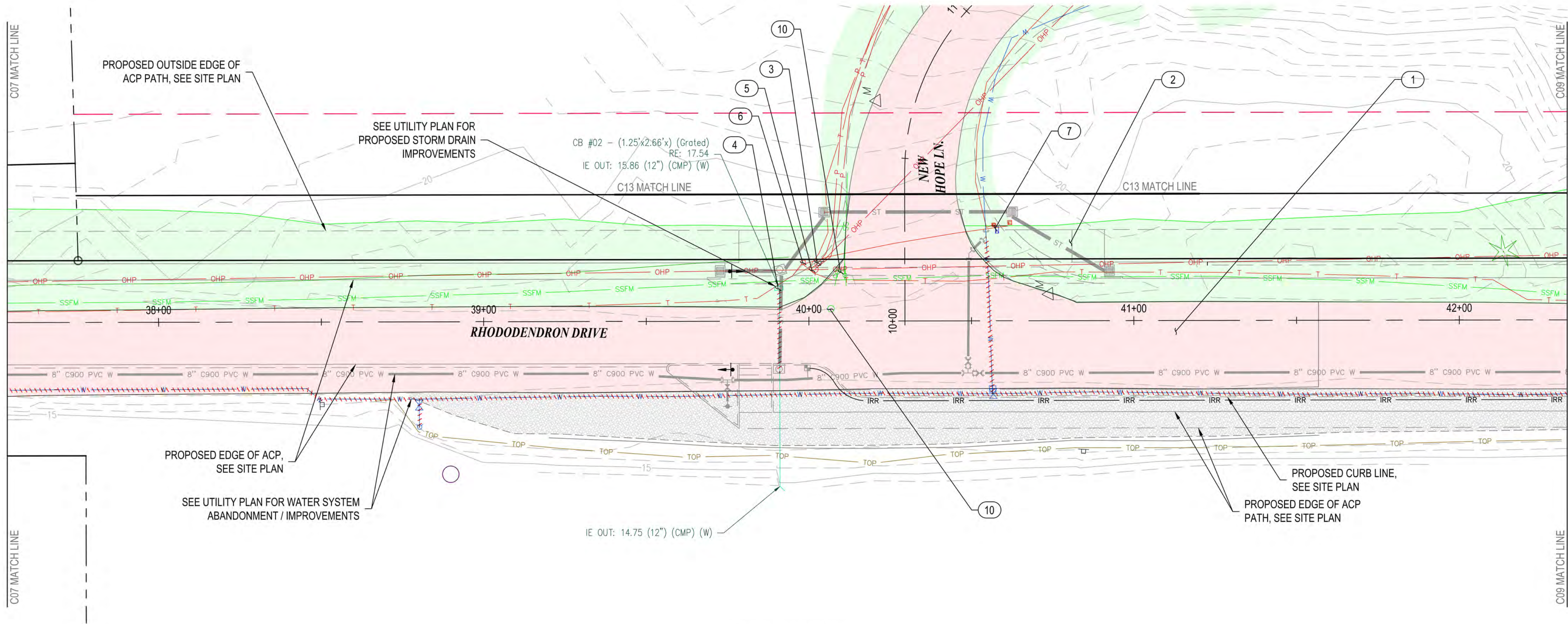


- | | |
|---|--|
| 4 | APPROX STA 34+35.1, 21.3' R, PROVIDE:
(1) - CONNECTION TO EXISTING 8" WATER MAIN
(1) - 8" DI 90° BEND (R ₁ X _R J) |
| 5 | PROVIDE APPROX 6 LF OF 8" RJ C900 PIPE |
| 6 | APPROX STA 34+37.1, 16.0' R, PROVIDE:
(1) - 8" DI 90° BEND (R ₁ X _R J)
(1) - 8" GATE VALVE (R ₁ X _R J)
(1) - 8" PVC SPOOL (P ₁ X _R J) |
| 7 | PROVIDE APPROX 101 LF OF 8" RJ C900 PIPE |
| 8 | PROVIDE APPROX 437 LF OF 8" C900 PIPE |

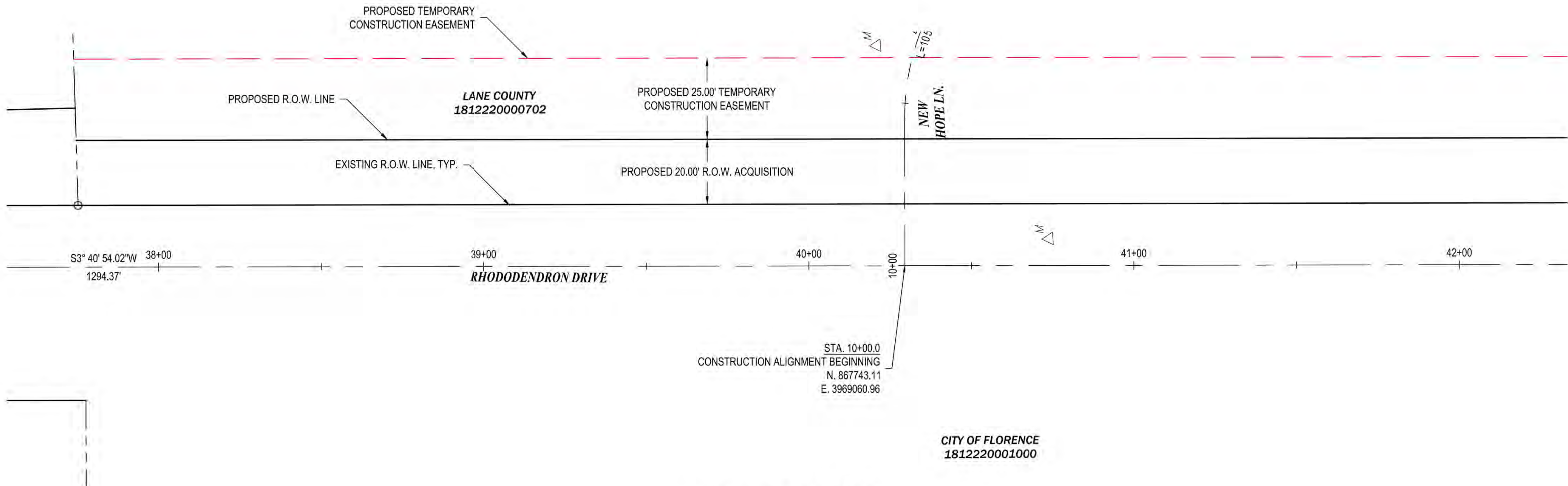
- 1 APPROX. STA 34+58.7, 28.2' R, PROVIDE:
(1) - 1" WATER SERVICE, REPLACE EXISTING ASSEMBLY
- 2 APPROX. STA 34+59.9, 28.3' R, PROVIDE:
(1) - 1" WATER SERVICE, REPLACE EXISTING ASSEMBLY

- 1 EXISTING WATER MAIN AND SERVICES TO BE ABANDONED. PER NOTES IN GENERAL INFORMATION SHEETS
- 2 MAINTAIN 6" MIN. VERTICAL SEPARATION FROM ALL UTILITIES SHOWN.





PLAN VIEW
1" = 20'



ALIGNMENT CONTROL
1" = 20'

CITY OF FLORENCE
1812220001000



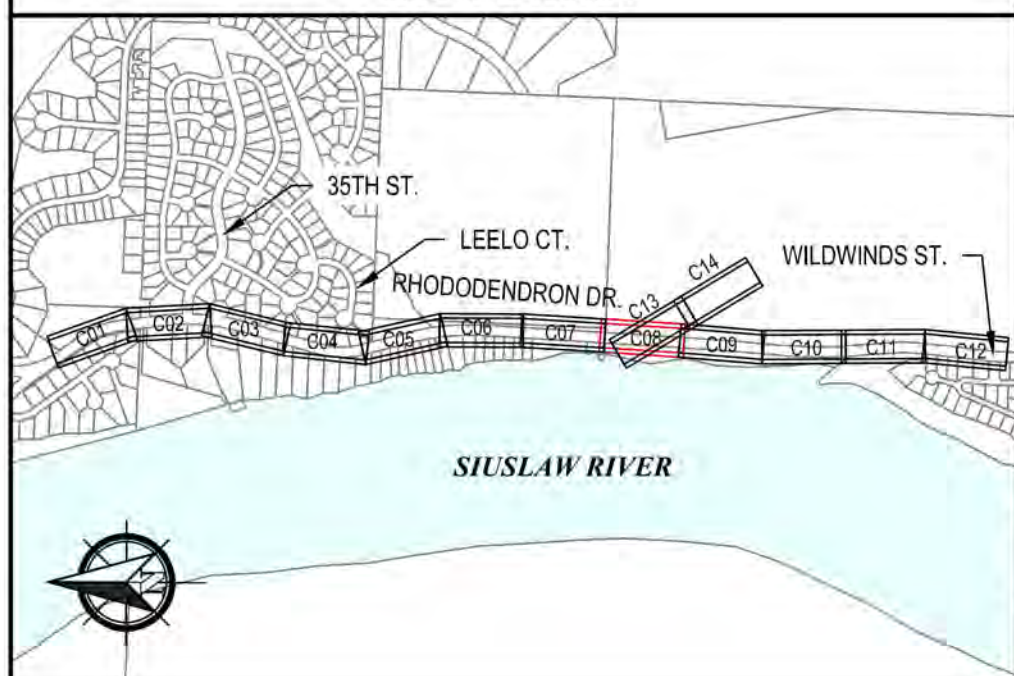
GENERAL NOTES

- 1) PROPOSED FEATURES SHOWN IN GRAY ARE FOR CONTRACTOR'S CONVENIENCE IN IDENTIFYING IMPROVEMENT LIMITS.
- 2) REFER TO CONSTRUCTION NOTES, DWG NO. GI-01 FOR UTILITY ABANDONMENT PROCEDURES.

DEMOLITION NOTES

- | | | |
|----|----------|---------------------------------|
| 1 | REMOVE | ASPHALT |
| 2 | REMOVE | VEGETATION |
| 3 | REMOVE | SIGN TEMPORARILY AND REPLACE |
| 4 | REMOVE | CATCH BASIN |
| 5 | RELOCATE | POWER POLE (BY OTHERS) |
| 6 | RELOCATE | TELEPHONE PEDESTAL (BY OTHERS) |
| 7 | RELOCATE | MAILBOX |
| 8 | RELOCATE | FENCE |
| 9 | ADJUST | SEWER MANHOLE |
| 10 | REPLACE | VALVE BOXES PER COF #F-403 |
| 11 | ABANDON | SEWER MANHOLE |
| 12 | ABANDON | SEWER LINE AND APPURTENANCES |
| 13 | PROPOSED | ACP SAWCUT LINE |
| 14 | PROVIDE | SILT FENCE |
| 15 | PROVIDE | INLET PROTECTION |
| 16 | RELOCATE | UTILITY (SEE UTILITY PLANS) |
| 17 | RELOCATE | SIGN (SEE GENERAL CONST. PLANS) |

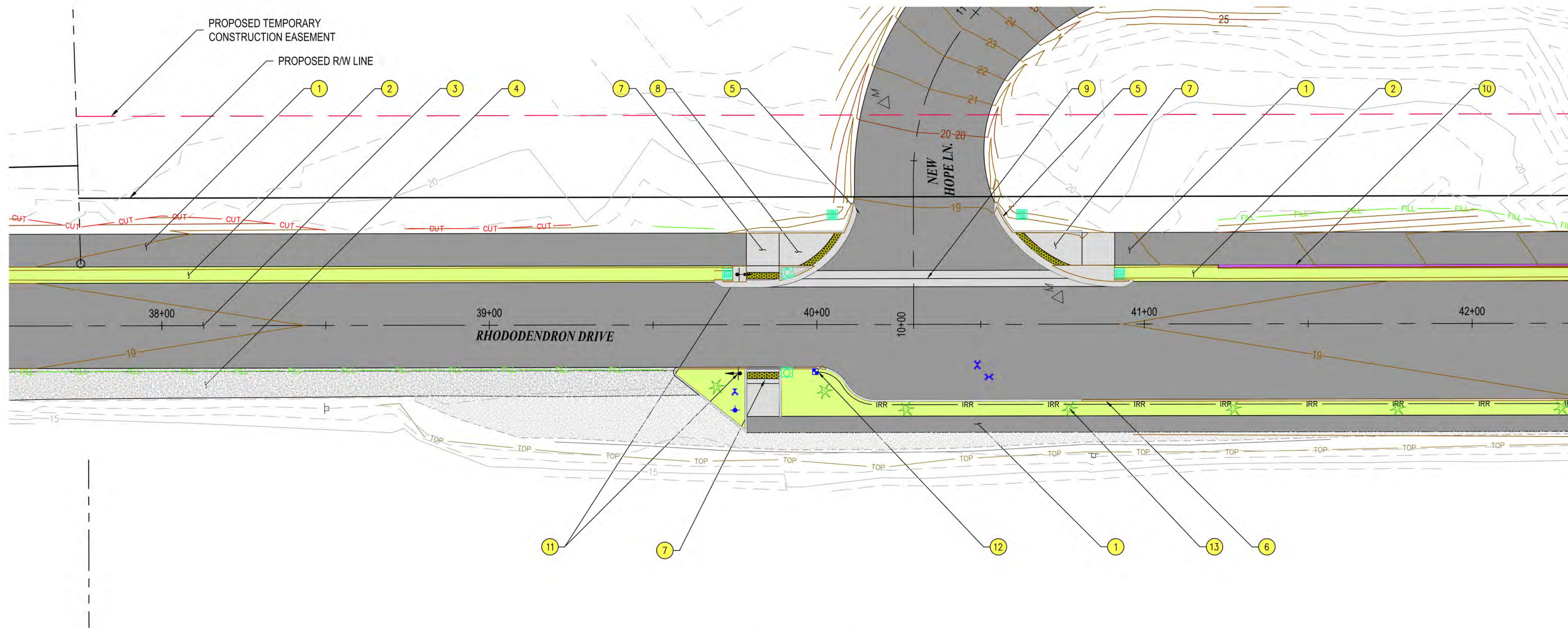
KEY PLAN



CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT
SITE PREPARATION AND SURVEY
CONTROL

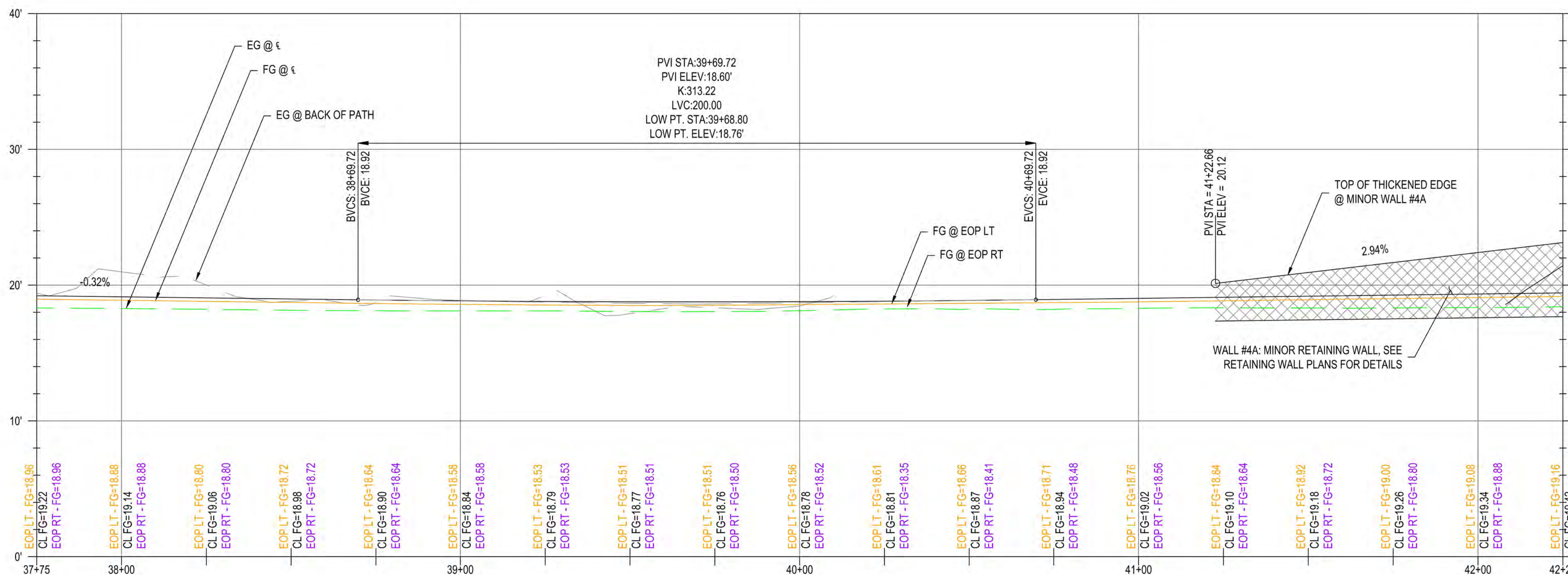


REVISIONS		DATE	DESCRIPTION	NO.	DATE	BY	REVIEW
ENGINEER	KAL	NOV 13, 2023					
REVIEWER	JAB	NOV 13, 2023					
DWG NO.: C08		SHEET NO.: 25		71			



PLAN VIEW

1" = 20'



P RHODY PROFILE

H: 1" = 20', V: 1" = 5'



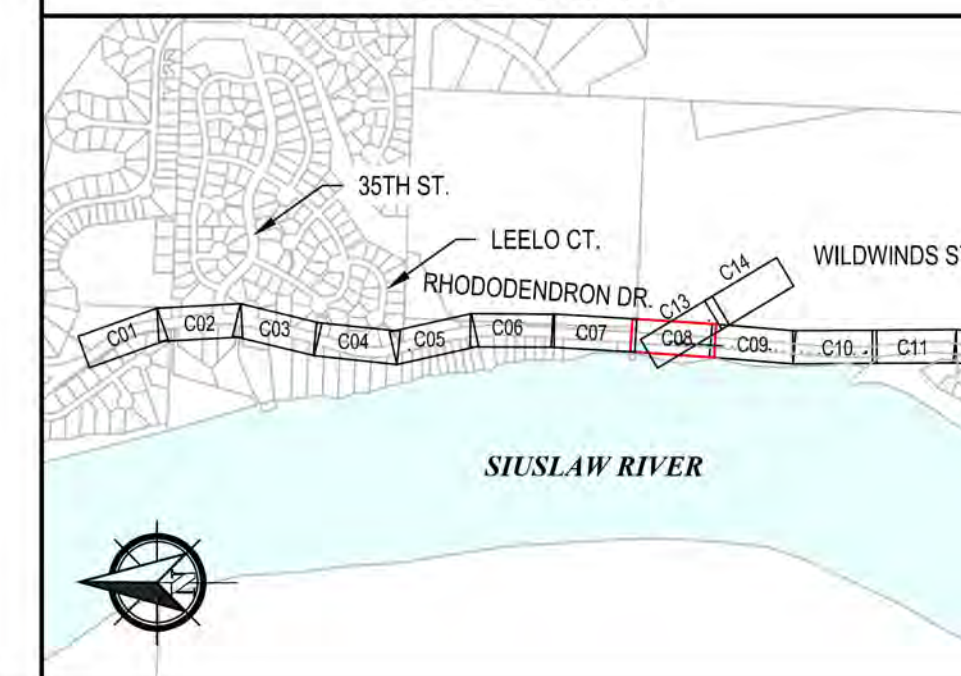
GENERAL NOTES

- EOP ELEVATIONS REFERENCED IN THE PROFILE VIEWS REPRESENT THE ASPHALT ELEVATION AT THE EDGE OF PAVEMENT. ELEVATIONS ARE PROJECTED THROUGH INTERSECTIONS.
- PROPOSED ADA RAMP ARE TO BE CONTRACTOR DESIGNED PER THE SPECIFICATIONS. PROPOSED RAMP CONFIGURATIONS AS SHOWN ON THE PLANS ARE FOR ILLUSTRATION ONLY, AND THE CONTRACTOR DESIGNED LAYOUT MAY VARY.
- ANY PROPOSED CURBS, RAMP, AND/OR SIDEWALK SHALL BE PROVIDED PER ODOT STANDARD DRAWINGS, RD700 SERIES.

CONSTRUCTION NOTES

- CONSTRUCT ACP PATH (FOR DETAIL, SEE DWG NO. S01)
- CONSTRUCT DRAINAGE SWALE (FOR DETAIL, SEE DWG NO. S01)
- FULL SECTION REPLACEMENT (FOR DETAIL, SEE DWG NO. S01)
- BACKFILL REMOVED ACP SECTION WITH NATIVE MATERIAL TO CREATE SHOULDER (FOR DETAIL, SEE DWG NO. S01)
- CONSTRUCT CURB AND GUTTER, PER COF #F-203
- CONSTRUCT STANDARD CURB, PER COF #F-203, WITH ANGLED CURB CUT OPENINGS SPACED @ APPROX. 100 LF INTERVALS (FOR DETAIL, SEE DWG NO. D03)
- CONSTRUCT CURB RAMP, SEE DWG NO. D02 FOR DETAIL
- CONSTRUCT CONC. S/W, PER COF #F-205
- CONSTRUCT "WIDE VALLEY GUTTER", PER COF #F-204
- STA. 41+23 TO STA. 51+71
CONSTRUCT WALL #4a - MODULAR BLOCK WALL (FOR DETAILS, SEE RETAINING WALL PLANS)
- CONSTRUCT RECTANGULAR RAPID FLASHING BEACON PEDASTAL ASSEMBLY PER ODOT STD DWG TM493
- CONTRACTOR TO DESIGN AND INSTALL IRRIGATION SYSTEM FOR LANDSCAPE STRIP. CONNECT TO IRRIGATION SERVICE INSTALLED PER UTILITY PLANS.
- PLANT TREES AS SHOWN EVERY 50 LF, TOTAL OF 24 TREES. INDIVIDUAL TREE PLANTING LOCATIONS SHALL BE VERIFIED BY THE CITY INSPECTOR PRIOR TO INSTALLATION.

KEY PLAN

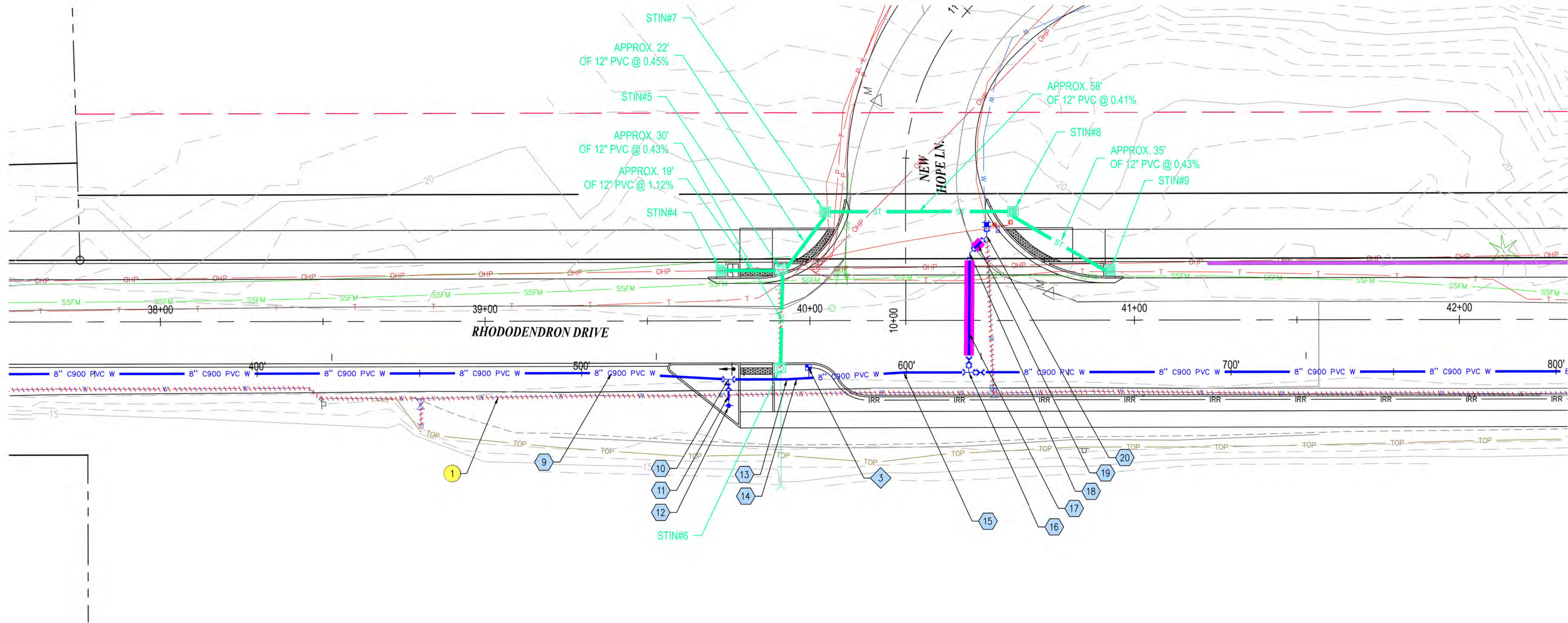


CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

GENERAL CONSTRUCTION

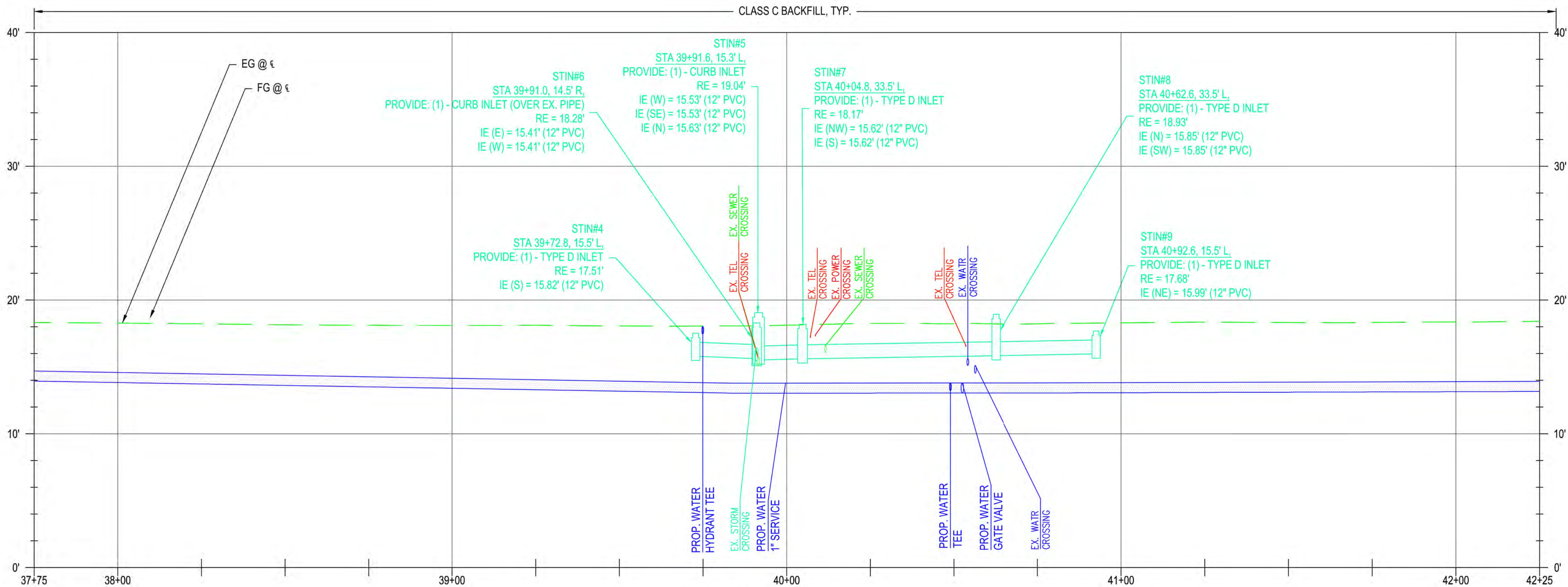
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SCALE: SHOWN
DRAWING IS FULL SCALE WHEN
BAR MEASURES 2"
DWG NO.: C08A
SHEET NO.: 26
71



PLAN VIEW

1" = 20'



PROFILE VIEW

H: 1" = 20' V: 1" = 5'



UTILITY NOTES

WATER MAIN PIPE AND FITTING NOTES

- 9 APPROX. STA 39+39.0, 16.0' R, PROVIDE: BEGIN PIPE JOINT DEFLECTION
- 10 APPROX. STA 39+74.9, 18.0' R, PROVIDE: (1) - 8" x 6" DI TEE (RJR) (1) - 6" GATE VALVE (FLRJ)
- 11 PROVIDE APPROX 8 LF OF 6" RJ C900 PIPE
- 12 APPROX. STA 39+75.0, 26.1' R, PROVIDE: (1) - FIRE HYDRANT ASSEMBLY
- 13 APPROX. STA 39+92.9, 18.0' R, PROVIDE: BEGIN PIPE JOINT DEFLECTION
- 14 PROVIDE APPROX 74 LF OF 8" C900 PIPE
- 15 APPROX. STA 40+28.9, 16.0' R, PROVIDE: END PIPE JOINT DEFLECTION
- 16 APPROX. STA 40+48.9, 16.0' R, PROVIDE: (1) - 8" DI TEE (RJR) (2) - 8" GATE VALVE (RJR) (1) - 8" PVC SPOOL (PEPE) (1) - 6" PVC SPOOL (PEPE)
- 17 PROVIDE APPROX 37 LF OF 8" RJ C900 PIPE
- 18 APPROX. STA 40+49.2, 20.7' L, PROVIDE: (1) - 8" DI 45° BEND (RJR)
- 19 PROVIDE APPROX 7 LF OF 8" RJ C900 PIPE
- 20 APPROX. STA 40+54.6, 26.0' L, PROVIDE: (1) - 8" DI 45° BEND (RJR) (1) - 8" x 6" DI REDUCER (RJR) (1) - CONNECTION TO EXISTING 6" WATER MAIN

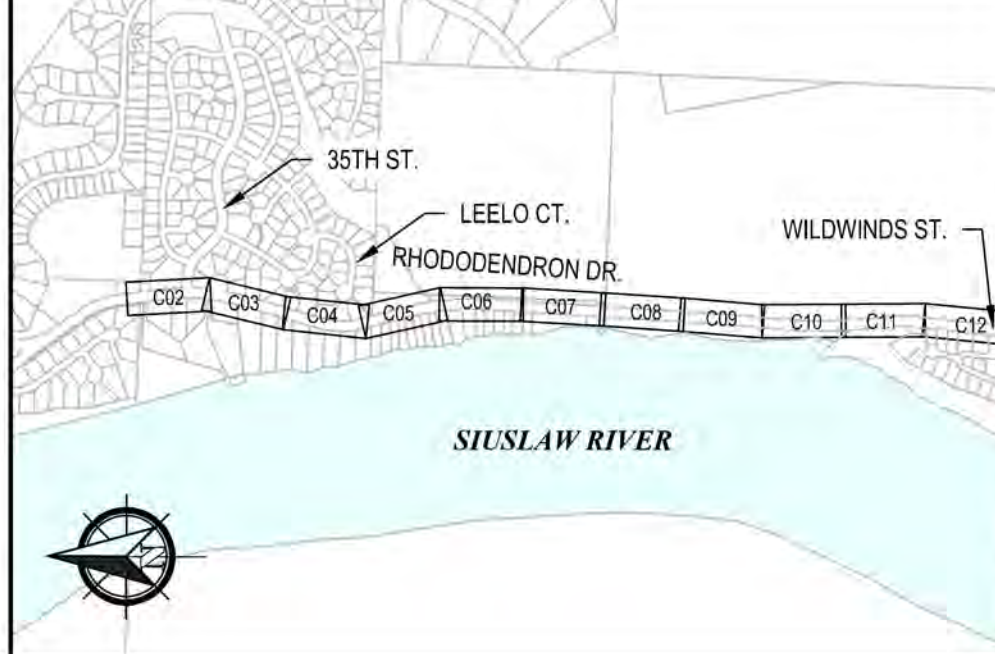
WATER SERVICE NOTES

- 3 APPROX. STA 39+99.5, 14.4' R, PROVIDE: (1) - 1" WATER SERVICE, IRRIGATION SERVICE

CONSTRUCTION NOTES

- 1 EXISTING WATER MAIN AND SERVICES TO BE ABANDONED. PER NOTES IN GENERAL INFORMATION SHEETS
- 2 MAINTAIN 6" MIN. VERTICAL SEPARATION FROM ALL UTILITIES SHOWN.

KEY PLAN



CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

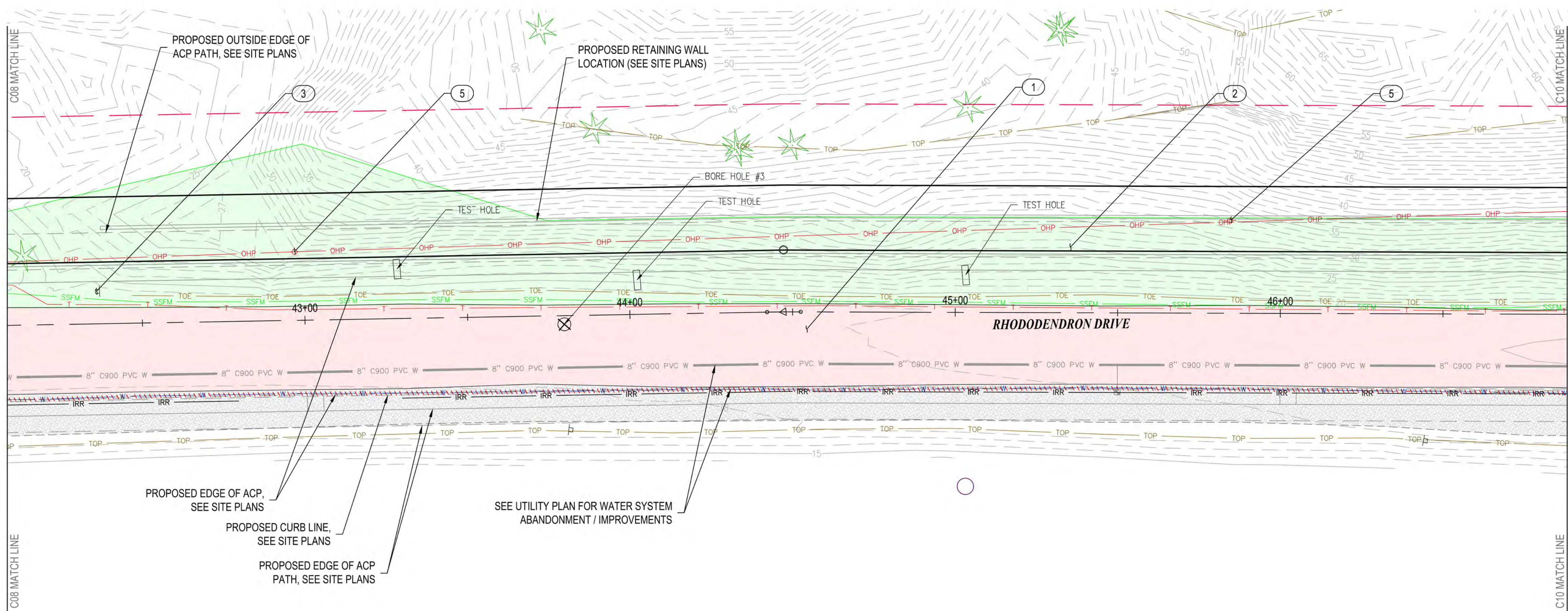
UTILITY PLAN



REVISIONS		DATE	DESCRIPTION	NO.	DATE	BY	REVIEW
1	EXISTING WATER MAIN AND SERVICES TO BE ABANDONED. PER NOTES IN GENERAL INFORMATION SHEETS						
2	MAINTAIN 6" MIN. VERTICAL SEPARATION FROM ALL UTILITIES SHOWN.						

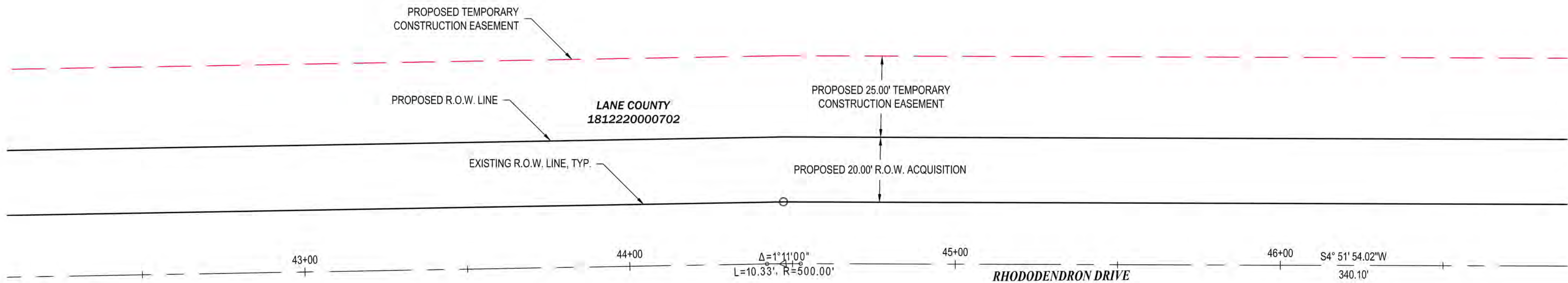
ENGINEER: KAL	DATE: Nov 13, 2023	CLIENT: FLO	LOG NO.: 1013-113
REVIEWED: JAB	DATE: Nov 13, 2023	FILENAME: RHOD-P-UTILP.DWG	

SCALE: SHOWN	DWG NO.: C08B	SHEET NO.: 27	71
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PLAN VIEW

1" = 20'



CITY OF FLORENCE
18122200001000

ALIGNMENT CONTROL

1" = 20'



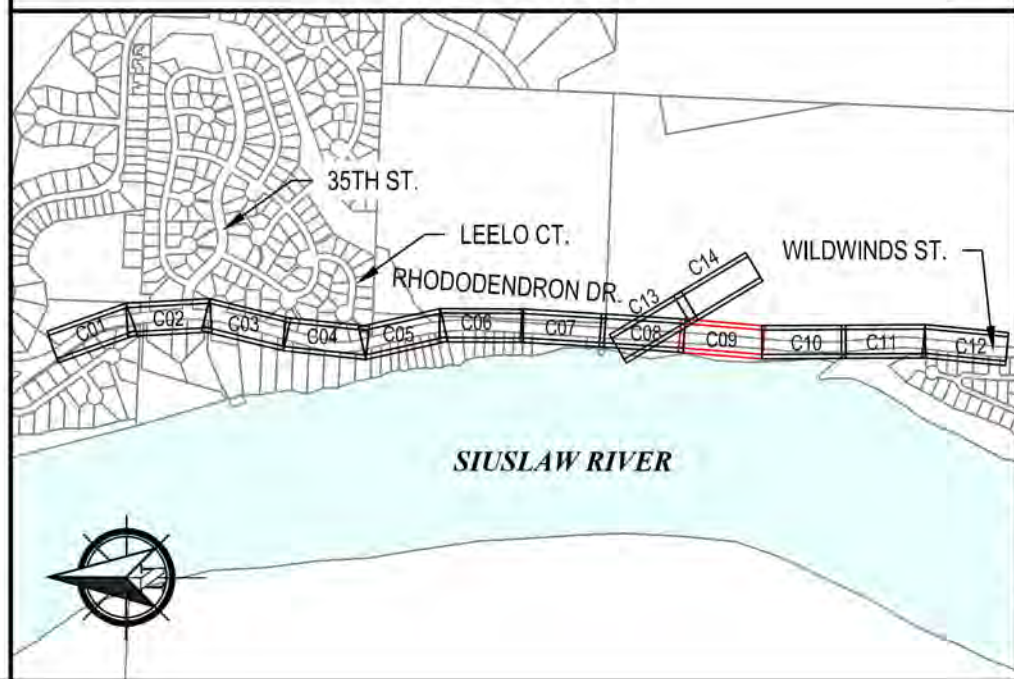
GENERAL NOTES

- 1) PROPOSED FEATURES SHOWN IN GRAY ARE FOR CONTRACTOR'S CONVENIENCE IN IDENTIFYING IMPROVEMENT LIMITS.
- 2) REFER TO CONSTRUCTION NOTES, DWG NO. GI-01 FOR UTILITY ABANDONMENT PROCEDURES.

DEMOLITION NOTES

- | | | |
|----|----------|---------------------------------|
| 1 | REMOVE | ASPHALT |
| 2 | REMOVE | VEGETATION |
| 3 | REMOVE | SIGN TEMPORARILY AND REPLACE |
| 4 | REMOVE | CATCH BASIN |
| 5 | RELOCATE | POWER POLE (BY OTHERS) |
| 6 | RELOCATE | TELEPHONE PEDESTAL (BY OTHERS) |
| 7 | RELOCATE | MAILBOX |
| 8 | RELOCATE | FENCE |
| 9 | ADJUST | SEWER MANHOLE |
| 10 | REPLACE | VALVE BOXES PER COF #F-403 |
| 11 | ABANDON | SEWER MANHOLE |
| 12 | ABANDON | SEWER LINE AND APPURTENANCES |
| 13 | PROPOSED | ACP SAWCUT LINE |
| 14 | PROVIDE | SILT FENCE |
| 15 | PROVIDE | INLET PROTECTION |
| 16 | RELOCATE | UTILITY (SEE UTILITY PLANS) |
| 17 | RELOCATE | SIGN (SEE GENERAL CONST. PLANS) |

KEY PLAN



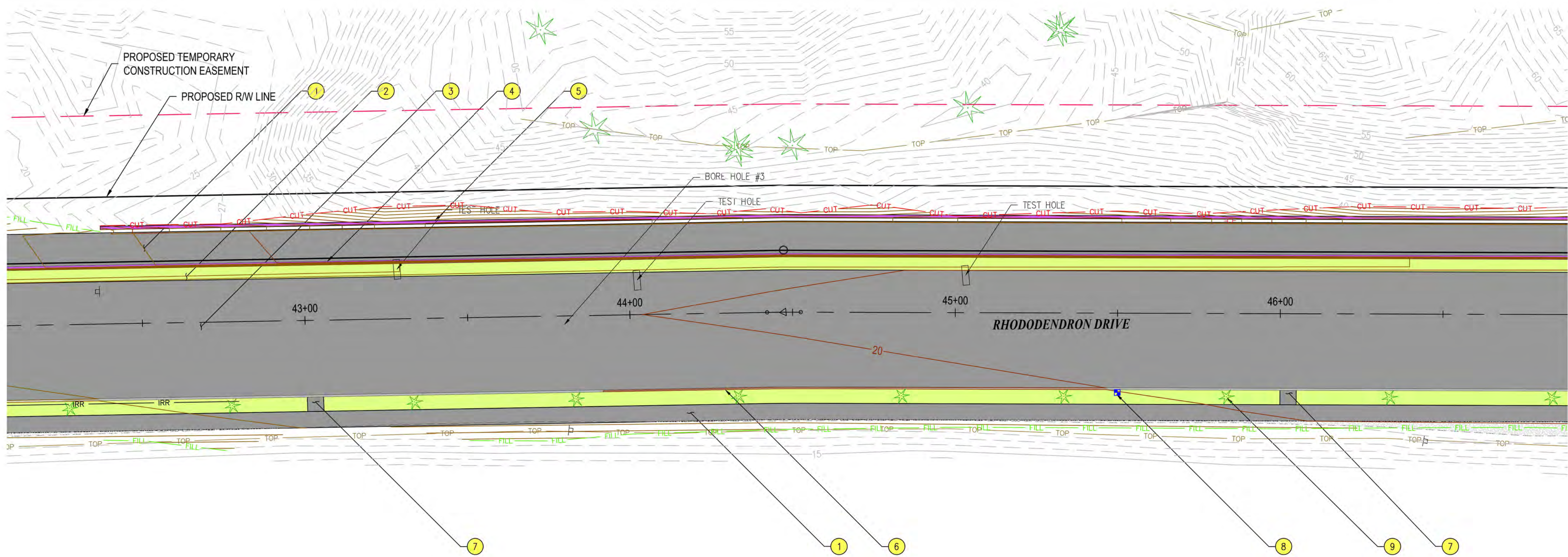
CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT
SITE PREPARATION AND SURVEY
CONTROL

NO.	DATE	DESCRIPTION	BY	REVIEW

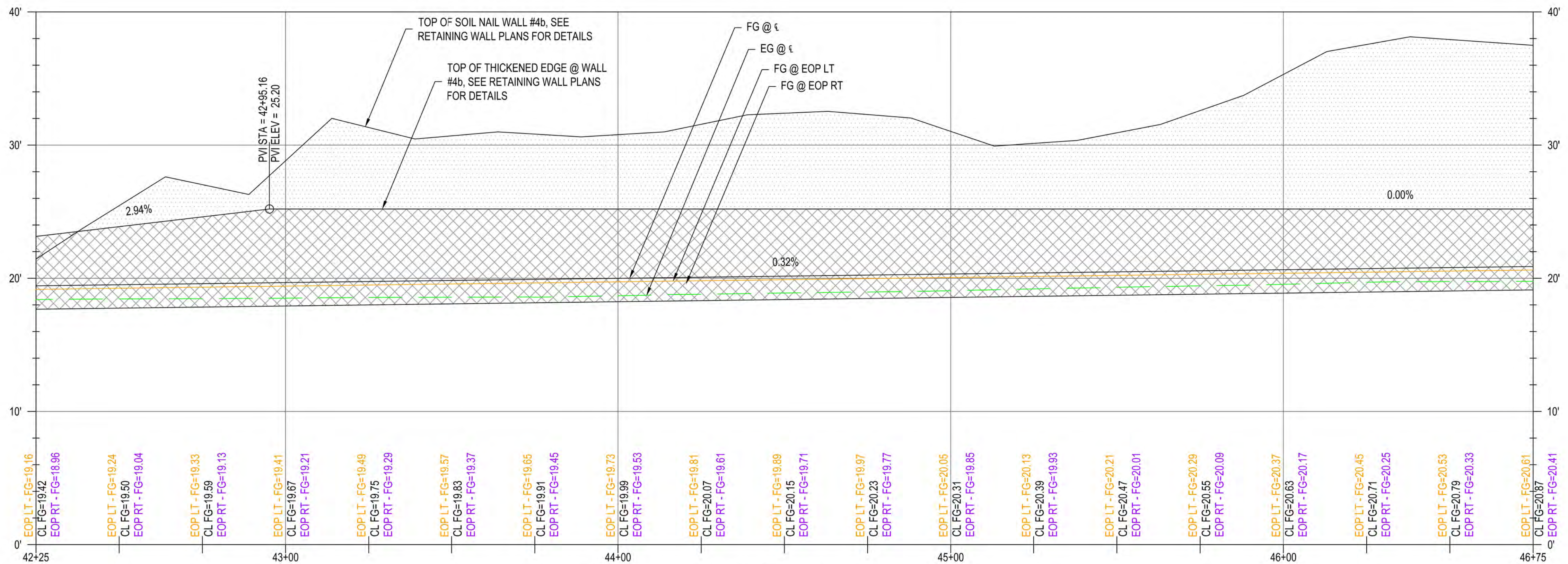
ENGINEER: KAL	SAFETY DATE: Nov 13, 2023	CLIENT: FLO	LOG NO.: 1013-113
REVIEWED: JAB	PLOT DATE: Nov 13, 2023	FILE NAME: RHOD-P-PREP.DWG	

DWG NO.: C09	SHEET NO.: 28	SCALE: SHOWN
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PLAN VIEW
1" = 20'



P RHODY PROFILE
H: 1" = 20', V: 1" = 5'



GENERAL NOTES

- EOP ELEVATIONS REFERENCED IN THE PROFILE VIEWS REPRESENT THE ASPHALT ELEVATION AT THE EDGE OF PAVEMENT. ELEVATIONS ARE PROJECTED THROUGH INTERSECTIONS.
- PROPOSED ADA RAMP ARE TO BE CONTRACTOR DESIGNED PER THE SPECIFICATIONS. PROPOSED RAMP CONFIGURATIONS AS SHOWN ON THE PLANS ARE FOR ILLUSTRATION ONLY, AND THE CONTRACTOR DESIGNED LAYOUT MAY VARY.
- ANY PROPOSED CURBS, RAMP, AND/OR SIDEWALK SHALL BE PROVIDED PER ODOT STANDARD DRAWINGS, RD700 SERIES.

CONSTRUCTION NOTES

- CONSTRUCT ACP PATH (FOR DETAIL, SEE DWG NO. S01)
- CONSTRUCT DRAINAGE SWALE (FOR DETAIL, SEE DWG NO. S01)
- FULL SECTION REPLACEMENT (FOR DETAIL, SEE DWG NO. S01)
- STA. 41+22 TO STA. 51+71
CONSTRUCT WALL #4a - MODULAR BLOCK WALL (FOR DETAILS, SEE RETAINING WALL PLANS)
- STA. 42+37 TO STA. 51+70
CONSTRUCT WALL #4b - SOIL NAIL WALL (FOR DETAILS, SEE RETAINING WALL PLANS)
- CONSTRUCT STANDARD CURB, PER COF #F-203, WITH ANGLED CURB CUT OPENINGS SPACED @ APPROX. 100 LF INTERVALS (FOR DETAIL, SEE DWG NO. D03)
- CONSTRUCT CURB OPENING AND 5'x5' ACP PEDESTRIAN LANDING AREA (APPROX. STA 43+00)
- CONTRACTOR TO DESIGN AND INSTALL IRRIGATION SYSTEM FOR LANDSCAPE STRIP. CONNECT TO IRRIGATION SERVICE INSTALLED PER UTILITY PLANS.
- PLANT TREES AS SHOWN EVERY 50 LF, TOTAL OF 24 TREES. INDIVIDUAL TREE PLANTING LOCATIONS SHALL BE VERIFIED BY THE CITY INSPECTOR PRIOR TO INSTALLATION.



CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

GENERAL CONSTRUCTION

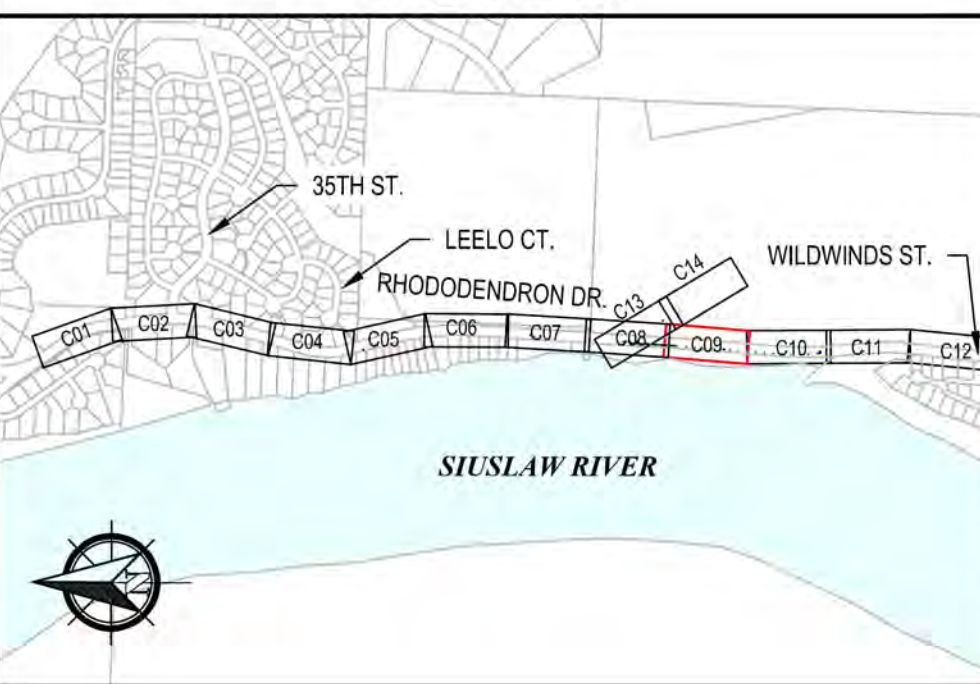


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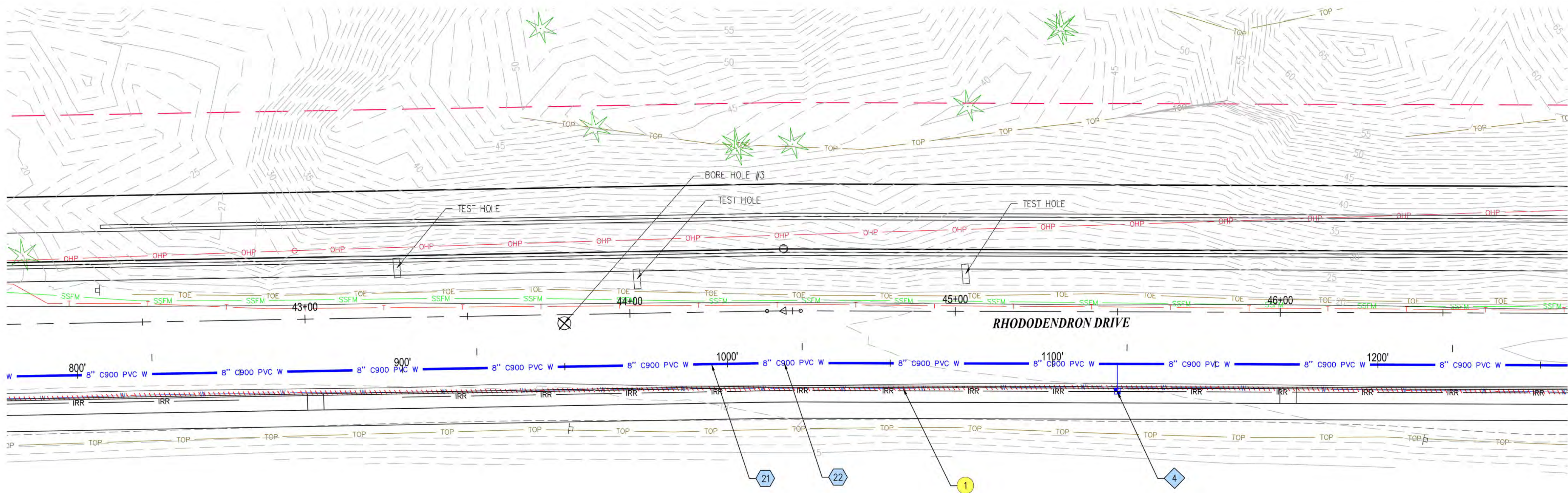
REVISIONS

PRELIMINARY REVIEW
DRAWINGS

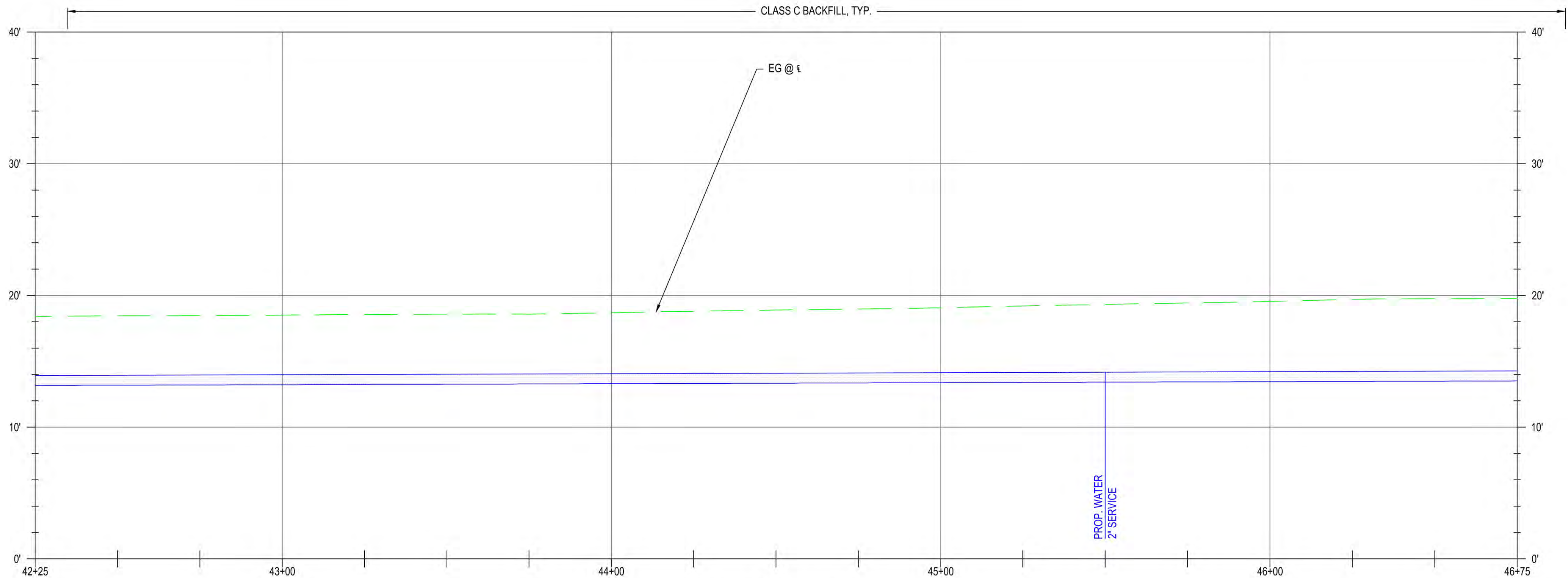
KEY PLAN



SCALE: SHOWN
0' 1' 2'
DRAWING IS FULL SCALE WHEN BAR MEASURES 2"
DWG NO.: C09A
SHEET NO.: 29
71



PLAN VIEW
1" = 20'



PROFILE VIEW
H: 1" = 20' V: 1" = 5'



UTILITY NOTES



CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

UTILITY PLAN



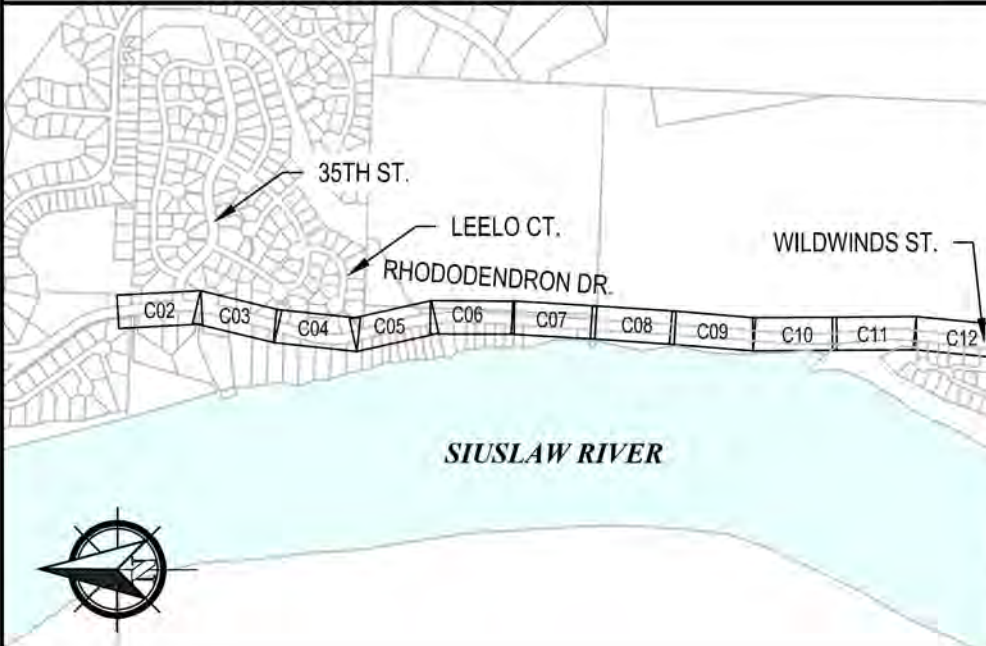
WATER MAIN PIPE AND FITTING NOTES

- 21 PROVIDE APPROX 1049 LF OF 8" C900 PIPE
- 22 APPROX. STA 44+47.3, 16.0' R, PROVIDE: PIPE JOINT DEFLECTION

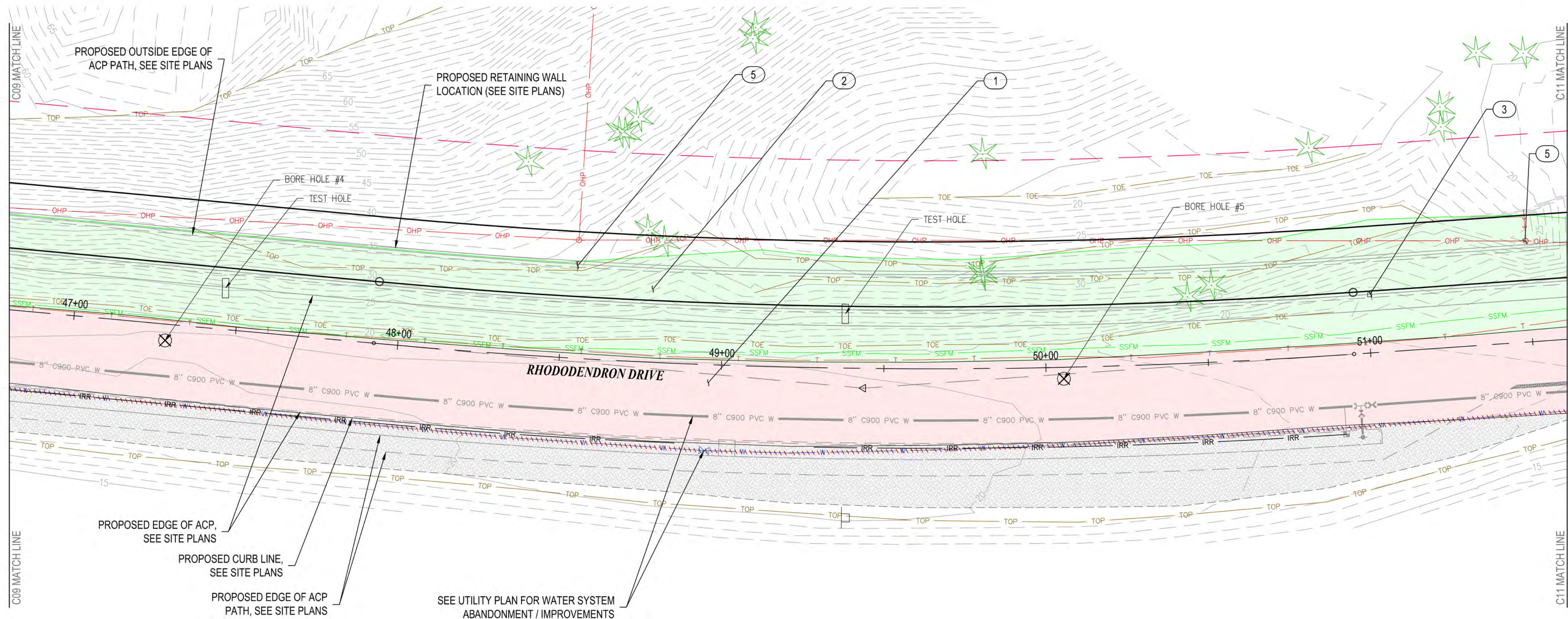
WATER SERVICE NOTES

- 4 APPROX. STA 45+50.0, 24.4' R, PROVIDE: (1) - 2" WATER SERVICE, IRRIGATION SERVICE

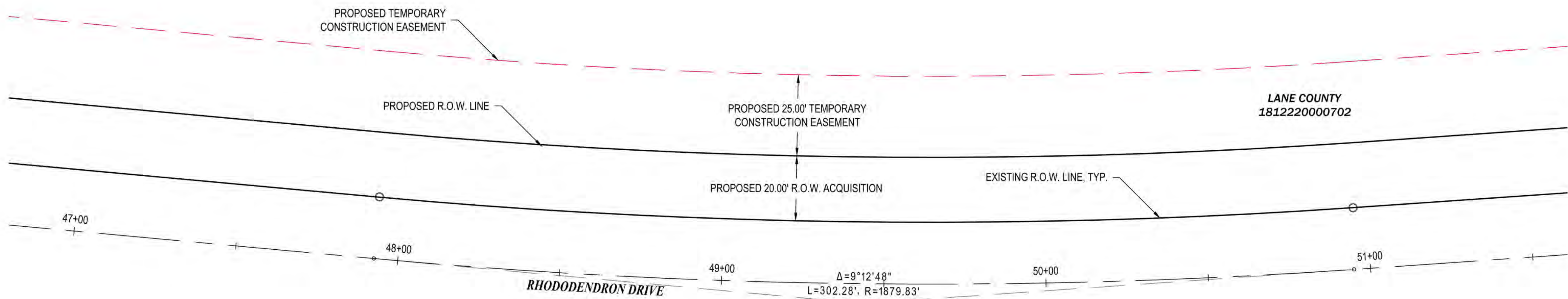
KEY PLAN



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PLAN VIEW
1" = 20'



CITY OF FLORENCE
18122200001000

ALIGNMENT CONTROL
1" = 20'



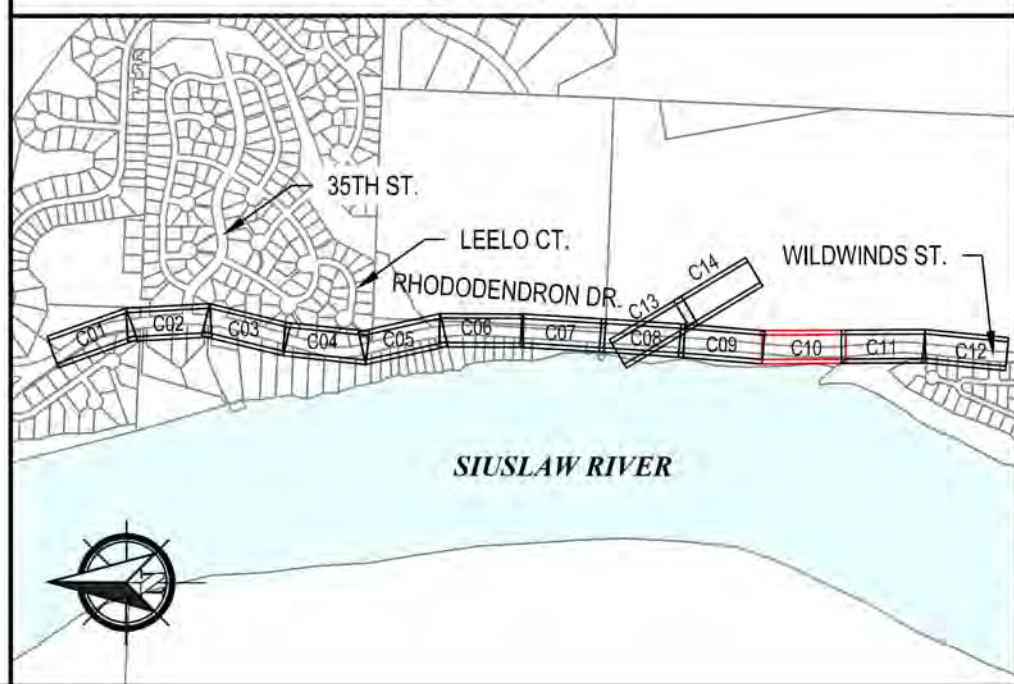
GENERAL NOTES

- 1) PROPOSED FEATURES SHOWN IN GRAY ARE FOR CONTRACTOR'S CONVENIENCE IN IDENTIFYING IMPROVEMENT LIMITS.
- 2) REFER TO CONSTRUCTION NOTES, DWG NO. GI-01 FOR UTILITY ABANDONMENT PROCEDURES.

DEMOLITION NOTES

- | | | |
|----|----------|---------------------------------|
| 1 | REMOVE | ASPHALT |
| 2 | REMOVE | VEGETATION |
| 3 | REMOVE | SIGN TEMPORARILY AND REPLACE |
| 4 | REMOVE | CATCH BASIN |
| 5 | RELOCATE | POWER POLE (BY OTHERS) |
| 6 | RELOCATE | TELEPHONE PEDESTAL (BY OTHERS) |
| 7 | RELOCATE | MAILBOX |
| 8 | RELOCATE | FENCE |
| 9 | ADJUST | SEWER MANHOLE |
| 10 | REPLACE | VALVE BOXES PER COF #F-403 |
| 11 | ABANDON | SEWER MANHOLE |
| 12 | ABANDON | SEWER LINE AND APPURTENANCES |
| 13 | PROPOSED | ACP SAWCUT LINE |
| 14 | PROVIDE | SILT FENCE |
| 15 | PROVIDE | INLET PROTECTION |
| 16 | RELOCATE | UTILITY (SEE UTILITY PLANS) |
| 17 | RELOCATE | SIGN (SEE GENERAL CONST. PLANS) |

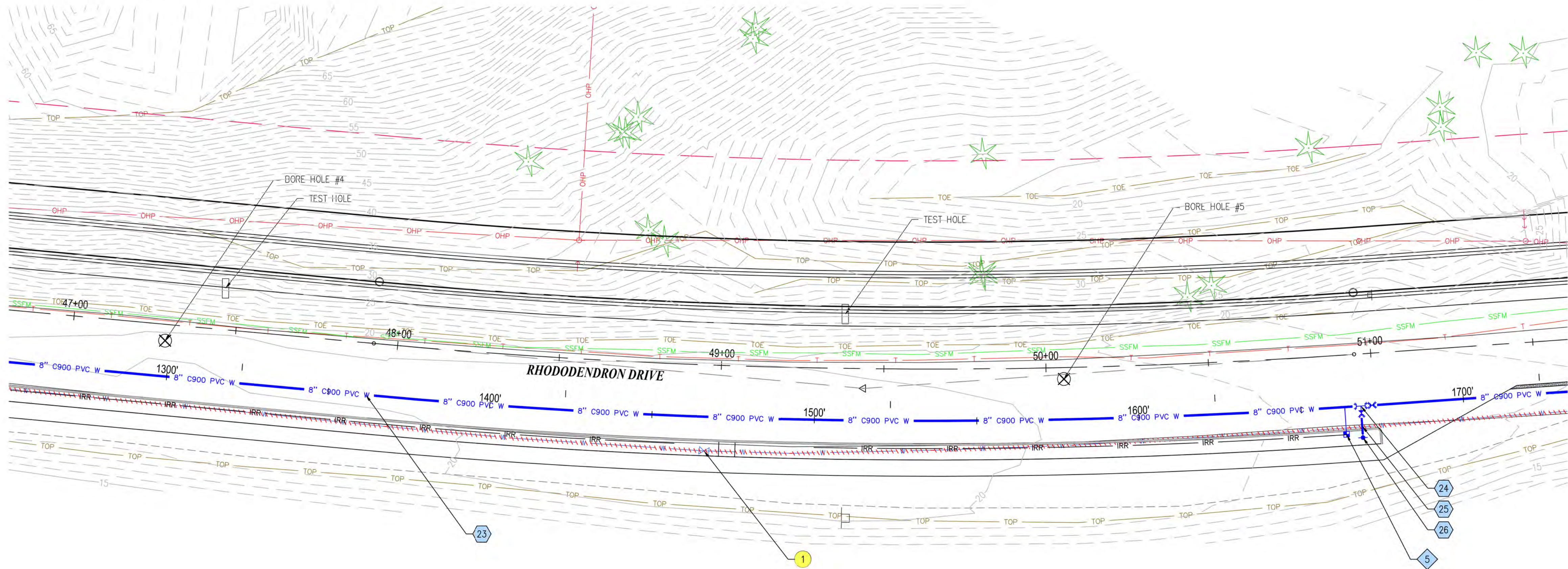
KEY PLAN



CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT
SITE PREPARATION AND SURVEY CONTROL

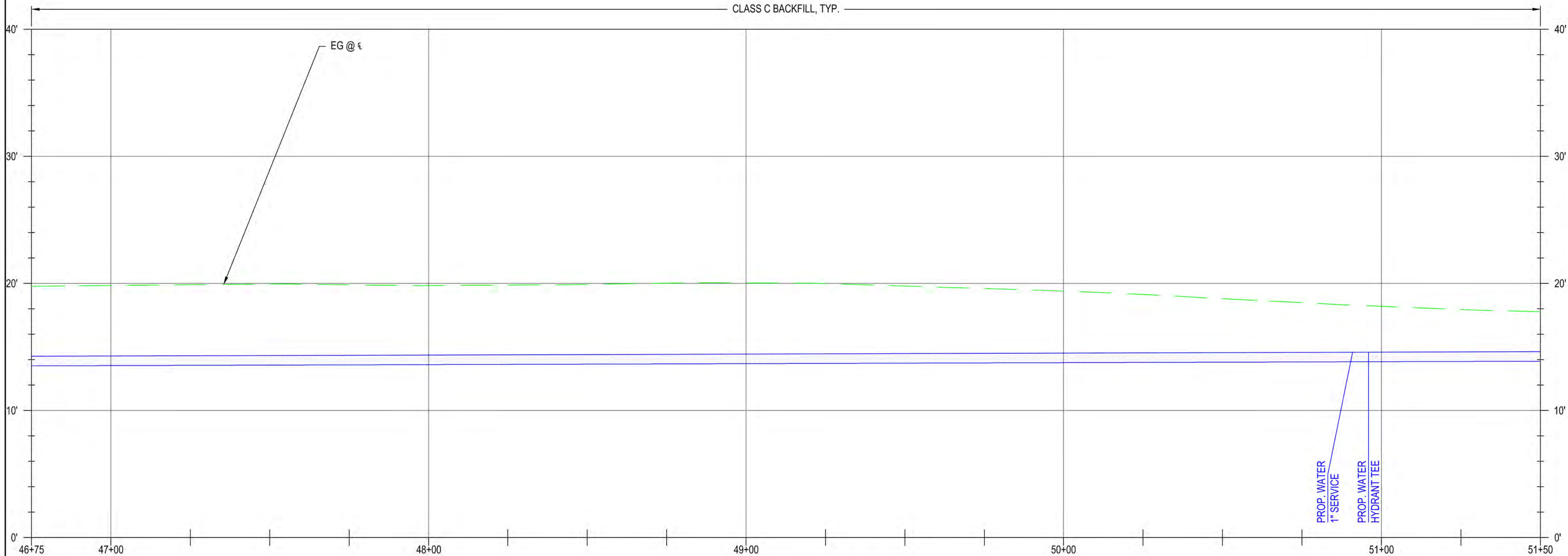


REVISIONS		NO.	DATE	DESCRIPTION	BY	REVIEW
ENGINEER	KAL	NOV 13, 2023				
REVIEWED	JAB	NOV 13, 2023				
DWG NO.: C10		SHEET NO.: 31		71		



PLAN VIEW

1" = 20'



PROFILE VIEW

H: 1" = 20' V: 1" = 5'



UTILITY NOTES

WATER MAIN PIPE AND FITTING NOTES

- 23 APPROX. STA 47+91.6, 16.0' R, PROVIDE:
BEGIN PIPE JOINT DEFLECTION
- 24 APPROX. STA 50+95.9, 16.0' R, PROVIDE:
END PIPE JOINT DEFLECTION
(1) - 8" x 6" DI TEE (RdxFL)
(1) - 8" GATE VALVE (RdxRJ)
(1) - 6" GATE VALVE (FLxRJ)
- 25 PROVIDE APPROX 9 LF OF 6" RJ C900 PIPE
- 26 APPROX. STA 50+95.9, 25.8' R, PROVIDE:
(1) - FIRE HYDRANT ASSEMBLY

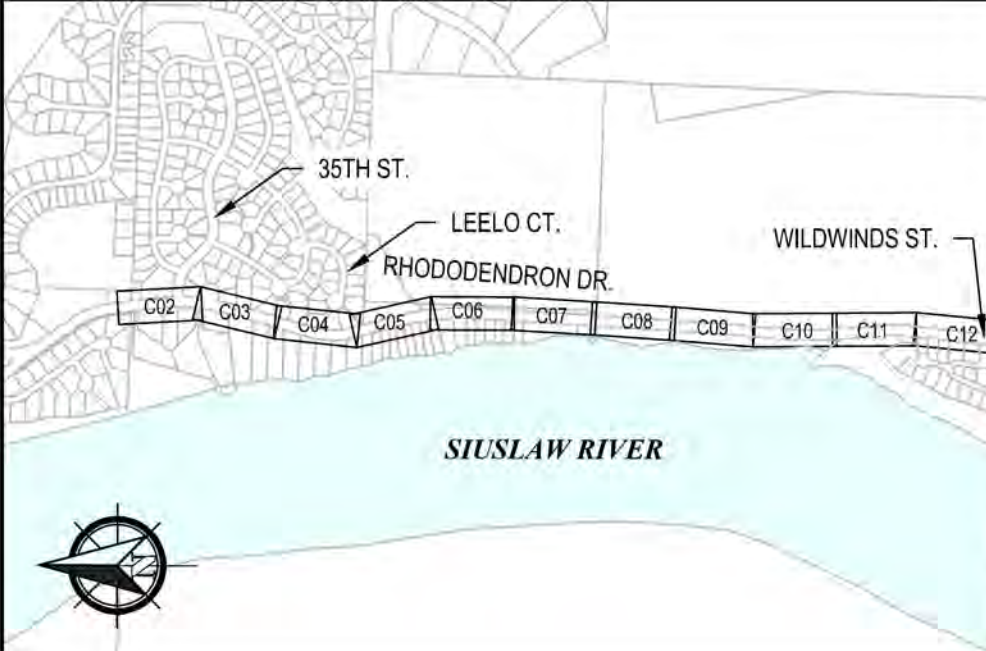
WATER SERVICE NOTES

- 5 APPROX. STA 50+90.9, 24.4' R, PROVIDE:
(1) - 1" WATER SERVICE, IRRIGATION SERVICE

CONSTRUCTION NOTES

- 1 EXISTING WATER MAIN AND SERVICES TO BE ABANDONED. PER NOTES IN GENERAL INFORMATION SHEETS
- 2 MAINTAIN 6" MIN. VERTICAL SEPARATION FROM ALL UTILITIES SHOWN.

KEY PLAN



CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

UTILITY PLAN



LOG NO.: 1013-113

CLIENT: FLO
FILENAME: RHOD-P-UTIL-P.DWG

ENGINEER: KAL
REVIEWED: JAB
DATE: Nov 13, 2023
PLOT DATE: Nov 13, 2023

NO. DATE DESCRIPTION BY REVIEW

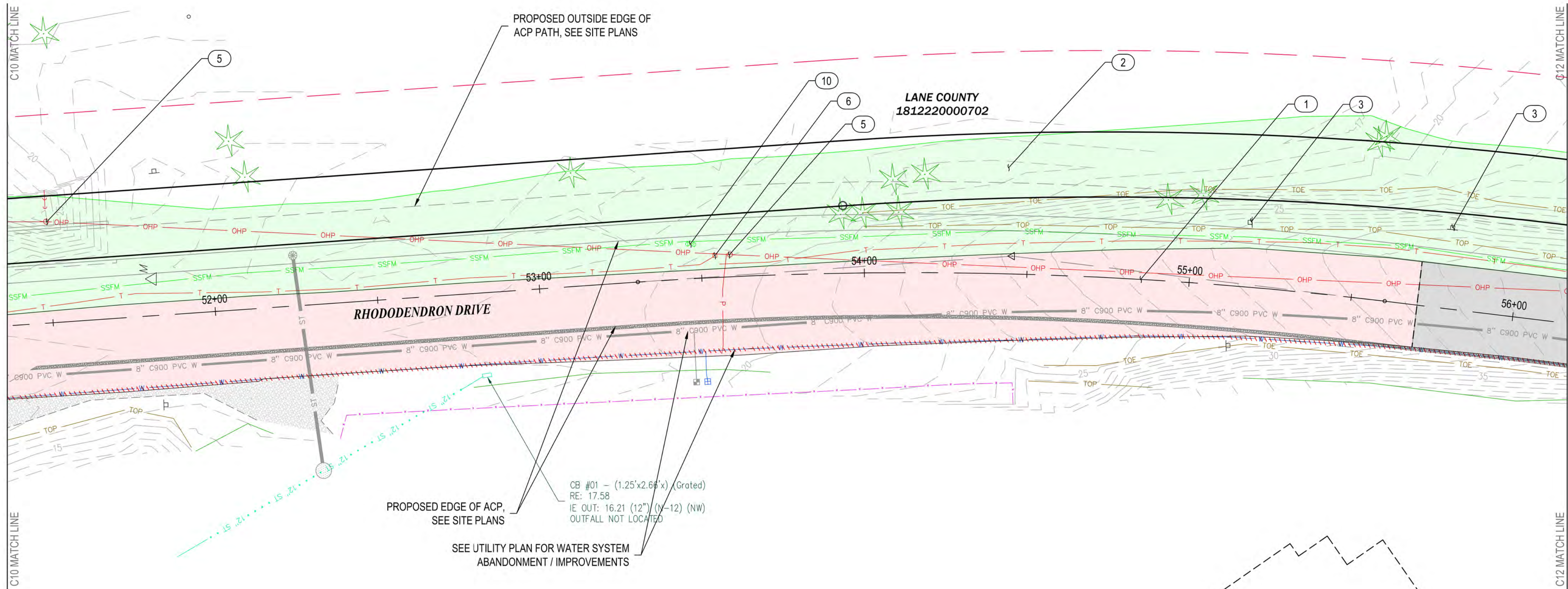
SCALE: SHOWN

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

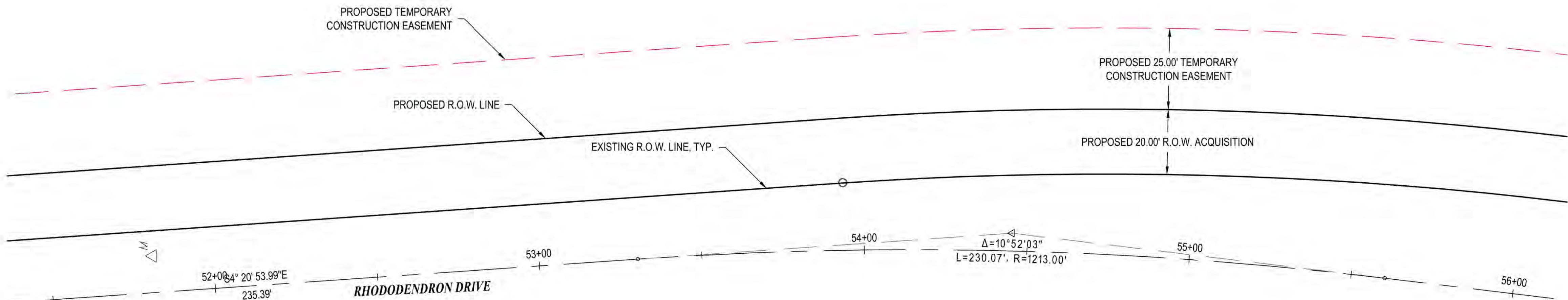
DWG NO.: C10B

SHEET NO.: 33

71



PLAN VIEW
1" = 20'



ALIGNMENT CONTROL
1" = 20'



EXPIRES: 12/31/2024

GENERAL NOTES

- 1) PROPOSED FEATURES SHOWN IN GRAY ARE FOR CONTRACTOR'S CONVENIENCE IN IDENTIFYING IMPROVEMENT LIMITS.
- 2) REFER TO CONSTRUCTION NOTES, DWG NO. GI-01 FOR UTILITY ABANDONMENT PROCEDURES.

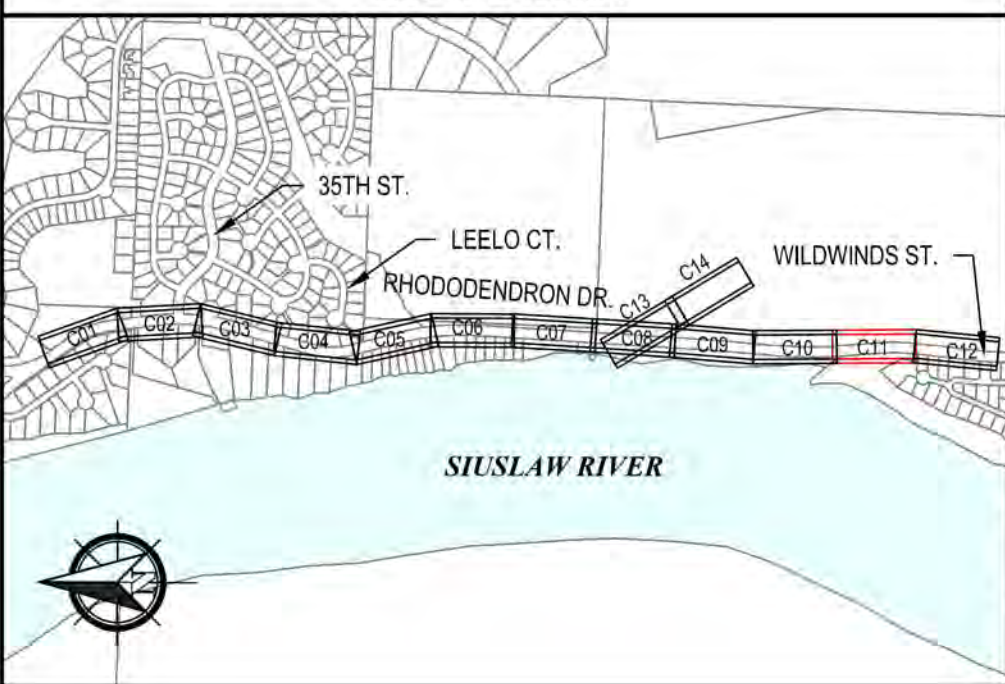
CITY OF FLORENCE RHODODENDRON DRIVE REALIGNMENT SITE PREPARATION AND SURVEY CONTROL



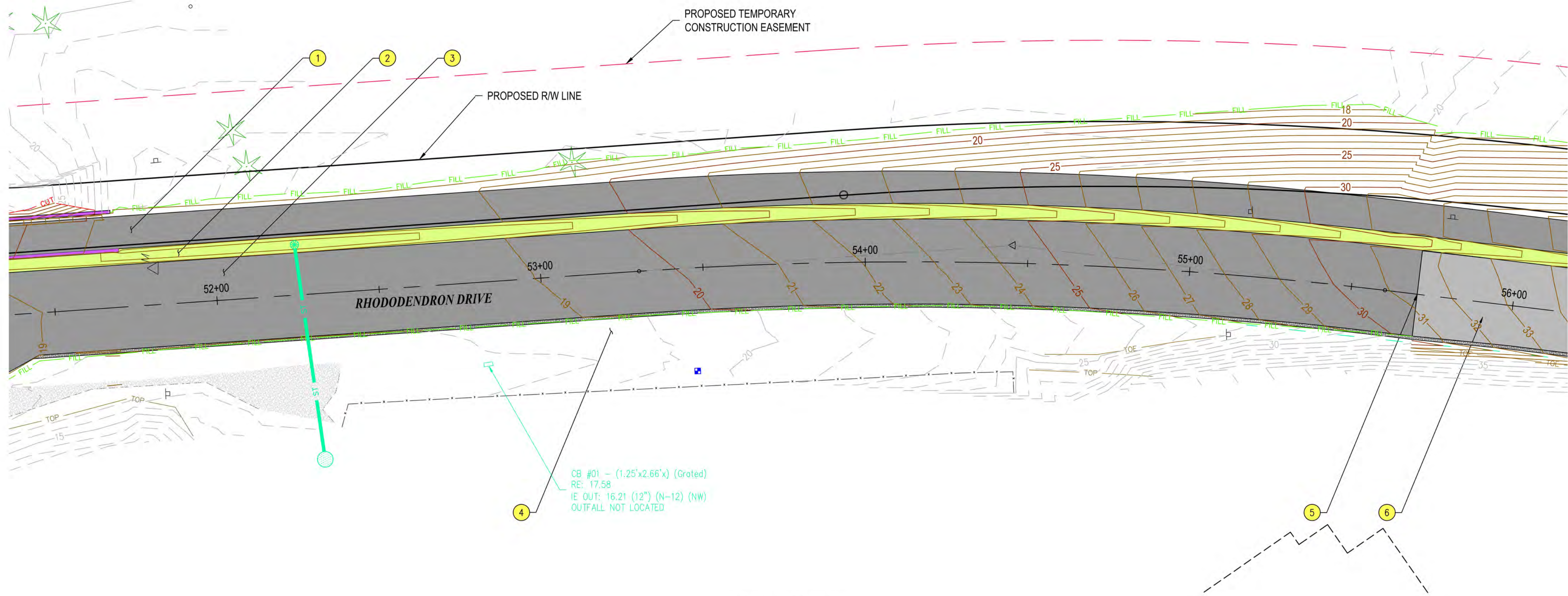
DEMOLITION NOTES

- | NO. | DESCRIPTION |
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| 1 | REMOVE ASPHALT |
| 2 | REMOVE VEGETATION |
| 3 | REMOVE SIGN TEMPORARILY AND REPLACE |
| 4 | REMOVE CATCH BASIN |
| 5 | RELOCATE POWER POLE (BY OTHERS) |
| 6 | RELOCATE TELEPHONE PEDESTAL (BY OTHERS) |
| 7 | RELOCATE MAILBOX |
| 8 | RELOCATE FENCE |
| 9 | ADJUST SEWER MANHOLE |
| 10 | REPLACE VALVE BOXES PER COF #F-403 |
| 11 | ABANDON SEWER MANHOLE |
| 12 | ABANDON SEWER LINE AND APPURTENANCES |
| 13 | PROPOSED ACP SAWCUT LINE |
| 14 | PROVIDE SILT FENCE |
| 15 | PROVIDE INLET PROTECTION |
| 16 | RELOCATE UTILITY (SEE UTILITY PLANS) |
| 17 | RELOCATE SIGN (SEE GENERAL CONST. PLANS) |

KEY PLAN

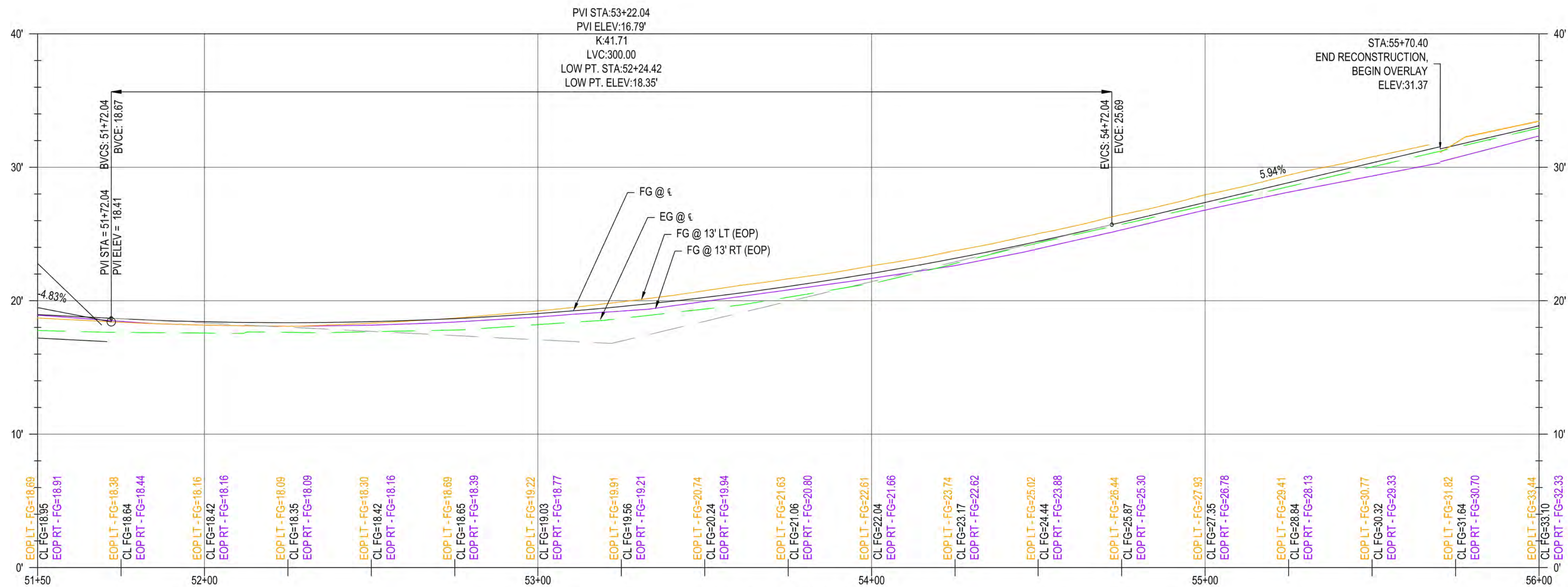


REVISIONS		DATE	DESCRIPTION	NO.	DATE	BY	REVIEW
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7	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023
8	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023
9	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023
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13	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023
14	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023
15	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023
16	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023	NOV 13, 2023
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PLAN VIEW

1" = 20'



P RHODY PROFILE

H: 1" = 20', V: 1" = 5'



GENERAL NOTES

- EOP ELEVATIONS REFERENCED IN THE PROFILE VIEWS REPRESENT THE ASPHALT ELEVATION AT THE EDGE OF PAVEMENT. ELEVATIONS ARE PROJECTED THROUGH INTERSECTIONS.
- PROPOSED ADA RAMP ARE TO BE CONTRACTOR DESIGNED PER THE SPECIFICATIONS. PROPOSED RAMP CONFIGURATIONS AS SHOWN ON THE PLANS ARE FOR ILLUSTRATION ONLY, AND THE CONTRACTOR DESIGNED LAYOUT MAY VARY.
- ANY PROPOSED CURBS, RAMP, AND/OR SIDEWALK SHALL BE PROVIDED PER ODOT STANDARD DRAWINGS, RD700 SERIES.

CONSTRUCTION NOTES

- CONSTRUCT ACP PATH (FOR DETAIL, SEE DWG NO. S01)
- CONSTRUCT DRAINAGE SWALE (FOR DETAIL, SEE DWG NO. S01)
- FULL SECTION REPLACEMENT (FOR DETAIL, SEE DWG NO. S01)
- BACKFILL REMOVED ACP SECTION WITH NATIVE MATERIAL TO CREATE SHOULDER (FOR DETAIL, SEE DWG NO. S01)
- STA. 55+70.40 END FULL SECTION REPLACEMENT, BEGIN OVERLAY SECTION (FOR DETAIL, SEE DWG NO. S01)
- 2" ACP OVERLAY (FOR DETAIL, SEE DWG NO. S01)



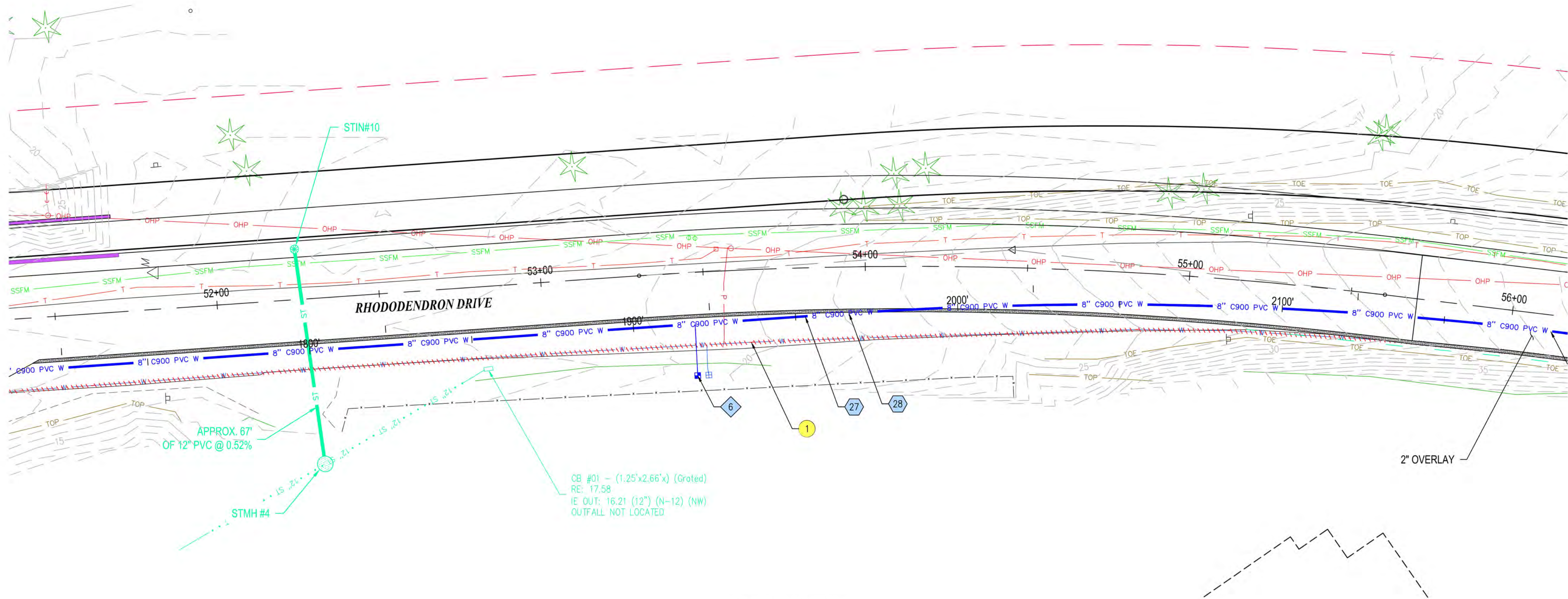
EXPIRES: 12/31/2024

CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

GENERAL CONSTRUCTION

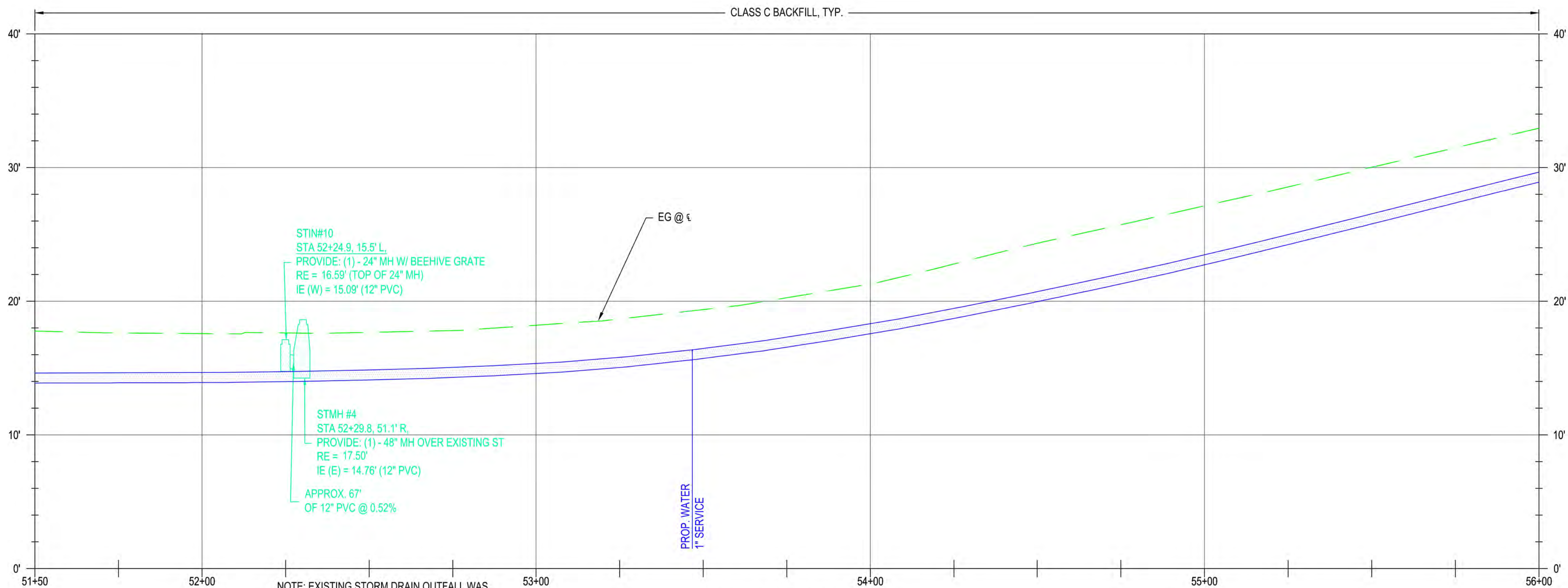


NO.	DATE	DESCRIPTION	BY	REVIEW
REVISIONS				
PRELIMINARY REVIEW DRAWINGS				
ENGINEER: KAL	DATE: Nov 13, 2023	CLIENT: FLO	LOG NO.: 1013-113	
REVIEWED: JAB	DATE: Nov 13, 2023	FILENAME: RHOD-P-CIV.DWG		
DWG NO.: C11A	SHEET NO.: 35			71



PLAN VIEW

1" = 20'



PROFILE VIEW

H: 1" = 20' V: 1" = 5'



UTILITY NOTES



CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

UTILITY PLAN



WATER MAIN PIPE AND FITTING
NOTES

- 27 PROVIDE APPROX 837 LF OF 8" C900 PIPE
- 28 APPROX. STA 53+94.8, 14.3' R. PROVIDE:
BEGIN PIPE JOINT DEFLECTION

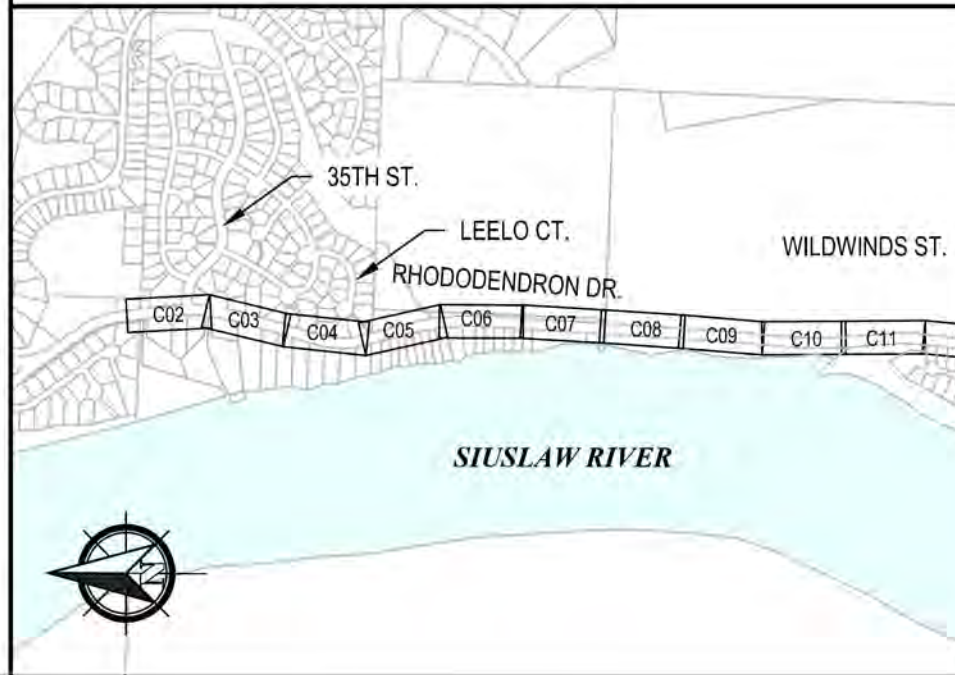
WATER SERVICE NOTES

- 6 APPROX. STA 53+46.6, 31.8' R. PROVIDE:
(1) - 1" WATER SERVICE, REPLACE EXISTING ASSEMBLY

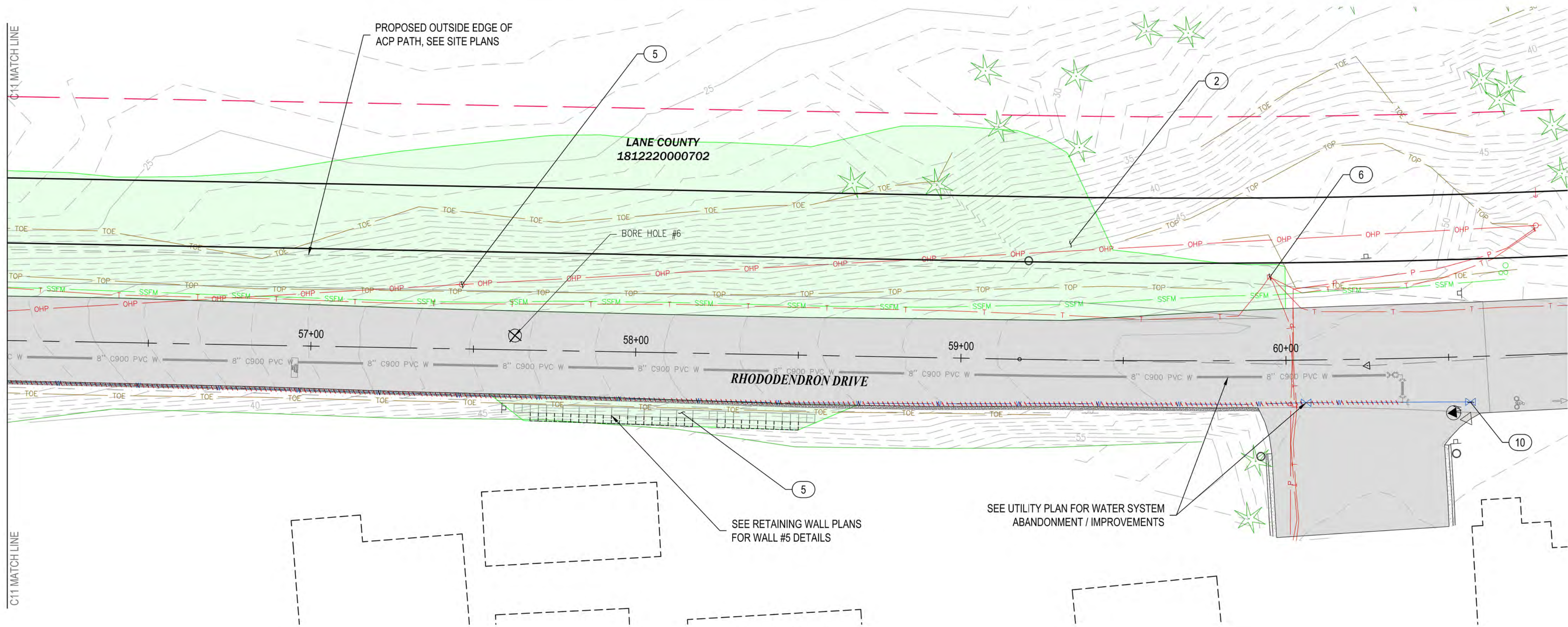
CONSTRUCTION NOTES

- 1 EXISTING WATER MAIN AND SERVICES TO BE ABANDONED. PER NOTES
IN GENERAL INFORMATION SHEETS
- 2 MAINTAIN 6" MIN. VERTICAL SEPARATION FROM ALL
UTILITIES SHOWN.

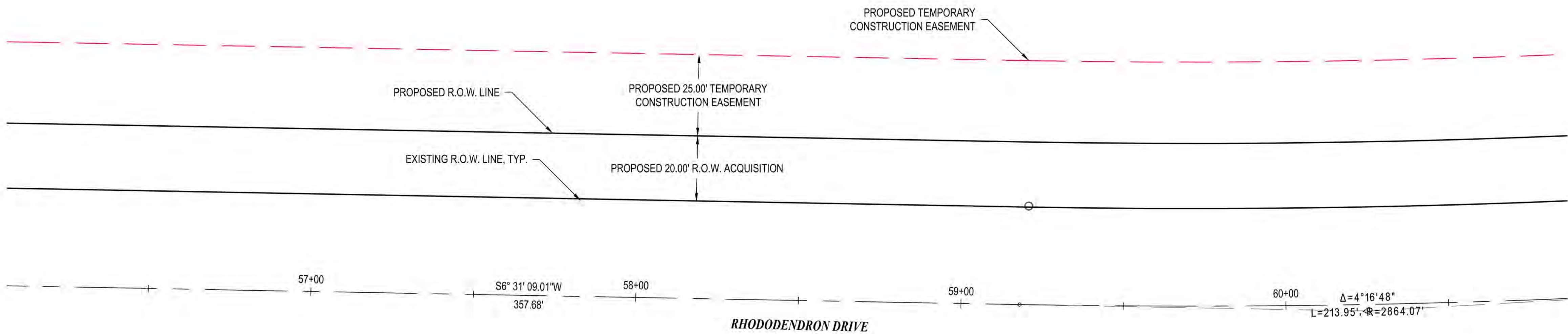
KEY PLAN



REVISIONS		NO.	DATE	DESCRIPTION	BY	REVIEW
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PLAN VIEW
1" = 20'



ALIGNMENT CONTROL
1" = 20'



GENERAL NOTES

- 1) PROPOSED FEATURES SHOWN IN GRAY ARE FOR CONTRACTOR'S CONVENIENCE IN IDENTIFYING IMPROVEMENT LIMITS.
- 2) REFER TO CONSTRUCTION NOTES, DWG NO. GI-01 FOR UTILITY ABANDONMENT PROCEDURES.



EXPIRES: 12/31/2024

CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

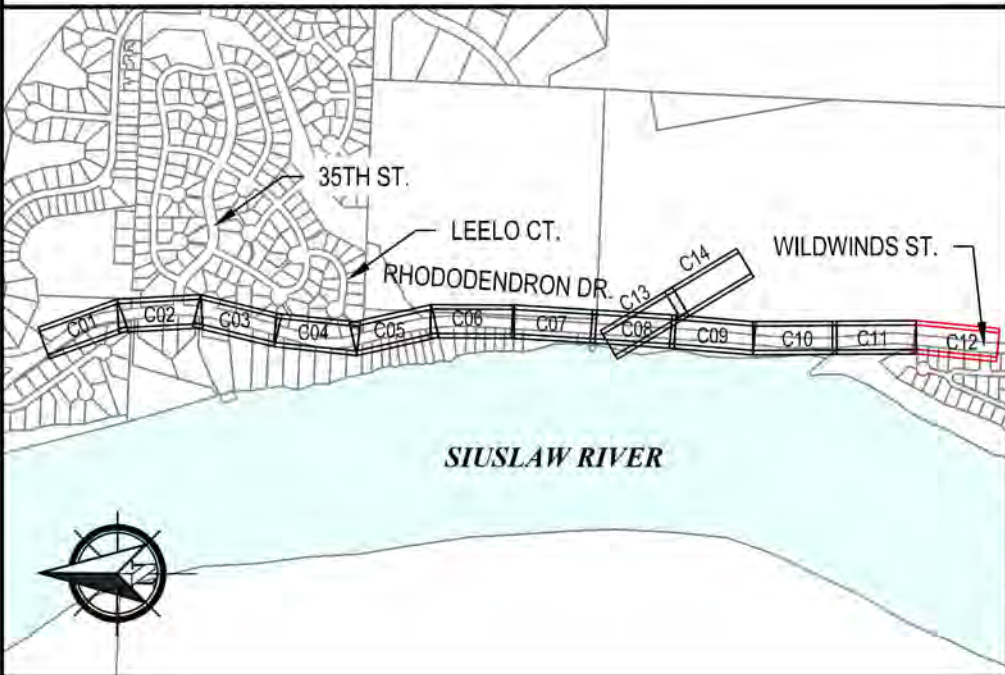


SITE PREPARATION AND SURVEY CONTROL

DEMOLITION NOTES

- | | | |
|----|----------|---------------------------------|
| 1 | REMOVE | ASPHALT |
| 2 | REMOVE | VEGETATION |
| 3 | REMOVE | SIGN TEMPORARILY AND REPLACE |
| 4 | REMOVE | CATCH BASIN |
| 5 | RELOCATE | POWER POLE (BY OTHERS) |
| 6 | RELOCATE | TELEPHONE PEDESTAL (BY OTHERS) |
| 7 | RELOCATE | MAILBOX |
| 8 | RELOCATE | FENCE |
| 9 | ADJUST | SEWER MANHOLE |
| 10 | REPLACE | VALVE BOXES PER COF #F-403 |
| 11 | ABANDON | SEWER MANHOLE |
| 12 | ABANDON | SEWER LINE AND APPURTENANCES |
| 13 | PROPOSED | ACP SAWCUT LINE |
| 14 | PROVIDE | SILT FENCE |
| 15 | PROVIDE | INLET PROTECTION |
| 16 | RELOCATE | UTILITY (SEE UTILITY PLANS) |
| 17 | RELOCATE | SIGN (SEE GENERAL CONST. PLANS) |

KEY PLAN



REVISIONS		LOG NO.	CLIENT	FILE NAME	DATE	DESCRIPTION	NO.	DATE	BY	REVIEW
1	NOV 13, 2023	1013-113	FLO	RHOD-PREP.DWG	NOV 13, 2023					
2	NOV 13, 2023									
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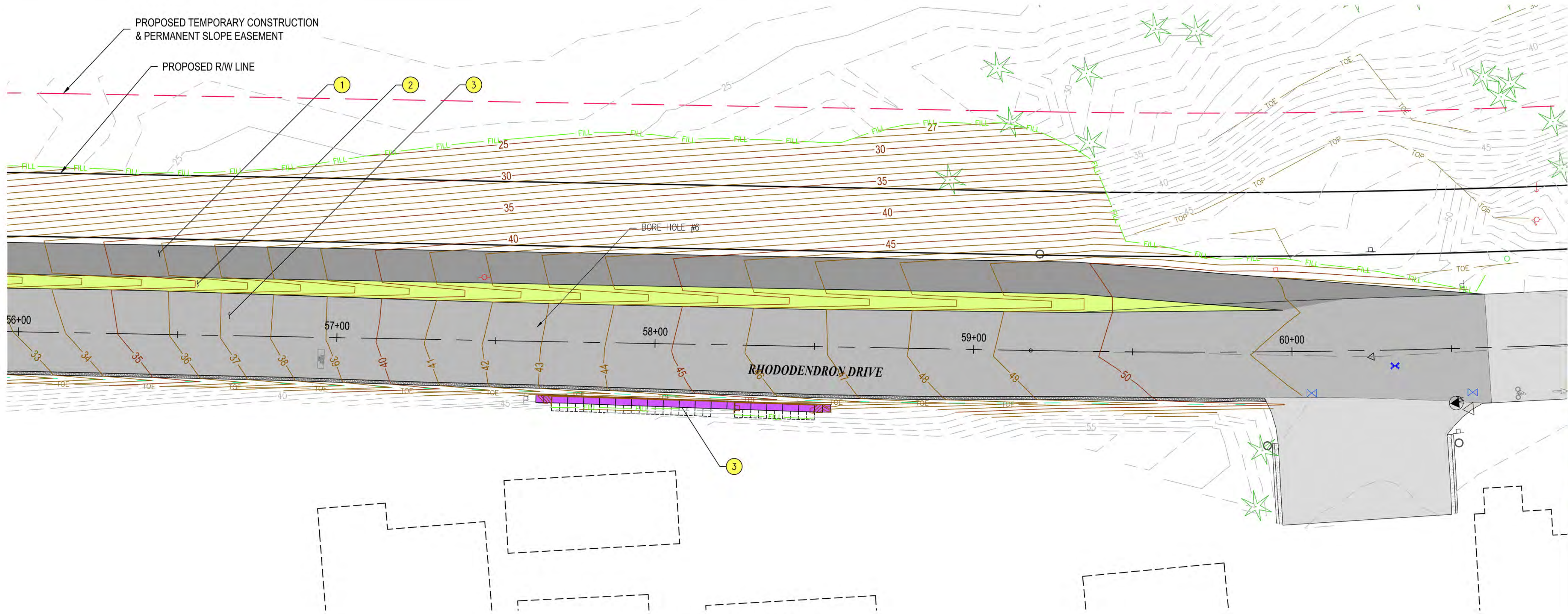
SCALE: SHOWN

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

DWG NO.: C12

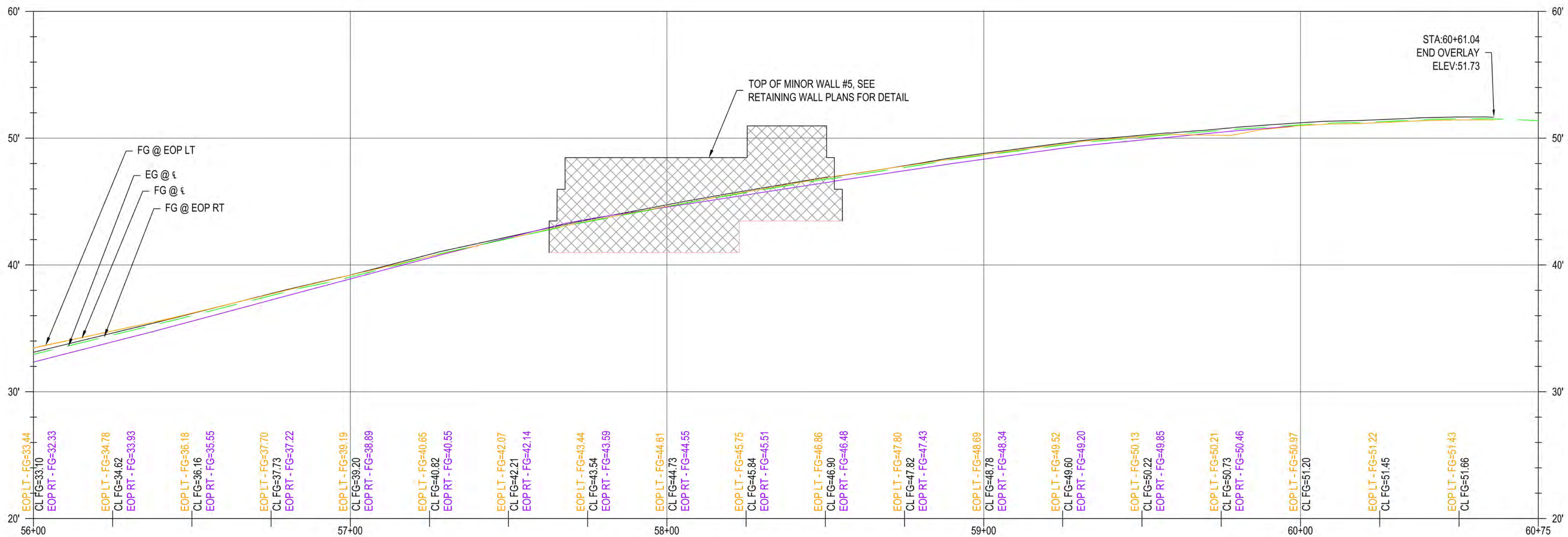
SHEET NO.: 37

71



PLAN VIEW

1" = 20'



P RHODY PROFILE

H: 1" = 20', V: 1" = 5'



GENERAL NOTES

- 1) EOP ELEVATIONS REFERENCED IN THE PROFILE VIEWS REPRESENT THE ASPHALT ELEVATION AT THE EDGE OF PAVEMENT. ELEVATIONS ARE PROJECTED THROUGH INTERSECTIONS.
- 2) PROPOSED ADA RAMP ARE TO BE CONTRACTOR DESIGNED PER THE SPECIFICATIONS. PROPOSED RAMP CONFIGURATIONS AS SHOWN ON THE PLANS ARE FOR ILLUSTRATION ONLY, AND THE CONTRACTOR DESIGNED LAYOUT MAY VARY.
- 3) ANY PROPOSED CURBS, RAMP, AND/OR SIDEWALK SHALL BE PROVIDED PER ODOT STANDARD DRAWINGS, RD700 SERIES.

CONSTRUCTION NOTES

- 1) CONSTRUCT ACP PATH (FOR DETAIL, SEE DWG NO. S01)
- 2) CONSTRUCT DRAINAGE SWALE (FOR DETAIL, SEE DWG NO. S01)
- 3) 2" ACP OVERLAY (FOR DETAIL, SEE DWG NO. S01)
- 4) STA. 57+63 TO STA. 58+55 CONSTRUCT WALL #5 - MODULAR BLOCK WALL (FOR DETAILS, SEE RETAINING WALL PLANS)
- 5) STA. 60+61 END IMPROVEMENTS



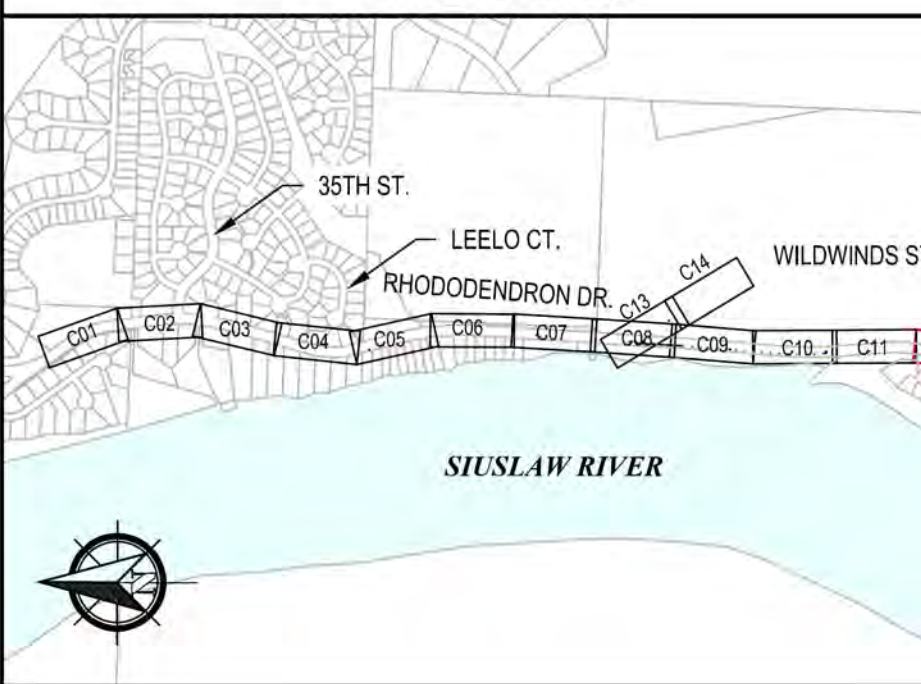
CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

GENERAL CONSTRUCTION



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KEY PLAN



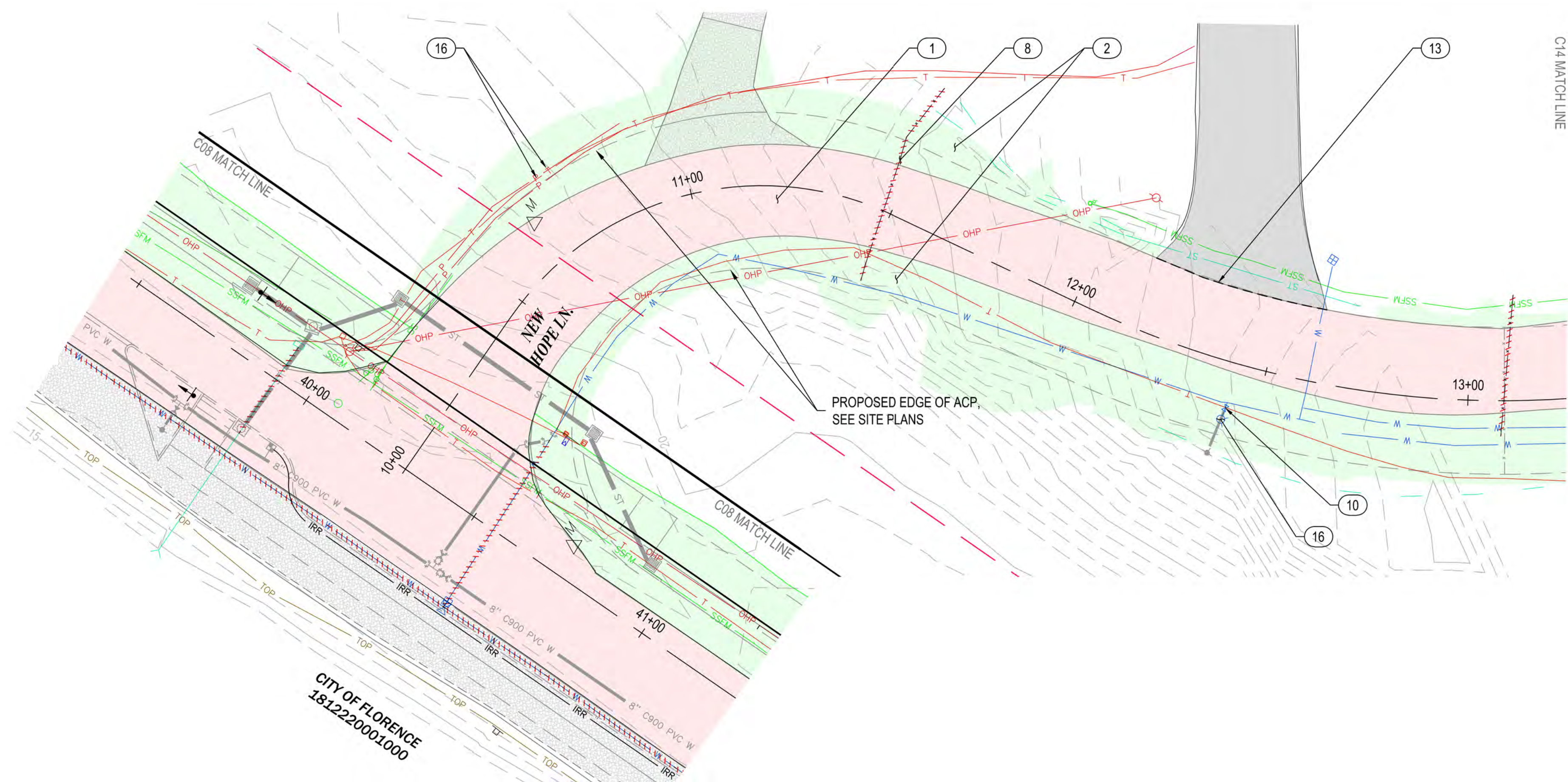
SCALE: SHOWN

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

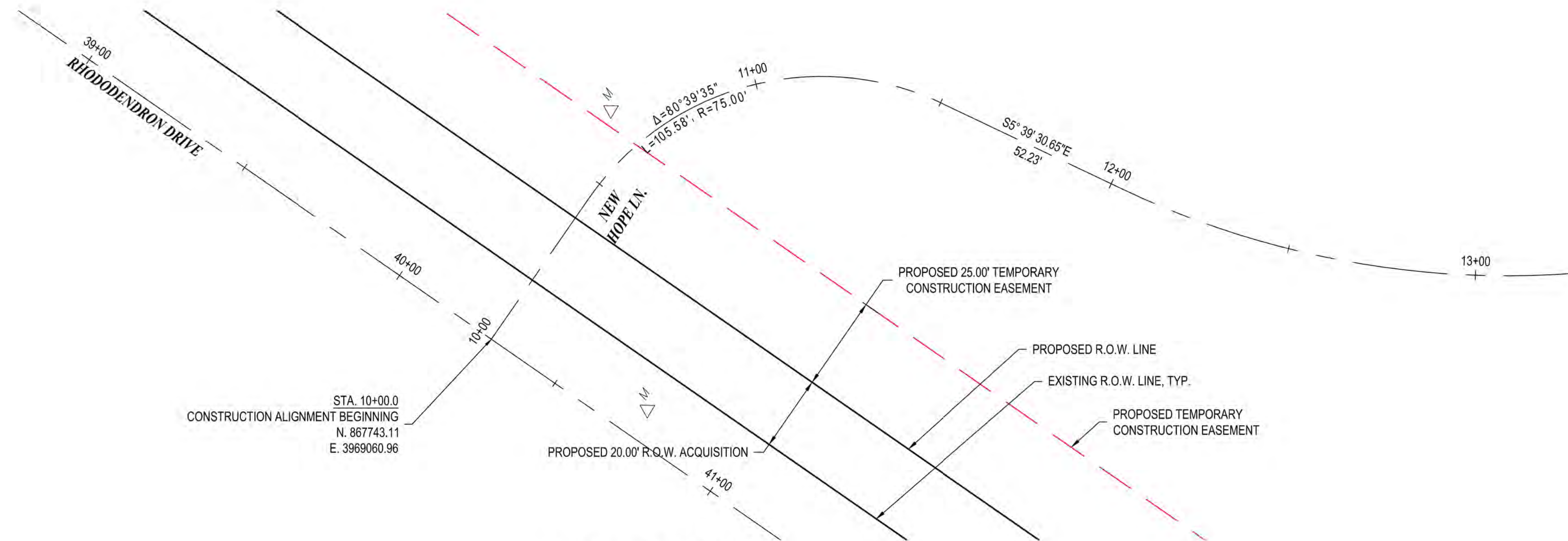
DWG NO.: C12A

SHEET NO.: 38

71



PLAN VIEW
1" = 20'



ALIGNMENT CONTROL
1" = 20'



GENERAL NOTES

- 1) PROPOSED FEATURES SHOWN IN GRAY ARE FOR CONTRACTOR'S CONVENIENCE IN IDENTIFYING IMPROVEMENT LIMITS.
- 2) REFER TO CONSTRUCTION NOTES, DWG NO. GI-01 FOR UTILITY ABANDONMENT PROCEDURES.



CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

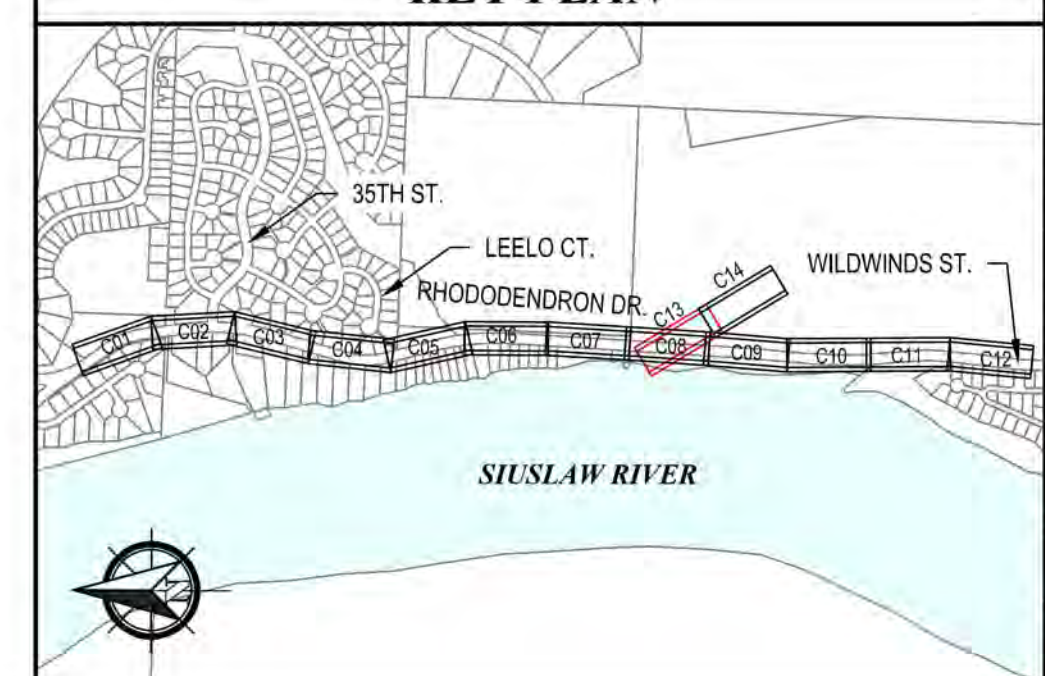
SITE PREPARATION AND SURVEY
CONTROL



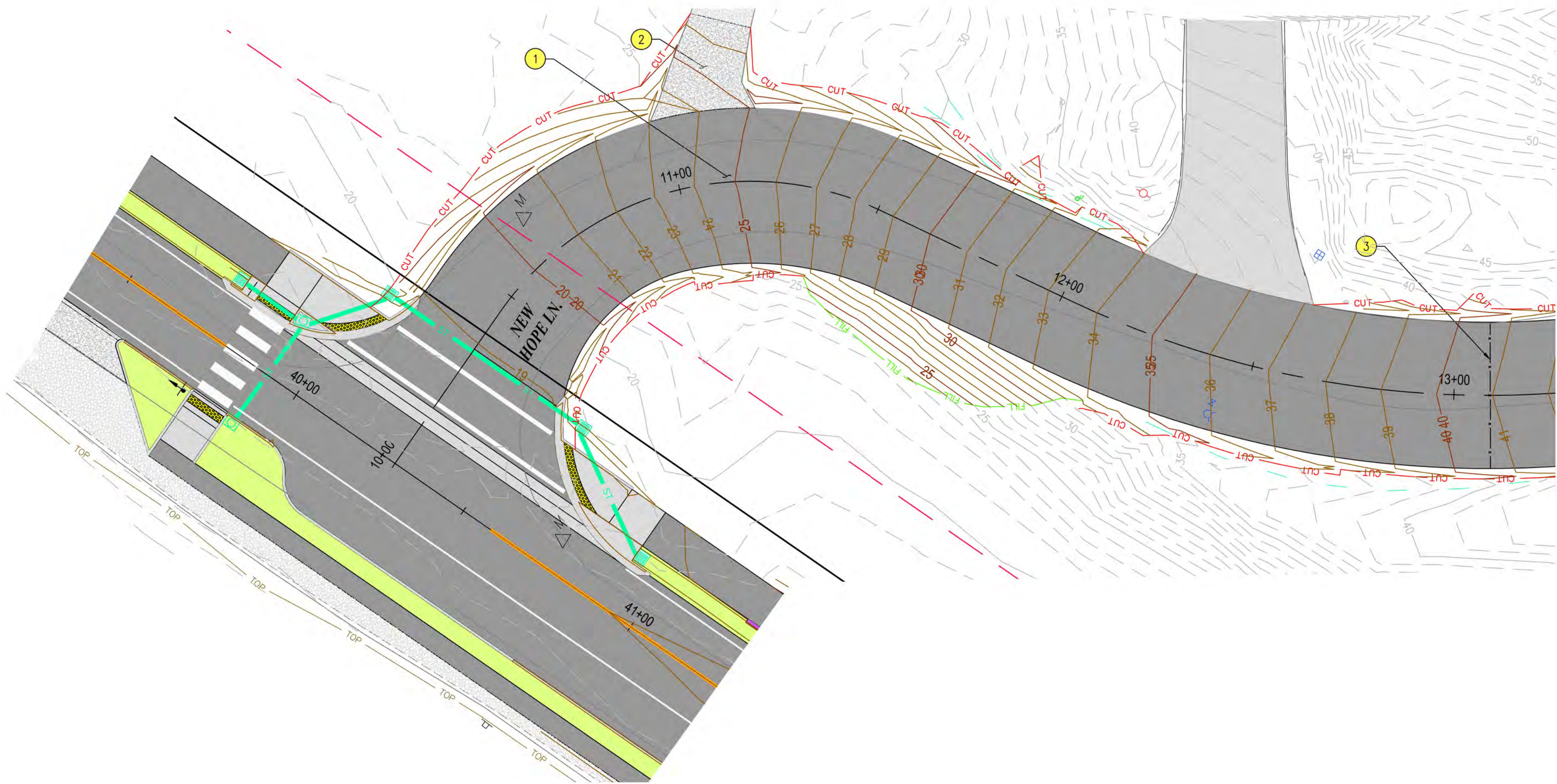
DEMOLITION NOTES

- | | | |
|----|----------|---------------------------------|
| 1 | REMOVE | ASPHALT |
| 2 | REMOVE | VEGETATION |
| 3 | REMOVE | SIGN TEMPORARILY AND REPLACE |
| 4 | REMOVE | CATCH BASIN |
| 5 | RELOCATE | POWER POLE (BY OTHERS) |
| 6 | RELOCATE | TELEPHONE PEDESTAL (BY OTHERS) |
| 7 | RELOCATE | MAILBOX |
| 8 | RELOCATE | FENCE |
| 9 | ADJUST | SEWER MANHOLE |
| 10 | REPLACE | VALVE BOXES PER COF #F-403 |
| 11 | ABANDON | SEWER MANHOLE |
| 12 | ABANDON | SEWER LINE AND APPURTENANCES |
| 13 | PROPOSED | ACP SAWCUT LINE |
| 14 | PROVIDE | SILT FENCE |
| 15 | PROVIDE | INLET PROTECTION |
| 16 | RELOCATE | UTILITY (SEE UTILITY PLANS) |
| 17 | RELOCATE | SIGN (SEE GENERAL CONST. PLANS) |

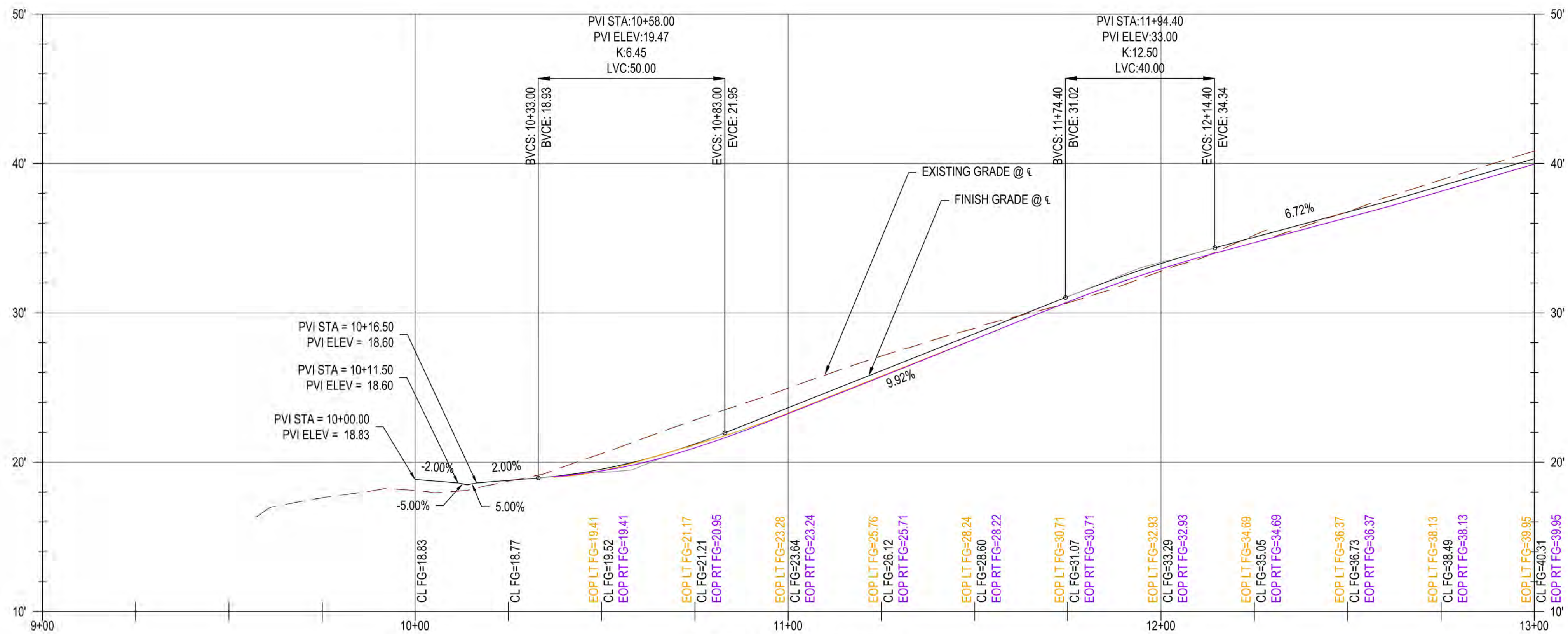
KEY PLAN



REVISIONS		DATE	DESCRIPTION	NO.	DATE	BY	REVIEW
1	NOV 13, 2023	NOV 13, 2023	FILE NAME: RHOD-P-PREP.DWG				
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PLAN VIEW
1" = 20'



NEW HOPE PROFILE
H: 1" = 20', V: 1" = 5'



GENERAL NOTES

- 1) EOP ELEVATIONS REFERENCED IN THE PROFILE VIEWS REPRESENT THE ASPHALT ELEVATION AT THE EDGE OF PAVEMENT. ELEVATIONS ARE PROJECTED THROUGH INTERSECTIONS.
- 2) PROPOSED ADA RAMP ARE TO BE CONTRACTOR DESIGNED PER THE SPECIFICATIONS. PROPOSED RAMP CONFIGURATIONS AS SHOWN ON THE PLANS ARE FOR ILLUSTRATION ONLY, AND THE CONTRACTOR DESIGNED LAYOUT MAY VARY.
- 3) ANY PROPOSED CURBS, RAMP, AND/OR SIDEWALK SHALL BE PROVIDED PER ODOT STANDARD DRAWINGS, RD700 SERIES.



CONSTRUCTION NOTES

- 1 FULL SECTION REPLACEMENT (FOR DETAIL, SEE DWG NO. S01)
- 2 REPLACE EXISTING GRAVEL DRIVEWAY APPROACH
- 3 ENTRANCE GATE (PROVIDED BY OTHERS)

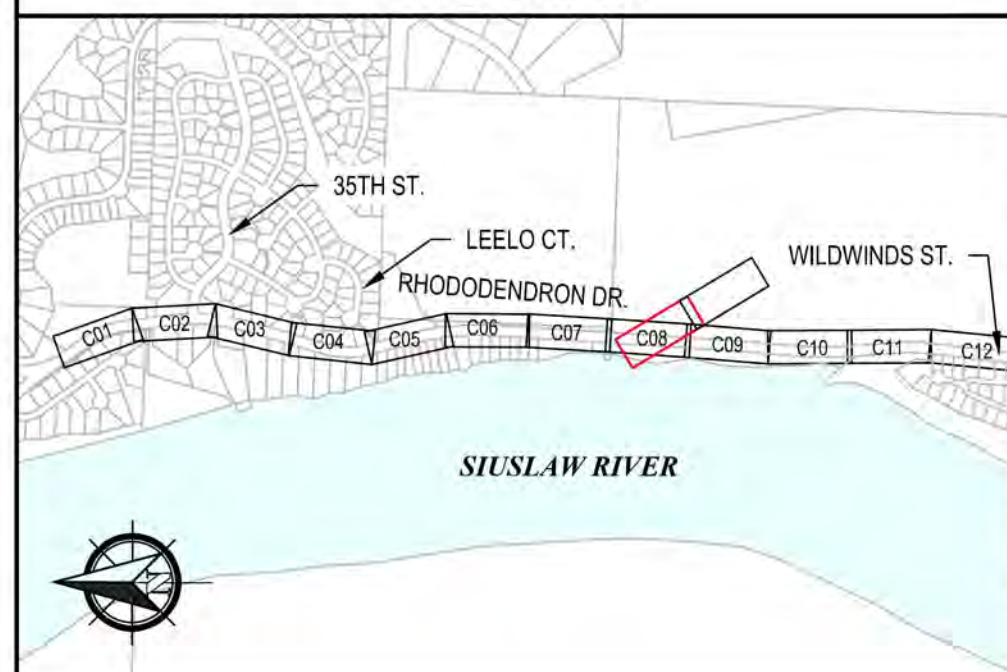
CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

GENERAL CONSTRUCTION

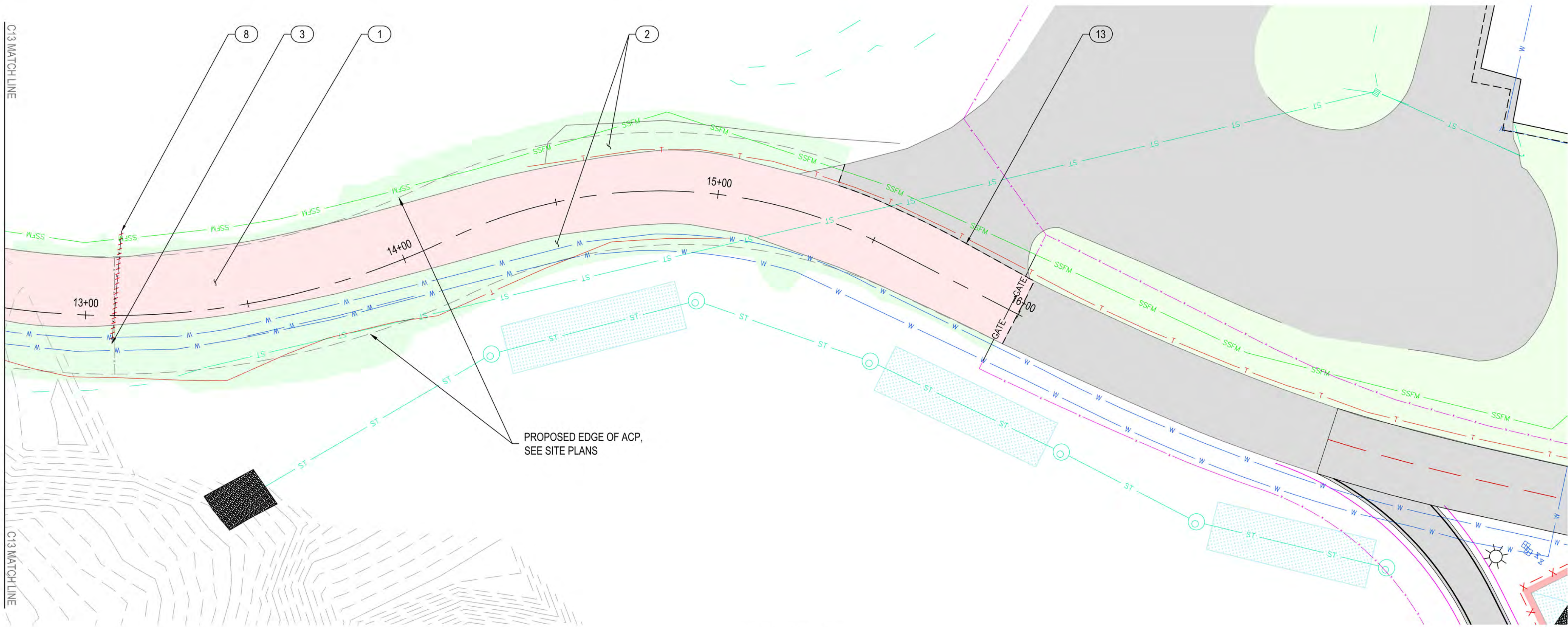


REVISIONS		DATE	DESCRIPTION	BY	REVIEW
NO.	DATE	DESCRIPTION	BY	REVIEW	

KEY PLAN

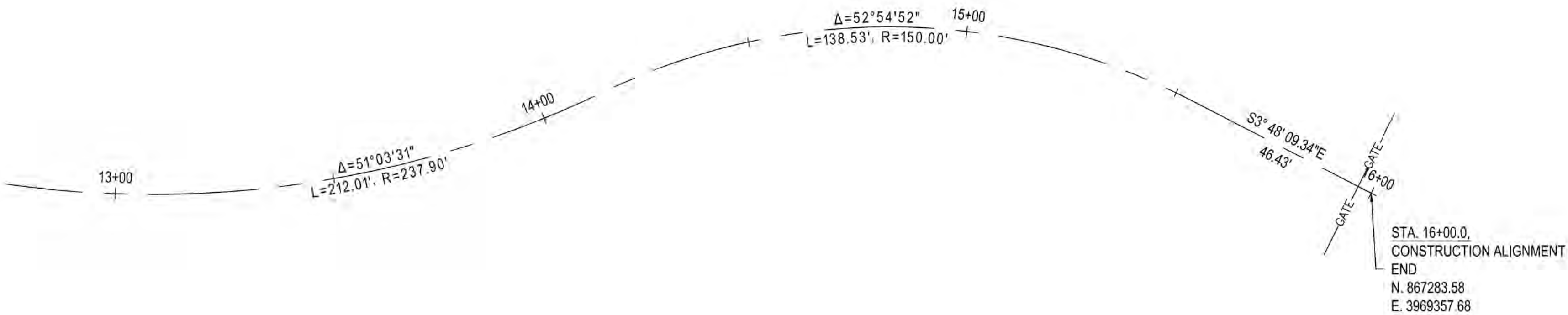


ENGINEER: KAL	DATE: Nov 10, 2023	CLIENT: FLO	LOG NO.: 1013-113
REVIEWED: JAB	DATE: Nov 13, 2023	FILENAME: RHOD-P-CIV_NHLDWG	
DWG NO.: C13A	SHEET NO.: 41	SCALE: SHOWN	



PLAN VIEW

1" = 20'



ALIGNMENT CONTROL

1" = 20'



GENERAL NOTES

- 1) PROPOSED FEATURES SHOWN IN GRAY ARE FOR CONTRACTOR'S CONVENIENCE IN IDENTIFYING IMPROVEMENT LIMITS.
- 2) REFER TO CONSTRUCTION NOTES, DWG NO. GI-01 FOR UTILITY ABANDONMENT PROCEDURES.



EXPIRES: 12/31/2024

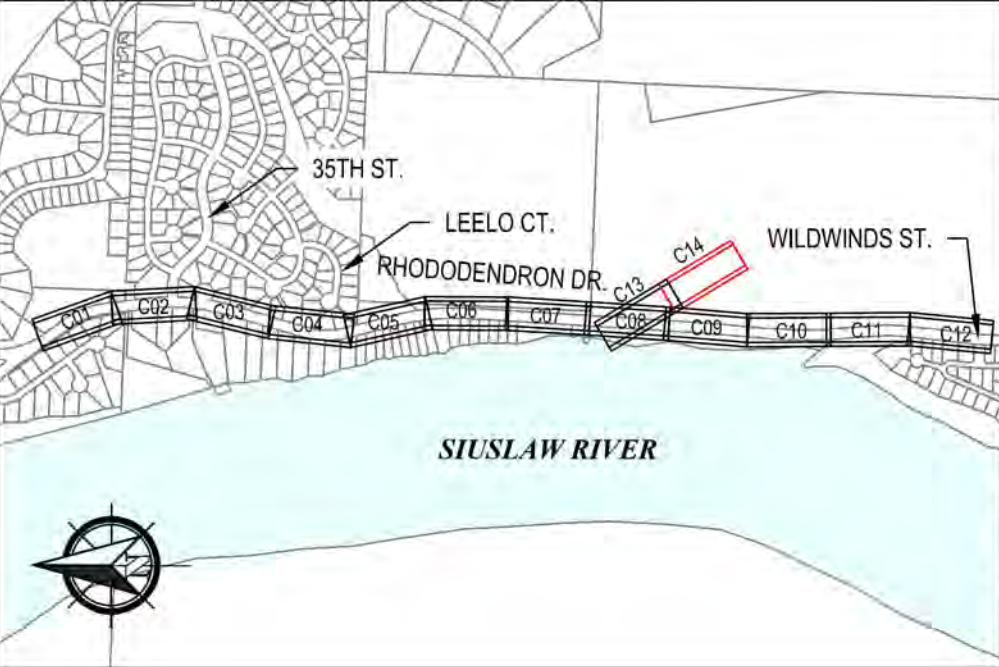
CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT
SITE PREPARATION AND SURVEY
CONTROL



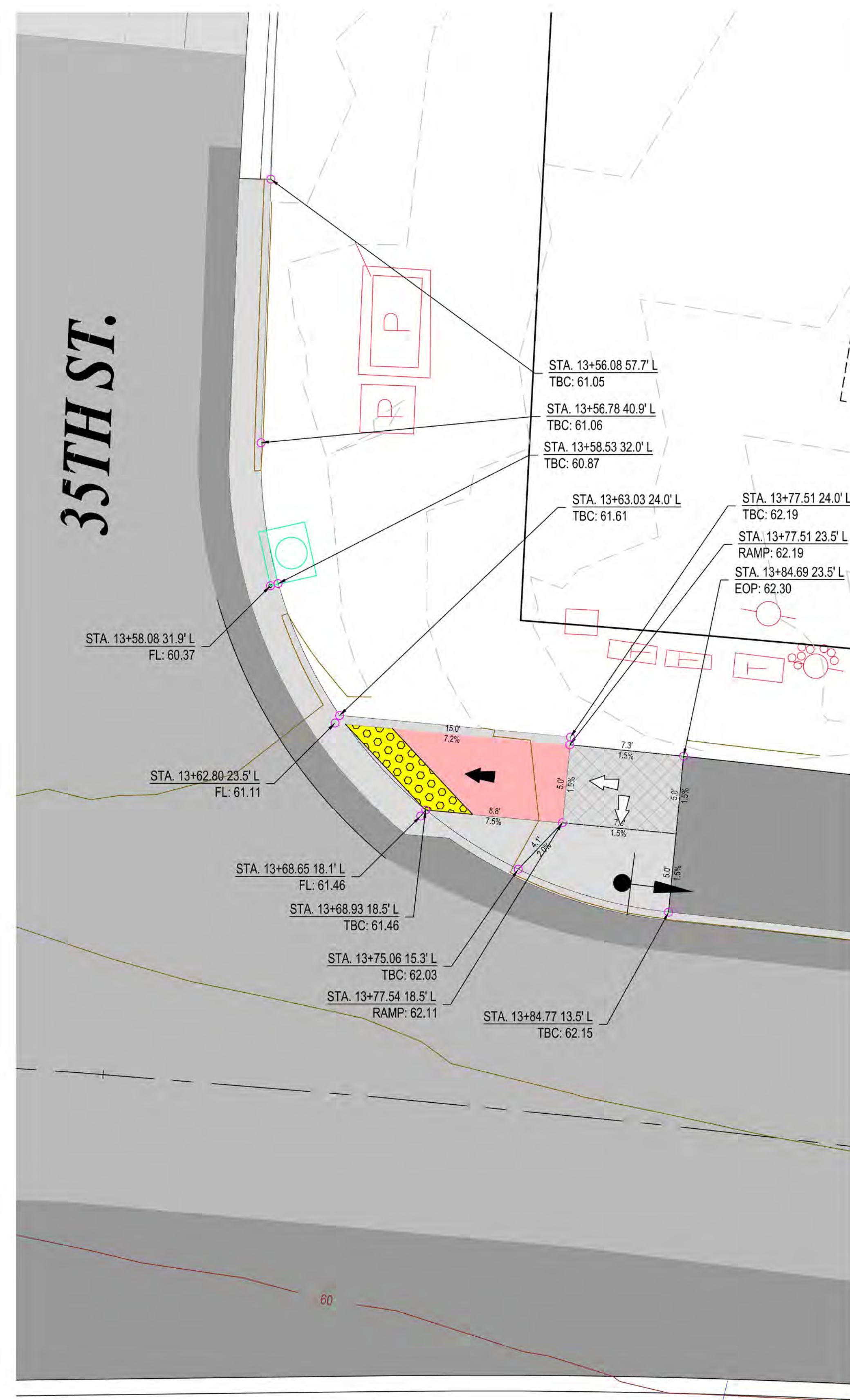
DEMOLITION NOTES

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|----|----------|---------------------------------|
| 1 | REMOVE | ASPHALT |
| 2 | REMOVE | VEGETATION |
| 3 | REMOVE | SIGN TEMPORARILY AND REPLACE |
| 4 | REMOVE | CATCH BASIN |
| 5 | RELOCATE | POWER POLE (BY OTHERS) |
| 6 | RELOCATE | TELEPHONE PEDESTAL (BY OTHERS) |
| 7 | RELOCATE | MAILBOX |
| 8 | RELOCATE | FENCE |
| 9 | ADJUST | SEWER MANHOLE |
| 10 | REPLACE | VALVE BOXES PER COF #F-403 |
| 11 | ABANDON | SEWER MANHOLE |
| 12 | ABANDON | SEWER LINE AND APPURTENANCES |
| 13 | PROPOSED | ACP SAWCUT LINE |
| 14 | PROVIDE | SILT FENCE |
| 15 | PROVIDE | INLET PROTECTION |
| 16 | RELOCATE | UTILITY (SEE UTILITY PLANS) |
| 17 | RELOCATE | SIGN (SEE GENERAL CONST. PLANS) |

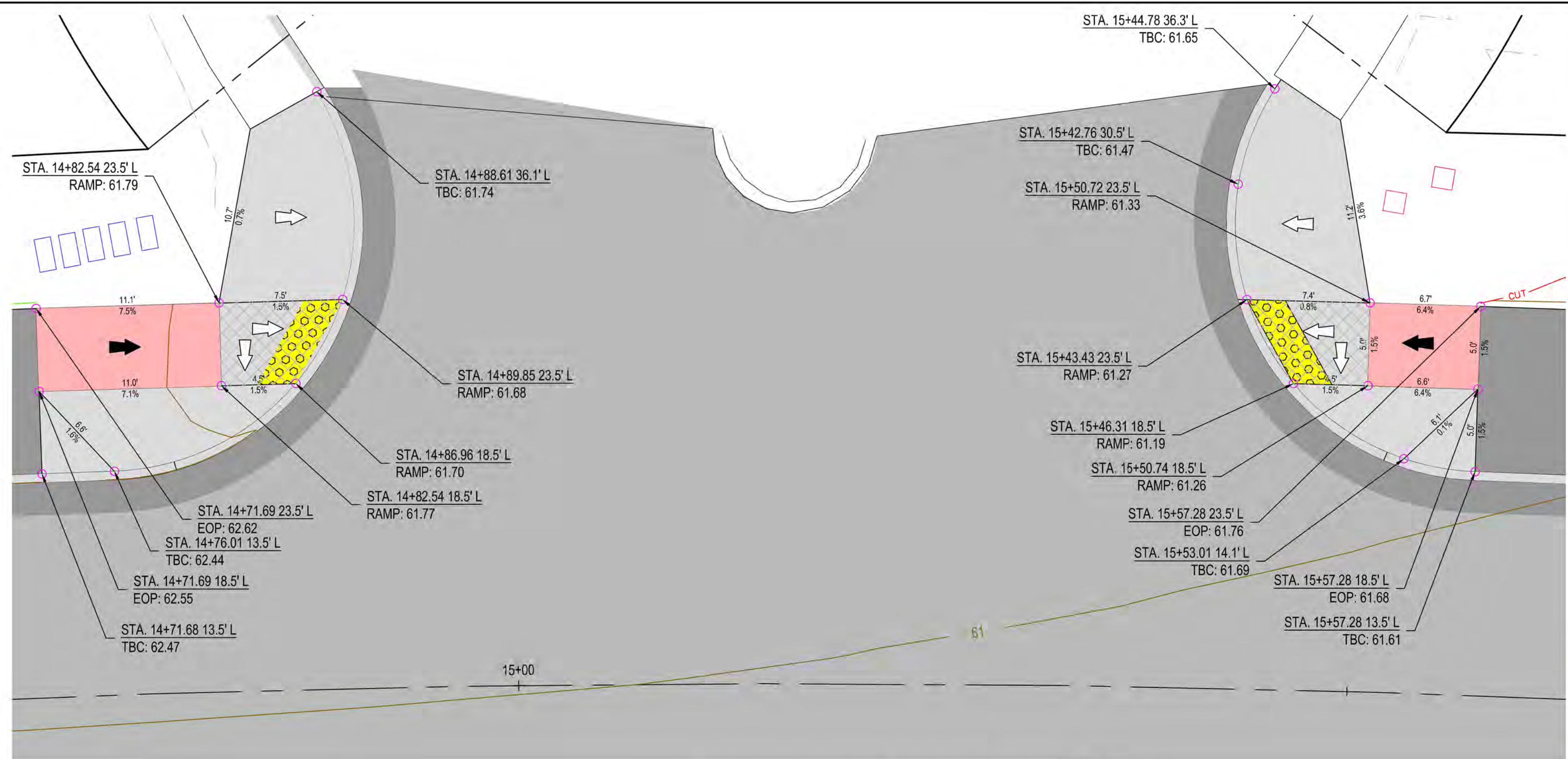
KEY PLAN



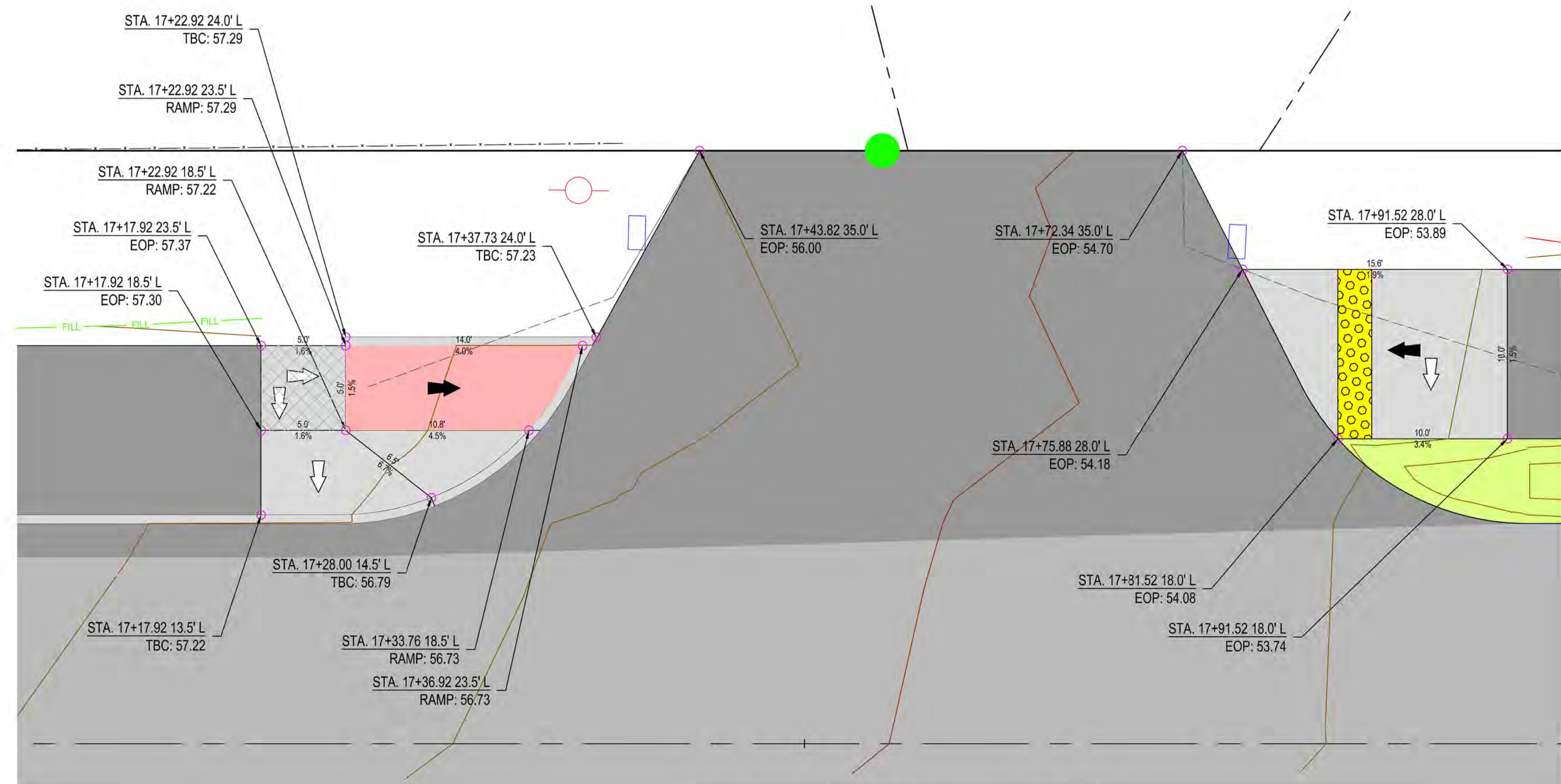
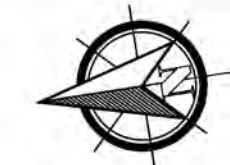
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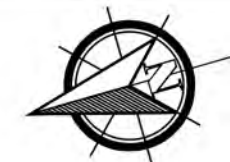
RAMP DETAIL @ 35TH INTX

$$1'' = 5$$


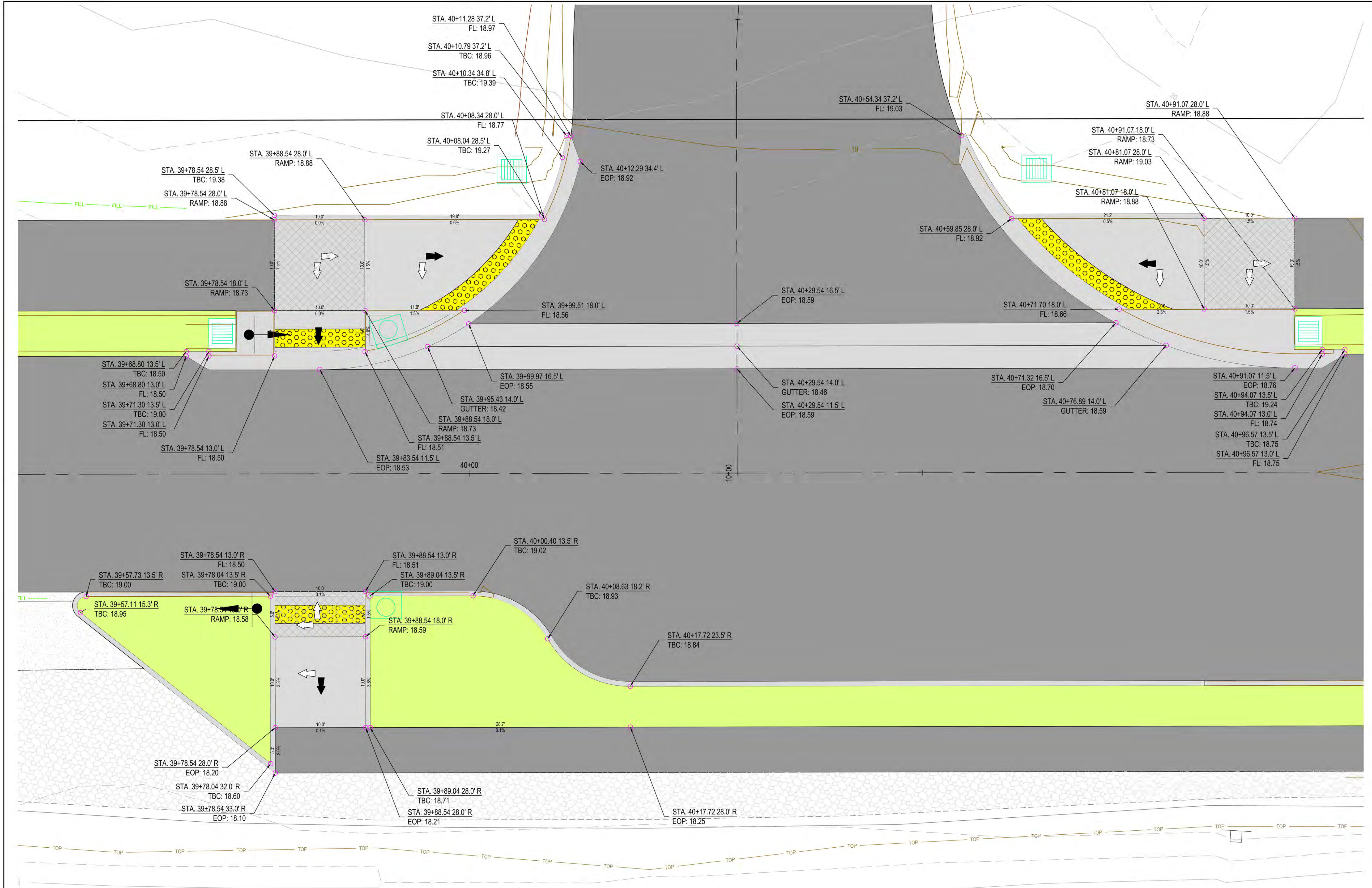
RAMP DETAIL @ STA. 15+00

$$1'' = 5$$


RAMP DETAIL @ STA. 17+50

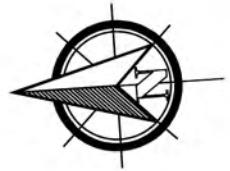
$$1'' = 5$$



SCALE: SHOWN		1"		2"	
DRAWING IS FULL SCALE WHEN BAR MEASURES 2"					
NG NO.: D01		SHEET NO.: 44		71	




RAMP DETAIL @ NEW HOPE LANE

1" = 5'







CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

CIVIL DETAILS

NO.	DATE	DESCRIPTION	BY	REVIEW

ENGINEER: KAL
REVIEWED: JAB

DATE: Nov 13, 2023
PLOT DATE: Nov 13, 2023

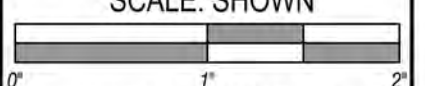
CLIENT: FLO
FILENAME: RHOD-P-QET_CIV.DWG

LOG NO.: 1013-113

REVISIONS

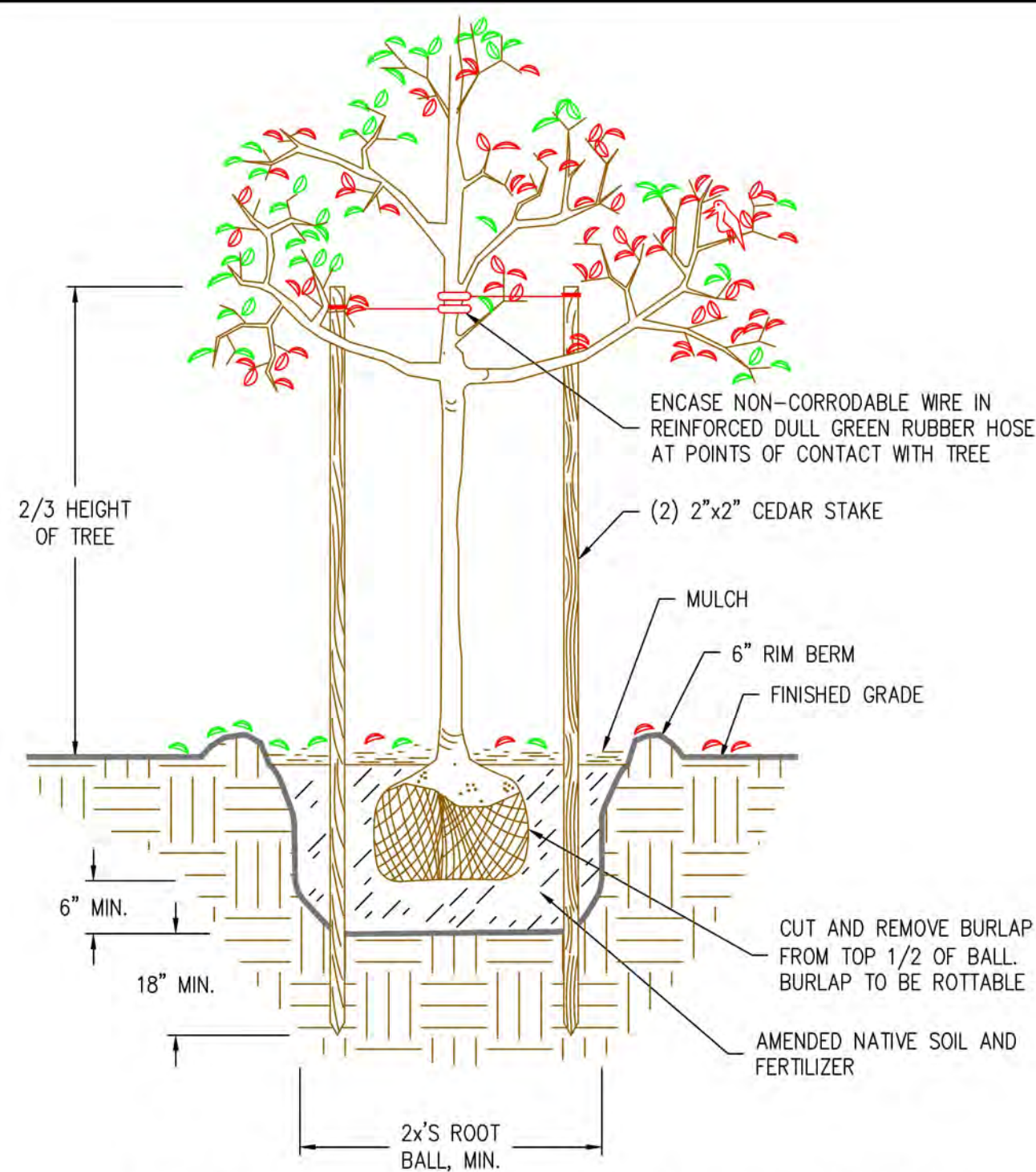
NO.	DATE	DESCRIPTION

SCALE: SHOWN

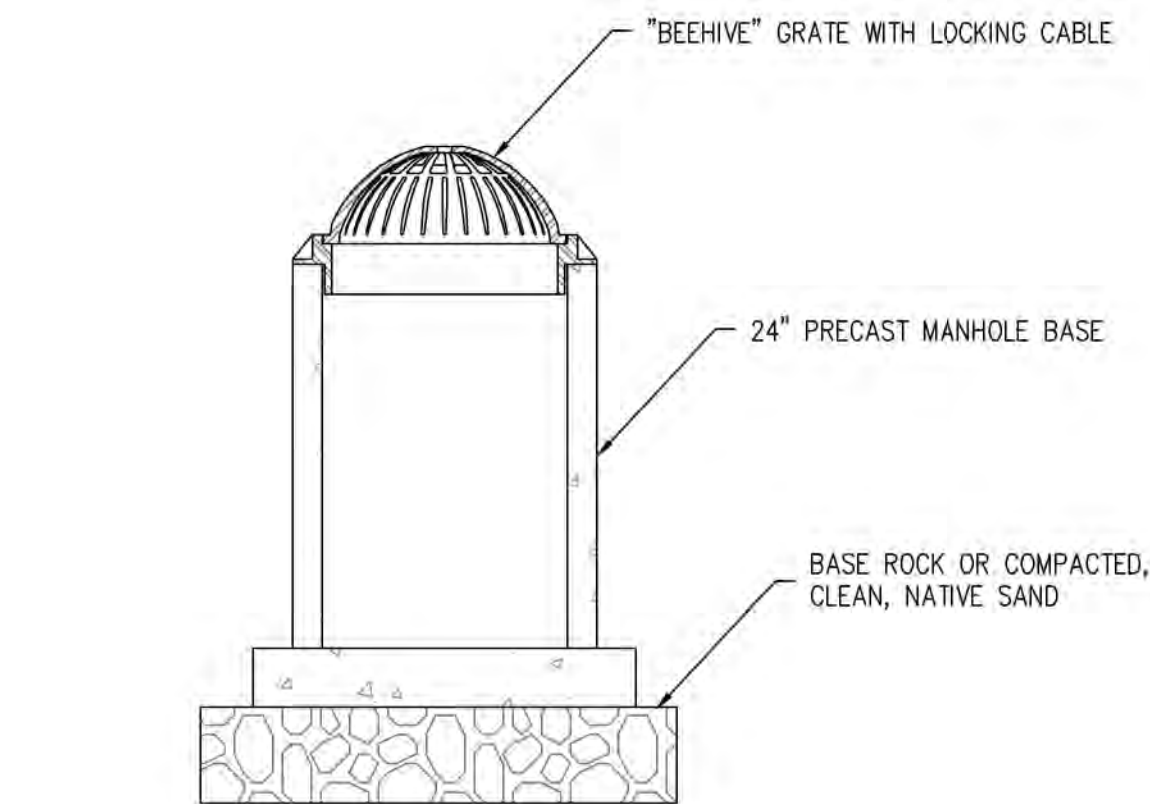


DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

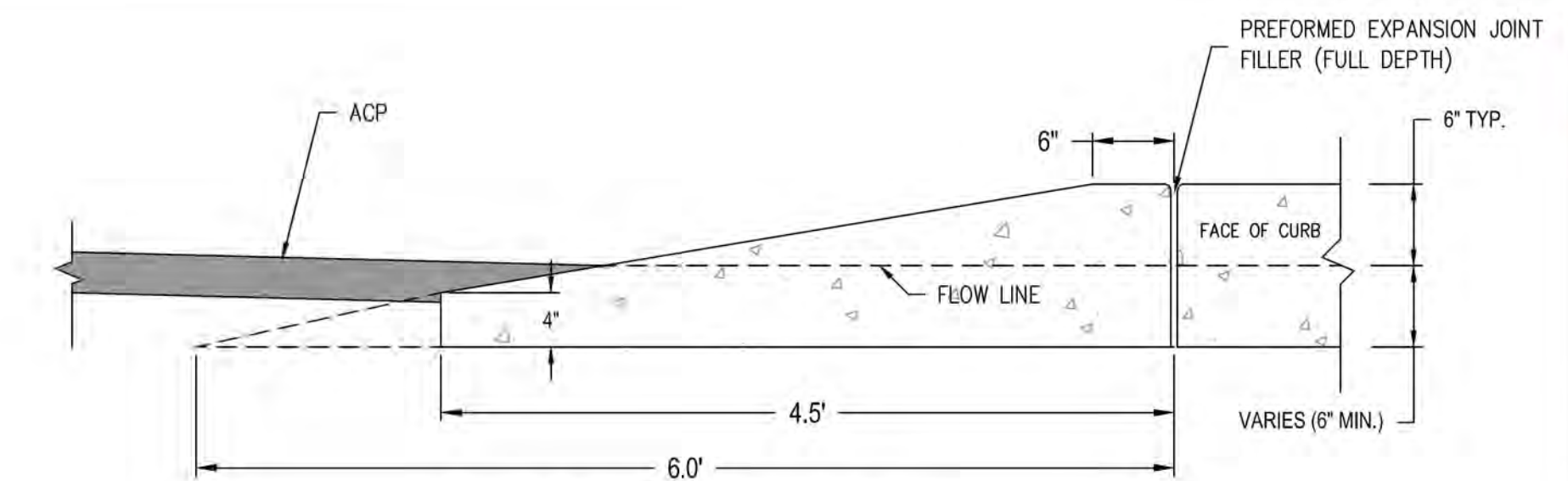
DWG NO.: D02
SHEET NO.: 45
71



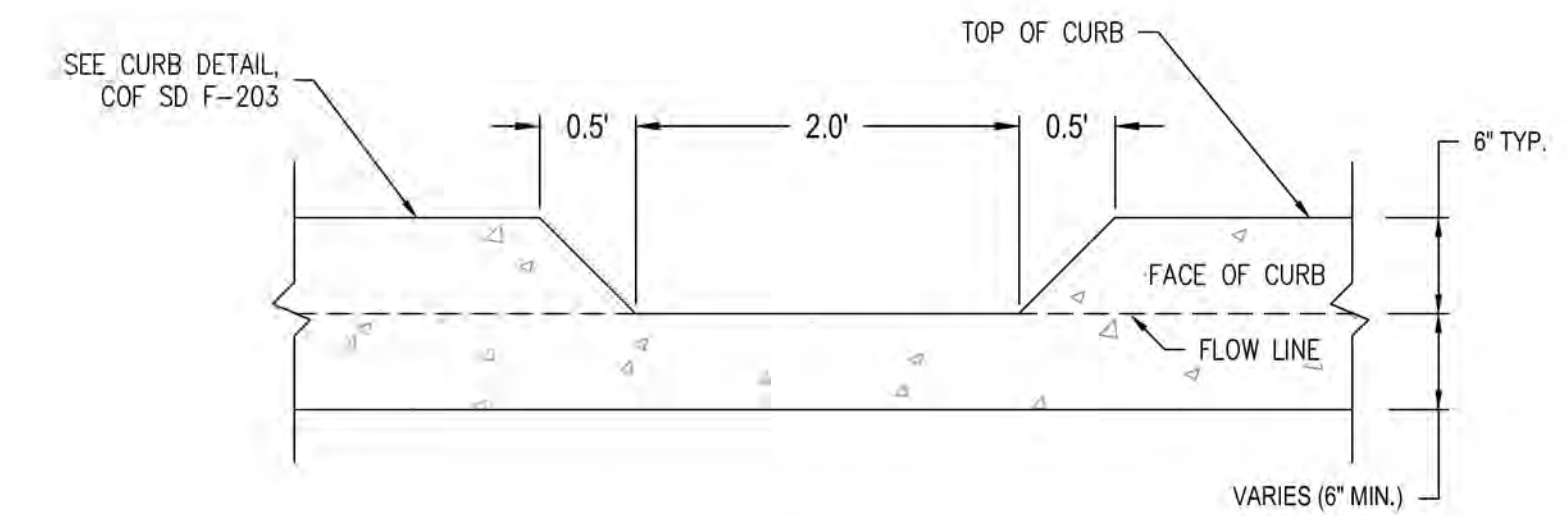
NOTE: VARIETIES TO BE SELECTED FROM CITY OF FLORENCE TREE AND PLANT LIST (AVAILABLE ON CITY'S WEBSITE OR AT CITY HALL). SELECTED SPECIES MUST BE SUBMITTED AND APPROVED BY CITY.



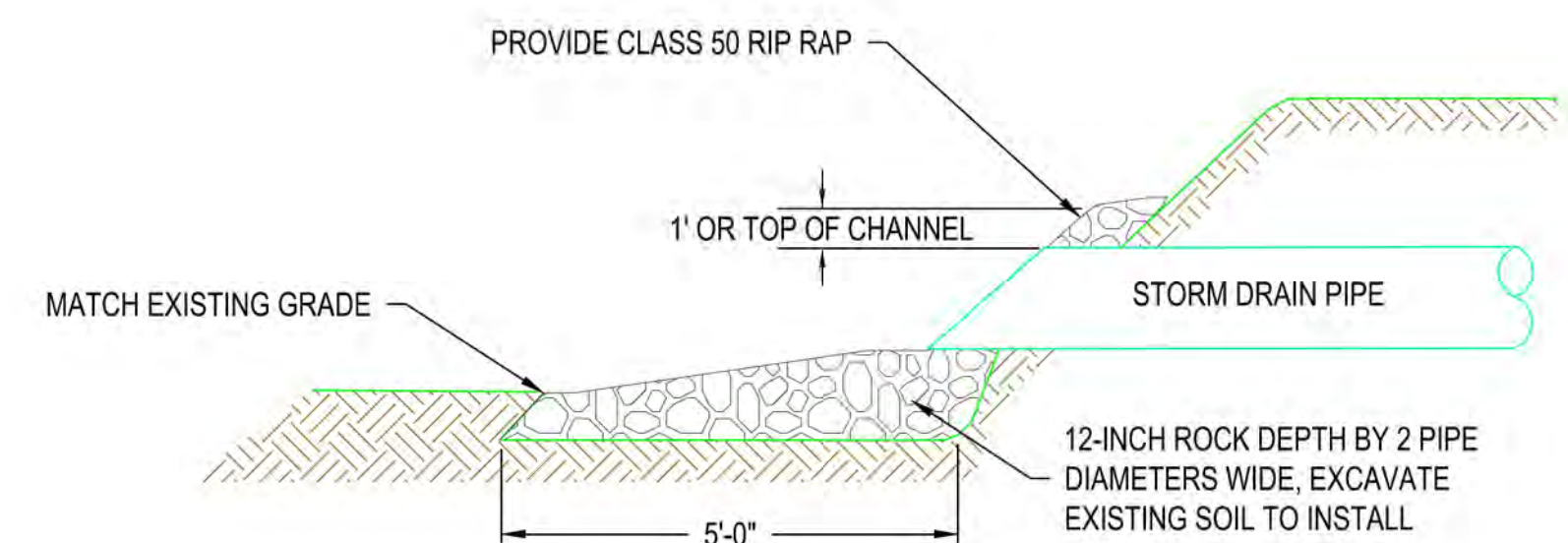
NOTE: MH INSTALLATION PER COF SD F-315



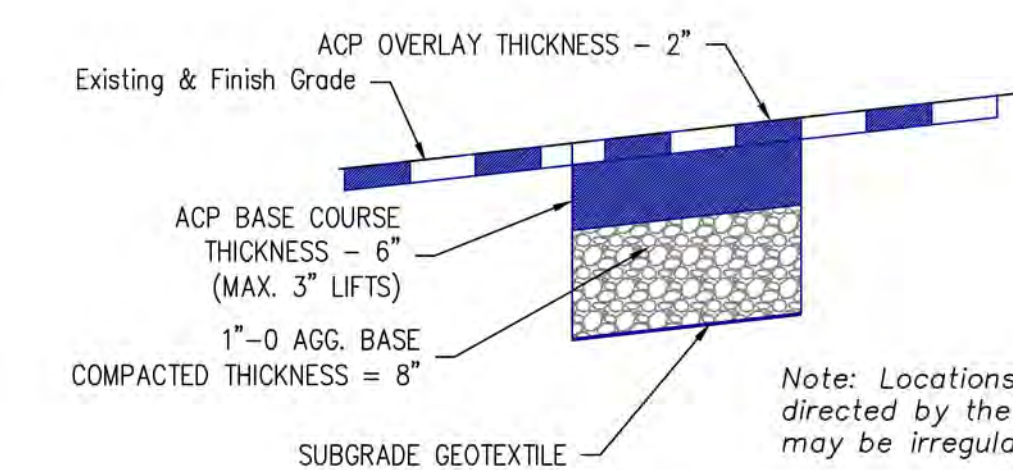
CURB ENDING DETAIL



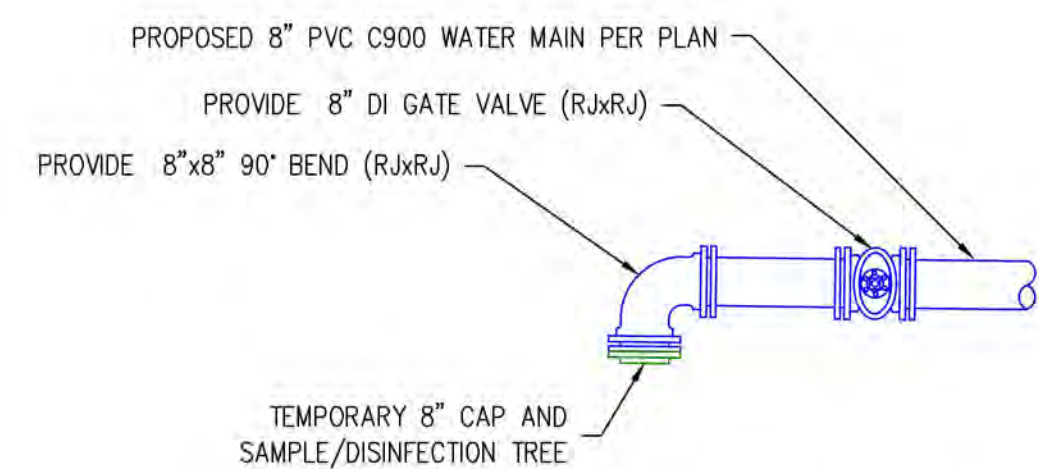
CURB CUT OPENING DETAIL



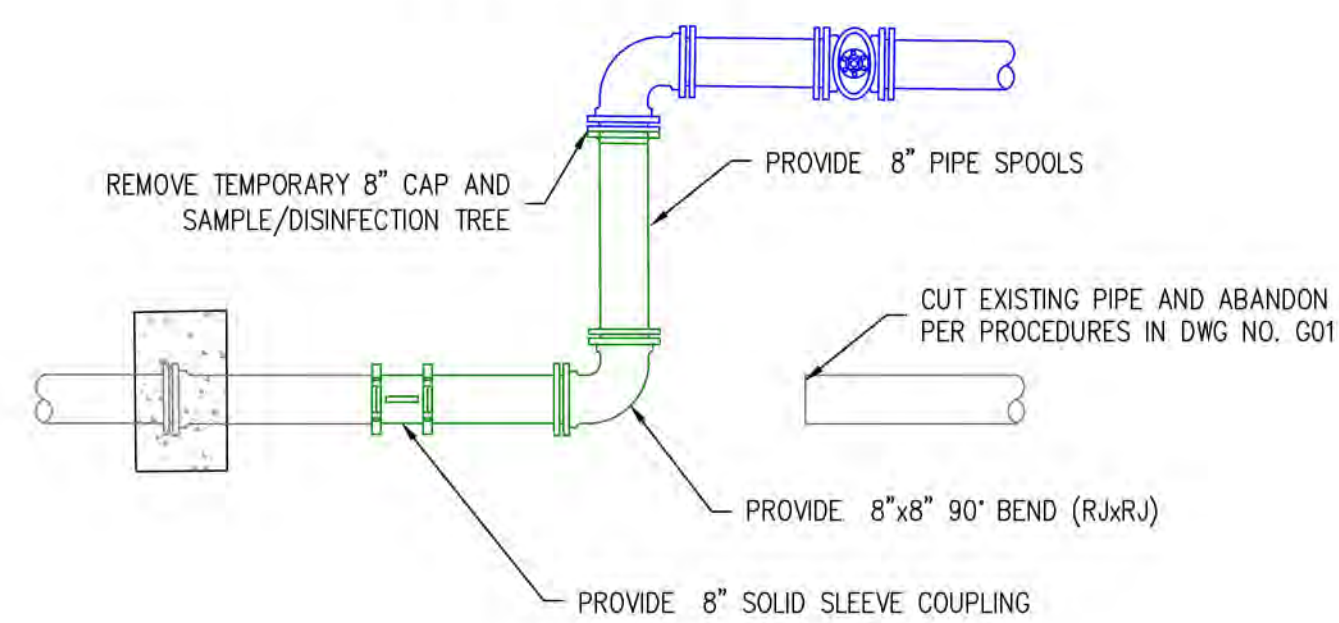
STORM DRAIN OUTFALL



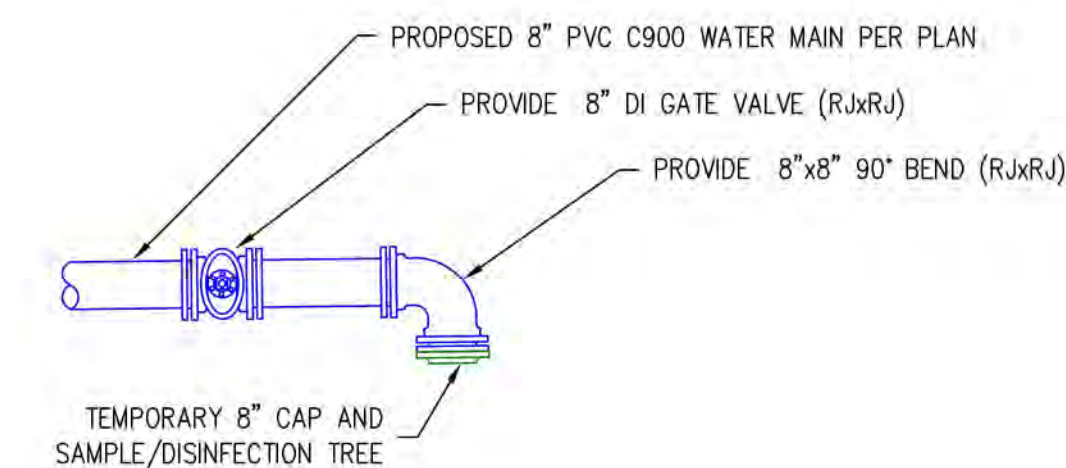
AC REPAIR DETAIL



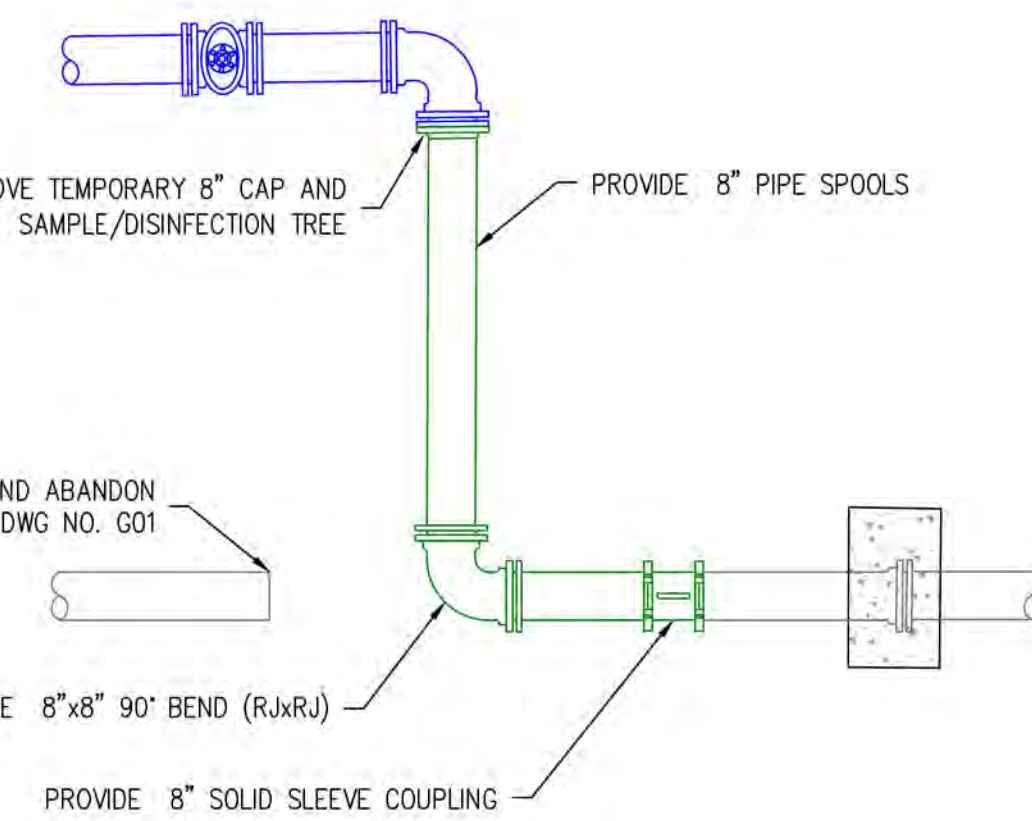
TESTING CONFIGURATION



FINAL CONFIGURATION



TESTING CONFIGURATION



FINAL CONFIGURATION



EXPIRES: 12/31/2024

CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

CIVIL DETAILS

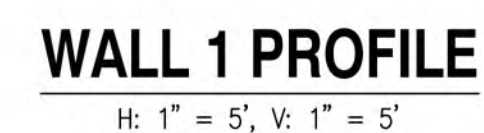
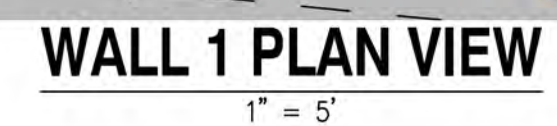
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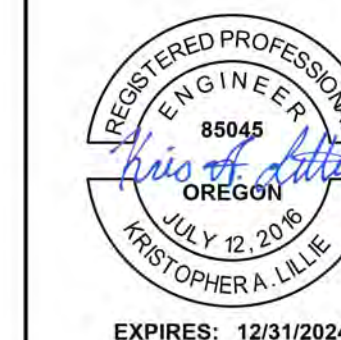
SCALE: SHOWN

1°	2°
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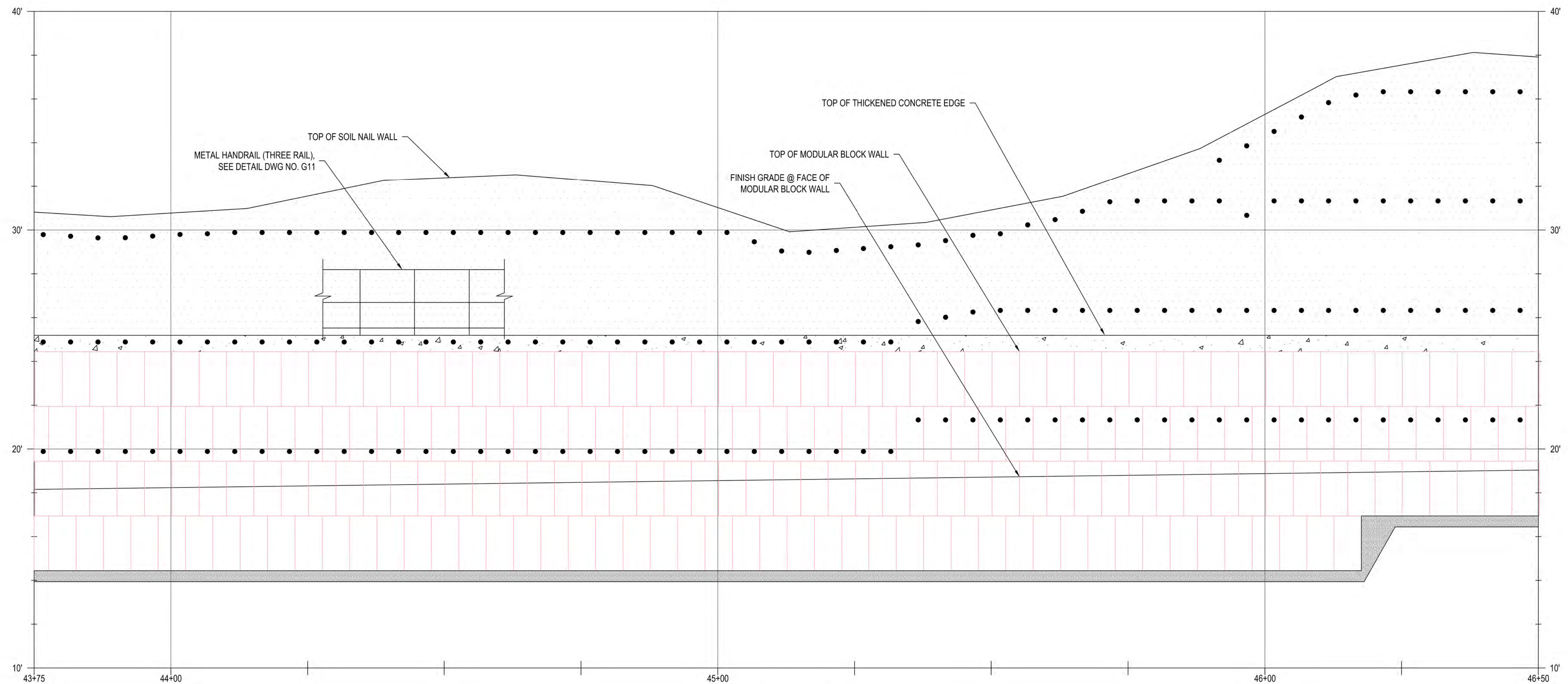
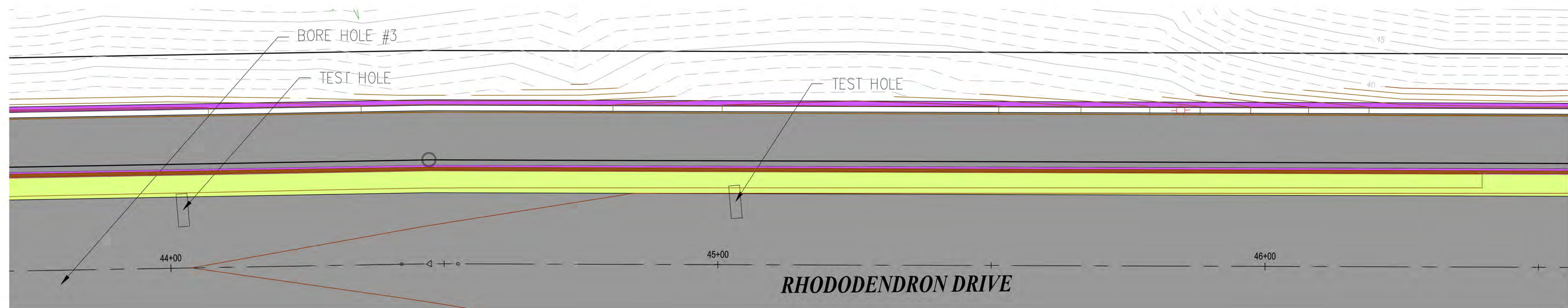
DRAWING IS FULL SCALE WHEN
BAR MEASURES 2"

WG NO.: SHEET NO.:

[illegible]

[illegible]





WALL 4 PROFILE

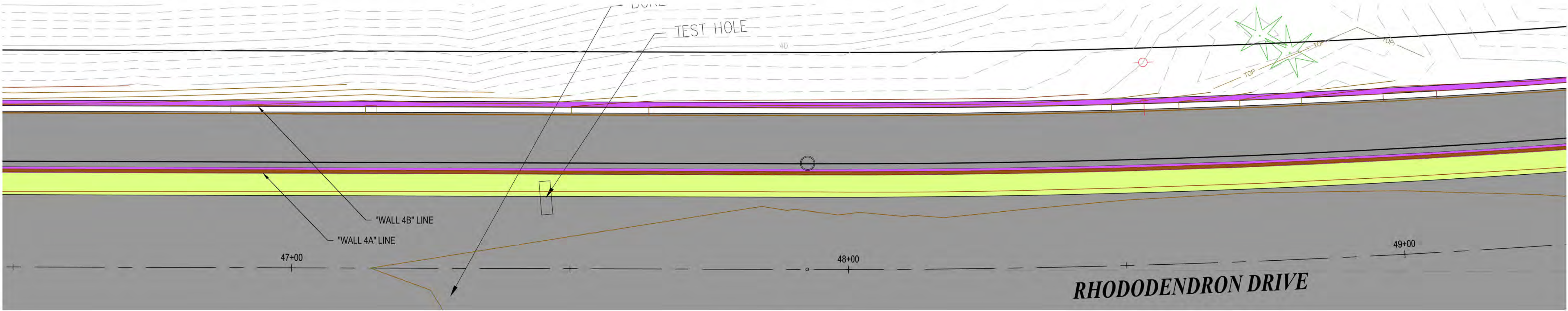


CITY OF FLORENCE

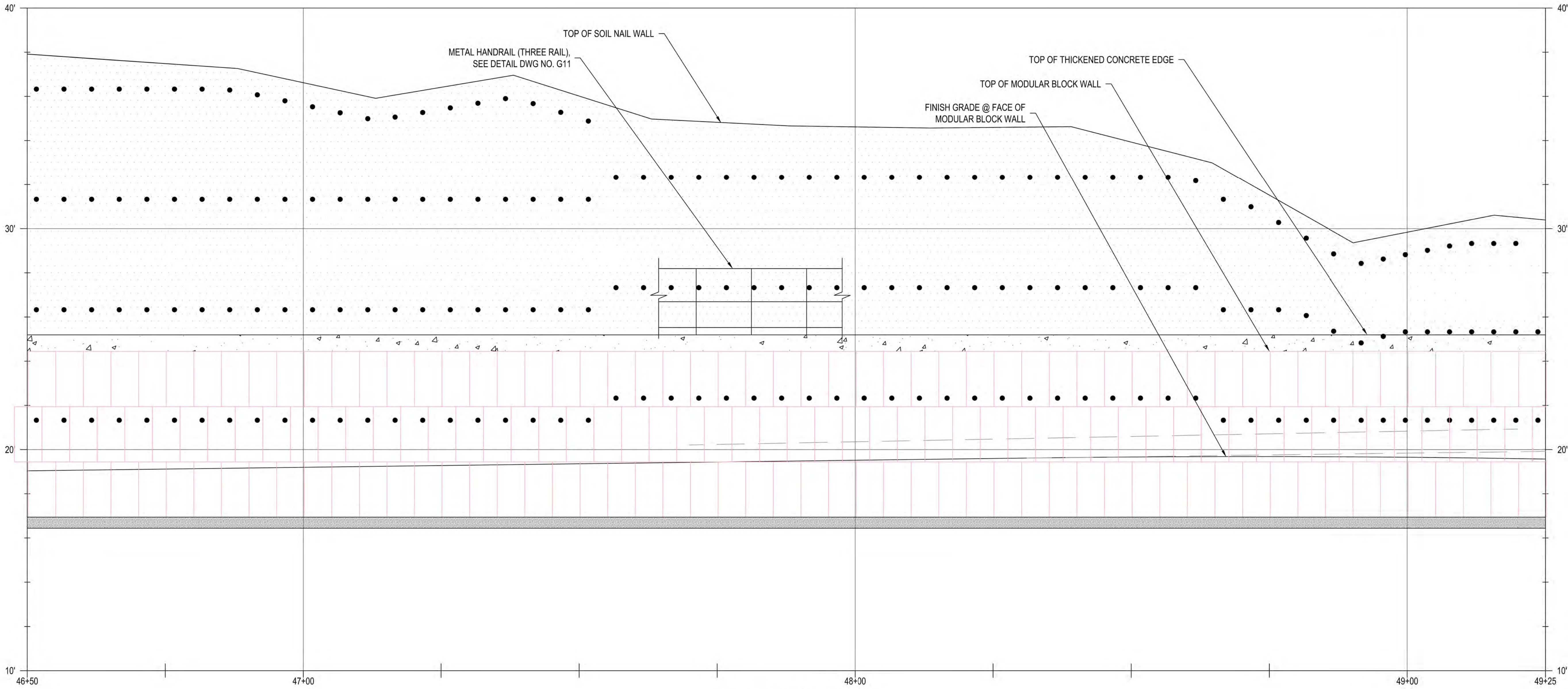
RHODODENDRON DRIVE REALIGNMENT

WALL 4 PLAN AND ELEVATION

[illegible]



WALL 4 PLAN VIEW
1" = 10'



WALL 4 PROFILE
H: 1" = 10', V: 1" = 2.5'





EXPIRES: 12/31/2024

CITY OF FLORENCE

RHODODENDRON DRIVE REALIGNMENT



WALL 4 PLAN AND ELEVATION

ENGINEER: KAL	DATE: Nov 13, 2023	CLIENT: FLO	LOG NO.: 1013-113	NO.	DATE	DESCRIPTION	BY	REVIEW
REVIEWED: JAB	PLOT DATE: Nov 13, 2023	FILE NAME: RHOD-P-WALL.DWG						
REVISIONS								

SCALE: SHOWN

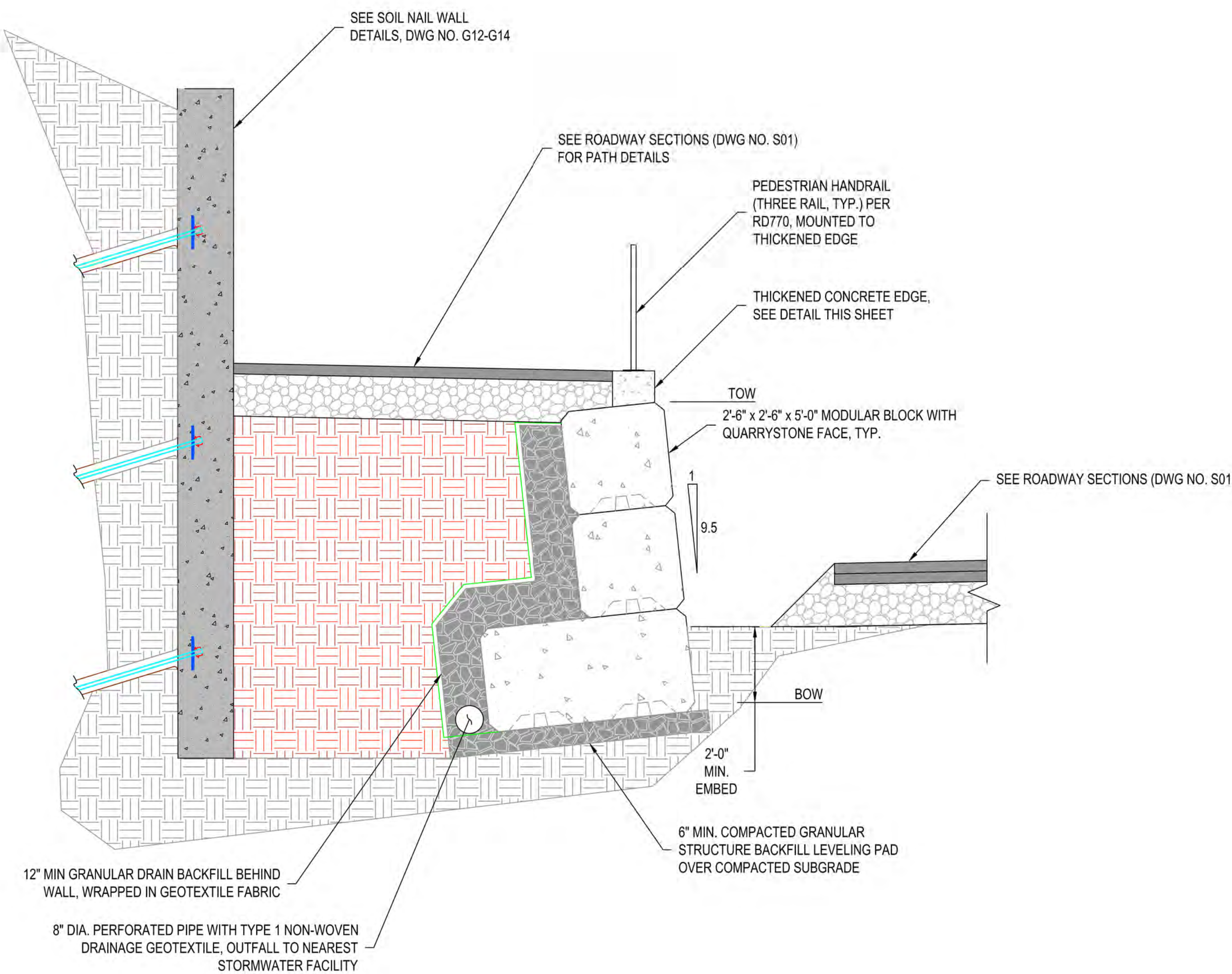


DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

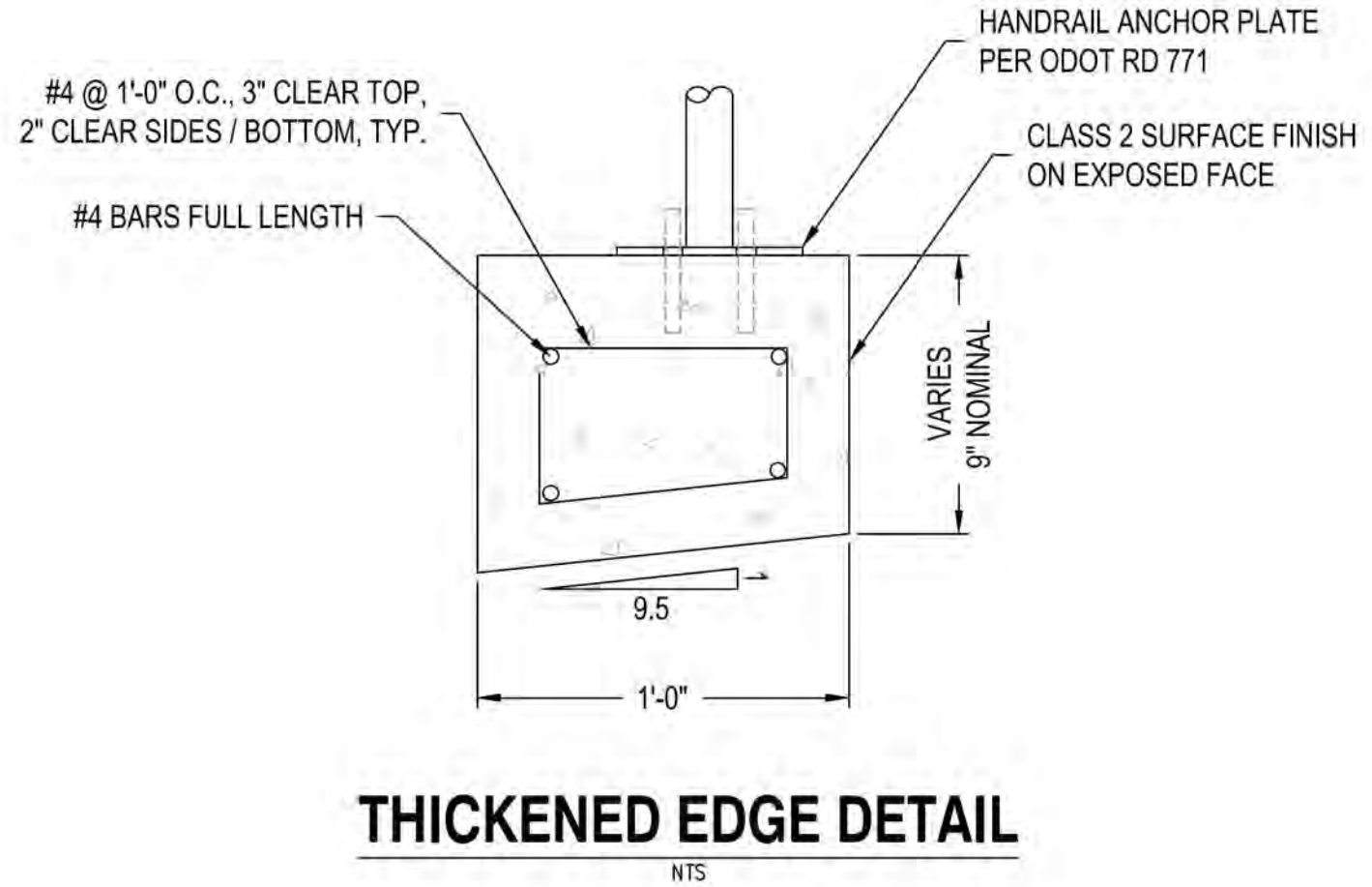
DWG NO.: G09

SHEET NO.: 55

71



SECTION A-A @ WALL 4
1/2" = 1'-0"







REGISTERED PROFESSIONAL ENGINEER
85045
Kristopher A. Lille
OREGON
JULY 12, 2016
EXPIRES: 12/31/2024

CITY OF FLORENCE

RHODODENDRON DRIVE REALIGNMENT



WALL 4 DETAILS

NO.	DATE	DESCRIPTION	BY	REVIEW

ENGINEER: KAL
REVIEWED: JAB

SAFE DATE: Nov 13, 2023
PLOT DATE: Nov 13, 2023

CLIENT: FLO
FILE NAME: RHOD-P-WALL.DWG

JOB NO.: 1013-113

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: SHOWN



DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

DWG NO.: G11
SHEET NO.: 57 / 71

1. GENERAL:

- A. ALL WORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE LATEST EDITION OF THE CURRENT DRAWINGS AND STANDARDS AS SPECIFIED.
- B. DRAWINGS SHALL NOT BE SCALED. ANY DISCREPANCIES BETWEEN THE DRAWINGS SHALL BE REFERRED TO THE ENGINEER OF RECORD FOR CLARIFICATION PRIOR TO UNDERTAKING THE WORK.
- C. VERIFY ALL LEVELS, DIMENSIONS, AND EXISTING CONDITIONS AND NOTIFY THE ENGINEER OF RECORD ANY DISCREPANCIES OR FIELD CHANGES PRIOR TO INSTALLATION OR FABRICATION. IN CASE OF DISCREPANCIES BETWEEN THE EXISTING CONDITION AND THE CONTRACT DRAWINGS, OBTAIN DIRECTION FROM THE ENGINEER OF RECORD BEFORE PROCEEDING. DIMENSIONS NOTED AS PLUS OR MINUS (+/-) INDICATE UNVERIFIED DIMENSIONS AND ARE APPROXIMATE. PRIOR TO CONSTRUCTION, VERIFY THAT OVERHEAD OBSTRUCTIONS, INCLUDING ELECTRICAL LINES, DO NOT INTERFERE WITH THE USE OF DRILLING EQUIPMENT.
- D. SUBMIT WORKING DRAWINGS PRIOR TO FABRICATION OR CONSTRUCTION FOR ALL STRUCTURAL ITEMS INCLUDING THE FOLLOWING: STRUCTURAL STEEL, MISCELLANEOUS METAL, AND SOIL NAILS TENDONS. SUBMIT MIX DESIGNS FOR ALL SHOTCRETE, CAST-IN-PLACE CONCRETE, AND GROUT.
- E. CONSTRUCTION STAGING AREA SHOWN ON DRAWING C11 BEHIND TOP OF WALL DESIGNED FOR 600 PSF VERTICAL SURCHARGE THAT EXTENDS FROM 5 FEET BEHIND THE WALL FACE TO 60 FEET BEHIND THE WALL FACE. ANY SURCHARGE LOADING GREATER THAN THIS SHALL BE DESIGNED BY THE CONTRACTOR. WHERE TRENCHLESS CROSSING IS LOCATED, THERE SHOULD BE NO SURCHARGE GREATER THAN 250 PSF ON TOP OF THE WALL.

2.DESIGN SPECIFICATIONS:

DESIGN SPECIFICATIONS ARE AS FOLLOWS UNLESS NOTED OTHERWISE.

A.FHWA-NHI-14-007, "GEOTECHNICAL ENGINEERING CIRCULAR NO.7 - SOIL NAIL WALLS".

3.DIMENSIONS:

A. ALL PLAN DIMENSIONS ARE MEASURED IN A TRUE HORIZONTAL PLANE.
B. ALL VERTICAL DIMENSIONS ARE MEASURED IN A TRUE VERTICAL PLANE.
C. ALL DIMENSIONS, LOCATIONS, AND ELEVATIONS OF EXISTING STRUCTURES AND UTILITIES SHOWN ON
THE DRAWINGS ARE FOR REFERENCE ONLY AND SHALL BE VERIFIED IN THE FIELD.
D. ALL ELEVATIONS SHALL BE NAVD 88.

4.MATERIAL PROPERTIES:

A. CONCRETE AND GROUT
MINIMUM REQUIRED SHOTCRETE COMPRESSIVE STRENGTH. $f_c = 4,000$ PSI (28 DAY)

MINIMUM REQUIRED GROUT COMPRESSIVE STRENGTH, $f'_c = 1,500$ PSI (3 DAY)
 $f'_c = 4,000$ PSI (28 DAY)

B. REINFORCING STEEL:

GRADE 60	fy = 60 ksi
WELDED WIRE FABRIC	fy = 65 ksi

5. STRUCTURAL CONCRETE:

A. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" UNLESS NOTED OTHERWISE ON THE DRAWINGS.

B. CONCRETE CLEAR COVER REQUIREMENTS ARE SPECIFIED BELOW UNLESS NOTED OTHERWISE ON THE DRAWINGS.

LOCATION	SPECIFIED COVER (INCHES)
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3.0"
CAST - IN - PLACE CONCRETE EXPOSED TO EARTH OR WEATHER	
PRIMARY REINFORCEMENT	2.0"
STIRRUPS, TIES, OR SPIRALS	1.5"

5. REINFORCING STEEL:

A. ALL REINFORCING BAR BENDS AND STANDARD HOOKS SHALL CONFORM TO THE LATEST ACI STANDARDS.

B. ALL LAP SPLICES OF REINFORCING BARS NOT DIMENSIONED ON THE DRAWINGS SHALL BE BASED ON THE LAP SPLICE TABLE BELOW.

C. MECHANICAL COUPLERS SHALL BE USED FOR REINFORCING BARS LARGER THAN #11. AT LEAST 125 PERCENT OF SPECIFIED YIELD STRENGTH OF THE BAR SHALL BE DEVELOPED.

D. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064 $F_y=65\text{ksi}$, FURNISH IN FLAT SHEETS NOT ROLLS. LAP SPLICE 4 SQUARES MINIMUM.

TENSION LAP SPLICE LENGTHS FOR GRADE 60 BARS

BAR SIZE	UNCOATED BARS	
	f _c = 4000 psi	
	TOP BARS (IN)	OTHERS (IN)
#3	24	18
#4	32	25
#5	40	31
#6	48	37
#7	70	54
#8	80	62
#9	90	70
#10	102	78
#11	113	87

NOTE:
TOP BARS ARE HORIZONTAL BARS PLACED SUCH THAT MORE THAN 12" OF CONCRETE IS CAST BELOW THE REINFORCEMENT. THE TABLE ABOVE CAN BE USED WHEN CLEAR SPACING BETWEEN BARS IS GREATER THAN 2*db AND COVER IS NOT LESS THAN db, WHERE db IS THE BAR DIAMETER.

6. SOIL NAILS

A. ALL STEEL SOIL NAILS SHALL CONFORM TO ASTM A615 GRADE 75 GALVANIZED IN ACCORDANCE WITH ASTM A767 CLASS I.

B. STEEL HARDWARE: PROVIDE COMPATIBLE NUTS, SPHERICAL OR BEVELED WASHERS AND BAR COUPLERS. BAR COUPLERS SHALL DEVELOP AT LEAST 125% OF THE SPECIFIED YIELD STRENGTH OF THE BAR.

C. STEEL HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH A123.

D. NAIL CENTRALIZERS OF SCHEDULE 40 PVC (POLYVINYL CHLORIDE) MATERIAL REQUIRED TO POSITION NAILS WITHIN 1" OF THE CENTER OF THE DRILL HOLE.

E. WALL MONITORING REQUIRED.

F. SOIL NAIL TESTING REQUIRED. SEE SOIL NAILING SPECIFICATION.

7. STRUCTURAL STEEL:

A.ALL STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING
ASTM DESIGNATIONS UNLESS NOTED OTHERWISE ON THE
DRAWINGS:

W SHAPES	A992
PLATES, BARS, CHANNELS, AND ANGLES	A36
HOLLOW STRUCTURAL SECTIONS	A500 GRADE B
STEEL PIPE	A53 GRADE B
HP SHAPES	A572 GRADE 50

B. ALL FASTENERS SHALL BE HIGH STRENGTH BOLTS, ASTM A325 SLIP CRITICAL UNLESS NOTED OTHERWISE. BOLT SHALL BE INSTALLED WITH ONLY THE HEAD END EXPOSED (WHEN FEASIBLE).

C. WELDING ELECTRODES SHALL BE 70XX SERIES CONFORMING TO ANSI AWS D1.1 TABLE 3.1 AND ELECTRODE SPECIFICATION AWS AS, WELDING SHALL BE CONDUCTED BY A WABO CERTIFIED WELDER.

8. SOIL NAIL WALLS:

A. NAIL INSTALLATION: DRILL HOLES FOR SOIL NAILS AT THE LOCATIONS AND TO THE LENGTHS SHOWN ON THE CONTRACT DRAWINGS. DRILL SOIL NAIL HOLES WITHOUT LOSS OF GROUND AND WITHOUT ENDANGERING PREVIOUSLY INSTALLED NAILS. THIS MAY INVOLVE CASING THE HOLES OR OTHER METHODS OF PROTECTION FROM CAVING. IMMEDIATELY SUSPEND DRILLING OPERATIONS IF GROUND MOVEMENT IS OBSERVED, IF THE SOIL NAIL WALL IS ADVERSELY AFFECTED, OR IF ADJACENT STRUCTURES ARE DAMAGED AS A RESULT OF THE DRILLING.

B. NAIL GROUTING: GROUT UNCASSED DRILL HOLES AFTER INSTALLATION OF THE NAIL. DO NOT LEAVE OPEN ANY PORTION OF THE DRILL HOLE FOR MORE THAN 1 HOUR PRIOR TO GROUTING. INJECT THE GROUT AT THE LOWEST POINT OF EACH DRILL HOLE THROUGH A TREMIE PIPE, HOLLOW-STEM AUGER, OR DRILL RODS WITH THE DRILL HOLE FILLED IN ONE CONTINUOUS OPERATION. KEEP THE CONDUIT DELIVERING THE GROUT BELOW THE SURFACE OF THE GROUT AS THE CONDUIT IS WITHDRAWN. WITHDRAW THE GROUTING CONDUIT AS THE DRILL HOLE IS FILLED IN A MANNER WHICH PREVENTS THE CREATION OF VOIDS.

C. NAIL TOLERANCES: DO NOT EXTEND THE SOIL NAIL TENDONS BEYOND THE RIGHT-OF-WAY OR EASEMENT LIMITS SHOWN IN THE CONTRACT DOCUMENTS, UNLESS APPROVED OTHERWISE. CENTER NAIL TENDONS WITHIN 1 INCH OF THE CENTER OF THE DRILL HOLE. AT THE EXCAVATED FACE, POSITION THE INDIVIDUAL NAIL TENDONS PLUS OR MINUS 6 INCHES FROM THE DESIGN LOCATIONS SHOWN IN THE CONTRACT DRAWINGS. LOCATION TOLERANCES ARE APPLICABLE TO ONLY ONE NAIL AND NOT CUMULATIVE OVER LARGE WALL AREAS. AT THE POINT OF ENTRY, CONTROL THE VERTICAL AND HORIZONTAL NAIL TENDON ANGLES WITHIN PLUS OR MINUS 3 DEGREES OF THAT SHOWN ON THE CONTRACT DRAWINGS.

D. NAIL SETTING: SECURE EACH SOIL NAIL AT THE FACING WITH A STEEL PLATE AS SHOWN IN THE CONTRACT DRAWINGS. TIGHTEN THE NUT TO ACHIEVE FULL BEARING BEHIND THE PLATE. TIGHTEN THE NUT WITH AT LEAST 100 FOOT-POUNDS OF TORQUE

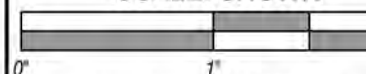


CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

WALL 4 DETAILS

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SCALE: SHOWN

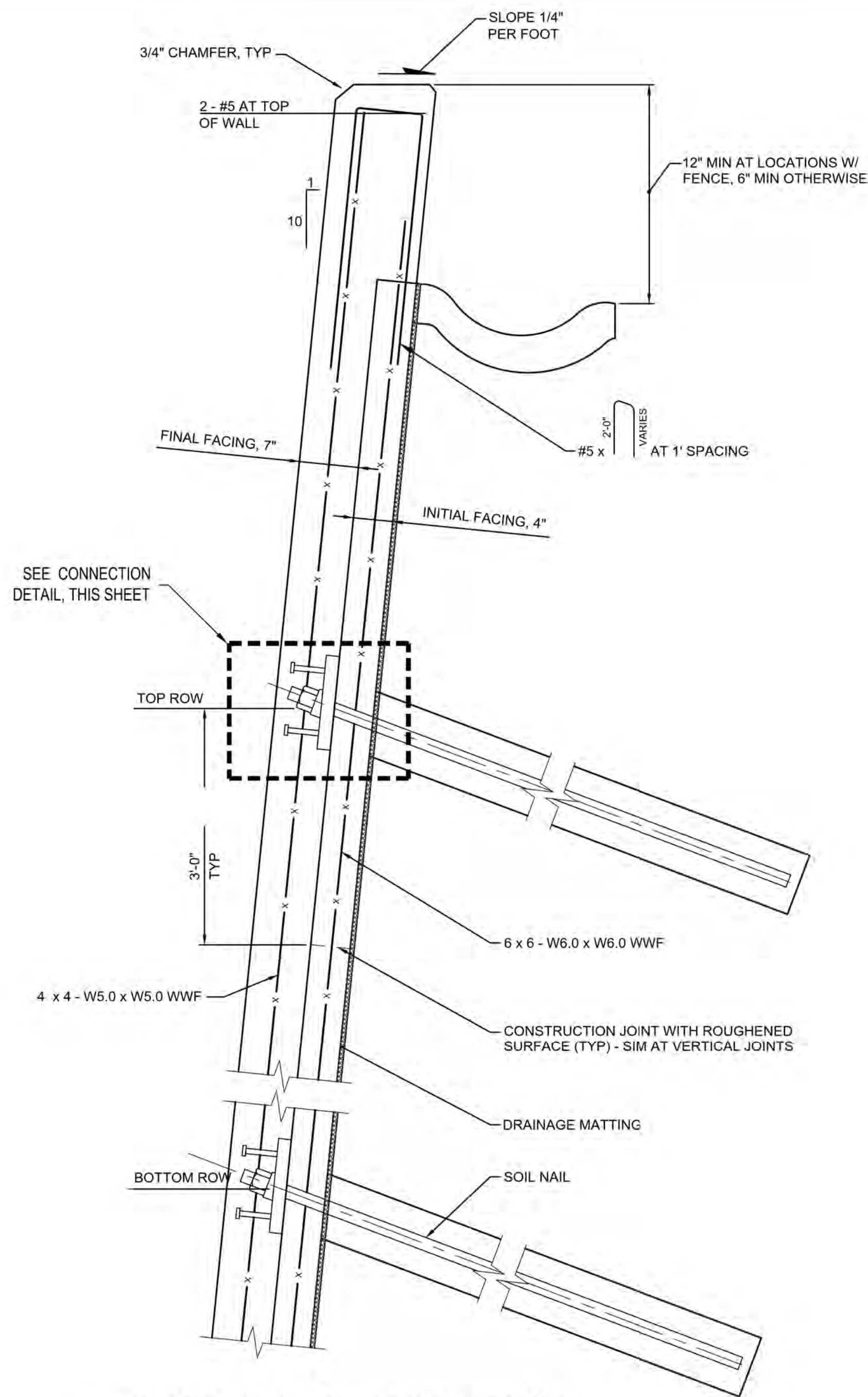


DRAWING IS FULL SCALE WHEN

BAR MEASURES 2"	
DWG NO.: G12	SHEET NO.: 58

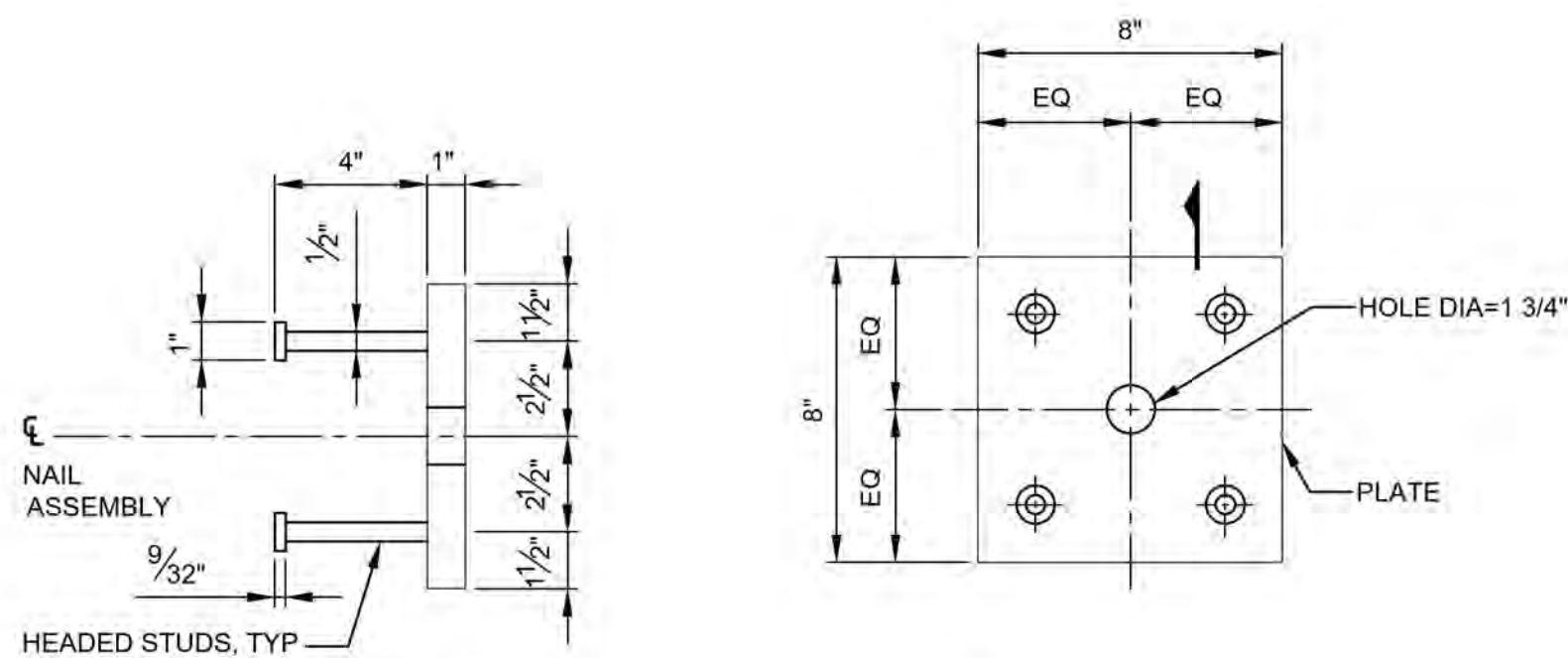


- NOTES:
1. SEE SOIL NAIL SCHEDULE FOR SOIL NAIL LENGTH, SPACING, AND DECLINATION.
 2. EXPANSION JOINTS TO BE LOCATED AT A MAXIMUM SPACING OF 24'-0" OC AND CENTERED BETWEEN NAILS, EXCEPT WHERE A JOINT IS WITHIN 1'-6" OF A STEP AT THE TOP OF WALL. IN THAT CASE LOCATE THE JOINT AT THE STEP.



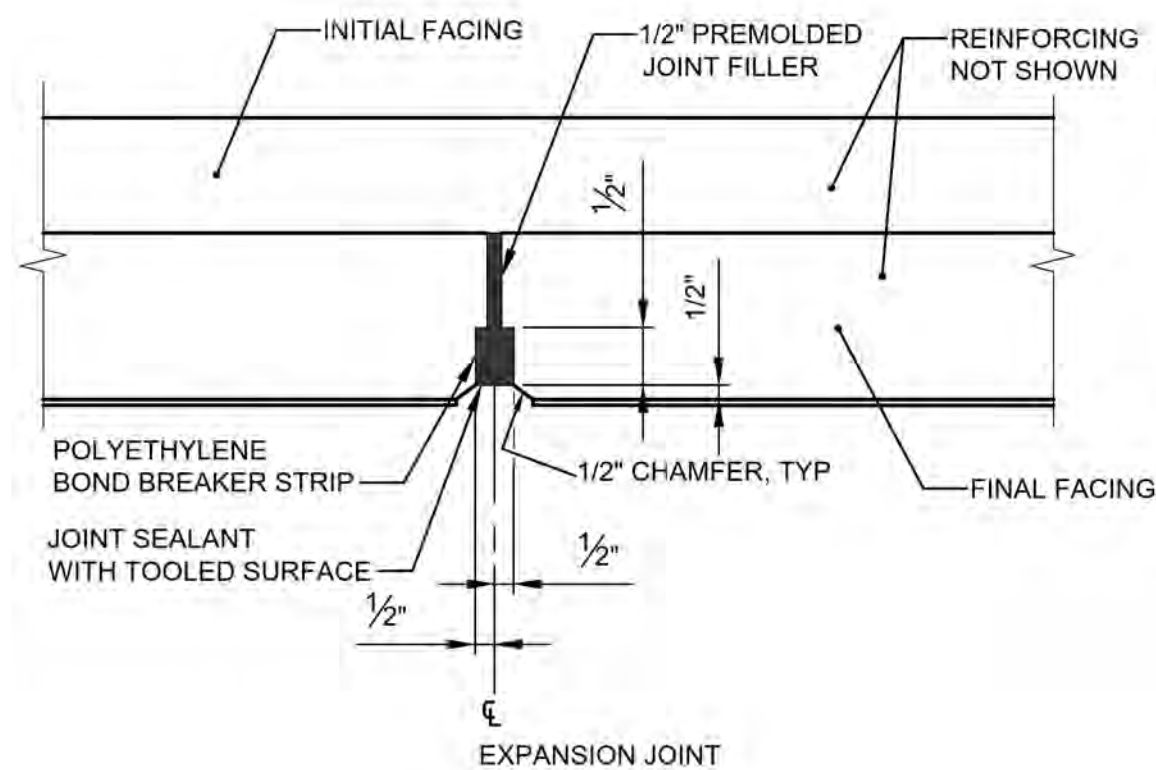
TYPICAL REINFORCING SECTION

NTS



ANCHOR PLATE DETAIL

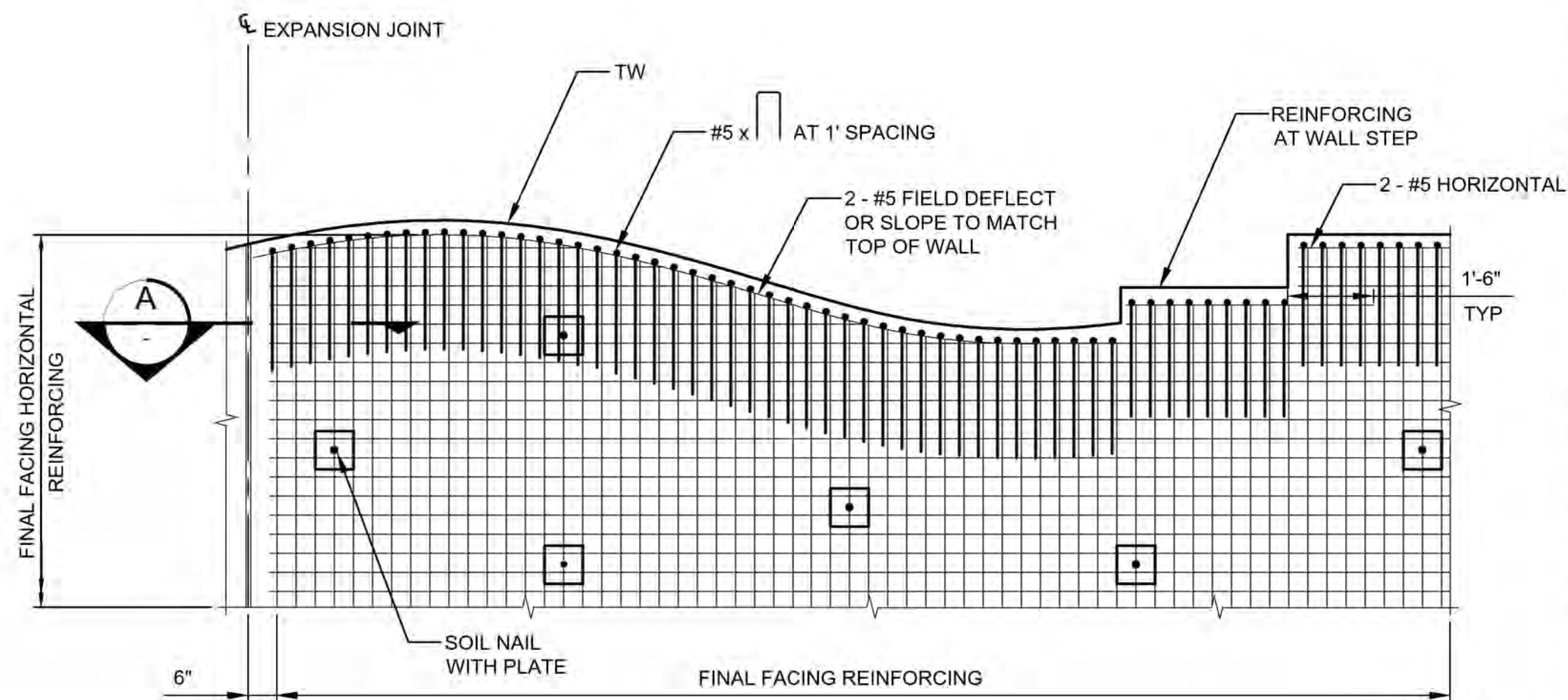
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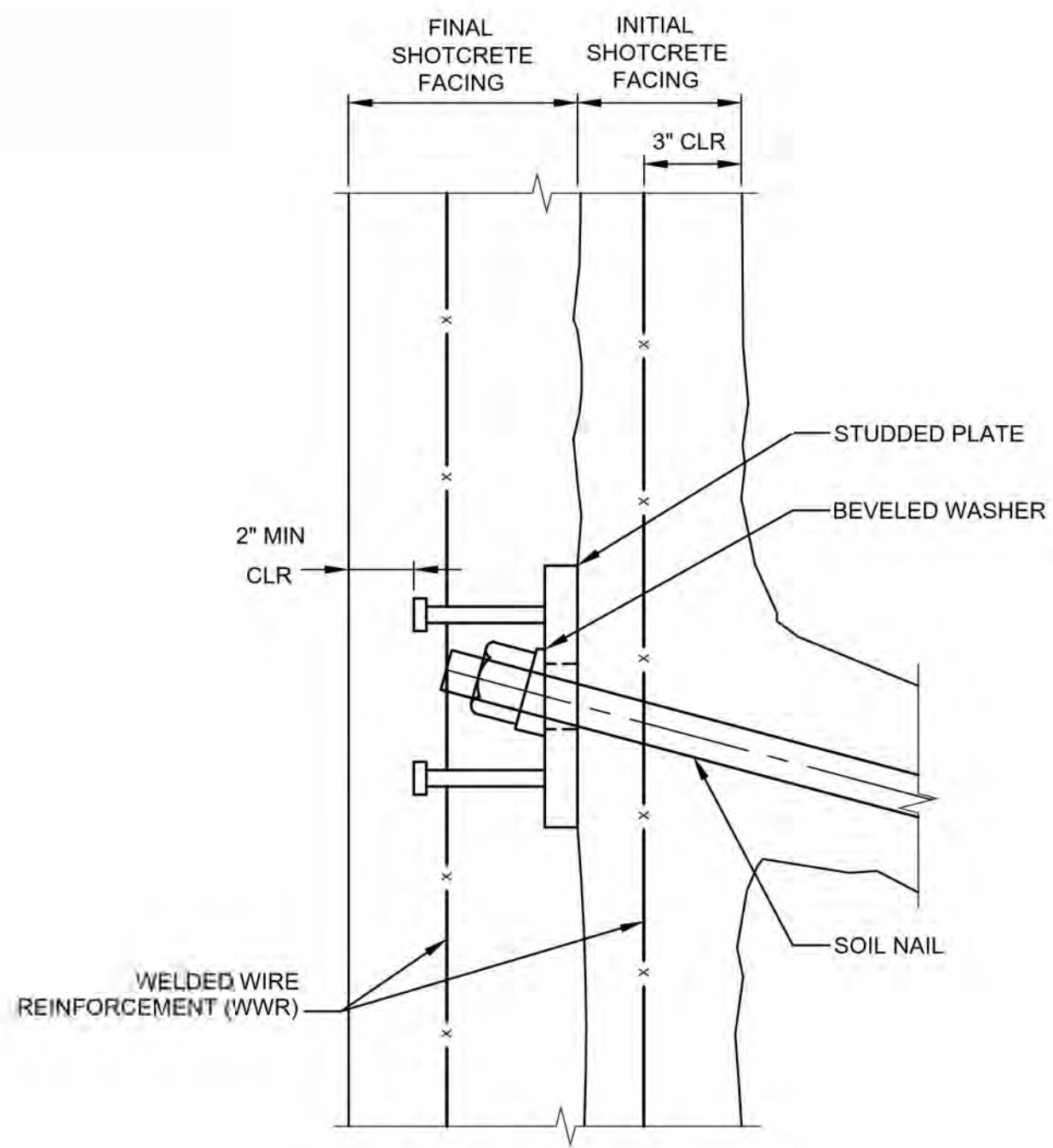
SECTION

TYPICAL FINAL FACING REINFORCEMENT

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ELEVATION



CONNECTION DETAIL

NTS



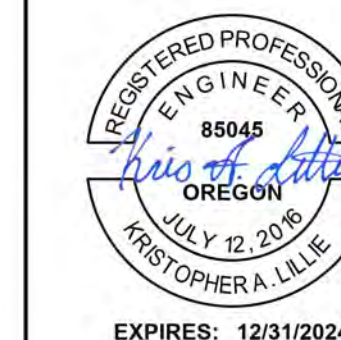
CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

WALL 4 DETAILS

NO.	DATE	DESCRIPTION	BY	REVIEW

ENGINEER: KAL	SAFEDATE: Nov 13, 2023	CLIENT: FLO	LOGNO.: 1013-113
REVIEWED: JAB	PLOT DATE: Nov 13, 2023	FILENAME: RHOD-P-WALL.DWG	

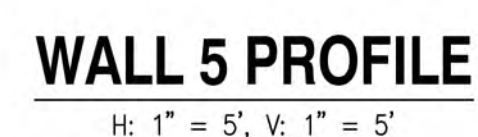
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DRAWING IS FULL SCALE WHEN BAR MEASURES 2"	
DWG NO.: G14	SHEET NO.: 60



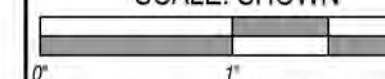
WALL 5 PLAN AND ELEVATION

[illegible]

TOW = TOP OF WALL
BOW = BOTTOM OF WALL



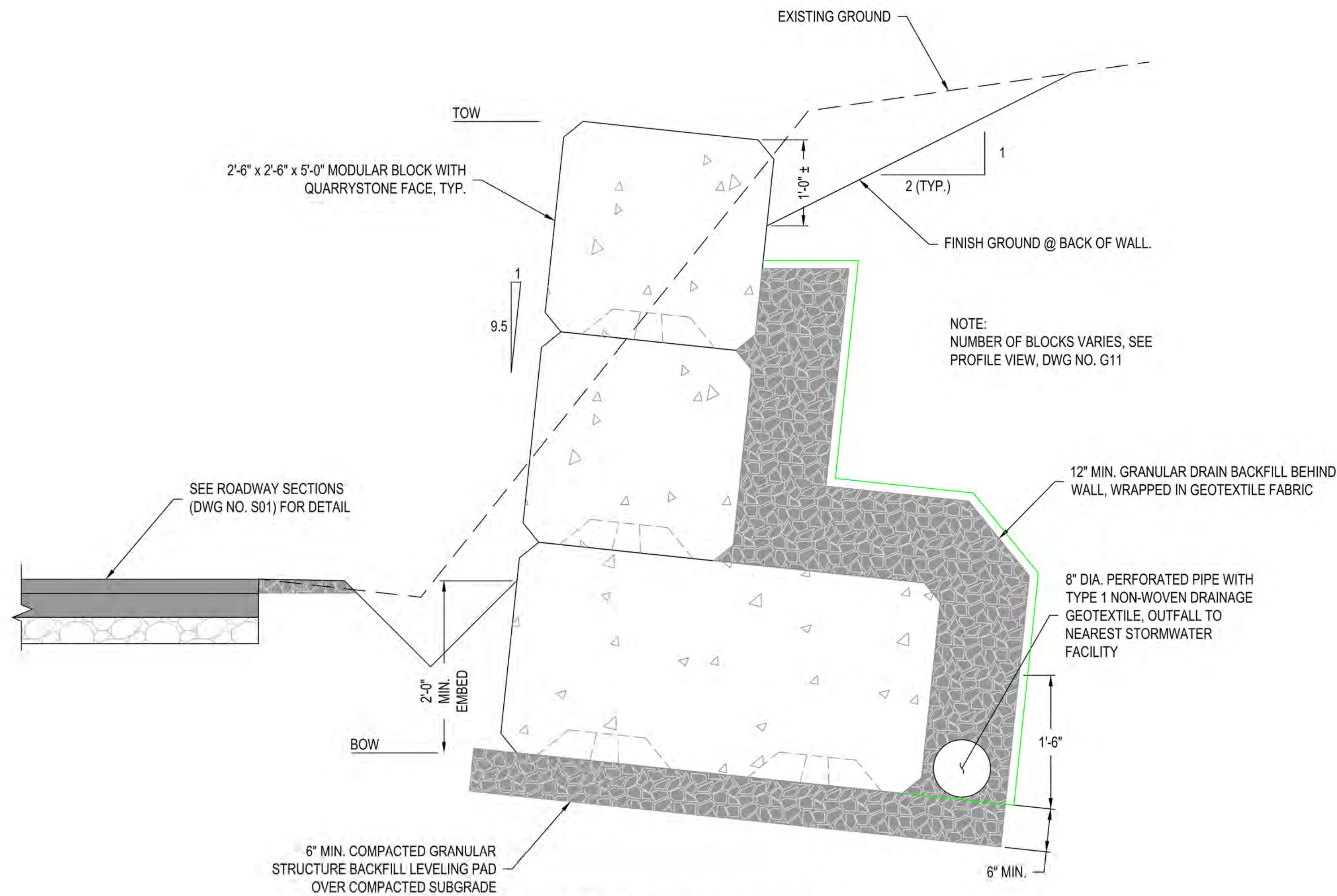
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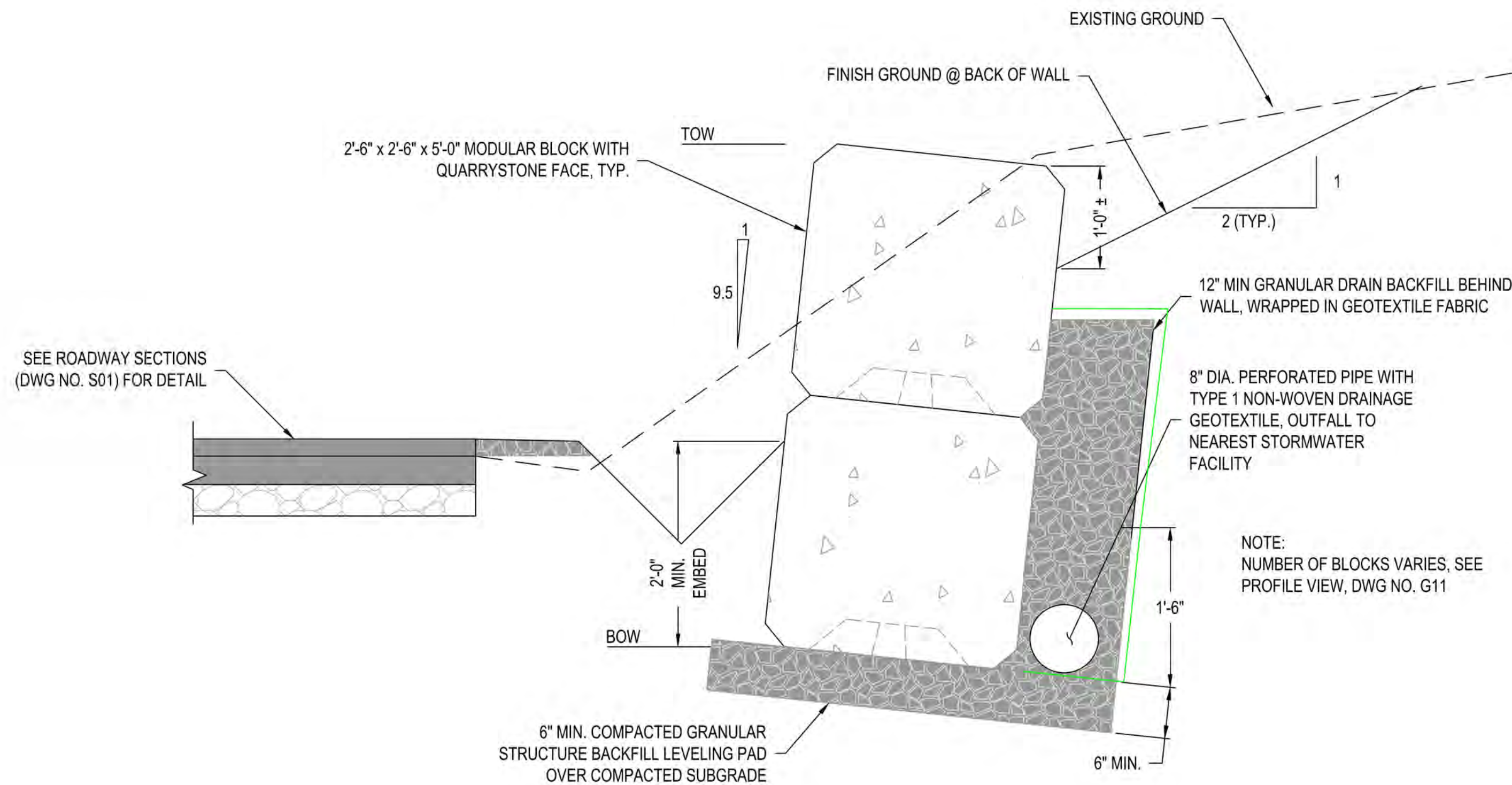
DRAWING IS FULL SCALE WHEN

DWG NO.:		SHEET NO.:	
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G15	61	
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SECTION A-A @ WALL 5
1" = 1'-0"



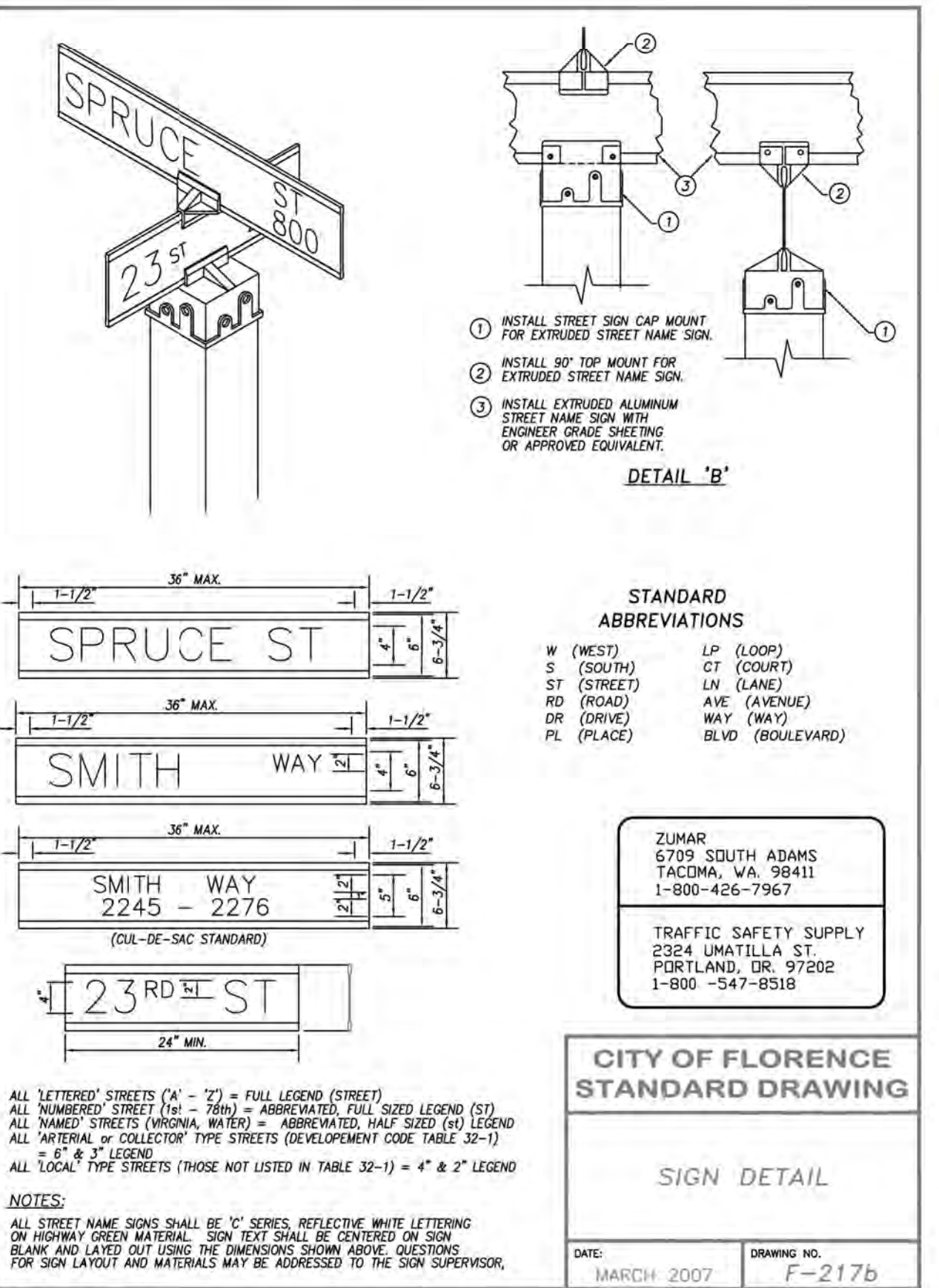
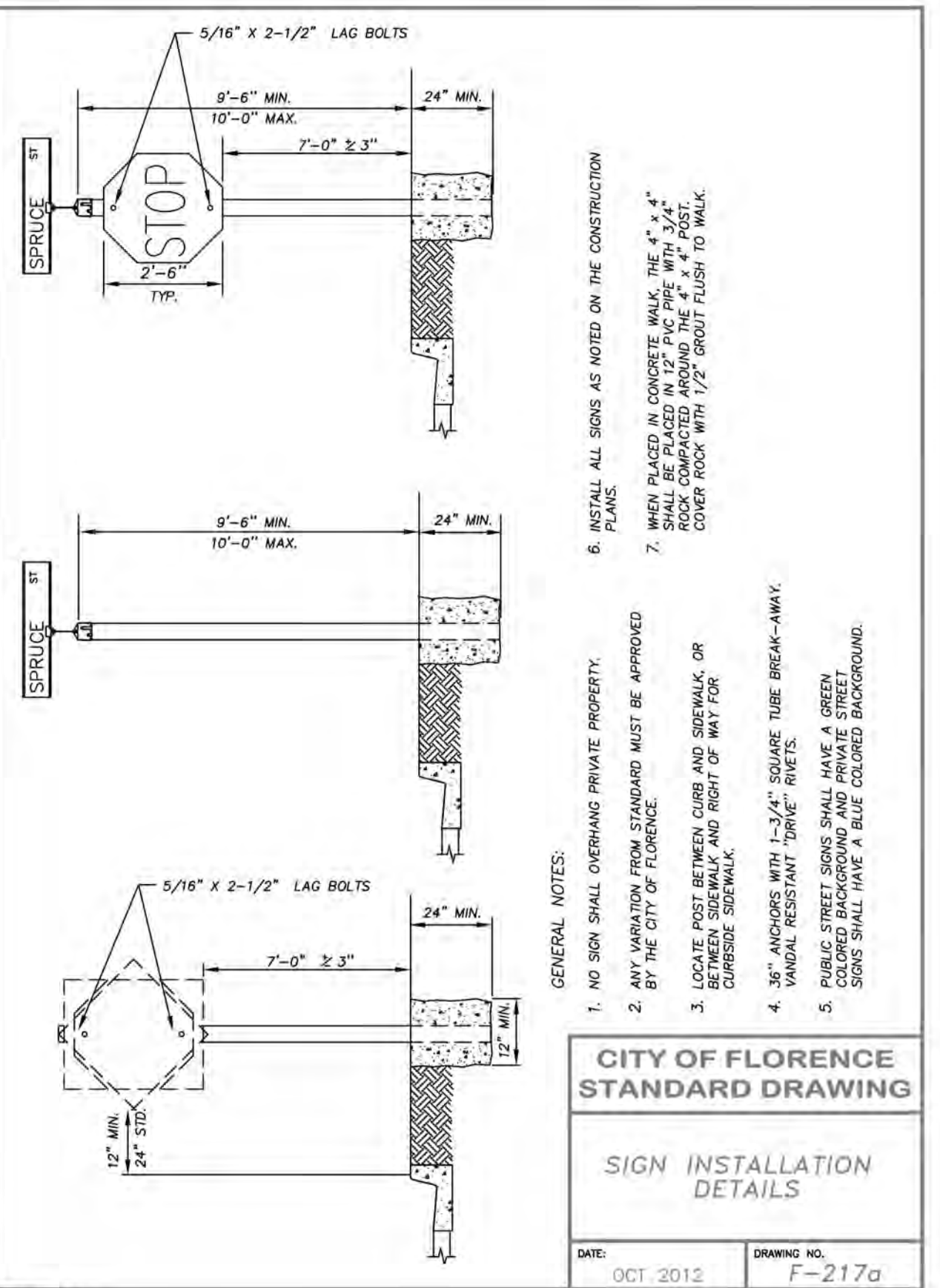
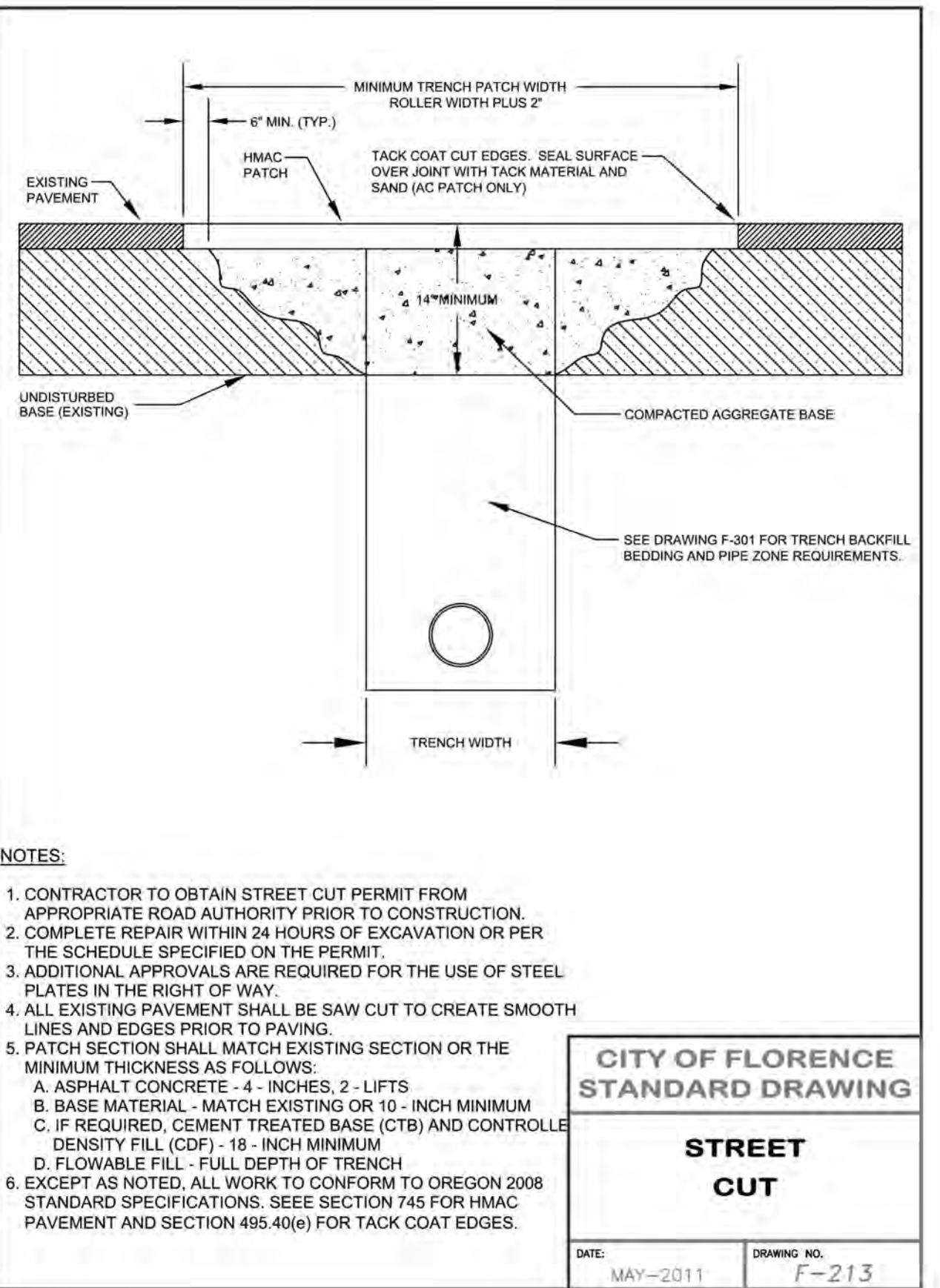
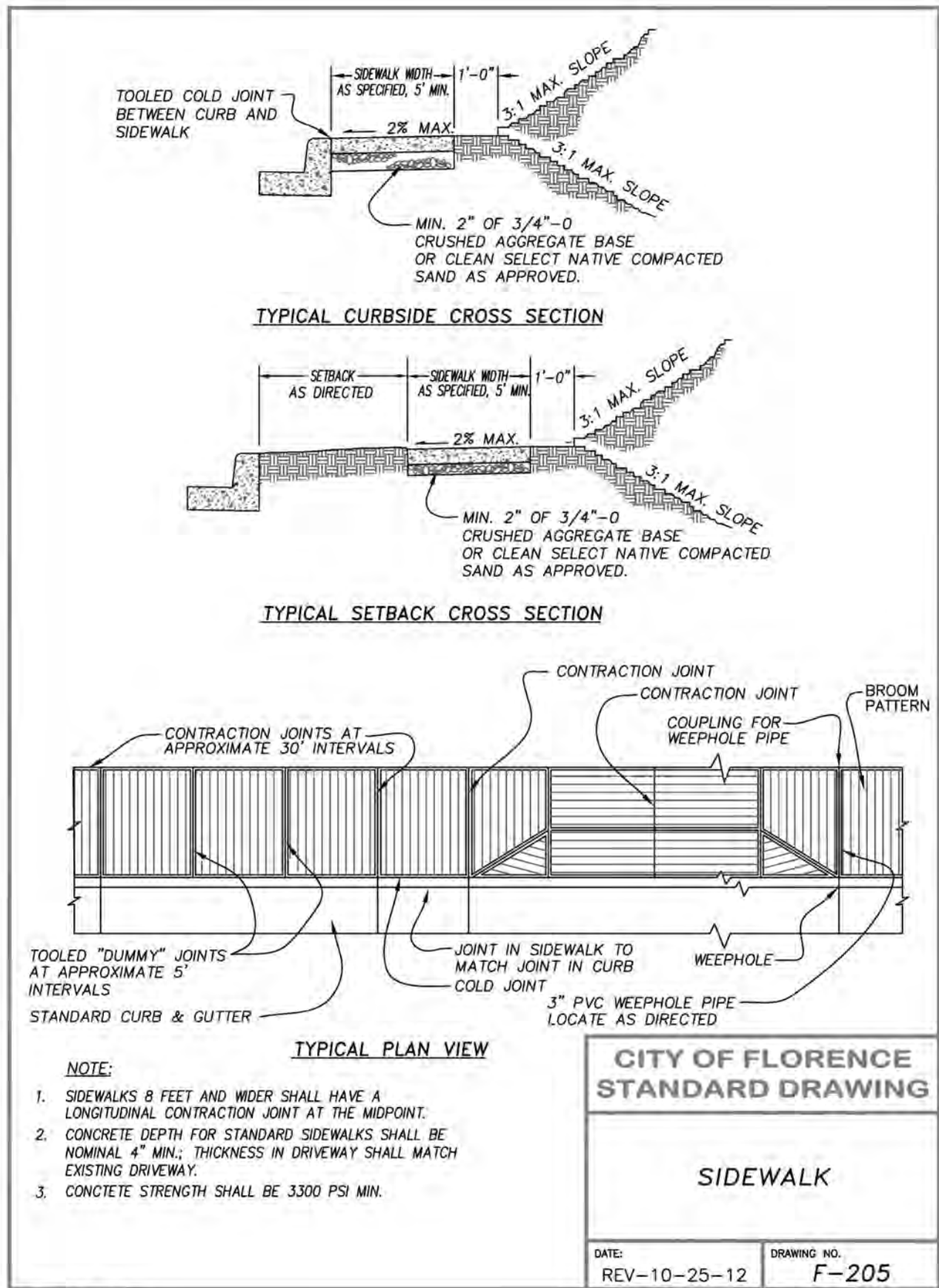
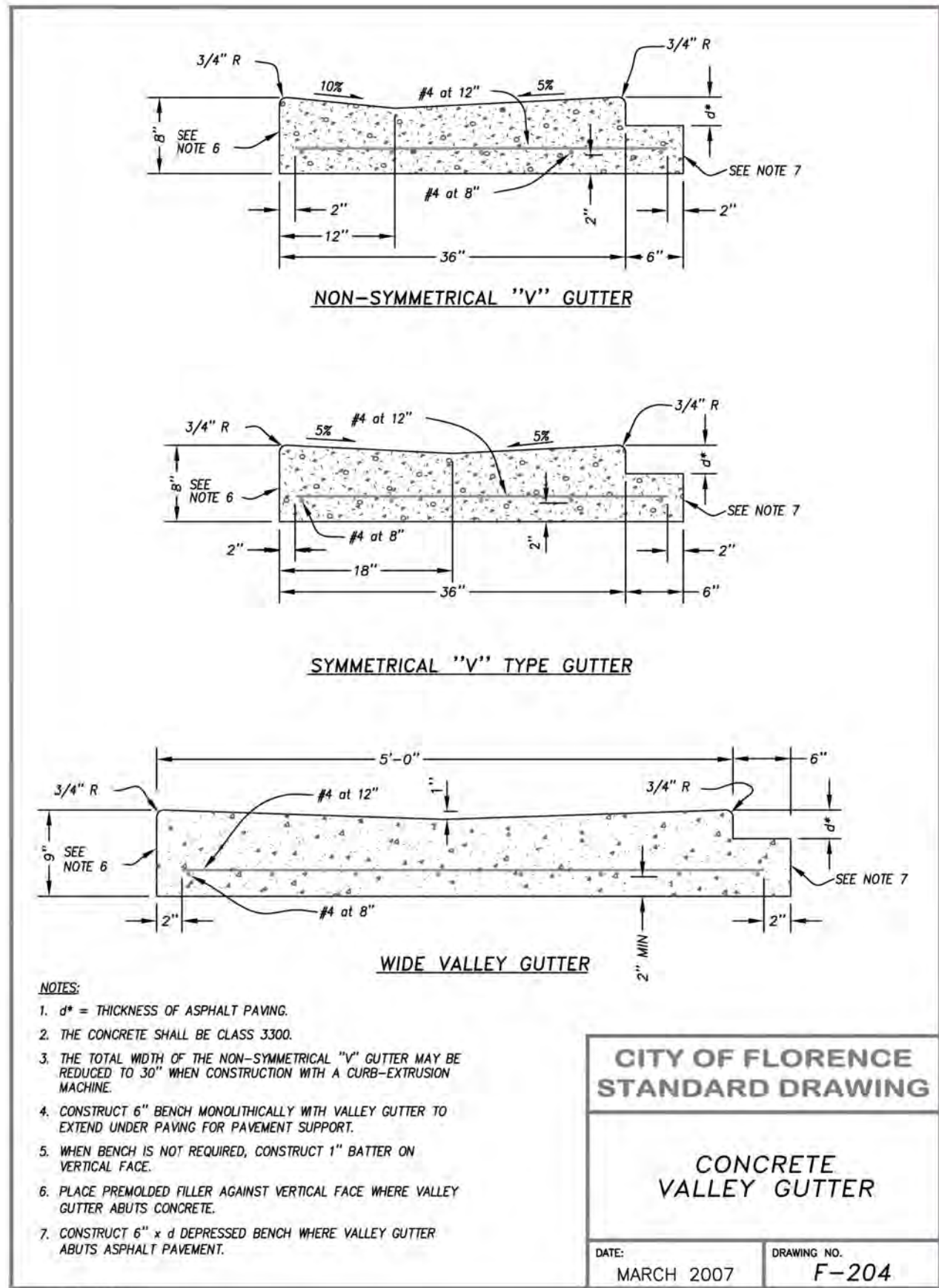
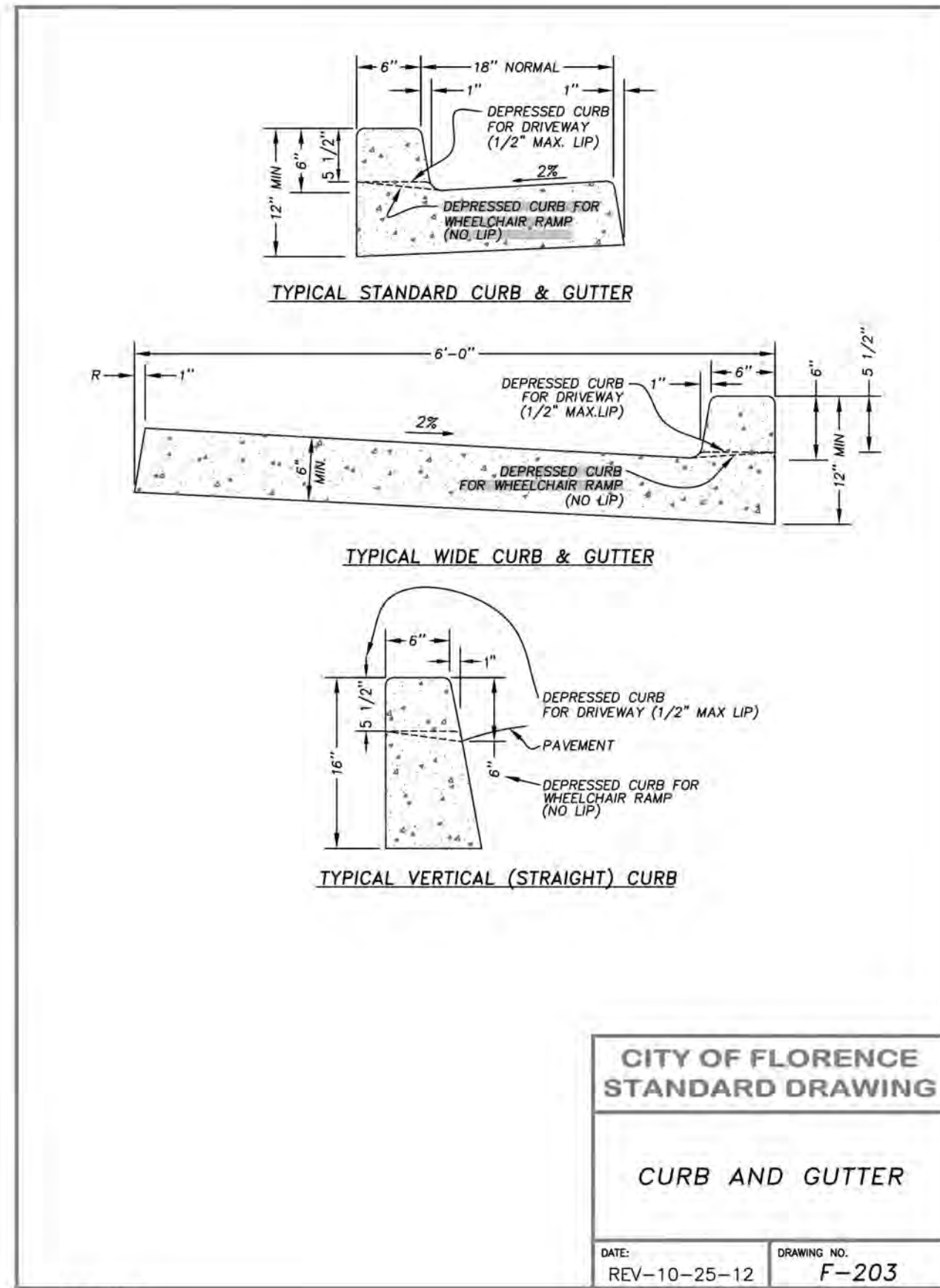
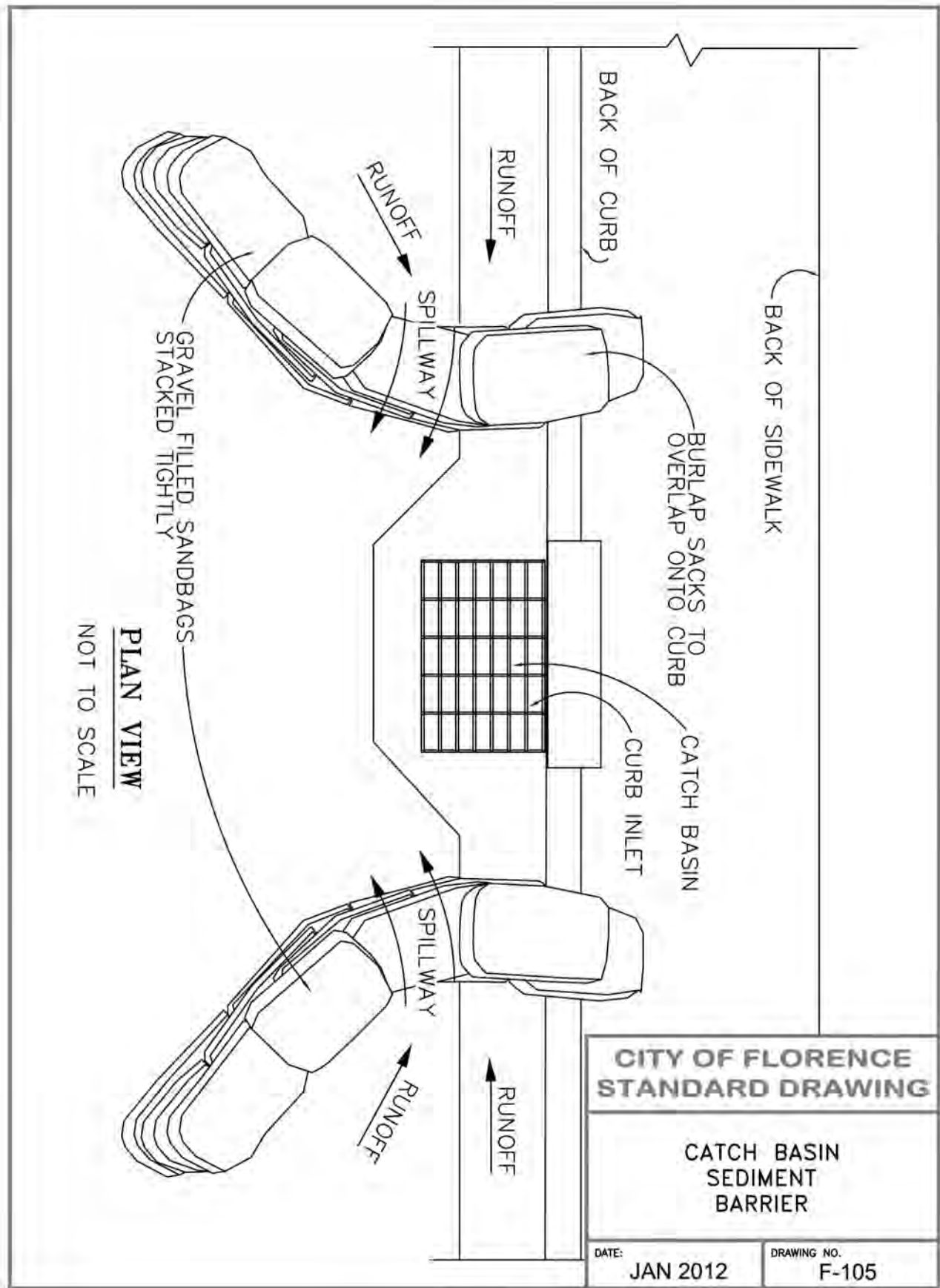
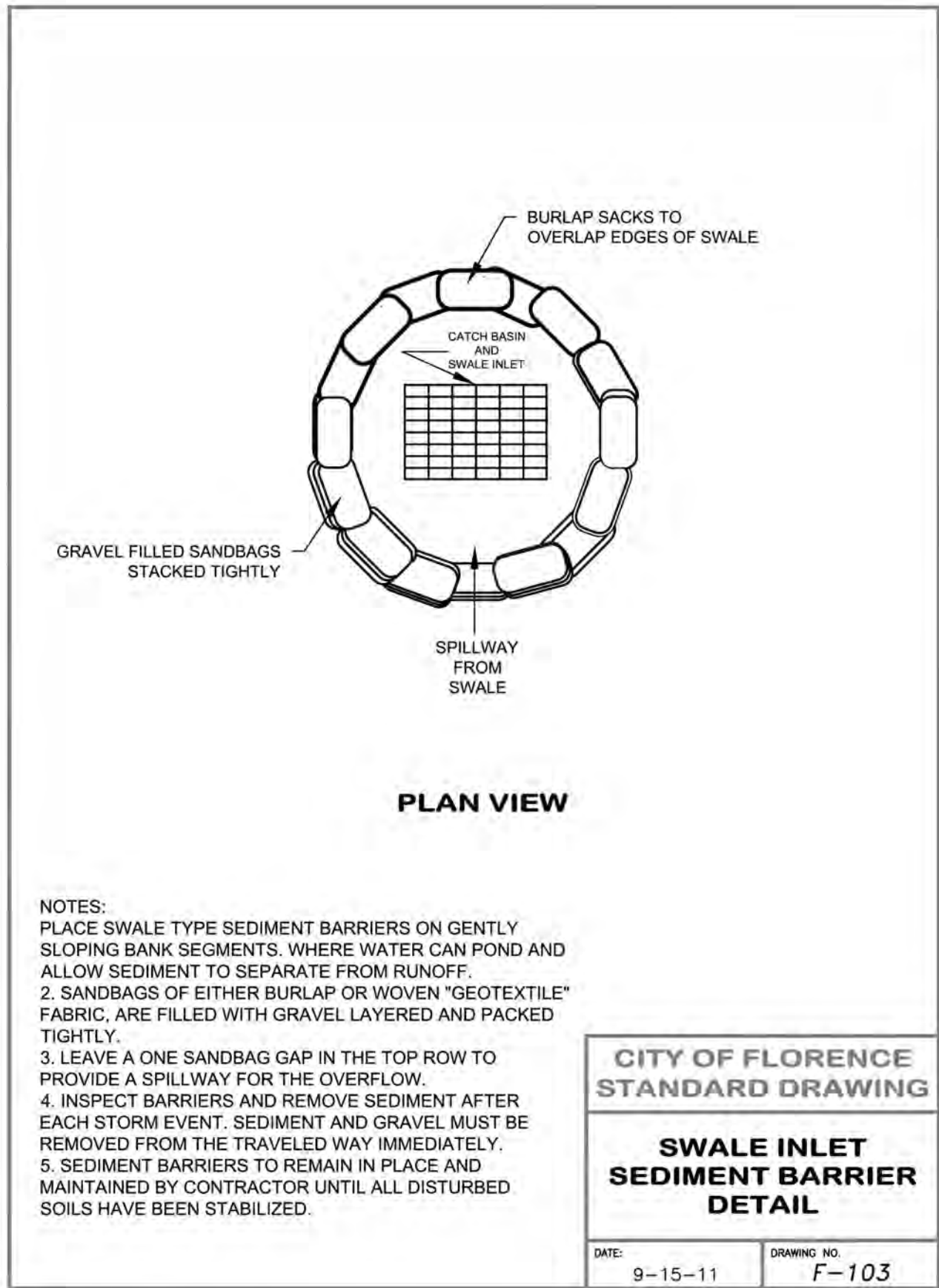
SECTION B-B @ WALL 5
1" = 1'-0"



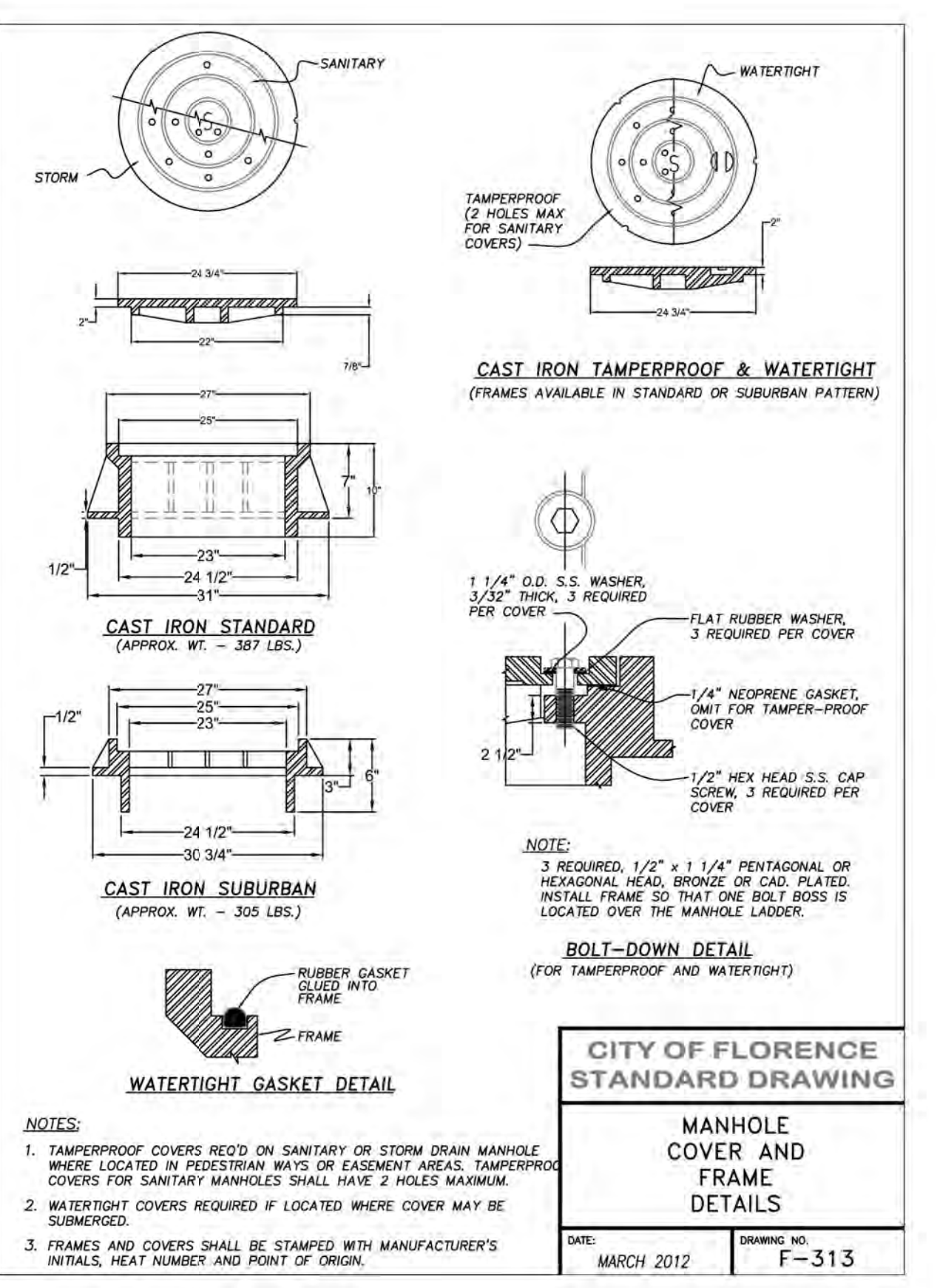
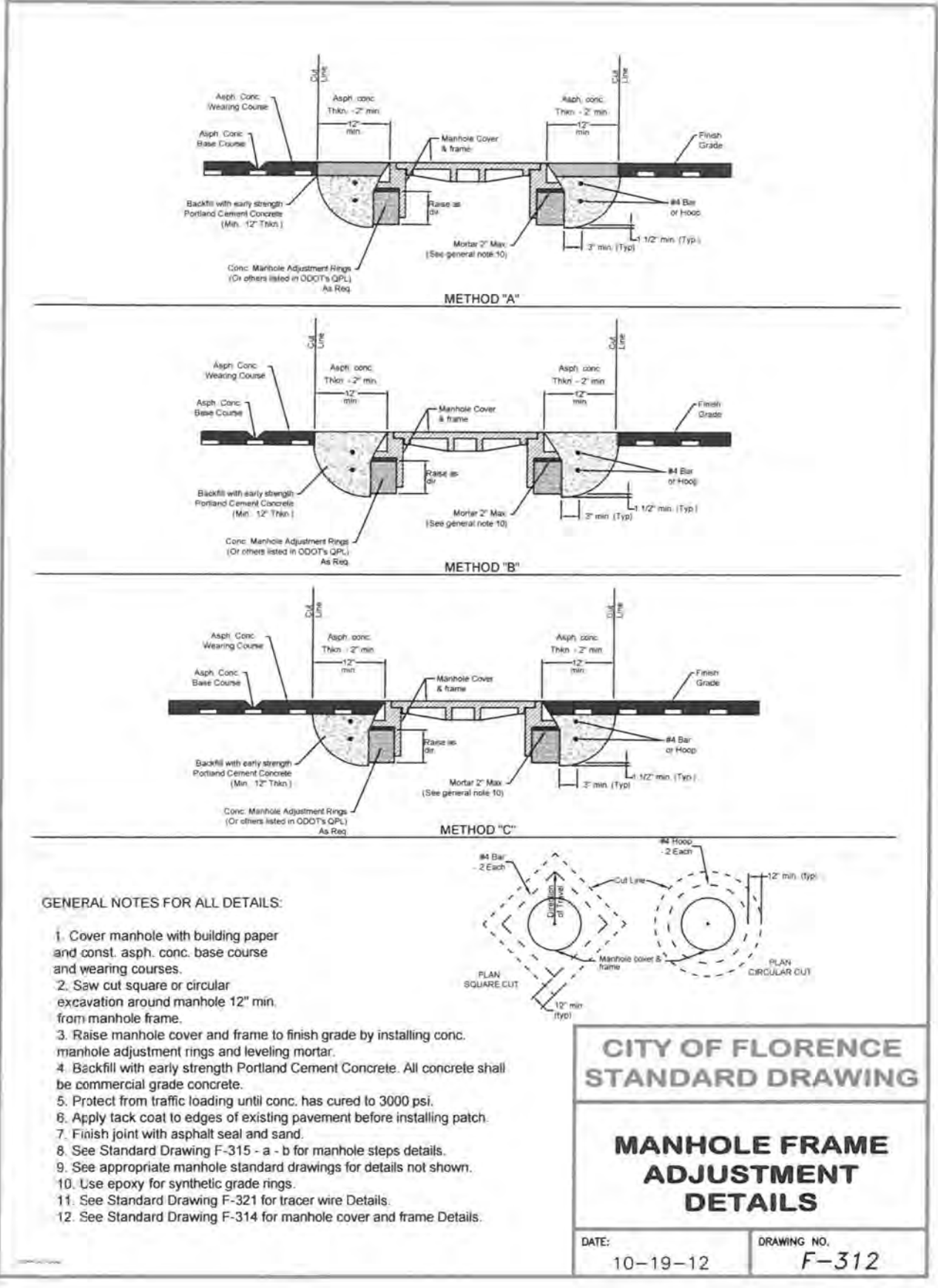
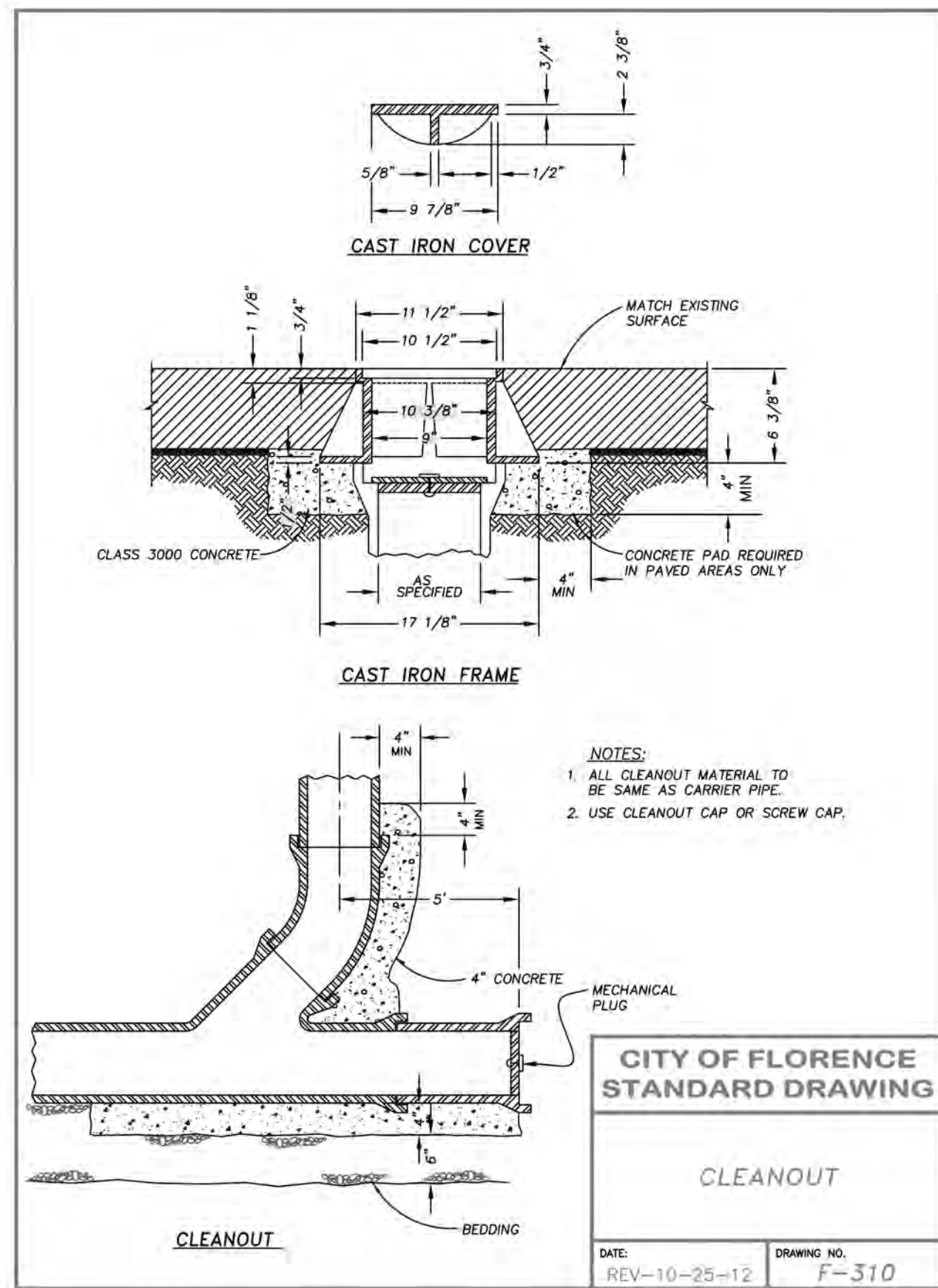
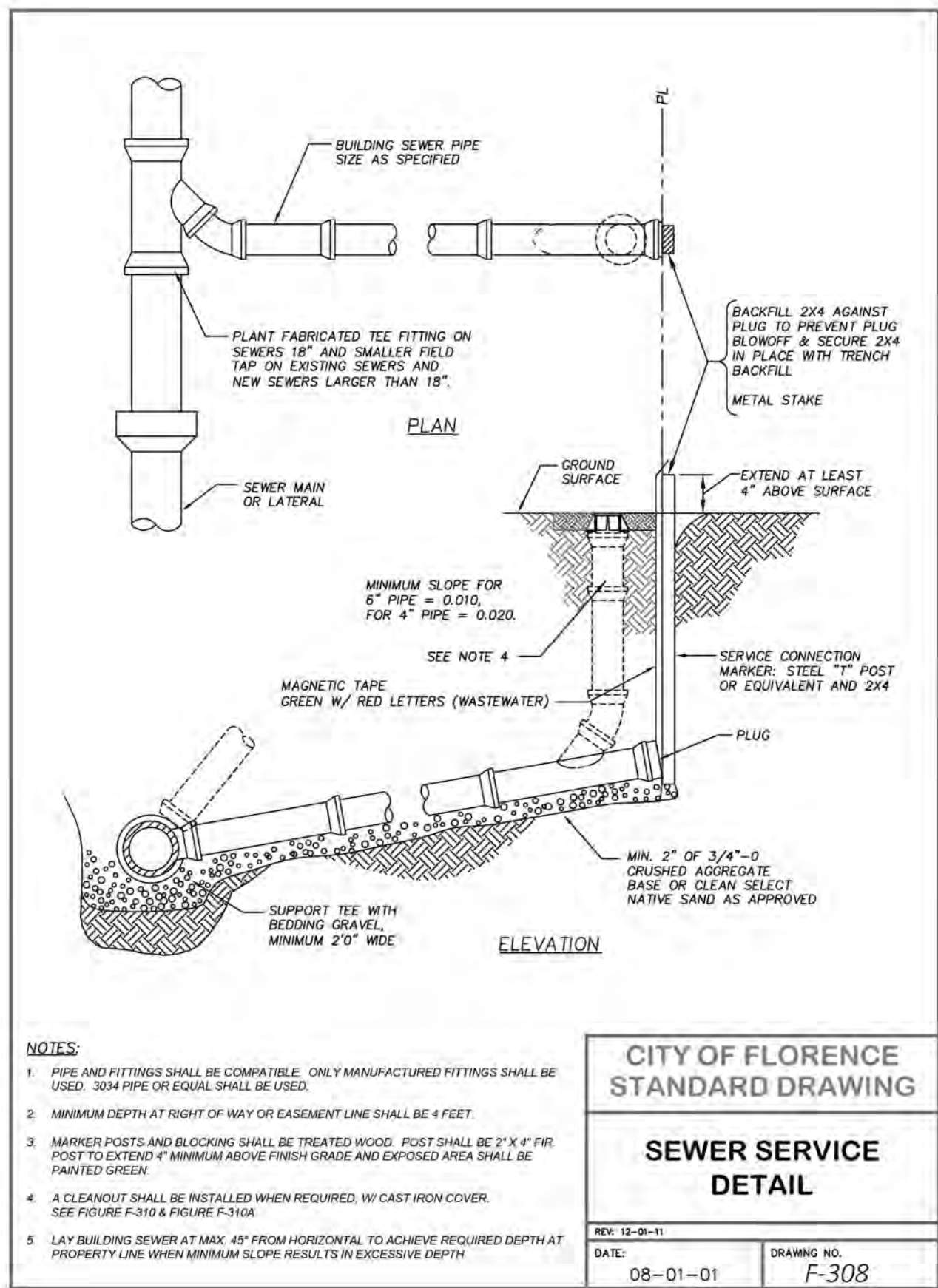
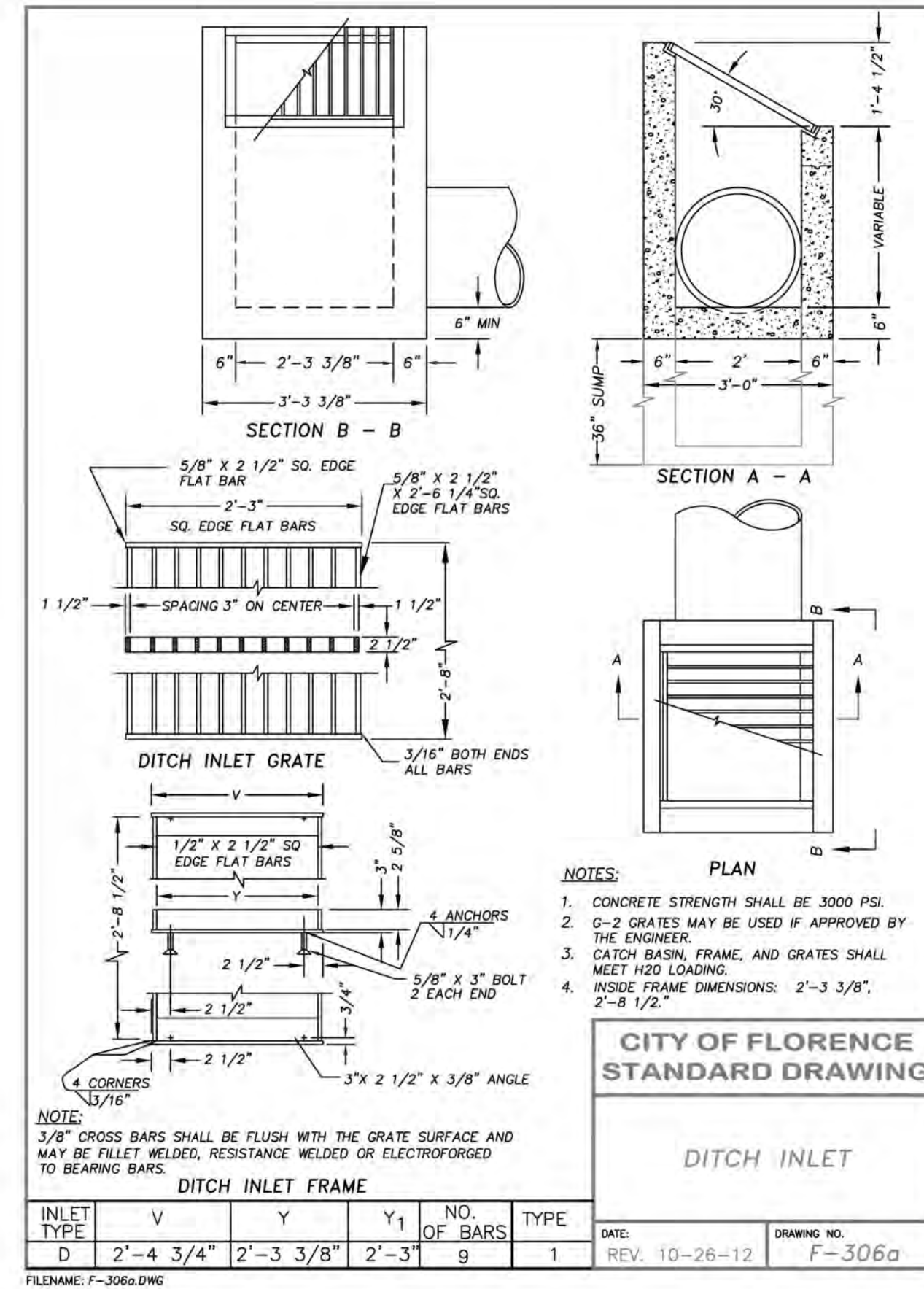
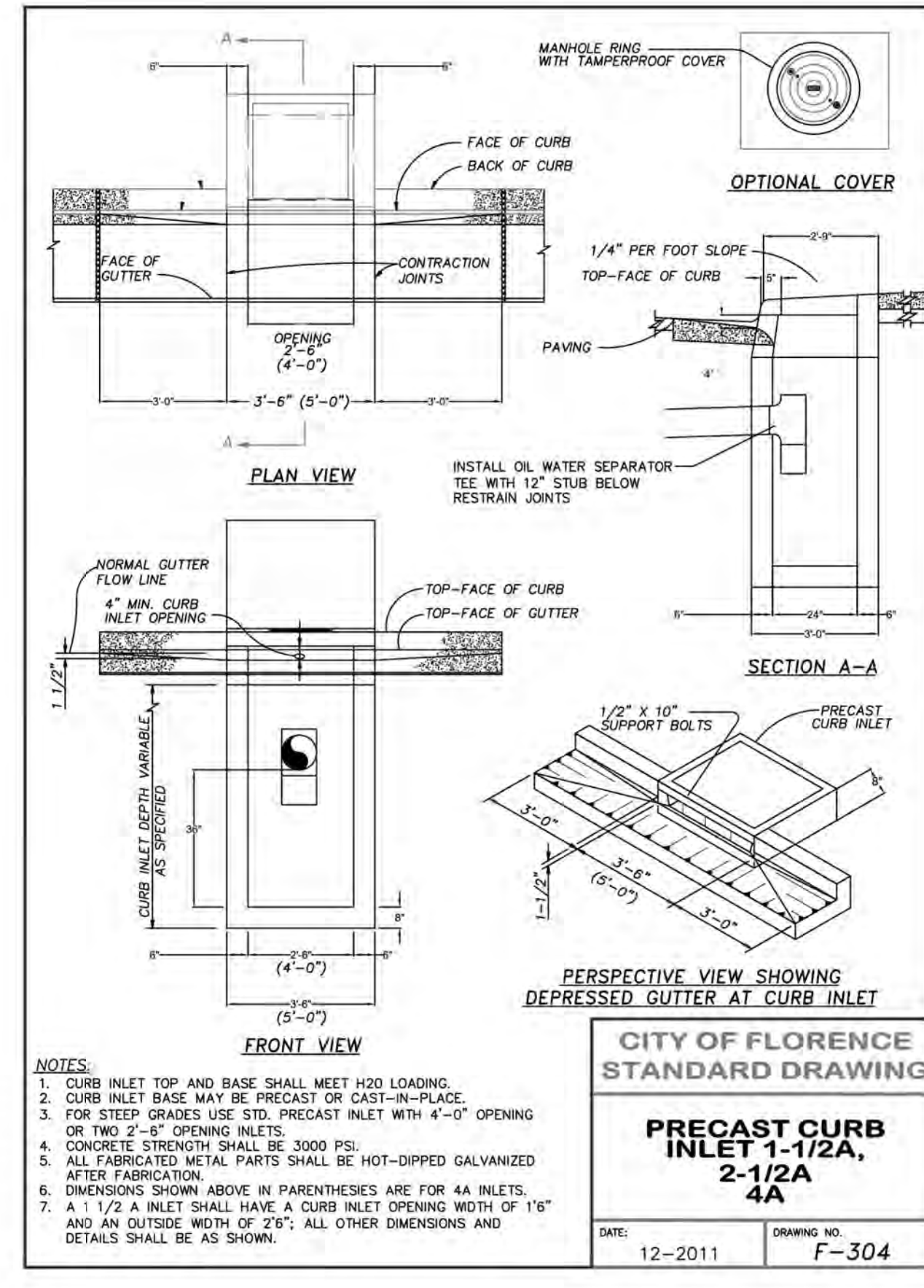
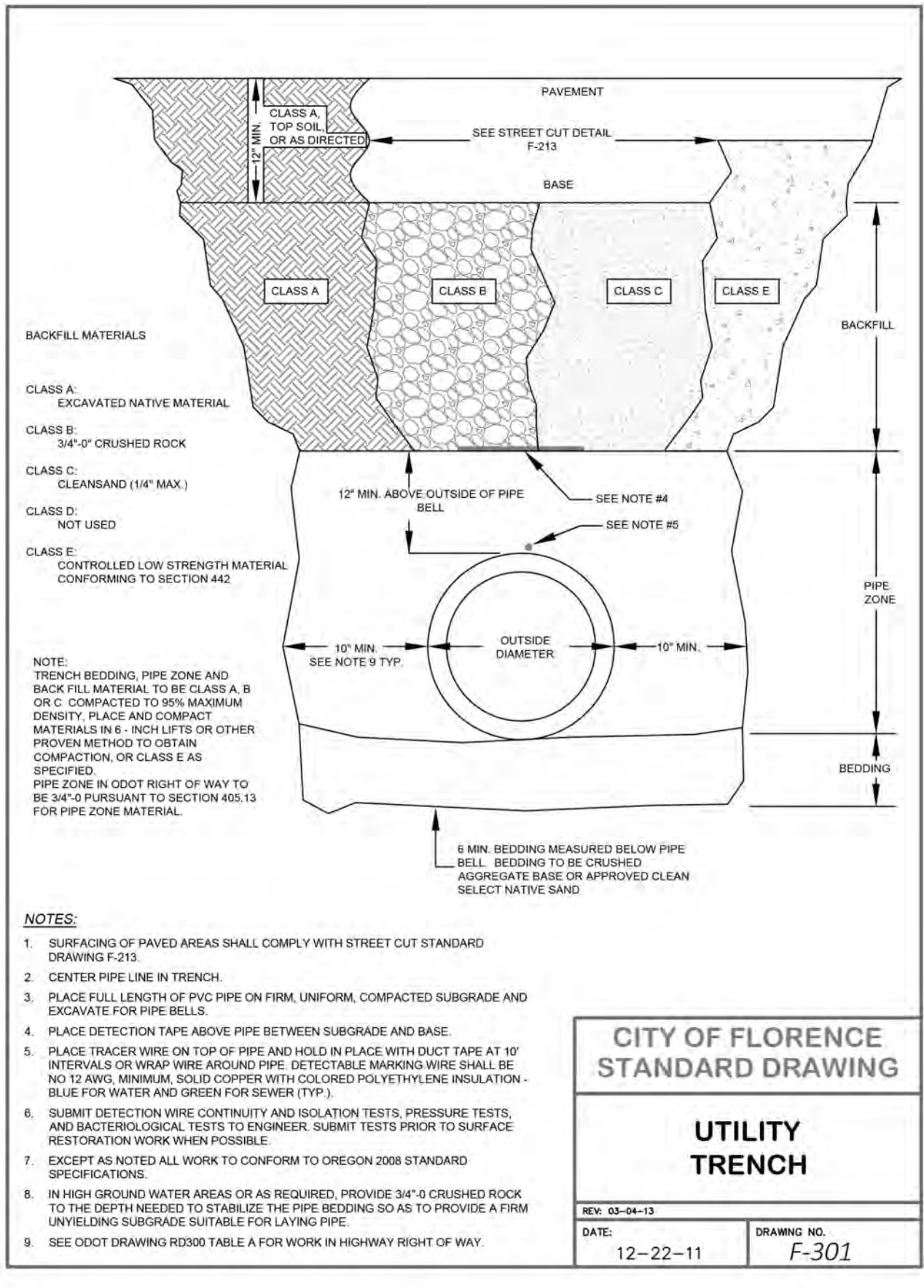
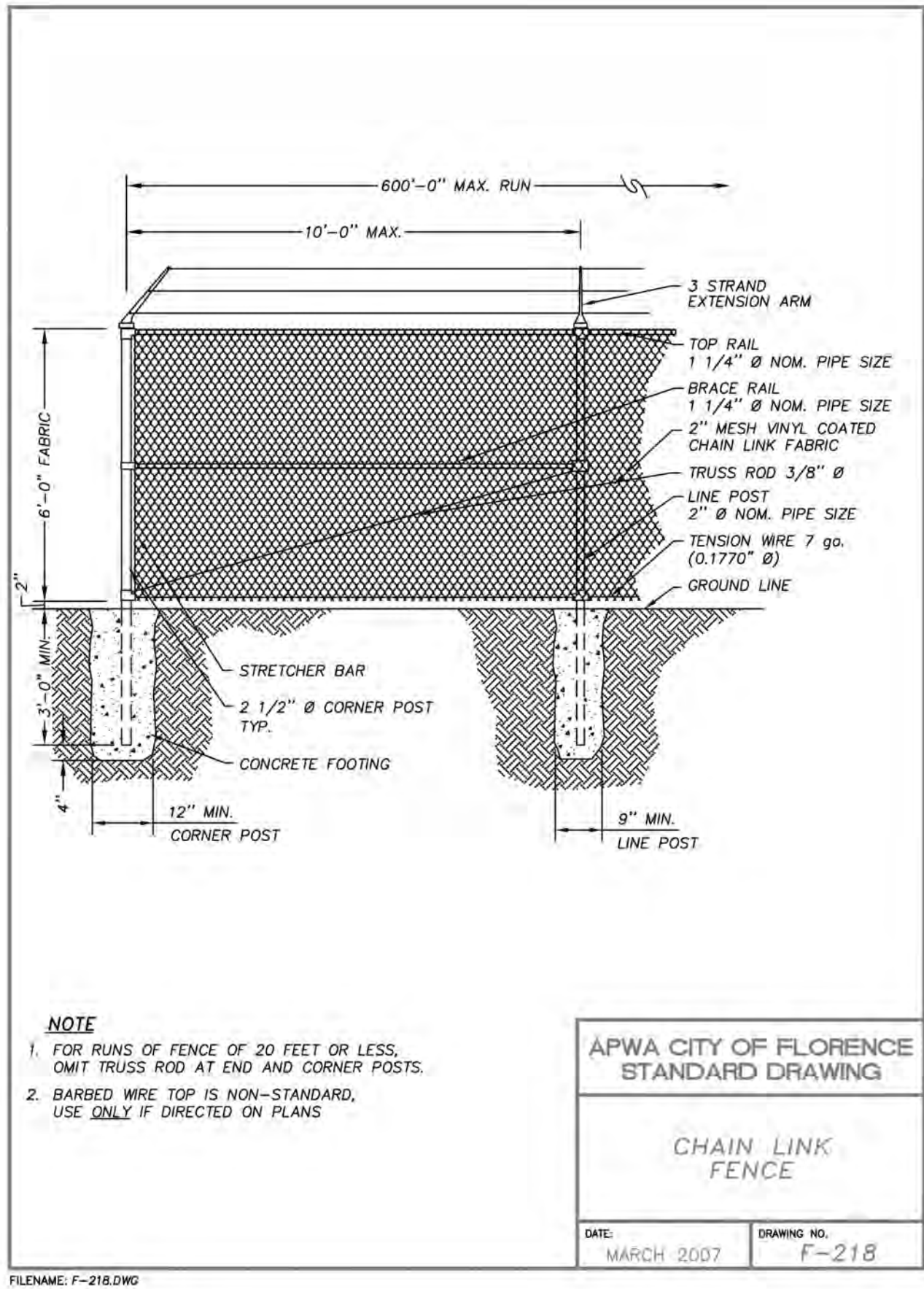
CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT
WALL 5 DETAILS

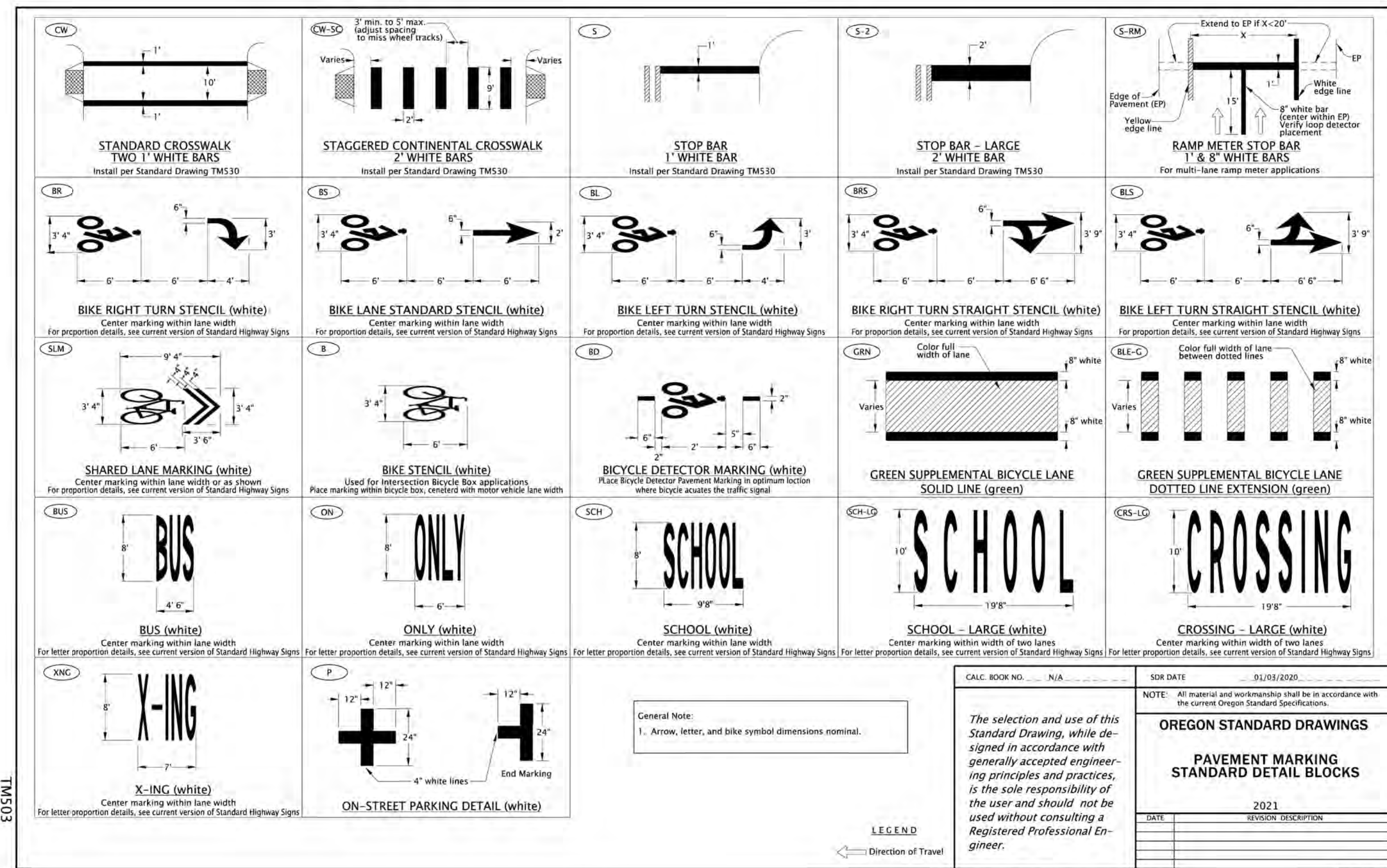
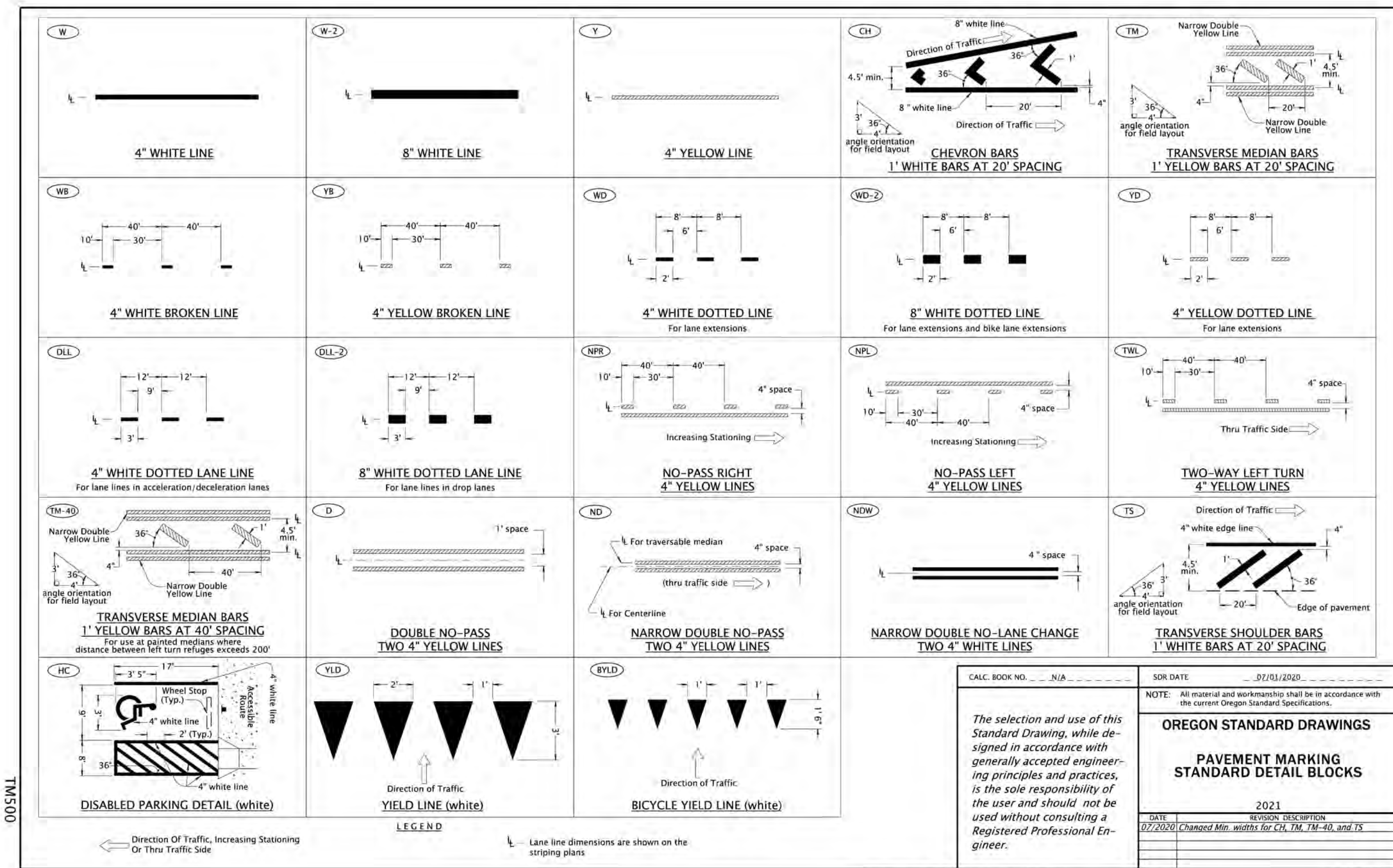
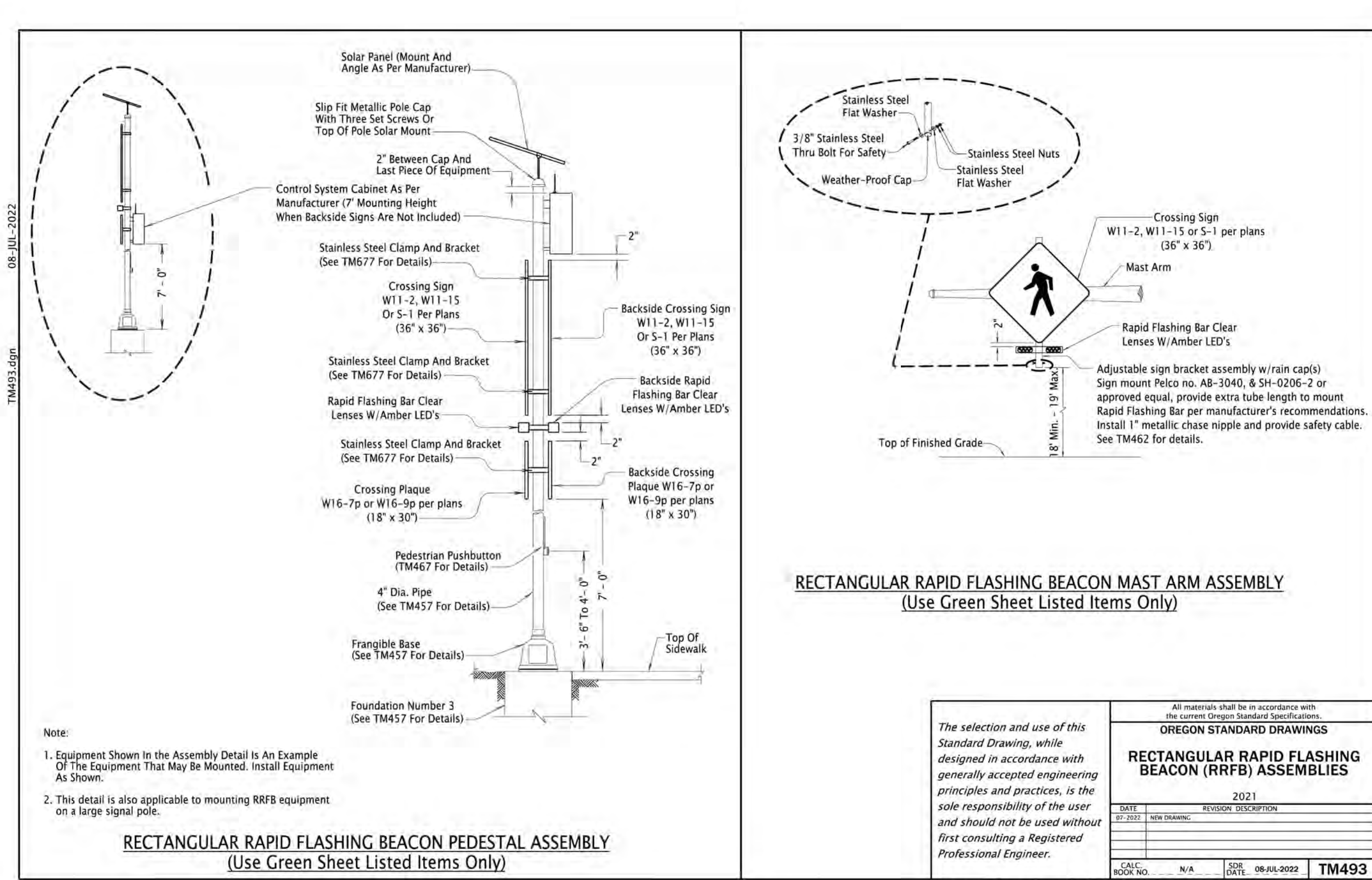
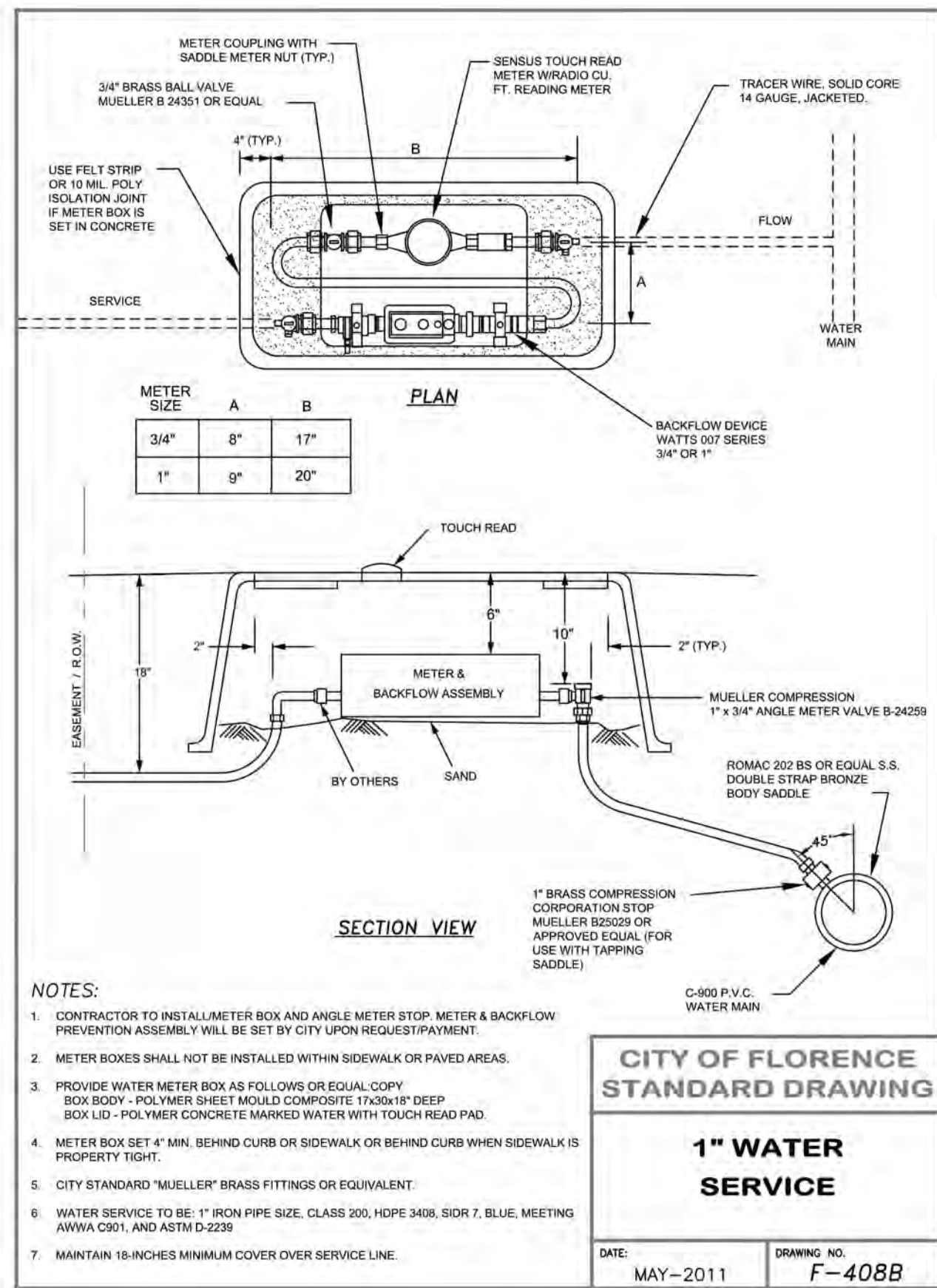
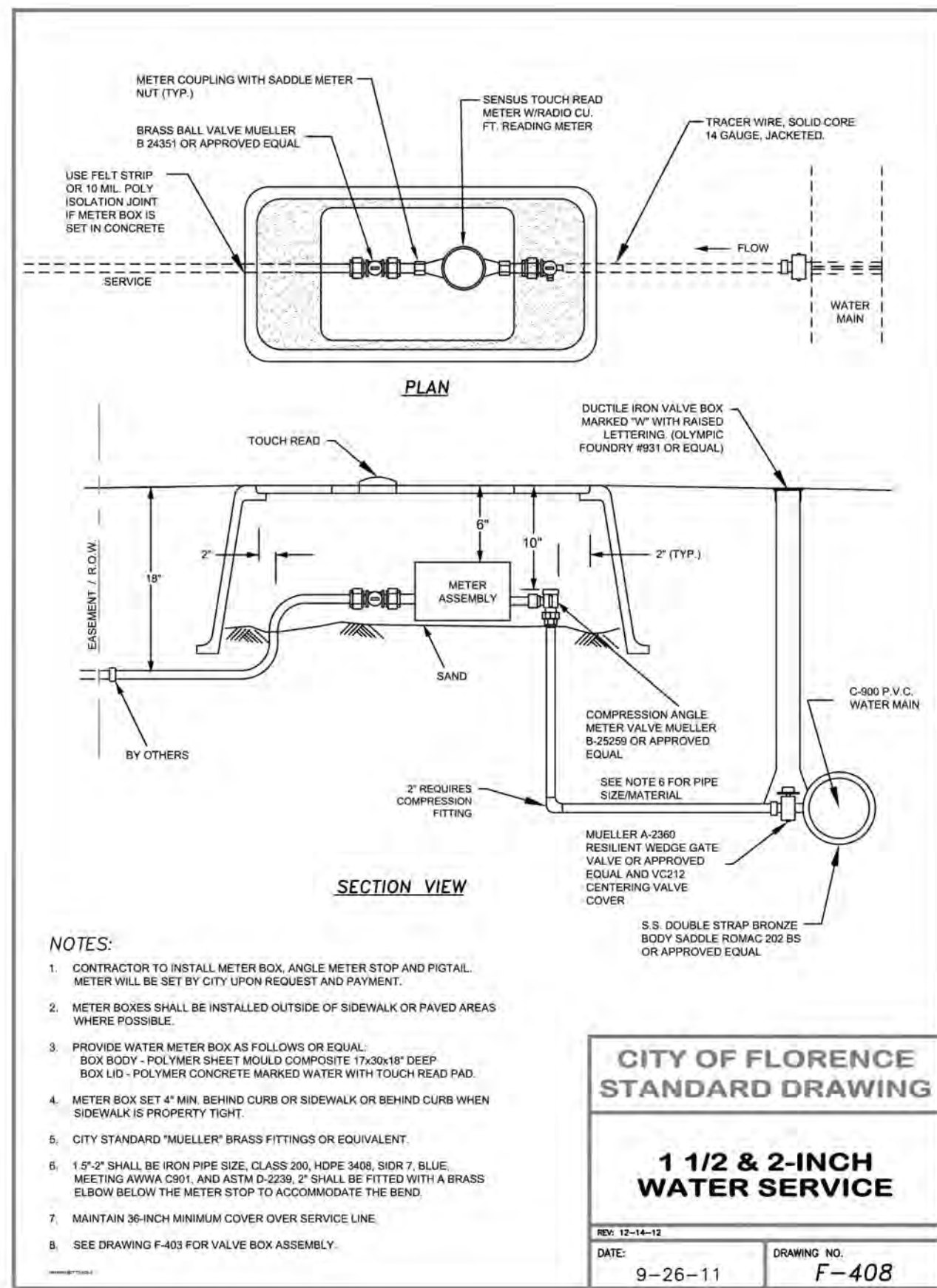


REVISIONS		NO.	DATE	DESCRIPTION	BY	REVIEW
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ENGINEER	DATE	REVISION	DESCRIPTION	NO.	DATE	BY	REVIEW
KAL	Nov 13, 2023						
JAB	Nov 13, 2023						





CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

DETAILS



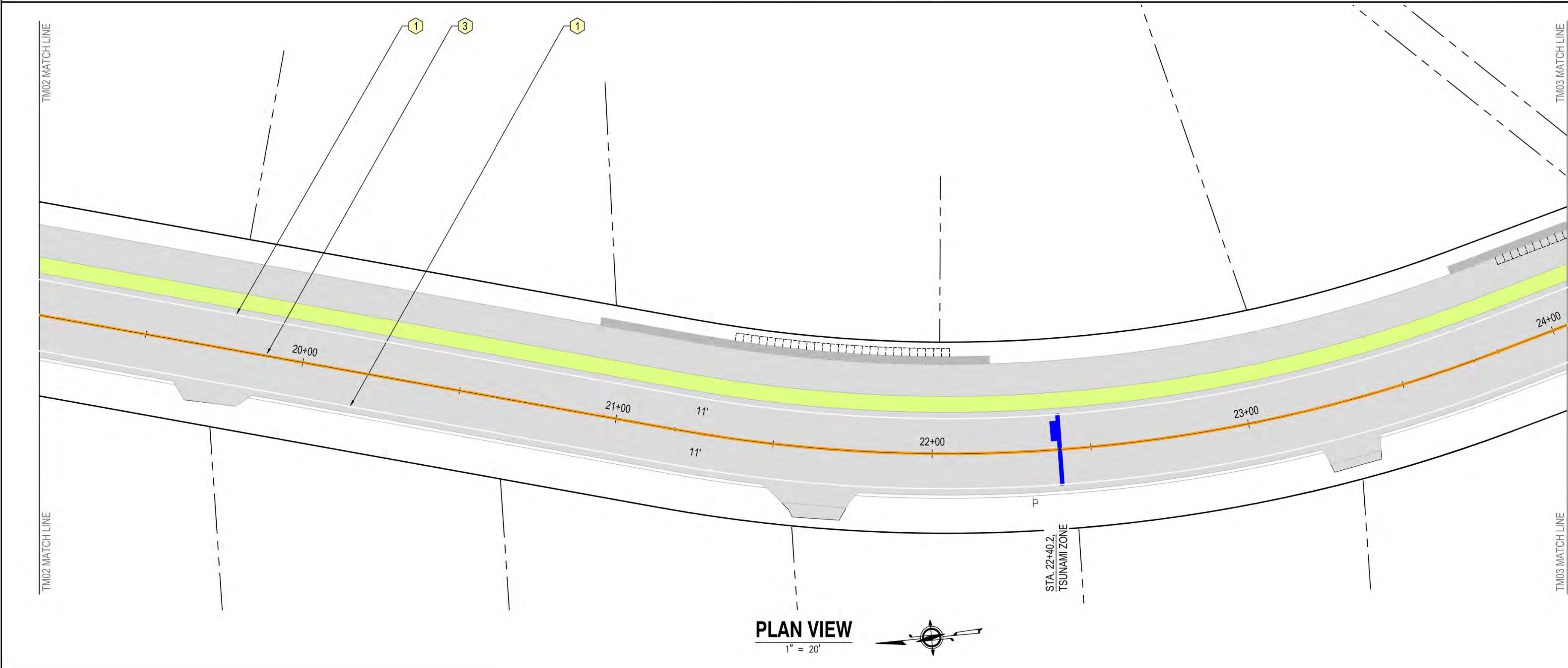
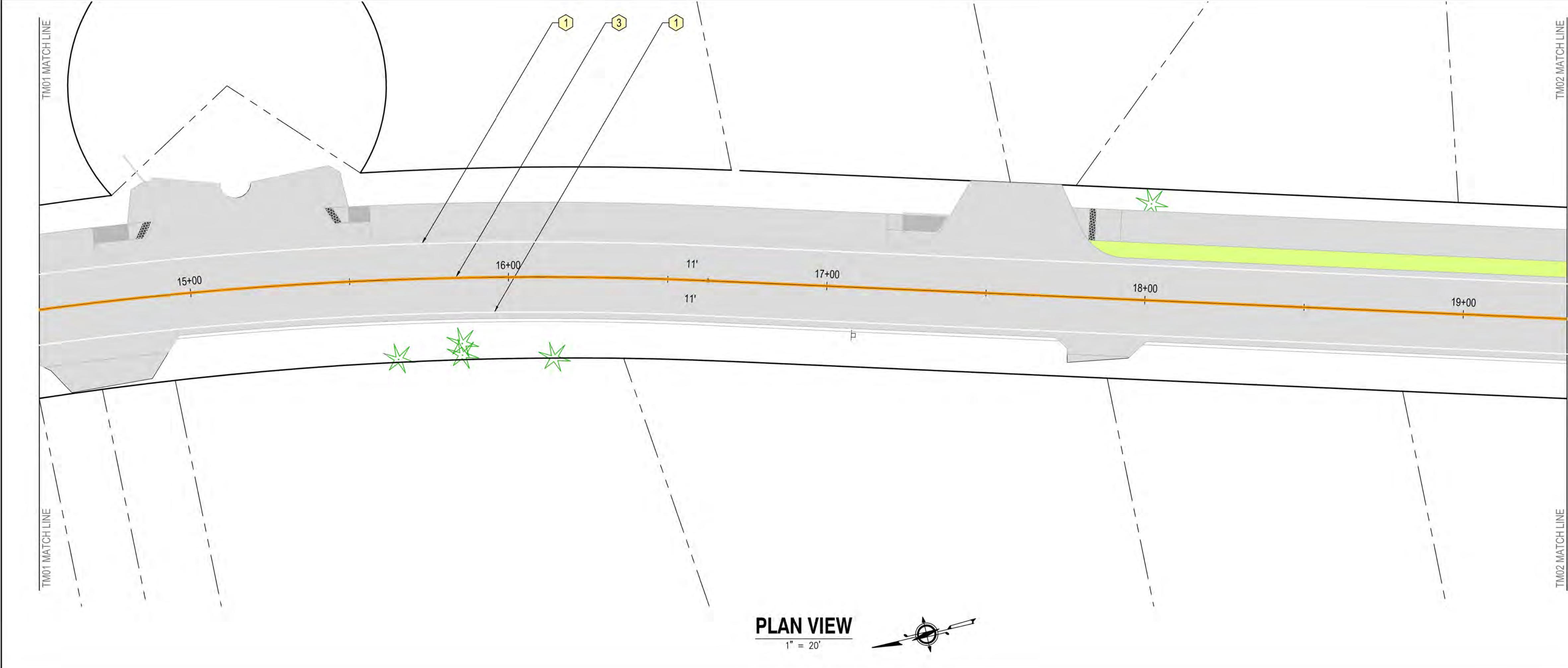
ENGINEER	SAFETY	DATE	NO.	DATE	DESCRIPTION	BY	REVIEW
KAL	Nov 13, 2023						
JAB	Nov 13, 2023						

LOG NO.: 1013-113
CLIENT: FLO
REVISIONS: RHOD-D-DET-DWG

SCALE: SHOWN

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

DWG NO.: XXX
SHEET NO.: 66
71



- GENERAL NOTES
- 1) THIS PLAN IS FOR PAVEMENT MARKINGS AND SIGNING ONLY, SEE ROADWAY AND UTILITY PLANS FOR PROPOSED SITE WORK.

2) DIMENSIONS ARE APPROXIMATE. ALL PAVEMENT MARKINGS SHALL BE APPROVED IN THE FIELD BY THE CITY PRIOR TO INSTALLATION. FOR RE-STRIPE CONDITIONS, IF DIMENSIONS FOR EXISTING STRIPING VARY FROM THOSE SHOWN ON PLANS, THE CONTRACTOR WILL PROVIDE THE CITY THE EXISTING DIMENSIONS AND RECEIVE APPROVAL PRIOR TO RE-STRIPING.

3) REMOVE ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THIS PLAN.

4) EXISTING SIGNS NOT SHOWN ON THESE PLANS ARE TO REMAIN IN PLACE, UNLESS OTHERWISE DIRECTED BY THE CITY.

- STRIPING NOTES
- 1

PLASTIC (WHITE)4" EDGE LINE (W)
- 2

PLASTIC (WHITE)8" EDGE LINE (W-2)
- 3

PLASTIC (YELLOW)NARROW DOUBLE NO PASS (ND)
- 4

PLASTIC (YELLOW)4" YELLOW LINE (Y)
- 5

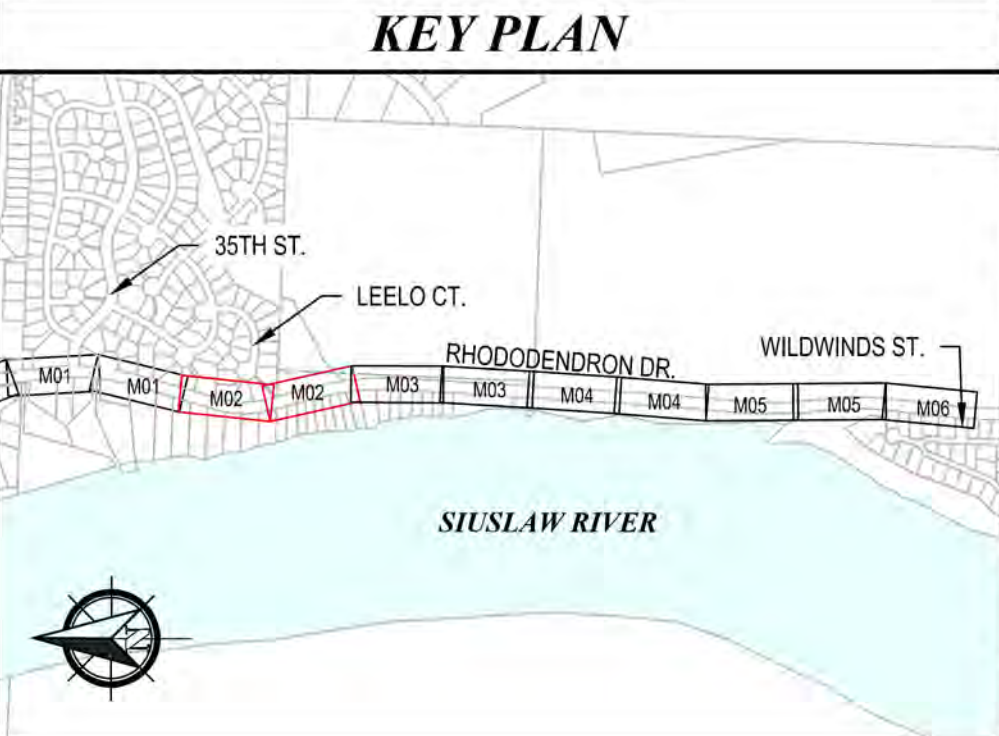
PLASTIC (WHITE)1' STOP BAR (S)
- 6

PLASTIC (WHITE)LEFT TURN ARROW
- 7

PLASTIC (WHITE)STRAIGHT ARROW
- 8

PLASTIC (WHITE)CONTINENTAL C/W BARS (CW-SC)
- 9

PLASTIC (WHITE)CROSSWALK BARS (CW)



RH2

REGISTERED PROFESSIONAL
ENGINEER
85045
Christopher A. Lille
OREGON
JULY 12, 2016
EXPIRES: 12/31/2024

CITY OF FLORENCE

RHODODENDRON DRIVE REALIGNMENT

SIGNAGE & PAVEMENT MARKING PLAN

ENGINEER: KAL
REVIEWED: JAB
DATE: NOV 13, 2023
DWG NO.: TM02

CLIENT: FLO
FILENAME: RHOD-P-MARKINGS.DWG
PLOT DATE: NOV 13, 2023
SHEET NO.: 67

LOG NO.: 1013-113

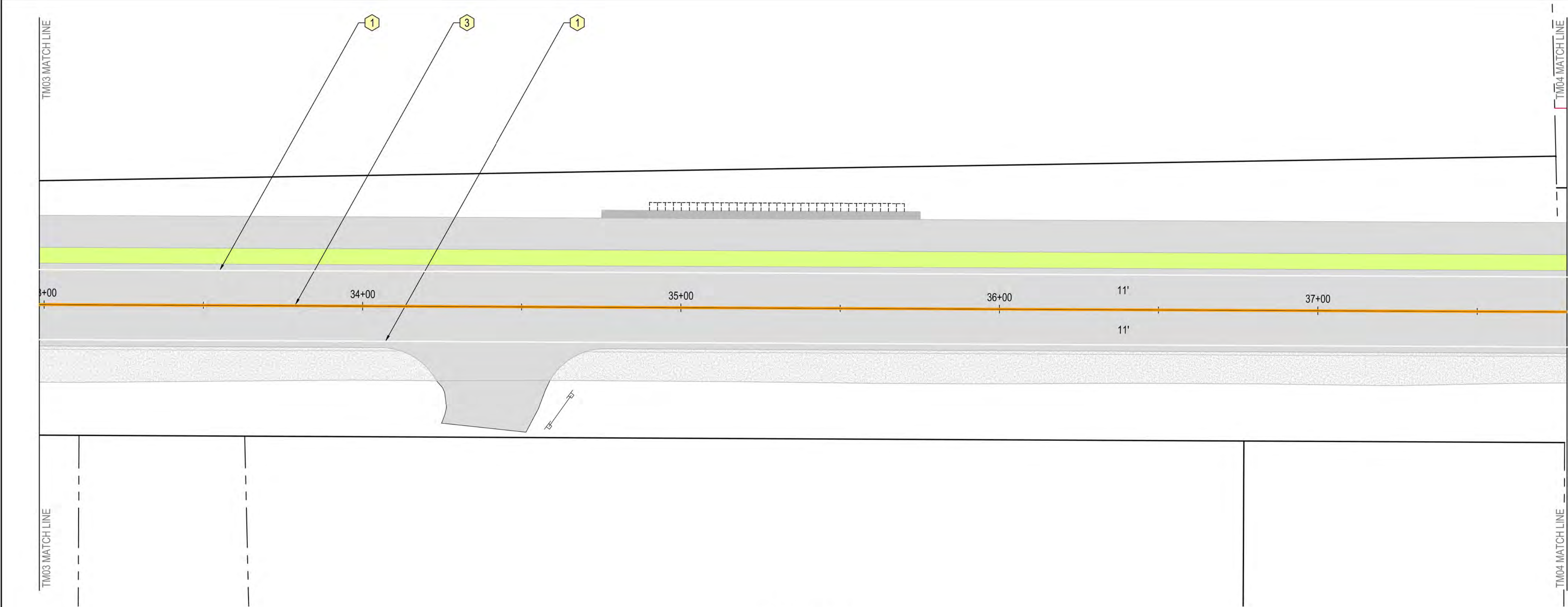
REVISIONS

NO.	DATE	DESCRIPTION	BY	REVIEW

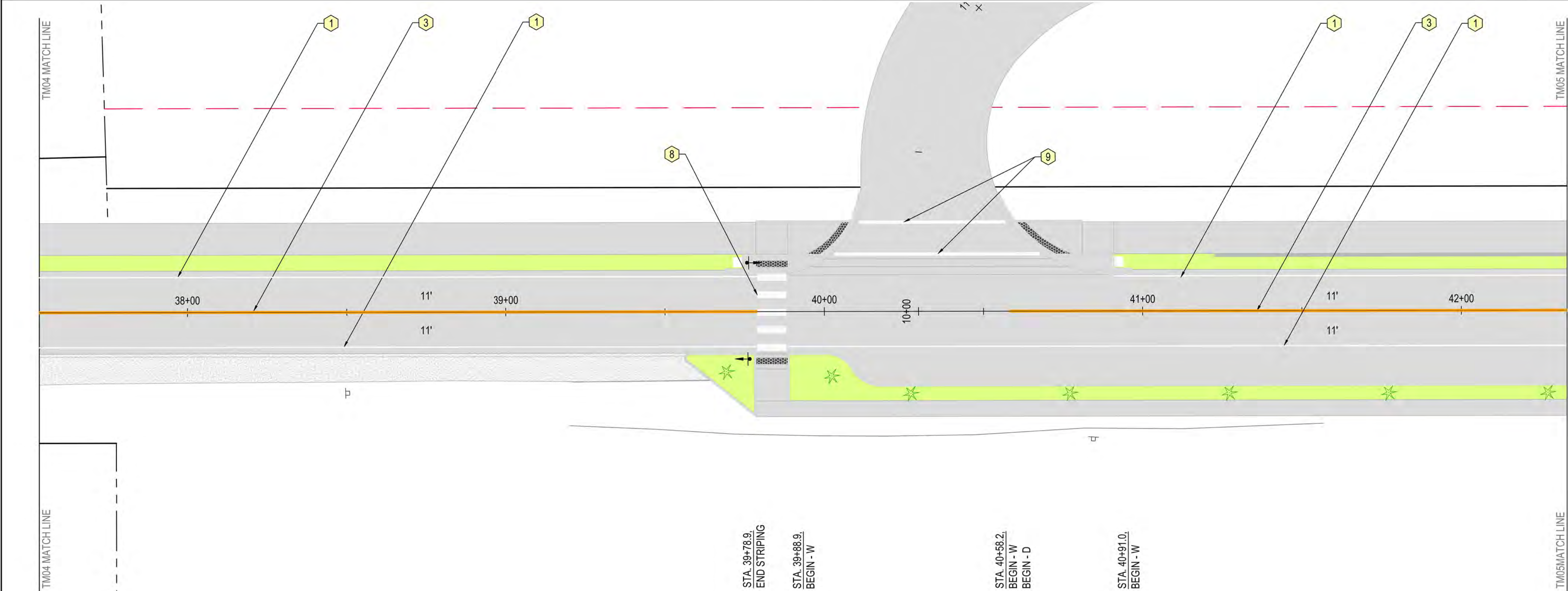
SCALE: SHOWN

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

71



PLAN VIEW
1" = 20'



PLAN VIEW
1" = 20'



STA. 39+78.9
END STRIPING

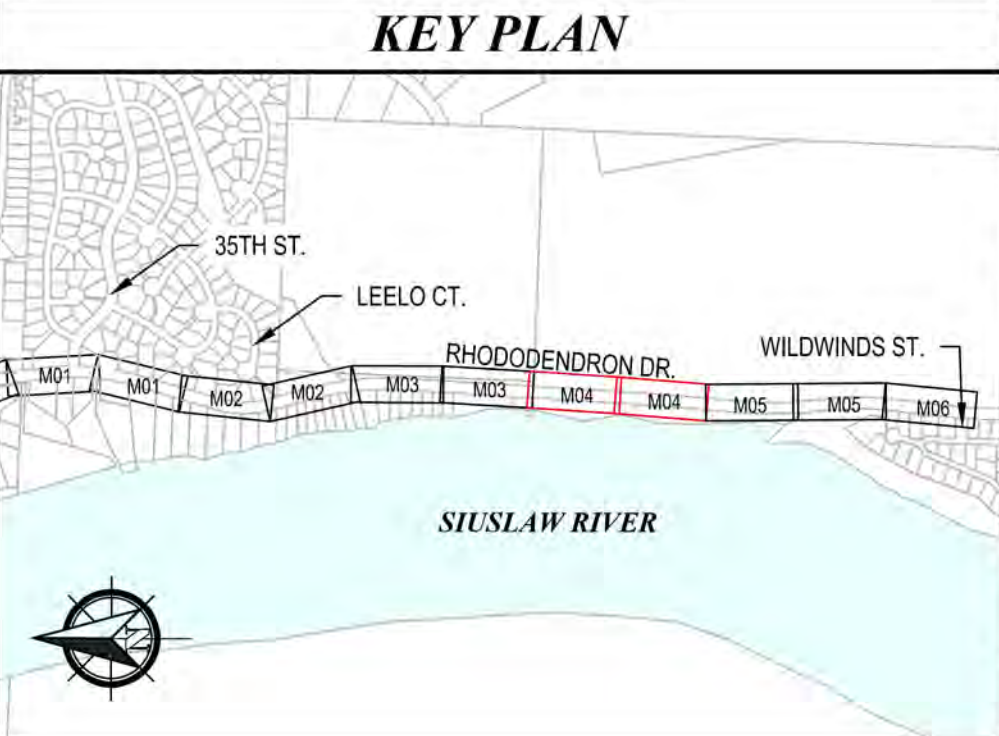
STA. 39+88.9
BEGIN - W

STA. 40+58.2
BEGIN - W
BEGIN - D

STA. 40+91.0
BEGIN - W

- GENERAL NOTES**
- 1) THIS PLAN IS FOR PAVEMENT MARKINGS AND SIGNING ONLY, SEE ROADWAY AND UTILITY PLANS FOR PROPOSED SITE WORK.
 - 2) DIMENSIONS ARE APPROXIMATE. ALL PAVEMENT MARKINGS SHALL BE APPROVED IN THE FIELD BY THE CITY PRIOR TO INSTALLATION. FOR RE-STRIPING CONDITIONS, IF DIMENSIONS FOR EXISTING STRIPING VARY FROM THOSE SHOWN ON PLANS, THE CONTRACTOR WILL PROVIDE THE CITY THE EXISTING DIMENSIONS AND RECEIVE APPROVAL PRIOR TO RE-STRIPING.
 - 3) REMOVE ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THIS PLAN.
 - 4) EXISTING SIGNS NOT SHOWN ON THESE PLANS ARE TO REMAIN IN PLACE, UNLESS OTHERWISE DIRECTED BY THE CITY.

- STRIPING NOTES**
- | | | |
|---|------------------|------------------------------|
| 1 | PLASTIC (WHITE) | 4" EDGE LINE (W) |
| 2 | PLASTIC (WHITE) | 8" EDGE LINE (W-2) |
| 3 | PLASTIC (YELLOW) | NARROW DOUBLE NO PASS (ND) |
| 4 | PLASTIC (YELLOW) | 4" YELLOW LINE (Y) |
| 5 | PLASTIC (WHITE) | 1' STOP BAR (S) |
| 6 | PLASTIC (WHITE) | LEFT TURN ARROW |
| 7 | PLASTIC (WHITE) | STRAIGHT ARROW |
| 8 | PLASTIC (WHITE) | CONTINENTAL C/W BARS (CW-SC) |
| 9 | PLASTIC (WHITE) | CROSSWALK BARS (CW) |



REGISTERED PROFESSIONAL
ENGINEER
85045
Chris A. Adler
OREGON
JULY 12, 2016
KRYSTOPHER A. LILLE
EXPIRES: 12/31/2024

CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

SIGNAGE & PAVEMENT MARKING PLAN

NO.	DATE	DESCRIPTION	BY	REVIEW

ENGINEER: KAL
REVIEWED: JAB

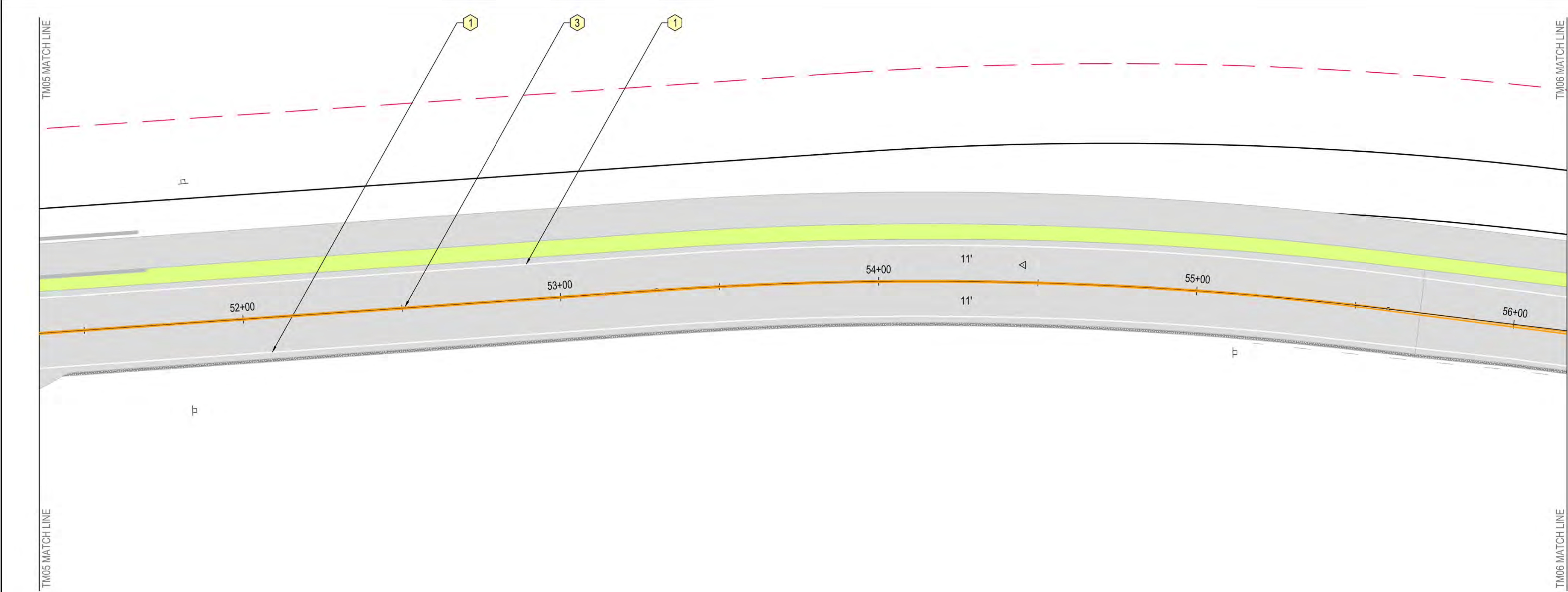
DATE: Nov 13, 2023
PLOT DATE: Nov 13, 2023

CLIENT: FLO
FILE NAME: RHOD-P-MARKINGS.DWG
JOB NO.: 1013-113

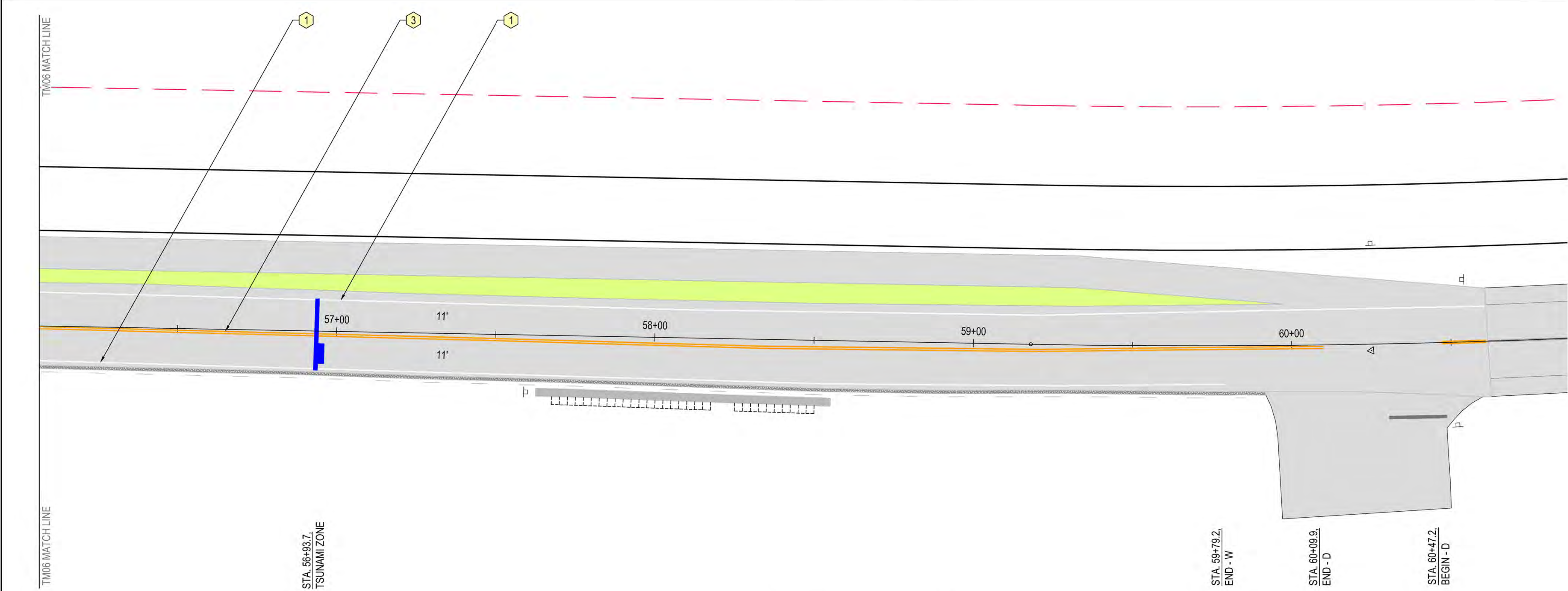
SCALE: SHOWN

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

DWG NO.: TM04
SHEET NO.: 69
71



PLAN VIEW
1" = 20'

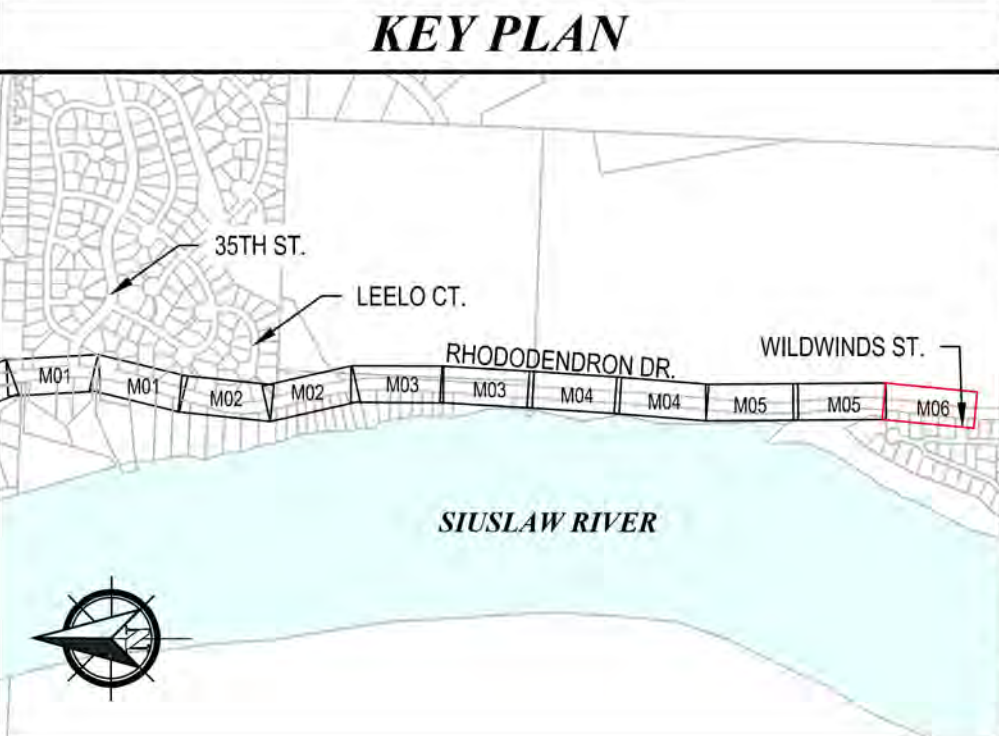


PLAN VIEW
1" = 20'



- GENERAL NOTES**
- 1) THIS PLAN IS FOR PAVEMENT MARKINGS AND SIGNING ONLY, SEE ROADWAY AND UTILITY PLANS FOR PROPOSED SITE WORK.
 - 2) DIMENSIONS ARE APPROXIMATE. ALL PAVEMENT MARKINGS SHALL BE APPROVED IN THE FIELD BY THE CITY PRIOR TO INSTALLATION. FOR RE-STRIPE CONDITIONS, IF DIMENSIONS FOR EXISTING STRIPING VARY FROM THOSE SHOWN ON PLANS, THE CONTRACTOR WILL PROVIDE THE CITY THE EXISTING DIMENSIONS AND RECEIVE APPROVAL PRIOR TO RE-STRIPING.
 - 3) REMOVE ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THIS PLAN.
 - 4) EXISTING SIGNS NOT SHOWN ON THESE PLANS ARE TO REMAIN IN PLACE, UNLESS OTHERWISE DIRECTED BY THE CITY.

- STRIPING NOTES**
- | | | |
|---|------------------|------------------------------|
| 1 | PLASTIC (WHITE) | 4" EDGE LINE (W) |
| 2 | PLASTIC (WHITE) | 8" EDGE LINE (W-2) |
| 3 | PLASTIC (YELLOW) | NARROW DOUBLE NO PASS (ND) |
| 4 | PLASTIC (YELLOW) | 4" YELLOW LINE (Y) |
| 5 | PLASTIC (WHITE) | 1' STOP BAR (S) |
| 6 | PLASTIC (WHITE) | LEFT TURN ARROW |
| 7 | PLASTIC (WHITE) | STRAIGHT ARROW |
| 8 | PLASTIC (WHITE) | CONTINENTAL C/W BARS (CW-SC) |
| 9 | PLASTIC (WHITE) | CROSSWALK BARS (CW) |



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85045
JULY 12, 2016
KRYSTOPHERA LILLE
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CITY OF FLORENCE
RHODODENDRON DRIVE REALIGNMENT

SIGNAGE & PAVEMENT MARKING PLAN

ENGINEER	DATE	REVISION	NO.	DATE	DESCRIPTION	BY	REVIEW
KAL	Nov 13, 2023						
JAB	Nov 13, 2023						

SCALE: SHOWN
0' 1' 2'
DRAWING IS FULL SCALE WHEN
BAR MEASURES 2"

DWG NO.: **TM06** SHEET NO.: **71**