

CITY OF DE PERE

PROJECT

23-04

KINGSTON PRESERVE UTILITY AND STREET CONSTRUCTION

**BID DATE:
MARCH 2, 2023
@ 1:00 PM**

Bid documents, including plans and specifications, are available for download at www.QuestCDN.com. The QuestCDN website can also be accessed through the City website at www.deperewi.gov/projects or by pressing the *Projects* icon at the bottom of any City website page. Download cost is \$15 for each contract. Bidders will be charged an additional fee of \$30 to submit a bid electronically. Bidding documents may be viewed on the QuestCDN website or at the Municipal Service Center, 925 S. Sixth Street, De Pere, WI 54115.

Bid Tabs must be verified by staff prior to posting and will be available for viewing on the website within 7 days following the bid opening. Award information will be pending until approved by the Common Council.

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CITY OF DE PERE

ADVERTISEMENT TO BID

PROJECT 23-04

KINGSTON PRESERVE UTILITY AND STREET CONSTRUCTION

Online bids will be received and accepted for Project 23-04 Kingston Preserve Utility and Street Construction via the online electronic bidding service through QuestCDN.com, until 1:00 PM, Thursday, March 2, 2023, at which time they will be publicly accepted, displayed and read aloud.

Project 23-04 for which proposals are being sought includes the following approximate quantities:

- 1,800 LF New Sanitary Sewer (8-inch) and Associated Appurtenances
- 1,800 LF New Water Main (8-inch) and Associated Appurtenances
- 2,000 LF New Storm Sewer (8-inch to 24-inch) and Associated Appurtenances
- 7,350 CY Pond Unclassified Excavation
- 2,500 CY Street Unclassified Excavation
- 6,400 SY Crushed Aggregate Base Course – 15-Inch Depth
- 3,500 LF New Concrete Curb and Gutter
- 500 SY New Concrete Sidewalk (4-Inch to 6-Inch Depth)
- 300 SY Remove and Replace 9-Inch Doweled Concrete Pavement
- 4,000 Tons of Asphaltic Concrete Pavement Placement
- Erosion Control & Restoration
- Traffic Control

Complete digital project bidding documents are available for viewing and/or downloading at www.QuestCDN.com or may be examined at the office of the Director of Public Works. Digital plan documents may be downloaded for \$15 by inputting Quest project #8350102 on Quest's Project Search page. Project documents must be downloaded from QuestCDN which will add your company to the Planholder List and allow access to vBid online bidding for the submittal of your bid. Bidders will be charged an additional fee of \$30 to submit a bid electronically. The QuestCDN website can also be accessed through the City website at www.deperewi.gov/projects or by pressing the *Projects* icon at the bottom of any City website page. Contact QuestCDN Customer Support at 952-233-1632 or info@questcdn.com for assistance in membership registration, downloading digital project information and vBid online bid submittal questions.

Each proposal shall be accompanied by a bid bond in an amount equal to five percent (5%) of the bid, payable to the City of De Pere, as a guarantee that if the bid is accepted, the bidder will execute a contract and furnish a contract bond as set forth in the General Conditions of the City of De Pere. In case the bidder

Project 23-04
Kingston Preserve Utility and Street Construction

City of De Pere

fails to file such contract and bond, the amount of the bid bond shall be forfeited to the City of De Pere as liquidated damages.

The letting of the contract is subject to the provisions of the following Wisconsin Statutes:

Section 62.15 regarding Public Works.

Section 66.0901(3) regarding Prequalification of Contractor.

Each bidder shall pre-qualify by submitting proof of responsibility on forms furnished by the Director of Public Works. Such forms shall be filed with the Director of Public Works no later than 4:00 PM, Monday, February 27, 2023. Prospective bidders who have previously submitted such forms subsequent to January 1, 2023 will not be required to separately submit such form for this project.

The City of De Pere reserves the right to reject any or all bids, to waive any informalities in bidding and to accept any proposal which the Common Council deems most favorable to the interest of the City of De Pere.

Dated this 10th day of February 2023.

Board of Public Works
City of De Pere
Eric Rakers, P.E.
City Engineer

Project 23-04

SECTION 00 21 13

INSTRUCTIONS TO BIDDERS

ARTICLE 1 – DEFINED TERMS

- 1.1 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
- None

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

- 2.1 Complete sets of the Bidding documents in the number and for the deposit sum, if any, stated in the Advertisement to Bid may be obtained as stated in the Advertisement for bids.
- 2.2 Complete sets of Bidding Documents shall be used in preparing Bids; Owner does not assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.3 Owner, in providing the Bidding Documents on the terms stated in the Advertisement for Bids, does so only for the purpose of obtaining Bids for the Work and does not confer a license or grant for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

- 3.1 In accordance with Section 66.0901(3), each bidder shall pre-qualify by submitting proof of responsibility on forms furnished by the Director of Public Works. Such forms shall be filed with the Director of Public Works as stated in the Advertisement for Bids. Prospective bidders who have previously submitted such forms after January 1st of this year will not be required to separately submit such form for this project.

ARTICLE 4 – EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA AND SITE

- 4.1 Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated conditions appear in the General Conditions.
- 4.2 Underground Facilities
- A. Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

4.3 Subsurface and Physical Conditions

- A. The technical data includes:
 - 1. Those reports known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site; and
 - 2. Those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except underground Facilities).
 - 3. No reports of explorations or tests of subsurface conditions at or contiguous to the Site, or drawings of physical conditions relating to existing surface or subsurface structures at the Site, are known to Owner.
- B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the accuracy of the “technical data” contained in such reports and drawings, but such reports and drawings are not Contract Documents. Contractor may not rely upon or make any claim against Owner, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
 - 1. the completeness of such reports and drawings for Contractor’s purposes, including but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
 - 2. Other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 - 3. Any Contractor interpretation of or conclusion drawn from any “technical data” or any such other data, interpretations, opinions, or information.

4.4 On request, Owner will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with all applicable Laws and Regulations relative to excavation and utility locates.

4.5 Reference is made to Section 01 10 00: Summary of Work, for work that will be completed and for the identification of the general nature of other work that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) that relates to the Work contemplated by these Bidding Documents. On request, Owner will provide to each Bidder for examination access to or copies of Contract Documents (other portions thereof related to price) for such other work.

4.6 It is the responsibility of each Bidder before submitting a Bid to:

- A. Examine and carefully study the Bidding Documents, the other related data identified in the Bidding Documents, and any Addenda;
- B. Visit the Site and become familiar with and satisfy Bidder as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;

- C. Become familiar with and satisfy Bidder as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work;
 - D. Obtain and carefully study (or accept consequences of not doing so) all examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto;
 - E. Agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents;
 - F. Become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
 - G. Correlate the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents;
 - H. Promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies, that bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder; and
 - I. Determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.
- 4.7 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Bidding Documents and applying any specific means, methods, techniques, sequences, and, procedures of construction that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents and the written resolutions thereof by Engineer are acceptable to Bidder, and that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

ARTICLE 5 – SITE AND OTHER AREAS

- 5.1 The Site is identified in the Bidding Documents. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by Owner unless otherwise provided in

the Bidding Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor.

ARTICLE 6 – INTERPRETATIONS AND ADDENDA

- 6.1 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Bidding Documents. Questions received less than ten days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 6.2 Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by Owner and Engineer.

ARTICLE 7 – BID SECURITY

- 7.1 A Bid shall be accompanied by Bid security made payable to Owner in an amount of five percent (5%) of Bidder's maximum Bid price and in the form of a certified check or bank money order or Bid bond (on the form attached) issued by a surety meeting the requirements of the General Conditions. Submittal of a Bid Bond on a form other than the Bid Bond form included in the Bidding Documents may be cause for rejection of Bid. The fully executed bid bond must be uploaded into QuestCDN. If the bidder elects to furnish bid security other than a bid bond, the bid security must be submitted in a sealed envelope enclosed in a separate package plainly marked on the outside with the notation "BID SECURITY" along with the project number and name and addressed to the Board of Public Works of the City of De Pere, Municipal Service Center, 925 S. Sixth Street, De Pere, WI 54115 **prior to the deadline for submission of bids.**
- 7.2 The Bid security of the Successful Bidder will be retained until such Bidder has executed the Contract documents, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within fifteen (15) days after the Notice of Award, Owner may annul the Notice of Award and the Bid security of that Bidder will be forfeited. The Bid security of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner per the General Conditions.
- 7.3 Bid security of other Bidders whom Owner believes do not have a reasonable chance of receiving the award will be returned within seven days after the Bid opening.

ARTICLE 8 – CONTRACT TIMES

- 8.1 The number of days within which, or the dates by which, Milestones are to be achieved and the

Work is to be substantially completed and ready for final payment are set forth in the Summary of Work.

ARTICLE 9 – LIQUIDATED DAMAGES

9.1 Provisions for liquidated damages are set forth in the General Conditions.

ARTICLE 10 – SUBSTITUTE AND “OR-EQUAL” ITEMS

10.1 The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or “or-equal” items. Whenever it is specified or described in the Bidding Documents that a substitute or “or-equal” item of material or equipment may be furnished or used by Contractor if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the Effective Date of the Bid Form and Summary of Work.

ARTICLE 11 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

11.1 The Bidder shall submit with the Bid to Owner a list of all such Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit a substitute, in which case apparent Successful Bidder shall submit an acceptable substitute, Bidder’s Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.

11.2 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposed to use acceptable Subcontractors, Suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner subject to revocation of such acceptance after the Effective Date of the Agreement.

11.3 Contractor shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom Contractor has reasonable objection.

ARTICLE 12 – PREPARATION OF BID

12.1 The Bid form is included with the Bidding documents.

12.2 All blanks on the Bid Form shall be completed by printing in ink or by typewrite and the Bid signed in

ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each alternative, and unit price item listed therein, or the words "No Bid," "No Change," or "Not Applicable" entered.

- 12.3 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporations shall be shown below the seal.
- 12.4 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown below the signature.
- 12.5 A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown below the signature.
- 12.6 A Bid by an individual shall show the Bidder's name and official address.
- 12.7 A Bid by a joint venture shall be executed by each joint venture in the manner indicated on the Bid Form. The official address of the joint venture shall be shown below the signature.
- 12.8 All names shall be typed or printed in ink below the signatures.
- 12.9 The Bid shall contain an acknowledgement of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 12.10 The address and telephone number for communications regarding the Bid shall be shown.
- 12.11 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the Contract. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.

ARTICLE 13 – BASIS OF BID; COMPARISON OF BIDS

13.1 Unit Price

- A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Bid Schedule.
- B. The total of all estimated prices will be the sum of the products of the estimated quantity of each item and the corresponding unit price. The final quantities and Contract Price will be determined in accord with the General Conditions.
- C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in

favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.

ARTICLE 14 – SUBMITTAL OF BID

14.1 A Bid shall be submitted no later than date and time prescribed and at place indicated in Advertisement for Bids and shall be submitted electronically using the QuestCDN online bidding vBid platform. No paper bids will be accepted.

14.2 See Bid Form for a list of documents typically required to be submitted with the Bid.

ARTICLE 15 – MODIFICATION AND WITHDRAWAL OF BID

15.1 A Bid may be modified or withdrawn by an appropriate document duly executed in the manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids.

15.2 If within 24 hours after Bids are opened, any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 16 – OPENING BIDS

16.1 Bids will be opened as indicated in the Advertisement to Bid. The bid opening can be viewed live via the GoToMeeting information shown below. An abstract of the amounts of the base bids and major alternatives, if any, will be made available to bidders after opening the bids.

The bid opening can be viewed live via GoToMeeting as follows:
Please join my meeting from your computer, tablet or smartphone.

<https://meet.goto.com/738459221>

You can also dial in using your phone.
United States (Toll Free): 1 866 899 4679
Access Code: 738-459-221

Get the app now and be ready when your first meeting starts: <https://meet.goto.com/install>

ARTICLE 17 – BIDS REMAIN SUBJECT TO ACCEPTANCE

17.1 All bids will remain subject to acceptance for the period of time stated in the General Conditions,

but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 18 – EVALUATION OF BIDS AND AWARD OF CONTRACT

- 18.1 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.
- 18.2 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.
- 18.3 In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- 18.4 In evaluating Bidders, Owner will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Supplier, and other individuals or entities proposed for those portions of the Work for which the identify of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in the Supplementary Conditions.
- 18.5 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities to perform the Work in accordance with the Contract Documents.
- 18.6 Bidder agrees to waive any claim it has or may have against the Owner and the respective employees arising out of or in connection with the administration, evaluation or recommendation of any Bid.
- 18.7 If the Contract is to be awarded, Owner will award the Contract to the lowest responsible responsive Bidder whose Bid is in the best interests of the Project.

ARTICLE 19 – CONTRACT SECURITY AND INSURANCE

- 19.1 The General Conditions set forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the executed Agreement to Owner, it shall be accompanied by such bonds and a certificate of insurance.

ARTICLE 20 – SIGNING OF AGREEMENT

- 20.1 When Owner gives a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement with the other Contract Documents which are identified in the Agreement as attached thereto. Within ten (10) days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner. Within ten (10) days thereafter, Owner shall deliver one fully signed counterpart to Successful Bidder with a complete set of Drawings with appropriate identification.

END OF SECTION

SECTION 00 41 13

CITY OF DE PERE

BID FORM

PROJECT 23-04

This bid, submitted by the undersigned Bidder to the City of De Pere, in accordance with the Advertisement to Bid, which will be received until 1:00 PM, Thursday March 2, 2023 is to furnish and deliver all materials, and to perform and do all work on the project designated per Section 01 10 00 Summary of Work.

Bidder has examined and carefully prepared the bid from the plans and specifications and has checked the same in detail before submitting said proposal or bid; and that said bidder or bidder's agents, officer or employees have not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal or bid.

Bidder has examined and carefully studied the Bidding Documents, other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged:

Addendum No.

Addendum Date

BASIS OF BID:

Bidder will complete the Work in accordance with the Contract documents for the following price(s):

As stated in the attached Unit Price Bid Schedule.

Unit Prices have been computed in accordance with the General Conditions.

Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

TOTAL BID PRICE: \$_____

ATTACHMENTS TO THIS BID

The following documents are submitted with and made a condition of this Bid:

- A. Required Bid Security
- B. Unit Price Bid Schedule (Section 00 41 43)
- C. Proposed Products Form (Section 00 43 33)
- D. Tabulation of Subcontractors (Section 00 43 36)

BID SUBMITTAL

This Bid is submitted by _____ of _____,

The Bidder, being duly sworn, does dispose that they are an authorized representative of

Bidder, if Bidder is:

An Individual

Name (typed or printed): _____

By: _____
(Individual's signature)

Doing business as: _____

A Partnership

Partnership Name: _____

By: _____
(Signature of general partner – attach evidence of authority to sign)

Name (typed or printed): _____

A Corporation

Corporation Name: _____

State of Incorporation: _____

Type (General Business, Professional, Service, Limited Liability): _____

By: _____
(Signature – attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(CORPORATE SEAL)

Attest _____

Date of Qualification to do business in Wisconsin is ____/____/____.

Joint Venture

Name of Joint Venture: _____

First Joint Venturer Name: _____ (SEAL)

By: _____

(Signature of first joint venture partner – attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Second Joint Venturer Name: _____ (SEAL)

By: _____

(Signature of second joint venture partner – attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. Manner of signing for each individual, partnership, and corporation that is a party to joint venture should be in manner indicated above.)

Bidder's Business Address _____

Phone No. _____ Fax No. _____

E-mail _____

SUBMITTED on _____, 20____.

State Contractor License No. _____ (if applicable)

SECTION 00 41 43

CITY OF DE PERE

PROJECT 23-04

BID SCHEDULE – UNIT PRICE

ITEM	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT BID
SANITARY SEWER					
SS-01	Provide 8" PVC Sanitary Sewer (Granular Backfill)	LF	1,600	\$	\$
SS-02	Provide 4" PVC Sanitary Sewer Lateral	LF	1,650	\$	\$
SS-03	Provide Sanitary Sewer Risers	LF	55	\$	\$
SS-04	Provide 8"x4" Sanitary Wye	EA	35	\$	\$
SS-05	Provide 4' Diameter Sanitary Sewer Manhole	VF	115	\$	\$
SS-06	Core Drill Sanitary Manhole	EA	1	\$	\$
STORM SEWER					
ST-01	Provide 36" RCP Class III or PP Storm Sewer (Natural Backfill)	LF	205	\$	\$
ST-02	Provide 24" PVC, RCP Class III, or PP Storm Sewer (Granular Backfill)	LF	270	\$	\$
ST-03	Provide 24" PVC, RCP Class III, or PP Storm Sewer (Natural Backfill)	LF	65	\$	\$
ST-04	Provide 18" PVC, RCP Class III, or PP Storm Sewer (Granular Backfill)	LF	200	\$	\$
ST-05	Provide 18" PVC, RCP Class III, or PP Storm Sewer (Natural Backfill)	LF	60	\$	\$
ST-06	Provide 15" PVC, RCP Class III, or PP Storm Sewer (Granular Backfill)	LF	570	\$	\$
ST-07	Provide 12" PVC, RCP Class III, or PP Storm Sewer (Granular Backfill)	LF	650	\$	\$
ST-08	Provide 12" RCP Class V Storm Sewer (Granular Backfill)	LF	30	\$	\$
ST-09	Provide 12" PVC, RCP Class III, or PP Storm Sewer (Natural Backfill)	LF	200	\$	\$

Project 23-04
Kingston Preserve Utility and Street Construction

City of De Pere

ITEM	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT BID
STORM SEWER CONTINUED					
ST-10	Provide 8" PVC Storm Sewer (Granular Backfill)	LF	80	\$	\$
ST-11	Provide 6" PVC Storm Sewer Lateral	LF	1,600	\$	\$
ST-12	Provide 24"x6" Storm Branch or Inserta Tee	EA	1	\$	\$
ST-13	Provide 18"x6" Storm Branch or Inserta Tee	EA	3	\$	\$
ST-14	Provide 15"x6" Storm Branch or Inserta Tee	EA	11	\$	\$
ST-15	Provide 12"x6" Storm Branch or Inserta Tee	EA	13	\$	\$
ST-16	Provide 8"x6" Storm Branch or Inserta Tee	EA	3	\$	\$
ST-17	Provide 5' Diameter Storm Manhole	VF	16	\$	\$
ST-18	Provide 4' Diameter Storm Manhole	VF	70	\$	\$
ST-19	Provide Type B Inlet	EA	10	\$	\$
ST-20	Provide Type A (30" Diameter) Field Inlet	EA	2	\$	\$
ST-21	Remove and Replace Type A (30" Diameter) Field Inlet	EA	1	\$	\$
ST-22	Relocate or Provide 36" RCP Endwall	EA	6	\$	\$
ST-23	Provide 24" RCP Endwall	EA	1	\$	\$
ST-24	Provide 18" RCP Endwall	EA	1	\$	\$
ST-25	Provide Pond Discharge Structure	EA	1	\$	\$
ST-26	Daylight Storm Lateral	EA	10	\$	\$
ST-27	Abandon/Remove Existing Storm Sewer Appurtenances	LS	1	\$	\$

Project 23-04
Kingston Preserve Utility and Street Construction

City of De Pere

ITEM	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT BID
WATER MAIN					
W-01	Provide 8" PVC Water Main (Granular Backfill)	LF	420	\$	\$
W-02	Provide 8" PVC Water Main (Natural Backfill)	LF	1,400	\$	\$
W-03	Provide 1" HDPE Water Service (Open Cut)	LF	1,750	\$	\$
W-04	Provide 1" Corporation and Curb Stop	EA	35	\$	\$
W-05	Provide 1" HDPE Water Service (50 LF Coiled) w/Plug	EA	35	\$	\$
W-06	Provide 8" Gate Valve	EA	2	\$	\$
W-07	Provide Connection to Existing Water Main 10"x8" Tapping Tee and Valve or Cut In Tee and Valve	EA	1	\$	\$
W-08	Provide Hydrant (6.5' Bury)	EA	4	\$	\$
W-09	Provide 6" PVC Hydrant Lead	LF	20	\$	\$
W-10	Provide Water Main Offset	EA	3	\$	\$
STREET AND DRAINAGE					
SD-01	Provide Clearing and Grubbing	LS	1	\$	\$
SD-02	Site Stripping (Located in Fill Areas)	SY	1,900	\$	\$
SD-03	Unclassified Excavation	CY	1,950	\$	\$
SD-04	Unclassified Excavation (Pond)	CY	7,400	\$	\$
SD-05	Backyard and Sideyard Swale Ditching	SY	950	\$	\$
SD-06	Provide ¾" Crushed Aggregate Base Course (4" Depth)	SY	700	\$	\$
SD-07	Provide ¾" Crushed Aggregate Base Course (6" Depth)	SY	110	\$	\$
SD-08	Provide 1-¼" Crushed Aggregate Base Course (15" Depth)	SY	6,600	\$	\$

Project 23-04
Kingston Preserve Utility and Street Construction

City of De Pere

ITEM	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT BID
STREET AND DRAINAGE CONTINUED					
SD-09	Provide Asphaltic Concrete Pavement Type 4 LT 58-28 S 1-¾" Upper Layer	TON	600	\$	\$
SD-10	Provide Asphaltic Concrete Pavement Type 3 LT 58-28 S, 2-¼" Lower Layer	TON	750	\$	\$
SD-11	Provide 24" Concrete Curb and Gutter	LF	3,450	\$	\$
SD-12	Remove and Replace 9-Inch Concrete Pavement	SY	320	\$	\$
SD-13	Provide 8" Concrete Sidewalk, CBU Pad, and Driveway	SY	100	\$	\$
SD-14	Provide 6" Concrete Sidewalk, Ramp, and Driveway	SY	70	\$	\$
SD-15	Provide 4" Concrete Sidewalk	SY	520	\$	\$
SD-16	Provide #4 Reinforcement Bars for Curb and Sidewalk	LF	2,900	\$	\$
SD-17	Drilled Tie Bars (Existing Sidewalk, Curb and Gutter)	EA	8	\$	\$
SD-18	Drilled Dowel Bars	EA	110	\$	\$
SD-19	Drilled Tie Bars (Concrete Pavement)	EA	40	\$	\$
SD-20	Provide Detectable Warning Field (Natural Patina)	EA	12	\$	\$
SD-21	Landscaping – Topsoil, Seed, Fertilizer and Mulch	SY	18,000	\$	\$
SD-22	Pond Landscaping - Topsoil, Wet Meadow Seeding with WisDOT Seed Mix No. 60 and Fertilizer	SY	2,000	\$	\$
SPECIAL CONSTRUCTION					
SC-01	Pipe Foundation Stabilization	CY	50	\$	\$
SC-02	Provide Silt Fence	LF	1,500	\$	\$
SC-03	Provide Erosion Bales	EA	20	\$	\$
SC-04	Inlet Protection Type A	EA	3	\$	\$

Project 23-04
Kingston Preserve Utility and Street Construction

City of De Pere

ITEM	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT BID
SPECIAL CONSTRUCTION CONTINUED					
SC-05	Inlet Protection Type D	EA	14	\$	\$
SC-06	Erosion Control Revegetation Mat (Class I)	SY	6,700	\$	\$
SC-07	Rip Rap Erosion Control	SY	440	\$	\$
SC-08	Tracking Pad	EA	1	\$	\$
SC-09	Polystyrene Insulation Board	LF	90	\$	\$
SC-10	Install Cluster Mailbox Units	EA	2	\$	\$
SC-11	Traffic Control	LS	1	\$	\$
SC-12	Traffic Control Detour Route	LS	1	\$	\$
TOTAL AMOUNT BID					\$

SECTION 00 43 13

CITY OF DE PERE

BID BOND

KNOW ALL MEN BY THESE PRESENTS: That _____,

as Principal, hereinafter called Principal, and _____,

as Surety, hereinafter called Surety, are held and firmly bound unto the City of De Pere, a municipal corporation of the State of Wisconsin, as Obligee, hereinafter called City, in the amount of _____ dollars (\$_____) for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presence.

WHEREAS, Principal has made a proposal to the City for furnishing all materials, labor, tools, equipment and incidentals necessary to complete the work of Project 23-04 in accordance with drawings and specifications prepared by the Director of Public Works of said City, which proposal is by reference made a part hereof, and is hereinafter referred to as the BID.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Principal shall be awarded the contract for said project and Principal shall enter into a contract in accordance with the BID, then this obligation shall be null and void; otherwise it shall remain in full force and effect, provided that:

1. The liability of Surety shall in no event exceed the penalty of this bond.
2. Any suits at law or proceedings, in equity brought or to be brought against Surety to recover any claim hereunder shall be executed within six (6) months from the date of this instrument.

Signed and sealed this _____ day of _____, 20_____.

In the presence of:

WITNESS

PRINCIPAL (SEAL)

WITNESS

SURETY (SEAL)

SECTION 00 43 33

PROPOSED PRODUCTS FORM

The following is a list of material, type or model numbers and manufacturers used in the preparation of this proposal and to be used on this project:

<u>ITEM</u>	<u>MATERIAL</u>	<u>SUPPLIER</u>
Water main	PVC	
Valves		
Hydrants		
Inlets / Catch Basins	RCP	
Manholes	RCP	
Sanitary Sewer	PVC	
Storm Sewer (PVC) (List Proposed Size)		
Storm Sewer (RCP) (List Proposed Size)		
Storm Sewer (PP) (List Proposed Size)		

SECTION 00 43 36

TABULATION OF SUBCONTRACTORS

The following information is submitted which gives the name, business address, and portion of work for each subcontractor that will be used in the work if the bidder is awarded the contract, and no subcontractor doing work in excess of one-half of one percent of the total amount of the bid and who is not listed will be used without the written approval of the Engineer. Additional numbered pages outlining this portion of the proposal may be attached to this page.

<u>PORTION OF WORK</u>	<u>BUSINESS NAME</u>	<u>BUSINESS ADDRESS</u>
Concrete Pavement		
Asphaltic Concrete Pavement		
Concrete Driveway, Sidewalk, and Curb and Gutter		
Utility Work		
Excavation		
Traffic Control		
Landscape Restoration		

SECTION 00 51 00

NOTICE OF AWARD

(Contractor)
(Contractor Name)
(Address)
(Address)

Project Description: 23-04 Kingston Preserve Utility and Street Construction

The City has considered the proposal submitted by you dated (BID DATE) for the above-described project in response to its Advertisement for Bids dated February 10, 2023 and February 17, 2023.

You are hereby notified that the Common Council of the City of De Pere has accepted your bid of (Contract Amount \$_____.00).

You are required to execute the Contract and furnish the required Performance Bond, Payment Bond and Certificates of Insurance within ten (10) calendar days from the date of this notice to you.

If you fail to execute said Agreement and to furnish said bonds within ten (10) days from the date of this notice, said City will be entitled to consider all your rights arising out of the City's acceptance of your bid as abandoned and as a forfeiture of your Bid Bond. The City will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the City.

Dated this _____ day of _____ 2023.

DEPARTMENT OF PUBLIC WORKS

BY: Eric P. Rakers, P.E.
City Engineer

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by:

_____, this the _____ day of _____, 20____

By: _____

Title: _____

SECTION 00 52 13

CONTRACT

This Contract, made and entered into this day _____ (date to be affixed by City), by and between (Contractor Name), hereinafter called Contractor, and the City of De Pere, a municipal corporation of the State of Wisconsin, hereinafter called City.

WITNESSETH: That, in consideration of the covenants and agreements herein contained, to be performed by the parties hereto, and of the payments hereinafter agreed to be made, it is mutually agreed as follows:

ARTICLE I - SCOPE OF WORK

The Contractor shall furnish all materials and all equipment and labor necessary, and perform all work shown on the drawings and described in the specifications for the project entitled Project 23-04 Kingston Preserve Utility and Street Construction, all in accordance with the requirements and provisions of the following documents, which are hereby made a part of this Contract:

- (a) Advertisement for Bids, dated February 10, 2023 and February 17, 2023.
- (b) Drawings designated for Project 23-04 Kingston Preserve Utility and Street Construction dated February 10, 2023.
- (c) City of De Pere 2022 Construction Specifications.
- (d) Special Provisions dated February 10, 2023.
- (e) Proposal submitted by (Contractor Name) dated Bid Date.
- (f) Addenda No. dated

ARTICLE II - TIME OF COMPLETION

- (a) The work to be performed under the Contract shall be commenced within (number spelled out) (__) calendar days after receipt of written notice to proceed. The work shall be completed within (Number spelled out) (__) calendar days) or (specific calendar dates) after receipt of Notice to Proceed.
- (b) Time is of the essence with respect to the date of completion herein above stated. Failure to complete the work within the number of calendar days stated in this Article, or interim dates included in the work sequence in Section 01 10 00, Summary of Work, including any extensions granted thereto, shall entitle the City to deduct from the monies due the Contractor an amount equal to Update based on 00 70 00 - General Conditions (Page 27)(\$) per day for each calendar day of delay in the completion of the work. Such amount shall be considered and treated not as a penalty but as liquidated damages, which the City will sustain, by failure of the Contractor to complete the work within the time stated.

ARTICLE III - PAYMENT

- (a) The Contract Sum. The City shall pay to the Contractor for the performance of the Contract the amounts determined for the total number of each of the following units of work completed at the unit price stated thereafter. The number of units contained in this schedule is approximate only, and the final payment shall be made for the actual number of units that are incorporated in or made necessary by the work covered by the Contract.
- (b) Progress Payments. The City shall make payments on account of the Contract as follows:
1. On not later than the fourth Friday of every month the Contractor shall present to the City an invoice covering an estimate of the amount and proportionate value of the work done as verified by the City under each item of work that has been completed from the start of the job up to and including the fourth Friday of the preceding month, and the value of the work so completed determined in accordance with the schedule of unit prices for such items, together with such supporting evidence as may be required. This invoice shall also include an allowance for the cost of such materials and equipment required in the permanent work as have been delivered to the site but not as yet incorporated in the work.
 2. On not later than the third week of the following month, the City shall, after deducting previous payments made, pay to the Contractor 95% of the amount of the approved invoice, retaining 5% of the estimate of work done until 50% of the work has been completed. At 50% completion of the work, the previous retainage shall not yet be paid, but further partial payments shall be made in full to the contractor without additional retainage being taken unless the engineer certifies that the work is not proceeding satisfactorily. If the work is not proceeding satisfactorily, additional amounts may be retained. After substantial completion, an amount retained may be paid to the contractor, keeping retained only such amount as is needed for the remaining work.
 3. The Contractor shall notify the City in writing when all work under this Contract has been completed. Upon receipt of such notice the City shall, within a reasonable time, make the final inspection and issue a final certificate stating that the work provided for in this Contract has been completed and is accepted under the terms and conditions thereof, and that the entire balance due the Contractor as noted in said final certificate is due and payable. Before issuance of the final certificate the Contractor shall submit evidence satisfactory to the City that payrolls, material bills, and other indebtedness connected with the work under this Contract have been paid. The City shall make final payment as soon after issuance of the final certificate as practicable.

ARTICLE IV – CONTRACT DOCUMENTS

(a) Contents

1. The Contract documents consist of the following:
 - a. This Contract (pages 00 52 13-1 to 0052-13-3, inclusive).
 - b. Payment bond (pages 00 61 13-1 to 00 61 13-2, inclusive).
 - c. Performance bond (page 00 61 16-1).
 - d. General Conditions (pages 00 70 00-1 to 00 70 00-27, inclusive).

- e. Specifications as listed in the table of contents of the Project Manual.
 - f. Drawings consisting of ____ sheets with each sheet bearing the following general title: ____ [or] the Drawings listed on attached sheet index.
 - g. Addenda (numbers ____ to ____ inclusive), dated ____.
 - h. Exhibits to this Agreement (enumerated as follows):
 - 1) Contractor's Bid (pages 00 41 13-1 to 00 41 13-3, inclusive).
 - 2) Bid Schedule – Unit Prices (Pages 00 41 43-1 to 00 41 43-, inclusive).
 - 3) Proposed Products Form (Page 00 43 33-1).
 - 4) Tabulation of Subcontractors (page 00 43 36-1).
 - 5) Documentation submitted by Contractor prior to Notice of Award (00 51 00-1).
 - i. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
 - 1) Notice to Proceed (Page 00 55 00-1).
 - 2) Change Orders.
2. The documents listed in Paragraph (a) Contents, are attached to this Agreement (except as expressly noted otherwise above).
3. There are no Contract Documents other than those listed above in this Article IV.

IN WITNESS WHEREOF, the parties hereto have executed this Contract, the day and year first written above.

(WITNESS) _____ (CONTRACTOR) (SEAL)

(WITNESS) BY: _____

(TITLE)

BY: _____

(TITLE)

CITY OF DE PERE (SEAL)

Approved as to Form By: _____ (City Attorney)

Sufficient funds are available to provide for the payment of this obligation.

(COMPTROLLER)

BY: _____
(MAYOR)

BY: _____
(CITY CLERK)

SECTION 00 55 00

NOTICE TO PROCEED

Date: _____

(CONTRACTOR NAME)

(ADDRESS)

(ADDRESS)

Project Description: 23-04 Kingston Preserve Utility and Street Construction

You are hereby notified to commence work in accordance with the CONTRACT dated _____, within ten (10) days of this Notice. All work under this contract shall be completed within _____ (NUMBER IN WORDS) (___#) consecutive days from the start of construction or _____ (DATE) whichever comes first.

Department of Public Works

By: Eric P. Rakers, P.E.
Title: City Engineer

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by

_____, this _____ day of _____, 20____.
Company Name

Signature

BY: _____
Printed Name

TITLE: _____

SECTION 00 61 13

CITY OF DE PERE

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: That (CONTRACTOR NAME), as Principal, hereinafter called Contractor, and _____, as Surety, hereinafter called Surety, are held and firmly bound unto the City of De Pere, a municipal corporation of the State of Wisconsin, as Obligee, hereinafter called the City, for the use and benefit of claimants as herein below defined in the amount _____ (CONTRACT AMT. SPELLED OUT) (\$) for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by written agreement dated _____ (date to be affixed by City) entered into a contract with City for Project 23-04, in accordance with drawings and specifications prepared by the Director of Public Works of said City, which contract is by reference made a part hereof, and is hereinafter referred to as the CONTRACT.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Contractor shall promptly make payments to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the CONTRACT, then this obligation shall be null and void; otherwise it shall remain in full force and effect, subject, however, to the following conditions.

1. A claimant is defined as one having a direct contract with Contractor or with a subcontractor of Contractor for labor, material, or both, used or reasonably required for use in the performance of the contract, labor and material being construed to include that part of water, gas, power, lights, heat, oil, gasoline, telephone service, or rental of equipment directly applicable to the contract.
2. The above named Contractor and Surety hereby jointly and severally agree with the City that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant may sue on this bond for the use of such claimant in the name of the City, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon, provided, however, that the City shall not be liable for the payment of any costs or expenses of any such suit.
3. No suit or action shall be commenced hereunder by any claimant:
 - a. Unless claimant shall have given written notice to any two of the following: The Contractor, the City, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail, postage prepaid, in an envelope addressed to the Contractor, City, or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the State of Wisconsin, save that such service need not be made by a public officer.

Project 23-04
Kingston Preserve Utility and Street Construction

City of De Pere

- b. After the expiration of one (1) year following the date on which Contractor ceased work on said CONTRACT.
 - c. Other than in a state court of competent jurisdiction in and for the County or other political subdivision of the state in which the project, or any part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere.
4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens, which may be filed or recorded against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

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

In Presence of:

_____	_____	_____
(WITNESS)	(CONTRACTOR)	(SEAL)
_____	_____	_____
(WITNESS)	(SURETY)	(SEAL)

SECTION 00 61 16

CITY OF DE PERE

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: That (CONTRACTOR'S NAME), as Principal, hereinafter called Contractor, and _____, as Surety, hereinafter called Surety, are held and firmly bound unto the City of De Pere, a municipal corporation of the State of Wisconsin, as Obligee, hereinafter called City, in the amount of (AMOUNT WRITTEN OUT) (\$_____) for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assign, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by written agreement dated _____ (date to be affixed by City), entered into a contract with the City for Project 23-04, in accordance with drawings and specifications prepared by the Director of Public Works of said City, which contract is by reference made a part hereof, and is hereinafter referred to as the CONTRACT.

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the Contractor shall promptly and faithfully perform said CONTRACT, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Whenever Contractor shall be, and declared by the City to be in default under the CONTRACT, the City having performed City's obligations there under, the Surety may promptly remedy the default, or shall promptly

1. Complete the CONTRACT in accordance with its terms and conditions or
2. Obtain a bid or bids for submission to City for completing the CONTRACT in accordance with its terms and conditions, and upon determination by the City and Surety of the lowest responsible bidder, arrange for a contract between such bidder and City make available as work progresses (even though there should be a default or succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable by City to Contractor under the CONTRACT and any amendments thereto, less the amount properly paid by City to Contractor.

Any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the CONTRACT falls due. No right of action shall accrue on this bond to or for the use of any person or corporation other than the owner named herein or the heirs, executors, administrators or successors of City.

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

In the Presence of:

_____ (WITNESS)	_____ (CONTRACTOR)	_____ (SEAL)
_____ (WITNESS)	_____ (SURETY)	_____ (SEAL)

SECTION 00 62 76

APPLICATION FOR PAYMENT

Contractor's Application for Payment No.

Application Period:	Application Date:
Owner: City of De Pere	Contractor:
	Contractor's Project No.:

APPLICATION FOR PAYMENT

Change Order Summary

Approved Change Orders			1. ORIGINAL CONTRACT PRICE:.....	
Number	Additions	Deductions	2. Net change by Change Orders and Written Amendments (+ or -):.....	\$0.00
			3. CURRENT CONTRACT PRICE (Line 1 plus Line 2):.....	\$0.00
			4. Total completed and stored to date Column H on Progress Estimate:.....	\$0.00
			5. Retainage (per Agreement):	
			a. Work Completed - Column H (95% up to 50% of Contract or 2.5% of 100% of Contract)	\$0.00
Total	\$0.00	\$0.00	6. AMOUNT ELIGIBLE TO DATE (Line 4 minus 5).....	\$0.00
NET CHANGE BY CHANGE ORDERS:			7. LESS PREVIOUS PAYMENTS (Line 6 from prior Application).....	\$0.00
			8. AMOUNT DUE THIS APPLICATION (Line 6 minus Line 7).....	\$0.00

CONTRACTOR'S CERTIFICATION

The undersigned Contractor certifies that:(1) all previous progress payments received from Owner on account of Work done under Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with Work covered by prior Applications for Payment; (2) title of all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to Owner at time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to Owner indemnifying Owner against any such Liens, security interest or encumbrances); and (3) all Work covered by the Application for Payment is in accordance with the Contract Documents and is not defective.

By:	Date:

Payment of:

\$
(Line 8 or other - attach explanation of other amount)

is recommended by:

(Contractor)

(Date)

Payment of:

\$
(Line 8 or other - attach explanation of other amount)

is recommended by:

(Owner)

(Date)

SECTION 00 65 16

CERTIFICATE OF SUBSTANTIAL COMPLETION

Project:

Owner:

Owner's Contract No.:

Contractor:

This [tentative] [definitive] Certificate of Substantial Completion applies to:

☐ All Work under the Contract Documents: ☐ The following specified portions of the Work:

Date of Substantial Completion

The Work to which this Certificate applies has been inspected by authorized representatives of Contractor and Engineer, and found to be substantially complete. The Date of Substantial completion of the Project or portion thereof designated above is hereby declared and is also the date of commencement of applicable warranties required by the Contract Documents, except as stated below.

A [tentative] [definitive] list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance and warranties shall be as provided in the Contract Documents except as amended as follows:

☐ Amended Responsibilities

☐ Not Amended

Owner's Amended Responsibilities:

Contractor's Amended Responsibilities:

The following documents are attached to and made part of this Certificate:

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract Documents.

Executed by Engineer

Date

Accepted by Contractor

Date

SECTION 01 10 00

SUMMARY OF WORK

PART 1 – GENERAL

1.1 SUMMARY

- A. Section Includes
 - 1. References
 - 2. Work Covered by the Contract Documents
 - 3. Work Sequence/Schedule
 - 4. Use of Premises
 - 5. Warranty
 - 6. Work by Others
 - 7. Project Utility Sources
 - 8. Miscellaneous Provisions

1.2 REFERENCES

- A. General Specifications. The work under this contract shall be in accordance with the City of De Pere, 2022 Construction Specifications and these Special Provisions and plans, and the latest edition of the Wisconsin Department of Transportation Standards Specifications for Highway and Structure Construction, where referenced in the City Specifications.
- B. Definitions. Any reference to the “state” or the “department” in said Standard Specifications shall mean the “City of De Pere” for the purposes of this contract.
- C. Industry Standards
 - 1. Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
 - 2. Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.
 - 3. If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement.
 - 4. The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements.

5. Each section of the specifications generally includes a list of reference standards normally referred to in that respective section. The purpose of this list is to furnish the Contractor with a list of standards normally used for outlining the quality control desired on the project. The lists are not intended to be complete or all inclusive, but only a general reference of standards that are regularly referred to.
6. Each entity engaged in construction on the Project shall be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents. Where copies of standards are needed to perform a required construction activity, obtain copies directly from the publication source and make them available on request.

1.3 WORK COVERED BY THE CONTRACT DOCUMENTS

A. Project Identification

1. Project Location
 - a. North Honeysuckle Court from Cul de Sac to Lawrence Drive
 - b. Everett Street from North Honeysuckle Court to 500 feet north
2. Work will be performed under the following prime contract:
 - a. Project 23-04 Kingston Preserve Utility and Street Construction

B. The Work includes:

1. Sanitary sewer and associated appurtenances installation.
2. Water main and associated appurtenances installation.
3. Storm sewer and associated appurtenances installation.
4. Curb and gutter installation.
5. Asphaltic concrete paving.
6. Terrace restoration.
7. Clearing and grubbing.
8. Unclassified excavation for roadway and pond construction.
9. Grading.
10. Ditching.
11. Erosion control.
12. Traffic control.

1.4 WORK SEQUENCE/SCHEDULE

- A. The anticipated start date is May 15th.
- B. Utility construction and street grading shall be completed by July 31st.
- C. Project shall be completed October 1st.
- D. Topsoil, seed, and mulch shall be completed prior to asphaltic concrete pavement placement.

1.5 USE OF PREMISES

- A. Contractor shall have full use of the premises for construction operations, including use of the Project Site, as allowed by law, ordinances, permits, easement agreements and the Contract documents.
- B. Contractor's use of premises is limited only by Owner's right to perform work or to retain other contractors on portions of the Project.
- C. The Project Site is limited to property boundaries, rights-of-way, easements, and other areas designated in the Contract Documents.
- D. Provide protection and safekeeping of material and products stored on or off the premises.
- E. Move any stored material or products which interfere with operations of Owner or other Contractors.

1.6 WARRANTY

- A. The Contractor warrants and guarantees to the City that all work shall be in accordance with the Contract Documents and will not be defective. Prompt notice of all defects will be given to the Contractor. All defective work, whether or not in place, may be rejected, corrected or accepted as provided in this proposal.
- B. If within one (1) year after the date of contract work completion or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents or by a special provision of the Contract Documents, any work is found to be defective, the Contractor shall comply in accordance with the City's written instructions. These written instructions will include either correcting such defective work or, if it has been rejected by the City, removing it from the site and replacing it with non-defective work. If the Contractor does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk or loss or damage, the City may have the defective work corrected or the rejected work removed and replaced. All direct and indirect costs of correction or removal and replacement of defective work, including compensation for additional professional services, shall be paid by the Contractor.

1.7 WORK BY OTHERS

- A. Utility installation for the subdivision will occur concurrently with this project.
- B. Home builders will be allowed to start construction during concurrently with this project.
- C. Cooperate fully with separate contractors and/or Owner so work by others may be carried out smoothly, without interfering with or delaying work under this Contract.

1.8 PROJECT UTILITY SOURCES

- A. Green Bay Metropolitan Sewer District (NEW Water), Lisa Sarau, (lsarau@newwater.us) (920-438-1039)
- B. AT&T, Victoria Kassab, (vk352k@att.com) (920-401-7512)
- C. Wisconsin Public Service, Bob Laskowski, (rtlaskowski@wisconsinpublicservice.com) (920-617-2775)
- D. Charter, Vince Albin, (vince.albin@charter.com) (920-378-0444)
- E. Nsight, Rick Vincent, (rick.vincent@nsight.com) (920-617-7316)
- F. TDS Metrocom, Steve Jakubiec, (steve.jakubiec@tdstelecom.com) (920-882-4166)
- G. Net-Lec (Mi-Tech Services), Dennis Lafave, (dlafave@mi-tech.us) (920-619-9774)
- H. CenturyLink, Relocation Team, (relocations@lumen.com) (800-871-9244)
- I. Central Brown County Water Authority, Rob Michaelson, (rmichaelson@mpu.org) (920-686-4354)

1.9 MISCELLANEOUS PROVISIONS

- A. All access to the site shall be from Lawrence Drive. No construction trucks shall be allowed to use North Honeysuckle Circle on the west side of Lawrence Drive.
- B. All hydrant caps to be painted color class-AA light blue.
- C. Excess clean fill, including from trench excavation, will be allowed to be placed on site as directed by the City.
- D. Cluster mailbox units and unit parcels shall be provided by the City for contractor installation. Units shall the City of De Pere specification and as follows:
 - a. Type IV per the exhibit.
 - b. Units will be black with decorative post and top covers.
- E. Hydroseeding will be allowed in place of mulch.

PART 2 – PRODUCTS

PART 3 – EXECUTION

END OF SECTION

SECTION 01 22 01

MEASUREMENT AND PAYMENT SANITARY SEWER

PART 1 – GENERAL

1.1 SUMMARY

- | | |
|-----------------------------------------------|---------------------|
| A. Section includes: | <u>Bid Item No.</u> |
| 1. Sanitary Sewer Mains (Granular Backfill) | SS-01 |
| 2. Sanitary Sewer Laterals | SS-02 |
| 3. Sanitary Sewer Risers | SS-03 |
| 4. Sanitary Sewer Service Branches | SS-04 |
| 5. Sanitary Sewer Manholes | SS-05 |
| 6. Core Drilling to Existing Sanitary Manhole | SS-06 |
- B. Unit Prices include:
1. Defined work for each Unit Price Item which will provide a functionally complete Project when combined with all unit price items. If there are specific work items which the Contractor believes are not identified in any Unit Price Item, but is required to provide a functionally complete Project, then the identified specific work items shall be included in the appropriate Unit Price Item.
 2. The method of measurement for payment.
 3. The price per unit for payment.

1.2 GENERAL WORK ITEMS

- A. Include with the appropriate Unit Price Item the following work items which are common to the Unit Price Items for sanitary sewer systems.
- B. If there is a specific Unit Price Item for any of the following items, then the work item shall be included with that specific unit price item.
1. Traffic Control.
 2. Sawcutting asphalt and/or concrete.
 3. Removal, hauling and disposal of surface materials including road pavement, curb and gutter, sidewalk, driveways and other pavement surfaces in the trench area and as shown on the drawings.
 4. Dewatering.
 5. Bypass pumping.
 6. Excavation.
 7. Open Trench installation method (unless bid item specifies other method).
 8. Pipe Bedding.
 9. Backfilling and compacting native obtained from the excavation.
 10. Supplying, hauling, backfilling and compacting granular material.

11. Loading, hauling and disposing of surplus excavated material.
12. Landscaping – turf establishment surface restoration and trees and bushes damaged during construction.
13. Maintenance, protection, replacement and/or repair of facilities not designated for alteration on the Site beyond the limits identified.
14. Site access requirements including temporary aggregate material as required for local traffic access.
15. Bulkhead and abandoned existing sanitary sewer with flowable fill as shown on Drawings.
16. If crossing or undermining of existing public or private utility, then include:
 - a. Maintaining the utility in service.
 - b. Replacing of existing utilities, if damaged.
 - c. Providing support and bedding material.
17. Dust control.
18. Remove and replace existing mailboxes and traffic signs.
19. Restroom facilities.
20. Easement and right-of-way requirements.
21. Construction staking and other survey work not provided by the Engineer.
22. Regulatory requirements.
23. Preconstruction videotaping and video equipment.
24. Quality assurance and quality control testing and inspections.
25. Shop drawings and other submittals.

1.3 SANITARY SEWER MAINS (GRANULAR BACKFILL)

- A. The unit price for Sanitary Sewer Mains (Granular Backfill) work includes:
 1. General Work Items of Article 1.2.
 2. Sanitary sewer pipe and fittings of material stated in the Unit Price Bid Schedule and installed using the open trench method.
 3. Excavation, breakdown and removal of abandoned piping inside the trench area, including plugging of existing connections.
 4. Excavation, breakdown and removal of abandoned pipeline structures inside the trench area, including plugging of existing connections.
 5. Clay anti-seepage collar around pipe.
- B. Measurement of payment will be the actual horizontal length along the centerline of the installed sewer from centerline of the manhole to centerline of manhole with no deductions for manholes, sewer services branches and other fittings.
- C. The unit of measurement for payment is linear feet.

1.4 SANITARY SEWER LATERALS

- A. The unit price for Sanitary Sewer Laterals work includes:
 1. General Work Items of Article 1.2.

2. Sanitary sewer lateral pipe and fittings of the material stated in the Unit Price Bid Schedule and installed using the open trench method.
 3. Watertight plug in the end of the sewer service lateral or connection including transition coupling to the existing building sewer lateral.
 4. Tracer wire.
 5. Install an 8' – 4" X 4" board at the end of the lateral.
- B. Measurement of payment will be the actual horizontal length along the centerline of the installed sewer service lateral pipe (excluding risers) from centerline of the service branch to the end of the pipe at the right of way, easement or existing sewer service lateral with no deductions for fittings.
- C. The unit of measurement for payment is linear feet.

1.5 SANITARY SEWER RISERS

- A. The unit price for Sanitary Sewer Risers work includes:
1. General Work Items of Article 1.2.
 2. Sanitary sewer riser pipe and fittings of material stated in the Unit Price Bid Schedule and installed using the open trench method.
 3. Risers to be installed at the main (new construction).
 4. Tracer wire.
- B. Measurement for payment will be the actual length of pipe along the centerline of the installed sewer service riser pipe from centerline of fitting to centerline of fitting having a vertical rise of 45 degrees or greater with no deductions for fittings.
- C. The unit of measurement for payment is linear feet.

1.6 SANITARY SEWER SERVICE BRANCHES

- A. The unit price for Sanitary Sewer Service Branches work includes:
1. General Work Items of Article 1.2.
 2. Sanitary sewer service branches of same material strength or better than sanitary sewer main pipe.
 3. Installation along with the sanitary sewer main pipe installation.
 4. Plug (where required).
- B. Measurement for payment will be the actual number installed.
- C. The unit of measurement for payment is each.

1.7 SANITARY SEWER MANHOLES

- A. The unit price for Sanitary Sewer Manholes work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Precast reinforced concrete components.
 - 3. Joint flexible gasket material.
 - 4. Resilient flexible connector between the manhole structure and the sewer pipe.
 - 5. Adjusting rings and bituminous plastic cement sealant at chimney.
 - 6. Manhole steps.
 - 7. Manhole frame and cover (Neenah Foundry R-1500 Manhole Cover with Non-Rocking Lid or equal). Sanitary Sewer manhole covers shall have gaskets and concealed pick holes.
 - 8. Bedding material.
 - 9. Sewer pipe stub with connections and watertight plug (where required).
 - 10. Final casting adjustment.
- B. Measurement for payment will be the distance from the invert of the lowest sewer to the top of the frame and cover as set.
- C. The unit of measurement for payment is vertical feet.

1.8 CORE DRILLING INTO EXISTING SANITARY MANHOLE

- A. The unit price for Core Drilling into Existing Sanitary Manhole work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Core drilling into existing sanitary sewer manhole (where required).
 - 3. Install A-Lok boot.
 - 4. Reform flow line in existing sanitary manhole.
- B. Measurement for payment will be the actual number complete.
- C. The unit of measurement for payment is each.

END OF SECTION

SECTION 01 22 02

MEASUREMENT AND PAYMENT STORM SEWER

PART 1 – GENERAL

1.1 SUMMARY

- A. Section includes:
- | | <u>Bid Item No.</u> |
|--------------------------------------------------|-------------------------------------------|
| 1. Storm Sewer Mains (Natural Backfill) | ST-01, ST-03, ST-05 & ST-09 |
| 2. Storm Sewer Mains (Granular Backfill) | ST-02, ST-04, ST-06, ST-07, ST-08 & ST-10 |
| 3. Storm Sewer Laterals | ST-11 |
| 4. Storm Sewer Service Branches | ST-12, ST-13, ST-14, ST-15 & ST-16 |
| 5. Storm Sewer Manholes | ST-17 & ST-18 |
| 6. Catch Basin/Inlets | ST-19, ST-20 & ST-21 |
| 7. Flared End Section | ST-22, ST-23 & ST-24 |
| 8. Provide Pond Outfall Structure | ST-25 |
| 9. Storm Lateral Yard Drain Riser | ST-26 |
| 10. Abandon/Remove Storm Sewer and Appurtenances | ST-27 |
- B. Unit Prices include:
1. Defined work for each Unit Price Item which will provide a functionally complete Project when combined with all unit price items. If there are specific work items which the Contractor believes are not identified in any Unit Price Item, but is required to provide a functionally complete Project, then the identified specific work items shall be included in the appropriate Unit Price Item.
 2. The method of measurement for payment.
 3. The price per unit for payment.

1.2 GENERAL WORK ITEMS

- A. Include with the appropriate Unit Price Item the following work items which are common to the Unit Price Items for storm sewer systems.
- B. If there is a specific Unit Price Item for any of the following items, then the work item shall be included with that specific unit price item.
1. Traffic Control.
 2. Sawcutting asphalt and/or concrete.
 3. Removal, hauling and disposal of surface materials including road pavement, curb and gutter, sidewalk, driveways and other pavement surfaces in the trench area and as shown on the drawings.
 4. Dewatering.
 5. Excavation.
 6. Open trench installation method (unless bid item specifies other method).

7. Pipe bedding.
8. Backfilling and compacting native obtained from the excavation.
9. Supplying, hauling, backfilling and compacting granular material.
10. Loading, hauling and disposing of surplus excavated material.
11. Landscaping – turf establishment surface restoration and trees and bushes damaged during construction.
12. Maintenance, protection, replacement and/or repair of facilities not designated for alteration on the Site beyond the limits identified.
13. Site access requirements including temporary aggregate material as required for local traffic access.
14. Bulkhead and abandon existing storm sewer with flowable fill as shown on drawings.
15. If crossing or undermining of existing public or private utility, then include:
 - a. Maintaining the utility in service.
 - b. Replacing of existing utilities, if damaged.
 - c. Providing support and bedding material.
16. Dust control.
17. Remove and replace existing mailboxes and traffic signs.
18. Restroom facilities.
19. Easement and right-of-way requirements.
20. Construction staking and other survey work not provided by the Engineer.
21. Regulatory requirements.
22. Preconstruction videotaping and video equipment.
23. Quality assurance and quality control testing and inspections.
24. Shop drawings and other submittals.

1.3 STORM SEWER MAINS (NATURAL BACKFILL)

- A. The unit price for Storm Sewer Main (Natural Backfill) work includes:
 1. General Work Items of Article 1.2.
 2. Storm sewer pipe and fittings of material stated in the Unit Price Bid Schedule and installed using the open trench method.
 3. Excavation, breakdown and removal of abandoned piping inside the trench area, including plugging of existing connections.
 4. Excavation, breakdown and removal of abandoned pipeline structures inside the trench area, including plugging of existing connections.
- B. Measurement of payment will be the actual horizontal length along the centerline of the installed sewer from centerline of the manhole to centerline of manhole with no deductions for manholes, sewer services branches and other fittings.
- C. The unit of measurement for payment is linear feet.

1.4 STORM SEWER MAINS (GRANULAR BACKFILL)

- A. The unit price for Storm Sewer Main (Granular Backfill) work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Storm sewer pipe and fittings of material stated in the Unit Price Bid Schedule and installed using the open trench method.
 - 3. Excavation, breakdown and removal of abandoned piping inside the trench area, including plugging of existing connections.
 - 4. Excavation, breakdown and removal of abandoned pipeline structures inside the trench area, including plugging of existing connections.
- B. Measurement of payment will be the actual horizontal length along the centerline of the installed sewer from centerline of the manhole to centerline of manhole with no deductions for manholes, sewer services branches and other fittings.
- C. The unit of measurement for payment is linear feet.

1.5 STORM SEWER LATERALS

- A. The unit price for Storm Sewer Laterals work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Storm sewer lateral pipe and fittings of the material stated in the Unit Price Bid Schedule and installed using the open trench method.
 - 3. Watertight plug in the end of the sewer service lateral or connection including transition coupling to the existing building sewer lateral.
 - 4. Tracer wire.
 - 5. Install an 8' – 4" X 4" board at the end of the lateral.
- B. Measurement of payment will be the actual horizontal length along the centerline of the installed sewer service lateral pipe from centerline of the service branch to the end of the pipe at the right of way, easement or existing sewer service lateral with no deductions for fittings.
- C. The unit of measurement for payment is linear feet.

1.6 STORM SEWER SERVICE BRANCHES/INSERTA TEES

- A. The unit price for Storm Sewer Service Branches/Inserta Tees work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Storm sewer service branches of same material strength or better than storm sewer main pipe (where required).
 - 3. Core drilling into concrete storm sewer main (where required).
 - 4. Installation along with the storm sewer main pipe installation.
 - 5. Plug (where required).

B. Measurement for payment will be the actual number installed.

C. The unit of measurement for payment is each.

1.7 STORM SEWER MANHOLES

A. The unit price for Storm Sewer Manholes work includes:

1. General Work Items of Article 1.2.
2. Precast reinforced concrete components.
3. Joint flexible gasket material.
4. Grout seal between the manhole and structure and the sewer pipe.
5. Adjusting rings and bituminous plastic cement sealant at chimney.
6. Manhole steps.
7. Manhole frame and cover.
8. Bedding material.
9. Sewer pipe stub with connections and watertight plug (where required).
10. Final casting adjustment.

B. Measurement for payment will be the distance from the invert of the lowest sewer to the top of the frame and cover as set.

C. The unit of measurement for payment is vertical feet.

1.8 CATCH BASIN/INLETS

A. The unit price for Catch Basin/Inlets work includes:

1. General Work Items of Article 1.2.
2. Precast reinforced concrete components.
3. Joint flexible gasket material.
4. Grout seal between the catch basin/inlet structure and the sewer pipe.
5. Adjusting rings grouted in place.
6. Casting frame and grate.
7. Bedding material.
8. Supply and install 6 to 10 feet of 4 inch flexible perforated plastic pipe with geotextile wrap subgrade drain.
9. Sand fill and Class "B" concrete floor and flow line.
10. Temporary cover over catch basin/inlet to prevent eroded materials from entering.
11. Final casting adjustment.

B. Measurement for payment will be the actual number installed.

C. The unit of measurement for payment is each.

1.9 FLARED END SECTION

- A. The unit price for Flared End Section includes:
 - 1. General Work Items of Article 1.2.
 - 2. Precast concrete components.
 - 3. Anchors to storm sewer pipe.
 - 4. The 36" endwall may be reused if salvaged in good condition.
 - a. This work includes removal and connection to the existing storm sewer/culverts.
- B. Measurement for payment will be the actual number installed.
- C. The unit of measurement for payment is each.

1.10 PROVIDE POND OUTFALL STRUCTURE

- A. The unit price for Provide Pond Outfall Structure work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Precast reinforced concrete components.
 - 3. Joint flexible gasket material.
 - 4. Grout seal between the manhole and structure and the sewer pipe.
 - 5. Installation of the grate.
 - 6. Bedding material.
 - 7. Sewer pipe stub with connections and watertight plug (where required).
- B. Measurement for payment will be the actual number installed.
- C. The unit of measurement for payment is each.

1.11 STORM SEWER LATERAL YARD DRAIN RISER

- A. The unit price for Storm Sewer Lateral Yard Drain Riser work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Storm sewer lateral pipe and fittings of the material stated in the Unit Price Bid Schedule and installed using the open trench method.
 - 3. Risers to be installed at utility easement line 12-feet out from the right-of-way line.
 - 4. Risers are to be daylighted at the ground surface and the adjacent ground is to be fine-graded to promote drainage to the yard-drain riser.
 - 5. Installation of slotted cap with erosion fabric.
 - 6. Tracer wire.
- B. Measurement for payment will be the actual number installed.
- C. The unit of measurement for payment is each.

1.12 ABANDON/REMOVE STORM SEWER AND APPURTENANCES

- A. The unit price for Abandon/Remove Storm Sewer and Appurtenances work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Excavating
 - 3. Install bulkheads and abandon storm sewer and/or structures.
 - 4. Removing existing storm sewer and/or structures where in conflict with other utilities.
 - 5. Providing and placing flowable fill.
 - 6. Backfilling and compacting.
 - 7. Removal and disposal as shown on the Drawings.
- B. Measurement for payment will not be made. This includes all of the project area.
- C. The unit of measurement for payment is lump sum.

END OF SECTION

SECTION 01 22 03

MEASUREMENT AND PAYMENT WATER SYSTEM

PART 1 – GENERAL

1.1 SUMMARY

- | | |
|-----------------------------------------|---------------------|
| A. Section includes: | <u>Bid Item No.</u> |
| 1. Water Mains (Granular Backfill) | W-01 |
| 2. Water Mains (Natural Backfill) | W-02 |
| 3. Water Services | W-03 |
| 4. Corporation and Curb Stop | W-04 |
| 5. Water Service (50' Coiled) with Plug | W-05 |
| 6. Valves | W-06 |
| 7. Connection to Existing Water Mains | W-07 |
| 8. Fire Hydrants | W-08 |
| 9. Hydrant Leads | W-09 |
| 10. Water Main Offset | W-10 |
- B. Unit Prices include:
1. Defined work for each Unit Price Item which will provide a functionally complete Project when combined with all unit price items. If there are specific work items which the Contractor believes are not identified in any Unit Price Item, but is required to provide a functionally complete Project, then the identified specific work items shall be included in the appropriate Unit Price Item.
 2. The method of measurement for payment.
 3. The price per unit for payment.

1.2 GENERAL WORK ITEMS

- A. Include with the appropriate Unit Price Item the following work items which are common to the Unit Price Items for water systems.
- B. If there is a specific Unit Price Item for any of the following items, then the work item shall be included with that specific unit price item.
1. Traffic Control.
 2. Sawcutting asphalt and/or concrete.
 3. Removal, hauling and disposal of surface materials including road pavement, curb and gutter, sidewalk, driveways and other pavement surfaces in the trench area and as shown on the drawings.
 4. Dewatering.
 5. Excavation.
 6. Open Trench installation method (unless bid item specifies other method).

7. Pipe Bedding.
8. Backfilling and compacting native obtained from the excavation.
9. Supplying, hauling, backfilling and compacting granular material.
10. Loading, hauling and disposing of surplus excavated material.
11. Landscaping – turf establishment surface restoration and trees and bushes damaged during construction.
12. Maintenance, protection, replacement and/or repair of facilities not designated for alteration on the Site beyond the limits identified.
13. Site access requirements including temporary aggregate material as required for local traffic access.
14. Bulkhead and abandoned existing water main with flowable fill as shown on Drawings.
15. If crossing or undermining of existing public or private utility, then include:
 - a. Maintaining the utility in service.
 - b. Replacing of existing utilities, if damaged.
 - c. Providing support and bedding material.
16. Dust control.
17. Remove and replace existing mailboxes and traffic signs.
18. Restroom facilities.
19. Easement and right-of-way requirements.
20. Construction staking and other survey work not provided by the Engineer.
21. Regulatory requirements.
22. Preconstruction videotaping and video equipment.
23. Quality assurance and quality control testing and inspections.
24. Shop drawings and other submittals.

1.3 WATER MAINS (GRANULAR BACKFILL)

- A. The unit price for Water Main (Granular Backfill) work includes:
 1. General Work Items of Article 1.2.
 2. Water pipe and fittings of material stated in the Unit Price Bid Schedule and installed using the open trench method.
 3. Ductile or cast-iron fittings.
 4. Tracer wire.
 5. Polyethylene encasement of ductile iron or cast-iron pipe and fittings.
 6. Blocking and joint restraints.
 7. Disinfection of pipelines.
- B. Measurement of payment will be the actual horizontal length along the centerline of the installed water main with no deductions for fittings and valves.
- C. The unit of measurement for payment is linear feet.

1.4 WATER MAINS (NATURAL BACKFILL)

- A. The unit price for Water Main (Natural Backfill) work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Water pipe and fittings of material stated in the Unit Price Bid Schedule and installed using the open trench method.
 - 3. Ductile or cast-iron fittings.
 - 4. Tracer wire.
 - 5. Polyethylene encasement of ductile iron or cast-iron pipe and fittings.
 - 6. Blocking and joint restraint.
 - 7. Disinfection of pipelines.
- B. Measurement of payment will be the actual horizontal length along the centerline of the installed water main with no deductions for fittings and valves.
- C. The unit of measurement for payment is linear feet.

1.5 WATER SERVICES

- A. The unit price for Water Services work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Pipe and fittings of material stated in the Unit Price Bid Schedule.
 - 3. Tracer wire.
 - 4. Disinfection of pipelines.
 - 5. Install an 8'- 4"x4" board at the end of the lateral.
- B. Measurement of payment will be the actual horizontal length along the centerline of the installed water service with no deductions for fittings and curb stops.
- C. The unit of measurement for payment is linear feet.

1.6 CORPORATION AND CURB STOPS

- A. The unit price for Corporation and Curb Stops work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Supply curb stops and curb boxes.
 - 3. Connection to existing water service (where required).
 - 4. Installation of curb stops and curb boxes.
 - 5. Tracer wire.
- B. Measurement for payment will be the actual number installed.
- C. The unit of measurement for payment is each.

1.7 WATER SERVICES (50' COILED) WITH PLUG

- A. The unit price for Water Service (50' Coiled) with Plug work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Pipe and fittings of material stated in the Unit Price Bid Schedule.
 - 3. Tracer wire.
 - 4. Disinfection of pipelines.
 - 5. Installed 50' of HDPE, coiled, with plug, at end of trench.
 - 6. Backfill over coiled water service.
- B. Measurement of payment will be the number installed.
- C. The unit of measurement for payment is each.

1.8 VALVES

- A. The unit price for Valves work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Valve.
 - 3. Valve box.
 - 4. Polyethylene encasement.
 - 5. Stem.
 - 6. Bedding material.
- B. Measurement for payment will be the actual number installed.
- C. The unit of measurement for payment is each.

1.9 CONNECTIONS TO EXISTING WATER MAINS

- A. The unit price for Connection to Existing Water Mains work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Locating existing water main.
 - 3. Connection to the end of existing pipe.
 - a. Remove existing plug.
 - b. Direct connection to end of existing pipe.
 - c. Transition fittings, if required.
 - d. Cut-in-tee or Tapping tee.
- B. Measurement for payment will be the actual number installed.
- C. The unit of measurement for payment is each.

1.10 FIRE HYDRANTS

- A. The unit price for Fire Hydrants work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Fire hydrant complete of the specified bury depth.
 - 3. Blocking and joint restraints.
 - 4. Hydrant wrenches.
 - 5. Hydrant markers.
 - 6. Polyethylene encasement.
 - 7. Drainage pit.
 - 8. Disinfection of hydrant.
 - 9. Tracer wire.
 - 10. Tracer wire access box.
- B. Measurement for payment will be the actual number installed.
- C. The unit of measurement for payment is each.

1.11 HYDRANTS LEADS

- A. The unit price for Hydrants Leads work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Pipe and fittings of material stated in the Unit Price Bid Schedule.
 - 3. Blocking and joint restraints.
 - 4. Tracer wire.
 - 5. Disinfection of pipeline.
- B. Measurement for payment will be the actual horizontal length along the centerline of the installed from the centerline of the water main to the centerline of the hydrant with no deductions for fittings and valves.
- C. The unit of measurement for payment is linear feet.

1.12 WATER MAIN OFFSET

- A. The unit price for Water Main Offset work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Ductile iron fittings and PVC pipe.
 - 3. Tracer wire.
 - 4. Polyethylene encasement of ductile iron pipe and fittings.
 - 5. Blocking and joint restraints.
- B. Measurement for payment will be the actual number installed.

- C. The unit of measurement for payment is each.

END OF SECTION

SECTION 01 22 04

MEASUREMENT AND PAYMENT STREET AND DRAINAGE CONSTRUCTION

PART 1 – GENERAL

1.1 SUMMARY

- | | |
|-------------------------------------------------------|----------------------|
| A. Section includes: | <u>Bid Item No.</u> |
| 1. Clearing and grubbing | SD-01 |
| 2. Site Stripping | SD-02 |
| 3. Topsoil and Unclassified Excavation | SD-03 & SD-04 |
| 4. Backyard and Sideyard Swale Ditching | SD-05 |
| 5. Crushed Aggregate Base and Surface Course | SD-06, SD-07 & SD-08 |
| 6. Asphaltic Concrete Pavement | SD-09 & SD-10 |
| 7. Portland Cement Concrete Curb and Gutter | SD-11 |
| 8. Portland Cement Concrete Pavement | SD-12 |
| 9. Portland Cement Concrete Driveway and Sidewalk | SD-13, SD-14 & SD-15 |
| 10. Deformed Reinforcement Bars | SD-16 |
| 11. Drilling Tie Bars and Dowel Bars | SD-17, SD-18 & SD-19 |
| 12. Detectable Warning Field Natural | SD-20 |
| 13. Landscaping – Topsoil, Seed, Fertilize, and Mulch | SD-21 & SD-22 |
- B. Unit Prices include:
1. Defined work for each Unit Price Item which will provide a functionally complete Project when combined with all unit price items. If there are specific work items which the Contractor believes are not identified in any Unit Price Item, but is required to provide a functionally complete Project, then the identified specific work items shall be included in the appropriate Unit Price Item.
 2. The method of measurement for payment.
 3. The price per unit for payment.

1.2 GENERAL WORK ITEMS

- A. Include with the appropriate Unit Price Item the following work items which are common to the Unit Price Items for street and drainage systems.
- B. If there is a specific Unit Price Item for any of the following items, then the work item shall be included with that specific unit price item.
1. Traffic Control.
 2. Sawcutting asphalt and/or concrete.
 3. Removal, hauling and disposal of surface materials including road pavement, curb and gutter, sidewalk, driveways and other pavement surfaces in the trench area and as shown on the drawings.

4. Maintenance, protection, replacement and/or repair of facilities not designated for alteration on the Site.
5. Site access requirements including temporary aggregate material as required for local traffic access.
6. Dust control.
7. Remove and replace existing mailboxes and traffic signs.
8. Restroom facilities.
9. Construction staking and other survey work not provided by the Engineer.
10. Regulatory requirements.
11. Quality assurance and quality control testing and inspections.
12. Final casting and valve box adjustment.
13. Shop drawings and other submittals.

1.3 CLEARING AND GRUBBING

- A. The unit price for Clearing and Grubbing work includes:
 1. General Work Items of Article 1.2.
 2. Cutting and disposing of trees, brush, windfalls, logs and other vegetation.
 3. Removing and disposing of roots, stumps, stubs, logs and other timber.
 4. Stripping and stockpiling topsoil.
- B. Measurement for payment will not be made.
- C. The unit of measurement for payment is lump sum.

1.4 TOPSOIL STRIPPING

- A. The unit price for Topsoil Stripping work includes:
 1. General Work Items of Article 1.2.
 2. Removal of topsoil in fill areas.
 3. Hauling and stockpiling topsoil.
 4. Placing unclassified material in stripped areas to subgrades shown on the Drawings.
 5. Compaction of subgrade and fill areas.
 6. Respreading topsoil to final grades shown on the Drawings.
 7. Finish grading.
- B. Measurement for payment will be the area of topsoil stripped in the fill areas.
- C. The unit of measurement for payment is square yards.

1.5 TOPSOIL AND UNCLASSIFIED EXCAVATION

- A. The unit price for Topsoil and Unclassified Excavation work includes:
 1. General Work Items of Article 1.2.

2. Removal of topsoil to depth available.
3. Hauling and stockpiling topsoil.
4. Excavation to subgrades shown on the Drawings.
5. Hauling of unclassified material.
6. Placing unclassified material in fill areas to subgrades shown on the Drawings and the subgrade required for placement of topsoil.
7. Compaction of subgrade and fill areas.
8. Test rolling subgrade.
9. Excavation of undercut areas for placing topsoil.
10. Respreading topsoil to final grades shown on the Drawings.
11. Disposal of surplus topsoil, unclassified material and unsuitable material.
12. Preparation of disposal site and transportation of material over an Engineer approved haul route from the site including all loading and dumping of material.
13. Finish grading.

B. Measurement of payment will not be made unless there is a change in project scope. The estimated quantity represents the computed volume by comparing the triangulated surfaces and will be the basis for payment.

C. The unit of measurement for payment is cubic yards.

1.6 BACKYARD AND SIDEYARD SWALE DITCHING

A. The unit price for Backyard and Sideyard Swale Ditching work includes:

1. General Work Items of Article 1.2.
2. Removal of topsoil to depth available.
3. Hauling and stockpiling topsoil.
4. Excavation to subgrades shown on the drawings.
5. Hauling of unclassified material.
6. Placing unclassified material in fill areas to subgrades shown on the Drawings and the subgrade required for placement of topsoil.
7. Compaction of subgrade and fill areas.
8. Excavation of undercut areas for placing topsoil.
9. Respreading topsoil to final grades shown on the Drawings.
10. Disposal of surplus topsoil, unclassified material and unsuitable material.
11. Preparation of disposal site and transportation of material over an Engineer approved haul route from the site including all loading and dumping of material
12. Finish Grading.
13. Place seed and erosion control revegetation mat, Class I, Urban.

B. Measurement of payment will be the length and width of the area to be ditched for backyard swales.

C. The unit of measurement for payment is square yards.

1.7 CRUSHED AGGREGATE BASE AND SURFACE COURSE

- A. The unit price for Crushed Aggregate Base and Surface Course work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Aggregate material.
 - 3. Preparation of foundation.
 - 4. Placing and compacting to thickness and width shown on the Drawings or specified elsewhere.
 - 5. Maintenance until surface pavement is constructed.
 - 6. Preparation of crushed aggregate base for paving.
 - 7. Adjustment of manholes and valve boxes to proposed finish road grade.
- B. Measurement of payment will be:
 - 1. For streets it is the surface area to a limit six inches behind the curb.
 - 2. For sidewalks, drives, and CBUs, the surface area plus six inches on each side.
- C. The unit of measurement for payment is square yards.

1.8 ASPHALTIC CONCRETE PAVEMENT

- A. The unit price for Asphaltic Concrete Pavement work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Asphaltic concrete mixture, tack coat and other required materials
 - 3. Surface preparation.
 - 4. Provide tack coat on base material.
 - 5. Saw cutting and/or mill adjacent and abutting pavement surfaces.
 - 6. Asphaltic concrete placement and compaction to thickness and width shown on the drawings or specified elsewhere.
 - 7. Tack coat between asphaltic concrete courses and abutting pavements.
- B. Measurement for payment will be the actual amount of material required and incorporated in the work verified by submitting to the Engineer delivery tickets provided with each load showing the weight measured on a certified scale, type of material, the date delivered and the project name.
- C. The Unit Price shall be adjusted for deficiencies for less than minimum density represented by the average lot density of five nuclear density tests of 750 tons of asphaltic concrete placed as shown in the following table:

Density Deficiency-Percent of Unit Price for Payment	
%Lot Density Below Specified Minimum	WisDOT Mixes
From 0.5-1.0 inclusive	98%
From 1.1-1.5 inclusive	95%
From 1.6-2.0 inclusive	91%
From 2.1-2.5 inclusive	85%
From 2.6-3.0 inclusive	70%
More than 3.0	0%

D. The unit of measurement for payment is tons.

1.9 PORTLAND CEMENT CONCRETE CURB AND GUTTER

A. The unit price for Portland Cement Concrete Curb and Gutter work includes:

1. General Work Items of Article 1.2.
2. Providing Portland cement concrete mixture of size shown in the drawings or specified elsewhere.
3. Providing expansion joints.
4. Providing curing.
5. Existing curb and gutter removal.
6. Subgrade preparation.
7. Provide crushed aggregate base.
8. Fine grading of subgrade.
9. Providing contraction joints.
10. Driveway entrances and handicap ramp entrances.
11. Adjustment of catch basin/inlets.
12. Finishing.
13. Protection.
14. Restoration behind the curb.

B. Measurement for payment will be along the flow line of the gutter and through inlets/catch basins.

C. The unit of measurement for payment is linear feet.

1.10 PORTLAND CEMENT CONCRETE PAVEMENT

A. The unit price for Portland Cement Concrete Pavement work includes:

1. General Work Items of Article 1.2.
2. Furnish all labor, tools, equipment and services.
3. Providing Portland cement concrete mixture of thickness shown in the drawings or specified elsewhere.
4. Surface preparation.

5. Providing reinforcement including tie bars and dowel bars.
6. Drilling tie bars and dowel bars into existing pavement.
7. Joint sealing.
8. Providing curing.
9. Concrete sealing with linseed oil.
10. Fine grading of subgrade.
11. Providing expansion joints and contraction joints.
12. Adjustment of manholes, water valves, inlets/catch basin and other structures to finish grade.
13. Finishing.
14. Protection.

B. Measurement for payment will be length and width of areas paved. Concrete curb and gutter will be measured separately, regardless if the curb is installed with integral curb. Curb and gutter will be paid per linear foot for twenty-four (24) inch width. The width and length will be subtracted from the concrete pavement area if integral curb is constructed.

C. The unit of measurement for payment is square yard.

1.11 PORTLAND CEMENT CONCRETE DRIVEWAY AND SIDEWALK

A. The unit price for Portland Cement Concrete Sidewalk and Driveway work includes:

1. General Work Items of Article 1.2.
2. Providing Portland cement concrete mixture of thickness shown in the drawings or specified elsewhere.
3. Providing reinforcement.
4. Providing expansion joint.
5. Providing curing.
6. Existing pavement removal.
7. Subgrade preparation.
8. Providing contraction joints.
9. Handicap ramps.
10. Sidewalk steps.
11. Saw cutting adjacent surfaces.
12. Finishing.
13. Protection.
14. Restoration.

B. Measurement for payment will be the average horizontal length and width of the concrete placed.

C. The unit of measurement for payment is square yards.

1.12 DEFORMED REINFORCEMENT BARS

- A. The unit price for Deformed Reinforcement Bars work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Supply and install two - #4 deformed reinforcement bars over all trenches that fall under any portion of the concrete curb and gutter, sidewalk, and driveway being constructed.
- B. Measurement for payment will be the horizontal length of each bar installed.
 - 1. This item applies to concrete curb and gutter, sidewalk, and driveway.
 - 2. This item does not apply to concrete pavement and patches.
- C. The unit of measurement for payment is linear feet.

1.13 DRILLING TIE BARS AND DOWEL BARS

- A. The unit price for Drilling Tie Bars and Dowel Bars work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Providing and installing tie bars and dowel bars, including coating.
 - 3. For drilling holes in concrete not placed under the contract.
 - 4. For epoxying or driving.
- B. Measurement for payment will be the actual number of bars installed.
 - 1. This item applies to drilling into existing concrete pavement, curb and gutter, and sidewalks.
 - 2. This item does not apply to dowel bar baskets within concrete pavement and patches.
- C. The unit of measurement for payment is each.

1.14 DETECTABLE WARNING FIELD NATURAL

- A. The unit price for Detectable Warning Field Natural work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Providing and installing Detectable Warning Field per ADA requirements.
 - 3. Each detectable warning field shall be two (2) feet by four (4) feet.
- B. Measurement for payment will be the actual number of detectable warning field installed.
- C. The unit of measurement for payment is each.

1.15 LANDSCAPING- TOPSOIL, SEED, FERTILIZE AND MULCH

- A. The unit price for Landscaping- Topsoil, Seed, Fertilize, and Mulch work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Provide 4" topsoil or salvaged topsoil.
 - 3. Provide seed.

4. Provide fertilizer.
 5. Provide mulch.
 6. Provide maintenance.
- B. Measurement for payment will be the width and length as shown on the plans.
1. Restoration required due to disturbances outside of these areas shall be incidental to other items bid.
 2. Restoration for swales is included in the swale item.
- C. The unit of measurement for payment is square yard.

END OF SECTION

SECTION 01 22 05

MEASUREMENT AND PAYMENT SPECIAL CONSTRUCTION

PART 1 – GENERAL

1.1 SUMMARY

- | | |
|-----------------------------------------------|---------------------|
| A. Section includes: | <u>Bid Item No.</u> |
| 1. Pipe Foundation Stabilization | SC-01 |
| 2. Silt Fence Erosion Control | SC-02 |
| 3. Erosion Bales | SC-03 |
| 4. Inlet Protection Erosion Control | SC-04 & SC-05 |
| 5. Erosion Control Revegetation Mat | SC-06 |
| 6. Rip Rap Erosion Control | SC-07 |
| 7. Tracking Pad | SC-08 |
| 8. Polystyrene Insulation Boards | SC-09 |
| 9. Cluster Mail Box Unit (CBU's) Installation | SC-10 |
| 10. Traffic Control | SC-11 & SC-12 |
- B. Unit Prices include:
1. Defined work for each Unit Price Item which will provide a functionally complete Project when combined with all unit price items. If there are specific work items which the Contractor believes are not identified in any Unit Price Item, but is required to provide a functionally complete Project, then the identified specific work items shall be included in the appropriate Unit Price Item.
 2. The method of measurement for payment.
 3. The price per unit for payment.

1.2 GENERAL WORK ITEMS

- A. Include with the appropriate Unit Price Item the following work items which are common to the Unit Price Items for special construction.
- B. If there is a specific Unit Price Item for any of the following items, then the work item shall be included with that specific unit price item.
1. Traffic Control.
 2. Loading, hauling and disposing of surplus material.
 3. Maintenance, protection, replacement and/or repair of facilities not designated for alteration on the Site beyond the limits identified.
 4. Dust control.
 5. Restroom facilities.
 6. Construction staking and other survey work not provided by the Engineer.
 7. Regulatory requirements.

8. Quality assurance and quality control testing and inspections.
9. Shop drawings and other submittals.

1.3 PIPE FOUNDATION STABILIZATION

- A. The unit price for Pipe Foundation Stabilization work includes:
 1. General Work Items of Article 1.2.
 2. Excavation below the limits of the pipe bedding with the bottom of the excavation wider than the top with 1:1 side slopes.
 3. Dewatering.
 4. Soil Class A-7 or A-8 aggregate material.
 5. Loading, hauling and disposing of surplus excavated material.
- B. Measurement of payment will be the volume calculated based on:
 1. The actual depth from four (4) inches below the bottom of pipe to the bottom of the aggregate material placed.
 2. The bottom width is the actual width not to exceed the pipe outside diameter plus twenty-four (24) inches plus 1:1 side slopes.
 3. The top width is the pipe outside diameter plus twenty-four (24) inches.
- C. The unit of measurement for payment is cubic yards.

1.4 SILT FENCE EROSION CONTROL

- A. The unit price for Silt Fence Erosion Control work includes:
 1. General Work Items of Article 1.2.
 2. Provide fabric and post.
 3. Excavate to anchor fabric and compact soil or provide soil class C-3 to anchor the fabric.
 4. Inspection and maintenance of the installed silt fence.
 5. Removal of the silt fence.
 6. Finish grading.
 7. Topsoil, seeding, fertilizing, and mulching area in the vicinity of the removed silt fence which does not have established turf.
- B. Measurement of payment will be the actual horizontal length installed.
- C. The unit of measurement for payment is linear feet.

1.5 EROSION BALES

- A. The unit price for Erosion Bales work includes:
 1. General Work Items of Article 1.2.
 2. Provide straw bales and anchor stakes.
 3. Excavate and embed the straw bales.

4. Inspection and maintenance of the installed straw bales.
5. Removal of the straw bales.
6. Finish grading.
7. Topsoil, seeding, fertilizing, and mulching area in the vicinity of the removed erosion bales which does not have established turf.

B. Measurement for payment will be the actual number of bales installed.

C. The unit of measurement for payment is each.

1.6 INLET PROTECTION EROSION CONTROL

A. The unit price for Inlet Protection Erosion Control work includes:

1. General Work Items of Article 1.2.
2. Provide geotextile and wood materials for type shown on the Drawings.
3. Placing inlet protection system.
4. Inspection and maintenance of the installed inlet protection.
5. Removal of the inlet protection.
6. Cleaning debris buildup around inlet.

B. Measurement for payment will be actual number of inlet protection erosion control installed.

C. The unit of measurement for payment is each.

1.7 EROSION CONTROL REVEGETATION MAT

A. The unit price for Erosion Control Revegetation Mat work includes:

1. General Work Items of Article 1.2.
2. Provide erosion mat material as stated in the Drawings or specified elsewhere.
3. Place erosion mat material.

B. Measurement for payment will be the actual area installed.

C. The unit of measurement for payment is square yards.

1.8 RIP RAP EROSION CONTROL

A. The unit price for Rip Rap Erosion Control work includes:

1. General Work Items of Article 1.2.
2. Provide rip rap material and geotextile fabric.
3. Excavate and place rip rap material.

B. Measurement for payment will be the actual area installed.

- C. The unit of measurement for payment is square yards.

1.9 TRACKING PAD

- A. The unit price for Tracking Pad work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Install to the dimensions as shown on the drawing or specified elsewhere.
 - 3. Providing filter fabric.
 - 4. Providing crushed aggregate base course (3-inch clear stone).
 - 5. Daily maintenance of aggregate.
 - 6. Removal of aggregate and restore with topsoil, seed, fertilizer, and mulch.
- B. Measurement for payment will be the actual number of tracking pads installed.
- C. The unit of measurement for payment is each.

1.10 POLYSTYRENE INSULATION BOARDS

- A. The unit price for Polystyrene Insulation Boards work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Supply and install a 2-inch-thick insulation per the Standard Specifications along the top of the water main and/or service and 6 inch above the water main and/or service with pipe bedding in between the polystyrene board and pipe.
- B. Measurement of payment will be the horizontal length installed.
- C. The unit of measurement for payment is linear feet.

1.11 CLUSTER MAILBOX UNIT (CBU) INSTALLATION

- A. The unit price for Cluster Mailbox Unit (CBU) Installation work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Transport CBUs from 925 S. Sixth Street to the project site. CBUs to be provided by City.
 - 3. Install City provided anchors.
 - 4. Install City provided CBUs including decorative post and top covers.
 - 5. Install Unit Parcel Box units.
- B. Measurement for payment will be for each CBU installation location.
 - 1. Each location consists of three boxes (2 CBUs and 1 United Parcel Box).
- C. The unit of measurement for payment is each.

1.12 TRAFFIC CONTROL

- A. The unit price for Traffic Control work includes:
 - 1. General Work Items of Article 1.2.
 - 2. Providing, installing, maintain, and removing the Traffic Control signing and barricades as shown on the plans and per the MUTCD.
 - 3. Traffic Detour, including covering signs when not in use.
 - 4. Flaggers per the MUTCD.
 - 5. Temporary traffic control signals (activated) per the MUTCD.
 - 6. Sidewalk closure.
- B. Measurement for payment will not be made.
 - 1. This item applies to the specific bid items lists. All other traffic control is incidental to other items bid.
- C. The unit of measurement for payment is for each intersection lump sum.

END OF SECTION

SECTION 01 29 00

PAYMENT PROCEDURES

PART 1 – GENERAL

1.1 SUMMARY

A. This section includes:

1. Administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.2 SCHEDULE OF VALUES

- A. Unit Price work will be the Schedule of Values used as the basis for reviewing Applications for Payment.**

1.3 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as recommended by the Engineer and approved by Owner.**
- B. The date for each progress payment should be the 3rd Wednesday of each month. The period covered by each Application for Payment starts on the day following the end of the preceding period and ends the 4th Friday of the Month.**
- C. Use forms provided by Engineer for Applications for Payment. Sample copy of the Application for Payment and Continuation Sheet is included in Section 00 62 76.**
- D. Application Preparation Procedures**
1. When requested by the Contractor, the Engineer will determine the actual quantities and classifications of Unit Price Work performed.
 - a. Preliminary determinations will be reviewed with the Contractor before completing Application for Payment.
 - b. Engineer will complete the Application for Payment based on Engineer's decision on actual quantities and classifications.
 - c. Engineer will submit three original copies of Application for Payment to Contractor for certification of all three original copies.
 - d. Contractor shall submit signed Application for Payment to Owner for approval within time frame agreed to at the Preconstruction Conference.
 2. If payment is requested for materials and equipment not incorporated in the Work, then the following shall be submitted with the Application for Payment:
 - a. Evidence that materials and equipment are suitably stored at the site or at another location agreed to in writing.

- b. A bill of sale, invoice, or other documentation warranting that the materials and equipment are free and clear of all liens.
 - c. Evidence that the materials and equipment are covered by property insurance.
 3. Complete every entry on form. Execute by a person authorized to sign legal documents on behalf of Contractor.
- E. With each Application for Payment, submit waivers of liens from subcontractors and suppliers for the construction period covered by the previous application.
 1. Submit partial waivers on each item for amount requested before deduction for retainage on each item.
 2. When an application shows completion for an item, submit final or full waivers.
 3. Owner reserves the right to designate which entities involved in the Work shall submit waivers.
 4. Submit final Application for Payment with or preceded by final waivers from every entity involved with performance of the Work covered by the application.
 5. Submit waivers of lien on forms executed in a manner acceptable to Owner.
- F. The following administrative actions and submittals shall precede or coincide with submittal of first Application for Payment:
 1. List of subcontractors.
 2. Schedule of Values (For Lump Sum Work).
 3. Contractor's construction schedule.
- G. Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted including, but not limited, to the following:
 1. Evidence of completion of Project closeout requirements.
 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 3. Updated final statement, accounting for final changes to the Contract Sum.
 4. Consent of Surety to Final Payment.
 5. Final lien waivers as evidence that claims have been settled.
 6. Final liquidated damages settlement statement.

PART 2 – PRODUCTS

PART 3 – EXECUTION

END OF SECTION

SECTION 01 32 33

CONSTRUCTION PHOTOGRAPHS

PART 1 – GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Photographs for utility construction sites.

1.2 SUBMITTALS

- A. Submit electronic files of each photographic view within seven (7) days of taking photographs.

1.3 QUALITY ASSURANCE

- A. Photographs are to be submitted to the Engineer for approval prior to the start of construction.

PART 2 – PRODUCTS

PART 3 – EXECUTION

3.1 UTILITY AND STREET CONSTRUCTION SITES

- A. Prior to start of construction provide sufficient photographs to adequately show the existing facilities and conditions within and adjacent to the construction Site to serve as a guide for final restoration including:
 - 1. Roads including shoulders and/or curb and gutter.
 - 2. Sidewalks, parking areas, and driveways.
 - 3. Utility structures.
 - 4. Landscaping including signs, plantings, walls, fences, trees, shrubbery, etc.
 - 5. Mailboxes.
 - 6. Drainage facilities including culverts, inlets, ditches.
 - 7. Building structures.
- B. During construction provide sufficient photographs (a minimum of one per 100 feet of installed utility) to adequately show construction means, methods, and Site conditions including:
 - 1. Crossings of other utilities.
 - 2. Exposure of existing structures.
 - 3. Soil conditions.

END OF SECTION

SECTION 01 33 00

SUBMITTALS

PART 1 – GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for submittals:
 - 1. Progress Schedule.
 - 2. Schedule of Shop Drawings and Sample Submittals.
 - 3. Shop Drawings.
- B. Failure to meet Submittal requirements to the satisfaction of the Engineer will constitute unsatisfactory performance of the work in accordance with the Contract Documents, therefore, the Engineer may recommend to the Owner that all or a portion of payments requested during the corresponding pay period be withheld until these requirements are met.

1.2 SUBMITTAL PROCEDURES

- A. Coordination: Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittals for related elements of the work so processing will not be delayed by the need to review submittals concurrently for coordination.
 - a. The Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.
 - 3. To avoid the need to delay installation as a result of the time required to process submittals, allow sufficient time for submittal review, including time for re-submittals.
 - a. Allow two weeks for initial submittal.
 - b. Allow two weeks for reprocessing each submittal.
 - c. No extension of Contract Time will be authorized because of failure to transmit submittals to the Engineer sufficiently in advance of the work to permit processing.
- B. Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.
 - 1. Assign a reference number to each submittal and re-submittal.
 - 2. Provide a space approximately four (4) by five (5) inches (100 by 125 mm) on the label or beside the title block on Shop Drawings to record the Contractor's review and approval markings and the action taken.
 - 3. Include the following information on the label for processing and recording action taken.

- a. Project name.
 - b. Date.
 - c. Name and address of the Engineer.
 - d. Name and address of the Contractor.
 - e. Name and address of the subcontractor.
 - f. Name and address of the supplier.
 - g. Name of the manufacturer.
 - h. Number and title of appropriate Specification Section.
 - i. Drawing number and detail references, as appropriate.
 4. Each submittal shall be stamped by the Contractor indicating that submittal was reviewed for conformance with the Contract Documents. The Engineer will not accept unstamped submittals.
- C. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal to the Engineer. The Engineer will not accept submittals received from sources other than the Contractor.
1. On the transmittal, record relevant information and requests for Engineer action. On a form, or separate sheet, record deviations from Contract Document requirements, including variations, limitations, and justifications. Include Contractor's certification that information complies with Contract Document requirements.

1.3 CONTRACTOR'S PROGRESS SCHEDULE

- A. Prepare and submit to the Engineer within 10 (ten) days after the Effective Date of the Agreement, four copies of a preliminary progress schedule of the work activities from Notice to Proceed until Substantial Completion.
1. Provide sufficient detail of the work activities comprising the schedule to assure adequate planning and execution of the work, such that in the judgment of the Engineer, it provides an appropriate basis for monitoring and evaluation of the progress of the work. A work activity is defined as an activity which requires substantial time and resources (manpower, equipment, and/or material) to complete and must be performed before the contract is considered complete.
 2. The schedule shall indicate the sequence of work activities. Identify each activity with a description, start date, completion date and duration. Include, but do not limit to the following items, as appropriate to this contract:
 - a. Shop drawing review by the Engineer.
 - b. Excavation and grading.
 - c. Asphalt and concrete placement sequence.
 - d. Restoration.
 - e. Construction of various segments of utilities.
 - f. Subcontractor's items of work.
 - g. Allowance for inclement weather.
 - h. Contract interfaces, date of Substantial Completion.
 - i. Interfacing and sequencing with existing facilities and utilities.

- j. Sequencing of major construction activities.
 - k. Milestones and completion dates.
- B. Distribution: Following response to the initial submittal, print and distribute copies of the revised construction schedule to the Engineer, Subcontractors, and other parties required to comply with scheduled dates. When revisions are made, distribute to the same parties. Delete parties from distribution when they have completed their assigned portion of the work and are no longer involved in construction activities.
- C. Schedule Updating: Revise the schedule after each meeting, event, or activity where revisions have been recognized or made. Issue the updated schedule concurrently with the report of each meeting.
- D. Punch List: Prepare and submit to the Engineer within ten (10) days after substantial completion a detailed progress schedule for outstanding work and punch list items.

1.4 SCHEDULE OF SHOP DRAWINGS AND SAMPLE SUBMITTALS

- A. Submit electronic or one (1) hard copy of preliminary submittal schedule in accordance with the General Conditions of the Contract and as follows:
- 1. Coordinate submittal schedule with the subcontractors, Schedule of Values, and of products as well as the Contractor's Progress Schedule.
 - 2. Prepare the schedule in chronological order. Provide the following information:
 - a. Scheduled date for the first submittal.
 - b. Related Section number.
 - c. Submittal category (Shop Drawings, Product Data, or Samples).
 - d. Name of the subcontractor.
 - e. Description of the part of the work covered.
 - f. Scheduled date for the Engineer's final release or approval.
- B. Distribution: Following response to the initial submittal, print and distribute copies of the revised construction schedule to the Engineer, Subcontractors, and other parties required to comply with scheduled dates. Post copies in the field office. When revisions are made, distribute to the same parties. Delete parties from distribution when they have completed their assigned portion of the work and are no longer involved in construction activities.
- C. Schedule Updating: Revise the schedule after each meeting or activity where revisions have been recognized or made. Issue the updated schedule concurrently with the report of each meeting.

1.5 SHOP DRAWINGS

- A. Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or

copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not a Shop Drawing.

- B. Collect product data into a single submittal for each element of construction of system. Product data includes printed information, such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams, and performance curves.
 - 1. Mark each copy to show actual product to be provided. Where printed Product Data includes information on several products that are not required, mark copies to indicate the applicable information. Include the following information:
 - a. Manufacturer's printed recommendations.
 - b. Compliance with trade association standards.
 - c. Compliance with recognized testing agency standards.
 - d. Application of testing agency labels and seals.
 - e. Notation of dimensions verified by field measurement.
 - f. Notation of coordination requirements.
- C. Do not use shop drawings without an appropriate final stamp indicating action taken.
- D. Submittals: Submit electronic or one (1) hard copy of each required submittal. The Engineer will scan and return the submittal to the Contractor marked with action taken and corrections or modifications required.
- E. Distribution: Furnish copies of reviewed submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms. Maintain one copy at the project site for reference.
 - 1. Do not proceed with installation until a copy of the Shop drawing is in the Installer's possession.
 - 2. Do not permit use of unmarked copies of the Shop Drawing in connection with construction.

1.6 ENGINEER'S ACTION

- A. Except for submittals for the record or information, where action and return is required, the Engineer will review each submittal, mark to indicate action taken, and return promptly. The Engineer will stamp each submittal with a uniform action stamp. The Engineer will mark the stamp appropriately to indicate the action taken, as follows:
 - 1. "No Exceptions Taken": The work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents.
 - 2. "Make Corrections Noted": The work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents.

3. "Amend and Resubmit": Do not proceed with work covered by the submittal. Resubmit without delay. Do not use, or allow others to use, submittals marked "Amend and Resubmit" at the Project Site or elsewhere where work is in progress.
 4. "Rejected – See Remarks": Do not proceed with work covered by the submittal. Resubmit without delay. Do not use, or allow others to use, submittals marked "Rejected and Resubmit" at the Project Site or elsewhere where work is in progress.
- B. Unsolicited Submittals: The Engineer will return unsolicited submittals to the sender without action.

PART 2 – PRODUCTS

PART 3 – EXECUTION

END OF SECTION

SECTION 01 41 00

REGULATORY REQUIREMENTS

PART 1 – GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Underground Utilities.
 - 2. Property Monuments.
 - 3. Traffic Control.
 - 4. Permits for Project.

1.2 UNDERGROUND UTILITIES

- A. Under the provisions of Wisconsin Statutes, Section 182.0175, all contractors, subcontractors, and any firm or individual intending to do work on this Contract shall contact all utility firms in the affected area of construction a minimum of three (3) working days prior to beginning construction so that affected utilities will be located and marked.

1.3 PROPERTY MONUMENTS

- A. Protect iron pipe monuments from movement.
- B. The cost of replacement of any monuments moved or destroyed during construction shall be the Contractor's responsibility.
- C. Perpetuation of destroyed or moved monuments shall be performed in accordance with state statutes by a registered land surveyor.

1.4 TRAFFIC CONTROL

- A. Provide traffic control facilities including barricades, signs, lights, warning devices, pavement markings, flaggers, etc.
- B. Construct and use traffic control facilities in accordance with the U.S. D. O. T. Federal Highway Administration's Manual on Uniform Traffic Control Devices for Streets and Highways.
- C. Maintain traffic control devices as required to properly safeguard the public travel through final completion, including during periods of suspension of work.

1.5 PERMITS FOR PROJECT

- A. The following permits are being obtained by the Owner:

1. WDNR
 - a. Water Main Extension
 - b. Sanitary Sewer Extension
 - c. WRAPP/NOI
 - d. Chapter 30
 - e. Wetland Filling

- B. Any costs associated with violations pertaining to the NOI permit will be the responsibility of the Contractor.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

END OF SECTION

SECTION 01 71 23

FIELD ENGINEERING

PART 1 – GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Engineering Surveys Provided by the Engineer.
 - 2. Engineering Surveys Provided by the Contractor.

1.2 SUBMITTALS

- A. None

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION

3.1 PREPARATION

- A. Investigate and verify the existence and location of site improvements, utilities, and other existing facilities.
- B. Before construction, verify the location of invert elevations at points of connection of sanitary sewer, storm sewer, water piping and underground electrical services.
- C. Furnish information to the Engineer and the appropriate utility regarding conflicts that are necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction.
- D. Provide the Engineer two (2) working days advance notification when ready for engineering surveys for construction to be provided by the Engineer.

3.2 ENGINEERING SURVEYS TO BE PROVIDED BY THE ENGINEER

- A. General
 - 1. Establish benchmarks for construction as shown on the drawings.
 - 2. Establish control points as shown on the drawings.
- B. Gravity Sewer Systems and Water Distribution Systems
 - 1. Provide construction reference stakes set for pipe construction location at critical changes in horizontal and vertical alignment.

2. Provide construction stakes for location of pipe at connections.

C. New Road Construction

1. Provide construction slope intercept stakes for horizontal and vertical alignment on each side of the road base on each cross section in the cross section sheets for requests received at least seventy-two (72) hours before the related work begins.
2. Provide construction reference stakes for subgrade at a minimum of fifty (50) foot intervals and maximum of one-hundred (100) foot intervals on tangents. Provide construction reference stakes for subgrade at twenty-five (25) foot intervals within vertical and horizontal curves. Provide a reference line stake at each location.
3. Provide construction reference stakes for top of crushed aggregate at a minimum of fifty (50) foot intervals and maximum of one-hundred (100) foot intervals on tangents. Provide construction reference stakes for top of crushed aggregate at twenty-five (25) foot intervals within vertical and horizontal curves. Provide a reference or centerline stake.

3.3 ENGINEERING SURVEYS TO BE PROVIDED BY THE CONTRACTOR

A. General

1. Locate, preserve and protect established construction reference stakes, benchmarks and control points.
2. Locate, preserve and protect property corners and section corner monuments. If moved or destroyed due to Contractor negligence, then replace in accordance with state requirements; some of which are referenced in the "Regulatory Requirements".
3. Provide additional construction staking as necessary to complete construction based on the construction reference stakes provided by the Engineer and the Drawings.
4. Before beginning with necessary construction staking, verify the information shown on the Drawings, in relation to the established construction reference stakes, bench marks, control points and property corners. Notify the Engineer of any discrepancies.
5. Remove construction reference stakes when directed by the Engineer.

B. Gravity Sewer Systems and Water Distribution Systems

1. Provide any intermediate construction reference points as required to verify installation at the line and grade established and locate appurtenant structures.
2. Check the line and grade with construction reference stakes at each pipe length.

C. New Road Construction

1. Provide additional construction reference stakes necessary to establish location and grade in accordance with the plans.

END OF SECTION

SECTION 31 23 00.1

EARTHWORK

PART 1 – GENERAL

1.1 SUMMARY

A. Work in this section shall include but not be limited to the following:

1. Excavation.
2. Test rolling.
3. Filling and compacting.
4. Backfilling around structures.
5. Disposal of surplus materials.
6. Finish grading.

1.2 REFERENCE STANDARDS

A. American Society for Testing and Materials (ASTM)

1. D4318 Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
2. D1140 Test for Amount of Material in Soils Finer than the No. 200 Sieve
3. D1556 Test for Density of Soil in Place by the Sand-Cone Method
4. D1557 Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10-Lb (4.54 kg) Rammer and 18 in. (457 mm) Drop
5. D2216 Laboratory Determination of Water (Moisture) Content of Soil, Rock, and Soil-Aggregate Mixtures
6. D2922 Test for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
7. D3017 Test for Moisture Content of Soil and Soil-Aggregate by Nuclear Method (Shallow Depth)

1.3 SUBMITTALS

A. Submit the following in accordance with Section 01 33 00, Submittals:

1. Two (2) copies of testing data of laboratory tests to the owner's representative if material is brought from off site.

1.4 DENSITY TESTING

A. The Engineer will provide an independent testing laboratory to provide testing services.

B. Anticipated testing schedule as follows:

<u>Fill Utilized For:</u>	<u>Number of Acceptable Tests for Each Class or Fill:</u>
Embankments, dikes or berms	1 test per 600 cubic yards
Structural or controlled fills	1 test per 1,500 square feet, minimum of 1 test per lift
Trench backfill under paved or surfaced areas greater than 15' depth	1 test per 100 feet of trench or any portion thereof, in the lower 1/4, each middle 1/4, and upper 1/4 of backfill
Trench backfill under paved or surfaced areas less than 15' depth	1 test per 100 feet of trench or any portion thereof, in the lower 1/3, middle 1/3, and upper 1/3 of backfill
Lateral trench backfill	1 test per 100 feet of trench with a minimum of 1 test location per trench in the lower 1/3, middle 1/3, and upper 1/3.
Non-structural fills	1 test per 2,000 cubic yards

PART 2 – PRODUCTS

2.1 SOIL MATERIALS

- A. Soil used for borrow, fill, and backfilling shall meet the requirements of soil class as called for on plans or in specifications.
- B. As a minimum, all soil shall meet the requirements of Soil Class G-1.
- C. All soil classes shall be as per Section 31 05 10, Soils and Aggregates for Earthwork.

PART 3 – EXECUTION

3.1 EXCAVATION

- A. Excavation to Correct Grade
 - 1. Excavate site of structures and pavements as follows:
 - a. To elevation shown on the plans.
 - b. To such additional width as necessary for erection and removal of forms, shoring or sheeting, and finishing of walls.
 - 2. Excavation of unsuitable materials.
 - a. Excavate unsuitable soil materials under a proposed structure.
 - b. Excavation shall extend lateral a minimum of 5 feet beyond the building limits plus 1 foot for each foot of cut below the foundation.
 - c. Notify the Owner's project representative prior to proceeding with their removal of unsuitable material.
- B. Borrow Excavation
 - 1. Clear site in accordance with Section, 31 10 00, Site Clearing.

2. Strip and stockpile topsoil.
3. Excavate, haul, place, and compact borrow soil material.
4. Regrade borrow areas as shown on the plans or in an acceptable manner to facilitate proper site drainage.
5. Replace stockpiled topsoil.
6. Surplus topsoil may be utilized in borrow area regarding.
7. Seed and mulch in accordance with Section 32 92 00, Turf and Grasses.

C. Excavation Precautions

1. Excavation slope stability.
 - a. Maintain excavation slope to ensure a stable excavation and prevent caving.
 - b. Provide and erect all timber work, shoring, sheeting, bracing, etc. necessary to prevent caving and displacement of adjacent property.
 - 1) Shoring shall be placed so as not to interfere with building work.
 - 2) Shoring shall be independent of footings.
2. Underpinning existing structures.
 - a. Underpin as necessary to protect existing structures and foundations.
 - b. Furnish all material, labor, and equipment necessary to complete underpinning operations.
3. Dewatering of excavations.
 - a. Contractor shall provide and maintain all equipment necessary to keep excavated areas free of all groundwater, surface water, or precipitation.
 - b. Soil which becomes soft, yielding, or loses support due to inadequate dewatering efforts shall be dealt with as follows:
 - 1) Excavate disturbed soil materials for their entire depth.
 - 2) Replace excavated materials with an approved fill material.
4. Protect excavation from freezing.
 - a. Take precautions necessary to prevent frost from entering subgrade soils.
 - b. If subgrade becomes frozen, remove snow, ice, and frozen soil prior to placement of additional fill or finish surfacings.

3.2 FILLING AND COMPACTING

- A. Layer thickness for fill soil shall be as follows:
 1. Layer thickness shall be dependent on the soil classification type, weight, and soil contact pressure of compaction equipment being used.
 2. Layer thickness shall not exceed 8 inches.
- B. Compaction
 1. Compaction method for fill soils shall be appropriate for soil material being compacted and provide sufficient soil contact pressure to thoroughly compact entire lift thickness.
- C. Proper soil moisture contents for compaction shall be maintained in all soils.
 1. Optimum moisture content as determined by Modified (ASTM D1557) Proctor shall be used

to determine acceptance moisture contents for soil compaction.

2. Contractor shall scarify and compact existing ground prior to placing fill material.

D. Compaction requirements for all fill soils unless specified elsewhere shall be as follows:

Class 1 -Fills supporting structures.

- Subgrade under pavements or floors.
- Backfill under piping and conduits.

Class 2 - Fills which do not support structures.

**COMPACTION REQUIREMENTS FOR
VARIOUS SOIL CLASSES**

Soil Class	Required Compaction (%) of Modified Proctor Density	
	Class 1	Class 2
B-3 through B-4	95	90
C-1 through C-6	95	90
D-1 through D-3, and G-1 and G-2	95	90
E-1	95	90

3.3 TEST ROLLING

A. The following testing services shall be provided:

1. The subgrade condition and elevation shall be checked by the Engineer prior to placement of fill material. The subgrade will be proof rolled using a tandem axle dump truck fully loaded with fill material to the maximum legal weight limit. The fill condition and elevation shall be checked by the Engineer prior to placement of subsequent courses.

B. Treat areas showing yielding or rutting under test rolling as follows:

1. Replace and/or recompact as necessary to stabilize the area.
2. Retest soil areas replaced or recompact.

3.4 BACKFILLING AROUND STRUCTURES

A. Do not backfill any foundation, wall, or structure prior to inspection by the Engineer.

B. Backfilling under pipes or conduits in areas excavated due to construction.

1. Contractor shall furnish and compact Soil Class A-7 under all piping or conduits.
 - a. Compact fill shall extend from undisturbed earth to grade.
 - b. Place and compact fill in all areas disturbed by construction.

3.5 DISPOSAL OF SURPLUS MATERIALS

- A. The Owner shall have prior claim to all surplus excavated material. If such claim is exercised by the Owner, the material shall be deposited at such points as may be directed by the Engineer at the expense of the Contractor, the haul not to exceed two (2) miles. If Owner does not desire to claim surplus excavated material, the Contractor shall be totally responsible for obtaining a disposal site. No material shall be disposed of in a floodplain, wetland or waterway.

After delivery to any designated location, such material shall be leveled off by the Contractor.

3.6 FINISH GRADING

- A. Grade, trim, and shape subgrade to required grade and section.
1. Adjust slopes by grading so that transition is smooth and gradual.
 2. The crests of cut banks shall be rounded and shaped.
 3. Washouts and ruts shall be refilled, regarded, and properly compacted.
 4. Remove all stones 3 inches or larger from grading limits.
- B. Vertical Grading Tolerances
1. Rough grading tolerance.
 - a. Areas to be topsoiled – rough grade to within 0.2 foot of finish grades.
 2. Areas having paved surfaces (i.e., concrete, asphalt, etc.).
 - a. Maximum allowable variation from correct profile and section shall not be more than ¼-inch in 10 feet.

END OF SECTION

SECTION 32 90 00.1

HYDROSEEDING

PART 1 -GENERAL

1.1 SUMMARY

- A. Work Included: This section includes the following:
 - 1. Hydroseeding

1.2 SUBMITTALS

- A. Submit the following:
 - 1. Fertilizer certification from supplier including brand name and hydroseeding manufacturer.

PART 2 - PRODUCTS

2.1 HYDROSEEDING

- A. Manufacturer: Central Fiber Corporation, Second Nature Wood fiber blend mulch, or equal.
- B. Include specified seed: temporary seed of oats or winter wheat, as specified, fertilizer, and hydroseed mulch

PART 3 - EXECUTION

3.1 HYDROSEEDING

- A. Minimum application rate shall be 1,500 lbs per acre.
- B. The hydroseed mixture shall be agitated in the mixing tank for a minimum of 3 minutes prior to application.
- C. The mixture shall be blown into place within 2 hours of mixing.

END OF SECTION

SECTION 32 90 10
NATIVE LANDSCAPING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes requirements for the following:
 - 1. Site Preparation.
 - 2. Seeding.
 - 3. Planting.
 - 4. Maintenance.
 - 5. Warranty.

1.2 REFERENCES

- A. Native material references:
 - 1. Black, M.R. and E.J. Judziewicz. 2009. Wildflowers of Wisconsin and the Great Lakes Region. University of Wisconsin Press, Madison, WI.
 - 2. Curtis, J. 1959. Vegetation of Wisconsin. University of Wisconsin Press, Madison, WI.
 - 3. Fassett, N.C. 1975. A Manual of Aquatic Plants. University of Wisconsin Press, Madison, WI.
 - 4. Fassett, N.C. 1976. Spring Flora of Wisconsin. University of Wisconsin Press, Madison, WI.
 - 5. Hip, A.L. 2008. Field Guide to Wisconsin Sedges – An Introduction to the Genus *Carex* (*Cyperaceae*). University of Wisconsin Press, Madison, WI.
 - 6. Kelsey, H.P, and W.A. Dayton. Standardized Plant Names. American Joint Committee on Horticulture Nomenclature (current edition).
- B. "State Specifications:" State of Wisconsin Department of Transportation, "Standard Specifications for Highway and Structure Construction – Sections 627,630 & 632," current edition, including any subsequent Supplemental Specifications.
- C. Wisconsin Statutes and Wisconsin Administrative Code - Chapters ATCP 20 and 29.
- D. American Association of Nurserymen, Inc. (AAN) Standard: American Standard for Nursery Stock (ANSI Z60.1).
- E. Standard Methods of the Association of Official Agricultural Chemists.

1.3 SUBMITTALS

- A. Submit the following to the OWNER and ENGINEER prior to installation:
 - 1. Information indicating vendor, species botanical and common names, gross weight, seed purity (% PLS), harvest date, and origin. Original nursery packaging for each species must be provided 14 days after seeding activities are completed.

2. Information indicating vendor, species botanical and common names, and pot size. Plant material shall comply with State of Wisconsin and federal laws with respect to inspection for plant diseases and insect infestation.
3. Inspection certificates and paperwork indicating the licensed nursery, species botanical and common names, and material size within 14 days of shipment.
4. Chemical Labels and Herbicide Application Record(s) within 30 days after application.
5. Photograph or detailed design of goose fencing system.

1.4 QUALITY ASSURANCE

A. Qualifications:

1. CONTRACTOR or Subcontractor shall be a company specializing in native landscaping installation and be able to show three (3) successful projects.
2. Perform planting by personnel familiar with accepted native landscape planting procedures. Qualified foreman, representing CONTRACTOR or Subcontractor, shall be on-site during planting procedures. The individual shall be an ecologist with at least 3 years of native plant installation experience.
3. Submit qualifications requested on the qualification form with the bid. OWNER has sole authority to approve or disapprove native landscape contractor and/or subcontractor at OWNER's sole discretion.

B. Ability to Deliver:

1. Investigate sources of supply and confirm they can supply plants specified on plant list in sizes, variety, and quantity noted and specified before submitting bid. Failure to take this precaution will not relieve responsibility for furnishing and installing plant material in accordance with Contract requirements.
2. Substitutions may be permitted only upon submission of written proof that specified plant is not obtainable locally. Such substitution may be made upon written authorization by qualified botanist. Adjustments will be made at no additional cost to OWNER.
3. Provide seed and plant materials discussed below in quantity and size designated.

C. Inspection:

1. OWNER and ENGINEER may inspect plant material at nursery. Such inspection shall be in addition to inspection at job site.
2. Upon delivery and before seeding and/or planting, OWNER and ENGINEER may inspect seed packages and plants.
3. Inspection and approval is for quality, size, and variety only, and in no way impairs right of rejection for failure to meet other requirements during progress of Work.
4. CONTRACTOR shall be present during required inspections.

D. Source Quality Control.

1. Certification: Landscape materials shall be from stock inspected and certified by authorized governmental agencies. Material shall comply with governmental regulations prevailing at supply source and project.

2. Plant material shall comply with State of Wisconsin and federal laws with respect to inspection for plant diseases and insect infestation.
3. Size and grading standards of plant materials shall be in accordance with American Association of Nurserymen, Inc. (AAN) Standard: American Standard for Nursery Stock (ANSI Z60.1).

E. VHS and INVASIVE SPECIES

1. To the extent practicable, equipment and gear used on infested waters should not be used on other non-infested waters.
2. All equipment utilized for the project including but not limited to tracked equipment, barges, boats, silt/turbidity curtains, hoses and pumps shall be decontaminated for invasive and exotic viruses and species prior to and after use. The following steps shall be taken every time equipment is moved to avoid transporting invasive and exotic viruses and species:
 - a. Inspect and remove terrestrial and aquatic plants, seeds, animals and mud from equipment.
 - b. Drain all water from equipment that comes in contact with infested waters.
 - c. Dispose of aquatic plants and animals in the trash. Never release or transfer aquatic plants, animals or water from one water body to another.
 - d. Wash equipment with hot (>104 degrees F) and/or high pressure water **OR** allow your equipment to dry thoroughly for 5 days.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Preparation for Delivery:

1. Seed:
 - a. Pack seeds for delivery in suitable bags in accordance with standard commercial practice.
 - b. Tag or label each bag as required by laws of State of Wisconsin and Federal Seed Act. Vendor's name shall show on or be attached to each bag together with statement signed by vendor indicating following:
 - i. Kind of seed contained.
 - ii. Percentage of purity and germination for native grass/sedge mix.
 - iii. Percentage of hard seed, if any.
 - iv. Statement conforming to laws of State of Wisconsin herein before mentioned showing percentage of weed seeds, if any.
2. Potted or Container Plants:
 - a. Provide container to hold rootstock protecting root mass and structure during delivery and handling.
 - b. Roots shall be developed and free from root rot.
 - c. Roots shall be kept cool and moist and out of sun and wind.
 - d. Bare root plants are unacceptable unless potted material is unavailable and substitution is accepted by OWNER and ENGINEER. Where bare root stock is used, it must be delivered and handled in such a way that roots are never allowed to dry out.

- e. Before wetland plant stock is transported, the top of the bulrush and other tall emergent shall be cut to leave an approximate 2-foot height. The intent is to promote rapid regrowth upon transplanting and to make them easier to transport.

B. Delivery:

1. Schedule shipping to minimize on-site storage of materials.
2. Plant Material: Take precautions in accordance with best trade practices and nursery recommendations to ensure arrival of material at Project Site in good condition and without injury. Cover plants to prevent freezing, drying, transit injury, or other exposure. During shipment, plants shall not be bent, stacked, or bound in manner that damages or destroys natural shape. Soil moisture shall be checked and material watered, if necessary.
3. Seed: Each species shall be delivered to the project site in the nursery's original, sealed packaging and labeled in accordance with Wisconsin State Law and the Federal Seed Act.
4. Notify ENGINEER 48 hours before delivery of seed and/or plant material.
5. Each shipment shall be accompanied by paperwork showing sizes and varieties included. Failure to notify ENGINEER in advance, in order to arrange proper scheduling, may result in loss of time or removal of plant material not installed as specified.
6. Protect seed against weather-related damage or other damages occurring during transit. Remove from site, seed that has become wet, moldy, or otherwise damaged and replace without extra cost to OWNER.
7. Fertilizer: Deliver fertilizer to site in original, unopened containers bearing weight, manufacturer's guaranteed chemical analysis, name, trade name, trademark, and conformance to state law.
8. Deliver topsoil in an unfrozen and non-muddy condition.

C. Temporary Storage:

1. Storage of Plant Material:
 - a. Set plants that are not to be planted within 4 hours, on ground and heal in with peat, soil, mulch or other approved media.
 - b. Protect roots of plant material from drying or other possible injury.
 - c. Water plants as necessary until planted.
 - d. Plants shall not remain unplanted for longer than 3 days.
 - e. Maintain plants in cold storage at approximately 30°F prior to being delivered to Site.
2. Keep seed cool and dry and protect against weather-related damage or other damages occurring during storage so their effectiveness will not be impaired. Do not store in direct contact with ground. Replace seed that has become wet, moldy, or otherwise damaged at CONTRACTOR'S expense.
3. Store fertilizer, humus, and spray materials in weatherproof storage areas and in such manner their effectiveness will not be impaired.

PART 2 - PRODUCTS

2.1 PLANT SPECIMENS

A. General:

1. Plant material shall be nursery grown or harvested unless otherwise specified or approved in writing by ENGINEER.
2. Unless specifically noted otherwise, plant material shall be of selected specimen quality, have normal habit of growth, and be sound, healthy, vigorous plants with well-developed root systems.
Plants shall be free of disease, insect pests, their eggs or larvae, and injuries.
3. Plant/Seed information:
 - a. See Paragraphs 2.01 E. & F. for seed mix and plant quantity requirements. It is the CONTRACTOR'S responsibility to ensure plants and/or seed are true to species and variety and conform to measurement specified in Paragraphs 2.01 E. & F., except plants larger than specified may be used if approved by ENGINEER. Use of such plants shall not result in increase in Contract Price.
 - b. Where plants larger than specified have been submitted in writing for approval and approved in writing by ENGINEER, CONTRACTOR shall assume responsibility of guarantee for plant in size as planted.
 - c. ENGINEER must approve any substitutions.

B. Cover Crop

1. Cover Crop Seed mix for all restored areas shall be as follows:

SPECIES	% MINIMUM PURITY	% MINIMUM GERMINATION
Annual Oats	98	90
Winter Wheat	95	90
Barnyard Grass(<i>Echinochloa crus-galli</i>)	95	90

2. Seeding a cover crop by itself between April 15th & August 15th shall be conducted using Annual Oats at a rate of 120 lbs/acre.
3. Seeding a cover crop by itself between August 15th & November 30th shall be conducted using Winter Wheat at a rate of 90 lbs/acre.
4. Native seeding conducted between April 15th & June 15th shall include a cover crop of Annual Oats at a rate of 20 lbs/acre.
5. Native seeding conducted between October 15th & November 30th shall include a cover crop of Winter Wheat at a rate of 10 lbs/acre.
6. Native wetland seeding shall also include a cover crop of Barnyard Grass at a rate of 1 lb/acre.

C. Native Seed

1. Seed stock shall be wild ecotype indigenous to Wisconsin or have natural origins within a 250 mile radius of the intended planting site.
2. Grasses classified as "Agricultural Grasses" shall be PLS as specified. Other seed shall be "clean" according to high quality industry standards.
3. Seed shall not be more than one year old at time of seeding.
4. Legumes shall be inoculated with proper rhizobia immediately prior to planting (six hours or less).

D. Mesic Prairie and Wet Meadow Seed Mix species and quantities:

Mesic Prairie Planting Zone

Common Name	Species Scientific Name	PLS Ounces Required Per Acre
<i>Forbs</i>		
Nodding Pink Onion	<i>Allium cernuum</i>	5.9
Butterfly Weed	<i>Asclepias tuberosa</i>	3.2
Heath Aster	<i>Aster ericoides</i>	0.3
Smooth Blue Aster	<i>Aster laevis</i>	2.4
New England Aster	<i>Aster novae-angliae</i>	2.0
Purple Prairie Clover	<i>Dalea purpurea</i>	4.5
Showy Tick Trefoil	<i>Desmodium canadense</i>	6.1
Pale Purple Coneflower	<i>Echinacea pallida</i>	12.8
Purple Coneflower*	<i>Echinacea purpurea</i>	6.7
Rattle Snake Master	<i>Eryngium yuccifolium</i>	11.9
Round Headed Bush Clover	<i>Lespedeza capitata</i>	2.8
Ox-eye	<i>Heliopsis helianthoides</i>	7.1
Prairie Blazing Star	<i>Liatris pycnostachya</i>	4.1
Wild Bergamot	<i>Monarda fistulosa</i>	5.7
Wild Quinine	<i>Parthenium integrifolium</i>	3.8
Smooth Penstemon*	<i>Penstemon digitalis</i>	0.9
Yellow coneflower	<i>Ratibida pinnata</i>	5.2
Black-eyed Susan	<i>Rudbeckia hirta</i>	1.9
Brown -eyed Susan	<i>Rudbeckia triloba</i>	3.3
Stiff Goldenrod	<i>Solidago rigida</i>	4.3
Common Spiderwort	<i>Tradescantia ohiensis</i>	5.6
Culver's Root	<i>Veronicastrum virginicum</i>	0.3
Golden Alexanders	<i>Zizia aurea</i>	10.1
<i>Grasses</i>		
Big Bluestem	<i>Andropogon gerardii</i>	36.4
Side Oats Grama	<i>Bouteloua curtipendula</i>	45.5
Prairie Sedge	<i>Carex bicknellii</i>	10.7
Brown Fox Sedge	<i>Carex vulpinoidea</i>	1.8
Canada Wild Rye	<i>Elymus canadensis</i>	35.0

Project 23-04
Kingston Preserve Utility and Street Construction

City of De Pere

Switch Grass	<i>Panicum virgatum</i>	19.5
Little Bluestem	<i>Schizachyrium scoparium</i>	12.1
Indian Grass	<i>Sorghastrum nutans</i>	22.8
TOTAL		294.7

***North American native species introduced into Wisconsin**

Wet Meadow Planting Zone

Common Name	Species Scientific Name	PLS Ounces Required Per Acre
<i>Forbs</i>		
Canada Anemone	<i>Anemone canadensis</i>	4.6
Marsh Milkweed	<i>Asclepias incarnata</i>	7.6
Calico Aster	<i>Aster lateriflorus</i>	1.3
New England Aster	<i>Aster novae-angliae</i>	3.3
Common Beggars Tick	<i>Bidens frondosa</i>	4.4
Joe Pye Weed	<i>Eupatorium maculatum</i>	4.6
Boneset	<i>Eupatorium perfoliatum</i>	4.1
Sneezeweed	<i>Helenium autumnale</i>	7.6
Northern Blue Flag	<i>Iris versicolor</i>	7.0
Marsh Blazingstar	<i>Liatris spicata</i>	6.6
Great Blue Lobelia	<i>Lobelia siphilitica</i>	1.5
Obedient Plant	<i>Physotegia virginiana</i>	3.3
Common Mountain Mint	<i>Pycnanthemum virginianum</i>	2.0
Riddell's Goldenrod	<i>Solidago riddellii</i>	3.9
Blue Vervain	<i>Verbena hastata</i>	1.6
Ironweed	<i>Vernonia fasciculata</i>	3.0
Culver's Root	<i>Veronicastrum virginicum</i>	1.4
Golden Alexander	<i>Zizia aurea</i>	9.9
<i>Grasses/Sedges/Rushes</i>		
Big Bluestem	<i>Andropogon gerardii</i>	35.7
Canada Bluejoint	<i>Calamagrostis canadensis</i>	2.0
Bebb's Sedge	<i>Carex bebbii</i>	10.5
Crested Oval Sedge	<i>Carex cristatella</i>	2.3
Awl-fruited Sedge	<i>Carex stipata</i>	6.6
Brown Fox Sedge	<i>Carex vulpinoidea</i>	3.6
Virginia Wild Rye	<i>Elymus virginicus</i>	31.8
Fowl Manna Grass	<i>Glyceria striata</i>	8.1
Rice Cut Grass	<i>Leersia oryzoides</i>	5.4
Switch Grass	<i>Panicum virgatum</i>	31.8
Green Bulrush	<i>Scirpus atrovirens</i>	1.9
Wool Grass	<i>Scirpus cyperinus</i>	1.3
TOTAL		218.7

2.2 PLANTING MATERIALS

A. Topsoil:

1. Obtained from natural well drained areas, and be fertile, friable soil, clean of undesirable materials such as plants, weeds, roots, stalks, stones, and other debris.
2. Existing topsoil shall be salvaged as it will be placed during restoration activities.
3. Acidity range of pH 5.0 and pH 7.0 and shall contain no less than 4% organic matter as determined by loss on ignition of moisture free samples dried at 100°C.

B. Soil Amendments:

1. Planting to be installed in native soils.

C. Water: CONTRACTOR shall make arrangements for water used for planting with appropriate water utilities. Cost of water usage is responsibility of CONTRACTOR and is incidental to contract.

1. Obtain from fresh water sources and free from injurious chemical or other toxic substances harmful to plant life. No water, which is brackish, may be used.
2. Provide hose and equipment necessary for proper watering of plant material.

2.3 EROSION CONTROL MATERIALS

A. Mulch:

1. Straw:

- a. Oat or wheat straw shall be air-dried, free of noxious and invasive weed species including reed canary grass, and other objectionable foreign matter.
- b. Wet and/or moldy straw is not acceptable and shall be removed from the site by the CONTRACTOR.

B. Erosion Blanket & Stakes:

1. Materials shall be completely biodegradable (Class I, Urban, Type A) and included on WisDOT PAL
2. Anchoring devices shall be a minimum of 4" in length, be completely biodegradable (Urban) and included on WisDOT PAL

2.4 HERBICIDE, ADJUVANT & DYES

A. General:

1. Use only chemicals approved by and registered with the Environmental Protection Agency (EPA).
2. Chemicals used around water shall be aquatic approved.
3. The chemical or combination of chemicals shall be chosen based on the target species present and the desired treatment outcome.

PART 3 - SUPPLIERS

3.1 PLANT SUPPLIERS

- A. At CONTRACTOR'S option, CONTRACTOR may contact the following companies for seed and plant supplies:

JFNew
708 Roosevelt Rd
Walkerton, IN 46574
(574) 586-2412

Taylor Creek Restoration Nursery
17921 Smith Road
PO Box 256
Brodhead, WI 53520
(608) 897-8641

Marshland Transplant Aquatic Nursery
116 East Huron Street
Berlin, WI 54923-2050
(800) AQUATIC

J&J Transplant Aquatic Nursery, LLC
PO Box 227
Wild Rose, WI 54984
(800) 622-5055

Prairie Nursery, Inc.
PO Box 306
Westfield, WI 53964
(800) 476-9453

Prairie Moon Nursery
32115 Prairie Lane
Winona, MN 55987
(866) 417-8156

Dragonfly Gardens
491 State Highway 46
Amery, WI 54001
(715) 268-7660

Hickory Road Gardens
2041 Hickory Road
Mosinee, WI 54455
(715) 693-6446

Stone Silo Prairie Garden
2325 Oak Ridge Circle
De Pere, WI 54115
(920) 336-1662

Agrecol, LLC
10101 North Casey Road
Evansville, WI 53536
(608) 223-3571

3.2 HERBICIDE SUPPLIERS

- A. At CONTRACTOR'S option, CONTRACTOR may contact following companies for chemical supplies:

Crop Production Services
N125 County Highway C
DeForest, WI 53532
(608) 846-1100

Red River Specialties, Inc
7545 Haygood Road
Shreveport, LA 71107
(317) 440-7103

PART 4 - EXECUTION

4.1 PROJECT/SITE CONDITIONS

A. Inspection:

1. Prior to beginning Work, CONTRACTOR shall examine and verify acceptability of Project site for conditions under which seeding and planting are to be performed. Do not proceed with Work until satisfactory conditions are present.
2. Starting Work constitutes acceptance of conditions under which Work is to be performed. After such acceptances, CONTRACTOR shall be responsible for correcting unsatisfactory and defective Work resulting from such unsatisfactory conditions.
3. When landscape work is executed in conjunction with construction of other work, coordinate schedule to permit execution of landscape work.

4.2 SEEDING

A. Seedbed Preparation

1. Prior to seeding a cover crop or native species, the planting area shall be prepared through the following sequence:
 - a. Topsoil shall be worked with a pulverizer, tiller, disc, or harrow to a depth of 1-2". The topsoil shall be free of heavy clay, refuse, stumps, large roots, rocks over 2 inches in diameter, weeds, or other extraneous material which would be detrimental to good seed-to-soil contact, and therefore seed establishment.
 - b. The surface shall then be dragged or raked to provide a smooth, fine textured soil throughout the planting area. All debris (e.g., wood, rocks, garbage, etc.) shall be removed during final seedbed preparation.
 - c. A temporary cover crop shall then be seeded. The species chosen and the rate utilized will follow the requirements per Paragraph 2.01 B. Seed shall be sown with a broadcast seeder and follow those guidelines found in Paragraph 4.02 C. Straw mulch may be applied to assist with cover crop establishment.
 - d. Once the cover crop has grown to a height of 6-8", a series of three (3) or four (4) herbicide applications will be conducted throughout the growing season(s). A combination of Glyphosate and 2,4-D are to be utilized for each application and shall be applied at the rates recommended on the label for the vegetation species present. The first application is expected to be completed in late May to early June. The second and third applications are expected to be undertaken in late July and mid-September – prior to the first hard freeze. The schedule for herbicide applications will be flexible to accommodate the weather and existing growing conditions; however, the Contractor must communicate with the Owner and the Engineer prior to conducting any application. Incomplete, untimely or unsuccessful herbicide treatments may result in additional treatment requirements to be conducted at the Contractor's expense.
 - e. Following the last herbicide application and prior to sowing the native seed the soil shall be lightly worked to a depth of ¼" – ½" in depth with a disc or harrow. If the soil is too

light and fluffy, the area shall be cultipacked to provide a firmer seedbed prior to seeding.

B. Installation and Procedures:

1. Seeding shall occur immediately after seedbed preparation. Restored areas shall be seeded with the native seed mixes at the PLS ounces per acre rate indicated in Paragraph 2.01 E. Seeding shall be conducted within the designated communities (Drawings) between October 15th and November 30th.
2. All native seed species shall be mixed on-site prior to installation.
3. If the communities are hand sown, the seed shall be mixed with a carrier (e.g., sawdust, vermiculite, moist sand, etc.) to ensure even seed distribution. If a broadcast seeder is utilized, it shall be properly calibrated to ensure an even seed distribution is achieved within the planting area.
4. After the seed has been installed, the area shall be rolled to ensure good seed to soil contact.
5. Once seed installation is complete, erosion blanket shall be placed in those areas designated on the Drawings. Mulch, if applied with the cover crop, and erosion blanket installation shall follow those requirements outlined in 4.05 below.

C. Seeding shall not be permitted during the following conditions unless otherwise approved:

1. Saturated soil conditions.
2. Frozen soil conditions.
3. Wind speeds >15 miles per hour.
4. Temperatures less than 32 degrees Fahrenheit.
5. Temperatures greater than 90 degrees Fahrenheit.

4.3 EROSION CONTROL MATERIALS

A. Mulch

1. General:
 - a. Place clean, straw mulch on the cover crop seeding within 72 hours after seeding, if desired.
 - b. Do not apply during high winds.
 - c. Place loosely enough to allow some sunlight penetration and air circulation, but thickly enough to shade the ground, conserve moisture and reduce erosion.
2. The CONTRACTOR shall perform mulching in accordance with "Method C" as explained in the "State Specifications:" State of Wisconsin Department of Transportation, "Standard Specifications for Highway and Structure Construction – Sections 627" current edition.

B. Erosion Blanket & Stakes

1. General:
 - a. Install Class I, Urban, Type A erosion blanket and biodegradable stakes on the slopes of the native seeding per Sheets 6 and 7 within 72 hours after seeding.
 - b. Do not apply during high winds.

2. The CONTRACTOR shall install the erosion blanket and stakes per manufacturer's recommendations.

4.4 CLEAN UP AND REPAIR

- A. Remove excess and waste material daily.
- B. Upon completion of planting, remove excess soil, stones, and debris and dispose of off-site.
- C. CONTRACTOR shall be liable for any damage caused to surrounding properties as a result of negligence when conducting landscape installation. Damage to existing landscape, pavements, or other site features as result of Work shall be repaired to its original condition.

4.5 PRELIMINARY ACCEPTANCE

- A. Notify ENGINEER at conclusion of planting and seeding operations so OWNER and ENGINEER can determine completion by field inspection.
- B. Completion requires:
 1. Seed and plant material conforms to Contract Documents with respect to quantity, quality, size, species, and location, except those items accepted or revised in the field by OWNER and ENGINEER.
 2. Plant material shall be established, upright, green (i.e., healthy condition), and exist in the locations as determined by the OWNER and ENGINEER.

4.6 MAINTENANCE DURING WARRANTY PERIOD

- A. General:
 1. CONTRACTOR shall provide maintenance during the two-year warranty period in accordance with the submitted and approved Maintenance Plan.
 2. Repair work necessitated by CONTRACTOR'S operations, land disturbance outside designated work areas, CONTRACTOR'S failure to perform adequate maintenance or due to CONTRACTOR'S negligence shall be performed without cost to OWNER.
 3. Any soil erosion resulting from inadequate cover crop or permanent seed establishment shall be corrected at the CONTRACTOR'S expense.
- B. Protection:
 1. CONTRACTOR is liable for damage to planted areas caused by deicing compounds, toxic substances, fertilizers, pesticides, and other materials applied by CONTRACTOR. CONTRACTOR is not liable for materials applied by others or damage caused by vandalism or natural causes.
 2. Protect landscape Work and materials from damage due to landscape operations, operations by other contractors and trades, and trespassers. Maintain protection until completion and acceptance.

3. Protect existing property and improvements within these sites and those adjacent to OWNER'S property.

4.7 WARRANTY

- A. During the 1-year warranty period CONTRACTOR shall re-seed areas with poor germination to meet the following criteria:
 1. Seeding success criteria – An area will be considered satisfactory if it meet the following:
 - a. A minimum of 75% total native vegetative coverage.
 - b. No bare areas larger than 10 square feet.
 - c. Vegetation is in healthy condition.
 2. 90% of the installed plants are living and healthy.
- B Replacement and Damages:
 1. On or about expiration of the 1 warranty period, follow-up inspections will be made to determine replacements or corrections required to be made by CONTRACTOR in accordance with provisions of these Specifications and the Maintenance Plan. ENGINEER will document findings in field report, and forward copies to CONTRACTOR. Items identified for replacement will be tagged during inspection with plastic flagging. Decision of OWNER and ENGINEER for required replacements is final and binding upon CONTRACTOR.
 2. CONTRACTOR is responsible for repairing damage to property caused by defective workmanship and materials.
- C. Exclusions:
 1. CONTRACTOR is not liable for replacement cost of seeds damaged by extreme weather conditions. CONTRACTOR is not liable for plants not installed by CONTRACTOR under CONTRACTOR'S supervision, by relocation or removal by others, by acts of God, or by vandalism, and losses because of curtailment of water by local authorities.

4.8 REPLACEMENTS

- A. General Procedure
 1. Reseeding shall be performed at the CONTRACTOR'S expense and in conformance with the original seeding and planting specifications unless they are modified by the ENGINEER.
 2. Seed shall be of the same species, quality, and size as originally installed, or with substitutes pre-approved in writing by the ENGINEER.
 3. Reseeding activities shall be conducted during the first available period, as determined by the OWNER and ENGINEER.
 4. Dispose of dead plants off-site.
 5. Restore areas damaged by replacement operations to original condition.
 6. Notify OWNER and ENGINEER at conclusion of replacement program
 7. OWNER and ENGINEER will conduct inspection of replacements for determining final acceptance.

4.9 FINAL ACCEPTANCE

A. Procedure

1. Upon completion of replacement program, CONTRACTOR shall notify OWNER and ENGINEER.
2. OWNER and ENGINEER will inspect the site to determine acceptability of required replacements.
3. If acceptable and the warranty criteria outlined in 4.09.A.1.&2. are met, OWNER and ENGINEER shall notify CONTRACTOR, in writing, of final acceptance of Work.
4. After acceptance, OWNER will be responsible for all future replacements and maintenance.

END OF SECTION

SECTION 33 00 05

DOUBLE AND TRIPLE WALLED POLYPROPYLENE PIPE

PART 1 – GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Double walled polypropylene pipe for mainline gravity storm sewer.
 - 2. Triple walled polypropylene pipe for mainline gravity storm sewer.
- B. The products described are not installed under this Section.

1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. D3212 Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
 - 2. F477 Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe
 - 3. F2736 Standard Specification for 6 to 27 in. (152 To 762 mm) Polypropylene (PP) Corrugated Single Wall Pipe And Double Wall Pipe
 - 4. F2764 Standard Specification for 30 to 60 in. [750 to 1500 mm] Polypropylene (PP) Triple Wall Pipe and Fittings for Non-Pressure Sanitary Sewer Applications

1.3 SUBMITTALS

- A. Submit the following:
 - 1. Certification of productions date of all materials.
 - 2. Manufacturer's certification that the materials delivered were manufactured, sampled, tested, and inspected in accordance with this specifications and appropriate referenced standards.
 - 3. Product data sheet.
 - 4. Manufacturer's recommendations for assembly.

1.4 QUALITY ASSURANCE

- A. Make pipe available to the Engineer's Representative for inspection.
- B. Pipe shall be considered defective and will be rejected when:
 - 1. Pitted or cratered.
 - 2. Flaking.

3. Straightness varies more than ½ inch in 10 feet.
4. Any defect which prevents assembly according to manufacturer's recommendations.
5. Not utilized within twelve months of date of production.
6. Pipe is not properly marked.

C. Material brands and/or pipe classes shall not be mixed.

D. Pipe Marking – pipe and fittings shall be marked as follows:

1. Manufacturer's name, trademark or logo.
2. Nominal size.
3. Pipe stiffness designation, dimension ration, or schedule size and pressure class.
4. ASTM specification designation.
5. Production date.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Inspect the pipe shipment to identify shifted loads, broken packaging or rough treatment, which could be an indication of damage.
- B. Unload the pipe in a manner which will not put stress on the pipe or strike anything causing damage.
- C. Place and store the pipe package units on level ground stacked no more than 8 feet high. Do not store close to heat sources.
- D. For onsite gasket installation on pipe, store gaskets away from excessive exposure to heat, direct sunlight, ozone, oil or grease.
- E. For gaskets installed on the pipe offsite, keep the protective wrap on gaskets until installation.
- F. Handle pipe in a manner to prevent impact blows, abrasion damage, gouging or cutting.
- G. When handling pipe in cold weather, provide additional care to prevent damage due to impact.

PART 2 – PRODUCTS

2.1 NON-PRESSURE RATED PIPE

A. Mainline Gravity Sewer and Sewer Services

1. Pipe fittings and repair couplings shall be manufactured and tested in accordance with the following standards:
 - a. Sizes 8 inch through 27 inch and depths up to 20 feet: ASTM F2736, PSM SDR-35 PVC
 - b. Sizes 30 inch through 60 inch and depths up to 20 feet: ASTM F2764, PS46 PVC, T-1 minimum cell classification

2. Pipe shall have a minimum pipe stiffness of 46 PSI.
3. Minimum height of cover to the top of pipe to the existing elevation or proposed finished elevation (whichever is less) shall be two feet.
4. Elastomeric Gaskets: Conform with ASTM F477
5. Elastomeric Joints: Conform with ASTM D3212
6. Solvent Weld Joints: Not permitted.

B. Sewer Services

1. 4" and 6" pipe shall be Schedule 40 PVC and conform to section 33 00 02, Polyvinyl Chloride (PVC) Pipe and Fittings.
2. Branch laterals shall be designed to accept SDR 35.

2.2 DEFLECTION TEST REQUIREMENTS

- A.** Deflection testing procedures shall conform to Section 01 45 23 10, Testing and Inspection of Pipeline and Appurtenances.
- B.** The following table shall be used for the mandrel setting for Polypropylene Pipe:

Table 1
SaniTite HP Recommended Mandrel Settings

Pipe Type	Pipe Diameter (Inches)	Minimum Inside Diameter (Inches)	Inside Diameter With 5% Deflection (Inches)
Dual Wall	12	11.90	11.31
	15	14.85	14.11
	18	17.93	17.03
	21	20.79	19.75
	24	23.90	22.71
	30	29.79	28.30
Triple Wall	30	29.62	28.14
	36	35.40	33.63
	42	41.31	39.24
	48	47.31	44.94
	60	59.30	56.34

END OF SECTION

EXHIBIT 1

**CITY OF DE PERE MUNICIPAL CLUSTER MAILBOX UNIT (CBU)
INFORMATIONAL GUIDE AND POLICY**

City of De Pere Municipal Cluster Mailbox Unit (CBU) Informational Guide and Policy



The US Postal Service (USPS) has indicated that CBU's will be installed in every new subdivision, businesses and private developments. Requests for exceptions will require an appeal process that will be lengthy and not result in a timely decision. In that light the City of De Pere developed a new policy to simplify USPS coordination efforts, expedite the review process and develop a common understanding of what is an acceptable installation for De Pere Developers, Surveyors, Engineers and the Post Office. The goal is to develop a simple, fast & easy process that will protect our municipality and be workable for USPS, developers, surveyors, engineers, Brown County Planning/Tax Listing and Highway Department. The details and approach outlined below was reviewed by the USPS, Brown County Home Builders Association and other stakeholders.

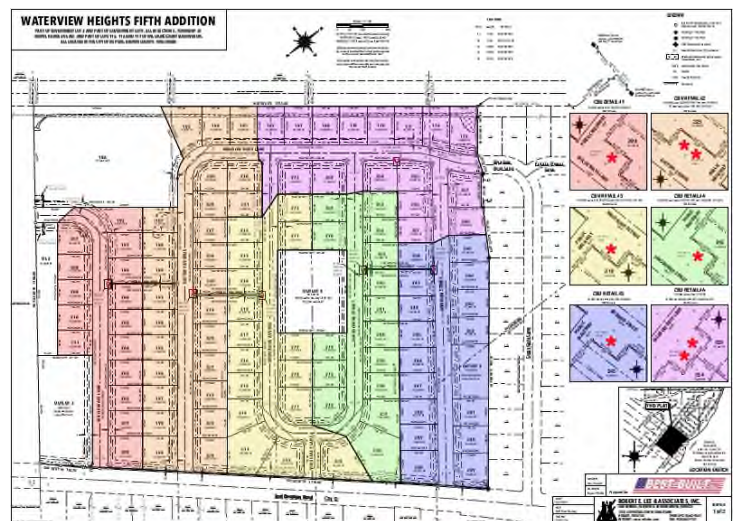
This guide also describes the construction and installation requirements for staff and for design engineers, limits municipal exposure and liability (as the right of way permitting authority), ensures proper ADA installations and clarifies that subdivision lot owners are responsible for long term CBU maintenance and replacement costs including the foundation pads. There are five major policy parts in De Pere:

- I. USPS CBU Coordination and Location Planning During the Plat/Site Plan Review
- II. Engineering Considerations for CBU Locations in Subdivisions
- III. CBU Construction Information
- IV. CBU Mailbox Information
- V. CBU Operation

All CBU installation costs will be added to municipal subdivision development costs, to be paid by the developer or property owner.

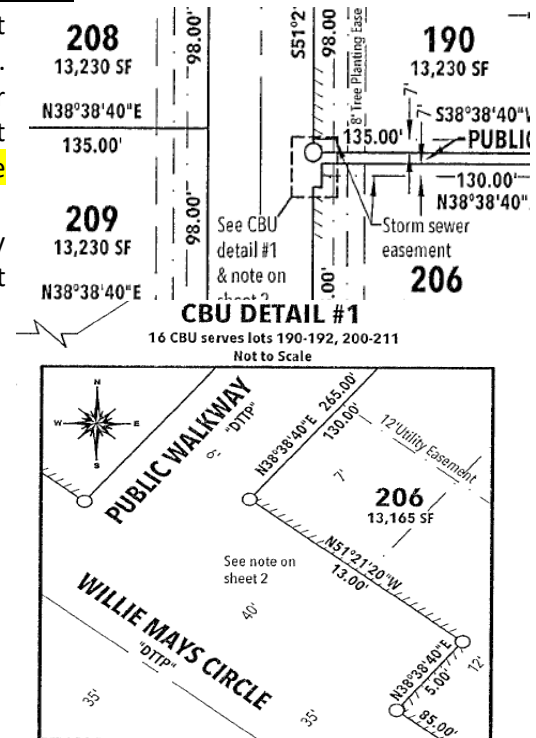
I. USPS CBU Coordination and Location Planning during the Plat/Site Plan Review

- Many of the CBU coordination difficulties begin with fact that neither USPS or Developers are transportation designers or engineers. Additionally, they cannot act as a Municipality to determine exactly what can be installed because they can't issue right of way use permits, nor approve designs for American Disability Act (ADA), crash, safety and breakaway requirements. Also, because so many different municipalities are involved each may have a different policy.
- **There are five steps for determining the location of CBU's once a subdivision plat comes our way:**
 - Assist the developer and surveyor. Engineers design and municipalities permit everything in the right of way, utilities, road, sewers etc. The City will assist planning and coordinate appropriate CBU locations that are ADA compliant and safe. CBU location needs are simple and outlined below. Creating a USPS plan submittal is easy and if done correctly the first time will be easy for USPS to approve it quickly.
 - Make a simple plan drawing like the one shown to the right. This simple plan shows which lots will be served by which CBU. Submit it to the post office and subdivision surveyor. USPS technically has 30 days to respond. Do it early and as soon as possible so as not to delay the subdivision design or platting process. Each location will have space for 2 CBU's, 1 parcel unit (for large packages) and space for 1 future CBU just in case. There are many CBU options, many units having 8 or more compartments, with 13 and 16 compartment units being most applicable to new



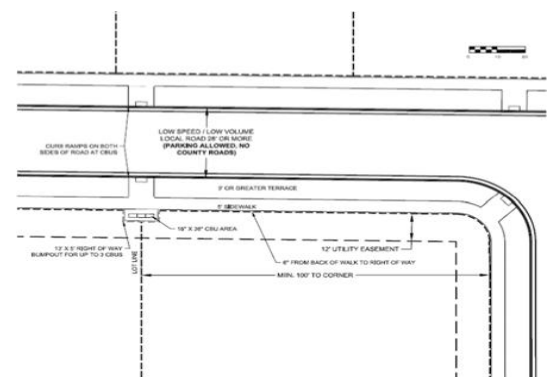
subdivisions. Two 13 or 16 compartment CBU's can accommodate from 26 or 32 lots. The CBU's will be installed on a 15' long by 5' wide concrete pad. Use only one model of CBU throughout whole subdivision or someone will get the dreaded "my compartment is smaller than their compartment" complaint.

- Ensure that the surveyor adds a "general" CBU plat note to protect the City. This is like the standard note on all plats requiring "drainage grading along lot lines". It should be a general note as Municipalities have nothing to do with enforcing restrictive covenants. However, the note could be both a general note and a restrictive covenant. De Pere's current note, endorsed by Brown County is as follows:
 - **The lot owners associated with the designated CBU are joint owners of the specified CBU structure and its foundation who are responsible for the long-term maintenance and replacement. If the property owners do not keep the CBU in a good-looking functional state, the municipality may assess/charge the lot owners for the shared cost of repairs or replacement.**
- Ensure the plat designates which lots are served by each CBU location.
 - The note is important because De Pere wants to convey that the municipality doesn't own or maintain the CBU's. Municipalities need to know exactly who is responsible for the CBU's if elected officials or constituents make a complaint about maintenance later. See the details and notes to the right as an example.
 - Brown County (as a separate coordination courtesy) currently plans to forward new plats to USPS representatives (contact info below) as part of their normal 20-day comment period. This does not replace the required USPS coordination plan/agreement, see below, but might help identify if a subdivision hasn't planned for CBU's.
- Submit the simple plan drawing to the USPS contacts below by email.
 - The City Planning Department will submit simple plan drawing to the area Postmaster and listed below:
 De Pere Postmaster - Amy DeBauche
 Phone: 920-336-4306 Cell: 414-588-8472
 Email: amy.e.debauche@usps.gov



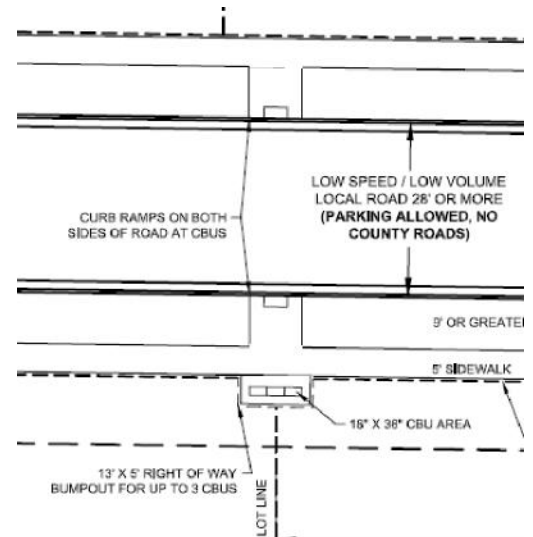
II. **Engineering Considerations in CBU Locations in Subdivisions**

- CBU location guide: see USPS National Delivery Planning Standards Handbook PO-632. (Construction details are in the next section)
 - Parking must be safe for residents & postal employees.
 - Locate them on low volume, low speed side streets that allow and provides for parking. The minimum street width is 28 feet.
 - Don't place CBU's on County, arterial or collector roadways that will have higher traffic volumes or high speeds. Typically, these roads only have travel lanes and narrow shoulders that are not adequate or safe to park on.
 - The roadway must have legal safe parking for users to stop and get out of cars.
 - Do not place CBU's in a cul-de-sac bulb area due to congestion of driveways and snow storage issues.
 - CBU's should be within one block from residences.
 - CBU's should be accessed from an ADA sidewalk.
 - Locate CBU's to have a short postal driving route travel distance.
 - Ideal postal driving routes utilize right hand turns.
 - The Post office will provide for an optional extra CBU parcel box to aid in parcel deliveries.
 - Items that don't fit into available compartments will be placed at the doorstep.



III. CBU Construction Information

- See the sample construction drawings urban roads with sidewalks.
- CBU's aren't crash or breakaway safe. Depending on your policy and terrace widths, CBU's should be a minimum of 2 or more feet clear of any curb as a clear zone and up to 6 feet away as a breakaway zone.
- While the CBU may be placed on either side of the sidewalk. De Pere does not want CBU's in the terrace due to possible CBU damage from snow plowing, to avoid breakaway requirements and clear distance issues.
- De Pere will require a right of way bump out behind the sidewalk so the CBU is still located in the public right of way, see the drawing to the right.
- A standard CBU **slab width** is 5 feet. The slab is poured adjacent to the sidewalk. **5 feet wide** allows a 2 feet offset to the front of the CBU from the sidewalk, 1.5 feet of CBU depth and 1.5 feet clearance on the back of the CBU's to the rear edge of slab.
- A standard CBU **slab length** measured along the sidewalk; to accommodate 2 CBU's, 1 parcel box and have 1 spare future CBU space, is 4 CBU spaces at 3 feet each plus 1.5 feet clear on each end, totaling **15 feet long**. The slab may be wider if a more centralized location is used and more CBU's are needed in a location. Just add 3 feet extra for each additional CBU.
- Each standard CBU **right of way bump out area width is 5 feet** to accommodate the 5 feet CBU slab that has the same clearance as the sidewalk is to right of way (6" in De Pere's case).
- Each standard CBU **right of way bump out area length is 18 feet** to accommodate more clearance of 1.5 feet on each side. Add 3 feet each if you plan additional CBU's
- ADA type accessible routes, part of USPS National Delivery Planning Standards Handbook PO-632
 - Standard sidewalk requirements: 5 feet wide (4 feet minimum), use curb ramps at curbs, 1 to 2% cross slope etc.
 - Don't place CBU's at the curb facing the street, as a curb is an ADA barrier and is not acceptable.
 - Place CBU's 15" or more off the sidewalk edge. De Pere will use a 24" offset for pedestrians and so there is generous space to plow snow with power equipment.
 - CBU foundation pads are 8" thick and they must be level to the sidewalk. Make them 5 feet wide to leave room around the sides and edges so lawnmowers and easily go around the edge without hitting the CBU box and eliminate lawn trimming needs.
 - The Sidewalk and CBU foundation will be installed by the City as part of the subdivision work.



IV. CBU Mailbox Information

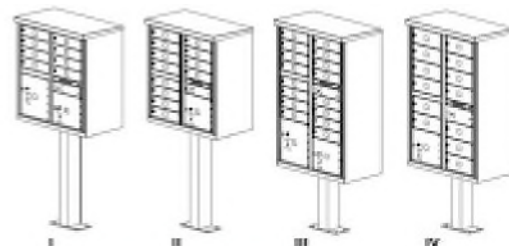
- Municipalities are an integral part of the subdivision construction process. Now that you know planning accessible routes and installing the CBU foundation pads is fairly simple, the City will purchase and install the actual CBU Mailboxes for the developer as well.
- Before the CBU is bolted down, call the post office to install the 2 Arrow USPS master door locks in the CBU so it is locked.
- **Also consider that it is probably important to make sure that CBU's and their foundation pads are installed before the first Builder shows up, so that home placement and driveways won't interfere with the CBU and pad later.**
 - Make sure the product you order is USPS approved - F SERIES



- The City will pass the keys out. If you have residents stopping by Public Works to get their garbage cans anyway that might make sense for the Municipality. Handing out keys only happens once.
- When homeowners move, they are supposed to hand CBU mailbox keys to the new homeowners.
- If a resident loses their keys, they will have to call the post office and for a fee USPS will install a new lock and provide a new set of keys.

- Florence Manufacturing and Salsbury Industries are the two primary manufacturers of USPS approved cluster mailboxes in the United States. The number of compartment slots and compartment slot sizes vary in each CBU type.

- All CBUs have the same outside overall dimensions: 30.5" wide by 18" deep. They all have the same total height. The posts are taller or shorter depending on how many compartments are selected. Standard 3" tall compartment door sizes come in 8, 12, and 16 unit configurations, while the larger 4-3/4" compartment door size comes in a 13 unit configuration. CBU's have two half double doors on the front that the postal employee opens to load the mail into. They also come with optional decorative features and parcel box models for larger delivery items.



	TYPE I	TYPE II	TYPE III	TYPE IV
INSTALLED HEIGHT	62"	64"	62"	62"
DEPTH	17-7/8"	17-7/8"	17-7/8"	17-7/8"
WIDTH	30.1/2"	30.1/2"	30.1/2"	30.1/2"
WEIGHT (WITHOUT POSTAL)	107 LBS	111 LBS	147 LBS	137 LBS
WEIGHT (WITH POSTAL)	123 LBS	129 LBS	162 LBS	152 LBS
QTY OF STANDARD COMPARTMENTS	8	12	16	13
QTY OF PARCEL COMPARTMENTS	0	0	0	1
PARCEL COMPARTMENT HEIGHT	30", 20"	30"	30", 20"	30"

- The two most common CBU models that might be used in a subdivision can be seen to the right. De Pere is going to standardize on the Type IV unit below.

- Type IV – is a 13 compartment CBU that has 4-3/4" tall and 12" wide slots. It has 1 lower parcel box built in the bottom and 1 outgoing mail slot. Smaller flexible.

Packages might fit in these larger slots but it only has one parcel box. 2 CBU units will serve up to 26 lots.



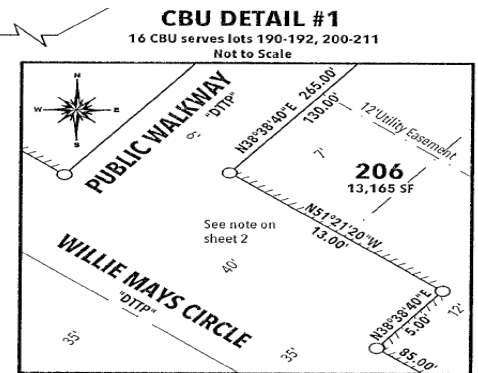
- De Pere is planning to standardize on the black color.
- Decorative features are optional, but De Pere plans to add the Flat top style decorative features for all new installations



V. CBU Operation

- How lot addresses & CBU door labels work:
 - Units come with either labels or engraved numbers on each mailbox compartment door.
 - Typically, up to 5 digits can be on each label or engraved.
 - Actual street addresses are not typically used on each tenant mailbox box door for various reasons.
 - In De Pere each CBU location will have a ROW bump out location number shown on the plat and a detail showing which lot numbers that are served. Typically, 2 CBU's will be at each bump out location serving 26 to 32 lots. If you have any duplexes, town houses or condo lots remember to plan for that. Apartments will have their own on-site CBU units.

- **Example CBU door numbering method** could be as follows: The first label number would be 4 for CBU bump out location #4. The second number, as normally there are 2 CBUs are at each location, would be either 1 or 2. The last two digits would be the CBU compartment number, say 1 – 13 or 1 – 16, so the the first CBU unit would have compartment numbers as 411, 412, 413 through 4116, the second CBU unit at the same location would be 421, 422, 423 through 4216. The numbers on the compartment doors can be labeled with decals or be engraved.
- Once the plat is recorded and a street address is given for each subdivision lot. City staff will use a strip label maker to label the floor of each compartment inside the CBU unit with the street name & address of the home so the delivery person will know which slot to put mail in when they open the front double doors. Then label each key with the CBU door unit number and the street address of the home. Keep the keys at the Public Works office, 925 S. Sixth Street, and distribute them when residents come in for their garbage cans.
- **When ordering, Color Select BLACK, Use/Locks Select USPS use WITHOUT Postmaster Lock (USPS installs them for free), Anchor Bolts Select Include Expansion Anchor Bolts for a pre poured concrete slab, Compartment Door Identification Select Custom Door Engraving it should be free, Enter the CBU custom numbering as determined by the subdivision plan & municipality.**
- **Parcel Keys work like this: When the postal delivery person places a parcel in a parcel box the key to the parcel box is placed in the mail slot of the resident intended to receive the package. When the resident obtains the key from their mail slot, they open the appropriately labeled parcel locker to retrieve their parcel and the special parcel lock traps and holds the key for the postal delivery person to be used again.**



Extra USPS provided parcel boxes

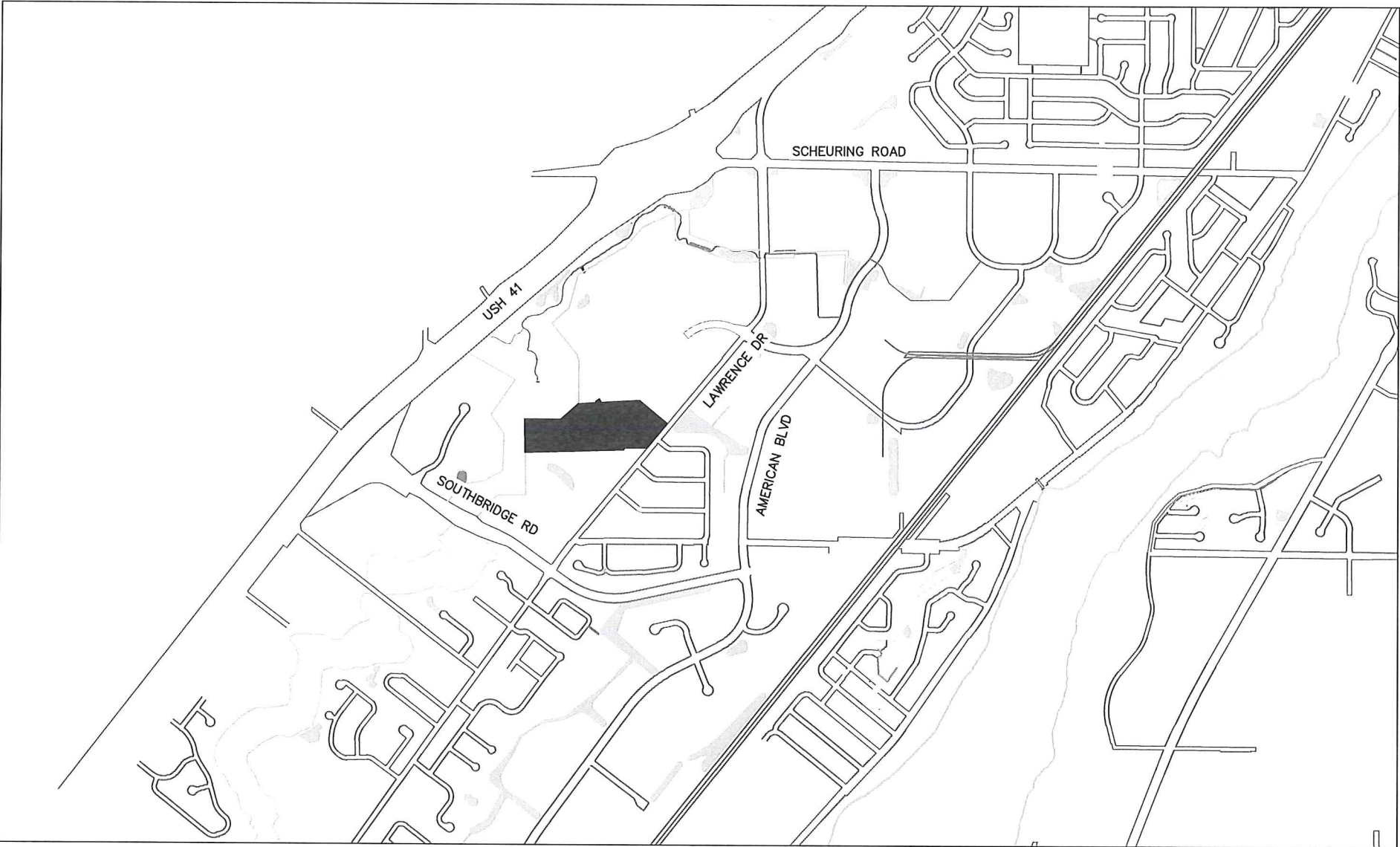
- USPS Postmasters in Brown County will optionally provide one extra 2 or 4 unit parcel box for larger parcels. It has the same dimensions as regular CBU's. An extra parcel box is not required.
- As part of the coordination process USPS will order and pay for the extra parcel box if desired and match the color. USPS has a contract with Salsbury for CBU's. There are several licensed & authorized CBU manufacturers and they should all be built exactly the same like Salsbury, Florence etc.

PROJECT# 23-04
KINGSTON PRESERVE UTILITY AND
STREET CONSTRUCTION

CITY OF DE PERE



ENGINEER DIVISION
925 S. SIXTH ST
DE PERE, WI 54115



SITE LOCATION MAP
N.T.S.

SHEET NO.	DESCRIPTION
G001	TITLE SHEET
G002	STANDARD ABBREVIATION & SYMBOLS
G003	PROJECT SHEET LAYOUT
G004	TYPICAL SECTIONS
G005	DEMOLITION PLAN
C101 - C111	PLAN AND PROFILE SHEETS
C301 - C311	CROSS SECTIONS
C401 - C402	ALIGNMENTS PLAN
C403	EROSION CONTROL PLAN
C404 - C405	INTERSECTION & CUL DE SAC DETAILS
C406	POND PLAN
C407	SITE GRADING AND RESTORATION PLANS
C408 - C409	TRAFFIC CONTROL PLANS
C501	PROJECT DETAILS
C502 - C504	CONSTRUCTION DETAILS

CITY OF DE PERE
BOARD OF PUBLIC WORKS

2/15/2023	<i>E.P. Rakers</i>
DATE	CITY ENGINEER
2/15/23	<i>Mayor M. R. Rakers</i>
DATE	CITY ADMINISTRATOR
2/15/2023	<i>[Signature]</i>
DATE	MAYOR

STAMPS:



LIST OF STANDARD ABBREVIATIONS

ADT	AVERAGE DAILY TRAFFIC	N	NORTH
AGGR	AGGREGATE	NB	NORTHBOUND
AH	AHEAD	NC	NORMAL CROWN
ASPH	ASPHALT	NE	NORTHEAST
B/B	BACK TO BACK	NO	NUMBER
BARR	BARRICADE	NTS	NOT TO SCALE
BC	BACK OF CURB	NW	NORTHWEST
BK	BACK	O	OIL
BL	BASELINE	O&C	OIL AND CHIP
BLVD	BOULEVARD	OBLIT	OBLITERATE
BLDG	BUILDING	OD	OUTSIDE DIAMETER
BM	BENCHMARK	PC	POINT OF CURVATURE
BOW	BACK OF SIDEWALK	PCC	POINT OF COMPOUND CURVE
BSMT	BASEMENT	PCC	PORTLAND CEMENT CONCRETE
C	CUT	PED	PEDESTAL
C&G	CURB AND GUTTER	PLE	PERMANENT LIMITED EASEMENT
C/C	CENTER TO CENTER	PVMT	PAVEMENT
CABC	CRUSHED AGGREGATE BASE COURSE	PE	PRIVATE ENTRANCE
CB	CATCH BASIN	PI	POINT OF INTERSECTION
CE	CONSTRUCTION ENTRANCE	PJF	PRE-FORMED JOINT FILLER
CI	CAST IRON PIPE	PL	PROPERTY LINE
CL	CENTERLINE	POC	POINT OF CURVE
CMP	CORRUGATED METAL PIPE	POT	POINT ON TANGENT
CNTY	COUNTY	PP	POLYETHYLENE
CO	CLEANOUT	PRC	POINT OF REVERSE CURVATURE
CONC	CONCRETE	PROJ	PROJECT
CONSTR	CONSTRUCTION	PROP	PROPOSED
CONSTR JT	CONSTRUCTION JOINT	PSI	POUND PER SQUARE INCH
CORP	CORPORATION	PT	POINT OF TANGENCY
CP	CONTROL POINT	PVC	POLYVINYL CHLORIDE
CTH	COUNTY TRUNK HIGHWAY	R	RANGE OR RADIUS
CTRL JT	CONTROL JOINT	RCP	REINFORCED CONCRETE PIPE
CTV	CABLE TV	REBAR	REINFORCEMENT BAR
CY	CUBIC YARD	REL	RELOCATE
D	DEPTH	REM	REMAINING
DIA	DIAMETER	REQD	REQUIRED
DI	DUCTILE IRON PIPE	RL	REFERENCE LINE
DISCH	DISCHARGE	ROW	RIGHT OF WAY
DW	DRIVEWAY	RP	REFERENCE POINT
E	EAST (SEE ELEC BELOW)	RR	RAILROAD
EA	EACH	RT	RIGHT
EB	EASTBOUND	RW	RETAINING WALL
EBS	EXCAVATION BELOW SUBGRADE	S	SOUTH
ECS	EXTERNAL CHIMNEY SEAL	SALV	SALVAGE
EL	ELEVATION	SAN	SANITARY
ELEC	ELECTRIC (E WHEN USED IN LINE STYLE)	SB	SOUTHBOUND
EMB	EMBANKMENT	SDWK	SIDEWALK
ENTR	ENTRANCE	SE	SOUTHEAST
EP	EDGE OF PAVEMENT	SF	SQUARE FEET
EW	ENDWALL	SHLDR	SHOULDER
EXC	EXCAVATION	SY	SQUARE YARD
EXIST	EXISTING	SS	STORM SEWER
F	FILL	SSD	STOPPING SIGHT DISTANCE
F/F	FACE TO FACE	ST	STREET
FDN	FOUNDATION	STA	STATION
FE	FIELD ENTRANCE	STD	STANDARD
FERT	FERTILIZER	STH	STATE HIGHWAY TRUNK
FIN GR	FINISHED GRADE	STM	STORM
FL	FLOWLINE	STP	SEWAGE TREATMENT PLANT
FO	FIBER OPTIC	STRUCT	STRUCTURE OR STRUCTURAL
FOW	FRONT OF SIDEWALK	SW	SOUTHWEST
FT	FOOT	TAN	TANGENT
FTG	FOOTING	T	TOWN (T WHEN USED FOR TELEPHONE LINE)
G	GAS	TEL	TELEPHONE
GV	GAS VALVE	TEMP	TEMPORARY
GW	GUY WIRE	TLE	TEMPORARY LIMITED EASEMENT
HDPE	HIGH DENSITY POLYETHYLENE	TOC	TOP OF CURB
HR	HANDICAP RAMP	TOW	TOP OF WATER
HSE	HOUSE	TRANS	TRANSITION
HT	HEIGHT	TYP	TYPICAL
HYD	HYDRANT	UG	UNDERGROUND
I	INTERSECTION ANGLE	USH	US HIGHWAY
ICS	INTERNAL CHIMNEY SEAL	VC	VERTICAL CURVE
ID	INSIDE DIAMETER	VERT	VERTICAL
IN	INCH	VOL	VOLUME
INL	INLET	VPC	VERTICAL POINT OF CURVATURE
INTERS	INTERSECTION	VPI	VERTICAL POINT OF INTERSECTION
INV	INVERT	VPRC	VERTICAL POINT OF REVERSE CURVE
IP	IRON PIPE OR PIN	VPT	VERTICAL POINT OF TANGENCY
JCT	JUNCTION	W	WEST
L	LENGTH (OF CURVE)	WB	WESTBOUND
LC	LONG CHORD OF CURVE	WM	WATERMAIN
LP	LIGHTPOLE	WSO	WATER SHUTOFF VALVE
LS	LIFT STATION OR LUMP SUM	WTP	WATER TREATMENT PLANT
LT	LEFT	WV	WATER VALVE
MAINT	MAINTENANCE	WWTP	WASTE WATER TREATMENT PLANT
MATL	MATERIAL	YD	YARD
MB	MAILBOX		
MH	MANHOLE		
MP	MARKER POST		

MAPPING & TOPOGRAPHY SYMBOLOGY

DESCRIPTION	SYMBOL	
	EXISTING	PROPOSED
BENCHMARK		
BUSH		
CATCH BASIN/INLET		
CABLE TV BOX		
CONTROL POINT		
ELECTRICAL BOX		
EROSION CONTROL - INLET		
FIELD INLET		
GAS VALVE		
HEDGE		
HYDRANT		
IRON PIPE		
LIGHTPOLE		
MAILBOX		
MANHOLE ELECTRIC		
MANHOLE SANITARY		
MANHOLE STORM		
MONITORING WELL		
POWER POLE		
LIGHT POLE		
SIGN		
SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE		
SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE		
SOIL BORING		
STUMP		
TELEPHONE MANHOLE		
TELEPHONE PEDESTAL		
TREE		
WELL		
WATER SERVICE VALVE		
BUTTERFLY WATER VALVE		
WATER VALVE		

GENERAL CONSTRUCTION NOTES:

- ALL ELEVATIONS ARE REFERENCED TO NAVD 88.
- THE WORK UNDER THIS CONTRACT SHALL BE IN ACCORDANCE WITH THE CITY OF DE PERE, CURRENT CONSTRUCTION SPECIFICATIONS AND THESE SPECIAL PROVISIONS AND PLANS, AND THE LATEST ADDITION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARDS SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION SPECIFICATIONS, LATEST EDITION, WHERE REFERENCED IN THE CITY SPECIFICATIONS.
- ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO CONSTRUCTION AND SHALL CONFIRM TO THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES CONSTRUCTION SITE EROSION CONTROL AND TECHNICAL STANDARDS.
- EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING EXACT LOCATIONS AND ELEVATIONS OF ALL UTILITIES. WHETHER SHOWN OR NOT, FROM THE OWNERS OF THE RESPECTIVE UTILITIES. ALL UTILITIES OWNERS SHALL BE NOTIFIED BY THE CONTRACTOR 72 HOURS PRIOR TO EXCAVATION.

MAPPING & TOPOGRAPHY SYMBOLOGY

DESCRIPTION	SYMBOL	
	PLAN	
EXISTING SANITARY SEWER LINE	<div>(SIZE AND MATERIAL) San</div>	
PROPOSED SANITARY SEWER LINE	<div>100'-8" PVC SAN San</div>	
EXISTING STORM SEWER LINE	<div>(SIZE AND MATERIAL) ST</div>	
PROPOSED STORM SEWER LINE	<div>100'-8" PVC STM ST</div>	
EXISTING WATER MAIN LINE	<div>(SIZE AND MATERIAL) W</div>	
PROPOSED WATER MAIN LINE	<div>100'-8" PVC WM (TEE-BEND) W</div>	
EXISTING ELECTRICAL LINE	<div>E</div>	
EXISTING GAS MAIN LINE	<div>G</div>	
EXISTING TELEPHONE LINE	<div>T</div>	
EXISTING CABLE TV LINE	<div>TV</div>	
EXISTING SANITARY LATERAL	<div>San</div>	
EXISTING WATER SERVICE	<div>W</div>	
RIGHT OF WAY	<div>ROW</div>	
PROPERTY LINE	<div>PL</div>	
EASEMENT	<div>ESM</div>	
SILT FENCE EROSION CONTROL	<div></div>	
EXISTING FIBER OPTIC	<div>FO</div>	
EXISTING MAJOR CONTOUR	<div>615</div>	
EXISTING MINOR CONTOUR	<div>612</div>	
PROPOSED MAJOR CONTOUR	<div>615</div>	
PROPOSED MINOR CONTOUR	<div>612</div>	

PROFILE

EXISTING SANITARY SEWER LINE	<div>(SIZE AND MATERIAL)</div>
PROPOSED SANITARY SEWER LINE	<div>100'-8" PVC SAN @ 0.40%</div>
EXISTING STORM SEWER LINE	<div>(SIZE AND MATERIAL)</div>
PROPOSED STORM SEWER LINE	<div>100'-8" PVC STM @ 1.0%</div>
EXISTING WATER MAIN LINE	<div>(SIZE AND MATERIAL)</div>
PROPOSED WATER MAIN LINE	<div>PROPOSE 8" PVC WM</div>

PATCH SYMBOLS

ASPHALTIC CONCRETE PAVEMENT		CRUSHED AGGREGATE BASE COURSE	
PORTLAND CEMENT CONCRETE			

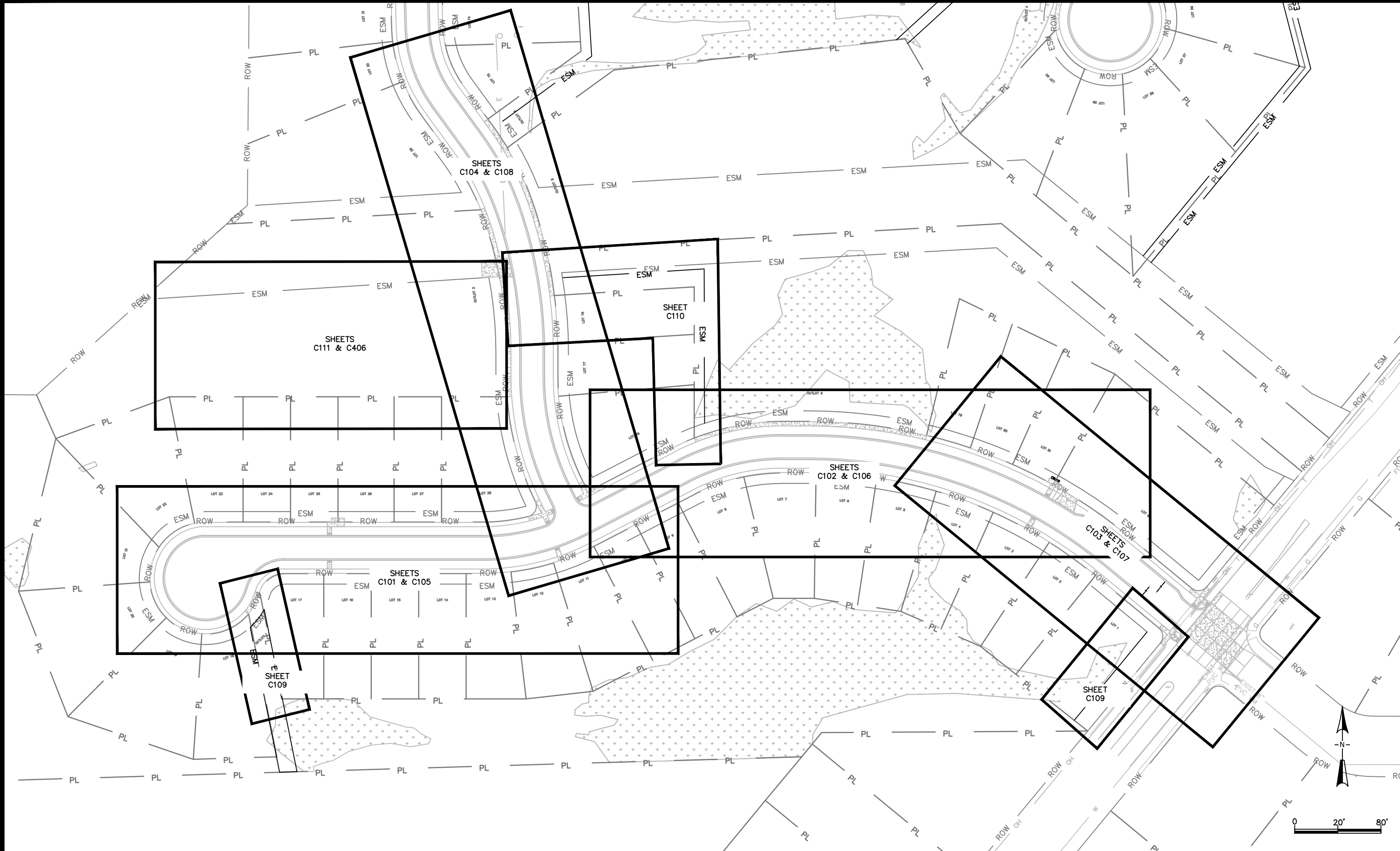
CITY OF DE PERE

ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115
OFFICE 920-339-4060 FAX 920-339-4071

STANDARD ABBREVIATIONS
AND SYMBOLS

NAME: KINGSTON PRESERVE UTILITY
AND STREET CONSTRUCTION
PROJECT # 23-04

	BY	DATE	REVISIONS / ISSUES			
			NO.	DATE	BY	REMARKS
SURVEYED						
DRAWN	KAD	01-2022				
DESIGNED						
CHECKED						



CITY OF DE PERE

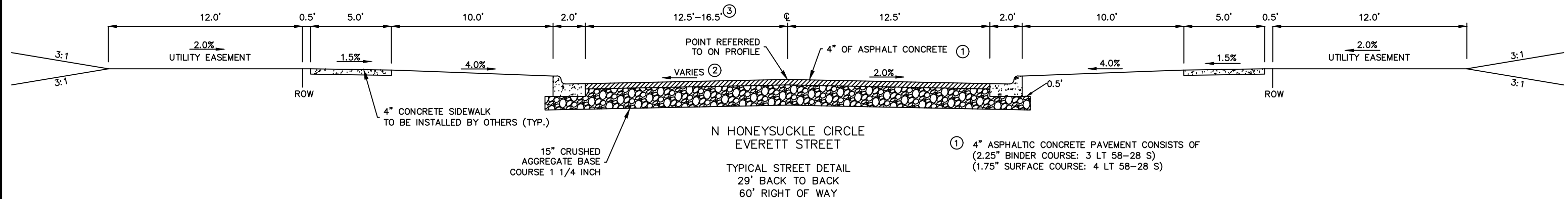
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115
OFFICE 920-339-4061 FAX 920-339-4071

**KINGSTON PRESERVE
OVERALL SHEET LAYOUT
PHASE 1**

NAME:
KINGSTON PRESERVE UTILITY
AND STREET CONSTRUCTION
PROJECT # 23-04

	BY	DATE
SURVEYED	REL	09-2022
DRAWN	MAL	11-2022
DESIGNED	MAL & EPR	11-2022
CHECKED	EPR	11-2022

REVISIONS / ISSUES			
NO.	DATE	BY	REMARKS

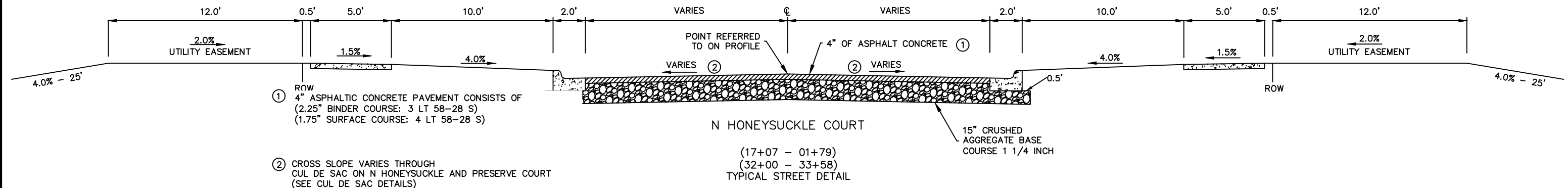


2 CROSS SLOPE VARIES AS FOLLOWS:

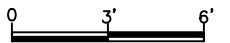
STATION	STATION	SLOPE
12+25	12+50	TRANSITION 2.0% TO 1.0%
12+50	13+00	1.0%

3 STREET WIDTH VARIES AS FOLLOWS:

STATION	STATION	WIDTH
11+26	11+38	VARIES 12.5' TO 16.5'
11+38	12+75	16.5'
12+75	12+86	VARIES 16.5' TO 12.5'



- 1 4" ASPHALTIC CONCRETE PAVEMENT CONSISTS OF (2.25" BINDER COURSE: 3 LT 58-28 S) (1.75" SURFACE COURSE: 4 LT 58-28 S)
- 2 CROSS SLOPE VARIES THROUGH CUL DE SAC ON N HONEYSUCKLE AND PRESERVE COURT (SEE CUL DE SAC DETAILS)



CITY OF DE PERE

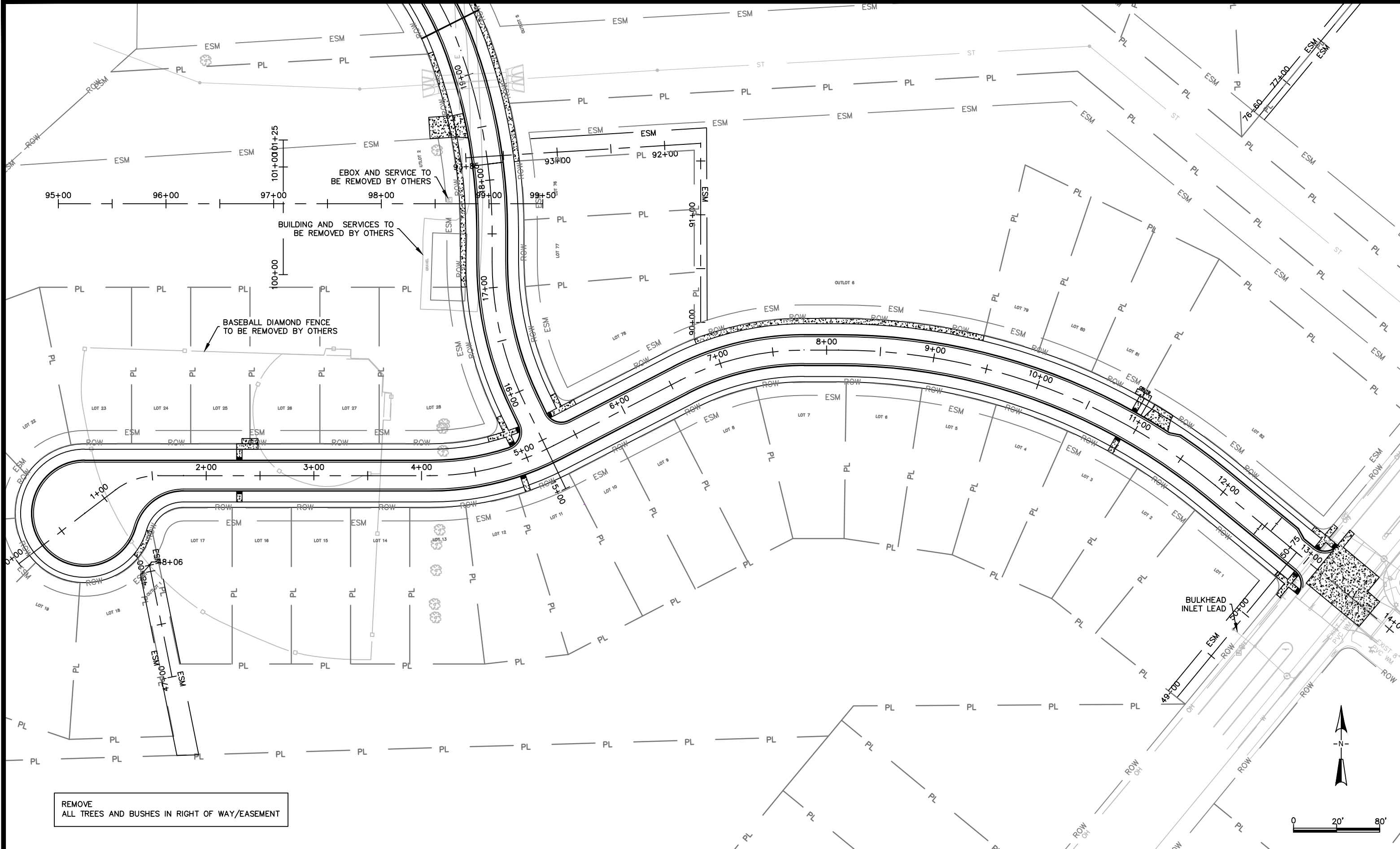
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115
OFFICE 920-339-4061 FAX 920-339-4071

KINGSTON PRESERVE TYPICAL SECTIONS

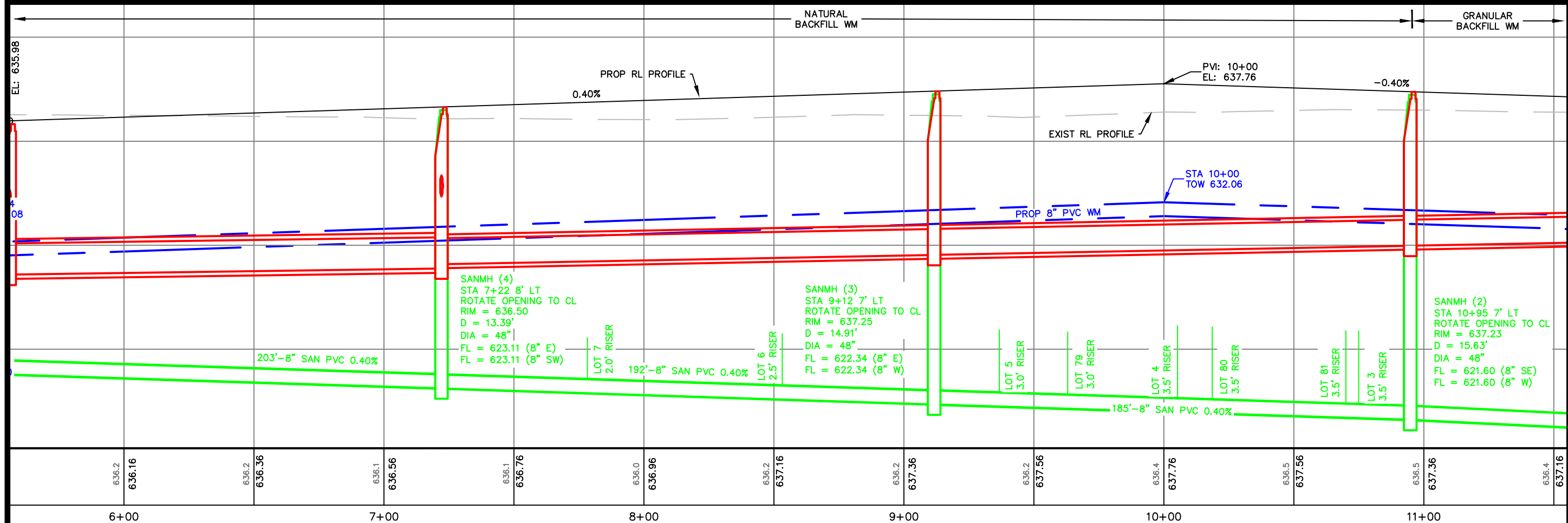
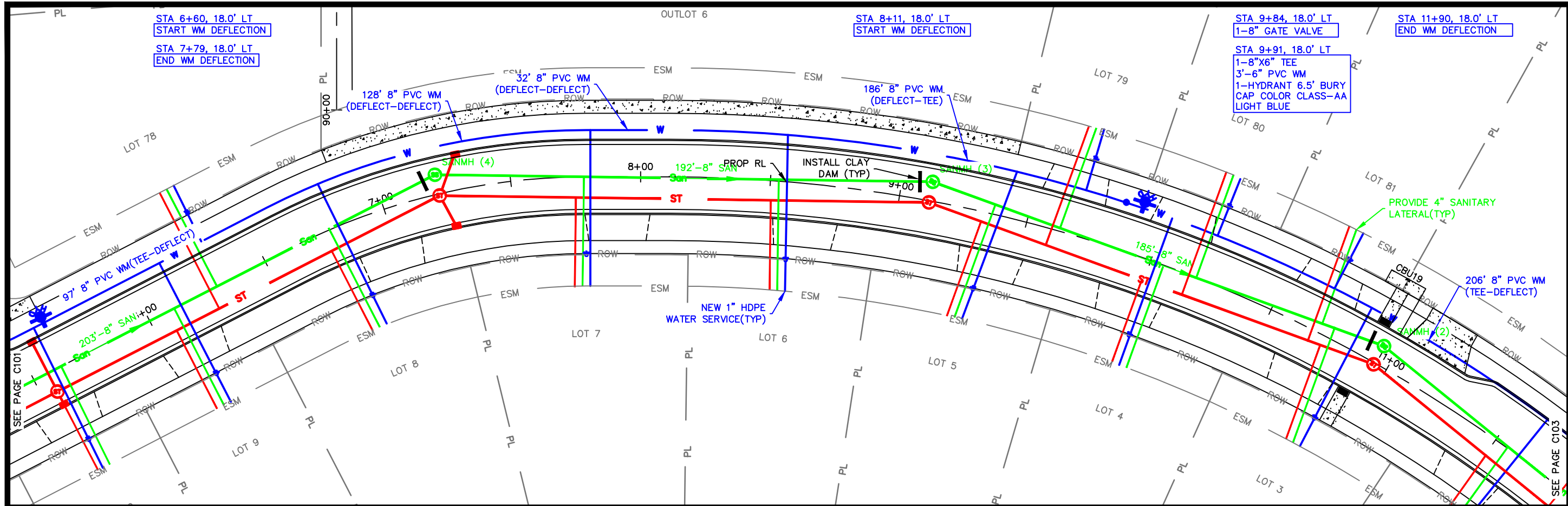
NAME: KINGSTON PRESERVE UTILITY AND STREET CONSTRUCTION
PROJECT # 23-04

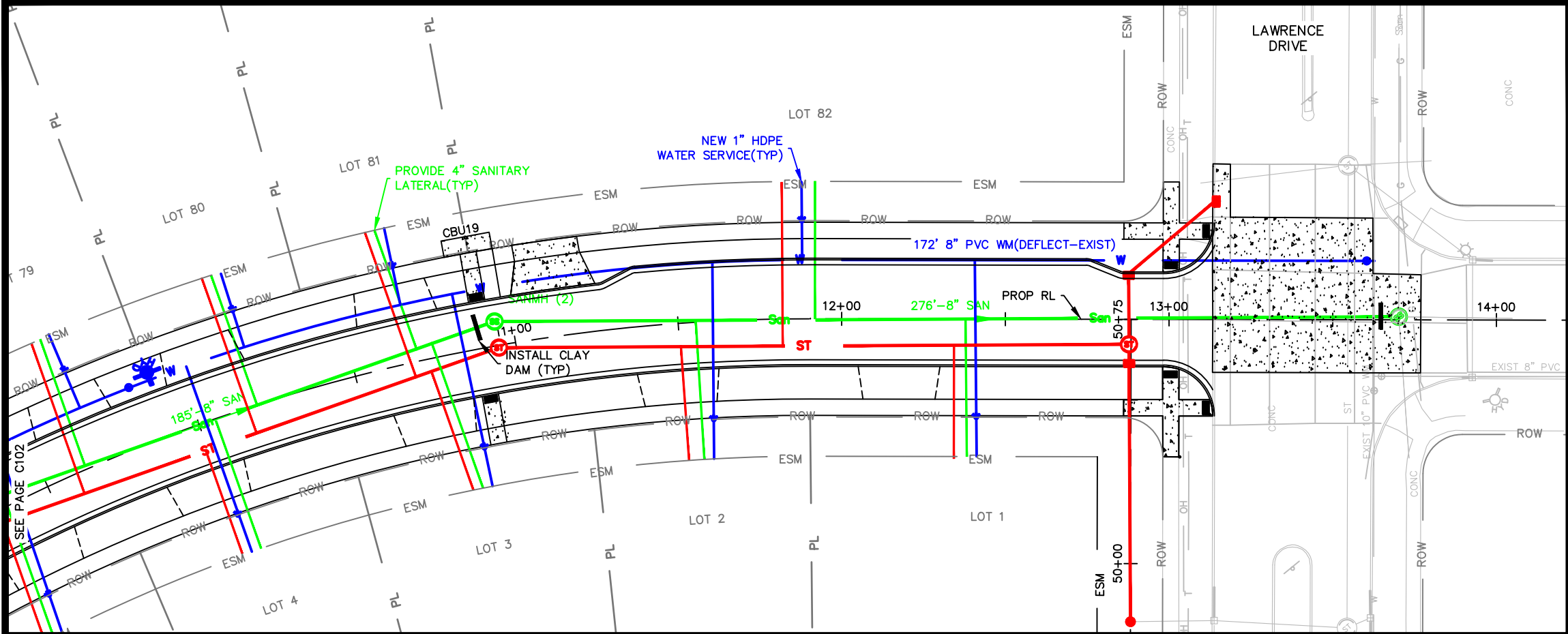
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DRAWN	MAL	11-2022				
DESIGNED	MAL & EPR	11-2022				
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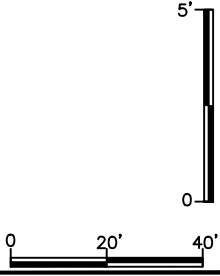
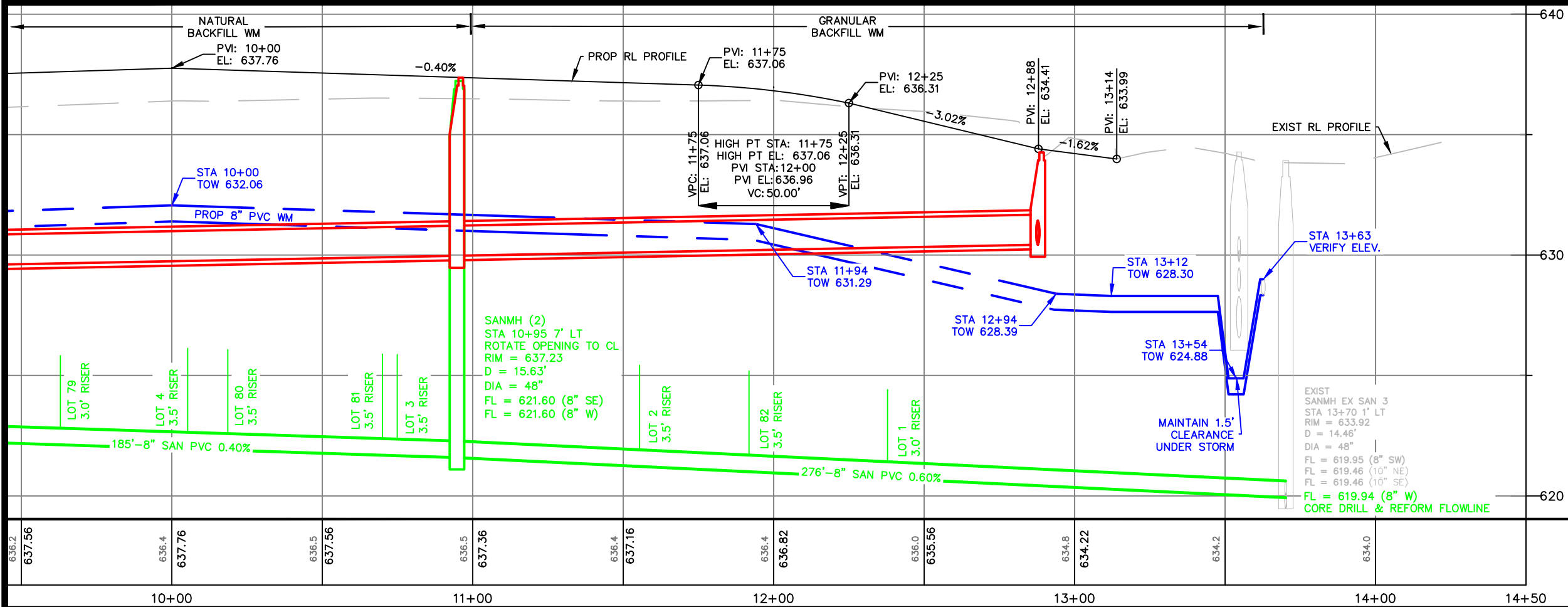
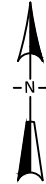
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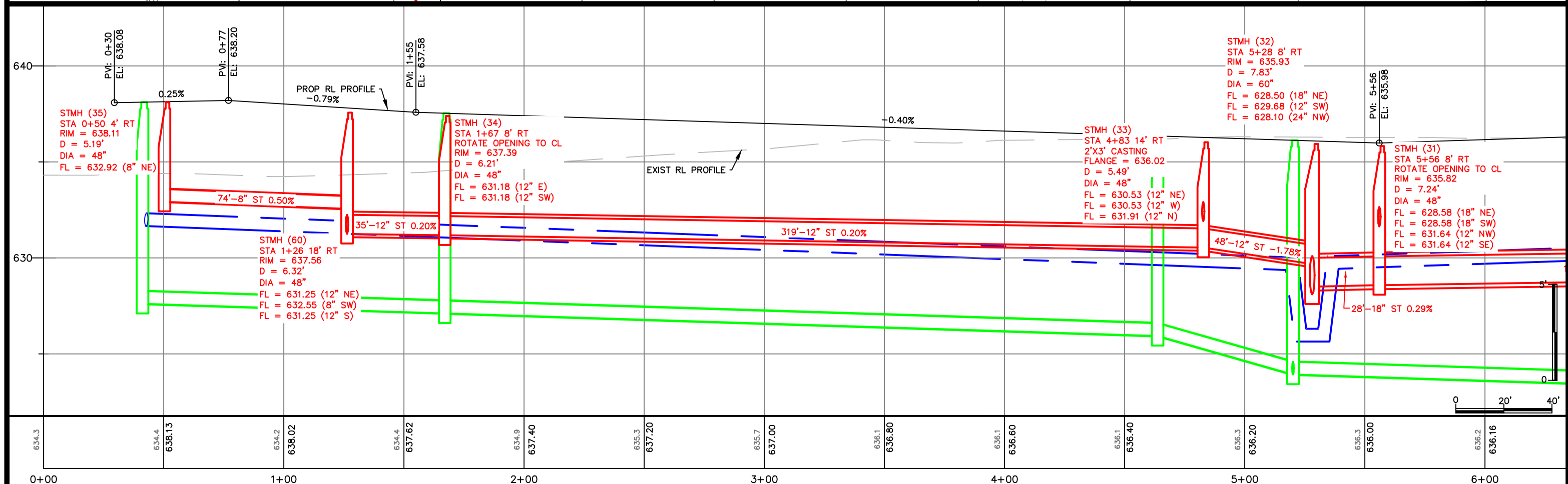
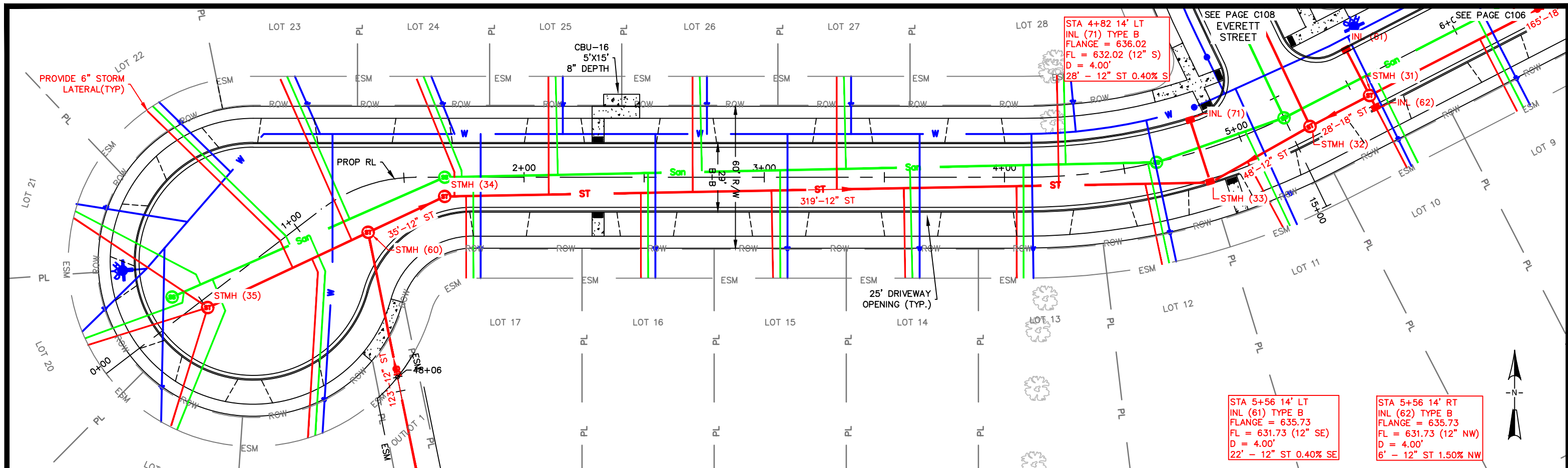




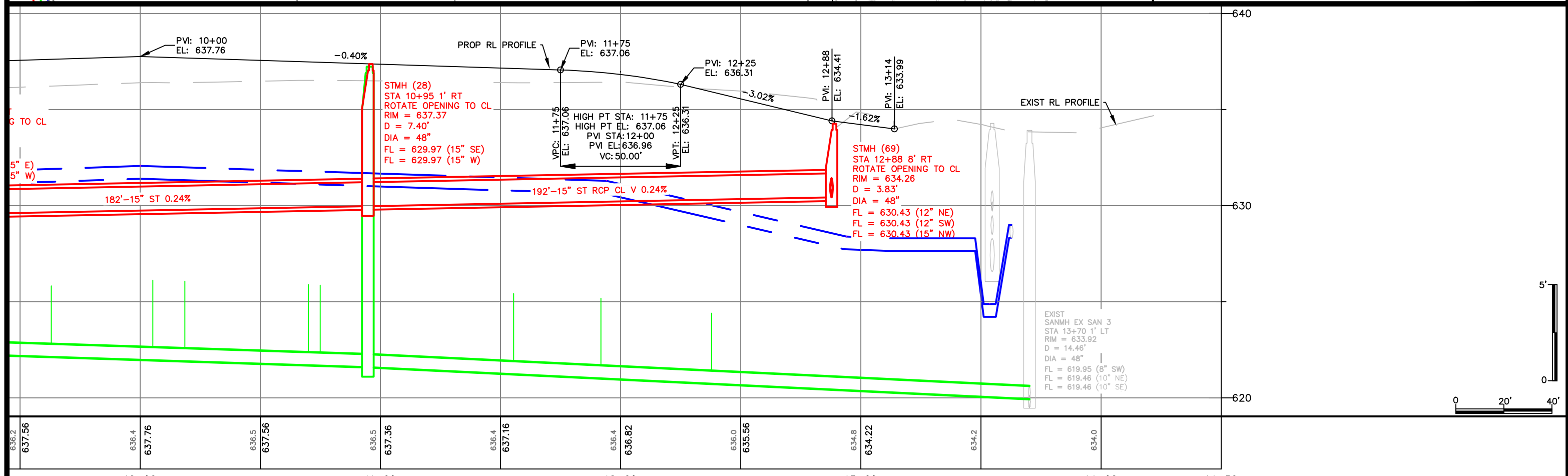
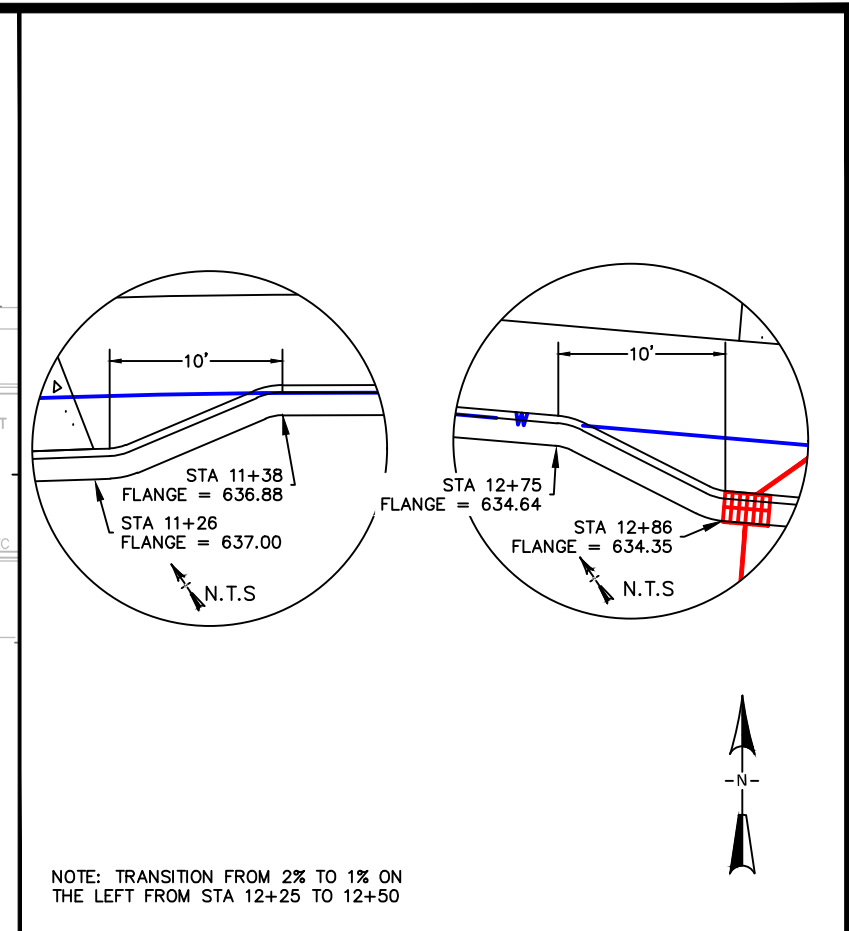
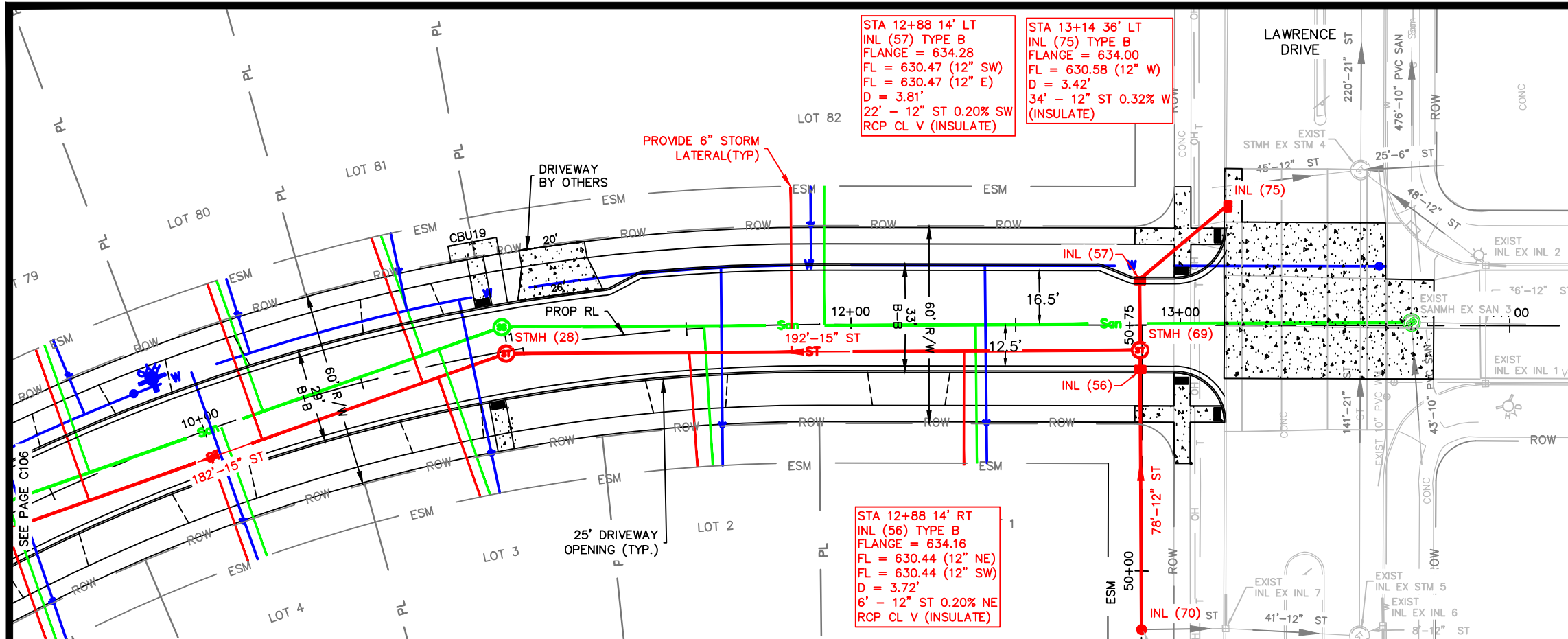
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1-VERTICAL OFFSET

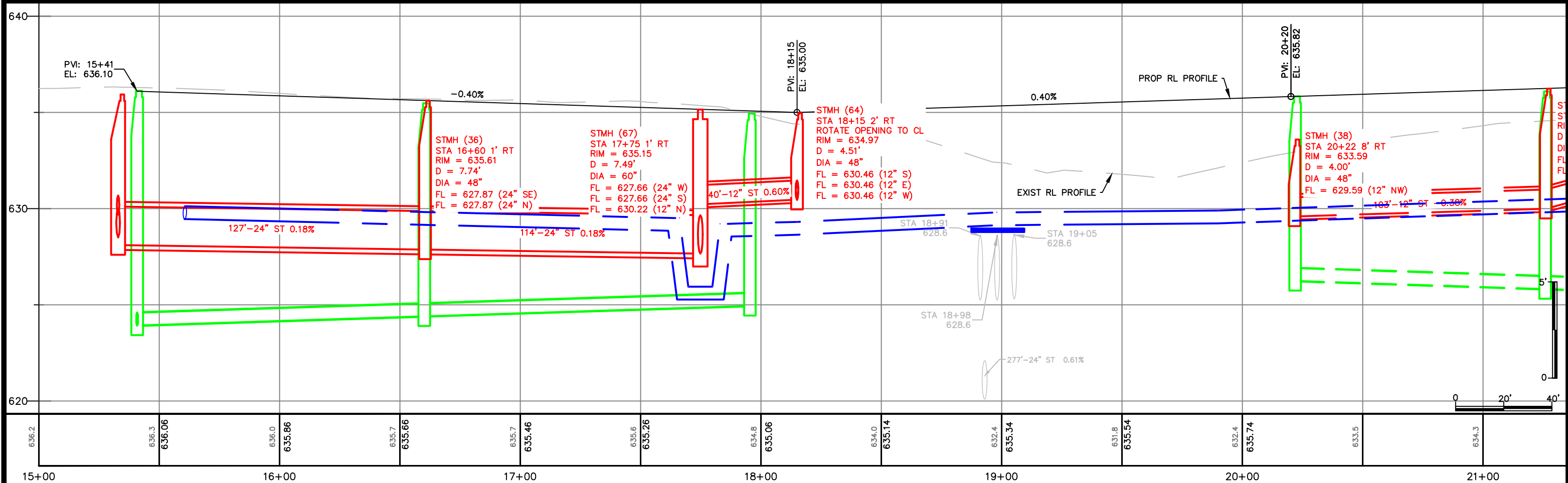
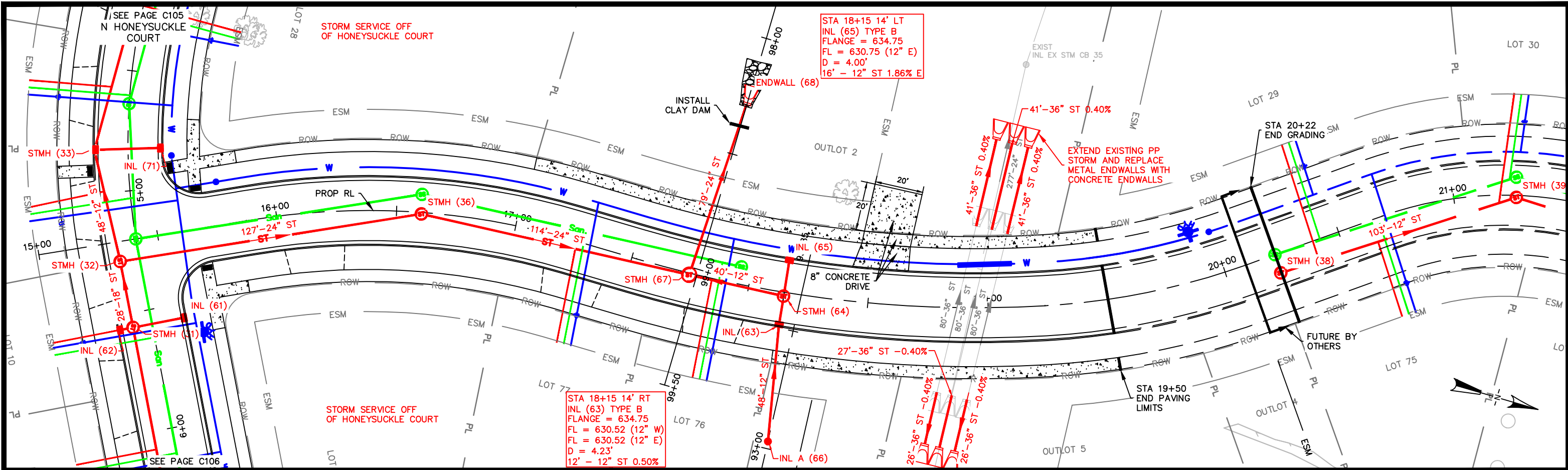
STA 13+63, 18.0' LT
1-8" VALVE WITH
TAPPING TEE OR
CUT-IN-TEE WITH VALVE

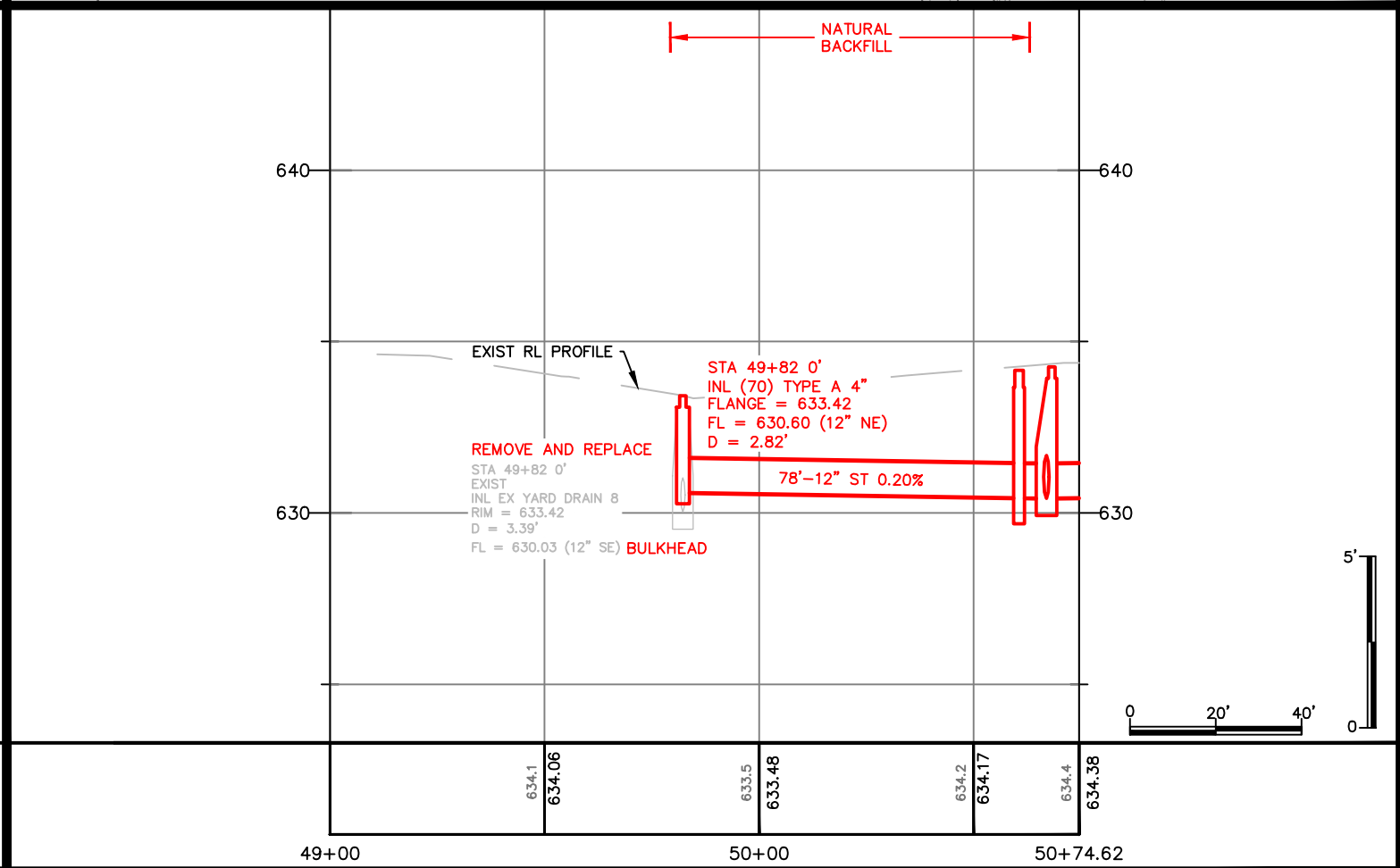
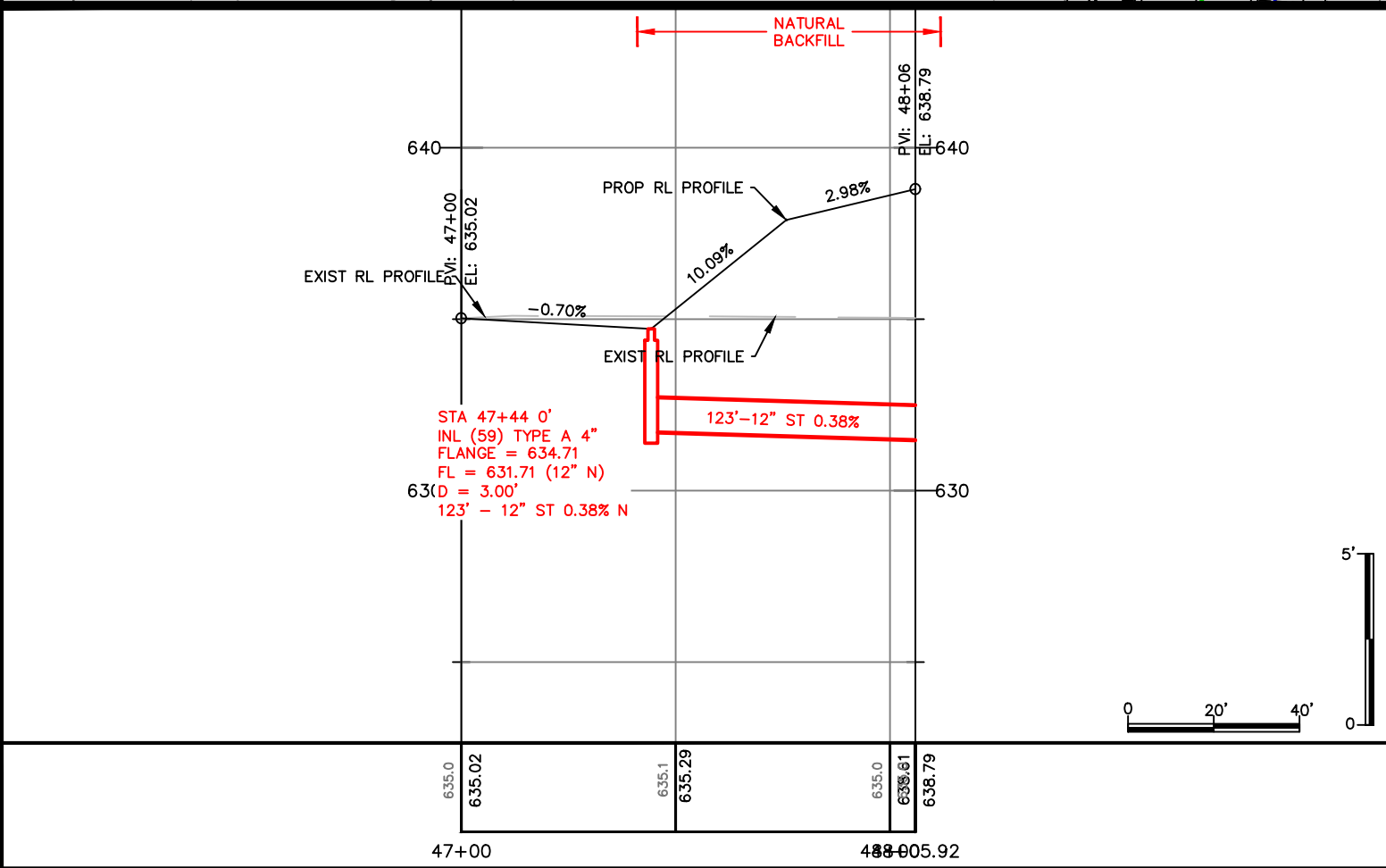
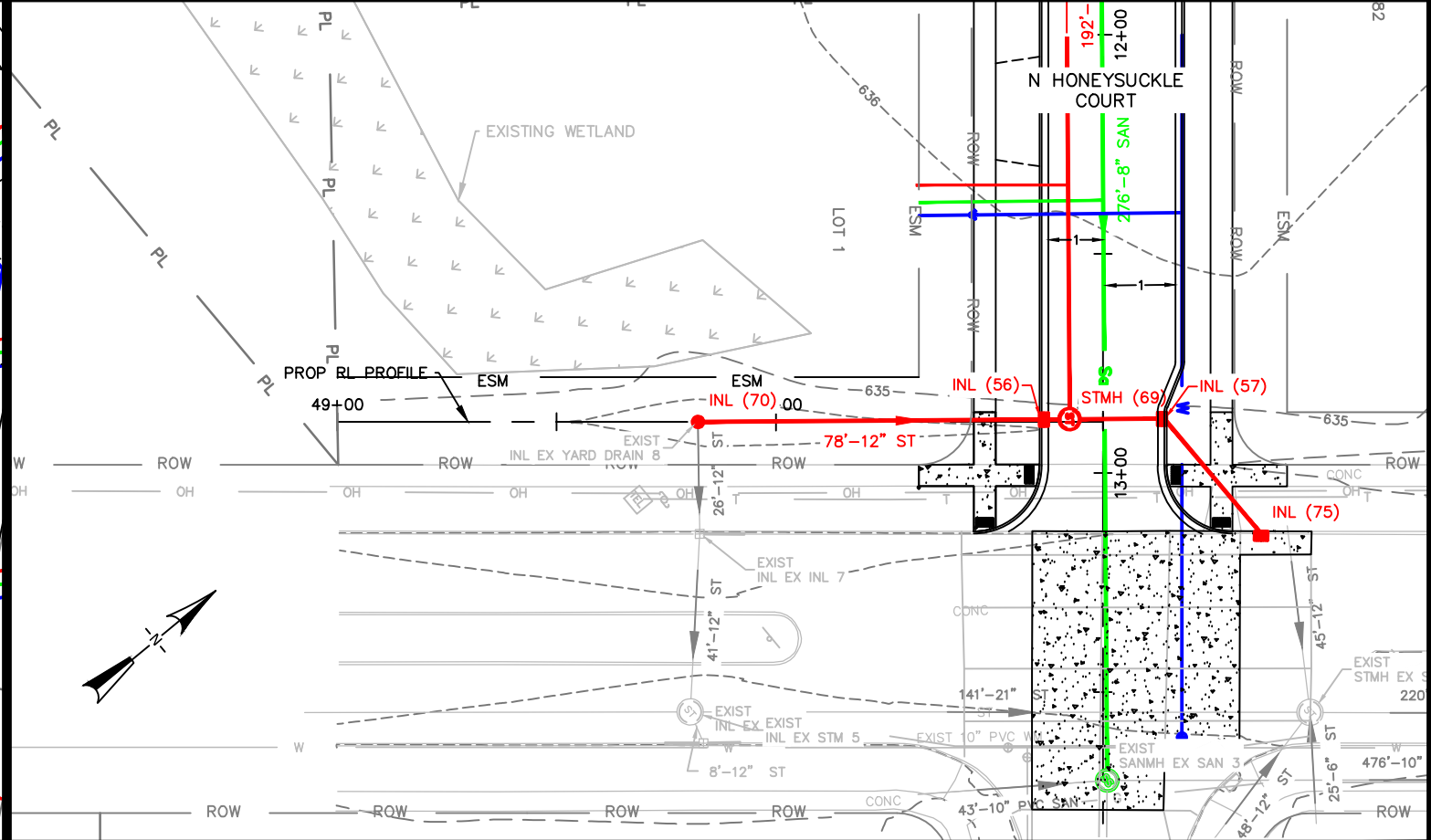
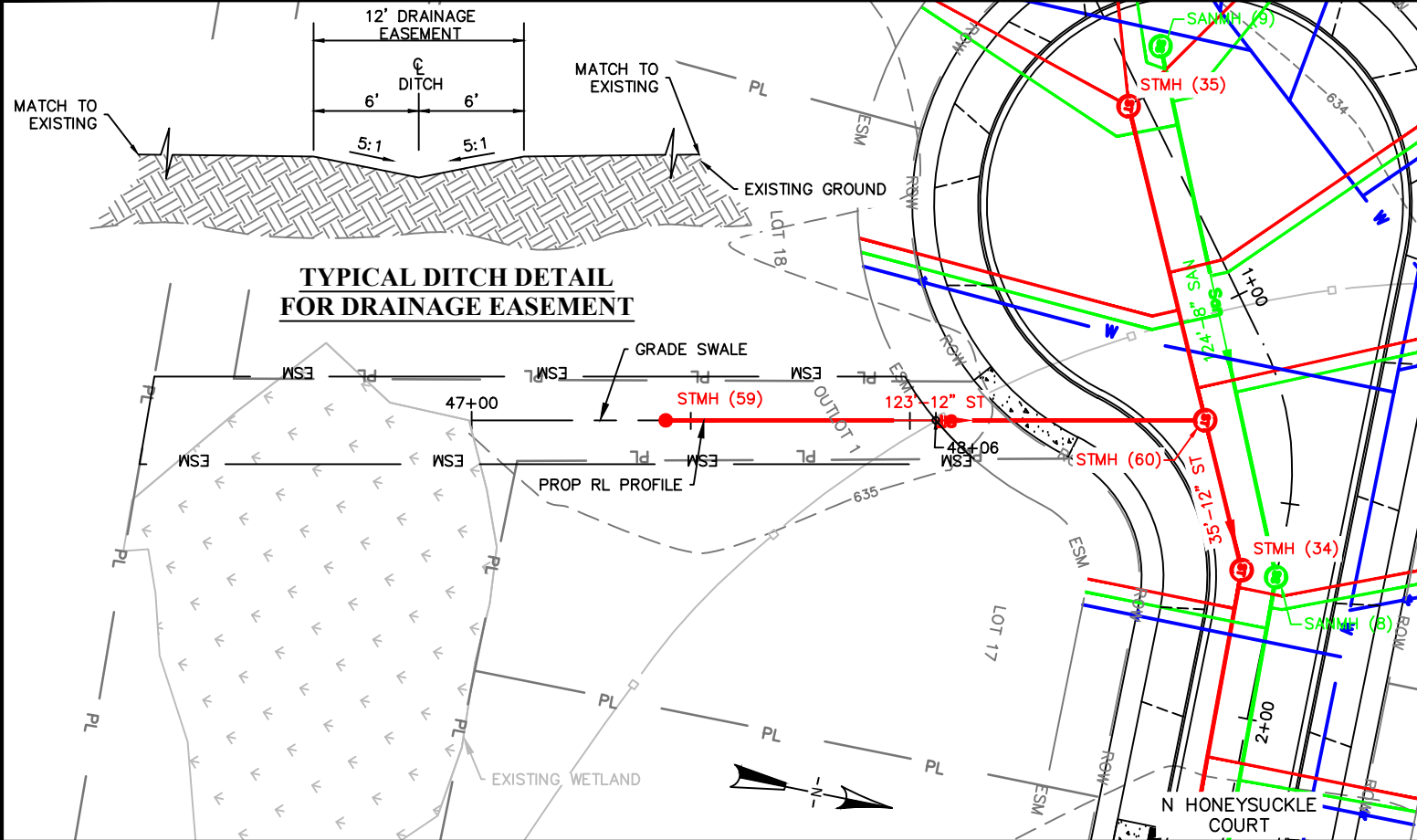


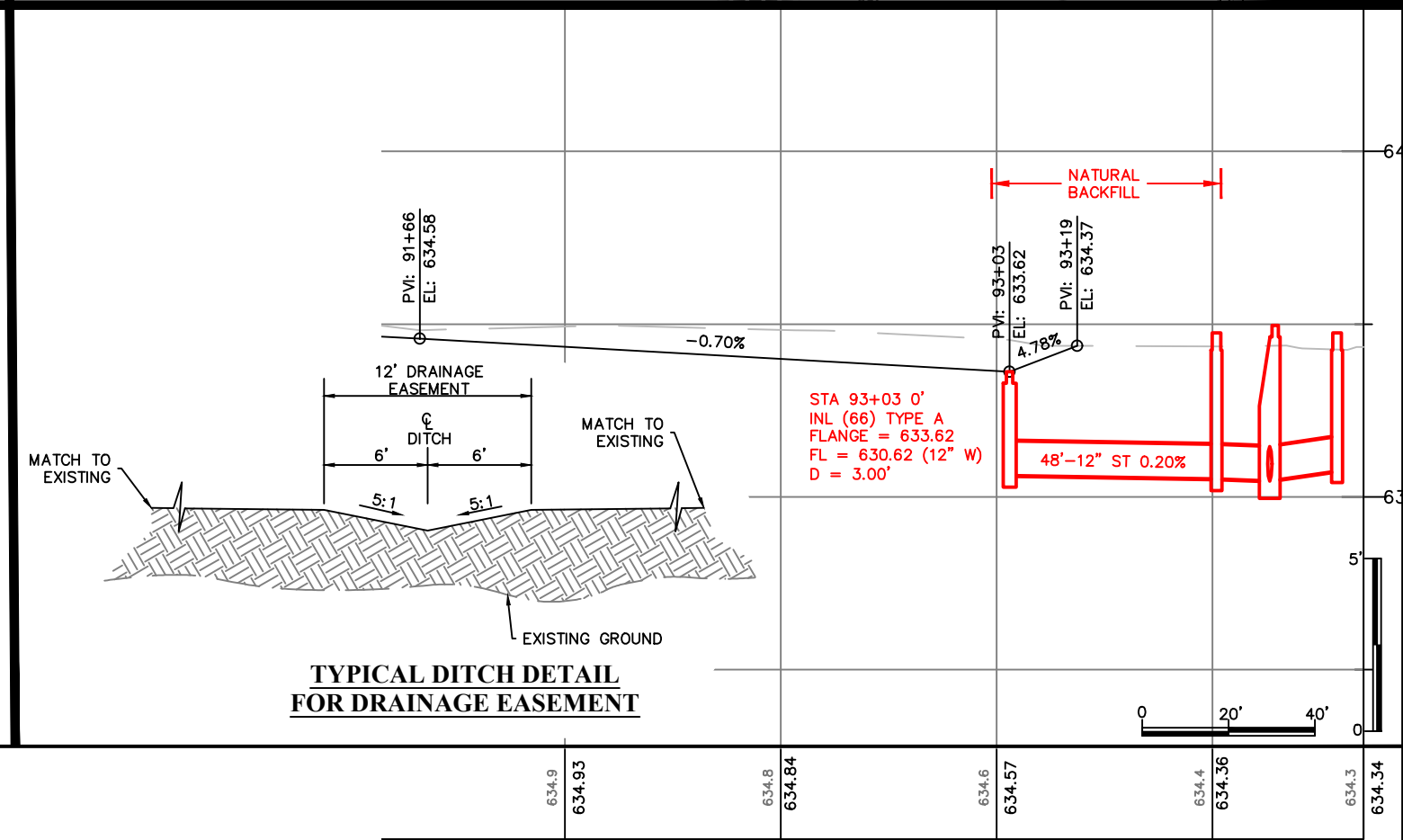
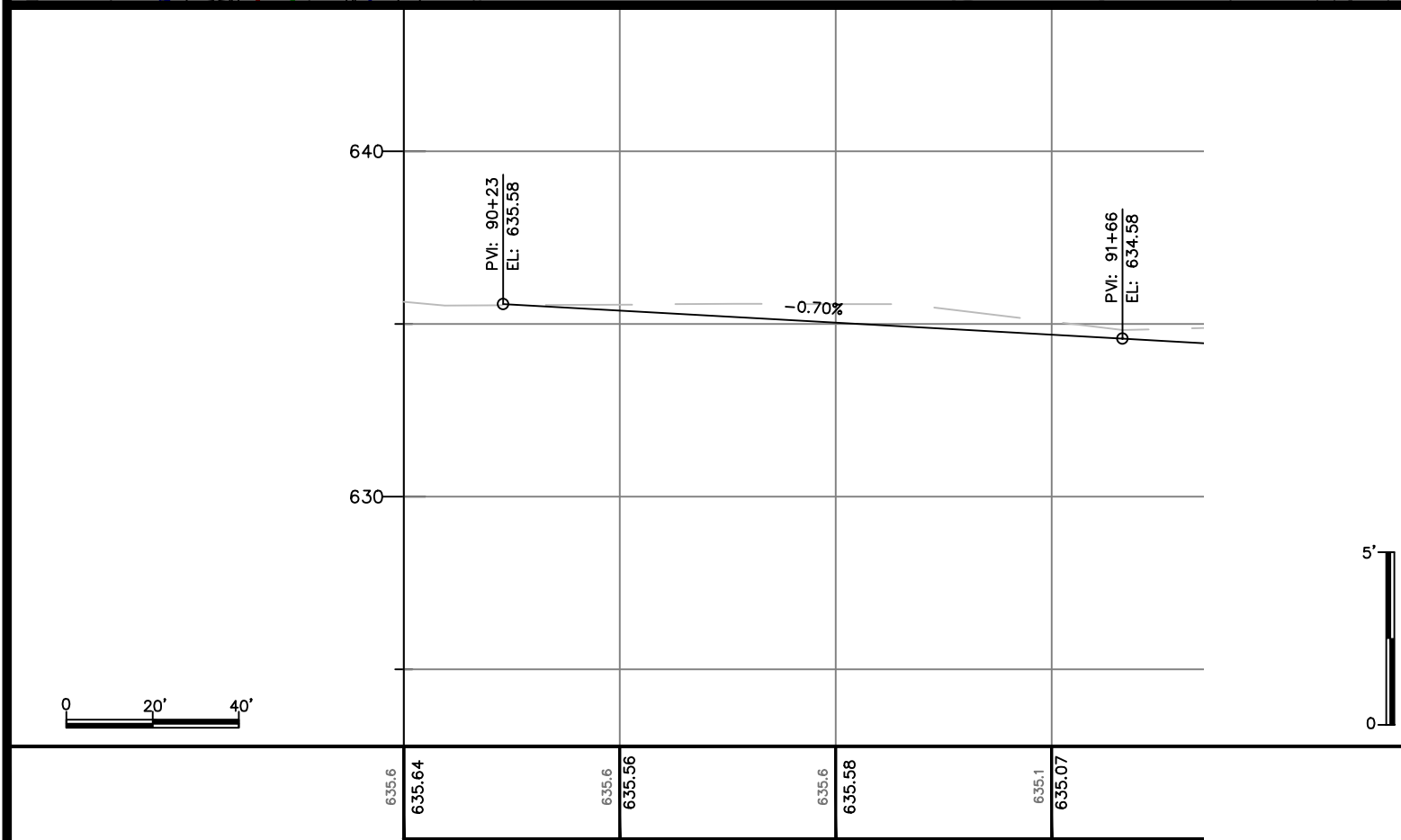
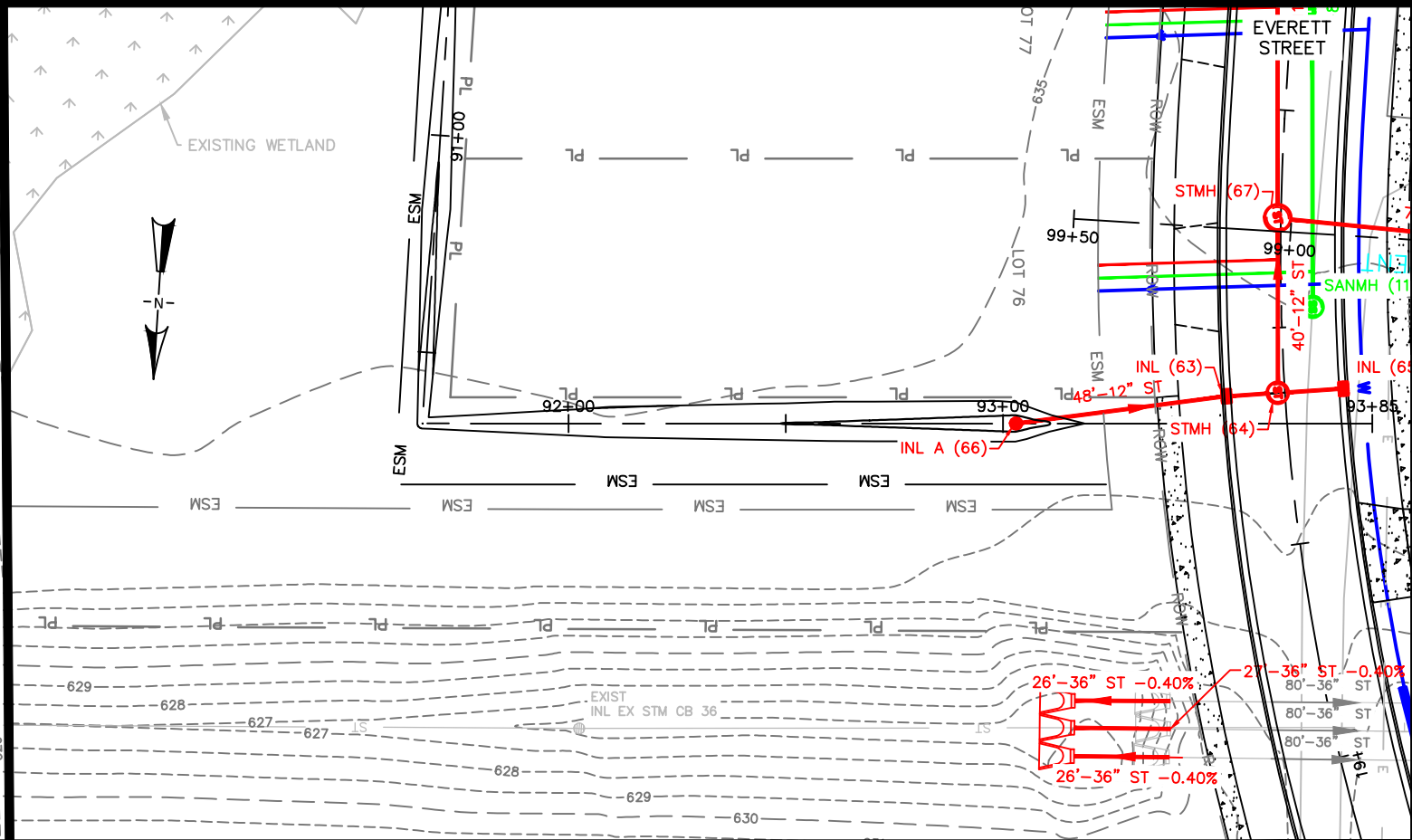
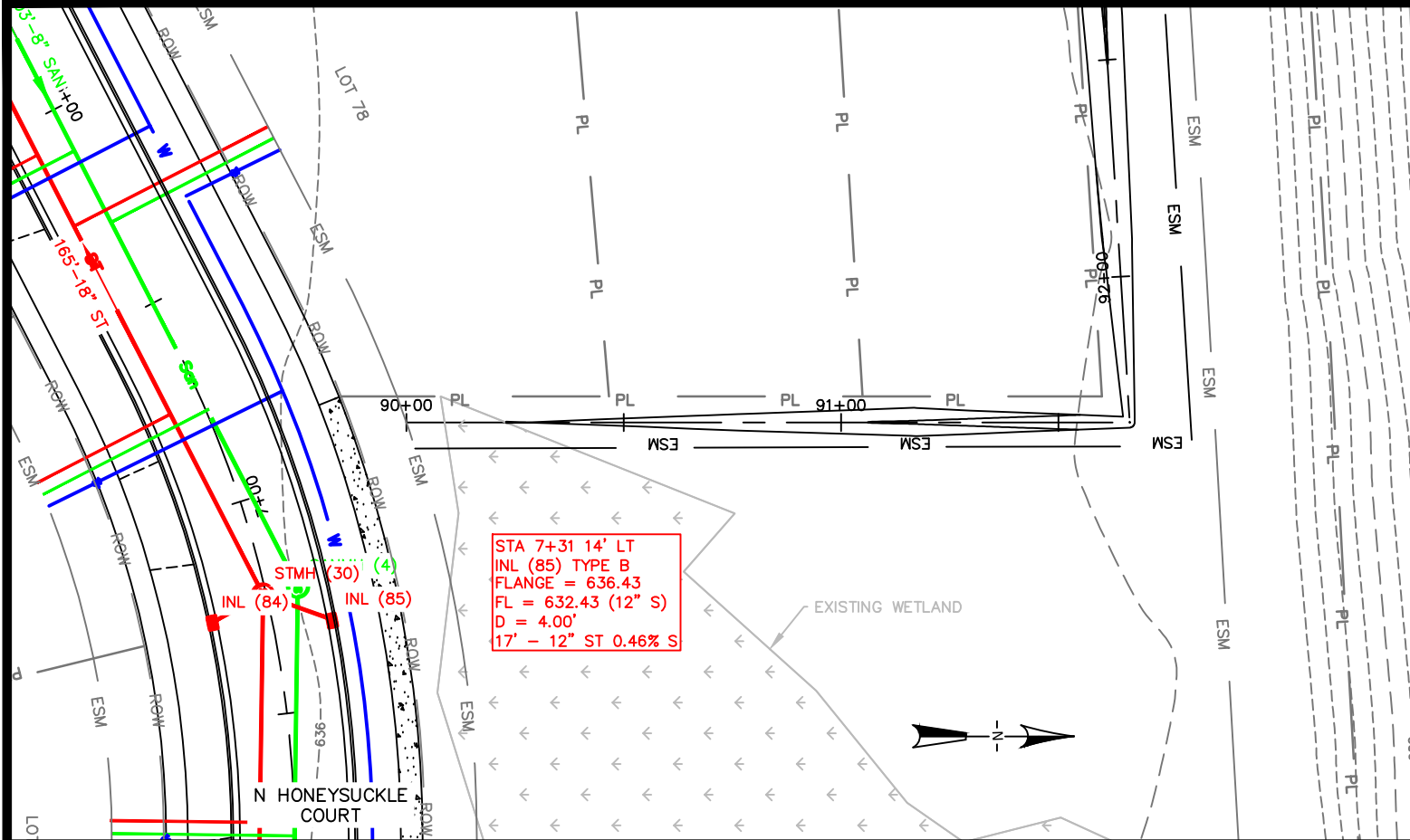


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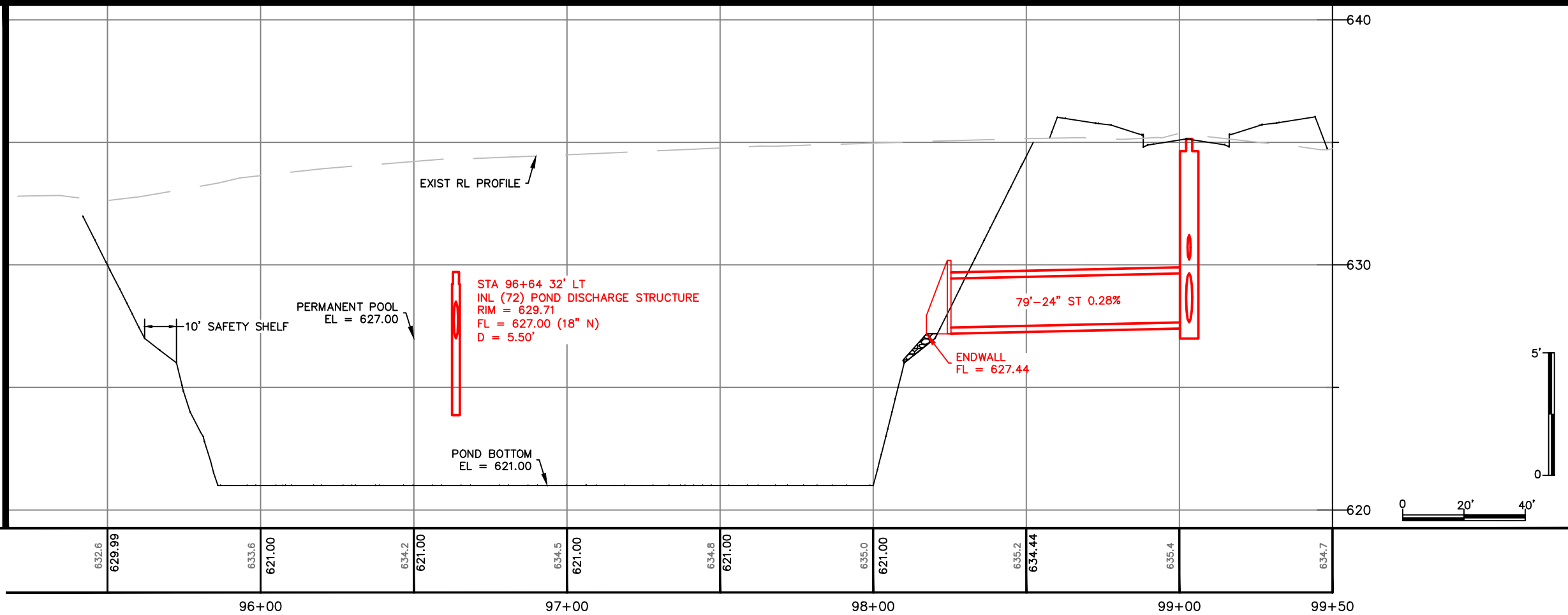
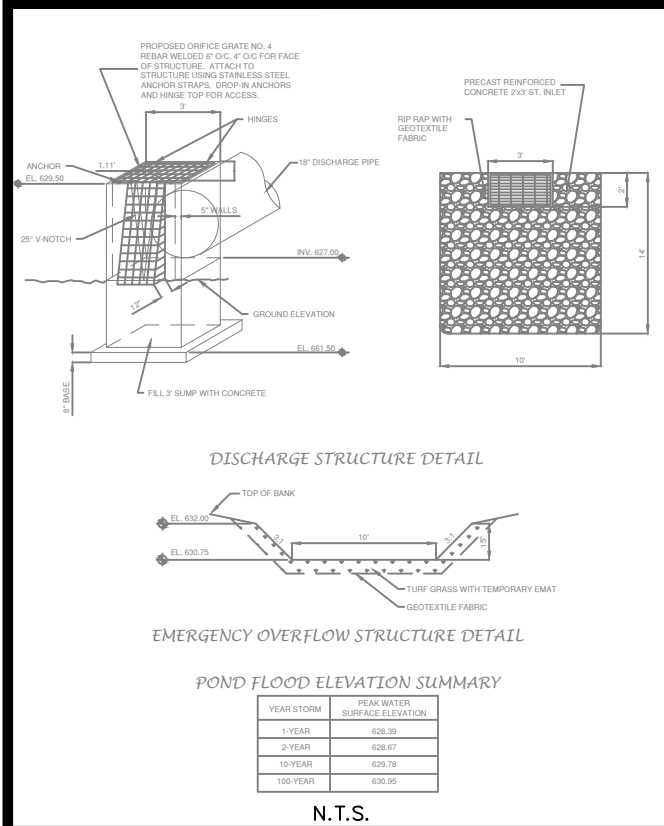
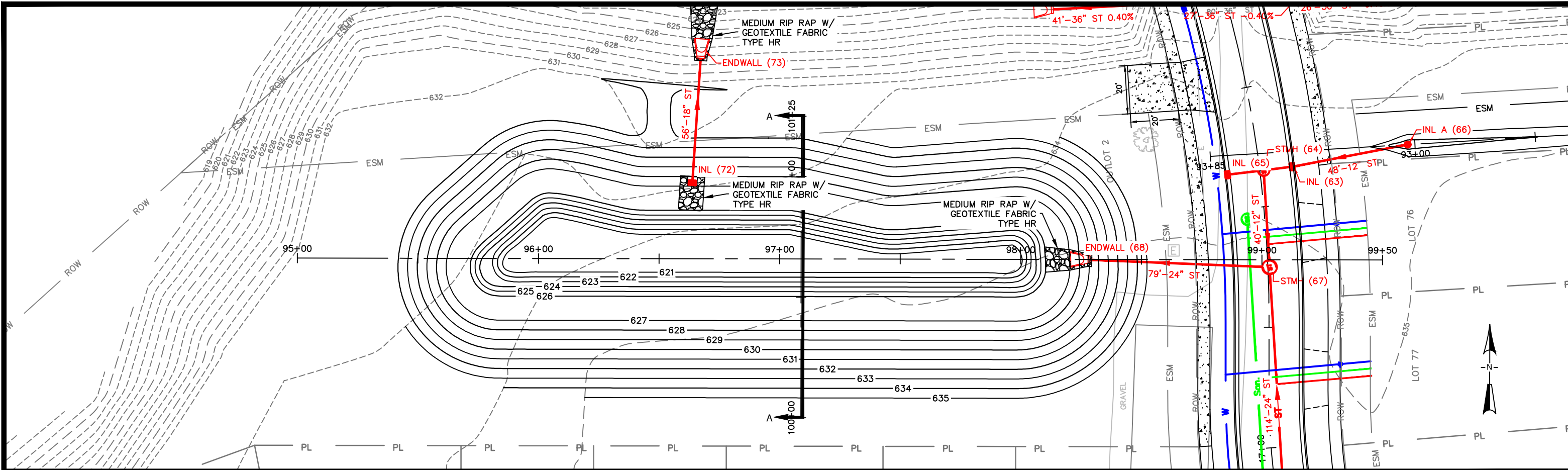








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NAME:
KINGSTON PRESERVE UTILITY
AND STREET CONSTRUCTION
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CITY OF DE PERE

ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115
OFFICE 920-339-4061 FAX 920-339-4071

N HONEYSUCKLE COURT
CROSS SECTIONS

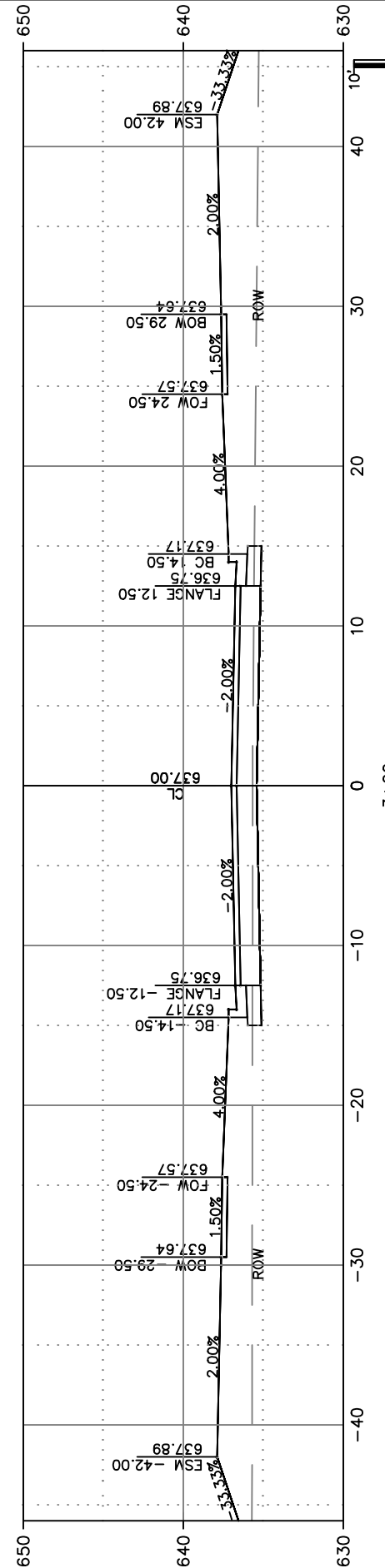
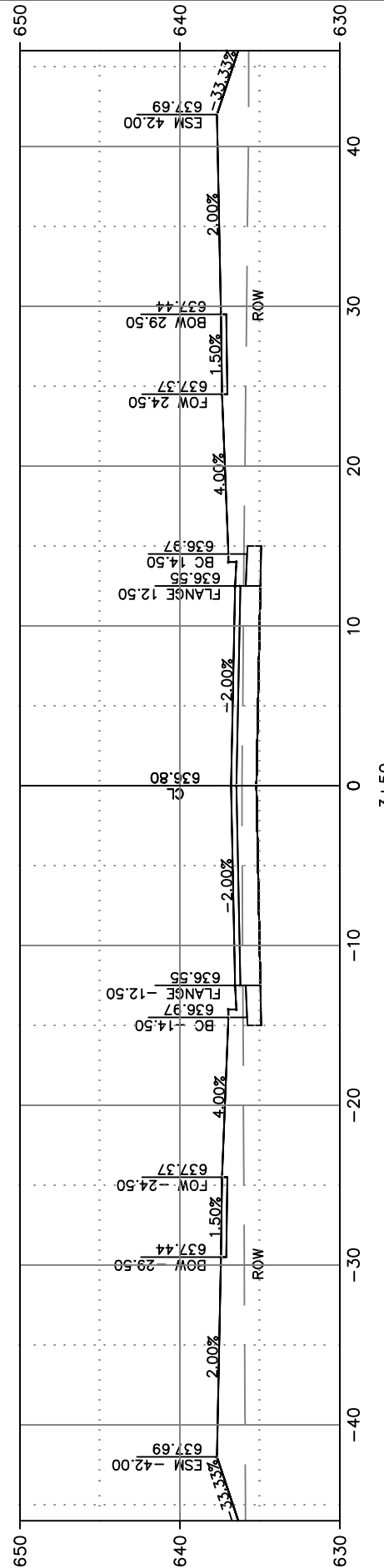
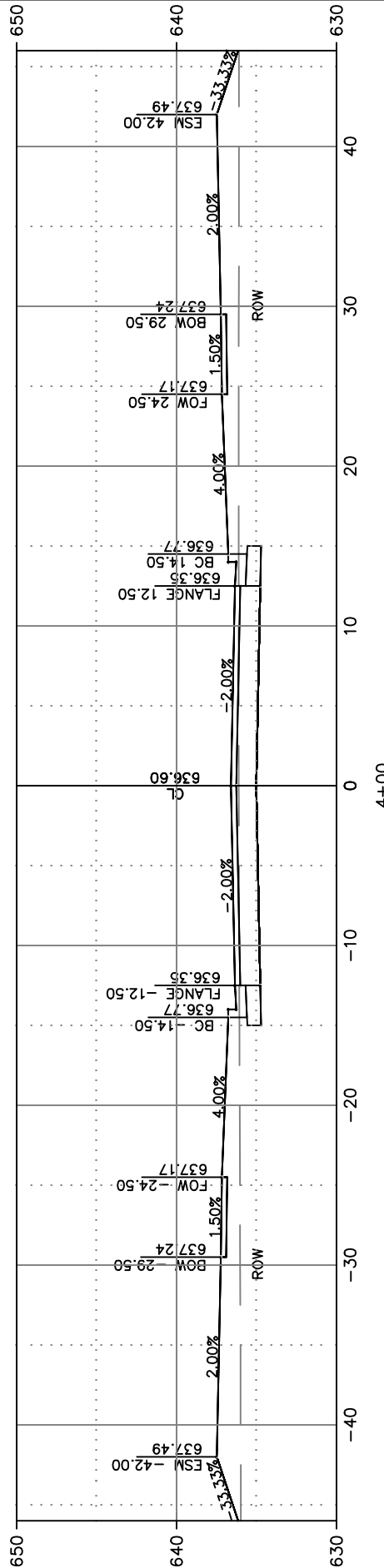
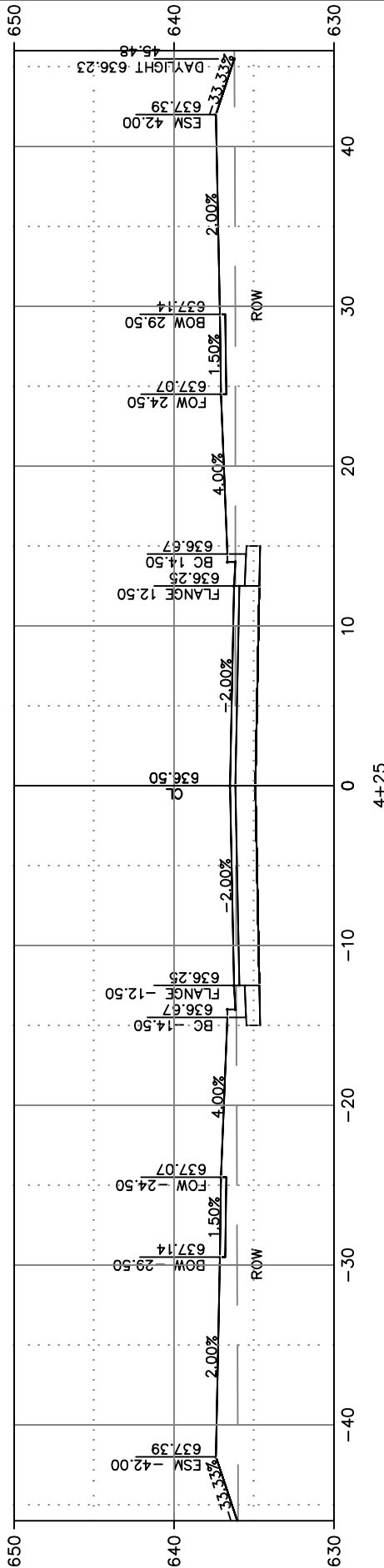
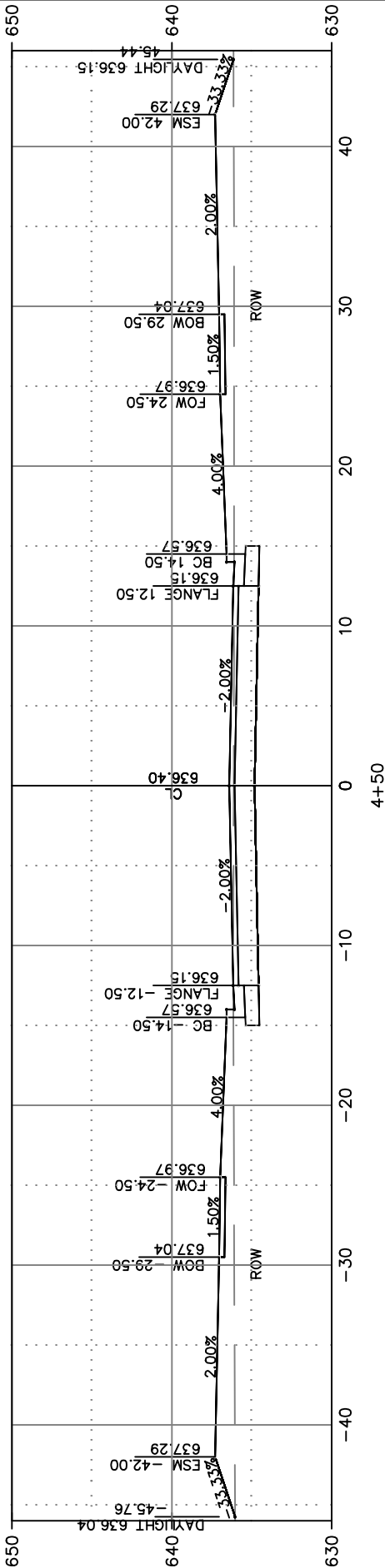
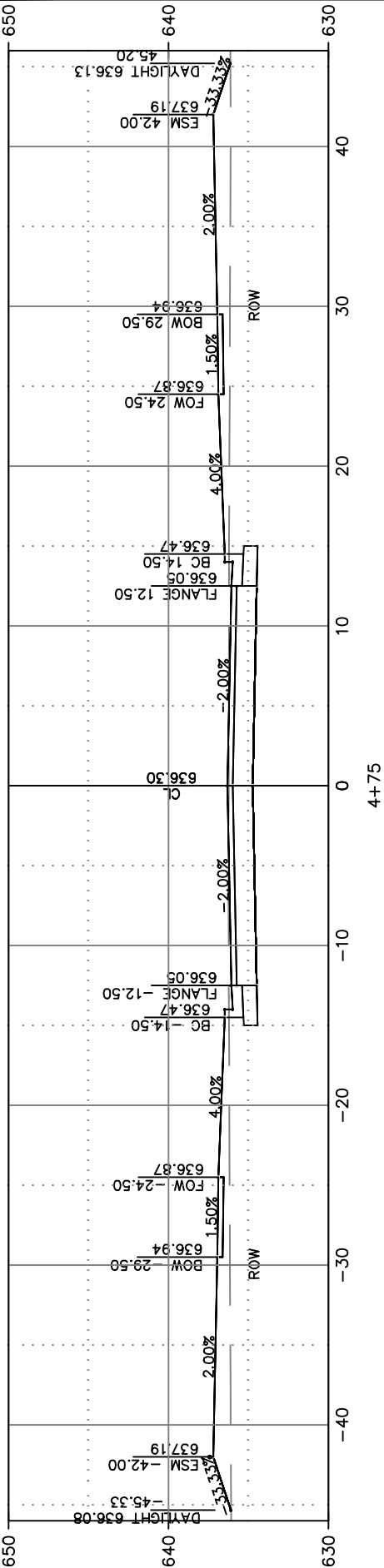
NAME:
KINGSTON PRESERVE UTILITY
AND STREET CONSTRUCTION
PROJECT #
23-04

	BY	DATE
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DRAWN	MAL	12-2022
DESIGNED	MAL/EPR	12-2022
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ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115
OFFICE 920-339-4061 FAX 920-339-4071

N HONEYSUCKLE COURT
CROSS SECTIONS

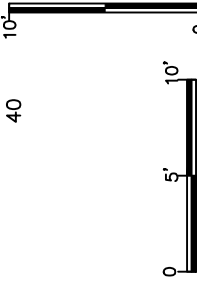
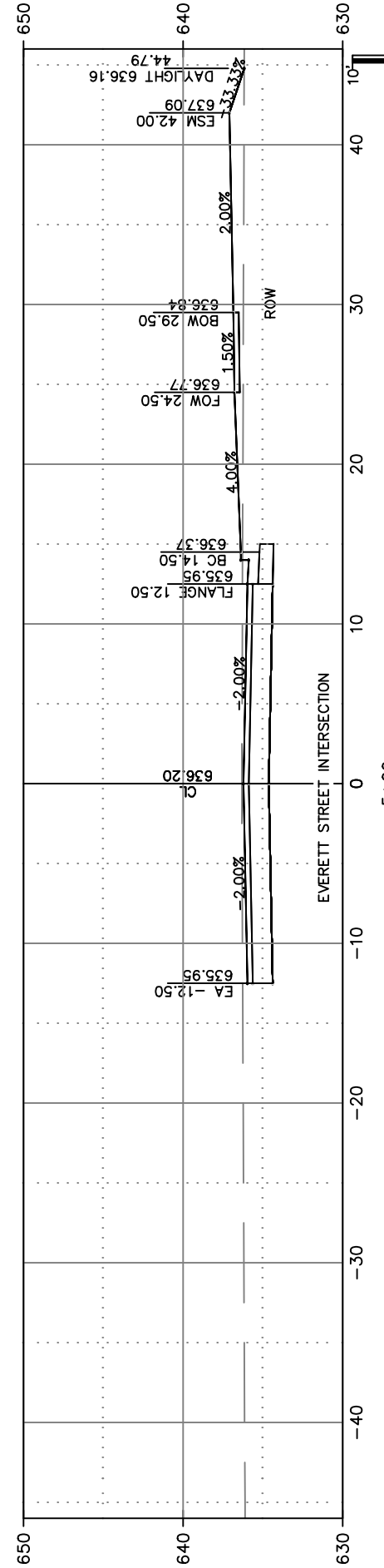
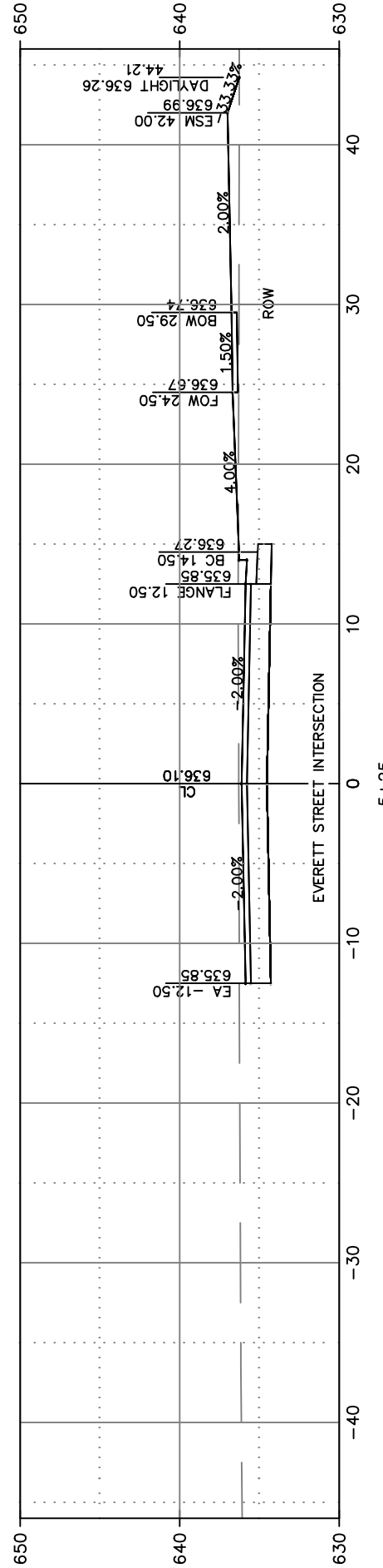
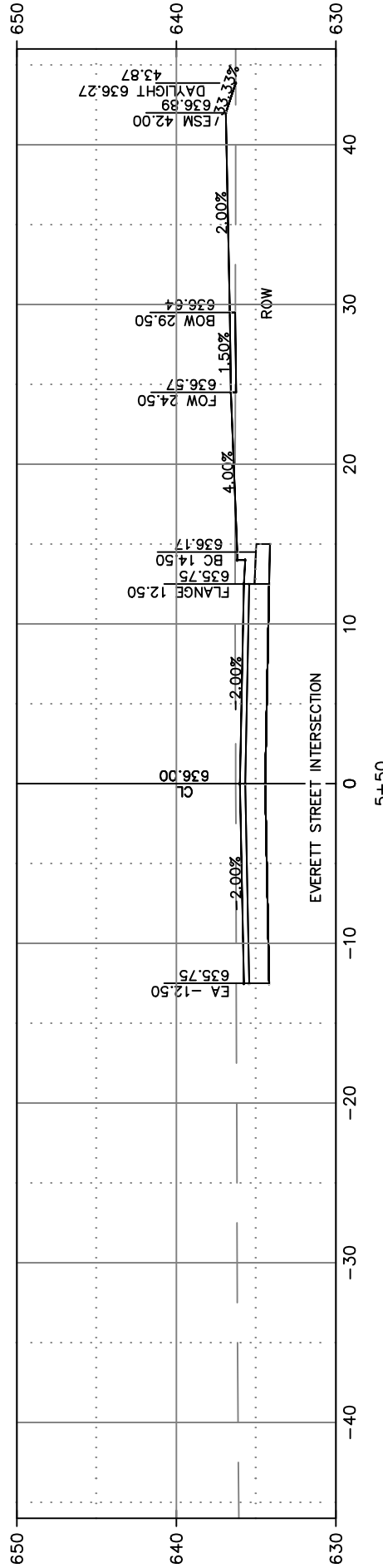
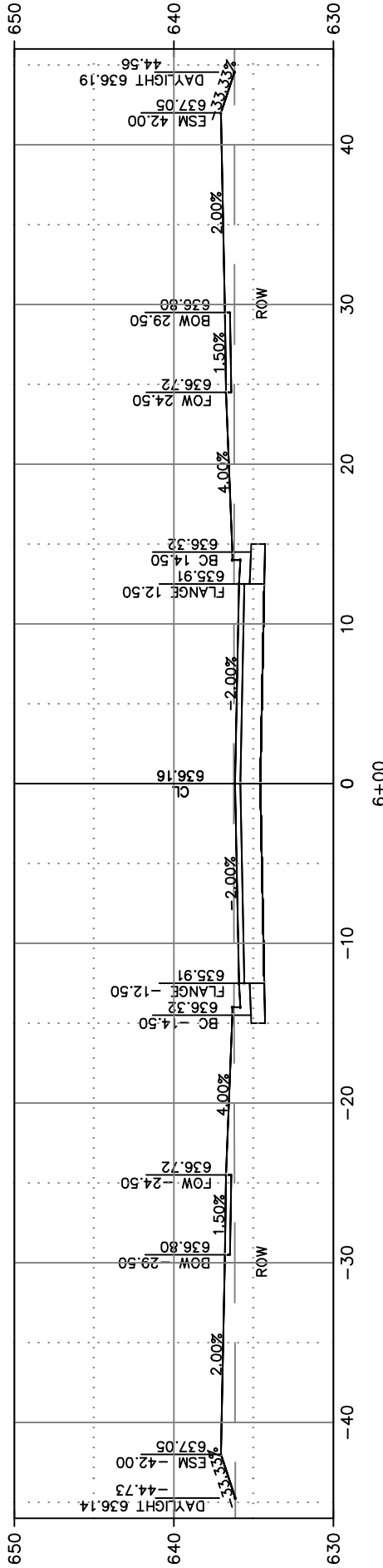
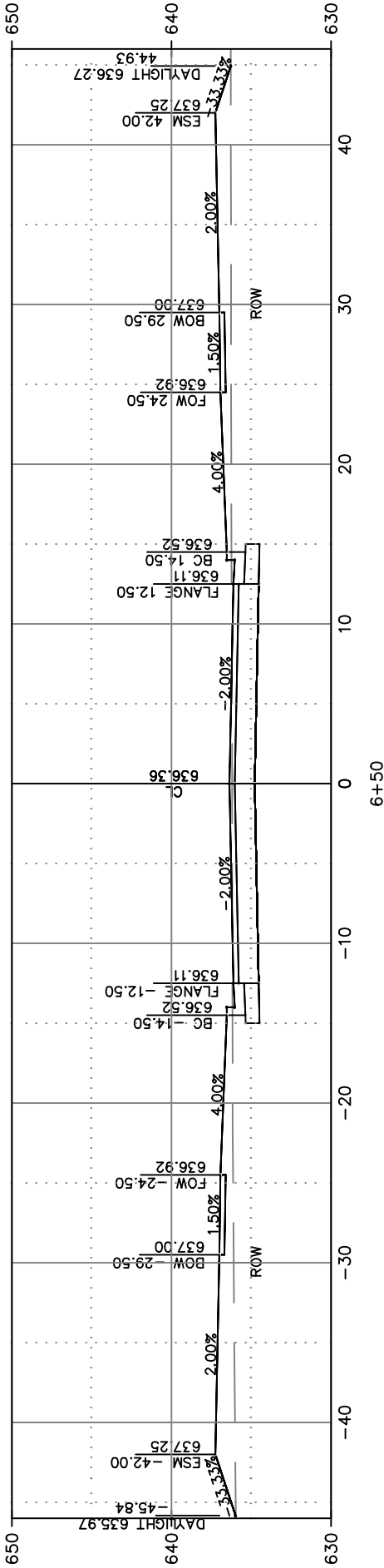
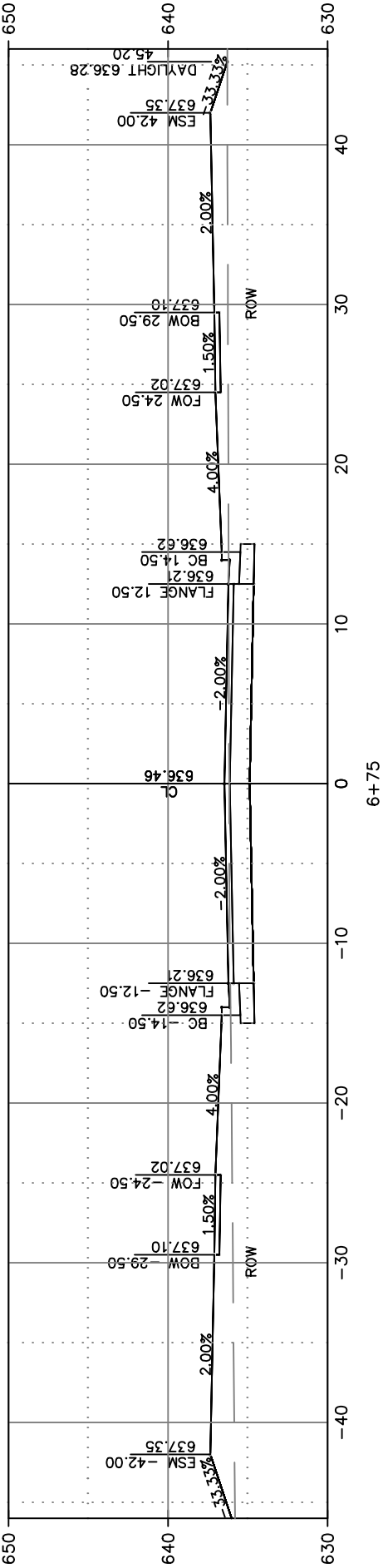
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PROJECT # 23-04

SURVEYED	BY REL	DATE 12-2022
DRAWN	MAL	DATE 12-2022
DESIGNED	MAL/EPR	DATE 12-2022
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N HONEYSUCKLE COURT
CROSS SECTIONS

NAME:
KINGSTON PRESERVE UTILITY
AND STREET CONSTRUCTION
PROJECT #
23-04

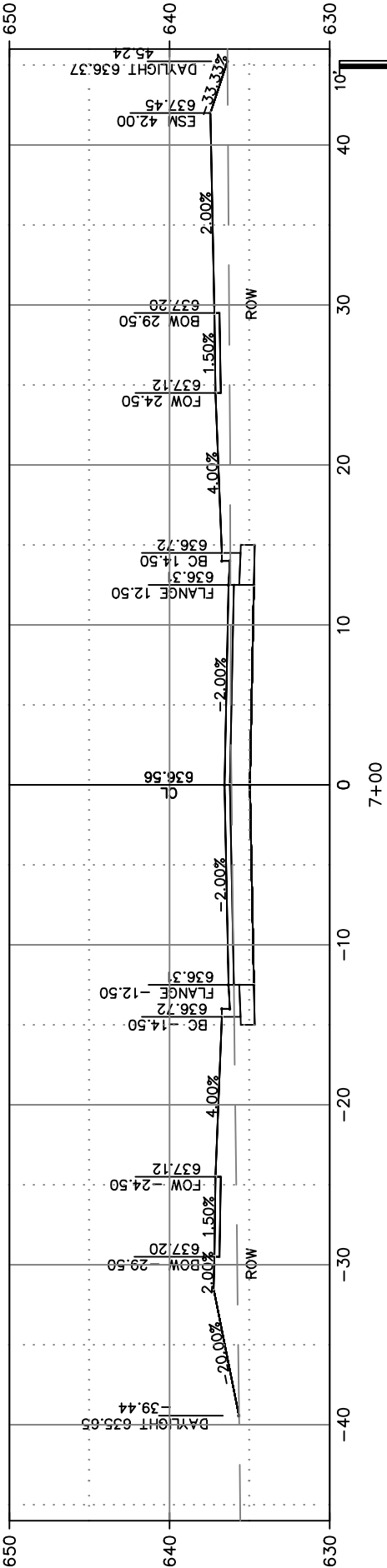
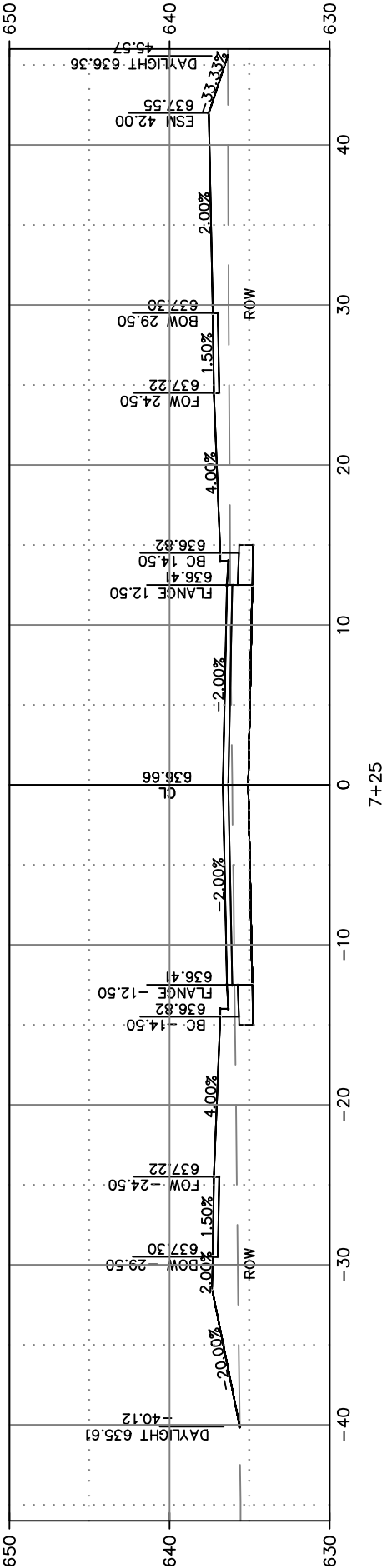
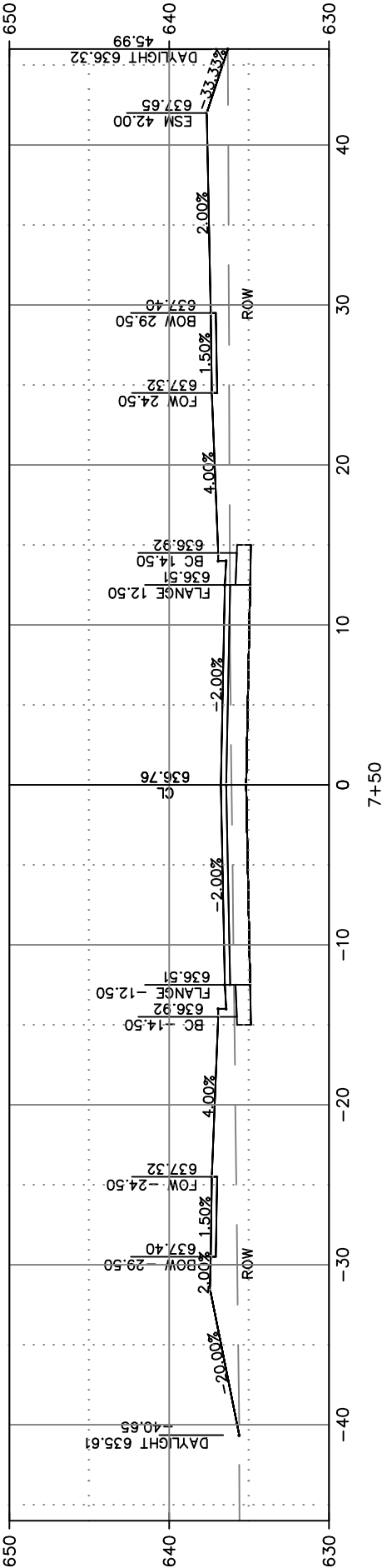
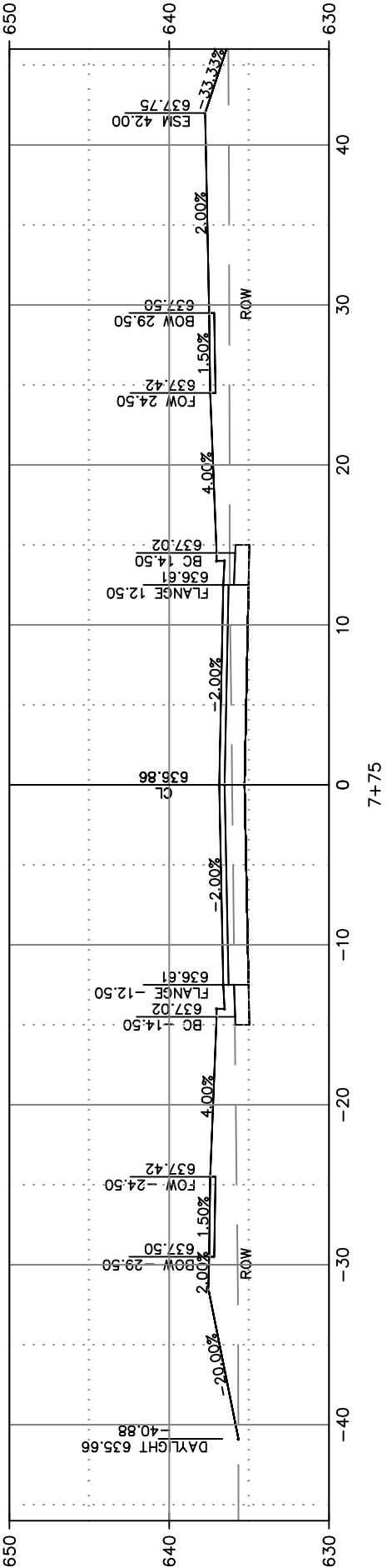
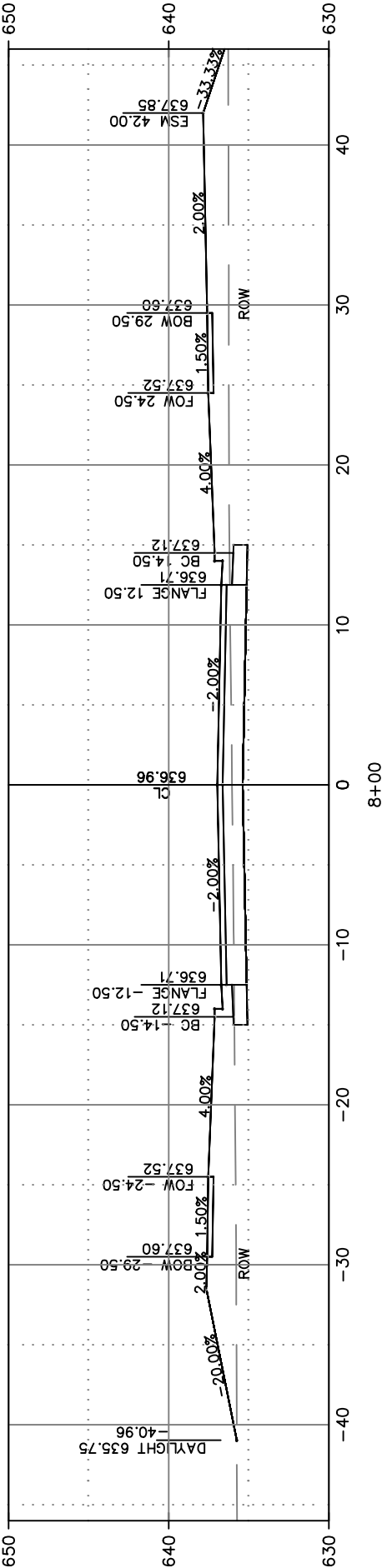
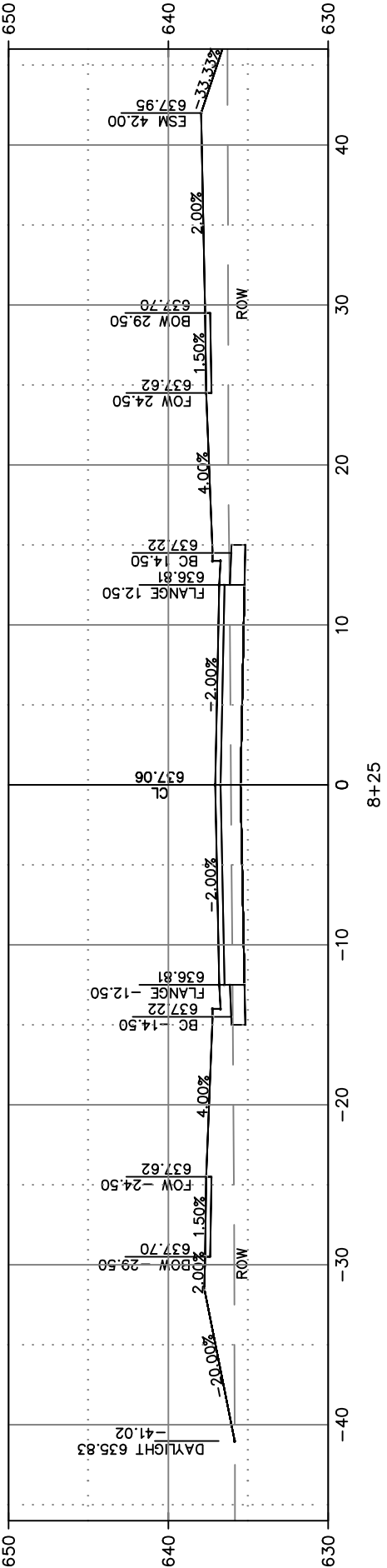
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DRAWN	MAL	12-2022
DESIGNED	MAL/EPR	12-2022
CHECKED	EPR	12-2022

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CROSS SECTIONS

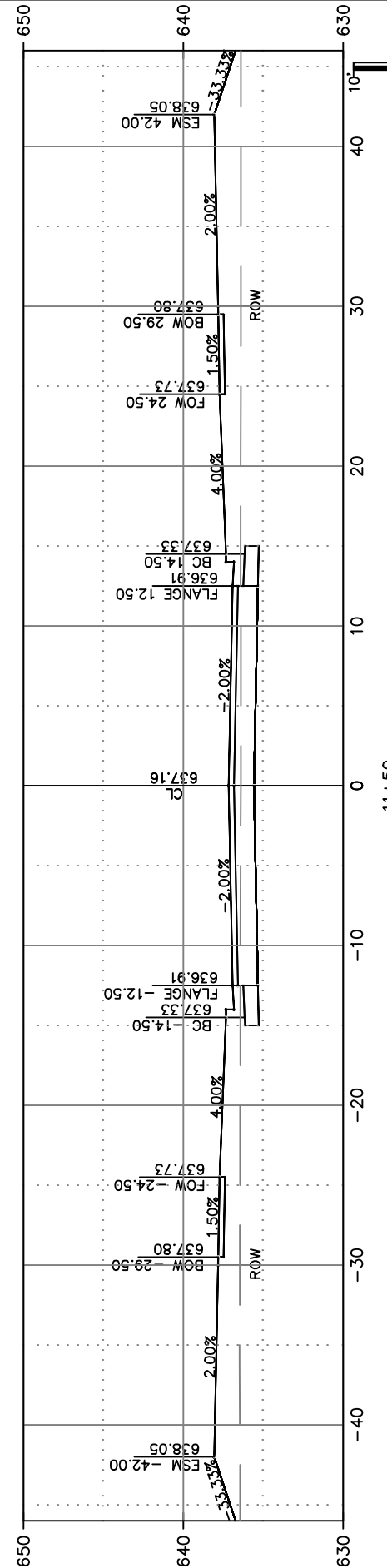
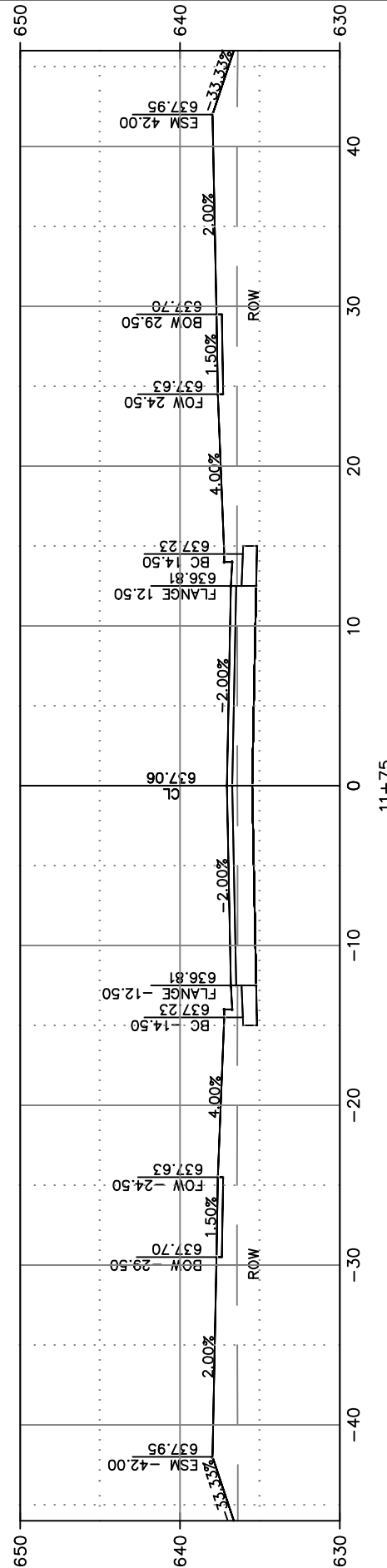
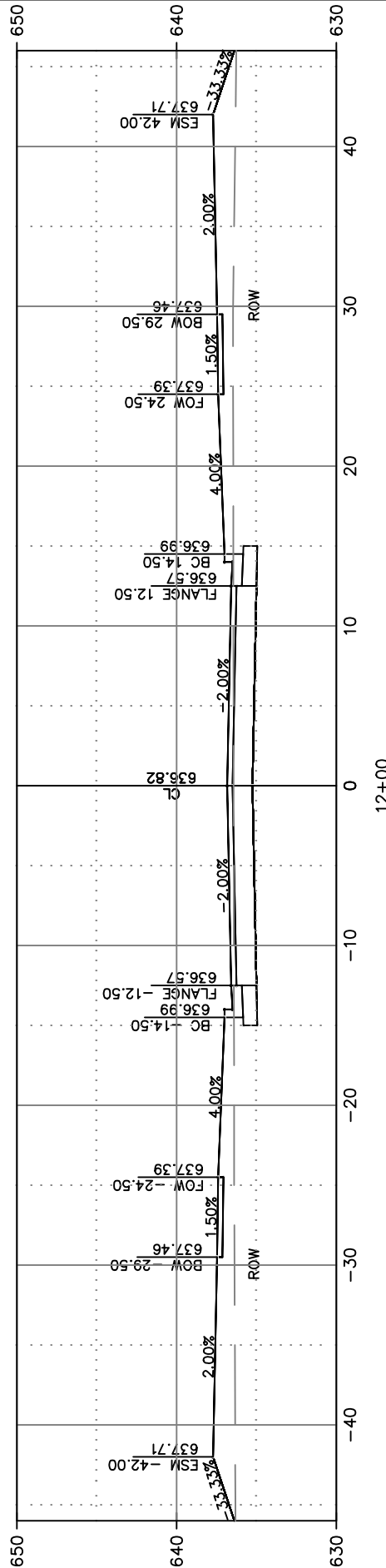
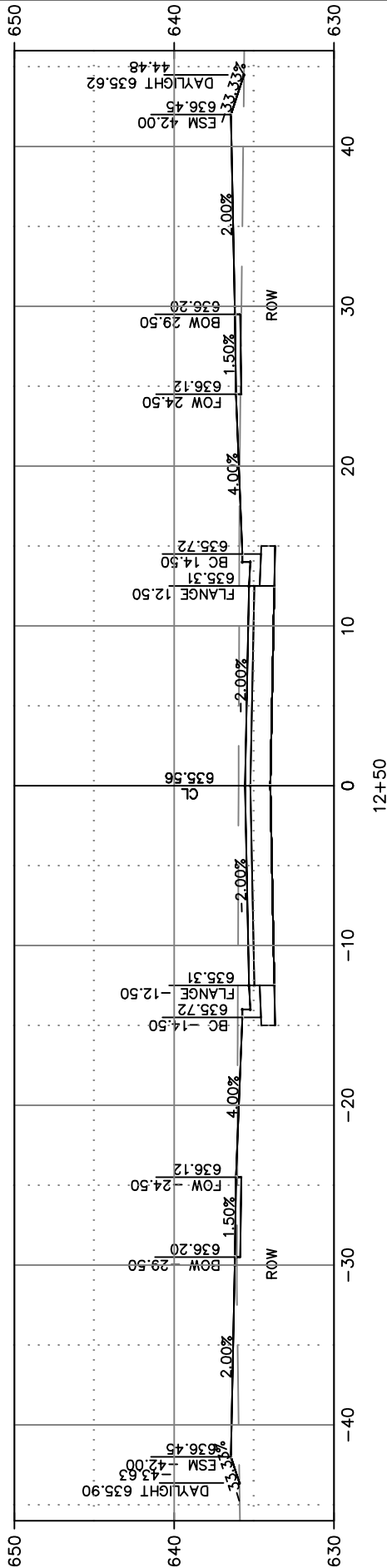
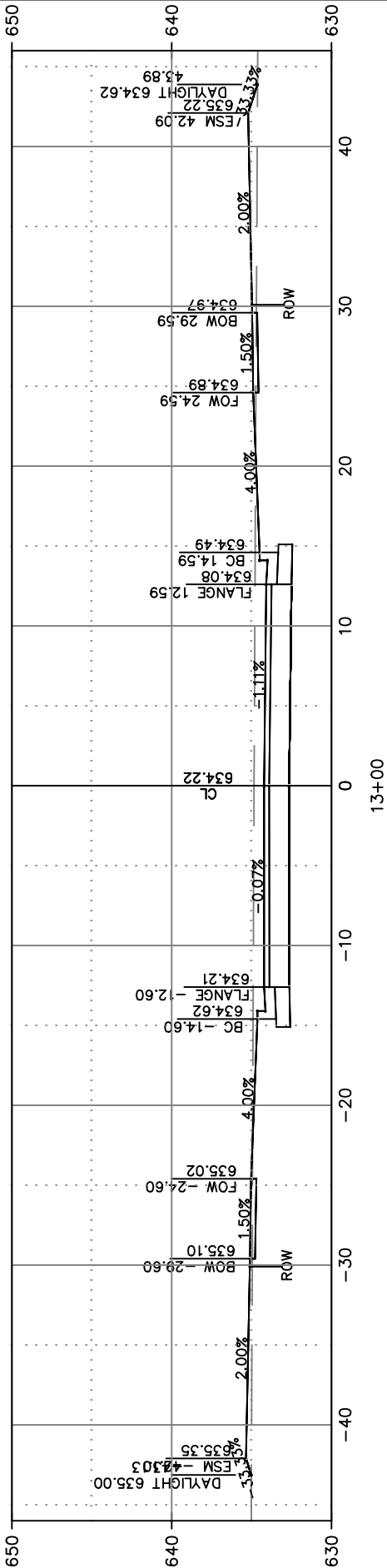
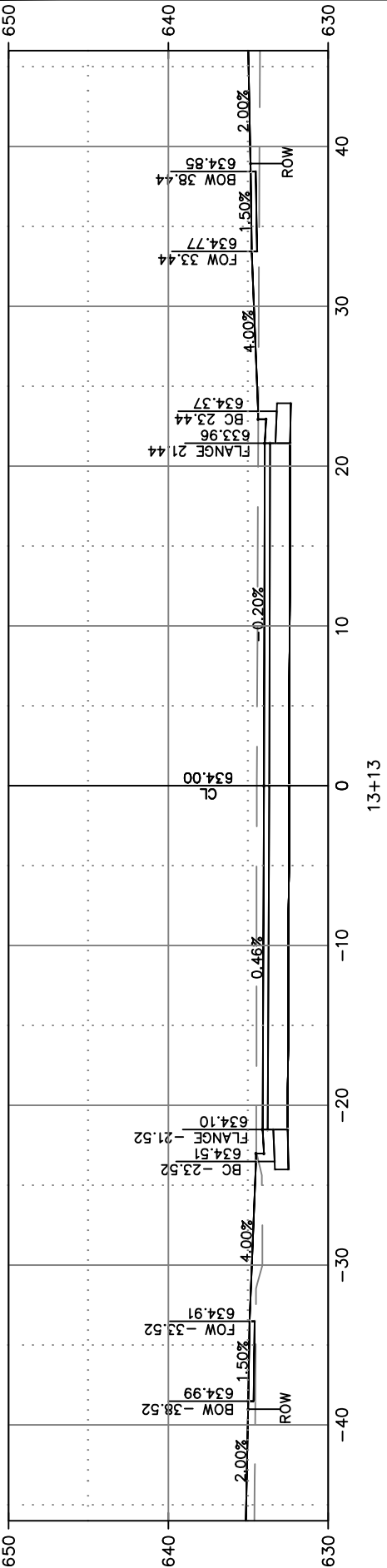
NAME: KINGSTON PRESERVE UTILITY AND STREET CONSTRUCTION
PROJECT # 23-04

	BY	DATE
SURVEYED	REL	12-2022
DRAWN	MAL	12-2022
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EVERETT STREET CROSS SECTIONS

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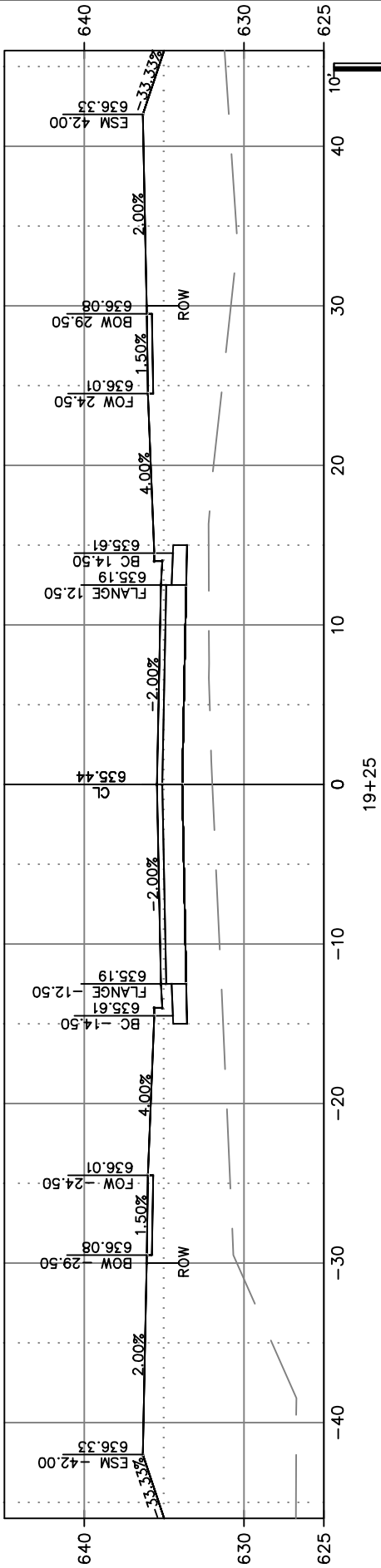
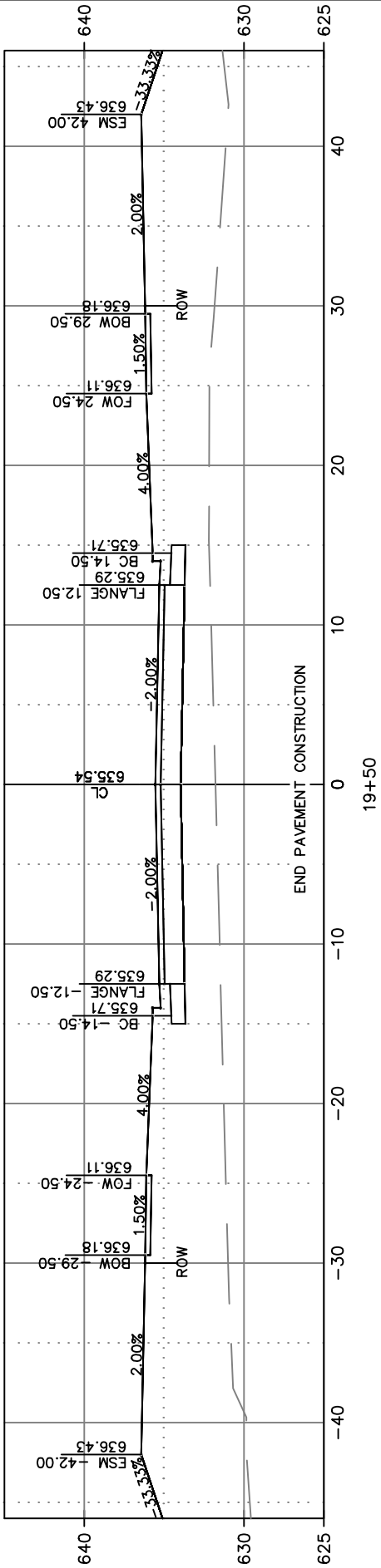
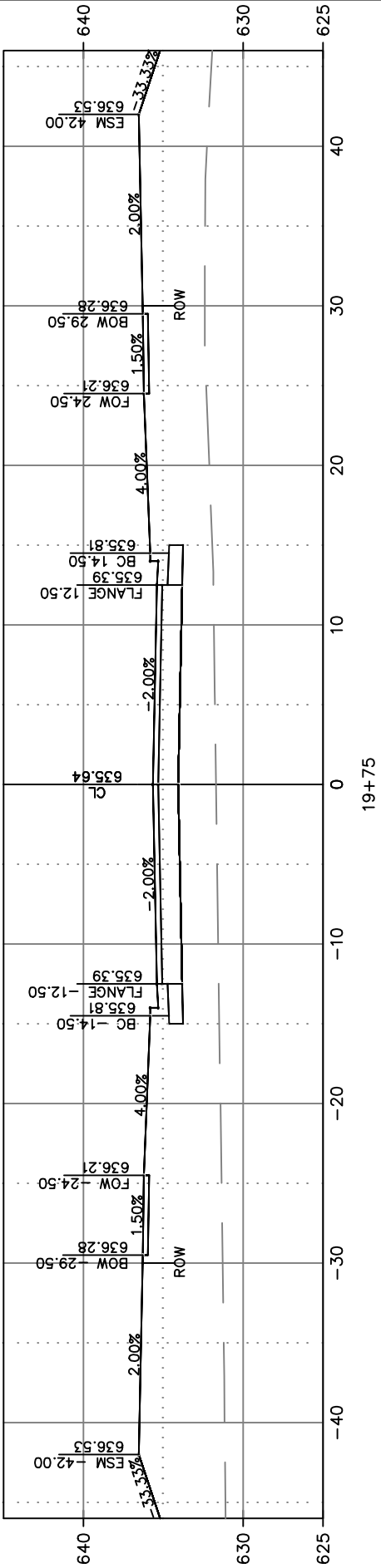
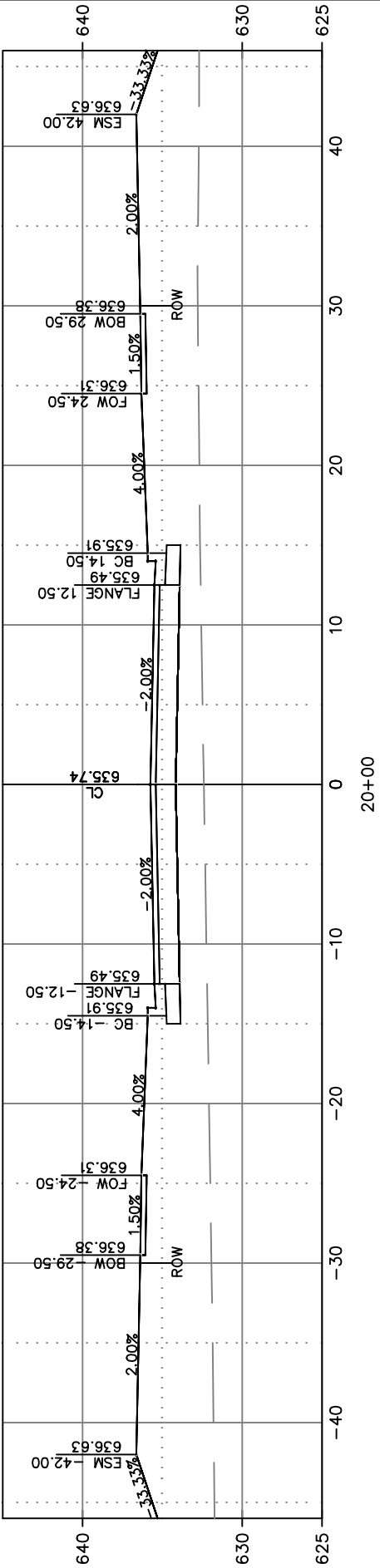
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115
OFFICE 920-339-4061 FAX 920-339-4071

EVERETT STREET
CROSS SECTIONS

NAME: KINGSTON PRESERVE UTILITY AND STREET CONSTRUCTION
PROJECT # 23-04

	BY	DATE
SURVEYED	REL	12-2022
DRAWN	MAL	12-2022
DESIGNED	MAL/EPR	12-2022
CHECKED	EPR	12-2022

REVISIONS / ISSUES			
NO.	DATE	BY	REMARKS



N HONEYSUCKLE COURT
CUT/FILL

Total Volume Table						
Station	Fill Area	Cut Area	Fill Volume	Cut Volume	Cumulative Fill Vol	Cumulative Cut Vol
0+50.00	578.76	0.00	0.00	0.00	0.00	0.00
1+00.00	559.23	0.00	1053.69	0.00	1053.69	0.00
1+25.00	477.79	0.00	468.84	0.00	1522.54	0.00
1+50.00	443.74	0.00	338.95	0.00	1861.48	0.00
2+00.00	277.80	0.00	656.87	0.00	2518.35	0.00
2+50.00	215.38	0.00	456.65	0.00	2975.00	0.00
3+00.00	163.42	12.10	350.74	11.21	3325.73	11.21
3+50.00	108.40	30.68	251.69	39.61	3577.42	50.82
4+00.00	78.16	37.25	172.75	62.90	3750.17	113.72
4+25.00	64.67	41.44	65.79	36.44	3815.95	150.16
4+50.00	57.36	43.79	56.11	39.46	3872.06	189.62
4+75.00	44.90	50.14	47.25	43.52	3919.31	233.14
5+00.00	31.45	63.44	35.40	52.43	3954.71	285.57
5+25.00	23.46	74.66	25.44	63.22	3980.15	348.79
5+50.00	22.33	57.73	21.17	61.26	4001.32	410.04
6+00.00	33.12	55.48	51.34	104.82	4052.67	514.86
6+50.00	47.98	47.23	75.10	95.10	4127.76	609.97
6+75.00	62.76	43.15	51.85	41.81	4179.61	651.77
7+00.00	61.38	39.17	57.92	37.96	4237.53	689.73
7+25.00	70.96	34.97	60.95	34.11	4298.48	723.84
7+50.00	80.50	31.64	69.71	30.69	4368.19	754.53
7+75.00	90.91	27.80	78.76	27.42	4446.95	781.94

N HONEYSUCKLE COURT
CUT/FILL

Total Volume Table						
Station	Fill Area	Cut Area	Fill Volume	Cut Volume	Cumulative Fill Vol	Cumulative Cut Vol
8+00.00	98.52	24.40	87.57	24.15	4534.52	806.09
8+25.00	103.99	22.69	93.48	21.77	4628.00	827.87
8+50.00	106.56	22.22	96.89	20.72	4724.89	848.59
8+75.00	108.12	22.37	98.85	20.55	4823.74	869.14
9+00.00	113.47	20.18	102.23	19.54	4925.96	888.68
9+25.00	123.51	15.91	109.51	16.52	5035.48	905.20
9+50.00	161.78	10.42	132.63	12.09	5168.11	917.29
9+75.00	165.75	10.26	152.57	9.55	5320.68	926.84
10+00.00	156.77	10.81	149.53	9.74	5470.21	936.58
10+25.00	139.68	14.65	136.80	11.79	5607.02	948.37
10+50.00	128.63	19.46	123.50	15.81	5730.52	964.18
10+75.00	119.70	23.51	114.30	19.92	5844.83	984.10
11+00.00	113.05	25.64	107.25	22.77	5952.08	1006.87
11+25.00	106.79	27.33	101.43	24.53	6053.51	1031.40
11+50.00	99.22	29.84	95.19	26.44	6148.70	1057.84
11+75.00	90.42	32.44	87.76	28.80	6236.46	1086.64
12+00.00	69.93	40.79	74.26	33.87	6310.72	1120.50
12+50.00	15.86	69.90	79.43	102.48	6390.15	1222.99
13+00.00	11.25	75.40	25.10	134.53	6415.25	1357.52
13+13.34	28.75	96.18	9.89	42.40	6425.14	1399.93
14+00.00	0.00	0.00	46.14	154.35	6471.28	1554.27

EVERETT STREET
CUT/FILL

Total Volume Table						
Station	Fill Area	Cut Area	Fill Volume	Cut Volume	Cumulative Fill Vol	Cumulative Cut Vol
15+50.00	0.00	0.00	0.00	0.00	0.00	0.00
16+00.00	25.69	55.65	23.79	51.53	23.79	51.53
16+25.00	29.86	53.33	25.69	50.47	49.48	102.00
16+50.00	36.65	53.16	30.60	49.31	80.08	151.31
16+75.00	35.95	53.71	33.03	49.50	113.11	200.81
17+00.00	33.02	56.90	30.87	51.26	143.98	252.07
17+50.00	34.06	59.80	60.56	108.15	204.54	360.22
17+75.00	37.76	55.24	34.10	53.23	238.64	413.45
18+00.00	67.16	41.47	49.16	44.75	287.80	458.20
18+25.00	95.43	30.28	75.51	33.21	363.32	491.41
18+50.00	155.09	14.28	116.67	20.64	479.98	512.05
18+75.00	449.10	0.00	286.55	6.61	766.53	518.66
19+00.00	641.52	0.00	506.17	0.00	1272.70	518.66
19+25.00	563.52	0.00	547.25	0.00	1819.95	518.66
19+50.00	477.31	0.00	468.41	0.00	2288.36	518.66
19+75.00	434.99	0.00	415.83	0.00	2704.19	518.66
20+00.00	372.92	0.00	369.95	0.00	3074.13	518.66
31+50.00	0.00	0.00	7993.41	0.00	11067.54	518.66



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N HONEYSUCKLE COURT/EVERETT STREET
VOLUME TABLES

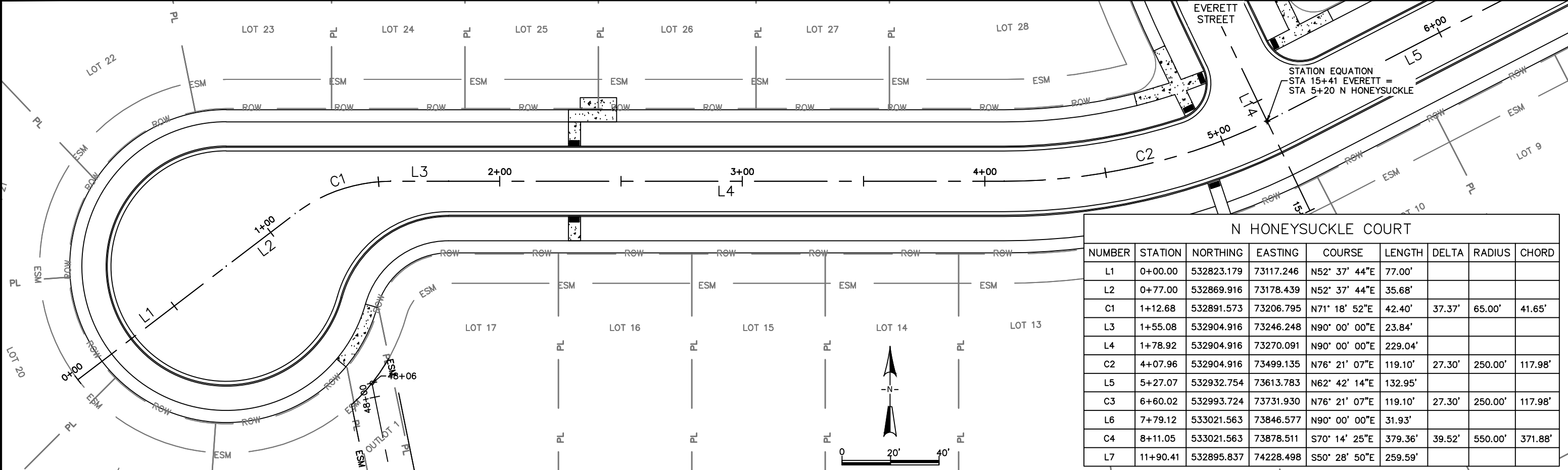
NAME: KINGSTON PRESERVE UTILITY
AND STREET CONSTRUCTION
PROJECT # 23-04

	BY	DATE
SURVEYED	REL	12-2022
DRAWN	MAL	12-2022
DESIGNED	MAL/EPR	12-2022
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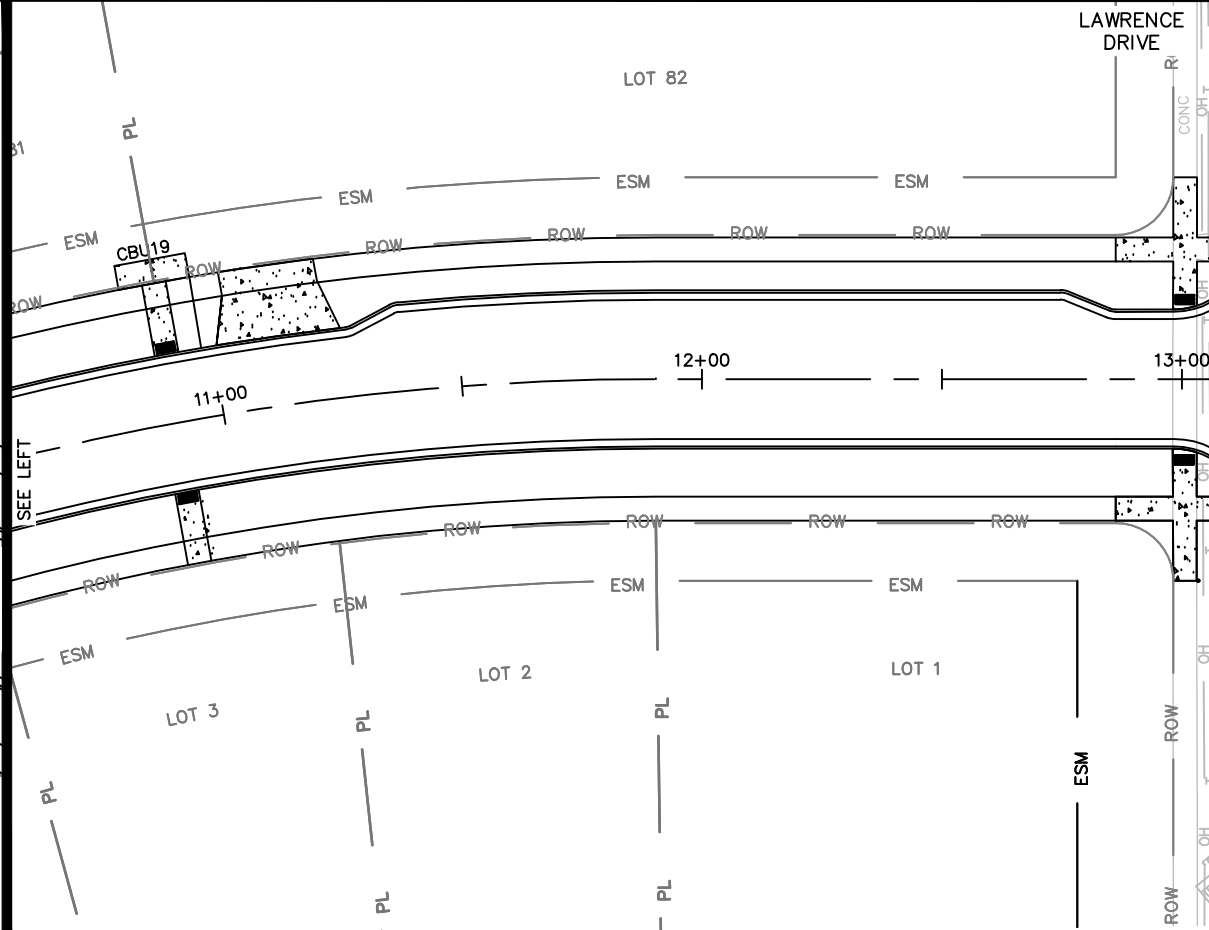
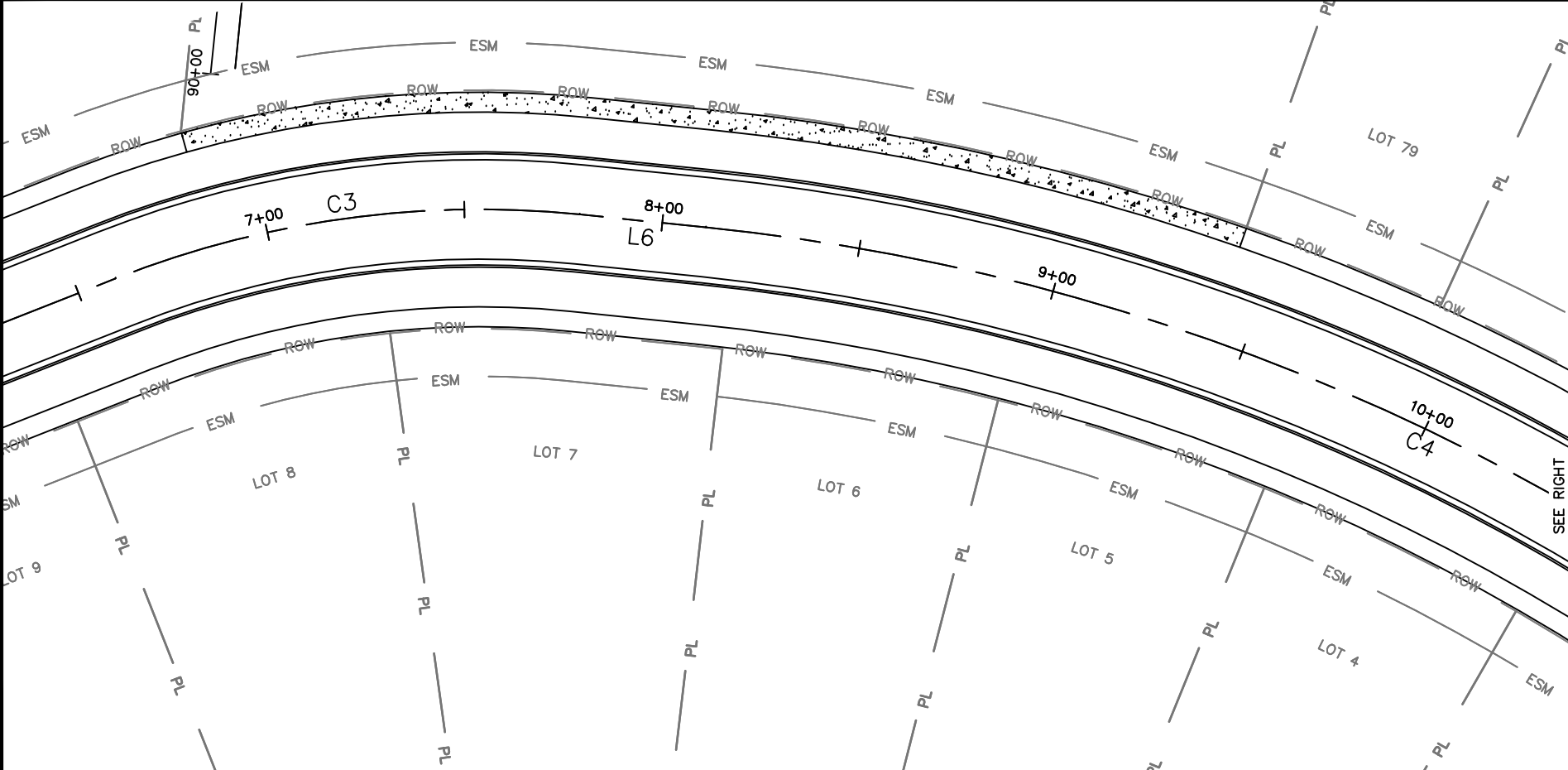
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NO.	DATE	BY	REMARKS	

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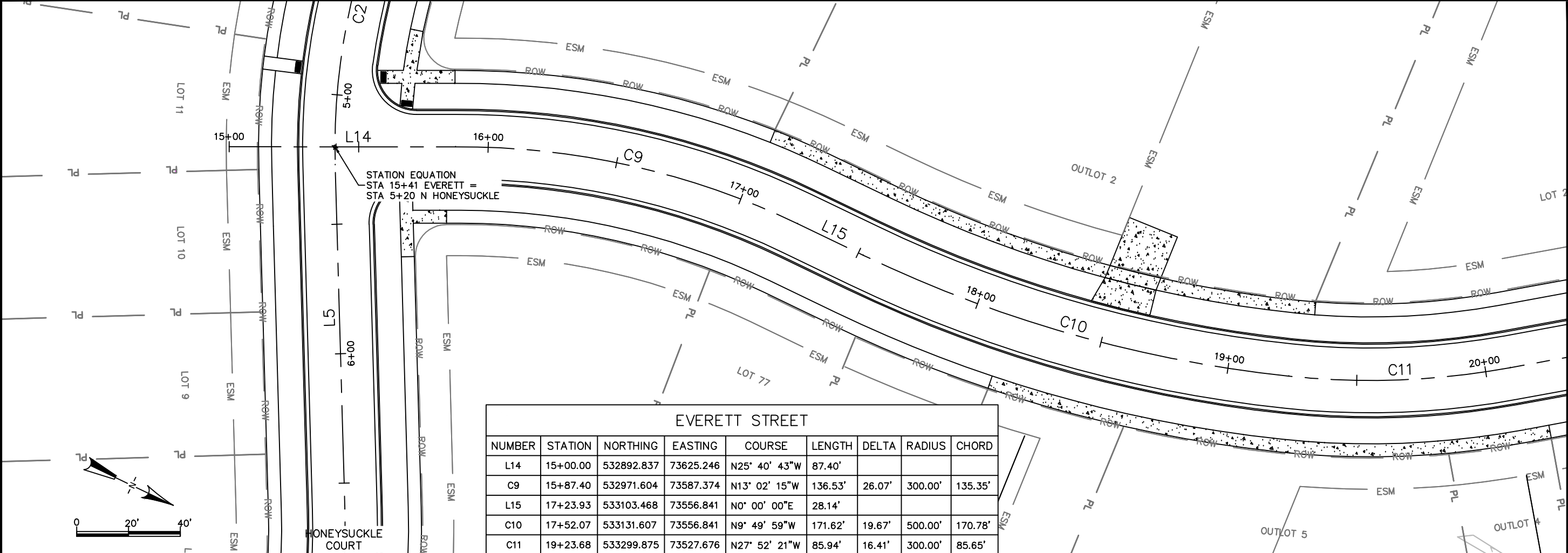
C311



N HONEYSUCKLE COURT								
NUMBER	STATION	NORTHING	EASTING	COURSE	LENGTH	DELTA	RADIUS	CHORD
L1	0+00.00	532823.179	73117.246	N52° 37' 44"E	77.00'			
L2	0+77.00	532869.916	73178.439	N52° 37' 44"E	35.68'			
C1	1+12.68	532891.573	73206.795	N71° 18' 52"E	42.40'	37.37'	65.00'	41.65'
L3	1+55.08	532904.916	73246.248	N90° 00' 00"E	23.84'			
L4	1+78.92	532904.916	73270.091	N90° 00' 00"E	229.04'			
C2	4+07.96	532904.916	73499.135	N76° 21' 07"E	119.10'	27.30'	250.00'	117.98'
L5	5+27.07	532932.754	73613.783	N62° 42' 14"E	132.95'			
C3	6+60.02	532993.724	73731.930	N76° 21' 07"E	119.10'	27.30'	250.00'	117.98'
L6	7+79.12	533021.563	73846.577	N90° 00' 00"E	31.93'			
C4	8+11.05	533021.563	73878.511	S70° 14' 25"E	379.36'	39.52'	550.00'	371.88'
L7	11+90.41	532895.837	74228.498	S50° 28' 50"E	259.59'			



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EVERETT STREET								
NUMBER	STATION	NORTHING	EASTING	COURSE	LENGTH	DELTA	RADIUS	CHORD
L14	15+00.00	532892.837	73625.246	N25° 40' 43"W	87.40'			
C9	15+87.40	532971.604	73587.374	N13° 02' 15"W	136.53'	26.07'	300.00'	135.35'
L15	17+23.93	533103.468	73556.841	N0° 00' 00"E	28.14'			
C10	17+52.07	533131.607	73556.841	N9° 49' 59"W	171.62'	19.67'	500.00'	170.78'
C11	19+23.68	533299.875	73527.676	N27° 52' 21"W	85.94'	16.41'	300.00'	85.65'



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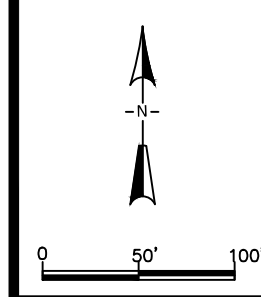
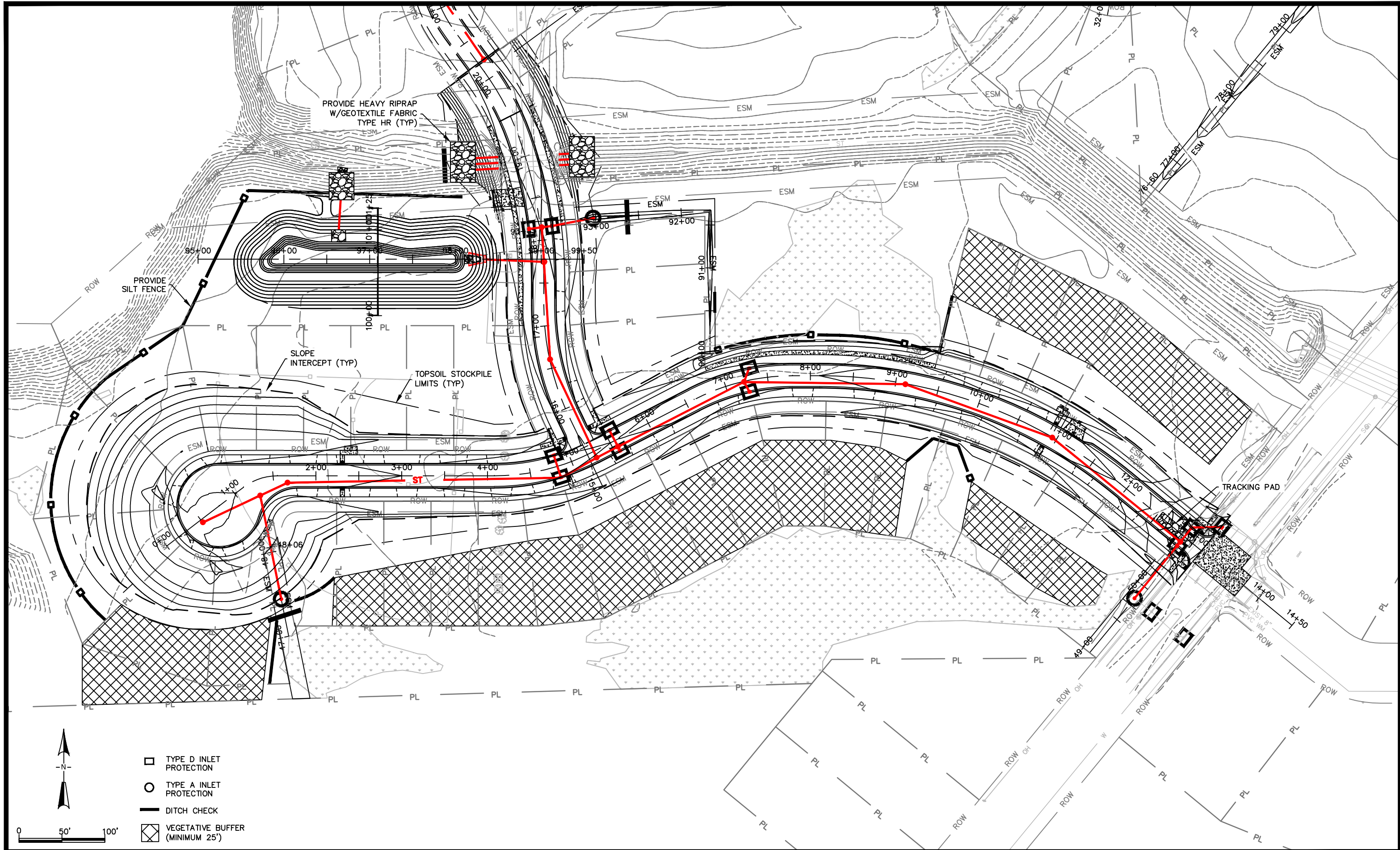
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115
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KINGSTON PRESERVE ALIGNMENTS
EVERETT STREET PHASE 1

NAME:
KINGSTON PRESERVE UTILITY
AND STREET CONSTRUCTION
PROJECT #
23-04

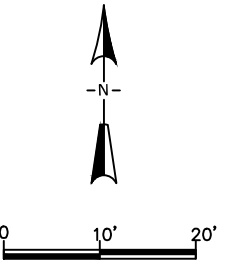
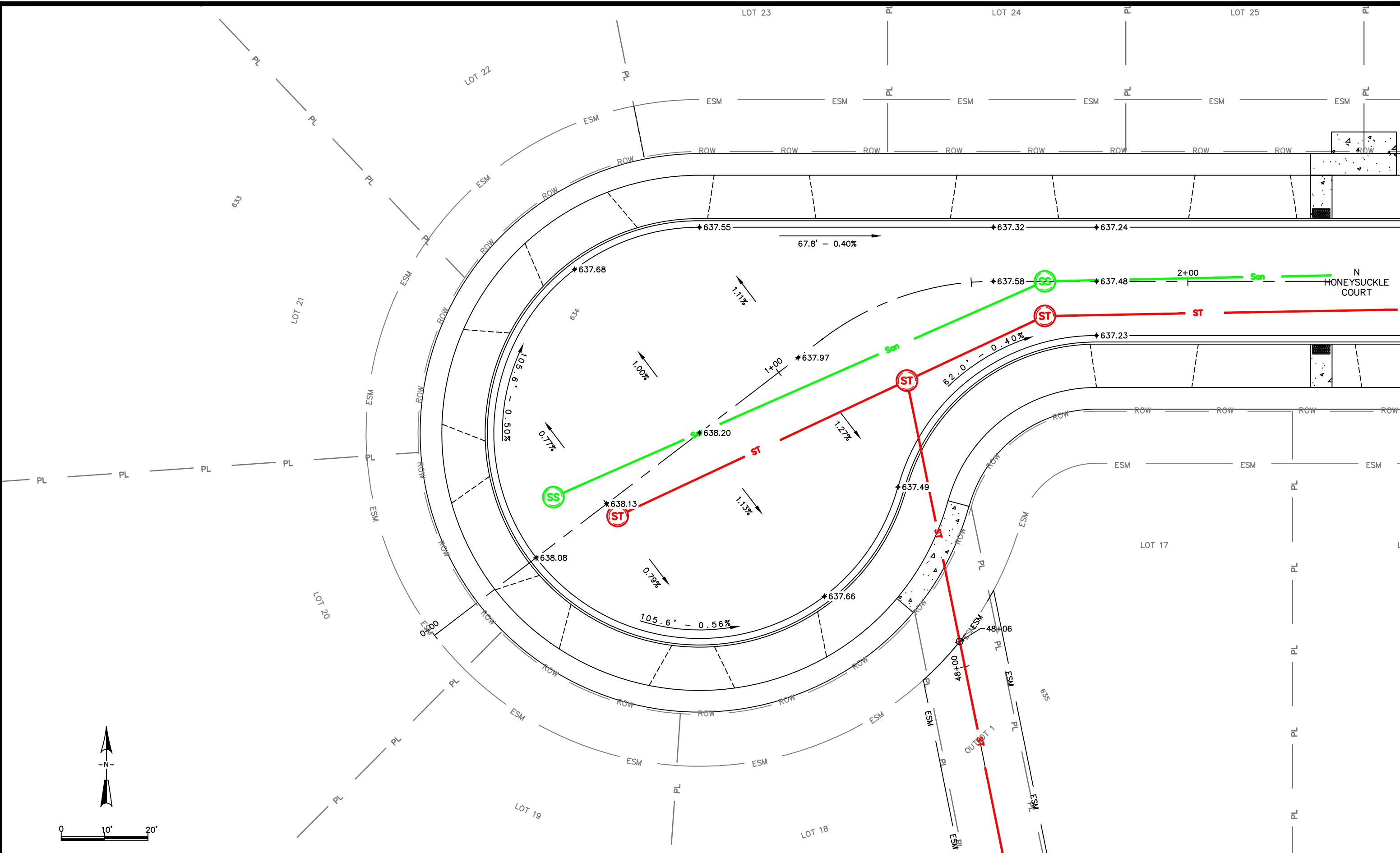
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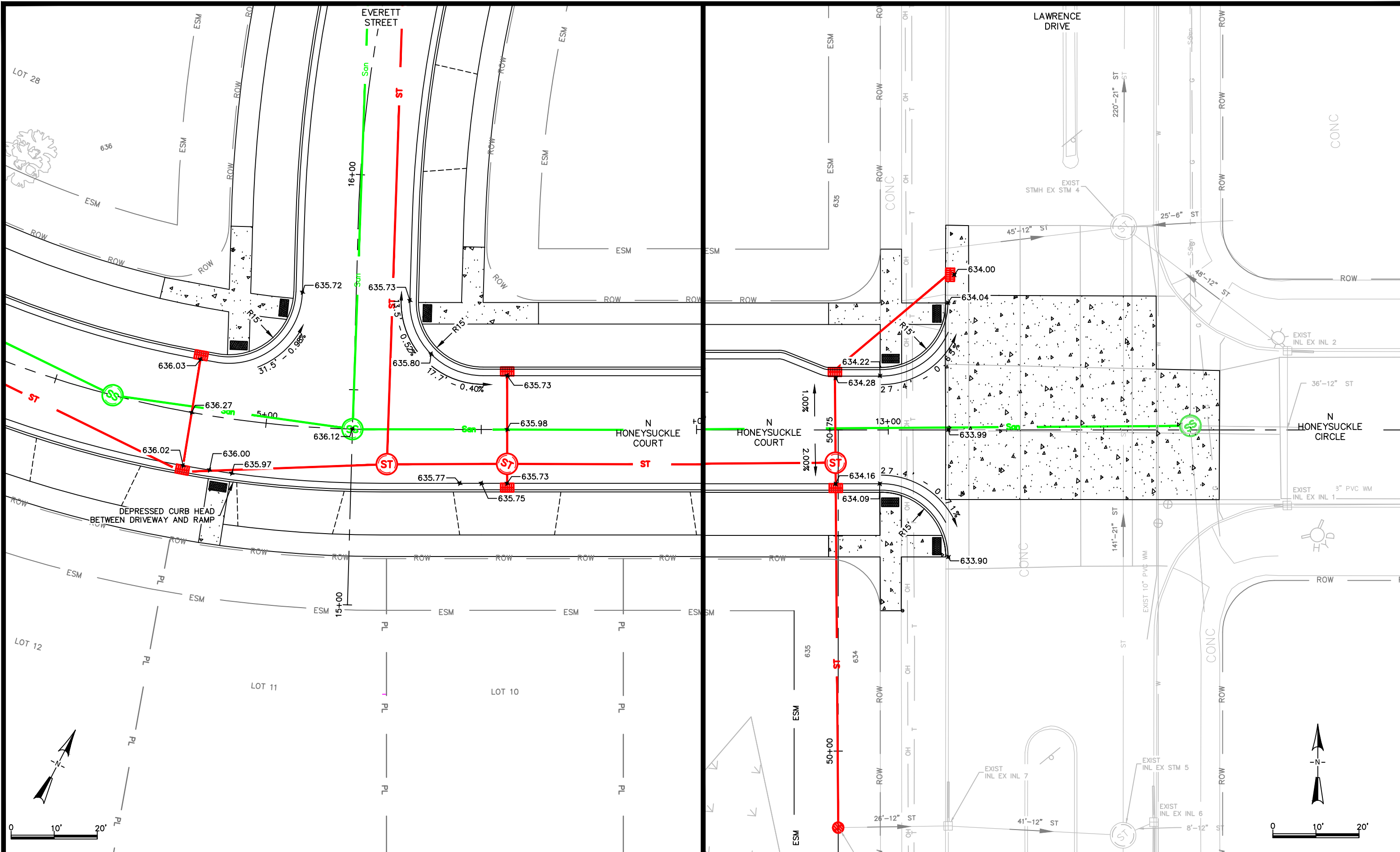


- TYPE D INLET PROTECTION
- TYPE A INLET PROTECTION
- DITCH CHECK
- ▨ VEGETATIVE BUFFER (MINIMUM 25')

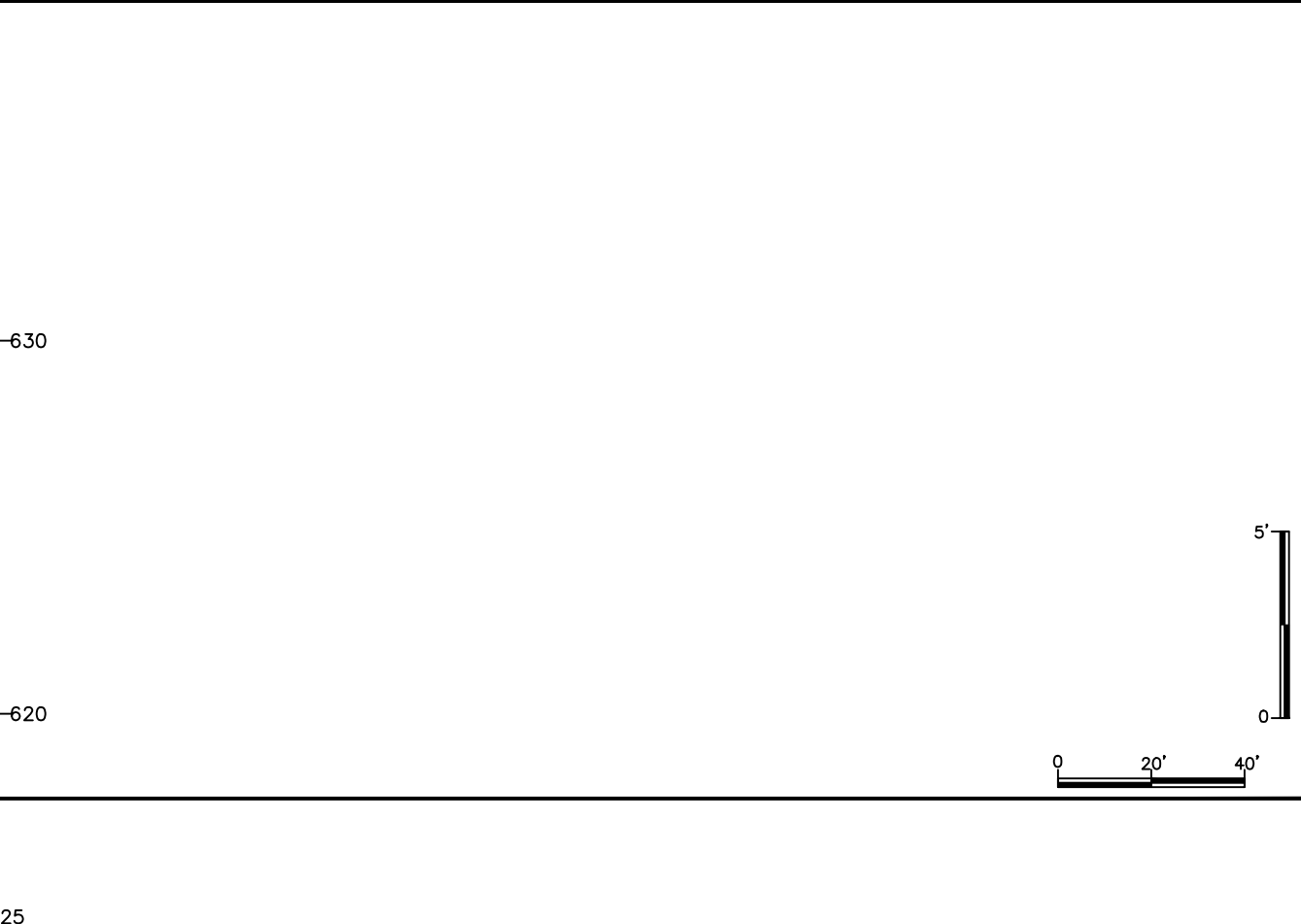
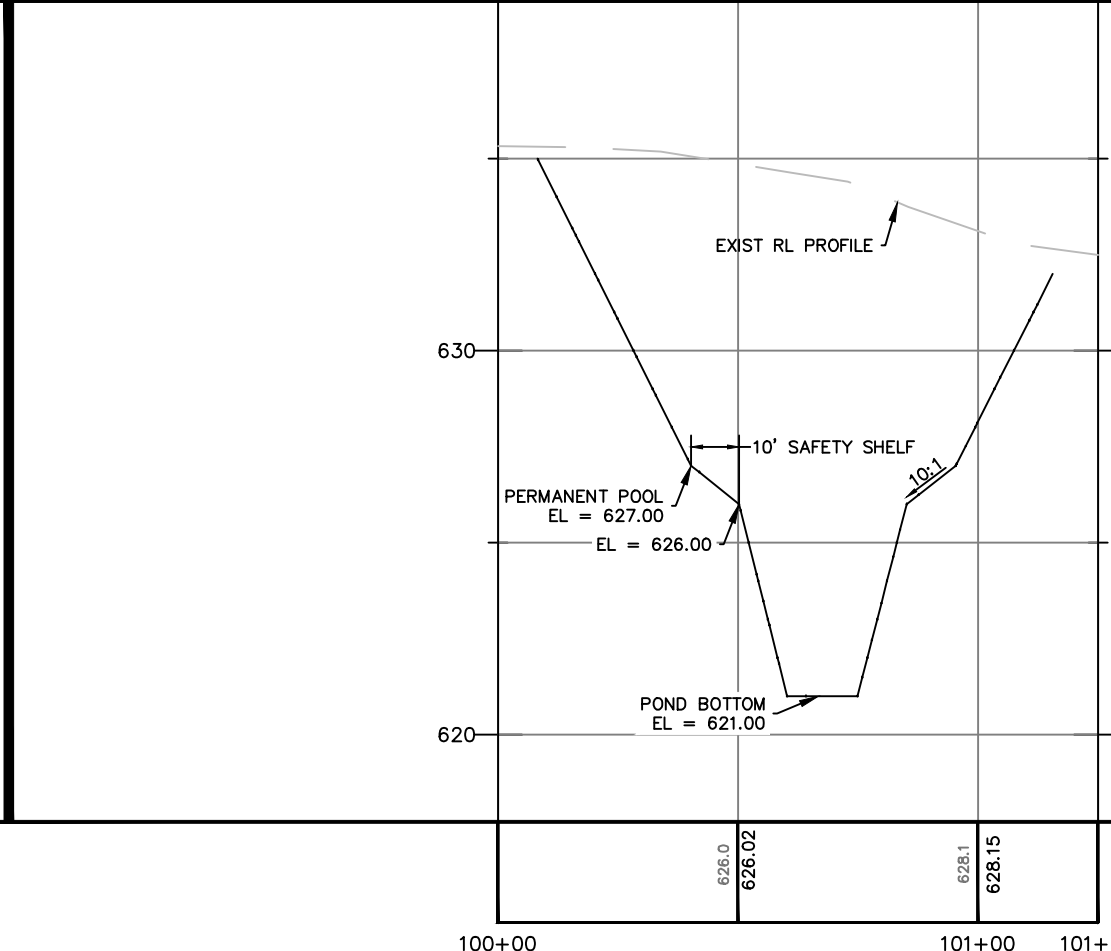
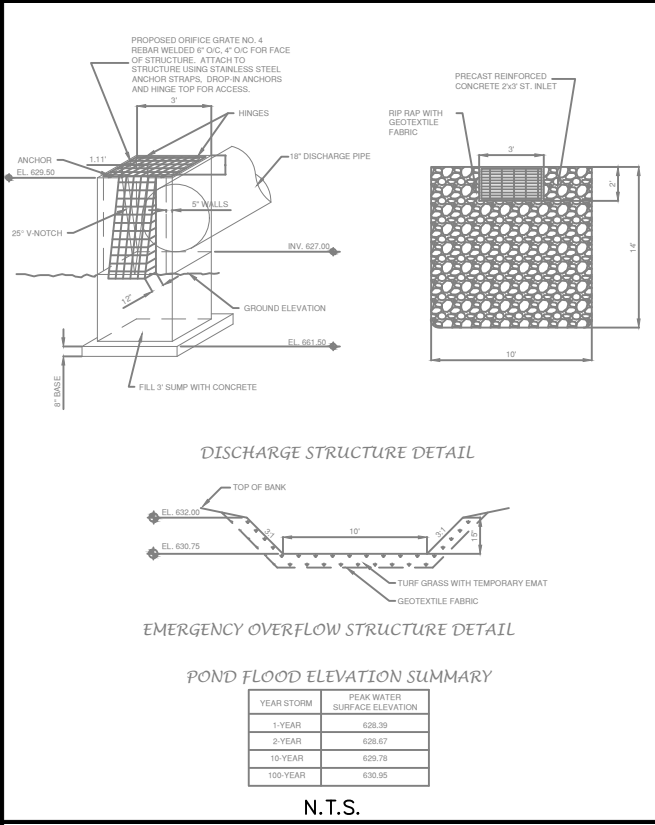
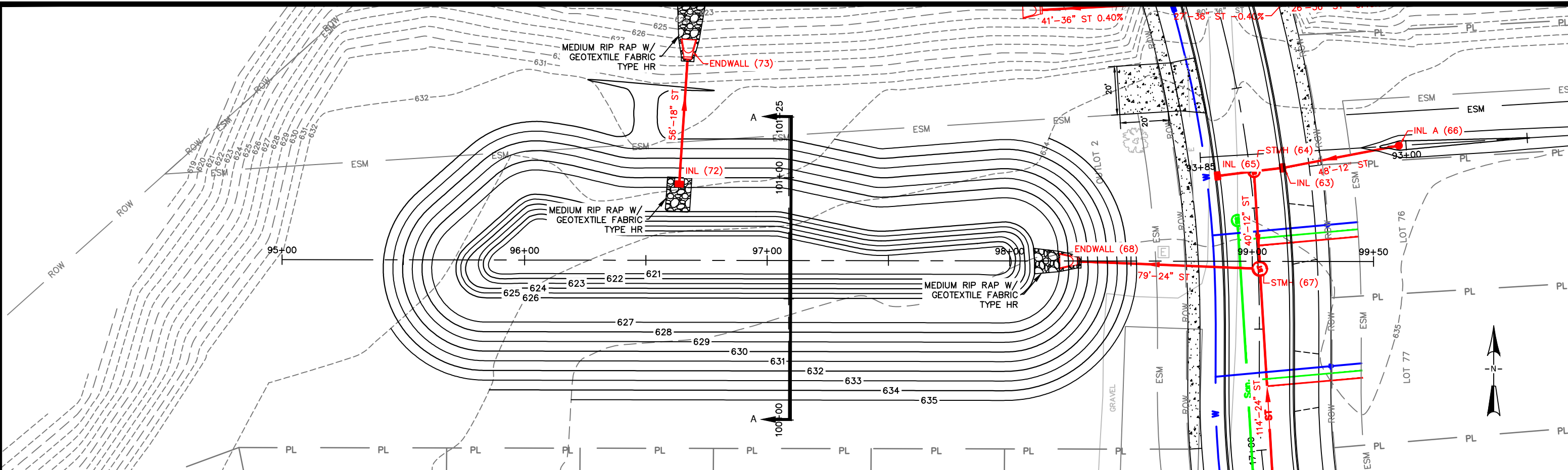
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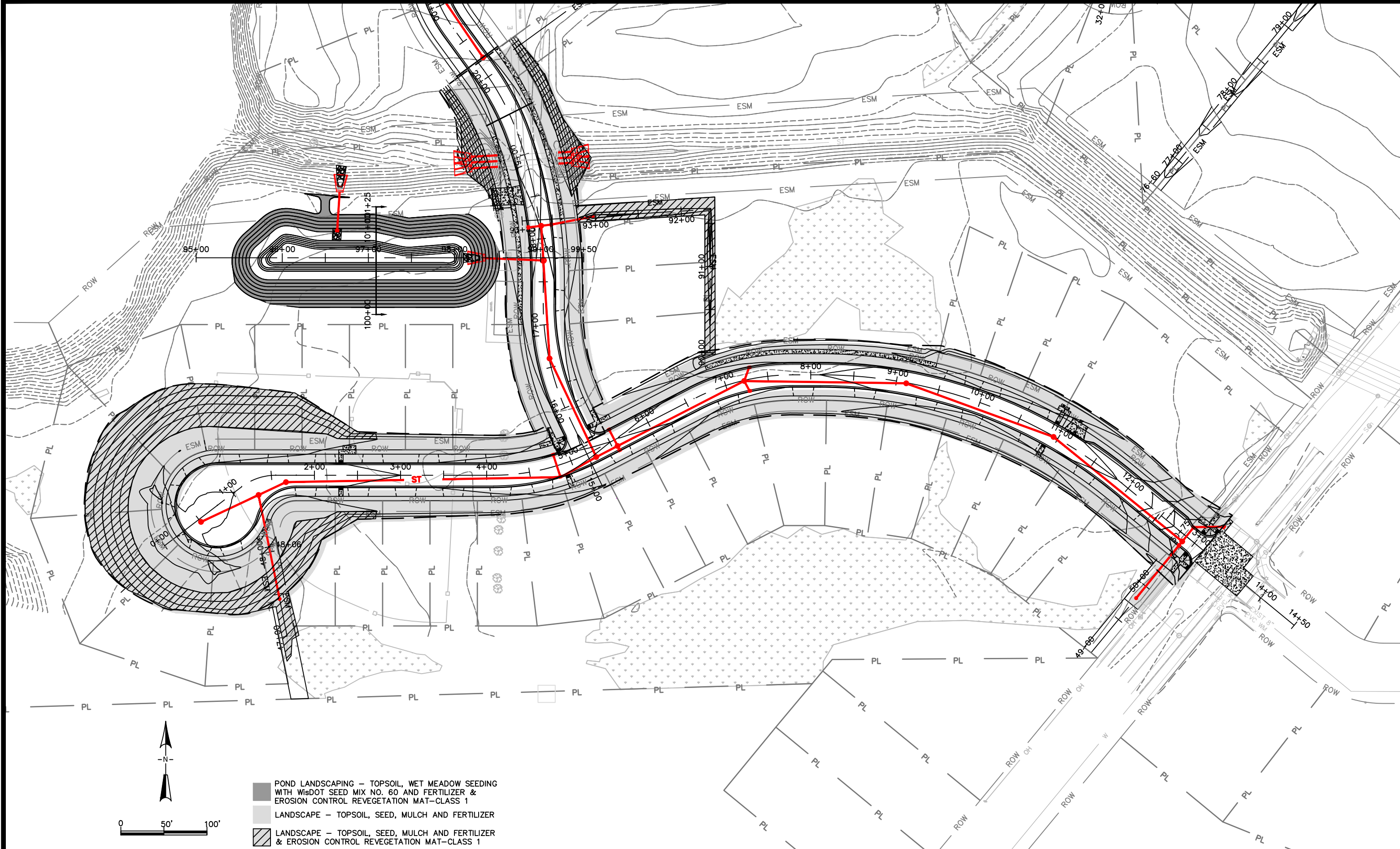


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- POND LANDSCAPING – TOPSOIL, WET MEADOW SEEDING WITH WISDOT SEED MIX NO. 60 AND FERTILIZER & EROSION CONTROL REVEGETATION MAT-CLASS 1
- LANDSCAPE – TOPSOIL, SEED, MULCH AND FERTILIZER
- LANDSCAPE – TOPSOIL, SEED, MULCH AND FERTILIZER & EROSION CONTROL REVEGETATION MAT-CLASS 1



CITY OF DE PERE

ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115
OFFICE 920-339-4061 FAX 920-339-4071

**KINGSTON PRESERVE
SITE GRADING AND RESTORATION PLAN**

NAME:
KINGSTON PRESERVE UTILITY
AND STREET CONSTRUCTION
PROJECT # 23-04

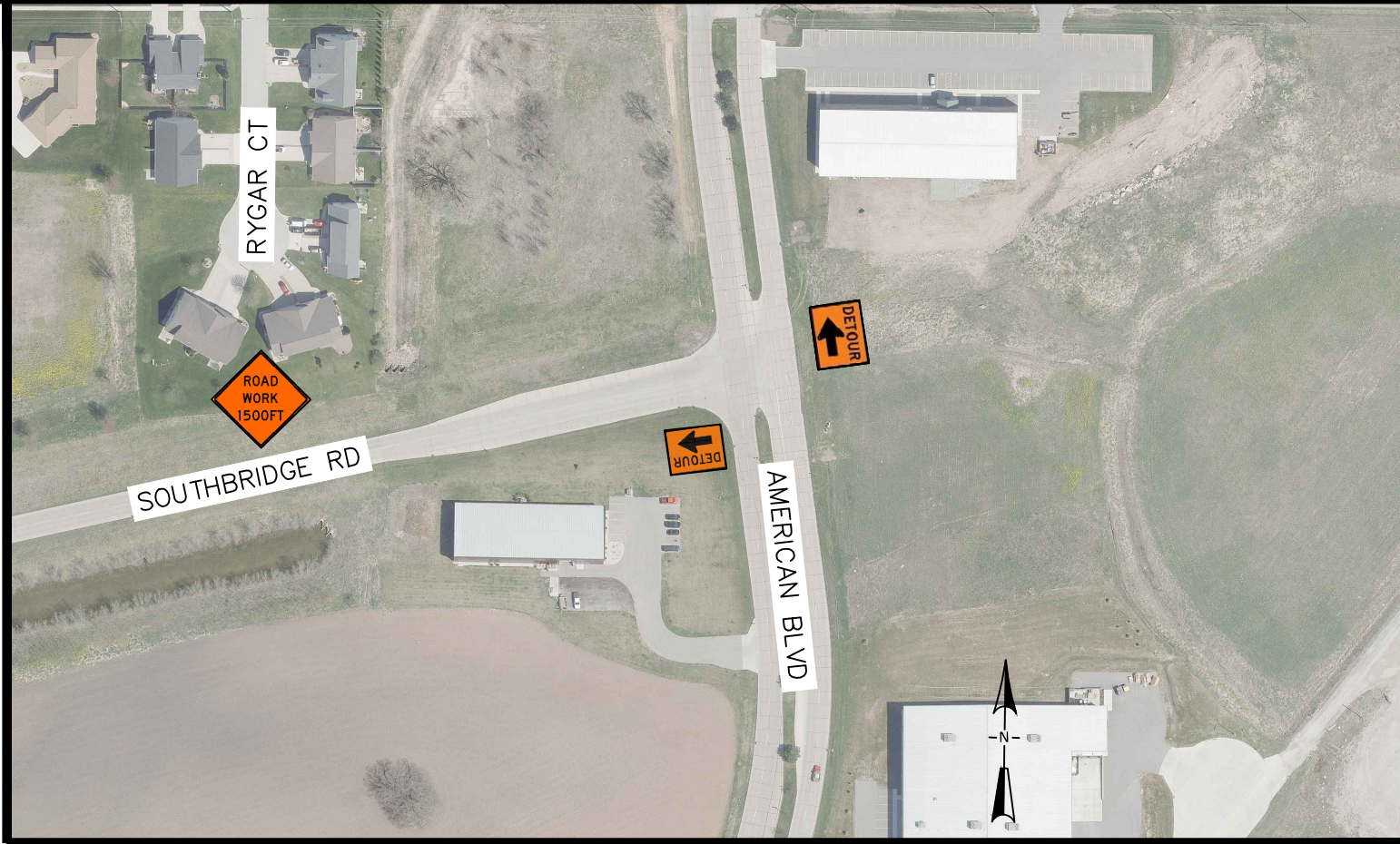
	BY	DATE
SURVEYED	REL	09-2022
DRAWN	MAL	12-2022
DESIGNED	MAL & EPR	12-2022
CHECKED	EPR	12-2022

REVISIONS / ISSUES			
NO.	DATE	BY	REMARKS

PAGE
NO.

C407

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CITY OF DE PERE

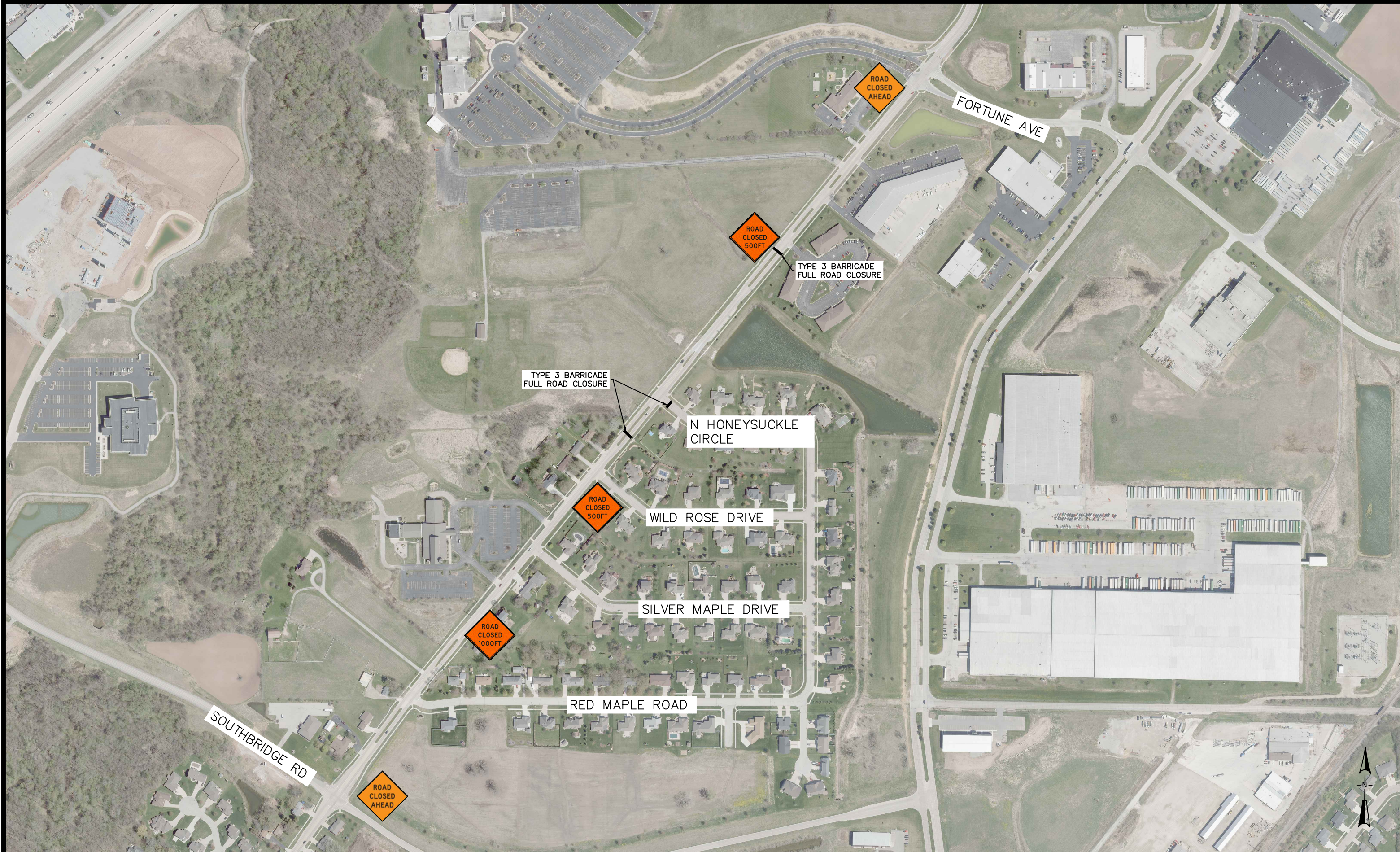
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115
OFFICE 920-339-4061 FAX 920-339-4071

**KINGSTON PRESERVE
DETOUR ROUTE
TRAFFIC CONTROL**

NAME:
KINGSTON PRESERVE UTILITY
AND STREET CONSTRUCTION
PROJECT #
23-04

	BY	DATE
SURVEYED	REL	09-2022
DRAWN	MAL	02-2023
DESIGNED	MAL & EPR	02-2023
CHECKED	EPR	02-2023

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**KINGSTON PRESERVE
TRAFFIC CONTROL**

NAME:
KINGSTON PRESERVE UTILITY
AND STREET CONSTRUCTION
PROJECT # 23-04

			REVISIONS / ISSUES			
			NO.	DATE	BY	REMARKS
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DRAWN	MAL	02-2023				
DESIGNED	MAL & EPR	02-2023				
CHECKED	EPR	02-2023				

PROPOSED ORIFICE GRATE NO. 4 REBAR WELDED 6" O/C, 4" O/C FOR FACE OF STRUCTURE. ATTACH TO STRUCTURE USING STAINLESS STEEL ANCHOR STRAPS, DROP-IN ANCHORS AND HINGE TOP FOR ACCESS.

ANCHOR

EL. 629.50

1.11'

3'

HINGES

18" DISCHARGE PIPE

5" WALLS

25° V-NOTCH

12"

GROUND ELEVATION

INV. 627.00

EL. 624.00

8" BASE

FILL 3' SUMP WITH CONCRETE

A cross-sectional diagram of a stormwater inlet system. The diagram shows a 10-foot wide area. At the top, there is a 3-foot wide, 2-foot high rectangular structure labeled "PRECAST REINFORCED CONCRETE 2'x3' ST. INLET". Below this structure is a layer of "RIP RAP WITH GEOTEXTILE FABRIC". The rip rap layer is 14 feet high. The total width of the area is 10 feet.

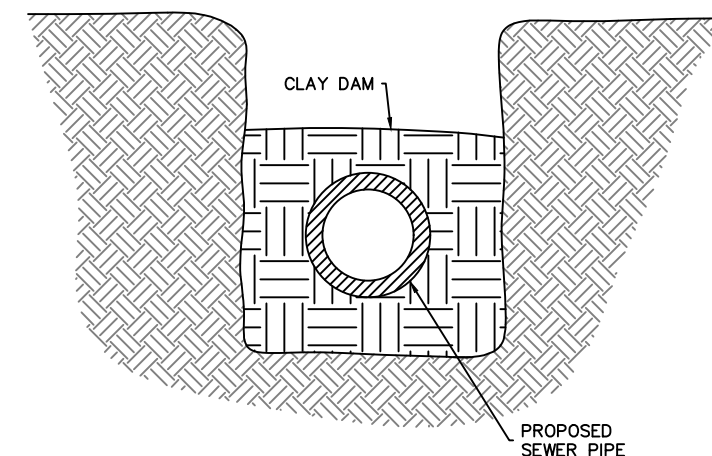
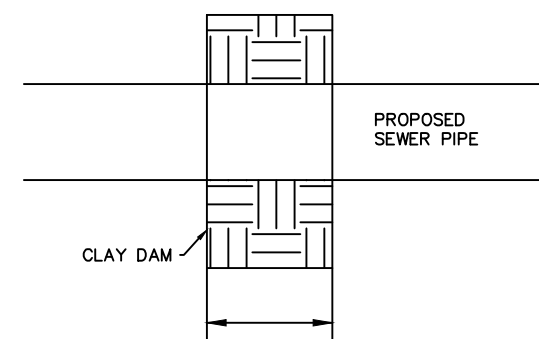
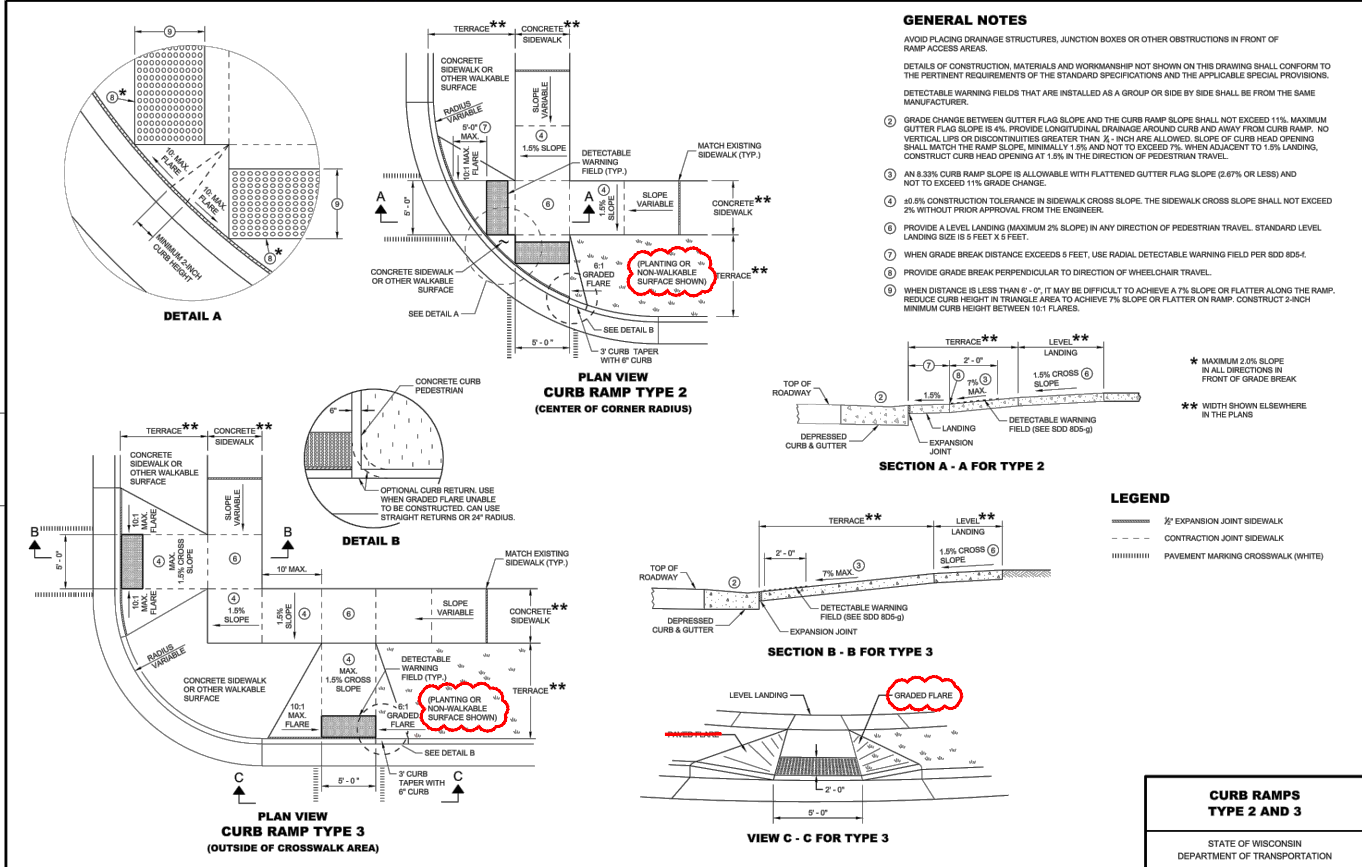


Diagram illustrating a cross-section of a slope stabilization project. The diagram shows a road cross-section with a 10' wide road surface. On the left, the existing ground line is at EL. 632.00 and the proposed grade is at EL. 630.75. The slope is 3:1. A 15' high retaining wall is shown on the right. The wall is topped with turf grass and temporary EMAT. A geotextile fabric is shown below the wall, with arrows indicating water flow. Labels include 'TOP OF BANK', 'EL. 632.00', 'EL. 630.75', '10'', '3:1', '15'', 'TURF GRASS WITH TEMPORARY EMAT', and 'GEOTEXTILE FABRIC'.

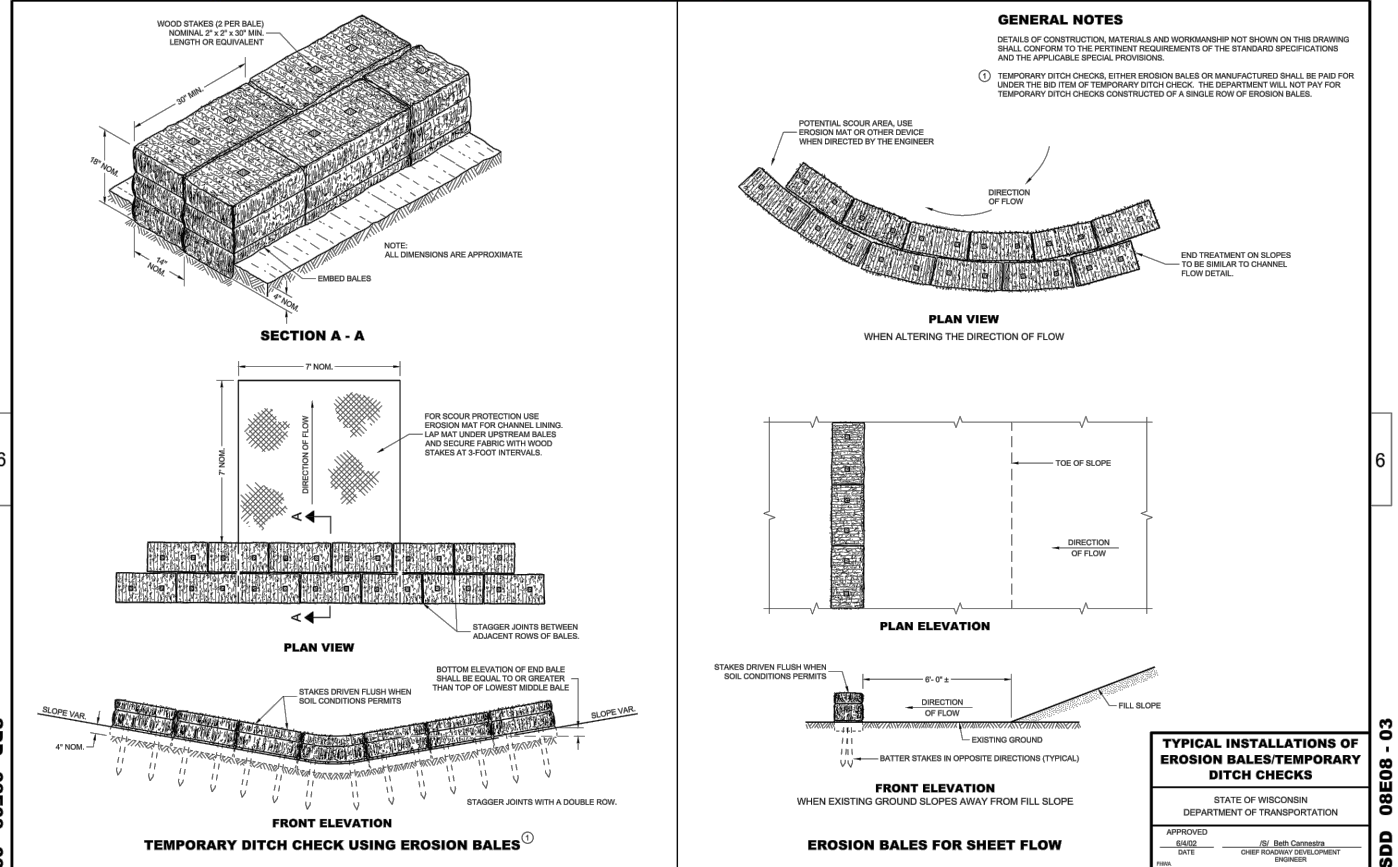
YEAR STORM	PEAK WATER SURFACE ELEVATION
1-YEAR	628.39
2-YEAR	628.67
10-YEAR	629.78
100-YEAR	630.95

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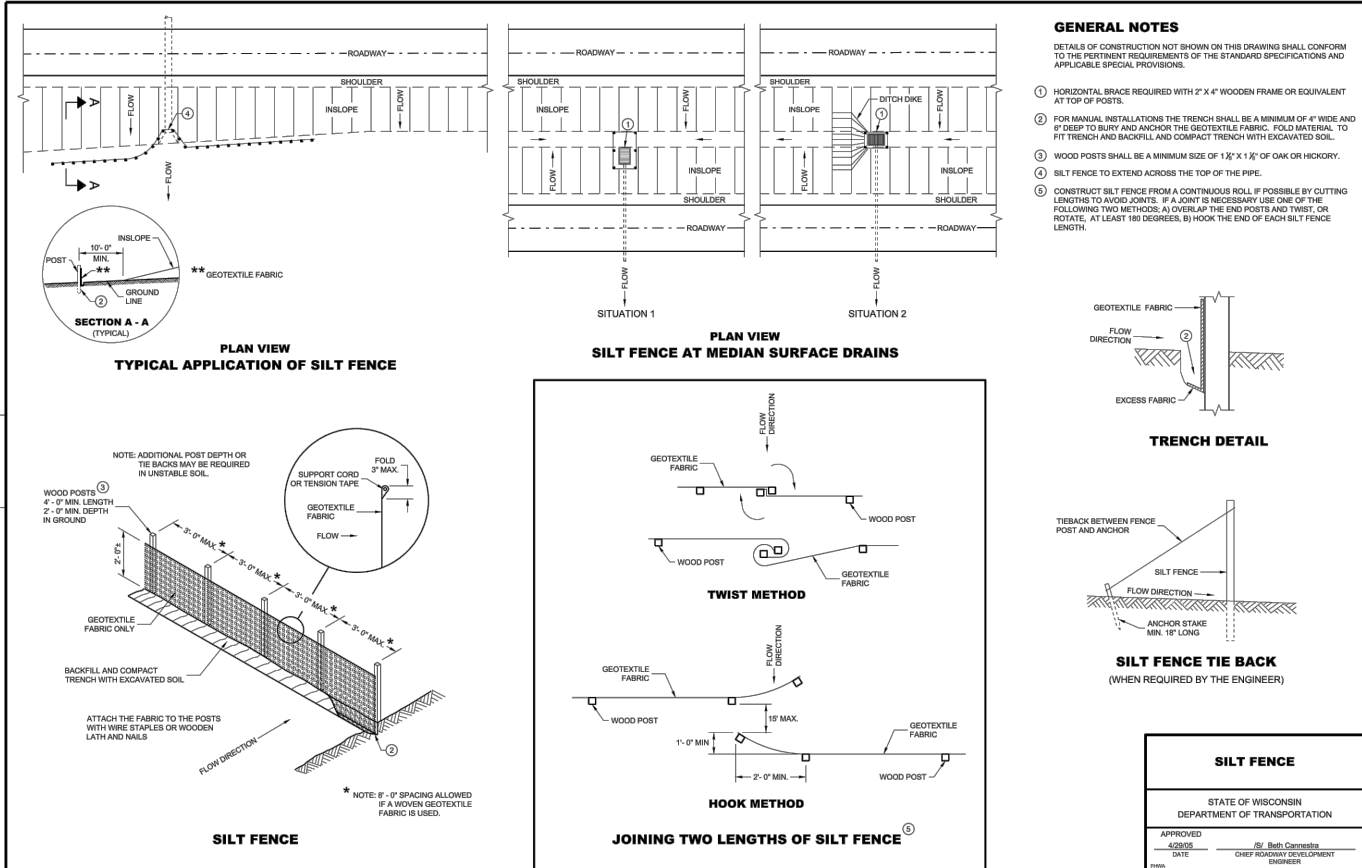
SDD 08D05-b Curb Ramps Types 2 and 3



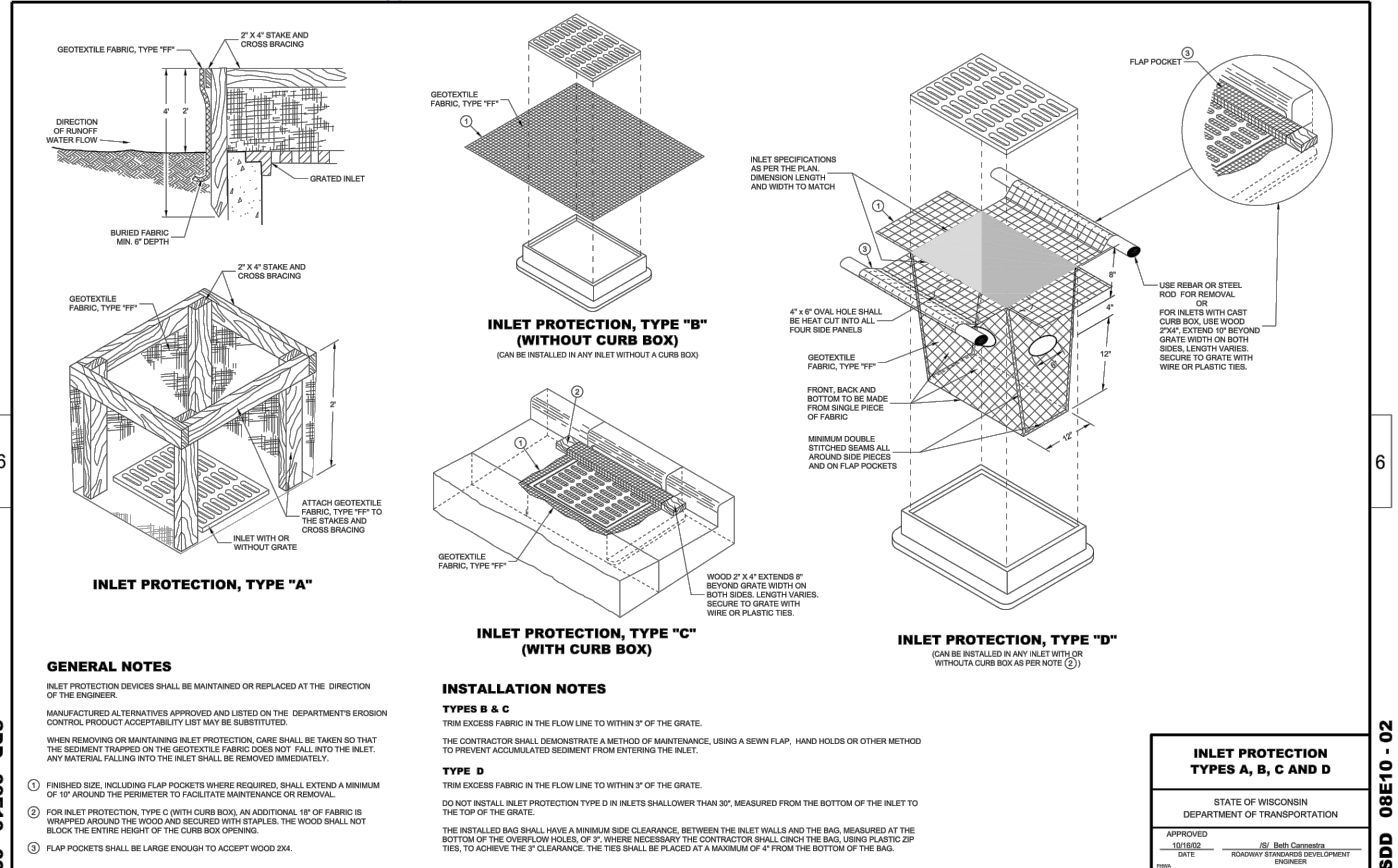
SDD 08E08 Typical Installations of Erosion Bales / Temporary Ditch Checks



SDD 08E09 Silt Fence



SDD 08E10 Inlet Protection, Types A, B, C and D



CITY OF DE PERE

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KINGSTON PRESERVE CONSTRUCTION DETAILS

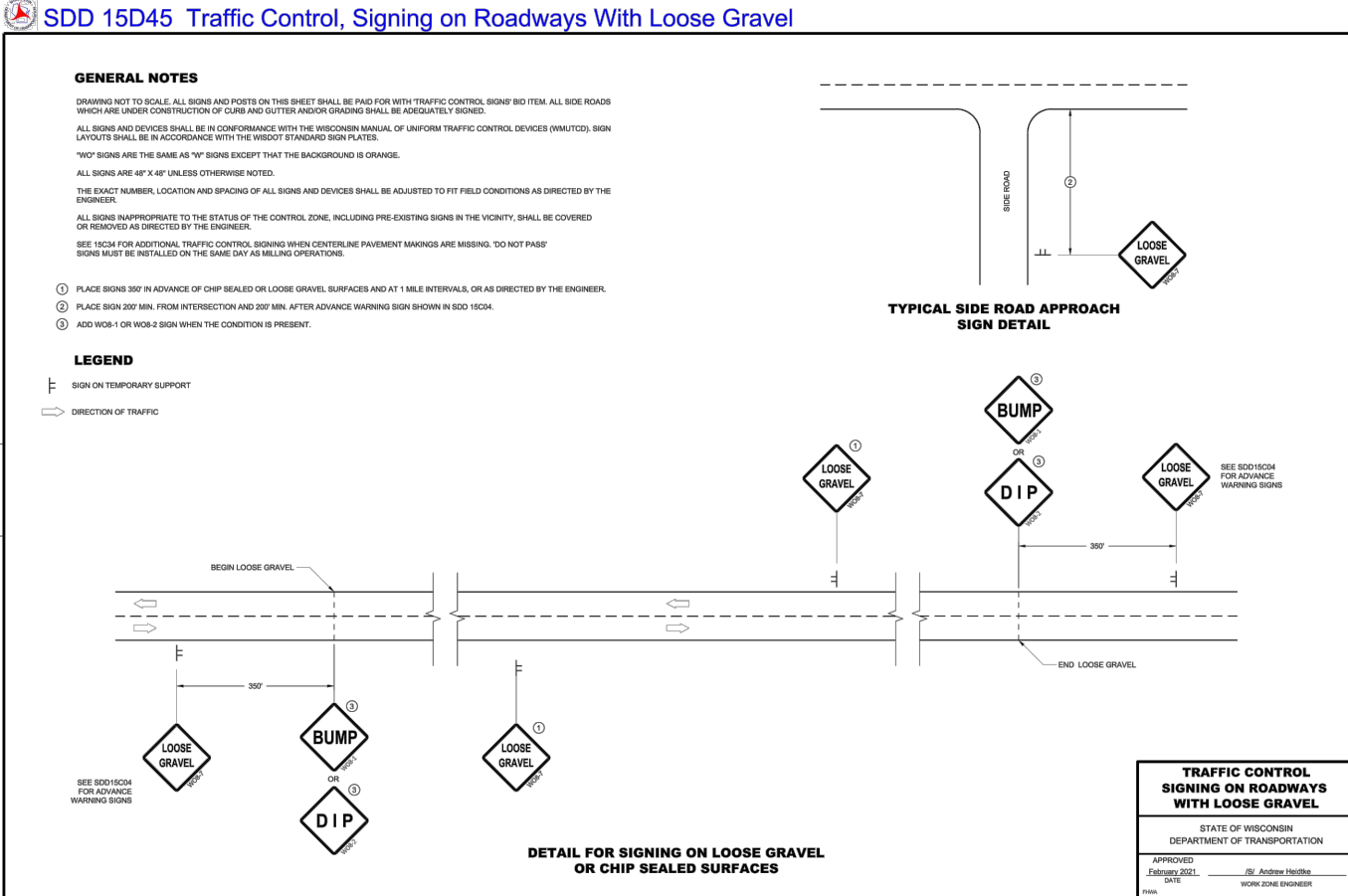
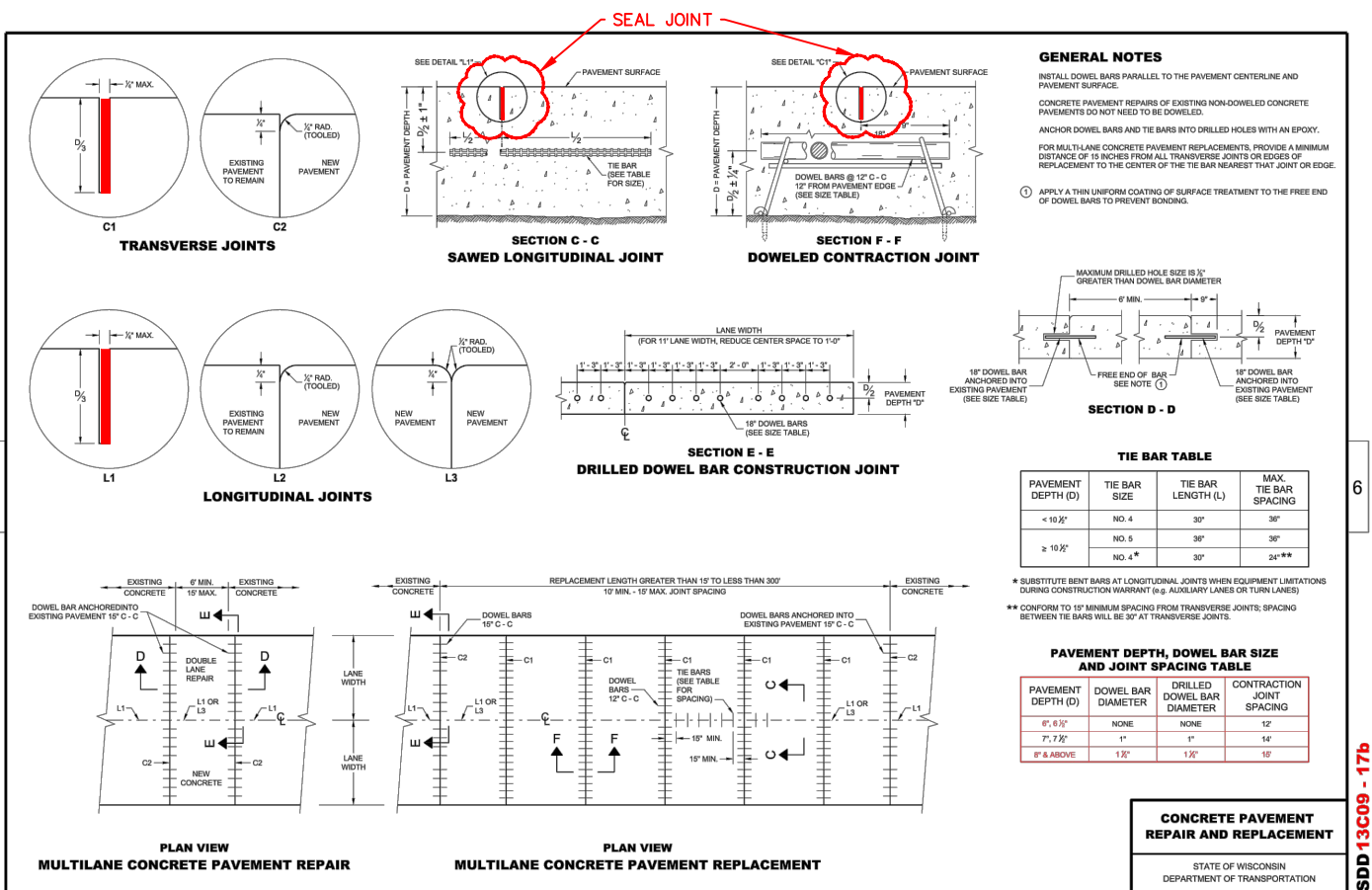
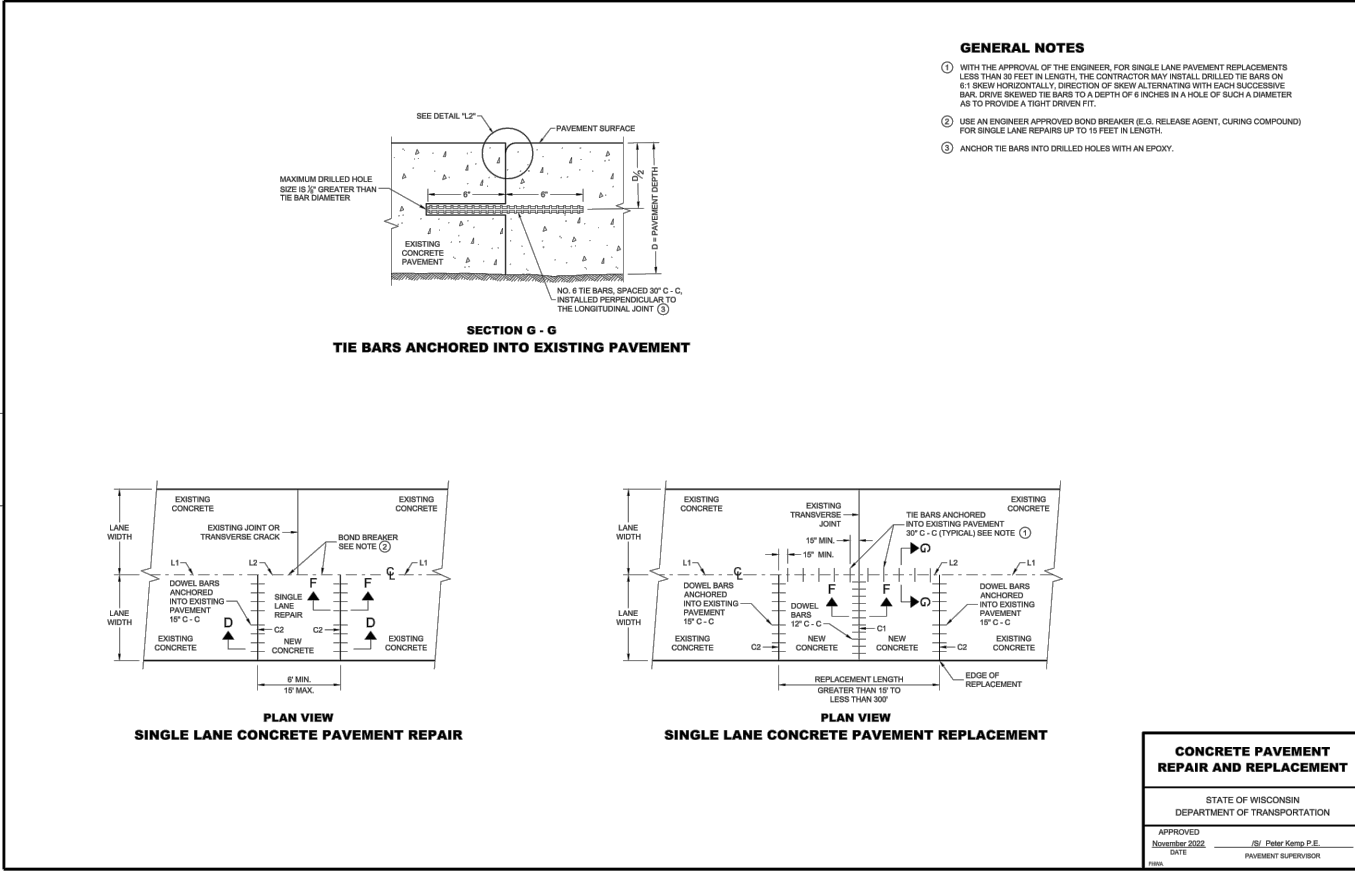
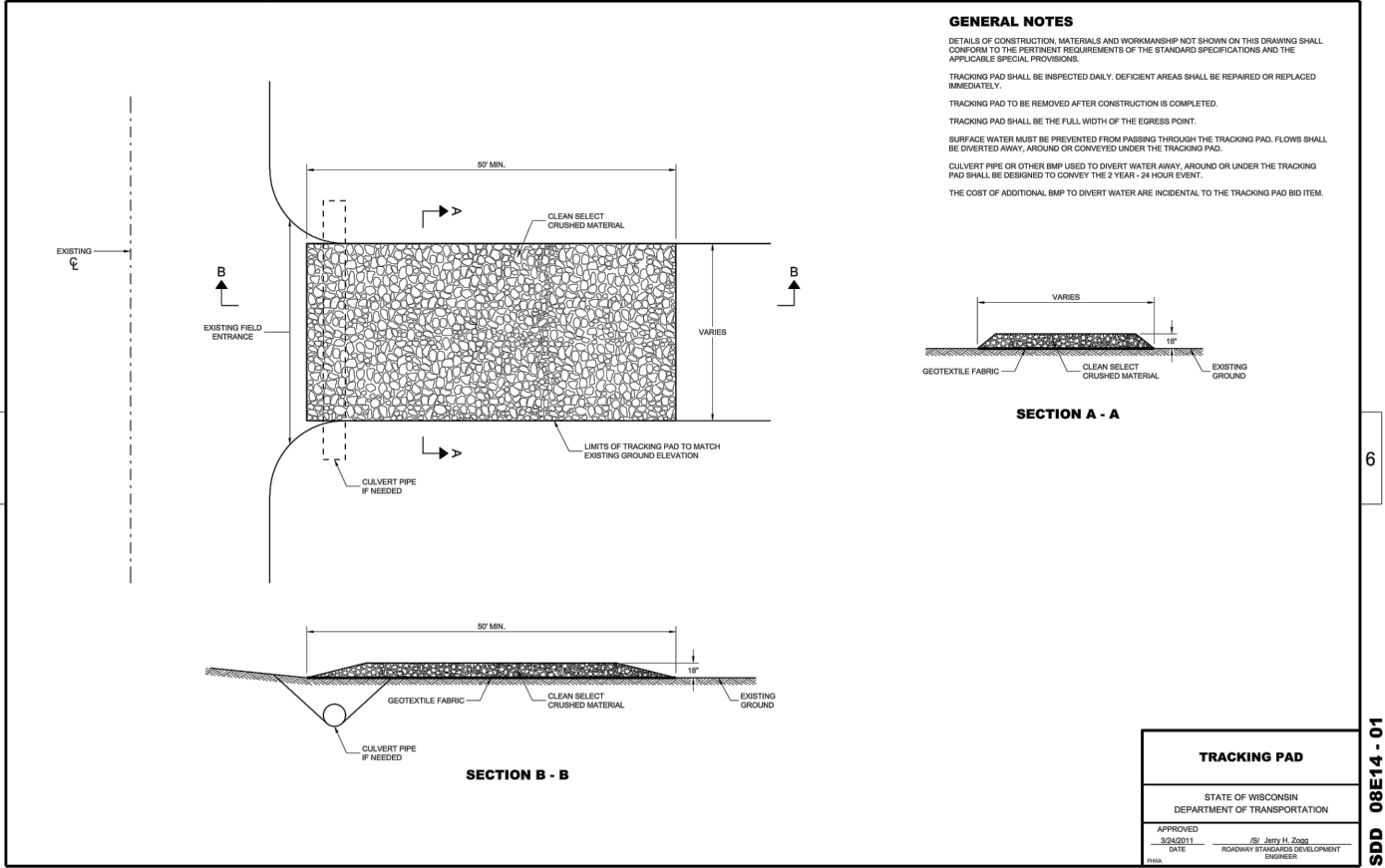
NAME:
KINGSTON PRESERVE UTILITY
AND STREET CONSTRUCTION
PROJECT # 23-04

BY	DATE
SURVEYED	REL 09-2022
DRAWN	MAL 11-2022
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NO.	DATE	BY	REMARKS

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SDD 08E14 Tracking Pad



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KINGSTON PRESERVE
CONSTRUCTION DETAILS

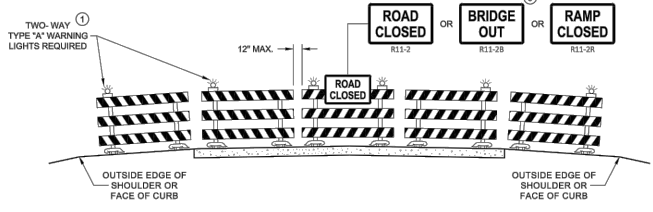
NAME: KINGSTON PRESERVE UTILITY AND STREET CONSTRUCTION
PROJECT # 23-04

REVISIONS / ISSUES			
NO.	DATE	BY	REMARKS
1	09-2022	REL	SURVEYED
2	11-2022	MAL	DRAWN
3	11-2022	MAL & EPR	DESIGNED
4	11-2022	EPR	CHECKED

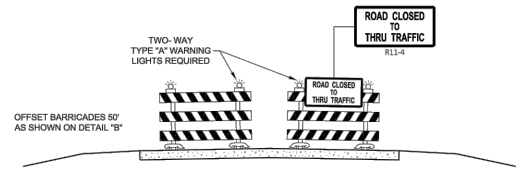
PAGE NO.

C503

SDD 15C02-b Barricades and Sign for Various Closures



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 8, R11 - 4, AND R10 - 81 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11 - 2 SHALL BE 48" X 30"

R11 - 3 SHALL BE 48" X 30"

M4 - 8 SHALL BE 30" X 24"

M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)

M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)

M1 - 4, M1 - 5A AND M1 - 8 SHALL BE 54" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)

M05 - 1 AND M06 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)

D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

R1 - 1 SHALL BE 36" X 36"

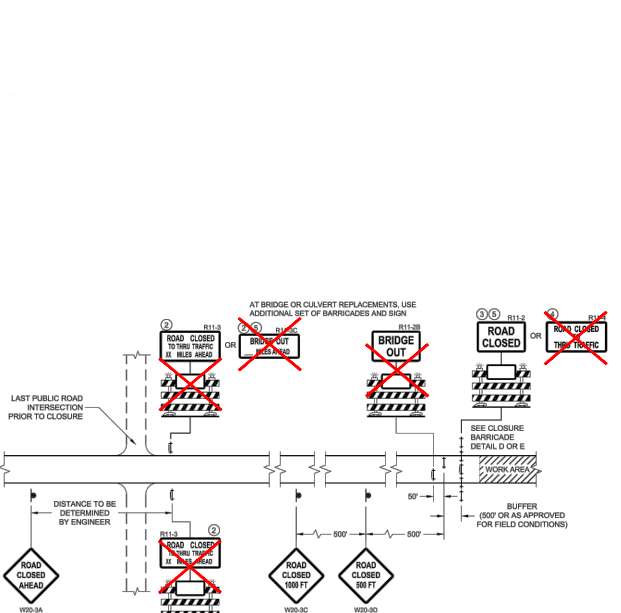
- TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

SDD 15C02-a Barricades and Signs for Mainline Closures



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	300
40	300
45	500
50	500
55	750

SEE SDD 15C2-SHEET "b" FOR GENERAL NOTES AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE II BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 18" X 18" MIN. (ORANGE)
- DETOUR
- EAST
- M4 - 8
- M3 - X
- M1 - 4
- M1 - 8
- M1 - 5A
- M05 - 1
- M06 - 1

BARRICADES AND SIGNS
FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

SDD 15C12-a Traffic Control for Lane Closure With Flagging Operation

- LEGEND
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

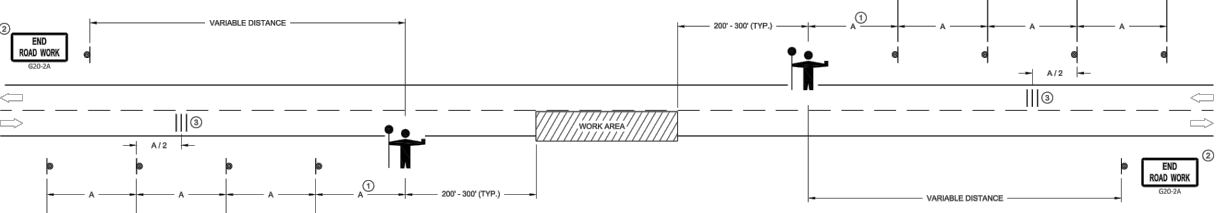
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND LOCATION OF ALL FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

① FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,000' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

TRAFFIC CONTROL FOR
LANE CLOSURE WITH
FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER



CITY OF DE PERE

ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115
OFFICE 920-339-4061 FAX 920-339-4071

KINGSTON PRESERVE
CONSTRUCTION DETAILS

NAME:
KINGSTON PRESERVE UTILITY
AND STREET CONSTRUCTION
PROJECT #
23-04

BY	DATE
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