

CITY OF DE PERE

PROJECT

22-03

SEWER LINING

**BID DATE:
FEBRUARY 17, 2022
@ 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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JANUARY 28, 2022 – FEBRUARY 4, 2022

CITY OF DE PERE

ADVERTISEMENT TO BID

PROJECT 22-03

SEWER LINING

Online bids will be received and accepted for Project 22-03 Sewer Lining via the online electronic bidding service through QuestCDN.com, until 1:00 PM, Thursday, February 17, 2022, at which time they will be publicly accepted, displayed and read aloud.

Project 22-03 for which proposals are being sought includes the following approximate quantities:

- 15,500 LF of 8" to 36" Cured-In-Place Pipe Lining and Associated Work

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 #8100835 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 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

**Project 22-03
Sewer Lining**

City of De Pere

Director of Public Works. Such forms shall be filed with the Director of Public Works no later than 4:00 PM, Monday, February 14, 2022. Prospective bidders who have previously submitted such forms subsequent to January 1, 2022 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 28th day of January 2022.

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

Project 22-03

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.
4. Photos and videos of existing sewers being lined are available for review. Request for the information should be made to Scott Lax at (920) 339-4072 ext. 2232 or at slax@deperewi.gov.

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 Bid Form and 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://global.gotomeeting.com/join/923962301>

You can also dial in using your phone.

United States (Toll Free): 1 877 309 2073
- One-touch: <tel:+18773092073,,923962301#>

United States: +1 (571) 317-3129
- One-touch: <tel:+15713173129,,923962301#>
Access Code: 923-962-301

New to GoToMeeting? Get the app now and be ready when your first meeting starts:
<https://global.gotomeeting.com/install/923962301>

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 22-03

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 February 17, 2022 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:

<u>Addendum No.</u>	<u>Addendum Date</u>
_____	_____
_____	_____

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 22-03

BID SCHEDULE – UNIT PRICE

ITEM	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT BID
SS-01	EASEMENT (WESTWOOD-SIXTH ST) 36" STORM SEWER	LF	1199	\$ _____	\$ _____
SS-02	EASEMENT (APOLLO - NINTH) 18" SANITARY SEWER	LF	579	\$ _____	\$ _____
SS-03	ALLEY (FOURTH/THIRD-MAIN/REID) 15" SANITARY SEWER	LF	385	\$ _____	\$ _____
SS-04	ALLEY (FOURTH/THIRD-MAIN/REID) 12" SANITARY SEWER	LF	195	\$ _____	\$ _____
SS-05	FRANKLIN STREET 12" SANITARY SEWER	LF	355	\$ _____	\$ _____
SS-06	TERRY LANE 10" SANITARY SEWER	LF	2211	\$ _____	\$ _____
SS-07	RUSK STREET 10" SANITARY SEWER	LF	336	\$ _____	\$ _____
SS-08	NOB HILL 10" SANITARY SEWER	LF	265	\$ _____	\$ _____
SS-09	ALLEY (WISCONSIN/MICHIGAN - FRANKLIN/WILLIAM) 8" SANITARY SEWER	LF	178	\$ _____	\$ _____
SS-10	ALLEY (SUPERIOR/HURON - FULTON/FRANKLIN) 8" SANITARY SEWER	LF	300	\$ _____	\$ _____
SS-11	EASEMENT (ERIE/ONTARIO - FULTON/FRANKLIN) 8" SANITARY SEWER	LF	166	\$ _____	\$ _____
SS-12	ALLEY (MICHIGAN/SUPERIOR - LEWIS/CHICAGO) 8" SANITARY SEWER	LF	362	\$ _____	\$ _____

**Project 22-03
Sewer Lining**

City of De Pere

ITEM	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT BID
SS-13	ALLEY (SUPERIOR/HURON - LEWIS/CHICAGO) 8" SANITARY SEWER	LF	476	\$ _____	\$ _____
SS-14	ALLEY (HURON/ERIE - LEWIS/CHICAGO) 8" SANITARY SEWER	LF	420	\$ _____	\$ _____
SS-15	EASEMENT (ERIE/ONTARIO - LEWIS/CHICAGO) 8" SANITARY SEWER	LF	351	\$ _____	\$ _____
SS-16	ALLEY (HURON/ERIE - JAMES/GEORGE) 8" SANITARY SEWER	LF	214	\$ _____	\$ _____
SS-17	ALLEY (ERIE/ONTARIO - JAMES/GEORGE) 8" SANITARY SEWER	LF	277	\$ _____	\$ _____
SS-18	EASEMENT (ONTARIO/WINNEBAGO - RIDGEWAY/FULTON) 8" SANITARY SEWER	LF	290	\$ _____	\$ _____
SS-19	WEBSTER AVENUE 8" SANITARY SEWER	LF	3060	\$ _____	\$ _____
SS-20	RIDGEWAY DRIVE 8" SANITARY SEWER	LF	221	\$ _____	\$ _____
SS-21	RUSK STREET 8" SANITARY SEWER	LF	628	\$ _____	\$ _____
SS-22	ZITA STREET 8" SANITARY SEWER	LF	824	\$ _____	\$ _____
SS-23	MARTIN STREET 8" SANITARY SEWER	LF	209	\$ _____	\$ _____
SS-24	RAINBOW AVENUE 8" SANITARY SEWER	LF	1985	\$ _____	\$ _____
SS-25	TELEVISIONING SANITARY LATERALS	EA	64	\$ _____	\$ _____
				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 22-03 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>
Cured In Place Pipe	_____	_____

SECTION 00 51 00

NOTICE OF AWARD

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

Project Description: 22-03 Sewer Lining

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 January 28, 2022 and February 4, 2022.

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 _____ 2022.

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 22-03 Sewer Lining, 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 January 28, 2022 and February 4, 2022.
- (b) Drawings designated for Project 22-03 Sewer Lining dated January 28, 2022.
- (c) City of De Pere 2022 Construction Specifications.
- (d) Special Provisions dated January 28, 2022
- (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: 22-03 Sewer Lining

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 22-03, 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.

- 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)
_____	_____
(WITNESS)	(SURETY)

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 22-03, 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		
Number	Additions	Deductions
Total	\$0.00	\$0.00
NET CHANGE BY CHANGE ORDERS:		\$0.00

1. ORIGINAL CONTRACT PRICE:.....	_____
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
6. AMOUNT ELIGIBLE TO DATE (Line 4 minus 5).....	_____ \$0.00
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. 36" Storm Sewer Easement – Westwood Drive to S. Sixth Street
 - b. Easement (Apollo – Ninth) – Apollo Way to Ninth Street
 - c. Alley (Fourth/Third-Main/Reid) – Fourth Street to Third Street
 - d. Franklin Street – Huron Street to Erie Street
 - e. Terry Lane – Lost Dauphin Road to Stevens Street
 - f. Rusk Street – From Clay Street to 700' E/O of Zita Street
 - g. Nob Hill – Charles Street to Termini
 - h. Alley (Wisconsin/Michigan-Franklin/William) – Franklin Street to 200' SW/O Franklin
 - i. Alley (Superior/Huron-Fulton/Franklin) – 300' SW/O Fulton to Fulton Street
 - j. Easement (Erie/Ontario-Fulton/Franklin) – 150' SW/O Fulton to Fulton Street
 - k. Alley (Michigan/Superior-Lewis/Chicago) – Lewis Street to Chicago Street
 - l. Alley (Superior/Huron-Lewis/Chicago) – Lewis Street to Chicago Street
 - m. Alley (Huron/Erie-Lewis/Chicago) – Lewis Street to Chicago Street
 - n. Easement (Erie/Ontario-Lewis/Chicago) – Lewis Street to Chicago Street
 - o. Alley (Huron/Erie-James/George) – 200' S/O James to James Street
 - p. Alley (Erie/Ontario-James/George) – 300' S/O James to James Street
 - q. Easement (Ontario/Winnebago-Ridgeway/Fulton) – 300' SW/O Ridgeway to Ridgeway
 - r. Webster Avenue – Chicago Street to Lebrun Street
 - s. Ridgeway Boulevard – Smits Street to Mandalay Terrace
 - t. Zita Street – Rusk Street to 350' NW/O Crestview
 - u. Martin Street – 350' S/O Butler to Termini
 - v. Rainbow Avenue – Autumn Drive to Termini
2. Work will be performed under the following prime contract:
- a. 22-03 Sewer Lining

B. The Work includes:

1. Sewer cleaning and material disposal
2. Sewer televising
3. Televising sanitary laterals

4. Bypassing (where applicable)
5. Pipe lining – CIPP
6. Final sewer televising and cleaning
7. Traffic Control

1.4 WORK SEQUENCE/SCHEDULE

- A. Project shall be completed by September 31, 2022.
- B. Conduct construction activities to maintain access to businesses and residences throughout construction.
- C. Arterial and collector streets will require a traffic control plan. These streets along with work time restrictions are as follows:
 1. Apollo Way and Ninth Street – No traffic obstructions between 7:00 am to 8:30 am and between 3:30 pm and 5:00 pm. Maintain one lane of travel in each direction on Ninth Street.
 2. Fourth Street and Third Street - No traffic obstructions between 7:00 am to 8:30 am and between 3:30 pm and 5:00 pm. Maintain one lane of travel in each direction on Fourth Street and Third Street.
 3. Chicago Street – No traffic obstructions between 7:00 am to 8:30 am and between 3:30 pm and 5:00 pm. Maintain one lane of travel in each direction on Chicago Street.
 4. Webster Avenue – No traffic obstructions between 7:00 am to 8:30 am and between 3:30 pm and 5:00 pm. Maintain one lane of travel in each direction on Webster Avenue.
 5. Charles Street – No traffic obstructions between 7:00 am to 8:30 am and between 3:30 pm and 5:00 pm. Maintain one lane of travel in each direction on Charles Street.
 6. Ridgeway Drive from Smits to Mandalay – No traffic obstructions between 7:00 am to 8:30 am and between 3:30 pm and 5:00 pm. Maintain one lane of travel in each direction on Ridgeway Boulevard.
 7. Ridgeway Boulevard in between Ontario Street and Winnebago Street – No time restriction. Maintain one lane of travel in each direction on Ridgeway Boulevard.
- D. Complete Nob Hill and the Alley (Huron/Erie – Lewis/Chicago) by July 31, 2022.

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. The City of De Pere Park Department will trim trees in conflict with construction if the City receives advanced notification. Questions regarding trees or landscaping that is bid as part of this contract can be directed to the Engineer.
- B. Owner has awarded a separate contract for performance of certain construction operations which will be conducted at the Project Site simultaneously with work under this Contract. This Contract includes the following:
 - 1. Project 22-02 Lewis Street Reconstruction – Street reconstruction curb and gutter and resurfacing.
 - a. Alley (Huron/Erie – Lewis/Chicago)
 - 2. Project 22-07 Curb Repair and Street Resurfacing – Nob Hill
- 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) (920-202-4002)
- 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. Notification to Residents –notify individually all residents and businesses 2-weeks prior to the start of operations, giving an estimated time that vehicle movement will be limited or prohibited. Property owners shall be notified 24-hours prior to closing a drive.
- B. The intent of televising the sanitary laterals is to find out if the laterals are active or not. Contractor is not to open the liner to the laterals that are abandoned and/or capped. Any questions on any laterals, contact the Engineer.
- C. If repair by excavation is required based on pre-televising, the City will repair under a separate contract.

PART 2 – PRODUCTS

PART 3 – EXECUTION

END OF SECTION

SECTION 01 22 06

MEASUREMENT AND PAYMENT PIPE LINING - CIPP

PART 1 – GENERAL

1.1 SUMMARY

- | | |
|---------------------------------|------------------|
| A. Section includes: | <u>Bid Items</u> |
| 1. Pipe Lining – CIPP | SS-1 Thru SS-24 |
| 2. Televising Sanitary Laterals | SS-25 |
- 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. Mobilization.
 3. All labor, material and equipment.
 4. Dust control.

1.3 PIPE LINING - CIPP

- A. The unit price for Sewer Cleaning work includes:
1. General Work Items of Article 1.2.
 2. Cleaning sewer pipe pre-lining and post lining.
 3. Removal of roots, mineral deposits, protruding laterals, and other debris in the sewer pipe.
 4. Televising of the sewer pipe pre-lining and post lining.

5. Bypassing existing flow.
6. Installation of liner.
7. Reconnection of all active services.
8. Restoration of surfaces.
9. Cleaning the manhole of lining material.
10. Dispose of material from the sewer pipe.

B. Measurement of payment will be from center of manhole to center of manhole.

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

1.4 TELEVISIONING SANITARY SEWER LATERALS

A. The unit price for Televising Sanitary Sewer Laterals work includes:

1. General Work Items of Article 1.2.
2. Televising of sewer laterals indicated by the Engineer to determine if it is active or not prior of lining the sewer line.

B. Measurement of payment will be the actual number of sanitary laterals televised.

C. The unit of measurement for payment is each.

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 four (4) hard copies or electronic copies 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 four (4) copies of each required submittal. The Engineer will retain two (2) copies, and return the others 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. Brown County Highway Department – Webster Avenue Lane Closure

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

END OF SECTION

SECTION 33 01 30

CURED IN PLACE PIPE (CIPP)

PART 1 – GENERAL

1.1 SUMMARY

A. Section Includes

1. Section includes lining processes for the rehabilitation of existing sanitary sewer mains using cured-in-place pipe.

1.2 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM D543 Test Method for Resistance of Plastics to Chemical Reagents
2. ASTM D638 Test Method for Tensile Properties of Plastics
3. ASTM 790 Test Method for Tensile Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
4. ASTM 903 Standard Test for Delamination of Plastic Composites
5. ASTM F1216 Rehabilitation of Existing Pipelines and Conduits by Inversion and Curing of a Resin-Impregnated Tube
6. ASTM D2990 Standard Test Methods for Flexural Properties of Unreinforced Plastics and Electrical Insulating Materials
7. ASTM 3034 Type PSM Poly (Vinyl/chloride)(PVC) Sewer Pipe and Fittings
8. ASTM D1248 Specification for Polyethylene Plastics molding and Extrusion Materials.
9. ASTM F1504 Standard Specification for Folded Poly (Vinyl/Chloride) (PVC) Pipe for Existing Sewer and Condit Rehabilitation
10. ASTM F1533 Standard Specification for Deformed Polyethylene (PE) Liner
11. ASTM D1784 Standard Specification for Rigid Poly (Vinyl/Chloride) and Chlorinated Poly (Vinyl/Chloride) Components
12. ASTM D2122 Method for Determining Dimensions of Thermoplastic Pipe and Fittings
13. ASTM D3350 Specifications for Polyethylene Plastics Pipe and Fittings Material

1.3 SUBMITTALS

A. Product Data.

1. Manufacturer's product literature and application and installation requirement for materials used in liner.
2. Manufacturer's product certification for materials used in liner.
3. Liner Pipe Thickness Design (Cured-in-Place).
4. Liner Pipe Thickness Design shall be in accordance with Appendix XI of ASTM F1216. In the liner thickness calculations shall be based on the following.
 - a. Fully deteriorated Pipe (No structure support from existing pipe).

- b. Minimum ovality of Host Pipe shall be 2%.
 - c. Height of Groundwater shall be 50% of Pipe Depth.
 - d. The Enhancement Factor (K) shall not be greater than 7.0.
 - e. The Minimum Safety Factor shall be 2.0.
 - f. The Flexural Modulus of Elasticity shall be reduced 50% to account for long term effects and used in the design equation EL.
5. No liner shall be installed until it has been approved for installation.
 6. No liner will be approved for installation until liner thickness calculations have been submitted and reviewed for conformance with the specifications and installation requirements.

B. Miscellaneous Submittals

1. Copies of video DVD (MPEG 2 format) of pre-lining and post-lining.
2. Test results required under Part 3.
3. Proposed plan for bypassing sewage during liner installation.
4. Documentation of when liner is impregnated and the potential life of impregnated liner.
5. Provide photographs of existing ground conditions prior to performing sanitary sewer lining.

1.4 QUALITY ASSURANCE

A. Corrosion

1. Fabricate finished liner from materials which, when cured, will be chemically resistant to withstand internal exposure to domestic sewage.

B. Manhole Connections

1. All manhole connections shall be watertight and approved by the Engineer.

C. Testing

1. Test finished pipe liner in accordance with this section.

PART 2 – PRODUCTS

2.1 CURED – IN – PLACE PIPE LINER (CIPP LINER)

A. Resin

1. Liner Bag: Polyester resin for general chemical applications.
 - a. Resin shall not contain fillers, except those required for viscosity control or fire retardance. Up to 5% by mass thixotropic agent which will not interfere with visual inspection may be added for viscosity control.
 - b. Resins may contain pigments, dyes or colorants which will not interfere with visual inspection of cured liner.
2. Epoxy resin may be required by contractor, if conditions are deemed to warrant their use.
 - a. Use of up to 40% by mass of suitable fillers may be permitted.

B. Reinforcing Material

1. Non-woven needle interlocked polyester felt formed into sheets of required thickness.
2. Felt tubes may be made of single or multiple layer construction with any layer not less than 1.5 mm thick.
3. Mechanical strengthener membrane or strips may be sandwiched in between layers where required to control longitudinal stretching.
4. Polyurethane membrane used during inversion of tube may be left on internal surface of liner after curing.
5. Minimum thickness of bonded polyurethane membrane and inner liner, if used shall be 0.30 mm, +5% and shall not affect structural dimension requirements of cured liner.
6. Minimum liner thickness shall be 6 millimeters, with an allowable spot variation of 10%.

C. Felt Content

1. Content shall ensure cured thickness of liner as specified.
2. Thickness of cured liner to be as specified (+10%-4%) and shall not include thickness of polyurethane inner liner.

D. Resin Content

1. 10% to 15% by volume greater than volume of felt in liner bag.

E. Cured liner shall conform to minimal structure standards listed:

Tensile Strength	ASTM D638	3,000 psi
Flexural Modulus of Elasticity	ASTM D790	250,000 psi
Flexural	ASTM D790	4,500 psi

- F. Fabricate liner to size when installed, will fit internal circumference of pipe, allowance shall be made for circumferential stretching during insertion.**

G. Meet requirements of ASTM F1216.

PART 3 – INSTALLATION

3.1 EXAMINATION

- A. Examine videos for condition of pipe interior before starting work.**

3.2 PREPARATION

- A. Prior to liner installation, sufficiently clean roots, encrustations of cast iron pipe, mineral deposits, and other debris from sewer line to provide for proper installation of product. Sewer liner to be televised after cleaning.**
- B. Remove or repair offset joints, protruding services or collapsed pipe that will prevent insertion of liner.**

1. Excavation to make repairs or due to bends in the pipe that are required due to a pre-existing condition will be completed by the City under a separate contract. The City shall be notified of repairs in a timely fashion to facilitate the repair prior to lining.
- C. If Contractor or Engineer determines that existing pipe is 15% or more out of roundness, Contractor shall redesign liner.
 1. Notify Engineer of condition of pipe.
- D. Any visible leaks prior to sewer lining that will prevent proper installation of the liner shall be grouted prior to lining.
- E. Field verify all active sanitary sewer laterals prior to lining.
- F. Sewage Bypassing
 1. Provide for flow of sewage around section of pipe to be lined.
 - a. Pump or bypass lines shall be adequate size and capacity to handle flow.
 - b. Coordinate bypassing operations with Engineer.

3.3 INSTALLATION

- A. CIPP Liner
 1. Preparation of liner:
 - a. Designate location where uncured resin in original containers and unimpregnated liner will be vacuum impregnated prior to installation. Contractor shall allow Engineer to inspect materials and “wet out” procedure.
 - b. Resin and catalyst system compatible with requirement of this method shall be used. Quantities of liquid thermosetting materials shall be to manufacturer’s standards to provide lining thickness required.
 - c. Liner tube shall be impregnated with resin not more than seven days before proposed time for installation and stored out of direct sunlight at temperature less than 40°F(4°C).
 - d. Transport resin impregnated liner to site immediately prior to inversion in suitable light-proof container with temperature maintained below 40°F (4°C).
 2. Insertion of liner:
 - a. Insert liner through an existing manhole or other access by means of an inversion process and application of hydrostatic head or air insertion sufficient to fully extend liner to next designated manhole or termination point or by means of winching the liner through the last pipe to the next designated manhole or termination point. Lubricant may be used.
 3. Curing liner:
 - a. After inversion is complete, provide heat source and water or steam recirculation equipment. Equipment shall be capable of delivering hot water or steam throughout section to uniformly raise water temperature above temperature required to effect cure of resin.

- b. Provide heat source with suitable monitors to gauge temperature of incoming and outgoing water or steam supply. Place second gauge between impregnated liner and pipe invert at remote manhole to determine temperatures during cure. Water or steam temperature in line during cure period shall be as recommended by resin manufacturer.
 - c. Initial cure shall be complete when inspection of exposed portions of liner are hard and sound and remote temperature sensor indicates that temperature is of magnitude to realize an exotherm. Cure period shall be of duration recommended by resin manufacturer.
 - d. Cool hardened liner to temperature below 100°F before relieving static head in inversion standpipe or before relieving steam pressure. Cool down by introduction of cool water or air into CIPP to replace water or steam being drained from downstream end. Care shall be taken in release of static head or steam so that a vacuum will not be developed that could damage newly installed liner.
4. Lateral reinstatement:
- a. Reinstatement all active sanitary laterals after pipe has been cured by using a remote cutting device with a camera.
 - b. After reinstatement all lateral connections shall be brushed/cleaned to remove jagged edges and to smooth the cut edge.

3.4 FIELD QUALITY CONTROL

A. CIPP Liners

- 1. Finished Liner:
 - a. Liner shall be continuous over entire length of insertion run and be as free as commercially practicable from visual defects such as foreign inclusions, dry spots, pinholes, lifts, and delamination.
 - b. During curing process, gauge water tightness under positive head.
 - c. Liner shall conform to shape of existing pipe before installation and not be out of round by more than 15%.
- 2. Liner Thickness:
 - a. Cured liner shall be accurately measured and shall not be more than 5% thickness specified.
- 3. Felt and Resin Content of Liner:
 - a. Visually inspect liner to ensure number of layers of felt conform to specified number of layers and thickness.
 - b. Calculate resin to felt ration by weight.
 - c. Ratio shall fall in range 1.0.1 to 1.15.1
- 4. Testing:
 - a. Tensile Strength for Force Main Lined Pipe
 - i. Test in accordance with ASTM D638
 - ii. Specimens tested shall be actual thickness of fabricated liner.
 - iii. Do not machine specimen on surface.
 - iv. Tensile strength shall be average of 5 specimens tested.
 - b. Flexural Strength and Modulus of Elasticity.

- i. Test in accordance with ASTM D790.
 - ii. Specimens tested shall be actual thickness of fabricated liner.
 - iii. Do not machine specimen on surface.
 - iv. Make test with smooth (inner) face in compression using 5 specimens.
 5. Examination:
 - a. Televis interior of pipe after completion of work but before introducing wastewater flow and provide DVD (MPEG 2) to Engineer.
 - b. Naming convention of the televising inspection report shall follow what is on the Drawings or in the Exhibits.
 - c. Use pan and tilt color 3 lux camera to view the sewer service lateral connection reinstatement.

3.5 CLEANING AND RESTORATION

- A. At completion of work, remove rubbish, debris, dirt, equipment and excess material from site. Clean adjacent surfaces soiled by and during course of work.
- B. Restore areas disturbed to original condition.
- C. Repair any surface damage that may occur during the heating of the liner caused by frost heave.

3.6 ACCEPTANCE

- A. Grounds for rejection or repair of CIPP shall be:
 1. Excessive bending or flattening of CIPP not related to the existing pipe condition.
 2. Visible infiltration.
 3. Visible damage from the lining procedure.
 4. Bulges/intrusions in the invert of the liner that impede flow and not related to the shape of the existing pipe.
 5. Bulges/intrusions above the invert that extend into the pipe by greater than 10% of the pipe diameter and not related to the shape of the existing pipe.

END OF SECTION

**APPENDIX A
TELEVISION REPORTS**



City of DePere
 925 South Sixth Street
 DePere, WI 54115-1199
 PH: 920-339-4062

Upstream MH	Downstream MH	Size	Material	Total Length	City
OntarWinRidgeFulto nJ8-DYCQT1	J8-EYISTO	8	Concrete Segments (unbolted)	292	City of DePere

Surveyor's Name	Certificate Number	Street Address	Location Details
Daryl	U-312-14702	OntarWinRidgeFulton	

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Maintenance Related	Dry	08/17/2021	07:24	

Additional Information
FOOTAGE IS NOT RIGHT

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: OntarWinRidgeFultonJ8-DYCQT1
0.0	MWL	Water Level		
0.0	SAV	Surface: Aggregate Visible	6 to 6	S01
6.8	MGO	General Observation		RFJ IN SOME PIPE
6.8	MWL	Water Level		
22.1	MWL	Water Level		
30.7	MWL	Water Level		
41.6	MWL	Water Level		
43.3	TFA	Tap, Factory Made: Active	10	
46.1	TFC	Tap, Factory Made: Capped	2	
69.6	MWL	Water Level		
77.2	MWL	Water Level		
87.6	MWL	Water Level		
94.5	MGO	General Observation		LATERAL?
97.5	TFC	Tap, Factory Made: Capped	10	
157.0	MWL	Water Level		
158.2	TFC	Tap, Factory Made: Capped	10	
162.4	TFC	Tap, Factory Made: Capped	1	
162.4	MWL	Water Level		
208.5	MWL	Water Level		
216.2	TFA	Tap, Factory Made: Active	11	ACTIVE?
216.2	MWL	Water Level		
219.9	TFC	Tap, Factory Made: Capped	2	
242.5	SAV	Surface: Aggregate Visible	6 to 6	F01
242.6	MSA	Survey Abandoned		CAN'T GET BY ROOTS



City of DePere
 925 South Sixth Street
 DePere, WI 54115-1199
 PH: 920-339-4062

Owner City of DePere	Customer ENGINEERING	Upstream MH BETW ONT/ERIE/FULT/ FRANK J8- 96GN8B	Downstream MH J8-9QFODY	Date 08-02-2012	Time 8:53 AM
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Surveyor DARYL	Street BETW ONT/ERIE/FULT/FRANK	City City of DePere	Weather Dry
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Size 8	Material Clay Tile	Sewer Use Sanitary	Purpose Maintenance Related	Length 166
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Comments UPSTREAM	Pre-Cleaning Jetting	(TV'd) 162.3
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	GO	General Observation			MMC PVC
3.0	GO	General Observation			MWL 20%
8.2	GO	General Observation			MWL 5%
19.6	GO	General Observation			MMC CLAY TILE
19.6	C	Crack	6 to 6	1	CH4
21.2	C	Crack	12 to 4	1	CM
23.3	R	Roots	7 to 4	1	RFJ
23.3	C	Crack	11 to 4	1	CH2
23.3	GO	General Observation			MWL 20%
25.4	R	Roots	8 to 12	1	RFJ
28.8	R	Roots	8 to 4	1	RFJ AT MOST JOINTS
28.8	GO	General Observation			MWL 25%
34.7	SC	Service Connection	9		TFA
36.8	SC	Service Connection	3		TFA?
36.8	R	Roots	2 to 4	1	RFL
37.0	C	Crack	8 to 4	1	CH3
39.3	C	Crack	8 to 4	1	CH3
41.9	C	Crack	8 to 4	1	CH3
43.6	C	Crack	12 to 4	1	CH2
45.5	C	Crack	8 to 4	1	CH IN MOST PIPE
45.5	GO	General Observation			MWL 10%
53.0	SC	Service Connection	2		TBA
53.0	R	Roots	2 to 4	2	RFL
61.7	GO	General Observation			MWL 5%
85.3	SC	Service Connection	9		TFA?
87.4	SC	Service Connection	3		TFC
95.6	SC	Service Connection	3		TBAI
155.1	SC	Service Connection	9		TFC
157.8	SC	Service Connection	9		TFA
160.4	SC	Service Connection	3		TFA?
160.8	GO	General Observation			MMC CONCRETE
162.3	IE	End Inspection			



City of DePere
 925 South Sixth Street
 DePere, WI 54115-1199
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Owner City of DePere	Customer ENGINEERING	Upstream MH ALLEY BETW HUR/SUP/FULT/ FRANK J8- 3VUOPC	Downstream MH J8-4W4QSG	Date 08-07-2012	Time 10:19 AM
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Surveyor DARYL	Street ALLEY BETW HUR/SUP/FULT/FRANK	City City of DePere	Weather Dry
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Size 8	Material Clay Tile	Sewer Use Sanitary	Purpose Maintenance Related	Length 300
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Comments	Pre-Cleaning Jetting	(TV'd) 94.7
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	GO	General Observation			MMC PVC
0.9	SC	Service Connection	9		TFA
2.1	GO	General Observation			MMC CLAY TILE
2.7	SC	Service Connection	9		TFC
22.8	SC	Service Connection	3		TFA
22.8	GO	General Observation			MWL 5%
32.3	R	Roots	3 to 4	1	RFJ
32.3	C	Crack	8 to 4	1	CH2
62.5	GO	General Observation			MWL 10%
65.5	R	Roots	8 to 4	1	RFJ
67.4	GO	General Observation			MWL 5%
75.5	R	Roots	8 to 4	1	RFJ
76.5	SC	Service Connection	9		TFA
80.0	R	Roots	3 to 4	1	RFB
81.3	SC	Service Connection	3		TFA
85.9	R	Roots	7 to 5	1	RFJ
87.9	R	Roots	1 to 5	1	RFJ
93.3	R	Roots	1 to 4	1	RFJ
94.7	GO	General Observation			CAN'T GET CAMERA BY ROOTS
94.7	IE	End Inspection			



City of DePere
 925 South Sixth Street
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Owner City of DePere	Customer ENGINEERING	Upstream MH ALLEY BETW HUR/SUP/FULT/ FRANK 2 J8- 3VUOPC	Downstream MH J8-4W4QSG	Date 08-07-2012	Time 9:16 AM
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Surveyor DARYL	Street ALLEY BETW HUR/SUP/FULT/FRANK	City City of DePere	Weather Dry
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Size 8	Material Polyvinyl Chloride	Sewer Use Sanitary	Purpose Maintenance Related	Length 300
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Comments UPSTREAM	Pre-Cleaning Jetting	(TV'd) 201.9
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
2.3	GO	General Observation			MWL 5%
24.7	GO	General Observation			MMC CLAY TILE
35.4	SC	Service Connection	3		TFA
41.0	GO	General Observation			MWL 10%
45.6	SC	Service Connection	9		TFC
57.1	GO	General Observation			MWL 25%
59.4	R	Roots	8 to 5	1	RFJ
61.9	R	Roots	8 to 1	1	RFJ
66.9	R	Roots	7 to 9	1	RFJ
66.9	R	Roots	2 to 4	1	RFJ
69.3	R	Roots	7 to 4	1	RFJ AT MOST JOINTS
69.3	GO	General Observation			MWL 10%
96.3	SC	Service Connection	3		TFA
111.5	SC	Service Connection	9		TFA?
111.5	R	Roots	7 to 9	1	RFL
114.8	GO	General Observation			MWL 5%
154.4	SC	Service Connection	9		TFC
154.4	R	Roots	7 to 9	1	RFL
159.8	SC	Service Connection	3		TFA?
196.6	R	Roots	7 to 8	1	RFB
200.7	R	Roots	7 to 4	3	RMJ
201.9	SC	Service Connection	10		TBA?
201.9	R	Roots	7 to 10	3	RML?
201.9	GO	General Observation			CAN'T GET CAMERA BY ROOTS
201.9	IE	End Inspection			



City of DePere
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Owner City of DePere	Customer ENGINEERING	Upstream MH ALLEY BETW WIS/MICH/WILL/ FRANK I8- Y78PGA	Downstream MH I8-YT4QOQ	Date 08-20-2012	Time 8:04 AM
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Surveyor DARYL	Street ALLEY BETW WIS/MICH/WILL/FRANK	City City of DePere	Weather Dry
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Size 8	Material Clay Tile	Sewer Use Sanitary	Purpose Maintenance Related	Length 178
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Comments	Pre-Cleaning Jetting	(TV'd) 75.7
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	DP	Deposits	7 to 8	2	DAGS S01
0.0	DP	Deposits	4 to 5	2	DAGS S02
0.0	GO	General Observation			MWL 5%
4.6	SC	Service Connection	9		TFC
5.8	R	Roots	3 to 4	1	RFJ
17.9	R	Roots	3 to 4	1	RFJ
20.8	DP	Deposits	3 to 5	1	DAEJ
27.0	DP	Deposits	8 to 9	1	DAEJ
27.0	DP	Deposits	3 to 5	1	DAEJ
28.2	SC	Service Connection	3		TFA
29.5	GO	General Observation			MWL 10%
50.5	R	Roots	7 to 9	1	RFJ
56.2	R	Roots	3 to 5	1	RFJ
62.9	R	Roots	8 to 9	1	RFJ
62.9	R	Roots	3 to 4	1	RFJ
62.9	GO	General Observation			MWL 5%
65.0	R	Roots	8 to 9	1	RFJ
72.3	SC	Service Connection	9		TFA
73.4	R	Roots	3 to 4	1	RFJ
74.5	SC	Service Connection	3		TFC
75.7	SC	Service Connection	2		TBAI
75.7	DP	Deposits	7 to 8	2	DAGS F01
75.7	DP	Deposits	4 to 5	2	DAGS F02
75.7	GO	General Observation			CAN'T GET CAMERA BY LATERAL
75.7	IE	End Inspection			



City of DePere
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Owner City of DePere	Customer ENGINEERING	Upstream MH ALLEY BETW WIS/MICH/WILL/ FRANK 2 I8- Y78PGA	Downstream MH I8-YT4QOQ	Date 08-16-2012	Time 1:29 PM
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Surveyor DARYL	Street ALLEY BETW WIS/MICH/WILL/FRANK	City City of DePere	Weather Dry
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Size 8	Material Polyvinyl Chloride	Sewer Use Sanitary	Purpose Maintenance Related	Length 178
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Comments UPSTREAM	Pre-Cleaning Jetting	(TV'd) 99.7
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	DP	Deposits	7 to 8	2	DAGS S01
0.0	DP	Deposits	4 to 5	2	DAGS S02
0.0	GO	General Observation			MWL 5%
17.0	GO	General Observation			MMC CLAY TILE
23.2	GO	General Observation			MWL 20%
35.0	SC	Service Connection	9		TFC
38.8	SC	Service Connection	10		TBA?
47.3	SC	Service Connection	3		TFC
47.3	GO	General Observation			MWL 5%
99.7	SC	Service Connection	11		TBAI
99.7	GO	General Observation			CAN'T GET CAMERA BY LATERAL
99.7	DP	Deposits	7 to 8	2	DAGS F01
99.7	DP	Deposits	4 to 5	2	DAGS F02
99.7	IE	End Inspection			



City of DePere
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Upstream MH	Downstream MH	Size	Material	Total Length	City
JamesGeorOntErieJ 8-7ILGW0	J8-7J6J10	8	Clay Tile	277	City of DePere

Surveyor's Name	Certificate Number	Street Address	Location Details
DARYL	U-312-14702	JamesGeorOntErie	

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Maintenance Related	Dry	06/10/2015	11:36	

Additional Information
ROOT CUT BY SEWER JET

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: JamesGeorOntErieJ8-7ILGW0
0.0	MWL	Water Level		
0.0	MMC	Material Change		PVC
1.2	TFA	Tap, Factory Made: Active	9	
2.4	MMC	Material Change		CLAY TILE
2.4	CL	Crack Longitudinal	6	
5.3	TFA	Tap, Factory Made: Active	3	
10.8	MWL	Water Level		
14.4	RFJ	Roots, Fine: Joint	2	
16.4	MWL	Water Level		
18.8	RFJ	Roots, Fine: Joint	3	
20.6	RFJ	Roots, Fine: Joint	7 to 5	RFJ AT SOME JOINTS
34.5	TBI	Tap, Break-in / Hammer: Intruding	2	
37.1	RTJ	Roots, Tap: Joint	8 to 4	
64.4	TFA	Tap, Factory Made: Active	3	
67.6	CC	Crack Circumferential	8 to 4	
68.6	TFA	Tap, Factory Made: Active	9	ROOTS IN LATERAL
107.1	TFC	Tap, Factory Made: Capped	2	
111.1	TFA	Tap, Factory Made: Active	3	
145.8	TFC	Tap, Factory Made: Capped	9	
152.0	TFA	Tap, Factory Made: Active	3	
169.2	CH2	Crack Longitudinal Hinge, 2	9 to 3	
179.9	TBI	Tap, Break-in / Hammer: Intruding	9	
179.9	CM	Crack Multiple	7 to 5	
179.9	MGO	General Observation		CAN'T GET CAMERA BY LATERAL
179.9	MSA	Survey Abandoned		END



City of DePere
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Upstream MH	Downstream MH	Size	Material	Total Length	City
JamesGeorgeErieHuronJ8-53RHEW	J8-54CJ2D	8	Clay Tile	214	City of DePere

Surveyor's Name	Certificate Number	Street Address	Location Details
Daryl	U-312-14702	JamesGeorgeErieHuron	

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Maintenance Related	Dry	02/24/2021	08:42	

Additional Information
UPSTREAM

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: J8-54CJ2D
0.0	MWL	Water Level		
0.4	JOM	Joint Offset (displaced): Medium		
1.8	MWL	Water Level		
4.2	MWL	Water Level		
9.2	JOM	Joint Offset (displaced): Medium		JOM IN SOME PIPE
18.5	MWL	Water Level		
35.6	MSA	Survey Abandoned		END



City of DePere
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Upstream MH	Downstream MH	Size	Material	Total Length	City
JamesGeorgeErieHuron2J8-53RHEW	J8-54CJ2D	8	Clay Tile	214	City of DePere

Surveyor's Name	Certificate Number	Street Address	Location Details
Daryl	U-312-14702	JamesGeorgeErieHuron	

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Maintenance Related	Dry	02/24/2021	09:07	

Additional Information
USED BACKUP CAMERA

Ftg.	Code	Description	Position	Comment
1.8	AMH	Access Point - Manhole		END
76.5	AMH	Access Point - Manhole		Starting Manhole: JamesGeorgeErieHuronJ8-53RHEW
76.5	MWL	Water Level		



City of DePere
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Upstream MH	Downstream MH	Size	Material	Total Length	City
LewisChicOntErieJ8-7FK8A7	J8-7CJ5KP	8	Clay Tile	351	City of DePere

Surveyor's Name	Certificate Number	Street Address	Location Details
Daryl	U-312-14702	LewisChicOntErie	

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Maintenance Related	Dry	08/13/2015	08:35	

Additional Information

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Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: LewisChicOntErieJ8-7FK8A7
0.0	MWL	Water Level		
2.0	TFA	Tap, Factory Made: Active	3	
5.4	CM	Crack Multiple	10 to 4	
8.3	CC	Crack Circumferential	1 to 5	
9.6	CS	Crack Spiral	10 to 2	
14.8	TFC	Tap, Factory Made: Capped	9	
18.7	MGO	General Observation		SMALL CRACKS IN SOME PIPE
24.7	RFJ	Roots, Fine: Joint	9 to 10	
42.8	RFJ	Roots, Fine: Joint	7 to 9	
49.2	RFJ	Roots, Fine: Joint	2 to 3	
51.0	RFJ	Roots, Fine: Joint	1 to 3	
57.9	TFC	Tap, Factory Made: Capped	3	
59.3	RFJ	Roots, Fine: Joint	7 to 5	RFJ IN SOME PIPE
62.3	MWL	Water Level		
69.5	MMC	Material Change		PVC
69.5	MWL	Water Level		
72.5	MWL	Water Level		
74.9	TFA	Tap, Factory Made: Active	3	
76.8	TFA	Tap, Factory Made: Active	9	
84.9	CM	Crack Multiple	7 to 5	S01
84.9	MMC	Material Change		CLAY TILE
116.7	TFC	Tap, Factory Made: Capped	9	
118.7	TFC	Tap, Factory Made: Capped	2	
126.6	TBI	Tap, Break-in / Hammer: Intruding	2	
126.6	RFC	Roots, Fine: Connection	3 to 5	
159.5	CM	Crack Multiple	7 to 5	F01
171.7	TFA	Tap, Factory Made: Active	3	ROOTS IN LATERAL
175.6	TFC	Tap, Factory Made: Capped	10	
177.7	TFC	Tap, Factory Made: Capped	3	
178.4	TBI	Tap, Break-in / Hammer: Intruding	9	
235.5	TFC	Tap, Factory Made: Capped	10	
237.9	TFC	Tap, Factory Made: Capped	2	
243.8	TBI	Tap, Break-in / Hammer: Intruding	2	
300.4	TFC	Tap, Factory Made: Capped	10	
302.1	TFC	Tap, Factory Made: Capped	2	
310.1	MMC	Material Change		ABS TRUSS PIPE
313.1	TFA	Tap, Factory Made: Active	10	
322.9	MMC	Material Change		CLAY TILE
322.9	MSA	Survey Abandoned		CAN'T GET CAMERA AROUND CORNER



City of DePere
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Upstream MH	Downstream MH	Size	Material	Total Length	City
LewisChicOntErie2J 8-7FK8A7	J8-7CJ5KP	8	Clay Tile	351	City of DePere

Surveyor's Name	Certificate Number	Street Address	Location Details
Daryl	U-312-14702	LewisChicOntErie	

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Maintenance Related	Dry	08/18/2015	11:40	

Additional Information
UPSTREAM

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: J8-7CJ5KP
0.0	MWL	Water Level		
1.0	JSL	Joint Separated (open): Large		
1.0	MSA	Survey Abandoned		CAN'T GET CAMERA AROUND CORNER



City of DePere
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Upstream MH	Downstream MH	Size	Material	Total Length	City
LewisChicErieHuron J8-5188UQ	J8-4YU5M4	8	Clay Tile	420	City of DePere

Surveyor's Name	Certificate Number	Street Address	Location Details
Daryl	U-312-14702	LewisChicErieHuron	

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Maintenance Related	Dry	06/20/2019	09:19	

Additional Information

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Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: LewisChicErieHuronJ8-5188UQ
0.0	MWL	Water Level		
1.8	DAE	Deposits Attached: Encrustation	5 to 7	
1.8	RFB	Roots, Fine: Barrel	5 to 7	
4.2	TFC	Tap, Factory Made: Capped	3	
6.9	MWL	Water Level		
22.7	TFA	Tap, Factory Made: Active	9	
32.3	RFJ	Roots, Fine: Joint	10 to 11	
55.6	TBA	Tap, Break-in / Hammer: Active	9	
81.9	TFC	Tap, Factory Made: Capped	9	
85.9	TFA	Tap, Factory Made: Active	3	
120.9	TBA	Tap, Break-in / Hammer: Active	3	
128.8	TFA	Tap, Factory Made: Active	9	
141.1	TFA	Tap, Factory Made: Active	9	
145.1	TFA	Tap, Factory Made: Active	3	
168.6	RFJ	Roots, Fine: Joint	8 to 9	
179.4	TFA	Tap, Factory Made: Active	3	
198.1	TFA	Tap, Factory Made: Active	9	
210.6	TBI	Tap, Break-in / Hammer: Intruding	3	
217.4	RFJ	Roots, Fine: Joint	10 to 4	
230.5	TFA	Tap, Factory Made: Active	3	
238.0	RFJ	Roots, Fine: Joint	1 to 2	
254.0	RFJ	Roots, Fine: Joint	8 to 10	
259.1	TFA	Tap, Factory Made: Active	9	ROOTS IN LATERAL
286.5	CM	Crack Multiple	12 to 5	
286.5	MGO	General Observation		CRACKS IN SOME PIPE
293.6	TBA	Tap, Break-in / Hammer: Active	12	
301.5	TFC	Tap, Factory Made: Capped	3	
311.8	TFC	Tap, Factory Made: Capped	9	
324.6	MWL	Water Level		
328.1	MWL	Water Level		
329.3	RFJ	Roots, Fine: Joint	2 to 3	
333.2	RFJ	Roots, Fine: Joint	7 to 5	RFJ IN SOME PIPE
352.5	TBI	Tap, Break-in / Hammer: Intruding	10	ROOTS IN LATERAL
352.5	MSA	Survey Abandoned		CAN'T GET CAMERA BY LATERAL



City of DePere
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Upstream MH	Downstream MH	Size	Material	Total Length	City
LewisChicSupHuron J8-2LD9BK	J8-2KC5N9	8	Clay Tile	476	City of DePere

Surveyor's Name	Certificate Number	Street Address	Location Details
Daryl	U-312-14702	LewisChicSupHuron	

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Maintenance Related	Dry	08/17/2015	09:42	

Additional Information

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Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: LewisChicSupHuronJ8-2LD9BK
0.0	MWL	Water Level		
0.0	MMC	Material Change		PVC
24.5	MMC	Material Change		CLAY TILE
27.2	RFJ	Roots, Fine: Joint	1 to 3	
32.8	TFA	Tap, Factory Made: Active	3	ROOTS IN LATERAL
33.4	RFJ	Roots, Fine: Joint	12	
34.8	TFA	Tap, Factory Made: Active	10	
37.6	RFJ	Roots, Fine: Joint	8 to 9	
37.6	RFJ	Roots, Fine: Joint	4 to 5	
43.6	RFJ	Roots, Fine: Joint	7 to 5	RFJ IN SOME PIPE
50.3	TBA	Tap, Break-in / Hammer: Active	10	ACTIVE?
92.8	TFC	Tap, Factory Made: Capped	10	
95.2	DAE	Deposits Attached: Encrustation	12 to 1	
124.9	TFA	Tap, Factory Made: Active	3	
129.6	MMC	Material Change		CONCRETE
129.6	SAV	Surface: Aggregate Visible	6 to 6	S01
131.8	TFA	Tap, Factory Made: Active	9	
155.7	SAV	Surface: Aggregate Visible	6 to 6	F01
155.7	SRI	Surface: Roughness Increased	6 to 6	S02
174.0	MWL	Water Level		
187.8	SRI	Surface: Roughness Increased	6 to 6	F02
187.8	MMC	Material Change		CLAY TILE
187.8	MWL	Water Level		
190.9	TFA	Tap, Factory Made: Active	9	
193.4	TFA	Tap, Factory Made: Active	3	
196.4	CL	Crack Longitudinal	9	
199.9	CL	Crack Longitudinal	11	
217.7	MGO	General Observation		SMALL CRACKS IN SOME PIPE
244.3	TFA	Tap, Factory Made: Active	9	
256.5	TFA	Tap, Factory Made: Active	3	
287.1	TFA	Tap, Factory Made: Active	9	
293.4	TBA	Tap, Break-in / Hammer: Active	10	
301.1	TBI	Tap, Break-in / Hammer: Intruding	3	
301.1	MSA	Survey Abandoned		CAN'T GET CAMERA BY LATERAL



City of DePere
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Upstream MH	Downstream MH	Size	Material	Total Length	City
LewisChicSupHuron 2J8-2LD9BK	J8-2KC5N9	8	Clay Tile	476	City of DePere

Surveyor's Name	Certificate Number	Street Address	Location Details
Daryl	U-312-14702	LewisChicSupHuron	

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Maintenance Related	Dry	08/17/2015	11:40	

Additional Information
UPSTREAM

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: J8-2KC5N9
0.0	MWL	Water Level		
0.0	MMC	Material Change		CONCRETE
0.0	SAV	Surface: Aggregate Visible	6 to 6	S01
14.4	SAV	Surface: Aggregate Visible	6 to 6	F01
14.4	MMC	Material Change		CLAY TILE
16.8	RFJ	Roots, Fine: Joint	7 to 10	
18.9	RFJ	Roots, Fine: Joint	3 to 5	
20.5	RFJ	Roots, Fine: Joint	7 to 5	RFJ IN SOME PIPE
32.2	TFC	Tap, Factory Made: Capped	9	
46.1	CL	Crack Longitudinal	11	
47.3	CL	Crack Longitudinal	12	
49.4	CH2	Crack Longitudinal Hinge, 2	9 to 12	
51.4	CH2	Crack Longitudinal Hinge, 2	9 to 12	
53.5	MGO	General Observation		CRACKS IN SOME PIPE
60.9	TFC	Tap, Factory Made: Capped	2	
78.7	TBI	Tap, Break-in / Hammer: Intruding	1	
78.7	RTC	Roots, Tap: Connection	1 to 2	
89.3	TFA	Tap, Factory Made: Active	9	
115.9	TFA	Tap, Factory Made: Active	3	
167.2	TFC	Tap, Factory Made: Capped	9	
169.3	TBI	Tap, Break-in / Hammer: Intruding	9	
169.3	MSA	Survey Abandoned		CAN'T GET CAMERA BY LATERAL



City of DePere
 925 South Sixth Street
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Upstream MH	Downstream MH	Size	Material	Total Length	City
LewisChicMichSupJ 8-05L8JS	J8-0455R8	8	Clay Tile	362	City of DePere

Surveyor's Name	Certificate Number	Street Address	Location Details
Daryl	U-312-14702	LewisChicMichSup	

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Maintenance Related	Dry	08/13/2019	07:35	

Additional Information

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Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: LewisChicMichSupJ8-05L8JS
0.0	MWL	Water Level		
18.1	TFA	Tap, Factory Made: Active	9	
24.2	TFC	Tap, Factory Made: Capped	9	
38.1	TBI	Tap, Break-in / Hammer: Intruding	3	
44.2	MGO	General Observation		SMALL CRACKS IN SOME PIPE
84.9	TBI	Tap, Break-in / Hammer: Intruding	10	
87.8	RFJ	Roots, Fine: Joint	8 to 9	
89.6	RFJ	Roots, Fine: Joint	3 to 4	
90.7	TFC	Tap, Factory Made: Capped	10	
110.8	TFA	Tap, Factory Made: Active	10	
155.3	TFC	Tap, Factory Made: Capped	11	
188.9	RFJ	Roots, Fine: Joint	1 to 2	
194.0	TBI	Tap, Break-in / Hammer: Intruding	10	
201.1	RFJ	Roots, Fine: Joint	8 to 4	
207.9	TFC	Tap, Factory Made: Capped	11	
211.2	RFJ	Roots, Fine: Joint	10 to 3	
214.2	TBA	Tap, Break-in / Hammer: Active	2	ROOTS IN LATERAL
217.3	RFJ	Roots, Fine: Joint	1 to 4	
219.2	RFJ	Roots, Fine: Joint	8 to 1	
221.0	RFJ	Roots, Fine: Joint	2 to 4	
221.0	MGO	General Observation		RFJ IN SOME PIPE
231.6	RTJ	Roots, Tap: Joint	7 to 5	
256.8	TBA	Tap, Break-in / Hammer: Active	3	
282.1	TFC	Tap, Factory Made: Capped	3	
298.4	MWL	Water Level		
329.6	DAE	Deposits Attached: Encrustation	7 to 9	
329.6	DAE	Deposits Attached: Encrustation	3 to 5	
334.4	TFC	Tap, Factory Made: Capped	10	
337.4	MWL	Water Level		
355.3	MMC	Material Change		PVC
356.6	AMH	Access Point - Manhole		END



City of DePere
 925 South Sixth Street
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Owner City of DePere	Customer ENGINEERING	Upstream MH MainReid3rd4thI8 -9GWAO3	Downstream MH I8-BVRAD8	Date 08-14-2014	Time 8:00 AM
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Surveyor DARYL	Street MainReid3rd4th	City City of DePere	Weather Dry
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Size 15	Material Clay Tile	Sewer Use Sanitary	Purpose Maintenance Related	Length 315
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Comments UPSTREAM	Pre-Cleaning Jetting	(TV'd) 314
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	GO	General Observation			MWL 5%
4.0	SC	Service Connection	1		TBA?
13.0	C	Crack	12	1	CL
15.3	C	Crack	12	1	CL
18.2	SC	Service Connection	12		TFC
26.8	SC	Service Connection	12		TFA
36.9	SC	Service Connection	9		TBAI?
36.9	I	Infiltration		2	IR IN LATERAL? LATERAL GOES INTO PARKING LOT
51.6	SC	Service Connection	3		TBAI
58.6	C	Crack	12	1	CL
61.5	SC	Service Connection	12		TFC
62.4	DP	Deposits	7 to 5	1	DAEJ
87.7	SC	Service Connection	2		TBAI
88.2	C	Crack		1	SMALL CRACKS IN SOME PIPE
101.0	SC	Service Connection	10		TBBI?
101.0	I	Infiltration		1	IR IN LATERAL? LATERAL GOES INTO PARKING LOT
108.5	SC	Service Connection	12		TFC
116.2	SC	Service Connection	12		TFC
127.0	SC	Service Connection	2		TBAI?
150.2	SC	Service Connection	1		TBAI
151.6	SC	Service Connection	12		TFC
161.6	SC	Service Connection	12		TFC
167.7	SC	Service Connection	11		TBBI
174.1	SC	Service Connection	3		TFA
194.7	SC	Service Connection	1		TBA?
200.9	SC	Service Connection	2		TBA?
206.5	SC	Service Connection	11		TBBI
206.5	GO	General Observation	8 to 11	1	FM
210.8	GO	General Observation	7 to 4	2	FM
210.8	SC	Service Connection	2		TBAI
210.8	SC	Service Connection	9		TBC
212.3	SC	Service Connection	10		TBBI?
215.7	SC	Service Connection	12		TFC
224.2	SC	Service Connection	10		TBBI?
227.4	SC	Service Connection	2		TBAI?
233.6	SC	Service Connection	10		TBBI?
244.6	SC	Service Connection	12		TFC
244.9	SC	Service Connection	9		TBA?
259.7	SC	Service Connection	11		TBB
273.1	GO	General Observation	11	2	FL
275.0	SC	Service Connection	11		TBB
288.3	SC	Service Connection	10		TBAI?
309.9	GO	General Observation			MMC PVC
314.0	IE	End Inspection			



City of DePere
 925 South Sixth Street
 DePere, WI 54115-1199
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Owner City of DePere	Customer ENGINEERING	Upstream MH MainReid3rd4th18 -BVRAD8	Downstream MH I8-CEVAAK	Date 08-14-2014	Time 7:41 AM
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Surveyor DARYL	Street MainReid3rd4th	City City of DePere	Weather Dry
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Size 15	Material Clay Tile	Sewer Use Sanitary	Purpose Maintenance Related	Length 69
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Comments	Pre-Cleaning Jetting	(TV'd) 64
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	GO	General Observation			MWL 5%
23.3	GO	General Observation	6 to 6	1	FM
26.1	SC	Service Connection	12		TBAI?
26.1	GO	General Observation	6 to 6	2	FM
28.5	SC	Service Connection	12		TFA?
28.5	GO	General Observation	6 to 6	2	FM
29.6	GO	General Observation			MMC PVC
30.8	SC	Service Connection	11		TFA
34.0	GO	General Observation			MMC CLAY TILE
34.0	GO	General Observation	10 to 2	1	FM
34.6	SC	Service Connection	11		TFC
53.6	GO	General Observation	12	1	FL
54.8	SC	Service Connection	12		TFB?
55.3	SC	Service Connection	9		TBAI
55.3	GO	General Observation		1	FL IN SOME PIPE
64.0	IE	End Inspection			



City of DePere
925 South Sixth Street
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Owner	Customer	Upstream MH	Downstream MH	Date	Time
City of DePere	ENGINEERING	MainReid3rd4th18 -CEVAAK	I8-DWFA3S	08-14-2014	7:09 AM

Surveyor	Street	City	Weather
DARYL	MainReid3rd4th	City of DePere	Dry

Size	Material	Sewer Use	Purpose	Length
12	Concrete segments (unbolted)	Sanitary	Maintenance Related	194

Comments	Pre-Cleaning	(TV'd)
	Jetting	190.3

Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	GO	General Observation			MWL 5%
0.0	SD	Surface Damage		1	SRI S01
27.3	SC	Service Connection	1		TBAI
40.3	SC	Service Connection	11		TBA
44.5	GO	General Observation			MWL 10%
51.1	GO	General Observation			MWL 5%
89.1	SC	Service Connection	11		TBAI
106.7	SC	Service Connection	12		TFA
119.0	SC	Service Connection	1		TFB?
165.4	GO	General Observation			MWL 15%
184.0	GO	General Observation			MWL 5%
190.3	SD	Surface Damage		1	SRI F01
190.3	IE	End Inspection			



City of DePere
 925 South Sixth Street
 DePere, WI 54115-1199
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Owner City of DePere	Customer ENGINEERING	Upstream MH ApolloH8-FKYBAN	Downstream MH H8-GGSDAU	Date 07-07-2014	Time 11:41 AM
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Surveyor DARYL	Street Apollo	City City of DePere	Weather Dry
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Size 18	Material Concrete segments (unbolted)	Sewer Use Sanitary	Purpose Maintenance Related	Length 284
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Comments	Pre-Cleaning Jetting	(TV'd) 281.6
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	GO	General Observation			MWL 15%
2.9	GO	General Observation			MWL 20%
14.7	DP	Deposits	7 to 5	1	DAEJ AT SOME JOINTS
21.9	GO	General Observation			MWL 15%
60.2	GO	General Observation			MWL 25%
60.2	SD	Surface Damage		1	SRI S01
80.5	I	Infiltration	12 to 1	1	ID
80.5	GO	General Observation			MWL 15%
85.4	GO	General Observation			MWL 25%
102.6	GO	General Observation			MWL 10%
119.8	GO	General Observation			MWL 15%
132.6	GO	General Observation			MWL 10%
145.8	GO	General Observation			MWL 25%
153.9	GO	General Observation			MWL 10%
176.4	GO	General Observation			MWL 20%
190.8	GO	General Observation			MWL 15%
207.5	R	Roots	7 to 8	1	RFJ
207.5	R	Roots	4 to 5	1	RFJ
211.8	R	Roots	7 to 9	1	RFJ
211.8	R	Roots	4 to 5	1	RFJ
232.2	GO	General Observation			MWL 20%
241.2	GO	General Observation			MWL 25%
267.3	GO	General Observation			MWL 30%
276.8	GO	General Observation			MWL 20%
281.5	SD	Surface Damage		1	SRI F01
281.6	IE	End Inspection			



City of DePere
 925 South Sixth Street
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Owner City of DePere	Customer ENGINEERING	Upstream MH S9thH8- GGSDAU	Downstream MH H8-HGGFCL	Date 07-07-2014	Time 12:10 PM
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Surveyor DARYL	Street S9th	City City of DePere	Weather Dry
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Size 18	Material Concrete segments (unbolted)	Sewer Use Sanitary	Purpose Maintenance Related	Length 295
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Comments	Pre-Cleaning Jetting	(TV'd) 293.5
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	GO	General Observation			MWL 30%
0.0	SD	Surface Damage		1	SRI S01
6.2	GO	General Observation			MWL 35%
17.5	GO	General Observation			MWL 25%
31.6	DP	Deposits	7 to 5	1	DAEJ AT SOME JOINTS
50.9	GO	General Observation			MWL 5%
61.3	GO	General Observation			MWL 10%
81.1	GO	General Observation			MWL 5%
91.3	GO	General Observation			MWL 15%
113.3	R	Roots	1 to 5	1	RFJ
117.7	R	Roots	3 to 5	1	RFJ
126.4	R	Roots		1	RFJ AT MOST JOINTS NEXT 44'
126.4	GO	General Observation			MWL 20%
136.8	GO	General Observation			MWL 25%
145.7	GO	General Observation			MWL 5%
157.5	SC	Service Connection	12		TBAI
157.5	GO	General Observation			MWL 20%
176.8	GO	General Observation			MWL 5%
186.7	GO	General Observation			MWL 10%
188.0	GO	General Observation			MWL 15%
234.5	GO	General Observation			MWL 20%
242.7	GO	General Observation			MWL 10%
255.6	GO	General Observation			MWL 15%
291.3	SD	Surface Damage		1	SRI F01
293.5	IE	End Inspection			



City of DePere
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Owner City of DePere	Customer ENGINEERING	Upstream MH MartinH7- WK4YLE	Downstream MH H8-WRC070	Date 10-02-2013	Time 12:10 PM
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Surveyor Daryl	Street Martin	City City of DePere	Weather Dry
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Size 8	Material Concrete segments (unbolted)	Sewer Use Sanitary	Purpose Maintenance Related	Length 209
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Comments	Pre-Cleaning Jetting	(TV'd) 210.6
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Ftg.	Code	Description	Position	Severity	Comment
1.0	IB	Begin Inspection			
1.0	GO	General Observation			MWL 5%
1.0	SD	Surface Damage		1	SRI S01
7.1	C	Crack	7 to 10	1	CC
14.1	GO	General Observation			MWL 10%
16.8	DP	Deposits	7 to 5	1	DAEJ
19.0	DP	Deposits	7 to 9	1	DAE
19.0	GO	General Observation			MWL 20%
24.1	GO	General Observation			MWL 30%
28.3	GO	General Observation			MWL 50%
32.6	GO	General Observation			MWL 25%
39.8	GO	General Observation			MWL 30%
41.1	SC	Service Connection	1		TFA
46.0	SC	Service Connection	12		TFA
59.3	GO	General Observation			MWL 10%
75.2	GO	General Observation			MWL 5%
84.1	GO	General Observation			MWL 10%
111.8	SC	Service Connection	1		TFA
115.9	GO	General Observation			MWL 30%
117.2	SC	Service Connection	11		TFA
125.5	GO	General Observation			MWL 10%
136.3	GO	General Observation			MWL 50%
138.1	GO	General Observation			MWL 85%
141.3	GO	General Observation			MCU
146.9	GO	General Observation			MWL 50%
155.8	GO	General Observation			MWL 25%
162.3	GO	General Observation			MWL 15%
170.1	GO	General Observation			MWL 30%
175.1	GO	General Observation			MWL 55%
177.6	SC	Service Connection	1		TFA
182.6	SC	Service Connection	11		TFA
187.9	GO	General Observation			MWL 70%
191.4	GO	General Observation			MCU
192.6	GO	General Observation			MWL 40%
196.5	GO	General Observation			MWL 15%
204.0	GO	General Observation			MWL 5%
208.3	SD	Surface Damage		1	SRI F01
210.6	IE	End Inspection			



City of DePere
 925 South Sixth Street
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Upstream MH RainbowH6-MGCHMI	Downstream MH H6-NCPIX8	Size 8	Material Concrete Segments (unbolted)	Total Length 205	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address Rainbow	Location Details
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Direction Downstream	Purpose Maintenance Related	Weather Dry	Date 05/15/2017	Time 09:13	Length Surveyed
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Additional Information

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Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: RainbowH6-MGCHMI
0.0	MWL	Water Level		
2.0	CL	Crack Longitudinal	12	
3.3	TFA	Tap, Factory Made: Active	9	
3.3	DAE	Deposits Attached: Encrustation	7 to 12	
5.4	CL	Crack Longitudinal	12	
5.7	DAE	Deposits Attached: Encrustation	7 to 5	
6.3	TFA	Tap, Factory Made: Active	3	
8.6	DAE	Deposits Attached: Encrustation	12 to 2	
10.8	DAE	Deposits Attached: Encrustation	7 to 5	DAE IN SOME PIPE
21.1	TFA	Tap, Factory Made: Active	9	
48.1	TFA	Tap, Factory Made: Active	3	
99.0	MWL	Water Level		
102.3	TFA	Tap, Factory Made: Active	12	
104.1	MWL	Water Level		
110.4	MWL	Water Level		
124.3	MWL	Water Level		
144.3	TFA	Tap, Factory Made: Active	12	ACTIVE?
145.8	MWL	Water Level		
145.8	SRI	Surface: Roughness Increased	6 to 6	S01
152.0	MWL	Water Level		
199.5	SRI	Surface: Roughness Increased	6 to 6	F01
201.5	AMH	Access Point - Manhole		END



City of DePere
925 South Sixth Street
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Upstream MH	Downstream MH	Size	Material	Total Length	City
RainbowH6-NCPIX8	H6-NNMJRG	8	Concrete Segments (unbolted)	116	City of DePere

Surveyor's Name	Certificate Number	Street Address	Location Details
Daryl	U-312-14702	Rainbow	

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Maintenance Related	Dry	05/15/2017	08:28	

Additional Information

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Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: RainbowH6-NCPIX8
0.0	MWL	Water Level		
0.0	SRI	Surface: Roughness Increased	6 to 6	S01
0.4	DAE	Deposits Attached: Encrustation	7 to 5	
1.2	DAE	Deposits Attached: Encrustation	7 to 5	
4.4	DAE	Deposits Attached: Encrustation	7 to 5	DAE IN SOME PIPE
35.7	TFA	Tap, Factory Made: Active	12	
80.8	TFA	Tap, Factory Made: Active	12	
91.2	RFJ	Roots, Fine: Joint	7 to 8	
91.2	RFJ	Roots, Fine: Joint	4 to 5	
94.4	MWL	Water Level		
102.8	MWL	Water Level		
111.0	SRI	Surface: Roughness Increased	6 to 6	F01
112.4	AMH	Access Point - Manhole		END



City of DePere
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Upstream MH RainbowH6-OD4KDX	Downstream MH H6-NNMJRG	Size 8	Material Concrete Segments (unbolted)	Total Length 122	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address Rainbow	Location Details
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Direction Downstream	Purpose Maintenance Related	Weather Dry	Date 05/23/2017	Time 10:08	Length Surveyed
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Additional Information

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Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: RainbowH6-OD4KDX
0.0	MWL	Water Level		
0.0	SRI	Surface: Roughness Increased	6 to 6	S01
5.4	DAE	Deposits Attached: Encrustation	7 to 5	
6.5	DAE	Deposits Attached: Encrustation	7 to 8	
6.5	DAE	Deposits Attached: Encrustation	4 to 5	
12.9	DAE	Deposits Attached: Encrustation	12 to 5	
17.0	DAE	Deposits Attached: Encrustation	4 to 5	
29.2	DAE	Deposits Attached: Encrustation	4 to 5	
34.7	MWL	Water Level		
40.4	MWL	Water Level		
47.3	DAE	Deposits Attached: Encrustation	7 to 5	DAE IN SOME PIPE
51.5	TFA	Tap, Factory Made: Active	12	
56.5	MWL	Water Level		
57.6	TFA	Tap, Factory Made: Active	12	
68.7	MWL	Water Level		
73.4	MWL	Water Level		
86.0	MWL	Water Level		
90.7	MWL	Water Level		
101.0	OBJ	Obstacle - Object Wedged in Joint	3 to 5	
101.0	SRI	Surface: Roughness Increased	3 to 6	F01
101.0	MSA	Survey Abandoned		CAN'T GET CAMERA BY OBJ



City of DePere
 925 South Sixth Street
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Upstream MH RainbowH6-PM9MUJ	Downstream MH H6-OD4KDX	Size 8	Material Concrete Segments (unbolted)	Total Length 359	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address Rainbow	Location Details
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Direction Downstream	Purpose Maintenance Related	Weather Dry	Date 05/18/2017	Time 11:50	Length Surveyed
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Additional Information ROOT CUT BY SEWER JET
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Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: RainbowH6-PM9MUJ
0.0	MWL	Water Level		
0.0	SAV	Surface: Aggregate Visible	6 to 6	S01
0.5	DAE	Deposits Attached: Encrustation	7 to 5	
5.0	MWL	Water Level		
16.7	MWL	Water Level		
19.9	MWL	Water Level		
21.6	TFA	Tap, Factory Made: Active	1	
29.3	MWL	Water Level		
29.3	RFJ	Roots, Fine: Joint	8 to 10	
32.7	MWL	Water Level		
39.5	TFA	Tap, Factory Made: Active	11	
52.2	MWL	Water Level		
56.3	RFJ	Roots, Fine: Joint	8 to 9	
59.2	MWL	Water Level		
68.4	DAE	Deposits Attached: Encrustation	7 to 9	
71.4	MWL	Water Level		
71.4	RFJ	Roots, Fine: Joint	7 to 5	RFJ IN SOME PIPE
82.5	MWL	Water Level		
91.8	MWL	Water Level		
100.0	MWL	Water Level		
122.3	DAE	Deposits Attached: Encrustation	7 to 5	
123.6	TFA	Tap, Factory Made: Active	12	ACTIVE?
126.6	TFA	Tap, Factory Made: Active	11	ROOTS IN LATERAL
128.4	DAE	Deposits Attached: Encrustation	7 to 11	
137.1	DAE	Deposits Attached: Encrustation	2 to 5	
143.9	MWL	Water Level		
159.6	MWL	Water Level		
176.0	DAE	Deposits Attached: Encrustation	7 to 8	
176.0	DAE	Deposits Attached: Encrustation	4 to 5	
177.9	MWL	Water Level		
191.1	DAE	Deposits Attached: Encrustation	7 to 5	DAE IN SOME PIPE
191.1	MWL	Water Level		
220.0	MWL	Water Level		
225.4	TFA	Tap, Factory Made: Active	12	ROOTS IN LATERAL
228.3	TFA	Tap, Factory Made: Active	12	ROOTS IN LATERAL
230.7	MWL	Water Level		
238.1	MWL	Water Level		
243.9	MWL	Water Level		
253.4	MWL	Water Level		
303.5	MWL	Water Level		
324.1	TFA	Tap, Factory Made: Active	12	ACTIVE?
327.9	MWL	Water Level		
334.5	MWL	Water Level		
340.7	MWL	Water Level		
349.3	CL	Crack Longitudinal	12	
351.4	CL	Crack Longitudinal	12	
354.6	SAV	Surface: Aggregate Visible	6 to 6	F01
355.4	AMH	Access Point - Manhole		END



City of DePere
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 DePere, WI 54115-1199
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Upstream MH RainbowH6-ROHPME	Downstream MH H6-PM9MUY	Size 8	Material Concrete Segments (unbolted)	Total Length 401	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address Rainbow	Location Details
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Direction Downstream	Purpose Maintenance Related	Weather Dry	Date 05/18/2017	Time 10:02	Length Surveyed
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Additional Information ROOT CUT BY SEWER JET
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Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: RainbowH6-ROHPME
0.0	MWL	Water Level		
0.2	CM	Crack Multiple	7 to 3	
1.7	CL	Crack Longitudinal	12	
5.1	TFA	Tap, Factory Made: Active	9	
5.1	CL	Crack Longitudinal	12	
7.1	CL	Crack Longitudinal	12	
8.0	TFA	Tap, Factory Made: Active	3	
12.6	SRI	Surface: Roughness Increased	6 to 6	S01
18.4	DAE	Deposits Attached: Encrustation	7 to 5	
20.8	TFA	Tap, Factory Made: Active	9	
20.8	CL	Crack Longitudinal	10	
20.8	DAE	Deposits Attached: Encrustation	7 to 5	
24.5	RFJ	Roots, Fine: Joint	4 to 5	
24.5	DAE	Deposits Attached: Encrustation	7 to 5	
27.6	RFJ	Roots, Fine: Joint	3 to 5	
27.6	DAE	Deposits Attached: Encrustation	7 to 10	
27.6	DAE	Deposits Attached: Encrustation	2 to 5	
30.6	DAE	Deposits Attached: Encrustation	7 to 5	DAE IN SOME PIPE
60.5	MWL	Water Level		
63.4	RFJ	Roots, Fine: Joint	7 to 9	
63.4	RFJ	Roots, Fine: Joint	3 to 5	
66.4	RFJ	Roots, Fine: Joint	7 to 9	
70.7	TFA	Tap, Factory Made: Active	9	
77.0	MWL	Water Level		
118.6	MWL	Water Level		
126.0	TFA	Tap, Factory Made: Active	3	
130.5	MWL	Water Level		
139.4	MWL	Water Level		
145.8	MWL	Water Level		
167.9	TFA	Tap, Factory Made: Active	10	
172.8	MWL	Water Level		
183.8	MWL	Water Level		
188.1	MWL	Water Level		
198.1	MWL	Water Level		
205.9	RFJ	Roots, Fine: Joint	7 to 10	
206.2	MWL	Water Level		
210.6	MWL	Water Level		
218.8	TFA	Tap, Factory Made: Active	3	
221.0	MWL	Water Level		
223.4	RFJ	Roots, Fine: Joint	3 to 4	
226.8	MWL	Water Level		
240.4	MWL	Water Level		
253.7	RFJ	Roots, Fine: Joint	2 to 4	
253.7	MWL	Water Level		
258.2	MWL	Water Level		
269.8	TFA	Tap, Factory Made: Active	9	
279.7	MWL	Water Level		
283.5	MWL	Water Level		
289.8	MWL	Water Level		
295.1	MWL	Water Level		
317.5	TFA	Tap, Factory Made: Active	3	
336.9	MWL	Water Level		
348.4	MWL	Water Level		



City of DePere
925 South Sixth Street
DePere, WI 54115-1199
PH: 920-339-4062

Upstream MH RainbowH6-ROHPME	Downstream MH H6-PM9MUY	Size 8	Material Concrete Segments (unbolted)	Total Length 401	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address Rainbow	Location Details
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Direction Downstream	Purpose Maintenance Related	Weather Dry	Date 05/18/2017	Time 10:02	Length Surveyed
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Additional Information
ROOT CUT BY SEWER JET

Ftg.	Code	Description	Position	Comment
396.0	SRI	Surface: Roughness Increased	6 to 6	F01
397.9	AMH	Access Point - Manhole		END



City of DePere
 925 South Sixth Street
 DePere, WI 54115-1199
 PH: 920-339-4062

Owner City of DePere	Customer ENGINEERING	Upstream MH RAINBOW AV H6-R9YQY2	Downstream MH H6-SVFTHP	Date 03-02-2012	Time 8:30 AM
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Surveyor DARYL	Street RAINBOW AV	City City of DePere	Weather Dry
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Size 8	Material Concrete segments (unbolted)	Sewer Use Sanitary	Purpose Maintenance Related	Length 389
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Comments	Pre-Cleaning Jetting	(TV'd) 389.7
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.4	DP	Deposits	8 to 4	1	
0.5	C	Crack	11	1	
1.4	C	Crack	12	1	
4.2	DP	Deposits	8 to 4	1	
5.1	C	Crack	12	1	
8.1	SC	Service Connection	3		ACTIVE
9.9	DP	Deposits		1	DEPOSITS AT MOST JOINTS
11.3	C	Crack	12	1	
14.3	C	Crack	12	1	
41.3	SC	Service Connection	9		ACTIVE?
86.7	SC	Service Connection	3		ACTIVE
152.9	SC	Service Connection	9		ACTIVE
186.1	SC	Service Connection	3		ACTIVE
273.6	SC	Service Connection	9		ACTIVE
274.9	DP	Deposits	8 to 4	3	
285.7	SC	Service Connection	3		ACTIVE?
389.7	IE	End Inspection			



City of DePere
 925 South Sixth Street
 DePere, WI 54115-1199
 PH: 920-339-4062

Owner City of DePere	Customer ENGINEERING	Upstream MH RAINBOW AV H6-SVFTHP	Downstream MH H6-UAGW5Z	Date 03-02-2012	Time 7:43 AM
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Surveyor DARYL	Street RAINBOW AV	City City of DePere	Weather Dry
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Size 8	Material Concrete segments (unbolted)	Sewer Use Sanitary	Purpose Maintenance Related	Length 392
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Comments	Pre-Cleaning Jetting	(TV'd) 391.4
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
7.0	SC	Service Connection	9		ACTIVE
13.0	SC	Service Connection	3		ACTIVE
14.0	C	Crack	12	1	
14.9	DP	Deposits	8 to 4	1	
18.0	DP	Deposits	7 to 10	1	
23.1	DP	Deposits		2	DEPOSITS AT MOST JOINTS
109.6	SC	Service Connection	3		ACTIVE?
124.5	SC	Service Connection	9		ACTIVE
141.2	R	Roots	3 to 5	1	
153.5	R	Roots	2 to 4	1	
156.5	R	Roots	3 to 5	1	
162.9	R	Roots	12 to 4	1	
165.9	R	Roots	8 to 11	1	
209.1	SC	Service Connection	3		ACTIVE
215.1	SC	Service Connection	10		ACTIVE
245.3	SC	Service Connection	3		ACTIVE?
311.2	SC	Service Connection	3		ACTIVE
323.4	SC	Service Connection	9		ACTIVE
381.8	C	Crack	12	1	
387.2	C	Crack	12	1	
391.4	IE	End Inspection			



City of DePere
925 South Sixth Street
DePere, WI 54115-1199
PH: 920-339-4062

Owner	Customer	Upstream MH	Downstream MH	Date	Time
City of DePere	ENGINEERING	TERRY LN H6-72W601	H6-5AR8K9	06-12-2012	7:29 AM

Surveyor	Street	City	Weather
DARYL	TERRY LN	City of DePere	Dry

Size	Material	Sewer Use	Purpose	Length
10	Concrete segments (unbolted)	Sanitary	Maintenance Related	404

Comments	Pre-Cleaning	(TV'd)
	Jetting	403.6

Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
1.9	GO	General Observation			MWL 25%
24.8	SD	Surface Damage		1	SRI S01
58.0	GO	General Observation			MWL 30%
87.1	GO	General Observation			MWL 25%
126.6	SC	Service Connection	12		TFA
222.8	SC	Service Connection	1		TFA
243.8	SC	Service Connection	11		TFA
290.1	GO	General Observation			MWL 30%
291.8	DP	Deposits	7 to 5	1	DAEJ
322.8	GO	General Observation			MWL 25%
392.0	SC	Service Connection	1		TFA
402.5	DP	Deposits	7 to 5	1	DAE
402.5	SD	Surface Damage		1	SRI S01
403.6	IE	End Inspection			



City of DePere
 925 South Sixth Street
 DePere, WI 54115-1199
 PH: 920-339-4062

Owner City of DePere	Customer ENGINEERING	Upstream MH TERRY LN H6-5AR8K9	Downstream MH H6-3JEB2S	Date 06-11-2012	Time 1:36 PM
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Surveyor DARYL	Street TERRY LN	City City of DePere	Weather Dry
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Size 10	Material Concrete segments (unbolted)	Sewer Use Sanitary	Purpose Maintenance Related	Length 398
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Comments	Pre-Cleaning Jetting	(TV'd) 398.3
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
1.5	DP	Deposits	7 to 5	1	DAEJ
2.9	SD	Surface Damage		1	SRI S01
2.9	GO	General Observation			MWL 25%
67.8	GO	General Observation			MWL 10%
77.0	GO	General Observation			MWL 25%
101.9	GO	General Observation			MWL 10%
125.6	GO	General Observation			MWL 25%
130.5	SC	Service Connection	12		TFA
251.5	SC	Service Connection	1		TFA
251.5	GO	General Observation			MWL 35%
261.9	GO	General Observation			MWL 25%
329.9	SC	Service Connection	1		TFA
394.4	DP	Deposits	7 to 5	1	DAEJ
394.4	I	Infiltration	10 to 12	2	IR
396.9	SD	Surface Damage		1	SRI F01
398.3	IE	End Inspection			



City of DePere
925 South Sixth Street
DePere, WI 54115-1199
PH: 920-339-4062

Owner	Customer	Upstream MH	Downstream MH	Date	Time
City of DePere	ENGINEERING	TERRY LN H6-3JEB2S	H6-3VRCFS	06-11-2012	11:41 AM

Surveyor	Street	City	Weather
DARYL	TERRY LN	City of DePere	Dry

Size	Material	Sewer Use	Purpose	Length
10	Concrete segments (unbolted)	Sanitary	Maintenance Related	182

Comments	Pre-Cleaning	(TV'd)
	Jetting	180.4

Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
2.7	GO	General Observation			MWL 25%
21.6	GO	General Observation			MWL 15%
32.1	SD	Surface Damage		1	SRI S01
42.4	GO	General Observation			MWL 25%
90.2	GO	General Observation			MWL 15%
115.2	GO	General Observation			MWL 25%
178.8	SD	Surface Damage		1	SRI F01
180.4	IE	End Inspection			



City of DePere
925 South Sixth Street
DePere, WI 54115-1199
PH: 920-339-4062

Owner	Customer	Upstream MH	Downstream MH	Date	Time
City of DePere	ENGINEERING	TERRY LN H6-3VRCFS	H6-4B9E5L	06-11-2012	10:21 AM

Surveyor	Street	City	Weather
DARYL	TERRY LN	City of DePere	Dry

Size	Material	Sewer Use	Purpose	Length
10	Concrete segments (unbolted)	Sanitary	Maintenance Related	229

Comments	Pre-Cleaning	(TV'd)
	Jetting	228.3

Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	SD	Surface Damage		1	SRI S01
0.0	GO	General Observation			MWL 20%
8.9	SC	Service Connection	12		TFA
14.8	GO	General Observation			MWL 25%
72.4	GO	General Observation			MWL 15%
110.5	GO	General Observation			MWL 20%
117.7	SC	Service Connection	11		TFA
172.4	SC	Service Connection	1		TFA
182.5	GO	General Observation			MWL 25%
196.3	SC	Service Connection	11		TFA
224.8	DP	Deposits	7 to 5	1	DAEJ
226.9	SD	Surface Damage		1	SRI F01
228.3	IE	End Inspection			



City of DePere
 925 South Sixth Street
 DePere, WI 54115-1199
 PH: 920-339-4062

Owner City of DePere	Customer ENGINEERING	Upstream MH TERRY LN H6-4B9E5L	Downstream MH H6-5ZBG8V	Date 06-11-2012	Time 9:46 AM
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Surveyor DARYL	Street TERRY LN	City City of DePere	Weather Dry
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Size 10	Material Concrete segments (unbolted)	Sewer Use Sanitary	Purpose Maintenance Related	Length 347
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Comments	Pre-Cleaning Jetting	(TV'd) 345.7
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
1.3	DP	Deposits	7 to 5	1	DAEJ
3.5	GO	General Observation			MWL 15%
9.0	SD	Surface Damage		1	SRI S01
25.7	SC	Service Connection	11		TFA
79.9	GO	General Observation			MWL 20%
88.9	GO	General Observation			MWL 25%
92.5	SC	Service Connection	1		TFA
116.3	SC	Service Connection	11		TFA
116.3	GO	General Observation			MWL 15%
130.3	GO	General Observation			MWL 25%
174.3	GO	General Observation			MWL 15%
200.9	SC	Service Connection	11		TFA
206.9	GO	General Observation			MWL 20%
218.7	GO	General Observation			MWL 25%
262.2	GO	General Observation			MWL 15%
273.7	SC	Service Connection	1		TFA
279.7	SC	Service Connection	11		TFA
344.2	SD	Surface Damage		2	SRI F01
345.7	IE	End Inspection			



City of DePere
 925 South Sixth Street
 DePere, WI 54115-1199
 PH: 920-339-4062

Owner City of DePere	Customer ENGINEERING	Upstream MH TERRY LN H6-5ZBG8V	Downstream MH H6-7JDI6V	Date 06-11-2012	Time 9:08 AM
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Surveyor DARYL	Street TERRY LN	City City of DePere	Weather Dry
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Size 10	Material Concrete segments (unbolted)	Sewer Use Sanitary	Purpose Maintenance Related	Length 323
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Comments	Pre-Cleaning Jetting	(TV'd) 322.7
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
2.4	SD	Surface Damage		1	SRI S01
2.4	GO	General Observation			MWL 25%
8.8	SC	Service Connection	1		TFA
15.2	SC	Service Connection	11		TFA
18.2	GO	General Observation			MWL 15%
49.4	GO	General Observation			MWL 25%
81.8	SC	Service Connection	1		TFA
87.8	SC	Service Connection	11		TFA
134.7	DP	Deposits	10 to 2	1	DAE S02
166.5	SC	Service Connection	1		TFA
173.0	SC	Service Connection	11		TFA
180.5	DP	Deposits		1	DAE F02
205.9	DP	Deposits	10 to 2	1	DAE S03
243.4	DP	Deposits	10 to 2	1	DAE F03
245.4	SC	Service Connection	1		TFA
251.2	SC	Service Connection	11		TFA
259.0	GO	General Observation			MWL 35%
281.3	GO	General Observation			MWL 15%
304.6	GO	General Observation			MWL 25%
320.5	SD	Surface Damage		1	SRI F01
322.7	IE	End Inspection			



City of DePere
925 South Sixth Street
DePere, WI 54115-1199
PH: 920-339-4062

Owner	Customer	Upstream MH	Downstream MH	Date	Time
City of DePere	ENGINEERING	TERRY LN H6-7JDI6V	H6-947K60	06-08-2012	1:25 PM

Surveyor	Street	City	Weather
DARYL	TERRY LN	City of DePere	Dry

Size	Material	Sewer Use	Purpose	Length
10	Concrete segments (unbolted)	Sanitary	Maintenance Related	328

Comments	Pre-Cleaning	(TV'd)
	Jetting	326.4

Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
1.4	DP	Deposits	7 to 2	2	DAEJ
1.4	I	Infiltration	11 to 1	2	ID
2.5	SD	Surface Damage		1	SRI S01
5.3	SC	Service Connection	12		TFA?
5.3	GO	General Observation			MWL 10%
11.0	SC	Service Connection	12		TFA
16.6	GO	General Observation			MWL 25%
83.2	SC	Service Connection	1		TFA
89.5	SC	Service Connection	11		TFA
162.0	SC	Service Connection	12		TFA
168.0	SC	Service Connection	11		TFA
184.8	GO	General Observation			MWL 15%
203.2	GO	General Observation			MWL 25%
239.7	GO	General Observation			MWL 30%
246.5	SC	Service Connection	1		TFA
252.6	SC	Service Connection	11		TFA
252.6	GO	General Observation			MWL 25%
326.4	IE	End Inspection			



City of DePere
 925 South Sixth Street
 DePere, WI 54115-1199
 PH: 920-339-4062

Upstream MH SWebsterJ8- HCK6GA	Downstream MH J8-FL42UY	Size 8	Material Concrete Segments (unbolted)	Total Length 519	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address SWebster	Location Details
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Direction Downstream	Purpose Maintenance Related	Weather Dry	Date 08/07/2015	Time 07:21	Length Surveyed
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Additional Information

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Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: SWebsterJ8-HCK6GA
0.0	MWL	Water Level		
1.2	TFA	Tap, Factory Made: Active	9	
2.9	SRI	Surface: Roughness Increased	6 to 6	S01
15.2	SRI	Surface: Roughness Increased	6 to 6	F01
15.2	MMC	Material Change		CLAY TILE
15.2	FM	Fracture Multiple	7 to 5	
15.2	DAE	Deposits Attached: Encrustation	7 to 12	
16.0	TBI	Tap, Break-in / Hammer: Intruding	11	
18.0	FS	Fracture Spiral	2 to 5	
21.0	DAE	Deposits Attached: Encrustation	7 to 5	
21.0	CS	Crack Spiral	12 to 5	
29.8	DAE	Deposits Attached: Encrustation	7 to 5	DAE IN SOME PIPE
29.8	CS	Crack Spiral	7 to 5	CS IN SOME PIPE
77.8	TFC	Tap, Factory Made: Capped	2	
79.8	TFC	Tap, Factory Made: Capped	10	
111.0	MMC	Material Change		PVC
120.4	MMC	Material Change		CLAY TILE
126.2	TFC	Tap, Factory Made: Capped	2	
136.0	TBA	Tap, Break-in / Hammer: Active	2	
136.0	FM	Fracture Multiple	8 to 4	
181.7	TFC	Tap, Factory Made: Capped	2	
183.5	TFA	Tap, Factory Made: Active	12	
239.0	TFA	Tap, Factory Made: Active	2	
241.1	TFC	Tap, Factory Made: Capped	11	
276.9	MMC	Material Change		PVC
287.2	TFA	Tap, Factory Made: Active	11	
292.0	MMC	Material Change		CLAY TILE
293.4	TFC	Tap, Factory Made: Capped	2	
295.3	TFC	Tap, Factory Made: Capped	10	
344.6	TFB	Tap, Factory Made: Abandoned	2	TFB?
345.8	JSL	Joint Separated (open): Large		
346.5	TFC	Tap, Factory Made: Capped	11	
383.5	MMC	Material Change		PVC
395.9	MMC	Material Change		CLAY TILE
407.8	TFC	Tap, Factory Made: Capped	2	
407.8	DAE	Deposits Attached: Encrustation	3 to 5	
407.8	MSA	Survey Abandoned		CAN'T GET CAMERA BY DAE



City of DePere
925 South Sixth Street
DePere, WI 54115-1199
PH: 920-339-4062

Upstream MH	Downstream MH	Size	Material	Total Length	City
SWebster2J8-HCK6GA	J8-FL42UY	8	Clay Tile	519	City of DePere

Surveyor's Name	Certificate Number	Street Address	Location Details
Daryl	U-312-14702	SWebster	

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Maintenance Related	Dry	08/07/2015	08:40	

Additional Information
UPSTREAM

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: J8-FL42UY
0.0	MWL	Water Level		
7.8	JOM	Joint Offset (displaced): Medium		
20.4	CS	Crack Spiral	7 to 11	
29.2	DAE	Deposits Attached: Encrustation	7 to 5	DAE IN SOME PIPE
63.4	TFA	Tap, Factory Made: Active	2	
65.4	TFC	Tap, Factory Made: Capped	11	
80.5	CM	Crack Multiple	11 to 3	
101.4	CS	Crack Spiral	8 to 4	
102.3	TFC	Tap, Factory Made: Capped	2	
102.3	DAE	Deposits Attached: Encrustation	3 to 5	
102.3	MSA	Survey Abandoned		CAN'T GET CAMERA BY DAE



City of DePere
 925 South Sixth Street
 DePere, WI 54115-1199
 PH: 920-339-4062

Owner City of DePere	Customer ENGINEERING	Upstream MH SWebsterJ8- HOA6WF	Downstream MH J8-INX8V2	Date 08-18-2014	Time 7:50 AM
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Surveyor DARYL	Street SWebster	City City of DePere	Weather Dry
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Size 8	Material Concrete segments (unbolted)	Sewer Use Sanitary	Purpose Maintenance Related	Length 285
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Comments	Pre-Cleaning Jetting	(TV'd) 283.5
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	GO	General Observation			MWL 5%
28.1	DP	Deposits	4 to 5	1	DAEJ
42.8	GO	General Observation			MWL 10%
46.9	GO	General Observation			MWL 25%
51.1	GO	General Observation			MWL 5%
52.5	SC	Service Connection	2		TFA
54.9	C	Crack	9 to 12	1	CS
56.8	GO	General Observation			MWL 10%
62.5	GO	General Observation			MWL 5%
62.5	SD	Surface Damage		1	SRI S01
64.3	SC	Service Connection	1		TFC
67.1	DP	Deposits	6 to 9	2	DAEJ
130.9	DP	Deposits		1	DAEJ AT SOME JOINTS
134.2	SC	Service Connection	2		TFA
173.1	GO	General Observation			MWL 10%
176.1	GO	General Observation			MWL 15%
184.8	GO	General Observation			MWL 10%
197.2	GO	General Observation			MWL 5%
204.8	GO	General Observation			MWL 30%
206.5	SC	Service Connection	2		TFA
210.0	GO	General Observation			MWL 5%
228.8	GO	General Observation			MWL 15%
238.0	GO	General Observation			MWL 30%
244.4	GO	General Observation			MWL 5%
255.0	SD	Surface Damage		1	SRI F01
255.0	SD	Surface Damage		1	SAV S02
257.0	GO	General Observation			MWL 10%
260.7	GO	General Observation			MWL 5%
266.0	GO	General Observation			MWL 15%
272.2	GO	General Observation			MWL 30%
279.1	SC	Service Connection	2		TFC
279.1	GO	General Observation			MWL 5%
281.5	SD	Surface Damage		1	SAV F02
283.5	IE	End Inspection			



City of DePere
 925 South Sixth Street
 DePere, WI 54115-1199
 PH: 920-339-4062

Owner City of DePere	Customer ENGINEERING	Upstream MH SWebsterJ8-LN0EU4	Downstream MH J8-JPDAX9	Date 08-18-2014	Time 8:52 AM
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Surveyor DARYL	Street SWebster	City City of DePere	Weather Dry
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Size 8	Material Concrete segments (unbolted)	Sewer Use Sanitary	Purpose Maintenance Related	Length 566
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Comments	Pre-Cleaning Jetting	(TV'd) 557.7
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	GO	General Observation			MWL 5%
4.6	SC	Service Connection	9		TFA
75.9	DP	Deposits	7 to 5	1	DAEJ
76.3	SC	Service Connection	11		TFA
78.4	DP	Deposits	7 to 9	1	DAEJ
78.4	DP	Deposits	2 to 5	1	DAEJ
81.6	DP	Deposits		1	DAEJ AT SOME JOINTS
118.5	SC	Service Connection	3		TFA
157.1	SC	Service Connection	10		TFC
161.7	SC	Service Connection	9		TBAI
168.1	SD	Surface Damage		1	SRI S01
187.1	SC	Service Connection	3		TFA
238.2	SC	Service Connection	11		TFA
247.2	SC	Service Connection	2		TFA
303.7	SC	Service Connection	11		TFA
316.1	SC	Service Connection	3		TFA
380.1	SC	Service Connection	9		TBA
384.9	SC	Service Connection	11		TFC
402.7	SC	Service Connection	2		TFA
450.9	SC	Service Connection	11		TFC
452.6	SC	Service Connection	11		TFC
468.8	SC	Service Connection	2		TFA?
468.8	DP	Deposits	3 to 5	1	DAE
507.8	SC	Service Connection	10		TFA
522.7	SC	Service Connection	12		TFC
548.1	SD	Surface Damage		1	SRI F01
548.1	GO	General Observation			MMC PVC
557.7	IE	End Inspection			



City of DePere
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Upstream MH NWebsterJ8- M03FLC	Downstream MH J8-M1PFNB	Size 8	Material Concrete Segments (unbolted)	Total Length 9	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address NWebster	Location Details
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Direction Downstream	Purpose Maintenance Related	Weather Dry	Date 07/28/2015	Time 13:41	Length Surveyed
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Additional Information

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Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: NWebsterJ8-M03FLC
0.0	MWL	Water Level		
4.4	AMH	Access Point - Manhole		END



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Upstream MH NWebsterJ8-N9AI1S	Downstream MH J8-MAOG4Y	Size 8	Material Concrete Segments (unbolted)	Total Length 277	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address NWebster	Location Details
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Direction Downstream	Purpose Maintenance Related	Weather Dry	Date 07/28/2015	Time 12:05	Length Surveyed
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Additional Information

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: NWebsterJ8-N9AI1S
0.0	MWL	Water Level		
0.0	SRI	Surface: Roughness Increased	6 to 6	S01
0.2	CC	Crack Circumferential	7 to 5	
20.4	TBI	Tap, Break-in / Hammer: Intruding	9	
150.9	TBI	Tap, Break-in / Hammer: Intruding	10	
153.1	MWL	Water Level		
159.7	MWL	Water Level		
289.2	MWL	Water Level		
302.0	MWL	Water Level		
343.0	DAE	Deposits Attached: Encrustation	7 to 5	
344.6	SRI	Surface: Roughness Increased	6 to 6	F01
344.6	AMH	Access Point - Manhole		END



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Upstream MH NWebsterJ8- NRBJ1Q	Downstream MH J8-N9A11S	Size 8	Material Concrete Segments (unbolted)	Total Length 145	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address NWebster	Location Details
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Direction Upstream	Purpose Maintenance Related	Weather Dry	Date 07/28/2015	Time 12:50	Length Surveyed
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Additional Information
UPSTREAM

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: J8-N9A11S
0.0	MWL	Water Level		
0.0	SRI	Surface: Roughness Increased	6 to 6	S01
57.2	TBA	Tap, Break-in / Hammer: Active	3	
136.8	TBA	Tap, Break-in / Hammer: Active	3	
138.9	SRI	Surface: Roughness Increased	6 to 6	F01
140.9	AMH	Access Point - Manhole		END



City of DePere
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Owner City of DePere	Customer ENGINEERING	Upstream MH NWebsterJ8-09EJU7	Downstream MH J8-OT9KY4	Date 03-30-2015	Time 11:42 AM
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Surveyor DARYL	Street NWebster	City City of DePere	Weather Dry
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Size 8	Material Concrete segments (unbolted)	Sewer Use Sanitary	Purpose Maintenance Related	Length 161
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Comments OBSTRUCTION REMOVED BY SEWER JET	Pre-Cleaning Jetting	(TV'd) 154.4
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	GO	General Observation			MWL 5%
0.0	SD	Surface Damage		1	SRI S01
0.8	DP	Deposits	7 to 5	1	DAEJ
2.7	SC	Service Connection	3		TFA
41.4	C	Crack	9 to 3	1	CC
55.9	C	Crack		1	CRACKS IN SOME PIPE
56.8	GO	General Observation			AGGREGATE MISSING IN SOME PIPE
56.8	GO	General Observation			MWL 10%
61.5	GO	General Observation			MWL 5%
74.1	DP	Deposits	7 to 10	1	DAE
76.9	DP	Deposits	6 to 8	1	DAEJ
77.9	SC	Service Connection	3		TFA
89.6	DP	Deposits		1	DAE IN SOME PIPE
110.0	DP	Deposits	7 to 5	1	DAEJ
113.0	DP	Deposits		1	DAEJ IN SOME PIPE
125.4	SC	Service Connection	9		TFA
128.4	SC	Service Connection	3		TFA
154.4	SD	Surface Damage		1	SRI F01
154.4	O	Obstruction	6 to 9	3	OBZ CONCRETE
154.4	GO	General Observation			CAN'T GET CAMERA BY OBZ
154.4	IE	End Inspection			



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Owner City of DePere	Customer ENGINEERING	Upstream MH NWebsterJ8-OT9KY4	Downstream MH J8-PWIN6P	Date 03-27-2015	Time 9:54 AM
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Surveyor DARYL	Street NWebster	City City of DePere	Weather Dry
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Size 8	Material Concrete segments (unbolted)	Sewer Use Sanitary	Purpose Maintenance Related	Length 323
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Comments	Pre-Cleaning Jetting	(TV'd) 211.8
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	GO	General Observation			MWL 5%
0.0	SD	Surface Damage		2	SAV S01
0.5	DP	Deposits	7 to 5	1	DAEJ
8.1	DP	Deposits	4 to 5	1	DAE
10.9	DP	Deposits	7 to 5	1	DAEJ
13.8	DP	Deposits		1	DAEJ IN SOME PIPE
23.9	DP	Deposits		1	DAE IN SOME PIPE
61.7	GO	General Observation			MWL 10%
65.7	SC	Service Connection	3		TFA
75.0	SC	Service Connection	9		TFA
76.8	GO	General Observation	7 to 1	3	B
77.4	JO	Joint Offset		2	JO
83.1	GO	General Observation			MWL 5%
92.4	DP	Deposits	4 to 5	3	DAE
107.5	DP	Deposits	3 to 5	3	DAE
133.9	DP	Deposits	3 to 6	3	DAE
134.4	SC	Service Connection	9		TFC
136.9	DP	Deposits	7 to 10	2	DAEJ
136.9	DP	Deposits	3 to 5	3	DAEJ
137.5	SC	Service Connection	3		TFC
140.0	DP	Deposits	7 to 9	2	DAEJ
140.0	DP	Deposits	1 to 5	3	DAEJ
172.7	DP	Deposits	7 to 5	2	DAEJ
177.3	SC	Service Connection	3		TBAI
191.6	SC	Service Connection	9		TFA
194.3	SC	Service Connection	3		TFC
196.3	GO	General Observation			MWL 10%
199.4	GO	General Observation			MWL 25%
204.2	GO	General Observation			MWL 35%
211.8	DP	Deposits	3 to 5	3	DAEJ
211.8	GO	General Observation			CAN'T GET CAMERA BY DEPOSITS
211.8	SD	Surface Damage		2	SAV F01
211.8	IE	End Inspection			



City of DePere
925 South Sixth Street
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Owner	Customer	Upstream MH	Downstream MH	Date	Time
City of DePere	ENGINEERING	NWebster2J8-OT9KY4	J8-PWIN6P	03-27-2015	12:21 PM

Surveyor	Street	City	Weather
DARYL	NWebster	City of DePere	Dry

Size	Material	Sewer Use	Purpose	Length
8	Concrete segments (unbolted)	Sanitary	Maintenance Related	323

Comments	Pre-Cleaning	(TV'd)
UPSTREAM	Jetting	66.2

Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	GO	General Observation			MWL 5%
0.0	GO	General Observation			MMC CLAY TILE
29.6	SC	Service Connection	3		TFC
32.9	C	Crack	7 to 12	1	CS
32.9	DP	Deposits	7	1	DAEJ
39.2	DP	Deposits	7 to 9	1	DAE
39.2	DP	Deposits	4 to 5	1	DAEJ
45.1	DP	Deposits		1	DAEJ AT SOME JOINTS
65.8	DP	Deposits	3 to 5	3	DAEJ
66.2	GO	General Observation			CAN'T GET CAMERA BY DEPOSITS
66.2	IE	End Inspection			



City of DePere
925 South Sixth Street
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Owner	Customer	Upstream MH	Downstream MH	Date	Time
City of DePere	ENGINEERING	NWebsterJ8- PWIN6P	J8-Q2GNGV	03-27-2015	11:55 AM

Surveyor	Street	City	Weather
DARYL	NWebster	City of DePere	Dry

Size	Material	Sewer Use	Purpose	Length
8	Concrete segments (unbolted)	Sanitary	Maintenance Related	42

Comments	Pre-Cleaning	(TV'd)
HIGH WATER LEVELS DUE TO RAGGING IN DOWNSTREAM MANHOLE	Jetting	36.8

Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	GO	General Observation			MWL 35%
0.0	SD	Surface Damage		2	SAV S01
2.2	GO	General Observation			MWL 45%
29.8	GO	General Observation			MWL 55%
36.8	SD	Surface Damage		2	SAV F01
36.8	IE	End Inspection			



City of DePere
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Owner City of DePere	Customer ENGINEERING	Upstream MH NWebsterJ8- R7SPQO	Downstream MH J8-Q2GNGV	Date 03-24-2015	Time 9:55 AM
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Surveyor DARYL	Street NWebster	City City of DePere	Weather Dry
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Size 8	Material Clay Tile	Sewer Use Sanitary	Purpose Maintenance Related	Length 330
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Comments	Pre-Cleaning Jetting	(TV'd) 327.4
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	GO	General Observation			MWL 5%
0.6	C	Crack	7 to 12	1	CS
3.0	C	Crack	7 to 3	1	CS
6.0	C	Crack	2 to 5	1	CS
8.5	C	Crack		1	SMALL CRACKS IN SOME PIPE
18.6	SC	Service Connection	11		TFA
50.0	GO	General Observation			MWL 10%
58.2	GO	General Observation			MWL 5%
65.3	DP	Deposits	7 to 9	1	DAE
65.3	DP	Deposits	1 to 5	1	DAE
67.4	SC	Service Connection	3		TBA
67.4	DP	Deposits	2 to 5	1	DAE
68.3	DP	Deposits		1	DAE IN SOME PIPE
69.0	SC	Service Connection	2		TFC
72.0	SC	Service Connection	10		TFC
74.2	DP	Deposits		1	DAEJ IN SOME PIPE
131.2	SC	Service Connection	1		TFC
133.9	I	Infiltration	11	3	IR IN LATERAL?
133.9	SC	Service Connection	11		TFA
192.3	GO	General Observation			MMC PVC
192.9	JO	Joint Offset		2	JO
194.1	GO	General Observation			MWL 35%
196.1	SC	Service Connection	12		TFA
196.1	I	Infiltration	11 to 1	2	IR IN LATERAL OR BY LATERAL?
197.8	GO	General Observation			MWL 5%
200.0	GO	General Observation			MMC CLAY TILE
201.5	GO	General Observation	7 to 12	2	FM
257.7	C	Crack	7 to 5	2	CM
261.7	SC	Service Connection	11		TFA
327.4	IE	End Inspection			



City of DePere
925 South Sixth Street
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Owner	Customer	Upstream MH	Downstream MH	Date	Time
City of DePere	ENGINEERING	NWebsterJ8-TG2U7R	J8-SCLS0J	03-26-2015	12:33 PM

Surveyor	Street	City	Weather
DARYL	NWebster	City of DePere	Dry

Size	Material	Sewer Use	Purpose	Length
8	Clay Tile	Sanitary	Maintenance Related	319

Comments	Pre-Cleaning	(TV'd)
	Jetting	318.5

Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	GO	General Observation			MWL 5%
0.0	GO	General Observation			MMC PVC
2.0	GO	General Observation			MMC CLAY TILE
4.9	C	Crack	12 to 5	1	CM
13.9	C	Crack	12 to 5	1	CC
16.9	C	Crack		1	CRACKS IN SOME PIPE
31.9	SC	Service Connection	3		TFC
35.1	SC	Service Connection	10		TFC
49.2	DP	Deposits	1 to 5	1	DAEJ
51.9	DP	Deposits	12 to 5	1	DAEJ
55.0	DP	Deposits		1	DAEJ AT SOME JOINTS
85.3	SC	Service Connection	3		TFC
88.6	SC	Service Connection	10		TFA
150.4	SC	Service Connection	2		TFC
152.5	SC	Service Connection	11		TFC
192.6	DP	Deposits	7 to 8	1	DAE
210.2	DP	Deposits	2 to 5	1	DAE
210.7	SC	Service Connection	3		TFC
213.7	SC	Service Connection	11		TFC
274.9	SC	Service Connection	3		TFC
278.4	SC	Service Connection	10		TFA
318.5	IE	End Inspection			



City of DePere
 925 South Sixth Street
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Upstream MH ZitaJ8-RODCUN	Downstream MH J8-QJWBW9	Size 8	Material Concrete Segments (unbolted)	Total Length 137	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address Zita	Location Details
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Direction Upstream	Purpose Maintenance Related	Weather Dry	Date 08/31/2015	Time 08:12	Length Surveyed
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Additional Information
 UPSTREAM

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: J8-QJWBW9
0.0	MWL	Water Level		
0.0	SRI	Surface: Roughness Increased	6 to 6	S01
0.2	DAE	Deposits Attached: Encrustation	7 to 5	
0.2	ID	Infiltration - Dripper	1 to 2	
0.5	TFA	Tap, Factory Made: Active	11	
1.0	DAE	Deposits Attached: Encrustation	1 to 5	
11.8	MWL	Water Level		
16.3	MWL	Water Level		
39.1	DAE	Deposits Attached: Encrustation	7 to 11	
39.1	DAE	Deposits Attached: Encrustation	4 to 5	
43.8	DAE	Deposits Attached: Encrustation	7 to 12	
50.4	TFA	Tap, Factory Made: Active	10	
130.6	TFA	Tap, Factory Made: Active	10	
132.7	DAE	Deposits Attached: Encrustation	7 to 5	
132.7	SRI	Surface: Roughness Increased	6 to 6	F01
134.5	AMH	Access Point - Manhole		END



City of DePere
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Upstream MH ZitaJ8-QJWBW9	Downstream MH J8-SYDAQ9	Size 8	Material Concrete Segments (unbolted)	Total Length 346	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address Zita	Location Details
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Direction Downstream	Purpose Maintenance Related	Weather Dry	Date 08/31/2015	Time 07:15	Length Surveyed
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Additional Information

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Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: ZitaJ8-QJWBW9
0.0	MWL	Water Level		
0.0	SRI	Surface: Roughness Increased	6 to 6	S01
0.0	DAE	Deposits Attached: Encrustation	7 to 5	
0.3	DAE	Deposits Attached: Encrustation	7 to 5	
2.0	TFA	Tap, Factory Made: Active	2	
3.5	DAE	Deposits Attached: Encrustation	7 to 5	
59.3	DAE	Deposits Attached: Encrustation	7 to 12	
77.1	TFA	Tap, Factory Made: Active	10	
82.2	TFA	Tap, Factory Made: Active	2	
83.5	DAE	Deposits Attached: Encrustation	7 to 5	
129.9	DAE	Deposits Attached: Encrustation	10 to 4	
157.4	TFA	Tap, Factory Made: Active	10	
158.8	DAE	Deposits Attached: Encrustation	12 to 5	
162.2	TFA	Tap, Factory Made: Active	2	
169.2	DAE	Deposits Attached: Encrustation	7 to 9	
184.8	DAE	Deposits Attached: Encrustation	10 to 5	
192.5	MWL	Water Level		
197.6	MWL	Water Level		
203.7	DAE	Deposits Attached: Encrustation	7 to 11	
241.1	DAE	Deposits Attached: Encrustation	1 to 5	
242.4	TFA	Tap, Factory Made: Active	10	
247.4	TFA	Tap, Factory Made: Active	2	
266.5	DAE	Deposits Attached: Encrustation	7 to 11	
270.9	DAE	Deposits Attached: Encrustation	7 to 11	
282.6	MWL	Water Level		
287.8	MWL	Water Level		
317.6	TFA	Tap, Factory Made: Active	11	
322.7	TFA	Tap, Factory Made: Active	2	
343.0	DAE	Deposits Attached: Encrustation	7 to 5	
343.0	SRI	Surface: Roughness Increased	6 to 6	F01
345.7	AMH	Access Point - Manhole		END



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Upstream MH ZitaJ8-SYDAQ9	Downstream MH J8-VBV9LA	Size 8	Material Concrete Segments (unbolted)	Total Length 341	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address Zita	Location Details
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Direction Downstream	Purpose Maintenance Related	Weather Dry	Date 08/27/2015	Time 11:59	Length Surveyed
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Additional Information

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Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: ZitaJ8-SYDAQ9
0.0	MWL	Water Level		
0.0	SRI	Surface: Roughness Increased	6 to 6	S01
43.7	MWL	Water Level		
49.4	TBA	Tap, Break-in / Hammer: Active	10	
50.3	MWL	Water Level		
54.6	TBA	Tap, Break-in / Hammer: Active	2	
68.1	SRI	Surface: Roughness Increased	6 to 6	F01
68.1	SAV	Surface: Aggregate Visible	6 to 6	S02
133.8	TFA	Tap, Factory Made: Active	10	
133.8	DAE	Deposits Attached: Encrustation	7 to 5	
138.7	TFA	Tap, Factory Made: Active	2	
139.2	DAE	Deposits Attached: Encrustation	7 to 8	
211.9	MWL	Water Level		
213.5	TFA	Tap, Factory Made: Active	10	
215.7	MWL	Water Level		
218.6	TFA	Tap, Factory Made: Active	2	
265.0	DAE	Deposits Attached: Encrustation	7 to 8	
265.0	DAE	Deposits Attached: Encrustation	4 to 5	
293.5	TFA	Tap, Factory Made: Active	9	
298.7	TFA	Tap, Factory Made: Active	3	
310.0	DAE	Deposits Attached: Encrustation	8 to 5	
310.7	DAE	Deposits Attached: Encrustation	7 to 10	
313.3	MWL	Water Level		
316.6	MWL	Water Level		
317.6	DAE	Deposits Attached: Encrustation	7 to 11	
319.2	SAV	Surface: Aggregate Visible	6 to 6	F02
319.2	SRI	Surface: Roughness Increased	6 to 6	S03
322.1	MWL	Water Level		
329.6	SRI	Surface: Roughness Increased	6 to 6	F03
329.6	AMH	Access Point - Manhole		END



City of DePere
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Upstream MH RuskJ8-PNAEWY	Downstream MH J8-RJVDZQ	Size 8	Material Concrete Segments (unbolted)	Total Length 274	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address Rusk	Location Details
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Direction Downstream	Purpose Maintenance Related	Weather Dry	Date 09/10/2015	Time 09:51	Length Surveyed
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Additional Information

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Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: RuskJ8-PNAEWY
0.0	MWL	Water Level		
0.6	DAE	Deposits Attached: Encrustation	7 to 5	
0.6	ID	Infiltration - Dripper	11 to 1	
14.8	DAE	Deposits Attached: Encrustation	12 to 5	
16.7	TFA	Tap, Factory Made: Active	2	
32.9	DAE	Deposits Attached: Encrustation	7 to 5	
32.9	ID	Infiltration - Dripper	11 to 1	
142.9	DAE	Deposits Attached: Encrustation	7 to 5	
166.6	TFA	Tap, Factory Made: Active	11	
172.9	DAE	Deposits Attached: Encrustation	7 to 9	
172.9	DAE	Deposits Attached: Encrustation	3 to 5	
191.5	TFA	Tap, Factory Made: Active	2	
252.2	SRI	Surface: Roughness Increased	6 to 6	S01
256.1	TFA	Tap, Factory Made: Active	10	
260.3	MWL	Water Level		
264.1	MWL	Water Level		
269.5	DAE	Deposits Attached: Encrustation	7 to 5	
269.5	SRI	Surface: Roughness Increased	6 to 6	F01
269.8	AMH	Access Point - Manhole		END



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Upstream MH RuskJ8-RJVDZQ	Downstream MH J8-U06CSU	Size 8	Material Concrete Segments (unbolted)	Total Length 353	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address Rusk	Location Details
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Direction Downstream	Purpose Maintenance Related	Weather Dry	Date 09/10/2015	Time 12:40	Length Surveyed
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Additional Information

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Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: RuskJ8-RJVDZQ
0.0	MWL	Water Level		
0.0	SRI	Surface: Roughness Increased	6 to 6	S01
13.8	DAE	Deposits Attached: Encrustation	7 to 5	
28.9	DAE	Deposits Attached: Encrustation	7 to 5	
28.9	ID	Infiltration - Dripper	11 to 1	
29.3	SRI	Surface: Roughness Increased	6 to 6	F01
29.3	MSA	Survey Abandoned		CAN'T GET CAMERA BY DAE



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 925 South Sixth Street
 DePere, WI 54115-1199
 PH: 920-339-4062

Upstream MH	Downstream MH	Size	Material	Total Length	City
Rusk2J8-RJVDZQ	J8-U06CSU	8	Concrete Segments (unbolted)	353	City of DePere

Surveyor's Name	Certificate Number	Street Address	Location Details
Daryl	U-312-14702	Rusk	

Direction	Purpose	Weather	Date	Time	Length Surveyed
Upstream	Maintenance Related	Dry	09/10/2015	13:15	

Additional Information
UPSTREAM

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: J8-U06CSU
0.0	MWL	Water Level		
0.0	SRI	Surface: Roughness Increased	6 to 6	S01
21.3	MWL	Water Level		
25.9	MWL	Water Level		
28.4	TFA	Tap, Factory Made: Active	11	
58.5	TFA	Tap, Factory Made: Active	2	
68.5	MWL	Water Level		
75.8	MWL	Water Level		
98.6	TFA	Tap, Factory Made: Active	11	
132.3	DAE	Deposits Attached: Encrustation	7 to 9	
132.3	DAE	Deposits Attached: Encrustation	3 to 5	
148.6	TFA	Tap, Factory Made: Active	2	
167.1	MWL	Water Level		
173.6	MWL	Water Level		
178.9	TFA	Tap, Factory Made: Active	11	
179.9	DAE	Deposits Attached: Encrustation	11 to 5	
225.4	MWL	Water Level		
230.9	MWL	Water Level		
231.9	DAE	Deposits Attached: Encrustation	7 to 11	
251.6	DAE	Deposits Attached: Encrustation	7 to 5	
253.2	TFA	Tap, Factory Made: Active	1	
258.5	TFA	Tap, Factory Made: Active	10	
316.7	DAE	Deposits Attached: Encrustation	7 to 5	
316.8	SRI	Surface: Roughness Increased	6 to 6	F01
316.8	MSA	Survey Abandoned		CAN'T GET CAMERA BY DAE



City of DePere
 925 South Sixth Street
 DePere, WI 54115-1199
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Upstream MH RuskJ8-U06CSU	Downstream MH J8-WC5BO2	Size 8	Material Concrete Segments (unbolted)	Total Length 336	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address Rusk	Location Details
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Direction Downstream	Purpose Maintenance Related	Weather Dry	Date 09/10/2015	Time 11:39	Length Surveyed
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Additional Information
 8" NOT 10"?

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: RuskJ8-U06CSU
0.0	MWL	Water Level		
0.0	SRI	Surface: Roughness Increased	6 to 6	S01
1.1	DAE	Deposits Attached: Encrustation	7 to 5	
27.4	TFA	Tap, Factory Made: Active	10	
57.1	TFA	Tap, Factory Made: Active	2	
95.9	MWL	Water Level		
109.3	MWL	Water Level		
132.4	TFA	Tap, Factory Made: Active	10	
137.4	MWL	Water Level		
137.4	TFA	Tap, Factory Made: Active	2	
141.7	MWL	Water Level		
199.0	DAE	Deposits Attached: Encrustation	1 to 5	
208.9	DAE	Deposits Attached: Encrustation	7 to 5	
215.3	TFA	Tap, Factory Made: Active	2	
219.3	TFA	Tap, Factory Made: Active	10	
232.1	DAE	Deposits Attached: Encrustation	7 to 11	
234.9	MWL	Water Level		
237.0	DAE	Deposits Attached: Encrustation	7 to 5	
240.7	MWL	Water Level		
247.0	DAE	Deposits Attached: Encrustation	12 to 5	
276.9	DAE	Deposits Attached: Encrustation	7 to 5	
287.2	DAE	Deposits Attached: Encrustation	7 to 11	
298.3	TFA	Tap, Factory Made: Active	2	
302.7	TFA	Tap, Factory Made: Active	11	
329.8	DAE	Deposits Attached: Encrustation	7 to 5	
329.8	SRI	Surface: Roughness Increased	6 to 6	F01
329.8	ID	Infiltration - Dripper	11 to 1	
330.4	AMH	Access Point - Manhole		END



City of DePere
925 South Sixth Street
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Upstream MH RidgewayDrJ8-Z7AIMT	Downstream MH J8-XO4JDP	Size 8	Material Concrete Segments (unbolted)	Total Length 221	City City of DePere
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Surveyor's Name Daryl	Certificate Number U-312-14702	Street Address RidgewayDr	Location Details
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Direction Upstream	Purpose Maintenance Related	Weather Dry	Date 09/14/2015	Time 09:25	Length Surveyed
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Additional Information
UPSTREAM

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: J8-XO4JDP
0.0	MWL	Water Level		
0.0	SRI	Surface: Roughness Increased	6 to 6	S01
62.7	MWL	Water Level		
78.0	MWL	Water Level		
84.5	MWL	Water Level		
91.8	MWL	Water Level		
206.4	TFA	Tap, Factory Made: Active	10	
206.4	DAE	Deposits Attached: Encrustation	8 to 10	
211.6	TFA	Tap, Factory Made: Active	3	
213.8	SRI	Surface: Roughness Increased	6 to 6	F01
213.8	AEP	Access Point - End of Pipe		END



City of DePere
925 South Sixth Street
DePere, WI 54115-1199
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Upstream MH	Downstream MH	Size	Material	Total Length	City
NobHillJ8-UDL7O9	J8-TGX5U7	10	Concrete Segments (unbolted)	265	City of DePere

Surveyor's Name	Certificate Number	Street Address	Location Details
Daryl	U-312-14702	NobHill	

Direction	Purpose	Weather	Date	Time	Length Surveyed
Downstream	Maintenance Related	Dry	08/19/2021	08:36	

Additional Information
10"?

Ftg.	Code	Description	Position	Comment
0.0	AMH	Access Point - Manhole		Starting Manhole: NobHillJ8-UDL7O9
0.0	MWL	Water Level		
0.0	SAV	Surface: Aggregate Visible	6 to 6	S01
12.7	MWL	Water Level		
20.4	MWL	Water Level		
22.4	DAE	Deposits Attached: Encrustation	12 to 5	
38.6	MGO	General Observation		DAE IN SOME PIPE
38.6	MWL	Water Level		
48.3	MWL	Water Level		
60.0	MWL	Water Level		
60.3	TFA	Tap, Factory Made: Active	2	
63.5	TFA	Tap, Factory Made: Active	10	
99.8	MWL	Water Level		
150.7	MWL	Water Level		
156.5	TFA	Tap, Factory Made: Active	10	
157.3	MWL	Water Level		
160.5	TFI	Tap, Factory Made: Intruding	2	
168.1	MWL	Water Level		
180.2	MWL	Water Level		
190.0	MWL	Water Level		
200.0	MWL	Water Level		
251.6	MWL	Water Level		
261.7	IG	Infiltration - Gusher	7 to 5	
261.7	SAV	Surface: Aggregate Visible	6 to 6	F01
262.4	IR	Infiltration - Runner	8 to 10	IR IN MANHOLE
262.4	AMH	Access Point - Manhole		END



City of DePere
 925 South Sixth Street
 DePere, WI 54115-1199
 PH: 920-339-4062

Owner City of DePere	Customer ENGINEERING	Upstream MH FRANKLIN ST J8-60EN5C	Downstream MH J8-4WDNP5	Date 08-22-2012	Time 1:00 PM
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Surveyor DARYL	Street FRANKLIN ST	City City of DePere	Weather Dry
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Size 12	Material Concrete segments (unbolted)	Sewer Use Sanitary	Purpose Maintenance Related	Length 161
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Comments	Pre-Cleaning Jetting	(TV'd) 159.9
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Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	SD	Surface Damage		1	SRI S01
2.3	GO	General Observation			MWL 5%
12.4	GO	General Observation			MWL 15%
27.5	GO	General Observation			MWL 20%
39.7	GO	General Observation			MWL 25%
57.8	GO	General Observation			MWL 30%
88.8	SC	Service Connection	9		TBA
98.9	SC	Service Connection	2		TFA
137.7	GO	General Observation			MWL 50%
149.3	GO	General Observation			MWL 25%
157.5	SD	Surface Damage		1	SRI F01
159.9	IE	End Inspection			



City of DePere
925 South Sixth Street
DePere, WI 54115-1199
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Owner	Customer	Upstream MH	Downstream MH	Date	Time
City of DePere	ENGINEERING	FRANKLIN ST J8-7C2MHJ	J8-60EN5C	08-22-2012	12:20 PM

Surveyor	Street	City	Weather
DARYL	FRANKLIN ST	City of DePere	Dry

Size	Material	Sewer Use	Purpose	Length
12	Concrete segments (unbolted)	Sanitary	Maintenance Related	192

Comments	Pre-Cleaning	(TV'd)
	Jetting	106.1

Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	SD	Surface Damage		1	SRI S01
2.8	GO	General Observation			MWL 25%
16.1	GO	General Observation			MWL 10%
61.6	GO	General Observation			MWL 5%
73.6	GO	General Observation			MWL 10%
86.9	SC	Service Connection	11		TBAI?
95.9	GO	General Observation			MWL 20%
106.1	SC	Service Connection	3		TBAI
106.1	GO	General Observation			CAN'T GET CAMERA BY LATERAL
106.1	IE	End Inspection			



City of DePere
925 South Sixth Street
DePere, WI 54115-1199
PH: 920-339-4062

Owner	Customer	Upstream MH	Downstream MH	Date	Time
City of DePere	ENGINEERING	FRANKLIN ST 2 J8-7C2MHJ	J8-60EN5C	08-22-2012	12:47 PM

Surveyor	Street	City	Weather
DARYL	FRANKLIN ST	City of DePere	Dry

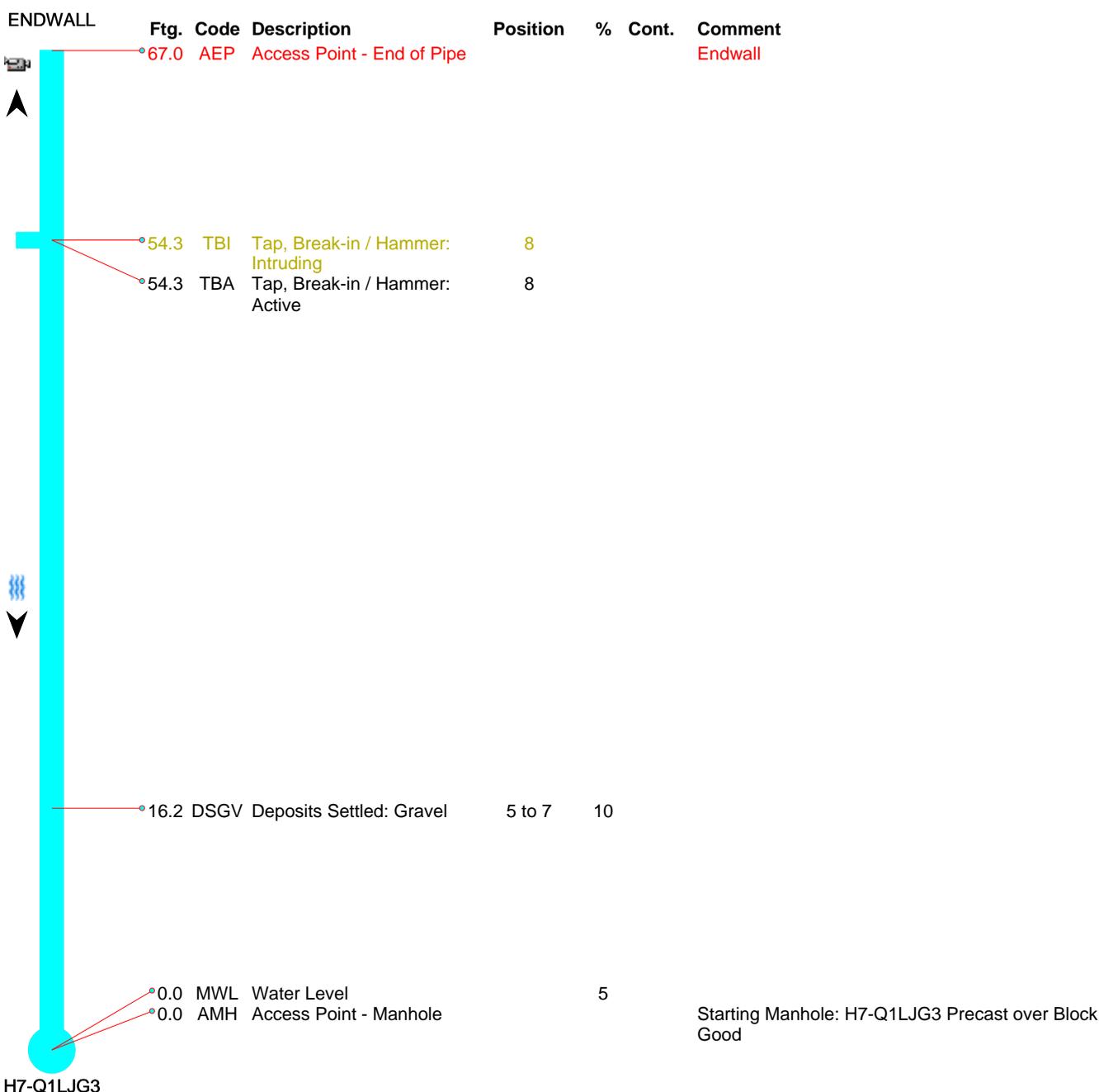
Size	Material	Sewer Use	Purpose	Length
12	Concrete segments (unbolted)	Sanitary	Maintenance Related	192

Comments	Pre-Cleaning	(TV'd)
UPSTREAM	Jetting	80.5

Ftg.	Code	Description	Position	Severity	Comment
0.0	IB	Begin Inspection			
0.0	SD	Surface Damage		1	SRI S01
2.8	GO	General Observation			MWL 15%
25.6	GO	General Observation			MWL 5%
61.3	GO	General Observation			MWL 15%
80.5	SD	Surface Damage		1	SRI F01
80.5	IE	End Inspection			

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Upstream MH			Downstream MH		
ENDWALL			H7-Q1LJG3		
Date	Time	Street			Page
5/13/2021	10:11 AM	Esmnt s/o Westwood			1
Sewer Use	Pipe Size	Pipe ID	Jt. Spacing	Shape	Survey Direction
Stormwater	36		20	Circular	Upstream
Pre-Cleaning	Weather	Media Label	Rim to Invert (U)	Rim to Invert (D)	Flow Direction
Jetting	Dry			7.8	NE
Date Cleaned	Surveyed Length	Total Length	Surveyor	Certificate No.	Surface
5/6/2021	67	67	Tyler Derenne	U-116-07002794	Turf
Owner		Material		Project	
City of De Pere		Corrugated Metal Pipe		21-15	
Additional Information					



H7-Q1LJG3



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Upstream MH		Downstream MH			
H7-Q1LJG3		H7-Q27JO0			
Date	Time	Street			Page
5/13/2021	10:38 AM	Esmnt n/o Westwood			1
Sewer Use	Pipe Size	Pipe ID	Jt. Spacing	Shape	Survey Direction
Stormwater	36		20	Circular	Downstream
Pre-Cleaning	Weather	Media Label	Rim to Invert (U)	Rim to Invert (D)	Flow Direction
Jetting	Dry		7.8	7.8	N
Date Cleaned	Surveyed Length	Total Length	Surveyor	Certificate No.	Surface
5/6/2021	30	30	Tyler Derenne	U-116-07002794	Bituminous
Owner		Material		Project	
City of De Pere		Corrugated Metal Pipe		21-15	
Additional Information					



H7-Q27JO0

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Upstream MH		Downstream MH			
H7-Q4CKHH		H7-QYBKPX			
Date	Time	Street			Page
5/13/2021	11:45 AM	Esmnt n/o Westwood			1
Sewer Use	Pipe Size	Pipe ID	Jt. Spacing	Shape	Survey Direction
Stormwater	36		20	Circular	Downstream
Pre-Cleaning	Weather	Media Label	Rim to Invert (U)	Rim to Invert (D)	Flow Direction
Jetting	Dry		9	3.8	NE
Date Cleaned	Surveyed Length	Total Length	Surveyor	Certificate No.	Surface
5/6/2021	110	110	Tyler Derenne	U-116-07002794	Turf
Owner		Material		Project	
City of De Pere		Corrugated Metal Pipe		21-15	
Additional Information					



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Upstream MH H7-QYBKPX			Downstream MH H7-R6IKSK		
Date 5/13/2021	Time 11:54 AM	Street Esmnt n/o Westwood		Page 1	
Sewer Use Stormwater	Pipe Size 36	Pipe ID	Jt. Spacing 20	Shape Circular	Survey Direction Downstream
Pre-Cleaning Jetting	Weather Dry	Media Label	Rim to Invert (U) 3.8	Rim to Invert (D) 4	Flow Direction NE
Date Cleaned 5/6/2021	Surveyed Length 30	Total Length 30	Surveyor Tyler Derenne	Certificate No. U-116-07002794	Surface Turf
Owner City of De Pere		Material Corrugated Metal Pipe		Project 21-15	
Additional Information					



H7-R6IKSK

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Upstream MH		Downstream MH			
H7-R6IKSK		H7-SAJM3E			
Date	Time	Street			Page
5/13/2021	7:54 AM	Esmnt w/o S 7th			1
Sewer Use	Pipe Size	Pipe ID	Jt. Spacing	Shape	Survey Direction
Stormwater	36		20	Circular	Upstream
Pre-Cleaning	Weather	Media Label	Rim to Invert (U)	Rim to Invert (D)	Flow Direction
Jetting	Dry		5.3	5.8	NE
Date Cleaned	Surveyed Length	Total Length	Surveyor	Certificate No.	Surface
5/6/2021	56	223	Tyler Derenne	U-116-07002794	Turf
Owner		Material		Project	
City of De Pere		Corrugated Metal Pipe		21-15	
Additional Information					

H7-R6IKSK	Ftg. Code	Description	Position	% Cont.	Comment
56.0	MSA	Survey Abandoned			
55.4	OBI	Obstacle - Object Protruding Thru Wall	4 to 8	30	Camera will not pass, Reverse T.V.



- 0.0 MWL Water Level
- 0.0 AMH Access Point - Manhole

H7-SAJM3E

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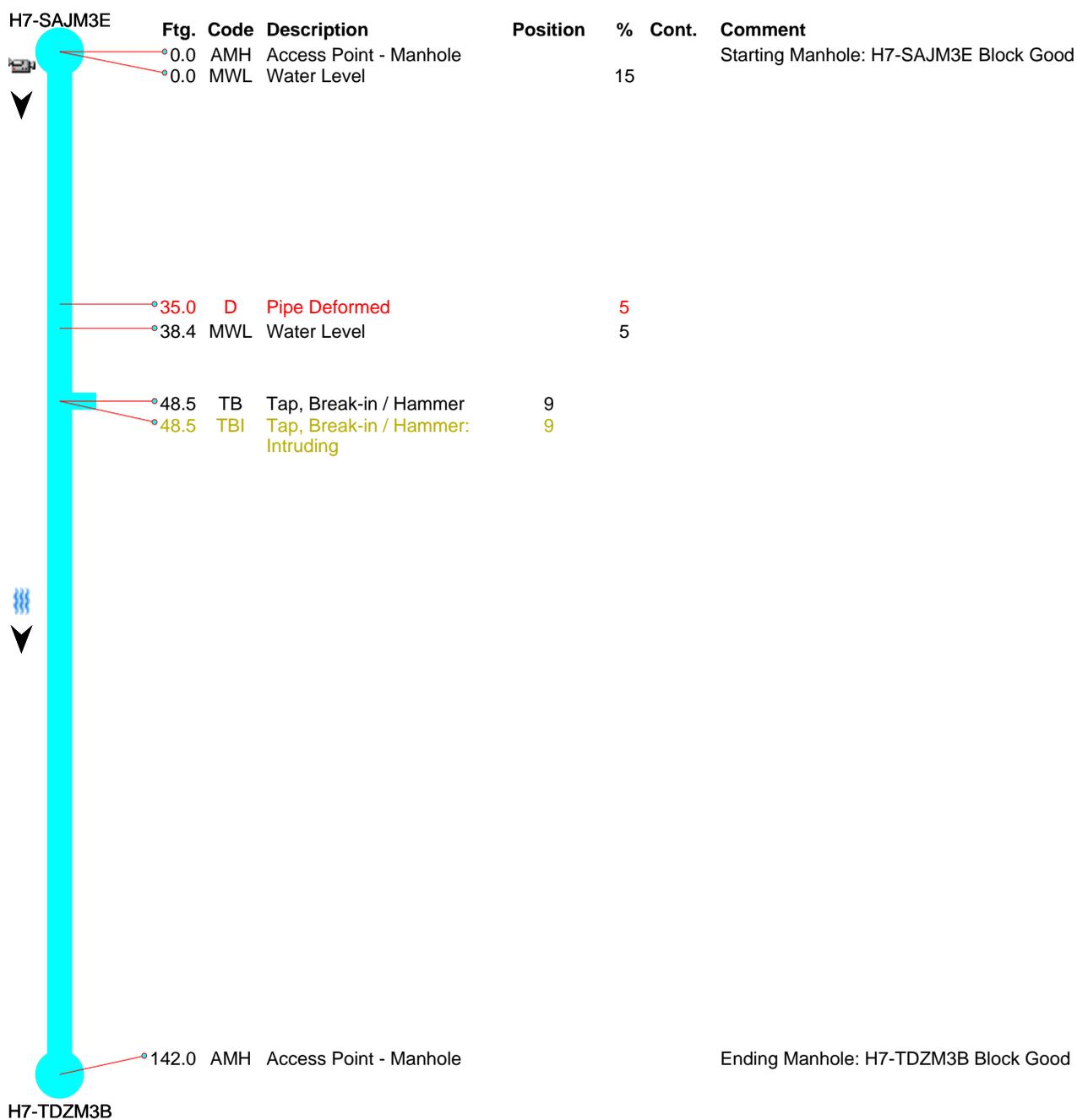
Upstream MH H7-R6IKSK		Downstream MH H7-SAJM3E	
Date 5/13/2021	Time 12:01 PM	Street Esmnt w/o S 7th	Page 1
Sewer Use Stormwater	Pipe Size 36	Pipe ID	Jt. Spacing 20
Pre-Cleaning Jetting	Weather Dry	Media Label	Shape Circular
Date Cleaned 5/6/2021	Surveyed Length 167	Total Length 223	Survey Direction Downstream
		Surveyor Tyler Derenne	Flow Direction NE
		Certificate No. U-116-07002794	Surface Turf
Owner City of De Pere	Material Corrugated Metal Pipe	Project 21-15	
Additional Information Reverse			

H7-R6IKSK	Ftg.	Code	Description	Position	%	Cont.	Comment
	0.0	AMH	Access Point - Manhole				Starting Manhole: H7-R6IKSK Block Good
	0.0	MWL	Water Level		5		
	3.7	TB	Tap, Break-in / Hammer	3			
	142.1	TB	Tap, Break-in / Hammer	12			
	142.1	TBI	Tap, Break-in / Hammer: Intruding	12			
	143.2	TB	Tap, Break-in / Hammer	12			
	143.2	TBI	Tap, Break-in / Hammer: Intruding	12			
	150.5	RPP	Point Repair - Patch Repair	7 to 9			Patch
	159.8	D	Pipe Deformed		5		
	161.5	HSV	Hole in Pipe: Soil Visible	12			
	167.0	MSA	Survey Abandoned				Point of Reversal, End T.V.

H7-SAJM3E

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Upstream MH		Downstream MH			
H7-SAJM3E		H7-TDZM3B			
Date	Time	Street			Page
5/13/2021	8:25 AM	Esmnt w/o S 7th			1
Sewer Use	Pipe Size	Pipe ID	Jt. Spacing	Shape	Survey Direction
Stormwater	36		20	Circular	Downstream
Pre-Cleaning	Weather	Media Label	Rim to Invert (U)	Rim to Invert (D)	Flow Direction
Jetting	Dry		5.8	5.8	E
Date Cleaned	Surveyed Length	Total Length	Surveyor	Certificate No.	Surface
5/6/2021	142	142	Tyler Derenne	U-116-07002794	Turf
Owner		Material		Project	
City of De Pere		Corrugated Metal Pipe		21-15	
Additional Information					



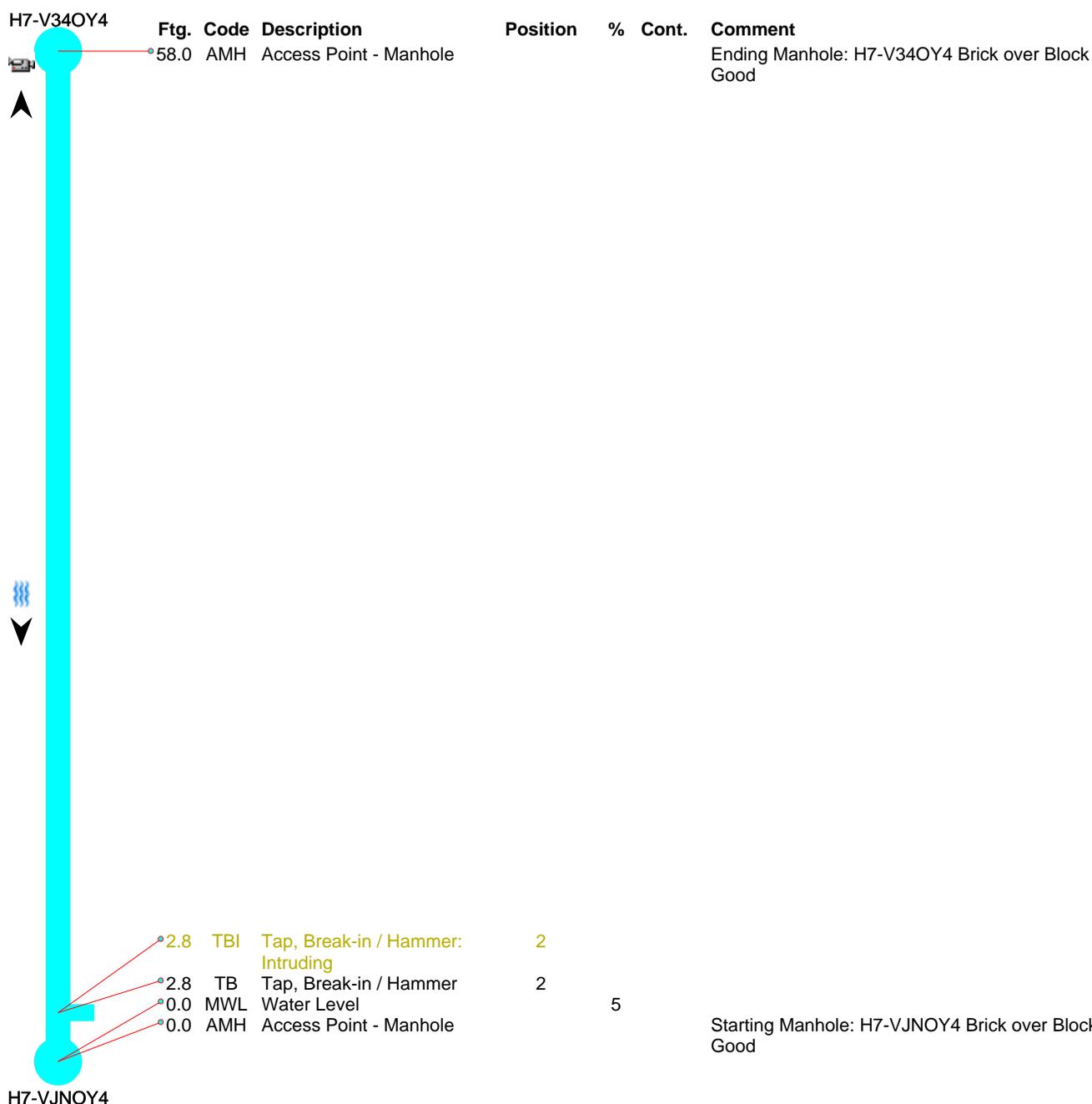
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Upstream MH		Downstream MH			
H7-TDZM3B		H7-V34OY4			
Date	Time	Street			Page
5/13/2021	9:37 AM	Esmnt w/o S 7th			1
Sewer Use	Pipe Size	Pipe ID	Jt. Spacing	Shape	Survey Direction
Stormwater	36		20	Circular	Upstream
Pre-Cleaning	Weather	Media Label	Rim to Invert (U)	Rim to Invert (D)	Flow Direction
Jetting	Dry		5.8	4.3	NE
Date Cleaned	Surveyed Length	Total Length	Surveyor	Certificate No.	Surface
5/6/2021	433	433	Tyler Derenne	U-116-07002794	Turf
Owner		Material		Project	
City of De Pere		Corrugated Metal Pipe		21-15	
Additional Information					

H7-TDZM3B	Ftg. Code	Description	Position	% Cont.	Comment
	433.0	AMH Access Point - Manhole			Ending Manhole: H7-TDZM3B Precast over Block Good
	429.4	TBI Tap, Break-in / Hammer: Intruding	10		
	429.4	TBA Tap, Break-in / Hammer: Active	10		
	410.5	TBI Tap, Break-in / Hammer: Intruding	2		
	410.5	TB Tap, Break-in / Hammer	2		
	330.1	TBI Tap, Break-in / Hammer: Intruding	10		
	330.1	TBA Tap, Break-in / Hammer: Active	10		
	264.0	RPP Point Repair - Patch Repair	11 to 12		Patch
	243.8	TB Tap, Break-in / Hammer	3		
	227.6	TB Tap, Break-in / Hammer	10		
	201.0	D Pipe Deformed		5	
	155.7	HVV Hole in Pipe: Void Visible	8 to 10		
	150.6	TBI Tap, Break-in / Hammer: Intruding	10		
	150.6	TB Tap, Break-in / Hammer	10		
	0.0	MWL Water Level		5	
	0.0	AMH Access Point - Manhole			Starting Manhole: H7-V34OY4 Brick over Block Good
H7-V34OY4					

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Upstream MH		Downstream MH			
H7-V34OY4		H7-VJNOY4			
Date	Time	Street			Page
5/13/2021	9:22 AM	Esmnt w/o S 7th			1
Sewer Use	Pipe Size	Pipe ID	Jt. Spacing	Shape	Survey Direction
Stormwater	36		20	Circular	Upstream
Pre-Cleaning	Weather	Media Label	Rim to Invert (U)	Rim to Invert (D)	Flow Direction
Jetting	Dry		4.3	3.5	E
Date Cleaned	Surveyed Length	Total Length	Surveyor	Certificate No.	Surface
5/6/2021	58	58	Tyler Derenne	U-116-07002794	Concrete
Owner		Material		Project	
City of De Pere		Corrugated Metal Pipe		21-15	
Additional Information					

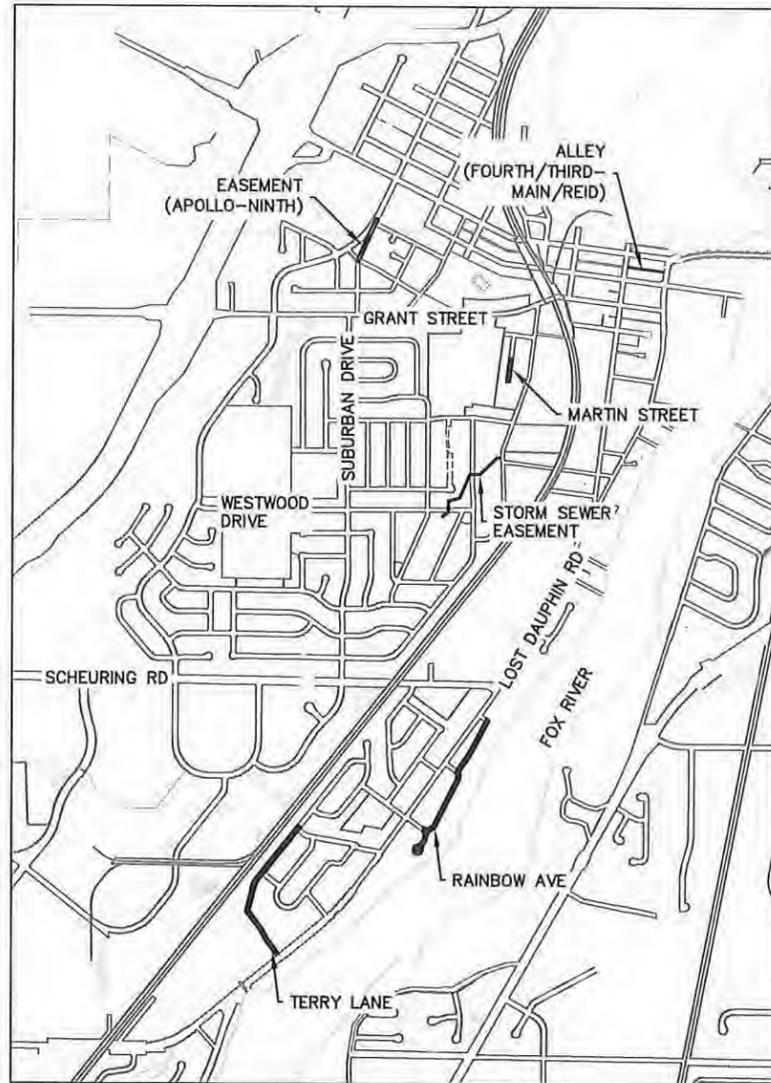


PROJECT# 22-03 SEWER LINING

CITY OF DE PERE



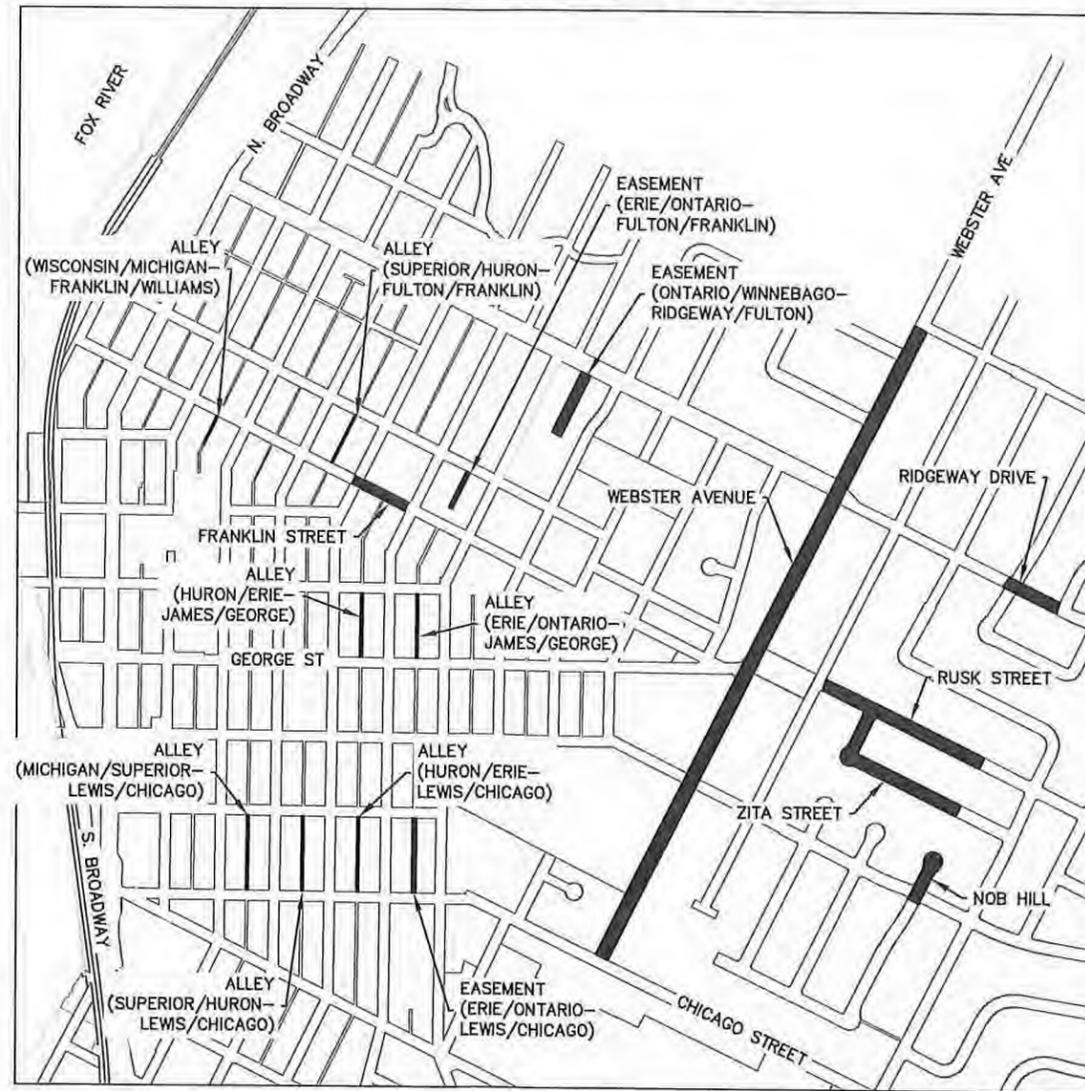
ENGINEER DIVISION
925 S. SIXTH ST
DE PERE, WI 54115



WEST SIDE LOCATION MAP

SITE LOCATION MAP

N.T.S.



EAST SIDE LOCATION MAP

SHEET NO.	DESCRIPTION
G001	TITLE SHEET
G002	STANDARD ABBREVIATION & SYMBOLS
C101	EASEMENT (ONTARIO/WINNEBAGO-RIDGEWAY/FULTON) PLAN AND PROFILE SHEET
C102	EASEMENT (ERIE/ONTARIO-FULTON/FRANKLIN) PLAN AND PROFILE SHEET
C103	ALLEY (SUPERIOR/HURON-FULTON/FRANKLIN) PLAN AND PROFILE SHEET
C104	ALLEY (WISCONSIN/MICHIGAN-FRANKLIN/WILLIAM) PLAN AND PROFILE SHEET
C105	ALLEY (ERIE/ONTARIO-JAMES/GEORGE) PLAN AND PROFILE SHEET
C106	ALLEY (HURON/ERIE-JAMES/GEORGE) PLAN AND PROFILE SHEET
C107	EASEMENT (ERIE/ONTARIO-LEWIS/CHICAGO) PLAN AND PROFILE SHEET
C108	ALLEY (HURON/ERIE-LEWIS/CHICAGO) PLAN AND PROFILE SHEET
C109	ALLEY (SUPERIOR/HURON-LEWIS/CHICAGO) PLAN AND PROFILE SHEET
C110	ALLEY (MICHIGAN/SUPERIOR-LEWIS/CHICAGO) PLAN AND PROFILE SHEET
C111	ALLEY (FOURTH/THIRD-MAIN/REID) PLAN AND PROFILE SHEET
C112	EASEMENT (APOLLO-NINTH) PLAN AND PROFILE SHEET
C113	MARTIN STREET PLAN AND PROFILE SHEETS
C114 - C118	RAINBOW AVENUE PLAN AND PROFILE SHEETS
C119 - C123	TERRY LANE PLAN AND PROFILE SHEETS
C124 - C130	WEBSTER AVENUE PLAN AND PROFILE SHEETS
C131 - C133	ZITA STREET PLAN AND PROFILE SHEETS
C134 - C136	RUSK STREET PLAN AND PROFILE SHEETS
C137	RIDGEWAY DRIVE PLAN AND PROFILE SHEET
C138	NOB HILL PLAN AND PROFILE SHEET
C139	FRANKLIN STREET PLAN AND PROFILE SHEETS
C140 - C141	STORM SEWER EASEMENT PLAN AND PROFILE SHEET
C401 - C405	TRAFFIC CONTROL PLANS

CITY OF DE PERE
BOARD OF PUBLIC WORKS

1/26/2022 *Eric P. Rakera*
DATE CITY-ENGINEER
1/27/2022 *Ann M. Poles*
DATE CITY ADMINISTRATOR
1/26/2022 *J. B. [Signature]*
DATE MAYOR

STAMPS:



1/26/2022

LIST OF STANDARD ABBREVIATIONS

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

DESCRIPTION	SYMBOL	
	EXISTING	PROPOSED
BENCHMARK		
BUSH		
CATCH BASIN		
CABLE TV BOX		
CONTROL POINT		
ELECTRICAL BOX		
EROSION CONTROL - INELT		
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		
STUMP		
TELEPHONE MANHOLE		
TELEPHONE PEDESTAL		
TREE		
WELL		
WATER SERVICE VALVE		
BUTTERFLY WATER VALVE		
WATER VALVE		

MAPPING & TOPOGRAPHY SYMBOLOGY

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

GENERAL CONSTRUCTION NOTES:

1. ALL ELEVATIONS ARE REFERENCED TO NAVD 88.
2. 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.
3. 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.
4. 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.

PROFILE

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

PATCH SYMBOLS

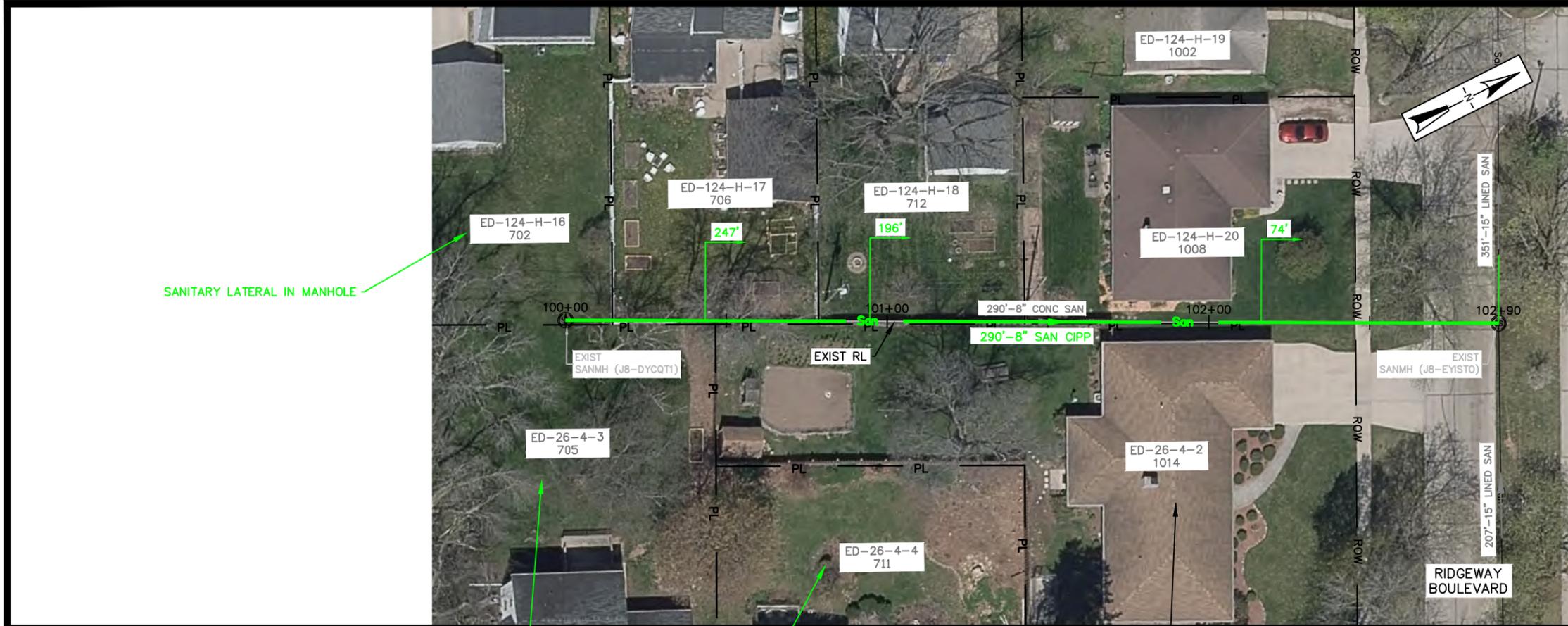
ASPHALTIC CONCRETE PAVEMENT		CRUSHED AGGREGATE BASE COURSE	
PORTLAND CEMENT CONCRETE			

CITY OF DE PERE

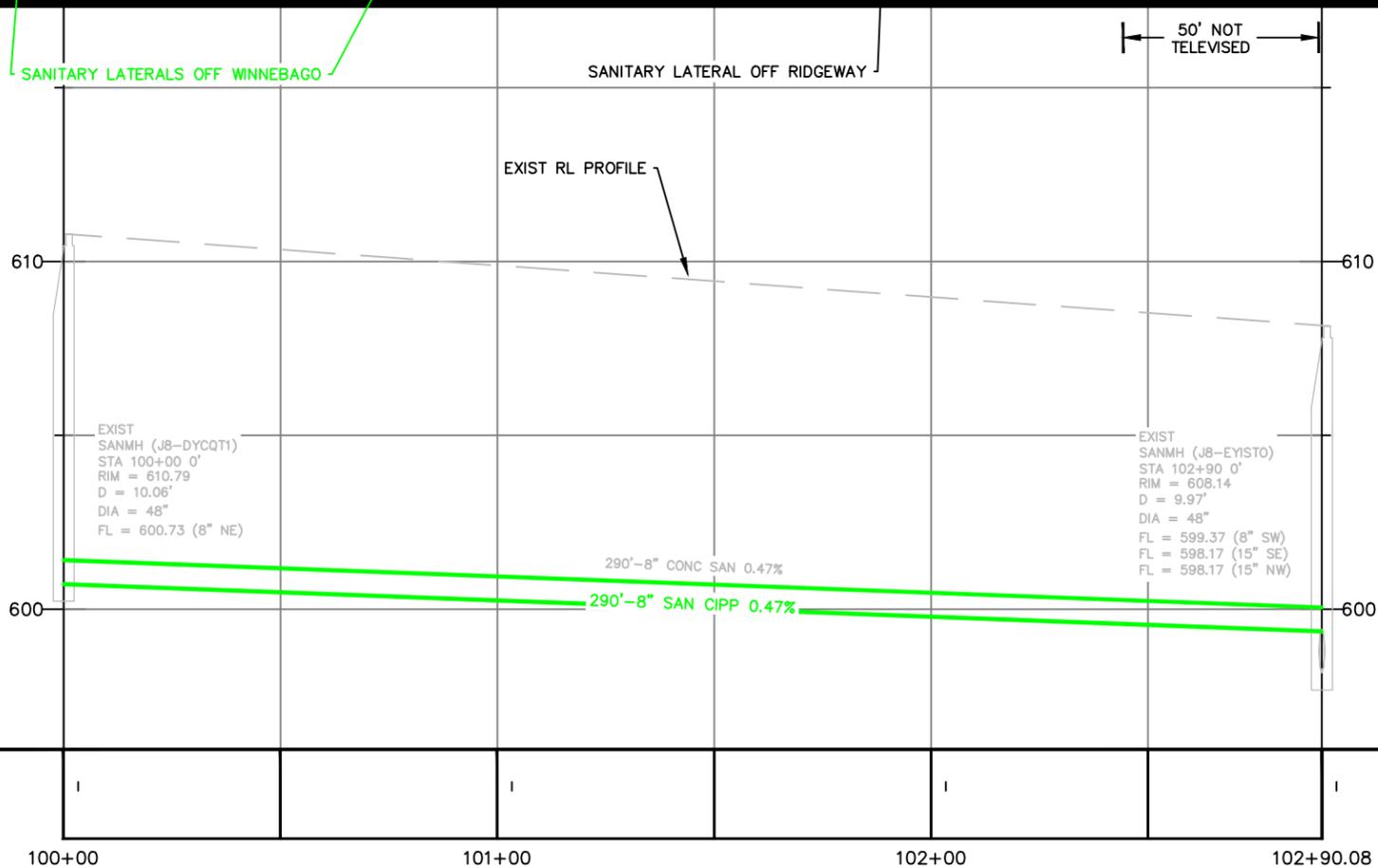
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115
OFFICE 920-339-4060 FAX 920-339-4071

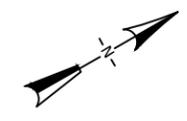
STANDARD ABBREVIATIONS AND SYMBOLS

NAME:	BY	DATE	REVISIONS / ISSUES				PAGE NO.
			NO.	DATE	BY	REMARKS	
SEWER LINING	SRL	01-2022					G002
PROJECT #							
22-03							

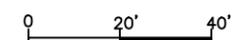
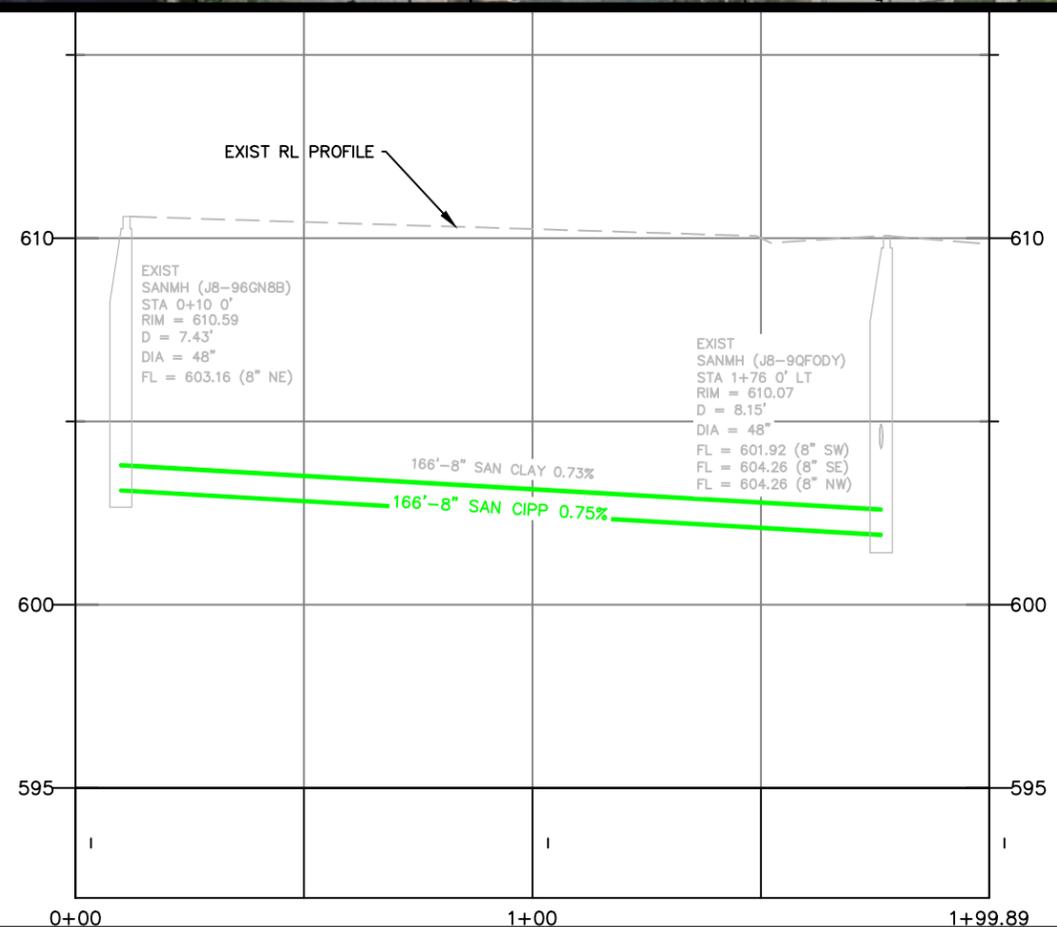


NOTE:
1. RECONNECT ALL ACTIVE LATERALS.

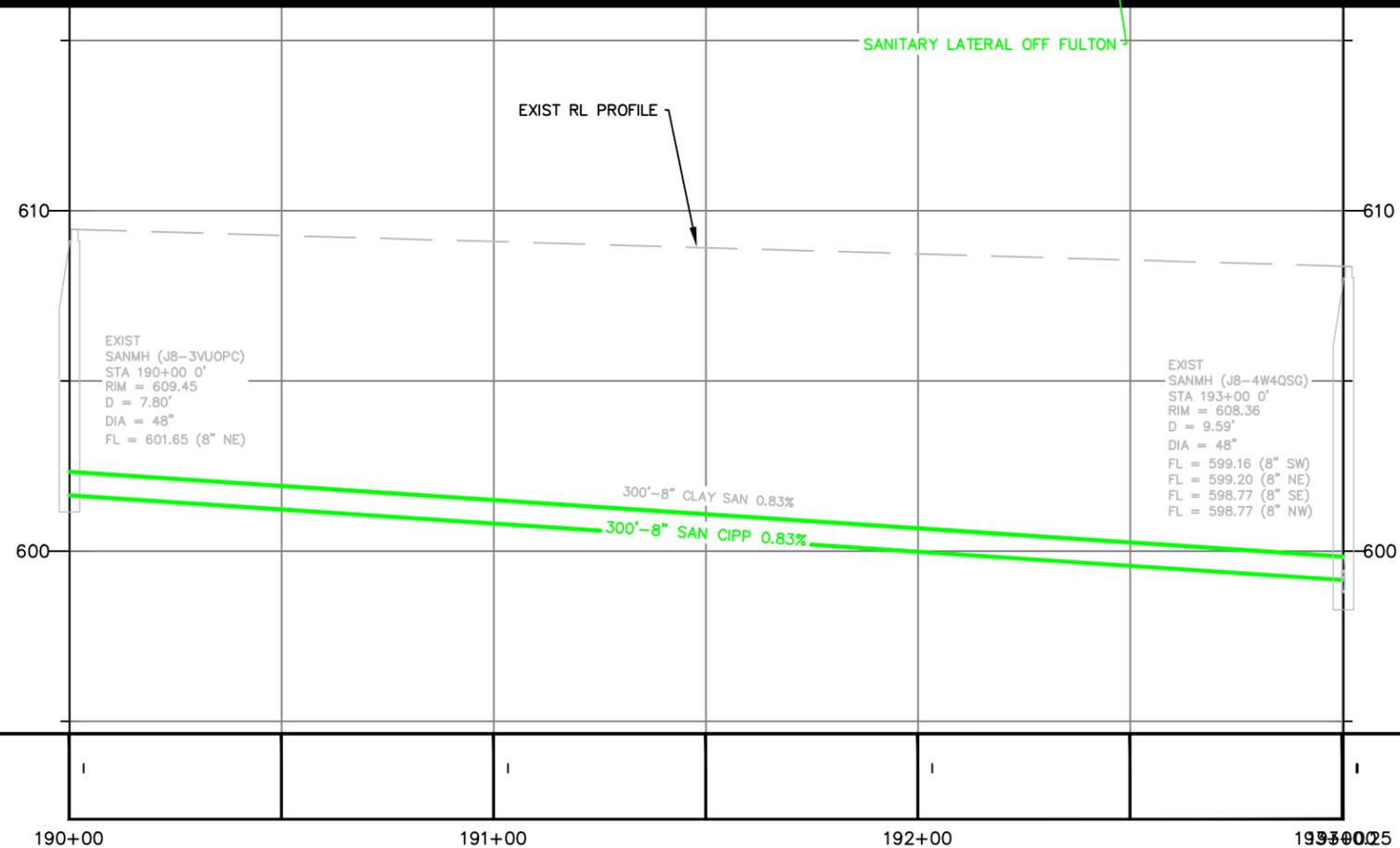
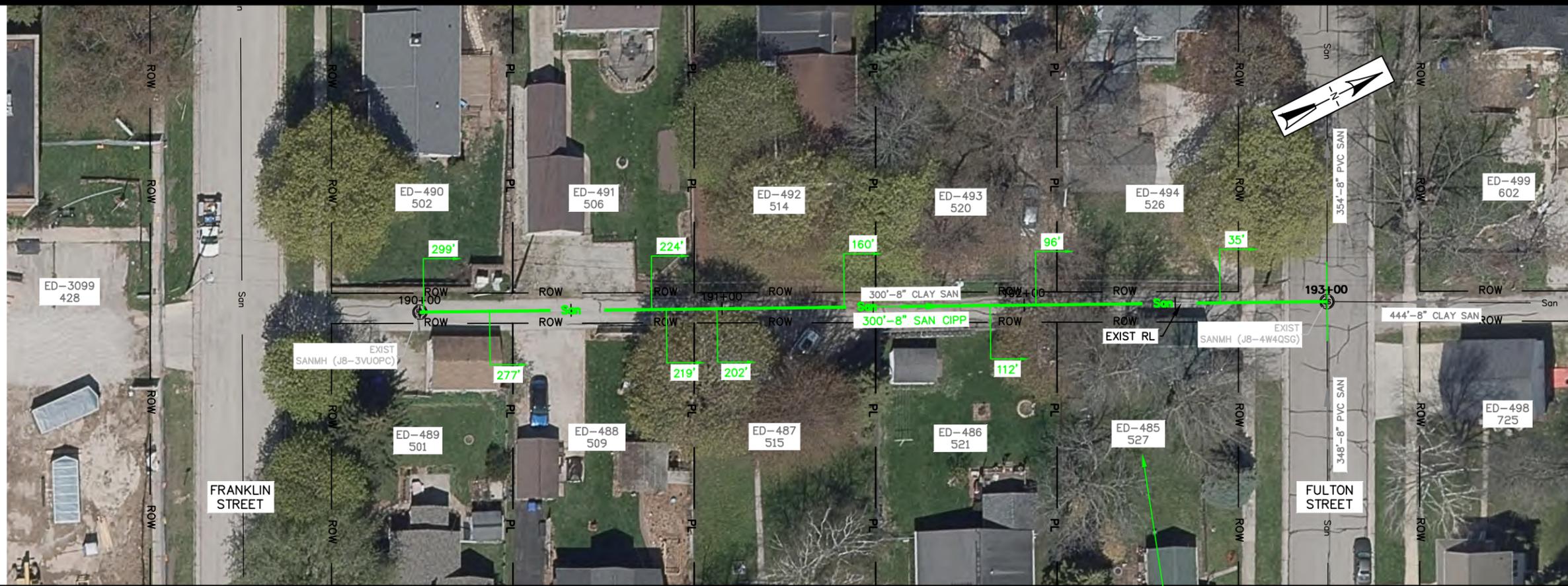




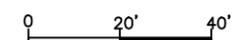
- NOTES:
1. RECONNECT ALL ACTIVE LATERALS.
 2. TELEWISE SANITARY LATERALS AS MARKED ON THE PLANS PRIOR TO LINING SANITARY MAIN.



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NOTE:
1. RECONNECT ALL ACTIVE LATERALS.



CITY OF DE PERE

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

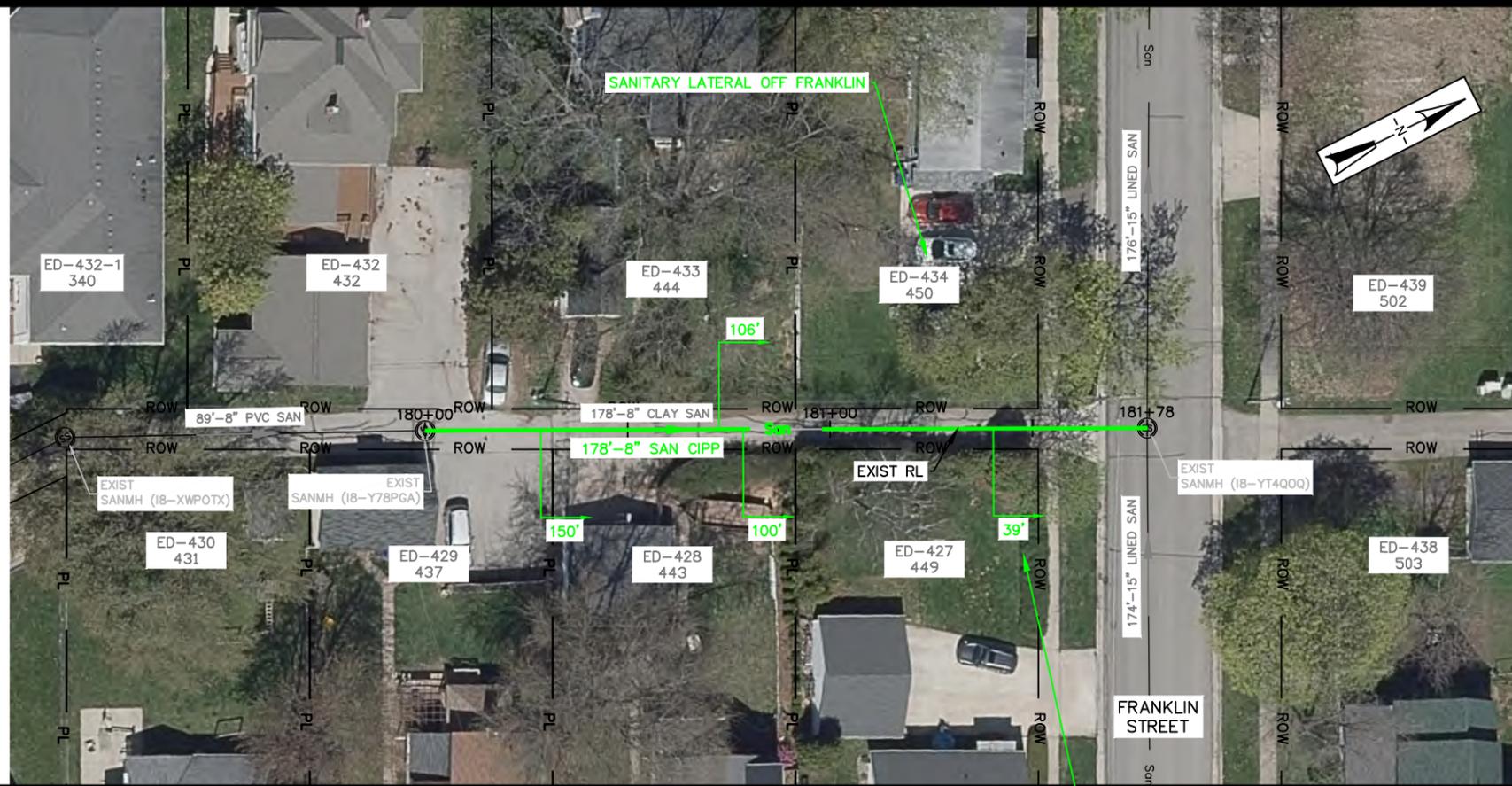
**ALLEY
(SUPERIOR/HURON-FULTON/FRANKLIN)
300' SW/O FULTON TO FULTON**

NAME: SEWER LINING
PROJECT # 22-03

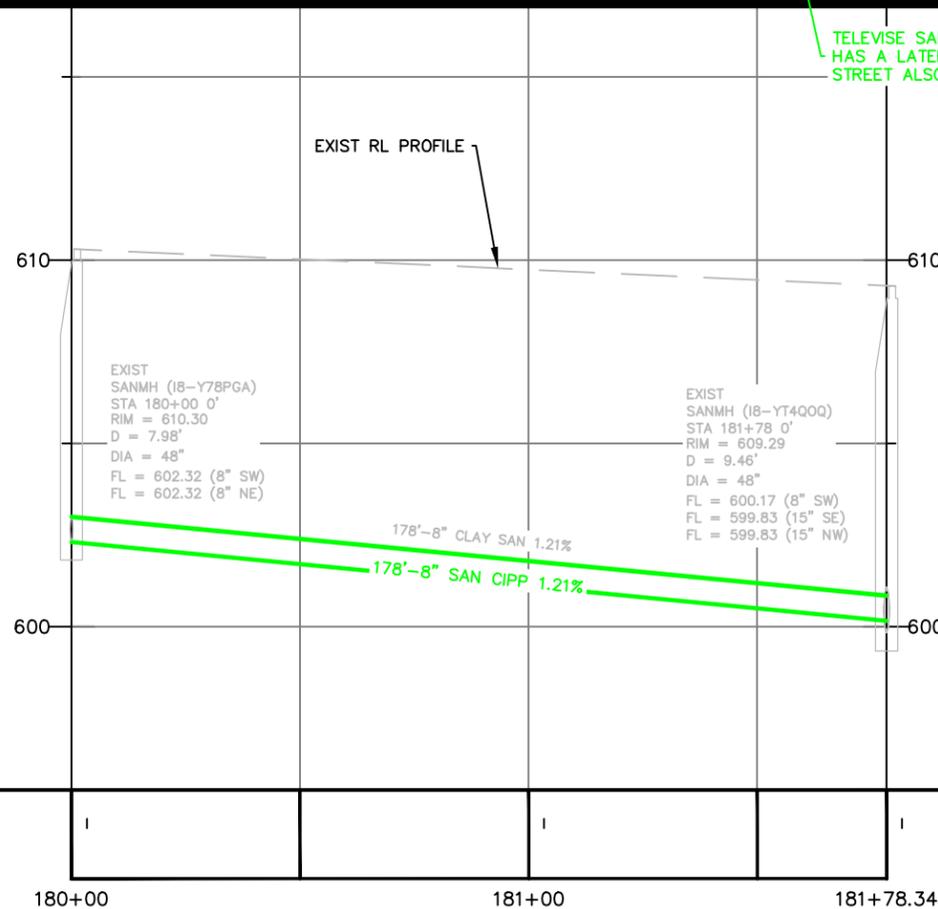
	BY	DATE
SURVEYED	MJT	01-2022
DRAWN	MJT	01-2022
DESIGNED	MJT	01-2022
CHECKED	EPR	01-2022

REVISIONS / ISSUES		
NO.	DATE	REMARKS

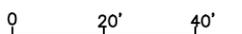
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C103



NOTE:
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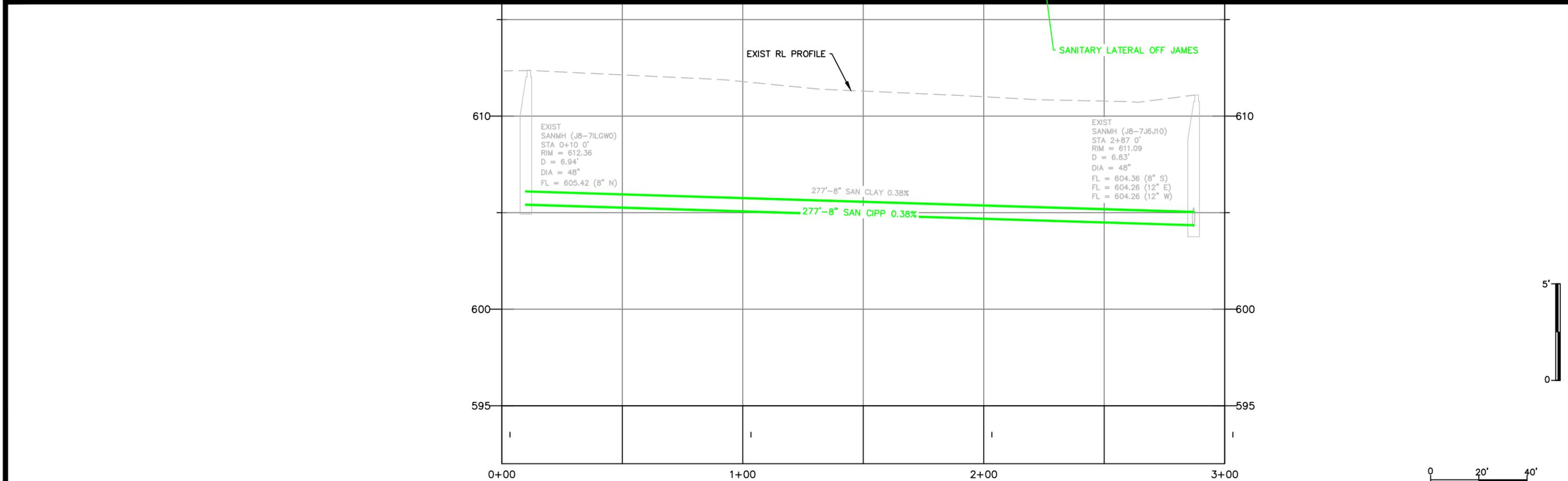


TELEVIEW SANITARY LATERAL.
HAS A LATERAL OFF FRANKLIN
STREET ALSO.



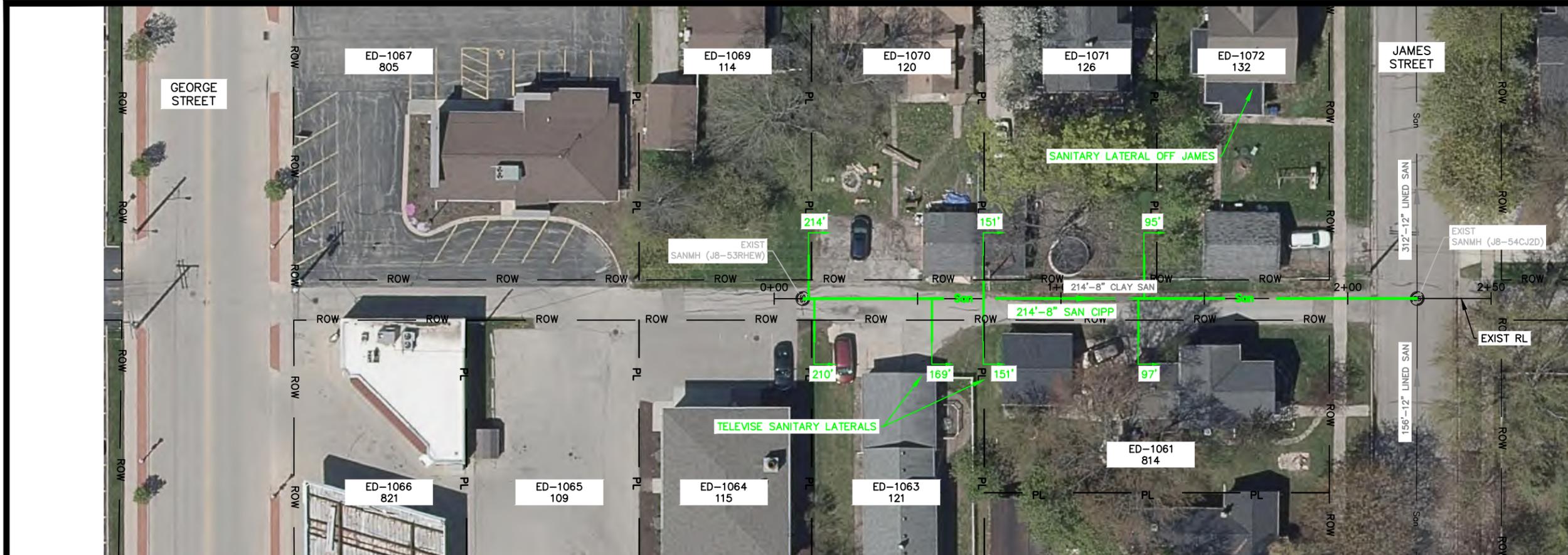


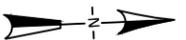
- NOTES:
1. RECONNECT ALL ACTIVE LATERALS.
 2. TELEVISION SANITARY LATERALS AS MARKED ON THE PLANS PRIOR TO LINING SANITARY MAIN.

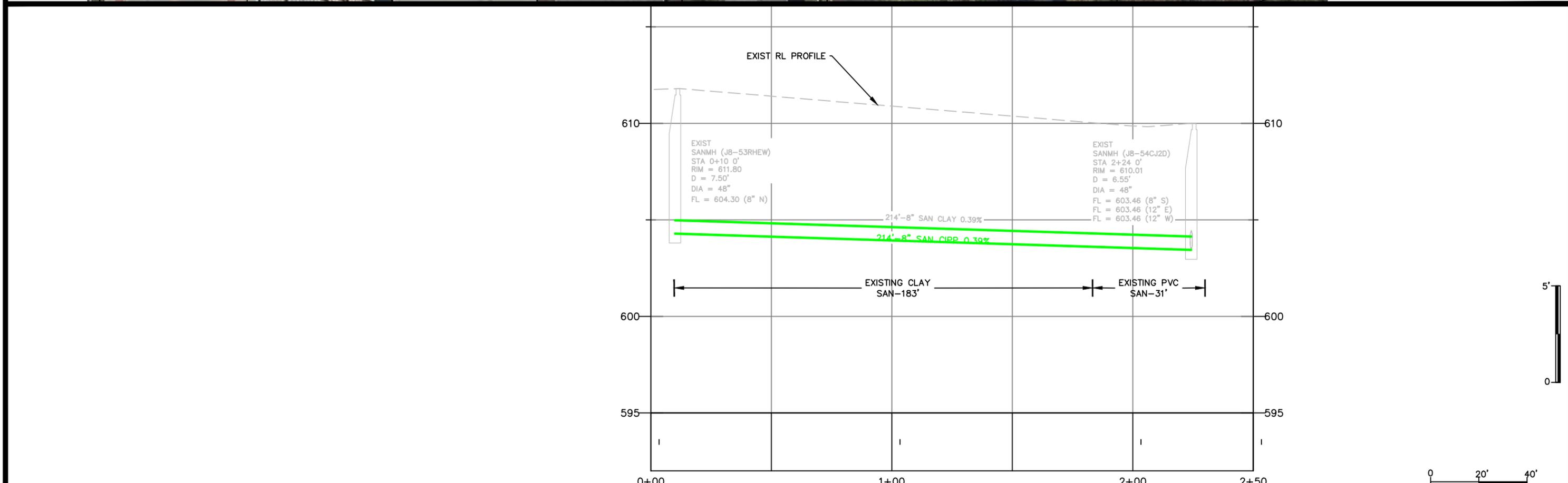


CITY OF DE PERE ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071	ALLEY (ERIE/ONTARIO-JAMES/GEORGE) 300' S/O JAMES ST TO JAMES ST	NAME: SEWER LINING	BY: SRL	DATE: 12-2021	REVISIONS / ISSUES		PAGE NO. C105
		PROJECT # 22-03	SURVEYED: SRL	DATE: 01-2022	NO.	DATE	
		DESIGNED: SRL	DATE: 01-2022				
		CHECKED: EPR	DATE: 01-2022				

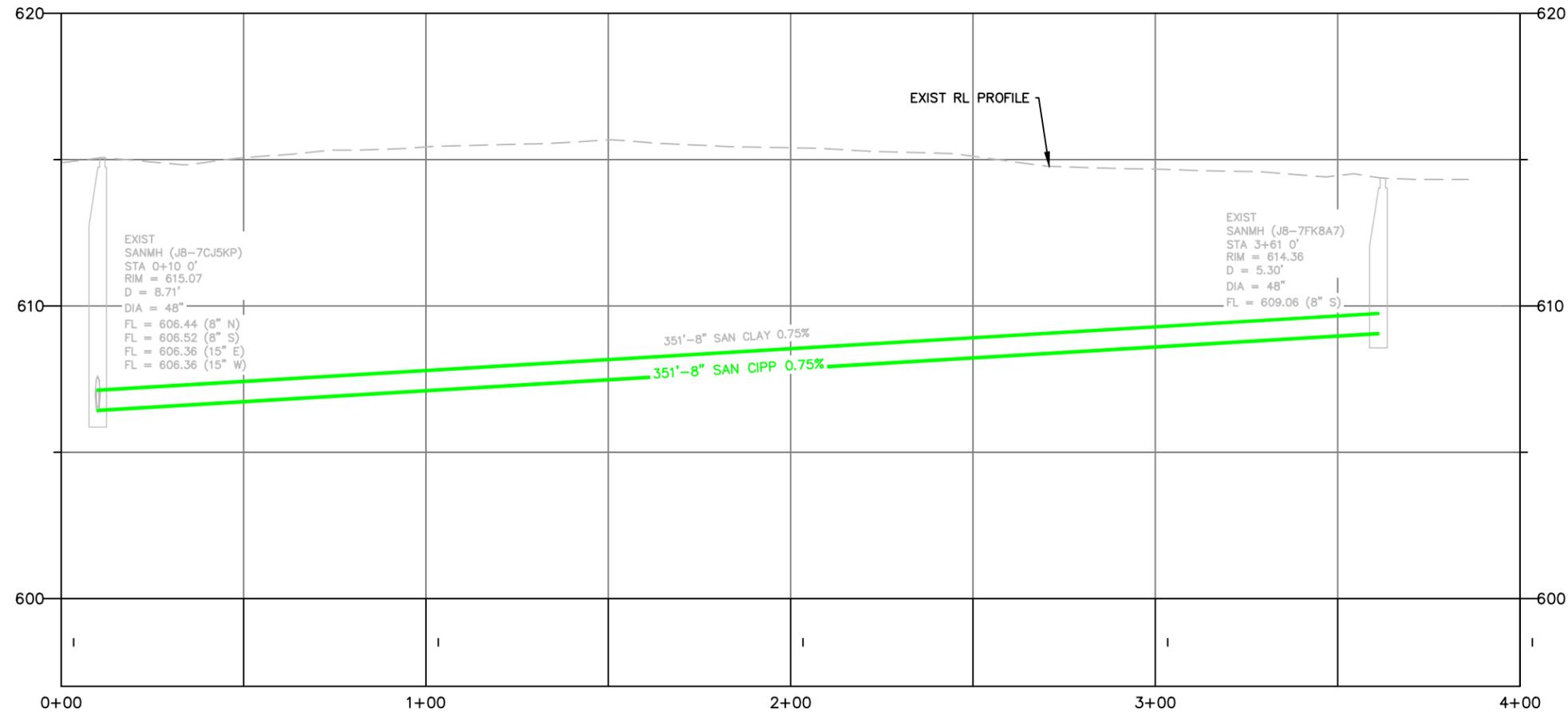
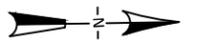
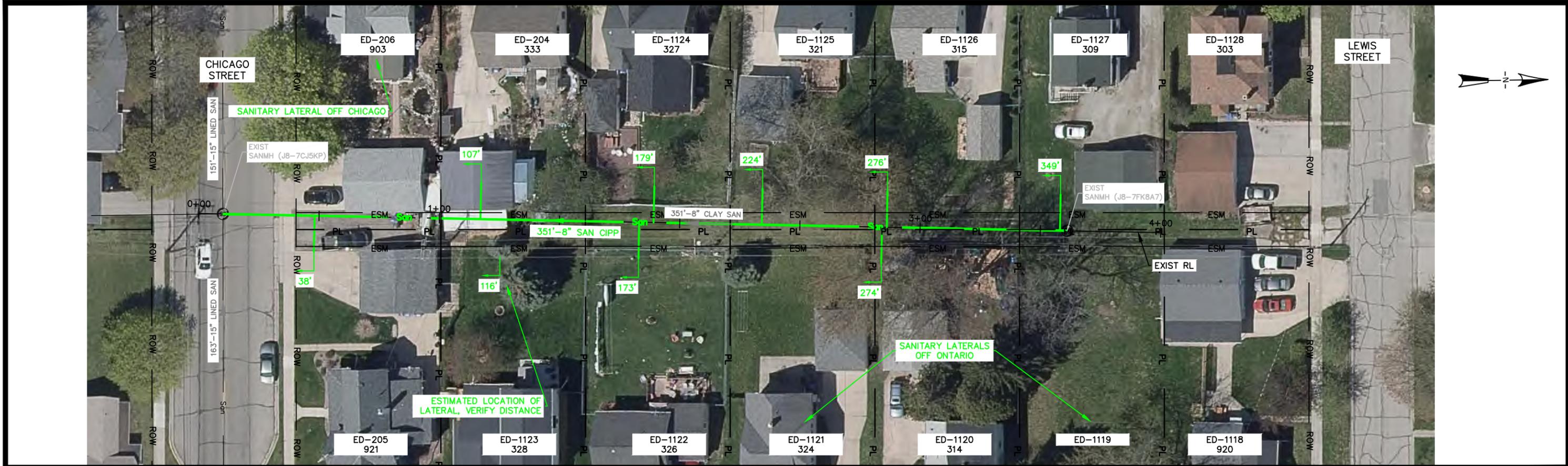
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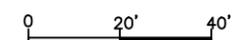

 NOTES:
 1. RECONNECT ALL ACTIVE LATERALS.
 2. TELEVISION SANITARY LATERALS AS MARKED ON THE PLANS PRIOR TO LINING SANITARY MAIN.



	CITY OF DE PERE	ALLEY (HURON/ERIE-JAMES/GEORGE) 200' S OF JAMES ST TO JAMES ST	NAME: SEWER LINING	BY: SRL	DATE: 12-2021	REVISIONS / ISSUES		PAGE NO. C106
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071		PROJECT # 22-03	DESIGNED: SRL	DATE: 01-2022	NO.	DATE	
			CHECKED: EPR	DATE: 01-2022				

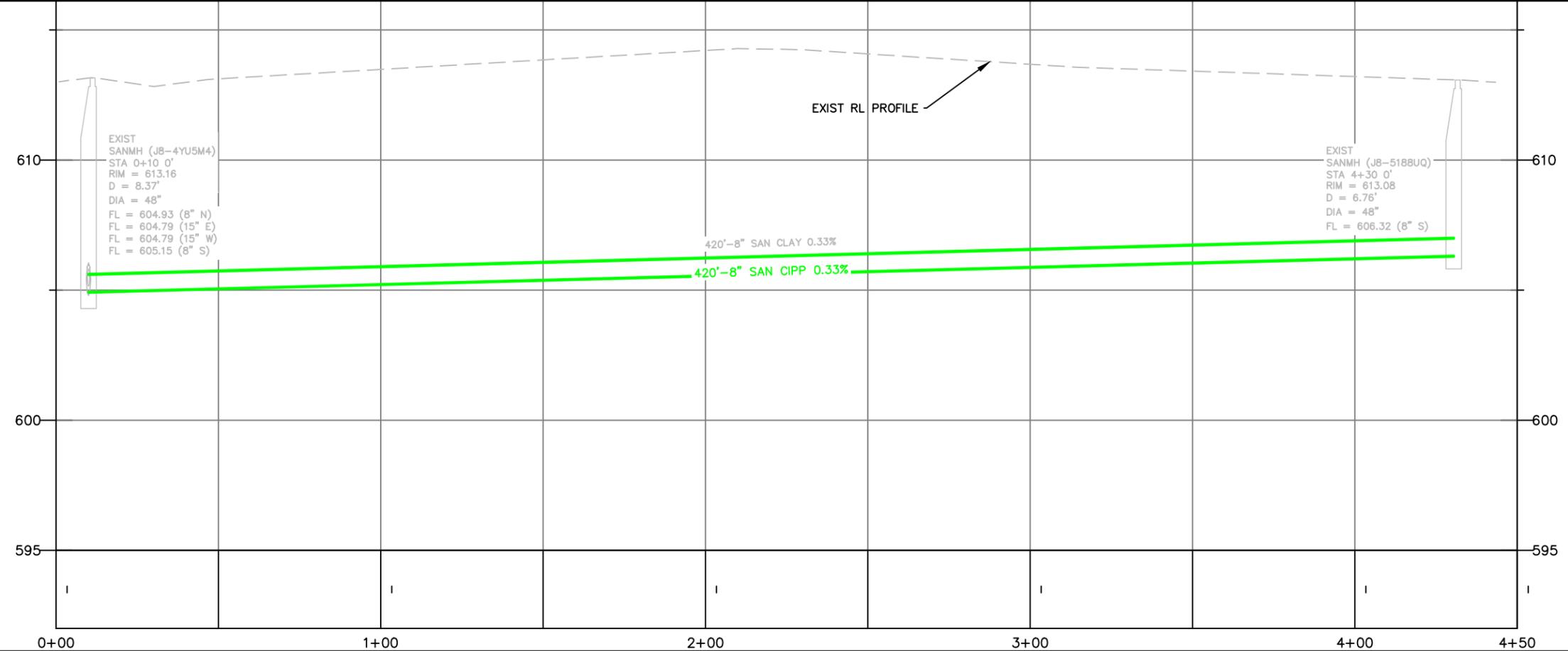
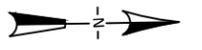
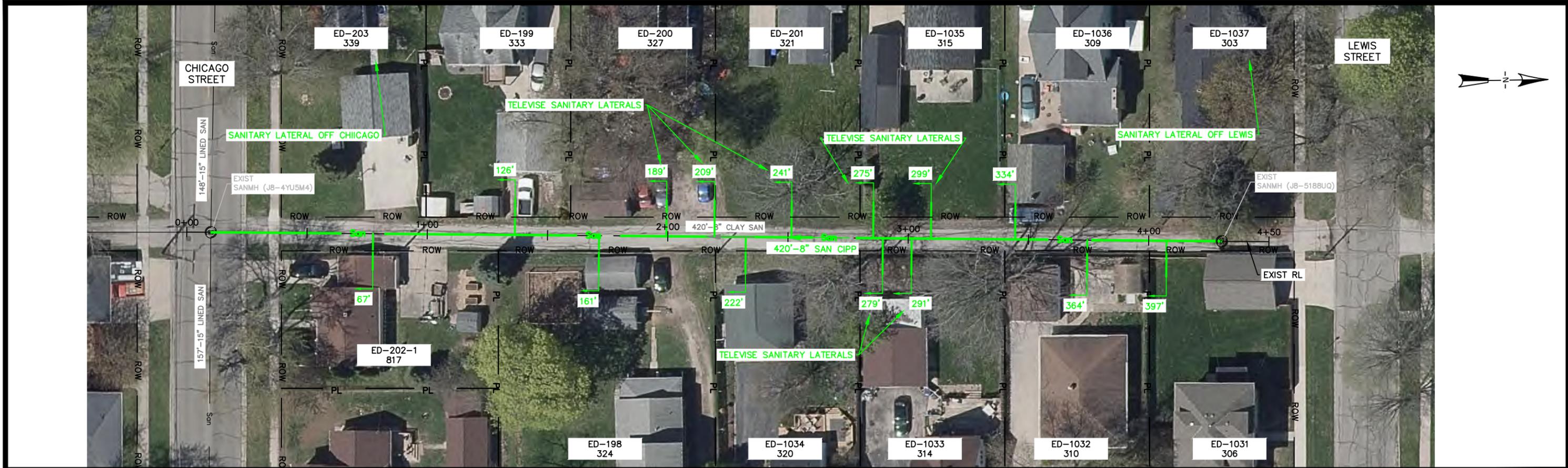


NOTE:
1. RECONNECT ALL ACTIVE LATERALS.

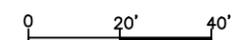


	CITY OF DE PERE	EASEMENT (ERIE/ONTARIO-LEWIS/CHICAGO) CHICAGO ST TO 350' N/O CHICAGO ST	NAME: SEWER LINING	BY SRL	DATE 12-2021	REVISIONS / ISSUES		PAGE NO. C107
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071		PROJECT # 22-03	DESIGNED SRL	DATE 01-2022	NO.	DATE	
			CHECKED EPR	DATE 01-2022				

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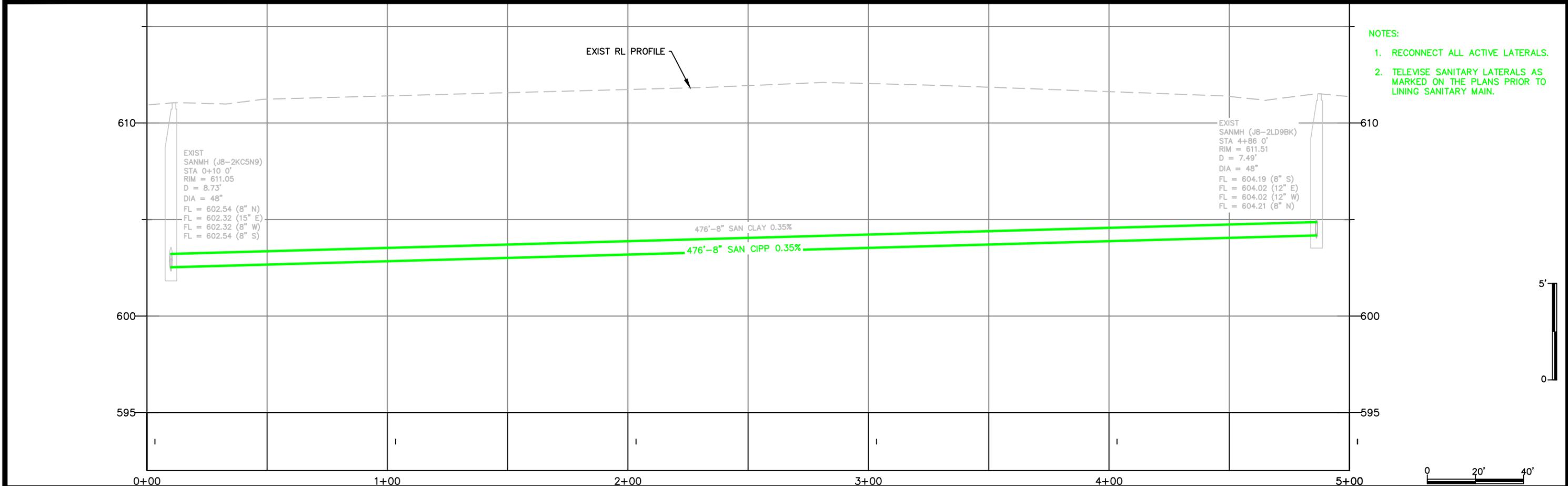
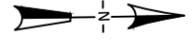
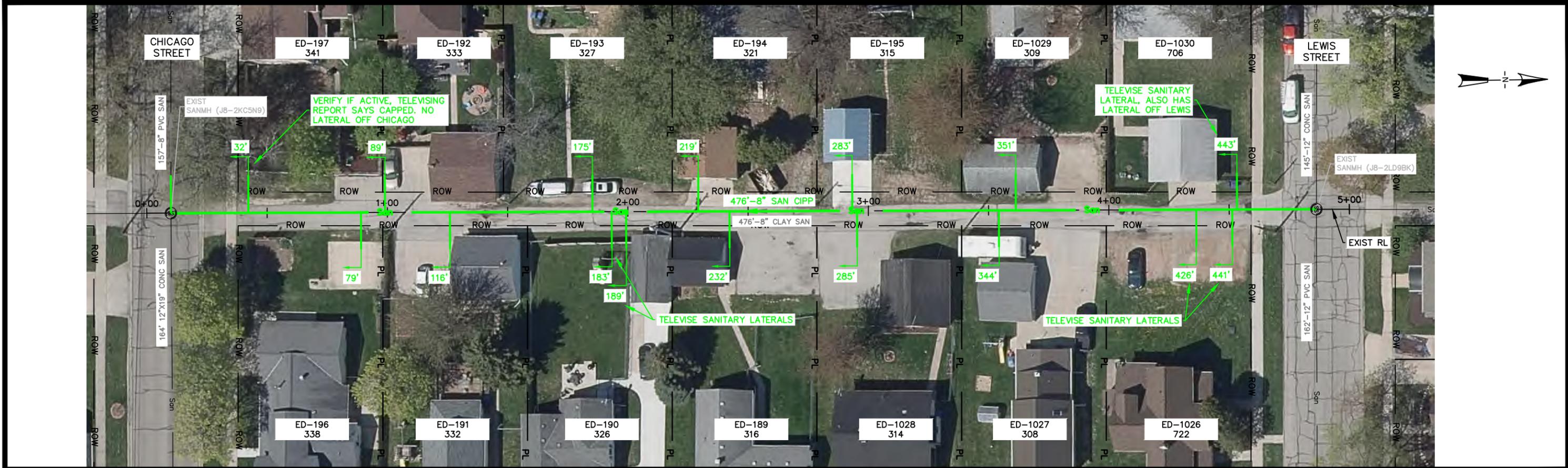


- NOTES:**
1. RECONNECT ALL ACTIVE LATERALS.
 2. TELEWISE SANITARY LATERALS AS MARKED ON THE PLANS PRIOR TO LINING SANITARY MAIN.



	CITY OF DE PERE	ALLEY (HURON/ERIE-LEWIS/CHICAGO) CHICAGO ST TO LEWIS ST	NAME: SEWER LINING	BY SRL	DATE 12-2021	REVISIONS / ISSUES		PAGE NO. C108
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071		PROJECT # 22-03	NO.	DATE	BY	REMARKS	
			DESIGNED SRL		01-2022			
			CHECKED EPR		01-2022			

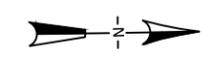
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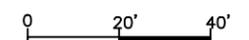
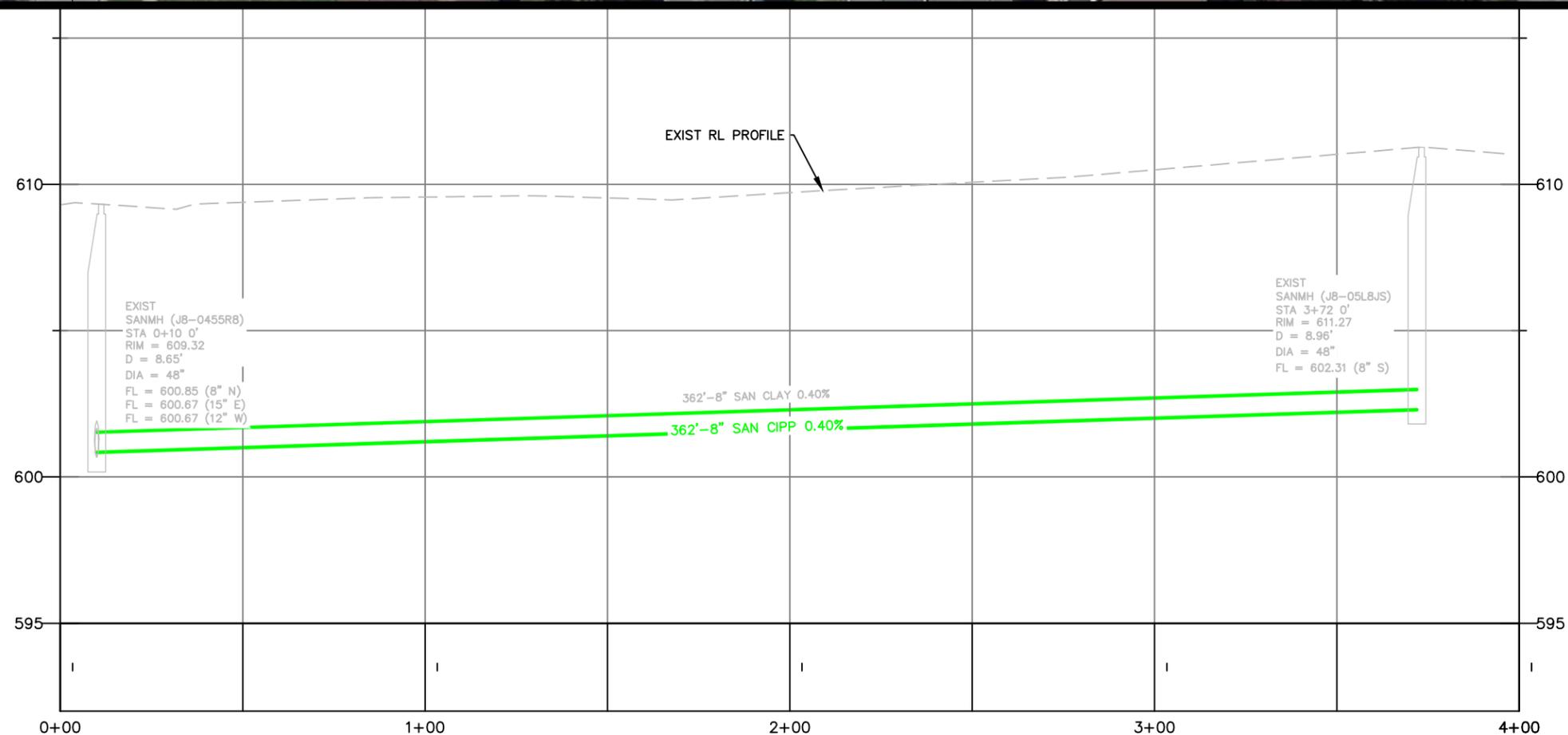
- NOTES:**
1. RECONNECT ALL ACTIVE LATERALS.
 2. TELEWISE SANITARY LATERALS AS MARKED ON THE PLANS PRIOR TO LINING SANITARY MAIN.

	CITY OF DE PERE	ALLEY	NAME:			REVISIONS / ISSUES		PAGE NO.		
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071	(SUPERIOR/HURON-LEWIS/CHICAGO) CHICAGO ST TO LEWIS ST	PROJECT # 22-03	SEWER LINING	BY: SRL	DATE: 12-2021	NO.		DATE	BY
			CHECKED: EPR	DESIGNED: SRL	DATE: 01-2022					
				DRAWN: SRL	DATE: 01-2022					
				SURVEYED: SRL	DATE: 12-2021					

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NOTE:
1. RECONNECT ALL ACTIVE LATERALS.



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

ALLEY
(MICHIGAN/SUPERIOR-LEWIS/CHICAGO)
CHICAGO ST TO 350' N/O CHICAGO ST

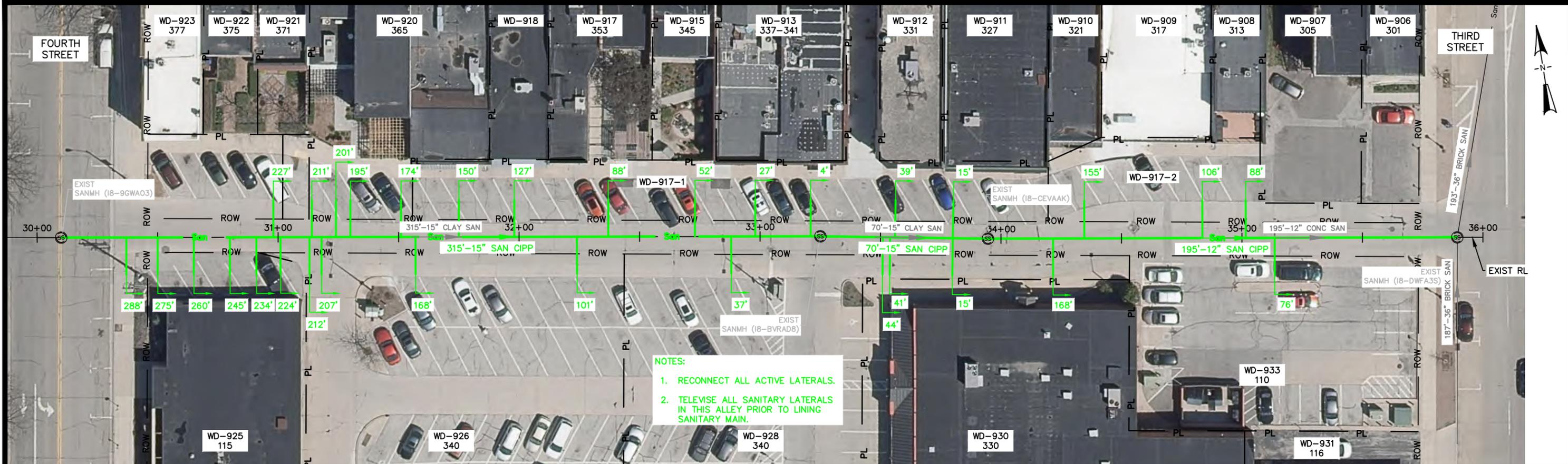
NAME: SEWER LINING
PROJECT # 22-03

BY	DATE
SURVEYED SRL	12-2021
DRAWN SRL	01-2022
DESIGNED SRL	01-2022
CHECKED EPR	01-2022

REVISIONS / ISSUES	
NO.	DATE

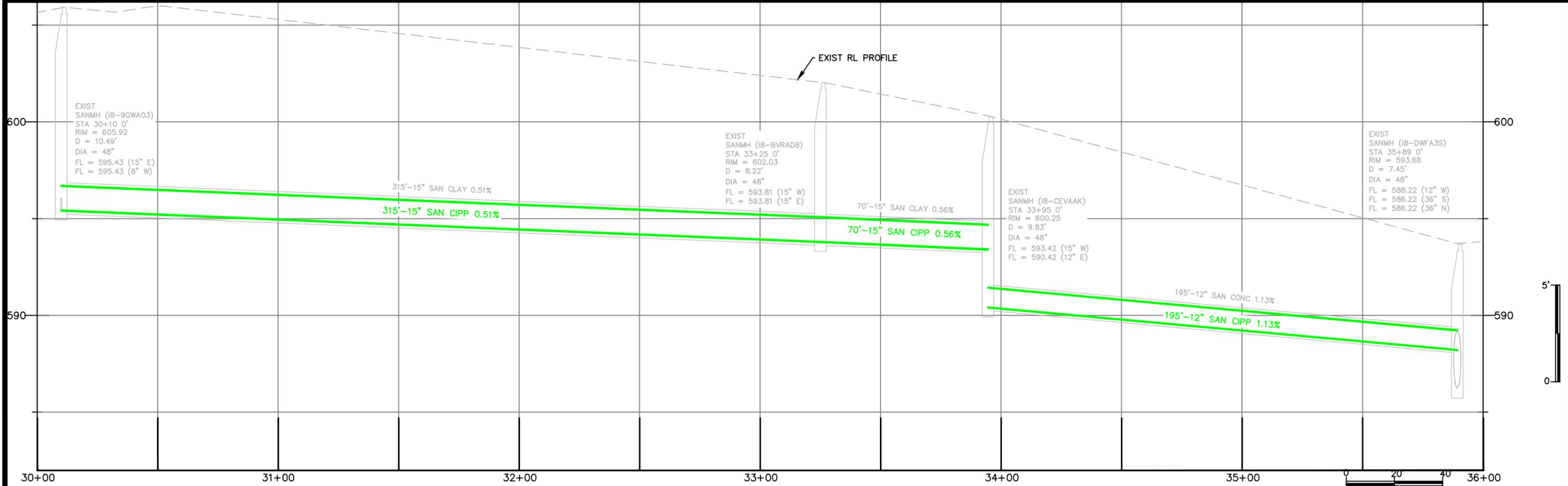
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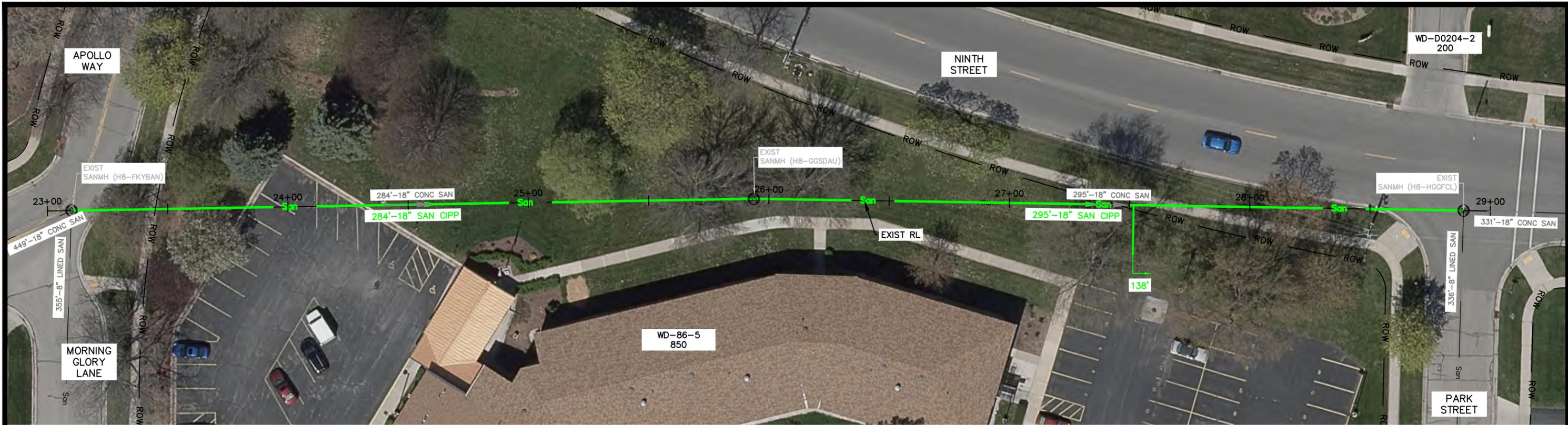
NOTES:

1. RECONNECT ALL ACTIVE LATERALS.
2. TELEWISE ALL SANITARY LATERALS IN THIS ALLEY PRIOR TO LINING SANITARY MAIN.

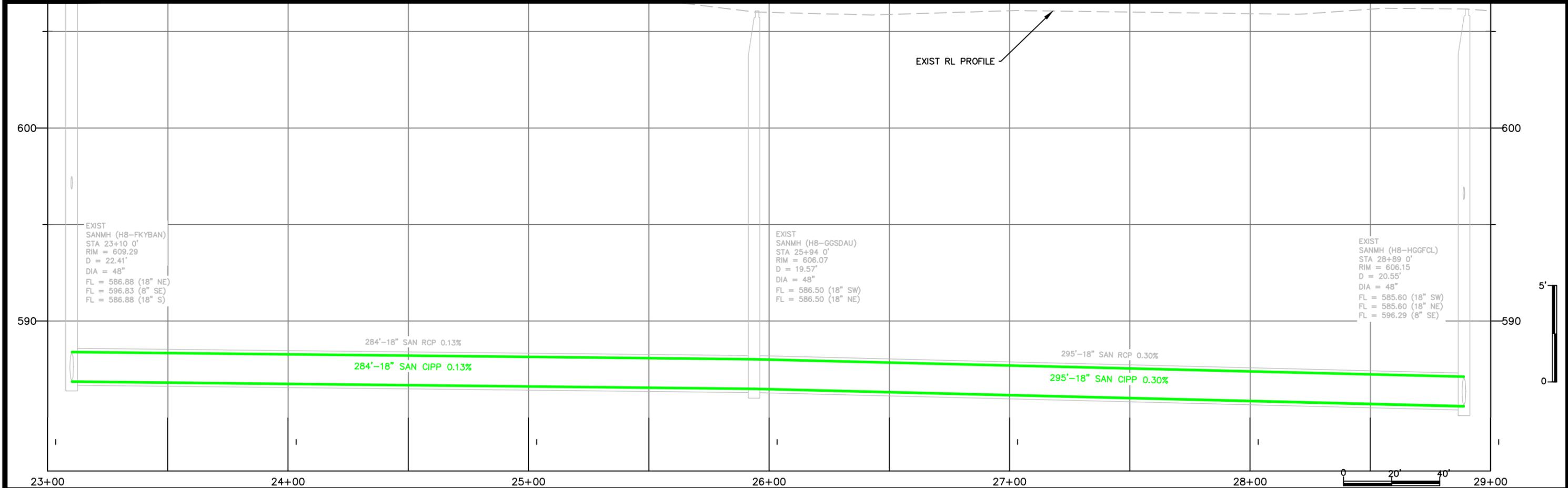


	CITY OF DE PERE	ALLEY (FOURTH/THIRD-MAIN/REID) FOURTH ST TO THIRD ST	NAME: SEWER LINING	BY: SRL	DATE: 12-2021	REVISIONS / ISSUES		PAGE NO. C111
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071		PROJECT # 22-03	NO.	DATE	BY	REMARKS	
			CHECKED: EPR		01-2022			

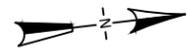
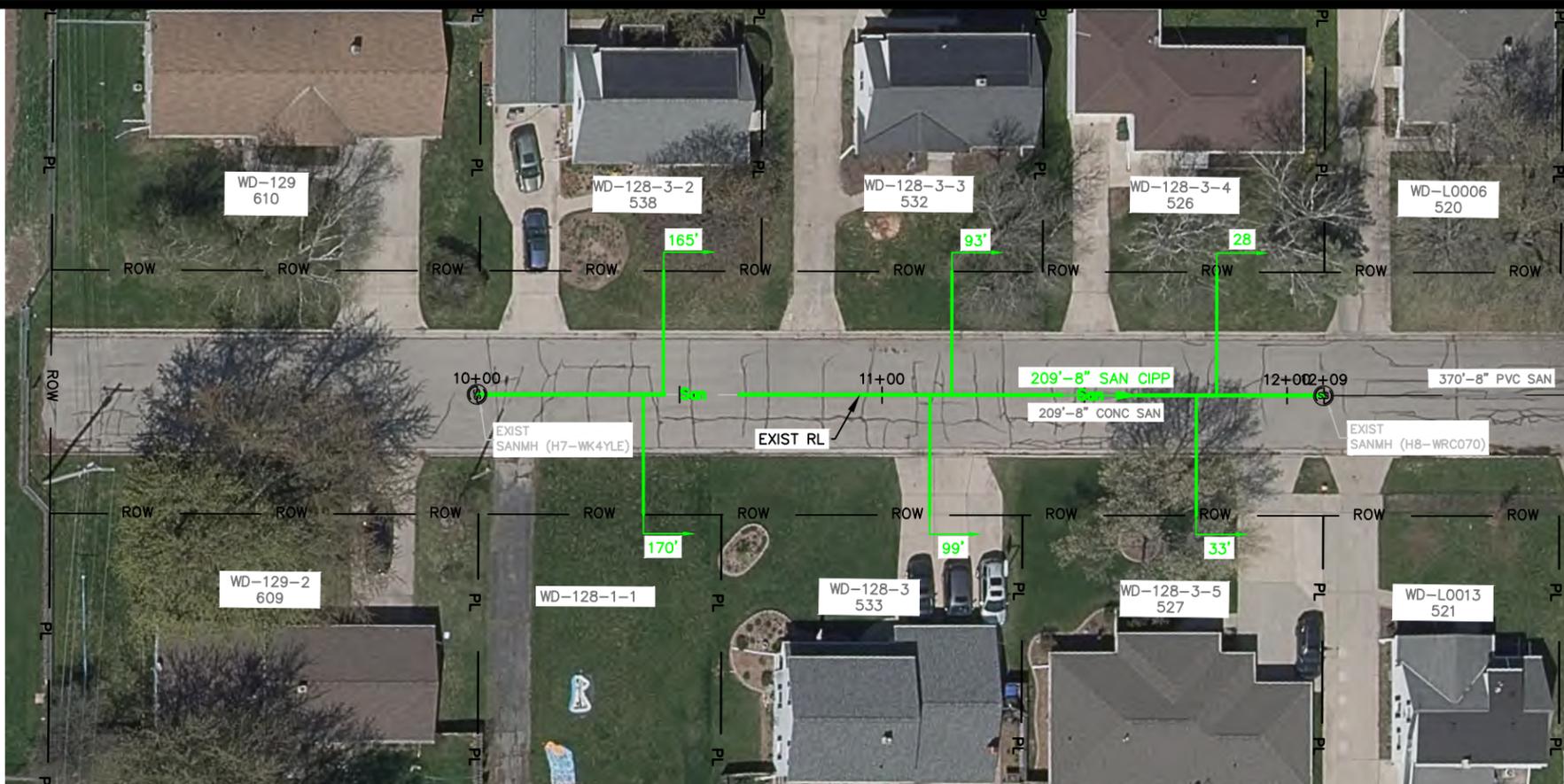
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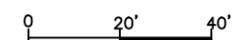
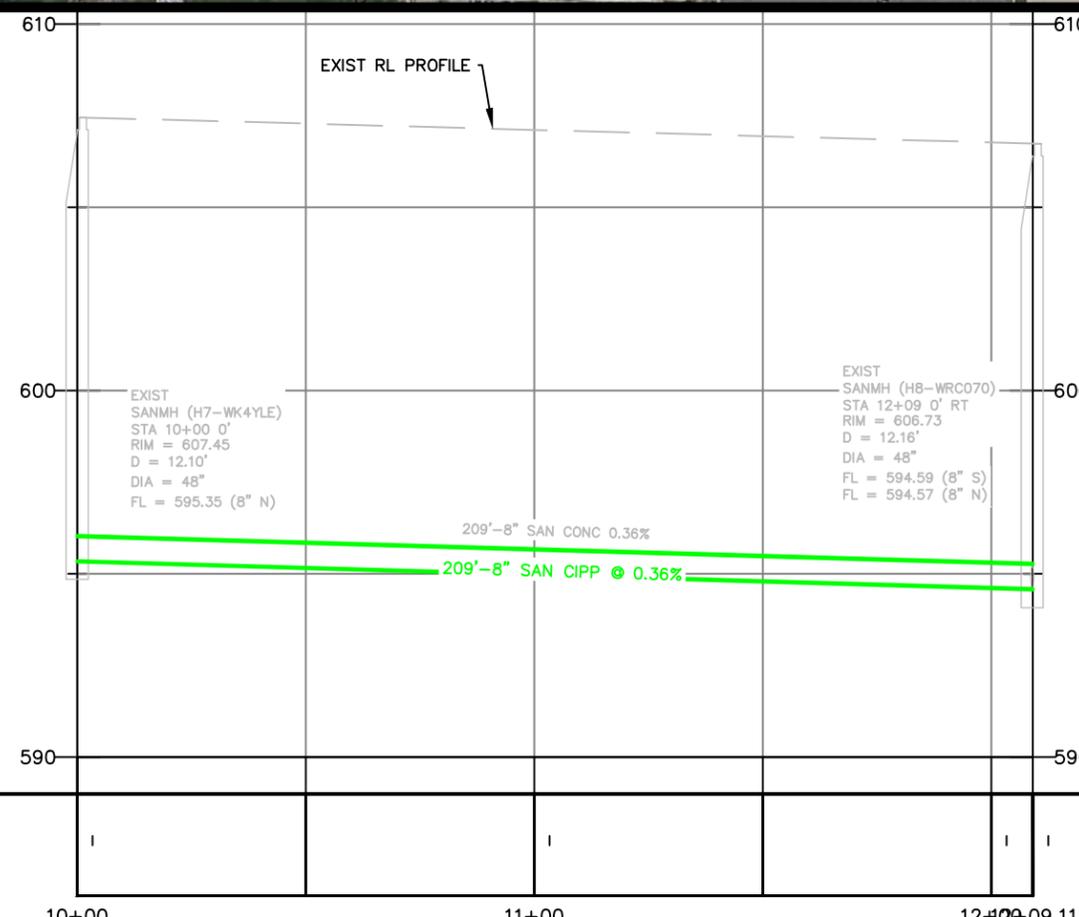
NOTE:
1. RECONNECT ALL ACTIVE LATERALS.



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NOTE:
1. RECONNECT ALL ACTIVE LATERALS.



CITY OF DE PERE

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

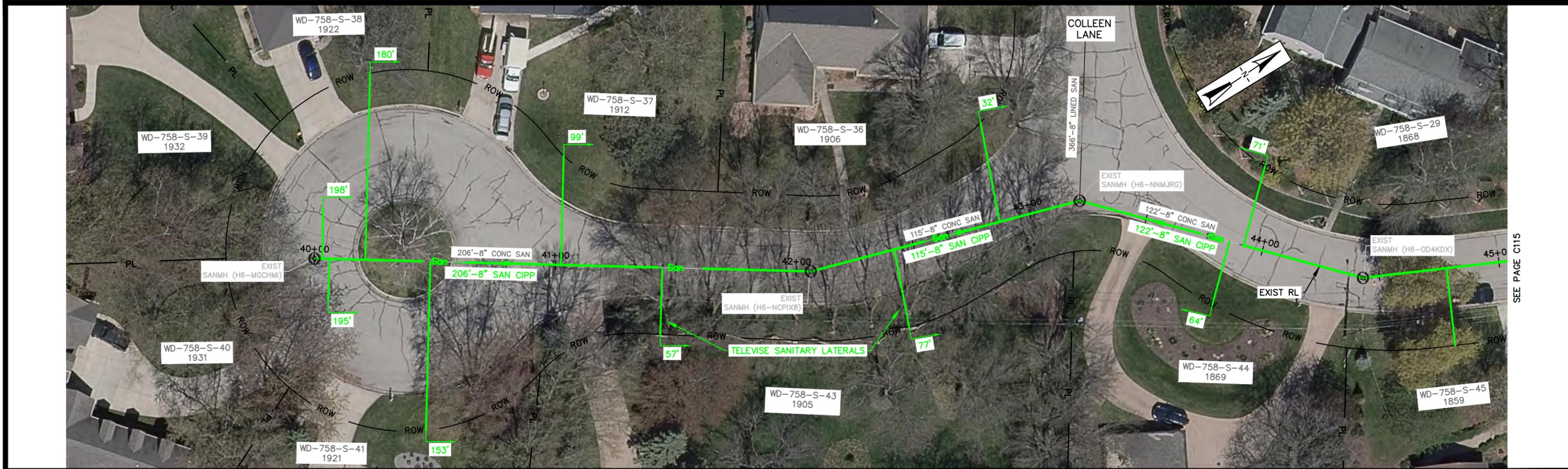
MARTIN STREET
350' S/O BUTLER ST TO TERMINUS

NAME: SEWER LINING
PROJECT # 22-03

NO.	DATE	BY	REVISIONS / ISSUES
	01-2022	MJT	SURVEYED
	01-2022	MJT	DRAWN
	01-2022	MJT	DESIGNED
	01-2022	EPR	CHECKED

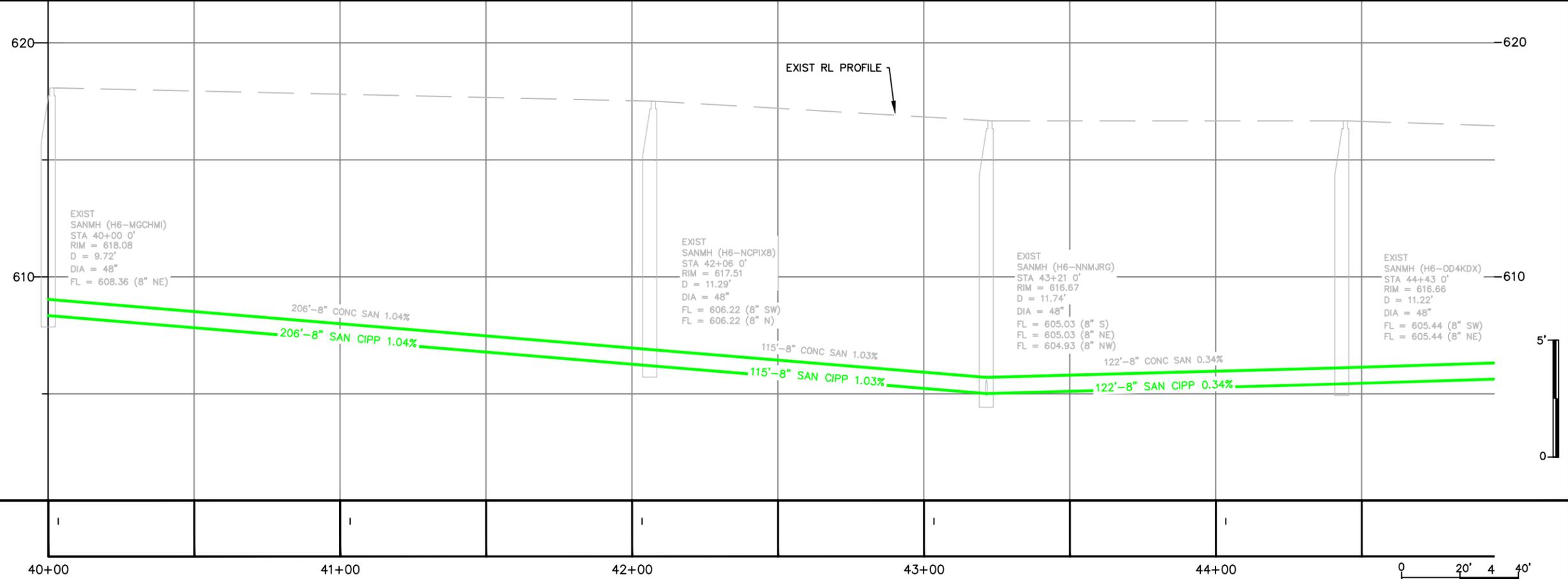
NO.	DATE	BY	REMARKS

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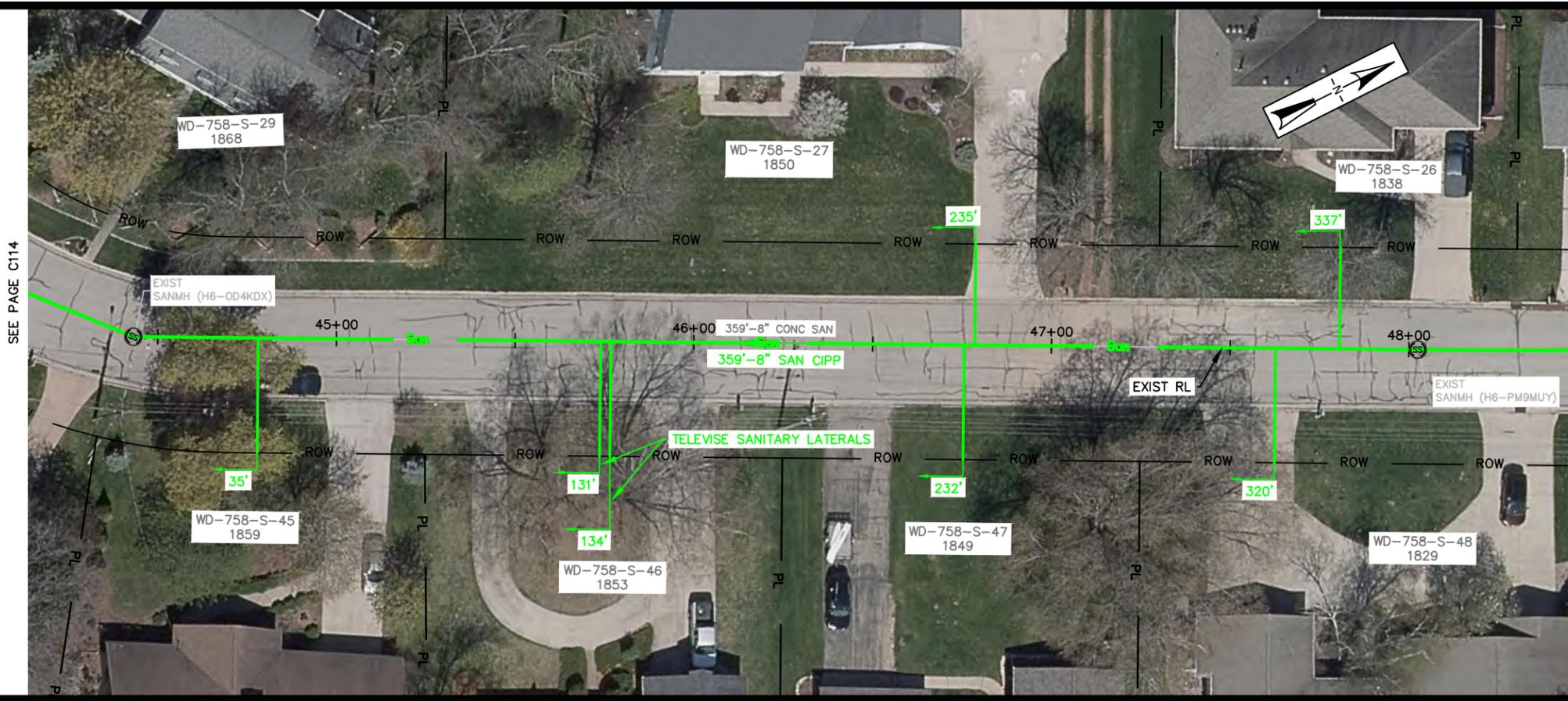
SEE PAGE C115

- NOTES:**
1. RECONNECT ALL ACTIVE LATERALS.
 2. TELEWISE SANITARY LATERALS AS MARKED ON THE PLANS PRIOR TO LINING SANITARY MAIN.

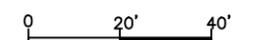
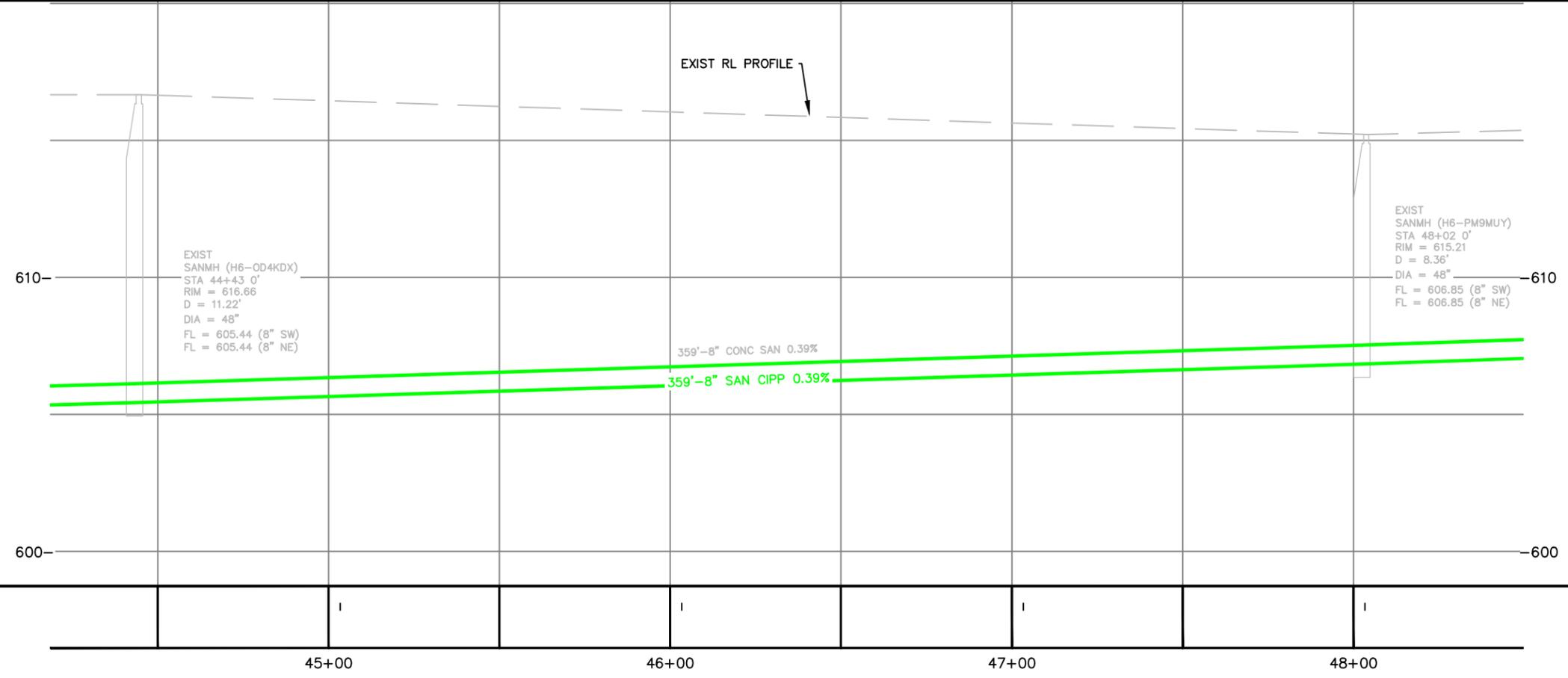


	CITY OF DE PERE	RAINBOW AVENUE TERMINUS TO 150' N/O COLLEEN LN	NAME: SEWER LINING	BY MJT	DATE 01-2022	REVISIONS / ISSUES			PAGE NO.
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071		PROJECT # 22-03	NO.	DATE	BY	REMARKS	C114	

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- NOTES:
1. RECONNECT ALL ACTIVE LATERALS.
 2. TELEWISE SANITARY LATERALS AS MARKED ON THE PLANS PRIOR TO LINING SANITARY MAIN.



CITY OF DE PERE

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

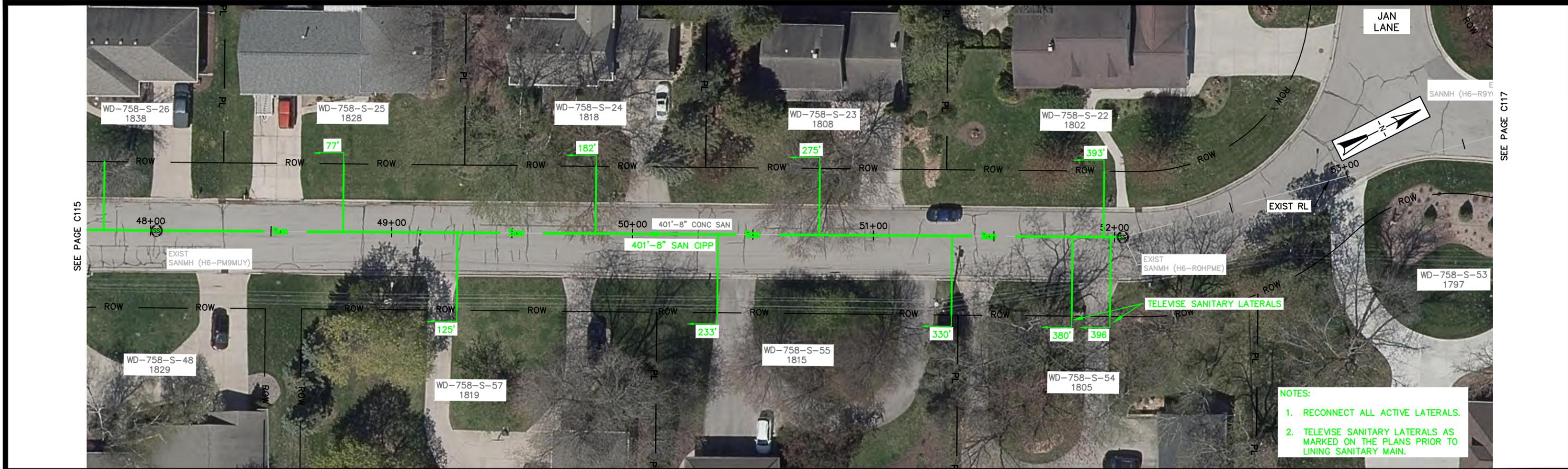
RAINBOW AVENUE
150' N/O COLLEEN LN TO 500' N/O COLLEEN LN

NAME: SEWER LINING
PROJECT # 22-03

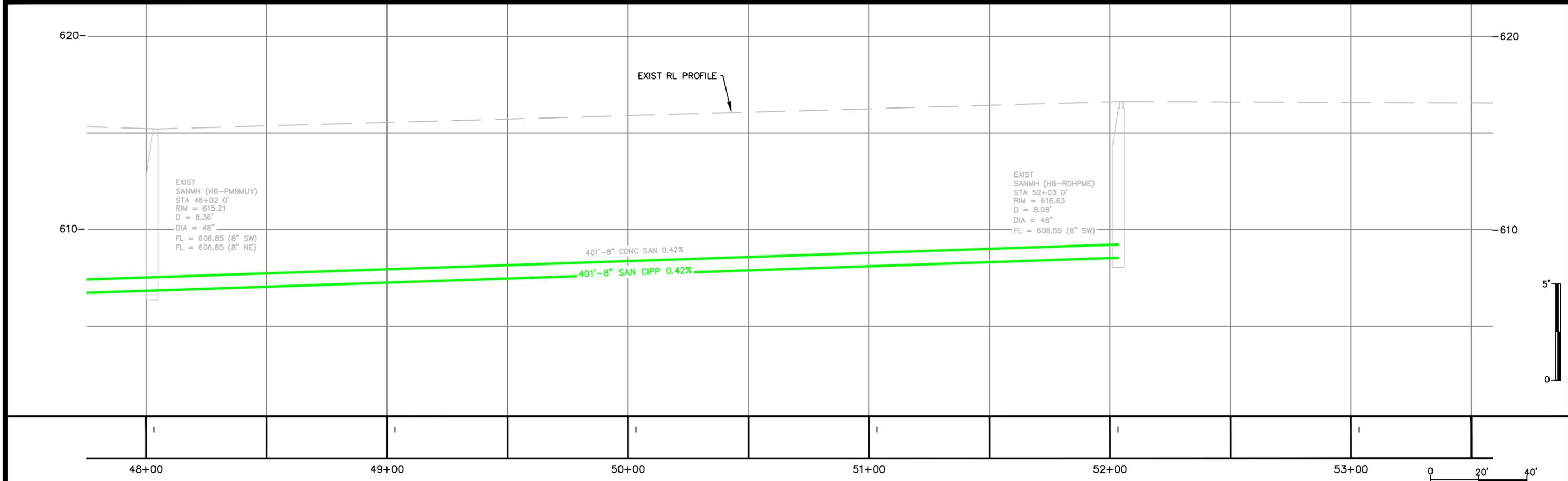
	BY	DATE
SURVEYED	MJT	01-2022
DRAWN	MJT	01-2022
DESIGNED	MJT	01-2022
CHECKED	EPR	01-2022

REVISIONS / ISSUES		
NO.	DATE	REMARKS

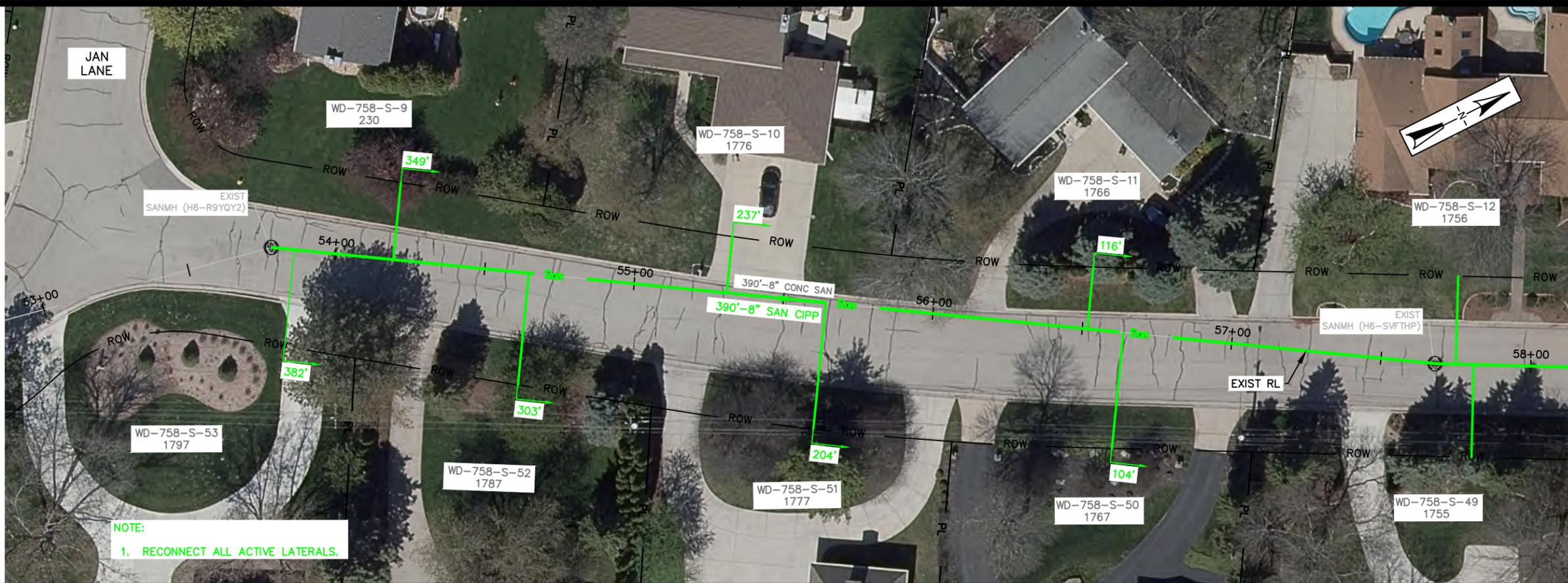
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- NOTES:**
1. RECONNECT ALL ACTIVE LATERALS.
 2. TELEWISE SANITARY LATERALS AS MARKED ON THE PLANS PRIOR TO LINING SANITARY MAIN.

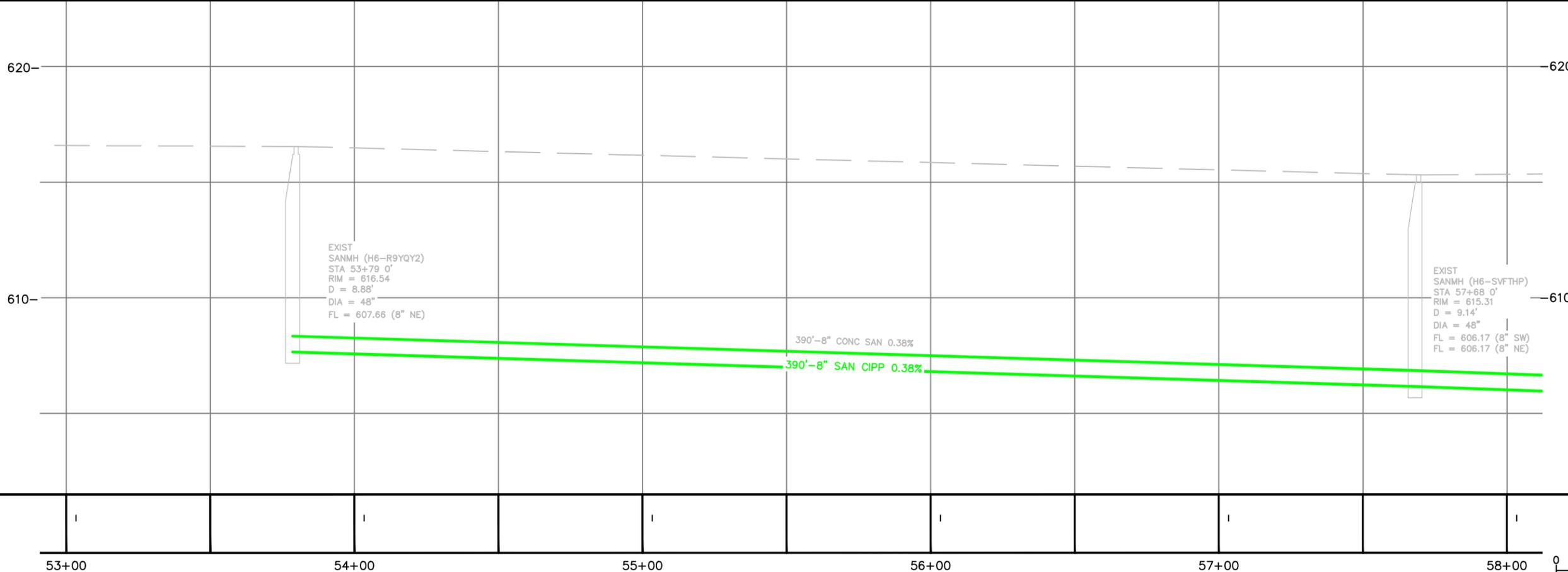


	CITY OF DE PERE	RAINBOW AVENUE 500' N/O COLLEEN LN TO JAN LN	NAME: SEWER LINING	BY MJT	DATE 01-2022	REVISIONS / ISSUES			PAGE NO. C116
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071		PROJECT # 22-03	NO.	DATE	BY	REMARKS		
			DESIGNED MJT						
			CHECKED EPR						



SEE PAGE C116

SEE PAGE C118



EXIST
SANMH (H6-R9YQY2)
STA 53+79.0'
RIM = 616.54
D = 8.88"
DIA = 48"
FL = 607.66 (8" NE)

EXIST
SANMH (H6-SVFTHP)
STA 57+68.0'
RIM = 615.31
D = 9.14"
DIA = 48"
FL = 606.17 (8" SW)
FL = 606.17 (8" NE)

390'-8" CONC SAN 0.38%
390'-8" SAN CIPP 0.38%

53+00 54+00 55+00 56+00 57+00 58+00 0 20' 40'



CITY OF DE PERE

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

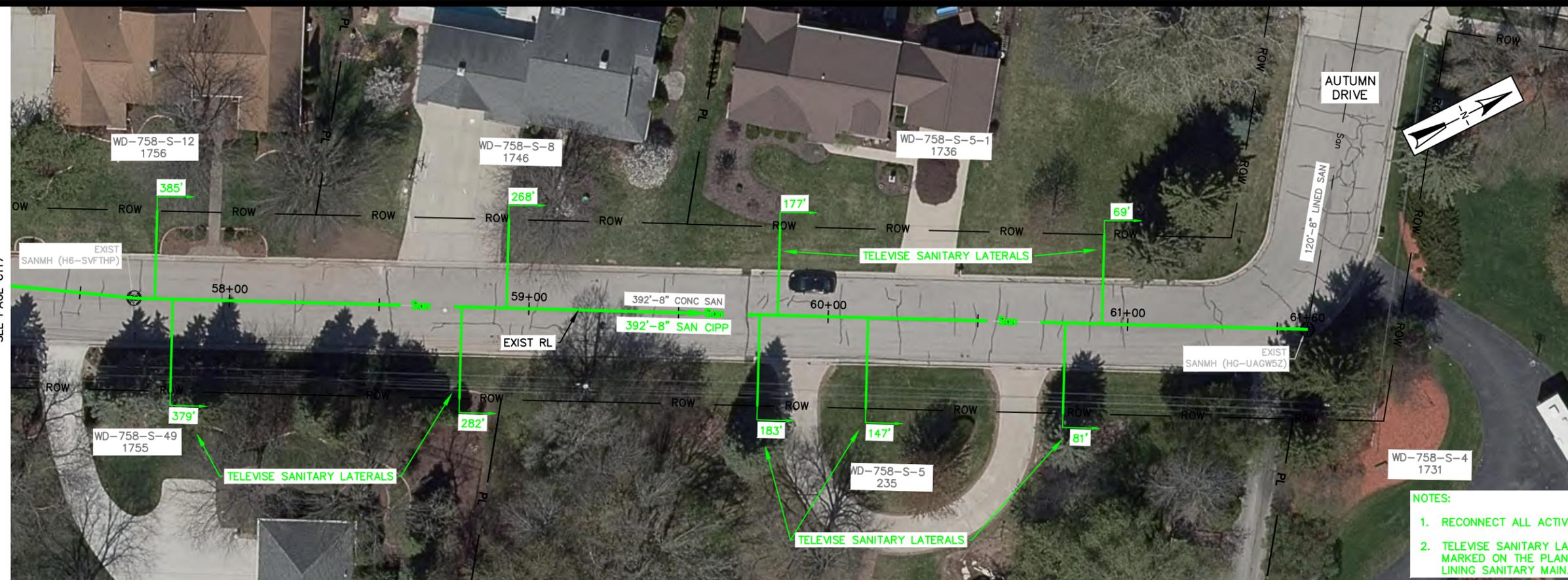
**RAINBOW AVENUE
JAN LN TO 450' N/O JAN LN**

NAME: SEWER LINING
PROJECT # 22-03

BY	DATE
MJT	01-2022
MJT	01-2022
MJT	01-2022
EPR	01-2022

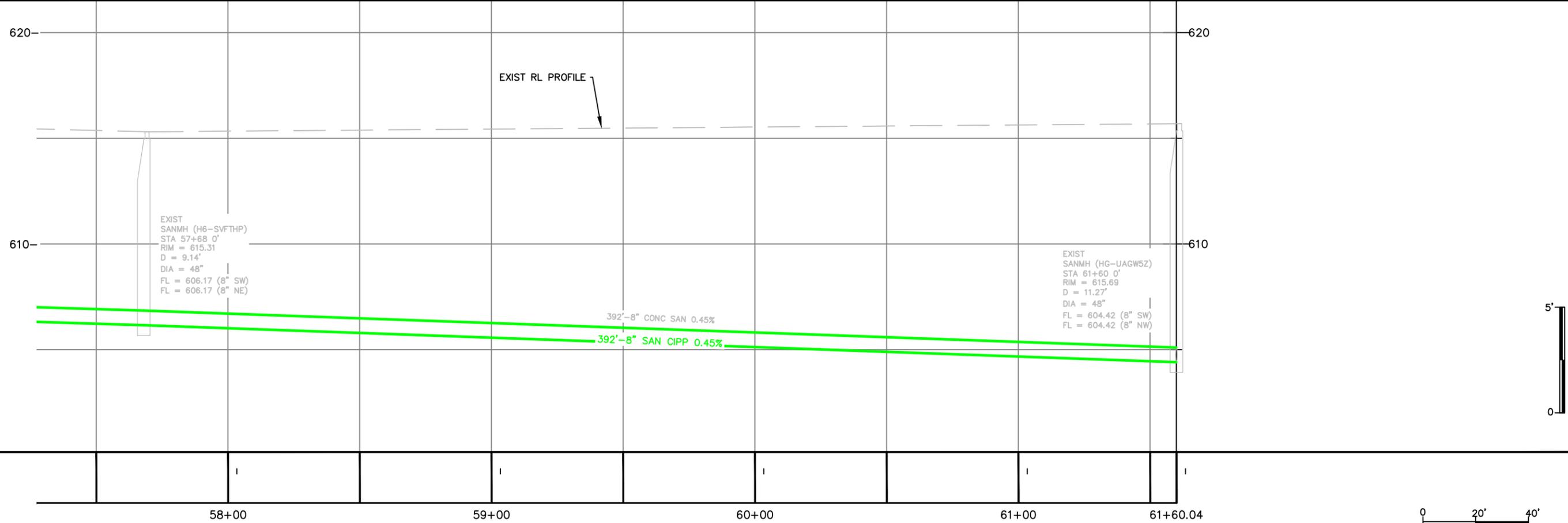
REVISIONS / ISSUES		
NO.	DATE	REMARKS

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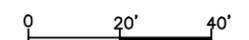
SEE PAGE C117

- NOTES:**
1. RECONNECT ALL ACTIVE LATERALS.
 2. TELEWISE SANITARY LATERALS AS MARKED ON THE PLANS PRIOR TO LINING SANITARY MAIN.



EXIST
SANMH (H6-SVFTHP)
STA 57+68.0'
RIM = 615.31
D = 9.14'
DIA = 48"
FL = 606.17 (8" SW)
FL = 606.17 (8" NE)

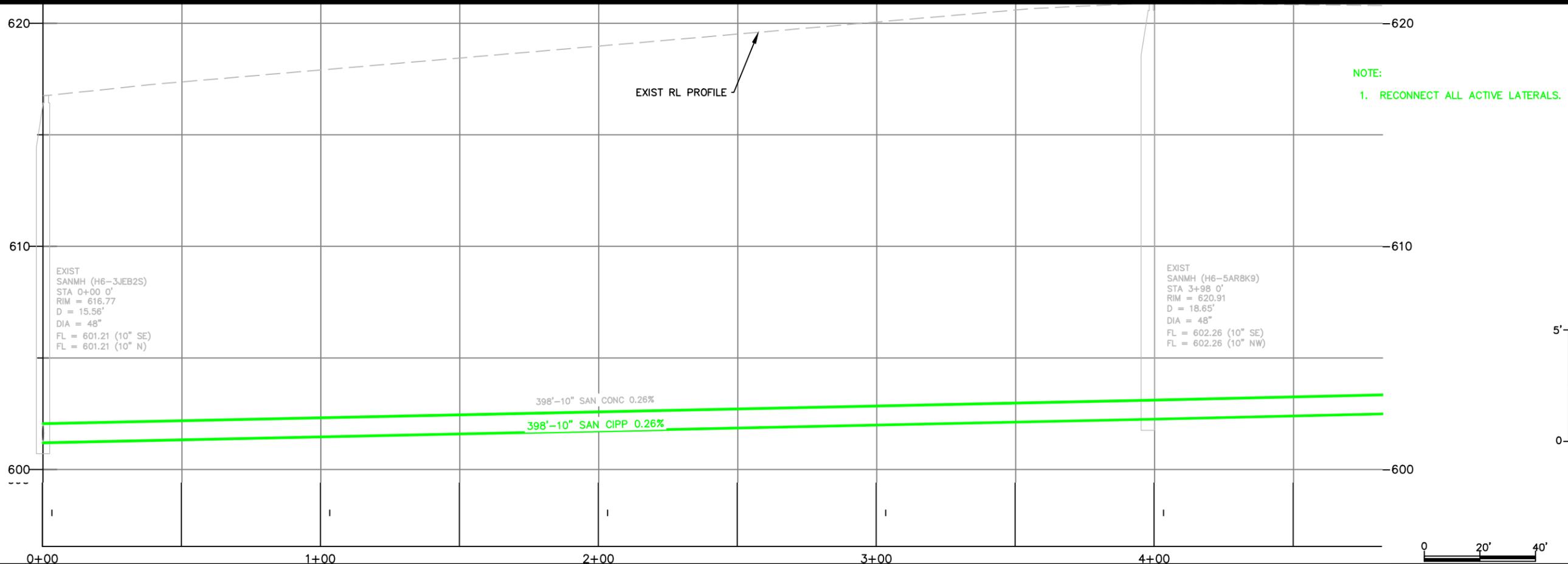
EXIST
SANMH (HG-UAGW5Z)
STA 61+60.0'
RIM = 615.69
D = 11.27'
DIA = 48"
FL = 604.42 (8" SW)
FL = 604.42 (8" NW)



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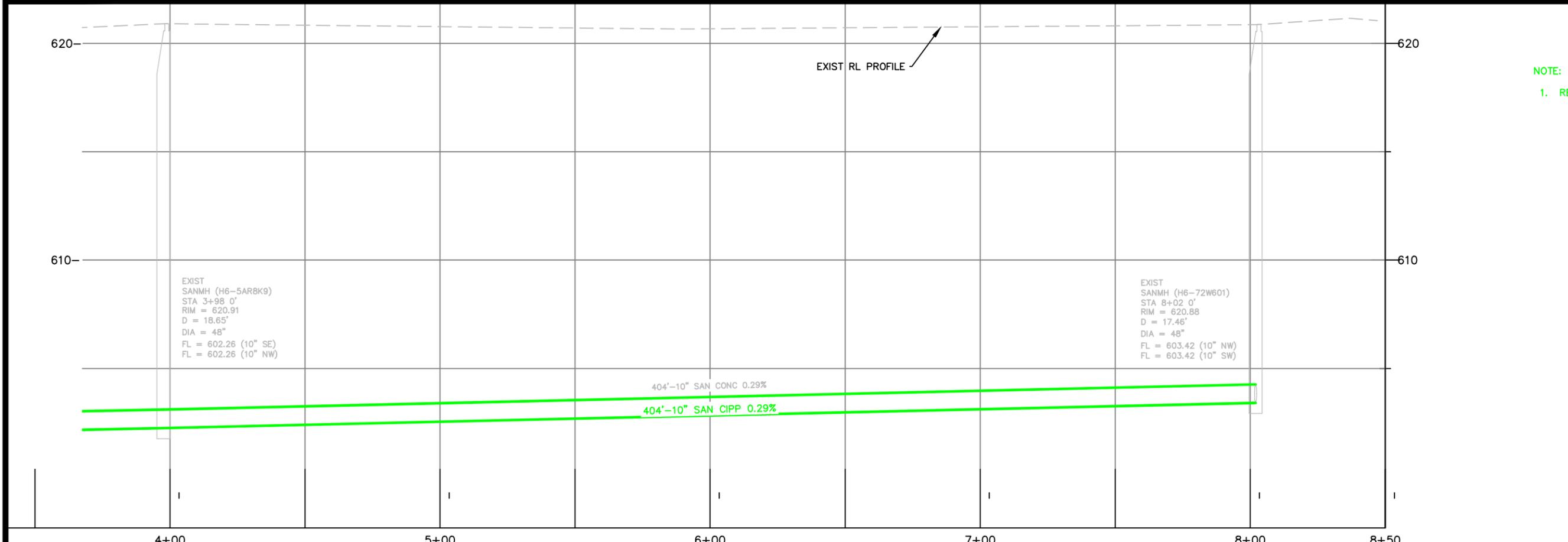
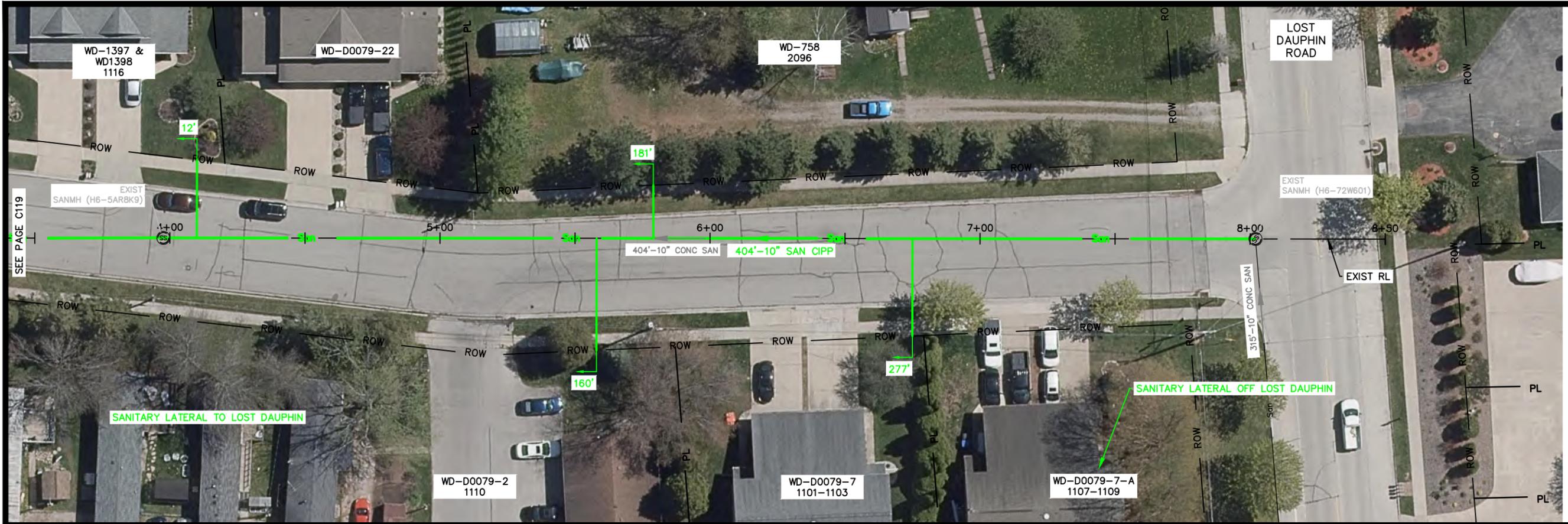
SEE PAGE C120



NOTE:
1. RECONNECT ALL ACTIVE LATERALS.

	CITY OF DE PERE	TERRY LANE	NAME: SEWER LINING	BY: SRL	DATE: 12-2021	REVISIONS / ISSUES		PAGE NO. C119	
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071	800' N/O LOST DAUPHIN TO 400' N/O LOST DAUPHIN	PROJECT # 22-03	DRAWN: SRL	DATE: 01-2022	NO.	DATE		BY
				DESIGNED: SRL	DATE: 01-2022				
				CHECKED: EPR	DATE: 01-2022				

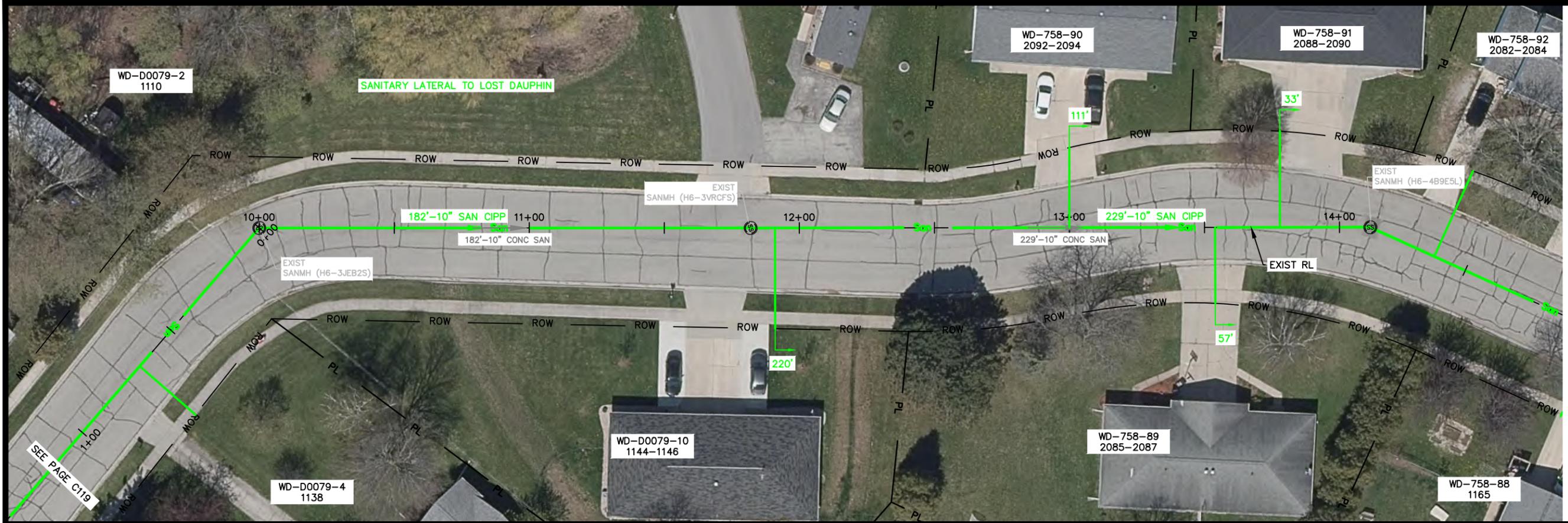
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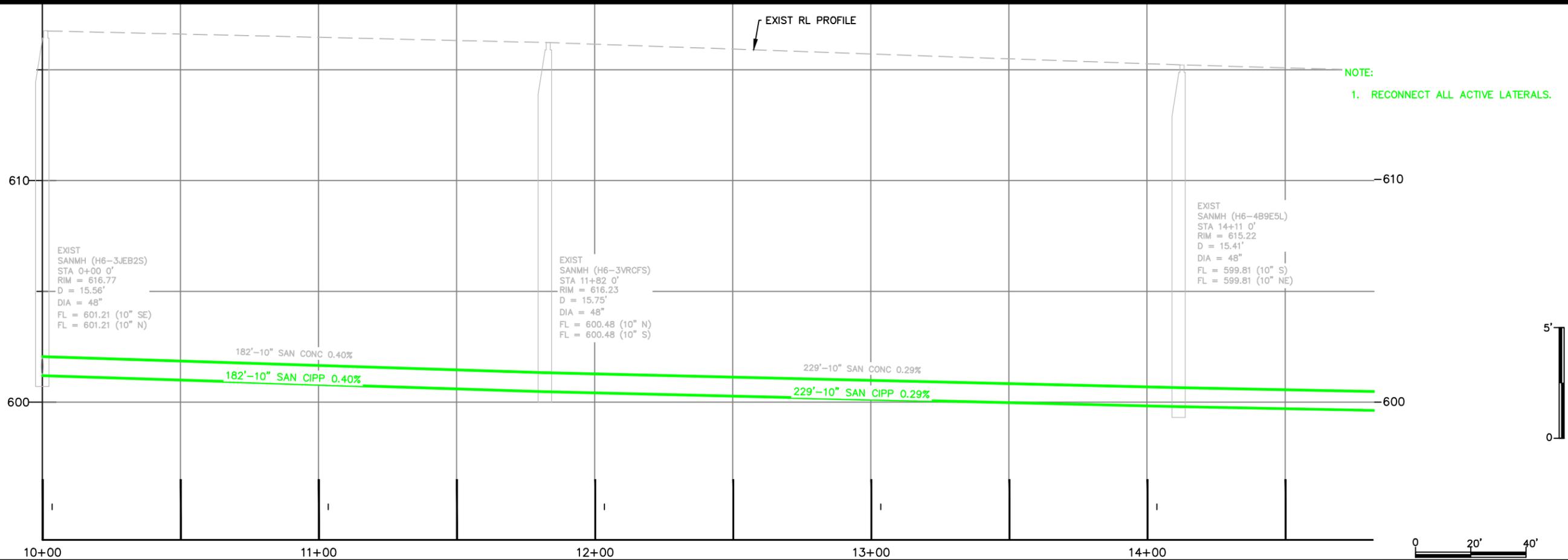
NOTE:
1. RECONNECT ALL ACTIVE LATERALS.

	CITY OF DE PERE	TERRY LANE 400' N/O LOST DAUPHIN TO LOST DAUPHIN	NAME: SEWER LINING	BY SRL	DATE 12-2021	REVISIONS / ISSUES		PAGE NO. C120
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071		PROJECT # 22-03	NO.	DATE	BY	REMARKS	
			CHECKED EPR	DESIGNED SRL	DRAWN SRL	SURVEYED SRL		

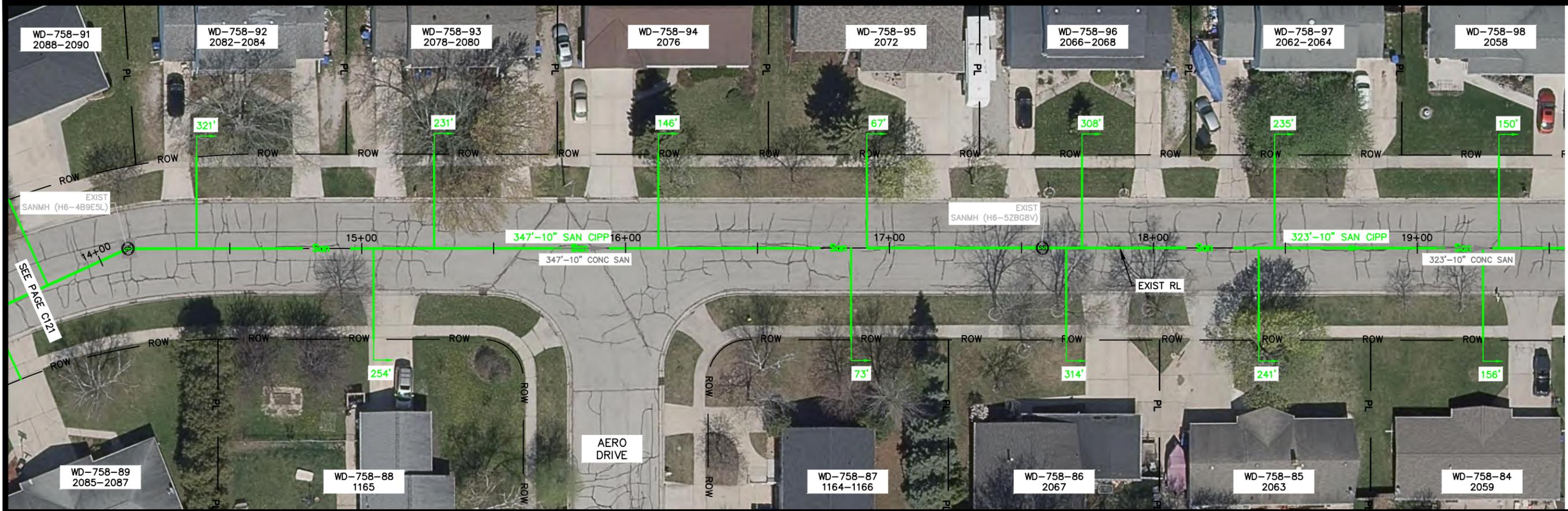
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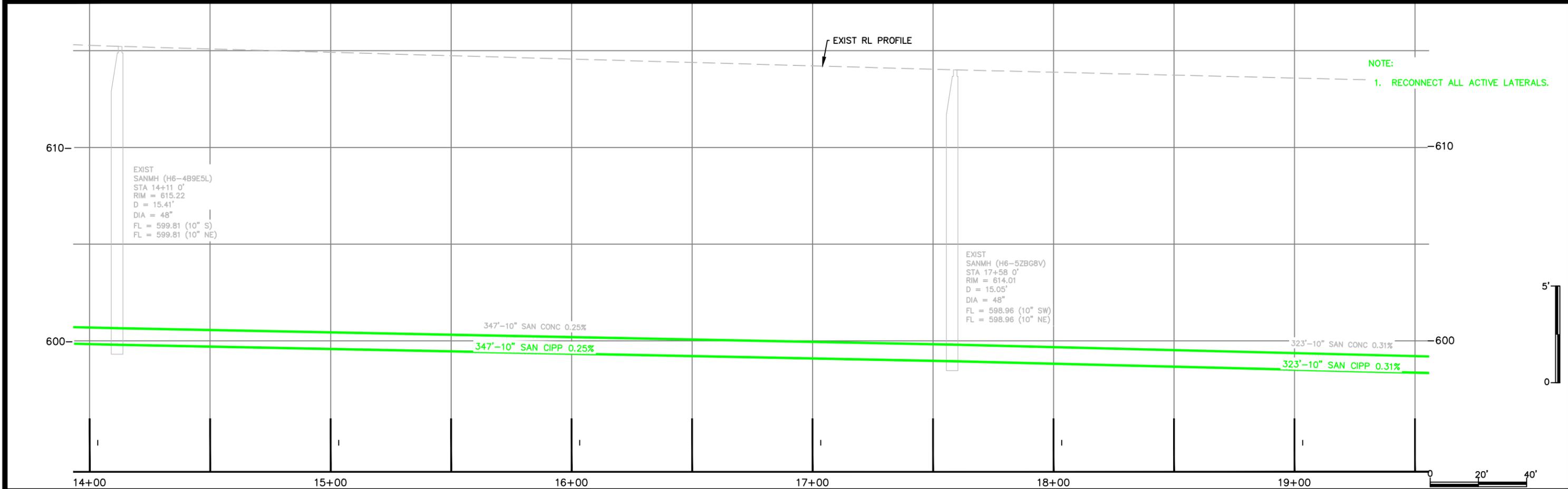
SEE PAGE C122



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SEE PAGE C123

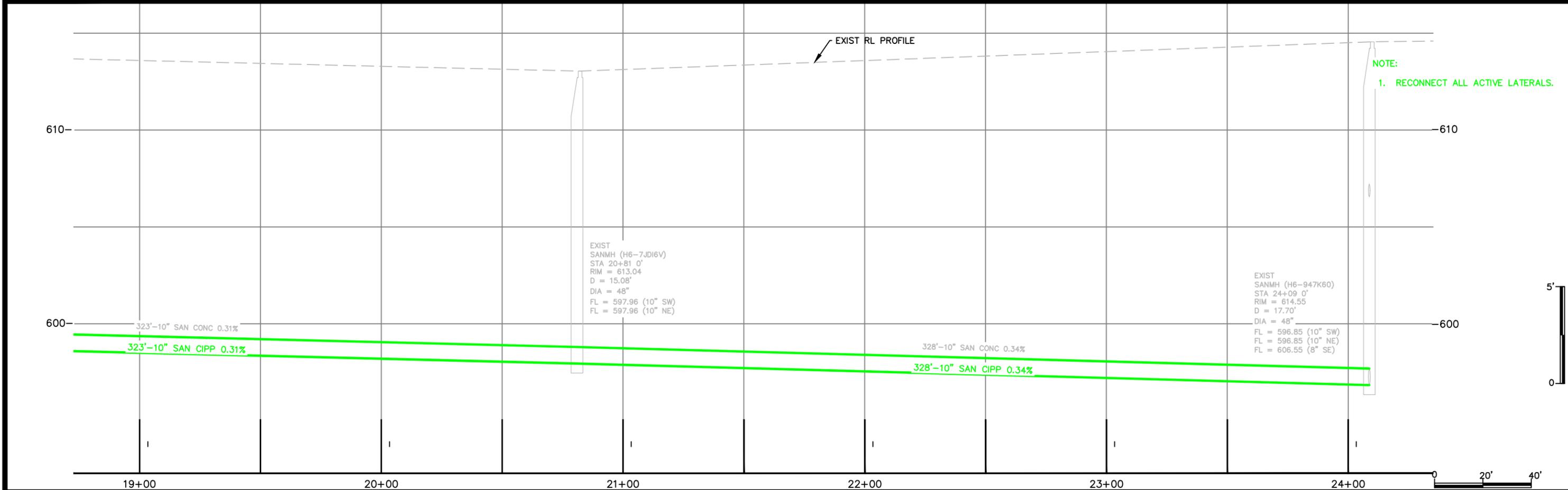
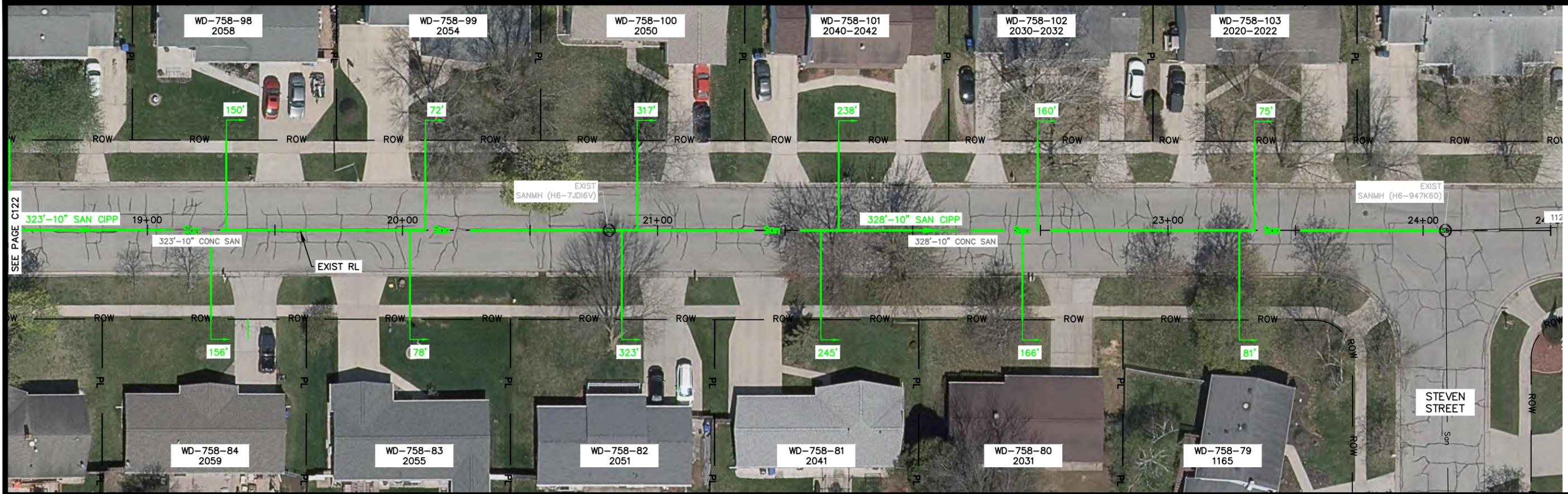


NOTE:
1. RECONNECT ALL ACTIVE LATERALS.



	CITY OF DE PERE	TERRY LANE 200' SW/O AERO DR TO 350' NE/O AERO DR	NAME: SEWER LINING	BY: SRL	DATE: 12-2021	REVISIONS / ISSUES		PAGE NO. C122
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071		PROJECT # 22-03	DRAWN: SRL	DATE: 01-2022	NO.	DATE	
			DESIGNED: SRL	DATE: 01-2022				
			CHECKED: EPR	DATE: 01-2022				

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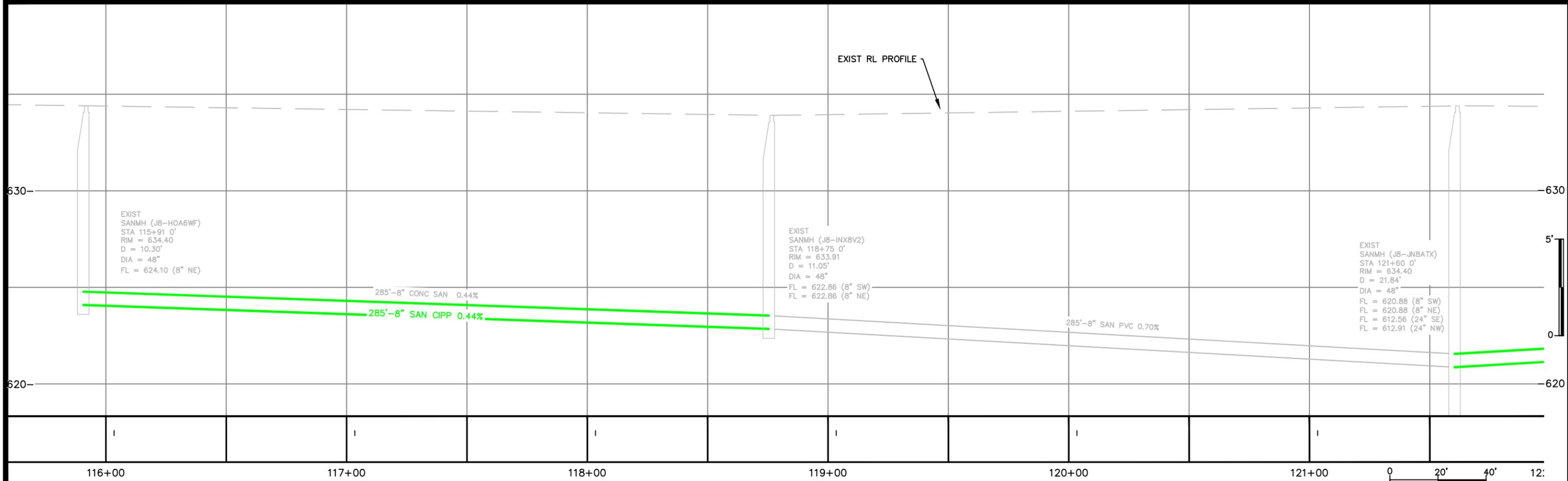
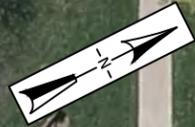


	CITY OF DE PERE	TERRY LANE 350' NE/O AERO DR TO STEVEN ST	NAME: SEWER LINING		BY: SRL	DATE: 12-2021	REVISIONS / ISSUES NO. DATE BY REMARKS		PAGE NO. C123
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071		PROJECT # 22-03	SURVEYED: SRL 01-2022	DESIGNED: SRL 01-2022	CHECKED: EPR 01-2022			

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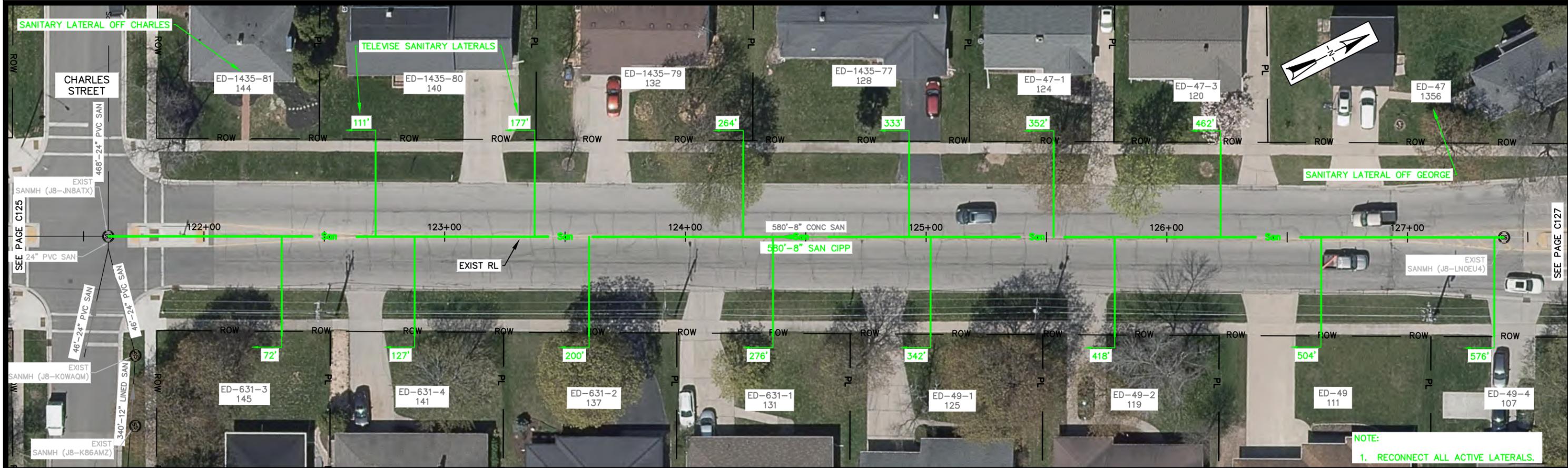


NOTE:
1. RECONNECT ALL ACTIVE LATERALS.

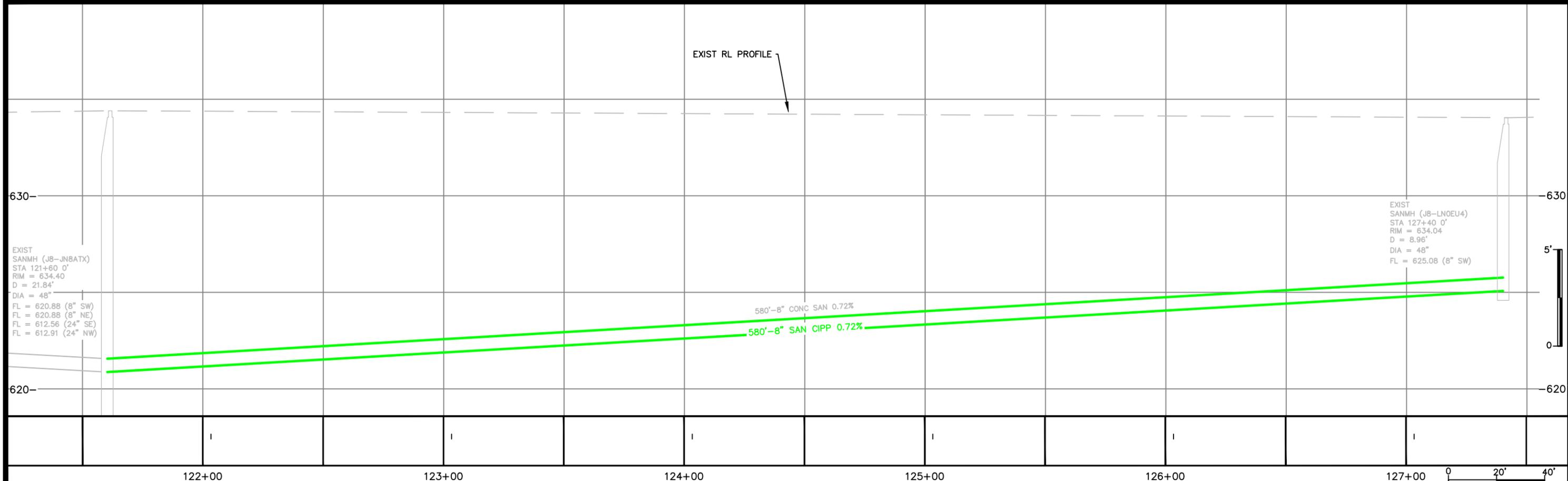


	CITY OF DE PERE	SOUTH WEBSTER AVENUE 500' N/O CHICAGO ST TO CHARLES ST	NAME: SEWER LINING	BY: MJT	DATE: 01-2022	REVISIONS / ISSUES			PAGE NO. C125
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071		PROJECT # 22-03	NO.	DATE	BY	REMARKS		
			DESIGNED: MJT	DATE: 01-2022					
			CHECKED: EPR	DATE: 01-2022					

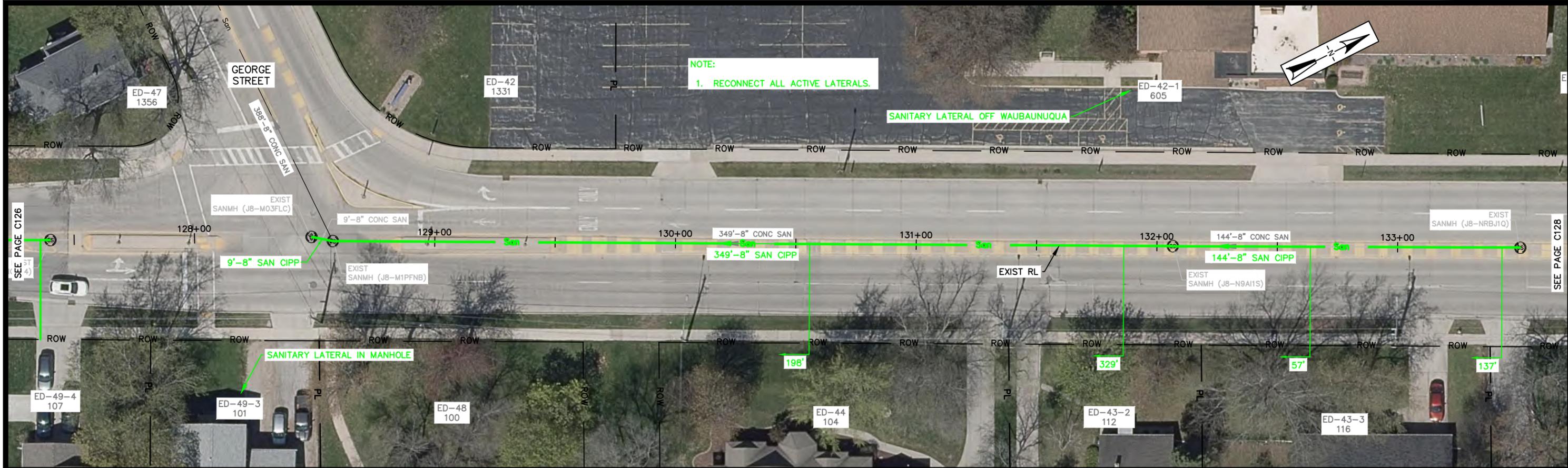
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NOTE:
1. RECONNECT ALL ACTIVE LATERALS.



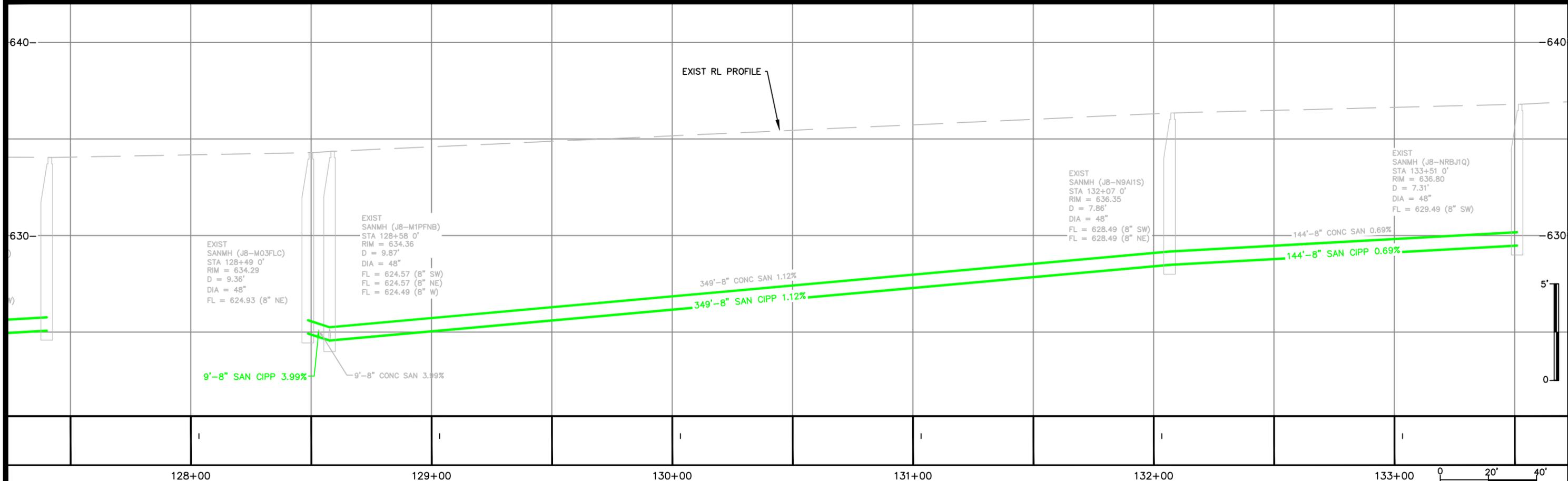
	CITY OF DE PERE	SOUTH WEBSTER AVENUE CHARLES ST TO GEORGE ST	NAME: SEWER LINING	BY MJT	DATE 01-2022	REVISIONS / ISSUES			PAGE NO. C126
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071		PROJECT # 22-03	NO.	DATE	BY	REMARKS		
			SURVEYED	MJT	01-2022				
			DRAWN	MJT	01-2022				
			DESIGNED	MJT	01-2022				
			CHECKED	EPR	01-2022				



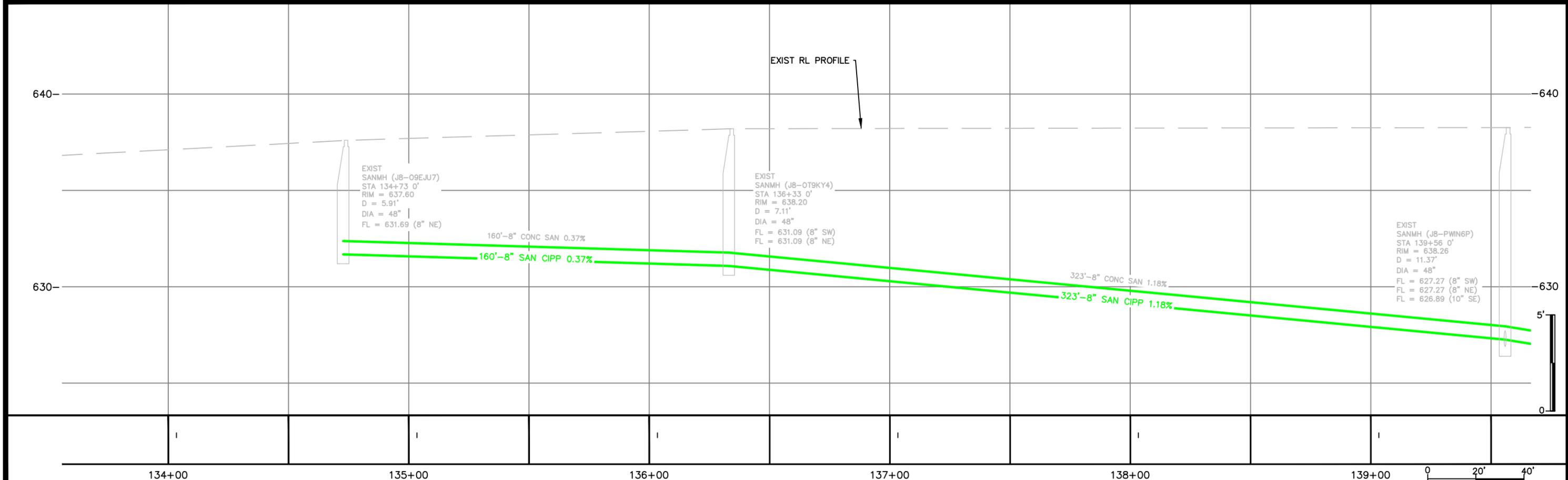
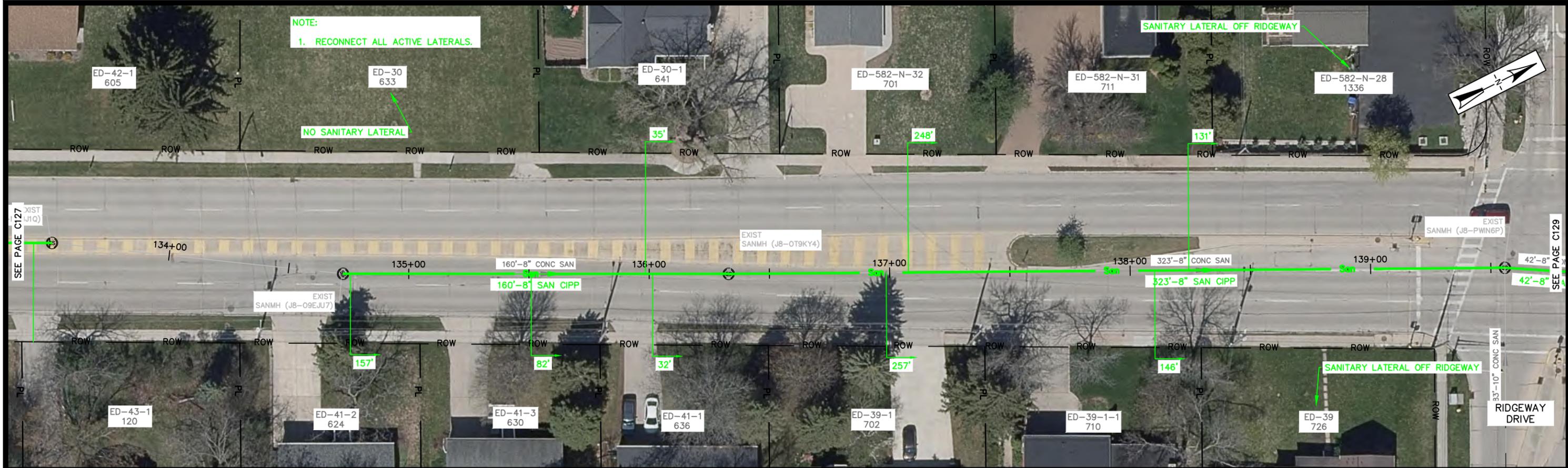
NOTE:
1. RECONNECT ALL ACTIVE LATERALS.

SANITARY LATERAL OFF WAUBAUNQUA

SANITARY LATERAL IN MANHOLE

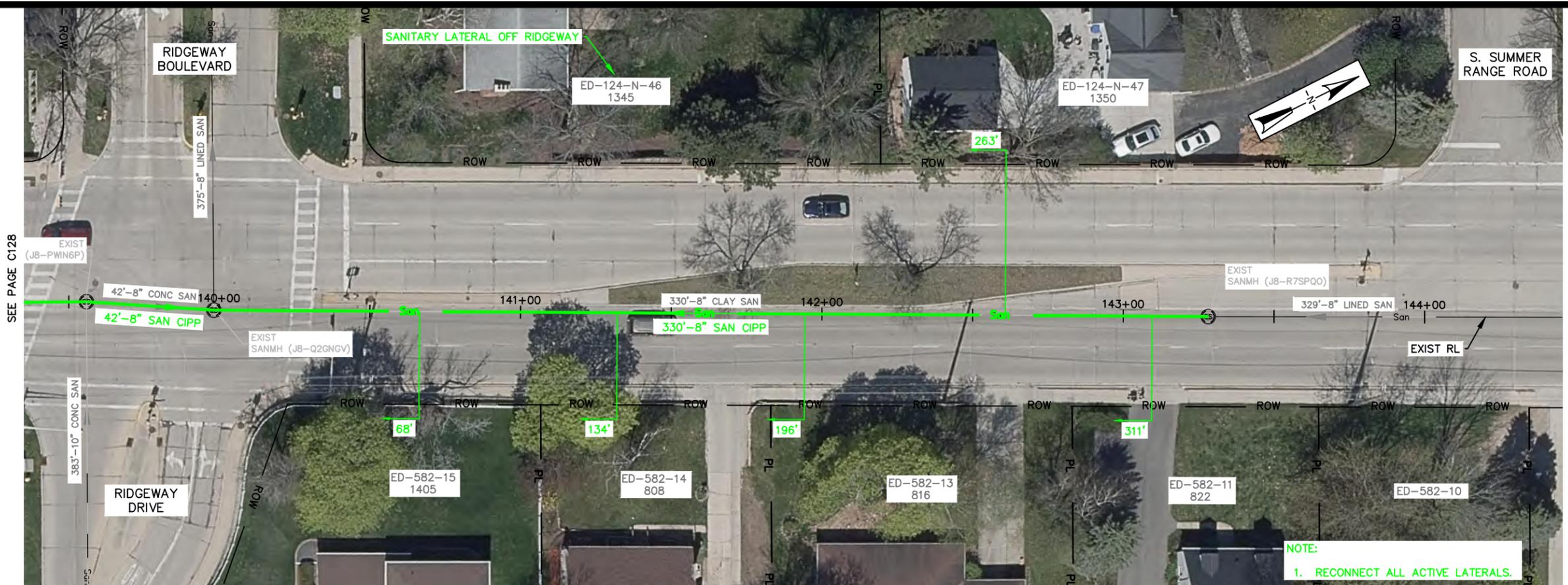


	CITY OF DE PERE ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071	SOUTH WEBSTER AVENUE GEORGE ST TO 500' N/O GEORGE ST	NAME:	SEWER LINING			BY	DATE	NO.	DATE	BY	REMARKS	PAGE NO.
			PROJECT #	22-03									
													C127



	CITY OF DE PERE	SOUTH WEBSTER AVENUE 500' N/O GEORGE ST TO RIDGEWAY DRIVE	NAME: SEWER LINING	BY MJT	DATE 01-2022	REVISIONS / ISSUES			PAGE NO. C128
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071		PROJECT # 22-03	NO.	DATE	BY	REMARKS		

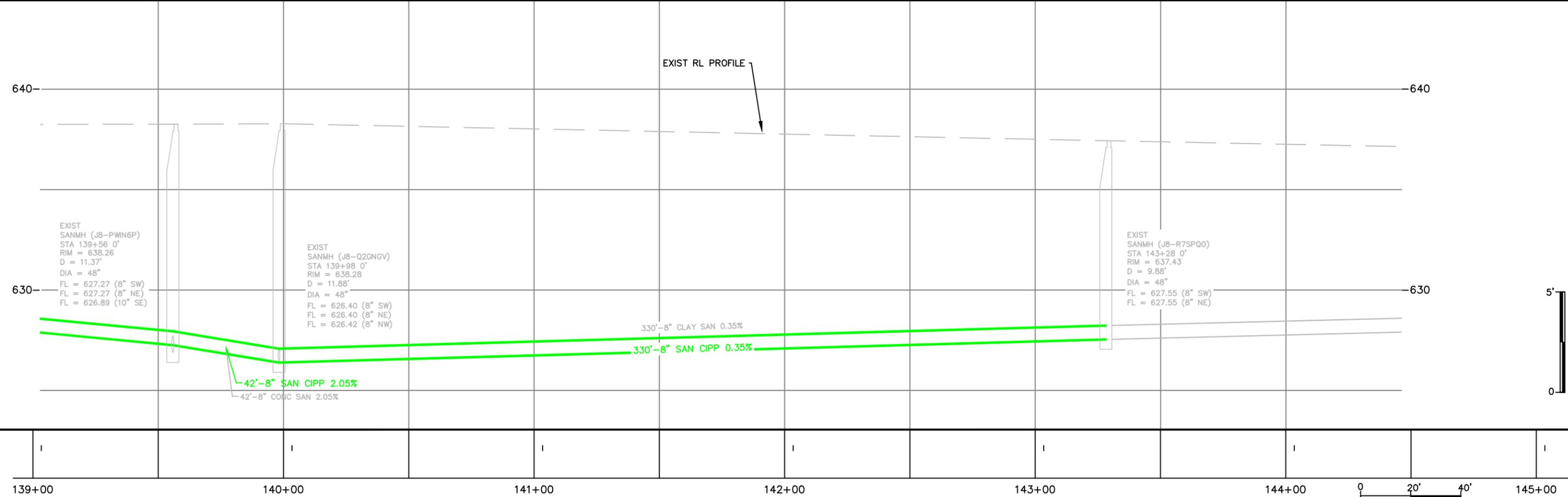
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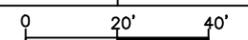
SEE PAGE C128

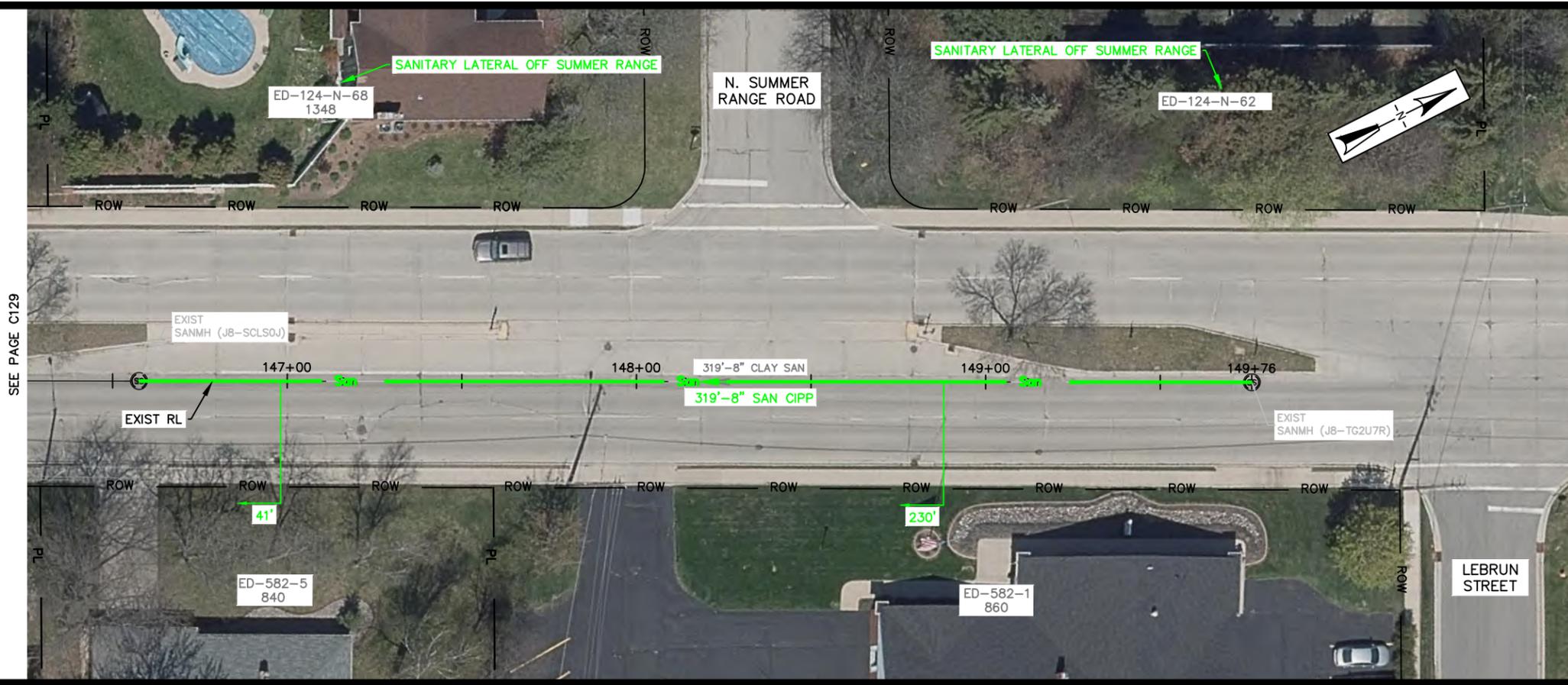
SEE PAGE C130

NOTE:
1. RECONNECT ALL ACTIVE LATERALS.

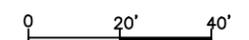
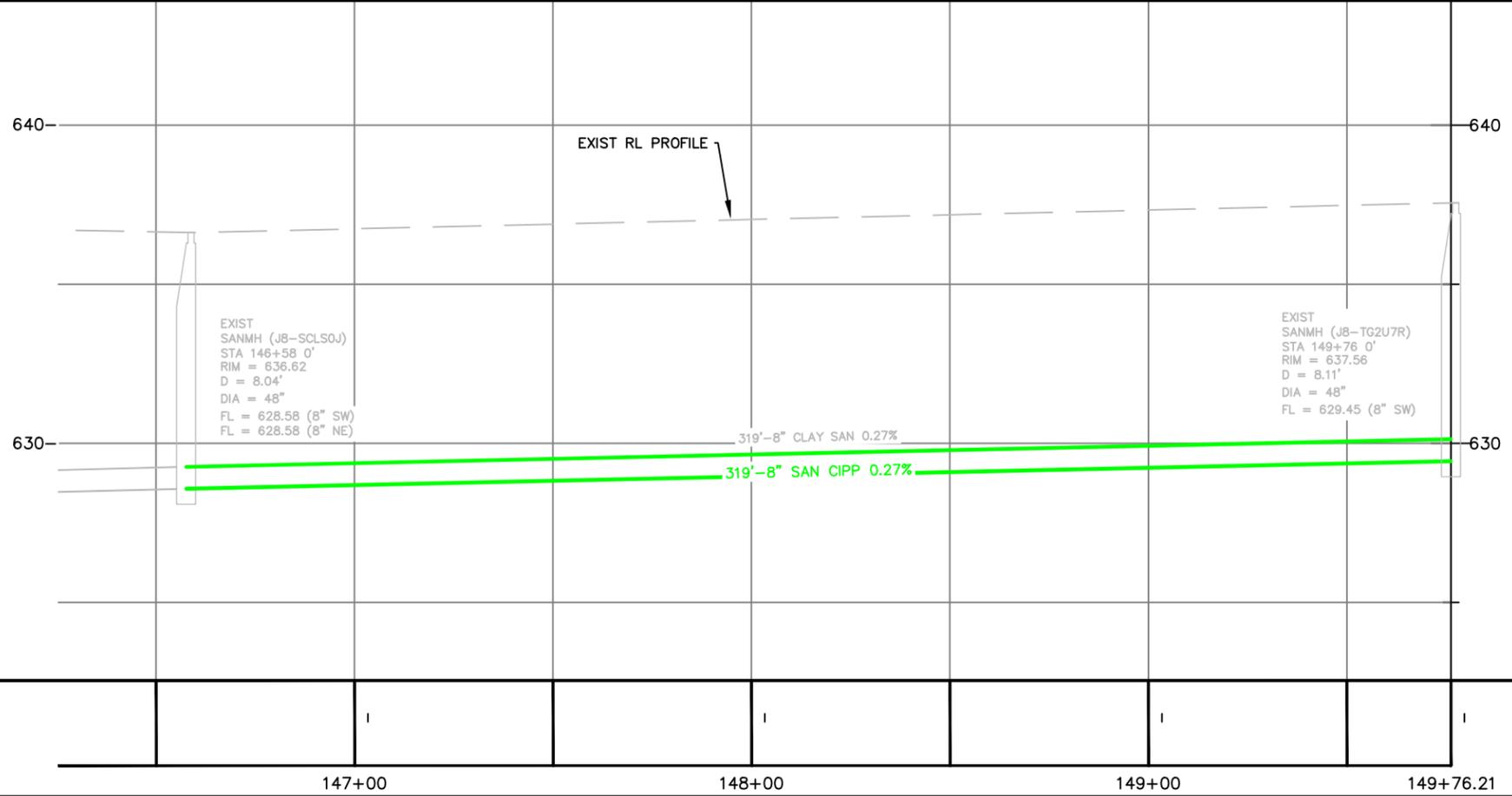


139+00 140+00 141+00 142+00 143+00 144+00 145+00

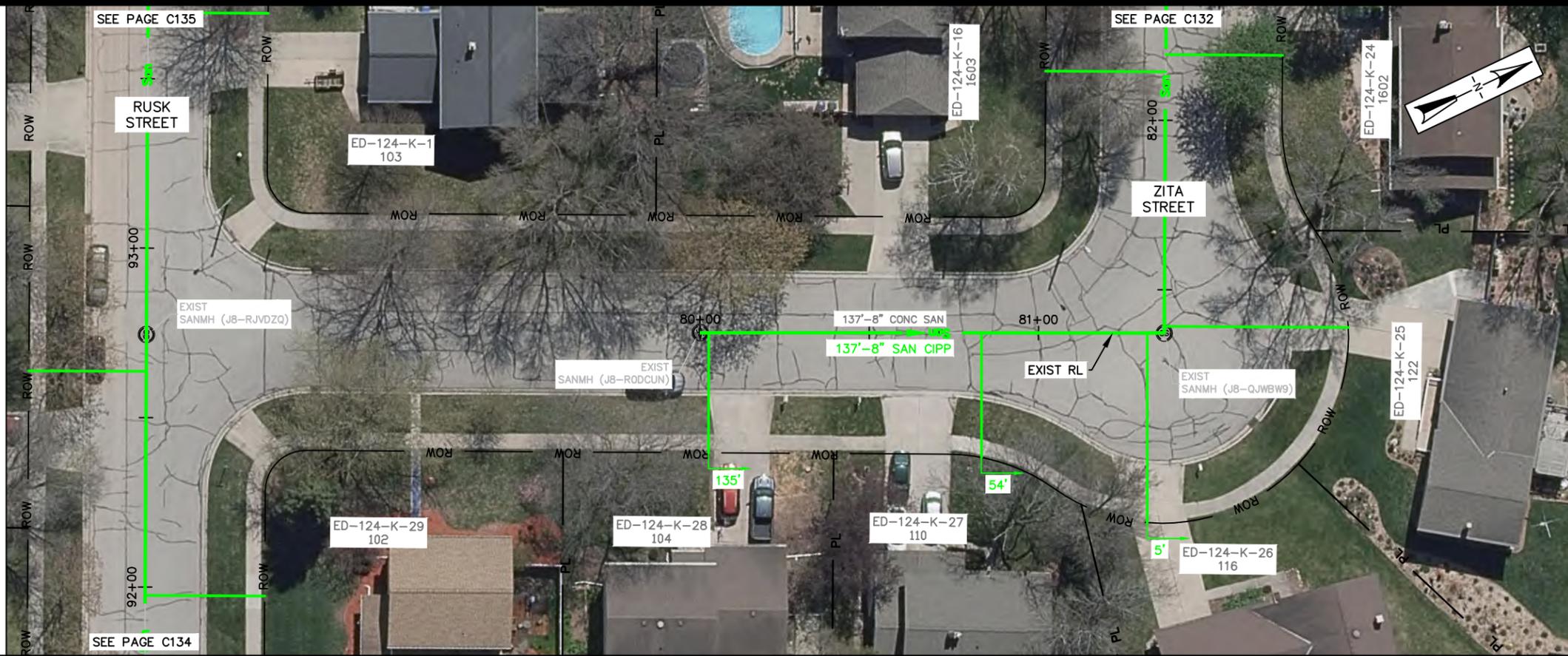




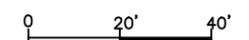
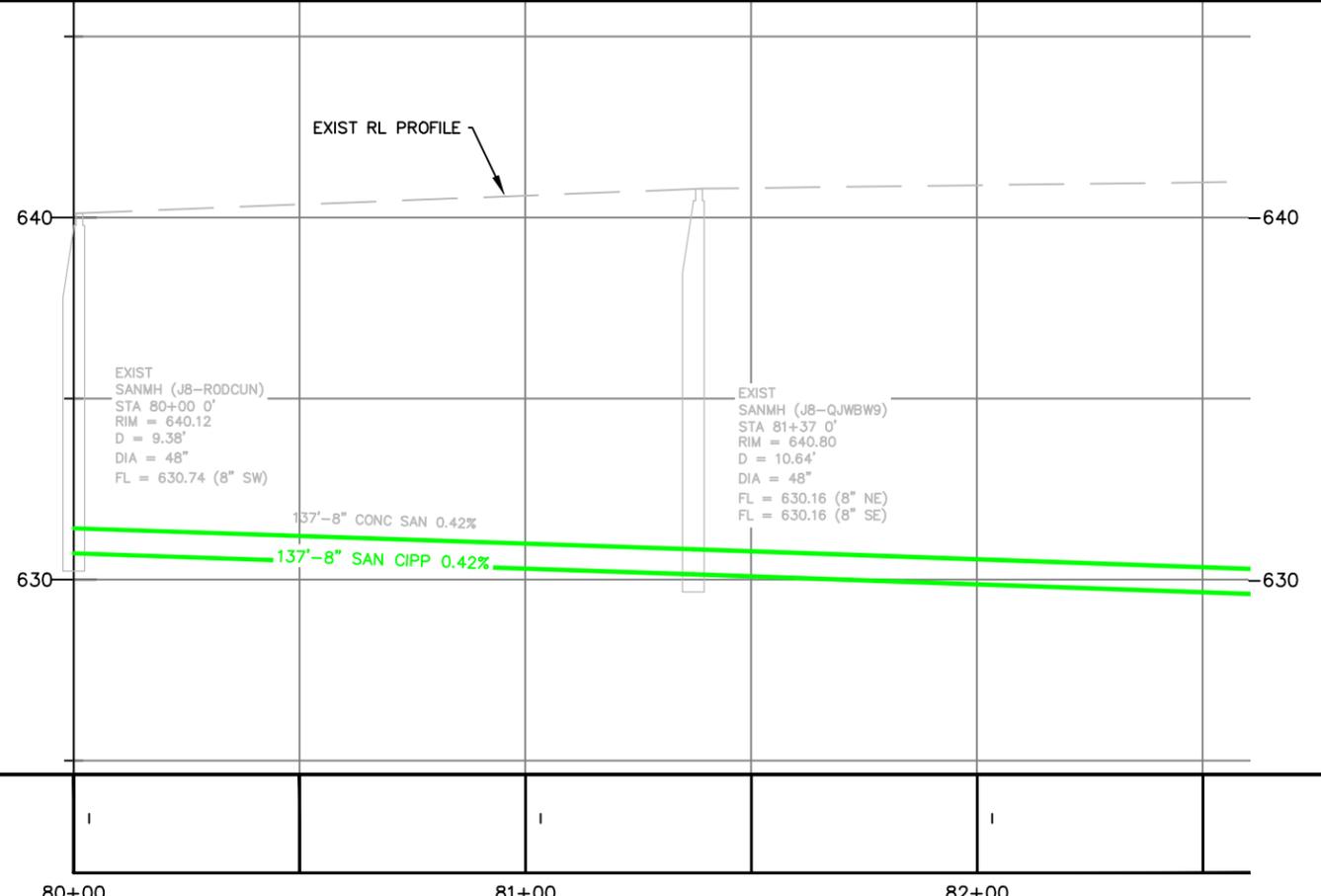
NOTE:
1. RECONNECT ALL ACTIVE LATERALS.

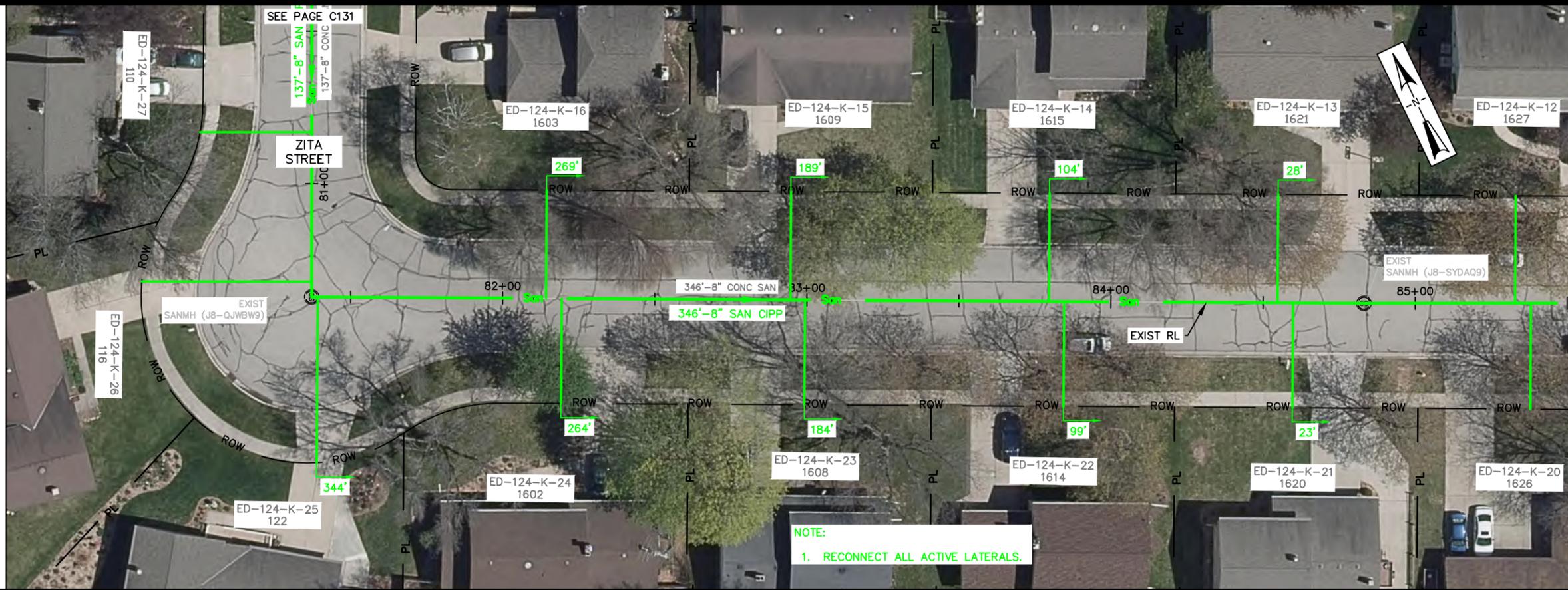


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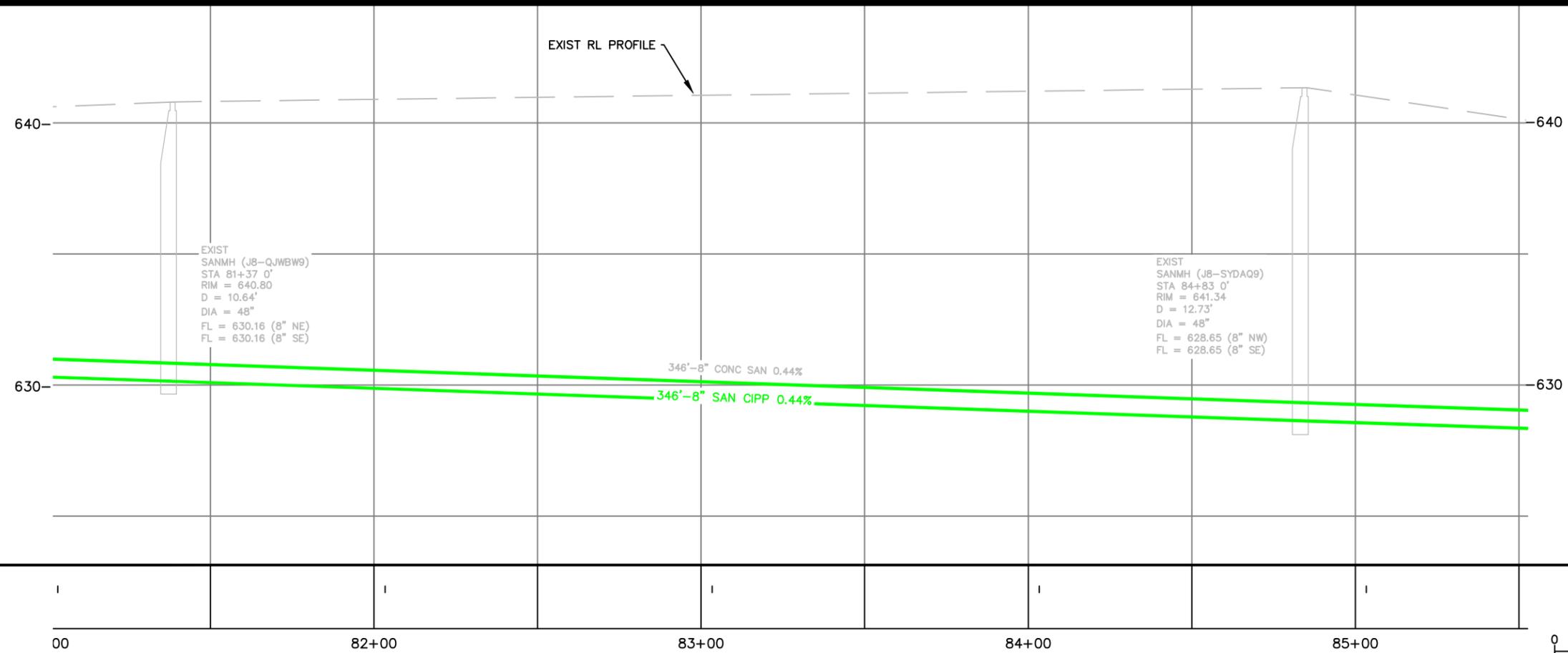


NOTE:
1. RECONNECT ALL ACTIVE LATERALS.





NOTE:
1. RECONNECT ALL ACTIVE LATERALS.



EXIST
SANMH (J8-QJWBW9)
STA 81+37 0'
RIM = 640.80
D = 10.64'
DIA = 48"
FL = 630.16 (8" NE)
FL = 630.16 (8" SE)

EXIST
SANMH (J8-SYDAQ9)
STA 84+83 0'
RIM = 641.34
D = 12.73'
DIA = 48"
FL = 628.65 (8" NW)
FL = 628.65 (8" SE)

SEE PAGE C133



CITY OF DE PERE

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

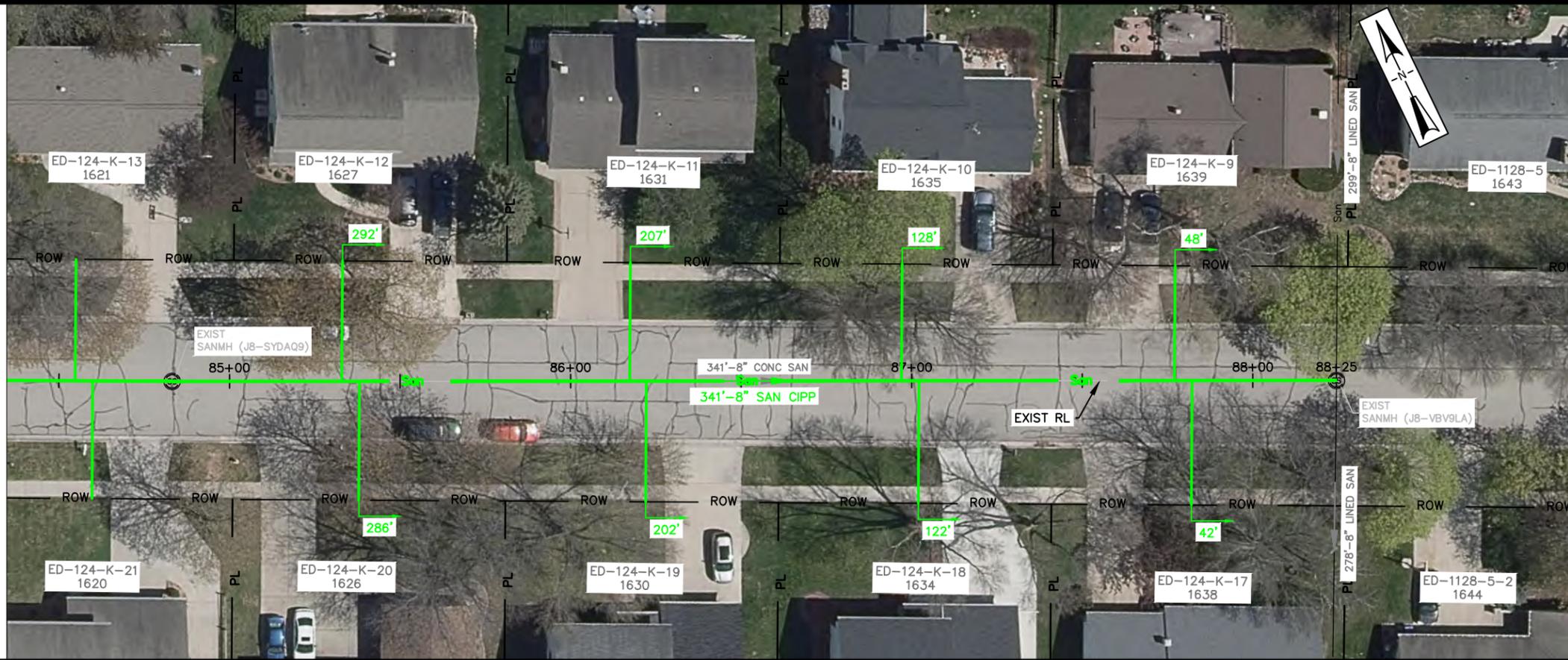
ZITA STREET

300' SW/O RUSK ST TO 700' NW/O CRESTVIEW

NAME: SEWER LINING
PROJECT # 22-03

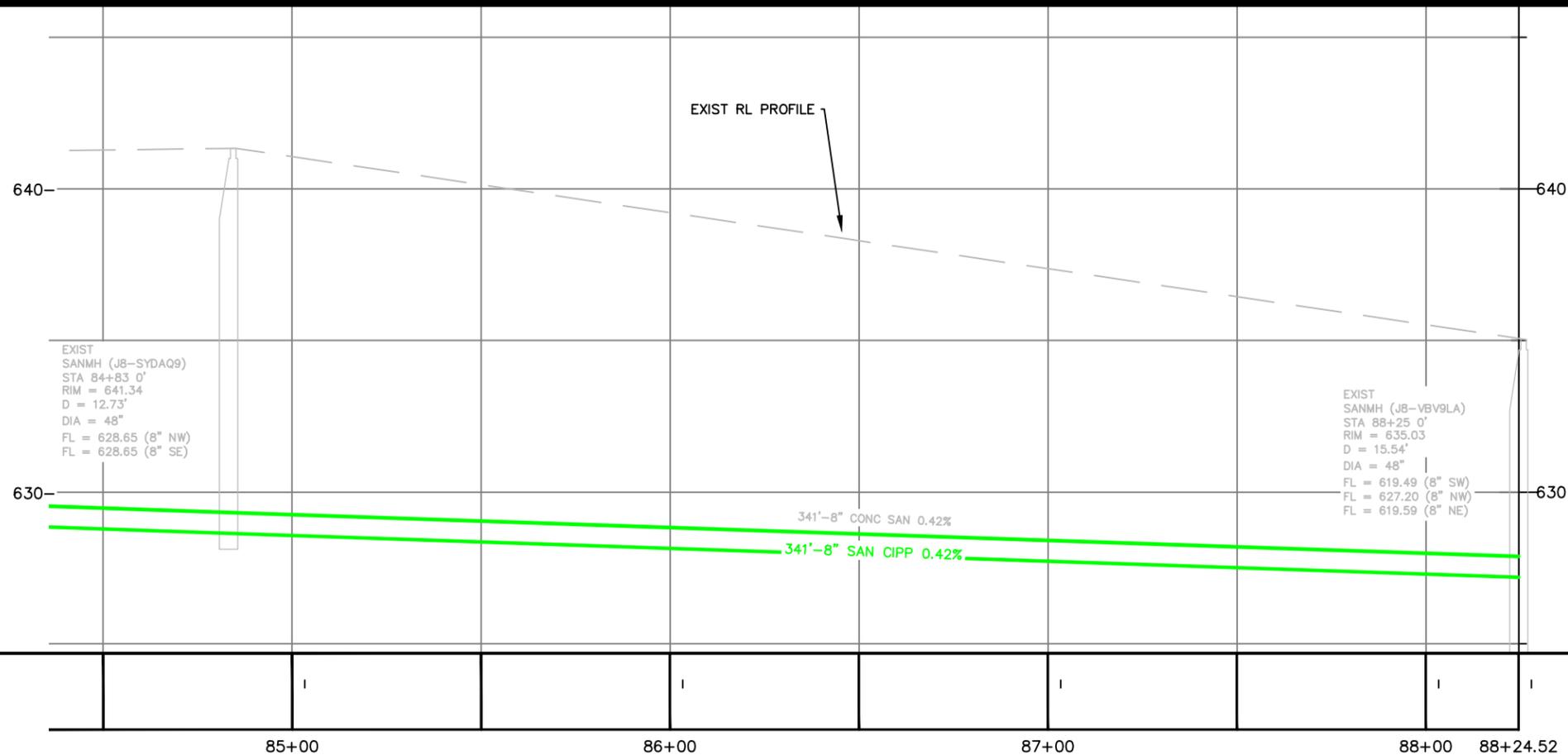
	BY	DATE
SURVEYED	MJT	01-2022
DRAWN	MJT	01-2022
DESIGNED	MJT	01-2022
CHECKED	EPR	01-2022

REVISIONS / ISSUES		
NO.	DATE	REMARKS



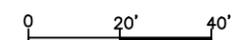
SEE PAGE C132

NOTE:
1. RECONNECT ALL ACTIVE LATERALS.



EXIST
SANMH (J8-SYDAQ9)
STA 84+83.0'
RIM = 641.34
D = 12.73'
DIA = 48"
FL = 628.65 (8" NW)
FL = 628.65 (8" SE)

EXIST
SANMH (J8-VB9LA)
STA 88+25.0'
RIM = 635.03
D = 15.54'
DIA = 48"
FL = 619.49 (8" SW)
FL = 627.20 (8" NW)
FL = 619.59 (8" NE)



CITY OF DE PERE

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

ZITA STREET

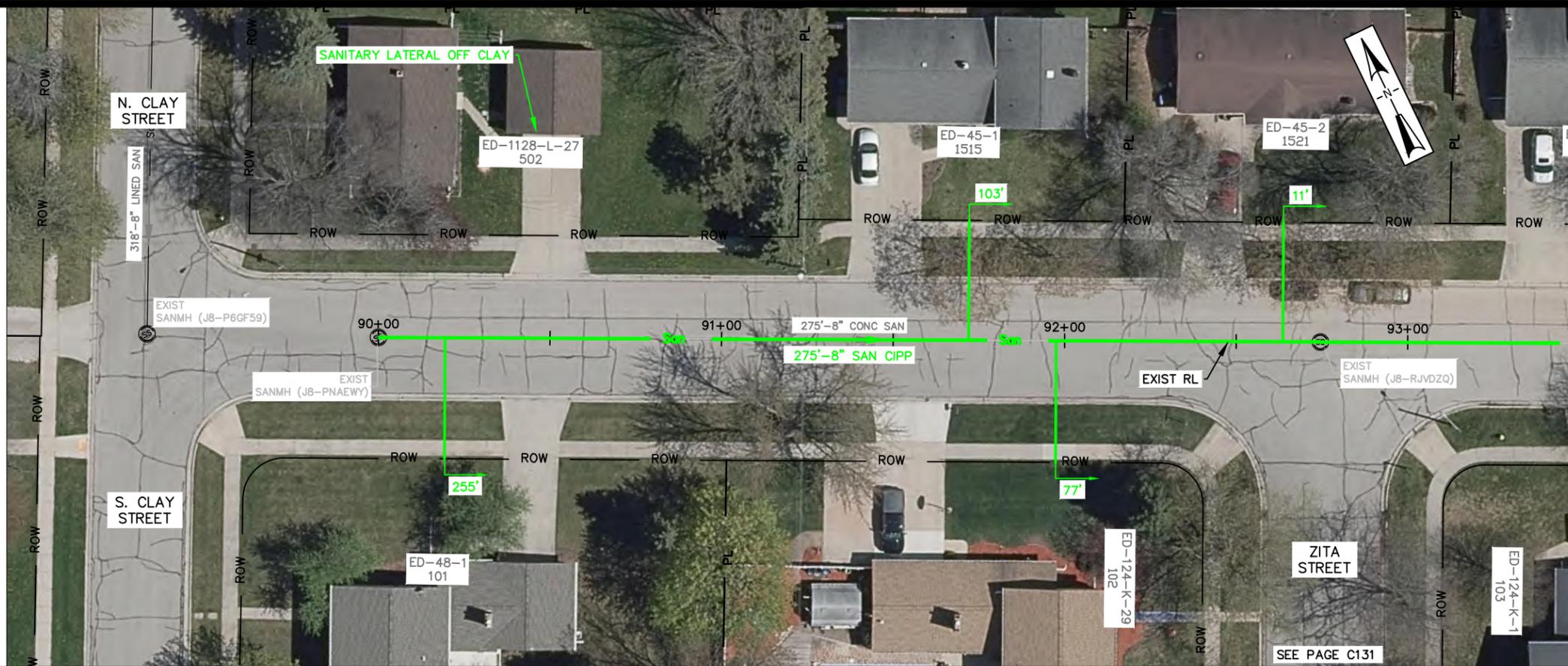
700' NW/O CRESTVIEW TO 350' NW/O CRESTVIEW

NAME: SEWER LINING
PROJECT # 22-03

NO.	DATE	BY	REVISIONS / ISSUES
SURVEYED	01-2022	MJT	
DRAWN	01-2022	MJT	
DESIGNED	01-2022	MJT	
CHECKED	01-2022	EPR	

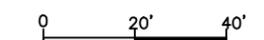
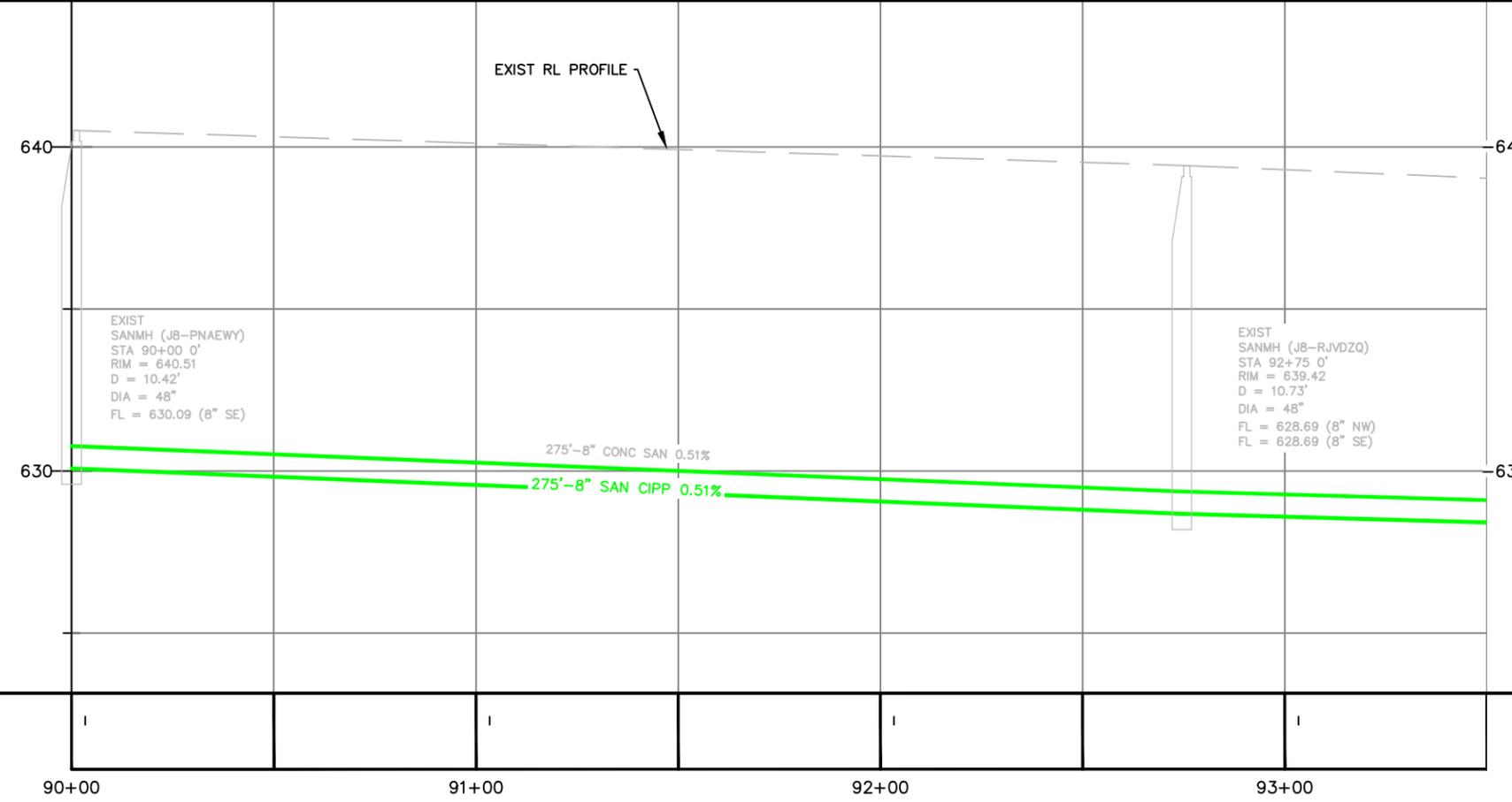
NO.	DATE	BY	REMARKS

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SEE PAGE C135

NOTE:
1. RECONNECT ALL ACTIVE LATERALS.



CITY OF DE PERE

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

RUSK STREET
50' E/O S. CLAY ST TO ZITA ST

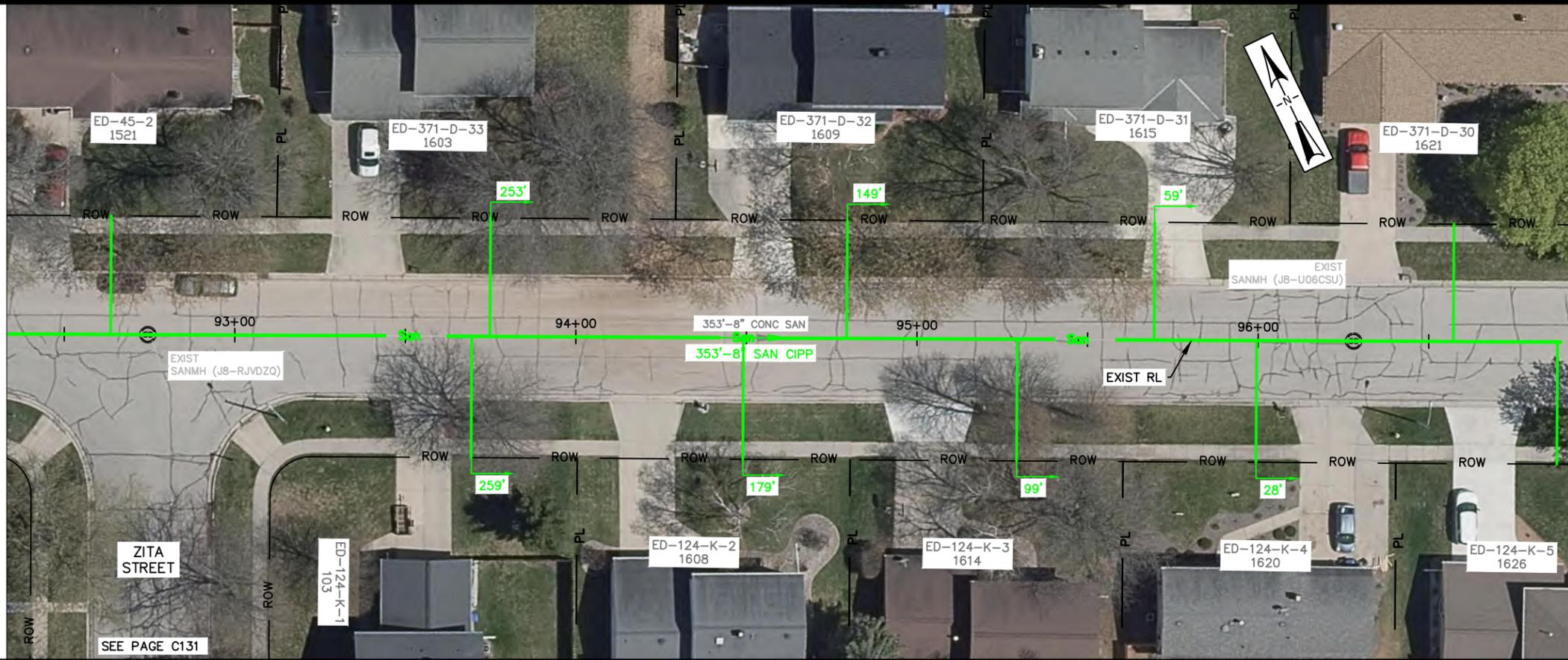
NAME: SEWER LINING
PROJECT # 22-03

	BY	DATE
SURVEYED	MJT	01-2022
DRAWN	MJT	01-2022
DESIGNED	MJT	01-2022
CHECKED	EPR	01-2022

REVISIONS / ISSUES		
NO.	DATE	REMARKS

PAGE NO.
C134

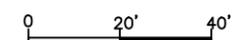
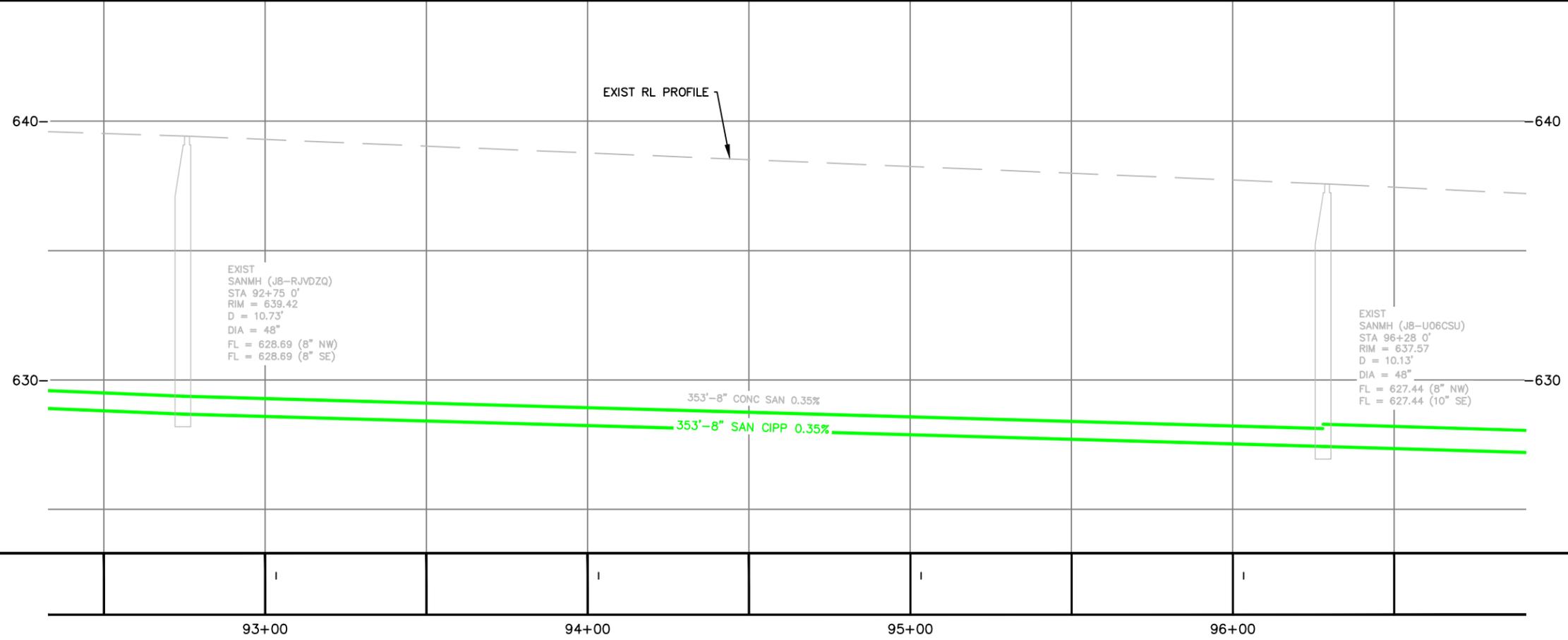
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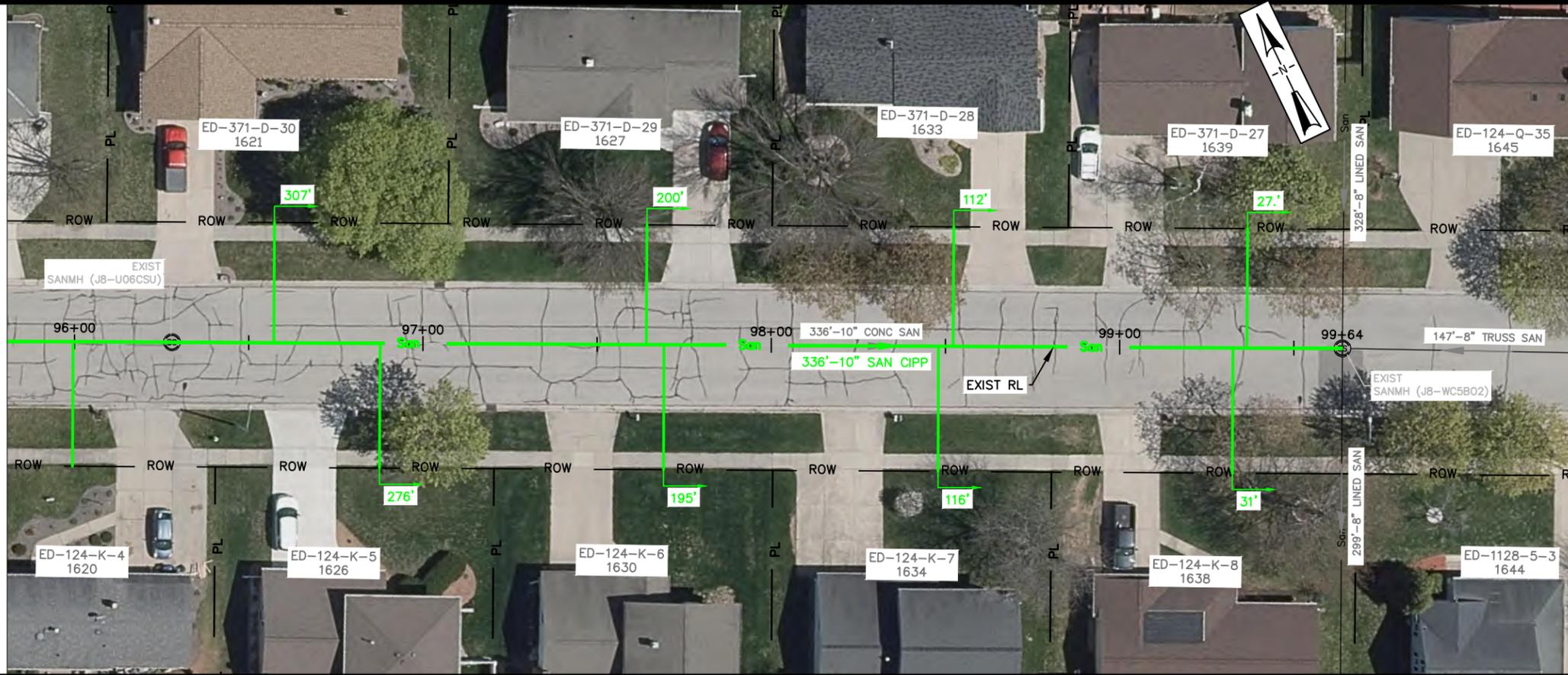
SEE PAGE C134

SEE PAGE C136

NOTE:
1. RECONNECT ALL ACTIVE LATERALS.

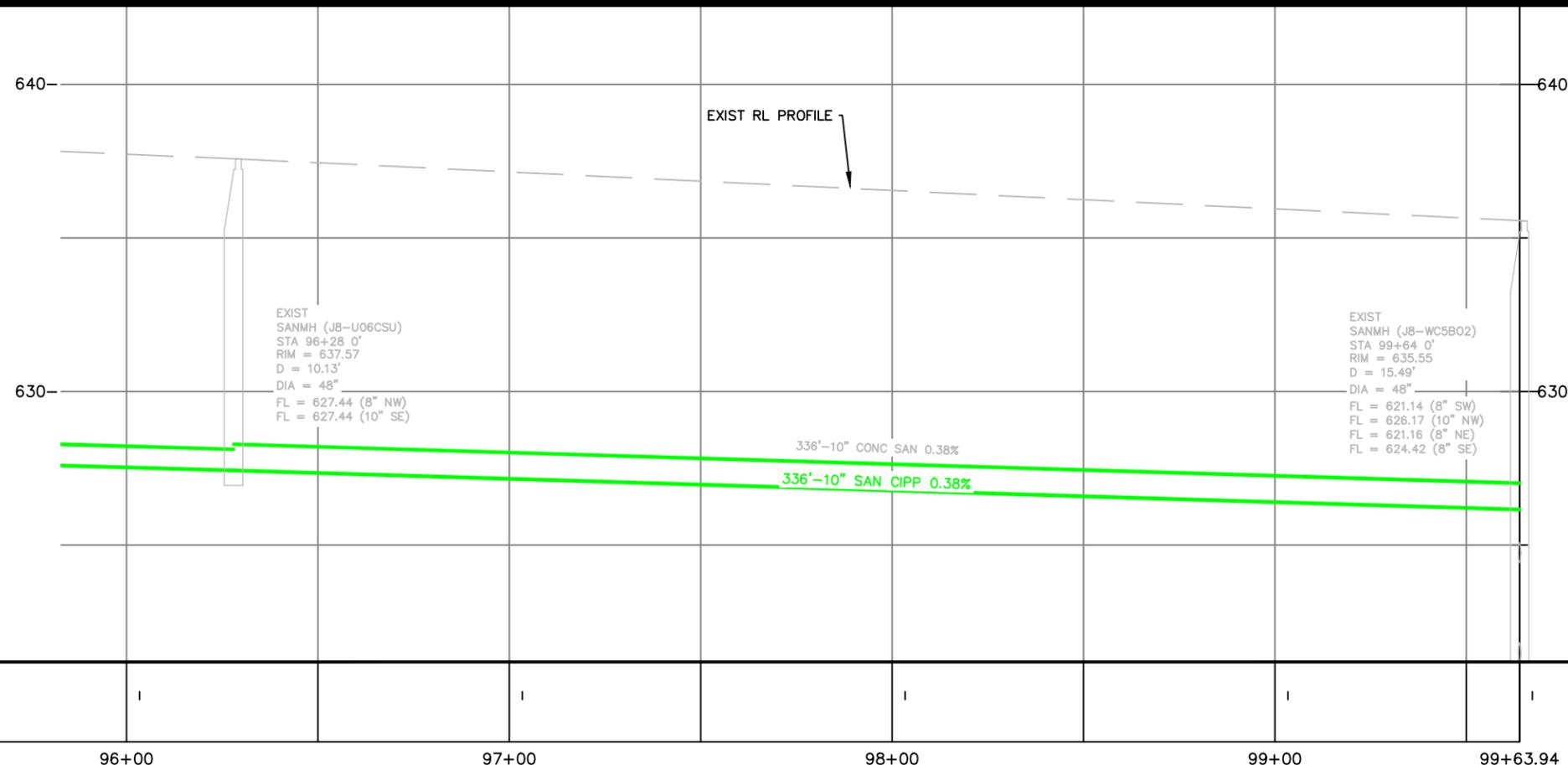


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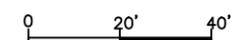


SEE PAGE C135

NOTE:
1. RECONNECT ALL ACTIVE LATERALS.

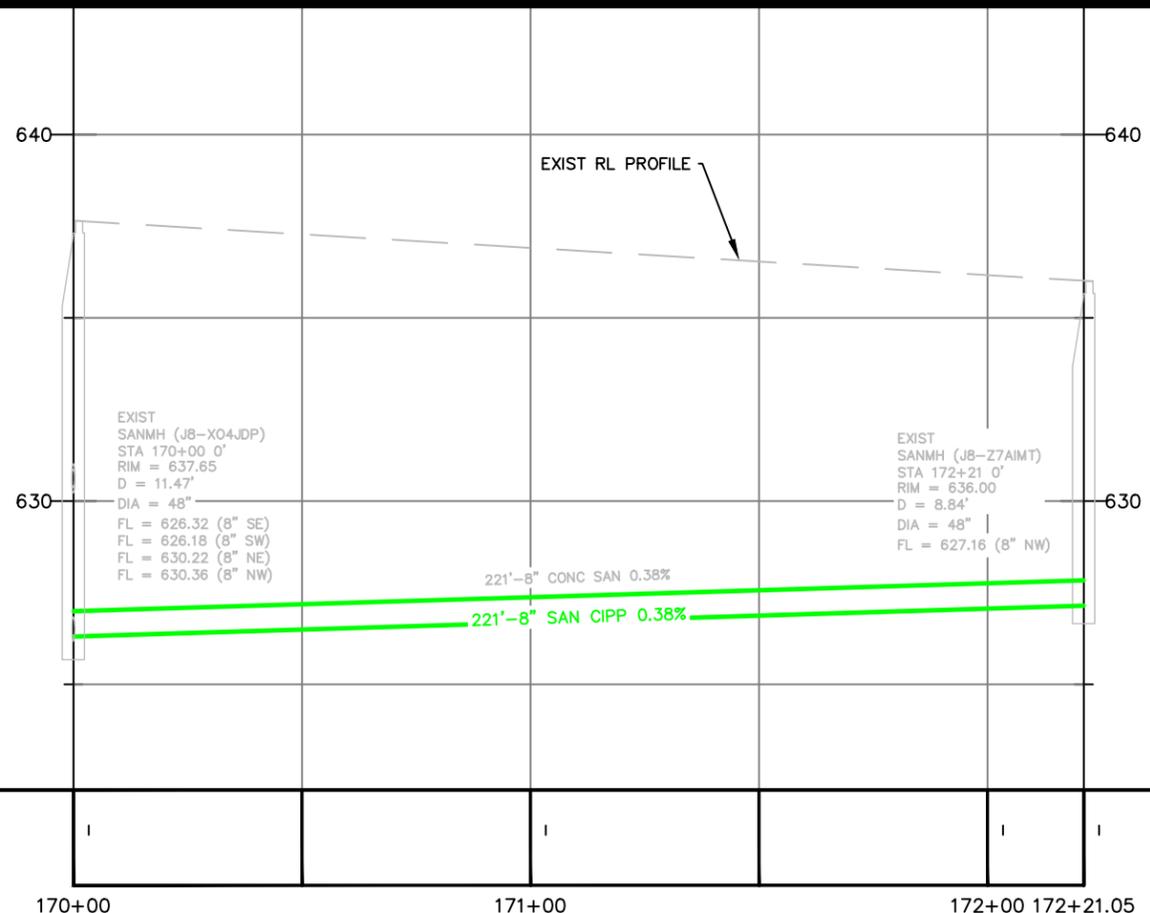
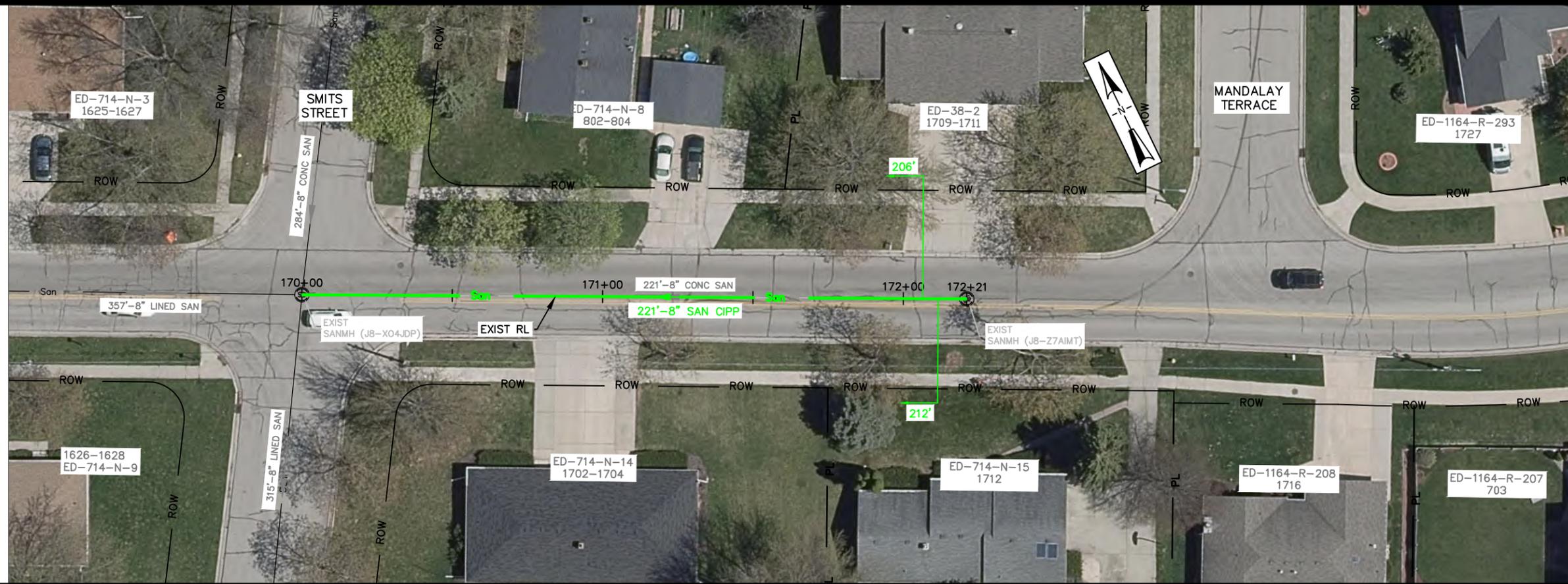


95+00 96+00 97+00 98+00 99+00 99+63.94

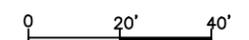


	CITY OF DE PERE	RUSK STREET	NAME: SEWER LINING	BY: MJT	DATE: 01-2022	REVISIONS / ISSUES		PAGE NO. C136
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071	350' E/O ZITA ST TO 700' E/O ZITA ST	PROJECT # 22-03	SURVEYED: MJT 01-2022	DRAWN: MJT 01-2022	DESIGNED: MJT 01-2022	CHECKED: EPR 01-2022	

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NOTE:
1. RECONNECT ALL ACTIVE LATERALS.



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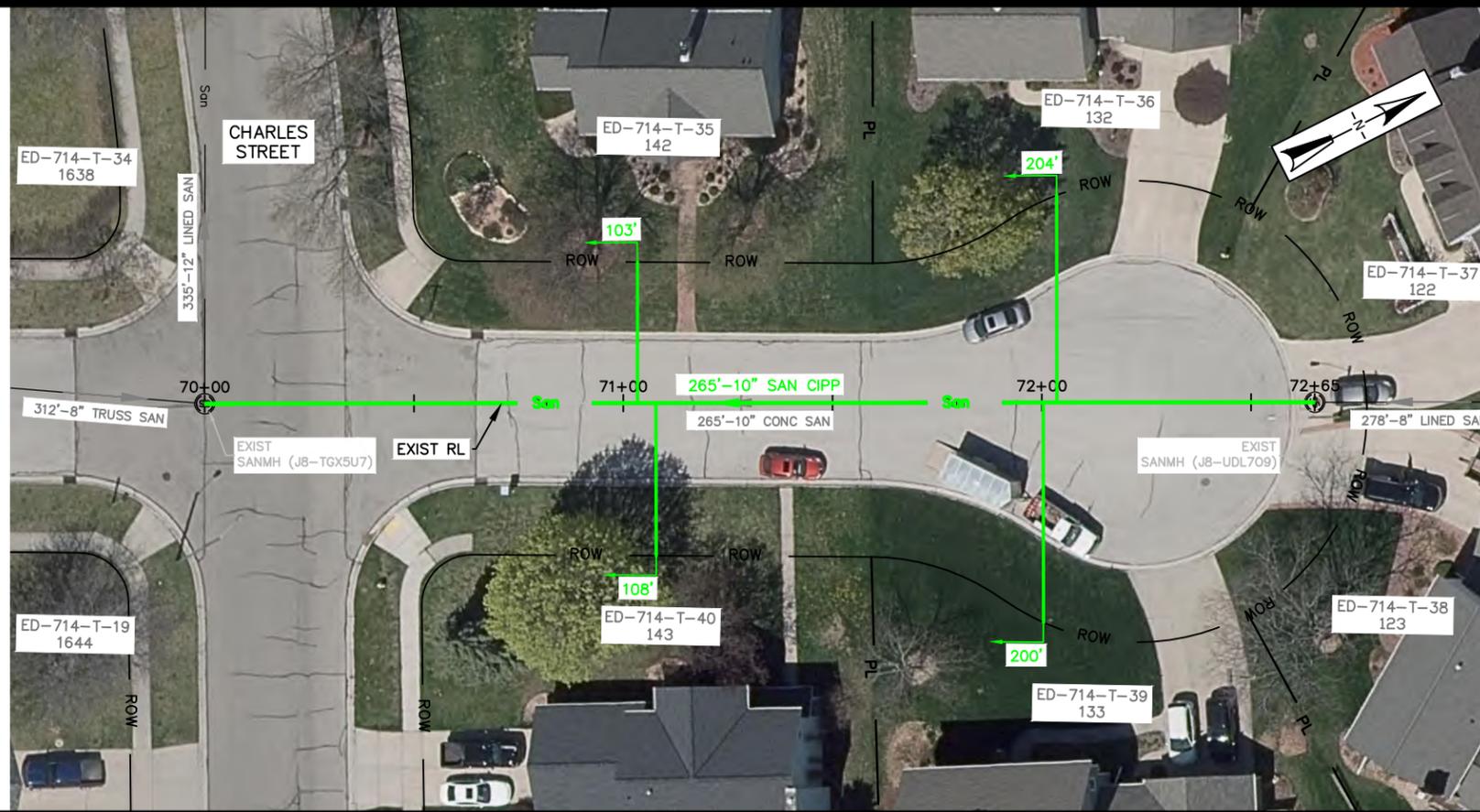
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115
OFFICE 920-339-4061 FAX 920-339-4071

**RIDGEWAY DRIVE
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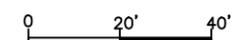
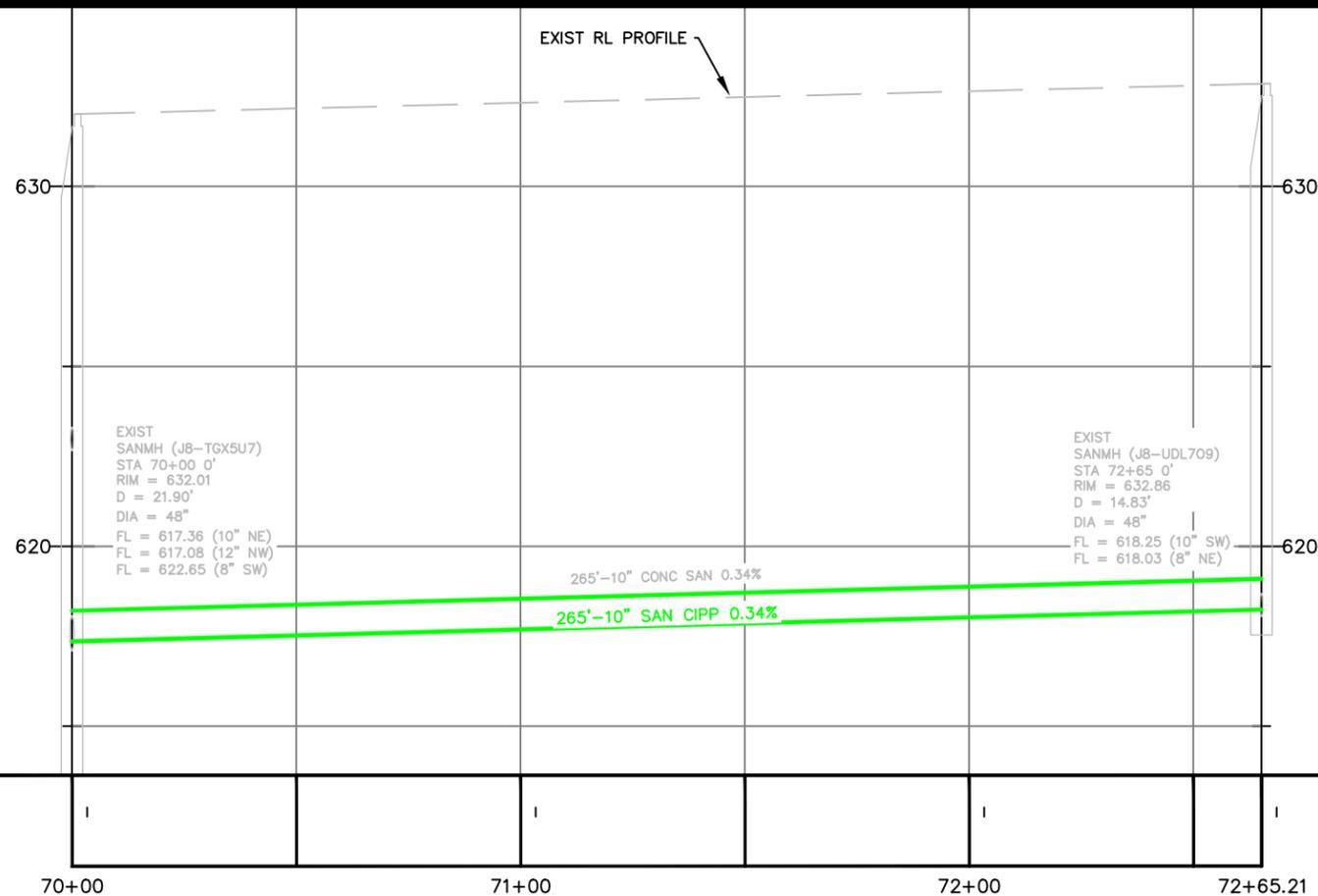
NAME: SEWER LINING
PROJECT # 22-03

	BY	DATE
SURVEYED	MJT	01-2022
DRAWN	MJT	01-2022
DESIGNED	MJT	01-2022
CHECKED	EPR	01-2022

REVISIONS / ISSUES		
NO.	DATE	REMARKS



NOTE:
1. RECONNECT ALL ACTIVE LATERALS.



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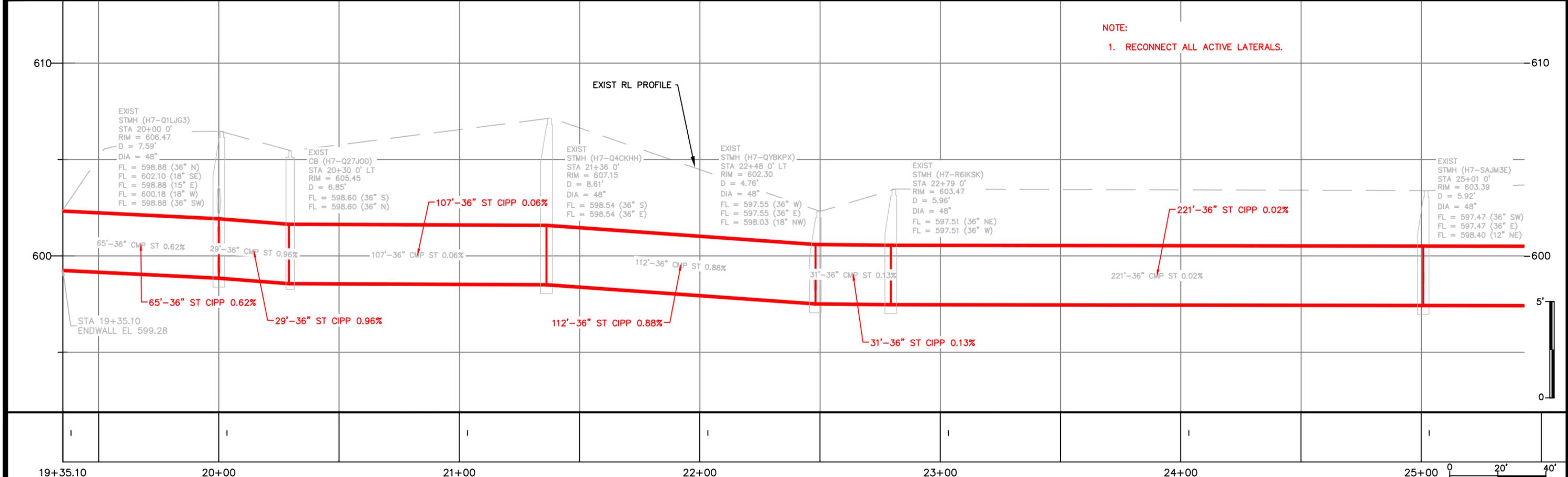
**NOB HILL LANE
CHARLES ST TO TERMINUS**

NAME: SEWER LINING
PROJECT # 22-03

NO.	DATE	BY	REVISIONS / ISSUES
	01-2022	MJT	SURVEYED
	01-2022	MJT	DRAWN
	01-2022	MJT	DESIGNED
	01-2022	EPR	CHECKED

NO.	DATE	BY	REMARKS

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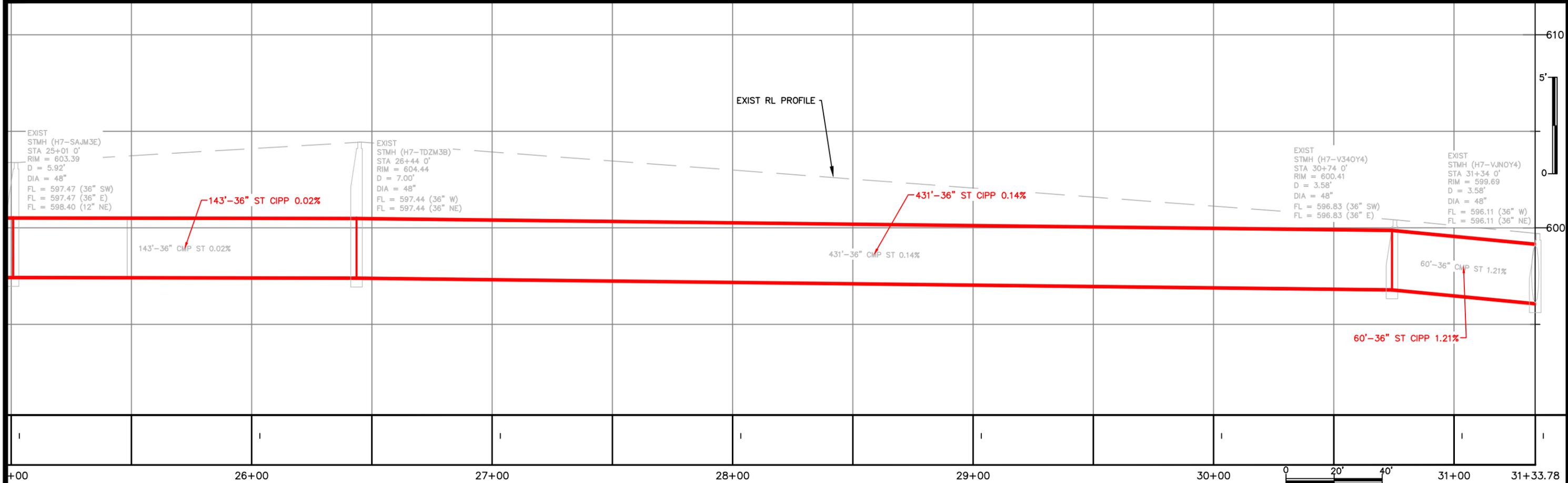
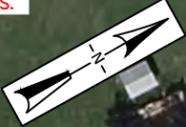
NOTE:
1. RECONNECT ALL ACTIVE LATERALS.

	CITY OF DE PERE	STORM SEWER EASEMENT WESTWOOD DR TO S SEVENTH ST	NAME: SEWER LINING	BY: MJT	DATE: 01-2022	REVISIONS / ISSUES		PAGE NO. C140											
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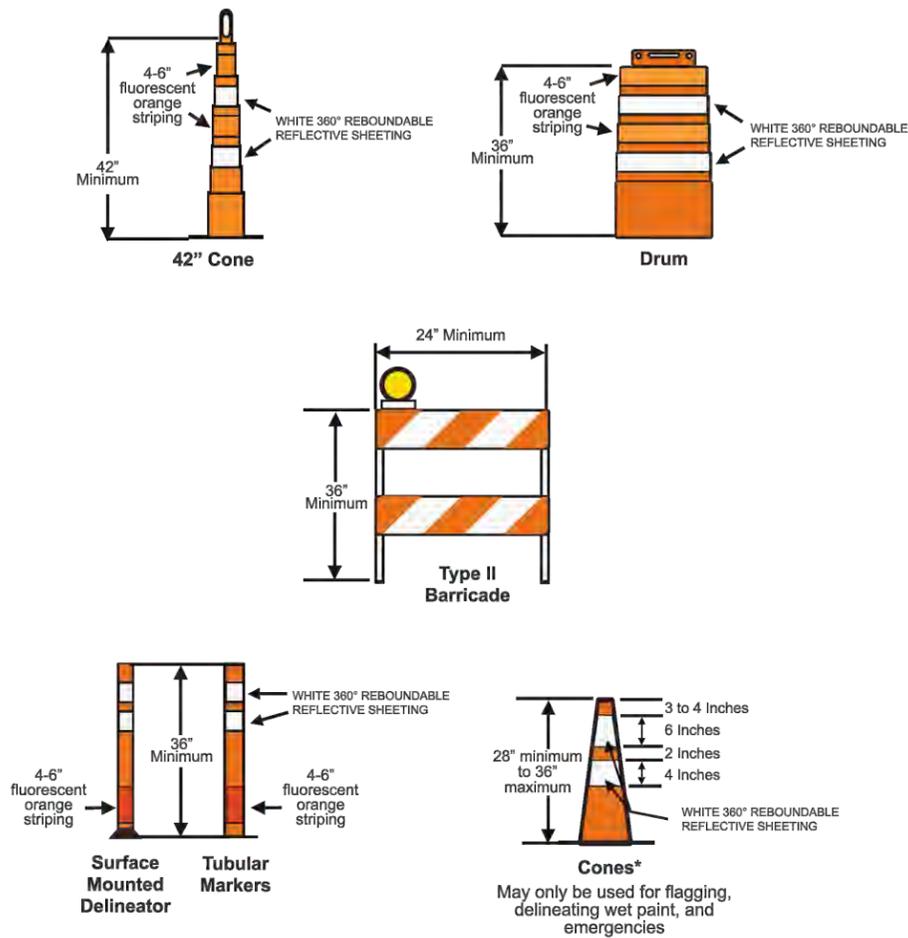
NOTE:
1. RECONNECT ALL ACTIVE LATERALS.



	CITY OF DE PERE	STORM SEWER EASEMENT S SEVENTH ST TO S SIXTH ST	NAME: SEWER LINING	BY MJT	DATE 01-2022	REVISIONS / ISSUES			PAGE NO.
	ENGINEERING DIVISION 925 S. SIXTH ST DE PERE WI 54115 OFFICE 920-339-4061 FAX 920-339-4071		PROJECT # 22-03	NO.	DATE	BY	REMARKS	C141	

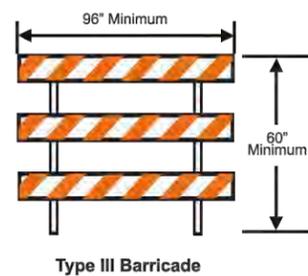
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CHANNELIZING DEVICES



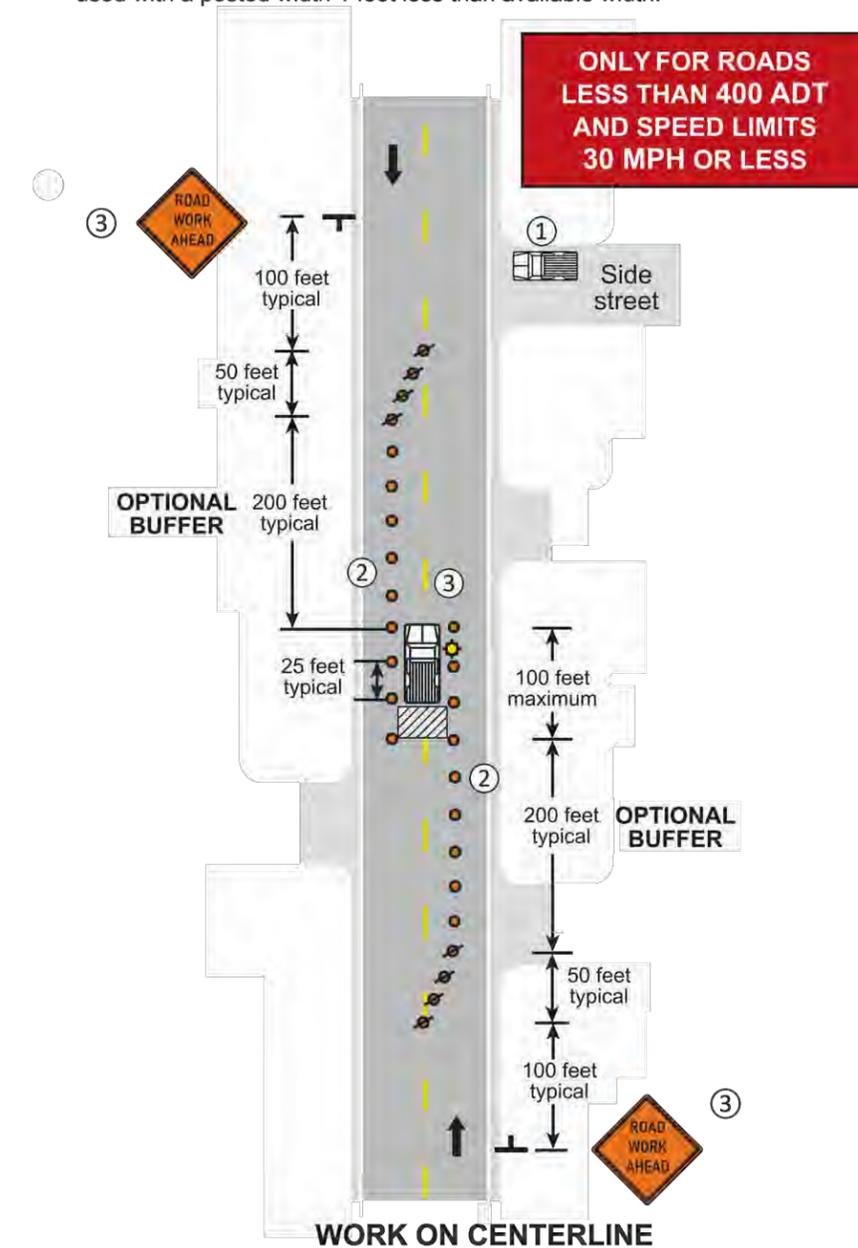
TYPE 3 BARRICADES

- Orange diagonals shall slope down toward the traffic side.
- Signs mounted on Type III barricades should not cover more than half of the top two rails or 33 percent of the total area of the three rails.
- Type A Flashing Warning Lights may be used - place on both side of barricade. Required for nighttime work or if device remaining overnight.



NOTES:

- 1 Additional Work Vehicle shall be parked off of the roadway. Do not obstruct the shoulder in the work area.
- 2 A minimum of 10 feet of drivable surface outside of the channelizers should be maintained on all sides. Anything less than 10 feet shall be approved by the road authority.
- 3 Channelizers and ROAD WORK AHEAD signs are optional at 15 minutes or less.
- 4 END ROAD WORK sign should be placed 500 feet past work area.
- 5 When available width is less than 16 feet, a Max Width (W12-52) sign should be used with a posted width 1 foot less than available width.



12 HOURS or LESS

LAYOUT 1



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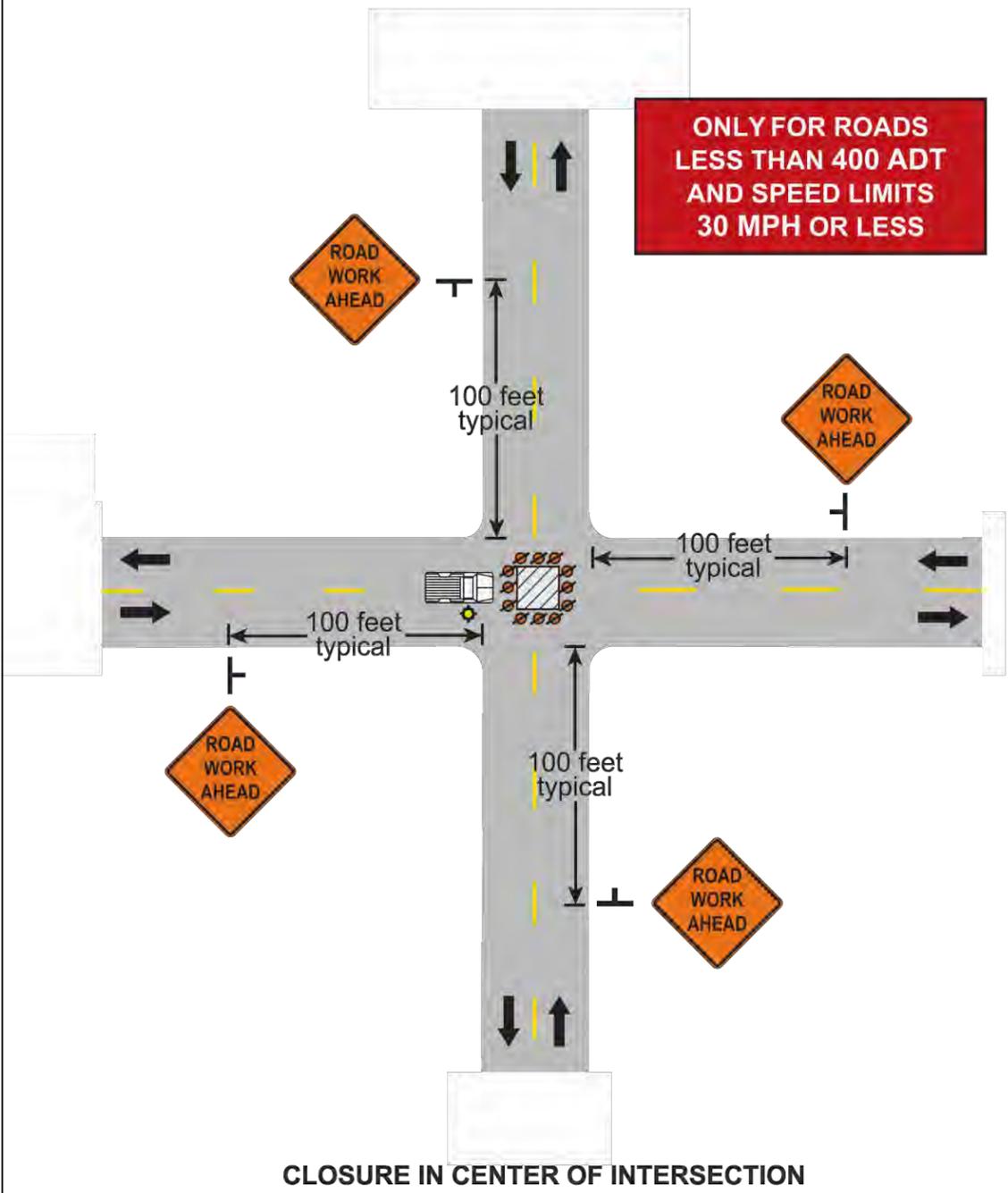
TRAFFIC CONTROL

NAME: SEWER LINING	BY	DATE	REVISIONS / ISSUES	
PROJECT # 22-03	SURVEYED	01-2022	NO.	DATE
	DRAWN	01-2022	BY	REMARKS
	DESIGNED	01-2022		
	CHECKED	01-2022		

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NOTES:

1. A minimum of 10 feet of drivable surface outside of the channelizers shall be maintained such that traffic can self-regulate.
2. END ROAD WORK sign should be placed 500 feet past work area.
3. When available width is less than 16 feet, a Max Width (W12-52) sign should be used with a posted width 1 foot less than available width.

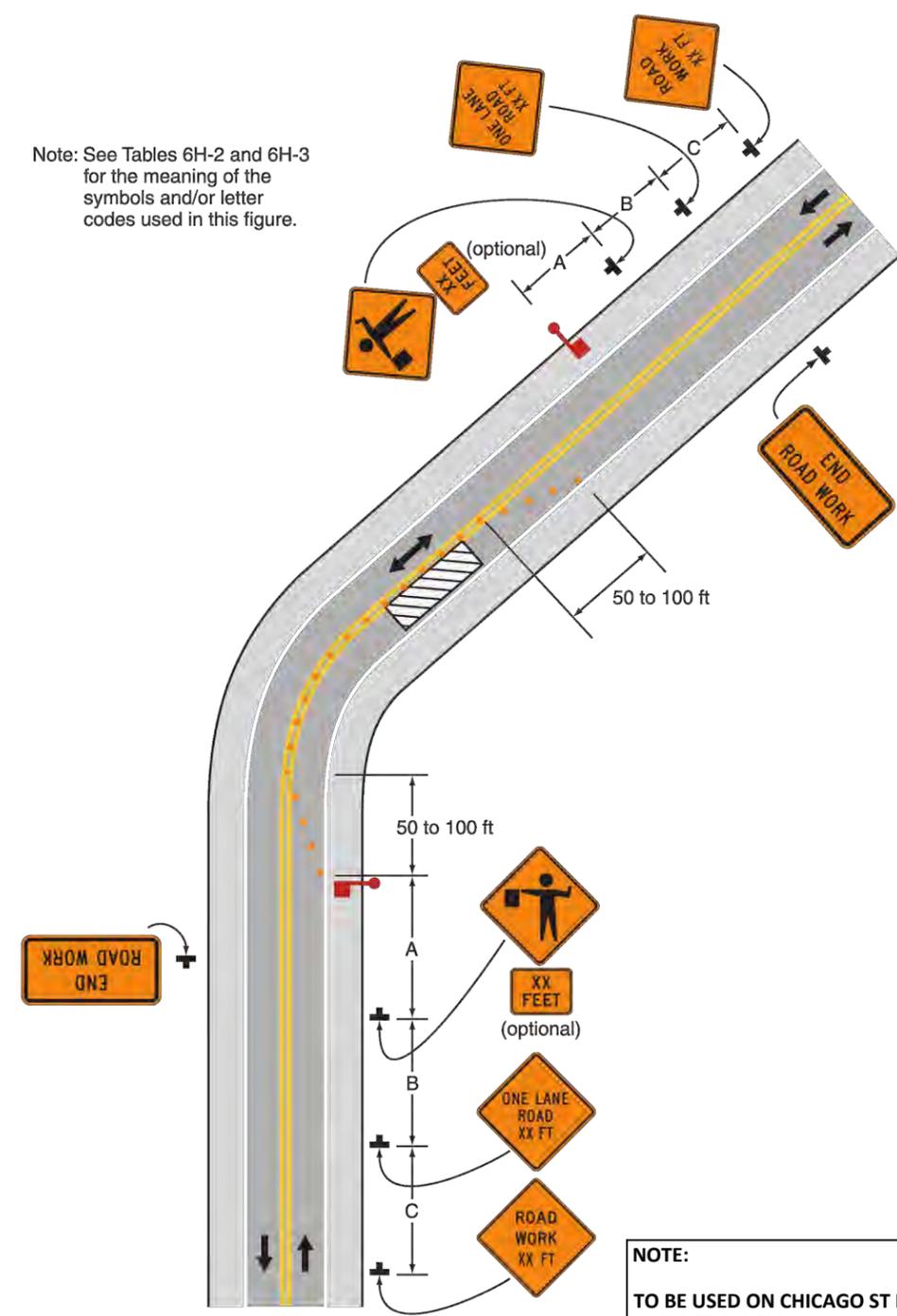


3 DAYS or LESS

LAYOUT 3

Figure 6H-10. Lane Closure on a Two-Lane Road Using Flaggers (TA-10)

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.



Typical Application 10



CITY OF DE PERE

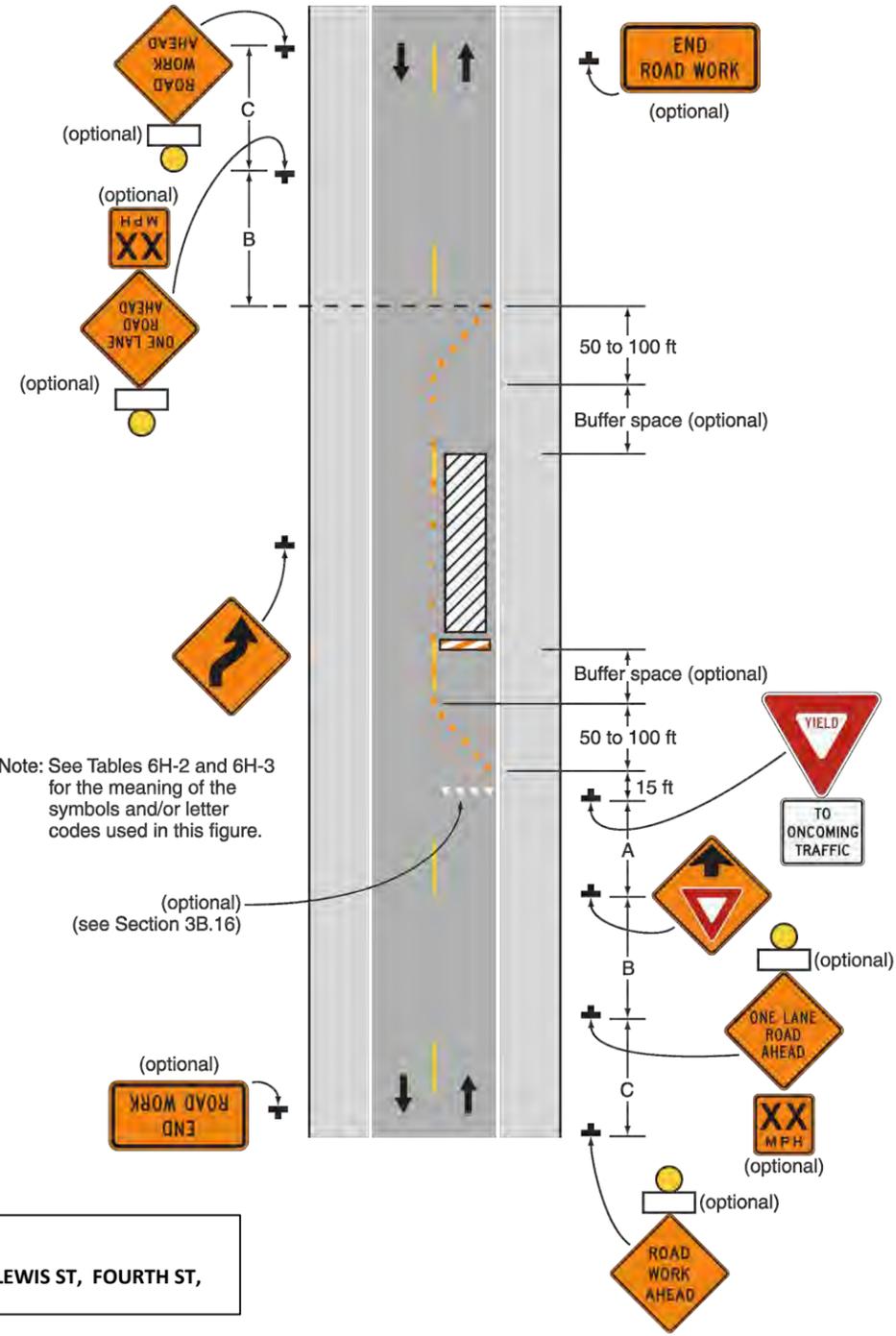
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TRAFFIC CONTROL

NAME: SEWER LINING	BY	DATE	REVISIONS / ISSUES		PAGE NO. C402
PROJECT # 22-03	SURVEYED		NO.	DATE	
	DRAWN	SRL 01-2022			
	DESIGNED	SRL 01-2022			
	CHECKED	EPR 01-2022			

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Figure 6H-11. Lane Closure on a Two-Lane Road with Low Traffic Volumes (TA-11)

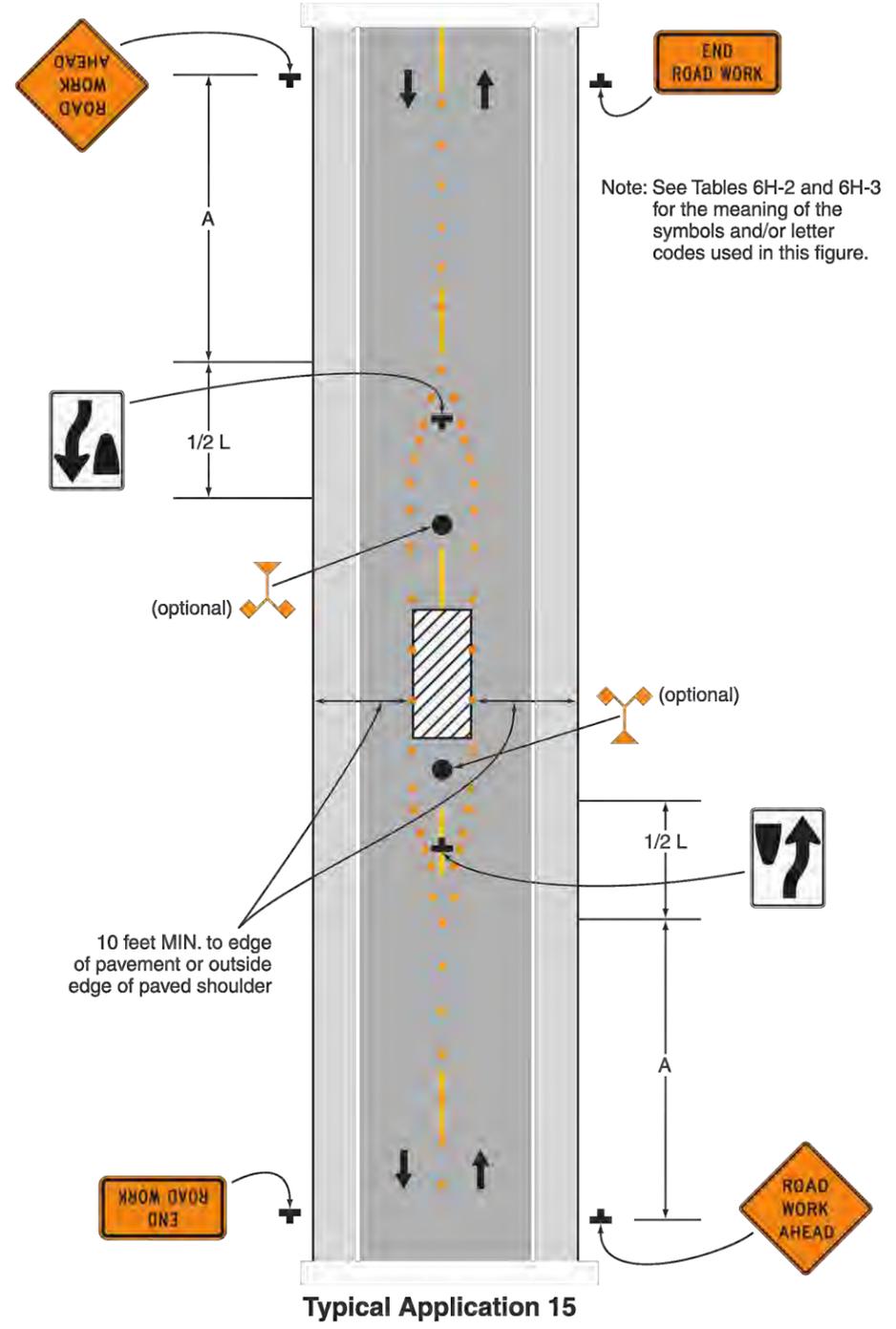


Typical Application 11

December 2009

Sect. 6H.01

Figure 6H-15. Work in the Center of a Road with Low Traffic Volumes (TA-15)



Typical Application 15

NOTE:
TO BE USED ON RIDGEWAY DR, CHICAGO ST, LEWIS ST, NINTH ST, FOURTH ST, APOLLO WAY AND WEBSTER AVE (CHICAGO TO GEORGE).

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Sect. 6H.01



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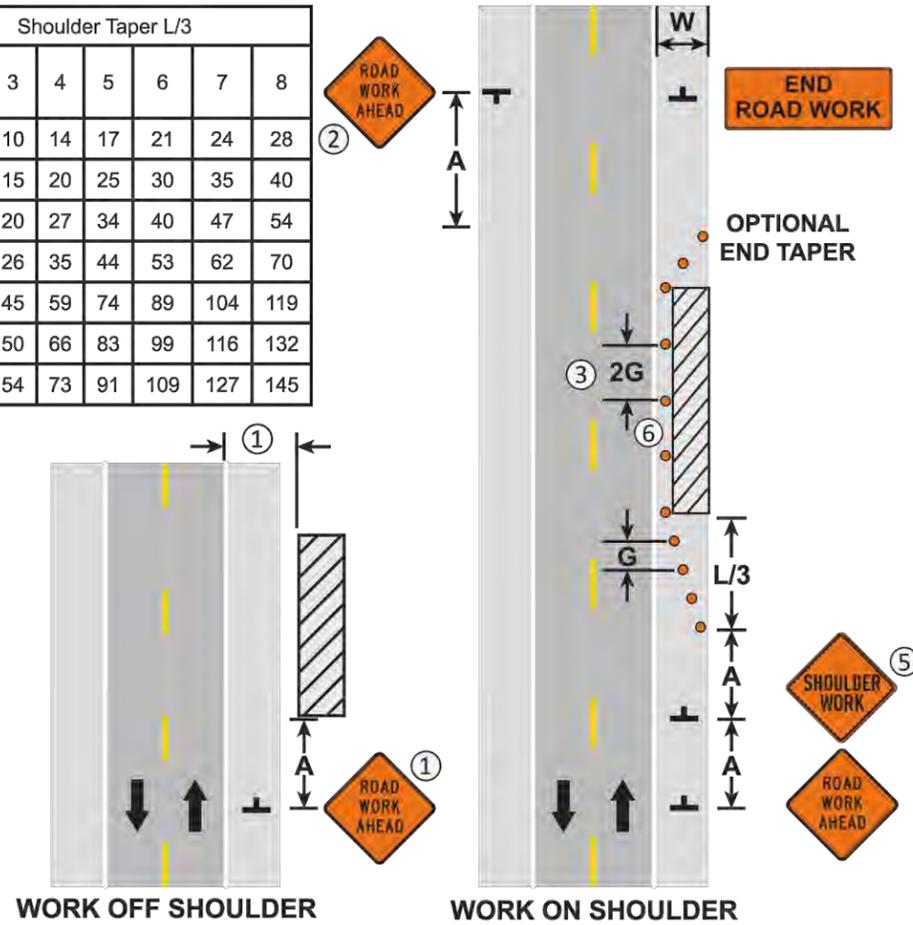
TRAFFIC CONTROL

NAME: SEWER LINING	BY	DATE	REVISIONS / ISSUES		PAGE NO. C403
PROJECT # 22-03	SURVEYED	01-2022	NO.	DATE	
	DRAWN	SRL	BY	REMARKS	
	DESIGNED	SRL			
	CHECKED	EPR			

NOTES:

- ① The ROAD WORK AHEAD sign may be omitted for short term daylight operations if a vehicle is displaying and operating a 360-degree flashing beacon and:
 - a. The distance from curb face to the work space is at least 2 feet, or
 - b. The distance from the edge of the roadway to the work space is at least 15 feet.
- ② This ROAD WORK AHEAD sign shall be installed on two-lane, two-way roads if traffic control devices are installed for a work space in the opposite shoulder.
- ③ If this layout is used to close a parking lane that is normally open to vehicle travel during the time of day the closure will be in effect, the lane shall be considered a traveled lane and not a parking lane. Layout 39 shall be used to provide traffic control for the lane closure.
4. If this layout is used to close a parking lane, channelizer spacing may be reduced from 2G to G in high volume areas.
- ⑤ Change SHOULDER WORK sign to ROAD NARROWS sign if work encroaches the live lane.
6. ROAD WORK AHEAD and END ROAD WORK signs are not required if the work area is within a larger work zone where these signs are already present.

Shoulder Taper L/3		3	4	5	6	7	8
W	mph						
	25	10	14	17	21	24	28
	30	15	20	25	30	35	40
	35	20	27	34	40	47	54
	40	26	35	44	53	62	70
	45	45	59	74	89	104	119
	50	50	66	83	99	116	132
	55	54	73	91	109	127	145

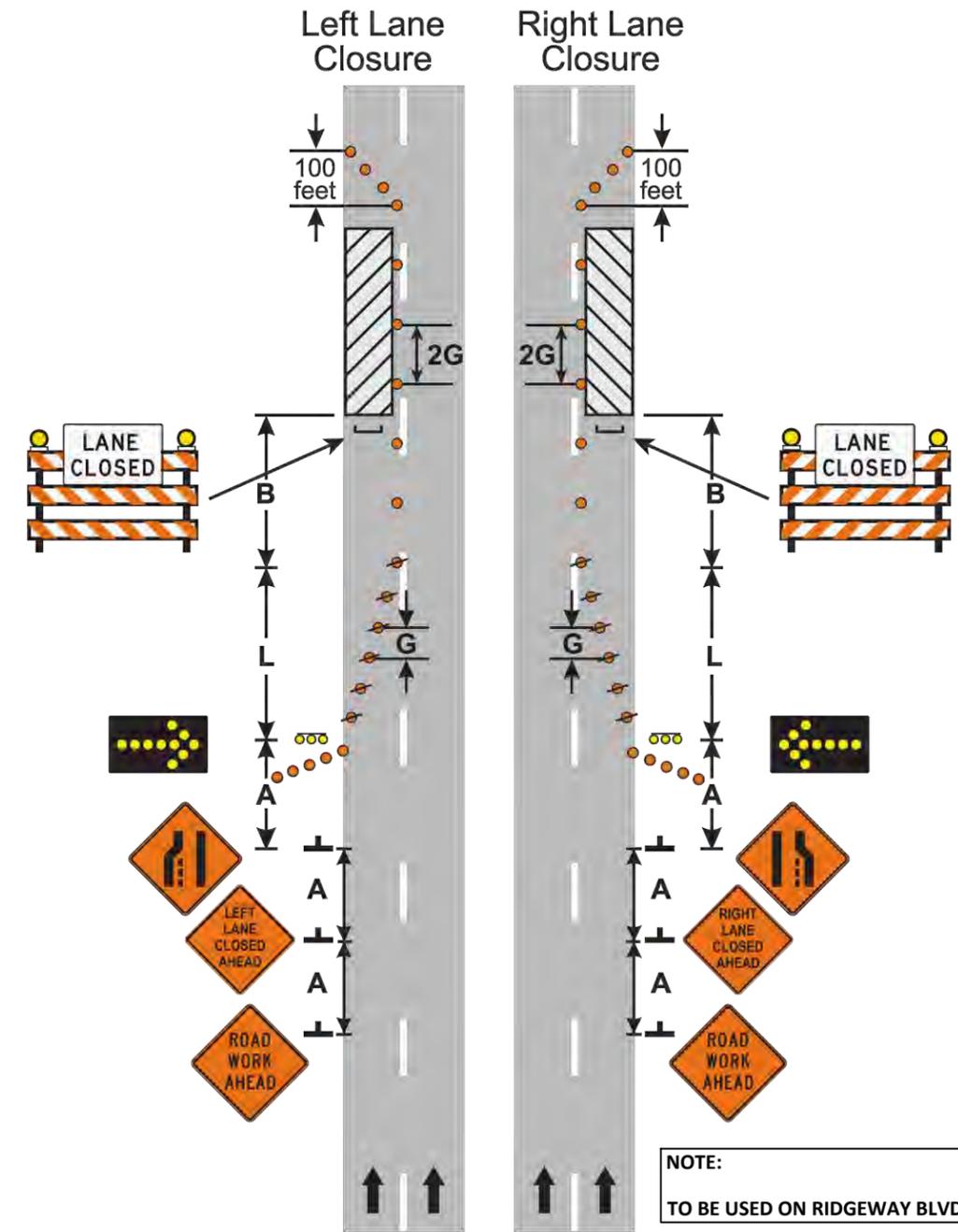


SHOULDER AND PARKING LANE CLOSURE
WORK ON or NEAR SHOULDER
3 DAYS or LESS **LAYOUT 6**

NOTE:
 TO BE USED ON LOST DAUPHIN.

NOTES:

1. END ROAD WORK sign should be placed 500 feet past work area.
2. When available width is less than 16 feet, a Max Width (W12-52) sign should be used with a posted width 1 foot less than available width.



45 MPH AND LESS
LANE CLOSURE
MULTI-LANE DIVIDED ROAD
3 DAYS or LESS **LAYOUT 52**

NOTE:
 TO BE USED ON RIDGEWAY BLVD.



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	DESIGNED	SRL	01-2022	
	CHECKED	EPR	01-2022	

