LORAIN CITY COUNCIL
Regular Meeting Agenda
Monday, February 2, 2026 @ 6:00 p.m.

1. **OPENING OF COUNCIL:** Prayer and the Pledge of Allegiance.
2. **ROLL CALL:**
3. **DISPOSITION OF MINUTES:**
   a. January 20, 2026 Regular Meeting Minutes.
   b. January 27, 2026 Special Call Minutes
4. **CORRESPONDENCE/REPORTS FROM DIRECTORS, BOARDS AND COMMISSIONS & OTHER GOVERNMENTAL AGENCIES**
   a. President Arredondo's appointment of a member of Council to serve as the Chaplain.
   b. President Arredondo's appointment of the Finance Chair to serve on the Tax Incentive Review Committee.
   c. Clerk of Court's submission of the 2025 Lorain Municipal Court's Summary Annual Report.
5. **PUBLIC COMMENTS:** (The sign-in sheet will be collected prior to commencement of the meeting) The two (2) minute per person limit and twenty (20) minute max will be observed.
6. **COMMITTEE REPORTS:**
7. **LEGISLATION - FIRST READING:**
   a. ____ Reso. recognizing, celebrating and declaring the month of February as Black History Month.
   b. ____ Reso. auth the S/S Director to waive the requirement for the installation of sidewalk at 4725 Meister Rd.
   c. ____ Ord. auth the S/S Director to enter into contract for the replacement of water infrastructure within the water distribution system.
   d. ____ Ord. auth the S/S Director to enter into a WPCLF agreement for the construction of the new Martin Run Pump Station.
   e. ____ Ord. auth the S/S Director to apply, accept & enter into a WPCLF agreement for the planning & work associated with the SSES.
   f. ____ Ord. auth the S/S Director to apply, accept & enter into a WSRLA agreement for the construction of the water main replacement year 2 project.
   g. ____ Ord. auth the S/S Director to enter into contract with Tri More Corp., for the Tower Blvd. rehab project.
   h. ____ Ord. assessing the cost of abating nuisance by removing litter & deposit of garbage, rubbish, junk, etc.
   i. ____ Ord. auth the Treasurer to enter into an agreement with Keith D. Weiner & Associates Co., LPA for the collection of delinquent income tax balances.
   j. ____ Appropriation.
   k. ____ Ord. auth the Auditor to pay an invoice submitted by the Utilities Dept., that invokes the Then and Now Cert. Exception Process.

l. ____ Ord. auth the issuance & sale of general obligation bonds for the purpose of paying the costs of roadway improvements as described herein.

m. ____ Ord. auth the issuance & sale of general obligation bonds for the purpose of retiring certain outstanding notes for roadway improvements as described herein.

n. ____ Ord. auth the issuance & sale of general obligation bonds for the purpose of retiring certain outstanding bonds for various purposes described herein.

o. ____ Ord. auth the issuance & sale of bonds for the purpose of refunding certain outstanding bonds used to pay the Urban Renewal Project Activities.

8. **LEGISLATION - SECOND READING: None.**

9. **LEGISLATION - THIRD READING: None.**

10. **COMMITTEE CALLS:**
February 23, 2026 @ 5:30pm- Public Hearing to discuss ZCA 3-2025; the rezoning of 2973 G. Street from B2 to R2.
April 13, 2026 @ 5:30pm- Finance Committee for a quarterly budget update.

11. **EXECUTIVE SESSION.**

12. **ADJOURNMENT.**

AN EXECUTIVE SESSION, BY PROPER MOTION, WILL BE HELD IN ACCORDANCE WITH ORC SECTION 121.22: G (2) TO CONSIDER THE PURCHASE OR SALE OF PROPERTY AND 121.22: G (3) TO CONFERENCE WITH THE PUBLIC BODY'S ATTORNEY REGARDING DISPUTES THAT ARE THE SUBJECT OF PENDING AND/OR IMMINENT COURT ACTION

City Council Regular Meeting **3. a.**
Meeting Date: 02/02/2026
Submitted by: Breanna Dull, Clerk of Council

PURPOSE AND BACKGROUND
January 20, 2026 Regular Meeting Minutes.

Administration only
January 20, 2026 Regular Meeting Minutes.

Attachments

Minutes

Form Review

Form Started By: Breanna Dull Started On: 01/29/2026 11:40 AM
Final Approval Date: 01/29/2026

Chaplain Angel Arroyo led council in the prayer and President Pro-Tem Dimacchia led the Pledge of Allegiance and then called the regular meeting to order at 6:04p.m.

ROLL CALL:

PRESENT- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

ABSENT - 3 Messrs. Drwal, Fallis, Arredondo.

Moved by Mrs. Springowski, supported by Mr. Thornsberry, to excuse the absent members. Motion carried unanimously.

DISPOSITION OF MINUTES:

a.) January 5, 2026, Regular Meeting Minutes
Without objection, the minutes were accepted as written.

CORRESPONDENCE/REPORTS FROM DIRECTORS, BOARDS AND COMMISSIONS & OTHER GOVERNMENTAL AGENCIES:

a.) President Arredondo's appointment of a member of Council to serve as the Chaplain.
Moved by Mrs. Springowski, supported by Mrs. Carter, to hold items a and b in abeyance. Motion carried unanimously.

b.) President Arredondo's appointment of the Finance Chair to serve on the Tax Incentive Review Committee.

c.) Correspondence received from the Ohio Division of Liquor Control advising of a D1 D3 Permit Transfer Application received for Crystal Rock Inn located at 2215 E. 28th St., from Tammy & Michael Losiewicz located at 2215 E. 28th St., (6th Ward). Moved by Mr. Arroyo, supported by Mrs. Springowski, to authorize the Clerk to notify the Board that no complaints have been received. Motion carried unanimously.

d.) Mayor Bradley's proclamation recognizing and declaring January 27th as International Holocaust Remembrance Day in the City of Lorain, Ohio.
Councilmember Springowski and Mayor Bradley spoke on this matter. Moved by Mrs. Springowski, supported by Mr. Thornsberry, to receive and file. Motion carried unanimously.

e.) Correspondence received from Lorain Planning Commission recommending Lorain City Council approve the rezoning of PPN 03-00-047-113-009, located at 2973 G Street, from a B-2 General Commercial District to an R-2 Transitional Residential District. Iraida Robles is the applicant. This is ZCA 3-2025. A Public Hearing will be held on Monday, February 23, 2026 at 5:30pm to discuss the item.
Councilmember Springowski spoke regarding this matter.
Moved by Mrs. Springowski, supported by Mr. Dimacchia, to concur with the recommendation of the Planning Commission. Motion carried unanimously.

Moved by Ms. Kempton requesting a point of privilege.

Moved by Mrs. Springowski, supported by Mr. Bearer, requesting a point of privilege to allow the mayor to speak regarding an incident over the weekend. The motion carries unanimously.

Mayor Bradley spoke regarding ICE agents potentially being in Lorain and the Speak Up Speak Out event held January 11, 2026.

Councilmembers Springowski, Arroyo, Carter, and Torres spoke regarding the matter.

PUBLIC COMMENTS: Clerk Dull announced that there is one member of the public signed up to speak this evening.
AARON KNAPP: Spoke regarding emails.

DRAFT

COMMITTEE REPORTS:

a.) The Police, Fire & Legislative & All of Council Committee met on Monday, January 12th, to hear a departmental overview/update from the IT Department, Human Resources, Engineering, BHP, Public Properties, Utilities, Fire and Police Departments, no action was taken as this was an informational meeting. Moved by Mrs. Springowski, supported by Mr. Dimacchia, to concur with the committee report. Motion carried unanimously.

LEGISLATION – FIRST READING:

Resolution 3-26 a.) Introduced by Mrs. Carter, a resolution appointing members to the local Board of Tax Review pursuant to Lorain Codified Ordinance Section 192.18 and declaring an emergency.

Moved by Mrs. Carter, supported by Mr. Thornsberry, to suspend the statutory three reading rule.

AYES- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

NAYS- 0 None. The rule was suspended.

Moved by Mrs. Carter, supported by Mr. Thornsberry, to pass the resolution.

AYES- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

NAYS- 0 None. The resolution passed unanimously.

Resolution 4-26 b.) Introduced by Mrs. Carter, a resolution appointing a member to the local Board of Tax Review pursuant to Lorain Codified Ordinance Section 192.18 and declaring an emergency.

Moved by Mrs. Carter, supported by Mrs. Springowski, to suspend the statutory three reading rule.

AYES- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

NAYS- 0 None. The rule was suspended.

Moved by Mrs. Carter, supported by Mrs. Springowski, to pass the resolution.

AYES- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

NAYS- 0 None. The resolution passed unanimously.

Resolution 5-26 c.) Introduced by Ms. Torres, a resolution to receive cannabis revenue from the Department of Taxation and allocate funds to the City of Lorain's General Fund.

Moved by Ms. Torres, supported by Mrs. Springowski, to suspend the statutory three reading rule.

AYES- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

NAYS- 0 None. The rule was suspended.

Moved by Mr. Bearer, supported by Mrs. Springowski, to amend the first whereas to correct the section of the ORC to 3780.23 instead of 3708.23.

AYES- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

NAYS- 0 None. The resolution is amended.

REMARKS: Councilmember's Torres, Bearer and Auditor Harper spoke regarding this matter

Moved by Ms. Torres, supported by Mrs. Springowski, to pass the resolution, as amended.

AYES- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

NAYS- 0 None. The resolution passed unanimously, as amended.

DRAFT

Resolution 6-26 d.) Introduced by Mrs. Carter, a resolution authorizing the Safety/Service Director to sell municipally owned personal property that is not needed for public use or which is obsolete or unfit for city use by internet auction.

Moved by Mrs. Carter, supported by Mrs. Springowski, to suspend the statutory three reading rule.

AYES- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

NAYS- 0 None. The rule was suspended.

REMARKS: Councilmember Carter and Auditor Harper spoke regarding this matter.

Moved by Mrs. Cater, supported by Mrs. Springowski, to pass the resolution.

AYES- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

NAYS- 0 None. The resolution passed unanimously.

Ordinance 5-26 e.) Introduced by Mrs. Carter, an ordinance authorizing the City of Lorain Treasurer to enter into all necessary agreements with Innovative Software Services, Inc. for the provision of software that allows City of Lorain income tax returns to be filed electronically and declaring an emergency.

Moved by Mrs. Carter, supported by Mr. Thornsberry, to suspend the statutory three reading rule.

AYES- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

NAYS- 0 None. The rule was suspended.

REMARKS: Councilmembers Carter, Springowski and Treasurer Soto spoke regarding this matter.

Moved by Mrs. Carter, supported by Mr. Thornsberry, to pass the ordinance.

AYES- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

NAYS- 0 None. The ordinance passed unanimously.

Ordinance 6-26 f.) Introduced by Mr. Thornsberry, an ordinance authorizing the Safety/Service Director to apply for grant funding on behalf of the City of Lorain for the construction of the 2028 Safe Routes to School (SRTS) Program.

Moved by Mr. Thornsberry, supported by Mrs. Springowski, to suspend the statutory three reading rule.

AYES- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

NAYS- 0 None. The rule was suspended.

Moved by Mr. Thornsberry, supported by Mrs. Springowski, to pass the ordinance.

AYES- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

NAYS- 0 None. The ordinance passed unanimously.

Ordinance 7-26 g.) Introduced by Mr. Thornsberry, an ordinance authorizing the Safety/Service Director to enter into a contract with RMH Concrete & Foundations, Inc. for the partial removal and replacement of sidewalks around Helen Steiner Rice and Southview Schools in the City of Lorain.

Moved by Mr. Thornsberry, supported by Mrs. Springowski, to suspend the statutory three reading rule.

AYES- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

NAYS- 0 None. The rule was suspended.

Moved by Mr. Thornsberry, supported by Mrs. Springowski, to pass the ordinance.

AYES- 9 Messrs. Dimacchia, Springowski, Kempton, Carter, Torres, Gonzalez, Arroyo, Bearer, Thornsberry.

NAYS- 0 None. The ordinance passed unanimously.

DRAFT

LEGISLATION – SECOND READING: None.

LEGISLATION – THIRD READING: None.

COMMITTEE CALLS:

COUNCILMEMBER CARTER: I would like to call a Finance Committee Meeting for the quarterly budget for April 13th at 5:30pm.

Councilmember Carter also spoke regarding an introduction of Mr. Rick Soto.

~~**EXECUTIVE SESSION: Cancelled.**~~

ADJOURNMENT Moved by Mrs. Springowski, supported by Mr. Thornsberry, to adjourn the meeting. The motion carried with one dissenting vote from Mr. Dimacchia, the meeting adjourned at 6:36pm.

_____ PRESIDENT OF COUNCIL

Brianna Dull
Clerk of Council

Accepted:

DRAFT

City Council Regular Meeting **3. b.**
Meeting Date: 02/02/2026
Submitted by: Breanna Dull, Clerk of Council

PURPOSE AND BACKGROUND
January 27, 2026 Special Call Minutes

Administration only
January 27, 2026 Special Call Minutes

Attachments

Minutes

Form Review

Form Started By: Breanna Dull Started On: 01/29/2026 11:35 AM
Final Approval Date: 01/29/2026

Chaplain Angel Arroyo led Council in the prayer and Pledge and then President Pro-Tem Dimacchia called the Special Call to order at 5:31pm.

ROLL CALL:

PRESENT- 9 Messrs. Dimacchia, Fallis, Drwal, Kempton, Carter, Torres, Gonzales, Arroyo, Bearer.
ABSENT - 3 Messrs. Springowski, Thornsberry, Arredondo.
Moved by Mrs. Carter, supported by Ms. Kempton, to excuse the absent members. The motion carried unanimously.

READING OF THE SPECIAL CALL LETTER:

Clerk Dull read the Special Call Letter.

LEGISLATION – FIRST READING:

Resolution 7-26 a.) Introduced by Mr. Dimacchia, a resolution submitting to the electors of the City of Lorain the question of a renewal of the 1.7 mills property tax levy for a period of five (5) years for the purpose of providing and maintaining adequate and consistent fire service, apparatus, buildings and sites necessary for the Lorain City Fire Department, pursuant to section 5705.19(i) of the Ohio Revised Code and declaring an emergency.
Moved by Mr. Dimacchia, supported by Mr. Arroyo, to suspend the three-reading rule.
AYES- 9 Messrs. Dimacchia, Fallis, Drwal, Kempton, Carter, Torres, Gonzales, Arroyo, Bearer.
NAYS- 0 None. The rule was suspended.
Moved by Ms. DuVall, supported by Mr. Dimacchia, to pass the resolution.
AYES- 9 Messrs. Dimacchia, Fallis, Drwal, Kempton, Carter, Torres, Gonzales, Arroyo, Bearer.
NAYS- 0 None. The ordinance passed unanimously.

ADJOURNMENT:

Moved by Mr. Fallis, supported by Ms. Kempton, to adjourn the meeting. The motion carried with one dissenting vote from Mr. Dimacchia. The meeting adjourned at 5:33 p.m.

Brianna Dull
Clerk of Council

_____
PRESIDENT PRO-TEMPORE OF COUNCIL

Accepted On:

DRAFT

CITY OF LORAIN

City Council Regular Meeting **4. a.**
Meeting Date: 02/02/2026
Submitted by: Breanna Dull, Clerk of Council

PURPOSE AND BACKGROUND
President Arredondo's appointment of a member of Council to serve as the Chaplain.

RECOMMENDATION TO COUNCIL:
Concur with the appointment.

Form Review

Form Started By: Breanna Dull Started On: 01/14/2026 10:55 AM
Final Approval Date: 01/22/2026

CITY OF LORAIN

City Council Regular Meeting **4. b.**
Meeting Date: 02/02/2026
Submitted by: Breanna Dull, Clerk of Council

PURPOSE AND BACKGROUND

President Arredondo's appointment of the Finance Chair to serve on the Tax Incentive Review Committee.

RECOMMENDATION TO COUNCIL:

Concur with the appointment.

Form Review

Form Started By: Breanna Dull Started On: 01/14/2026 10:54 AM
Final Approval Date: 01/22/2026

CITY OF LORAIN

City Council Regular Meeting **4. c.**
Meeting Date: 02/02/2026
Submitted by: Breanna Dull, Clerk of Council

PURPOSE AND BACKGROUND
Clerk of Court's submission of the 2025 Lorain Municipal Court's Summary Annual Report

RECOMMENDATION TO COUNCIL:
Receive and file.

Attachments

Annual Report

Form Review

Form Started By: Breanna Dull Started On: 01/30/2026 09:25 AM
Final Approval Date: 01/30/2026

Lorain Municipal Court

200 West Erie Avenue Lorain, Ohio 44052

(440) 204-2140

2025 Annual Report

Judge Thomas Elwell
Judge Mark Mihok
Linda Webber, Magistrate
Mr. Ted Kalo, Clerk of Court





To the City of Lorain Mayor and City Council, City of Sheffield Lake Mayor and City Council, Sheffield Township Trustees, Lorain County Commissioners, Ohio State Patrol, Lorain County Sheriff, Lorain County Metro Parks and all other interested parties:

In accordance with the provisions of Section 1901.14 (4) of the Ohio Revised Code, the Lorain Municipal Court presents to you the 2025 Annual Report.

The purpose of this report is to demonstrate to you the activity and collections of funds that are disbursed to the various jurisdictions and agencies designated to receive funds.

The material in this report was obtained from various sources per dating of the report. We have taken reasonable care to ensure that, and to the best of our knowledge, material information contained herein is in accordance with the facts and contain no omission likely to affect its understanding.

Respectfully submitted by:



Ted Kalo
Clerk of Court



Judge Mark Mihok
Administrative Judge



Judge Thomas Elwell
Presiding Judge

Lorain Municipal Court

Lorain Municipal Court implemented practices and procedures that increased efficiency and public interaction with the constituents the court serves.

I Ohio Senate Bill 94 took effect October 24, 2024, requiring municipal courts to accept pleadings and documents by electronic filing, commonly referred to as e-filing. The bill gave courts a deadline of July 21, 2025, to implement and start accepting e-filings.

The Lorain Municipal Court Clerk of Courts has been compliant with the new requirements since the end of 2023; nearly 600 days prior to the required date. In 2025 the Clerk of Courts accepted over 1,305 new e-filed cases, a 35% increase over 2024, and 1,349 e-filed documents to existing cases, a 72% increase over 2024.

The Clerk of Courts expects these numbers to increase as more attorneys become aware that e-filing is available.

Final implementation is continuing for the jail inmate interface between the county jail and Lorain Municipal Court. When finalized this process will ensure a speedy arraignment of defendants housed in the Lorain County Jail.

The court has continued to upgrade and refine the communications to the public through the messaging system in the court administration system (Benchmark). The upgrades have contributed to the uptick in the amounts of payments from defendants for fines and costs.

Driver's License Rehabilitation Program succeeded in getting 113 people a valid license while assisting many more with license issues. Pretrials Risk Assessment grant was renewed for 2 years. 1182 risk assessments were performed at the County Jail. Also, 69 persons suspected of being victims of human trafficking were referred to Safe Harbor.

Overall, the court has experienced a decrease in money collected for fines and costs. Revenue received through the Lorain Municipal Court Clerk of Court Office has decreased by 6.1% less than 2024.

In order to enhance the payment of fines and costs the Lorain Municipal Clerk of Courts office has contracted with three collections agencies over the years. The current collections agency being used is Schuerger Law Collections. Since 07/01/2019 the Clerk of Court office has submitted 23,554 cases to collections with a value of
$12,761,594.93. Additionally, we continue to collect revenue on cases submitted to other collections agencies.

The Lorain Municipal Clerk of Courts finally received reimbursement of over $675,000.00 from Lorain County for overpayments from 2013-2018. This reimbursement was distributed to the proper agencies as determined by the Ohio Revised Code.

Lorain Municipal Court
Population Demographics

Lorain Municipal Court is located at 200 West Erie Avenue, Second Floor, Lorain, Ohio.

The court covers the City of Lorain, City of Sheffield Lake and Sheffield Township.

*Lorain Municipal Court District Population:

City of Lorain	65,218
City of Sheffield Lake	8,957
Sheffield Township	3,963
Total Population	78,138

* Figures based on US Census 2024: ACS 1-2025 Estimates Data Profile

Section One
FINANCIAL

The Ohio Revised Code sets forth how the court is to collect and distribute money derived from the fines, fees and costs. It also mandates that the Lorain Municipal Court collect money for the State and for Lorain County from virtually every case filed to fund county and state run programs.

The mandatory court costs are as follows:

Costs

Civil Case Costs

Type of Charge	Cost Amount
Agreed Judgment/Consent Judgment/Judgment	$10.00
Alias: For Personal	$25.00
For Personal through Process Server	$30.00
For Certified Mail	$20.00
For Ordinary Mail	$20.00
For Each Additional Defendant	$20.00
All Notices	$5.00
Amended Complaint: With 1 Defendant	$40.00
Each Additional Defendant	$20.00
Answers, Replies, Briefs	$5.00
Application and Default Motion	$20.00
Appraiser Fee: Each trip and Each Person	$25.00
Assignment of Judgment	$10.00
Bench Warrant	$200.00
Capias (Order to Show)	$200.00
Certificate of Judgment for Lien	$10.00
Certificate of Satisfaction	$5.00
Certified Copy of Journal Entry	$5.00
Cognovit Note: with 1 Defendant	$170.00
Each Additional Defendant	$2.00
For Each Notice of Judgment	$2.00
For Each Mailing to Defendant	$2.00
Complaint: with 1 Defendant	$170.00
Continuances to Party Requesting	$10.00
Correcting Names, etc. on Record	$5.00
Counter Claim and Cross Claim: With 1 Defendant	$40.00
Each Additional Defendant	$20.00
Dismissal	$5.00
Driver's License Action (12 Payments/Reinstatement Fee)	$60.50
Examination Before Judge (Personal Exam, One Defendant per Exam)	$45.00
Execution	$10.00
Forcible Entry: with 1 Defendant	$181.00
Garnishment: Personal Earnings	$110.00
Other than Personal Earnings Plus $1 Garnishee Fee	$45.00

Type of Charge	Cost Amount
Journal Entry	$10.00
Jury Demand	$75.00
Jury Deposit	$350.00
Leaves/Granting	$10.00
Marriages	$60.00
Motions	$20.00
Notice of Appeal	$125.00
NSF Check Fee	$37.00
Objection to Magistrate Decision	$20.00
Order of Show Cause	$10.00
Re-Issuance of Garnishment by Ordinary Mail	$20.00
Replevin: with 1 Defendant	$242.00
Each Additional Defendant	$20.00
Retrieval of Records Off-Site	Actual Cost
Revival of Judgment: with 1 Defendant	$35.00
Each Additional Defendant	$20.00
Satisfy Docket	$10.00
Secretary of State, per Defendant	$25.00
Service by Publication	Actual Cost
Sheriff Service at County Seat	$25.00 or Actual Cost, whichever is greater.
Subpoena: Each Name	$10.00
Payable to Each Witness	$12.00
Third Party Complaint	$40.00
Each Additional Defendant	$20.00
To issue Writ of Replevin after Hearing	$20.00
To issue Writ of Restitution after Hearing	$20.00
Transcript	$25.00
Transfer from another without Judgement	$226.00
Transfer from Another Court with Judgment	$79.00
With Personal Earnings Garnishment	$341.00
With Bank (other than)	$276.00
Fee payable to Garnishee (Other than Aids)	$1.00
Trusteeship Filing	$102.00
Venire (Each Person)	$5.00

Costs

Criminal and Traffic Case Costs

Type of Charge	Cost Amount
Additional Charge(s) Fee, Each Additional Charge	$1.00
Amend Charges	$25.00
Application to Expunge a Case (record of conviction)	$100.00
Application to Seal a Case (record of conviction)	$100.00
Application to Seal or Expunge a Record of Dismissal or Not Guilty	No Cost
Bond Fee	$5.00
Bureau of Motor Vehicles Forfeiture Notification Fee	$25.00
Capias Warrant and Criminal Warrant Fee	$200.00
Collection Agency Fee	30% of Amount Owed
Commitment Costs, City Jail Fee	$4.00
Commitment Costs, County Jail Fee	$12.00
Continuance Fee (Traffic and Criminal, Each Occurrence)	$10.00
Conviction Fee	$1.00
Credit Card Fee, Each Use (in office), whichever is greater	$4.99 or 3.5%
Credit Card Fee, Each Use (Phone Transaction)	7.0%
General Court Costs (Criminal)	$131.00
General Court Costs (Traffic)	$131.00
Immobilization of Motor Vehicle	$100.00
Jury Demand	$50.00
Modification of Occupational Driving Privilege (Pre-Conviction or issuance of Post-Conviction Privileges)	$10.00
Motion for Occupational Driving Privilege/Issuance ODP	$50.00
NSF Check Fee	$37.00
Probation: Active	$100.00
Probation: Each Additional Year	$100.00
Probation: Intensive	$150.00
Probation: Monitored One Year Good Behavior	$50.00
Probation: Pre-Sentence Investigation/Report	$75.00
Probation: Reschedule Appointment	$15.00
Public Defender Fee	$25.00
Sheffield Lake Court Costs	$126.00
Subpoena Fee, Each Subpoena	$6.00
Time to Pay Fee (Criminal and Traffic)	$25.00
Witness Fee, Each Witness	$6.00

Security Deposit & Small Claims Fee

Security Deposits

Type of Charge	Cost/Fee
If Going with Jury after Pre-Trial	$350.00
Jury Demand	$75.00
Levy on Execution	$100.00

Small Claims Fee

Type of Charge	Cost/Fee
Objection to Magistrates Decision	$20.00
Small Claims Filing: With 1 Defendant	$110.00
Transfer to Civil Docket	$75.00

2025 Lorain Municipal Court Receipts and Disbursements by Cost Type and Agency

Agency Name	Amount	Destination
(OSP) TREASURER OF STATE	$132.55	OSP
BMV REVENUE MANAGMENT	$45.00	Misc. Agency
CAPITAL RECOVERY SYSTEMS	$18,201.72	Collection Fees
DANA & PARISER CO LPA	$426.05	Collection Fees
LORAIN COUNTY ADULT PROBATION DEPARTMENT	$1,899.71	Misc. Agency
LORAIN COUNTY AUDITOR	$152,402.33	Lorain County
LORAIN COUNTY CLERK OF COURT	$356.27	Misc. Agency
LORAIN COUNTY LAW LIBRARY	$4,650.00	Lorain County Law Library
LORAIN COUNTY METRO PARKS	$649.00	Misc. Agency
LORAIN COUNTY METRO PARKS - STATE CRIMINAL	$617.00	Misc. Agency
LORAIN COUNTY SHERIFF OFFICE - OVI	$275.22	Misc. Agency
LORAIN COUNTY SHERIFF OFFICE - SHERIFF FEES	$2,542.63	Misc. Agency
LORAIN POLICE DEPARTMENT	$751.73	Misc. Agency
LORAIN POLICE MDFF	$3,727.72	Misc. Agency
Miscellaneous Disbursements	$1,826,100.64	Miscellaneous
ODNR DIVISION OF WILDLIFE	$1,237.70	Misc. Agency
OHIO STATE BOARD OF PHARMACY	$1,739.60	Misc. Agency
OHIO STATE HIGHWAY PATROL 47 - DRUG	$206.50	OSP
OHIO STATE HIGHWAY PATROL 47 - OVI	$2,057.88	OSP
SCHUERGER LAW COLLECTIONS	$63,611.12	Collection Fees
SHEFFIELD LAKE POLICE DEPARTMENT	$738.86	City of Sheffield Lake
TERRI SOTO, LORAIN CITY TREASURER	$2,396,786.02	City of Lorain
TREASURER, STATE OF OHIO	$780,476.45	State of Ohio
Grand Total	**$5,259,631.70**	

2025 Lorain Municipal Court Receipts and Disbursements by Cost Type and Agency (continued)

Disbursement Paid To	Amount
City of Lorain	$2,396,786.02
City of Sheffield Lake	$738.86
Collection Fees	$82,238.89
Lorain County	$152,402.33
Lorain County Law Library	$4,650.00
Lorain Municipal Court	$0.00
Misc. Agency	$13,841.58
Miscellaneous	$1,826,100.64
OSP	$2,396.93
State of Ohio	$780,476.45
Total Receipts & Disbursements	**$5,259,631.70**

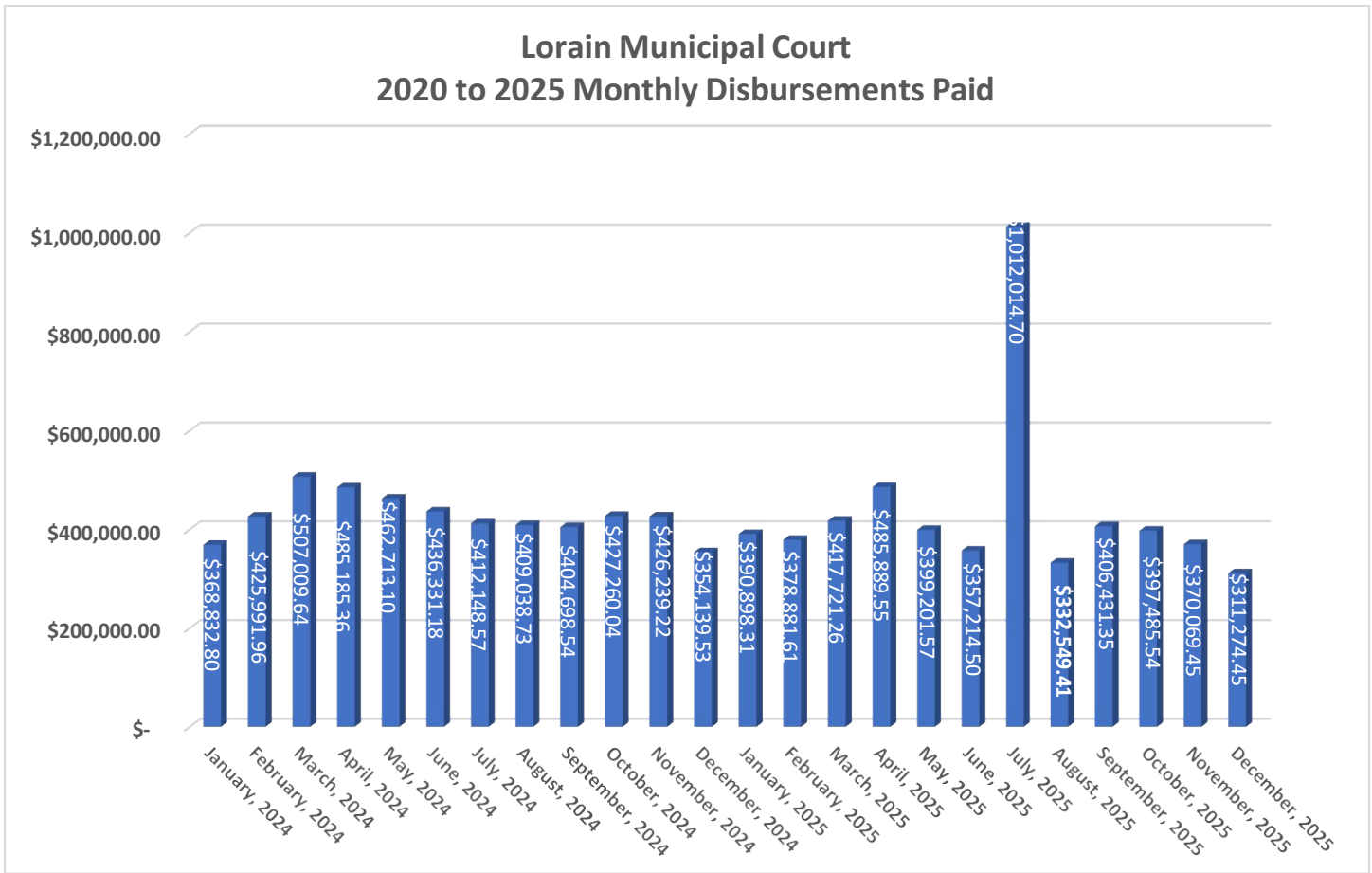
*** Miscellaneous Disbursements are as follows:**

CRIM/TRAF REFUNDS	$15,436.56
CRIM/TRAF RESTITUTION	$65,645.50
BOND REFUND	$40,912.50
CRIM/TRAF HOLD	$19,739.40
GARNISHMENT DISBURSEMENTS	$1,523,863.61
CIVIL/SMALL CLAIMS Holds	$146,828.53
CIVIL Refunds	$0.00
JURYWITNESS	$13,674.54
Grand Total	**$1,826,100.64**

2025 vs 2024 Lorain Municipal Court Disbursements Comparison

Comparison Period 2024 and 2025			
Agency Type	**2024 Year**	**2025**	**% Change**
City of Lorain	$2,550,079.05	$2,396,786.02	-6.01%
City of Sheffield Lake	$1,671.31	$738.86	-55.79%
Collection Fees	$129,340.66	$82,238.89	-36.42%
Lorain County	$207,902.32	$152,402.33	-26.70%
Lorain Municipal Court	$0.00	$0.00	0.00%
Misc. Agency	$28,015.05	$18,491.58	-33.99%
OSP	$3,348.70	$2,396.93	-28.42%
State of Ohio	$526,692.21	$780,476.45	48.18%
Grand Totals	**$3,447,049.29**	**$3,433,531.06**	**-0.39%**

Comparison Period 2024 to 2025				
Paid to Non-Agencies		**2024**	**2025**	**% Change**
Miscellaneous		$1,672,539.38	$1,826,100.64	**9.18%**



Section Two
Case Types and Charges

Lorain Municipal Court

2025 Agency and Case Type Count

Criminal, Traffic & Parking

Agency	Case Count	CRIMINAL	TRAFFIC
(OSP) TREASURER OF STATE	2	2	0
ANIMAL PROTECTIVE LEAGUE	20	20	0
CITY OF LORAIN BUILDING DEPARTMENT	268	268	0
CITY OF LORAIN TAX DEPARTMENT	422	422	0
LORAIN COUNTY DOG KENNEL	1	1	0
LORAIN COUNTY METRO PARKS	29	23	6
LORAIN COUNTY SHERIFF OFFICE	289	133	156
LORAIN POLICE DEPARTMENT	6,939	2,318	4,621
ODNR DIVISION OF WILDLIFE	27	27	0
OHIO DEPARTMENT OF PUBLIC SAFETY/INVESTIGATORY UNIT	7	7	0
OHIO DEPARTMENT OF TAXATION	2	2	0
OSP POST 18	5	2	3
OSP POST 22	9	3	6
OSP POST 39	123	0	123
OSP POST 47	2,216	102	2114
OSP POST 52	6	0	6
OSP POST 90	3	0	3
SHEFFIELD LAKE POLICE DEPARTMENT	173	123	50
Total Cases	10,542	3,454	7,088

CASE TYPE COUNT	
OTHER TRAFFIC	6,601
MISDEMEANOR	2.663
FELONY	791
OMVI	374
DRIVER'S LICENSE APPEALS	113
Total Case Type	**10,542**

Civil, Marriage, Rent Escrow and Trusteeship									
Individual Case Filings	**Case Count**	**MAR**	**CVE**	**CVF**	**CVG**	**CVH**	**CVI**	**RE0**	**TRU**
CIVIL	**4,218**	11	0	2,739	846	49	573	0	0
RENT ESCROW	**25**	0	0	0	0	0	0	25	0
TRUSTEESHIP	**0**	0	0	0	0	0	0	0	0
Grand Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Total Cases	**14,785**

2025 Criminal and Traffic Offenses Filed

Offense Code	Offense Description	Count	Degree
2905.01A3	KIDNAPPING - TERRORIZE/INFLICT SERIOUS HARM	1	F1
2909.02A1	AGGRAVATED ARSON - HARM TO PERSON	1	F1
2911.01A1	AGGRAVATED ROBBERY - WEAPON	3	F1
2911.01A3	AGGRAVATED ROBBERY - PHYSICAL HARM	2	F1
2911.11A1	AGGRAVATED BURGLARY - PHYSCIAL HARM	22	F1
2923.162A3C4	DISCHARGE OF FIREARM ON OR NEAR PROHIBITED PREMISES - CAUSE SERIOUS HARM	1	F1
2925.03(A)(1)(C)(9)(h)	TRAFFICKING IN A FENTANYL-RELATED COMPOUND > 100 GRAMS	2	F1
2925.03A1C1d	TRAFFICKING IN DRUG SCHEDULE I OR II > 5x BULK < 50x BULK (SCHOOL OR JUVENILE)	1	F1
2925.03A1C9	TRAFFICKING IN A FENTANYL-RELATED COMPOUND >= 20 g < 50 g (VICINITY OF SCHOOL OR JUVENILE)	1	F1
2925.03A4f	TRAFFICKING IN COCAINE - > 27G < 100G	5	F1
2925.03A4g	TRAFFICKING IN COCAINE - > 100G	4	F1
2925.03AC1e	AGGRAVATED TRAFFICKING IN DRUGS SCHEDULE I OR II >50 < 100x's BULK	1	F1
2925.11(C)(11)(e)	POSSESSION OF A FENTANYL RELATED COMPOUND >= 20 g < 50	2	F1
2925.11(C)(11)(g)	POSSESSION OF A FENTANYL RELATED COMPOUND >= 1000 unit doses or >= 100g	1	F1
2925.11AC1d	AGGRAVATED POSSESSION OF DRUGS SCHEDULE I OR II - > 50X < 100X BULK	1	F1
2925.11AC4e	POSSESSION OF COCAINE - > 27G < 100G	6	F1
2925.11AC4f	POSSESSION OF COCAINE - > 100G	5	F1
2923.161	IMPROPERLY DISCHARGING A FIREARM AT OR INTO A HABITATION OR SCHOOL	5	F2
2903.08A1aB1d	AGGRAVATED VEHICULAR ASSAULT - UNDER THE INFLUENCE 3 OR MORE PRIOR DUI	1	F2
2903.11A1	FELONIOUS ASSAULT - NO WEAPON	14	F2
2903.11A2D1a	FELONIOUS ASSAULT - WEAPON	31	F2
2903.18B1	STRANGULATION	14	F2
2905.01A5C1	KIDNAPPING - HINDER/IMPEDE/OBSTRUCT GOVERNMENT WITH A SAFE RETURN	1	F2
2905.01B2C1	KIDNAPPING- RESTRAINT WITH RISK OF SERIOUS PHSYICAL HARM WITH SAFE RETURN	1	F2
2911.02A2	ROBBERY - PHYSICAL HARM	9	F2
2911.12A1	BURGLARY - STRUCTURE WITH OTHER PERSON PRESENT	14	F2
2911.12A2	BURGLARY - HABITATION WITH OTHER PERSON PRESENT	6	F2
2917.31A25	INDUCING PANIC - THREATENING TO COMMIT VIOLENT ACT SCHOOL	1	F2
2921.34A1(C)(2)(a)	ESCAPE	1	F2
2925.03(A)(1)(C)(9)(d)	TRAFFICKING IN FENTANYL-RELATED COMPOUND > BULK < 5X BULK IN VICINITY OF SCHOOL/JUVENILE	1	F2
2925.03(A)(1)(C)(9)(e)	TRAFFICKING IN FENTANYL-RELATED COMPOUND >10g < 20g	1	F2
2925.03A4d	TRAFFICKING IN COCAINE - > 10G < 20G/SCHOOL	1	F2
2925.03A4e	TRAFFICKING IN COCAINE - > 20G < 27G	2	F2

2925.03C1d	AGGRAVATED TRAFFICKING IN DRUGS (SCHEDULE I OR II)	1	F2
2925.11(C)(11)(d)	POSSESSION OF A FENTANYL RELATED COMPOUND >10G <20G	2	F2
2925.11AC1c	AGGRAVATED POSSESSION OF DRUGS SCHEDULE I OR II - > 5X < 50X BULK	6	F2
2925.11AC4d	POSSESSION OF COCAINE - > 20G < 27G	2	F2
2903.041	RECKLESS HOMICIDE	1	F3
2909.23	MAKING TERRORISTIC THREATS	4	F3
2903.08A1a	AGGRAVATED VEHICULAR ASSAULT - UNDER THE INFLUENCE	1	F3
2903.18B2	STRANGULATION	8	F3
2903.18B3	STRANGULATION - INTIMATE PARTNERS, HOUSEHOLD MEMBER, OR VICTIM PREGNANT	5	F3
2903.18B3	STRANGULATION - WITH PRIOR VIOLENT FELONY CONVICTION	8	F3
2905.02A2	ABDUCTION - RESTRAINT OF LIBERTY	6	F3
2907.04AB3	UNLAWFUL SEXUAL CONDUCT WITH A MINOR - OFFENDER IS 10 OR MORE YEARS OLDER	1	F3
2911.02A	ROBBERY - USE OR THREAT OF FORCE	1	F3
2911.02A3	ROBBERY - USE OR THREAT OF FORCE	1	F3
2911.12A3	BURGLARY - STRUCTURE	1	F3
2913.02A	GRAND THEFT - FIREARM	3	F3
2919.25AD42P	DOMESTIC VIOLENCE - 2 OR MORE PRIORS	42	F3
2919.25AD42PVP	DOMESTIC VIOLENCE - 2 OR MORE PRIORS	3	F3
2919.25BD42P	DOMESTIC VIOLENCE - 2 OR MORE PRIORS	5	F3
2919.25BD42PVP	DOMESTIC VIOLENCE - 2 OR MORE PRIORS VICTIM PREG.	2	F3
2919.27AB4	VIOLATING A PROTECTION ORDER - WHILE COMMITTING A FELONY	25	F3
2921.03A3	INTIMIDATION	12	F3
2921.04B2	INTIMIDATION OF A WITNESS IN A CRIMINAL CASE - BY FORCE OR THREAT	1	F3
2921.12A1	TAMPERING WITH EVIDENCE - ALTER/DESTROY/CONCEAL	36	F3
2921.32A5C4AH	OBSTRUCTING JUSTICE - FALSE INFORMATION	1	F3
2921.331BC4	FAILURE TO COMPY WITH AN ORDER OR SIGNAL OF A POLICE OFFICER - ELUDE AFTER FELONY	7	F3
2921.331BC5ai	FAILURE TO COMPLY WITH AN ORDER OR SIGNAL OF A POLICE OFFICER - ELUDE CAUSE HARM	2	F3
2921.331BC5aii	FAILURE TO COMPLY WITH AN ORDER OR SIGNAL OF A POLICE OFFICER - ELUDE SUBSTANTIAL RISK OF HARM	7	F3
2921.36A2	ILLEGAL CONVEYANCE OF DRUGS OF ABUSE	1	F3
2923.121A	POSSESSION OF FIREARM IN LIQUOR PERMIT PREMISES - CONCEALED	1	F3
2923.13A1	HAVING WEAPONS UNDER DISABILITY - FUGITIVE	3	F3
2923.13A2	HAVING WEAPONS WHILE UNDER DISABILITY - VIOLENT OFFENSE	27	F3
2923.13A3	HAVING WEAPONS WHILE UNDER DISABILITY - DRUG OFFENSE	10	F3
2923.13A4	HAVING WEAPONS WHILE UNDER DISABILITY - DRUG/ALCOHOL DEPENDANT	3	F3
2923.162A3	DISCHARGE OF FIREARM ON OR NEAR PROHIBITED PREMISES	2	F3
2925.03(A)(1)(C)(d)	TRAFFICKING IN A FENTANYL-RELATED COMPOUND > 5G < 10G	1	F3
2925.03A4c	TRAFFICKING IN COCAINE - > 5G < 10G/SCHOOL	1	F3
2925.03C1c	TRAFFICKING IN DRUG SCHEDULE I OR II	2	F3
2925.11(C)(11)(c)	POSSESSION OF A FENTANYL RELATED COMPOUND >5G <10G	1	F3

2925.11AC1b	AGGRAVATED POSSESSION OF DRUGS SCHEDULE I OR II - > BULK < 5X BULK	4	F3
2925.11AC4c	POSSESSION OF COCAINE - > 10G < 20 G	3	F3
4549.02(B)(3)(a)	FAILURE TO STOP AFTER AN ACCIDENT THAT RESULTED IN THE DEATH OF A PERSON	1	F3
2907.22	PROMOTING PROSTITUTION	1	F4
2903.13AC3	ASSAULT - KNOWINGLY - PEACE OFFICER OR EMT	16	F4
2903.13AC5	ASSAULT - KNOWINGLY - PEACE OFFICER, EMT, FIREFIGHTER	4	F4
2903.13BC3	ASSAULT - RECKLESSLY - PEACE OFFICER OR EMT	1	F4
2903.18B3	STRANGULATION - INTIMATE PARTNER OR HOUSEHOLD MEMBER	32	F4
2903.211AB2c	MENACING BY STALKING - TRESPASS	3	F4
2903.216B1	ILLEGAL UISE OF A TRACKING DEVICE OR APPLICATION	1	F4
2907.04A	UNLAWFUL SEXUAL CONDUCT WITH A MINOR	1	F4
2909.04A1	DISRUPTING PUBLIC SERVICE - MASS COMMUNICATION	16	F4
2909.04A3	DISRUPTING PUBLIC SERVICES - IMPAIR LAW ENFORCEMENT OFFICER/FIREFIGHTER/EMERGENCY PERSONNEL	3	F4
2911.12B	TRESPASS IN A HABITATION WHEN A PERSON IS PRESENT OR LIEKLY TO BE PRESEENT (IN BURGLARY STATUTE)	8	F4
2913.02A3B2	GRAND THEFT BY DECEPTION - > $7,500 < $150,000	1	F4
2913.02AB2	THEFT - > $7,500 < $150,000	4	F4
2913.02AB5	GRAND THEFT OF A MOTOR VEHICLE	21	F4
2913.02AB6	THEFT OF DRUGS	2	F4
2913.11BF	PASSING BAD CHECKS - > $7,500 < $150,000	1	F4
2913.30(B)(2)	COUNTERFEITING	1	F4
2913.51AC	RECEIVING STOLEN PROPERTY - FIREARM OR DANGEROUS ORDINANCE	10	F4
2913.51AC	RECEIVING STOLEN PROPERTY - MOTOR VEHICLE	12	F4
2917.02A2	AGGRAVATED RIOT - OFFENSE OF VIOLENCE	11	F4
2919.25A	DOMESTIC VIOLENCE - 1 PRIOR	51	F4
2919.25AD31P	DOMESTIC VIOLENCE - 1 PRIOR	9	F4
2919.25AD31PVP	DOMESTIC VIOLENCE - 1 PRIOR VICTIM PREG.	1	F4
2919.25BD31P	DOMESTIC VIOLENCE - 1 PRIOR	1	F4
2919.25BD31PVP	DOMESTIC VIOLENCE - 1 PRIOR VICTIM PREG.	1	F4
2921.331B	FAILURE TO COMPLY WITH AN ORDER OR SIGNAL OF A POLICE OFFICER - WILLFULLY ELUDE	40	F4
2921.33C2	RESISTING ARREST - RECKLESSLY PHYS HARM W/ DEADLY WEAPON	1	F4
2923.12A	CARRYING CONCEALED WEAPONS - WITH PRIORS	1	F4
2923.12B3	CARRYING CONCEALED WEAPONS - LOADED FIREARM	32	F4
2923.16A	IMPROPER HANDLING FIREARMS IN A MOTOR VEHICLE - DISCHARGE	1	F4
2923.16B	IMPROPER HANDLING FIREARMS IN MOTOR VEHICLE - ACCESSIBLE TO OCCUPANT	22	F4
2923.16D1I	IMPROPER HANDLING FIREARMS IN A MOTOR VEHICLE - UNDER THE INFLUENCE UNDER INFLUENCE ALCOHOL/DRUG OF ABUSE WEAPON ON PERSON'S PERSON	4	F4
2925.03A1C2b	TRAFFICKING IN DRUGS SCHEDULE III, IV, OR V (SCHOOL OR JUVENILE)	1	F4
2925.03A1C9c	TRAFFICKING IN FENTANYL > 1g < 5g	3	F4

2925.03A3b	TRAFFICKING IN MARIHUANA - < 200G/SCHOOL	1	F4
2925.03A4b	TRAFFICKING IN COCAINE - < 5G/SCHOOL	3	F4
2925.03C1	AGGRAVATED TRAFFICKING IN DRUGS SCHEDULE I or II	2	F4
2925.11(C)(11)(b)	POSSESSION OF A FENTANYL RELATED COMPOUND > 1 Grams UNIT DOSES < 5 Grams	1	F4
2925.11AC4b	POSSESSION OF COCAINE - > 5G < 10G	7	F4
2925.11AC6b	POSSESSION OF HEROIN > 1 < 5G	1	F4
2925.11AC8b	POSSESSION OF A CONTROLLED SUBSTANCE ANALOG > 10g < 20g	1	F4
2913.49	IDENTITY FRAUD	4	F5
2925.03	TRAFFICKING IN DRUGS SCHEDULE 1 F5	1	F5
2903.13AC8b	ASSAULT - HEALTHCARE PROFESSIONAL	1	F5
2903.18B3	STRANGULATION	14	F5
2903.21AB	AGGRAVATED MENACING - OFFICER/CHILDREN SERVICES EMPLOYEE	1	F5
2909.05B	VANDALISM - BUSINESS DAMAGE > $1,000	3	F5
2909.05B2	VANDALISM - GOVERNMENT ENTITY	1	F5
2911.13A	BREAKING AND ENTERING - UNOCCUPIED STRUCTURE	5	F5
2911.13B	BREAKING AND ENTERING - LAND OR PREMISES	1	F5
2913.02A	THEFT FROM AN ELDERLY/DISABLED PERSON - < $1,000	1	F5
2913.02A1	THEFT - CREDIT CARD or CHECK	4	F5
2913.02A3B2	THEFT BY DECEPTION - > $1,000 < $7,500	2	F5
2913.02AB2	THEFT - > $1,000 < $7,500	15	F5
2913.03B	UNAUTHORIZED USE OF A MOTOR VEHICLE - POSSESS MORE THAN 48 HOURS/REMOVE FROM STATE	1	F5
2913.05A	TELECOMMUNICATIONS FRAUD - > $1,000	1	F5
2913.11BF	PASSING BAD CHECKS - SINGLE VENDOR/PERSON > $1,000 < $7,500	1	F5
2913.21B2	MISUSE OF CREDIT CARDS - OBTAIN PROPERTY OR SERVICES	1	F5
2913.49B1	IDENTITY FRAUD	5	F5
2913.49B2	IDENTITY FRAUD	3	F5
2913.51A	RECEIVING STOLEN PROPERTY - LICENSE PLATE	2	F5
2919.25AD5	DOMESTIC VIOLENCE - VICTIM PREG.	8	F5
2919.25BD5	DOMESTIC VIOLENCE - VICTIM PREG.	4	F5
2919.27AB3	VIOLATING A PROTECTION ORDER - PRIORS	20	F5
2921.31AB	OBSTRUCTING OFFICIAL BUSINESS - RISK OF PHYSICAL HARM	47	F5
2921.34A	ESCAPE (FEL)	3	F5
2921.38B	HARASSMENT WITH A BODILY SUBSTANCE - LAW ENFORCEMENT OFFICER	2	F5
2923.121A	POSSESSION OF FIREARM IN LIQUOR PERMIT PREMISES	1	F5
2923.16D1	IMPROPER HANDLING FIREARMS IN A MOTOR VEHICLE - UNDER THE INFLUENCE UNDER INFLUENCE ALCOHOL/DRUG OF ABUSE	7	F5
2923.16D2	IMPROPER HANDLING FIREARMS IN A MOTOR VEHICLE - UNDER THE INFLUENCE	1	F5
2923.17(A)	UNLAWFUL POSSESSION OF DANGEROUS ORDNANCE	3	F5
2923.21(A)	IMPROPER FURNISHING FIREARMS TO A MINOR	1	F5
2923.24AC	POSSESSING CRIMINAL TOOLS - TO COMMIT FELONY	8	F5
2925.03A1C9	TRAFFICKING IN A FENTANYL-RELATED COMPOUND	1	F5
2925.03A3a	TRAFFICKING IN MARIHUANA - < 200G	1	F5

2925.03A4a	TRAFFICKING IN COCAINE - < 5G	7	F5
2925.11(C)(11)(a)	POSSESSION OF A FENTANYL RELATED COMPOUND < 1 Gram	16	F5
2925.11(C)(5)	POSSESSION OF A CONTROLLED SUBSTANCE - LSD	1	F5
2925.11AaC1a	AGGRAVATED POSSESSION OF DRUGS SCHEDULE I OR II - < BULK	68	F5
2925.11AC4a	POSSESSION OF COCAINE - < 5G	89	F5
2925.11AC6a	POSSESSION OF HEROIN < 1G	2	F5
4549.02AB2a	FAILURE TO STOP AFTER AN ACCIDENT - SERIOUS HARM TO A PERSON	2	F5
301.3	PROPERTY MAINTENANCE CODE VIOLATION - VACANT STRUCTURES AND LAND	1	M1
302.1	PROPERTY MAINTENANCE CODE VIOLATION - SANITATION	9	M1
302.2	PROPERTY MAINTENANCE CODE VIOLATION - GRADING AND DRAINAGE	1	M1
302.3	PROPERTY MAINTENANCE CODE VIOLATION - SIDEWALKS AND DRIVEWAYS	7	M1
302.4	PROPERTY MAINTENANCE CODE VIOLATION - WEEDS	129	M1
302.5	PROPERTY MAINTENANCE CODE VIOLATION - RODENT HARBORAGE	1	M1
302.7	PROPERTY MAINTENANCE CODE VIOLATION - ACCESSORY STRUCTURES	64	M1
302.8	PROPERTY MAINTENANCE CODE VIOLATION - MOTOR VEHICLES	44	M1
302.9	PROPERTY MAINTENANCE CODE VIOLATION - DEFACEMENT OF PROPERTY	1	M1
303.1	PROVIDING FALSE INFORMATION TO A POLICE OFFICER	1	M1
303.2	PROPERTY MAINTENANCE CODE VIOLATION - ENCLOSURES	5	M1
304.1	PROPERTY MAINTENANCE CODE VIOLATION - GENERAL	3	M1
304.1	PROPERTY MAINTENANCE CODE VIOLATION - STAIRWAYS, DECKS, PORCHES, AND BALCONIES	16	M1
304.11	PROPERTY MAINTENANCE CODE VIOLATION - CHIMNEYS AND TOWERS	5	M1
304.12	PROPERTY MAINTENANCE CODE VIOLATION - HANDRAILS AND GUARDS	5	M1
304.13	PROPERTY MAINTENANCE CODE VIOLATION - WINDOW, SKYLIGHT, AND DOOR FRAMES	47	M1
304.16	PROPERTY MAINTENANCE CODE VIOLATION - BASEMENT HATCHWAY	1	M1
304.2	PROPERTY MAINTENANCE CODE VIOLATION - PROTECTIVE TREATMENT	124	M1
304.3	PROPERTY MAINTENANCE CODE VIOLATION - PREMISES IDENTIFICATION	12	M1
304.4	PROPERTY MAINTENANCE CODE VIOLATION - STRUCTURAL MEMBERS	2	M1
304.5	PROPERTY MAINTENANCE CODE VIOLATION - FOUNDATION WALLS	1	M1
3.05E+02	PROPERTY MAINTENANCE CODE VIOLATION - EXTERIOR WALLS	10	M1
304.7	PROPERTY MAINTENANCE CODE VIOLATION - ROOFS AND DRAINAGE	79	M1
305.3	PROPERTY MAINENANCE CODE - INTERIOR SURFACES	9	M1
305.5	PROPERTY MAINTENANCE CODE VIOLATION - HANDRAILS AND GUARDS	2	M1
305.6	PROPERTY MAINTENANCE CODE VIOLATION - INTERIOR DOORS	2	M1

308.1	PROPERTY MAINTENANCE CODE VIOLATION - ACCUMMULATION OF RUBBISH OR GARBAGE	121	M1
309.1	PROPERTY MAINTENANCE CODE VIOLATION - INFESTATION	3	M1
335.07	DUS	32	M1
335.071	DUS - OVI SUSPENSION	34	M1
335.12	FAILURE TO STOP AFTER AN ACCIDENT	62	M1
504.1	PROPERTY MAINTENANCE CODE VIOLATION - GENERAL PLUMBING SYSTEMS AND FIXTURES	2	M1
505.101	CRUELTY TO COMPANION ANIMALS	1	M1
505.102	TETHERING ANIMALS - INJURY TO ANIMAL	1	M1
505.2	PHYSICAL HARM BY ANIMAL	2	M1
549.03	USING WEAPONS WHILE INTOXICATED	1	M1
605.1	PROPERTY MAINTENANCE CODE VIOLATION - INSTALLATION	6	M1
1503.03	PROPERTY MAINTENANCE CODE VIOLATION - SCOPE	1	M1
1503.05	BUILDING CODE - COMPLIANCE	2	M1
1515.04	PROPERTY MAINTENANCE CODE VIOLATION - VACANT PROPERTY REGISTRATION	6	M1
1537.06	PROPERTY MAINTENANCE VIOLATION - REGISTRATION OF RENTAL DWELLING UNIT	14	M1
2907.231	ENGAGING IN PROSTITUTION	2	M1
2919.23	INTERFERENCE WITH CUSTODY	4	M1
2925.31	ABUSING HARMFUL INTOXICANTS	1	M1
4510.14	DUS (OVI)	34	M1
4511.251	STREET RACING	8	M1
4513.361	FURNISHING FALSE INFORMATION TO AN OFFICER	3	M1
4549.021	FAILURE TO STOP AFTER A NONPUBLIC ROAD ACCIDENT	2	M1
4549.03	HIT SKIP (PROPERTY)	1	M1
4.30E+04	UNDERAGE CONSUMPTION	1	M1
2.92E+08	IMPROPER HANDLING FIREARMS IN A MOTOR VEHICLE - CCW DISREGARD/FAIL TO COMPLY WITH LAWFUL ORDER OF LAW ENFORCEMENT OFFICER	1	M1
111.1.5	PROPERTY MAINTENANCE CODE - DANGEROUS STRUCTURE OR PREMISES	2	M1
1501.03a	BUILDING CODE - FAILURE TO OBTAIN A PERMIT	19	M1
1541.02b	REGISTRY VIOLATION - FAILURE TO REGISTER AUTHORIZED AGENT	1	M1
1541.02b	REGISTRY VIOLATION - REGISTRATION STATEMENT	1	M1
2903.13A	ASSAULT - KNOWINGLY	154	M1
2903.211A	MENACING BY STALKING	6	M1
2903.21A	AGGRAVATED MENACING	74	M1
2909.03A1	ARSON - WITHOUT CONSENT	4	M1
2911.211A	AGGRAVATED TRESPASS	3	M1
2913.02A1	THEFT	31	M1
2913.02A2	PETTY THEFT	119	M1
2913.02A3B1 M1	PETTY THEFT BY DECEPTION - < $1,000	10	M1
2913.03A	UNAUTHORIZED USE OF A MOTOR VEHICLE	15	M1
2913.11B	PASSING BAD CHECKS - < $1,000	3	M1
2913.21B2	MISUSE OF CREDIT CARDS - OBTAIN PROPERTY OR SERVICES	2	M1

2913.21B4	MISUSE OF CREDIT CARDS - FALSELY REPRESENT THAT PROP OR SERVICES HAVE BEEN FURNISHED	1	M1
2913.31B1	FORGING IDENTIFICATION CARDS	1	M1
2913.51A	RECEIVING STOLEN PROPERTY - < $1,000 VALUE	2	M1
2917.03A1	RIOT - DC 4 OR MORE PEOPLE PURPOSE TO COMMIT COMMISSION OF MISDEMEANOR	1	M1
2917.13A1C	MISCONDUCT AT AN EMERGENCY - HAMPER LAWFUL OPERATIONS RISK OF HARM	1	M1
2917.13A2C	MISCONDUCT AT AN EMERGENCY - HAMPER LAWFUL ACTIVITIES OF EMERGENCY FACILITY PERSON RISK OF PHYS HARM	1	M1
2917.21A1	TELECOMMUNICATIONS HARASSMENT - FAILURE TO IDENTIFY WITH PURPOSE TO HARASS	5	M1
2917.21A3	TELECOMMUNICATIONS HARASSMENT - VIOLATION OF §2903.21 (AGGRAVATED MENACING)	1	M1
2917.21A4	TELECOMMUNICATIONS HARASSMENT - KNOWING STATE INTENTION TO CAUSE DAMAGE OR DESTROY PROPERTY	1	M1
2917.21A5	TELECOMMUNICATIONS HARASSMENT - KNOWING MAKES TELECOMMUNICATION AFTER PREVIOUSLY TOLD NOT TO BY THE RECIPIENT	1	M1
2917.21B	TELECOMMUNICATIONS HARASSMENT - PURPOSE TO ABUSE, THREATEN, OR HARASS	2	M1
2917.31A2	INDUCING PANIC - THREATENING TO COMMIT VIOLENT ACT	2	M1
2919.22A	ENDANGERING CHILDREN - RISK TO HEALTH OR SAFETY	28	M1
2919.22C	ENDANGERING CHILDREN - DUI	11	M1
2919.24A1	CONTRIBUTING TO THE UNRULINESS OR DELINQUENCY OF A CHILD - AID/ABET/ENCOURAGE CHILD	6	M1
2919.25ADV	DOMESTIC VIOLENCE - KNOWINGLY	337	M1
2919.25B	DOMESTIC VIOLENCE - RECKLESSLY	4	M1
2919.25CD3	DOMESTIC VIOLENCE - 2 OR MORE PRIORS	21	M1
2919.27A1	VIOLATING A PROTECTION ORDER - PURSUANT TO 2919.26 OR 3113.31	90	M1
2921.13A2	FALSIFICATION - INCRIMINATE ANOTHER	1	M1
2921.13A3	FALSIFICATION - MISLEAD PUBLIC OFFICIAL	4	M1
2921.32A1C2A1	OBSTRUCTING JUSTICE - FIRST DEGREE MISDEMEANOR ADULT HARBOR/CONCEAL	1	M1
2921.331A	FAILURE TO COMPLY WITH AN ORDER OR SIGNAL OF A POLICE OFFICER	13	M1
2921.33B	RESISTING ARREST - HARM TO OFFICER	9	M1
2923.02A/2913.02A1	ATTEMPTED THEFT	1	M1
2923.12A1	CARRYING CONCEALED WEAPONS - DEADLY WEAPON OTHER THAN HANDGUN	2	M1
2923.12A2	CARRYING CONCEALED WEAPONS - FIREARM	11	M1
2923.15A	USING WEAPONS WHILE INTOXICATED	9	M1
2923.201A2	POSSESSING A DEFACED FIREARM	2	M1
2923.24A	POSSESSING CRIMINAL TOOLS	11	M1
2925.11AC2a	POSSESSION OF DRUGS - SCHEDULE III, IV, OR V	13	M1
2925.13A	PERMITTING DRUG ABUSE - VEHICLE	1	M1
303.01b	FAILURE TO COMPLY WITH AN ORDER OR SIGNAL OF A POLICE OFFICER - FLEEING	1	M1
304.1.1	PROPERTY MAINTENANCE CODE VIOLATION - UNSAFE CONDITIONS	20	M1

304.13.2	PROPERTY MAINTENANCE CODE VIOLATION - OPENABLE WINDOWS	2	M1
304.18.1	PROPERTY MAINTENANCE CODE VIOLATION - DOORS	2	M1
308.2.2	PROPERTY MAINTENANCE CODE VIOLATION - DISPOSAL OF REFRIGERATORS	1	M1
333.01A1A	OPERATING A VEHICLE UNDER THE INFLUENCE - ALCOHOL	9	M1
333.01a1B	OPERATING A VEHICLE UNDER THE INFLUENCE - PER SE LOW TIER (.08<.17)	1	M1
335.07a	DRIVING UNDER SUSPENSION	12	M1
335.07h	DRIVING UNDER SUSPENSION - 12 POINT	12	M1
335.13a	FAILURE TO STOP AFTER A NONPUBLIC ROAD ACCIDENT	12	M1
4301.69A	UNDERAGE CONSUMPTION - SALE	2	M1
4506.03A1	DRIVING WITHOUT REQUIRED ENDORSEMENT	1	M1
4506.15A*	CDL - REFUSE TO SUBMIT TO A TEST UNDER SECTION 4506.17 or 4511.191 OF REVISED CODE	1	M1
4507.02A1	PERMITTING OPERATION BY UNLICENSED DRIVER	1	M1
4510.037J	DUS - 12 POINT	11	M1
4510.11A	DUS (SUSPENSION OTHER THAN FRA)	44	M1
4510.11B	DUS (RESTRICTIONS)	182	M1
4511.194B1	PHYSICAL CONTROL OF VEHICLE WHILE UNDER THE INFLUENCE	3	M1
4511.19A1a	OPERATING A VEHICLE UNDER THE INFLUENCE - ALCOHOL	13	M1
4511.19A1a	OPERATING A VEHICLE UNDER THE INFLUENCE - ALCOHOL	340	M1
4511.19A1b	OPERATING A VEHICLE UNDER THE INFLUENCE - PER SE LOW TIER (.08<.17)	8	M1
4511.19A1d	OPERATING A VEHICLE UNDER THE INFLUENCE - LOW TIER (.08<.17) BREATH	54	M1
4511.19A1e	OPERATING A VEHICLE UNDER THE INFLUENCE - ALCOHOL - > .11g < .238 URINE	1	M1
4511.19A1f	OPERATING A VEHICLE UNDER THE INFLUENCE - PER SE (>.17)	1	M1
4511.19A1g	OPERATING A VEHICLE UNDER THE INFLUENCE - BLOOD OR PLASMA > .204	2	M1
4511.19A1H	OPERATING A VEHICLE UNDER THE INFLUENCE - HI TIER	33	M1
4511.19A1I	OPERATING A VEHICLE UNDER THE INFLUENCE - HI TIER .238 Or Above In Urine	2	M1
4511.19A1jviiiIII	OPERATING A VEHICLE UNDER THE INFLUENCE - MARIHUANA	1	M1
4511.19A2	OPERATING A VEHICLE UNDER THE INFLUENCE - REFUSAL	86	M1
4511.19A2b	REFUSAL TO SUBMIT TO CHECMICAL TESTS AFTER CONVICTION	15	M1
4511.19B	OPERATING A VEHICLE UNDER THE INFLUENCE - UNDERAGE	2	M1
4511.203(A)(4)	WRONGFUL ENTRUSTMENT OF A MV - OMVI	1	M1
4549.02A	FAILURE TO STOP AFTER AN ACCIDENT	7	M1
537.03a	ASSAULT	8	M1
537.05a	AGGRAVATED MENACING	3	M1
537.07a	ENDANGERING CHILDREN - SUBSTIANTIAL RISK	7	M1
537.10a1	TELECOMMUNICATION HARASSMENT - FAIL TO IDENTIFY	1	M1
537.14a	DOMESTIC VIOLENCE - KNOWINGLY	1	M1
545.05a1	THEFT - WITHOUT CONSENT	11	M1
549.11a	DISCHARGING FIREWORKS - POSSESS/POSSESS FOR SALE/SELL	2	M1
549.11b	SALE OR DISCHARGE OF FIREWORKS - DISCHARGE/IGNITE/EXPLODE FIREWORKS	3	M1

959.131B	CRUELTY TO COMPANION ANIMALS	2	M1
505.07	ABANDONING ANIMALS	1	M2
505.071	CRUELTY TO COMPANION ANIMALS	2	M2
505.08	KILLING OR INJURING ANIMALS	1	M2
505.1	CRUELTY TO ANIMALS	1	M2
549.05	FAILURE TO SECURE DANGEROUS ORDNANCE	1	M2
2.92E+04	IMPROPER HANDLING FIREARMS IN A MOTOR VEHICLE - CCW FAILURE TO INFORM LAW ENFORCEMENT OFFICER	7	M2
2909.06A1	CRIMINAL DAMAGING OR ENDANGERING - KNOWINGLY	78	M2
2919.25CD4	DOMESTIC VIOLENCE - 1 PRIOR	14	M2
2921.31A	OBSTRUCTING OFFICIAL BUSINESS	219	M2
2921.33A	RESISTING ARREST	84	M2
2923.12B1	FAILURE TO PROMPTLY INFORM LAW ENFORCEMENT OF CCW LICENSE	5	M2
2923.211B	UNDERAGE PURCHASE OF A HANDGUN	1	M2
2925.12A	POSSESSING DRUG ABUSE INSTRUMENT	10	M2
505.101c5	CRUELTY TO COMPANION ANIMALS - DEPRIVE SUSTENANCE	1	M2
525.07a	OBSTRUCTING OFFICIAL BUSINESS	13	M2
525.09a	RESISTING ARREST	5	M2
541.03a1	CRIMINAL DAMAGING OR ENDANGERING - KNOWINGLY	4	M2
959.131D1	CRUELTY TO COMPANION ANIMALS - ACT OF CRUELTY	27	M2
959.131D2	PROHIBITIONS CONCERNING COMPANION ANIMALS - DEPRIVE ANIMAL	13	M2
959.131D3	PROHIBITIONS CONCERNING COMPANION ANIMALS - IMPOUND OR CONFINE	2	M2
959.13A	CRUELTY TO ANIMALS	1	M2
959.13A1	CRUELTY TO ANIMALS	5	M2
333.09	RECKLESS OPERATION	21	M3
511.16	EXCESSIVE NOISE - CAR STEREO	3	M3
1533.41	ILLEGAL USE OF A GILL NET	1	M3
2305.46	PROVIDING FALSE IDENTIFYING INFORMATION	1	M3
2903.14A	NEGLIGENT ASSAULT	1	M3
2905.03A	UNLAWFUL RESTRAINT	15	M3
2909.07A1	CRIMINAL MISCHIEF - KNOWING DAMAGE PROPERTY OF ANOTHER	9	M3
2917.211B	DISSEMINATION OF IMAGE OF ANOTHER PERSON	1	M3
2919.25CD5	DOMESTIC VIOLENCE - VICTIM PREG.	1	M3
3767.32A	LITTERING	4	M3
3767.32B	LITTERING - OTHER RECEPTICLE	3	M3
549.08a	DISCHARGING FIREARMS	11	M3
335.11	USE OF ILLEGAL LICENSE PLATES	7	M4
537.06	MENACING	2	M4
2.71E+03	CONTEMPT OF COURT - DIRECT	4	M4
4301.64	CONSUMPTION OF ALCOHOL IN A MOTOR VEHICLE	2	M4
4511.45	FAILURE TO YIELD TO PUBLIC SAFETY OR CORONER VEHICLE	1	M4
4511.62	RAILROAD GRADE CROSSING VIOLATION	1	M4
1531.02-33	OVER POSSESSION OF WALLEYE (LAKE ERIE) IN EXCESS OF TWO FISH OVER THE LIMIT	1	M4

1531.02-34	OVER POSSESSION OF WALLEYE 1-2 FISH (LAKE ERIE)	2	M4
1531.02-46	UNDERSIZE FISH	3	M4
1533.32-1	FAILURE TO CARRY AND EXHIBIT FISHING LICENSE	6	M4
1533.32-2	FISHING WITHOUT A LICENSE/ FAILURE TO CARRY AND EXHIBIT	15	M4
192.23D1	FAILURE TO FILE INCOME TAXES	1213	M4
192.23D3	FAILURE TO PAY INCOME TAXES	377	M4
2705.02C	CONTEMPT OF COURT - FAILURE TO OBEY SUBPOENA	11	M4
2903.22A	MENACING	37	M4
2907.09A	PUBLIC INDECENCY - RECKLESS EXPOSURE	7	M4
2911.21A1	CRIMINAL TRESPASS - KNOWING	92	M4
2911.21A2	CRIMINAL TRESPASS - KNOWING RESTRICTED	3	M4
2911.21A3	CRIMINAL TRESPASS - RECKLESSLY	4	M4
2911.21A4	CRIMINAL TRESPASS - NEGLIGENT/REFUSAL	3	M4
2917.11A1E3a	DISORDERLY CONDUCT - RECKLESSLY FIGHTING OR VIOLENT BEHAVIOR PERSISTING	9	M4
2917.11A1E3b	DISORDERLY CONDUCT - RECKLESSLY FIGHTING OR VIOLENT BEHAVIOR W/I VICINITY OF SCHOOL	1	M4
2917.11A2E3a	DISORDERLY CONDUCT - RECKLESSLY MAKE UNREASONABLE NOISE OR ABUSIVE LANGUAGE PERSISTING	27	M4
2917.11A2E3b	DISORDERLY CONDUCT - RECKLESSLY MAKE UNREASONABLE NOISE OR ABUSIVE LANGUAGE W/I VINCINTY OF SCHOOL	2	M4
2917.11A3E3a	DISORDERLY CONDUCT - RECKLESSLY INSULT OR TAUNT ANOTHER PERSISTING	6	M4
2917.11A5E3a	DISORDERLY CONDUCT - RECKLESSLY CREATE PHYSICALLY OFFENSIVE CONDITION PERSISTING	10	M4
2917.11B1E3a	DISORDERLY CONDUCT - INTOXICATED PUBLIC PLACE PERSISTING	10	M4
2917.11B2E3a	DISORDERLY CONDUCT - INTOXICATED PHYSICAL RISK OF HARM PERSISTING	2	M4
2917.13A1	MISCONDUCT AT AN EMERGENCY - HAMPER LAWFUL OPERATIONS	3	M4
2919.25C	DOMESTIC VIOLENCE - KNOWINGLY - BY THREAT	52	M4
2921.29A	FAILURE TO DISCLOSE ONE'S PERSONAL INFORMATION	7	M4
2921.51B	IMPERSONATION OF A PEACE OFFICER	1	M4
2923.162A2	DISCHARGE OF A FIREARM ON OR NEAR PROHIBITED PREMISES	1	M4
2923.16C	IMPROPER HANDLING FIREARMS IN A MOTOR VEHICLE - UNLAWFULLY TRANSPORT PLAIN SIGHT	1	M4
2925.11AC3b	POSSESSION OF MARIHUANA - > 100G < 200G	1	M4
2925.14C1	POSSESSION OF DRUG PARAPHERNALIA	139	M4
2927.02B1	GIVE, SELL OR DISTRIBUTE CIGARETTES, TOBACCO PRODUCTS OR PAPERS TO A CHILD	5	M4
331.21A	FAILURE TO YIELD TO PUBLIC SAFETY OR CORONER VEHICLE	3	M4
333.03b1Aj	SPEED SCHOOL ZONE NON WAIVERABLE	1	M4
333.03b1j	SPEED NON WAIVERABLE	429	M4
335.074a (2 Prior)	DUS - COURT FORFEITURE (2 OR MORE PRIOR CONVICTIONS)	1	M4
335.10A	EXPIRED REGISTRATION	15	M4
335.11A	FICTICIOUS PLATES	23	M4
4511.19B3	OPERATING A VEHICLE UNDER THE INFLUENCE - UNDERAGE (.02-.08)	1	M4
4511.21B1aO	SPEED SCHOOL ZONE NON WAIVERABLE	1	M4

4511.21BO	SPEED NON WAIVERABLE	215	M4
4549.08A1	FICTICIOUS PLATES	13	M4
509.02a	FAILURE TO DISPERSE - LIKELY PHYSICAL HARM	1	M4
509.03a2b3A	DISORDERLY CONDUCT - UNREASONABLE OR OFFENSIVE NOISE PERSISTING	2	M4
509.03a2b3C	DISORDERLY CONDUCT - UNREASONABLE OR OFFENSIVE NOISE W/I PRESENCE OF LAW ENFORCEMENT OFFICER	1	M4
509.03a5b3A	DISORDERLY CONDUCT - OFFENSIVE CONDITION PERSISTING	1	M4
509.09a	DISTURBING THE PEACE - UNREASONABLE NOISE BY INSTRUMENT OR DEVICE/NOISY OR BOISTEROUS MANNER	12	M4
509.09b	DISTURBING THE PEACE - INTOXICATION/FIGHTING/ASSAULT/OBSCENCE LANGUAGE/LEWD BEHAVIOR	1	M4
509.11a	HOURS OF PARKS AND BEACHES	12	M4
509.16b1	PANHANDLING - AGGRESSIVE MANNER	4	M4
513.12c1	ILLEGAL USE OR POSSESSION OF DRUG PARAPHERNALIA	1	M4
533.07a1	PUBLIC INDECENCY - RECKLESS EXPOSURE	2	M4
541.05a1	CRIMINAL TRESPASS - KNOWING	5	M4
541.05a3	CRIMINAL TRESPASS - RECKLESSLY	1	M4
545.06d	VEHICLE TRESPASS	2	M4
959.15(A)	ANIMAL FIGHTS	7	M4
1	COMPLIANCE TO RULES SIGNS AND ORDERS	1	MM
3.1	HOURS OF OPERATION AND CLOSING	2	MM
4.1	ALCOHOLIC BEVERAGES	1	MM
7.1	LITTER	1	MM
28	PARKING - OTHER	1	MM
185.23	OPERATING GREATER THAN IDLE SPEED IN A WAKE ZONE	1	MM
302.7	PROPERTY MAINTENANCE CODE VIOLATION - ACCESSORY STRUCTURES	1	MM
303.08	IMPOUNDING OF VEHICLES; REDEMPTION	39	MM
303.081	NUISANCE MOTOR VEHICLE	17	MM
303.09	LEAVING JUNK AND OTHER VEHICLES ON PRIVATE OR PUBLIC PROPERTY W/O PERMISSION	33	MM
304.14	PROPERTY MAINTENANCE CODE VIOLATION - INSECT SCREENS	4	MM
305.2	PRPERTY MAINTENANCE CODE VIOLATION - STRUCTURAL MEMBERS	2	MM
308.1	PROPERTY MAINTENANCE CODE VIOLATION - ACCUMMULATION OF RUBBISH OR GARBAGE	1	MM
311.08	TREE, SHRUB, AND VEGETATION NUISANCES PROHIBITED	2	MM
313.01	RED LIGHT	133	MM
313.02	STOP SIGN/YIELD SIGN VIOLATION	7	MM
313.03	TRAFFIC SIGNAL VIOLATION	6	MM
331.01	DRIVING UPON THE RIGHT SIDE OF ROADWAY	4	MM
331.12	IMPROPER U TURN	1	MM
331.3	ONE-WAY STREETS AND ROTARY TRAFFIC ISLANDS	28	MM
331.34	FAILURE TO CONTROL	4	MM
331.37	DRIVING ON SIDEWALK/CURB	3	MM
331.42	LITTERING FROM VEHICLE	2	MM
333.03	ASSURED CLEAR DISTANCE - SPEED	157	MM

333.03	SPEEDING	215	MM
333.09	RECKLESS OPERATION	5	MM
335.01	OPERATING A MOTOR VEHICLE WITHOUT A VALID LICENSE - EXPIRED	12	MM
335.021	OHIO DRIVER'S LICENSE REQUIRED FOR IN STATE RESIDENTS	3	MM
335.03	TEMPORARY PERMIT VIOLATION	11	MM
335.032	USE OF DEVICES BY PERSONS UNDER 18 YEARS OF AGE	4	MM
337.02	IMPROPER USE OF HEADLIGHTS	2	MM
337.221	TINTED WINDOWS	4	MM
337.26	CHILD RESTRAINT	5	MM
337.28	USE OF SUNSCREENING, NONTRANSPARENT AND REFLECTORIZED MATERIALS	3	MM
337.29	BUMPER HEIGHT	1	MM
351.03	PARKED MORE THAN 12 INCHES FROM CURB	13	MM
351.05	MANNER OF ANGLE PARKING	5	MM
351.06	SELLING/WASHING/REPAIRING A VEHICLE ON THE ROADWAY	10	MM
351.07	UNATTENDED MOTOR VEHICLE	1	MM
351.1	PARKED AT A BUS STOP	2	MM
351.11	PARKED IN AN ALLEY OR NARROW STREET	3	MM
351.13	PARKING ON POSTED PRIVATE PROPERTY	1	MM
357.04	NO PARKING DURING A SNOW EMERGENCY	14	MM
371.01	FAILURE TO YIELD BY A PEDESTRIAN	2	MM
371.03	JAYWALKING	14	MM
371.05	WALKING ALONG HIGHWAY	15	MM
371.09	WALKING ON HIGHWAY WHILE INTOXICATED	1	MM
373.06	BIKE LIGHT/REFLECTOR	4	MM
373.1	TRAFFIC CONTROL DEVICE (BICYCLE)	4	MM
505.06	ANNUAL REGISTRATION OF DOGS; TAGS REQUIRED	104	MM
505.11	RABIES IMMUNIZATION	118	MM
505.12	NUISANCE CONDITION PROHIBITED	1	MM
505.13	BARKING OR HOWLING DOGS	1	MM
505.18	WILD ANIMALS AND FARM ANIMALS PROHIBITED	10	MM
505.22	MAXIMUM NUMBER OF DOMESTIC ANIMALS PERMITTED	10	MM
529.07	OPEN CONTAINER	21	MM
955.1	TAGS TO BE WORN	2	MM
1547.49	LITTERING FROM VESSEL	1	MM
1548.02	PERMIT REQUIRED	1	MM
2917.11	DISORDERLY CONDUCT	1	MM
4301.62	OPEN CONTAINER	27	MM
4503.11	EXPIRED REGISTRATION	74	MM
4503.21	IMPROPER DISPLAY OF PLATES	20	MM
4511.03	EMERGENCY VEHICLES AT RED SIGNAL OR STOP SIGN	1	MM
4511.13	HIGHWAY TRAFFIC SIGNAL INDICATIONS	29	MM
4511.2	RECKLESS OPERATION ON PUBLIC PROPERTY	24	MM
4511.21	SPEED WAIVERABLE	285	MM
4511.213	UNSAFE OPERATION AROUND EMERGENCY VEHICLE	4	MM

4511.25	RIGHT SIDE OF ROADWAY	19	MM
4511.32	DRIVING WRONG WAY	2	MM
4511.33	MARKED LANES	88	MM
4511.35	IMPROPER CROSSING OF A DIVIDED HIGHWAY	2	MM
4511.36	IMPROPER TURN	9	MM
4511.38	IMPROPER STARTING/BACKING	15	MM
4511.39	TURN SIGNAL VIOLATION	28	MM
4511.41	FAILURE TO YIELD RIGHT OF WAY AT AN INTERSECTION	2	MM
4511.42	FAILURE TO YIELD RIGHT OF WAY	19	MM
4511.44	FAILURE TO YIELD FROM ANY PLACE OTHER THAN ROADWAY	7	MM
4511.48	FAILURE TO YIELD (PEDESTRIAN) TO TRAFFIC	1	MM
4511.5	IMPROPER WALKING ON ROADWAY	4	MM
4511.56	FAILURE TO HAVE PROPER BICYCLE SIGNAL DEVICES	1	MM
4511.681	PARKING WHERE PROHIBITED	3	MM
4511.7	IMPROPER OPENING DOOR INTO MOVING TRAFFIC	1	MM
4511.71	DRIVING ON CLOSED ROAD	1	MM
4511.81	CHILD RESTRAINT	19	MM
4511.82	LITTERING FROM VEHICLE	1	MM
4513.05	NO TAIL/PLATE LIGHTS	28	MM
4513.071	2 OR MORE STOP LIGHTS REQUIRED	1	MM
4513.14	IMPROPER HEADLIGHTS	10	MM
4513.15	IMPROPER USE OF HIGHBEAMS	12	MM
4513.24	WINDSHIELD AND WINDSHIELD WIPERS	1	MM
4513.31	INSECURE LOAD	2	MM
4513.64	WILLFULLY LEAVING ABANDONDED JUNK MOTOR VEHICLE	14	MM
4549.1	NO LICENSE PLATES	1	MM
5577.04	OVERLOADED AXLE/WHEEL	1	MM
1201.12h	PROPERTY MAINTENANCE VIOLATION-RECREATION VEHICLE, CAMPER, BOAT	1	MM
2917.11A1	DISORDERLY CONDUCT - RECKLESSLY FIGHTING OR VIOLENT BEHAVIOR	8	MM
2917.11A2	DISORDERLY CONDUCT - RECKLESSLY MAKE UNREASONABLE NOISE OR ABUSIVE LANGUAGE	7	MM
2917.11A5	DISORDERLY CONDUCT - RECKLESSLY CREATE PHYSICALLY OFFENSIVE CONDITION	8	MM
2917.11B1	DISORDERLY CONDUCT - INTOXICATED PUBLIC PLACE	32	MM
2917.11B2	DISORDERLY CONDUCT - INTOXICATED PHYSICAL RISK OF HARM	3	MM
2925.11AC3a	POSSESSION OF MARIHUANA - < 100G	24	MM
2925.141C	ILLEGAL USE OR POSSESSION OF MARIHUANA DRUG PARAPHERNALIA	9	MM
303.02b	OBEDIENCE TO SCHOOL GUARD	1	MM
303.08a2	ABANDONED VEHICLE (48 HRS.)	14	MM
313.04A	LANE USE CONTROL SIGNAL VIOLATION	1	MM
331.03A	IMPROPER PASSING	6	MM
331.04A	IMPROPER PASSING ON THE RIGHT	7	MM
331.05A	LEFT OF CENTER	17	MM
331.07A	PASSING IN A NO PASSING ZONE	3	MM

331.08a	MARKED LANES	50	MM
331.09A	FOLLOWING TOO CLOSELY	1	MM
331.10A	IMPROPER TURN	27	MM
331.11A	IMPOPER TURN (PRIVATE DRIVE)	1	MM
331.13A	IMPROPER STARTING/BACKING	48	MM
331.14A	TURN SIGNAL VIOLATION	33	MM
331.16A	FAILURE TO YIELD RIGHT OF WAY (INTERSECTION)	9	MM
331.17A	FAILURE TO YIELD RIGHT OF WAY (TURNING LEFT)	43	MM
331.18A	YIELD SIGN VIOLATION	2	MM
331.19A	STOP SIGN VIOLATION - ORD	308	MM
331.20A	FAILURE TO SLOW DOWN AT AN INTERSECTION BY AN EMERGENCY VEHICLE	1	MM
331.22A	FAILURE TO YIELD FROM PRIVATE DRIVE	28	MM
331.23A	FAILURE TO YIELD SIDEWALK	1	MM
331.26A	DRIVING ON A CLOSED ROAD	10	MM
331.33A	IMPROPERING OBSTRUCTION OF INTERSECTION/CROSSWALK/GRADE CROSSING	2	MM
331.34a	FAILURE TO CONTROL	141	MM
331.34b	WEAVING	5	MM
331.34c	FULL TIME AND ATTENTION	1	MM
331.36A	SQUEALING TIRES/CRACKING EXHAUST	10	MM
331.41A	SHORTCUTTING AN INTERSECTION	26	MM
333.02a	OPERATION IN WILLFUL DISREGARD OF SAFETY - STREET OR HIGHWAY	5	MM
333.02b	OPERATION IN WILLFUL DISREGARD OF SAFETY - PUBLIC OR PRIVATE PROPERTY	4	MM
333.03A	ASSURED CLEAR DISTANCE	1	MM
333.03b1	SPEED WAIVERABLE	223	MM
333.03b1A	SPEED SCHOOL ZONE WAIVERABLE	1	MM
333.04a	IMPEDING TRAFFIC	2	MM
333.05A	SPEEDING OVER A BRIDGE	1	MM
333.08A	OPERATION WITHOUT REASONABLE CONTROL	3	MM
333.11a	ELECTRONIC WIRELESS COMMUNICATION DEVICE USE PROHIBITED WHILE DRIVING	6	MM
335.09A	IMPROPER DISPLAY OF PLATES	72	MM
335.10C	FAILURE TO OBTAIN OHIO REGISTRATION	1	MM
335.10D	EXPIRED LICENSE PLATE OR VALIDATION STICKER	633	MM
335.111A	REGISTRATION WITHIN THIRTY DAYS OF RESIDENCY	2	MM
337.01a	UNSAFE VEHICLE	3	MM
337.03a	UNEQUIPPED HEADLIGHTS	8	MM
337.04a	NO TAIL LIGHT(S)	9	MM
337.04b	NO LIGHTED PLATES	13	MM
337.13a	IMPROPER HEADLIGHTS	7	MM
337.14a	HEADLIGHT FOCUS/INTENSITY VIOLATION	1	MM
337.20a	EXCESSIVE NOISE (MUFFLER)	3	MM
337.20b	EXCESSIVE SMOKE/GAS	1	MM
337.21a	REAR VIEW MIRROR	1	MM

337.24a	NO BRAKE LIGHTS	1	MM
337.27b1	SEAT BELT VIOLATION	126	MM
337.27b2	SEAT BELT VIOLATION (PASSENGER)	10	MM
337.31a	NO TURN SIGNAL	4	MM
339.11a	INSECURE LOAD	2	MM
351.03A1	PARKED ON SIDEWALK, CURB, OR STREET LAWN AREA	162	MM
351.03a1	PROHIBITED STANDING OR PARKING PLACES	114	MM
351.03A11	PARKED NEAR STREET OR EXCAVATION CONSTRUCTION	4	MM
351.03A12	DOUBLE PARKED	2	MM
351.03A14	PARKED WHERE PROHIBITED	106	MM
351.03A15	PARKING WITHIN ONE FOOT OF ANOTHER PARKED VEHICLE	1	MM
351.03A17	TREE LAWN PARKING PROHIBITED	74	MM
351.03a2	BLOCKING ANY PART OF DRIVEWAY	3	MM
351.03a20	FIRELANE	25	MM
351.03a22	FRONT YARD PARKING	522	MM
351.03a4	FIRE HYDRANT - WITHIN 10 FEET	12	MM
351.03a5	PARKING ON CROSSWALK	2	MM
351.03A6	PARKED WITHIN 20 FEET OF CROSSWALK	3	MM
351.03A7	PARKED WITHIN 30 FEET OF STOP SIGN	11	MM
351.03B	PARKING PROHIBITED	2	MM
351.04a	MORE THAN 12 INCHES FROM CURB	29	MM
351.04c1	HEADED WRONG WAY	40	MM
351.04f	PARKING PROHIBITED (HANDICAPPED)	50	MM
351.14a	COMMERCIAL VEHICLE PARKING	6	MM
371.06(b)	USE OF HIGHWAY FOR SOLICITING EMPLOYMENT, BUSINESS, OR CONTRIBUTIONS	1	MM
4301.62B4	OPEN CONTAINER IN MOTOR VEHICLE	27	MM
4510.12A	OPERATING A MOTOR VEHICLE WITHOUT A VALID LICENSE - EXPIRED	2	MM
4510.12A >6 months	OPERATING A MOTOR VEHICLE WITHOUT A VALID LICENSE - EXPIRED > 6 MONTHS	1	MM
4510.12B	OPERATING A MOTORCYCLE WITHOUT A VALID LICENSE OR ENDORSEMENT - EXPIRED	1	MM
4511.12A	TRAFFIC CONTROL DEVICE VIOLATION	24	MM
4511.201A	RECKLESS OPERATION ON PRIVATE PROPERTY	1	MM
4511.202A	FAILURE TO CONTROL	24	MM
4511.21A	ASSURED CLEAR DISTANCE - SPEED	26	MM
4511.21B1a	SPEED SCHOOL ZONE WAIVERABLE	9	MM
4511.21B2	SPEED - 25MPH ON ALL OTHER PORTIONS OF A MUNICIPAL CORP.	47	MM
4511.21B3	SPEED - 35MPH ON ALL ROADS IN MUNICIPAL CORP.	61	MM
4511.21C	SPEEDING	19	MM
4511.22A	SLOW SPEED	1	MM
4511.27A	IMPROPER PASSING	4	MM
4511.28A	IMPROPER PASSING ON THE RIGHT	2	MM
4511.29A	IMPROPER PASSING LEFT OF CENTER	2	MM
4511.29A	LEFT OF CENTER	1	MM
4511.30A	DRIVING ON LEFT SIDE OF THE ROADWAY	1	MM

4511.31A	PASSING IN A HAZARDOUS ZONE	1	MM
4511.43A	STOP SIGN VIOLATION - ORC	164	MM
4511.43B	YIELD SIGN VIOLATION	3	MM
4511.53B	OPERATING A BICYCLE/MOTORCYCLE OTHER THAN UPON THE SEAT	1	MM
4511.661A	UNATTENDED MOTOR VEHICLE	1	MM
4511.68A2	PARKING IN FRONT OF A PUBLIC OR PRIVATE DRIVEWAY	1	MM
4513.02A	UNSAFE VEHICLE	2	MM
4513.03A	IMPROPER USE OF HEADLIGHTS	24	MM
4513.04A	UNEQUIPPED HEADLIGHTS	11	MM
4513.241C	TINTED WINDOWS - OPERATE	10	MM
4513.263B1	SEAT BELT VIOLATION	592	MM
4513.263B3	SEAT BELT VIOLATION (PASSENGER)	8	MM
505.03a	ANIMALS RUNNING AT LARGE	52	MM
505.03a	ANNUAL REGISTRATION OF DOGS; TAGS REQUIRED	3	MM
505.09a	UNREASONABLE ANIMAL NOISE PROHIBITED	3	MM
509.03a1	DISORDERLY CONDUCT - FIGHTING	9	MM
509.03a5	DISORDERLY CONDUCT - OFFENSIVE CONDITION	2	MM
509.08a1	DISORDERLY CONDUCT BY INTOXICATION - OFFENSIVE/INCONVIENENT/ANNOYING CONDUCT	5	MM
509.12B	MINOR'S CURFEW	11	MM
513.03ac2A	POSSESSION OF MARIHUANA < 100 gr	1	MM
513.121c	ILLEGAL USE OR POSSESSION OF MARIHUANA DRUG PARAPHERNALIA	1	MM
529.07b	OPEN CONTAINER PROHIBITED	13	MM
955.22C	DOG AT LARGE	3	MM
2903.01B	AGGRAVATED MURDER - FELONY MURDER	1	SF
2903.02A	MURDER	1	SF
375.03	OPERATION OF AN ATV WHERE PROHIBITED	11	SM
375.06	REGISTRATION OF VEHICLES	1	SM
4511.75	STOPPED SCHOOL BUS VIOLATION	5	SM
5739.3	FAILURE TO FILE STATE TAX	2	SM
375.05a	LICENSING REQUIRMENTS OF OPERATOR	1	SM
505.02b	CONFINEMENT OF DOGS	2	SM
505.02c	CONFINEMENT OF VICIOUS DOG	1	SM
941.03f	GARBAGE CAN ON CURB MORE THAN 24 HOURS PRIOR TO SCHEDULED COLLECTION	3	SM
3734.03	OPEN BURNING OR OPEN DUMPING	2	UF
302.1	PROPERTY MAINTENANCE CODE VIOLATION - SANITATION	1	UM
304.12	PROPERTY MAINTENANCE CODE VIOLATION - HANDRAILS AND GUARDS	10	UM
304.13	PROPERTY MAINTENANCE CODE VIOLATION - WINDOW, SKYLIGHT, AND DOOR FRAMES	1	UM
304.15	PROPERTY MAINTENANCE CODE VIOLATION - DOORS	18	UM
304.2	PROPERTY MAINTENANCE CODE VIOLATION - PROTECTIVE TREATMENT	2	UM
305.4	PROPERTY MAINTENACE CODE VIOLATION - STAIRS AND WALKING SURFACES	5	UM

335.01	OPERATING A MOTOR VEHICLE WITHOUT A VALID LICENSE - NEVER HELD A VALID DL	96	UM
335.06	FAILURE TO DISPLAY A LICENSE	1	UM
335.073	DUS - FAILURE TO REINSTATE	23	UM
4510.21	FAILURE TO REINSTATE LICENSE	28	UM
4511.203	WRONGFUL ENTRUSTMENT OF A MOTOR VEHICLE	1	UM
4511.204	DRIVING WHILE TEXTING (1st Offense in 2 years)	660	UM
4511.204	DRIVING WHILE TEXTING (2nd Offense in 2 years)	23	UM
4511.204	DRIVING WHILE TEXTING (3rd Offense in 2 years)	1	UM
4511.991	DISTRACTED DRIVING	1	UM
1141.24a	PERMITTING PARKING/STORAGE OF INOPERABLE VEHCICLE, EQUIPMENT, PARTS	4	UM
1141.25(a)	RECREATIONAL VEHICLE PARKING VIOLATION	7	UM
1141.29(b)	SWIMMING POOL\DECK LOCATION VIOLATION	1	UM
331.38A	STOPPING FOR SCHOOL BUS; ENDANGERING CHILDREN	3	UM
331.44A	VEHICULAR OPERATION ON STREET CLOSED DUE TO RISE IN WATER LEVEL	2	UM
335.02A	PERMITTING UNLICENSED DRIVER TO DRIVE	6	UM
335.05a1	WRONGFUL ENTRUSTMENT - NOT VALID	7	UM
335.05a2	WRONGFUL ENTRUSTMENT - DUS	25	UM
335.072a	DUS - NON- COMPLIANCE (FRA)	215	UM
335.072b	DUS - JUDGMENT	7	UM
335.074a	DUS - COURT FORFEITURE	101	UM
335.074b	DUS - CHILD SUPPORT	71	UM
4510.111A	DUS (COURT FORFEITURE)	24	UM
4510.111B	DUS (CHILD SUPPORT)	10	UM
4510.12A	OPERATING A MOTOR VEHICLE WITHOUT A VALID LICENSE - NEVER HELD A VALID DL	72	UM
4510.12B	OPERATING A MOTORCYCLE WITHOUT A VALID LICENSE OR ENDORSEMENT - NEVER HELD A VALID DL	3	UM
4510.16A	DUS (FRA)	88	UM
4510.16B	DUS (NONPAYMENT OF A JUDGEMENT SUSPENSION)	1	UM
2919.25	DOMESTIC VIOLENCE	1	
2923.02AE	ATTEMPT TO COMMIT (AN OFFENSE) - KNOWING	13	
2923.02AE1	ATTEMPT TO COMMIT (AN OFFENSE) - KNOWING	1	
2923.03A	COMPLICITY IN THE COMMISSION OF (AN OFFENSE)	7	
2923.03Af	COMPLICITY IN THE COMMISSION OF (AN OFFENSE)	1	
	Total Count of All Charges & Types	**15,157**	**654**

2025 Criminal and Traffic Summary

Summary of Charges by Degree		
Degree	Description	Charges Filed
F1	Felony 1st Degree	59
F2	Felony 2nd Degree	114
F3	Felony 3rd Degree	243
F4	Felony 4th Degree	333
F5	Felony 5th Degree	359
SF	Felony Special	2
UF	Unclassified Felony	2
M1	Misdemeanor 1st Degree	2885
M2	Misdemeanor 2nd Degree	495
M3	Misdemeanor 3rd Degree	71
M4	Misdemeanor 4th Degree	2822
MM	Minor Misdemeanor	6205
SM	Special Misdemeanor	26
UM	Unclassified Misdemeanor	1518
N/A	Not Otherwise Classified	23
	Grand Total	**15,157**

Section Three
2025 Hearings

2025 Hearings

HEARING DESCRIPTION	COUNT OF HEARINGS	COURT TYPE
2ND CAUSE	538	Civil
ARRAIGNMENTS	9,376	Criminal/Traffic
BENCH TRIAL	549	Criminal/Traffic/Civil
BOND FORFEITURE	63	Criminal/Traffic
CIVIL PRETRIALS/TRIALS	619	Civil
CONTEMPT HEARING	52	Criminal/Traffic
DEBTOR EXAM	22	Civil
DIP HEARING	134	Traffic
EVICTIONS	967	Civil
EXPUNGMENT	136	Criminal/Traffic
FINAL PRE-TRIAL	401	Criminal/Traffic
FINE HEARING	1,070	Criminal/Traffic
GARNISHMENTS HEARING	64	Civil
HOUSING ARRAIGNMENT	465	Criminal
HOUSING BENCH TRIAL	24	Criminal
HOUSING PRE-TRIAL	288	Criminal
HOUSING REVIEW	1	Criminal
HOUSING SHOW CAUSE	22	Criminal
JAIL ARRAIGNMENTS	3	Criminal/Traffic
JURY TRIAL	92	Criminal/Traffic/Civil
MERITS HEARING	305	Criminal/Traffic
MISCELLANEOUS HEARINGS	139	Criminal/Traffic/Civil
MOTION HEARING	125	Criminal/Traffic/Civil
MOTION TO SEAL	12	Criminal/Traffic
PLEA HEARING	116	Criminal/Traffic
PRE-TRIAL	7,364	Criminal/Traffic/Civil
PRELIMINARY HEARING	1,001	Criminal/Traffic
PROBABLE CAUSE HEARING	578	Criminal/Traffic
REVIEW HEARING	1,906	Criminal/Traffic
SENTENCING	295	Criminal/Traffic
SHOW CAUSE HEARING	1,253	Criminal/Traffic
SMALL CLAIMS	1,032	Civil
STATUS CONFERENCE	1	Criminal/Traffic
TAX ARRAINGMENT	587	Criminal
TAX BENCH TRIAL	31	Criminal
TAX PRE-TRIAL	350	Criminal
TAX REVIEW HEARINGS	127	Criminal
TPO HEARING	2	Criminal
WALK-INS	292	Criminal/Traffic/Civil
WEDDING	18	Civil
Total	30,420	

Section Four
Probation and Bailiff Activity

2025 Probation Department Report

Caseload Carryover

Type	2022	2023	2024	2025
Monitored Time (non-reporting)	1,333	1,532	2,674	2,819
Active (reporting)	52	57	82	91
Intensive Supervised Probation	80	58	98	86

Assigned Caseload

Type	2022	2023	2024	2025
Monitored Time (non-reporting)	2,726	909	1,255	1,277
Active (reporting)	44	20	50	32
Intensive Supervised Probation	100	12	42	41

Terminations

Type	2022	2023	2024	2025
Monitored Time (non-reporting)	1,304	1,173	1,056	182
Active (reporting)	18	16	45	7
Intensive Supervised Probation	37	45	38	1

Additional Probation Information

	2022	2023	2024	2025
Probation Violation Hearings	567 (-25%)	706	676	754 (+12%)
Presentence Reports	15 (-6%)	1	15	16 (+7%)
Expungements				
City Charge	17	14	16	20
State Charge	59	58	53	77
Review Hearings Conducted	679	475	424	461

2025 Outside Bailiff Report

Writs of Restitution		**2023**	**2024**	**2025**
Writ Satisfied		247	237	207
Evictions/Physical Putout		38	75	51
Writ Not Satisfied Tenant Paid/Cancelled by Plaintiff		45	79	27
Miscellaneous				
	Total	330	349	285
Garnishments				
Certified Mail		1,434	1,592	1,927
Summons				
Ordinary Mail		1,708	2,557	2,774
Posted		928	904	804
Certified Mail		2,665	3,735	4,419
Process Server		35	28	15
Personal Service		2	678	670
Residential Service		0	0	0
Bailiff Unable to Serve		23	58	15
Sheriff Service			4	2
	Total	5,361	7,960	8,699

CITY OF LORAIN

City Council Regular Meeting **7. a.**

Meeting Date: 02/02/2026

Submitted by: Maggie Partin, Deputy Clerk

AGENDA ITEM DESCRIPTION OR LEGISLATION TITLE

A RESOLUTION RECOGNIZING, CELEBRATING AND DECLARING THE MONTH OF FEBRUARY AS BLACK HISTORY MONTH IN THE CITY OF LORAIN, OHIO

PURPOSE AND BACKGROUND:

WHEREAS, the month of February is nationally recognized as Black History Month and serves as a time to honor, reflect upon, and celebrate the significant contributions, achievements, and lasting impact of African Americans throughout the history of the United States; and

WHEREAS, Black History Month provides an opportunity for residents of the City of Lorain to deepen their understanding of Black history, heritage, and culture, and to recognize the many African American leaders, innovators, educators, workers, artists, and public servants who have shaped our nation, the State of Ohio, and the City of Lorain; and

WHEREAS, increasing awareness and knowledge of Black history strengthens our community by fostering greater understanding of civil and human rights, acknowledging the progress made toward equality, and recognizing the ongoing challenges related to racial injustice, discrimination, and economic disparity; and

WHEREAS, Black History Month highlights the richness and diversity of African American experiences and contributions that have profoundly influenced local, national, and global culture; and

WHEREAS, recognizing Black History Month reminds all individuals that resilience, innovation, leadership, and courage can overcome marginalization and systemic barriers, and that the pursuit of dignity, equality, and justice remains an enduring responsibility shared by all members of the community.

RECOMMENDATION TO COUNCIL:

Lorain City Council consider

Attachments

Resolution

Form Review

Form Started By: Maggie Partin Started On: 01/29/2026 08:53 AM

Final Approval Date: 01/29/2026

VOTE ON PASSAGE					
	AYE	NAY		AYE	NAY
Springowski			Torres		
Dimacchia			Gonzalez		
Fallis			Arroyo		
Drwal			Bearer		
Kempton			Thornsberry		
Carter			Arredondo		

Resolution No. _____

A RESOLUTION RECOGNIZING, CELEBRATING AND DECLARING THE MONTH OF FEBRUARY AS BLACK HISTORY MONTH IN THE CITY OF LORAIN, OHIO

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WHEREAS, Black History Month provides an opportunity for residents of the City of Lorain to deepen their understanding of Black history, heritage, and culture, and to recognize the many African American leaders, innovators, educators, workers, artists, and public servants who have shaped our nation, the State of Ohio, and the City of Lorain; and

WHEREAS, increasing awareness and knowledge of Black history strengthens our community by fostering greater understanding of civil and human rights, acknowledging the progress made toward equality, and recognizing the ongoing challenges related to racial injustice, discrimination, and economic disparity; and

WHEREAS, Black History Month highlights the richness and diversity of African American experiences and contributions that have profoundly influenced local, national, and global culture; and

WHEREAS, recognizing Black History Month reminds all individuals that resilience, innovation, leadership, and courage can overcome marginalization and systemic barriers, and that the pursuit of dignity, equality, and justice remains an enduring responsibility shared by all members of the community.

NOW THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF LORAIN, STATE OF OHIO:

SECTION I. That Lorain City Council, on behalf of all the residents of the City of Lorain, hereby recognizes, celebrates and declares the month of February as "Black History Month in the City of Lorain, Ohio"

SECTION II. That it is found and determined that all formal actions of this Council concerning and relating to the passage of this resolution were adopted in open meetings of this Council and that all deliberations of this Council and any of its committees that resulted in such formal actions were in meetings open to the public, all in compliance with legal requirements, including O.R.C. Section 121.22.

SECTION III. That this resolution shall take effect and be in force at the earliest period allowed by law.

Passed:_____, 2026 _____
President of Council

Attest:_____, Clerk _____
Mayor

CITY OF LORAIN

City Council Regular Meeting **7. b.**
Meeting Date: 02/02/2026
Submitted by: Elva Martes

AGENDA ITEM DESCRIPTION OR LEGISLATION TITLE

A Resolution authorizing the Safety/Service Director, of the City of Lorain, Ohio to waive the requirement for the installation of city sidewalk at 4725 Meister Rd. in the City of Lorain, Ohio.

PURPOSE AND BACKGROUND

The City of Lorain has a sidewalk requirement per Codified Ordinance 903.03, which mandates the installation of sidewalks when a hard surface driveway is installed on the project site. The City of Lorain Safety/Service Director recommends that the sidewalk requirement be waived for this area for the reason that sidewalks are not currently installed in this area. This waiver will not prohibit the future installation of an assessed sidewalk project.

RECOMMENDATION TO COUNCIL:

Consideration for passage.

Attachments

Resolution

Form Review

Inbox	Reviewed By	Date
Carrion	Rey Carrion	01/27/2026 01:45 PM
Mayor Bradley	Jack Bradley	01/27/2026 01:51 PM
P. Riley	Michele Beko	01/28/2026 10:20 AM
Form Started By: Elva Martes		Started On: 01/22/2026 09:29 AM
Final Approval Date: 01/28/2026		

VOTE ON PASSAGE					
	AYE	NAY		AYE	NAY
Springowski			Torres		
Dimacchia			Gonzalez		
Fallis			Arroyo		
Drwal			Bearer		
Kempton			Thornsberry		
Carter			Arredondo		

RESOLUTION NO._____

A RESOLUTION AUTHORIZING THE SAFETY/SERVICE DIRECTOR, OF THE CITY OF LORAIN, OHIO TO WAIVE THE REQUIREMENT FOR THE INSTALLATION OF CITY SIDEWALK AT 4725 MEISTER ROAD IN THE CITY OF LORAIN, OH.

WHEREAS, the City of Lorain currently has a sidewalk requirement per Codified Ordinance 903.03 which mandates the installation of sidewalks when a hard surface driveway is installed at a project site; and,

WHEREAS, the City of Lorain Safety/Service Director recommends that the sidewalk requirement be waived for this area for the reason that sidewalks are not currently installed in this area; and,

WHEREAS, if the City of Lorain deems it necessary to connect a sidewalk network to this area, it will be done through the assessment process.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF LORAIN, STATE OF OHIO:

SECTION I The Safety/Service Director is authorized to waive the sidewalk requirement as defined by Chapter 903.03 for the property to be built at 4725 Meister Road, Lorain, Ohio. This waiver will not prohibit the future installation of an assessed sidewalk project.

SECTION II That it is found and determined that all formal actions of this Council concerning and relating to the passage of this resolution were adopted in an open meeting of this Council, and that all deliberations of this Council and any of its committees that resulted in such formal actions were in meetings open to the public and in compliance with Section 121.22 of the Ohio Revised Code.

SECTION III That this Resolution shall take effect and be in force from and after the earliest period allowed by law.

PASSED:_____, 2026

_____
PRESIDENT OF COUNCIL

ATTEST:_____, Clerk

_____
MAYOR

APPROVED:_____, 2026

CITY OF LORAIN

City Council Regular Meeting **7. c.**

Meeting Date: 02/02/2026

Submitted by: Joe Carbonaro, Utilities Director

AGENDA ITEM DESCRIPTION OR LEGISLATION TITLE:

AN ORDINANCE AUTHORIZING THE SAFETY/SERVICE DIRECTOR TO ENTER INTO A CONTRACT WITH THE LOWEST AND BEST BIDDER FOR THE REPLACEMENT OF WATER INFRASTRUCTURE WITHIN THE CITY OF LORAIN'S WATER DISTRIBUTION SYSTEM AND DECLARING AN EMERGENCY.

PURPOSE AND BACKGROUND:

WHEREAS, the Utilities Department has determined that a transmission main valve located near the Fulton Tower is near critical failure and requires immediate replacement; and

WHEREAS, the Utilities Department is unable to perform the work themselves and is in need of contracted services to perform the necessary replacement; and

WHEREAS, the replacement of this valve is necessary to ensure proper operation of the water distribution system and provide quality potable water to customers.

RECOMMENDATION TO COUNCIL:

Passage

Fiscal Impact

Funds Available in Current Year Budget (Y/N):	Y
Estimated Total Expenditure:	200000
List of Funding Source and/or Account Number:	Budget
Estimate of Incoming Revenue (fees, grants, etc.):	
Financing Requirements (Bonds, Loans, Lease, etc.):	

Attachments

Ordinance

Bid Tab

Form Review

Inbox	Reviewed By	Date
Carrion	Rey Carrion	01/27/2026 01:41 PM
Mayor Bradley	Jack Bradley	01/27/2026 01:52 PM
Harper	Anita Harper	01/27/2026 04:13 PM

P. Riley Michele Beko 01/28/2026 01:18 PM
Form Started By: Joe Carbonaro Started On: 01/21/2026 09:18 AM
Final Approval Date: 01/28/2026

VOTE ON PASSAGE					
	AYE	NAY		AYE	NAY
Springowski			Torres		
Dimacchia			Gonzalez		
Fallis			Arroyo		
Drwal			Bearer		
Kempton			Thornsberry		
Carter			Arredondo		

ORDINANCE NO.

AN ORDINANCE AUTHORIZING THE SAFETY/SERVICE DIRECTOR TO ENTER INTO A CONTRACT WITH THE LOWEST AND BEST BIDDER FOR THE REPLACEMENT OF WATER INFRASTRUCTURE WITHIN THE CITY OF LORAIN'S WATER DISTRIBUTION SYSTEM AND DECLARING AN EMERGENCY.

WHEREAS, the Utilities Department has determined that a transmission main valve located near the Fulton Tower is near critical failure and requires immediate replacement; and

WHEREAS, the Utilities Department is unable to perform the work themselves and is in need of contracted services to perform the necessary replacement; and

WHEREAS, the replacement of this valve is necessary to ensure proper operation of the water distribution system and provide quality potable water to customers.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LORAIN, STATE OF OHIO:

SECTION 1: That, the Safety/Service Director, is hereby authorized to enter into a contract, as approved to form, with the lowest and best bidder for the replacement of the transmission main valve. All work on this project shall be coordinated by the City of Lorain Engineering Department in accordance with the plans and specification on file in the Engineering Office and subject to the approval of the Board of Control of said City as required by law, said plans and specifications being incorporated herein.

SECTION 2: The cost of this project will be in an amount not to exceed **$200,000** and be paid for by the Utilities Department from the Water Works Fund:
GL Account 6020.P602.6190.6300.1500 – Contractual Services.

SECTION 3: That it is found and determined that all formal actions of this Council concerning and relating to the passage of this ordinance were adopted in an open meeting of this Council; and that all deliberations of this Council and of any of its committees that resulted in such formal actions were in meetings open to the public and in compliance with all legal requirements, including Section 121.22, Ohio Revised Code.

SECTION 4: That this Ordinance is hereby declared to be an emergency, as it is necessary to immediately coordinate replacement of the transmission main valve; therefore, this ordinance shall take effect immediately upon its passage and approval of the Mayor, providing it meets the statutory requirements for passage; otherwise, it shall take effect and be in force from and after the earliest period allowed by law.

PASSED: _____, 2026

_____
PRESIDENT OF COUNCIL

ATTEST: _____, CLERK

_____
MAYOR

APPROVED: _____, 2026

PROPOSED BID PRICES
CITY OF LORAIN - ENGINEERING **Transmission Main Valve Replacement - 3041**
Engineer's Estimate = $163,000.00

			EDENS EXCAVATING INC					SPEER BROS, INC.					FABRIZI TRUCKING & PAVING CO				
				Unit Price in Numbers			Unit Price in Words	Est. Cost of Item		Unit Price in Numbers			Unit Price in Words	Est. Cost of Item		Unit Price in Numbers			Unit Price in Words	Est. Cost of Item
Item No.	**Bid Item Description**	**Unit**	**Quantity**	**Material**	**Labor**	**Total**	**Total**	**Total in Numbers**	**Quantity**	**Material**	**Labor**	**Total**	**Total**	**Total in Numbers**	**Quantity**	**Material**	**Labor**	**Total**	**Total**	**Total in Numbers**
			Q	**M**	**L**	**M+L=T**		**QxT**	**Q**	**M**	**L**	**M+L=T**		**QxT**	**Q**	**M**	**L**	**M+L=T**		**QxT**
1	Mobilization	LS	1	$2,672.00	$3,328.00	$6,000.00	Six Thousand	$6,000.00	1	$15,000.00	$15,000.00	$30,000.00	Thirty Thousand	$30,000.00	1	$0.00	$20,000.00	$20,000.00	Twenty Thousand	$20,000.00
2	Excavation, Bedding, and Backfill (no density testing necessary, as long as it's 95% compacted) (Nothing larger than No. 57 stone)	LS	1	$20,105.75	$4,182.60	$24,288.35	Twenty-Four Thousand Two Hundred Eighty-Eight and Thirty-Five Cents	$24,288.35	1	$20,000.00	$20,000.00	$40,000.00	Forty Thousand	$40,000.00	1	$9,000.00	$11,670.00	$20,670.00	Twenty Thousand Six Hundred Seventy	$20,670.00
3	24" Line Stop (furnish all material)	EA	2	$22,500.00	$4,848.00	$27,348.00	Fifty-Four Thousand Six Hundred Ninety-Six	$54,696.00	2	$10,000.00	$10,000.00	$20,000.00	Forty Thousand	$40,000.00	2	$35,200.00	$7,500.00	$42,700.00	Eighty-Five Thousand Four Hundred	$85,400.00
4	Remove Existing 24" Gate Valve	EA	1	$10,592.00	$4,848.00	$15,440.00	Fifteen Thousand Four Hundred Forty	$15,440.00	1	$2,000.00	$2,000.00	$4,000.00	Four Thousand	$4,000.00	1	$0.00	$3,500.00	$3,500.00	Three Thousand Five Hundred	$3,500.00
5	24" Gate Valve (including labor & materials required for total installation)	EA	1	$46,800.00	$4,848.00	$51,648.00	Fifty-One Thousand Six Hundred Forty-Eight	$51,648.00	1	$30,000.00	$20,000.00	$50,000.00	Fifty Thousand	$50,000.00	1	$34,850.00	$10,000.00	$44,850.00	Forty-Four Thousand Eight Hundred Fifty	$44,850.00
6	Thompson 24" PCCP to PE Ductile Iron transition adapters (including measurements, and set of 1 spigot adapter, 1 bell adapter, O-rings, grout diapers, 6 mega lugs, and 2 solid sleeves as needed)	EA	1	$11,307.99	$0.00	$11,307.99	Eleven Thousand Three Hundred Seven	$11,307.99	1	$5,000.00	$5,000.00	$10,000.00	Ten Thousand	$10,000.00	1	$20,275.00	$10,000.00	$30,275.00	Thirty Thousand Two Hundred Seventy-Five	$30,275.00
7	Ductile Iron Pipe, 24 Inch, for Replacement	LF	40	$272.74	$0.00	$272.74	Ten Thousand Nine Hundred Nine and Sixty Cents	$10,909.60	40	$200.00	$50.00	$250.00	Ten Thousand	$10,000.00	40	$200.00	$50.00	$250.00	Ten Thousand	$10,000.00
8	Pavement Repairs (8" Portland Cement Concrete Finish Pavement (MS), Curb incidental, 3" Asphalt Surface, ADA-Compliant Ramp)	SY	40	$12,300.00	$9,696.00	$21,996.00	Twenty-One Thousand Nine Hundred Ninety-Six and Sixty Cents	$21,996.00	40	$120.00	$120.00	$240.00	Nine Thousand Six Hundred	$9,600.00	40	$90.00	$135.00	$225.00	Nine Thousand	$9,000.00
TOTAL BASE BID & PROJECT COST - INCLUDE CONTIGENCY ITEMS							**One Hundred Ninety-Six Thousand Two Hundred Eighty-Five and Ninety-Four Cents**	**$196,285.94**					**One Hundred Ninety-Three Thousand Six Hundred**	**$193,600.00**					**Two Hundred Twenty-Three Thousand Six Hundred Ninety-Five**	**$223,695.00**
							in words	in numbers					in words	in numbers					in words	in numbers

CITY OF LORAIN

City Council Regular Meeting **7. d.**

Meeting Date: 02/02/2026

Submitted by: Joe Carbonaro, Utilities Director

AGENDA ITEM DESCRIPTION OR LEGISLATION TITLE:

AN ORDINANCE AUTHORIZING THE SAFETY/SERVICE DIRECTOR TO ENTER INTO A WATER POLLUTION CONTROL LOAN FUND AGREEMENT ON BEHALF OF THE CITY OF LORAIN FOR THE CONSTRUCTION OF THE NEW MARTIN RUN PUMP STATION AND DECLARING AN EMERGENCY.

PURPOSE AND BACKGROUND:

WHEREAS, the City of Lorain intends to apply for a Water Pollution Control Loan Fund (WPCLF) for the construction of wastewater pump station facilities; and

WHEREAS, the City of Lorain has determined that the existing pump station has reached its useful life and capacity. It needs to be reconstructed and moved out of a 100-yr old flood plain to ensure continued flows are properly conveyed and treated at the PQM WWTP; and

WHEREAS, the Ohio WPCLF requires the government authority to pass legislation for application of a loan and the execution of an agreement as well as designating a dedicated repayment source.

RECOMMENDATION TO COUNCIL:

Passage

Fiscal Impact

Funds Available in Current Year Budget (Y/N):	Y
Estimated Total Expenditure:	12,000,000
List of Funding Source and/or Account Number:	WPCLF
Estimate of Incoming Revenue (fees, grants, etc.):	3,375,000

Financing Requirements (Bonds, Loans, Lease, etc.):

Funds to applied for to cover necessary expenses associated with construction of the pump station. $3,375,000 has already been award by the Army Corps for this project.

Attachments

Ordinance

Form Review

Inbox	Reviewed By	Date
Carrion	Rey Carrion	01/27/2026 01:44 PM

Mayor Bradley	Jack Bradley	01/27/2026 01:52 PM
Harper	Anita Harper	01/27/2026 04:14 PM
P. Riley	Michele Beko	01/28/2026 10:04 AM
Carbonaro (Originator)	Joe Carbonaro	01/28/2026 10:22 AM
P. Riley	Michele Beko	01/28/2026 11:57 AM
Carbonaro (Originator)	Joe Carbonaro	01/28/2026 12:04 PM
P. Riley	Michele Beko	01/28/2026 01:17 PM
Beko	Michele Beko	01/28/2026 01:19 PM
P. Riley	Michele Beko	01/28/2026 01:19 PM
Carbonaro (Originator)	Joe Carbonaro	01/28/2026 02:48 PM

Form Started By: Joe Carbonaro Started On: 01/21/2026 02:42 PM

Final Approval Date: 01/28/2026

VOTE ON PASSAGE					
	AYE	NAY		AYE	NAY
Springowski			Torres		
Dimacchia			Gonzalez		
Fallis			Arroyo		
Drwal			Bearer		
Kempton			Thornsberry		
Carter			Arredondo		

ORDINANCE NO.

AN ORDINANCE AUTHORIZING THE SAFETY/SERVICE DIRECTOR TO ENTER INTO A WATER POLLUTION CONTROL LOAN FUND AGREEMENT ON BEHALF OF THE CITY OF LORAIN FOR THE CONSTRUCTION OF THE NEW MARTIN RUN PUMP STATION AND DECLARING AN EMERGENCY.

WHEREAS, the City of Lorain intends to apply for a Water Pollution Control Loan Fund (WPCLF) for the construction of wastewater pump station facilities; and

WHEREAS, the City of Lorain has determined that the existing pump station has reached its useful life and capacity. It needs to be reconstructed and moved out of a 100-yr old flood plain to ensure continued flows are properly conveyed and treated at the PQM WWTP; and

WHEREAS, the Ohio WPCLF requires the government authority to pass legislation for application of a loan and the execution of an agreement as well as designating a dedicated repayment source.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LORAIN, STATE OF OHIO:

SECTION I: That, the Safety/Service Director, is hereby authorized to apply for a WPCLF Loan, sign all documents for and enter into a WPCLF with the Ohio Environmental Protection Agency and the Ohio Water Development Authority for the construction of new wastewater pump station facilities for the purpose of funding not to exceed $12,500,000 in long term obligations; said funding is necessary to construct the new Martin Run Pump Station.

SECTION II: Therein, subject to approval by the Law Director, the Director of Safety/Service is hereby authorized to execute any and all documentation that may be required by the WPCLF to secure and administer a Cooperative Agreement for a loan for the purpose stated therein.

SECTION III: That it is found and determined that all formal actions of this Council concerning and relating to the passage of this ordinance were adopted in an open meeting of this Council; and that all deliberations of this Council and of any of its committees that resulted in such formal actions were in meetings open to the public and in compliance with all legal requirements, including Section 121.22, Ohio Revised Code.

SECTION IV: That this ordinance is declared to be an emergency, the nature of the emergency being the need to execute the WPCLF Agreement and apply/secure funding. Therefore, this Ordinance shall take effect immediately upon its passage and approval by the Mayor, providing it receives the statutory requirements for passage; otherwise, it shall take effect and be in force from and after the earliest period allowed by law.

PASSED: _____, 2026

_____

PRESIDENT OF COUNCIL

ATTEST: _____, CLERK

_____

MAYOR

APPROVED: _____, 2026

CITY OF LORAIN

City Council Regular Meeting **7. e.**

Meeting Date: 02/02/2026

Submitted by: Joe Carbonaro, Utilities Director

AGENDA ITEM DESCRIPTION OR LEGISLATION TITLE:

AN ORDINANCE AUTHORIZING THE SAFETY/SERVICE DIRECTOR TO APPLY, ACCEPT, AND ENTER INTO A WATER POLLUTION CONTROL LOAN FUND (WPCLF) AGREEMENT ON BEHALF OF THE CITY OF LORAIN FOR THE PLANNING AND WORK ASSOCIATED WITH THE CITY OF LORAIN SANITARY SEWER EVALUATION STUDY (SSES), AND DECLARING AN EMERGENCY.

PURPOSE AND BACKGROUND:

WHEREAS, the City of Lorain intends to apply for a WPCLF loan for planning and work associated with the SSES within the City of Lorain; and

WHEREAS, the City of Lorain is required to conduct an SSES to meet obligations of their Capacity Assurance Plan with the US EPA; and

WHEREAS, the WPCLF requires the government authority to pass legislation for application of a loan and execution of an agreement as well as designating a dedicated repayment source.

RECOMMENDATION TO COUNCIL:

Passage

Fiscal Impact

Funds Available in Current Year Budget (Y/N):	N
Estimated Total Expenditure:	5,000,000
List of Funding Source and/or Account Number:	WPCLF
Estimate of Incoming Revenue (fees, grants, etc.):	

Financing Requirements (Bonds, Loans, Lease, etc.):

Loan to be applied for after the passage of this Ordinance

Attachments

Ordinance

Form Review

Inbox	Reviewed By	Date
Carrion	Rey Carrion	01/27/2026 01:46 PM
Mayor Bradley	Jack Bradley	01/27/2026 01:51 PM

Harper	Anita Harper	01/27/2026 04:18 PM
P. Riley	Michele Beko	01/28/2026 10:02 AM
Carbonaro (Originator)	Joe Carbonaro	01/28/2026 10:25 AM
P. Riley	Michele Beko	01/28/2026 01:18 PM
Carbonaro (Originator)	Joe Carbonaro	01/28/2026 02:48 PM
P. Riley	Michele Beko	01/28/2026 02:49 PM

Form Started By: Joe Carbonaro Started On: 01/26/2026 12:24 PM

Final Approval Date: 01/28/2026

VOTE ON PASSAGE					
	AYE	NAY		AYE	NAY
Springowski			Torres		
Dimacchia			Gonzalez		
Fallis			Arroyo		
Drwal			Bearer		
Kempton			Thornsberry		
Carter			Arredondo		

ORDINANCE NO.

AN ORDINANCE AUTHORIZING THE SAFETY/SERVICE DIRECTOR TO APPLY, ACCEPT, AND ENTER INTO A WATER POLLUTION CONTROL LOAN FUND (WPCLF) AGREEMENT ON BEHALF OF THE CITY OF LORAIN FOR THE PLANNING AND WORK ASSOCIATED WITH THE CITY OF LORAIN SANITARY SEWER EVALUATION STUDY (SSES), AND DECLARING AN EMERGENCY.

WHEREAS, the City of Lorain intends to apply for a WPCLF loan for planning and work associated with the SSES within the City of Lorain; and

WHEREAS, the City of Lorain is required to conduct an SSES to meet obligations of their Capacity Assurance Plan with the US EPA; and

WHEREAS, the WPCLF requires the government authority to pass legislation for application of a loan and execution of an agreement as well as designating a dedicated repayment source.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LORAIN, STATE OF OHIO:

SECTION I: That the Safety/Service Director is hereby authorized to apply for a WPCLF Loan, sign all documents for, and enter into a WPCLF Agreement with the Ohio Environmental Protection Agency and the Ohio Water Development Authority for the planning and work associated with the SSES for the purpose of funding not to exceed $5,000,000 in low interest loan obligations.

SECTION II: Therein, subject to approval by the Law Director, the Safety/Service Director is hereby authorized to execute any and all documentation that may be required by the WSRLA to secure and administer a Cooperative Agreement for a loan for the purpose stated therein.

SECTION III: That it is found and determined that all formal actions of this Council concerning and relating to the passage of this ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal actions were in meetings open to the public, and in compliance with all legal requirements, including Section 121.22, Ohio Revised Code.

SECTION IV: That this Ordinance is hereby declared an emergency, the nature of the emergency being the immediate need to apply for the WPCLF loan to meet certain deadlines for the process and SSES. Therefore, this Ordinance shall take effect and be in force immediately upon passage by City Council and approval by the Mayor, providing it receives the statutory requirements for passage, otherwise it shall; take effect and be in force from and after the earliest period allowed by law.

PASSED: _____, 2026

_____
PRESIDENT OF COUNCIL

ATTEST: _____, CLERK

_____
MAYOR

APPROVED: _____, 2026

CITY OF LORAIN

City Council Regular Meeting **7. f.**

Meeting Date: 02/02/2026

Submitted by: Joe Carbonaro, Utilities Director

AGENDA ITEM DESCRIPTION OR LEGISLATION TITLE:

AN ORDINANCE AUTHORIZING THE SAFETY/SERVICE DIRECTOR TO APPLY, ACCEPT, AND ENTER INTO A WATER SUPPLY REVOLVING LOAN ACCOUNT (WSRLA) AGREEMENT ON BEHALF OF THE CITY OF LORAIN FOR THE CONSTRUCTION OF THE WATER MAIN REPLACEMENT YEAR 2 PROJECT.

PURPOSE AND BACKGROUND:

WHEREAS, the City of Lorain intends to apply for a WSRLA for the construction of water infrastructure throughout the City of Lorain; and

WHEREAS, the City of Lorain has previously determined that the existing water mains in portions of the City are in need of replacement to resolve water quality issues and decrease unexpected maintenance and repair; and

WHEREAS, the City of Lorain has completed design work for water mains and associated infrastructure with an engineering consultant; and

WHEREAS, the WSRLA requires the government authority to pass legislation for application of a loan and execution of an agreement as well as designating a dedicated repayment source.

RECOMMENDATION TO COUNCIL:

Passage

Fiscal Impact

Funds Available in Current Year Budget (Y/N):	N
Estimated Total Expenditure:	6,000,000
List of Funding Source and/or Account Number:	WSRLA
Estimate of Incoming Revenue (fees, grants, etc.):	
Financing Requirements (Bonds, Loans, Lease, etc.):	

Attachments

Ordinance

Project Drawings

Form Review

Inbox	Reviewed By	Date
Carrion	Rey Carrion	01/27/2026 01:48 PM
Mayor Bradley	Jack Bradley	01/27/2026 01:50 PM
Harper	Anita Harper	01/27/2026 04:19 PM
P. Riley	Michele Beko	01/28/2026 10:03 AM
P. Riley	Michele Beko	01/28/2026 11:58 AM
Carbonaro (Originator)	Joe Carbonaro	01/28/2026 12:02 PM
P. Riley	Michele Beko	01/28/2026 01:18 PM
Carbonaro (Originator)	Joe Carbonaro	01/28/2026 02:48 PM
P. Riley	Michele Beko	01/28/2026 02:49 PM

Form Started By: Joe Carbonaro
Started On: 01/27/2026 12:50 PM
Final Approval Date: 01/28/2026

VOTE ON PASSAGE					
	AYE	NAY		AYE	NAY
Springowski			Torres		
Dimacchia			Gonzalez		
Fallis			Arroyo		
Drwal			Bearer		
Kempton			Thornsberry		
Carter			Arredondo		

ORDINANCE NO.

AN ORDINANCE AUTHORIZING THE SAFETY/SERVICE DIRECTOR TO APPLY, ACCEPT, AND ENTER INTO A WATER SUPPLY REVOLVING LOAN ACCOUNT (WSRLA) AGREEMENT ON BEHALF OF THE CITY OF LORAIN FOR THE CONSTRUCTION OF THE WATER MAIN REPLACEMENT YEAR 2 PROJECT.

WHEREAS, the City of Lorain intends to apply for a WSRLA for the construction of water infrastructure throughout the City of Lorain; and

WHEREAS, the City of Lorain has previously determined that the existing water mains in portions of the City are in need of replacement to resolve water quality issues and decrease unexpected maintenance and repair; and

WHEREAS, the City of Lorain has completed design work for water mains and associated infrastructure with an engineering consultant; and

WHEREAS, the WSRLA requires the government authority to pass legislation for application of a loan and execution of an agreement as well as designating a dedicated repayment source.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LORAIN, STATE OF OHIO:

SECTION I: That the Safety/Service Director is hereby authorized to apply for a WSRLA Loan, sign all documents for, and enter into a WSRLA with the Ohio Environmental Protection Agency and the Ohio Water Development Authority for the construction of water infrastructure for the purpose of funding not to exceed $6,000,000 in long term loan obligations.

SECTION II: Therein, subject to approval by the Law Director, the Safety/Service Director is hereby authorized to execute any and all documentation that may be required by the WSRLA to secure and administer a Cooperative Agreement for a loan for the purpose stated therein.

SECTION III: That it is found and determined that all formal actions of this Council concerning and relating to the passage of this ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal actions were in meetings open to the public, and in compliance with all legal requirements, including Section 121.22, Ohio Revised Code.

PASSED: _____, 2026

_____
PRESIDENT OF COUNCIL

ATTEST: _____, CLERK

_____
MAYOR

APPROVED: _____, 2026

CITY OF LORAIN
WATER MAIN REPLACEMENT PROGRAM
PHASE 2

INDEX OF DRAWINGS

GENERAL

G1 - TITLE SHEET
G2 - GENERAL NOTES I
G3 - SURVEYOR'S NOTES, BENCHMARKS, & CONTROL POINTS
G4 - QUANTITIES SHEET

PLAN & PROFILE

E1 - EASTMAN - PLAN & PROFILE 0+50 TO 4+00
E2 - EASTMAN - PLAN & PROFILE 4+00 TO 7+50
E3 - EASTMAN - PLAN & PROFILE 7+50 TO 11+50
E4 - EASTMAN - PLAN & PROFILE 11+50 TO 15+50
E5 - EASTMAN - ALTERNATE PLAN & PROFILE 20+00 TO 23+00
E6 - EASTMAN - ALTERNATE PLAN & PROFILE 23+00 TO 26+00
L1 - LEAVITT - PLAN & PROFILE 0+50 TO 4+25
L2 - LEAVITT - PLAN & PROFILE 4+25 TO 8+50
L3 - LEAVITT - DETAILS
L4 - LEAVITT - PAVEMENT MARKING
M1 - MISSOURI - PLAN & PROFILE 0+50 TO 3+75
M2 - MISSOURI - PLAN & PROFILE 3+75 TO 6+00
M3 - MISSOURI - PAVEMENT MARKING
S1 - SHERWOOD - PLAN & PROFILE 0+50 TO 4+75
S2 - SHERWOOD - PLAN & PROFILE 4+75 TO 8+50
S3 - SHERWOOD - PLAN & PROFILE 8+50 TO 12+50
S4 - SHERWOOD - PLAN & PROFILE 12+50 TO 15+00
S5 - SHERWOOD - PLAN & PROFILE 15+00 TO 19+00
S6 - SHERWOOD - PLAN & PROFILE 19+00 TO 23+00
S7 - SHERWOOD - PLAN & PROFILE 23+00 TO 26+00
S8 - SHERWOOD - ADD ALTERNATE BYPASS PLAN
S9 - SHERWOOD - ADD ALTERNATE BYPASS PLAN
S10 - SHERWOOD - ADD ALTERNATE BYPASS PLAN
S11 - SHERWOOD - ADD ALTERNATE BYPASS PLAN
S12 - SHERWOOD - PAVEMENT MARKING 1
S13 - SHERWOOD - PAVEMENT MARKING 2
S14 - SHERWOOD - ALT PLAN & PROFILE 0+50 TO 4+75
S15 - SHERWOOD - ALT PLAN & PROFILE 4+75 TO 8+50
S16 - SHERWOOD - ALT PLAN & PROFILE 8+50 TO 12+50
S17 - SHERWOOD - ALT PLAN & PROFILE 12+50 TO 15+00
S18 - SHERWOOD - ALT PLAN & PROFILE 15+00 TO 19+00
S19 - SHERWOOD - ALT PLAN & PROFILE 19+00 TO 23+00
S20 - SHERWOOD - ALT PLAN & PROFILE 23+00 TO 26+00
V1 - VALLEYVIEW - PLAN & PROFILE 0+50 TO 4+00
V2 - VALLEYVIEW - PLAN & PROFILE 4+00 TO 8+00
V3 - VALLEYVIEW - PLAN & PROFILE 8+00 TO 11+50
V4 - VALLEYVIEW - PLAN & PROFILE 11+50 TO 14+00
V5 - VALLEYVIEW - PLAN & PROFILE 14+00 TO 17+00
V6 - VALLEYVIEW - ADD ALTERNATE BYPASS PLAN
V7 - VALLEYVIEW - ADD ALTERNATE BYPASS PLAN
V8 - VALLEYVIEW - ADD ALTERNATE BYPASS PLAN
V9 - VALLEYVIEW - ALT PLAN & PROFILE 0+50 TO 4+00
V10 - VALLEYVIEW - ALT PLAN & PROFILE 4+00 TO 8+00
V11 - VALLEYVIEW - ALT PLAN & PROFILE 8+00 TO 11+50
V12 - VALLEYVIEW - ALT PLAN & PROFILE 11+50 TO 14+00
V13 - VALLEYVIEW - ALT PLAN & PROFILE 14+00 TO 17+00
W1 - WEST ERIE - PLAN & PROFILE 0+00 TO 4+00
W2 - WEST ERIE - PLAN & PROFILE 4+00 TO 9+00
W3 - WEST ERIE - PLAN & PROFILE 9+00 TO 13+50
W4 - WEST ERIE - PLAN & PROFILE 13+50 TO 18+00
W5 - WEST ERIE - PLAN & PROFILE 18+00 TO 22+50
W6 - WEST ERIE - PAVEMENT MARKING 1
W7 - WEST ERIE - PAVEMENT MARKING 2
W8 - WEST ERIE - PAVEMENT MARKING 3
H1 - HAMILTON - PLAN & PROFILE 0+25 TO 3+50
H2 - HAMILTON - PLAN & PROFILE 3+50 TO 7+00
H3 - HAMILTON & W 1ST INTERSECTION - PLAN & PROFILE
H4 - W 1ST - PLAN & PROFILE 2+00 TO 6+50
H5 - W 1ST - PLAN & PROFILE 6+50 TO 9+00
H6 - HAMILTON - PAVEMENT MARKING 1
B0 - BOREMAN'S FARM OVERVIEW MAP
B1 - BOREMAN - PLAN & PROFILE 0+50 TO 3+00
B2 - BOREMAN - PLAN & PROFILE 3+00 TO 5+75
B3 - BOREMAN - PLAN & PROFILE 5+75 TO 10+00
B4 - BOREMAN - PLAN & PROFILE 10+00 TO 13+50
B5 - BOREMAN - PLAN & PROFILE 13+50 TO 17+50
B6 - BOREMAN - PLAN & PROFILE 17+50 TO 21+50
B7 - BOREMAN - PLAN & PROFILE 21+50 TO 25+50
B8 - BOREMAN - PLAN & PROFILE 25+50 TO 30+00
B9 - BOREMAN - PLAN & PROFILE 30+00 TO 33+50
B10 - BOREMAN - PLAN & PROFILE 33+50 TO 37+00
B11 - BOREMAN - PLAN & PROFILE 37+00 TO 40+50
B12 - BOREMAN - PLAN & PROFILE 40+50 TO 44+50
B13 - BOREMAN - PLAN & PROFILE 44+50 TO 48+00
B14 - BOREMAN - PLAN & PROFILE 48+00 TO 51+50
B15 - BOREMAN - PLAN & PROFILE 51+50 TO 54+50

MAINTENANCE OF TRAFFIC

TC1 - MAINTENANCE OF TRAFFIC SUMMARY TABLE
TC2-TC13 - MAINTENANCE OF TRAFFIC DETAILS

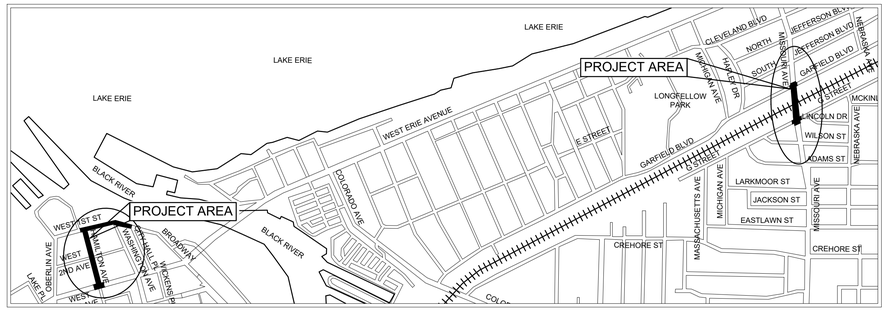
DETAILS

D1-D2 - DETAILS (SWPPP)
D3-D4 - DETAILS (GENERAL)
D5 - DETAILS (MISCELLANEOUS)
D6-D8 - DETAILS (PAVEMENT)
D9 - DETAILS (STORM SEWER)
D10-D16 - DETAILS (WATERLINE)

NORTH

VICINITY MAP

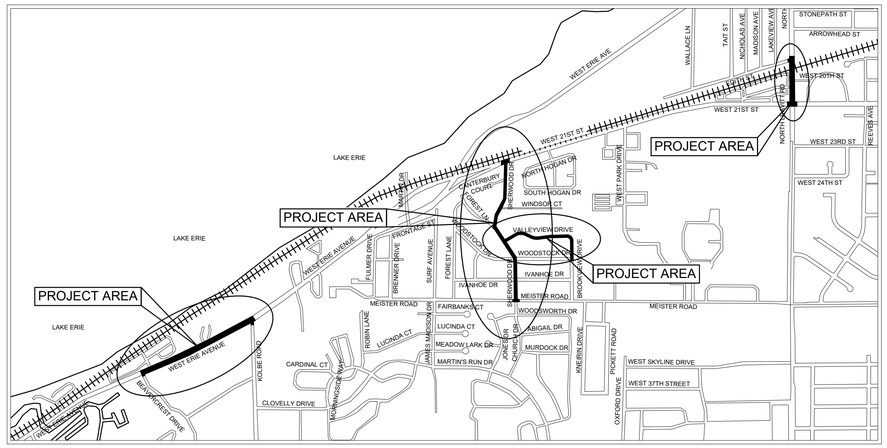
1" = 1000'



NORTH

VICINITY MAP

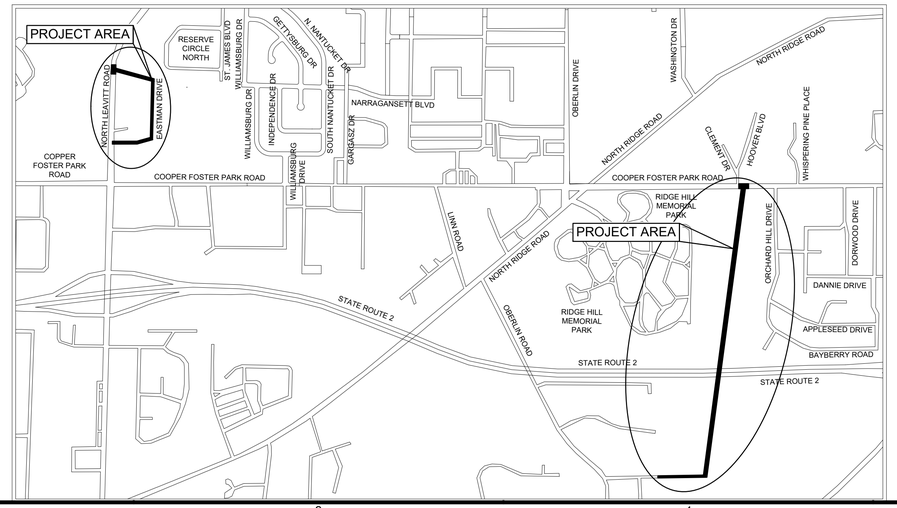
1" = 1200'



NORTH

VICINITY MAP

1" = 1000'



SIGNATURES AND APPROVALS

MAYOR - JACK W. BRADLEY — DATE

DIRECTOR OF PUBLIC SAFETY/SERVICE - REY CARRION — DATE

UTILITIES DIRECTOR - JOSEPH CARBONARO — DATE

CITY ENGINEER - DALE VANDERSOMMEN, P.E. — DATE

COUNCIL

JOEL ARREDONDO - PRESIDENT
MARY SPRINGOWSKI - COUNCIL AT-LARGE
SYLVIA DUVALL - COUNCIL AT-LARGE
TONY DIMACCHIA - COUNCIL AT-LARGE
BETH HENLEY - 1ST WARD
VICTORIA KEMPTON - 2ND WARD
PAMELA CARTER - 3RD WARD
DAN NUTT - 4TH WARD
JOANNE MOON - 5TH WARD
ANTONIO BAEZ - 6TH WARD
MARY SPELLACY - 7TH WARD
JOSHUA THORNSBERRY - 8TH WARD
BREANNA DULL - CLERK OF COUNCIL

CITY OF LORAIN OFFICIALS

JACK W. BRADLEY - MAYOR
REY CARRION - SAFETY/SERVICE DIRECTOR
JOSEPH CARBONARO - DIRECTOR OF UTILITIES
AVERY BROWN - WATER PLANT SUPERINTENDENT
JAMES MALICK - WATER DISTRIBUTION SUPERINTENDENT
DALE VANDERSOMMEN, P.E. - CITY ENGINEER
PATRICK RILEY - LAW DIRECTOR
JOSEPH KOZIURA - AUDITOR
TERRI SOTO - TREASURER

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OR 811
CALL TOLL FREE (614)-715-2984
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SEAL OF THE CITY OF LORAIN 1834 OHIO

OSBORN ENGINEERING
Ohio | Florida | Michigan | Tennessee
(216) 861-2020
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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
6402
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

TITLE SHEET

DRAWING NO.

G1

P:\Lorain - City Of\J20221302.000_Water_Main_Repl_PH2\Drawings\Civil\J20221302.000_C 01 - TITLE SHT.dwg
6/9/2025 1:55 PM
Rawson, Burke

LORAIN WATER NOTES FOR WATER MAIN INSTALLATION AND/OR REPLACEMENT

DEVELOPERS, ENGINEERS, AND CONTRACTORS ARE TO ABIDE BY THE MOST CURRENT VERSION OF THE LORAIN WATER DEPARTMENT (LWD) NOTES AND DETAILS. THE MOST UP-TO-DATE VERSION CAN BE FOUND AT https://www.cityoflorain.org/537/City-of-Lorain-Standards

GENERAL:

1. ALL WATER WORK REQUIRED, WHETHER SHOWN ON THE PLANS OR AS DIRECTED BY LWD, SHALL BE AT THE EXPENSE OF THE PROJECT UNLESS OTHERWISE AGREED TO BY THE CITY OF LORAIN'S DIRECTOR OF PUBLIC UTILITIES.
2. THE INFORMATION SHOWN ON THE LORAIN'S SUMMARY OF WORK AND FEES INVOICE, AS-BUILT DRAWINGS, AND/OR GIS ARE TAKEN FROM EXISTING AVAILABLE RECORDS, AND THEIR ACCURACY IS NOT GUARANTEED.
3. THE CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING AT LEAST ONE (1) WEEK PRIOR TO STARTING CONSTRUCTION. ALL WATER WORK MUST BE INSPECTED BY LWD OR A REPRESENTATIVE WORKING ON THEIR BEHALF. TO SCHEDULE AN INSPECTION CALL JIM MALICK AT 440-204-2582. THE OPERATION OF ANY VALVE OR ALTERATION OF ANY PART OF THE WATER SYSTEM BY CONTRACTORS OR THEIR EMPLOYEES IS PROHIBITED WITHOUT THE SUPERVISION OF THE LWD INSPECTOR. SEE ALSO NOTE 20 REGARDING ADDITIONAL ADVANCE NOTIFICATION REQUIRED IN AREAS SUSPECTED TO CONTAIN LEAD SERVICE CONNECTION (ALL AREAS INSTALLED PRIOR TO 1954).
4. PRIOR TO REQUESTING CHLORINATION, THE CONTRACTOR SHALL SUPPLY THE LWD INSPECTOR WITH ASBUILT DRAWINGS. THESE SHALL BE REDLINED DRAWINGS SHOWING CHANGES MADE FROM THE APPROVED DESIGN DRAWINGS AND ACTUAL MEASUREMENTS. CHLORINATION SHALL NOT OCCUR BEFORE THESE DRAWINGS ARE SUBMITTED.
5. FOR THE PURPOSES OF CHLORINATION AND BACTERIOLOGICAL TESTING OF THE WATER MAINS THE CONTRACTOR SHALL PROVIDE AND INSTALL FLUSHING AND SAMPLING TAPS, AT EACH OF THE CHLORINATION PIT LOCATIONS SHOWN AND AT OTHER LOCATIONS DETERMINED BY LWD. FLUSHING / SAMPLING TAP SIZES ARE TO BE DETERMINED LWD. CHLORINATION PITS SHALL BE SIX (6) FOOT SQUARE AND ARE TO MEET OSHA STANDARDS. NO CUSTOMER TAPS SHALL BE INSTALLED PRIOR TO CHLORINATION.
6. A TWO YEAR WARRANTY, COMMENCING FROM THE DATE OF ACCEPTANCE OF THE FINAL CHLORINATION OF THE WATER MAIN INSTALLATION SHALL BE PROVIDED BY THE BUILDER/DEVELOPER AND/OR CONTRACTOR FOR ALL WATER MAINS AND SERVICE CONNECTION WORK PERFORMED BY THE CONTRACTOR, INCLUDING TAPS IF PERFORMED. SHOULD ANY LEAKS OCCUR AND REPAIRS BE REQUIRED DUE TO DEFECTIVE MATERIAL OR POOR WORKMANSHIP. A LETTER INDICATING THE COMMENCEMENT DATE AND END DATE OF THE WARRANTY SHALL BE INCLUDE WITH THE AS-BUILT SUBMISSION IN NOTE 12.
7. USE BACKFILL MATERIAL AS SPECIFIED AND COMPACT SUFFICIENTLY IN THOSE AREAS WHERE EXISTING MAINS AND WATER SERVICE CONNECTIONS ARE EXPOSED. (SEE LWD DETAIL WT-G01)
8. ALL MATERIALS, INCLUDING BUT NOT LIMITED TO WATER MAINS, FIRE HYDRANTS, VALVES, CONNECTION MATERIALS AND OTHER WATER APPURTENANCES, SHALL BE NEW AND UNUSED AND SHALL CONFORM TO THE MOST CURRENT LWD SPECIFICATIONS. ALL MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH LWD'S STANDARDS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING WATER MAINS AND APPURTENANCES THEREOF WHEN CONSTRUCTING OR CONNECTING THE NEW WATER MAIN. THIS SHALL INCLUDE LEADED JOINTS IN EXISTING FITTINGS WHICH MAY REQUIRE REPLACEMENT FITTINGS AT THE DISCRESION OF THE LWD. IF IT IS DETERMINED THEY WERE DISTURBED. ALL REPAIRS TO DAMAGED EXISTING FACILITIES SHALL BE MADE BY THE CONTRACTOR, AT THE PROJECT'S EXPENSE, TO THE SATISFACTION OF LWD.
10. ALL HYDROSTATIC PRESSURE TESTING SHALL BE DONE BY THE CONTRACTOR IN THE PRESENCE OF THE LWD INSPECTOR. THE HYDROSTATIC TEST PRESSURE SHALL BE 75 PSI ABOVE THE STATIC PRESSURE PREVAILING AT THE SITE, BUT IN NO CASE LESS THAN 150 PSI. THE PRESSURE TEST SHALL BE FOR A DURATION OF TWO (2) HOURS WITH THE PRESSURE BEING MAINTAINED WITHIN 5 PSI OF THE REQUIRED TEST PRESSURE. SHOULD THE PRESSURE TEST FAIL THE CONTRACTOR SHLWD AND REPEAT THE TWO (2) HOUR PRESSURE TEST.
11. ALL BURIED WATER MAINS, FITTINGS, VALVES, FIRE HYDRANT BRANCH PIPING AND APPURTENANCES SHALL BE ENCASED WITH V- BIO® ENHANCED POLYETHYLENE ENCASEMENT INSTALLED IN ACCORDANCE WITH THE MOST CURRENT REVISION OF ANSI/AWWA C- 105/A21.5 MODIFIED METHOD "A".
12. THE PROJECT'S PROFESSIONAL ENGINEER OR A DESIGNATED PROFESSIONAL SURVEYOR SHALL OBTAIN ACTUAL FIELD MEASUREMENTS OF THE MAIN DURING INSTALLATION AND SHALL FURNISH THE LWD INSPECTOR WITH AS-BUILT DRAWINGS MEETING LWD STANDARDS WITHIN 30 DAYS OF THE WATER MAIN GOING INTO SERVICE AND ALL TAPS/RETAPS BEING MADE. ONE HARD COPY AND ONE PDF COPY SHALL BE PROVIDED. DRAWINGS SHALL BE SIGNED, DATED, AND STAMPED WITH THE ENGINEER OR SURVEYOR'S SEAL. REDLINE DRAWINGS ARE NOT SUFFICIENT. LWD RESERVES THE RIGHT TO WITHHOLD PAYMENT AND/OR APPROVAL OF FUTURE WORK IF AS-BUILTS ARE NOT SUBMITTED.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING MAIL SERVICE IN THE CONSTRUCTION AREA. PRIOR TO DISTURBING ANY MAILBOXES, THE CONTRACTOR SHALL CONTACT THE POSTAL AUTHORITIES PRIOR TO PERFORMING WORK AND SHALL TEMPORARILY RELOCATE MAILBOXES IN ACCORDANCE WITH POSTAL SERVICE REQUIREMENTS. THE CONTRACTOR SHALL RESTORE MAILBOXES TO THEIR ORIGINAL CONDITION AND LOCATION. COST OF SAME SHALL BE INCLUDED THE PRICE PER LINEAL FOOT OF WATER MAIN.
14. REFER TO DRAWINGS D1 - D16 FOR ADDITIONAL REQUIREMENTS.

WATER MAINS:

1. ALL PIPE, UNLESS OTHERWISE APPROVED BY LWD, SHALL BE:

   DUCTILE IRON, MINIMUM CLASS 52, CEMENT LINED HAVING PUSH-ON JOINTS WITH RADIALLY COMPRESSED RUBBER RING GASKET AND INSTALLED AS PER THE MOST CURRENT REVISION OF AWWA C600.

   OR

   POLYVINAL CHLORIDE (PVC) PRESSURE PIPE IN ACCORDANCE WITH AWWA C-909-98 200 PSI OR BETTER. JOINTS SHALL BE MADE UTILIZING A STAB TYPE, RUBBER GASKETED BELL AND SPIGOT. SOLVENT CEMENT TYPE JOINTS WILL NOT BE PERMITTED. STANDARD PLASTIC TRACER TAPE IS TO BE BURIED DIRECTLY OVER THE MAIN AS INDICATED IN STANDARD DETAIL LWD-001.

   RESTRAINT JOINT REIBERLOK GASKET IS REQUIRED ON C-909 PIPE IN ADDITION TO BLOCKING.
2. CONTRACT SHALL PROCURE AND INSTALL PIPE MATERIAL AS INDICATED ON THE CONSTRUCTION DRAWINGS, SPECIFICATIONS, AND STANDARD DETAILS. ANY VARIANCE SHALL REQUIRE WRITTEN APPROVAL BY THE DIRECTOR OF PUBLIC UTILITES.
3. ALL FITTINGS, UNLESS OTHERWISE CALLED FOR, SHALL BE APPROVED DUCTILE IRON, CLASS 350, CEMENT LINED OR FUSION BONDED EPOXY COATED. ALL FITTINGS AND PIPE CONNECTED TO FITTINGS SHALL BE RESTRAINED USING A "RETAINED" MECHANICAL JOINT CONFORMING TO THE MATERIAL AND PERFORMANCE REQUIREMENTS OF ANSI/AWWA C-110/A21.10 AND ANSI/AWWA C-111/A21.11, OR "COMPACT" FITTINGS IN ACCORDANCE WITH ANSI/AWWA C- 153/A21.53. EXCEPT FOR ANCHOR TEES, REDUCERS OR OTHER SPECIAL CIRCUMSTANCES WHEN APPROVED BY LWD. ALL FITTINGS ARE TO HAVE BELL ENDS.
4. ALL BOLTS AND NUTS ON ALL "RETAINED" MECHANICAL JOINTS SHALL HAVE FIELD APPLIED ONE (1) COAT OF BITUMASTIC PAINTING.
5. WHERE SHOWN ON THE PLANS, OR WHEN OTHERWISE CALLED FOR, PIPE AND FITTINGS SHALL HAVE AN APPROVED "TYPE I" OR "TYPE II" BOLTLESS RESTRAINED PUSH-ON JOINTS TO THE LIMITS SHOWN ON THE DRAWINGS.
6. AT THE END OF EACH WORKDAY, THE CONTRACTOR SHALL PLUG ALL OPEN PIPE ENDS WITH WATER TIGHT PLUGS AS PER THE "PREVENTITIVE AND CORRECTIVE MEASURES DURING CONSTRUCTION" SECTION OF THE MOST CURRENT REVISION OF AWWA C-651 AS TO PREVENT THE INFILTRATION OR INTRUSION OF ANY FOREIGN OBJECTS OR MATERIALS. DATE STAMPED DIGITAL PHOTOS SHALL BE PROVIDED FOR EACH WORKDAY DEMONSTRATING THAT PROPER AWWA C-651 METHODS WERE USED TO PLUG ALL OPEN WATER MAIN ENDS. EACH PHOTO SHALL CLEARLY IDENTIFY THE STATION AT WHICH THE PIPE IS PLUGGED. THE STATIONING SHALL BE SHOWN BY THE USE OF A STATION MARKER PLACED AT THE PLUGGED PIPE END. PHOTOS SHALL BE SUBMITTED ON A DAILY BASIS UNLESS OTHERWISE DEFINED BY THE LWD INSPECTOR OR ENGINEER. ALL PHOTOS TAKEN OVER THE COURSE OF THE PROJECT SHALL BE SUBMITTED BY THE CONTRACTOR AS PART OF THE AS-BUILT SUBMITTAL. PHOTOS ARE TO INCLUDE STATIONING MARKERS AND INCLUDE LATITUDE/LONGITUDE DATA SUCH THAT THEY CAN BE GEOREFERENCED. AS-BUILTS SHALL BE DEEMED INCOMPLETE WITHOUT SAID COLLECTION OF DIGITAL PHOTOS.

HYDRANTS:

1. IN ALL HYDRANT INSTALLATIONS THE CONTRACTOR SHALL FACE ALL HYDRANT'S 4" (STEAMER) NOZZLE TOWARD THE PAVEMENT PRIOR TO TESTING AND CHLORINATION OF WATER MAINS. ONLY MUELLER SUPER CENTURION 250 HYDRANTS OR AN APPROVED EQUAL WITH STORZ CONNECTION SHALL BE INSTALLED. FOR WORK OUTSIDE THE CITY OF LORAIN, CONTRACTOR SHALL CONSULT WITH THE LOCAL MUNICIPALITY'S ENGINEERING OR SERVICE DEPARTMENT TO OBTAIN APPROVED HYDRANT MAKE , MODEL, AND NOZZLE THREAD REQUIREMENTS IF NOT INDICATED ON THE APPROVED PLANS. ALL HYDRANTS SHALL BE FACTORY EQUIPPED WITH THE APPROPRIATE HYDRANT NOZZLE. HYDRANT BRANCHES SHALL BE FULLY RESTRAINED AND INSTALLED PER THE APPROPRIATE LWD HYDRANT DETAIL(S). HYDRANT BRANCH VALVES SHALL BE PLACED DIRECTLY AFTER THE HYDRANT TEE UNLESS OTHERWISE APPROVED BY THE INSPECTOR.

VALVES:

1. ALL VALVES SHALL BE MUELLER A2360 OR APPROVED EQUAL RESILIENT SEATED GATE VALVES AS PER THE MOST CURRENT VERSION OF AWWA C509 OR C515. VALVE OPERATING NUTS SHALL BE TAPERED (1 7/8" TO 2" FROM TOP TO BOTTOM) AND 2" DEEP. VALVES MORE THAN 10 YEARS OLD AT TIE IN POINTS TO EXISTING MAINS SHALL BE REPLACED AT THE PROJECT'S EXPENSE UNLESS OTHERWISE DIRECTED.

LEAD SERVICE CONNECTIONS:

1. LEAD SERVICES: A MINIMUM OF 45 DAYS BEFORE THE PRECONSTRUCTION MEETING, LWD SHALL PROVIDE A NOTICE TO ALL AFFECTED CUSTOMERS THAT THEIR WATER SERVICE LINE WILL BE DISTURBED. A MINIMUM OF 75 DAYS BEFORE THE PRECONSTRUCTION MEETING, THE CONTRACTOR OR ENGINEER SHALL PROVIDE LWD (AND THE LOCAL MUNICIPALITY OF OUTSIDE THE CITY OF LORAIN) A LIST OF ALL CUSTOMER ADDRESSES THAT WILL BE AFFECTED BY THE WATER MAIN REPLACEMENT PROJECT. FAILURE TO PROVIDE A LIST OF CUSTOMER ADDRESSES IN A TIMELY MANNER MAY RESULT IN PROJECT DELAYS. ANY CITY-OWNED LEAD SERVICE LINE ENCOUNTERED SHALL BE REPLACED WITH TYPE K COPPER. THE REPLACEMENT SERVICE LINE SHALL BE SIZE-ON-SIZE WITH A 1-INCH MINIMUM DIAMETER. IF A CUSTOMER-OWNED LEAD SERVICE LINE IS ENCOUNTERED, THE CONTRACTOR SHALL LEAVE A LWD-SUPPLIED CUSTOMER NOTIFICATION DOOR HANGER ON ALL ACCESSIBLE POINTS OF ENTRY TO THE HOME AND IMMEDIATELY NOTIFY THE LWD INSPECTOR. IF THE LWD INSPECTOR IS NOT AVAILABLE, CALL JIM MALICK AT 440-204-2582. CUSTOMERS WITH A CUSTOMER-OWNED LEAD SERVICE LINE SHALL NOT BE RECONNECTED TO THE NEW WATER MAIN WITHOUT EXPRESS WRITTEN APPROVAL FROM JIM MALICK, OR HIS APPROVED REPRESENTATIVE AT LWD. AS PART OF THIS CONTRACT, THE CONTRACTOR SHALL OFFER EACH CUSTOMER TO REPLACE LEAD SERVICES FROM THE CORPORATION STOP TO THE INLET STOP & WASTE VALVE INSIDE THE CUSTOMER'S HOME. IF THE REPLACEMENT IS NOT COVERED UNDER THE BID ITEMS, THE CONTRACTOR SHALL PROVIDE LWD (AND THE LOCAL MUNICIPALITY IF OUTSIDE THE CITY OF LORAIN) WITH A CHANGE ORDER AND COST ESTIMATES FOR THE CUSTOMER-OWNED LEAD SERVICE LINE REPLACEMENT. UPON APPROVAL FROM LWD (AND THE LOCAL MUNICIPALITY IF OUTSIDE THE CITY OF LORAIN), THE CONTRACTOR SHALL PERFORM THE REPLACEMENT OF THE CUSTOMER-OWNED LEAD SERVICE LINE. AS STATED ABOVE, CUSTOMERS WITH CUSTOMER-OWNED LEAD SERVICE LINES SHALL NOT BE RECONNECTED TO THE NEW WATER MAIN WITHOUT EXPRESS WRITTEN APPROVAL FROM JIM MALICK, OR HIS APPROVED REPRESENTATIVE AT LWD. IN THE EVENT THAT AN LWD WAIVER IS GRANTED SUCH THAT A CUSTOMER-OWNED LEAD SERVICE LINE IS NOT REPLACED, LWD SHALL SUPPLY THE CONTRACTOR WITH LEAD FILTERS AND PITCHERS THAT THE CONTRACTOR SHALL DISTRIBUTE TO EACH RESIDENCE WITHIN THE PROJECT AREA, INCLUDING TO ALL UNITS OF MULTI-UNIT HOUSING BUILDINGS. THE FILTERS SHALL BE POUR-THROUGH PITCHER TYPE LEAD FILTERS THAT ARE NSF/ANSI-53 CERTIFIED TO REMOVE LEAD. THE PITCHER, A 3-MONTH SUPPLY OF FILTERS, AND LWD-SUPPLIED USE INSTRUCTIONS AND OTHER APPLICABLE MATERIALS SHALL BE DISTRIBUTED. RECORDS OF RESIDENTS WHO RECEIVED AND WHO REFUSED THE FILTERS SHALL BE PROVIDED BY THE CONTRACTOR TO LWD (AND THE LOCAL MUNICIPALITY IF OUTSIDE THE CITY OF LORAIN). AT THE BEGINNING OF THE DAY THAT A CUSTOMER IS SCHEDULED TO BE CONNECTED TO THE NEW WATER MAIN, THE CONTRACTOR SHALL DISTRIBUTE THE APPROPRIATE LWD- SUPPLIED CUSTOMER NOTIFICATION DOOR HANGER AND OTHER APPLICABLE MATERIALS ON ALL ACCESSIBLE POINTS OF ENTRY TO THE HOME AND IN A PROMINENT LOCATION AT ALL MULTI-UNIT HOUSING BUILDINGS. THE APPROPRIATE DOOR NOTIFICATION WILL BE DETERMINED BY (1) WHETHER A CUSTOMER- OWNED LEAD SERVICE LINE REMAINS IN THE PROJECT AREA AND (2) THE TYPE OF MATERIAL OF THE INDIVIDUAL CUSTOMER-OWNED SERVICE LINE.
2. DIELECTRIC COUPLINGS: IN THE EVENT THAT AN LWD WAIVER IS GRANTED SUCH THAT A CUSTOMER-OWNED LEAD SERVICE LINE IS NOT REPLACED, AND A NEW SERVICE IS CONNECTED TO A CUSTOMER-OWNED LEAD SERVICE LINE, A DIELECTRIC COUPLING SHALL BE PROVIDED TO TRANSITION FROM THE NEW MATERIALS TO THE LEAD PIPE. THE MODEL COUPLING USED IS SUBJECT TO APPROVAL FROM LWD. HARCO - PHILMAC UTC OR APPROVED EQUAL.

GENERAL SERVICE CONNECTIONS:

1. AS PART OF THE ASBUILT SUBMISSION IN NOTE 12, THE CONTRACTOR SHALL PROVIDE A TABLE SHOWING ALL EXISTING CONNECTIONS, IDENTIFIED BY LOCATION AND ADDRESS, SHOWING THE FOUND CONNECTION MATERIAL FOR BOTH THE CITYSIDE AND OWNERSIDE CONNECTION, AS WELL AS THE NEW CONNECTION MATERIAL FOR ALL CONNECTIONS REPLACED. THE TABLE SHALL ALSO NOTE ANY REVISED CONNECTION MEASUREMENTS AND SIZES. A SAMPLE TABLE WILL BE PROVIDED UPON REQUEST. THE SUBMISSION SHALL BE IN MICRSOFT EXCEL FORMAT. LWD SHALL REQUIRE THE DELIVERY AND ACCEPTANCE OF THIS TABLE BEFORE THE PRESSURE TEST AND CHLORINATION / DISINFECTION OF THE MAIN WILL BE PERMITTED.
2. NEW WATER SERVICE CONNECTIONS LOCATIONS SHOWN ON THESE DRAWINGS ARE FOR REFERENCE ONLY AND ARE NOT PART OF THE WATER MAIN APPROVAL. THE SPECIFIC LOCATION FOR EACH CONNECTION WILL BE DETERMINED BY CONTRACTOR PERFORMING TAPS OR OUPS LOCATION REQUEST. ALL FEES CAN BE OBTAINED FROM THE LORAIN ENGINEERING OFFICE AT 440-204-2003. ACCOUNTS SHALL BE INITIATED IN THE LAND OWNER'S NAME AS PART OF THE PERMITTING PROCESS. ALL RESPONSIBILITIES ASSOCIATED WITH EACH WATER SERVICE, INCLUDING, THE OWNER SIDE INSPECTIONS, METER SET/METER PIPING INSPECTION AND THE METER INSTALLATION SHALL BE THE RESPONSIBILITY OF SAID OWNER. METERS INSTALLATIONS WILL NOT BE AUTHORIZED TO BE INSTALLED UNTIL ALL INSPECTIONS HAVE BEEN COMPLETED. ESTIMATED BILLS MAY ENSUE IF A HOME IS IDENTIFIED AS HAVING WATER SERVICE BUT NO METER HAS BEEN INSTALLED. IF NEW OWNERS, ONCE PARCELS ARE SOLD OFF AND TRANSFER TITLE, DO NOT CONTACT LWD TO ESTABLISH ACCOUNTS IN THEIR NAME, ACCOUNTS AND THEIR ASSOCIATED BILLS WILL REMAIN IN THE NAME OF THE LAST OWNER OF RECORD WHICH MAY BE THE DEVELOPER OR BUILDER. IT IS THE RESPONSIBILITY OF THE NEW OWNER TO TRANSFER ACCOUNTS INTO THEIR NAME WHEN THE PROPERTIES LEGALLY TRANSFER. UPON TRANSFER OF PROPERTY, SELLER OF PROPERTY MUST COMMUNICATE ALL UNCOMPLETED PORTIONS OF THE REFERENCED RESPONSIBILITIES TO THE NEW OWNER.
3. ONE-INCH SERVICE CONNECTIONS SHALL BE PERMITTED TO SERVICE NEW HOMES (AS SHOWN ON APPROVED WATER MAIN EXTENSION PLANS) BASED ON THE FOLLOWING CRITERIA:
   - 3.1. PEAK FLOW DEMANDS DO NOT EXCEED 25 GPM FOR AN INDIVIDUAL HOME/UNIT. INCLUSIVE OF ALL USAGE (DOMESTIC AND/OR IRRIGATION),
   - 3.2. LENGTH OF ONE INCH CONNECTION DOES NOT EXCEED 75 FEET AS MEASURED FROM THE MAIN TO THE POINT OF ENTRY INTO THE PROPOSED HOME/UNIT.
   - 3.3. THE CONNECTIONS DO NOT INCLUDE LIMITED AREA OR NFPA 13D SPRINKLER SYSTEMS
   - 3.4. ANY SERVICE REQUESTS DIFFERING FROM THE STATED CRITERIA SHALL REQUIRE THE SUBMITTAL OF A WATER SERVICE APPLICATION FOR EACH WATER SERVICE REQUESTED.
   - 3.5. ALL CURB VALVE BOXES & METER VAULTS WILL BE INSTALLED IN GRASS AREAS WHEN POSSIBLE. CURB VALVES SHALL BE PLACED APPROXIMATELY 2 FEET OFF THE CURB OR AS CLOSE TO THE MAIN AS POSSIBLE IF THE MAIN IS LOCATED 2-FEET OFF THE CURB, WITHIN THE TREELAWN. CURB VALVES IN EASEMENTS SHALL BE PLACED APPROXIMATELY 3 FEET OFF THE WATER MAIN. IF VALVE BOXES OR METER VAULTS ARE INSTALLED OUTSIDE OF A DEDICATED RIGHT OF WAY OR EASEMENT FOR THE PURPOSES OF WATER SUPPLY, A STANDARD LORAIN EASEMENT FOR A VAULT SHALL BE PROVIDED.

EMERGENCIES:

1. IF A WATER MAIN OR SERVICE CONNECTION BREAK OCCURS DURING OR OUTSIDE OF CONSTRUCTION AND EMERGENCY ASSISTANCE IS REQUIRED, PLEASE NOTIFY LWD AT:
   - 440-204-2285 - DURING WORKING HOURS
   - 440-204-2280 - AFTER WORKING HOURS

LINE LABEL KEY

LINE TYPE	LABEL EXISTING	LABEL PROPOSED
SANITARY SEWER	SAN	SAN
STORM SEWER	STM	ST
WATER MAIN	W	W
WATER MAIN TO BE ABANDONED	W	
GAS MAIN	GAS	G
CONSTRUCTION LIMITS		
ROADWAY		
PROPERTY LINE	P	
RIGHT-OF-WAY	R/W	
ALIGNMENT	12+34	
CENTERLINE	℄	

LEGEND

DESCRIPTION	EXISTING	PROPOSED
SANITARY & STORM MANHOLE	○	●
CATCH BASIN	▤	■
CURB INLET	▤	
CLEANOUT	○	•
HYDRANT	⬡	●+
VALVE	⋈	⫼
FLUSH PIPE	○	•
ELECTRIC BOX	EB	
POWER POLE		
LIGHT POLE		
SIGN	┼ ▬ ⊕	▬
BOLLARDS	○	•
TREE		
CONTOUR	723	723
SOIL BORING	TH#4	
TEMPORARY BENCH MARK	△	

OSBORN ENGINEERING
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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO · KEVIN D. CODIN · 64026 · REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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GENERAL NOTES I

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SURVEYOR'S NOTES:

1. SURVEY PREPARED BY KS ASSOCIATES, INC.
2. VERTICAL DATUM IS NAVD 1988.
3. PERTINENT RECORDS USED ARE AS SHOWN HEREON.
4. THIS MAP AND THE SURVEY ON WHICH IT IS BASED HAVE BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND ARE NOT INTENDED TO REFLECT ALL EASEMENTS, ENCUMBRANCES, OR OTHER CIRCUMSTANCES AFFECTING THE TITLE TO THE PROPERTY SHOWN HEREON.
5. THE UTILITIES, SEWERS AND THEIR LOCATIONS SHOWN HEREON ARE DERIVED FROM A COMBINATION OF FIELD SURVEYING OF VISIBLE UTILITY STRUCTURES, AVAILABLE PLANS AND A LEVEL C SUBSURFACE UTILITY INVESTIGATION. ACTUAL LOCATION OF UTILITIES MAY VARY FROM THE DEPICTED LOCATIONS. OTHER UNKNOWN UTILITIES MAY EXIST AND NECESSARY PRECAUTIONS SHOULD BE FOLLOWED WHEN EXCAVATING. ADDITIONAL INVESTIGATION SUCH AS VIDEOTAPING PIPE RUNS, NON-DESTRUCTIVE EXPOSURE OF UTILITIES MAY DETERMINE THE UNKNOWN UTILITY INFORMATION. CONTACT OHIO UTILITIES PROTECTION SERVICE (OUPS) AT 1-800-362-2764 PRIOR TO EXCAVATION.
6. PROPERTY LINES AND RIGHT OF WAY LINES ARE SHOWN FROM LORAIN GIS INFORMATION AND ARE NOT INTENDED TO REPRESENT A COMPLETE BOUNDARY SURVEY.

EASTMAN:
1. HORIZONTAL DATUM IS OHIO STATE PLANE, NORTH ZONE NAD83(2011) GRID NORTH BASED ON GPS OBSERVATIONS PERFORMED ON (12-07-23).
2. AS OF (FEBRUARY 21, 2024), THE FOLLOWING COMPANIES HAVE RESPONDED TO THE INITIAL OUPS REQUEST: A334102395, A335000072 FOR UTILITY PLANS: BREEZELINE, BRIGHTSPEED, CENTURYLINK, CITY OF LORAIN UTILITIES DEPARTMENT, COLUMBIA GAS OF OHIO, OHIO EDISON, TIME WARNER CABLE.

LEAVITT:
1. HORIZONTAL DATUM IS OHIO STATE PLANE, NORTH ZONE NAD83(2011) GRID NORTH BASED ON GPS OBSERVATIONS PERFORMED ON (NOVEMBER 15, 2023).
2. AS OF JANUARY 5, 2024, THE FOLLOWING COMPANIES HAVE RESPONDED TO THE INITIAL OUPS REQUEST A333200419-00A FOR UTILITY PLANS: CENTURYLINK, CITY OF LORAIN, COLUMBIA GAS, FIRST ENERGY, JOB 8, & WINDSTREAM.

MISSOURI:
1. HORIZONTAL DATUM IS OHIO STATE PLANE, NORTH ZONE NAD83(2011) GRID NORTH BASED ON GPS OBSERVATIONS PERFORMED ON (NOVEMBER 15, 2023).
2. AS OF JANUARY 29, 2024, THE FOLLOWING COMPANIES HAVE RESPONDED TO THE INITIAL OUPS REQUEST A333200405-00A FOR UTILITY PLANS: CENTURYLINK, CITY OF LORAIN, COLUMBIA GAS, FIRST ENERGY, JOB 8, & WINDSTREAM.

SHERWOOD & VALLEYVIEW:
1. HORIZONTAL DATUM IS OHIO STATE PLANE, NORTH ZONE NAD83(2011) GRID NORTH BASED ON GPS OBSERVATIONS PERFORMED ON (12-07-23).
2. AS OF (JANUARY 10, 2024), THE FOLLOWING COMPANIES HAVE RESPONDED TO THE INITIAL OUPS REQUEST: A331900736, A331900759, A331900783, A331900824, A331900847, A331900879, A331900908, A331900918, A331900930, A331900951, A331900977, A331901006, A331901024, A331901140, A331901145, A333200437, A333200444, A333200456, A333200466, A333200469, A333200472, A333200477, A333200488, A333200493, A333200500, A333200505, A333200516, A333200521, A333200522, A333200526 FOR UTILITY PLANS: BRIGHTSPEED, CHARTER COMMUNICATIONS, CITY OF LORAIN UTILITIES DEPARTMENT, COLUMBIA GAS OF OHIO, CENTURYLINK, JOB 8 LLC., OHIO EDISON, WINDSTREAM, ZAYO FIBER SOLUTIONS.

WEST ERIE:
1. HORIZONTAL DATUM IS OHIO STATE PLANE, NORTH ZONE NAD83(2011) GRID NORTH BASED ON GPS OBSERVATIONS PERFORMED ON (12-08-23).
2. AS OF (FEBRUARY 20, 2024), THE FOLLOWING COMPANIES HAVE RESPONDED TO THE INITIAL OUPS REQUEST: A334102444, A334102455, A335000073, A335000074 FOR UTILITY PLANS: BRIGHTSPEED, CENTURYLINK, CITY OF LORAIN UTILITIES DEPARTMENT, COLUMBIA GAS OF OHIO, OHIO EDISON, RURAL LORAIN WATER, TIME WARNER CABLE, WINDSTREAM, ZAYO FIBER SOLUTIONS.

HAMILTON:
1. HORIZONTAL DATUM IS OHIO STATE PLANE, NORTH ZONE NAD83(2011) GRID NORTH BASED ON GPS OBSERVATIONS PERFORMED ON (FEBRUARY 5, 2024).
2. AS OF MARCH 12, 2024, THE FOLLOWING COMPANIES HAVE RESPONDED TO THE INITIAL OUPS REQUEST A400802530-00A & A400802542 FOR UTILITY PLANS: BRIGHTSPEED, CITY OF LORAIN, COLUMBIA GAS, & FIRST ENERGY.

BOREMAN:
1. HORIZONTAL DATUM IS OHIO STATE PLANE, NORTH ZONE NAD83(2011) GRID NORTH BASED ON GPS OBSERVATIONS PERFORMED ON (2-02-24).
2. AS OF (MARCH 2, 2024), THE FOLLOWING COMPANIES HAVE RESPONDED TO THE INITIAL OUPS REQUEST: A400400676, A400802622, A400802622, A400802653, A400802653, B400400275, B400400280 FOR UTILITY PLANS: BREEZELINE, BRIGHTSPEED, CENTURYLINK, CITY OF LORAIN UTILITIES DEPARTMENT, COLUMBIA GAS OF OHIO, OHIO EDISON, TIME WARNER CABLE.

BENCHMARKS:

EASTMAN BENCHMARKS:

BM 601:
BENCHTIE SET IN NORTHEAST FACE OF TELEPHONE POWER POLE LOCATED IN FRONT OF RESIDENCE #5021 EASTMAN DRIVE.
ELEV=623.73

BM 602:
BENCHTIE SET IN NORTHWEST FACE OF TELEPHONE POWER POLE LOCATED IN FRONT OF CATCH BASIN SQUARE #25627.
ELEV=623.21

BM 603:
BENCHTIE SET IN EAST FACE OF TELEPHONE POWER POLE LOCATED IN FRONT OF RESIDENCE #5513 EASTMAN DRIVE MAILBOX.
ELEV=625.26

BM 604:
BENCHTIE SET IN EAST FACE OF TELEPHONE POWER POLE LOCATED IN FRONT OF RESIDENCE #5623 EASTMAN DRIVE.
ELEV=628.06

BM 605:
BENCHTIE SET IN NORTH FACE OF TELEPHONE POWER POLE #0911 LOCATED NORTHWEST CORNER OF COOPER FOSTER PARK ROAD AND LIBERTY BELL DRIVE.
ELEV=631.52

BM 650:
TOP OF NORTH WEST ANCHOR BOLT FOR SIGNAL POLE, LOCATED EAST SIDE OF LEAVITT ROAD, NORTH OF WALGREENS ENTRANCE.
ELEV=625.58

LEAVITT BENCHMARKS:

BM 600:
RAILROAD SPIKE ON THE WEST SIDE OF TELEPHONE POWER POLE #38DE1C-2 LOCATED ON THE EAST SIDE OF THE INTERSECTION OF LEAVITT ROAD AND EDITH STREET.
ELEV=608.31

BM 601:
RAILROAD SPIKE ON THE WEST WIDE OF TELEPHONE POWER POLE #CNTV500003 LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF LEAVITT ROAD AND WEST 20TH STREET.
ELEV=609.57

BM 602:
BENCH TIE IN THE NORTH SIDE OF TELEPHONE POWER POLE #45462 LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF LEAVITT ROAD AND WEST 21ST STREET.
ELEV=609.26

MISSOURI BENCHMARKS:

BM 601:
BENCH TIE SET IN THE WEST SIDE OF TELEPHONE POWER POLE #36DB3A-52 ON THE NORTHEAST CORNER OF MISSOURI AVE AND GARFIELD BLVD.
ELEV=602.25

BM 602:
BENCH TIE SET IN THE EAST SIDE OF TELEPHONE POWER POLE #36DB/3D-23 ON THE NORTHWEST CORNER OF MISSOURI AVE AND G ST.
ELEV=604.60

SHERWOOD & VALLEYVIEW BENCHMARKS:

BM 601:
BENCH TIE SET ON WEST FACE OF TELEPHONE POWER POLE #38DF/1B-4 LOCATED AT THE NORTHEAST CORNER OF SHERWOOD DRIVE AND MEISTER ROAD.
ELEV=609.66

BM 602:
BENCH TIE SET ON WEST FACE OF TELEPHONE POWER POLE #38DF/4C-33 LOCATED AT THE NORTHEAST CORNER OF SHERWOOD DRIVE AND IVANHOE DRIVE.
ELEV=607.43

BM 603:
BENCH TIE SET ON NORTHWEST FACE OF TELEPHONE POWER POLE #38DF/4C-22 LOCATED AT THE SOUTHEAST CORNER OF SHERWOOD DRIVE AND WOODSTOCK DRIVE.
ELEV=605.80

BM 604:
BENCH TIE SET ON WEST FACE OF TELEPHONE POWER POLE #38DF/4C-10 LOCATED AT THE NORTH CORNER OF SHERWOOD DRIVE AND VALLEYVIEW DRIVE.
ELEV=598.57

BM 605:
BENCH TIE SET ON NORTHEAST FACE OF TELEPHONE POWER POLE #38DF/4C-5 LOCATED AT THE SOUTHWEST CORNER OF SHERWOOD DRIVE AND ROBINHOOD DRIVE.
ELEV=586.41

BM 606:
BENCH TIE SET ON EAST FACE OF TELEPHONE POWER POLE #38DF/4B-32 LOCATED AT THE NORTHWEST CORNER OF SHERWOOD DRIVE AND WINDSOR COURT.
ELEV=587.11

BM 607:
BENCH TIE SET ON EAST FACE OF TELEPHONE POWER POLE #38DF/4B-22 LOCATED AT THE SOUTHWEST CORNER OF SHERWOOD DRIVE AND WEST 21ST STREET.
ELEV=600.76

BM 608:
BENCH TIE SET ON NORTH FACE OF TELEPHONE POWER POLE #38DF/4C-17 LOCATED IN FRONT BETWEEN RESIDENCE #3827 AND #3815 VALLEYVIEW DRIVE.
ELEV=605.80

BM 609:
BENCH TIE SET ON WEST FACE OF TELEPHONE POWER POLE #38DF/4D-6 LOCATED AT THE SOUTHEAST CORNER OF SHERWOOD DRIVE AND WOODSTOCK DRIVE.
ELEV=608.24

BENCHMARKS:

WEST ERIE BENCHMARKS:

BM 600:
BENCHTIE SET IN SOUTH FACE OF LIGHT POLE LOCATED NORTHWEST OF WEST ERIE AVENUE AND KOLBE ROAD.
ELEV=601.34

BM 601:
BENCHTIE SET IN SOUTH FACE OF TELEPHONE POWER POLE LOCATED IN FRONT OF RESIDENCE #552a0 WEST ERIE AVENUE.
ELEV=598.84

BM 602:
BENCHTIE SET IN NORTH FACE OF TELEPHONE POWER POLE LOCATED SOUTHEAST OF WEST ERIE AVENUE AND BEAVERCREST DRIVE.
ELEV=596.02

BM 603:
BENCHTIE SET IN SOUTH FACE OF POWER LIGHT POLE # 39DG-2/D-7 LOCATED IN FRONT OF RESIDENCE #5780 WEST ERIE AVENUE.
ELEV=592.48

HAMILTON BENCHMARKS:

BM 601:
BENCH TIE SET IN THE NORTH SIDE OF TELEPHONE POWER POLE #37DD/1C-57 ON THE NORTHWEST CORNER OF HAMILTON AVE AND W. ERIE AVE.
ELEV=587.62

BM 602:
BENCH TIE SET IN THE EAST SIDE OF TELEPHONE POWER POLE #F2684 ON THE SOUTHWEST CORNER OF HAMILTON AVE AND W. 2ND ST.
ELEV=592.61

BM 603:
BENCH TIE SET IN THE WEST SIDE OF TELEPHONE POWER POLE #1100-23 37DD/2A-1 ON THE NORTH SIDE OF THE INTERSECTION OF HAMILTON AVE AND W. 1ST ST.
ELEV=590.86

BM 604:
MAG NAIL SET IN WEST SIDE OF A TELEPHONE POWER POLE ON THE NORTH SIDE OF THE INTERSECTION OF W. 1ST ST AND WASHINGTON AVE.
ELEV=587.10

BM 605:
SQUARE CUT INTO THE SOUTHWEST SIDE OF A LIGHT POLE ON THE NORTH SIDE OF THE INTERSECTION OF W. 1ST ST AND CITY HALL PLACE.
ELEV=583.67

BOREMAN BENCHMARKS:

BM 601:
BENCH TIE SET ON NORTH FACE OF TELEPHONE POWER POLE #40DD/4B-21 LOCATED SOUTHWEST ON PROPERTY OF BORMAN FARMS ON COOPER FOSTER ROAD.
ELEV=687.98

BM 609:
SQUARE CUT ON TOP OF CONCRETE CASTING FOR SANITARY MANHOLE #28129 LOCATED ON PROPERTY OF AMHERST HAMPSHIRE FARMS.
ELEV=703.40

BM 610:
BENCH TIE SET ON WEST FACE OF POWER POLE #D63434 205620 LOCATED AT THE END OF KAY DRIVE.
ELEV=706.91

BM 611:
RAILROAD SPIKE SET ON SOUTH FACE OF TELEPHONE POWER POLE LOCATED AT NORTHEAST CORNER OF KAY DRIVE AND OBERLIN ROAD.
ELEV=706.20

BM 612:
BENCH TIE SET ON NORTH FACE OF TELEPHONE POWER POLE #F1428 LOCATED AT SOUTHWEST CORNER OF HIDDEN TREE LANE AND OBERLIN ROAD.
ELEV=711.83

CONTROL POINT					
STREET	POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
EASTMAN DRIVE	200	639881.788	2048408.311	616.96	CNPT IPINS
	201	639821.35	2048833.33	621.375	CNPT IPINS
	202	639273.663	2048908.224	626.769	CNPT IPINS
	203	638969.774	2048907.059	627.658	CNPT IPINS
	204	638744.461	2048999.049	621.935	CNPT IPINS
	205	638514.35	2049062.616	624.555	CNPT IPINS
	206	638357.467	2049172.881	629.239	CNPT IPINS
	207	638270.439	2049145.523	630.348	CNPT MAGS
	400	638535.076	2048922.51	616.273	IPIPE 7/8IN
	401	638537.885	2048919.573	616.363	IPIPE 7/8IN
	402	638341.872	2049266.686	630.367	IPIPE 7/8IN
	403	638655.312	2049265.302	628.672	IPIPE 7/8IN
	404	638262.841	2049177.614	629.313	MONBOX IPIN 1IN
	405	638197.799	2049177.726	629.25	MONBOX IPIN 5/8IN BRAMHALL
	406	638821.521	2048926.878	620.205	IPIN 3/4IN
	407	638848.818	2048955.294	621.205	IPIN 3/4IN
	408	638964.302	2048929.458		IPIPE 7/8IN
	409	639480.842	2048933.426	624.26	IPIN 5/8IN
	410	639264.568	2048935.011	625.504	IPIPE 7/8IN
	411	639779.905	2048942.532	622.702	IPIN 5/8IN KS ASSOC
	412	639765.607	2048842.506	621.179	IPIN 3/4IN
	413	639978.584	2048647.375	621.164	IPIPE 1.5IN
	414	640086.967	2048672.594	621.832	IPIPE 1.5IN
	415	640082.442	2048700.105	620.171	IPIPE 1IN
	416	640125.064	2048722.085	619.943	IPIPE 3/4IN
	417	639874.567	2048623.035	623.374	IPIPE 1.5IN
	418	640142.159	2048373.196	619.629	IPIPE 3/4IN
	419	640121.802	2048470.831	620.748	IPIN 5/8IN
	420	640016.631	2048437.788	616.424	IPIPE 3/4IN
	421	639067.665	2048350.832	622.031	MONBOX IPIN 1IN
	422	640032.211	2048395.703	617.197	MONBOX IPIN 1IN
	423	640361.379	2048516.038	619.319	MONBOX IPIN 1IN
	424	638301.797	2048333.648	628.072	MONBOX IPIN 1IN
	24472	638333.333	2049080.519	626.235	CNPT SPIKESET
	24629	638673.056	2049019.76	622.224	CNPT SPIKESET
	24705	638872.514	2048935.681	622.661	CNPT SPIKESET
	25211	639517.03	2048880.272	623.202	CNPT SPIKESET
	25650	639862.428	2048629.465	623.201	CNPT MAGS
	26390	640038.857	2048435.7	618.027	CNPT SPIKESET
	26391	640154.13	2048319.37	619.407	CNPT SPIKESET
LEAVITT ROAD	200	650829.101	2050073.613	607.66	CNPT MAGS
	201	650205.044	2050142.904	608.295	CNPT MAGS
	202	650497.024	2050076.114	608.532	CNPT MAGS
	21482	650158.773	2050103.797	608.128	MONBOX NOT OPENED
MISSOURI AVENUE	200	659091.203	2065291.367	601.443	CNPT IPINS
	201	658730.26	2065290.325	608.398	CNPT MAGS
	202	658428.726	2065364.9	604.116	CNPT IPINS
	20001	658971.856	2065305.142	601.611	CNPT DRILLHS
	100201	658730.183	2065290.325	608.292	CNPT MAGS
	100202	658428.722	2065364.861	604.011	CNPT IPINS
SHERWOOD & VALLEYVIEW	200	646802.745	2045429.87	609.404	CNPT IPINS
	201	647560.489	2045417.887	605.224	CNPT IPINS
	202	647214.1	2045427.521	607.031	CNPT MAGS
	203	647843.202	2045224.966	597.021	CNPT MAGS
	204	648066.459	2045059.153	586.276	CNPT MAGS
	205	648452.515	2045207.793	586.432	CNPT MAGS
	206	648881.514	2045315.347	600.791	CNPT MAGS
	207	649178.724	2045263.196	595.236	CNPT IPINS
	208	647934.586	2045552.028	601.662	CNPT IPINS
	209	647852.482	2045938.479	605.392	CNPT IPINS
	210	647889.159	2046420.632	606.588	CNPT IPINS
	211	647514.192	2046462.669	608.021	CNPT IPINS
	10993	647367.338	2045494.42	607.239	CNPT
	11562	648285.706	2045121.934	585.85	CNPT
	11617	648239.204	2045079.095	585.072	MAGS
	11626	648262.557	2045199.821	585.333	MAGS

CONTROL POINT					
STREET	POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
WEST ERIE	200	646550.904	2041015.101	600.135	CNPT IPINS
	201	646220.123	2040416.873	598.85	CNPT IPINS
	202	645957.99	2039860.847	593.5416	CNPT IPINS
	203	645691.83	2039291.005	597.0144	CNPT IPINS
	204	645368.866	2038708.786	590.7284	CNPT IPINS
	16034	645940.747	2039673.778	593.148	CNPT MAGS
	16081	645847.169	2039829.812	591.157	CNPT MAGS
	16287	645840.7	2039518.139	595.314	CNPT MAGS
	30255	645464.205	2038736.738	591.664	CNPT HUB
HAMILTON AVENUE	200	656228.245	2055467.398		CNPT MAGS
	201	656569.62	2055404.933	591.29	CNPT MAGS
	202	656994.321	2055273.248		CNPT IPINS
	203	657105.877	2055695.321		CNPT MAGS
	204	657045.16	2055931.859		CNPT MAGS
	205	656228.245	2055467.398		CNPT MAGS
	206	656569.62	2055404.933	591.29	CNPT MAGS
	207	656994.321	2055273.248		CNPT IPINS
	208	657105.877	2055695.321		CNPT IPINS
	209	657045.16	2055931.859		CNPT MAGS
	400	656597.551	2055384.137	591.171	MONBOX BDSK CUT
	401	656597.551	2055384.137	591.171	MONBOX BDSK CUT
	2000	656228.184	2055467.41	587.038	CNPT MAGS
	2001	656569.62	2055404.933	591.289	CNPT MAGS
	2002	656228.184	2055467.41	587.038	CNPT MAGS
	2003	656569.62	2055404.933	591.289	CNPT MAGS
	2005	657045.141	2055931.958	582.517	CNPT MAGS
	40713	656993.313	2055445.869	584.627	CNPT
	41843	656993.313	2055445.869	584.627	CNPT
BOREMAN'S FARM	200	638274.395	2057581.187	691.075	CNPT IPINS
	201	638271.028	2056745.748	687.111	CNPT IPINS
	202	637595.2	2056749.164	688.927	CNPT IPINS
	203	636910.137	2056743.194	692.145	CNPT IPINS
	204	636415.804	2056715.444	696.37	CNPT IPINS
	205	635962.05	2056515.046	699.4	CNPT IPINS
	206	635761.053	2056463.292	703.957	CNPT IPINS
	207	635582.297	2056463.34	700.885	CNPT IPINS
	208	634819.987	2056207.777	701.31	CNPT IPINS
	209	634283.137	2056045.605	705.46	CNPT MAGS
	210	634268.469	2055693.469	705.495	CNPT MAGS
	211	634254.299	2055271.934	706.861	CNPT IPINS
	212	633874.301	2055232.479	710.915	CNPT IPINS
	400	635811.936	2056541.084	700.465	IPIPE 3/4IN
	401	635811.926	2056461.479	700.734	IPIPE 3/4IN
	26560	638278.54	2057075.764	689.59	CNPT MAGS
	27101	637768.06	2056805.824	689.618	CNPT SPIKESET
	27102	637694.969	2056752.65	688.55	CNPT SPIKESET
	27647	637242.797	2056743.855	690.483	CNPT TEMP
	27741	636546.483	2056728.737	696.244	CNPT SPIKESET
	28013	635654.583	2056479.141	704.036	CNPT MAGS
	28475	634545.88	2056162.866	704.344	CNPT SPIKESET
	28476	634390.812	2056077.649	704.407	CNPT SPIKESET
	29148	634241.657	2055437.82	705.72	CNPT MAGS
	29895	634309.541	2056096.756	706.93	CNPT MAGS
	29897	634357.053	2056147.545	706.234	CNPT SPIKESET

OSBORN ENGINEERING
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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CORN
E-8406
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

SURVEYOR'S NOTES, BENCHMARKS, & CONTROL POINTS

DRAWING NO.

G3

P:\lorain - City Of\j20221302.000_water_main_repl_ph2\Drawings\Civil\J20221302.000_C 03 - SURVEY CONTROL POINT SHT.dwg
3/6/2025 1:10 PM Pawar, Sayali

BID ITEM	ODOT REF.	ITEM DESCRIPTION	UNIT	SECTION A - EASTMAN	SECTION B - LEAVITT	SECTION B - MISSOURI	SECTION C - SHERWOOD	SECTION C - VALLEYVIEW	SECTION D - WEST ERIE	SECTION E - HAMILTON	SECTION F - BOREMAN	TOTAL
01	614	MAINTENANCE OF TRAFFIC	LS	-	-	-	-	-	-	-	-	1
02	638	REPLACE WATER MAIN WITH NEW 8-INCH DIAMETER	LF	1,310	58	85	2,418	1,559	7	0	0	5,437
03	638	REPLACE WATER MAIN WITH NEW 12-INCH DIAMETER	LF	0	1,818	387	0	0	2,206	112	0	4,523
04	638	REPLACE WATER MAIN WITH NEW 16-INCH DIAMETER	LF	0	0	0	0	0	0	21	139	160
05	638	REPLACE WATER MAIN WITH NEW 18-INCH DIAMETER	LF	0	0	0	0	0	0	45	0	45
06	SPECIAL	TRENCHLESS INSTALLATION OF NEW 8-INCH DIAMETER WATER MAIN VIA HORIZONTAL DIRECTIONAL DRILLING	LF	0	0	0	0	0	0	0	0	0
07	SPECIAL	EXCAVATION OF ACCESS PITS FOR HORIZONATAL DIRECTIONAL DRILLING, INCLUDING PAVEMENT AND FILL REMOVAL AND DISPOSAL	EA	0	0	0	0	0	0	0	0	0
08	SPECIAL	TRENCHLESS INSTALLATION OF NEW 8-INCH DIAMETER WATER MAIN VIA JACK AND BORE	LF	0	0	0	0	0	0	0	0	0
09	SPECIAL	TRENCHLESS INSTALLATION OF NEW 12-INCH DIAMETER WATER MAIN VIA JACK AND BORE	LF	0	82	72	0	0	0	0	0	154
10	SPECIAL	TRENCHLESS INSTALLATION OF NEW 16-INCH DIAMETER WATER MAIN VIA JACK AND BORE	LF	0	0	0	0	0	0	0	261	261
11	SPECIAL	EXCAVATION OF ACCESS PITS FOR JACK AND BORE TRENCHLESS INSTALLATION, INCLUDING PAVEMENT AND FILL REMOVAL AND DISPOSAL	EA	0	2	2	0	0	0	0	3	7
12	SPECIAL	REHABILITATION OF 16-INCH WATER MAIN WITH PRESSURE CURED-IN PLACE PIPE (CIPP)	LF	0	0	0	0	0	0	866	0	866
13	SPECIAL	REHABILITATION OF 18-INCH STEEL WATER MAIN WITH PRESSURE CURED-IN PLACE PIPE (CIPP)	LF	0	0	0	0	0	0	617	0	617
14	SPECIAL	EXCAVATION OF ACCESS PITS FOR CIPP RELINING, INCLUDING PAVEMENT AND FILL REMOVAL AND DISPOSAL	EA	0	0	0	0	0	0	6	0	6
15	638	ABANDON WATER MAIN IN PLACE	LF	1,150	717	541	2,415	1,596	2,146	0	0	8,565
16	SPECIAL	REMOVE AND REPLACE HYDRANT WITH NEW 6-INCH HYDRANT ASSEMBLY	EA	0	0	1	0	4	2	1	0	8
17	SPECIAL	INSTALL NEW 6-INCH HYDRANT ASSEMBLY	EA	4	1	1	8	2	7	0	2	25
18	638	REPLACE WATER SERVICE CONNECTIONS WITH NEW 1-INCH COPPER (LONG SIDE)	EA	2	0	0	8	22	0	0	0	32
19	638	REPLACE WATER SERVICE CONNECTIONS WITH NEW 1-INCH COPPER (SHORT SIDE)	EA	10	11	0	24	13	2	0	0	60
20	638	REPLACE WATER SERVICE CONNECTIONS WITH NEW 2-INCH COPPER	EA	0	0	0	0	0	1	0	0	1
21	638	REPLACE PROPERTY OWNER'S LEAD WATER SERVICE CONNECTION UP TO 100 LINEAR FEET (OWNER SIDE)	EA	5	5	5	5	5	5	5	5	40
22	638	REPLACE PROPERTY OWNER'S LEAD WATER SERVICE CONNECTION LENGTH EXCEEDING 100 LINEAR FEET (OWNER SIDE)	LF	100	100	100	100	100	100	100	100	800
23	638	PENETRATE WALL AND CONNECT TO FIRST FITTING INSIDE OF BUILDING WHEN REPLACING PROPERTY OWNER'S LEAD WATER SERVICE CONNECTION	EA	5	5	5	27	17	5	5	5	74
24	SPECIAL	INSTALL 8-INCH DIAMETER GATE VALVE AND VALVE BOX	EA	2	2	2	5	4	1	0	0	16
25	SPECIAL	INSTALL 12-INCH DIAMETER GATE VALVE AND VALVE BOX	EA	0	3	4	0	0	4	2	0	13
26	SPECIAL	INSTALL 16-INCH DIAMETER GATE VALVE AND VALVE BOX	EA	0	0	0	0	0	0	3	7	10
27	SPECIAL	INSTALL 18-INCH DIAMETER GATE VALVE AND VALVE BOX	EA	0	0	0	0	0	0	2	0	2
28	608	REMOVE AND REPLACE CONCRETE SIDEWALK, ITEM 608	SF	0	0	48	0	0	0	29	0	77
29	608	REMOVE AND REPLACE CURB RAMP, ITEM 608	EA	0	0	2	1	0	0	1	0	4
30	452	REMOVE AND REPLACE DRIVEWAY APRON, ITEM 452	SF	463	0	0	0	0	321	670	0	1,454
31	SPECIAL	TYPE "A" PAVEMENT REPLACEMENT (CONCRETE) ROADWAY	SY	52	0	378	123	0	0	0	0	553
32	SPECIAL	TYPE "B" PAVEMENT REPLACEMENT (ASPHALT) ROADWAY	SY	1,117	424	0	1,584	1,320	1,212	88	0	5,745
33	609	CONCRETE CURB, INCLUDING REMOVAL.	LF	0	6	72	54	36	0	37	0	205
34	640	PAVEMENT MARKINGS, ITEM 640	LS	-	-	-	-	-	-	-	-	1
35	630	REMOVE, STORE, AND RE-ERECT SIGNS	EA	0	0	0	0	1	2	0	0	3
36	SPECIAL	UTILITY POLE SUPPORT ALLOWANCE	ALLOW	-	-	-	-	-	-	-	-	$20,000.00
37	201	CLEARING AND GRUBBING	SY	0	0	0	0	0	0	0	0	0
38	SPECIAL	PRE- AND POST CONSTRUCTION DOCUMENTATION	LS	-	-	-	-	-	-	-	-	1
39	SPECIAL	RECORD DOCUMENTS - AS BUILT DRAWINGS	LS	-	-	-	-	-	-	-	-	1
40	623	CONSTRUCTION LAYOUT AND STAKING	LS	-	-	-	-	-	-	-	-	1
41	SPECIAL	ALTERNATE - TEMPORARY BYPASS WATER MAINS, HYDRANTS, AND SERVICES CONNECTIONS FOR WATER MAINS TO BE REPLACED - SHERWOOD	LS	-	-	-	-	-	-	-	-	1
42	SPECIAL	ALTERNATE - TEMPORARY BYPASS WATER MAINS, HYDRANTS, AND SERVICES CONNECTIONS FOR WATER MAINS TO BE REPLACED - VALLEYVIEW	LS	-	-	-	-	-	-	-	-	1
43	SPECIAL	ALTERNATE - REHABILITATION OF EXISTING WATER MAIN WITH CLOSE FIT (COMPRESSION) HDPE LINING - HAMILTON	LS	-	-	-	-	-	-	-	-	1
44	SPECIAL	ALTERNATE - REHABILITATION OF EXISTING WATER MAIN WITH PRESSURE CURED-IN PLACE PIPE (CIPP) - BOREMAN	LS	-	-	-	-	-	-	-	-	1
45	SPECIAL	ALTERNATE - REHABILITATION OF EXISTING WATER MAIN WITH CLOSE FIT (COMPRESSION) HDPE LINING - BOREMAN	LS	-	-	-	-	-	-	-	-	1
46	SPECIAL	DEDUCT ALTERNATE – NON-PREFORM 16" WATER MAIN VIA JACK AND BORE – BOREMAN	LS	-	-	-	-	-	-	-	-	1
47	SPECIAL	ALTERNATE – INSTALLATION OF WATERMAIN LOOP THROUGH EASEMENT USING HDD UNDER CREEK – EASTMAN	LS	-	-	-	-	-	-	-	-	1

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. COON
84026
REGISTERED PROFESSIONAL ENGINEER

03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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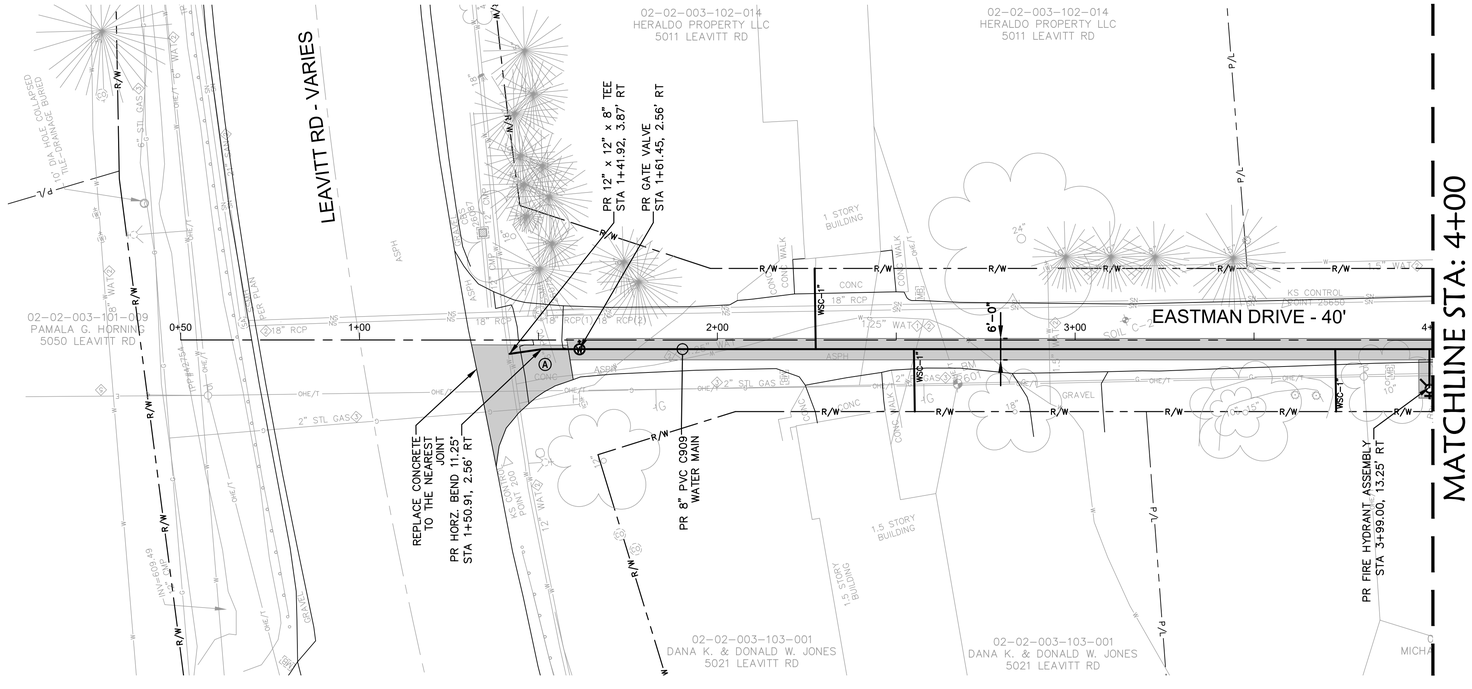
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OSBORN PROJ NO.	J20221302.000

QUANTITIES SHEET

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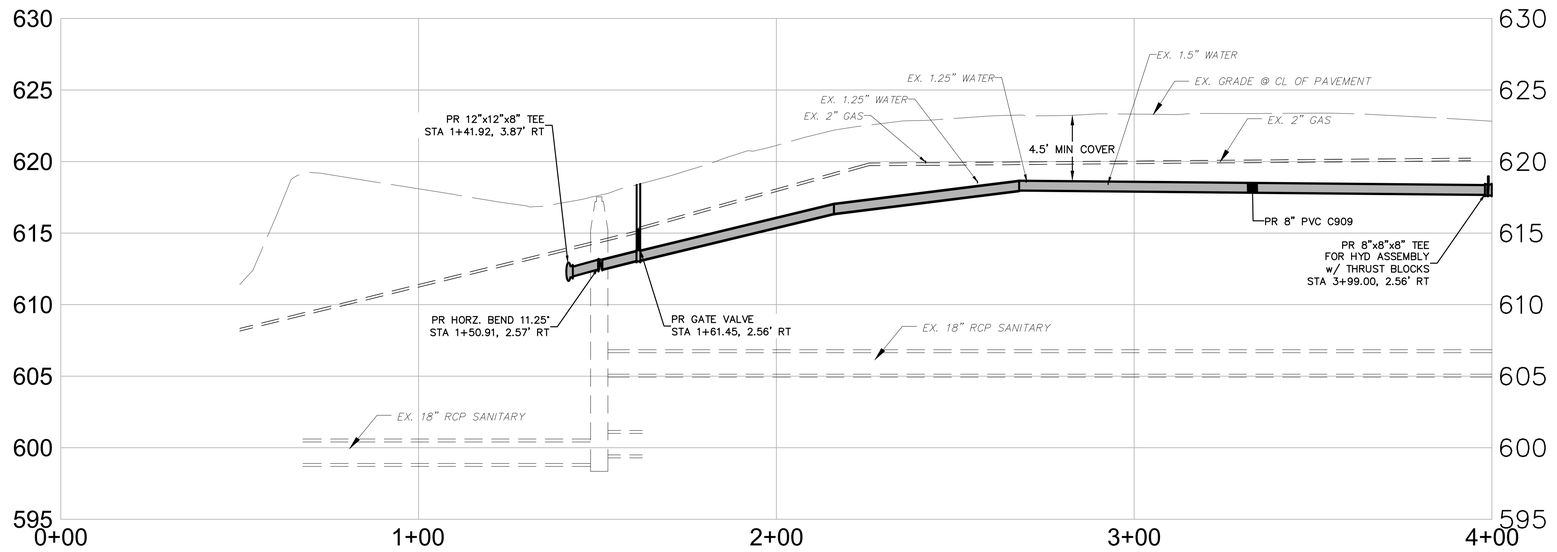
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EASTMAN DRIVE

SCALE: 1" = 20'



EASTMAN DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 26075
RIM=617.54
INV=599.5± 18" RCP SE (1)
INV=605.14 18" RCP SE (2)
INV=611.99 6" PVC S
INV=598.9± 18" RCP NW

CBS 26087
RIM=616.16
INV=609.76 12" RCP NE
INV=609.66 12" RCP SW

GENERAL NOTES:

1. EXISTING PAVEMENT FOR EASTMAN DRIVE VARIES FROM SHEET 1.5" TO 3.5" ASPHALT PAVEMENT OVER VARYING 3.5" TO 10.5" BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. PER RECORD INFORMATION, EXISTING RESIDENTIAL WATER SERVICE CONNECTIONS ARE LOCATED ON THE SOUTH AND WEST WALLS OF EACH HOME. PRIOR TO INSTALLING ANY WATER SERVICE CONNECTIONS ON EASTMAN DRIVE, CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF WATER SERVICE CONNECTION FOR INSTALLATION AND PROPOSED ROUTING WITH EACH PROPERTY OWNER.

KEY NOTES:

Ⓐ KEEP EXISTING WATER MAIN LIVE DURING CONSTRUCTION AND COORDINATE TIMING FOR ABANDONING WITH THE CITY OF LORAIN.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. COON
E-64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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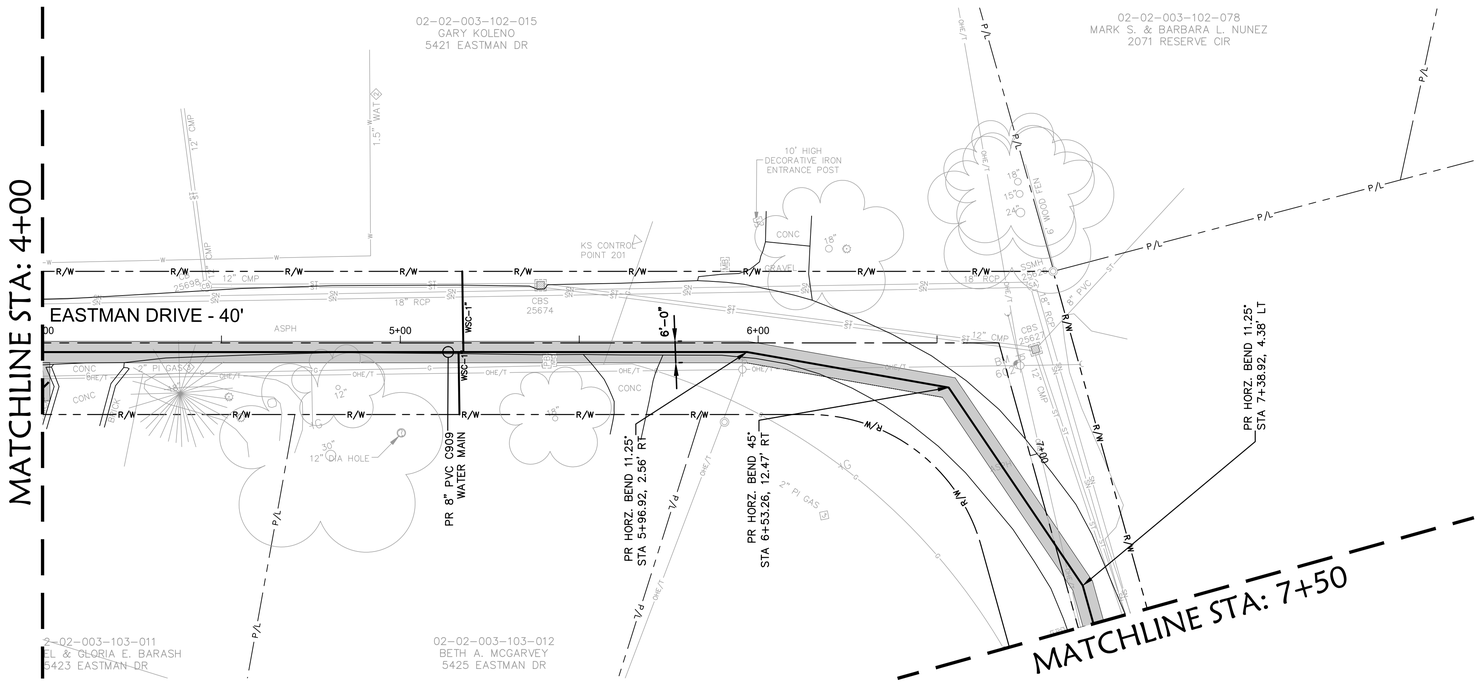
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OSBORN PROJ NO.	J20221302.000

EASTMAN - PLAN & PROFILE 0+50 TO 4+00

DRAWING NO.

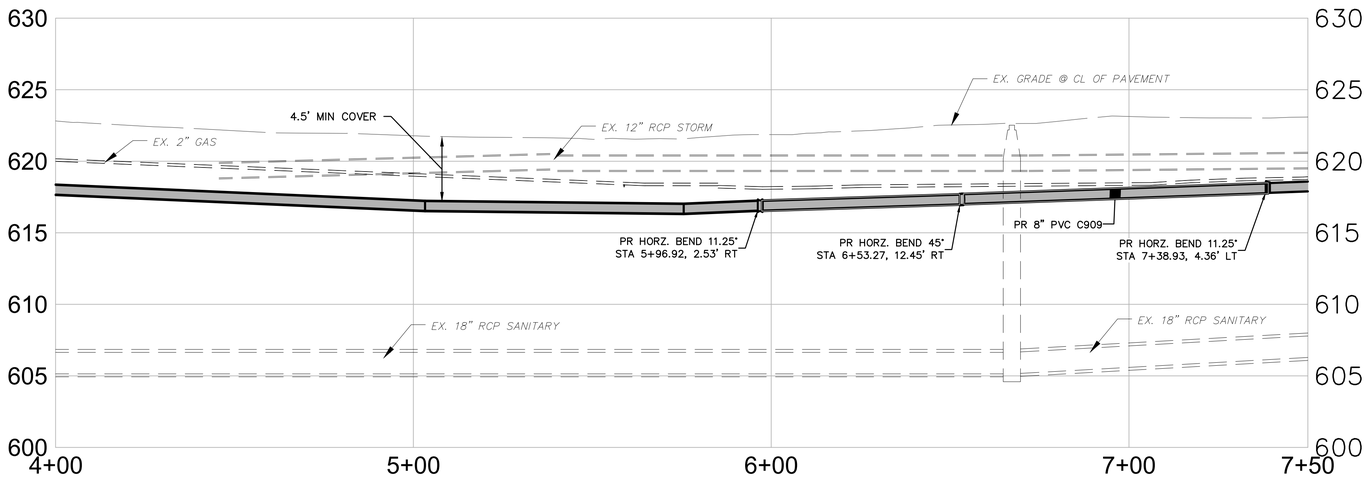
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6/10/2025 1:25 PM Coon, Kevin



EASTMAN DRIVE

SCALE: 1" = 20'



EASTMAN DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE

20 0 10 20

(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 25626
RIM=622.52
18" SAN NW
18" RCP S
UNABLE TO OPEN

CBS 25627
RIM=622.31
INV=619.61 8" PVC NE
INV=619.36 12" CMP S
INV=619.46 12" CMP W

CBS 25674
RIM=620.96
INV=618.38 12"x10" BRICK OPENING SE
INV=618.36 12"x10" BRICK OPENING NW
12" CMP LIKELY RECESSED AT BOTH OPENINGS

CB 25698
RIM=621.34
INV=618.84 12" CMP NE & SE

GENERAL NOTES:

1. EXISTING PAVEMENT FOR EASTMAN DRIVE VARIES FROM SHEET 1.5" TO 3.5" ASPHALT PAVEMENT OVER VARVING 3.5" TO 10.5" BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. PER RECORD INFORMATION, EXISTING RESIDENTIAL WATER SERVICE CONNECTIONS ARE LOCATED ON THE SOUTH AND WEST WALLS OF EACH HOME. PRIOR TO INSTALLING ANY WATER SERVICE CONNECTIONS ON EASTMAN DRIVE, CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF WATER SERVICE CONNECTION FOR INSTALLATION AND PROPOSED ROUTING WITH EACH PROPERTY OWNER.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

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LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. COON
E-84062
REGISTERED PROFESSIONAL ENGINEER

03/06/2025

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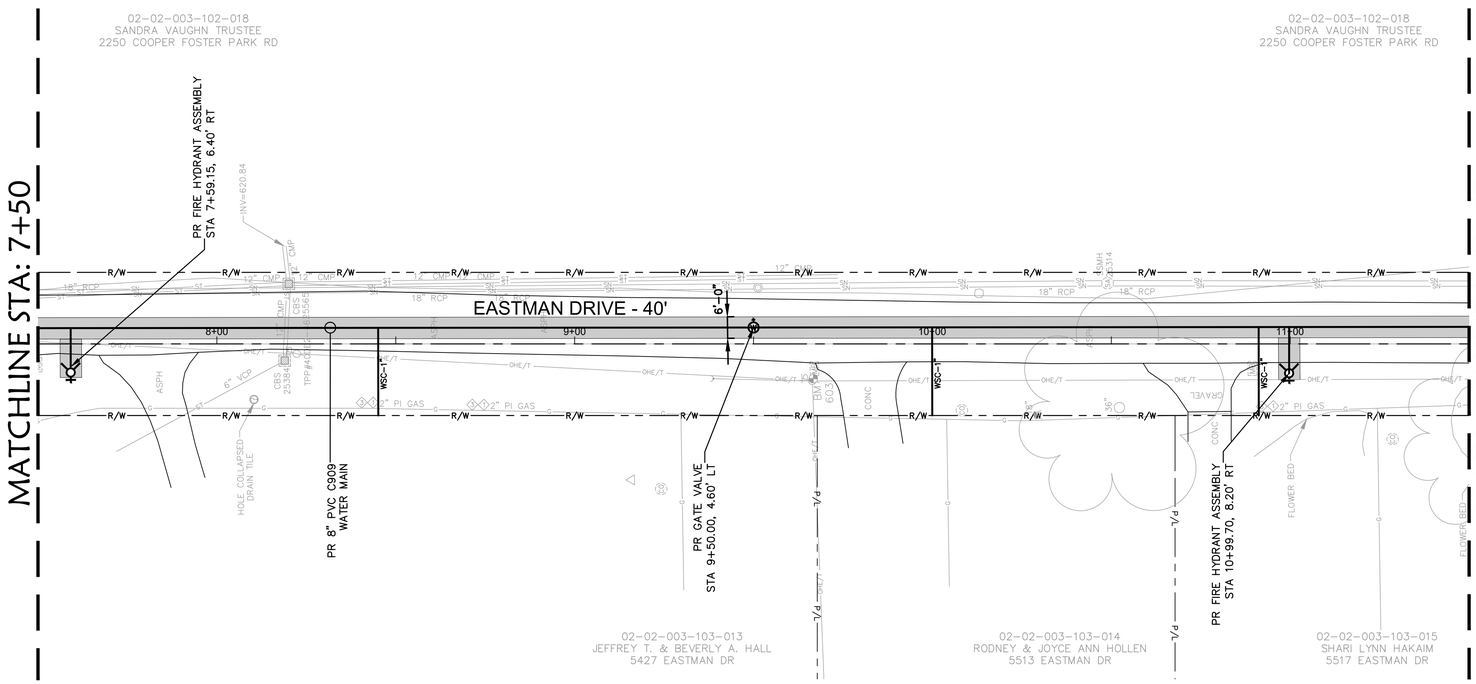
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OSBORN PROJ NO.	J20221302.000

EASTMAN - PLAN & PROFILE 4+00 TO 7+50

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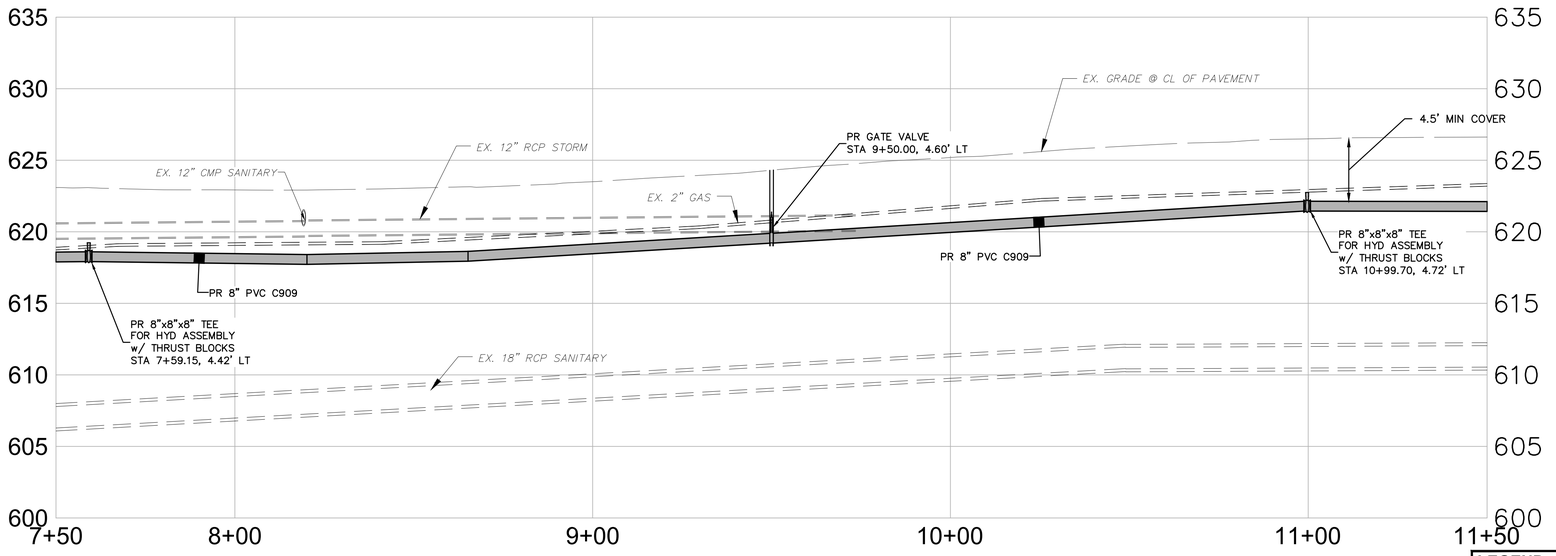
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6/10/2025 1:26 PM Coon, Kevin



EASTMAN DRIVE

SCALE: 1" = 20'



EASTMAN DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 25314
RIM=625.98
INV=610.44 18" RCP N
INV=610.42 18" RCP S

CBS 25384
RIM=622.51
INV=620.61 12" CMP E
INV=620.61 6" VCP NW

CBS 25565
RIM=622.36
INV=619.71 12" CMP N
INV=620.11 12" CMP S
INV=620.06 12" CMP W
INV=620.16 12" CMP E

GENERAL NOTES:

1. EXISTING PAVEMENT FOR EASTMAN DRIVE VARIES FROM SHEET 1.5" TO 3.5" ASPHALT PAVEMENT OVER VARYING 3.5" TO 10.5" BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
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LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. COON
E-64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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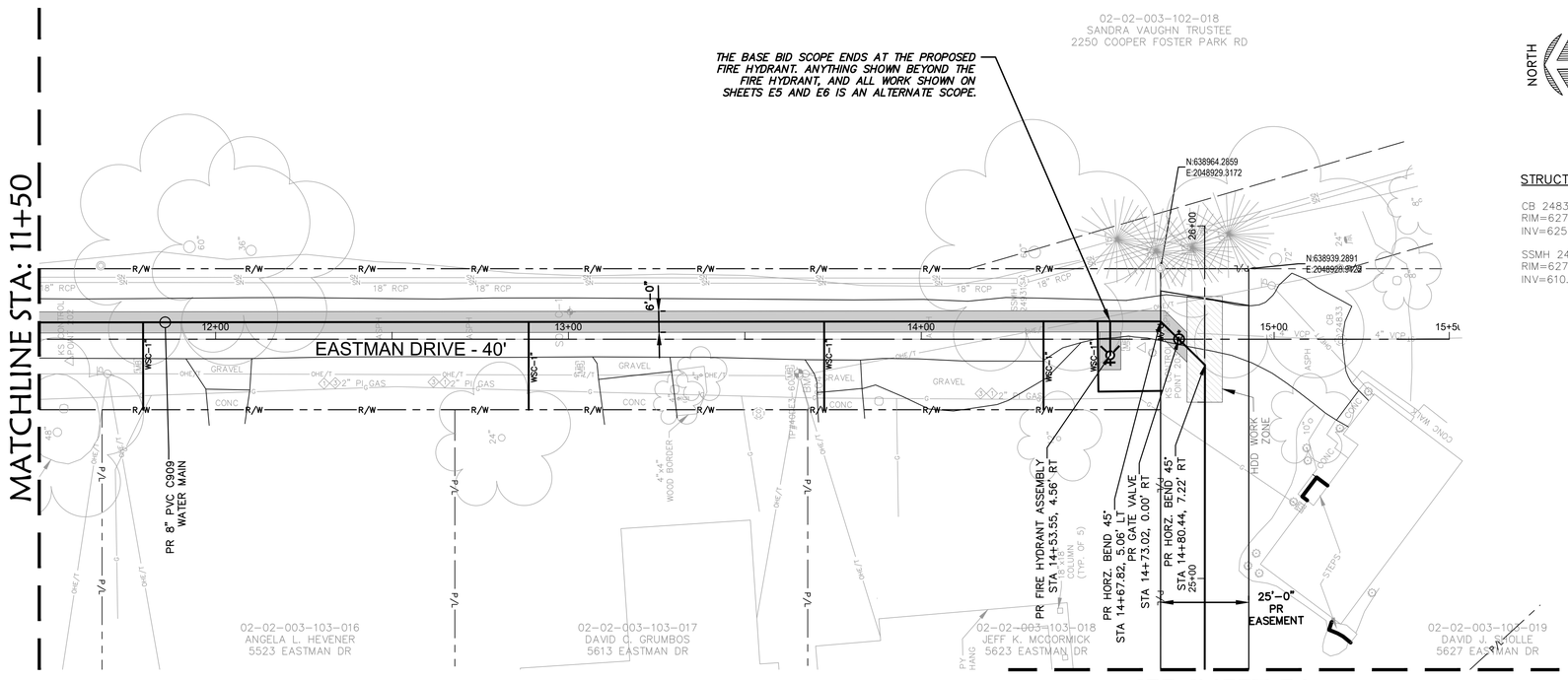
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EASTMAN - PLAN & PROFILE 7+50 TO 11+50

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E3

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EASTMAN DRIVE

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20

(IN FEET)

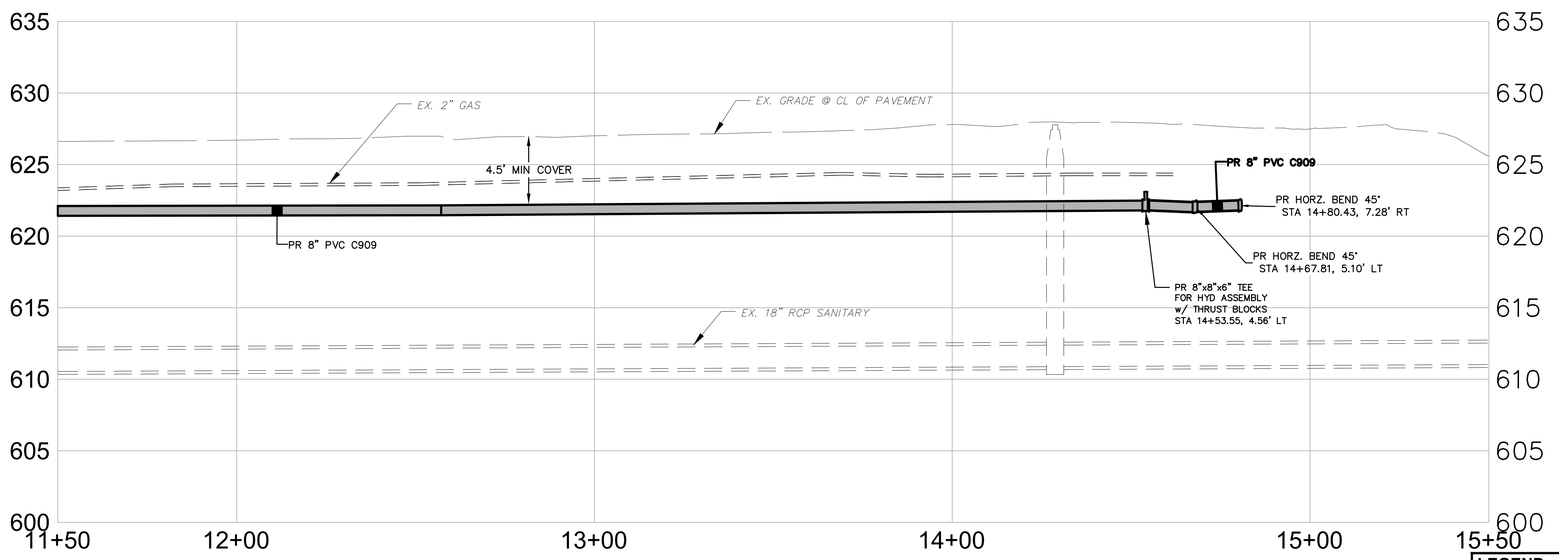
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

CB 24833
RIM=627.06
INV=625.06 4" VCP N & S

SSMH 24931
RIM=627.78
INV=610.88 18" RCP N & SE



EASTMAN DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)

1 inch = 5 ft.

GENERAL NOTES:

1. EXISTING PAVEMENT FOR EASTMAN DRIVE VARIES FROM SHEET 1.5" TO 3.5" ASPHALT PAVEMENT OVER VARYING 3.5" TO 10.5" BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. PER RECORD INFORMATION, EXISTING RESIDENTIAL WATER SERVICE CONNECTIONS ARE LOCATED ON THE SOUTH AND WEST WALLS OF EACH HOME. PRIOR TO INSTALLING ANY WATER SERVICE CONNECTIONS ON EASTMAN DRIVE, CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF WATER SERVICE CONNECTION FOR INSTALLATION AND PROPOSED ROUTING WITH EACH PROPERTY OWNER.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODN
E-84052
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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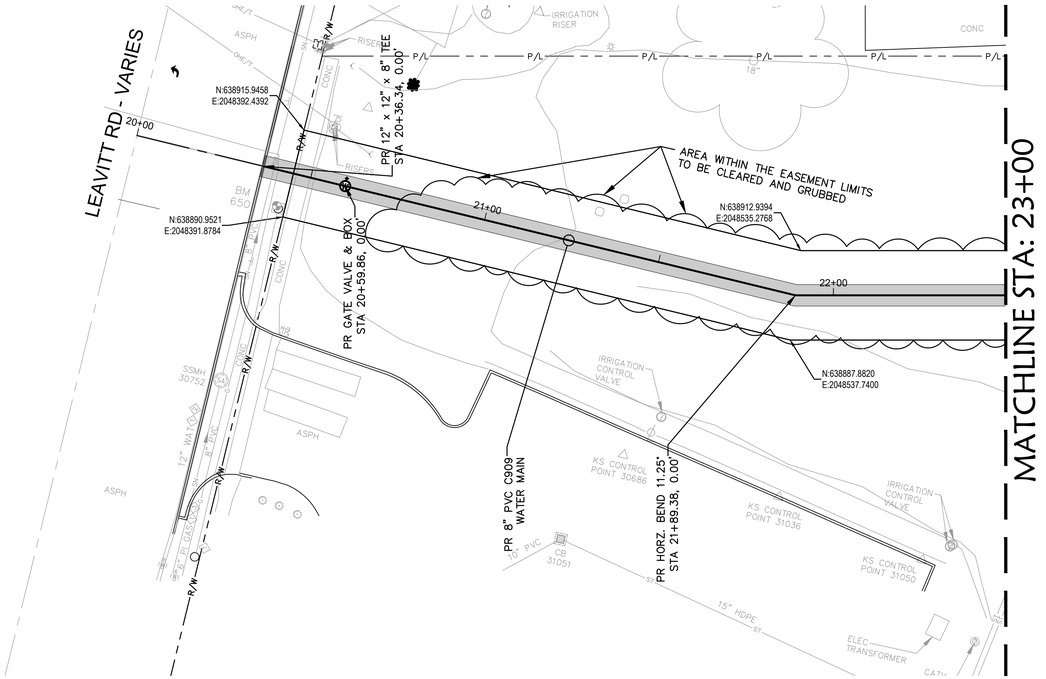
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EASTMAN - PLAN & PROFILE 11+50 TO 15+50

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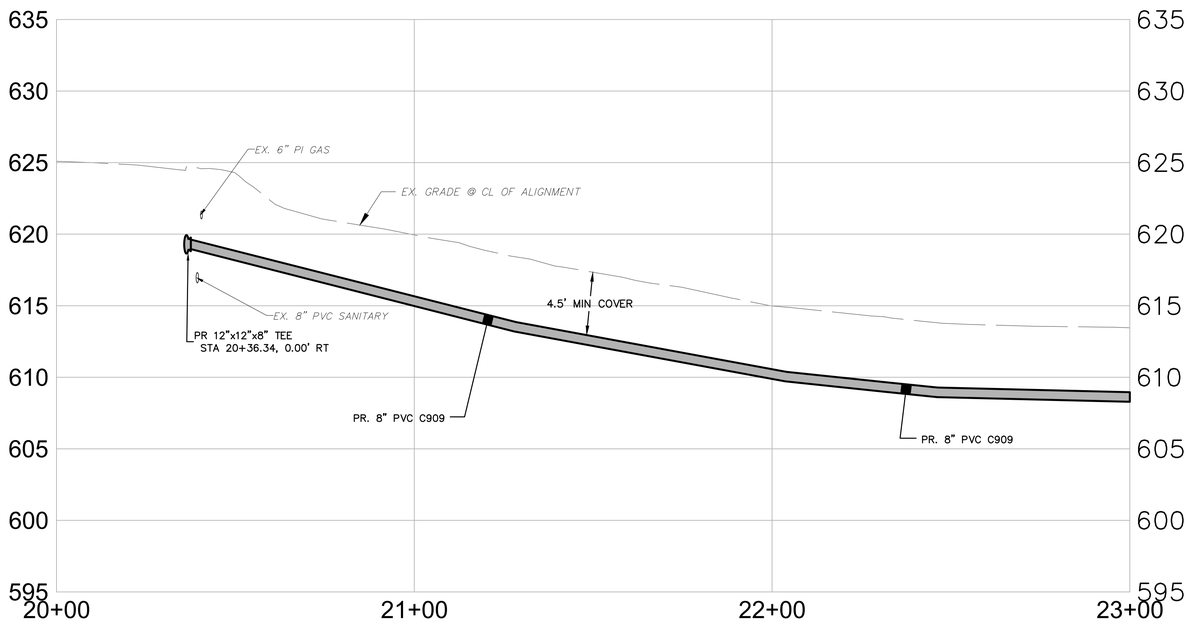
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EASTMAN DRIVE

SCALE: 1" = 20'



EASTMAN DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 24639
RIM=621.04
INV=611.24 18" RCP NW
INV=611.29 18" RCP SE

GENERAL NOTES:

1. EXISTING PAVEMENT FOR EASTMAN DRIVE VARIES FROM SHEET 1.5" TO 3.5" ASPHALT PAVEMENT OVER VARYING 3.5" TO 10.5" BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN OHIO 1834

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
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STATE OF OHIO
KEVIN D. COON
E-64026
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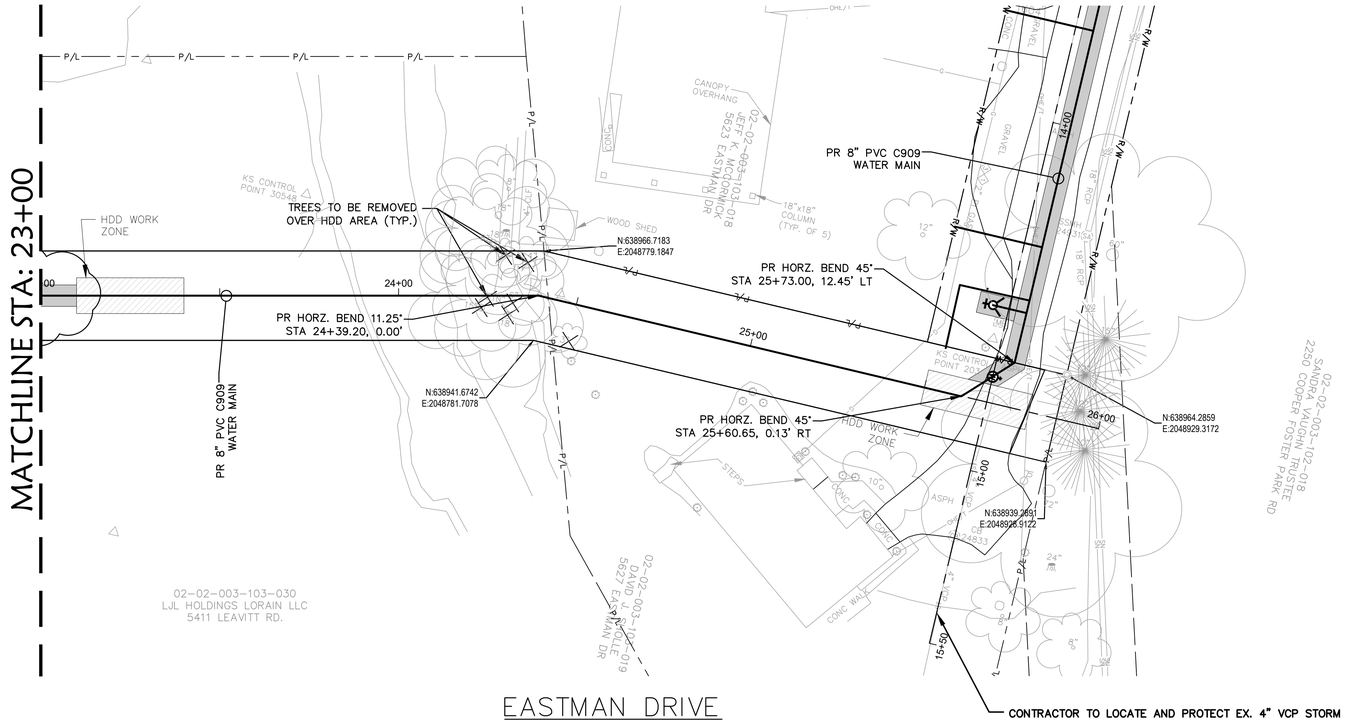
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OSBORN PROJ NO.	J20221302.000

EASTMAN - ALTERNATE PLAN & PROFILE 20+00 TO 23+00

DRAWING NO.

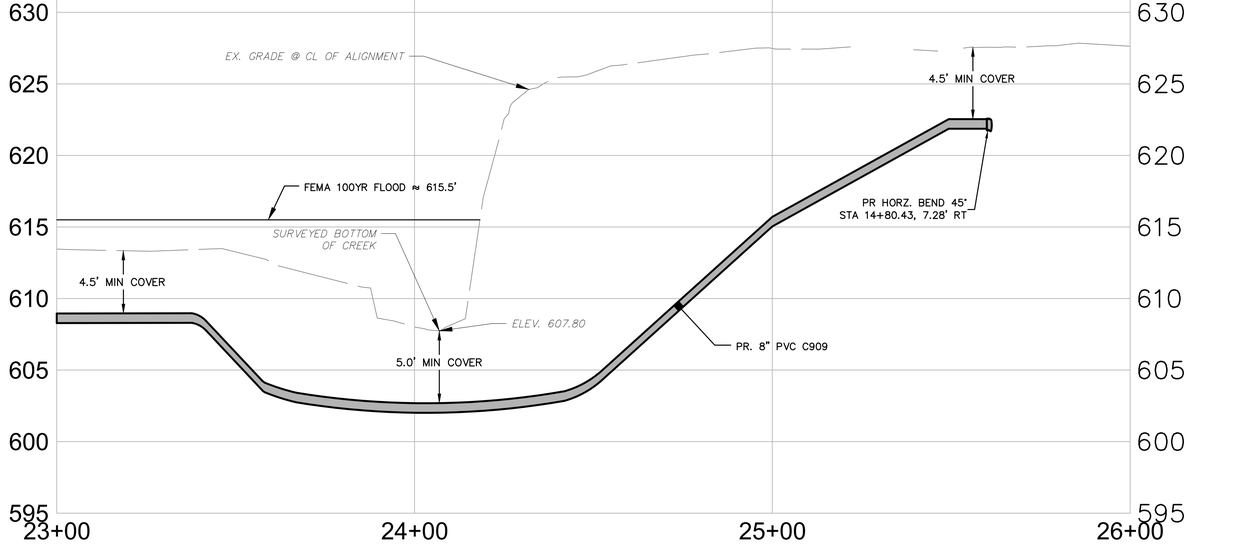
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EASTMAN DRIVE

SCALE: 1" = 20'



EASTMAN DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

CB 24304

SSMH 24305
RIM=630.20
INV=618.90 15" RCP E & W
INV=618.90 10" RCP S

STMH 24308
RIM=630.28
INV=620.71 42" HDPE E
INV=618.45 42" HDPE NW

SSMH 24309
RIM=630.35
INV=619.17 18" RCP E
INV=619.10 18" RCP NW

CI 24311
RIM=629.93
INV=626.33 12" CPP W
INV=626.83 6" PVC SW
(DOUBLE GRATE)
BOTTOM=626.43

STMH 24416
RIM=628.03
INV=617.79 18" PVC SE
INV=614.34 42" HDPE SE
INV=620.21 12" PVC SE
INV=614.30 42" HDPE NW

SSMH 24486
RIM=619.08
INV=611.98 18" RCP SE & NW

CB 24833
RIM=627.06
INV=625.06 4" VCP N & S

GENERAL NOTES

1. EXISTING PAVEMENT FOR EASTMAN DRIVE VARIES FROM SHEET 1.5" TO 3.5" ASPHALT PAVEMENT OVER VARYING 3.5" TO 10.5" BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. LIMITS OF SENDING/RECEIVING PITS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR ACTUAL LOCATION AND SIZING OF PITS. CONTRACTOR IS RESPONSIBLE FOR MODIFICATION OF RESTORATION LIMITS AND MOT.
4. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING LOCATION OF EXISTING UTILITIES AND COORDINATING WITH UTILITY OWNERS REGARDING TEMPORARY RELOCATION OR PROTECTION IN PLACE WITHIN LIMITS OR IN PROXIMITY OF SENDING/RECEIVING PITS.
5. NO TREES SHALL BE REMOVED EXCEPT DURING THE PERIOD BETWEEN OCTOBER 1 AND MARCH 31 PER FEDERAL REGULATORY REQUIREMENTS. NO TREES SHALL BE REMOVED WITHOUT EXPLICIT WRITTEN PERMISSION PROVIDED TO THE CONTRACTOR BY THE OWNER. THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT. ANY TREE CLEARING FROM APRIL 1 TO SEPTEMBER 30 WILL REQUIRE EMERGENT SURVEYS FOR ALL SITES.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN 1834 OHIO

OSBORN ENGINEERING
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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. COON
64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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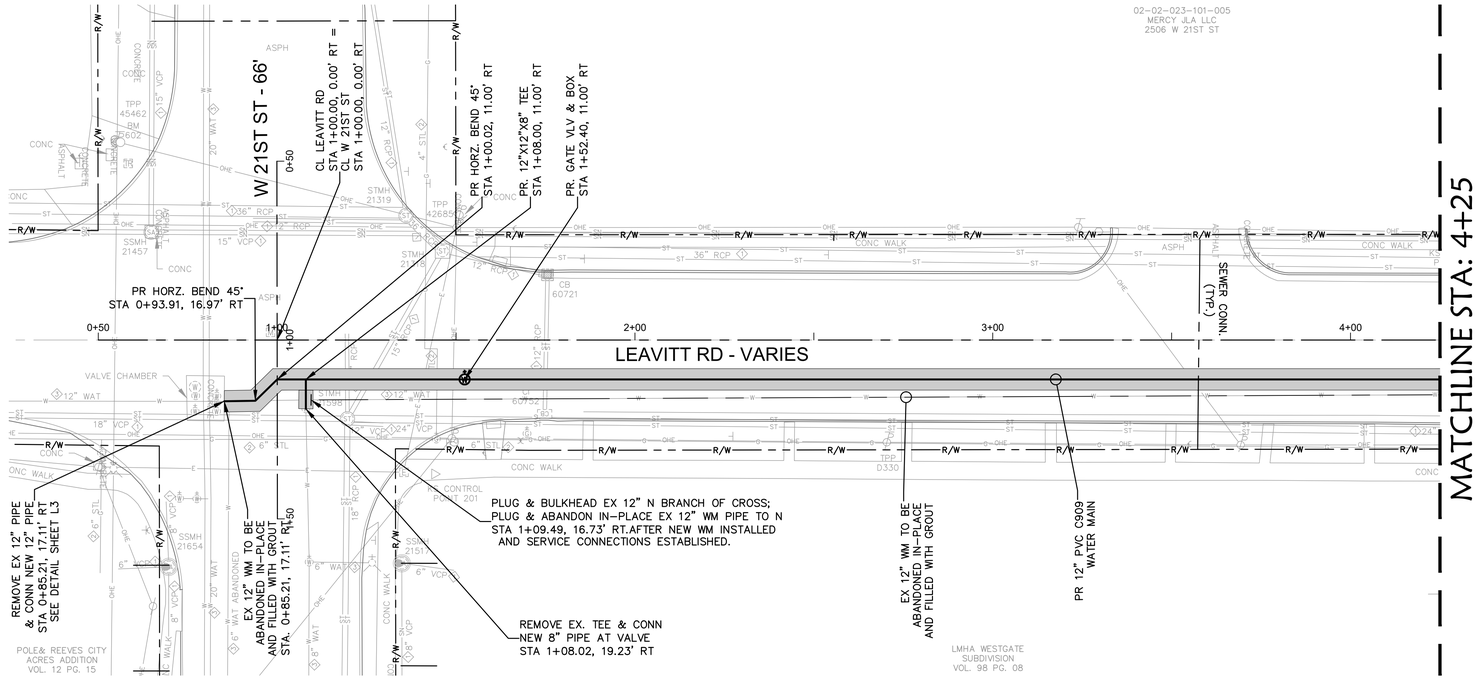
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CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

EASTMAN - ALTERNATE PLAN & PROFILE 23+00 TO 26+00

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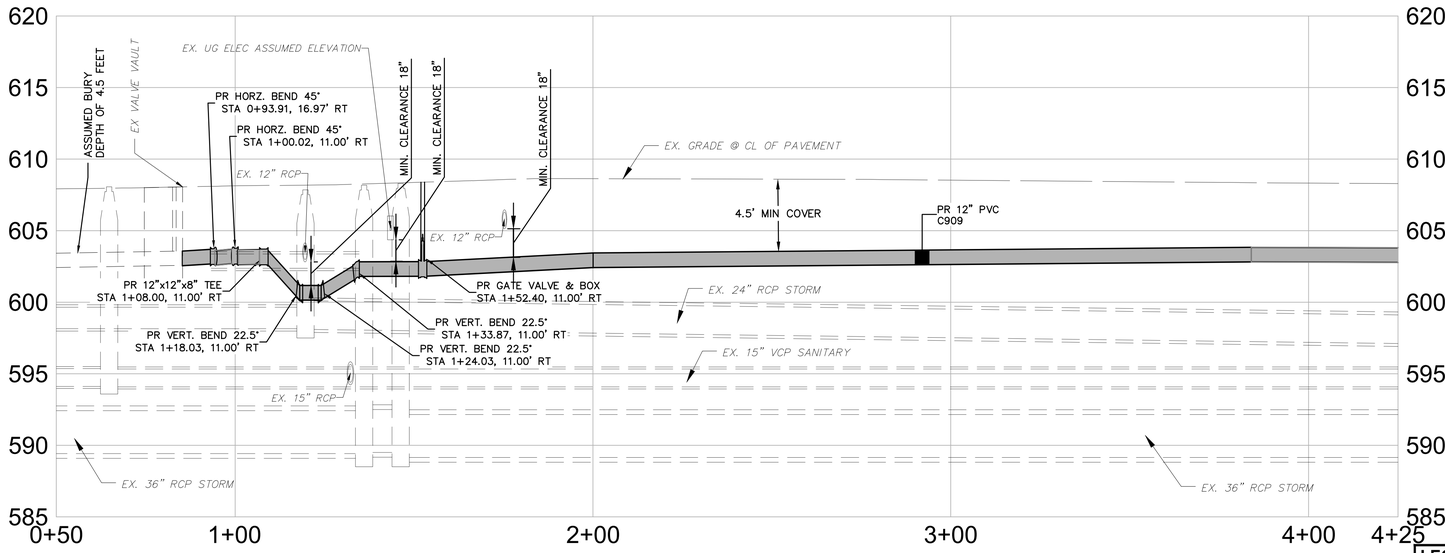
E6

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LEAVITT ROAD

SCALE: 1" = 20'



LEAVITT ROAD PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

STMH 21318
RIM=608.30
INV=604.35 12" RCP NE
INV=589.15 36" RCP NE
INV=589.55 36" RCP SW

STMH 21319
RIM=608.17
INV=589.02 36" RCP NE
INV=589.42 36" RCP SE
INV=602.37 12" RCP SE
INV=602.44 12" RCP SW

SSMH 21457
RIM=608.07
INV=594.08 15" VCP NE
INV=594.11 15" VCP SW
INV=594.60 15" VCP

SSMH 21517
RIM=607.92
INV=601.14 6" VCP NE
INV=601.12 8" VCP E

STMH 21598
RIM=607.85
INV=598.10 24" VCP NE
INV=598.68 18" VCP SE
INV=598.15 18" VCP SW
INV=602.70 12" RCP W
INV=599.08 15" RCP NW
INV=602.10 12" VCP NE
(PLUGGED)

SSMH 21654
RIM=607.92
INV=601.17 8" VCP SW
INV=600.99 8" VCP E
INV=601.40 6" VCP SE

CB 60721
RIM=608.37
INV=605.02 12" RCP SE,SW

CI 60752
RIM=608.03
INV=605.61 8" PVC NW

GENERAL NOTES:

1. EXISTING PAVEMENT FOR LEAVITT ROAD IS SHEET 7" ASPHALT & 6" CONCRETE COMBINED PAVEMENT OVER 6" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD FOR ASPHALT & POOR FOR CONCRETE PAVEMENT. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN OHIO 1834

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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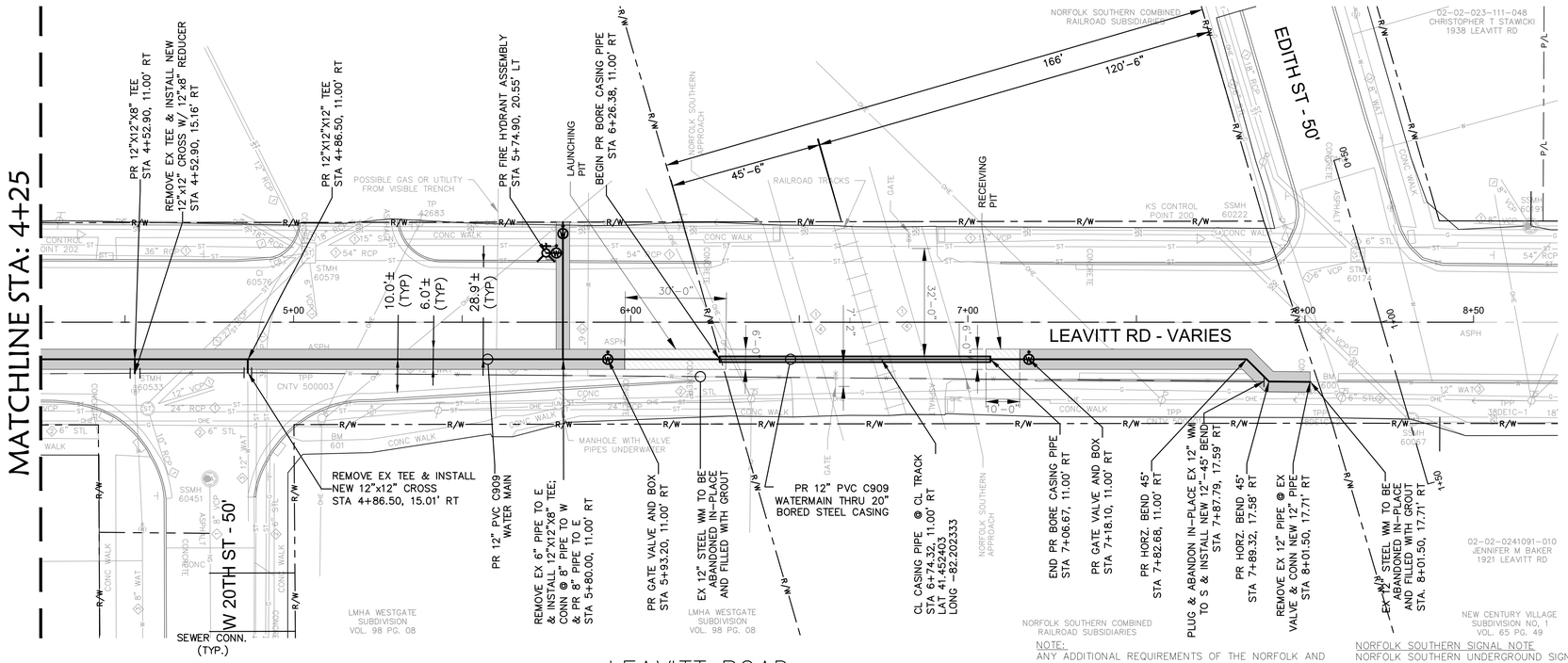
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CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

LEAVITT - PLAN & PROFILE 0+50 TO 4+25

DRAWING NO.

L1

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LEAVITT ROAD

SCALE: 1" = 20'

NOTE:
ANY ADDITIONAL REQUIREMENTS OF THE NORFOLK AND SOUTHERN RAILROAD, INCLUDING BUT NOT LIMITED TO POTHOLING AND SAFETY FLAGGER SHALL BE INCLUDED IN THE COST OF THE CASING PIPE BORED AND JACKED, COMPLETE AS PER INSTALLATION.

NORFOLK SOUTHERN SIGNAL NOTE
NORFOLK SOUTHERN UNDERGROUND SIGNAL AND COMMUNICATION SYSTEM CONDUIT LOCATIONS ARE UNKNOWN. CONTACT NORFOLK SOUTHERN COMMUNICATION AND SIGNAL DIVISION TO LOCATE IN THE FIELD. NORFOLK SOUTHERN IS NOT PART OF THE OUPS LOCATING SYSTEM AND NEEDS TO BE CONTACTED SEPARATELY PRIOR TO CONSTRUCTION

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 60067
RIM=606.66
INV=592.58 18" VCP NE
INV=592.61 18" VCP SW

STMH 60174
RIM=606.21
INV=585.61 54" RCP NE
INV=602.79 6" VCP SE
INV=585.61 54" RCP SW
INV=593.69 18" RCP SW

SSMH 60191
RIM=606.14
INV=597.19 8" VCP NE
INV=597.29 8" VCP SE
INV=597.68 8" VCP SW

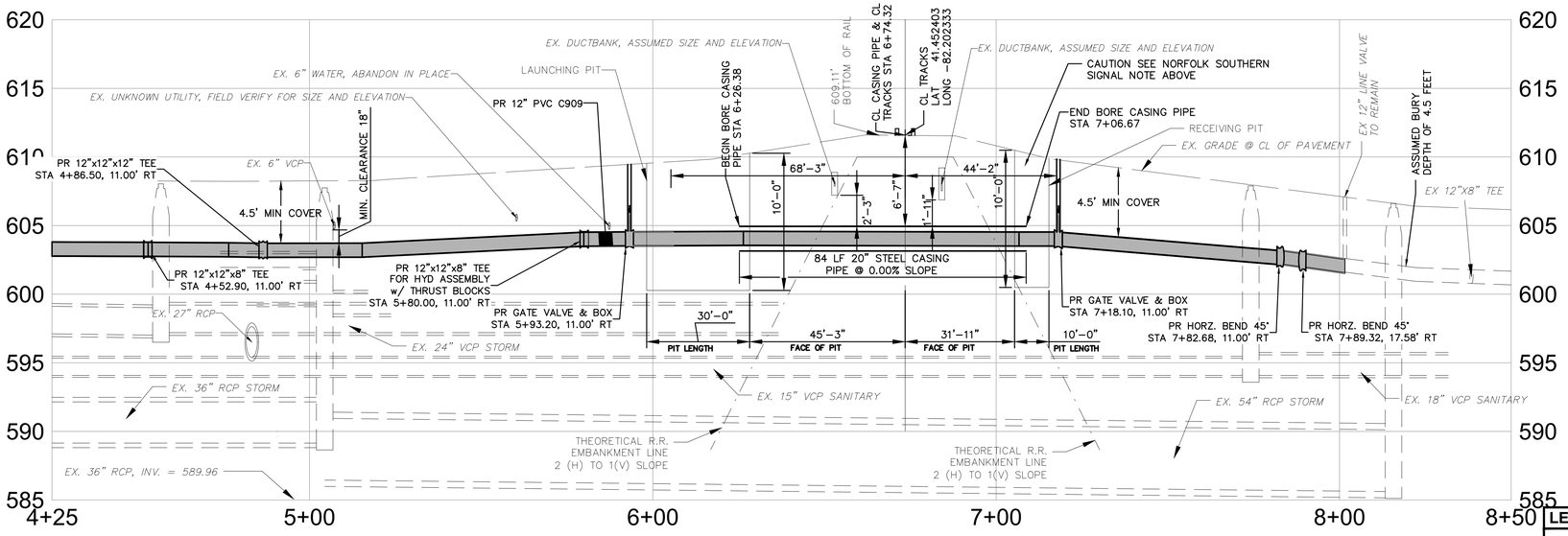
SSMH 60222
RIM=607.43
CANNOT OPEN

SSMH 60451
RIM=607.78
INV=599.73 8" VCP NE

STMH 60533
RIM=608.05
INV=597.20 27" RCP NW
INV=603.51 12" RCP NW
INV=597.20 24" RCP NE
INV=602.97 10" RCP NE
INV=597.01 24" VCP SW

CI 60576
RIM=607.81
INV=601.96 12" RCP SE

STMH 60579
RIM=607.75
INV=586.45 54" RCP NE
INV=603.40 6" VCP NE
INV=589.98 36" RCP SE
INV=593.94 27" RCP SE
INV=587.60 36" RCP SW
INV=601.65 12" RCP SE
INV=599.30 18" RCP SW
INV=601.95 12" RCP SW
INV=598.57 18" RCP NW



LEAVITT ROAD PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

GENERAL NOTES:

1. EXISTING PAVEMENT FOR LEAVITT ROAD IS SHEET 7" ASPHALT & 6" CONCRETE COMBINED PAVEMENT OVER 6" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD FOR ASPHALT & POOR FOR CONCRETE PAVEMENT. REFER TO REPORT DATED FEBRUARY 2, 2024.
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LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

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- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO KEVIN D. CODIN 84026 REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

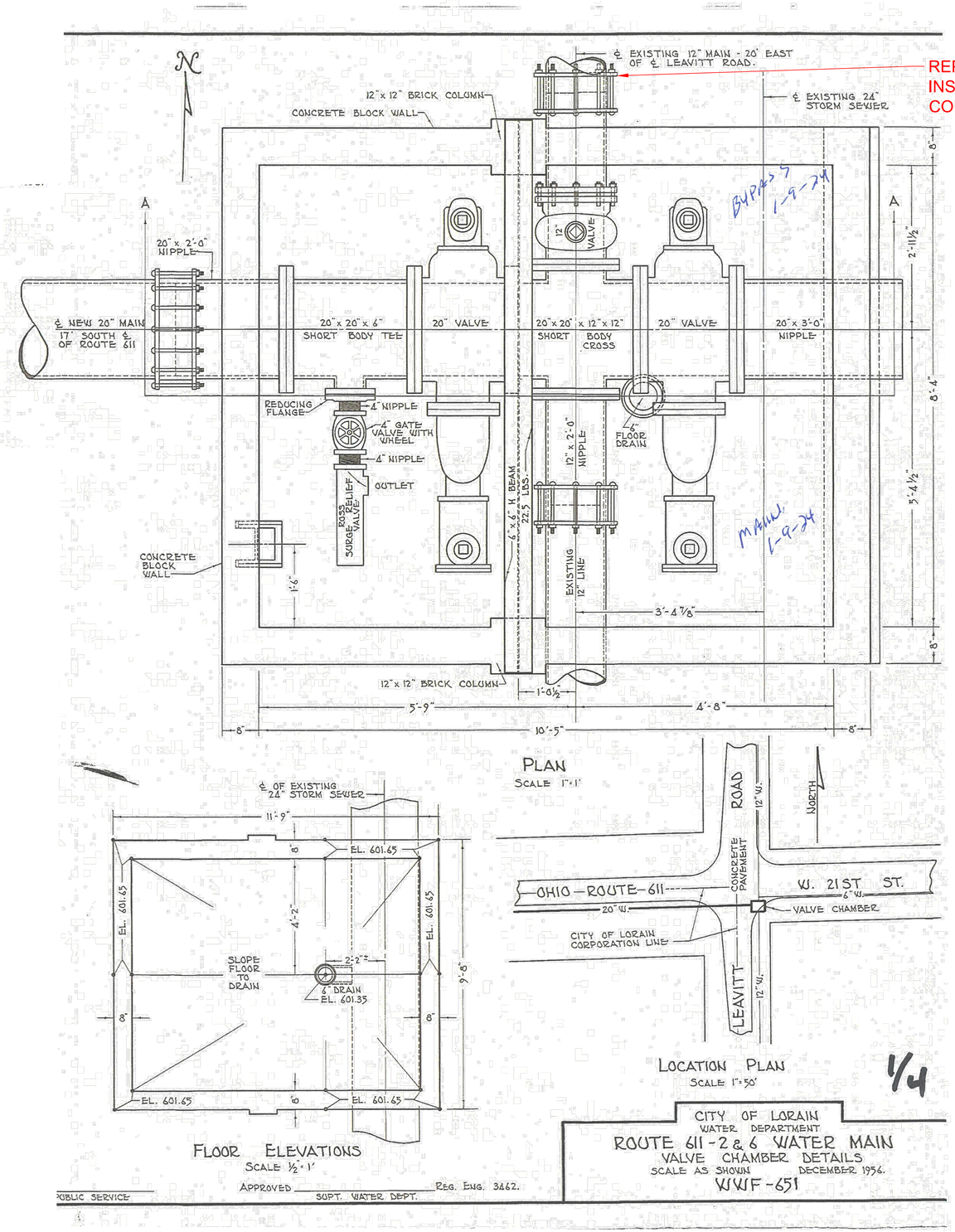
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OSBORN PROJ NO.	J20221302.000

LEAVITT - PLAN & PROFILE 4+25 TO 8+50

DRAWING NO.
L2

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LEAVITT ROAD—VALVE CHAMBER DETAILS

NOT TO SCALE

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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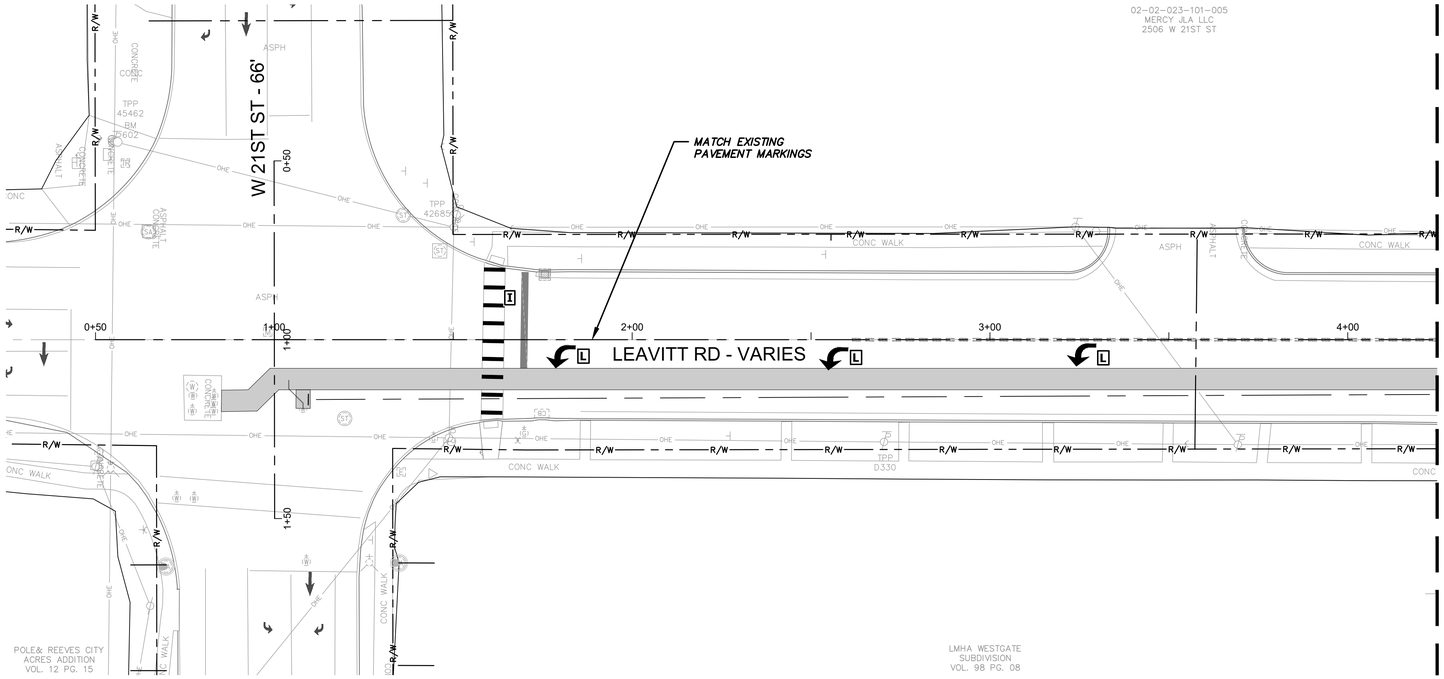
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OSBORN PROJ NO.	J20221302.000

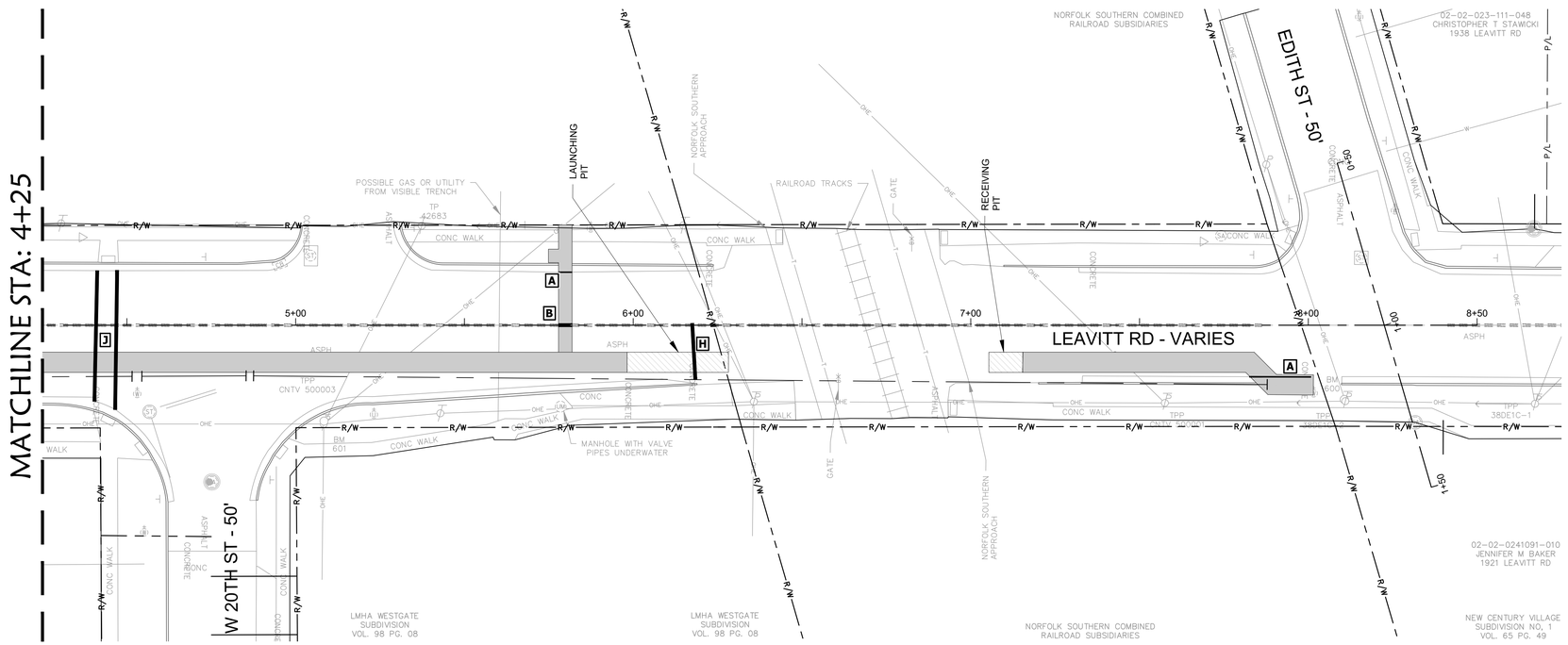
LEAVITT - DETAILS

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L3

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NORTH

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

NOTES

1. *THIS PAVEMENT STRIPING RESTORATION PLAN AS DEVELOPED BY THE ENGINEER IS TO BE USED AS A GUIDELINE FOR THE CONTRACTOR.*
2. *DISTANCE BETWEEN PAVEMENT LINES SHOULD BE MEASURED FROM THE NEAREST CURB TO THE ROADWAY CENTERLINE.*
3. *ALL PERMANENT MARKINGS ON ASPHALT PAVEMENT SHALL BE THERMOPLASTIC PAINT PER CITY OF LORAIN TRAFFIC STANDARDS.*
4. *ALL PERMANENT MARKINGS ON CONCRETE AND/OR BRICK PAVEMENT SHALL BE EPOXY PAINT PER CITY OF LORAIN TRAFFIC STANDARDS.*
5. *ALL PAVEMENT MARKINGS SHALL CONFORM TO THE CITY OF LORAIN TRAFFIC STANDARDS AND ODOT ITEM 640.*
6. *FOR ADDITIONAL INFORMATION ON PAVEMENT MARKINGS, REFER TO "PART 3 - MARKINGS" OF OMUTCD (2012 EDITION) AND "PART 3 - MARKINGS" OF ODOT TRAFFIC ENGINEERING MANUAL (ITEM - JANUARY 2024 REVISION).*

CODED NOTES

X	NAME	COLOR	WIDTH
A	EDGE LINE	WHITE	4"
B	CENTER LINE - SOLID, DOUBLE	YELLOW	4"
C	CENTER LINE - SOLID/DASHED COMBO, DOUBLE	YELLOW	4"
D	CHANNELIZING LINE	WHITE	8"
E	LANE LINE - DOTTED	WHITE	4" **
F	TRANSVERSE LINE	YELLOW	24"
G	TRANSVERSE LINE	WHITE	24" *
H	STOP BAR	WHITE	24"
I	CROSSWALK W/ LADDER	WHITE	24" ***
J	CROSSWALK W/O LADDER	WHITE	12"
K	THROUGH ARROW	WHITE	N/A
L	TURNING ARROW (L)	WHITE	N/A
M	TURNING ARROW (R)	WHITE	N/A
N	TURNING AND THROUGH ARROW (L)	WHITE	N/A
O	BICYCLE SYMBOL	WHITE	N/A

** - at 10' centers*
*** - 3' long, 9' gaps*
**** - 24" wide steps w/ 24" gaps*

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. COBN
E-84062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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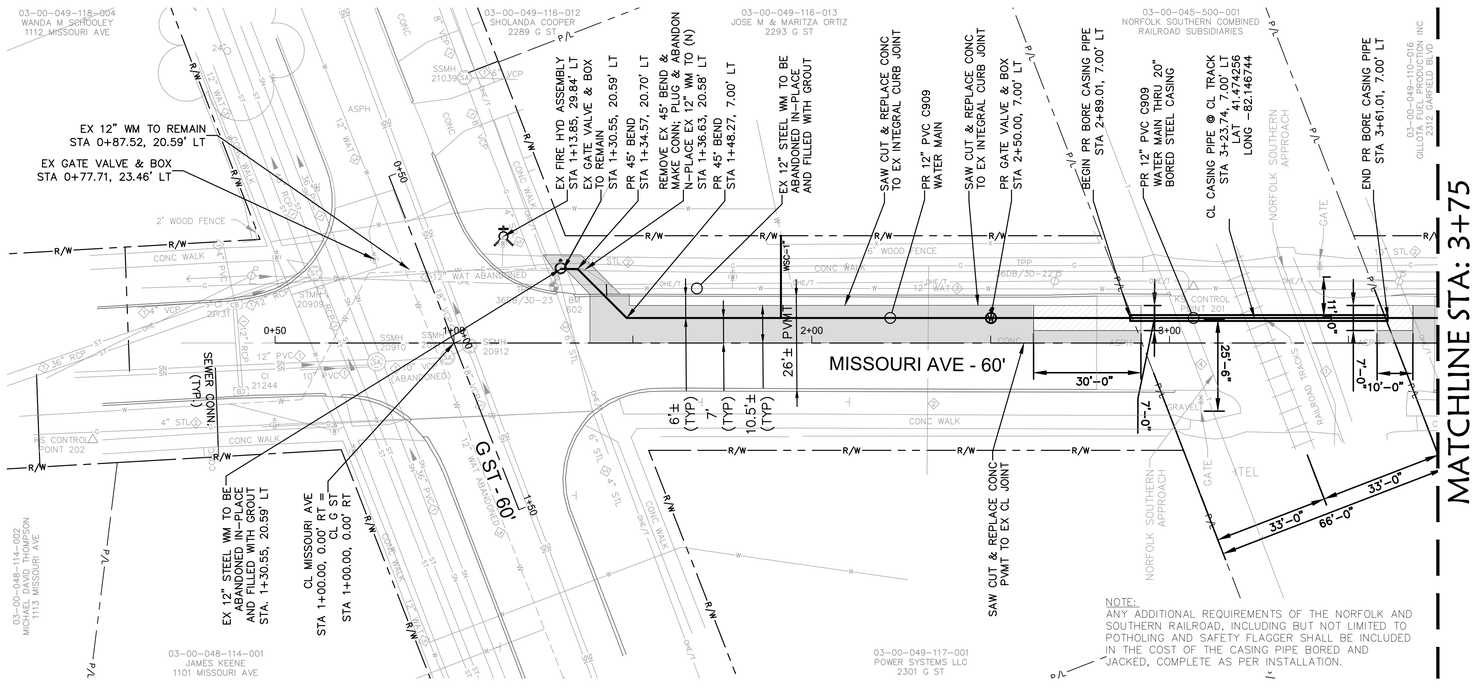
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OSBORN PROJ NO.	J20221302.000

LEAVITT - PAVEMENT MARKING

DRAWING NO.

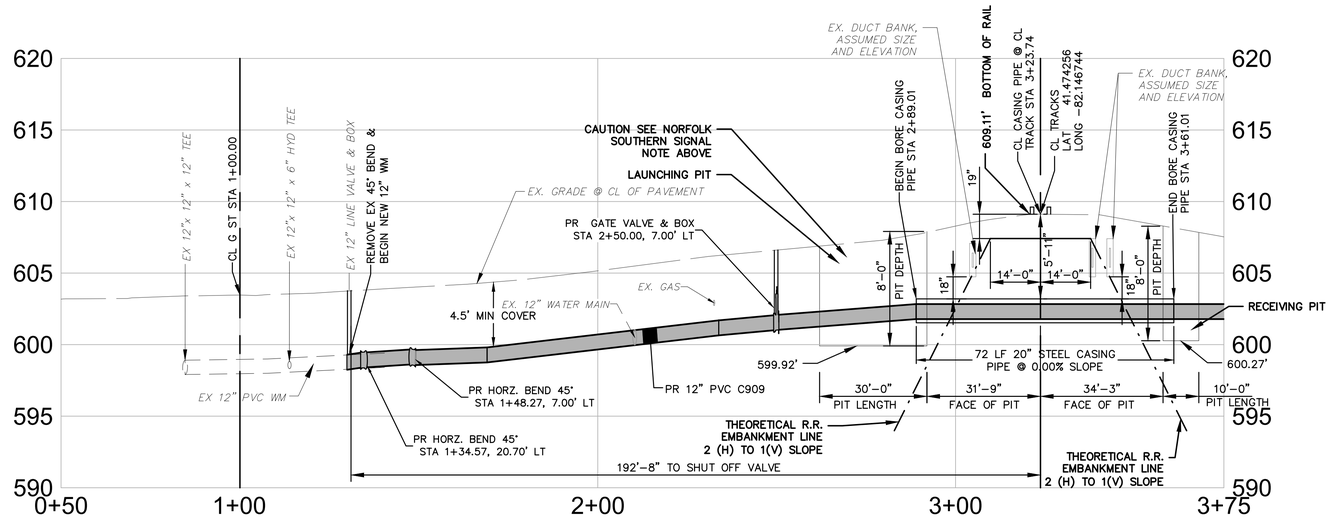
L4

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MISSOURI AVENUE

SCALE: 1" = 20'



MISSOURI AVENUE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

STMH 20909
RIM=603.05
INV=592.65 27" RCP NE
INV=599.32 12" RCP SE
INV=590.22 36" RCP SE
INV=589.31 48" RCP SW

SSMH 20910
RIM=603.24
INV=590.74 12" PVC NW PLUGGED
INV=590.84 12" PVC SE
INV=587.24 10" PVC SE
INV=585.00 36" PVC NE
INV=584.94 36" PVC SW

SSMH 20911
RIM=603.40
INV=590.50 10" VCP NW
INV=590.90 10" VCP SE
(PLUGGED –APPEARS ABANDONED)

SSMH 20912
RIM=603.43
INV=583.87 18" VCP NE
INV=583.47 18" VCP SW

SSMH 21039
RIM=604.24
INV=596.54 6" VCP NW
INV=596.41 8" VCP NE
INV=596.36 8" VCP SW

CI 21131
RIM=602.71
INV=599.76 12" RCP NW,SE
INV=601.41 4" PVC SW
INV=601.21 4" VCP NE
BOTTOM=599.71

CI 21244
RIM=602.76
FULL OF DEBRIS–NO PIPES VISIBLE

GENERAL NOTES

1. EXISTING PAVEMENT FOR MISSOURI AVENUE IS SHEET 7.5" CONCRETE PAVEMENT OVER 4.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. LIMITS OF SENDING/RECEIVING PITS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR ACTUAL LOCATION AND SIZING OF PITS. CONTRACTOR IS RESPONSIBLE FOR MODIFICATION OF RESTORATION LIMITS AND MOT.
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LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-84026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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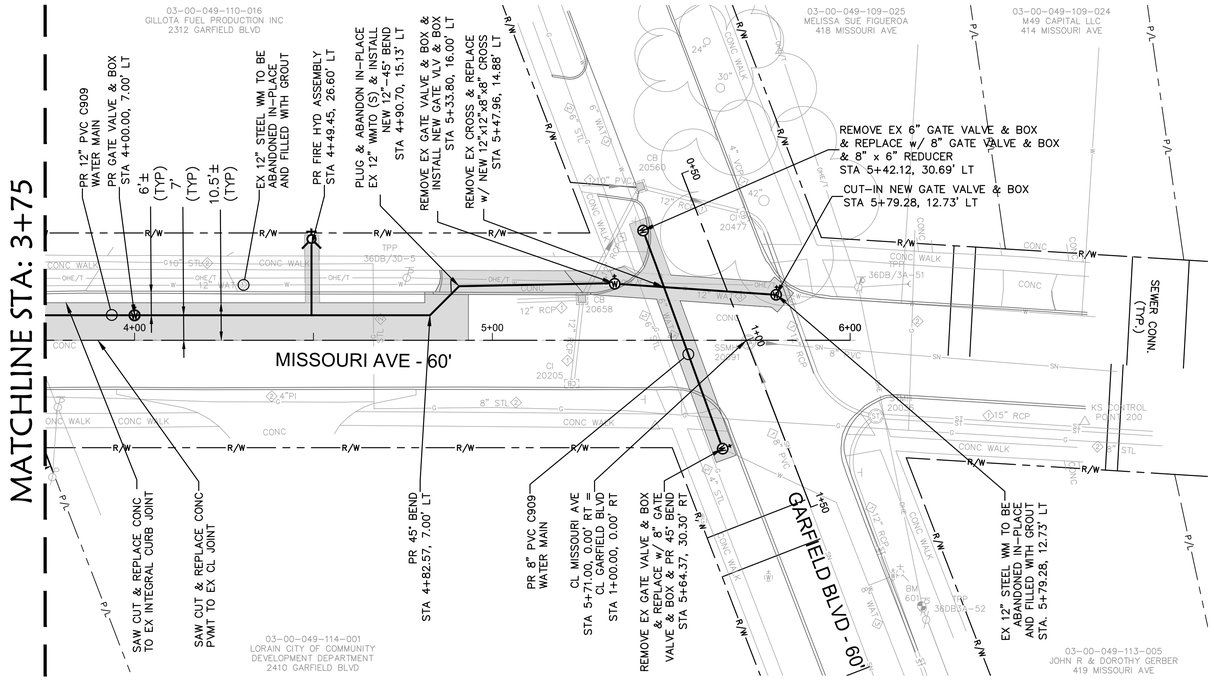
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CHECKED BY	KDC
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OSBORN PROJ NO.	J20221302.000

MISSOURI - PLAN & PROFILE 0+50 TO 3+75

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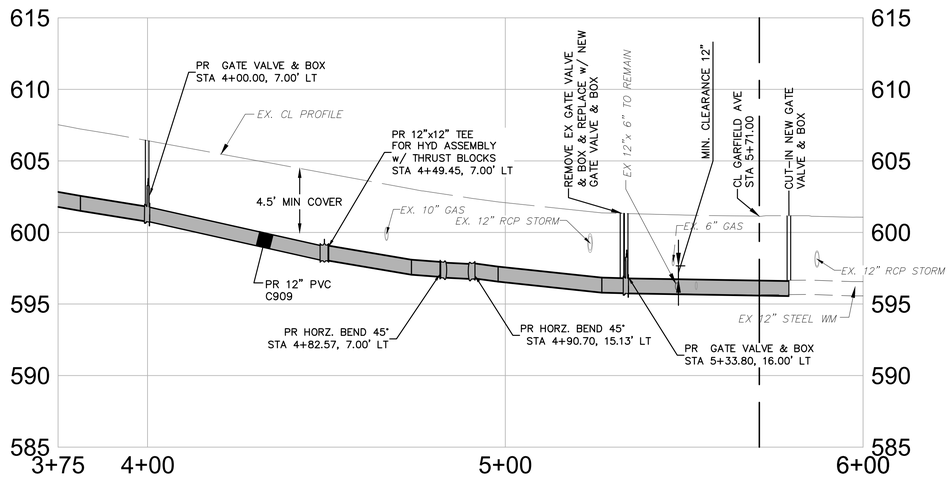
M1

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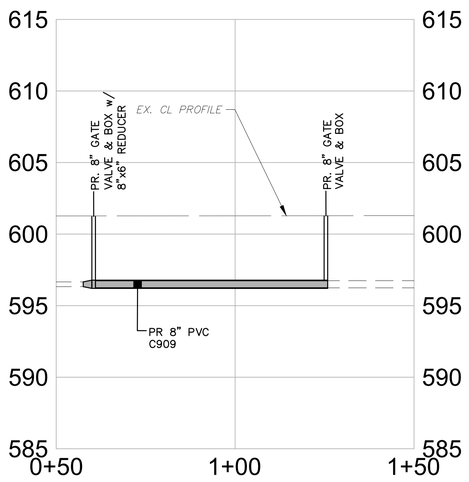
MISSOURI AVENUE

SCALE: 1" = 20'



MISSOURI AVENUE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



GARFIELD BOULEVARD PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE

20 0 10 20

(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

STMH 20036
RIM=601.09
INV=596.79 15" RCP NW
INV=597.09 12" RCP NE,SW

SSMH 20091
RIM=601.13
INV=590.93 8" PVC NE
INV=590.27 8" PVC NW

CI 20205
RIM=601.21
INV=598.71 12" PVC NW
DEBRIS FILLED -UNABLE TO DETERMINE IF OTHER PIPES POSSIBLE BOTTOM=598.7

CI 20477
RIM=600.52
INV=597.81 12" RCP NE
INV=597.82 12" RCP SW
INV=599.22 4" PVC NE
INV=598.72 4" VCP SW
BOTTOM=597.82

CB 20560
RIM=600.56
INV=598.11 12" RCP NE
INV=598.46 10" PVC SE
INV=598.16 10" PVC SE
BOTTOM=598.06

CB 20658
RIM=601.10
INV=598.65 12" RCP SE
INV=598.64 12" RCP NW
INV=598.80 12" RCP SE

GENERAL NOTES

1. EXISTING PAVEMENT FOR MISSOURI AVENUE IS SHEET 7.5" CONCRETE PAVEMENT OVER 4.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
6400
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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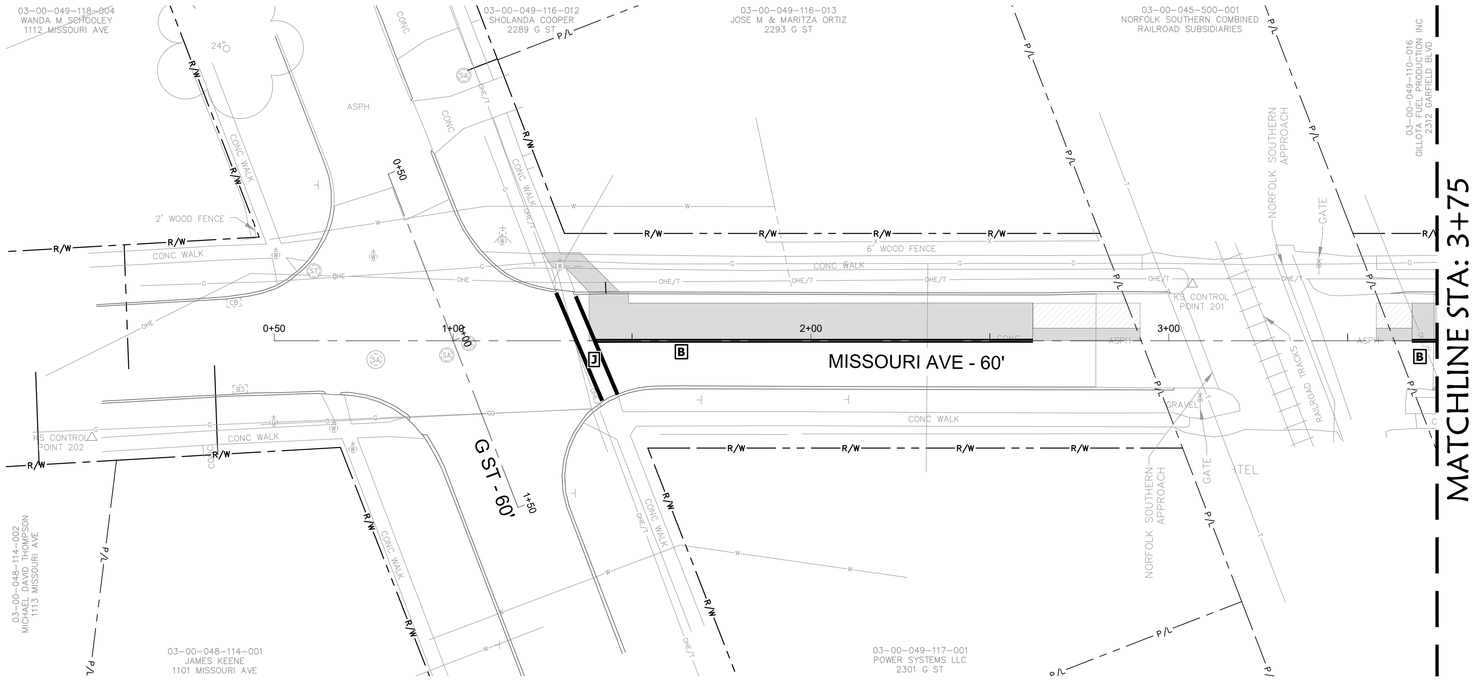
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CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

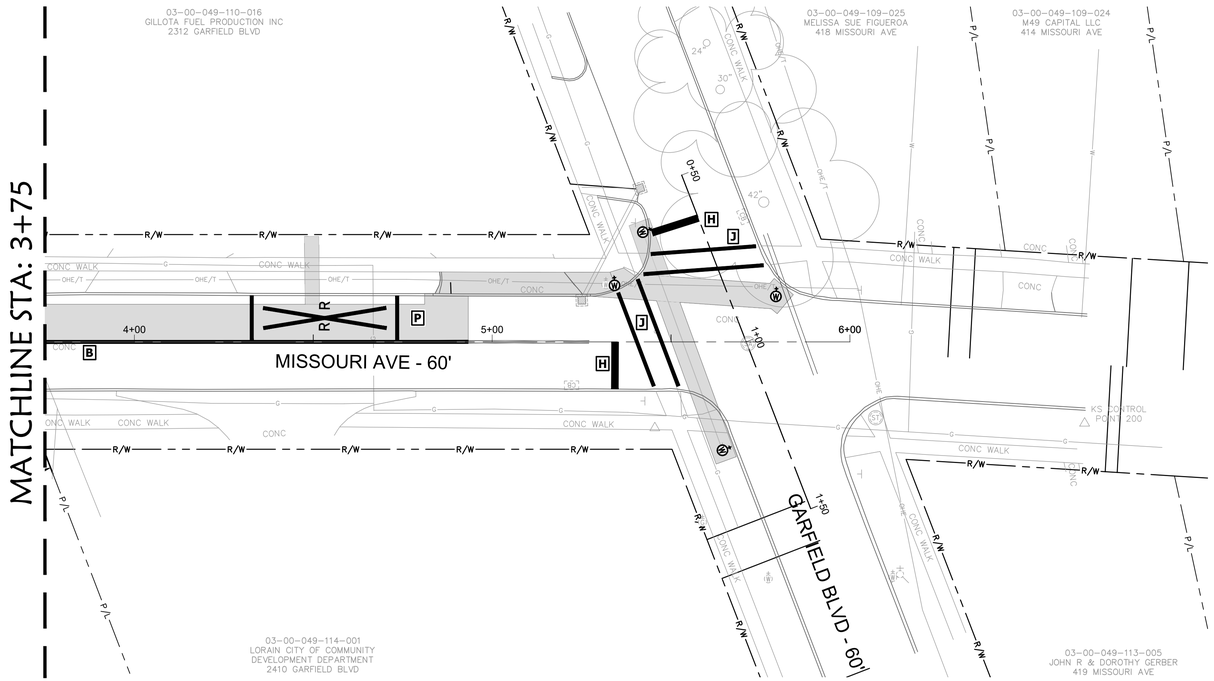
MISSOURI - PLAN & PROFILE 3+75 TO 6+00

DRAWING NO.

M2

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NORTH

GRAPHIC SCALE

20 0 10 20

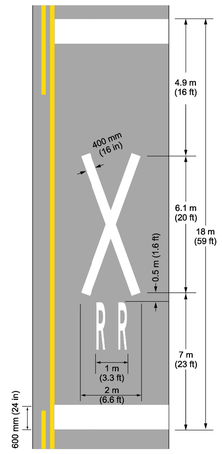
(IN FEET)

1 inch = 20 ft.

NOTES

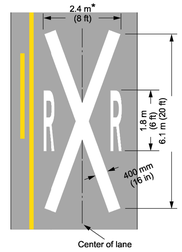
1. *THIS PAVEMENT STRIPING RESTORATION PLAN AS DEVELOPED BY THE ENGINEER IS TO BE USED AS A GUIDELINE FOR THE CONTRACTOR.*
2. *DISTANCE BETWEEN PAVEMENT LINES SHOULD BE MEASURED FROM THE NEAREST CURB TO THE ROADWAY CENTERLINE.*
3. *ALL PERMANENT MARKINGS ON ASPHALT PAVEMENT SHALL BE THERMOPLASTIC PAINT PER CITY OF LORAIN TRAFFIC STANDARDS.*
4. *ALL PERMANENT MARKINGS ON CONCRETE AND/OR BRICK PAVEMENT SHALL BE EPOXY PAINT PER CITY OF LORAIN TRAFFIC STANDARDS.*
5. *ALL PAVEMENT MARKINGS SHALL CONFORM TO THE CITY OF LORAIN TRAFFIC STANDARDS AND ODOT ITEM 640.*
6. *FOR ADDITIONAL INFORMATION ON PAVEMENT MARKINGS, REFER TO "PART 3 - MARKINGS" OF OMUTCD (2012 EDITION) AND "PART 3 - MARKINGS" OF ODOT TRAFFIC ENGINEERING MANUAL (ITEM - JANUARY 2024 REVISION).*

Figure 8B-7. Examples of Highway-Rail Grade Crossing Pavement Markings



Highway-rail grade crossing alternative (narrow) pavement markings

Note: Refer to Figure 8B-6 for placement



Highway-rail grade crossing pavement markings

*Width may vary according to lane width

CODED NOTES

X	NAME	COLOR	WIDTH
A	EDGE LINE	WHITE	4"
B	CENTER LINE - SOLID, DOUBLE	YELLOW	4"
C	CENTER LINE - SOLID/DASHED COMBO, DOUBLE	YELLOW	4"
D	CHANNELIZING LINE	WHITE	8"
E	LANE LINE - DOTTED	WHITE	4" **
F	TRANSVERSE LINE	YELLOW	24"
G	TRANSVERSE LINE	WHITE	24" *
H	STOP BAR	WHITE	24"
I	CROSSWALK W/ LADDER	WHITE	24" ***
J	CROSSWALK W/O LADDER	WHITE	12"
K	THROUGH ARROW	WHITE	N/A
L	TURNING ARROW (L)	WHITE	N/A
M	TURNING ARROW (R)	WHITE	N/A
N	TURNING AND THROUGH ARROW (L)	WHITE	N/A
O	BICYCLE SYMBOL	WHITE	N/A
P	HIGHWAY-RAIL GRADE CROSSING	WHITE	

** - at 10' centers*
*** - 3' long, 9' gaps*
**** - 24" wide steps w/ 24" gaps*

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CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN R. COBN
E-64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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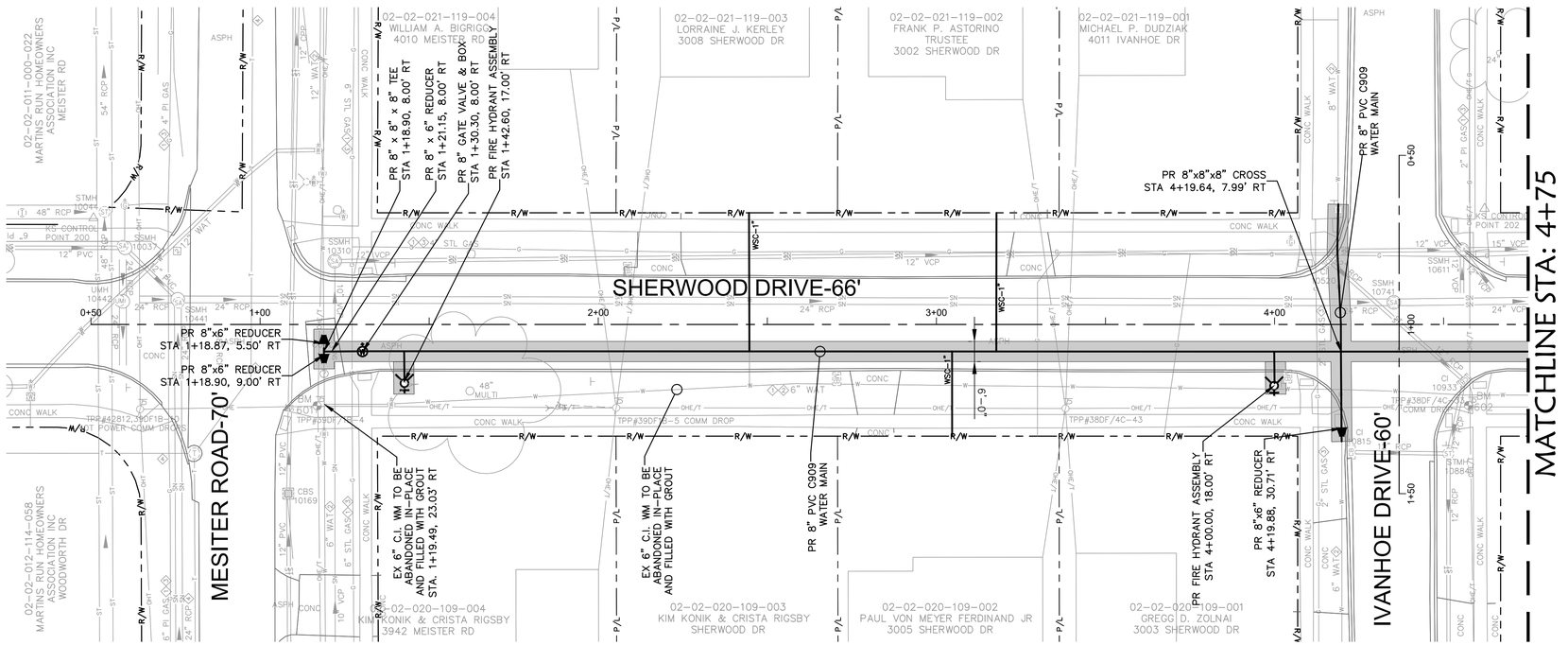
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CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

MISSOURI - PAVEMENT MARKING

DRAWING NO.

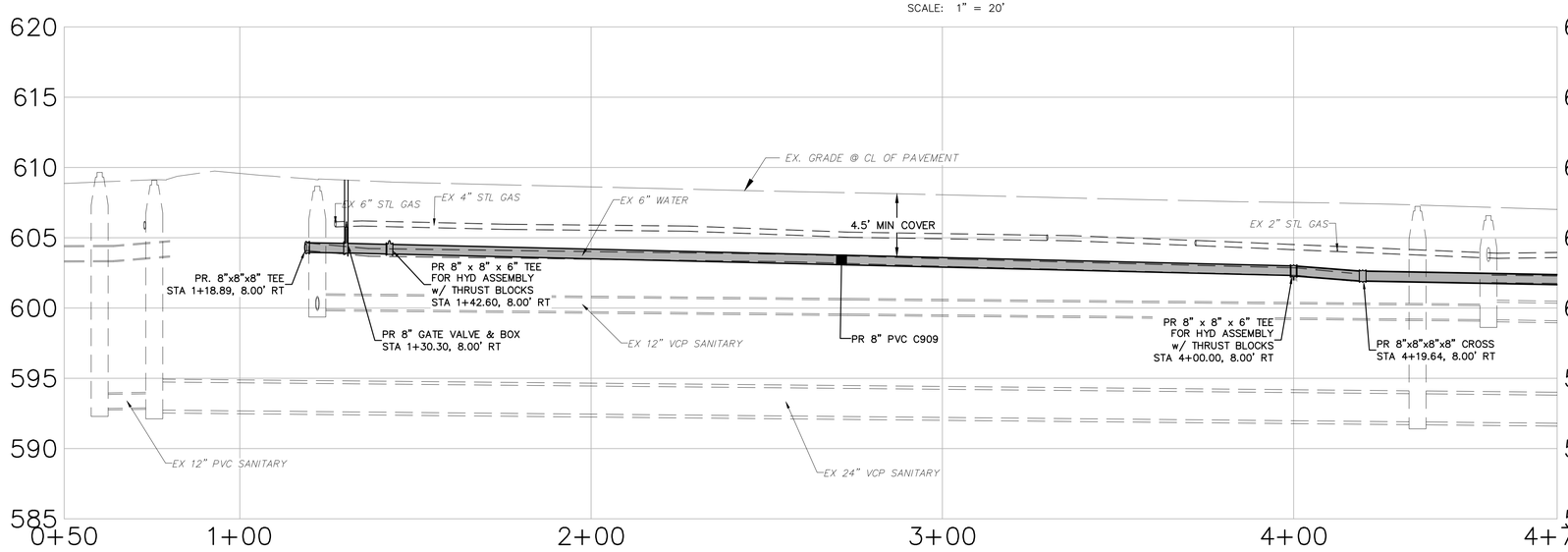
M3

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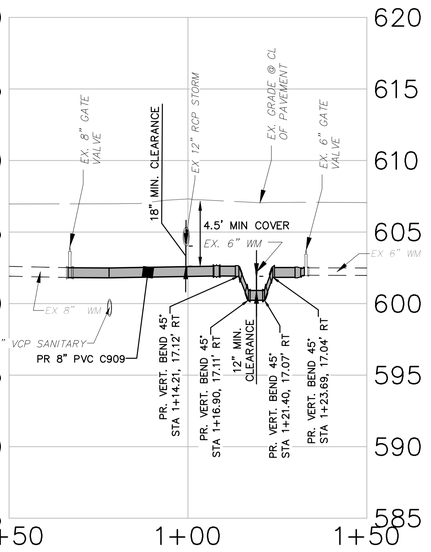
SHERWOOD DRIVE

SCALE: 1" = 20'



SHERWOOD DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



IVANHOE DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

SSMH 10037
RIM=609.75
INV=592.84 12" PVC NE
INV=592.91 12" PVC S

STMH 10044
RIM=609.45
INV=595.47 48" RCP E
INV=594.88 48" RCP S
INV=594.60 54" RCP W

CBS 10169
RIM=608.61
INV=607.49 12" PVC W
INV=607.54 12" PVC E
BOTTOM=607.41

SSMH 10310
RIM=608.66
INV=599.91 12" VCP N
INV=599.91 10" VCP E

SSMH 10441
RIM=609.10
INV=592.74 24" RCP N
INV=592.75 24" RCP E
INV=592.67 24" RCP S
INV=592.91 12" PVC SW

CI 10520
RIM=606.62
INV=604.52 12" RCP NE
BOTTOM=604.42

SSMH 10611
RIM=606.57
INV=603.31 12" VCP NE
INV=599.90 12" VCP E
INV=599.17 12" VCP S
INV=599.17 15" VCP N

SSMH 10741
RIM=607.23
INV=591.90 24" VCP N
INV=591.90 24" RCP S

CI 10815
RIM=606.38
INV=604.11 12" RCP N
BOTTOM=603.98

STMH 10884
RIM=607.13
INV=603.53 12" RCP E
INV=603.71 12" RCP S
INV=603.59 12" RCP NW
BOTTOM=603.53

CI 10933
RIM=606.38
INV=603.98 12" RCP SE
INV=603.88 12" RCP SW
BOTTOM=603.88

GENERAL NOTES:

1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM SHEET 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-84026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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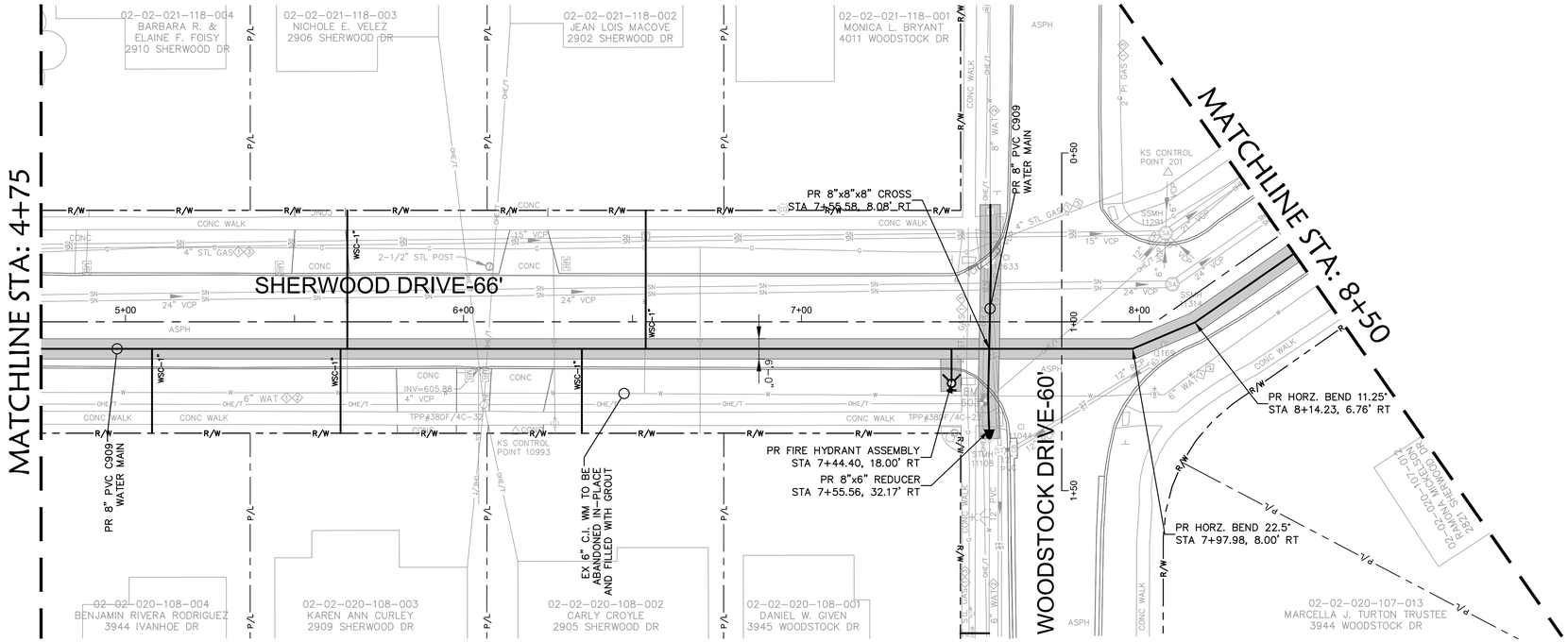
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CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

SHERWOOD - PLAN & PROFILE 0+50 TO 4+75

DRAWING NO.

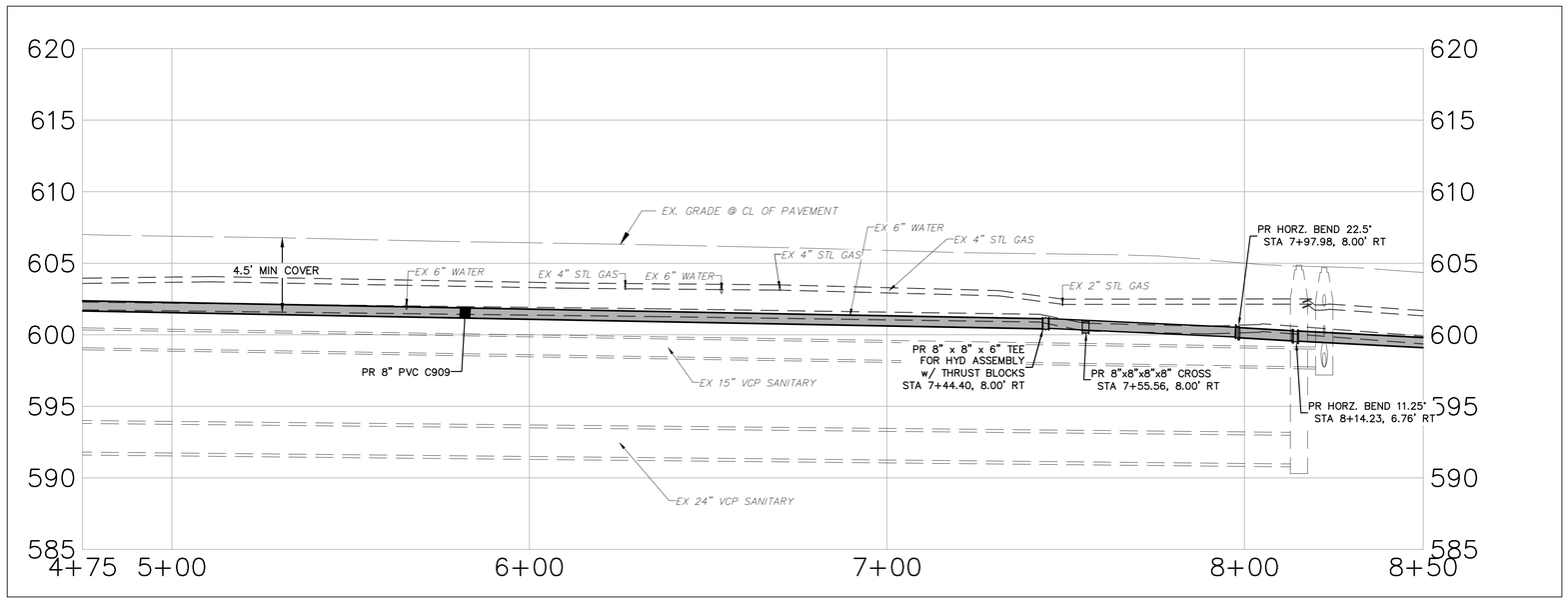
S1

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SHERWOOD DRIVE

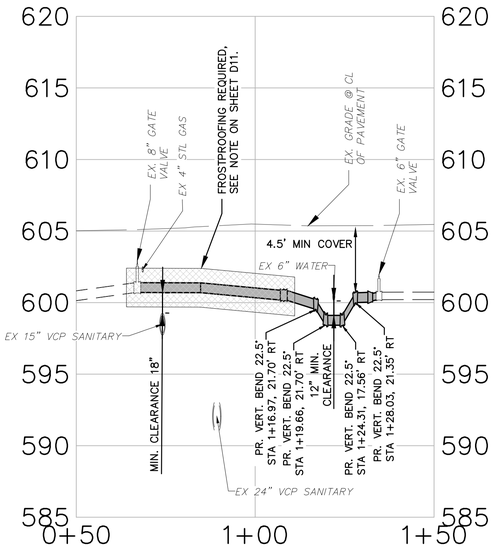
SCALE: 1" = 20'



SHERWOOD DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.



WOODSTOCK DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

CI 11044
RIM=604.60
INV=601.92 12" RCP NW
INV=601.90 12" PVC SE
BOTTOM=601.90

STMH 11108
RIM=605.14
INV=601.84 12" PVC E
INV=602.57 12" VCP W
INV=602.06 12" PVC NW

CI 11169
RIM=604.53
INV=602.53 12" RCP SE

SSMH 11291
RIM=604.69
INV=597.74 21" VCP NW
INV=597.74 15" VCP S
INV=597.75 12" VCP SE
INV=599.99 6" VCP E
INV=601.99 10" VCP NE
INV=600.16 6" VCP W

SSMH 11314
RIM=604.87
INV=590.97 24" VCP S
INV=590.85 24" VCP NW

CI 12633
RIM=604.78
INV=602.91 12" VCP NE
INV=603.23 4" VCP NW
INV=603.33 4" VCP SE (PLUGGED
BOTTOM=602.88

GENERAL NOTES:

1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM SHEET 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

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200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO KEVIN D. CODIN E-64062 REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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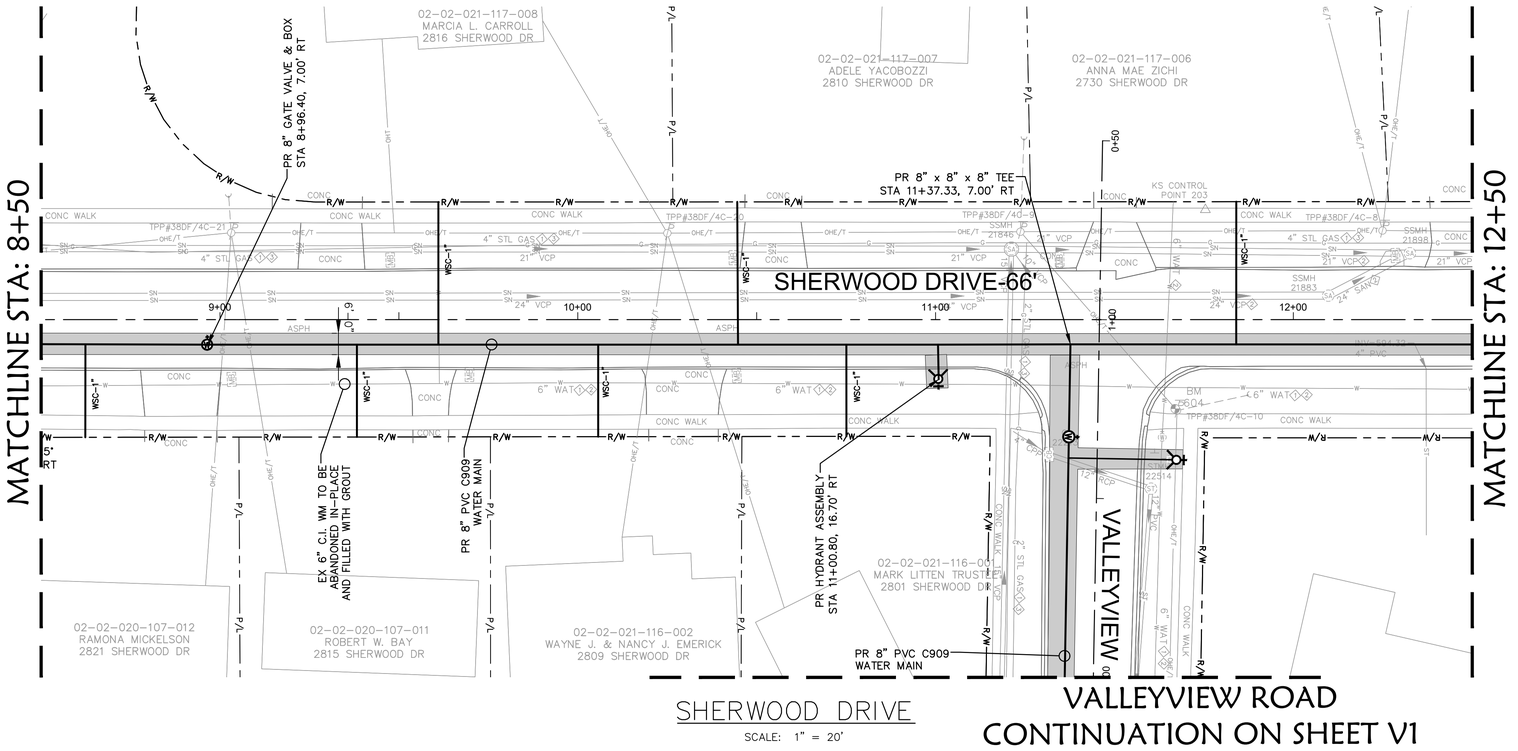
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OSBORN PROJ NO.	J20221302.000

SHERWOOD - PLAN & PROFILE 4+75 TO 8+50

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S2

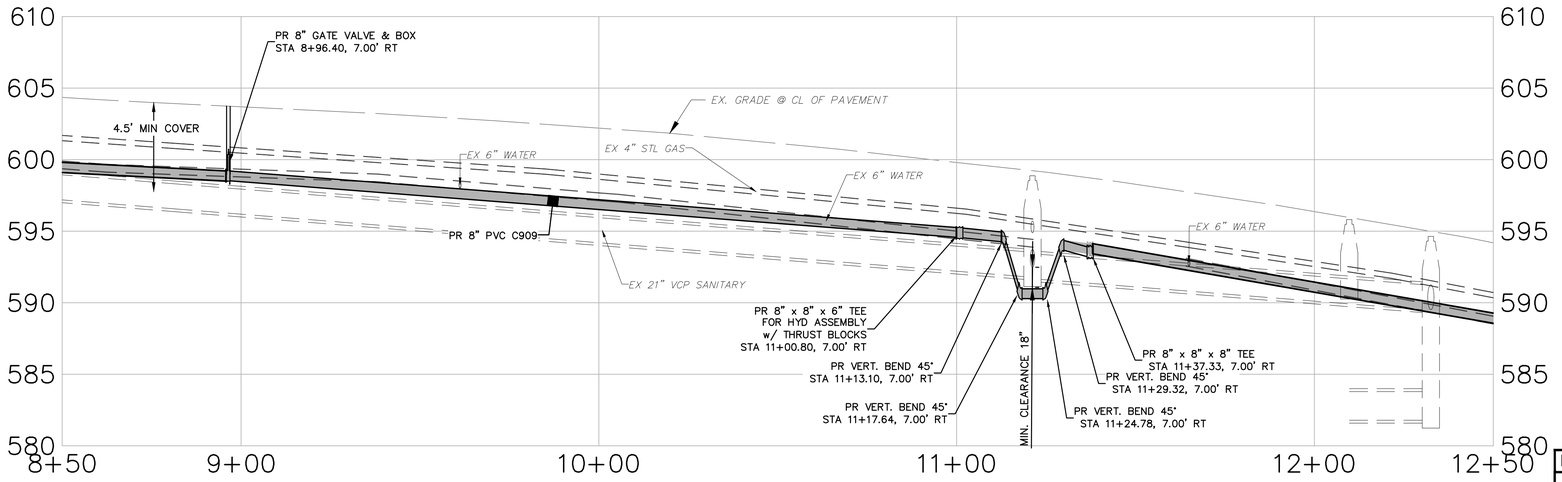
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SHERWOOD DRIVE

SCALE: 1" = 20'

VALLEYVIEW ROAD
CONTINUATION ON SHEET V1



SHERWOOD DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 21846
RIM=598.88
INV=591.68 21" VCP NW
INV=594.88 10" VCP NE
INV=592.48 15" VCP NE
INV=591.78 21" VCP SE

SSMH 21883
RIM=595.81
COULD NOT OPEN

SSMH 21898
RIM=594.64
COULD NOT OPEN

CI 22213
RIM=597.92
INV=596.07 12" RCP NW
INV=596.92 4" CPP S
BOTTOM=595.82

STMH 22514
RIM=598.48
INV=595.53 12" PVC NE
INV=595.68 12" RCP SE

GENERAL NOTES:

1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM SHEET 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. EXISTING PAVEMENT FOR VALLEYVIEW ROAD IS VARYING FROM SHEET 4.5" TO 5" ASPHALT PAVEMENT OVER VARYING 6" TO 7.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR TO POOR. REFER TO REPORT DATED FEBRUARY 2, 2024.
3. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
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(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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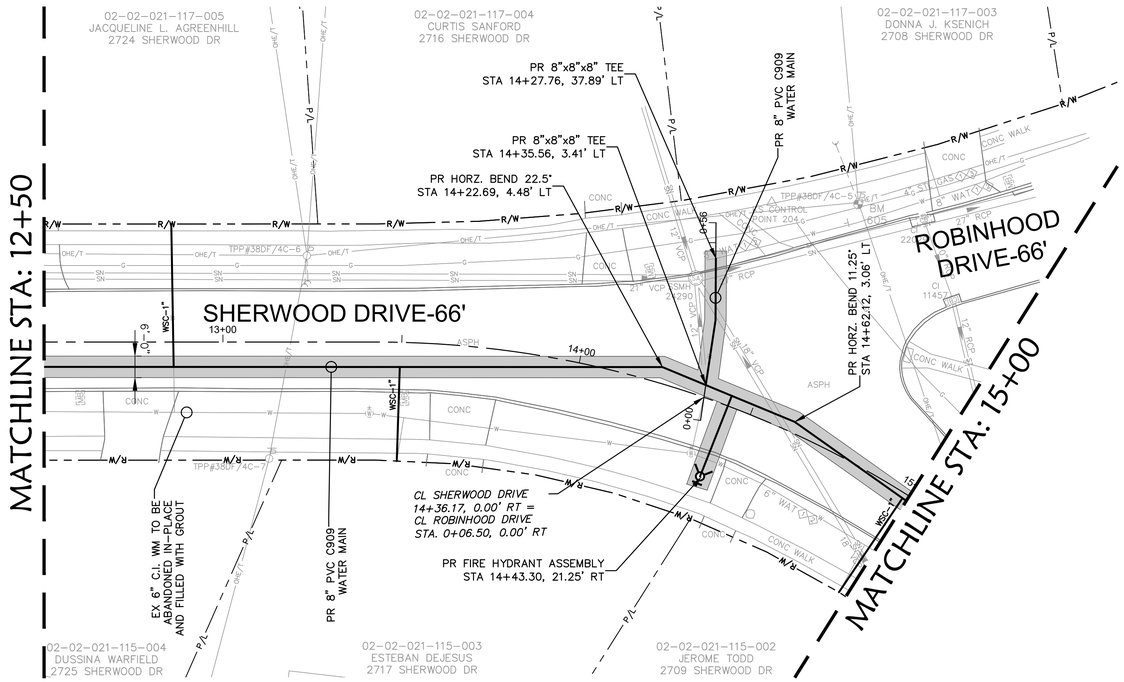
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SHERWOOD - PLAN & PROFILE 8+50 TO 12+50

DRAWING NO.

S3

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3/7/2025 5:52 PM Duffy, Alex



SHERWOOD DRIVE

SCALE: 1" = 20'

NORTH

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

STRUCTURE TABLE

CI 11457
RIM=585.42
INV=581.72 12" RCP NE
INV=581.72 10" RCP SW
BOTTOM=581.72

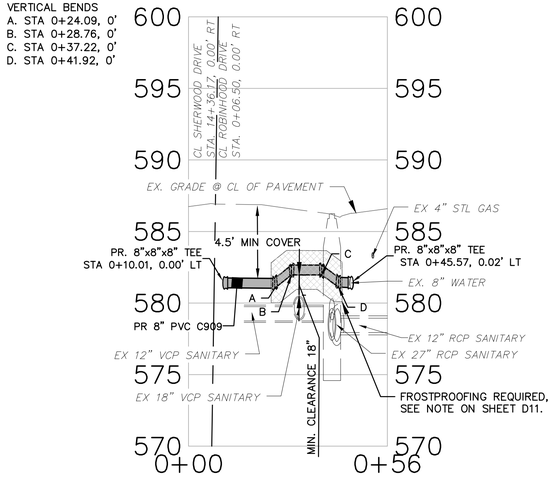
CI 22029
RIM=585.25
INV=582.05 10" RCP NE

SSMH 24290
RIM=586.15
INV=578.82 18" VCP NE
INV=578.75 12" VCP NE
INV=577.61 21" VCP SE
INV=578.94 12" VCP SW
INV=577.38 27" RCP NW

GENERAL NOTES:

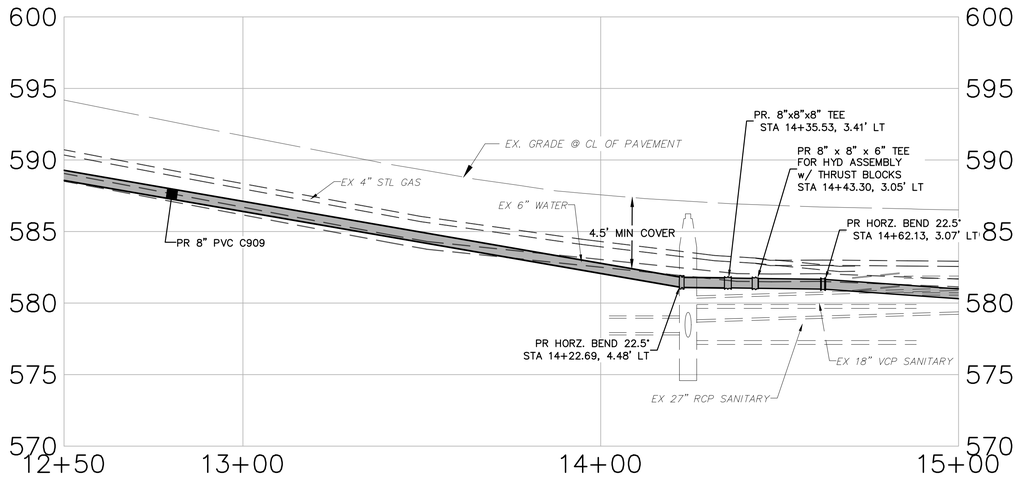
1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM SHEET 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

PR 8" – 11.25°
VERTICAL BENDS
A. STA 0+24.09, 0'
B. STA 0+28.76, 0'
C. STA 0+37.22, 0'
D. STA 0+41.92, 0'



ROBINHOOD DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



SHERWOOD DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)

1 inch = 5 ft.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64026
REGISTERED PROFESSIONAL ENGINEER

03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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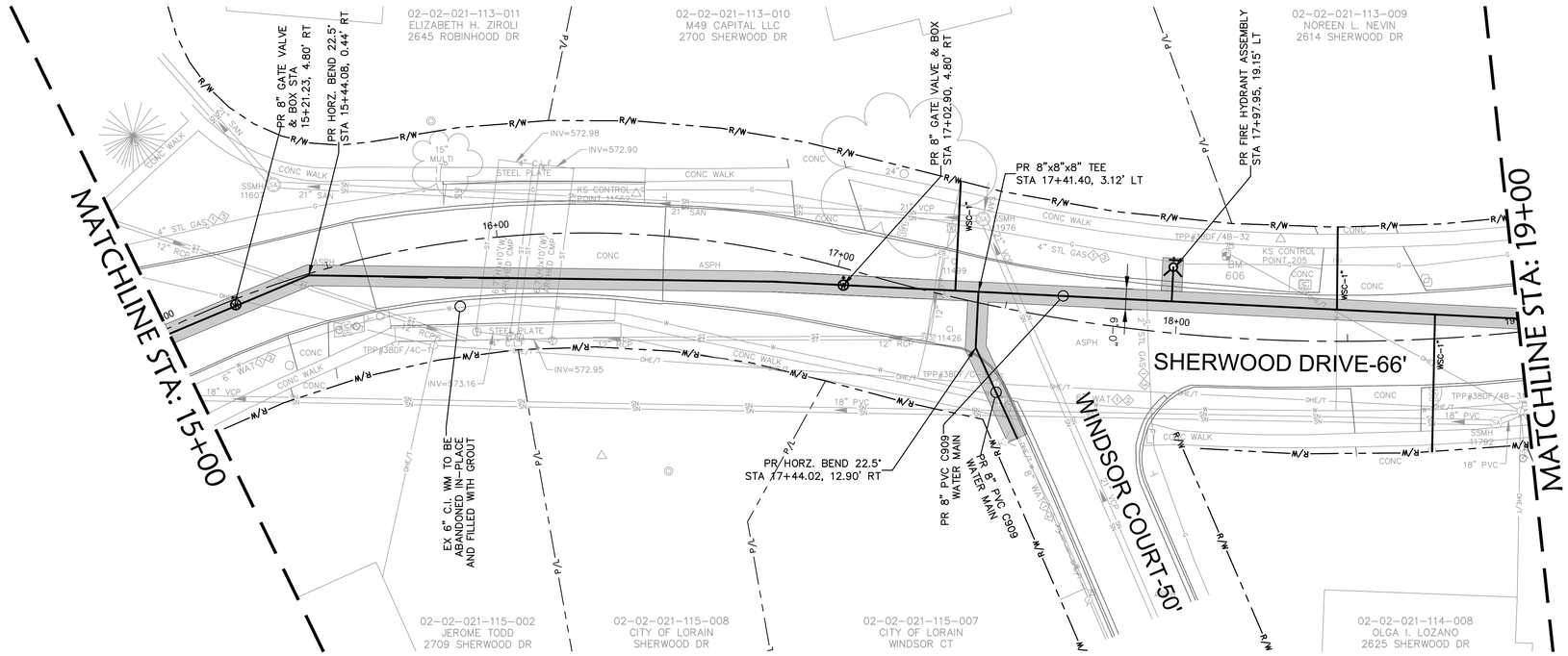
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CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

SHERWOOD - PLAN & PROFILE 12+50 TO 15+00

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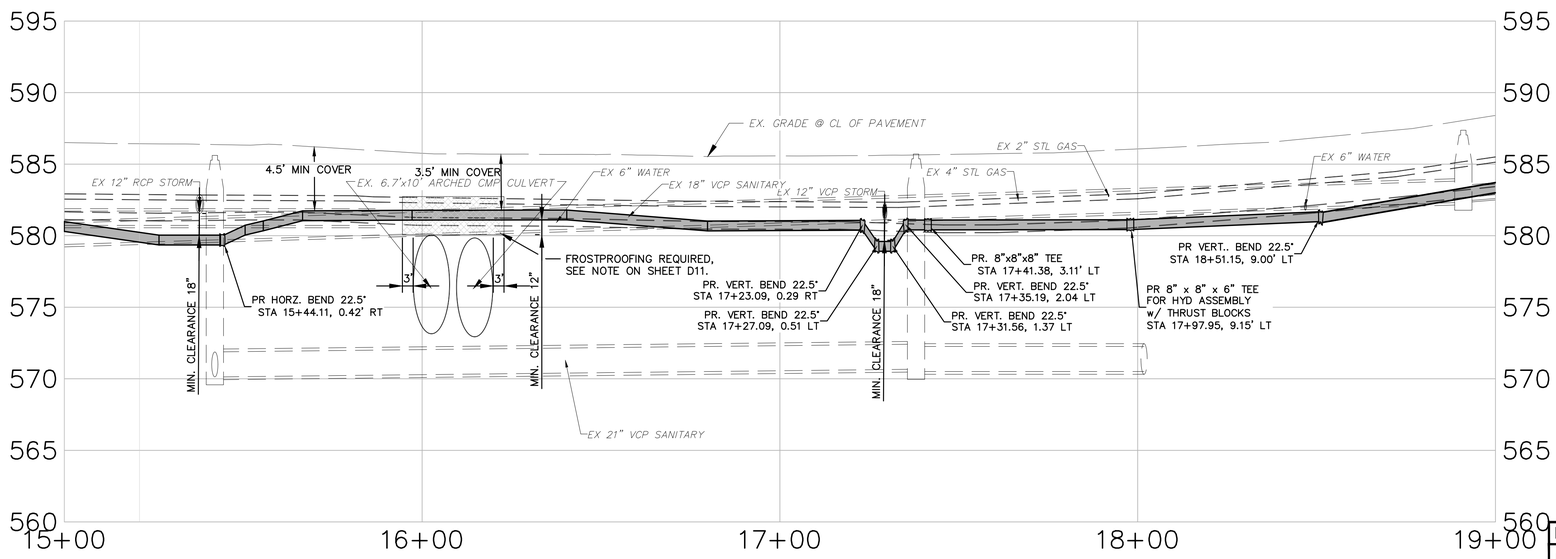
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SHERWOOD DRIVE

SCALE: 1" = 20'



SHERWOOD DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

CI 11426
RIM=584.78
INV=581.23 12" RCP S
INV=581.23 12" VCP NW

CI 11499
RIM=584.85
INV=581.61 12" RCP SE
BOTTOM=581.61

SSMH 11607
RIM=585.61
INV=570.13 21" SAN NE & SW

SSMH 11792
RIM=587.37
INV=582.42 18" PVC N
INV=582.33 18" PVC SW

SSMH 11976
RIM=585.71
INV=570.51 21" VCP E
INV=570.67 21" VCP SW
INV=572.81 SAN NW
(RECESSED)

GENERAL NOTES:

1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM SHEET 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. LIMITS OF SENDING/RECEIVING PITS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR ACTUAL LOCATION AND SIZING OF PITS. CONTRACTOR IS RESPONSIBLE FOR MODIFICATION OF RESTORATION LIMITS AND MOT.
4. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING LOCATION OF EXISTING UTILITIES AND COORDINATING WITH UTILITY OWNERS REGARDING TEMPORARY RELOCATION OR PROTECTION IN PLACE WITHIN LIMITS OR IN PROXIMITY OF SENDING/RECEIVING PITS.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-84026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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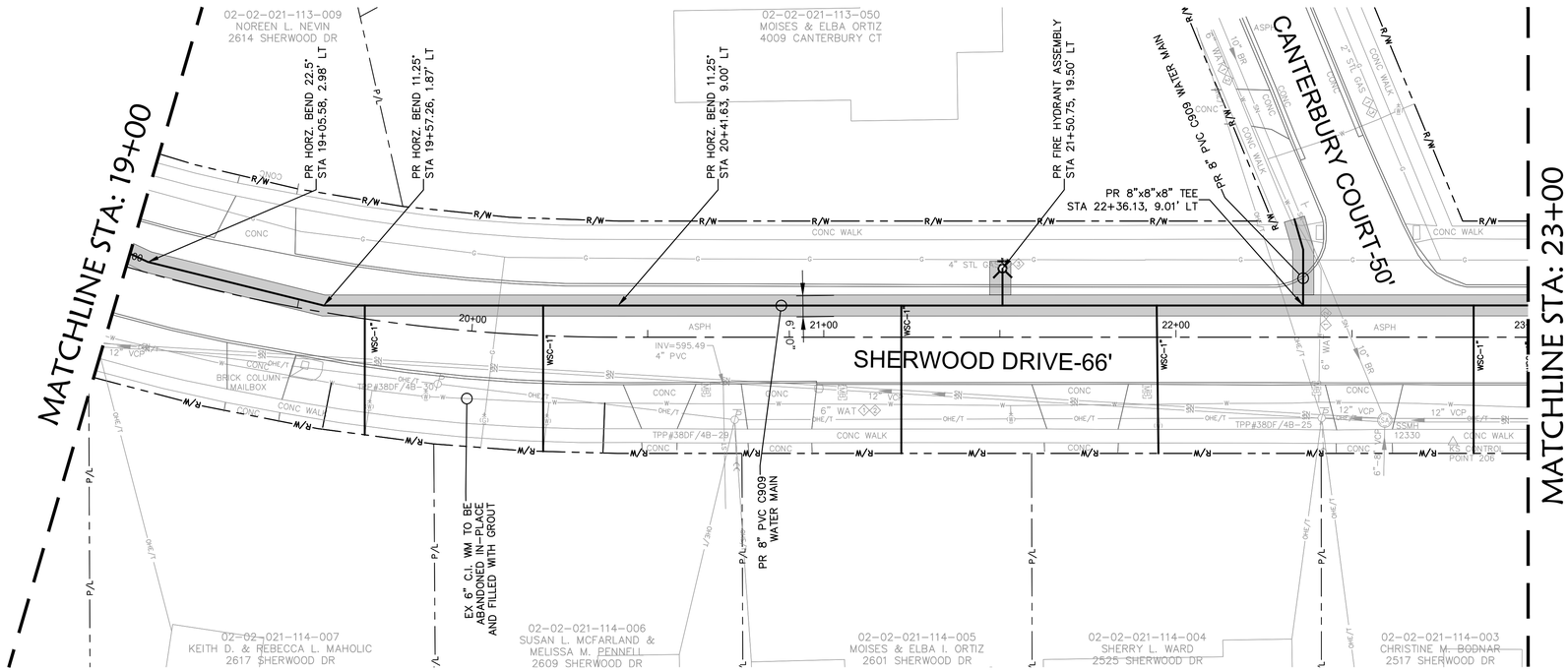
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CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

SHERWOOD - PLAN & PROFILE 15+00 TO 19+00

DRAWING NO.

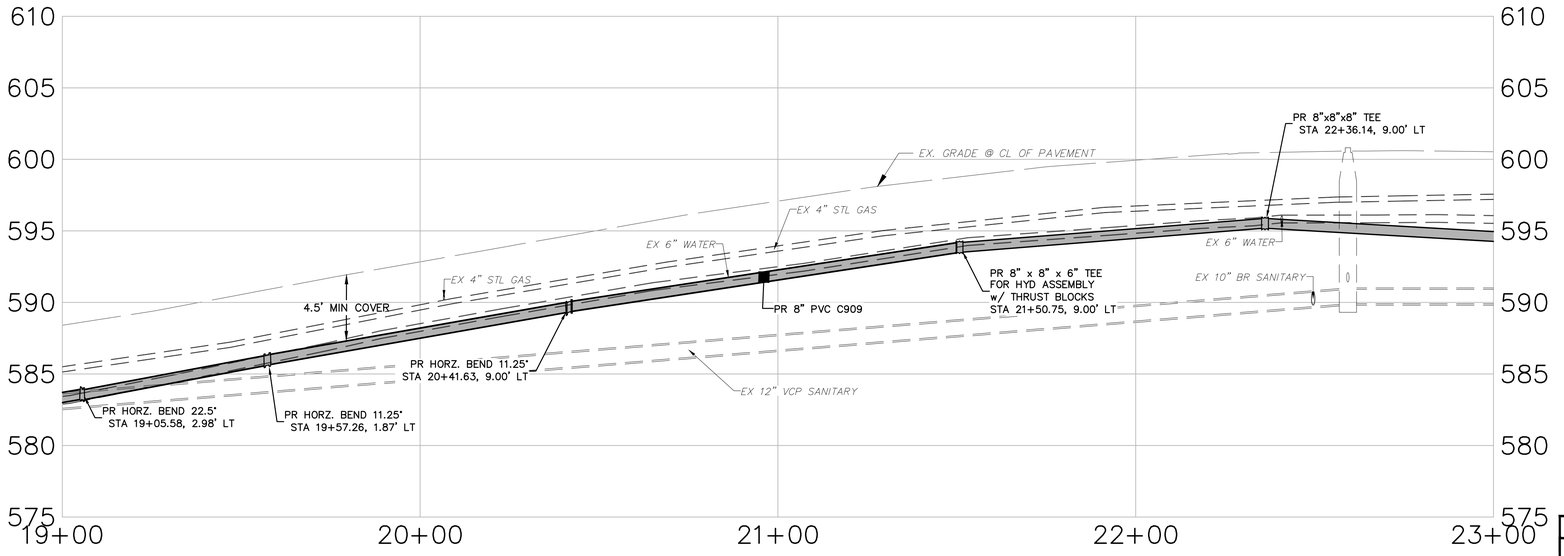
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3/7/2025 5:54 PM Duffy, Alex



SHERWOOD DRIVE

SCALE: 1" = 20'



SHERWOOD DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 12330
RIM=600.82
INV=589.91 12" VCP N
INV=589.91 12" VCP SW
INV=589.86 10" BR SW
(RECESSED)
INV=591.42 6"-8" VCP E

GENERAL NOTES:

1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM SHEET 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

CITY OF LORAIN
WATER MAIN REPLACEMENT PROGRAM PHASE 2

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REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
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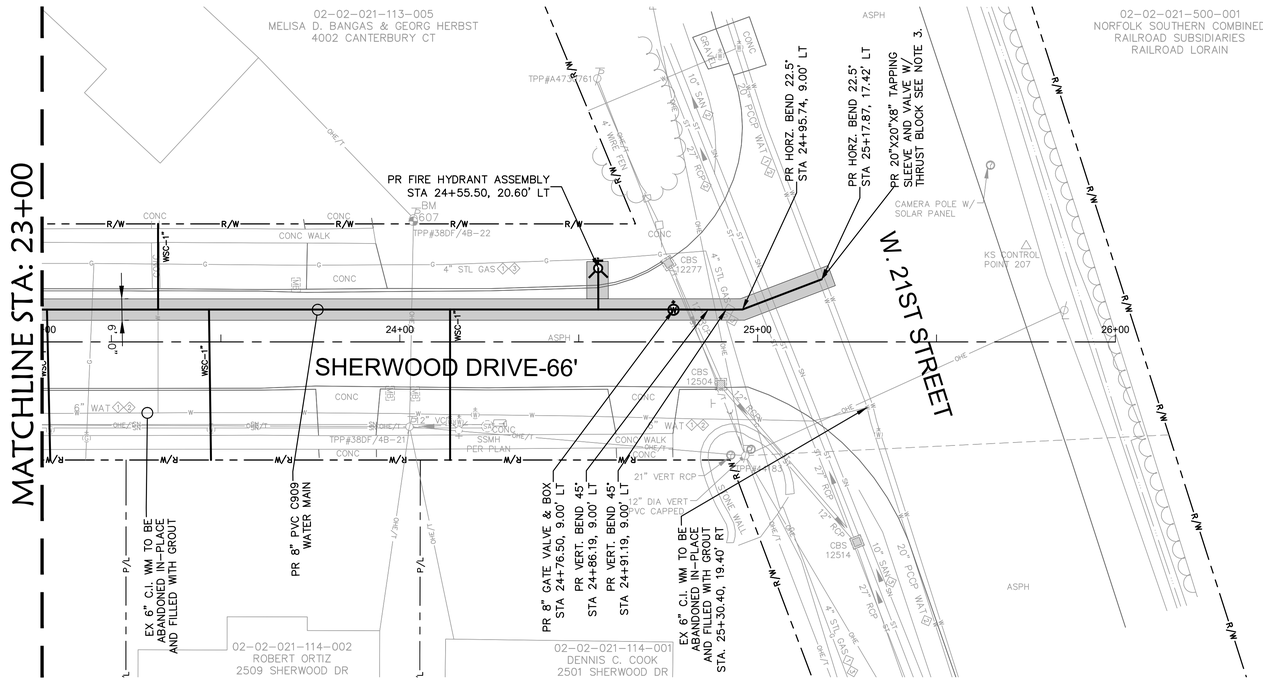
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SHERWOOD - PLAN & PROFILE 19+00 TO 23+00

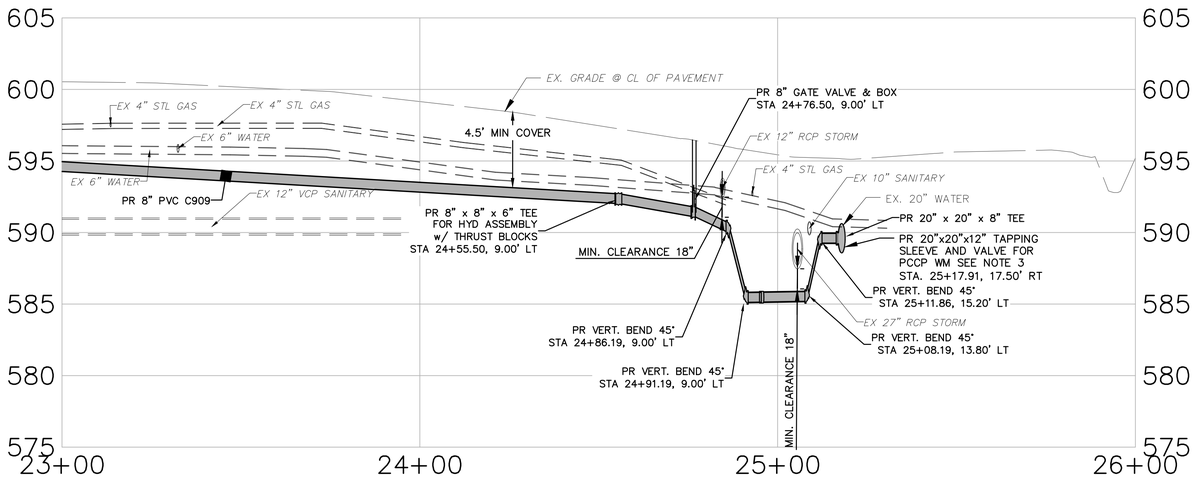
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SHERWOOD DRIVE

SCALE: 1" = 20'



SHERWOOD DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

CBS 12277
RIM=595.54
INV=593.49 12" RCP NE
BOTTOM=593.54
TOP OF WATER=593.84

CBS 12504
RIM=595.97
INV=591.32 12" RCP NE
(RECESSED)
INV=592.71 12" RCP SW
BOTTOM=591.32

CBS 12514
RIM=593.53
INV=587.73 27" RCP NE
INV=590.68 12" RCP SW
INV=587.73 27" RCP SW
BOTTOM=587.73

GENERAL NOTES:

1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM SHEET 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. TAPPING SLEEVE SHALL BE JCM 415, SMITH-BLAIR 625 OR APPROVED EQUAL. FURNISH AND INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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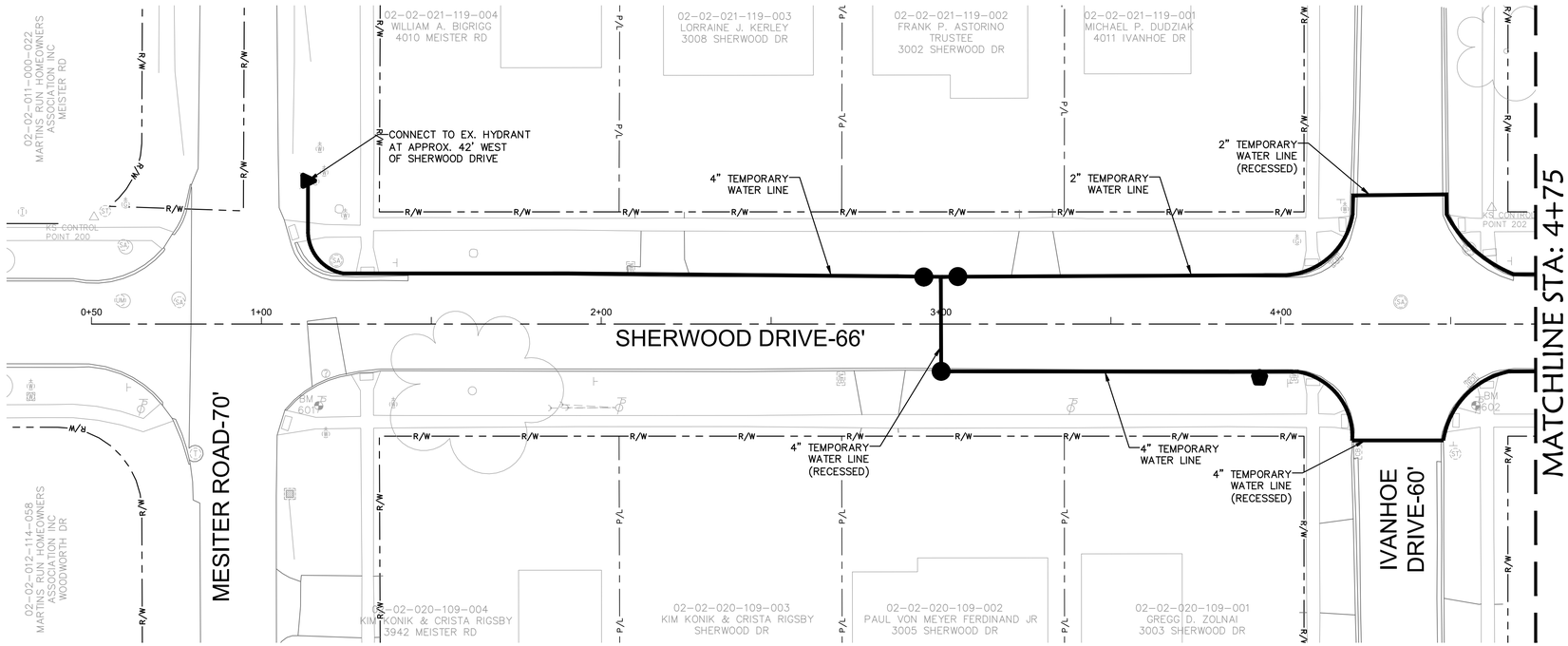
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CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

SHERWOOD - PLAN & PROFILE 23+00 TO 26+00

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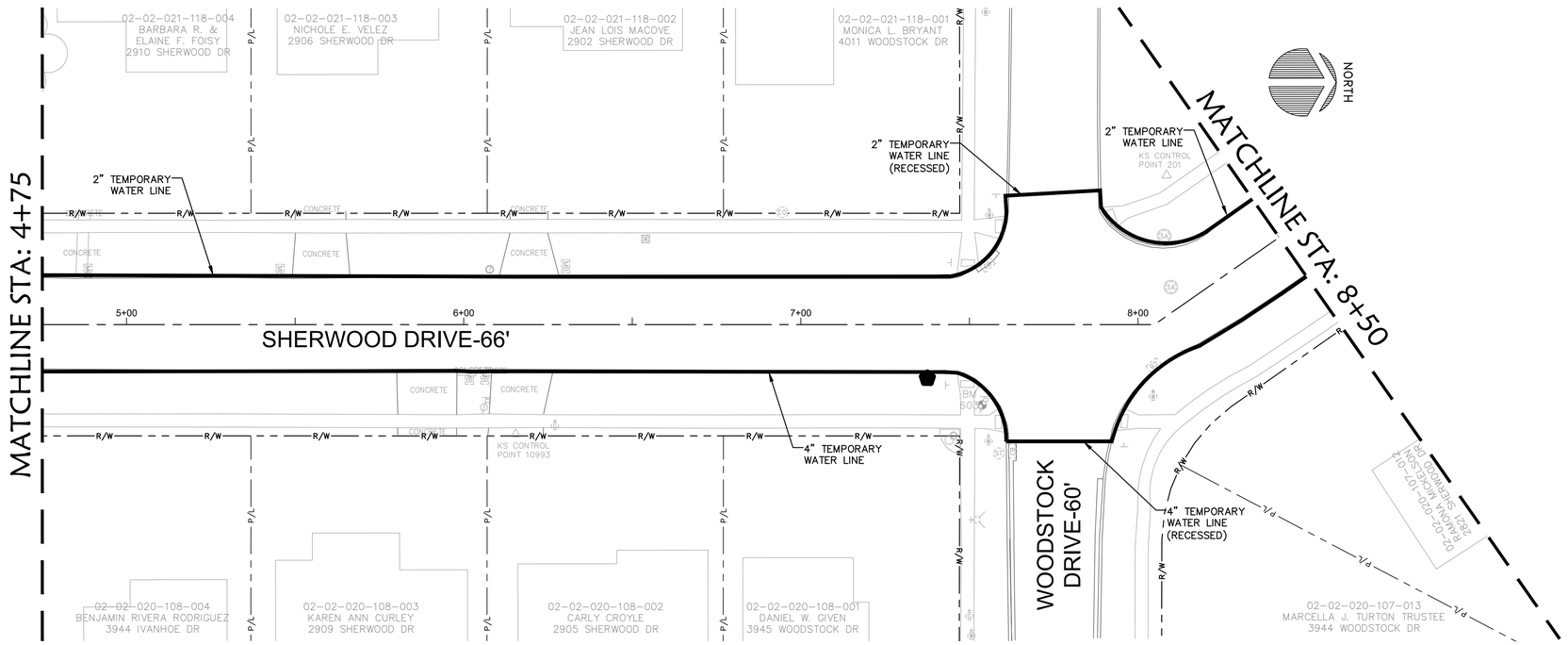
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3/7/2025 5:55 PM Duffy, Alex



SHERWOOD DRIVE – BYPASS PLAN

SCALE: 1" = 20'



SHERWOOD DRIVE – BYPASS PLAN

SCALE: 1" = 20'

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

GENERAL NOTES:

1. IF THIS ALTERNATE IS APPROVED, THE CONTRACTOR SHALL REPLACE THE EXISTING WATER MAIN AS SPECIFIED IN THESE DOCUMENTS, IN THE SAME LOCATION AS THE EXISTING WATER MAIN. THE CONTRACTOR IS RESPONSIBLE FOR MODIFICATIONS TO THE RESTORATION LIMITS AND MOT AS APPLICABLE.
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY WATER SERVICE IN ACCORDANCE WITH LWD REQUIREMENTS. THE CONTRACTOR SHALL USE THIS SCHEMATIC PLAN AS A GUIDE AND WILL BE PERMITTED TO ADJUST OR MODIFY AS APPROVED BY THE ENGINEER.
3. THE CONTRACTOR SHALL ADJUST OR MODIFY THIS PLAN AS DIRECTED BY THE ENGINEER, CITY, OR FIRE DEPARTMENT AS REQUESTED TO PROVIDE ADEQUATE WATER AND FIRE SERVICE WITHIN THE PROJECT LIMITS AT NO ADDITIONAL COST TO THE CITY.
4. THE CONTRACTOR SHALL INSTALL TEMPORARY HYDRANTS PER THE LWD DETAILS AT OR NEAR THE EXISTING HYDRANTS ALONG SHERWOOD ROAD OR AS DIRECTED BY THE ENGINEER OR CITY.
5. THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER SERVICE CONNECTIONS TO ALL RESIDENCES UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
6. THE CONTRACTOR MAY BE REQUIRED TO INCREASE PIPING SIZE OR ADD ADDITIONAL CROSSINGS TO MAINTAIN THE REQUIRED FLOW AND PRESSURE TO THE SYSTEM AT NO ADDITIONAL COST TO THE CITY OR PROJECT.

LEGEND

- TEMPORARY HYDRANT
- FEED HYDRANT
- TEMPORARY VALVE (2"/4")
- BYPASS PIPE (2"/4")

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CORN
E-64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
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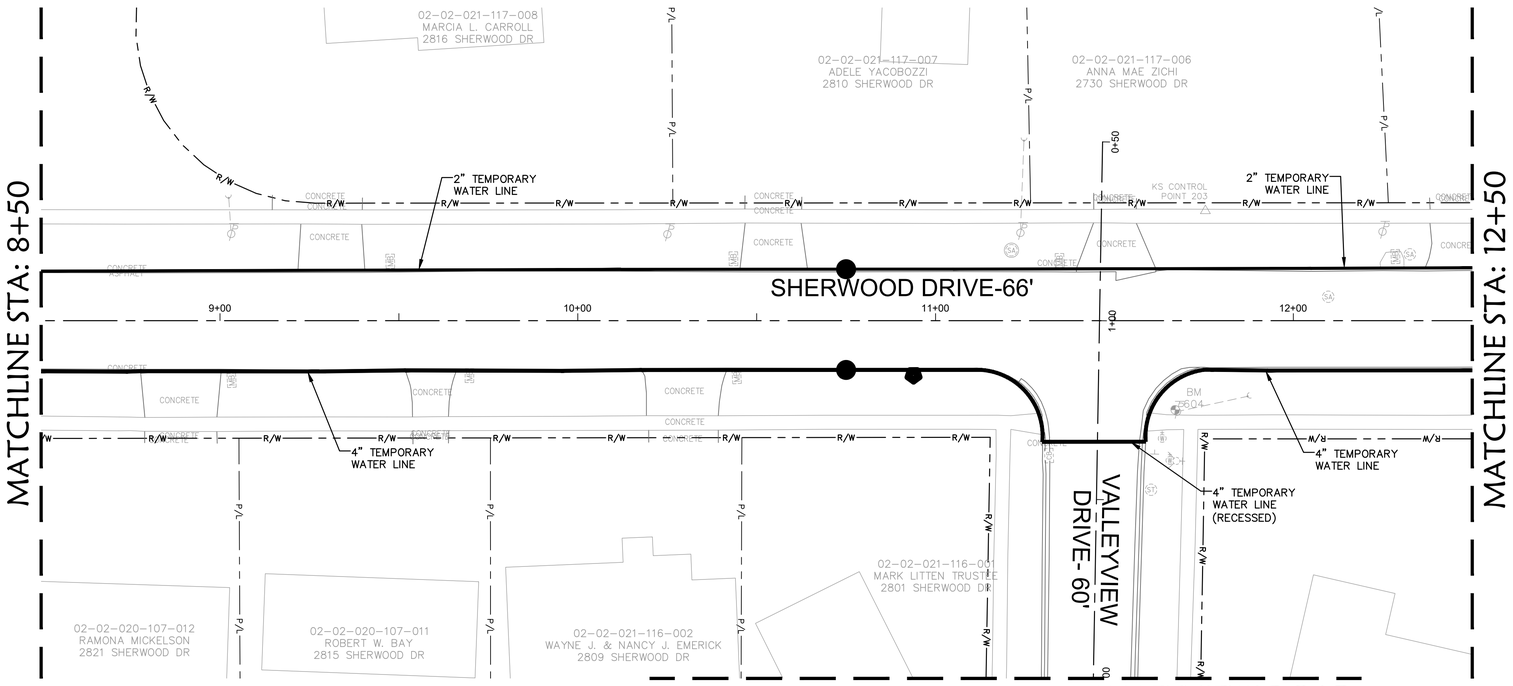
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SHERWOOD - ADD ALTERNATE BYPASS PLAN

DRAWING NO.
S8

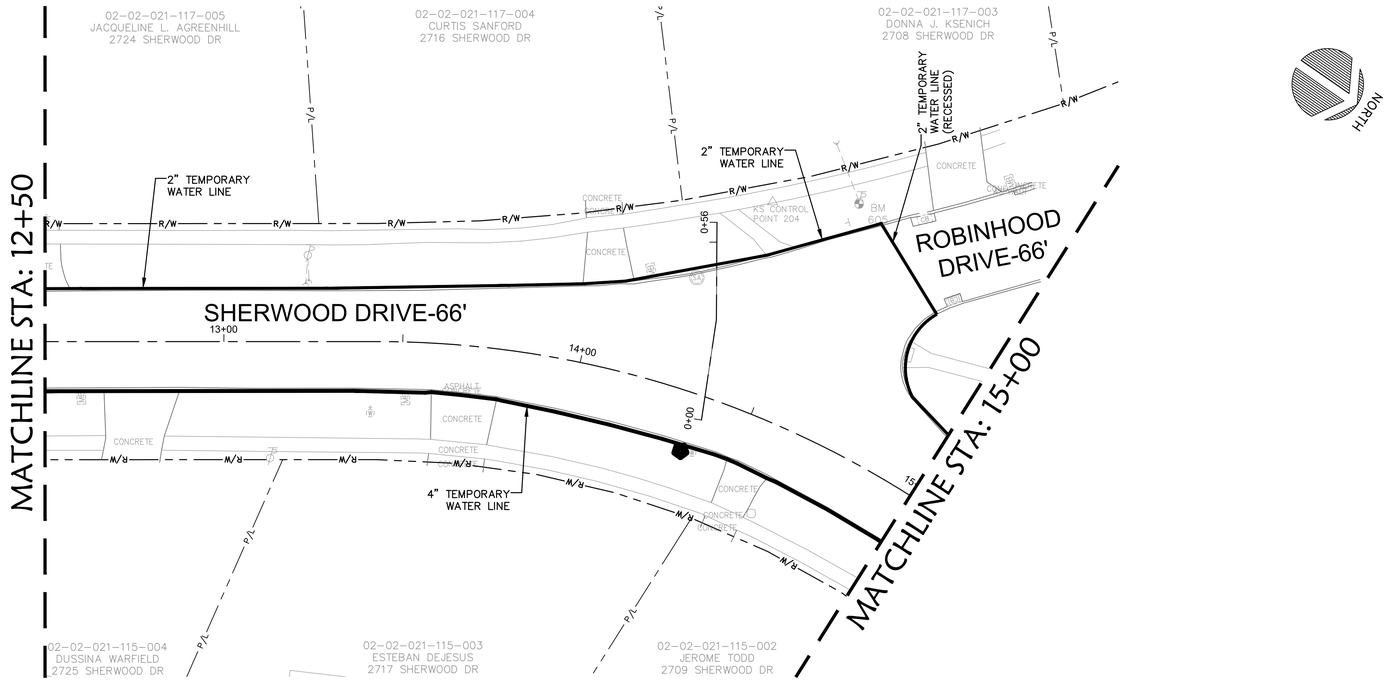
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3/7/2025 4:53 PM Pawar, Sayali



SHERWOOD DRIVE – BYPASS PLAN

SCALE: 1" = 20'

VALLEYVIEW ROAD
CONTINUATION ON SHEET V6



SHERWOOD DRIVE – BYPASS PLAN

SCALE: 1" = 20'

NORTH

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

GENERAL NOTES:

1. IF THIS ALTERNATE IS APPROVED, THE CONTRACTOR SHALL REPLACE THE EXISTING WATER MAIN AS SPECIFIED IN THESE DOCUMENTS, IN THE SAME LOCATION AS THE EXISTING WATER MAIN. THE CONTRACTOR IS RESPONSIBLE FOR MODIFICATIONS TO THE RESTORATION LIMITS AND MOT AS APPLICABLE.
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY WATER SERVICE IN ACCORDANCE WITH LWD REQUIREMENTS. THE CONTRACTOR SHALL USE THIS SCHEMATIC PLAN AS A GUIDE AND WILL BE PERMITTED TO ADJUST OR MODIFY AS APPROVED BY THE ENGINEER.
3. THE CONTRACTOR SHALL ADJUST OR MODIFY THIS PLAN AS DIRECTED BY THE ENGINEER, CITY, OR FIRE DEPARTMENT AS REQUESTED TO PROVIDE ADEQUATE WATER AND FIRE SERVICE WITHIN THE PROJECT LIMITS AT NO ADDITIONAL COST TO THE CITY.
4. THE CONTRACTOR SHALL INSTALL TEMPORARY HYDRANTS PER THE LWD DETAILS AT OR NEAR THE EXISTING HYDRANTS ALONG SHERWOOD ROAD OR AS DIRECTED BY THE ENGINEER OR CITY.
5. THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER SERVICE CONNECTIONS TO ALL RESIDENCES UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
6. THE CONTRACTOR MAY BE REQUIRED TO INCREASE PIPING SIZE OR ADD ADDITIONAL CROSSINGS TO MAINTAIN THE REQUIRED FLOW AND PRESSURE TO THE SYSTEM AT NO ADDITIONAL COST TO THE CITY OR PROJECT.

LEGEND

- TEMPORARY HYDRANT
- FEED HYDRANT
- TEMPORARY VALVE (2"/4")
- BYPASS PIPE (2"/4")

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

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STATE OF OHIO
KEVIN D. CODIN
64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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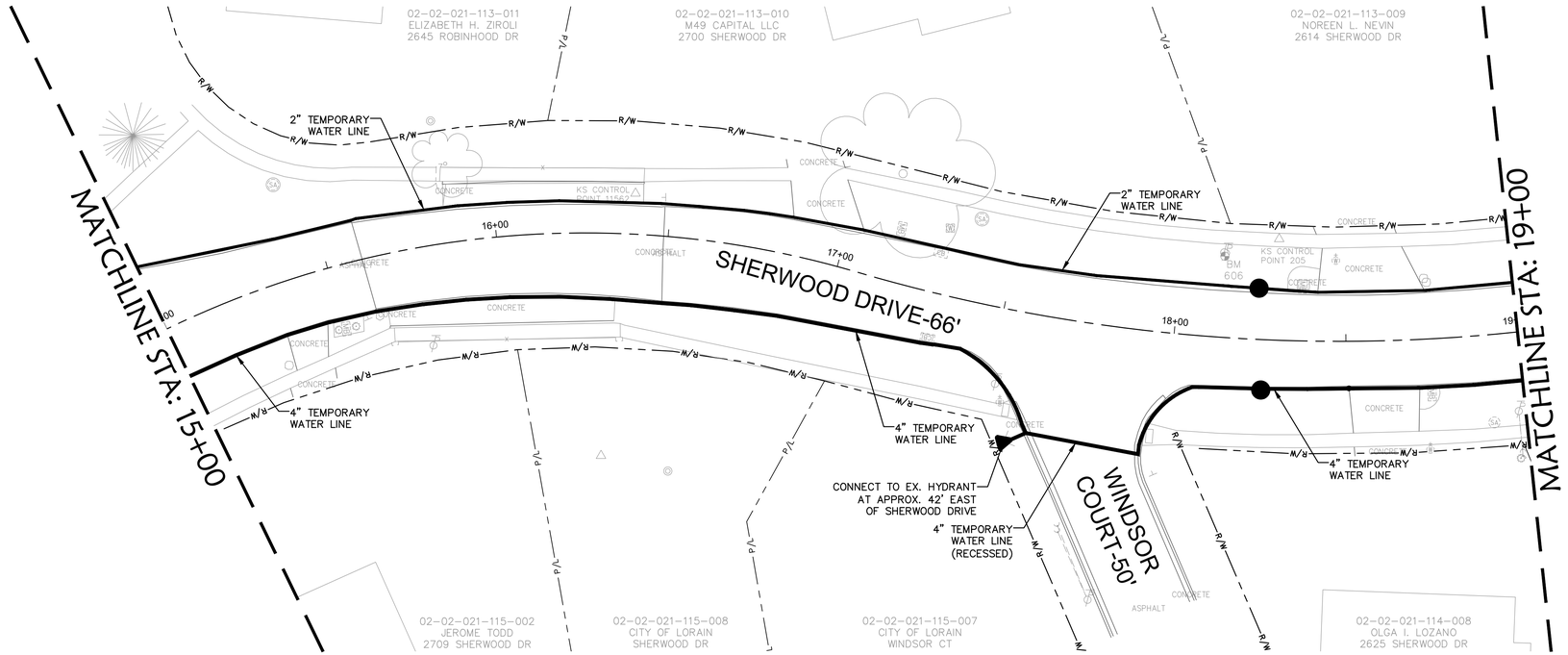
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SHERWOOD - ADD ALTERNATE BYPASS PLAN

DRAWING NO.

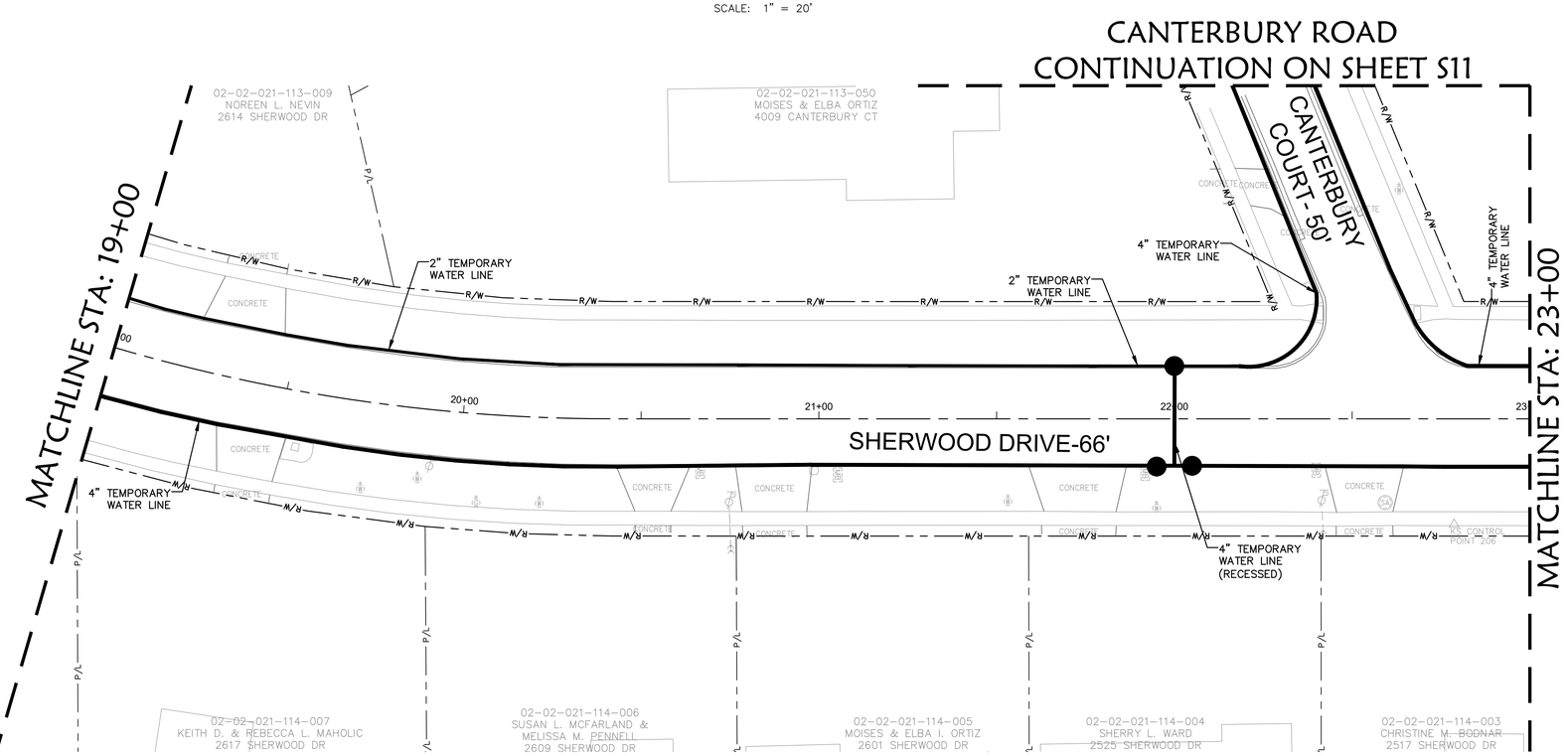
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SHERWOOD DRIVE – BYPASS PLAN

SCALE: 1" = 20'



SHERWOOD DRIVE – BYPASS PLAN

SCALE: 1" = 20'

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

GENERAL NOTES:

1. IF THIS ALTERNATE IS APPROVED, THE CONTRACTOR SHALL REPLACE THE EXISTING WATER MAIN AS SPECIFIED IN THESE DOCUMENTS, IN THE SAME LOCATION AS THE EXISTING WATER MAIN. THE CONTRACTOR IS RESPONSIBLE FOR MODIFICATIONS TO THE RESTORATION LIMITS AND MOT AS APPLICABLE.
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY WATER SERVICE IN ACCORDANCE WITH LWD REQUIREMENTS. THE CONTRACTOR SHALL USE THIS SCHEMATIC PLAN AS A GUIDE AND WILL BE PERMITTED TO ADJUST OR MODIFY AS APPROVED BY THE ENGINEER.
3. THE CONTRACTOR SHALL ADJUST OR MODIFY THIS PLAN AS DIRECTED BY THE ENGINEER, CITY, OR FIRE DEPARTMENT AS REQUESTED TO PROVIDE ADEQUATE WATER AND FIRE SERVICE WITHIN THE PROJECT LIMITS AT NO ADDITIONAL COST TO THE CITY.
4. THE CONTRACTOR SHALL INSTALL TEMPORARY HYDRANTS PER THE LWD DETAILS AT OR NEAR THE EXISTING HYDRANTS ALONG SHERWOOD ROAD OR AS DIRECTED BY THE ENGINEER OR CITY.
5. THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER SERVICE CONNECTIONS TO ALL RESIDENCES UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
6. THE CONTRACTOR MAY BE REQUIRED TO INCREASE PIPING SIZE OR ADD ADDITIONAL CROSSINGS TO MAINTAIN THE REQUIRED FLOW AND PRESSURE TO THE SYSTEM AT NO ADDITIONAL COST TO THE CITY OR PROJECT.

LEGEND

- TEMPORARY HYDRANT
- FEED HYDRANT
- TEMPORARY VALVE (2"/4")
- BYPASS PIPE (2"/4")

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TAG	ISSUED	DATE
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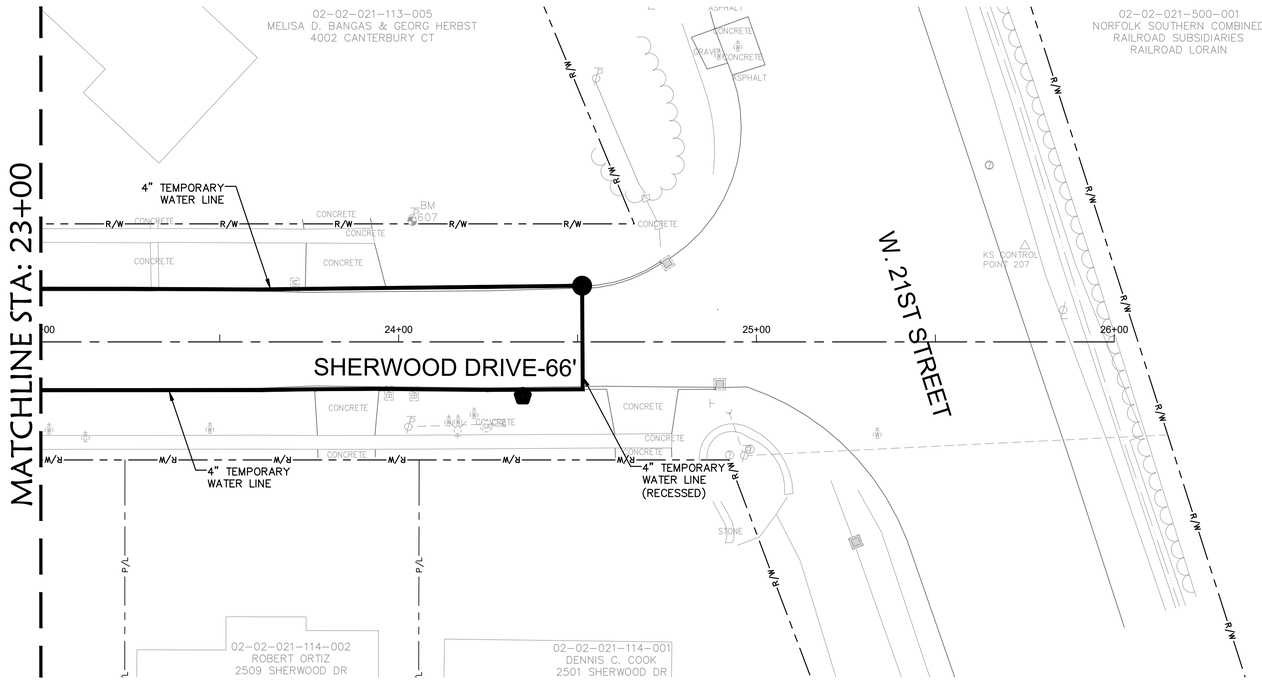
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CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

SHERWOOD - ADD ALTERNATE BYPASS PLAN

DRAWING NO.

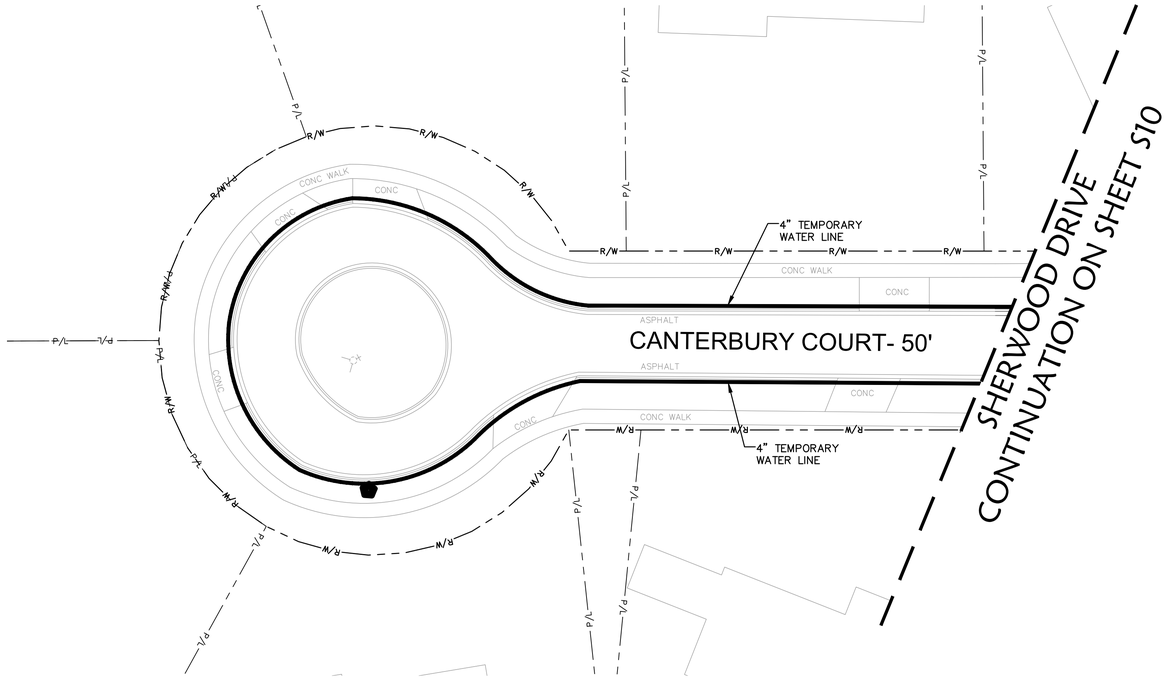
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3/7/2025 4:54 PM Pawar, Sayali



SHERWOOD DRIVE – BYPASS PLAN

SCALE: 1" = 20'



CANTERBURY COURT – BYPASS PLAN

SCALE: 1" = 20'

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

GENERAL NOTES:

1. IF THIS ALTERNATE IS APPROVED, THE CONTRACTOR SHALL REPLACE THE EXISTING WATER MAIN AS SPECIFIED IN THESE DOCUMENTS, IN THE SAME LOCATION AS THE EXISTING WATER MAIN. THE CONTRACTOR IS RESPONSIBLE FOR MODIFICATIONS TO THE RESTORATION LIMITS AND MOT AS APPLICABLE.
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY WATER SERVICE IN ACCORDANCE WITH LWD REQUIREMENTS. THE CONTRACTOR SHALL USE THIS SCHEMATIC PLAN AS A GUIDE AND WILL BE PERMITTED TO ADJUST OR MODIFY AS APPROVED BY THE ENGINEER.
3. THE CONTRACTOR SHALL ADJUST OR MODIFY THIS PLAN AS DIRECTED BY THE ENGINEER, CITY, OR FIRE DEPARTMENT AS REQUESTED TO PROVIDE ADEQUATE WATER AND FIRE SERVICE WITHIN THE PROJECT LIMITS AT NO ADDITIONAL COST TO THE CITY.
4. THE CONTRACTOR SHALL INSTALL TEMPORARY HYDRANTS PER THE LWD DETAILS AT OR NEAR THE EXISTING HYDRANTS ALONG SHERWOOD ROAD AND CANTERBURY COURT OR AS DIRECTED BY THE ENGINEER OR CITY.
5. THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER SERVICE CONNECTIONS TO ALL RESIDENCES UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
6. THE CONTRACTOR MAY BE REQUIRED TO INCREASE PIPING SIZE OR ADD ADDITIONAL CROSSINGS TO MAINTAIN THE REQUIRED FLOW AND PRESSURE TO THE SYSTEM AT NO ADDITIONAL COST TO THE CITY OR PROJECT.

LEGEND

- TEMPORARY HYDRANT
- FEED HYDRANT
- TEMPORARY VALVE (2"/4")
- BYPASS PIPE (2"/4")

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

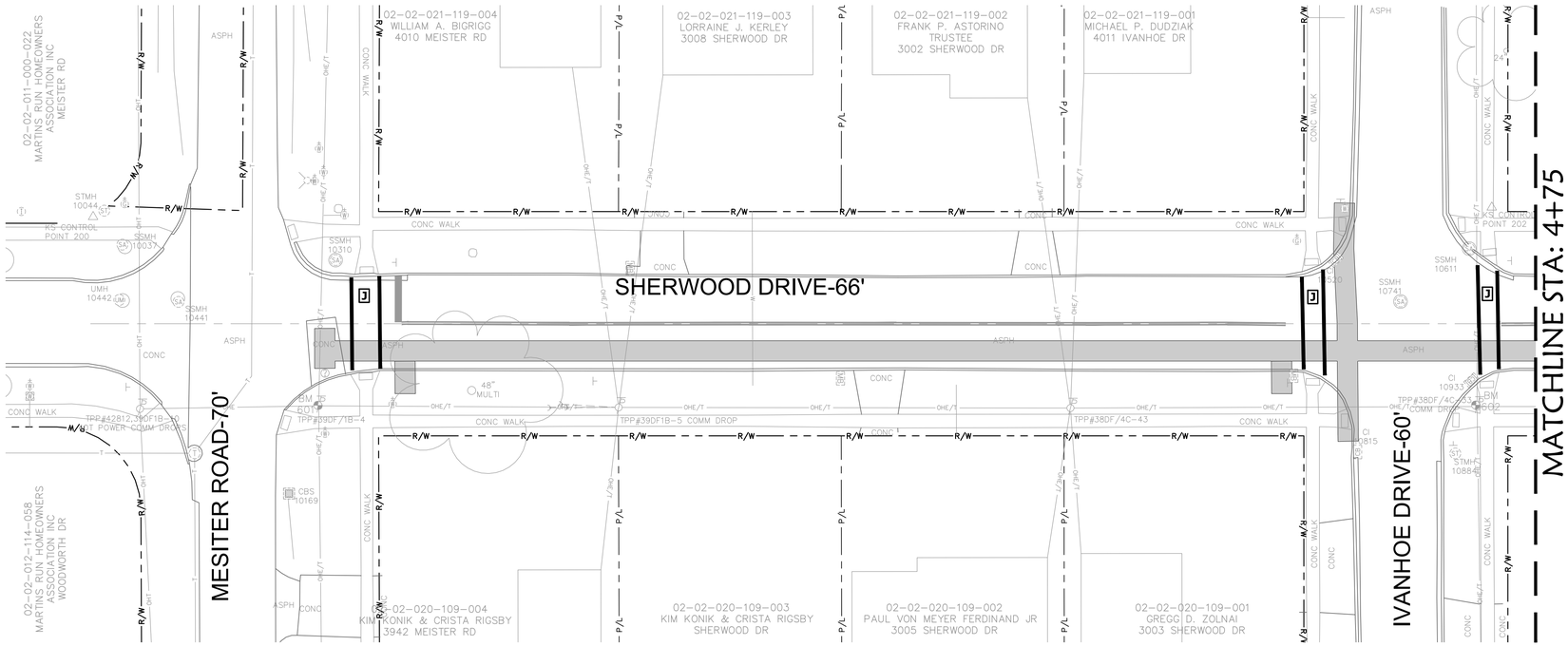
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OSBORN PROJ NO.	J20221302.000

SHERWOOD - ADD ALTERNATE BYPASS PLAN

DRAWING NO.
S11

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3/7/2025 4:54 PM Pawar, Sayali



NORTH

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

NOTES

1. *THIS PAVEMENT STRIPING RESTORATION PLAN AS DEVELOPED BY THE ENGINEER IS TO BE USED AS A GUIDELINE FOR THE CONTRACTOR.*
2. *DISTANCE BETWEEN PAVEMENT LINES SHOULD BE MEASURED FROM THE NEAREST CURB TO THE ROADWAY CENTERLINE.*
3. *ALL PERMANENT MARKINGS ON ASPHALT PAVEMENT SHALL BE THERMOPLASTIC PAINT PER CITY OF LORAIN TRAFFIC STANDARDS.*
4. *ALL PERMANENT MARKINGS ON CONCRETE AND/OR BRICK PAVEMENT SHALL BE EPOXY PAINT PER CITY OF LORAIN TRAFFIC STANDARDS.*
5. *ALL PAVEMENT MARKINGS SHALL CONFORM TO THE CITY OF LORAIN TRAFFIC STANDARDS AND ODOT ITEM 640.*
6. *FOR ADDITIONAL INFORMATION ON PAVEMENT MARKINGS, REFER TO "PART 3 - MARKINGS" OF OMUTCD (2012 EDITION) AND "PART 3 - MARKINGS" OF ODOT TRAFFIC ENGINEERING MANUAL (ITEM - JANUARY 2024 REVISION).*

CODED NOTES

X	NAME	COLOR	WIDTH
A	EDGE LINE	WHITE	4"
B	CENTER LINE - SOLID, DOUBLE	YELLOW	4"
C	CENTER LINE - SOLID/DASHED COMBO, DOUBLE	YELLOW	4"
D	CHANNELIZING LINE	WHITE	8"
E	LANE LINE - DOTTED	WHITE	4" **
F	TRANSVERSE LINE	YELLOW	24"
G	TRANSVERSE LINE	WHITE	24" *
H	STOP BAR	WHITE	24"
I	CROSSWALK W/ LADDER	WHITE	24" ***
J	CROSSWALK W/O LADDER	WHITE	12"
K	THROUGH ARROW	WHITE	N/A
L	TURNING ARROW (L)	WHITE	N/A
M	TURNING ARROW (R)	WHITE	N/A
N	TURNING AND THROUGH ARROW (L)	WHITE	N/A
O	BICYCLE SYMBOL	WHITE	N/A

* - at 10' centers
** - 3' long, 9' gaps
*** - 24" wide steps w/ 24" gaps

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

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STATE OF OHIO
KEVIN R. COBN
64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

SHERWOOD - PAVEMENT MARKING 1

DRAWING NO.

S12

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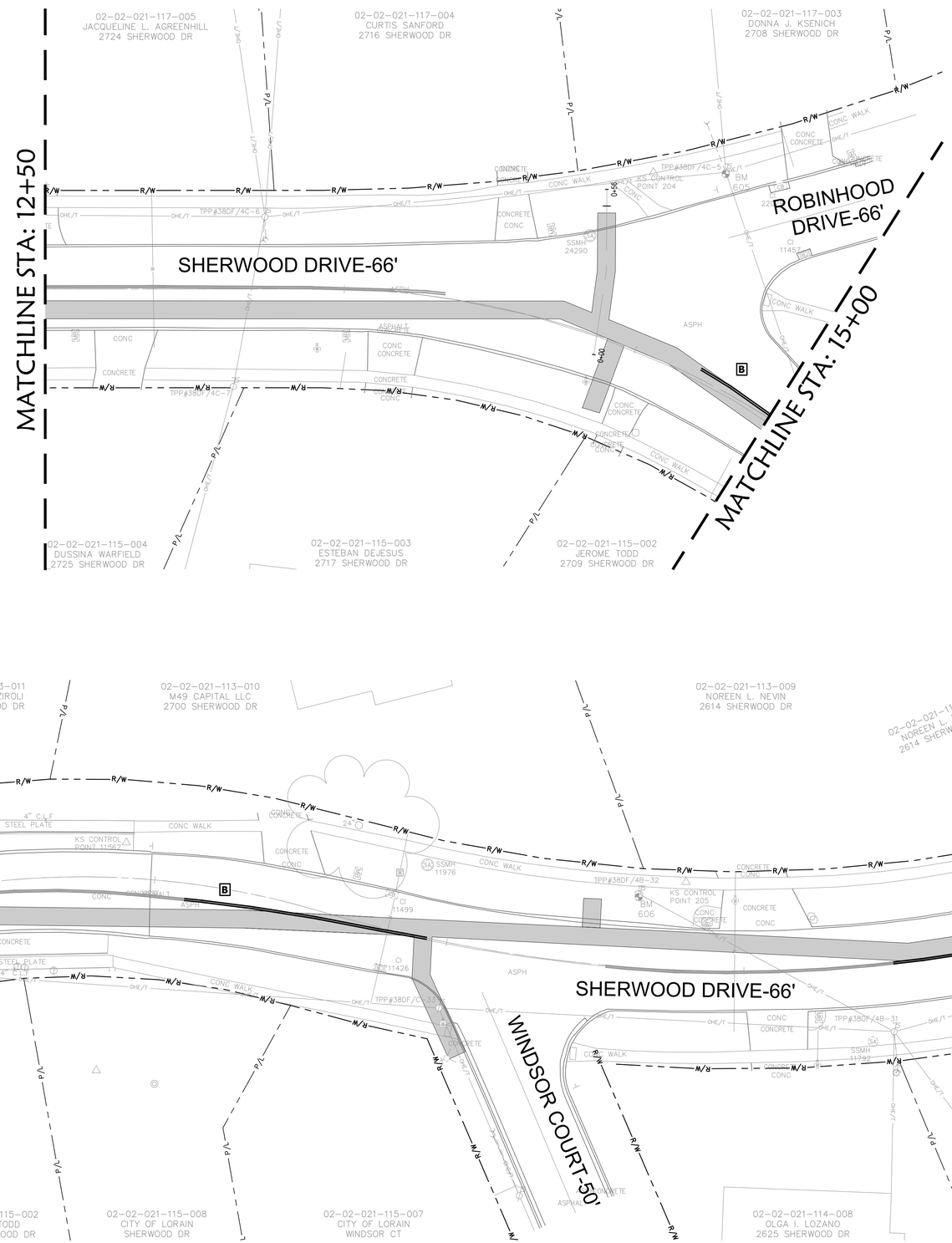
NOTES

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CODED NOTES

X	NAME	COLOR	WIDTH
A	EDGE LINE	WHITE	4"
B	CENTER LINE - SOLID, DOUBLE	YELLOW	4"
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D	CHANNELIZING LINE	WHITE	8"
E	LANE LINE - DOTTED	WHITE	4" **
F	TRANSVERSE LINE	YELLOW	24"
G	TRANSVERSE LINE	WHITE	24" *
H	STOP BAR	WHITE	24"
I	CROSSWALK W/ LADDER	WHITE	24" ***
J	CROSSWALK W/O LADDER	WHITE	12"
K	THROUGH ARROW	WHITE	N/A
L	TURNING ARROW (L)	WHITE	N/A
M	TURNING ARROW (R)	WHITE	N/A
N	TURNING AND THROUGH ARROW (L)	WHITE	N/A
O	BICYCLE SYMBOL	WHITE	N/A

** - at 10' centers*
*** - 3' long, 9' gaps*
**** - 24" wide steps w/ 24" gaps*



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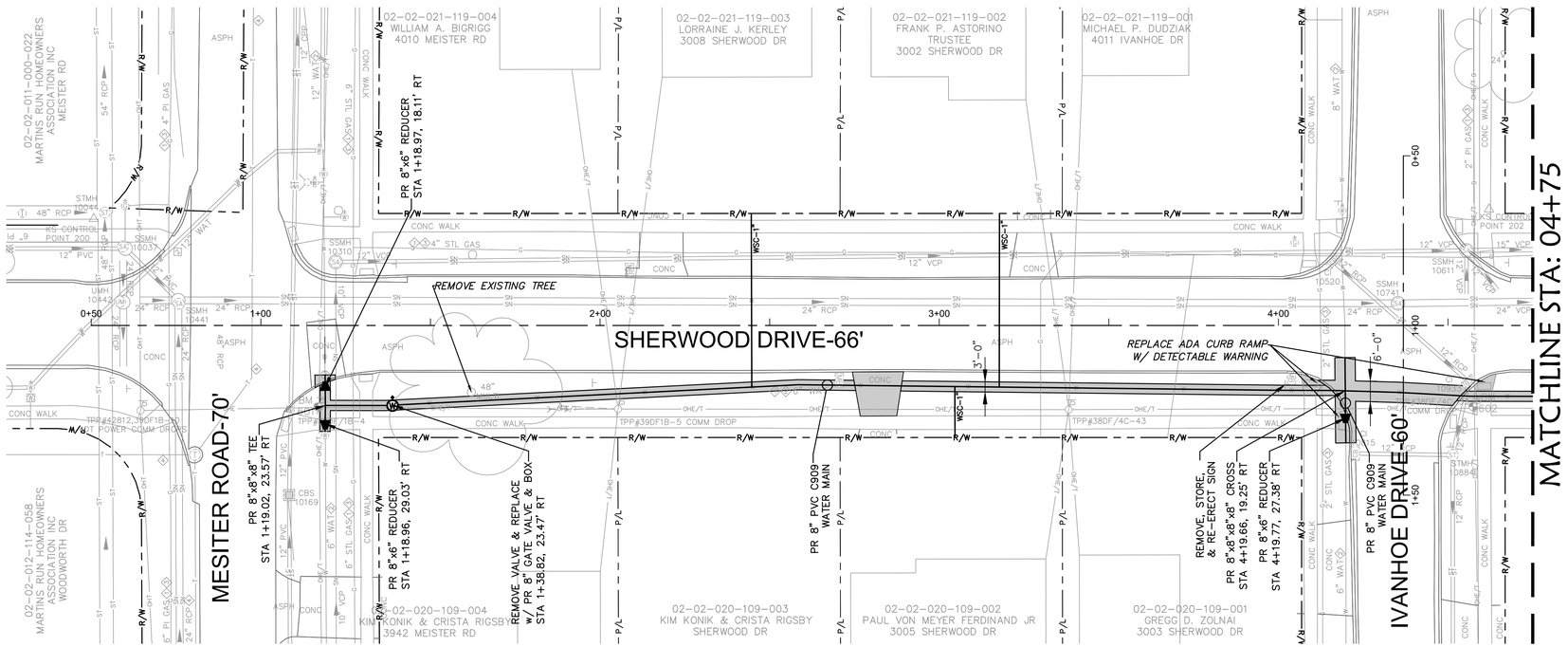
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OSBORN PROJ NO.	J20221302.000

SHERWOOD - PAVEMENT MARKING 2

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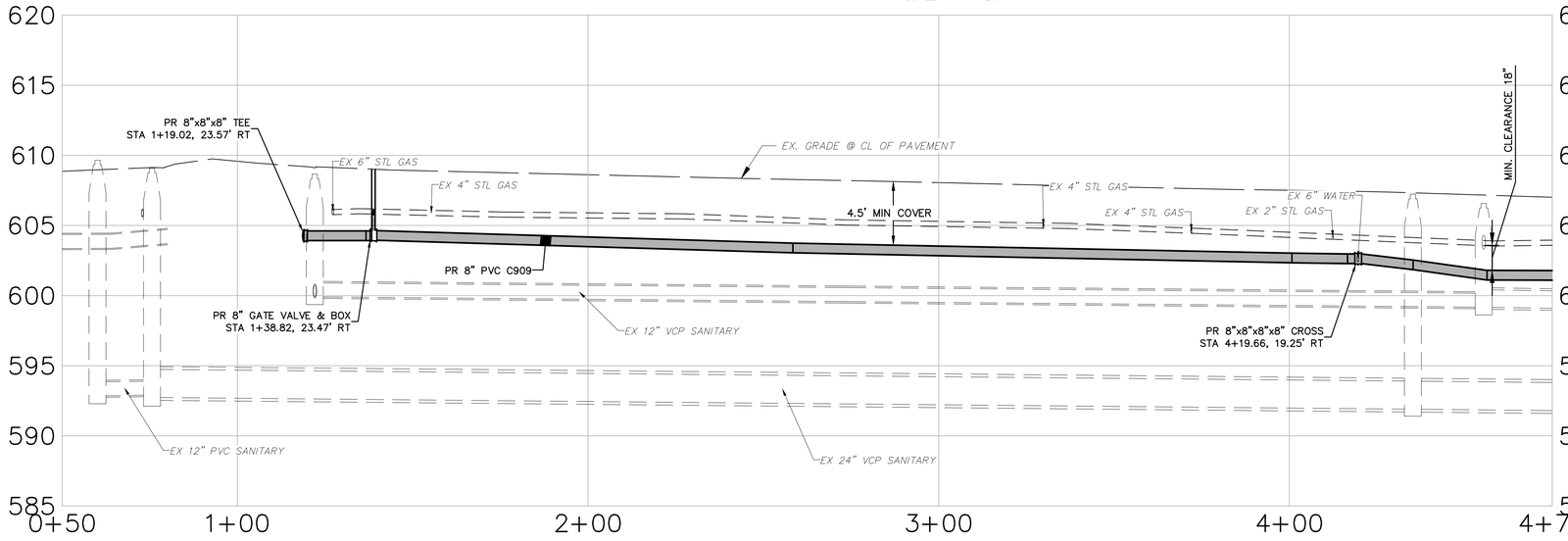
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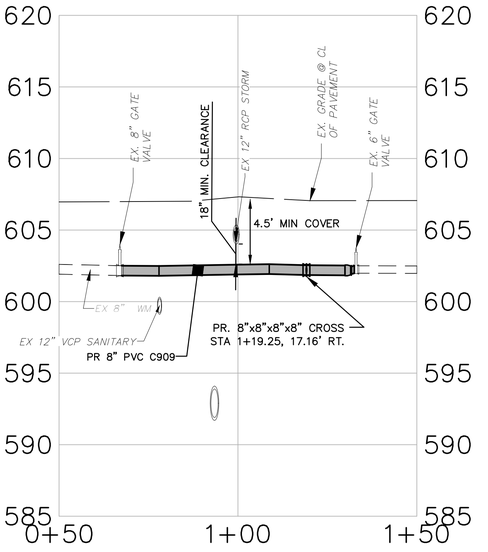
SHERWOOD DRIVE–ALTERNATE W/ BYPASS

SCALE: 1" = 20'



SHERWOOD DRIVE PROFILE ALTERNATE W/ BYPASS

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



IVANHOE DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

SSMH 10037
RIM=609.75
INV=592.84 12" PVC NE
INV=592.91 12" PVC S

STMH 10044
RIM=609.45
INV=595.47 48" RCP E
INV=594.88 48" RCP S
INV=594.60 54" RCP W

CBS 10169
RIM=608.61
INV=607.49 12" PVC W
INV=607.54 12" PVC E
BOTTOM=607.41

SSMH 10310
RIM=608.66
INV=599.91 12" VCP N
INV=599.91 10" VCP E

SSMH 10441
RIM=609.10
INV=592.74 24" RCP N
INV=592.75 24" RCP E
INV=592.67 24" RCP S
INV=592.91 12" PVC SW

CI 10520
RIM=606.62
INV=604.52 12" RCP NE
BOTTOM=604.42

SSMH 10611
RIM=606.57
INV=603.31 12" VCP NE
INV=599.90 12" VCP E
INV=599.17 12" VCP S
INV=599.17 15" VCP N

SSMH 10741
RIM=607.23
INV=591.90 24" VCP N
INV=591.90 24" RCP S

CI 10815
RIM=606.38
INV=604.11 12" RCP N
BOTTOM=603.98

STMH 10884
RIM=607.13
INV=603.53 12" RCP E
INV=603.71 12" RCP S
INV=603.59 12" RCP NW
BOTTOM=603.53

CI 10933
RIM=606.38
INV=603.98 12" RCP SE
INV=603.88 12" RCP SW
BOTTOM=603.88

GENERAL NOTES:

1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. ALL CONCRETE SIDEWALK REPLACEMENT SHALL BE TO THE NEAREST JOINT.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-84062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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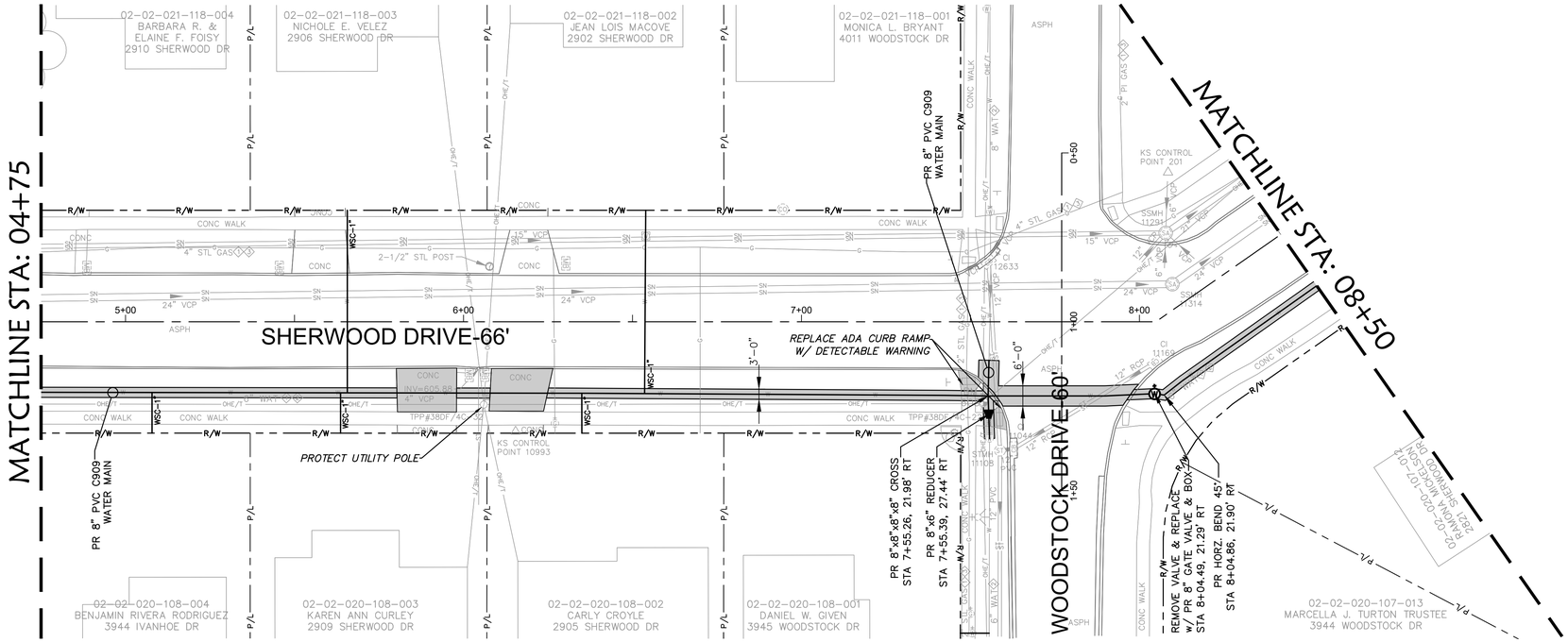
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OSBORN PROJ NO.	J20221302.000

SHERWOOD - ALT PLAN & PROFILE 0+50 TO 4+75

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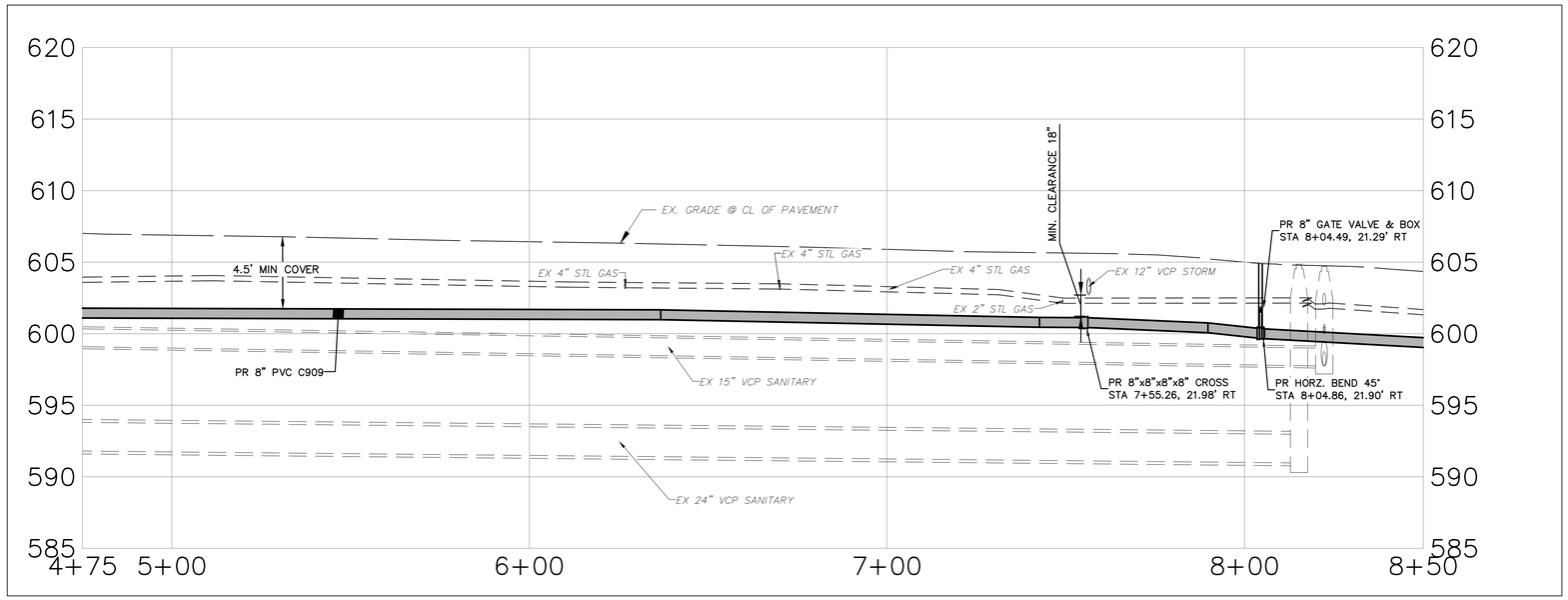
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SHERWOOD DRIVE–ALTERNATE W/ BYPASS

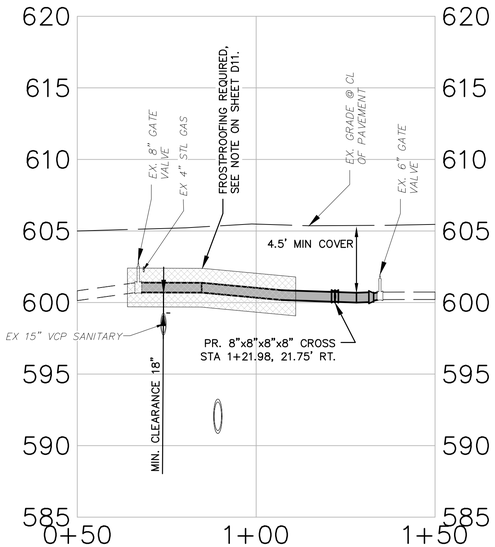
SCALE: 1" = 20'



SHERWOOD DRIVE ALT. PROFILE W/ BYPASS

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.



WOODSTOCK DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

CI 11044
RIM=604.60
INV=601.92 12" RCP NW
INV=601.90 12" PVC SE
BOTTOM=601.90

STMH 11108
RIM=605.14
INV=601.84 12" PVC E
INV=602.57 12" VCP W
INV=602.06 12" PVC NW

CI 11169
RIM=604.53
INV=602.53 12" RCP SE

SSMH 11291
RIM=604.69
INV=597.74 21" VCP NW
INV=597.74 15" VCP S
INV=597.75 12" VCP SE
INV=599.99 6" VCP E
INV=601.99 10" VCP NE
INV=600.16 6" VCP W

SSMH 11314
RIM=604.87
INV=590.97 24" VCP S
INV=590.85 24" VCP NW

CI 12633
RIM=604.78
INV=602.91 12" VCP NE
INV=603.23 4" VCP NW
INV=603.33 4" VCP SE (PLUGGED)
BOTTOM=602.88

GENERAL NOTES:

1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. ALL CONCRETE SIDEWALK REPLACEMENT SHALL BE TO THE NEAREST JOINT.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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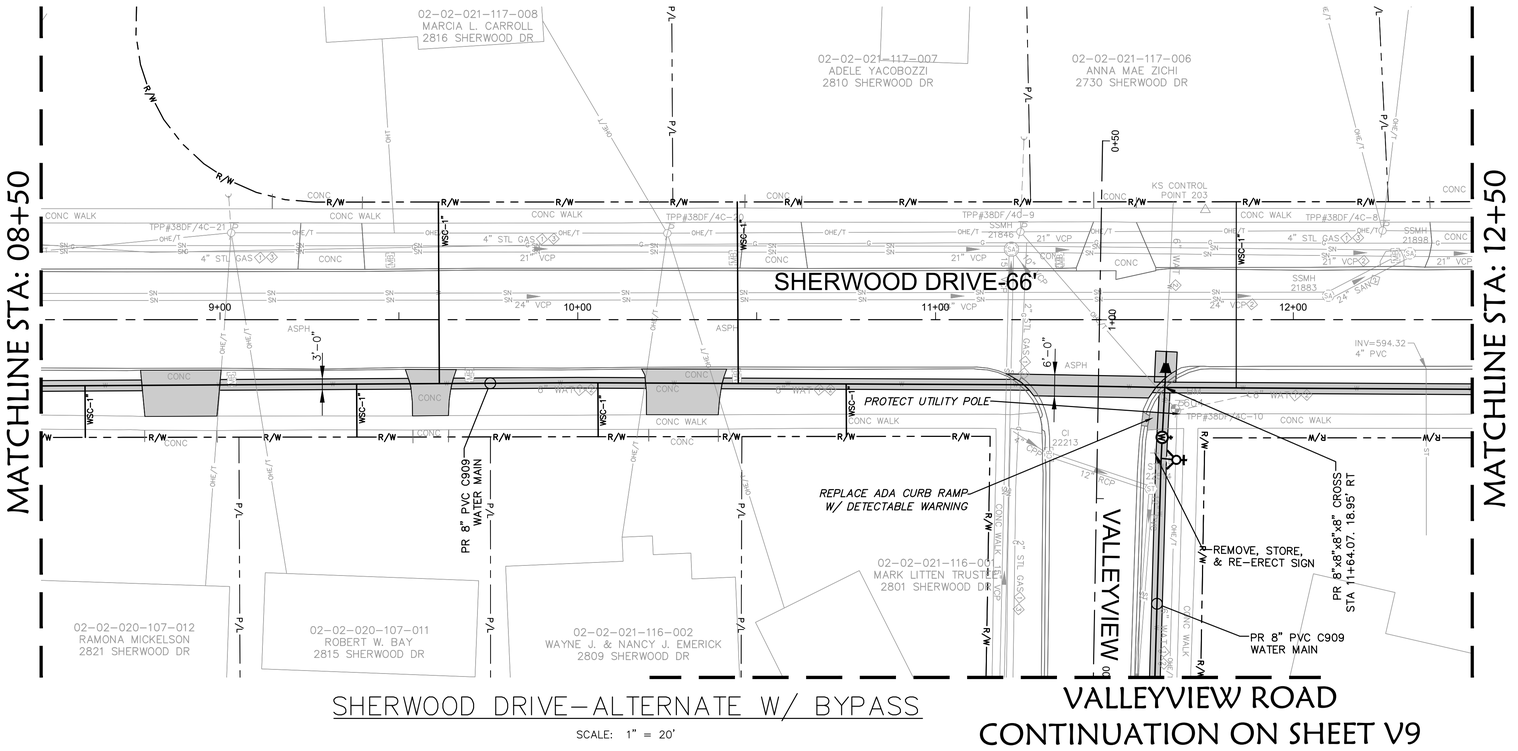
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CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

SHERWOOD - ALT PLAN & PROFILE 4+75 TO 8+50

DRAWING NO.

S15

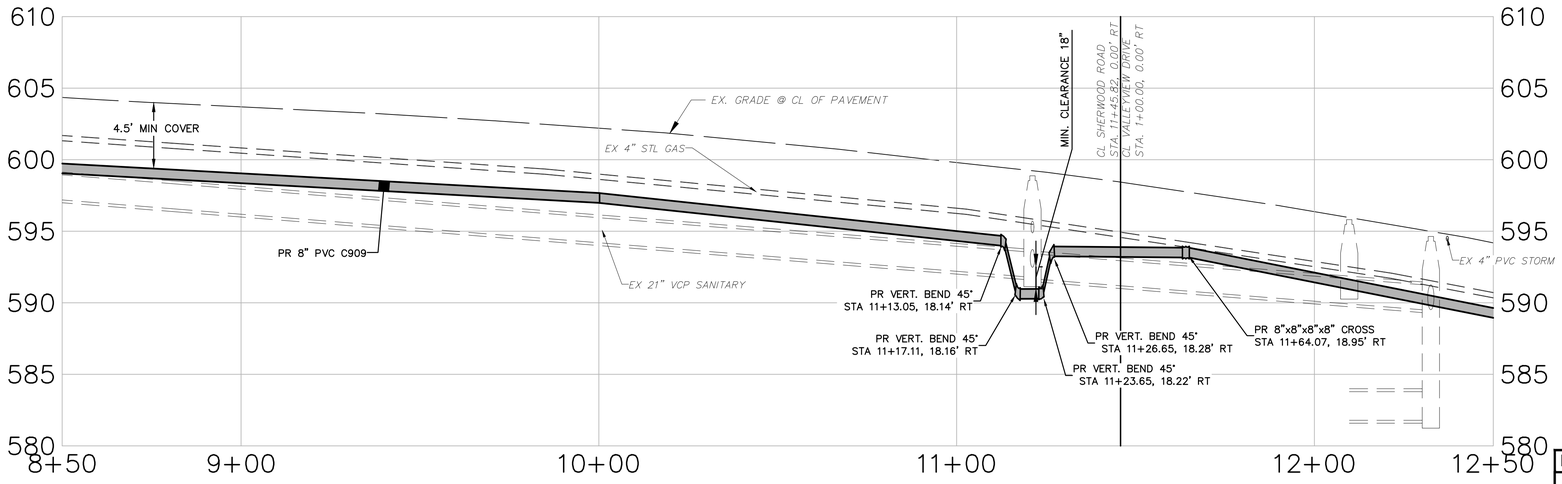
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SHERWOOD DRIVE–ALTERNATE W/ BYPASS

SCALE: 1" = 20'

VALLEYVIEW ROAD
CONTINUATION ON SHEET V9



SHERWOOD DRIVE ALT. PROFILE W/ BYPASS

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

SSMH 21846
RIM=598.88
INV=591.68 21" VCP NW
INV=594.88 10" VCP NE
INV=592.48 15" VCP NE
INV=591.78 21" VCP SE

SSMH 21883
RIM=595.81
COULD NOT OPEN

SSMH 21898
RIM=594.64
COULD NOT OPEN

CI 22213
RIM=597.92
INV=596.07 12" RCP NW
INV=596.92 4" CPP S
BOTTOM=595.82

STMH 22514
RIM=598.48
INV=595.53 12" PVC NE
INV=595.68 12" RCP SE

GENERAL NOTES:

1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. EXISTING PAVEMENT FOR VALLEYVIEW ROAD IS VARYING FROM 4.5" TO 5" ASPHALT PAVEMENT OVER VARYING 6" TO 7.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR TO POOR. REFER TO REPORT DATED FEBRUARY 2, 2024.
3. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
4. ALL CONCRETE SIDEWALK REPLACEMENT SHALL BE TO THE NEAREST JOINT.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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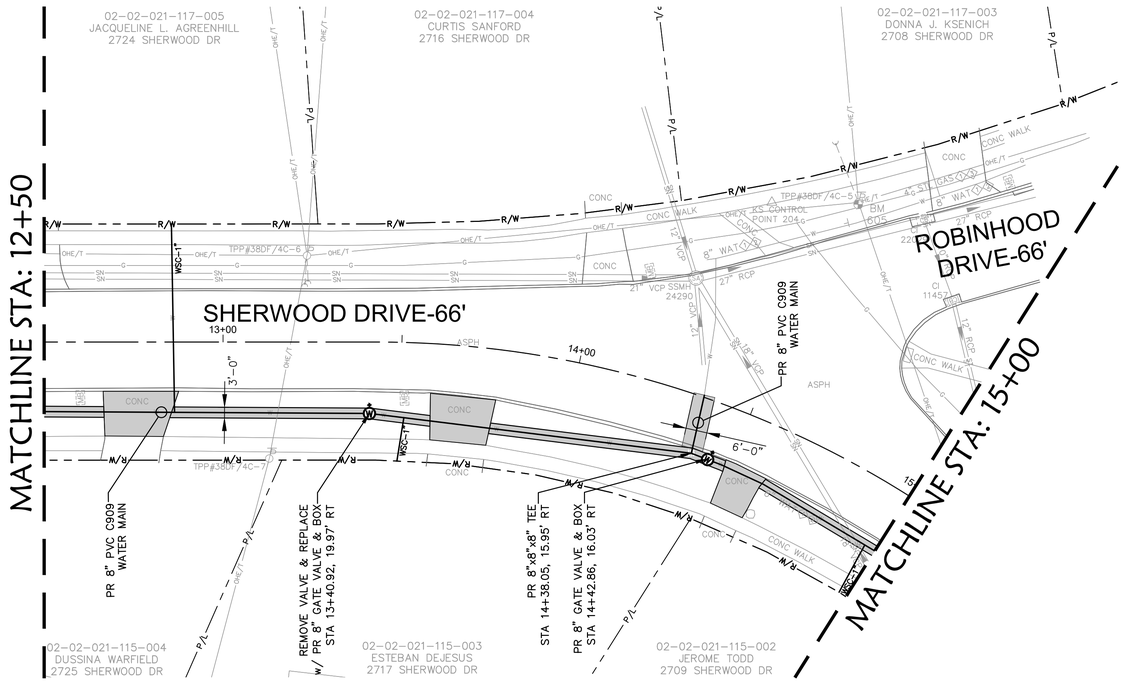
DRAWN BY	BYR
CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

SHERWOOD - ALT PLAN & PROFILE 8+50 TO 12+50

DRAWING NO.

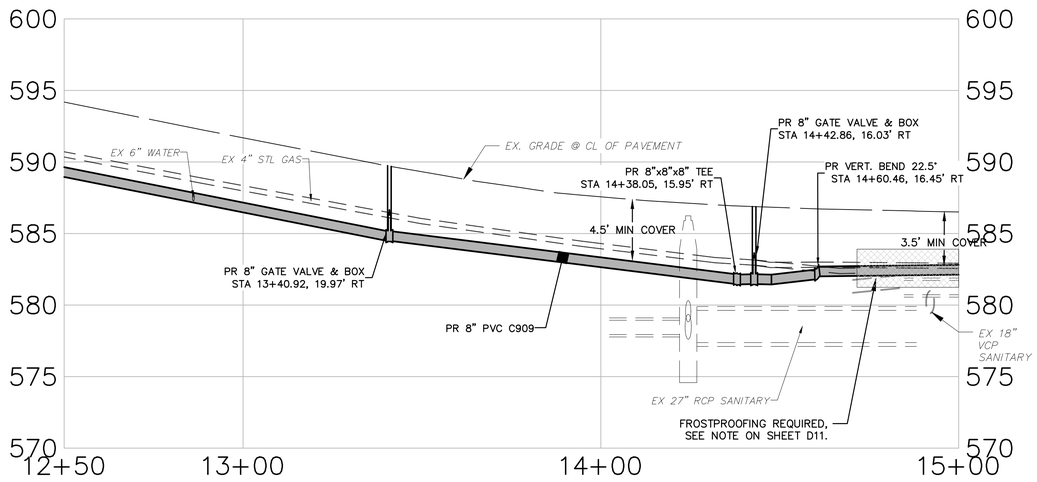
S16

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3/7/2025 4:57 PM Pawar, Sayali



SHERWOOD DRIVE—ALTERNATE W/ BYPASS

SCALE: 1" = 20'



SHERWOOD DRIVE ALT. PROFILE W/ BYPASS

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

CI 11457
RIM=585.42
INV=581.72 12" RCP NE
INV=581.72 10" RCP SW
BOTTOM=581.72

CI 22029
RIM=585.25
INV=582.05 10" RCP NE

SSMH 24290
RIM=586.15
INV=578.82 18" VCP NE
INV=578.75 12" VCP NE
INV=577.61 21" VCP SE
INV=578.94 12" VCP SW
INV=577.38 27" RCP NW

GENERAL NOTES:

1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM SHEET 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. ALL CONCRETE SIDEWALK REPLACEMENT SHALL BE TO THE NEAREST JOINT.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

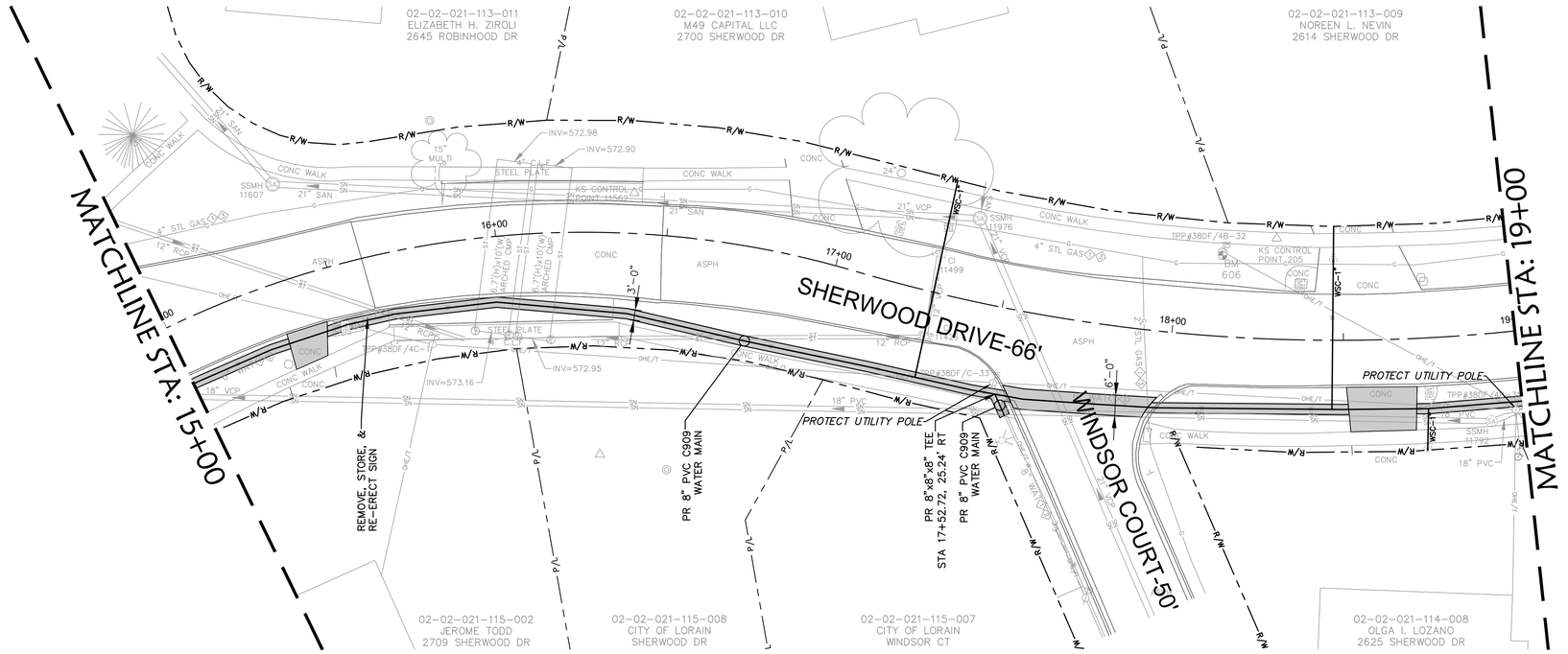
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SHERWOOD - ALT PLAN & PROFILE 12+50 TO 15+00

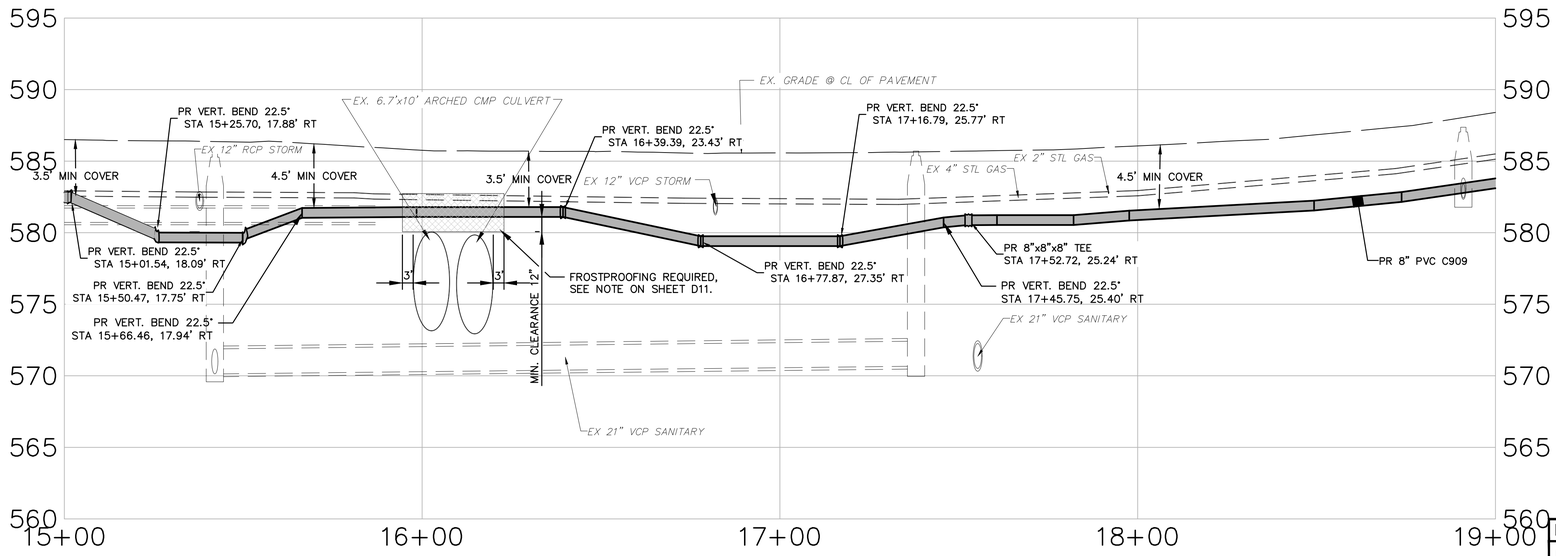
DRAWING NO.
S17

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3/7/2025 4:58 PM Pawar, Sayali



SHERWOOD DRIVE–ALTERNATE W/ BYPASS

SCALE: 1" = 20'



SHERWOOD DRIVE ALTERNATE PROFILE W/ BYPASS

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

CI 11426
RIM=584.78
INV=581.23 12" RCP S
INV=581.23 12" VCP NW

CI 11499
RIM=584.85
INV=581.61 12" RCP SE
BOTTOM=581.61

SSMH 11607
RIM=585.61
INV=570.13 21" SAN NE & SW

SSMH 11792
RIM=587.37
INV=582.42 18" PVC N
INV=582.33 18" PVC SW

SSMH 11976
RIM=585.71
INV=570.51 21" VCP E
INV=570.67 21" VCP SW
INV=572.81 SAN NW
(RECESSED)

GENERAL NOTES:

1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM SHEET 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. LIMITS OF SENDING/RECEIVING PITS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR ACTUAL LOCATION AND SIZING OF PITS. CONTRACTOR IS RESPONSIBLE FOR MODIFICATION OF RESTORATION LIMITS AND MOT.
4. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING LOCATION OF EXISTING UTILITIES AND COORDINATING WITH UTILITY OWNERS REGARDING TEMPORARY RELOCATION OR PROTECTION IN PLACE WITHIN LIMITS OR IN PROXIMITY OF SENDING/RECEIVING PITS.
5. ALL CONCRETE SIDEWALK REPLACEMENT SHALL BE TO THE NEAREST JOINT.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-84026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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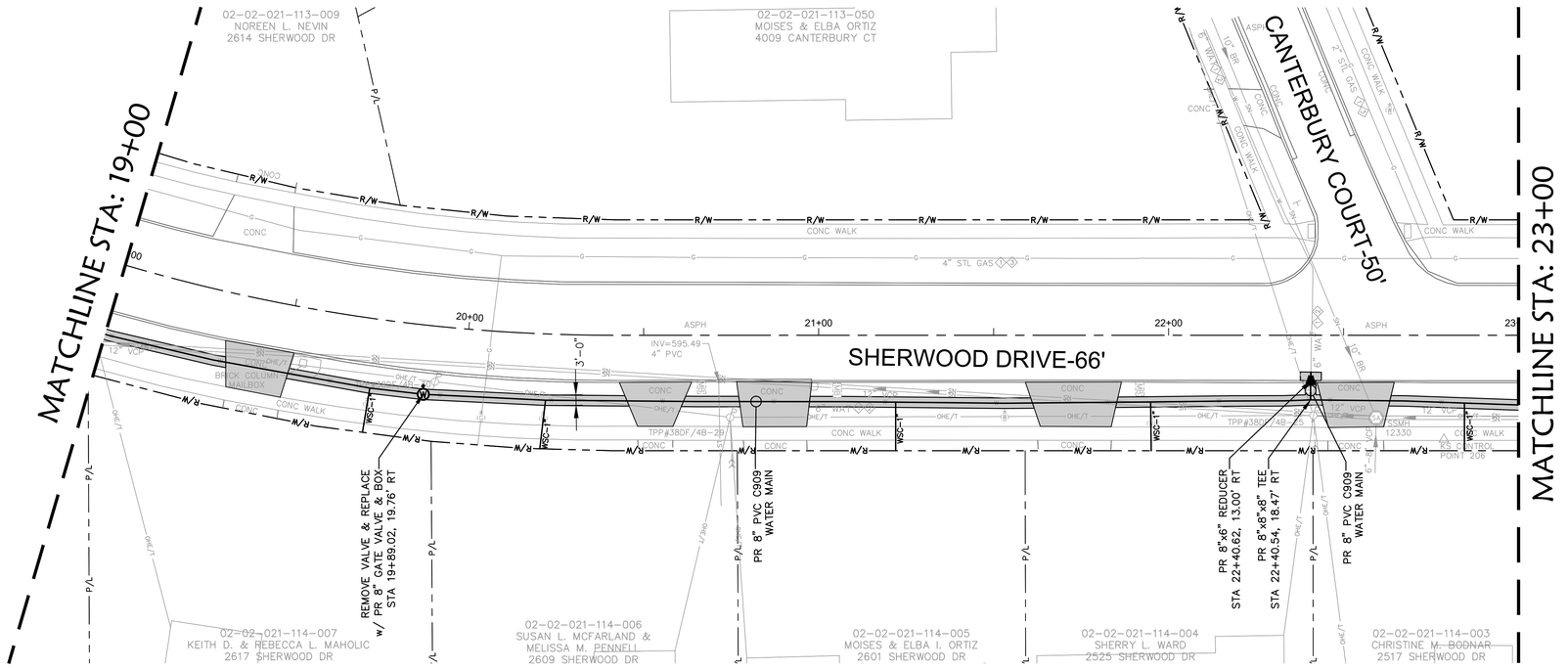
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OSBORN PROJ NO.	J20221302.000

SHERWOOD - ALT PLAN & PROFILE 15+00 TO 19+00

DRAWING NO.

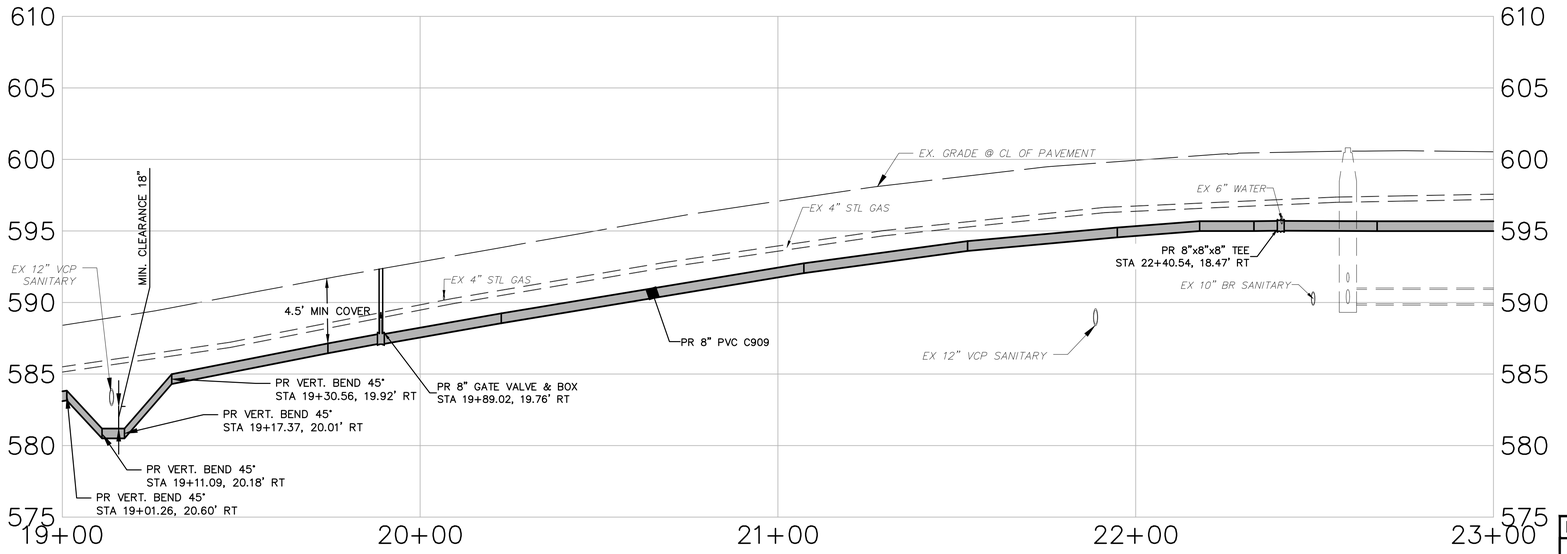
S18

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3/7/2025 4:59 PM Pawar, Sayali



SHERWOOD DRIVE—ALTERNATE W/ BYPASS

SCALE: 1" = 20'



SHERWOOD DRIVE ALTERNATE W/ BYPASS PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 12330
RIM=600.82
INV=589.91 12" VCP N
INV=589.91 12" VCP SW
INV=589.86 10" BR SW
(RECESSED)
INV=591.42 6"-8" VCP E

GENERAL NOTES:

1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM SHEET 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. ALL CONCRETE SIDEWALK REPLACEMENT SHALL BE TO THE NEAREST JOINT.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN OHIO 1834

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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SHERWOOD - ALT PLAN & PROFILE 19+00 TO 23+00

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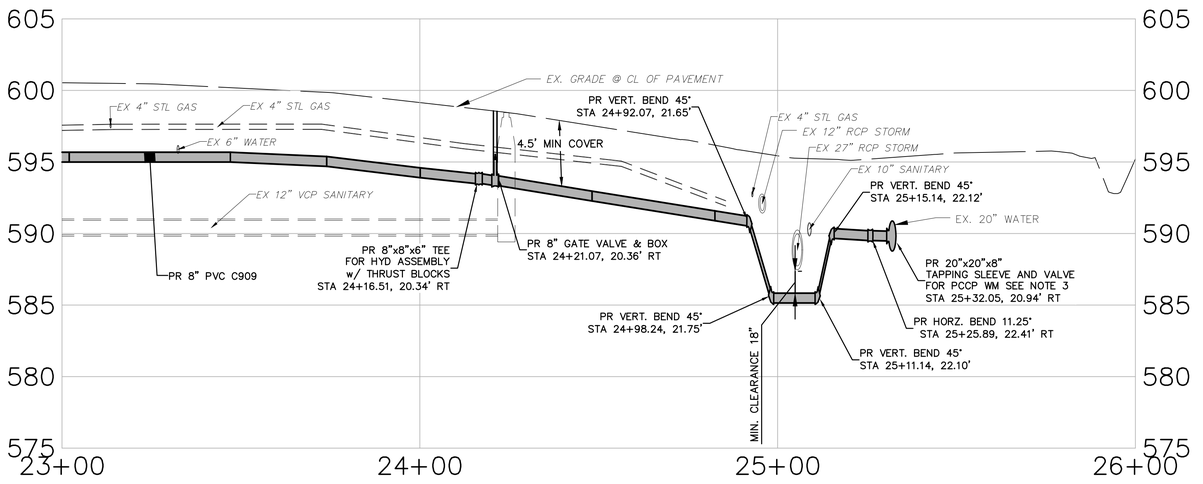
S19

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3/7/2025 6:19 PM Pawar, Sayali



SHERWOOD DRIVE–ALTERNATE W/ BYPASS

SCALE: 1" = 20'



SHERWOOD DRIVE ALT. PROFILE W/ BYPASS

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

CBS 12277
RIM=595.54
INV=593.49 12" RCP NE
BOTTOM=593.54
TOP OF WATER=593.84

CBS 12504
RIM=595.97
INV=591.32 12" RCP NE
(RECESSED)
INV=592.71 12" RCP SW
BOTTOM=591.32

CBS 12514
RIM=593.53
INV=587.73 27" RCP NE
INV=590.68 12" RCP SW
INV=587.73 27" RCP SW
BOTTOM=587.73

GENERAL NOTES:

1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM SHEET 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. TAPPING SLEEVE SHALL BE JCM 415, SMITH-BLAIR 625 OR APPROVED EQUAL. FURNISH AND INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
4. ALL CONCRETE SIDEWALK REPLACEMENT SHALL BE TO THE NEAREST JOINT.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
84026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

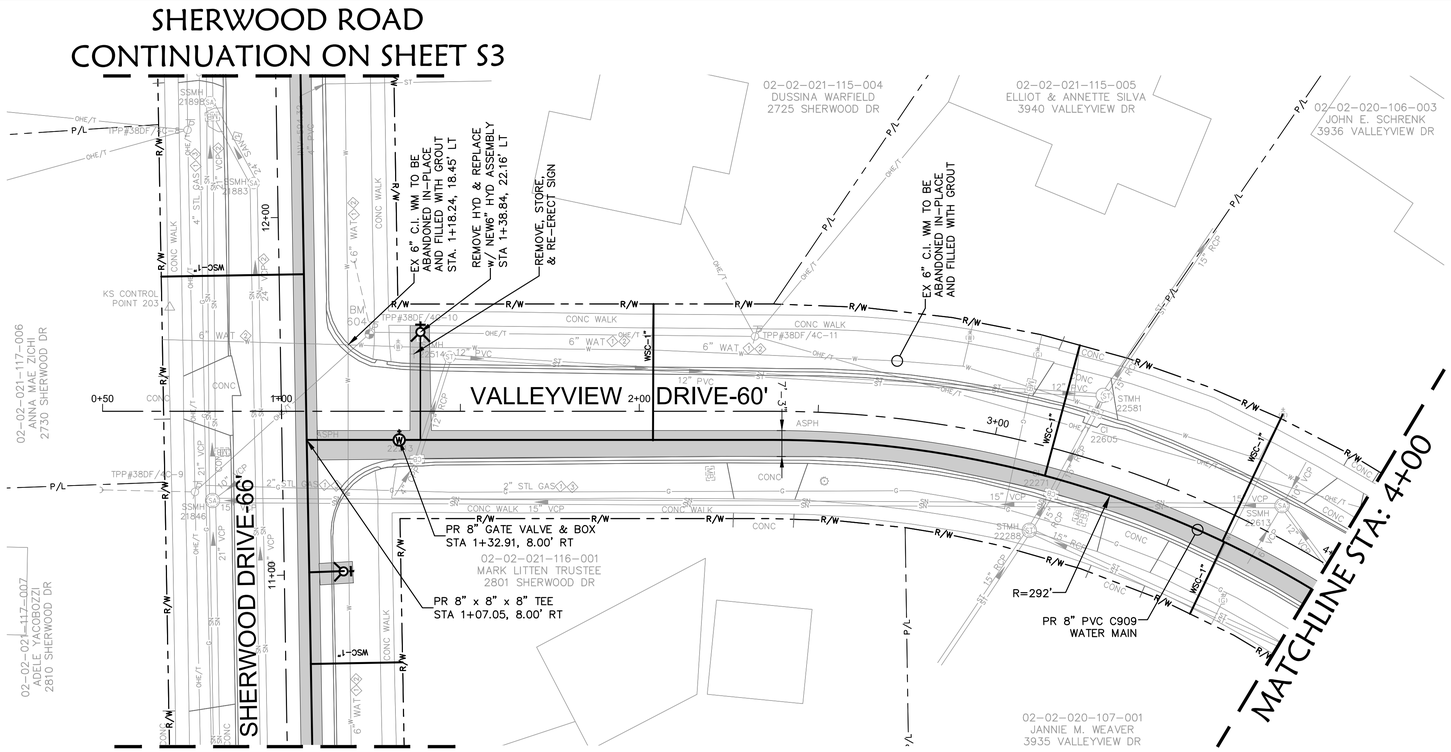
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OSBORN PROJ NO.	J20221302.000

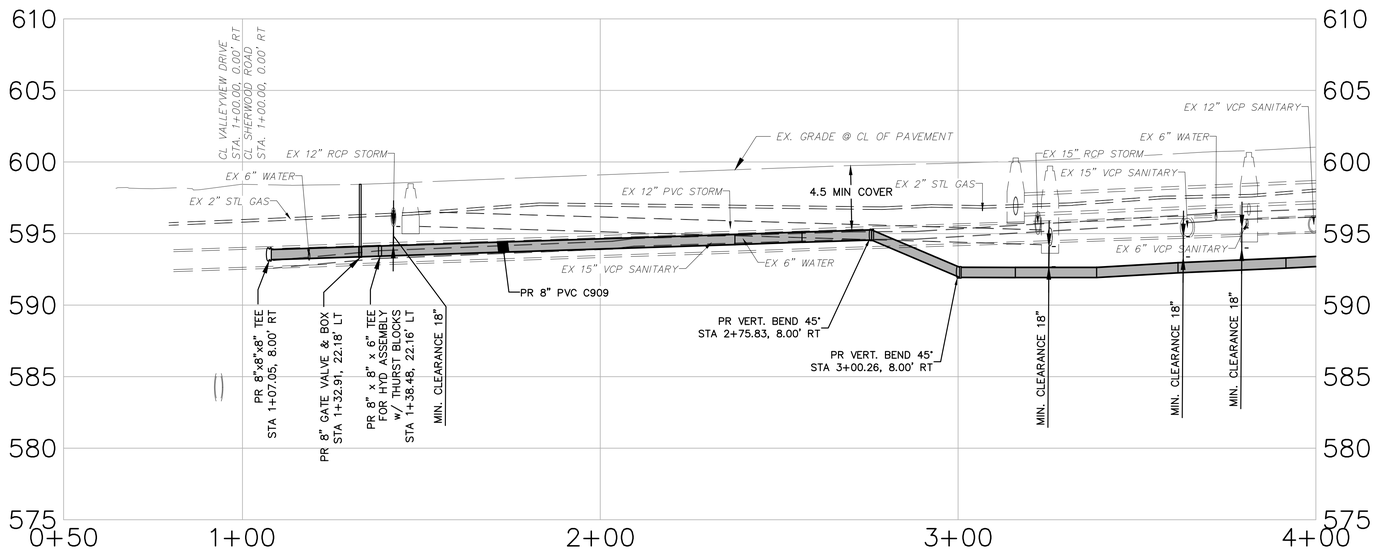
SHERWOOD - ALT PLAN & PROFILE 23+00 TO 26+00

DRAWING NO.
S20

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3/7/2025 6:20 PM Pawar, Sayali



VALLEYVIEW DRIVE
SCALE: 1" = 20'



VALLEYVIEW DRIVE PROFILE
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 21846
RIM=598.88
INV=591.68 21" VCP NW
INV=594.88 10" VCP NE
INV=592.48 15" VCP NE
INV=591.78 21" VCP SE

SSMH 21883
RIM=595.81
COULD NOT OPEN

SSMH 21898
RIM=594.64
COULD NOT OPEN

CI 22213
RIM=597.92
INV=596.07 12" RCP NW
INV=596.92 4" CPP S
BOTTOM=595.82

CI 22271
RIM=599.50
INV=595.75 15" RCP N
INV=595.75 15" RCP S

STMH 22288
RIM=600.28
INV=596.28 15" RCP N
INV=596.38 15" RCP NE
INV=596.33 15" RCP SW

STMH 22514
RIM=598.48
INV=595.53 12" PVC NE
INV=595.68 12" RCP SE

STMH 22581
RIM=599.72
INV=594.12 15" RCP N
INV=594.17 15" RCP S
INV=594.22 12" PVC SW

STMH 22605
RIM=599.77
INV=594.47 15" RCP N
INV=594.77 15" RCP S

SSMH 22613
RIM=600.67
INV=596.27 10" VCP N
INV=594.97 12" VCP SE
INV=595.47 6" VCP S
INV=594.96 15" VCP SW

GENERAL NOTES:

1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM SHEET 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. EXISTING PAVEMENT FOR VALLEYVIEW DRIVE IS VARYING FROM SHEET 4.5" TO 5" ASPHALT PAVEMENT OVER VARYING 6" TO 7.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR TO POOR. REFER TO REPORT DATED FEBRUARY 2, 2024.
3. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO KEVIN D. CODIN E-64026 REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

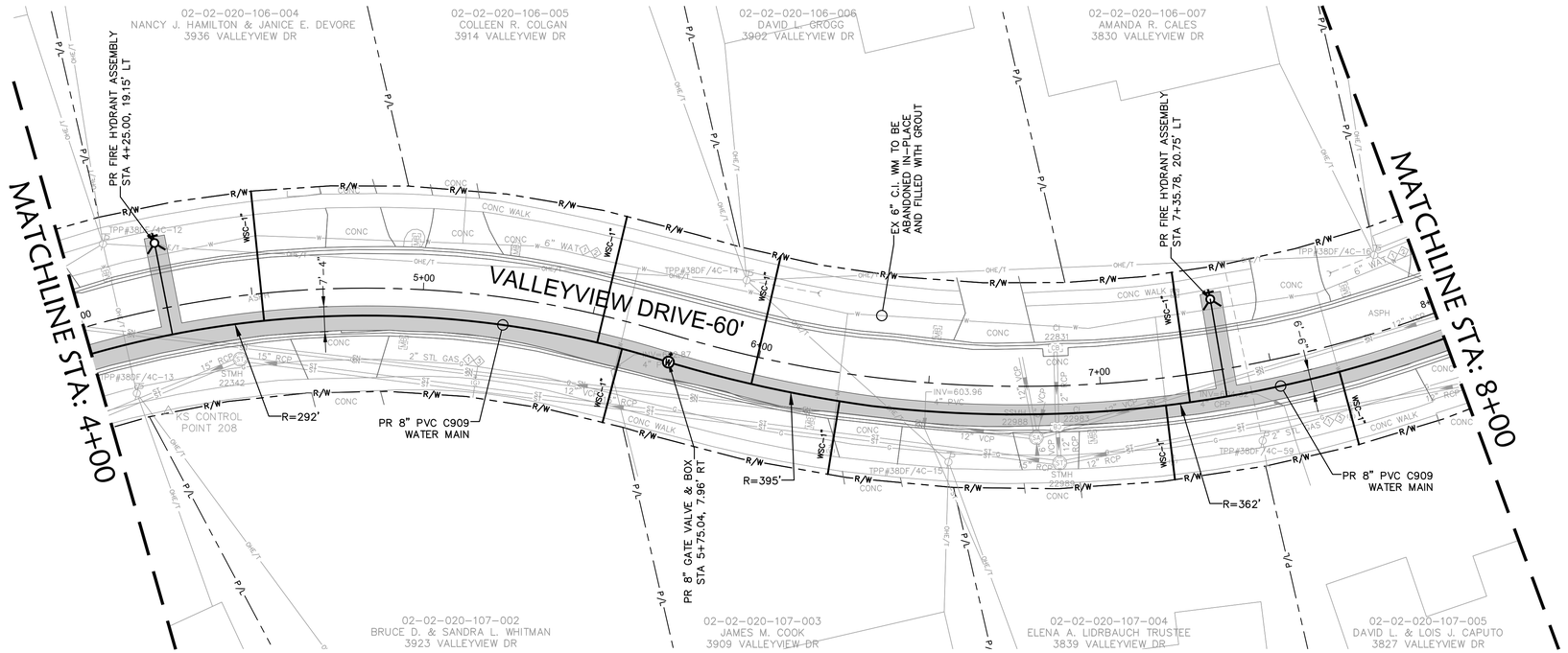
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CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

VALLEYVIEW - PLAN & PROFILE 0+50 TO 4+00

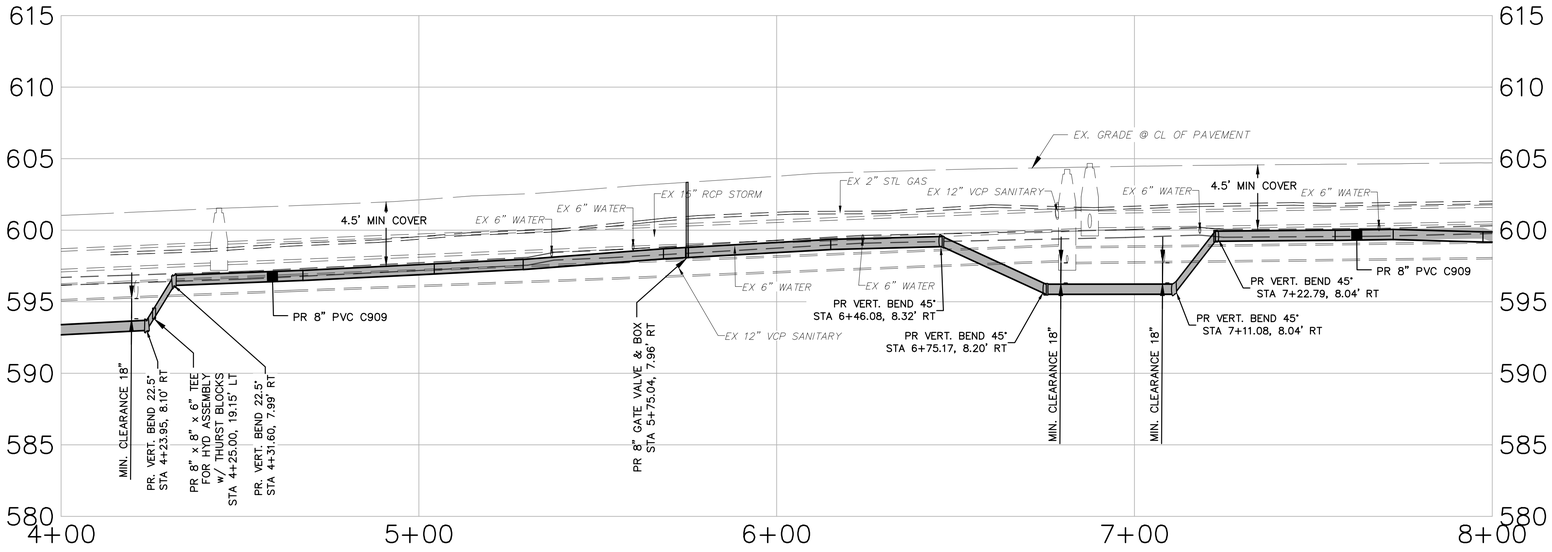
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V1

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3/7/2025 6:12 PM Duffy, Alex



VALLEYVIEW DRIVE

SCALE: 1" = 20'



VALLEYVIEW DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

STMH 22342
RIM=601.55
INV=597.75 15" RCP SE
INV=597.74 15" RCP SW

CI 22831
RIM=604.03
INV=601.13 12" RCP SW
BOTTOM=601.13

CI 22983
RIM=603.99
INV=600.59 12" RCP NE
INV=600.59 12" RCP SE

SSMH 22988
RIM=604.25
INV=600.85 12" VCP N
INV=598.85 6" VCP NE
INV=597.90 12" VCP NE
INV=598.75 6" VCP SW
INV=597.90 12" VCP NW

STMH 22989
RIM=604.66
INV=600.76 12" RCP NE
INV=600.16 12" RCP E
INV=600.15 15" RCP NW

GENERAL NOTES:

1. EXISTING PAVEMENT FOR VALLEYVIEW DRIVE IS VARYING FROM SHEET 4.5" TO 5" ASPHALT PAVEMENT OVER VARYING 6" TO 7.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR TO POOR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN OHIO 1834

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Ohio | Florida | Michigan | Tennessee
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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

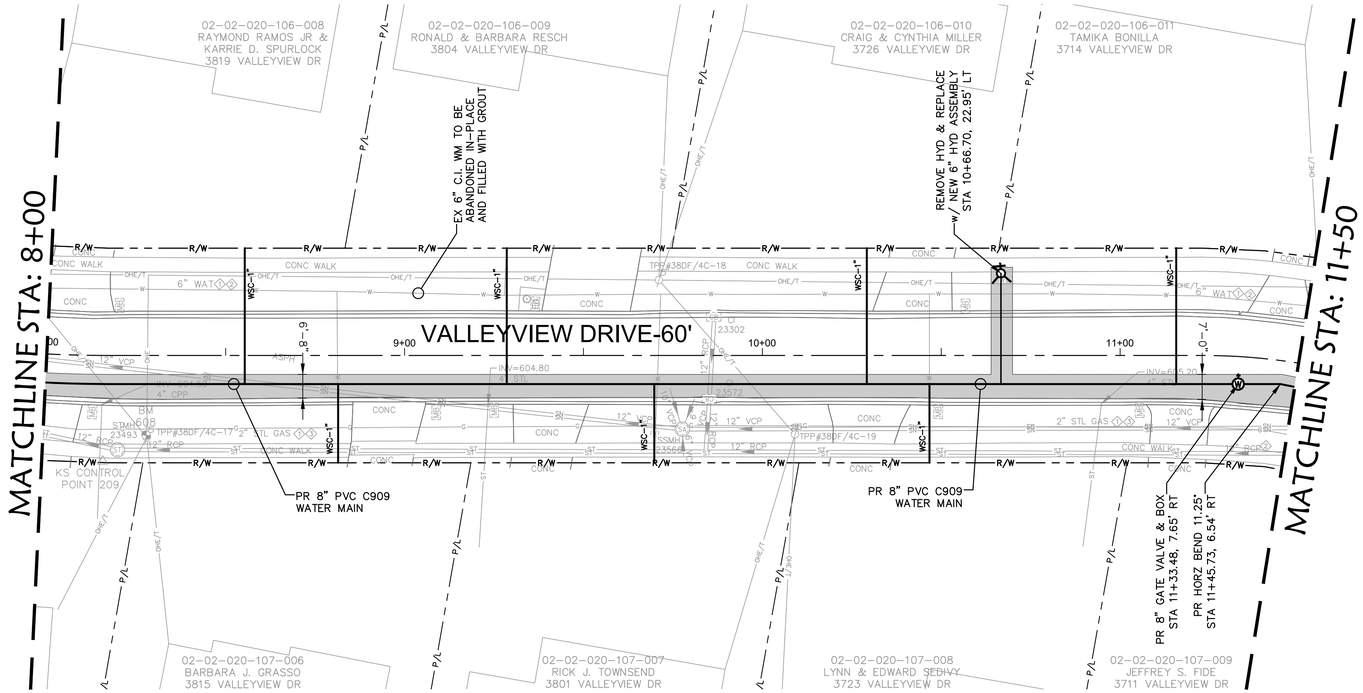
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CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

VALLEYVIEW - PLAN & PROFILE 4+00 TO 8+00

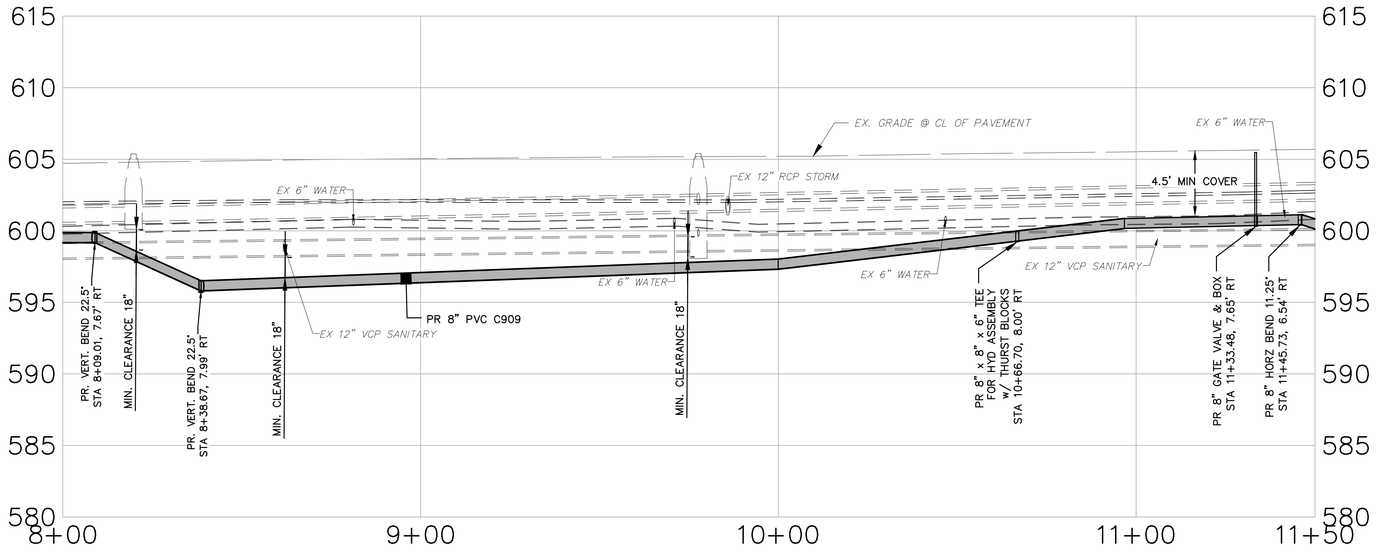
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V2

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3/7/2025 6:13 PM Duffy, Alex



VALLEYVIEW DRIVE

SCALE: 1" = 20'



VALLEYVIEW DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

CI 23302
RIM=604.57
INV=601.27 12" RCP S
BOTTOM=601.27

STMH 23493
RIM=605.37
INV=600.67 12" RCP W
INV=600.66 12" RCP NE

SSMH 23566
RIM=605.41
INV=601.81 10" VCP NW
INV=599.61 6" VCP NE
INV=598.62 12" VCP NE
INV=599.61 6" VCP SE
INV=598.61 12" VCP SW

CI 23572
RIM=604.73
INV=601.23 12" RCP N
INV=601.13 12" RCP S
BOTTOM=601.13

GENERAL NOTES:

1. EXISTING PAVEMENT FOR VALLEYVIEW DRIVE IS VARYING FROM SHEET 4.5" TO 5" ASPHALT PAVEMENT OVER VARYING 6" TO 7.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR TO POOR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN OHIO 1834

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(216) 861-2020 www.osborn-eng.com

WATER MAIN REPLACEMENT PROGRAM PHASE 2

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LORAIN, OHIO
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KEVIN D. CODIN
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REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
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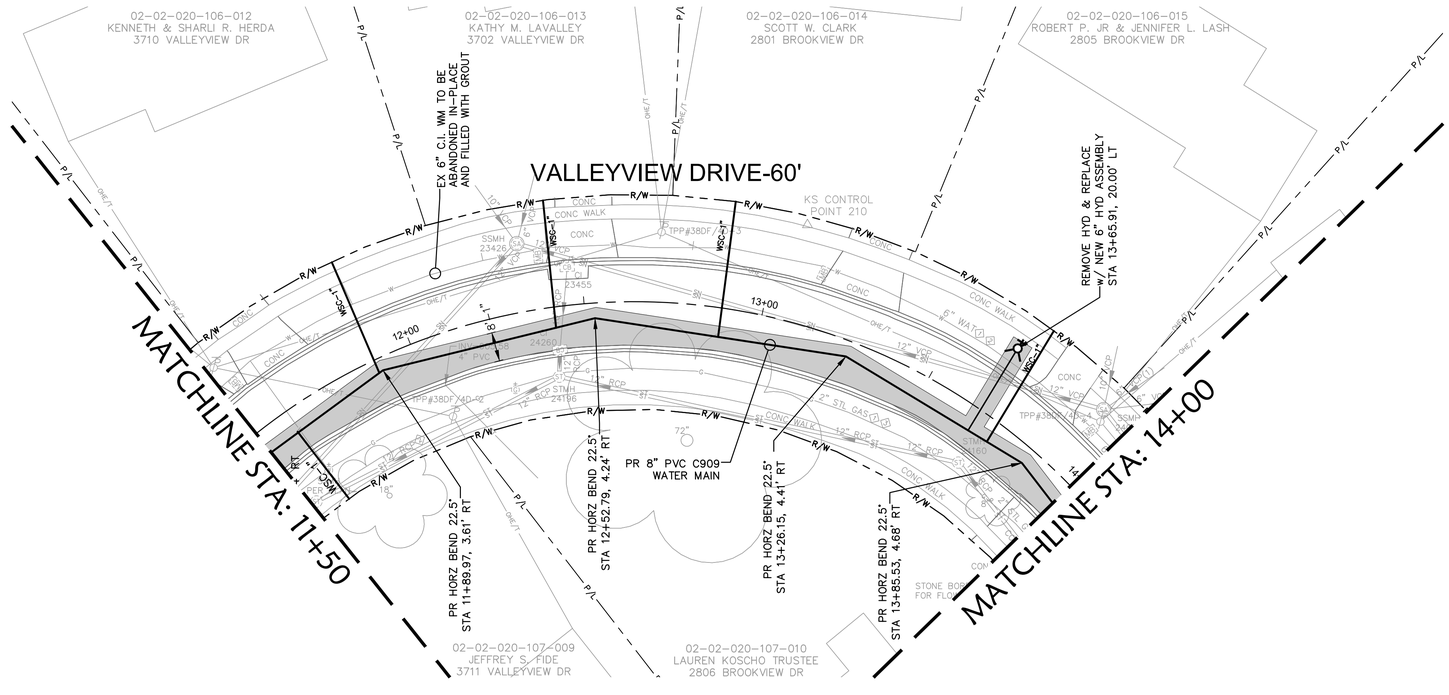
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CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

VALLEYVIEW - PLAN & PROFILE 8+00 TO 11+50

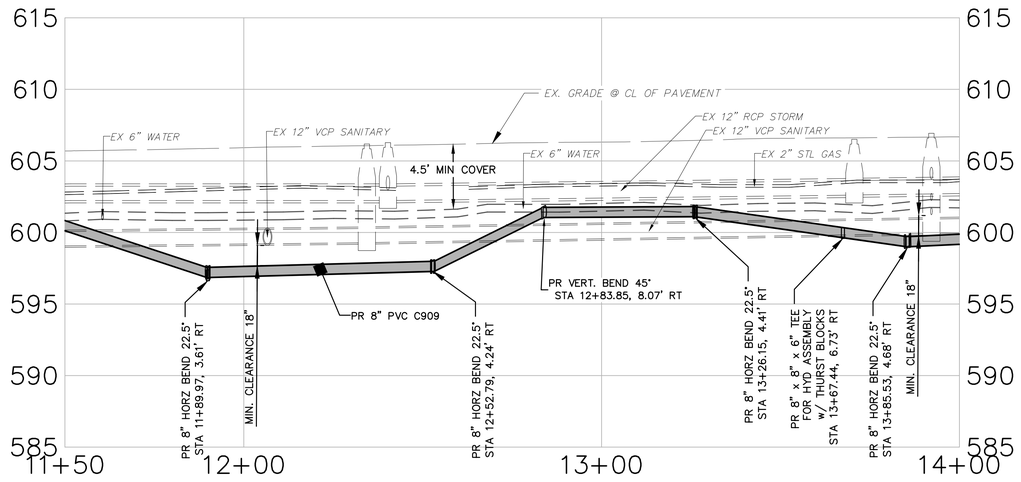
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3/7/2025 6:13 PM Duffy, Alex



VALLEYVIEW DRIVE

SCALE: 1" = 20'



VALLEYVIEW DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 23426
RIM=606.18
INV=602.18 10" VCP N
INV=600.46 6" VCP NE
INV=599.29 12" VCP SE
INV=599.28 12" VCP SW

CI 23455
RIM=605.52
INV=602.27 10" RCP SW

SSMH 24035
RIM=606.93
INV=599.93 12" VCP NW
INV=603.73 10" VCP NE
INV=602.23 6" VCP SE (1)
INV=601.23 6" VCP SE (2)
INV=599.94 12" VCP S

STMH 24160
RIM=606.51
INV=602.61 12" RCP NW
INV=602.62 12" RCP S

STMH 24196
RIM=606.28
INV=602.23 12" RCP NW
INV=602.33 12" RCP NE
INV=602.33 12" RCP SE

CI 24260
RIM=605.45
INV=602.31 10" RCP NE
INV=602.30 12" RCP SW

GENERAL NOTES:

1. EXISTING PAVEMENT FOR VALLEYVIEW DRIVE IS VARYING FROM SHEET 4.5" TO 5" ASPHALT PAVEMENT OVER VARYING 6" TO 7.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR TO POOR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN OHIO 1834

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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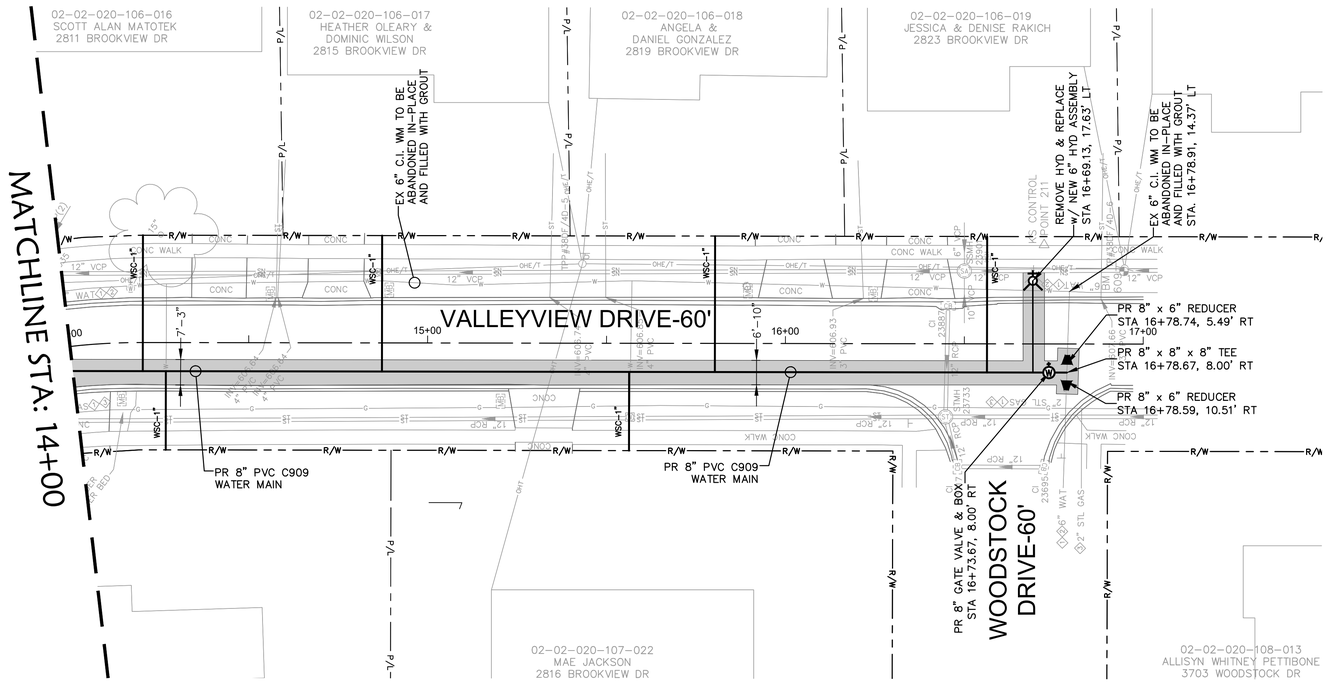
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CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

VALLEYVIEW - PLAN & PROFILE 11+50 TO 14+00

DRAWING NO.

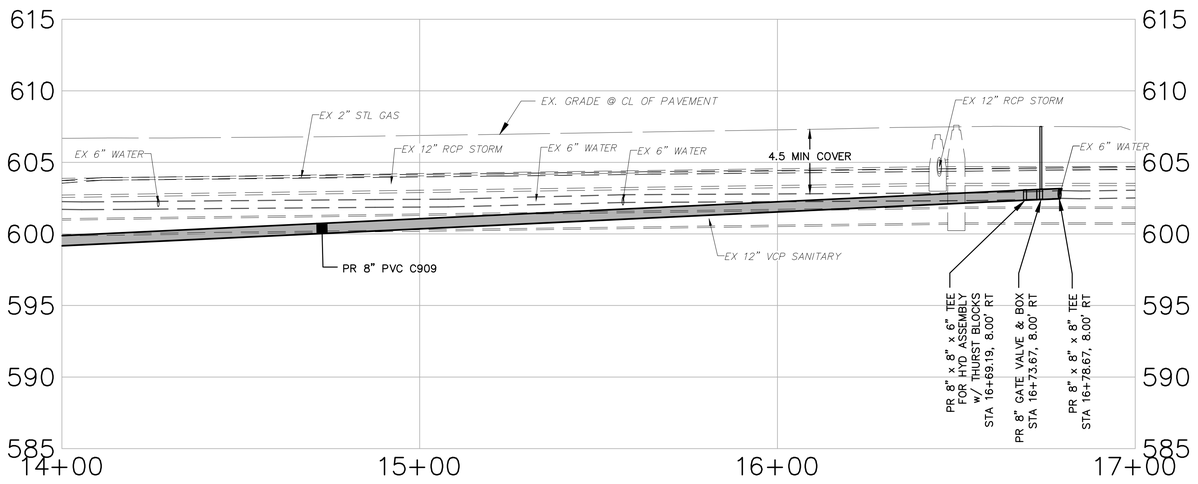
V4

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3/7/2025 6:14 PM Duffy, Alex



VALLEYVIEW DRIVE

SCALE: 1" = 20'



VALLEYVIEW DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 23426
RIM=606.18
INV=602.18 10" VCP N
INV=600.46 6" VCP NE
INV=599.29 12" VCP SE
INV=599.28 12" VCP SW

CI 23455
RIM=605.52
INV=602.27 10" RCP SW

SSMH 24035
RIM=606.93
INV=599.93 12" VCP NW
INV=603.73 10" VCP NE
INV=602.23 6" VCP SE (1)
INV=601.23 6" VCP SE (2)
INV=599.94 12" VCP S

STMH 24160
RIM=606.51
INV=602.61 12" RCP NW
INV=602.62 12" RCP S

STMH 24196
RIM=606.28
INV=602.23 12" RCP NW
INV=602.33 12" RCP NE
INV=602.33 12" RCP SE

CI 24260
RIM=605.45
INV=602.31 10" RCP NE
INV=602.30 12" RCP SW

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2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

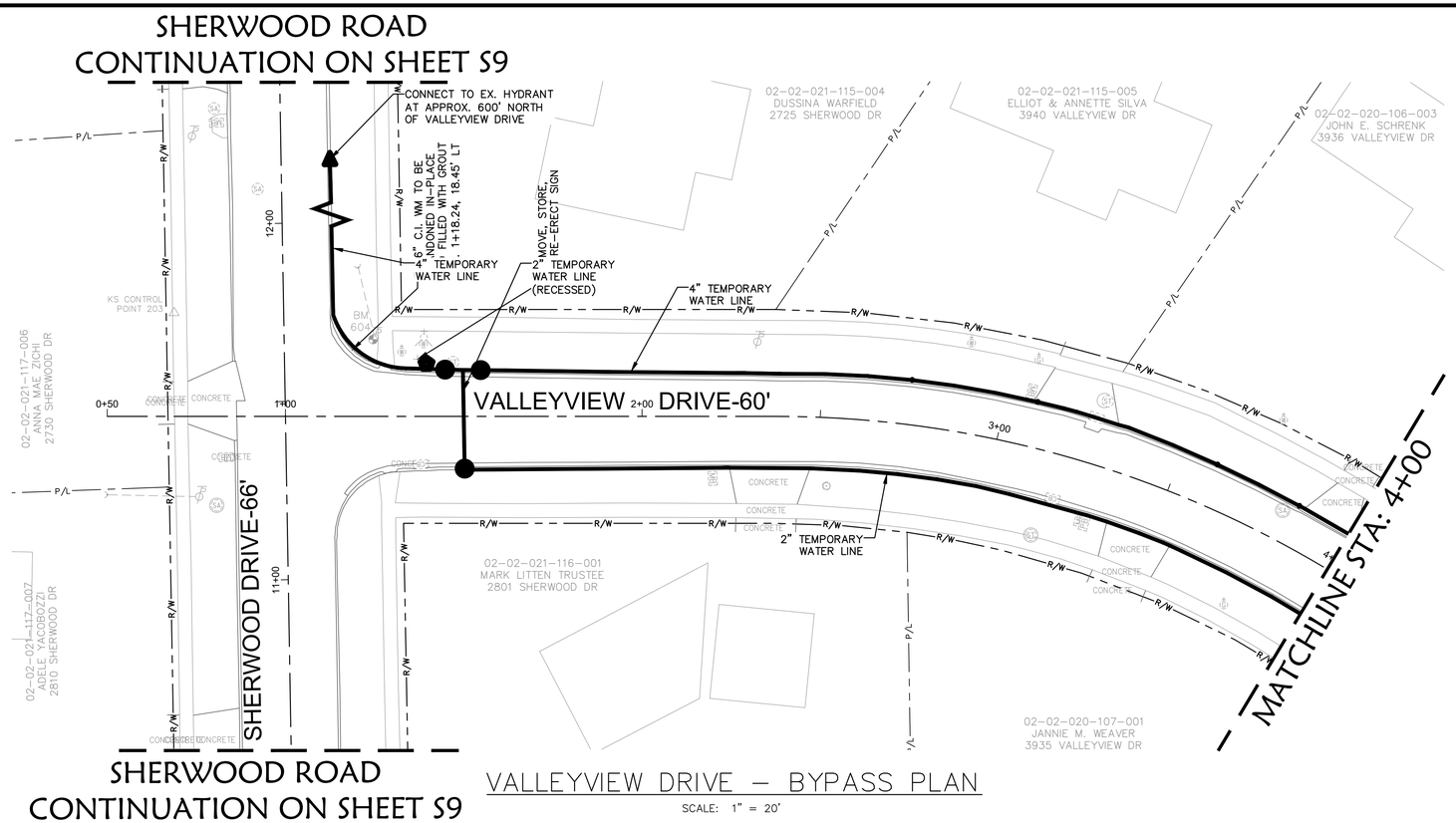
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CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

VALLEYVIEW - PLAN & PROFILE 14+00 TO 17+00

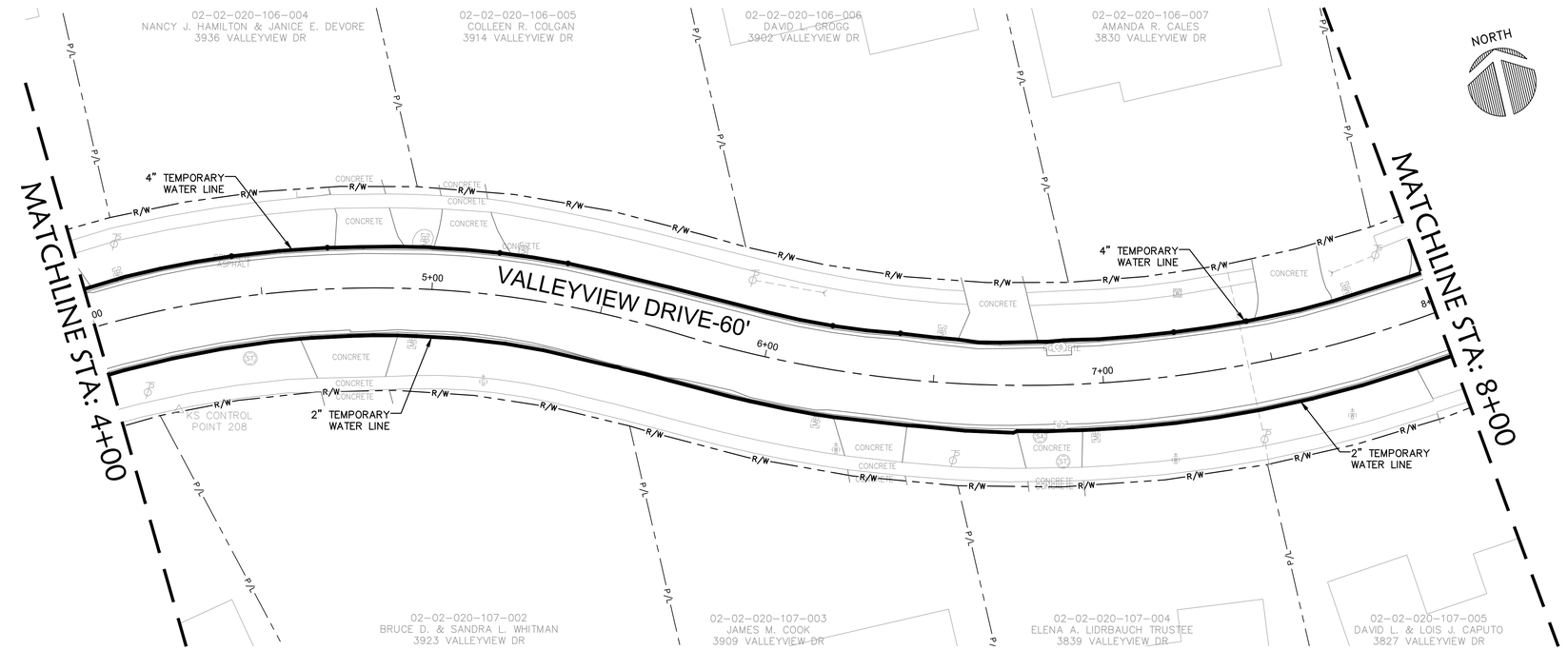
DRAWING NO.
V5

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3/7/2025 6:15 PM Duffy, Alex



VALLEYVIEW DRIVE – BYPASS PLAN

SCALE: 1" = 20'



VALLEYVIEW DRIVE – BYPASS PLAN

SCALE: 1" = 20'

GENERAL NOTES:

1. IF THIS ALTERNATE IS APPROVED, THE CONTRACTOR SHALL REPLACE THE EXISTING WATER MAIN AS SPECIFIED IN THESE DOCUMENTS, IN THE SAME LOCATION AS THE EXISTING WATER MAIN. THE CONTRACTOR IS RESPONSIBLE FOR MODIFICATIONS TO THE RESTORATION LIMITS AND MOT AS APPLICABLE.
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY WATER SERVICE IN ACCORDANCE WITH LWD REQUIREMENTS. THE CONTRACTOR SHALL USE THIS SCHEMATIC PLAN AS A GUIDE AND WILL BE PERMITTED TO ADJUST OR MODIFY AS APPROVED BY THE ENGINEER.
3. THE CONTRACTOR SHALL ADJUST OR MODIFY THIS PLAN AS DIRECTED BY THE ENGINEER, CITY, OR FIRE DEPARTMENT AS REQUESTED TO PROVIDE ADEQUATE WATER AND FIRE SERVICE WITHIN THE PROJECT LIMITS AT NO ADDITIONAL COST TO THE CITY.
4. THE CONTRACTOR SHALL INSTALL TEMPORARY HYDRANTS PER THE LWD DETAILS AT OR NEAR THE EXISTING HYDRANTS ALONG VALLEYVIEW DRIVE OR AS DIRECTED BY THE ENGINEER OR CITY.
5. THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER SERVICE CONNECTIONS TO ALL RESIDENCES UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
6. THE CONTRACTOR MAY BE REQUIRED TO INCREASE PIPING SIZE OR ADD ADDITIONAL CROSSINGS TO MAINTAIN THE REQUIRED FLOW AND PRESSURE TO THE SYSTEM AT NO ADDITIONAL COST TO THE CITY OR PROJECT.

LEGEND

- TEMPORARY HYDRANT
- FEED HYDRANT
- TEMPORARY VALVE (2"/4")
- BYPASS PIPE (2"/4")

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
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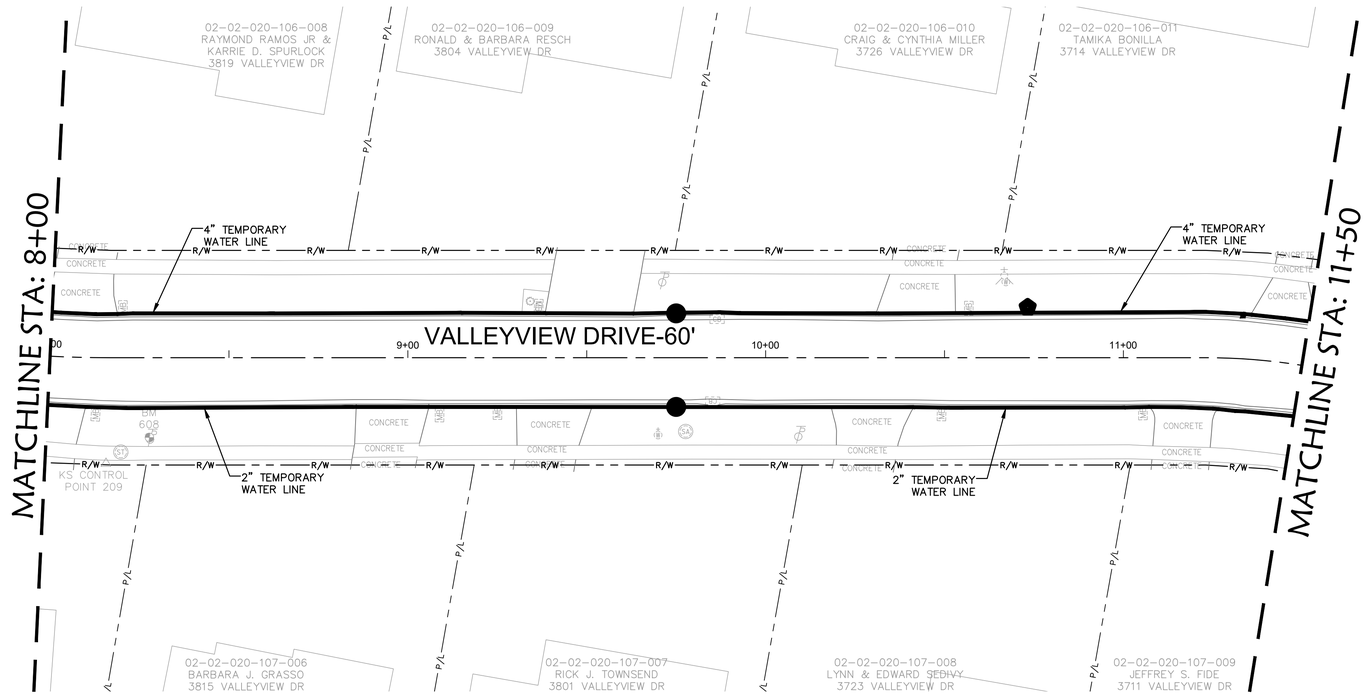
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CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

VALLEYVIEW - ADD ALTERNATE BYPASS PLAN

DRAWING NO.

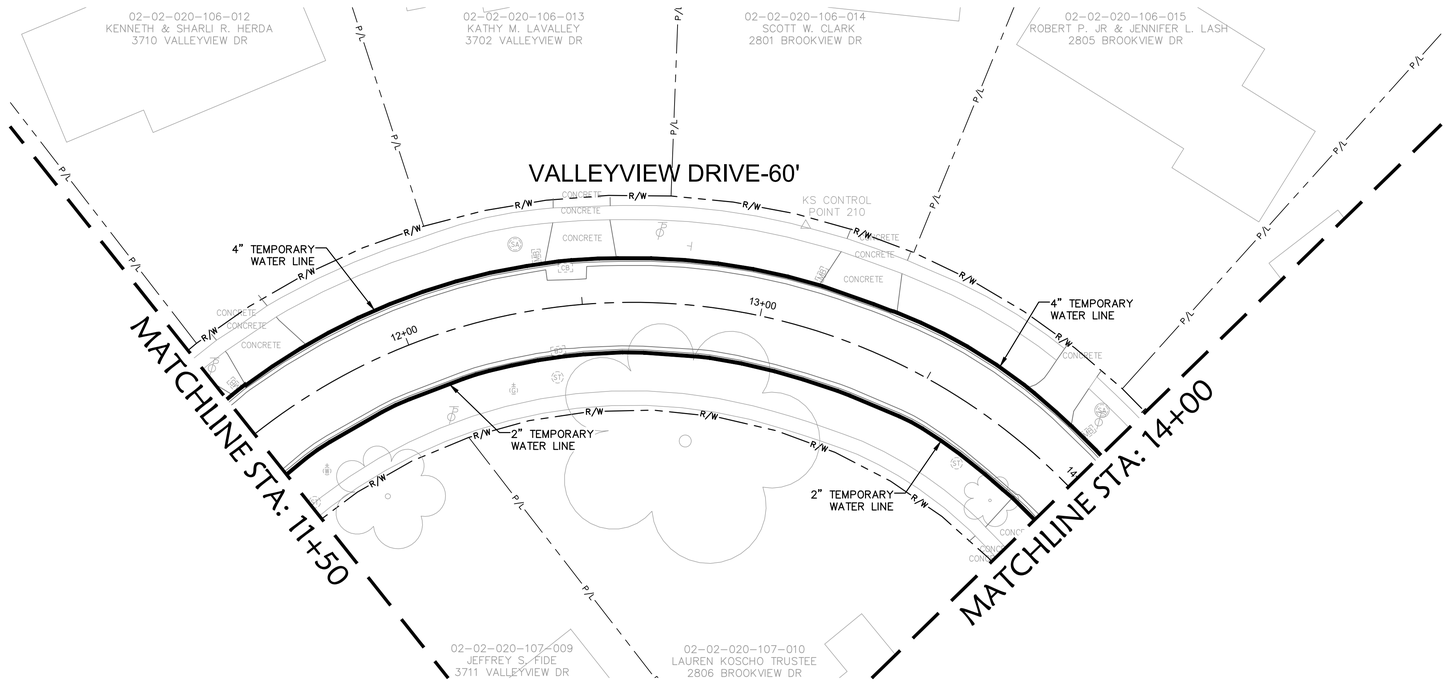
V6

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3/7/2025 5:11 PM Pawar, Sayali



VALLEYVIEW DRIVE – BYPASS PLAN

SCALE: 1" = 20'



VALLEYVIEW DRIVE – BYPASS PLAN

SCALE: 1" = 20'

NORTH

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

GENERAL NOTES:

1. IF THIS ALTERNATE IS APPROVED, THE CONTRACTOR SHALL REPLACE THE EXISTING WATER MAIN AS SPECIFIED IN THESE DOCUMENTS, IN THE SAME LOCATION AS THE EXISTING WATER MAIN. THE CONTRACTOR IS RESPONSIBLE FOR MODIFICATIONS TO THE RESTORATION LIMITS AND MOT AS APPLICABLE.
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6. THE CONTRACTOR MAY BE REQUIRED TO INCREASE PIPING SIZE OR ADD ADDITIONAL CROSSINGS TO MAINTAIN THE REQUIRED FLOW AND PRESSURE TO THE SYSTEM AT NO ADDITIONAL COST TO THE CITY OR PROJECT.

LEGEND

- TEMPORARY HYDRANT
- FEED HYDRANT
- TEMPORARY VALVE (2"/4")
- BYPASS PIPE (2"/4")

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
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KEVIN D. CODIN
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03/06/2025

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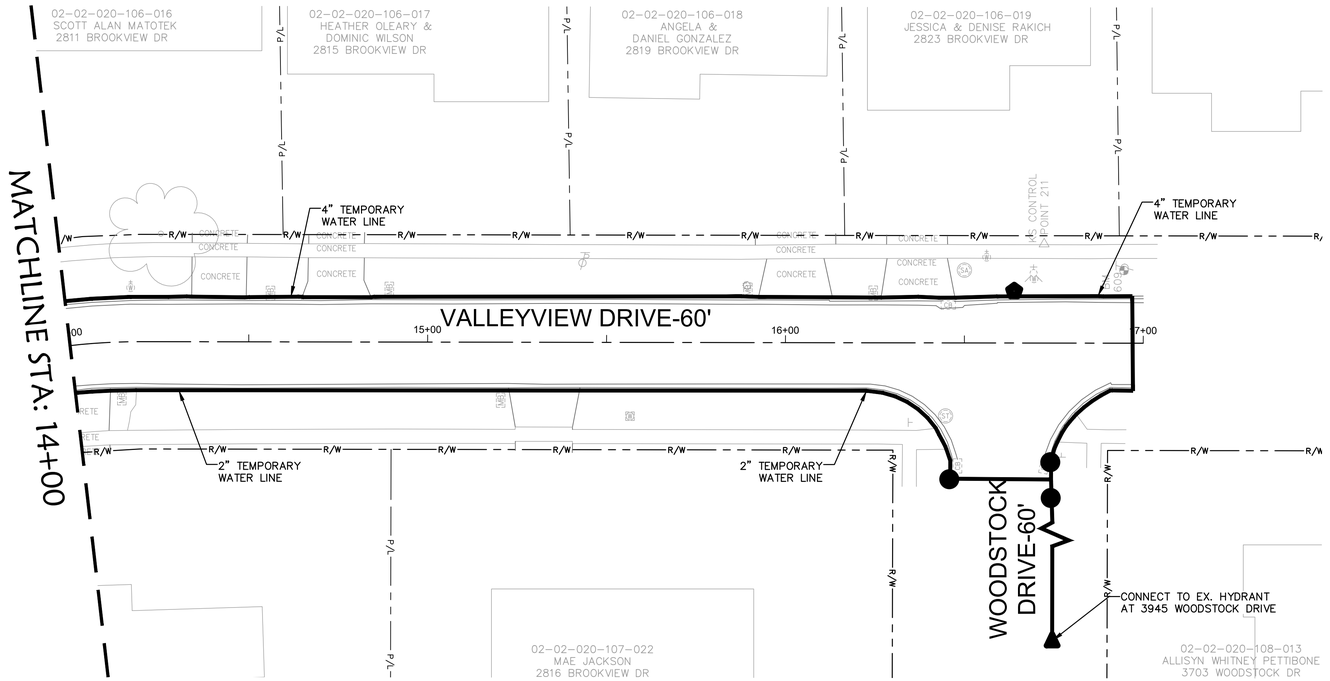
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CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

VALLEYVIEW - ADD ALTERNATE BYPASS PLAN

DRAWING NO.

V7

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3/7/2025 5:11 PM Pawar, Sayali



NORTH

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

VALLEYVIEW DRIVE – BYPASS PLAN

SCALE: 1" = 20'

GENERAL NOTES:

1. IF THIS ALTERNATE IS APPROVED, THE CONTRACTOR SHALL REPLACE THE EXISTING WATER MAIN AS SPECIFIED IN THESE DOCUMENTS, IN THE SAME LOCATION AS THE EXISTING WATER MAIN. THE CONTRACTOR IS RESPONSIBLE FOR MODIFICATIONS TO THE RESTORATION LIMITS AND MOT AS APPLICABLE.
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6. THE CONTRACTOR MAY BE REQUIRED TO INCREASE PIPING SIZE OR ADD ADDITIONAL CROSSINGS TO MAINTAIN THE REQUIRED FLOW AND PRESSURE TO THE SYSTEM AT NO ADDITIONAL COST TO THE CITY OR PROJECT.

LEGEND

- TEMPORARY HYDRANT
- FEED HYDRANT
- TEMPORARY VALVE (2"/4")
- BYPASS PIPE (2"/4")

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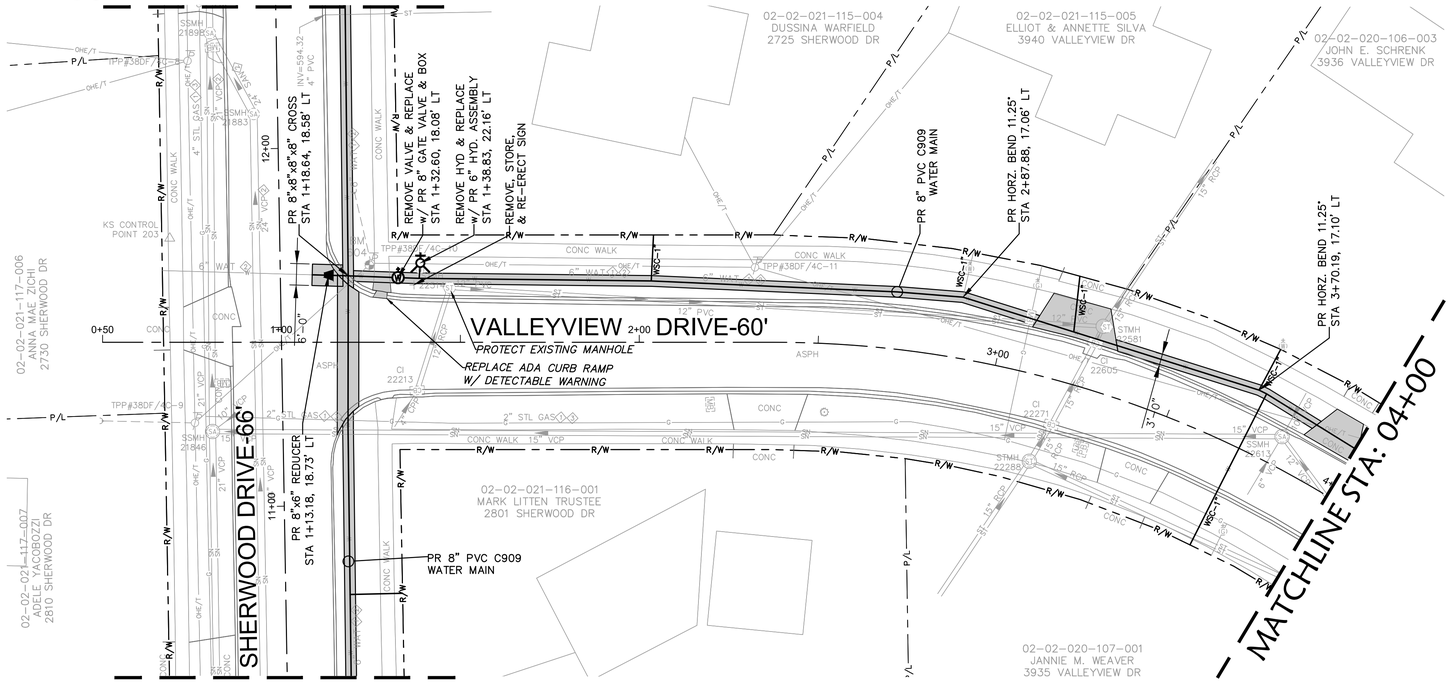
DRAWN BY	AJD
CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

VALLEYVIEW - ADD ALTERNATE BYPASS PLAN

DRAWING NO.

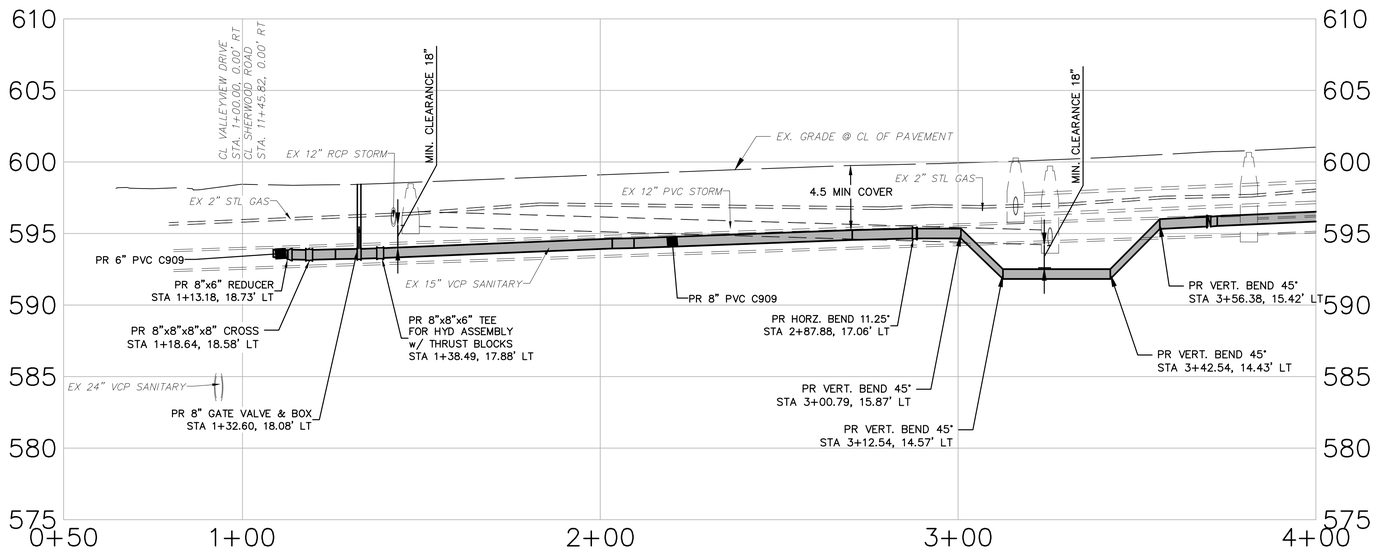
V8

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3/7/2025 5:12 PM Pawar, Sayali



VALLEYVIEW DRIVE–ALTERNATE W/ BYPASS

SCALE: 1" = 20'



VALLEYVIEW DRIVE ALTERNATE PROFILE W/ BYPASS

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 21846
RIM=598.88
INV=591.68 21" VCP NW
INV=594.88 10" VCP NE
INV=592.48 15" VCP NE
INV=591.78 21" VCP SE

SSMH 21883
RIM=595.81
COULD NOT OPEN

SSMH 21898
RIM=594.64
COULD NOT OPEN

CI 22213
RIM=597.92
INV=596.07 12" RCP NW
INV=596.92 4" CPP S
BOTTOM=595.82

CI 22271
RIM=599.50
INV=595.75 15" RCP N
INV=595.75 15" RCP S

STMH 22288
RIM=600.28
INV=596.28 15" RCP N
INV=596.38 15" RCP NE
INV=596.33 15" RCP SW

STMH 22514
RIM=598.48
INV=595.53 12" PVC NE
INV=595.68 12" RCP SE

STMH 22581
RIM=599.72
INV=594.12 15" RCP N
INV=594.17 15" RCP S
INV=594.22 12" PVC SW

STMH 22605
RIM=599.77
INV=594.47 15" RCP N
INV=594.77 15" RCP S

SSMH 22613
RIM=600.67
INV=596.27 10" VCP N
INV=594.97 12" VCP SE
INV=595.47 6" VCP S
INV=594.96 15" VCP SW

GENERAL NOTES:

1. EXISTING PAVEMENT FOR SHERWOOD DRIVE IS VARYING FROM SHEET 3.5" TO 4.25" ASPHALT PAVEMENT OVER 8.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. EXISTING PAVEMENT FOR VALLEYVIEW DRIVE IS VARYING FROM SHEET 4.5" TO 5" ASPHALT PAVEMENT OVER VARYING 6" TO 7.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR TO POOR. REFER TO REPORT DATED FEBRUARY 2, 2024.
3. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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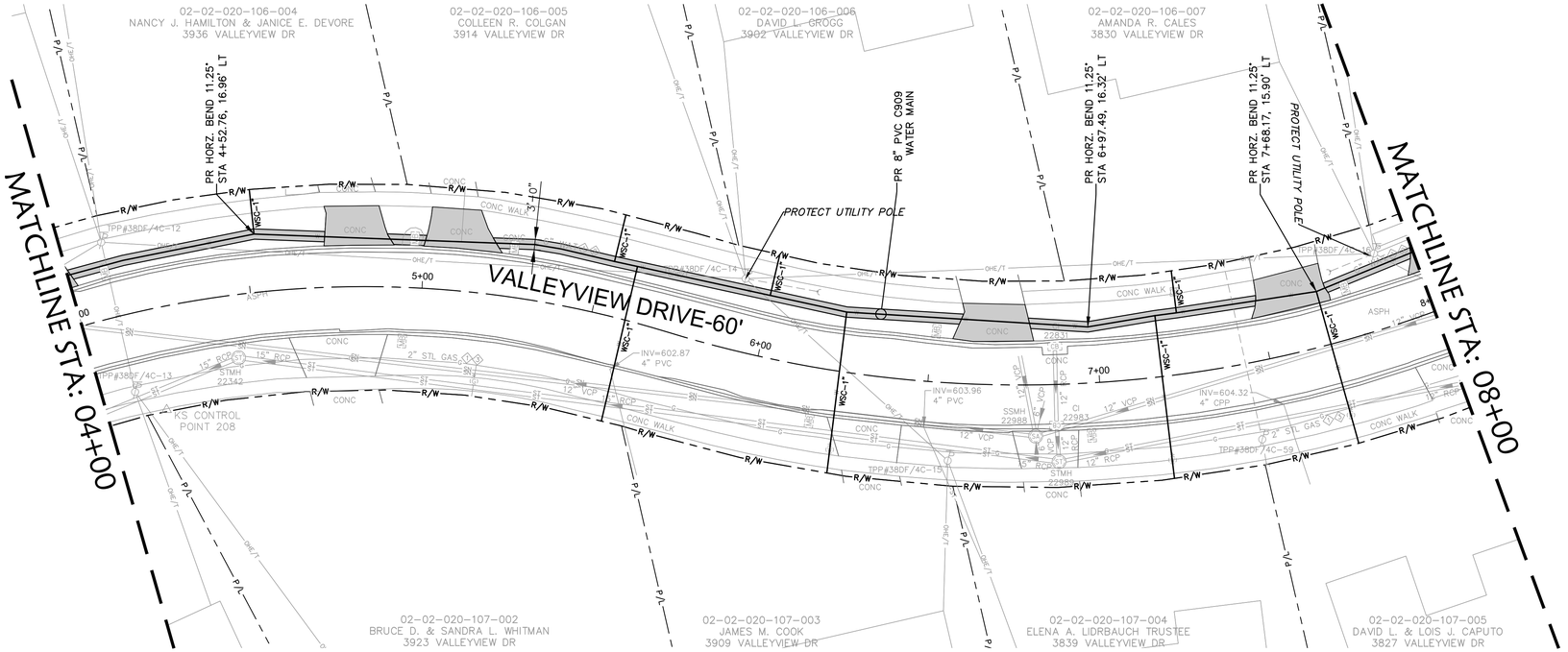
DRAWN BY	SUP
CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

VALLEYVIEW - ALT PLAN & PROFILE 0+50 TO 4+00

DRAWING NO.

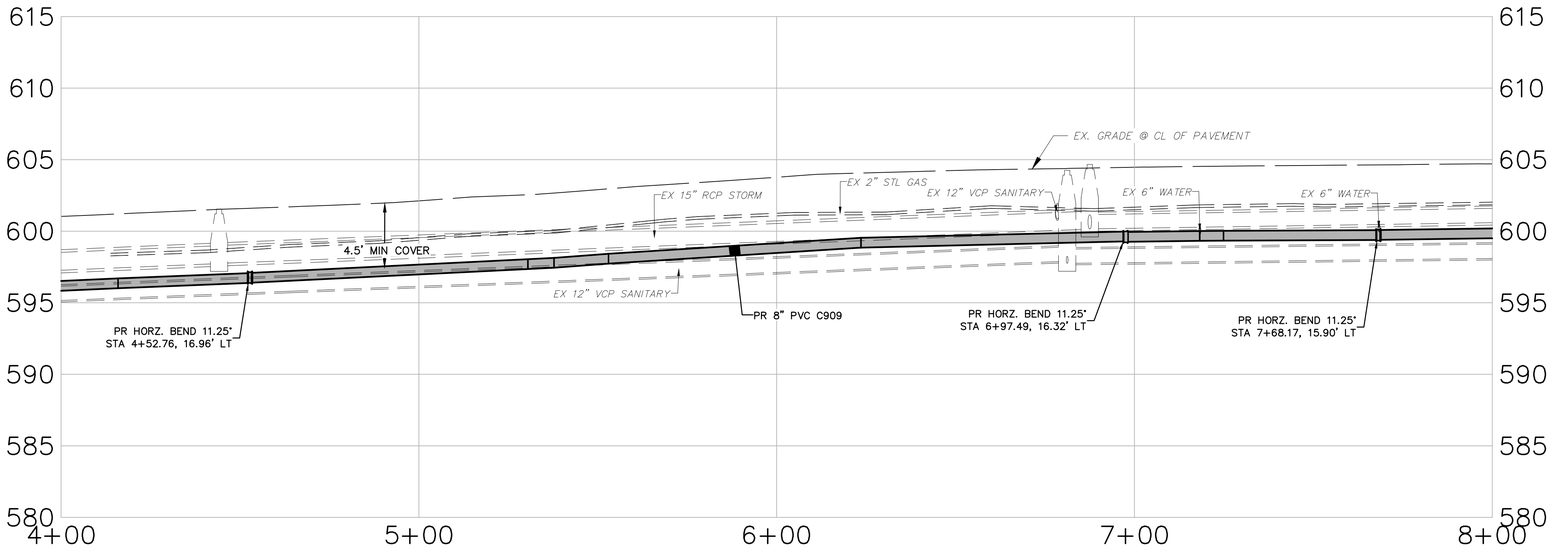
V9

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3/7/2025 6:21 PM Pawar, Sayali



VALLEYVIEW DRIVE–ALTERNATE W/ BYPASS

SCALE: 1" = 20'



VALLEYVIEW DRIVE ALT. PROFILE W/ BYPASS

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

STMH 22342
RIM=601.55
INV=597.75 15" RCP SE
INV=597.74 15" RCP SW

CI 22831
RIM=604.03
INV=601.13 12" RCP SW
BOTTOM=601.13

CI 22983
RIM=603.99
INV=600.59 12" RCP NE
INV=600.59 12" RCP SE

SSMH 22988
RIM=604.25
INV=600.85 12" VCP N
INV=598.85 6" VCP NE
INV=597.90 12" VCP NE
INV=598.75 6" VCP SW
INV=597.90 12" VCP NW

STMH 22989
RIM=604.66
INV=600.76 12" RCP NE
INV=600.16 12" RCP E
INV=600.15 15" RCP NW

GENERAL NOTES:

1. EXISTING PAVEMENT FOR VALLEYVIEW DRIVE IS VARYING FROM SHEET 4.5" TO 5" ASPHALT PAVEMENT OVER VARYING 6" TO 7.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR TO POOR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-84062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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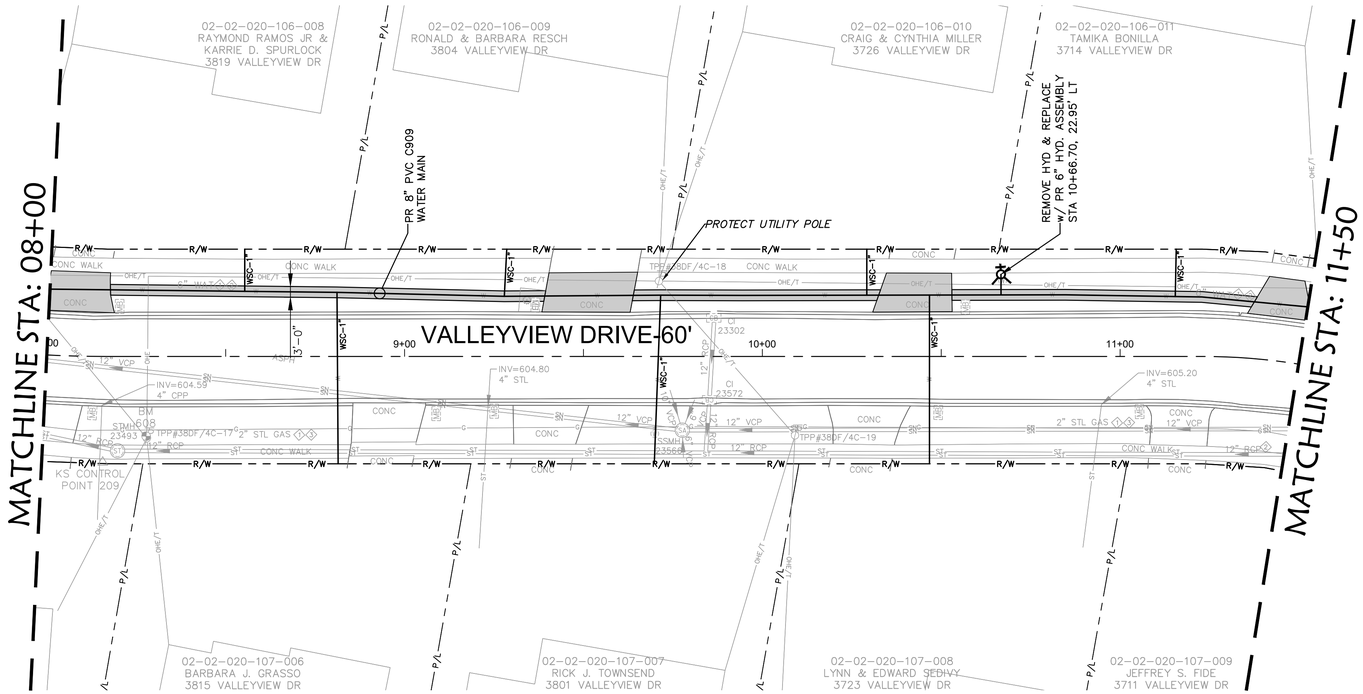
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CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

VALLEYVIEW - ALT PLAN & PROFILE 4+00 TO 8+00

DRAWING NO.

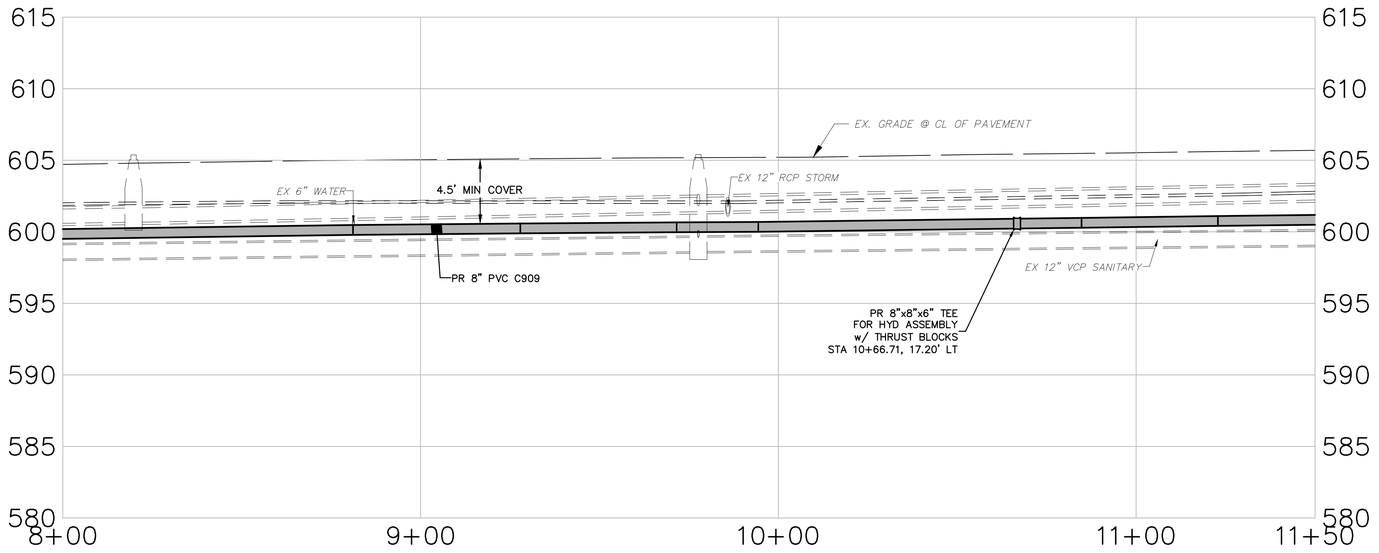
V10

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3/7/2025 6:15 PM Pawar, Sayali



VALLEYVIEW DRIVE–ALTERNATE W/ BYPASS

SCALE: 1" = 20'



VALLEYVIEW DRIVE ALT. PROFILE W/ BYPASS

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

CI 23302
RIM=604.57
INV=601.27 12" RCP S
BOTTOM=601.27

STMH 23493
RIM=605.37
INV=600.67 12" RCP W
INV=600.66 12" RCP NE

SSMH 23566
RIM=605.41
INV=601.81 10" VCP NW
INV=599.61 6" VCP NE
INV=598.62 12" VCP NE
INV=599.61 6" VCP SE
INV=598.61 12" VCP SW

CI 23572
RIM=604.73
INV=601.23 12" RCP N
INV=601.13 12" RCP S
BOTTOM=601.13

GENERAL NOTES:

1. EXISTING PAVEMENT FOR VALLEYVIEW DRIVE IS VARYING FROM SHEET 4.5" TO 5" ASPHALT PAVEMENT OVER VARYING 6" TO 7.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR TO POOR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CORN
E-64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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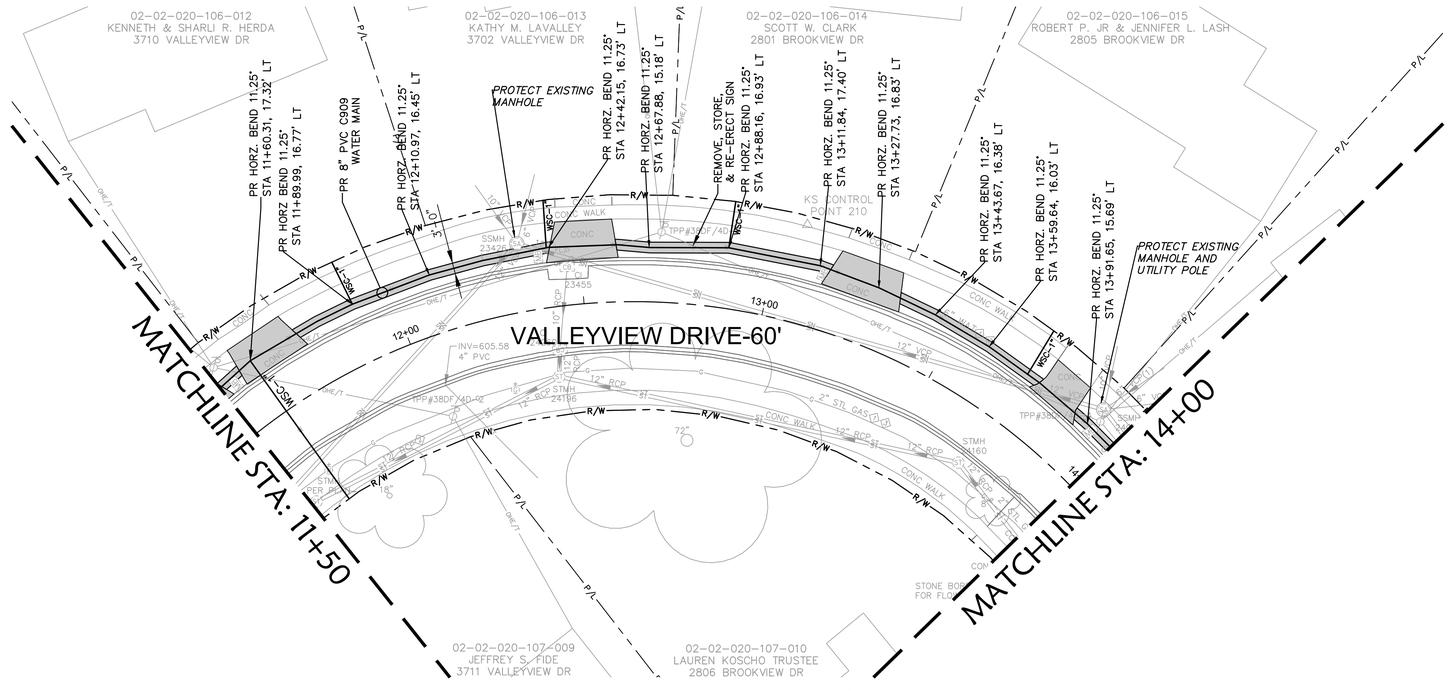
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OSBORN PROJ NO.	J20221302.000

VALLEYVIEW - ALT PLAN & PROFILE 8+00 TO 11+50

DRAWING NO.

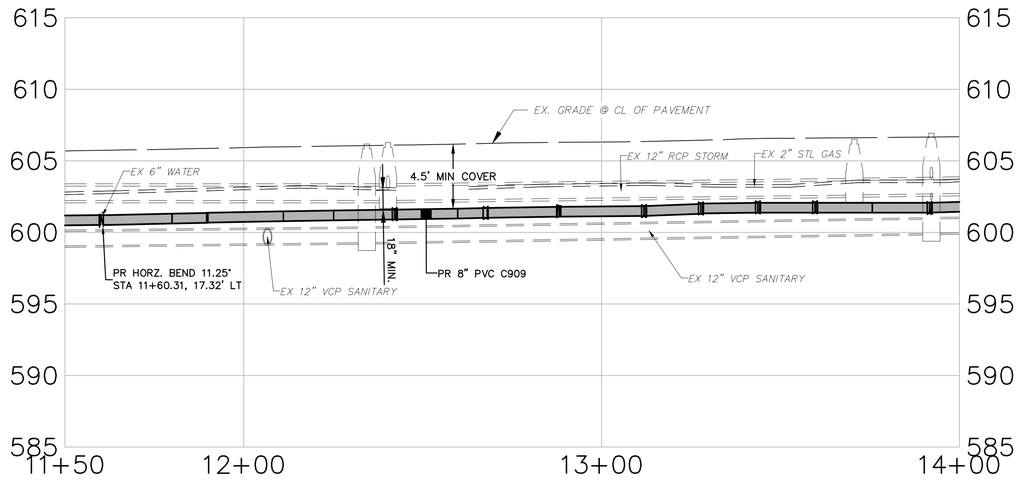
V11

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3/7/2025 5:14 PM Pawar, Sayali



VALLEYVIEW DRIVE—ALTERNATE W/ BYPASS

SCALE: 1" = 20'



VALLEYVIEW DRIVE ALT. PROFILE W/ BYPASS

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 23426
RIM=606.18
INV=602.18 10" VCP N
INV=600.46 6" VCP NE
INV=599.29 12" VCP SE
INV=599.28 12" VCP SW

CI 23455
RIM=605.52
INV=602.27 10" RCP SW

SSMH 24035
RIM=606.93
INV=599.93 12" VCP NW
INV=603.73 10" VCP NE
INV=602.23 6" VCP SE (1)
INV=601.23 6" VCP SE (2)
INV=599.94 12" VCP S

STMH 24160
RIM=606.51
INV=602.61 12" RCP NW
INV=602.62 12" RCP S

STMH 24196
RIM=606.28
INV=602.23 12" RCP NW
INV=602.33 12" RCP NE
INV=602.33 12" RCP SE

CI 24260
RIM=605.45
INV=602.31 10" RCP NE
INV=602.30 12" RCP SW

GENERAL NOTES:

1. EXISTING PAVEMENT FOR VALLEYVIEW DRIVE IS VARYING FROM SHEET 4.5" TO 5" ASPHALT PAVEMENT OVER VARYING 6" TO 7.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR TO POOR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. COON
E-84060
REGISTERED PROFESSIONAL ENGINEER

03/06/2025

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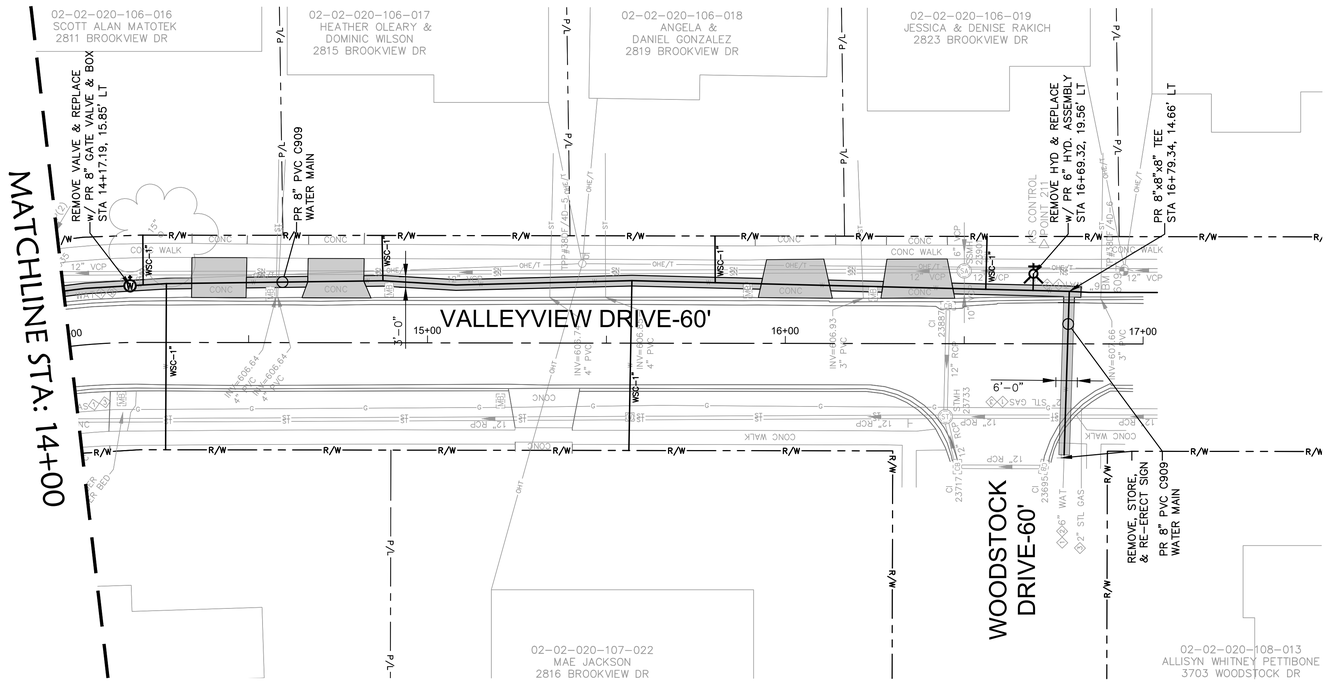
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CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

VALLEYVIEW - ALT PLAN & PROFILE 11+50 TO 14+00

DRAWING NO.

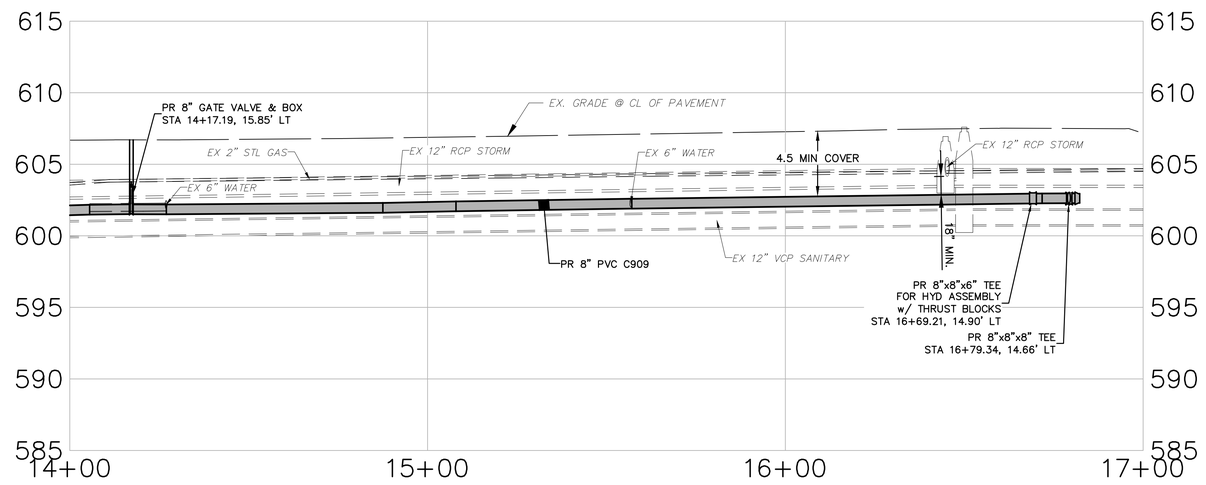
V12

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3/7/2025 5:15 PM Pawar, Sayali



VALLEYVIEW DRIVE–ALTERNATE W/ BYPASS

SCALE: 1" = 20'



VALLEYVIEW DRIVE ALTERNATE PROFILE W/ BYPASS

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

SSMH 23426
RIM=606.18
INV=602.18 10" VCP N
INV=600.46 6" VCP NE
INV=599.29 12" VCP SE
INV=599.28 12" VCP SW

CI 23455
RIM=605.52
INV=602.27 10" RCP SW

SSMH 24035
RIM=606.93
INV=599.93 12" VCP NW
INV=603.73 10" VCP NE
INV=602.23 6" VCP SE (1)
INV=601.23 6" VCP SE (2)
INV=599.94 12" VCP S

STMH 24160
RIM=606.51
INV=602.61 12" RCP NW
INV=602.62 12" RCP S

STMH 24196
RIM=606.28
INV=602.23 12" RCP NW
INV=602.33 12" RCP NE
INV=602.33 12" RCP SE

CI 24260
RIM=605.45
INV=602.31 10" RCP NE
INV=602.30 12" RCP SW

GENERAL NOTES:

1. EXISTING PAVEMENT FOR VALLEYVIEW DRIVE IS VARYING FROM SHEET 4.5" TO 5" ASPHALT PAVEMENT OVER VARYING 6" TO 7.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR TO POOR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. COBN
E-64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
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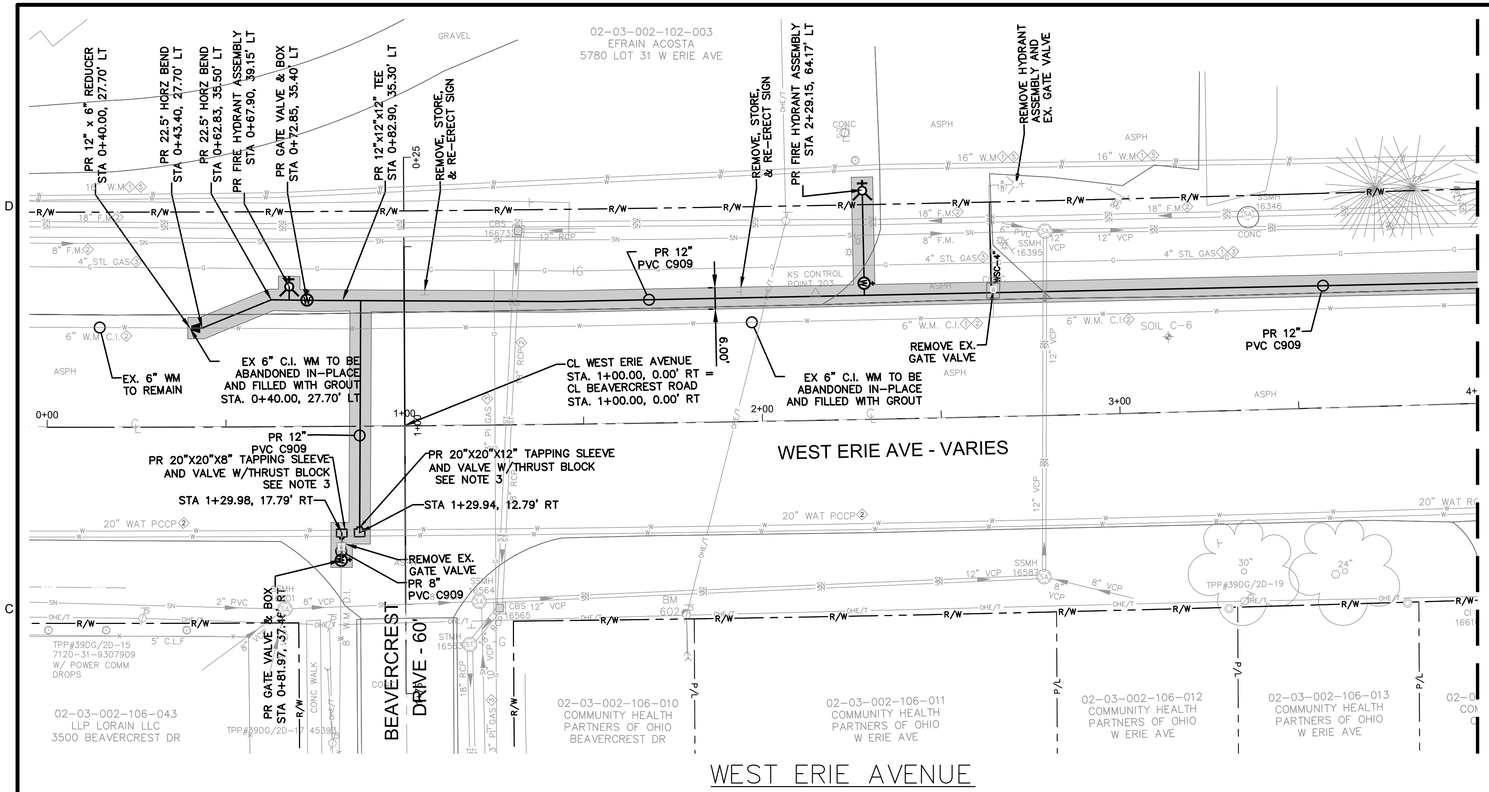
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CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

VALLEYVIEW - ALT PLAN & PROFILE 14+00 TO 17+00

DRAWING NO.

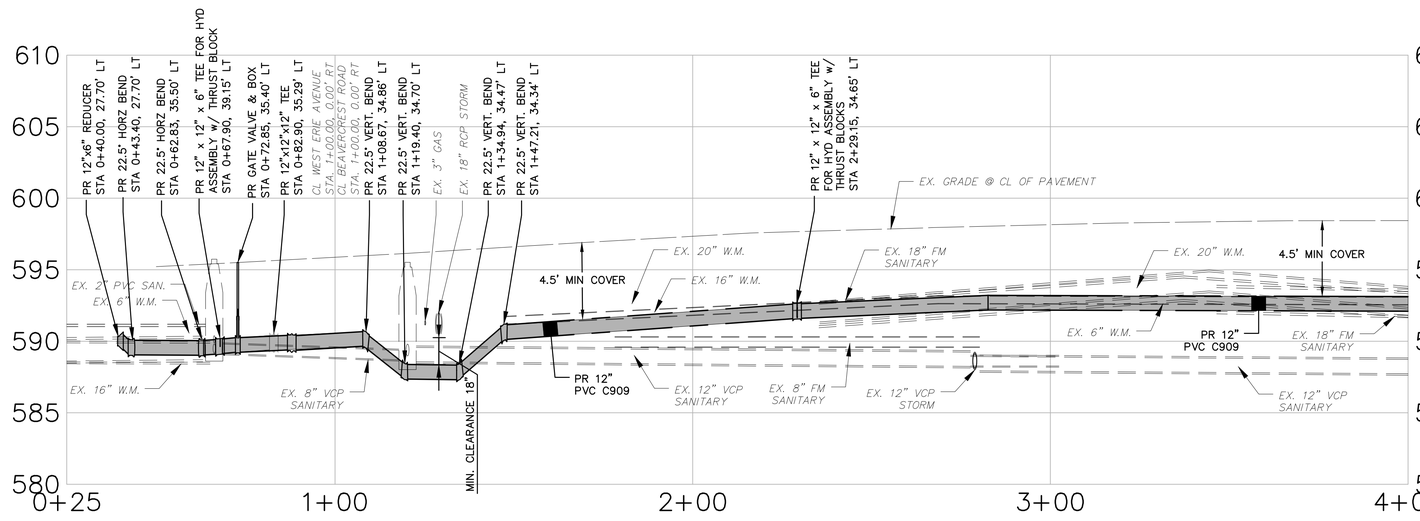
V13

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3/7/2025 5:15 PM Pawar, Sayali



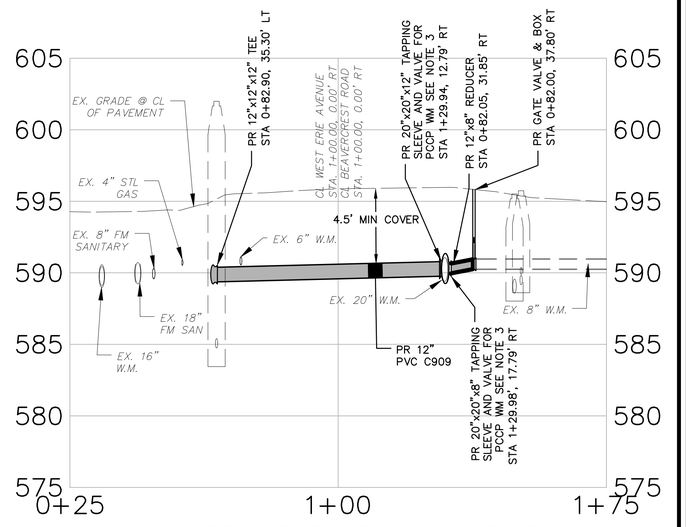
WEST ERIE AVENUE

SCALE: 1" = 20'



WEST ERIE AVENUE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



BEAVERCREST DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 16395
RIM=598.71
INV=588.01 12" VCP SE
INV=589.61 8" VCP SW
TOP OF PIPE=590.91 6" PVC SW
INV=587.93 12" VCP NE

SSMH 16501
RIM=595.74
INV=589.89 6" VCP SE
INV=589.42 8" VCP SW
INV=589.16 8" VCP NE
TOP OF PIPE=591.19 2" PVC SW

STMH 16563
RIM=595.13
INV=590.95 18" RCP NE & SE
BOTTOM=590.95
TOP OF WATER=591.93

SSMH 16564
RIM=595.52
INV=588.57 12" VCP NE
INV=588.68 10" VCP SE
INV=588.97 8" VCP SW

CBS 16565
RIM=594.72
INV=590.97 18" RCP SW & NW
BOTTOM=590.97
TOP OF WATER=591.92

SSMH 16587
RIM=596.42
INV=588.24 12" VCP SW
INV=587.97 12" VCP NW
INV=588.27 8" VCP NE

CBS 16673

GENERAL NOTES

1. EXISTING PAVEMENT FOR WEST ERIE AVENUE IS VARYING FROM SHEET 7" TO 11.5" ASPHALT PAVEMENT OVER 8.5" BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR TO GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. TAPPING SLEEVE SHALL BE JCM 415, SMITH-BLAIR 625 OR APPROVED EQUAL. FURNISH AND INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN OHIO 1834

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODN 64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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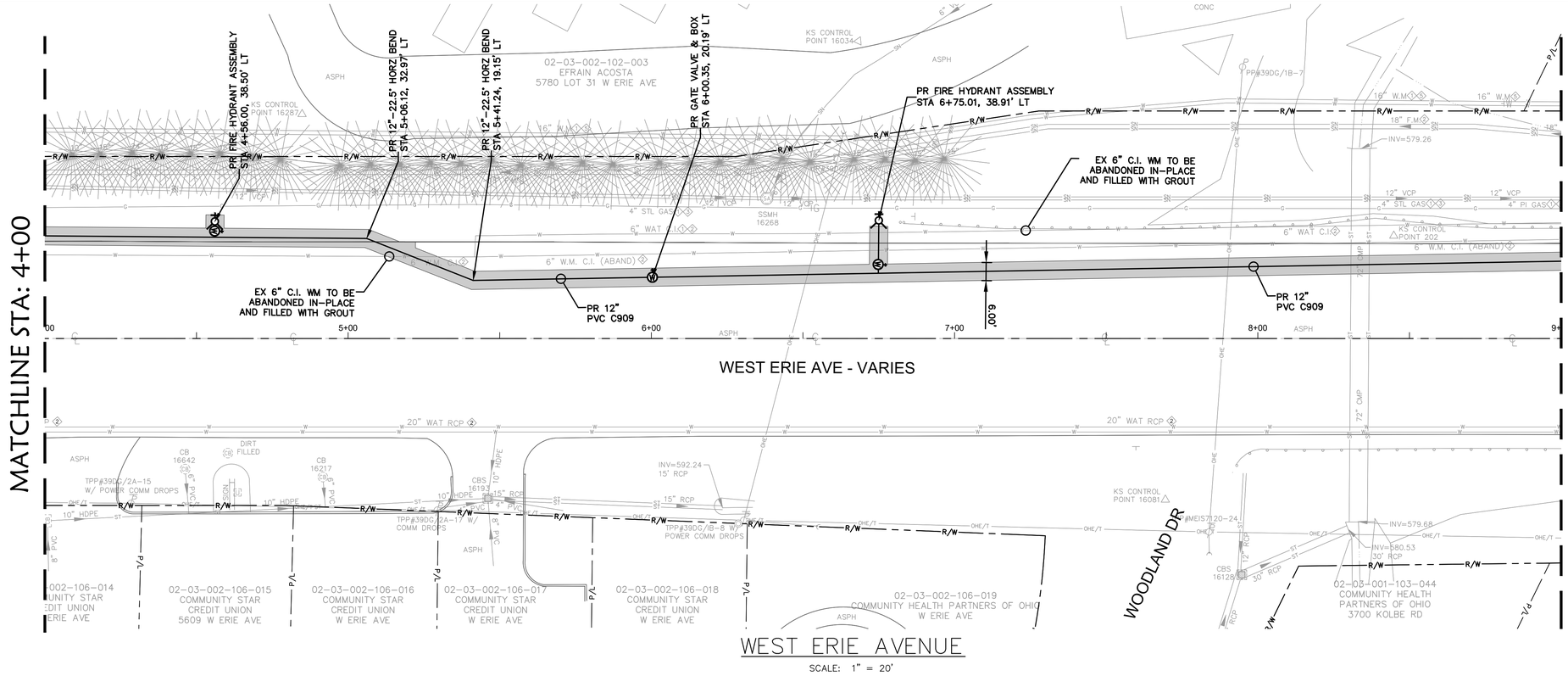
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OSBORN PROJ NO.	J20221302.000

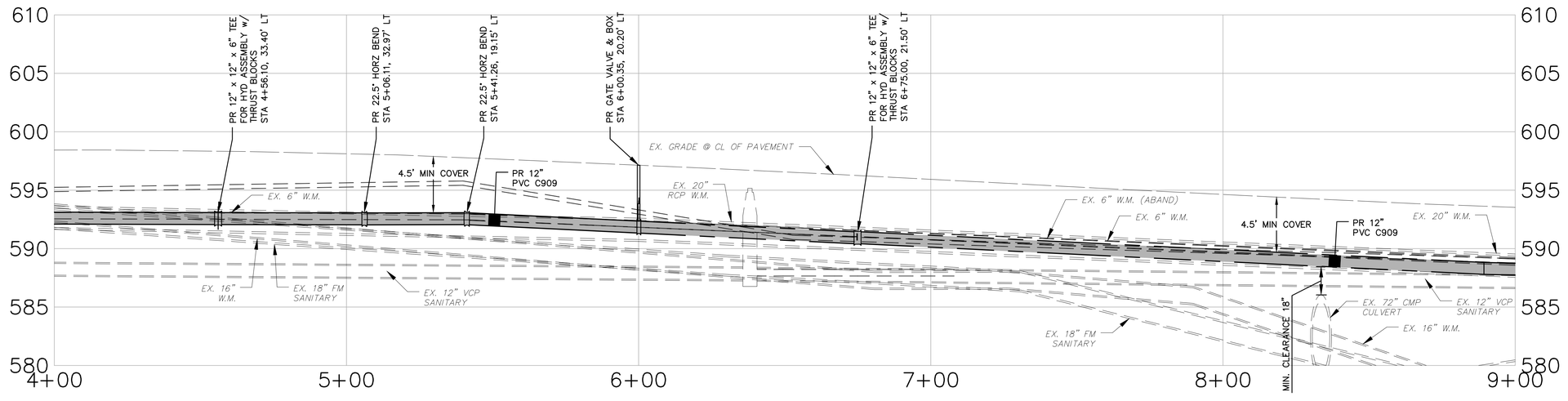
WEST ERIE - PLAN & PROFILE 0+00 TO 4+00

DRAWING NO.

W1

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3/7/2025 5:16 PM Pawar, Sayali





WEST ERIE AVENUE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

CBS 16128
RIM=584.24
INV=581.02 24" RCP SE
INV=580.59 30" RCP NE
INV=580.71 12" RCP NW
(RECESSED)

CBS 16193
RIM=596.81
INV=592.70 10" HDPE SW
INV=594.29 4" PVC SW
INV=594.26 4" PVC NW
INV=592.36 15" RCP NE
INV=594.31 4" PVC NE
INV=592.85 8" PVC SE
BOTTOM=591.91
TOP OF WATER=592.81

CB 16217
RIM=596.73
INV=593.73 6" PVC SE

SSMH 16268
RIM=595.16
INV=587.33 12" VCP SW
INV=587.69 6" VCP NE
INV=587.31 12" VCP NE

GENERAL NOTES

1. EXISTING PAVEMENT FOR WEST ERIE AVENUE IS VARYING FROM SHEET 7" TO 11.5" ASPHALT PAVEMENT OVER 8.5" BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR TO GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO KEVIN D. CODIN 84026 REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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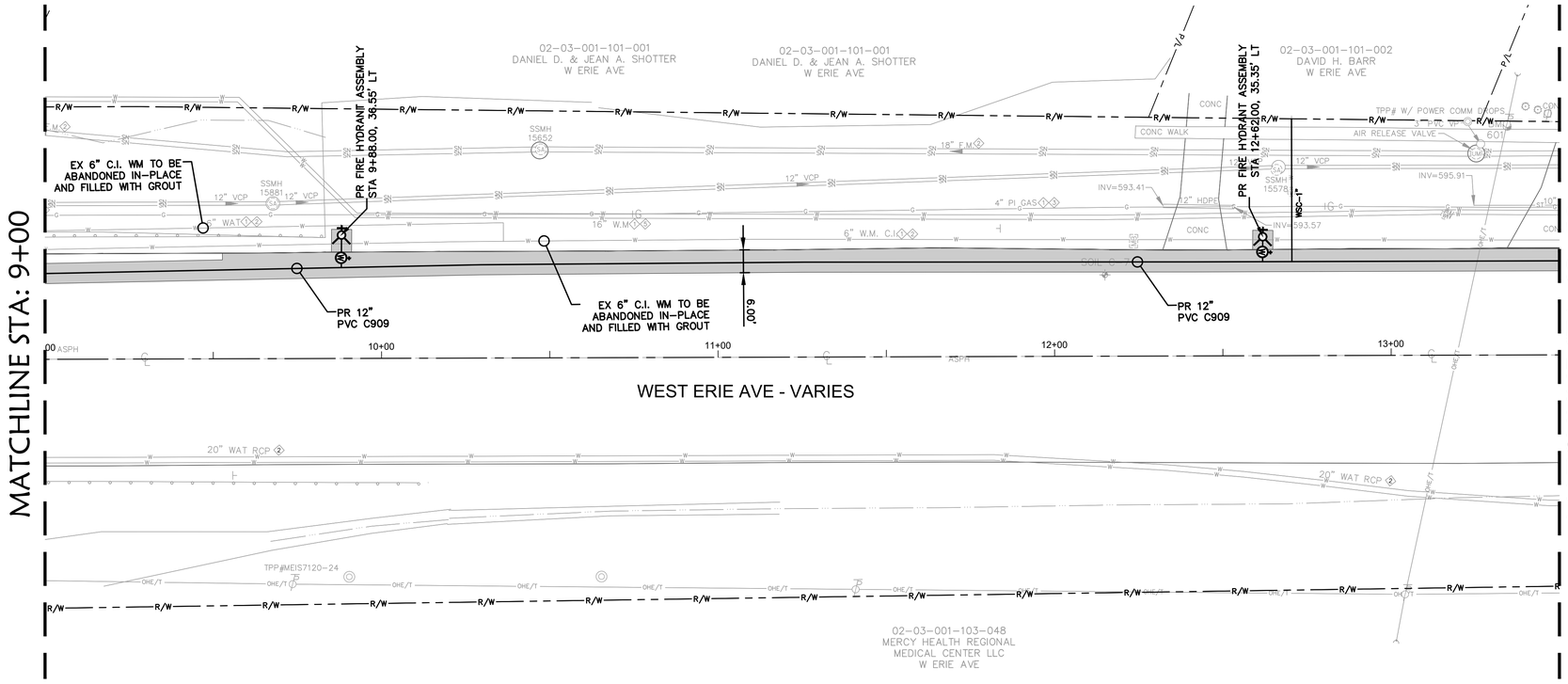
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OSBORN PROJ NO.	J20221302.000

WEST ERIE - PLAN & PROFILE 4+00 TO 9+00

DRAWING NO.

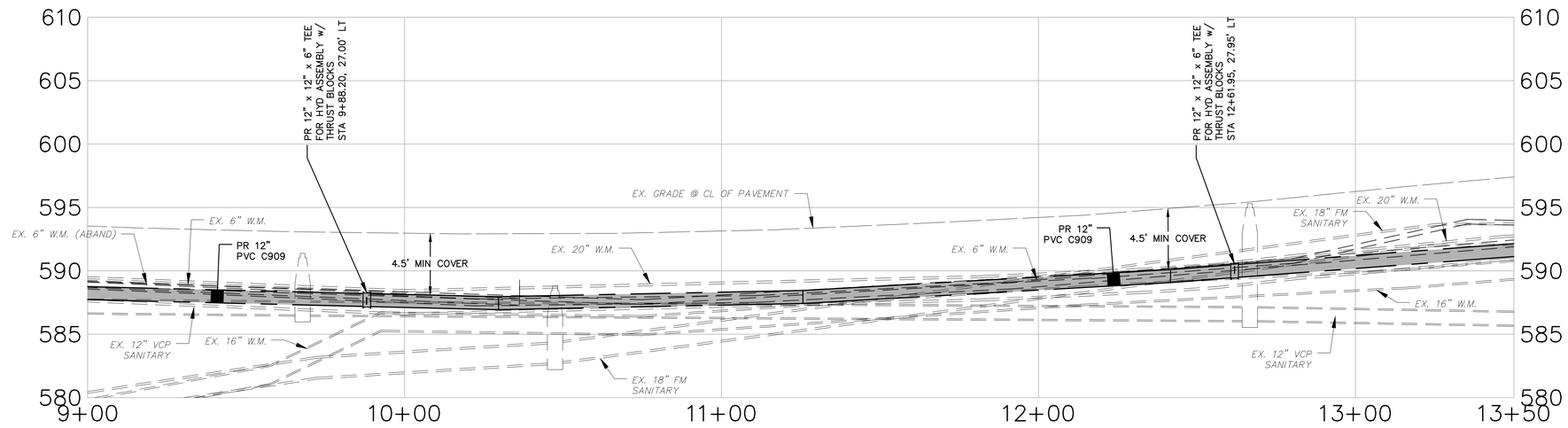
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WEST ERIE AVENUE

SCALE: 1" = 20'



WEST ERIE AVENUE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)
1 inch = 5 ft.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

NORTH

GRAPHIC SCALE

20 0 10 20

(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 15652
RIM=588.80
FULL OF WATER

SSMH 15578
RIM=595.23
INV=586.08 12" VCP SW & NE

SSMH 15881
RIM=591.37
INV=586.52 12" VCP SW & NE

GENERAL NOTES

1. EXISTING PAVEMENT FOR WEST ERIE AVENUE IS VARYING FROM SHEET 7" TO 11.5" ASPHALT PAVEMENT OVER 8.5" BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR TO GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO KEVIN D. CODY E-64026 REGISTERED PROFESSIONAL ENGINEER

03/06/2025

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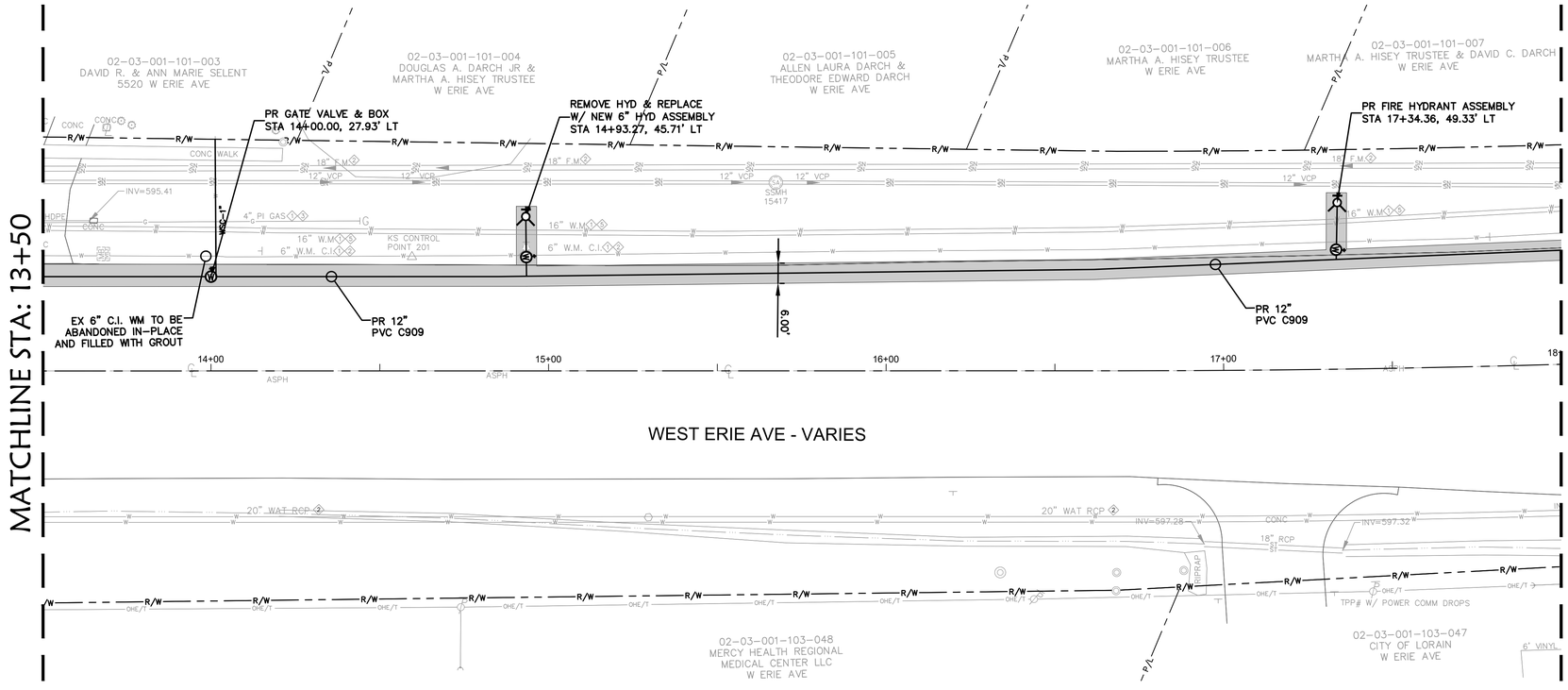
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OSBORN PROJ NO.	J20221302.000

WEST ERIE - PLAN & PROFILE 9+00 TO 13+50

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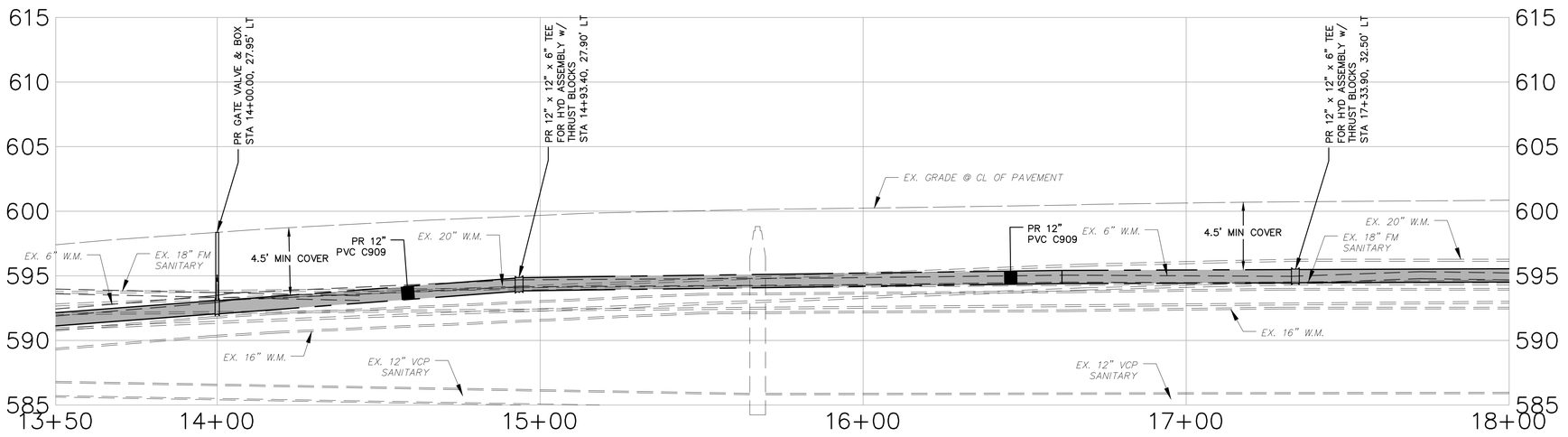
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Pawar, Sayali



WEST ERIE AVENUE

SCALE: 1" = 20'



WEST ERIE AVENUE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE

20 0 10 20

(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 15417
RIM=598.82
INV=585.52 12" VCP SW
INV=585.42 12" VCP NE

GENERAL NOTES

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2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. IF TRENCH RESTORATION LIMITS ARE LESS THAN 2 FEET FROM EDGE OF PAVEMENT, CONTRACTOR TO RESTORE ROADWAY TO EDGE OF PAVEMENT.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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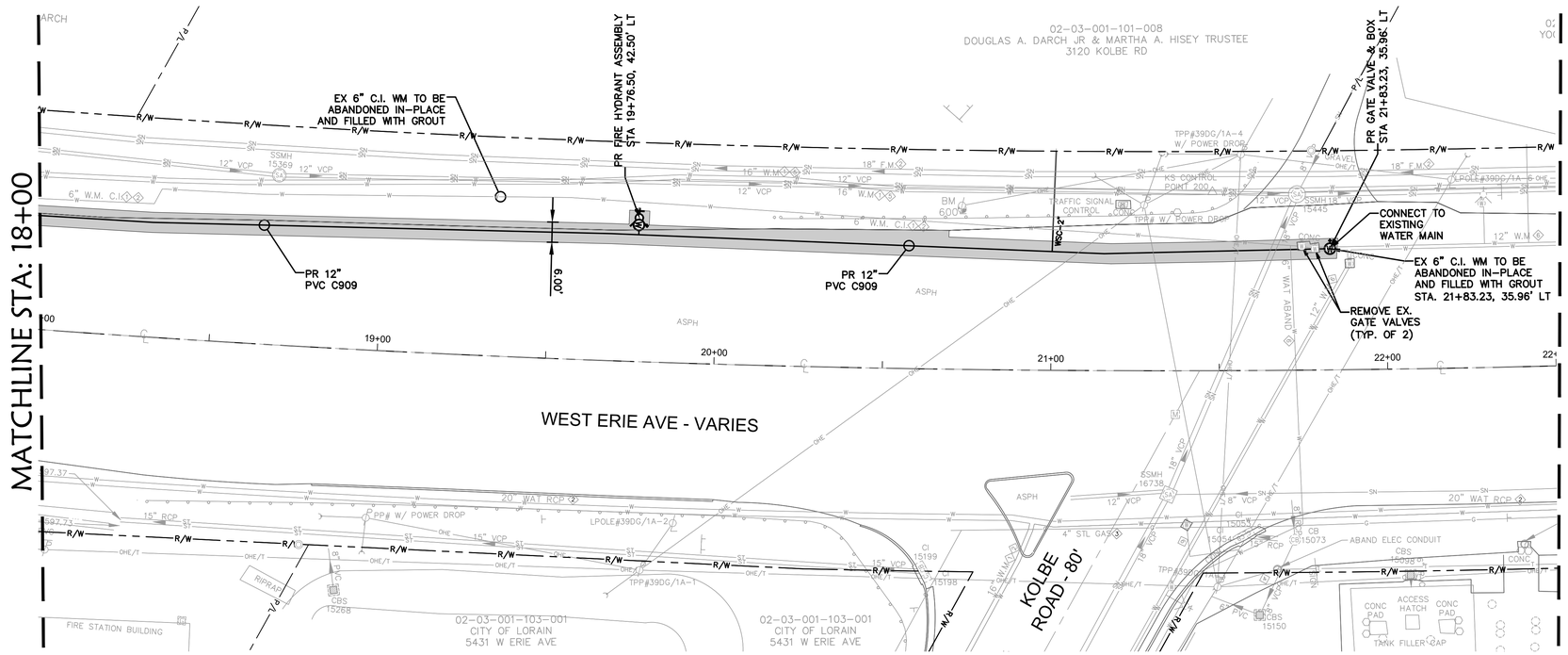
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WEST ERIE - PLAN & PROFILE 13+50 TO 18+00

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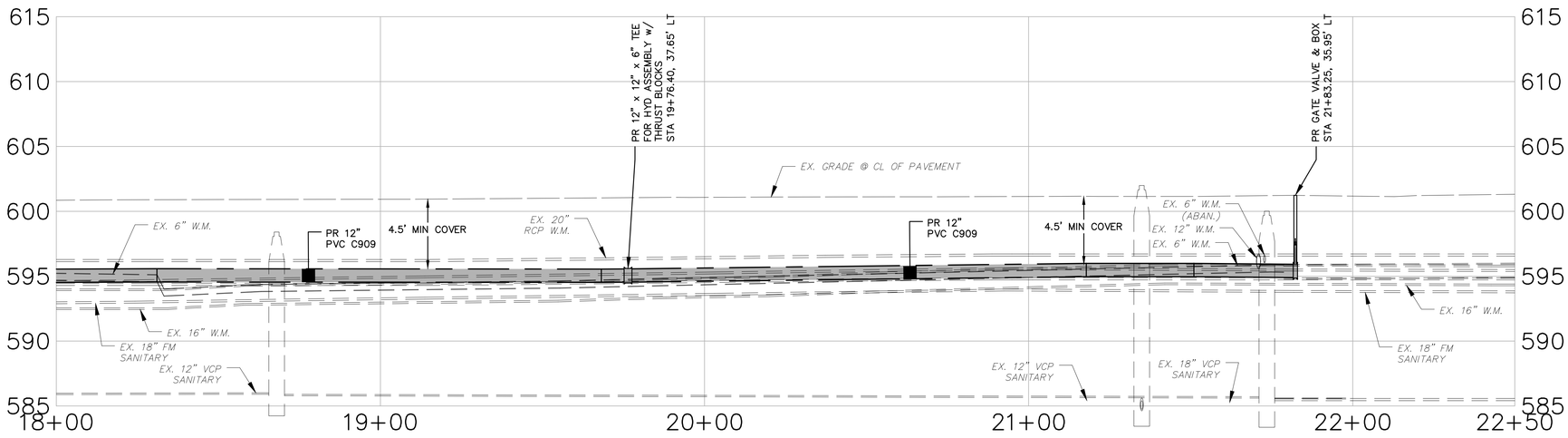
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WEST ERIE AVENUE

SCALE: 1" = 20'



WEST ERIE AVENUE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE

20 0 10 20

(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

CB 15073
RIM=601.70
INV=599.45 8" RCP NW (RECESSED)
INV=598.60 8" VCP S
BOTTOM=598.50
TOP OF WATER=599.05

CBS 15150
RIM=602.16
INV=599.61 8" RCP NW
INV=599.06 6" PVC SW

CI 15199
RIM=600.58
INV=598.08 15" VCP SW (DUAL GRATES)
BOTTOM=598.08
TOP OF WATER=598.68

CBS 15268
RIM=600.67
INV=598.52 8" PVC NW
BOTTOM=596.17
TOP OF WATER=598.67
TOP OF 6" RIM=600.27 6" VERTICAL

SSMH 15369
RIM=598.41
INV=584.91 12" VCP SW
INV=584.79 12" VCP NE

SSMH 15445
RIM=600.01
INV=584.87 8" VCP N
INV=583.91 18" VCP NE
INV=583.95 18" VCP SE
INV=584.61 12" VCP SW

SSMH 16738
RIM=601.99
INV=583.99 18" VCP NW
INV=584.74 8" VCP NE
INV=584.02 18" VCP SE
INV=584.62 12" VCP SW

GENERAL NOTES

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LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

NORTH

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODN
E-84062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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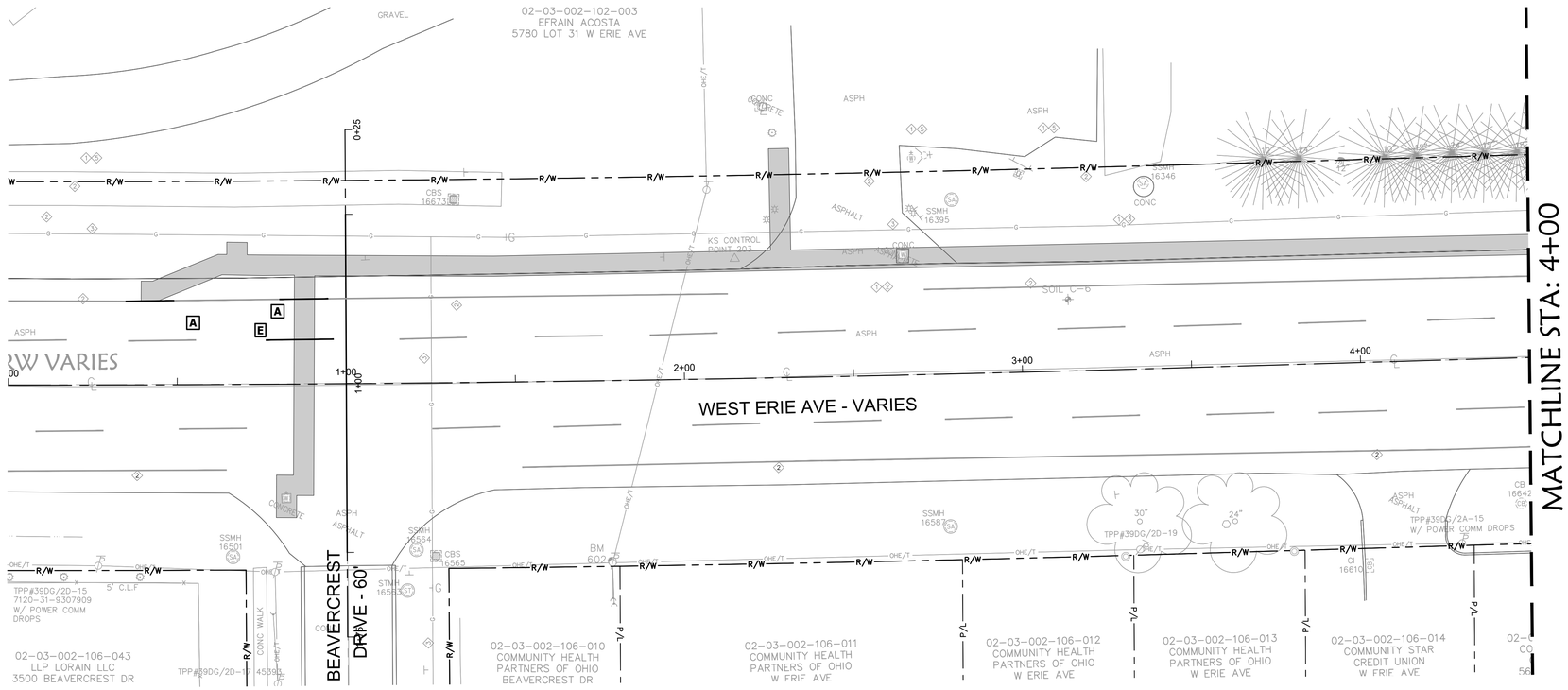
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WEST ERIE - PLAN & PROFILE 18+00 TO 22+50

DRAWING NO.

W5

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NORTH

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

NOTES

1. *THIS PAVEMENT STRIPING RESTORATION PLAN AS DEVELOPED BY THE ENGINEER IS TO BE USED AS A GUIDELINE FOR THE CONTRACTOR.*
2. *DISTANCE BETWEEN PAVEMENT LINES SHOULD BE MEASURED FROM THE NEAREST CURB TO THE ROADWAY CENTERLINE.*
3. *ALL PERMANENT MARKINGS ON ASPHALT PAVEMENT SHALL BE THERMOPLASTIC PAINT PER CITY OF LORAIN TRAFFIC STANDARDS.*
4. *ALL PERMANENT MARKINGS ON CONCRETE AND/OR BRICK PAVEMENT SHALL BE EPOXY PAINT PER CITY OF LORAIN TRAFFIC STANDARDS.*
5. *ALL PAVEMENT MARKINGS SHALL CONFORM TO THE CITY OF LORAIN TRAFFIC STANDARDS AND ODOT ITEM 640.*
6. *FOR ADDITIONAL INFORMATION ON PAVEMENT MARKINGS, REFER TO "PART 3 - MARKINGS" OF OMUTCD (2012 EDITION) AND "PART 3 - MARKINGS" OF ODOT TRAFFIC ENGINEERING MANUAL (ITEM - JANUARY 2024 REVISION).*

CODED NOTES

X	NAME	COLOR	WIDTH
A	EDGE LINE	WHITE	4"
B	CENTER LINE - SOLID, DOUBLE	YELLOW	4"
C	CENTER LINE - SOLID/DASHED COMBO, DOUBLE	YELLOW	4"
D	CHANNELIZING LINE	WHITE	8"
E	LANE LINE - DOTTED	WHITE	4" **
F	TRANSVERSE LINE	YELLOW	24"
G	TRANSVERSE LINE	WHITE	24" *
H	STOP BAR	WHITE	24"
I	CROSSWALK W/ LADDER	WHITE	24" ***
J	CROSSWALK W/O LADDER	WHITE	12"
K	THROUGH ARROW	WHITE	N/A
L	TURNING ARROW (L)	WHITE	N/A
M	TURNING ARROW (R)	WHITE	N/A
N	TURNING AND THROUGH ARROW (L)	WHITE	N/A
O	BICYCLE SYMBOL	WHITE	N/A

** - at 10' centers*
*** - 3' long, 9' gaps*
**** - 24" wide steps w/ 24" gaps*

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64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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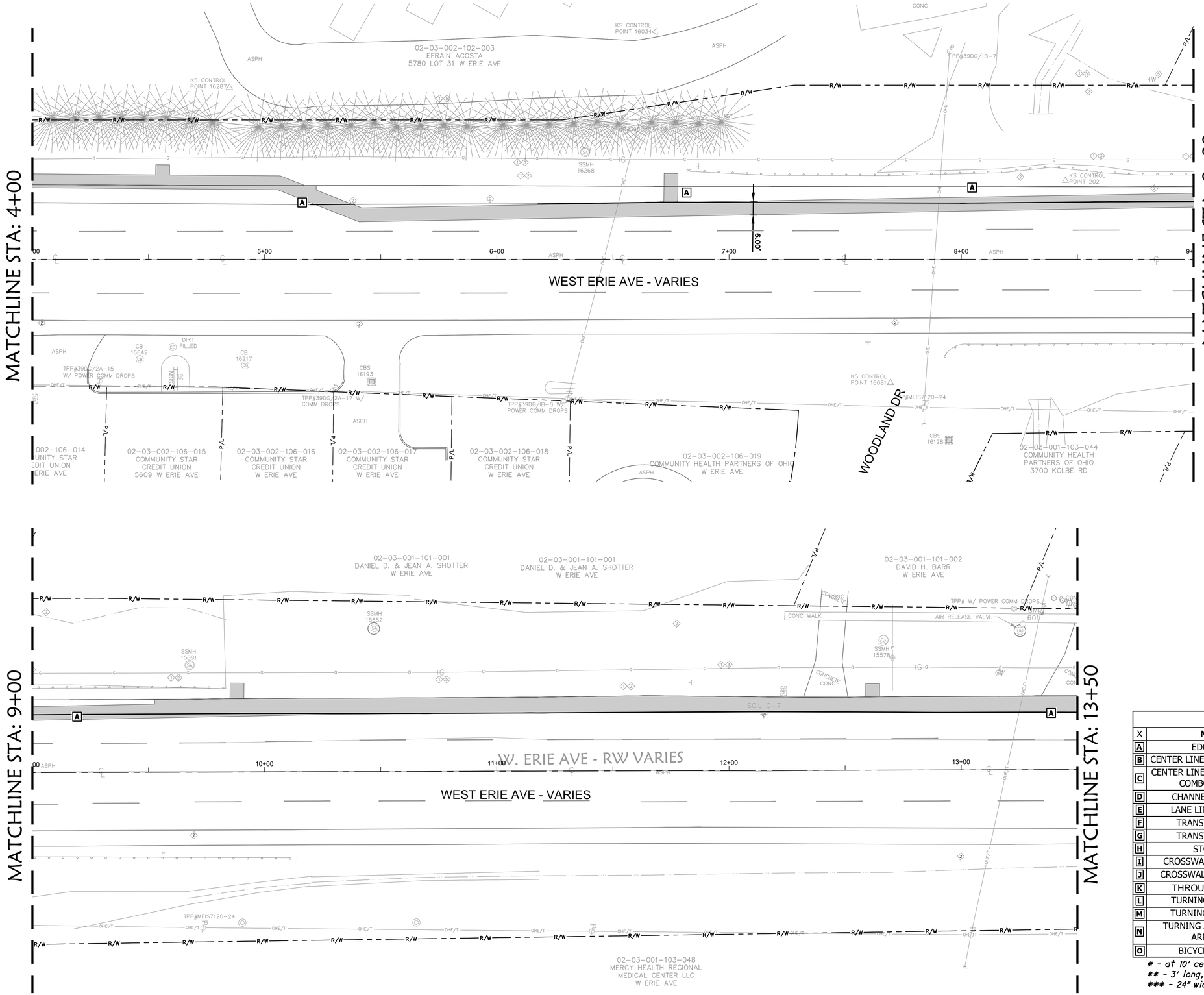
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OSBORN PROJ NO.	J20221302.000

WEST ERIE - PAVEMENT MARKING 1

DRAWING NO.

W6

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NORTH

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

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CODED NOTES

X	NAME	COLOR	WIDTH
A	EDGE LINE	WHITE	4"
B	CENTER LINE - SOLID, DOUBLE	YELLOW	4"
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D	CHANNELIZING LINE	WHITE	8"
E	LANE LINE - DOTTED	WHITE	4" **
F	TRANSVERSE LINE	YELLOW	24"
G	TRANSVERSE LINE	WHITE	24" *
H	STOP BAR	WHITE	24"
I	CROSSWALK W/ LADDER	WHITE	24" ***
J	CROSSWALK W/O LADDER	WHITE	12"
K	THROUGH ARROW	WHITE	N/A
L	TURNING ARROW (L)	WHITE	N/A
M	TURNING ARROW (R)	WHITE	N/A
N	TURNING AND THROUGH ARROW (L)	WHITE	N/A
O	BICYCLE SYMBOL	WHITE	N/A

** - at 10' centers*
*** - 3' long, 9' gaps*
**** - 24" wide steps w/ 24" gaps*

SEAL OF THE CITY OF LORAIN OHIO 1834

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO KEVIN D. CODIN 64026 REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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OSBORN PROJ NO.	J20221302.000

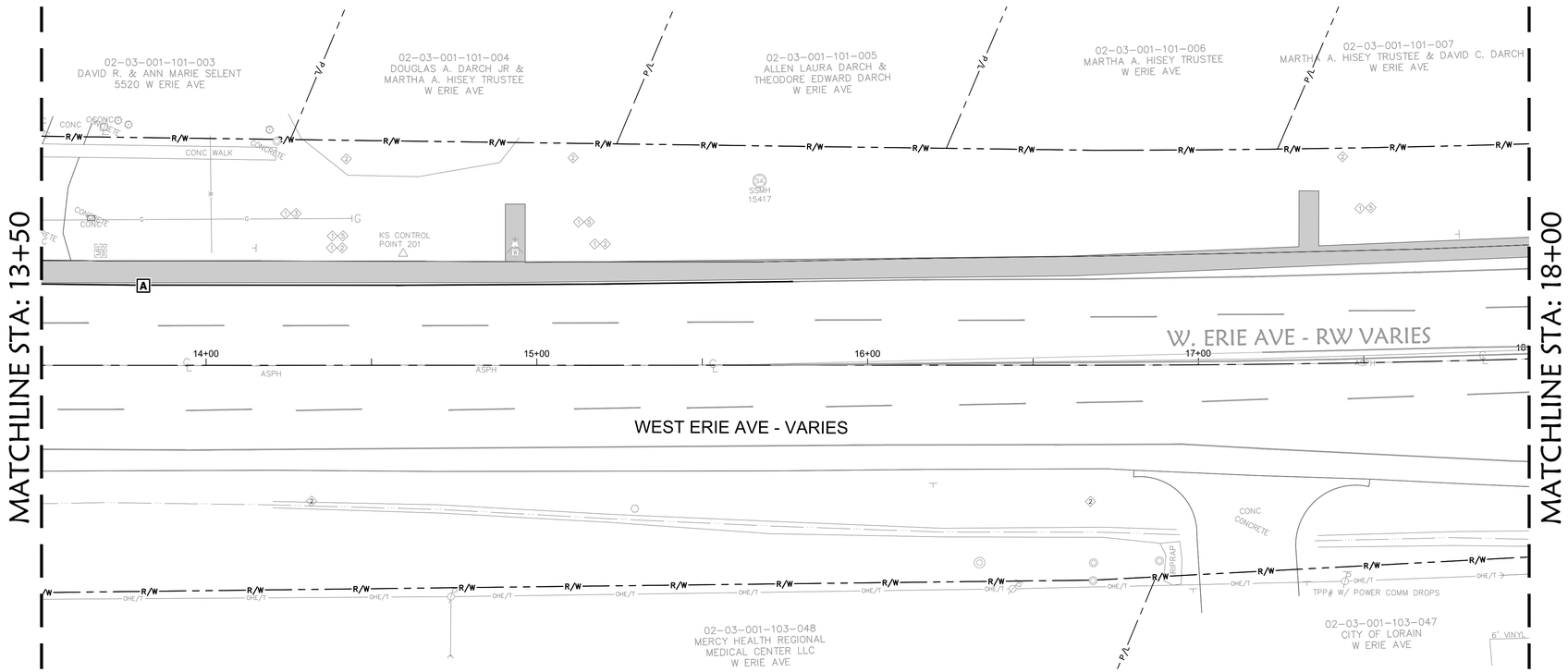
WEST ERIE - PAVEMENT MARKING 2

DRAWING NO.

W7

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3/7/2025 5:18 PM Pawar, Sayali

TM



NORTH

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

NOTES

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CODED NOTES

X	NAME	COLOR	WIDTH
A	EDGE LINE	WHITE	4"
B	CENTER LINE - SOLID, DOUBLE	YELLOW	4"
C	CENTER LINE - SOLID/DASHED COMBO, DOUBLE	YELLOW	4"
D	CHANNELIZING LINE	WHITE	8"
E	LANE LINE - DOTTED	WHITE	4" **
F	TRANSVERSE LINE	YELLOW	24"
G	TRANSVERSE LINE	WHITE	24" *
H	STOP BAR	WHITE	24"
I	CROSSWALK W/ LADDER	WHITE	24" ***
J	CROSSWALK W/O LADDER	WHITE	12"
K	THROUGH ARROW	WHITE	N/A
L	TURNING ARROW (L)	WHITE	N/A
M	TURNING ARROW (R)	WHITE	N/A
N	TURNING AND THROUGH ARROW (L)	WHITE	N/A
O	BICYCLE SYMBOL	WHITE	N/A

** - at 10' centers*
*** - 3' long, 9' gaps*
**** - 24" wide steps w/ 24" gaps*

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
64026
REGISTERED PROFESSIONAL ENGINEER

03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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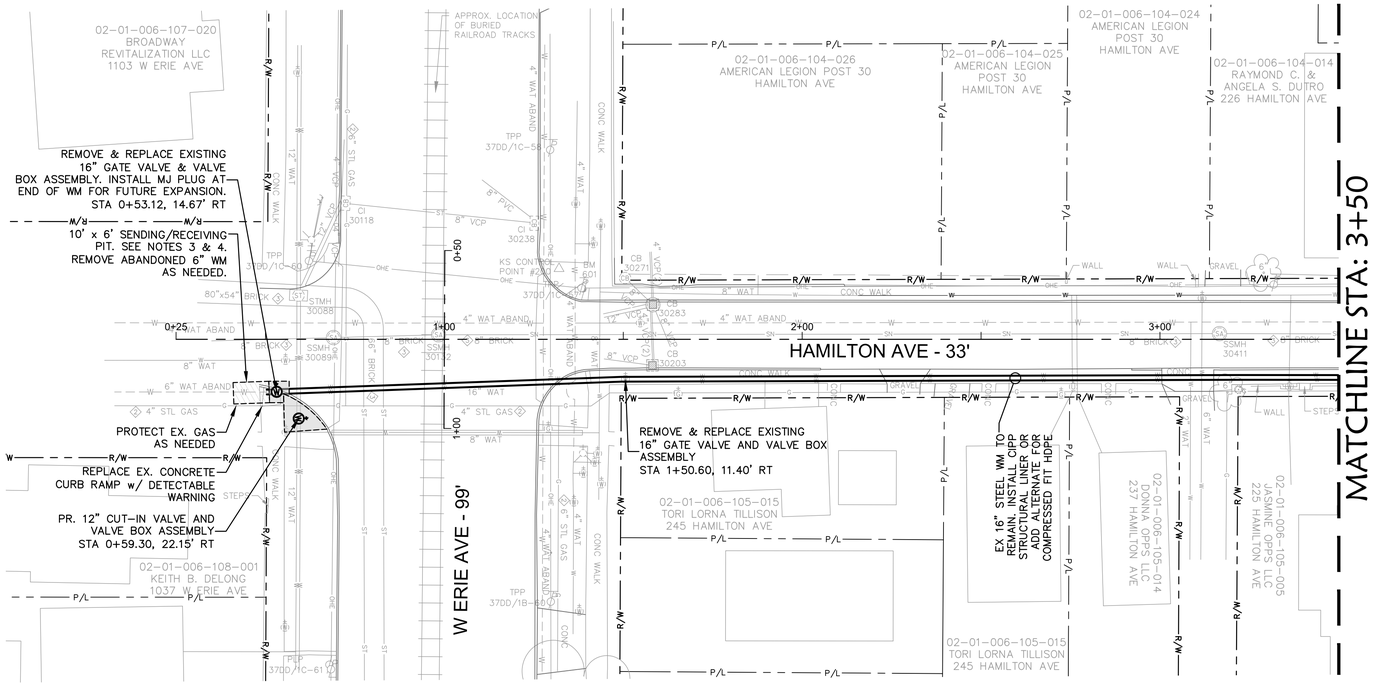
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OSBORN PROJ NO.	J20221302.000

WEST ERIE - PAVEMENT MARKING 3

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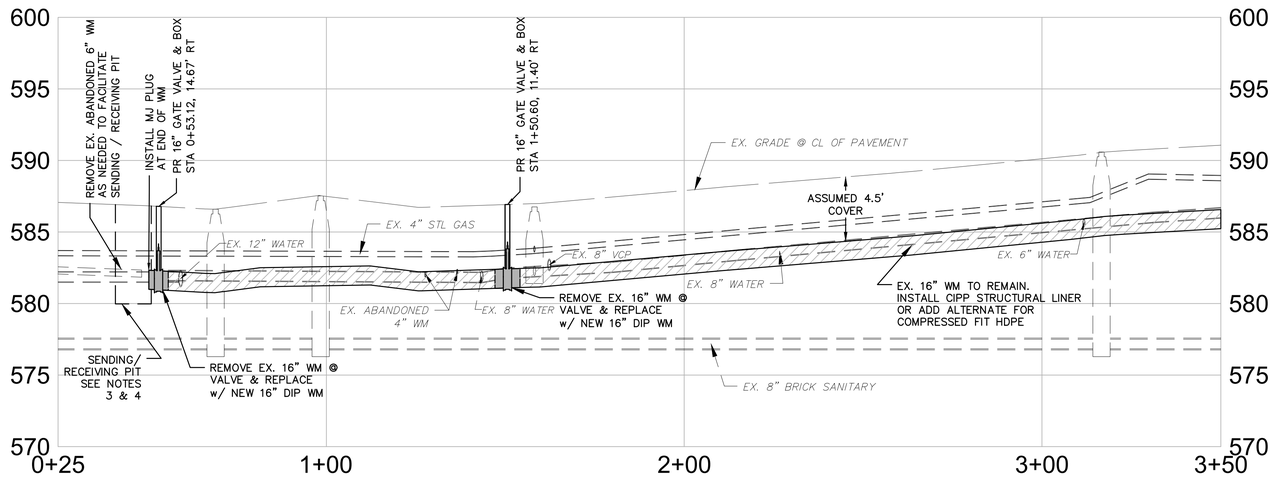
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HAMILTON AVENUE

SCALE: 1" = 20'



HAMILTON AVENUE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

STMH 30088
RIM=586.72
INV=575.56 36" BRICK NW,SE

SSMH 30089
RIM=586.59
FULL OF WATER
BOTTOM=576.99

CI 30118
RIM=587.24
INV=584.84 4" VCP NE
INV=584.94 4" VCP SW
INV=582.76 12" VCP

CB 30203
RIM=586.75
INV=581.95 8" VCP SE
BOTTOM=581.75

CI 30238
RIM=587.14
INV=583.32 12" VCP SE TOP OF TRAP
INV=584.92 4" VCP NE
INV=583.64 4" VCP NE
INV=585.09 4" VCP SW
INV=583.49 4" VCP SW
INV=582.37 8" VCP NE
RESISTANCE=581.94

CB 30271
RIM=587.00
INV=585.15 8" PVC NE
BOTTOM=584.80

CB 30283
RIM=586.55
INV=583.65 8" VCP SE
INV=584.75 8" PVC SW
BOTTOM=583.65

SSMH 30411
RIM=590.60
FULL OF WATER
BOTTOM=577.40

GENERAL NOTES:

1. EXISTING PAVEMENT IS SHEET 3" ASPHALT & 4" CONCRETE COMBINED PAVEMENT OVER 1" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. LIMITS OF SENDING/RECEIVING PITS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR ACTUAL LOCATION AND SIZING OF PITS. CONTRACTOR IS RESPONSIBLE FOR MODIFICATION OF RESTORATION LIMITS AND MOT.
4. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING LOCATION OF EXISTING UTILITIES AND COORDINATING WITH UTILITY OWNERS REGARDING TEMPORARY RELOCATION OR PROTECTION IN PLACE WITHIN LIMITS OR IN PROXIMITY OF SENDING/RECEIVING PITS.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

CITY OF LORAIN
SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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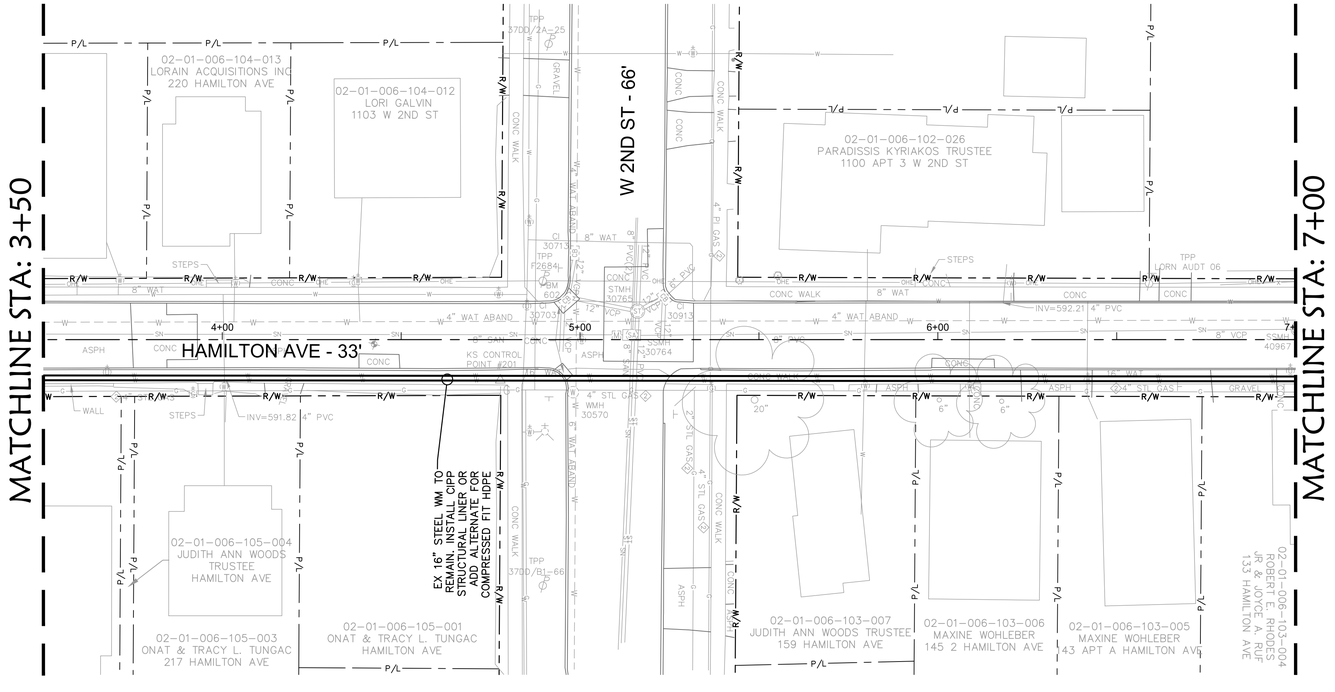
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OSBORN PROJ NO.	J20221302.000

HAMILTON - PLAN & PROFILE 0+25 TO 3+50

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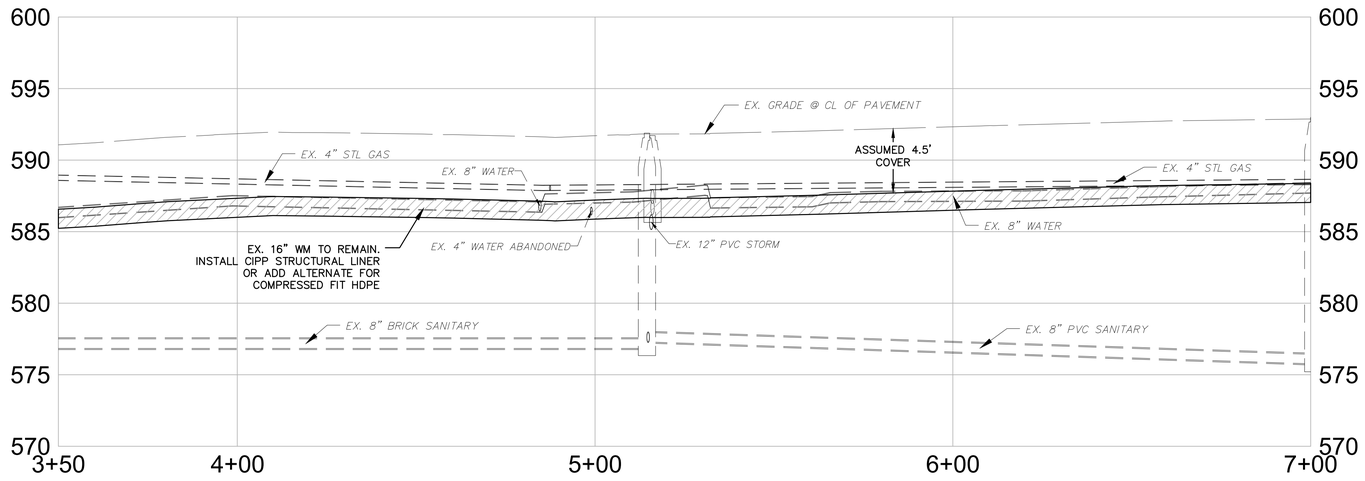
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HAMILTON AVENUE

SCALE: 1" = 20'



HAMILTON AVENUE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

CI 30703
RIM=591.51
INV=587.76 12" VCP NE
INV=587.71 12" VCP NW
INV=587.56 12" VCP NE

CI 30713
RIM=591.78
INV=588.08 12" VCP SE
BOTTOM=587.88

SSMH 30764
RIM=591.89
INV=576.79 8" PVC NW
INV=577.29 8" NE
INV=576.84 8" SE
INV=579.12 8" PVC SW
INV=583.01 8" PVC SW

STMH 30765
RIM=591.72
INV=585.34 12" PVC NE,SW
INV=586.29 12" PVC SW
INV=586.19 12" PVC NW

CI 30913
RIM=591.71
INV=587.19 12" VCP NE
INV=586.96 12" VCP SE
INV=589.66 6" PVC NW

SSMH 40967
RIM=593.00
INV=575.76 8" VCP NW,SE

GENERAL NOTES:

1. EXISTING PAVEMENT IS SHEET 3" ASPHALT & 4" CONCRETE COMBINED PAVEMENT OVER 1" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
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03/06/2025

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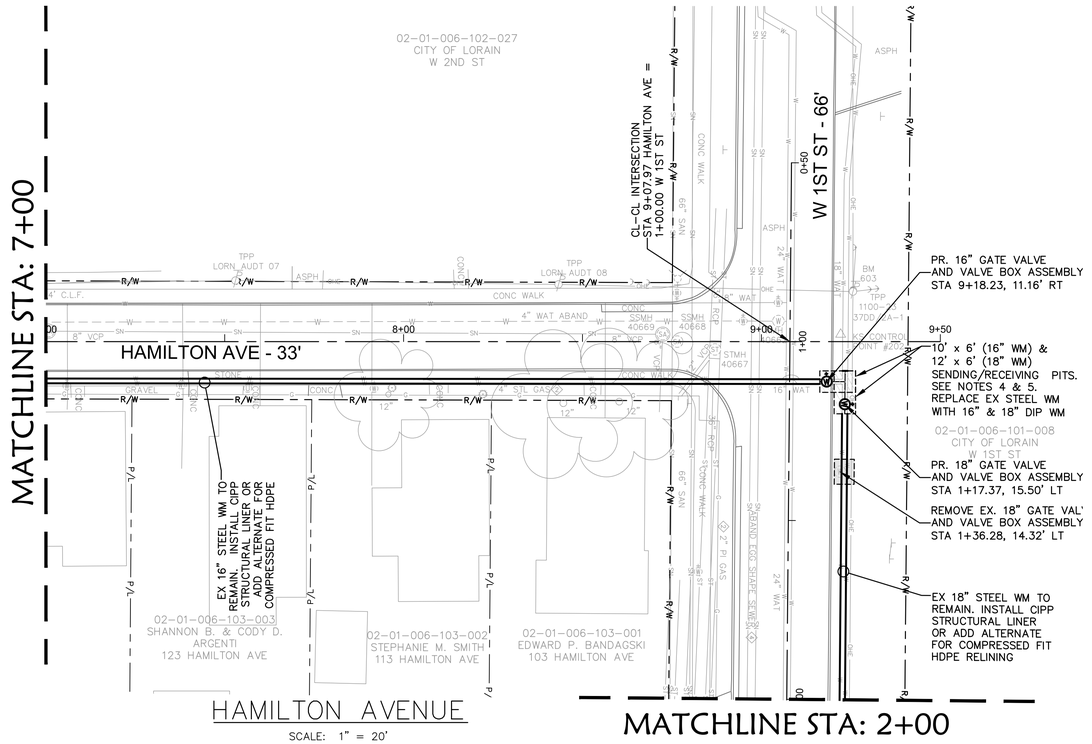
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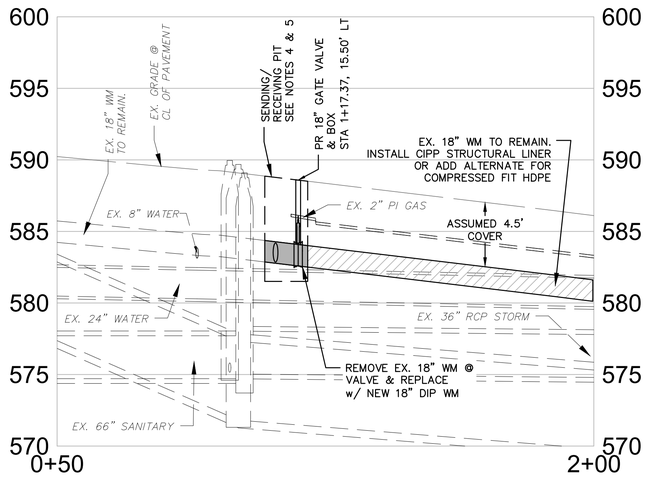
HAMILTON - PLAN & PROFILE 3+50 TO 7+00

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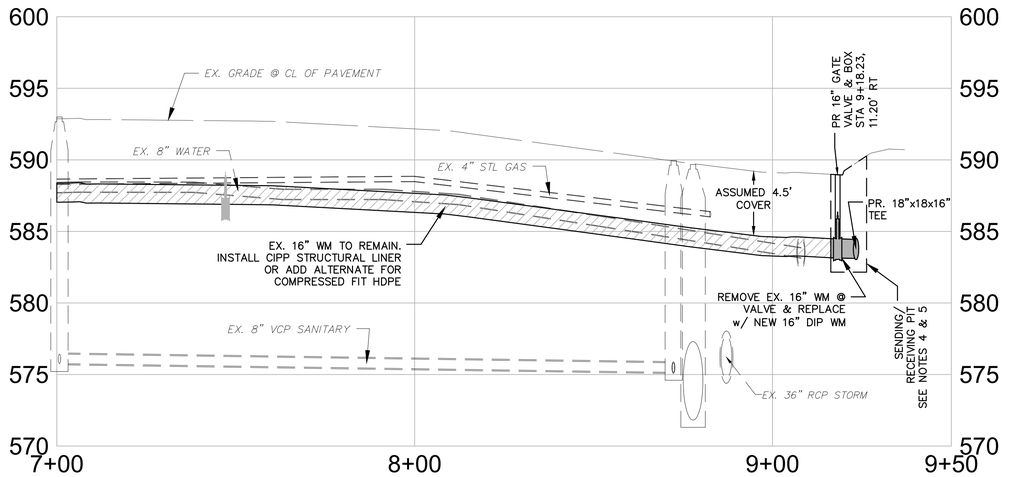




WEST 1ST PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.



HAMILTON AVENUE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

STMH 40667
RIM=589.10
INV=575.03 36" RCP NE,SW
INV=583.80 12" VCP SE

SSMH 40668
RIM=589.77
INV=571.81 6" RCP NE
INV=571.87 6" RCP SW

SSMH 40669
RIM=589.96
INV=575.16 8" VCP SE
INV=575.15 8" VCP NE

GENERAL NOTES:

1. EXISTING PAVEMENT FOR HAMILTON AVENUE IS SHEET 3" ASPHALT & 4" CONCRETE COMBINED PAVEMENT OVER 1" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. EXISTING PAVEMENT FOR WEST 1ST STREET IS SHEET 1.5" ASPHALT & 8" CONCRETE COMBINED PAVEMENT OVER 1.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR FOR ASPHALT & GOOD FOR CONCRETE PAVEMENT. REFER TO REPORT DATED FEBRUARY 2, 2024.
3. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
4. LIMITS OF SENDING/RECEIVING PITS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR ACTUAL LOCATION AND SIZING OF PITS. CONTRACTOR IS RESPONSIBLE FOR MODIFICATION OF RESTORATION LIMITS AND MOT.
5. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING LOCATION OF EXISTING UTILITIES AND COORDINATING WITH UTILITY OWNERS REGARDING TEMPORARY RELOCATION OR PROTECTION IN PLACE WITHIN LIMITS OR IN PROXIMITY OF SENDING/RECEIVING PITS.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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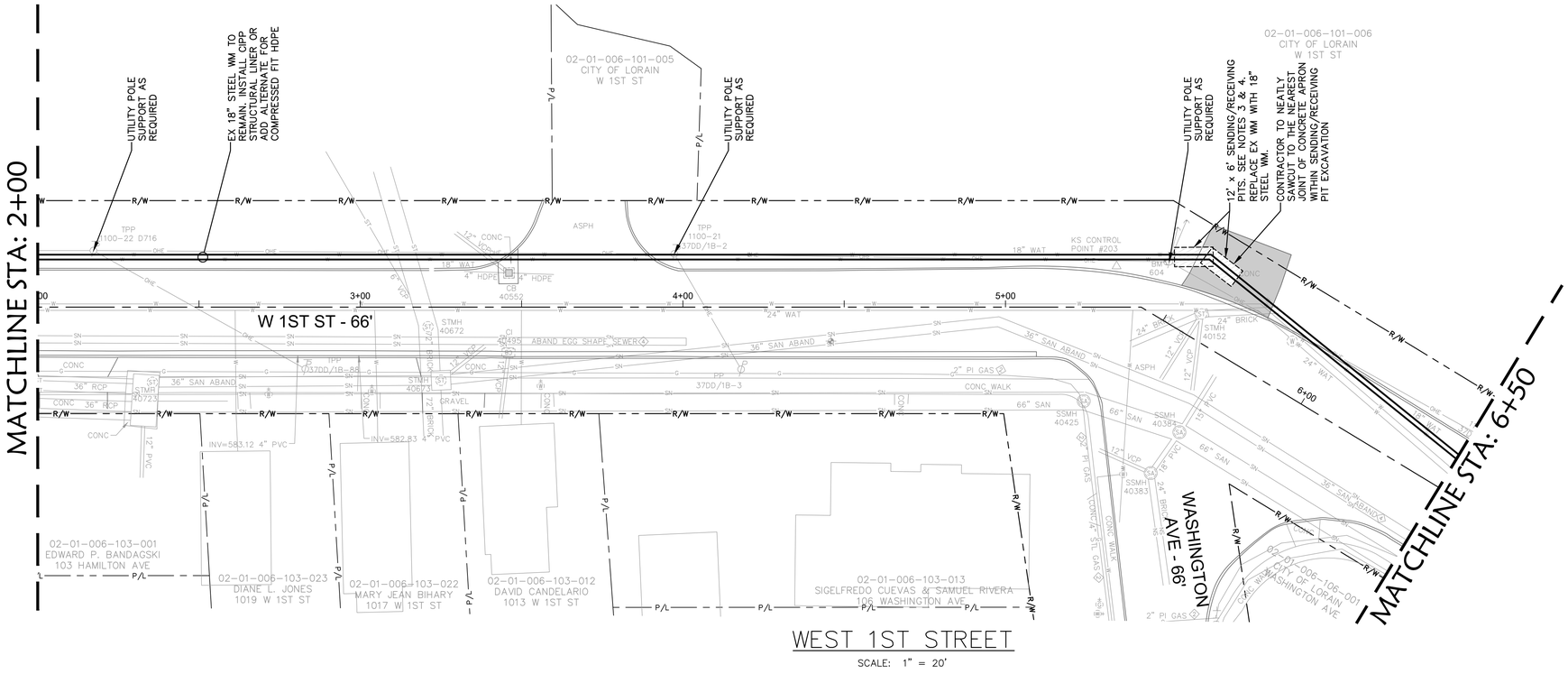
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OSBORN PROJ NO.	J20221302.000

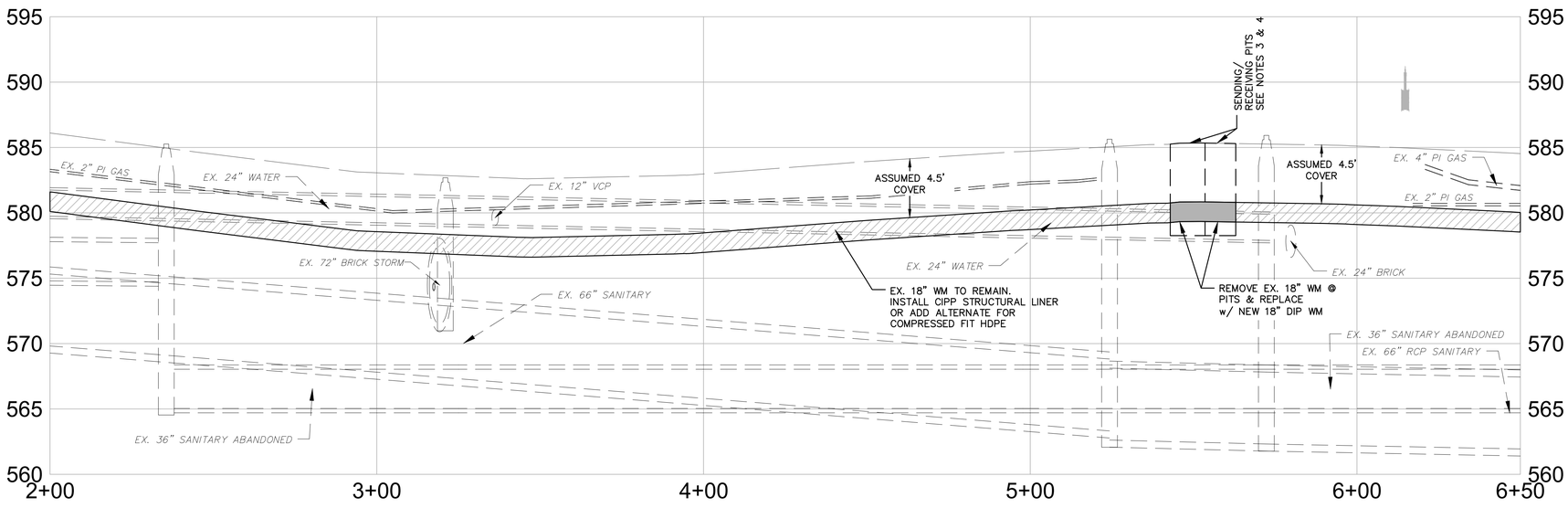
HAMILTON & W 1ST INTERSECTION - PLAN & PROFILE

DRAWING NO.

H3

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WEST 1ST STREET PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

STMH 40152
RIM=585.05
INV=576.83 24" BRICK NE,SW
INV=578.91 12" VCP SE
INV=580.03 12" VCP SW

SSMH 40383
RIM=586.41
INV=576.97 24" BRICK SE
INV=582.54 12" VCP NW
INV=576.92 18" PVC NE

SSMH 40384
RIM=585.92
INV=562.32 66" SAN NW
UNABLE TO SEE PIPE
INV=574.94 15" PVC NE
UNABLE TO SEE PIPE
INV=562.32 66" SAN SE
INV=575.48 15" PVC SW

SSMH 40425
RIM=585.63
INV=562.62 66" SAN NE,SW
RECESSED

CI 40495
RIM=582.17
INV=578.47 12" VCP SE
RECESSED
BOTTOM=578.47

CB 40552
RIM=582.43
INV=579.43 12" VCP NW
INV=580.83 4" HDPE NE,SW
BOTTOM=579.13

STMH 40672
RIM=582.68
INV=571.48 6' BRICK SE
RECESSED
INV=575.09 6" VCP NW
RECESSED
TOP OF WATER=572.68
BOTTOM=571.48
LARGE STRUCTURE-UNABLE TO DETERMINE SIZE OR OTHER PIPES

STMH 40673
RIM=583.18
INV=572.68 6' BRICK NW,SE
INV=575.78 12" VCP NE

STMH 40723
RIM=585.26
INV=565.04 SW UNABLE TO OBTAIN PIPE SIZE/MATERIAL
573.66 6" STEEL VERTICAL PIPE
INV=574.71 36" RCP SW
INV=565.13 36" RCP SW
INV=565.04 NE UNABLE TO OBTAIN PIPE SIZE/MATERIAL
INV=573.78 SW RECESSED UNABLE TO OBTAIN PIPE SIZE/MATERIAL
INV=577.26 12" PVC SE
BOTTOM=564.66

GENERAL NOTES:

1. EXISTING PAVEMENT IS SHEET 1.5" ASPHALT & 8" CONCRETE COMBINED PAVEMENT OVER 1.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR FOR ASPHALT & GOOD FOR CONCRETE PAVEMENT. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. LIMITS OF SENDING/RECEIVING PITS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR ACTUAL LOCATION AND SIZING OF PITS. CONTRACTOR IS RESPONSIBLE FOR MODIFICATION OF RESTORATION LIMITS AND MOT.
4. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING LOCATION OF EXISTING UTILITIES AND COORDINATING WITH UTILITY OWNERS REGARDING TEMPORARY RELOCATION OR PROTECTION IN PLACE WITHIN LIMITS OR IN PROXIMITY OF SENDING/RECEIVING PITS.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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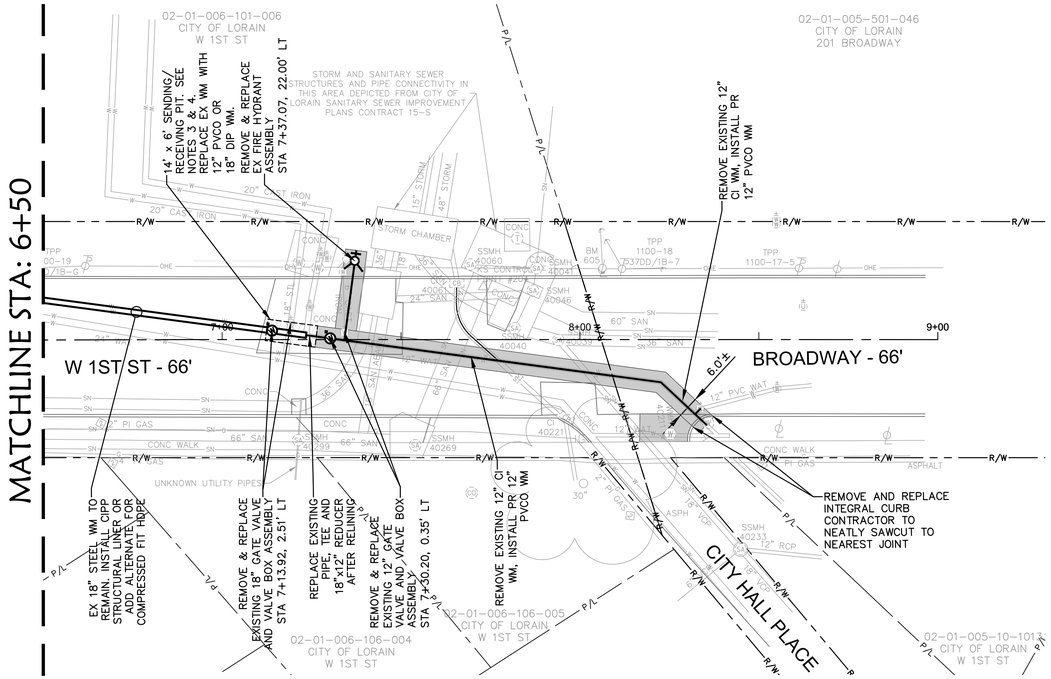
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OSBORN PROJ NO.	J20221302.000

W 1ST - PLAN & PROFILE 2+00 TO 6+50

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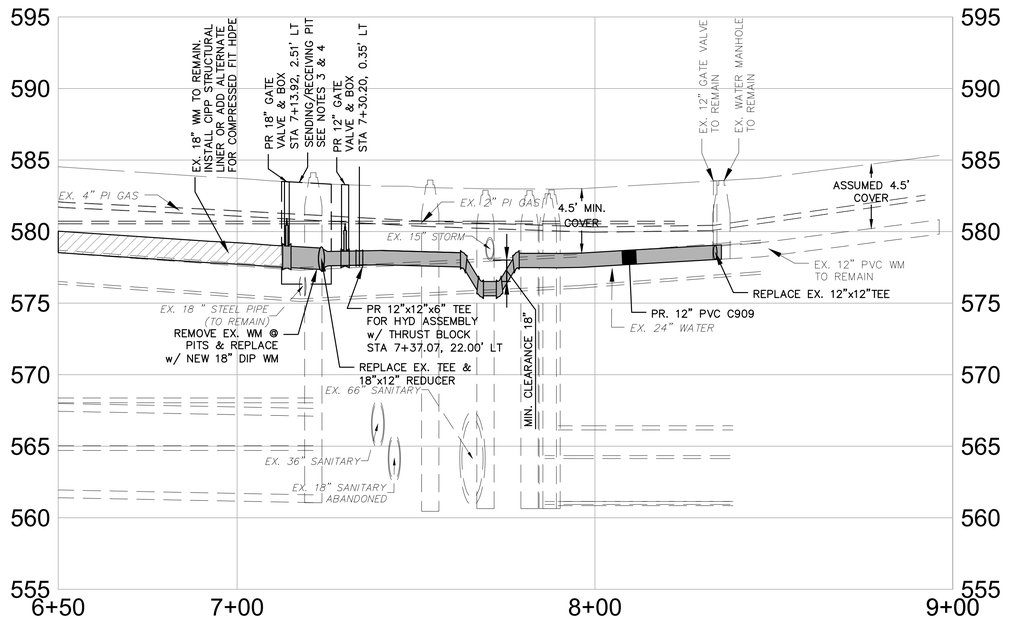
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WEST 1ST STREET

SCALE: 1" = 20'



WEST 1ST STREET PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 40039
RIM=583.02
UNABLE TO OPEN

SSMH 40040
RIM=582.87
UNABLE TO OPEN

SSMH 40041
RIM=582.91
INV=568.41 5'x12' CONC SW
LARGE STRUCTURE – HEAVY FLOW
UNABLE TO PROVIDE DETAILS

SSMH 40046
RIM=582.65
UNABLE TO OPEN

SSMH 40060
RIM=582.89
BOTTOM=561.14
LARGE STRUCTURE – HEAVY FLOW
UNABLE TO PROVIDE DETAILS

CI 40061
RIM=582.34
INV=577.99 15" PVC NE,SE

CI 40221
RIM=582.59
INV=578.24 12" PVC SW
INV=578.14 15" PVC NW

SSMH 40233
RIM=583.63
INV=576.90 6" VCP SW
INV=574.81 18" VCP NW
INV=578.09 12" RCP SE PLUGGED
INV=574.90 18" VCP SE

SSMH 40269
RIM=583.60
INV=561.00 66" SAN NE,NW
RECESSED
UNABLE TO SEE OTHER PIPES

SSMH 40299
RIM=584.12
INV=561.60 66" SAN NW,SE
572.72 TOP OF 2" PIPE PASSING THROUGH STRUCTURE
571.52 TOP OF 6-8" PIPE PASSING THROUGH STRUCTURE
UNABLE TO SEE OTHER PIPES

GENERAL NOTES:

1. EXISTING PAVEMENT IS SHEET 1.5" ASPHALT & 8" CONCRETE COMBINED PAVEMENT OVER 1.5" AGGREGATE BASE PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS FAIR FOR ASPHALT & GOOD FOR CONCRETE PAVEMENT. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.
3. LIMITS OF SENDING/RECEIVING PITS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR ACTUAL LOCATION AND SIZING OF PITS. CONTRACTOR IS RESPONSIBLE FOR MODIFICATION OF RESTORATION LIMITS AND MOT.
4. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING LOCATION OF EXISTING UTILITIES AND COORDINATING WITH UTILITY OWNERS REGARDING TEMPORARY RELOCATION OR PROTECTION IN PLACE WITHIN LIMITS OR IN PROXIMITY OF SENDING/RECEIVING PITS.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN OHIO 1834

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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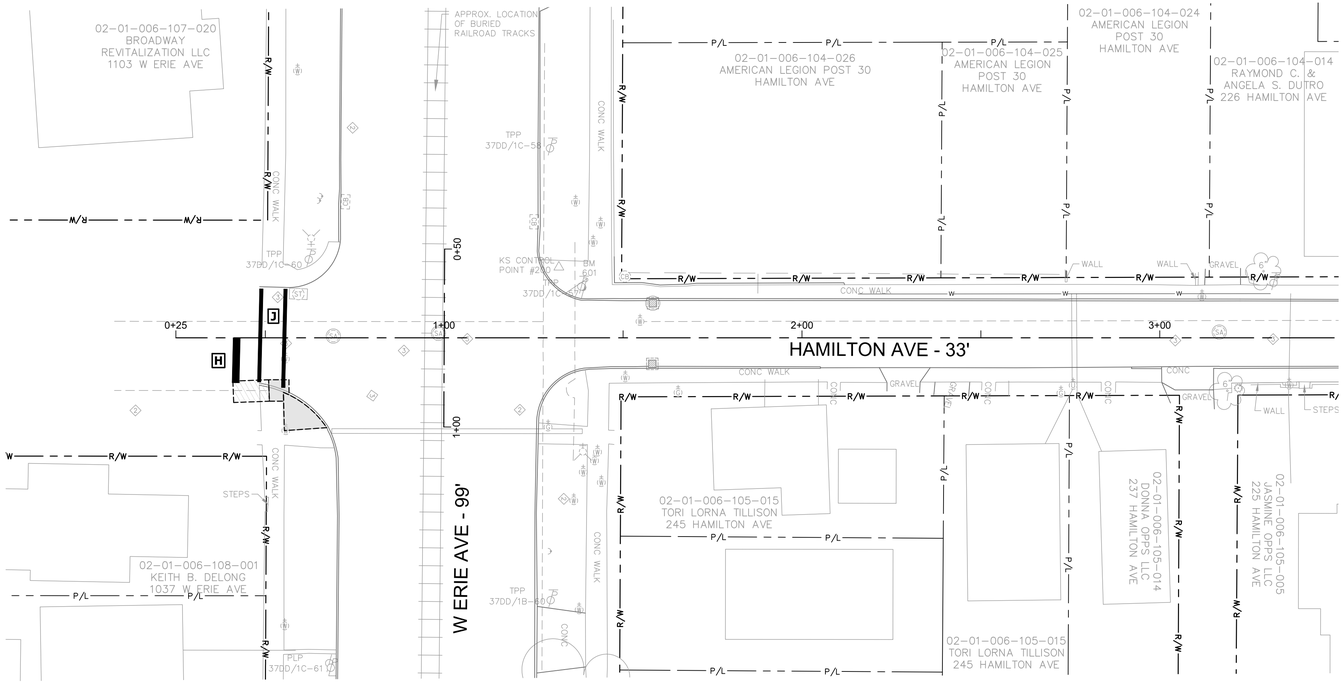
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OSBORN PROJ NO.	J20221302.000

W 1ST - PLAN & PROFILE 6+50 TO 9+00

DRAWING NO.

H5

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3/7/2025 5:20 PM Pawar, Sayali



GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

NOTES

1. *THIS PAVEMENT STRIPING RESTORATION PLAN AS DEVELOPED BY THE ENGINEER IS TO BE USED AS A GUIDELINE FOR THE CONTRACTOR.*
2. *DISTANCE BETWEEN PAVEMENT LINES SHOULD BE MEASURED FROM THE NEAREST CURB TO THE ROADWAY CENTERLINE.*
3. *ALL PERMANENT MARKINGS ON ASPHALT PAVEMENT SHALL BE THERMOPLASTIC PAINT PER CITY OF LORAIN TRAFFIC STANDARDS.*
4. *ALL PERMANENT MARKINGS ON CONCRETE AND/OR BRICK PAVEMENT SHALL BE EPOXY PAINT PER CITY OF LORAIN TRAFFIC STANDARDS.*
5. *ALL PAVEMENT MARKINGS SHALL CONFORM TO THE CITY OF LORAIN TRAFFIC STANDARDS AND ODOT ITEM 640.*
6. *FOR ADDITIONAL INFORMATION ON PAVEMENT MARKINGS, REFER TO "PART 3 - MARKINGS" OF OMUTCD (2012 EDITION) AND "PART 3 - MARKINGS" OF ODOT TRAFFIC ENGINEERING MANUAL (ITEM - JANUARY 2024 REVISION).*

CODED NOTES

X	NAME	COLOR	WIDTH
A	EDGE LINE	WHITE	4"
B	CENTER LINE - SOLID, DOUBLE	YELLOW	4"
C	CENTER LINE - SOLID/DASHED COMBO, DOUBLE	YELLOW	4"
D	CHANNELIZING LINE	WHITE	8"
E	LANE LINE - DOTTED	WHITE	4" **
F	TRANSVERSE LINE	YELLOW	24"
G	TRANSVERSE LINE	WHITE	24" *
H	STOP BAR	WHITE	24"
I	CROSSWALK W/ LADDER	WHITE	24" ***
J	CROSSWALK W/O LADDER	WHITE	12"
K	THROUGH ARROW	WHITE	N/A
L	TURNING ARROW (L)	WHITE	N/A
M	TURNING ARROW (R)	WHITE	N/A
N	TURNING AND THROUGH ARROW (L)	WHITE	N/A
O	BICYCLE SYMBOL	WHITE	N/A

** - at 10' centers*
*** - 3' long, 9' gaps*
**** - 24" wide steps w/ 24" gaps*

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

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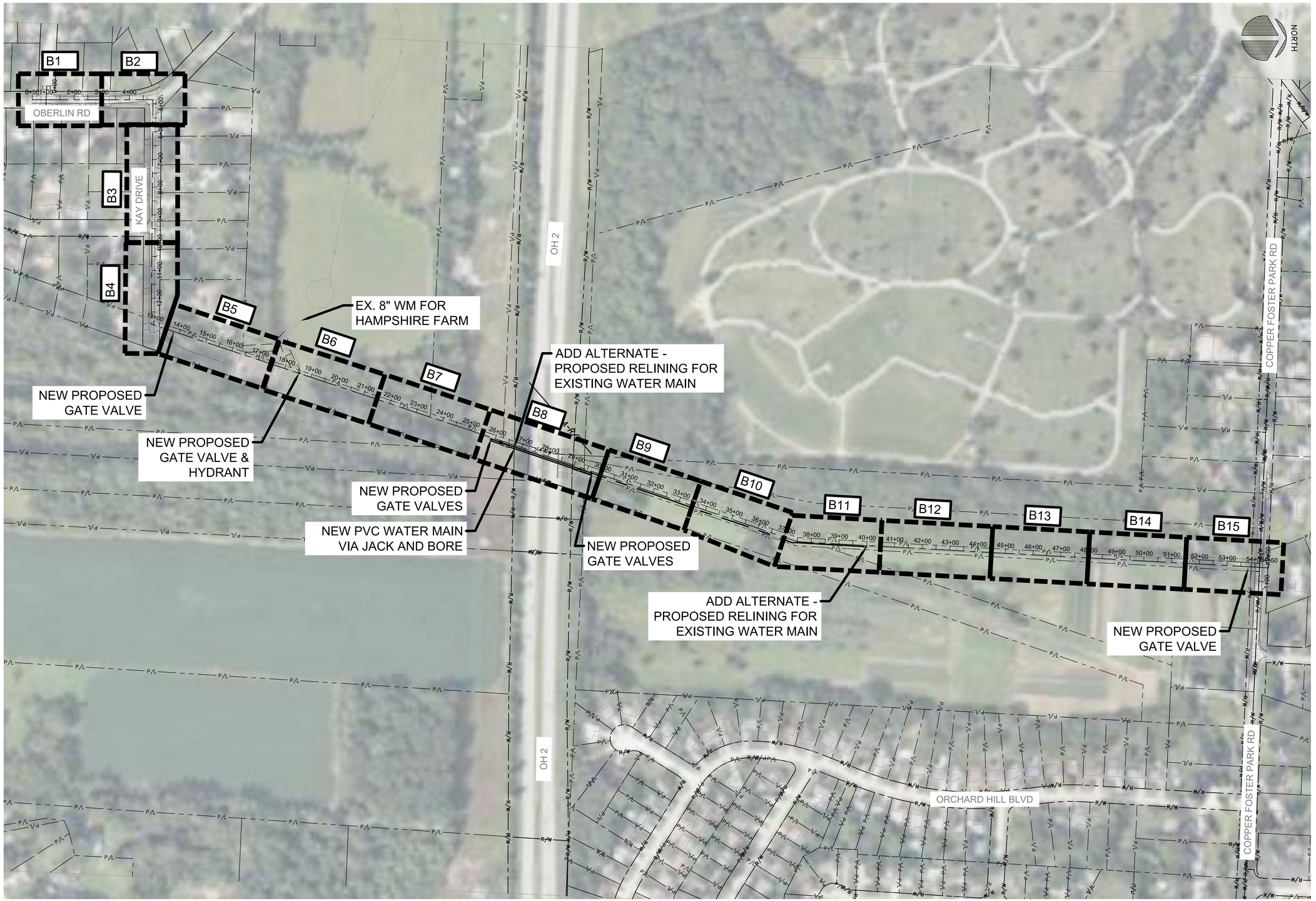
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HAMILTON - PAVEMENT MARKING 1

DRAWING NO.

H6

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BOREMAN'S FARM – OVERVIEW MAP

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

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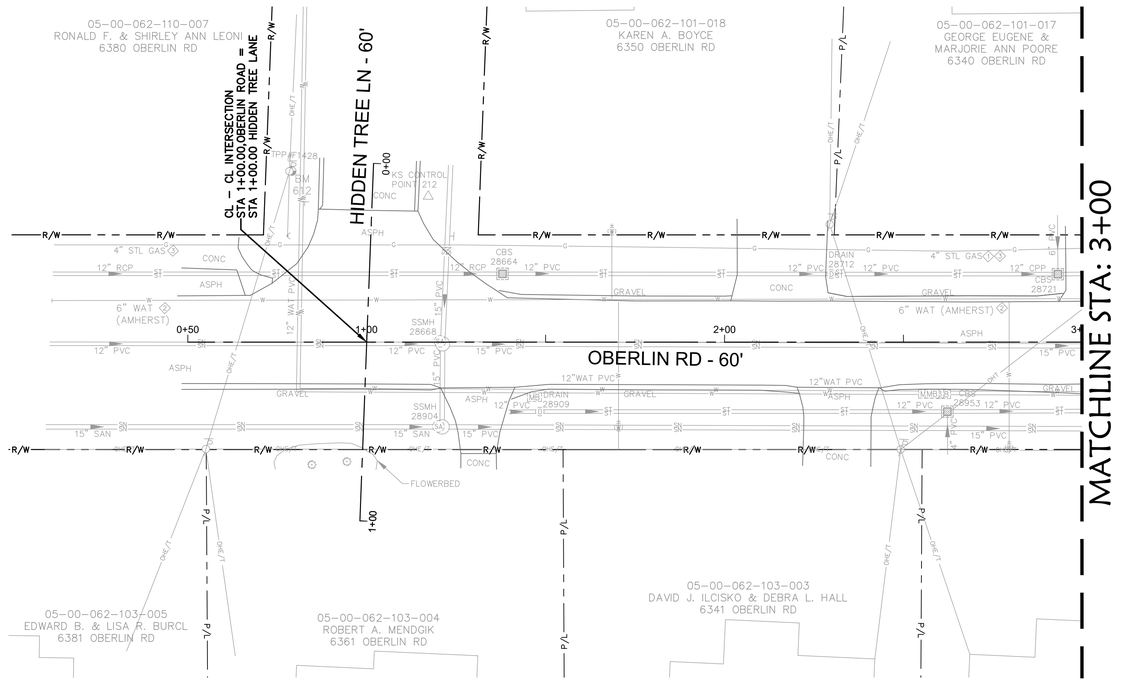
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OSBORN PROJ NO.	J20221302.000

BOREMAN'S FARM OVERVIEW MAP

DRAWING NO.

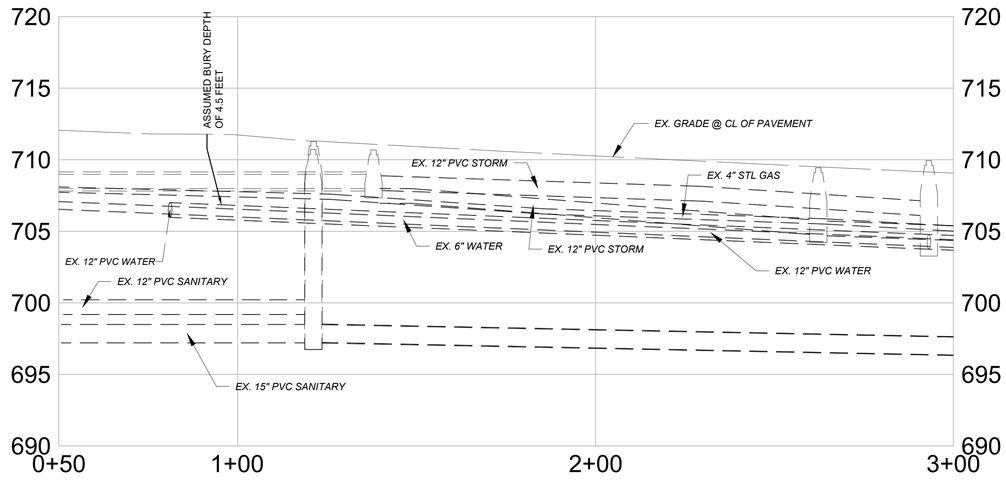
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OBERLIN ROAD

SCALE: 1" = 20'



OBERLIN ROAD PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

CBS 28664
RIM=709.68
INV=707.88 12" PVC N
INV=707.98 12" RCP S

SSMH 28668
RIM=711.30
INV=697.26 15" PVC N
INV=697.34 15" PVC E
INV=699.20 12" PVC S
INV=697.33 15" PVC W

DRAIN 28712
RIM=709.22
INV=707.12 12" PVC N & S
FULL OF GRAVEL

CBS 28721
RIM=708.56
INV=703.77 12" CPP N
INV=706.08 12" CPP S
INV=706.69 6" PVC W

SSMH 28904
RIM=710.72
INV=697.22 15" PVC N
INV=699.31 15" SAN S
INV=697.44 15" PVC W

DRAIN 28909
RIM=709.71
INV=706.97 12" PVC N & S

CBS 28953
RIM=708.50
INV=704.72 12" PVC N
INV=706.45 4" PVC E
INV=704.75 12" PVC S

GENERAL NOTES:

1. EXISTING PAVEMENT FOR BOREMAN'S IS SHEET 8" ASPHALT PAVEMENT WITH PARTIAL RECOVERY PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN OHIO 1834

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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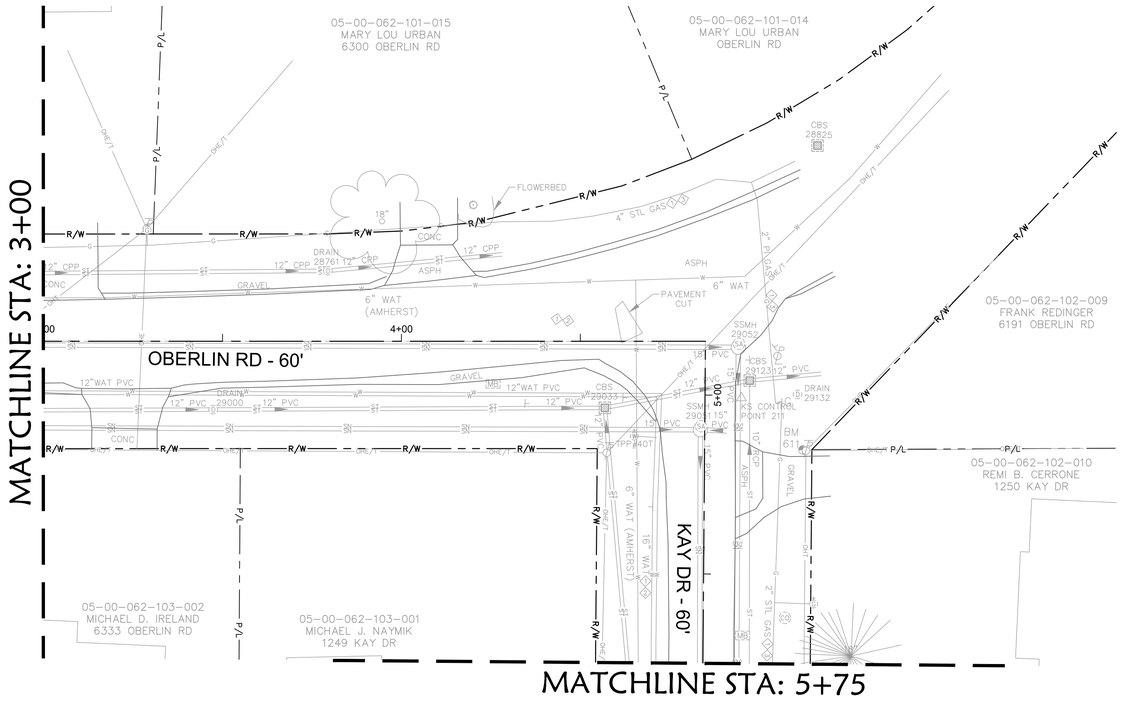
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CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

BOREMAN - PLAN & PROFILE 0+50 TO 3+00

DRAWING NO.

B1

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GRAPHIC SCALE

NORTH

20 0 10 20

(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

DRAIN 28761
RIM=706.00
INV=703.25 12" CPP NW

CBS 28825
RIM=704.73
BURIED

DRAIN 29000
RIM=707.24
INV=703.94 12" PVC N & S

CBS 29033
RIM=705.68
INV=702.97 12" PVC NW
INV=703.33 12" PVC NE
INV=702.98 12" PVC S

SSMH 29051
RIM=706.84
INV=695.26 15" PVC N
INV=695.11 15" PVC E
INV=695.31 15" PVC S

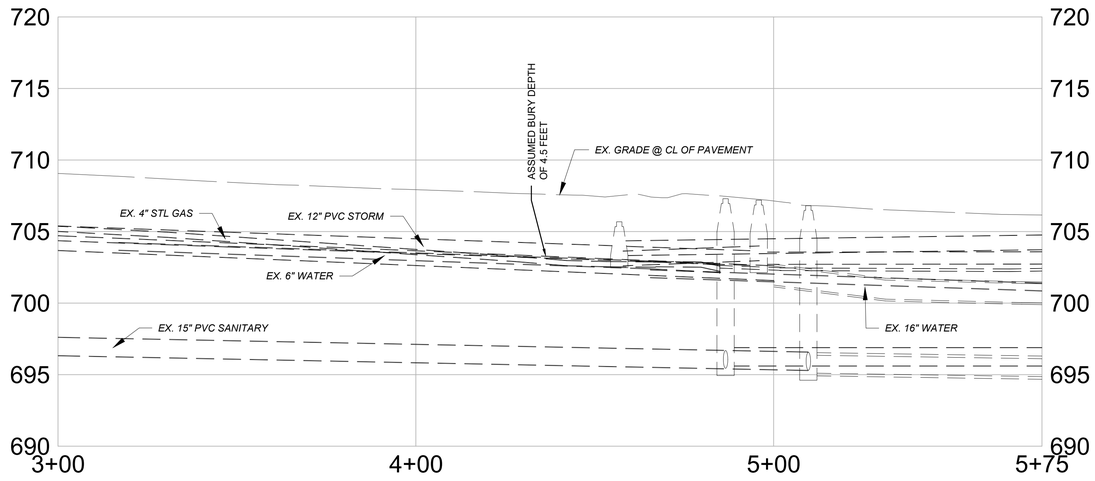
SSMH 29052
RIM=707.34
INV=695.44 15" PVC S
INV=695.62 15" PVC E

CBS 29123
RIM=705.98
INV=702.62 12" PVC NW
INV=702.72 10" RCP E
INV=702.63 12" PVC S

DRAIN 29132
RIM=705.28
12" PVC VERTICAL

OBERLIN ROAD

SCALE: 1" = 20'



OBERLIN ROAD PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)
1 inch = 5 ft.

GENERAL NOTES:

1. EXISTING PAVEMENT FOR BOREMAN'S IS SHEET 8" ASPHALT PAVEMENT WITH PARTIAL RECOVERY PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64062
REGISTERED PROFESSIONAL ENGINEER

03/06/2025

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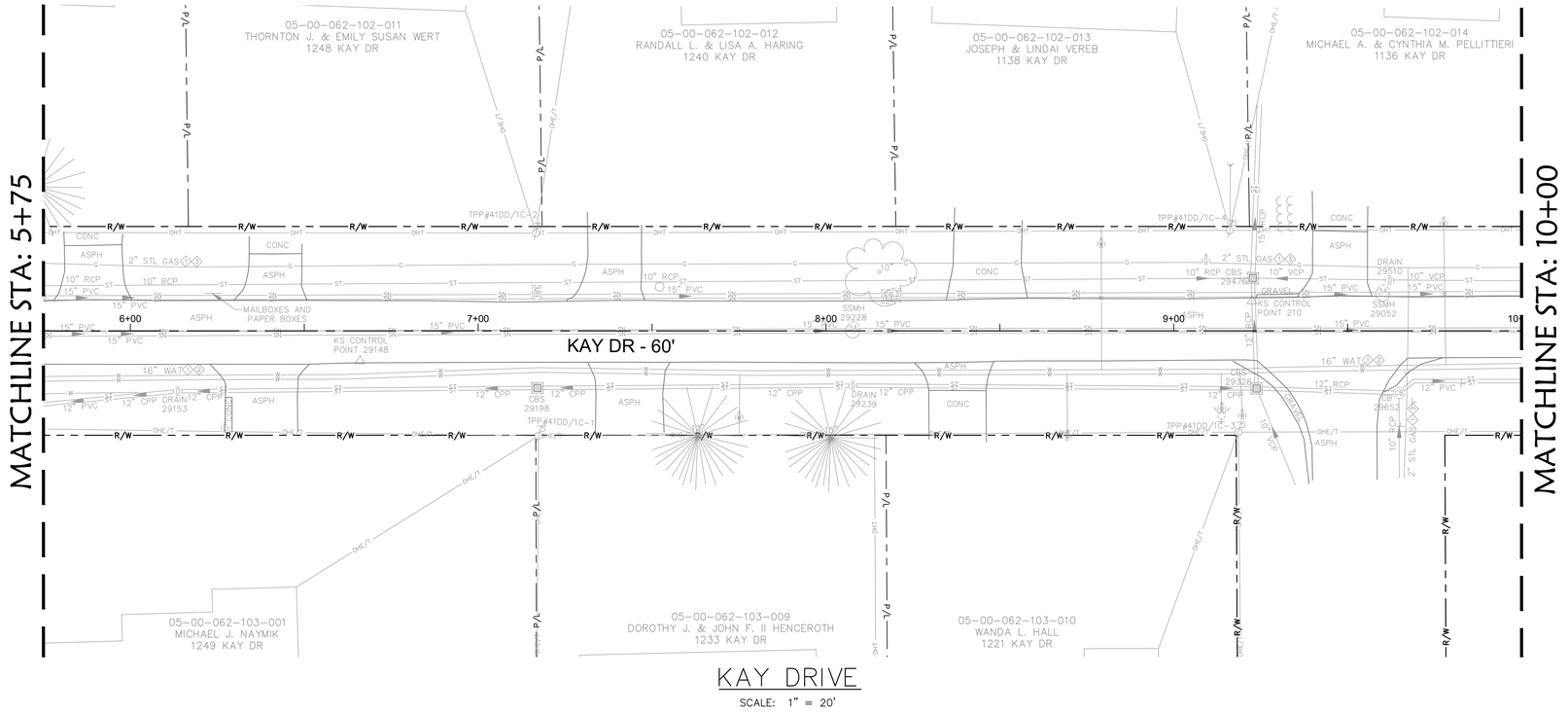
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BOREMAN - PLAN & PROFILE 3+00 TO 5+75

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B2

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3/7/2025 5:22 PM Pawar, Sayali



NORTH

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 29052
RIM=707.34
INV=695.44 15" PVC S
INV=695.62 15" PVC E

DRAIN 29153
RIM=705.38
INV=703.88 12" CPP SW & E

CBS 29198
RIM=704.83
INV=702.98 12" CPP E
INV=703.03 12" CPP W

SSMH 29228
RIM=705.55
INV=693.98 15" PVC W & E

DRAIN 29239
RIM=703.78
INV=702.78 12" CPP W & E

CBS 29328
RIM=704.58
INV=702.73 12" RCP N
INV=702.88 12" RCP E
INV=702.90 12" CPP W
INV=702.88 10" VCP SE

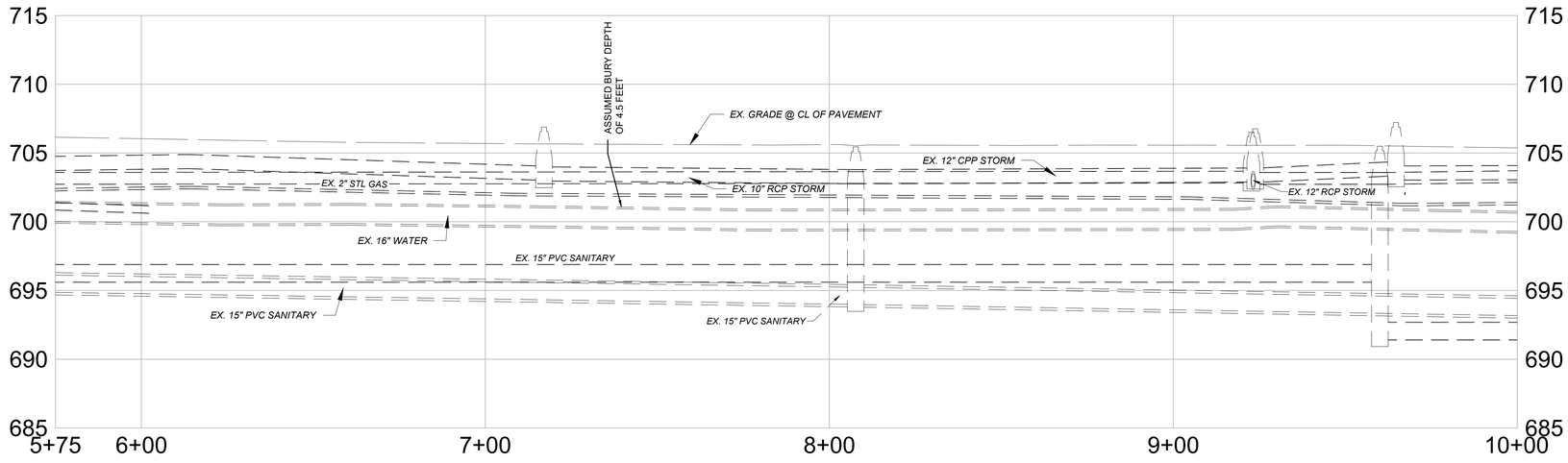
CBS 29476
RIM=704.51
INV=702.30 15" RCP N
INV=702.74 10" VCP E
INV=702.31 12" RCP S
INV=702.83 10" RCP W

DRAIN 29510

CB 29652
RIM=704.76
INV=703.05 12" PVC NE
INV=703.16 10" RCP S
INV=703.36 12" RCP W
TOP OF WATER=703.41

GENERAL NOTES:

1. EXISTING PAVEMENT FOR BOREMAN'S IS SHEET 8" ASPHALT PAVEMENT WITH PARTIAL RECOVERY PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.



KAY DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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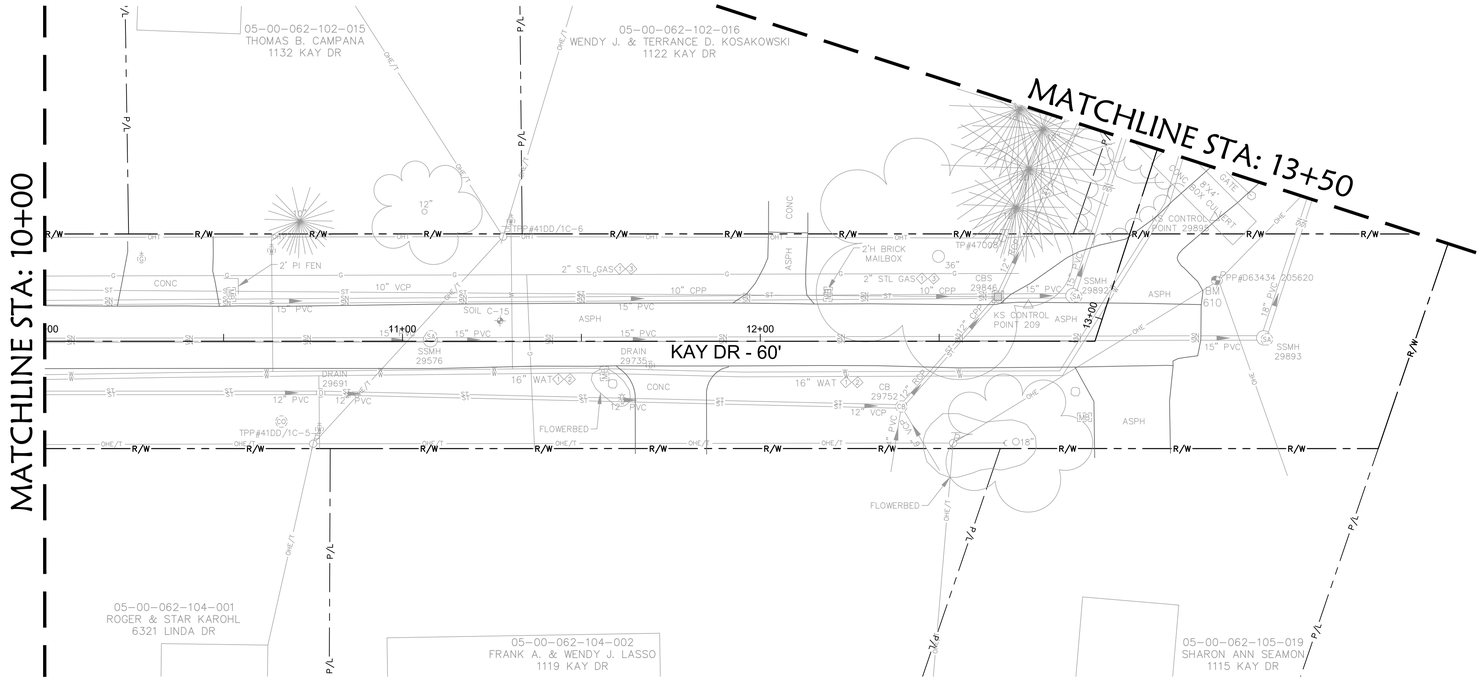
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BOREMAN - PLAN & PROFILE 5+75 TO 10+00

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B3

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3/7/2025 5:22 PM Pawar, Sayali



KAY DRIVE

SCALE: 1" = 20'

NORTH

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

STRUCTURE TABLE

SSMH 29576
RIM=705.02
INV=692.63 15" PVC E
INV=692.72 15" PVC W

DRAIN 29691
RIM=704.32
INV=703.13 12" PVC E & W

DRAIN 29735

CB 29752
RIM=705.14
INV=703.04 12" RCP NE (RECESSED)
INV=703.45 6" VCP SE
INV=703.81 4" PVC SW
INV=703.39 12" VCP W (RECESSED)
BOTTOM=703.04
TOP OF WATER=703.51

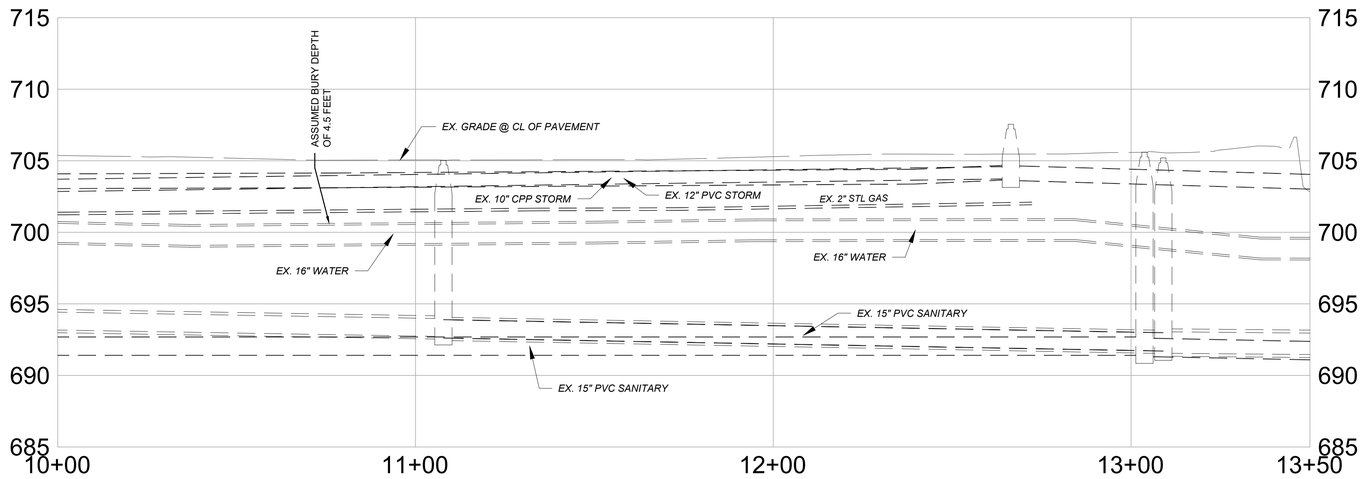
CBS 29846
RIM=705.14
INV=703.64 12" RCP NE
INV=703.69 12" CPP SW
INV=703.75 12" CPP W
BOTTOM=703.59

SSMH 29892
RIM=705.44
INV=691.34 15" PVC NE
INV=691.42 15" PVC W

SSMH 29893
RIM=705.57
INV=691.55 18" PVC N
INV=691.72 15" PVC W

GENERAL NOTES:

1. EXISTING PAVEMENT FOR BOREMAN'S IS SHEET 8" ASPHALT PAVEMENT WITH PARTIAL RECOVERY PER RECORD - CONTRACTOR TO FIELD VERIFY. PAVEMENT CONDITION PER PROFESSIONAL SERVICE INDUSTRIES, INC. REPORT IS GOOD. REFER TO REPORT DATED FEBRUARY 2, 2024.
2. ALL PROPOSED WATER SERVICE CONNECTION SHALL BE 1-INCH COPPER TYPE K UNLESS OTHERWISE NOTED.



KAY DRIVE PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)

1 inch = 5 ft.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

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- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

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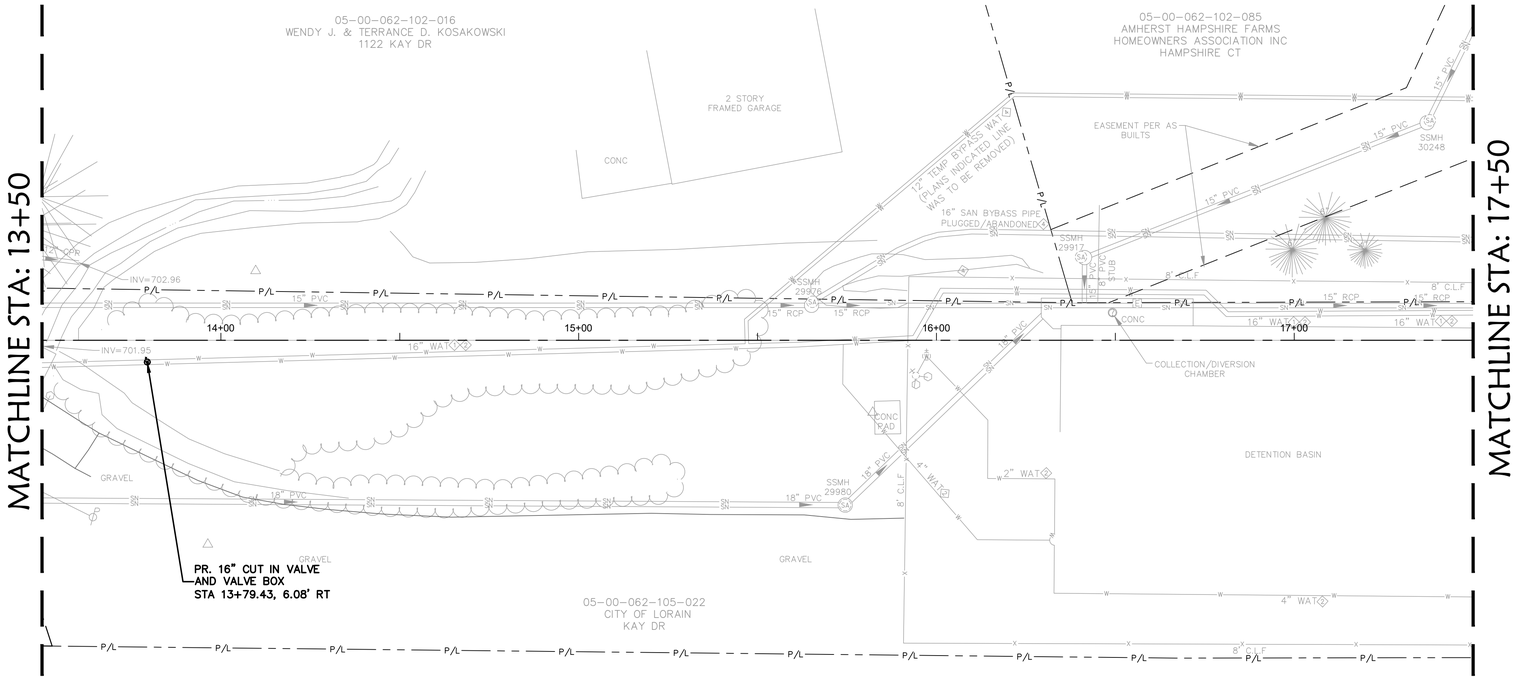
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BOREMAN - PLAN & PROFILE 10+00 TO 13+50

DRAWING NO.

B4

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BOREMAN'S FARM

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

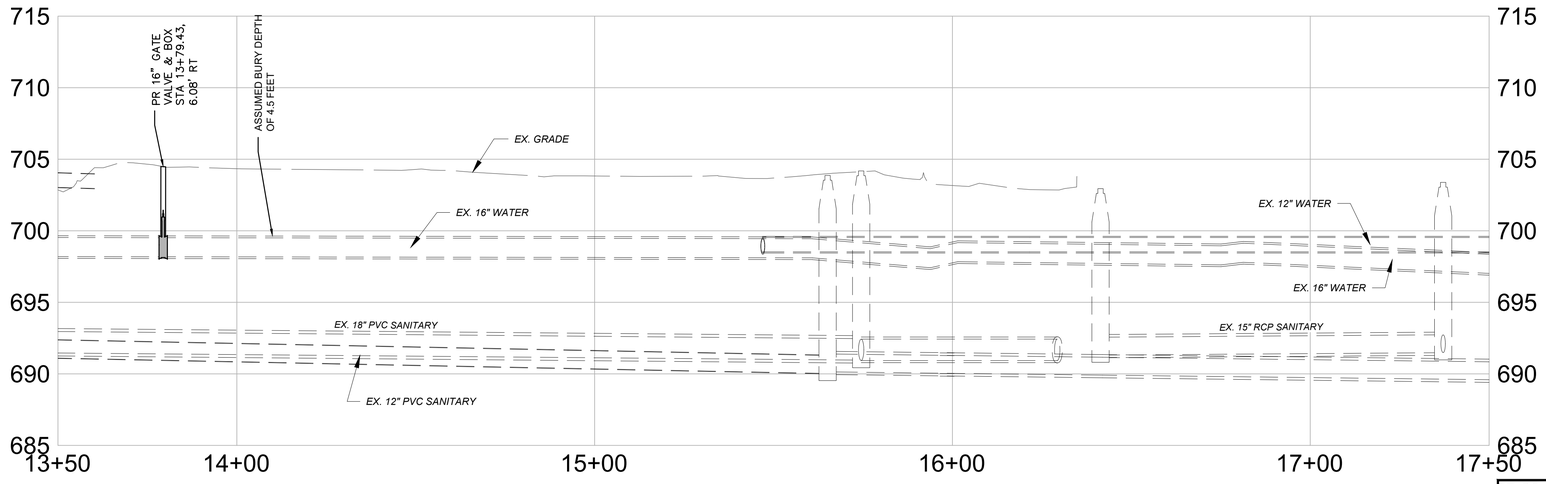
STRUCTURE TABLE

SSMH 29917
RIM=702.95
INV=691.40 15" PVC SW
INV=691.31 15" PVC NE

SSMH 29976
RIM=703.86
INV=690.14 15" RCP NE
INV=690.03 15" RCP SW

SSMH 29980
RIM=704.81
INV=690.93 18" PVC NW
INV=690.96 18" PVC SW

SSMH 30248
RIM=702.20
INV=691.48 15" PVC NW
INV=691.48 15" PVC S



BOREMAN'S FARM PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)

1 inch = 5 ft.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

SEAL OF THE CITY OF LORAIN OHIO 1834

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

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LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64062
REGISTERED PROFESSIONAL ENGINEER

03/06/2025

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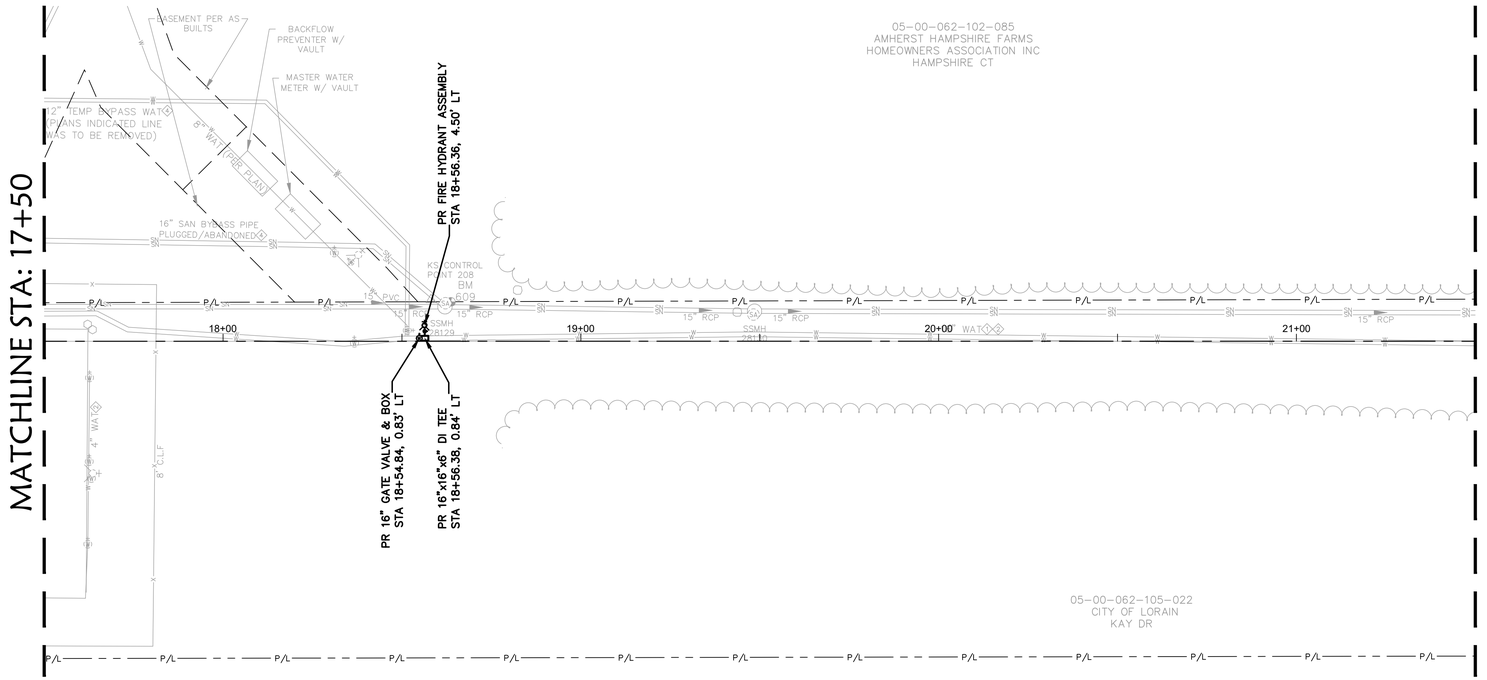
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CHECKED BY	KDC
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BOREMAN - PLAN & PROFILE 13+50 TO 17+50

DRAWING NO.

B5

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3/7/2025 5:23 PM Pawar, Sayali



BOREMAN'S FARM

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20

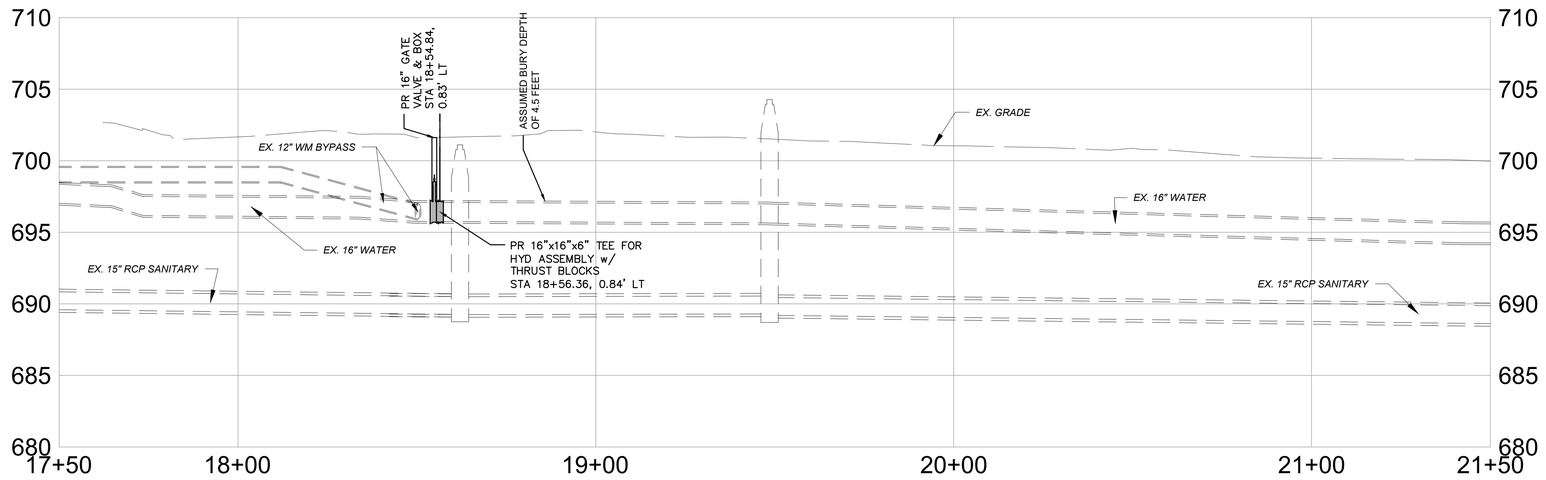
(IN FEET)

1 inch = 20 ft.

STRUCTURE TABLE

SSMH 28129
RIM=704.00
INV=689.25 15" RCP NE
INV=689.26 15" RCP SW
INV=689.75 15" PVC SW
(PARTIALLY PLUGGED)

SSMH 28130
RIM=700.80
INV=689.20 15" RCP NE
INV=689.30 15" RCP SW



BOREMAN'S FARM PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)

1 inch = 5 ft.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

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STATE OF OHIO
KEVIN D. CODIN
E-64026
REGISTERED PROFESSIONAL ENGINEER
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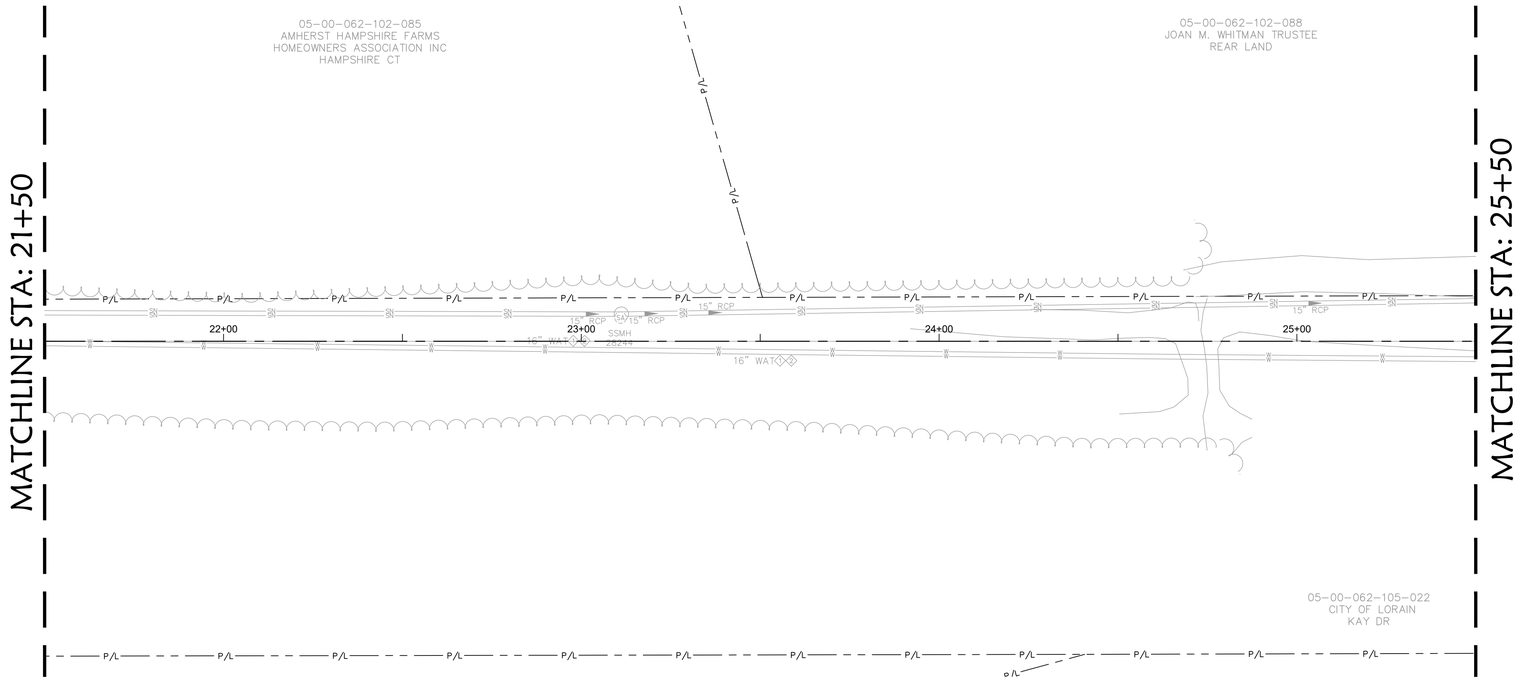
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BOREMAN - PLAN & PROFILE 17+50 TO 21+50

DRAWING NO.

B6

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BOREMAN'S FARM

SCALE: 1" = 20'

GRAPHIC SCALE

NORTH

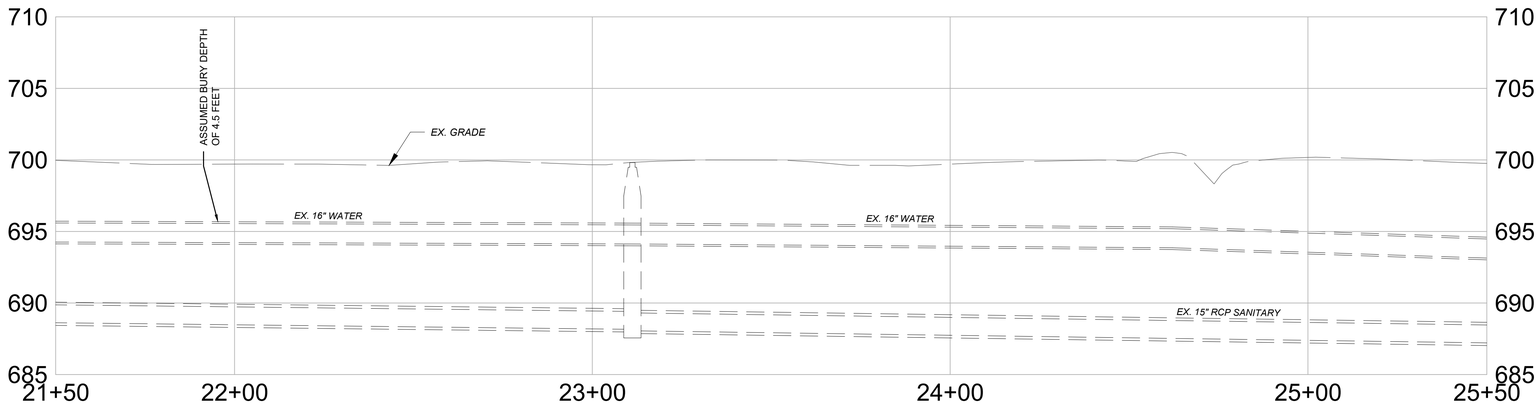
20 0 10 20

(IN FEET)

1 inch = 20 ft.

STRUCTURE TABLE

SSMH 28244
RIM=699.46
INV=688.06 15" RCP NE
INV=688.16 15" RCP SW



BOREMAN'S FARM PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)

1 inch = 5 ft.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

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(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64026
REGISTERED PROFESSIONAL ENGINEER

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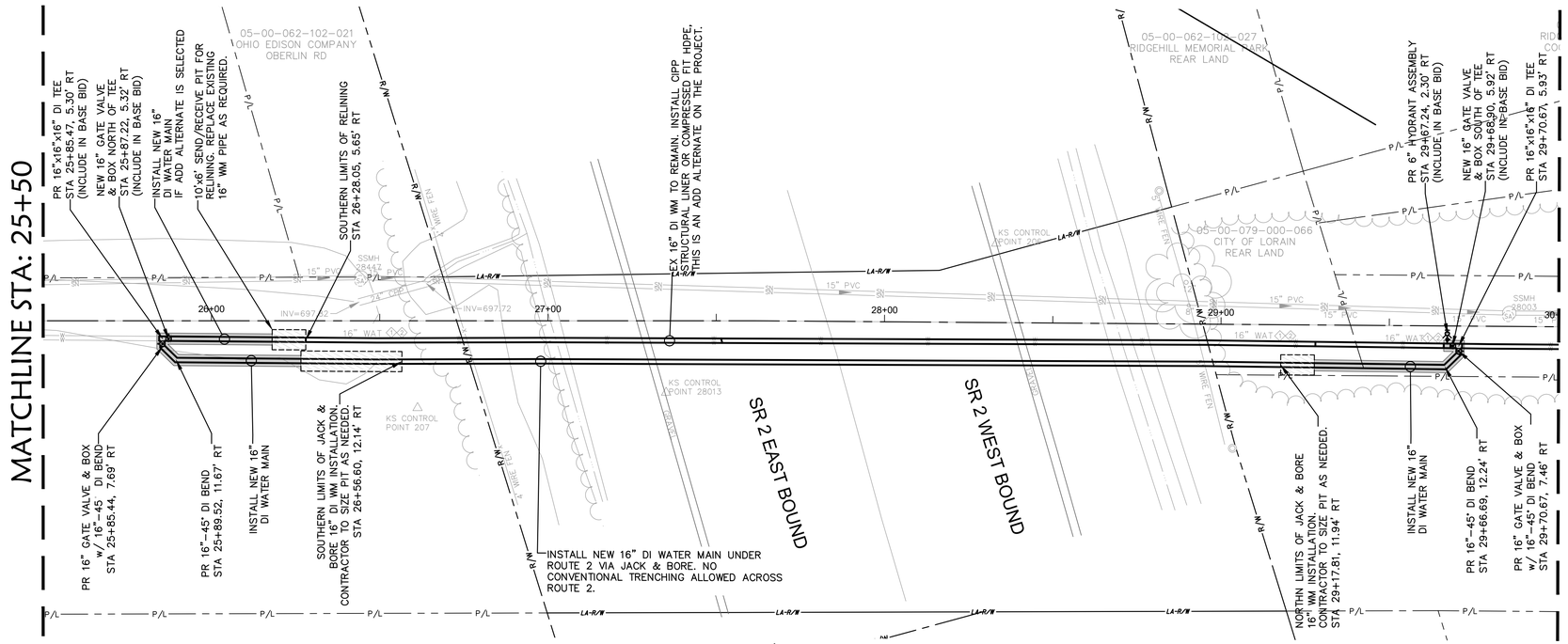
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BOREMAN - PLAN & PROFILE 21+50 TO 25+50

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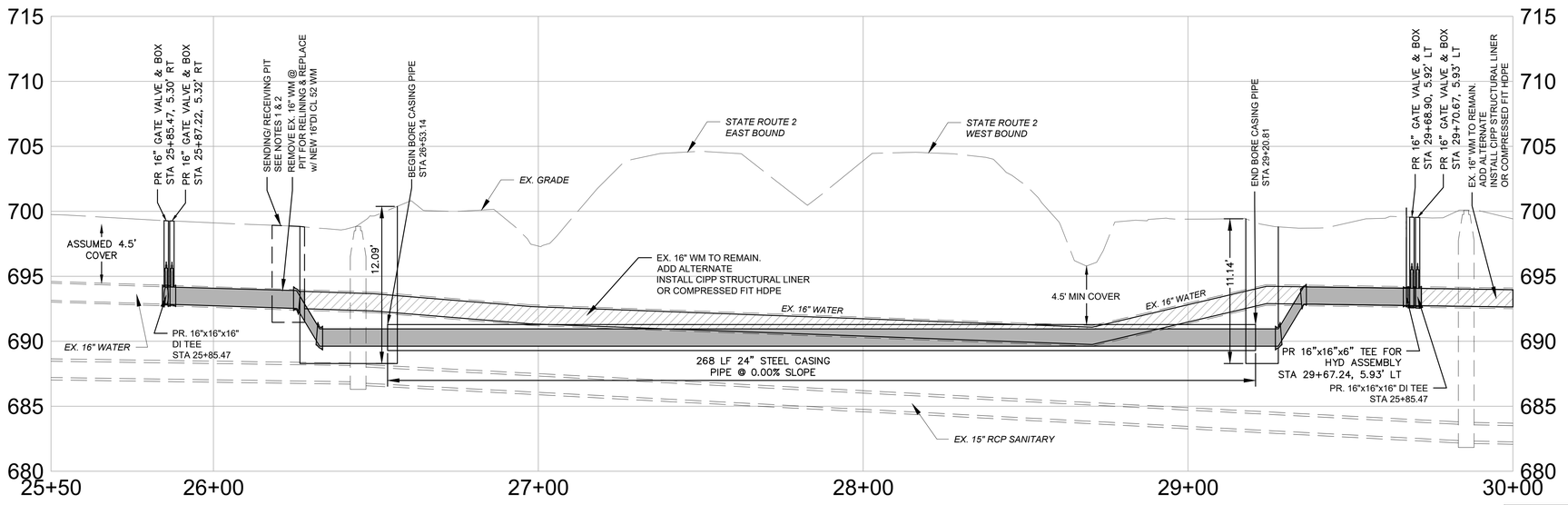
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BOREMAN'S FARM

SCALE: 1" = 20'



BOREMAN'S FARM PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
5 0 2.5 5
(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE
NORTH
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 28447
RIM=699.80
INV=686.80 15" PVC NE
INV=686.88 15" PVC SW

GENERAL NOTES:

1. LIMITS OF SENDING/RECEIVING PITS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR ACTUAL LOCATION AND SIZING OF PITS. CONTRACTOR IS RESPONSIBLE FOR MODIFICATION OF RESTORATION LIMITS AND MOT.
2. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING LOCATION OF EXISTING UTILITIES AND COORDINATING WITH UTILITY OWNERS REGARDING TEMPORARY RELOCATION OR PROTECTION IN PLACE WITHIN LIMITS OR IN PROXIMITY OF SENDING/RECEIVING PITS.

LEGEND

PROPOSED:
- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

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KEVIN D. CODIN
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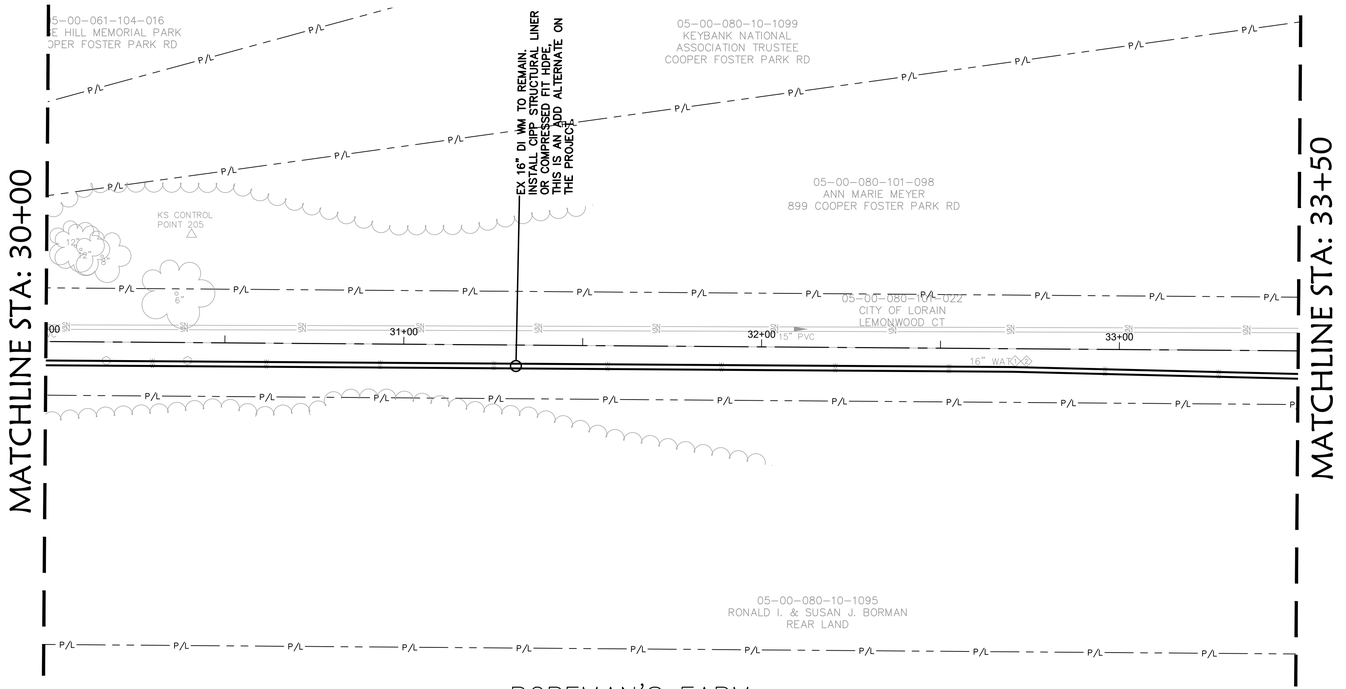
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BOREMAN - PLAN & PROFILE 25+50 TO 30+00

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B8

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BOREMAN'S FARM

SCALE: 1" = 20'

GRAPHIC SCALE

NORTH

20 0 10 20

(IN FEET)

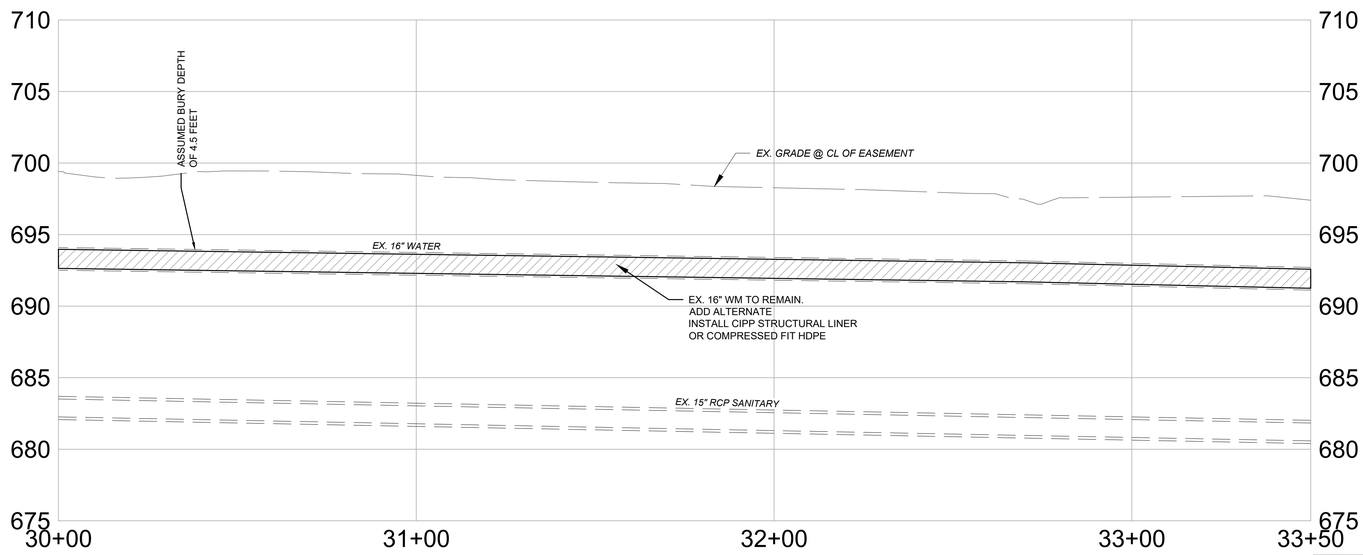
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 28003
RIM=700.41
INV=682.33 15" PVC NE & SW

GENERAL NOTES:

1. LIMITS OF SENDING/RECEIVING PITS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR ACTUAL LOCATION AND SIZING OF PITS. CONTRACTOR IS RESPONSIBLE FOR MODIFICATION OF RESTORATION LIMITS AND MOT.
2. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING LOCATION OF EXISTING UTILITIES AND COORDINATING WITH UTILITY OWNERS REGARDING TEMPORARY RELOCATION OR PROTECTION IN PLACE WITHIN LIMITS OR IN PROXIMITY OF SENDING/RECEIVING PITS.



BOREMAN'S FARM PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)

1 inch = 5 ft.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

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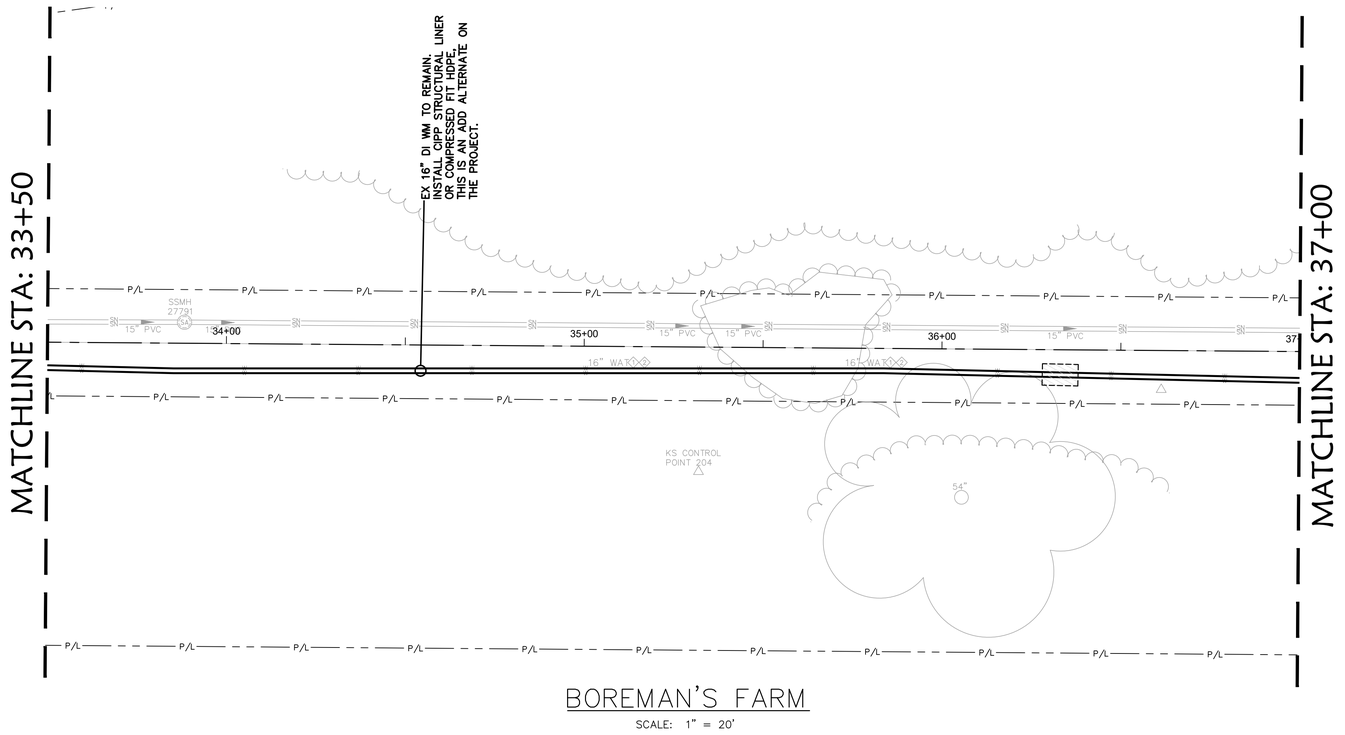
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OSBORN PROJ NO.	J20221302.000

BOREMAN - PLAN & PROFILE 30+00 TO 33+50

DRAWING NO.

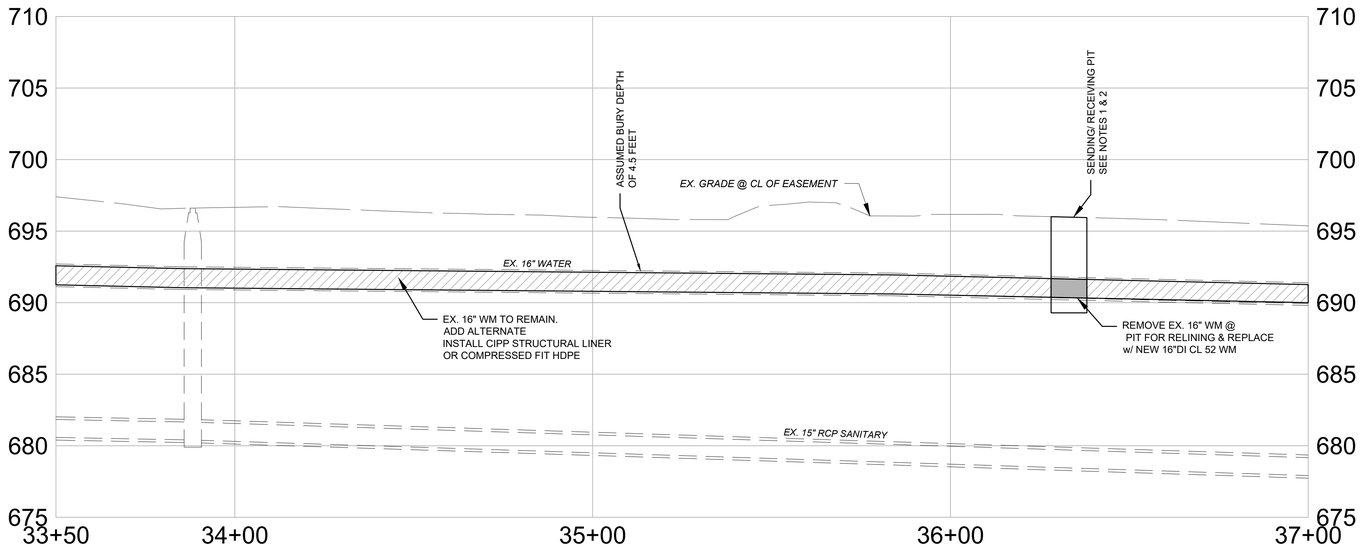
B9

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3/7/2025 5:25 PM Pawar, Sayali



BOREMAN'S FARM

SCALE: 1" = 20'



BOREMAN'S FARM PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALE

NORTH

20 0 10 20

(IN FEET)
1 inch = 20 ft.

STRUCTURE TABLE

SSMH 27791
RIM=696.42
INV=680.40 15" PVC NE & SW

GENERAL NOTES:

1. LIMITS OF SENDING/RECEIVING PITS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR ACTUAL LOCATION AND SIZING OF PITS. CONTRACTOR IS RESPONSIBLE FOR MODIFICATION OF RESTORATION LIMITS AND MOT.
2. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING LOCATION OF EXISTING UTILITIES AND COORDINATING WITH UTILITY OWNERS REGARDING TEMPORARY RELOCATION OR PROTECTION IN PLACE WITHIN LIMITS OR IN PROXIMITY OF SENDING/RECEIVING PITS.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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(440) 204-2003

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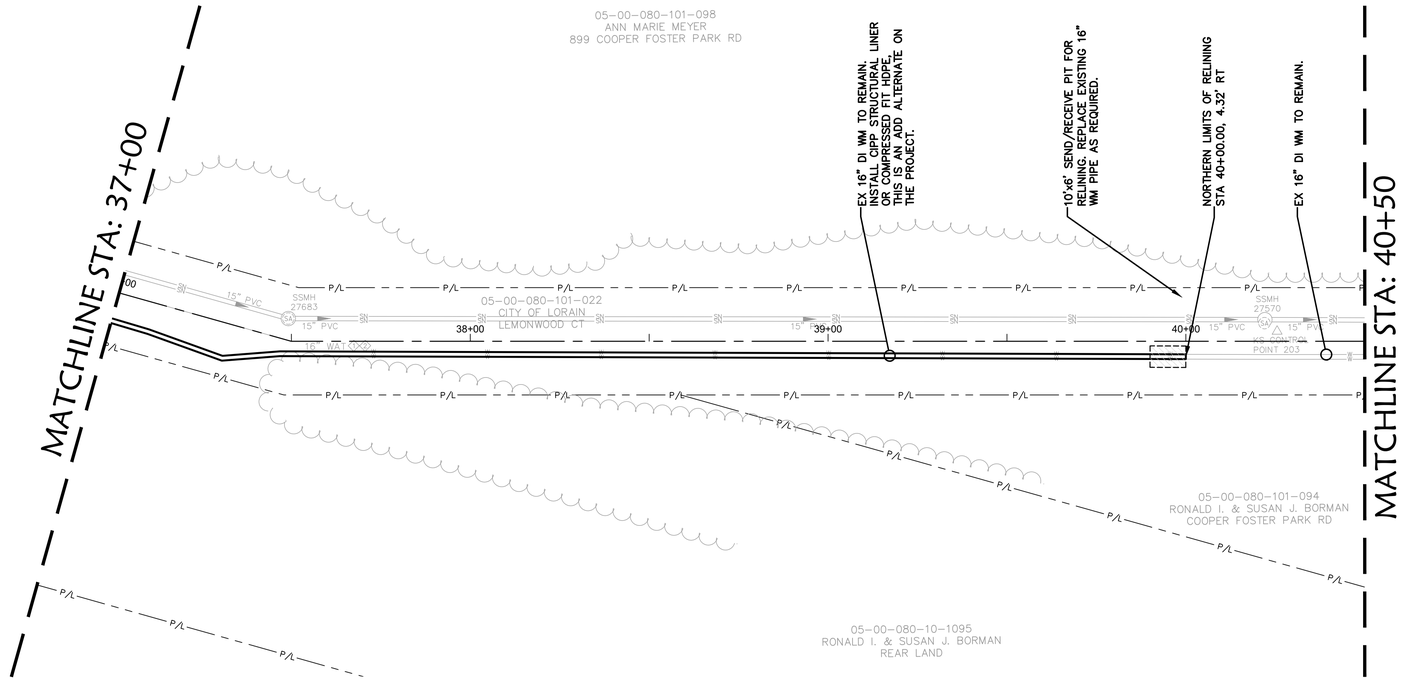
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BOREMAN - PLAN & PROFILE 33+50 TO 37+00

DRAWING NO.

B10

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3/7/2025 5:25 PM Pawar, Sayali



BOREMAN'S FARM

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

NORTH

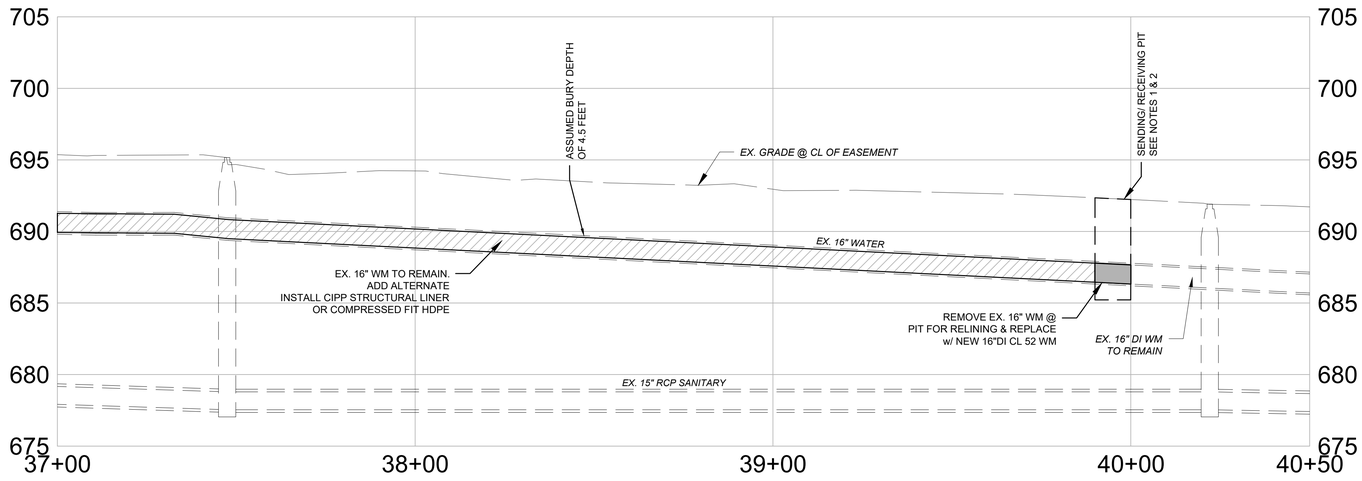
STRUCTURE TABLE

SSMH 27570
RIM=691.96
INV=677.54 15" PVC N. & S

SSMH 27683

GENERAL NOTES:

1. LIMITS OF SENDING/RECEIVING PITS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR ACTUAL LOCATION AND SIZING OF PITS. CONTRACTOR IS RESPONSIBLE FOR MODIFICATION OF RESTORATION LIMITS AND MOT.
2. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING LOCATION OF EXISTING UTILITIES AND COORDINATING WITH UTILITY OWNERS REGARDING TEMPORARY RELOCATION OR PROTECTION IN PLACE WITHIN LIMITS OR IN PROXIMITY OF SENDING/RECEIVING PITS.



BOREMAN'S FARM PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)

1 inch = 5 ft.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

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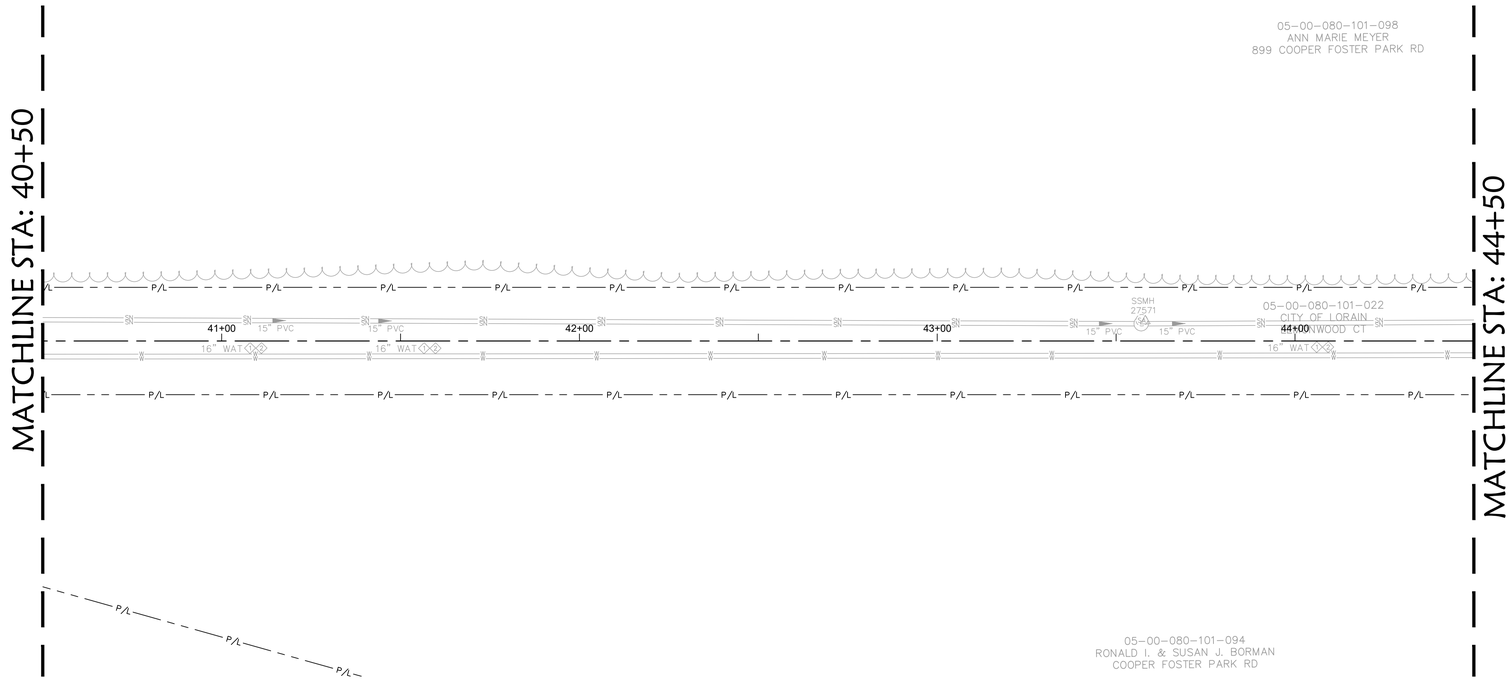
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BOREMAN - PLAN & PROFILE 37+00 TO 40+50

DRAWING NO.

B11

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3/7/2025 5:25 PM Pawar, Sayali



BOREMAN'S FARM

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20

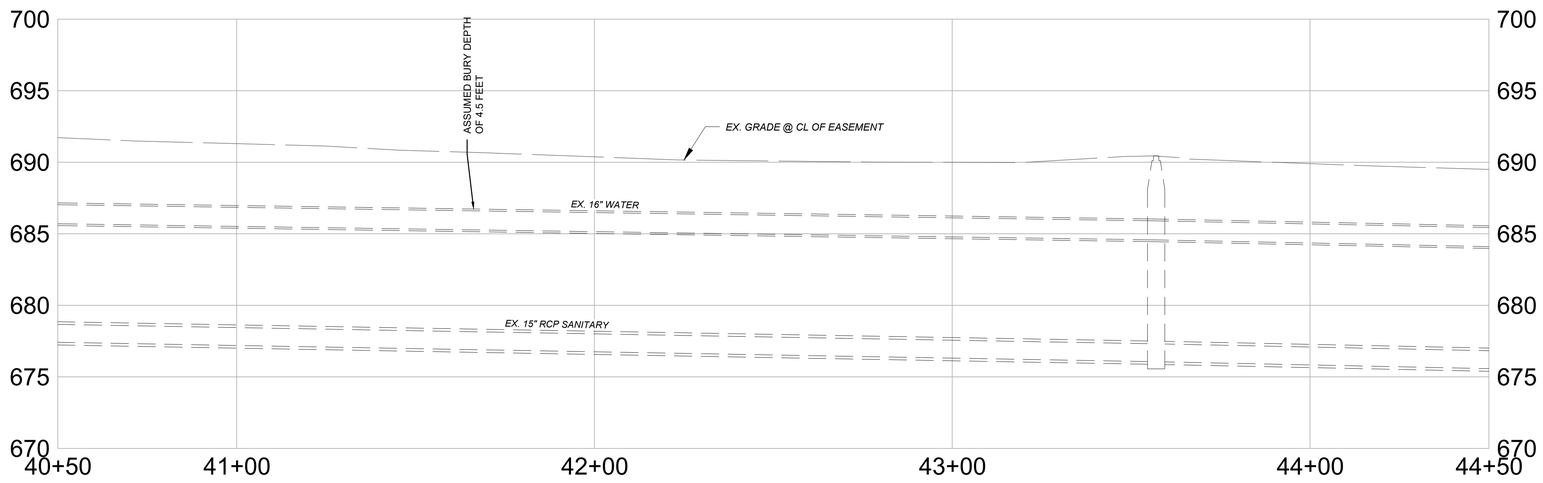
(IN FEET)

1 inch = 20 ft.

NORTH

STRUCTURE TABLE

SSMH 27571
RIM=690.48
INV=676.06 15" PVC N. & S



BOREMAN'S FARM PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)

1 inch = 5 ft.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

- TRENCH RESTORATION LIMITS
- SENDING & RECEIVING PITS

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

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LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
64026
REGISTERED PROFESSIONAL ENGINEER

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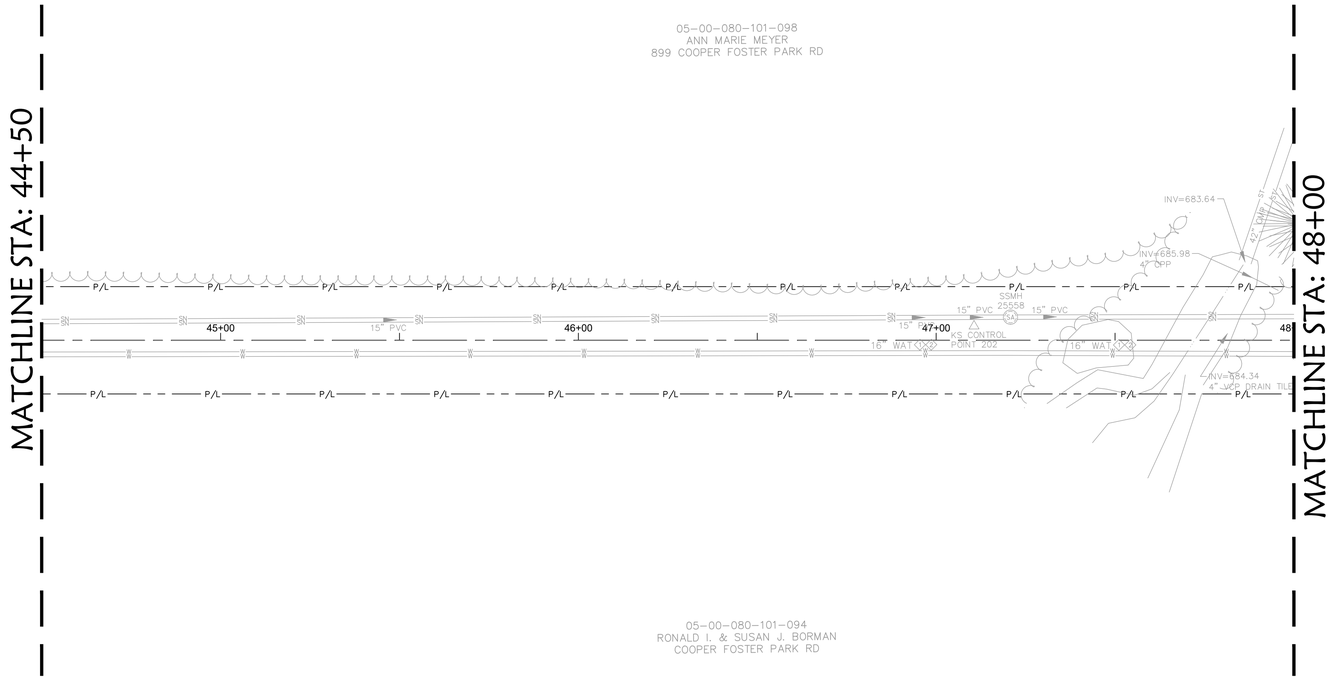
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BOREMAN - PLAN & PROFILE 40+50 TO 44+50

DRAWING NO.

B12

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BOREMAN'S FARM

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20

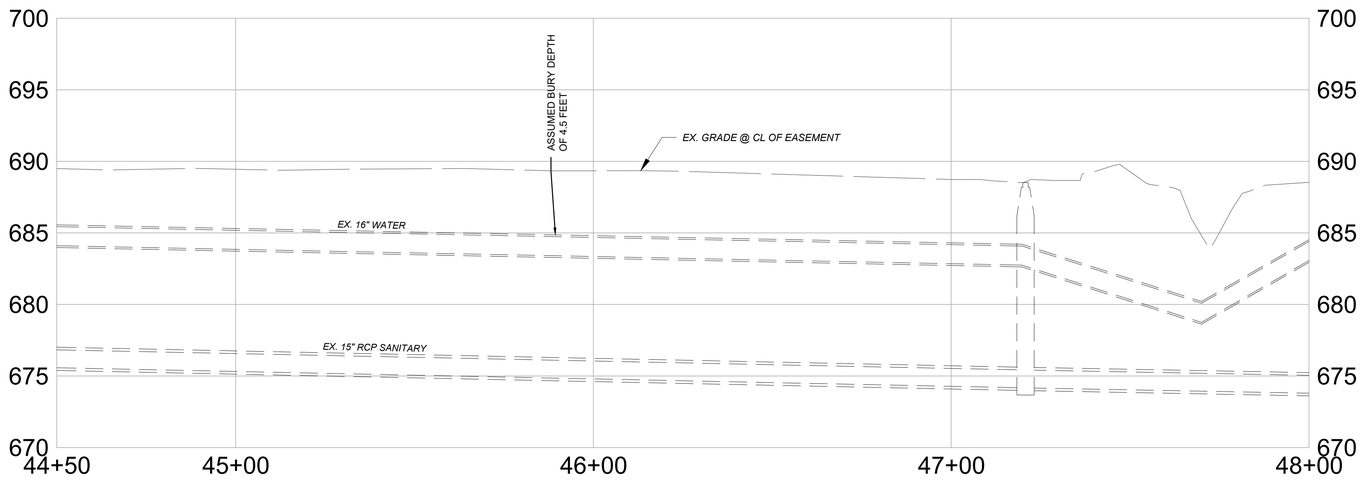
(IN FEET)

1 inch = 20 ft.

NORTH

STRUCTURE TABLE

SSMH 25558
RIM=688.42
INV=674.17 15" PVC N & S



BOREMAN'S FARM PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)

1 inch = 5 ft.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

ALL PROPOSED WSC'S SHALL BE 1" COPPER, TYPE K UNLESS OTHERWISE NOTED. INSTALL NEW VALVE CURB BOX.

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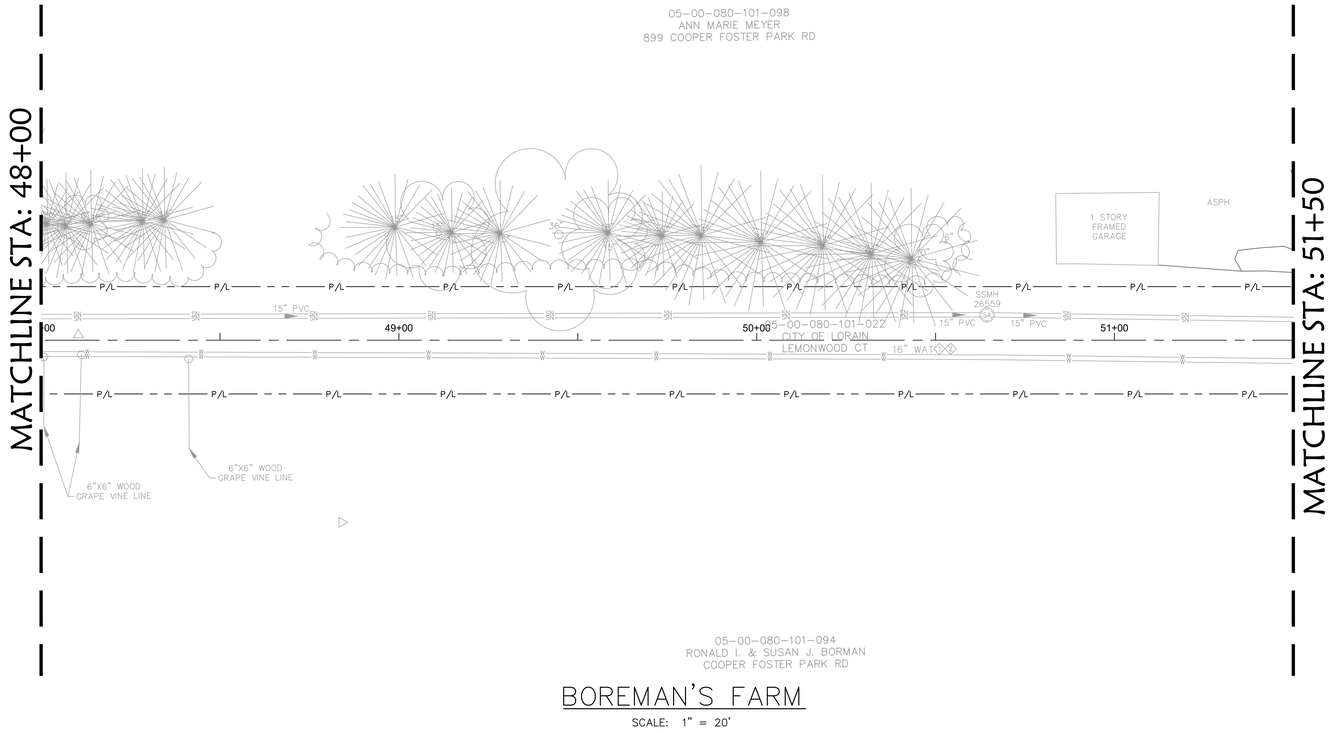
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BOREMAN - PLAN & PROFILE 44+50 TO 48+00

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B13

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BOREMAN'S FARM

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20

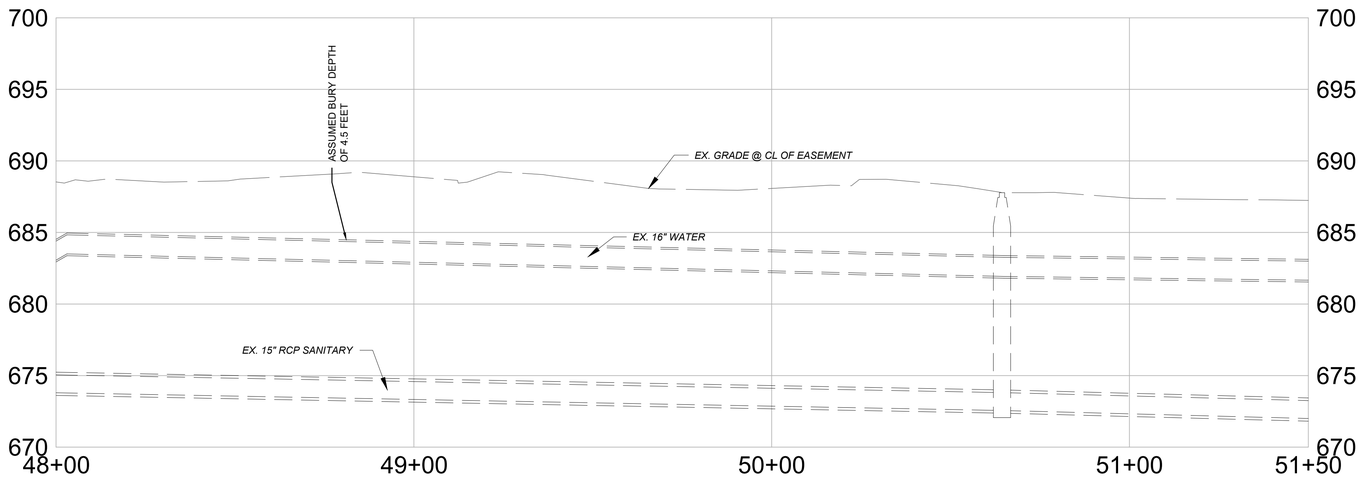
(IN FEET)

1 inch = 20 ft.

NORTH

STRUCTURE TABLE

SSMH 26559
RIM=687.80
INV=672.56 15" PVC N. & S



BOREMAN'S FARM PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)

1 inch = 5 ft.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

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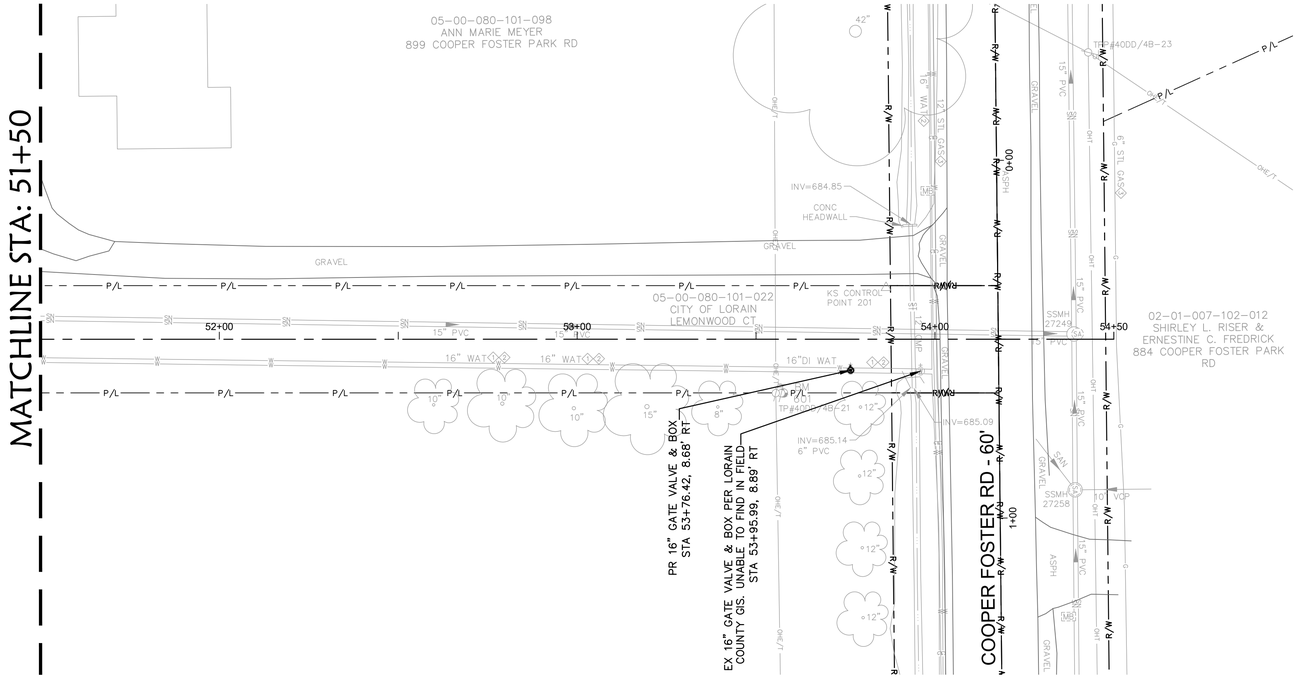
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BOREMAN - PLAN & PROFILE 48+00 TO 51+50

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B14

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BOREMAN'S FARM

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20

(IN FEET)

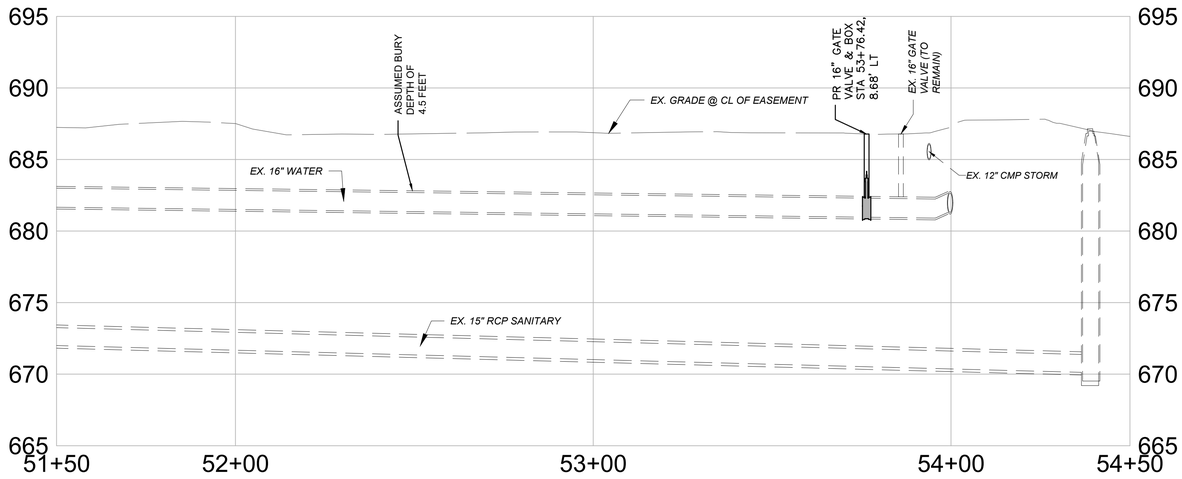
1 inch = 20 ft.

NORTH

STRUCTURE TABLE

SSMH 27249
RIM=686.98
INV=670.02 15" PVC E
INV=670.11 15" PVC S
INV=669.70 15" PVC W

SSMH 27258
RIM=686.80
INV=671.32 10" VCP N
INV=670.28 15" VCP E
INV=677.40 SAN SW
INV=670.14 15" VCP W



BOREMAN'S FARM PROFILE

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)

1 inch = 5 ft.

LEGEND

PROPOSED:

- WATER MAIN
- SERVICE CONNECTION
- RELINE EXISTING STEEL W.M.
- CIPP STRUCTURAL LINER OR COMPRESSED FIT HDPE
- WATER VALVE
- FIRE HYDRANT
- REDUCER

EXISTING: SEE GENERAL NOTES

KEYNOTES:

WSC = WATER SERVICE CONNECTION

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BOREMAN - PLAN & PROFILE 51+50 TO 54+50

DRAWING NO.

B15

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OMUTCD Typical Application Guidance Table

Street	Section	See Detail TA-10 (Sht TC3)	See Detail TA-18 (Sht TC4)	See Detail TA-22 (Sht TC5)	See Detail TA-26 (Sht TC6)	See Detail TA-27 (Sht TC7)	See Detail TA-30 (Sht TC10)	See Detail TA-33 (Sht TC11)	See Detail TA-46 (Sht TC12)	Detail	Notes
Eastman Drive	Eastman Drive intersection, southeast corner					X					None
	Eastman Drive between Leavitt Road and Station 14+67.82'		X								Moving closure
	Leavitt Road north of Walgreens parking lot.			X							
Leavitt Road	Center of intersection of W 21st Street and Leavitt Road				X						
	W 21st Street intersection, northeast corner					X					
	Leavitt Road between W 21st Street and W 20th Street	X									Moving closure
	W 20th Street intersection southeast corner					X					
	W 20th Street intersection northeast corner					X					
	Leavitt Road between W 20th Street to Edith Street								X		
Missouri Avenue	G Street intersection, northwest corner					X					
	Missouri Avenue between G Street and Garfield Boulevard								X		Moving closure
	Garfield Boulevard intersection, southeast corner					X					
Sherwood Drive	Meister Road intersection, northeast corner					X					
	Sherwood Drive between Meister Road and Forest Lane	X									Moving closure
	Ivanhoe Drive intersection, southeast corner					X					
	Ivanhoe Drive intersection, northeast corner					X					
	Woodstock Drive intersection, southeast corner					X					
	Woodstock Drive intersection, northeast corner					X					
	Valleyview Drive intersection, southeast corner					X					
	Valleyview Drive intersection, northeast corner					X					
	Forest Lane intersection, southeast corner					X					
	Forest Lane intersection, northeast corner					X					
	Sherwood Drive between Forest Lane and Windsor Court									X	MOT Plan Sheet TC13
	Sherwood Drive between Windsor Court and W 21st Street	X									Moving closure
	Windsor Court intersection, southwest corner					X					
	Windsor Court intersection, northwest corner					X					
	Canterbury Court intersection, southwest corner					X					
	Canterbury Court intersection, northwest corner					X					
	W 21st Street intersection, southwest corner					X					
Valleyview Drive	Sherwood Drive intersection, southeast corner					X					
	Valleyview Drive between Sherwood Drive and Woodstock Drive	X									Moving closure
	Woodstock Drive intersection, northwest corner					X					
	Woodstock Drive intersection, southwest corner					X					
West Erie Avenue	Beavercrest Drive intersection, southwest corner					X					
	Beavercrest Drive intersection, interior lanes of West Erie Avenue						X				Additional signage required for speed and volume
	West Erie Avenue between Beavercrest Drive and Kolbe Road							X			Moving closure
	Kolbe Road intersection, northwest corner			X							Provide sufficient lane taper for lane closure
Hamilton Avenue	West Erie intersection, southeast corner					X					
	Hamilton Avenue STA. 1+50 to facilitate installation of cut in valves or access	X									
	W 1st Street intersection, north side					X					
	W 1st Street intersection of City Hall Place to 100' north	X									Moving closure for pit installation and trenching

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MAINTENANCE OF TRAFFIC SUMMARY TABLE

DRAWING NO.

TC1

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Table 6H-2. Meaning of Symbols on Typical Application Diagrams

	Arrow board		Shadow vehicle
	Arrow board support or trailer (shown facing down)		Sign (shown facing left)
	Changeable message sign or trailer		Surveyor
	Channelizing device		Temporary barrier
	Crash cushion		Temporary barrier with warning light
	Direction of temporary traffic detour		Traffic or pedestrian signal
	Direction of traffic		
	Flagger		Truck-mounted attenuator
	High-level warning device (Flag tree)		Type 3 barricade
	Longitudinal channelizing device		Warning light
	Luminaire		Work space
	Pavement markings that should be removed for a long-term project		Work Vehicle

Table 6H-3. Meaning of Letter Codes on Typical Application Diagrams

Road Type	Distance Between Signs (Feet) **		
	A	B	C
Urban (low speed) *	100	100	100
Urban (high speed) *	350	350	350
Rural	500	500	500
Expressway / Freeway	1,000	1,500	2,640

* Speed category to be determined by highway agency.

** The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The “first sign” is the sign in a three-sign series that is closest to the TTC zone. The “third sign” is the sign that is furthest upstream from the TTC zone.)

Table 6H-4. Formulas for Determining Taper Lengths

Speed (S)	Taper Length (L) in Feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	L =WS

Where: L = taper length in feet
W = width of offset in feet
S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

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MAINTENANCE OF TRAFFIC GENERAL NOTES

DRAWING NO.

TC2

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Notes for Figure 6H-10—Typical Application 10
Lane Closure on a Two-Lane Road Using Flaggers

Option:

1. For low-volume situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger, positioned to be visible to road users approaching from both directions, may be used (see Chapter 6E).
2. The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short-duration operations.
3. Flashing warning lights and/or flags may be used to call attention to the advance warning signs. A BE PREPARED TO STOP sign may be added to the sign series.

Guidance:

4. *The buffer space should be extended so that the two-way traffic taper is placed before a horizontal (or crest vertical) curve to provide adequate sight distance for the flagger and a queue of stopped vehicles.*

Standard:

5. **At night, flagger stations shall be illuminated, except in emergencies.**

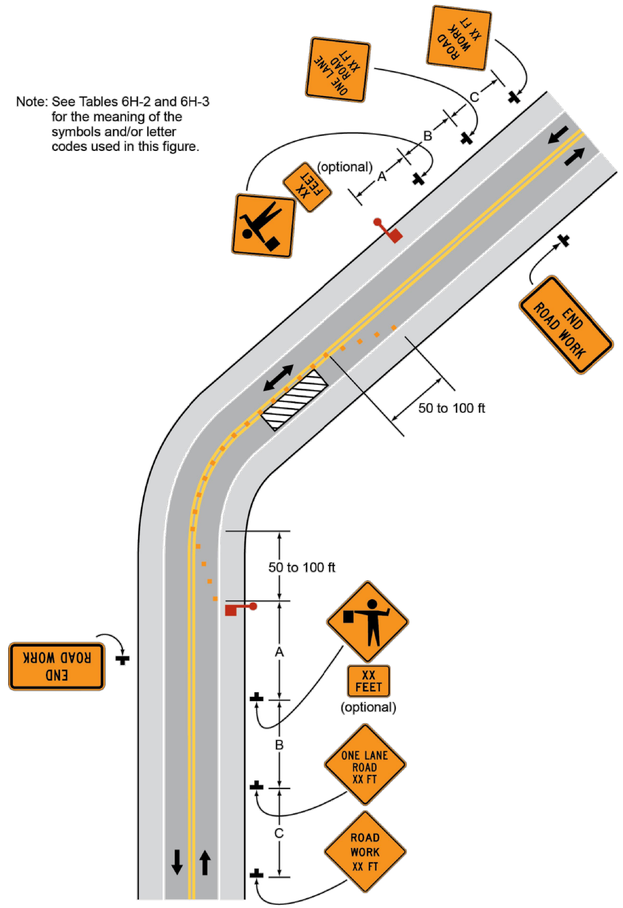
Guidance:

6. *When used, the BE PREPARED TO STOP sign should be located between the Flagger sign and the ONE LANE ROAD sign.*
7. *When a grade crossing exists within or upstream of the transition area and it is anticipated that queues resulting from the lane closure might extend through the grade crossing, the TTC zone should be extended so that the transition area precedes the grade crossing.*
8. *When a grade crossing equipped with active warning devices exists within the activity area, provisions should be made for keeping flaggers informed as to the activation status of these warning devices.*
9. *When a grade crossing exists within the activity area, drivers operating on the left-hand side of the normal center line should be provided with comparable warning devices as for drivers operating on the right-hand side of the normal center line.*
10. *Early coordination with the railroad company or light rail transit agency should occur before work starts.*

Option:

11. A flagger or a uniformed law enforcement officer may be used at the grade crossing to minimize the probability that vehicles are stopped within 15 feet of the grade crossing, measured from both sides of the outside rails.

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



Typical Application 10

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MAINTENANCE OF TRAFFIC GENERAL TA-10 DETAIL

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TC3

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Notes for Figure 6H-18—Typical Application 18
Lane Closure on a Minor Street

Standard:

1. This TTC shall be used only for low-speed facilities having low traffic volumes.

Option:

2. Where the work space is short, where road users can see the roadway beyond, and where volume is low, vehicular traffic may be self-regulating.

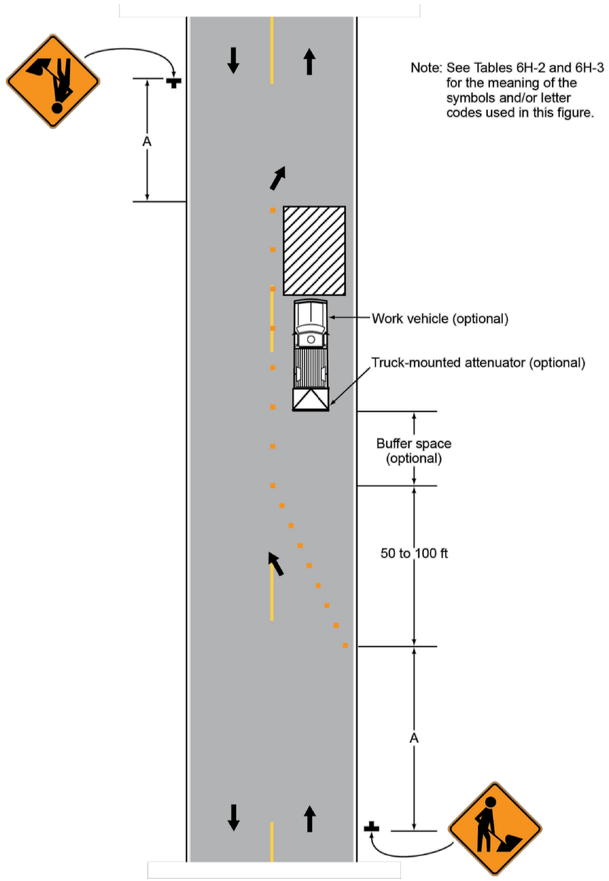
Standard:

3. Where vehicular traffic cannot effectively self-regulate, one or two flaggers shall be used as illustrated in Figure 6H-10.

Option:

4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
5. A truck-mounted attenuator may be used on the work vehicle and the shadow vehicle.

Figure 6H-18. Lane Closure on a Minor Street (TA-18)



Typical Application 18

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Notes for Figure 6H-22—Typical Application 22
Right-Hand Lane Closure on the Far Side of an Intersection

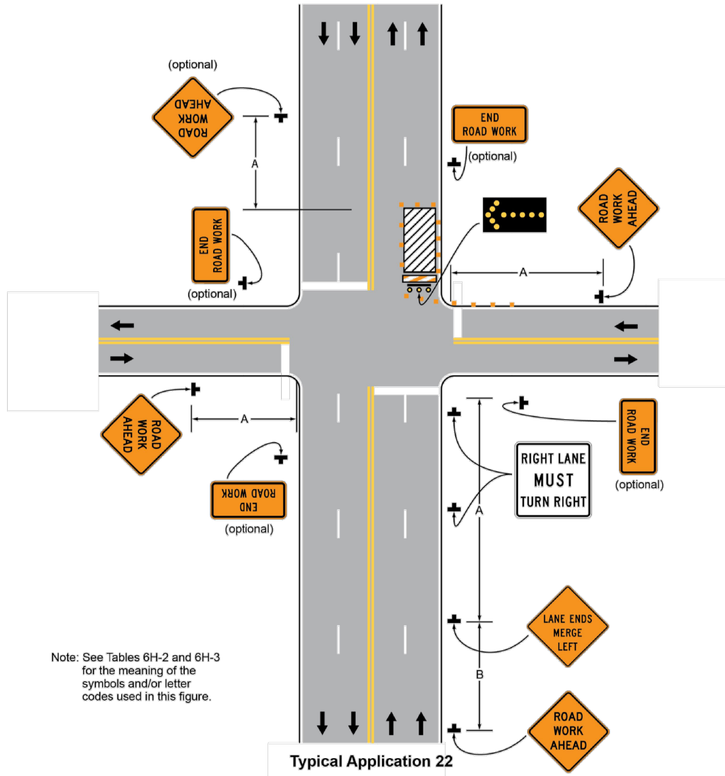
Guidance:

1. *If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure 6H-29.*

Option:

2. The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection. However, when this results in the closure of a right-hand lane having significant right turning movements, then the right-hand lane may be restricted to right turns only, as shown. This procedure increases the through capacity by eliminating right turns from the open through lane.
3. For intersection approaches reduced to a single lane, left-turning movements may be prohibited to maintain capacity for through vehicular traffic.
4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
5. Where the turning radius is large, it may be possible to create a right-turn island using channelizing devices or pavement markings.

Figure 6H-22. Right-Hand Lane Closure on the Far Side of an Intersection (TA-22)



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TC5

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Notes for Figure 6H-26—Typical Application 26
Closure in the Center of an Intersection

Guidance:

1. *All lanes should be a minimum of 10 feet in width as measured to the near face of the channelizing devices.*
2. *The shifting taper should be approximately L in length where speeds are 50 mph or greater (see Table 6C-3).*

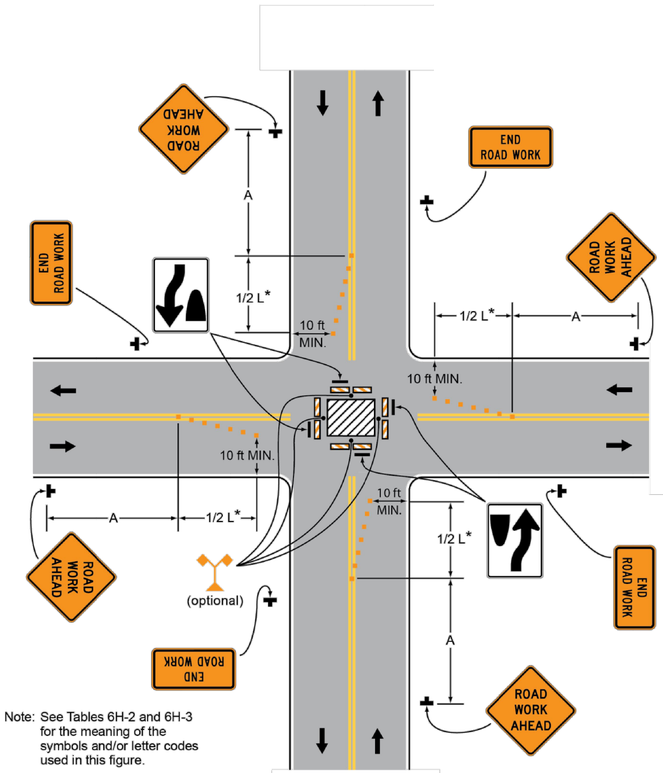
Option:

3. A high-level warning device may be placed in the work space, if there is sufficient room.
4. For short-term use on low-volume, low-speed roadways with vehicular traffic that does not include longer and wider heavy commercial vehicles, a minimum lane width of 9 feet may be used.
5. Flashing warning lights and/or flags may be used to call attention to advance warning signs.
6. Unless the streets are wide, it may be physically impossible to turn left, especially for large vehicles. Left turns may be prohibited as required by geometric conditions.
7. For short-duration work operations, the channelizing devices may be eliminated if a vehicle displaying high-intensity rotating, flashing, oscillating, or strobe lights is positioned in the work space.
8. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

Standard:

9. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

Figure 6H-26. Closure in the Center of an Intersection (TA-26)



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

* See Note 2.

Typical Application 26

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

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(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

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MAINTENANCE OF TRAFFIC GENERAL TA-26 DETAIL

DRAWING NO.

TC6

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3/7/2025 5:29 PM Pawar, Sayali

Notes for Figure 6H-27—Typical Application 27
Closure at the Side of an Intersection

Guidance:

1. *The situation depicted can be simplified by closing one or more of the intersection approaches. If this cannot be done, and/or when capacity is a problem, through vehicular traffic should be directed to other roads or streets.*
2. *Depending on road user conditions, flagger(s) or uniformed law enforcement officer(s) should be used to direct road users within the intersection.*

Standard:

3. At night, flagger stations shall be illuminated, except in emergencies.

Option:

4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
5. For short-duration work operations, the channelizing devices may be eliminated if a vehicle displaying high-intensity rotating, flashing, oscillating, or strobe lights is positioned in the work space.
6. A BE PREPARED TO STOP sign may be added to the sign series.

Guidance:

7. *When used, the BE PREPARED TO STOP sign should be located before the Flagger symbol sign.*
8. *ONE LANE ROAD AHEAD signs should also be used to provide adequate advance warning.*

Support:

9. Turns can be prohibited as required by vehicular traffic conditions. Unless the streets are wide, it might be physically impossible to make certain turns, especially for large vehicles.

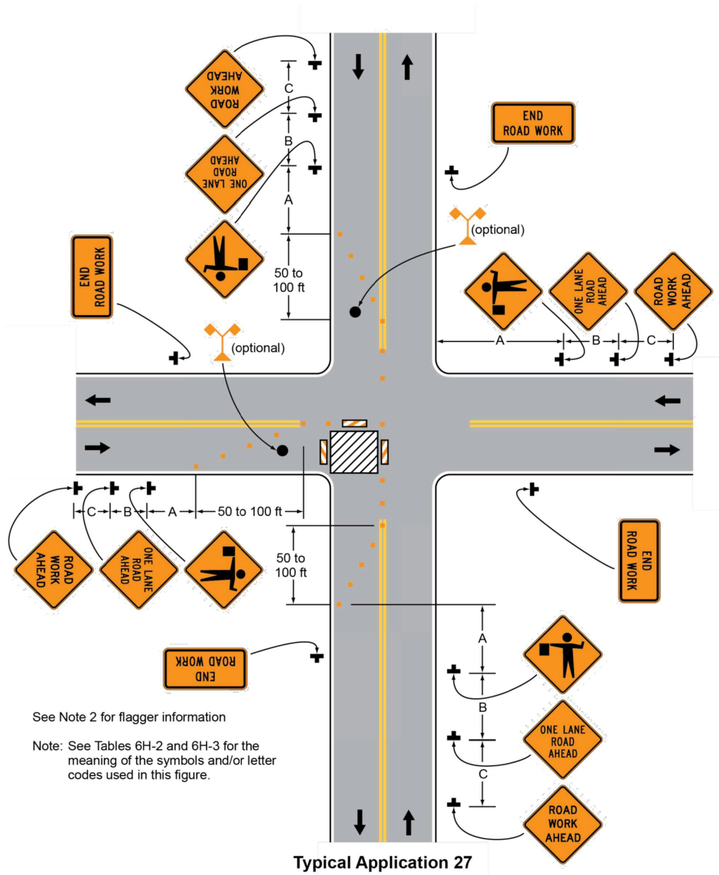
Option:

10. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

Standard:

11. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

Figure 6H-27. Closure at the Side of an Intersection (TA-27)



See Note 2 for flagger information

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

Typical Application 27

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

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MAINTENANCE OF TRAFFIC GENERAL TA-27 DETAIL

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TC7

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Notes for Figure 6H-28—Typical Application 28
Sidewalk Detour or Diversion

Standard:

1. **When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.**

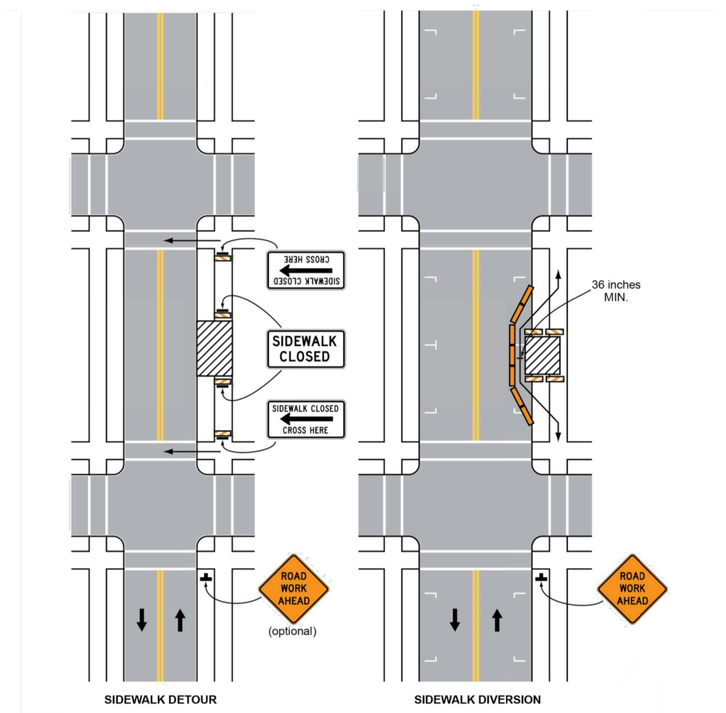
Guidance:

2. *Where high speeds are anticipated, a temporary traffic barrier and, if necessary, a crash cushion should be used to separate the temporary sidewalks from vehicular traffic.*
3. *Audible information devices should be considered where midblock closings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.*

Option:

4. Street lighting may be considered.
5. Only the TTC devices related to pedestrians are shown. Other devices, such as lane closure signing or ROAD NARROWS signs, may be used to control vehicular traffic.
6. For nighttime closures, Type A Flashing warning lights may be used on barricades that support signs and close sidewalks.
7. Type C Steady-Burn or Type D 360-degree Steady-Burn warning lights may be used on channelizing devices separating the temporary sidewalks from vehicular traffic flow.
8. Signs, such as KEEP RIGHT (LEFT), may be placed along a temporary sidewalk to guide or direct pedestrians.

Figure 6H-28. Sidewalk Detour or Diversion (TA-28)



Typical Application 28

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

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Notes for Figure 6H-29—Typical Application 29
Crosswalk Closures and Pedestrian Detours

Standard:

1. **When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.**
2. **Curb parking shall be prohibited for at least 50 feet in advance of the midblock crosswalk.**

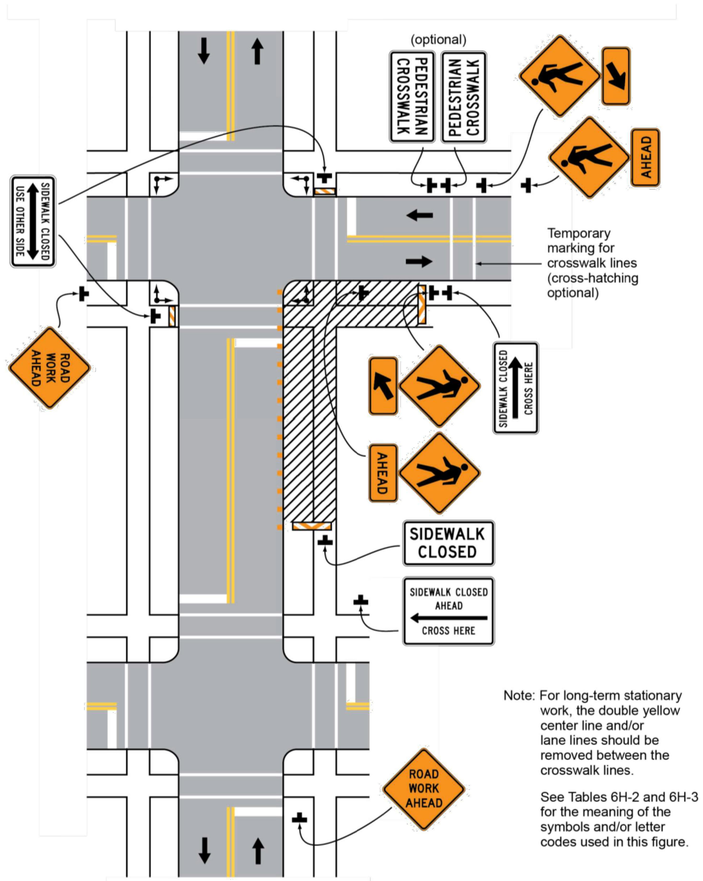
Guidance:

3. *Audible information devices should be considered where midblock closings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.*
4. *Pedestrian traffic signal displays controlling closed crosswalks should be covered or deactivated.*

Option:

5. Street lighting may be considered.
6. Only the TTC devices related to pedestrians are shown. Other devices, such as lane closure signing or ROAD NARROWS signs, may be used to control vehicular traffic.
7. For nighttime closures, Type A Flashing warning lights may be used on barricades supporting signs and closing sidewalks.
8. Type C Steady-Burn or Type D 360-degree Steady-Burn warning lights may be used on channelizing devices separating the work space from vehicular traffic.
9. In order to maintain the systematic use of the fluorescent yellow-green background for pedestrian, bicycle, and school warning signs in a jurisdiction, the fluorescent yellow-green background for pedestrian, bicycle, and school warning signs may be used in TTC zones.

Figure 6H-29. Crosswalk Closures and Pedestrian Detours (TA-29)



Note: For long-term stationary work, the double yellow center line and/or lane lines should be removed between the crosswalk lines.

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

Typical Application 29

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MAINTENANCE OF TRAFFIC GENERAL TA-29 DETAIL

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TC9

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3/7/2025 5:30 PM Pawar, Sayali

Notes for Figure 6H-30—Typical Application 30
Interior Lane Closure on a Multi-lane Street

Guidance:

1. *This information applies to low-speed, low-volume urban streets. Where speed or volume is higher, additional signing such as Lane Ends (W4-2) should be used.*

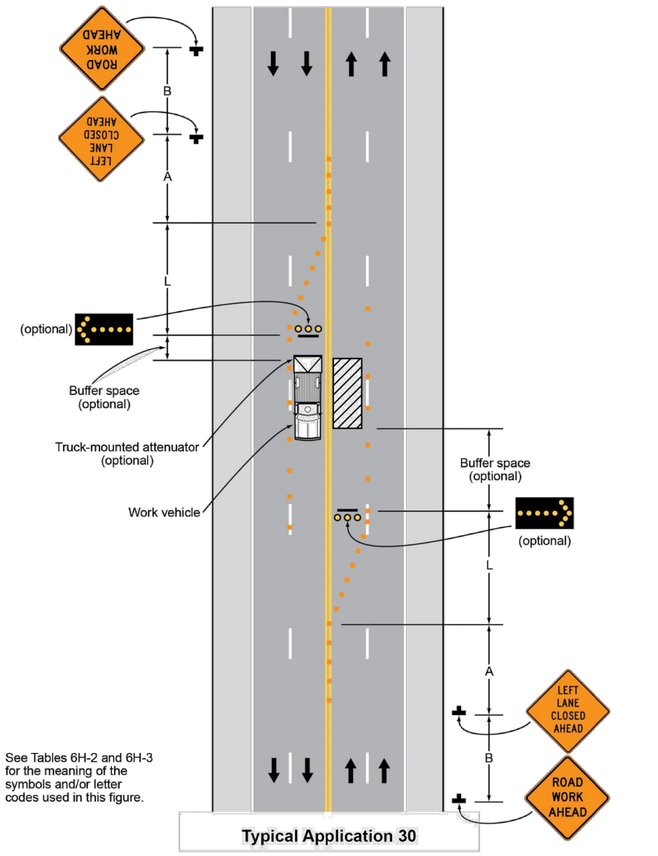
Option:

2. The closure of the adjacent interior lane in the opposing direction may not be necessary, depending upon the activity being performed and the work space needed for the operation.
3. Shadow vehicles with a truck-mounted attenuator may be used.

Standard:

4. When an additional sign is used (see Note 1), the signs shown shall be relocated to accommodate standard sign spacing for the added sign.

Figure 6H-30. Interior Lane Closure on a Multi-lane Street (TA-30)



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TC10

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3/7/2025 5:30 PM Pawar, Sayali

Notes for Figure 6H-33—Typical Application 33
Stationary Lane Closure on a Divided Highway

Standard:

1. **This information also shall be used when work is being performed in the lane adjacent to the median on a divided highway. In this case, the LEFT LANE CLOSED signs and the corresponding Lane Ends signs shall be substituted.**
2. **When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.**

Guidance:

3. *When paved shoulders having a width of 8 feet or more are closed, channelizing devices should be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.*

Option:

4. A truck-mounted attenuator may be used on the work vehicle and/or shadow vehicle.

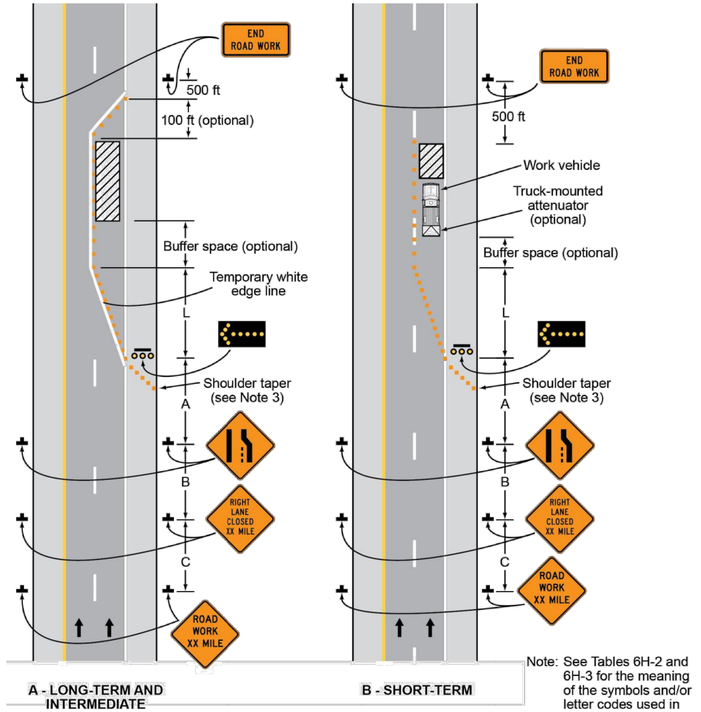
Support:

5. Where conditions permit, restricting all vehicles, equipment, workers, and their activities to one side of the roadway might be advantageous.

Standard:

6. **An arrow board shall be used when a freeway lane is closed. When more than one freeway lane is closed, a separate arrow board shall be used for each closed lane.**

Figure 6H-33. Stationary Lane Closure on a Divided Highway (TA-33)



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

Typical Application 33

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TC11

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Notes for Figure 6H-46—Typical Application 46
Work in the Vicinity of a Grade Crossing

Guidance:

1. *When grade crossings exist either within or in the vicinity of roadway work activities, extra care should be taken to minimize the probability of conditions being created, by lane restrictions, flagging, or other operations, where vehicles might be stopped within the grade crossing, considered as being 15 ft on either side of the closest and farthest rail.*

Standard:

2. **If the queuing of vehicles across active rail tracks cannot be avoided, a uniformed law enforcement officer or flagger shall be provided at the highway-rail grade crossing to prevent vehicles from stopping within the grade crossing (as described in Note 1), even if automatic warning devices are in place.**

Guidance:

3. *Early coordination with the railroad company or light rail transit agency should occur before work starts.*
4. *In the example depicted, the buffer space of the activity area should be extended upstream of the grade crossing (as shown) so that a queue created by the flagging operation will not extend across the grade crossing.*
5. *The DO NOT STOP ON TRACKS sign should be used on all approaches to a highway-rail grade crossing within the limits of a TTC zone.*

Option:

6. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
7. A BE PREPARED TO STOP sign may be added to the sign series.

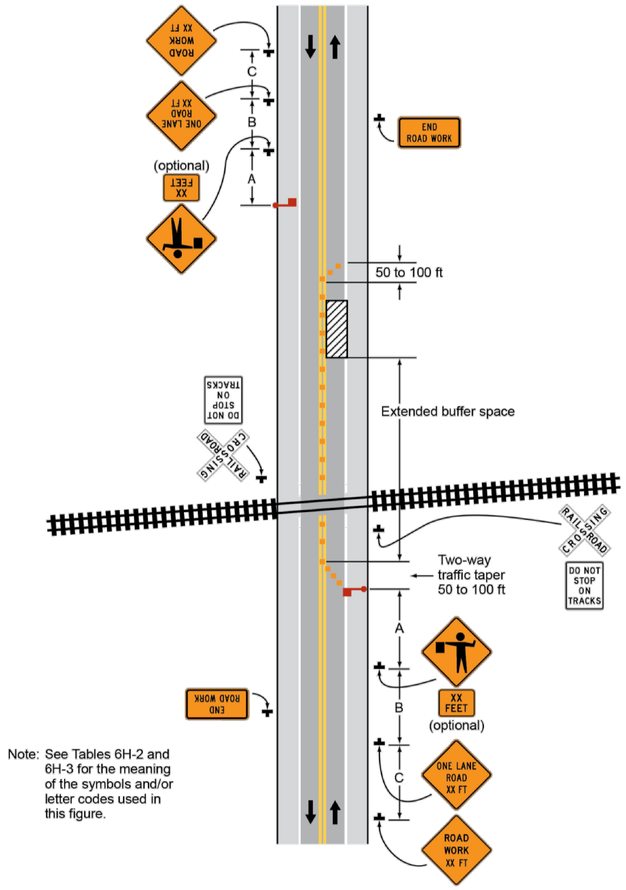
Guidance:

8. *When used, the BE PREPARED TO STOP sign should be located before the Flagger symbol sign.*

Standard:

9. **At night, flagger stations shall be illuminated, except in emergencies.**

Figure 6H-46. Work in the Vicinity of a Grade-Crossing (TA-46)



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

Typical Application 46

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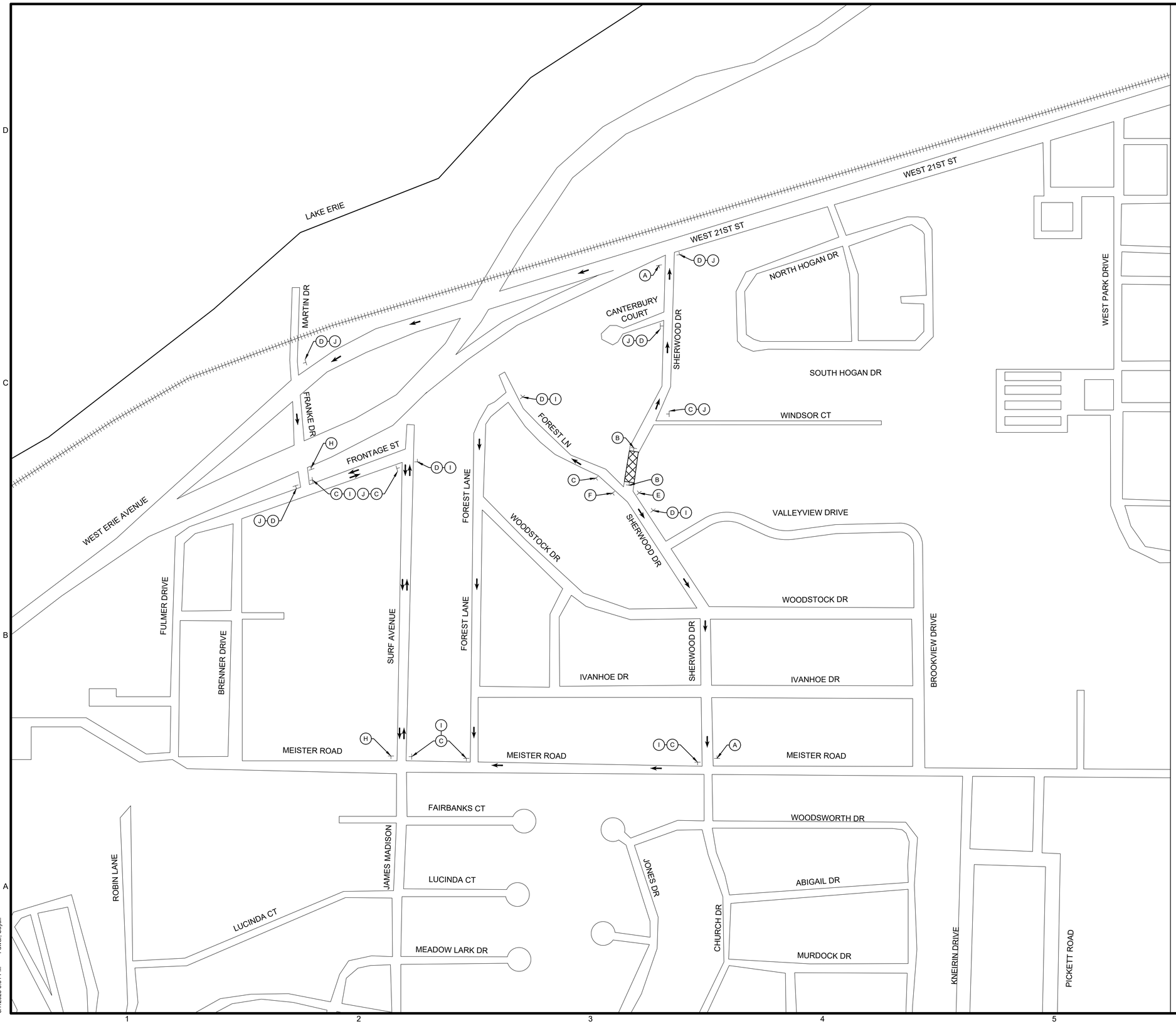
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MAINTENANCE OF TRAFFIC GENERAL TA-46 DETAIL

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TC12

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NORTH

GRAPHIC SCALE
200 0 100 200
(IN FEET)
1 inch = 200 ft.

X OUMTCD SIGN

A
BRIDGE OUT
XX MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3B (60 x 30)

B
ROAD CLOSED
R11-2 (48 x 30)
D3-1 (24 x 8)
STREET NAME

C
DETOUR
M4-9R (30 x 24)
D3-1 (24 x 8)
STREET NAME

D
DETOUR
M4-9L (30 x 24)

E
R3-1 (36 x 36)

F
R3-2 (36 x 36)

G
ROAD CLOSED AHEAD
W20-3 (36 x 36)

H
END DETOUR
M4-8a (24 x 18)
D3-1 (24 x 8)

I
W 21ST STREET

J
D3-1 (24 x 8)
MEISTER ROAD

LEGEND
- SINGLE POST SIGN
- DIRECTION OF DETOURED TRAVEL
- WORK AREA

GENERAL NOTES:

1. THIS DETOUR PLAN AS DEVELOPED BY THE ENGINEER IS TO BE USED AS A GUIDELINE FOR THE CONTRACTOR. DETOUR PLAN SHALL BE PROVIDED BY THE CONTRACTOR FOR APPROVAL BY THE CITY OF LORAIN.
2. TYPICAL SIGN SPACING IS 100' UNLESS OTHERWISE SPECIFIED IN THE PLANS.
3. CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF THE PROPOSED ADVANCED WARNING SIGNS.
4. FLUORESCENT ORANGE TYPE G SIGN SHEETING SHALL BE USED FOR ALL DETOUR AND CONSTRUCTION WARNING SIGNS.
5. CONTRACTOR SHALL MAINTAIN LOCAL ACCESS TO ALL BUSINESS, RESIDENTS, SCHOOLS, EMERGENCY VEHICLES AND ALL SIDE STREETS AT ALL TIMES.
6. CONTRACTOR SHALL PROVIDE DRIVE ACCESS TO RESIDENTS AT 2709 SHERWOOD DRIVE AND 2700 SHERWOOD DRIVE AS APPLICABLE.
7. ADVANCE WARNING SIGNS SHALL BE ERECTED DURING THE CONSTRUCTION OF WATER MAIN TO BE JACKED AND BORED UNDER THE EXISTING CULVERT. CONTRACTOR SHALL ADD ANY ADDITIONAL SIGNS IF NECESSARY.
8. SEE SHEET S5 FOR DETAILED VIEW OF THE WATER MAIN WORK.

SEAL OF THE CITY OF LORAIN 1834 OHIO

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

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MAINTENANCE OF TRAFFIC SHERWOOD DR DETOUR

DRAWING NO.

TC13

GENERAL

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF LORAIN CODIFIED ORDINANCE 1529, OHIO EPA STORMWATER REGULATIONS, AND ODOT ITEM 832. ALL STORMWATER BEST MANAGEMENT PRACTICES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO IMPLEMENTATION. DEVELOPMENT SITES LESS THAN ONE (1) ACRE IN SIZE: ALL CONSTRUCTION ACTIVITY WITHIN THE CITY WITH LESS THAN ONE (1) ACRE IN SIZE OF DISTURBED AREA SHALL BE REQUIRED TO MAINTAIN COMPLIANCE WITH THE FOLLOWING MINIMUM STANDARDS:

1. CONSTRUCTION ENTRANCE: A CONSTRUCTION ENTRANCE INSTALLED AND MAINTAINED TO THE STANDARDS OF THE CURRENT OHIO DEPARTMENT OF NATURAL RESOURCES' RAINWATER AND LAND DEVELOPMENT MANUAL IS REQUIRED AT ALL ACCESS POINTS USED BY VEHICULAR TRAFFIC OR CONSTRUCTION EQUIPMENT.
2. INLET PROTECTION: CITY APPROVED INLET PROTECTION IS REQUIRED ON ALL EXISTING OR PROPOSED STORM SEWER INLETS IN THE VICINITY OF THE CONSTRUCTION SITE THAT MAY RECEIVE SITE RUNOFF.
3. PERIMETER CONTROL: MUST BE INSTALLED AND MAINTAINED ALONG THE EDGE OF THE CONSTRUCTION SITE TO PREVENT OR FILTER SURFACE RUNOFF LEAVING THE CONSTRUCTION SITE. THE TYPE OF PERIMETER CONTROL USED SHALL BE DETERMINED BASED ON SITE AND LOCATION.
4. SITE STABILIZATION: TEMPORARY AND PERMANENT STABILIZATION MUST BE IMPLEMENTED ON ALL SITES PER THE STANDARDS IN THE CURRENT STORM WATER DISCHARGES FROM SMALL AND LARGE CONSTRUCTION ACTIVITIES - OHIO GENERAL NPDES PERMIT.
5. SPILL PREVENTION/CONTAINMENT: ALL SITES SHALL IMPLEMENT MEASURES FOR PREVENTING, CONTROLLING OR CONTAINING SPILLS OF FUEL, LUBRICANTS, TEMPORARY SANITARY TOILETS, OR OTHER POLLUTANTS AND PROTECTION POTENTIAL POLLUTANTS FROM CONTACT WITH PRECIPITATION OR RUNOFF.
6. STAGING AREA AND CONCRETE WASHOUT: ALL SITES MUST HAVE A CONTAINMENT AREA DESIGNATED FOR TRASH DISPOSAL, VEHICLE MAINTENANCE, MATERIAL STORAGE, AND CONCRETE WASHOUT. SHOULD THE USE OF A PREDEFINED BERMED CONTAINMENT AREA OR APPROVED WASHOUT DEVICE BE TECHNICALLY INFEASIBLE DUE TO THE PROJECT SIZE, THE DISPOSAL METHOD AND/OR LOCATION MUST BE PRE-APPROVED BY THE CITY ENGINEER OR HIS/HER DESIGNEE.
7. STREET SWEEPING: ALL PAVED SURFACES AFFECTED BY THE CONSTRUCTION SITE MUST BE SWEPT AT THE END OF EACH WORK DAY AND DURING THE DAY AS NEEDED WHEN SEDIMENT AND OTHER MATERIALS ARE TRACED OR DISCHARGED INTO THEM. STREET WASHING SHALL BE ALLOWED ONLY AFTER SHOVELING OR SWEEPING HAS REMOVED MOST OF THE SEDIMENT AND APPROVED STORM SEWER INLET PROTECTION IS PROPERLY INSTALLED ,UNLESS END OF SEWER SEDIMENT PONDS EXIST AND ARE PROPERLY FUNCTIONING.

NOTE 1 THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE. WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.
NOTE 2 BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBERS AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.

NO.	DATE	REVISION	NO.	DATE	REVISION
1	10/27/2015				
9	01/01/2019				

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200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
EROSION CONTROL
GENERAL NOTES

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TEMPORARY SEEDING SPECIFICATIONS

TEMPORARY SEEDING SPECIES SELECTION

SEEDING DATES	SPECIES	LB./1000 FT2	LB./ACRE
MARCH 1 TO AUGUST 15			
	OATS	3	128 (4 BUSHEL)
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	PERENNIAL RYEGRASS	1	40
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	KENTUCKY BLUEGRASS	1.25	55
	PERENNIAL RYEGRASS	3.25	142
	CREEPING RED FESCUE	0.4	17
	KENTUCKY BLUEGRASS	0.4	17
AUGUST 16 TO NOVEMBER 1			
	OATS	3	128 (3 BUSHEL)
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	RYE	3	112 (2 BUSHEL)
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	WHEAT	3	120 (2 BUSHEL)
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	PERENNIAL RYE	1	40
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	ANNUAL RYEGRASS	1.25	40
	PERENNIAL RYEGRASS	3.25	40
	CREEPING RED FESCUE	0.4	40
	KENTUCKY BLUEGRASS	0.4	
NOVEMBER 2 TO FEBRUARY 28	USE MULCH ONLY OR DORMANT SEEDING		

NOTE: OTHER APPROVED SPECIES MAY BE SUBSTITUTED.

1. STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS AND SEDIMENT TRAPS SHALL BE INSTALLED AND STABILIZED WITH TEMPORARY SEEDING PRIOR TO GRADING THE REST OF THE CONSTRUCTION SITE.
2. TEMPORARY SEED SHALL BE APPLIED BETWEEN CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED OR REWORKED FOR 14 DAYS OR GREATER. THESE IDLE AREAS SHALL BE SEEDED WITHIN 7 DAYS AFTER GRADING.
3. THE SEEDBED SHOULD BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION. TEMPORARY SEEDING SHOULD NOT BE POSTPONED IF IDEAL SEEDBED PREPARATION IS NOT POSSIBLE.
4. SOIL AMENDMENTS—TEMPORARY VEGETATION SEEDING RATE SHALL ESTABLISH ADEQUATE STANDS OF VEGETATION, WHICH MAY REQUIRE THE USE OF SOIL AMENDMENTS. BASE RATES FOR LIME AND FERTILIZER SHALL BE USED.
5. SEEDING METHOD—SEED SHALL BE APPLIED UNIFORMLY WITH A CYCLONE SPREADER, DRILL, CULTIPACKER SEEDER, OR HYDRO-SEEDER. WHEN FEASIBLE, SEED THAT HAS BEEN BROADCAST SHALL BE COVERED BY RAKING OR DRAGGING AND THEN LIGHTLY TAMPED INTO PLACE USING A ROLLER OR CULTIPACKER. IF HYDROSEEDING IS USED, THE SEED AND FERTILIZER WILL BE MIXED ON-SITE AND THE SEEDING SHALL BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.

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NOTE 2 BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBERS AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.

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TEMPORARY SEEDING SPECIFICATIONS CONT'D.

MULCHING FOR TEMPORARY SEEDING

1. APPLICATIONS OF TEMPORARY SEEDING SHALL INCLUDE MULCH, WHICH SHALL BE APPLIED DURING OR IMMEDIATELY AFTER SEEDING. SEEDING MADE DURING OPTIMUM SEEDING DATES ON FAVORABLE, VERY FLAT SOIL CONDITIONS MAY NOT NEED MULCH TO ACHIEVE ADEQUATE STABILIZATION.
2. MATERIALS: STRAW-IF STRAW IS USED, IT SHALL BE UNROTTED SMALL-GRAIN STRAW APPLIED AT A RATE OF 2 TONS PER ACRE OR 90 LBS./1,000 SQ. FT. (2-3 BALES).
   HYDROSEEDERS-IF WOOD CELLULOSE FIBER IS USED, IT SHALL BE USED AT 2000 LBS./AC. OR 46 LB./1,000 SQ. FT.
   OTHER-OTHER ACCEPTABLE MULCHES INCLUDE MULCH MATTING APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR WOOD CHIPS APPLIED AT 6 TON/AC.
3. STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER. ANCHORING METHODS:
   MECHANICAL-A DISK, CRIMPER, OR SIMILAR TYPE TOOL SHALL BE SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT LEFT TO A LENGTH OF APPROXIMATELY 6 INCHES.
   MULCH NETTING-NETTING SHALL BE USED ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS. NETTING MAY BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATED RUNOFF AND ON CRITICAL SLOPES.
   SYNTHETIC BINDERS-SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TRACK OR EQUIVALENT MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER.
   WOOD-CELLULOSE FIBER-WOOD-CELLULOSE FIBER BINDER SHALL BE APPLIED AT A NET DRY WT. OF 750 LB./AC. THE WOOD-CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LB./100 GAL.

PERMANENT SEEDING SPECIFICATIONS

SITE PREPARATION

1. SUBSOILER, PLOW, OR OTHER IMPLEMENT SHALL BE USED TO REDUCE SOIL COMPACTION AND ALLOW MAXIMUM INFILTRATION. (MAXIMIZING INFILTRATION WILL HELP CONTROL BOTH RUNOFF RATE AND WATER QUALITY.) SUBSOILING SHOULD BE DONE WHEN THE SOIL MOISTURE IS LOW ENOUGH TO ALLOW THE SOIL TO CRACK OR FRACTURE. SUBSOILING SHALL NOT BE DONE ON SLIP-PRONE AREAS WHERE SOIL PREPARATION SHOULD BE LIMITED TO WHAT IS NECESSARY FOR ESTABLISHING VEGETATION.
2. THE SITE SHALL BE GRADED AS NEEDED TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION AND SEEDING.
3. TOPSOIL SHALL BE APPLIED WHERE NEEDED TO ESTABLISH VEGETATION.

SEEDBED PREPARATION

1. LIME-AGRICULTURAL GROUND LIMESTONE SHALL BE APPLIED TO ACID SOIL AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, LIME SHALL BE APPLIED AT THE RATE OF 100 POUNDS PER 1,000-SQ. FT. OR 2 TONS PER ACRE.
2. FERTILIZER-FERTILIZER SHALL BE APPLIED AS RECOMMENDED BY A SOIL TEST IN PLACE OF A SOIL TEST, FERTILIZER SHALL BE APPLIED AT A RATE OF 25 POUNDS PER 1,000-SQ. FT. OR 1000 POUNDS PER ACRE OF A 10-10-10 OR 12-12-12 ANALYSES.
3. THE LIME AND FERTILIZER SHALL BE WORKED INTO THE SOIL WITH A DISK HARROW, SPRING-TOOTH HARROW, OR OTHER SUITABLE FIELD IMPLEMENT TO A DEPTH OF 3 INCHES. ON SLOPING LAND, THE SOIL SHALL BE WORKED ON THE CONTOUR.

SEEDING DATES AND SOIL CONDITIONS

SEEDING SHOULD BE DONE MARCH 1 TO MAY 31 OR AUGUST 1 TO SEPTEMBER 30. IF SEEDING OCCURS OUTSIDE OF THE ABOVE SPECIFIED DATES, ADDITIONAL MULCH AND IRRIGATION MAY BE REQUIRED TO ENSURE A MINIMUM OF 80% GERMINATION. TILLAGE FOR SEEDBED PREPARATION SHOULD BE DONE WHEN THE SOIL IS DRY ENOUGH TO CRUMBLE AND NOT FORM RIBBONS WHEN COMPRESSED BY HAND. FOR WINTER SEEDING, SEE THE FOLLOWING SECTION ON DORMANT SEEDING.

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PERMANENT SEEDING SPECIFICATIONS CONT'D.

DORMANT SEEDING

1. SEEDING SHOULD NOT BE MADE FROM OCTOBER 1 THROUGH NOVEMBER 20. DURING THIS PERIOD, THE SEEDS ARE LIKELY TO GERMINATE BUT PROBABLY WILL NOT BE ABLE TO SURVIVE THE WINTER.
2. THE FOLLOWING METHODS MAY BE USED FOR "DORMANT SEEDING":
   FROM OCTOBER 1 THROUGH NOVEMBER 20, PREPARE THE SEEDBED, ADD THE REQUIRED AMOUNTS OF LIME AND FERTILIZER, THEN MULCH AND ANCHOR. AFTER NOVEMBER 20, AND BEFORE MARCH 15, BROADCAST THE SELECTED SEED MIXTURE. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.
   FROM NOVEMBER 20 THROUGH MARCH 15, WHEN SOIL CONDITIONS PERMIT, PREPARE THE SEEDBED, LIME AND FERTILIZE, APPLY THE SELECTED SEED MIXTURE, MULCH AND ANCHOR. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.
   APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRO-SEEDER (SLURRY MAY INCLUDE SEED AND FERTILIZER) ON A FIRM, MOIST SEEDBED.
   WHERE FEASIBLE, EXCEPT WHEN A CULTIPACKER TYPE SEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A CULTIPACKER, ROLLER, OR LIGHT DRAG. ON SLOPING LAND, SEEDING OPERATIONS SHOULD BE ON THE CONTOUR WHERE FEASIBLE.

MULCHING

1. MULCH MATERIAL SHALL BE APPLIED IMMEDIATELY AFTER SEEDING. DORMANT SEEDING SHALL BE MULCHED. 100% OF THE GROUND SURFACE SHALL BE COVERED WITH AN APPROVED MATERIAL.
2. MATERIALS
   STRAW-IF STRAW IS USED IT SHALL BE UNROTTED SMALL-GRAIN STRAW APPLIED AT THE RATE OF 2 TONS PER ACRE OR 90 POUNDS (TWO TO THREE BALES) PER 1,000-SQ. FT. THE MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY APPLIED SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000-SQ.FT. SECTIONS AND SPREAD TWO 45-LB. BALES OF STRAW IN EACH SECTION.
   HYDROSEEDERS-IF WOOD CELLULOSE FIBER IS USED, IT SHALL BE APPLIED AT 2,000 LB./AC. OR 46 LB./1,000 SQ. FT.
   OTHER-OTHER ACCEPTABLE MULCHES INCLUDE ROLLED EROSION CONTROL MATTING OR BLANKETS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR WOOD CHIPS APPLIED AT 6 TONS PER ACRE.
3. STRAW AND MULCH ANCHORING METHODS
   STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER.
   MECHANICAL-A DISK, CRIMPER, OR SIMILAR TYPE TOOL SHALL BE SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT, GENERALLY, BE LEFT LONGER THAN 6 INCHES.
   MULCH NETTING-NETTING SHALL BE USED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. NETTING MAY BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATED RUNOFF AND ON CRITICAL SLOPES.
   ASPHALT EMULSION-ASPHALT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURE OR AT THE RATE OF 160 GALLONS PER ACRE.
   SYNTHETIC BINDERS-SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TACK OR EQUIVALENT MAY BE USED AT RATES SPECIFIED BY THE MANUFACTURER.
   WOOD CELLULOSE FIBER-WOOD CELLULOSE FIBER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER WITH THE MIXTURE CONTAINING A MAXIMUM OF 50 POUNDS CELLULOSE PER 100 GALLONS OF WATER.

IRRIGATION

PERMANENT SEEDING SHALL INCLUDE IRRIGATION TO ESTABLISH VEGETATION DURING DRY WEATHER OR ON ADVERSE SITE CONDITIONS, WHICH REQUIRE ADEQUATE MOISTURE FOR SEED GERMINATION AND PLANT GROWTH.

IRRIGATION RATES SHALL BE MONITORED TO PREVENT EROSION AND DAMAGE TO SEEDED AREAS FROM EXCESSIVE RUNOFF.

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PERMANENT SEEDING - TABLE 1

SEED MIX	SEEDING RATE LBS./ACRE	SEEDING RATE LBS./1,000 SQ. FT.	NOTES:
GENERAL USE			
CREEPING RED FESCUE	20-40	1/2-1	FOR CLOSE MOWING & FOR WATERWAYS WITH
DOMESTIC RYEGRASS	10-20	1/4-1/2	<2.0 FT/SEC VELOCITY
KENTUCKY BLUEGRASS	20-40	1/2-1	
TALL FESCUE	40-50	1-1 1/4	
TURF-TYPE (DWARF) FESCUE	90	2 1/4	
STEEP BANKS OR CUT SLOPES			
TALL FESCUE	40-50	1-1 1/4	
CROWN VETCH	10-20	1/4-1/2	DO NOT SEED LATER THAN AUGUST
TALL FESCUE	20-30	1/2-3/4	
FLAT PEA	20-25	1/2-3/4	DO NOT SEED LATER THAN AUGUST
TALL FESCUE	20-30	1/2-3/4	
ROAD DITCHES AND SWALES			
TALL FESCUE	40-50	1-1 1/4	
TURF-TYPE (DWARF) FESCUE	90	2 1/4	
KENTUCKY BLUEGRASS	5	0.1	
LAWNS			
KENTUCKY BLUEGRASS	100-120	2	
PERENNIAL RYEGRASS		2	
KENTUCKY BLUEGRASS	100-120	2	FOR SHADED AREAS
CREEPING RED FESCUE		1-1/2	

NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED.

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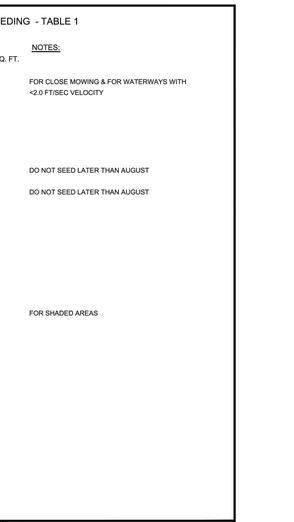
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STANDARD DESIGNS
EROSION CONTROL
GENERAL NOTES

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CONCRETE WASHOUT AREA INSTALLATION NOTES:

1. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
2. THE CONCRETE WASHOUT AREA WILL BE CONSTRUCTED ABOVE GRADE OR BELOW GRADE AT THE OPTION OF THE CONTRACTOR. THE ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.
3. THE CONCRETE WASHOUT AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS. THE WASHOUT AREA MUST BE CLEANED, OR A NEW WASHOUT AREA MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
4. THE CONCRETE WASHOUT SIGN SHALL BE PLACED WITHIN 30' OF THE WASHOUT AREA. ADDITIONAL SIGNS SHOULD BE CONSTRUCTED AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
5. THE CONCRETE WASHOUT AREA SHALL BE LOCATED A MINIMUM OF 50' FROM STORM DRAIN INLETS, OPEN DISCHARGE FACILITIES, AND WATERCOURSES. EACH FACILITY SHOULD BE LOCATED AWAY FROM CONSTRUCTION TRAFFIC OR ACCESS TO PREVENT DISTURBANCE OR TRACKING. VEHICLE TRACKING CONTROL IS REQUIRED AT CONCRETE WASHOUT ENTRANCE IF ACCESS TO AREA IS OFF PAVEMENT.
6. PLASTIC LINING MATERIAL SHALL BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHALL BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
7. WHEN THE CONCRETE WASHOUT AREA IS NO LONGER REQUIRED FOR WORK, THE HARDENED CONCRETE AND MATERIAL USED TO CONSTRUCT WASHOUT AREA SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED WASTE SITE.
8. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE ENGINEER.

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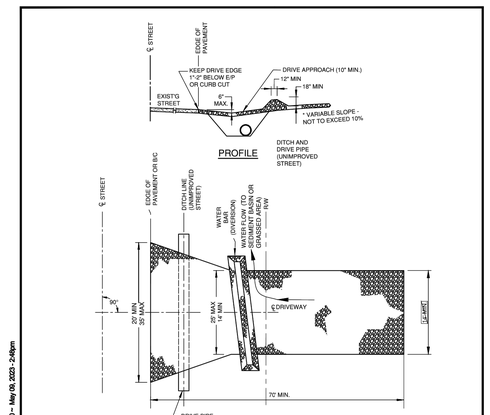
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STANDARD DESIGNS
EROSION CONTROL
CONCRETE WASHOUT AREA

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NOTES:

1. CURB CUTS AND DRIVE PIPES SHALL BE CONSTRUCTED PRIOR TO ANY CONSTRUCTION ACTIVITIES TAKING PLACE.
2. TEMPORARY DRIVES SHALL BE COORDINATED WITH PERMANENT DRIVE CONSTRUCTION.
3. STONE FOR CONSTRUCTION DRIVES SHALL MEET THE GRADATION FOR ODOT SIZE NO. 2 COARSE AGGREGATE, MINIMUM THICKNESS SHALL BE 10" FOR NON-RESIDENTIAL SITES, 6" FOR RESIDENTIAL.
4. A GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE ENTIRE DRIVE AREA PRIOR TO PLACING STONE. GEOTEXTILE MATERIAL SHALL MEET ODOT ITEM 712.09 TYPE B REQUIREMENTS.
5. THE CONSTRUCTION DRIVE SHALL BE MAINTAINED BY PERIODICALLY ADDING STONE AS CONDITIONS DEMAND.
6. CONSTRUCTION TRAFFIC SHALL BE LIMITED TO THE CONSTRUCTION DRIVE AS MUCH AS POSSIBLE. MUD AND STONES WHICH ARE SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS OR OTHER SURFACES WHERE SEDIMENT CONTROLS WERE NOT ADEQUATE, SHALL BE REMOVED IMMEDIATELY BY SCRAPING OR SWEEPING.

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STANDARD DESIGNS
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CONSTRUCTION DRIVE DETAIL

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
64402
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

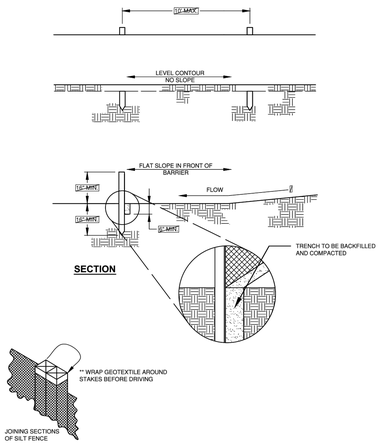
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STANDARD DESIGNS
EROSION CONTROL
SILT FENCE DETAIL

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NOTES

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.
4. SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5' (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16" ABOVE THE ORIGINAL GROUND SURFACE.
7. THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6" DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE. A MINIMUM OF 8" OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6" DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.
9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6". OVERLAP PRIOR TO DRIVING INTO THE GROUND (SEE DETAIL).
10. MAINTENANCE-SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER THE FABRIC OR AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE:
    1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED
    2) ACCUMULATED SEDIMENT SHALL BE REMOVED OR
    3) OTHER PRACTICES SHALL BE INSTALLED.
11. SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE-HALF OF THE HEIGHT OF THE SILT FENCE.
12. SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING A PROLONGED RAINFALL. THE LOCATION OF EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY.

CRITERIA FOR SILT FENCE MATERIALS:
SILT FENCE FABRIC SHALL MEET THE REQUIREMENTS OF ODOT ITEM 712.09, TYPE C. THE LENGTH OF FENCE POSTS SHALL BE A MINIMUM OF 32". WOOD POSTS WILL BE 2" BY 2". NOMINAL DIMENSIONED HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS AND OTHER VISIBLE IMPERFECTIONS, THAT WILL WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10'. POSTS SHALL BE DRIVEN A MINIMUM 16" INTO THE GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING THE FENCE DUE TO SEDIMENT/WATER LOADING.

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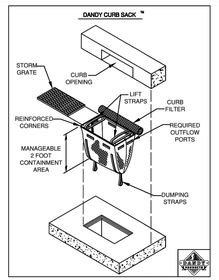
NO.	DATE	REVISION	NO.	DATE	REVISION

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
EROSION CONTROL
SILT FENCE DETAIL NOTES

DWG FILE:	DRAWN BY:	APPROVED BY:	ISSUE DATE:	SCALE:	SHEET:
ER-4.1.dwg	EA	DV	08/19/2015	NONE	ER-4.1

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NOTE: THE DANDY CURB SACK™ WILL BE **MANUFACTURED IN THE U.S.A.** FROM A WOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

REGULAR FLOW DANDY CURB SACK™ (BLACK)

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.78 (400) x 1.40 (315)
Grab Tensile Elongation	ASTM D 4632	%	15 x 15
Puncture Strength	ASTM D 4833	kN (lbs)	0.67 (150)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	5506 (800)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.67 (150) x 0.73 (165)
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	l/min/m² (gal/min/ft²)	2852 (70)
Permittivity	ASTM D 4491	Sec⁻¹	0.90

HI-FLOW DANDY CURB SACK™ (SAFETY ORANGE)

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.62 (365) X 0.89 (200)
Grab Tensile Elongation	ASTM D 4632	%	24 X 10
Puncture Strength	ASTM D 4833	kN (lbs)	0.40 (90)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3097 (450)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.51 (115) X 0.33 (75)
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	l/min/m² (gal/min/ft²)	5907 (145)
Permittivity	ASTM D 4491	Sec⁻¹	2.1

•NOTE: ALL DANDY SACKS™ CAN BE ORDERED WITH OUR OPTIONAL OIL ABSORBENT PILLOWS

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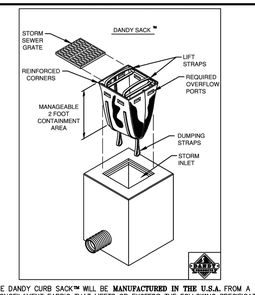
NO.	DATE	REVISION	NO.	DATE	REVISION

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
EROSION CONTROL
INLET PROTECTION WITH CURB

DWG FILE:	DRAWN BY:	APPROVED BY:	ISSUE DATE:	SCALE:	SHEET:
ER-5.0.dwg	EA	DV	08/19/2015	NONE	ER-5.0

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Mechanical Properties	Test Method	Units	MARV
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Grab Tensile Elongation	ASTM D 4632	%	24 X 10
Puncture Strength	ASTM D 4833	kN (lbs)	0.40 (90)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3097 (450)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.51 (115) X 0.33 (75)
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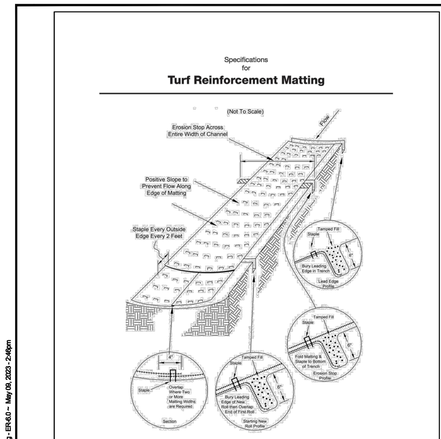
NO.	DATE	REVISION	NO.	DATE	REVISION

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
EROSION CONTROL
INLET PROTECTION WITHOUT CURB

DWG FILE:	DRAWN BY:	APPROVED BY:	ISSUE DATE:	SCALE:	SHEET:
ER-5.1.dwg	EA	DV	08/19/2015	NONE	ER-5.1

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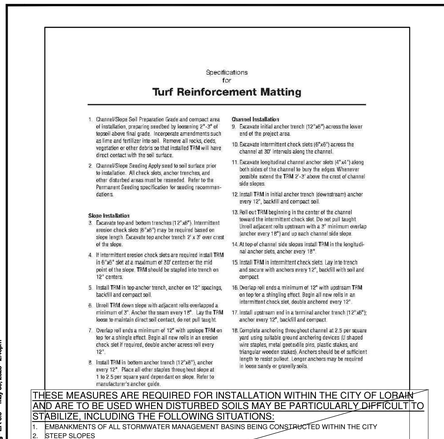
NO.	DATE	REVISION	NO.	DATE	REVISION

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
EROSION CONTROL
TURF REINFORCEMENT DETAIL

DWG FILE:	DRAWN BY:	APPROVED BY:	ISSUE DATE:	SCALE:	SHEET:
ER-6.0.dwg	VAN	DV	07/01/2016	NONE	ER-6.0

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Specifications
for
Turf Reinforcement Matting

1. Channel/Slope Soil Preparation: Grade and compact area of installation, preparing seedbed by loosening 3"–5" of topsoil above final grade. Incorporate amendments such as lime and fertilizer into soil. Remove all rocks, clods, vegetation or other debris so that installed **TRM** will have direct contact with the soil surface.
2. Channel/Slope Seeding: Apply seed to soil surface prior to installation. All check slots, anchor trenches, and other disturbed areas must be reseeded. Refer to the Permanent Seeding specification for seeding recommendations.

Slope Installation

3. Excavate top and bottom trenches (12"x6"). Intermittent erosion check slots (6"x6") may be required based on slope length. Excavate top anchor trench 2' x 3' over crest of the slope.
4. If intermittent erosion check slots are required install **TRM** in 6'x6" slot at a maximum of 75' centers or the mid point of the slope. **TRM** should be stapled into trench on 12" centers.
5. Install **TRM** in top anchor trench, anchor on 12" spacings, backfill and compact soil.
6. Unroll **TRM** down slope with adjacent rolls overlapped a minimum of 3". Anchor the seam every 18". Lay the **TRM** loose to maintain direct soil contact, do not pull taught.
7. Overlap roll ends a minimum of 12" with upslope **TRM** on top for a shingle effect. Begin all new rolls in an erosion check slot if required, double anchor across roll every 12".
8. Install **TRM** in bottom anchor trench (12"x6"), anchor every 12". Place all ether staples three/next above at 1 to 2.5 per square yard dependent on slope. Refer to manufacturer's anchor guide.

Channel Installation

9. Excavate initial anchor trench (12"x6") across the lower end of the project area.
10. Excavate intermittent check slots (6"x6") across the channel at 30' intervals along the channel.
11. Excavate longitudinal channel anchor slots (4"x4") along both sides of the channel to bury the edges. Whenever possible extend the **TRM** 2'–3' above the crest of channel side slopes.
12. Install **TRM** in initial anchor trench (downstream) anchor every 12", backfill and compact soil.
13. Roll out **TRM** beginning in the center of the channel toward the intermittent check slot. Do not pull taught. Unroll adjacent rolls upstream with a 3" minimum overlap (anchor every 18") and up each channel side slope.
14. At top of channel side slopes install **TRM** in the longitudinal anchor slots, anchor every 18".
15. Install **TRM** in intermittent check slots. Lay into trench and secure with anchors every 12", backfill with soil and compact.
16. Overlap roll ends a minimum of 12" with upstream **TRM** on top for a shingling effect. Begin all new rolls in an intermittent check slot, double anchored every 12".
17. Install upstream end in a terminal anchor trench (12"x6"); anchor every 12", backfill and compact.
18. Complete anchoring throughout channel at 2.5 per square yard using suitable ground anchoring devices (U shaped wire staples, metal geotextile pins, plastic stakes, and triangular wooden stakes). Anchors should be of sufficient length to resist pullout. Longer anchors may be required in loose sandy or gravelly soils.

THESE MEASURES ARE REQUIRED FOR INSTALLATION WITHIN THE CITY OF LORAIN AND ARE TO BE USED WHEN DISTURBED SOILS MAY BE PARTICULARLY DIFFICULT TO STABILIZE, INCLUDING THE FOLLOWING SITUATIONS:

1. EMBANKMENTS OF ALL STORMWATER MANAGEMENT BASINS BEING CONSTRUCTED WITHIN THE CITY
2. STEEP SLOPES
3. SLOPES WHERE THE EROSION POTENTIAL IS HIGH
4. SLOPES AND DISTURBED SOILS WHERE MULCH MUST BE ANCHORED.
5. DISTURBED AREAS WHERE PLANTS ARE SLOW TO DEVELOP.
6. CHANNELS WITH FLOWS EXCEEDING 1.0 M/S (3.3 FT/S).
7. CHANNELS TO BE VEGETATED.
8. STOCKPILES.
9. SLOPES ADJACENT TO WATER BODIES

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NO.	DATE	REVISION	NO.	DATE	REVISION

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
EROSION CONTROL
TURF REINFORCEMENT NOTES

DWG FILE:	DRAWN BY:	APPROVED BY:	ISSUE DATE:	SCALE:	SHEET:
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1. WETLAND PROTECTION AREA SIGNS SHALL BE INSTALLED AT 75 FOOT INTERVALS AROUND THE PERIMETER OF WETLAND AREAS PRIOR TO THE START OF WORK UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF SIGN PANELS, POSTS, MISCELLANEOUS HARDWARE, AND LABOR FOR INSTALLATION AND UPKEEP OF SIGNAGE THROUGHOUT THE DURATION OF PROJECT.
3. WETLAND PROTECTION AREA SIGN PANELS ARE AVAILABLE FOR PURCHASE AT THE CITY OF LORAIN PUBLIC PROPERTIES DEPARTMENT.
4. ADDITIONAL SIGNAGE FOR RIPARIAN PROTECTION AREA, NO CUT ZONES, CONSERVATION AREA, AND OTHER ENVIRONMENTAL PROTECTION AREAS MAY BE REQUIRED AS DETERMINED BY ENGINEER.

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City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
EROSION CONTROL
WETLAND PROTECTION SIGN

DWG FILE:	DRAWN BY:	APPROVED BY:	ISSUE DATE:	SCALE:	SHEET:
ER-7.0.dwg	AJP	DV	5/9/2022	NONE	ER-7.0

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3/7/2025 5:31 PM Pawar, Sayali

SEAL OF THE CITY OF LORAIN 1834 OHIO

OSBORN ENGINEERING
Ohio | Florida | Michigan | Tennessee
(216) 861-2020 www.osborn-eng.com

WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

DETAILS (SWPPP)

DRAWING NO.

D2

City of Lorain

STANDARD DETAILS - INDEX

GN - GENERAL

D3	04/20/2023	GN-1.0-1.1:	INDEX
D4	06/20/2019	GN-2.0	GENERAL NOTES
D4	05/02/2022	GN-2.1	GENERAL NOTES
D4	06/20/2019	GN-2.2	GENERAL NOTES
D4	06/20/2019	GN-2.3	GENERAL NOTES
D4	04/20/2023	GN-2.4	GENERAL NOTES
D4	06/20/2019	GN-2.5	GENERAL NOTES
D4	04/25/2022	GN-2.6	GENERAL NOTES

ER - EROSION CONTROL

D1	12/28/2018	ER-1.0 -1.4	GENERAL NOTES
D1	05/19/2017	ER-2.0	CONCRETE WASHOUT AREA
D1	05/19/2017	ER-3.0	CONSTRUCTION DRIVE DETAIL
##	05/19/2017	ER-4.0, 4.1	SILT FENCE DETAIL
##	05/19/2017	ER-5.0,	INLET PROTECTION WITH CURB
##	05/19/2017	ER-5.1	INLET PROTECTION WITHOUT CURB
##	07/09/2018	ER-6.0,	TURF REINFORCEMENT DETAIL
##	07/09/2018	ER-6.1	TURF REINFORCEMENT NOTES
##	05/09/2022	ER-7.0	WETLAND PROTECTION AREA DETAIL

MS - MISCELLANEOUS

D5	04/20/2023	MS-1.0	UTILITY TRENCH DETAIL
D5	09/23/2020	MS-1.1	SERVICE LINE TRENCH DETAIL
D5	11/21/2018	MS-2.0	TILE REPAIR DETAIL
D5	04/20/2023	MS-3.0	MONUMENT BOX ASSEMBLY
D5	05/19/2017	MS-4.0	GEODETIC SURVEY MARKER
D5	04/20/2023	MS-5.0	STREET UTILITY LOCATIONS

PV - PAVEMENT

D6	04/20/2023	PV-1.0 -1.2	GENERAL NOTES
D6	07/28/2022	PV-2.0	TYPICAL STREET - RESIDENTIAL
D6	07/28/2022	PV-2.1	TYPICAL STREET - INDUSTRIAL/COMMERCIAL
D6	04/20/2023	PV-3.0	UNDERDRAIN DETAIL
D7	06/20/2019	PV-4.0	DRAIN THRU CURB DETAIL
D7	05/19/2017	PV-5.0	CURB DETAILS
D7	05/19/2017	PV-5.1	CURB DETAILS
D7	04/26/2022	PV-6.0	DRIVE APPROACH DETAILS
D7	04/20/2023	PV-7.0	SIDEWALK DETAIL
D7	04/26/2022	PV-8.0	SIDEWALK REALIGNMENT DETAIL
D8	05/19/2017	PV-9.0	INTERSECTION DETAIL
	~~05/19/2017~~	~~PV-10.0~~	~~CUL-DE-SAC DETAIL~~
	~~05/19/2017~~	~~PV-11.0~~	~~TEMPORARY TURN-AROUND DETAIL~~
D8	04/26/2022	PV-12.0-12.2	PAVEMENT REPLACEMENT DETAIL
D8	04/26/2022	PV-13.0	BLOCKOUT DETAILS
D8	04/25/2022	PV-14.0	PAVEMENT MARKING DETAILS

SS - SANITARY SEWER

	~~04/20/2023~~	~~SS-1.0~~	~~GENERAL NOTES - CONSTRUCTION~~
	~~05/19/2017~~	~~SS-2.0~~	~~GENERAL NOTES - SEWER TESTING~~
	~~05/19/2017~~	~~SS-2.1~~	~~GENERAL NOTES - SEWER TESTING~~
	~~02/04/2021~~	~~SS-3.0~~	~~GENERAL NOTES - MANHOLES~~
	~~05/19/2017~~	~~SS-4.0~~	~~VACUUM TEST TABLE~~
	~~07/05/2022~~	~~SS-5.0~~	~~STANDARD LATERAL CONNECTION~~
	~~05/19/2017~~	~~SS-5.1~~	~~DEEP LATERAL CONNECTION~~
	~~05/19/2017~~	~~SS-6.0~~	~~CLEANOUT DETAIL - IN GRASS~~
	~~07/05/2022~~	~~SS-6.1~~	~~TEST TEE DETAIL - IN GRASS~~
	~~05/19/2017~~	~~SS-7.0~~	~~CLEANOUT DETAIL - IN PAVEMENT~~
	~~01/18/2021~~	~~SS-7.1~~	~~TEST TEE DETAIL - IN PAVEMENT~~
	~~05/19/2017~~	~~SS-8.0~~	~~TYPICAL LATERAL PLAN~~
	~~05/19/2017~~	~~SS-9.0~~	~~GREASE INTERCEPTOR~~
	~~04/20/2023~~	~~SS-10.0~~	~~EXTERNAL DROP MANHOLE~~

ST - STORM SEWER

D9	06/20/2019	ST-1.0	GENERAL NOTES
D9	01/03/2019	ST-2.0	GENERAL NOTES - MANHOLES
D9	01/27/2022	ST-3.0	GENERAL NOTES - CATCH BASINS & INLETS
D9	07/05/2022	ST-4.0	LATERAL DETAIL
D9	06/20/2019	ST-5.0	INLET TAP

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NO.	DATE	REVISION	NO.	DATE	REVISION
12	02/05/2021	Revised for New Construction			
13	07/28/2022	Revised for New Construction			
14	04/20/2023	Revised for New Construction			

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
GENERAL
INDEX

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GN-1.0.dwg	EA	DV	08/19/2015	NONE	GN-1.0

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City of Lorain

STANDARD DETAILS - INDEX

WT - WATERLINE

D1	05/24/2023	WT-N01	WATER LINE GENERAL NOTES
D1	05/24/2023	WT-N02	WATER LINE GENERAL NOTES - WATER LINE TESTING
D1	05/24/2023	WT-N03	WATER LINE GENERAL NOTES - WATER LINE TESTING
D1	05/24/2023	WT-G01	WATER MAIN TRENCH DETAIL
D1	05/24/2023	WT-G02	ALTERNATE PRESSURE TESTING DETAIL
D1	05/24/2023	WT-G03	TYPICAL FLUSHING ASSEMBLY DETAIL
D1	05/24/2023	WT-G04	PLUGGING ABANDONED WATER MAIN ENDS DETAIL
D1	05/24/2023	WT-G05	CUT-IN-VALVE DETAIL
D1	05/24/2023	WT-G06	THRUST BLOCKS: PIPE 16" DIAMETER OR LESS DETAIL
D1	05/24/2023	WT-G07	SLEEVE-IN INSTALLATION DETAIL
D1	05/24/2023	WT-G08	SPOOL PIECE INSTALLATION DETAIL
D1	05/24/2023	WT-G09	TYPICAL FROSTPROOFING DETAIL
D1	05/24/2023	WT-G10	GUARDRAIL DETAILS AT HYDRANT
D1	05/24/2023	WT-G11	STANDARD CUL-DE-SAC- HYDRANT LOOP SCHEMATIC DETAIL
D1	05/24/2023	WT-G12	WATER LINE BUMP OUT HYDRANT/LOOP SCHEMATIC
D1	05/24/2023	WT-G13	WATER LINE RESTRAINED PIPE POINT TABLE
D1	05/24/2023	WT-G14	AIR RELIEF VALVE ASSEMBLY DETAIL
D1	05/24/2023	WT-G15	ROW CROSS SECTION FOR NEW CONSTRUCTION
D1	05/24/2023	WT-G16	CASING DETAIL
D1	05/24/2023	WT-G17	HORIZONTAL CLEARANCE FOR UTILITIES DETAIL
D1	05/24/2023	WT-G18	VERTICAL CLEARANCE FOR UTILITIES DETAIL
D1	05/24/2023	WT-G19	CROSSING LARGE DITCHES OR SMALL STREAMS PROFILE - OPEN CUT METHOD
D1	05/24/2023	WT-G20	CROSSING LARGE DITCHES OR SMALL STREAMS SECTION A-A - OPEN CUT
D1	05/24/2023	WT-C01	NEW 1" SERVICE CONNECTION DETAIL IN RIGHT-OF-WAY (LONG-SIDE)
D1	05/24/2023	WT-C02	TWO-PLEX SETTING FOR REMOTE REGISTER METER AT BUILDING DETAIL
D1	05/24/2023	WT-C03	TWO-PLEX SETTING FOR REMOTE REGISTER METER AT BUILDING DETAIL
D1	05/24/2023	WT-C04	NEW WATER SERVICE CONNECTION FOR 1-1/2" & 2" DETAIL
D1	05/24/2023	WT-C05	WATER SERVICE CONNECTION "LONG-SIDE" SERVICE
D1	05/24/2023	WT-H01	TYPICAL NEW HYDRANT INSTALLATION DETAIL "A"
D1	05/24/2023	WT-H02	TYPICAL NEW HYDRANT INSTALLATION DETAIL "B"
D1	05/24/2023	WT-H03	TYPICAL NEW HYDRANT INSTALLATION DETAIL "C"
D1	05/24/2023	WT-H04	ADJUSTING6" HYDRANT ELEVATION DETAIL
D1	05/24/2023	WT-H05	6" HYDRANT ELEVATION DETAIL
D1	05/24/2023	WT-H06	TEMPORARY WATER MAIN AND HYDRANT ASSEMBLY DETAIL "A"
D1	05/24/2023	WT-H07	TEMPORARY WATER MAIN AND HYDRANT ASSEMBLY DETAIL "C"
D1	05/24/2023	WT-L01	PIPE LOWERING DETAIL
D1	05/24/2023	WT-L02	LOWERING DETAIL
D1	05/24/2023	WT-L03	LOWERING DETAIL UNDER OBSTRUCTION 24" IN DIAMETER OR LESS
D1	05/24/2023	WT-L04	LOWERING DETAIL UNDER OBSTRUCTIONS 24" IN DIA. & LARGER
D1	05/24/2023	WT-L05	LOWERING DETAIL UNDER OBSTRUCTIONS 24" AND SMALLER
D1	05/24/2023	WT-L06	LOWERING DETAIL UNDER OBSTRUCTIONS 24" AND LARGER
D1	05/24/2023	WT-M01	METER SETTINGS FOR 5/8", 3/4", & 1" METERS
D1	05/24/2023	WT-T01	CUT-IN TEE DETAIL METHOD NO. 1
D1	05/24/2023	WT-T02	CUT-IN TEE DETAIL METHOD NO. 2
D1	05/24/2023	WT-T03	CUT-IN TEE DETAIL METHOD NO. 3
D1	05/24/2023	WT-W02	TRACER WIRE AT HYDRANT TEE DETAIL
D1	05/24/2023	WT-W03	TRACER WIRE AT LINE VALVE BOX DETAIL
D1	05/24/2023	WT-H08	CUT-IN HYDRANT DETAIL
D1	05/24/2023	WT-W01	TRACER WIRE AT HYDRANT DETAIL

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NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBERS AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.

NO.	DATE	REVISION	NO.	DATE	REVISION
12	02/05/2021	Revised for New Construction			
13	05/09/2022	Revised for New Construction			
14	04/20/2023	Revised for New Construction			

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
GENERAL
INDEX

CAD FILE:	DRWN BY:	APPRV'D BY:	ISSUE DATE:	SCALE:	SHEET:
GN-1.0.dwg	EA	DV	08/19/2015	NONE	GN-1.1

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OSBORN ENGINEERING
Ohio | Florida | Michigan | Tennessee
(216) 861-2020 www.osborn-eng.com

WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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DRAWN BY	BTC
CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

DETAILS (GENERAL)

DRAWING NO.

D3

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GENERAL

1. ALL WORK AND MATERIALS FURNISHED SHALL BE IN ACCORDANCE WITH THE PLANS AND THE CURRENT EDITIONS OF THE "STATE OF OHIO DEPARTMENT OF TRANSPORTATION SPECIFICATIONS" AND THE "CITY OF LORAIN STANDARD DESIGNS", SHALL MEET AASHTO M306 STANDARDS AND SHALL BE MADE IN THE USA. CITY PLANS SUPERCEDE ODOT SPECS.
2. WHERE GROUND COVER IS DISTURBED DURING THE CONSTRUCTION, THE CONTRACTOR SHALL INSTALL ALL NECESSARY EROSION CONTROL AND DRAINAGE CONTROL DEVICES IN ACCORDANCE WITH REGULATIONS OF THE CITY OF LORAIN, AND THE OHIO EPA. THESE DEVICES SHALL BE ROUTINELY MONITORED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL SATISFACTORY GROUND COVER HAS BEEN RE-ESTABLISHED. NO WORK SHALL BEGIN UNTIL ALL SUCH DEVICES ARE IN PLACE.
3. ALL DEVELOPMENTS INVOLVING UTILITY IMPROVEMENTS SHALL HAVE DETAILED DESIGN DRAWINGS PREPARED AND SEALED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER OR SURVEYOR. DRAWINGS SHALL BE SIGNED AND DATED BY THE PREPARING ENGINEER OR SURVEYOR OR WILL NOT BE CONSIDERED VALID. ELECTRONIC AS-BUILTS OF ALL IMPROVEMENTS SHALL BE PROVIDED AND SEALED BY A PROFESSIONAL SURVEYOR. AS-BUILT COMPATIBILITY WITH GIS IS REQUIRED.
4. CITY OF LORAIN STANDARD DESIGNS CONSTITUTE A MINIMUM DESIGN STANDARD. SPECIFIC PROJECTS MAY INVOLVE SPECIAL CIRCUMSTANCES WHICH REQUIRE MODIFICATION OF STANDARDS AND ADDITIONAL ENGINEERING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADDITIONAL DESIGN AND FOR OBTAINING APPROVAL OF ANY STANDARD DESIGNS MODIFICATIONS.
5. PAVEMENT MARKINGS WHICH ARE DAMAGED OR DESTROYED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH CITY OF LORAIN, ODOT, AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES REQUIREMENTS.
6. DOMESTIC IRON AND STEEL SHALL BE USED FOR ALL CASTINGS, FITTINGS AND STEEL PRODUCTS.
7. ALL CONSTRUCTION AND DEMOLITION DEBRIS (C&DD) WASTE MUST BE DISPOSED OF IN AN OHIO EPA APPROVED C&DD LANDFILL AS REQUIRED BY OHIO REVISED CODE 3714.
8. AT THE END OF EACH DAY THE CONTRACTOR SHALL CLEAN ALL PUBLIC WALKS AND STREETS USED IN CONJUNCTION WITH THE PROJECT TO THE SATISFACTION OF THE ENGINEER.
9. ALL MATERIAL, I.E., MANHOLE FRAMES OR LIDS, FIRE HYDRANTS, INLET FRAMES OR GRATES AND MONUMENT BOXES DIRECTED TO BE SALVAGED SHALL BE DELIVERED ON WOOD PALLETS BY THE CONTRACTOR TO THE CITY OF LORAIN SEWER DEPARTMENT AT 6001 WEST ERIE AVENUE (ACCESS FROM OAK POINT ROAD, BEAR LEFT AT DRIVEWAY SPLIT). FOR EACH ITEM THAT IS TO BE SALVAGED AND NOT DELIVERED TO THE SEWER DEPARTMENT, THERE WILL BE A REASONABLE MONETARY SUM WITHHELD FROM THE CONTRACT PAYMENTS AND CHARGED AGAINST THE CONTRACTOR. CALL (440) 204-2200 TO MAKE ARRANGEMENTS FOR THE MATERIAL DELIVERY.
10. WHEN, FOR ANY REASON, THE WORK IS LEFT UNFINISHED FOR AN EXTENDED PERIOD OF TIME,AS DEFINED BY THE ENGINEERING DEPARTMENT, ALL TRENCHES AND EXCAVATIONS SHALL BE FULLY PROTECTED OR FILLED TO LEAVE THE SITE IN A GOOD AND SAFE CONDITION.
11. A PRECONSTRUCTION CONFERENCE SCHEDULED BY THE ENGINEER SHALL BE HELD PRIOR TO THE START OF ANY WORK.
12. THE ENGINEER SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF THE START OF ANY WORK UNDER THE CONTRACT IN ORDER TO SCHEDULE THE ASSIGNMENT OF AN INSPECTOR FOR THE WORK.
13. ALL SHOP DRAWINGS AND OTHER SUBMITTALS MUST BE CHECKED, APPROVED, AND STAMPED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE ENGINEER FOR REVIEW.
14. THE CONTRACTOR SHALL PROVIDE A PRECONSTRUCTION VIDEO TAPE SURVEY OF THE ENTIRE PROJECT AREA. ANY DAMAGE DEEMED TO BE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED AT HIS OWN EXPENSE. ALL COSTS ASSOCIATED FOR THIS WORK, INCLUDING THE VIDEOTAPE SURVEY, SHALL BE INCLUDED IN ITEM 624-MOBILIZATION.
15. EXISTING STREET RIGHT-OF-WAYS SHALL BE CONSIDERED TO BE THE PROJECT LIMITS FOR ALL STREETS IN THE CONTRACT.
16. ALL EXCAVATED MATERIALS SHALL BE DEPOSITED AT AN APPROVED DUMP SITE IN ACCORDANCE WITH ODOT 105.16.
17. FURNISH THE ENGINEER A PROGRESS SCHEDULE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

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NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBERS AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

NO.	DATE	REVISION	NO.	DATE	REVISION
9	01/01/2019				
10	06/20/2019	NO. 10 & 15 CHANGED			
11	02/04/2020	PREVIOUS NO. 17 OMITTED			
11	02/04/2020	NO. 1 REVISED			

STANDARD DESIGNS
GENERAL
GENERAL NOTES

DWG'S): GN-2.0.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: GN-2.0

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GENERAL, CONT'D

19. THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED "AS DIRECTED BY ENGINEER" (ADBE) UNLESS AUTHORIZED BY THE PROJECT ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE DOCUMENTED AND THE CONTRACTOR SHALL BE PAID IN ACCORDANCE WITH THE CONTRACT UNIT PRICE FOR EACH APPLICABLE BID ITEM.
20. STORING CONSTRUCTION EQUIPMENT AND VEHICLES AND/OR STOCKPILING CONSTRUCTION MATERIALS ON PROPERTY, PUBLIC OR PRIVATE, NOT PREVIOUSLY SPECIFIED ON THE PLANS BY THE ENGINEER FOR SUCH PURPOSES SHALL BE PROHIBITED WITHOUT AUTHORIZATION BY THE ENGINEER.
21. OPERATIONS ENTAILING THE USE OF VIBRATORY HAMMERS OR COMPACTORS OUTSIDE OF THE HOURS OF 7:00 AM TO 7:00 PM IS PROHIBITED.
22. VIOLATION OF ANY CITY ORDINANCE MAY RESULT IN THE ISSUANCE OF A STOP WORK ORDER.
23. ALL BACKFILL SHALL BE PREMIUM BACKFILL. BACKFILL SHALL BE IN ACCORDANCE WITH THE TRENCH DETAILS SHOWN HEREIN. ALL BACKFILL IN SEWER TRENCHES SHALL BE PLACED IN LAYERS SUFFICIENT TO MEET THE COMPACTION REQUIREMENTS OF 100%-MAXIMUM LABORATORY DRY DENSITY PER ASTM D-698 AND THOROUGHLY COMPACTED WITH MACHINE MOUNTED COMPACTION EQUIPMENT. THE PLACING OF BACKFILL MATERIAL SHALL BE CONTINUED UNTIL THE TRENCH IS ENTIRELY FILLED AND COMPACTED TO THE GRADE CALLED FOR ON THE CONTRACT DRAWINGS. COMPACTION TESTING OF THE BACKFILL MAY BE REQUIRED BY THE CITY. THE CONTRACTOR SHALL PAY FOR ALL LABORATORY TESTING COSTS OF BACKFILL MATERIAL. THE COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS OF WORK. ALL BACKFILL SHALL BE PLACED IN MAXIMUM 12" LIFTS AND COMPACTED.
24. THE CONTRACTOR SHALL RESTORE ALL DISTURBED LANDSCAPED AREAS, PAVEMENT SURFACES, SIDEWALKS AND DRIVEWAYS TO A CONDITION EQUAL TO, OR BETTER THAN THAT WHICH EXISTED PRIOR TO THE START OF WORK AS DECIDED BY ENGINEER. THE CONTRACTOR SHALL PERFORM ALL RESTORATION WITH MATERIALS IDENTICAL TO THE EXISTING SURFACE, INCLUDING, BUT NOT LIMITED TO ASPHALT AND CONCRETE PAVEMENT, ASPHALT, CONCRETE AND BRICK SIDEWALK, INTEGRAL CURB, AND SPECIAL SURFACES (SUCH AS COLORED OR TEXTURED) AS ENCOUNTERED. ALL DAMAGES TO OTHER EXISTING FACILITIES BY CONTRACTOR SHALL BE PAID BY THE EXPENSE OF THE CONTRACTOR.

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Phone: (440) 204-2003

NO.	DATE	REVISION	NO.	DATE	REVISION
1	10/27/2015				
7	01/01/2018				
9	01/01/2019				
11	02/04/2020	NO. 19 & 20 REMOVED			
13	05/02/2022	NO. 24 ADDED			

STANDARD DESIGNS
GENERAL
GENERAL NOTES

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ITEM 614 - MAINTAINING TRAFFIC

1. MAINTAIN THROUGH TRAFFIC AT ALL TIMES IN ACCORDANCE WITH ODOT ITEM 614 AND THE DETAILS AND NOTES ON THE STANDARD CONSTRUCTION DRAWINGS AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, LATEST REVISION.
2. IT IS THE CONTRACTORS RESPONSIBILITY TO MAINTAIN PEDESTRIAN, LOCAL ROADWAY AND DRIVEWAY ACCESS AT ALL TIMES. THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY STONE DRIVES/WALKS WITH A MATERIAL WHICH IS APPROVED BY THE ENGINEER. THESE TEMPORARY STONE DRIVES SHALL BE MAINTAINED TO THE SATISFACTION OF THE ENGINEER. COST FOR ALL MATERIALS, LABOR AND EQUIPMENT FOR CONSTRUCTION MAINTENANCE AND SUBSEQUENT REMOVAL SHALL BE INCLUDED IN 614 MAINTAINING TRAFFIC.
3. PROVIDE STEEL PLATES ACROSS TRENCHES AS DIRECTED TO PROVIDE TEMPORARY VEHICLE OR PEDESTRIAN ACCESS TO RESIDENCES. ADDITIONAL ACCOMMODATIONS MAY BE REQUIRED TO PROVIDE ACCESSIBILITY FOR VEHICLES OF HANDICAPPED OR OTHER IDENTIFIED RESIDENTS.
4. LANE CLOSURES AND RESTRICTIONS ARE PROHIBITED WITHOUT PRIOR APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL SUBMIT A LANE CLOSURE/TRAFFIC RESTRICTION REQUEST 48 HOURS IN ADVANCE OF ANY PLANNED IMPLEMENTATION SPECIFYING THE LIMITS AND DURATION OF THE WORK. SAID REQUEST SHALL INCLUDE A MAP DEPICTING THE LOCATION OF ALL TRAFFIC CONTROL DEVICES (SIGNS, DRUMS, ETC.). IF PERMITTED, THE ENGINEER WILL APPROVE THE LENGTH AND DURATION OF LANE CLOSURES AND/OR TRAFFIC RESTRICTIONS, WITH THE INTENT OF MINIMIZING THE IMPACT TO THE TRAVELING PUBLIC. THE ENGINEER WILL NOT PERMIT LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME. THE CONTRACTOR IS RESPONSIBLE FOR ERECTING ALL NECESSARY DETOUR SIGNS AND TRAFFIC CONTROL DEVICES. COSTS SHALL BE INCLUDED IN ITEM 614, MAINTENANCE OF TRAFFIC.
5. THE CONTRACTOR SHALL POST SIGNS 24 HOURS IN ADVANCE TO NOTIFY CITIZENS OF THE NEED FOR NO PARKING ON THE STREET DURING CONSTRUCTION HOURS. FAILURE TO PERFORM THIS POSTING, OR NOT TO PERFORM WORK IN THE SPECIFIED TIME OF THE SIGN POSTING, WILL RESULT IN THE CONTRACTOR BEING RESPONSIBLE FOR ALL TOWING FEES AND FINES RESULTING FROM THE FAILURE TO EXECUTE THE WORK AS PER THE SIGN POSTING.
6. FURNISH, ERECT, MAINTAIN, AND SUBSEQUENTLY REMOVE WORK ZONE TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (OMUTCD), ODOT ITEM 614, THE STANDARD CONSTRUCTION DRAWINGS AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC CONTROL DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.
7. FURNISH AND MAINTAIN ALL NECESSARY SAFEGUARDS SUCH AS TEMPORARY STRIPING, BARRICADES, LIGHTING, FLAGGERS, AND OTHER SUCH TRAFFIC CONTROL DEVICES IN THE WORK ZONE IN ACCORDANCE WITH ITEM 614-MAINTAINING TRAFFIC SO AS TO AVOID DAMAGE AND/OR INJURY TO VEHICLES AND PERSONS USING THE ROADWAY DURING CONSTRUCTION.
8. RELOCATE EXISTING TRAFFIC CONTROL DEVICES (SIGNS AND/OR TRAFFIC SIGNALS), LOCATED WITHIN THE WORK AREA, WHICH ARE REQUIRED FOR INTERIM OR PERMANENT TRAFFIC CONTROL, TO POINTS APPROVED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR ERECTING ALL NECESSARY DETOUR SIGNS AND TRAFFIC CONTROL DEVICES. COSTS SHALL BE INCLUDED IN ITEM 614-MAINTENANCE OF TRAFFIC.
9. ALL STREET AND TRAFFIC SIGNS REMOVED DURING CONSTRUCTION SHALL BE REINSTALLED AS REQUIRED UPON COMPLETION OF THE PROJECT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING DUST, DIRT AND MUD DUE TO CONSTRUCTION IN THE PROJECT AREA DURING THE LIFE OF THE PROJECT. DUST CONTROL OPERATIONS SHALL BE PERFORMED BY THE CONTRACTOR AT THE TIME, LOCATION AND IN THE AMOUNT ORDERED BY THE ENGINEER AND SHALL BE IN ACCORDANCE WITH ITEM 616 OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS. ONLY WATER SHALL BE USED FOR DUST CONTROL NEAR SURFACE WATER AND CATCH BASINS. THE COST FOR THESE OPERATIONS SHALL BE INCLUDED IN ITEM 614-MAINTENANCE OF TRAFFIC.
11. THE PROVISIONS OF THIS SECTION SHALL NOT IN ANY WAY RELIEVE "THE CONTRACTOR OF ANY OF HIS LEGAL RESPONSIBILITIES OR LIABILITIES FOR THE SAFETY OF THE PUBLIC. THE CONTRACTOR SHALL INDEMNIFY AND SAVE HARMLESS THE CITY OF LORAIN FROM ANY EXPENSE WHATSOEVER DUE TO HIS OPERATION OVER SAID ROADWAYS.

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Phone: (440) 204-2003

NO.	DATE	REVISION	NO.	DATE	REVISION
1	10/27/2015				
9	01/01/2019	NO. 2 ADDED			
10	06/20/2019	NO. 15 REMOVED			

STANDARD DESIGNS
GENERAL
GENERAL NOTES

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ITEM 614 - MAINTAINING TRAFFIC, CONT'D

12. THE CONTRACTOR SHALL CONTACT THE FOLLOWING ENTITIES PRIOR TO CHANGING THE CURRENT TRAFFIC CONFIGUARTION:

LORAIN CITY SCHOOLS TRANSPORTATION
SHONTEEA FORD
CHARLESTON ADMINISTRATION CENTER
2601 POLE AVE.
LORAIN, OHIO 44052
PH: 440-830-4047
EMAIL: SFORD@LORAIN.CSD.ORG

FIRST STUDENT
BRAD SPRAGUE
1800 COLORADO AVE.
LORAIN, OHIO 44052
PH: 440-288-2222 EXT. 222
EMAIL: BRAD.SPRAGUE@FIRSTGROUP.COM

LORAIN COUNTY TRANSIT
PAMELA NOVAK
226 MIDDLE AVE.
ELYRIA, OHIO 44035
PH: 440-309-5525
EMAIL: PNOVAK@LORAINCOUNTY.US

UNITED STATES POST OFFICE
CHARLES HIRSCH
3190 COLOADO AVENUE
LORAIN, OH 44052
PH: 440-288-8593
EMAIL: CHARLES.E.HIRSCH@USPS.GOV

REPUBLIC WASTE SERVICES
CHUCK ALLOMONG & TJ ROSE
PH: 440-458-5191
EMAIL: CALLOMONG@REPUBLICSERVICES.COM
TROSE2@REPUBLICSERVICES.COM

LORAIN ENGINEERING DEPARTMENT
DALE VANDERSOMMEN, PE - CITY ENGINEER
200 WEST ERIE AVENUE
LORAIN, OHIO 44052
PH: 440-204-2003

LORAIN CITY FIRE DEPARTMENT
CENTRAL FIRE STATION
1350 BROADWAY AVE.
LORAIN, OHIO 44052
PH: 440-204-2220

LORAIN POLICE DEPARTMENT
JAMES MCDANN, CHIEF
200 WEST ERIE AVENUE
LORAIN, OHIO 44052
PH: 440-204-2103

13. CONTRACTOR SHALL PROVIDE ENGINEER WITH A PLAN ON HOW DRIVE ACCESS WILL BE RESTORED AFTER PAVEMENT HAS CURED AND ITS MAINTENANCE. THE COST FOR THIS SHALL BE INCIDENTAL TO ITEM 614-MAINTENANCE OF TRAFFIC.
14. THE CONTRACTOR SHALL NOTIFY EACH RESIDENT OF ANY RESTRICTED ACCESS TO THEIR PROPERTY NO LATER THAN ONE (1) WEEK IN ADVANCE.
15. THE CONTRACTOR SHALL PROVIDE PERSONNEL TO DELIVER CORRESPONDENCE TO THE HOMEOWNERS AS NEEDED TO UPDATE RESIDENTS ON THE PROGRESS OF THE WORK. THE CONTRACTOR WILL PREPARE THIS CORRESPONDENCE AND THE ENGINEER WILL REVIEW AND APPROVE, PRIOR TO DELIVERY.
16. TEMPORARY CARDBOARD NO PARKING IN STREET OR TREELAWN SIGNS SHALL BE UTILIZED DURING CONSTRUCTION, ANY RESIDENT CARS THAT ARE PARKED IN THE TREELAWN (THE AREA BETWEEN THE CURB AND SIDEWALK) OR IN THE STREET WHERE PROHIBITED SHALL BE REPORTED FOR REMOVAL TO THE CITY OF LORAIN POLICE, TRAFFIC DIVISION. ANY CONTRACTOR PARKING ON THE TREELAWN WILL BE DOCUMENTED AND FULL RESTORATION WILL BE REQUIRED AT THE COST OF THE CONTRACTOR.

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NO.	DATE	REVISION	NO.	DATE	REVISION
1	10/27/2015		11	02/04/2020	POST OFFICE ADDED
7	01/01/2018		11	02/04/2020	PREV. NO. 12 & 14 REMV.
9	01/01/2019				
10	06/20/2019	NO. 17 ADDED			
11	02/04/2020	NO. 14 CHANGED			
11	02/04/2020	POLICE CHIEF UPDATED			

STANDARD DESIGNS
GENERAL
GENERAL NOTES

DWG'S): GN-2.3.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: GN-2.3

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PAVEMENT MARKING

1. FURNISH AND INSTALL PAVEMENT MARKINGS IN ACCORDANCE WITH ODOT ITEM 640, THE STANDARD CONSTRUCTION DRAWINGS AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, LATEST REVISION.

PROHIBITED CONSTRUCTION ACTIVITIES

1. DISPOSING OF EXCESS OR UNSUITABLE EXCAVATED MATERIAL IN WETLANDS OR FLOODPLAINS, EVEN WITH THE PERMISSION OF THE OWNER.
2. LOCATING STOCKPILE STORAGE AREAS IN ENVIRONMENTALLY SENSITIVE AREAS.
3. DAMAGING VEGETATION OUTSIDE OF THE CONSTRUCTION AREA.
4. DISPOSING OF TREES, BRUSH AND OTHER DEBRIS IN ANY STREAM CORRIDORS, ANY WETLANDS, OR ANY SURFACE WATERS, OR AT UNSPECIFIED LOCATIONS. THE USE OF EXPLOSIVES WITHIN CITY LIMITS, UNLESS A PERMIT IS ISSUED BY THE CITY.
5. INDISCRIMINATE, ARBITRARY, OR CAPRICIOUS OPERATIONS OF EQUIPMENT IN ANY STREAM CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS OR OUTSIDE THE EASEMENT LIMITS.
6. PUMPING OF SEDIMENT LADEN WATER FROM TRENCHES OR OTHER EXCAVATIONS DIRECTLY INTO ANY SURFACE WATERS, ANY STREAM CORRIDORS, ANY WETLANDS OR STORM SEWERS; ALL SUCH WATER WILL BE PROPERLY FILTERED OR SETTLED TO REMOVE SILT PRIOR TO RELEASE.
7. DISCHARGING POLLUTANTS SUCH AS CHEMICALS, FUELS, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWAGE, OR ANY OTHER HARMFUL WASTE INTO OR ALONGSIDE OF RIVERS, STREAMS, IMPOUNDMENTS OR INTO NATURAL OR MANMADE CHANNELS LEADING THERETO; PERMANENT OR UNSPECIFIED ALTERATION OF THE LOW LINE OF ANY STREAM.
8. STEEL TRACK CONSTRUCTION EQUIPMENT IS PROHIBITED ON ALL NEW PAVEMENT TO REMAIN.

RESTORATION

1. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE REGRADED AND SEEDED AS PER CITY OF LORAIN CODIFIED ORDINANCE 1929, OHIO EPA STORMWATER REGULATIONS, AND ODOT ITEM 832.
2. HYDROSEEDING IS REQUIRED FROM MARCH 1ST THROUGH OCTOBER 30TH.
3. PAY LIMITS FOR TOPSOIL AND SEEDING AND MULCHING SHALL EXTEND FOUR (4) FEET BEHIND BACK OF CURB/EDGE OF PAVEMENT, UNLESS NOTED OTHERWISE. ANY RESTORATION OUTSIDE OF THESE LIMITS IS THE RESPONSIBILITY OF THE CONTRACTOR.

SIGNS

1. FURNISH AND ERECT SIGNS IN ACCORDANCE WITH ODOT ITEM 630, THE STANDARD CONSTRUCTION DRAWINGS AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, LATEST REVISION.
2. PROPOSED SIGNS SHALL MATCH THE CHARACTERISTICS OF AN EXISTING SIGN IF IT IS TO REMAIN WITHIN THE PROJECT LIMITS UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THIS COORDINATION.

SURVEY

1. THE CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTS AND BENCHMARKS, PER ODOT 623.
2. DISTURBED PRIVATE RIGHT-OF-WAY MONUMENTS ON OR OUTSIDE THE PROJECT RIGHT-OF-WAY LIMITS AND NOT ENCLOSED WITHIN A TEMPORARY EASEMENT FOR THE PROJECT SHALL BE RESET OR REPLACED AT THE CONTRACTOR'S EXPENSE. PRIVATE RIGHT-OF-WAY MONUMENTS WITHIN THE PROJECT RIGHT-OF-WAY/TEMPORARY EASEMENTS WHICH ARE UNAVOIDABLY DISPLACED OR DAMAGED DURING THE CONTRACT WORK SHALL BE RESET OR REPLACED ALL AT THE DETERMINATION/DIRECTION OF THE ENGINEER.
3. MONUMENTS SHALL BE LEFT UNDISTURBED UNTIL THE CITY OF LORAIN ENGINEERING DEPARTMENT HAS CHECKED/VERIFIED THE REFERENCES PROVIDED BY THE CONTRACTOR'S SURVEYOR. IN ALL CASES THE CONTRACTOR SHALL CONTACT THE CITY OF LORAIN ENGINEERING DEPARTMENT AT 440-204-2003 NO LESS THAN TWO (2) WEEKS PRIOR TO THE DISTURBANCE OF ANY EXISTING MONUMENTS.

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.
NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBERS AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

NO.	DATE	REVISION	NO.	DATE	REVISION
9	01/01/2019				
10	06/20/2019	NO. 2 ADDED IN RESTORATION			
11	02/04/2020	NO. 3 IN RESTORATION REV.			
11	02/04/2020	PREV. NO. 3 IN SIGNS DELETED			
11	02/04/2020	NO. 1 IN SURVEY REVISED			
14	04/20/2023	NO. 8 IN PROHIBITIONS ADDED			

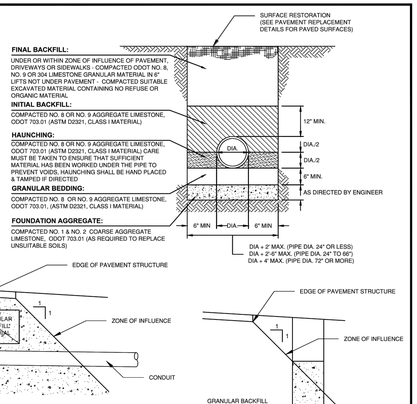
STANDARD DESIGNS
GENERAL
GENERAL NOTES

DWG'S): GN-2.4.dwg | DRAWN BY: RS | APPROVED BY: DV | ISSUE DATE: 10/27/2015 | SCALE: NONE | SHEET: GN-2.4

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UNDERGROUND

1. WATER AND SANITARY SERVICES SHALL BE MARKED FOR THEIR LOCATION AT THE RIGHT-OF-WAY WITH A 4x4 TREATED WOOD POST. PLACE POST AT THE END OF THE LINE AND EXTEND VERTICALLY TO 3' MINIMUM ABOVE THE PROPOSED FINISH GRADE. POSTS SHALL BE MARKED FOR EITHER WATER OR SEWER AND SHALL REMAIN IN PLACE UNTIL SUCH TIME THE BUILDING CONNECTIONS ARE MADE.
2. LININGS OF ALL UTILITY PIPING AND STRUCTURES SHALL BE KEPT CLEAN AND FREE OF DEBRIS PRIOR TO AND DURING INSTALLATIONS. THE CONTRACTOR SHALL PROTECT FLOW LINES AND STRUCTURES FROM DEBRIS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL FINAL APPROVAL IS GRANTED BY THE CITY LORAIN ENGINEERING DIVISION.
3. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEANWATER CONNECTIONS TO ANY SANITARY SEWER IS PROHIBITED.
4. DOWNSPOUT AND FOOTER DRAINS SHALL OUTLET INTO THE STORM SEWER, PROTRUDE THROUGH THE CURB OR SHALL DAYLIGHT ONTO THE PROPERTY ONTO SPLASH BLOCKS AND SHALL AT NO TIME BE CONNECTED TO THE SANITARY SEWER.
5. BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE CITY, REPRESENTATIVES OF THE CITY AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE IN WRITING BY THE CITY.
6. ALL NEW CONDUITS, INLET, CATCH BASINS, AND MANHOLES CONSTRUCTED AS PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE CITY.
7. ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.
8. ALL BACKFILL UNDER OR WITHIN THE ZONE OF INFLUENCE OF ROADS, DRIVES, SIDEWALKS, AND PARKING LOTS SHALL BE GRANULAR BACKFILL PER SPECIFICATIONS.
9. PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS ENCOUNTERED DURING CONSTRUCTION.
10. REVIEW OF DRAINAGE FACILITIES: BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE CITY, REPRESENTATIVES OF THE CITY AND THE CONTRACTOR, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE IN WRITING BY THE CITY. ALL NEW CONDUITS, INLET, CATCH BASINS, AND MANHOLES CONSTRUCTED AS PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE CITY. ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT I



NOTES:

1. SUITABLE EXCAVATED MATERIAL SHALL CONSIST OF LOOSE FRIABLE SOIL FREE OF DEBRIS AND COMPACTED IN 6" LIFTS.
2. ALL PIPE BACKFILL SHALL BE TAMPED IN 6' LIFTS COMPACTED TO 98% OF STANDARD PROCTOR DENSITY.
3. ALL TRENCHES THROUGH A STREAM OR WATERWAY SHALL BE APPROVED BY THE CITY ENGINEER BEFORE CONSTRUCTION.
4. CLAY DAMS SHALL BE REQUIRED WHEN AND WHERE NECESSARY PER PLAN OR AS DIRECTED BY THE ENGINEER.
5. REFER TO GN 2.1 - GENERAL NOTE #25 FOR ADDITIONAL BACKFILL GUIDANCE.

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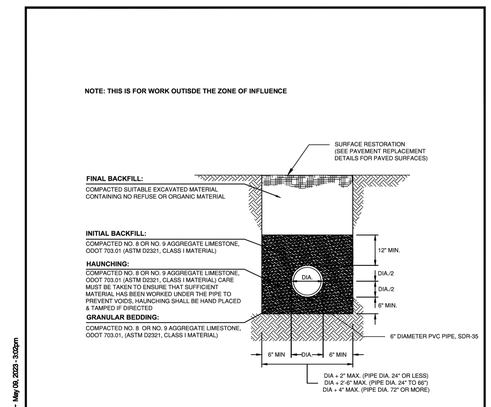
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NO.	DATE	REVISION	NO.	DATE	REVISION
7	01/01/2018				
8	06/12/2018				
9	01/01/2019				
14	04/20/2023	MAX TRENCH WIDTH CLARIFIED			

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
MISCELLANEOUS
ROADWAY TRENCH DETAIL

DETAILS: MS-1.0.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: MS-1.0



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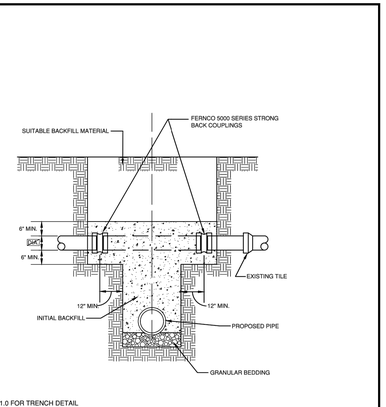
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NO.	DATE	REVISION	NO.	DATE	REVISION

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
MISCELLANEOUS
SERVICE LINE TRENCH DETAIL

DETAILS: MS-1.0.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: MS-1.1



NOTES:

1. REFER TO MS-1.0 FOR TRENCH DETAIL

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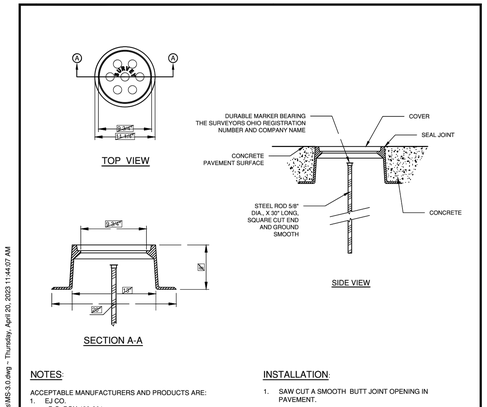
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NO.	DATE	REVISION	NO.	DATE	REVISION
9	01/01/2019				

City of Lorain
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STANDARD DESIGNS
MISCELLANEOUS
TILE REPAIR DETAIL

DETAILS: MS-2.0.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: MS-2.0



NOTES:

ACCEPTABLE MANUFACTURERS AND PRODUCTS ARE:
1. EJ CO.
P.O. BOX 439-301
EAST JORDAN, MI. 49727
PRODUCT # **EJ 1578**
2. NEENAH R-1976
3. ALTERNATE PRODUCTS MAY BE SUBMITTED FOR APPROVAL.

INSTALLATION:

1. SAW CUT A SMOOTH BUTT JOINT OPENING IN PAVEMENT.
2. REMOVE DEBRIS AND PREPARE PAVEMENT OPENING FOR CASTING INSTALLATION.
3. INSTALL CASTING AND FINISH FLUSH WITH EXISTING PAVEMENT.
4. REFER TO CITY OF LORAIN STANDARD DESIGN, PAGE PV-13.0 FOR BLOCKOUT DETAIL.

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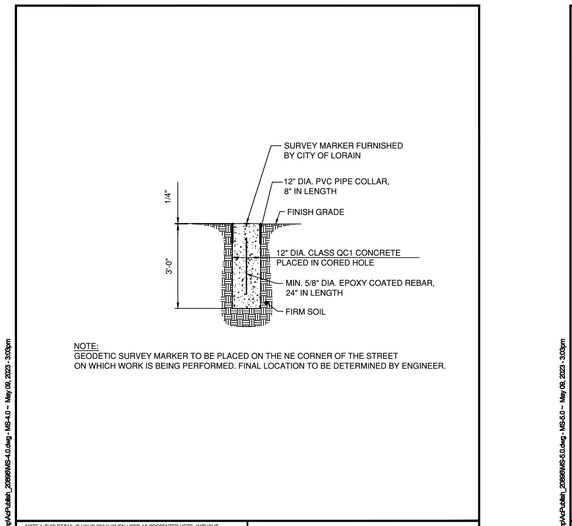
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NO.	DATE	REVISION	NO.	DATE	REVISION
10	6/20/2019	FILE PATH ADDED			
11	02/04/2020	NOTES NO. 1 CHANGED			
11	02/04/2020	NOTES NO. 2 ADDED			
14	04/20/2023	INSTALLATION NOTES			

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STANDARD DESIGNS
MISCELLANEOUS
MONUMENT BOX ASSEMBLY

DETAILS: MS-3.0.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: MS-3.0



NOTE:
GEODETIC SURVEY MARKER TO BE PLACED ON THE NE CORNER OF THE STREET ON WHICH WORK IS BEING PERFORMED. FINAL LOCATION TO BE DETERMINED BY ENGINEER.

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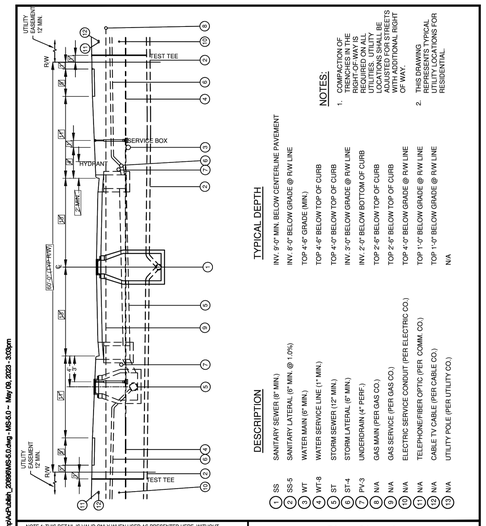
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NO.	DATE	REVISION	NO.	DATE	REVISION
1	10/27/2015				

City of Lorain
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Phone: (440) 204-2003

STANDARD DESIGNS
MISCELLANEOUS
GEODETIC SURVEY MARKER

DETAILS: MS-4.0.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: MS-4.0



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NO.	DATE	REVISION	NO.	DATE	REVISION
1	10/27/2015				
13	05/02/2022	UTILITY LOCATIONS			
14	04/20/2023	UTILITY LOCATIONS			

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
MISCELLANEOUS
STREET UTILITY LOCATIONS

DETAILS: MS-5.0.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: MS-5.0

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CITY OF LORAIN
OHIO
1834

OSBORN ENGINEERING
Ohio | Florida | Michigan | Tennessee
(216) 861-2020
www.osborn-eng.com

WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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DRAWN BY	BTC
CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

DETAILS (MISCELLANEOUS)

DRAWING NO.

D5

GENERAL

1. COMPACTION OF TRENCHES IN THE RIGHT-OF-WAY IS REQUIRED FOR ALL UTILITIES. AREAS OF TIGHT EXCAVATION THAT DO NOT ALLOW FOR ODOT APPROVED COMPACTION DEVICES TO BE UTILIZED SHALL BE BACKFILLED WITH LOW STRENGTH MORTAR BACKFILL, TYPE 2 PER CURRENT ODOT CONSTRUCTION AND MATERIAL SPECIFICATION.
2. LIMESTONE SHALL BE USED FOR ALL AGGREGATE SUBBASE, FOR COARSE AGGREGATE IN ALL ASPHALT PAVEMENT SURFACE, AND FOR COARSE AGGREGATE IN CONCRETE.
3. NO VEHICULAR TRAFFIC SHALL BE PERMITTED ON A PREPARED AND APPROVED SUB-GRADE, SUB-BASE, OR PAVEMENT BASE.
4. ALL SAW CUTTING SHALL BE PERFORMED WITH A DIAMOND SAW BLADE AND INCLUDED FOR PAYMENT WITH THE COST OF THE PAVEMENT.
5. ANY ADJACENT FACILITIES DAMAGED AS RESULT OF THE CONTRACTOR'S NEGLIGENCE, AS DETERMINED BY THE ENGINEER, AND WHICH ARE NOT OTHERWISE DESIGNATED FOR REPLACEMENT, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. IT IS RECOMMENDED CONTRACTOR VERIFY EXISTING PAVEMENT THICKNESS AND SECTION MAKE-UP PRIOR TO BID.
7. BASE PAVEMENT REPAIRS SHALL BE COMPLETED ONLY IF DIRECTED BY ENGINEER AFTER MILLING OPERATIONS HAVE BEEN COMPLETED. THE ENGINEERING DEPARTMENT WILL MARK BASE REPAIR AREAS WITHIN 72 HOURS, WEATHER DEPENDENT, AFTER THE THE STREET HAS BEEN SWEPT.
8. CONTRACTOR IS RESPONSIBLE FOR THE DEWATERING OF ANY REPAIR AREAS PRIOR TO PLACEMENT OF NEW PAVEMENT (BASE PAVEMENT OR FINISHED PAVEMENT).
9. FURNISH ALL AGGREGATE DIRECTLY TO THE PROJECT FROM AN APPROVED SOURCE. ONLY LIMESTONE AGGREGATE SHALL BE PERMITTED FOR USE.
10. SUBGRADE COMPACTION SHALL BE INCIDENTAL TO AND INCLUDED FOR PAYMENT WITH ITEM 452-DRIVEWAY APRON AND ITEM 608-WALKS, CURB RAMPS, AND STEPS, RESPECTIVELY.
11. ALL BACKFILL UNDER OR WITHIN THE ZONE OF INFLUENCE OF ROADS, DRIVES, SIDEWALKS, AND PARKING LOTS SHALL BE GRANULAR BACKFILL PER SPECIFICATIONS.

ASPHALT

1. GENERAL: THE MECHANICAL SPREADING AND FINISHING EQUIPMENT SHALL CONSIST OF SELF-POWERED PAVERS, CAPABLE OF SPREADING AND FINISHING THE MIXTURE TO THE LINE, GRADE AND CROWN SET BY THE ENGINEER. THE THICKNESS OF THE COURSES SHALL BE VARIED BY THE CONTRACTOR, AS REQUIRED, SO THAT THE WORK WILL BE COMPLETED WITHIN THE QUANTITY OF MATERIAL SET UP ON THE PLANS AND PROPOSAL. THE ENGINEER, HOWEVER, RESERVES THE RIGHT TO REQUIRE CHANGES IN THE THICKNESS OF COURSES, WHERE, IN HIS OPINION, THE SAME IS REQUIRED TO CAUSE THE WORK TO BE COMPLETED WITHIN THE SAID QUANTITIES. THIS RESERVATION, ON PART OF THE ENGINEER, SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY OF PROPERLY REGULATING USE OF MATERIALS AS ABOVE SPECIFIED. OVER RUNS IN SAID QUANTITIES WILL ONLY BE CONSIDERED WHERE WRITTEN SUPPLEMENTARY CONTRACTS FOR ADDITIONAL AMOUNT HAVE BEEN AGREED UPON PRIOR TO EXECUTION OF THE WORK. THE GUTTER SHALL BE FINISHED TO THE TRUE GRADE. ANY IRREGULARITIES SHALL BE CORRECTED TO ENSURE PROPER DRAINAGE. A WATER TEST MAY BE USED TO LOCATE SPOTS IN GUTTER REQUIRING CORRECTION.
2. SEALING GUTTERS AND EDGES: THE WIDTH OF THE GUTTER OR EDGE SURFACE TO BE SEALED SHALL BE 4" WHERE THE SURFACE IS BOUNDED BY RAISED CURB OR EDGE SEALED WHERE A BERM EXISTS, IN ACCORDANCE WITH ODOT SPECIFICATIONS. THE EDGES OF ALL CASTINGS, FEATHERED EDGES AND WHERE NEW SURFACE MEETS OLD PAVEMENTS SHALL BE PAINTED WITH SUITABLE ASPHALT MATERIAL. THE GUTTER OR EDGE SHALL BE SEALED IMMEDIATELY AFTER THE SURFACE COURSE IS PLACED ON EACH STREET. THE EDGE SEAL IS INTENDED TO FILL ANY VOIDS.

(CONTINUED ON NEXT PAGE)

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City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

NO.	DATE	REVISION	NO.	DATE	REVISION
1	10/27/2015				
2	04/18/2017				
3	01/01/2019				
11	02/05/2020	PREV. NO. 4 MOVED TO PV-5.1			
11	02/05/2020	NO. 7 REVISED			
11	02/05/2020	ASPHALT HEADING REV.			

STANDARD DESIGNS
PAVEMENT
GENERAL NOTES

DWG FILE: PV-1.0.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 02/05/2017 | SCALE: NONE
SHEET: PV-1.0

C:\Users\mwoomer\AppData\Local\Temp\AcPublish_20868\PV-1.0.dwg - PV-1.0 - May 09, 2023 - 3:00pm

ASPHALT, CONT'D

3. CLEANING OF PAVEMENT: THE STREET MUST BE SWEPT PRIOR TO BASE REPAIR MARK OUTS. CLEANING OF THE PAVEMENT PRIOR TO PAVING SHALL BE ACCOMPLISHED BY A SELF-CONTAINED VACUUM/SWEEPER WITH WATER SPRAYER FOR DUST CONTROL. THIS EQUIPMENT SHALL CLEAN THE PAVEMENT THE DAY OF PAVING TO THE SATISFACTION OF THE INSPECTOR.
4. ASPHALT BINDER PRICE ADJUSTMENT: THE PROVISIONS OF ODOT CMS 401.20, ASPHALT BINDER PRICE ADJUSTMENT IS NOT PART OF THIS CONTRACT. THE CONTRACTOR SHALL BID ACCORDINGLY.
5. SUBMITTAL OF ASPHALT TICKETS IS REQUIRED FOR PAYMENT OF ASPHALT ITEMS.
6. WARM MIX ASPHALT IS NOT PERMITTED. ONLY HOT MIX SHALL BE USED FOR SURFACE, INTERMEDIATE AND BASE COURSES.
7. ASPHALT TESTING SHALL BE PERFORMED BY AN INDEPENDENT OHIO DEPARTMENT OF TRANSPORTATION (ODOT) CERTIFIED ASPHALT TESTING LABORATORY.
8. TESTING SHALL INCLUDE: BATCH PLANT, EXTRACTION/GRADATION, JMF REVIEW, FIELD DENSITY, TEMPERATURE AND CORING W/ DENSITY. TESTING SHALL BE PERFORMED ON ASPHALT INTERMEDIATE COURSES AND ASPHALT SURFACE COURSES. ASPHALT TESTING SHALL BE INCLUDED FOR PAYMENT WITH ITEM 441-ASPHALT INTERMEDIATE COURSE AND 441-ASPHALT SURFACE COURSE. ALL TEST REPORTS SHALL BE SUBMITTED TO THE CITY FOLLOWING EACH DAY OF PAVING.
9. RECLAIMED ASPHALT SHINGLES (RAS) ARE NOT PERMITTED IN ASPHALT PAVEMENT.

PORTLAND CEMENT CONCRETE

1. USE CONCRETE MIX CLASS QC1P FOR ROADWAY PAVEMENT AND QC MS DRIVEWAY APRONS. QC FS SHALL NOT BE USED UNLESS AS DIRECTED BY ENGINEER.
2. SAWED AND HAND-FORMED JOINTS SHALL BE SEALED WITH CMS 705.04 JOINT SEALER.
3. PAVEMENT GUTTER REINFORCING STEEL (#5X30" TIE BAR) SHALL BE INSTALLED IN ACCORDANCE WITH ODOT SCD BP-2.1 AND INCLUDED FOR PAYMENT WITH THE CONCRETE PAVEMENT.
4. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
5. ALL DROPS FOR DRIVEWAY APRONS SHALL BE INCLUDED IN THE COST OF THE CURB.
6. KEYWAYS ARE NOT REQUIRED PER CITY OF LORAIN, ODOT ITEM 452.
7. EXISTING DRIVE APRON REMOVAL/REPLACEMENT: IT IS INTENDED THAT EXISTING DRIVE APRONS REMAIN UNDISTURBED DURING ANY ADJACENT INTEGRAL CONCRETE CURB AND PAVEMENT REMOVAL/REPLACEMENTS. REMOVAL OF ADJACENT INTEGRAL CONCRETE CURB AND PAVEMENT SHALL BE IN A MANNER THAT WILL NOT DISTURB, DAMAGE OR UNDERMINE THE ABUTTING DRIVE APRONS. SAW CUTS ALONG THE BACK OF CURB SHALL BE REQUIRED TO FACILITATE THE CURB AND PAVEMENT REMOVALS. DRIVE APRONS WHICH ARE UNAVOIDABLY DAMAGED DURING THE REMOVAL/REPLACEMENT OF ANY ADJACENT INTEGRAL CONCRETE CURB AND PAVEMENT SHALL BE REPLACED, IN KIND, TO THE NEAREST JOINT OR THE LIMITS ESTABLISHED/DIRECTED BY THE ENGINEER. EXCEPT AS OTHERWISE DIRECTED BY THE ENGINEER, THE CONFIGURATIONS OF ANY REPLACED DRIVE APRON AREAS SHALL CONFORM, AS NEARLY AS POSSIBLE, TO EXISTING CONFIGURATIONS. RESIDENTIAL DRIVES, COMMERCIAL DRIVES, AND ALLEYS SHALL BE 8" THICK. CONCRETE MIX CLASS "QC MS" SHALL BE USED FOR ITEM 452-DRIVEWAY APRON. THE CONTRACTOR SHALL NOTIFY EACH RESIDENT OF ANY RESTRICTED ACCESS TO THEIR PROPERTY NO LATER THAN ONE (1) WEEK IN ADVANCE. ACCESS TO ALL PROPERTY SHALL BE MAINTAINED AT ALL TIMES.

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NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBERS AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

NO.	DATE	REVISION	NO.	DATE	REVISION
1	10/27/2015		11	02/05/2020	ASPHALT HEADING REV.
2	02/12/2016		11	02/05/2020	PREV. NO. 8 REMOVED
7	01/01/2018		14	04/20/2023	UPDATE NOTE 7
8	07/01/2018				
9	01/01/2019				
10	06/20/2019	NO. 3 REVISED			

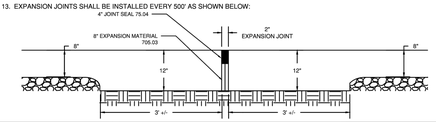
STANDARD DESIGNS
PAVEMENT
GENERAL NOTES

DWG FILE: PV-1.1.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE
SHEET: PV-1.1

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PORTLAND CEMENT CONCRETE, CONT'D

8. PARTIAL WIDTH CONSTRUCTION: POSITIVE DRAINAGE WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. THE INTENT OF THE METHOD REQUIRED TO REPLACE THIS PAVEMENT IS TO UTILIZE THE EXISTING ONE – HALF OF THE PAVEMENT TO PREVENT DAMAGE TO THE SUB-GRADE BY CONSTRUCTION TRAFFIC AND FOR RESIDENTS TO MAINTAIN REASONABLE PEDESTRIAN ACCESS TO THEIR RESIDENCE. THE CONTRACTOR IS REQUIRED TO KEEP OPEN ONE LANE OF TRAFFIC FOR USE BY RESIDENTS AND BUSINESSES AT ALL TIMES. THE EXISTING PAVEMENT WILL BE SAWED IN THE LONGITUDINAL DIRECTION TO ALLOW FOR HALF WIDTH REMOVAL. THE REMOVAL WIDTH WILL BE DETERMINED BY THE CONTRACTOR TO ALLOW FOR ACCESS FOR THEIR EQUIPMENT. THE REMOVAL AREA THEN IS TO BE EXCAVATED; SUB-GRADE COMPACTED BY APPROVED METHOD AND EQUIPMENT, AND ODOT #304 LIMESTONE PLACED AND COMPACTED, AS DIRECTED. ALL PERIMETER SAWING FOR REMOVAL AGAINST EXISTING PAVEMENT IS TO BE DIAMOND SAWED, OTHER TYPES OF SAWING IS PERMISSIBLE FOR REMOVAL OF INTERIOR MATERIAL TO BE REMOVED LATER. ALL SAWING IS INCIDENTAL TO THE PROJECT.
9. ITEM 499 CONCRETE - GENERAL: CONCRETE MIX DESIGNS SHALL BE LIMITED TO THE FOLLOWING CLASSES: QC 1; QC 1-P; QC MS; QC MISC.
10. ITEM 499 - MS CONCRETE FOR LARGE AREAS: THE PROJECT ENGINEER MAY ALLOW MS CONCRETE IN PLACE OF QC 1-P AS REQUIRED ON THE PROJECT. THE MIX DESIGN FOR THIS WELL GRADED QCMS IS AS FOLLOWS:
    TYPE I - 800 LBS
    WATER - 312 LBS
    #57 - 1347 LBS
    #8 - 165 LBS
    SAND - 1190 LBS
    AIR - 6%
11. CONCRETE STRENGTH: CLASS QC1, QC1P, AND QC-MS SHALL ATTAIN A MODULUS OF RUPTURE OF 600 POUNDS PER SQUARE INCH (2.8 MPa) WITHIN 5 DAYS. CITY OF LORAIN INSPECTORS WILL PREPARE TWO (2) BEAM SPECIMENS FOR EACH CONCRETE PLACEMENT. THE INSPECTOR WILL TEST ONE (1) BEAM SPECIMEN AFTER 5 DAYS OF CURE. IF THE TESTED BEAM SPECIMEN FAILS TO ATTAIN THE REQUIRED STRENGTH OF 600 PSI WITHIN 5 DAYS, THUS PROHIBITING THE CONCRETE PAVEMENT FROM BEING OPENED TO TRAFFIC, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN THE AMOUNT OF 10% OF THE CONTRACT BID ITEM AND ASSOCIATED QUANTITY THAT CONTAINED THE STRENGTH DEFICIENCY. LIQUIDATED DAMAGES WILL INCREASE 10% PER CALENDAR DAY THEREAFTER NOT TO EXCEED 50% OF THE CONTRACT BID ITEM AND ASSOCIATED QUANTITY CONTAINING THE DEFICIENCY. AFTER 5 DAYS, THE CONTRACTOR MAY TAKE POSSESSION OF THE SECOND BEAM SPECIMEN FOR ADDITIONAL TESTING BY AN ODOT PREQUALIFIED LABORATORY AT NO ADDITIONAL COST TO THE CITY. UPON USE OF THE SECOND BEAM SPECIMEN, IF FURTHER SPECIMENS ARE REQUIRED TO TEST CONCRETE STRENGTH THE CONTRACTOR MAY OBTAIN PAVEMENT CORES FROM THE PAVEMENT SECTION CONTAINING THE DEFICIENCY. ALL COSTS RELATED TO ACQUIRING THE PAVEMENT CORES, INCLUDING BUT NOT LIMITED TO REMOVAL, TESTING, REPLACEMENT AND RESTORATION, SHALL BE AT THE COST OF THE CONTRACTOR. IF THE DEFICIENCY REMAINS AFTER TWENTY EIGHT (28) DAYS, THE CONTRACTOR SHALL REMOVE AND REPLACE THE AFFECTED CONCRETE PAVEMENT AT NO ADDITIONAL COST TO THE CITY. THE AFOREMENTIONED CONCRETE STRENGTH REQUIREMENTS AND LIQUIDATED DAMAGES SHALL BE APPLICABLE TO ALL FUTURE REPLACEMENTS OF THE CONCRETE PAVEMENT SECTIONS CONTAINING THE ORIGINAL DEFICIENCIES.
12. IF AT ANY TIME THE CONCRETE STRENGTH REQUIREMENTS ARE SATISFACTORILY MET AND THE CONTRACTOR FAILS TO OPEN THE CONCRETE PAVEMENT TO TRAFFIC BY THE END OF THE WORK DAY, THE CONTRACTOR SHALL INCUR LIQUIDATED DAMAGES AS STATED ABOVE.
13. EXPANSION JOINTS SHALL BE INSTALLED EVERY 500' AS SHOWN BELOW:



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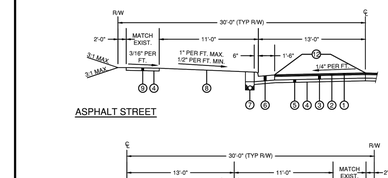
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

NO.	DATE	REVISION	NO.	DATE	REVISION
7	01/01/2018		11	03/04/2020	NO. 10 REVISED
8	07/01/2018		14	04/20/2023	ADD QCMS TO NOTE 11
9	01/01/2019				
10	06/20/2019	NO. 11 ADDED			
11	02/19/2020	NO. 8 REVISED			
11	02/21/2020	EXP. JOINT DETAIL REV.			

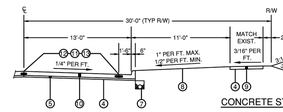
STANDARD DESIGNS
PAVEMENT
GENERAL NOTES

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SHEET: PV-1.2

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ASPHALT STREET



CONCRETE STREET

LEGEND

1	ITEM 441	1-1/4"	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22 (10% RAP MAX)	8	ITEM 659		SEEDING AND MULCHING
2	ITEM 441	1-3/4"	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22 (20% RAP MAX.)	9	ITEM 608	4"	CONCRETE SIDEWALK 6" DRIVE APPROACH AND 6" SIDEWALK BEHIND APPROACH, 6" CURB RAMPS
3	ITEM 301	9"	ASPHALT CONCRETE BASE	10	ITEM 452	8"	PLAIN PORTLAND CEMENT CONCRETE PAVEMENT WITH TYPE 2A INTEGRAL CURB, CLASS QC 1
4	ITEM 204	*	SUBGRADE COMPACTION AND PROOF ROLLING	11	ITEM 451.09		LONGITUDINAL & TRANSVERSE JOINTS PER ODOT SCD BP-2.1 AND 2.2; SAW CUT TRANSVERSE JOINTS ON 15' CENTERS AND AT RE-ENTRY CORNERS; #5 X 30" TIE BAR @ 30" C/C FOR LONGITUDINAL JOINTS
5	SUBBASE:			12	ITEM 451.16/705.04		JOINT SEALING; LONGITUDINAL, TRANSVERSE AND CURB & GUTTER JOINTS; 2" TO 4" BAND WHEN SEALING ASPHALT.
	ASPHALT	4"	304 LIMESTONE	13	ITEM 451.09		PAVEMENT GUTTER REINFORCING STEEL; SAW CUT; #5 X 30" TIE BAR @ 30" C/C PER ODOT SCD BP-2.1
	CONCRETE	3"	304 LIMESTONE				
6	ITEM 609	24"	COMBINATION CURB & GUTTER; MODIFIED TYPE 2, CLASS QC 1				
7	ITEM 605	4"	UNDERDRAINS (SEE DETAIL PV-3.0)				

NOTES

1. VERTICAL 6" CURB ROADWAY STANDARDS ARE AS FOLLOWS: TRAVEL LANE = 26' MINIMUM. BOC TO BOC 27' MINIMUM.
2. ROLLED 4" CURB ROADWAY STANDARDS ARE AS FOLLOWS: TRAVEL LANE = 26" MINIMUM. BOC TO BOC 27' 4" MINIMUM.
3. ADDITIONAL CURB DESIGNS CAN BE FOUND ON PV 5.0 AND PV 5.1.
4. CONCRETE SPECIFICATIONS: QC1P: ROADWAY; QCMS: BOXOUTS, DRIVEWAYS, SIDWALK WITHIN DRIVEWAY; QC1 OR QC MISC: WALK AND CURB RAMPS.

* WHERE GRANULAR FILL IS USED TO REPLACE SOFT SUBBASE AREAS, EXTEND CUT AND GRANULAR TO UNDERDRAIN.

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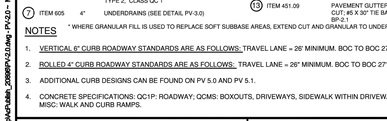
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

NO.	DATE	REVISION	NO.	DATE	REVISION
2	02/12/2016		11	03/04/2020	LEGEND NO. 12 REV.
4	04/18/2017		13	04/26/2022	CROSS SLOPE REV.
7	01/01/2018		13	07/28/2022	CONC. SUBBASE DEPTH
10	06/20/2019	NO. 4 CHANGED			
11	02/05/2020	DETAIL NO. 12 REVISED			
11	02/12/2020	SIDEWALK WIDTH REV.			

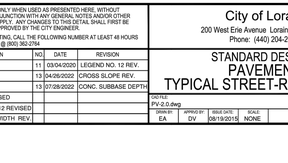
STANDARD DESIGNS
PAVEMENT
TYPICAL STREET-INDUSTRIAL/COMMERCIAL

DWG FILE: PV-2.1.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE
SHEET: PV-2.1

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ASPHALT STREET



CONCRETE STREET

LEGEND

1	ITEM 441	1-1/4"	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22 (10% RAP MAX)	8	ITEM 659		SEEDING AND MULCHING
2	ITEM 441	1-3/4"	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22 (35% RAP MAX.)	9	ITEM 608	4"	CONCRETE SIDEWALK 6" DRIVE APPROACH AND 6" SIDEWALK BEHIND APPROACH, 6" CURB RAMPS
3	ITEM 301	9"	ASPHALT CONCRETE BASE	10	ITEM 451	10"	REINFORCED CONCRETE PAVEMENT WITH INTEGRAL CURB; TYPE 2A, CLASS QC 1. MIN. REINFORCEMENT WWF 6X6 - W4 X W4 WELDED WIRE MESH OR APPROVED FIBER.
4	ITEM 204	*	SUBGRADE COMPACTION AND PROOF ROLLING	11	ITEM 451.09		LONGITUDINAL & TRANSVERSE JOINTS PER ODOT SCD BP-2.1 AND 2.2; SAW CUT TRANSVERSE JOINTS ON 15' CENTERS AND AT RE-ENTRY CORNERS; #5 X 30" TIE BAR @ 30" C/C FOR LONGITUDINAL JOINTS
5	SUBBASE:			12	ITEM 451.16/705.04		JOINT SEALING; LONGITUDINAL, TRANSVERSE AND CURB & GUTTER JOINTS; 2" TO 4" BAND WHEN SEALING ASPHALT.
	ASPHALT	4"	304 LIMESTONE	13	ITEM 451.09		PAVEMENT GUTTER REINFORCING STEEL; SAW CUT; #5 X 30" TIE BAR @ 30" C/C PER ODOT SCD BP-2.1
	CONCRETE	3"	304 LIMESTONE				
6	ITEM 609	24"	COMBINATION CURB & GUTTER; MODIFIED TYPE 2; CLASS QC 1				
7	ITEM 605	4"	UNDERDRAINS (SEE DETAIL PV-3.0)				

* WHERE GRANULAR FILL IS USED TO REPLACE SOFT SUBBASE AREAS, EXTEND CUT AND GRANULAR TO UNDERDRAIN.

NOTES

1. VERTICAL 6" CURB ROADWAY STANDARDS ARE AS FOLLOWS: TRAVEL LANE = 26' MINIMUM. BOC TO BOC 27' MINIMUM.
2. ROLLED 4" CURB ROADWAY STANDARDS ARE AS FOLLOWS: TRAVEL LANE = 26" MINIMUM. BOC TO BOC 27' 4" MINIMUM.
3. ADDITIONAL CURB DESIGNS CAN BE FOUND ON PV 5.0 AND PV 5.1.
4. CONCRETE SPECIFICATIONS: QC1P: ROADWAY; QCMS: BOXOUTS, DRIVEWAYS, SIDWALK WITHIN DRIVEWAY; QC1 OR QC MISC: WALK AND CURB RAMPS.

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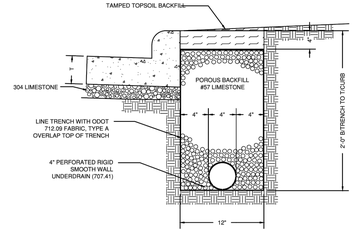
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

NO.	DATE	REVISION	NO.	DATE	REVISION
11	02/05/2020	CLEANOUT DETAIL REV.			
11	02/05/2020	NOTE NO. 1 REV.			
11	02/05/2020	CLEANOUT DETAIL REV.			
14	04/20/2023	ADD NOTE 2, NOTE 7			

STANDARD DESIGNS
PAVEMENT
UNDERDRAIN DETAIL

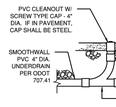
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SHEET: PV-3.0

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NOTES:

1. UNDERDRAINS ARE REQUIRED FOR ALL CONCRETE ROADWAY CONSTRUCTION, UNLESS APPROVED OTHERWISE, OR MODIFIED, BY THE CITY ENGINEER.
2. ALTERNATE DESIGN FOR UNDERDRAIN MAY BE ACCEPTED AS DECIDED BY ENGINEER OR AS PROVIDED IN PLANS.
3. UNDERDRAIN PIPING OR TUBING SHALL BE INSTALLED TRUE TO LINE AND GRADE SHOWN ON THE PLANS.
4. NO TRENCHING PERMITTED. COMPACT BOTTOM OF TRENCH.
5. UNDERDRAIN SHALL BE CONNECTED TO INLET/MH STRUCTURE.
6. UNDERDRAIN CLEANOUTS SHALL BE INSTALLED AT THREE HUNDRED (300) FEET INTERVALS, OR AS DIRECTED BY ENGINEER. CLEANOUTS SHALL BE INCLUDED FOR PAYMENT W/ 4" UNDERDRAIN.
7. UNDERDRAIN SHALL HAVE POSITIVE FLOW TOWARDS INLET/MANHOLE OR AS DIRECTED BY ENGINEER



UNDERDRAIN CLEANOUT

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NO.	DATE	REVISION	NO.	DATE	REVISION
2	02/12/2016	LEGEND NO. 12 REV.			
4	04/18/2017	CROSS SLOPE REV.			
7	01/01/2018	CONC. SUBBASE DEPTH			
10	06/20/2019	NO. 4 CHANGED			
11	02/05/2020	DETAIL NO. 12 REVISED			
11	02/12/2020	SIDEWALK WIDTH REV.			

STANDARD DESIGNS
PAVEMENT
TYPICAL STREET-RESIDENTIAL

DWG FILE: PV-2.0.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE
SHEET: PV-2.0

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3/7/2025 5:34 PM Pawar, Sayali

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CITY OF LORAIN
200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

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(216) 861-2020
www.osborn-eng.com

WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

STATE OF OHIO
KEVIN D. CODIN
64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

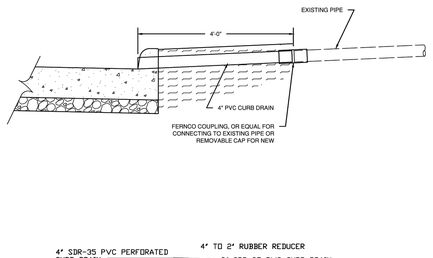
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CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

DETAILS (PAVEMENT)

DRAWING NO.

D6



NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

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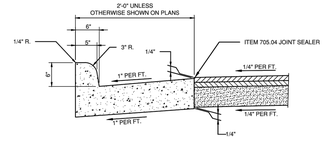
NO.	DATE	REVISION	NO.	DATE	REVISION
10	06/20/2019	ROLL CURB DETAIL ADDED			

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
PAVEMENT
DRAIN THRU CURB DETAIL

DATA FILE: PV-4.0.dwg | DRAWN BY: EA | APPROV BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: PV-4.0

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MODIFIED TYPE 2 CURB & GUTTER
FOR ASPHALT PAVEMENT

NOTES:

GENERAL: THIS DRAWING SHOWS MODIFIED TYPES OF CURB THAT MAY BE USED ON VARIOUS TYPES OF PAVEMENT. THE CONTRACT DOCUMENTS SPECIFY THE CURB TYPE TO BE USED. ALL OTHER CURBS SHALL BE IN ACCORDANCE WITH ODOT SCD BP-5.1.

JOINTS: 1" [25] EXPANSION JOINTS SHALL EXTEND UP TO THE TOP OF THE CURB AND SHALL BE CONSTRUCTED IN THE CURB AND GUTTER SECTION IN SUCH A MANNER THAT THE JOINT SEAL WILL EXTEND THE FULL WIDTH OF THE GUTTER AND INTO THE CURB FACE A SUFFICIENT DISTANCE TO SEAL THE JOINT TO AN ELEVATION OF AT LEAST 2" [50] ABOVE THE FLOW LINE OF THE GUTTER. DOWEL BARS SHALL BE USED IN THE CURB AND GUTTER SECTION AT EXPANSION JOINTS AND TO THE SURFACE OF THE PAVEMENT. TRANSVERSE EXPANSION JOINT MATERIAL SHALL MEET THE REQUIREMENTS OF ITEM 705.03. EXPANSION JOINT MATERIAL SHALL BE GROUND DOWN AS NECESSARY TO PERMIT SEALING OF JOINTS WITH CMS 705.04 JOINT SEALER.

GUTTER PLATE THICKNESS: THICKNESS OF GUTTER PLATE "T" SHALL BE 9" [230] UNLESS OTHERWISE SHOWN ON THE PLANS.

TOLERANCES: DIMENSIONAL TOLERANCES ARE AS FOLLOWS:
CURBS: -0" TO +1/4 [-0 TO +6]
GUTTERS: 0 TO +3" [0 TO +12].

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBERS AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.

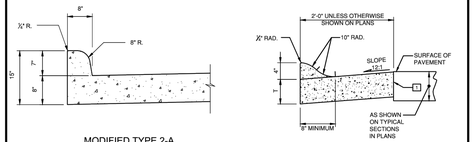
NO.	DATE	REVISION	NO.	DATE	REVISION

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
PAVEMENT
CURB DETAIL

DATA FILE: PV-5.0.dwg | DRAWN BY: EA | APPROV BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: PV-5.0

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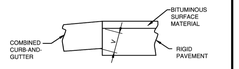
MODIFIED TYPE 2-A
INTEGRAL CURB

MODIFIED TYPE 3

FOR ADDITIONAL CURB DETAILS, SEE ODOT SCD BP-5.1.

LEGEND

T BUTT JOINTS SHALL BE PROVIDED BETWEEN COMBINED CURB-AND-GUTTER AND NEW OR EXISTING RIGID PAVEMENTS, WITH TIE BARS OR HOOK BOLTS PROVIDED AT INTERVALS OF 5' [1.5 M]. SEE SCD BP-2.1 FOR DETAILS OF TIE BARS AND HOOK BOLTS. IF THE COMBINED CURB-AND-GUTTER ADJOINS A NEW RIGID BASE OR AN EXISTING RIGID BASE OR PAVEMENT THAT IS TO BE SURFACED WITH BITUMINOUS MATERIAL, A BUTT JOINT SHALL ALSO BE PROVIDED. HOWEVER, TIE BARS OR HOOK BOLTS SHALL BE OMITTED WHEN THE VERTICAL OVERLAP ("H" IN DETAIL RIGHT) BETWEEN THE CURB-AND-GUTTER AND RIGID PAVEMENT IS LESS THAN 7" [175].



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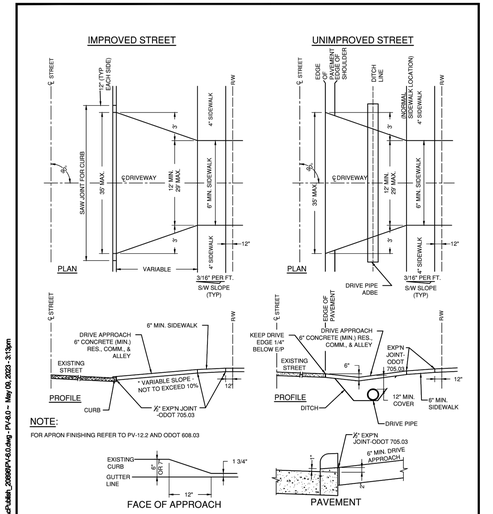
NO.	DATE	REVISION	NO.	DATE	REVISION
1	04/18/2017				
11	02/05/2020	ADDED CURB NOTE			

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STANDARD DESIGNS
PAVEMENT
CURB DETAILS

DATA FILE: PV-5.1.dwg | DRAWN BY: EA | APPROV BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: PV-5.1

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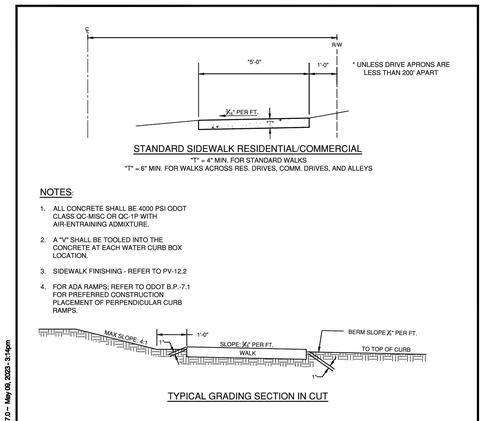
NO.	DATE	REVISION	NO.	DATE	REVISION
11	02/05/2020	6" ALLEY NOTE ADDED			
11	02/21/2020	DETAILS REV.			
13	04/26/2022	CROSS SLOPE REV.			
14	04/20/2023	RES. & COMM. DRIVE			

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STANDARD DESIGNS
PAVEMENT
DRIVE APPROACH DETAILS

DATA FILE: PV-6.0.dwg | DRAWN BY: EA | APPROV BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: PV-6.0

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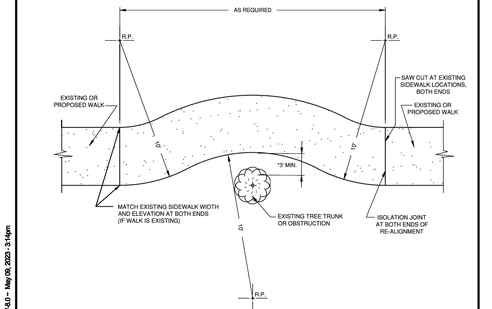
NO.	DATE	REVISION	NO.	DATE	REVISION
10	06/20/2019	NO. 3 ADDED			
11	02/05/2020	ALLEY NOTE ADDED			
11	02/10/2020	ADA RAMP NOTE ADDED			
11	02/21/2020	WALK DETAIL REV.			
13	04/26/2022	CROSS SLOPE REV.			
14	04/20/2023	NOTE 1 & ALLEY DEPTH			

City of Lorain
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STANDARD DESIGNS
PAVEMENT
SIDEWALK DETAIL

DATA FILE: PV-7.0.dwg | DRAWN BY: EA | APPROV BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: PV-7.0

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NOTES:

1. "OFFSET SHALL BE 3' MIN. FOR TREES, 1'-6" FOR OTHER OBSTRUCTIONS.
2. PROVIDE 1/4" SAW JOINTS AT APPROXIMATELY 5' SPACING, AND A MINIMUM OF 4' SPACING.
3. PROVIDE 1/4" EXPANSION JOINT WITH FILLER AT ALL ISOLATION JOINTS.

R.P. = RADIUS POINT

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NO.	DATE	REVISION	NO.	DATE	REVISION
13	04/26/2022	NOTE #2, MIN. SPACING			

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
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STANDARD DESIGNS
PAVEMENT
SIDEWALK REALIGNMENT DETAIL

DATA FILE: PV-8.0.dwg | DRAWN BY: EA | APPROV BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: PV-8.0

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3/7/2025 5:34 PM Pawar, Sayali

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

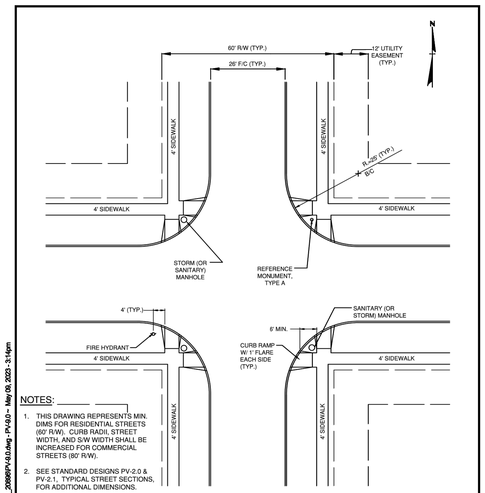
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DRAWN BY	BTC
CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

DETAILS (PAVEMENT)

DRAWING NO.

D7



NOTES:

1. THIS DRAWING REPRESENTS MIN. DIMS FOR RESIDENTIAL STREETS (60' R/W). CURB RADII, STREET WIDTH, AND S/W WIDTH SHALL BE INCREASED FOR COMMERCIAL STREETS (80' R/W).
2. SEE STANDARD DESIGNS PV-2.0 & PV-2.1, TYPICAL STREET SECTIONS, FOR ADDITIONAL DIMENSIONS.
3. SEE ODOT SCD BP-7.1 FOR CURB RAMP DETAILS.

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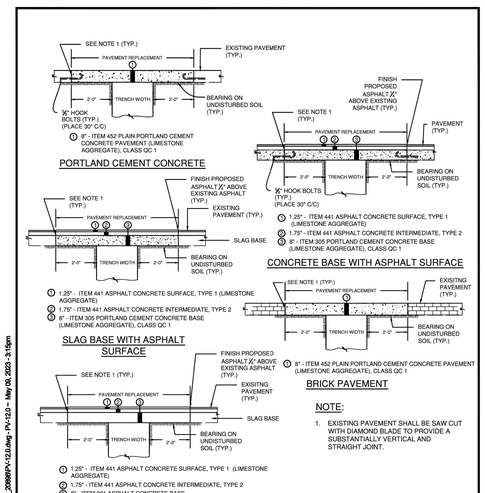
NO.	DATE	REVISION	NO.	DATE	REVISION

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
PAVEMENT INTERSECTION DETAIL

DWG FILE: PV-9.0.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: PV-9.0

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NOTE:

1. EXISTING PAVEMENT SHALL BE SAW CUT WITH DIAMOND BLADE TO PROVIDE A SUBSTANTIALLY VERTICAL AND STRAIGHT JOINT.

NOTE 1 THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.
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NO.	DATE	REVISION	NO.	DATE	REVISION
7	01/01/2018				
9	01/01/2019				

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
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STANDARD DESIGNS
PAVEMENT REPLACEMENT DETAIL

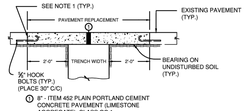
DWG FILE: PV-12.0.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: PV-12.0

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TYPICAL PAVEMENT REPLACEMENT DETAILS

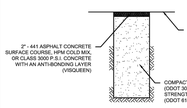
REPLACEMENT NOTES:

1. THE EXISTING PAVEMENT SHALL BE DIAMOND BLADE SAW CUT AT A DISTANCE OF 2' TO PROVIDE A SUBSTANTIALLY VERTICAL AND STRAIGHT JOINT BETWEEN THE EXISTING AND REPLACEMENT PAVEMENT.
2. ALL PAVEMENT AND SIDEWALK REPLACEMENT DETAILS SHOWN REPRESENT THE MINIMUM ACCEPTABLE REPAIR. IF EXISTING SURFACES EXCEED THESE DETAILS, THEN REPAIRED SURFACES SHALL MATCH THE EXISTING.
3. ALL EDGES OF PATCHED AREAS TO BE SEALED USING ITEM 451.16/705.04.
4. ALL CURB REPLACEMENT TO BE INCLUDED W/ PAVEMENT REPLACEMENT.
5. HOOK BOLTS SHALL BE EPOXY COATED.
6. THE EXISTING LONGITUDINAL AND TRANSVERSE JOINTS SHALL DETERMINE THE AREA OF PAVEMENT REPLACEMENT REQUIRED. WHENEVER A PROPOSED SAW CUT IS DISTANT LESS THEN FIVE (5) FT. FROM A LONGITUDINAL AND/OR A TRANSVERSE JOINT, THE PAVEMENT SHALL BE REPLACED TO THE EXISTING JOINT AND LIMITS OF ALL DESIGNATED BY THE ENGINEER IN THE FIELD.
7. ALL CONCRETE FOR STREETS AND CURBS SHALL BE ODOT CLASS QC1P.



REPLACEMENT DETAIL

TEMPORARY PAVEMENT DETAIL



TEMPORARY REPLACEMENT NOTES:

1. TEMPORARY PAVEMENT SHALL BE INSTALLED WHENEVER THE PERMANENT PAVEMENT WILL NOT BE INSTALLED WITHIN 14 DAYS OF PAVEMENT REMOVAL.
2. TEMPORARY PAVEMENT PATCHES SHALL BE MAINTAINED IN A DRIVABLE CONDITION.
3. TEMPORARY PAVEMENT PATCHES SHALL BE REPLACED WITH PERMANENT PAVEMENT RESTORATION AS SOON AS POSSIBLE.
4. TEMPORARY CONCRETE SHALL USE NO. 8 STONE.

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NO.	DATE	REVISION	NO.	DATE	REVISION
7	01/01/2018				
10	06/20/2019	NO. 7 CHANGED			
11	02/06/2020	REPL. DETAIL CHANGED			
11	02/06/2020	REPL. NOTE NO. 1 REV.			

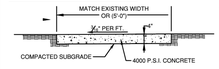
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
PAVEMENT REPLACEMENT DETAIL

DWG FILE: PV-12.1.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: PV-12.1

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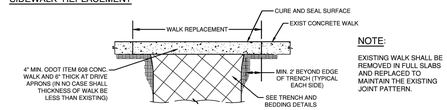
TYPICAL SIDEWALK DETAIL



NOTE:

WALK TO BE DIVIDED INTO EQUALLY SPACED BLOCKS AT APPROXIMATELY 5' INTERVALS. EXPANSION JOINT FILLER ½" THICK SHALL BE INSTALLED BETWEEN WALK AND ANY FIXED STRUCTURE EXTENDING FOR THE FULL DEPTH OF THE SIDEWALK. THE EXPANSION JOINT FILLER SHALL BE 1" THICK WHERE WALK IS INSTALLED AGAINST BACK OF CURB. SEE PV-7.

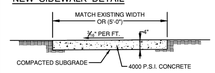
SIDEWALK REPLACEMENT



NOTE:

EXISTING WALK SHALL BE REMOVED IN FULL SLABS AND REPLACED TO MAINTAIN THE EXISTING JOINT PATTERN.

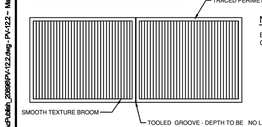
NEW SIDEWALK DETAIL



NOTE:

TOOL CONTROL JOINTS @ 5'-0" O.C.SURFACE FINISH WILL BE A SMOOTH TEXTURE BROOM PERPENDICULAR TO WALK FLOW WITH RE-TRACED PERIMITER USING AN APPROVED EDGING TOOL WITH A RADIUS OF ONE-QUARTER INCH AND INTERIOR JOINTS USING AN APPROVED GROOVING TOOL TO A DEPTH OF NOT LESS THAN ONE-QUARTER THE THICKNESS OF THE SLAB. REFER TO ODOT 608.03 C. PLACING AND FINISHING FOR WALKS, CURB RAMPS, STEPS AND APRONS.

NEW SIDEWALK FINISHING DETAIL



NOTE:

BROOM AND TOOL FINISHING FOR WALKS, CURB RAMPS, STEPS AND APRONS.

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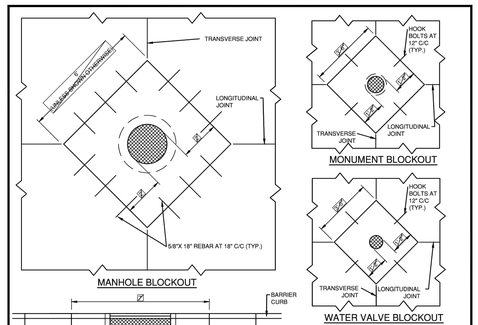
NO.	DATE	REVISION	NO.	DATE	REVISION
9	01/01/2019				
11	02/06/2020	NEW WALK DETAIL REV.			
11	02/21/2020	NEW WALK NOTE REV.			
11	09/24/2020	NEW FINISHING DETAIL			
13	04/26/2022	CROSS SLOPE REV.			

City of Lorain
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STANDARD DESIGNS
SIDEWALK FINISHING DETAIL

DWG FILE: PV-12.2.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: PV-12.2

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NOTES:

1. THE FOLLOWING CASTINGS ARE RECOMMENDED FOR USE: EJIW MANHOLE 1715, EJIW CATCH BASIN 7035 WITH M2 GRATE AND T1 BACK, EJIW MONUMENT BOX 1578, EJIW WATER VALVE 8560 OR APPROVED EQUALS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INVENTORY AND CONFIRM THE NUMBER AND TYPES OF CASTINGS REQUIRED BEFORE ORDERING.
2. BLOCKOUTS FOR STRUCTURES OCCURRING IN CONCRETE PAVEMENT SHALL BE INCLUDED FOR PAYMENT WITH CONCRETE PAVEMENT. WHEN BLOCKOUT IS ADJACENT TO ASPHALT CONCRETE PAVEMENT, OMIT THE DOWELS AND THE COST SHALL BE INCLUDED WITH STRUCTURE ADJUSTMENT OR RECONSTRUCTION.
3. MIX DESIGN QC MS SHALL BE USED FOR PLACEMENT OF BLOCKOUTS.
4. MONUMENT AND WATER VALVE BLOCKOUTS SHALL INCLUDE HOOK BOLTS TWELVE (12) INCHES ON CENTER FOR EACH SIDE OF THE BLOCKOUT.
5. CONCRETE BLOCKOUTS SHALL BE PLACED AT FINISH GRADE OF THE ROADWAY SURFACE.
6. PATCH SHALL BE EDGED TO A ½" RADIUS, PRIOR TO FINISHING TO MATCH EXISTING PAVEMENT.

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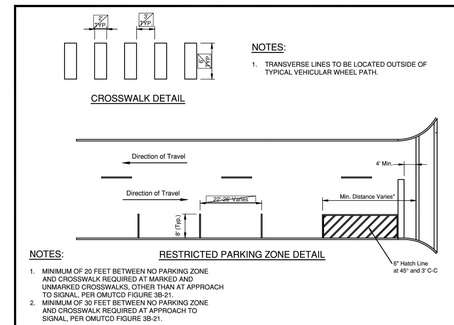
NO.	DATE	REVISION	NO.	DATE	REVISION
9	01/01/2019				
13	04/26/2022	REM. OF EXP. MATERIAL			

City of Lorain
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STANDARD DESIGNS
PAVEMENT BLOCKOUT DETAILS

DWG FILE: PV-13.0.dwg | DRAWN BY: EA | APPROVED BY: DV | ISSUE DATE: 08/19/2015 | SCALE: NONE | SHEET: PV-13.0

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NOTES:

1. WIDTHS OF BIKE LANE AND BUFFER LANE MAY VARY. REFER TO PLAN DRAWINGS.
2. OMIT 6" HATCH LINE WHERE BIKE BUFFER IS LESS THAN 3' WIDE

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NOTE 2 BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBERS AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.

NO.	DATE	REVISION	NO.	DATE	REVISION

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
PAVEMENT PAVEMENT MARKING DETAILS

DWG FILE: PV-14.0.dwg | DRAWN BY: AP | APPROVED BY: VAN | ISSUE DATE: 04/05/2022 | SCALE: NONE | SHEET: PV-14.0

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3/7/2025 5:35 PM Pawar, Sayali

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CITY OF LORAIN
200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

STATE OF OHIO
KEVIN D. CODIN
64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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OSBORN PROJ NO.	J20221302.000

DETAILS (PAVEMENT)

DRAWING NO.

D8

STORM SEWER

1. STORM PIPE: THE MINIMUM SIZE STORM SEWER PIPE SHALL BE 12" DIAMETER. ALL STORM SEWER SHALL BE PLACED PER THE TYPICAL DETAILS. WHERE STORM AND SANITARY SEWERS CROSS, ALIGN JOINTS EQUIDISTANT FROM THE CROSS AND EXTEND PREMIUM, GASKETED JOINTS 10' IN EACH DIRECTION.
2. STORM PIPE MATERIAL: 12" AND 15" PIPE SHALL CONFORM TO ODOT 611. MATERIAL SPECS AS FOLLOWS: REINFORCED CONCRETE PIPE - ODOT 706.02, ASTM C14-2, W/ GASKETED JOINTS PER ASTM C361 OR C443. 18" AND LARGER PIPE SHALL CONFORM TO CDOT 611, MATERIAL SPECS AS FOLLOWS: REINFORCED CONCRETE SEWER PIPE - ODOT 706.02, ASTM C76, CLASS 3, 4 OR 5 BASED ON LOADING CONDITIONS, WITH GASKETED JOINTS PER ASTM C361 OR C443. COVER OVER STORM PIPES SHALL BE PER ODOT L&D VOLUME 2 SECTION 1104.2.
3. MANHOLE PIPE CONNECTIONS: STORM SEWER PIPE CONNECTIONS TO MANHOLES SHALL BE MADE WITH CLASS C CONCRETE COLLAR SEALS, A MIN. 6" THICK AROUND THE PIPE.
4. DRIVE PIPE: RCP UNDER DRIVES AT UNIMPROVED ROADS. MINIMUM 12" DIAMETER PIPE, OR AS APPROVED BY THE CITY ENGINEER. MINIMUM 12" COVER, OR AS APPROVED BY THE CITY ENGINEER.
5. HEADWALLS: POURED IN PLACE, REINFORCED CONCRETE OR PRECAST CONCRETE, PER ODOT SCD HW-2.2 OR HW-1.1 AND ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS, ITEM 602.
6. ROCK CHANNEL PROTECTION: TYPE A, B, OR C ROCK OR STONE, WITH FILTER FABRIC, PER ODOT CONSTRUCTION & MATERIAL SPECS ITEM 601; OF THE SIZE, THICKNESS AND LENGTH AS SPECIFIED IN FIGURE 1107-1 "ROCK CHANNEL PROTECTION AT CULVERT AND STORM SEWER OUTLETS", CDOT LOCATION AND DESIGN MANUAL VOL. 2 - DRAINAGE DESIGN. ROCK CHANNEL PROTECTION SHALL BE INSTALLED IMMEDIATELY AFTER THE INSTALLATION OF THE PERTINENT STORM STRUCTURE OR HEADWALL.
7. ITEM 611 - PIPE CULVERTS, SEWERS, DRAINS, AND DRAINAGE STRUCTURES - THE FOLLOWING SECTIONS SHALL BE EXCLUDED:
   - 611.04.B - INSTALLATION PLAN
   - 611.04.C - CONSTRUCTION INSPECTION FORMS
   - 611.04.D - PERFORMANCE REPORT
   - 611.12 - PERFORMANCE INSPECTION
   - 611.13 - CONDUIT EVALUATION
   - 611.14 - DRAINAGE STRUCTURE EVALUATION
8. REFER TO GN 2.1 - GENERAL NOTE #25 FOR ADDITIONAL BACKFILL GUIDANCE.
9. CATCH BASIN ADJUST/RECONSTRUCT - ANY PIPE REQUIRING REPLACEMENT DURING ADJUSTMENT OR RECONSTRUCT OF CATCH BASIN SHALL BE INCLUDED IN ITEM COST.

NOTE:

LIFT HOLES IN REINFORCED CONCRETE PIPE SHALL BE PLUGGED WITH CEMENT/CONCRETE PLUGS PRIOR TO BACKFILL.

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NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBERS AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.

NO.	DATE	REVISION	NO.	DATE	REVISION
1	10/27/2015				
7	01/01/2018				
10	06/30/2019	NO. 2 CHANGED			
11	02/07/2020	NO. 9 ADDED			

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
STORM SEWER
GENERAL NOTES

CAD FILE: ST-1.0.dwg | DRWN BY: EA | APPRVD BY: DV | ISSUE DATE: 06/19/2015 | SCALE: NONE | SHEET: ST-1.0

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A. CONSTRUCTION:

1. MANHOLES SHALL BE IN ACCORDANCE WITH ODOT SCD MH-1.1, MH-1.2, MH-1.3 OR MH-3.1 AND SHALL BE INCLUDED FOR PAYMENT WITH ITEM 611.
2. ALL NEW MANHOLES SHALL BE 48" MINIMUM INSIDE DIAMETER, PRE-CAST CONCRETE CONFORMING TO ASTM C478. PRE-CAST BASES SHALL BE 6" MINIMUM.
3. NEW MANHOLES PLACED OVER EXISTING SEWER LINES, REFERRED TO AS DOGHOUSE MANHOLES, SHALL HAVE CAST-IN-PLACE CONCRETE BASES WITH REINFORCEMENT; REBAR #4@12" O/C EACH WAY. BASES SHALL BE CLASS QC1 CONCRETE WITH A MINIMUM THICKNESS OF 10".
4. MANHOLES WITH PRE-CAST CONCRETE BASES SHALL BE PLACED ON A COMPACTED GRAVEL BED OF NO. 57 AGGREGATE, HAVING A MINIMUM THICKNESS OF 3".
5. RUBBER O-RING GASKETS SHALL BE USED BETWEEN PRE-CAST MANHOLE SECTIONS, MEETING ASTM C443. APPLY MASTIC TAR STRIP BETWEEN SECTIONS.
6. THE CENTERLINE OF THE MANHOLE SHALL BE LOCATED OVER THE CENTERLINE OF THE MAIN SEWER, WHENEVER POSSIBLE.
7. MANHOLE STEPS MAY BE REINFORCED POLYPROPYLENE PLASTIC, 16" O/C MAXIMUM AND IN PROPER ALIGNMENT.
8. THE FRAMES SHALL BE SET EVEN AND FLUSH WITH THE INTERIOR WALLS OF THE MANHOLE.
9. GRADE ADJUSTMENT RINGS SHALL BE PRE-CAST CONCRETE ONLY AND CONFORMING TO ASTM C478 GRADE RINGS. A MAXIMUM 12" OF ADJUSTMENT RINGS MAY BE USED FOR CONCRETE STRUCTURES. ONLY MASONRY CLAY-SOLID BRICK (ASTM C-32, GRADE S.S.) SHALL BE USED FOR EXISTING STRUCTURE ADJUSTMENTS.

B. CASTINGS:

1. APPROVED MANHOLE FRAMES AND LIDS ARE EAST JORDAN #1715 OR EQUAL. 1710Z MAY BE SUBSTITUTED; OR NEENAH R-1782.
2. FRAMES SHALL BE SET LEVEL, EXCEPT SET TO GRADE WHEN WITHIN THE PAVEMENT. LIDS SHALL BE FITTED AND FINISHED TO PROVIDE A FIRM AND EVEN SEAT IN THE FRAME.
3. FRAMES AND LIDS SHALL BE FITTED, MATCHED AND MARKED PRIOR TO DELIVERY TO THE PROJECT.
4. THE FRAME SHALL BE SET ON A MASTIC STRIP AROUND IT'S PERIMETER AND MORTARED TO THE SEAT OF THE CONCRETE STRUCTURE.
5. ANY SUBSTITUTIONS OF EQUAL QUALITY AND DIMENSIONS SHALL FIRST BE APPROVED BY THE CITY ENGINEER PRIOR TO PROCUREMENT.
6. ALL LIDS SHALL BE CAST WITH THE WORDS "STORM"; USE CITY OF LORAIN MANHOLE COVERS.
7. ALL CASTINGS AND LIDS SHALL MEET OR EXCEED ODOT H20 LOADING AND AASHTO M306 REQUIREMENTS.

C. PAYMENT:

1. PAYMENT SHALL BE FOR THE MANHOLE COMPLETE IN PLACE, EXCAVATION AND BACKFILL INCLUDED.

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NO.	DATE	REVISION	NO.	DATE	REVISION
9	01/01/2019				
11	02/10/2020	CASTINGS NO. 1 & 6 REV.			
11	02/10/2020	CAST. OLD NO. 7 REM.			

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
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STANDARD DESIGNS
STORM SEWER
GENERAL NOTES-MANHOLES

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A. CONSTRUCTION:

1. CATCH BASINS SHALL BE IN ACCORDANCE WITH ODOT SCD CB-2-2A, CB-2-2B, OR CB-2-2C.
2. INLETS AND CATCH BASINS MAY BE CAST-IN-PLACE OR PRE-CAST CONCRETE. CAST-IN-PLACE CONCRETE SHALL BE CLASS QC1. REINFORCED PRE-CAST CONCRETE SHALL BE AS SPECIFIED.
3. MINIMUM WALL THICKNESS OF CAST-IN-PLACE INLETS AND BASINS SHALL BE 8". MINIMUM WALL THICKNESS OF PRE-CAST INLETS AND BASINS SHALL BE 6".
4. MINIMUM THICKNESS FOR BASES OF INLETS AND BASINS SHALL BE 6", CAST-IN-PLACE AND PRE-CAST.
5. CATCH BASINS & INLETS WITH PRE-CAST CONCRETE BASES SHALL BE PLACED ON A COMPACTED GRAVEL BED OF NO. 57 AGGREGATE, HAVING A MINIMUM THICKNESS OF 3".
6. CONCRETE BLOCK IS NOT PERMITTED MATERIALS FOR THE CONSTRUCTION OR MODIFICATION OF INLETS AND CATCH BASINS; ONLY MASONRY CLAY-SOLID BRICK (ASTM C-32, GRADE S. S.) SHALL BE USED.
7. FRAMES SHALL BE SET EVEN AND FLUSH WITH THE INTERIOR WALLS OF THE INLETS AND BASINS.
8. DOUBLE INLETS SHALL BE LOCATED AT ALL SAG VERTICAL CURVES. UNDERDRAINS SHALL DRAIN TO THE SIDES, SOLID PIPE SHALL BE PROVIDED A MINIMUM OF 10' FROM THE WALLS, OR AS DIRECTED BY THE CITY ENGINEER.
9. INVERTS SHALL BE FORMED IN ALL INLET AND BASIN STRUCTURES TO PROVIDE POSITIVE FLOW. USE CLASS QC1 CONCRETE TO FORM INVERTS.
10. ALL PIPING THROUGH CATCH BASIN WALLS SHALL BE SEALED WITH A CLASS QC1 CONCRETE COLLAR A MIN. OF 6" THICK.

B. CASTINGS:

1. APPROVED FRAMES/GRATES FOR BASINS AND INLETS ARE SHOWN BELOW:

STRUCTURE TYPE	NEENAH		EJ		
	FRAME	GRATE	FRAME	GRATE	BACK
SINGLE CURB INLET (MOD. NO. 3A CB)	R-3246-CL	C	7035	M2	T1-BARRIER CURB T2-ROLL CURB OR DRIVE APRON
DOUBLE CURB INLET (MOD. NO. 3 CB)			7036	M2	T1-BARRIER CURB T2-ROLL CURB OR DRIVE APRON
SINGLE CURB INLET (< 3'X2')	R-3030	A	7010 7020	M1 M2	T1-BARRIER CURB T4-ROLL CURB

NOTE: 7010 ALTERNATE IS 7020, M2, T1-BARRIER

2. ALL GRATES WITHIN THE PAVEMENT SHALL BE BICYCLE-SAFE AND SET CORRECTLY WITH THE DIRECTION OF WATER FLOW.
3. THE FRAME AND GRATE SHALL BE FITTED AND FINISHED TO PROVIDE A FIRM AND EVEN SEAT IN THE FRAME.
4. BASINS AND INLETS SHALL BE PLACED TRUE TO LINE AND GRADE, PER PLAN.
5. THE FRAMES AND GRATES SHALL BE FITTED, MATCHED AND MARKED PRIOR TO DELIVERY TO THE PROJECT.
6. ANY SUBSTITUTIONS OF EQUAL QUALITY AND DIMENSIONS SHALL FIRST BE APPROVED BY THE CITY ENGINEER PRIOR TO PROCUREMENT.
7. ALL FRAMES AND GRATES SHALL MEET OR EXCEED AASHTO M306.
8. ALL CASTINGS SHALL HAVE THE WORDS "DUMP NO WASTE" AND "DRAINS TO WATERWAY" ALONG WITH A FISH LOGO CAST INTO THE GRATE AND/OR CURB BOX.

C. PAYMENT:

1. THE PAVEMENT BLOCK-OUT SHALL BE PLACED AFTER THE CASTING HAS BEEN SET, BUT WILL BE PAID FOR AS THOUGH PART OF THE CONCRETE PAVEMENT.
2. NO DEDUCTION SHALL BE MADE IN QUANTITIES OF PAVEMENT BECAUSE OF THE CASTING.

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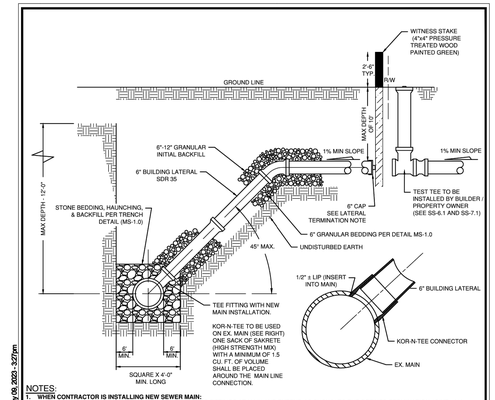
NO.	DATE	REVISION	NO.	DATE	REVISION
11	02/07/2020	CONST. NO. 6 REV.			
11	02/07/2020	CASTINGS CHART REV.			
11	02/07/2020	CASTINGS NO. 7 REV.			
13	01/21/2022	CONST. NO. 1 REV.			

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
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STANDARD DESIGNS
STORM SEWER
GENERAL NOTES-CATCH BASINS & INLETS

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NOTES:

1. **WHEN CONTRACTOR IS INSTALLING NEW SEWER MAIN:**
   - 1.1. ALL LATERALS SHALL BE INSTALLED WITH IN-LINE TEE FITTINGS AT MAIN AND EXTEND AS SHOWN TO THE DEFINED TERMINATION JOINT. ALL LATERALS NOTED ON PLANS SHALL BE PRESSURE TESTED WITH MAIN AND MARKED WITH WITNESS STAKE AS SHOWN.
   - 1.2. LATERAL INSTALLATION SHALL BE INSPECTED BY AN AUTHORIZED CITY OF LORAIN INSPECTOR.
   - 1.3. THE TEST PLUG SHALL BE YELLOW IN COLOR AND JOINED BY MEANS OF AN INTEGRAL BELL WITH A ELASTOMERIC GASKET JOINT AND BE APPROVED BY THE ENGINEER.
   - 1.4. A PIECE OF FERROUS MATERIAL HAVING A VOLUME OF 1.5 CUBIC INCHES SHALL BE PLACE OVER THE TOP OF THE TEST PLUG AND BACKFILLED WITH 6" TO 12" OF TOPSOIL. ANY TEST PLUG LOCATED IN A PAVED AREA SHALL BE APPROVED BY THE CITY ENGINEER BEFORE CONSTRUCTION IS TO BEGIN.
2. **WHEN LATERALS ARE INSTALLED ON EXISTING SEWERS:**
   - 2.1. NO WORK MAY BE PERFORMED PRIOR TO ISSUANCE OF SEWER SERVICE PERMIT BY ENGINEERING DEPARTMENT.
   - 2.2. ALL WORK IS TO BE INSPECTED AS PER CODIFIED ORDINANCE 913.036 SEWER CONNECTION INSPECTION. INSPECTIONS CAN BE SCHEDULED WITH ENGINEERING DEPARTMENT (440-204-2003).
   - 2.3. HOLES IN EXISTING MAINS FOR INSTALLATION OF KOR-N-TEE CONNECTOR SHALL BE CORE DRILLED USING HOLESAWS OR CORING MACHINES TO ENSURE A CLEAN, ROUND, SMOOTH HOLE.
   - 2.4. CONTRACTOR WILL INSTALL LATERAL AND TEST TEE, AND SERVICE INTO HOME/BUILDING. NO WITNESS STAKE IS REQUIRED.
3. THE TEST TEE RISER SECTION SHALL BE INSTALLED WHEN THE CONNECTION IS EXTENDED TO THE HOME OR BUILDING.

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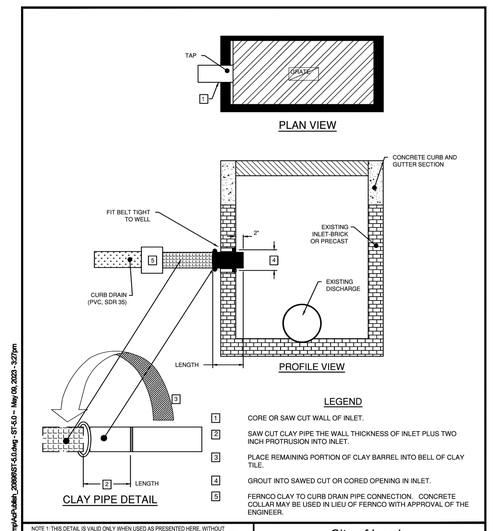
NO.	DATE	REVISION	NO.	DATE	REVISION
1	2/5/2021	EXT OF TERMINATION LOCATION			
13	7/5/2022	CLARIFICATION OF ORDINANCE IN NOTE 2.2			

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
STORM SEWER
STANDARD LATERAL CONNECTION

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NO.	DATE	REVISION	NO.	DATE	REVISION

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
STORM SEWER
INLET TAP

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3/7/2025 5:35 PM Pawar, Sayali

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
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DETAILS (STORM SEWER)

DRAWING NO.

D9

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GENERAL - MATERIAL

NOTE: ALL MATERIALS SHALL BE "LEAD FREE" PER SAFE DRINKING WATER ACT.

1. MAIN LINES: PVC PLASTIC, AWWA C909, PRESSURE CLASS 235. RUBBER GASKETED JOINTS, AWWA C111. 6" MINIMUM DIAMETER FOR DISTRIBUTION LINE.
2. FITTINGS: DUCTILE IRON, CEMENT LINED, FULL OR COMPACT BODY, MECHANICAL JOINT, AWWA C110 OR C153 WITH 316 STAINLESS STEEL BOLTS. ALL FITTINGS SHALL BE POLYETHYLENE ENCASED, AWWA C105.
3. THRUST RESTRAINT: MECH. JOINTS W/ EBAA IRON SERIES 19MJ AND PIPE JOINTS WITH EBAA IRON SERIES 1900 RESTRAINERS (STAINLESS STEEL BOLTS).
4. TAPPING SLEEVE SHALL BE SMITH-BLAIR STYLE 665 (STAINLESS STEEL) OR MUELLER H-304L (STAINLESS STEEL WITH STAINLESS STEEL FLANGE AND MJ OUTLET FOR STANDARD GATE VALVE). ALL TAPS SHALL BE MADE BY THE CONTRACTOR UNDER THE SUPERVISION OF AUTHORIZED CITY PERSONNEL, AND IN ACCORDANCE WITH CITY STANDARDS.
5. BACKFILL: 4'-6" MINIMUM COVER ON MAIN LINE. REFER TO GN 2.1 - GENERAL NOTE #25 FOR ADDITIONAL BACKFILL GUIDANCE.
6. MAIN LINE VALVES: MUELLER A-2360 WITH 316 STAINLESS STEEL FASTENERS, OPEN LEFT, RESILIENT WEDGE, MECHANICAL JOINT. MAIN LINE OFFSETS LOCATED AT 7' OR GREATER DEPTH SHALL HAVE VALVES LOCATED ON EITHER SIDE OF OFFSET; VALVE EXTENSIONS SHALL BE UTILIZED SO THAT VALVE KEY REQUIRED FOR O&M IS MAXIMUM 5'. ALSO, NO TAPS MAY BE MADE BETWEEN VALVES ON AN OFFSET.
7. INSERTION VALVES: TEAM INSERT VALVE WITH STAINLESS STEEL FASTENERS. ONE CUBIC YARD OF ODOT 613 LOW STRENGTH MORTAR SHALL BE INSTALLED AROUND THE INSERTION VALVE PRIOR TO CLOSING THE VALVE. INSERTION VALVES SHALL NOT BE INSTALLED WITHIN 6 FEET OF AN EXISTING JOINT.
8. TEMPORARY LINESTOPS: DUCTILE IRON OR STAINLESS STEEL TAPPING SLEEVES WITH STAINLESS STEEL FASTENERS WITH SHUT OFF WEDGE VALVE BY HYDROSTOP, EZ VALVE OR APPROVED EQUAL. ONE CUBIC YARD OF ODOT 613 LOW STRENGTH MORTAR SHALL BE INSTALLED AROUND THE LINE STOP PRIOR TO CLOSING THE VALVE. LINESTOPS SHALL NOT BE INSTALLED WITHIN 6 FEET OF AN EXISTING JOINT.
9. VALVE BOX: EAST JORDAN IRON WORKS 8560 SERIES THREE PIECE WITH DROP LID.
10. HYDRANTS: MUELLER SUPER CENTURION 250; A-423, 5'-0" BURY, TWO 2-1/2" NST HOSE OUTLETS AND ONE 5" STORZ OUTLET, OPEN LEFT, WITH 316 STAINLESS STEEL BOLTS. HYDRANTS SHALL BE PAINTED RED BARRELS AND WHITE DOMES.
11. COPPER SERVICE: TYPE K COPPER, 1" MINIMUM.
12. HIGH DENSITY POLYETHYLENE SERVICE: POLYFLEX TUBING (CTS) WITH 200 WITH PSI RATING AND CONFORMING TO ASTM D2737, AWWA, C901 AND NSF STANDARDS 14 AND 61. STAINLESS STEEL SLEEVES SHALL BE USED AT EACH CONNECTION POINT. TRACER WIRE SHALL BE INSTALLED CHECK CONDUCTIVITY, 2" MINIMUM.
13. CURB STOP: MUELLER H-15204 1" MINIMUM FOR COPPER OR MUELLER H-15209 2" MINIMUM FOR HDPE, OR EQUIVALENT MODEL APPROVED BY ENGINEER.
14. CURB BOX: MUELLER H-10334 CURB BOX, 60"; 89376 LID, BRASS MACHINE THREADS. MUELLER H-10336 CURB BOX FOR 1-1/2" AND 2" SERVICES, OR EQUIVALENT MODEL APPROVED BY ENGINEER.
15. CORPORATION STOP: MUELLER B-1500 WITH AWWA TAPER INLET THREADS, 1" MINIMUM, OR EQUIVALENT MODEL APPROVED BY ENGINEER.
16. COUPLING: MUELLER H-15400 UNION, STRAIGHT THREE PART, FOR COPPER OR MUELLER H-15403 FOR HDPE. SMITH-BLAIR, INC. 400 SERIES BETWEEN NEW COPPER AND EXISTING GALVANIZED WATER SERVICE.
17. BRASS PLUGS: MUELLER H-10033 1" BRASS PLUGS, WHEN NECESSARY.
18. SERVICE SADDLE: MUELLER BR-2-B SERIES WITH AWWA TAPER OUTLET THREADS.
19. TRACER TAPE: NYLON REINFORCED METALIZED FOIL CORE LAMINATED BETWEEN TWO LAYERS OF INERT PLASTIC FILM. 3" WIDE BY 5 MILS. THICK WITH WARNING MESSAGE "CAUTION WATERLINE BURIED BELOW" REPEATED EVERY 30'. REEF INDUSTRIES TERRA TAPE SENTRY LINE 1350 OR APPROVED EQUAL.
20. TRACER WIRE: COPPERHEAD STEEL CORE COPPER CLAD REINFORCED #12 AWG WITH 30 MIL. HIGH DENSITY POLYETHYLENE COATING. BLUE IN COLOR WITH APPROVED MOISTURE TIGHT SPLICE KITS.

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NO.	DATE	REVISION	NO.	DATE	REVISION
14	04/20/2023	NOTE 13, 14, 15			

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
WATERLINE
GENERAL NOTES

DATA	DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	SHEET
WT-N01.dwg	GS	DV	04/25/2022	NONE	WT-N01

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GENERAL

1. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE EXISTING MAIN AND SERVICE CONNECTIONS DURING CONSTRUCTION. ANY BREAKS IN THE MAIN OR CONNECTIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT DURING THE ENTIRE TIME THE EXISTING MAIN IS IN SERVICE.
2. THE LOCATION AND ELEVATION OF EXISTING SANITARY AND STORM SEWER TAPS ARE UNKNOWN. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS TO PROVIDE EIGHTEEN (18) INCHES OF VERTICAL CLEARANCE FOR PERPENDICULAR SANITARY SEWER CONNECTIONS AND TWELVE (12) INCHES OF CLEARANCE FOR STORM SEWER CONNECTIONS.
3. WATER LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF 4'-6" FEET BELOW EXISTING GRADE OR 4'-6" FEET BELOW LEVEL OF EDGE OF ADJACENT PAVEMENT WHICHEVER RESULTS IN THE LOWER ELEVATION.
4. A MINIMUM OF 35 PSI SHALL BE MAINTAINED TO THE CURB STOPS DURING NORMAL OPERATING CONDITIONS.
5. BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS.
6. THE CONTRACTOR SHALL PERFORM PRESSURE TEST, CHLORINATION OF LINE, CHLORINATION TESTS, AND DISINFECTION TESTS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY TEMPORARY CONNECTIONS FOR THE REQUIRED TESTING. THE CONTRACTOR SHALL PROVIDE TEMPORARY CAPS OR PLUGS ON THE PROPOSED WATERLINE AS NECESSARY FOR TESTING. PRESSURE TESTS SHALL BE UNDER THE SUPERVISION OF THE OWNER'S AUTHORIZED REPRESENTATIVE.
7. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO OPEN AND CLOSE WATER VALVES.
8. FIRE HYDRANTS THAT ARE LOCATED WITHIN 10 FEET OF A STORM OR SANITARY SEWER SHALL HAVE THE HYDRANT DRAINS PLUGGED.
9. WATERLINE PIPE AND FITTING JOINTS SHALL BE RESTRAINED IN ACCORDANCE WITH THE RESTRAINED JOINT TABLE.
10. PRIOR TO FINAL WALK-THROUGH, THE CONTRACTOR SHALL VERIFY THAT ALL GATE VALVES AND CURB STOPS ARE OPERABLE AND IN THE CORRECT OPEN OR CLOSED POSITION BY PHYSICALLY CHECKING ALL VALVES IN THE PRESENCE OF THE ENGINEER'S REPRESENTATIVE WITH A VALVE WRENCH.
11. ALL WATERLINES TO BE ABANDONED IN PLACE SHALL BE PLUGGED AND FILLED.
12. WATERLINES SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 18 INCHES AND 10 FEET HORIZONTAL SEPARATION FROM ANY SANITARY SEWER OR STORM SEWER.
13. THE CONTRACTOR SHALL REMOVE ALL ABANDONED CASTINGS FOR MANHOLES, METERS AND VALVES TO A MINIMUM OF ONE (1) FOOT BELOW GRADE AND FILL THE STRUCTURE WITH COMPACTED SAND OR LOW STRENGTH MORTAR (LSM). IF THE CASTING IS IN A PAVED AREA THE PAVEMENT SHALL BE REMOVED 1'-6" BEYOND THE CASTING AND REPLACED ACCORDING TO THE PAVEMENT REPLACEMENT STANDARD DETAILS.
14. THE CONTRACTOR SHALL REMOVE EXISTING HYDRANT AND HYDRANT VALVE ASSEMBLIES IN ONE PIECE, PALLETIZE AND DELIVER TO THE CITY'S WATER DISTRIBUTION STORAGE AREA FOR DISASSEMBLY BY CITY WORKERS. AFTER THE HYDRANT ASSEMBLY IS REMOVED THE REMAINING LINE TO THE MAIN SHALL BE PLUGGED.
15. CONTRACTOR SHALL PERFORM THE CONSTRUCTION USING THE FOLLOWING SEQUENCE OF CONSTRUCTION FOR EACH PROJECT AREA:
    15.1. INSTALL PROPOSED WATERLINES, VALVES, HYDRANTS, SERVICE TAP ASSEMBLIES, CURB STOPS AND WATER SERVICE PIPE.
    15.2. PRESSURE TEST THE WATERLINE IN ACCORDANCE WITH AWWA C-600.
    15.3. DISINFECT THE WATERLINE IN ACCORDANCE WITH AWWA C-651.
    15.4. CHARGE THE NEWLY INSTALLED WATERLINE AND SWITCH OVER SERVICES FROM THE OLD WATERLINE TO THE NEW WATERLINE. FOR EACH SERVICE SWITCHOVER, THE SERVICE SHALL BE SWITCHED FROM A CHARGED OLD WATERLINE TO A CHARGED NEW WATERLINE.
    15.5. MAKE RECONNECTION OF THE NEW WATERLINE IN ACCORDANCE WITH AWWA C-651, SECTION 9. DISCONNECT AND ABANDON THE OLD WATERLINE.
    15.6. COMPLETE SURFACE RESTORATION.
16. WINTER FLUSHING OF WATER MAINS: THE CONTRACTOR SHALL PROVIDE MEASURES TO PREVENT WATER FLUSHED FROM WATER MAINS FROM FREEZING AND ACCUMULATING IN PAVED AREAS.

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NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBERS AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.

NO.	DATE	REVISION	NO.	DATE	REVISION
1	10/27/2015				
2	01/01/2018				

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
WATERLINE
GENERAL NOTES

DATA	DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	SHEET
WT-1.1.dwg	EA	DV	09/19/2015	NONE	WT-N02

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A. PRESSURE TESTING:

1. PRESSURE TESTING OF ALL NEW WATER MAINS SHALL BE IN ACCORDANCE WITH CURRENT AWWA C-600 STANDARDS AND REGULATIONS.
2. AFTER EXPELLING ALL TRAPPED AIR IN THE LINE, THE TEST PRESSURE SHALL BE 150 PSI OR 50% ABOVE THE NORMAL OPERATING PRESSURE, WHICHEVER IS GREATER.
3. DURATION OF THE LEAKAGE TEST SHALL NOT BE LESS THAN 2 HOURS UNDER PRESSURE. ALLOWABLE LEAKAGE SHALL NOT EXCEED 10.49 GALLONS PER INCH OF PIPE DIAMETER PER MILE OF PIPE PER 24 HOUR PERIOD.
4. THE CONTRACTOR SHALL PERFORM ALL TESTING IN THE PRESENCE OF THE CITY ENGINEER OR REPRESENTATIVE, EXCEPT FIRELINE TESTING AS NOTED ABOVE.
5. FAILURES SHALL BE FOUND AND CORRECTED AND THE TEST REPEATED UNTIL SATISFACTORY RESULTS ARE OBTAINED.

B. DISINFECTION PROCEDURES:

1. ALL NEW MAINS OR SECTIONS OF MAINS ARE REQUIRED TO HAVE 1" TAPS WITHIN 50' OF THE INFLUENT END, EVERY 500' TO 700', AND AT THE END OF THE MAIN. EACH TAP IS REQUIRED TO HAVE A BRONZE STANDARD HOSE BIBB (OR SIMILAR) FOR THE PURPOSE OF STERILIZATION AND COLLECTION OF SAMPLES. A TEST HOSE BIBB CAN BE INCORPORATED INTO A FLUSHING ASSEMBLY IF APPROVED. CHLORINE OR BACTERIA TESTING WILL NOT BE PERMITTED FROM A FIRE HYDRANT. WATER PLANT PERSONNEL WILL HAVE FINAL APPROVAL OF THE LOCATION OF ALL CHLORINE AND BACTERIA TESTING TAPS.
2. ANY NEW LINE LESS THAN 100' IN LENGTH MAY REQUIRE ONLY ONE TAP TO BE PLACED AT THE EFFLUENT END OF THE LINE WITH APPROVAL OF WATER PLANT PERSONNEL.
3. A RESIDUAL OF 25 MG/L OR GREATER OF CHLORINE MUST BE PRESENT AT THE INFLUENT, AT THE DESIGNATED TAPS, AND AT THE END OF THE MAIN OR BRANCH. THE CONTRACTOR WILL NOTIFY THE WATER PLANT PERSONNEL AT 440-204-2280 TO HAVE THE HIGH CHLORINE RESIDUAL LEVEL CHECKED.
4. AFTER 24 HOURS, WATER PLANT PERSONNEL OR THE CITY INSPECTOR WILL AGAIN CHECK THE DESIGNATED TAPS TO SEE IF THE REQUIRED 10 MG/L CHLORINE RESIDUAL IS STILL PRESENT. IF IT IS NOT PRESENT, RECHLORINATION WILL BE NECESSARY. (THE CITY INSPECTOR WILL REQUIRE THE PRESSURE TEST TO BE COMPLETED PRIOR TO THE FLUSHING OF THE CHLORINE FROM THE NEW MAIN.)
5. THE NEW MAIN CAN THEN BE FLUSHED TO BRING THE CHLORINE LEVEL BACK TO NORMAL CITY WATER. THE LEVEL WILL BE CHECKED BY WATER PLANT PERSONNEL TO SEE IF ADDITIONAL FLUSHING IS NECESSARY.
6. FLUSHING WATER WITH HIGH LEVELS OF CHLORINE SHALL BE NEUTRALIZED PRIOR TO DISCHARGE TO WATERS OF THE STATE.
7. BACTERIA SAMPLES WILL BE TAKEN AT THE EARLIEST CONVENIENT TIME BY WATER PLANT PERSONNEL, AFTER 24 HOURS ANOTHER BACTERIA SAMPLE WILL BE TAKEN FROM THE SAME LOCATION(S). THE NEW MAIN INFLUENT VALVES ARE TO REMAIN CLOSED UNTIL ALL BACTERIA TESTING RESULTS ARE ACQUIRED. IT IS REQUIRED THAT ALL BACTERIA SAMPLES BE NEGATIVE.
8. WHEN ALL OF THE ABOVE REQUIREMENTS ARE MET, THE CORPORATION STOPS MUST BE REMOVED AND BRASS PLUGS INSERTED. THE CITY INSPECTOR MUST WITNESS THIS. THE NEW MAIN WILL THEN BE ACCEPTED FOR USE.
9. ALL WATERMAIN DISINFECTION SHALL BE IN ACCORDANCE WITH AWWA C-651.

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NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBERS AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.

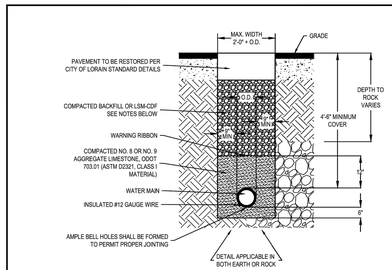
NO.	DATE	REVISION	NO.	DATE	REVISION

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
WATERLINE
GENERAL NOTES-WATERLINE TESTING

DATA	DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	SHEET
WT-N03.dwg	EA	DV	04/25/2022	NONE	WT-N03

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WATER MAIN TRENCH DETAILS

- NOT TO SCALE -

NOTES:
1. WHEN INSTALLING AWWA C-909 PVC PIPE:
   A. INSTALL A WARNING RIBBON ONE-FOOT ABOVE WATER MAIN AND CENTERED ON IT.
   B. INSTALL AN INSULATED #12 GAUGE TRACER WIRE. WIRE SHALL BE SECURED TO WATER MAIN AT 5-FOOT INTERVALS USING TAPE OR PLASTIC TIES. WIRE SHALL HAVE SUFFICIENT SLACK (APPROXIMATELY 5%) TO ALL FOR INSERTION OF FUTURE TAP SADDLES.
2. PREMIUM LIMESTONE BACKFILL GRADED PER ODOT 304.02 SHALL BE USED UNDER ALL EXISTING OR FUTURE PAVEMENTS, SIDEWALKS, DRIVES AND OUTSIDE OF PAVEMENT WITHIN THE ZONE OF INFLUENCE AS DEFINED IN MS-1.0. NO SLAG IS PERMITTED
3. LOW STRENGTH MORTAR/CONTROLLED DENSITY FILL (LSM-CDF) "FLOWABLE FILL" SHALL BE USED WHEN REQUIRED BY CITY ENGINEER
4. ALL PIPE BACKFILL AND BEDDING SHALL BE TAMPED IN SIX (6) INCH LAYERS, SIMULTANEOUSLY ON EACH SIDE OF THE PIPE, AND THOROUGHLY COMPACTED SO AS TO PROVIDE A SOLID BACKING AGAINST THE EXTERNAL SURFACE OF THE PIPE.
5. MINIMUM COMPACTION FOR ALL SAND BEDDING, BACKFILL AND PREMIUM BACKFILL SHALL BE 95% OF STANDARD PROCTOR. NO OVER-COMPACTION. CARE SHALL BE TAKEN AT PIPE JOINTS AS TO KEEP THE POINT JOINT CLEAN AND FREE FROM CONTAMINATION BY BEDDING MATERIAL.
6. CONTRACTOR SHALL USE SPECIAL CARE IN PLACING THE SAND BEDDING, SO AS TO AVOID SCRAPING THE EXTERIOR OF PIPE, DAMAGING COATING, INJURING THE PIPE, DISTORTING OR MOVING THE PIPE WHEN COMPACTING THE SAME.
7. PAVEMENT, SIDEWALK AND DRIVES REPAIRS NECESSITATED BY TRENCH ARE TO BE MADE IN ACCORDANCE WITH CITY OF LORAIN STANDARD DETAILS AND SPECIFICATIONS.
8. ALL EXCAVATION SHALL BE IN ACCORDANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS.

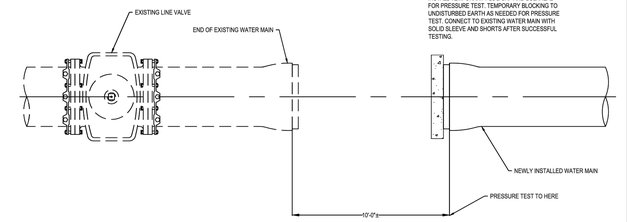
NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS
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WATER MAIN TRENCH DETAIL

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DU	GS	5/9/2022	NONE	WT-G01
REV. DATE	REV. DATE	REV. DATE	REV. DATE	

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NOTE:
PRESSURE TESTING OF WATER MAINS:
WHERE NEW/EXTENDED WATER MAINS ARE CONNECTED TO AN EXISTING WATER MAIN FOR PRESSURE TEST, RESULTING IN FAILURE OF THE PRESSURE TEST OR ANY DAMAGE TO THE EXISTING WATER MAIN , OR ITS APPURTENANCES, THE REPAIR THEREOF SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ALL REPAIRS SHALL BE DONE TO THE SATISFACTION OF THE LORAIN WATER DEPARTMENT.

ALTERNATE PRESSURE TESTING DETAIL

- NOT TO SCALE -

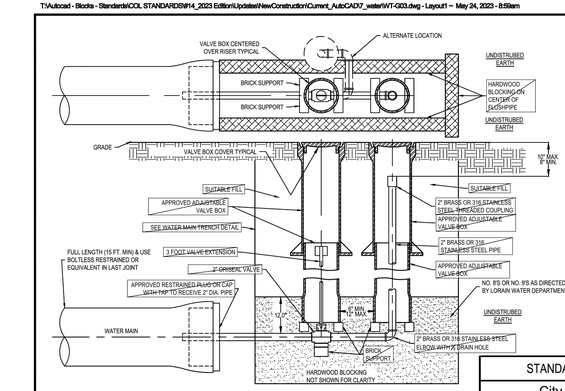
STANDARD DETAILS
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
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ALTERNATE PRESSURE TESTING DETAIL

DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	SHEET
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TYPICAL FLUSHING ASSEMBLY

- NOT TO SCALE -

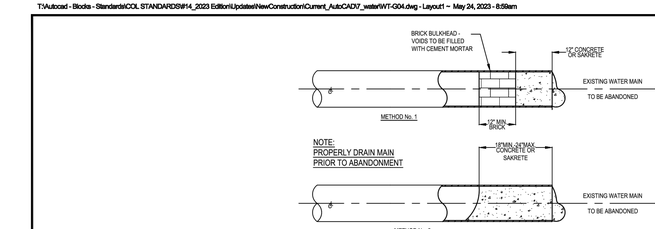
STANDARD DETAILS
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200 West Erie Avenue Lorain, Ohio 44052
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TYPICAL FLUSHING ASSEMBLY DETAIL

DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	SHEET
DU	GS	5/9/2022	NONE	WT-G03
REV. DATE	REV. DATE	REV. DATE	REV. DATE	

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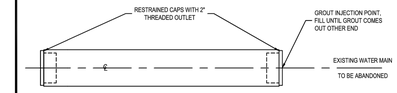
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PLUGGING ABANDONED WATER MAIN ENDS (WITHOUT GROUT)

- NOT TO SCALE -

NOTE:
PROPERLY DRAIN MAIN
PRIOR TO ABANDONMENT



PLUGGING ABANDONED WATER MAIN ENDS (WITH GROUT)

- NOT TO SCALE -

STANDARD DETAILS
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

PLUGGING ABANDONED WATER MAIN ENDS DETAIL

DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	SHEET
DU	GS	5/9/2022	NONE	WT-G04
REV. DATE	REV. DATE	REV. DATE	REV. DATE	

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SEAL OF THE CITY OF LORAIN OHIO 1834

OSBORN ENGINEERING
Ohio | Florida | Michigan | Tennessee
(216) 861-2020
www.osborn-eng.com

WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. COBIN
64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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OSBORN PROJ NO.	J20221302.000

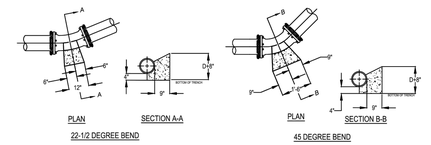
DETAILS (WATERLINE)

DRAWING NO.

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- NOT TO SCALE -
D = PIPE DIAMETER

NOTE 1: ALL DIMENSIONS SHOWN HEREON ARE MINIMUM; THRUST BLOCK SHALL BE POURED TO UNDISTURBED EARTH.

NOTE 2: ALL CONCRETE FOR THRUST BLOCKS SHALL BE CLASS QC 1 HAVING 4,000 PSI 28 DAY COMPRESSIVE STRENGTH.

NOTE 3: DO NOT COVER BOLTS WITH CONCRETE ON MECHANICAL JOINTS.

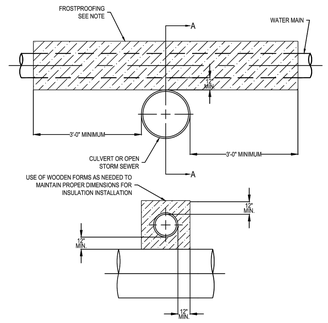
NOTE 4: USE FORMS WHEN POURING CONCRETE TO MAINTAIN SHAPE AND DIMENSIONS OF THRUST BLOCKS.

THRUST BLOCKS: 16" DIAMETER OR LESS DETAIL

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
THRUST BLOCKS: PIPE 16" DIAMETER OR LESS DETAIL				
DRAWN BY: DU (REV. DATE)	APPROV BY: GS (REV. DATE)	ISSUE DATE: 5/9/2022 (REV. DATE)	SCALE: NONE (REV. DATE)	SHEET: WT-G06

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SECTION A-A

MINIMUM ONE (1) FOOT FROSTPROOFING INSULATION ENVELOPE REQUIRED WITH WATER MAIN LAID WITH LESS THAN FOUR (4) FT. COVER; CROSSING OVER STORM SEWERS 24" AND LARGER; OR CROSSING UNDER OPEN END CULVERTS, OR OTHERWISE DIRECTED BY LORAIN WATER DEPARTMENT. IN NO CASE SHALL THE MAINS BE LAID WITH LESS THAN 3'-6" OF COVER IN UNPAVED AREAS & 3'-0" TO BOTTOM OF SLAB IN PAVED AREAS.
NOTE:
COMPACTED "WITCOLITE" INSULATION AS MANUFACTURED BY PIONEER PRODUCTS, DIVISION OF WITCO CHEMICAL COMPANY, INC. OR "GISULATE 500 XR" AS MANUFACTURED BY AMERICAN THERMAL PRODUCTS, INC.

TYPICAL FROSTPROOFING DETAIL

- NOT TO SCALE -

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City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
TYPICAL FROSTPROOFING DETAIL				
DRAWN BY: DU (REV. DATE)	APPROV BY: GS (REV. DATE)	ISSUE DATE: 5/9/2022 (REV. DATE)	SCALE: NONE (REV. DATE)	SHEET: WT-G09

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"CONNECTION SHALL BE MADE WITH RETAINED MECHANICAL JOINT SOLID SLEEVES (SHORT OR LONG PATTERN) DUCTILE IRON CLASS 350 OR CAST IRON CLASS 250 OR COMPRESSION COUPLINGS.

COMPRESSION COUPLINGS SHALL BE OF A GASKETED, SLEEVE TYPE WITH DIAMETERS TO PROPERLY FIT PLAIN END IRON PIPE. EACH COUPLING SHALL CONSIST OF ONE (1) MIDDLE RING, WITHOUT STOPS; TWO (2) FOLLOWER GLANDS; TWO (2) RUBBER-COMPOUND BUNA-N BLEND, WEDGE SECTION GASKETS; AND SUFFICIENT TRACKHEAD STAINLESS STEEL BOLTS AND NUTS (ASTM A276/A193/194, TYPE 316 EXTRA HEAVY HEX) TO PROPERLY COMPRESS THE GASKETS.

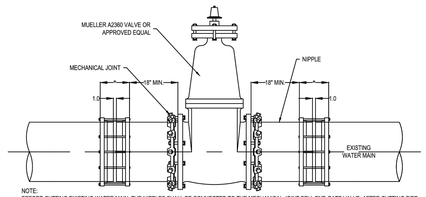
MIDDLE RING AND FOLLOWER GLANDS SHALL BE OF EITHER STEEL OR DUCTILE IRON (ASTM-A536).

THE COMPRESSION COUPLING SHALL BE WITHOUT STOPS AND BE RATED FOR A MINIMUM WORKING PRESSURE OF 250 PSI AND SHALL BE SMITH-BLAIR 421 OR 441 STRAIGHT AND TRANSITION COUPLINGS.

ALL BOLTS AND NUTS ON ALL MECHANICAL JOINTS, INCLUDING THOSE ON THE "RETAINED" TYPE, SHALL BE PROTECTED BY AN ENCASEMENT OF POLYETHYLENE WRAPPING IN ACCORDANCE WITH ANSI/AWWA C-105/A21.5-88, CLASS "C", METHOD "B".

LORAIN WATER DEPARTMENT WILL DETERMINE THE FIELD LOCATION OF THE CUT-IN-VALVE ASSEMBLY. THE LORAIN WATER DEPARTMENT WILL ALSO SET THE TIME OF INSTALLATION OF THE CUT-IN-VALVE ASSEMBLY.

THE CONTRACTOR SHALL DO ALL PIPE CUTTING AND INSTALLATION. HOWEVER, THE INSTALLATION OF THE CUT-IN-VALVE ASSEMBLY SHALL BE DONE UNDER THE SUPERVISION OF THE LORAIN WATER DEPARTMENT.



NOTE:
BEFORE CUTTING EXISTING WATER MAIN, THE NIPPLES SHALL BE CONNECTED TO THE MECHANICAL JOINT BELL END GATE VALVE. AFTER CUTTING PIPE, FINAL CONNECTIONS SHALL BE MADE WITH COUPLINGS/SOLID SLEEVES AS SPECIFIED.

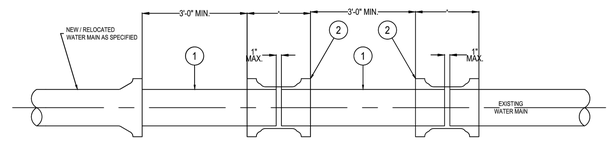
CUT-IN-VALVE DETAIL

- NOT TO SCALE -

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
CUT-IN-VALVE DETAIL				
DRAWN BY: DU (REV. DATE)	APPROV BY: GS (REV. DATE)	ISSUE DATE: 5/9/2022 (REV. DATE)	SCALE: NONE (REV. DATE)	SHEET: WT-G05

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

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SLEEVE-IN INSTALLATION DETAIL

- NOT TO SCALE -

1) PLAIN END x PLAIN END PVC PIPE AS SPECIFIED (CUT TO SUIT).

2) *CONNECTION SHALL BE MADE WITH RETAINED MECHANICAL JOINT SOLID SLEEVES (SHORT OR LONG PATTERN) DUCTILE IRON CLASS 350 OR CAST IRON CLASS 250 OR COMPRESSION COUPLINGS.

COMPRESSION COUPLINGS SHALL BE OF A GASKETED, SLEEVE TYPE WITH DIAMETERS TO PROPERLY FIT PLAIN END IRON PIPE. EACH COUPLING SHALL CONSIST OF ONE (1) MIDDLE RING, WITHOUT STOPS; TWO (2) FOLLOWER GLANDS; TWO (2) RUBBER-COMPOUND BUNA-N BLEND, WEDGE SECTION GASKETS; AND SUFFICIENT TRACKHEAD STAINLESS STEEL BOLTS AND NUTS (ASTM A276/A193/194, TYPE 316, EXTRA HEAVY HEX) TO PROPERLY COMPRESS THE GASKETS.

MIDDLE RING AND FOLLOWER GLANDS SHALL BE OF EITHER STEEL OR DUCTILE IRON (ASTM-A536).

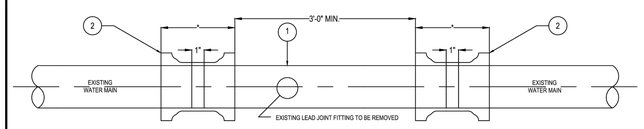
THE COMPRESSION COUPLING SHALL BE WITHOUT STOPS AND BE RATED FOR A MINIMUM WORKING PRESSURE OF 250 PSI AND SHALL BE SMITH-BLAIR 421 OR 441 STRAIGHT AND TRANSITION COUPLINGS.

3) ALL BOLTS AND NUTS ON ALL MECHANICAL JOINTS, INCLUDING THOSE ON THE "RETAINED" TYPE, SHALL BE PROTECTED BY AN ENCASEMENT OF POLYETHYLENE WRAPPING IN ACCORDANCE WITH ANSI/AWWA C-105/A21.5-88, CLASS "C", METHOD "B".

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
SLEEVE-IN INSTALLATION DETAIL				
DRAWN BY: DU (REV. DATE)	APPROV BY: GS (REV. DATE)	ISSUE DATE: 5/9/2022 (REV. DATE)	SCALE: NONE (REV. DATE)	SHEET: WT-G07

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

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SPOOL PIECE INSTALLATION DETAIL

-NOT TO SCALE-

1) PLAIN END x PLAIN END PVC C900 PIPE AS SPECIFIED (CUT TO SUIT).

2) *CONNECTION SHALL BE MADE WITH RETAINED MECHANICAL JOINT SOLID SLEEVES (SHORT OR LONG PATTERN) DUCTILE IRON CLASS 350 OR CAST IRON CLASS 250 OR COMPRESSION COUPLINGS.

COMPRESSION COUPLINGS SHALL BE OF A GASKETED, SLEEVE TYPE WITH DIAMETERS TO PROPERLY FIT PLAIN END IRON PIPE. EACH COUPLING SHALL CONSIST OF ONE (1) MIDDLE RING, WITHOUT STOPS; TWO (2) FOLLOWER GLANDS; TWO (2) RUBBER-COMPOUND BUNA-N BLEND, WEDGE SECTION GASKETS; AND SUFFICIENT TRACKHEAD STAINLESS STEEL BOLTS AND NUTS (ASTM A276/A193/194, TYPE 316, EXTRA HEAVY HEX) TO PROPERLY COMPRESS THE GASKETS.

MIDDLE RING AND FOLLOWER GLANDS SHALL BE OF EITHER STEEL OR DUCTILE IRON (ASTM-A536).

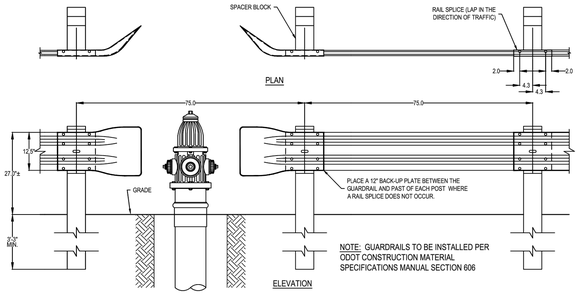
THE COMPRESSION COUPLING SHALL BE WITHOUT STOPS AND BE RATED FOR A MINIMUM WORKING PRESSURE OF 250 PSI AND SHALL BE SMITH-BLAIR 421 OR 441 STRAIGHT AND TRANSITION COUPLINGS.

3) ALL BOLTS AND NUTS ON ALL MECHANICAL JOINTS, INCLUDING THOSE ON THE "RETAINED" TYPE, SHALL BE PROTECTED BY AN ENCASEMENT OF POLYETHYLENE WRAPPING IN ACCORDANCE WITH ANSI/AWWA C-105/A21.5-88, CLASS "C", METHOD "B".

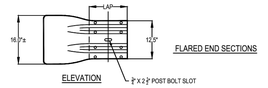
STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
SPOOL PIECE INSTALLATION DETAIL				
DRAWN BY: DU (REV. DATE)	APPROV BY: GS (REV. DATE)	ISSUE DATE: 5/9/2022 (REV. DATE)	SCALE: NONE (REV. DATE)	SHEET: WT-G08

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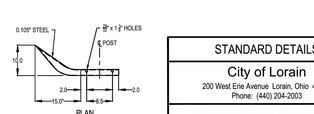
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NOTE: GUARDRAILS TO BE INSTALLED PER ODOT CONSTRUCTION MATERIAL SPECIFICATIONS MANUAL SECTION 606



FLARED END SECTIONS



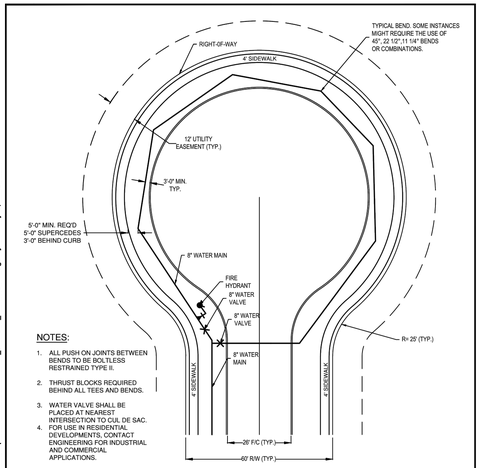
GUARDRAIL DETAILS AT HYDRANT

- NOT TO SCALE -

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
GUARDRAIL DETAILS AT HYDRANT				
DRAWN BY: DU (REV. DATE)	APPROV BY: GS (REV. DATE)	ISSUE DATE: 5/9/2022 (REV. DATE)	SCALE: NONE (REV. DATE)	SHEET: WT-G10

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NOTES:
1. ALL PUSH ON JOINTS BETWEEN BENDS TO BE BOLTLESS RESTRAINED TYPE II.
2. THRUST BLOCKS REQUIRED BEHIND ALL TEES AND BENDS.
3. WATER VALVE SHALL BE PLACED AT NEAREST INTERSECTION TO CUL DE SAC.
4. FOR USE IN RESIDENTIAL DEVELOPMENTS, CONTACT ENGINEERING FOR INDUSTRIAL AND COMMERCIAL APPLICATIONS.

STANDARD CUL-DE-SAC HYDRANT LOOP SCHEMATIC DETAIL

- NOT TO SCALE -

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
STANDARD CUL-DE-SAC HYDRANT LOOP SCHEMATIC DETAIL				
DRAWN BY: DU (REV. DATE)	APPROV BY: (REV. DATE)	ISSUE DATE: (REV. DATE)	SCALE: NONE (REV. DATE)	SHEET: WT-G11

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODY
E-84062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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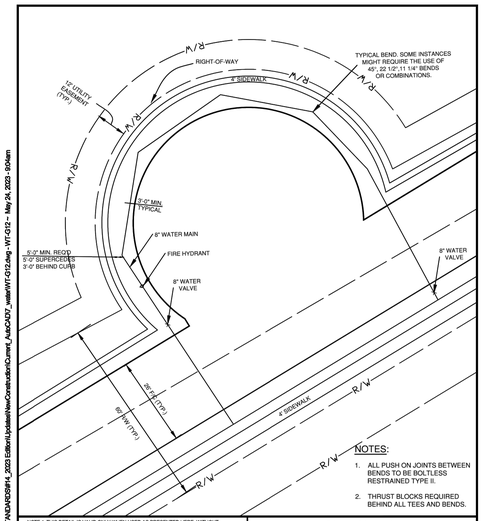
DRAWN BY	BTC
CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

DETAILS (WATERLINE)

DRAWING NO.

D11

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3/7/2025 5:36 PM Pawar, Sayali



NOTES:

1. ALL PUSH ON JOINTS BETWEEN BENDS TO BE BOLTLESS RESTRAINED TYPE II.
2. THRUST BLOCKS REQUIRED BEHIND ALL TEES AND BENDS.

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.
NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBERS AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.

NO.	DATE	REVISION	NO.	DATE	REVISION

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
WATER LINE
BUMP OUT HYDRANT/LOOP SCHEMATIC

DGN'D: WT-G12.dwg	DRWN BY: VAN	APPRD BY: DV	ISSUE DATE: 04/25/2022	SCALE: NONE	SHEET: WT-G12

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PVC AND DUCTILE IRON PIPE RESTRAINT JOINT TABLE						
	DIAMETER OF PIPE					
FITTING TYPE	4"	6"	8"	10"	12"	16"
HORIZONTAL 90°	13'	18'	24'	28'	33'	43'
HORIZONTAL 45°	6'	8'	10'	12'	14'	18'
HORIZONTAL 22½°	3'	4'	5'	6'	7'	9'
HORIZONTAL 11¼°	2'	2'	3'	3'	4'	5'
VALVE / PLUG	29'	40'	53'	64'	76'	99'
TEE	24'	35'	48'	58'	70'	92'
VERTICAL 22½°	7'	10'	13'	16'	19'	25'
VERTICAL 11¼°	4'	5'	7'	8'	10'	12'

NOTES:

1. RESTRAINED LENGTHS IN TABLE ARE MINIMUM VALUES.
2. ALL JOINTS WITHIN THE SPECIFIED LENGTH SHALL BE RESTRAINED. LENGTH OF RESTRAINT FOR TEES APPLIES TO BRANCH, ASSUMING JOINTS ON RUN ARE RESTRAINED AND CONNECTED TO A MINIMUM OF 1' OF PIPE IN EACH DIRECTION WITHOUT JOINTS.
3. VALVES AND BENDS SHALL BE RESTRAINED WITHIN THE LENGTHS INDICATED ABOVE IN BOTH DIRECTIONS.

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.
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NO.	DATE	REVISION	NO.	DATE	REVISION

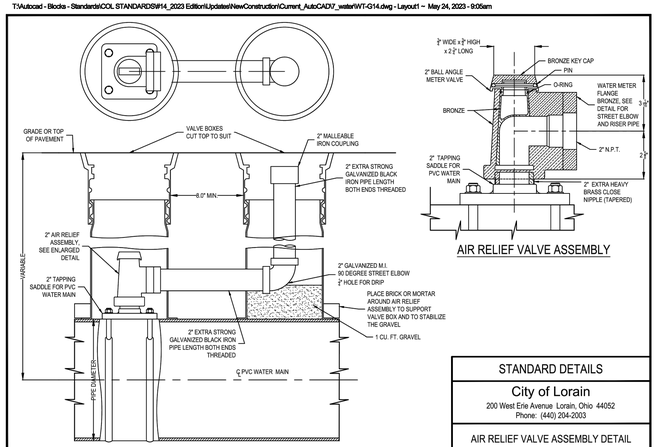
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

STANDARD DESIGNS
WATERLINE
RESTRAINED PIPE JOINT TABLE

DGN'D: WT-3.0.dwg	DRWN BY: EA	APPRD BY: DV	ISSUE DATE: 08/19/2015	SCALE: NONE	SHEET: WT-G13

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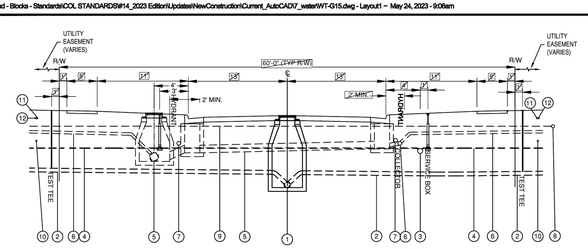


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STANDARD DETAILS
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003
AIR RELIEF VALVE ASSEMBLY DETAIL

DRWN BY: DU	APPROV BY: GS	ISSUE DATE: 4/25/22	SCALE: NONE	SHEET: WT-G14
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

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DESCRIPTION

1	SS	SANITARY SEWER (8" MIN.)	INV. 9'-0" MIN. BELOW CENTERLINE PAVEMENT
2	SS-8	SANITARY LATERAL (6" MIN. @ 1.0%)	INV. 8'-0" BELOW GRADE @ R/W LINE
3	WT	WATER MAIN (6" MIN.)	TOP 4'-6" GRADE (MIN.)
4	WT-9	WATER SERVICE LINE (1" MIN.)	TOP 4'-6" BELOW TOP OF CURB
5	ST	STORM SEWER (12" MIN.)	TOP 4'-0" BELOW TOP OF CURB
6	ST-13	STORM LATERAL (6" MIN.)	INV. 3'-0" BELOW GRADE @ R/W LINE
7	PV-4	UNDERDRAIN (4" PERF.)	INV. 2'-0" BELOW BOTTOM OF CURB
8	N/A	GAS MAIN (PER GAS CO.)	TOP 2'-6" BELOW TOP OF CURB
9	N/A	GAS SERVICE (PER GAS CO.)	TOP 2'-6" BELOW TOP OF CURB
10	N/A	ELECTRIC SERVICE CONDUIT (PER ELECTRIC CO.)	TOP 4'-0" BELOW GRADE @ R/W LINE
11	N/A	TELEPHONE CABLE (PER TELEPHONE CO.)	TOP 1'-0" BELOW GRADE @ R/W LINE
12	N/A	CABLE TV CABLE (PER CABLE CO.)	TOP 1'-0" BELOW GRADE @ R/W LINE
13	N/A	UTILITY POLE (PER UTILITY CO.)	N/A

TYPICAL DEPTH

NOTES:

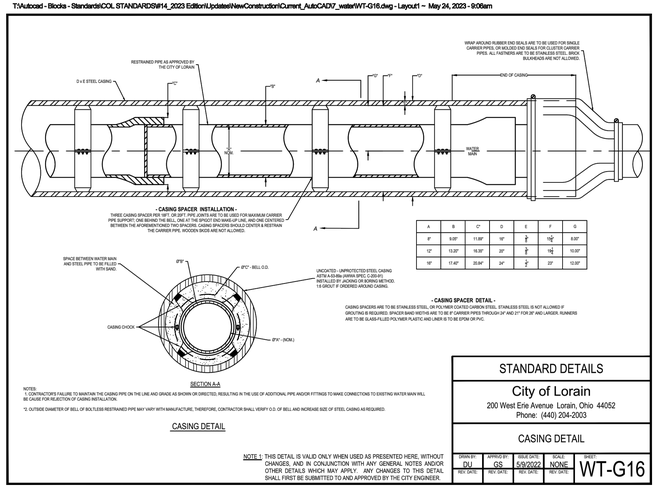
1. COMPACTION OF TRENCHES IN THE RIGHT-OF-WAY IS REQUIRED ON ALL UTILITIES. UTILITY LOCATIONS SHALL BE ADJUSTED FOR STREETS WITH ADDITIONAL RIGHT OF WAY.
2. THIS DRAWING REPRESENTS TYPICAL UTILITY LOCATIONS FOR RESIDENTIAL.

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003
ROW CROSS SECTION FOR NEW CONSTRUCTION DETAIL

DRWN BY: DU	APPROV BY: GS	ISSUE DATE: 5/9/2022	SCALE: NONE	SHEET: WT-G15
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

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A	B	C	D	E	F	G
8"	9.05"	11.95"	16"	8"	10½"	8.05"
12"	13.25"	16.35"	20"	8"	14½"	10.85"
16"	17.45"	20.84"	24"	8"	22"	12.95"

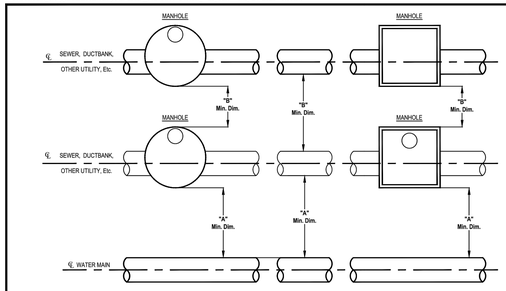
NOTES:
1. CONTRACTOR'S FAILURE TO MAINTAIN THE CASING PIPE ON THE LINE AND GRADE AS SHOWN OR DIRECTED, RESULTING IN THE USE OF ADDITIONAL PIPE AND/OR FITTINGS TO MAKE CONNECTIONS TO EXISTING WATER MAIN WILL BE CAUSE FOR REJECTION OF CASING INSTALLATION.
*D: OUTSIDE DIAMETER OF BELL OF BOLTLESS RESTRAINED PIPE MAY VARY WITH MANUFACTURE, THEREFORE, CONTRACTOR SHALL VERIFY O.D. OF BELL AND INCREASE SIZE OF STEEL CASING AS REQUIRED.

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003
CASING DETAIL

DRWN BY: DU	APPROV BY: GS	ISSUE DATE: 5/9/2022	SCALE: NONE	SHEET: WT-G16
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

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HORIZONTAL CLEARANCE	STORM SEWER	SANITARY SEWER	GAS, DUCTBANK, OTHER UTILITY, Etc.
"A"	10'-0" MIN.	10-0" MIN.	5'-0" MIN.
"B"	10'-0" MIN.	10-0" MIN.	5'-0" MIN.

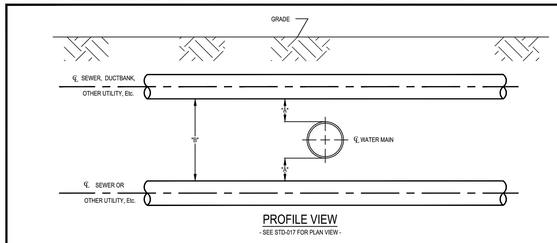
HORIZONTAL CLEARANCE FOR UTILITIES
NOT TO SCALE

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003
HORIZONTAL CLEARANCE FOR UTILITIES DETAIL

DRWN BY: DU	APPROV BY: GS	ISSUE DATE: 5/9/2022	SCALE: NONE	SHEET: WT-G17
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

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VERTICAL CLEARANCE	SANITARY SEWER LESS THAN 24"	SANITARY SEWER 24" & LARGER	STORM SEWER, DUCTBANK, GAS, OTHER UTILITY LESS THAN 24"	STORM SEWER, DUCTBANK, GAS, OTHER UTILITY 24" & LARGER	REMARKS
"A"	18" Min.	18" Min.	18" Min.	18" Min.	IF CANNOT ACHIEVE MIN. CLEARANCE WATER MAIN TO BE LOWERED
"B"	12" Min.	18" Min.	12" Min.	18" Min.	

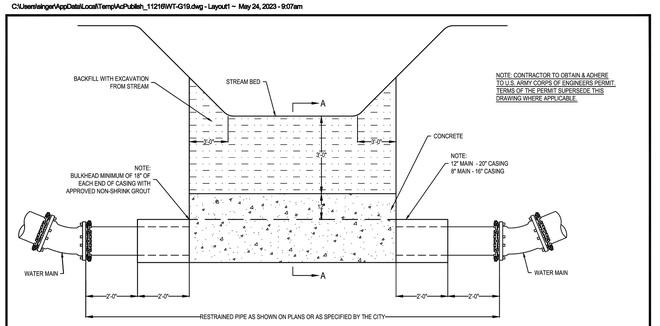
VERTICAL CLEARANCE FOR UTILITIES
NOT TO SCALE

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003
VERTICAL CLEARANCE FOR UTILITIES DETAIL

DRWN BY: DU	APPROV BY: GS	ISSUE DATE: 5/9/2022	SCALE: NONE	SHEET: WT-G18
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

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STANDARD DETAILS
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003
CROSSING LARGE DITCHES OR SMALL STREAMS PROFILE - OPEN CUT METHOD

DRWN BY: DU	APPROV BY: GS	ISSUE DATE: 5/9/2022	SCALE: NONE	SHEET: WT-G19
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

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WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
64062
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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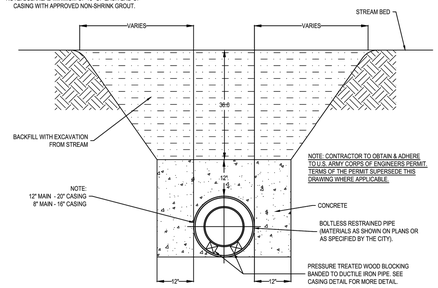
DRAWN BY	BTC
CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

DETAILS (WATERLINE)

DRAWING NO.
D12

P:\lorain - City Of\J20221302.000_water_main_repl_ph2\Drawings\Civil\J20221302.000_C 85 - WATER DETAILS.dwg
3/7/2025 5:37 PM Pawar, Sayali

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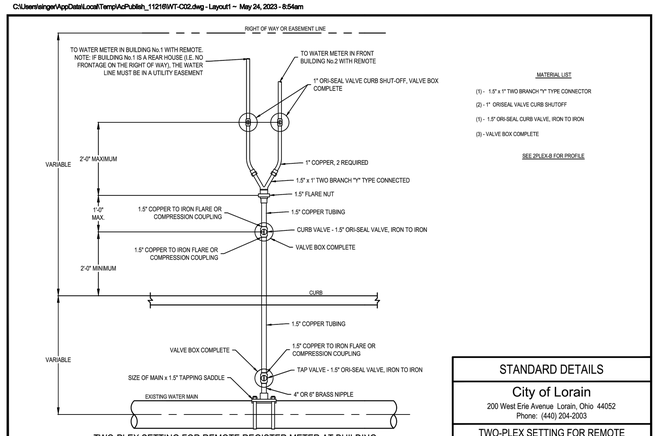
CROSSING LARGE DITCHES OR SMALL STREAMS SECTION A-A - OPEN CUT METHOD

- NOT TO SCALE -

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
CROSSING LARGE DITCHES OR SMALL STREAMS SECTION A-A - OPEN CUT				
DRAWN BY: DU REV. DATE:	APPROVED BY: GS REV. DATE:	ISSUE DATE: 5/9/2022 REV. DATE:	SCALE: NONE REV. DATE:	SHEET: WT-G20

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

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TWO-PLEX SETTING FOR REMOTE REGISTER METER AT BUILDING

MATERIAL LIST

(1) - 1.5" x 1" TWO BRANCH "Y" TYPE CONNECTOR

(2) - 1" ORISEAL VALVE CURB SHUTOFF

(1) - 1.5" ORI-SEAL CURB VALVE, IRON TO IRON

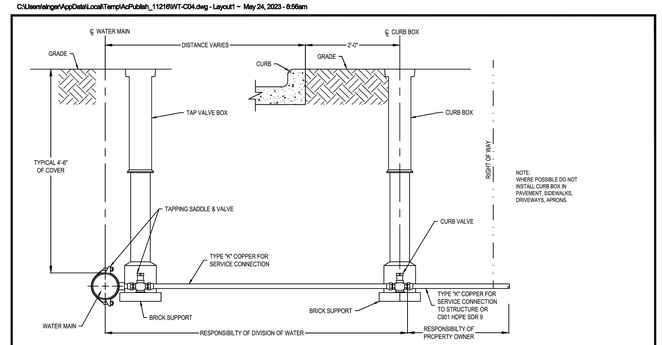
(3) - VALVE BOX COMPLETE

SEE 2PLEX-8 FOR PROFILE

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
TWO-PLEX SETTING FOR REMOTE REGISTER METER AT BUILDING DETAIL				
DRAWN BY: DU REV. DATE:	APPROVED BY: GS REV. DATE:	ISSUE DATE: 5/9/2022 REV. DATE:	SCALE: NONE REV. DATE:	SHEET: WT-C02

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NOTE: WHERE POSSIBLE DO NOT INSTALL CURB BOX IN PAVEMENT, SIDEWALKS, DRIVEWAYS, APRONS.

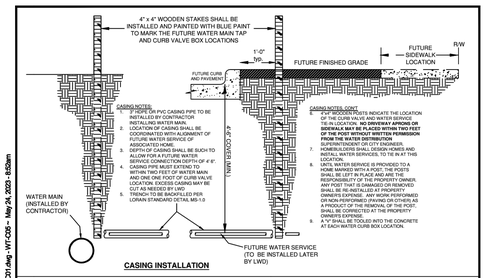
NEW WATER SERVICE CONNECTION FOR 1-1/2" & 2"

- NOT TO SCALE -

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
NEW WATER SERVICE CONNECTION FOR 1-1/2" & 2" DETAIL				
DRAWN BY: DU REV. DATE:	APPROVED BY: GS REV. DATE:	ISSUE DATE: 5/9/2022 REV. DATE:	SCALE: NONE REV. DATE:	SHEET: WT-C04

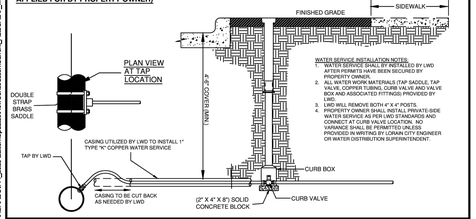
NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

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CASING INSTALLATION

WATER SERVICE INSTALLATION (PERFORMED BY LWD WHEN SERVICE APPLIED FOR BY PROPERTY OWNER)



WATER SERVICE INSTALLATION NOTES:
1. WATER SERVICE SHALL BY INSTALLED BY LWD AFTER PERMITS HAVE BEEN SECURED BY PROPERTY OWNER.
2. LWD WILL PROVIDE MATERIALS (TAP SADDLE, TAP VALVE, COPPER TUBING, CURB VALVE AND VALVE BOX AND ASSOCIATED FITTINGS) PROVIDED BY LWD.
3. LWD WILL REMOVE BOTH 2" X 4" POSTS.
4. ALL WORK PERFORMED ON THE PRIVATE-SIDE WATER SERVICE AS PER LWD STANDARDS AND CONNECT AT CURB VALVE LOCATION. NO VARIANCE SHALL BE PERMITTED UNLESS PROVIDED IN WRITING BY LORAIN CITY ENGINEER OR WATER DISTRIBUTION SUPERINTENDENT.

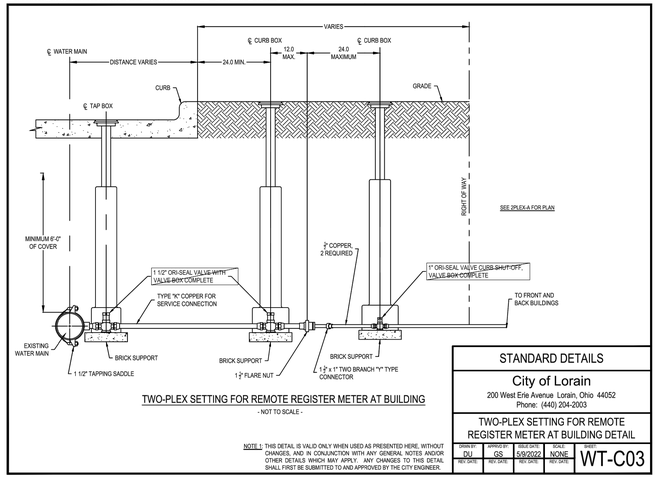
NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBERS AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.

NO.	DATE	REVISION	NO.	DATE	REVISION

City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
STANDARD DESIGNS WATER SERVICE CONNECTION NEW "LONG-SIDE" SERVICE				
DATE FILE: WT-C05.dwg				SHEET: WT-C01
DRAWN BY: GS	APPROVED BY: DV	ISSUE DATE: 04/25/2022	SCALE: NONE	

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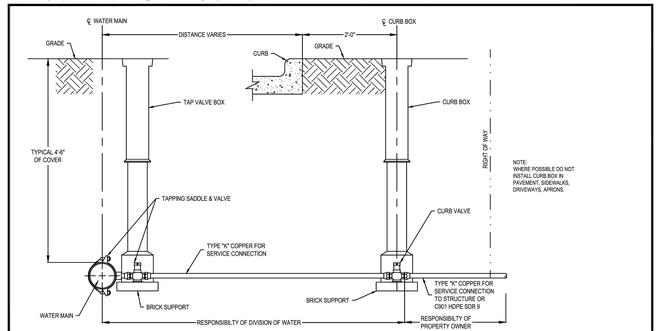
TWO-PLEX SETTING FOR REMOTE REGISTER METER AT BUILDING

- NOT TO SCALE -

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
TWO-PLEX SETTING FOR REMOTE REGISTER METER AT BUILDING DETAIL				
DRAWN BY: DU REV. DATE:	APPROVED BY: GS REV. DATE:	ISSUE DATE: 5/9/2022 REV. DATE:	SCALE: NONE REV. DATE:	SHEET: WT-C03

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NOTE: WHERE POSSIBLE DO NOT INSTALL CURB BOX IN PAVEMENT, SIDEWALKS, DRIVEWAYS, APRONS.

NEW WATER SERVICE CONNECTION FOR 1-1/2" & 2"

- NOT TO SCALE -

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
NEW WATER SERVICE CONNECTION FOR 1-1/2" & 2" DETAIL				
DRAWN BY: DU REV. DATE:	APPROVED BY: GS REV. DATE:	ISSUE DATE: 5/9/2022 REV. DATE:	SCALE: NONE REV. DATE:	SHEET: WT-C05

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

OSBORN ENGINEERING
Ohio | Florida | Michigan | Tennessee
(216) 861-2020
www.osborn-eng.com

WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

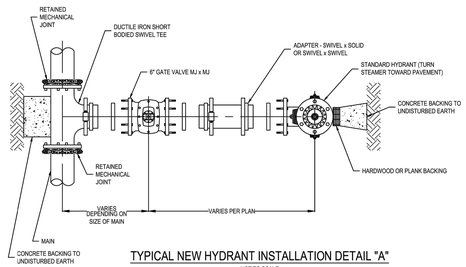
DETAILS (WATERLINE)

DRAWING NO.

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3/7/2025 5:37 PM Pawar, Sayali

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TYPICAL NEW HYDRANT INSTALLATION DETAIL "A"

- NOT TO SCALE -

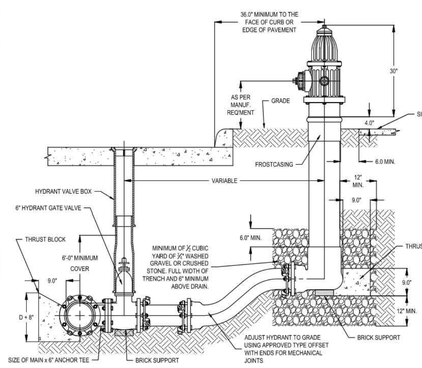
NOTE: IN LIEU OF SWIVEL BRANCH TEES AND ADAPTERS CONTRACTORS MAY FURNISH HYDRANT BRANCHES HAVING RETAINED MECHANICAL JOINTS INCLUDING HYDRANT SHOE. ALL MECHANICAL JOINTS SHALL HAVE FIELD APPLIED ONE (1) COAT OF BITUMASTIC PAINT. ALL MECHANICAL JOINTS SHALL BE POLYETHYLENE WRAPPED IN ACCORDANCE WITH AWWA C-105/A21.5-88 CLASS "C" METHOD "B".

ALL BOLTS AND NUTS FURNISHED WITH RETAINED MECHANICAL JOINTS INCLUDING RETAINER OR WEDGE ACTION TYPE GLANDS SHALL BE COPPER-BEARING DUCTILE IRON, OR EQUIVALENT HIGH STRENGTH, LOW ALLOY CORROSION RESISTANT STEEL.

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
TYPICAL NEW HYDRANT INSTALLATION DETAIL "A"				
DRAWN BY: DU (REV. DATE)	APPROVED BY: GS (REV. DATE)	ISSUE DATE: 5/9/2022 (REV. DATE)	SCALE: NONE (REV. DATE)	SHEET: WT-H01

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ADJUSTING 6" HYDRANT ELEVATION

NOT TO SCALE

NOTE:
IN LIEU OF SWIVEL BRANCH TEES AND ADAPTERS CONTRACTORS MAY FURNISH HYDRANT BRANCHES HAVING RETAINED MECHANICAL JOINTS INCLUDING HYDRANT SHOE. ALL MECHANICAL JOINTS SHALL HAVE FIELD APPLIED ONE (1) COAT OF BITUMASTIC PAINT. ALL MECHANICAL JOINTS SHALL BE POLYETHYLENE WRAPPED IN ACCORDANCE WITH AWWA C-105/A21.5-88 CLASS "C" METHOD "B".

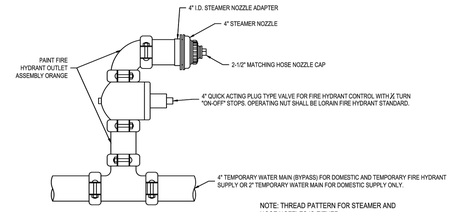
ALL BOLTS AND NUTS FURNISHED WITH RETAINED MECHANICAL JOINTS INCLUDING RETAINER OR WEDGE ACTION TYPE GLANDS SHALL BE COPPER-BEARING DUCTILE IRON, OR EQUIVALENT HIGH STRENGTH, LOW ALLOY CORROSION RESISTANT STEEL.

ALL FIRE HYDRANTS AND VALVE BOXES SHALL BE SECURELY BRACED WHEN SET AND BACKFILLED. ALL FIRE HYDRANTS, VALVES, VALVE BOXES AND FITTINGS SHALL MEET THE LATEST STANDARD SPECIFICATIONS FOR CONSTRUCTING WATER MAINS AND APPURTENANCES OF THE LORAIN WATER DEPARTMENT.

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
ADJUSTING 6" HYDRANT ELEVATION DETAIL				
DRAWN BY: DU (REV. DATE)	APPROVED BY: GS (REV. DATE)	ISSUE DATE: 5/9/2022 (REV. DATE)	SCALE: NONE (REV. DATE)	SHEET: WT-H04

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NOTE: THREAD PATTERN FOR STEAMER AND HOSE NOZZLES IS EITHER LORAIN STANDARD OR NATIONAL STANDARD THREAD (NST)

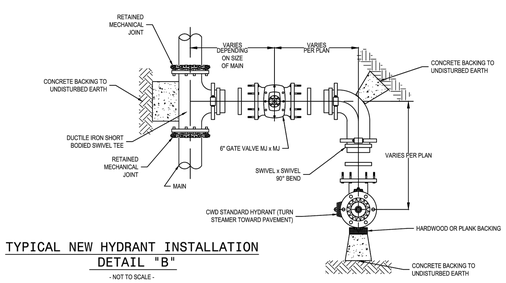
TEMPORARY WATER MAIN & HYDRANT CONNECTION ASSEMBLY-C OUTLET END

- NOT TO SCALE -

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
TEMPORARY WATER MAIN AND HYDRANT ASSEMBLY DETAIL "C"				
DRAWN BY: DU (REV. DATE)	APPROVED BY: GS (REV. DATE)	ISSUE DATE: 5/9/2022 (REV. DATE)	SCALE: NONE (REV. DATE)	SHEET: WT-H07

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

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TYPICAL NEW HYDRANT INSTALLATION DETAIL "B"

- NOT TO SCALE -

NOTE: IN LIEU OF SWIVEL BRANCH TEES AND ADAPTERS CONTRACTORS MAY FURNISH HYDRANT BRANCHES HAVING RETAINED MECHANICAL JOINTS INCLUDING HYDRANT SHOE. ALL MECHANICAL JOINTS SHALL HAVE FIELD APPLIED ONE (1) COAT OF BITUMASTIC PAINT. ALL MECHANICAL JOINTS SHALL BE POLYETHYLENE WRAPPED IN ACCORDANCE WITH AWWA C-1-5/A21.5-88 CLASS "C" METHOD "B".

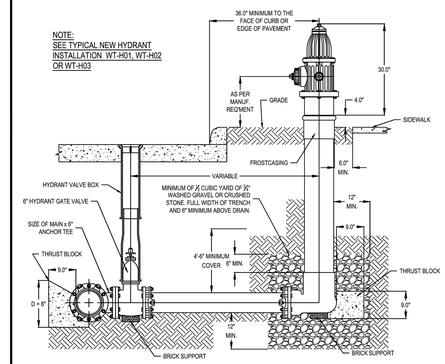
ALL BOLTS AND NUTS FURNISHED WITH RETAINED MECHANICAL JOINTS INCLUDING RETAINER OR WEDGE ACTION TYPE GLANDS SHALL BE COPPER-BEARING DUCTILE IRON, OR EQUIVALENT HIGH STRENGTH, LOW ALLOY CORROSION RESISTANT STEEL.

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
TYPICAL NEW HYDRANT INSTALLATION DETAIL "B"				
DRAWN BY: DU (REV. DATE)	APPROVED BY: GS (REV. DATE)	ISSUE DATE: 5/9/2022 (REV. DATE)	SCALE: NONE (REV. DATE)	SHEET: WT-H02

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

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NOTE:
SEE TYPICAL NEW HYDRANT INSTALLATION WT-H01, WT-H02 OR WT-H03



6" HYDRANT ELEVATION

NOT TO SCALE

NOTE:
IN LIEU OF SWIVEL BRANCH TEES AND ADAPTERS CONTRACTORS MAY FURNISH HYDRANT BRANCHES HAVING RETAINED MECHANICAL JOINTS INCLUDING HYDRANT SHOE. ALL MECHANICAL JOINTS SHALL HAVE FIELD APPLIED ONE (1) COAT OF BITUMASTIC PAINT. ALL MECHANICAL JOINTS SHALL BE POLYETHYLENE WRAPPED IN ACCORDANCE WITH AWWA C-105/A21.5-88 CLASS "C" METHOD "B".

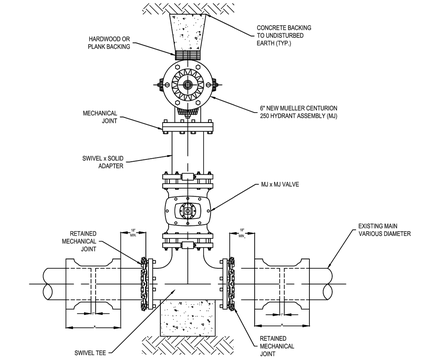
ALL BOLTS AND NUTS FURNISHED WITH RETAINED MECHANICAL JOINTS INCLUDING RETAINER OR WEDGE ACTION TYPE GLANDS SHALL BE COPPER-BEARING DUCTILE IRON, OR EQUIVALENT HIGH STRENGTH, LOW ALLOY CORROSION RESISTANT STEEL.

ALL FIRE HYDRANTS AND VALVE BOXES SHALL BE SECURELY BRACED WHEN SET AND BACKFILLED. ALL FIRE HYDRANTS, VALVES, VALVE BOXES AND FITTINGS SHALL MEET THE LATEST STANDARD SPECIFICATIONS FOR CONSTRUCTING WATER MAINS AND APPURTENANCES OF THE LORAIN WATER DEPARTMENT.

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
6" HYDRANT ELEVATION DETAIL				
DRAWN BY: DU (REV. DATE)	APPROVED BY: GS (REV. DATE)	ISSUE DATE: 4/25/22 (REV. DATE)	SCALE: NONE (REV. DATE)	SHEET: WT-H05

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

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- NOT TO SCALE -

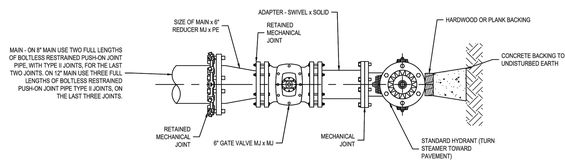
*CONNECTION SHALL BE MADE WITH RETAINED MECHANICAL JOINT SOLID SLEEVES (SHORT OR LONG PATTERN) DUCTILE IRON CLASS 350 OR CAST IRON CLASS 250 OR COMPRESSION COUPLINGS. COMPRESSION COUPLINGS SHALL BE OF A GASKETED, SLEEVE TYPE WITH DIAMETERS TO PROPERLY FIT PLAIN END IRON PIPE. EACH COUPLING SHALL CONSIST OF ONE (1) MIDDLE RING, WITHOUT STOPS; TWO (2) FOLLOWER GLANDS; TWO (2) RUBBER-COMPOUND BUNA-N BLEND, WEDGE SECTION GASKETS; AND SUFFICIENT TRACHEAD STAINLESS STEEL BOLTS AND NUTS (ASTM A276/A193/18, TYPE 316, EXTRA HEAVY HEX) TO PROPERLY COMPRESS THE GASKETS. MIDDLE RING AND FOLLOWER GLANDS SHALL BE OF EITHER STEEL OR DUCTILE IRON (ASTM A536). THE COMPRESSION COUPLING SHALL BE WITHOUT STOPS AND BE RATED FOR A MINIMUM WORKING PRESSURE OF 250 PSI AND SHALL BE SMITH-BLAIR 441 OR 421 STRAIGHT AND TRANSITION COUPLINGS. ROD AND CLAMP COMPRESSION COUPLING AS DIRECTED BY LWD. ALL BOLTS AND NUTS ON ALL MECHANICAL JOINTS, INCLUDING THOSE ON THE "RETAINED" TYPE, SHALL BE PROTECTED BY AN ENCASEMENT OF POLYETHYLENE WRAPPING IN ACCORDANCE WITH ANSI/AWWA C-105/A21.5-88, CLASS "C", METHOD "B".

CUT-IN HYDRANT DETAIL"

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
CUT-IN HYDRANT DETAIL"				
DRAWN BY: DU (REV. DATE)	APPROVED BY: GS (REV. DATE)	ISSUE DATE: 5/8/2022 (REV. DATE)	SCALE: NONE (REV. DATE)	SHEET: WT-H08

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

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TYPICAL NEW HYDRANT INSTALLATION DETAIL "C"

NOT TO SCALE

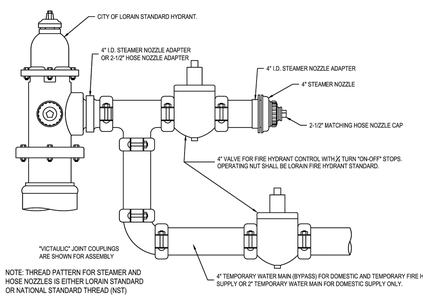
NOTE: IN LIEU OF SWIVEL BRANCH TEES AND ADAPTERS CONTRACTORS MAY FURNISH HYDRANT BRANCHES HAVING RETAINED MECHANICAL JOINTS INCLUDING HYDRANT SHOE. ALL MECHANICAL JOINTS SHALL HAVE FIELD APPLIED ONE (1) COAT OF BITUMASTIC PAINT. ALL MECHANICAL JOINTS SHALL BE POLYETHYLENE WRAPPED IN ACCORDANCE WITH AWWA C-1-5/A21.5-88 CLASS "C" METHOD "B".

ALL BOLTS AND NUTS FURNISHED WITH RETAINED MECHANICAL JOINTS INCLUDING RETAINER OR WEDGE ACTION TYPE GLANDS SHALL BE COPPER-BEARING DUCTILE IRON, OR EQUIVALENT HIGH STRENGTH, LOW ALLOY CORROSION RESISTANT STEEL.

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
TYPICAL NEW HYDRANT INSTALLATION DETAIL "C"				
DRAWN BY: DU (REV. DATE)	APPROVED BY: GS (REV. DATE)	ISSUE DATE: 5/9/2022 (REV. DATE)	SCALE: NONE (REV. DATE)	SHEET: WT-H03

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

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TEMPORARY WATER MAIN & HYDRANT CONNECTION ASSEMBLY-A

TO PROVIDE SIMULTANEOUS SERVICE IN EXISTING HYDRANT AND TEMPORARY BYPASS MAIN

- NOT TO SCALE -

STANDARD DETAILS				
City of Lorain 200 West Erie Avenue Lorain, Ohio 44052 Phone: (440) 204-2003				
TEMPORARY WATER MAIN AND HYDRANT ASSEMBLY DETAIL "A"				
DRAWN BY: DU (REV. DATE)	APPROVED BY: GS (REV. DATE)	ISSUE DATE: 4/25/22 (REV. DATE)	SCALE: NONE (REV. DATE)	SHEET: WT-H06

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

SEAL OF THE CITY OF LORAIN 1834 OHIO

OSBORN ENGINEERING
Ohio | Florida | Michigan | Tennessee
(216) 861-2020
www.osborn-eng.com

WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
64026
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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DRAWN BY	BTC
CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

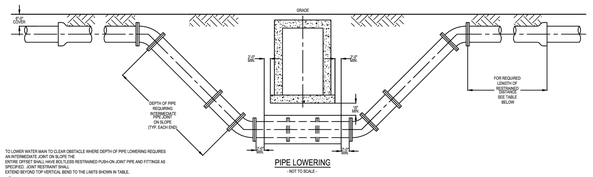
DETAILS (WATERLINE)

DRAWING NO.

D14

P:\lorain - City Of\j20221302.000_water_main_repl_ph2\Drawings\Civil\J20221302.000_C 87 - WATER DETAILS.dwg
3/7/2025 5:37 PM Pawar, Sayali

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PIPE LOWERING
- NOT TO SCALE -

TO LOWER WATER MAIN TO CLEAR OBSTACLE WHERE DEPTH OF PIPE LOWERING REQUIRES AN INTERMEDIATE JOINT ON SLOPE THE FOLLOWING LENGTHS OF RESTRAINED PUSH-ON JOINT PIPE AND FITTINGS AS SPECIFIED. JOINT RESTRAINT SHALL EXTEND BEYOND TOP VERTICAL BEND TO THE LIMITS SHOWN IN TABLE.

Ⓒ CALCULATIONS FOR RESTRAINED LENGTHS INCLUDE 1½ PSI FOR TESTING.

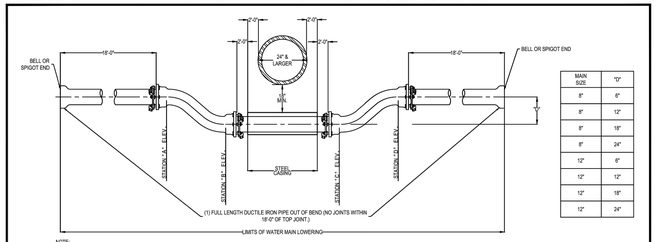
DIAMETER	BEND	STATIC PRESSURE Ⓒ	* RESTRAINED LENGTHS
8"	11°15'	0 to 275 PSI	ONE (1)
	22°30'	0 to 250 PSI	ONE (1)
		251 to 275 PSI	TWO (2)
	45°	0 to 125 PSI	ONE (1)
		126 to 275 PSI	TWO (2)
12"	11°15'	0 to 275 PSI	ONE (1)
	22°30'	0 to 165 PSI	ONE (1)
		166 to 275 PSI	TWO (2)
	45°	0 to 65 PSI	ONE (1)
		66 to 215 PSI	TWO (2)
		166 to 275 PSI	THREE (3)
16"	11°15'	0 to 275 PSI	ONE (1)
	22°30'	0 to 115 PSI	ONE (1)
		116 to 275 PSI	TWO (2)
	45°	0 to 45 PSI	ONE (1)
		46 to 165 PSI	TWO (2)
		166 to 275 PSI	THREE (3)

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003
PIPE LOWERING DETAIL

DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	SHEET
DU	GS	5/9/2022	NONE	WT-L01
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

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MAIN SIZE	"D"
8"	6"
8"	12"
8"	18"
8"	24"
12"	6"
12"	12"
12"	18"
12"	24"

NOTE:
1) WATER MAIN SHALL BE DUCTILE IRON, MINIMUM CLASS 52, CEMENT LINED PUSH-ON JOINT PIPE WITH RETAINED MECHANICAL JOINT DUCTILE IRON CLASS 350, CEMENT LINE RETAINED MECHANICAL JOINT FITTINGS.
* ALL FITTINGS MUST FOLLOW ANSI/AWWA C110/A21.10 FOR FULL BODY FITTINGS AND ANSI/AWWA C153/A221.5 FOR COMPACT FITTINGS.ALL FITTINGS ARE NOT AVAILABLE FROM ALL APPROVED MANUFACTURES.

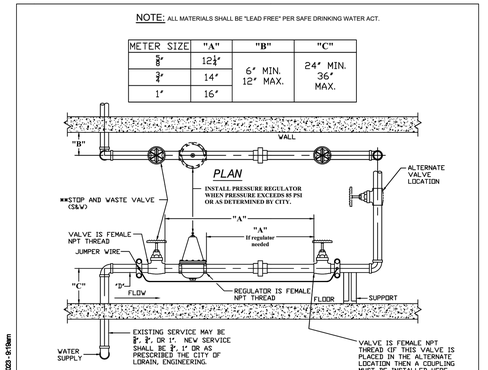
2) WHERE LENGTH OF LOWERING UNDER OBSTRUCTION(S) REQUIRES AN INTERMEDIATE JOINT ONLY BETWEEN STATIONS "B" & "C", THAT INTERMEDIATE JOINT(S) SHALL BE MADE WITH A BOLTLESS RESTRAINED PUSH-ON JOINT, TYPE II.

DETAIL FOR WATER MAIN LOWERING USING MECHANICAL JOINT OFFSETS
UNDER OBSTRUCTIONS 24" AND LARGER IN DIAMETER OR WIDTH FOR "NEW CONSTRUCTION"
- NOT TO SCALE -

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003
LOWERING DETAIL UNDER OBSTRUCTIONS 24" IN DIA. & LARGER

DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	SHEET
DU	GS	5/9/2022	NONE	WT-L04
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	



METER SIZE	"A"	"B"	"C"
5/8"	12 1/2"	6' MIN. 12' MAX.	24" MIN. 36" MAX.
3/4"	14"		
1"	16"		

NOTES: IF METER SIZE IS REDUCED FROM THE INCOMING LINE SIZE, THE APPROPRIATE REDUCTION SHOULD TAKE PLACE AT OR UPSTREAM OF POINT "D".

METER SETTING SHALL BE PLACED IN AN UNOBSTRUCTED AREA. METER SETTINGS MAY NOT BE INSTALLED IN CRAWL SPACES.

BALL VALVES MAY BE USED IN PLACE OF STOP AND WASTE VALVES.

IF PROPERTY RECEIVING WATER SERVICE HAS MORE THAN 2 UNITS OR AN IRRIGATION SYSTEM, AN APPROVED BACKFLOW PREVENTION DEVICE IS REQUIRED. FOR TYPE AND MODEL OF BACKFLOW DEVICE REQUIRED, CONTACT THE BACKFLOW UNIT OF WATER DISTRIBUTION AT 440-204-2285.

NEW METER INSTALLATIONS SHALL BE RADIO FREQUENCY TRANSMITTED AND DO NOT REQUIRE A COMMUNICATION WIRE BETWEEN THE METER AND ENDPOINT DEVICE ON OUTSIDE OF HOUSE.

WHEN REQUIRED BY THE CITY, A 3 CONDUCTOR, 22 GAUGE WIRE SHALL BE INSTALLED TO BE INSTALLED BETWEEN THE METER AND ENDPOINT DEVICE ON OUTSIDE OF HOUSE.

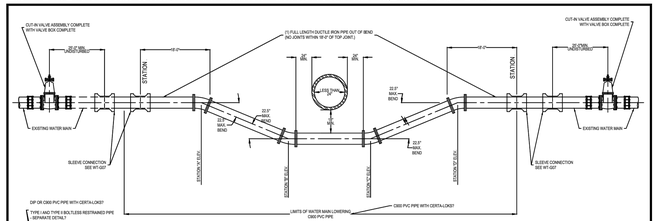
NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.
NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBERS AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.

NO.	DATE	REVISION	NO.	DATE	REVISION

City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003
STANDARD DESIGNS
WATER
Meter Settings for 5/8", 3/4" & 1" Meters

DATA FILE: WT-M01.dwg				SHEET
DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	WT-M01
GS	DV	04/25/2022	NONE	

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NOTE:
1) WATER MAIN SHALL BE DUCTILE IRON, MINIMUM CLASS 52, CEMENT LINED PUSH-ON JOINT PIPE WITH RETAINED MECHANICAL JOINT DUCTILE IRON CLASS 350, CEMENT LINED OR FUSION BONDED EPOXY COATED RETAINED MECHANICAL JOINT FITTINGS.

2) WHERE DEPTH OF LOWERING REQUIRES AN INTERMEDIATE JOINT BETWEEN STATIONS "A" & "B" AND/OR "C" & "D" THE ENTIRE LOWERING SHALL BE MADE WITH DUCTILE IRON, MINIMUM CLASS 52, CEMENT LINED PIPE AND DUCTILE IRON CLASS 350, CEMENT LINED FITTINGS ALL HAVING BOLTLESS RESTRAINED PUSH-ON JOINTS, TYPE II.

3) WHERE LENGTH OF LOWERING UNDER OBSTRUCTIONS REQUIRES AN INTERMEDIATE JOINT ONLY BETWEEN STATIONS "B" & "C" THAT INTERMEDIATE JOINT(S) SHALL BE MADE WITH A BOLTLESS RESTRAINED PUSH-ON JOINT, TYPE II.

4) WHERE EXISTING WATER MAIN IS SIX (6)-INCHES IN DIAMETER THE PIPE LOWERING SHALL BE MADE WITH PIPE AND FITTINGS NO LESS THAN EIGHT (8)-INCH IN DIAMETER WITH REDUCERS INSTALLED AT STATIONS "E" AND "F". THE REDUCERS SHALL BE RETAINED MECHANICAL JOINT WITH SMALL END OF REDUCER PLAIN END FOR CONNECTION WITH SLEEVES OR COMPRESSION COUPLINGS.

5) ALL EXISTING WATER SERVICE CONNECTIONS BETWEEN THE CUT-IN-VALVE ASSEMBLIES SHALL BE MAINTAINED BY "TEMPORARY SERVICE CONNECTIONS" PROVIDED AND MAINTAINED BY THE CONTRACTOR.

6) EXISTING WATER SERVICE CONNECTIONS NEEDED TO BE RETAPPED AND RECONNECTED WILL ONLY BE PERMITTED BETWEEN STATIONS "A" AND "E" AND STATIONS "D" AND "F". NO RETAPPING OF SERVICE CONNECTIONS WILL BE ALLOWED BETWEEN STATIONS "A" AND "D".

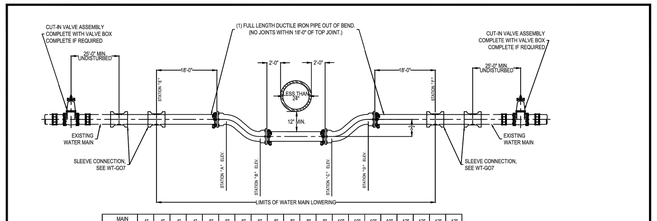
DETAIL FOR WATER MAIN LOWERING UNDER OBSTRUCTIONS LESS THAN 24" IN DIAMETER OR WIDTH FOR "EXISTING CONSTRUCTION"
- NOT TO SCALE -

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003
LOWERING DETAIL

DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	SHEET
DU	GS	5/9/2022	NONE	WT-L02
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

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MAIN SIZE	4"	4"	4"	4"	6"	6"	6"	6"	8"	8"	8"	8"	10"	10"	10"	10"	12"	12"	12"	12"
"X"	6"	12"	18"	24"	6"	12"	18"	24"	6"	12"	18"	24"	6"	12"	18"	24"	6"	12"	18"	24"

NOTE:
1) WATER MAIN SHALL BE DUCTILE IRON, MINIMUM CLASS 52, CEMENT LINED PUSH-ON JOINT PIPE WITH RETAINED MECHANICAL JOINT DUCTILE IRON CLASS 350, CEMENT LINED RETAINED MECHANICAL JOINT FITTINGS.
* ALL FITTINGS MUST FOLLOW ANSI/AWWA C110/A21.10 FOR FULL BODY FITTINGS AND ANSI/AWWA C153/A221.5 FOR COMPACT FITTINGS. ALL FITTINGS ARE NOT AVAILABLE FROM ALL APPROVED MANUFACTURES.

2) WHERE LENGTH OF LOWERING UNDER OBSTRUCTION(S) REQUIRES AN INTERMEDIATE JOINT ONLY BETWEEN STATIONS "B" & "C", THAT INTERMEDIATE JOINT(S) SHALL BE MADE WITH A BOLTLESS RESTRAINED PUSH-ON JOINT, TYPE II.

3) WHERE EXISTING WATER MAIN IS SIX (6)-INCHES IN DIAMETER THE PIPE LOWERING SHALL BE MADE WITH PIPE AND FITTINGS NO LESS THAN EIGHT (8)-INCH IN DIAMETER WITH REDUCERS INSTALLED AT STATIONS "E" AND "F". THE REDUCERS SHALL BE RETAINED MECHANICAL JOINT WITH SMALL END OF REDUCER PLAIN END FOR CONNECTION WITH SLEEVES OR COMPRESSION COUPLINGS.

4) ALL EXISTING WATER SERVICE CONNECTIONS BETWEEN THE CUT-IN-VALVE ASSEMBLIES SHALL BE MAINTAINED BY "TEMPORARY SERVICE CONNECTIONS" PROVIDED AND MAINTAINED BY THE CONTRACTOR.

5) EXISTING WATER SERVICE CONNECTIONS NEEDED TO BE RETAPPED AND RECONNECTED WILL ONLY BE PERMITTED BETWEEN STATIONS "A" AND "E" AND STATIONS "D" AND "F". NO RETAPPING OF SERVICE CONNECTIONS WILL BE ALLOWED BETWEEN STATIONS "A" AND "D".

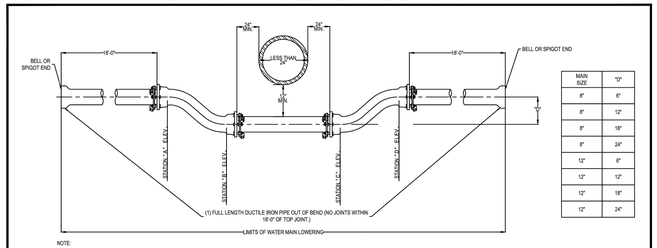
DETAIL FOR WATER MAIN LOWERING UNDER OBSTRUCTIONS LESS THAN 24" IN DIAMETER OR WIDTH
USING MECHANICAL OFFSETS FOR "EXISTING MAINS"
- NOT TO SCALE -

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003
LOWERING DETAIL UNDER OBSTRUCTIONS 24" AND SMALLER

DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	SHEET
DU	GS	5/9/2022	NONE	WT-L05
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

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MAIN SIZE	"D"
8"	6"
8"	12"
8"	18"
8"	24"
12"	6"
12"	12"
12"	18"
12"	24"

NOTE:
1) WATER MAIN SHALL BE DUCTILE IRON, MINIMUM CLASS 52, CEMENT LINED PUSH-ON JOINT PIPE WITH RETAINED MECHANICAL JOINT DUCTILE IRON CLASS 350, CEMENT LINE RETAINED MECHANICAL JOINT FITTINGS.
* ALL FITTINGS MUST FOLLOW ANSI/AWWA C110/A21.10 FOR FULL BODY FITTINGS AND ANSI / AWWA C153/A221.5 FOR COMPACT FITTINGS.ALL FITTINGS ARE NOT AVAILABLE FROM ALL APPROVED MANUFACTURES.

2) WHERE LENGTH OF LOWERING UNDER OBSTRUCTIONS(S) REQUIRES AN INTERMEDIATE JOINT ONLY BETWEEN STATIONS "B" & "C", AND PIPE JOINTS ARE AS INDICATED IN NOTE "1" ABOVE, THAT INTERMEDIATE JOINT(S) SHALL BE MADE WITH A BOLTLESS RESTRAINED PUSH-ON JOINT, TYPE II.

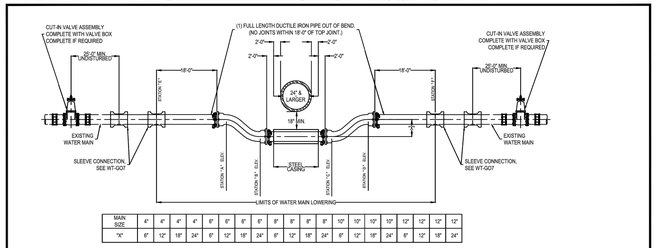
DETAIL FOR WATER MAIN LOWERING USING MECHANICAL JOINT OFFSETS
UNDER OBSTRUCTIONS LESS THAN 24" IN DIAMETER OR WIDTH FOR "NEW CONSTRUCTION"
- NOT TO SCALE -

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003
LOWERING DETAIL UNDER OBSTRUCTIONS 24" IN DIAMETER OR LESS

DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	SHEET
DU	GS	5/9/2022	NONE	WT-L03
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

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MAIN SIZE	4"	4"	4"	4"	6"	6"	6"	6"	8"	8"	8"	8"	10"	10"	10"	10"	12"	12"	12"	12"
"X"	6"	12"	18"	24"	6"	12"	18"	24"	6"	12"	18"	24"	6"	12"	18"	24"	6"	12"	18"	24"

NOTE:
1) WATER MAIN SHALL BE DUCTILE IRON, MINIMUM CLASS 52, CEMENT LINED PUSH-ON JOINT PIPE WITH RETAINED MECHANICAL JOINT DUCTILE IRON CLASS 350, CEMENT LINED RETAINED MECHANICAL JOINT FITTINGS.
* ALL FITTINGS MUST FOLLOW ANSI/AWWA C110/A21.10 FOR FULL BODY FITTINGS AND ANSI/AWWA C153/A221.5 FOR COMPACT FITTINGS. ALL FITTINGS ARE NOT AVAILABLE FROM ALL APPROVED MANUFACTURES.

2) WHERE LENGTH OF LOWERING UNDER OBSTRUCTIONS(S) REQUIRES AN INTERMEDIATE JOINT ONLY BETWEEN STATIONS "B" & "C", THAT INTERMEDIATE JOINT(S) SHALL BE MADE WITH A BOLTLESS RESTRAINED PUSH-ON JOINT, TYPE II.

3) WHERE EXISTING WATER MAIN IS SIX (6)-INCHES IN DIAMETER THE PIPE LOWERING SHALL BE MADE WITH PIPE AND FITTINGS NO LESS THAN EIGHT (8)-INCH IN DIAMETER WITH REDUCERS INSTALLED AT STATIONS "E" AND "F". THE REDUCERS SHALL BE RETAINED MECHANICAL JOINT WITH SMALL END OF REDUCER PLAIN END FOR CONNECTION WITH SLEEVES OR COMPRESSION COUPLINGS.

4) ALL EXISTING WATER SERVICE CONNECTIONS BETWEEN THE CUT-IN-VALVE ASSEMBLIES SHALL BE MAINTAINED BY "TEMPORARY SERVICE CONNECTIONS" PROVIDED AND MAINTAINED BY THE CONTRACTOR.

5) EXISTING WATER SERVICE CONNECTIONS NEEDED TO BE RETAPPED AND RECONNECTED WILL ONLY BE PERMITTED BETWEEN STATIONS "A" AND "E" AND STATIONS "D" AND "F". NO RETAPPING OF SERVICE CONNECTIONS WILL BE ALLOWED BETWEEN STATIONS "A" AND "D".

DETAIL FOR WATER MAIN LOWERING UNDER OBSTRUCTIONS 24" & LARGER IN DIAMETER OR WIDTH
USING MECHANICAL OFFSETS FOR "EXISTING MAINS"
- NOT TO SCALE -

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS
City of Lorain
200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003
LOWERING DETAIL UNDER OBSTRUCTIONS 24" AND LARGER

DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	SHEET
DU	GS	5/9/2022	NONE	WT-L06
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

CITY OF LORAIN
200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

OSBORN ENGINEERING
Ohio | Florida | Michigan | Tennessee
(216) 861-2020
www.osborn-eng.com

WATER MAIN REPLACEMENT PROGRAM PHASE 2

STATE OF OHIO
KEVIN D. CODIN
REGISTERED PROFESSIONAL ENGINEER
03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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DRAWN BY BTC
CHECKED BY KDC
CLIENT PROJ NO. -
OSBORN PROJ NO. J20221302.000

DETAILS (WATERLINE)

DRAWING NO.
D15

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3/7/2025 5:38 PM Pawar, Sayali

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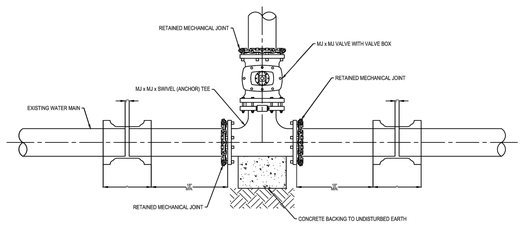
1.) * CONNECTION SHALL BE MADE WITH RETAINED MECHANICAL JOINT SOLID SLEEVES (SHORT OR LONG PATTERN). DUCTILE IRON CLASS 350 OR CAST IRON CLASS 250 OR COMPRESSION COUPLINGS.

2.) COMPRESSION COUPLINGS SHALL BE OF A GASKETED, SLEEVE TYPE WITH DIAMETERS TO PROPERLY FIT PLAIN END IRON PIPE. EACH COUPLING SHALL CONSIST OF ONE (1) MIDDLE RING, WITHOUT STOPS; TWO (2) FOLLOWER GLANDS; TWO (2) RUBBER-COMPOUND BUNA-N BLEND, WEDGE SECTION GASKETS; AND SUFFICIENT TRACKHEAD STAINLESS STEEL BOLTS AND NUTS (ASTM A276/A193/A194, TYPE 316, EXTRA HEAVY HEX) TO PROPERLY COMPRESS THE GASKETS.

3.) MIDDLE RING AND FOLLOWER GLANDS SHALL BE OF EITHER STEEL OR DUCTILE IRON (ASTM-A536).

4.) THE COMPRESSION COUPLING SHALL BE WITHOUT STOPS AND BE RATED FOR A MINIMUM WORKING PRESSURE OF 250 PSI AND SHALL BE SMITH-BLAIR 421 OR 441 STRAIGHT AND TRANSITION COUPLINGS.

5.) ALL BOLTS AND NUTS ON ALL MECHANICAL JOINTS, INCLUDING THOSE ON THE "RETAINED" TYPE, SHALL BE PROTECTED BY AN ENCASEMENT OF POLYETHYLENE WRAPPING IN ACCORDANCE WITH ANSI/AWWA C-105/A21.5-88, CLASS "C", METHOD "B".



CUT-IN TEE DETAIL METHOD No.1

NOT TO SCALE

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS

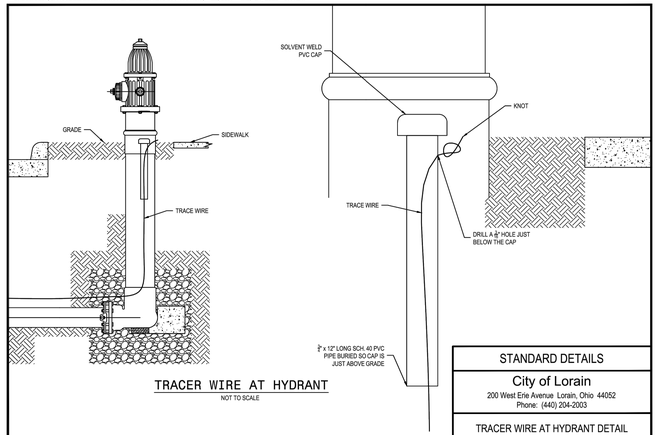
City of Lorain

200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

CUT-IN TEE DETAIL METHOD NO. 1

DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	NAME
DU	GS	4/25/22	NONE	WT-T01
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

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TRACER WIRE AT HYDRANT

NOT TO SCALE

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS

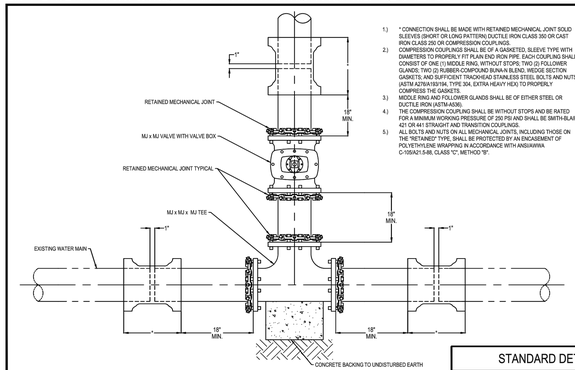
City of Lorain

200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

TRACER WIRE AT HYDRANT DETAIL

DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	NAME
DU	GS	5/9/2022	NONE	WT-W01
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

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1.) * CONNECTION SHALL BE MADE WITH RETAINED MECHANICAL JOINT SOLID SLEEVES (SHORT OR LONG PATTERN) DUCTILE IRON CLASS 350 OR CAST IRON CLASS 250 OR COMPRESSION COUPLINGS.

2.) COMPRESSION COUPLINGS SHALL BE OF A GASKETED, SLEEVE TYPE WITH DIAMETERS TO PROPERLY FIT PLAIN END IRON PIPE. EACH COUPLING SHALL CONSIST OF ONE (1) MIDDLE RING, WITHOUT STOPS; TWO (2) FOLLOWER GLANDS; TWO (2) RUBBER-COMPOUND BUNA-N BLEND, WEDGE SECTION GASKETS; AND SUFFICIENT TRACKHEAD STAINLESS STEEL BOLTS AND NUTS (ASTM A276/A193/A194, TYPE 304, EXTRA HEAVY HEX) TO PROPERLY COMPRESS THE GASKETS.

3.) MIDDLE RING AND FOLLOWER GLANDS SHALL BE OF EITHER STEEL OR DUCTILE IRON (ASTM-A536).

4.) THE COMPRESSION COUPLING SHALL BE RATED FOR A MINIMUM WORKING PRESSURE OF 250 PSI AND SHALL BE SMITH-BLAIR 421 OR 441 STRAIGHT AND TRANSITION COUPLINGS.

5.) ALL BOLTS AND NUTS ON ALL MECHANICAL JOINTS, INCLUDING THOSE ON THE "RETAINED" TYPE, SHALL BE PROTECTED BY AN ENCASEMENT OF POLYETHYLENE WRAPPING IN ACCORDANCE WITH ANSI/AWWA C-105/A21.5-88, CLASS "C", METHOD "B".

CUT-IN TEE DETAIL METHOD No. 2

NOT TO SCALE

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS

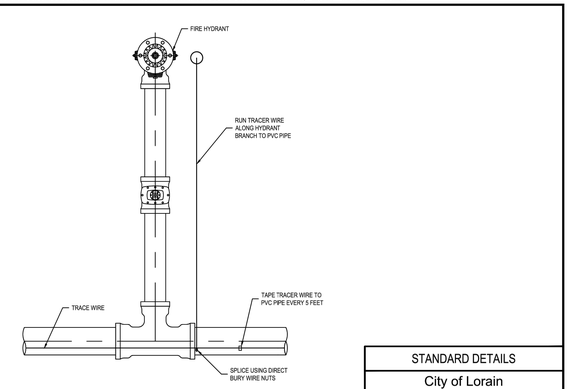
City of Lorain

200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

CUT-IN TEE DETAIL METHOD NO. 2

DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	NAME
DU	GS	4/25/22	NONE	WT-T02
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

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TRACER WIRE AT HYDRANT TEE

NOT TO SCALE

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS

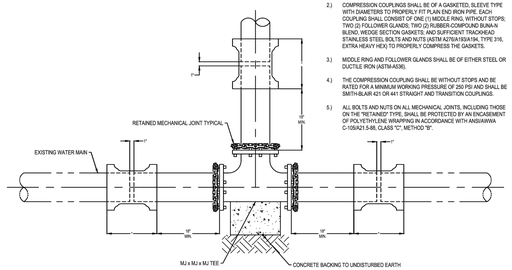
City of Lorain

200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

TRACER WIRE AT HYDRANT TEE DETAIL

DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	NAME
DU	GS	5/9/2022	NONE	WT-W02
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

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1.) * CONNECTION SHALL BE MADE WITH RETAINED MECHANICAL JOINT SOLID SLEEVES (SHORT OR LONG PATTERN) DUCTILE IRON CLASS 350 OR CAST IRON CLASS 250 OR COMPRESSION COUPLINGS.

2.) COMPRESSION COUPLINGS SHALL BE OF A GASKETED, SLEEVE TYPE WITH DIAMETERS TO PROPERLY FIT PLAIN END IRON PIPE. EACH COUPLING SHALL CONSIST OF ONE (1) MIDDLE RING, WITHOUT STOPS; TWO (2) FOLLOWER GLANDS; TWO (2) RUBBER-COMPOUND BUNA-N BLEND, WEDGE SECTION GASKETS; AND SUFFICIENT TRACKHEAD STAINLESS STEEL BOLTS AND NUTS (ASTM A276/A193/A194, TYPE 316, EXTRA HEAVY HEX) TO PROPERLY COMPRESS THE GASKETS.

3.) MIDDLE RING AND FOLLOWER GLANDS SHALL BE OF EITHER STEEL OR DUCTILE IRON (ASTM-A536).

4.) THE COMPRESSION COUPLING SHALL BE WITHOUT STOPS AND BE RATED FOR A MINIMUM WORKING PRESSURE OF 250 PSI AND SHALL BE SMITH-BLAIR 421 OR 441 STRAIGHT AND TRANSITION COUPLINGS.

5.) ALL BOLTS AND NUTS ON ALL MECHANICAL JOINTS, INCLUDING THOSE ON THE "RETAINED" TYPE, SHALL BE PROTECTED BY AN ENCASEMENT OF POLYETHYLENE WRAPPING IN ACCORDANCE WITH ANSI/AWWA C-105/A21.5-88, CLASS "C", METHOD "B".

CUT-IN TEE DETAIL METHOD No. 3

NOT TO SCALE

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STANDARD DETAILS

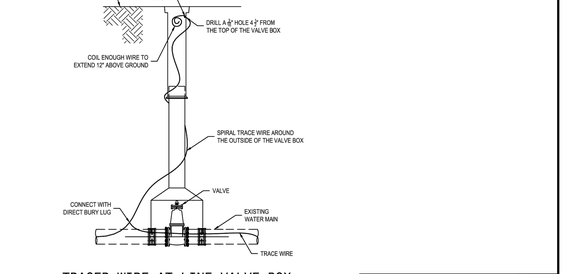
City of Lorain

200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

CUT-IN TEE DETAIL METHOD NO. 3

DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	NAME
DU	GS	4/25/22	NONE	WT-T03
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

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TRACER WIRE AT LINE VALVE BOX

NOT TO SCALE

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.

STANDARD DETAILS

City of Lorain

200 West Erie Avenue Lorain, Ohio 44052
Phone: (440) 204-2003

TRACER WIRE AT LINE VALVE BOX DETAIL

DRAWN BY	APPROVED BY	ISSUE DATE	SCALE	NAME
DU	GS	5/9/2022	NONE	WT-W03
REV. DATE:	REV. DATE:	REV. DATE:	REV. DATE:	

SEAL OF THE CITY OF LORAIN 1834 OHIO

OSBORN ENGINEERING
Ohio | Florida | Michigan | Tennessee
(216) 861-2020
www.osborn-eng.com

WATER MAIN REPLACEMENT PROGRAM PHASE 2

CITY OF LORAIN

200 W. ERIE AVENUE
LORAIN, OHIO
(440) 204-2003

STATE OF OHIO
KEVIN D. CODIN
E-64062
REGISTERED PROFESSIONAL ENGINEER

03/06/2025

TAG	ISSUED	DATE
A	FOR BID	03/06/25

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DRAWN BY	BTC
CHECKED BY	KDC
CLIENT PROJ NO.	-
OSBORN PROJ NO.	J20221302.000

DETAILS (WATERLINE)

DRAWING NO.

D16

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1 2 3 4 5 6

CITY OF LORAIN

City Council Regular Meeting **7. g.**

Meeting Date: 02/02/2026

Submitted by: Elva Martes

AGENDA ITEM DESCRIPTION OR LEGISLATION TITLE:

AN ORDINANCE AUTHORIZING THE SAFETY/SERVICE DIRECTOR TO ENTER INTO A CONTRACT WITH THE LOWEST AND BEST BIDDER, TRI MOR CORPORATION, FOR THE TOWER BOULEVARD REHABILITATION PROJECT (PID 120287) IN THE CITY OF LORAIN, AND DECLARING AN EMERGENCY.

PURPOSE AND BACKGROUND:

The City of Lorain has been awarded funding by ODOT for the Tower Blvd. Rehab Project. The City of Lorain has completed the necessary engineering and construction planning and specifications for this project and seeks to award the construction of this project to the lowest and best bidder.

RECOMMENDATION TO COUNCIL:

Consideration for passage.

Fiscal Impact

Funds Available in Current Year Budget (Y/N):	Y
Estimated Total Expenditure:	$3,600,001.90
List of Funding Source and/or Account Number:	4010.C401.6300.5601
Estimate of Incoming Revenue (fees, grants, etc.):	$2,829,941.20

Financing Requirements (Bonds, Loans, Lease, etc.):

Project Total: $3,600,001.90 (ODOT portion $2,829,941.20 / City portion $770,060.70)

Attachments

Ordinance

Form Review

Inbox	Reviewed By	Date
Carrion	Rey Carrion	01/27/2026 01:50 PM
Mayor Bradley	Jack Bradley	01/27/2026 01:50 PM
Harper	Anita Harper	01/27/2026 04:29 PM
P. Riley	Michele Beko	01/28/2026 01:18 PM
Form Started By: Elva Martes		Started On: 01/27/2026 01:14 PM
Final Approval Date: 01/28/2026		

VOTE ON PASSAGE					
	AYE	NAY		AYE	NAY
Springowski			Torres		
Dimacchia			Gonzalez		
Fallis			Arroyo		
Drwal			Bearer		
Kempton			Thornsberry		
Carter			Arredondo		

ORDINANCE NO. _____

AN ORDINANCE AUTHORIZING THE SAFETY/SERVICE DIRECTOR TO ENTER INTO A CONTRACT WITH THE LOWEST AND BEST BIDDER, TRI MOR CORPORATION, FOR THE TOWER BOULEVARD REHABILITATION PROJECT (PID 120287) IN THE CITY OF LORAIN, AND DECLARING AN EMERGENCY.

WHEREAS, Tower Boulevard Rehabilitation Project is a transportation activity eligible to receive Ohio Department of Transportation ODOT Funding; and,

WHEREAS, the City of Lorain (LPA) has been awarded funding by ODOT; and,

WHEREAS, the City of Lorain (LPA) has completed the necessary engineering and construction planning and specifications for the road; and,

WHEREAS, the City of Lorain has received a low bid in the amount of $3,272,729.00; and,

WHEREAS, ODOT is responsible for $2,829,941.20 of the project funding and, the City is responsible for the remaining balance of the project funding, $770,060.70.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LORAIN, STATE OF OHIO:

SECTION 1: That the Safety/Service Director, is hereby authorized to enter into a contract for the Tower Boulevard Rehabilitation Project in the City of Lorain for the bid amount plus ten percent contingency for a total not to exceed $3,600,001.90 (ODOT portion $2,829,941.20 / City portion $770,060.70). All work on the project shall be coordinated by the City of Lorain Department of Engineering in accordance with plans and specifications that will be on file in the office of the City of Lorain Engineer and subject to Board of Control approval, as required by law. This shall be awarded to the lowest and best bidder for the bid amount plus ten percent contingency.

SECTION 2: That funding for the project has already been acquired and hereby appropriated in the following account 4010.C401.6300.5601. The project is not to exceed $3,600,001.90.

SECTION 3: That it is found and determined that all formal actions of this Council concerning and relating to the passage of this ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal actions were in meetings open to the public, and in compliance with all legal requirements, including Section 121.22, Ohio Revised Code.

SECTION 4: This ordinance is hereby declared to be an emergency measure to expedite the highway project and to promote highway safety. Therefore, this ordinance shall take effect immediately upon its passage and approval by the Mayor, providing that it meets the statutory requirements for passage otherwise, it shall take effect and be in force from and after the earliest period allowed by law.

PASSED: _____, 2026

_____
PRESIDENT OF COUNCIL

ATTEST: _____, CLERK

_____
MAYOR

APPROVED: _____, 2026

CITY OF LORAIN

City Council Regular Meeting **7. h.**
Meeting Date: 02/02/2026
Submitted by: Tim Shinsky

AGENDA ITEM DESCRIPTION OR LEGISLATION TITLE:

An ordinance assessing the cost of abating nuisance by removing litter and deposit of garbage, rubbish, junk, etc... during current calendar year.

PURPOSE AND BACKGROUND:

We wish to assess the cost of abating garbage, rubbish, junk, etc... at the properties listed in exhibit A, attached.

RECOMMENDATION TO COUNCIL:

We recommend Council consider passage of ordinance

Fiscal Impact

Funds Available in Current Year Budget (Y/N):	Y
Estimated Total Expenditure:	4323.40
List of Funding Source and/or Account Number:	1010.G100.4050.1000 Outside Source
Estimate of Incoming Revenue (fees, grants, etc.):	
Financing Requirements (Bonds, Loans, Lease, etc.):	

Attachments

Ordinance
Exhibit A

Form Review

Inbox	Reviewed By	Date
Garcia	Lori Garcia	01/22/2026 01:30 PM
Carrion	Rey Carrion	01/27/2026 01:45 PM
Mayor Bradley	Jack Bradley	01/27/2026 01:51 PM
Harper	Anita Harper	01/27/2026 04:16 PM
P. Riley	Michele Beko	01/28/2026 10:20 AM
Form Started By: Tim Shinsky		Started On: 01/22/2026 08:51 AM
Final Approval Date: 01/28/2026		

VOTE ON PASSAGE					
	AYE	NAY		AYE	NAY
Springowski			Torres		
Dimacchia			Gonzalez		
Fallis			Arroyo		
Drwal			Bearer		
Kempton			Thornsberry		
Carter			Arredondo		

ORDINANCE NO.

AN ORDINANCE ASSESSING THE COST OF ABATING NUISANCE BY REMOVING LITTER AND DEPOSIT OF GARBAGE, RUBBISH, JUNK ETC. DURING THE CURRENT CALENDAR YEAR AND DECLARING AN EMERGENCY.

WHEREAS, It is the duty of the owner and, if different, the lessee, agent or tenant having charge of real property to inspect and insure that litter, garbage, rubbish, junk, etc. is collected and removed from said property and that said property is safe and does not create a health or safety condition for others: and

WHEREAS, the need exists to abate the property nuisances and to assess these properties.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LORAIN, STATE OF OHIO:

SECTION I. This council finds that the Director of Public Safety/ Service has abated certain nuisances after notifying the owners of the property on which said nuisances originated, and has reported the cost of such abatement, all in the manner provided by law, as follows per attached Exhibit A is fully incorporated herein:

SECTION II. The amounts shown are hereby assessed upon the properties shown and such assessments shall be certified for collection upon the current Calendar collection year duplicate in the same manner as general taxes. All funds collected shall be deposited into Special Assessment Account 1010.G100.4050.1000 upon receipt.

SECTION III. That it is found and determined that all formal actions of this Council concerning and relating to the passage of this Ordinance adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal actions were in meetings open to the public and in compliance with all legal requirements, including section 121.22 of the Ohio Revised Code.

SECTION IV. That this Ordinance is hereby declared to be an emergency the nature of the emergency being the immediate need to provide for normal operating and capital expenditures to assess the properties, and in order to render services to protect the health, safety, and welfare of the City. Therefore, this ordinance shall take effect immediately upon its passage and approval by the Mayor, providing it receives the statutory requirements for passage, otherwise, it shall take effect and be in force from and after the earliest period allowed by law.

PASSED:_____, 2026 _____
PRESIDENT OF COUNCIL

ATTEST: _____, CLERK

_____
MAYOR

APPROVED: _____, 2026

EXHIBIT A

HOMEOWNER of RECORD	Permanent Parcel #	Removal Cost	Admin	Total	PROPERTY ADDRESS	DATE CLEANED
Joshua Baker	0201003104018	$178.84	$300.00	$478.84	228 Florida Ave	11/8/2025
First Spanish Evangelical	0201003146024	$178.84	$300.00	$478.84	1714 Reid Ave	10/11/2025
Steven Kessler	0201004109002	$178.84	$300.00	$478.84	821 Lexington Ave	10/11/2025
SBN Properties of Ohio LLC	0202007109032	$180.77	$300.00	$480.77	4401 Marshall Ave	10/4/2025
Sharpe Property Services LLC	0300055119002	$186.89	$300.00	$486.89	1609 Nevada Ave	10/25/2025
H2 Capital Partners LLC	0300077117013	$178.84	$300.00	$478.84	2818 Packard Dr	10/11/2025
H2 Capital Partners LLC	0300077117017	$180.77	$300.00	$480.77	2904 Packard dr	10/4/2025
August Vincent Graziano	0300077118014	$178.84	$300.00	$478.84	4705 Chelsea Ave	11/8/2025
Myhen Associates	0300098116017	$180.77	$300.00	$480.77	3175 Caroline ave	10/4/2025
			Total	$4,323.40		

ORIGINATOR:
Tim Shinsky
tim_shinsky@cityoflorain.org

CITY OF LORAIN

City Council Regular Meeting **7. i.**

Meeting Date: 02/02/2026

Submitted by: Terri Soto, Treasurer

AGENDA ITEM DESCRIPTION OR LEGISLATION TITLE

An ordinance authorizing the Treasurer of the City of Lorain, Ohio to enter into an agreement with Keith D. Weiner & Associates Co., LPA for the collection of delinquent income tax balances that are owed to the City of Lorain.

PURPOSE AND BACKGROUND:

An ordinance authorizing the Treasurer of the City of Lorain, Ohio to enter into an agreement with Keith D. Weiner & Associates Co., LPA for the collection of delinquent income tax balances that are owed to the City of Lorain.

RECOMMENDATION TO COUNCIL:

Lorain City Council consider

Attachments

Ordinance For Treasurer Debt Collection Attorney

Retainer Agreement with KWa & City Treasurer "Exhibit A"

Form Review

Inbox	Reviewed By	Date
P. Riley	Michele Beko	01/28/2026 01:18 PM

Form Started By: Terri Soto Started On: 01/28/2026 10:16 AM

Final Approval Date: 01/28/2026

VOTE ON PASSAGE					
	AYE	NAY		AYE	NAY
Springowski			Torres		
Dimacchia			Gonzalez		
Fallis			Arroyo		
Drwal			Bearer		
Kempton			Thornsberry		
Carter			Arredondo		

ORDINANCE NO. _____

AN ORDINANCE AUTHORIZING THE TREASURER OF THE CITY OF LORAIN, OHIO TO ENTER INTO AN AGREEMENT WITH KEITH D. WEINER & ASSOCIATES CO., LPA FOR THE COLLECTION OF DELINQUENT INCOME TAX BALANCES THAT ARE OWED TO THE CITY OF LORAIN.

WHEREAS, the Treasurer of the City of Lorain is responsible for the collection of City Income Taxes; and

WHEREAS, the Treasurer currently utilizes the legal services of Keith D. Weiner & Associates Co., LPA for the collection of City Income Taxes; however, the parties desire to enter into a new Retainer Agreement containing operational modifications with respect to collecting Income Taxes.

NOW, THEREFORE BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LORAIN, OHIO:

SECTION I. That the Treasurer of the City of Lorain is hereby authorized to enter into an Agreement with Keith D. Weiner & Associates Co., LPA, which shall be in form and substance essentially similar to the Retainer Agreement which is marked Exhibit A, attached hereto and made a part hereof by reference, subject to the approval of the Law Director.

SECTION II. That it is found and determined that all formal actions of this Council concerning and relating to the passage of this ordinance were adopted in an open meeting and that all deliberations of this Council and any of its committees that resulted in such formal actions were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

SECTION III. That this ordinance shall take effect and be in force from and after the earliest period allowed by law.

PASSED: _____, 2026 _____
MAYOR

ATTEST: _____, CLERK

APPROVED: _____, 2026

_____
PRESIDENT OF COUNCIL

RETAINER AGREEMENT

This retainer agreement is made and entered into this ____ date of _____, 2026("Effective Date") by and between the **City of Lorain, Treasurer's Office** (hereinafter referred to as "City") and **Keith D. Weiner & Associates Co., L.P.A**. (hereinafter referred to as "Firm"). The City and the Firm are sometimes collectively referred to as "the parties." This retainer agreement supersedes the previous retainer agreement executed September 8th 2023 by the City's Treasurer, Terri Soto and the Firm's Principal, Keith D. Weiner.

Recitals:

Whereas the City desires to retain the Firm for debt collection services for its delinquent tax accounts and other miscellaneous past due accounts which may arise.

Whereas the debt collection services will include but will not be limited to the following: skip tracing, sending written demand letters requesting payment, location and asset verification, telephonic contact with taxpayers, accepting and negotiating payments on accounts placed for collection, filing lawsuit, obtaining judgment and issuing legal execution.

Whereas, the Firm, in the ordinary course of its business, provides these services to other creditors including numerous cities within this State and desires to provide said debt collection services to the City.

Whereas these debt collection services shall be provided to the City on a contingency fee basis in accordance with the terms below.

Now therefore, in consideration of the terms and conditions set forth below, the parties, with the full intent to be legally bound, do hereby agree as follows:

I. Relationship of Parties

Nothing contained in this Agreement shall be construed as constituting Firm as a servant or employee of City. The Firm is solely responsible for the employment, acts, omissions, control, and direction of its employees. Notwithstanding the above, City and Firm agree that Firm is authorized to conduct business as an independent contractor and to conduct all necessary activities to collect outstanding balances upon Accounts, including but not limited to "collection follow up" which is to include skip tracing, telephone calls, letter series, lawsuits and executions on judgments until the account is paid in full, settled or closed and returned to City. Firm is authorized to engage in all lawful actions that it deems appropriate and necessary to represent the City and protect the legal interests of the City. The City shall not intentionally attempt to collect accounts that it has referred to Firm, and the City will promptly report to the Firm any direct payments received on any placed accounts.

II. Compliance with Law

Firm warrants and represents that its practices shall be conducted in accordance with all applicable laws, rules, regulations and other rules of federal, state, and territorial

governments or any political subdivisions thereof, or any other duly constituted public authority.

III. Licensing, Bonding and Insurance

Firm will maintain all licensing, bonding, insurance and financial records required by federal, state and municipal authorities including: (1.) Errors and Omissions and General Liability Insurance in the amount of one million dollars ($1,000,000.00) per claim and three million dollars ($3,000,000.00) aggregate, (2.) Employee fidelity bond in the amount of one million dollars ($1,000,000.00) per incident, (3.) Commercial general liability insurance at one million dollars ($1,000,000.00) per claim, two million dollars ($2,000,000.00) aggregate, (4.) Automobile liability of one million dollars ($1,000,000.00) and, (5.) an excess general liability of $1,000,000.00. Firm shall furnish City copies of the licensing, bonding, insurance policies as City may require from time to time.

IV. Contingency Collection Fees and Court Costs

1. **Contingency Rate:**

   A) The Firm will charge 25% of all funds recovered after reimbursing the City for Court's Costs incurred, including cases placed after judgment. (See section 3. Court Costs below)

   B) In cases where Collection Fees are added to the taxpayer's outstanding balance, per Ohio Revised Code 718.27G, those fees will become part of the total balance owed. Firm will charge 25% of all funds recovered including but not limited to those Collections Fees added.

   C) In cases where estimated total balances are adjusted post suit or post judgment below the amount of $500.00, the Firm will charge the City a flat fee of $200. This flat fee is in addition to the contract contingency fee charged on any remaining balances to offset firm's labor costs for legal processing. The total balance is derived of the amount owed as of the account's placement with Firm and is not inclusive of Court Costs (3.).

2. **Lawsuits:** Firm has authority to file suit on any account placed for collection as it deems necessary and does not need to seek additional authority from the City to do so. The Firm will not file suit or incur court costs on any account with a total balance less than **five hundred dollars ($500.00)** at time of suit. From time to time, however, the parties may orally agree to file suit on balances less than this threshold amount as they deem necessary.

   When filing suit on multiple tax years, the firm will file suit using the lowest post-judgment statutory interest rate to increase efficiency, avoid

confusion and ensure accurate balances. City understands and agrees to forgo its rights to the additional interest that would be available if the accounts were assessed post judgment interest at the higher interest rate available to it by statute based on year.

3. **Court Costs:** Court costs are pass-through charges assessed by the court. City can choose to authorize our Firm to advance court costs for suit or receive an invoice listing accounts ready for suit and forward these costs to us. It is our preference to advance court costs for filing suit as it allows us to prosecute claims quicker. Court costs for motions, miscellaneous court fees and post judgment executions are advanced by the Firm because they are time sensitive and necessary to prosecute the claim once suit is authorized. First funds collected on an account are applied to court costs expended before our contingency fee is applied. We ask the City to pay court cost invoices within 30 days, and we reserve the right to offset seriously delinquent invoices (over 90 days delinquent), from monthly recoveries.

   Courts that defer filing fees but assess them as costs will be paid by the Firm from first dollars collected provided Firm is counsel of record and is in possession of the account proceeds or City authorizes the Firm to offset deferred fees from gross proceeds collected and account for same on its monthly reports.

   City can choose from any one of the following reporting options:

   - *Gross Remittance*: City is sent all funds collected and invoiced later for Court Costs and Contingency Fees. Invoice must be paid within 30 days.
   - *Net Remittance*: City is invoiced for all Court Costs. Firm nets its contingency fee from the funds collected. Our monthly report shows all court costs collected and reimbursed to the City on a per account basis.
   - *Full Net Remittance*: Firm nets courts costs and contingency fees from all funds collected from the previous month.

4. **Contested Files:** Firm reserves the right to deviate from the contingency fee arrangement in the event a counterclaim is filed, or it becomes necessary to prosecute, or defend an appeal. In such cases, any agreement to divert from the contingency fee shall be agreed upon in writing, (email), but Firm is authorized to take any necessary action to protect City's interests.

5. **Miscellaneous Costs:** The Firm will not bill the City for incidental costs. Examples would include telephone calls, copying charges, credit bureau charges, Accurint or Lexis/Nexus charges, or other research fees. The Firm will bill the City for third party charges which are billed to the Firm and incurred as a result of a third party responding to subpoenas for debt collection information. Such charges are not billable to the taxpayers.

V. Payments for Collection Services Performed

The Firm shall deposit all collection revenue generated on accounts it is handling on behalf of the City into the Firm's escrow account. Due to direct payments sent to the City, the funds held in the Firm's escrow at the end of the reporting period may be less than the collection fees due to the Firm. In such instances the Firm will offset its fees that are due during the reporting period from the funds it holds in hand and send the City an invoice for any deficiency. The City shall pay said invoice upon receipt but not later than 30 days.

VI. Trust Fund and Remittances

Firm agrees not to co-mingle money received on City accounts with its own funds or to use any part of City money in the conduct of Firm business.

All funds collected upon Accounts by Firm will be marked for deposit only and deposited into the Firm's escrow account in accordance with State Law.

The parties agree that each reporting period will begin upon the first day of each calendar month and end upon the last day of each calendar month. A remittance report setting forth all debt payments received, assessed collection fees received, all court costs incurred, and miscellaneous debits or credits will be generated by Firm and delivered to City within seven business days following the end of the reporting period.

City agrees to report to Firm all direct pays immediately upon receipt, so that all reports showing payments and credits will be accurate and comprehensive. Firm will deduct collection fees due for all direct pays from City's monthly remittance. All such calculations will be reflected in the monthly remittance report.

VII. Record Inspection and Notice of Contract Restrictions

A. Firm will permit City representatives, auditors, or representatives of audit firms engaged by City to perform an audit and to duplicate, when necessary, all documents, records, and files pertaining to City accounts at any time during regular business hours with seven days' notice.

B. City shall notify Firm of any restrictions regarding account debtor contact, including notification of attorney representation, bankruptcy petitions, and any other collection limitations of which City may or should have knowledge.

VIII. Treatment of Confidential Information

For purposes of this Agreement, "Confidential Information" is defined as information, data, or material deemed proprietary and/or confidential by City, not generally known or available to the public, and for which City has notified Firm that

it has deemed such information proprietary or confidential. Firm understands the necessity of protecting the confidentiality of confidential information of City. Firm agrees to use all reasonable means to protect the confidentiality of confidential information of City, and to instruct all employees of Firm in the necessity of same. Disclosure of confidential information shall be restricted to those individuals who are participating in a proposed transaction solely on a "need to know" basis, who are advised of this agreement and agree to be bound by its terms, or as otherwise may be required by law. In accordance with all applicable law, Firm shall utilize the same efforts and procedure to protect confidential information of City as it uses to protect its own confidential and proprietary information.

IX. Termination

Each party shall have the right to terminate this Agreement upon giving the other party 30 days written notice by certified mail.

Upon termination of this Agreement, Firm shall return all Accounts to City, excluding those accounts which have generated a payment to Firm within the 45 days before the date of termination; and those Accounts upon which City has authorized litigation; or those accounts which are remitting periodic payments.

City will continue to pay to Firm the fees due under the terms of this Agreement for any Account remaining with Firm after the termination date of this Agreement. In no event will an account be retained by Firm longer than 6 months after the termination date, unless agreed otherwise by the parties.

X. Retention

All Accounts placed with Firm by City for collection will be returned to City within 12 months of the placement date, if the account has not had a payment post within 45 days of the end of the 12-month retention period or if there has been no legal action initiated on the account.

XI. Assignment

This agreement is binding upon the parties hereto and upon their respective successors and assigns. Firm will not assign, sell, lease, transfer, or permit the use of this Agreement or any of City's accounts, records or related documents by any other party or parties for any purpose other than as described herein unless City grants express written authorization.

XII. Miscellaneous Provisions

A. All representatives, warranties, covenants and indemnities in this Agreement shall survive the termination of this Agreement but shall not be deemed to have been made with respect to any period of time subsequent to the termination of this Agreement.

B. Any provision of this Agreement which is prohibited, unenforceable or not authorized in any jurisdiction shall be invalid in that jurisdiction to the extent of such prohibition, unenforceability or non-authorization without invalidating the remaining provisions of this Agreement or affecting the validity, enforceability or legality of the provision in any other jurisdiction.

C. No amendment, modification, termination or waiver of any provision of this Agreement by either party shall be effective unless it is in writing and signed by the party to be bound, and then the waiver or consent shall be effective only in the specific instance and for the specific purpose for which given. No notice or demand on either party in any case shall entitle the other party to any other or further notice or demand in similar or other circumstances. Inaction or failure to demand strict performance shall not be deemed a waiver.

D. This Agreement constitutes the entire Agreement between the parties with respect to the subject matter. All prior agreements, representations, statements, negotiations, and undertakings are superseded hereby.

E. This agreement shall be governed by and construed in accordance with the laws of the State of Ohio, and the parties agree that the sole forum in which jurisdiction shall lie for an action for enforcement of any provision of this Agreement shall be the county of the City's municipality.

F. The City may withdraw an account placed for collection as needed. All fees earned up to withdrawal shall be considered earned by the Firm.

G. **The Firm may subcontract with vendors to assist in the collection of any delinquent accounts without the prior written consent of the City.**

H. Notices of termination required or authorized to be sent by the parties to this Agreement must be sent by certified mail and addressed as follows:

Keith D. Weiner & Associates Co., L.P.A., 1100 Superior Ave East. Suite 1100, Cleveland, Ohio 44114

City of Lorain, Treasurer's Office, 605 West 4th St., Lorain, OH 44052

Agreed and Entered into by:
Keith D. Weiner & Associates Co., L.P.A.

By:_____

Its:_____

_____
Effective Date

City of Lorain, Treasurer's Office

By:_____

Its:_____

_____
Effective Date

CITY OF LORAIN

City Council Regular Meeting **7. j.**

Meeting Date: 02/02/2026

Submitted by: Dawn Walther

AGENDA ITEM DESCRIPTION OR LEGISLATION TITLE

AN ORDINANCE APPROPRIATING FUNDS FOR CURRENT EXPENSES AND OTHER EXPENDITURES OF THE CITY OF LORAIN, STATE OF OHIO AS PASSED BY TEMPORARY BUDGET ORDINANCE #185-25 BEGINNING JANUARY 1, 2026 AND ENDING MARCH 31, 2026 AND DECLARING AN EMERGENCY.

PURPOSE AND BACKGROUND:

To appropriate additional funds in the temporary budget for current expenses.

RECOMMENDATION TO COUNCIL:

Lorain City Council to consider for passage.

Fiscal Impact

Funds Available In Current Year Budget (Y/N):	Y
Estimate of Total Expenditure:	2,143.00
List of Funding Source and/or Account Number:	1010
Estimate of Incoming Revenue (fees, grants, etc.):	
Financing Requirements (Bonds, Loans, Lease, etc.):	

Attachments

Ordinance

Ordinance Attachment

Form Review

Inbox	Reviewed By	Date
Harper	Anita Harper	01/28/2026 03:17 PM
P. Riley	Michele Beko	01/28/2026 03:26 PM

Form Started By: Dawn Walther Started On: 01/22/2026 11:34 AM

Final Approval Date: 01/28/2026

ORDINANCE NO. _____

AN ORDINANCE APPROPRIATING FUNDS FOR CURRENT EXPENSES AND OTHER EXPENDITURES OF THE CITY OF LORAIN, STATE OF OHIO AS PASSED BY TEMPORARY BUDGET ORDINANCE #185-25 BEGINNING JANUARY 1, 2026 AND ENDING MARCH 31, 2026 AND DECLARING AN EMERGENCY.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LORAIN, STATE OF OHIO:

SECTION I. That the following amount be appropriated from the following funds to provide for the current expenses and other expenditures in the City of Lorain, State of Ohio, beginning January 1, 2026 and ending March 31, 2026:

General Fund	
Fund Balance	$2,143.00

SECTION II. That the following amounts be appropriated to the following funds:

General Fund	
Clerk of Council - Contract Services	$2,143.00

SECTION III. That this Ordinance is passed by virtue of the provisions of Section 5705.40 Ohio Revised Code, all provisions of which have been complied with.

SECTION IV. That it is found and determined that all formal actions relating to the passage of this Ordinance were adopted in an open meeting of this Council and that all deliberations of this Council and any of its committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements, including Section 121.22, Ohio Revised Code.

SECTION V. This ordinance is hereby declared to be an emergency, the nature of which is the immediate need to provide funding to meet contractual obligations. Therefore, this Ordinance shall take effect immediately upon its passage and approval by the Mayor, provided it receives the statutory requirements for passage, otherwise it shall take effect and be in force from and after the earliest period allowed by law.

PASSED:_____ , 2026 _____
President of Council

ATTEST:_____, 2026 _____
Clerk of Council Mayor

APPROVED:_____, 2026

Harper, Anita

From: Dull, Breanna
Sent: Thursday, January 22, 2026 10:44 AM
To: Harper, Anita; Nutt, Daniel
Subject: Appropriation Request

Good morning,

On the next appropriation ordinance, can you please appropriate $2143.00 for contractual services (Account Number 1010.E100.1150.~~3600~~.1500)

Please let me know if you need anything else from me!

Thank you,

Source: Fund Balance

Breanna Dull, CMC
Clerk of Lorain City Council
200 West Erie Avenue
Lorain, Ohio 44052

440.204.2050
440.204.2521 fax

CITY OF LORAIN

City Council Regular Meeting **7. k.**

Meeting Date: 02/02/2026

Submitted by: Dawn Walther

AGENDA ITEM DESCRIPTION OR LEGISLATION TITLE

AN ORDINANCE AUTHORIZING THE AUDITOR OF THE CITY OF LORAIN, OHIO TO PAY INVOICE SUBMITTED BY THE UTILITIES DEPARTMENT THAT INVOKE THE THEN AND NOW CERTIFICATION EXCEPTION PROCESS AS PER OHIO REVISED CODE SECTION 5705.41 AND TO PAY FOR SAID INVOICES AND DECLARING AN EMERGENCY.

PURPOSE AND BACKGROUND:

Invoice date was before purchase order was obtained.

RECOMMENDATION TO COUNCIL:

Lorain City Council to consider for passage.

Fiscal Impact

Funds Available In Current Year Budget (Y/N):	Y
Estimate of Total Expenditure:	5,945.00
List of Funding Source and/or Account Number:	6020.P602
Estimate of Incoming Revenue (fees, grants, etc.):	
Financing Requirements (Bonds, Loans, Lease, etc.):	

Attachments

Ordinance Then & Now

Ordinance Then & Now Attachment

Form Review

Inbox	Reviewed By	Date
Harper	Anita Harper	01/27/2026 04:29 PM
P. Riley	Michele Beko	01/28/2026 10:20 AM

Form Started By: Dawn Walther Started On: 01/27/2026 03:29 PM

Final Approval Date: 01/28/2026

ORDINANCE NO. _____

AN ORDINANCE AUTHORIZING THE AUDITOR OF THE CITY OF LORAIN, OHIO TO PAY INVOICE SUBMITTED BY THE UTILITIES DEPARTMENT THAT INVOKE THE THEN AND NOW CERTIFICATION EXCEPTION PROCESS AS PER OHIO REVISED CODE SECTION 5705.41 AND TO PAY FOR SAID INVOICES AND DECLARING AN EMERGENCY.

WHEREAS, Ohio Revised Code section 5705.41 requires the Auditor of the City of Lorain to certify that funds have been appropriated and are available to pay invoices as a result of a purchase order or contract subject to certain exceptions which are not otherwise applicable herein: and

WHEREAS, the Utilities Department has submitted an invoice which totals **$5,945.00** and money was available then and is available **NOW**; and

WHEREAS, the Auditor of the City Of Lorain has certified, using the Then and Now Certification exception pursuant to ORC section 5705.41(D)(1), that the appropriate funds were available THEN and the appropriate funds are available NOW; and

WHEREAS, the City of Lorain, Ohio deems it necessary to pay these invoices for services rendered or material received;

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LORAIN, STATE OF OHIO:

SECTION I. That the Auditor of the City of Lorain is hereby authorized to pay the invoice along with the attached THEN and NOW certificate, in the amount **$5,945.00** and remit said payment to the appropriate vendor.

SECTION II. That it is found and determined that all formal actions of this Council concerning and relating to the adoption of this ordinance were adopted in an open meeting of the Council, and that all deliberations of this Council and any of its committees that resulted in such formal actions, were in meetings open to the public, in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

SECTION III. That this Ordinance is hereby declared to be an emergency, the nature of the emergency being the immediate need to pay the invoices submitted for services rendered or material received by the City of Lorain and to protect the credit of the City in order to continue to receive products and services from vendors. Therefore, this Ordinance shall take effect and be in force from and immediately after its passage and approval of the Mayor, providing it meets the statutory requirements for passage, otherwise, it shall take effect and be in force from and after the earliest period allowed by law.

PASSED:_____ , 2026 _____
President of Council

ATTESTED:_____ , 2026 _____
Clerk of Council

APPROVED:_____ , 2026 _____
Mayor

INVOICE APPROVAL VOUCHER

City of Lorain

Time/Date Received

JAN 14 '26 AM11:53

Check #	**DATE:** 1/12/26	**DEPARTMENT**	UTILITIES
VENDOR # 33962	**VENDOR** UtiliSync, LLC		
[ ] Emergency Purchase **Approval Date**	[X] Then & Now Certificate attached		

Original P.O. Date	Invoice #	Invoice Date	Invoice Description/Account Number	PO #	PO COMPLETE Y/N	Invoice Gross Amount	Sep Chk.
12/22/2025	INV-1866	12/12/2025	6020.P602.6190.6300.1500	2025-1873	Y	5,945.00	
			Contractual Service				
			Ohio Utilities Protection service ticket				
			management system				
				TOTAL		**5,945.00**	

Department Head	Date 1/13/2026
Auditor Approval	Date

By: Pschilens

[ ] **DO NOT MAIL CHECK. PLEASE RETURN IT TO UTILITIES DEPARTMENT. THANK YOU.**

INVOICE

City of Lorain

Invoice Date
Dec 12, 2025

Invoice Number
INV-1866

EIN
xxx-xx-0303

UtiliSync, LLC
9980 S 300 West, Ste 200
Sandy, UT 84070

Description	Quantity	Unit Price	Tax	Amount USD
UtiliSync TMS: Receive 811 Ticket from OHIO811 and show the tickets on a map and in a list view. Includes the following: • Access to UtiliSync TMS. • Create custom, branded PDF reports, including photos taken, for every ticket. • Send Positive Response to OHIO811. • Send email to excavator including custom PDF report. • Up to 15,000 tickets/year • Up to 100 811 Locate Users • Up to 100 View-Only Users • Up to 100 Admin Users Term: 1 Year Renews: February 1	1.00	4,950.00	Tax Exempt	4,950.00
Cityworks 811 Integration: • Create a Cityworks service request every time a new ticket is received • When a ticket is close: • Attach the PDF report to the service request • Attach photos taken to the service request • Close the service request Term: 1 Year Renews: February 1	1.00	995.00	Tax Exempt	995.00
			Subtotal	5,945.00
			TOTAL TAX	0.00
			TOTAL USD	**5,945.00**

Due Date: Feb 1, 2026

PAYMENT ADVICE

To: UtiliSync, LLC
9980 S 300 West, Ste 200
Sandy, UT 84070

Customer	City of Lorain
Invoice Number	INV-1866
Amount Due	**5,945.00**
Due Date	Feb 1, 2026
Amount Enclosed	

Enter the amount you are paying above

City of Lorain Auditor's Office
Anita Harper, Auditor

THEN & NOW CERTIFICATE

Please complete Sections 1. & 2.
Attach it to the payment voucher and send it to the Auditor's Office for processing.

1.

Individual/s Responsible for Purchasing Item/s without a purchase order:	Pam Schilens
Explanation of Purchase without a P.O.	Did not receive a quote prior to receiving invoicing for annual renewal
Purchaser's Signature	Pamela A Schilens — Date: 1/12/26
Department Head Signature	Date: 1/13/2026

2. *THEN & NOW CERTIFICATION*

I hereby certify that sufficient funds, in the sum of $ 5,945.00, were available at the time the attached invoice, contract or obligation was made (THEN) and that sufficient funds are NOW currently available to pay the attached invoice, contract or obligation.

G/L ACCOUNT #: 6020.P602.6190.6300.1500

Amount Available THEN: $ 5,945.00 Amount Available NOW: $ 5,945.00

Certified by: _____ Date: 1-23-26
City Auditor/Deputy Auditor

NOTE: If the purchase is over $3,000 or if funds were **not** available THEN, this voucher will need to be approved by Lorain City Council. You will need to notify the vendor explaining to them that this will not be paid in a timely manner due to the purchasing oversight.

In case of an EMERGENCY PURCHASE, please remember to call the S/S office for approval, enter the requisition and then call the Auditor's Office for the PO#. This procedure is to be used for true emergency items or procedures, i.e. roof repair, broken window...

Rev. 7/2/2013

CITY OF LORAIN

City Council Regular Meeting **7. l.**
Meeting Date: 02/02/2026
Submitted by: Anita Harper, Auditor

AGENDA ITEM DESCRIPTION OR LEGISLATION TITLE

Issuance and sale of bonds in the maximum amount of $4,200,000 for the purpose of improving various local roadways within the city.

PURPOSE AND BACKGROUND:

The purpose is to finance the repair and replacement of certain roadways within the city including the 2026 Tower Blvd project and the Local Roadway Rehab rounds 39 and 40 in conjunction with Ohio Public Works Commission to be completed in 2026 and 2027.

RECOMMENDATION TO COUNCIL:

Lorain City Council consider passage

Fiscal Impact

Funds Available In Current Year Budget (Y/N):	No
Estimate of Total Expenditure:	4,200,000
List of Funding Source and/or Account Number:	4010
Estimate of Incoming Revenue (fees, grants, etc.):	4,200,000

Financing Requirements (Bonds, Loans, Lease, etc.):
New bond Issuance

Attachments

bond Ordinance-2026 New $

Form Review

Inbox	Reviewed By	Date
Harper (Originator)	Anita Harper	01/28/2026 04:30 PM
P. Riley	Michele Beko	01/29/2026 08:42 AM
Form Started By: Anita Harper		Started On: 01/28/2026 04:04 PM
Final Approval Date: 01/29/2026		

ORDINANCE NO. ____-26

AN ORDINANCE AUTHORIZING THE ISSUANCE AND SALE OF GENERAL OBLIGATION BONDS IN A MAXIMUM AGGREGATE PRINCIPAL AMOUNT OF $4,200,000, FOR THE PURPOSE OF PAYING THE COSTS OF ROADWAY IMPROVEMENTS AS FURTHER DESCRIBED HEREIN, TOGETHER WITH ANY NECESSARY APPURTENANCES THERETO, AND TO PAY THE COST OF ISSUANCE FOR SAID BONDS; AND DECLARING AN EMERGENCY.

WHEREAS, the City Auditor has certified to this Council that the estimated life or period of usefulness of the Roadway Improvements defined in Section 14 at least five (5) years and has further certified the maximum maturity of the Series 2026 Roadway Improvement Bonds is 20 years, based upon the weighted average of the amounts allocated to several classes of improvements set forth in the City Auditor's Certificate, which allocation is approved, ratified and confirmed.

NOW THEREFORE, BE IT ORDAINED by the Council of the City of Lorain, Lorain County, Ohio:

Section 1. Findings and Determinations. This Council finds and determines the following matters (capitalized terms that are not otherwise defined are defined in Section 14):

(a) It is necessary for the City to issue the Series 2026 Roadway Improvement Bonds for the purpose of (1) paying the costs of Roadway Improvements (the "Improvements," as further defined in Section 14 hereof) and (2) paying Financing Costs (as defined in Section 8 hereof) of the Series 2026 Roadway Improvement Bonds.

(b) The Series 2026 Roadway Improvement Bonds may be sold in a consolidated issue under Section 133.30(B) of the Ohio Revised Code (the "Revised Code").

(c) The City Auditor has certified to this Council the maximum maturity of the Series 2026 Roadway Improvement Bonds.

(d) All acts and conditions necessary to be performed by the City or to have been met for the issuance of the Series 2026 Roadway Improvement Bonds in order to make them legal, valid, and binding general obligations of the City, have been performed and met, or will have been performed and met at the time of delivery of the Series 2026 Roadway Improvement Bonds, as required by law.

(e) No statutory or constitutional limitation of indebtedness or taxation will be exceeded by the issuance of the Series 2026 Roadway Improvement Bonds.

(f) All formal actions of this Council relating to the enactment of this Ordinance were taken in an open meeting of this Council, and all deliberations of this

Council and of any of its committees that resulted in those formal actions, were in meetings open to the public, in compliance with all legal requirements, including Section 121.22, Revised Code.

Section 2. Terms of the Series 2026 Roadway Improvement Bonds. The Series 2026 Roadway Improvement Bonds will have the following terms:

(a) **Amount.** The Series 2026 Roadway Improvement Bonds shall be issued in the maximum Original Principal Amount as determined by the City Auditor in the Certificate of Award, but in no event shall such Original Principal Amount exceed $4,200,000. The principal amounts of the Series 2026 Roadway Improvement Bonds to be issued as Serial Series 2026 Roadway Improvement Bonds or as Term Series 2026 Roadway Improvement Bonds will be determined by the City Auditor in the Certificate of Award.

(b) **Date.** The Series 2026 Roadway Improvement Bonds shall be dated the Closing Date, or such other date, not more than 31 days before the Closing Date, as determined by the City Auditor in the Certificate of Award.

(c) **Maturity.** The Series 2026 Roadway Improvement Bonds will mature or be payable by Mandatory Sinking Fund Redemption in the amounts and on the Principal Payment Dates as determined by the City Auditor in the Certificate of Award.

The City Auditor may adjust the principal payment schedule within the limitations of Ohio Revised Code Section 133.21. This Council authorizes and directs the City Auditor to prepare separate maturity schedules for each of the issues of bonds sold as a consolidated issue and to include those separate maturity schedules in the Certificate of Award, demonstrating compliance of each of those bond issues with the separate periodic maturity or principal payment limitations in Section 133.21(A), Ohio Revised Code.

(d) **Redemption Before Stated Maturity.** The Series 2026 Roadway Improvement Bonds will be subject to redemption before their stated maturity as described in this Section 2(d), unless otherwise determined by the City Auditor in the Certificate of Award.

(1) ***Mandatory Sinking Fund Redemption.*** If any of the Series 2026 Roadway Improvement Bonds are issued as Term Series 2026 Roadway Improvement Bonds, the Term Series 2026 Roadway Improvement Bonds will be subject to Mandatory Sinking Fund Redemption, in part, on the Mandatory Redemption Dates, at a redemption price of 100% of the principal amount being redeemed, plus interest accrued to the redemption date. The principal amounts to be paid by Mandatory Sinking Fund Redemption will be those in the principal payment schedule as determined by the City Auditor in the Certificate of Award.

The City will have the option to deliver Term Series 2026 Roadway Improvement Bonds in any principal amount to the Registrar for cancellation. The City will be entitled to a credit against its obligation to pay Debt Service by Mandatory Sinking Fund Redemption on any future Mandatory Redemption Date for Term Series 2026 Roadway Improvement Bonds that (A) are delivered by the City to the Registrar, (B) have previously been redeemed other than by Mandatory Sinking Fund Redemption, or (C) have been purchased and canceled by the Registrar (i) as provided in the Registrar Agreement, or (ii) if the City Treasurer is the Registrar, by written request of the City Auditor to the Registrar, at a price not exceeding the price set by the City Auditor in that request.

(2) ***Optional Redemption.*** If determined by the City Auditor in the Certificate of Award to be in the best interest of and financially advantageous to the City, the Series 2026 Roadway Improvement Bonds shall be subject to prior redemption on any date, by and at the sole option of the City, as provided in the Certificate of Award, either in whole or in part, in integral multiples of $5,000, at the redemption prices specified in the Certificate of Award (expressed as percentages of the principal amount redeemed), plus accrued interest to the redemption date; provided that such redemption prices may not exceed 110%.

The City's option to redeem the Series 2026 Roadway Improvement Bonds shall be exercised by a notice from the City Auditor to the Registrar (i) as provided in the Registrar Agreement, or (ii) if the City Treasurer is the Registrar, the notice shall specify the redemption date and the principal amount of the Series 2026 Roadway Improvement Bonds to be redeemed, and be given at least 45 days before the redemption date or such shorter period as acceptable to the Registrar.

(3) ***Terms of Redemption.*** The following are the procedures for partial redemption, for notice of redemption, and for payment of redeemed Series 2026 Roadway Improvement Bonds.

(A) ***Partial Redemption.*** If Series 2026 Roadway Improvement Bonds are to be redeemed in part by optional redemption, the maturities of Series 2026 Roadway Improvement Bonds to be redeemed and the amounts of each maturity to be redeemed shall be selected by the City. If fewer than all Series 2026 Roadway Improvement Bonds of a maturity are to be redeemed, the Registrar shall select the Series 2026 Roadway Improvement Bonds of a maturity to be redeemed by lot in any manner it determines. The Registrar shall treat each portion of Series 2026 Roadway Improvement Bonds of a maturity in the lowest Authorized Denomination as a separate bond for purposes of that selection. If the Series 2026 Roadway Improvement Bonds to be redeemed are book-entry Series 2026 Roadway Improvement Bonds, the Registrar shall direct the

Depository to select portions of Series 2026 Roadway Improvement Bonds or beneficial ownership interests of a maturity to be redeemed. If a portion of a Bond is redeemed, the Holder shall surrender that Bond for exchange of the unredeemed portion.

(B) ***Notice of Redemption.*** The Registrar shall give notice of redemption of Series 2026 Roadway Improvement Bonds to the Holders at least 30 days before the redemption date, by first-class mail. If the Registrar sends the notice, the failure of a Holder to receive the notice will not affect the validity of the redemption. The notice shall state all of the following:

(i) the redemption date,

(ii) the redemption price,

(iii) the principal amount of Series 2026 Roadway Improvement Bonds to be redeemed,

(iv) if fewer than all the outstanding Series 2026 Roadway Improvement Bonds are to be redeemed, the identifying information of the Series 2026 Roadway Improvement Bonds to be redeemed,

(v) the places where the amounts due on redemption are payable, and

(vi) that the redemption price of each Bond redeemed will be due and payable on the redemption date, and interest on that Bond will cease to accrue on and after the redemption date.

(C) ***Payment of Redeemed Series 2026 Roadway Improvement Bonds.*** The City shall pay the redemption price of the Series 2026 Roadway Improvement Bonds called for redemption to the Registrar on or before the redemption date. The Registrar shall deposit that redemption price, at the direction of the City, in an account held by the Registrar or in a separate escrow fund established by the City with an escrow agent. The Series 2026 Roadway Improvement Bonds called for redemption will become due and payable on the redemption date at the redemption price, if the notice provided for in (B) above has been given. The Registrar shall pay the redemption price on the redemption date to the Holders upon presentation and surrender of those Series 2026 Roadway Improvement Bonds at the places specified in the notice. On and after the redemption date, the Series 2026 Roadway Improvement Bonds called for redemption that are due and payable will no longer bear interest and will no longer be

outstanding under the Bond Proceedings, if the money for the redemption price for those Series 2026 Roadway Improvement Bonds is held by the Registrar—or an escrow agent holding an escrow fund—on the redemption date and is available for that payment. If the money for the redemption price is not available on the redemption date, the Series 2026 Roadway Improvement Bonds called for redemption will continue to bear interest until paid at the same rate as if they had not been called for redemption.

(e) **Interest Rates.** The Series 2026 Roadway Improvement Bonds will bear interest at the rate or rates determined in the Certificate of Award, which rate or rates shall be in the best interest of the City. The true interest cost on the Series 2026 Roadway Improvement Bonds, calculated as the rate, compounded semi-annually, necessary to discount the amounts payable on the respective principal and interest payment dates to the purchase price received for the Series 2026 Roadway Improvement Bonds, may not exceed 6% per annum. Interest will be calculated on a 360-day year of twelve 30-day months.

The Series 2026 Roadway Improvement Bonds will bear interest from the most recent date to which interest has been paid or provided for or, if no interest has been paid or provided for, from their date. Interest on the Series 2026 Roadway Improvement Bonds will be payable on the Interest Payment Dates until the principal amount has been paid or provided for. The City Auditor shall designate the first Interest Payment Date in the Certificate of Award, which shall be either June 1 or December 1 following the date of the Series 2026 Roadway Improvement Bonds, as determined by the City Auditor.

(f) **Form, Numbering, and Denominations.** The Series 2026 Roadway Improvement Bonds shall be issued in fully registered form. They shall be issued in Authorized Denominations and in such numbers as requested by the Original Purchaser and approved by the City Auditor. They shall be numbered as determined by the City Auditor in a manner to distinguish each Series 2026 Roadway Improvement Bond from any other Series 2026 Roadway Improvement Bond. They shall express on their faces the purpose for which they are issued and that they are issued in accordance with this Ordinance. The Series 2026 Roadway Improvement Bonds will be designated "City of Lorain, Ohio General Obligation (Limited Tax) Roadway Improvement Bonds, Series 2026," unless otherwise designated in the Certificate of Award.

Section 3. Payment. The Debt Service on the Series 2026 Roadway Improvement Bonds will be payable in lawful money of the United States of America without deduction for the services of the Registrar as paying agent. Principal and any premium on the Series 2026 Roadway Improvement Bonds will be payable when due upon presentation and surrender of the Series 2026 Roadway Improvement Bonds at the office of the Registrar. Interest on the Series 2026 Roadway Improvement Bonds will be paid on each Interest Payment Date by check or draft mailed on the Interest Payment Date to the Holder as shown on the Register at the close of business on the 15th day of the month preceding the Interest Payment Date. Notwithstanding the

foregoing, so long as the Series 2026 Roadway Improvement Bonds are issued in book-entry form in a book-entry system, Debt Service on the Series 2026 Roadway Improvement Bonds will be payable as provided in any agreement entered into by the City in connection with the book-entry system. Payment of Debt Service on any Bond will be made only to or upon the order of the Holder. All such payments will be valid and effectual to satisfy and discharge the City's liability upon that Series 2026 Roadway Improvement Bond to the extent of the amount or amounts so paid.

Section 4. Signing and Authentication of Series 2026 Roadway Improvement Bonds.

(a) **Signing.** The Series 2026 Roadway Improvement Bonds will be signed on behalf of the City by the Mayor and the City Auditor. In the absence of the Mayor, the Series 2026 Roadway Improvement Bonds shall be signed by the President of Council and, in the absence of the City Auditor, the Series 2026 Roadway Improvement Bonds shall be signed by the Chief Deputy Auditor. Both signatures on the Series 2026 Roadway Improvement Bonds may be facsimiles.

(b) **Authentication.** No Series 2026 Roadway Improvement Bond will be valid or obligatory for any purpose or will be entitled to any security or benefit under the Bond Proceedings unless and until the certificate of authentication printed on the bond certificate is signed by the Registrar as authenticating agent. Authentication by the Registrar will be conclusive evidence that the Series 2026 Roadway Improvement Bond so authenticated has been duly issued, signed, and delivered under, and is entitled to the security and benefit of, the Bond Proceedings. The certificate of authentication may be signed by any authorized officer or employee of the Registrar or by any other person acting as an agent of the Registrar and approved by the City Auditor on behalf of the City. The same person need not sign the certificate of authentication on all of the Series 2026 Roadway Improvement Bonds.

Section 5. Registration; Transfer and Exchange; Book-Entry System.

(a) **Registration.** So long as any of the Series 2026 Roadway Improvement Bonds remain outstanding, the City Auditor shall cause the Registrar to maintain the Register. The person in whose name a Bond is registered on the Register will be regarded as the absolute Holder of that Bond for all purposes of the Bond Proceedings. Payment of the Debt Service on any Bond will be made only to or upon the order of that person. Neither the City nor the Registrar will be affected by any notice to the contrary, but the registration may be changed as provided in this Section and in any Registrar Agreement.

(b) **Transfer and Exchange.** Any Series 2026 Roadway Improvement Bond may be transferred or exchanged for Series 2026 Roadway Improvement Bonds of any Authorized Denomination upon presentation and surrender at the office of the Registrar, together with a request for exchange signed by the Holder or by a person legally empowered to do so in a form satisfactory to the Registrar. A

Series 2026 Roadway Improvement Bond may be transferred only on the Register upon presentation and surrender of the Series 2026 Roadway Improvement Bond at the office of the Registrar together with an assignment signed by the Holder or by a person legally empowered to do so in a form satisfactory to the Registrar. Upon exchange or transfer the Registrar will complete, authenticate, and deliver a new Series 2026 Roadway Improvement Bond or Series 2026 Roadway Improvement Bonds of any Authorized Denomination requested by the Holder equal to the unmatured principal amount of the Series 2026 Roadway Improvement Bond surrendered and bearing interest at the same rate and maturing on the same date.

If manual signatures on behalf of the City are required, the Registrar will undertake the exchange or transfer of Series 2026 Roadway Improvement Bonds only after the new Series 2026 Roadway Improvement Bonds are signed by the authorized officers of the City. In all cases of Series 2026 Roadway Improvement Bonds exchanged or transferred, the City will sign and the Registrar will authenticate and deliver Series 2026 Roadway Improvement Bonds in accordance with the provisions of the Bond Proceedings. The exchange or transfer will be without charge to the Holder, except that the City and the Registrar may make a charge sufficient to reimburse them for any tax or other governmental charge required to be paid with respect to the exchange or transfer. The City or the Registrar may require that those charges, if any, be paid before the procedure is begun for the exchange or transfer. All Series 2026 Roadway Improvement Bonds issued and authenticated upon any exchange or transfer will be valid obligations of the City, evidencing the same debt, and entitled to the same security and benefit under the Bond Proceedings as the Series 2026 Roadway Improvement Bonds surrendered upon that exchange or transfer. Neither the City nor the Registrar will be required to make any exchange or transfer of (1) Series 2026 Roadway Improvement Bonds then subject to call for redemption between the 15th day preceding the mailing of notice of Series 2026 Roadway Improvement Bonds to be redeemed and the date of that mailing, or (2) any Bond selected for redemption, in whole or in part.

(c) **Book-Entry System.** Unless otherwise determined in the Certificate of Award, the Series 2026 Roadway Improvement Bonds shall be originally issued in book-entry form to a Depository, initially The Depository Trust Company, for use in a book-entry system upon the terms provided in the Registrar Agreement. Under the book-entry system, the Series 2026 Roadway Improvement Bonds will be registered in the name of a Depository or its nominee, the bond certificates in fully-registered form will be deposited with and retained in the custody of the Depository or its agent, and the ownership of interests in the Series 2026 Roadway Improvement Bonds may be transferred only through a book entry on the records of the Depository.

Subject to the provisions of this Ordinance relating to the City's Continuing Disclosure Agreement, the City and the Registrar shall recognize and treat the Depository as the Holder of the Series 2026 Roadway Improvement Bonds for all

purposes, including payment of Debt Service, redemption and other notices, and enforcement of remedies.

If any Depository determines not to continue to act as a Depository for the Series 2026 Roadway Improvement Bonds for use in a book-entry system or if the City determines to discontinue the book-entry system, the City Auditor may attempt to establish a securities depository/book-entry relationship with another qualified Depository. If the City Auditor does not do so, the City Auditor shall direct the Registrar to make provision for notification of the book-entry interest owners by the Depository and to make any other arrangements necessary for the withdrawal of the Series 2026 Roadway Improvement Bonds from the book-entry system.

If the Series 2026 Roadway Improvement Bonds are originally sold in a private placement and not in book-entry form, the City, if requested by a Holder of the Series 2026 Roadway Improvement Bonds, will complete the necessary procedures to qualify the Series 2026 Roadway Improvement Bonds as book-entry bonds.

Section 6. Sale of the Series 2026 Roadway Improvement Bonds.

(a) **Private Sale.** This Council authorizes and directs the City Auditor to sell the Series 2026 Roadway Improvement Bonds in a private sale at a purchase price determined by the City Auditor in the Certificate of Award. That purchase price shall not be less than 97% of the aggregate Original Principal Amount of the Series 2026 Roadway Improvement Bonds, plus any accrued interest on the Series 2026 Roadway Improvement Bonds from their date to the Closing Date. The City Auditor may either sell the Series 2026 Roadway Improvement Bonds to an investment banker, acting as underwriter, or to a financial institution or other entity or person, in a private placement. The City Auditor may enter into a Purchase Agreement with the Original Purchaser in that private sale, or may sell the Series 2026 Roadway Improvement Bonds without a Purchase Agreement. The Series 2026 Roadway Improvement Bonds shall be sold with and upon such other terms as are required or authorized by this Ordinance to be specified in the Certificate of Award, in accordance with law, the provisions of this Ordinance, and any Purchase Agreement.

(b) **Certificate of Award.** The City Auditor shall state in the Certificate of Award the original principal amount of the Series 2026 Roadway Improvement Bonds; the principal amounts to be issued as Serial Series 2026 Roadway Improvement Bonds and Term Series 2026 Roadway Improvement Bonds; the interest rates on the Series 2026 Roadway Improvement Bonds; the purchase price for the Series 2026 Roadway Improvement Bonds; the first Interest Payment Date; the maturity date(s), principal payment schedule, redemption provisions, and the designation of the Series 2026 Roadway Improvement Bonds; and any other terms authorized by this Ordinance.

(c) **Delivery.** The City Auditor shall sign and deliver the Certificate of Award and shall cause the Series 2026 Roadway Improvement Bonds to be prepared, signed, and delivered, together with a true transcript of proceedings of the issuance of the Series 2026 Roadway Improvement Bonds, to the Original Purchaser upon payment of the purchase price. This Council authorizes and directs the City Auditor to provide to the Clerk of Council, for inclusion in the transcript, a statement of the indebtedness of the City and the other information required by Section 133.33, Revised Code.

(d) **Consolidated Issue.** The City Auditor is authorized, if he determines it to be in the best interest of the City, to combine the Series 2026 Roadway Improvement Bonds with one or more other contemporaneous issues of bonds payable from taxes within the ten-mill limitation into a consolidated bond issue, pursuant to 133.30(B) of the Revised Code. To the extent applicable, provisions of this Ordinance relating to the Series 2026 Roadway Improvement Bonds shall apply to that consolidated issue. Such consolidated issue shall be designated "City of Lorain, Ohio Various Purpose General Obligation (Limited Tax) Refunding and Improvement Bonds, Series 2026," or shall have such other designation as provided in the Certificate of Award.

Section 7. Disclosure.

(a) **Primary Offering Disclosure—Official Statement.** If determined necessary by the City Auditor, this Council authorizes and directs the Mayor and the City Auditor, or either of them (1) to prepare or cause to be prepared, and to make or authorize modifications, completions, or changes of or supplements to, a disclosure document in the form of an official statement, (2) to determine, and certify or otherwise represent, when the official statement is to be "deemed final" (except for permitted omissions) or is a final official statement for purposes of the SEC Rule, (3) to use and distribute, or authorize the use and distribution of, that official statement and any supplements in connection with the original issuance of the Series 2026 Roadway Improvement Bonds, and (4) to complete and sign the final official statement together with certificates, statements, or other documents in connection with the finality, accuracy, and completeness of that official statement.

(b) **Secondary Market Disclosure—Continuing Disclosure Agreement.** If the City prepares and distributes an official statement in accordance with Section 7(a), for the benefit of the Holders of the Series 2026 Roadway Improvement Bonds and the beneficial owners of book-entry interests in the Series 2026 Roadway Improvement Bonds, the City agrees, as the only obligated person with respect to the Series 2026 Roadway Improvement Bonds under the SEC Rule, to provide financial information and operating data, financial statements, and notices, in the manner required for purposes of paragraph (b)(5)(i) of the SEC Rule.

(1) ***Information Filing.*** The City further agrees, in particular, to provide:

(A) to the MSRB through its EMMA System, in an electronic format as prescribed by the MSRB and containing such identifying information as prescribed by the MSRB, (1) Annual Information for each City fiscal year, not later than the June 30 following the end of the fiscal year, and (2) when and if available, audited City financial statements for each of those fiscal years; and

(B) to the MSRB through its EMMA System, in an electronic format as prescribed by the MSRB and containing such identifying information as prescribed by the MSRB, in a timely manner, notice of (1) any Specified Event (to be provided within ten (10) business days), (2) the City's failure to provide the Annual Information within the time specified above, and (3) any change in the accounting principles applied in the preparation of its annual financial statements, any change in its fiscal year, its failure to appropriate funds to meet costs to be incurred to perform the Continuing Disclosure Agreement, and the termination of the Continuing Disclosure Agreement.

(2) ***Continuing Disclosure Agreement.*** To further describe and specify certain terms of the Continuing Disclosure Agreement, this Council authorizes and directs the City Auditor to (A) complete, sign, and deliver the Continuing Disclosure Agreement, in the name and on behalf of the City, and (B) to specify in reasonable detail the Annual Information to be provided (which may be provided by specific reference to other documents previously filed and available in accordance with the SEC Rule), whether the City has obtained any credit enhancement for the Series 2026 Roadway Improvement Bonds, and the City's expectations as to whether audited financial statements will be prepared, the accounting principles to be applied in their preparation, and whether they will be available together with, or separately from, the Annual Information.

(3) ***Disclosure Procedures.*** This Council further authorizes and directs the City Auditor to establish procedures to ensure compliance by the City with the Continuing Disclosure Agreement, including timely provision of information and notices as described above. Before making any filing in accordance with(b)(2) above or providing notice of the occurrence of any other events, the City Auditor may consult with and obtain legal advice from bond counsel or other qualified independent special counsel selected by the City. The City Auditor, acting in the name and on behalf of the City, may rely upon that legal advice in determining whether a filing should be made.

(4) ***Amendments.*** The City reserves the right to amend the Continuing Disclosure Agreement, and to obtain the waiver of noncompliance with any provision of the Continuing Disclosure Agreement, as may be necessary or appropriate to achieve its compliance with any applicable

federal securities law or rule, to cure any ambiguity, inconsistency, or formal defect or omission, and to address any change in circumstances arising from a change in legal requirements, change in law, or change in the identity, nature, or status of the City, or type of business conducted by the City. Any amendment or waiver will not be effective unless the Continuing Disclosure Agreement (as amended or taking into account that waiver) would have complied with the requirements of the SEC Rule at the time of the primary offering of the Series 2026 Roadway Improvement Bonds, after taking into account any applicable amendments to or official interpretations of the SEC Rule, as well as any change in circumstances, and until the City has received either (A) a written opinion of bond counsel or other qualified independent special counsel selected by the City that the amendment or waiver would not materially impair the interests of Holders or beneficial owners of book-entry interests in the Series 2026 Roadway Improvement Bonds, or (B) the written consent to the amendment or waiver by the Holders of at least a majority of the principal amount of the Series 2026 Roadway Improvement Bonds then outstanding. Annual Information containing any revised operating data or financial information shall explain, in narrative form, the reasons for any amendment or waiver and the impact of the change on the type of operating data or financial information being provided.

(5) ***Enforcement.*** The Continuing Disclosure Agreement will be solely for the benefit of the Holders of, and beneficial owners of book-entry interests in, the Series 2026 Roadway Improvement Bonds. The exclusive remedy for any breach of the Continuing Disclosure Agreement by the City will be limited, to the extent permitted by law, to a right of Holders and beneficial owners to institute and maintain legal proceedings to obtain the specific performance by the City of its obligations under the Continuing Disclosure Agreement. Any individual Holder or beneficial owner may institute and maintain those proceedings to require the City to provide a filing if the filing is due and has not been made. Any proceedings to require the City to perform any other obligation under the Continuing Disclosure Agreement (including any proceedings that contest the sufficiency of any filing) may be instituted and maintained only (A) by a trustee appointed by the Holders and beneficial owners of not less than 25% in principal amount of the Series 2026 Roadway Improvement Bonds then outstanding, or (B) by Holders and beneficial owners of not less than 10% in principal amount of the Series 2026 Roadway Improvement Bonds then outstanding, in accordance with Section 133.25(B)(4)(b) or (C)(1), Revised Code, as applicable, or any comparable successor provisions.

(6) ***Appropriation.*** The performance by the City of the Continuing Disclosure Agreement will be subject to the annual appropriation of any funds that may be necessary to perform it.

(7) ***Term.*** The Continuing Disclosure Agreement will remain in effect only for the period that the Series 2026 Roadway Improvement Bonds are outstanding in accordance with their terms and the City is an obligated person with respect to the Series 2026 Roadway Improvement Bonds within the meaning of the SEC Rule. The obligation of the City to provide the Annual Information, audited financial statements, and notices of the events described above will terminate if and when the City is no longer an obligated person with respect to the Series 2026 Roadway Improvement Bonds.

Section 8. Financing Costs. The City retains the professional services and authorizes the payment of the financing costs for the Series 2026 Roadway Improvement Bonds (the "Financing Costs"), as provided in this Section 8.

(a) **Bond Counsel.** The City retains the legal services of Tucker Ellis LLP, as bond counsel for the Series 2026 Roadway Improvement Bonds. The legal services will be in the nature of legal advice and recommendations as to the documents and the proceedings in connection with the issuance and sale of the Series 2026 Roadway Improvement Bonds and rendering legal opinions upon the delivery of the Series 2026 Roadway Improvement Bonds. Bond Counsel will render those services to the City in an attorney-client relationship. Bond Counsel will be paid just and reasonable compensation for those legal services, and will be reimbursed for actual out-of-pocket expenses it incurs in rendering those legal services, in accordance with Section 8(f) below.

(b) **Original Purchaser.** This Council authorizes and directs the City Auditor to select the Original Purchaser, either as an underwriter or as a purchaser in a private placement. The Original Purchaser shall be identified in the Certificate of Award. The Original Purchaser shall be paid for services in accordance with any Purchase Agreement or, if there is no Purchase Agreement, in accordance with its proposal.

(c) **Registrar.** This Council authorizes and directs the City Auditor to appoint a Registrar for the Series 2026 Roadway Improvement Bonds. The Registrar shall be (1) the City Treasurer, or (2) a financial institution able to complete transfer and exchange functions for the Series 2026 Roadway Improvement Bonds in accordance with standards and conditions applicable to registered corporate securities. The City retains the services of the Registrar for the Series 2026 Roadway Improvement Bonds. The Registrar will perform the services as bond registrar, authenticating agent, paying agent, and transfer agent for the Series 2026 Roadway Improvement Bonds as provided in this Ordinance. If the Registrar is a financial institution, it will be paid for those services in accordance with any Registrar Agreement.

(d) **Ratings and Insurance.** If, in the judgment of the City Auditor, the filing of an application for (1) a rating on the Series 2026 Roadway Improvement Bonds by one or more nationally recognized statistical rating organizations, or (2) a policy

of insurance, from one or more bond insurance providers, to better assure the payment of Debt Service on the Series 2026 Roadway Improvement Bonds, is in the best interest of and financially advantageous to the City, this Council authorizes and directs the City Auditor to prepare and submit those applications and to provide to those rating agencies or insurance providers the information required for the purpose. This Council further authorizes the fees for those ratings and the premiums for the insurance to be included in Financing Costs authorized under Section 8(e) below.

(e) **Limits on Authority of Service Providers.** In rendering the services described above, as independent contractors, those service providers shall not exercise any administrative discretion on behalf of the City in the formulation of public policy; expenditure of public funds; enforcement of laws, rules and regulations of the State, the City, or any other political subdivision; or the execution of public trusts.

(f) **Payment of Financing Costs.** This Council authorizes and approves the expenditure of the amounts necessary to pay those Financing Costs specifically authorized above and all other necessary Financing Costs in connection with the issuance and sale of the Series 2026 Roadway Improvement Bonds. Those Financing Costs may be paid by the Original Purchaser in accordance with any Purchase Agreement. To the extent they are not paid by the Original Purchaser, this Council authorizes and directs the City Auditor to provide for the payment of those Financing Costs from the proceeds of the Series 2026 Roadway Improvement Bonds to the extent available and, otherwise, from any other funds lawfully available and appropriated for the purpose.

Section 9. Use of Proceeds. The proceeds from the sale of the Series 2026 Roadway Improvement Bonds shall be deposited and used as provided in this Section 9.

(a) Any accrued interest or premium received on the sale of the Series 2026 Roadway Improvement Bonds shall be deposited in the Bond Retirement Fund of the City and used for the payment of interest on the Series 2026 Roadway Improvement Bonds on the first Interest Payment Date.

(b) An amount necessary to pay any Financing Costs of the Series 2026 Roadway Improvement Bonds, to the extent not paid by the Original Purchaser in accordance with the Purchase Agreement and to the extent that the City Auditor determines to pay those Financing Costs from the proceeds of the Series 2026 Roadway Improvement Bonds, shall be deposited in a separate fund and used for the payment of those Financing Costs.

(c) The remainder of the proceeds shall be paid into the proper fund or funds of the City and used to pay costs of the Roadway Improvements.

Section 10. Security and Source of Payment. The Series 2026 Roadway Improvement Bonds will be general obligations of the City.

(a) This Council pledges to the payment of Debt Service on the Series 2026 Roadway Improvement Bonds the full faith and credit of the City including, without limitation:

(1) The general taxing power of the City, including the power to levy taxes within the ten-mill limitation, as defined in Section 5705.02, Revised Code.

(2) Proceeds of the municipal income tax of the City designated for the street levy fund and lawfully available to pay Debt Service.

(3) The proceeds to be received from the sale of any bonds issued to refund the Series 2026 Roadway Improvement Bonds.

(4) Any money remaining from the sale of the Series 2026 Roadway Improvement Bonds after the payment of the Financing Costs of the Series 2026 Roadway Improvement Bonds and not used to pay costs of the Roadway Improvements.

(b) During the years while the Series 2026 Roadway Improvement Bonds are outstanding, there will be levied on all the taxable property in the City, in addition to all other taxes, a direct tax annually, in an amount sufficient to pay Debt Service on the Series 2026 Roadway Improvement Bonds when due. The tax will not be less than the interest and sinking fund tax required by Section 11 of Article XII of the Ohio Constitution. The tax will be and is ordered to be computed, certified, levied, and extended upon the tax list and collected by the same officers, in the same manner, and at the same time that taxes for general purposes for each of those years are computed, certified, levied, extended, and collected. The tax will be placed before and in preference to all other items and for its full amount. The money derived from that tax levy shall be placed in the Bond Retirement Fund of the City and is irrevocably pledged for the payment of the Debt Service on the Series 2026 Roadway Improvement Bonds, when and as that Debt Service falls due.

(c) The tax provided in (b) above will be reduced in each year the Series 2026 Roadway Improvement Bonds are outstanding by the sum of the following items, if available to pay Debt Service on the Series 2026 Roadway Improvement Bonds and appropriated for that purpose:

(1) Any proceeds of the City's Permissive License Tax lawfully available to pay debt service on the Series 2026 Roadway Improvement Bonds.

(2) Any surplus in the Bond Retirement Fund.

(3) Any other money lawfully available to the City, including but not limited to gasoline tax proceeds lawfully available for Debt Service.

Section 11. Federal Tax Matters. The City covenants that it will take those actions required to maintain the Federal Tax Status of the Series 2026 Roadway Improvement Bonds and that it will not take or permit to be taken any actions that would adversely affect that Federal Tax Status. Without limiting these covenants, the City specifically covenants as follows:

(a) **Private Activity Bonds.** The City will apply the proceeds received from the sale of the Series 2026 Roadway Improvement Bonds to the uses described in Section 9. The City will not permit the use of the Roadway Improvements by any person, will not secure or derive the money for payment of Debt Service on the Series 2026 Roadway Improvement Bonds by any property or payments, and will not loan the proceeds of the Series 2026 Roadway Improvement Bonds to any person, all in a manner as to cause the Series 2026 Roadway Improvement Bonds to be "private activity bonds" within the meaning of Code Section 141(a).

(b) **Arbitrage.** The City will restrict the use of proceeds of the Series 2026 Roadway Improvement Bonds in the manner and to the extent as may be necessary, after taking into account reasonable expectations on the Closing Date of the Series 2026 Roadway Improvement Bonds, so that the Series 2026 Roadway Improvement Bonds will not constitute "arbitrage bonds" within the meaning of Code Section 148. The City Auditor or any other official having responsibility for issuing the Series 2026 Roadway Improvement Bonds, is authorized and directed, alone or in conjunction with any other official, employee, or consultant of the City, to sign and deliver a certificate of the City, for inclusion in the transcript of proceedings for the Series 2026 Roadway Improvement Bonds. That certificate shall set forth the reasonable expectations of the City on the Closing Date, regarding the amount and use of the proceeds of the Series 2026 Roadway Improvement Bonds in accordance with Code Section 148. If required, the City will limit the yield on any "investment property" (as defined in Code Section 148(b)(2)) acquired with the proceeds of the Series 2026 Roadway Improvement Bonds.

(c) **Arbitrage Rebate.** Unless the gross proceeds of the Series 2026 Roadway Improvement Bonds are expended in accordance with one of the spending period exceptions set forth in Treas. Reg. §1.148-7, the City will pay the amounts required by Code Section 148(f)(2) to the United States at the times required by Code Section 148(f)(3). The City will maintain the books and records and make calculations and reports as are required to comply with the Code's arbitrage rebate requirements.

(d) **Federal Guarantee.** The City will not permit the use of the Roadway Improvements, or make loans of the proceeds of the Series 2026 Roadway Improvement Bonds, or invest the proceeds of the Series 2026 Roadway Improvement Bonds in a manner as to cause the Series 2026 Roadway Improvement Bonds to be "federally guaranteed" within the meaning of Code Section 149(b).

(e) **Information Reporting.** This Council authorizes and directs the City Auditor or any other official of the City having responsibility for issuing the Series 2026 Roadway Improvement Bonds to sign and file Form 8038-G for the Series 2026 Roadway Improvement Bonds with the Internal Revenue Service.

(f) **Bank-Qualified Obligations.** The City Auditor is hereby authorized to, if appropriate, designate the Series 2026 Roadway Improvement Bonds as "qualified tax-exempt obligations" under Code Section 265(b)(3) in the Certificate of Award.

Section 12. Signing and Delivery of Series 2026 Roadway Improvement Bonds and Documents. This Council authorizes and directs the Mayor and the City Auditor, or the persons designated to sign in their absence, to sign and deliver the Series 2026 Roadway Improvement Bonds in accordance with Section 4 of this Ordinance. This Council authorizes and directs the Mayor and the City Auditor, or either of them, to sign and approve a preliminary official statement, a final official statement, and supplements and amendments to both in accordance with Section 7 of this Ordinance.

(a) This Council authorizes and directs the City Auditor to sign and deliver, on behalf of the City:

(1) The Certificate of Award.

(2) Any Purchase Agreement.

(3) Any Registrar Agreement.

(4) The Continuing Disclosure Agreement.

(5) Any agreements or letters of representation in connection with a book-entry system for the Series 2026 Roadway Improvement Bonds.

(6) If determined in best interest of the City by the City Auditor as set forth in the Certificate of Award, applications for and agreements in connection with obtaining a policy of municipal bond insurance for the Series 2026 Roadway Improvement Bonds.

(7) If determined in best interest of the City by the City Auditor as set forth in the Certificate of Award, applications for and agreements in connection with obtaining one or more ratings for the Series 2026 Roadway Improvement Bonds.

In the absence of the City Auditor, this Council authorizes and directs the Chief Deputy Auditor to sign and deliver any of those documents and certificates.

(b) This Council authorizes and directs the City Auditor, or in his absence the Chief Deputy Auditor, to sign and deliver, on behalf of the City, in his capacity as fiscal officer of the City:

(1) Any certificates in accordance with Section 5705.41, Revised Code, required for any of the agreements in connection with the Series 2026 Roadway Improvement Bonds.

(2) The statements of indebtedness provided for in Section 133.33(B), Revised Code.

(c) This Council authorizes and directs the Mayor, the Law Director, the City Auditor, the City Treasurer, the President of Council, the Council Clerk, and any other City officials:

(1) to sign and deliver any agreements, certificates, instruments, and other documents that the official considers necessary or appropriate in connection with the issuance and sale of the Series 2026 Roadway Improvement Bonds, and that are not inconsistent with this Ordinance; and

(2) to take such actions as are necessary or appropriate to consummate the transactions contemplated by this Ordinance.

Section 13. Certification to County Auditor. This Council directs the City Auditor or the Clerk of this Council to forward a certified copy of this Ordinance and a copy of the Certificate of Award to the Auditor of Lorain County.

Section 14. Definitions. Words and terms are used in this Ordinance with the following meanings:

"Annual Information" means the annual financial information and operating data of the type to be specified in the Continuing Disclosure Agreement in accordance with the SEC Rule.

"Authorized Denominations" means the denomination of $5,000 or any whole multiple of $5,000.

"Bond Proceedings" means, collectively, this Ordinance, the Certificate of Award, any Purchase Agreement, the Continuing Disclosure Agreement, any Registrar Agreement, and the other proceedings of the City, including the Series 2026 Roadway Improvement Bonds, that provide collectively for, among other things, the rights of Holders and beneficial owners of the Series 2026 Roadway Improvement Bonds.

"Certificate of Award" means the certificate authorized by Section 6 of this Ordinance, setting forth the terms and other provisions of the Series 2026 Roadway Improvement Bonds required or authorized by this Ordinance.

"Closing Date" means the date of delivery of and payment for the Series 2026 Roadway Improvement Bonds.

"Code" means the Internal Revenue Code of 1986, as amended. References to the Code and sections of the Code include applicable regulations (whether temporary or final) under the Code, and any amendments of, or successor provisions to, those sections or regulations.

"Continuing Disclosure Agreement" means the continuing disclosure agreement made by the City for the benefit of Holders and beneficial owners of the Series 2026 Roadway Improvement Bonds in accordance with the SEC Rule. It consists of the covenants in Section 7(b) of this Ordinance and the Continuing Disclosure Agreement.

"Continuing Disclosure Agreement" means the certificate authorized by Section 7(b).

"Debt Service" means all amounts due as principal, interest, and any premium on an issue of securities.

"Depository" means any securities depository that is a clearing agency under federal law operating and maintaining a book-entry system to record ownership of book-entry interests in securities or the principal of and interest on securities, and to effect transfers of securities in book -entry form.

"EMMA System" means the MSRB's Electronic Municipal Market Access system.

"Federal Tax Status" means the status of the interest on any Series 2026 Bonds issued as tax-exempt obligations as excludable from gross income for federal income tax purposes and not treated as an item of tax preference for purposes of the alternative minimum tax.

"Financing Costs" means any financing costs authorized to be paid by Section 133.01(K), Revised Code.

"Holder" means, as to any Series 2026 Roadway Improvement Bond, the person in whose name the Series 2026 Roadway Improvement Bond is registered on the Register.

"Interest Payment Dates" means June 1 and December 1 of each year, beginning on the first Interest Payment Date designated by the City Auditor in the Certificate of Award.

"Mandatory Redemption Dates" means December 1 in each of the years designated in the Certificate of Award as Mandatory Redemption Dates.

"Mandatory Sinking Fund Redemption" means redemption in accordance with the mandatory redemption requirements, if any, for the Series 2026 Roadway Improvement Bonds as determined in the Certificate of Award and as described in Section 2(d).

"MSRB" means the Municipal Securities Rulemaking Board.

"Original Principal Amount" means the face amount of the Series 2026 Roadway Improvement Bonds.

"Original Purchaser" means the entity selected by the City Auditor under Section 8(b) as the purchaser of the Series 2026 Roadway Improvement Bonds.

"Principal Payment Dates" means December 1 of the years set forth in the Certificate of Award.

"Purchase Agreement" means any Bond Purchase Agreement between the City and the Original Purchaser, entered into in accordance with Section 6 of this Ordinance.

"Register" means all books and records necessary for the registration, exchange, and transfer of the Series 2026 Roadway Improvement Bonds.

"Registrar" means the entity or person selected by the City Auditor in accordance with Section 8(c) to serve as registrar for the Series 2026 Roadway Improvement Bonds.

"Registrar Agreement" means any bond registrar agreement between the City and the Registrar.

"Roadway Improvements" means street or roadway improvements, including but not limited to resurfacing, constructing, reconstructing, widening, opening, improving, grading, draining, paving, extending, or changing the line of roads, highways, streets, sidewalks, alleys, curbs, gutters or other street or roadway improvements to Tower Boulevard, and other local streets or roadways within the City.

"SEC Rule" means SEC Rule 15c2-12.

"Serial Series 2026 Roadway Improvement Bonds" means Series 2026 Roadway Improvement Bonds designated as Serial Series 2026 Roadway Improvement Bonds in the Certificate of Award and maturing on the dates set forth in the Certificate of Award, and not subject to Mandatory Sinking Fund Redemption.

"Series 2026 Roadway Improvement Bonds" means the City of Lorain, Ohio General Obligation (Limited Tax) Roadway Improvement Bonds, Series 2026, as authorized by this Ordinance.

"Specified Events" means any of the events specified in SEC Rule Section (b)(5)(C), as in effect and applicable to the Series 2026 Roadway Improvement Bonds at the time of the primary offering of the Series 2026 Roadway Improvement Bonds.

"Term Series 2026 Roadway Improvement Bonds" means the Series 2026 Roadway Improvement Bonds designated as Term Series 2026 Roadway Improvement Bonds in the Certificate of Award and maturing on the dates set forth in the Certificate of Award, and subject to Mandatory Sinking Fund Redemption.

Section 15. Emergency and Effective Date. This Ordinance is declared to be an emergency measure necessary for the immediate preservation of the public peace, property, health, safety and welfare in the City, and for the further reason that the Series 2026 Roadway Improvement Bonds shall be sold promptly in order to provide for safer roadways within the City; and provided it receives the affirmative vote of at least two-thirds of its members elected to Council, this Ordinance shall take effect and be in force immediately upon its passage by the Council and approval by the Mayor; otherwise it shall take effect and be in force after the earliest period allowed by law.

Passed: _____, 2026

_____
President of Council

Attest:_____
Clerk of Council

Approved: _____, 2026

_____
Mayor

CITY OF LORAIN

City Council Regular Meeting **7. m.**

Meeting Date: 02/02/2026

Submitted by: Anita Harper, Auditor

AGENDA ITEM DESCRIPTION OR LEGISLATION TITLE

Issuance and sale of bonds in the maximum amount of $2,650,000 for the purpose of retiring the 2025 Bond Anticipation Note issued for the SR 611 roadway improvements.

PURPOSE AND BACKGROUND:

The purpose of the bond is to retire the short-term bond anticipation note previously issued and convert to a long-term bond.

RECOMMENDATION TO COUNCIL:

Lorain City Council consider passage

Fiscal Impact

Funds Available In Current Year Budget (Y/N):	no
Estimate of Total Expenditure:	2,650,000
List of Funding Source and/or Account Number:	3010
Estimate of Incoming Revenue (fees, grants, etc.):	2,650,000

Financing Requirements (Bonds, Loans, Lease, etc.):

Refunding Bond Issuance

Attachments

Refunding Bond Ordinance-2025 SR 611 BAN

Form Review

Inbox	Reviewed By	Date
Harper (Originator)	Anita Harper	01/28/2026 04:30 PM
P. Riley	Michele Beko	01/29/2026 08:42 AM
Harper (Originator)	Anita Harper	01/29/2026 11:37 AM
P. Riley	Michele Beko	01/29/2026 01:39 PM
Form Started By: Anita Harper		Started On: 01/28/2026 03:49 PM
Final Approval Date: 01/29/2026		

ORDINANCE NO. ____-26

AN ORDINANCE AUTHORIZING THE ISSUANCE AND SALE OF GENERAL OBLIGATION BONDS IN A MAXIMUM AGGREGATE PRINCIPAL AMOUNT OF $2,650,000, FOR THE PURPOSE OF RETIRING CERTAIN OUTSTANDING NOTES OF THE CITY ISSUED FOR ROADWAY IMPROVEMENTS AS FURTHER DESCRIBED HEREIN; PAYING THE COSTS OF ISSUANCE FOR SAID BONDS; AND DECLARING AN EMERGENCY.

WHEREAS, pursuant to Ordinance Nos. 87-25 and 88-25, each enacted by the Council of the City on June 16, 2025, this Council authorized the issuance of the City's $2,482,000 General Obligation (Limited Tax) Road Improvement Bond Anticipation Notes, Series 2025 (the "Series 2025 Notes"), in anticipation of the issuance of bonds, which Series 2025 Notes mature on April 8, 2026; and

WHEREAS, this Council desires (a)(i) to retire the Series 2025 Notes in the aggregate principal amount of $2,482,000 (the "Outstanding Obligations"), (b) to pay capitalized interest accrued thereon, and (c) to pay the costs of issuance costs associated therewith, by the issuance of the City's General Obligation (Limited Tax) Roadway Improvement Refunding Bonds, Series 2026 (the "Series 2026 Bonds") in the total maximum aggregate principal amount of $2,650,000, which may be issued in one or more sub-series.

WHEREAS, the City Auditor has certified to this Council that the estimated life or period of usefulness of the various improvements financed with the Outstanding Obligations is at least five (5) years and has further certified the maximum maturity of the Series 2026 Bonds is 20 years, based upon the weighted average of the amounts allocated to several classes of improvements set forth in the City Auditor's Certificate, which allocation is approved, ratified and confirmed.

NOW THEREFORE, BE IT ORDAINED by the Council of the City of Lorain, Lorain County, Ohio:

Section 1. Findings and Determinations. This Council finds and determines the following matters (capitalized terms that are not otherwise defined are defined in Section 14):

(a) The City has previously authorized and issued the Outstanding Obligations. The Outstanding Obligations were issued to pay the costs of the Roadway Improvements (as defined herein).

(b) It is necessary for the City to issue the Series 2026 Bonds for the purpose of (1) retiring the Outstanding Obligations at their maturity as described in the recitals and as further set forth in the Certificate of Award; and (2) paying Financing Costs (as defined in Section 8 hereof) of the Series 2026 Bonds.

(c) The Series 2026 Roadway Improvement Bonds may be sold in a consolidated issue under Section 133.30(B) of the Ohio Revised Code (the "Revised Code").

(d) The City Auditor has certified to this Council the maximum maturity of the Series 2026 Bonds.

(e) All acts and conditions necessary to be performed by the City or to have been met for the issuance of the Series 2026 Bonds in order to make them legal, valid, and binding general obligations of the City, have been performed and met, or will have been performed and met at the time of delivery of the Series 2026 Bonds, as required by law.

(f) No statutory or constitutional limitation of indebtedness or taxation will be exceeded by the issuance of the Series 2026 Bonds.

(g) All formal actions of this Council relating to the enactment of this Ordinance were taken in an open meeting of this Council, and all deliberations of this Council and of any of its committees that resulted in those formal actions, were in meetings open to the public, in compliance with all legal requirements, including Section 121.22, Revised Code.

Section 2. Terms of the Series 2026 Bonds. The Series 2026 Bonds will have the following terms:

(a) **Amount.** The Series 2026 Bonds shall be issued in the maximum Original Principal Amount as determined by the City Auditor in the Certificate of Award, but in no event shall such Original Principal Amount exceed $2,650,000. The principal amounts of the Series 2026 Bonds to be issued as Serial Series 2026 Bonds or as Term Series 2026 Bonds will be determined by the City Auditor in the Certificate of Award.

(b) **Date.** The Series 2026 Bonds shall be dated the Closing Date, or such other date, not more than 31 days before the Closing Date, as determined by the City Auditor in the Certificate of Award.

(c) **Maturity.** The Series 2026 Bonds will mature or be payable by Mandatory Sinking Fund Redemption in the amounts and on the Principal Payment Dates as determined by the City Auditor in the Certificate of Award.

The City Auditor may adjust the principal payment schedule within the limitations of Ohio Revised Code Section 133.21. This Council authorizes and directs the City Auditor to prepare separate maturity schedules for each of the issues of bonds sold as a consolidated issue and to include those separate maturity schedules in the Certificate of Award, demonstrating compliance of each of those bond issues with the separate periodic maturity or principal payment limitations in Section 133.21(A), Ohio Revised Code.

(d) **Redemption Before Stated Maturity.** The Series 2026 Bonds will be subject to redemption before their stated maturity as described in this Section 2(d), unless otherwise determined by the City Auditor in the Certificate of Award.

(1) ***Mandatory Sinking Fund Redemption.*** If any of the Series 2026 Bonds are issued as Term Series 2026 Bonds, the Term Series 2026 Bonds will be subject to Mandatory Sinking Fund Redemption, in part, on the Mandatory Redemption Dates, at a redemption price of 100% of the principal amount being redeemed, plus interest accrued to the redemption date. The principal amounts to be paid by Mandatory Sinking Fund Redemption will be those in the principal payment schedule as determined by the City Auditor in the Certificate of Award.

The City will have the option to deliver Term Series 2026 Bonds in any principal amount to the Registrar for cancellation. The City will be entitled to a credit against its obligation to pay Debt Service by Mandatory Sinking Fund Redemption on any future Mandatory Redemption Date for Term Series 2026 Bonds that (A) are delivered by the City to the Registrar, (B) have previously been redeemed other than by Mandatory Sinking Fund Redemption, or (C) have been purchased and canceled by the Registrar (i) as provided in the Registrar Agreement, or (ii) if the City Treasurer is the Registrar, by written request of the City Auditor to the Registrar, at a price not exceeding the price set by the City Auditor in that request.

(2) ***Optional Redemption.*** If determined by the City Auditor in the Certificate of Award to be in the best interest of and financially advantageous to the City, the Series 2026 Bonds shall be subject to prior redemption on any date, by and at the sole option of the City, as provided in the Certificate of Award, either in whole or in part, in integral multiples of $5,000, at the redemption prices specified in the Certificate of Award (expressed as percentages of the principal amount redeemed), plus accrued interest to the redemption date; provided that such redemption prices may not exceed 110%.

The City's option to redeem the Series 2026 Bonds shall be exercised by a notice from the City Auditor to the Registrar (i) as provided in the Registrar Agreement, or (ii) if the City Treasurer is the Registrar, the notice shall specify the redemption date and the principal amount of the Series 2026 Bonds to be redeemed, and be given at least 45 days before the redemption date or such shorter period as acceptable to the Registrar.

(3) ***Terms of Redemption.*** The following are the procedures for partial redemption, for notice of redemption, and for payment of redeemed Series 2026 Bonds.

(A) ***Partial Redemption.*** If Series 2026 Bonds are to be redeemed in part by optional redemption, the maturities of Series 2026 Bonds to be redeemed and the amounts of each maturity to be redeemed shall be selected by the City. If fewer than all Series 2026 Bonds of a maturity are to be redeemed, the Registrar shall select the Series 2026 Bonds of a maturity to be redeemed by lot in any

manner it determines. The Registrar shall treat each portion of Series 2026 Bonds of a maturity in the lowest Authorized Denomination as a separate bond for purposes of that selection. If the Series 2026 Bonds to be redeemed are book-entry Series 2026 Bonds, the Registrar shall direct the Depository to select portions of Series 2026 Bonds or beneficial ownership interests of a maturity to be redeemed. If a portion of a Bond is redeemed, the Holder shall surrender that Bond for exchange of the unredeemed portion.

(B) ***Notice of Redemption.*** The Registrar shall give notice of redemption of Series 2026 Bonds to the Holders at least 30 days before the redemption date, by first-class mail. If the Registrar sends the notice, the failure of a Holder to receive the notice will not affect the validity of the redemption. The notice shall state all of the following:

(i) the redemption date,

(ii) the redemption price,

(iii) the principal amount of Series 2026 Bonds to be redeemed,

(iv) if fewer than all the outstanding Series 2026 Bonds are to be redeemed, the identifying information of the Series 2026 Bonds to be redeemed,

(v) the places where the amounts due on redemption are payable, and

(vi) that the redemption price of each Bond redeemed will be due and payable on the redemption date, and interest on that Bond will cease to accrue on and after the redemption date.

(C) ***Payment of Redeemed Series 2026 Bonds.*** The City shall pay the redemption price of the Series 2026 Bonds called for redemption to the Registrar on or before the redemption date. The Registrar shall deposit that redemption price, at the direction of the City, in an account held by the Registrar or in a separate escrow fund established by the City with an escrow agent. The Series 2026 Bonds called for redemption will become due and payable on the redemption date at the redemption price, if the notice provided for in (B) above has been given. The Registrar shall pay the redemption price on the redemption date to the Holders upon presentation and surrender of those Series 2026 Bonds at the places specified in the notice. On and after the redemption date, the Series 2026 Bonds called for redemption that are due and payable

will no longer bear interest and will no longer be outstanding under the Bond Proceedings, if the money for the redemption price for those Series 2026 Bonds is held by the Registrar—or an escrow agent holding an escrow fund—on the redemption date and is available for that payment. If the money for the redemption price is not available on the redemption date, the Series 2026 Bonds called for redemption will continue to bear interest until paid at the same rate as if they had not been called for redemption.

(e) **Interest Rates.** The Series 2026 Bonds will bear interest at the rate or rates determined in the Certificate of Award, which rate or rates shall be in the best interest of the City. The true interest cost on the Series 2026 Bonds, calculated as the rate, compounded semi-annually, necessary to discount the amounts payable on the respective principal and interest payment dates to the purchase price received for the Series 2026 Bonds, may not exceed 6% per annum. Interest will be calculated on a 360-day year of twelve 30-day months.

The Series 2026 Bonds will bear interest from the most recent date to which interest has been paid or provided for or, if no interest has been paid or provided for, from their date. Interest on the Series 2026 Bonds will be payable on the Interest Payment Dates until the principal amount has been paid or provided for. The City Auditor shall designate the first Interest Payment Date in the Certificate of Award, which shall be either June 1 or December 1 following the date of the Series 2026 Bonds, as determined by the City Auditor.

(f) **Form, Numbering, and Denominations.** The Series 2026 Bonds shall be issued in fully registered form. They shall be issued in Authorized Denominations and in such numbers as requested by the Original Purchaser and approved by the City Auditor. They shall be numbered as determined by the City Auditor in a manner to distinguish each Series 2026 Bond from any other Series 2026 Bond. They shall express on their faces the purpose for which they are issued and that they are issued in accordance with this Ordinance. The Series 2026 Bonds will be designated "City of Lorain, Ohio General Obligation (Limited Tax) Roadway Improvement Refunding Bonds, Series 2026," unless otherwise designated in the Certificate of Award.

Section 3. Payment. The Debt Service on the Series 2026 Bonds will be payable in lawful money of the United States of America without deduction for the services of the Registrar as paying agent. Principal and any premium on the Series 2026 Bonds will be payable when due upon presentation and surrender of the Series 2026 Bonds at the office of the Registrar. Interest on the Series 2026 Bonds will be paid on each Interest Payment Date by check or draft mailed on the Interest Payment Date to the Holder as shown on the Register at the close of business on the 15th day of the month preceding the Interest Payment Date. Notwithstanding the foregoing, so long as the Series 2026 Bonds are issued in book-entry form in a book-entry system, Debt Service on the Series 2026 Bonds will be payable as provided in any agreement entered into by the City in connection with the book-entry system. Payment of Debt Service on any Bond will be made only to or upon the order of the Holder. All such payments will be valid and effectual to satisfy and

discharge the City's liability upon that Series 2026 Bond to the extent of the amount or amounts so paid.

Section 4. Signing and Authentication of Series 2026 Bonds.

(a) **Signing.** The Series 2026 Bonds will be signed on behalf of the City by the Mayor and the City Auditor. In the absence of the Mayor, the Series 2026 Bonds shall be signed by the President of Council and, in the absence of the City Auditor, the Series 2026 Bonds shall be signed by the Chief Deputy Auditor. Both signatures on the Series 2026 Bonds may be facsimiles.

(b) **Authentication.** No Series 2026 Bond will be valid or obligatory for any purpose or will be entitled to any security or benefit under the Bond Proceedings unless and until the certificate of authentication printed on the bond certificate is signed by the Registrar as authenticating agent. Authentication by the Registrar will be conclusive evidence that the Series 2026 Bond so authenticated has been duly issued, signed, and delivered under, and is entitled to the security and benefit of, the Bond Proceedings. The certificate of authentication may be signed by any authorized officer or employee of the Registrar or by any other person acting as an agent of the Registrar and approved by the City Auditor on behalf of the City. The same person need not sign the certificate of authentication on all of the Series 2026 Bonds.

Section 5. Registration; Transfer and Exchange; Book-Entry System.

(a) **Registration.** So long as any of the Series 2026 Bonds remain outstanding, the City Auditor shall cause the Registrar to maintain the Register. The person in whose name a Bond is registered on the Register will be regarded as the absolute Holder of that Bond for all purposes of the Bond Proceedings. Payment of the Debt Service on any Bond will be made only to or upon the order of that person. Neither the City nor the Registrar will be affected by any notice to the contrary, but the registration may be changed as provided in this Section and in any Registrar Agreement.

(b) **Transfer and Exchange.** Any Series 2026 Bond may be transferred or exchanged for Series 2026 Bonds of any Authorized Denomination upon presentation and surrender at the office of the Registrar, together with a request for exchange signed by the Holder or by a person legally empowered to do so in a form satisfactory to the Registrar. A Series 2026 Bond may be transferred only on the Register upon presentation and surrender of the Series 2026 Bond at the office of the Registrar together with an assignment signed by the Holder or by a person legally empowered to do so in a form satisfactory to the Registrar. Upon exchange or transfer the Registrar will complete, authenticate, and deliver a new Series 2026 Bond or Series 2026 Bonds of any Authorized Denomination requested by the Holder equal to the unmatured principal amount of the Series 2026 Bond surrendered and bearing interest at the same rate and maturing on the same date.

If manual signatures on behalf of the City are required, the Registrar will undertake the exchange or transfer of Series 2026 Bonds only after the new Series 2026 Bonds are signed by the authorized officers of the City. In all cases of Series 2026 Bonds exchanged or transferred, the City will sign and the Registrar will authenticate and deliver Series 2026 Bonds in accordance with the provisions of the Bond Proceedings. The exchange or transfer will be without charge to the Holder, except that the City and the Registrar may make a charge sufficient to reimburse them for any tax or other governmental charge required to be paid with respect to the exchange or transfer. The City or the Registrar may require that those charges, if any, be paid before the procedure is begun for the exchange or transfer. All Series 2026 Bonds issued and authenticated upon any exchange or transfer will be valid obligations of the City, evidencing the same debt, and entitled to the same security and benefit under the Bond Proceedings as the Series 2026 Bonds surrendered upon that exchange or transfer. Neither the City nor the Registrar will be required to make any exchange or transfer of (1) Series 2026 Bonds then subject to call for redemption between the 15th day preceding the mailing of notice of Series 2026 Bonds to be redeemed and the date of that mailing, or (2) any Bond selected for redemption, in whole or in part.

(c) **Book-Entry System.** Unless otherwise determined in the Certificate of Award, the Series 2026 Bonds shall be originally issued in book-entry form to a Depository, initially The Depository Trust Company, for use in a book-entry system upon the terms provided in the Registrar Agreement. Under the book-entry system, the Series 2026 Bonds will be registered in the name of a Depository or its nominee, the bond certificates in fully-registered form will be deposited with and retained in the custody of the Depository or its agent, and the ownership of interests in the Series 2026 Bonds may be transferred only through a book entry on the records of the Depository.

Subject to the provisions of this Ordinance relating to the City's Continuing Disclosure Agreement, the City and the Registrar shall recognize and treat the Depository as the Holder of the Series 2026 Bonds for all purposes, including payment of Debt Service, redemption and other notices, and enforcement of remedies.

If any Depository determines not to continue to act as a Depository for the Series 2026 Bonds for use in a book-entry system or if the City determines to discontinue the book-entry system, the City Auditor may attempt to establish a securities depository/book-entry relationship with another qualified Depository. If the City Auditor does not do so, the City Auditor shall direct the Registrar to make provision for notification of the book-entry interest owners by the Depository and to make any other arrangements necessary for the withdrawal of the Series 2026 Bonds from the book-entry system.

If the Series 2026 Bonds are originally sold in a private placement and not in book-entry form, the City, if requested by a Holder of the Series 2026 Bonds, will

complete the necessary procedures to qualify the Series 2026 Bonds as book-entry bonds.

Section 6. Sale of the Series 2026 Bonds.

(a) **Private Sale.** This Council authorizes and directs the City Auditor to sell the Series 2026 Bonds in a private sale at a purchase price determined by the City Auditor in the Certificate of Award. That purchase price shall not be less than 97% of the aggregate Original Principal Amount of the Series 2026 Bonds, plus any accrued interest on the Series 2026 Bonds from their date to the Closing Date. The City Auditor may either sell the Series 2026 Bonds to an investment banker, acting as underwriter, or to a financial institution or other entity or person, in a private placement. The City Auditor may enter into a Purchase Agreement with the Original Purchaser in that private sale, or may sell the Series 2026 Bonds without a Purchase Agreement. The Series 2026 Bonds shall be sold with and upon such other terms as are required or authorized by this Ordinance to be specified in the Certificate of Award, in accordance with law, the provisions of this Ordinance, and any Purchase Agreement.

(b) **Certificate of Award.** The City Auditor shall state in the Certificate of Award the original principal amount of the Series 2026 Bonds; the principal amounts to be issued as Serial Series 2026 Bonds and Term Series 2026 Bonds; the interest rates on the Series 2026 Bonds; the purchase price for the Series 2026 Bonds; the first Interest Payment Date; the maturity date(s), principal payment schedule, redemption provisions, and the designation of the Series 2026 Bonds; and any other terms authorized by this Ordinance.

(c) **Delivery.** The City Auditor shall sign and deliver the Certificate of Award and shall cause the Series 2026 Bonds to be prepared, signed, and delivered, together with a true transcript of proceedings of the issuance of the Series 2026 Bonds, to the Original Purchaser upon payment of the purchase price. This Council authorizes and directs the City Auditor to provide to the Clerk of Council, for inclusion in the transcript, a statement of the indebtedness of the City and the other information required by Section 133.33, Revised Code.

(d) **Consolidated Issue.** The City Auditor is authorized, if he determines it to be in the best interest of the City, to combine the Series 2026 Bonds with one or more other contemporaneous issues of bonds payable from taxes within the ten-mill limitation into a consolidated bond issue, pursuant to 133.30(B) of the Revised Code. To the extent applicable, provisions of this Ordinance relating to the Series 2026 Bonds shall apply to that consolidated issue. Such consolidated issue shall be designated "City of Lorain, Ohio Various Purpose General Obligation (Limited Tax) Refunding and Improvement Bonds, Series 2026," or shall have such other designation as provided in the Certificate of Award.

Section 7. Disclosure.

(a) **Primary Offering Disclosure—Official Statement.** If determined necessary by the City Auditor, this Council authorizes and directs the Mayor and the City Auditor, or either of them (1) to prepare or cause to be prepared, and to make or authorize modifications, completions, or changes of or supplements to, a disclosure document in the form of an official statement, (2) to determine, and certify or otherwise represent, when the official statement is to be "deemed final" (except for permitted omissions) or is a final official statement for purposes of the SEC Rule, (3) to use and distribute, or authorize the use and distribution of, that official statement and any supplements in connection with the original issuance of the Series 2026 Bonds, and (4) to complete and sign the final official statement together with certificates, statements, or other documents in connection with the finality, accuracy, and completeness of that official statement.

(b) **Secondary Market Disclosure—Continuing Disclosure Agreement.** If the City prepares and distributes an official statement in accordance with Section 7(a), for the benefit of the Holders of the Series 2026 Bonds and the beneficial owners of book-entry interests in the Series 2026 Bonds, the City agrees, as the only obligated person with respect to the Series 2026 Bonds under the SEC Rule, to provide financial information and operating data, financial statements, and notices, in the manner required for purposes of paragraph (b)(5)(i) of the SEC Rule.

(1) ***Information Filing.*** The City further agrees, in particular, to provide:

(A) to the MSRB through its EMMA System, in an electronic format as prescribed by the MSRB and containing such identifying information as prescribed by the MSRB, (1) Annual Information for each City fiscal year, not later than the June 30 following the end of the fiscal year, and (2) when and if available, audited City financial statements for each of those fiscal years; and

(B) to the MSRB through its EMMA System, in an electronic format as prescribed by the MSRB and containing such identifying information as prescribed by the MSRB, in a timely manner, notice of (1) any Specified Event (to be provided within ten (10) business days), (2) the City's failure to provide the Annual Information within the time specified above, and (3) any change in the accounting principles applied in the preparation of its annual financial statements, any change in its fiscal year, its failure to appropriate funds to meet costs to be incurred to perform the Continuing Disclosure Agreement, and the termination of the Continuing Disclosure Agreement.

(2) ***Continuing Disclosure Agreement.*** To further describe and specify certain terms of the Continuing Disclosure Agreement, this Council

authorizes and directs the City Auditor to (A) complete, sign, and deliver the Continuing Disclosure Agreement, in the name and on behalf of the City, and (B) to specify in reasonable detail the Annual Information to be provided (which may be provided by specific reference to other documents previously filed and available in accordance with the SEC Rule), whether the City has obtained any credit enhancement for the Series 2026 Bonds, and the City's expectations as to whether audited financial statements will be prepared, the accounting principles to be applied in their preparation, and whether they will be available together with, or separately from, the Annual Information.

(3) ***Disclosure Procedures.*** This Council further authorizes and directs the City Auditor to establish procedures to ensure compliance by the City with the Continuing Disclosure Agreement, including timely provision of information and notices as described above. Before making any filing in accordance with(b)(2) above or providing notice of the occurrence of any other events, the City Auditor may consult with and obtain legal advice from bond counsel or other qualified independent special counsel selected by the City. The City Auditor, acting in the name and on behalf of the City, may rely upon that legal advice in determining whether a filing should be made.

(4) ***Amendments.*** The City reserves the right to amend the Continuing Disclosure Agreement, and to obtain the waiver of noncompliance with any provision of the Continuing Disclosure Agreement, as may be necessary or appropriate to achieve its compliance with any applicable federal securities law or rule, to cure any ambiguity, inconsistency, or formal defect or omission, and to address any change in circumstances arising from a change in legal requirements, change in law, or change in the identity, nature, or status of the City, or type of business conducted by the City. Any amendment or waiver will not be effective unless the Continuing Disclosure Agreement (as amended or taking into account that waiver) would have complied with the requirements of the SEC Rule at the time of the primary offering of the Series 2026 Bonds, after taking into account any applicable amendments to or official interpretations of the SEC Rule, as well as any change in circumstances, and until the City has received either (A) a written opinion of bond counsel or other qualified independent special counsel selected by the City that the amendment or waiver would not materially impair the interests of Holders or beneficial owners of book-entry interests in the Series 2026 Bonds, or (B) the written consent to the amendment or waiver by the Holders of at least a majority of the principal amount of the Series 2026 Bonds then outstanding. Annual Information containing any revised operating data or financial information shall explain, in narrative form, the reasons for any amendment or waiver and the impact of the change on the type of operating data or financial information being provided.

(5) ***Enforcement.*** The Continuing Disclosure Agreement will be solely for the benefit of the Holders of, and beneficial owners of book-entry interests in, the Series 2026 Bonds. The exclusive remedy for any breach of the Continuing Disclosure Agreement by the City will be limited, to the extent permitted by law, to a right of Holders and beneficial owners to institute and maintain legal proceedings to obtain the specific performance by the City of its obligations under the Continuing Disclosure Agreement. Any individual Holder or beneficial owner may institute and maintain those proceedings to require the City to provide a filing if the filing is due and has not been made. Any proceedings to require the City to perform any other obligation under the Continuing Disclosure Agreement (including any proceedings that contest the sufficiency of any filing) may be instituted and maintained only (A) by a trustee appointed by the Holders and beneficial owners of not less than 25% in principal amount of the Series 2026 Bonds then outstanding, or (B) by Holders and beneficial owners of not less than 10% in principal amount of the Series 2026 Bonds then outstanding, in accordance with Section 133.25(B)(4)(b) or (C)(1), Revised Code, as applicable, or any comparable successor provisions.

(6) ***Appropriation.*** The performance by the City of the Continuing Disclosure Agreement will be subject to the annual appropriation of any funds that may be necessary to perform it.

(7) ***Term.*** The Continuing Disclosure Agreement will remain in effect only for the period that the Series 2026 Bonds are outstanding in accordance with their terms and the City is an obligated person with respect to the Series 2026 Bonds within the meaning of the SEC Rule. The obligation of the City to provide the Annual Information, audited financial statements, and notices of the events described above will terminate if and when the City is no longer an obligated person with respect to the Series 2026 Bonds.

Section 8. Financing Costs. The City retains the professional services and authorizes the payment of the financing costs for the Series 2026 Bonds (the "Financing Costs"), as provided in this Section 8.

(a) **Bond Counsel.** The City retains the legal services of Tucker Ellis LLP, as bond counsel for the Series 2026 Bonds. The legal services will be in the nature of legal advice and recommendations as to the documents and the proceedings in connection with the issuance and sale of the Series 2026 Bonds and rendering legal opinions upon the delivery of the Series 2026 Bonds. Bond Counsel will render those services to the City in an attorney-client relationship. Bond Counsel will be paid just and reasonable compensation for those legal services, and will be reimbursed for actual out-of-pocket expenses it incurs in rendering those legal services, in accordance with Section 8(f) below.

(b) **Original Purchaser.** This Council authorizes and directs the City Auditor to select the Original Purchaser, either as an underwriter or as a purchaser in a private placement. The Original Purchaser shall be identified in the Certificate of Award. The Original Purchaser shall be paid for services in accordance with any Purchase Agreement or, if there is no Purchase Agreement, in accordance with its proposal.

(c) **Registrar.** This Council authorizes and directs the City Auditor to appoint a Registrar for the Series 2026 Bonds. The Registrar shall be (1) the City Treasurer, or (2) a financial institution able to complete transfer and exchange functions for the Series 2026 Bonds in accordance with standards and conditions applicable to registered corporate securities. The City retains the services of the Registrar for the Series 2026 Bonds. The Registrar will perform the services as bond registrar, authenticating agent, paying agent, and transfer agent for the Series 2026 Bonds as provided in this Ordinance. If the Registrar is a financial institution, it will be paid for those services in accordance with any Registrar Agreement.

(d) **Ratings and Insurance.** If, in the judgment of the City Auditor, the filing of an application for (1) a rating on the Series 2026 Bonds by one or more nationally recognized statistical rating organizations, or (2) a policy of insurance, from one or more bond insurance providers, to better assure the payment of Debt Service on the Series 2026 Bonds, is in the best interest of and financially advantageous to the City, this Council authorizes and directs the City Auditor to prepare and submit those applications and to provide to those rating agencies or insurance providers the information required for the purpose. This Council further authorizes the fees for those ratings and the premiums for the insurance to be included in Financing Costs authorized under Section 8(e) below.

(e) **Limits on Authority of Service Providers.** In rendering the services described above, as independent contractors, those service providers shall not exercise any administrative discretion on behalf of the City in the formulation of public policy; expenditure of public funds; enforcement of laws, rules and regulations of the State, the City, or any other political subdivision; or the execution of public trusts.

(f) **Payment of Financing Costs.** This Council authorizes and approves the expenditure of the amounts necessary to pay those Financing Costs specifically authorized above and all other necessary Financing Costs in connection with the issuance and sale of the Series 2026 Bonds. Those Financing Costs may be paid by the Original Purchaser in accordance with any Purchase Agreement. To the extent they are not paid by the Original Purchaser, this Council authorizes and directs the City Auditor to provide for the payment of those Financing Costs from the proceeds of the Series 2026 Bonds to the extent available and, otherwise, from any other funds lawfully available and appropriated for the purpose.

Section 9. Use of Proceeds. The proceeds from the sale of the Series 2026 Bonds shall be deposited and used and the Outstanding Obligations shall be paid as provided in this Section 9.

(a) Any accrued interest or premium received on the sale of the Series 2026 Bonds shall be deposited in the Bond Retirement Fund of the City and used for the payment of interest on the Series 2026 Bonds on the first Interest Payment Date.

(b) An amount necessary to pay any Financing Costs of the Series 2026 Bonds, to the extent not paid by the Original Purchaser in accordance with the Purchase Agreement and to the extent that the City Auditor determines to pay those Financing Costs from the proceeds of the Series 2026 Bonds, shall be deposited in a separate fund and used for the payment of those Financing Costs.

(c) The remainder of the proceeds shall be paid into the Bond Retirement Fund and used to retire the Outstanding Obligations at their maturity, and such amount is hereby pledged and is to be applied solely to such payment.

Section 10. Security and Source of Payment. The Series 2026 Bonds will be general obligations of the City.

(a) This Council pledges to the payment of Debt Service on the Series 2026 Bonds the full faith and credit of the City including, without limitation:

(1) The general taxing power of the City, including the power to levy taxes within the ten-mill limitation, as defined in Section 5705.02, Revised Code.

(2) Proceeds of the municipal income tax of the City designated for the street levy fund and lawfully available to pay Debt Service.

(3) The proceeds to be received from the sale of any bonds issued to refund the Series 2026 Bonds.

(4) Any money remaining from the sale of the Series 2026 Bonds after the payment of the Financing Costs of the Series 2026 Bonds and not required to retire the Outstanding Obligations.

(b) During the years while the Series 2026 Bonds are outstanding, there will be levied on all the taxable property in the City, in addition to all other taxes, a direct tax annually, in an amount sufficient to pay Debt Service on the Series 2026 Bonds when due. The tax will not be less than the interest and sinking fund tax required by Section 11 of Article XII of the Ohio Constitution. The tax will be and is ordered to be computed, certified, levied, and extended upon the tax list and collected by the same officers, in the same manner, and at the same time that taxes for general purposes for each of those years are computed, certified, levied, extended, and collected. The tax will be placed before and in preference to all other items and for its full amount. The money derived from that tax levy shall be

placed in the Bond Retirement Fund of the City and is irrevocably pledged for the payment of the Debt Service on the Series 2026 Bonds, when and as that Debt Service falls due.

(c) The tax provided in (b) above will be reduced in each year the Series 2026 Bonds are outstanding by the sum of the following items, if available to pay Debt Service on the Series 2026 Bonds and appropriated for that purpose:

(1) Any proceeds of the City's Permissive License Tax lawfully available to pay debt service on the Series 2026 Bonds.

(2) Any surplus in the Bond Retirement Fund.

(3) Any other money lawfully available to the City, including but not limited to gasoline tax proceeds lawfully available for Debt Service.

Section 11. Federal Tax Matters. The City covenants that it will take those actions required to maintain the Federal Tax Status of the Series 2026 Bonds and that it will not take or permit to be taken any actions that would adversely affect that Federal Tax Status. Without limiting these covenants, the City specifically covenants as follows:

(a) **Private Activity Bonds.** The City will apply the proceeds received from the sale of the Series 2026 Bonds to the uses described in Section 9. The City will not permit the use of the Roadway Improvements by any person, will not secure or derive the money for payment of Debt Service on the Series 2026 Bonds by any property or payments, and will not loan the proceeds of the Series 2026 Bonds to any person, all in a manner as to cause the Series 2026 Bonds to be "private activity bonds" within the meaning of Code Section 141(a).

(b) **Arbitrage.** The City will restrict the use of proceeds of the Series 2026 Bonds in the manner and to the extent as may be necessary, after taking into account reasonable expectations on the Closing Date of the Series 2026 Bonds, so that the Series 2026 Bonds will not constitute "arbitrage bonds" within the meaning of Code Section 148. The City Auditor or any other official having responsibility for issuing the Series 2026 Bonds, is authorized and directed, alone or in conjunction with any other official, employee, or consultant of the City, to sign and deliver a certificate of the City, for inclusion in the transcript of proceedings for the Series 2026 Bonds. That certificate shall set forth the reasonable expectations of the City on the Closing Date, regarding the amount and use of the proceeds of the Series 2026 Bonds in accordance with Code Section 148. If required, the City will limit the yield on any "investment property" (as defined in Code Section 148(b)(2)) acquired with the proceeds of the Series 2026 Bonds.

(c) **Arbitrage Rebate.** Unless the gross proceeds of the Series 2026 Bonds are expended in accordance with one of the spending period exceptions set forth in Treas. Reg. §1.148-7, the City will pay the amounts required by Code Section 148(f)(2) to the United States at the times required by Code Section 148(f)(3).

The City will maintain the books and records and make calculations and reports as are required to comply with the Code's arbitrage rebate requirements.

(d) **Federal Guarantee.** The City will not permit the use of the Roadway Improvements, or make loans of the proceeds of the Series 2026 Bonds, or invest the proceeds of the Series 2026 Bonds in a manner as to cause the Series 2026 Bonds to be "federally guaranteed" within the meaning of Code Section 149(b).

(e) **Information Reporting.** This Council authorizes and directs the City Auditor or any other official of the City having responsibility for issuing the Series 2026 Bonds to sign and file Form 8038-G for the Series 2026 Bonds with the Internal Revenue Service.

(f) **Bank-Qualified Obligations.** The Series 2026 Bonds are deemed designated as "qualified tax-exempt obligations" under Code Section 265(b)(3).

Section 12. Signing and Delivery of Series 2026 Bonds and Documents. This Council authorizes and directs the Mayor and the City Auditor, or the persons designated to sign in their absence, to sign and deliver the Series 2026 Bonds in accordance with Section 4 of this Ordinance. This Council authorizes and directs the Mayor and the City Auditor, or either of them, to sign and approve a preliminary official statement, a final official statement, and supplements and amendments to both in accordance with Section 7 of this Ordinance.

(a) This Council authorizes and directs the City Auditor to sign and deliver, on behalf of the City:

(1) The Certificate of Award.

(2) Any Purchase Agreement.

(3) Any Registrar Agreement.

(4) The Continuing Disclosure Agreement.

(5) Any agreements or letters of representation in connection with a book-entry system for the Series 2026 Bonds.

(6) If determined in best interest of the City by the City Auditor as set forth in the Certificate of Award, applications for and agreements in connection with obtaining a policy of municipal bond insurance for the Series 2026 Bonds.

(7) If determined in best interest of the City by the City Auditor as set forth in the Certificate of Award, applications for and agreements in connection with obtaining one or more ratings for the Series 2026 Bonds.

In the absence of the City Auditor, this Council authorizes and directs the Chief Deputy Auditor to sign and deliver any of those documents and certificates.

(b) This Council authorizes and directs the City Auditor, or in his absence the Chief Deputy Auditor, to sign and deliver, on behalf of the City, in his capacity as fiscal officer of the City:

(1) Any certificates in accordance with Section 5705.41, Revised Code, required for any of the agreements in connection with the Series 2026 Bonds.

(2) The statements of indebtedness provided for in Section 133.33(B), Revised Code.

(c) This Council authorizes and directs the Mayor, the Law Director, the City Auditor, the City Treasurer, the President of Council, the Council Clerk, and any other City officials:

(1) to sign and deliver any agreements, certificates, instruments, and other documents that the official considers necessary or appropriate in connection with the issuance and sale of the Series 2026 Bonds, and that are not inconsistent with this Ordinance; and

(2) to take such actions as are necessary or appropriate to consummate the transactions contemplated by this Ordinance.

Section 13. Certification to County Auditor. This Council directs the City Auditor or the Clerk of this Council to forward a certified copy of this Ordinance and a copy of the Certificate of Award to the Auditor of Lorain County.

Section 14. Definitions. Words and terms are used in this Ordinance with the following meanings:

"Annual Information" means the annual financial information and operating data of the type to be specified in the Continuing Disclosure Agreement in accordance with the SEC Rule.

"Authorized Denominations" means the denomination of $5,000 or any whole multiple of $5,000.

"Bond Proceedings" means, collectively, this Ordinance, the Certificate of Award, any Purchase Agreement, the Continuing Disclosure Agreement, any Registrar Agreement, and the other proceedings of the City, including the Series 2026 Bonds, that provide collectively for, among other things, the rights of Holders and beneficial owners of the Series 2026 Bonds.

"Certificate of Award" means the certificate authorized by Section 6 of this Ordinance, setting forth the terms and other provisions of the Series 2026 Bonds required or authorized by this Ordinance.

"Closing Date" means the date of delivery of and payment for the Series 2026 Bonds.

"Code" means the Internal Revenue Code of 1986, as amended. References to the Code and sections of the Code include applicable regulations (whether temporary or final) under the Code, and any amendments of, or successor provisions to, those sections or regulations.

"Continuing Disclosure Agreement" means the continuing disclosure agreement made by the City for the benefit of Holders and beneficial owners of the Series 2026 Bonds in accordance with the SEC Rule. It consists of the covenants in Section 7(b) of this Ordinance and the Continuing Disclosure Agreement.

"Continuing Disclosure Agreement" means the certificate authorized by Section 7(b).

"Debt Service" means all amounts due as principal, interest, and any premium on an issue of securities.

"Depository" means any securities depository that is a clearing agency under federal law operating and maintaining a book-entry system to record ownership of book-entry interests in securities or the principal of and interest on securities, and to effect transfers of securities in book -entry form.

"EMMA System" means the MSRB's Electronic Municipal Market Access system.

"Federal Tax Status" means the status of the interest on any Series 2026 Bonds issued as tax-exempt obligations as excludable from gross income for federal income tax purposes and not treated as an item of tax preference for purposes of the alternative minimum tax.

"Financing Costs" means any financing costs authorized to be paid by Section 133.01(K), Revised Code.

"Holder" means, as to any Series 2026 Bond, the person in whose name the Series 2026 Bond is registered on the Register.

"Interest Payment Dates" means June 1 and December 1 of each year, beginning on the first Interest Payment Date designated by the City Auditor in the Certificate of Award.

"Mandatory Redemption Dates" means December 1 in each of the years designated in the Certificate of Award as Mandatory Redemption Dates.

"Mandatory Sinking Fund Redemption" means redemption in accordance with the mandatory redemption requirements, if any, for the Series 2026 Bonds as determined in the Certificate of Award and as described in Section 2(d).

"MSRB" means the Municipal Securities Rulemaking Board.

"Original Principal Amount" means the face amount of the Series 2026 Bonds.

"Original Purchaser" means the entity selected by the City Auditor under Section 8(b) as the purchaser of the Series 2026 Bonds.

"Outstanding Obligations" has the meaning given to such term in the recitals.

"Principal Payment Dates" means December 1 of the years set forth in the Certificate of Award.

"Purchase Agreement" means any Bond Purchase Agreement between the City and the Original Purchaser, entered into in accordance with Section 6 of this Ordinance.

"Register" means all books and records necessary for the registration, exchange, and transfer of the Series 2026 Bonds.

"Registrar" means the entity or person selected by the City Auditor in accordance with Section 8(c) to serve as registrar for the Series 2026 Bonds.

"Registrar Agreement" means any bond registrar agreement between the City and the Registrar.

"Roadway Improvements" means the improvements to State Route 611 and U.S. Route 6, completed in cooperation with the Ohio Department of Transportation in Lorain County and the City of Lorain, including but not limited to an asphalt concrete overlay, drainage upgrades, curbs, curb ramps, sidewalks, pavement repair, pavement planning, resurfacing and pavement markings; together with the necessary appurtenances.

"SEC Rule" means SEC Rule 15c2-12.

"Serial Series 2026 Bonds" means Series 2026 Bonds designated as Serial Series 2026 Bonds in the Certificate of Award and maturing on the dates set forth in the Certificate of Award, and not subject to Mandatory Sinking Fund Redemption.

"Series 2026 Bonds" means the City of Lorain, Ohio General Obligation (Limited Tax) Roadway Improvement Refunding Bonds, Series 2026, as authorized by this Ordinance.

"Specified Events" means any of the events specified in SEC Rule Section (b)(5)(C), as in effect and applicable to the Series 2026 Bonds at the time of the primary offering of the Series 2026 Bonds.

"Term Series 2026 Bonds" means the Series 2026 Bonds designated as Term Series 2026 Bonds in the Certificate of Award and maturing on the dates set forth in the Certificate of Award, and subject to Mandatory Sinking Fund Redemption.

Section 15. Emergency and Effective Date. This Ordinance is declared to be an emergency measure necessary for the immediate preservation of the public peace, property, health, safety and welfare in the City, and for the further reason that the Series 2026 Bonds shall be sold promptly in order to retire the Outstanding Obligations at their maturity and provide for safer roadways within the City; and provided it receives the affirmative vote of at least two-thirds of its members elected to Council, this Ordinance shall take effect and be in force immediately upon its passage by the Council and approval by the Mayor; otherwise it shall take effect and be in force after the earliest period allowed by law.

Passed: _____, 2026

_____
President of Council

Attest:_____
Clerk of Council

Approved: _____, 2026

_____
Mayor

CITY OF LORAIN

City Council Regular Meeting **7. n.**
Meeting Date: 02/02/2026
Submitted by: Anita Harper, Auditor

AGENDA ITEM DESCRIPTION OR LEGISLATION TITLE

Issuance and sale of bonds in the maximum amount of $2,400,000 for the purpose of retiring and reissuing the City's series 2017 various purpose refunding bonds.

PURPOSE AND BACKGROUND:

The purpose of the refunding bond would be the realization of cost savings for the City.

RECOMMENDATION TO COUNCIL:

Lorain City Council consider passage

Fiscal Impact

Funds Available In Current Year Budget (Y/N):	no
Estimate of Total Expenditure:	2,400,000
List of Funding Source and/or Account Number:	3010
Estimate of Incoming Revenue (fees, grants, etc.):	2,400,000

Financing Requirements (Bonds, Loans, Lease, etc.):
Refunding Bond Issuance

Attachments

Refunding bond Ordinance-2017 Var Purp

Form Review

Inbox	Reviewed By	Date
Harper (Originator)	Anita Harper	01/28/2026 04:30 PM
P. Riley	Michele Beko	01/29/2026 08:42 AM
Harper (Originator)	Anita Harper	01/29/2026 11:32 AM
P. Riley	Michele Beko	01/29/2026 01:39 PM
Form Started By: Anita Harper		Started On: 01/28/2026 03:38 PM
Final Approval Date: 01/29/2026		

ORDINANCE NO. ____-26

AN ORDINANCE AUTHORIZING THE ISSUANCE AND SALE OF GENERAL OBLIGATION BONDS IN A MAXIMUM AGGREGATE PRINCIPAL AMOUNT OF $2,400,000, FOR THE PURPOSE OF RETIRING CERTAIN OUTSTANDING BONDS OF THE CITY ISSUED FOR VARIOUS PURPOSES AS FURTHER DESCRIBED HEREIN; PAYING THE COSTS OF ISSUANCE FOR SAID BONDS; AND DECLARING AN EMERGENCY.

WHEREAS, pursuant to Ordinance Nos. 19-17, 20-17 and 21-17, enacted by the Council of the City on March 6, 2017, this Council authorized the issuance of the City's $6,855,000 General Obligation Refunding and Improvement Bonds, Series 2017 (the "Series 2017 Bonds"), (1) to advance refund the outstanding principal amount of the City's General Obligation (Limited Tax) Pellet Terminal Improvement Bonds, Series 2008, (2) to pay the costs of improvements including the construction, acquisition, furnishing, equipping and otherwise improving buildings necessary for the City fire department, and purchasing equipment for the fire department, (3) to pay the costs of street or roadway improvements and (4) to pay certain costs of issuing the Series 2017 Bonds; and

WHEREAS, this Council desires to (a) refund the Series 2017 Bonds, currently outstanding in the aggregate principal amount of $2,280,000 (the "Outstanding Obligations"), (b) pay the costs of refunding the Outstanding Obligations, including to pay capitalized interest thereon and (c) pay issuance costs associated therewith, by the issuance of the City's General Obligation (Limited Tax) Refunding Bonds, Series 2026 (the "Series 2026 Bonds") in the total maximum aggregate principal amount of $2,400,000, which may be issued in one or more sub-series.

WHEREAS, the City Auditor has certified to this Council that the estimated life or period of usefulness of the various improvements financed with the Outstanding Obligations is at least five (5) years and has further certified the maximum maturity of the Series 2026 Bonds is December 1, 2036, which certification is approved, ratified and confirmed.

NOW THEREFORE, BE IT ORDAINED by the Council of the City of Lorain, Lorain County, Ohio:

Section 1. Findings and Determinations. This Council finds and determines the following matters (capitalized terms that are not otherwise defined are defined in Section 14):

(a) The City has previously authorized and issued the Outstanding Obligations. The Outstanding Obligations were issued to pay the costs of the Improvements (as defined herein).

(b) It is necessary for the City to issue the Series 2026 Bonds for the purpose of (1) retiring the Outstanding Obligations at their maturity as described in the recitals and as further set forth in the Certificate of Award; and (2) paying Financing Costs (as defined in Section 8 hereof) of the Series 2026 Bonds.

(c) The Series 2026 Bonds may be sold in a consolidated issue under Section 133.30(B) of the Ohio Revised Code (the "Revised Code").

(d) The City Auditor has certified to this Council the maximum maturity of the Series 2026 Bonds.

(e) All acts and conditions necessary to be performed by the City or to have been met for the issuance of the Series 2026 Bonds in order to make them legal, valid, and binding general obligations of the City, have been performed and met, or will have been performed and met at the time of delivery of the Series 2026 Bonds, as required by law.

(f) No statutory or constitutional limitation of indebtedness or taxation will be exceeded by the issuance of the Series 2026 Bonds.

(g) All formal actions of this Council relating to the enactment of this Ordinance were taken in an open meeting of this Council, and all deliberations of this Council and of any of its committees that resulted in those formal actions, were in meetings open to the public, in compliance with all legal requirements, including Section 121.22, Revised Code.

Section 2. Terms of the Series 2026 Bonds. The Series 2026 Bonds will have the following terms:

(a) **Amount.** The Series 2026 Bonds shall be issued in the maximum Original Principal Amount as determined by the City Auditor in the Certificate of Award, but in no event shall such Original Principal Amount exceed $2,400,000. The principal amounts of the Series 2026 Bonds to be issued as Serial Series 2026 Bonds or as Term Series 2026 Bonds will be determined by the City Auditor in the Certificate of Award.

(b) **Date.** The Series 2026 Bonds shall be dated the Closing Date, or such other date, not more than 31 days before the Closing Date, as determined by the City Auditor in the Certificate of Award.

(c) **Maturity.** The Series 2026 Bonds will mature or be payable by Mandatory Sinking Fund Redemption in the amounts and on the Principal Payment Dates as determined by the City Auditor in the Certificate of Award.

The City Auditor may adjust the principal payment schedule within the limitations of Ohio Revised Code Section 133.21. This Council authorizes and directs the City Auditor to prepare separate maturity schedules for each of the issues of bonds sold as a consolidated issue and to include those separate maturity schedules in the Certificate of Award, demonstrating compliance of each of those bond issues with the separate periodic maturity or principal payment limitations in Section 133.21(A), Ohio Revised Code.

(d) **Redemption Before Stated Maturity.** The Series 2026 Bonds will be subject to redemption before their stated maturity as described in this Section 2(d), unless otherwise determined by the City Auditor in the Certificate of Award.

(1) ***Mandatory Sinking Fund Redemption.*** If any of the Series 2026 Bonds are issued as Term Series 2026 Bonds, the Term Series 2026 Bonds will be subject to Mandatory Sinking Fund Redemption, in part, on the Mandatory Redemption Dates, at a redemption price of 100% of the principal amount being redeemed, plus interest accrued to the redemption date. The principal amounts to be paid by Mandatory Sinking Fund Redemption will be those in the principal payment schedule as determined by the City Auditor in the Certificate of Award.

The City will have the option to deliver Term Series 2026 Bonds in any principal amount to the Registrar for cancellation. The City will be entitled to a credit against its obligation to pay Debt Service by Mandatory Sinking Fund Redemption on any future Mandatory Redemption Date for Term Series 2026 Bonds that (A) are delivered by the City to the Registrar, (B) have previously been redeemed other than by Mandatory Sinking Fund Redemption, or (C) have been purchased and canceled by the Registrar (i) as provided in the Registrar Agreement, or (ii) if the City Treasurer is the Registrar, by written request of the City Auditor to the Registrar, at a price not exceeding the price set by the City Auditor in that request.

(2) ***Optional Redemption.*** If determined by the City Auditor in the Certificate of Award to be in the best interest of and financially advantageous to the City, the Series 2026 Bonds shall be subject to prior redemption on any date, by and at the sole option of the City, as provided in the Certificate of Award, either in whole or in part, in integral multiples of $5,000, at the redemption prices specified in the Certificate of Award (expressed as percentages of the principal amount redeemed), plus accrued interest to the redemption date; provided that such redemption prices may not exceed 110%.

The City's option to redeem the Series 2026 Bonds shall be exercised by a notice from the City Auditor to the Registrar (i) as provided in the Registrar Agreement, or (ii) if the City Treasurer is the Registrar, the notice shall specify the redemption date and the principal amount of the Series 2026 Bonds to be redeemed, and be given at least 45 days before the redemption date or such shorter period as acceptable to the Registrar.

(3) ***Terms of Redemption.*** The following are the procedures for partial redemption, for notice of redemption, and for payment of redeemed Series 2026 Bonds.

(A) ***Partial Redemption.*** If Series 2026 Bonds are to be redeemed in part by optional redemption, the maturities of Series 2026 Bonds to

be redeemed and the amounts of each maturity to be redeemed shall be selected by the City. If fewer than all Series 2026 Bonds of a maturity are to be redeemed, the Registrar shall select the Series 2026 Bonds of a maturity to be redeemed by lot in any manner it determines. The Registrar shall treat each portion of Series 2026 Bonds of a maturity in the lowest Authorized Denomination as a separate bond for purposes of that selection. If the Series 2026 Bonds to be redeemed are book-entry Series 2026 Bonds, the Registrar shall direct the Depository to select portions of Series 2026 Bonds or beneficial ownership interests of a maturity to be redeemed. If a portion of a Bond is redeemed, the Holder shall surrender that Bond for exchange of the unredeemed portion.

(B) ***Notice of Redemption.*** The Registrar shall give notice of redemption of Series 2026 Bonds to the Holders at least 30 days before the redemption date, by first-class mail. If the Registrar sends the notice, the failure of a Holder to receive the notice will not affect the validity of the redemption. The notice shall state all of the following:

(i) the redemption date,

(ii) the redemption price,

(iii) the principal amount of Series 2026 Bonds to be redeemed,

(iv) if fewer than all the outstanding Series 2026 Bonds are to be redeemed, the identifying information of the Series 2026 Bonds to be redeemed,

(v) the places where the amounts due on redemption are payable, and

(vi) that the redemption price of each Bond redeemed will be due and payable on the redemption date, and interest on that Bond will cease to accrue on and after the redemption date.

(C) ***Payment of Redeemed Series 2026 Bonds.*** The City shall pay the redemption price of the Series 2026 Bonds called for redemption to the Registrar on or before the redemption date. The Registrar shall deposit that redemption price, at the direction of the City, in an account held by the Registrar or in a separate escrow fund established by the City with an escrow agent. The Series 2026 Bonds called for redemption will become due and payable on the redemption date at the redemption price, if the notice provided for in (B) above has been given. The Registrar shall pay the

redemption price on the redemption date to the Holders upon presentation and surrender of those Series 2026 Bonds at the places specified in the notice. On and after the redemption date, the Series 2026 Bonds called for redemption that are due and payable will no longer bear interest and will no longer be outstanding under the Bond Proceedings, if the money for the redemption price for those Series 2026 Bonds is held by the Registrar—or an escrow agent holding an escrow fund—on the redemption date and is available for that payment. If the money for the redemption price is not available on the redemption date, the Series 2026 Bonds called for redemption will continue to bear interest until paid at the same rate as if they had not been called for redemption.

(e) **Interest Rates.** The Series 2026 Bonds will bear interest at the rate or rates determined in the Certificate of Award, which rate or rates shall be in the best interest of the City. The true interest cost on the Series 2026 Bonds, calculated as the rate, compounded semi-annually, necessary to discount the amounts payable on the respective principal and interest payment dates to the purchase price received for the Series 2026 Bonds, may not exceed 6% per annum. Interest will be calculated on a 360-day year of twelve 30-day months.

The Series 2026 Bonds will bear interest from the most recent date to which interest has been paid or provided for or, if no interest has been paid or provided for, from their date. Interest on the Series 2026 Bonds will be payable on the Interest Payment Dates until the principal amount has been paid or provided for. The City Auditor shall designate the first Interest Payment Date in the Certificate of Award, which shall be either June 1 or December 1 following the date of the Series 2026 Bonds, as determined by the City Auditor.

(f) **Form, Numbering, and Denominations.** The Series 2026 Bonds shall be issued in fully registered form. They shall be issued in Authorized Denominations and in such numbers as requested by the Original Purchaser and approved by the City Auditor. They shall be numbered as determined by the City Auditor in a manner to distinguish each Series 2026 Bond from any other Series 2026 Bond. They shall express on their faces the purpose for which they are issued and that they are issued in accordance with this Ordinance. The Series 2026 Bonds will be designated "City of Lorain, Ohio Various Purpose General Obligation (Limited Tax) Refunding Bonds, Series 2026," unless otherwise designated in the Certificate of Award.

Section 3. Payment. The Debt Service on the Series 2026 Bonds will be payable in lawful money of the United States of America without deduction for the services of the Registrar as paying agent. Principal and any premium on the Series 2026 Bonds will be payable when due upon presentation and surrender of the Series 2026 Bonds at the office of the Registrar. Interest on the Series 2026 Bonds will be paid on each Interest Payment Date by check or draft mailed on the Interest Payment Date to the Holder as shown on the Register at the close of business on the 15th day of the month preceding the Interest Payment Date. Notwithstanding the foregoing, so

long as the Series 2026 Bonds are issued in book-entry form in a book-entry system, Debt Service on the Series 2026 Bonds will be payable as provided in any agreement entered into by the City in connection with the book-entry system. Payment of Debt Service on any Bond will be made only to or upon the order of the Holder. All such payments will be valid and effectual to satisfy and discharge the City's liability upon that Series 2026 Bond to the extent of the amount or amounts so paid.

Section 4. Signing and Authentication of Series 2026 Bonds.

(a) **Signing.** The Series 2026 Bonds will be signed on behalf of the City by the Mayor and the City Auditor. In the absence of the Mayor, the Series 2026 Bonds shall be signed by the President of Council and, in the absence of the City Auditor, the Series 2026 Bonds shall be signed by the Chief Deputy Auditor. Both signatures on the Series 2026 Bonds may be facsimiles.

(b) **Authentication.** No Series 2026 Bond will be valid or obligatory for any purpose or will be entitled to any security or benefit under the Bond Proceedings unless and until the certificate of authentication printed on the bond certificate is signed by the Registrar as authenticating agent. Authentication by the Registrar will be conclusive evidence that the Series 2026 Bond so authenticated has been duly issued, signed, and delivered under, and is entitled to the security and benefit of, the Bond Proceedings. The certificate of authentication may be signed by any authorized officer or employee of the Registrar or by any other person acting as an agent of the Registrar and approved by the City Auditor on behalf of the City. The same person need not sign the certificate of authentication on all of the Series 2026 Bonds.

Section 5. Registration; Transfer and Exchange; Book-Entry System.

(a) **Registration.** So long as any of the Series 2026 Bonds remain outstanding, the City Auditor shall cause the Registrar to maintain the Register. The person in whose name a Bond is registered on the Register will be regarded as the absolute Holder of that Bond for all purposes of the Bond Proceedings. Payment of the Debt Service on any Bond will be made only to or upon the order of that person. Neither the City nor the Registrar will be affected by any notice to the contrary, but the registration may be changed as provided in this Section and in any Registrar Agreement.

(b) **Transfer and Exchange.** Any Series 2026 Bond may be transferred or exchanged for Series 2026 Bonds of any Authorized Denomination upon presentation and surrender at the office of the Registrar, together with a request for exchange signed by the Holder or by a person legally empowered to do so in a form satisfactory to the Registrar. A Series 2026 Bond may be transferred only on the Register upon presentation and surrender of the Series 2026 Bond at the office of the Registrar together with an assignment signed by the Holder or by a person legally empowered to do so in a form satisfactory to the Registrar. Upon exchange or transfer the Registrar will complete, authenticate, and deliver a new

Series 2026 Bond or Series 2026 Bonds of any Authorized Denomination requested by the Holder equal to the unmatured principal amount of the Series 2026 Bond surrendered and bearing interest at the same rate and maturing on the same date.

If manual signatures on behalf of the City are required, the Registrar will undertake the exchange or transfer of Series 2026 Bonds only after the new Series 2026 Bonds are signed by the authorized officers of the City. In all cases of Series 2026 Bonds exchanged or transferred, the City will sign and the Registrar will authenticate and deliver Series 2026 Bonds in accordance with the provisions of the Bond Proceedings. The exchange or transfer will be without charge to the Holder, except that the City and the Registrar may make a charge sufficient to reimburse them for any tax or other governmental charge required to be paid with respect to the exchange or transfer. The City or the Registrar may require that those charges, if any, be paid before the procedure is begun for the exchange or transfer. All Series 2026 Bonds issued and authenticated upon any exchange or transfer will be valid obligations of the City, evidencing the same debt, and entitled to the same security and benefit under the Bond Proceedings as the Series 2026 Bonds surrendered upon that exchange or transfer. Neither the City nor the Registrar will be required to make any exchange or transfer of (1) Series 2026 Bonds then subject to call for redemption between the 15th day preceding the mailing of notice of Series 2026 Bonds to be redeemed and the date of that mailing, or (2) any Bond selected for redemption, in whole or in part.

(c) **Book-Entry System.** Unless otherwise determined in the Certificate of Award, the Series 2026 Bonds shall be originally issued in book-entry form to a Depository, initially The Depository Trust Company, for use in a book-entry system upon the terms provided in the Registrar Agreement. Under the book-entry system, the Series 2026 Bonds will be registered in the name of a Depository or its nominee, the bond certificates in fully-registered form will be deposited with and retained in the custody of the Depository or its agent, and the ownership of interests in the Series 2026 Bonds may be transferred only through a book entry on the records of the Depository.

Subject to the provisions of this Ordinance relating to the City's Continuing Disclosure Agreement, the City and the Registrar shall recognize and treat the Depository as the Holder of the Series 2026 Bonds for all purposes, including payment of Debt Service, redemption and other notices, and enforcement of remedies.

If any Depository determines not to continue to act as a Depository for the Series 2026 Bonds for use in a book-entry system or if the City determines to discontinue the book-entry system, the City Auditor may attempt to establish a securities depository/book-entry relationship with another qualified Depository. If the City Auditor does not do so, the City Auditor shall direct the Registrar to make provision for notification of the book-entry interest owners by the

Depository and to make any other arrangements necessary for the withdrawal of the Series 2026 Bonds from the book-entry system.

If the Series 2026 Bonds are originally sold in a private placement and not in book-entry form, the City, if requested by a Holder of the Series 2026 Bonds, will complete the necessary procedures to qualify the Series 2026 Bonds as book-entry bonds.

Section 6. Sale of the Series 2026 Bonds.

(a) **Private Sale.** This Council authorizes and directs the City Auditor to sell the Series 2026 Bonds in a private sale at a purchase price determined by the City Auditor in the Certificate of Award. That purchase price shall not be less than 97% of the aggregate Original Principal Amount of the Series 2026 Bonds, plus any accrued interest on the Series 2026 Bonds from their date to the Closing Date. The City Auditor may either sell the Series 2026 Bonds to an investment banker, acting as underwriter, or to a financial institution or other entity or person, in a private placement. The City Auditor may enter into a Purchase Agreement with the Original Purchaser in that private sale, or may sell the Series 2026 Bonds without a Purchase Agreement. The Series 2026 Bonds shall be sold with and upon such other terms as are required or authorized by this Ordinance to be specified in the Certificate of Award, in accordance with law, the provisions of this Ordinance, and any Purchase Agreement.

(b) **Certificate of Award.** The City Auditor shall state in the Certificate of Award the original principal amount of the Series 2026 Bonds; the principal amounts to be issued as Serial Series 2026 Bonds and Term Series 2026 Bonds; the interest rates on the Series 2026 Bonds; the purchase price for the Series 2026 Bonds; the first Interest Payment Date; the maturity date(s), principal payment schedule, redemption provisions, and the designation of the Series 2026 Bonds; and any other terms authorized by this Ordinance.

(c) **Delivery.** The City Auditor shall sign and deliver the Certificate of Award and shall cause the Series 2026 Bonds to be prepared, signed, and delivered, together with a true transcript of proceedings of the issuance of the Series 2026 Bonds, to the Original Purchaser upon payment of the purchase price. This Council authorizes and directs the City Auditor to provide to the Clerk of Council, for inclusion in the transcript, a statement of the indebtedness of the City and the other information required by Section 133.33, Revised Code.

(d) **Consolidated Issue.** The City Auditor is authorized, if he determines it to be in the best interest of the City, to combine the Series 2026 Bonds with one or more other contemporaneous issues of bonds payable from taxes within the ten-mill limitation into a consolidated bond issue, pursuant to 133.30(B) of the Revised Code. To the extent applicable, provisions of this Ordinance relating to the Series 2026 Bonds shall apply to that consolidated issue. Such consolidated issue shall be designated "City of Lorain, Ohio Various Purpose General Obligation (Limited

Tax) Refunding and Improvement Bonds, Series 2026," or shall have such other designation as provided in the Certificate of Award.

Section 7. Disclosure.

(a) **Primary Offering Disclosure—Official Statement.** If determined necessary by the City Auditor, this Council authorizes and directs the Mayor and the City Auditor, or either of them (1) to prepare or cause to be prepared, and to make or authorize modifications, completions, or changes of or supplements to, a disclosure document in the form of an official statement, (2) to determine, and certify or otherwise represent, when the official statement is to be "deemed final" (except for permitted omissions) or is a final official statement for purposes of the SEC Rule, (3) to use and distribute, or authorize the use and distribution of, that official statement and any supplements in connection with the original issuance of the Series 2026 Bonds, and (4) to complete and sign the final official statement together with certificates, statements, or other documents in connection with the finality, accuracy, and completeness of that official statement.

(b) **Secondary Market Disclosure—Continuing Disclosure Agreement.** If the City prepares and distributes an official statement in accordance with Section 7(a), for the benefit of the Holders of the Series 2026 Bonds and the beneficial owners of book-entry interests in the Series 2026 Bonds, the City agrees, as the only obligated person with respect to the Series 2026 Bonds under the SEC Rule, to provide financial information and operating data, financial statements, and notices, in the manner required for purposes of paragraph (b)(5)(i) of the SEC Rule.

(1) ***Information Filing.*** The City further agrees, in particular, to provide:

(A) to the MSRB through its EMMA System, in an electronic format as prescribed by the MSRB and containing such identifying information as prescribed by the MSRB, (1) Annual Information for each City fiscal year, not later than the June 30 following the end of the fiscal year, and (2) when and if available, audited City financial statements for each of those fiscal years; and

(B) to the MSRB through its EMMA System, in an electronic format as prescribed by the MSRB and containing such identifying information as prescribed by the MSRB, in a timely manner, notice of (1) any Specified Event (to be provided within ten (10) business days), (2) the City's failure to provide the Annual Information within the time specified above, and (3) any change in the accounting principles applied in the preparation of its annual financial statements, any change in its fiscal year, its failure to appropriate funds to meet costs to be incurred to perform the Continuing Disclosure Agreement, and the termination of the Continuing Disclosure Agreement.

(2) ***Continuing Disclosure Agreement.*** To further describe and specify certain terms of the Continuing Disclosure Agreement, this Council authorizes and directs the City Auditor to (A) complete, sign, and deliver the Continuing Disclosure Agreement, in the name and on behalf of the City, and (B) to specify in reasonable detail the Annual Information to be provided (which may be provided by specific reference to other documents previously filed and available in accordance with the SEC Rule), whether the City has obtained any credit enhancement for the Series 2026 Bonds, and the City's expectations as to whether audited financial statements will be prepared, the accounting principles to be applied in their preparation, and whether they will be available together with, or separately from, the Annual Information.

(3) ***Disclosure Procedures.*** This Council further authorizes and directs the City Auditor to establish procedures to ensure compliance by the City with the Continuing Disclosure Agreement, including timely provision of information and notices as described above. Before making any filing in accordance with(b)(2) above or providing notice of the occurrence of any other events, the City Auditor may consult with and obtain legal advice from bond counsel or other qualified independent special counsel selected by the City. The City Auditor, acting in the name and on behalf of the City, may rely upon that legal advice in determining whether a filing should be made.

(4) ***Amendments.*** The City reserves the right to amend the Continuing Disclosure Agreement, and to obtain the waiver of noncompliance with any provision of the Continuing Disclosure Agreement, as may be necessary or appropriate to achieve its compliance with any applicable federal securities law or rule, to cure any ambiguity, inconsistency, or formal defect or omission, and to address any change in circumstances arising from a change in legal requirements, change in law, or change in the identity, nature, or status of the City, or type of business conducted by the City. Any amendment or waiver will not be effective unless the Continuing Disclosure Agreement (as amended or taking into account that waiver) would have complied with the requirements of the SEC Rule at the time of the primary offering of the Series 2026 Bonds, after taking into account any applicable amendments to or official interpretations of the SEC Rule, as well as any change in circumstances, and until the City has received either (A) a written opinion of bond counsel or other qualified independent special counsel selected by the City that the amendment or waiver would not materially impair the interests of Holders or beneficial owners of book-entry interests in the Series 2026 Bonds, or (B) the written consent to the amendment or waiver by the Holders of at least a majority of the principal amount of the Series 2026 Bonds then outstanding. Annual Information containing any revised operating data or financial information shall explain, in narrative form, the reasons for any

amendment or waiver and the impact of the change on the type of operating data or financial information being provided.

(5) ***Enforcement.*** The Continuing Disclosure Agreement will be solely for the benefit of the Holders of, and beneficial owners of book-entry interests in, the Series 2026 Bonds. The exclusive remedy for any breach of the Continuing Disclosure Agreement by the City will be limited, to the extent permitted by law, to a right of Holders and beneficial owners to institute and maintain legal proceedings to obtain the specific performance by the City of its obligations under the Continuing Disclosure Agreement. Any individual Holder or beneficial owner may institute and maintain those proceedings to require the City to provide a filing if the filing is due and has not been made. Any proceedings to require the City to perform any other obligation under the Continuing Disclosure Agreement (including any proceedings that contest the sufficiency of any filing) may be instituted and maintained only (A) by a trustee appointed by the Holders and beneficial owners of not less than 25% in principal amount of the Series 2026 Bonds then outstanding, or (B) by Holders and beneficial owners of not less than 10% in principal amount of the Series 2026 Bonds then outstanding, in accordance with Section 133.25(B)(4)(b) or (C)(1), Revised Code, as applicable, or any comparable successor provisions.

(6) ***Appropriation.*** The performance by the City of the Continuing Disclosure Agreement will be subject to the annual appropriation of any funds that may be necessary to perform it.

(7) ***Term.*** The Continuing Disclosure Agreement will remain in effect only for the period that the Series 2026 Bonds are outstanding in accordance with their terms and the City is an obligated person with respect to the Series 2026 Bonds within the meaning of the SEC Rule. The obligation of the City to provide the Annual Information, audited financial statements, and notices of the events described above will terminate if and when the City is no longer an obligated person with respect to the Series 2026 Bonds.

Section 8. Financing Costs. The City retains the professional services and authorizes the payment of the financing costs for the Series 2026 Bonds (the "Financing Costs"), as provided in this Section 8.

(a) **Bond Counsel.** The City retains the legal services of Tucker Ellis LLP, as bond counsel for the Series 2026 Bonds. The legal services will be in the nature of legal advice and recommendations as to the documents and the proceedings in connection with the issuance and sale of the Series 2026 Bonds and rendering legal opinions upon the delivery of the Series 2026 Bonds. Bond Counsel will render those services to the City in an attorney-client relationship. Bond Counsel will be paid just and reasonable compensation for those legal services, and will be

reimbursed for actual out-of-pocket expenses it incurs in rendering those legal services, in accordance with Section 8(f) below.

(b) **Original Purchaser.** This Council authorizes and directs the City Auditor to select the Original Purchaser, either as an underwriter or as a purchaser in a private placement. The Original Purchaser shall be identified in the Certificate of Award. The Original Purchaser shall be paid for services in accordance with any Purchase Agreement or, if there is no Purchase Agreement, in accordance with its proposal.

(c) **Registrar.** This Council authorizes and directs the City Auditor to appoint a Registrar for the Series 2026 Bonds. The Registrar shall be (1) the City Treasurer, or (2) a financial institution able to complete transfer and exchange functions for the Series 2026 Bonds in accordance with standards and conditions applicable to registered corporate securities. The City retains the services of the Registrar for the Series 2026 Bonds. The Registrar will perform the services as bond registrar, authenticating agent, paying agent, and transfer agent for the Series 2026 Bonds as provided in this Ordinance. If the Registrar is a financial institution, it will be paid for those services in accordance with any Registrar Agreement.

(d) **Ratings and Insurance.** If, in the judgment of the City Auditor, the filing of an application for (1) a rating on the Series 2026 Bonds by one or more nationally recognized statistical rating organizations, or (2) a policy of insurance, from one or more bond insurance providers, to better assure the payment of Debt Service on the Series 2026 Bonds, is in the best interest of and financially advantageous to the City, this Council authorizes and directs the City Auditor to prepare and submit those applications and to provide to those rating agencies or insurance providers the information required for the purpose. This Council further authorizes the fees for those ratings and the premiums for the insurance to be included in Financing Costs authorized under Section 8(e) below.

(e) **Escrow Agent.** This Council authorizes and directs the City Auditor to appoint an Escrow Agent, if required, for the Series 2026 Bonds, pursuant to the terms of an Escrow Agreement.

(f) **Verification Agent.** If, in the judgment of the City Auditor, it is in the best interest of the City, this Council authorizes and directs the City Auditor to retain, on behalf of the City, the services of an independent public accounting firm to perform a verification of the sufficiency of amounts in the Escrow Fund (established pursuant to the terms of an Escrow Agreement) to cause the Outstanding Obligations to be deemed paid and discharged.

(g) **Limits on Authority of Service Providers.** In rendering the services described above, as independent contractors, those service providers shall not exercise any administrative discretion on behalf of the City in the formulation of public policy;

expenditure of public funds; enforcement of laws, rules and regulations of the State, the City, or any other political subdivision; or the execution of public trusts.

(h) **Payment of Financing Costs.** This Council authorizes and approves the expenditure of the amounts necessary to pay those Financing Costs specifically authorized above and all other necessary Financing Costs in connection with the issuance and sale of the Series 2026 Bonds. Those Financing Costs may be paid by the Original Purchaser in accordance with any Purchase Agreement. To the extent they are not paid by the Original Purchaser, this Council authorizes and directs the City Auditor to provide for the payment of those Financing Costs from the proceeds of the Series 2026 Bonds to the extent available and, otherwise, from any other funds lawfully available and appropriated for the purpose.

Section 9. Use of Proceeds. The proceeds from the sale of the Series 2026 Bonds shall be deposited and used and the Outstanding Obligations shall be paid as provided in this Section 9.

(a) Any accrued interest or premium received on the sale of the Series 2026 Bonds shall be deposited in the Bond Retirement Fund of the City and used for the payment of interest on the Series 2026 Bonds on the first Interest Payment Date.

(b) An amount necessary to pay any Financing Costs of the Series 2026 Bonds, to the extent not paid by the Original Purchaser in accordance with the Purchase Agreement and to the extent that the City Auditor determines to pay those Financing Costs from the proceeds of the Series 2026 Bonds, shall be deposited in a separate fund and used for the payment of those Financing Costs.

(c) The remainder of the proceeds shall be paid into the Bond Retirement Fund and used to retire the Outstanding Obligations at their maturity, and such amount is hereby pledged and is to be applied solely to such payment.

Section 10. Security and Source of Payment. The Series 2026 Bonds will be general obligations of the City.

(a) This Council pledges to the payment of Debt Service on the Series 2026 Bonds the full faith and credit of the City including, without limitation:

(1) The general taxing power of the City, including the power to levy taxes within the ten-mill limitation, as defined in Section 5705.02, Revised Code.

(2) Proceeds of the City's Permissive License Tax.

(3) Proceeds of the City's Fire Levy (to the extent applicable to the Outstanding Obligations).

(4) Proceeds of the municipal income tax of the City designated for the street levy fund and lawfully available to pay Debt Service.

(5) The proceeds to be received from the sale of any bonds issued to refund the Series 2026 Bonds.

(6) Any money remaining from the sale of the Series 2026 Bonds after the payment of the Financing Costs of the Series 2026 Bonds and not required to retire the Outstanding Obligations.

(b) During the years while the Series 2026 Bonds are outstanding, there will be levied on all the taxable property in the City, in addition to all other taxes, a direct tax annually, in an amount sufficient to pay Debt Service on the Series 2026 Bonds when due. The tax will not be less than the interest and sinking fund tax required by Section 11 of Article XII of the Ohio Constitution. The tax will be and is ordered to be computed, certified, levied, and extended upon the tax list and collected by the same officers, in the same manner, and at the same time that taxes for general purposes for each of those years are computed, certified, levied, extended, and collected. The tax will be placed before and in preference to all other items and for its full amount. The money derived from that tax levy shall be placed in the Bond Retirement Fund of the City and is irrevocably pledged for the payment of the Debt Service on the Series 2026 Bonds, when and as that Debt Service falls due.

(c) The tax provided in (b) above will be reduced in each year the Series 2026 Bonds are outstanding by the sum of the following items, if available to pay Debt Service on the Series 2026 Bonds and appropriated for that purpose:

(1) Any proceeds of the City's Permissive License Tax lawfully available to pay debt service on the Series 2026 Bonds.

(2) Any funds available from the City's Fire Levy lawfully available to pay debt service on the Series 2026 Bonds.

(3) Any surplus in the Bond Retirement Fund.

(4) Any other money lawfully available to the City, including but not limited to gasoline tax proceeds lawfully available for Debt Service.

Section 11. Federal Tax Matters. The City covenants that it will take those actions required to maintain the Federal Tax Status of the Series 2026 Bonds and that it will not take or permit to be taken any actions that would adversely affect that Federal Tax Status. Without limiting these covenants, the City specifically covenants as follows:

(a) **Private Activity Bonds.** The City will apply the proceeds received from the sale of the Series 2026 Bonds to the uses described in Section 9. The City will not permit the use of the Improvements by any person, will not secure or derive the money for payment of Debt Service on the Series 2026 Bonds by any property or payments, and will not loan the proceeds of the Series 2026 Bonds to any person, all in a manner as to cause the Series 2026 Bonds to be "private activity bonds" within the meaning of Code Section 141(a).

(b) **Arbitrage.** The City will restrict the use of proceeds of the Series 2026 Bonds in the manner and to the extent as may be necessary, after taking into account reasonable expectations on the Closing Date of the Series 2026 Bonds, so that the Series 2026 Bonds will not constitute "arbitrage bonds" within the meaning of Code Section 148. The City Auditor or any other official having responsibility for issuing the Series 2026 Bonds, is authorized and directed, alone or in conjunction with any other official, employee, or consultant of the City, to sign and deliver a certificate of the City, for inclusion in the transcript of proceedings for the Series 2026 Bonds. That certificate shall set forth the reasonable expectations of the City on the Closing Date, regarding the amount and use of the proceeds of the Series 2026 Bonds in accordance with Code Section 148. If required, the City will limit the yield on any "investment property" (as defined in Code Section 148(b)(2)) acquired with the proceeds of the Series 2026 Bonds.

(c) **Arbitrage Rebate.** Unless the gross proceeds of the Series 2026 Bonds are expended in accordance with one of the spending period exceptions set forth in Treas. Reg. §1.148-7, the City will pay the amounts required by Code Section 148(f)(2) to the United States at the times required by Code Section 148(f)(3). The City will maintain the books and records and make calculations and reports as are required to comply with the Code's arbitrage rebate requirements.

(d) **Federal Guarantee.** The City will not permit the use of the Improvements, or make loans of the proceeds of the Series 2026 Bonds, or invest the proceeds of the Series 2026 Bonds in a manner as to cause the Series 2026 Bonds to be "federally guaranteed" within the meaning of Code Section 149(b).

(e) **Information Reporting.** This Council authorizes and directs the City Auditor or any other official of the City having responsibility for issuing the Series 2026 Bonds to sign and file Form 8038-G for the Series 2026 Bonds with the Internal Revenue Service.

(f) **Bank-Qualified Obligations.** The Series 2026 Bonds are deemed designated as "qualified tax-exempt obligations" under Code Section 265(b)(3).

Section 12. Signing and Delivery of Series 2026 Bonds and Documents. This Council authorizes and directs the Mayor and the City Auditor, or the persons designated to sign in their absence, to sign and deliver the Series 2026 Bonds in accordance with Section 4 of this Ordinance. This Council authorizes and directs the Mayor and the City Auditor, or either of them, to sign and approve a preliminary official statement, a final official statement, and supplements and amendments to both in accordance with Section 7 of this Ordinance.

(a) This Council authorizes and directs the City Auditor to sign and deliver, on behalf of the City:

(1) The Certificate of Award.

(2) Any Purchase Agreement.

(3) Any Registrar Agreement.

(4) The Continuing Disclosure Agreement.

(5) Any Escrow Agreement.

(6) Any agreements or letters of representation in connection with a book-entry system for the Series 2026 Bonds.

(7) If determined in best interest of the City by the City Auditor as set forth in the Certificate of Award, applications for and agreements in connection with obtaining a policy of municipal bond insurance for the Series 2026 Bonds.

(8) If determined in best interest of the City by the City Auditor as set forth in the Certificate of Award, applications for and agreements in connection with obtaining one or more ratings for the Series 2026 Bonds.

In the absence of the City Auditor, this Council authorizes and directs the Chief Deputy Auditor to sign and deliver any of those documents and certificates.

(b) This Council authorizes and directs the City Auditor, or in his absence the Chief Deputy Auditor, to sign and deliver, on behalf of the City, in his capacity as fiscal officer of the City:

(1) Any certificates in accordance with Section 5705.41, Revised Code, required for any of the agreements in connection with the Series 2026 Bonds.

(2) The statements of indebtedness provided for in Section 133.33(B), Revised Code.

(c) This Council authorizes and directs the Mayor, the Law Director, the City Auditor, the City Treasurer, the President of Council, the Council Clerk, and any other City officials:

(1) to sign and deliver any agreements, certificates, instruments, and other documents that the official considers necessary or appropriate in connection with the issuance and sale of the Series 2026 Bonds, and that are not inconsistent with this Ordinance; and

(2) to take such actions as are necessary or appropriate to consummate the transactions contemplated by this Ordinance.

Section 13. Certification to County Auditor. This Council directs the City Auditor or the Clerk of this Council to forward a certified copy of this Ordinance and a copy of the Certificate of Award to the Auditor of Lorain County.

Section 14. Definitions. Words and terms are used in this Ordinance with the following meanings:

"Annual Information" means the annual financial information and operating data of the type to be specified in the Continuing Disclosure Agreement in accordance with the SEC Rule.

"Authorized Denominations" means the denomination of $5,000 or any whole multiple of $5,000.

"Bond Proceedings" means, collectively, this Ordinance, the Certificate of Award, any Purchase Agreement, the Continuing Disclosure Agreement, any Registrar Agreement, and the other proceedings of the City, including the Series 2026 Bonds, that provide collectively for, among other things, the rights of Holders and beneficial owners of the Series 2026 Bonds.

"Certificate of Award" means the certificate authorized by Section 6 of this Ordinance, setting forth the terms and other provisions of the Series 2026 Bonds required or authorized by this Ordinance.

"Closing Date" means the date of delivery of and payment for the Series 2026 Bonds.

"Code" means the Internal Revenue Code of 1986, as amended. References to the Code and sections of the Code include applicable regulations (whether temporary or final) under the Code, and any amendments of, or successor provisions to, those sections or regulations.

"Continuing Disclosure Agreement" means the continuing disclosure agreement made by the City for the benefit of Holders and beneficial owners of the Series 2026 Bonds in accordance with the SEC Rule. It consists of the covenants in Section 7(b) of this Ordinance and the Continuing Disclosure Agreement.

"Continuing Disclosure Agreement" means the certificate authorized by Section 7(b).

"Debt Service" means all amounts due as principal, interest, and any premium on an issue of securities.

"Depository" means any securities depository that is a clearing agency under federal law operating and maintaining a book-entry system to record ownership of book-entry interests in securities or the principal of and interest on securities, and to effect transfers of securities in book -entry form.

"EMMA System" means the MSRB's Electronic Municipal Market Access system.

"Federal Tax Status" means the status of the interest on any Series 2026 Bonds issued as tax-exempt obligations as excludable from gross income for federal income tax purposes and not treated as an item of tax preference for purposes of the alternative minimum tax.

"Financing Costs" means any financing costs authorized to be paid by Section 133.01(K), Revised Code.

"Holder" means, as to any Series 2026 Bond, the person in whose name the Series 2026 Bond is registered on the Register.

"Improvements" means (i) public improvements including the construction, acquisition, furnishing, equipping and otherwise improving buildings necessary for the City fire department, and purchasing equipment for the fire department, together with all other necessary and appropriate appurtenances, (ii) purchasing the site of the former Lorain Pellet Terminal in the City, and after acquiring that site, cleaning up and remediating contamination on that site and to provide for and enable the environmentally safe and productive development and reuse of that site (the "Pellet Terminal Project") and (iii) street or roadway improvements, including but not limited to resurfacing, constructing, reconstructing, widening, opening, improving, grading, draining, paving, extending, or changing the line of roads, highways, streets, sidewalks, alleys, curbs, gutters or other street or roadway improvements to East Erie Avenue, West Erie Avenue, or other streets or roadways within the City.

"Interest Payment Dates" means June 1 and December 1 of each year, beginning on the first Interest Payment Date designated by the City Auditor in the Certificate of Award.

"Mandatory Redemption Dates" means December 1 in each of the years designated in the Certificate of Award as Mandatory Redemption Dates.

"Mandatory Sinking Fund Redemption" means redemption in accordance with the mandatory redemption requirements, if any, for the Series 2026 Bonds as determined in the Certificate of Award and as described in Section 2(d).

"MSRB" means the Municipal Securities Rulemaking Board.

"Original Principal Amount" means the face amount of the Series 2026 Bonds.

"Original Purchaser" means the entity selected by the City Auditor under Section 8(b) as the purchaser of the Series 2026 Bonds.

"Outstanding Obligations" has the meaning given to such term in the recitals.

"Principal Payment Dates" means December 1 of the years set forth in the Certificate of Award.

"Purchase Agreement" means any Bond Purchase Agreement between the City and the Original Purchaser, entered into in accordance with Section 6 of this Ordinance.

"Register" means all books and records necessary for the registration, exchange, and transfer of the Series 2026 Bonds.

"Registrar" means the entity or person selected by the City Auditor in accordance with Section 8(c) to serve as registrar for the Series 2026 Bonds.

"Registrar Agreement" means any bond registrar agreement between the City and the Registrar.

"SEC Rule" means SEC Rule 15c2-12.

"Serial Series 2026 Bonds" means Series 2026 Bonds designated as Serial Series 2026 Bonds in the Certificate of Award and maturing on the dates set forth in the Certificate of Award, and not subject to Mandatory Sinking Fund Redemption.

"Series 2026 Bonds" means the City of Lorain, Ohio Various Purpose General Obligation (Limited Tax) Refunding Bonds, Series 2026, as authorized by this Ordinance.

"Specified Events" means any of the events specified in SEC Rule Section (b)(5)(C), as in effect and applicable to the Series 2026 Bonds at the time of the primary offering of the Series 2026 Bonds.

"Term Series 2026 Bonds" means the Series 2026 Bonds designated as Term Series 2026 Bonds in the Certificate of Award and maturing on the dates set forth in the Certificate of Award, and subject to Mandatory Sinking Fund Redemption.

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Section 15. Emergency and Effective Date. This Ordinance is declared to be an emergency measure necessary for the immediate preservation of the public peace, property, health, safety and welfare in the City, and for the further reason that the Series 2026 Bonds shall be sold promptly in order to refund the Outstanding Obligations for debt service savings; and provided it receives the affirmative vote of at least two-thirds of its members elected to Council, this Ordinance shall take effect and be in force immediately upon its passage by the Council and approval by the Mayor; otherwise it shall take effect and be in force after the earliest period allowed by law.

Passed: _____, 2026

_____
President of Council

Attest:_____
Clerk of Council

Approved: _____, 2026

_____
Mayor

CITY OF LORAIN

City Council Regular Meeting **7. o.**
Meeting Date: 02/02/2026
Submitted by: Anita Harper, Auditor

AGENDA ITEM DESCRIPTION OR LEGISLATION TITLE

Issuance and sale of bonds in the maximum amount of $2,000,000 for the purpose of retiring and reissuing the series 2015 urban renewal refunding bonds.

PURPOSE AND BACKGROUND:

The purpose of the refunding bond would be the realization of cost savings for the City.

RECOMMENDATION TO COUNCIL:

Lorain City Council consider passage

Fiscal Impact

Funds Available In Current Year Budget (Y/N):	No
Estimate of Total Expenditure:	2,000,000
List of Funding Source and/or Account Number:	3010
Estimate of Incoming Revenue (fees, grants, etc.):	2,000,000

Financing Requirements (Bonds, Loans, Lease, etc.):
Refunding bond issuance.

Attachments

Refunding Bond Ordinance-2015 Urb Renewal

Form Review

Inbox	Reviewed By	Date
Harper (Originator)	Anita Harper	01/28/2026 04:30 PM
P. Riley	Michele Beko	01/29/2026 09:36 AM
Harper (Originator)	Anita Harper	01/29/2026 11:30 AM
P. Riley	Michele Beko	01/29/2026 01:39 PM
Form Started By: Anita Harper		Started On: 01/28/2026 04:19 PM
Final Approval Date: 01/29/2026		

ORDINANCE NO. ____-26

AN ORDINANCE AUTHORIZING THE ISSUANCE AND SALE OF BONDS IN A MAXIMUM PRINCIPAL AMOUNT OF $2,000,000, FOR THE PURPOSE OF REFUNDING CERTAIN OUTSTANDING BONDS OF THE CITY ORIGINALLY ISSUED TO PAY COSTS OF THE CITY OF LORAIN'S URBAN RENEWAL PROJECT ACTIVITIES IN THE RIVERFRONT URBAN RENEWAL PLAN AREA AND TO PAY THE COSTS OF REFUNDING AND COSTS OF ISSUANCE FOR SAID BONDS; AND DECLARING AN EMERGENCY.

WHEREAS, pursuant to Ordinance No. 90-99, passed by this Council on June 7, 1999, this Council approved and adopted the Revised Riverfront Urban Renewal Plan, dated May 18, 1999; and

WHEREAS, pursuant to Ordinance No. 102-00, passed by this Council on June 19, 2000, this Council approved and adopted amendments to the revised Riverfront Urban Renewal Plan (together with all amendments thereto, the "Plan"); and

WHEREAS, on October 21, 2002, this Council passed Ordinance No. 180-02, and amended said Ordinance on November 18, 2002 by Ordinance No. 195-02 and on April 21, 2003 by Ordinance No. 64-03 (collectively, the "Original Bond Ordinance") to authorize the issuance of City of Lorain, Ohio General Obligation (Limited Tax) Urban Renewal Bonds, Series 2003 (the "Series 2003 Urban Renewal Bonds"), issued in the principal amount of $4,470,000 for the purpose of paying costs of carrying out urban renewal project activities on land located in the area described in the Plan (the "Plan Area"); and

WHEREAS, on May 18, 2015 this Council passed Ordinance No. 60-15, (the "2026 Refunding Bond Ordinance") to authorize the issuance of City of Lorain, Ohio General Obligation (Limited Tax) Urban Renewal Bonds, Series 2015 (the "Series 2015 Urban Renewal Refunding Bonds"), issued in the principal amount of $3,845,000 for the purpose of refunding the Series 2003 Urban Renewal Bonds; and

WHEREAS, this Council desires to refinance the Series 2015 Urban Renewal Refunding Bonds, which shall be outstanding on the Refunding Date in the principal amount of $1,835,000 (the "Outstanding Bonds"), and to pay the costs of issuance associated therewith with the issuance of general obligation (limited tax) refunding bonds in the maximum principal amount of $2,000,000 (the "Series 2026 Urban Renewal Refunding Bonds"), which Series 2026 Urban Renewal Refunding Bonds shall constitute "Additional Bonds" under the Original Bond Ordinance; and

WHEREAS, the City Auditor has certified to this Council that the estimated life or period of usefulness of the Projects (as more specifically described in Section 14 hereof) to be refinanced with the Series 2026 Urban Renewal Refunding Bonds is at least five (5) years and has further certified that the maximum maturity of the Series 2026 Urban Renewal Refunding Bonds is December 1, 2032, based upon the weighted average of the amounts allocated to the

several classes of improvements set forth in the City Auditor's Certificate, which allocation is approved, ratified and confirmed.

NOW THEREFORE, BE IT ORDAINED by the Council of the City of Lorain, Lorain County, Ohio:

Section 1. Findings and Determinations. This Council finds and determines the following matters (capitalized terms that are not otherwise defined are defined in Section 14):

(a) The City has previously authorized and issued the Outstanding Bonds pursuant to the Original Bond Ordinance. The Outstanding Bonds were issued to pay the costs of the Projects (as defined herein).

(b) It is necessary for the City to issue the Series 2026 Urban Renewal Refunding Bonds as Additional Bonds under the Original Bond Ordinance for the purpose of (1) refunding the Outstanding Bonds and (2) paying Financing Costs (as defined in Section 8 hereof) of the Series 2026 Urban Renewal Refunding Bonds.

(c) The Series 2026 Urban Renewal Refunding Bonds may be part of a consolidated issue under Sections 133.30(B) of the Ohio Revised Code (the "Revised Code").

(d) The City Auditor has certified to this Council the maximum maturity of the Series 2026 Urban Renewal Refunding Bonds.

(e) All acts and conditions necessary to be performed by the City or to have been met for the issuance of the Series 2026 Urban Renewal Refunding Bonds in order to make them legal, valid, and binding general obligations of the City, have been performed and met, or will have been performed and met at the time of delivery of the Series 2026 Urban Renewal Refunding Bonds, as required by law.

(f) No statutory or constitutional limitation of indebtedness or taxation will be exceeded by the issuance of the Series 2026 Urban Renewal Refunding Bonds.

(g) All formal actions of this Council relating to the enactment of this Ordinance were taken in an open meeting of this Council, and all deliberations of this Council and of any of its committees that resulted in those formal actions, were in meetings open to the public, in compliance with all legal requirements, including Section 121.22, Revised Code.

Section 2. Terms of the Series 2026 Urban Renewal Refunding Bonds. The Series 2026 Urban Renewal Refunding Bonds will have the following terms:

(a) **Amount.** The Series 2026 Urban Renewal Refunding Bonds shall be issued in the maximum Original Principal Amount as determined by the City Auditor in the Certificate of Award, but in no event shall such Original Principal Amount exceed $2,000,000. The principal amounts of the Series 2026 Urban Renewal Refunding Bonds to be issued as Serial Series 2026 Urban Renewal Refunding Bonds or as

Term Series 2026 Urban Renewal Refunding Bonds will be determined by the City Auditor in the Certificate of Award.

(b) **Date.** The Series 2026 Urban Renewal Refunding Bonds shall be dated the Closing Date, or such other date, not more than 31 days before the Closing Date, as determined by the City Auditor in the Certificate of Award.

(c) **Maturity.** The Series 2026 Urban Renewal Refunding Bonds will mature or be payable by Mandatory Sinking Fund Redemption in the amounts and on the Principal Payment Dates as determined by the City Auditor in the Certificate of Award.

(d) **Redemption Before Stated Maturity.** The Series 2026 Urban Renewal Refunding Bonds will be subject to redemption before their stated maturity as described in this Section 2(d), unless otherwise determined by the City Auditor in the Certificate of Award.

(1) ***Mandatory Sinking Fund Redemption.*** If any of the Series 2026 Urban Renewal Refunding Bonds are issued as Term Series 2026 Urban Renewal Refunding Bonds, the Term Series 2026 Urban Renewal Refunding Bonds will be subject to Mandatory Sinking Fund Redemption, in part, on the Mandatory Redemption Dates, at a redemption price of 100% of the principal amount being redeemed, plus interest accrued to the redemption date. The principal amounts to be paid by Mandatory Sinking Fund Redemption will be those in the principal payment schedule as determined by the City Auditor in the Certificate of Award.

The City will have the option to deliver Term Series 2026 Urban Renewal Refunding Bonds in any principal amount to the Registrar for cancellation. The City will be entitled to a credit against its obligation to pay Debt Service by Mandatory Sinking Fund Redemption on any future Mandatory Redemption Date for Term Series 2026 Urban Renewal Refunding Bonds that (A) are delivered by the City to the Registrar, (B) have previously been redeemed other than by Mandatory Sinking Fund Redemption, or (C) have been purchased and canceled by the Registrar (i) as provided in the Registrar Agreement, or (ii) if the City Treasurer is the Registrar, by written request of the City Auditor to the Registrar, at a price not exceeding the price set by the City Auditor in that request.

(2) ***Optional Redemption.*** If determined by the City Auditor in the Certificate of Award to be in the best interest of and financially advantageous to the City, the Series 2026 Urban Renewal Refunding Bonds shall be subject to prior redemption on any date, by and at the sole option of the City, as provided in the Certificate of Award, either in whole or in part, in integral multiples of $5,000, at the redemption prices specified in the Certificate of Award (expressed as percentages of the principal amount redeemed), plus

accrued interest to the redemption date; provided that such redemption prices may not exceed 110%.

The City's option to redeem the Series 2026 Urban Renewal Refunding Bonds shall be exercised by a notice from the City Auditor to the Registrar (i) as provided in the Registrar Agreement, or (ii) if the City Treasurer is the Registrar, the notice shall specify the redemption date and the principal amount of the Series 2026 Urban Renewal Refunding Bonds to be redeemed, and be given at least 45 days before the redemption date or such shorter period as acceptable to the Registrar.

(3) ***Terms of Redemption.*** The following are the procedures for partial redemption, for notice of redemption, and for payment of redeemed Series 2026 Urban Renewal Refunding Bonds.

(A) ***Partial Redemption.*** If Series 2026 Urban Renewal Refunding Bonds are to be redeemed in part by optional redemption, the maturities of Series 2026 Urban Renewal Refunding Bonds to be redeemed and the amounts of each maturity to be redeemed shall be selected by the City. If fewer than all Series 2026 Urban Renewal Refunding Bonds of a maturity are to be redeemed, the Registrar shall select the Series 2026 Urban Renewal Refunding Bonds of a maturity to be redeemed by lot in any manner it determines. The Registrar shall treat each portion of Series 2026 Urban Renewal Refunding Bonds of a maturity in the lowest Authorized Denomination as a separate bond for purposes of that selection. If the Series 2026 Urban Renewal Refunding Bonds to be redeemed are book-entry Series 2026 Urban Renewal Refunding Bonds, the Registrar shall direct the Depository to select portions of Series 2026 Urban Renewal Refunding Bonds or beneficial ownership interests of a maturity to be redeemed. If a portion of a Bond is redeemed, the Holder shall surrender that Bond for exchange of the unredeemed portion.

(B) ***Notice of Redemption.*** The Registrar shall give notice of redemption of Series 2026 Urban Renewal Refunding Bonds to the Holders at least 30 days before the redemption date, by first-class mail. If the Registrar sends the notice, the failure of a Holder to receive the notice will not affect the validity of the redemption. The notice shall state all of the following:

(i) the redemption date,

(ii) the redemption price,

(iii) the principal amount of Series 2026 Urban Renewal Refunding Bonds to be redeemed,

(iv) if fewer than all of the outstanding Series 2026 Urban Renewal Refunding Bonds are to be redeemed, the identifying information of the Series 2026 Urban Renewal Refunding Bonds to be redeemed,

(v) the places where the amounts due on redemption are payable, and

(vi) that the redemption price of each Bond redeemed will be due and payable on the redemption date, and interest on that Bond will cease to accrue on and after the redemption date.

(C) ***Payment of Redeemed Series 2026 Urban Renewal Refunding Bonds.*** The City shall pay the redemption price of the Series 2026 Urban Renewal Refunding Bonds called for redemption to the Registrar on or before the redemption date. The Registrar shall deposit that redemption price, at the direction of the City, in an account held by the Registrar or in a separate escrow fund established by the City. The Series 2026 Urban Renewal Refunding Bonds called for redemption will become due and payable on the redemption date at the redemption price, if the notice provided for in (B) above has been given. The Registrar shall pay the redemption price on the redemption date to the Holders upon presentation and surrender of those Series 2026 Urban Renewal Refunding Bonds at the places specified in the notice. On and after the redemption date, the Series 2026 Urban Renewal Refunding Bonds called for redemption that are due and payable will no longer bear interest and will no longer be outstanding under the Bond Proceedings, if the money for the redemption price for those Series 2026 Urban Renewal Refunding Bonds is held by the Registrar—or an escrow agent holding an escrow fund—on the redemption date and is available for that payment. If the money for the redemption price is not available on the redemption date, the Series 2026 Urban Renewal Refunding Bonds called for redemption will continue to bear interest until paid at the same rate as if they had not been called for redemption.

(e) **Interest Rates.** The Series 2026 Urban Renewal Refunding Bonds shall bear interest at the rate or rates determined in the Certificate of Award, which rate or rates shall be in the best interest of the City. The true interest cost on the Series 2026 Urban Renewal Refunding Bonds, calculated as the rate, compounded semi-annually, necessary to discount the amounts payable on the respective principal and interest payment dates to the purchase price received for the Series 2026 Urban Renewal Refunding Bonds, may not exceed 7% per annum. Interest will be calculated on a 360-day year of twelve 30-day months.

The Series 2026 Urban Renewal Refunding Bonds will bear interest from the most recent date to which interest has been paid or provided for or, if no interest has been paid or provided for, from their date. Interest on the Series 2026 Urban Renewal Refunding Bonds will be payable on the Interest Payment Dates until the principal amount has been paid or provided for. The City Auditor shall designate the first Interest Payment Date in the Certificate of Award, which shall be either June 1 or December 1 following the date of the Series 2026 Urban Renewal Refunding Bonds, as determined by the City Auditor.

(f) **Form, Numbering, and Denominations.** The Series 2026 Urban Renewal Refunding Bonds shall be issued in fully registered form. They shall be issued in Authorized Denominations and in such numbers as requested by the Original Purchaser and approved by the City Auditor. They shall be numbered as determined by the City Auditor in a manner to distinguish each Urban Renewal Refunding Bond from any other Urban Renewal Refunding Bond. They shall express on their faces the purpose for which they are issued and that they are issued in accordance with this Ordinance. The Series 2026 Urban Renewal Refunding Bonds will be designated "City of Lorain, Ohio General Obligation Urban Renewal Refunding Bonds, Series 2026," unless otherwise designated in the Certificate of Award. If the Series 2026 Urban Renewal Refunding Bonds are issued as part of a consolidated issue under Sections 133.30(B) of the Ohio Revised Code, such issue shall be designated as set forth in Section 6(d).

Section 3. Payment. The Debt Service on the Series 2026 Urban Renewal Refunding Bonds will be payable in lawful money of the United States of America without deduction for the services of the Registrar as paying agent. Principal and any premium on the Series 2026 Urban Renewal Refunding Bonds will be payable when due upon presentation and surrender of the Series 2026 Urban Renewal Refunding Bonds at the office of the Registrar. Interest on the Series 2026 Urban Renewal Refunding Bonds will be paid on each Interest Payment Date by check or draft mailed on the Interest Payment Date to the Holder as shown on the Register at the close of business on the 15th day of the month preceding the Interest Payment Date. Notwithstanding the foregoing, so long as the Series 2026 Urban Renewal Refunding Bonds are issued in book-entry form in a book-entry system, Debt Service on the Series 2026 Urban Renewal Refunding Bonds will be payable as provided in any agreement entered into by the City in connection with the book-entry system. Payment of Debt Service on any Bond will be made only to or upon the order of the Holder. All such payments will be valid and effectual to satisfy and discharge the City's liability upon that Urban Renewal Refunding Bond to the extent of the amount or amounts so paid.

Section 4. Signing and Authentication of Series 2026 Urban Renewal Refunding Bonds.

(a) **Signing.** The Series 2026 Urban Renewal Refunding Bonds will be signed on behalf of the City by the Mayor and the City Auditor. In the absence of the Mayor, the Series 2026 Urban Renewal Refunding Bonds shall be signed by the President of Council and, in the absence of the City Auditor, the Series 2026 Urban Renewal Refunding Bonds shall be signed by the Chief Deputy Auditor. Both signatures on the Series 2026 Urban Renewal Refunding Bonds may be facsimiles.

(b) **Authentication.** No Urban Renewal Refunding Bond will be valid or obligatory for any purpose or will be entitled to any security or benefit under the Bond Proceedings unless and until the certificate of authentication printed on the bond certificate is signed by the Registrar as authenticating agent. Authentication by the Registrar will be conclusive evidence that the Urban Renewal Refunding Bond so authenticated has been duly issued, signed, and delivered under, and is entitled to the security and benefit of, the Bond Proceedings. The certificate of authentication may be signed by any authorized officer or employee of the Registrar or by any other person acting as an agent of the Registrar and approved by the City Auditor on behalf of the City. The same person need not sign the certificate of authentication on all of the Series 2026 Urban Renewal Refunding Bonds.

Section 5. Registration; Transfer and Exchange; Book-Entry System.

(a) **Registration.** So long as any of the Series 2026 Urban Renewal Refunding Bonds remain outstanding, the City Auditor shall cause the Registrar to maintain the Register. The person in whose name a Bond is registered on the Register will be regarded as the absolute Holder of that Bond for all purposes of the Bond Proceedings. Payment of the Debt Service on any Bond will be made only to or upon the order of that person. Neither the City nor the Registrar will be affected by any notice to the contrary, but the registration may be changed as provided in this Section and in any Registrar Agreement.

(b) **Transfer and Exchange.** Any Urban Renewal Refunding Bond may be transferred or exchanged for Series 2026 Urban Renewal Refunding Bonds of any Authorized Denomination upon presentation and surrender at the office of the Registrar, together with a request for exchange signed by the Holder or by a person legally empowered to do so in a form satisfactory to the Registrar. A Urban Renewal Refunding Bond may be transferred only on the Register upon presentation and surrender of the Urban Renewal Refunding Bond at the office of the Registrar together with an assignment signed by the Holder or by a person legally empowered to do so in a form satisfactory to the Registrar. Upon exchange or transfer the Registrar will complete, authenticate, and deliver a new Urban Renewal Refunding Bond or Series 2026 Urban Renewal Refunding Bonds of any Authorized Denomination requested by the Holder equal to the unmatured

principal amount of the Urban Renewal Refunding Bond surrendered and bearing interest at the same rate and maturing on the same date.

If manual signatures on behalf of the City are required, the Registrar will undertake the exchange or transfer of Series 2026 Urban Renewal Refunding Bonds only after the new Series 2026 Urban Renewal Refunding Bonds are signed by the authorized officers of the City. In all cases of Series 2026 Urban Renewal Refunding Bonds exchanged or transferred, the City will sign and the Registrar will authenticate and deliver Series 2026 Urban Renewal Refunding Bonds in accordance with the provisions of the Bond Proceedings. The exchange or transfer will be without charge to the Holder, except that the City and the Registrar may make a charge sufficient to reimburse them for any tax or other governmental charge required to be paid with respect to the exchange or transfer. The City or the Registrar may require that those charges, if any, be paid before the procedure is begun for the exchange or transfer. All Series 2026 Urban Renewal Refunding Bonds issued and authenticated upon any exchange or transfer will be valid obligations of the City, evidencing the same debt, and entitled to the same security and benefit under the Bond Proceedings as the Series 2026 Urban Renewal Refunding Bonds surrendered upon that exchange or transfer. Neither the City nor the Registrar will be required to make any exchange or transfer of (1) Series 2026 Urban Renewal Refunding Bonds then subject to call for redemption between the 15th day preceding the mailing of notice of Series 2026 Urban Renewal Refunding Bonds to be redeemed and the date of that mailing, or (2) any Bond selected for redemption, in whole or in part.

(c) **Book-Entry System.** Unless otherwise determined in the Certificate of Award, the Series 2026 Urban Renewal Refunding Bonds shall be originally issued in book-entry form to a Depository, initially The Depository Trust Company, for use in a book-entry system upon the terms provided in the Registrar Agreement. Under the book-entry system, the Series 2026 Urban Renewal Refunding Bonds will be registered in the name of a Depository or its nominee, the bond certificates in fully-registered form will be deposited with and retained in the custody of the Depository or its agent, and the ownership of interests in the Series 2026 Urban Renewal Refunding Bonds may be transferred only through a book entry on the records of the Depository.

Subject to the provisions of this Ordinance relating to the City's Continuing Disclosure Agreement, the City and the Registrar shall recognize and treat the Depository as the Holder of the Series 2026 Urban Renewal Refunding Bonds for all purposes, including payment of Debt Service, redemption and other notices, and enforcement of remedies.

If any Depository determines not to continue to act as a Depository for the Series 2026 Urban Renewal Refunding Bonds for use in a book-entry system or if the City determines to discontinue the book-entry system, the City Auditor may attempt to establish a securities depository/book-entry relationship with another qualified Depository. If the City Auditor does not do so, the City Auditor shall

direct the Registrar to make provision for notification of the book-entry interest owners by the Depository and to make any other arrangements necessary for the withdrawal of the Series 2026 Urban Renewal Refunding Bonds from the book-entry system.

If the Series 2026 Urban Renewal Refunding Bonds are originally sold in a private placement and not in book-entry form, the City, if requested by a Holder of the Series 2026 Urban Renewal Refunding Bonds, will complete the necessary procedures to qualify the Series 2026 Urban Renewal Refunding Bonds as book-entry bonds.

Section 6. Sale of the Series 2026 Urban Renewal Refunding Bonds.

(a) **Negotiated Sale.** This Council authorizes and directs the City Auditor to sell the Series 2026 Urban Renewal Refunding Bonds in a negotiated sale at a purchase price determined by the City Auditor in the Certificate of Award. That purchase price shall not be less than 97% of the aggregate Original Principal Amount of the Series 2026 Urban Renewal Refunding Bonds, plus any accrued interest on the Series 2026 Urban Renewal Refunding Bonds from their date to the Closing Date. The City Auditor may either sell the Series 2026 Urban Renewal Refunding Bonds to an investment banker, acting as underwriter, or to a financial institution or other entity or person, in a private placement. The City Auditor may enter into a Purchase Agreement with the Original Purchaser in that private sale, or may sell the Series 2026 Urban Renewal Refunding Bonds without a Purchase Agreement. The Series 2026 Urban Renewal Refunding Bonds shall be sold with and upon such other terms as are required or authorized by this Ordinance to be specified in the Certificate of Award, in accordance with law, the provisions of this Ordinance, and any Purchase Agreement.

(b) **Certificate of Award.** The City Auditor shall state in the Certificate of Award the original principal amount of the Series 2026 Urban Renewal Refunding Bonds; the name of the Original Purchaser; the principal amounts to be issued as Serial Series 2026 Urban Renewal Refunding Bonds and Term Series 2026 Urban Renewal Refunding Bonds; the interest rates on the Series 2026 Urban Renewal Refunding Bonds; the purchase price for the Series 2026 Urban Renewal Refunding Bonds; the first Interest Payment Date; the maturity date(s), principal payment schedule, redemption provisions, and the designation of the Series 2026 Urban Renewal Refunding Bonds; and any other terms authorized by this Ordinance.

(c) **Delivery.** The City Auditor shall sign and deliver the Certificate of Award and shall cause the Series 2026 Urban Renewal Refunding Bonds to be prepared, signed, and delivered, together with a true transcript of proceedings of the issuance of the Series 2026 Urban Renewal Refunding Bonds, to the Original Purchaser upon payment of the purchase price. This Council authorizes and directs the City Auditor to provide to the Clerk of Council, for inclusion in the

transcript, a statement of the indebtedness of the City and the other information required by Section 133.33, Revised Code.

(d) **Consolidated Issue.** The City Auditor is authorized, if he determines to be in the best interest of the City, to combine the Series 2026 Urban Renewal Refunding Bonds with one or more other contemporaneous issues of bonds payable from taxes within the ten-mill limitation into a consolidated bond issue, pursuant to 133.30(B) of the Revised Code. To the extent applicable, provisions of this Ordinance relating to the Series 2026 Urban Renewal Refunding Bonds shall apply to that consolidated issue. Such consolidated issue shall be designated "City of Lorain, Ohio Various Purpose General Obligation Refunding and Improvement Bonds, Series 2026," or such other designation as shall be set forth in the Certificate of Award.

Section 7. Disclosure.

(a) **Primary Offering Disclosure—Official Statement.** If determined necessary by the City Auditor, this Council authorizes and directs the Mayor and the City Auditor, or either of them (1) to prepare or cause to be prepared, and to make or authorize modifications, completions, or changes of or supplements to, a disclosure document in the form of an official statement, (2) to determine, and certify or otherwise represent, when the official statement is to be "deemed final" (except for permitted omissions) or is a final official statement for purposes of the SEC Rule, (3) to use and distribute, or authorize the use and distribution of, that official statement and any supplements in connection with the original issuance of the Series 2026 Urban Renewal Refunding Bonds, and (4) to complete and sign the final official statement together with certificates, statements, or other documents in connection with the finality, accuracy, and completeness of that official statement.

(b) **Secondary Market Disclosure—Continuing Disclosure Agreement.** If the City prepares and distributes an official statement in accordance with Section 7(a), for the benefit of the Holders of the Series 2026 Urban Renewal Refunding Bonds and the beneficial owners of book-entry interests in the Series 2026 Urban Renewal Refunding Bonds, the City agrees, as the only obligated person with respect to the Series 2026 Urban Renewal Refunding Bonds under the SEC Rule, to provide financial information and operating data, financial statements, and notices, in the manner required for purposes of paragraph (b)(5)(i) of the SEC Rule.

(1) ***Information Filing.*** The City further agrees, in particular, to provide:

(A) to the MSRB through its EMMA System, in an electronic format as prescribed by the MSRB and containing such identifying information as prescribed by the MSRB, (1) Annual Information for each City fiscal year, not later than the June 30 following the

end of the fiscal year, and (2) when and if available, audited City financial statements for each of those fiscal years; and

(B) to the MSRB through its EMMA System, in an electronic format as prescribed by the MSRB and containing such identifying information as prescribed by the MSRB, in a timely manner, notice of (1) any Specified Event (within 10 days), (2) the City's failure to provide the Annual Information within the time specified above, and (3) any change in the accounting principles applied in the preparation of its annual financial statements, any change in its fiscal year, its failure to appropriate funds to meet costs to be incurred to perform the Continuing Disclosure Agreement, and the termination of the Continuing Disclosure Agreement.

(2) ***Continuing Disclosure Agreement.*** To further describe and specify certain terms of the Continuing Disclosure Agreement, this Council authorizes and directs the City Auditor to (A) complete, sign, and deliver the Continuing Disclosure Agreement, in the name and on behalf of the City, and (B) to specify in reasonable detail the Annual Information to be provided (which may be provided by specific reference to other documents previously filed and available in accordance with the SEC Rule), whether the City has obtained any credit enhancement for the Series 2026 Urban Renewal Refunding Bonds, and the City's expectations as to whether audited financial statements will be prepared, the accounting principles to be applied in their preparation, and whether they will be available together with, or separately from, the Annual Information.

(3) ***Disclosure Procedures.*** This Council further authorizes and directs the City Auditor to establish procedures to ensure compliance by the City with the Continuing Disclosure Agreement, including timely provision of information and notices as described above. Before making any filing in accordance with(b)(2) above or providing notice of the occurrence of any other events, the City Auditor may consult with and obtain legal advice from bond counsel or other qualified independent special counsel selected by the City. The City Auditor, acting in the name and on behalf of the City, may rely upon that legal advice in determining whether a filing should be made.

(4) ***Amendments.*** The City reserves the right to amend the Continuing Disclosure Agreement, and to obtain the waiver of noncompliance with any provision of the Continuing Disclosure Agreement, as may be necessary or appropriate to achieve its compliance with any applicable federal securities law or rule, to cure any ambiguity, inconsistency, or formal defect or omission, and to address any change in circumstances arising from a change in legal requirements, change in law, or change in the identity, nature, or status of the City, or type of business conducted by the City. Any amendment or waiver will not be effective unless the

Continuing Disclosure Agreement (as amended or taking into account that waiver) would have complied with the requirements of the SEC Rule at the time of the primary offering of the Series 2026 Urban Renewal Refunding Bonds, after taking into account any applicable amendments to or official interpretations of the SEC Rule, as well as any change in circumstances, and until the City has received either (A) a written opinion of bond counsel or other qualified independent special counsel selected by the City that the amendment or waiver would not materially impair the interests of Holders or beneficial owners of book-entry interests in the Series 2026 Urban Renewal Refunding Bonds, or (B) the written consent to the amendment or waiver by the Holders of at least a majority of the principal amount of the Series 2026 Urban Renewal Refunding Bonds then outstanding. Annual Information containing any revised operating data or financial information shall explain, in narrative form, the reasons for any amendment or waiver and the impact of the change on the type of operating data or financial information being provided.

(5) ***Enforcement.*** The Continuing Disclosure Agreement will be solely for the benefit of the Holders of, and beneficial owners of book-entry interests in, the Series 2026 Urban Renewal Refunding Bonds. The exclusive remedy for any breach of the Continuing Disclosure Agreement by the City will be limited, to the extent permitted by law, to a right of Holders and beneficial owners to institute and maintain legal proceedings to obtain the specific performance by the City of its obligations under the Continuing Disclosure Agreement. Any individual Holder or beneficial owner may institute and maintain those proceedings to require the City to provide a filing if the filing is due and has not been made. Any proceedings to require the City to perform any other obligation under the Continuing Disclosure Agreement (including any proceedings that contest the sufficiency of any filing) may be instituted and maintained only (A) by a trustee appointed by the Holders and beneficial owners of not less than 25% in principal amount of the Series 2026 Urban Renewal Refunding Bonds then outstanding, or (B) by Holders and beneficial owners of not less than 10% in principal amount of the Series 2026 Urban Renewal Refunding Bonds then outstanding, in accordance with Section 133.25(B)(4)(b) or (C)(1), Revised Code, as applicable, or any comparable successor provisions.

(6) ***Appropriation.*** The performance by the City of the Continuing Disclosure Agreement will be subject to the annual appropriation of any funds that may be necessary to perform it.

(7) ***Term.*** The Continuing Disclosure Agreement will remain in effect only for the period that the Series 2026 Urban Renewal Refunding Bonds are outstanding in accordance with their terms and the City is an obligated person with respect to the Series 2026 Urban Renewal Refunding Bonds within the meaning of the SEC Rule. The obligation of the City to provide

the Annual Information, audited financial statements, and notices of the events described above will terminate if and when the City is no longer an obligated person with respect to the Series 2026 Urban Renewal Refunding Bonds.

Section 8. Financing Costs. The City retains the professional services and authorizes the payment of the financing costs for the Series 2026 Urban Renewal Refunding Bonds (the "Financing Costs"), as provided in this Section 8.

(a) **Bond Counsel.** The City retains the legal services of Tucker Ellis LLP, as bond counsel for the Series 2026 Urban Renewal Refunding Bonds. The legal services will be in the nature of legal advice and recommendations as to the documents and the proceedings in connection with the issuance and sale of the Series 2026 Urban Renewal Refunding Bonds and rendering legal opinions upon the delivery of the Series 2026 Urban Renewal Refunding Bonds. Bond Counsel will render those services to the City in an attorney-client relationship. Bond Counsel will be paid just and reasonable compensation for those legal services, and will be reimbursed for actual out-of-pocket expenses it incurs in rendering those legal services, in accordance with Section 8(f) below.

(b) **Original Purchaser.** This Council authorizes and directs the City Auditor to select the Original Purchaser, either as an underwriter or as a purchaser in a private placement. If the Original Purchaser is an underwriter, it will be identified in the Certificate of Award. The Original Purchaser shall be paid for services in accordance with any Purchase Agreement or, if there is no Purchase Agreement, in accordance with its proposal.

(c) **Registrar.** This Council authorizes and directs the City Auditor to appoint a Registrar for the Series 2026 Urban Renewal Refunding Bonds. The Registrar shall be (1) the City Treasurer, or (2) a financial institution able to complete transfer and exchange functions for the Series 2026 Urban Renewal Refunding Bonds in accordance with standards and conditions applicable to registered corporate securities. The City retains the services of the Registrar for the Series 2026 Urban Renewal Refunding Bonds. The Registrar will perform the services as bond registrar, authenticating agent, paying agent, and transfer agent for the Series 2026 Urban Renewal Refunding Bonds as provided in this Ordinance. If the Registrar is a financial institution, it will be paid for those services in accordance with any Registrar Agreement.

(d) **Ratings and Insurance.** If, in the judgment of the City Auditor, the filing of an application for (1) a rating on the Series 2026 Urban Renewal Refunding Bonds by one or more nationally recognized statistical rating organizations, or (2) a policy of insurance, from one or more bond insurance providers, to better assure the payment of Debt Service on the Series 2026 Urban Renewal Refunding Bonds, is in the best interest of and financially advantageous to the City, this Council authorizes and directs the City Auditor to prepare and submit those applications and to provide to those rating agencies or insurance providers the

information required for the purpose. This Council further authorizes the fees for those ratings and the premiums for the insurance to be included in Financing Costs authorized under Section 8(h) below.

(e) **Escrow Agent.** This Council authorizes and directs the City Auditor to appoint an escrow agent, if required, for the Series 2026 Urban Renewal Refunding Bonds, pursuant to the terms of an Escrow Agreement.

(f) **Verification Agent.** If, in the judgment of the City Auditor, it is in the best interest of the City, this Council authorizes and directs the City Auditor to retain, on behalf of the City, the services of an independent public accounting firm to perform a verification of the sufficiency of amounts in the Escrow Fund (established pursuant to the terms of an Escrow Agreement) to cause the Outstanding Bonds to be deemed paid and discharged.

(g) **Limits on Authority of Service Providers.** In rendering the services described above, as independent contractors, those service providers shall not exercise any administrative discretion on behalf of the City in the formulation of public policy; expenditure of public funds; enforcement of laws, rules and regulations of the State, the City, or any other political subdivision; or the execution of public trusts.

(h) **Payment of Financing Costs.** This Council authorizes and approves the expenditure of the amounts necessary to pay those Financing Costs specifically authorized above and all other necessary Financing Costs in connection with the issuance and sale of the Series 2026 Urban Renewal Refunding Bonds. Those Financing Costs may be paid by the Original Purchaser in accordance with any Purchase Agreement. To the extent they are not paid by the Original Purchaser, this Council authorizes and directs the City Auditor to provide for the payment of those Financing Costs from the proceeds of the Series 2026 Urban Renewal Refunding Bonds to the extent available and, otherwise, from any other funds lawfully available and appropriated for the purpose.

Section 9. Use of Proceeds. The proceeds from the sale of the Series 2026 Urban Renewal Refunding Bonds shall be deposited and used as provided in this Section 9.

(a) Any accrued interest or premium received on the sale of the Series 2026 Urban Renewal Refunding Bonds shall be deposited in the Debt Retirement Fund of the City and used for the payment of interest on the Series 2026 Urban Renewal Refunding Bonds on the first Interest Payment Date.

(b) An amount necessary to pay any Financing Costs of the Series 2026 Urban Renewal Refunding Bonds, to the extent not paid by the Original Purchaser in accordance with the Purchase Agreement and to the extent that the City Auditor determines to pay those Financing Costs from the proceeds of the Series 2026 Urban Renewal Refunding Bonds, shall be deposited in a separate fund and used for the payment of those Financing Costs.

(c) The remainder of the proceeds shall be paid, as applicable, directly to refund, or into the proper escrow fund or funds to be held by the Escrow Agent pursuant to an Escrow Agreement and thereby used to refund, on the Refunding Date the entire outstanding principal amount of the Outstanding Bonds. Such amount is hereby pledged and is to be applied solely to the payment of the redemption price of the Outstanding Bonds, and if applicable, will be used as set forth in an Escrow Agreement.

Section 10. Security and Source of Payment. The Series 2026 Urban Renewal Refunding Bonds will be general obligations of the City.

(a) Debt Retirement Fund. Pursuant to the Original Bond Ordinance, the City created the Riverfront Phase II Debt Retirement Fund (the "Debt Retirement Fund") and accounts therein, including the Riverfront Phase II Land Sale Proceeds Account ("Land Sale Proceeds Account) and the Riverfront Phase II Tax Proceeds Account ("Tax Proceeds Account"). There shall be deposited into the Debt Retirement Fund, as and when received, (i) any accrued interest or premium received from the sale of the Series 2026 Urban Renewal Refunding Bonds, (ii) the Urban Renewal Service Payments to be made pursuant to the Development Agreement, (iii) any Debt Service Shortfall Payments to be made pursuant to the Development Agreement, (iv) any money transferred from the Developer Sinking Fund, (v) any other money received by the City, constituting "revenues" within the meaning of the Act, that this Council determines to make available for the payment of debt service charges on the Series 2026 Urban Renewal Refunding Bonds, and (vi) the proceeds of the tax levied pursuant to Section 10(d), below.

All Land Sale Proceeds and Developer Completion Payments shall be deposited in the Land Sale Proceeds Account established pursuant to the Original Bond Ordinance. The City may appropriate money in the Land Sale Proceeds Account to pay debt service charges on the Bonds. Money in the Land Sale Proceeds Account may also be used to pay other urban renewal project costs authorized under the Act.

All proceeds of the tax levied pursuant to Section 10(d) of this Ordinance for the payment of principal of and interest on the Series 2026 Urban Renewal Refunding Bonds shall be deposited in the Tax Proceeds Account.

(b) Developer Sinking Fund. The City created, pursuant to the Original Bond Ordinance, the Riverfront Phase II Developer Sinking Fund (the "Developer Sinking Fund"). All of the Developer's Sinking Fund Payments shall be deposited in the Developer Sinking Fund. Money in the Developer Sinking Fund shall be (i) used to pay Debt Service Shortfall Payments into the Debt Retirement Fund or (ii) transferred to the Debt Retirement Fund when and to the extent sufficient Urban Renewal Service Payments are not available in the Debt Retirement Fund when needed to pay debt service charges on the Series 2026 Urban Renewal Refunding Bonds, and may otherwise be invested and disbursed as provided in the Developer Agreement.

(c) This Council pledges to the payment of Debt Service on the Series 2026 Urban Renewal Refunding Bonds the full faith and credit of the City including, without limitation:

(1) The general taxing power of the City, including the power to levy taxes within the ten-mill limitation, as defined in Section 5705.02, Revised Code.

(2) Any money in the Debt Retirement Fund (other than the Land Sale Proceeds Account and the Tax Proceeds Account).

(3) The proceeds to be received from the sale of any bonds issued to refund the Series 2026 Urban Renewal Refunding Bonds.

(4) Any money remaining from the sale of the Series 2026 Urban Renewal Refunding Bonds after the payment of the Financing Costs of the Series 2026 Urban Renewal Refunding Bonds and not used to pay costs of the Project.

(d) During the years while the Series 2026 Urban Renewal Refunding Bonds are outstanding, there will be levied on all the taxable property in the City, in addition to all other taxes, a direct tax annually, in an amount sufficient to pay Debt Service on the Series 2026 Urban Renewal Refunding Bonds when due. The tax will not be less than the interest and sinking fund tax required by Section 11 of Article XII of the Ohio Constitution. The tax will be and is ordered to be computed, certified, levied, and extended upon the tax list and collected by the same officers, in the same manner, and at the same time that taxes for general purposes for each of those years are computed, certified, levied, extended, and collected. The tax will be placed before and in preference to all other items and for its full amount. The money derived from that tax levy shall be placed in the Tax Proceeds Account of the Debt Retirement Fund and is irrevocably pledged for the payment of the Debt Service on the Series 2026 Urban Renewal Refunding Bonds and any Additional Obligations issued under the Original Bond Ordinance, when and as that Debt Service falls due.

(e) The tax provided in (d) above will be reduced in each year the Series 2026 Urban Renewal Refunding Bonds are outstanding by the sum of the following items, if available to pay Debt Service on the Series 2026 Urban Renewal Refunding Bonds and appropriated for that purpose:

(1) Any surplus in the Debt Retirement Fund (other than in the Land Sale Proceeds Account).

(2) The proceeds to be received from the sale of any bonds issued to refund the Series 2026 Urban Renewal Refunding Bonds.

(3) Any other money lawfully available to the City.

Section 11. Federal Tax Matters. The City covenants that it will take those actions required to maintain the Federal Tax Status of the Series 2026 Urban Renewal Refunding Bonds and that it will not take or permit to be taken any actions that would adversely affect that Federal Tax Status. Without limiting these covenants, the City specifically covenants as follows:

(a) **Private Activity Bonds.** The City will apply the proceeds received from the sale of the Series 2026 Urban Renewal Refunding Bonds to the uses described in Section 9. The City will not permit the use of the Project by any person, will not secure or derive the money for payment of Debt Service on the Series 2026 Urban Renewal Refunding Bonds by any property or payments, and will not loan the proceeds of the Series 2026 Urban Renewal Refunding Bonds to any person, all in a manner as to cause the Series 2026 Urban Renewal Refunding Bonds to be "private activity bonds" within the meaning of Code Section 141(a).

(b) **Arbitrage.** The City will restrict the use of proceeds of the Series 2026 Urban Renewal Refunding Bonds in the manner and to the extent as may be necessary, after taking into account reasonable expectations on the Closing Date of the Series 2026 Urban Renewal Refunding Bonds, so that the Series 2026 Urban Renewal Refunding Bonds will not constitute "arbitrage bonds" within the meaning of Code Section 148. The City Auditor or any other official having responsibility for issuing the Series 2026 Urban Renewal Refunding Bonds, is authorized and directed, alone or in conjunction with any other official, employee, or consultant of the City, to sign and deliver a certificate of the City, for inclusion in the transcript of proceedings for the Series 2026 Urban Renewal Refunding Bonds. That certificate shall set forth the reasonable expectations of the City on the Closing Date, regarding the amount and use of the proceeds of the Series 2026 Urban Renewal Refunding Bonds in accordance with Code Section 148. If required, the City will limit the yield on any "investment property" (as defined in Code Section 148(b)(2)) acquired with the proceeds of the Series 2026 Urban Renewal Refunding Bonds.

(c) **Arbitrage Rebate.** Unless the gross proceeds of the Series 2026 Urban Renewal Refunding Bonds are expended in accordance with one of the spending period exceptions set forth in Treas. Reg. §1.148-7, the City will pay the amounts required by Code Section 148(f)(2) to the United States at the times required by Code Section 148(f)(3). The City will maintain the books and records and make calculations and reports as are required to comply with the Code's arbitrage rebate requirements.

(d) **Federal Guarantee.** The City will not permit the use of the Project, or make loans of the proceeds of the Series 2026 Urban Renewal Refunding Bonds, or invest the proceeds of the Series 2026 Urban Renewal Refunding Bonds in a manner as to cause the Series 2026 Urban Renewal Refunding Bonds to be "federally guaranteed" within the meaning of Code Section 149(b).

(e) **Information Reporting.** This Council authorizes and directs the City Auditor or any other official of the City having responsibility for issuing the Series 2026

Urban Renewal Refunding Bonds to sign and file Form 8038-G for the Series 2026 Urban Renewal Refunding Bonds with the Internal Revenue Service.

(f) **Bank-Qualified Obligations.** The Series 2026 Urban Renewal Refunding Bonds are deemed designated as "qualified tax-exempt obligations" under Code Section 265(b)(3).

Section 12. Signing and Delivery of Series 2026 Urban Renewal Refunding Bonds and Documents. This Council authorizes and directs the Mayor and the City Auditor, or the persons designated to sign in their absence, to sign and deliver the Series 2026 Urban Renewal Refunding Bonds in accordance with Section 4 of this Ordinance. This Council authorizes and directs the Mayor and the City Auditor, or either of them, to sign and approve a preliminary official statement, a final official statement, and supplements and amendments to both in accordance with Section 7 of this Ordinance.

(a) This Council authorizes and directs the City Auditor to sign and deliver, on behalf of the City:

(1) The Certificate of Award.

(2) Any Purchase Agreement.

(3) Any Registrar Agreement.

(4) The Continuing Disclosure Agreement.

(5) Any Escrow Agreement.

(6) Any agreements or letters of representation in connection with a book-entry system for the Series 2026 Urban Renewal Refunding Bonds.

(7) If determined in best interest of the City by the City Auditor as set forth in the Certificate of Award, applications for and agreements in connection with obtaining a policy of municipal bond insurance for the Series 2026 Urban Renewal Refunding Bonds.

(8) If determined to be in the best interest of the City by the City Auditor as set forth in the Certificate of Award, applications for and agreements in connection with obtaining one or more ratings for the Series 2026 Urban Renewal Refunding Bonds.

In the absence of the City Auditor, this Council authorizes and directs the Chief Deputy Auditor to sign and deliver any of those documents and certificates.

(b) This Council authorizes and directs the City Auditor, or in his absence the Chief Deputy Auditor, to sign and deliver, on behalf of the City, in his capacity as fiscal officer of the City:

(1) Any certificates in accordance with Section 5705.41, Revised Code, required for any of the agreements in connection with the Series 2026 Urban Renewal Refunding Bonds.

(2) The statements of indebtedness provided for in Section 133.33(B), Revised Code.

(c) This Council authorizes and directs the Mayor, the Law Director, the City Auditor, the City Treasurer, the President of Council, the Council Clerk, and any other appropriate City officials:

(1) to sign and deliver any agreements, certificates, instruments, and other documents that the official considers necessary or appropriate in connection with the issuance and sale of the Series 2026 Urban Renewal Refunding Bonds, and that are not inconsistent with this Ordinance; and

(2) to take such actions as are necessary or appropriate to consummate the transactions contemplated by this Ordinance.

Section 13. Certification to County Auditor. This Council directs the City Auditor or the Clerk of this Council to forward a certified copy of this Ordinance and a copy of the Certificate of Award to the Auditor of Lorain County.

Section 14. Definitions. Words and terms are used in this Ordinance with the following meanings:

"Act" means, collectively, Article XVIII of the Ohio Constitution and Chapter 725 of the Ohio Revised Code.

"Annual Information" means the annual financial information and operating data of the type to be specified in the Continuing Disclosure Agreement in accordance with the SEC Rule.

"Authorized Denominations" means the denomination of $5,000 or any whole multiple of $5,000.

"Bond Proceedings" means, collectively, this Ordinance, the Certificate of Award, any Purchase Agreement, the Continuing Disclosure Agreement, any Registrar Agreement, an Escrow Agreement, if applicable, and the other proceedings of the City, including the Series 2026 Urban Renewal Refunding Bonds, that provide collectively for, among other things, the rights of Holders and beneficial owners of the Series 2026 Urban Renewal Refunding Bonds.

"Certificate of Award" means the certificate authorized by Section 6 of this Ordinance, setting forth the terms and other provisions of the Series 2026 Urban Renewal Refunding Bonds required or authorized by this Ordinance.

"Closing Date" means the date of delivery of and payment for the Series 2026 Urban Renewal Refunding Bonds.

"Code" means the Internal Revenue Code of 1986, as amended. References to the Code and sections of the Code include applicable regulations (whether temporary or final) under the Code, and any amendments of, or successor provisions to, those sections or regulations.

"Continuing Disclosure Agreement" means the continuing disclosure agreement made by the City for the benefit of Holders and beneficial owners of the Series 2026 Urban Renewal Refunding Bonds in accordance with the SEC Rule. It consists of the covenants in Section 7(b) of this Ordinance and the Continuing Disclosure Agreement.

"Debt Retirement Fund" has the meaning set forth in Section 10(a) of this Ordinance.

"Debt Service" means all amounts due as principal, interest, and any premium on an issue of securities.

"Debt Service Shortfall Payments" means Debt Service Shortfall Payments required to be made by or on behalf of the Developer pursuant to the Development Agreement.

"Depository" means any securities depository that is a clearing agency under federal law operating and maintaining a book-entry system to record ownership of book-entry interests in securities or the principal of and interest on securities, and to effect transfers of securities in book -entry form.

"Developer" means Spitzer Great Lakes, Ltd. Company, and its successors and assigns.

"Developer's Sinking Fund" means the Riverfront Phase II Developer Sinking Fund established pursuant to the Original Bond Ordinance.

"Developer's Sinking Fund Payments" means the Developer's Sinking Fund Payments required to be made by or on behalf of the Developer pursuant to the Development Agreement.

"Development Agreement" means the Development Agreement between the City and the Developer for the private redevelopment of certain land in the Plan Area.

"EMMA System" means the MSRB's Electronic Municipal Market Access system.

"Escrow Agreement" means, if applicable, an Escrow Agreement by and between the City of Lorain, Ohio and the escrow agent appointed in the Certificate of Award.

"Federal Tax Status" means the status of the interest on the Series 2026 Urban Renewal Refunding Bonds as excludable from gross income for federal income tax purposes and not treated as an item of tax preference for purposes of the alternative minimum tax.

"Financing Costs" means any financing costs authorized to be paid by Section 133.01(K), Revised Code.

"Holder" means, as to any Urban Renewal Refunding Bond, the person in whose name the Urban Renewal Refunding Bond is registered on the Register.

"Interest Payment Dates" means June 1 and December 1 of each year, beginning on the first Interest Payment Date designated by the City Auditor in the Certificate of Award.

"Mandatory Redemption Dates" means December 1 in each of the years designated in the Certificate of Award as Mandatory Redemption Dates.

"Mandatory Sinking Fund Redemption" means redemption in accordance with the mandatory redemption requirements, if any, for the Series 2026 Urban Renewal Refunding Bonds as determined in the Certificate of Award and as described in Section 2(d).

"MSRB" means the Municipal Securities Rulemaking Board.

"Original Principal Amount" means the face amount of the Series 2026 Urban Renewal Refunding Bonds.

"Original Purchaser" means the entity selected by the City Auditor under Section 8(b) hereof, as the purchaser of the Series 2026 Urban Renewal Refunding Bonds.

"Outstanding Bonds" has the meaning given to such term in the fourth recital hereof.

"Plan" means the City's Revised Riverfront Urban Renewal Plan originally adopted by the City Council on June 7, 1999, together with all amendments thereto.

"Plan Area" means the area constituting a designated urban renewal area in accordance with the Plan and the Act.

"Principal Payment Dates" means December 1 of the years set forth in the Certificate of Award.

"Projects" means the direct and indirect costs of acquiring real property, preparing property for redevelopment, constructing public improvements, including, without limitation, public streets, utilities, public parks, public walkways and related public improvements, paying for title, appraisal, planning, engineering and legal costs related thereto, and paying financing costs relating to issuing bonds.

"Purchase Agreement" means any Bond Purchase Agreement between the City and the Original Purchaser, entered into in accordance with Section 6 of this Ordinance.

"Redemption Date" means the date of redemption of the Outstanding Bonds, as established in the Certificate of Award.

"Register" means all books and records necessary for the registration, exchange, and transfer of the Series 2026 Urban Renewal Refunding Bonds.

"Registrar" means the entity or person selected by the City Auditor in accordance with Section 8(c) to serve as registrar for the Series 2026 Urban Renewal Refunding Bonds.

"Registrar Agreement" means any bond registrar agreement between the City and the Registrar.

"SEC Rule" means SEC Rule 15c2-12.

"Serial Series 2026 Urban Renewal Refunding Bonds" means Series 2026 Urban Renewal Refunding Bonds designated as Serial Series 2026 Urban Renewal Refunding Bonds in the Certificate of Award and maturing on the dates set forth in the Certificate of Award, and not subject to Mandatory Sinking Fund Redemption.

"Specified Events" means any of the events specified in SEC Rule Section (b)(5)(C), as in effect and applicable to the Series 2026 Urban Renewal Refunding Bonds at the time of the primary offering of the Series 2026 Urban Renewal Refunding Bonds.

"Series 2026 Urban Renewal Refunding Bonds" means the City of Lorain, Ohio General Obligation (Limited Tax) Urban Renewal Refunding Bonds, Series 2026, as authorized by this Ordinance.

"Tax Proceeds Account" means the Riverfront Urban Renewal Refunding Tax Proceeds Account in the Debt Retirement Fund established pursuant to the Original Bond Ordinance.

"Term Series 2026 Urban Renewal Refunding Bonds" means the Series 2026 Urban Renewal Refunding Bonds designated as Term Series 2026 Urban Renewal Refunding Bonds in the Certificate of Award and maturing on the dates set forth in the Certificate of Award, and subject to Mandatory Sinking Fund Redemption.

"Urban Renewal Service Payments" means the Urban Renewal Service Payments required to be paid by or on behalf of the Developer pursuant to the Development Agreement and the Act.

Section 15. Emergency and Effective Date. This Ordinance is declared to be an emergency measure necessary for the immediate preservation of the public peace, property, health, safety and welfare in the City, and for the further reason that the Series 2026 Urban Renewal Refunding Bonds shall be sold promptly in order to achieve debt service savings and preserve the credit of the City; and provided it receives the affirmative vote of at least two-thirds of its members elected to Council, this Ordinance shall take effect and be in force immediately upon its passage by the Council and approval by the Mayor; otherwise it shall take effect and be in force after the earliest period allowed by law.

Passed: _____, 2026

_____
President of Council

Attest:_____
Clerk of Council

Approved: _____, 2026

_____
Mayor