

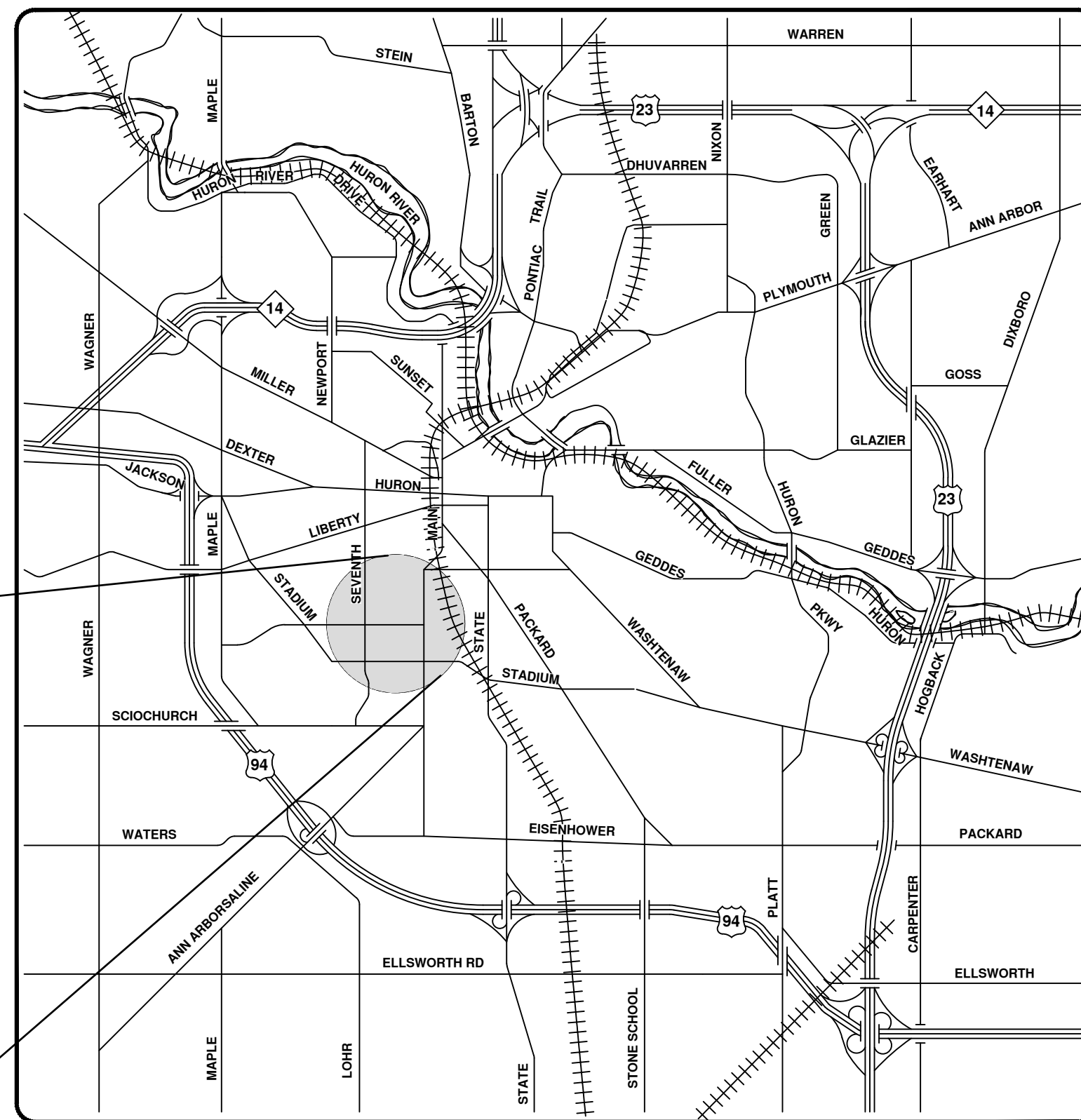
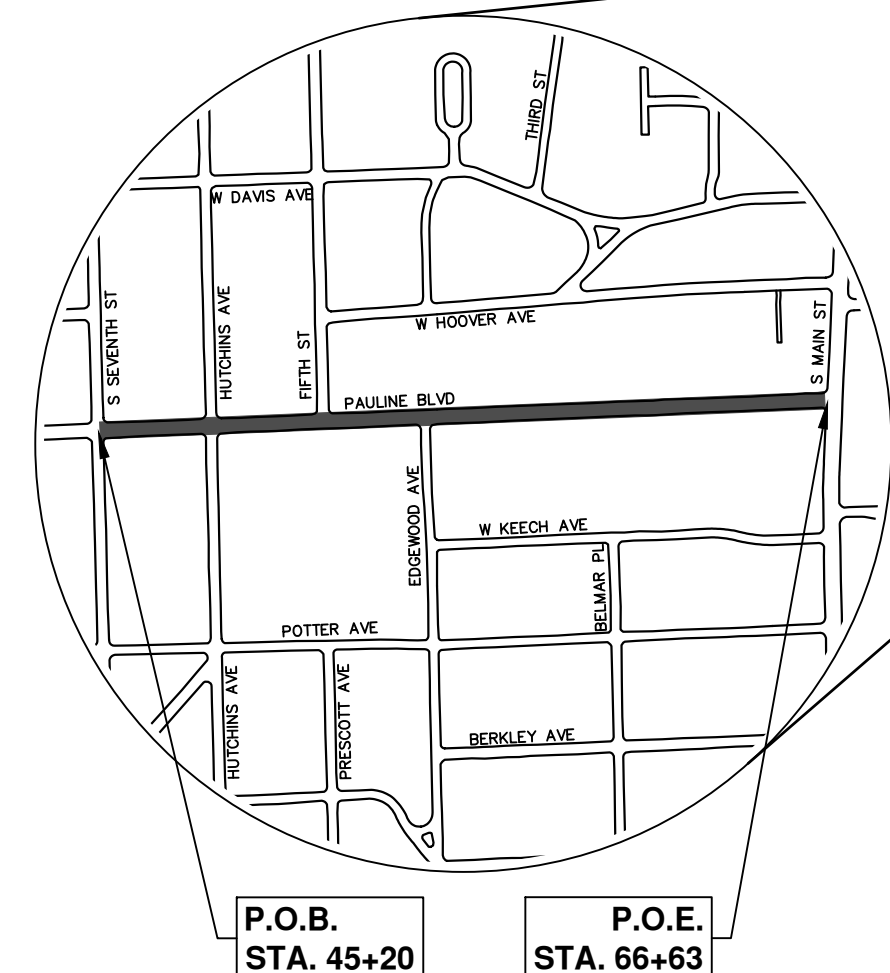
CITY OF ANN ARBOR ENGINEERING

IN COOPERATION WITH THE
MICHIGAN DEPARTMENT OF TRANSPORTATION
AND
FEDERAL HIGHWAY ADMINISTRATION

PAULINE WATER MAIN & RESURFACING

MDOT JOB NO. 214899

MDOT CONTROL SECTION NO. 81000



VICINITY MAP

| TRAFFIC DATA | |
|---------------------------------|--------|
| 2024 ANNUAL DAILY TRAFFIC (ADT) | 4,199 |
| 2044 ADT | 4,616 |
| 2024 % COMMERCIAL | 4.4% |
| 2044 % COMMERCIAL | 4.4% |
| POSTED SPEED | 25 MPH |
| DESIGN SPEED | 25 MPH |

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION (INCLUDING REFERENCED M.D.O.T. PUBLICATIONS) AND THIS PROJECT'S CONTRACT DOCUMENTS.

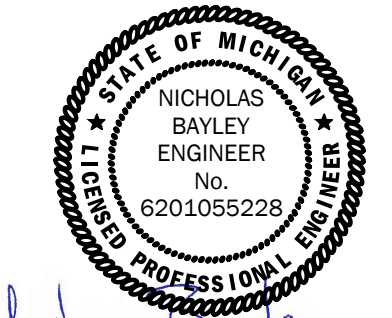

THE PROPOSED IMPROVEMENTS COVERED BY THESE PLANS ARE DESIGNED IN ACCORDANCE WITH THE LOCAL AGENCY PROGRAM < 3R or 4R > GUIDELINES FOR GEOMETRICS ON LOCAL AGENCY PROJECTS 2017 EDITION, 2012 A.A.S.H.T.O. "GUIDE FOR PLANNING, DESIGN, AND OPERATION OF BICYCLE FACILITIES", AND THE TRAFFIC CONTROL IN ACCORDANCE WITH THE 2011 "MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".

| STANDARD PLANS | | |
|-----------------------------------|--|-----------------------|
| REQUIRED ON THIS PROJECT | ITEM OF WORK | STANDARD PLAN NUMBERS |
| X | COVER B | R-7-F |
| X | MONUMENT BOXES | R-11-E |
| X | COVER K | R-15-G* |
| X | COVER Q | R-18-F |
| X | COVER R | R-20-D |
| X | SIDEWALK RAMP AND DETECTABLE WARNING DETAILS | R-28-K* |
| X | DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALK | R-29-J* |
| X | CONCRETE CURB AND CONCRETE CURB & GUTTER | R-30-G |
| X | TRANSVERSE PAVEMENT JOINTS (PLAIN CONCRETE PAVEMENT) | R-39-K |
| X | LOAD TRANSFER ASSEMBLIES FOR TRANSVERSE JOINTS | R-40-I |
| X | LONGITUDINAL PAVEMENT JOINTS | R-41-H |
| X | TYPICAL JOINT LAYOUTS FOR CONCRETE PAVEMENT | R-42-F |
| X | LOCATION OF TRANSVERSE JOINTS IN PLAIN CONCRETE PAVEMENT | R-43-J |
| X | TEMPORARY CONCRETE BARRIER LIMITED DEFLECTION | R-53-A* |
| X | GRANULAR BLANKET, UNDERDRAINS, OUTLET ENDINGS FOR UNDERDRAINS, AND SEWER BULKHEADS | R-80-F* |
| X | SOIL EROSION & SEDIMENTATION CONTROL MEASURES | R-96-E |
| X | SEEDING AND TREE PLANTING | R-100-H |
| X | GRADING CROSS-SECTIONS | R-105-D |
| TRAFFIC AND SAFETY STANDARD PLANS | | |
| X | GROUND DRIVEN SIGN SUPPORTS FOR TEMP SIGNS | WZD-100-A* |
| X | TEMPORARY TRAFFIC CONTROL DEVICES | WZD-125-E* |
| X | IMPACT ATTENUATOR OBJECT MARKER | WZD-150-A* |
| X | SAND MODULE IMPACT ATTENUATOR (TEMPORARY) | WZD-175-A* |
| X | PAVEMENT ARROW AND MESSAGE DETAILS | PAVE-900-G* |
| X | LONGITUDINAL LINE TYPES AND PLACEMENT | PAVE-905-E* |
| X | SHARED LANE (SHARROW) MARKING | PAVE-961-C* |

* SPECIAL DETAIL LOCATED IN PROPOSAL

CITY OF ANN ARBOR
IN COOPERATION WITH THE
MICHIGAN DEPARTMENT OF TRANSPORTATION
AND
FEDERAL HIGHWAY ADMINISTRATION

PROJECT NO. 214899 CITY/TWP ANN ARBOR
LOCATION PAULINE BOULEVARD
CONTRACT FOR THE CITY OF ANN ARBOR IS PROPOSING 0.40 MILES OF FULL-DEPTH HMA SURFACE REMOVAL AND HMA RESURFACING, ADA SIDEWALK RAMP IMPROVEMENTS, REPLACING AGING WATER MAIN WITH NEW 12-INCH DI WATER MAIN, STORM SEWER DRAINAGE IMPROVEMENTS, PEDESTRIAN IMPROVEMENTS, PAVEMENT MARKINGS AND DELINEATORS FOR BICYCLE LANES, AND RESTORATION FROM S. SEVENTH ST. TO S. MAIN ST.

| | |
|--|---|
| <p>PREPARED UNDER THE SUPERVISION OF</p>  <p>NICHOLAS BAYLEY, P.E. PROJECT ENGINEER</p> | <p>CITY APPROVAL</p>  <p>NICHOLAS HUTCHINSON, P.E. CITY ENGINEER</p> |
| <p>DATE <u>1/1/2024</u></p> | <p>DATE <u>1/1/2024</u></p> |

| Sheet List Table | |
|---|---|
| Sheet Number | Sheet Title |
| 1 | (MDot) Cover |
| 2 | (MDot) Std Notes |
| 3 | (MDOT) Legend |
| 4 | SESC Notes and Details |
| 5 | Special Details |
| 6 | Special Details (2) |
| 7 | Special Details (3) |
| 8 | Special Details (4) |
| 9 | Special Details (5) |
| 10 | Special Details (6) |
| 11 | Special Details (7) |
| Typical Cross Sections | |
| 12 | Existing Cross Sections |
| 13 | Existing Cross Sections |
| 14 | Existing Cross Sections |
| 15 | Proposed Cross Sections |
| 16 | Proposed Cross Sections |
| 17 | Proposed Cross Sections |
| Alternate Pedestrian Route Details | |
| 18 | Bypass |
| 19 | Detour |
| 20 | Ramps |
| 21 | Walkway Devices |
| Detour Plan | |
| 22 | East Bound Pauline Blvd |
| 23 | North Bound S Seventh Street |
| Maintenance of Traffic - Phase I | |
| 24 | P.O.B. - Sta. 63+00 |
| 25 | Sta. 63+00 - P.O.E. |
| Maintenance of Traffic - Phase I WM Conn at 7th | |
| 26 | Water Main Tie-In at S Seventh St |
| Maintenance of Traffic - Phase II | |
| 27 | P.O.B. - Sta. 63+00 |
| 28 | Sta. 63+00 - P.O.E. |
| Removals | |
| 29 | Sta. 45+20 - Sta. 54+00 |
| 30 | Sta. 54+00 - Sta. 63+00 |
| 31 | Sta. 63+00 - Sta. 66+63 |
| Water Main Plan & Profile | |
| 32 | Sta. 0+00 - Sta. 4+00 |
| 33 | Sta. 4+00 - Sta. 8+50 |
| 34 | Sta. 8+50 - Sta. 13+00 |
| 35 | Sta. 13+00 - Sta. 17+50 |
| 36 | Sta. 17+50 - Sta. 21+04 |
| 37 | Hutchins Ave Conn., Hyd H-4 |
| 38 | Fifth St Conn., Hyd H-1 |
| 39 | Hyd H-2, Hyd H-3 |
| Proposed Storm Plan & Profile | |
| 40 | R100, R101, R102, R103, R104, R105, R123 |
| 41 | R106, R107, R108, R115, R125 |
| 42 | R109, R110, R111, R112, R118, R119, R120, R124 |
| 43 | R113, R114, R126, R127, R128 |
| 44 | R116, R117, R121, R122 |
| Pauline Blvd Road Plan & Profile | |
| 45 | P.O.B. - Sta. 49+50 |
| 46 | Sta. 49+50 - Sta. 54+00 |
| 47 | Sta. 54+00 - Sta. 58+50 |
| 48 | Sta. 58+50 - Sta. 63+00 |
| 49 | Sta. 63+00 - P.O.E. |
| Proposed Intersection Grades | |
| 50 | Pauline Blvd and Hutchins Ave |
| 51 | Pauline Blvd and Hutchins Ave Jointing Plan |
| 52 | Pauline Blvd and Fifth Ave., Pauline Blvd and Edgewood Ave. |
| Pavement Markings | |
| 53 | Sta. 45+00 - Sta. 54+00 |
| 54 | Sta. 54+00 - Sta. 63+00 |
| 55 | Sta. 63+00 - Sta. 67+00 |
| Permanent Signing | |
| 56 | P.O.B. - Sta. 54+00 |
| 57 | Sta. 54+00 - Sta. 63+00 |
| 58 | Sta. 63+00 - P.O.E. |

R:\2023017 Pauline WM Plan Production\2023017Cov.dwg - _a2 standard bw.stb - Plot Date: 12/11/2024 8:57:29 AM

811
Know what's below.
Call before you dig.

FINAL ROW PLAN SUBMITTAL DATE: < enter date >

| | | | | | | | |
|----|----------------------------|----------|-----|-----|------|-------|---------|
| 01 | MDOT GI SUBMITTAL COMMENTS | 11-04-24 | A2D | A2D | DATE | DRAWN | CHECKED |
| 00 | MDOT GI SUBMITTAL REV. | 8-12-24 | | | | | |

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CITY OF ANN ARBOR MICHIGAN

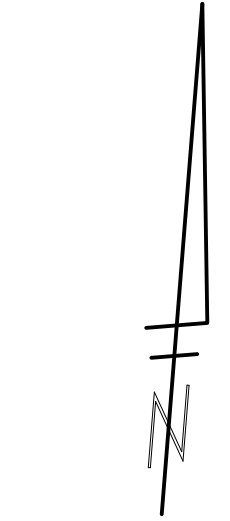
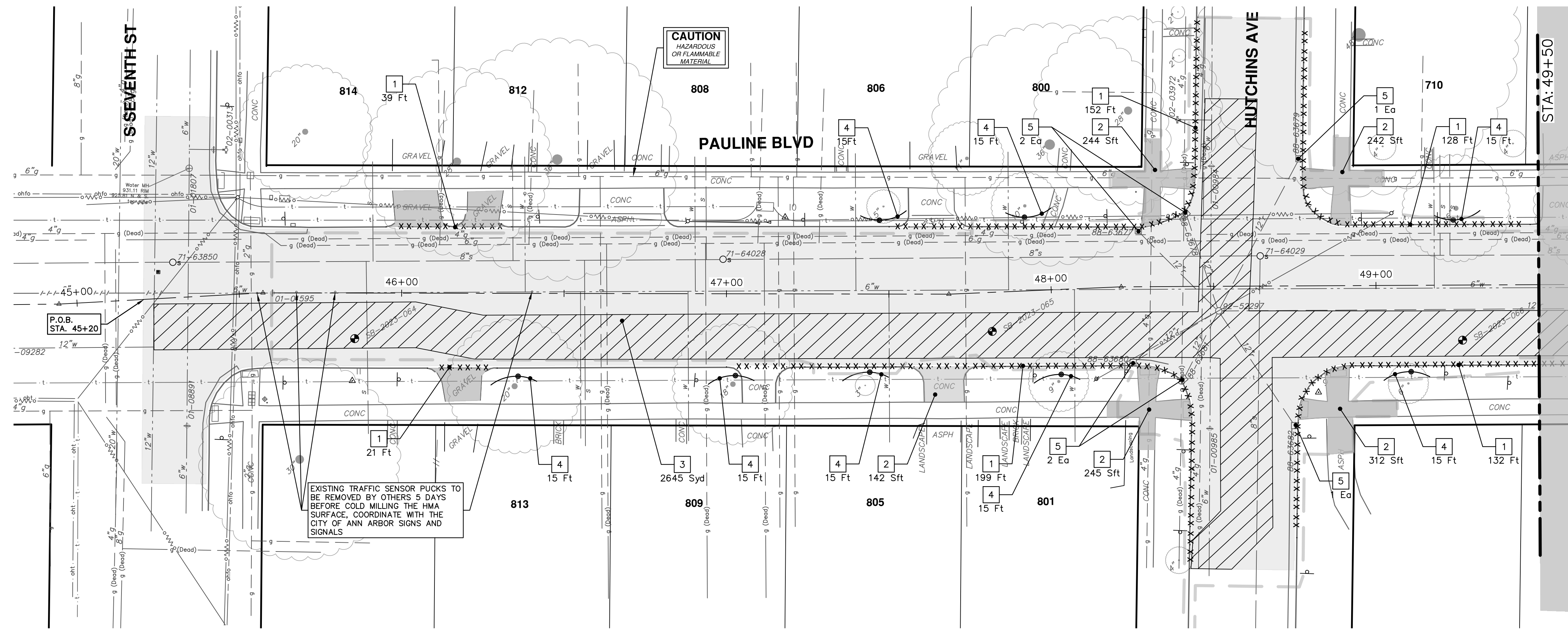
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE

DRAWING NO. 2023017-1

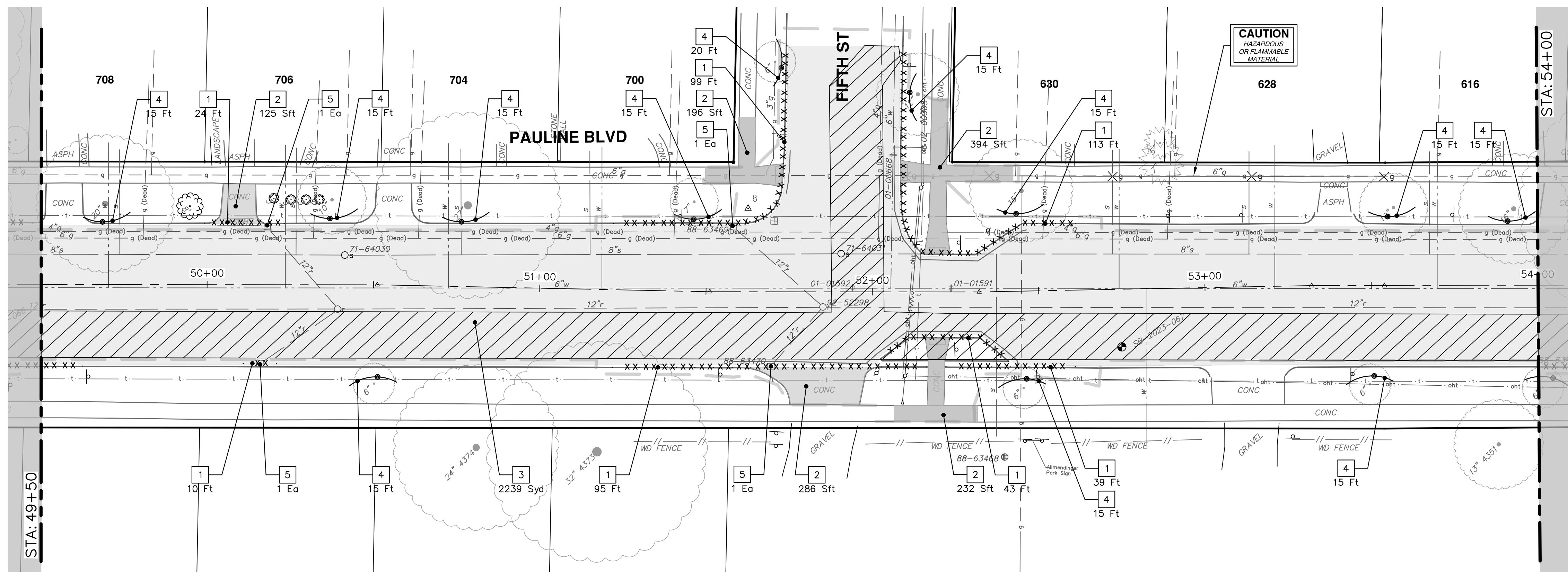
SHEET NO. 1 OF 58

© PAULINE WATER MAIN & RESURFACING; 2023017; CONTROL SECTION NO. 81000; JOB NO. 214899;



| REMOVAL KEY | |
|-------------|--|
| KEY | DESCRIPTION |
| 1 | Curb, Gutter, and Curb and Gutter, Any Type, Rem * |
| 2 | Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem |
| 3 | HMA, Any Thickness, Rem * |
| 4 | Tree Protective Fence |
| 5 | Erosion Control, Inlet Protection, Fabric Drop |
| 6A | Tree, Rem, 6 In. - 12 In. |
| 6B | Tree, Rem, 13 In. - 19 In. |
| 6C | Tree, Rem, 20 In. - 29 In. |
| | APPROX. LIMITS OF WATER TRENCH |

* SAWCUT FULL DEPTH AT REMOVAL LIMITS AS DIRECTED BY ENGINEER



| NO. | DATE | DESCRIPTION |
|-----|----------|----------------------------|
| 01 | 11-04-24 | MDOT GI SUBMITTAL COMMENTS |
| 02 | 8-12-24 | MDOT GI SUBMITTAL |
| 03 | | DRAWN |
| 04 | | CHECKED |

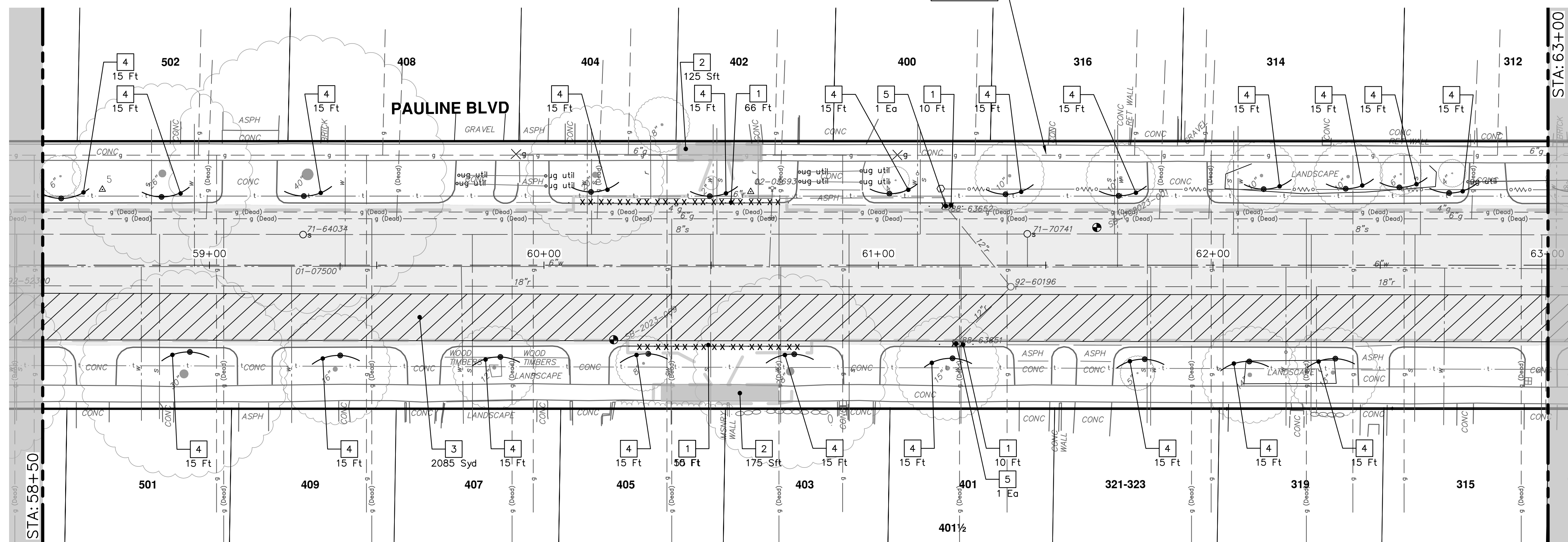
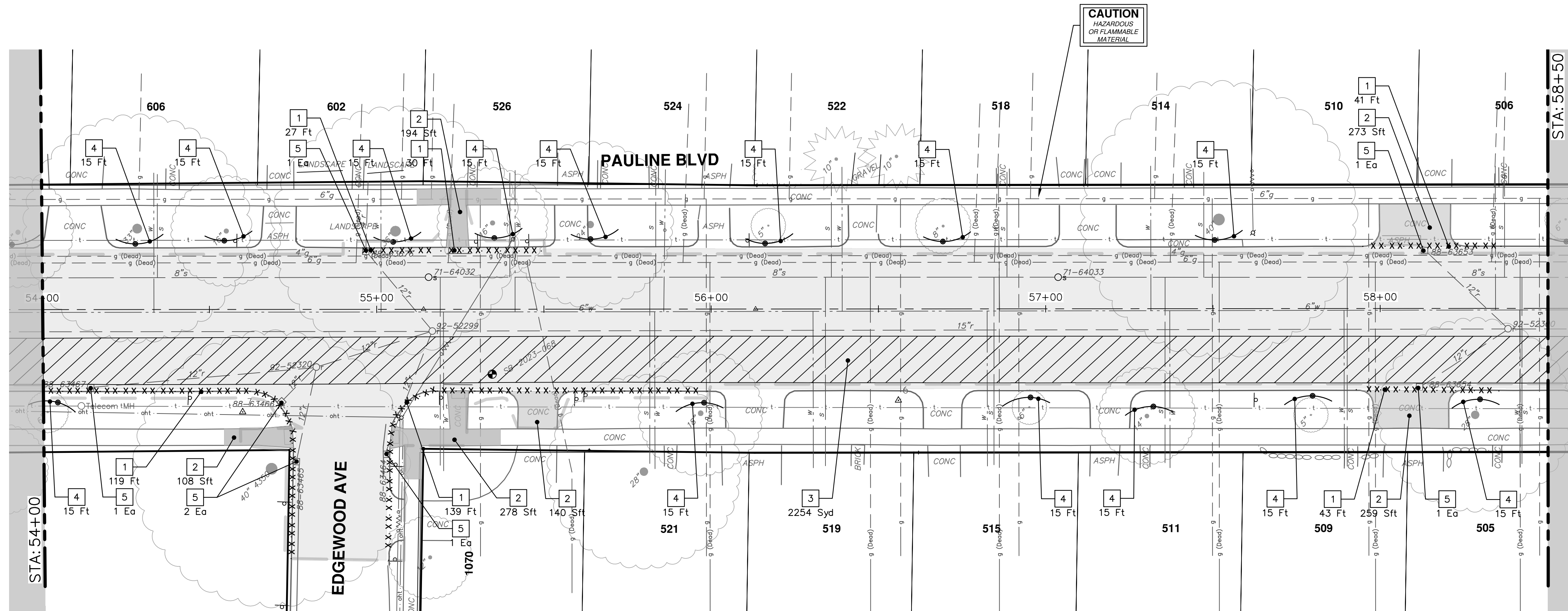
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PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR MI 48107-8647
www.aagov.org



CITY OF ANN ARBOR - ENGINEERING
REMOVALS
PAULINE WATER MAIN & RESURFACING

SCALE: 1" = 20'
DRAWING No. 2023017-29

R:\2023017 Pauline WM Plan Production\2023017Rem.dwg Dwg Created: 28-Oct-24 - _g2 standard bw.stb - Plot Date: 11-Dec-24



| REMOVAL KEY | |
|-------------|--|
| KEY | DESCRIPTION |
| 1 | Curb, Gutter, and Curb and Gutter, Any Type, Rem * |
| 2 | Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem |
| 3 | HMA, Any Thickness, Rem * |
| 4 | Tree Protective Fence |
| 5 | Erosion Control, Inlet Protection, Fabric Drop |
| 6A | Tree, Rem, 6 in. - 12 in. |
| 6B | Tree, Rem, 13 in. - 19 in. |
| 6C | Tree, Rem, 20 in. - 29 in. |
| | APPROX. LIMITS OF WATER TRENCH |

* SAWCUT FULL DEPTH AT REMOVAL LIMITS AS DIRECTED BY ENGINEER



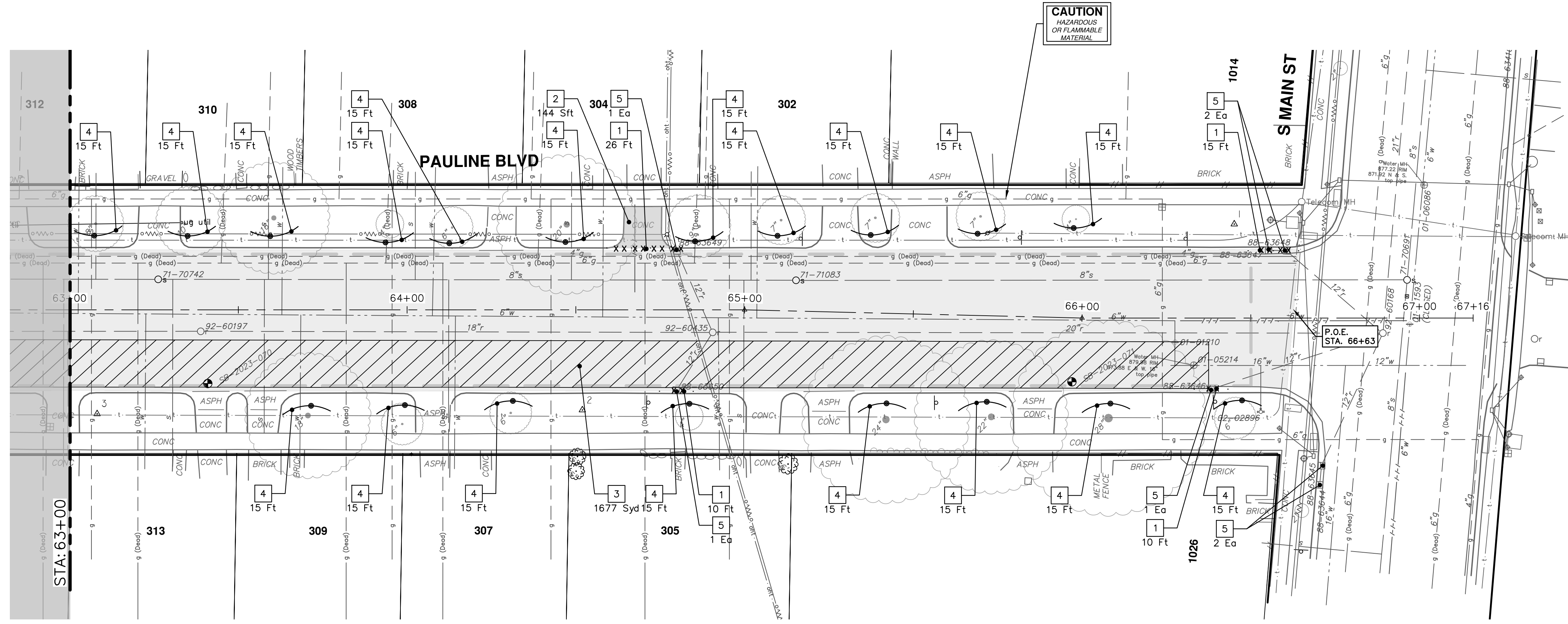
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|-----|----------|-------|---------|
| 01 | 11-04-24 | AZD | NB |
| 00 | 8-12-24 | AZD | NB |

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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
REMOVALS
PAULINE WATER MAIN & RESURFACING

SCALE: 1" = 20'
DRAWING No. 2023017-30



| REMOVAL KEY | |
|-------------|--|
| KEY | DESCRIPTION |
| 1 | Curb, Gutter, and Curb and Gutter, Any Type, Rem * |
| 2 | Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem |
| 3 | HMA, Any Thickness, Rem * |
| 4 | Tree Protective Fence |
| 5 | Erosion Control, Inlet Protection, Fabric Drop |
| 6A | Tree, Rem, 6 In. - 12 In. |
| 6B | Tree, Rem, 13 In. - 19 In. |
| 6C | Tree, Rem, 20 In. - 29 In. |
| | APPROX. LIMITS OF WATER TRENCH |

* SAWCUT FULL DEPTH AT REMOVAL LIMITS AS DIRECTED BY ENGINEER

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

REMOVALS

PAULINE WATER MAIN & RESURFACING

STATION: 63+00 - STA. 66+63

DRAWING No. 2023017-31

SHEET No. 31 OF 58

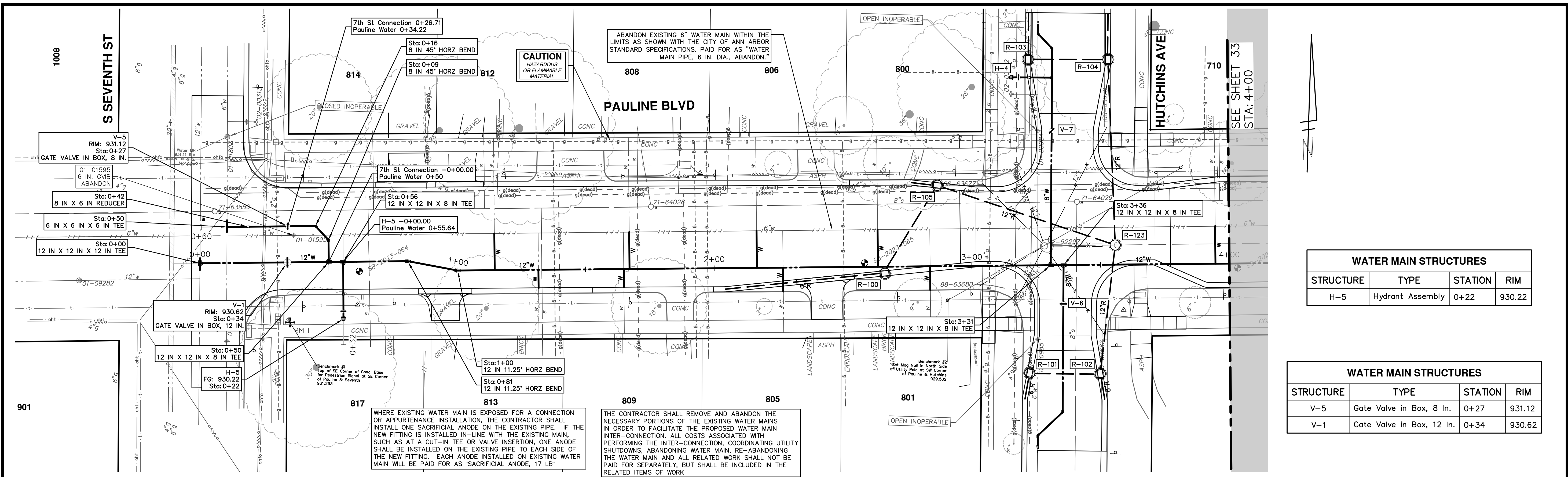
811
Know what's below. Call before you dig.

MDOT GI SUBMITTAL COMMENTS: 11-04-24
DATE: 8-12-24

MDOT GI SUBMITTAL DESCRIPTION: DRAWN
REV. CHECKED

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301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.aagov.org

R:\2023017 Pauline WM Plan Production\2023017Wtr.dwg Dwg Created: 10-Dec-24 - _a2 standard bw.stb - Plot Date: 11-Dec-24



| WATER MAIN STRUCTURES | | | |
|-----------------------|------------------|---------|--------|
| STRUCTURE | TYPE | STATION | RIM |
| H-5 | Hydrant Assembly | 0+22 | 930.22 |

| WATER MAIN STRUCTURES | | | |
|-----------------------|---------------------------|---------|--------|
| STRUCTURE | TYPE | STATION | RIM |
| V-5 | Gate Valve in Box, 8 In. | 0+27 | 931.12 |
| V-1 | Gate Valve in Box, 12 In. | 0+34 | 930.62 |

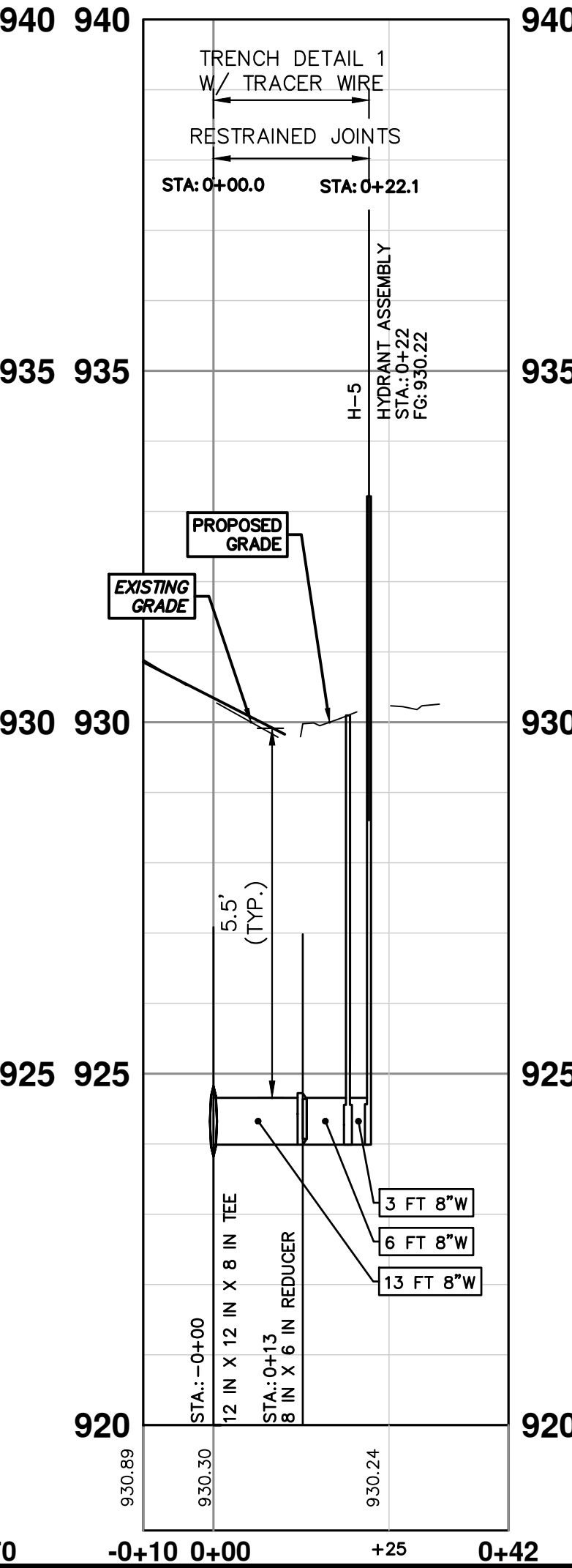
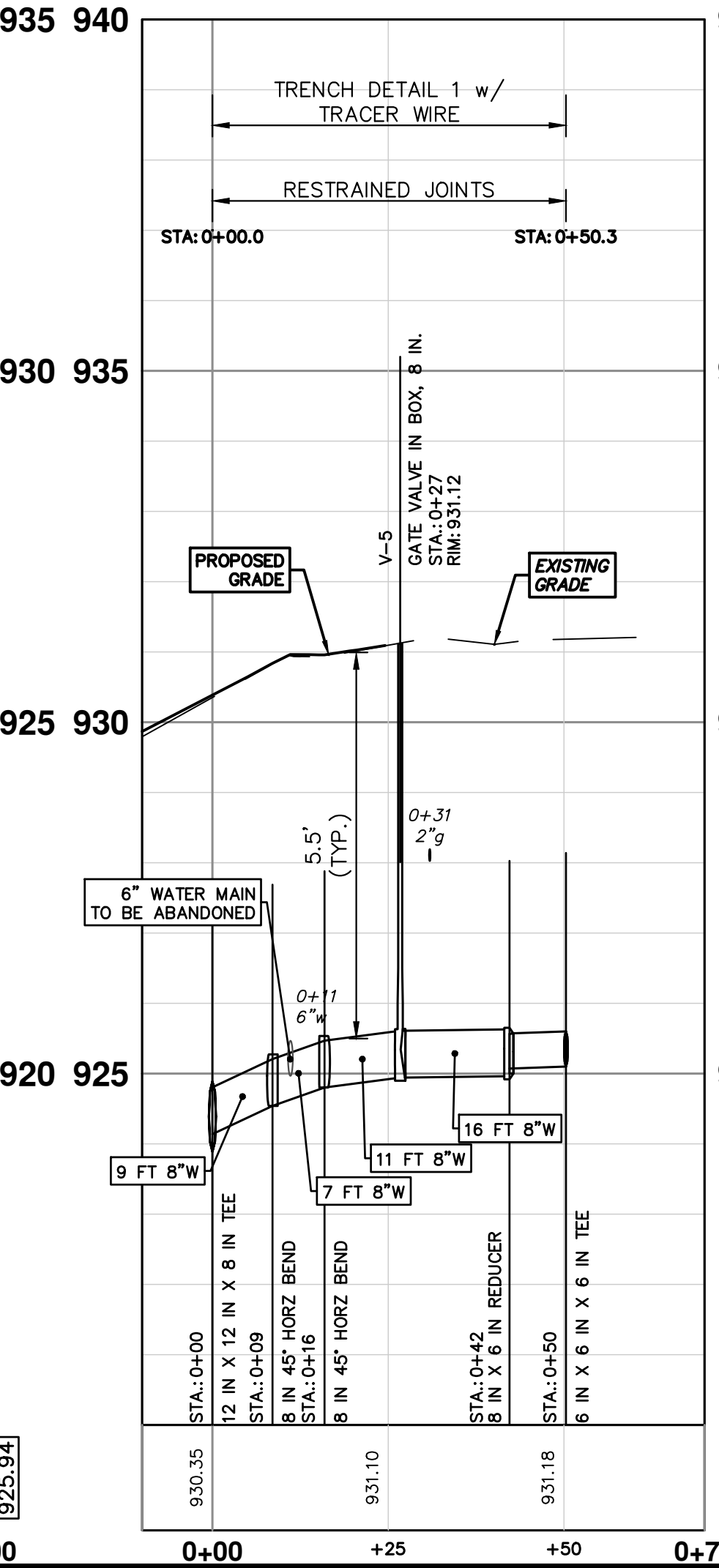
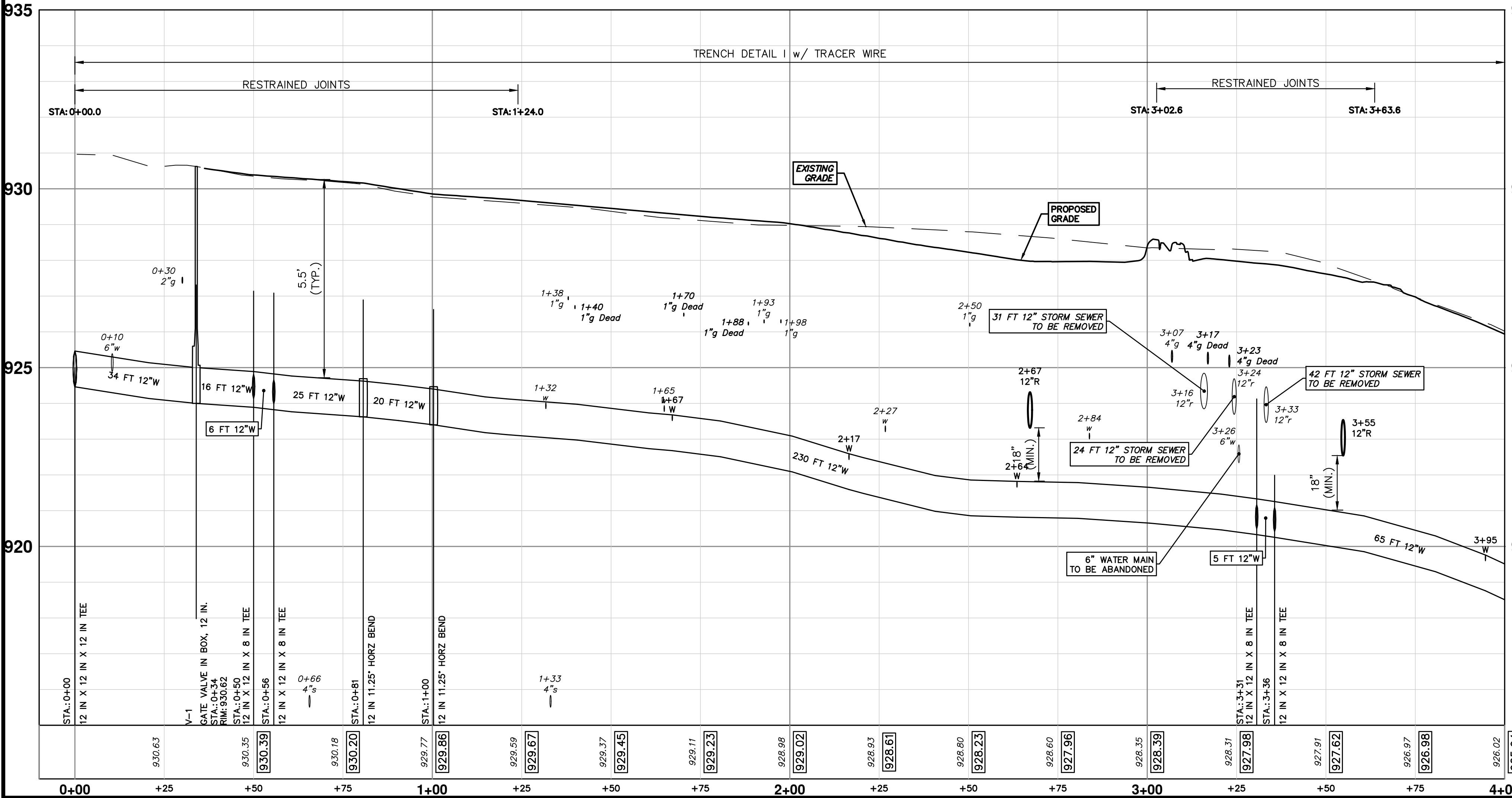
WHERE EXISTING WATER MAIN IS EXPOSED FOR A CONNECTION OR APPURTENANCE INSTALLATION, THE CONTRACTOR SHALL INSTALL ONE SACRIFICIAL ANODE ON THE EXISTING PIPE. IF THE NEW FITTING IS INSTALLED IN-LINE WITH THE EXISTING MAIN, SUCH AS AT A CUT-IN TEE OR VALVE INSERTION, ONE ANODE SHALL BE INSTALLED ON THE EXISTING PIPE TO EACH SIDE OF THE NEW FITTING. EACH ANODE INSTALLED ON EXISTING WATER MAIN WILL BE PAID FOR AS 'SACRIFICIAL ANODE, 17 LB'


THE CONTRACTOR SHALL REMOVE AND ABANDON THE NECESSARY PORTIONS OF THE EXISTING WATER MAINS IN ORDER TO FACILITATE THE PROPOSED WATER MAIN INTER-CONNECTION. ALL COSTS ASSOCIATED WITH PERFORMING THE INTER-CONNECTION, COORDINATING UTILITY SHUTDOWNS, ABANDONING WATER MAIN, RE-ABANDONING THE WATER MAIN AND ALL RELATED WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE RELATED ITEMS OF WORK.

PAULINE WATER

7TH ST CONNECTION


H-5





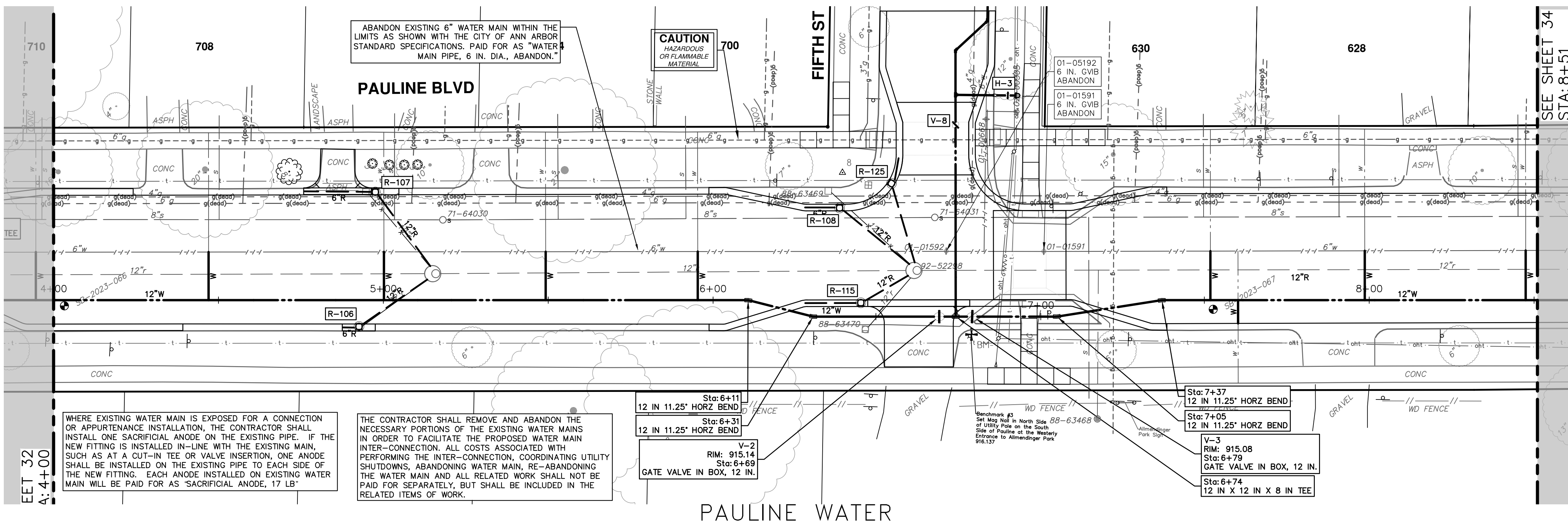
Know what's below.
Call before you dig.

| REV. | DATE | DESCRIPTION |
|------|----------|----------------------------|
| 01 | 11-04-24 | MDOT GI SUBMITTAL COMMENTS |
| 00 | 8-12-24 | MDOT GI SUBMITTAL |

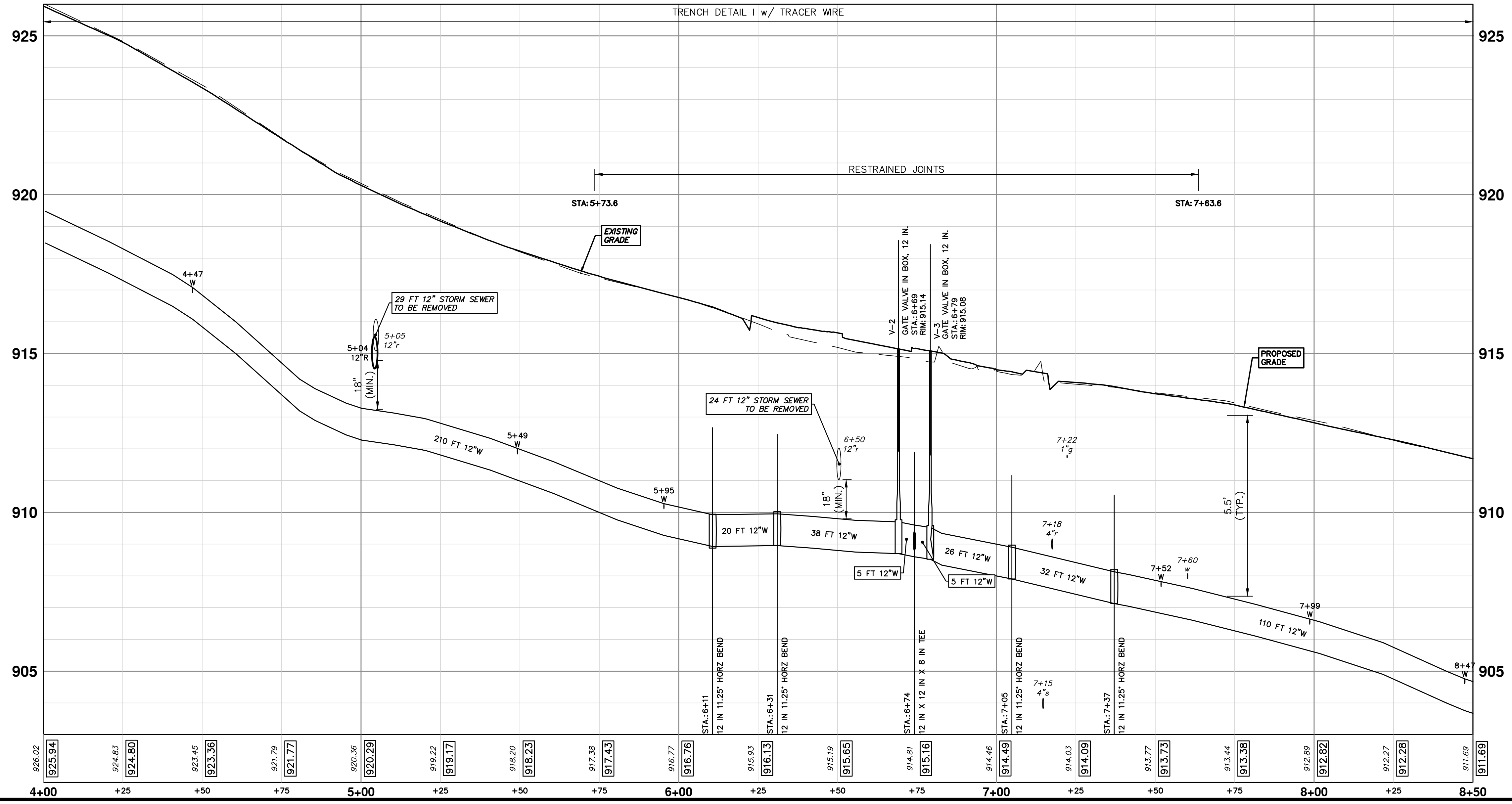


CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PAULINE WATER MAIN & RESURFACING
WATER MAIN PLAN & PROFILE

SHEET No. **32 OF 58**
DRAWING No. **2023017-32**
PROFILE: 1" = 2'
SCALE PLAN: 1" = 20'
STA. 0+00 - STA. 4+00



| WATER MAIN STRUCTURES | | | |
|-----------------------|---------------------------|---------|--------|
| STRUCTURE | TYPE | STATION | RIM |
| V-2 | Gate Valve in Box, 12 In. | 6+69 | 915.14 |
| V-3 | Gate Valve in Box, 12 In. | 6+79 | 915.08 |



811 Know what's below. Call before you dig.

| | | | | | |
|----|----------------------------|----------|-------------|----|---------|
| 01 | MDOT GI SUBMITTAL COMMENTS | 11-04-24 | A2D | NB | CHECKED |
| 00 | MDOT GI SUBMITTAL | 8-12-24 | A2D | NB | DRAWN |
| | REV. | DATE | DESCRIPTION | | |

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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

PAULINE WATER MAIN & RESURFACING

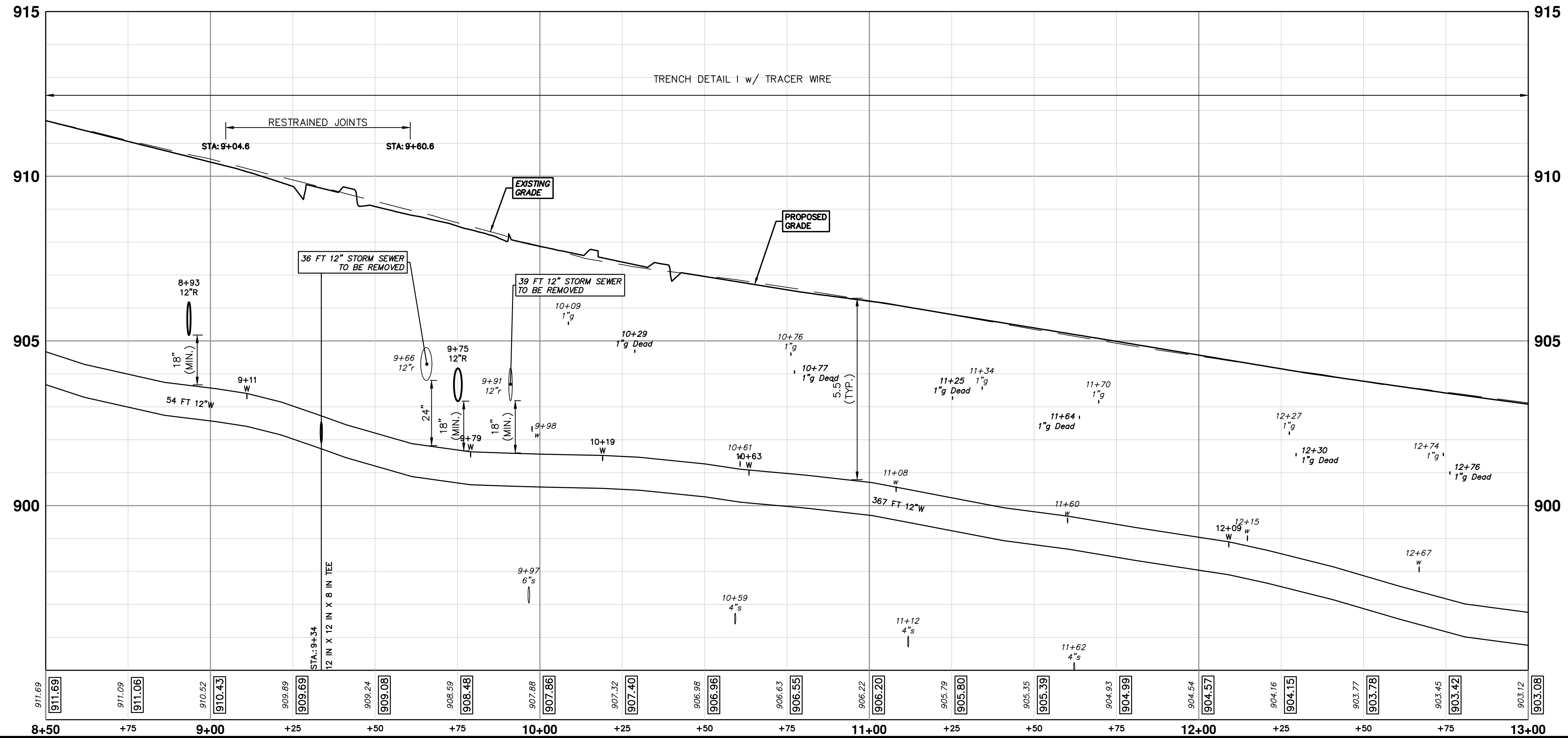
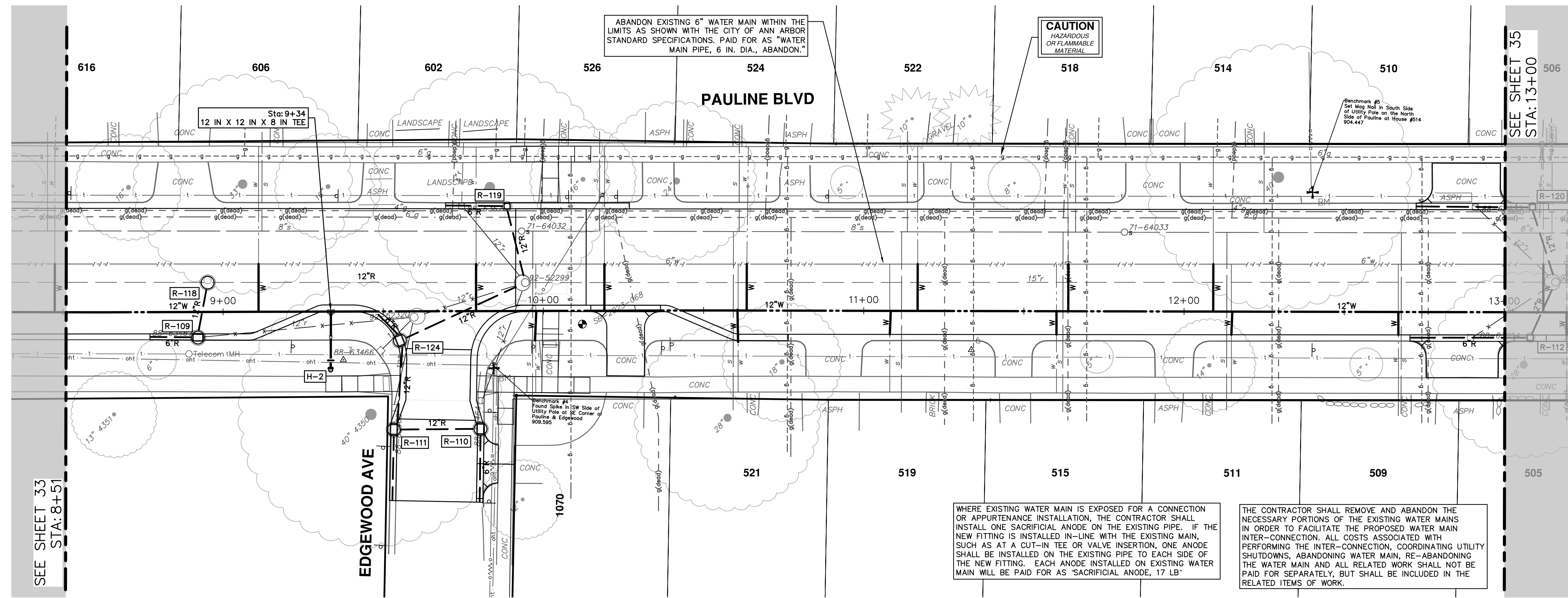
WATER MAIN PLAN & PROFILE

SCALE PLAN: 1" = 20'
PROFILE: 1" = 2'

DRAWING NO. 2023017-33

SHEET NO. 33 OF 58

STA. 4+00 - STA. 8+50



811 Know what's below. Call before you dig.

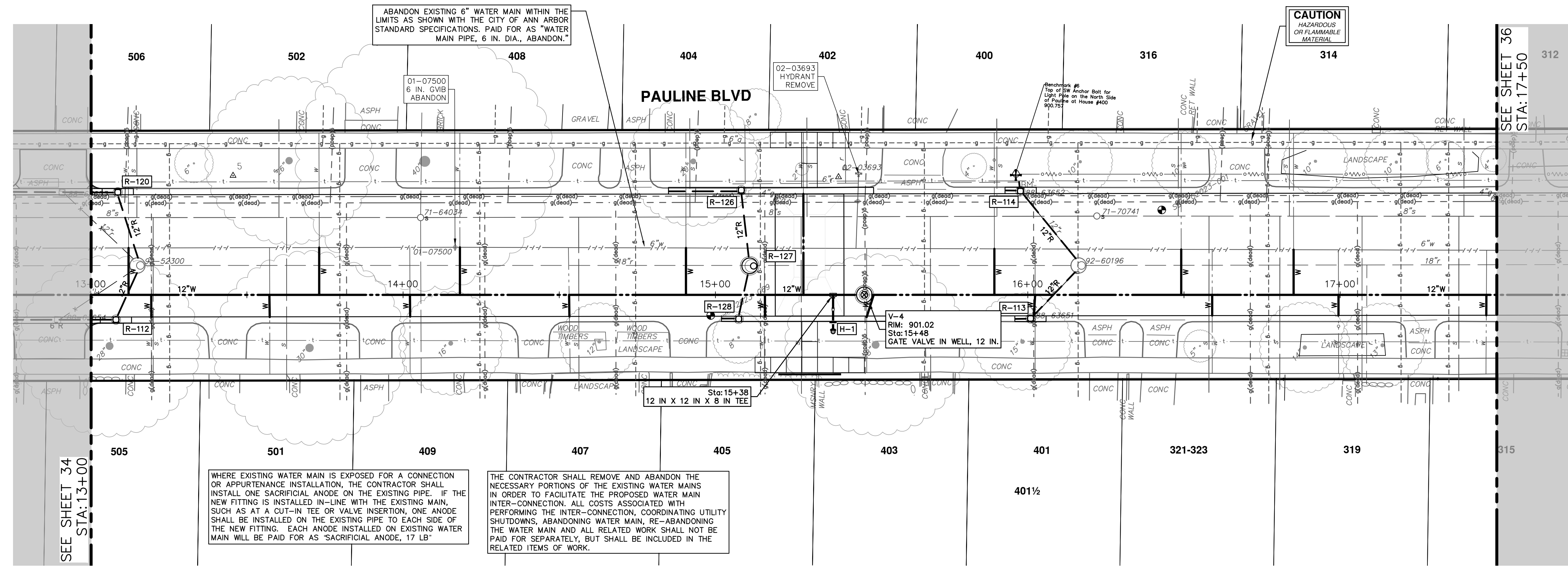
| REV. | DATE | DRAWN | CHECKED |
|------|----------|-------|---------|
| 01 | 11-04-24 | A2D | NB |
| 00 | 8-12-24 | A2D | NB |

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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PAULINE WATER MAIN & RESURFACING
 WATER MAIN PLAN & PROFILE

SCALE PLAN: 1" = 20' PROFILE: 1" = 2'
 DRAWING No. 2023017-34
 SHEET No. 34 OF 58
 STA. 8+50 - STA. 13+00

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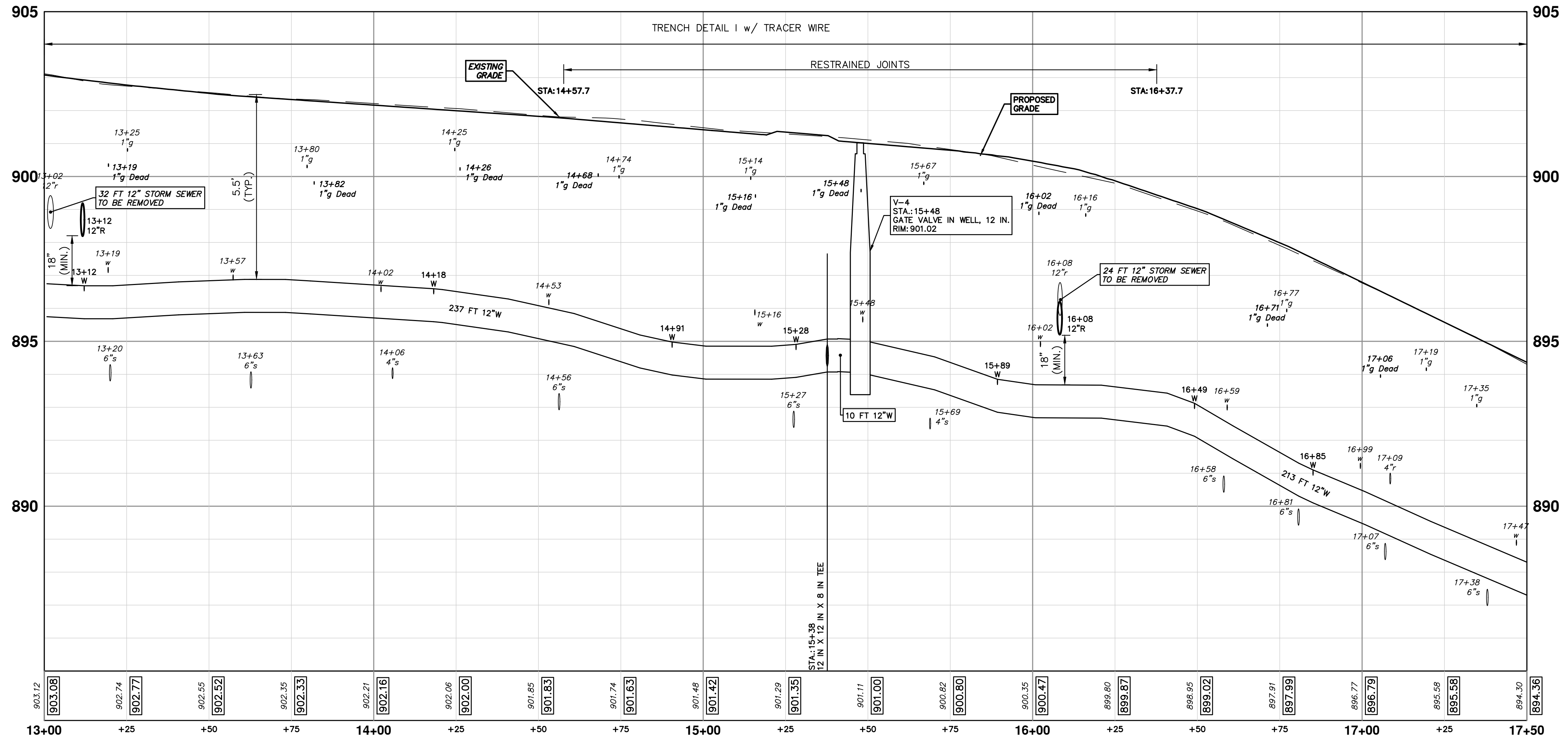
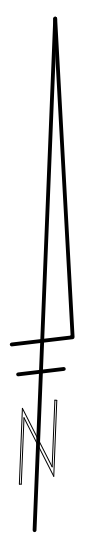
WHERE EXISTING WATER MAIN IS EXPOSED FOR A CONNECTION OR APPURTENANCE INSTALLATION, THE CONTRACTOR SHALL INSTALL ONE SACRIFICIAL ANODE ON THE EXISTING PIPE. IF THE NEW FITTING IS INSTALLED IN-LINE WITH THE EXISTING MAIN, SUCH AS AT A CUT-IN TEE OR VALVE INSERTION, ONE ANODE SHALL BE INSTALLED ON THE EXISTING PIPE TO EACH SIDE OF THE NEW FITTING. EACH ANODE INSTALLED ON EXISTING WATER MAIN WILL BE PAID FOR AS "SACRIFICIAL ANODE, 17 LB"

THE CONTRACTOR SHALL REMOVE AND ABANDON THE NECESSARY PORTIONS OF THE EXISTING WATER MAINS IN ORDER TO FACILITATE THE PROPOSED WATER MAIN INTER-CONNECTION. ALL COSTS ASSOCIATED WITH PERFORMING THE INTER-CONNECTION, COORDINATING UTILITY SHUTDOWNS, ABANDONING WATER MAIN, RE-ABANDONING THE WATER MAIN AND ALL RELATED WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE RELATED ITEMS OF WORK.

CAUTION
HAZARDOUS
OR FLAMMABLE
MATERIAL

SEE SHEET 34
STA:13+00

SEE SHEET 36
STA:17+50



| WATER MAIN STRUCTURES | | | |
|-----------------------|----------------------------|---------|--------|
| STRUCTURE | TYPE | STATION | RIM |
| V-4 | Gate Valve in Well, 12 In. | 15+48 | 901.02 |

Know what's below.
Call before you dig.

01 MDOT GI SUBMITTAL COMMENTS 11-04-24
00 MDOT GI SUBMITTAL REV. 8-12-24

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PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
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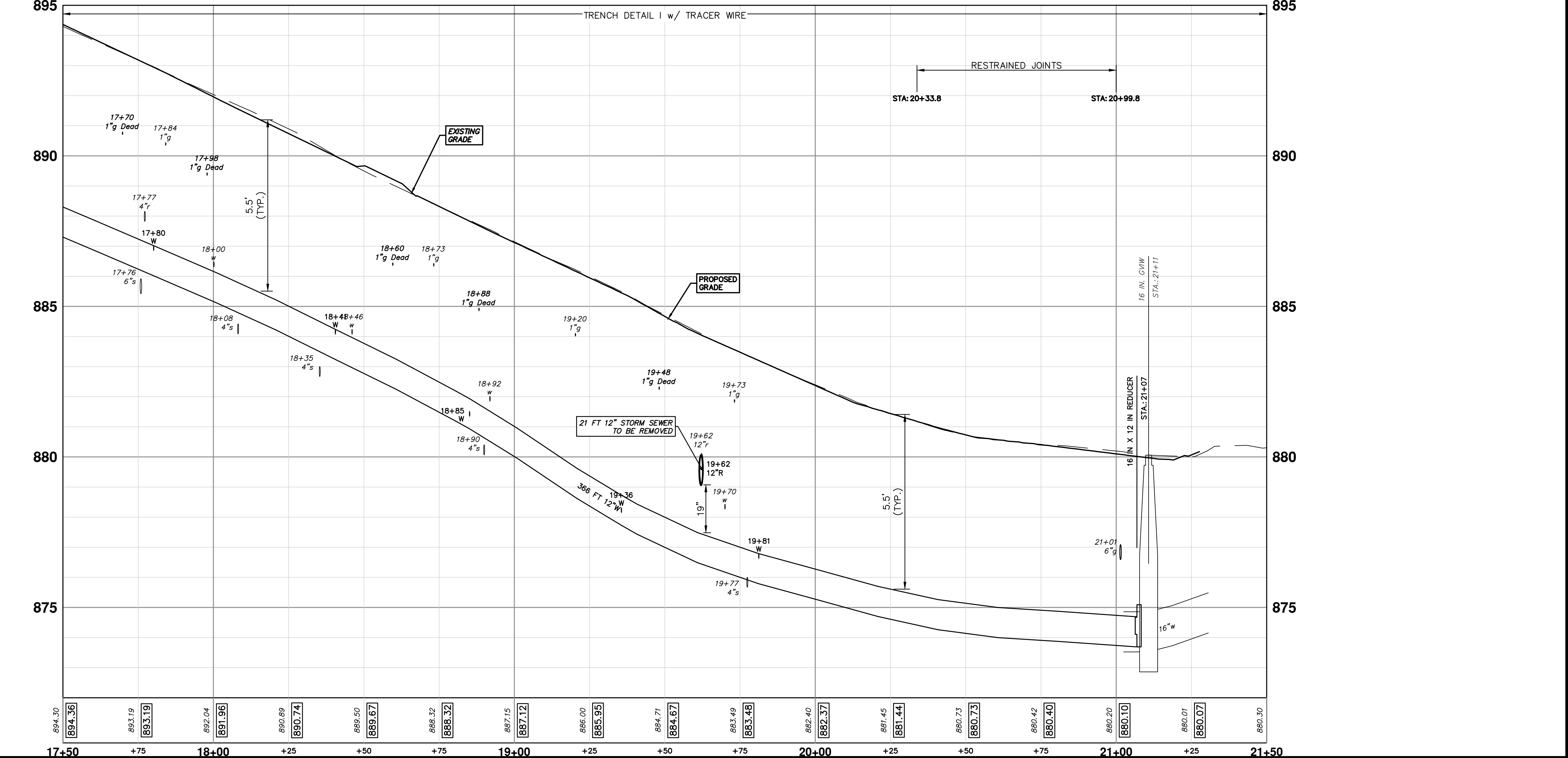
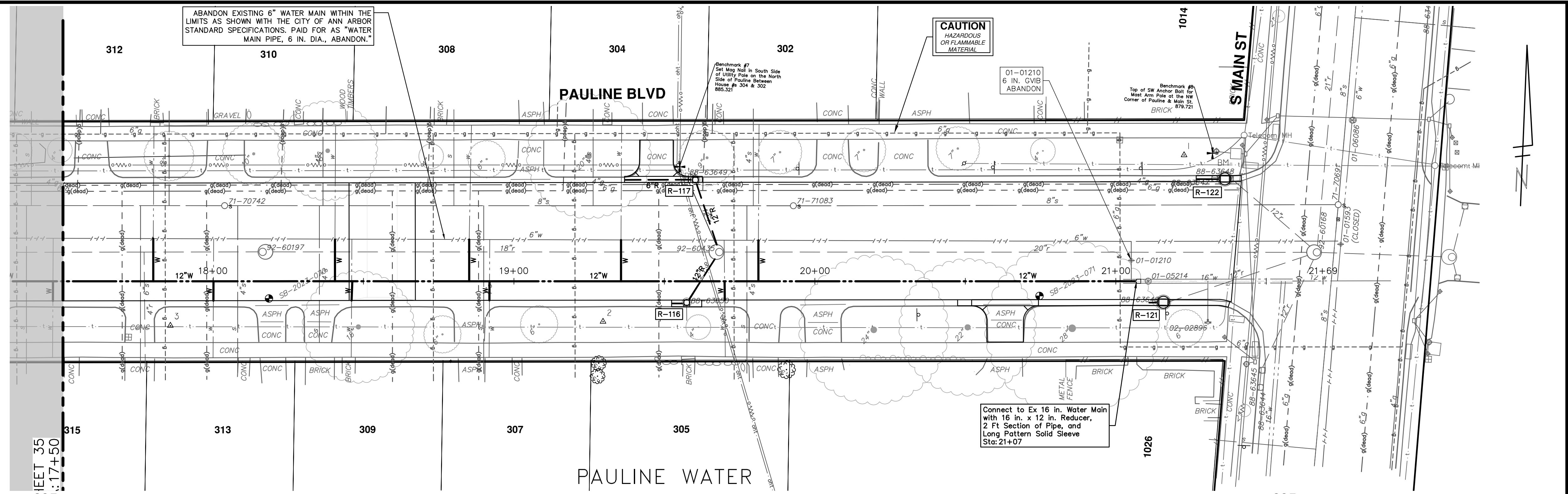
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PAULINE WATER MAIN & RESURFACING
WATER MAIN PLAN & PROFILE
SCALE PLAN: 1" = 20'
PROFILE: 1" = 2'

STA. 13+00 - STA. 17+50
DRAWING No. 2023017-35
SHEET No. 35 OF 58

R:\2023017 Pauline WM Plan Production\2023017Wtr.dwg Dwg Created: 10-Dec-24 - _a2 standard bw.stb - Plot Date: 11-Dec-24

WHERE EXISTING WATER MAIN IS EXPOSED FOR A CONNECTION OR APPURTENANCE INSTALLATION, THE CONTRACTOR SHALL INSTALL ONE SACRIFICIAL ANODE ON THE EXISTING PIPE. IF THE NEW FITTING IS INSTALLED IN-LINE WITH THE EXISTING MAIN, SUCH AS AT A CUT-IN TEE OR VALVE INSERTION, ONE ANODE SHALL BE INSTALLED ON THE EXISTING PIPE TO EACH SIDE OF THE NEW FITTING. EACH ANODE INSTALLED ON EXISTING WATER MAIN WILL BE PAID FOR AS "SACRIFICIAL ANODE, 17 LB".

THE CONTRACTOR SHALL REMOVE AND ABANDON THE NECESSARY PORTIONS OF THE EXISTING WATER MAINS IN ORDER TO FACILITATE THE PROPOSED WATER MAIN INTER-CONNECTION. ALL COSTS ASSOCIATED WITH PERFORMING THE INTER-CONNECTION, COORDINATING UTILITY SHUTDOWNS, ABANDONING WATER MAIN, RE-ABANDONING THE WATER MAIN AND ALL RELATED WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE RELATED ITEMS OF WORK.



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| REV. | DATE | DESCRIPTION |
|------|----------|----------------------------|
| 01 | 11-04-24 | MDOT GI SUBMITTAL COMMENTS |
| 00 | 8-12-24 | MDOT GI SUBMITTAL |

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

SCALE PLAN: 1" = 20'
PROFILE: 1" = 2'

PAULINE WATER MAIN & RESURFACING

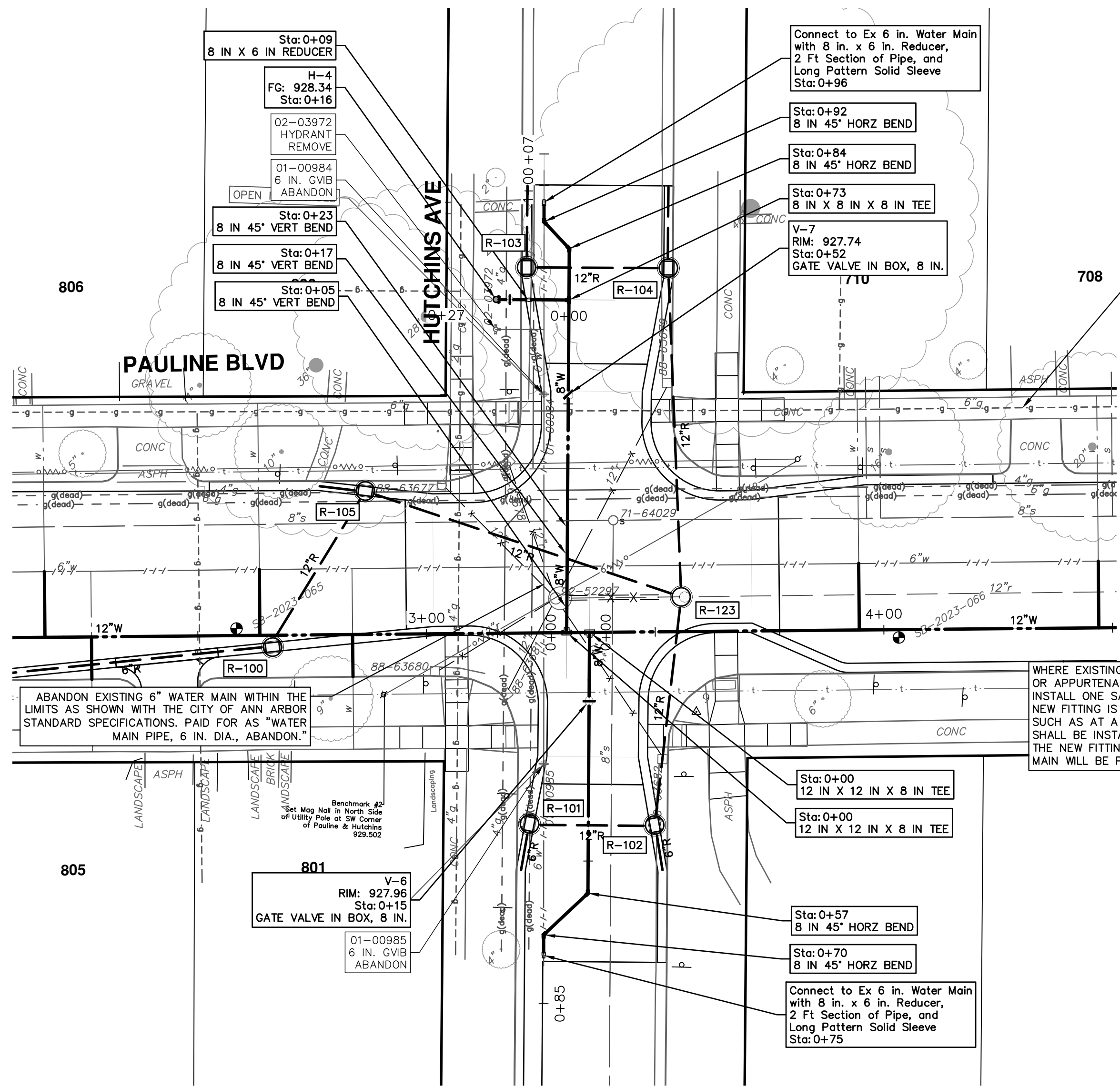
WATER MAIN PLAN & PROFILE

STA. 17+50 - STA. 21+04

SHEET No. **36 OF 58**

DRAWING No. **2023017-36**

R:\2023017 Pauline WM Plan Production\2023017Wtr1.dwg Dwg Created: 10-Dec-24 - _a2 standard bw.stb - Plot Date: 11-Dec-24



CAUTION
HAZARDOUS
OR FLAMMABLE
MATERIAL

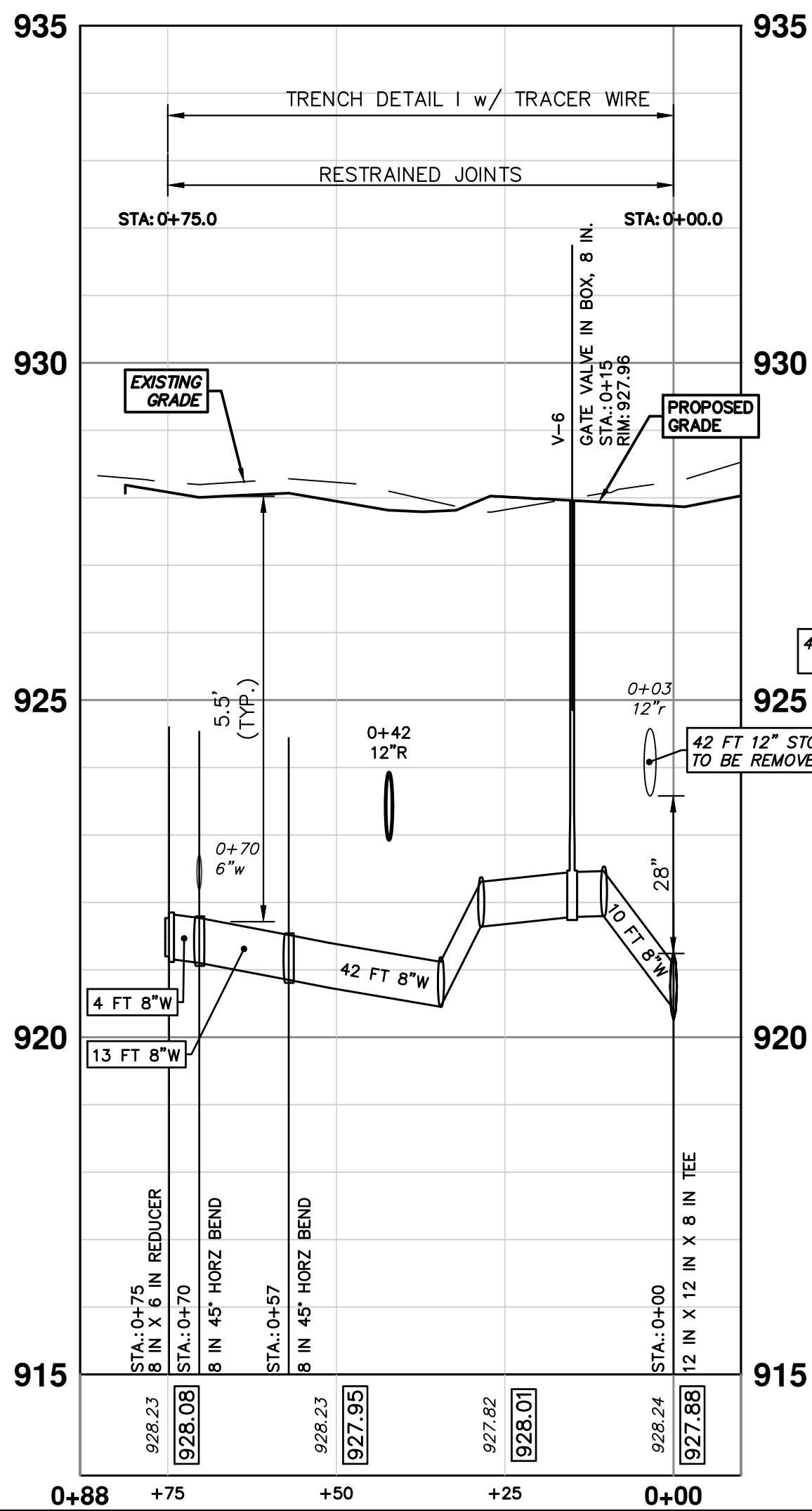
WHERE EXISTING WATER MAIN IS EXPOSED FOR A CONNECTION OR APPURTENANCE INSTALLATION, THE CONTRACTOR SHALL INSTALL ONE SACRIFICIAL ANODE ON THE EXISTING PIPE. IF THE NEW FITTING IS INSTALLED IN-LINE WITH THE EXISTING MAIN, SUCH AS AT A CUT-IN TEE OR VALVE INSERTION, ONE ANODE SHALL BE INSTALLED ON THE EXISTING PIPE TO EACH SIDE OF THE NEW FITTING. EACH ANODE INSTALLED ON EXISTING WATER MAIN WILL BE PAID FOR AS 'SACRIFICIAL ANODE, 17 LB'

THE CONTRACTOR SHALL REMOVE AND ABANDON THE NECESSARY PORTIONS OF THE EXISTING WATER MAINS IN ORDER TO FACILITATE THE PROPOSED WATER MAIN INTER-CONNECTION. ALL COSTS ASSOCIATED WITH PERFORMING THE INTER-CONNECTION, COORDINATING UTILITY SHUTDOWNS, ABANDONING WATER MAIN, RE-ABANDONING THE WATER MAIN AND ALL RELATED WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE RELATED ITEMS OF WORK.

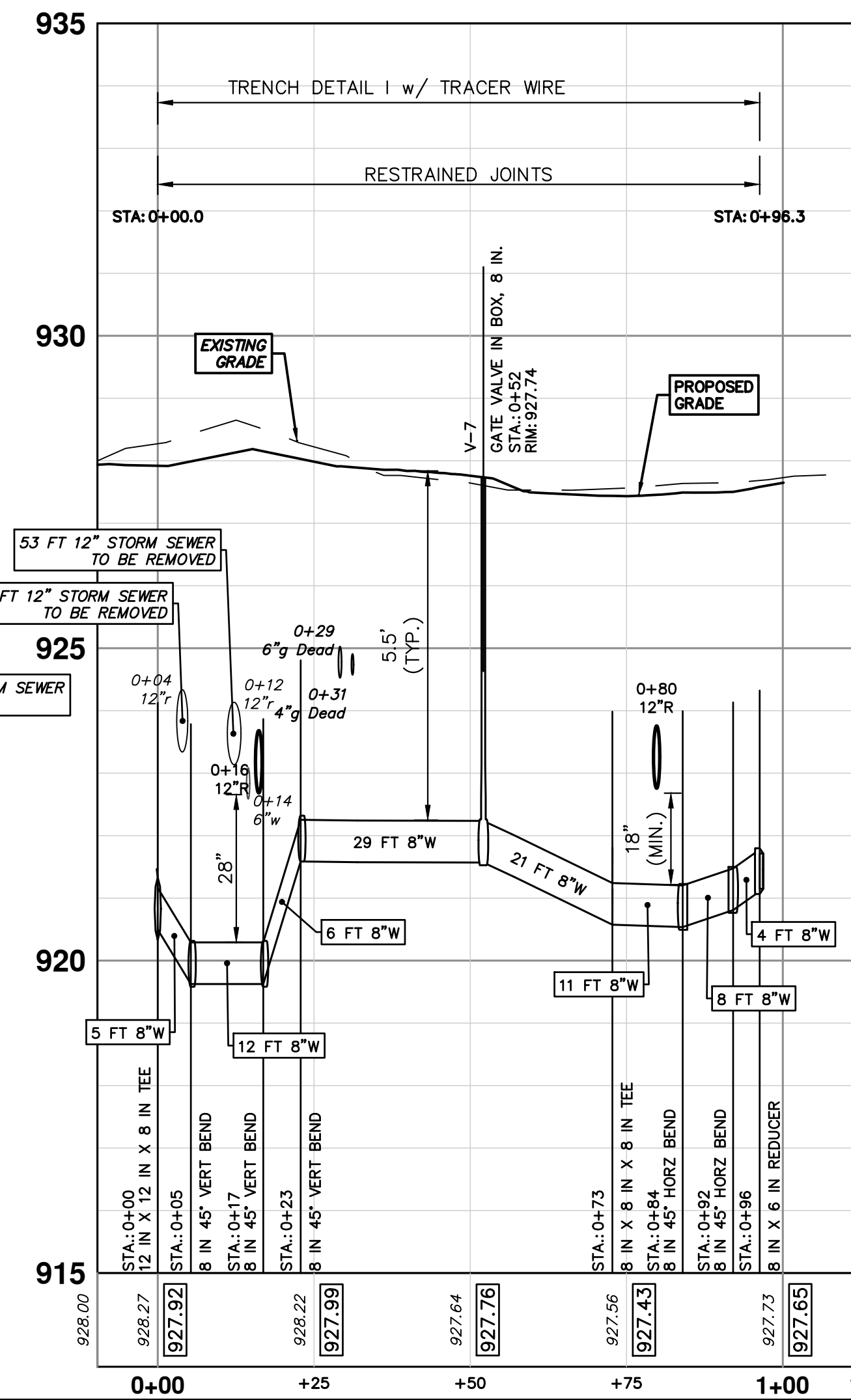
| WATER MAIN STRUCTURES | | | |
|-----------------------|------------------|---------|--------|
| STRUCTURE | TYPE | STATION | FG |
| H-4 | Hydrant Assembly | 0+16 | 928.34 |

| WATER MAIN STRUCTURES | | | |
|-----------------------|--------------------------|---------|--------|
| STRUCTURE | TYPE | STATION | RIM |
| V-6 | Gate Valve in Box, 8 In. | 0+15 | 927.96 |
| V-7 | Gate Valve in Box, 8 In. | 0+52 | 927.74 |

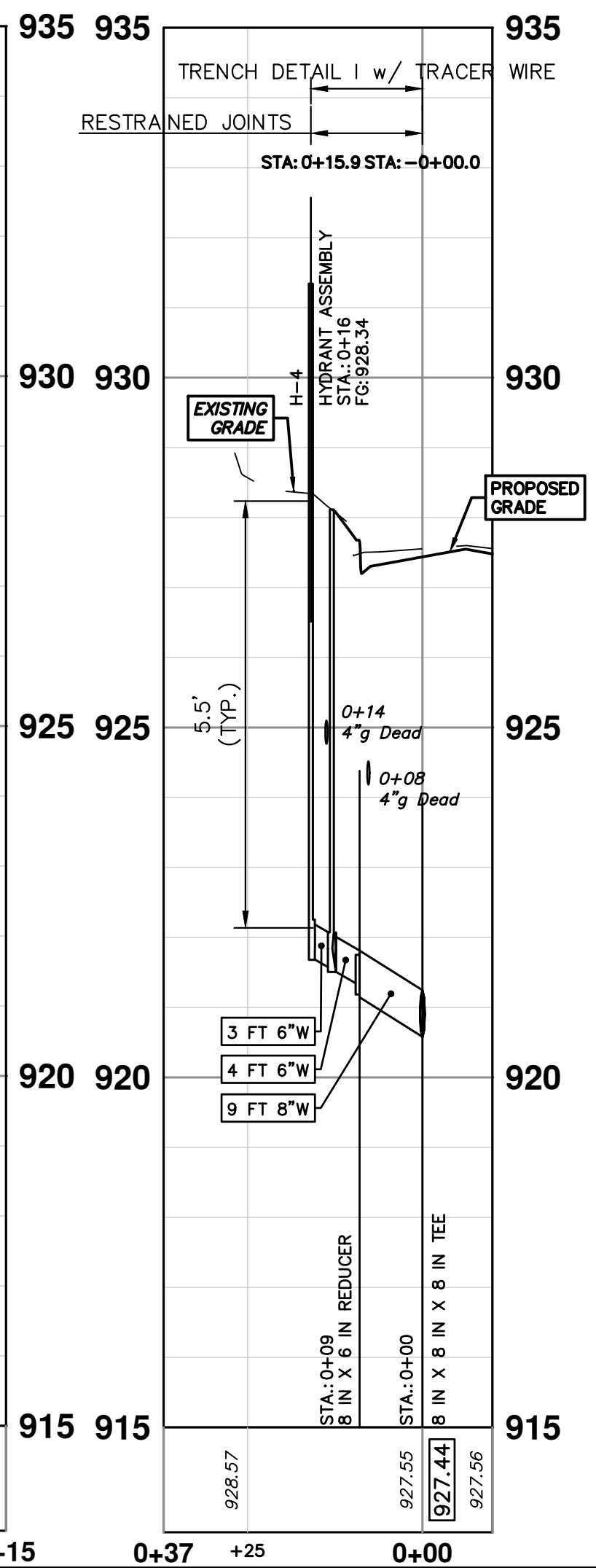
HUTCHINS CONNECTION SOUTH




HUTCHINS CONNECTION NORTH



H-4





CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PAULINE WATER MAIN & RESURFACING
HUTCHINS AVE CONN., HYD H-4

| REV. | DATE | DESCRIPTION |
|------|----------|----------------------------|
| 01 | 11-04-24 | MDOT GI SUBMITTAL COMMENTS |
| 00 | 8-12-24 | MDOT GI SUBMITTAL |

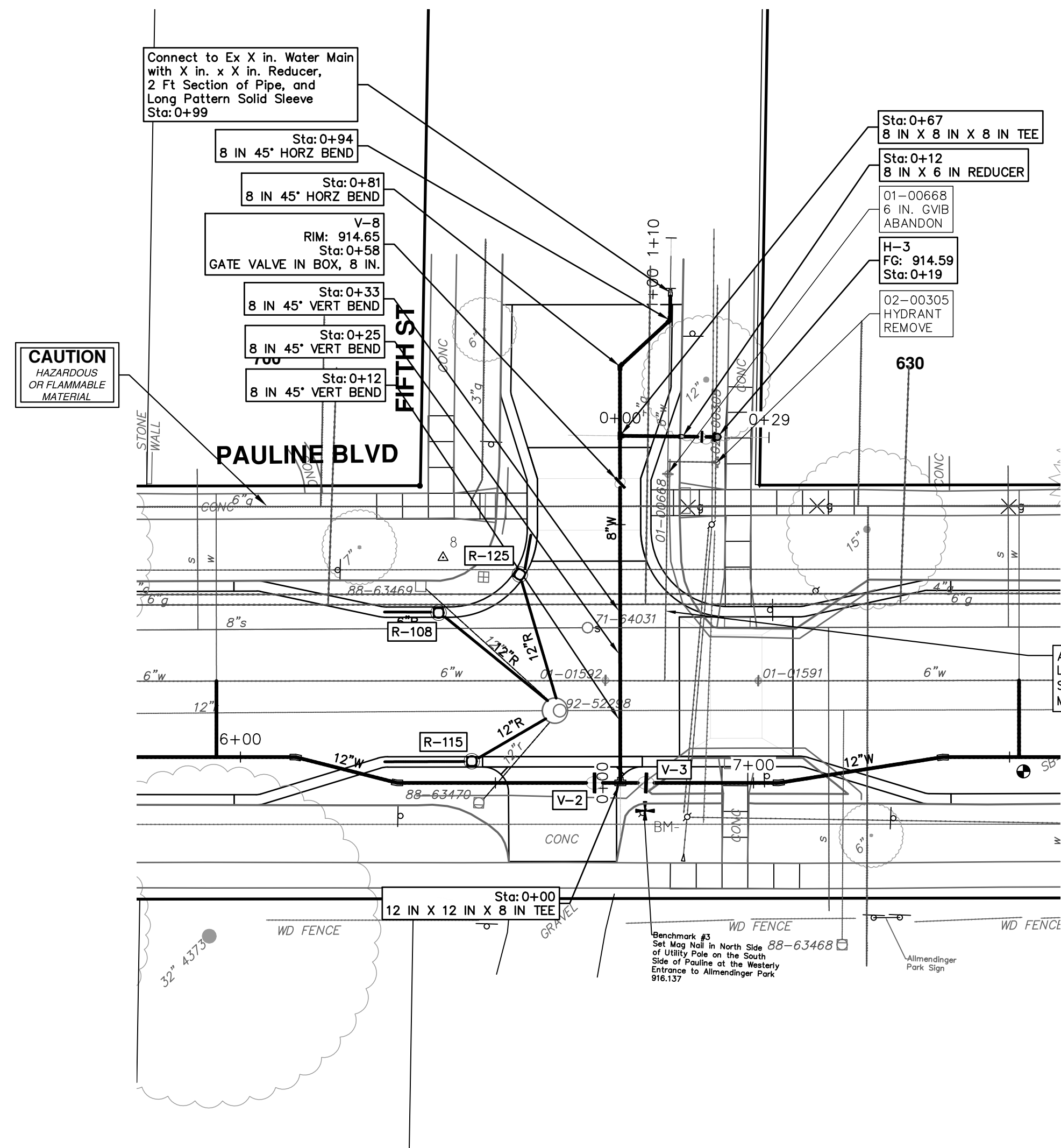
SCALE PLAN: 1" = 20'
PROFILE: 1" = 2'

DRAWING NO. 2023017-37

SHEET NO. 37 OF 58

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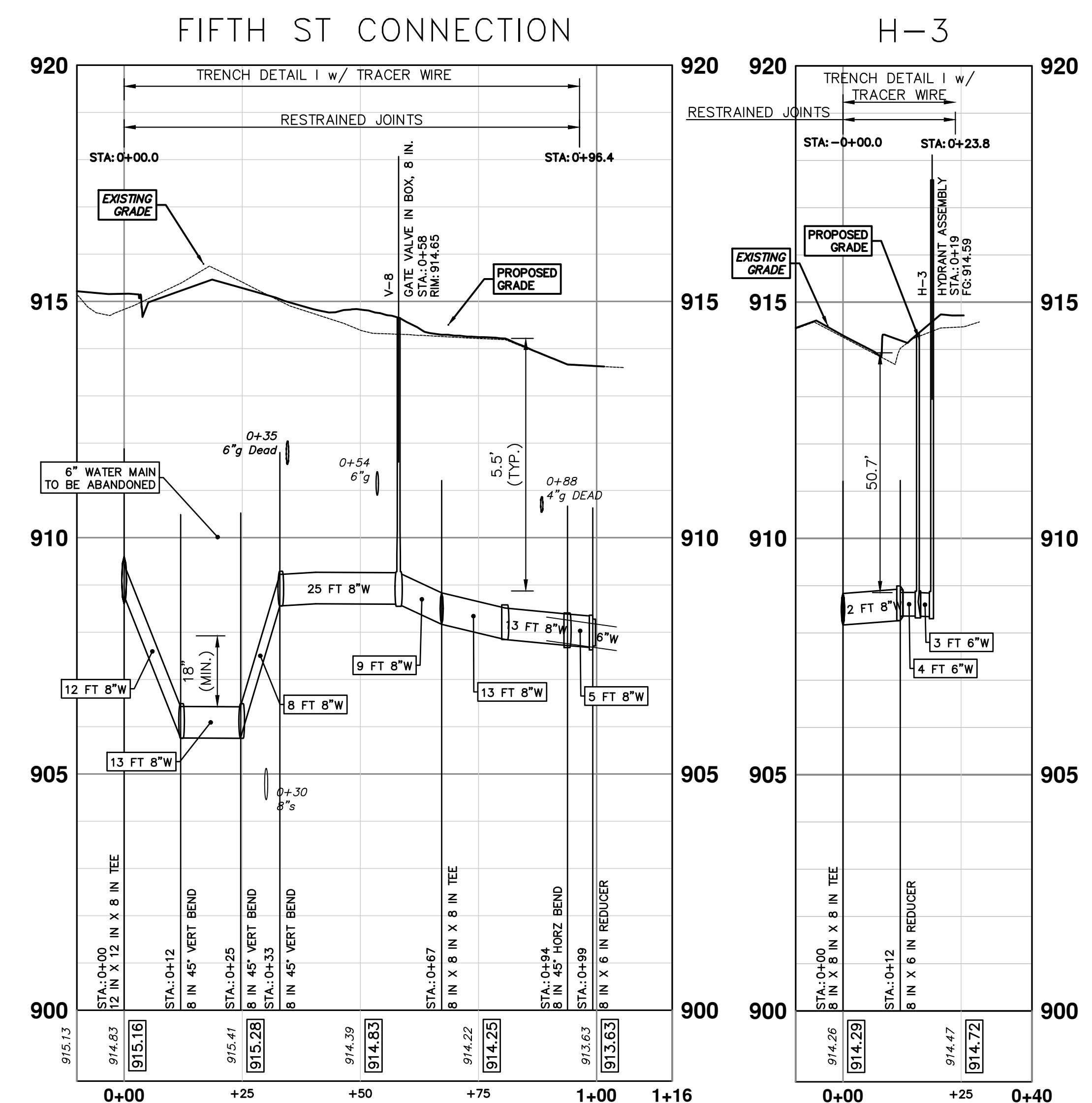


THE CONTRACTOR SHALL REMOVE AND ABANDON THE NECESSARY PORTIONS OF THE EXISTING WATER MAINS IN ORDER TO FACILITATE THE PROPOSED WATER MAIN INTER-CONNECTION. ALL COSTS ASSOCIATED WITH PERFORMING THE INTER-CONNECTION, COORDINATING UTILITY SHUTDOWNS, ABANDONING WATER MAIN, RE-ABANDONING THE WATER MAIN AND ALL RELATED WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE RELATED ITEMS OF WORK.

WHERE EXISTING WATER MAIN IS EXPOSED FOR A CONNECTION OR APPURTENANCE INSTALLATION, THE CONTRACTOR SHALL INSTALL ONE SACRIFICIAL ANODE ON THE EXISTING PIPE. IF THE NEW FITTING IS INSTALLED IN-LINE WITH THE EXISTING MAIN, SUCH AS AT A CUT-IN TEE OR VALVE INSERTION, ONE ANODE SHALL BE INSTALLED ON THE EXISTING PIPE TO EACH SIDE OF THE NEW FITTING. EACH ANODE INSTALLED ON EXISTING WATER MAIN WILL BE PAID FOR AS "SACRIFICIAL ANODE, 17 LB"

| WATER MAIN STRUCTURES | | | |
|-----------------------|------------------|---------|--------|
| STRUCTURE | TYPE | STATION | FG |
| H-3 | Hydrant Assembly | 0+19 | 914.59 |

| WATER MAIN STRUCTURES | | | |
|-----------------------|--------------------------|---------|--------|
| STRUCTURE | TYPE | STATION | RIM |
| V-8 | Gate Valve in Box, 8 In. | 0+58 | 914.65 |

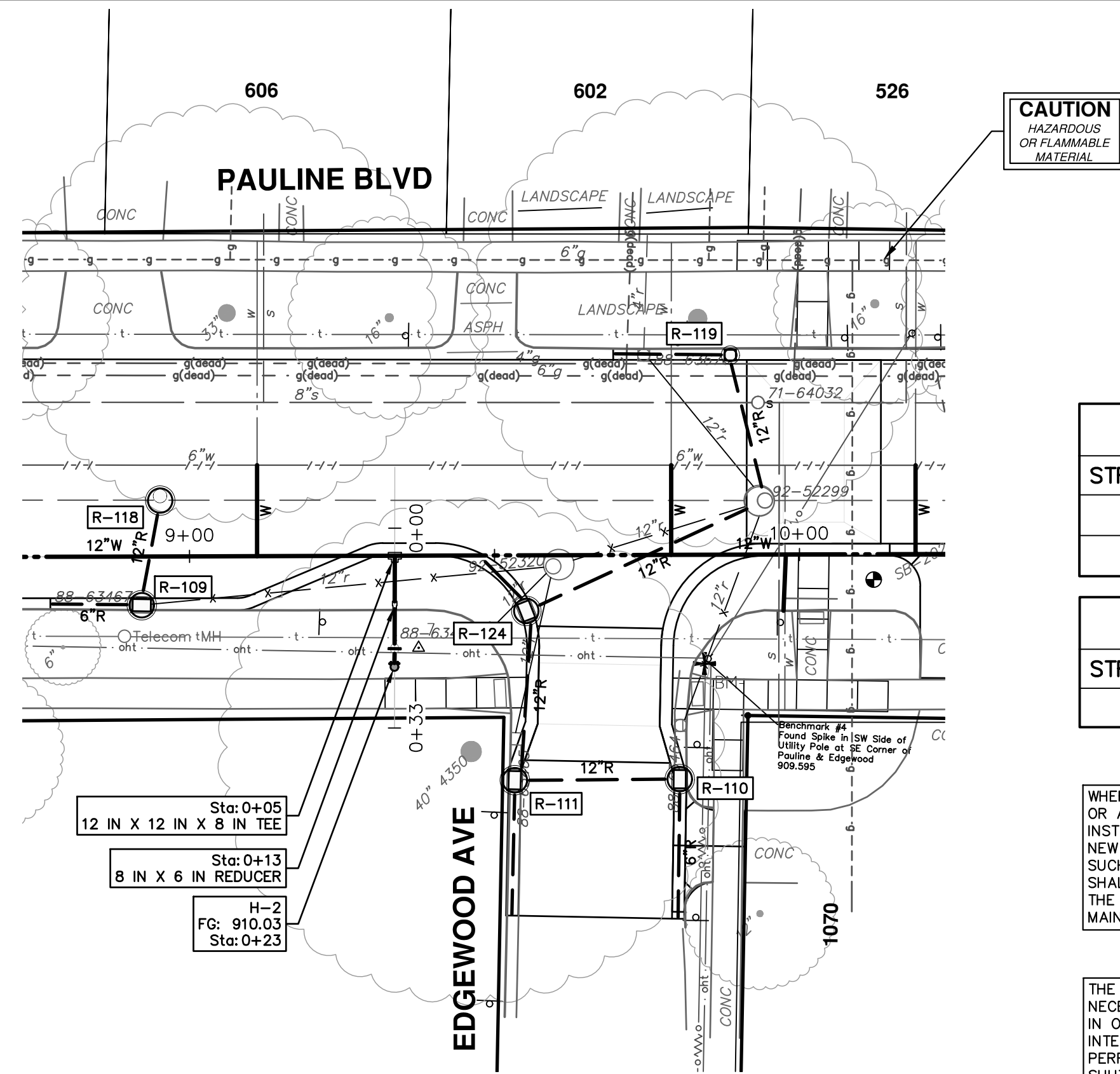


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| REV. | DATE | DESCRIPTION |
|------|----------|----------------------------|
| 01 | 11-04-24 | MDOT GI SUBMITTAL COMMENTS |
| 00 | 8-12-24 | MDOT GI SUBMITTAL |

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PAULINE WATER MAIN & RESURFACING
WATER MAIN PLAN & PROFILE
FIFTH ST CONN., HYD H-3

| | |
|----------------------|------------------|
| SHEET No. | 38 OF 58 |
| SCALE PLAN: 1" = 20' | PROFILE: 1" = 2' |
| DRAWING No. | 2023017-38 |

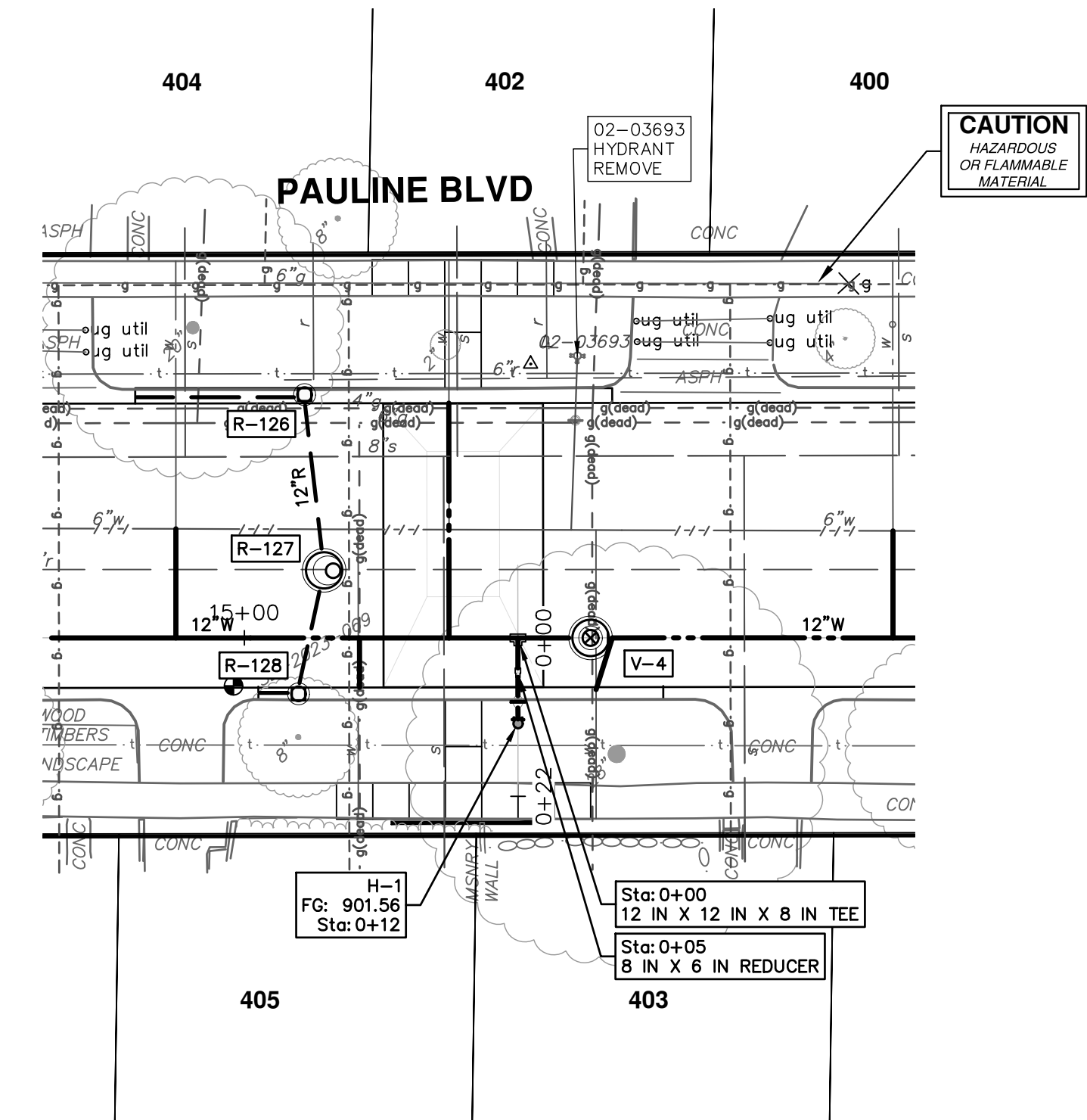


| WATER MAIN STRUCTURES | | | |
|-----------------------|------------------|---------|--------|
| STRUCTURE | TYPE | STATION | FG |
| H-1 | Hydrant Assembly | 0+23 | 901.56 |
| H-2 | Hydrant Assembly | 0+23 | 910.03 |

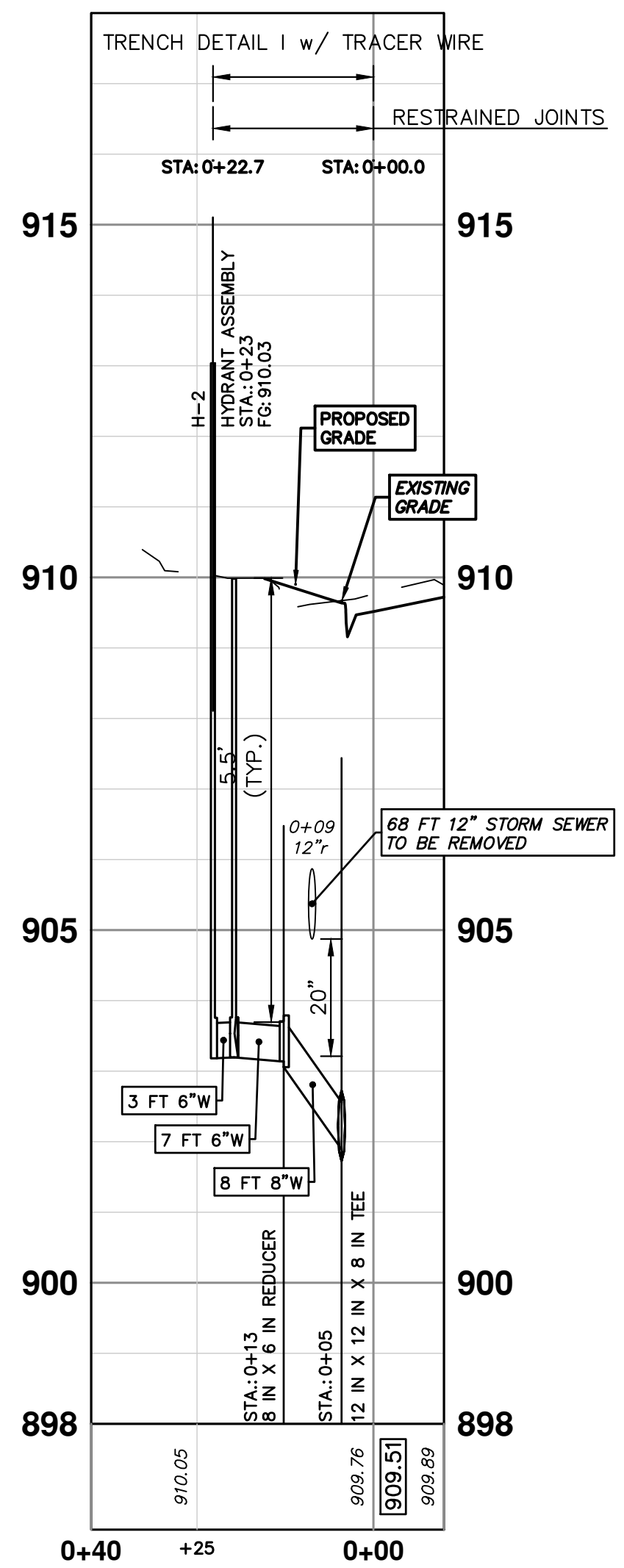
| WATER MAIN STRUCTURES | | | |
|-----------------------|----------------------------|---------|--------|
| STRUCTURE | TYPE | STATION | RIM |
| V-4 | Gate Valve in Well, 12 in. | 15+48 | 901.02 |

WHERE EXISTING WATER MAIN IS EXPOSED FOR A CONNECTION OR APPURTENANCE INSTALLATION, THE CONTRACTOR SHALL INSTALL ONE SACRIFICIAL ANODE ON THE EXISTING PIPE. IF THE NEW FITTING IS INSTALLED IN-LINE WITH THE EXISTING MAIN, SUCH AS AT A CUT-IN TEE OR VALVE INSERTION, ONE ANODE SHALL BE INSTALLED ON THE EXISTING PIPE TO EACH SIDE OF THE NEW FITTING. EACH ANODE INSTALLED ON EXISTING WATER MAIN WILL BE PAID FOR AS 'SACRIFICIAL ANODE, 17 LB'

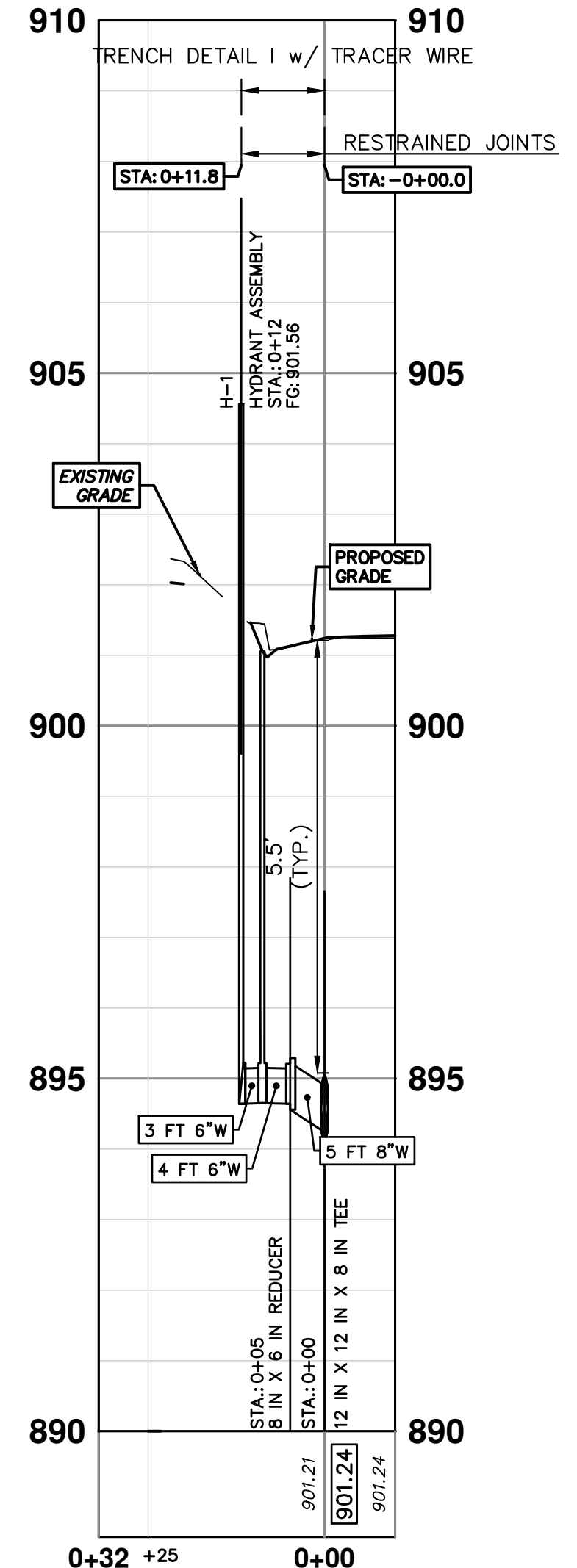
THE CONTRACTOR SHALL REMOVE AND ABANDON THE NECESSARY PORTIONS OF THE EXISTING WATER MAINS IN ORDER TO FACILITATE THE PROPOSED WATER MAIN INTER-CONNECTION. ALL COSTS ASSOCIATED WITH PERFORMING THE INTER-CONNECTION, COORDINATING UTILITY SHUTDOWNS, ABANDONING WATER MAIN, RE-ABANDONING THE WATER MAIN AND ALL RELATED WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE RELATED ITEMS OF WORK.




H-2



H-1





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PAULINE WATER MAIN & RESURFACING
 WATER MAIN PLAN & PROFILE
 HYD H-2, HYD H-1

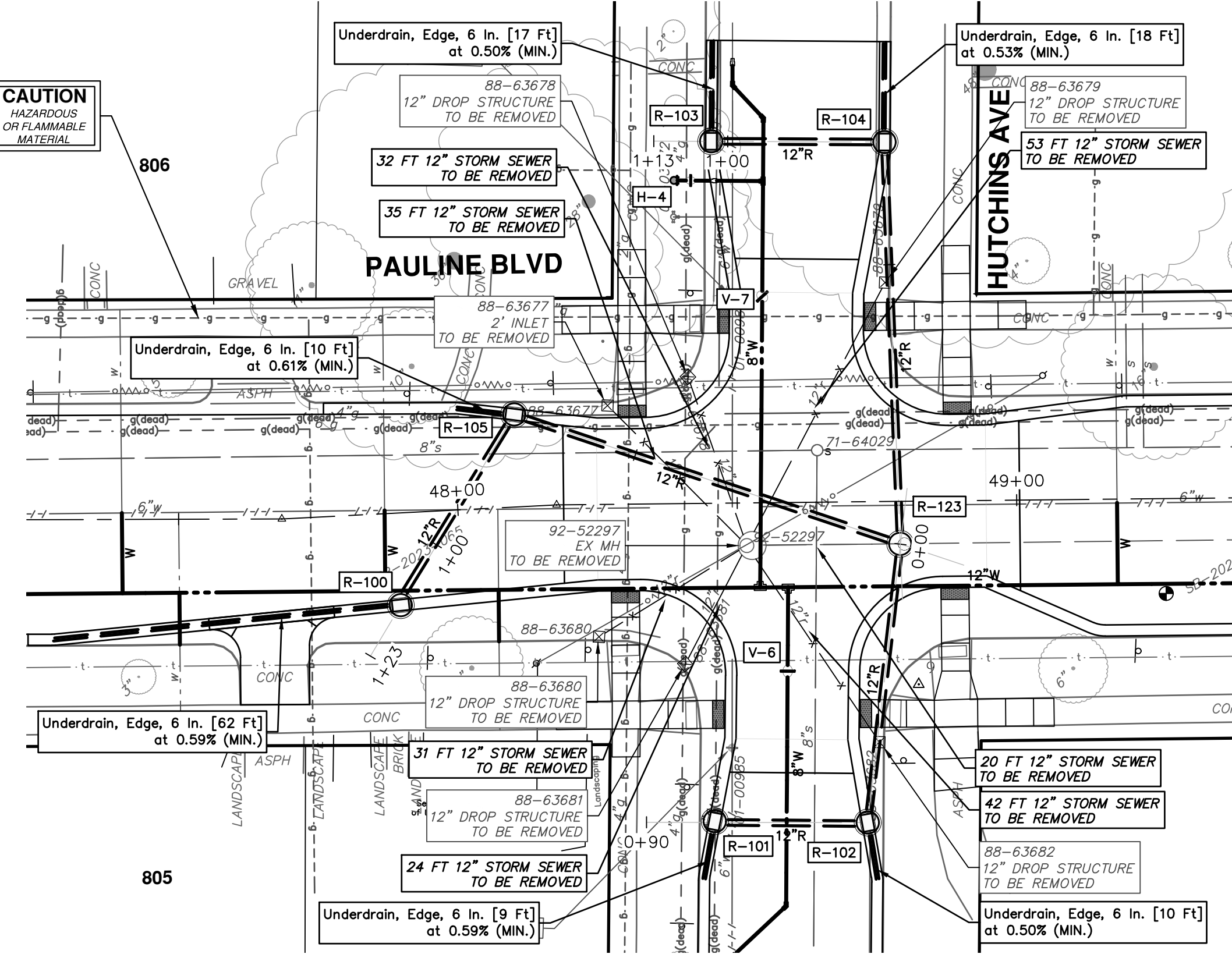
811
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| REV. | DATE | DESCRIPTION |
|------|----------|----------------------------|
| 01 | 11-04-24 | MDOT GI SUBMITTAL COMMENTS |
| 00 | 8-12-24 | MDOT GI SUBMITTAL |

SHEET No. **39 OF 58**
 SCALE PLAN: 1" = 20'
 PROFILE: 1" = 2'
 DRAWING No. **2023017-39**

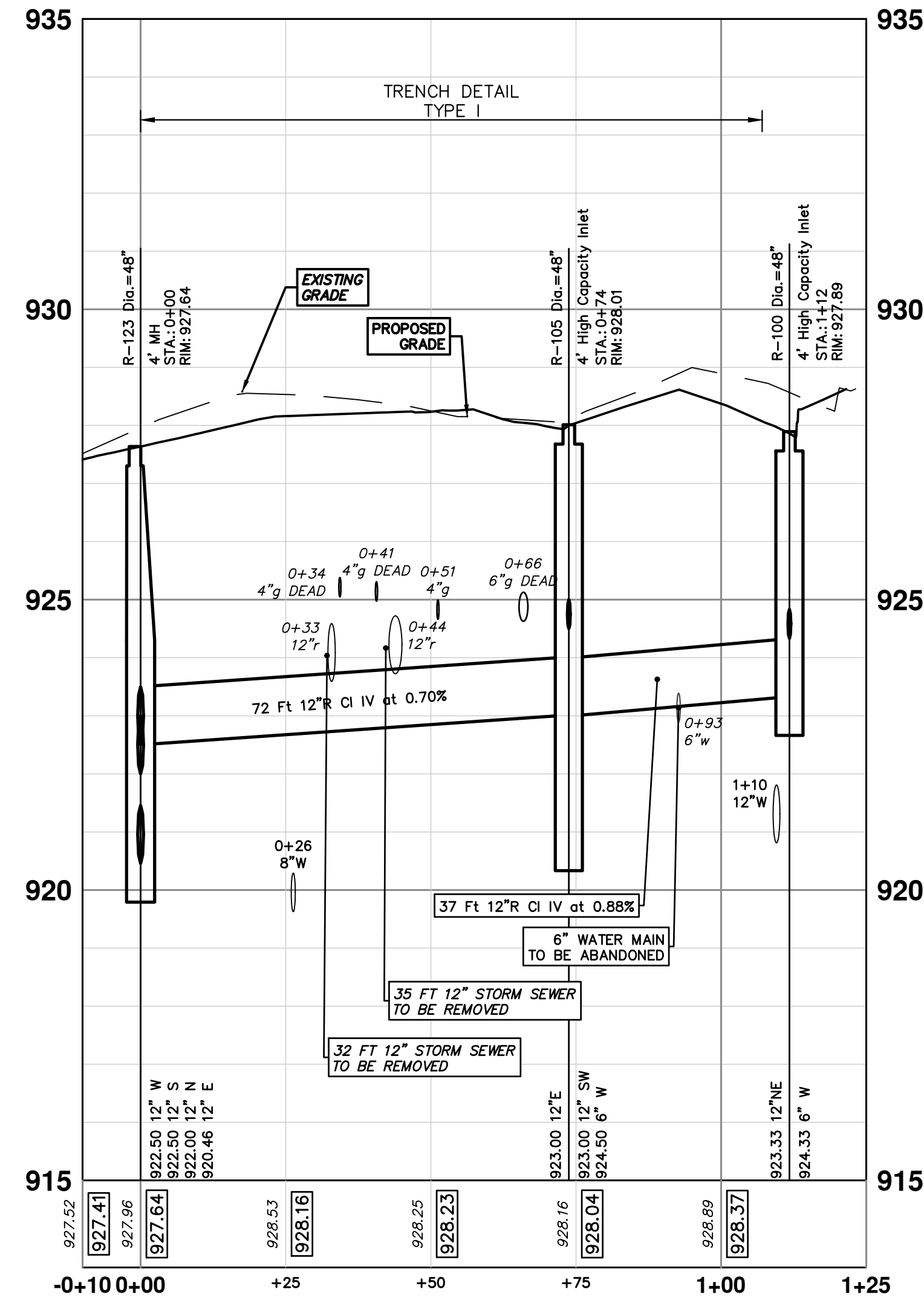
| STORM SEWER STRUCTURE TABLE | | | | | | |
|-----------------------------|-----------------|------------------------|--------|--|--------------|------|
| STRUCTURE | UTILITY STATION | TYPE | RIM | INVERTS | DEPTH (Feet) | SUMP |
| R-100 | 1+12 | 4' High Capacity Inlet | 927.89 | 6" W 924.33 12" NE 923.33 | 4.56 | 0' |
| R-101 | 0+77 | 4' High Capacity Inlet | 927.52 | 6" S 923.50 12" E 923.00 | 6.52 | 2' |
| R-102 | 0+51 | 4' High Capacity Inlet | 927.50 | 12" W 922.84 6" S 924.00 12" N 922.75 | 6.75 | 2' |
| R-103 | 1+02 | 4' High Capacity Inlet | 927.33 | 6" N 923.83 12" E 922.83 | 6.50 | 2' |
| R-104 | 0+73 | 4' High Capacity Inlet | 927.34 | 12" W 922.58 6" N 923.83 12" S 922.50 | 6.84 | 2' |
| R-105 | 0+74 | 4' High Capacity Inlet | 928.01 | 12" SW 923.00 6" W 924.50 12" E 923.00 | 7.01 | 2' |
| R-123 | 0+00 | 4' MH | 927.64 | 12" W 922.50 12" S 922.50 12" N 922.00 12" E 920.46 | 7.18 | 0' |

CAUTION
HAZARDOUS
OR FLAMMABLE
MATERIAL

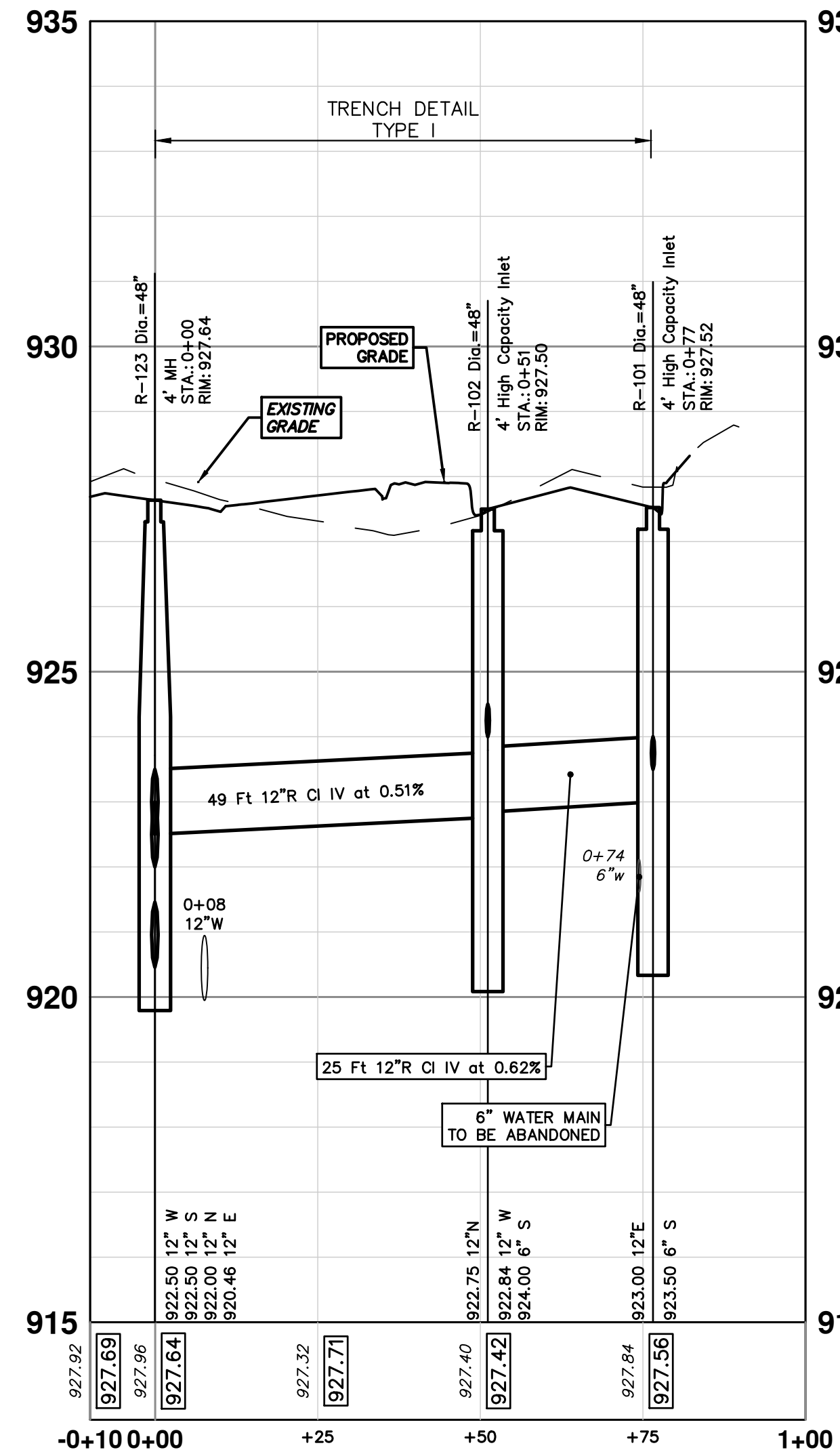


| EXISTING STORM SEWER STRUCTURE REMOVAL TABLE | | |
|--|--------------|----------------------------------|
| STRUCTURE | DEPTH (Feet) | REMOVE |
| 88-63679 | 2.84 | 12" Drop Structure TO BE REMOVED |
| 88-63682 | 2.72 | 12" Drop Structure TO BE REMOVED |
| 88-63678 | 2.99 | 12" Drop Structure TO BE REMOVED |
| 88-63681 | 2.97 | 12" Drop Structure TO BE REMOVED |
| 88-63677 | 3.54 | 2' Inlet TO BE REMOVED |
| 88-63680 | 3.23 | 12" Drop Structure TO BE REMOVED |
| 92-52297 | 8.60 | EX MH TO BE REMOVED |

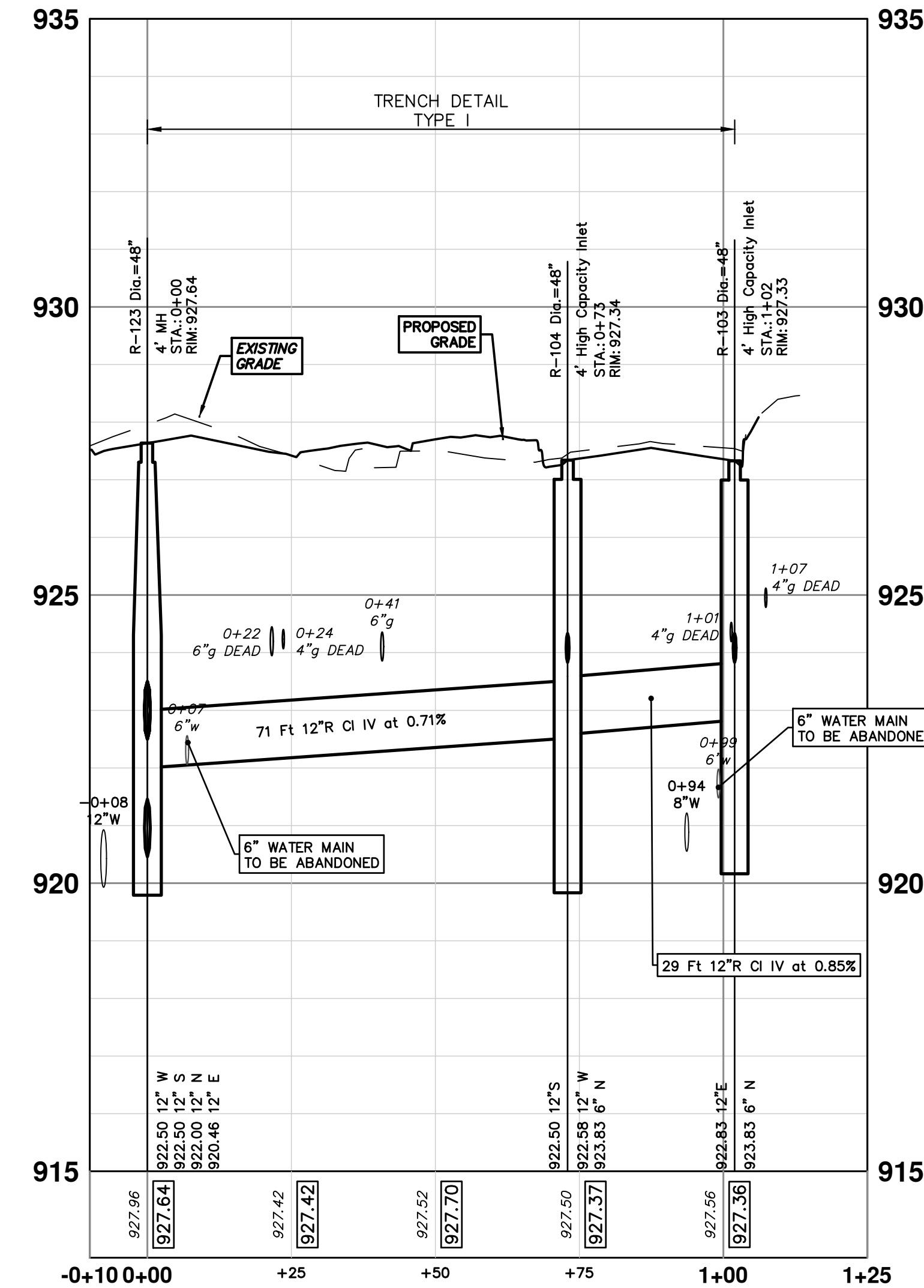
R-123 - R100



R-123 - R101



R-123 - R103



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| NO. | DATE | DESCRIPTION | BY | CHKD |
|-----|----------|----------------------------|-----|------|
| 01 | 11-04-24 | MDOT GI SUBMITTAL COMMENTS | AZD | AZD |
| 00 | 8-12-24 | MDOT GI SUBMITTAL | AZD | AZD |
| | | REV. | | |

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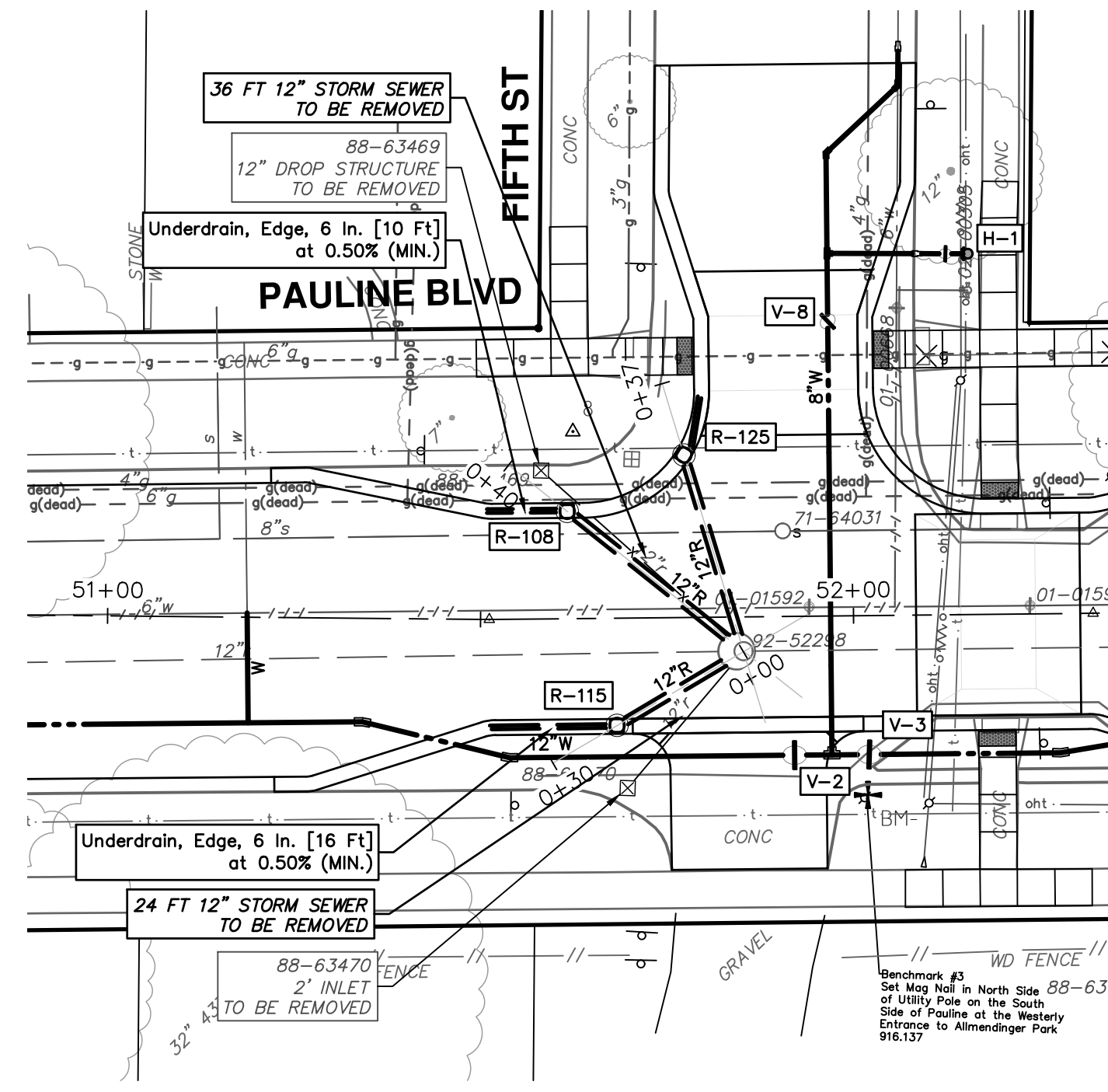
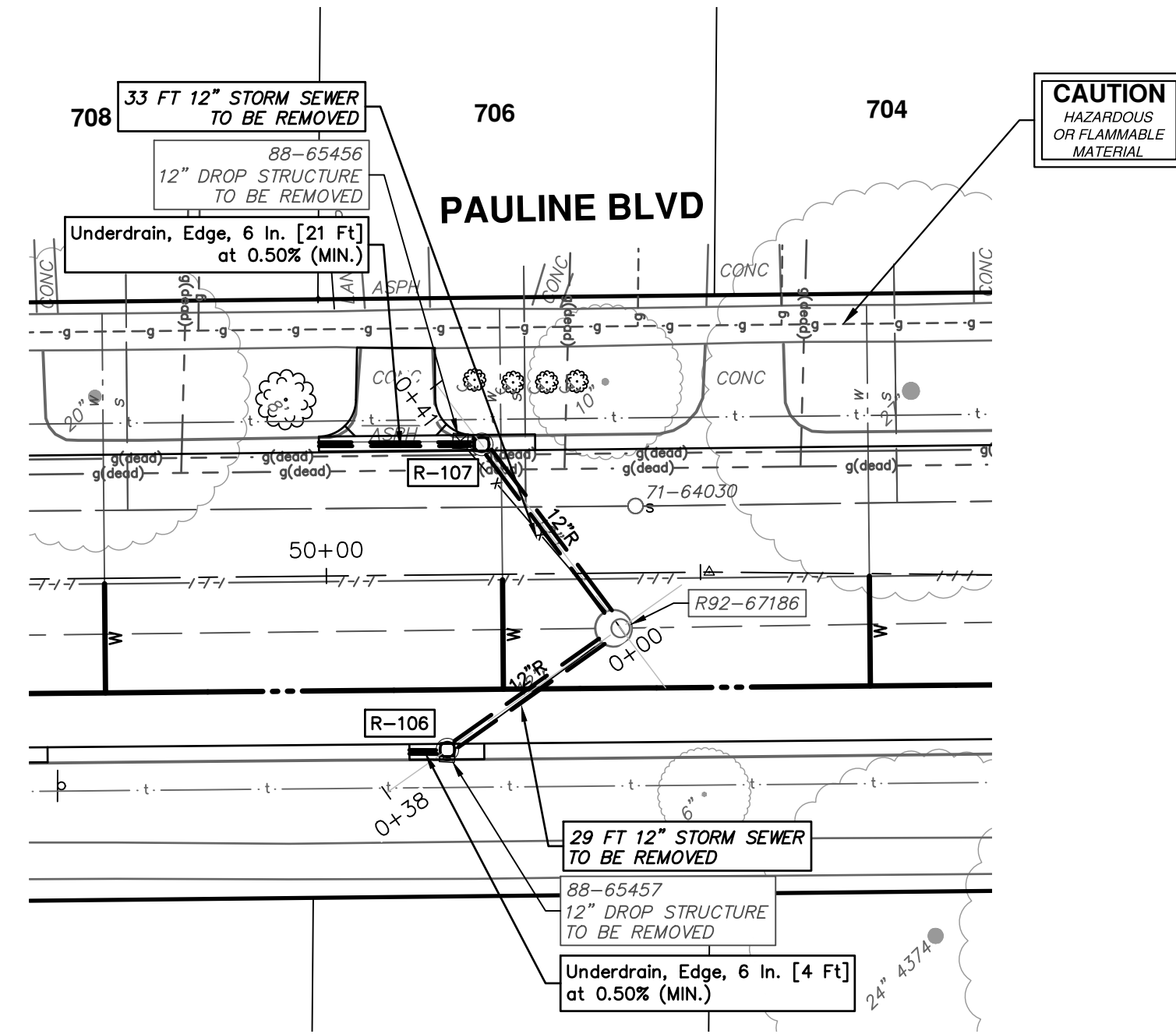


CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PAULINE WATER MAIN & RESURFACING
PROPOSED STORM PLAN & PROFILE
R100, R101, R102, R103, R104, R105, R123

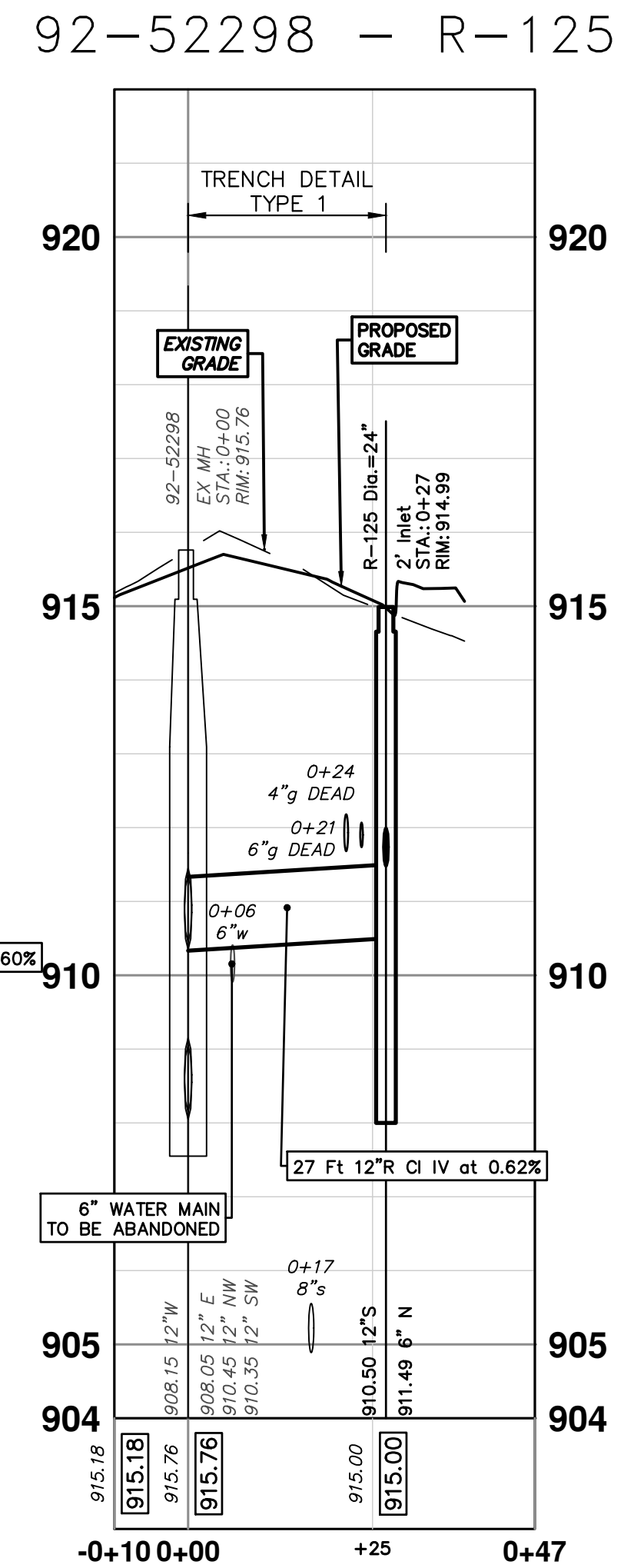
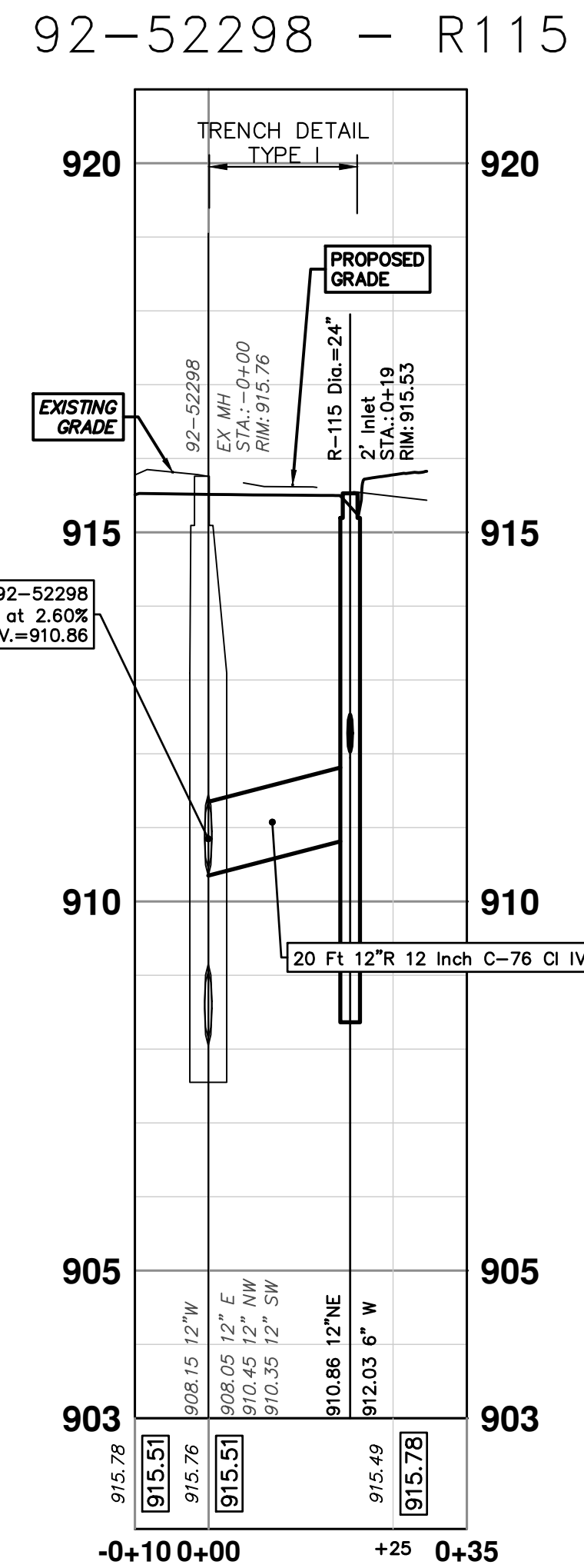
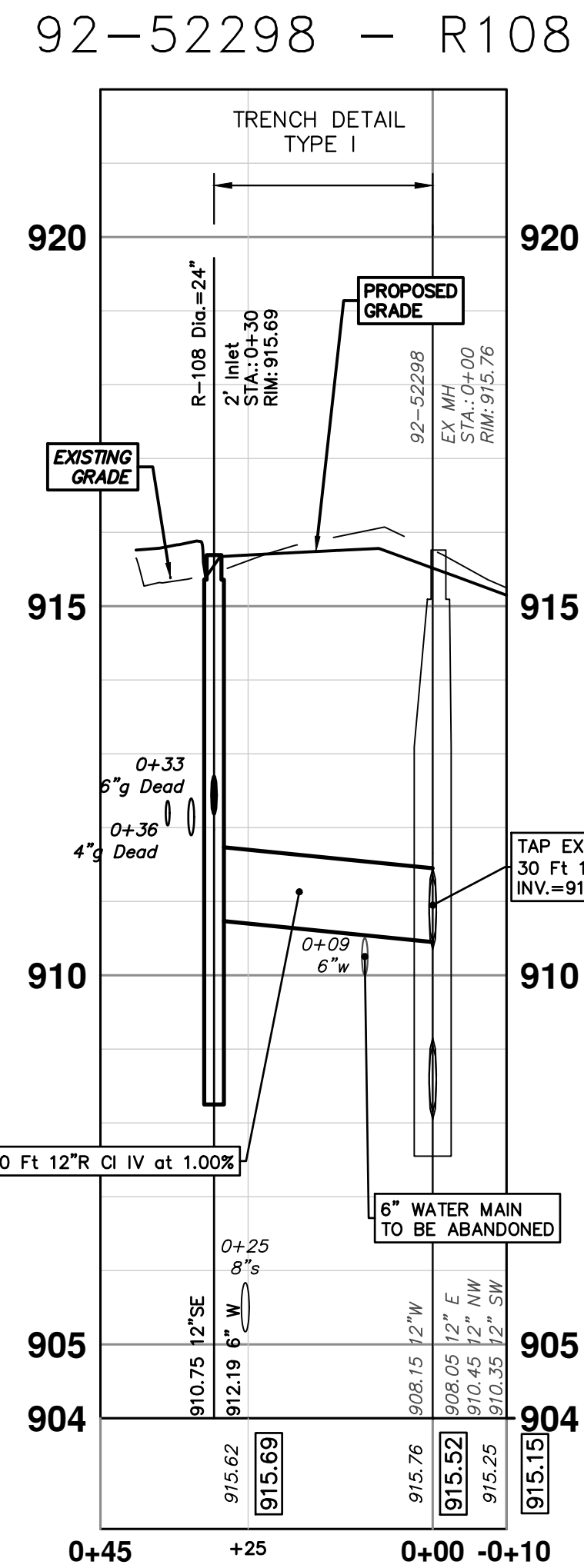
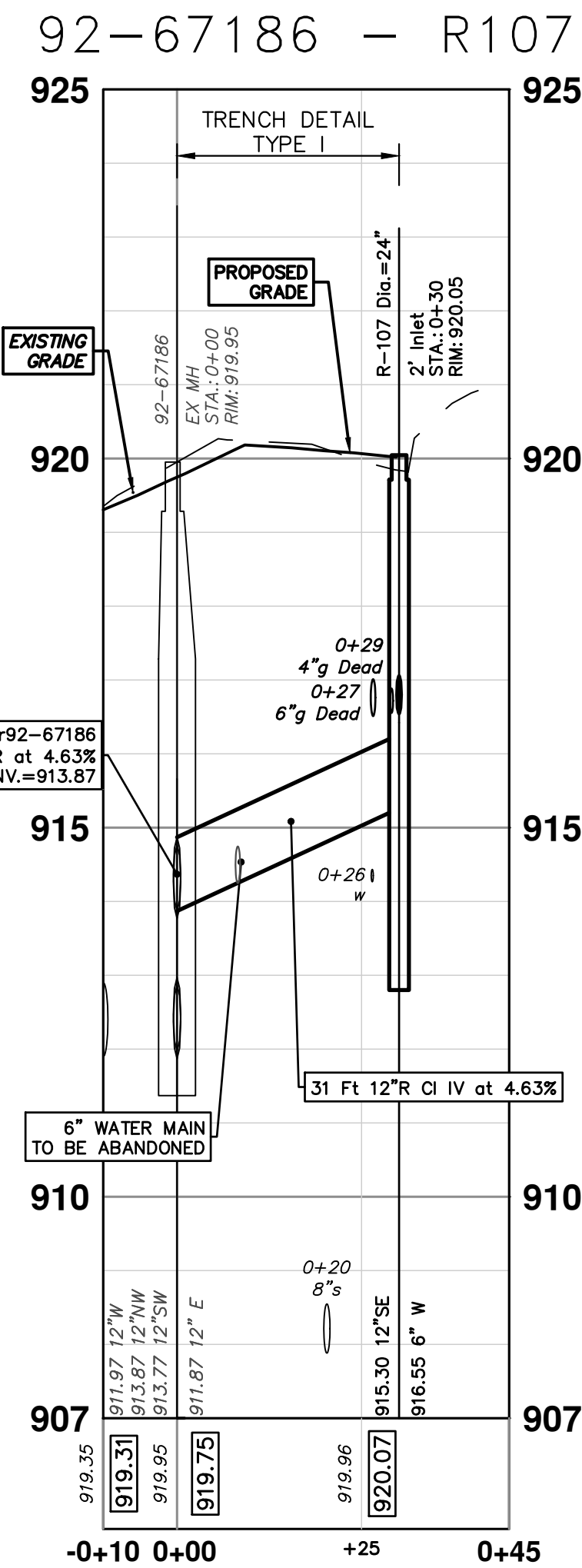
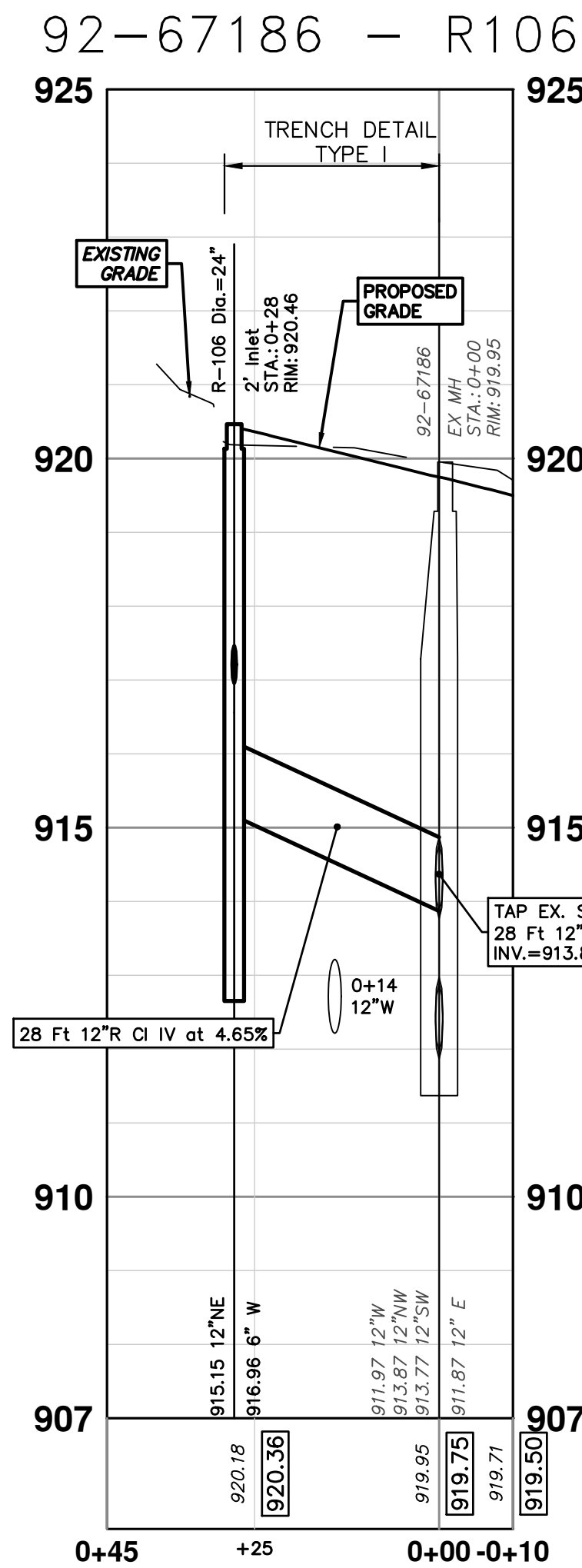
SCALE PLAN: 1" = 20'
PROFILE: 1" = 2'
DRAWING NO: 2023017-40
SHEET NO: 40 OF 58

R:\2023017 Pauline WM Plan Production\2023017Strm.dwg Dwg Created: 4-Nov-24 - _o2_standard bw.stb - Plot Date: 11-Dec-24

| STRUCTURE | DEPTH (Feet) | REMOVE |
|-----------|--------------|----------------------------------|
| 88-63469 | 2.75 | 12" Drop Structure TO BE REMOVED |
| 88-63470 | 3.95 | 2" Inlet TO BE REMOVED |
| 88-65456 | 3.30 | 12" Drop Structure TO BE REMOVED |
| 88-65457 | 3.69 | 12" Drop Structure TO BE REMOVED |



| STRUCTURE | UTILITY STATION | TYPE | RIM | INVERTS | DEPTH (Feet) | SUMP |
|-----------|-----------------|----------|--------|------------------------------|--------------|------|
| R-106 | 0+28 | 2" Inlet | 920.46 | 6" W 916.96 12" NE 915.15 | 7.31 | 2' |
| R-107 | 0+30 | 2" Inlet | 920.05 | 6" W 916.55 12" SE 915.30 | 6.75 | 2' |
| R-108 | 0+30 | 2" Inlet | 915.69 | 6" W 912.19 12" SE 910.75 | 6.94 | 2' |
| R-115 | 0+19 | 2" Inlet | 915.53 | 6" W 912.03 12" NE 910.86 | 6.67 | 2' |
| R-125 | 0+27 | 2" Inlet | 914.99 | 6" N 911.49 12" S 910.50 | 6.49 | 2' |



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| NO. | DATE | DESCRIPTION | BY | CHECKED |
|-----|----------|----------------------------|----|---------|
| 01 | 11-04-24 | MDOT GI SUBMITTAL COMMENTS | | |
| 00 | 8-12-24 | MDOT GI SUBMITTAL | | |

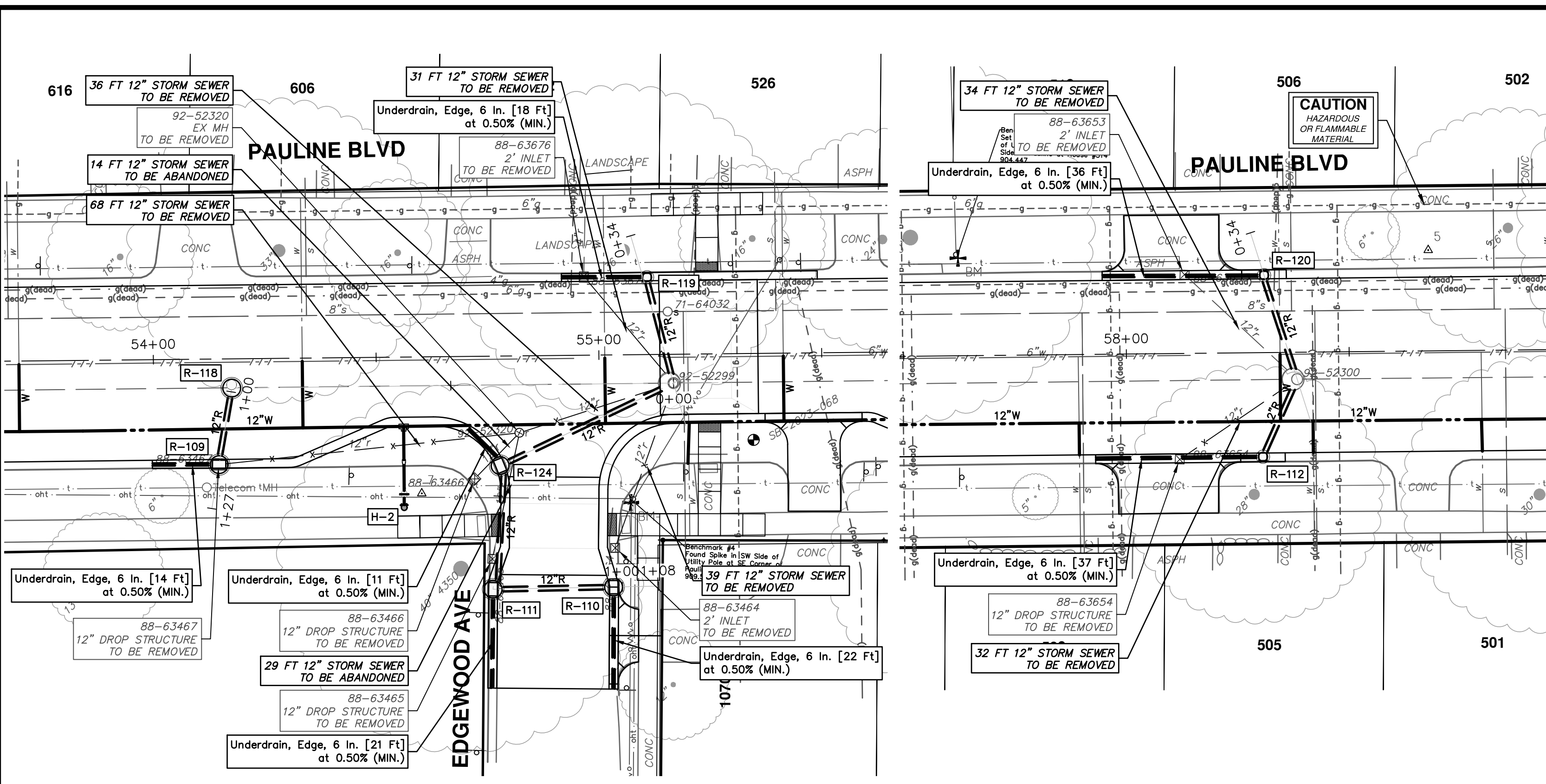
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PAULINE WATER MAIN & RESURFACING
PROPOSED STORM PLAN & PROFILE
R106, R107, R108, R115, R125

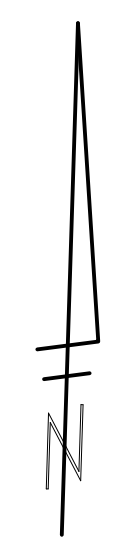
SCALE PLAN: 1" = 20'
PROFILE: 1" = 2'
DRAWING NO. 2023017-41

R:\2023017 Pauline WM Plan Production\2023017Stm.dwg Dwg Created: 4-Nov-24 - _o2 standard bw.stb - Plot Date: 11-Dec-24



| STRUCTURE | UTILITY STATION | TYPE | RIM | INVERTS | DEPTH (Feet) | SUMP |
|-----------|-----------------|------------------------|--------|---|--------------|------|
| R-109 | 1+16 | 4' High Capacity Inlet | 910.47 | 6" W 906.97 12" N 905.50 | 6.97 | 2' |
| R-110 | 0+97 | 4' High Capacity Inlet | 908.59 | 6" S 905.09 12" W 904.33 | 6.26 | 2' |
| R-111 | 0+72 | 4' High Capacity Inlet | 909.26 | 12" E 904.00 6" S 905.76 12" N 904.00 | 7.26 | 2' |
| R-112 | 0+18 | 2' Inlet | 902.96 | 6" W 899.46 12" N 898.55 | 6.41 | 2' |
| R-118 | 0+99 | 4' MH DOGHOUSE | 910.69 | 12" S 904.75 12" W 903.54 12" E 903.54 | 7.14 | 0' |
| R-119 | 0+24 | 2' Inlet | 907.60 | 6" W 904.10 12" S 904.00 | 5.60 | 2' |
| R-120 | 0+24 | 2' Inlet | 902.13 | 6" W 898.63 12" S 897.79 | 6.33 | 2' |
| R-124 | 0+42 | 4' High Capacity Inlet | 908.88 | 12" S 903.50 6" NW 905.38 12" NE 903.50 | 7.38 | 2' |

| STRUCTURE | DEPTH (Feet) | REMOVE |
|-----------|--------------|----------------------------------|
| 88-63653 | 3.04 | 2' Inlet TO BE REMOVED |
| 88-63654 | 3.96 | 12" Drop Structure TO BE REMOVED |
| 88-63676 | 3.78 | 2' Inlet TO BE REMOVED |
| 88-63464 | 3.57 | 2' Inlet TO BE REMOVED |
| 88-63466 | 2.73 | 12" Drop Structure TO BE REMOVED |
| 88-63465 | 3.06 | 12" Drop Structure TO BE REMOVED |
| 88-63467 | 4.34 | 12" Drop Structure TO BE REMOVED |
| 92-52320 | 4.95 | EX MH TO BE REMOVED |



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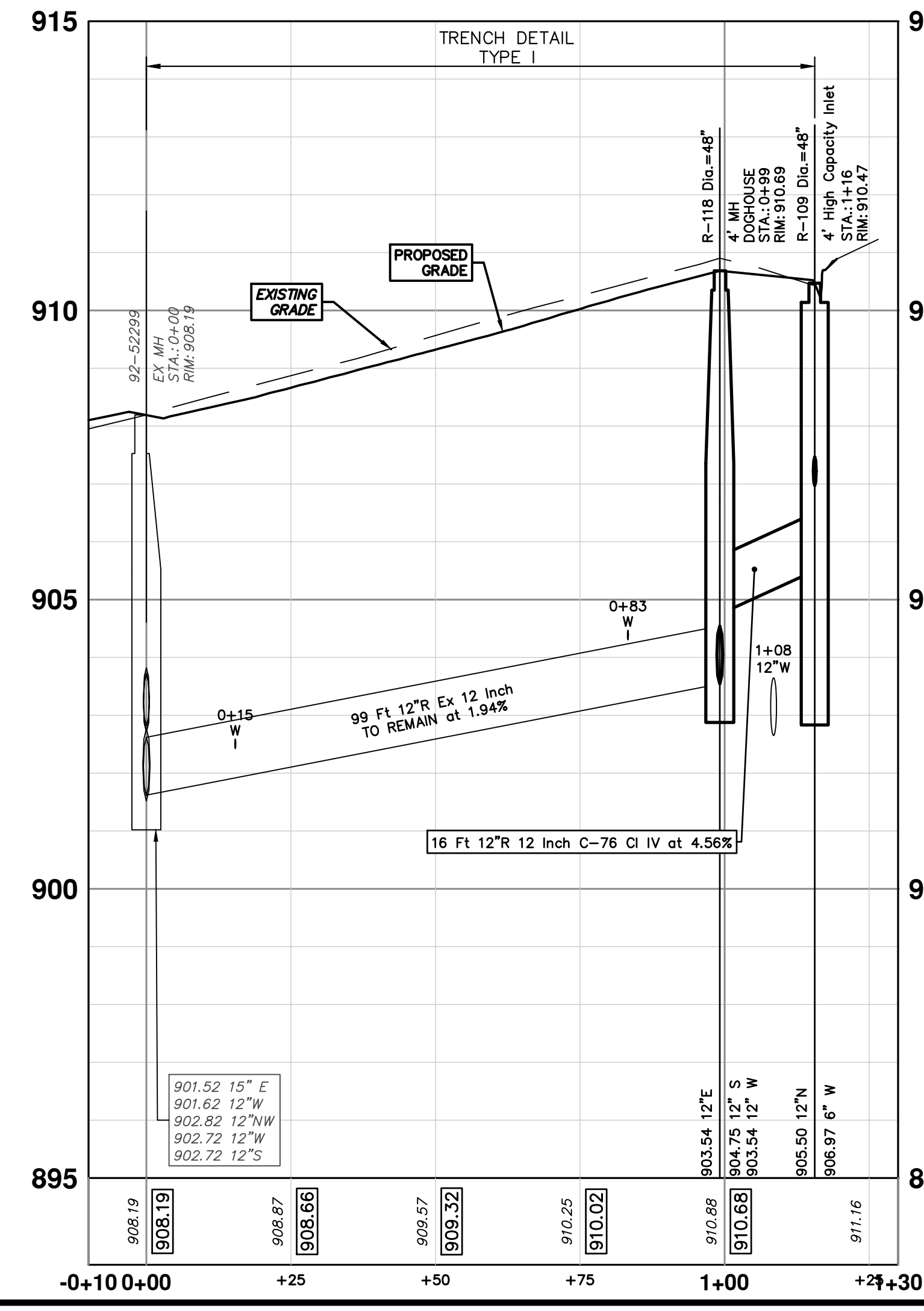
01 MDOT GI SUBMITTAL COMMENTS
00 MDOT GI SUBMITTAL COMMENTS

REV. DATE DRAWN CHECKED

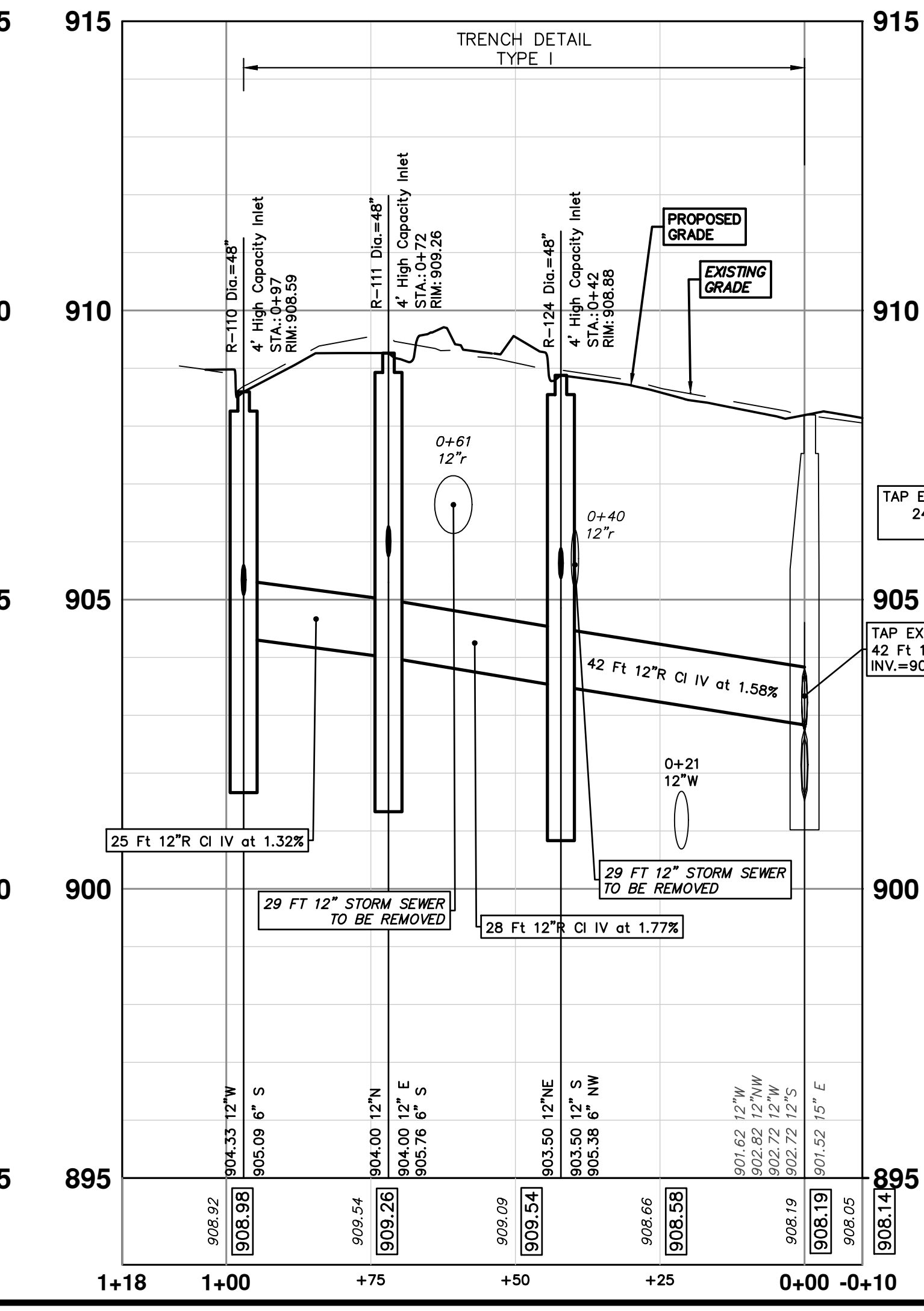
CITY OF ANN ARBOR
PUBLIC SERVICES
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PAULINE WATER MAIN & RESURFACING
PROPOSED STORM PLAN & PROFILE
R109, R110, R111, R112, R118, R119, R120, R124

PROFILE: 1" = 2'
SCALE PLAN: #####
DRAWING NO. 2023017-42
SHEET NO. 42 OF 58

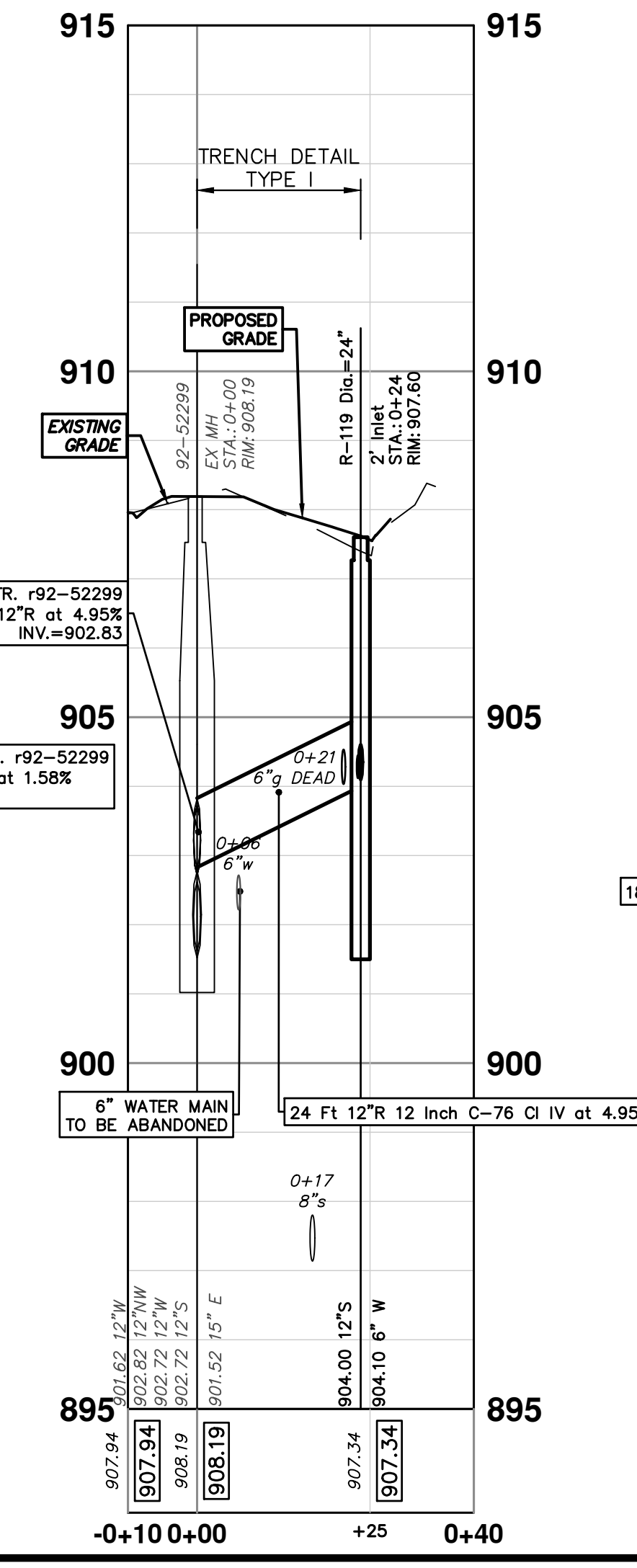
92-52299 - R109



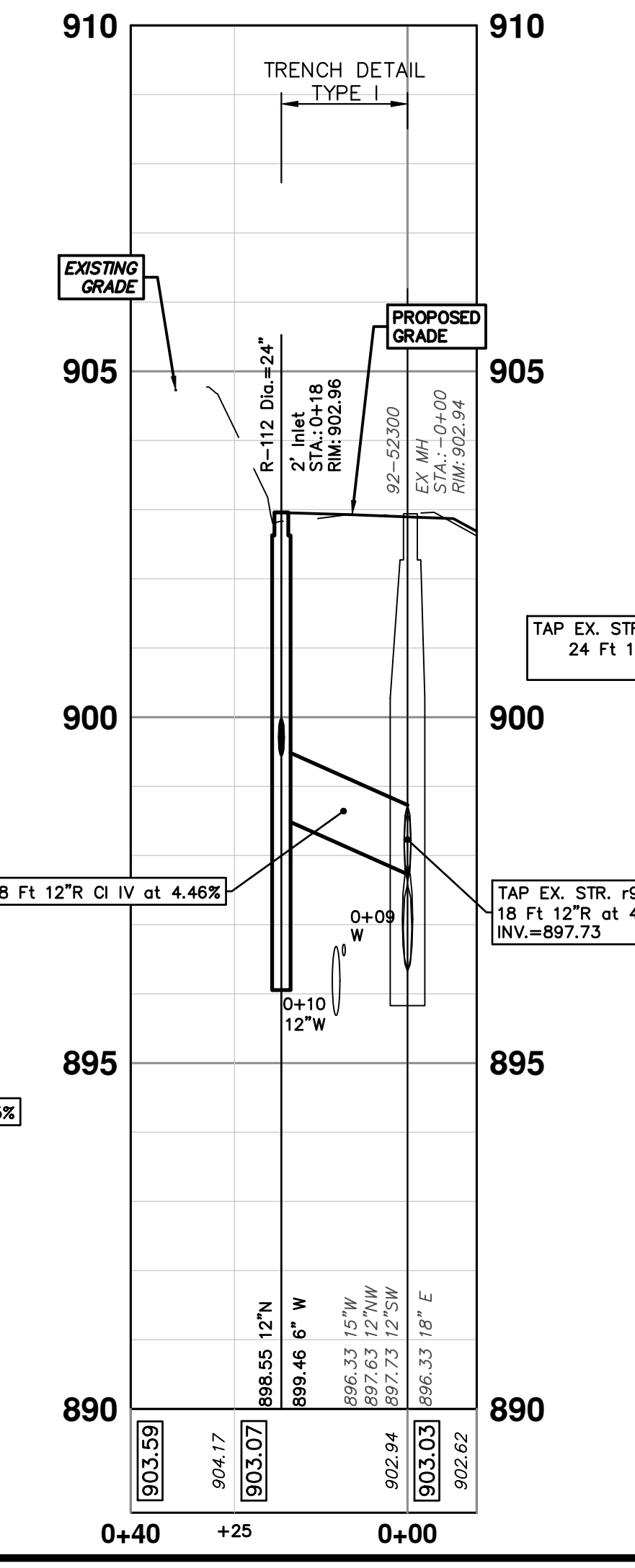
92-52299 - R110



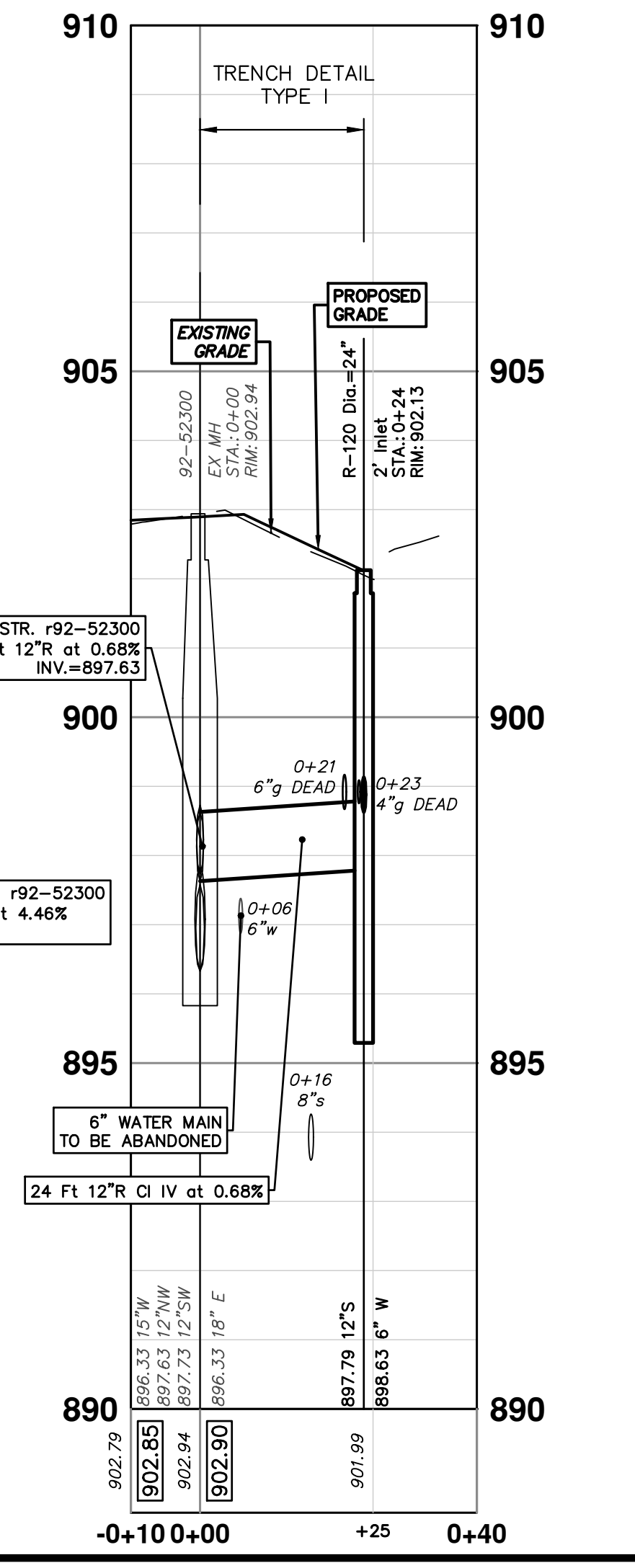
92-52299 - R119



92-52300 - R112



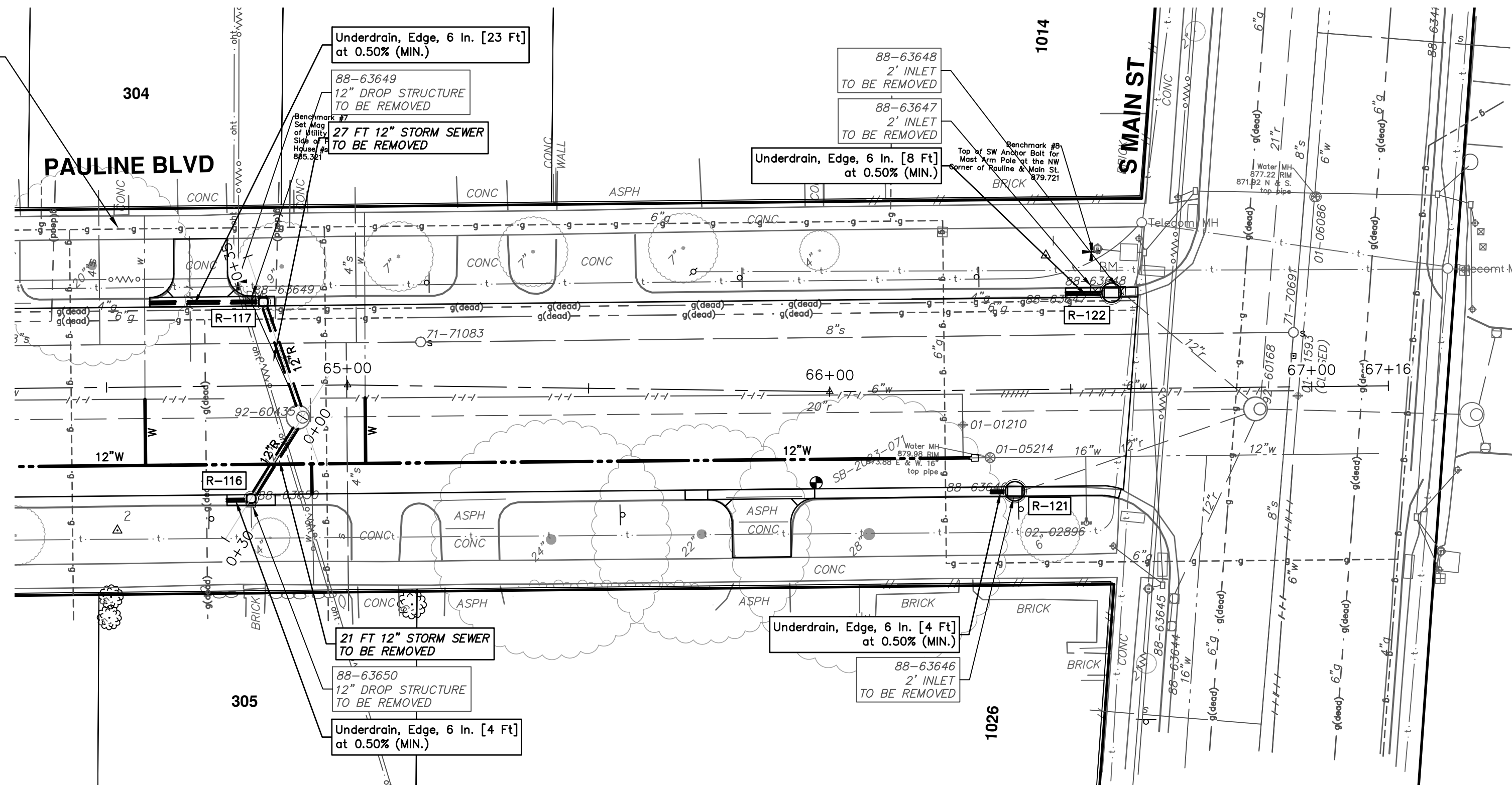
92-52300 - R120



EXISTING STORM SEWER STRUCTURE REMOVAL TABLE

| STRUCTURE | DEPTH (Feet) | REMOVE |
|-----------|--------------|----------------------------------|
| 88-63646 | 2.48 | 2' Inlet TO BE REMOVED |
| 88-63649 | 3.42 | 12" Drop Structure TO BE REMOVED |
| 88-63650 | 4.53 | 12" Drop Structure TO BE REMOVED |
| 88-63648 | 3.03 | 2' Inlet TO BE REMOVED |
| 88-63647 | 2.86 | 2' Inlet TO BE REMOVED |

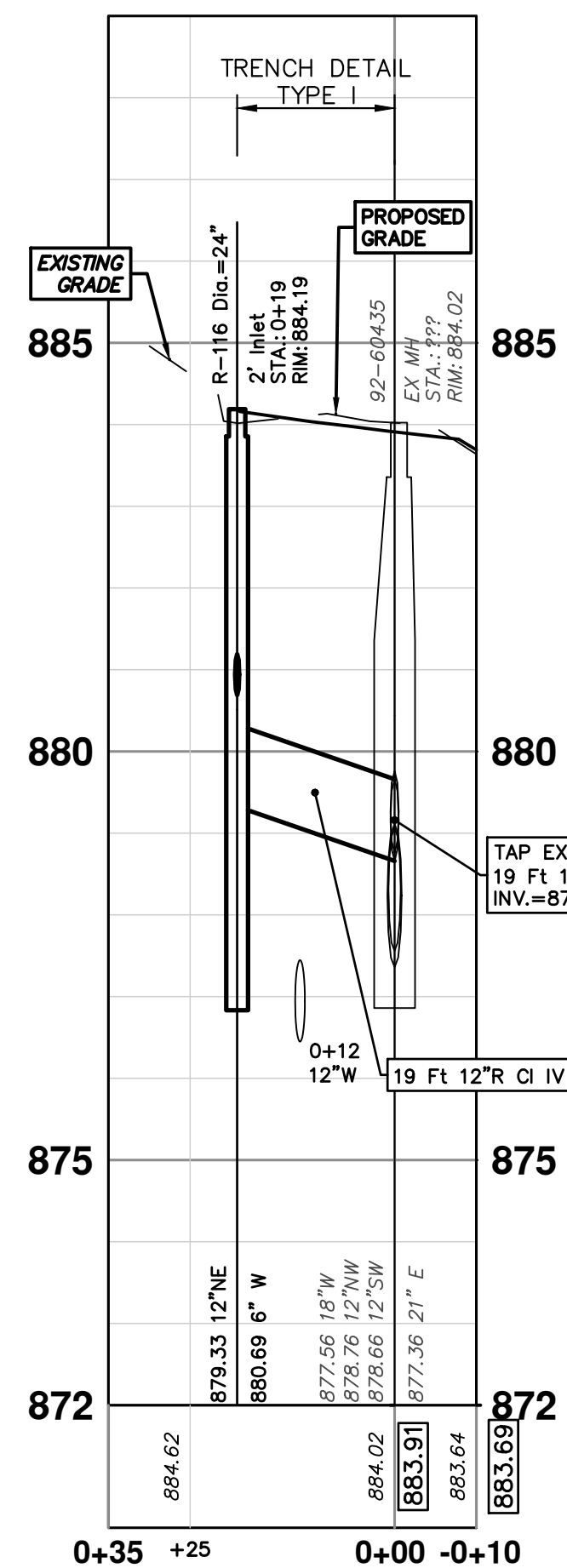
CAUTION
HAZARDOUS OR FLAMMABLE MATERIAL



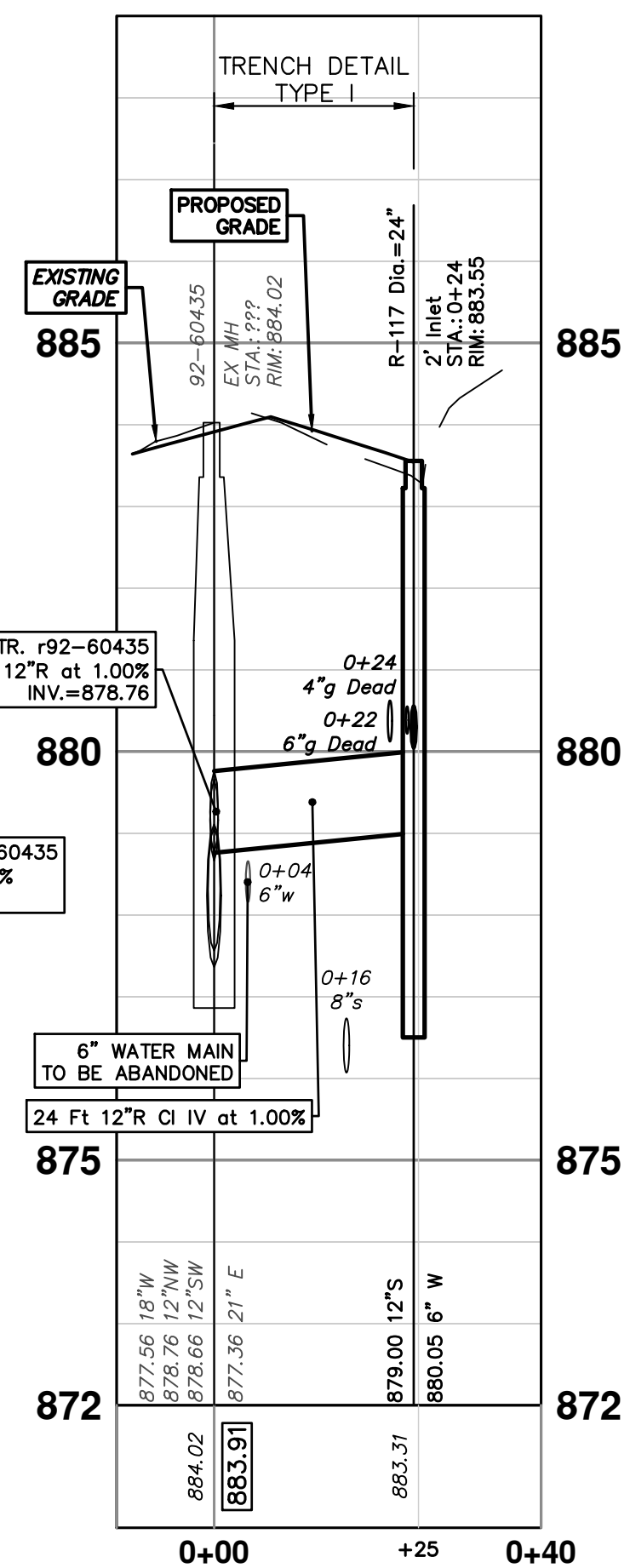
STORM SEWER STRUCTURE TABLE

| STRUCTURE | UTILITY STATION | TYPE | RIM | INVERTS | DEPTH (Feet) | SUMP |
|-----------|-----------------|------------------------|--------|------------------------------|--------------|------|
| R-116 | 0+19 | 2' Inlet | 884.19 | 6" W 880.69 12" NE 879.33 | 6.86 | 2' |
| R-117 | 0+24 | 2' Inlet | 883.55 | 6" W 880.05 12" S 879.00 | 6.55 | 2' |
| R-121 | 0+53 | 4' High Capacity Inlet | 880.39 | 6" W 876.52 12" E 877.24 | 5.87 | 2' |
| R-122 | 0+38 | 4' High Capacity Inlet | 878.17 | 6" W 875.50 12" SE 874.98 | 5.19 | 2' |

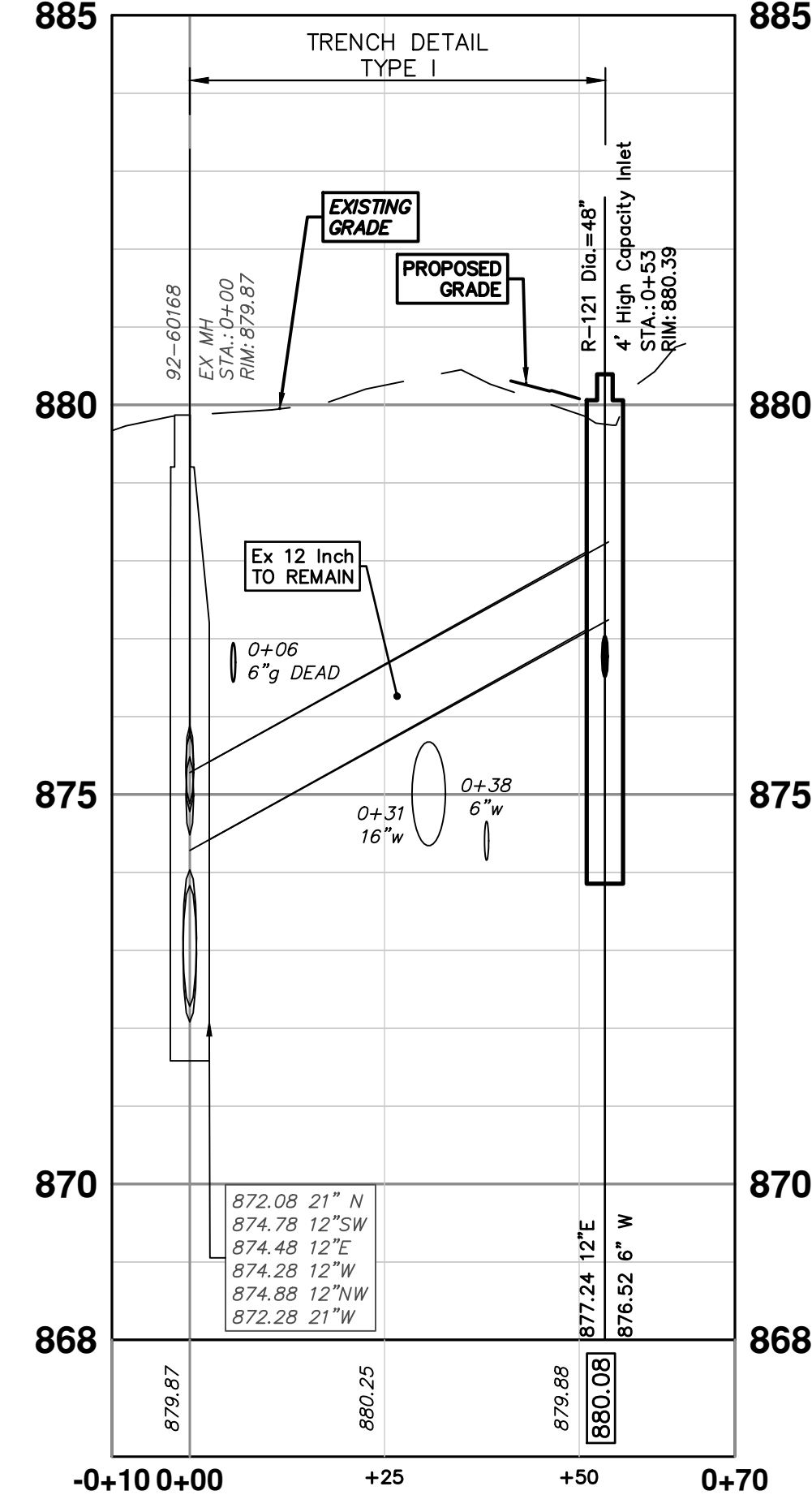
92-60435 - R116



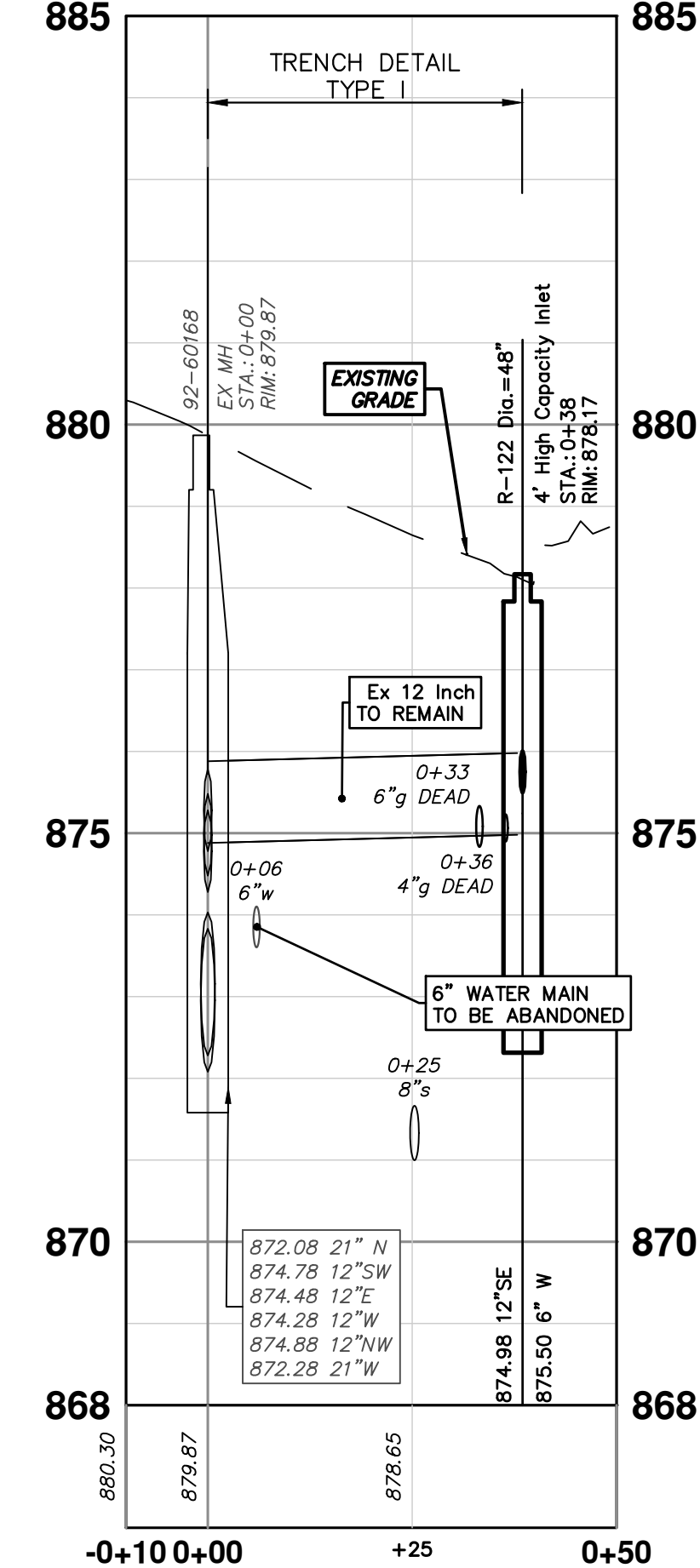
92-60435 - R117



92-60168 - R121



92-60168 - R122



Know what's below.
Call before you dig.

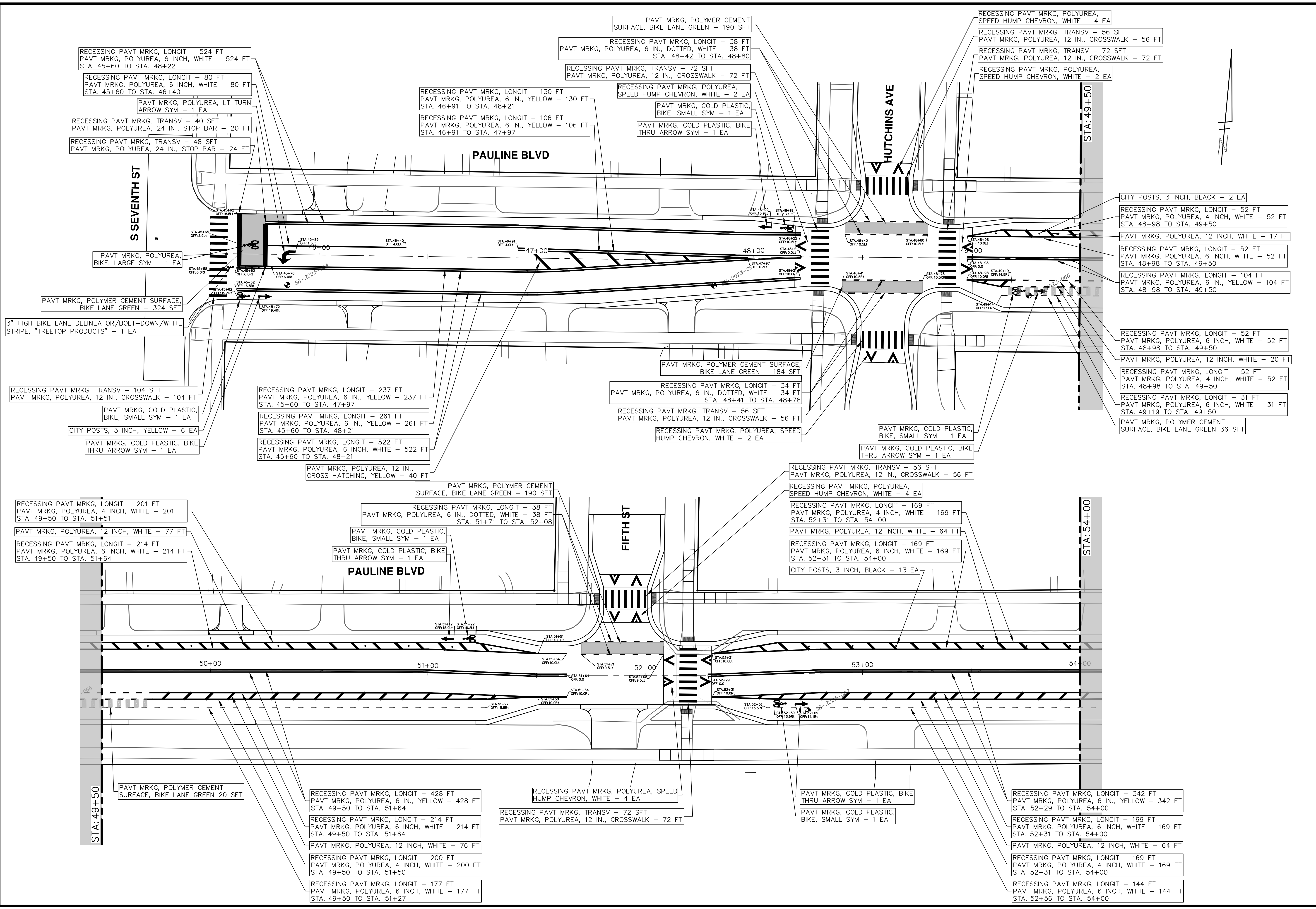
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PAULINE WATER MAIN & RESURFACING
PROPOSED STORM PLAN & PROFILE
R116, R117, R121, R122

SCALE PLAN: #####
PROFILE: 1" = 2'
DRAWING No. 2023017-44

R:\2023017 Pauline WM Plan Production\2023017Pmk.dwg Dwg Created: 8-Nov-24 - _o2_standard_bw.stb - Plot Date: 11-Dec-24



811
Know what's below.
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| REV | DATE | DESCRIPTION |
|-----|----------|----------------------------|
| 01 | 11-04-24 | MDOT GI SUBMITTAL COMMENTS |
| 00 | 8-12-24 | MDOT GI SUBMITTAL |

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PAVEMENT MARKINGS
STA. 45+00 - STA. 54+00

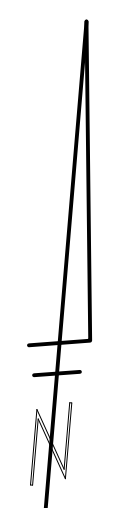
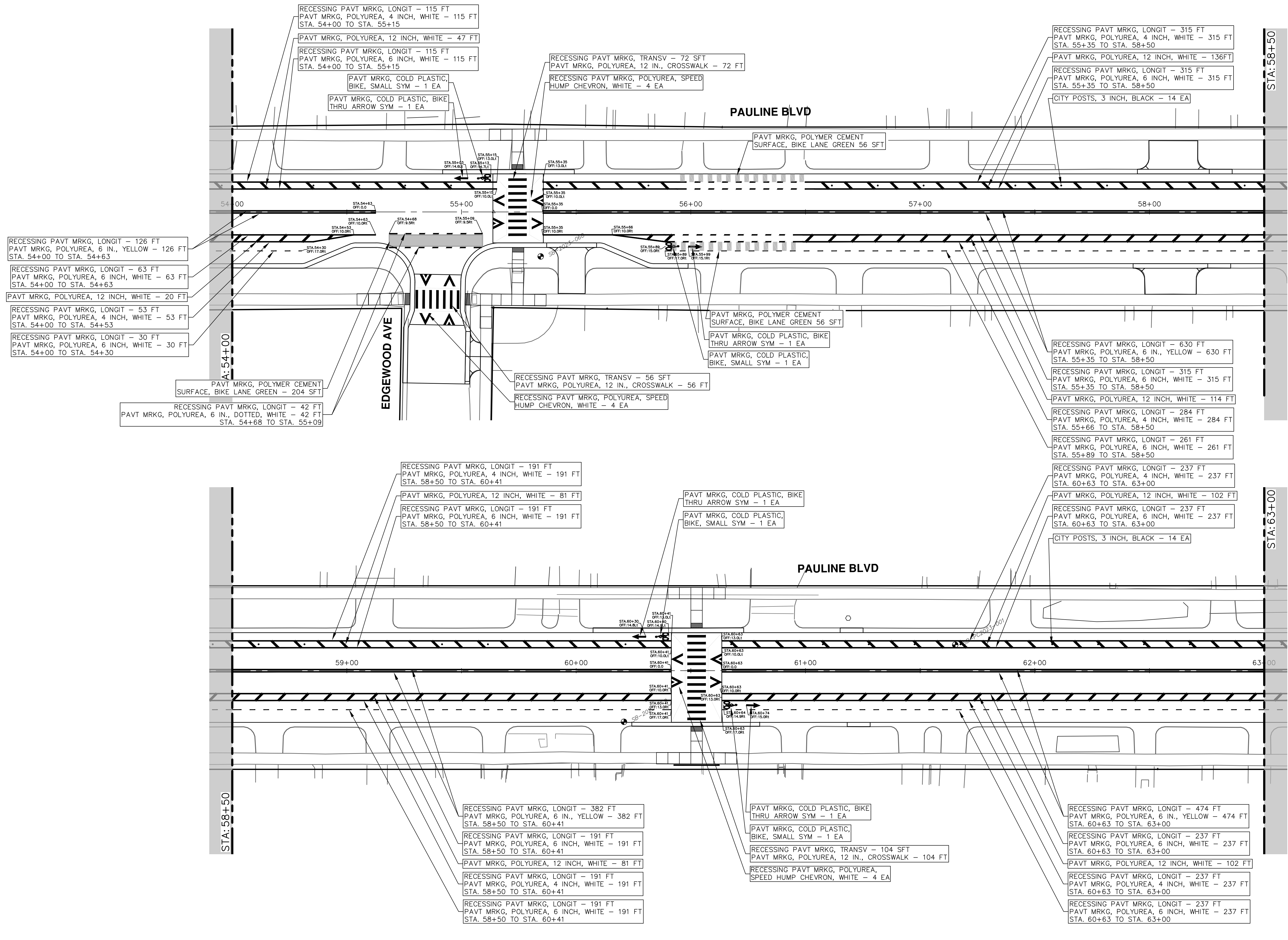
SCALE: 1" = 20'

DRAWING No.
2023017-53

SHEET No.

53 OF 58

R:\2023017 Pauline WM Plan Production\2023017Pmk.dwg Dwg Created: 8-Nov-24 - _o2 standard bw.stb - Plot Date: 11-Dec-24



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PAULINE WATER MAIN & RESURFACING

PAVEMENT MARKINGS

STA. 54+00 - STA. 63+00

SCALE: 1" = 20'

DRAWING No. 2023017-54

SHEET No. 54 OF 58

811

Know what's below. Call before you dig.

| REV. | DATE | DRAWN | CHECKED |
|------|----------|-------|---------|
| 01 | 11-04-24 | A2D | NB |
| 00 | 8-12-24 | A2D | NB |

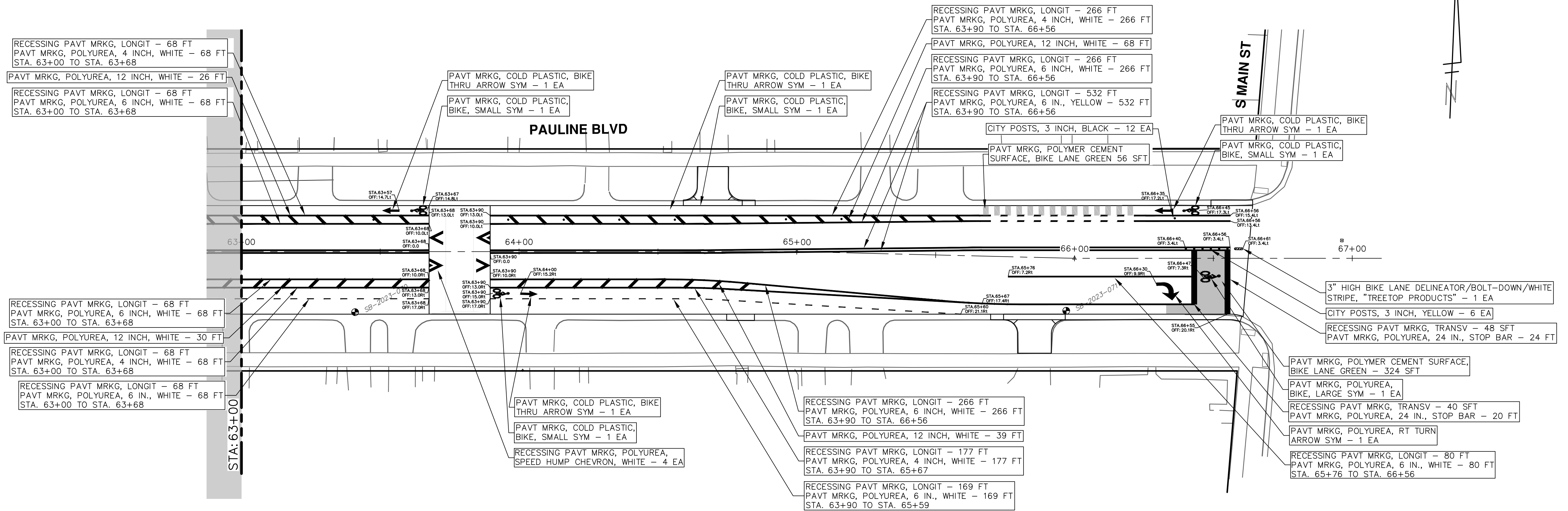
MDOT GI SUBMITTAL COMMENTS

MDOT GI SUBMITTAL

DESCRIPTION

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| NO. | DATE | DESCRIPTION | CHECKED |
|-----|----------|----------------------------|---------|
| 01 | 11-04-24 | MDOT GI SUBMITTAL COMMENTS | NB |
| 00 | 8-12-24 | MDOT GI SUBMITTAL | NB |

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PAVEMENT MARKINGS

STA. 63+00 - STA. 67+00

SCALE: 1" = 20'

DRAWING No. 2023017-55

SHEET No. 55 OF 58