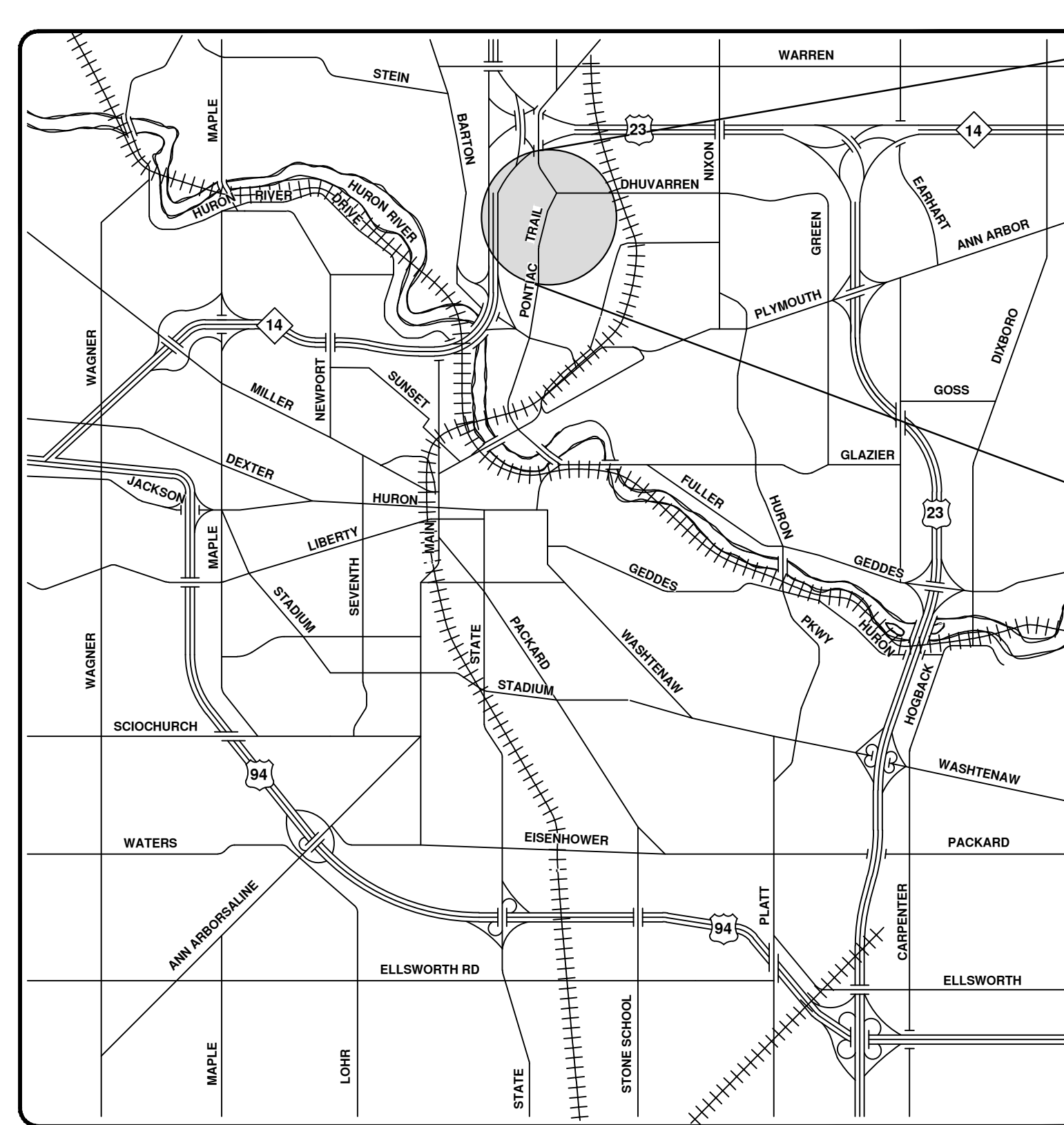
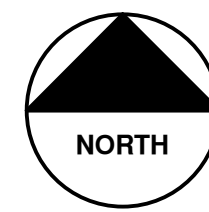




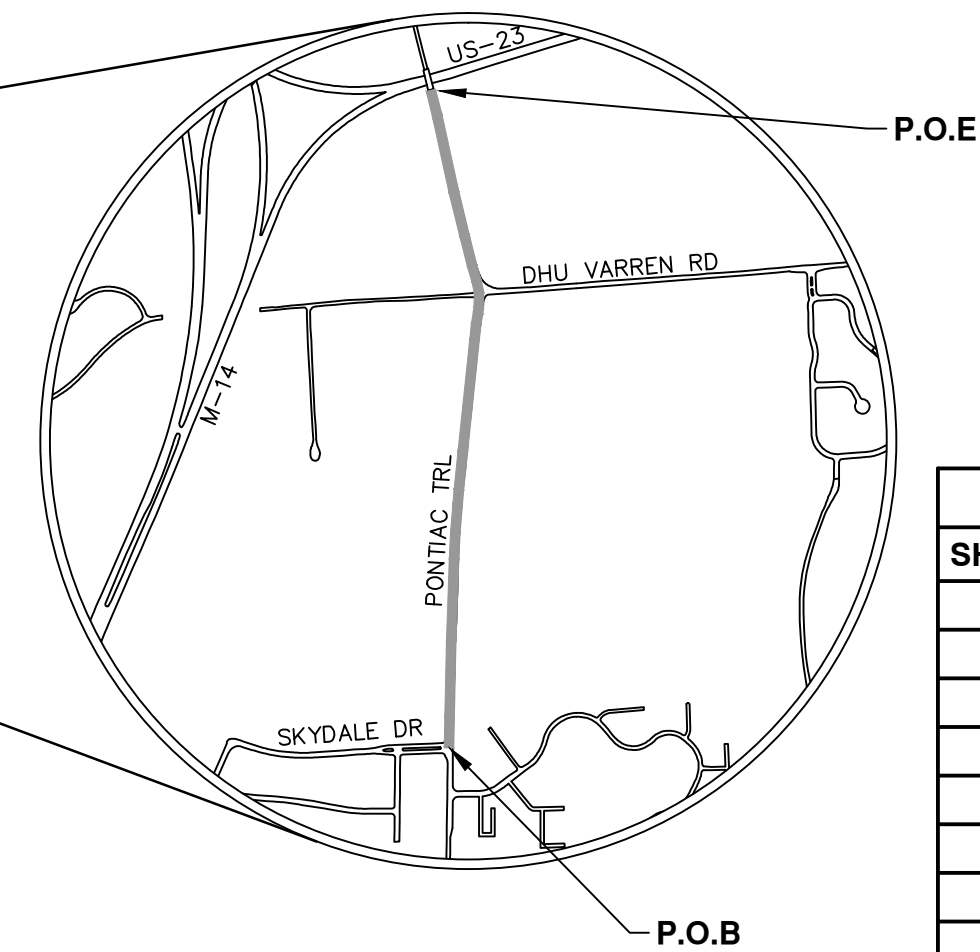
CITY OF ANN ARBOR PROJECT MANAGEMENT

PONTIAC TRAIL IMPROVEMENTS

BID No. 4324, FILE No. 2012028
APRIL 2014



VICINITY MAP



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NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, 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 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.

PROJECT MANAGEMENT SERVICE UNIT

Nicholas Hutchinson
NICHOLAS HUTCHINSON, P.E. - MI LICENSE No. 46789
CITY ENGINEER

03/18/2014
DATE

ENGINEER'S SEAL

PREPARED UNDER THE SUPERVISION OF

Anne M. Warrow
ANNE WARROW, P.E. - MI LICENSE No. 48239
PROJECT MANAGER

03/18/2014
DATE

ENGINEER'S SEAL

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

PROJECT DESCRIPTION: 1.0 MI. OF ASPHALT REMOVAL AND HOT MIX ASPHALT OVERLAY, REPLACEMENT OF DRAINAGE STRUCTURES, AND SOME CONCRETE CURB & GUTTER AND SIDEWALK RAMP.

CONTRACT FOR

DRAWING No. 2012028 - 01

SHEET No. 01 TO 102

REV.	DATE	DESCRIPTION	BY	CHECKED
01	03-18-2014	ADD DESCRIPTION AN MAKE LAYER PLOT	BRM/OC	MRN
00		BID SUBMITTAL		

CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR MI 48106-1410
www.a2gov.org

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© PONTIAC TRAIL IMPROVEMENTS; FILE No. 2012028

EXISTING LEGEND

- ⊕ FIRE HYDRANT
- | GATE VALVE IN BOX
- ⊗ GATE VALVE IN WELL
- ⊙ STOP BOX
- ⊠ WATER VAULT
- ⊙ WELL
- CATCH BASIN (SQ)
- ⊙ CATCH BASIN (RD)
- ⊙ STORM MANHOLE
- NON-CURB CATCH BASIN (SQ)
- ⊙ SANITARY MANHOLE
- ⊙ CLEAN-OUT
- POST
- ⊕ PEDESTRIAN SIGNAL
- ⊕ SIGN
- HAND HOLE
- ⊗ ORNAMENTAL LIGHT
- ⊗ FLOOD LIGHT
- ⊙ UNKNOWN MANHOLE
- ⊙ TELEPHONE MANHOLE
- ⊗ TELEPHONE RISER
- ⊙ GAS VALVE
- ⊙ GAS VENT
- ⊗ GAS BOX
- ⊗ ELECTRICAL RISER
- ⊗ TRANSFORMER
- ⊕ UTILITY POLE
- LAMP POLE
- GUY POLE
- GUY ANCHOR
- GUY POLE
- ⊙ MONITORING WELL
- ⊠ MAILBOX
- ⊙ SOIL BORING
- △ TRAVERSE POINT
- ⊕ BENCH MARK
- IRON PIPE
- ⊠ MON BOX

- W WATER MAIN
- R STORM SEWER
- S SANITARY SEWER
- GAS MAIN
- ELECTRICAL OVERHEAD
- ELECTRICAL UNDERGROUND
- BOUNDARY
- BUILDING
- CENTERLINE OF DITCH
- CENTERLINE/CROWN OF ROAD
- EDGE OF WATER
- FENCE
- GRAVEL
- STONE WALL
- R.O.W.
- TREE LINE
- WETLAND

- TREE (DECIDUOUS)
- TREE (CONIFEROUS)
- ⊙ STUMP
- SHRUB (DECIDUOUS)

PROPOSED LEGEND

- ⊕ HYDRANT (PLAN)
- ⊗ WATER GATE WELL
- ▼ REDUCER
- | WATER GATE VALVE
- ⊙ WATER STOP BOX
- ⊠ WATER VAULT
- INLET
- DOUBLE INLET
- ⊙ INLET JUNCTION CHAMBER
- ROUND CATCH BASIN
- ⊙ STORM MANHOLE
- DRAIN ARROW
- ▽ FLARED END SECTION
- SANITARY MANHOLE
- CLEAN-OUT
- BARREL
- SIGN
- PUSH BUTTON

- W WATER MAIN
- R STORM SEWER
- S SANITARY SEWER
- CENTERLINE OF DITCH
- CENTERLINE OF ROAD
- FENCE
- SILT FENCE
- LOT/UNIT
- STAGE LINE
- CURB
- TEMPORARY GRADING PERMIT
- WATER EASEMENT
- STORM EASEMENT
- SANITARY EASEMENT
- R.O.W.
- LIMITS OF CONSTRUCTION
- STONE WALL

- DETECTABLE WARNING SURFACE
- ASPHALT
- CONCRETE
- SIDEWALK
- REMOVE TREE (DECIDUOUS)
- REMOVE TREE (CONIFEROUS)

PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
"NO PARKING" SIGNS PERMIT	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
GRADING/SOIL EROSION & SEDIMENTATION CONTROL PERMIT	CITY OF ANN ARBOR CUSTOMER SERVICE
RIGHT-OF-WAY PERMIT	CITY OF ANN ARBOR CUSTOMER SERVICE

* NO COST TO CONTRACTOR

PERMITS REQUIRED TO BE OBTAINED BY THE CITY OF ANN ARBOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

PERMIT	ISSUING AUTHORITY
M.D.E.Q. WATER MAIN CONSTRUCTION PERMIT	MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
M.D.E.Q. SANITARY SEWER CONSTRUCTION PERMIT	MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

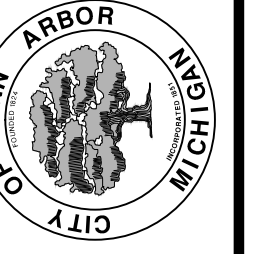
CONTACT INFORMATION

PUBLIC UTILITIES	OWNER	CONTACT
WATER		DAN WOODEN (734) 794-6350
SANITARY	CITY OF ANN ARBOR FIELD OPERATIONS SERVICE UNIT W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD ANN ARBOR, MI 48108	MARK COZART (734) 794-6350
STORM		KEVIN ERNST (734) 794-6350
FORESTRY		STEVEN GOEBEL (734) 794-6350
SIGNS SIGNALS STREET LIGHTS		CHUCK FOJTIK (734) 794-6361
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 17150 ALLEN ROAD MELVINDALE, MI 48122	JAY WILLIAMS (313) 380-7303
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	CLAY COMBEE (734) 397-4112
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SUTHERLAND (313) 999-8300
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	(734) 996-2135
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-6016



DATE	BY	DESCRIPTION
03-18-2014	RM/ili	DRAWN
		CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR, MI 48106
734.794.4410
www.a2gov.org



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS**

SCALE: NTS
DRAWING No. 2012028-02
SHEET No. 02 OF 102

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CONSTRUCTION SEQUENCE:

The contractor shall review the traffic maintenance plans of the contract documents and note that each of the five construction stages are provided to maintain local northbound traffic. Plans indicate leaving 10 feet of existing pavement for access road for utility installation, final removal limits of pavement as directed by engineer. The driveways are to be maintained at all times. During crossing of drives with utilities and road building, residents must be notified at least a day in advance so vehicles can be moved prior to the closure. Drives are to be temporarily put back as soon as possible, and opened for resident use at the end of each day. The contractor may choose to adjust the limits or sequencing of construction in order to complete the work more efficiently. However, changes to the recommended stages and phases must be approved in writing by the engineer prior to construction and must assure that access is maintained as described above.

STAGE 1

Stage 1, shall consist of placing temporary pavement along the west side of pontiac trail in accordance with the plans.

- 1. Installation of traffic control devices, and maintenance of traffic plan for northbound and southbound pontiac trail detour and stage 1 maintenance of traffic plan. Northbound local traffic is to be maintained on the east side of pontiac trail. Installation of portable, changeable message signs with messages as directed by the engineer ten days prior to construction.
2. Installation of soil erosion control devices along the west half of pontiac trail.
3. Abandon existing hydrant at station 38+50 and install a new hydrant approximately 7 feet west from existing hydrant.
4. Clearing and removal of trees along the west side of pontiac trail shall be completed within the grading limits shown on the plans.
5. Grading in preparation of temporary aggregate base shall be completed in accordance with the plans.
6. Relocation of mail boxes
7. temporary pavement is to be placed in accordance with the plans along the west side of pontiac trail.

STAGE 2, PHASE I AND PHASE II

Stage 2 shall consist of construction the sanitary sewer on the east side of pontiac trail.

- 8. Installation of traffic control devices, and maintenance of traffic stage 2 maintenance of traffic plan. Northbound local traffic is to be maintained on the west half of pontiac trail.
9. Installation of soil erosion control devices along the east half of pontiac trail.
10. Clearing and removal of trees along the east side of pontiac trail shall be completed within the grading limits shown on the plans.
11. Phase i pavement removal shall be completed.
12. Installation of sanitary sewer with in phase i shall be completed in accordance with plans and city of ann arbor standard specifications.
13. Sanitary sewer constructed in phase i shall be tested and televised in accordance with the psdss.
14. Construct the east half of pontiac trail within phase i. This work includes, but is not limited to, installation of the infiltration trench, 3 inch conduit, communication handholds, underdrain, storm sewer, and sidewalk. Access to all side streets and driveways shall be maintained at all times. The contractor is to coordinate construction in front of driveways with affected property owners.
15. Phase ii pavement removal shall be completed.
16. Installation of sanitary sewer with in phase ii shall be completed in accordance with plans.
17. Sanitary sewer constructed in phase ii shall be tested and televised in accordance with the city of ann arbor standard specification.

STAGE 3

Stage 3 shall consist of construction the road cross section on the east half of pontiac trail.

- 1. Construct road cross section for east half of pontiac trail.
2. Construct the east half of pontiac trail within phase ii. This work includes, but is not limited to, installation of the infiltration trench, 3 inch conduit, communication handholds, underdrain, storm sewer, and sidewalk. Access to all side streets and driveways shall be maintained at all times. The contractor is to coordinate construction in front of driveways with

affected property owners.

- 3. Video taping of the newly constructed storm and sanitary sewer and review by engineer for approval. This may be performed after portions of the sand and aggregate base are placed, but the sewer must be accepted by the engineer prior to paving.
4. Placement of sand subbase and aggregate base.
5. The contractor shall place aggregate base course to the limits as shown on the plans. The contractor may elect to prepare and seek the engineer's approval of only that portion of the aggregate base course needed to construct the concrete curb and gutter and drive approaches. The contractor shall then set the forms for the concrete curb and gutter and/or drive approaches. The engineer will require 24 hours notice and, after all the forms have been set, 24 hours to check the forms. Should the forms need corrections, additional time to recheck the forms may be required by the engineer. Following the acceptance of the aggregate base grade and curb and gutter forms, structure adjustments (within the proposed curb line) must be checked and approved by the engineer.
6. The contractor shall then place all needed concrete curb and gutter and drive approaches in the along the east half of pontiac trail. The contractor shall then finalize the preparation of the remaining aggregate base course and request the engineer's approval of the aggregate base course. The engineer will require 24 hours notice and, after the entire aggregate base to be paved is graded, 24 hours to check the aggregate base grade. Should the aggregate base require re-grading, the engineer may require an additional 24 hours to recheck the grades. After the final grading of the aggregate base, no unnecessary construction equipment will be allowed on the grade. Any grade damaged prior to paving will be repaired at the contractor's sole expense. All time requirements exclude sundays and holidays. There will be no exceptions to these time requirements.
7. Construction of concrete curb and gutter in bituminous pavement areas. The concrete curb and gutter shall be allowed to cure a minimum of three (3) days prior to backfilling behind it or fine grading the aggregate base.
8. Topsoil, seed, and install mulch blankets at all disturbed areas in stage 3.
9. Construction of bituminous base and leveling courses. Provide the needed traffic control devices to perform this work and maintain traffic as approved by the engineer.

STAGE 4

Stage 4 shall consist of installation of new water main along the west side of pontiac trail. Exploratory excavation at proposed connection to existing water main shall be completed approximately 10 days before work on the new water main is scheduled to begin.

- 1. Continue to maintain previously installed traffic control devices, and maintenance of traffic plan for northbound and southbound pontiac trail detour. Northbound local traffic is to be maintained on the east side of pontiac trail. Installation of soil erosion control devices.
2. Remove hma along the west side of pontiac trail.
3. Install new 8 inch water main.
4. With passing pressure test on new water main, schedule and make connection to existing 16x16x8 tee.
5. Excavate and complete the part width installation of sanitary sewer leads.
6. Test water main per city detailed specification for water main testing.
7. Once bacteriological samples have passed, schedule and excavate for new water services in accordance with the plans.

STAGE 5

Stage 5 consist of constructing the road cross section for the west half of pontiac trail, placing the final wearing course over both sides of Pontiac and final restoration.

- 1. Construct road cross section for the west half of pontiac trail.
2. Construct the west half of pontiac trail. This work includes, but is not limited to, installation of the infiltration trench, and underdrain. Access to all side streets and driveways shall be maintained at all times. The contractor is to coordinate construction in front of driveways with affected property owners.
3. Placement of sand subbase and aggregate base.
4. The contractor shall place aggregate base course to the limits as shown on the plans. The contractor may elect to prepare and seek the engineer's approval of only that portion of the aggregate base course needed

to construct the concrete curb and gutter and drive approaches. The contractor shall then set the forms for the concrete curb and gutter and/or drive approaches. The engineer will require 24 hours notice and, after all the forms have been set, 24 hours to check the forms. Should the forms need corrections, additional time to recheck the forms may be required by the engineer. Following the acceptance of the aggregate base grade and curb and gutter forms, structure adjustments (within the proposed curb line) must be checked and approved by the engineer.

- 5. The contractor shall then place all needed concrete curb and gutter and drive approaches in the along the west half of pontiac trail. The contractor shall then finalize the preparation of the remaining aggregate base course and request the engineer's approval of the aggregate base course. The engineer will require 24 hours notice and, after the entire aggregate base to be paved is graded, 24 hours to check the aggregate base grade. Should the aggregate base require re-grading, the engineer may require an additional 24 hours to recheck the grades. After the final grading of the aggregate base, no unnecessary construction equipment will be allowed on the grade. Any grade damaged prior to paving will be repaired at the contractor's sole expense. All time requirements exclude sundays and holidays. There will be no exceptions to these time requirements.
6. Construction of concrete curb and gutter in bituminous pavement areas. The concrete curb and gutter shall be allowed to cure a minimum of three (3) days prior to backfilling behind it or fine grading the aggregate base.
7. Construction of bituminous base and leveling courses. Trim the longitudinal joint of pontiac trail as required by other contract detailed specifications. Provide the needed traffic control devices to perform this work and maintain traffic as approved by the engineer.
8. Topsoil, seed, and install mulch blankets at all disturbed areas in stage 5.
9. Adjust structures in the road in stage 3 and stage 5 to finish grade, while maintaining one lane of traffic .
10. Schedule and pave wearing course for entire project stage 3 and 5. Trim the longitudinal joints in accordance with the project detailed specifications.
11. Place permanent pavement markings
12. Remove soil erosion control and construction signage.
13. Open road to normal traffic.

SOIL EROSION CONTROL NOTES:

GENERAL:

- 1. The contractor shall implement and maintain the soil erosion control measures as shown on the plans at all times during construction on this project. Any modifications or additions to the soil erosion control measures due to construction or changed conditions shall be complied with as required or directed by the owner, project engineer, or the City of Ann Arbor.
2. All soil erosion and sedimentation control work shall conform to the permit requirements of the City of Ann Arbor, Chapter 63, and the laws of the State of Michigan.
3. Daily or after storm events inspections shall be made by the contractor. Periodic inspections may be made by the owner/project engineer to determine the effectiveness of erosion and sedimentation control measures. Any necessary corrections shall be made without delay, and without additional cost to the Owner.
4. Erosion and sedimentation from work on the site shall be contained on the site and not be allowed to collect on any off-site areas or waterways.
5. All mud/dirt tracked onto roads from the site due to construction, shall be promptly removed by the contractor. If so ordered, the Contractor shall employ a mechanical street sweeper at no additional cost to the Owner.
6. Restoration of all disturbed areas, including placement of topsoil, seed, fertilizer and mulch and/or sod shall be done within 5 days of the completion of final grade
7. Construction operations shall be scheduled and performed so that preventative soil erosion control measures are in place prior to excavation in critical areas and temporary stabilization measures are in place immediately following backfilling operations.
8. Special precautions will be taken in the use of construction equipment to prevent situations that promote erosion.

CONSTRUCTION NOTES:

- 1. Driveways and entrances to buildings, real property, and the like shall not be blocked except for short durations and only when approved by the Engineer. Vehicular and pedestrian access shall be maintained at all times. It shall be the Contractor's responsibility to coordinate all necessary driveway closures with the property owner(s) and resident(s) in the areas of construction.
2. The location and depth of all existing utilities and service leads are to be field verified by the Contractor prior to construction.
3. Location and depth of utilities as depicted on the plans is approximate and shown according to the best information available. It is the Contractor's responsibility to excavate ahead and adjust depth of conflict utilities accordingly. Any damage to utilities is the Contractor's responsibility to avoid and/or repair as necessary.
4. The Contractor is to take special care to protect the existing water main and be responsible for maintaining consistent water service.
5. During non-working hours no trench shall remain open; any open trench shall be properly secured with protective fencing. This work shall be included in the item of work "General Conditions".
6. Trenches for new water services shall be excavated to MIOSHA and City of Ann Arbor Field Services requirements.
7. City of Ann Arbor Field Services will install the corporation and copper service lead(s) to transfer the connection(s). If an existing water service is found to be failing or is not copper, the lead will be replaced to the curb box by Field Services.
8. For the installation of corporations, or any other related activities, the Contractor shall not receive additional compensation for delays due to the scheduling of or coordination with the City of Ann Arbor Field Services.
9. The Contractor shall backfill trenches in accordance with Trench Detail specified on plans. This work shall be included in the item of work "Excavate and Backfill for Water Service Tap and Lead". All concrete removals and replacements required for this work will be paid for separately.

ROADS:

- 22. During construction, all roads shall be protected from unvegetated areas washing onto road surface by placement of silt fence behind curb or a 10 foot wide straw mulch bank behind curb or other approved method and/or as shown on the plans.
23. During construction of any portion of the project, adjoining roads shall be maintained free of dirt, silt and construction debris. Contractor required to use vacuum sweeper equipment for cleaning construction site and adjoining roads. The use of broom sweeper is not permitted.

CATCH BASIN/MANHOLE PROTECTION:

- 24. Protect storm sewer catch basins with approved inlet filters.

SEQUENCE OF EROSION CONTROL MEASURES:

- 13. Install silt fence, tree protection fencing and inlet filters on existing storm inlets prior to any clearing or earth moving operation.
14. Install inlet filters immediately following installation of proposed storm drainage system.
15. Contractor to continually maintain erosion and sedimentation control measures, as required to allow drainage and sediment removal. Remove any accumulated sediment.
16. Strip and clear - maintain erosion control measures around temporary stock piles.

ROUGH GRADE:

- 17. Install stormwater management system.
18. Connect stormwater management system.
19. Ensure all soil is stabilized. Remove all temporary soil erosion control measures.

TEMPORARY SEEDING:

- 20. Seed in accordance with project drawings and specifications.
21. Any disturbed area not paved, seeded, mulched, sodded or built upon by November 15th or June 30th is to be temporarily stabilized per specifications.

- 10. All ductile iron pipe and fittings shall be polyethylene wrapped per ANSI/AWWA C105/A21.5.
11. Cor-blw bolts to be used at all mechanical water main joints at hydrants and Megalug fittings
12. The Contractor shall construct, flush, and bacteriologically test the water main per Detailed Specification "Water Main Installation and Testing" and as approved by the Engineer. All chlorinated water shall be discharged directly into an approved sanitary sewer. The Contractor shall supply all necessary hoses, fittings and the like to accomplish this work.
13. Water main fittings, other than those specifically listed as separate pay items, which are required to complete the work, such as blow-off assemblies, concrete thrust blocks, solid sleeves and mechanical plugs, shall not be paid for separately, but shall be included in the pipe pay items.
14. "No Parking" signs shall be installed by the Contractor at locations as approved or directed by the Engineer. All signs shall be installed in accordance with the detailed specifications.
15. Postal delivery and refuse pickup service shall be maintained at all times by the Contractor.
16. All fittings, hydrants, valves and castings removed during construction are the property of the City of Ann Arbor. The Contractor within 48 hours shall deliver to City of Ann Arbor Field Operations and Maintenance Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.
17. Where street curbs are undermined due to construction activities, they shall be removed and replaced as directed by the Engineer.
18. The Contractor shall be responsible for the continuous maintenance of the temporary road surface and soil erosion control measures within the construction area until the full completion of the project. This work shall be included in the item of work "General Conditions".
19. All curb, sidewalk, driveway approach removals shall be approved by Engineer before the work is done.
20. Sawn sewer pipe connections shall be coupled with a Fernco flexible coupling and a stainless steel shear ring.
21. The location of material stock piles and

on-site staging areas to be approved by the Engineer.

22. For mainline paving, the width of the mat for each pass of the paver shall be not less than 10.5' or greater than 15', as directed by the Engineer. The Engineer will direct the layout of the longitudinal joints during construction.

23. All structures shall receive new castings as directed by the Engineer, as specified on the standard casting schedule. The existing castings are the property of the City of Ann Arbor. The Contractor shall deliver to City of Ann Arbor Field Operations and Maintenance Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.

24. Payment for drainage structure sumps, where specified, shall be included in the payment for the various drainage structure sizes and or types.

25. Where sewer pipes of different sizes or materials are joined, Fernco flexible couplings with stainless steel shear rings shall be used. The Contractor's purchase price for these devices, including shipping, shall be paid as an extra. Prior to payment for this item, the Contractor shall submit receipts for the Engineer's review and approval. All other costs associated with the installation of these devices shall be included in the payment for the sewer.

26. Where sewer and water main are to be removed & replaced or added, all pipe shall be installed using Trench Detail detailed in the specifications or shown on Plans. Backfill for sewer and water construction shall be MDOT Granular Material, Class II, Modified.

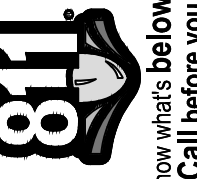
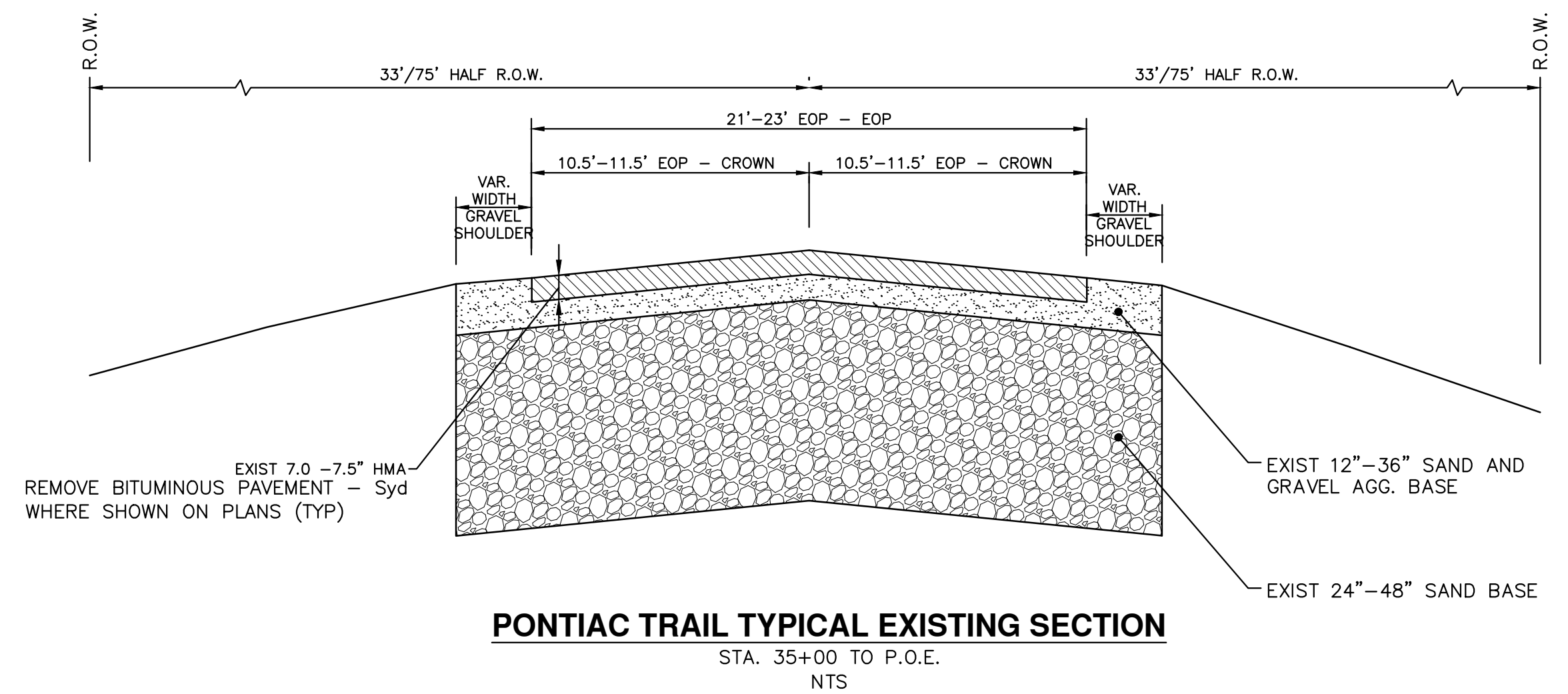
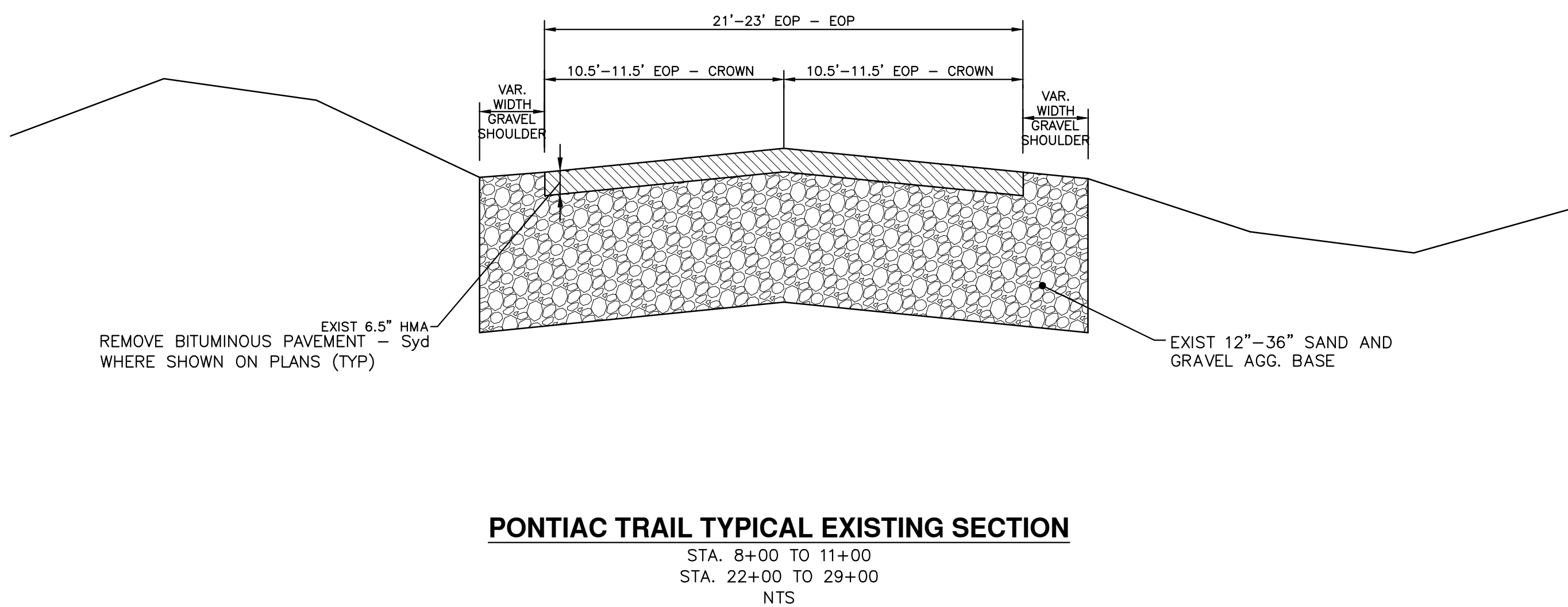
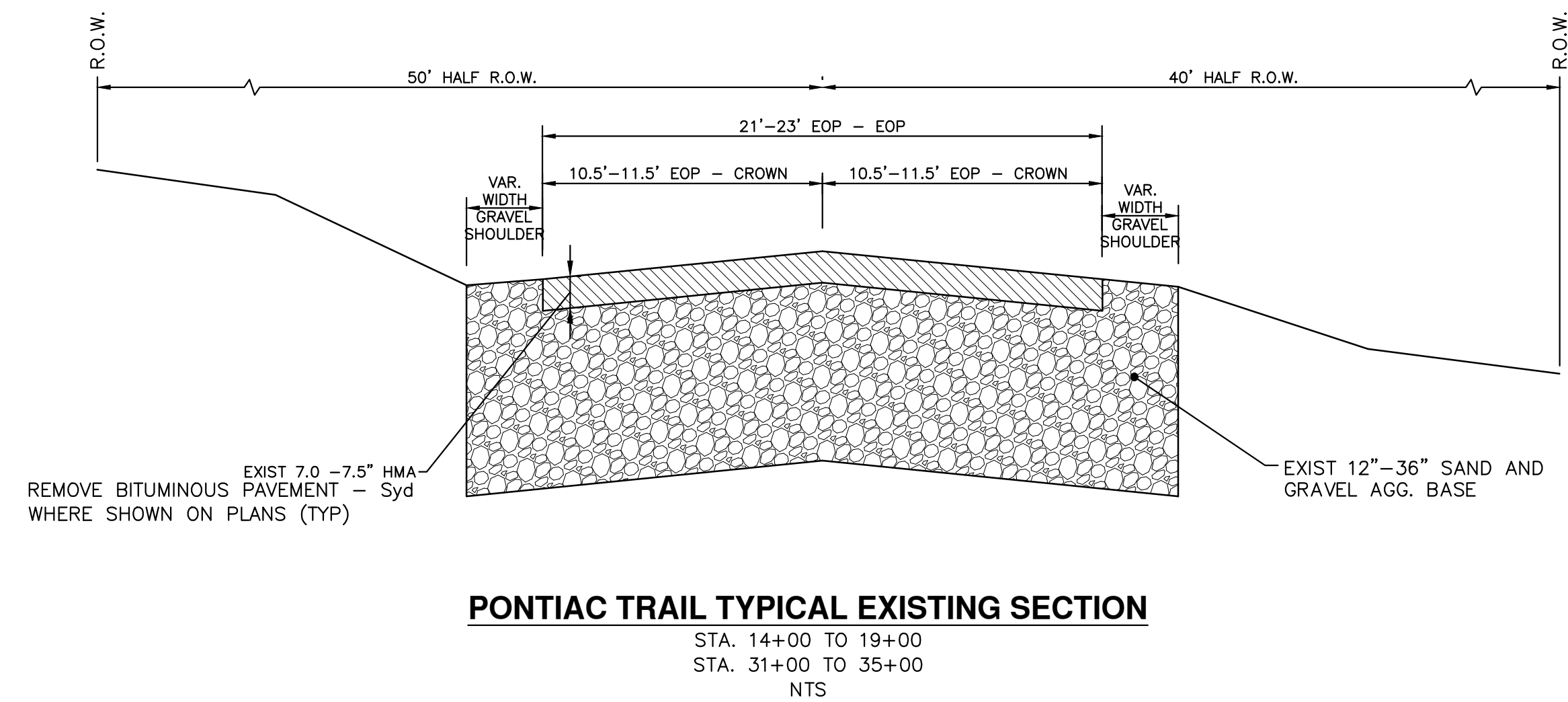
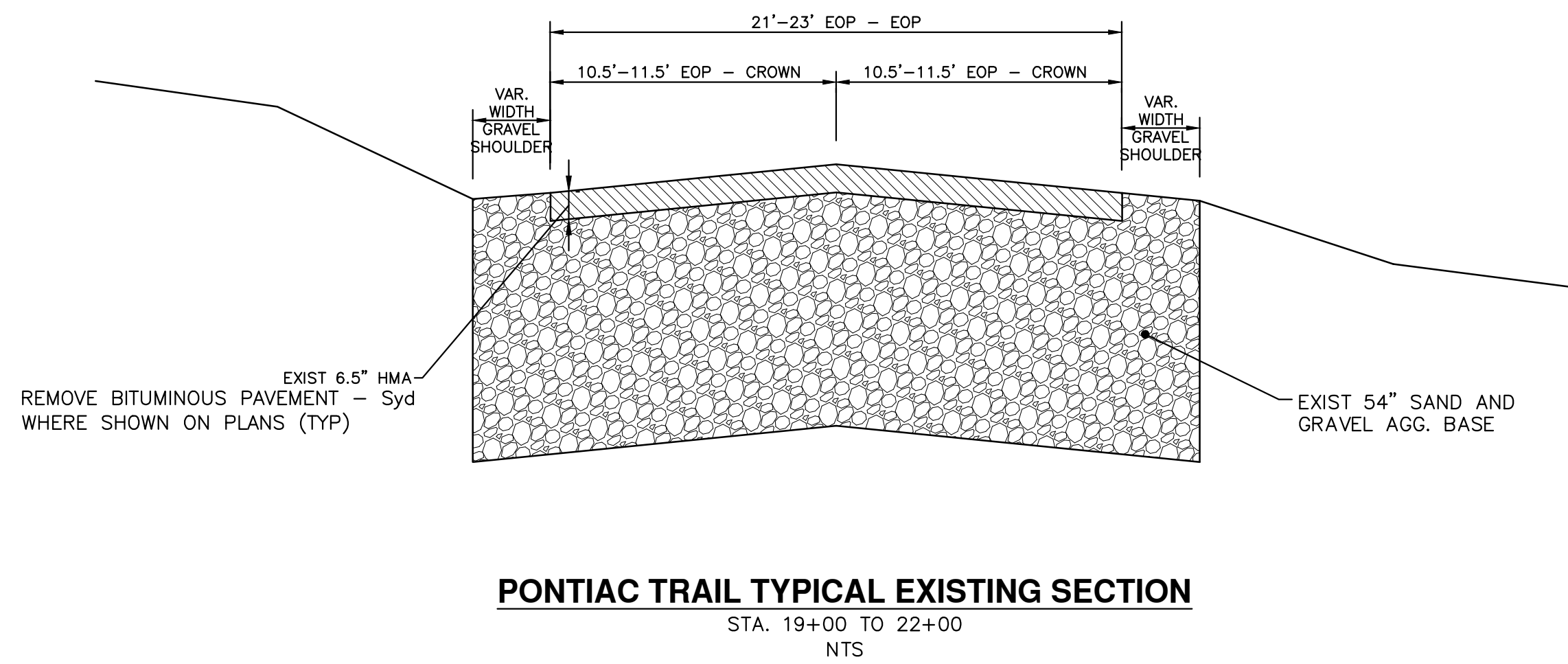
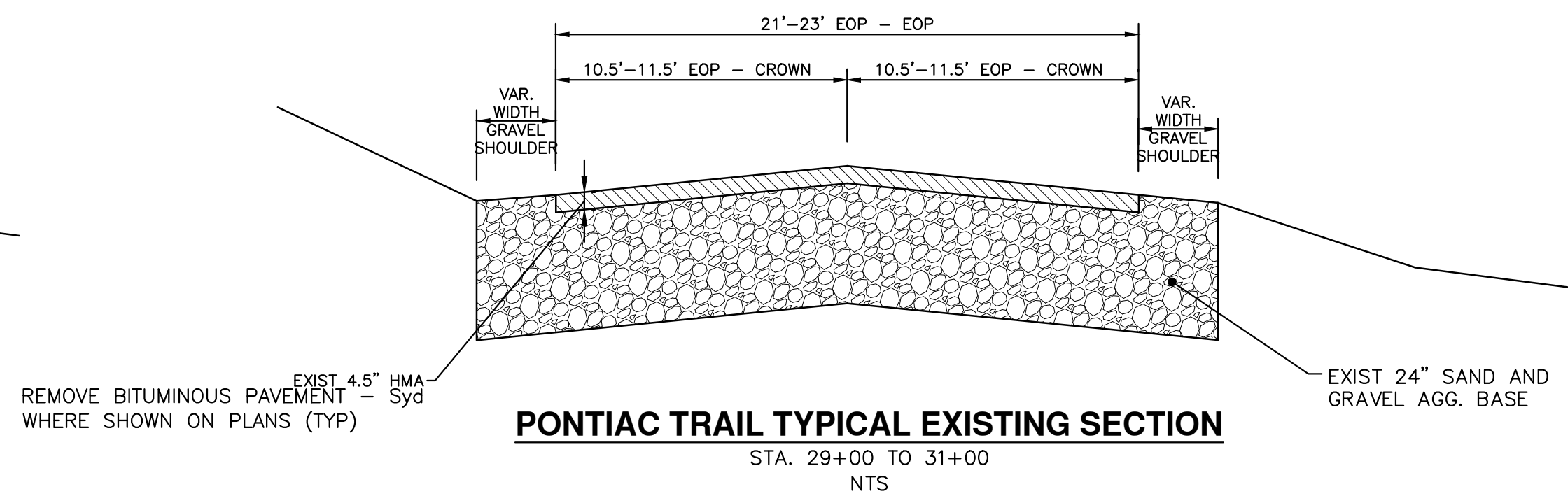
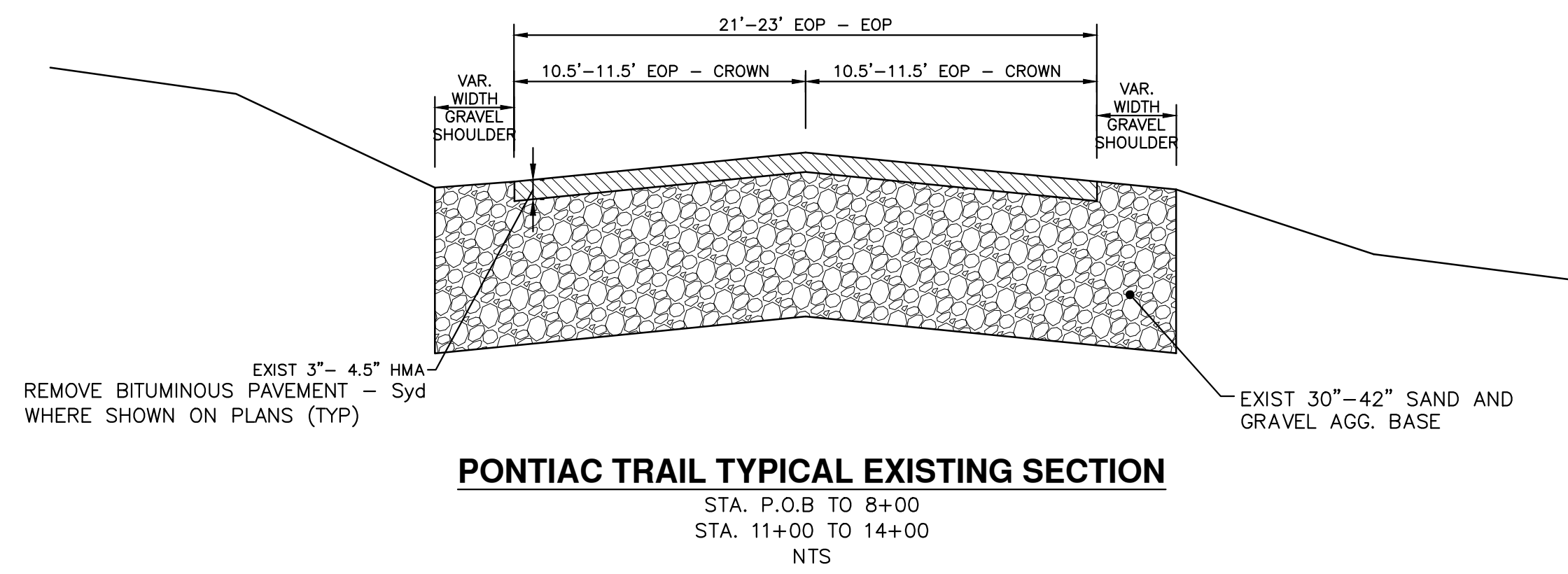
27. Existing street name, guide, and regulatory signs, and mailboxes which conflict with the proposed construction shall be removed prior to construction, stored in a manner which will prevent damage, and re-set in locations as directed by the Engineer. This work will not be paid for separately, but shall be included in "Machine Grading, Modified"

28. In areas where edge drain cannot be installed in accordance with City of Ann Arbor Detail SD-TD-11, the edge drain shall be installed at the depth as indicated on the plans, or as directed by Engineer. In no case shall the edge drain be installed at a grade less than 0.50% or at a depth of less than 2' below top of proposed pavement.

Table with 3 columns: BM #, ELEV, and DESCRIPTION. Contains 20 rows of bench mark data for Pontiac Trail.

Project Management - Public Services - City of Ann Arbor. Pontiac Trail Improvements. Includes 811 logo, revision table, and drawing information.

S:\Project Management\Design\2012028 Pontiac Trail\Plan Production\Primary\2012028DET.dwg Dwg Created: 18-Oct-12 - -_a2_standard_bw.stb - Plot Date: 19-Mar-14



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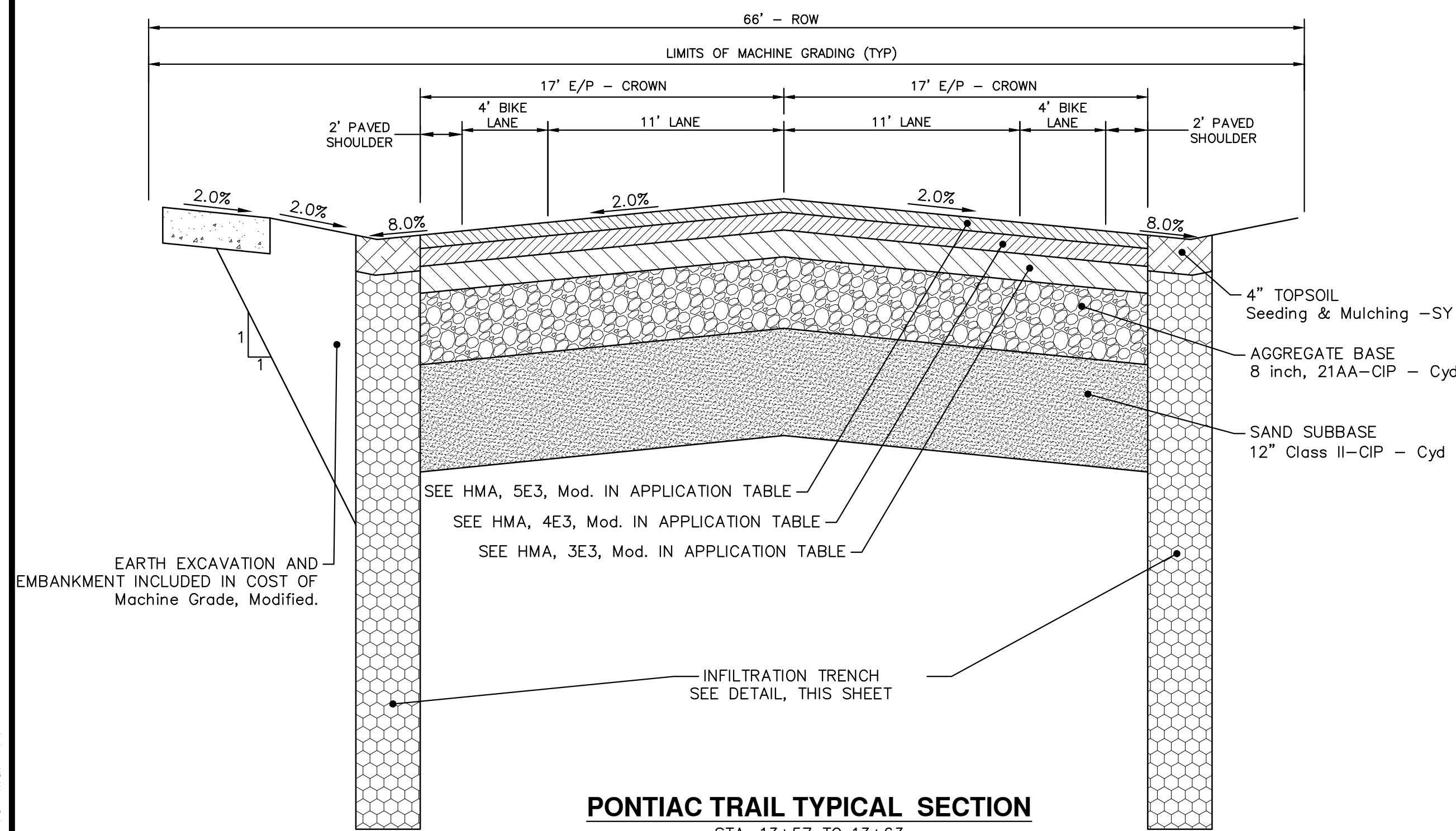
REV.	DATE	BY	CHECKED
00	03-18-2014	RML	

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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 TYPICAL SECTIONS
 PONTIAC TRAIL EXISTING

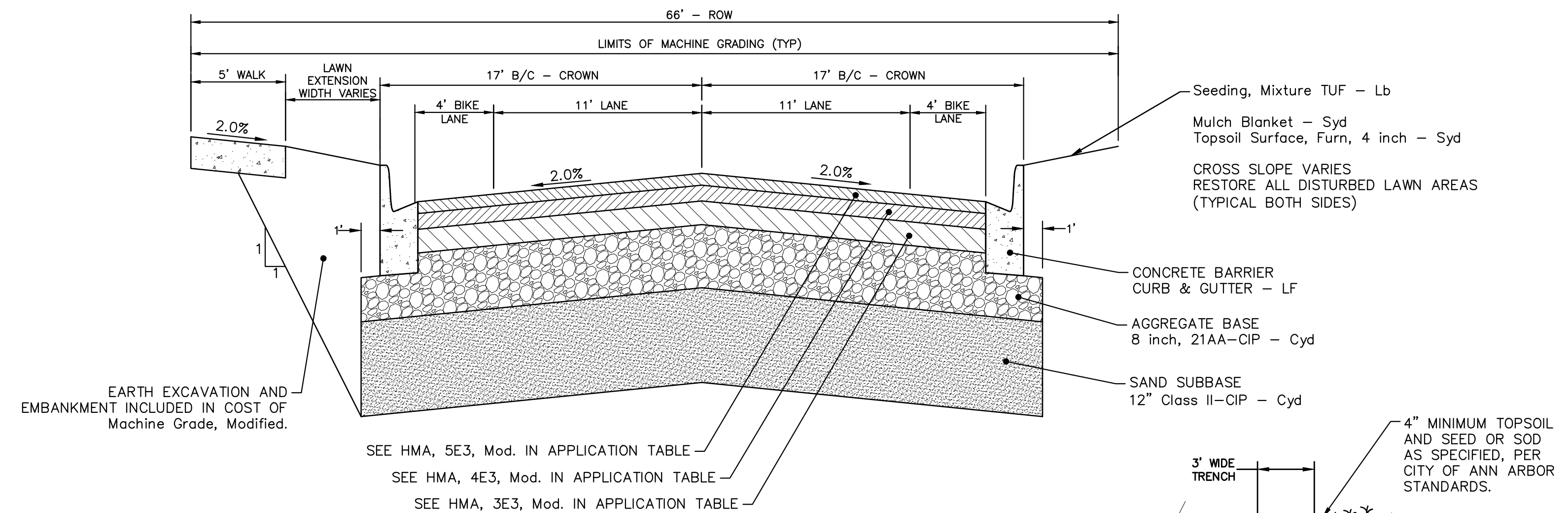
SCALE: NTS
 DRAWING No. 2012028-04

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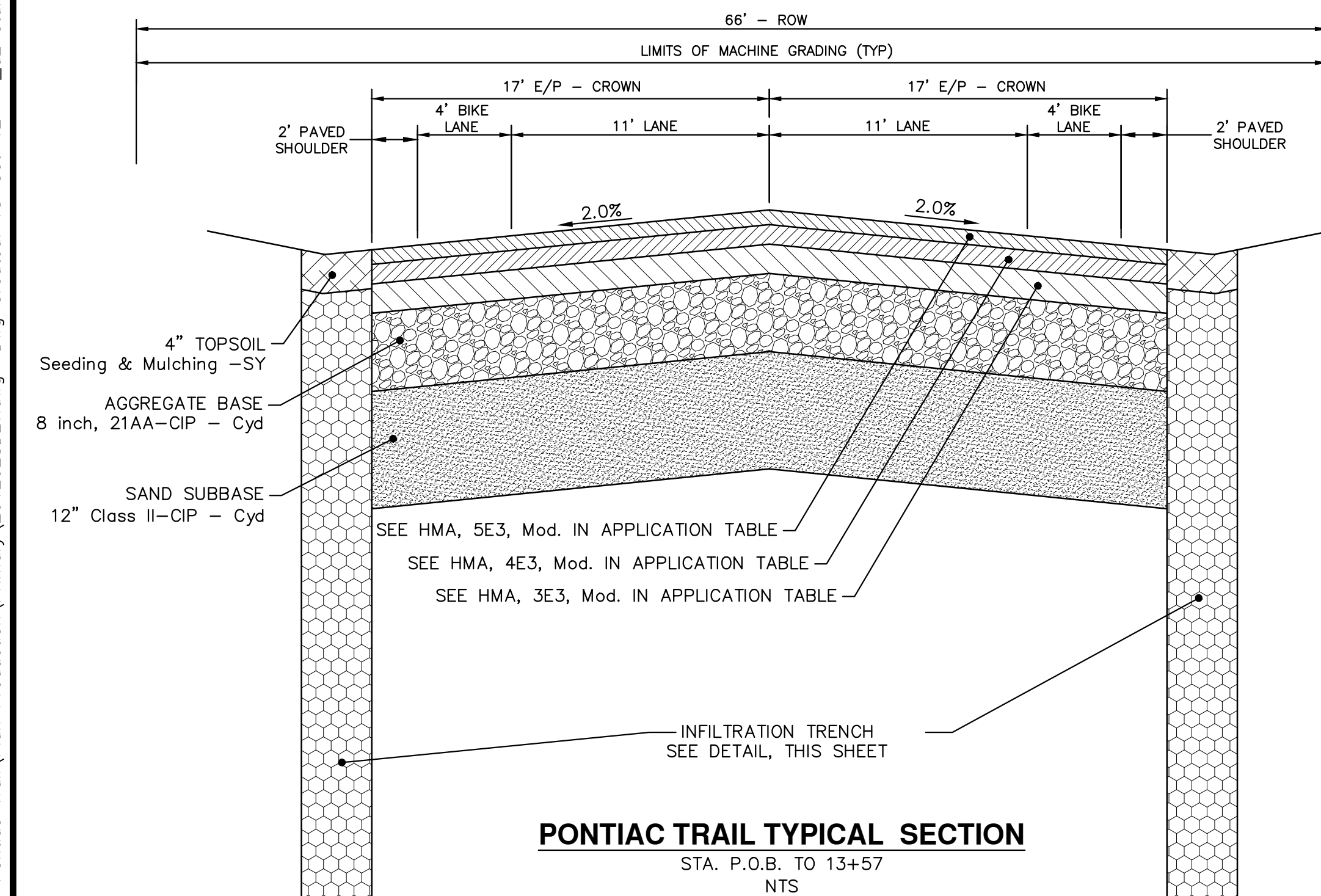
PONTIAC TRAIL TYPICAL SECTION

STA. 13+57 TO 13+63
NTS



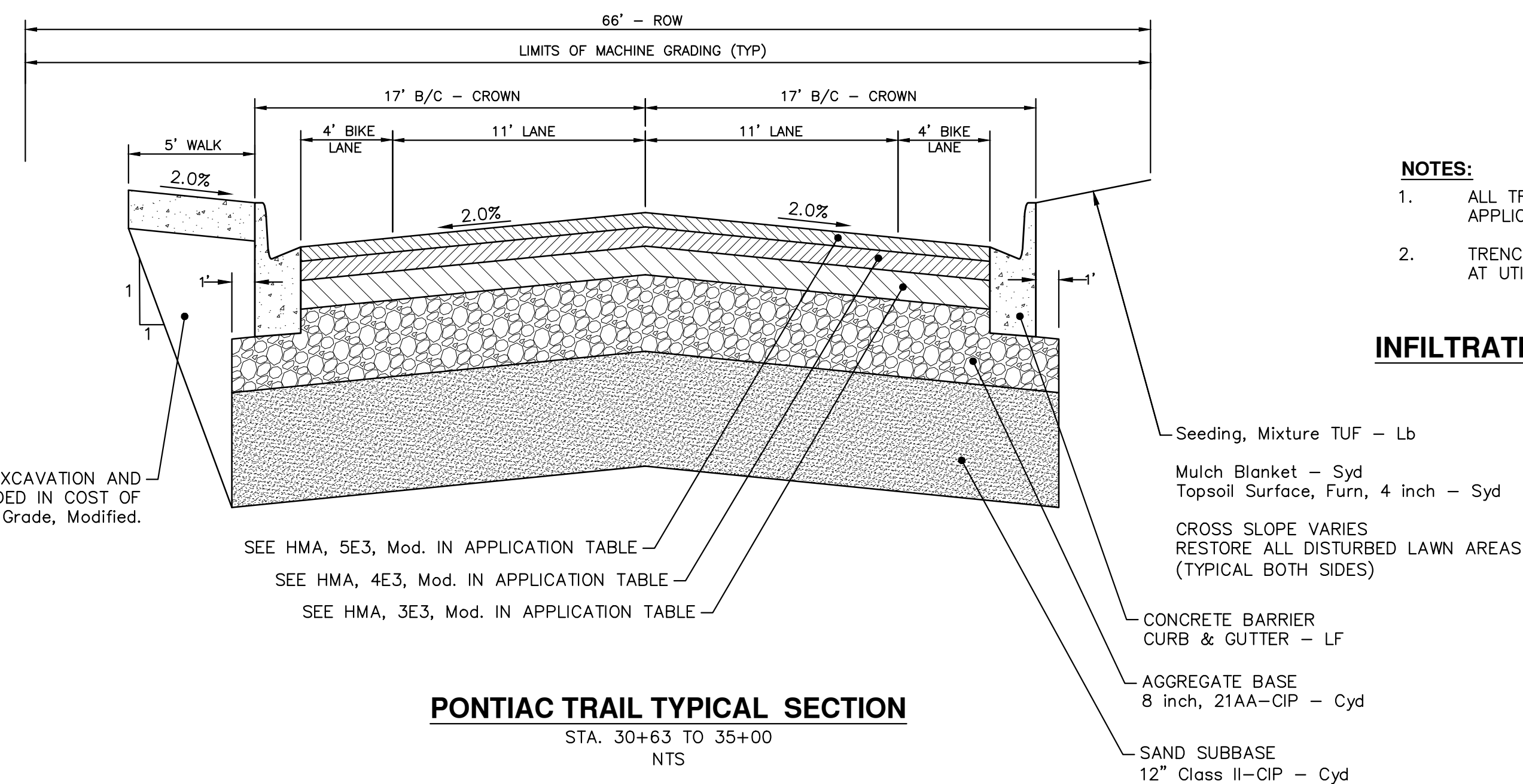
PONTIAC TRAIL TYPICAL SECTION

STA. 35+00 TO P.O.E.
NTS



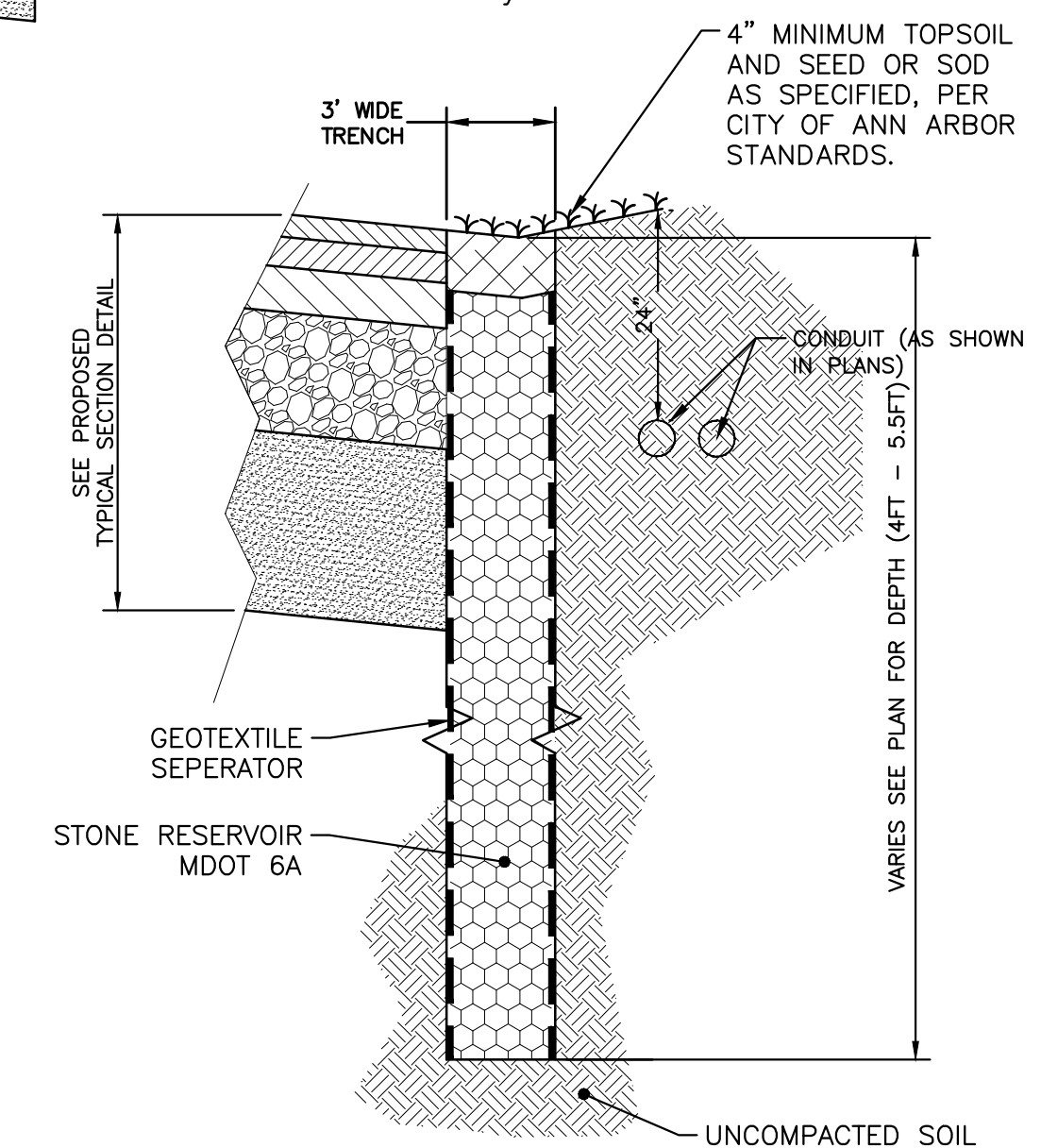
PONTIAC TRAIL TYPICAL SECTION

STA. P.O.B. TO 13+57
NTS



PONTIAC TRAIL TYPICAL SECTION

STA. 30+63 TO 35+00
NTS



NOTES:

1. ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. STANDARDS
2. TRENCH DEPTH SHALL BE 4FT DEPTH AT UTILITY CROSSINGS

INFILTRATION TRENCH DETAIL

NOTES:

FOR MAINLINE HMA PAVING, THE WIDTH OF THE MAT FOR EACH PASS OF THE PAVER SHALL BE NOT LESS THAN 10.5', NOR GREATER THAN 15', EXCEPT AS NOTED IN THE PLANS AND AS DIRECTED BY THE ENGINEER. THE ENGINEER WILL DIRECT THE LAYOUT OF ALL HMA LONGITUDINAL JOINTS DURING CONSTRUCTION. PRIOR TO PLACING THE ADJACENT PAVING PASS ON THE LEVELING AND WEARING COURSES OF HMA, THE CONTRACTOR SHALL CUT AND REMOVE 6" TO 8" OF THE PREVIOUSLY PLACED PAVEMENT BY MEANS OF A COULTER WHEEL. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY METHOD(S) FOR CUTTING THE PAVEMENT THAT DOES NOT PROVIDE A SATISFACTORY EDGE AS DETERMINED BY THE ENGINEER. ANY METHOD(S) EMPLOYED BY THE CONTRACTOR SHALL BE COMPLETELY EFFECTIVE. THE CUT EDGE SHALL HAVE A UNIFORM BEAD OF CRAFTCOJOINT ADHESIVE APPLIED. THE REMOVAL OF THIS HMA MATERIAL AND RESULTING EDGE MUST BE APPROVED BY THE ENGINEER PRIOR TO PROCEEDING WITH THE PLACEMENT OF THE SUCCEEDING PASS OF HMA. THE BASE COURSE OF HMA WILL ONLY HAVE ITS EDGES TACKED IN ACCORDANCE WITH STANDARD PAVING PRACTICES. ALL COSTS ASSOCIATED WITH COMPLYING WITH THESE REQUIREMENTS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN ASSOCIATED HMA PLACEMENT PAY ITEMS.

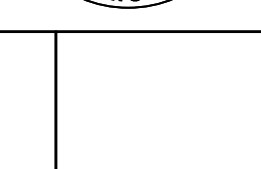
TYPICAL ROAD CROSS SECTION APPLICATION TABLE

MIX	RATE OF APPLICATION	THICKNESS (INCHES)	AWI	BINDER	LOCATION/NOTES
HMA, 5E3, Mod.	165 LB/SYD	1.5	260	PG 64-28 P	WEARING COURSE
HMA, 4E3, Mod.	220 LB/SYD	2.0	-	PG 64-28 P	LEVELING COURSE
HMA, 3E3, Mod.	330 LB/SYD	3.0	-	PG-58-22	BASE COURSE
Bond Coat SS-1h	0.10 GAL/SYD	-	-	-	INCLUDE IN COST OF HMA ITEM



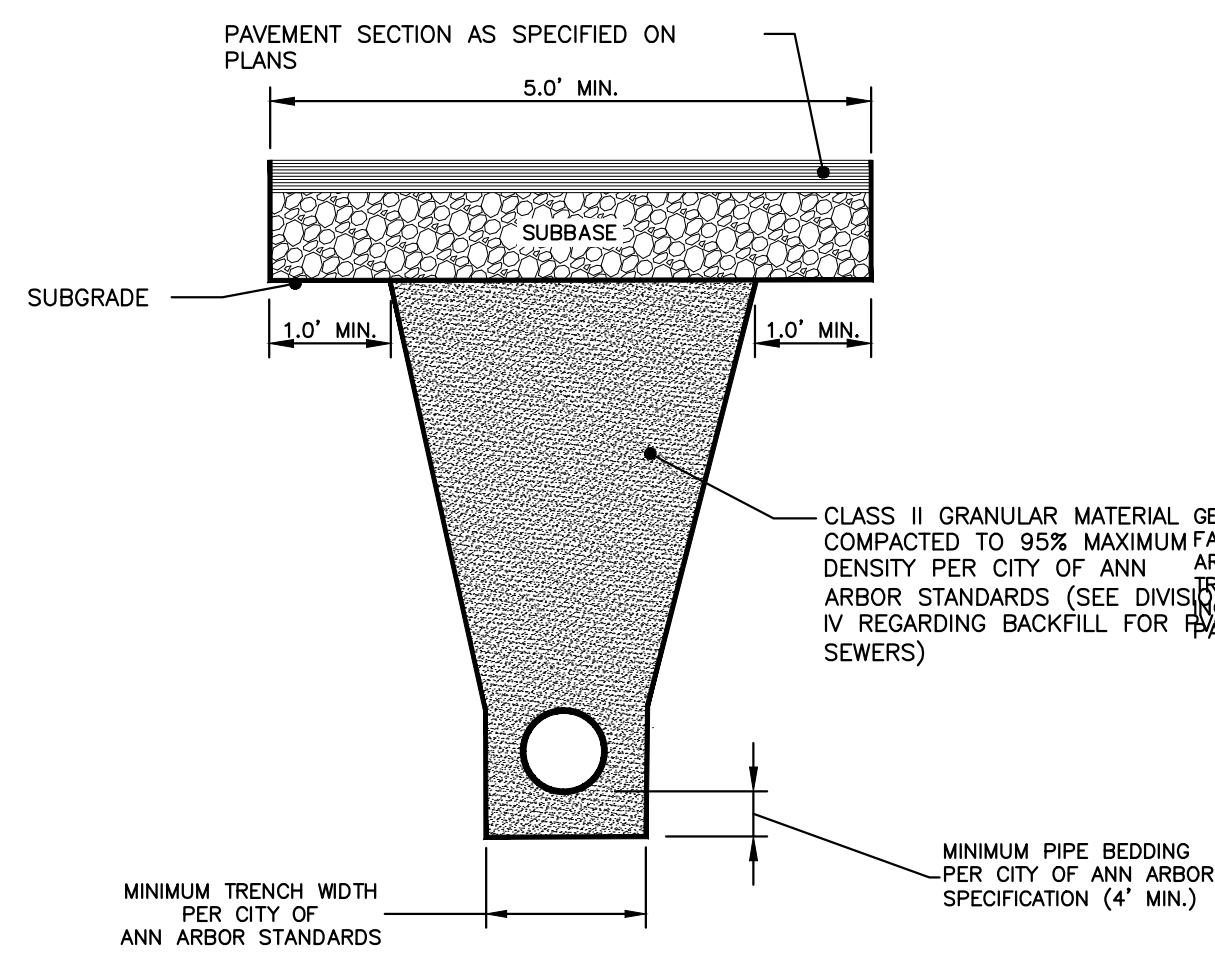
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00		03-18-2014	RMLH	DRWN

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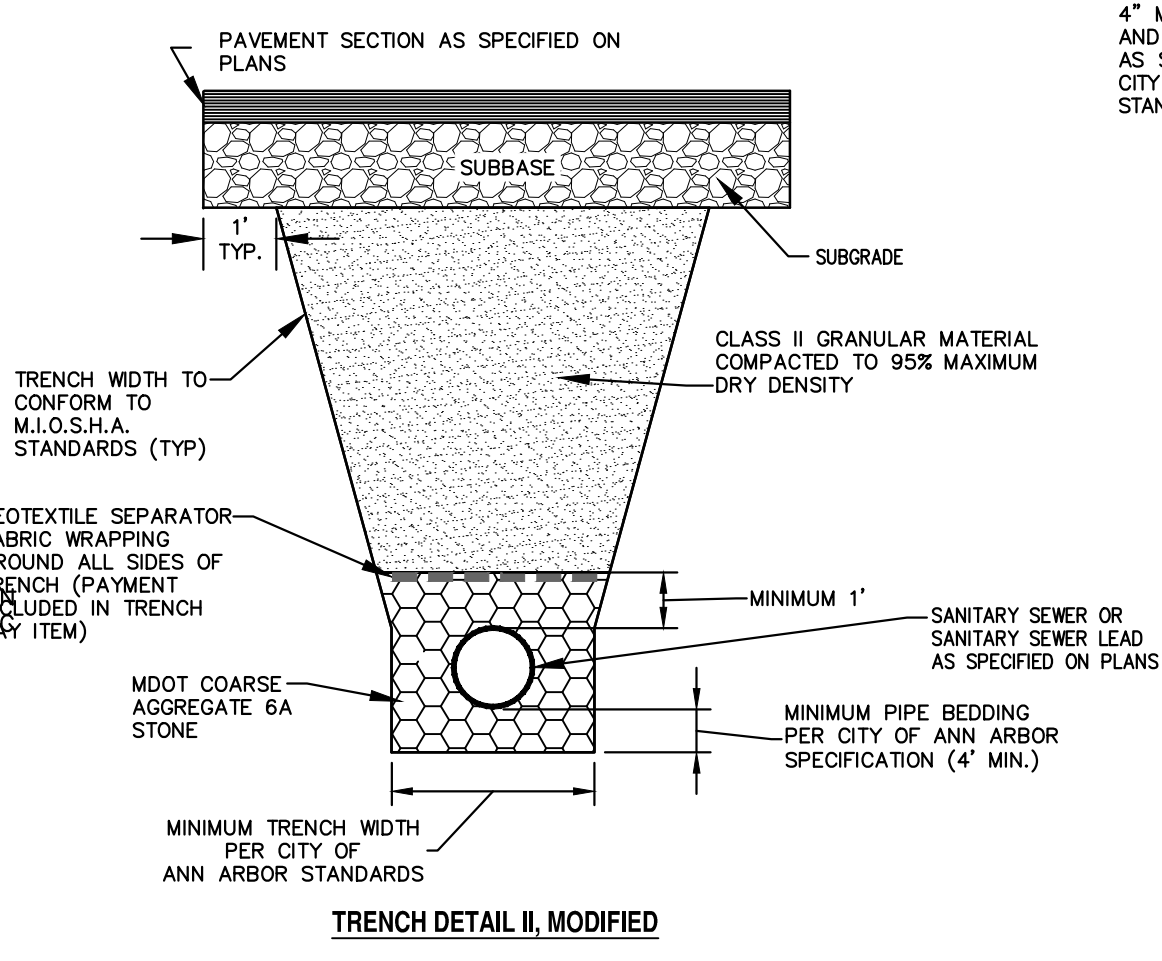


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
TYPICAL SECTIONS
PONTIAC TRAIL PROPOSED

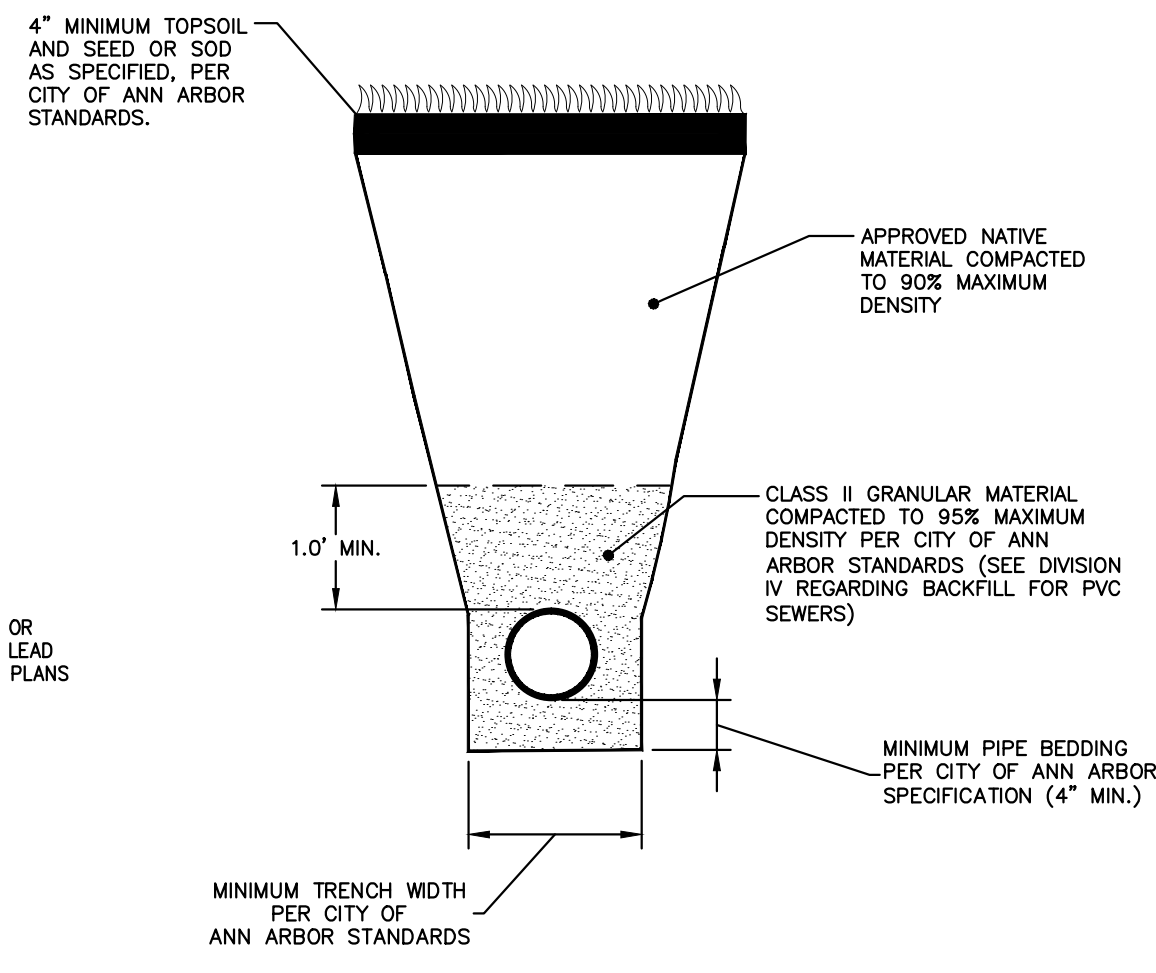
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TRENCH DETAIL I, MODIFIED



TRENCH DETAIL II, MODIFIED

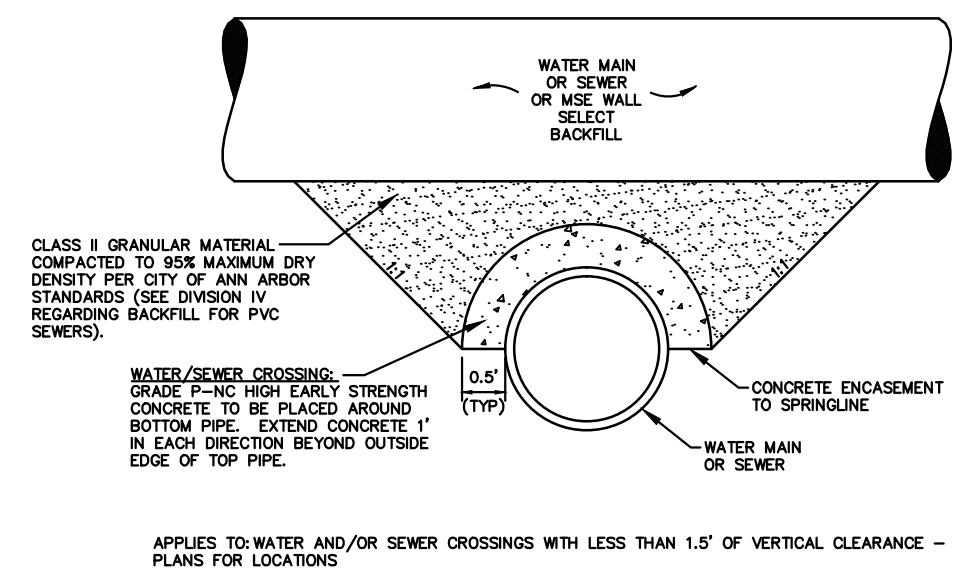


TRENCH DETAIL V

UTILITY TRENCH DETAILS

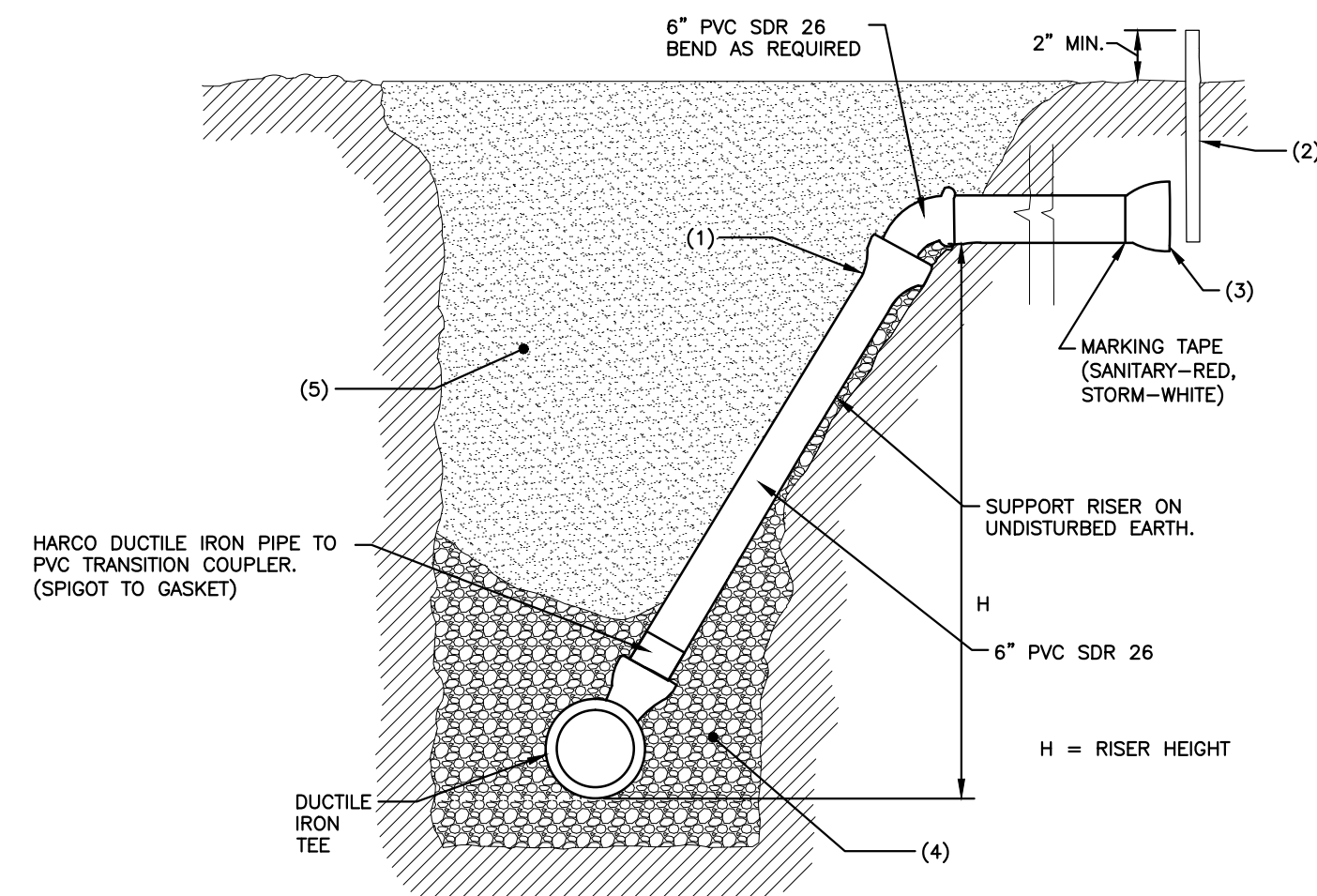
NOTES:

- TRENCH DETAILS SHOW TYPE OF BACKFILL AND SURFACE RESTORATION ONLY.
- ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. STANDARDS

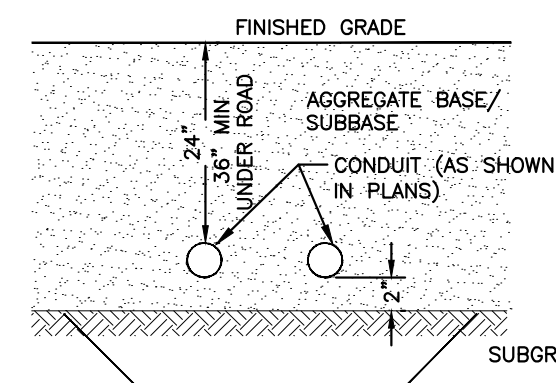


CONCRETE UTILITY SADDLE

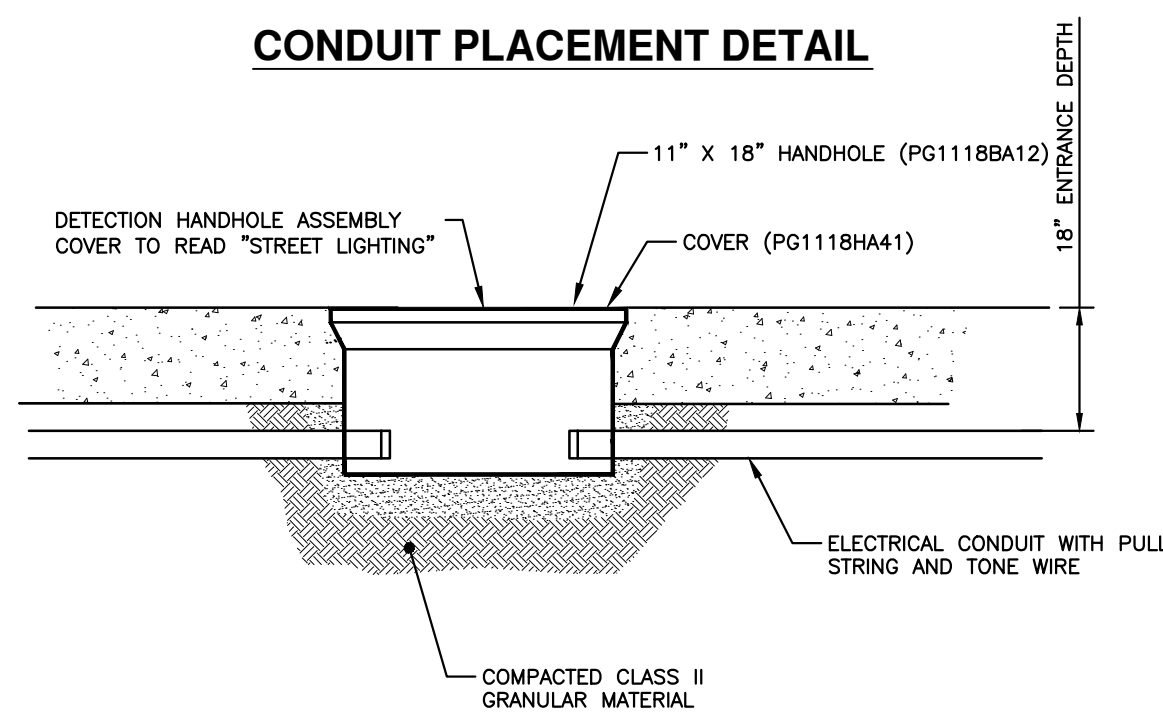
- CARRY TO WITHIN 8' TO 10' OF GROUND ELEVATION.
- MIN. 2" x 2" CEDAR OR TREATED WOOD MARKER, MARKED (SANITARY-RED, STORM-WHITE), SET VERTICALLY.
- CAP WITH SOLVENT WELDED CAP OR PLUG.
- 6AA LIMESTONE TO EXTEND MIN. 1.0' BEYOND TEE JOINTS (D.I.P. TEE NOT ENCASED)
- MATERIAL, COMPACTED CLASS II TO 95% MAXIMUM DENSITY PER ANN ARBOR STANDARD CITY OF SPECIFICATIONS.



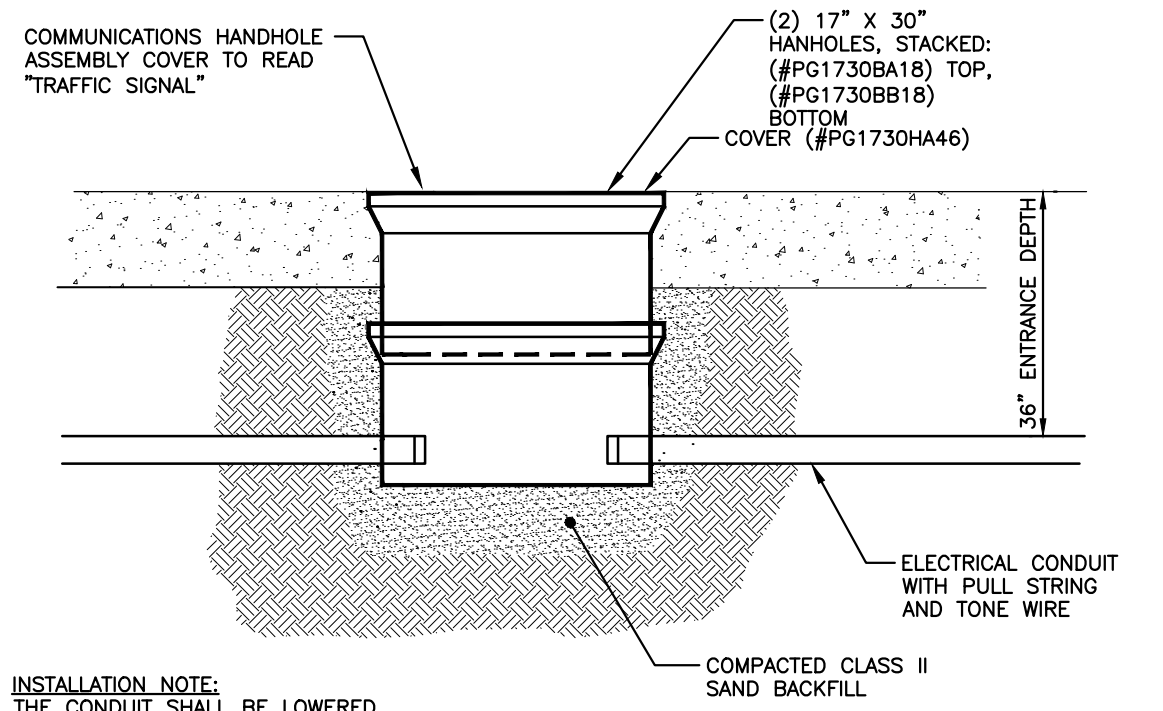
SANITARY SEWER CONNECTION WITH RISER MODIFIED



CONDUIT PLACEMENT DETAIL

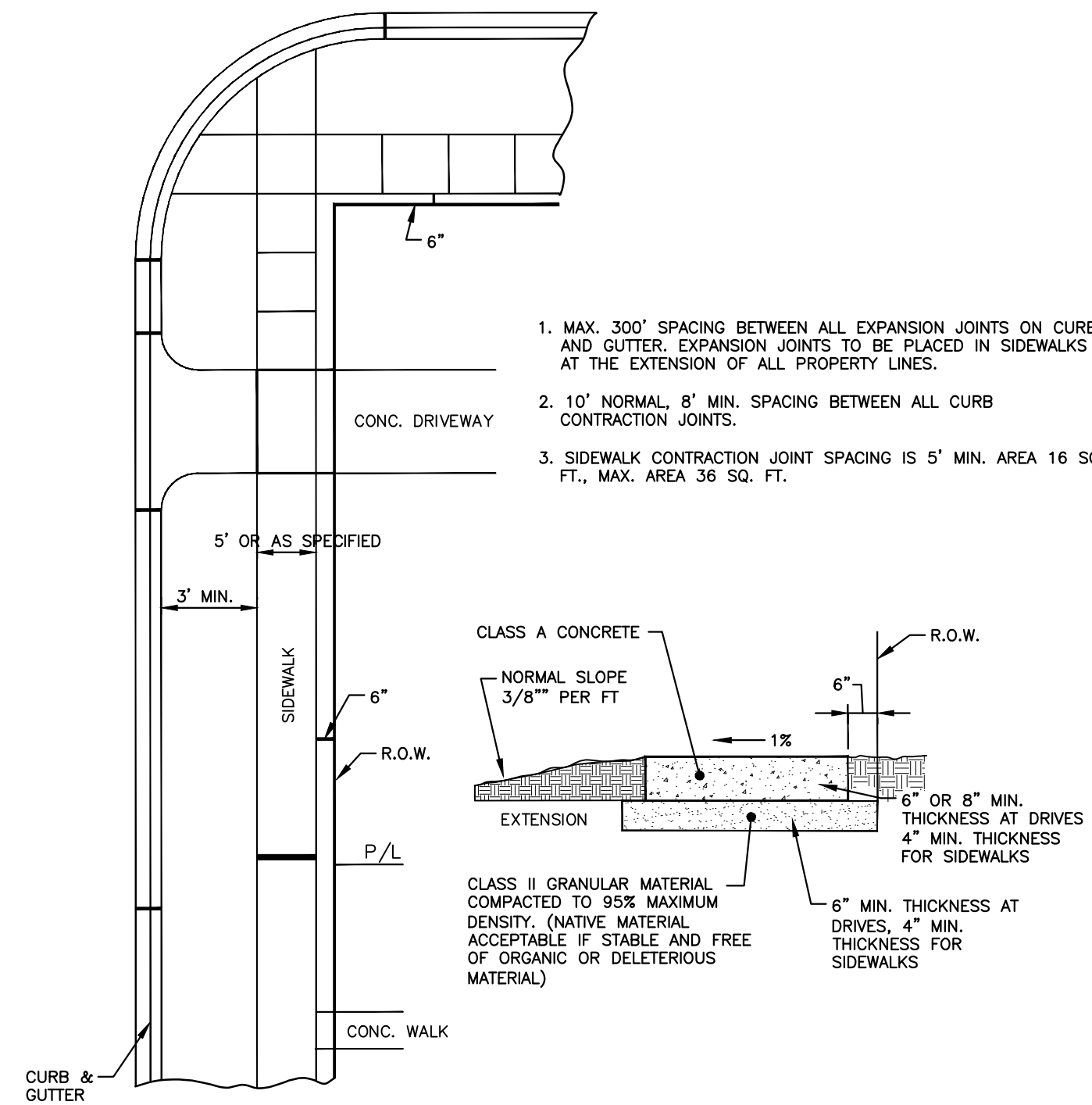


ELECTRICAL HANDHOLE ASSEMBLY



INSTALLATION NOTE:
THE CONDUIT SHALL BE LOWERED TO A MINIMUM ENTRANCE DEPTH OF 36" BELOW TOP OF THE HAND HOLE OVER A DISTANCE OF 10' ON EACH SIDE OF THE HANDHOLE ASSEMBLY

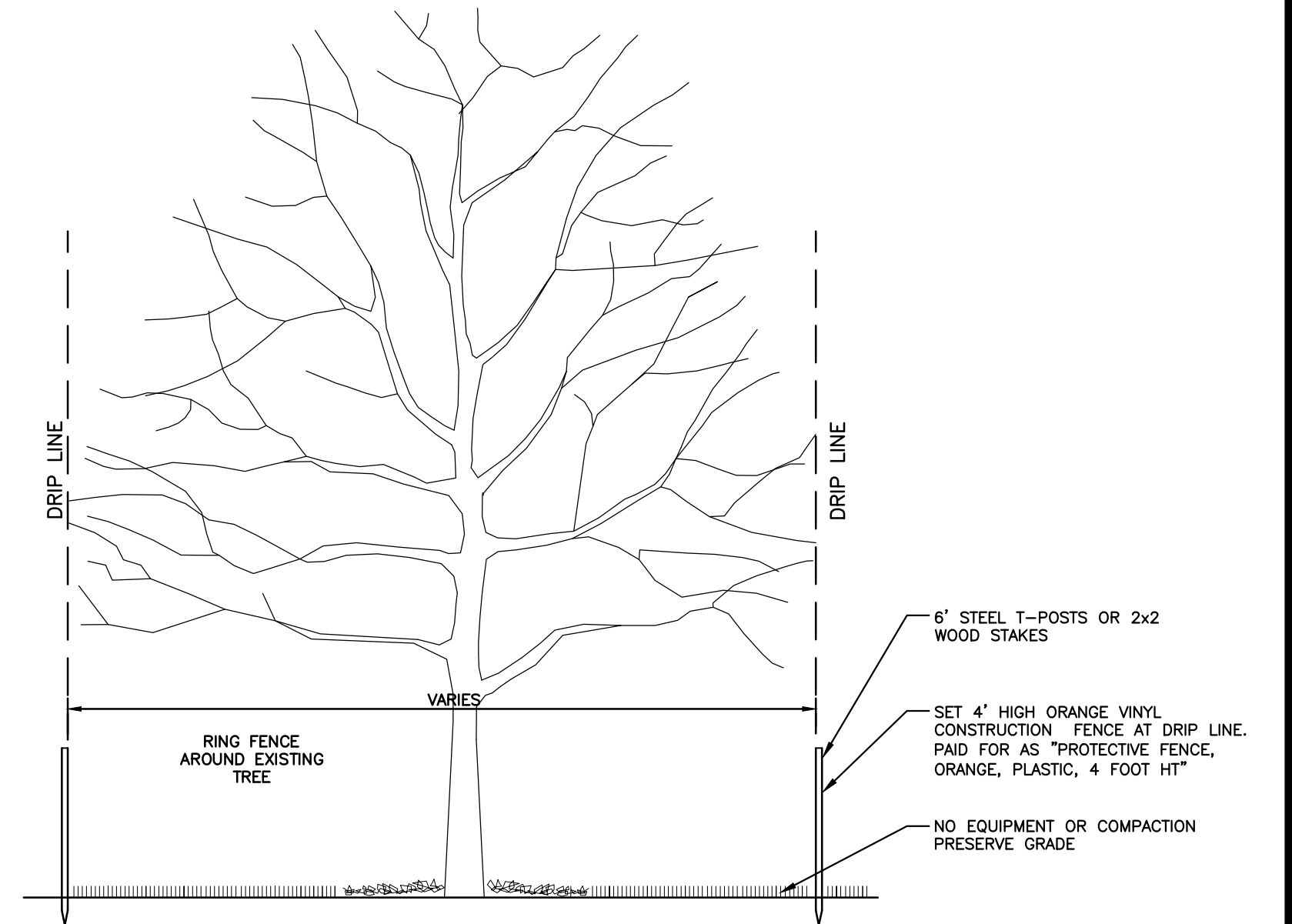
COMMUNICATIONS HANDHOLE ASSEMBLY



- MAX. 300' SPACING BETWEEN ALL EXPANSION JOINTS ON CURB AND GUTTER. EXPANSION JOINTS TO BE PLACED IN SIDEWALKS AT THE EXTENSION OF ALL PROPERTY LINES.
- 10' NORMAL, 8' MIN. SPACING BETWEEN ALL CURB CONTRACTION JOINTS.
- SIDEWALK CONTRACTION JOINT SPACING IS 5' MIN. AREA 16 SQ. FT., MAX. AREA 36 SQ. FT.

- LEGEND:
- CONTRACTION JOINTS
 - 1/2" EXPANSION JOINTS
 - 3/4" EXPANSION JOINTS

SIDEWALK AND CURB & GUTTER JOINTS



NOTE:
Contractor shall not store or place equipment and/or materials inside drip line of any city tree. Mechanical damage to city owned trees (i.e. Bark damage, branch breakage) is not permitted. Contractor is responsible for properly pruning trees to prevent damage. If branches greater than 2" in diameter require pruning, contractor to contact forestry for consultation and evaluation at (734) 794-6364. No roots of city-owned trees greater than 2 inches in diameter are to be cut. If contractor encounters city-owned trees with roots greater than 2 inches in diameter that they determine need to be cut, contact forestry immediately for evaluation. All trenching and bore pits of any kind shall be clear of tree drip lines. If any city-owned street trees are damaged by this work, the contractor must contact forestry as soon as possible so that the damage can be assessed. Contractor will be responsible for all costs associated with damage remediation.

TREE PROTECTION DETAIL



NO.	DATE	BY	CHECKED
00	03-18-2014	RMLH	DRAWN

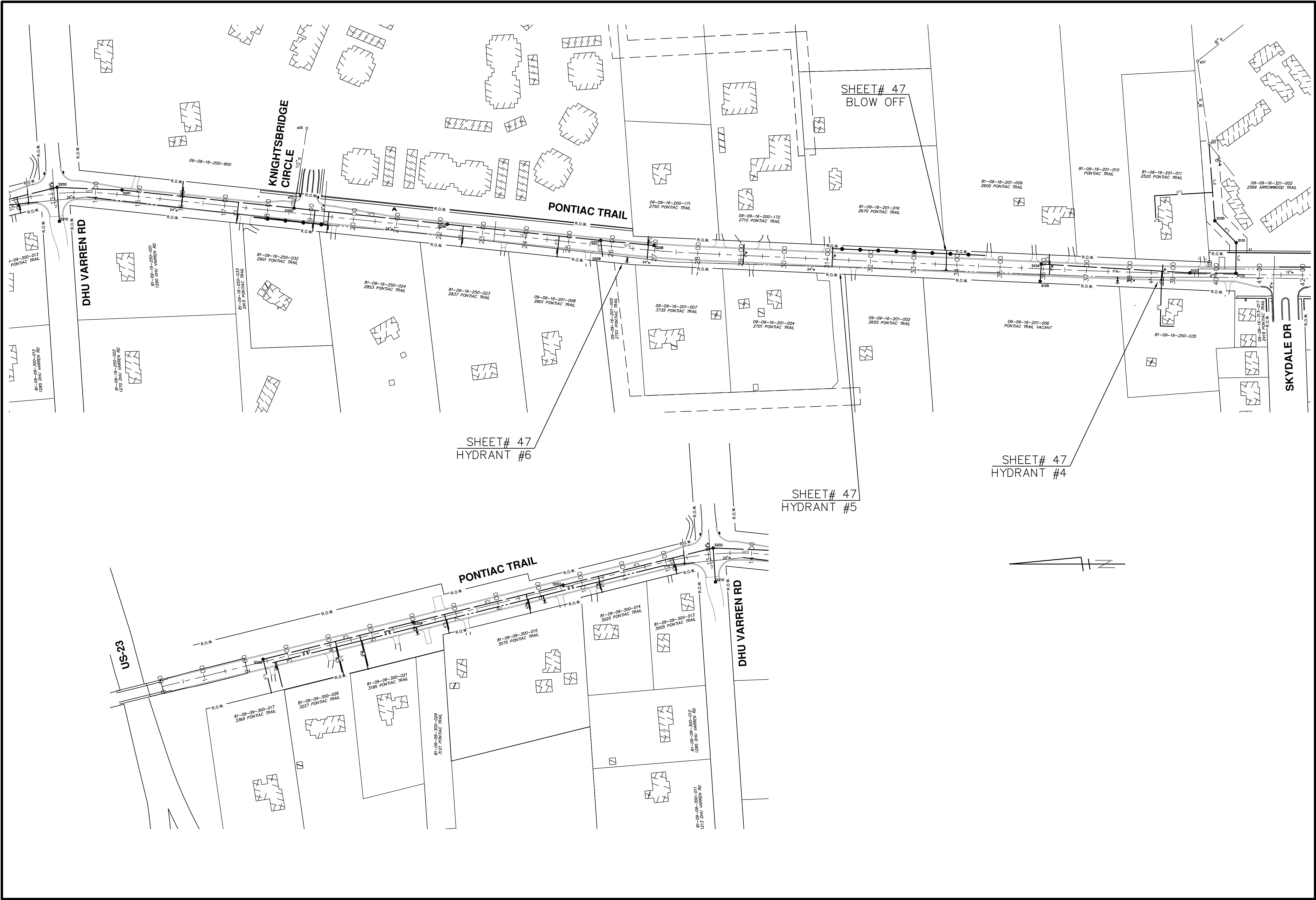
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
DETAILS

SCALE NTS
DRAWING No.
2012028-06

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811
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REV.	DESCRIPTION	DATE	BY	CHECKED
00	BID SUBMITTAL	03-18-2014	RMLH	
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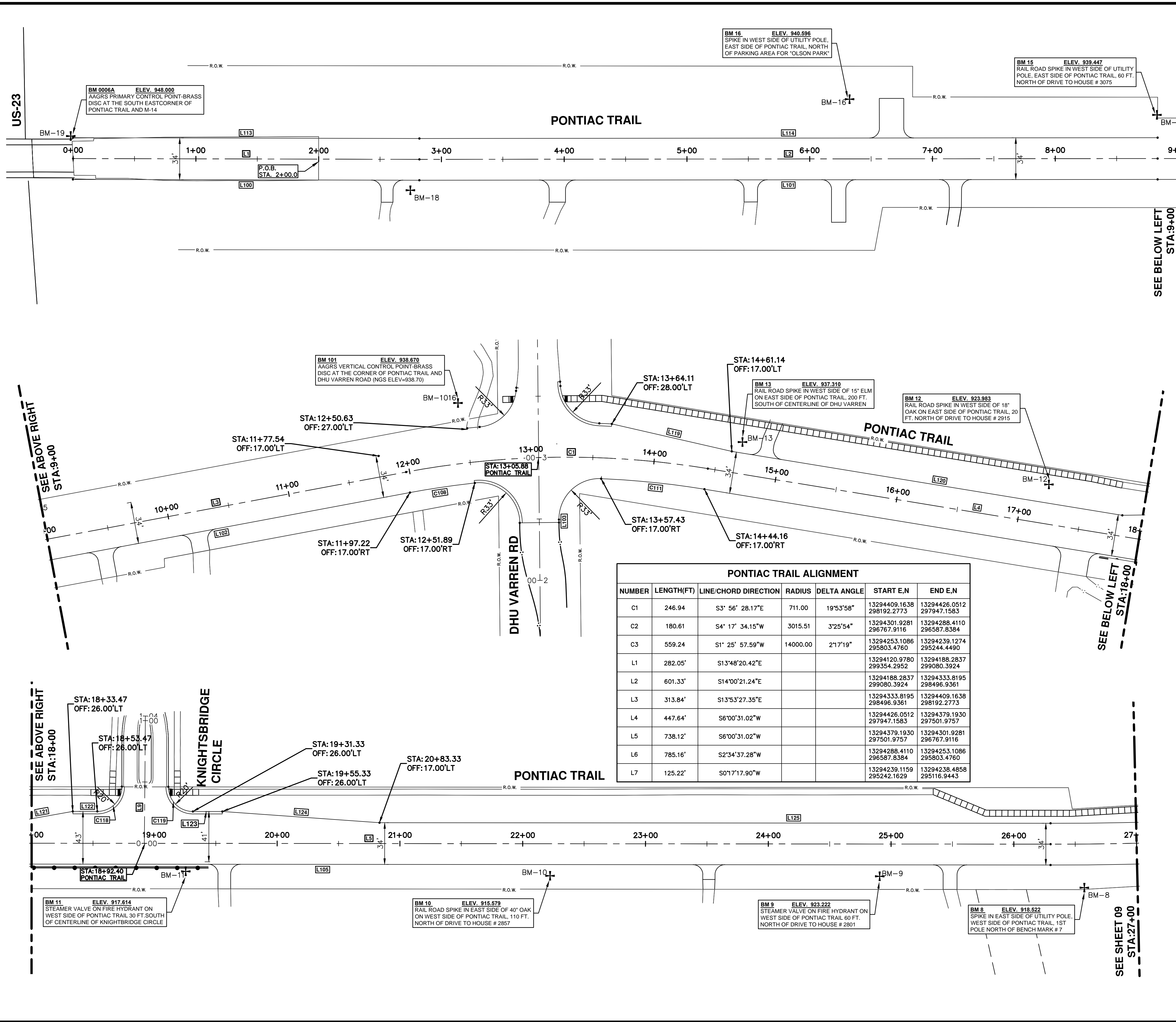
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
PROPOSED SANITARY SEWER AND WATER MAIN OVERALL LAYOUT

SCALE PLAN: 1" = 100'
DRAWING No. 2012028-07

SHEET No. 07 OF 102

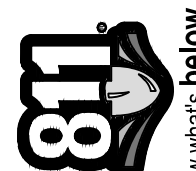
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PONTIAC TRAIL ALIGNMENT						
NUMBER	LENGTH(FT)	LINE/CHORD DIRECTION	RADIUS	DELTA ANGLE	START E,N	END E,N
C1	246.94	S3° 56' 28.17"E	711.00	19°53'58"	13294409.1638 298192.2773	13294426.0512 297947.1583
C2	180.61	S4° 17' 34.15"W	3015.51	3°25'54"	13294301.9281 296767.9116	13294288.4110 296587.8384
C3	559.24	S1° 25' 57.59"W	14000.00	2°17'19"	13294253.1086 295803.4760	13294239.1274 295244.4490
L1	282.05'	S13°48'20.42"E			13294120.9780 299354.2952	13294188.2837 299080.3924
L2	601.33'	S14°00'21.24"E			13294188.2837 299080.3924	13294333.8195 298496.9361
L3	313.84'	S13°53'27.35"E			13294333.8195 298496.9361	13294409.1638 298192.2773
L4	447.64'	S6°00'31.02"W			13294426.0512 297947.1583	13294379.1930 297501.9757
L5	738.12'	S6°00'31.02"W			13294379.1930 297501.9757	13294301.9281 296767.9116
L6	785.16'	S2°34'37.28"W			13294288.4110 296587.8384	13294253.1086 295803.4760
L7	125.22'	S0°17'17.90"W			13294239.1159 295242.1629	13294238.4858 295116.9443


PONTIAC TRAIL EDGE OF PAVEMENT					
LINE #/CURVE #	LENGTH(FT)	BEARING/DELTA	START E,N	END E,N	RADIUS
L119	100.20	S9°37'32.58"W	13294457.94 298027.28	13294441.18 297928.49	
L116	75.57	N20°40'18.07"W	13294447.62 298144.75	13294420.94 298215.46	
L115	294.17	N13°53'27.35"W	13294420.94 298215.46	13294350.32 298501.03	
C111	84.66	6.99	13294409.14 297948.94	13294412.86 298033.46	694.00
L121	50.80	S4°11'43.29"E	13294407.44 297607.93	13294411.16 297557.26	
L120	322.51	N6°00'31.02"E	13294407.44 297607.93	13294441.18 297928.49	
C108	53.36	4.41	13294403.47 298135.95	13294392.66 298188.20	694.00
L124	128.32	S10°01'50.18"W	13294398.40 297436.08	13294376.05 297309.72	
L102	313.82	N13°53'27.35"W	13294392.66 298188.20	13294317.32 298492.84	
L114	601.32	N14°00'21.24"W	13294350.32 298501.03	13294204.79 298084.48	
L125	546.59	N6°00'31.02"E	13294318.83 296766.13	13294376.05 297309.72	
L101	601.35	N14°00'21.24"W	13294317.32 298492.84	13294171.78 298076.31	
C120	179.59	3.43	13294305.39 296587.07	13294318.83 296766.13	2998.51
L105	1185.76	N6°00'31.02"E	13294285.02 296769.69	13294409.14 297948.94	
C112	181.63	3.43	13294271.43 296588.60	13294285.02 296769.69	3032.51
L109	95.69	N2°34'37.28"E	13294236.13 295804.24	13294240.43 295899.83	
L113	282.11	N13°48'20.42"W	13294204.79 298084.48	13294137.46 298358.44	
L100	282.17	N13°48'20.42"W	13294171.78 298076.31	13294104.45 298350.33	

PONTIAC TRAIL BACK OF CURB					
LINE #/CURVE #	LENGTH(FT)	BEARING/DELTA	START E,N	END E,N	RADIUS
L118	3.57	N82°16'27.80"E	13294486.34 298070.90	13294489.88 298071.38	
C116	48.10	83.51	13294486.34 298070.90	13294457.79 298037.49	33.00
L117	2.58	N87°18'54.14"W	13294482.90 298106.63	13294480.32 298106.75	
C117	10.20	0.79	13294457.94 298027.28	13294457.79 298037.49	739.00
C115	45.22	78.51	13294449.25 298134.67	13294480.32 298106.75	33.00
C114	10.22	0.79	13294449.25 298134.67	13294447.62 298144.75	739.00
C119	31.49	90.21	13294422.97 297477.73	13294400.91 297459.95	20.00
C110	53.51	92.90	13294412.86 298033.46	13294377.63 298065.82	33.00
L122	20.00	N6°00'31.02"E	13294409.06 297537.37	13294411.16 297557.26	
C118	31.61	90.55	13294409.06 297537.37	13294427.05 297515.37	20.00
L123	24.00	N6°00'31.02"E	13294398.40 297436.08	13294400.91 297459.95	
L103	2.31	S86°07'07.67"W	13294377.63 298065.82	13294375.32 298065.86	
C109	55.06	95.60	13294373.15 298097.59	13294403.47 298135.95	33.00



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REV.	DATE	DESCRIPTION	BY	CHECKED
00	03-18-2014		RMLI	DRAWN
				CHECKED

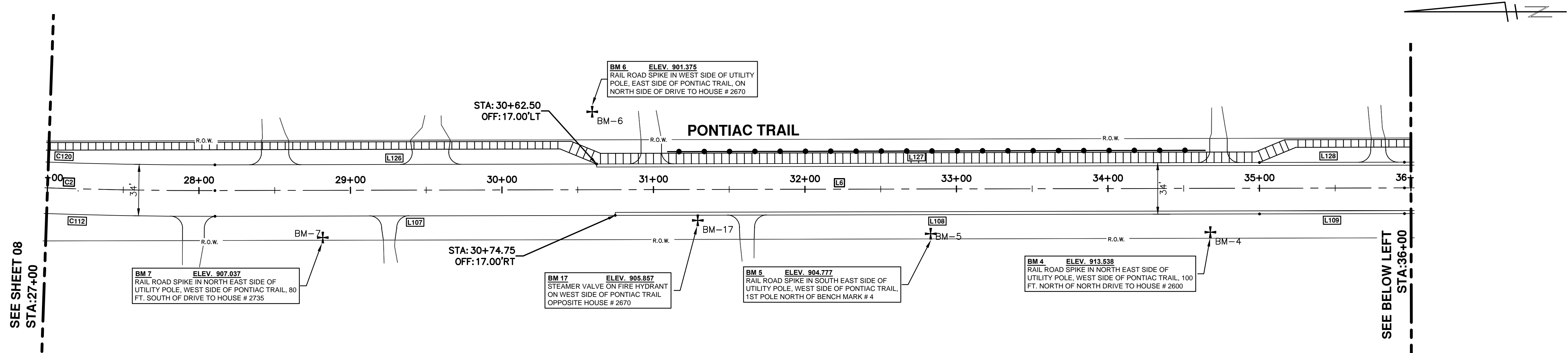


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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
HORIZONTAL ALIGNMENT

SCALE PLAN: 1" = 40'
DRAWING NO: 2012028-08
SHEET NO. 08 OF 102

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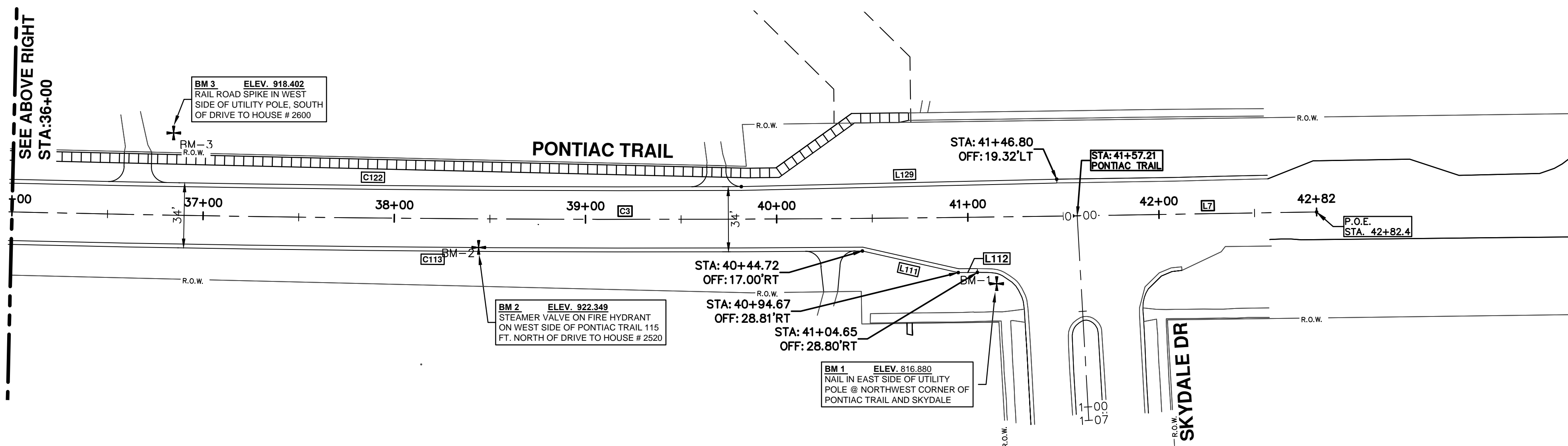
SEE SHEET 08
STA: 27+00

SEE BELOW LEFT
STA: 36+00

PONTIAC TRAIL EDGE OF PAVEMENT					
LINE #/CURVE #	LENGTH(FT)	BEARING/DELTA	START E,N	END E,N	RADIUS
C120	179.59	3.43	13294305.39 296587.07	13294318.83 296766.13	2998.51
L126	251.97	N2°34'37.28"E	13294294.06 296335.36	13294305.39 296587.07	
C112	181.63	3.43	13294271.43 296588.60	13294285.02 296769.69	3032.51
L107	264.22	N2°34'37.28"E	13294259.55 296324.65	13294271.43 296588.60	

PONTIAC TRAIL ALIGNMENT						
NUMBER	LENGTH(FT)	LINE/CHORD DIRECTION	RADIUS	DELTA ANGLE	START E,N	END E,N
C1	246.94	S3° 56' 28.17"E	711.00	19°53'58"	13294409.1638 298192.2773	13294426.0512 297947.1583
C2	180.61	S4° 17' 34.15"W	3015.51	3°25'54"	13294301.9281 296767.9116	13294288.4110 296587.8384
C3	559.24	S1° 25' 57.59"W	14000.00	2°17'19"	13294253.1086 295803.4760	13294239.1274 295244.4490
L1	282.05'	S13°48'20.42"E			13294120.9780 299354.2952	13294188.2837 299080.3924
L2	601.33'	S14°00'21.24"E			13294188.2837 299080.3924	13294333.8195 298496.9361
L3	313.84'	S13°53'27.35"E			13294333.8195 298496.9361	13294409.1638 298192.2773
L4	447.64'	S6°00'31.02"W			13294426.0512 297947.1583	13294379.1930 297501.9757
L5	738.12'	S6°00'31.02"W			13294379.1930 297501.9757	13294301.9281 296767.9116
L6	785.16'	S2°34'37.28"W			13294288.4110 296587.8384	13294253.1086 295803.4760
L7	125.22'	S0°17'17.90"W			13294239.1159 295242.1629	13294238.4858 295116.9443

PONTIAC TRAIL BACK OF CURB					
LINE #/CURVE #	LENGTH(FT)	BEARING/DELTA	START E,N	END E,N	RADIUS
L127	437.50	N2°34'37.28"E	13294274.39 295898.30	13294294.06 296335.36	
L128	95.69	N2°34'37.28"E	13294270.09 295802.71	13294274.39 295898.30	
L129	165.00	S0°08'44.15"E	13294258.07 295417.47	13294258.49 295252.47	
C122	385.44	1.58	13294258.07 295417.47	13294270.09 295802.71	13983.00
L108	425.25	N2°34'37.28"E	13294240.43 295899.83	13294259.55 296324.65	
L109	95.69	N2°34'37.28"E	13294236.13 295804.24	13294240.43 295899.83	
C113	449.58	1.84	13294223.12 295354.87	13294236.13 295804.24	14017.00
L111	51.40	N13°54'57.19"E	13294210.75 295304.97	13294223.12 295354.87	
L112	10.00	N0°29'38.66"E	13294210.67 295294.98	13294210.75 295304.97	



SEE ABOVE RIGHT
STA: 36+00

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

PONTIAC TRAIL IMPROVEMENTS


HORIZONTAL ALIGNMENT

STA. 27+00 TO STA. 42+82

SCALE PLAN: 1" = 40'

DRAWING No. 2012028-09

SHEET No. 09 OF 102

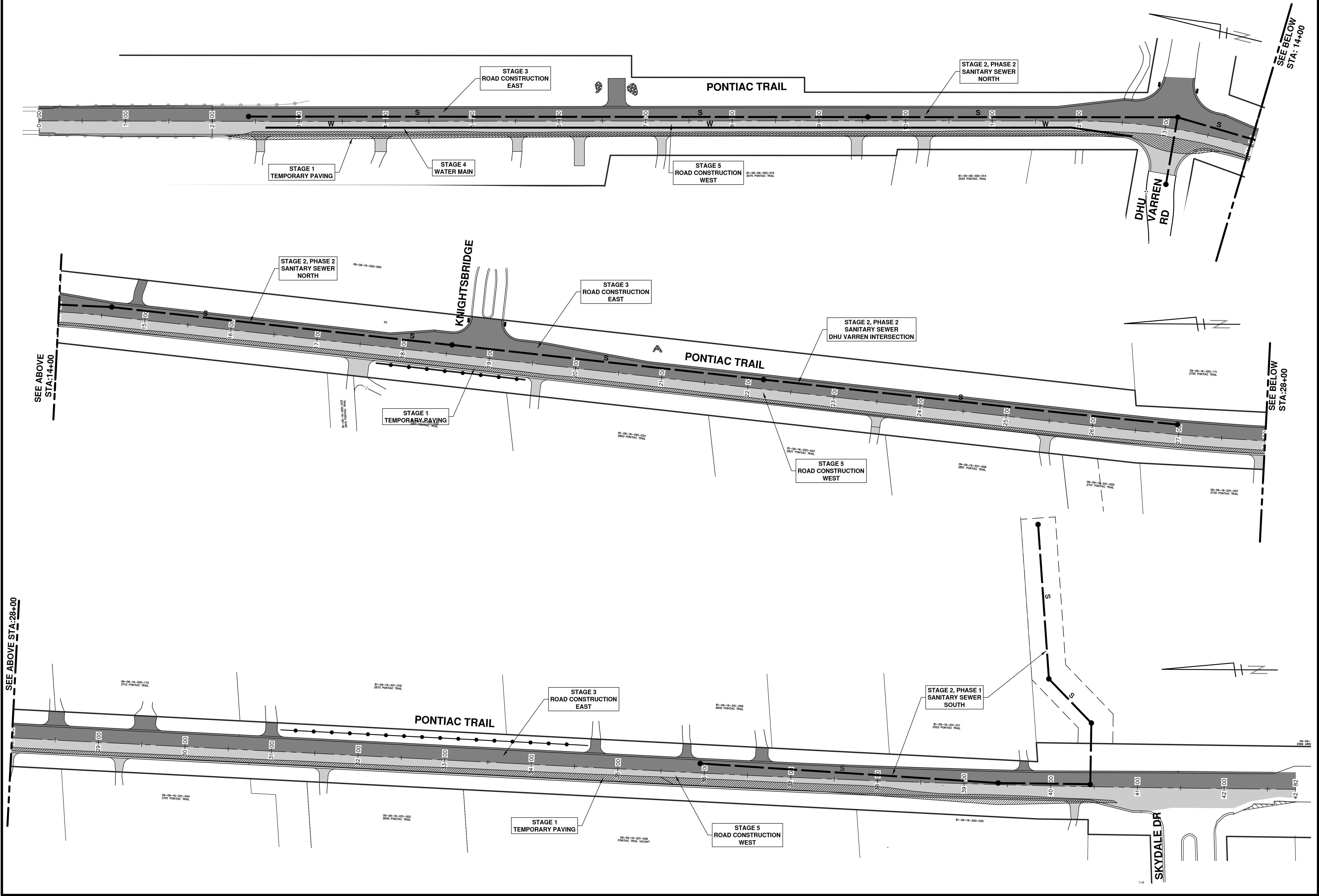


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BY: [Signature]

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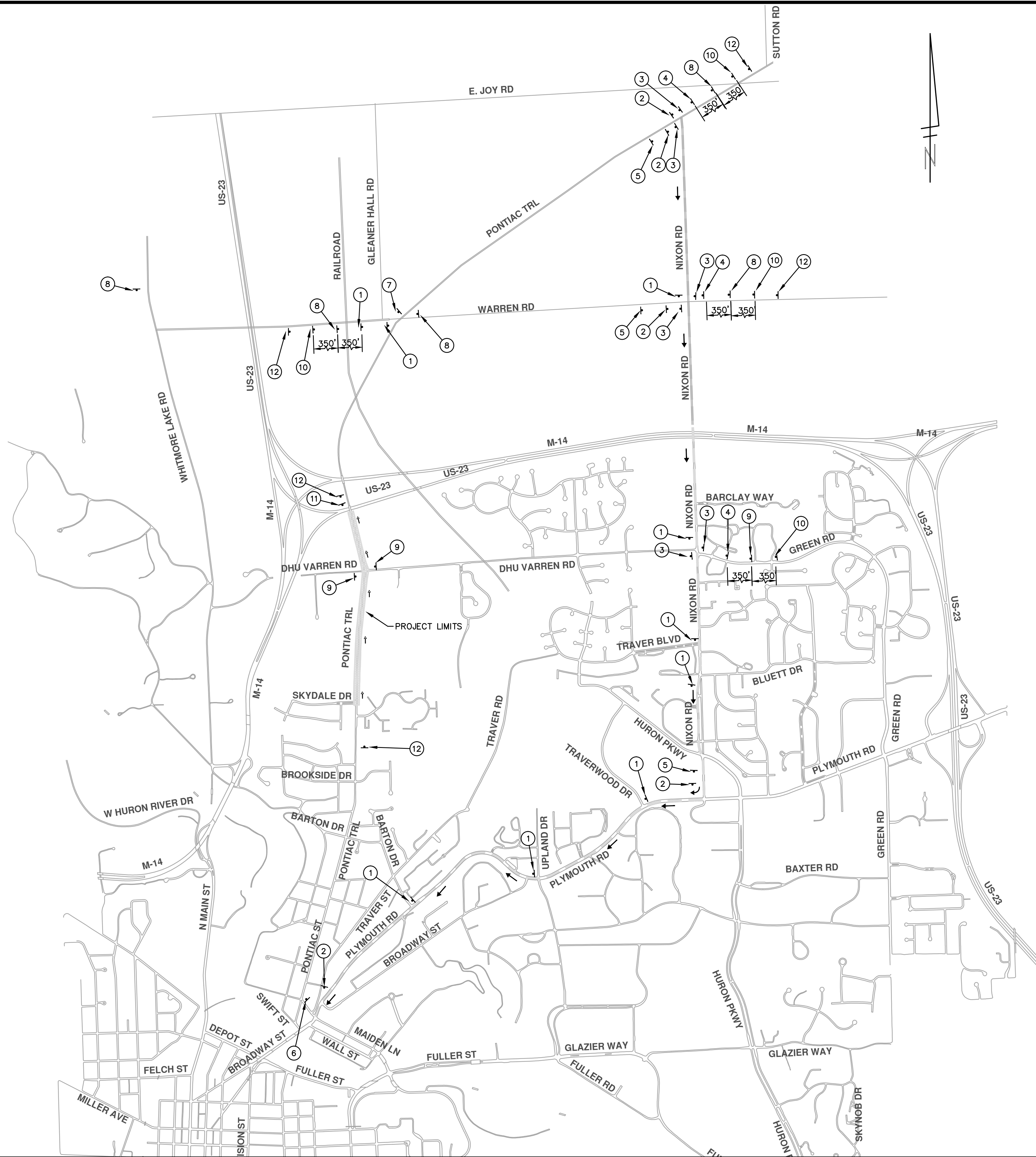


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03-18-2014	DATE
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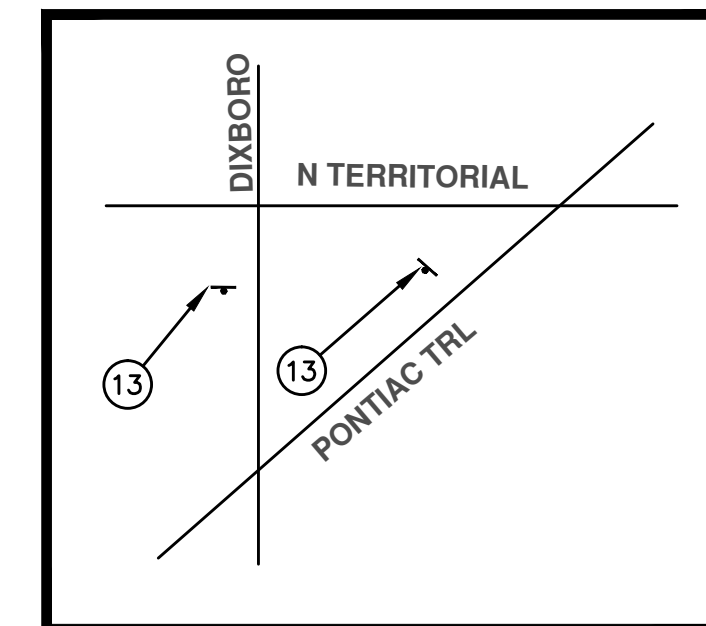
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 MAINTENANCE OF TRAFFIC
 STAGING AND PHASING

SCALE PLAN: 1" = 50'
 DRAWING No. 2012028-10
 SHEET No. 10 OF 102



DETOUR CONSTRUCTION NOTES:

- Depending on the detour routes that are put in place, conflicting signs may be present. Prior to the ordering or placement of any signs, meet with the engineer to verify the exact number and location of the signs to be placed. The engineer and the contractor shall work together to eliminate all conflicts.
- The city reserves the right to order additional signs and place them into service in order to safely maintain traffic. Adjustments in the unit price for these items of work shall not be allowed for these occurrences.
- The contractor shall coordinate his operations with those of the city of Ann Arbor's signs and signals unit during the course of the detour route establishment to effectively and safely maintain traffic. Do not erect any signs until its location and proposed date of installation is approved by the city of Ann Arbor.
- These detours are to be in place during pontiac trail roadway reconstruction. See "special provision for maintaining traffic and construction sequencing" for details on construction staging sequencing, closure and detour limitations, and other details.
- Reference the "special provision for maintaining traffic and construction sequencing" for additional project requirements. The contractor's attention is specifically directed to the section of same special provision regarding coordination with the city signs and signals unit for the several detour route modifications and the modifications to traffic signals for the detour.
- The contractor shall furnish, erect and maintain signs as shown on the plans or otherwise directed by the engineer.
- Construction warning signs shall have an orange reflectorized background.
- Signs shall conform to the current michigan manual of uniform traffic control devices.
- The contractor shall drive all signs into exposed ground or insert into a bored hole in pavement as necessary to permanently secure. All holes in pavement shall be filled with engineer-approved mortar when the sign is removed and no longer needed. Costs for this work shall be included in the pay item "sign, type b, temp, prismatic, furn" or "sign, type b, prismatic, special, furn".
- Advance warning signs shall be provided with two (2) type a flashing lights and one (1) day-glow orange flag.
- Conflicting signs to be covered by contractor Paid for under minor traffic control
- Message boards to be installed 1 week prior to the start of construction.



TRAFFIC CONTROL SIGN			
TAG	SIGN	NUM.	QTY.
①		D3-1 M4-9S 30x24	9
②		D3-1 M4-9R 30x24	6
③		D3-1 M4-9L 30x24	6
④		D3-1 M4-9L (MOD.) 30x24	3
⑤		D3-1 M4-9L (MOD.) 30x24	3
⑥		D3-1 M4-8a 24x18	1
⑦		R11-4 60x30	1
⑧		SPECIAL 48x60	5
⑨		SPECIAL 48x60	3
⑩		W20-2 48x48	4
⑪		R11-2 48"x60"	1
⑫	MESSAGE BOARD		5
⑬		SPECIAL 48x60	2
BARRICADE, TYPE III, HIGH INTENSITY, LIGHTED - 1 EACH			

SIGN, PORTABLE, CHANGEABLE MESSAGE - 5 EACH
 VERIFY EXACT QUANTITY AND LOCATION WITH ENGINEER PRIOR TO ORDERING
 TOTAL SIGNS SFT = 473 SFT

LEGEND:

- SOUTH BOUND PONTIAC TRAIL DETOUR ROUTE
- PONTIAC TRAIL CONSTRUCTION ZONE



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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 MAINTENANCE OF TRAFFIC
 SOUTH BOUND DETOUR PLAN

SCALE PLAN: 1" = 1200'
 DRAWING No. 2012028-11
 SHEET No.



TRAFFIC CONTROL SIGN			
TAG	SIGN	NUM.	QTY.
①		D3-1 M4-9S 30x24	11
②		D3-1 M4-9R 30x24	3
③		D3-1 M4-9L 30x24	3
④		D3-1 M4-9L (MOD.) 30x24	3
⑤		D3-1 M4-9L (MOD.) 30x24	1
⑥		D3-1 M4-8a 24x18	1
⑦		R11-4 60x30	0
⑧		SPECIAL 48x60	6
⑨		SPECIAL 48x60	2
⑩		W20-2 48x48	0
⑪		R11-2 48"x60"	1
⑫	MESSAGE BOARD		1

BARRICADE, TYPE III, HIGH INTENSITY, LIGHTED - 1 EACH

SIGN, PORTABLE, CHANGEABLE MESSAGE - 1 EACH
 VERIFY EXACT QUANTITY AND LOCATION WITH ENGINEER PRIOR TO ORDERING
 TOTAL SIGNS SFT = 340 SFT

LEGEND:
 NORTH BOUND PONTIAC TRAIL DETOUR
 PONTIAC TRAIL CONSTRUCTION ZONE



Know what's below. Call before you dig.

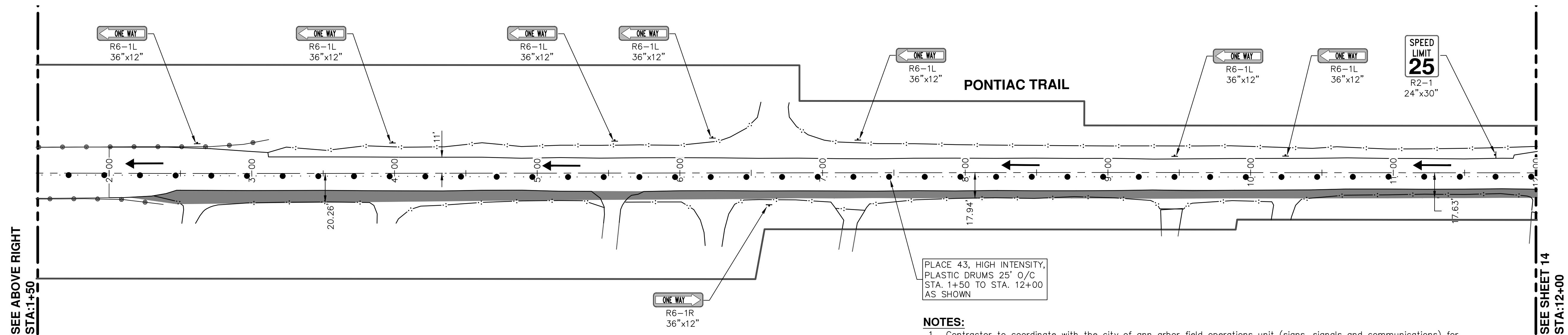
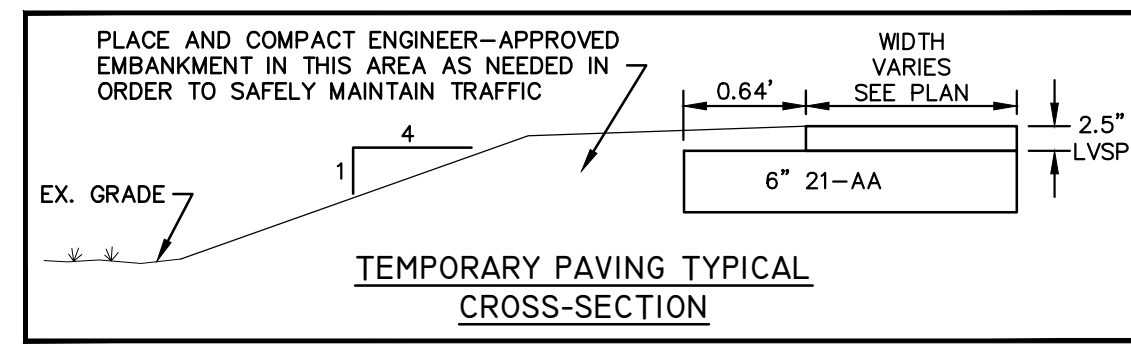
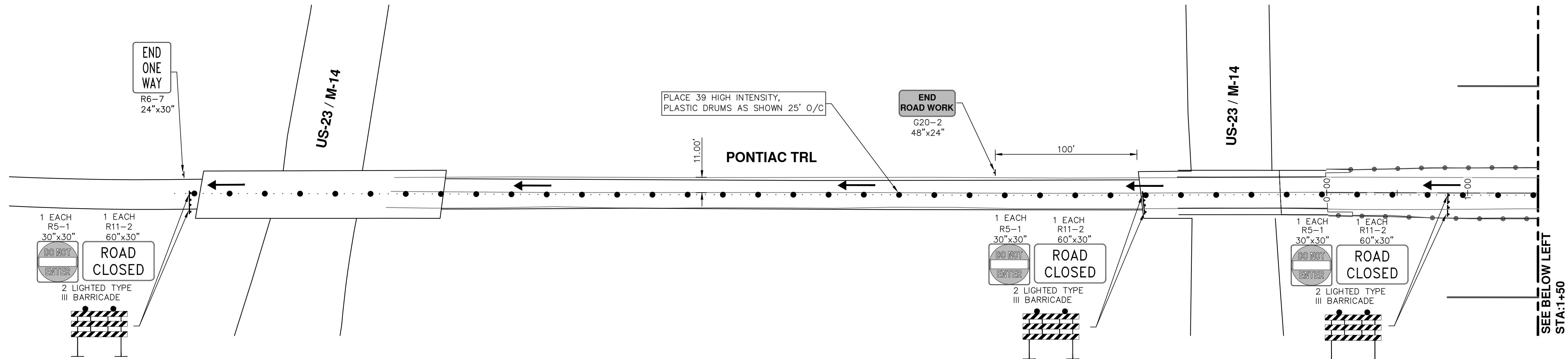
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 MAINTENANCE OF TRAFFIC
 NORTH BOUND DETOUR PLAN

SCALE PLAN: 1" = 120'
 DRAWING No. 2012028-12

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NOTES:

1. Contractor to coordinate with the city of ann arbor field operations unit (signs, signals and communications) for placement of new/relocated traffic signals and the bagging of existing traffic signals to facilitate traffic control for each stage. 48 hour advance notice is required.
2. Cover conflicting signs as needed or as directed by engineer paid as minor traffic control.
3. Remove as directed conflicting pavement markings as directed by the engineer. Quantities provided.
4. Remove conflicting stop bars and place temporary stop bars as directed by the engineer. Quantities provided.
5. Only one (1) intersection quadrant at a time shall be closed for construction. Pedestrian detours shall be placed at intersections. Detours shall be approved by city prior to placement. Miscellaneous quantities for furnishing and operating type b signs have been provided.
6. Pontiac trail/dhu varren road intersection work will require maintenance of traffic plan submitted one (1) week prior to work in intersection for review, approval and notification to public.
7. Contractor shall place portable, changeable message signs a minimum of one (1) week prior to the start of construction in locations indicated by engineer. Message to be provided by the engineer.
8. 42" Jersey barrier to be placed at end of excavation at the end of each day.

811
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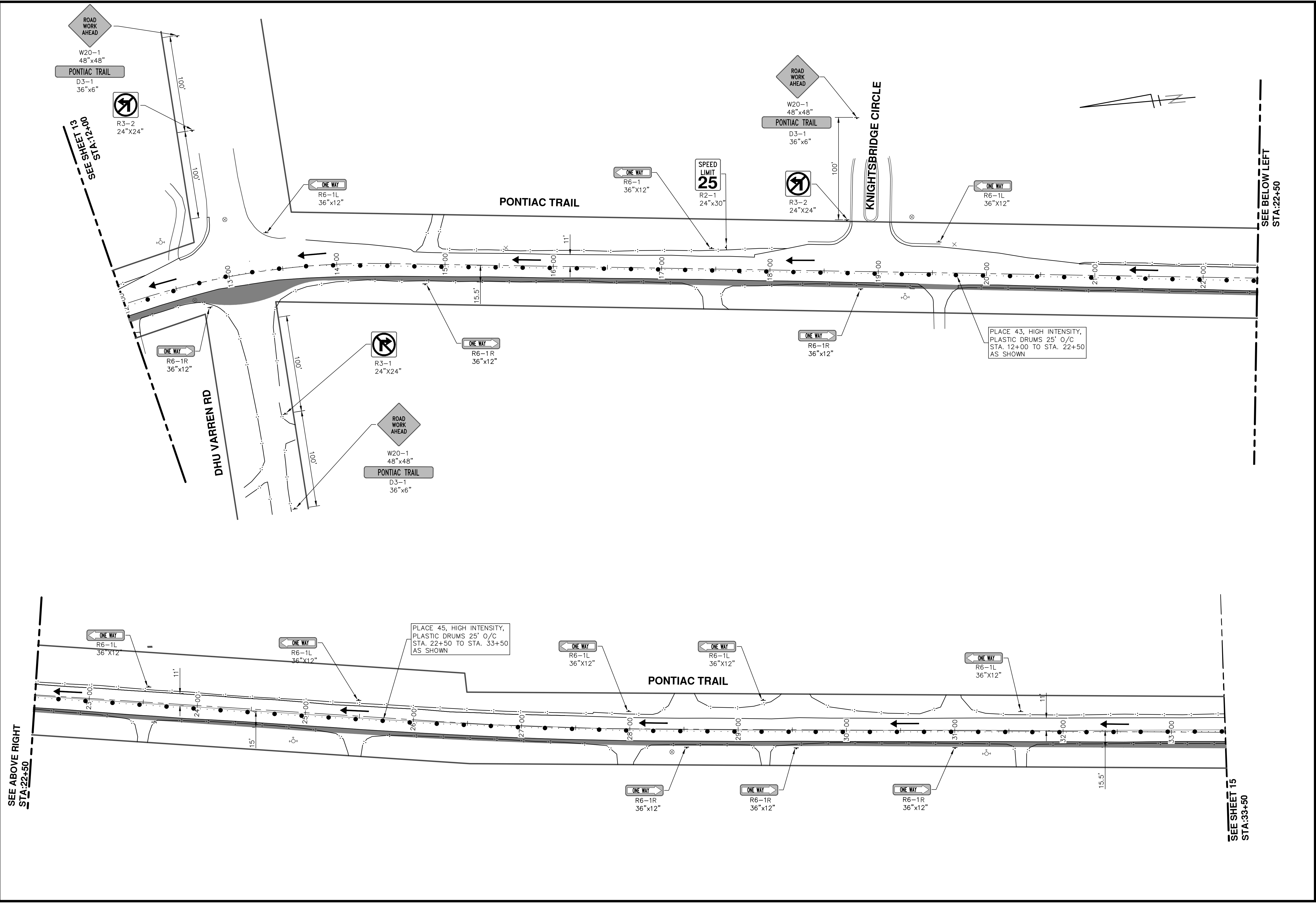
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
MAINTENANCE OF TRAFFIC
STAGE 1 - TEMPORARY PAVING

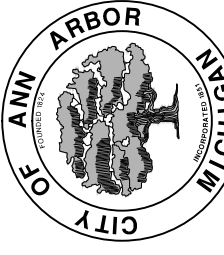
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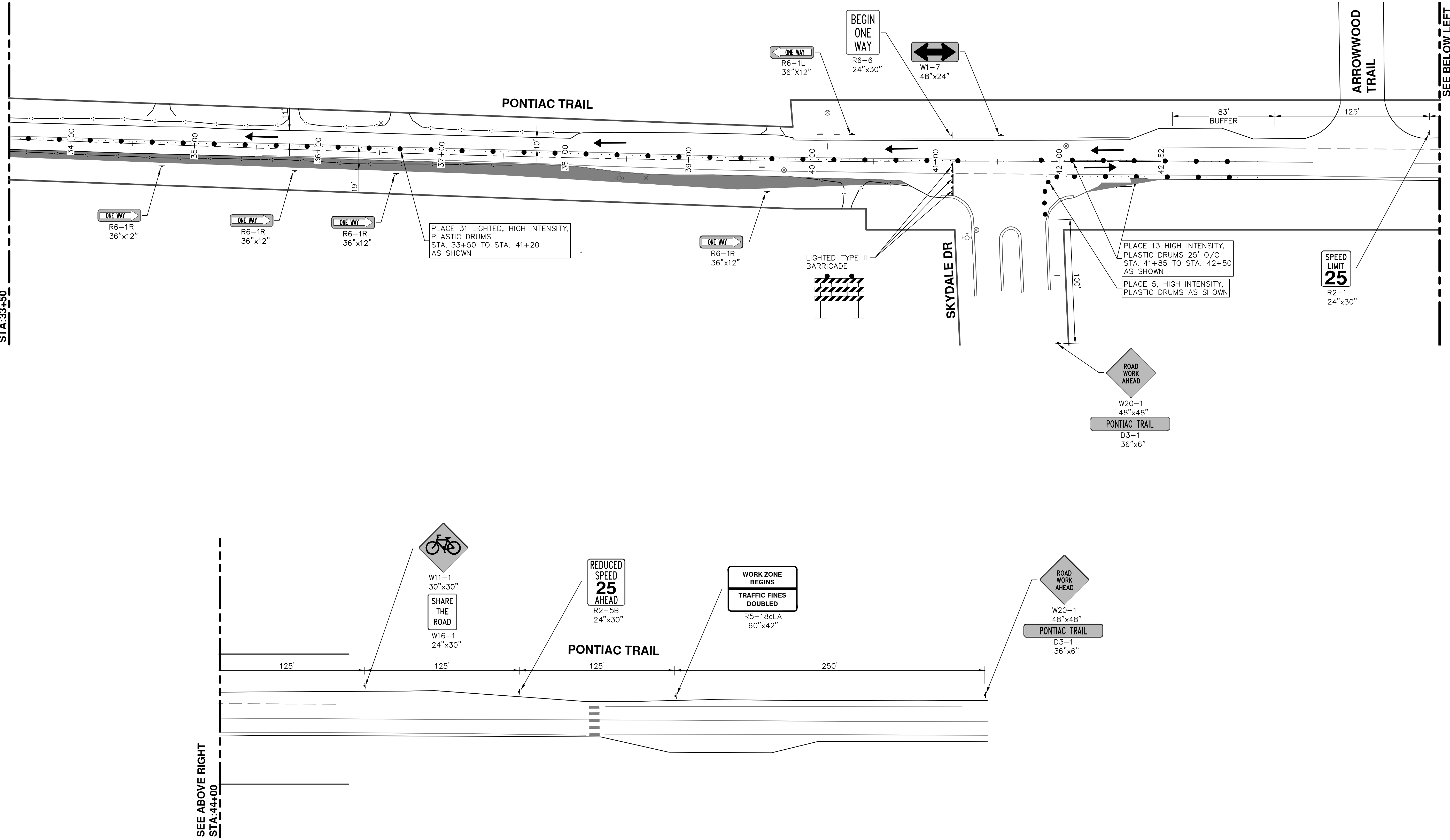
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR PONTIAC TRAIL IMPROVEMENTS MAINTENANCE OF TRAFFIC STAGE 1 - TEMPORARY PAVING	
SCALE PLAN: 1" = 40'	DRAWING No. 2012028-14
SHEET No. 14 OF 102	

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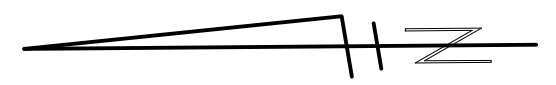
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SEE SHEET 14
STA:33+50



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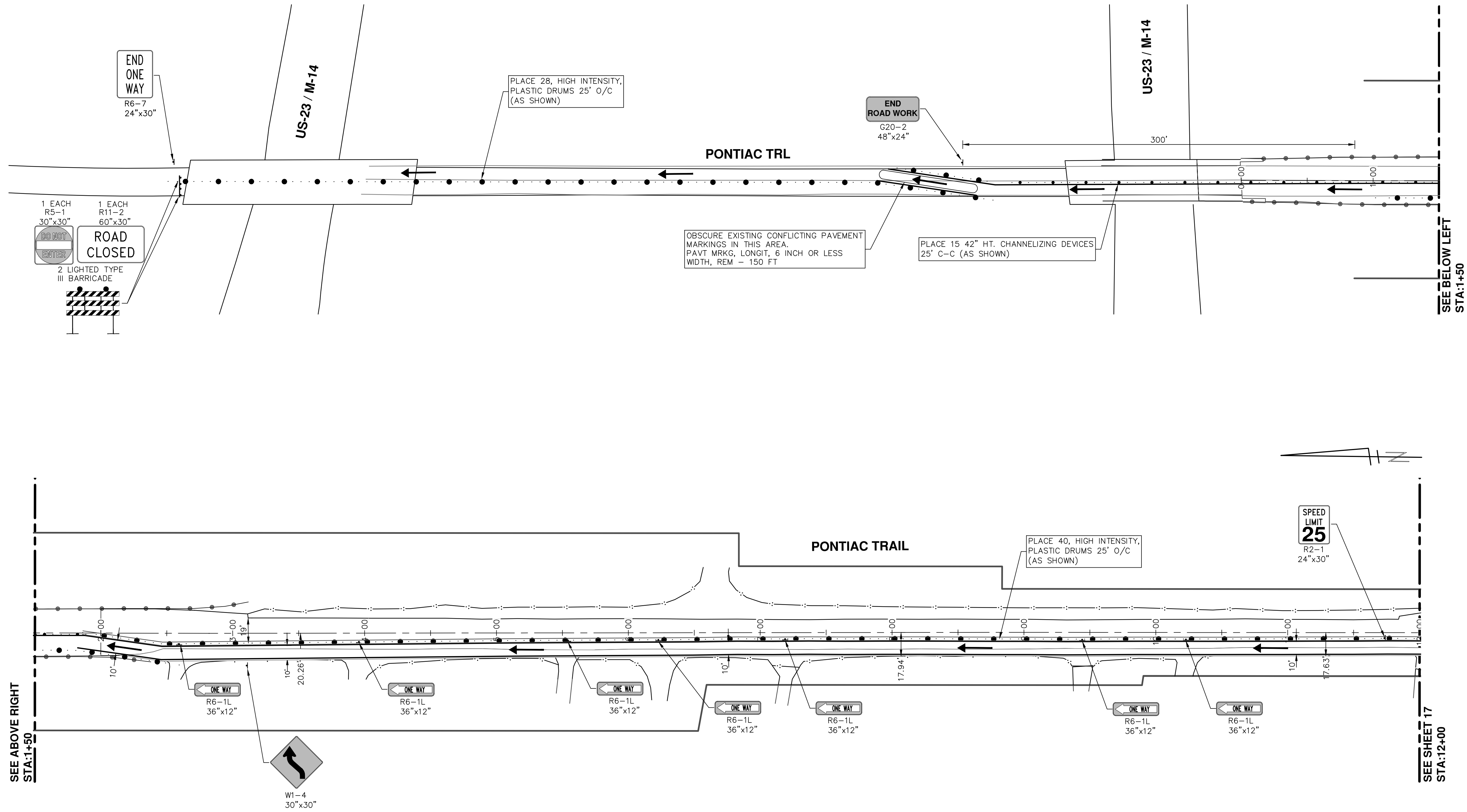
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 MAINTENANCE OF TRAFFIC
 STAGE 1 - TEMPORARY PAVING

SCALE PLAN: Custom
 DRAWING No. 2012028-15

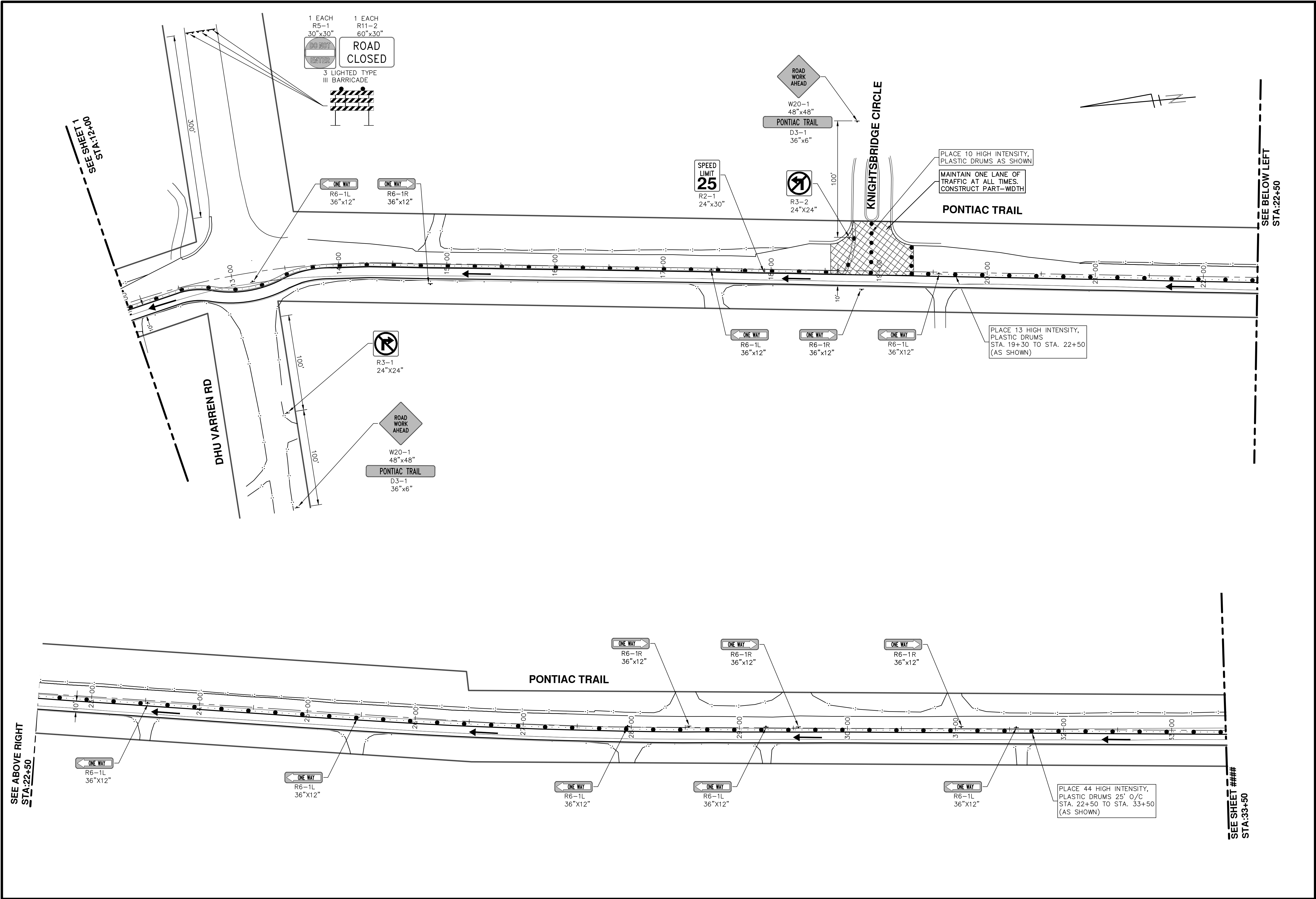
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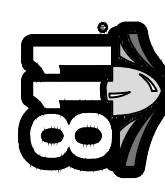
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<p>PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR</p> <p>PONTIAC TRAIL IMPROVEMENTS</p> <p>MAINTENANCE OF TRAFFIC</p> <p>STAGE 2 PHASE 1 - SANITARY SEWER - SOUTH</p>	<p>City of Ann Arbor Public Service 301 East Huron Street Ann Arbor, MI 48106 www.a2gov.org</p>
<p>SCALE PLAN: 1" = 40'</p> <p>DRAWING No. 2012028-16</p>	<p>DATE: 03-18-2014</p> <p>BY: RMLI</p> <p>CHECKED: []</p>
<p>SHEET No. 16 OF 102</p>	<p>DESCRIPTION</p>

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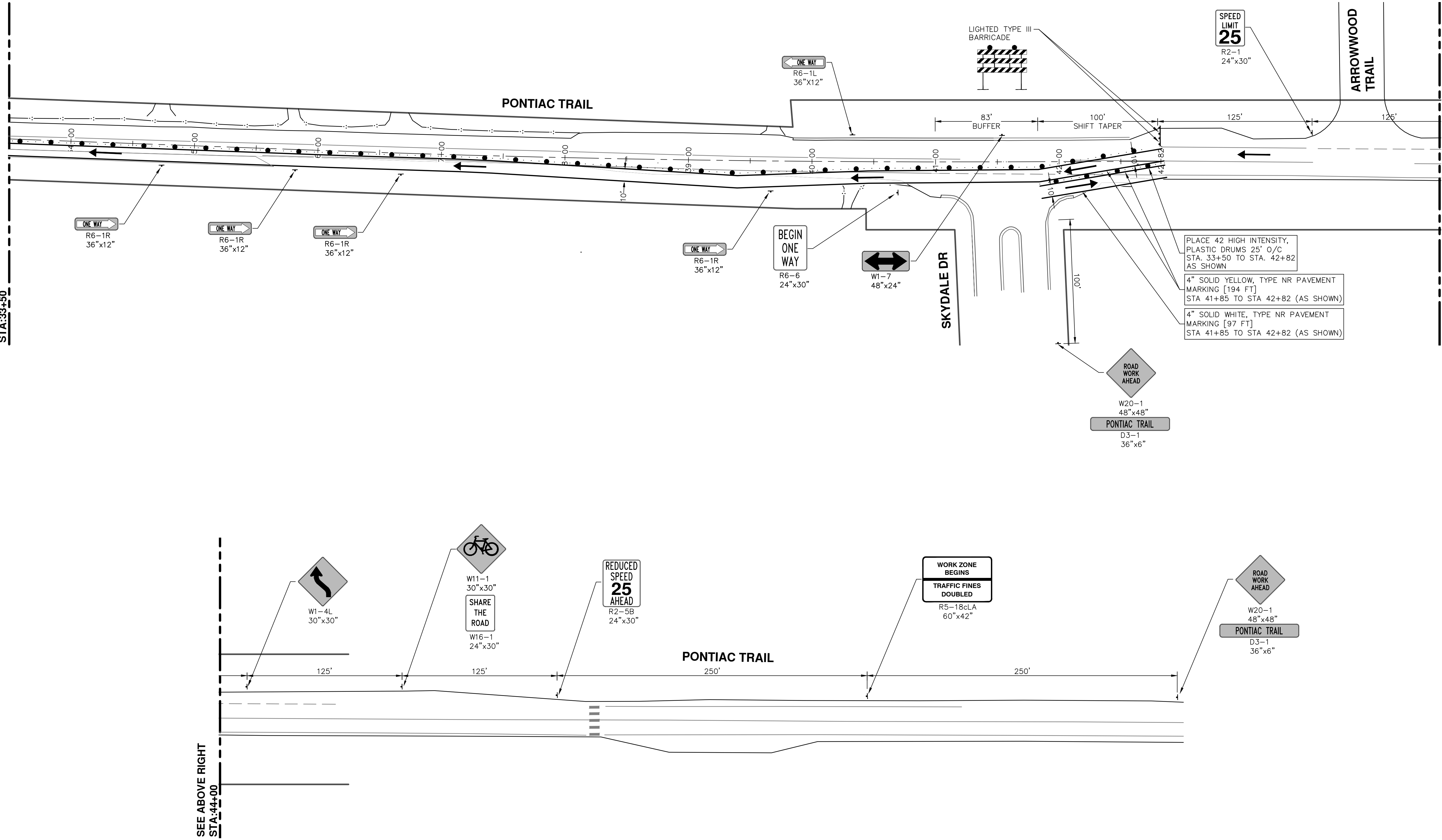
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 MAINTENANCE OF TRAFFIC
 STAGE 2 PHASE 1 - SANITARY SEWER - SOUTH

SCALE PLAN: 1" = 40'
 DRAWING No. 2012028-17

SHEET No. 17 OF 102

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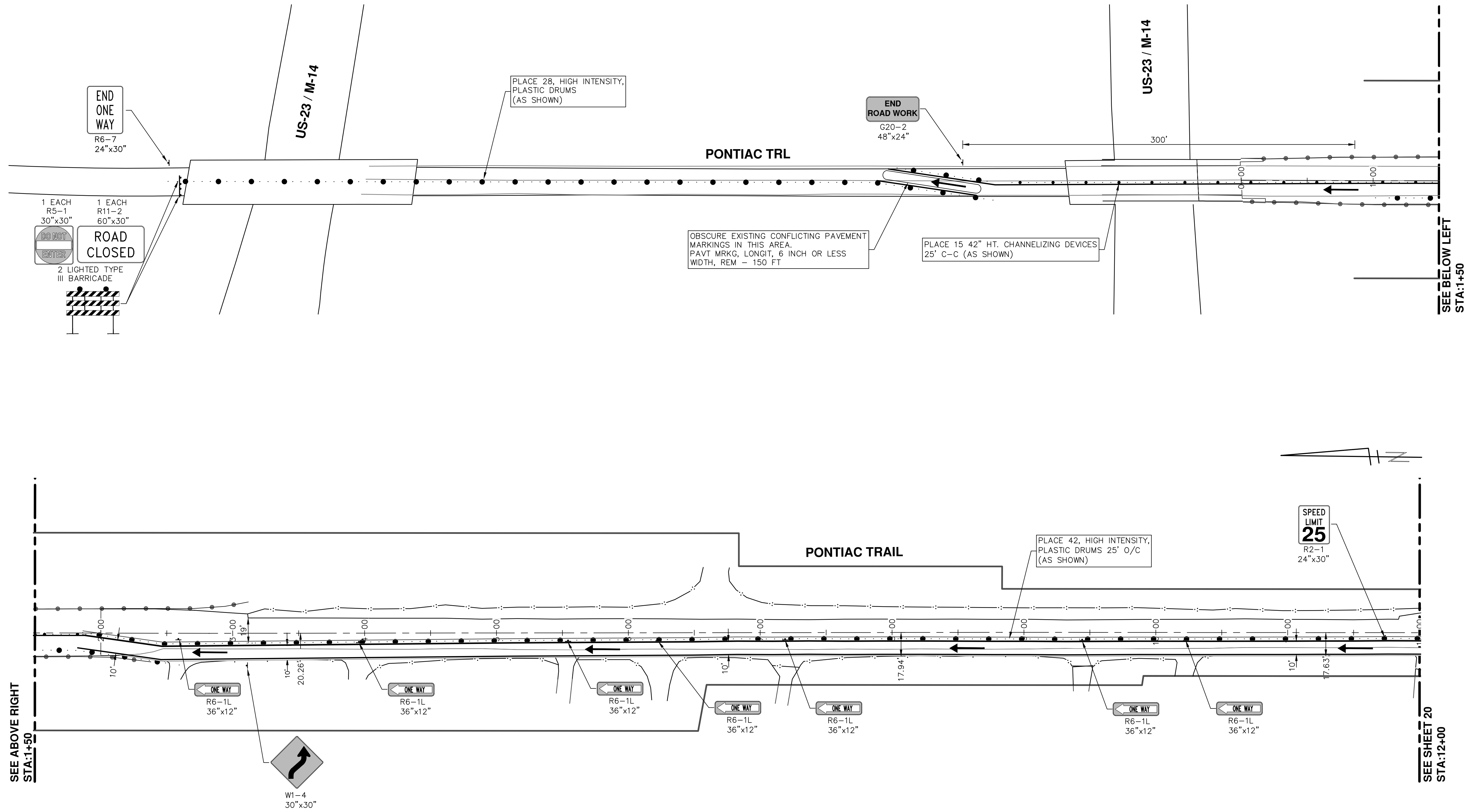


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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR PONTIAC TRAIL IMPROVEMENTS MAINTENANCE OF TRAFFIC STAGE 2 PHASE 1 - SANITARY SEWER - SOUTH	CITY OF ANN ARBOR PUBLIC SERVICE 301 EAST HURON STREET ANN ARBOR, MI 48106-1000 WWW.A2GPOV.ORG
SCALE PLAN: Custom DRAWING No. 2012028-18	REV. NO. 00 BID SUBMITTAL DATE 03-18-2014 DRAWN RMLI CHECKED BY
SHEET No. 18 OF 102	

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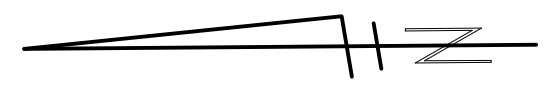
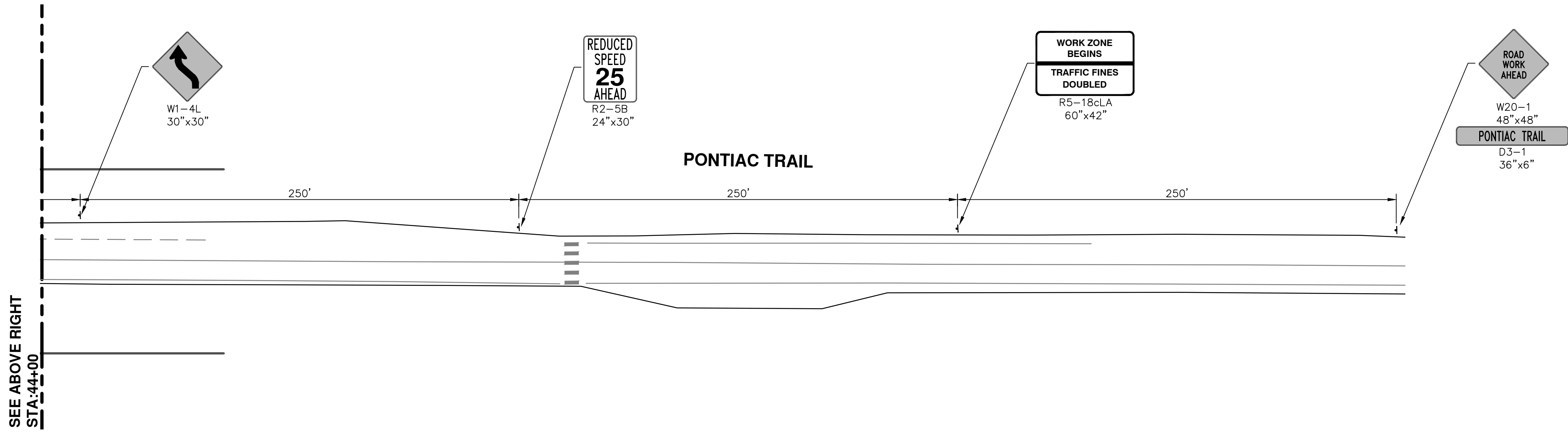
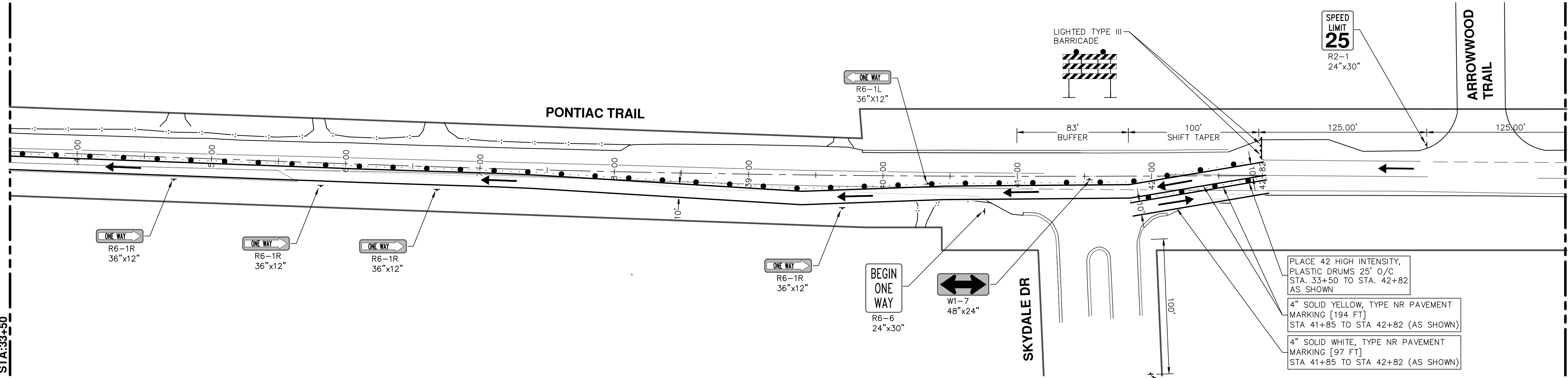


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
MAINTENANCE OF TRAFFIC
STAGE 2 PHASE 2 - SANITARY SEWER - NORTH

SCALE PLAN: 1" = 40'
DRAWING No. 2012028-19

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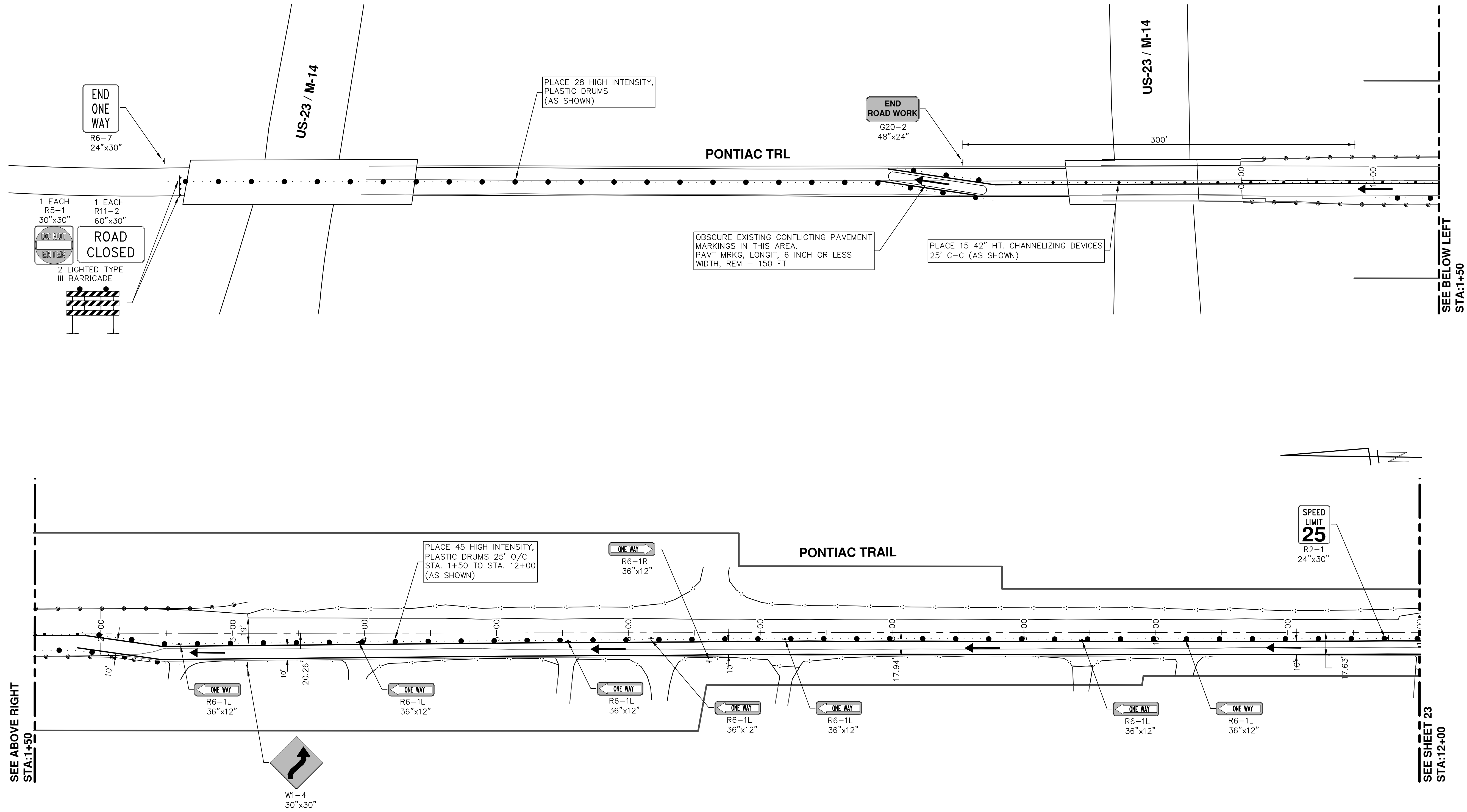
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 MAINTENANCE OF TRAFFIC
 STAGE 2 PHASE 2 - SANITARY SEWER - NORTH

SCALE PLAN: Custom
 DRAWING No.: 2012028-21

SHEET No.: 21 OF 102

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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 MAINTENANCE OF TRAFFIC

SCALE PLAN: 1" = 40'
 DRAWING No. 2012028-22

STAGE 3 - ROAD CONSTRUCTION - EAST

DATE: 03-18-2014
 BY: RMLI
 CHECKED: []

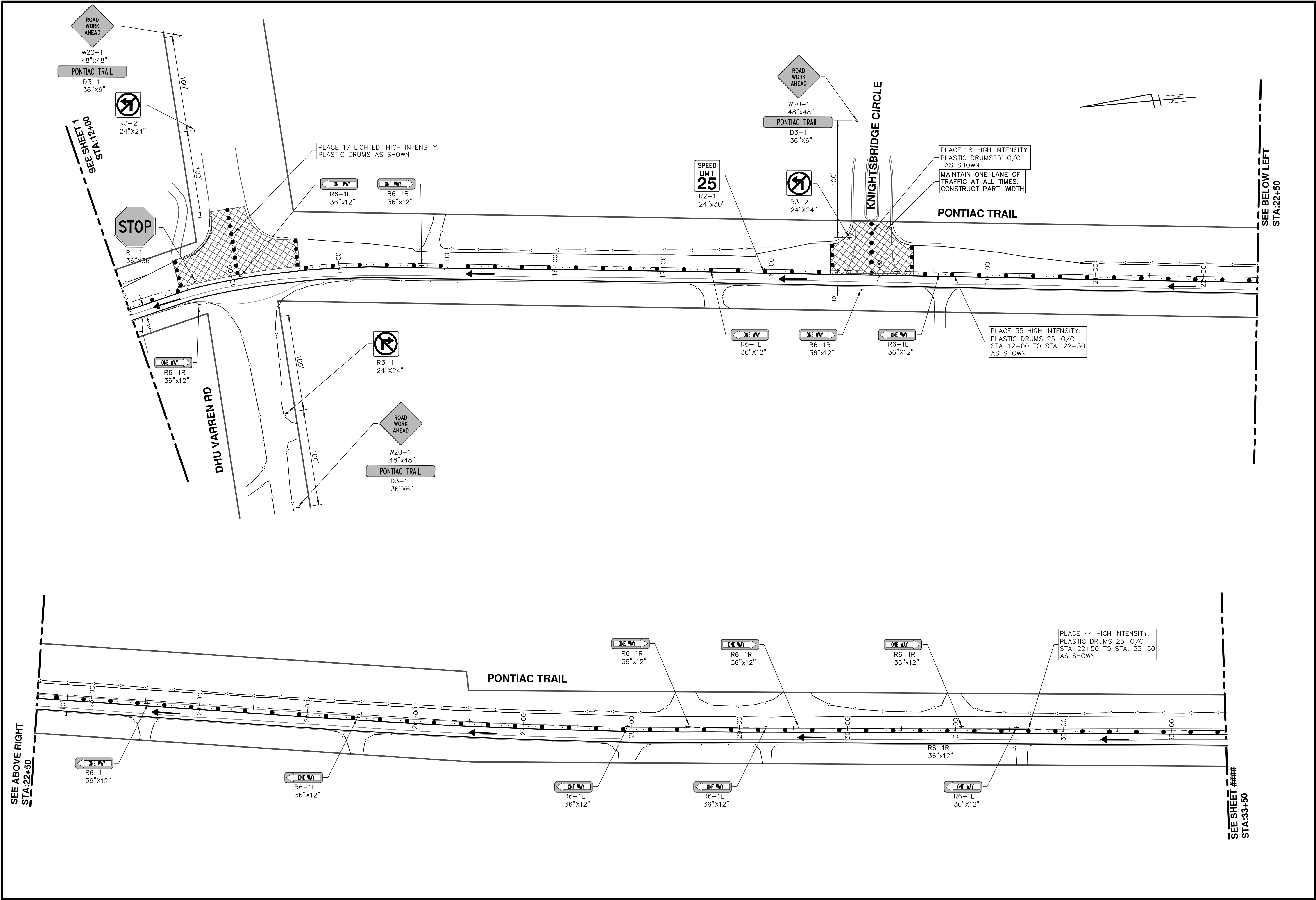
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 REV. []

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PONTIAC TRAIL IMPROVEMENTS
 MAINTENANCE OF TRAFFIC
 STAGE 3 - ROAD CONSTRUCTION - EAST

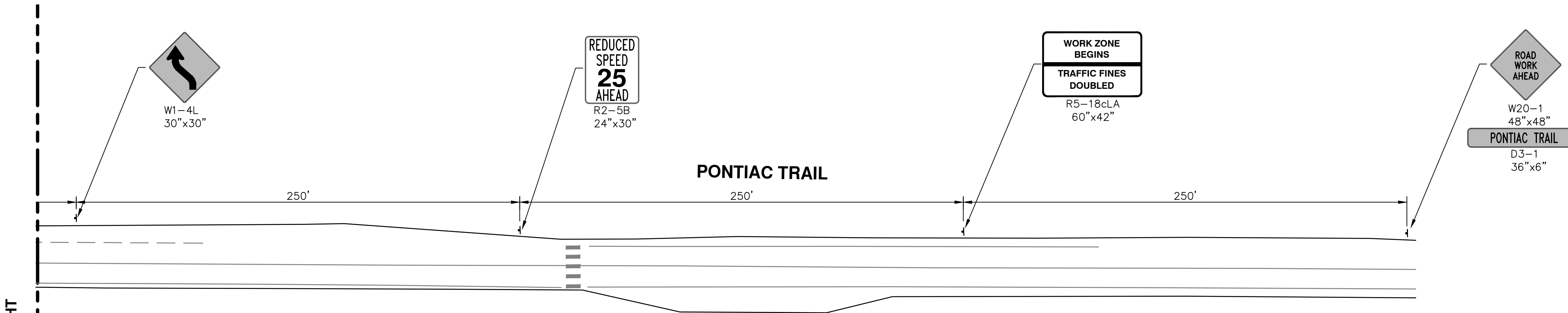
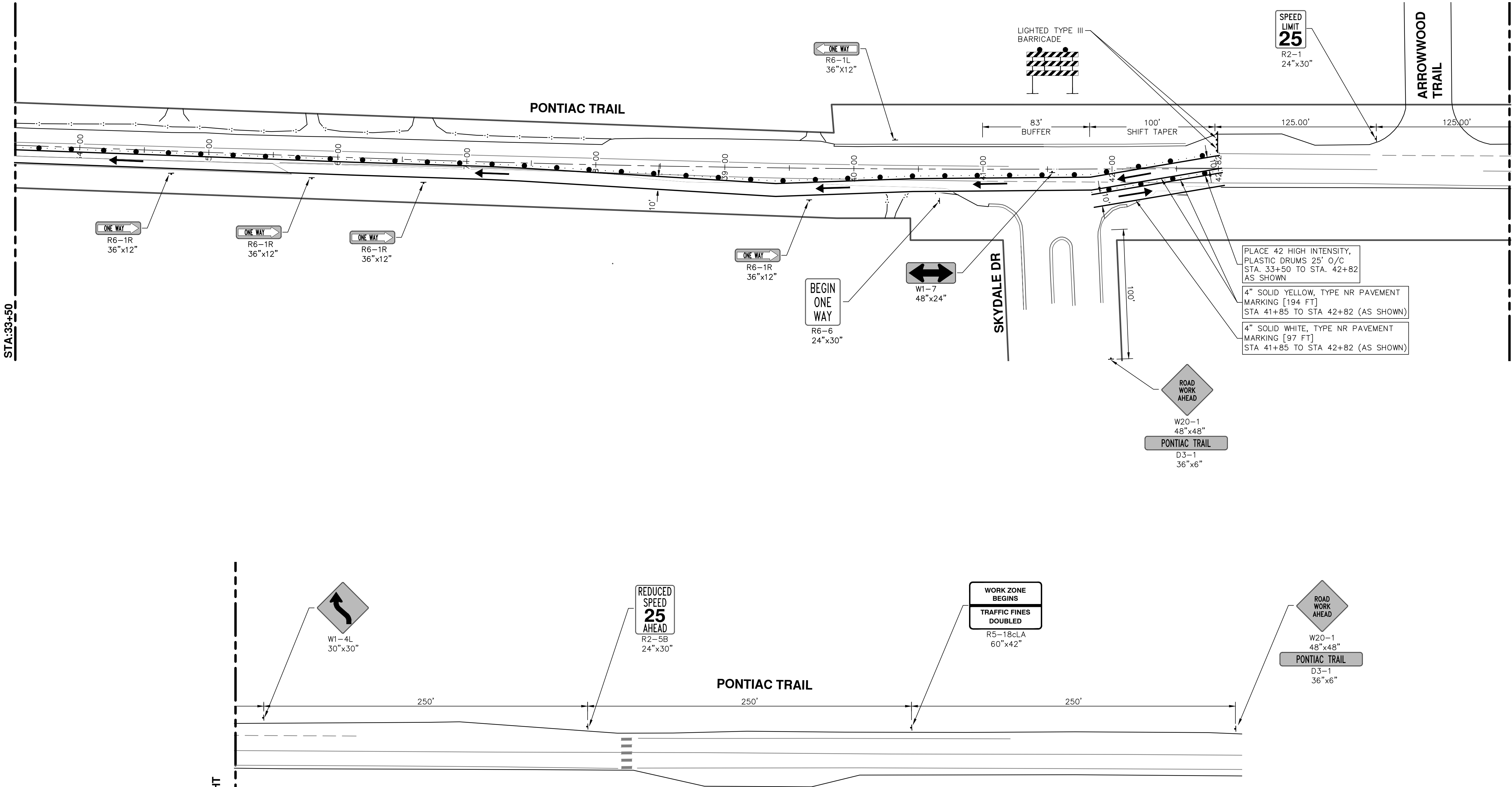
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 DRAWING No. 2012028-23

SHEET No. 23 OF 102

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SEE SHEET 23
STA:33+50

SEE ABOVE RIGHT
STA:44+00



PLACE 42 HIGH INTENSITY, PLASTIC DRUMS 25' O/C STA. 33+50 TO STA. 42+82 AS SHOWN

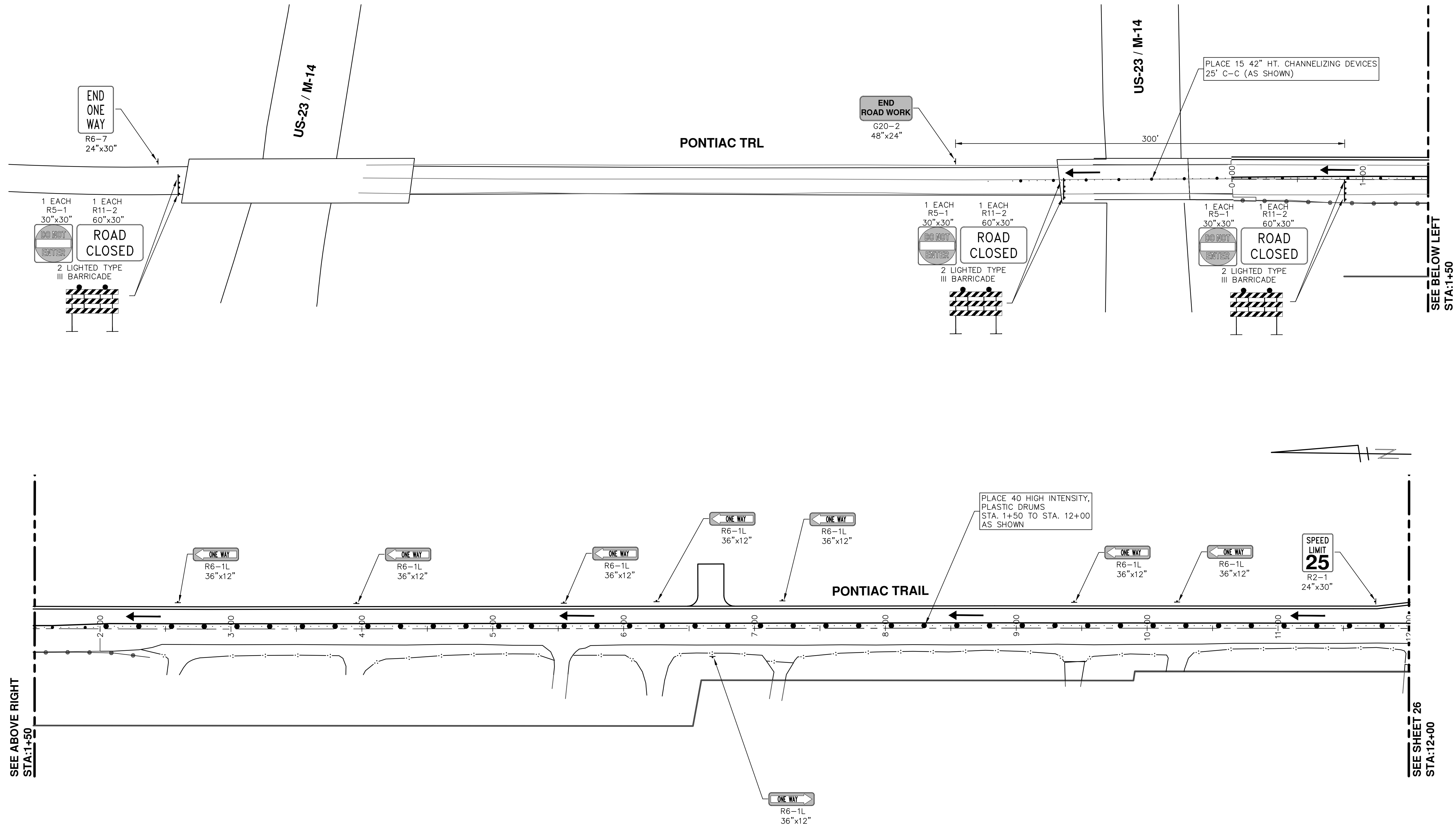
4" SOLID YELLOW, TYPE NR PAVEMENT MARKING [194 FT] STA 41+85 TO STA 42+82 (AS SHOWN)

4" SOLID WHITE, TYPE NR PAVEMENT MARKING [97 FT] STA 41+85 TO STA 42+82 (AS SHOWN)

SEE BELOW LEFT
STA:44+00

<p>PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR</p> <p>PONTIAC TRAIL IMPROVEMENTS</p> <p>MAINTENANCE OF TRAFFIC</p> <p>STAGE 3 - ROAD CONSTRUCTION - EAST</p>	<p>SCALE PLAN: Custom</p> <p>DRAWING No. 2012028-24</p>
<p>CITY OF ANN ARBOR PUBLIC SERVICE 301 EAST HURON STREET ANN ARBOR MI 48106-0001 www.a2gov.org</p>	<p>REV. 00</p> <p>BID SUBMITTAL</p> <p>DESCRIPTION</p>
<p>DATE 03-18-2014</p> <p>BY RML</p> <p>CHECKED</p>	<p>DATE</p> <p>DRAWN</p> <p>CHECKED</p>
<p>SHEET No. 24 OF 102</p>	

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SEE SHEET 26
STA:12+00

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STA:1+50

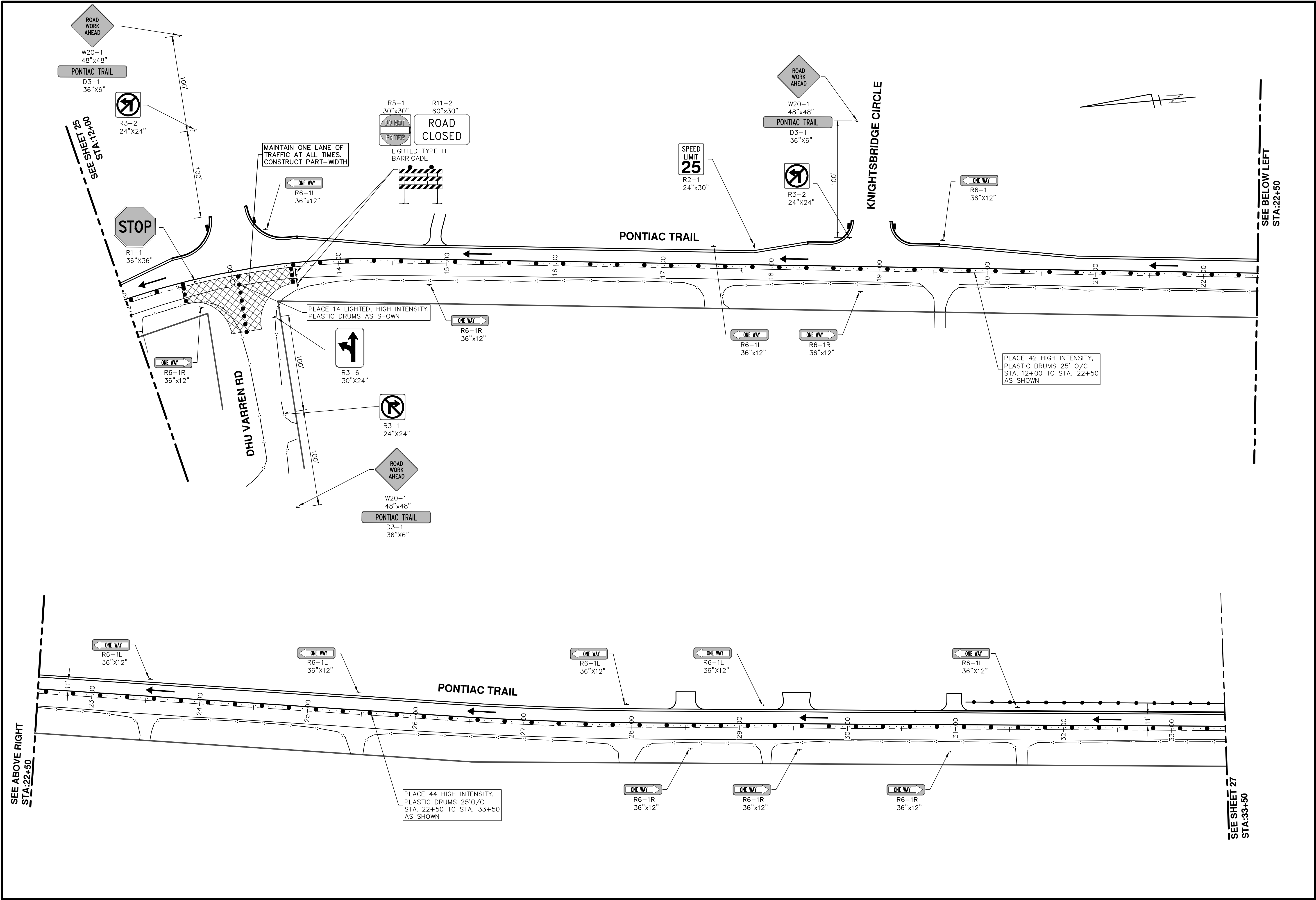



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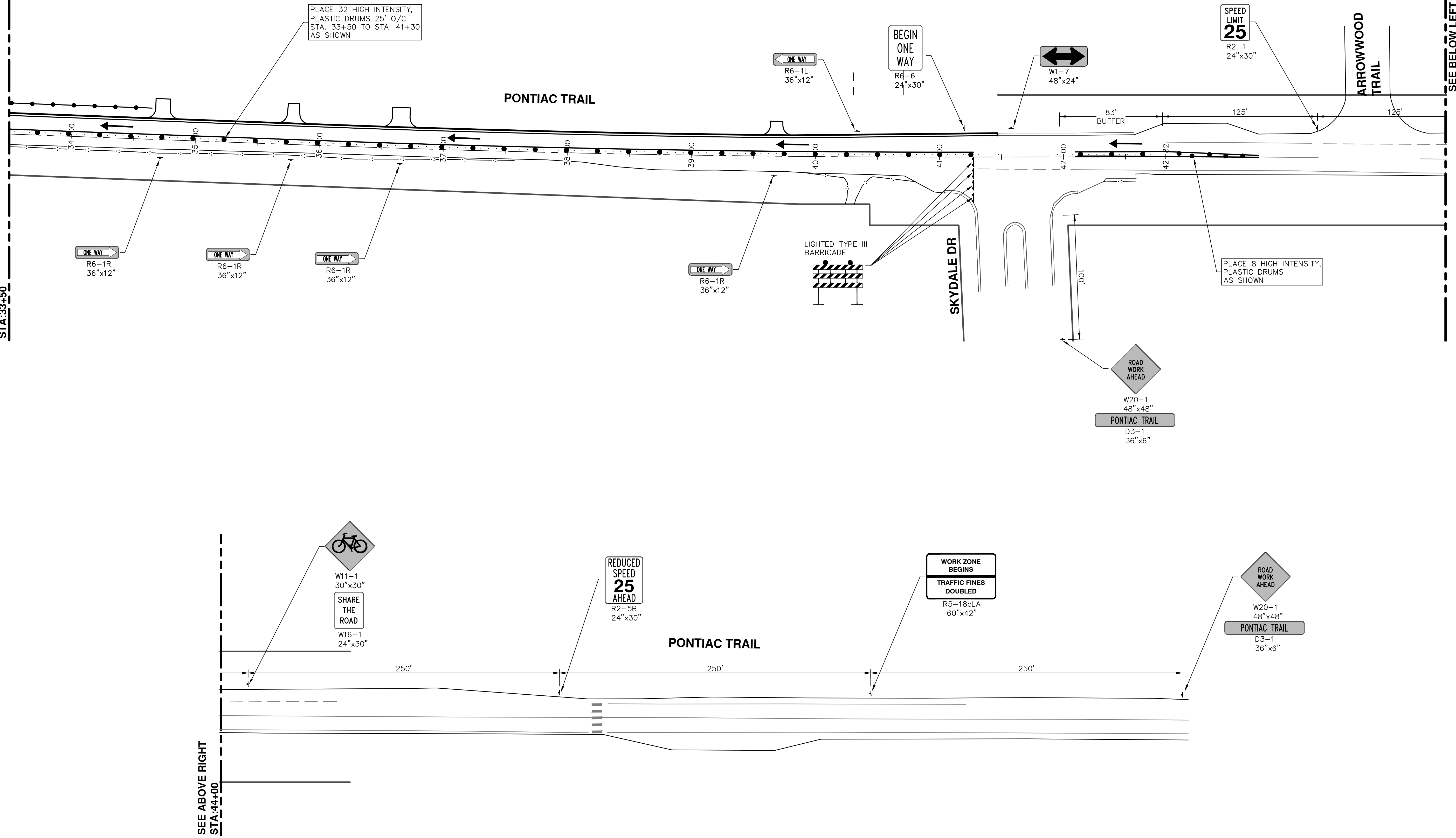
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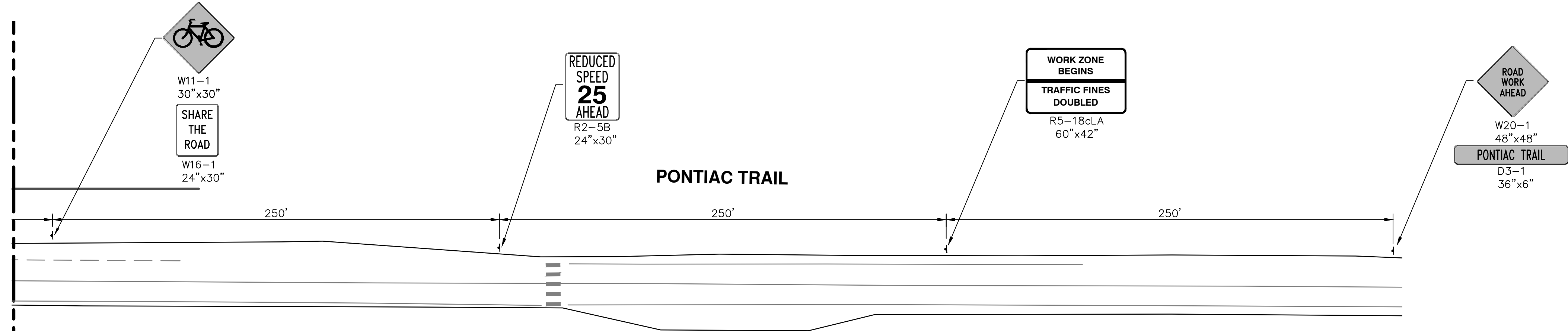
	
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR PONTIAC TRAIL IMPROVEMENTS MAINTENANCE OF TRAFFIC STAGE 4 - WATER MAIN	SCALE PLAN: 1" = 40' DRAWING No. 2012028-26
SHEET No. 26 OF 102	REV. NO. DESCRIPTION DATE DRAWN CHECKED 00 BID SUBMITTAL 03-18-2014 RML BY

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SEE SHEET 26
STA:33+50



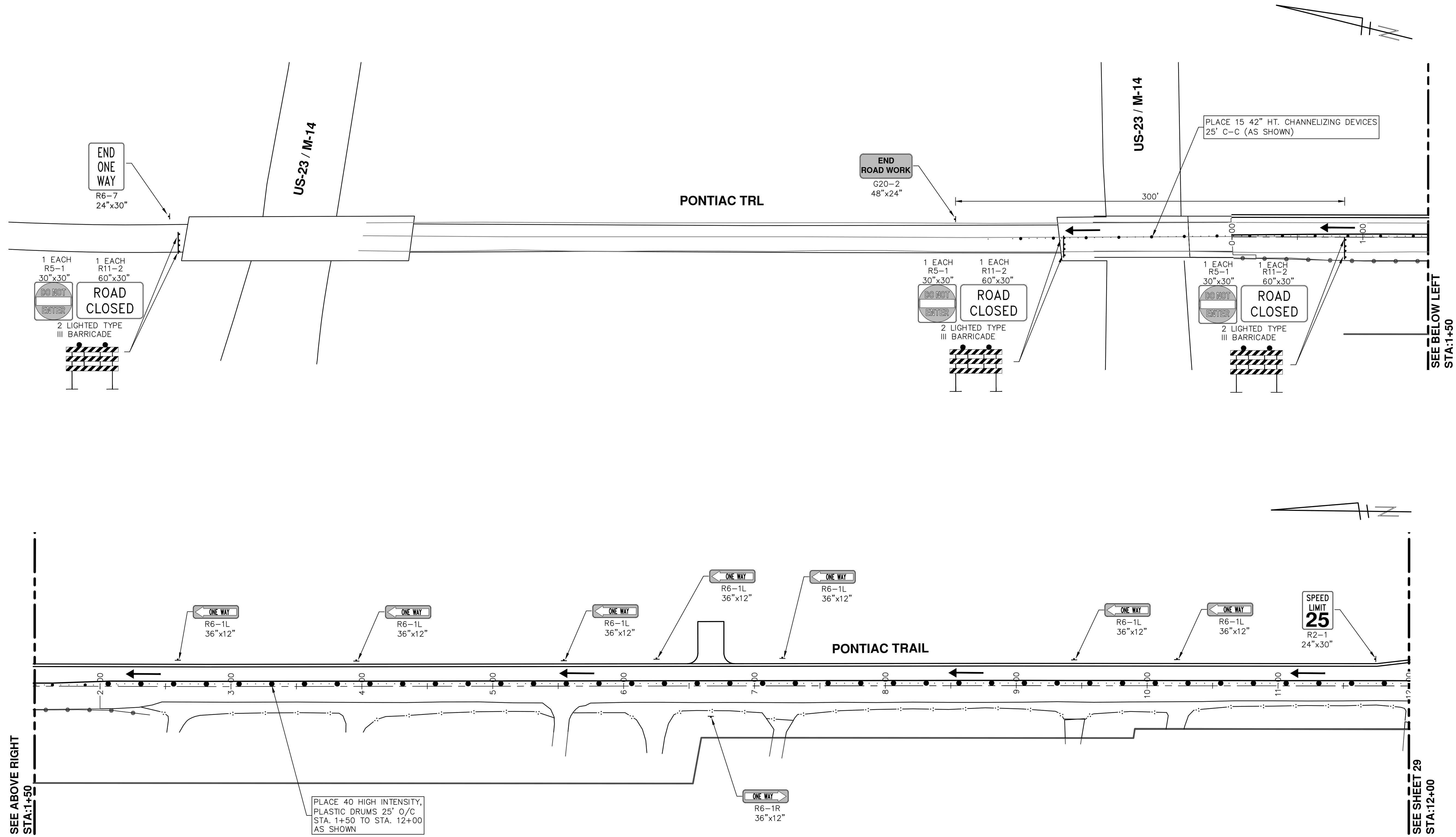
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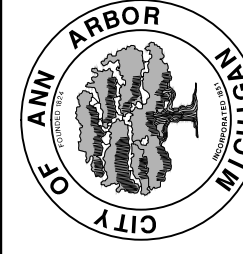
<p>PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR PONTIAC TRAIL IMPROVEMENTS MAINTENANCE OF TRAFFIC STAGE 4 - WATER MAIN</p>	<p>CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET ANN ARBOR MI 48106-1607 www.a2gov.org</p>								
<p>SCALE PLAN: Custom DRAWING No.: 2012028-27</p>	<p>REV. DESCRIPTION</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>CHECKED</th> </tr> </thead> <tbody> <tr> <td>00</td> <td>03-18-2014</td> <td>RMLH</td> <td></td> </tr> </tbody> </table>	NO.	DATE	BY	CHECKED	00	03-18-2014	RMLH	
NO.	DATE	BY	CHECKED						
00	03-18-2014	RMLH							
<p>SHEET No. 27 OF 102</p>									

S:\Project Management\Design\2012028 Pontiac Trail\Plan Production\Primary\2012028MTRF-Stage5.dwg Dwg Created: 2-Dec-13 - _02 standard bw.stb - Plot Date: 19-Mar-14



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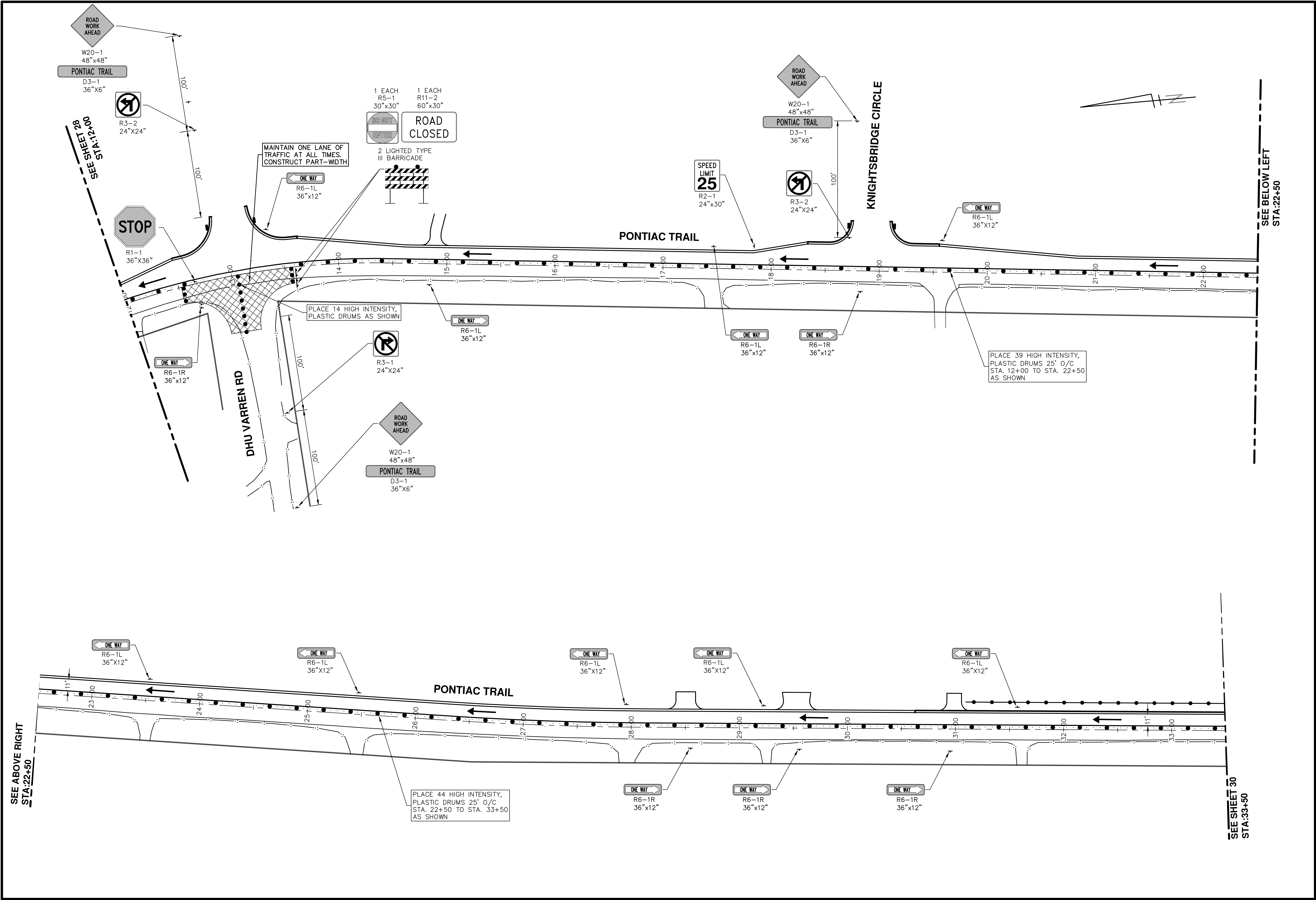
CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR MI 48106-0667
www.a2gov.org




PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
MAINTENANCE OF TRAFFIC
STAGE 5 - ROAD CONSTRUCTION - WEST

SCALE PLAN: 1" = 40'
DRAWING No. 2012028-28

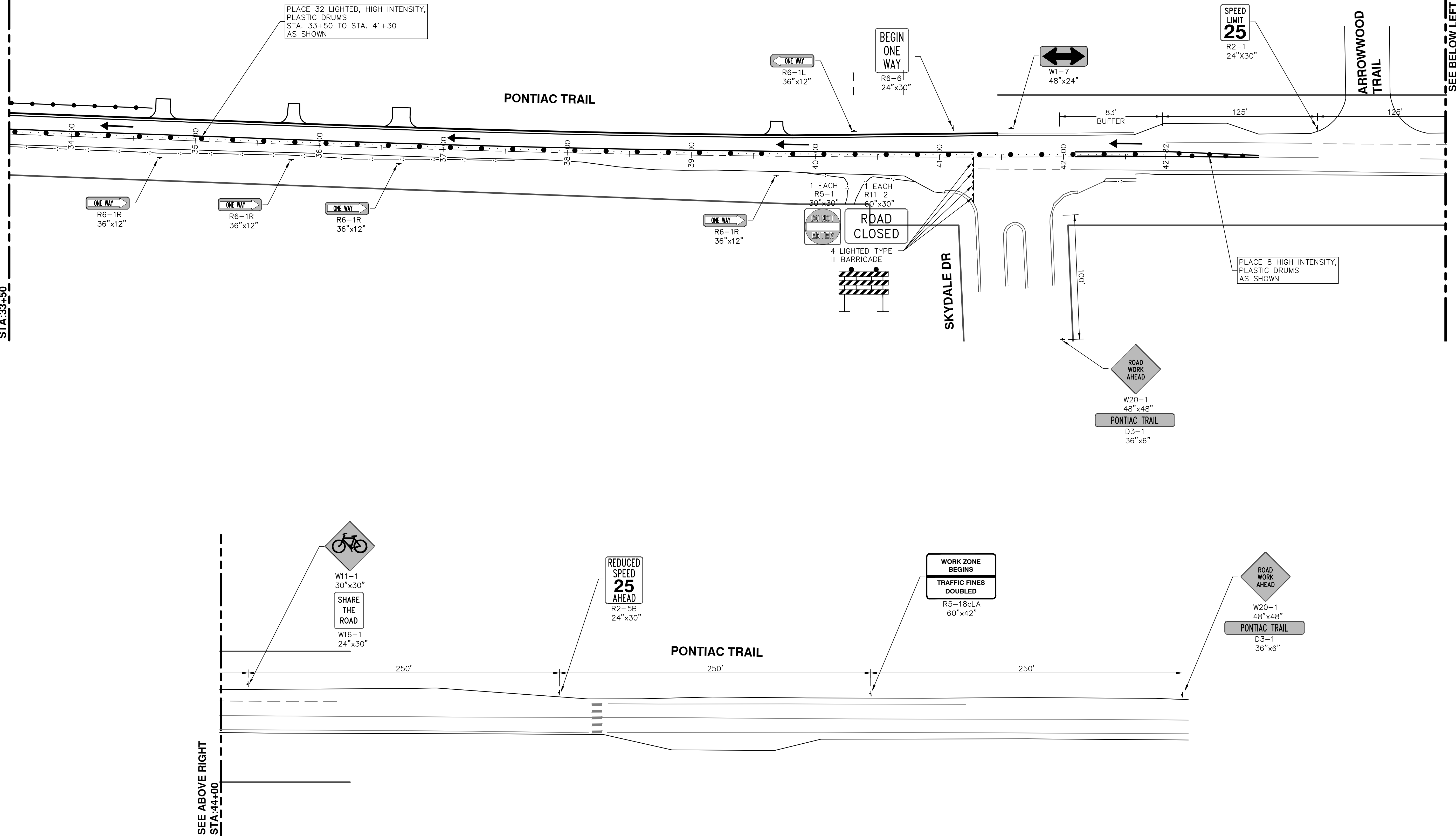
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 CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET ANN ARBOR, MI 48106-1500 www.a2gov.org	
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR PONTIAC TRAIL IMPROVEMENTS MAINTENANCE OF TRAFFIC STAGE 5 - ROAD CONSTRUCTION - WEST	SCALE PLAN: 1" = 40' DRAWING No. 2012028-29
SHEET No. 29 OF 102	REV.
DESCRIPTION	DATE
DRAWN	CHECKED
BY	DATE

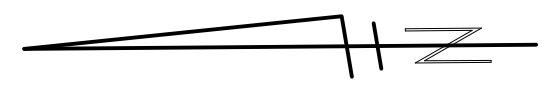
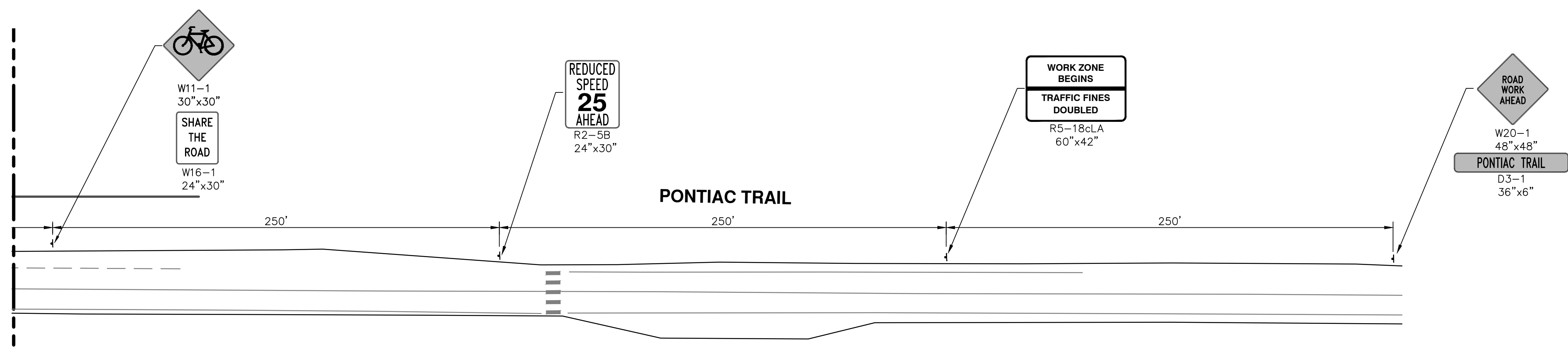
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SEE SHEET 29
STA:33+50



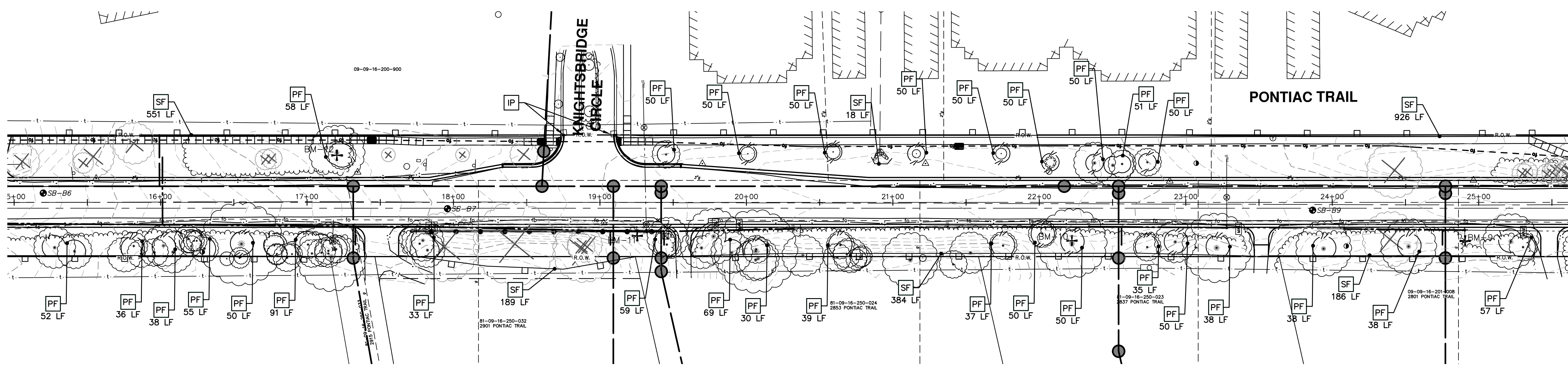
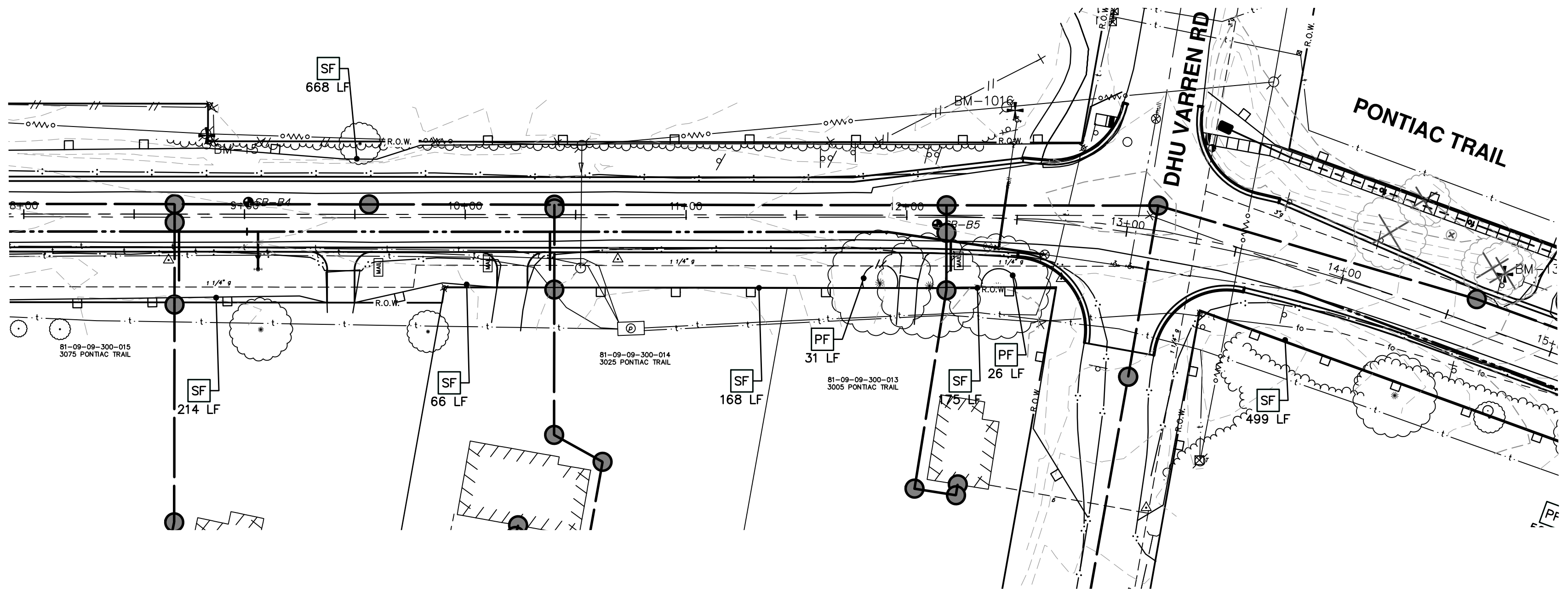
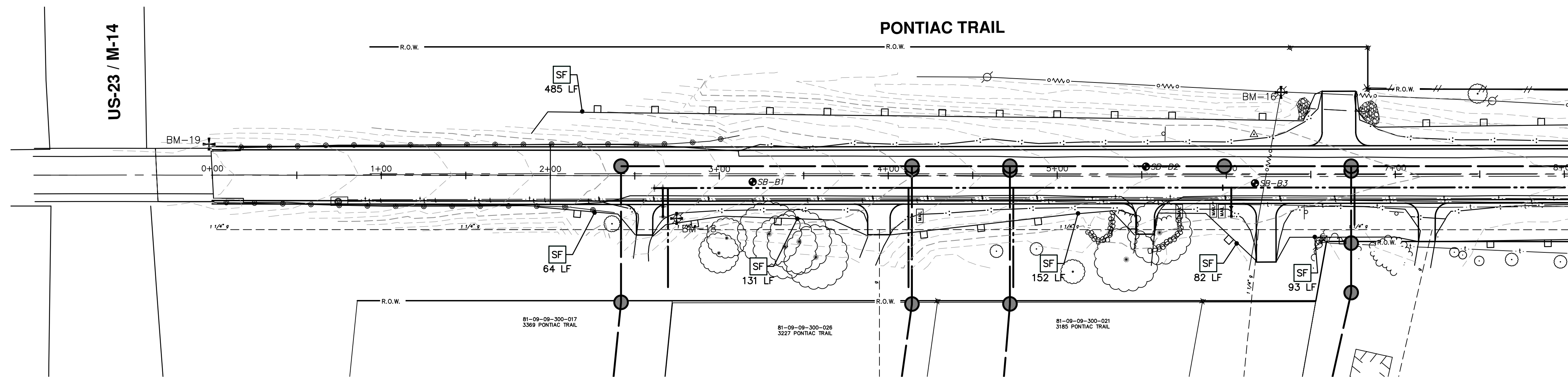
SEE ABOVE RIGHT
STA:44+00

SEE BELOW LEFT
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CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET ANN ARBOR, MI 48106-1410 www.a2gov.org	REV. NO. DESCRIPTION DATE DRAWN CHECKED 00 BID SUBMITTAL 03-18-2014 RMLH
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR PONTIAC TRAIL IMPROVEMENTS MAINTENANCE OF TRAFFIC STAGE 5 - ROAD CONSTRUCTION - WEST	
SCALE PLAN: Custom DRAWING No. 2012028-30	SHEET No. 30 OF 102

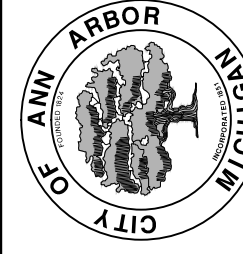
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SESC MEASURES KEY	
KEY	DESCRIPTION
SF	INSTALL SILT FENCE
PF	INSTALL PROTECTIVE FENCING
CD	INSTALL CHECK DAM, STONE
ID	INTERCEPTING DITCH
RR	INSTALL RIP-RAP
SB	TEMPORARY SEDIMENT BASIN
BAG	SAND BAG
TM	TEMPORARY SEEDING/MULCH BLANKET
MB	MULCH BLANKET, HIGH VELOCITY
IP	INSTALL INLET FILTER



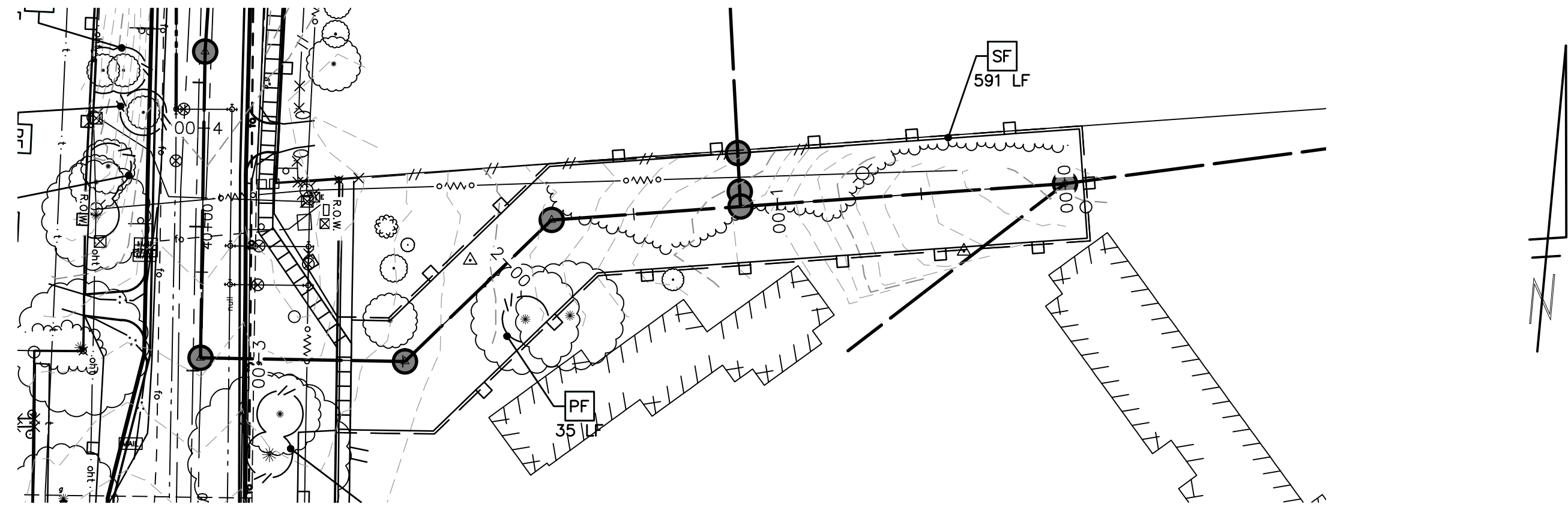
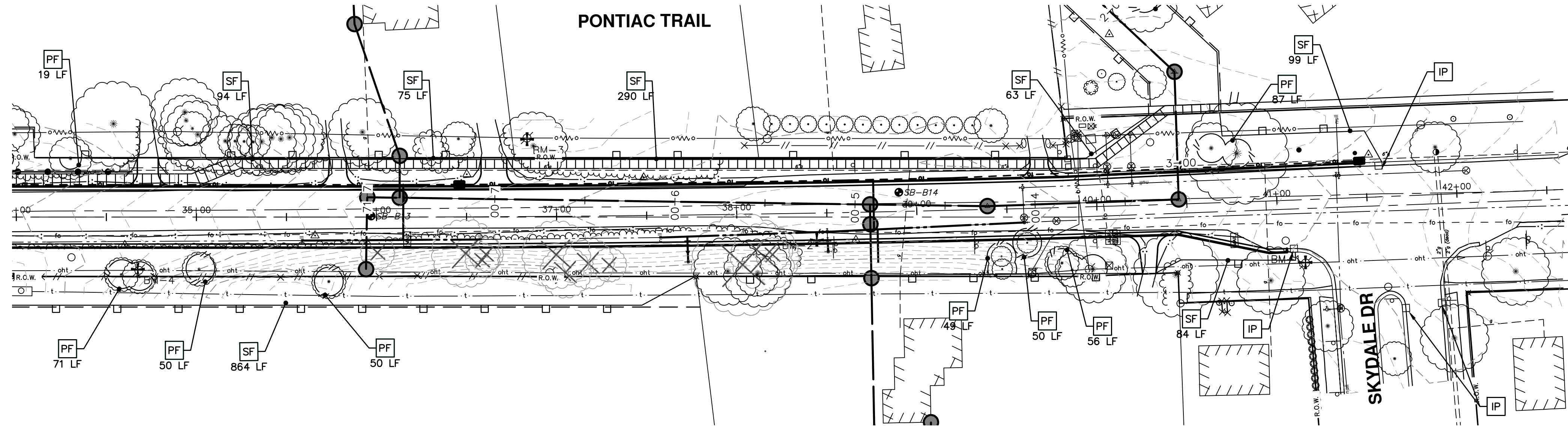
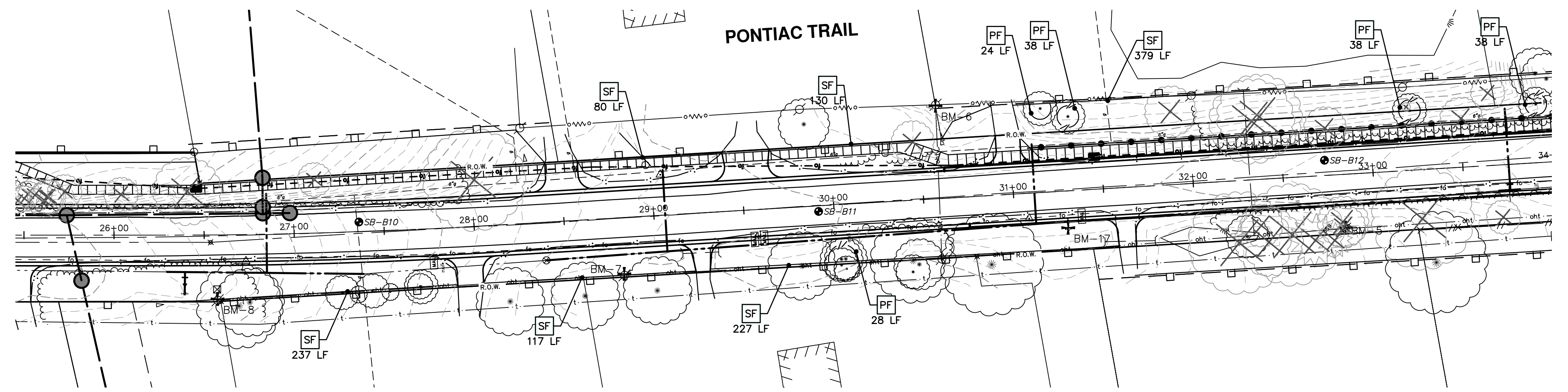
CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR MI 48106-1500
www.a3gov.org



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
SOIL EROSION & SEDIMENTATION CONTROL

REV.	DATE	BY	CHECKED	DESCRIPTION
00	03-18-2014	RM/ML		BID SUBMITTAL

S:\Project Management\Design\2012028 Pontiac Trail\Plan Production\Primary\2012028SESC.dwg Dwg Created: 7-Mar-14 - _a2_standard bw.stb - Plot Date: 19-Mar-14



SESC MEASURES KEY	
KEY	DESCRIPTION
SF	INSTALL SILT FENCE
PF	INSTALL PROTECTIVE FENCING
CD	INSTALL CHECK DAM, STONE
ID	INTERCEPTING DITCH
RR	INSTALL RIP-RAP
SB	TEMPORARY SEDIMENT BASIN
BAG	SAND BAG
TM	TEMPORARY SEEDING/MULCH BLANKET
MB	MULCH BLANKET, HIGH VELOCITY
IP	INSTALL INLET FILTER

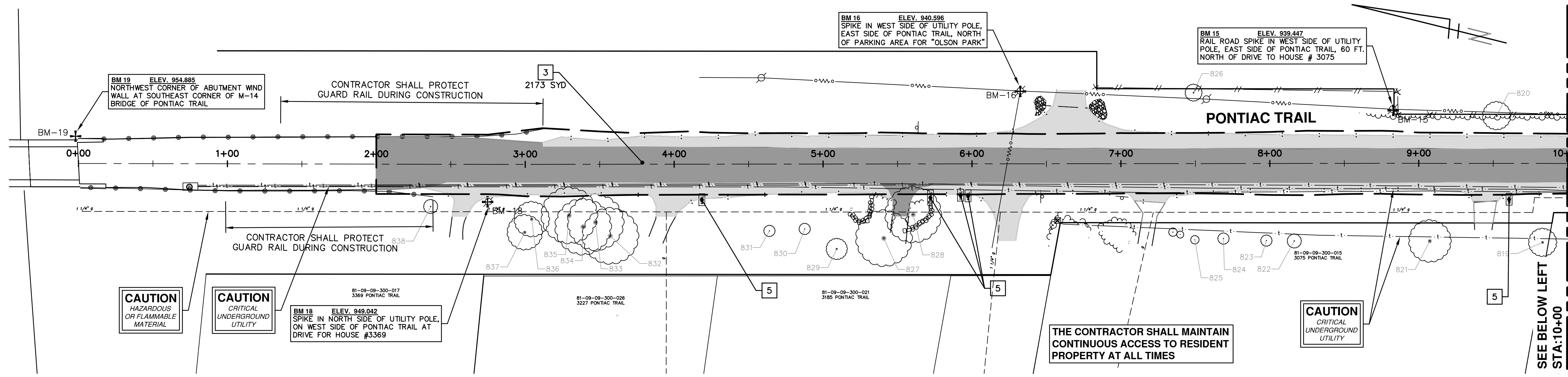


REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	BID SUBMITTAL	03-18-2014	RMLI	BY

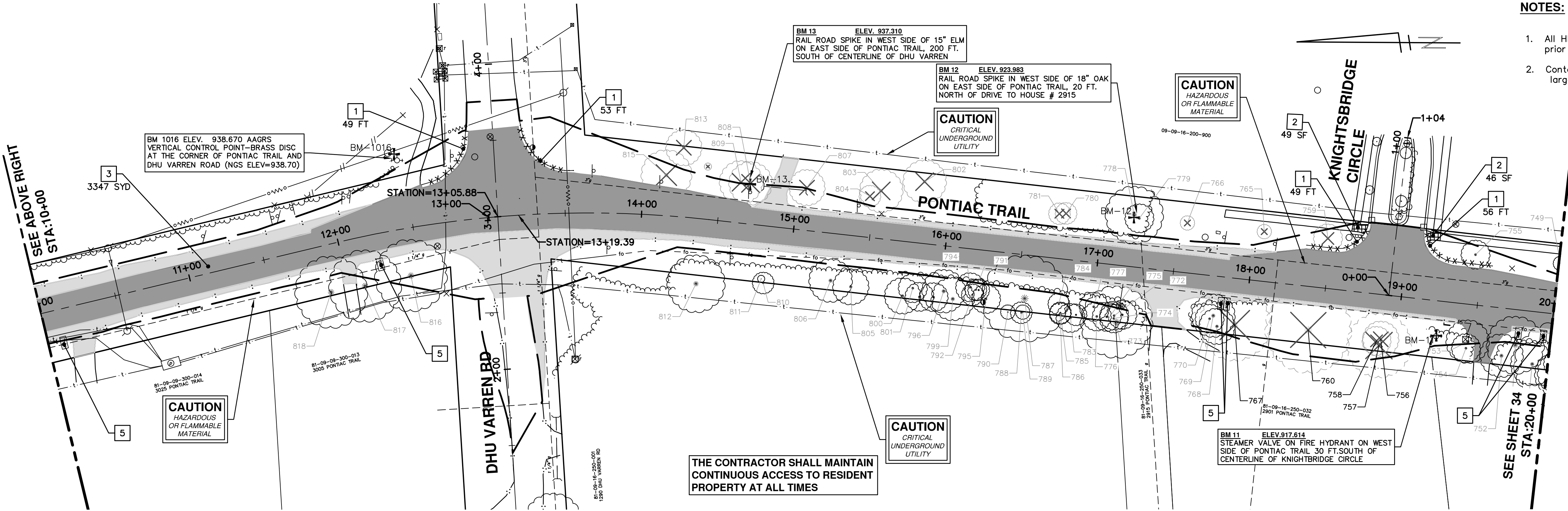


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 SOIL EROSION & SEDIMENTATION CONTROL
 SHEET 2 OF 2

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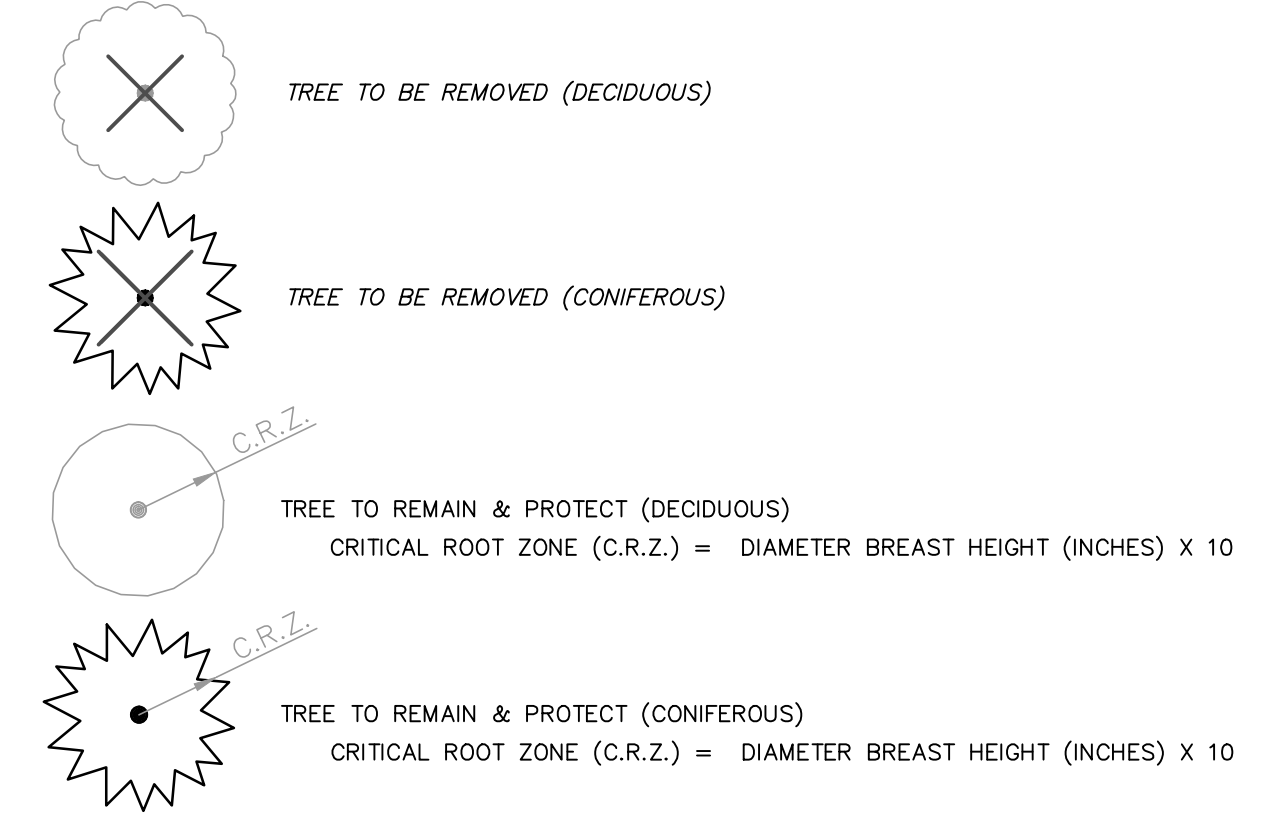
REMOVAL KEY	
KEY	DESCRIPTION
1	CURB AND GUTTER, REMOVAL
2	SIDEWALK, REMOVAL
3	PAVEMENT, REMOVAL
4	EXCAVATION, EARTH
5	MAILBOX, REMOVE AND RELOCATE



- NOTES:**
- All HMA pavement removals to be approved by engineer prior to work being scheduled.
 - Contact city forester for pruning of tree branches 2" and larger.

TREE REMOVAL TABLE			
TREE NUM.	SIZE AND SPECIES	NORTHING	EASTING
815	12" SIBERIAN ELM POOR	297975.1566	13294454.9800
813	16" SIBERIAN ELM POOR	297963.8406	13294473.0000
814	20" BLUE SPRUCE FAIR	297947.9820	13294460.7300
809	10" SIBERIAN ELM	297926.2636	13294450.5600
808	10" SIBERIAN ELM	297920.0468	13294449.8900
807	10" HONEY LOCUST	297883.1288	13294447.3800
804	6" SIBERIAN ELM	297841.8858	13294442.0100
803	8" SIBERIAN ELM	297834.5326	13294445.5500
802	12" CHERRY	297806.1612	13294451.7500
781	8" BUR OAK	297717.8424	13294431.3000
780	8" BUCKTHORN	297713.5124	13294431.5100
766	3" DEAD	297634.0897	13294425.7500
767	28" PIGNUT HICKORY	297602.7175	13294359.1400
765	3" HONEY LOCUST	297583.7749	13294420.4100
760	36" WHITE OAK	297554.6409	13294356.2200
759	6" RED APPLE	297542.0945	13294416.1900
758	10" CHERRY	297509.9013	13294349.3700
757	20" WHITE OAK	297508.2860	13294346.3400
756	16" BUCKTHORN	297507.1424	13294350.4600

LEGEND



CITY OF ANN ARBOR
PUBLIC SERVICES
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ANN ARBOR, MI 48106-1607
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

PONTIAC TRAIL IMPROVEMENTS

REMOVALS

STA. 0+00 TO STA. 20+00

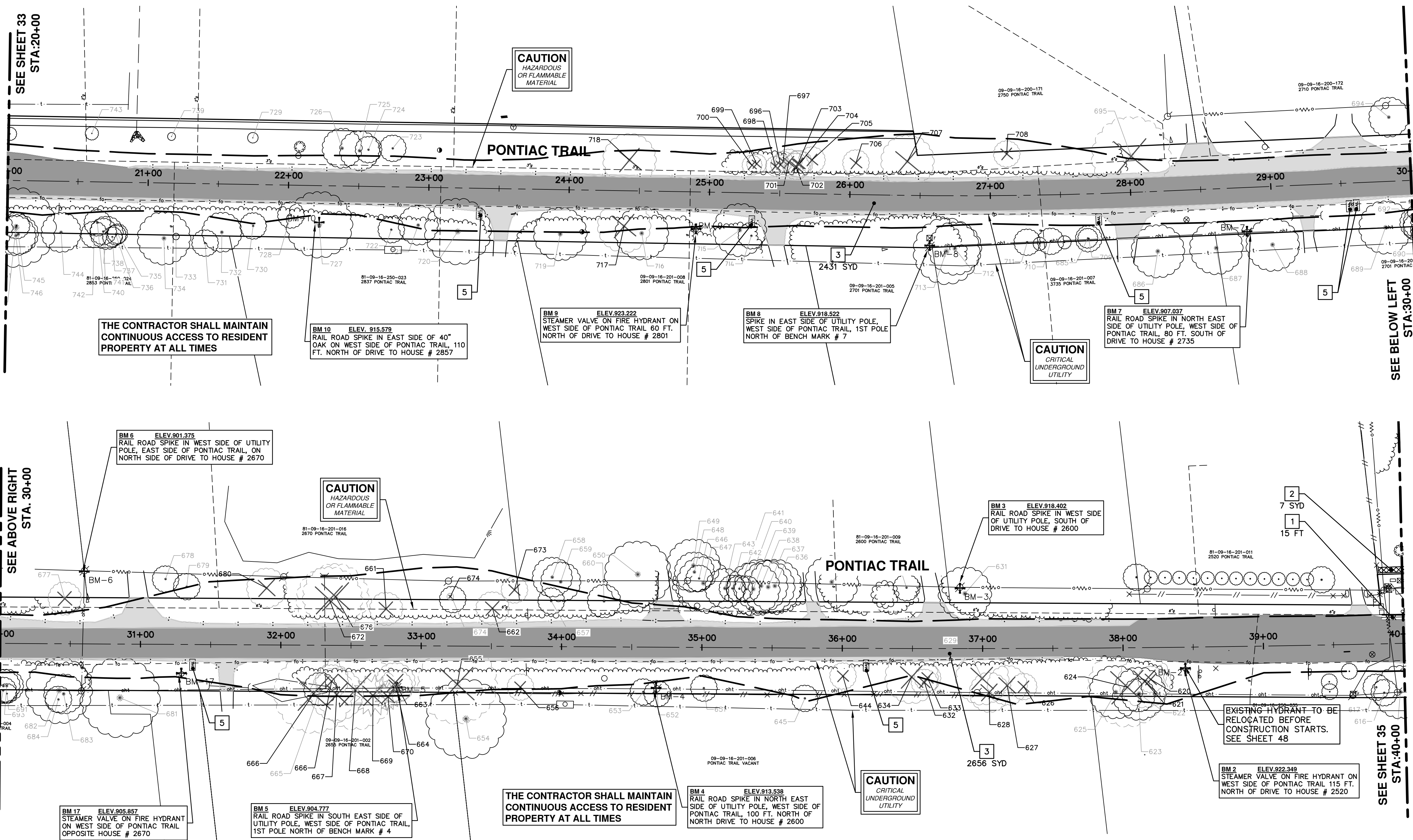
SCALE PLAN: 1" = 40'

DRAWING No. 2012028-33

SHEET No.

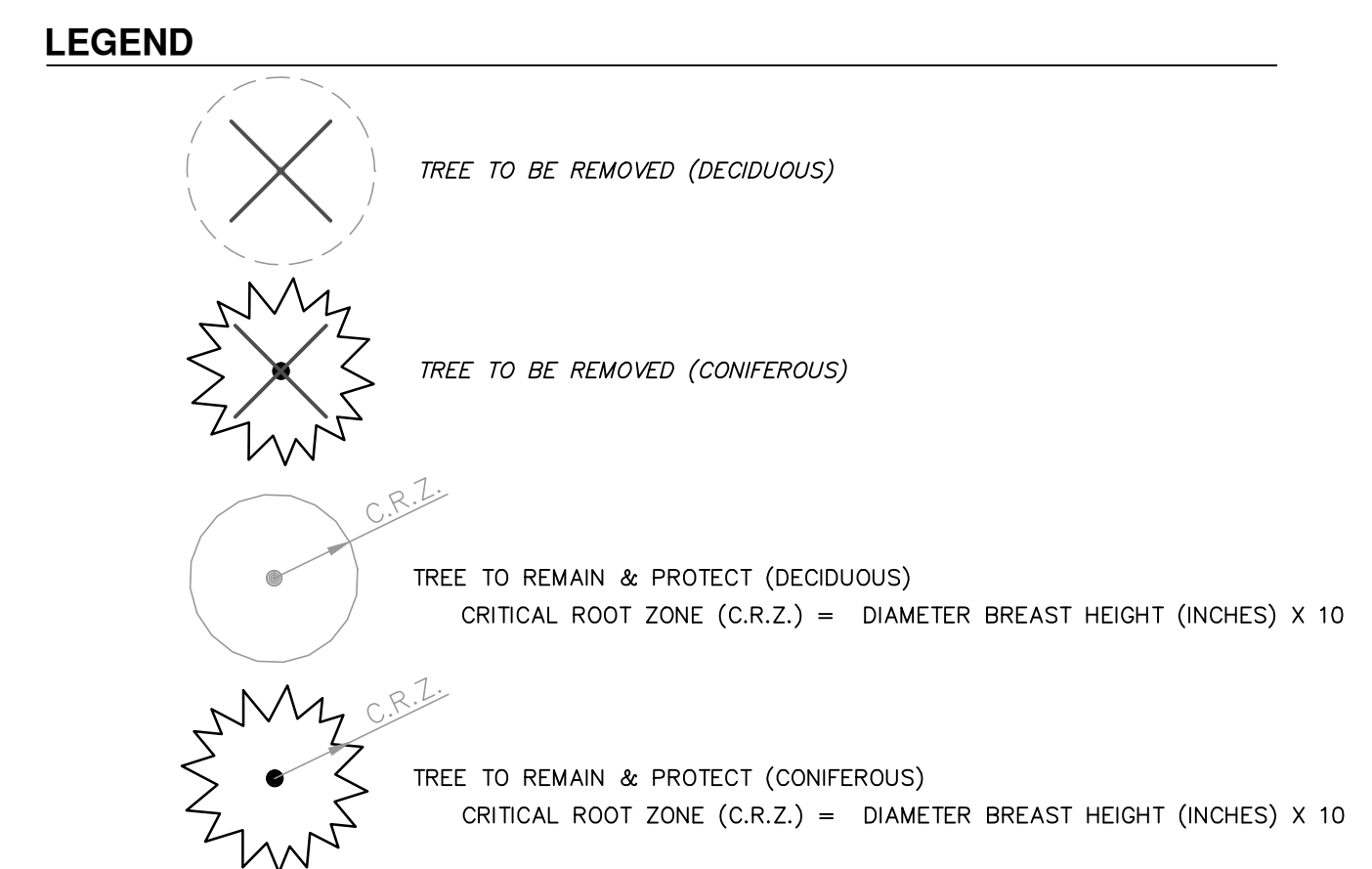
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00	03-18-2014	RML	DRAWN
			CHECKED

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TREE REMOVAL TABLE			
TREE NUM.	SIZE AND SPECIES	NORTHING	EASTING
717	32" WHITE OAK	296959.9134	13294296.7600
718	14" WHITE OAK	296951.9602	13294343.3400
700	12" CRAB APPLE	296865.2979	13294332.0000
699	12" CRAB APPLE	296861.9057	13294332.6500
698	6" BUCKTHORN	296848.7305	13294329.7600
696	6" BUCKTHORN	296845.0602	13294330.4300
697	6" BOX ELDER	296842.8760	13294332.8000
701	8" BOX ELDER	296839.0100	13294331.7600
702	8" BOX ELDER	296834.1356	13294328.3400
703	8" BOX ELDER	296832.6607	13294330.0400
704	8" BOX ELDER	296831.5759	13294329.9700
705	12" ELM	296822.4456	13294331.8800
706	8" ELM	296791.4055	13294327.0700
707	30" PIGNUT HICKORY	296754.8027	13294324.9400
708	8" BLACK WALNUT	296683.8568	13294324.0000
695	30" DEAD	296595.6984	13294314.5300
677	10" BOX ELDER	296351.2863	13294310.0000
680	12" BLACK WALNUT	296207.2812	13294311.8500
671	30" SILVER MAPLE	296176.7440	13294235.4200
666	8" BOX ELDER	296163.6187	13294243.6800
672	24" SILVER MAPLE	296162.9618	13294301.7000
667	20" BOX ELDER	296160.3540	13294234.0600
676	24" BOX ELDER	296158.4381	13294303.7800
668	26" SILVER MAPLE	296147.0047	13294236.7600
669	22" BLACK SPRUCE	296134.5738	13294232.3900
670	8" BLACK SPRUCE	296123.9341	13294231.2200
661	8" BLACK WALNUT	296122.8415	13294293.6700
663	12" BOX ELDER	296118.3308	13294240.9300
664	8" BOX ELDER	296118.0421	13294238.2400
675	30" COTTONWOOD	296076.8065	13294300.7000
655	28" MULBERRY	296074.2493	13294238.0200
662	10" BLACK WALNUT	296047.0779	13294291.0800
673	6"	296030.9372	13294303.6000
656	6" BLACK WALNUT	296029.4302	13294234.2200
644	8" ELM	295799.4679	13294233.1300
634	10" ELM	295750.6175	13294230.5300
632	6" BOX ELDER	295741.6500	13294226.3100
633	6" ELM	295739.3142	13294229.4800
629	12" AMERICAN ELM	295700.4495	13294227.5500
628	18" AMERICAN ELM	295695.7466	13294217.4100
627	6" HACKBERRY	295682.8292	13294221.8600
626	12" ELM	295671.1889	13294220.5600
624	26" BLACK LOCUST	295597.2950	13294217.3000

REMOVAL KEY	
KEY	DESCRIPTION
1	CURB AND GUTTER, REMOVAL
2	SIDEWALK, REMOVAL
3	PAVEMENT, REMOVAL
4	EXCAVATION, EARTH
5	MAILBOX, REMOVE AND RELOCATE



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

PONTIAC TRAIL IMPROVEMENTS

REMOVALS

SCALE PLAN: 1" = 40'

DRAWING NO. 2012028-34

SHEET NO.

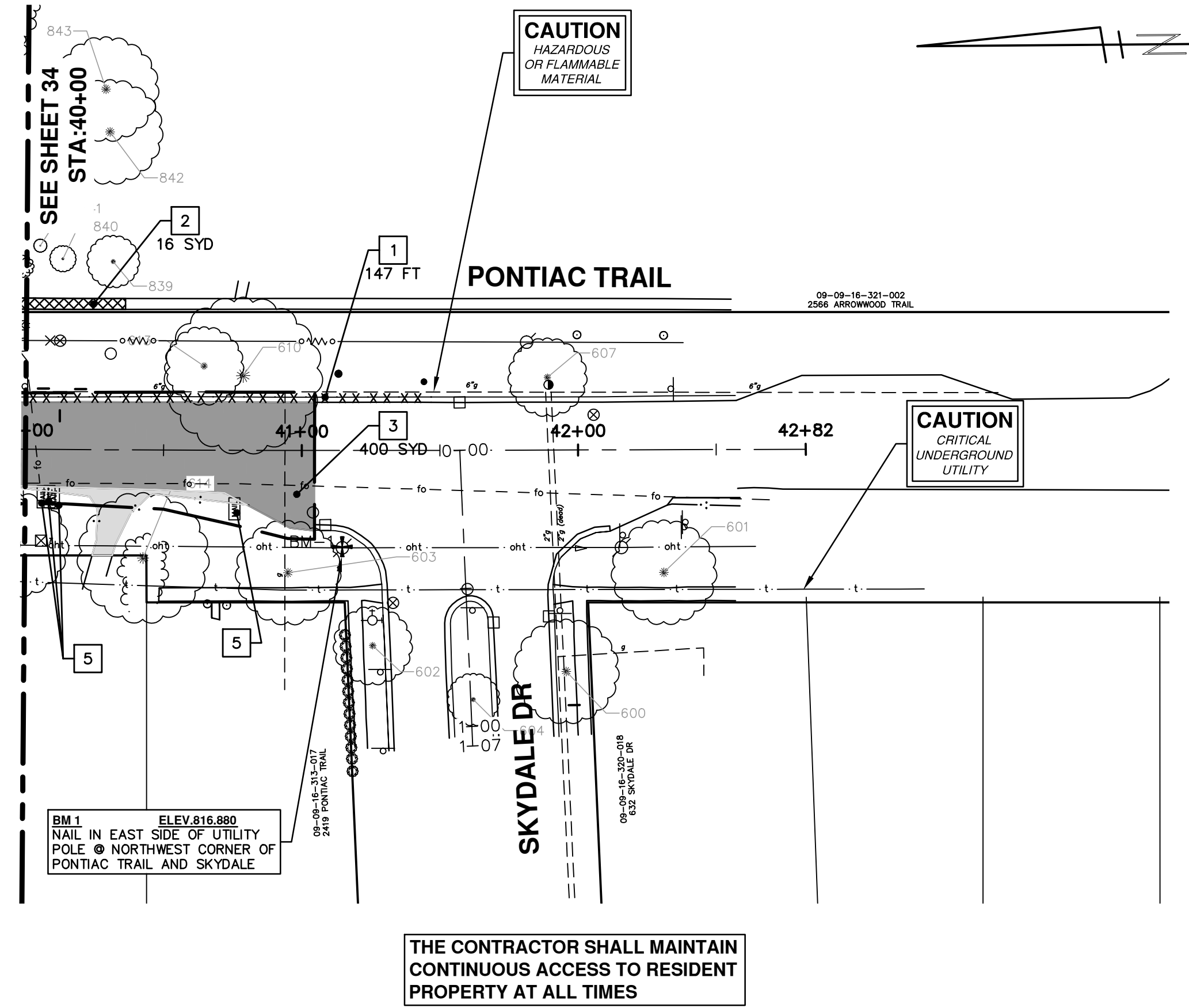
STA. 20+00 TO STA. 40+00

34 OF 102

CITY OF ANN ARBOR
 PUBLIC SERVICES
 301 EAST HURON STREET
 ANN ARBOR, MI 48106
 WWW.A2GOV.ORG

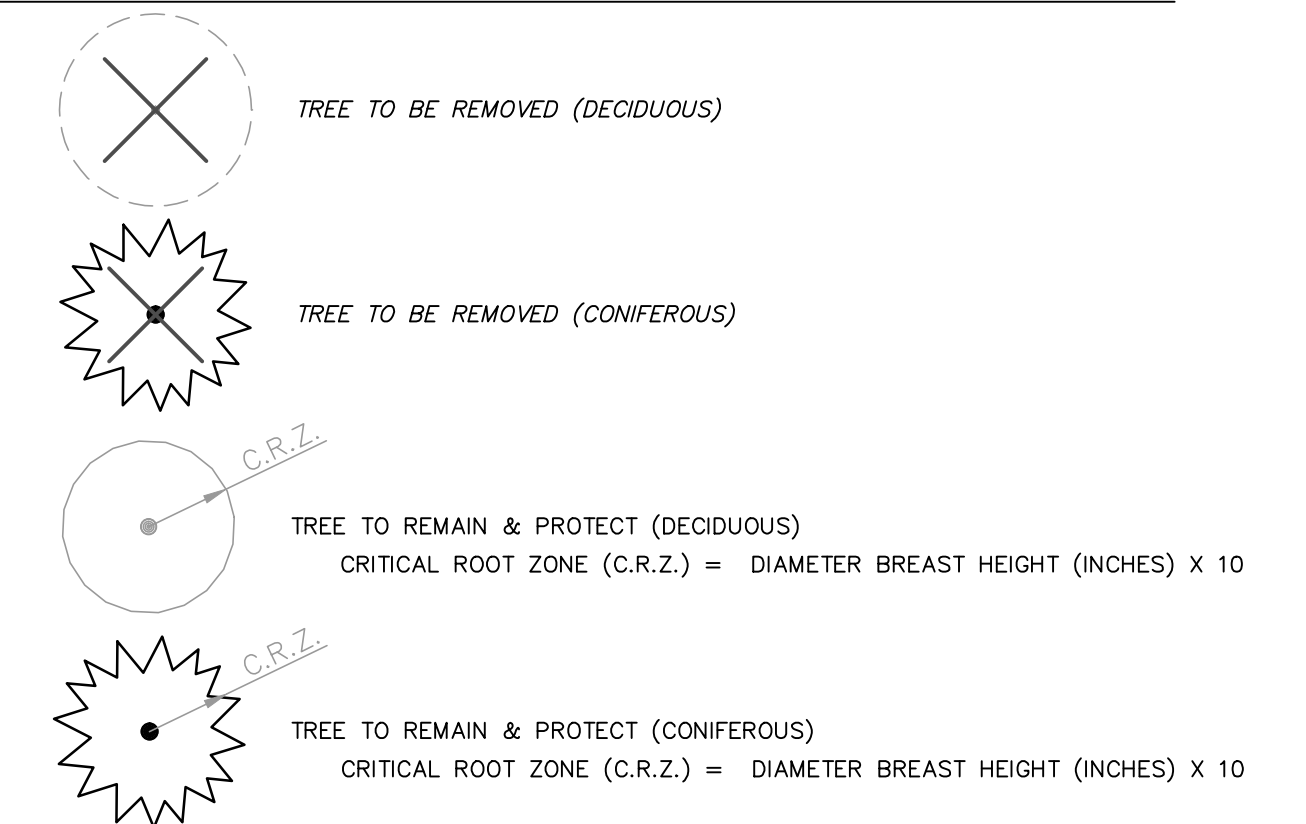
REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	BID SUBMITTAL	03-18-2014	RMLI	

BY: Know what's below. Call before you dig.



REMOVAL KEY	
KEY	DESCRIPTION
1	CURB AND GUTTER, REMOVAL
2	SIDEWALK, REMOVAL
3	PAVEMENT, REMOVAL
4	EXCAVATION, EARTH
5	MAILBOX, REMOVE AND RELOCATE

LEGEND



REV.	DATE	DESCRIPTION	DRAWN	CHECKED
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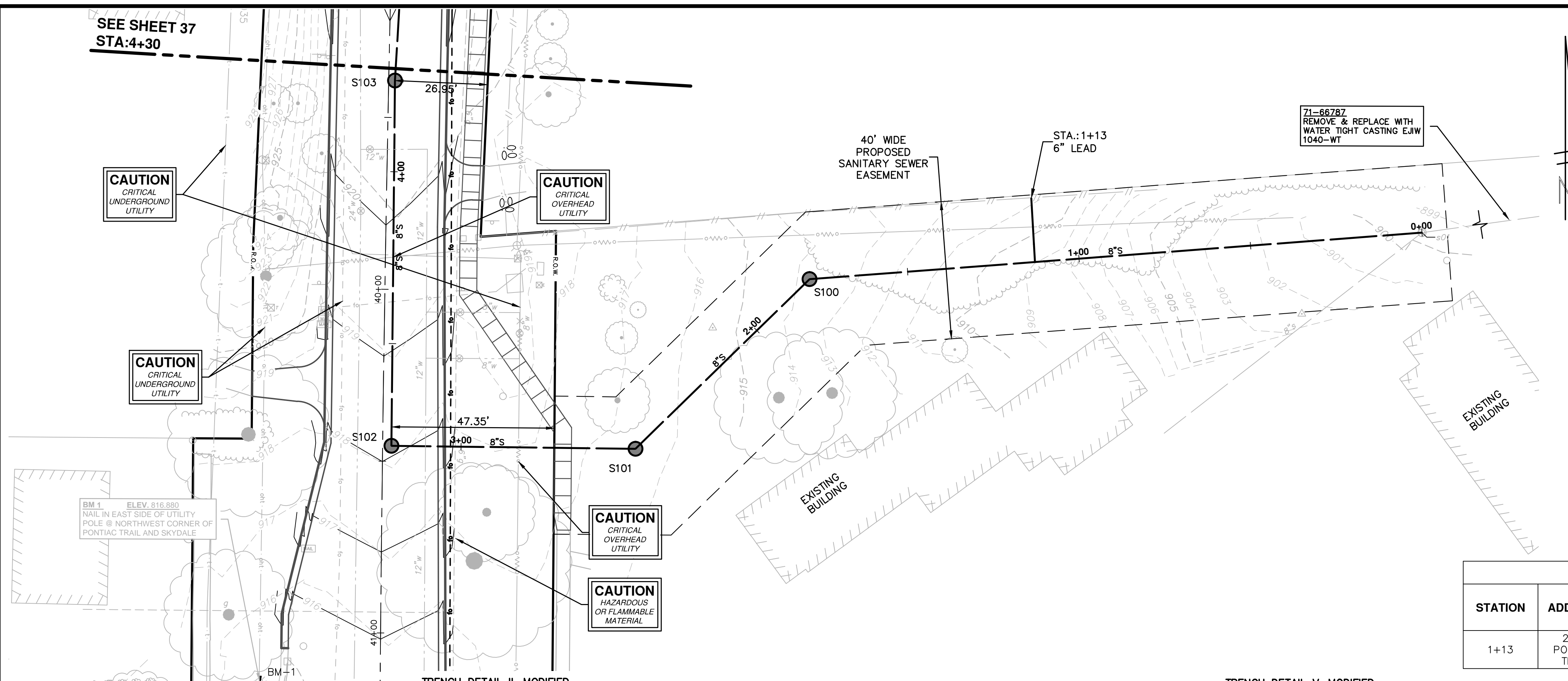
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PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR, MI 48106-3667
ANN ARBOR 734.764.4410
www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
REMOVALS STA. 40+00 TO STA. 42+82

SCALE PLAN: 1" = 40'

DRAWING No. 2012028-35

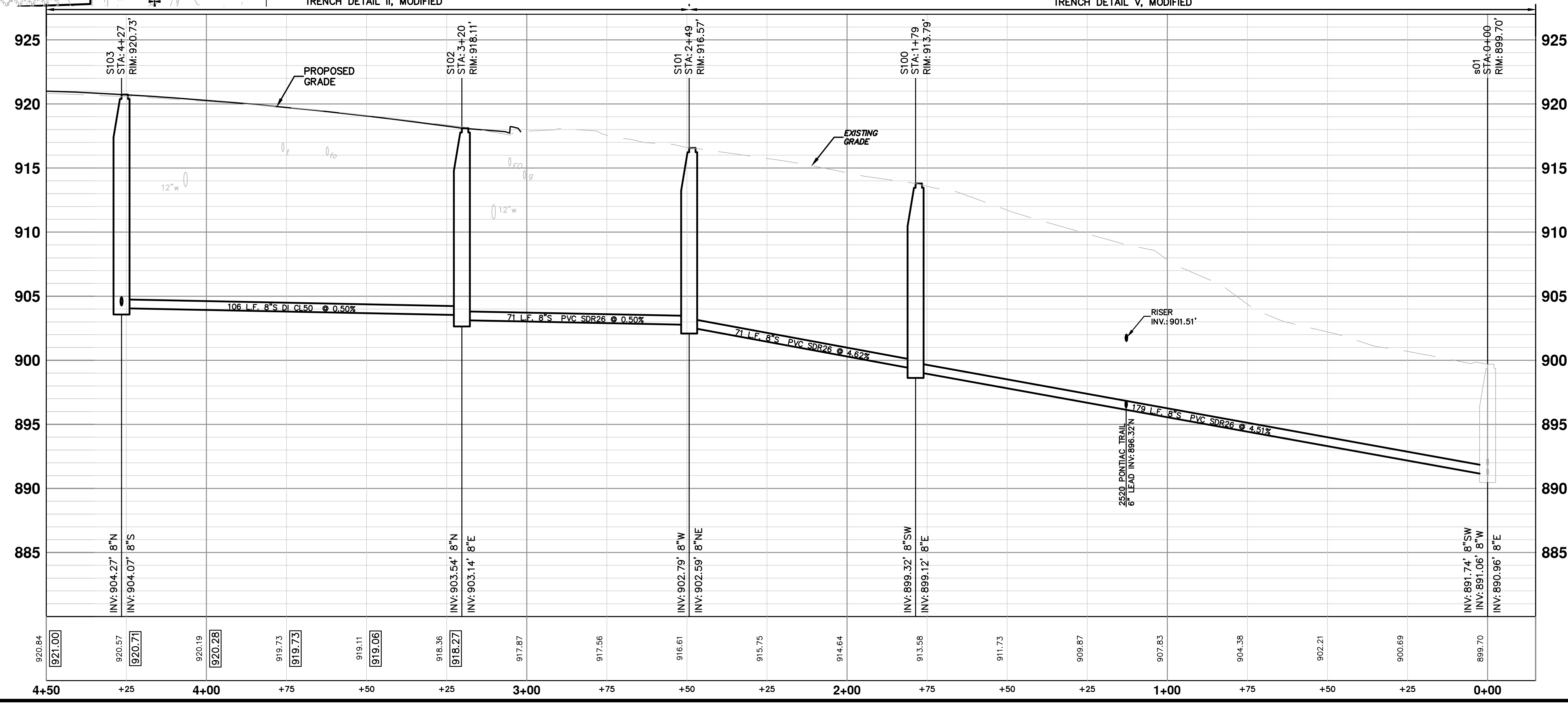
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SANITARY SEWER STRUCTURE TABLE						
STRUCTURE	STATION	RIM	DEPTH	DIA.	TYPE	INVERTS
S103	4+27	920.73	16.66	48	MANHOLE	8" N 904.27 8" S 904.07
S102	3+20	918.10	14.96	48	MANHOLE	8" N 903.54 8" E 903.14
S101	2+49	916.57	13.98	48	MANHOLE	8" N 902.79 8" NE 902.59
S100	1+79	913.79	14.67	48	MANHOLE	8" SW 899.32 8" E 899.12
s01	0+00	899.70	8.96	48	Existing Manhole	8" SW 890.74 8" W 891.06 8" E 890.96

NOTE:
SEWER LEADS SHALL HAVE A MINIMUM OF 5 FEET OF COVER. WHEN PLACED IN THE SAME TRENCH AS A WATER SERVICE LEAD, THE WATER SERVICE SHALL BE A MINIMUM OF 1.5 FEET ABOVE THE SEWER LEAD AND PLACED ON A SHELF OF UNDISTURBED EARTH.

SANITARY SEWER LEAD SCHEDULE									
STATION	ADDRESS	FITTING	RISER LENGTH (FT)	SIZE	INVERT @ MAIN	RISER INVERT	LEAD INVERT @ ROW	SLOPE	LEAD LENGTH (FT)
1+13	2520 PONTIAC TRAIL	TEE	5.0	6"	896.32	901.51	901.66	1.1%	14.0



NOTE:
1. TAP EXISTING MANHOLE BY CORING AT ELEVATIONS SHOWN. INSTALL CITY OF ANN ARBOR RUBBER BOOT AND CONNECT PROPOSED SANITARY SEWER. ALL COSTS ASSOCIATED WITH THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK 8" SANITARY SEWER

Know what's below.
Call before you dig.

00	BID SUBMITTAL	03-18-2014	DATE	RML	BY	CHECKED				
	DESCRIPTION									REV.

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ANN ARBOR, MI 48106-1007
ANN ARBOR 734.764.4410
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

PONTIAC TRAIL IMPROVEMENTS

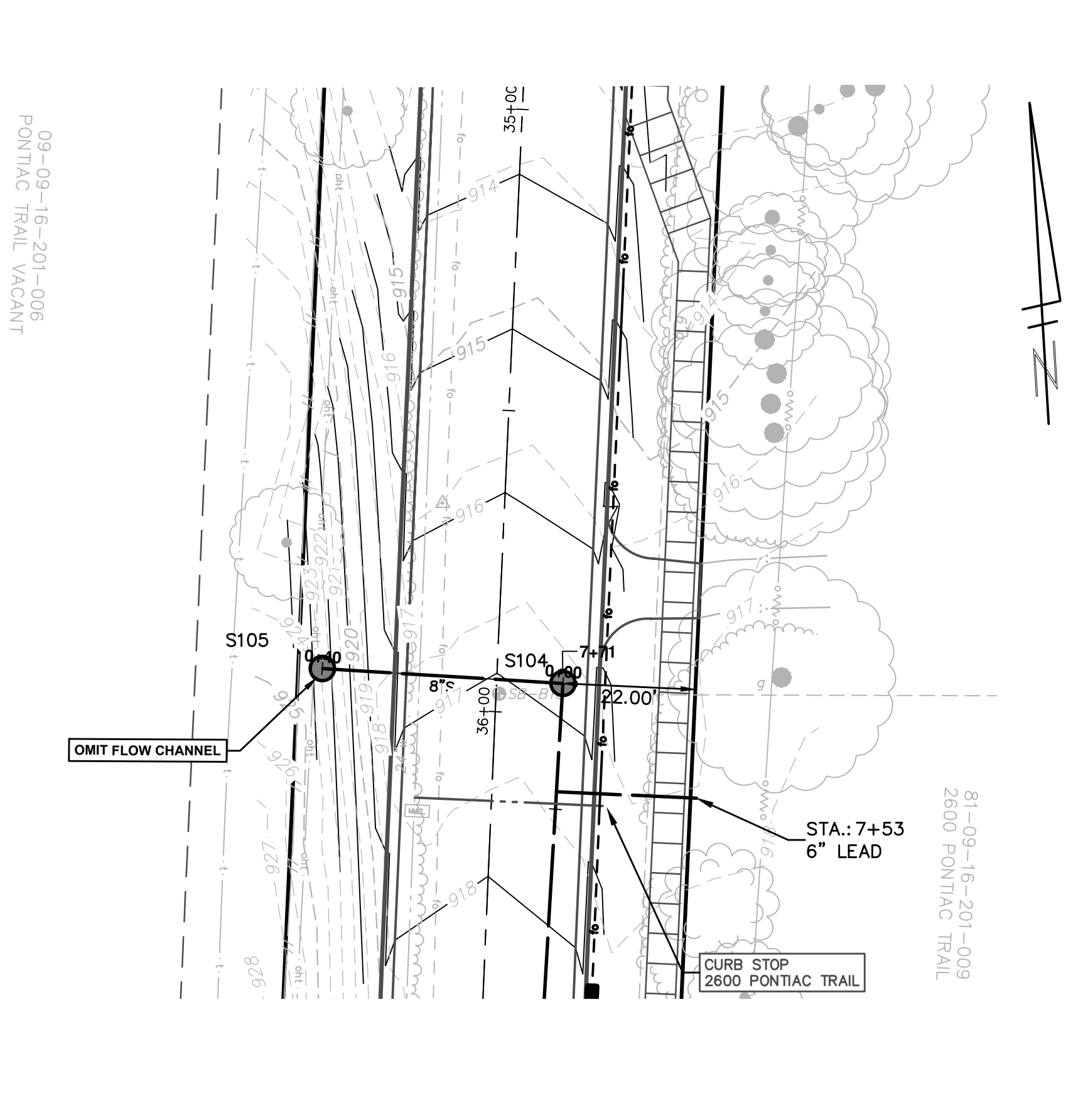
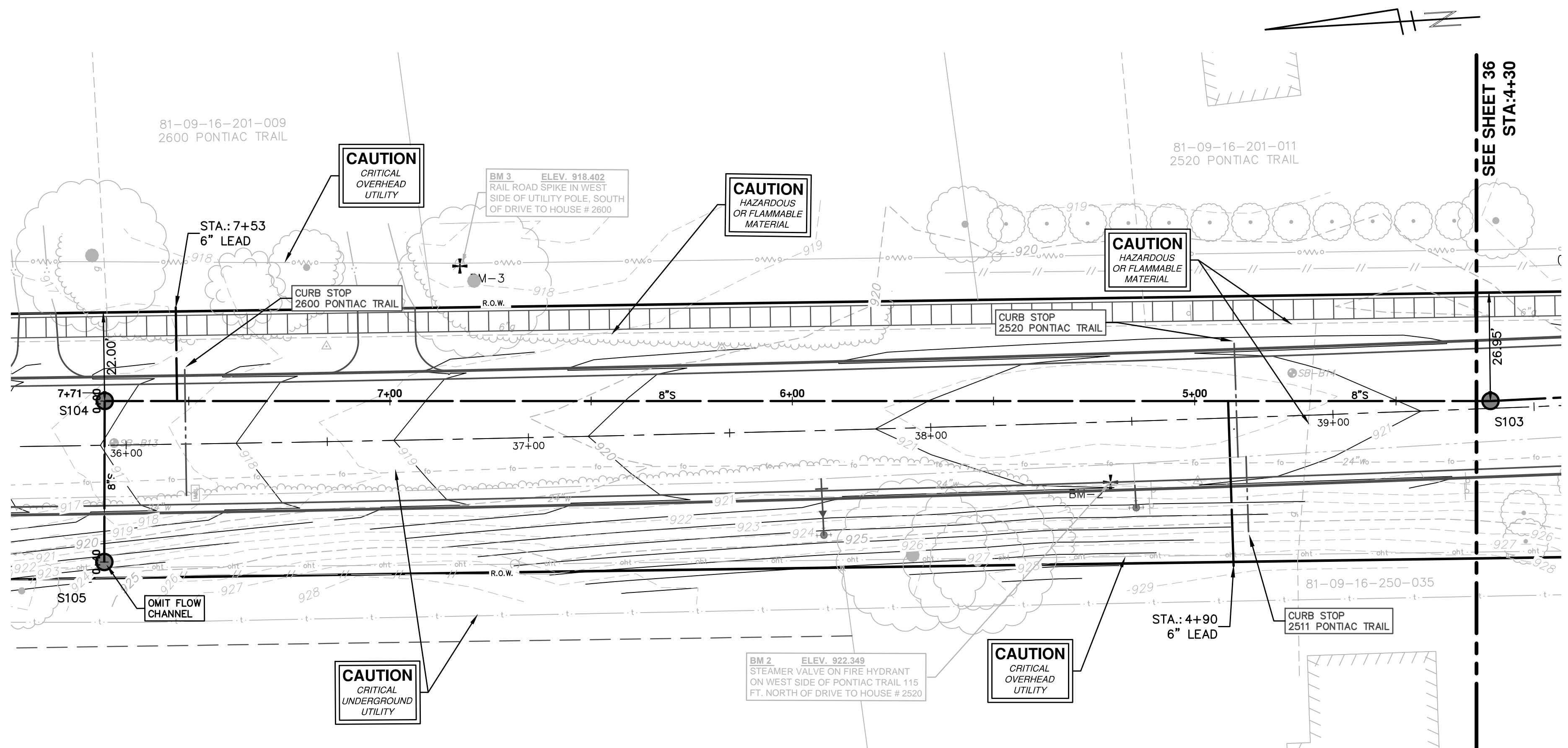
SANITARY SEWER PLAN AND PROFILE
s01 to S103
STA 0+00 TO 4+50

SCALE PLAN: 1" = 20'
PROFILE: 1" = 5'

DRAWING NO. 2012028-36

SHEET NO. 36 OF 102

S:\Project Management\Design\2012028 Pontiac Trail\Plan Production\Primary\2012028SSWR.dwg Dwg Created: 29-Oct-12 - _o2 standard bw.stb - Plot Date: 19-Mar-14

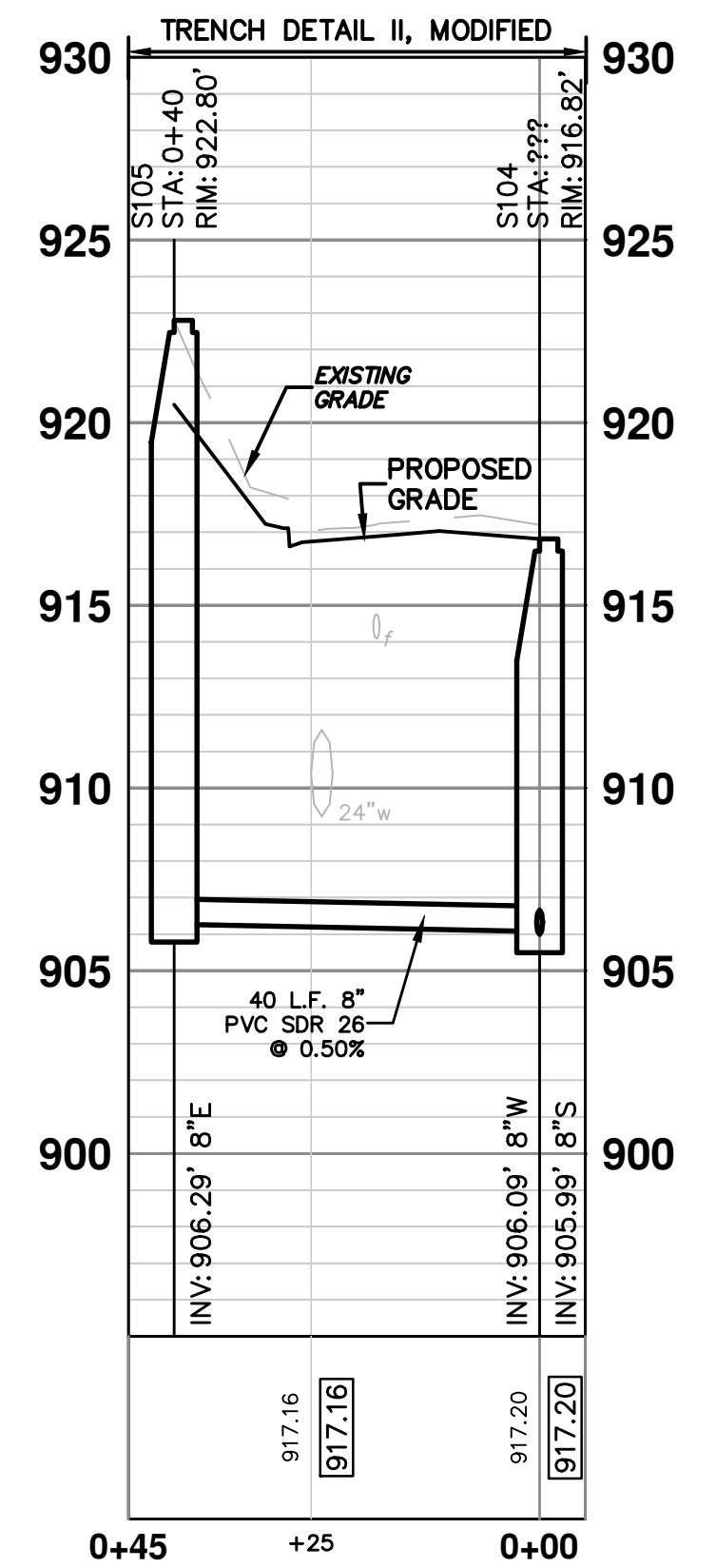
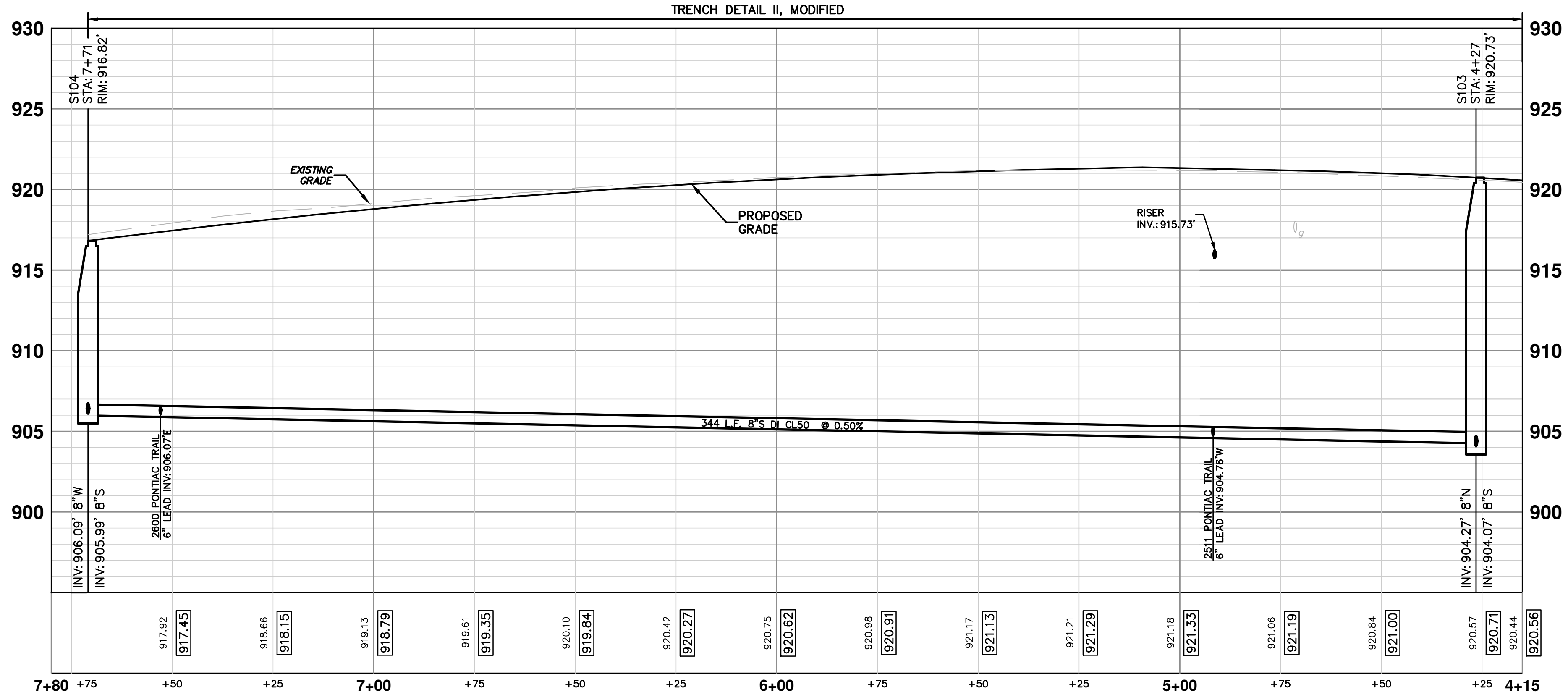


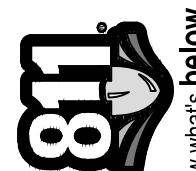
SANITARY SEWER LEAD SCHEDULE

STATION	ADDRESS	FITTING	RISER LENGHT H (FT)	SIZE	INVERT @ MAIN	RISER INVERT	LEAD INVERT @ ROW	SLOPE	LEAD LENGTH (FT)
4+92	2511 PONTIAC TRAIL	TEE	11.0	6"	904.76	915.73	917.78	6.8%	30.0
7+53	2600 PONTIAC TRAIL	WYE		6"	906.07		906.80	3.2%	23.0

SANITARY SEWER STRUCTURE TABLE


STRUCTURE	STATION	RIM	DEPTH	DIA.	TYPE	INVERTS
S105	0+40	922.80	16.51	48	MANHOLE	8" E 906.29
S104	7+71	916.82	10.82	48	MANHOLE	8" W 906.09 8" S 905.99
S103	4+27	920.73	16.66	48	MANHOLE	8" N 904.27 8" S 904.07





Know what's below.
Call Before you dig.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED	BY
00	BID SUBMITTAL	03-18-2014	RMLH		



CITY OF ANN ARBOR
PUBLIC SERVICES
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ANN ARBOR MI 48106-1500
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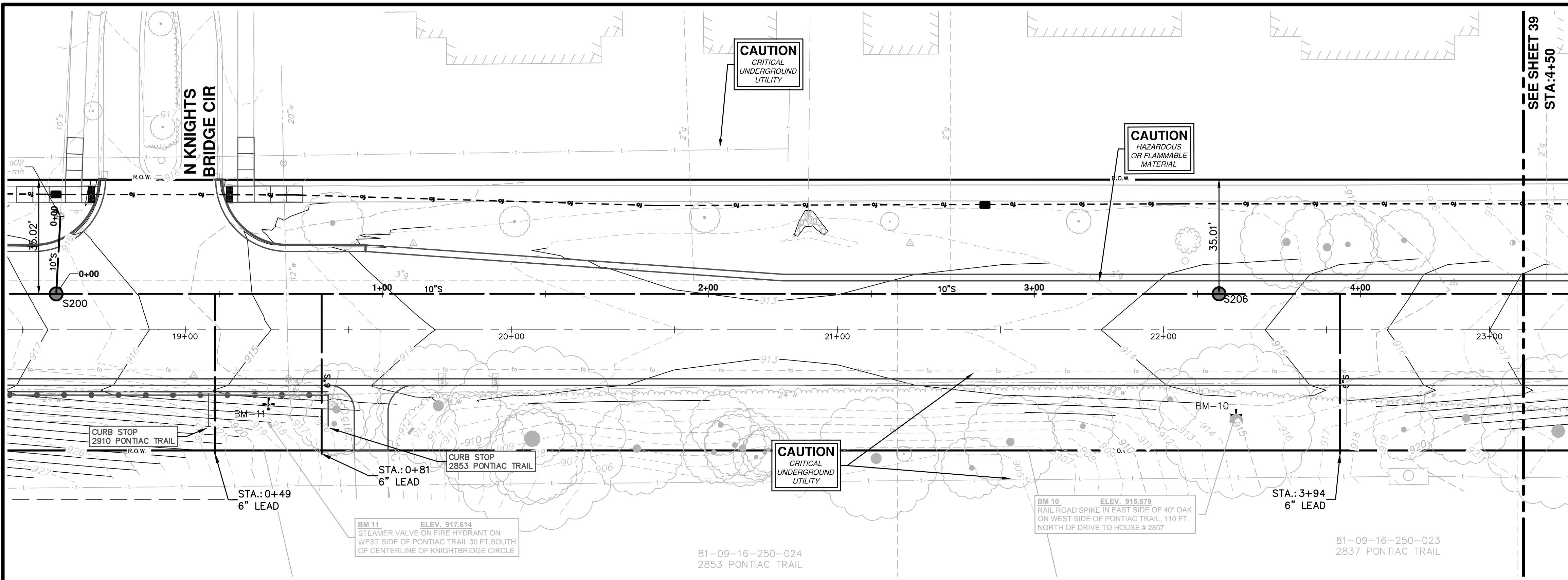
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 SANITARY SEWER PLAN AND PROFILE
 STA 103 TO S105
 STA 4+15 TO 8+00

SCALE PLAN: 1" = 20'
 PROFILE: 1" = 5'

DRAWING No. **2012028-37**

SHEET No. **37 OF 102**

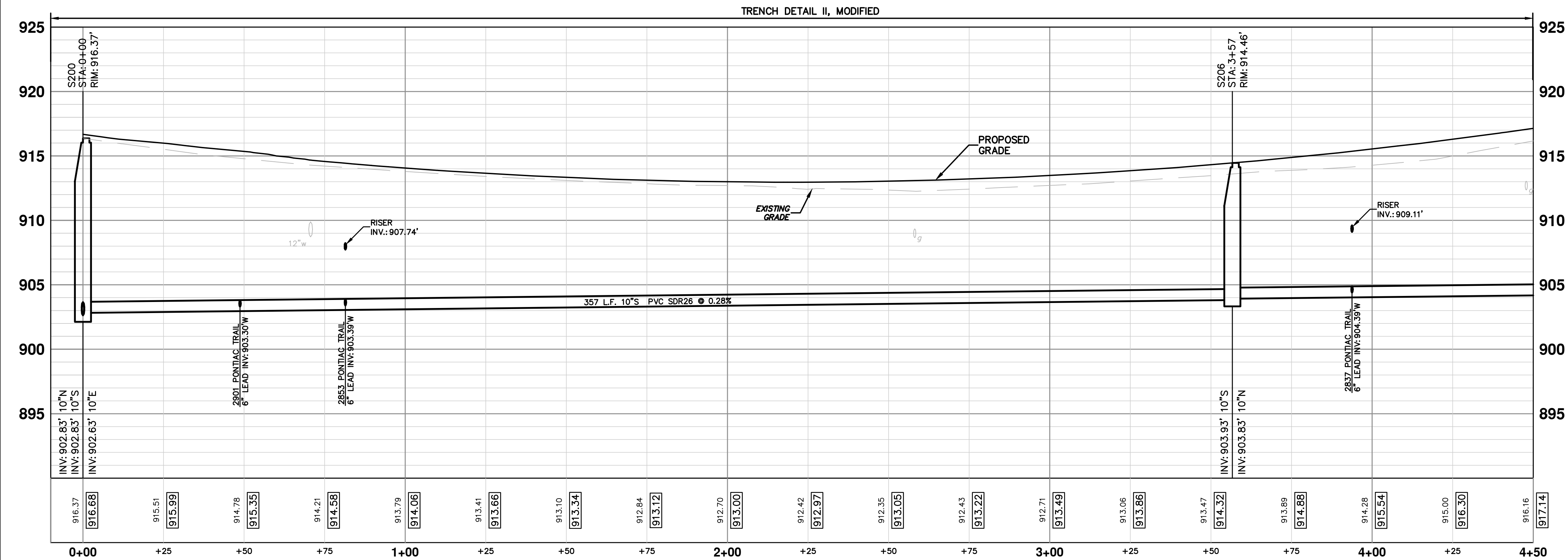
S:\Project Management\Design\2012028 Pontiac Trail\Plan Production\Primary\2012028SSWR.dwg Dwg Created: 29-Oct-12 - _o2 standard bw.stb - Plot Date: 19-Mar-14



SEE SHEET 39
STA: 4+50

SANITARY SEWER LEAD SCHEDULE									
STATION	ADDRESS	FITTING	RISER LENGTH (FT)	SIZE	INVERT @ MAIN	RISER INVERT	LEAD INVERT @ ROW	SLOPE	LEAD LENGTH (FT)
0+49	2901 PONTIAC TRAIL	WYE		6"	903.30		904.16	1.8%	49.0
0+81	2853 PONTIAC TRAIL	TEE	4.5	6"	903.39	907.74	908.18	1.0%	45.0
3+94	2837 PONTIAC TRAIL	TEE	5.0	6"	904.39	909.11	909.55	1.0%	44.5

SANITARY SEWER STRUCTURE TABLE						
STRUCTURE	STATION	RIM	DEPTH	DIA.	TYPE	INVERTS
S206	3+57	914.46	10.63	48	MANHOLE	10" S 903.93 10" N 903.83
S200	0+24	916.70	14.08	48	MANHOLE	10" N 902.83 10" S 902.83 10" E 902.63



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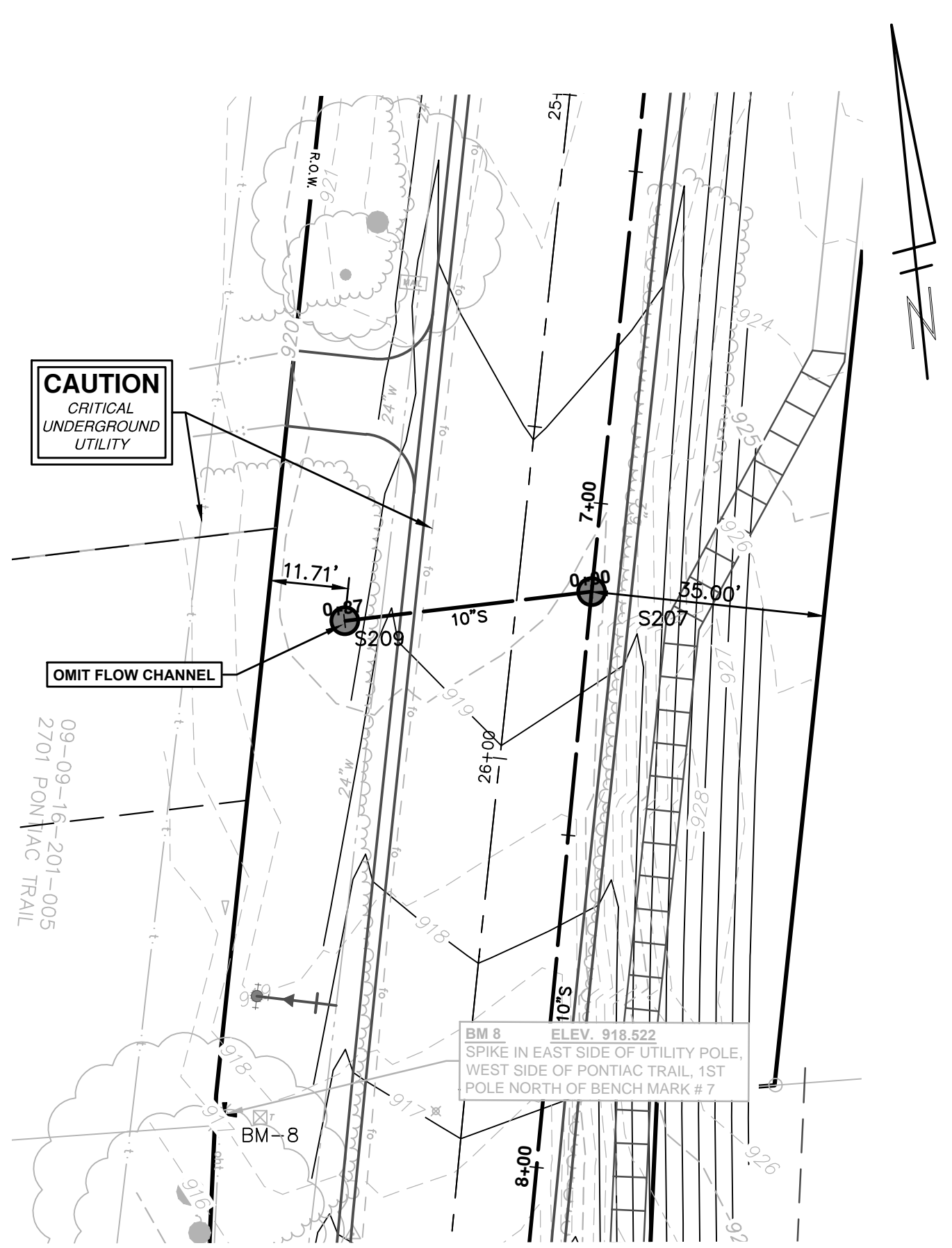
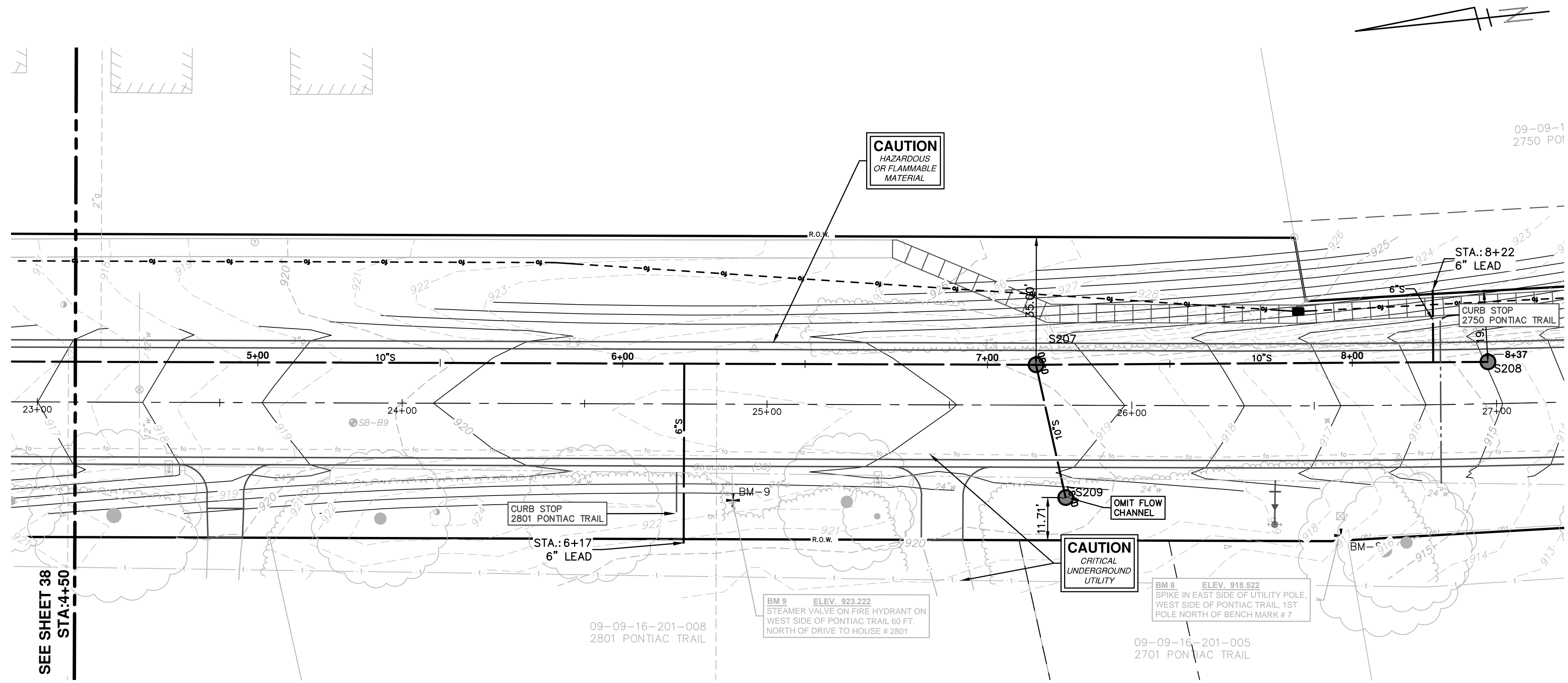
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SANITARY SEWER PLAN AND PROFILE

STA 0+00 TO 4+50

SHEET No. 38 OF 102

SCALE PLAN: 1" = 20'
PROFILE: 1" = 5'
DRAWING No. 2012028-38

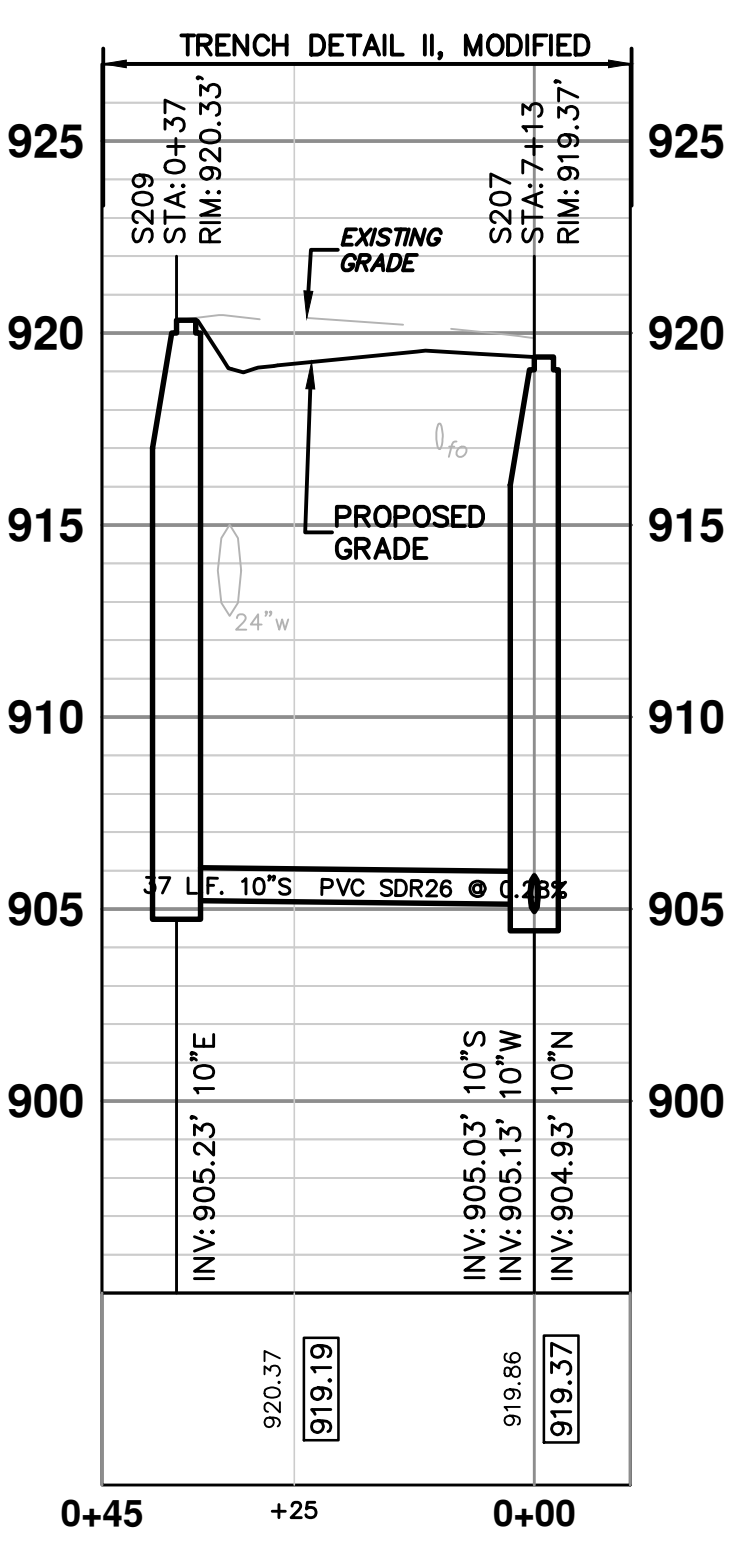
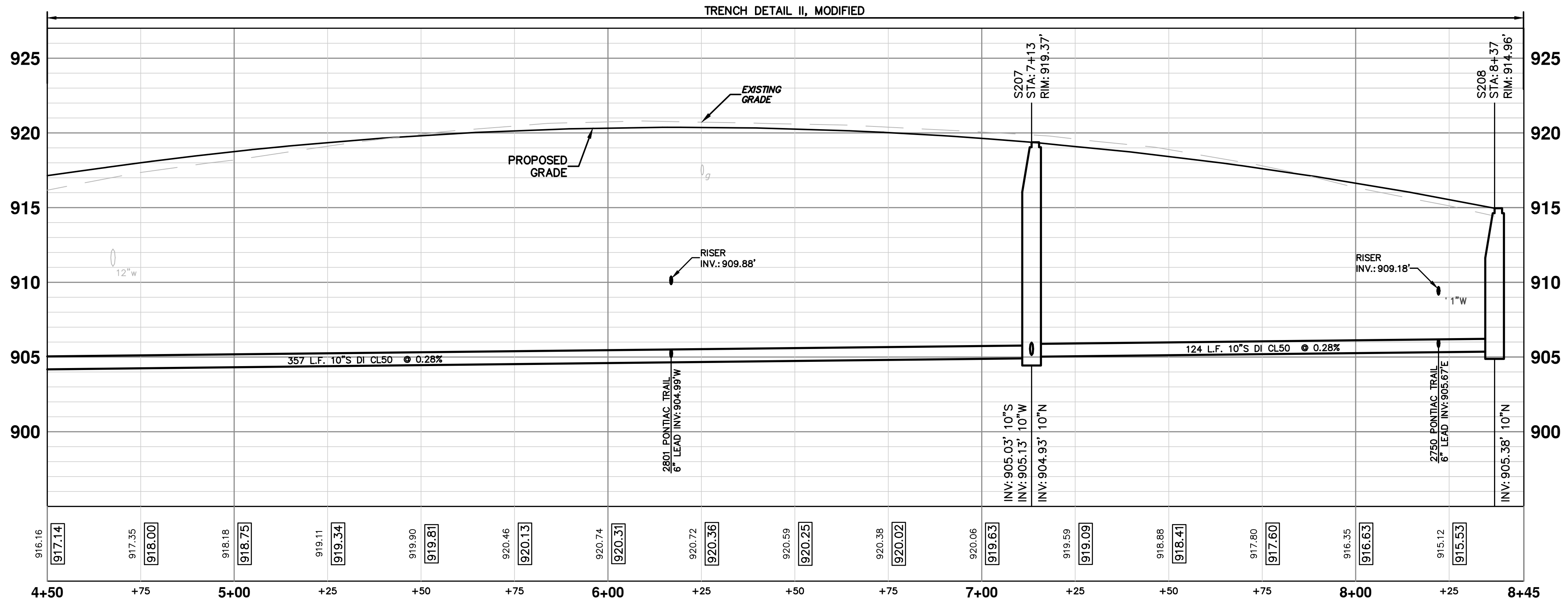
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SANITARY SEWER STRUCTURE TABLE						
STRUCTURE	STATION	RIM	DEPTH	DIA.	TYPE	INVERTS
S208	8+37	914.96	9.58	48	MANHOLE	10" N 905.38
S207	7+13	919.37	14.44	48	MANHOLE	10" S 905.03 10" W 905.13 10" N 904.93

SANITARY SEWER LEAD SCHEDULE									
STATION	ADDRESS	FITTING	RISER LENGTH (FT)	SIZE	INVERT @ MAIN	RISER INVERT	LEAD INVERT @ ROW	SLOPE	LEAD LENGTH (FT)
6+17	2801 PONTIAC TRAIL	TEE	5.0	6"	904.99	909.88	910.33	1.0%	44.0
8+22	2750 PONTIAC TRAIL	TEE	3.5	6"	905.67	909.18	911.05	11.7%	16.0

SANITARY SEWER STRUCTURE TABLE						
STRUCTURE	STATION	RIM	DEPTH	DIA.	TYPE	INVERTS
S209	0+37	920.33	15.10	48	MANHOLE	10" E 905.23
S207	7+13	919.37	14.44	48	MANHOLE	10" S 905.03 10" W 905.13 10" N 904.93



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SANITARY SEWER PLAN AND PROFILE

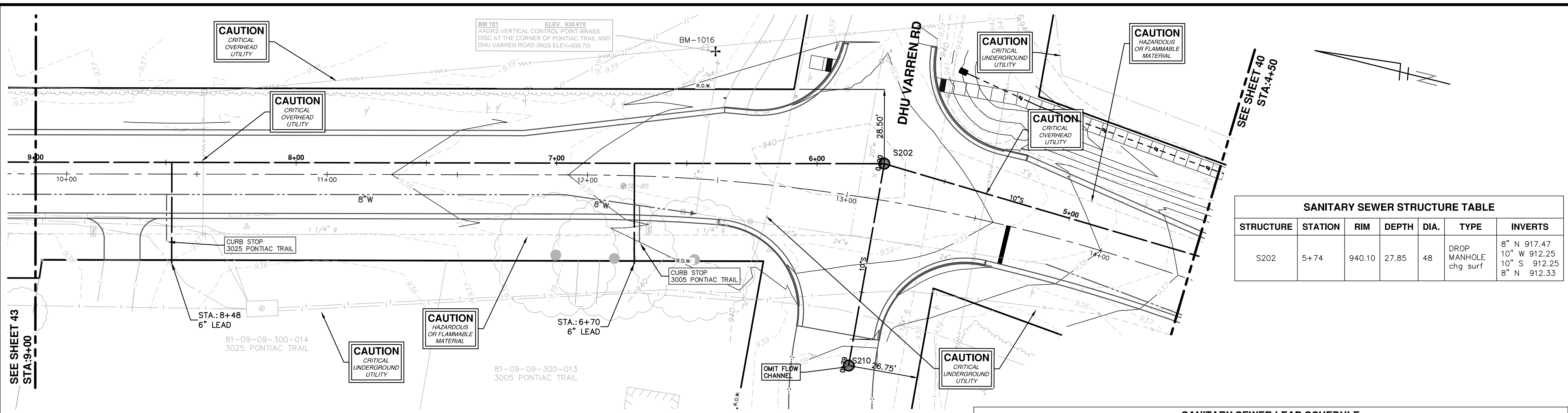
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DRAWING No. **2012028-39**

STA 4+50 TO 8+37

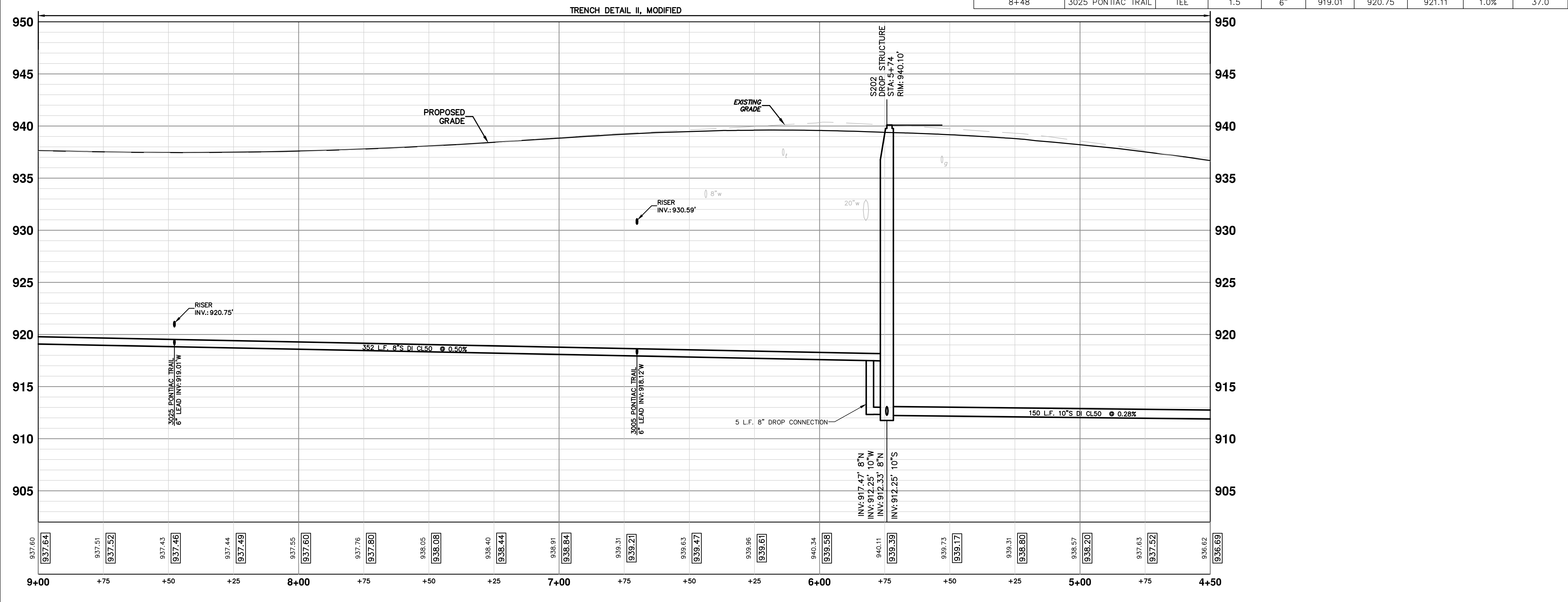
SHEET No. **39 OF 102**

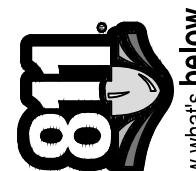
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SANITARY SEWER STRUCTURE TABLE						
STRUCTURE	STATION	RIM	DEPTH	DIA.	TYPE	INVERTS
S202	5+74	940.10	27.85	48	DROP MANHOLE chg surf	8" N 917.47 10" W 912.25 10" S 912.25 8" N 912.33

SANITARY SEWER LEAD SCHEDULE									
STATION	ADDRESS	FITTING	RISER LENGTH (FT)	SIZE	INVERT @ MAIN	RISER INVERT	LEAD INVERT @ ROW	SLOPE	LEAD LENGTH (FT)
6+70	3005 PONTIAC TRAIL	TEE	12.5	6"	918.12	930.59	930.85	1.0%	26.0
8+48	3025 PONTIAC TRAIL	TEE	1.5	6"	919.01	920.75	921.11	1.0%	37.0






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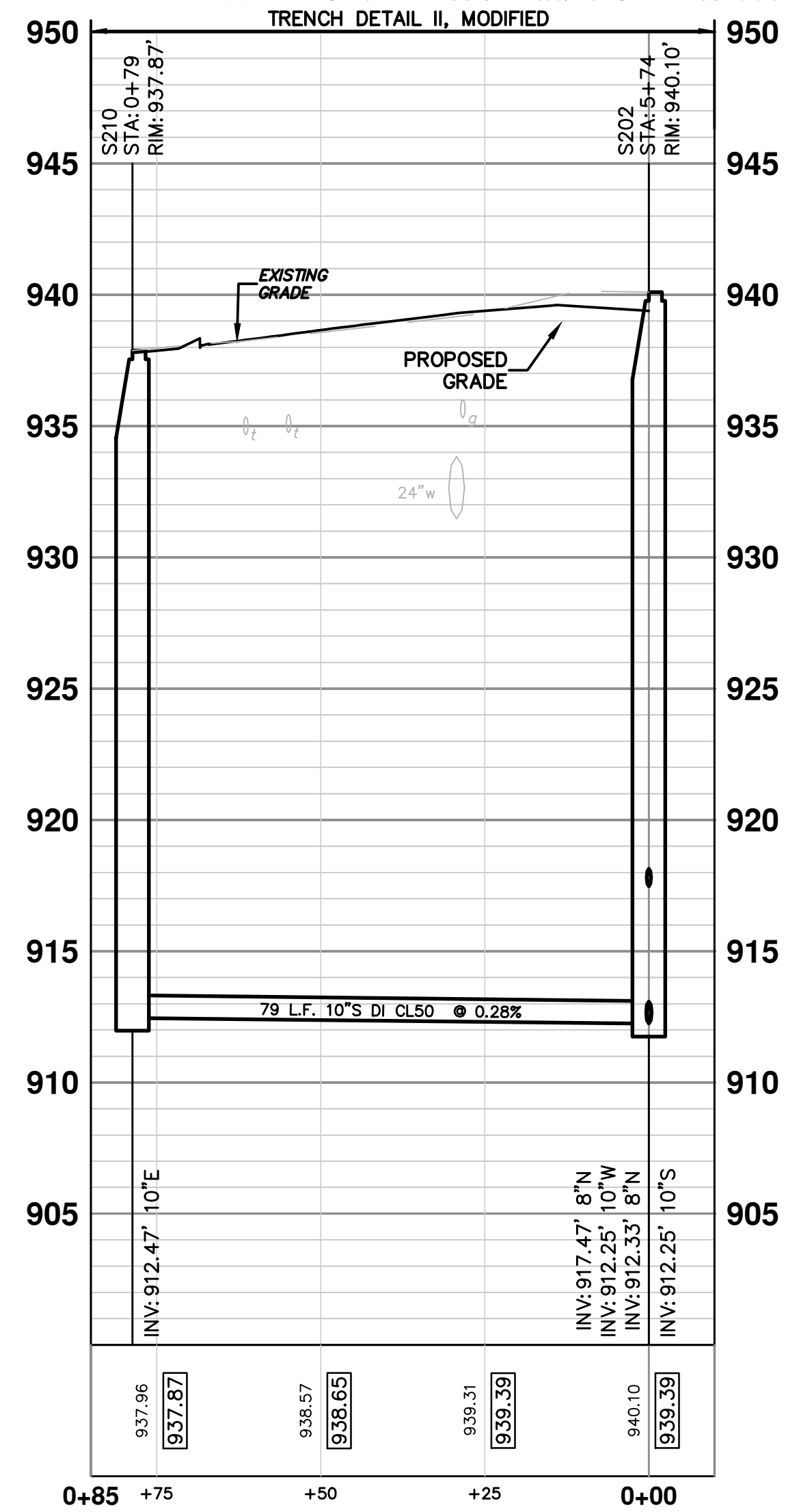
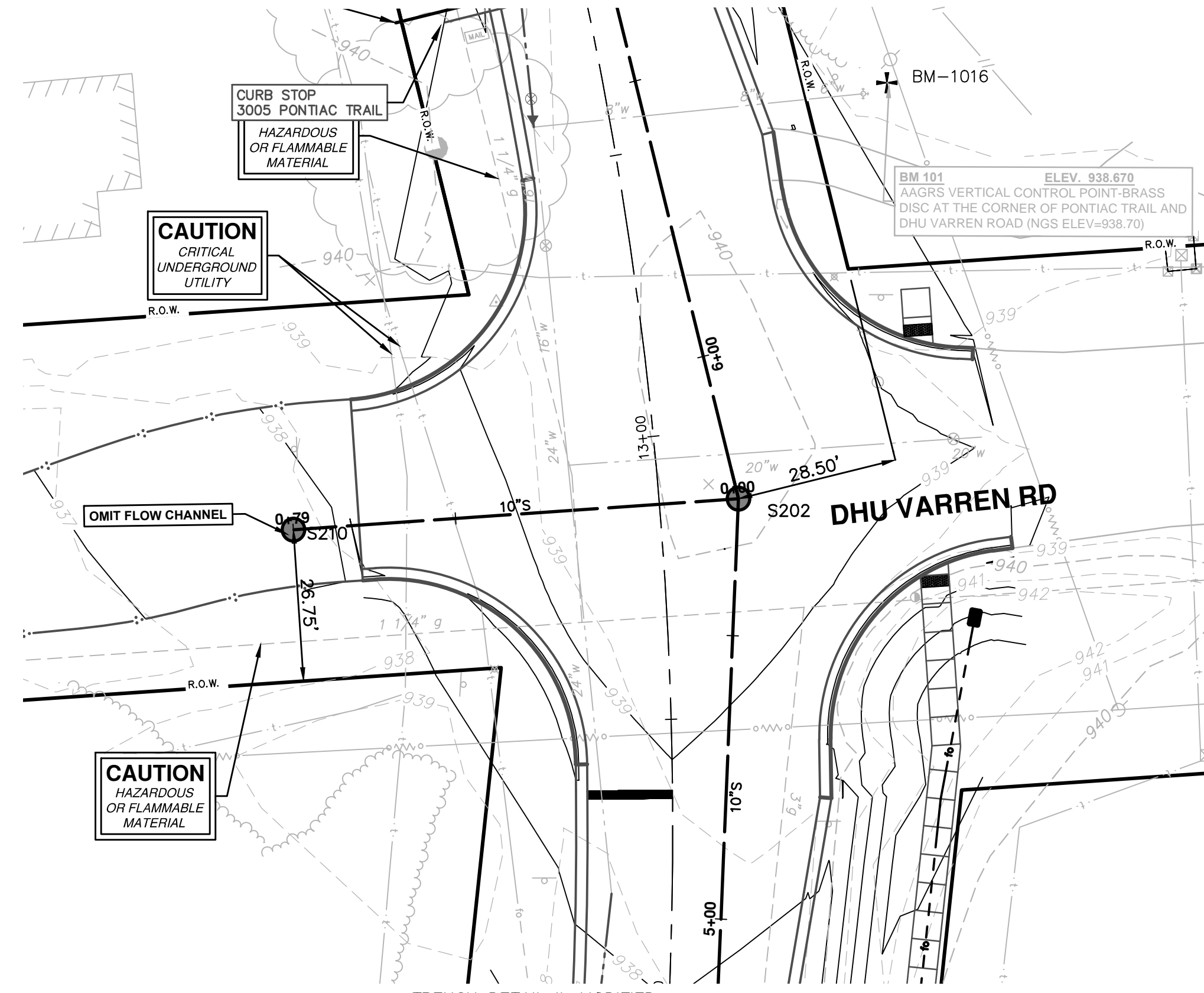
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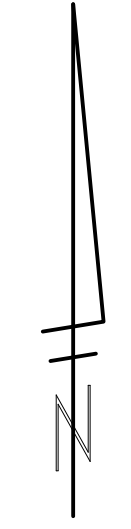
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PONTIAC TRAIL IMPROVEMENTS
 SANITARY SEWER PLAN AND PROFILE
 S202 TO S203
 STA 4+50 TO 9+00

SCALE PLAN: 1" = 20'
 PROFILE: 1" = 5'
 DRAWING No. 2012028-41

SHEET No. 41 OF 102

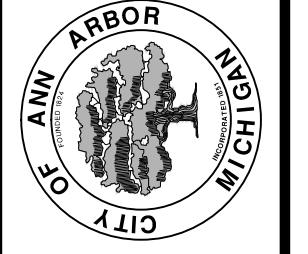


SANITARY SEWER STRUCTURE TABLE						
STRUCTURE	STATION	RIM	DEPTH	DIA.	TYPE	INVERTS
S210	0+79	937.87	25.40	48	MANHOLE	10" E 912.47
S202	5+74	940.10	27.85	48	DROP MANHOLE chg surf	8" N 917.47 10" W 912.25 10" S 912.25 8" N 912.33



REV.	DESCRIPTION	DATE	BY	CHECKED
00	BID SUBMITTAL	03-18-2014	RMLH	DRAWN

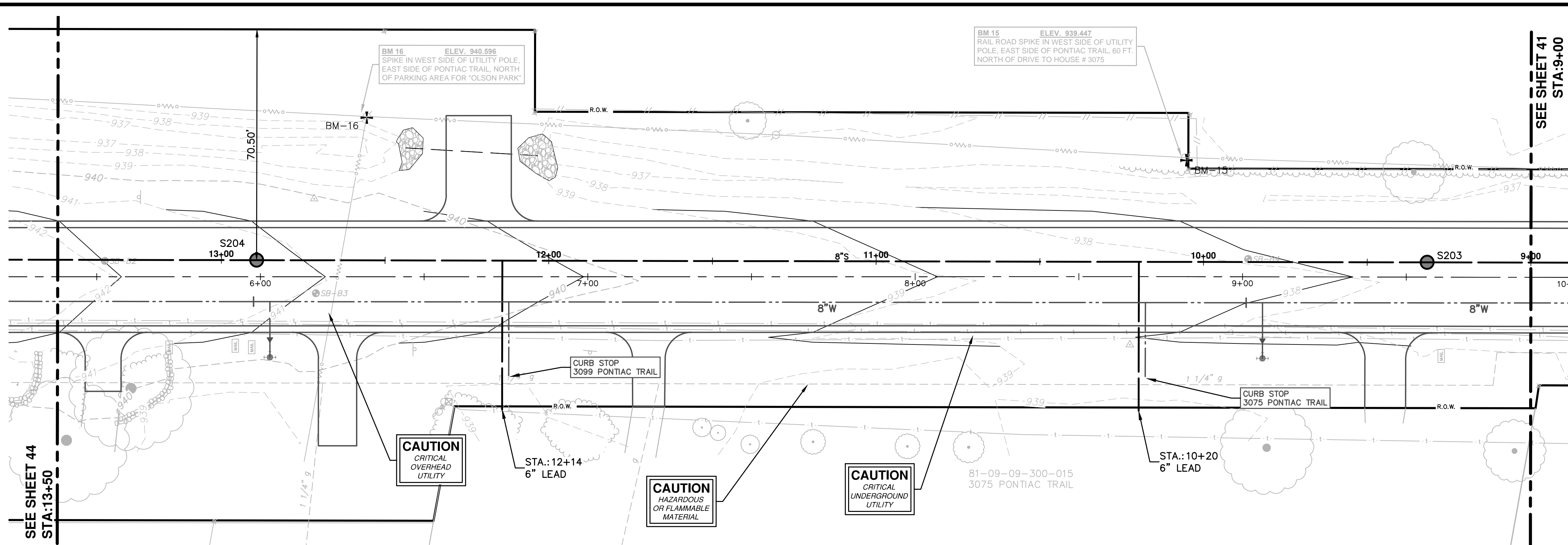
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SANITARY SEWER PLAN AND PROFILE
S202 TO S210
STA 0+00 TO 0+79

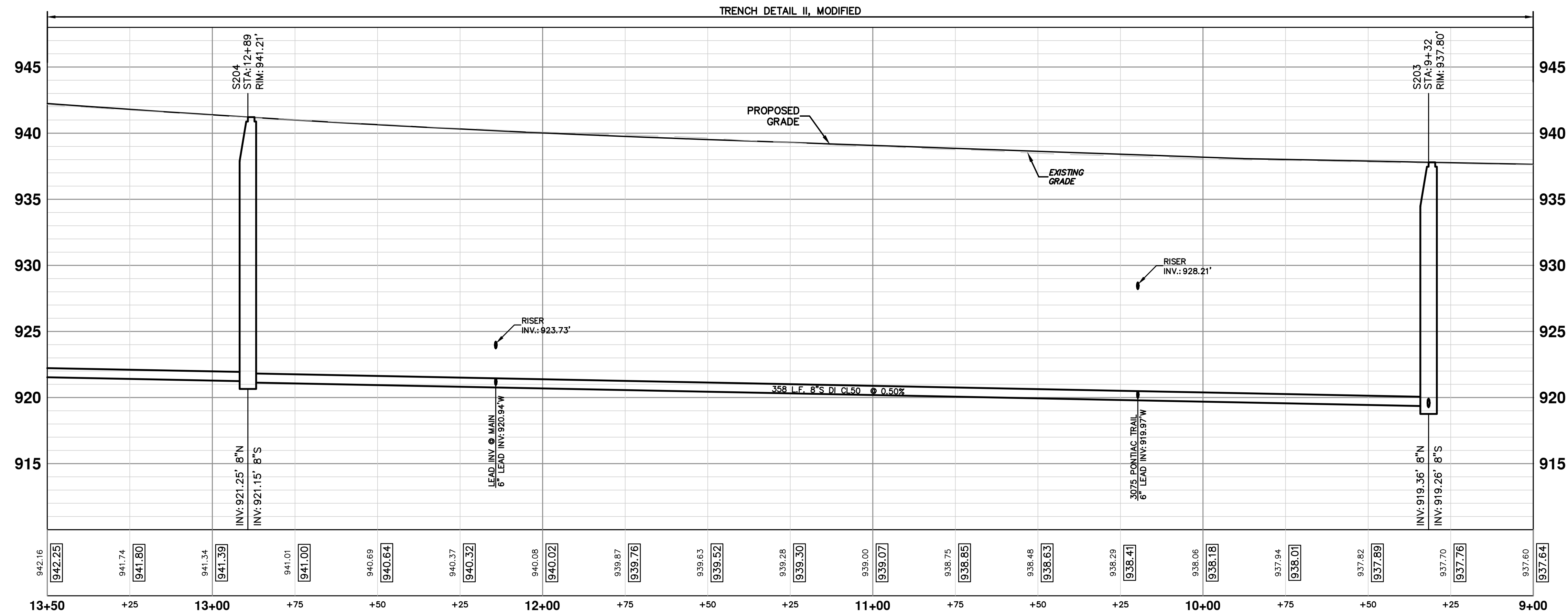
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PROFILE: 1" = 5'
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SANITARY SEWER STRUCTURE TABLE						
STRUCTURE	STATION	RIM	DEPTH	DIA.	TYPE	INVERTS
S204	12+89	941.21	20.06	48	MANHOLE	8" N 921.25 8" S 921.15
S203	9+32	937.80	18.54	48	MANHOLE	8" N 919.36 8" S 919.26

SANITARY SEWER LEAD SCHEDULE									
STATION	ADDRESS	FITTING	RISER LENGTH (FT)	SIZE	INVERT @ MAIN	RISER INVERT	LEAD INVERT @ ROW	SLOPE	LEAD LENGTH (FT)
10+20	3075 PONTIAC TRAIL	TEE	8.0	6"	919.97	928.21	928.58	1.0%	37.0
12+14		TEE	3.0	6"	920.94	923.73	924.16	1.0%	43.0



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SANITARY SEWER PLAN AND PROFILE
S203 TO S204
STA 9+00 TO 13+50

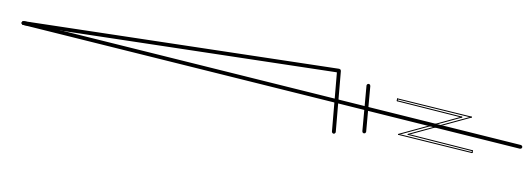
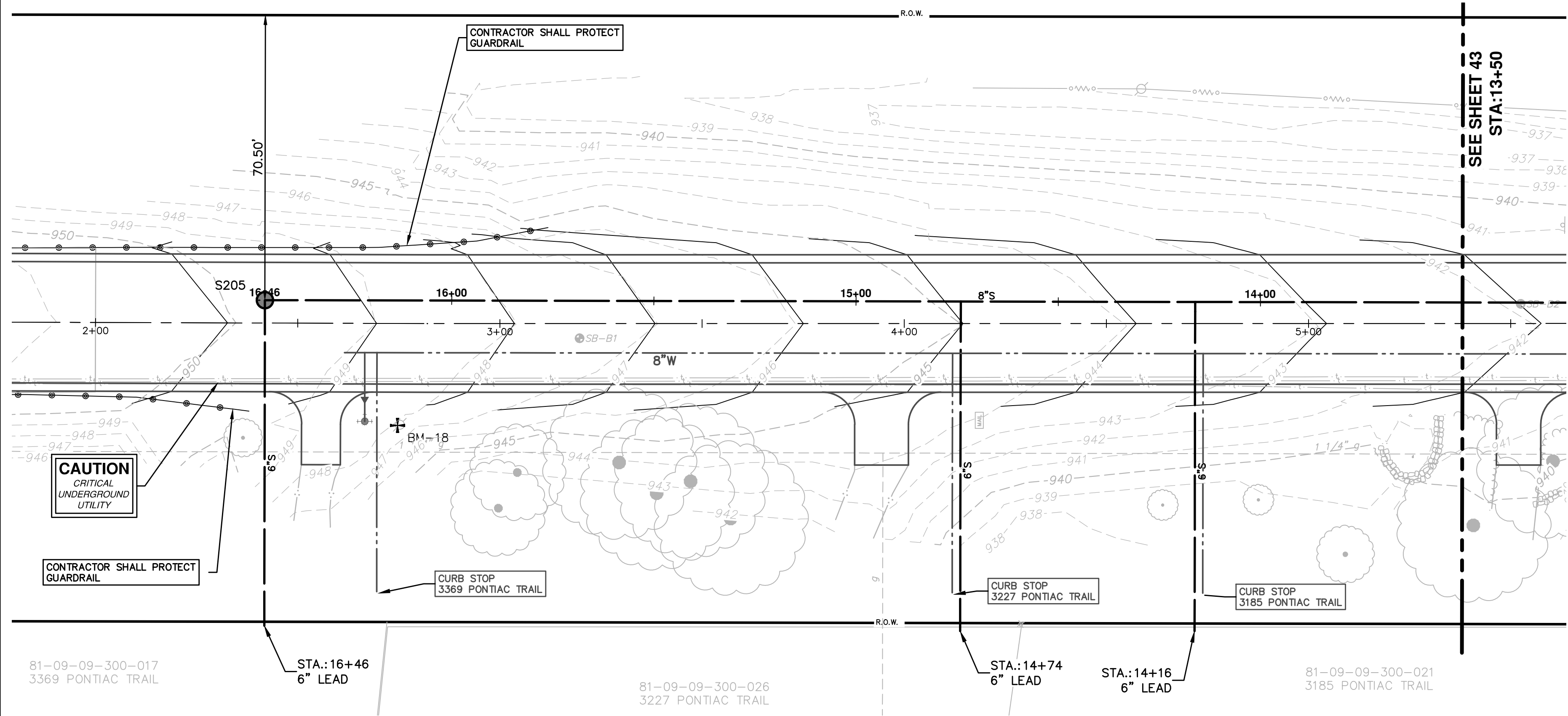
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DRAWING No.
2012028-43

SHEET No.
43 OF 102

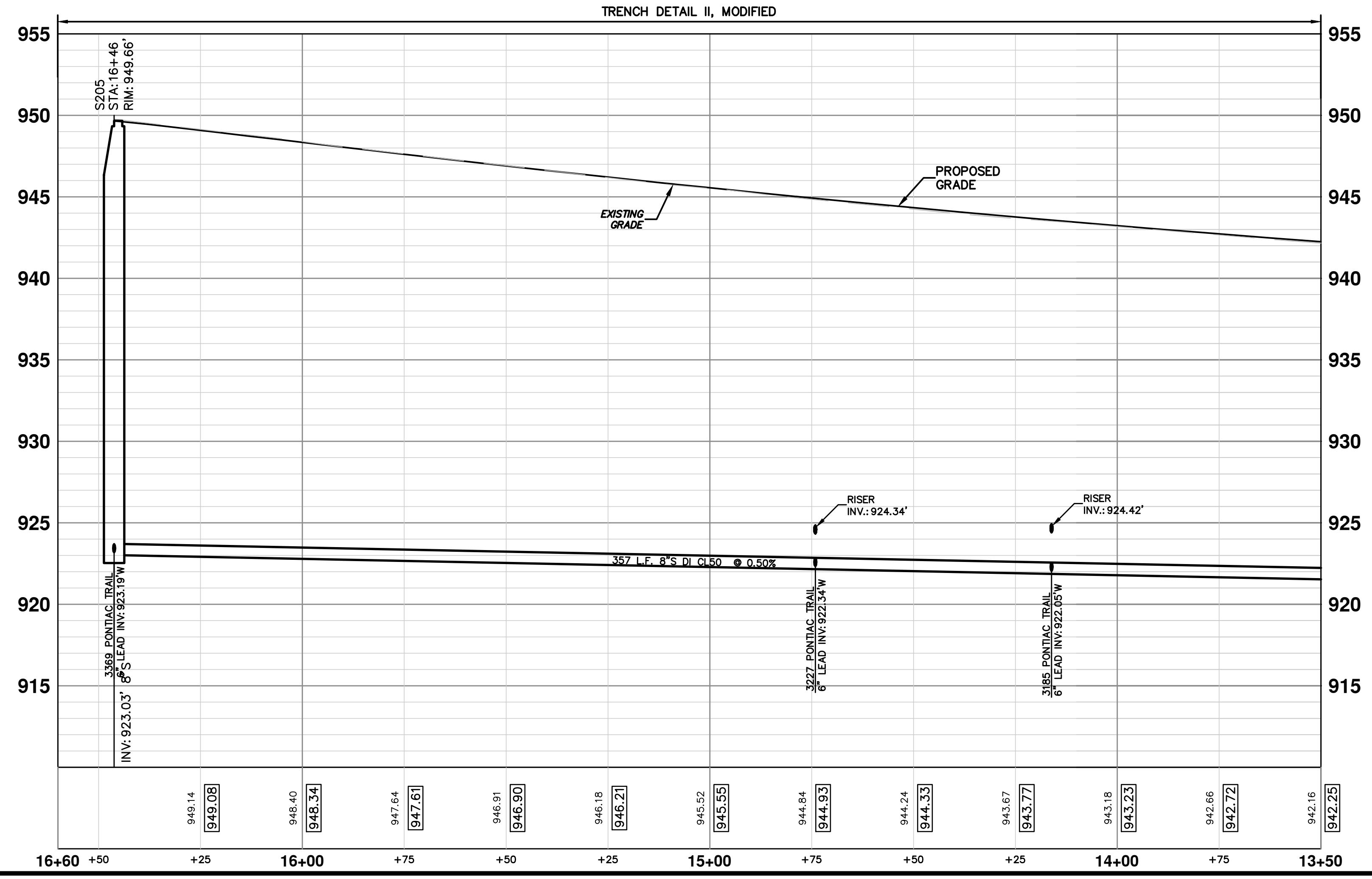
DATE

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STRUCTURE	STATION	RIM	DEPTH	DIA.	TYPE	INVERTS
S205	16+46	949.66	26.63	48	MANHOLE	8" S 923.03

STATION	ADDRESS	FITTING	RISER LENGTH (FT)	SIZE	INVERT @ MAIN	RISER INVERT	LEAD INVERT @ ROW	SLOPE	LEAD LENGTH (FT)
14+16	3185 PONTIAC TRAIL	TEE	2.0	6"	922.05	924.42	925.21	1.0%	79.0
14+74	3227 PONTIAC TRAIL	TEE	2.0	6"	922.34	924.34	925.14	1.0%	79.5
16+46	3369 PONTIAC TRAIL	WYE		6"	923.19		923.99	1.0%	80.5



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PONTIAC TRAIL IMPROVEMENTS
SANITARY SEWER PLAN AND PROFILE
STA 13+50 TO 16+46

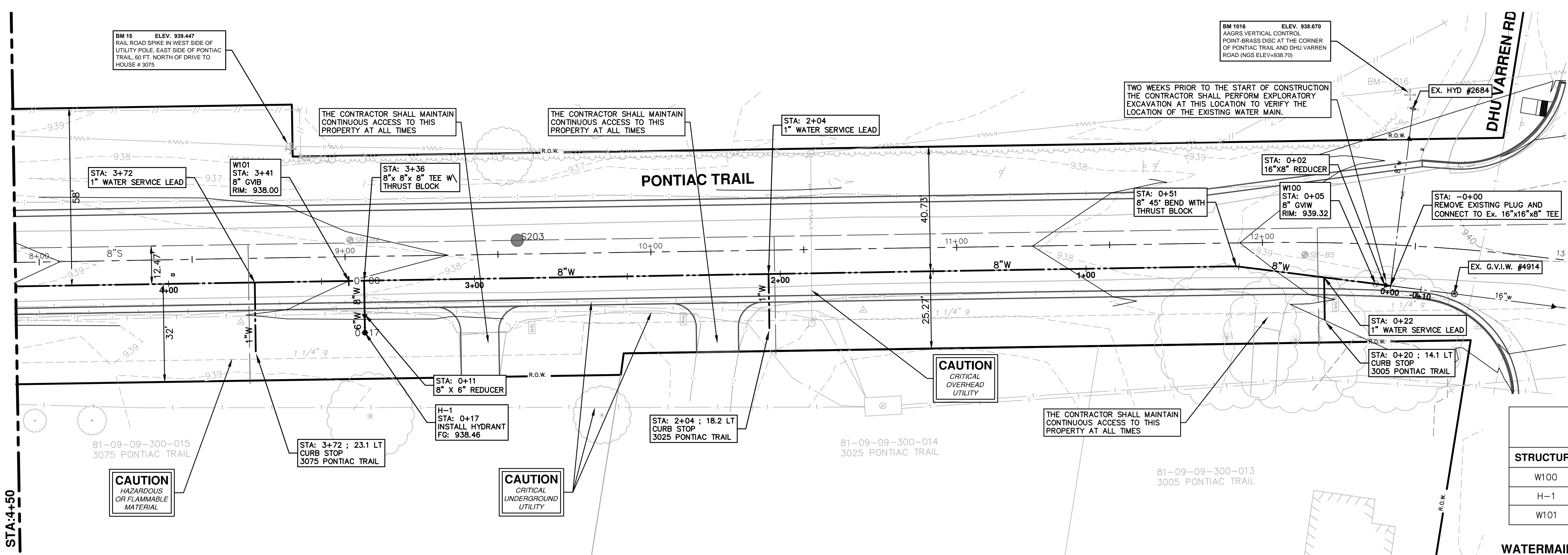
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PROFILE: 1" = 5'

DRAWING No. **2012028-44**

SHEET No. **44 OF 102**

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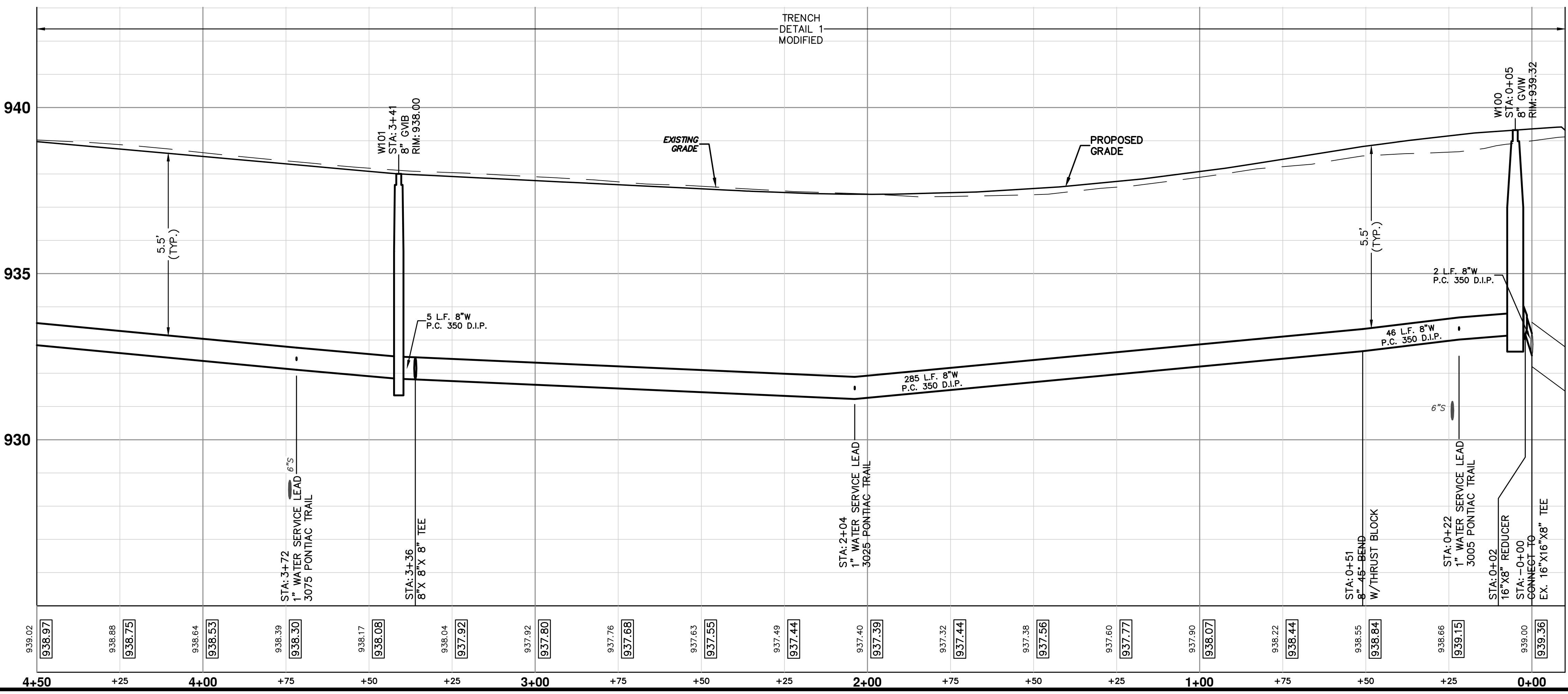
SEE SHEET 46
STA: 4+50

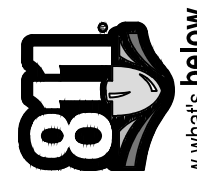


STRUCTURE	TYPE	STATION	RIM	DEPTH
W100	8" G.V.I.W.	0+05	939.32	6.17
H-1	INSTALL HYDRANT	0+17	938.46	5.88
W101	8" G.V.I.B.	3+41.07	938.00	6.17

WATERMAIN CONSTRUCTION NOTES:

- Erosion control items see erosion control sheets.
- All water main work shall be staged in accordance with the construction staging sheets and special provision as directed by the engineer. The contractor shall be responsible for coordinating all work, construction methods, and equipment to comply with the contract requirements.
- The contractor shall carefully protect from damage or injury during construction operations all utilities not designated for removal or abandonment. Payment for protection of utilities included in "machine grading, modified, pontiac trail". Existing facilities not designated for removal or abandonment but which are damaged by the contractor's operation shall be repaired or replaced by the contractor at his sole expense, in a manner that is approved by the engineer.
- The existing utilities shown on these plans represent the best information available as obtained through surveys and/or existing plans. This information does not relieve the contractor of the responsibility to be satisfied as to its accuracy and/or the location of existing utilities. If storm, sanitary, or water mains cross with less than 18" clearance, they shall be saddled (see utd detail #3). If storm, sanitary, or water mains cross other utilities, contact their respective owners for information on how to proceed. Payment for the coordination efforts, concrete saddles, and any other associated items shall be included in the related storm, sanitary, or water main items and shall not be paid for separately.
- The contractor will only be allowed to shut down the existing 16" water main for a maximum duration of 8 hours in any one shutdown in any given 24-hour period. Shutdown of the existing watermain must be scheduled with the engineer a minimum of 3 working days in advance of the intended shutdown. The shutdown of the water main will not be allowed to take place on a Saturday or a Sunday.
- The contractor shall propose a method(s) and equipment for the flushing of chlorinated water from proposed water main into existing sanitary sewers. Chlorinated water shall not be allowed in storm sewers or bioswales. Any and all measures necessary to comply with this requirement shall be included in the cost of the water main installation and will not be paid for separately.
- Upon completion of the 8 inch water main and pressure test of new water main contractor to schedule shut down and make connection to existing water main at gwiv W100. In process of connection install aqua swab and flush till removed at north end. Contractor to schedule Field Operations for placement of 1 inch testing corporation in W100. Fee for placement of corporation shall be paid for by contractor. 8 inch water main to be chlorinated via 1 inch corporation, flushed and bacteriological tested. All testing to be done per City of Ann Arbor Standards and Detailed Standard Specification for Water Main Testing. Once all testing completed and approved contractor can schedule Field Operations for placement of corporations, 1 inch copper and curb stops.
- Copper services that will be placed to homes on eastside of Pontiac Trail from existing 24 inch water main on Westside of Pontiac Trail will be installed part width. Contractor to schedule work with Field Operations. Work to be included in pay item 460 Excavate and backfill for water service.






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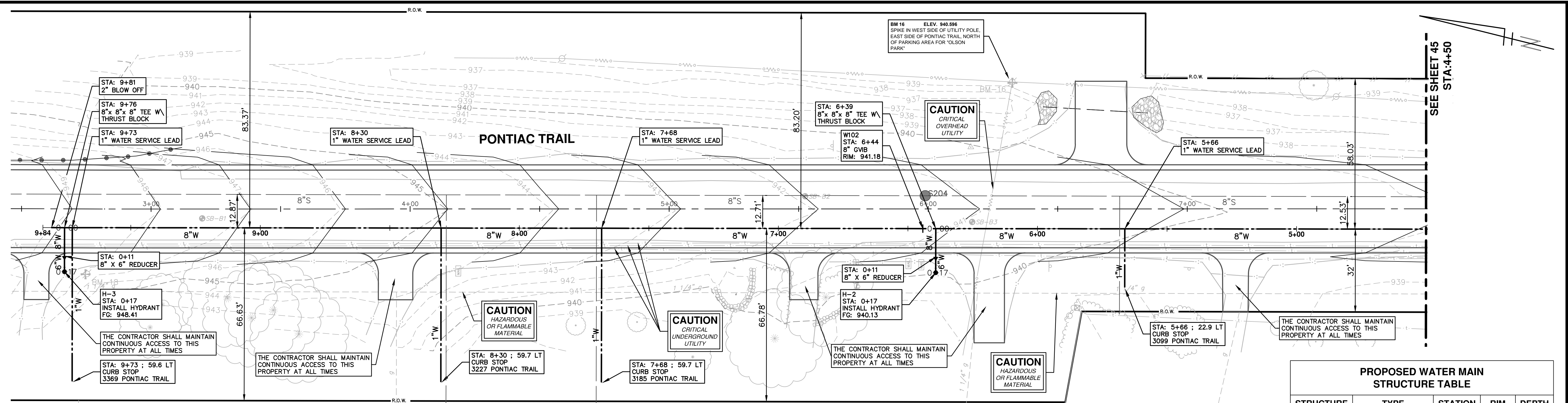
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PONTIAC TRAIL IMPROVEMENTS
WATER MAIN PLAN AND PROFILE
STA. 0+00 TO STA. 4+50

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

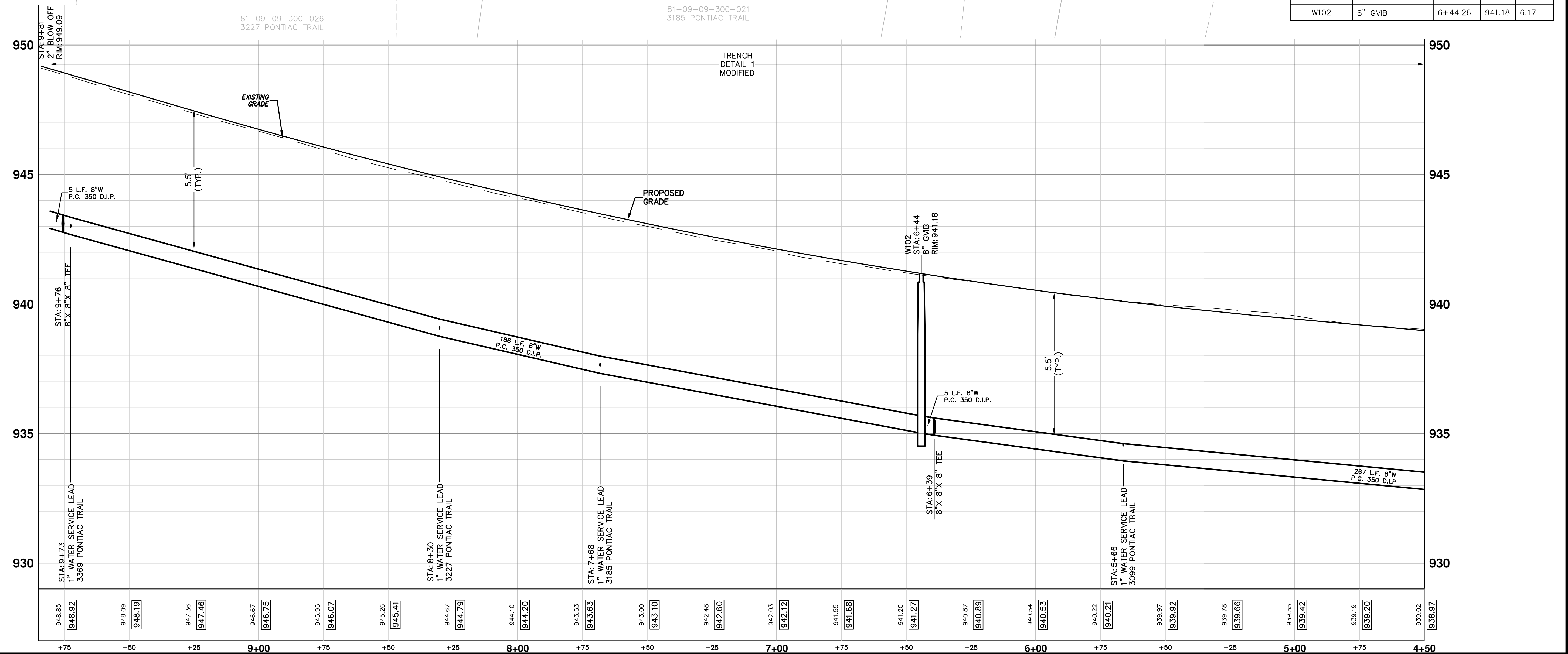


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SHEET NO. 45 OF 102

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PROPOSED WATER MAIN STRUCTURE TABLE				
STRUCTURE	TYPE	STATION	RIM	DEPTH
H-2	INSTALL HYDRANT	0+17	940.13	6.30
W102	8" GVB	6+44.26	941.18	6.17



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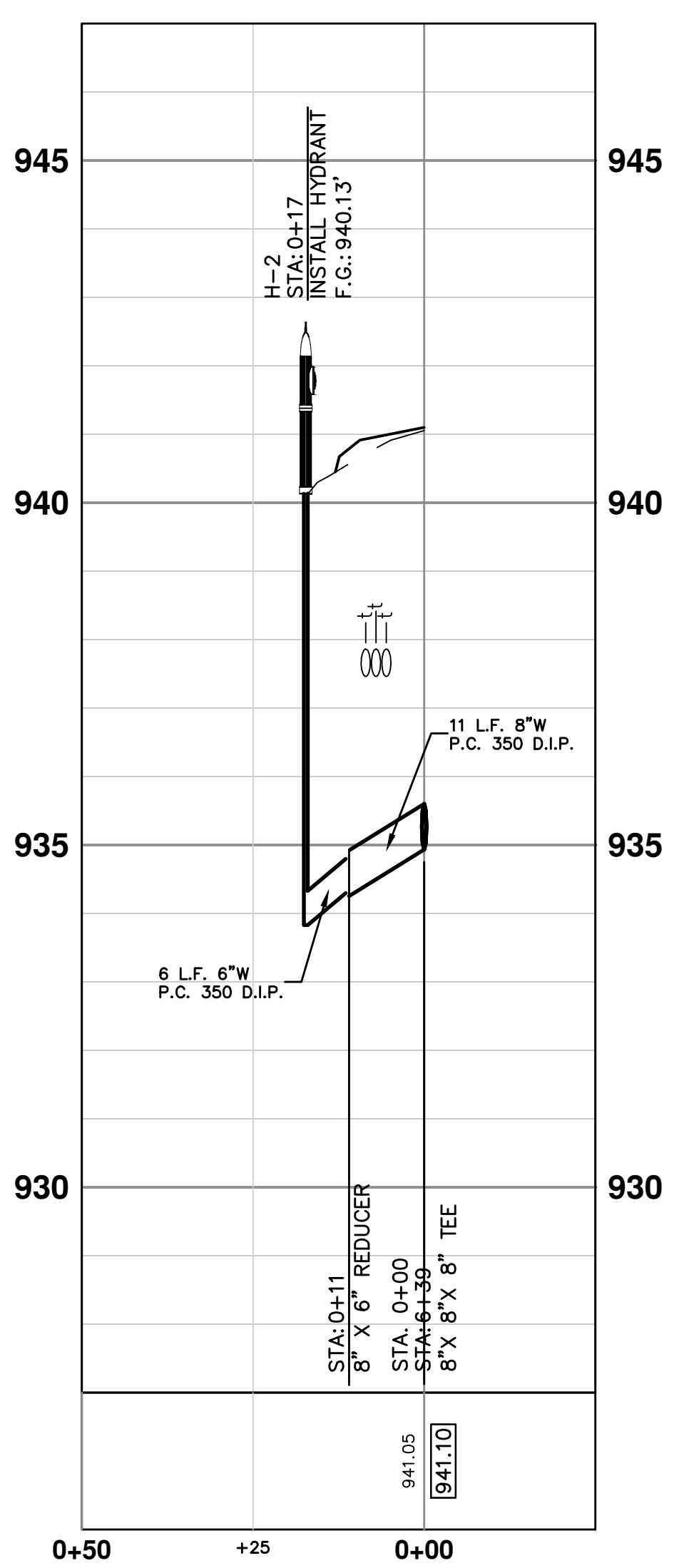
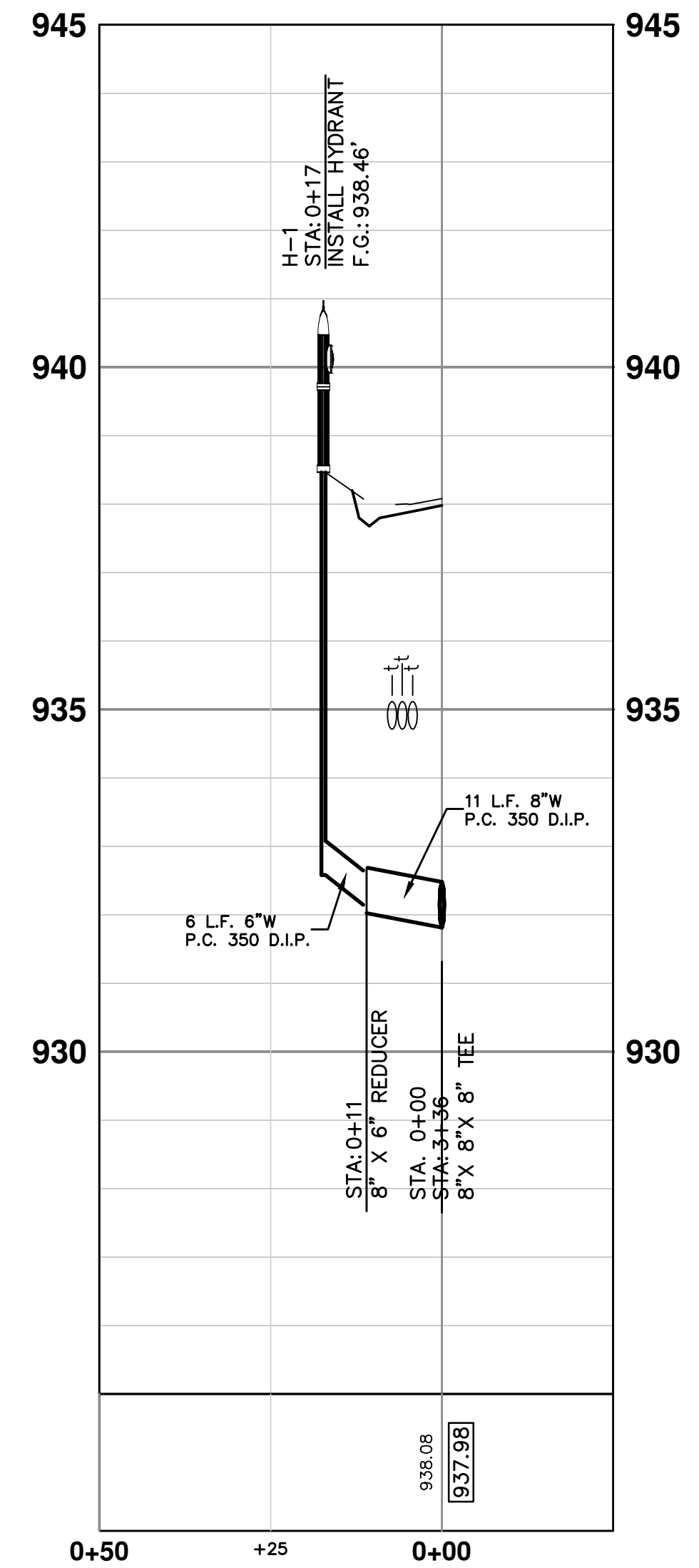
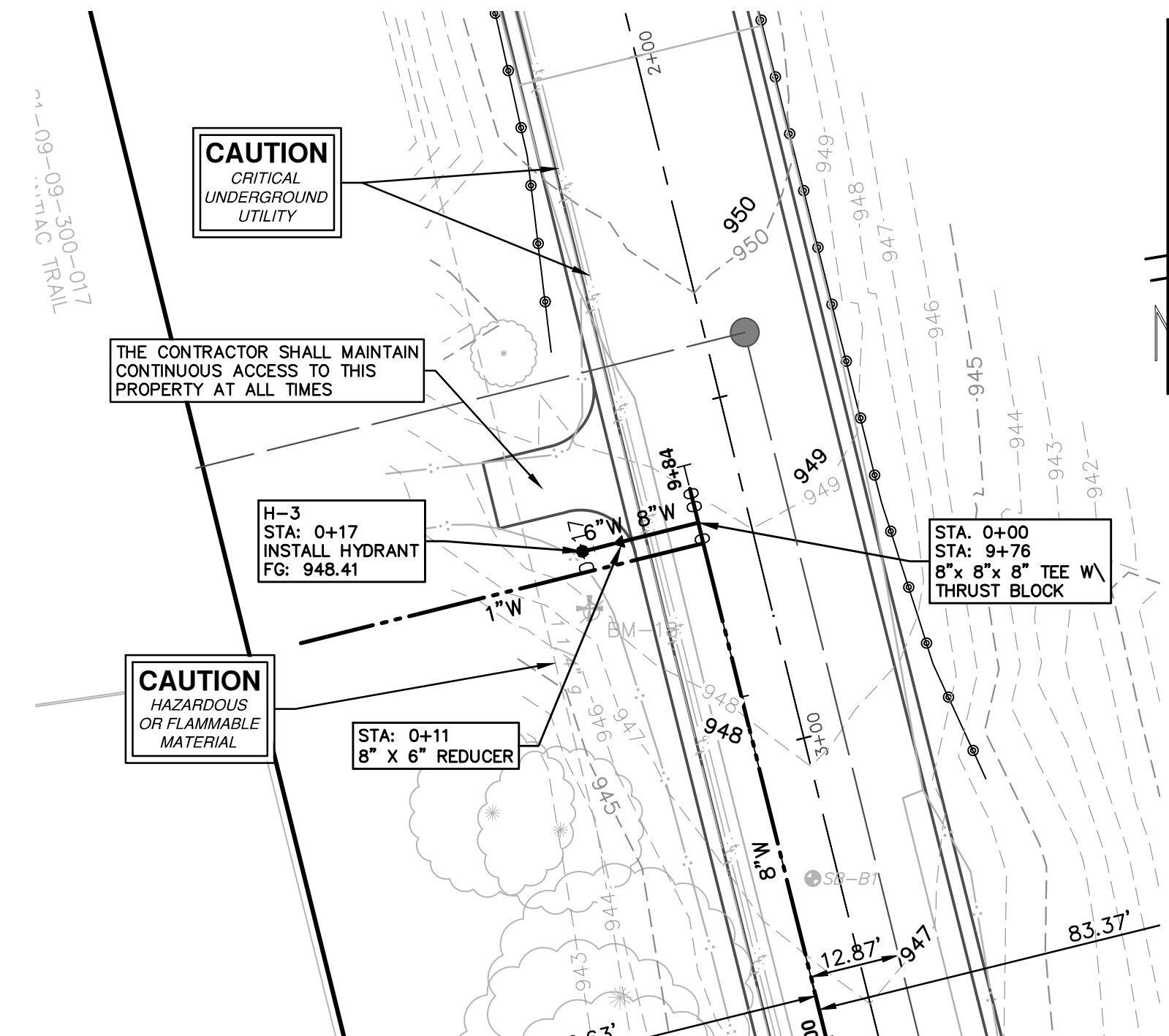
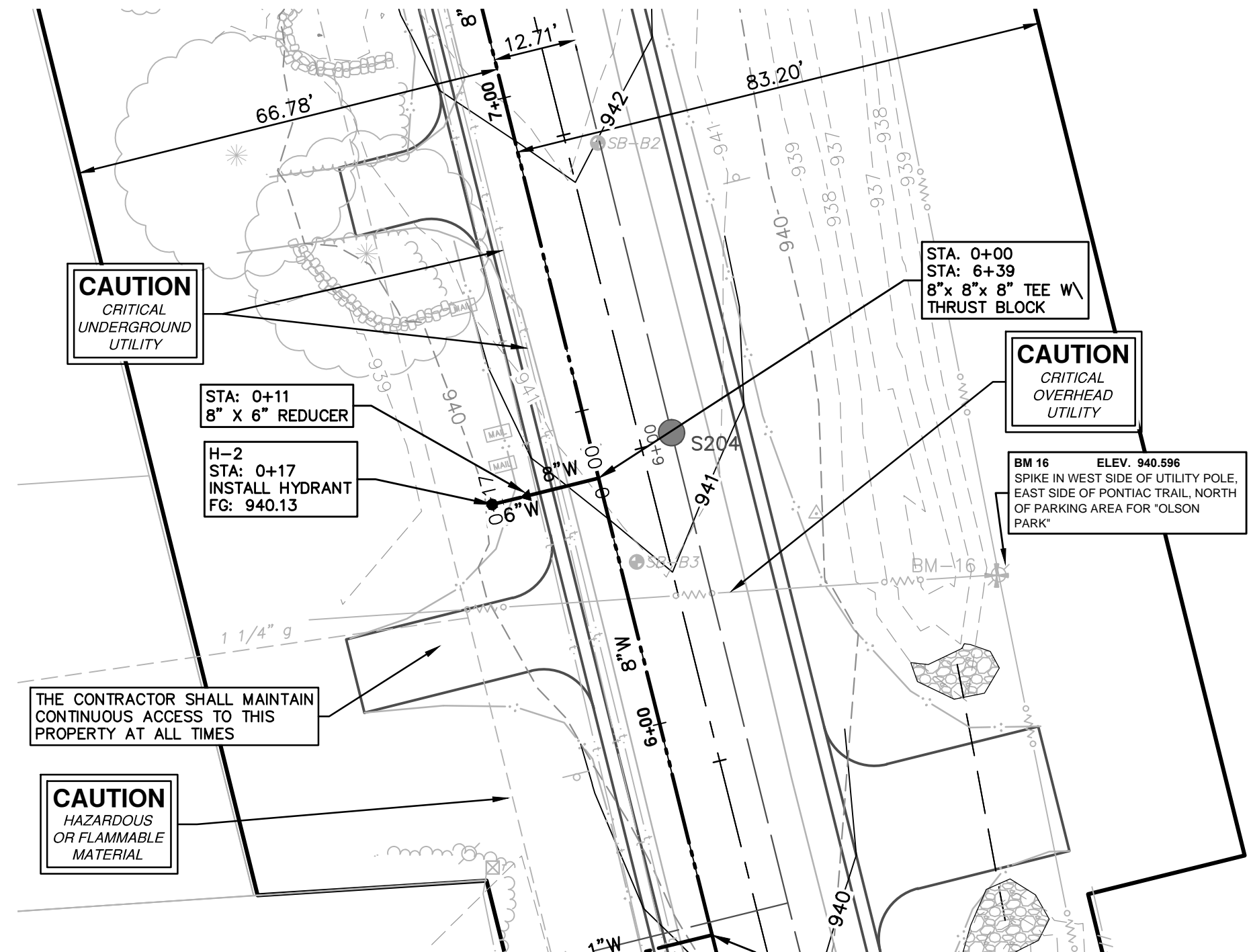
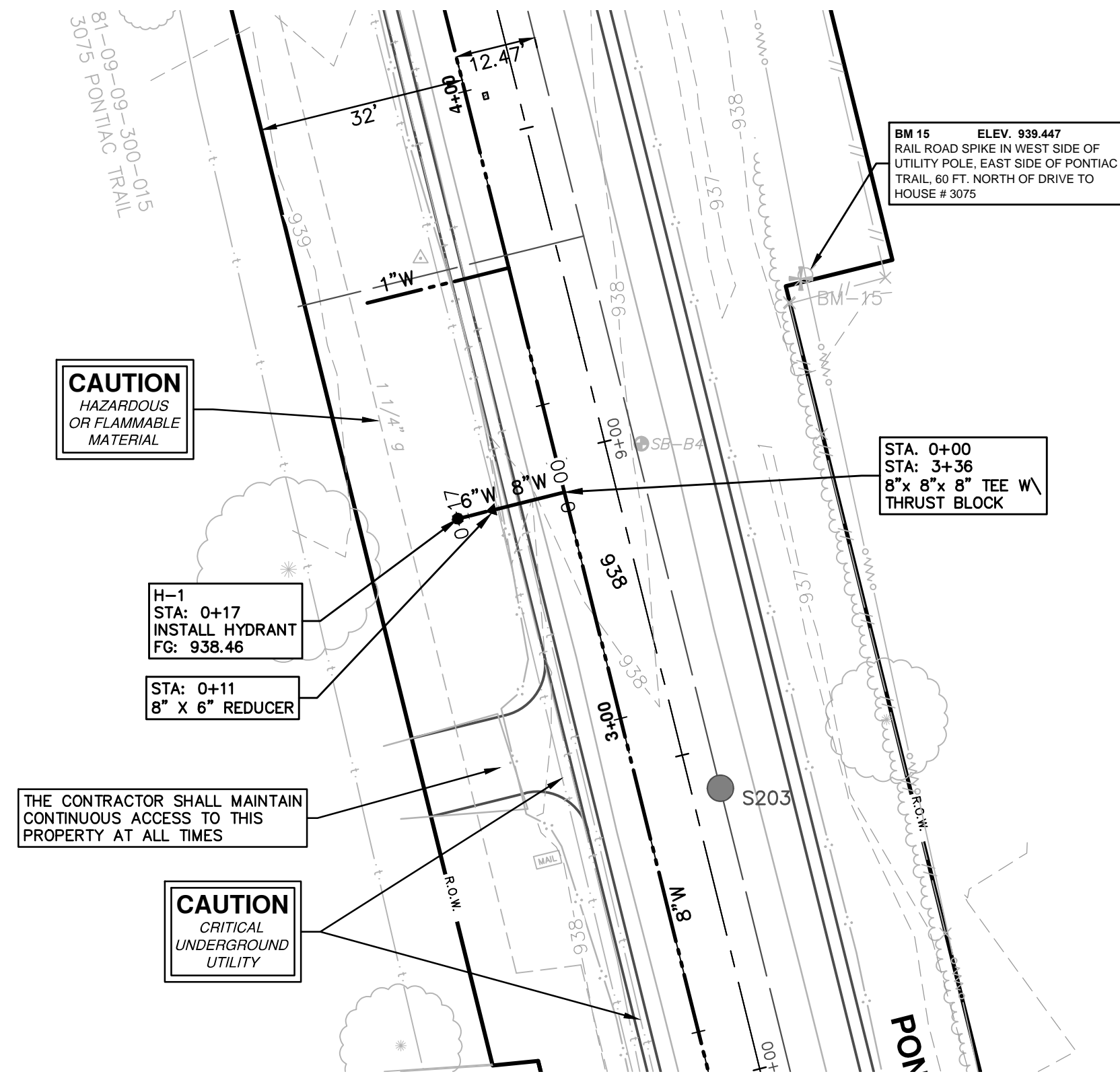
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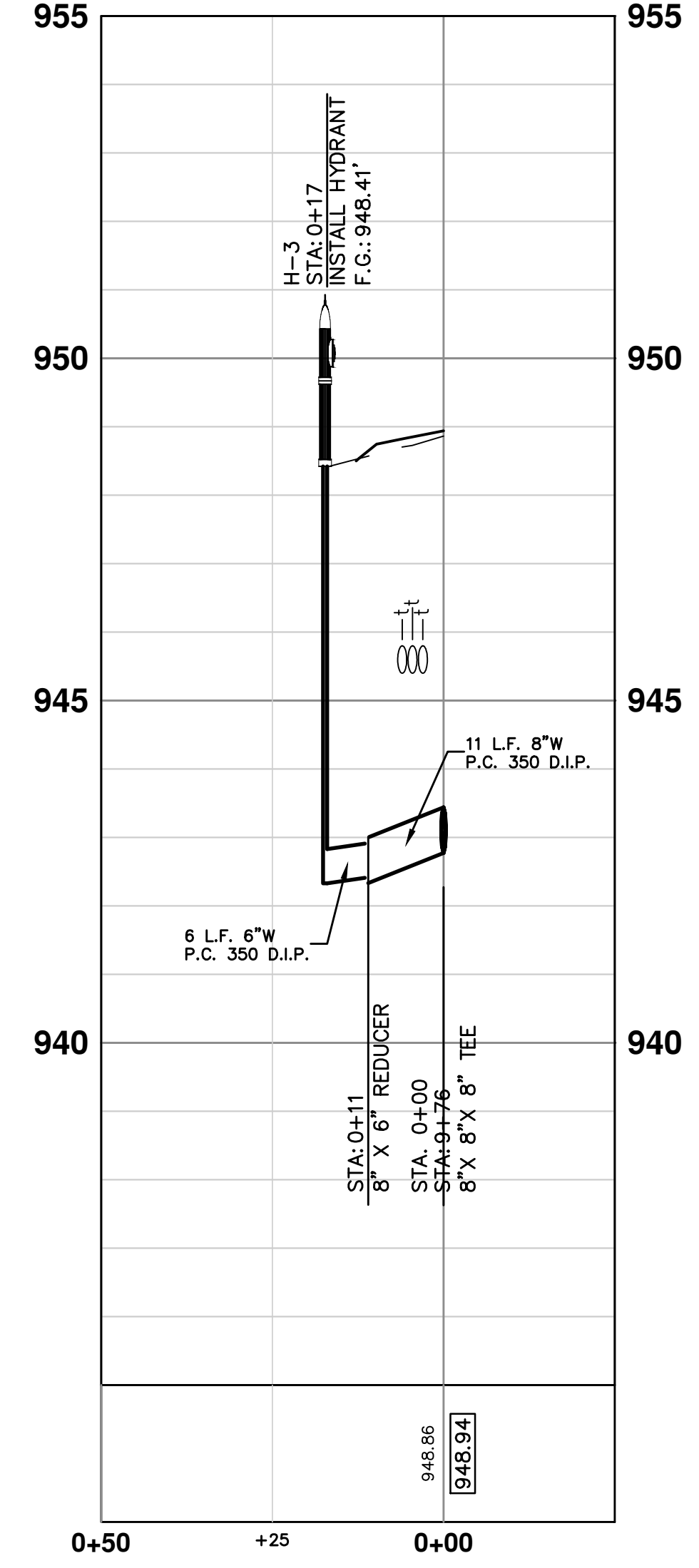
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PROFILE: 1" = 2'

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PROPOSED WATER MAIN STRUCTURE TABLE				
STRUCTURE	TYPE	STATION	RIM	DEPTH
H-1	INSTALL HYDRANT	0+17	938.46	5.88
H-2	INSTALL HYDRANT	0+17	940.13	6.30
H-3	INSTALL HYDRANT	0+17	948.41	6.08



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 WATER MAIN PLAN AND PROFILE
 HYDRANT PROFILES H-1, H-2, H-3

SCALE: HOR: 1" = 20'
 VERT: 1" = 2'

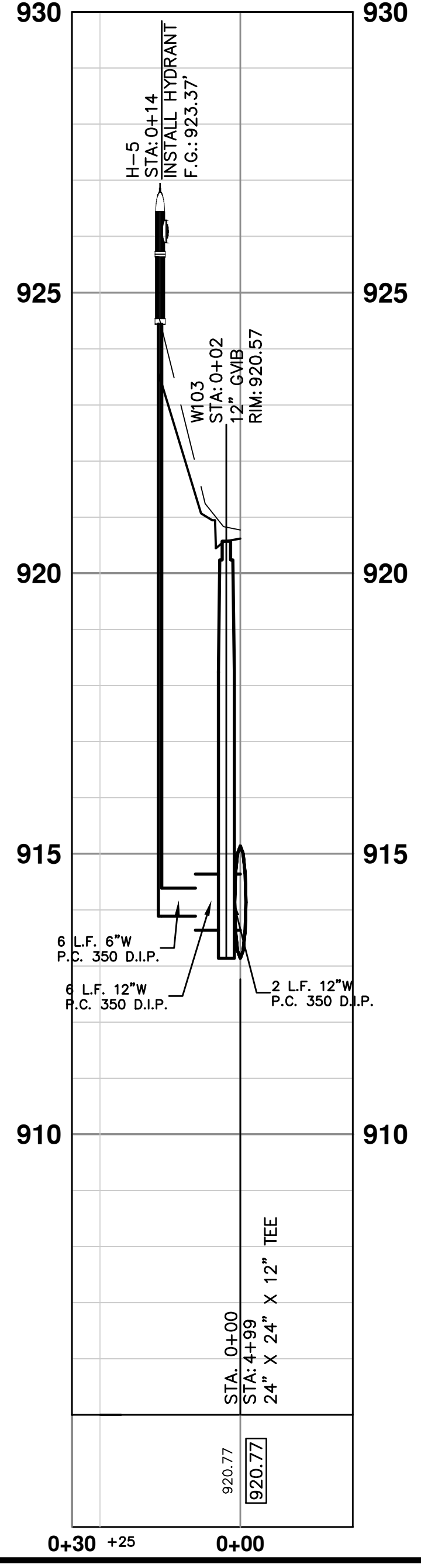
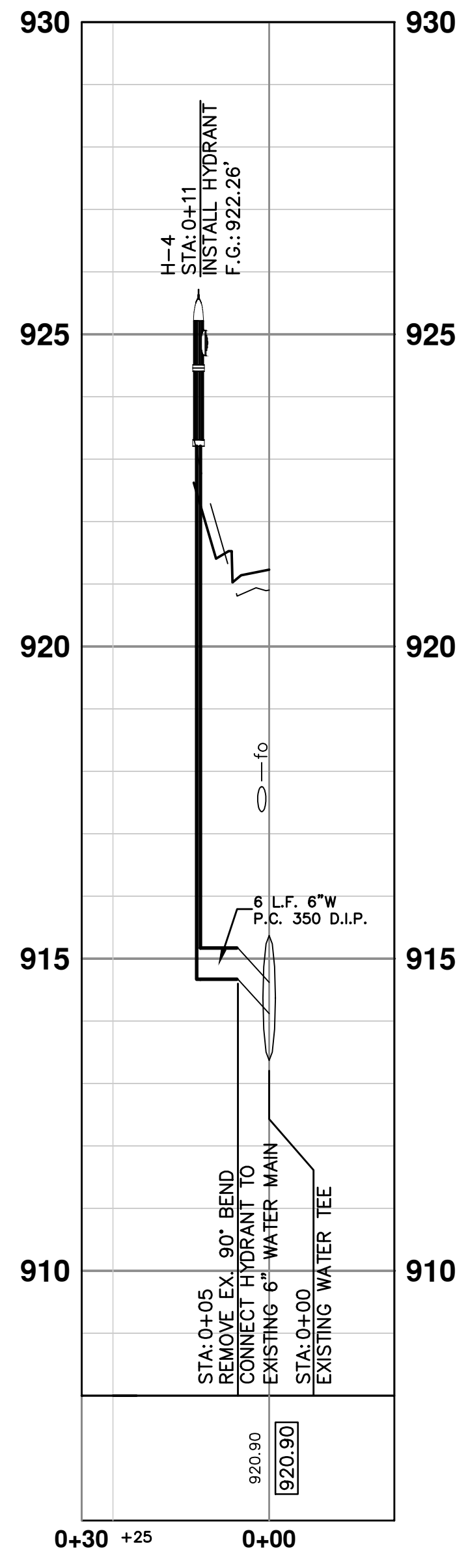
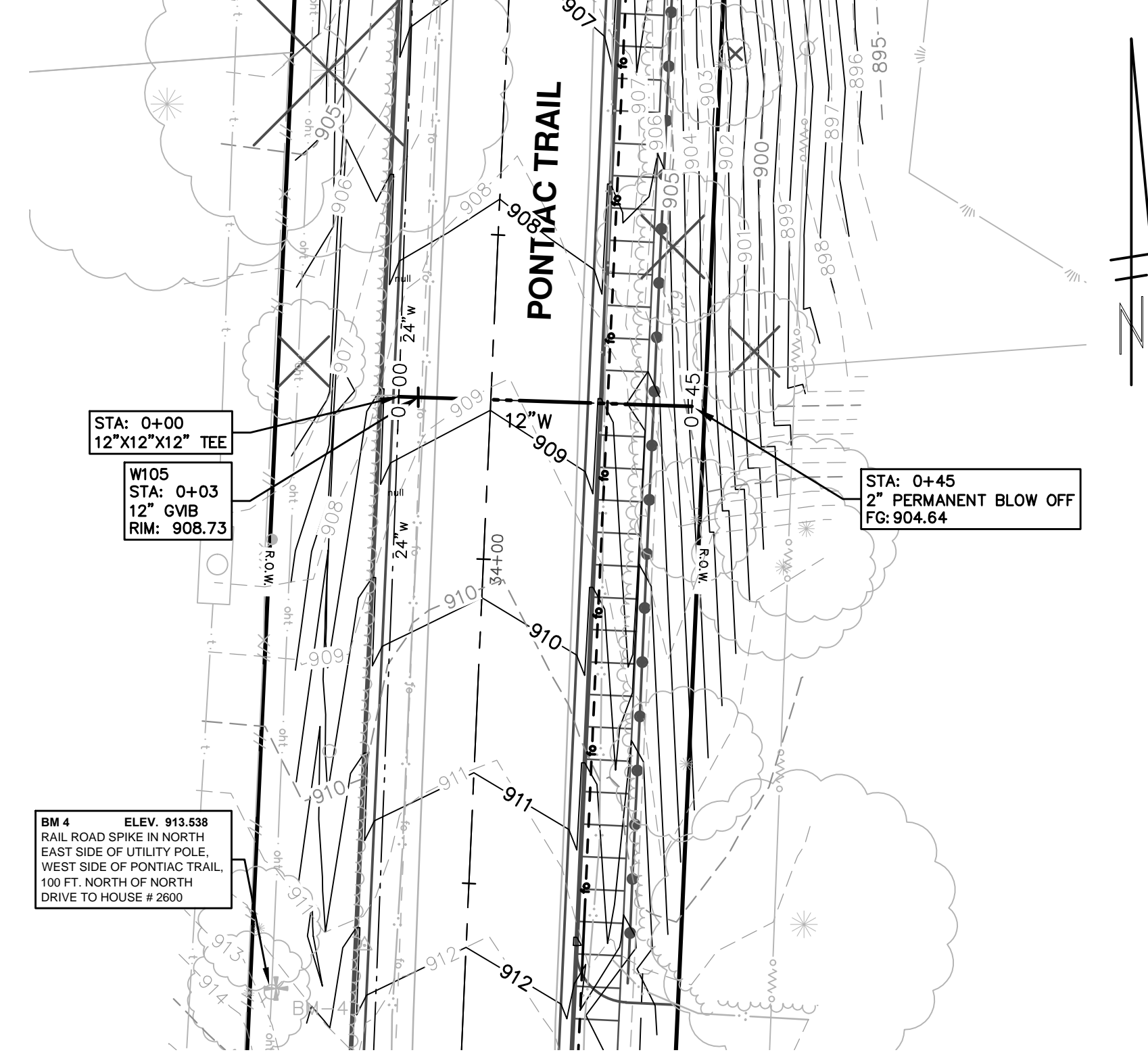
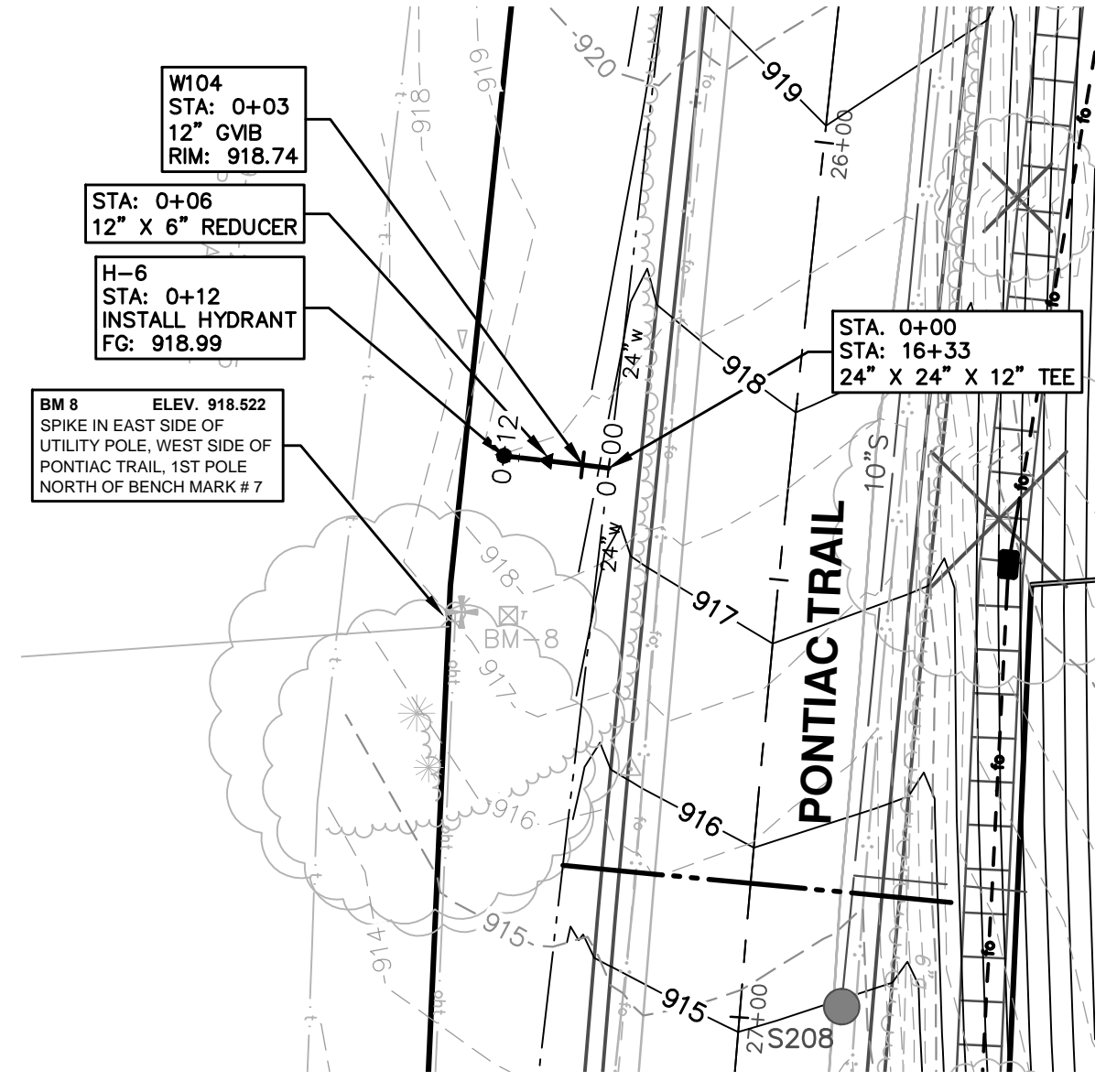
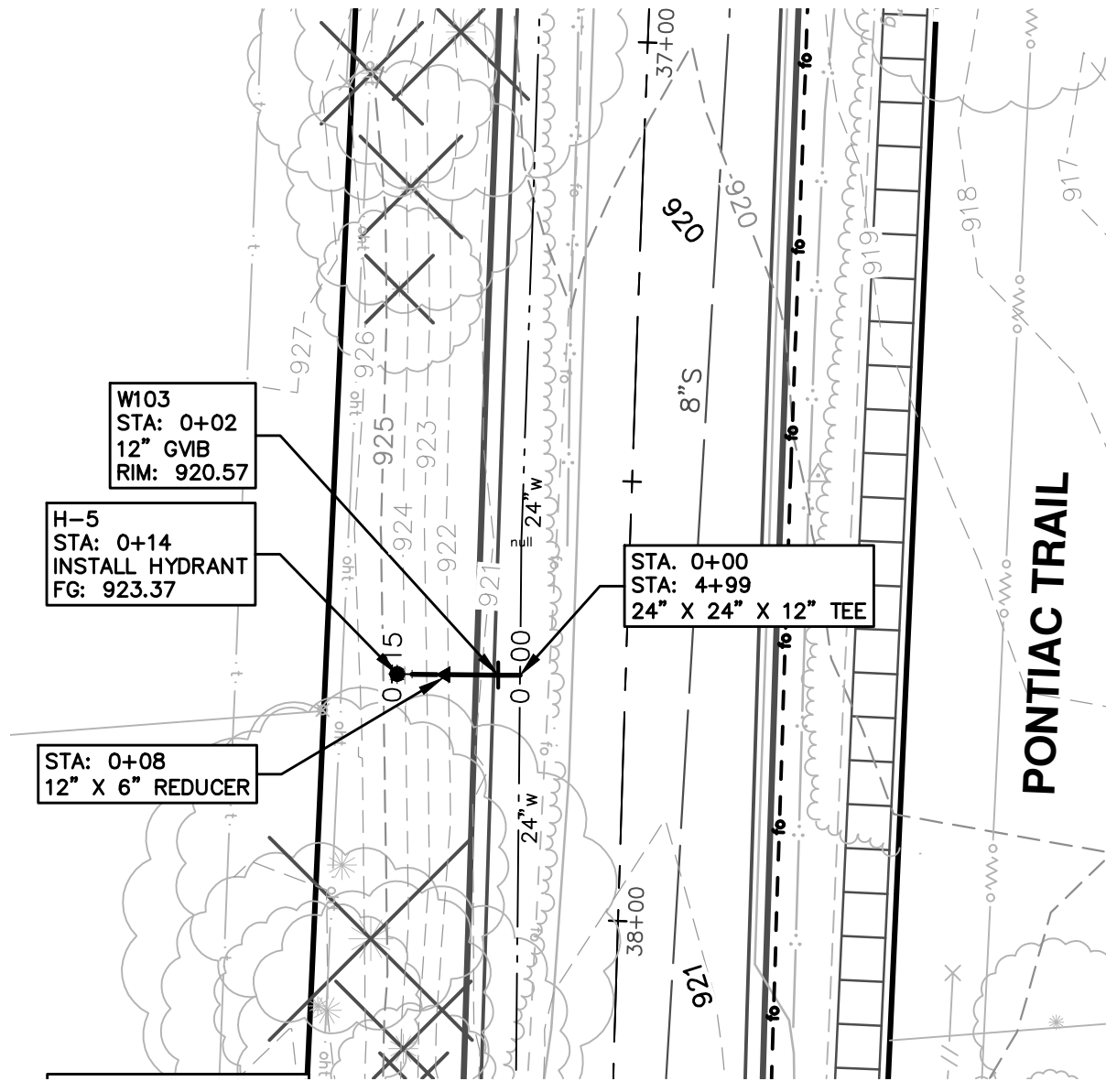
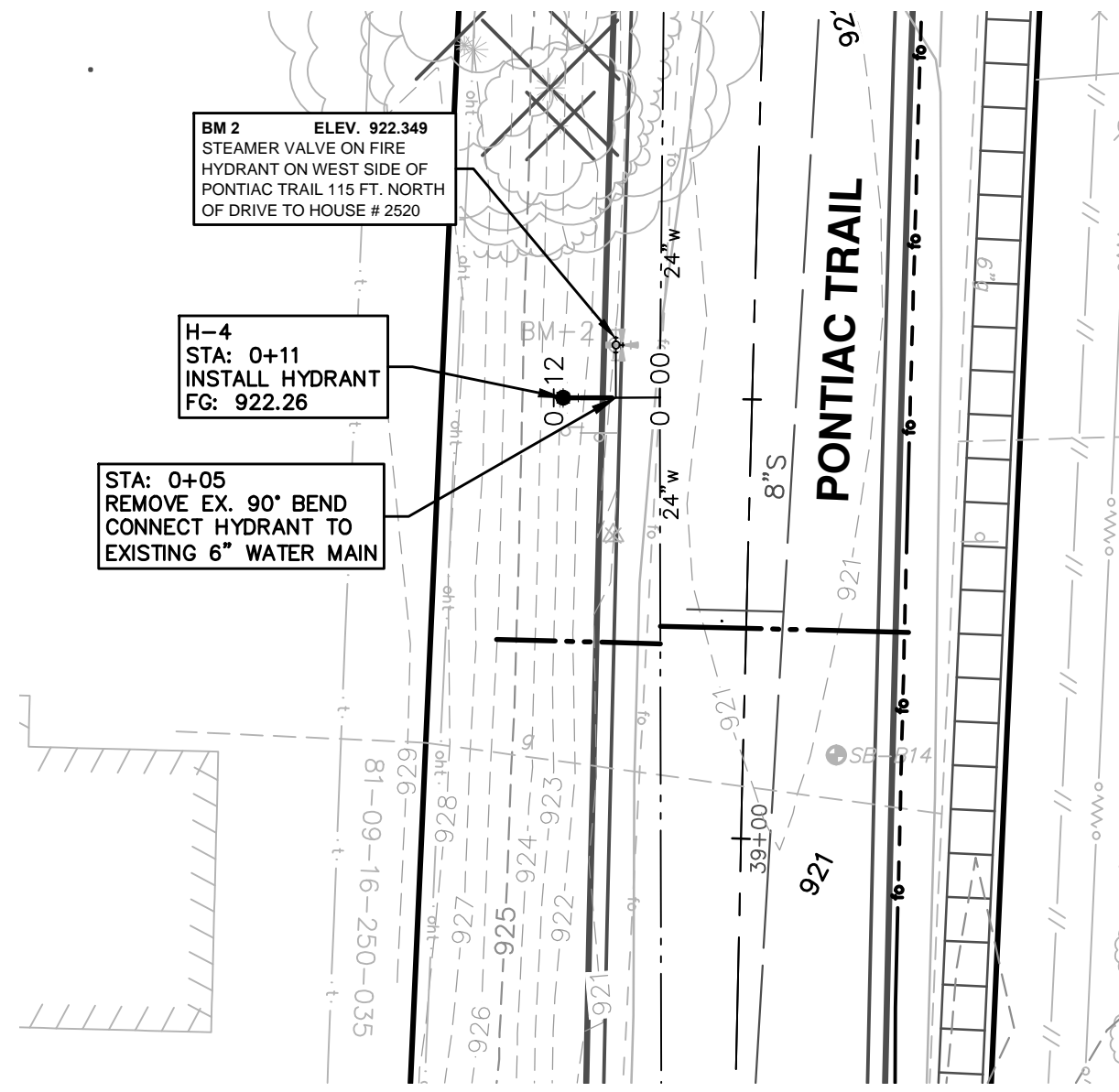
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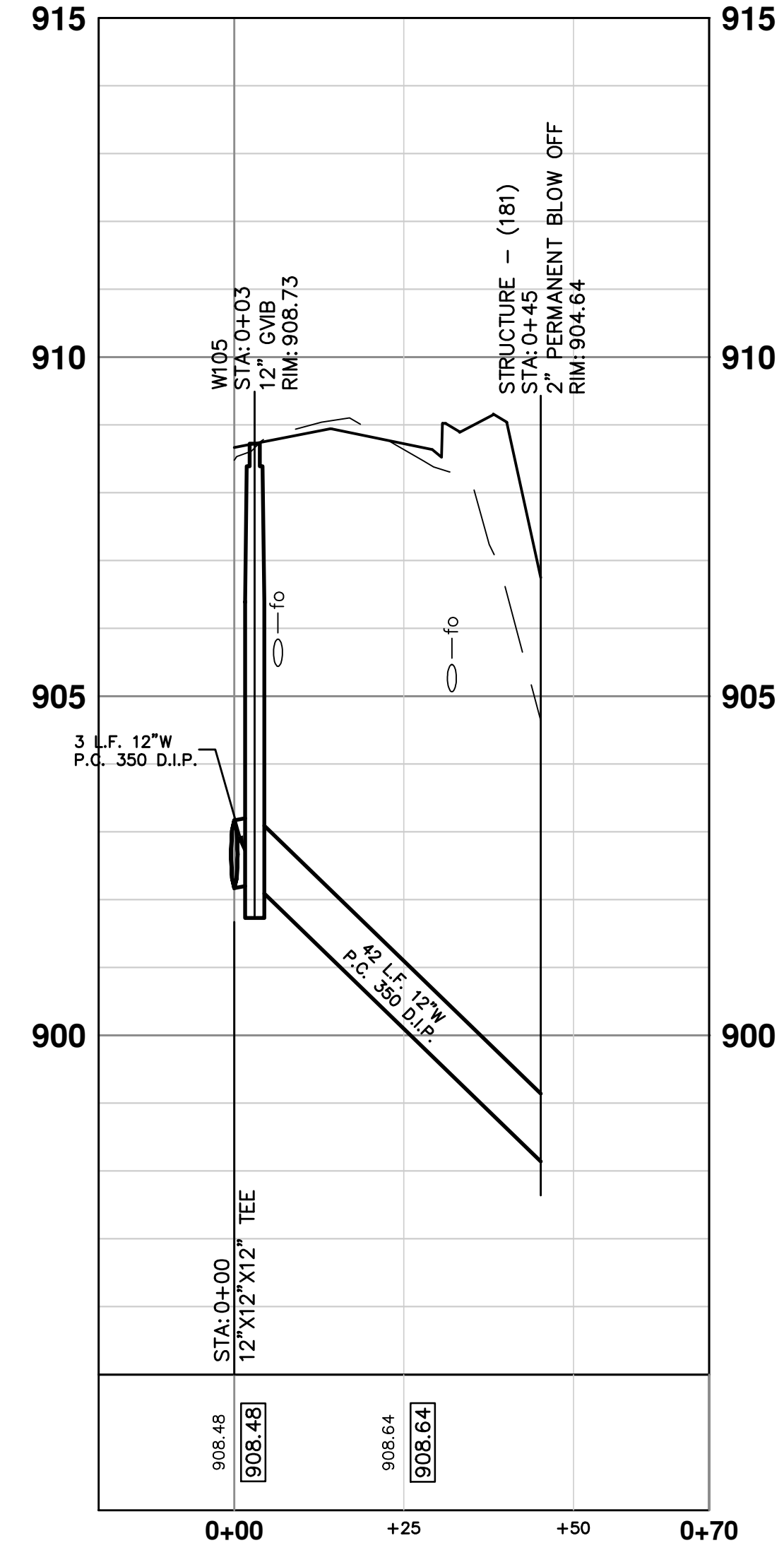
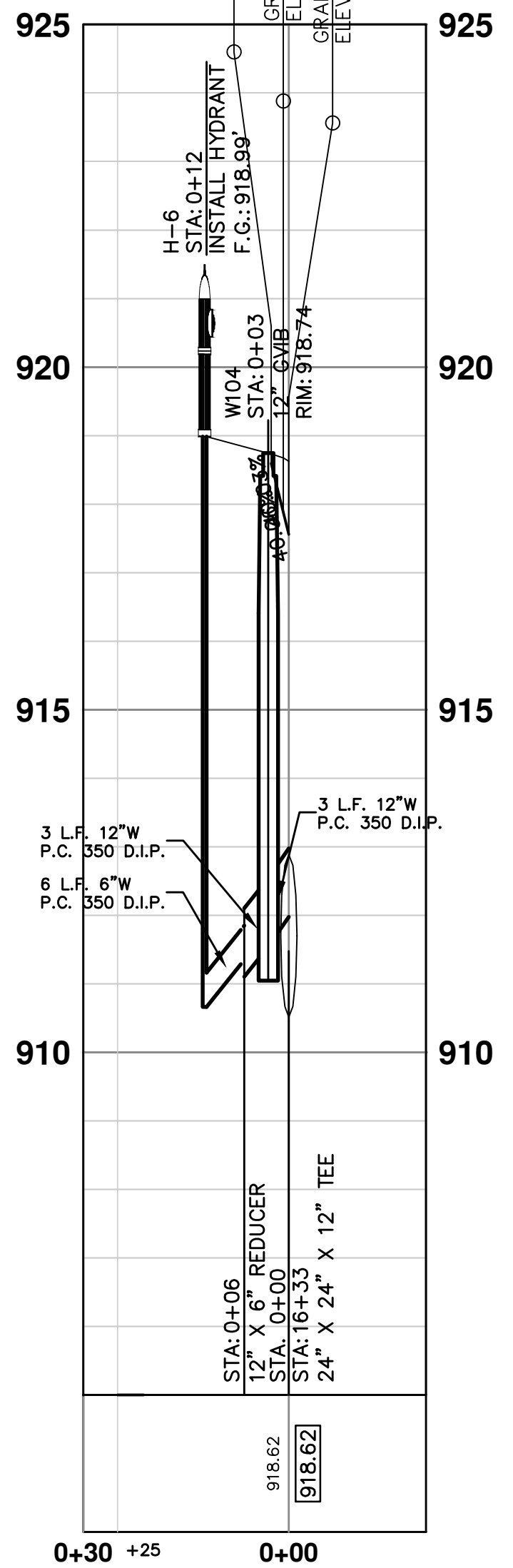
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**PROPOSED WATER MAIN
STRUCTURE TABLE**

STRUCTURE	TYPE	STATION	RIM	DEPTH
H-4	INSTALL HYDRANT	0+11	922.26	7.59
H-5	INSTALL HYDRANT	0+14	923.37	9.49
H-6	INSTALL HYDRANT	0+12	918.99	8.32



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PONTIAC TRAIL IMPROVEMENTS

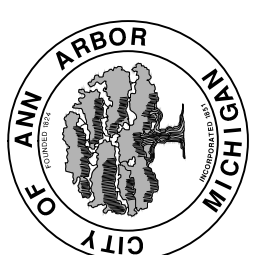
WATER MAIN PLAN AND PROFILE

HYDRANT PROFILES H-4, H-5, H-6 AND WM STUB

SCALE: HOR. ##### VERT. 1" = 2'

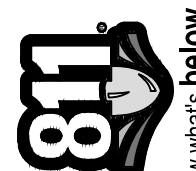
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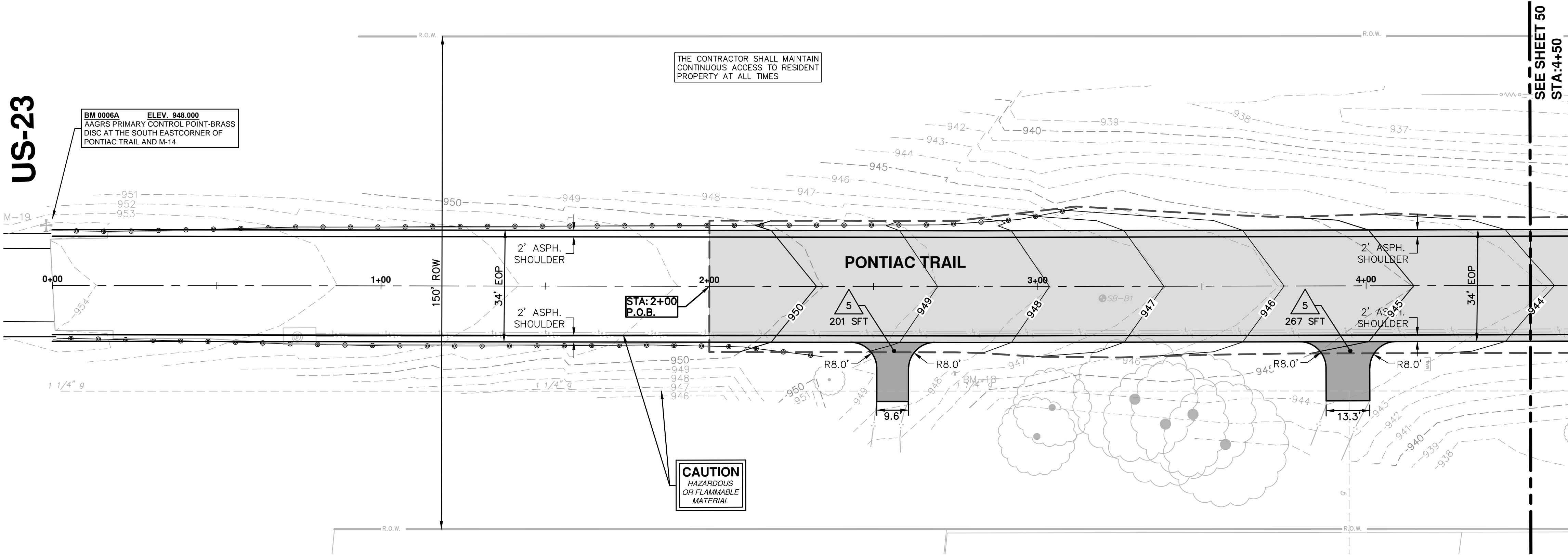
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00	03-18-2014				BID SUBMITTAL



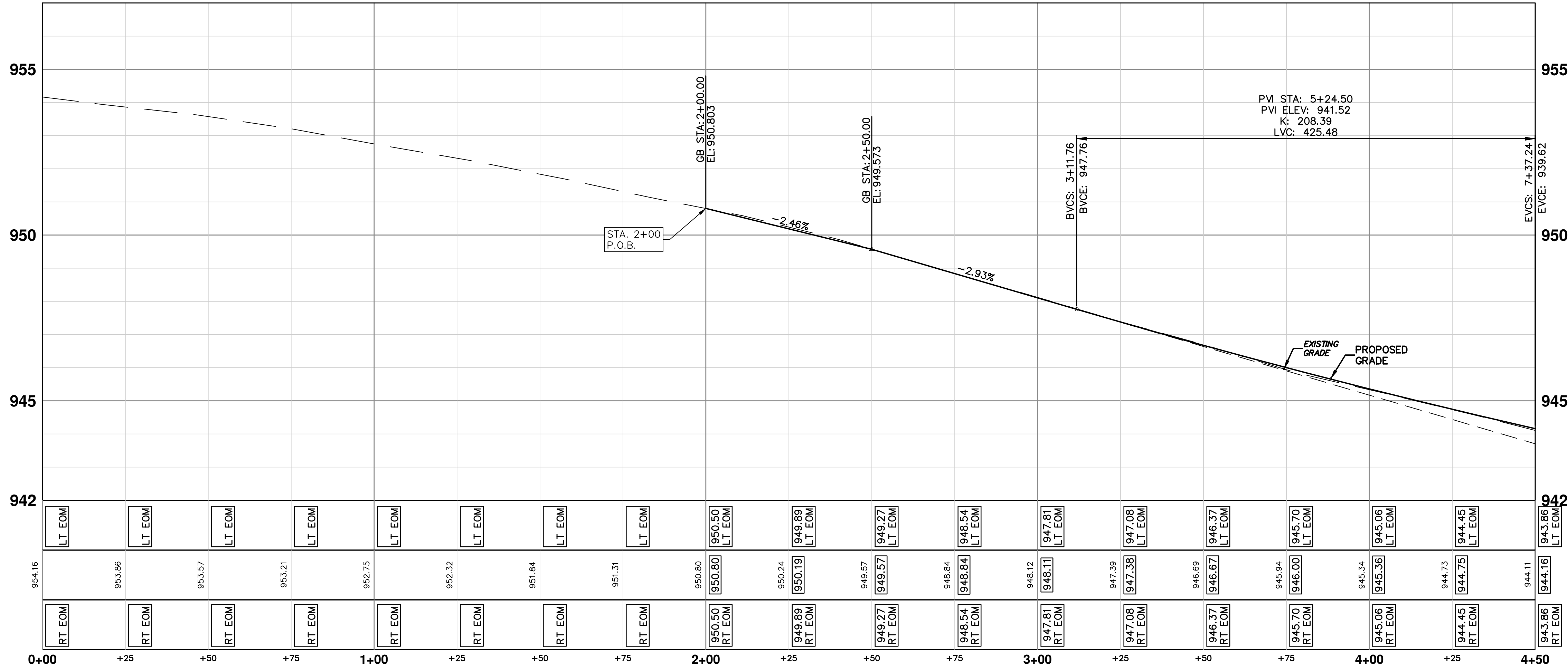
Know what's below.
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US-23



PONTIAC TRAIL



CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PLACE CURB AND GUTTER, CONCRETE, MODIFIED
2	PLACE SIDEWALK, CONCRETE, 4 INCH
3	PLACE SIDEWALK, CONCRETE, 6 INCH
4	PLACE DRIVEWAY, NON REINFORCE, CONCRETE, 6 INCH MODIFIED
5	PLACE DRIVEWAY, 13A HMA, 3 1/2", WITH 6" 21AA AGG BASE
6	SIDEWALK RAMP, CONCRETE, 6 INCH MODIFIED
7	DETECTABLE WARNING SURFACE, MODIFIED
8	DRIVE OPENING, CONCRETE, DET M, MODIFIED
9	SIDEWALK RETAINING WALL, 7 TO 18 INCH
10	SIDEWALK RETAINING WALL, GREATER THAN 18 INCH
11	BLOCK RETAINING WALL, MORTARLESS, UNREINF, MODIFIED
1	ADJUST GATE VALVE BOX OR MONUMENT BOX. GAS BOX
2	REMOVE AND REPLACE MDOT TYPE B CASTING ADJUST TO FINISH GRADE.
3	REMOVE AND REPLACE MDOT TYPE K CASTING ADJUST TO FINISH GRADE.
4	REMOVE STRUCTURE AND REPLACE 2' DIA. DRAINAGE STRUCTURE.
5	POINT STRUCTURE.
6	REMOVE AND REPLACE MDOT TYPE K CASTING. ADJUST TO FINISH GRADE.
7	ADJUST GATE VALVE IN BOX

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

00
REV.

01
REV.

02
REV.

03-18-2014
DATE

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www.aagov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

PONTIAC TRAIL IMPROVEMENTS

ROAD PLAN AND PROFILE

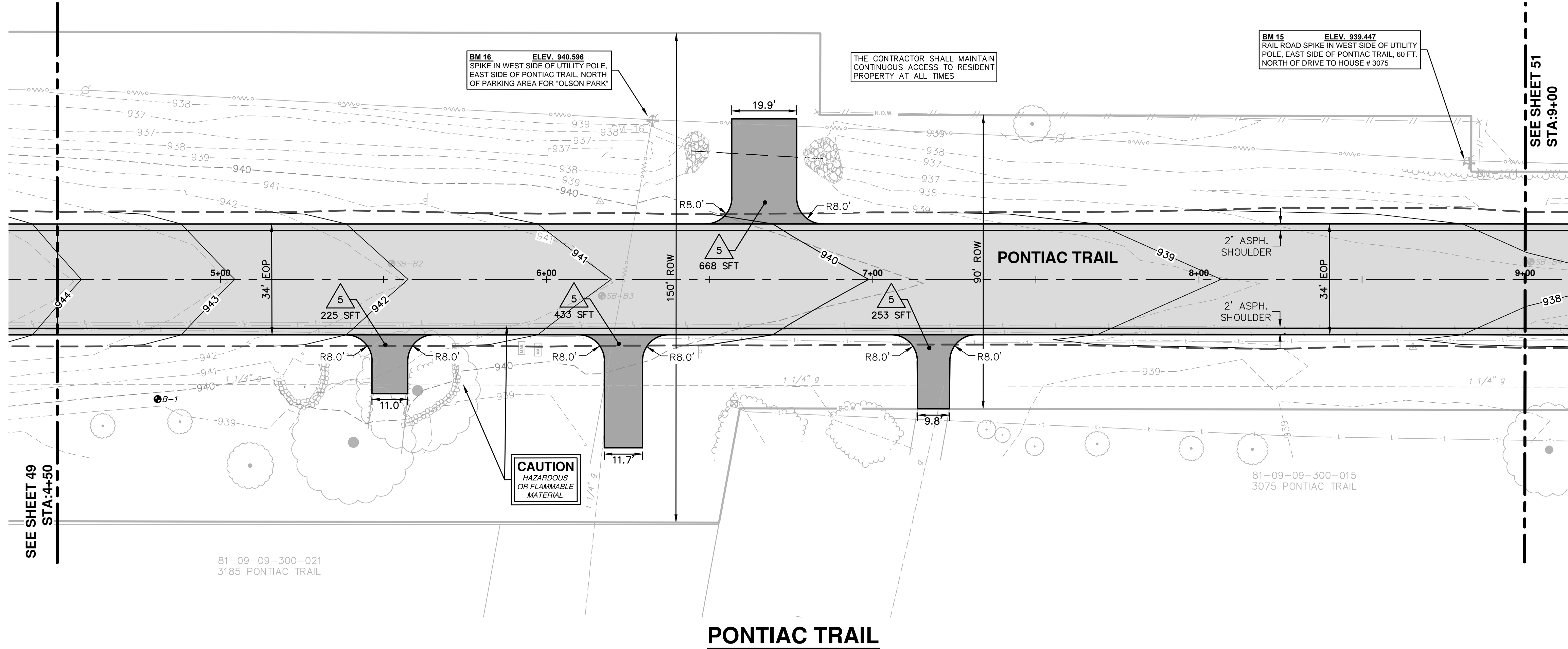
STA. 0+00 TO STA. 4+50

PROFILE: 1" = 2'

DRAWING No.
2012028-49

SHEET No.
49 OF 102

S:\Project Management\Design\2012028 Pontiac Trail\Plan Production\Primary\2012028PFRD.dwg Dwg Created: 9-Oct-12 -- a2_standard bw.stb -- Plot Date: 19-Mar-14



BM 15 ELEV. 939.447
RAILROAD SPIKE IN WEST SIDE OF UTILITY POLE, EAST SIDE OF PONTIAC TRAIL, 60 FT. NORTH OF DRIVE TO HOUSE # 3075

BM 16 ELEV. 940.696
SPIKE IN WEST SIDE OF UTILITY POLE, EAST SIDE OF PONTIAC TRAIL, NORTH OF PARKING AREA FOR 'OLSON PARK'

THE CONTRACTOR SHALL MAINTAIN CONTINUOUS ACCESS TO RESIDENT PROPERTY AT ALL TIMES

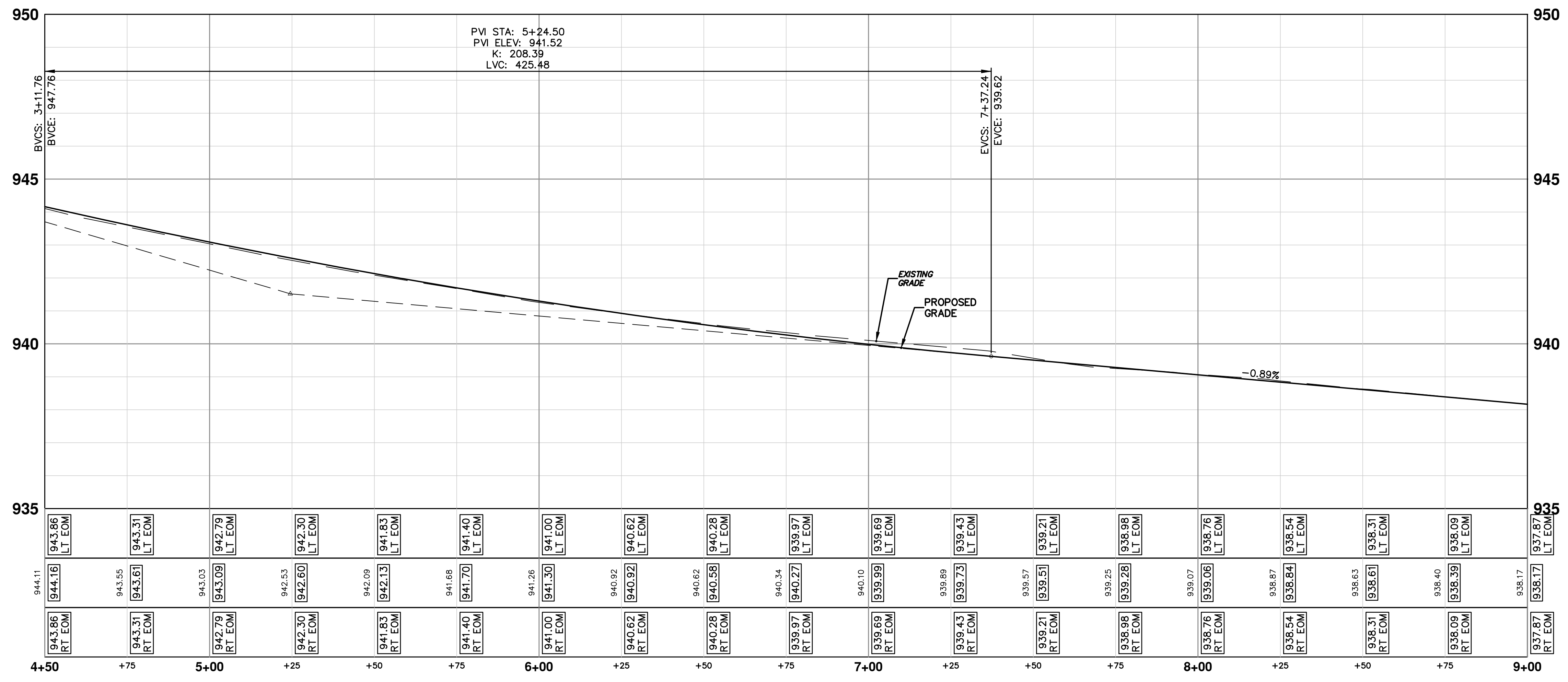
SEE SHEET 51
STA: 9+00

SEE SHEET 49
STA: 4+50

81-09-09-300-021
3185 PONTIAC TRAIL

81-09-09-300-015
3075 PONTIAC TRAIL

PONTIAC TRAIL



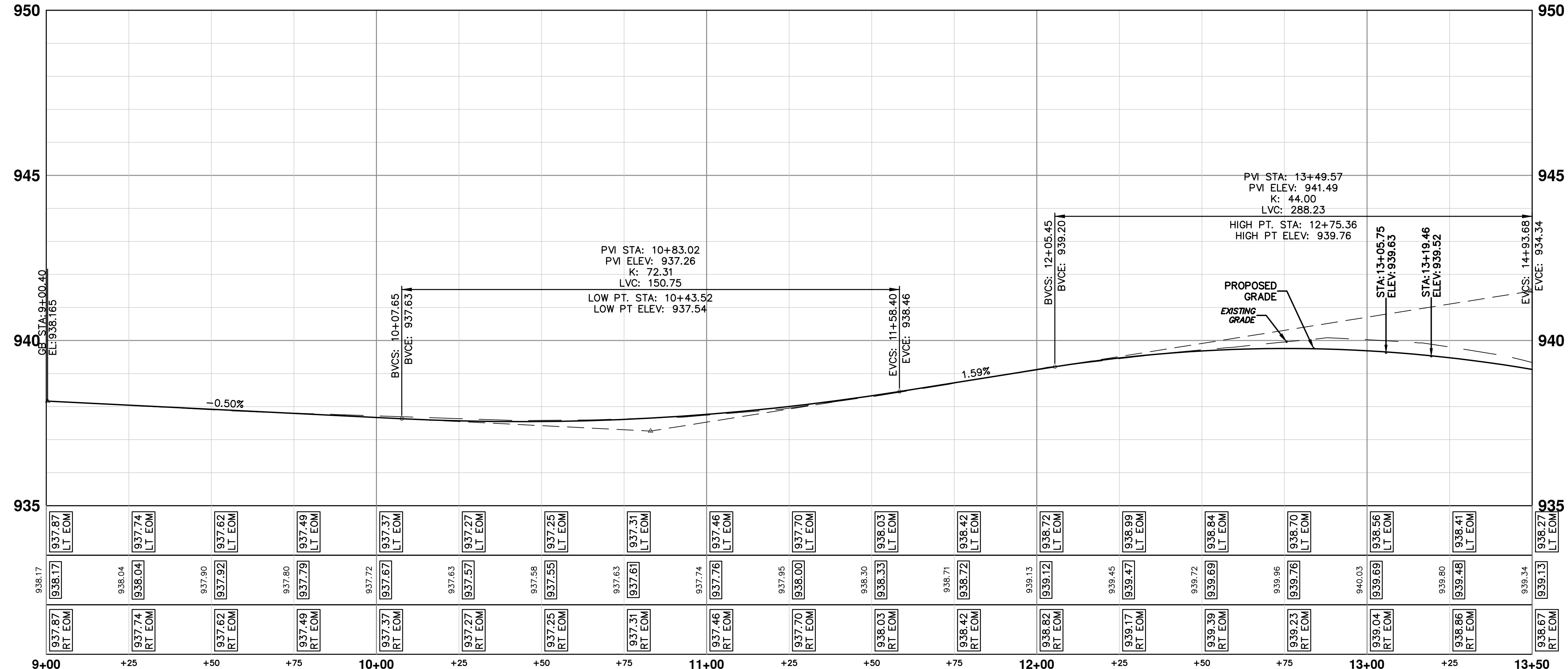
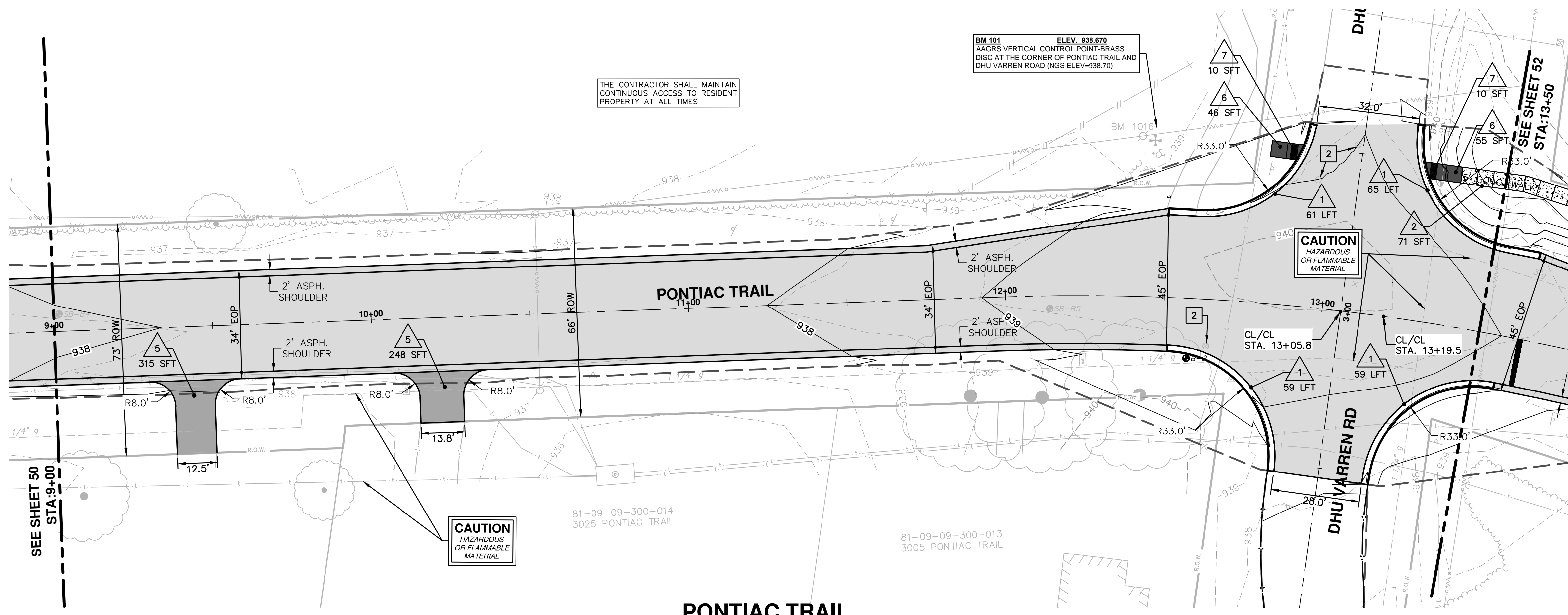
CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PLACE CURB AND GUTTER, CONCRETE, MODIFIED
2	PLACE SIDEWALK, CONCRETE, 4 INCH
3	PLACE SIDEWALK, CONCRETE, 6 INCH
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5	PLACE DRIVEWAY, 13A HMA, 3 1/2", WITH 6" 21AA AGG BASE
6	SIDEWALK RAMP, CONCRETE, 6 INCH MODIFIED
7	DETECTABLE WARNING SURFACE, MODIFIED
8	DRIVE OPENING, CONCRETE, DET M, MODIFIED
9	SIDEWALK RETAINING WALL, 7 TO 18 INCH
10	SIDEWALK RETAINING WALL, GREATER THAN 18 INCH
11	BLOCK RETAINING WALL, MORTARLESS, UNREINF, MODIFIED
1	ADJUST GATE VALVE BOX OR MONUMENT BOX. GAS BOX
2	REMOVE AND REPLACE MDOT TYPE B CASTING ADJUST TO FINISH GRADE.
3	REMOVE AND REPLACE MDOT TYPE K CASTING ADJUST TO FINISH GRADE.
4	REMOVE STRUCTURE AND REPLACE 2' DIA. DRAINAGE STRUCTURE.
5	POINT STRUCTURE.
6	REMOVE AND REPLACE MDOT TYPE K CASTING. ADJUST TO FINISH GRADE.
7	ADJUST GATE VALVE IN BOX

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 ROAD PLAN AND PROFILE
 STA. 4+50 TO STA. 9+00
 SCALE PLAN: 1" = 20'
 PROFILE: 1" = 2'
 DRAWING NO. 2012028-50
 SHEET NO. 50 OF 102

CITY OF ANN ARBOR
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REV.	DATE	BY	CHECKED	DESCRIPTION
00	03-18-2014	RMLH		BID SUBMITTAL

S:\Project Management\Design\20120228 Pontiac Trail\Plan Production\Primary\20120228PRD.dwg Dwg Created: 9-Oct-12 - a2 standard bw.stb - Plot Date: 19-Mar-14



CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PLACE CURB AND GUTTER, CONCRETE, MODIFIED
2	PLACE SIDEWALK, CONCRETE, 4 INCH
3	PLACE SIDEWALK, CONCRETE, 6 INCH
4	PLACE DRIVEWAY, NON REINFORCE, CONCRETE, 6 INCH MODIFIED
5	PLACE DRIVEWAY, 13A HMA, 3 1/2", WITH 6" 21AA AGG BASE
6	SIDEWALK RAMP, CONCRETE, 6 INCH MODIFIED
7	DETECTABLE WARNING SURFACE, MODIFIED
8	DRIVE OPENING, CONCRETE, DET M, MODIFIED
9	SIDEWALK RETAINING WALL, 7 TO 18 INCH
10	SIDEWALK RETAINING WALL, GREATER THAN 18 INCH
11	BLOCK RETAINING WALL, MORTARLESS, UNREINF, MODIFIED
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3	REMOVE AND REPLACE MDOT TYPE K CASTING ADJUST TO FINISH GRADE.
4	REMOVE STRUCTURE AND REPLACE 2' DIA. DRAINAGE STRUCTURE.
5	POINT STRUCTURE.
6	REMOVE AND REPLACE MDOT TYPE K CASTING. ADJUST TO FINISH GRADE.
7	ADJUST GATE VALVE IN BOX

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

BY: _____
CHECKED: _____
DATE: 03-18-2014
DRAWN: _____
DESCRIPTION: _____
REV: _____

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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
ROAD PLAN AND PROFILE
STA. 9+00 TO STA. 13+50

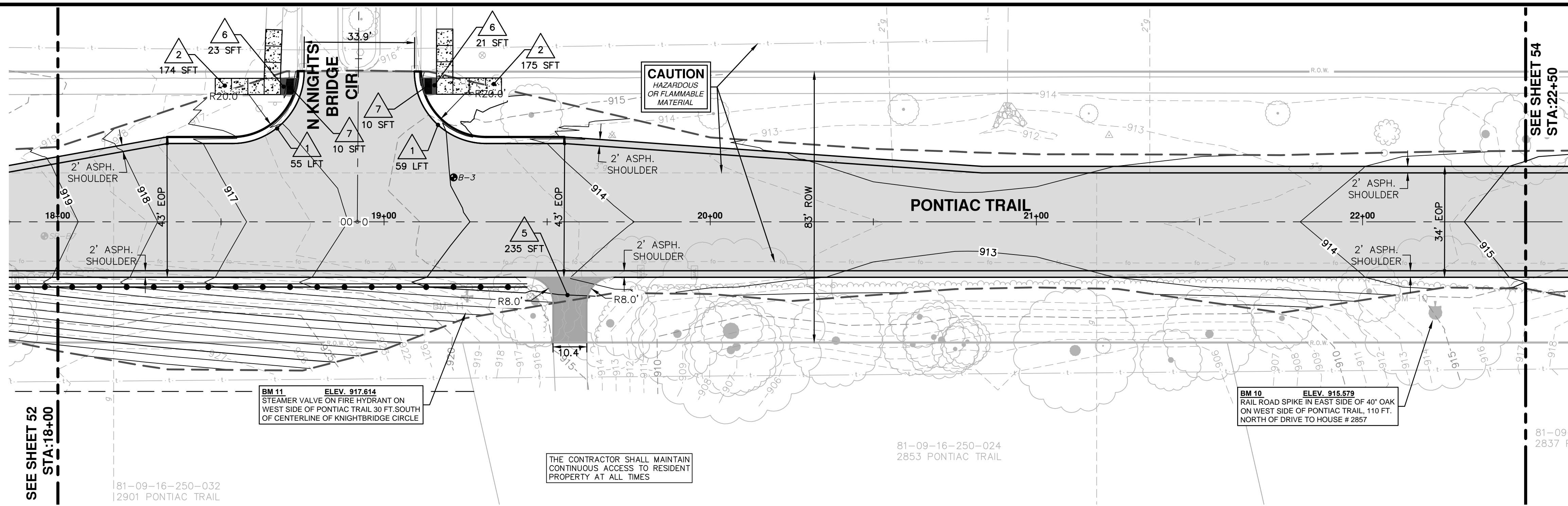
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PROFILE: 1" = 2'

DRAWING NO.
20120228-51

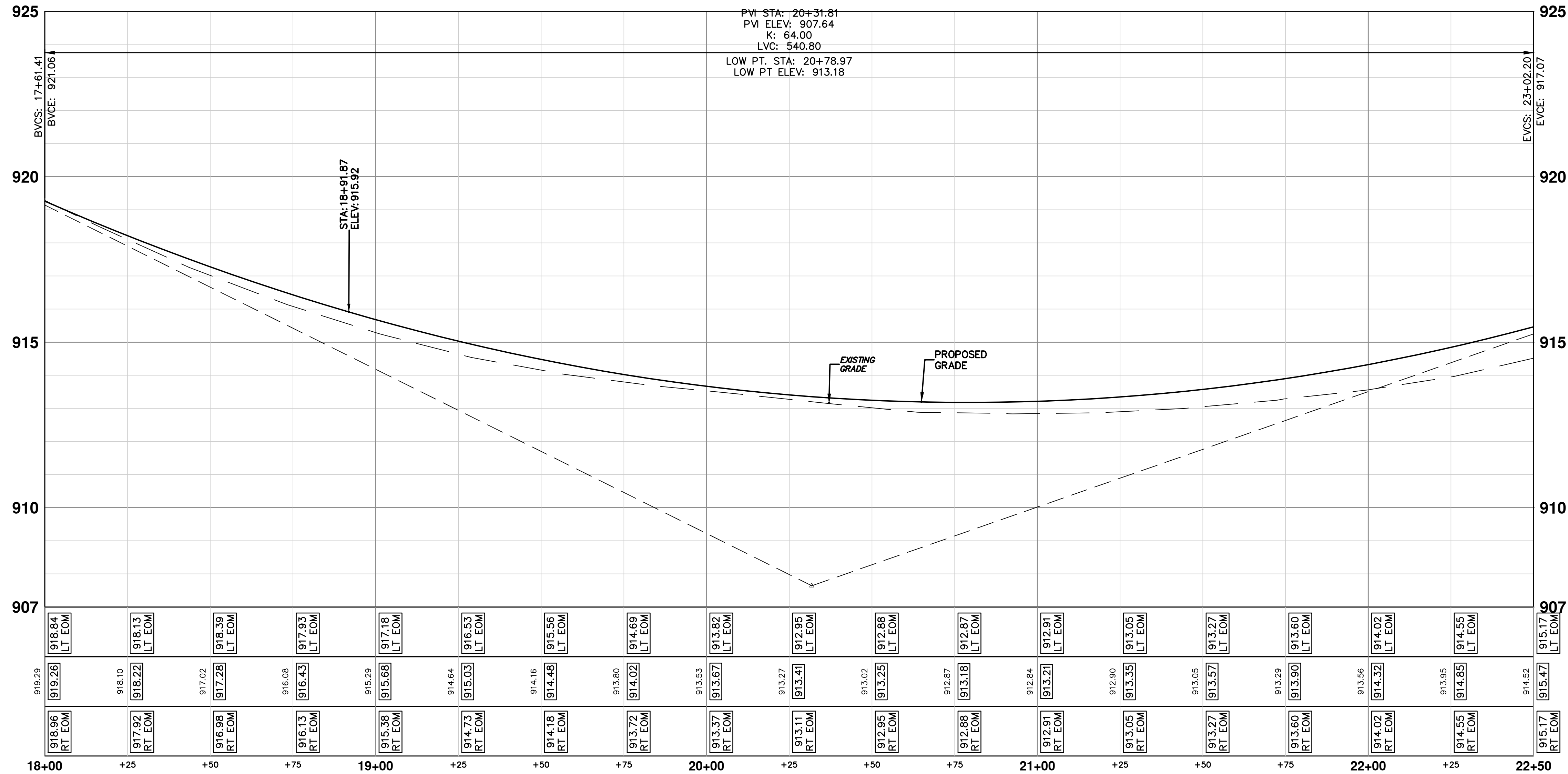
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51 OF 102

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PONTIAC TRAIL



CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PLACE CURB AND GUTTER, CONCRETE, MODIFIED
2	PLACE SIDEWALK, CONCRETE, 4 INCH
3	PLACE SIDEWALK, CONCRETE, 6 INCH
4	PLACE DRIVEWAY, NON REINFORCE, CONCRETE, 6 INCH MODIFIED
5	PLACE DRIVEWAY, 13A HMA, 3 1/2", WITH 6" 21AA AGG BASE
6	SIDEWALK RAMP, CONCRETE, 6 INCH MODIFIED
7	DETECTABLE WARNING SURFACE, MODIFIED
8	DRIVE OPENING, CONCRETE, DET M, MODIFIED
9	SIDEWALK RETAINING WALL, 7 TO 18 INCH
10	SIDEWALK RETAINING WALL, GREATER THAN 18 INCH
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3	REMOVE AND REPLACE MDOT TYPE K CASTING ADJUST TO FINISH GRADE.
4	REMOVE STRUCTURE AND REPLACE 2' DIA. DRAINAGE STRUCTURE.
5	POINT STRUCTURE.
6	REMOVE AND REPLACE MDOT TYPE K CASTING. ADJUST TO FINISH GRADE.
7	ADJUST GATE VALVE IN BOX

811
Know what's below.
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81-09-2837 PC

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81-09-2837 PC

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
ROAD PLAN AND PROFILE
STA. 18+00 TO STA. 22+50

81-09-2837 PC

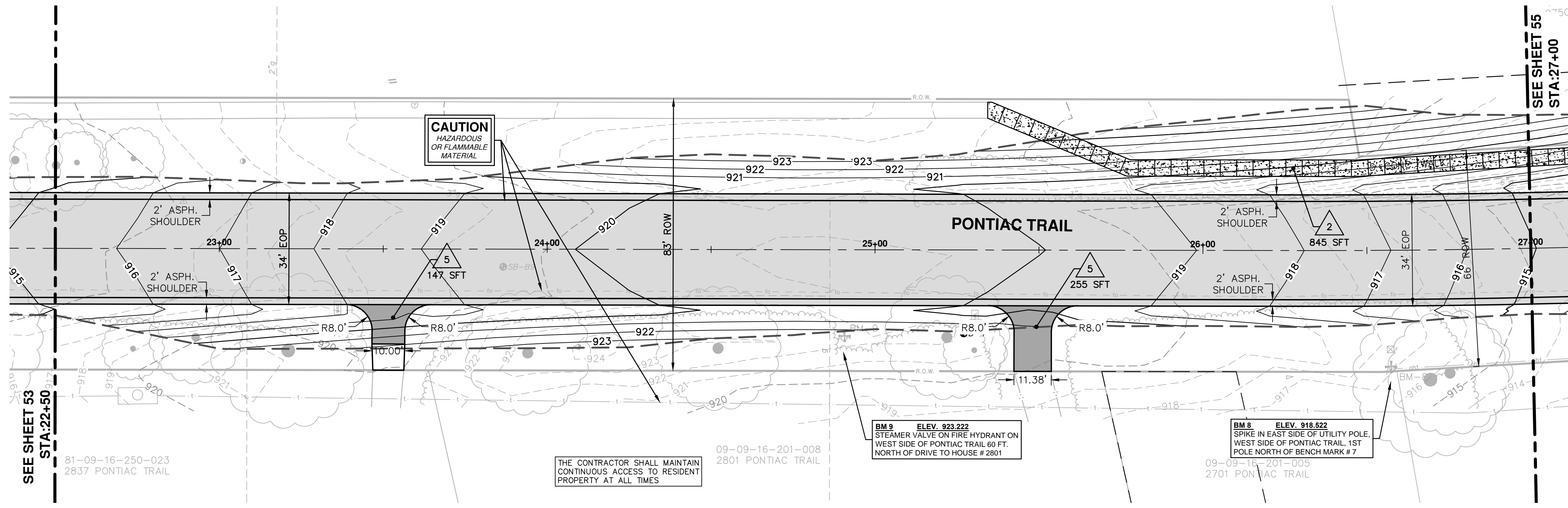
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PROFILE: 1" = 2'

DRAWING NO.
2012028-53

SHEET No.

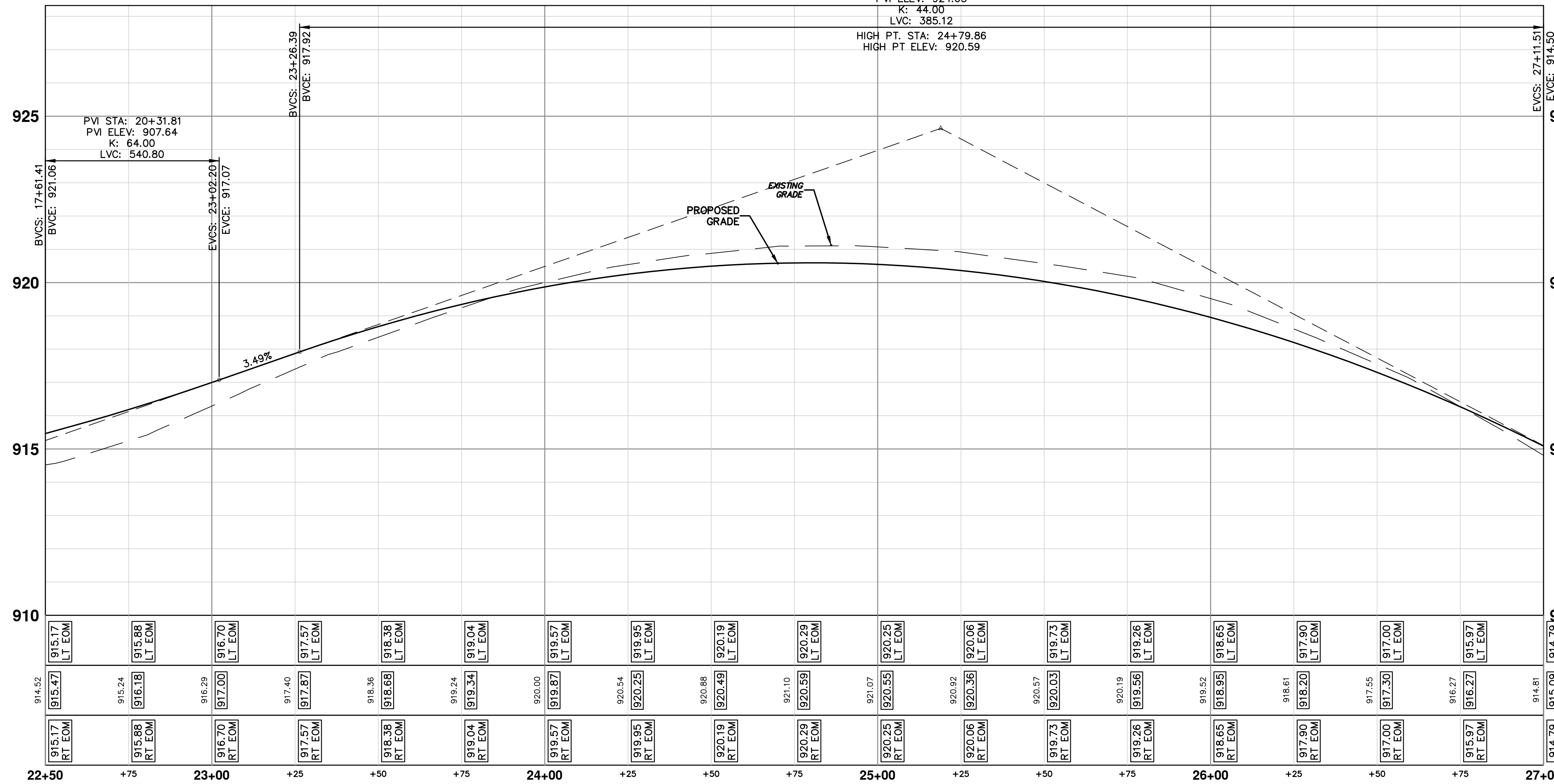
53 OF 102

S:\Project Management\Design\2012028 Pontiac Trail\Plan Production\Primary\2012028PFRD.dwg Dwg Created: 9-Oct-12 - a2_standard bw.stb - Plot Date: 19-Mar-14



PONTIAC TRAIL

PVI STA: 25+18.95
 PVI ELEV: 924.63
 K: 44.00
 LVC: 385.12
 HIGH PT. STA: 24+79.86
 HIGH PT ELEV: 920.59



CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PLACE CURB AND GUTTER, CONCRETE, MODIFIED
2	PLACE SIDEWALK, CONCRETE, 4 INCH
3	PLACE SIDEWALK, CONCRETE, 6 INCH
4	PLACE DRIVEWAY, NON REINFORCE, CONCRETE, 6 INCH MODIFIED
5	PLACE DRIVEWAY, 13A HMA, 3 1/2", WITH 6" 21AA AGG BASE
6	SIDEWALK RAMP, CONCRETE, 6 INCH MODIFIED
7	DETECTABLE WARNING SURFACE, MODIFIED
8	DRIVE OPENING, CONCRETE, DET M, MODIFIED
9	SIDEWALK RETAINING WALL, 7 TO 18 INCH
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2	REMOVE AND REPLACE MDOT TYPE B CASTING ADJUST TO FINISH GRADE.
3	REMOVE AND REPLACE MDOT TYPE K CASTING ADJUST TO FINISH GRADE.
4	REMOVE STRUCTURE AND REPLACE 2' DIA. DRAINAGE STRUCTURE.
5	POINT STRUCTURE.
6	REMOVE AND REPLACE MDOT TYPE K CASTING. ADJUST TO FINISH GRADE.
7	ADJUST GATE VALVE IN BOX

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00 REV. DESCRIPTION DATE DRAWN CHECKED BY

03-18-2014 DATE DRAWN CHECKED BY

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

PONTIAC TRAIL IMPROVEMENTS

ROAD PLAN AND PROFILE

STA. 22+50 TO STA. 27+00

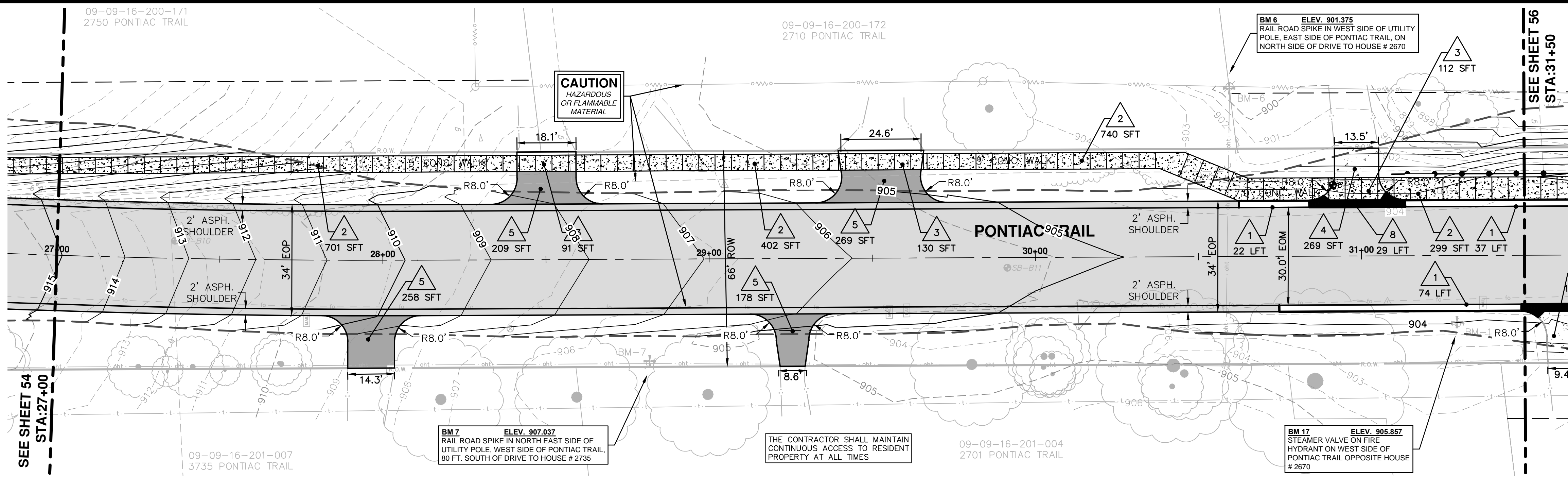
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PROFILE: 1" = 2'

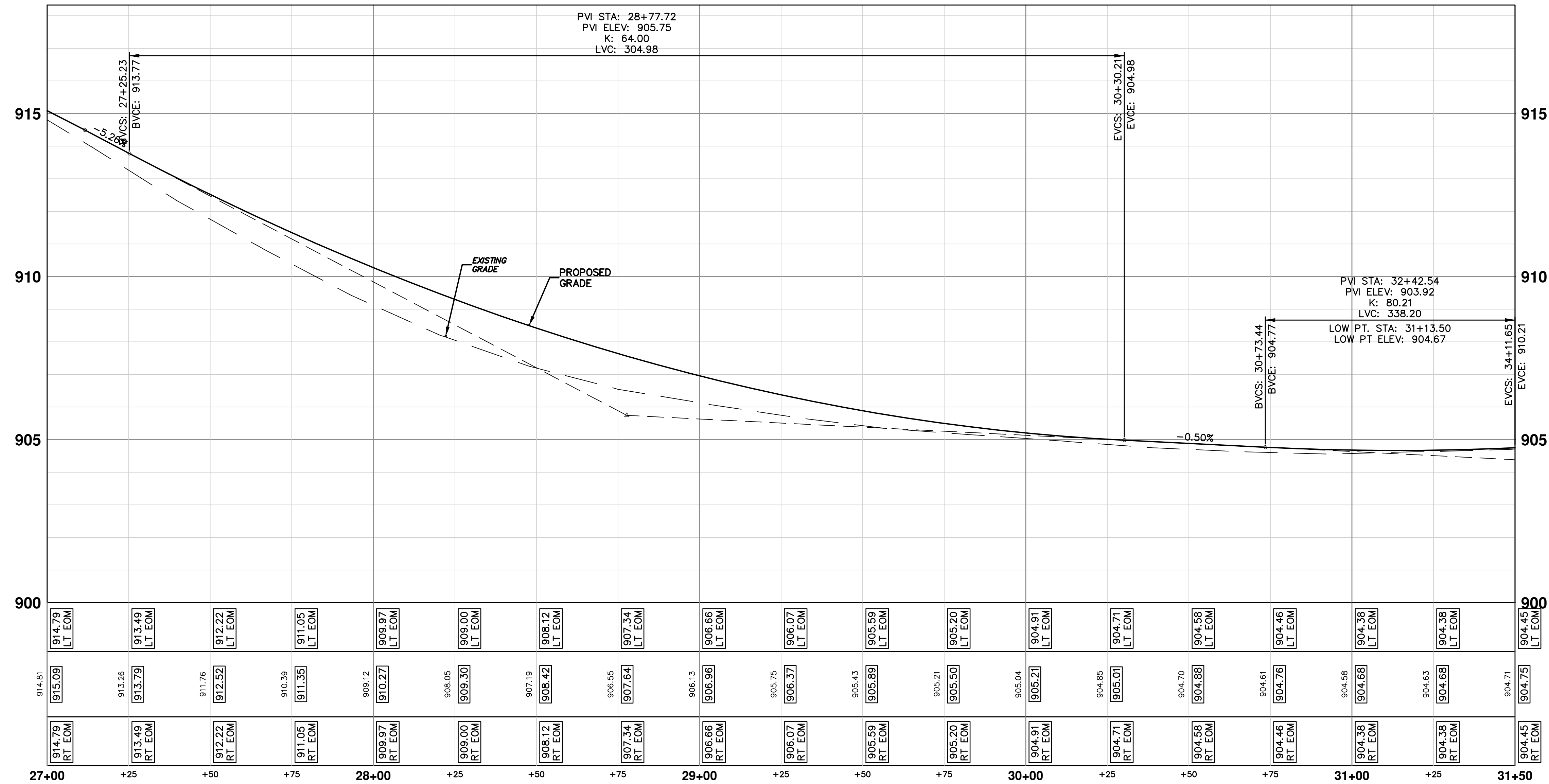
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SHEET NO. 54 OF 102

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PONTIAC TRAIL



CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PLACE CURB AND GUTTER, CONCRETE, MODIFIED
2	PLACE SIDEWALK, CONCRETE, 4 INCH
3	PLACE SIDEWALK, CONCRETE, 6 INCH
4	PLACE DRIVEWAY, NON REINFORCE, CONCRETE, 6 INCH MODIFIED
5	PLACE DRIVEWAY, 13A HMA, 3 1/2", WITH 6" 21AA AGG BASE
6	SIDEWALK RAMP, CONCRETE, 6 INCH MODIFIED
7	DETECTABLE WARNING SURFACE, MODIFIED
8	DRIVE OPENING, CONCRETE, DET M, MODIFIED
9	SIDEWALK RETAINING WALL, 7 TO 18 INCH
10	SIDEWALK RETAINING WALL, GREATER THAN 18 INCH
11	BLOCK RETAINING WALL, MORTARLESS, UNREINF, MODIFIED
1	ADJUST GATE VALVE BOX OR MONUMENT BOX. GAS BOX
2	REMOVE AND REPLACE MDOT TYPE B CASTING ADJUST TO FINISH GRADE.
3	REMOVE AND REPLACE MDOT TYPE K CASTING ADJUST TO FINISH GRADE.
4	REMOVE STRUCTURE AND REPLACE 2' DIA. DRAINAGE STRUCTURE.
5	POINT STRUCTURE.
6	REMOVE AND REPLACE MDOT TYPE K CASTING. ADJUST TO FINISH GRADE.
7	ADJUST GATE VALVE IN BOX

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PONTIAC TRAIL IMPROVEMENTS

ROAD PLAN AND PROFILE

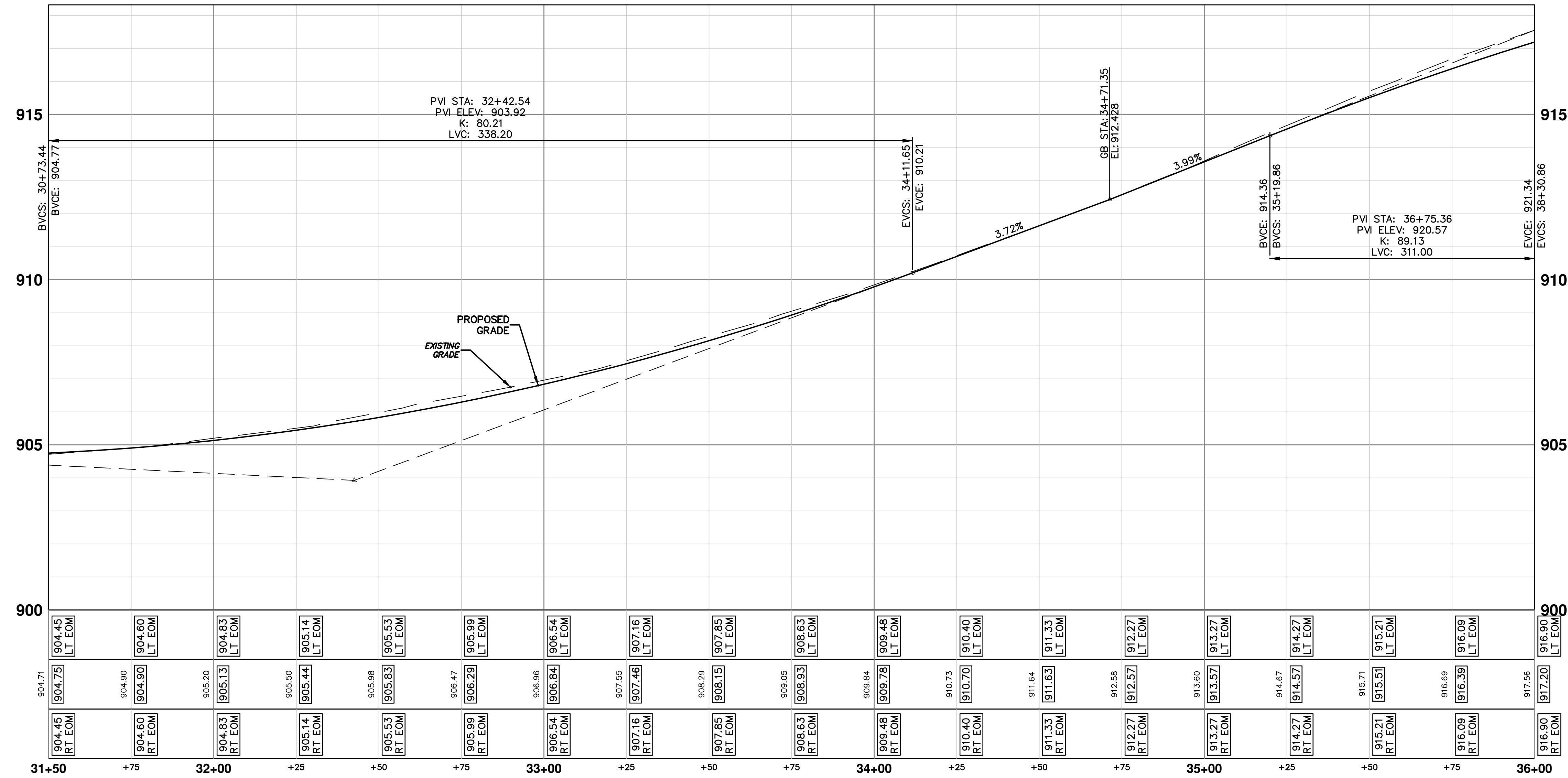
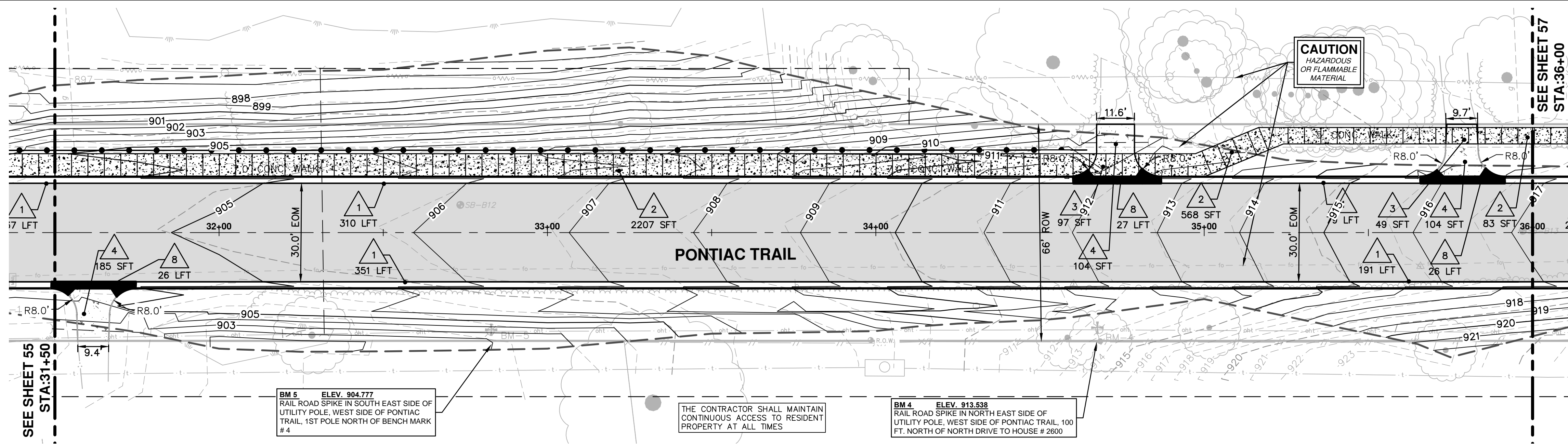
STA. 27+00 TO STA. 31+50

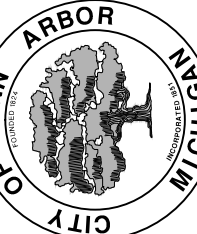
SCALE PLAN: 1" = 20'
PROFILE: 1" = 2'

DRAWING NO. **2012028-55**

SHEET NO. **55 OF 102**

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PONTIAC TRAIL IMPROVEMENTS
ROAD PLAN AND PROFILE
STA. 31+50 TO STA. 36+00

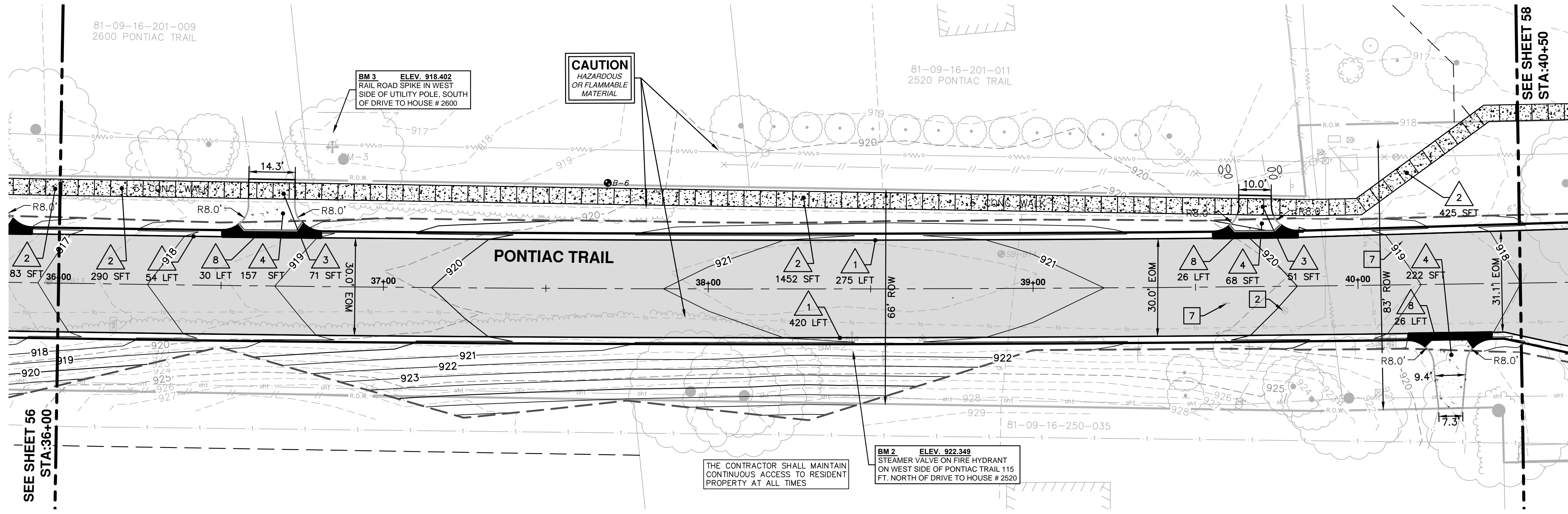
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PROFILE: 1" = 2'

DRAWING NO. **2012028-56**

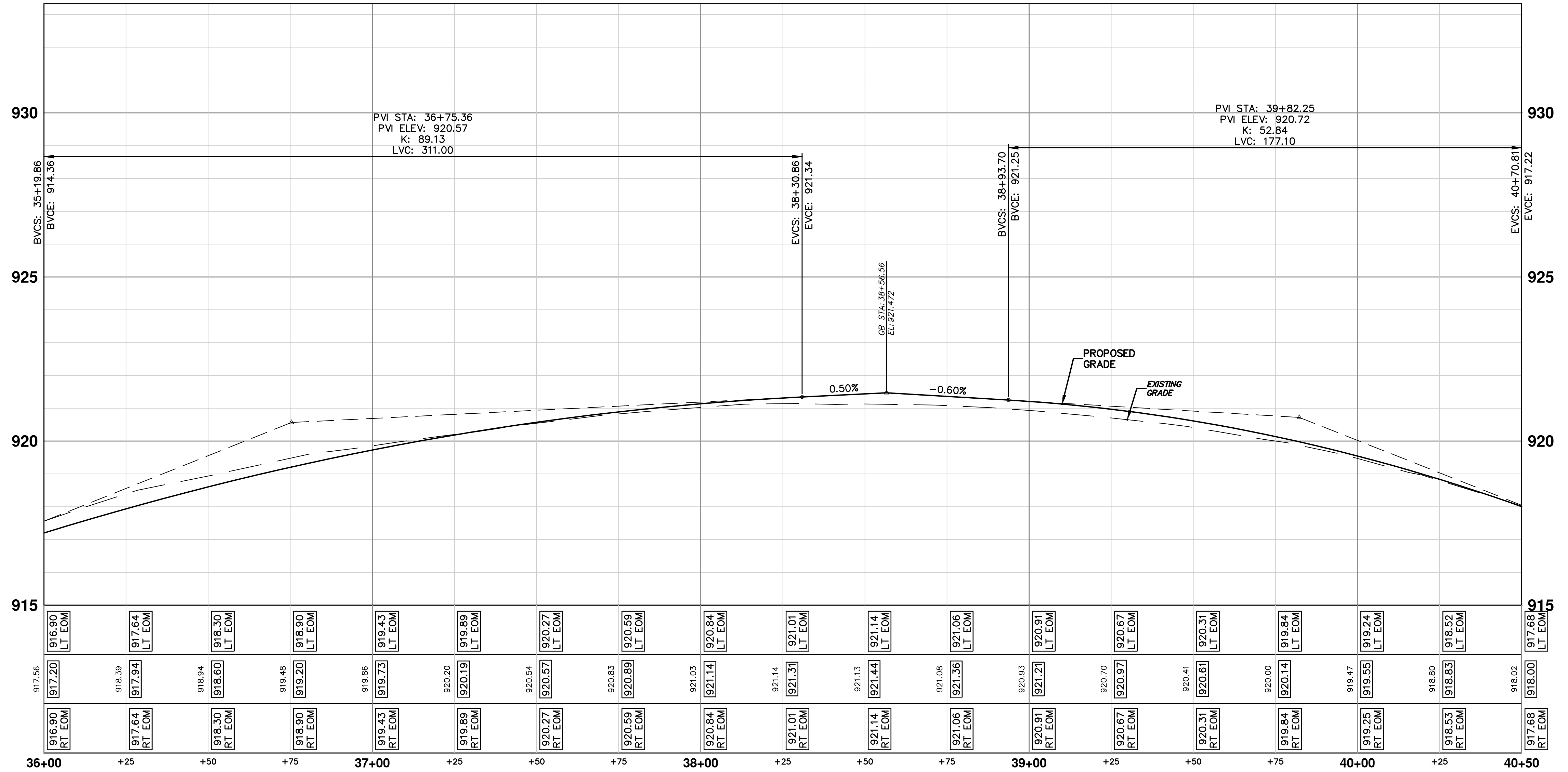
SHEET NO. **56 OF 102**

REV.	DATE	BY	CHECKED	DESCRIPTION
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PONTIAC TRAIL



CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PLACE CURB AND GUTTER, CONCRETE, MODIFIED
2	PLACE SIDEWALK, CONCRETE, 4 INCH
3	PLACE SIDEWALK, CONCRETE, 6 INCH
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5	PLACE DRIVEWAY, 13A HMA, 3 1/2", WITH 6" 21AA AGG BASE
6	SIDEWALK RAMP, CONCRETE, 6 INCH MODIFIED
7	DETECTABLE WARNING SURFACE, MODIFIED
8	DRIVE OPENING, CONCRETE, DET M, MODIFIED
9	SIDEWALK RETAINING WALL, 7 TO 18 INCH
10	SIDEWALK RETAINING WALL, GREATER THAN 18 INCH
11	BLOCK RETAINING WALL, MORTARLESS, UNREINF, MODIFIED
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2	REMOVE AND REPLACE MDOT TYPE B CASTING. ADJUST TO FINISH GRADE.
3	REMOVE AND REPLACE MDOT TYPE K CASTING. ADJUST TO FINISH GRADE.
4	REMOVE STRUCTURE AND REPLACE 2' DIA. DRAINAGE STRUCTURE.
5	POINT STRUCTURE.
6	REMOVE AND REPLACE MDOT TYPE K CASTING. ADJUST TO FINISH GRADE.
7	ADJUST GATE VALVE IN BOX

811
Know what's below.
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DATE
BY
RMLI
DRAWN
CHECKED

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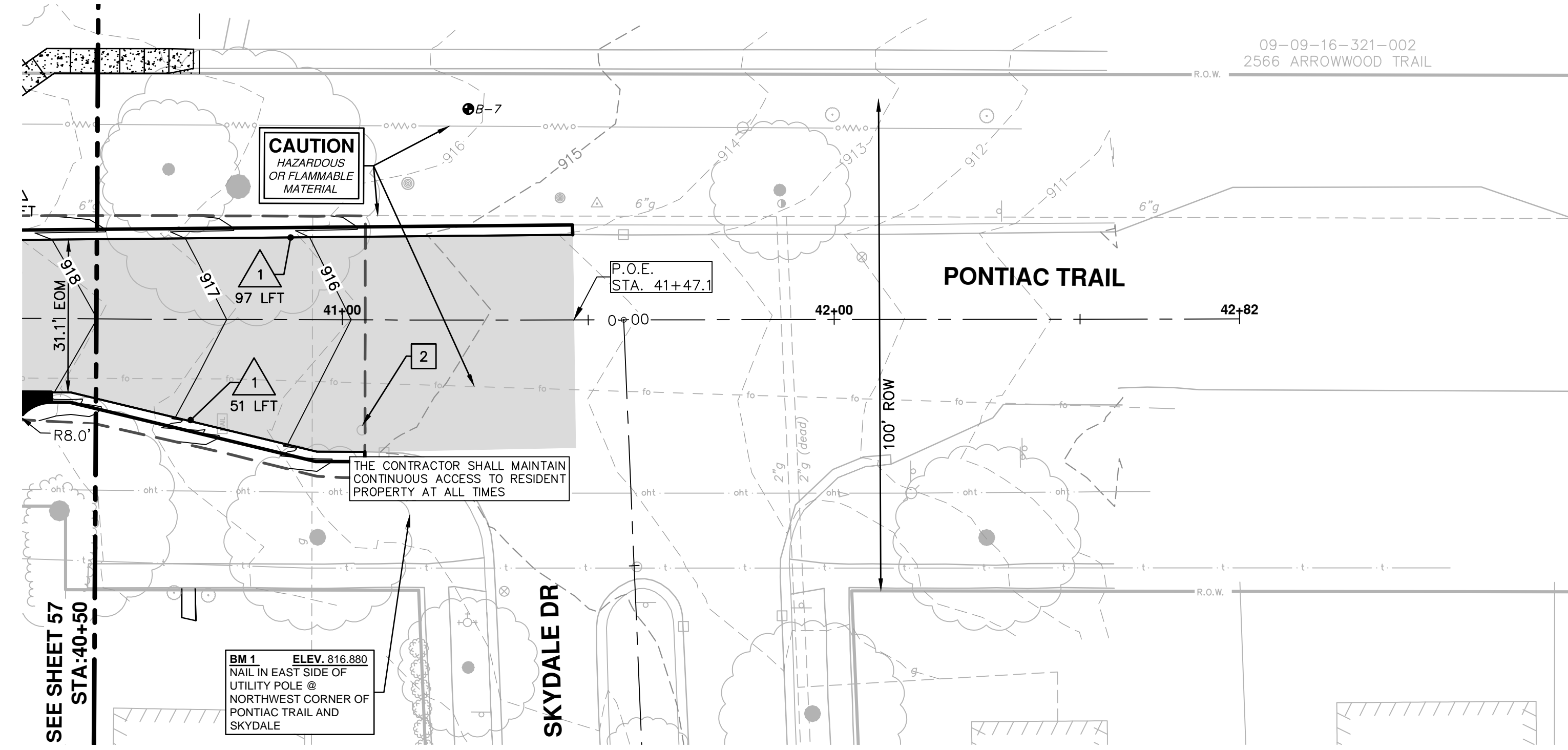
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
ROAD PLAN AND PROFILE

STA. 36+00 TO STA. 40+50

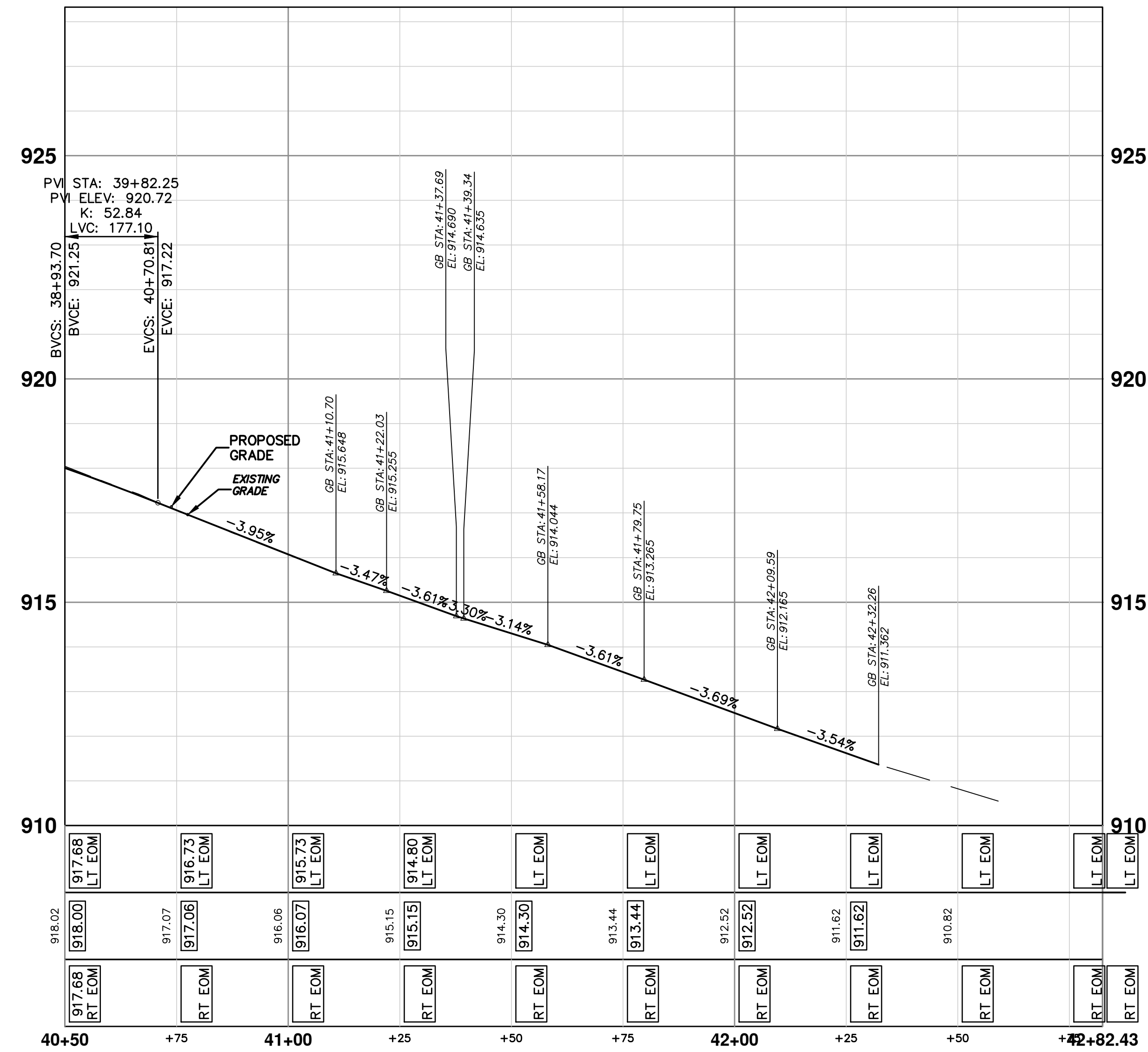
SCALE PLAN: 1" = 20'
PROFILE: 1" = 2'

DRAWING No.
2012028-57

SHEET No.
57 OF 102



PONTIAC TRAIL



CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PLACE CURB AND GUTTER, CONCRETE, MODIFIED
2	PLACE SIDEWALK, CONCRETE, 4 INCH
3	PLACE SIDEWALK, CONCRETE, 6 INCH
4	PLACE DRIVEWAY, NON REINFORCE, CONCRETE, 6 INCH MODIFIED
5	PLACE DRIVEWAY, 13A HMA, 3 1/2", WITH 6" 21AA AGG BASE
6	SIDEWALK RAMP, CONCRETE, 6 INCH MODIFIED
7	DETECTABLE WARNING SURFACE, MODIFIED
8	DRIVE OPENING, CONCRETE, DET M, MODIFIED
9	SIDEWALK RETAINING WALL, 7 TO 18 INCH
10	SIDEWALK RETAINING WALL, GREATER THAN 18 INCH
11	BLOCK RETAINING WALL, MORTARLESS, UNREINF, MODIFIED
1	ADJUST GATE VALVE BOX OR MONUMENT BOX. GAS BOX
2	REMOVE AND REPLACE MDOT TYPE B CASTING. ADJUST TO FINISH GRADE.
3	REMOVE AND REPLACE MDOT TYPE K CASTING. ADJUST TO FINISH GRADE.
4	REMOVE STRUCTURE AND REPLACE 2' DIA. DRAINAGE STRUCTURE.
5	POINT STRUCTURE.
6	REMOVE AND REPLACE MDOT TYPE K CASTING. ADJUST TO FINISH GRADE.
7	ADJUST GATE VALVE IN BOX

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

PONTIAC TRAIL IMPROVEMENTS

ROAD PLAN AND PROFILE

STA. 40+50 TO STA. 42+82

SCALE PLAN: 1" = 20'
PROFILE: 1" = 4'

DRAWING No. 2012028-58

SHEET No. 58 OF 102

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

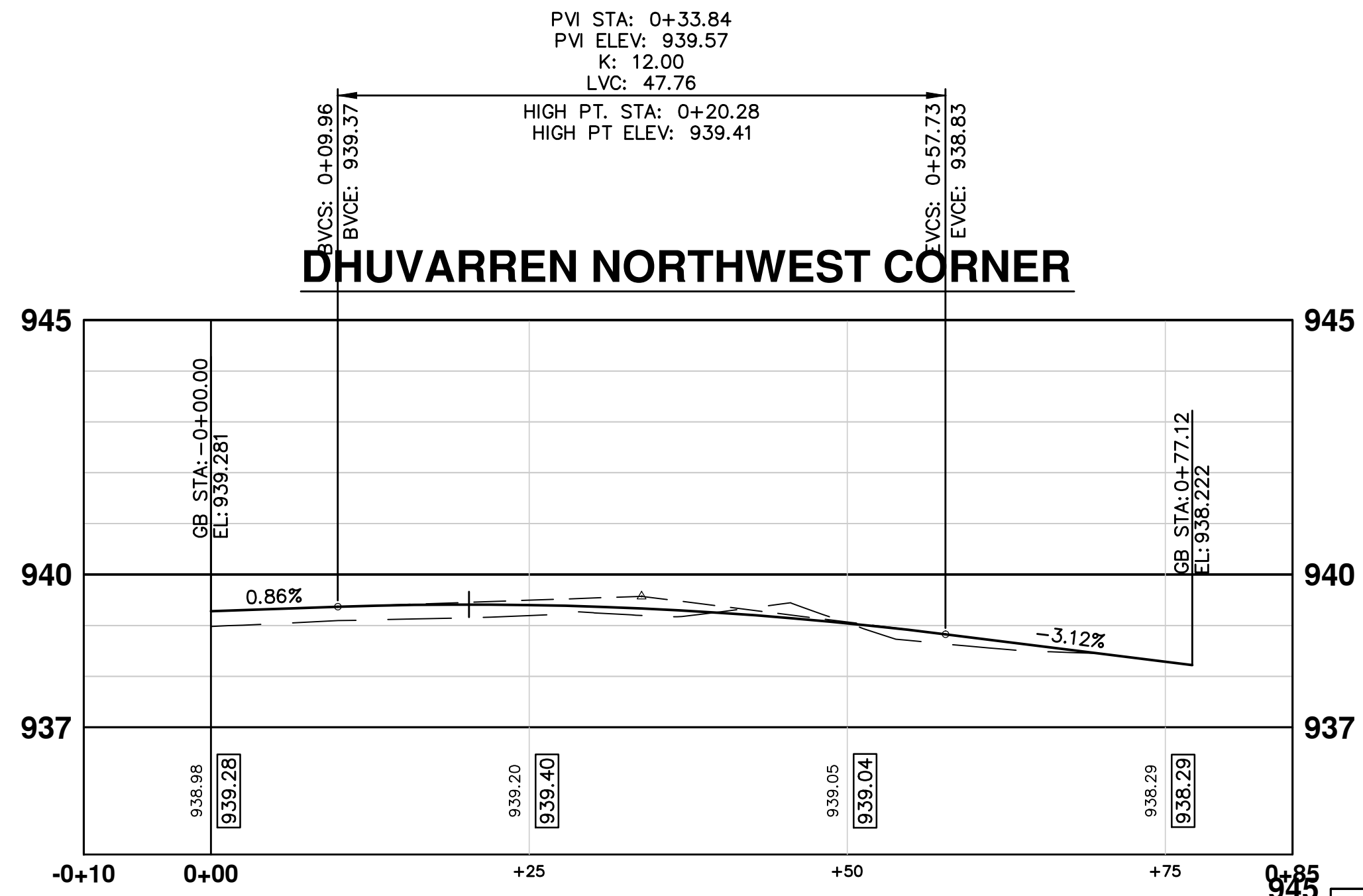
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-3667
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ANN ARBOR MICHIGAN

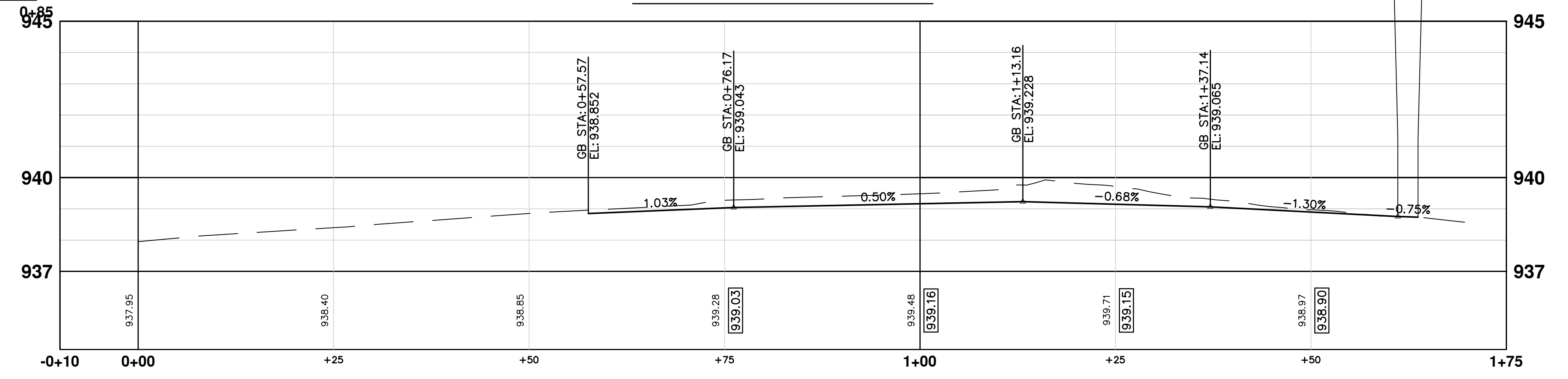
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00	BID SUBMITTAL	03-18-2014	RM/ML	

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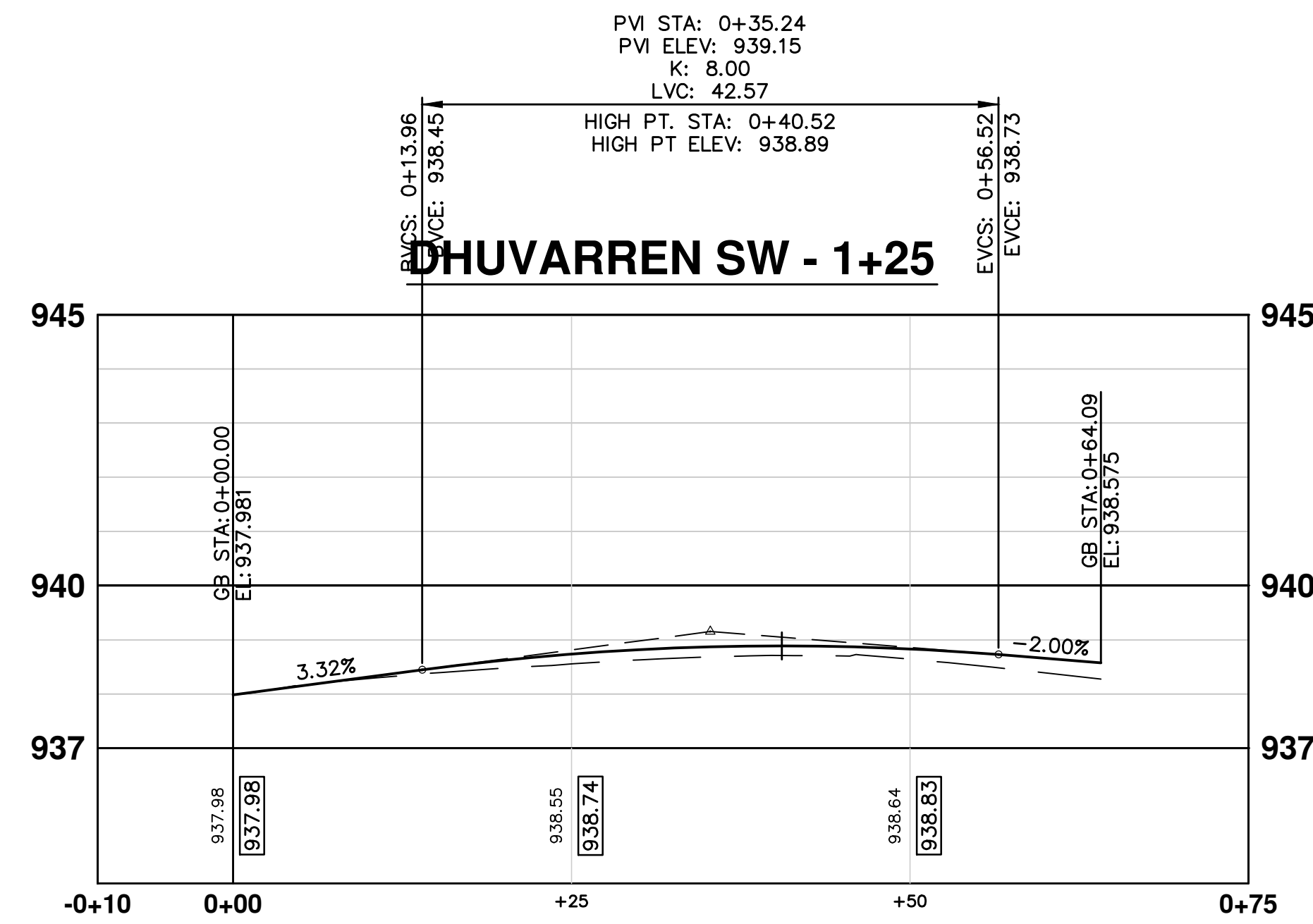
DHUVARREN NORTHWEST CORNER



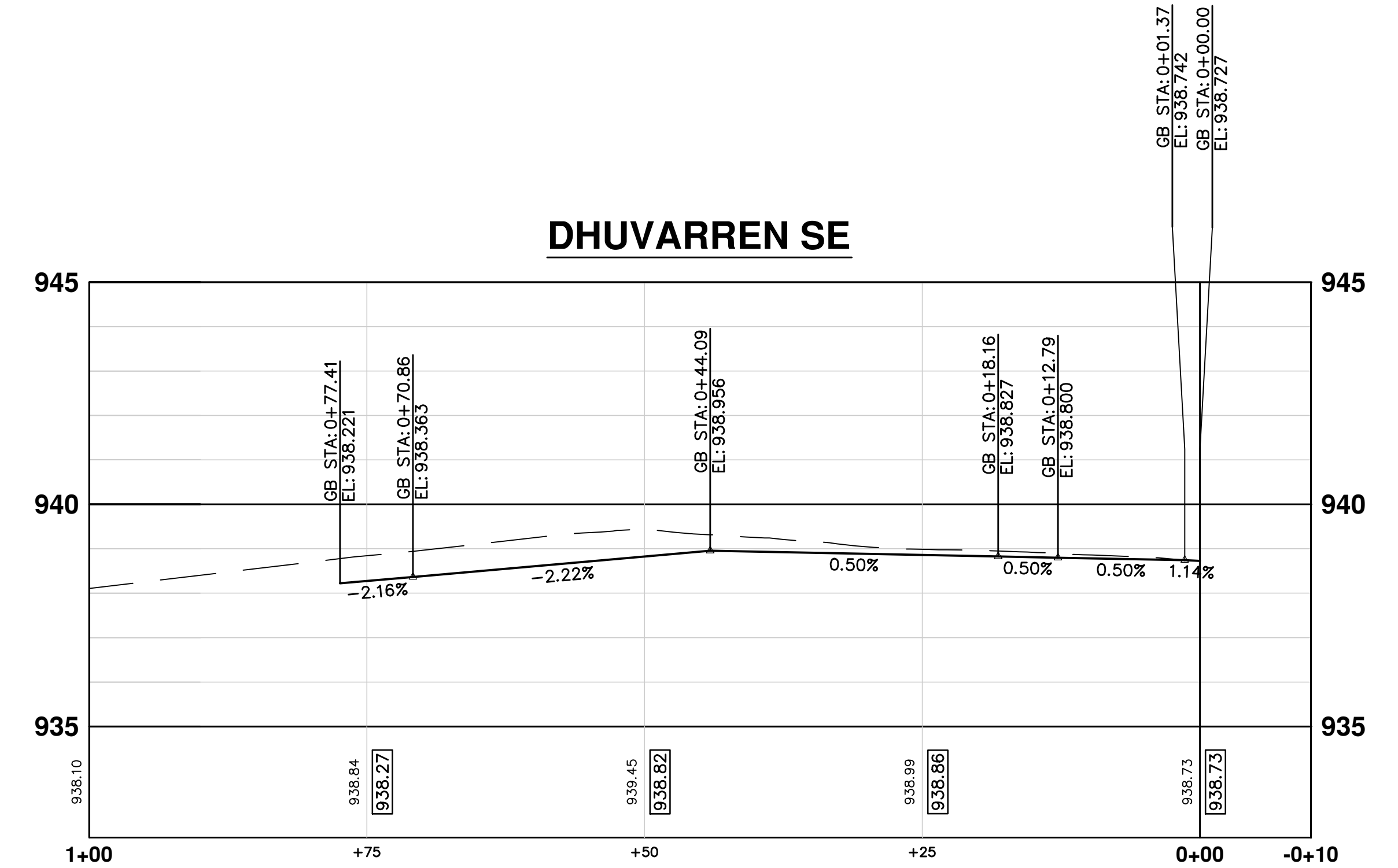
DHUVARREN NE - 2+25



DHUVARREN SW - 1+25



DHUVARREN SE



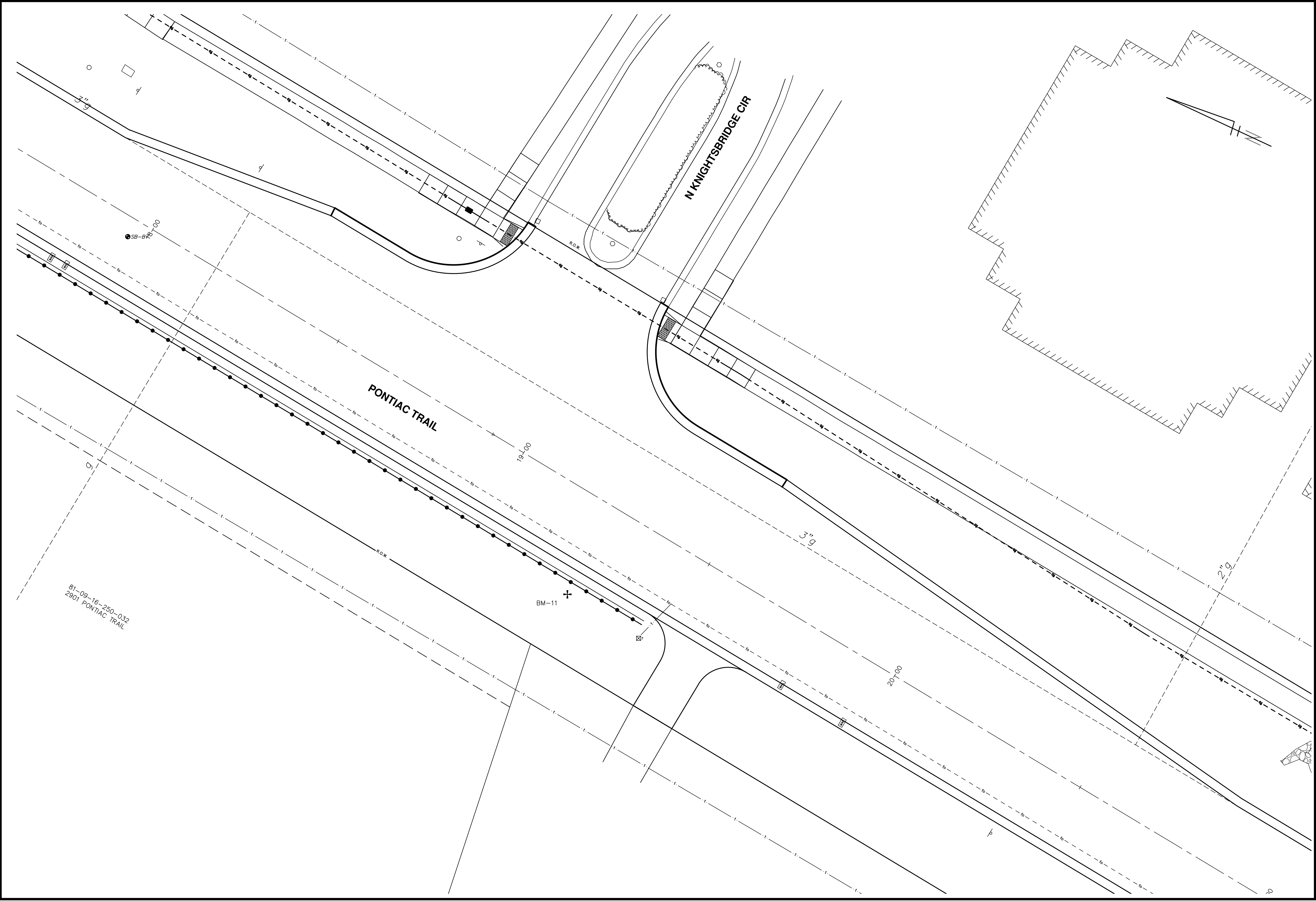
REV.	DATE	DESCRIPTION	BY	CHECKED
00	03-18-2014		RMLL	
			DRAWN	

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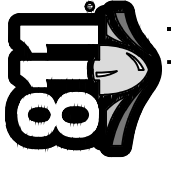
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
INTERSECTION GRADES
INT (2)

SCALE PLAN: #####
DRAWING No. 2012028-60
SHEET No. 60 OF 102

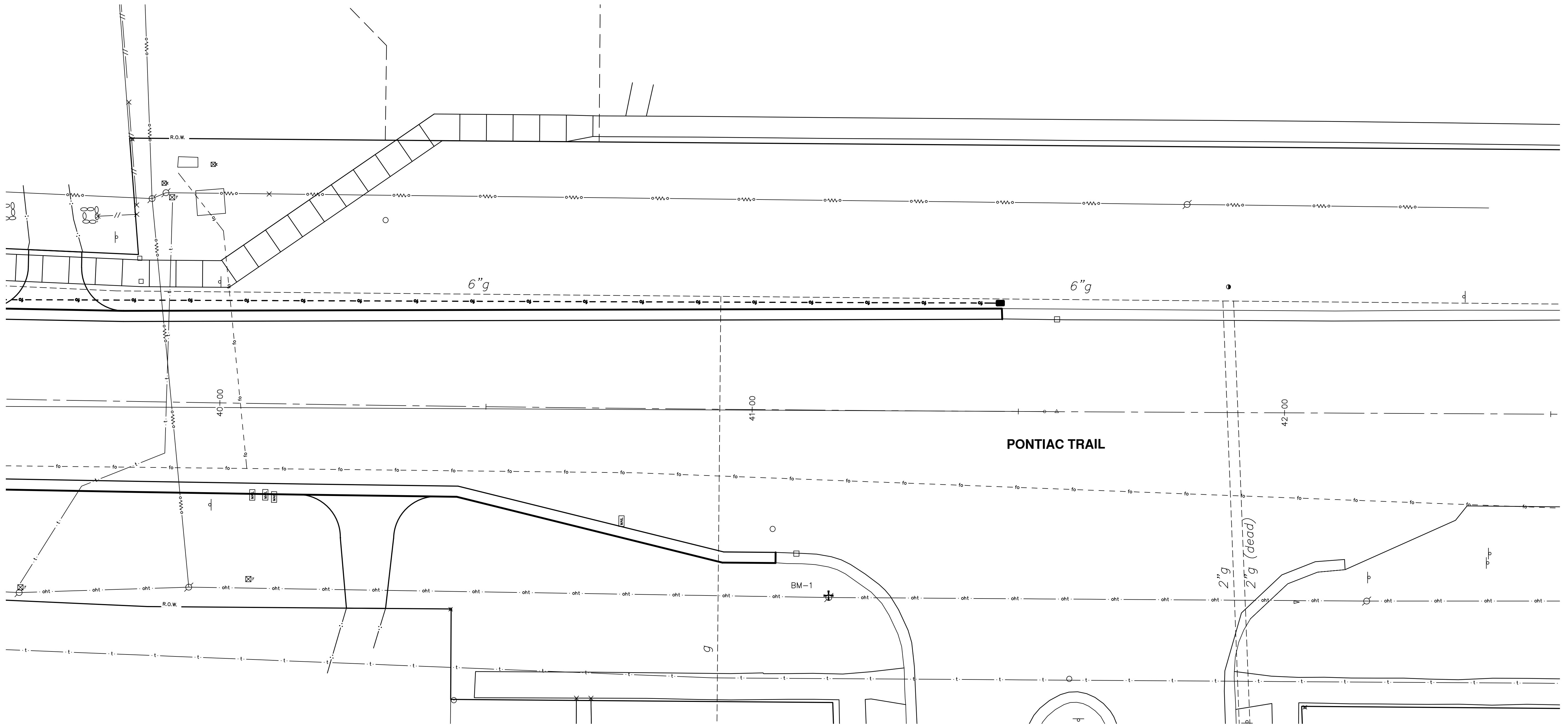
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81-09-16-250-032
2901 PONTIAC TRAIL

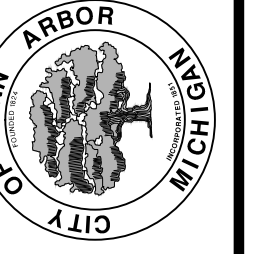
 CITY OF ANN ARBOR PUBLIC SERVICE 301 EAST HURON STREET ANN ARBOR, MI 48106-3667 www.a2gov.org		00 BID SUBMITTAL REV.	03-18-2014 DATE	RMLI DRAWN	BY CHECKED
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR PONTIAC TRAIL IMPROVEMENTS INTERSECTION GRADES INT (3)		SHEET No. 61 OF 102			

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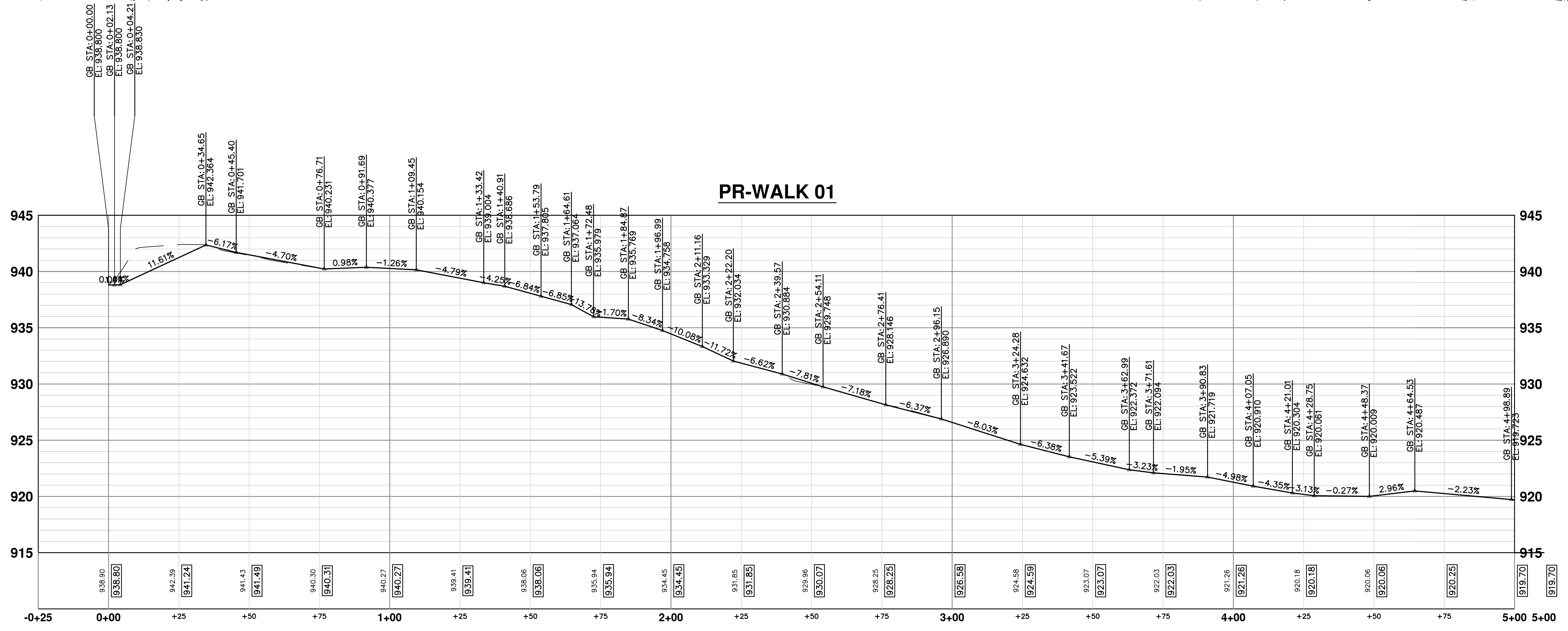
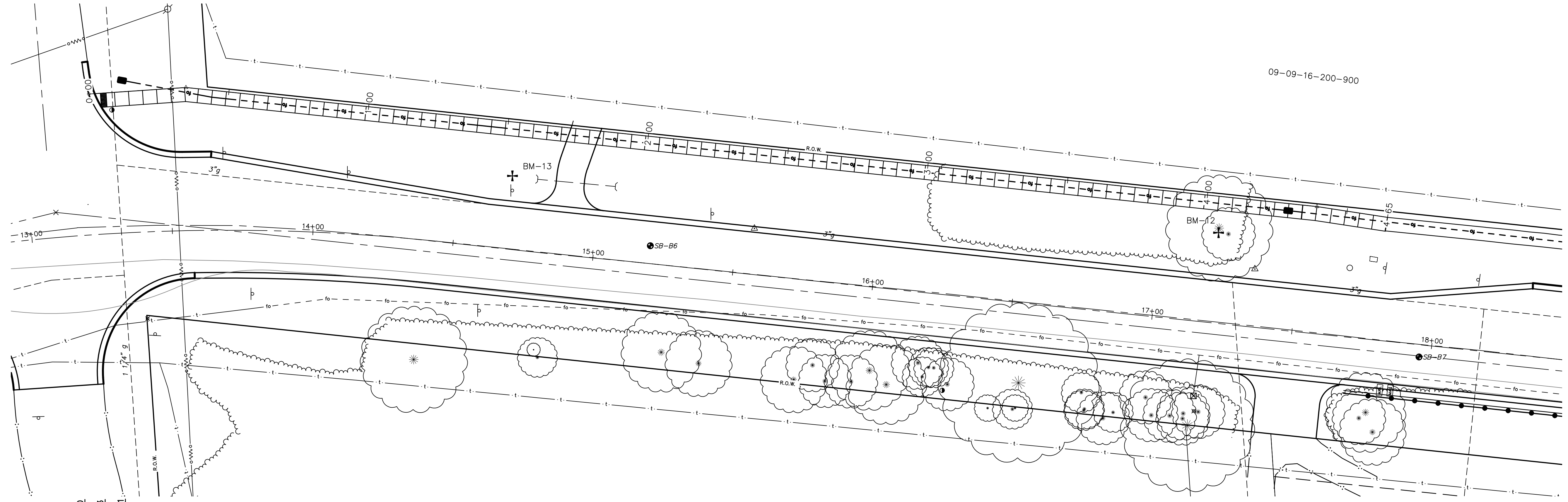
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SCALE PLAN: 1" = 10'
 DRAWING No.
2012028-62

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PONTIAC TRAIL IMPROVEMENTS

SIDEWALK PLAN AND PROFILE

PFSW (01)

SCALE PLAN: 1" = 20'
PROFILE: 1" = 4'

DRAWING NO. 2012028-63

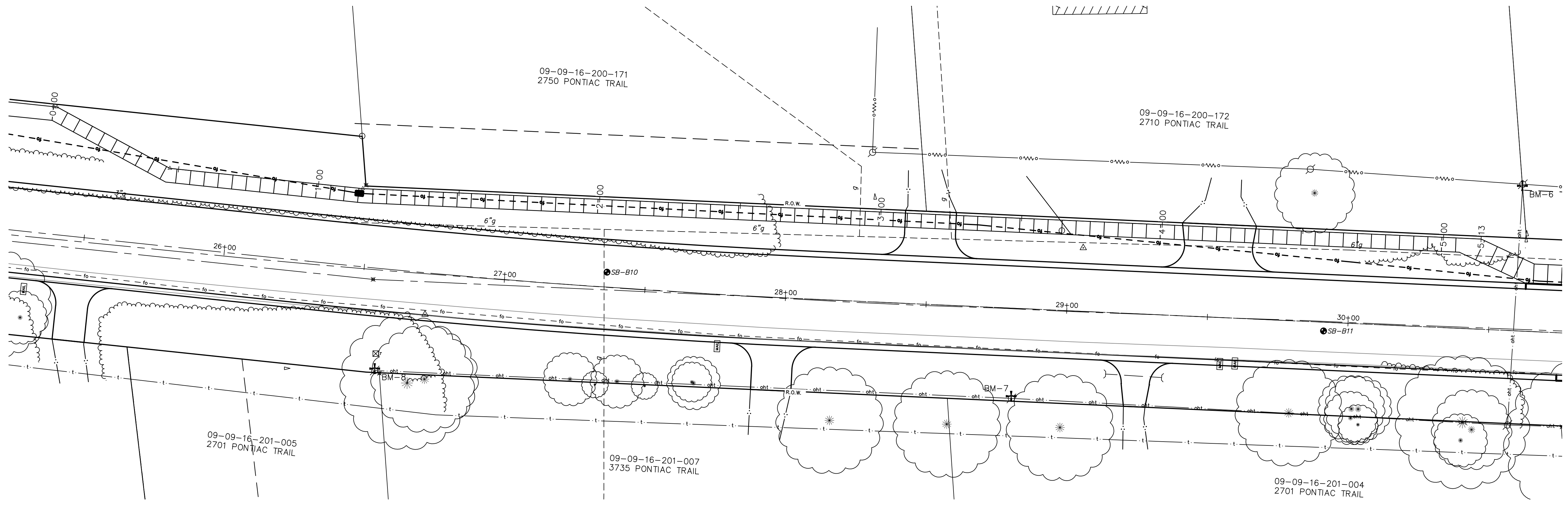
SHEET NO. 63 OF 102

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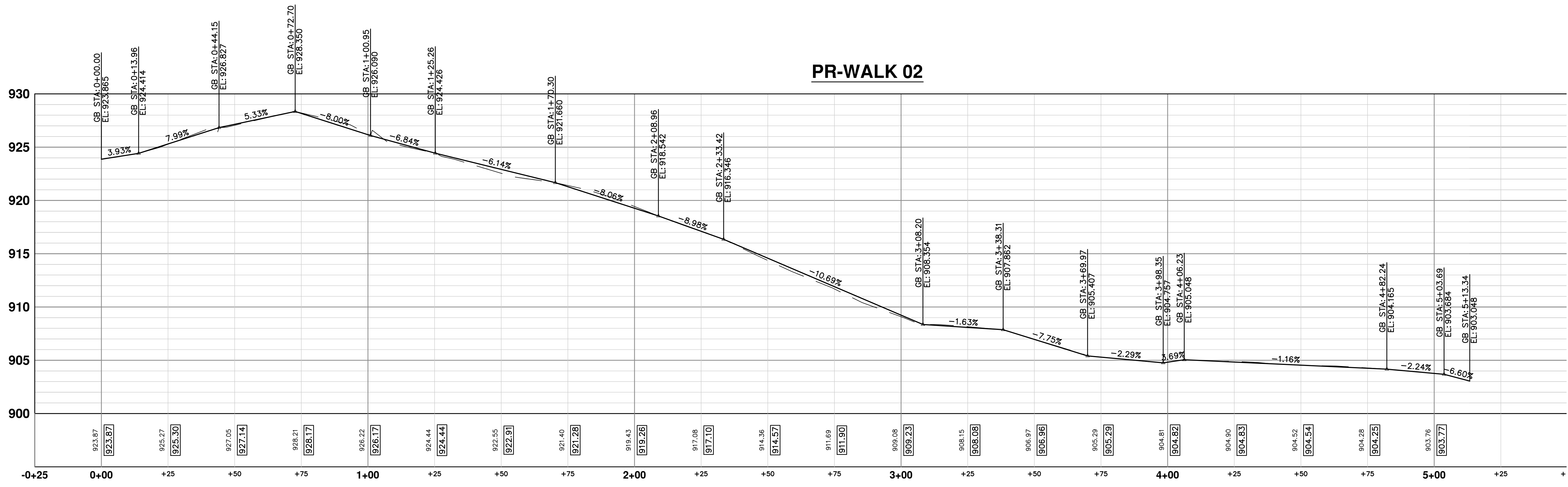
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PR-WALK 02



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PONTIAC TRAIL IMPROVEMENTS

SIDEWALK PLAN AND PROFILE

PROFILE: 1" = 4'

SCALE PLAN: 1" = 20'

DRAWING NO. 2012028-64

SHEET NO. 64 OF 102

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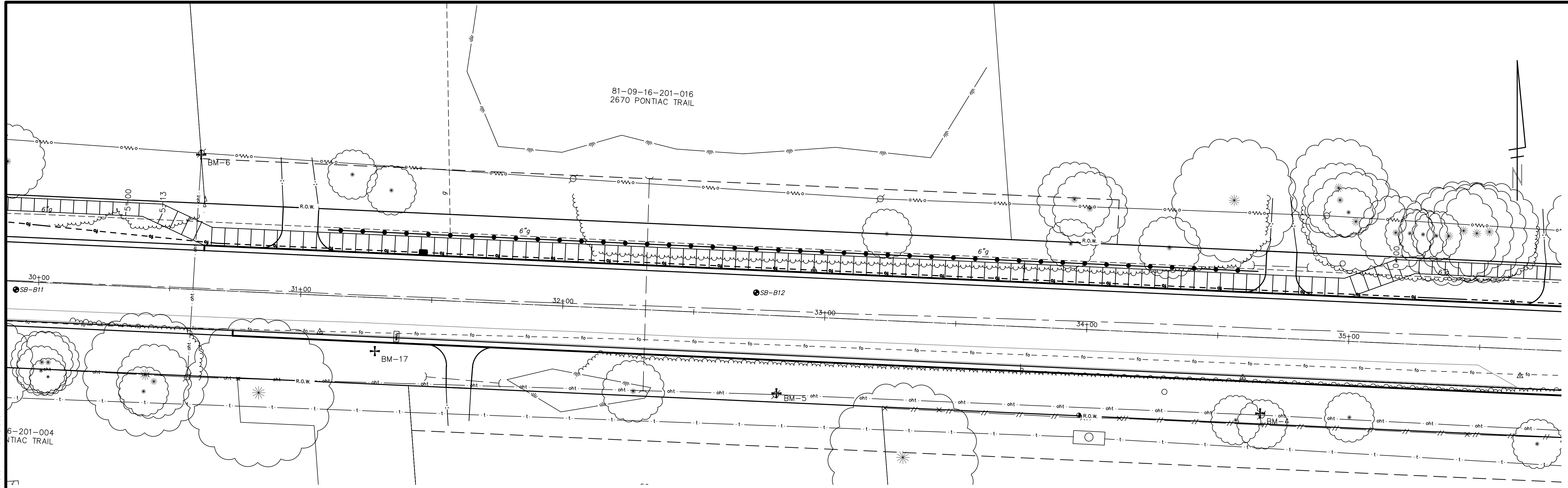
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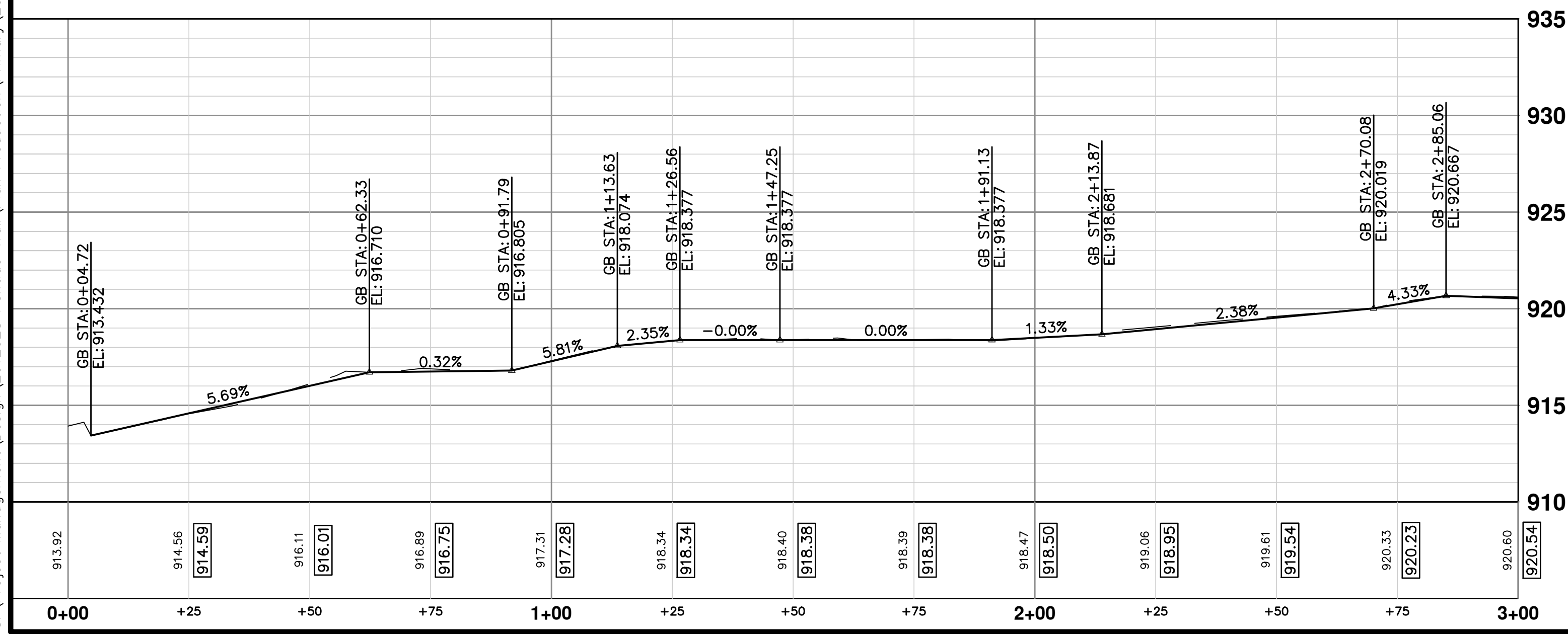
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PROJECT: PFSW (02)

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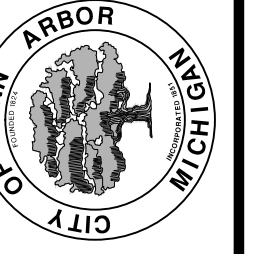


PR-WALK 03



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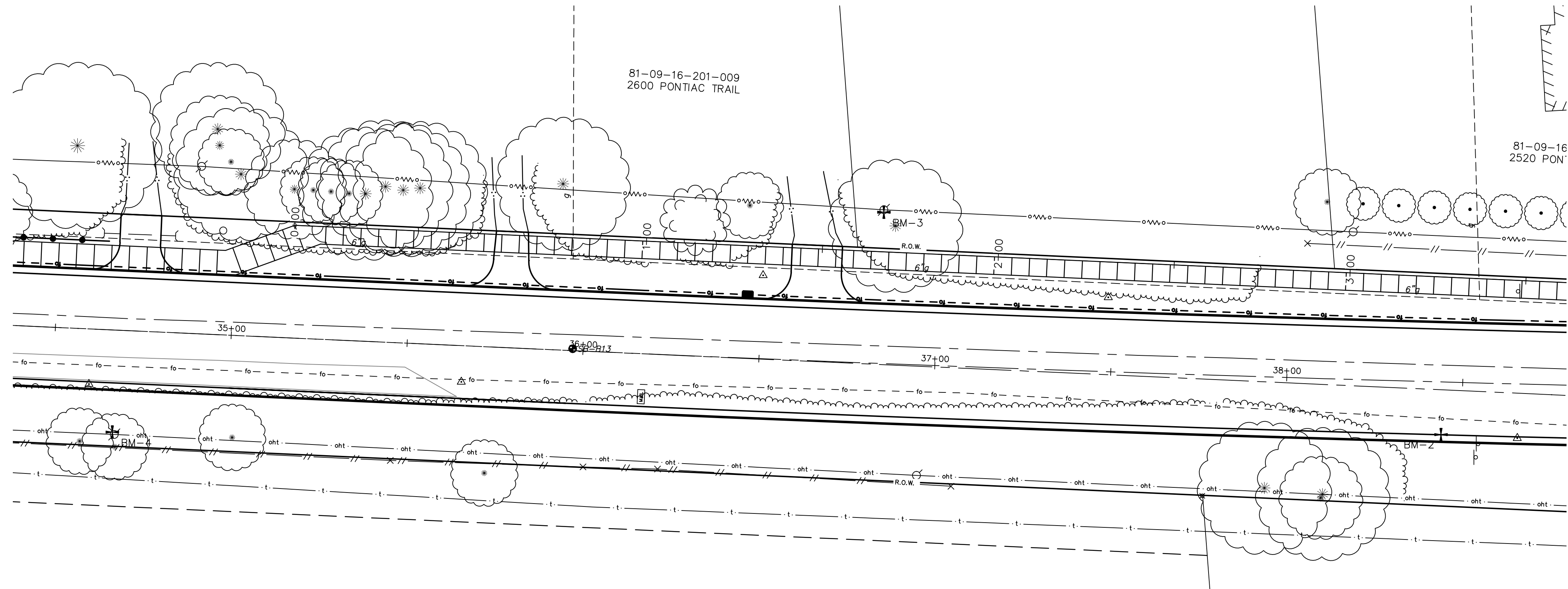
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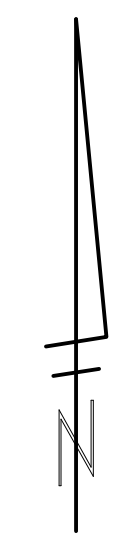
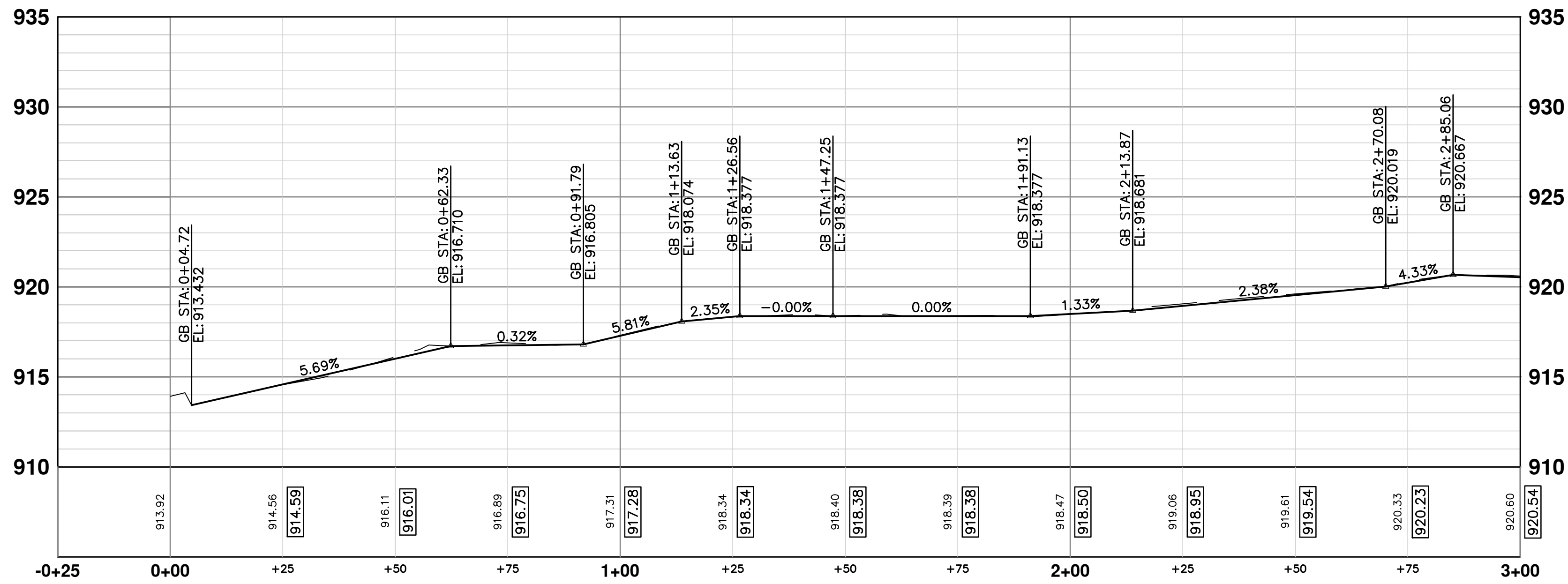
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PONTIAC TRAIL IMPROVEMENTS
SIDEWALK PLAN AND PROFILE
PFSW (03)

SHEET No. **65 OF 102**
SCALE PLAN: 1" = 20'
PROFILE: 1" = 4'
DRAWING No. **2012028-65**

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PR-WALK 03



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PONTIAC TRAIL IMPROVEMENTS
 SIDEWALK PLAN AND PROFILE
 PFSW (04)

SCALE PLAN: 1" = 20'
 PROFILE: 1" = 4'

DRAWING No.
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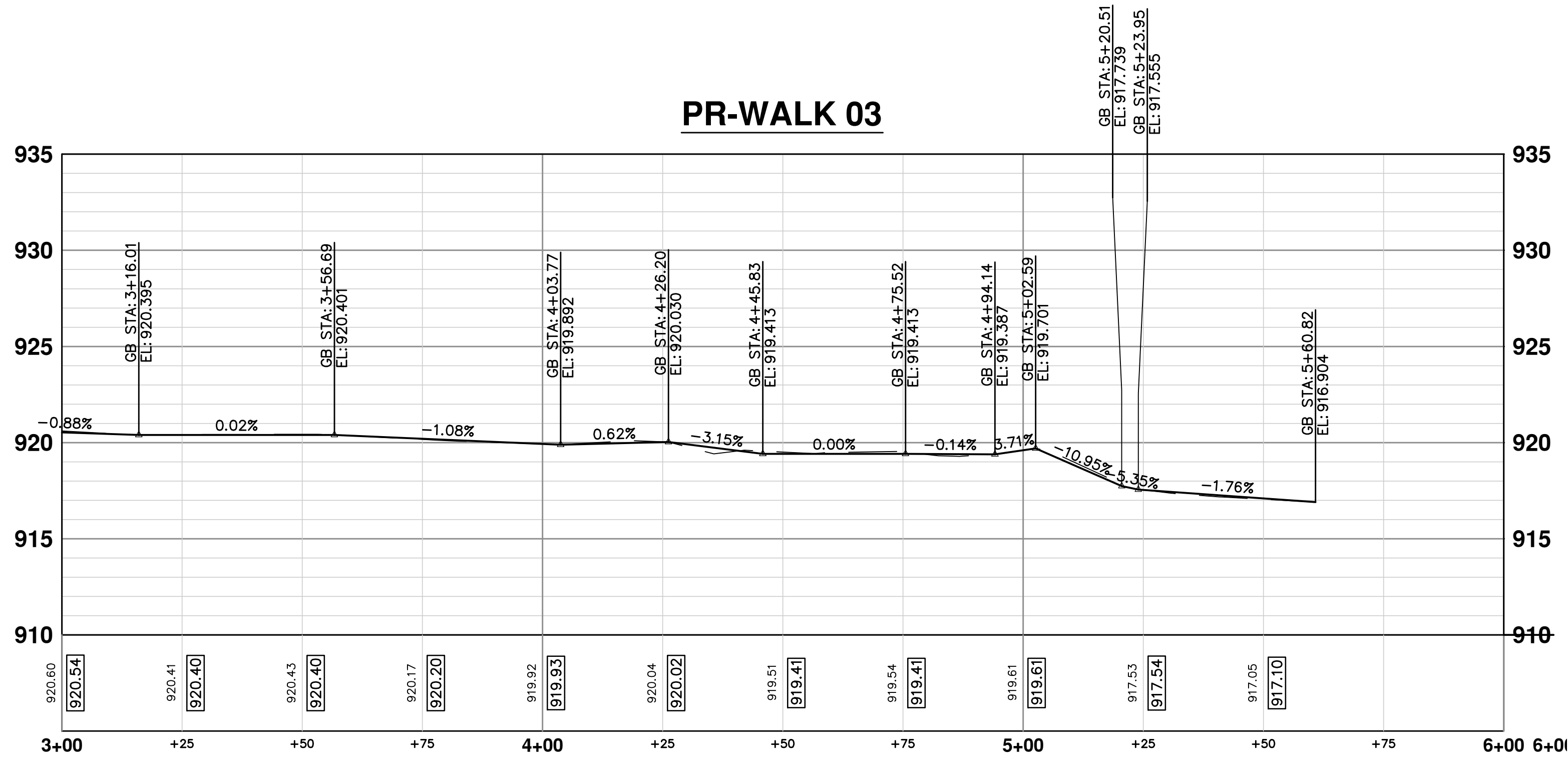
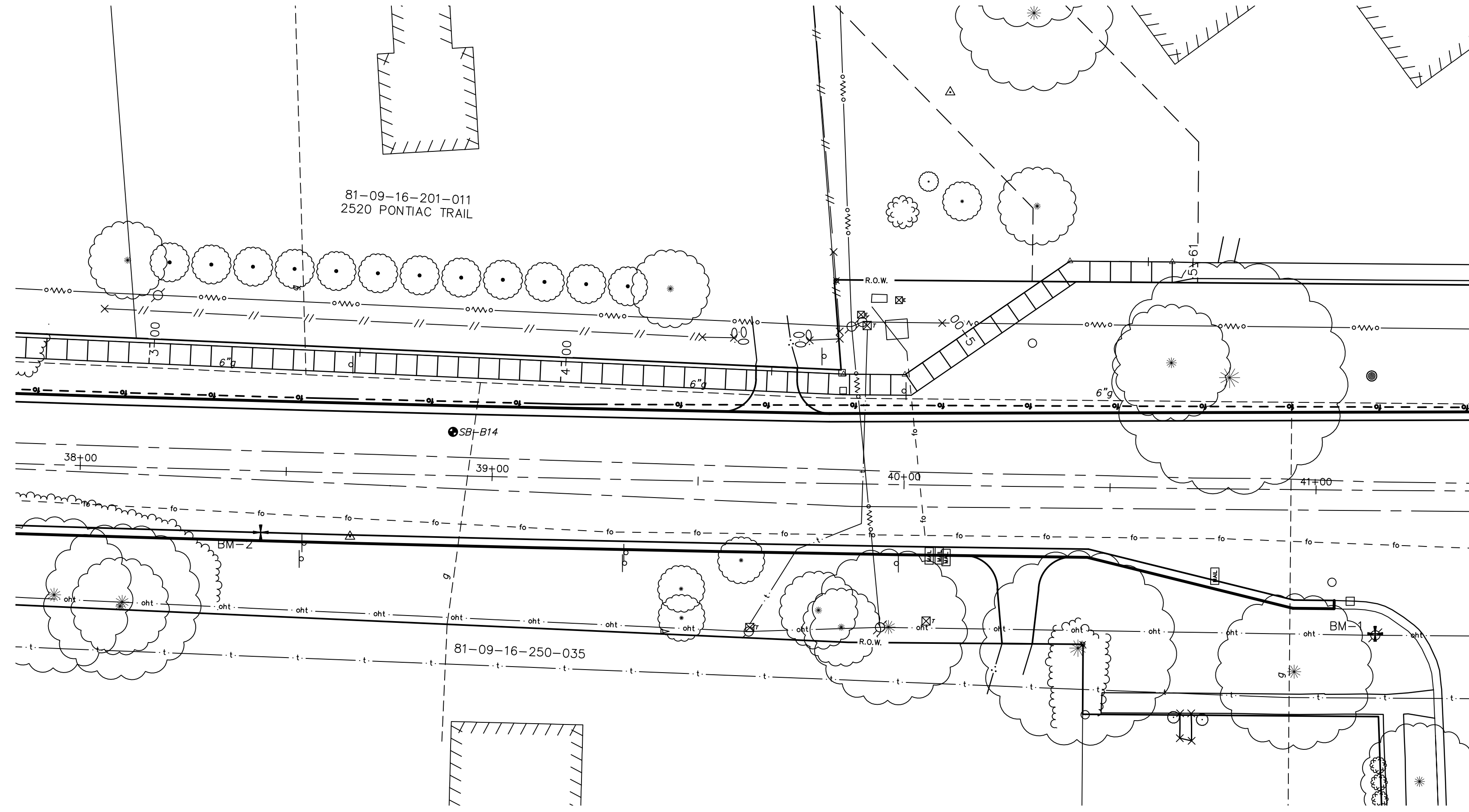
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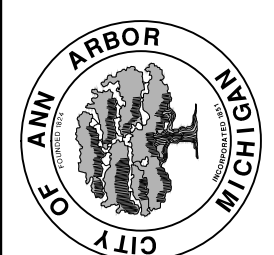


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PONTIAC TRAIL IMPROVEMENTS

SIDEWALK PLAN AND PROFILE

PFSW (05)



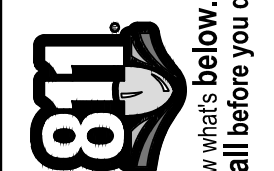
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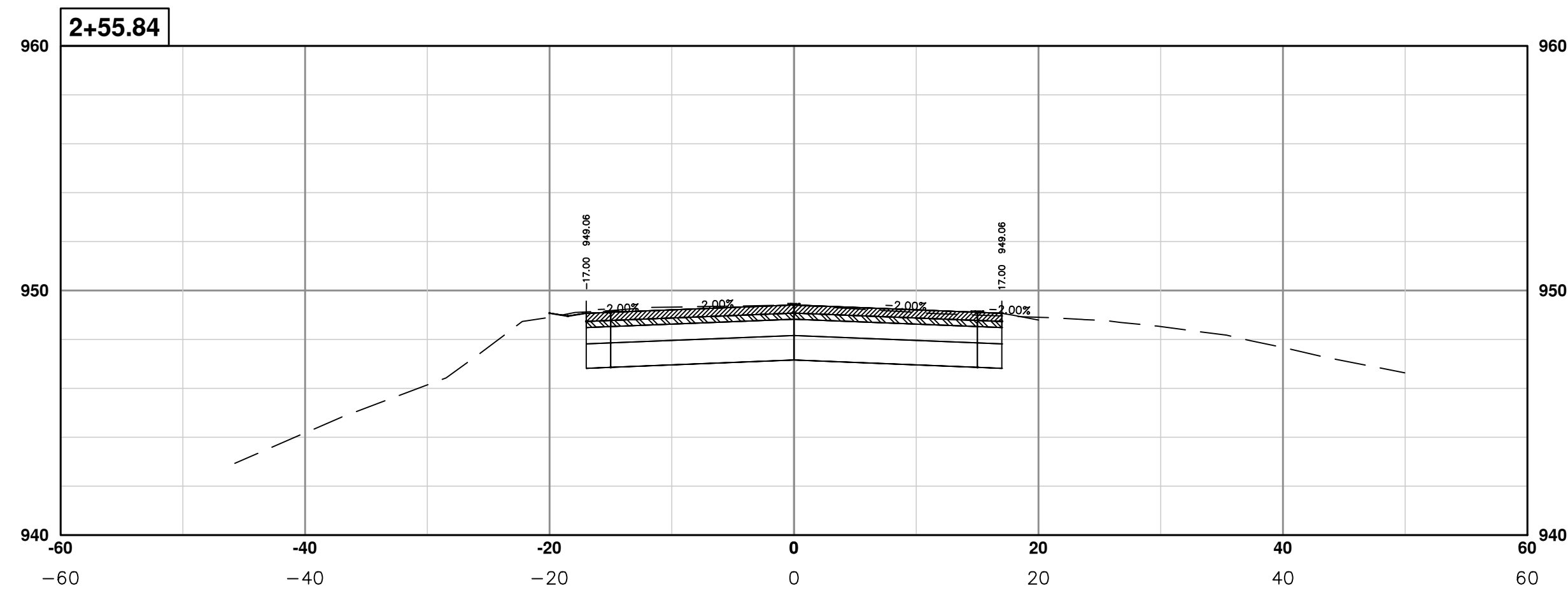
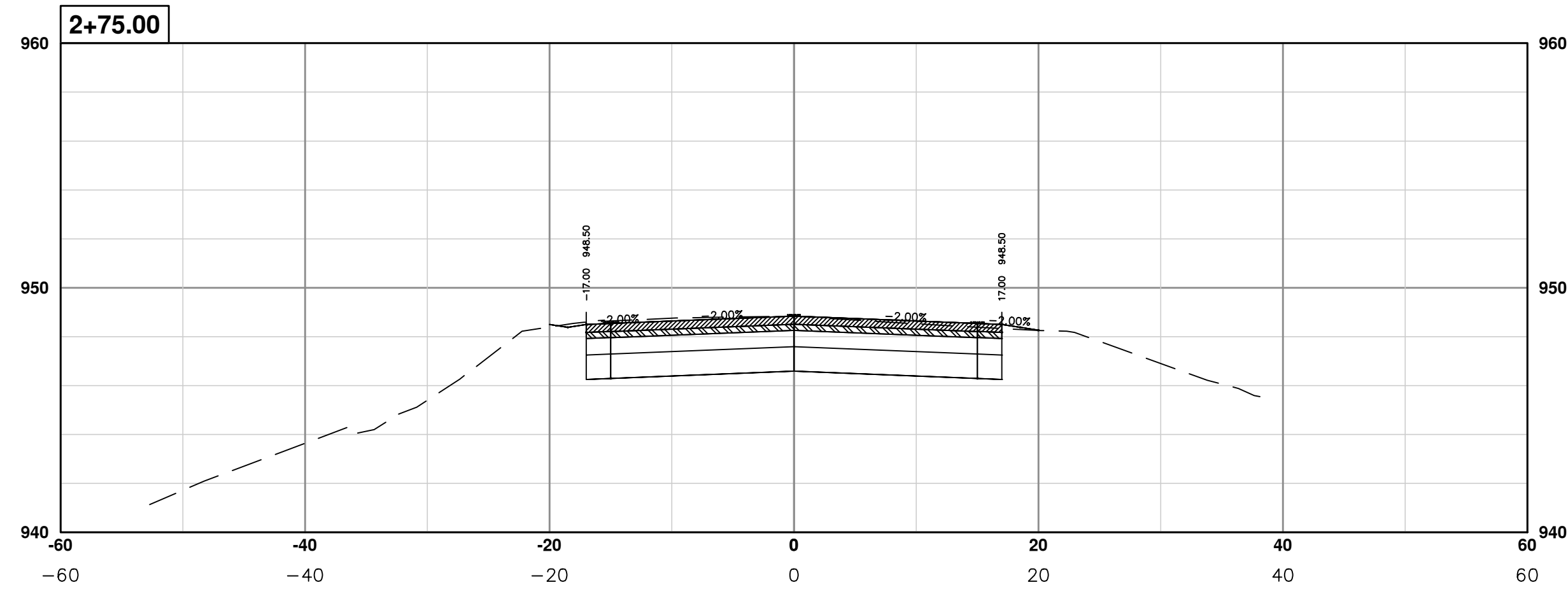
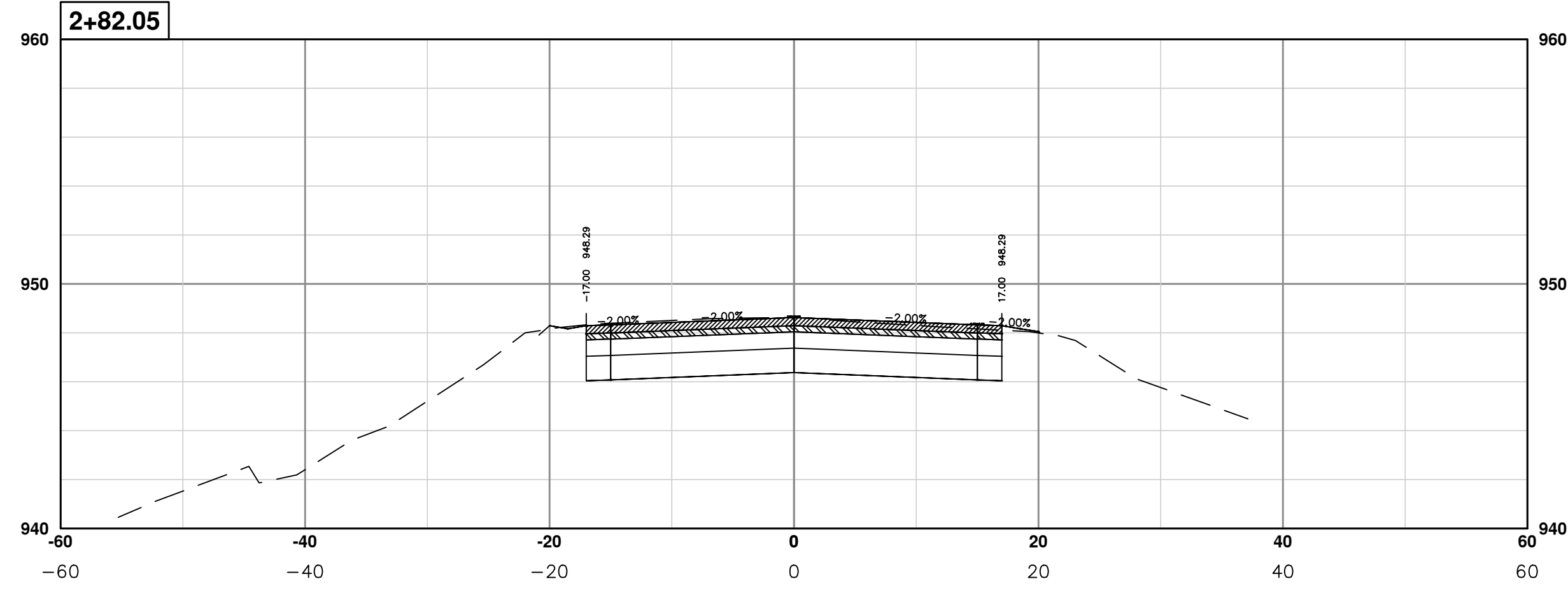
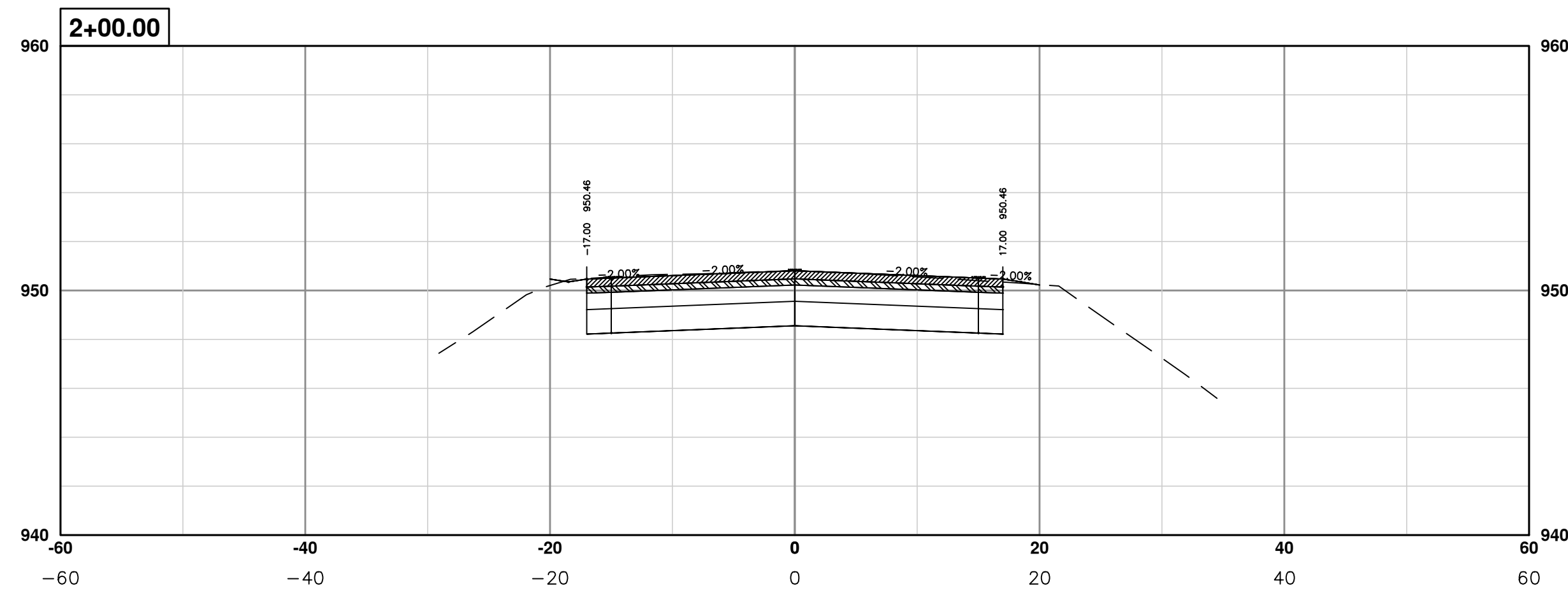
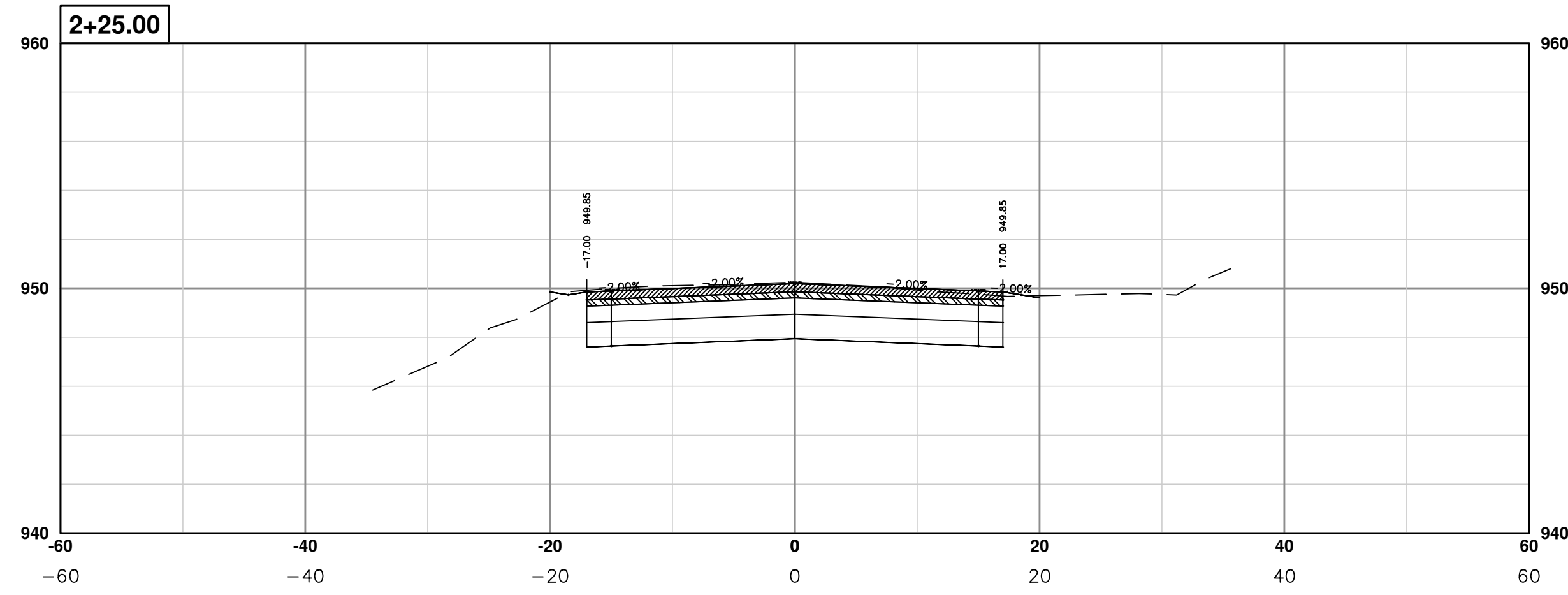
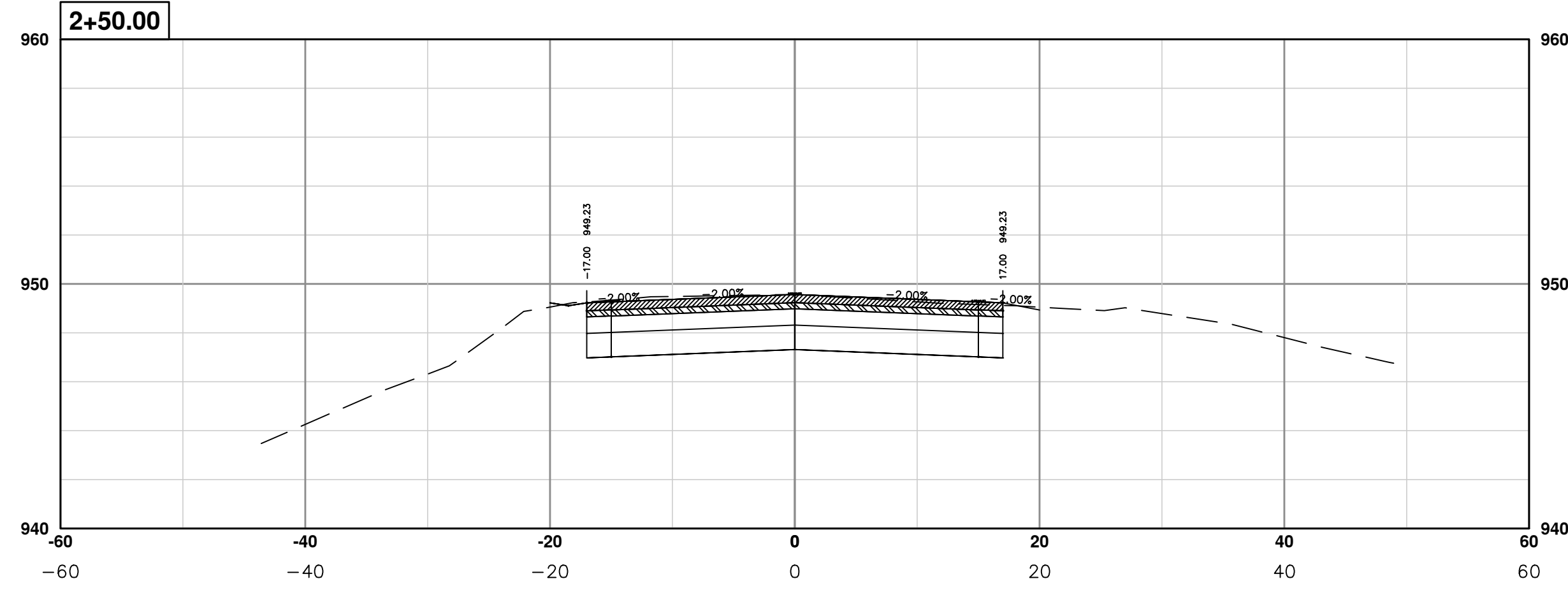
SCALE PLAN: 1" = 20'
PROFILE: 1" = 4'

DRAWING No. **2012028-67**



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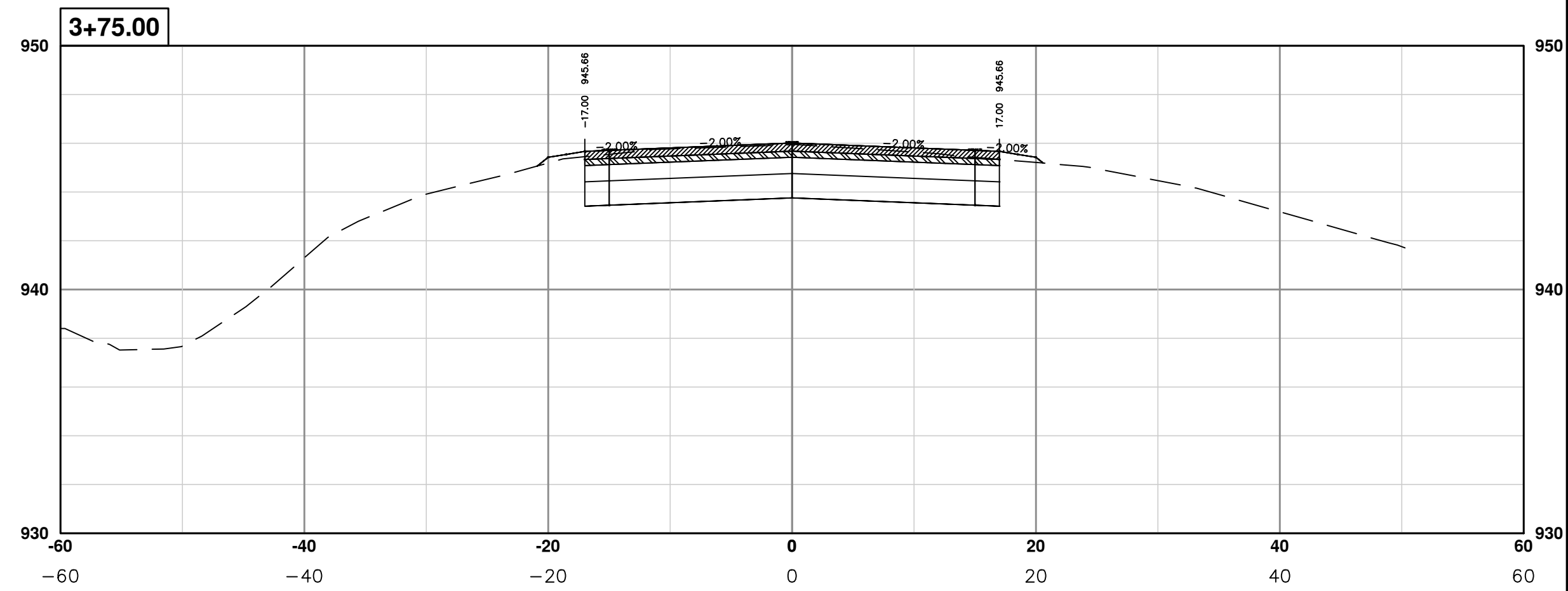
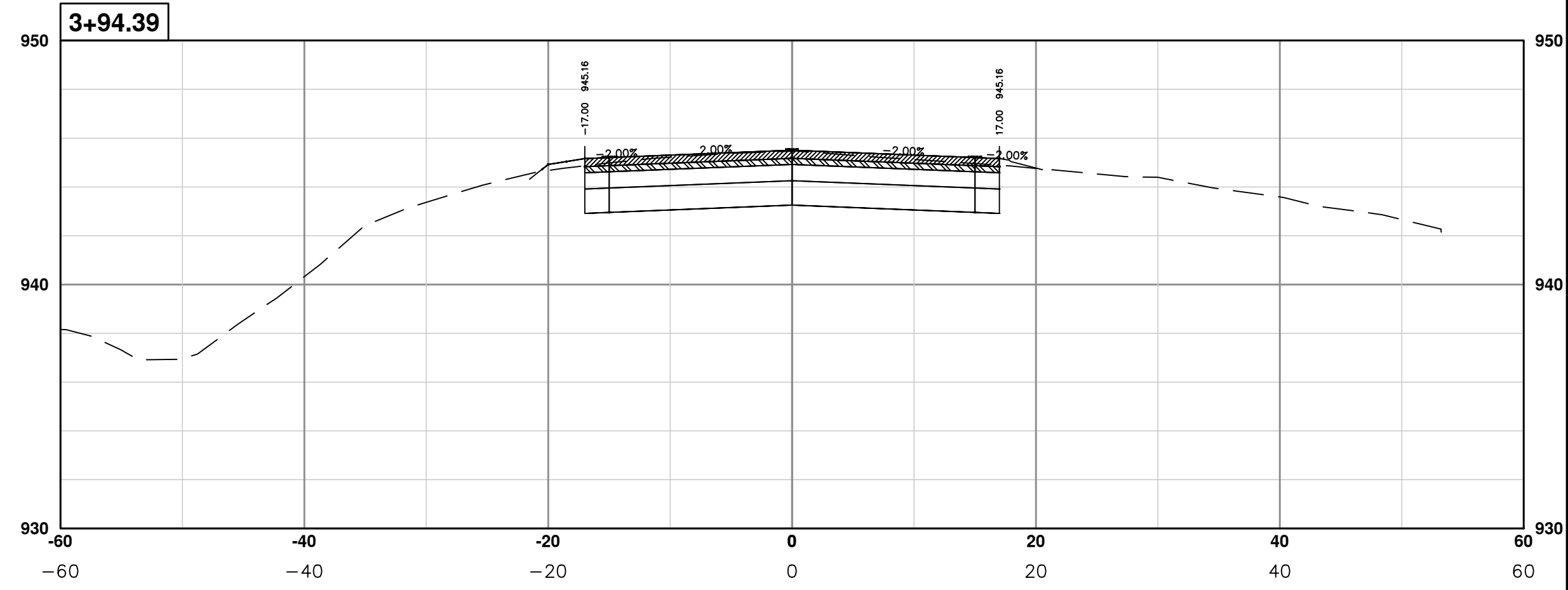
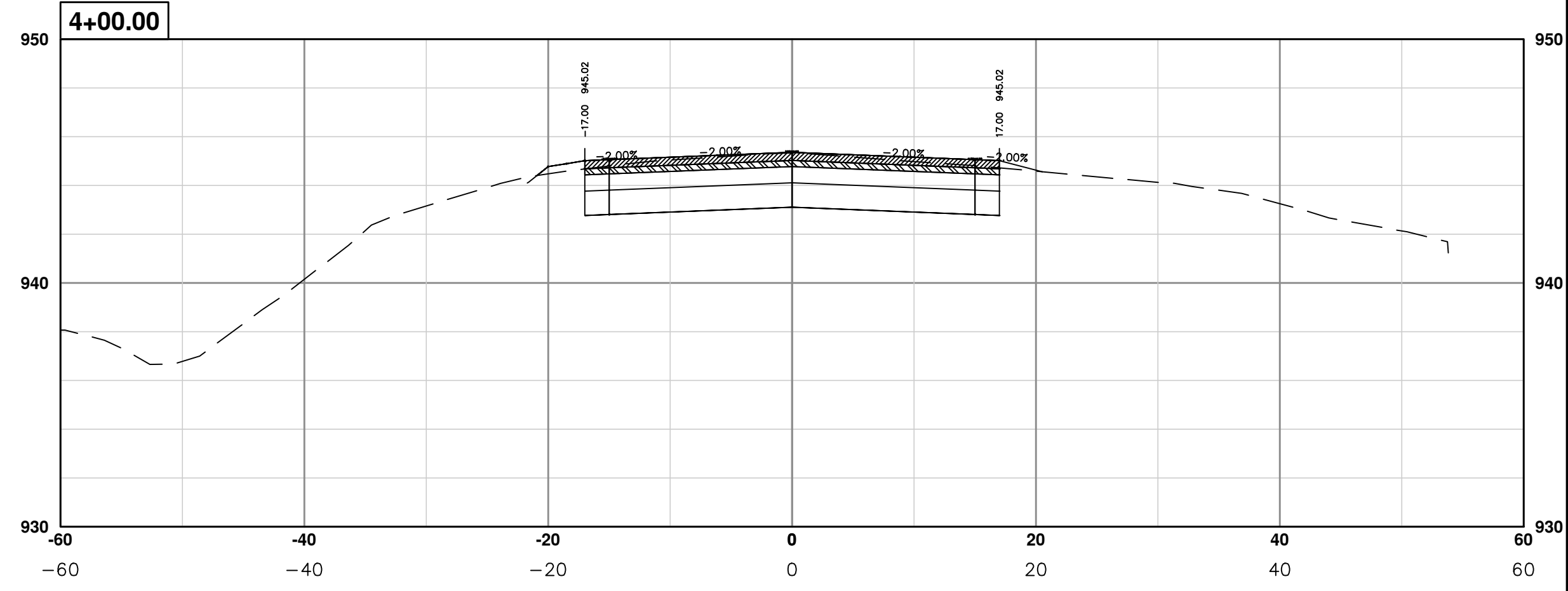
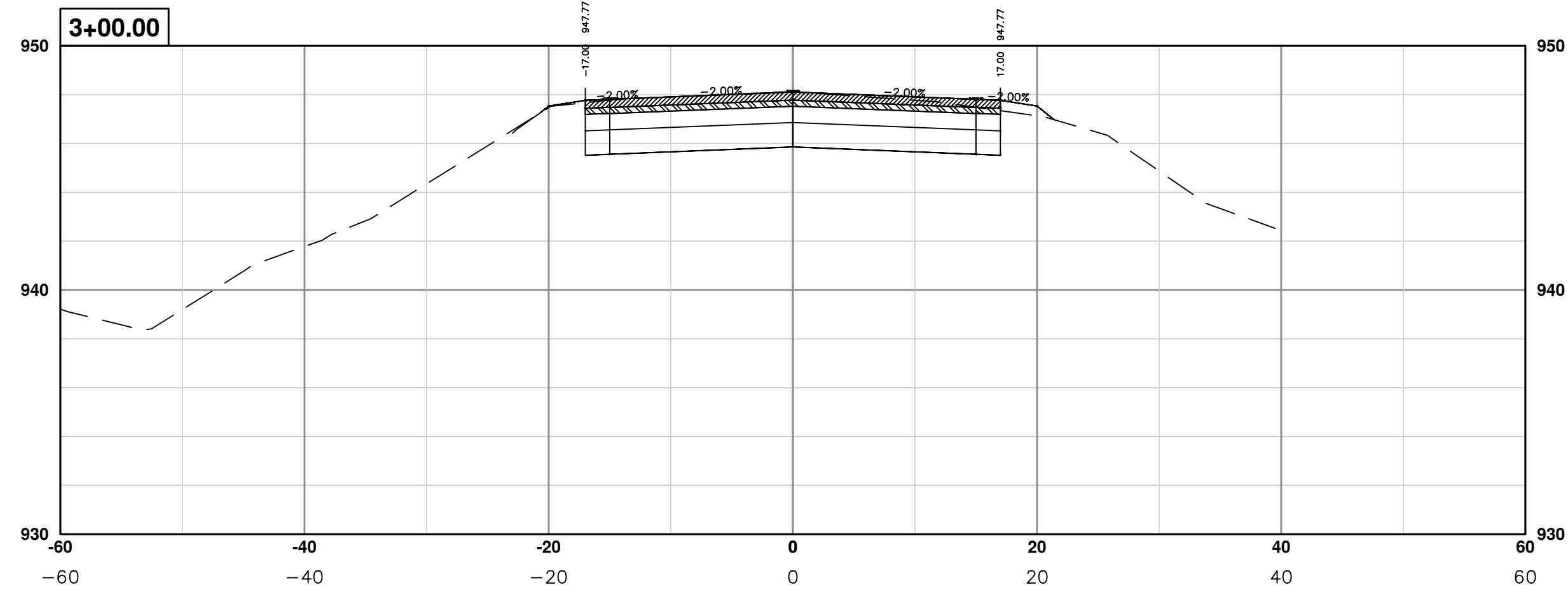
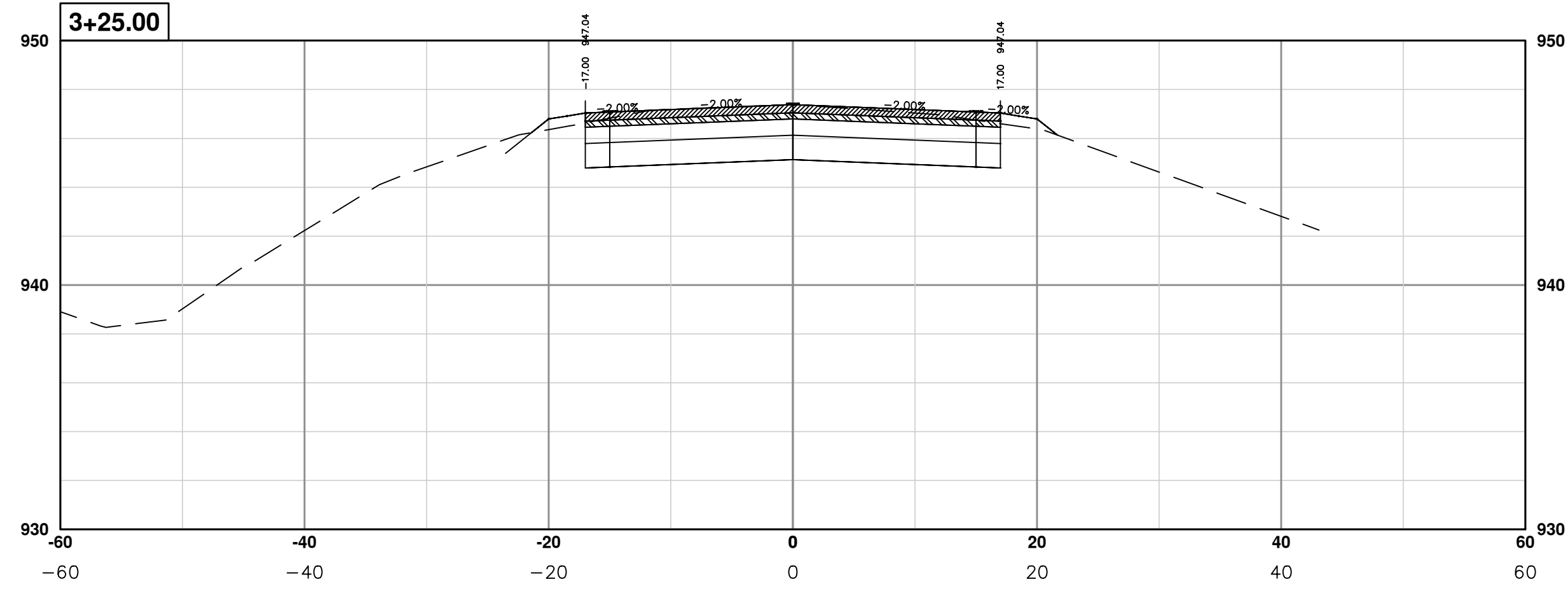
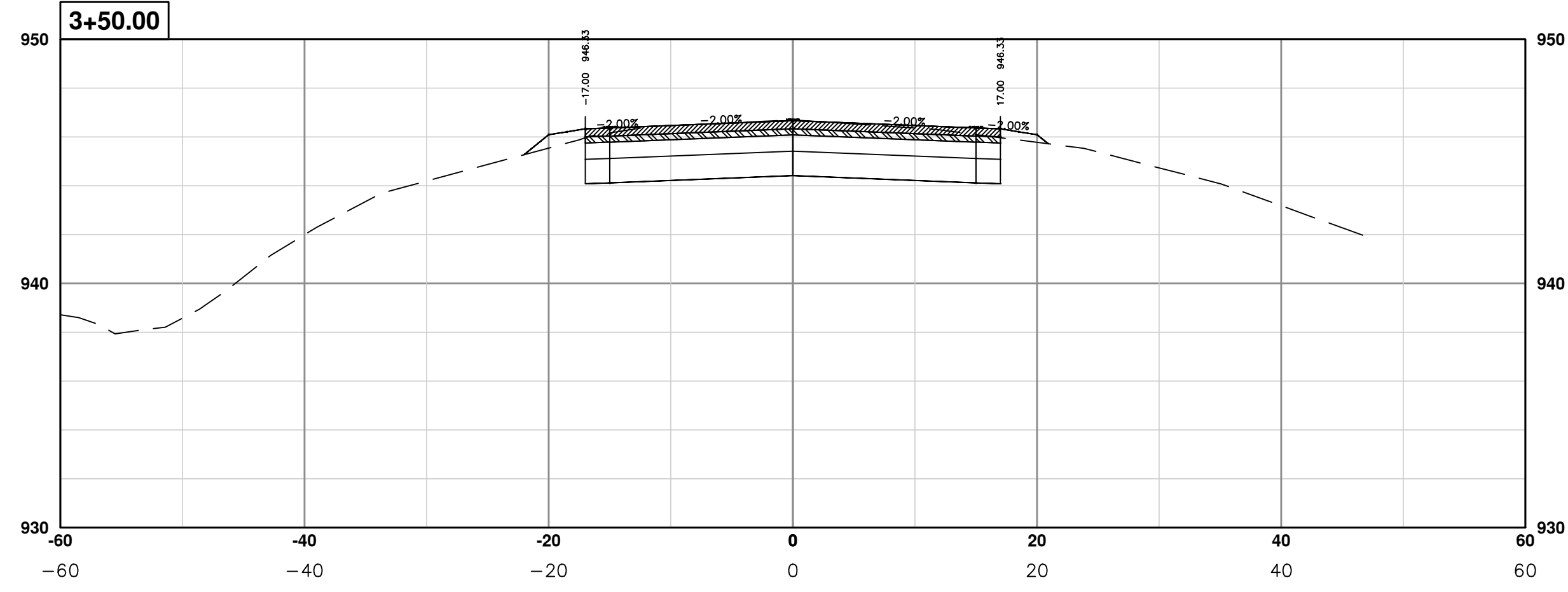
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PONTIAC TRAIL IMPROVEMENTS
PONTIAC TRAIL ROAD CROSS SECTIONS
SECTION PLANS 1 OF 94

SCALE PLAN: #####
PROFILE: 1" = 4'
DRAWING No. 2012028-68
SHEET No.



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PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 2 OF 94

SCALE PLAN: #####
 PROFILE: 1" = 4'
 DRAWING No. 2012028-69
 SHEET No. 69 OF 102

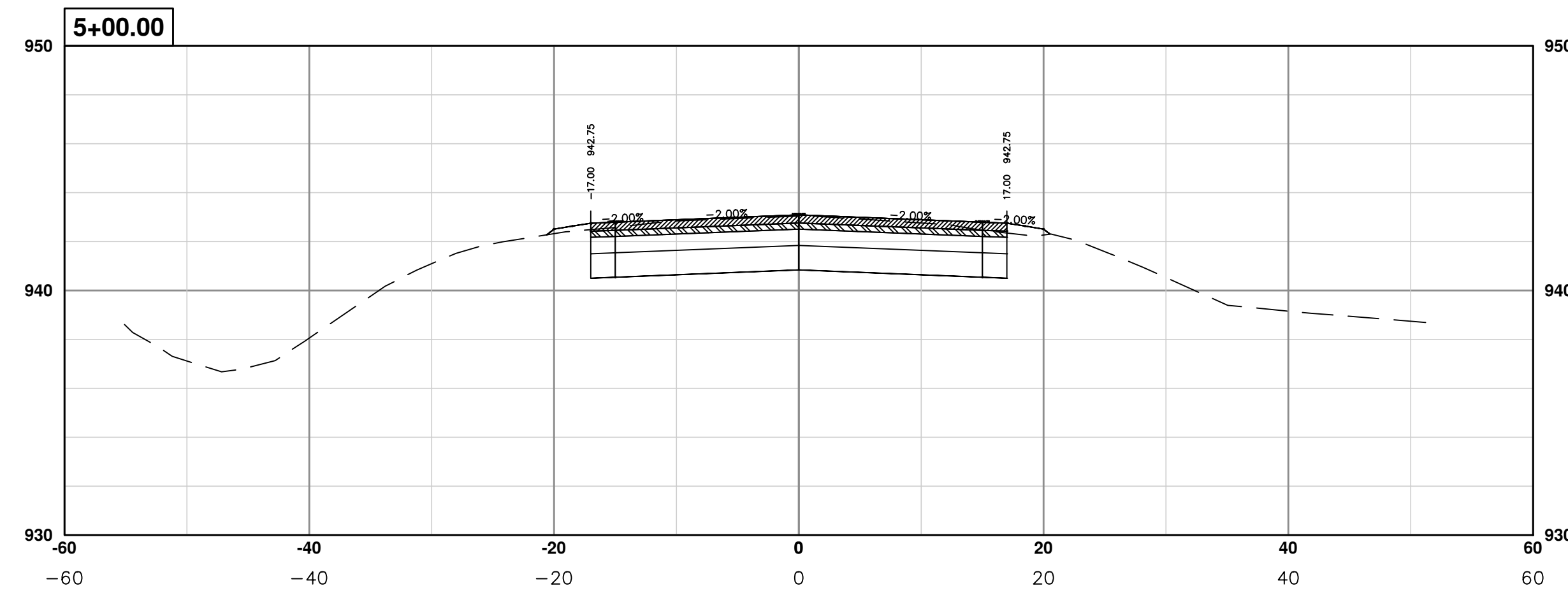
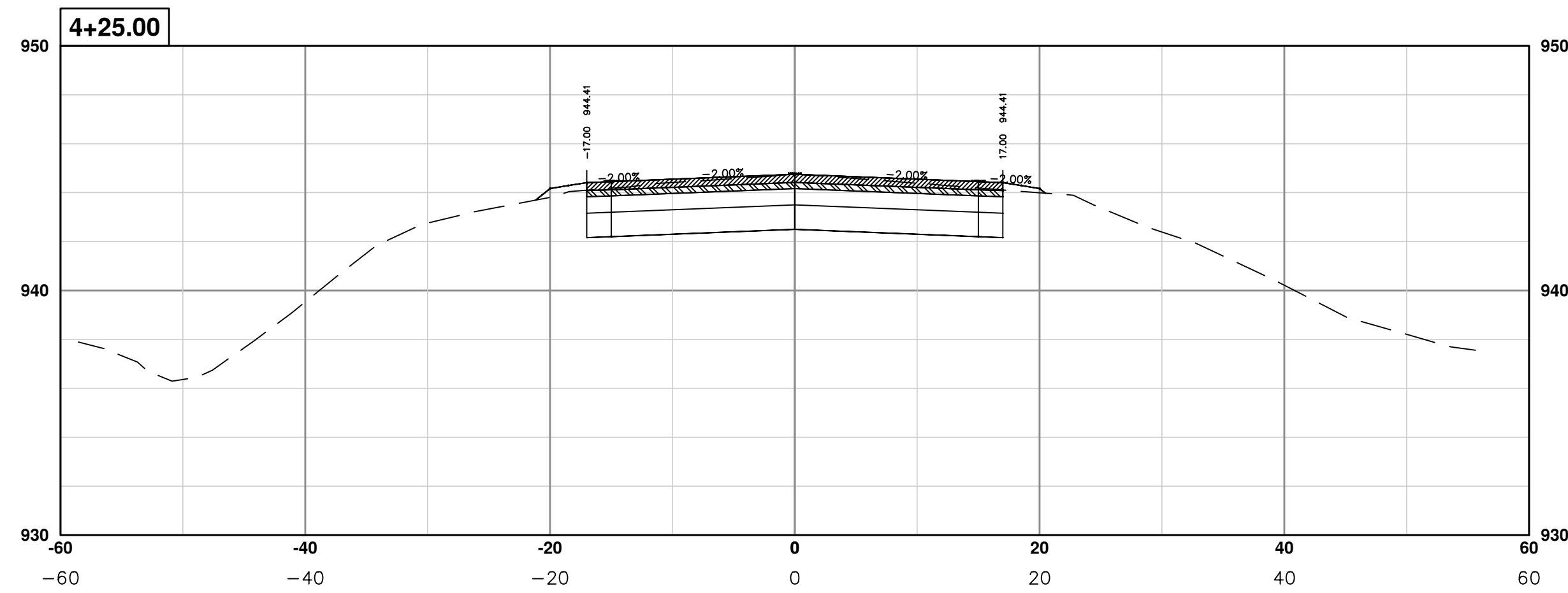
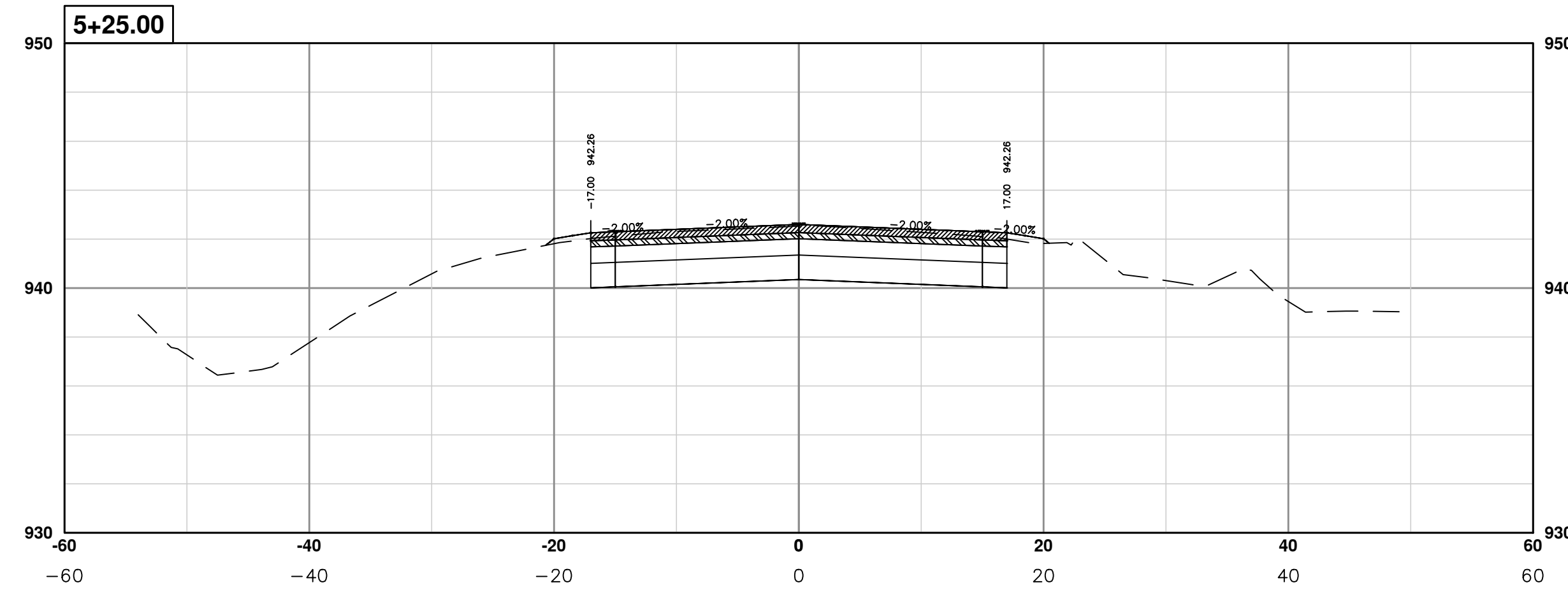
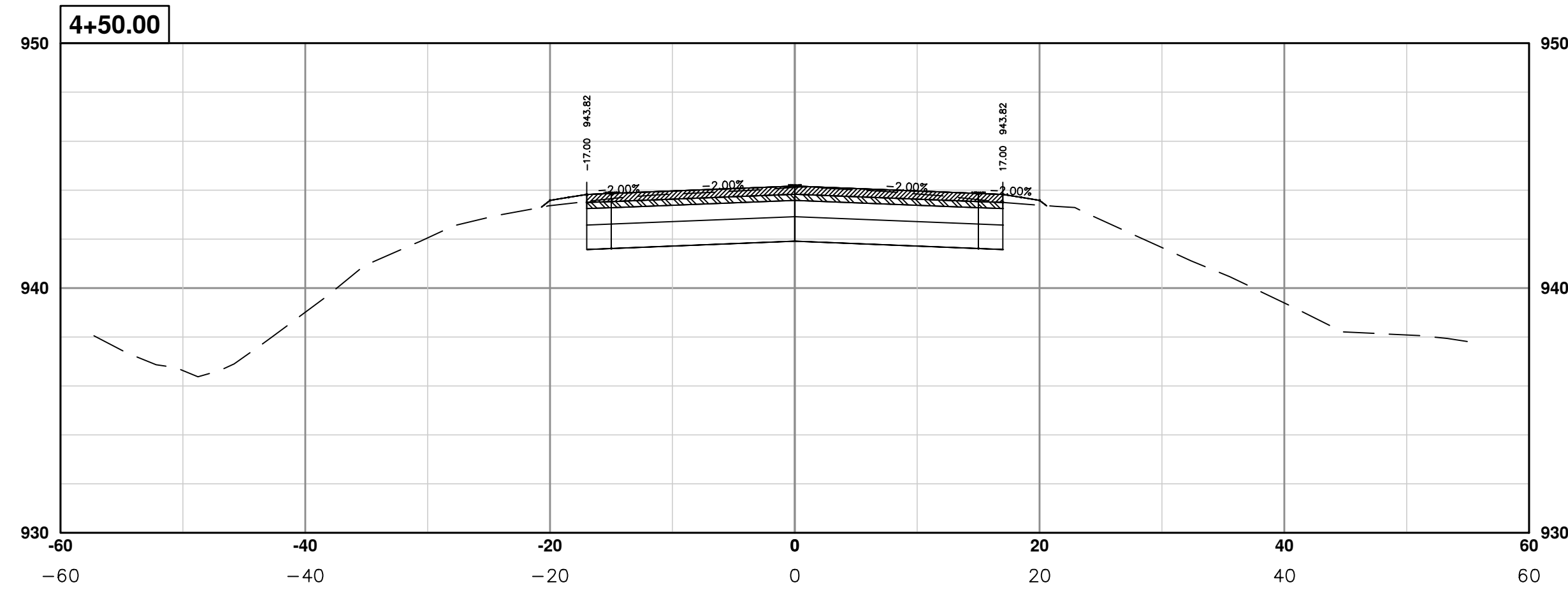
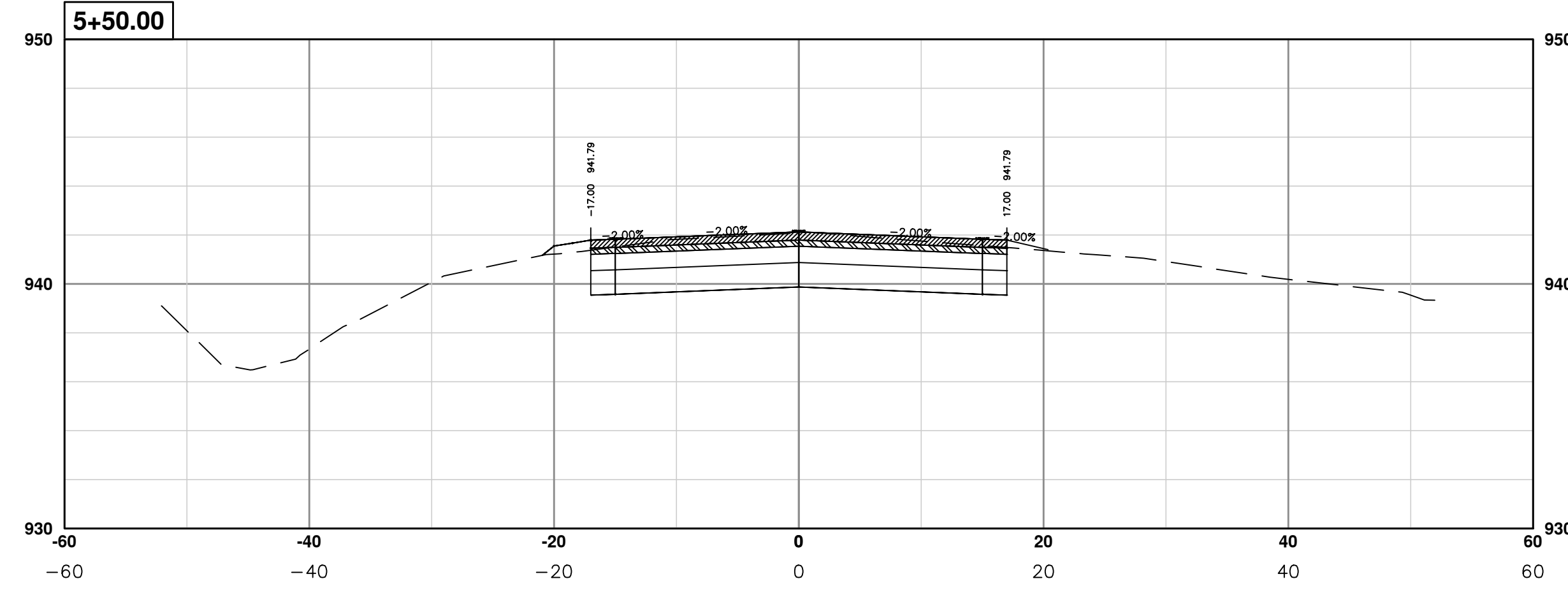
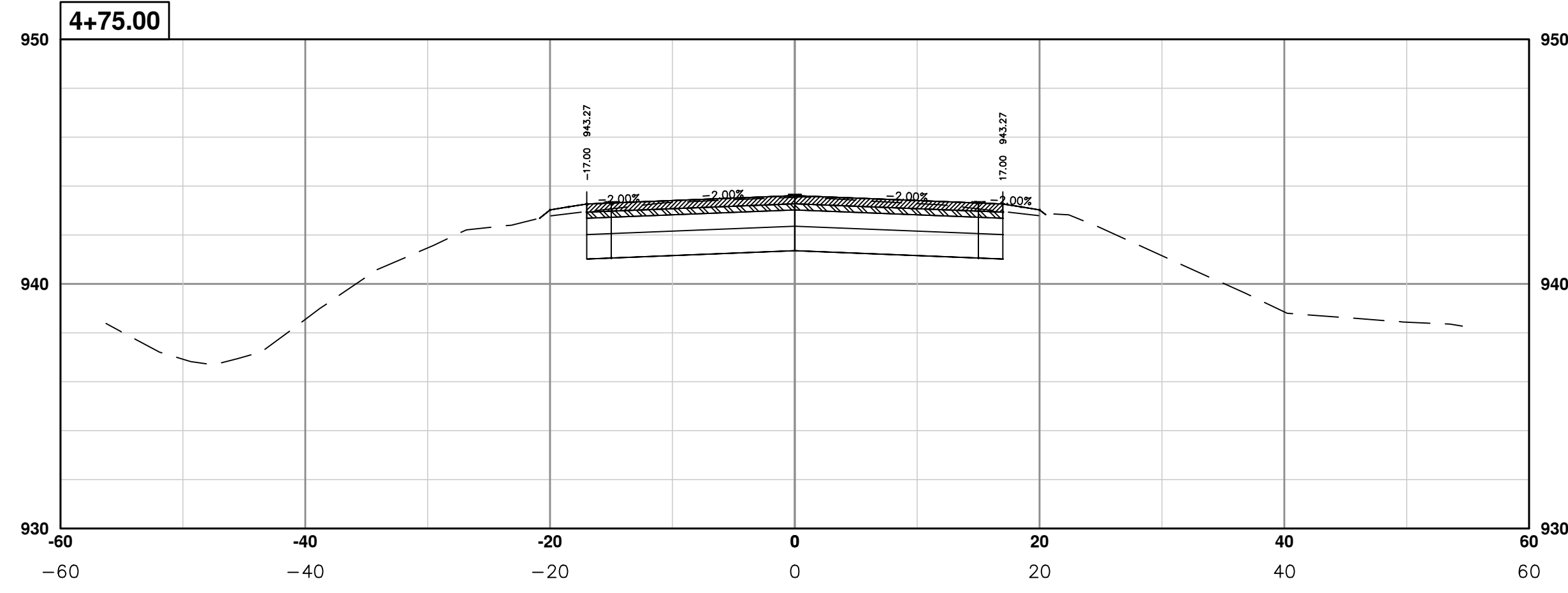
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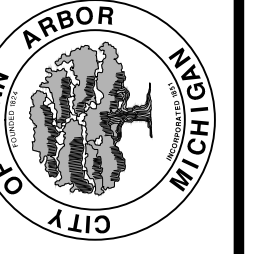
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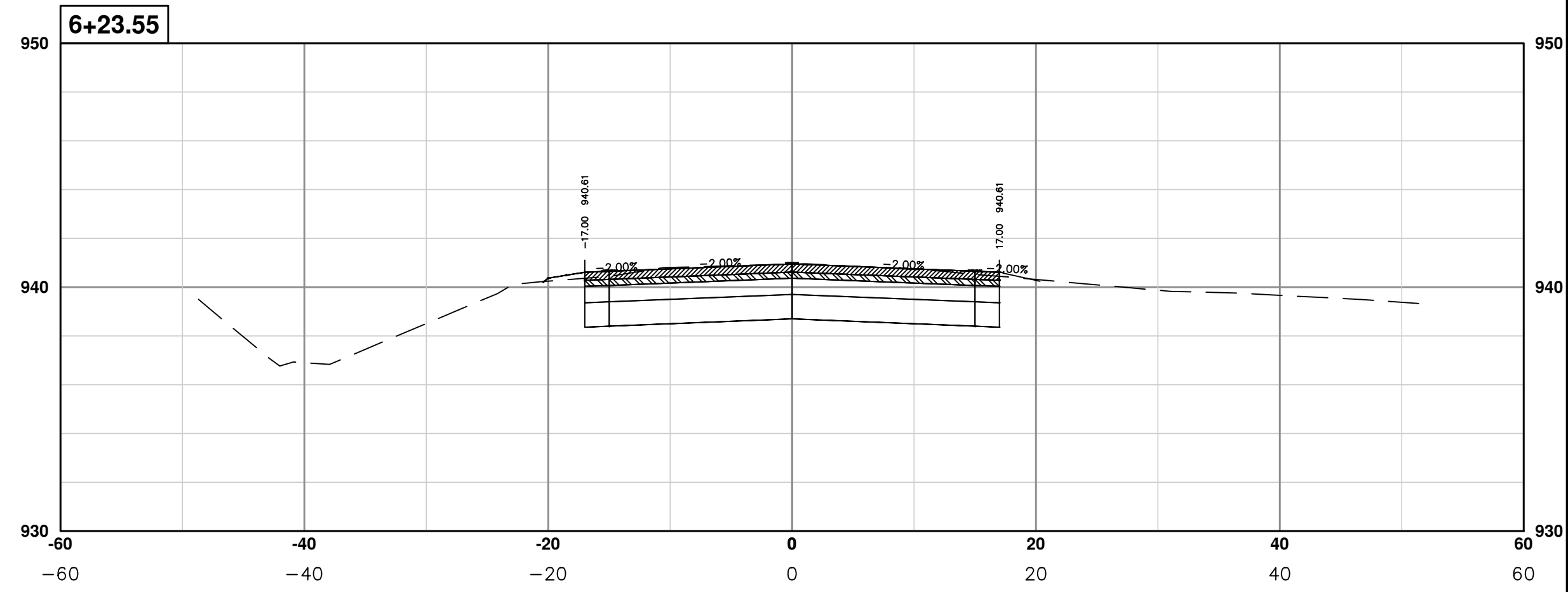
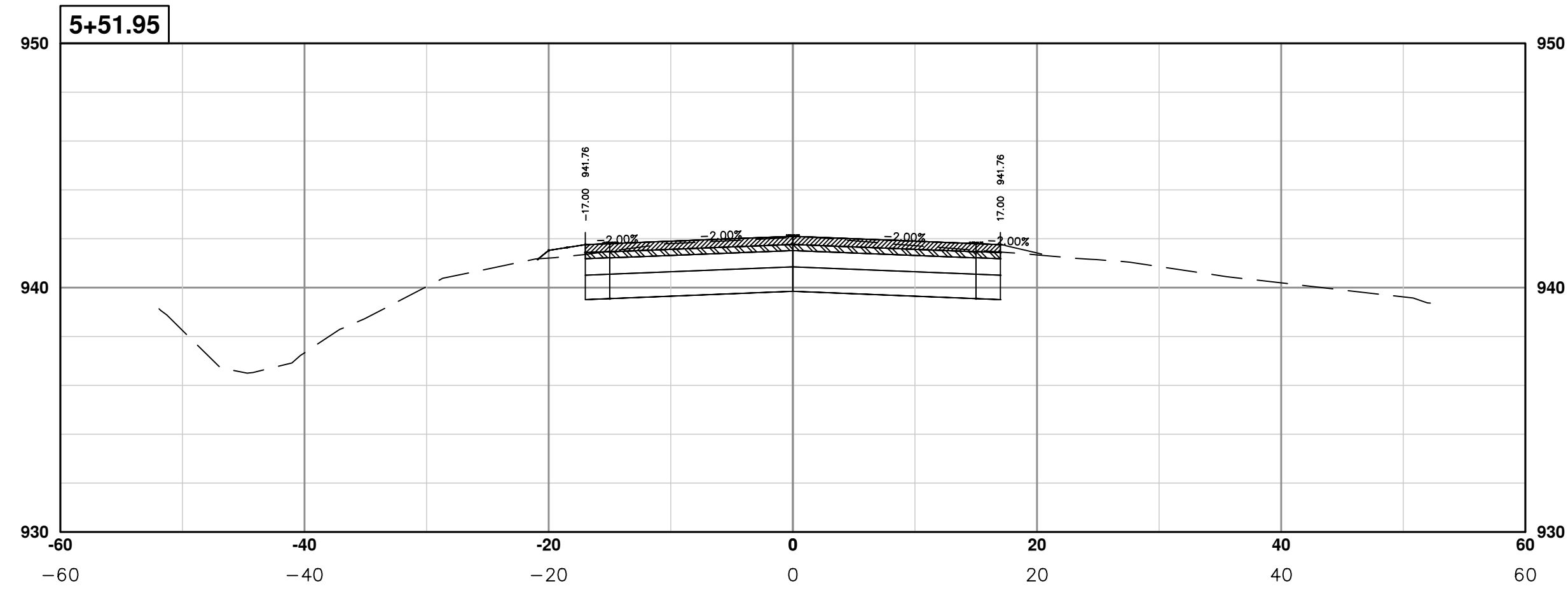
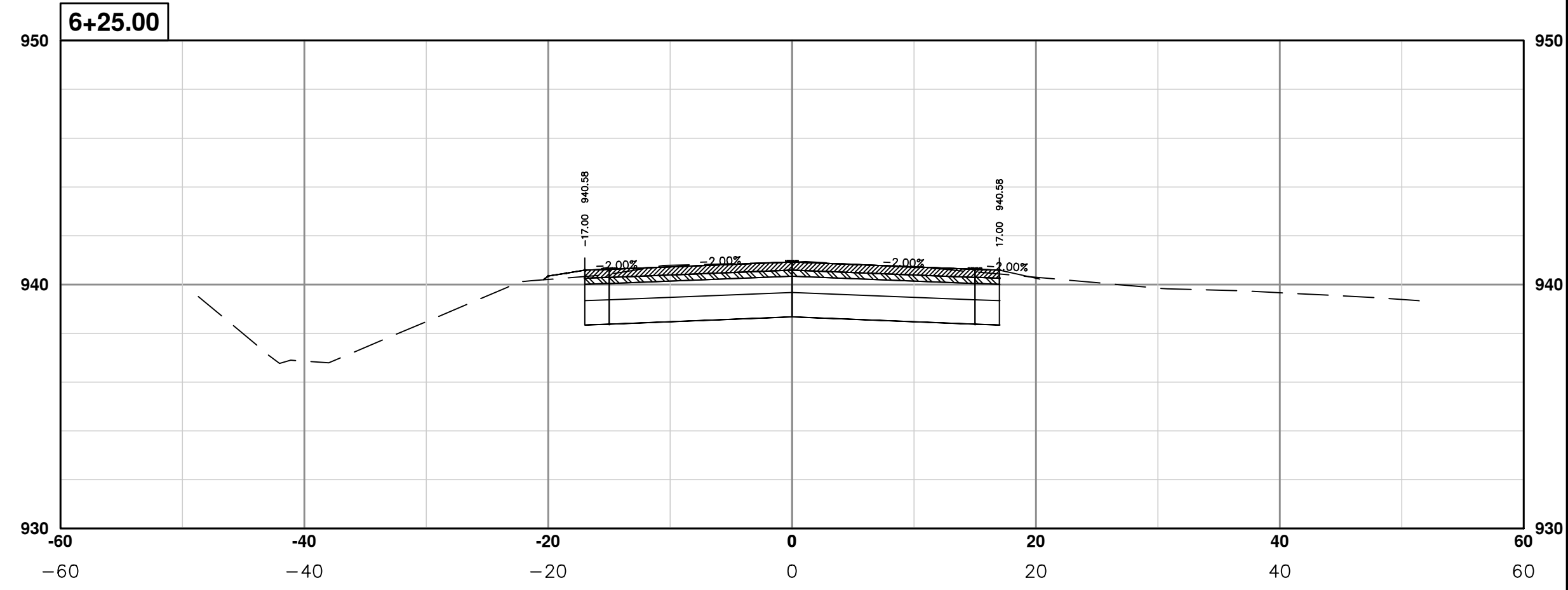
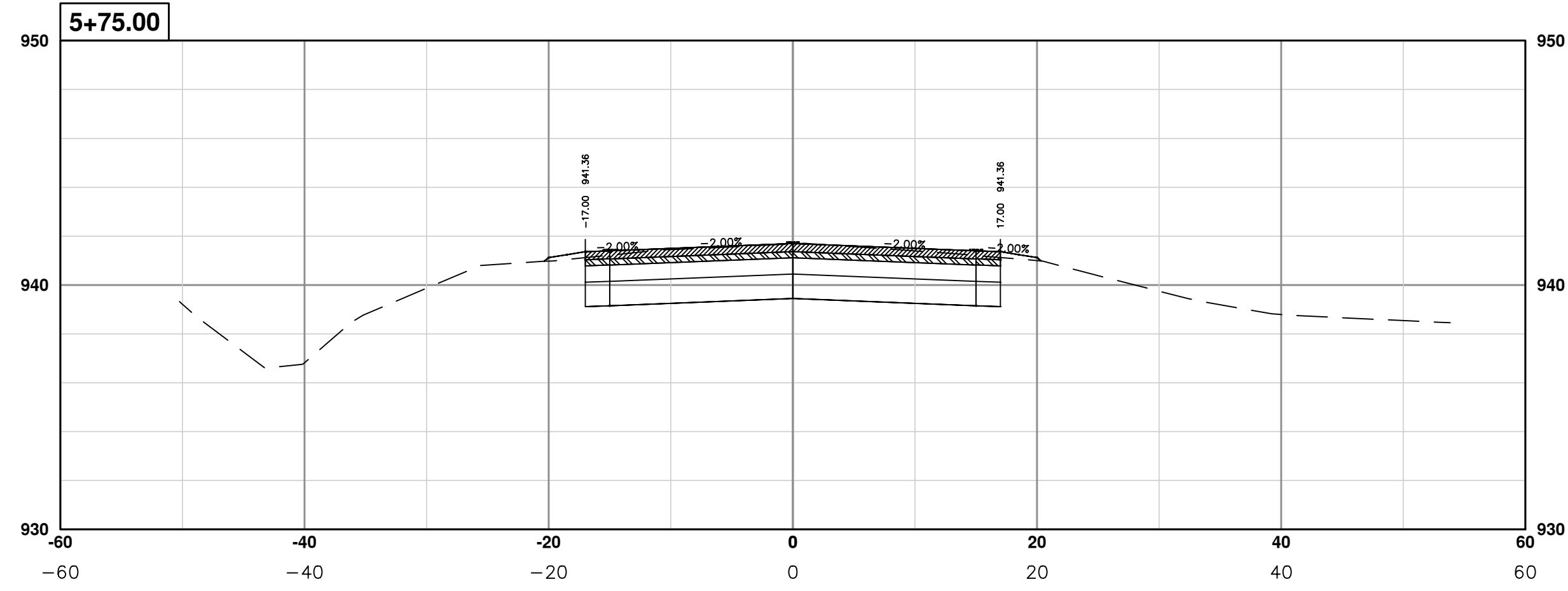
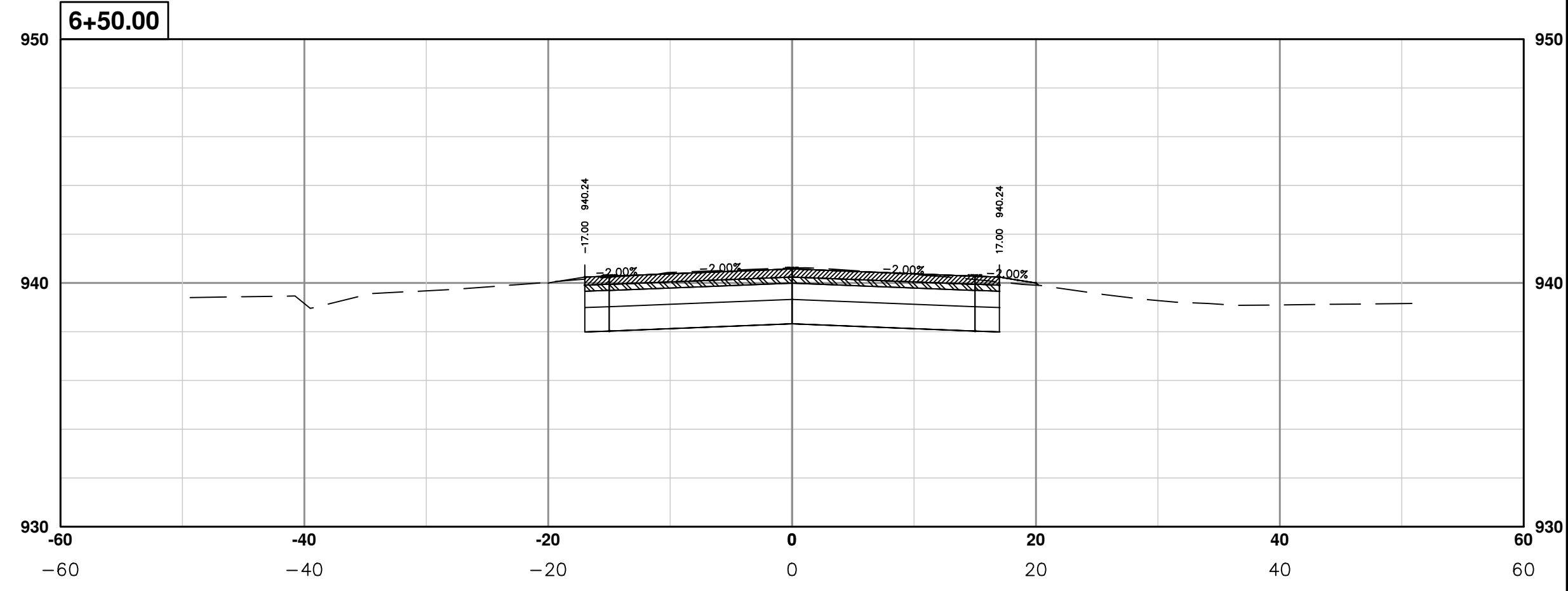
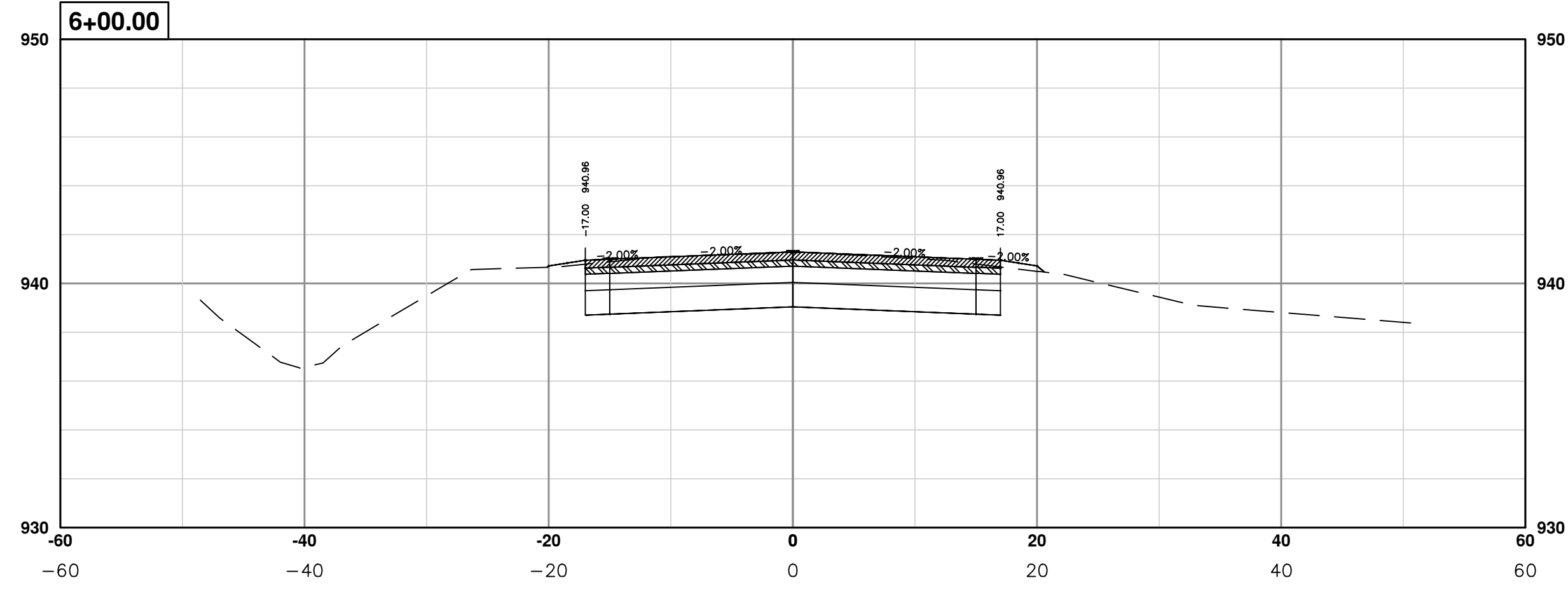
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SECTION PLANS 3 OF 34

SCALE PLAN: #####
PROFILE: 1" = 4'
DRAWING No. 2012028-70
SHEET No.

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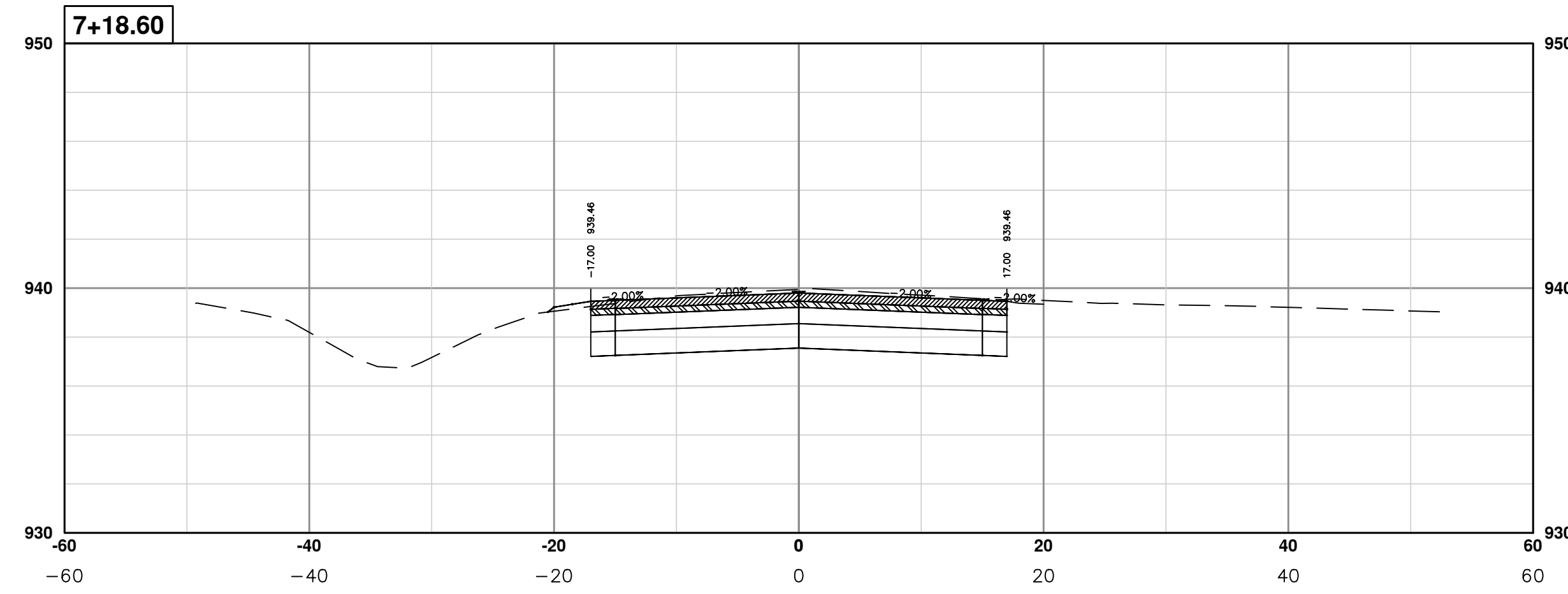
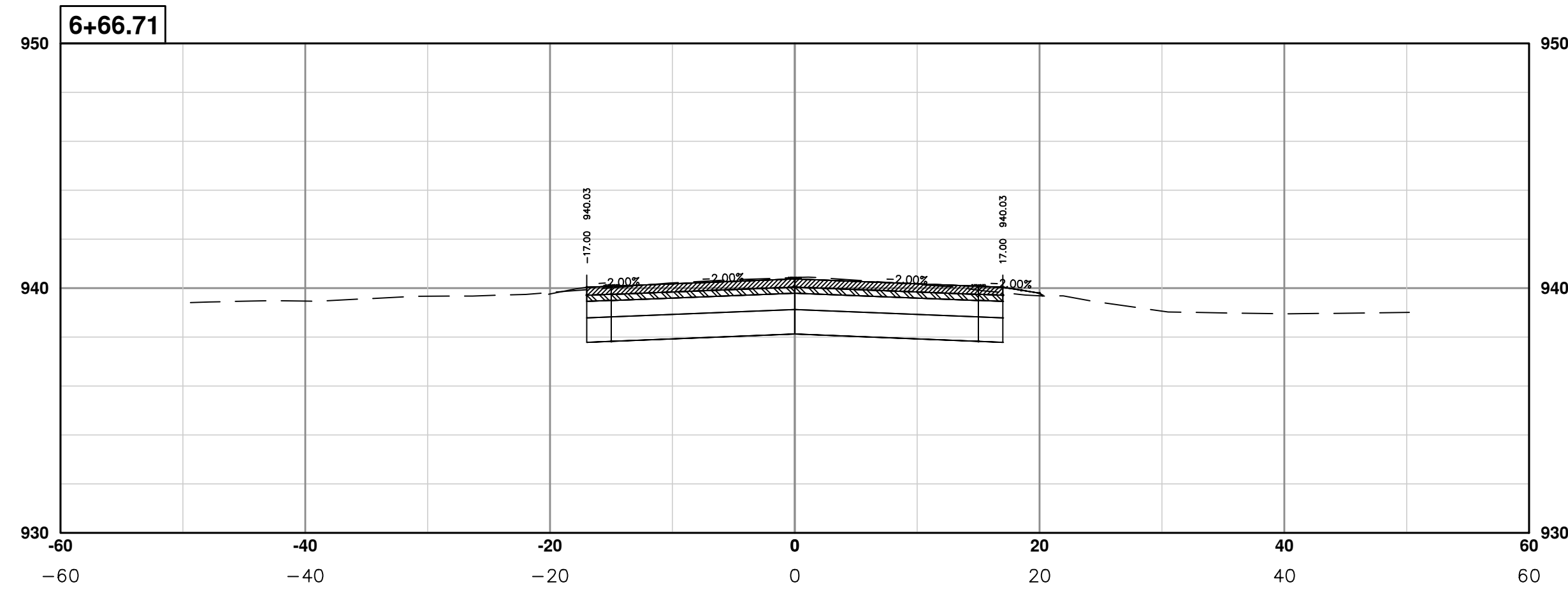
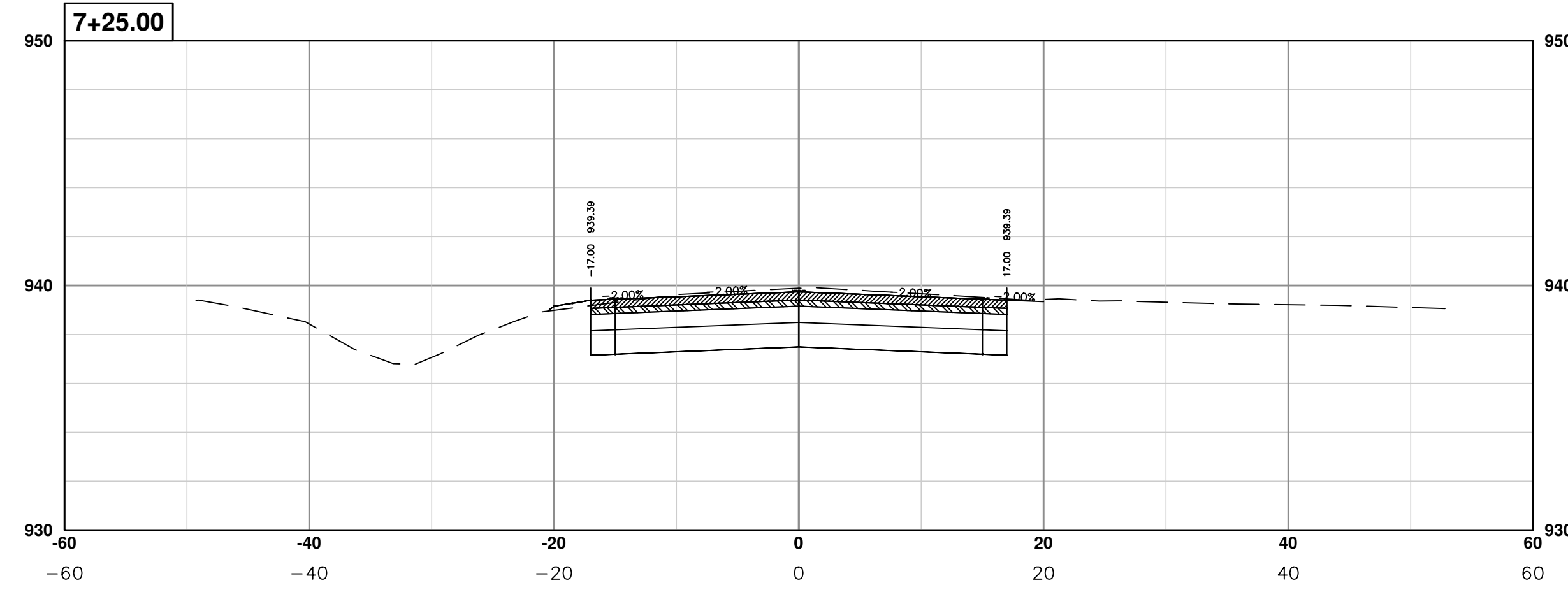
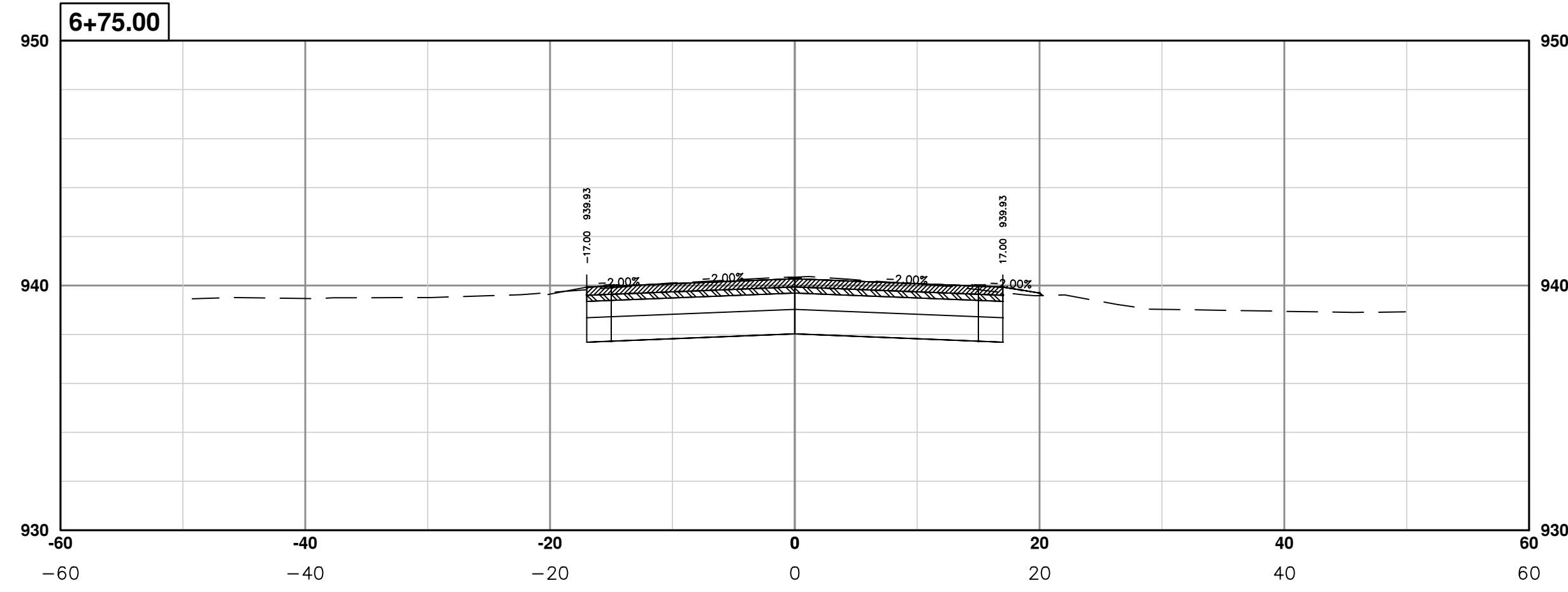
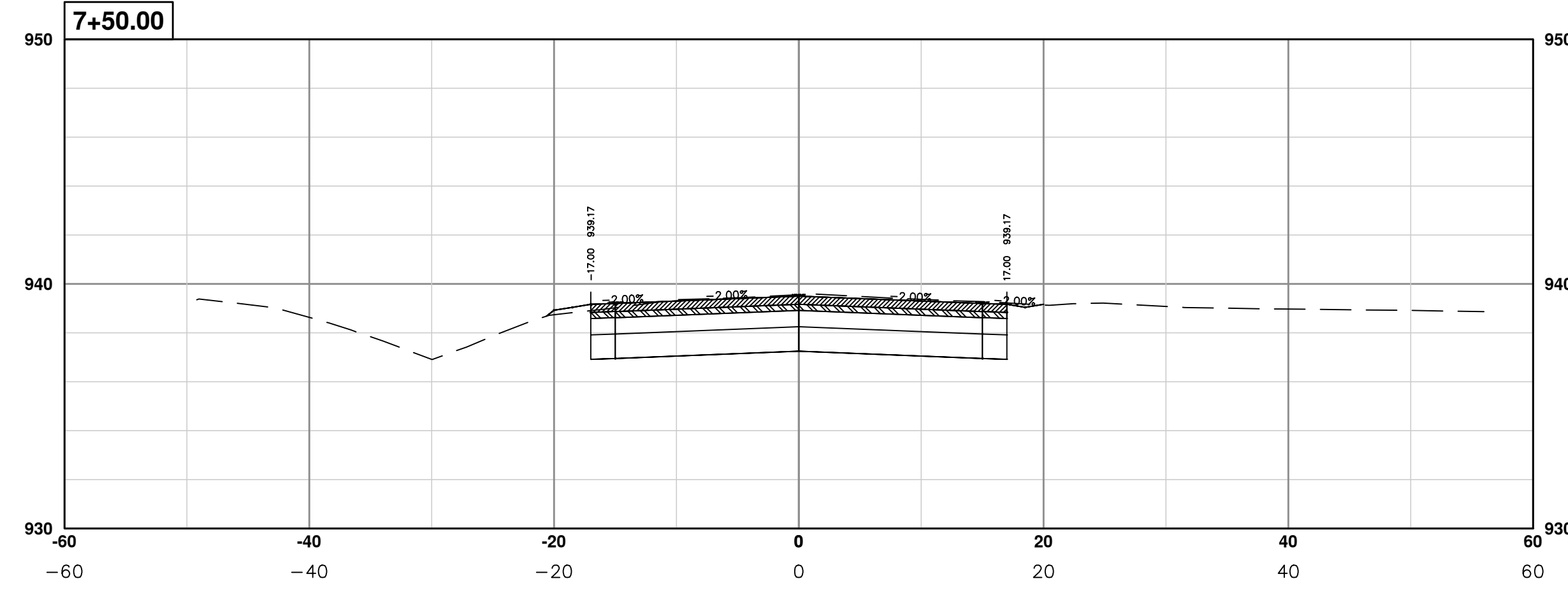
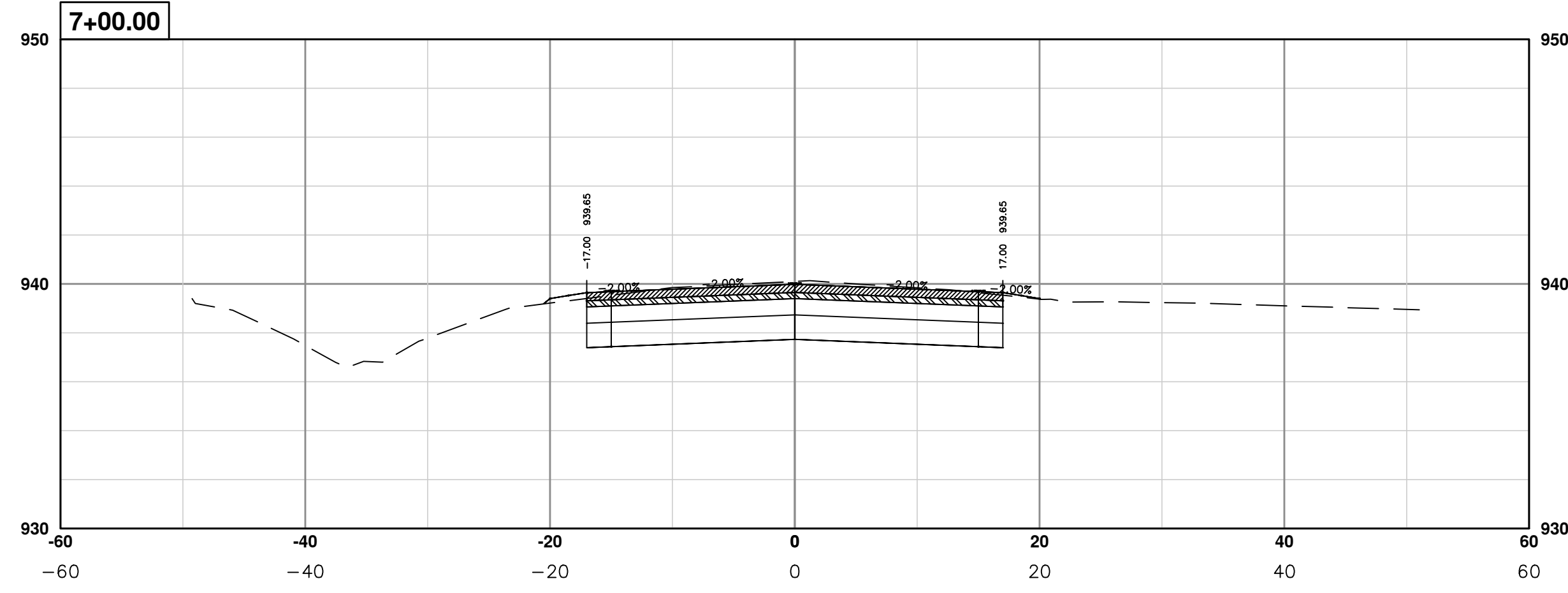
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SECTION PLANS 4 OF 94

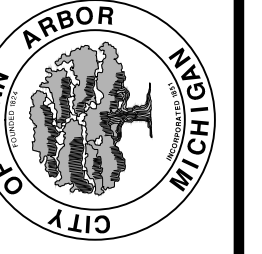
SCALE PLAN: #####
PROFILE: 1" = 4'
DRAWING No. 2012028-71
SHEET No.

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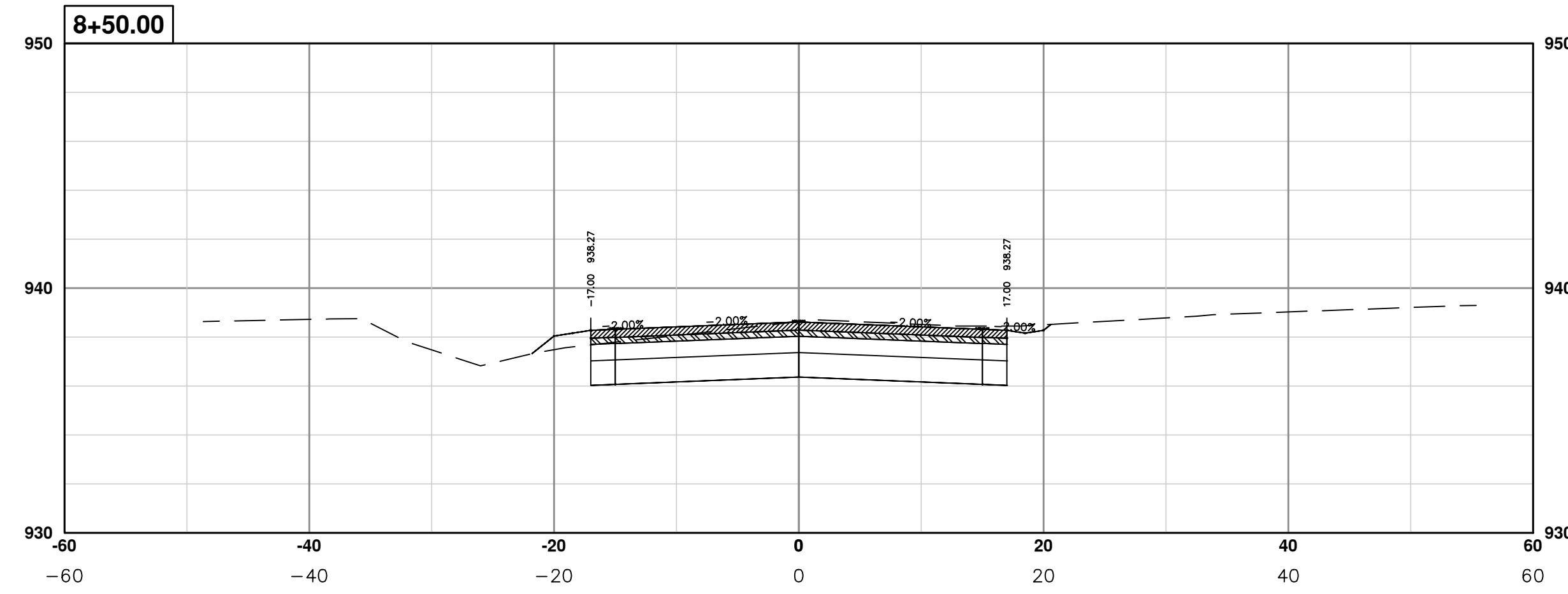
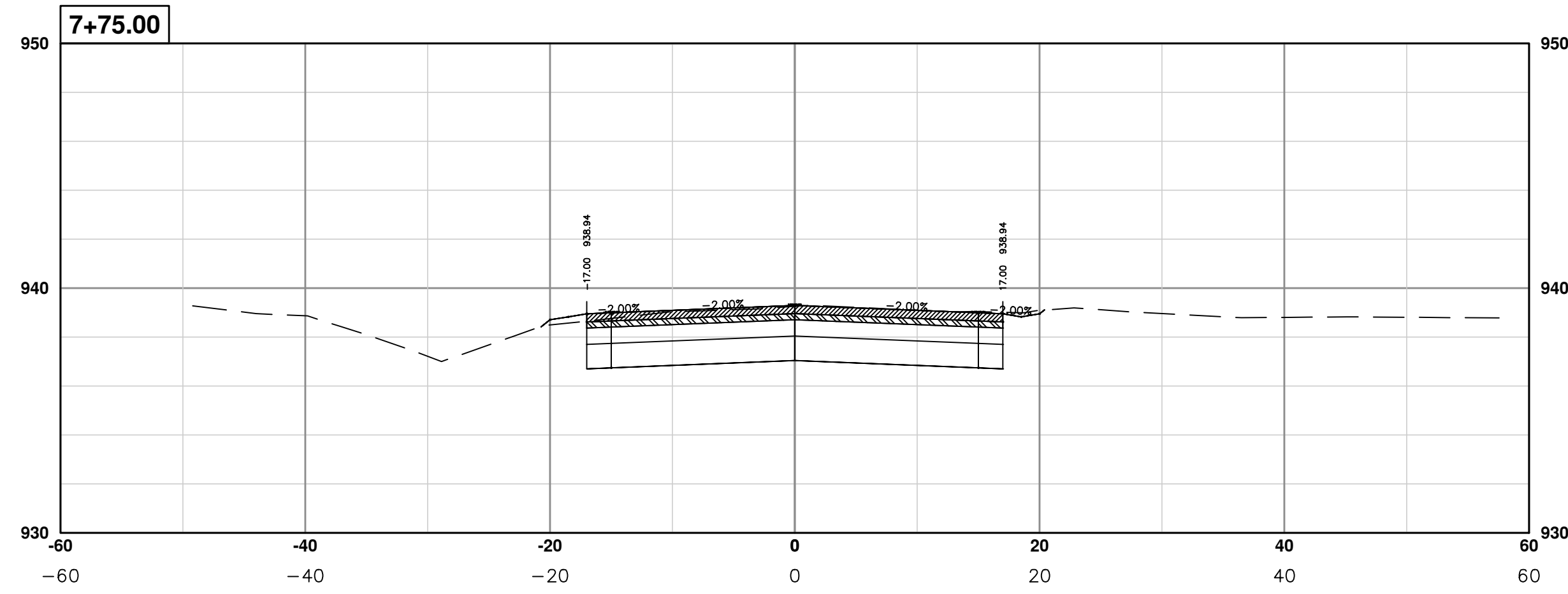
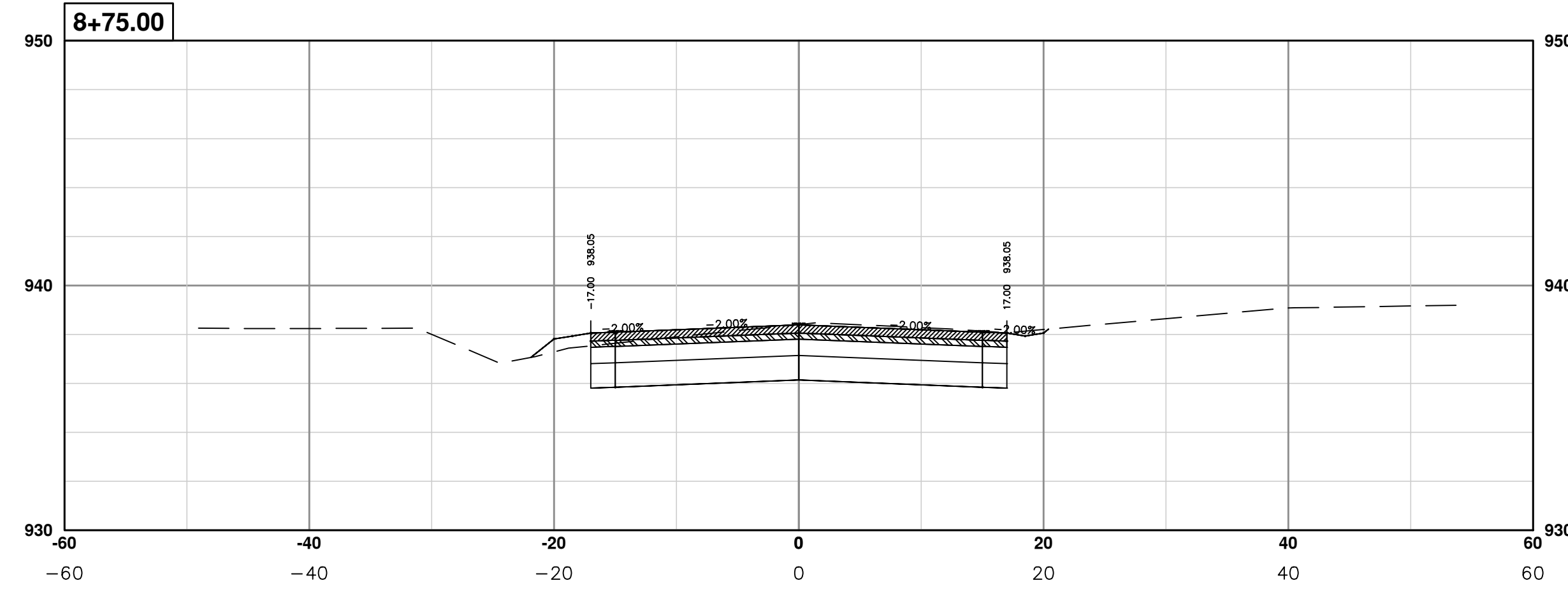
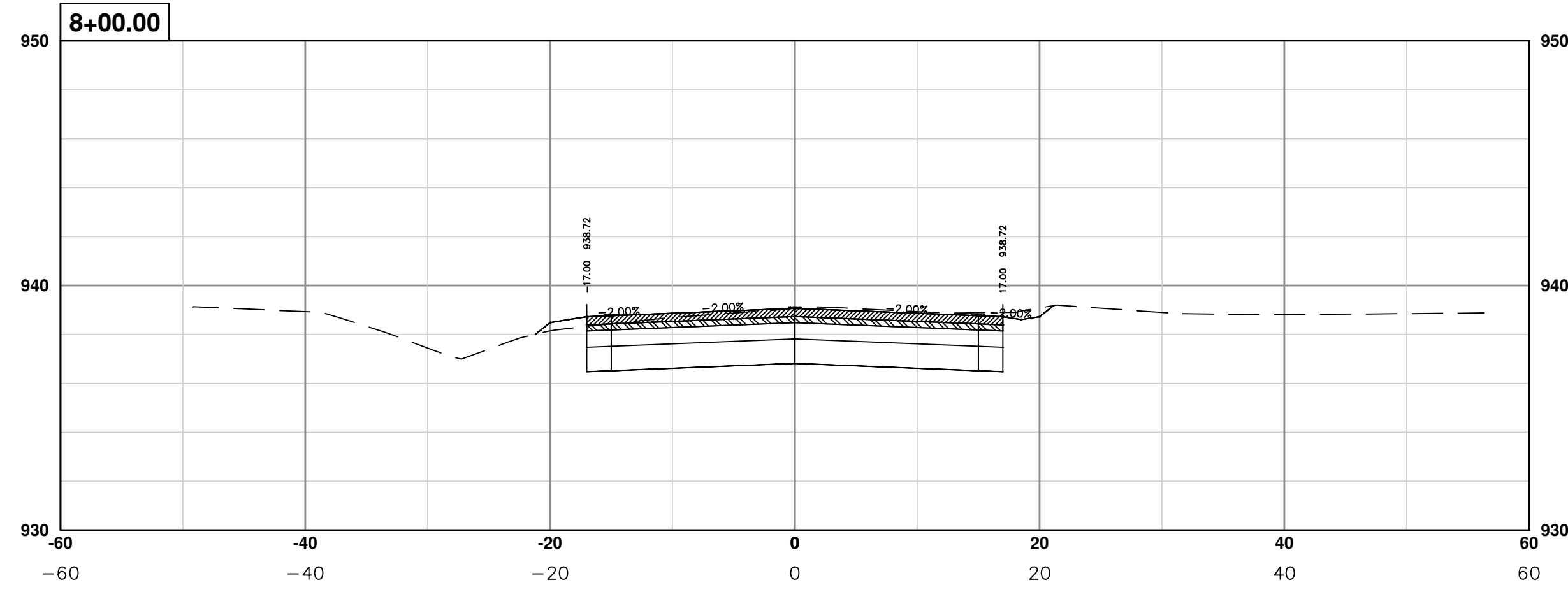
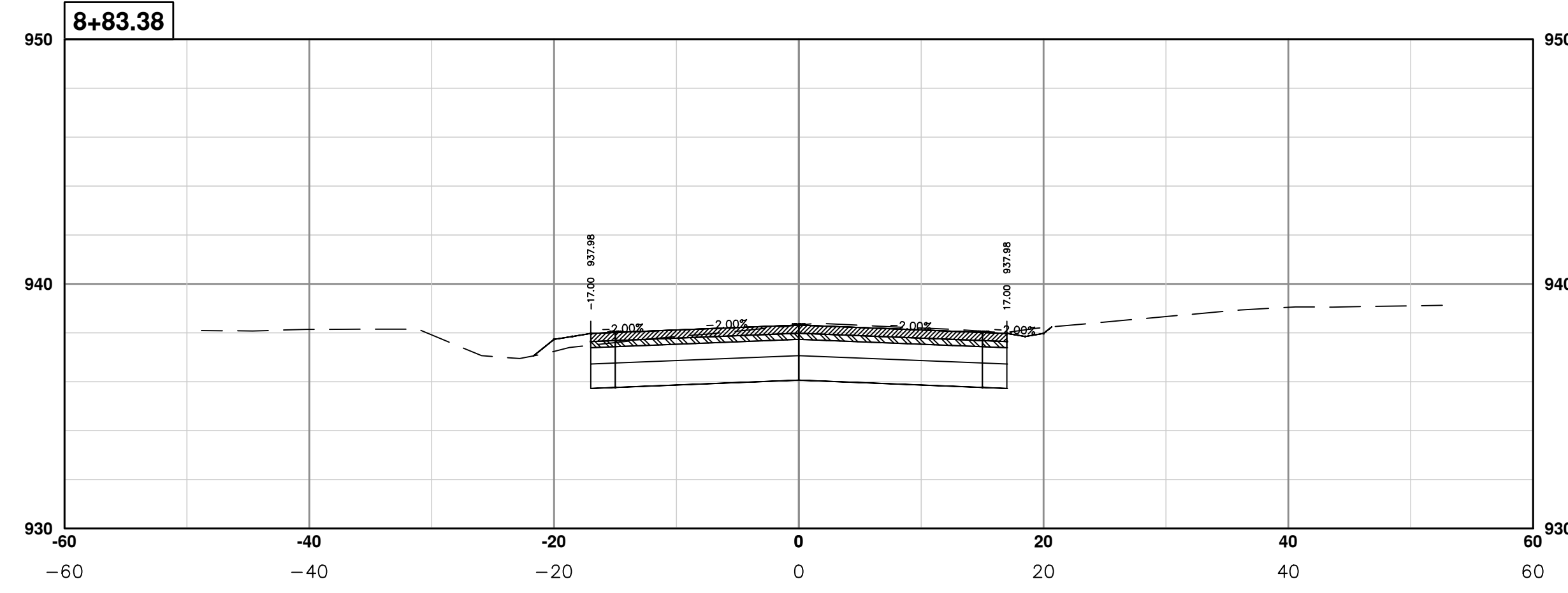
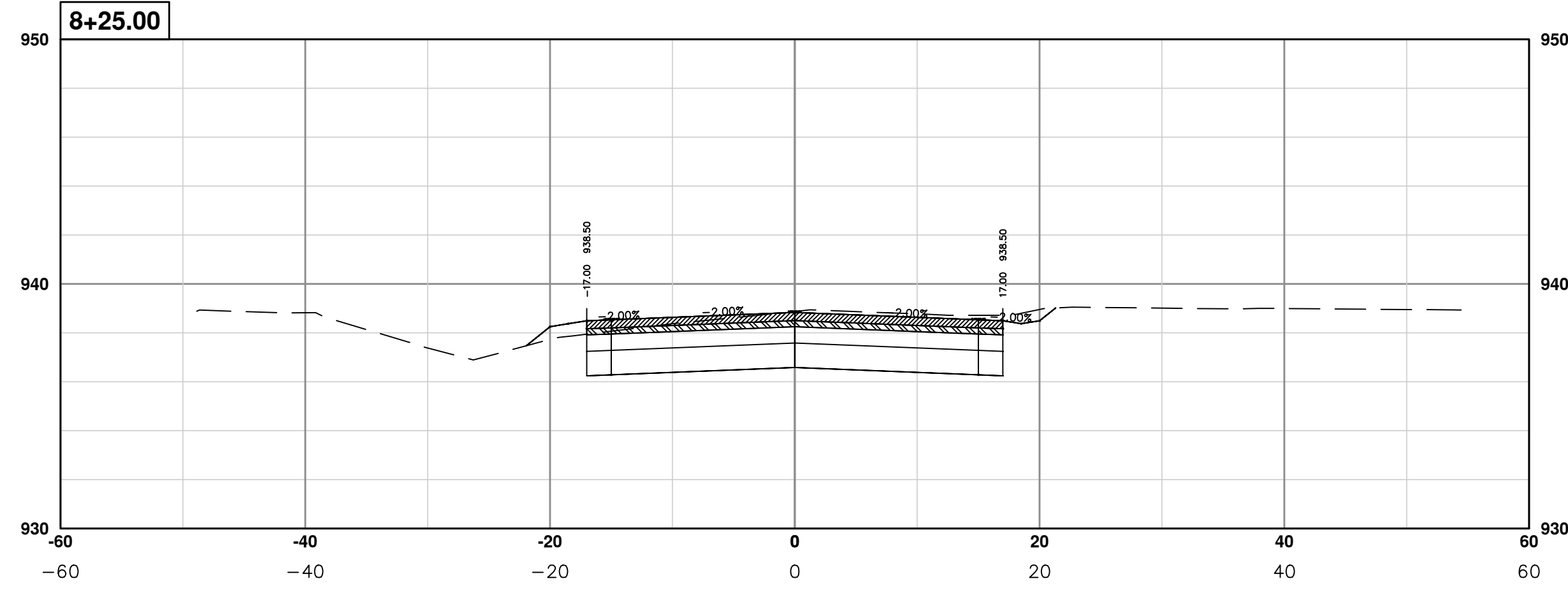
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SECTION PLANS 5 OF 34

SCALE PLAN: #####
PROFILE: 1" = 4'
DRAWING No. 2012028-72
SHEET No.

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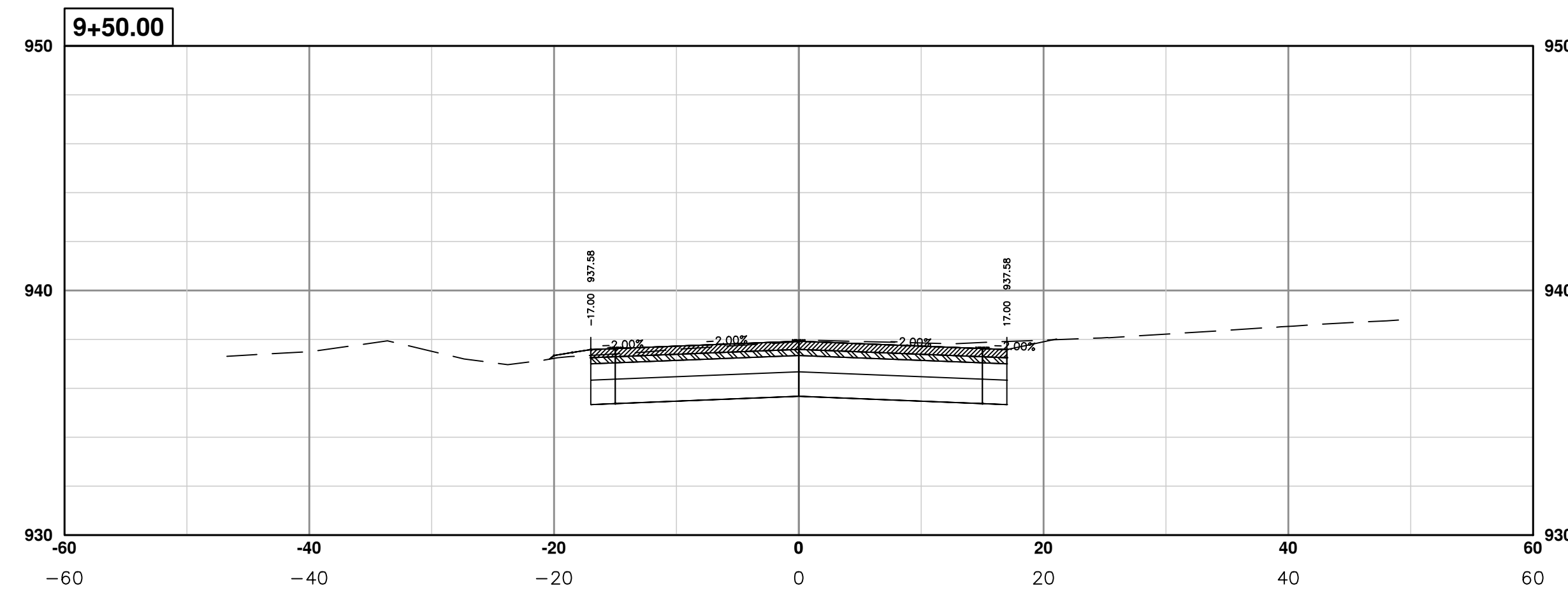
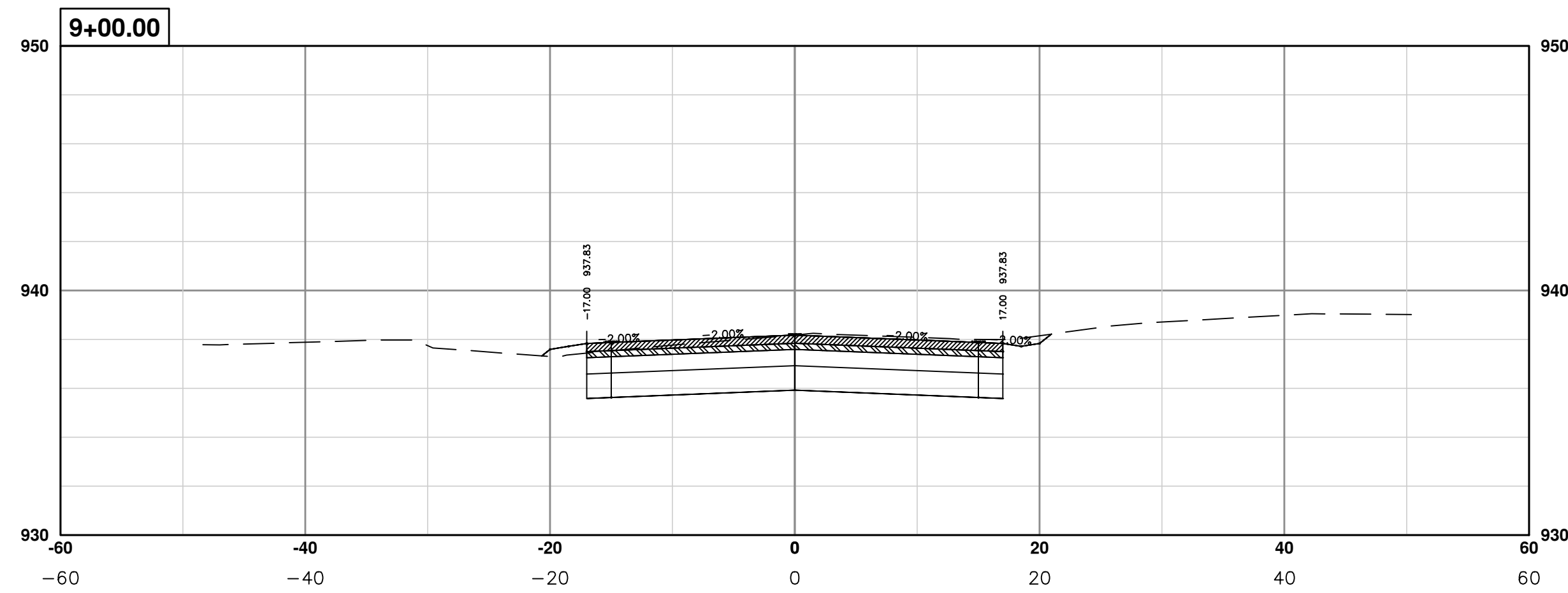
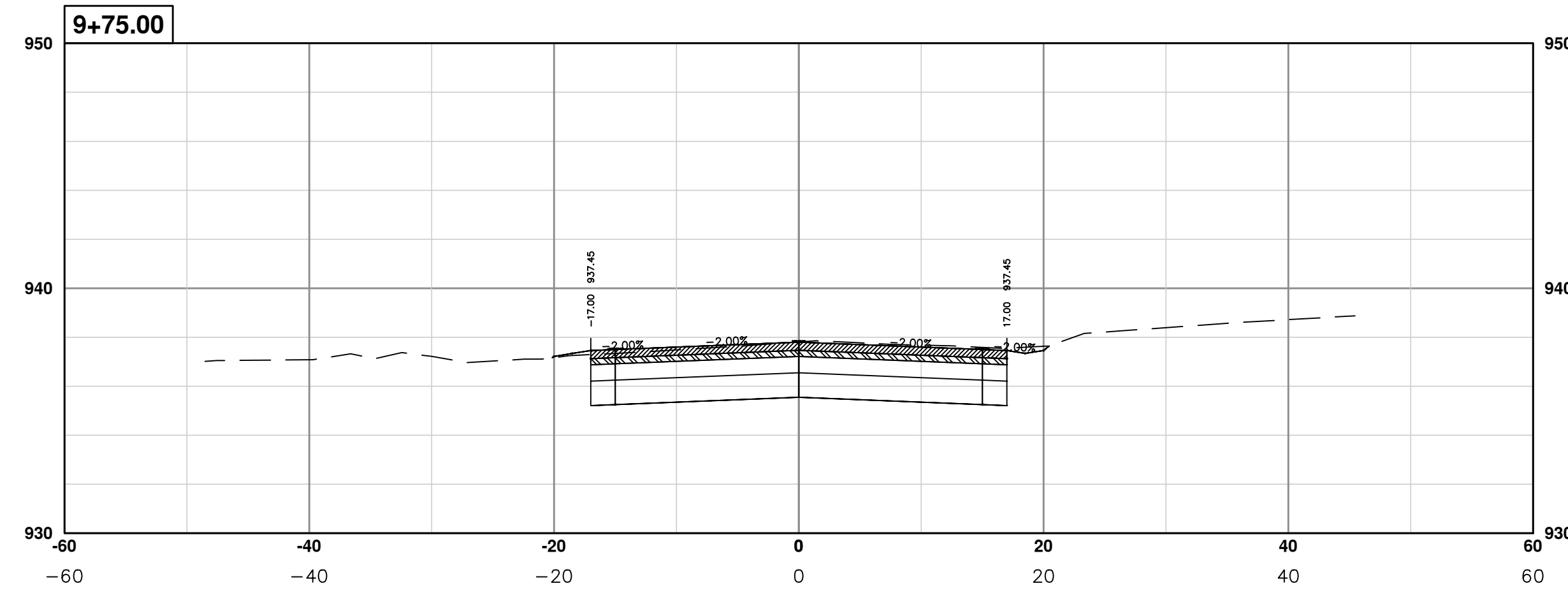
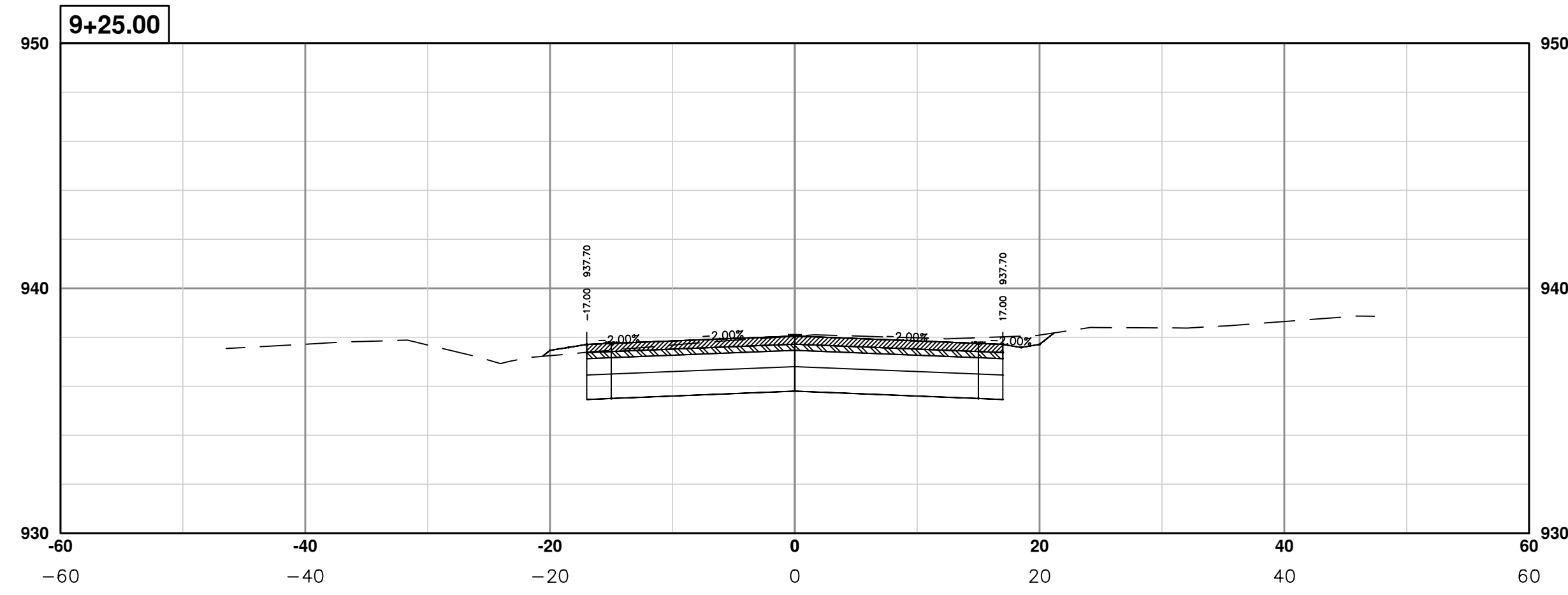
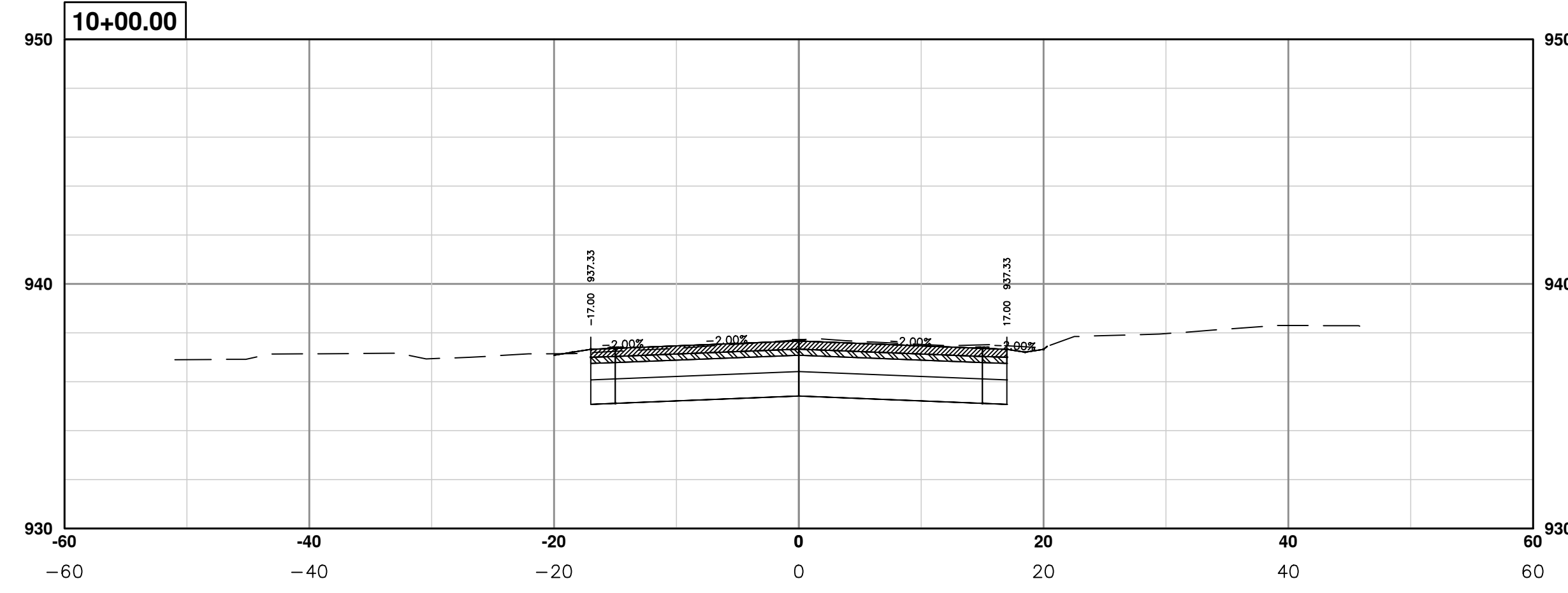
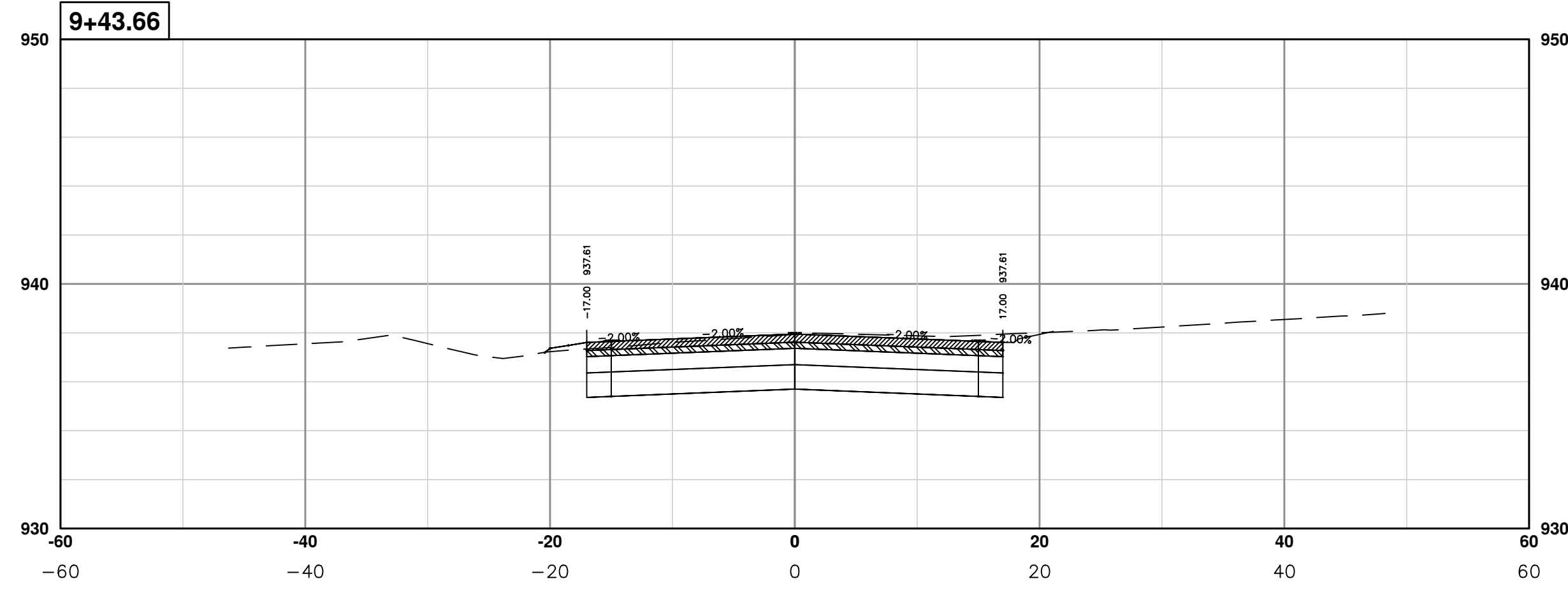
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PONTIAC TRAIL ROAD CROSS SECTIONS
SECTION PLANS 6 OF 94

SCALE PLAN: #####
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SHEET No.

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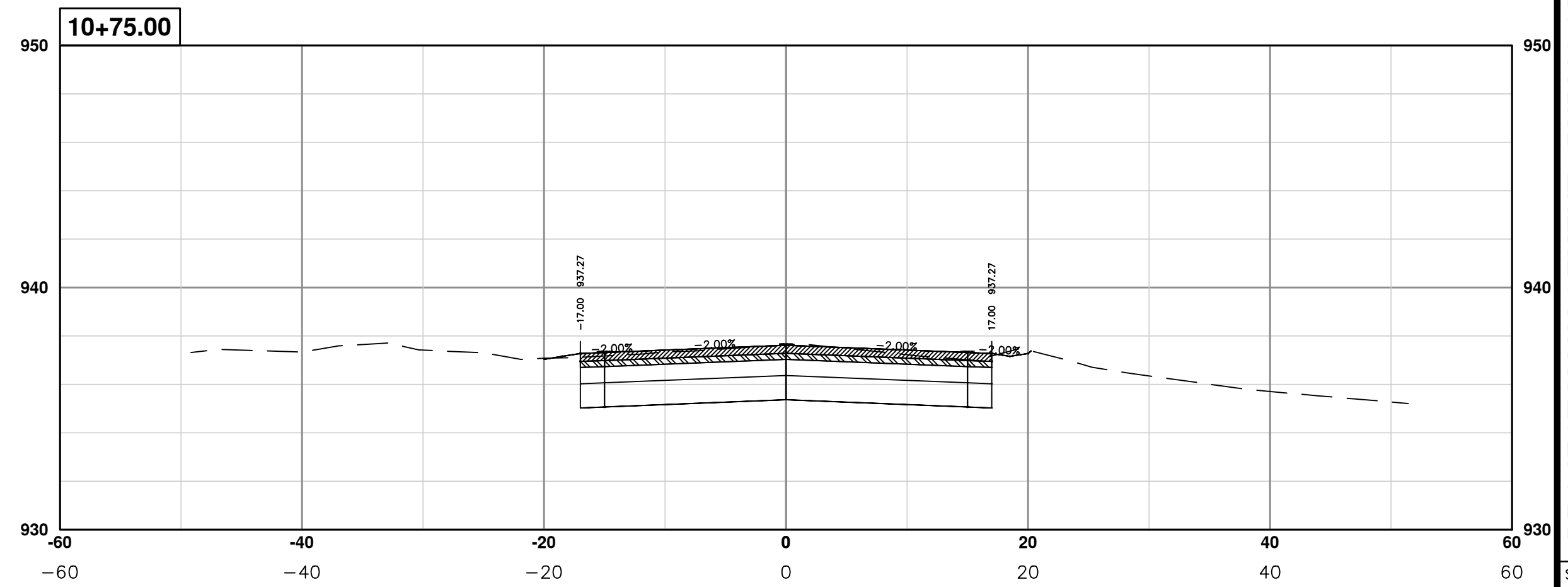
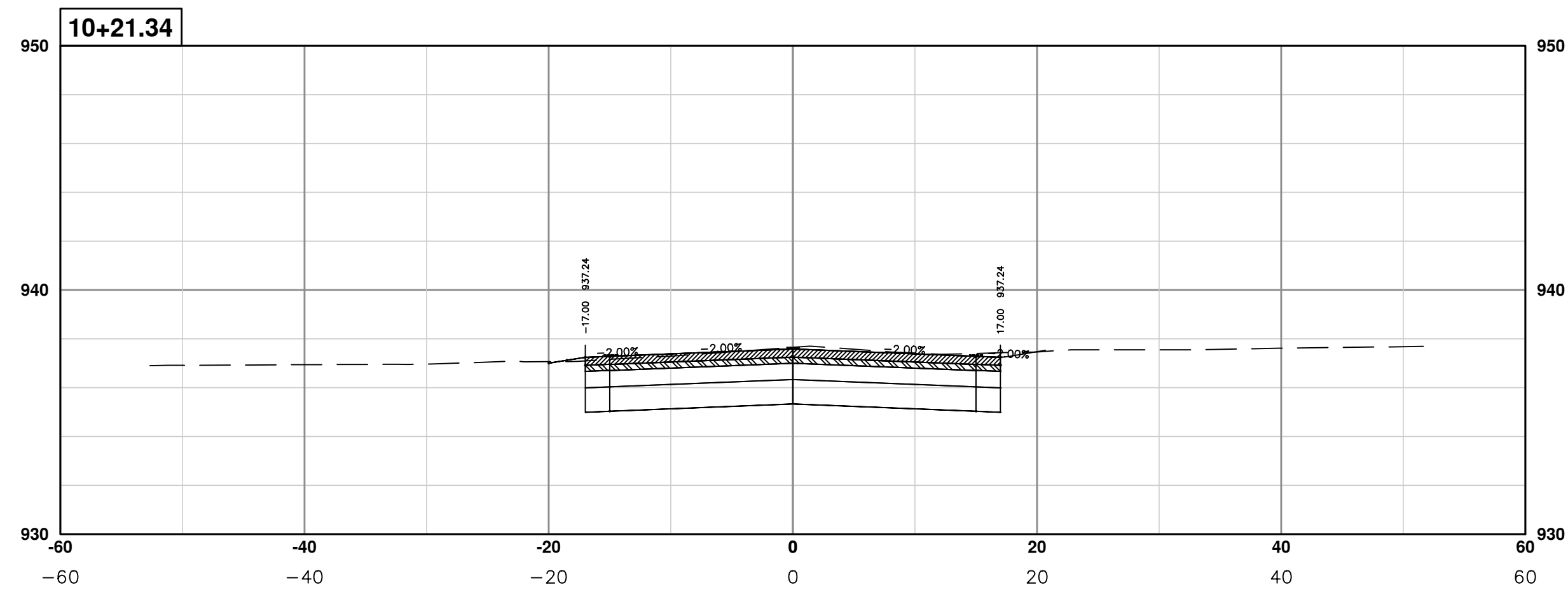
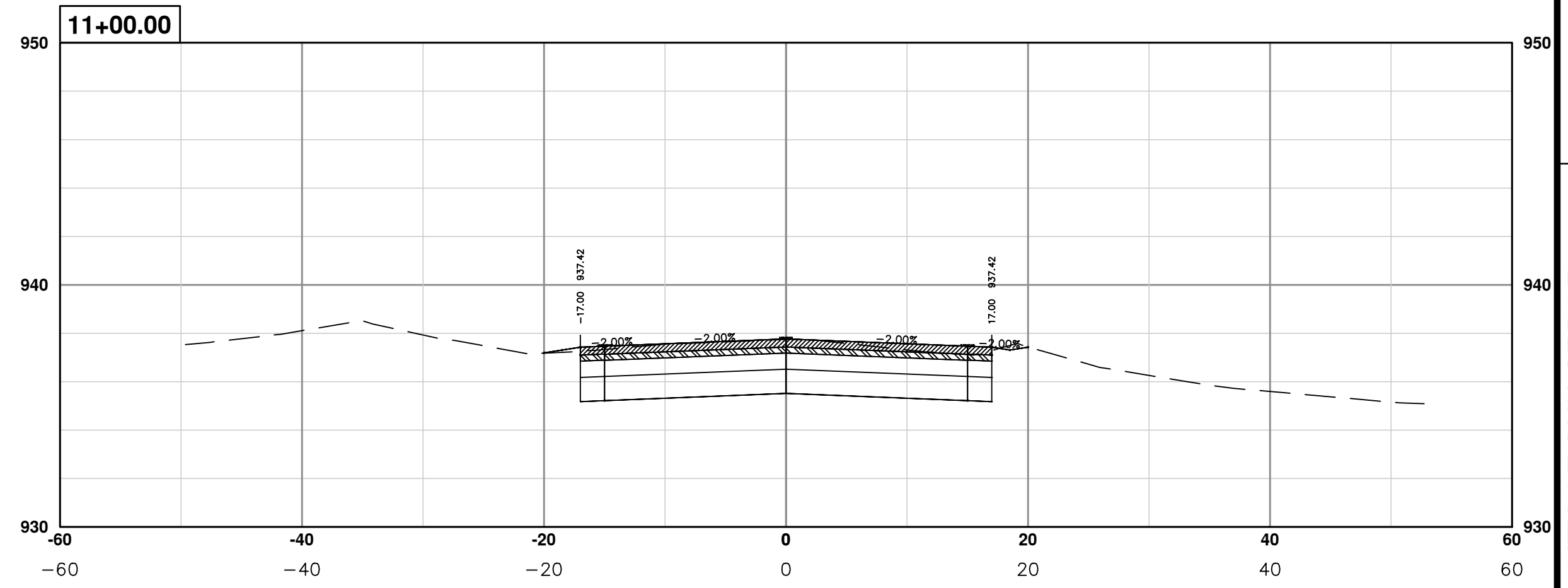
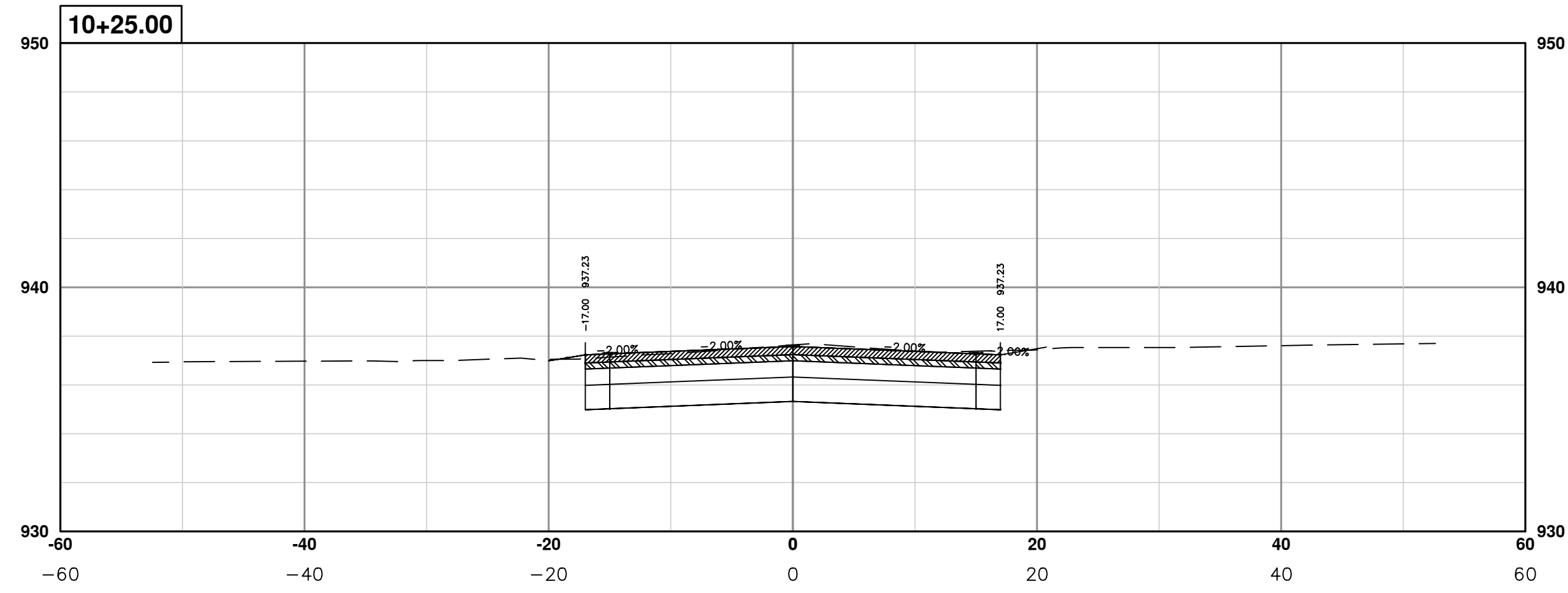
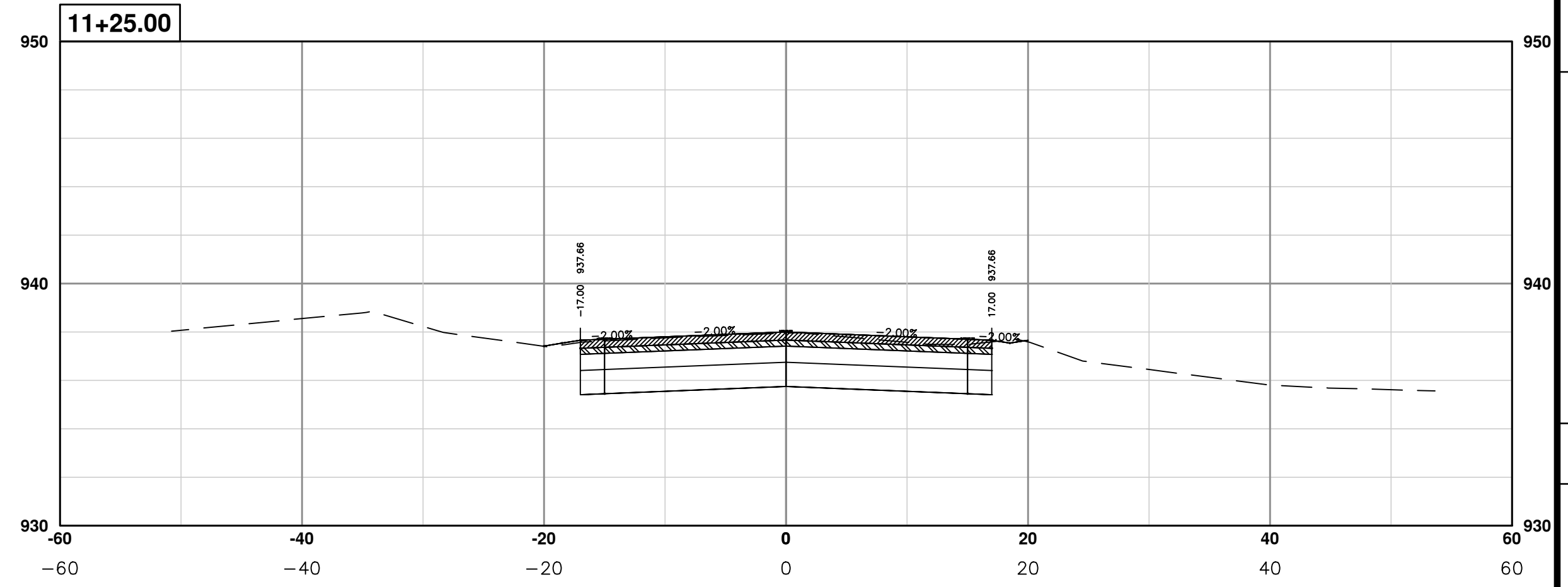
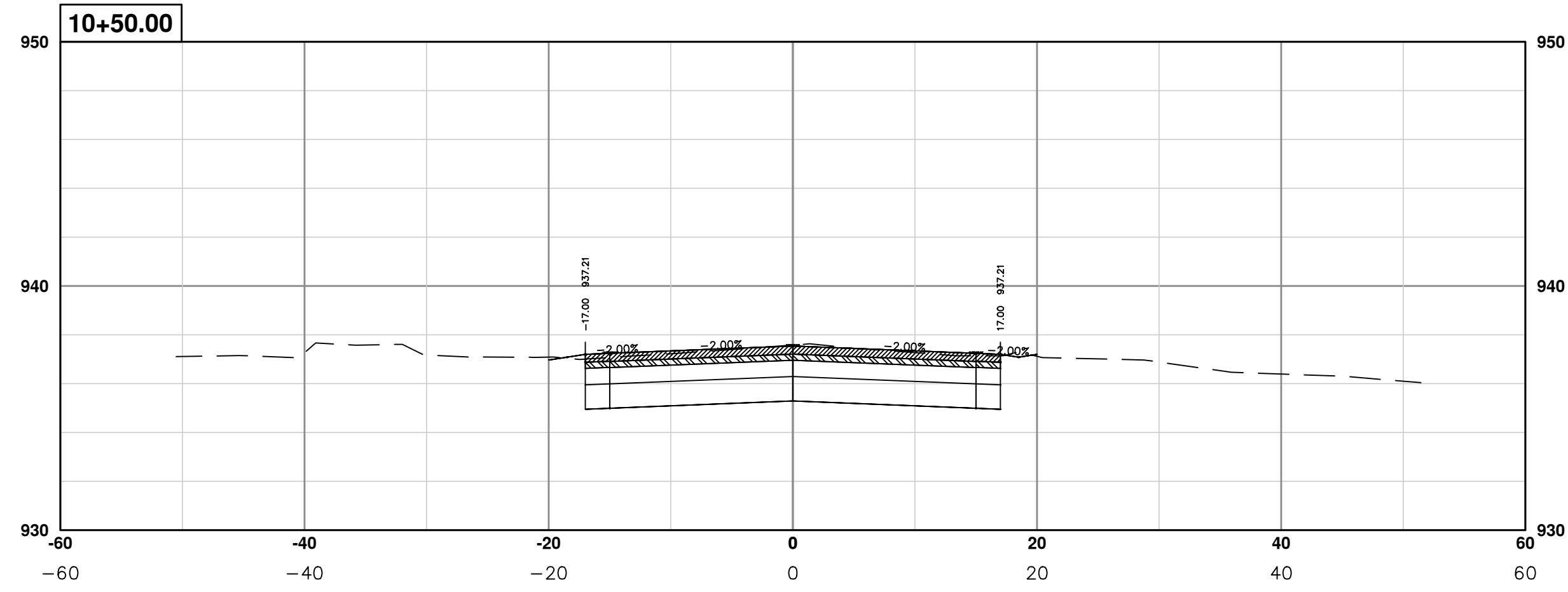
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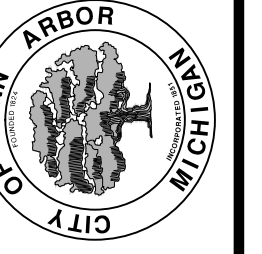
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 7 OF 94

SCALE PLAN: #####
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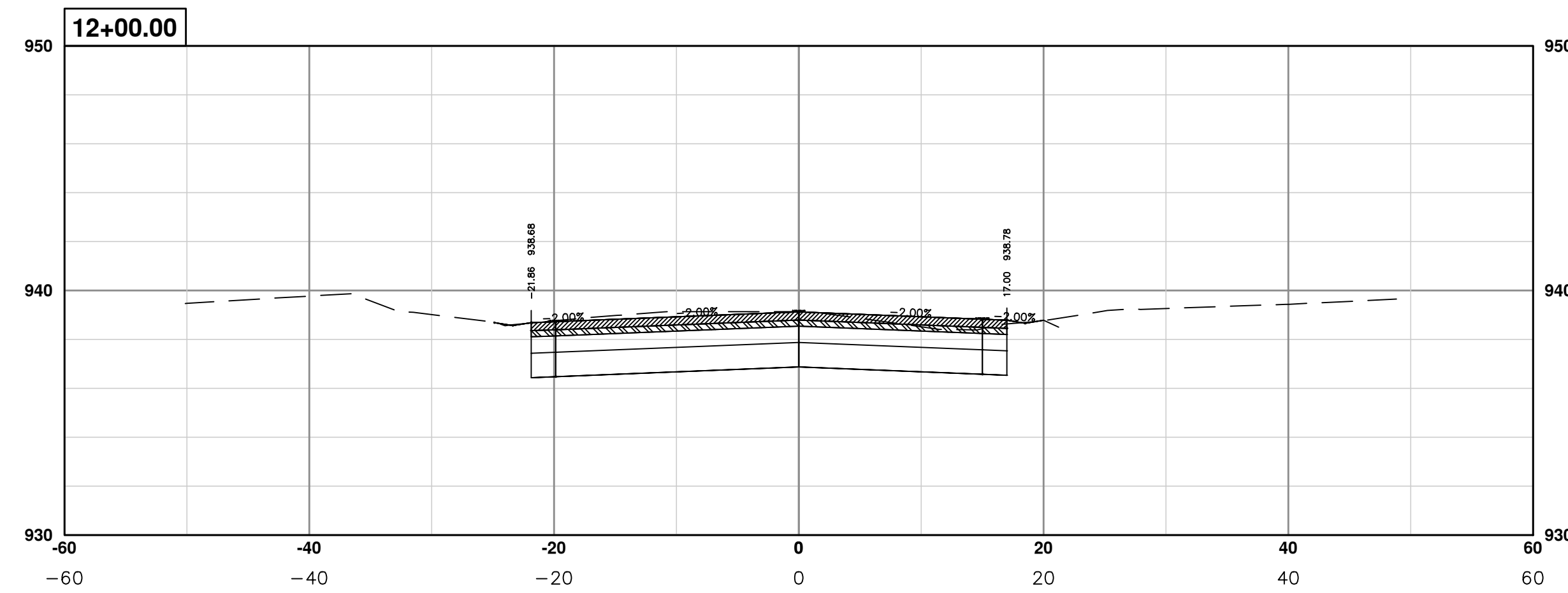
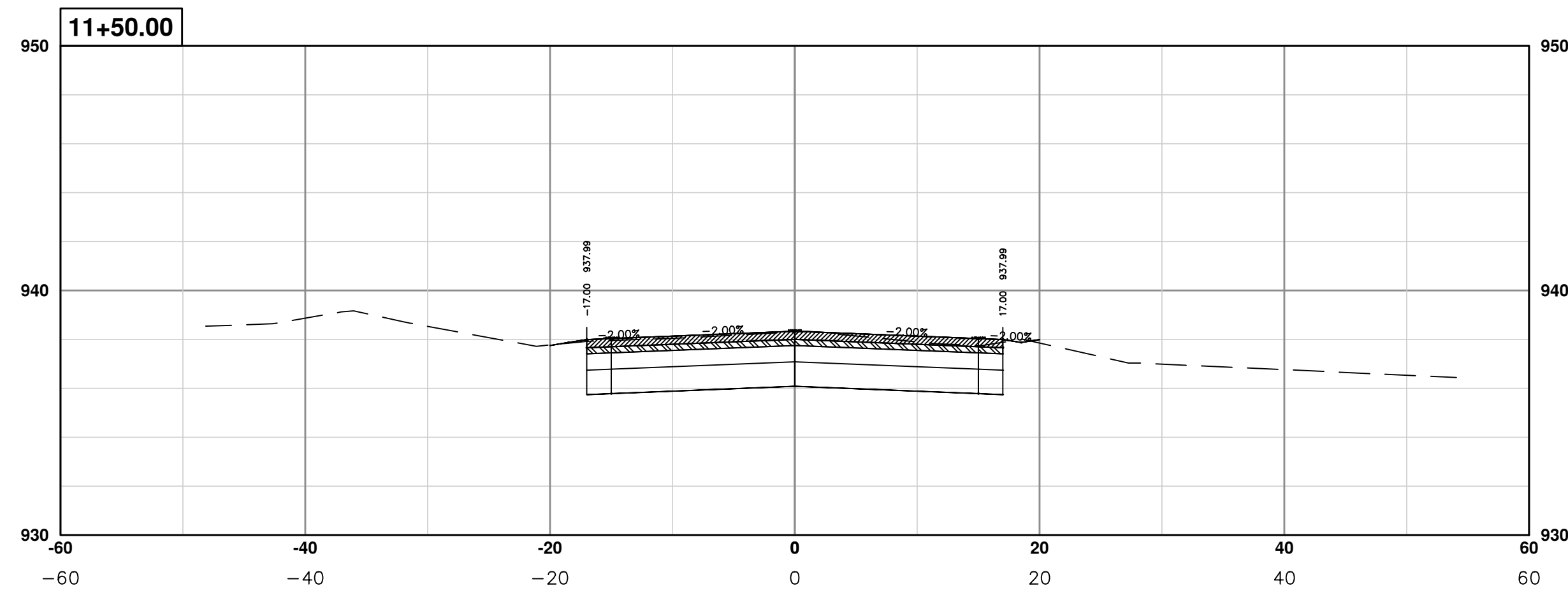
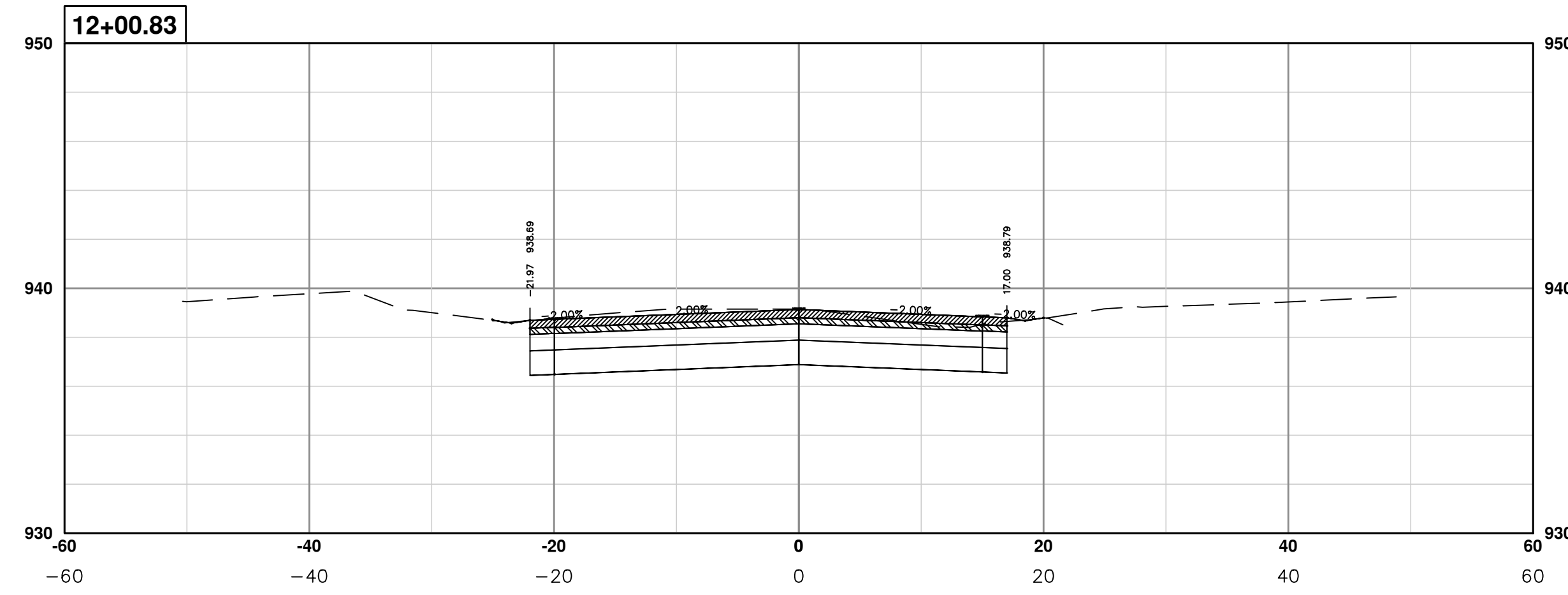
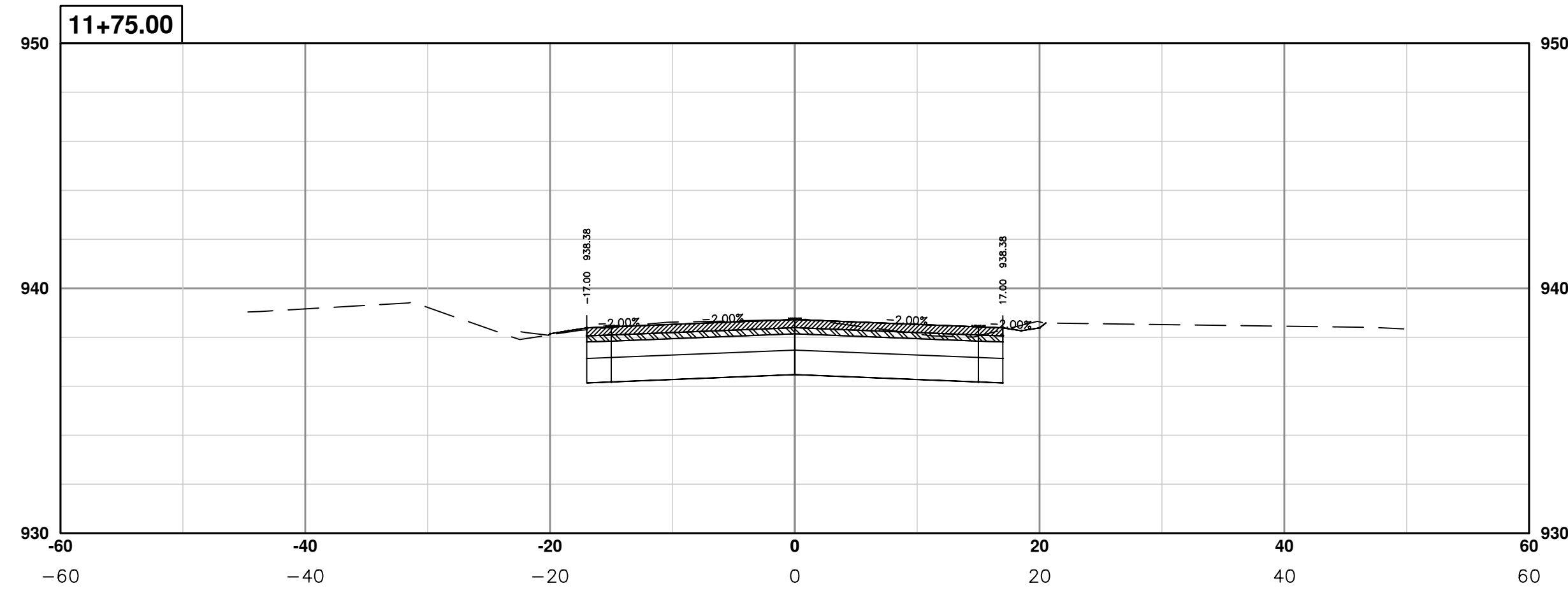
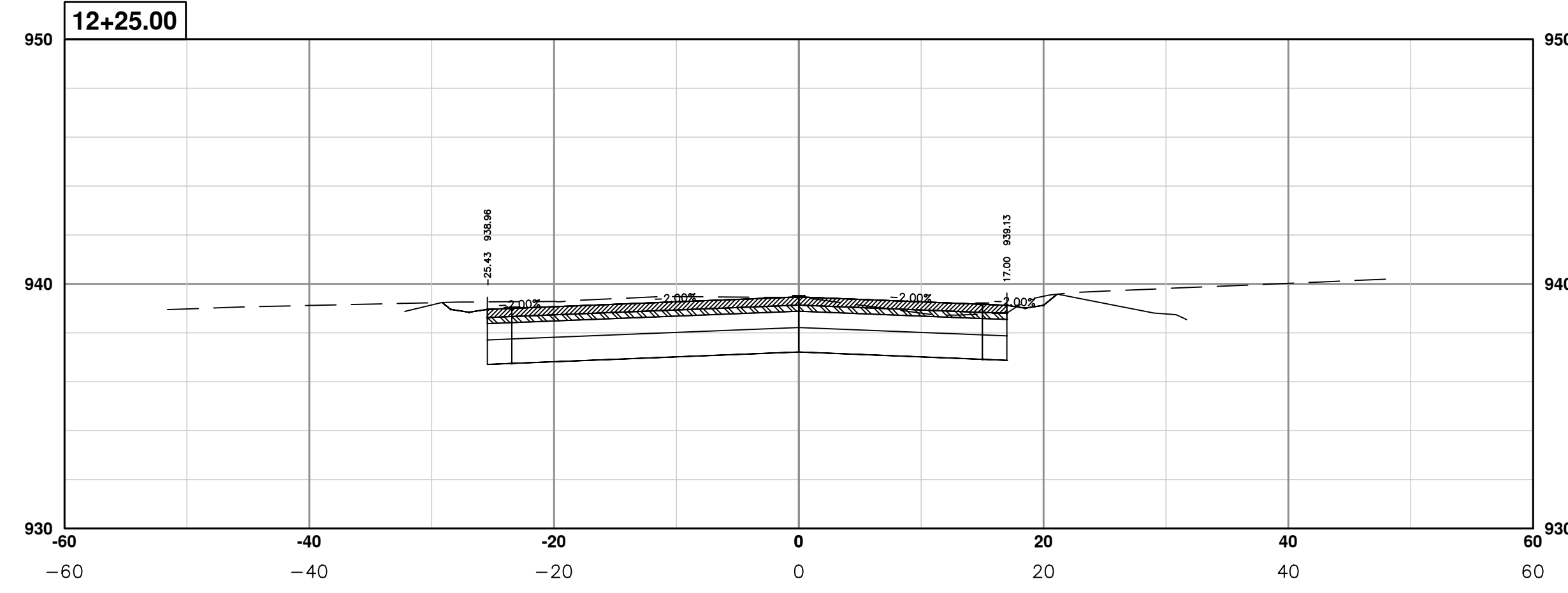
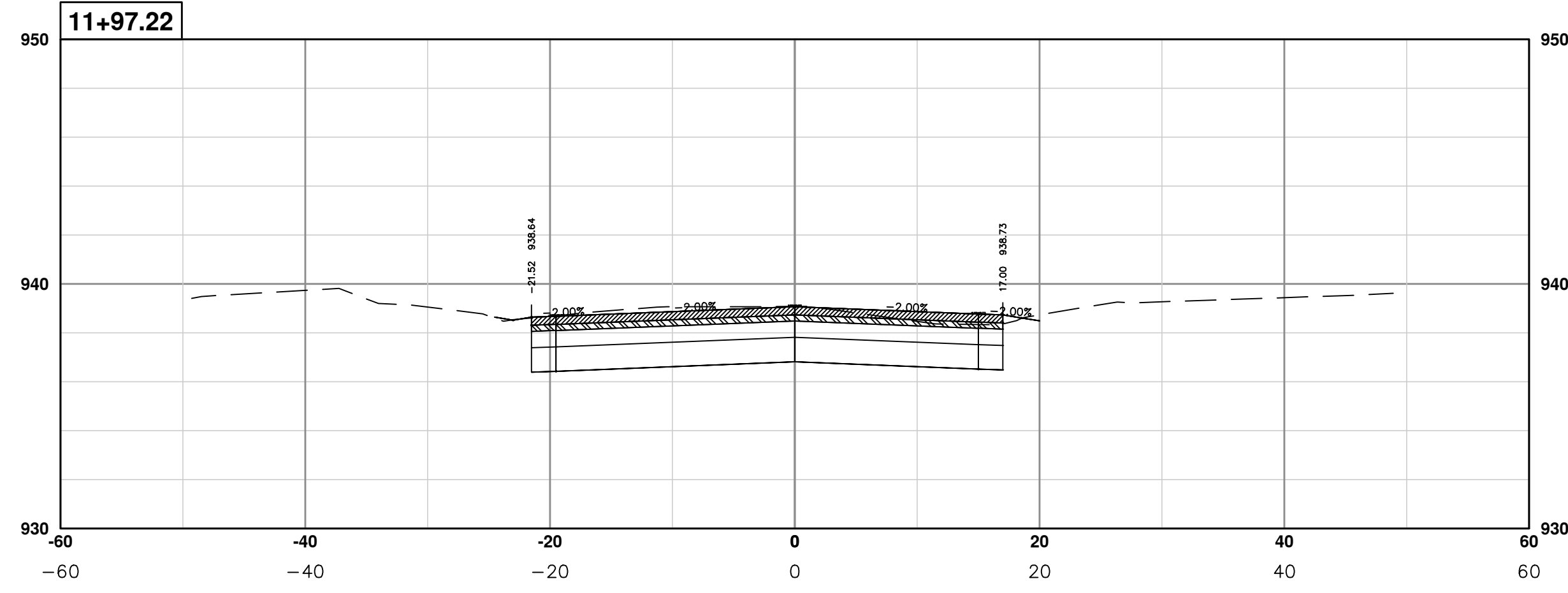
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 8 OF 94

SCALE PLAN: ##### PROFILE: 1"=4'
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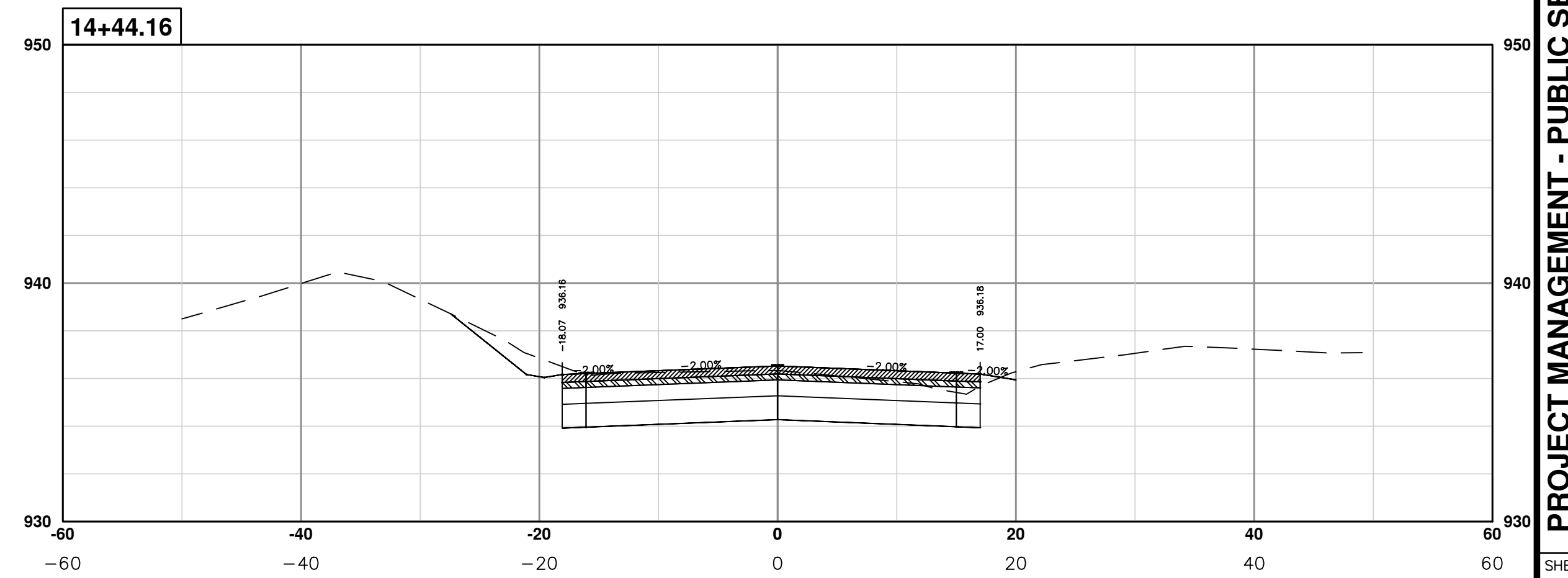
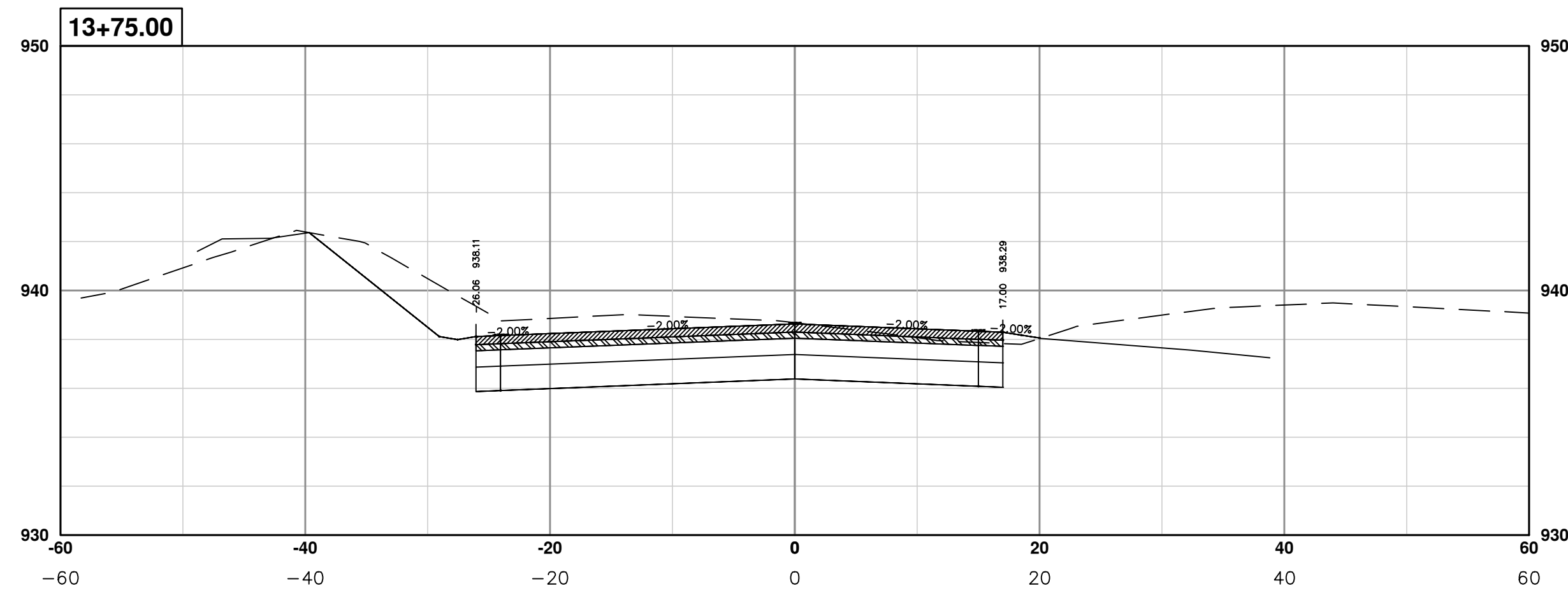
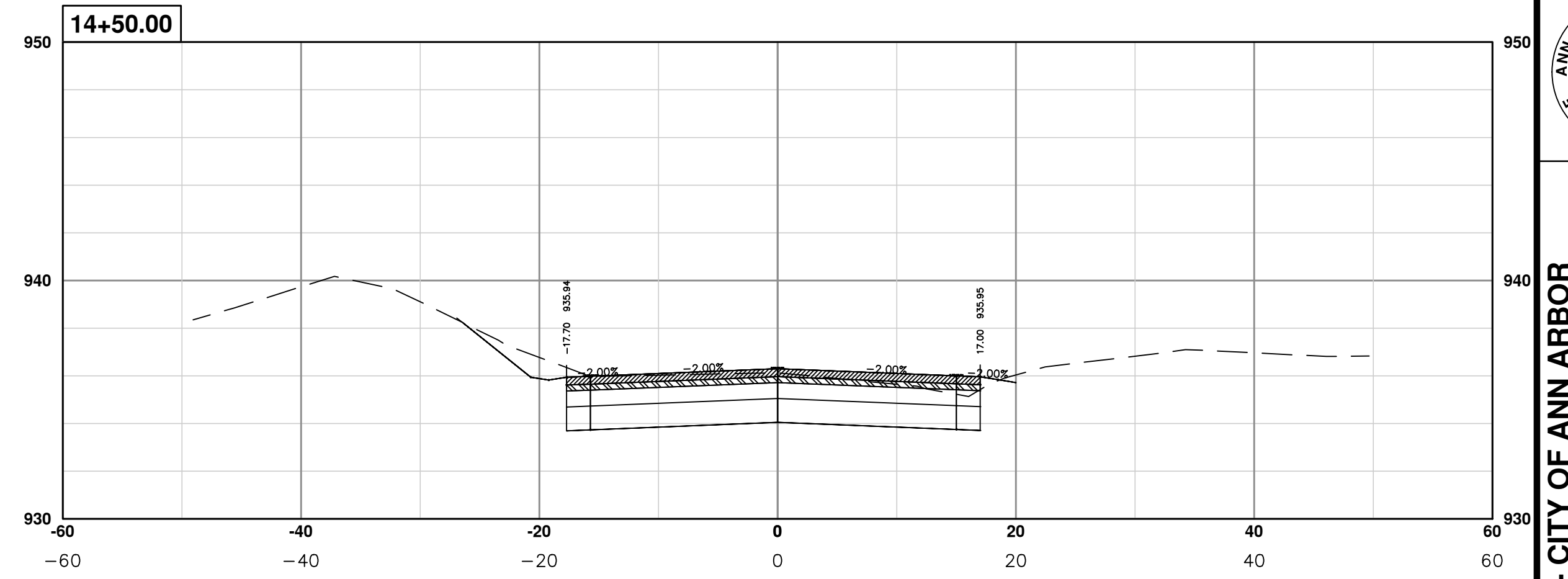
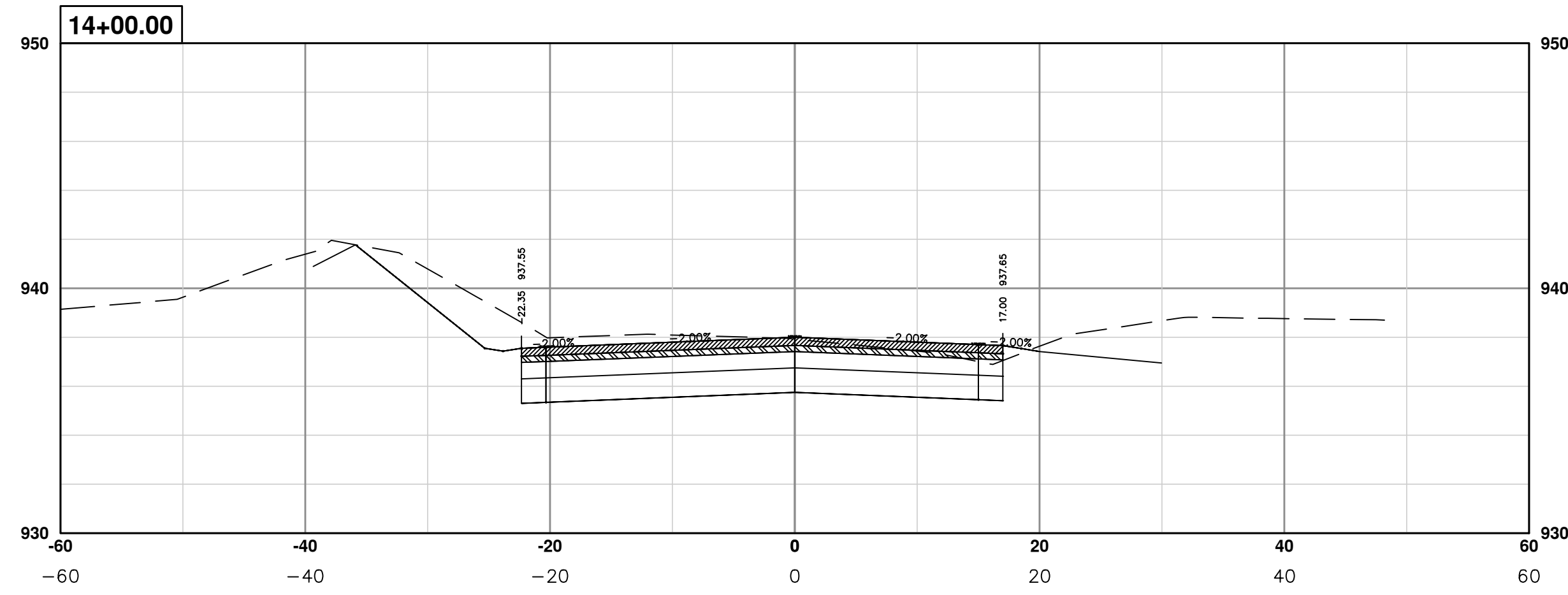
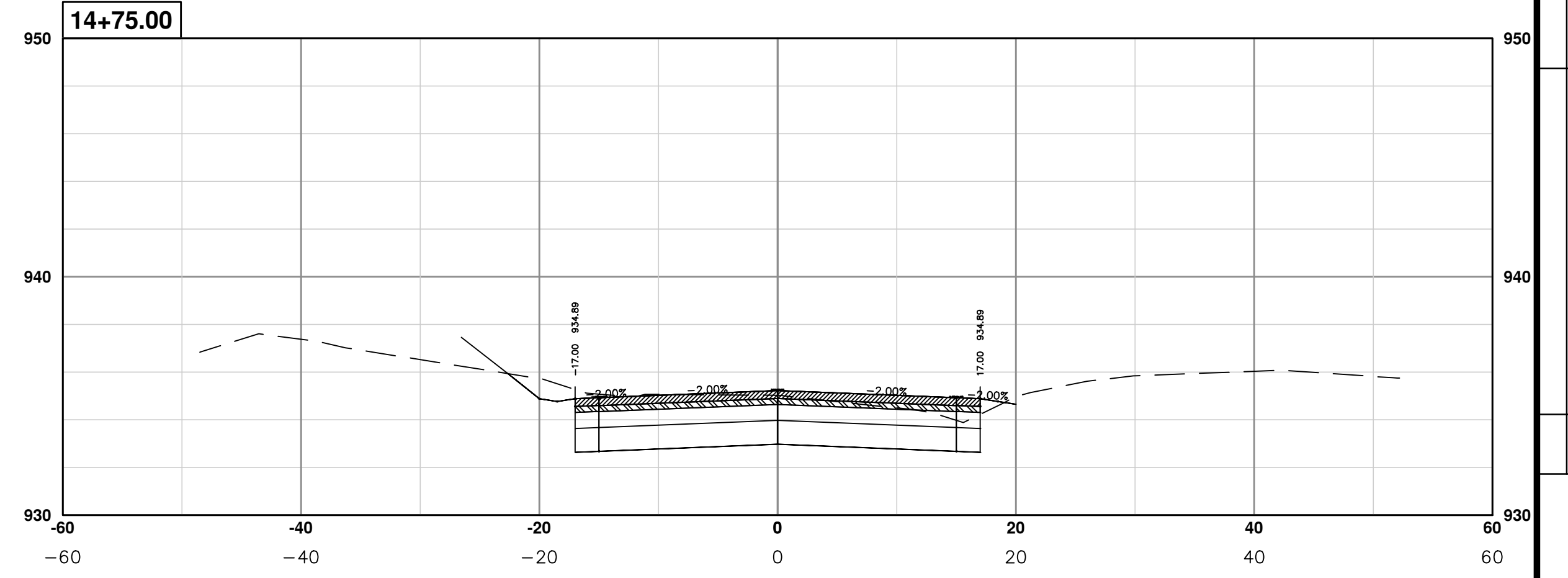
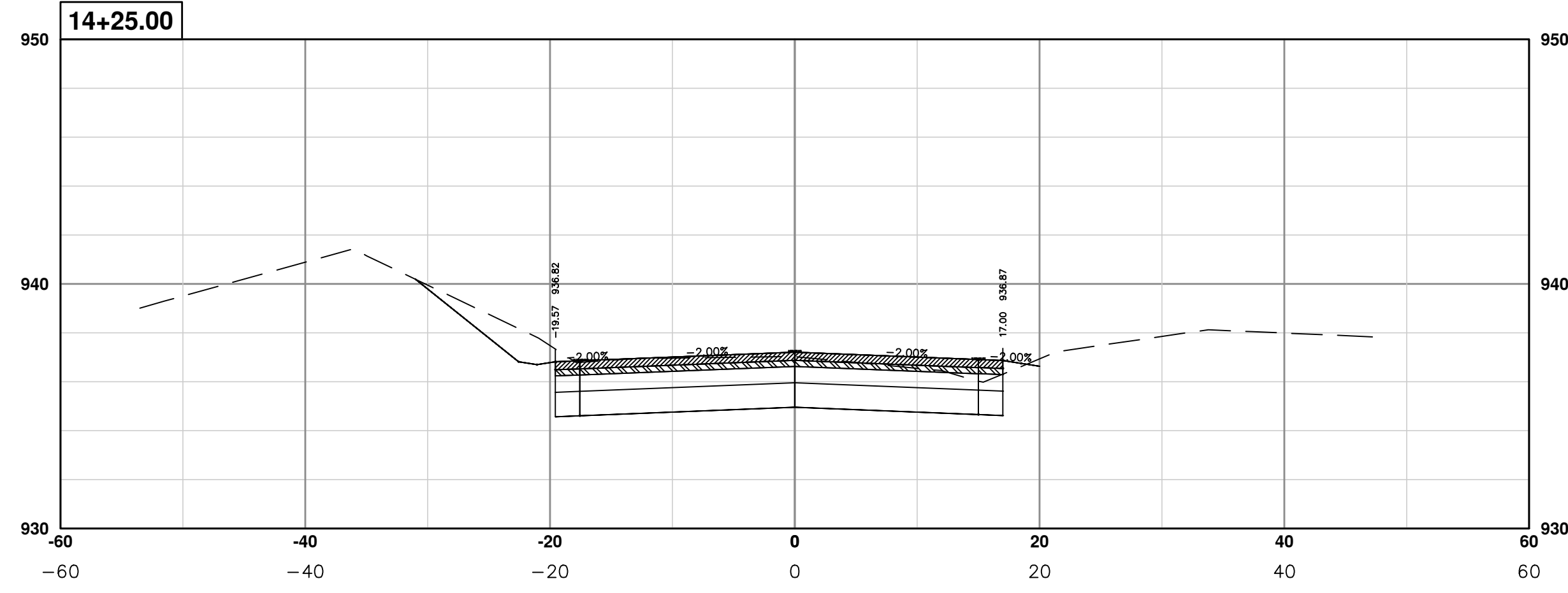
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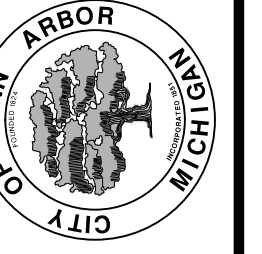
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 9 OF 94

SCALE PLAN: #####
 PROFILE: 1" = 4'
 DRAWING No. 2012028-76
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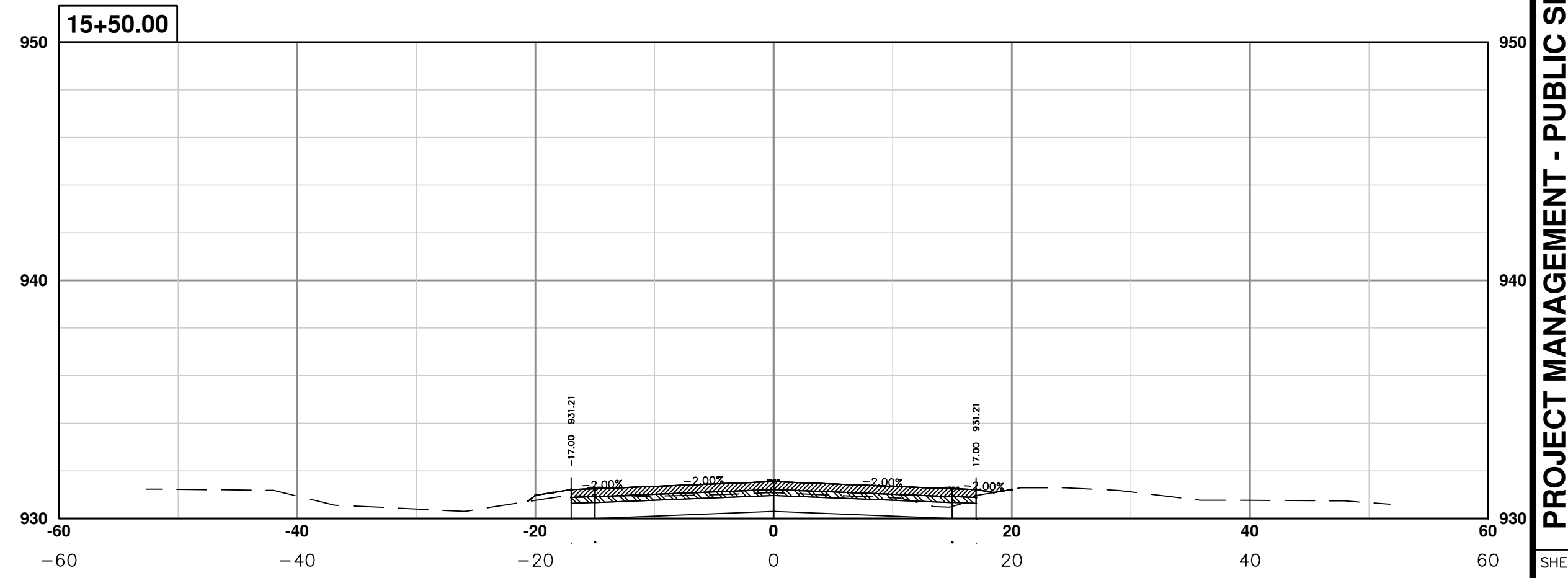
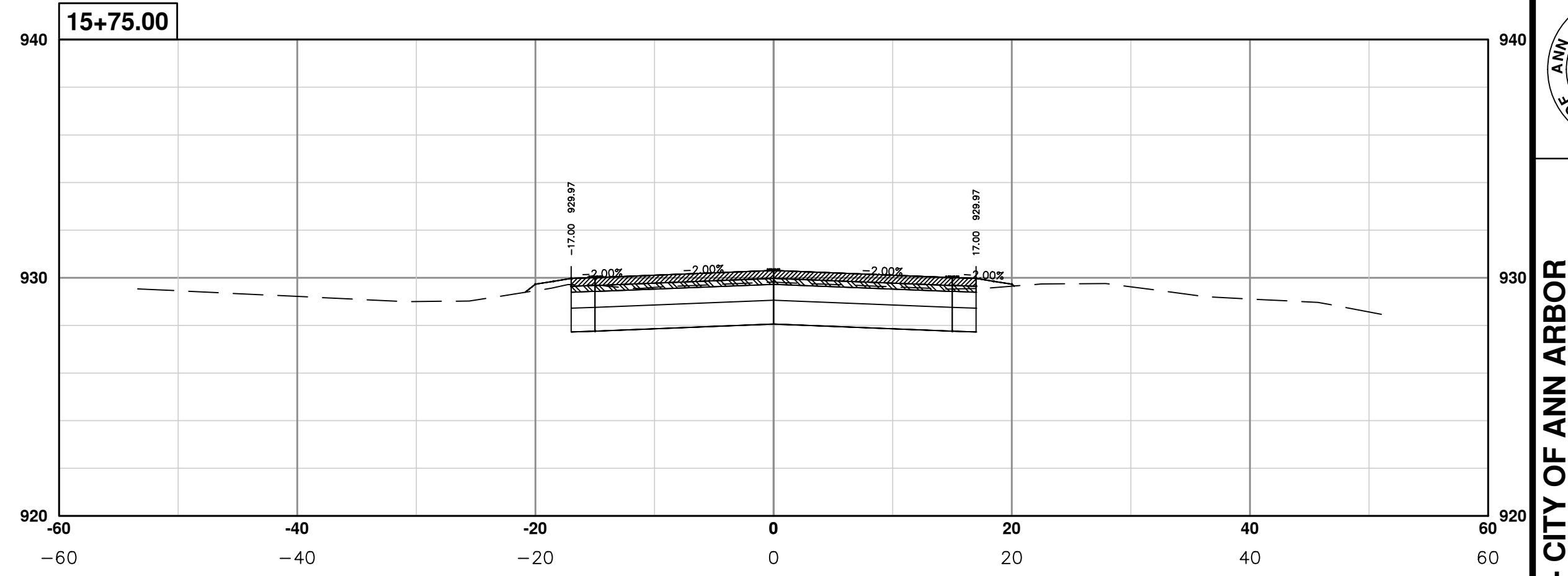
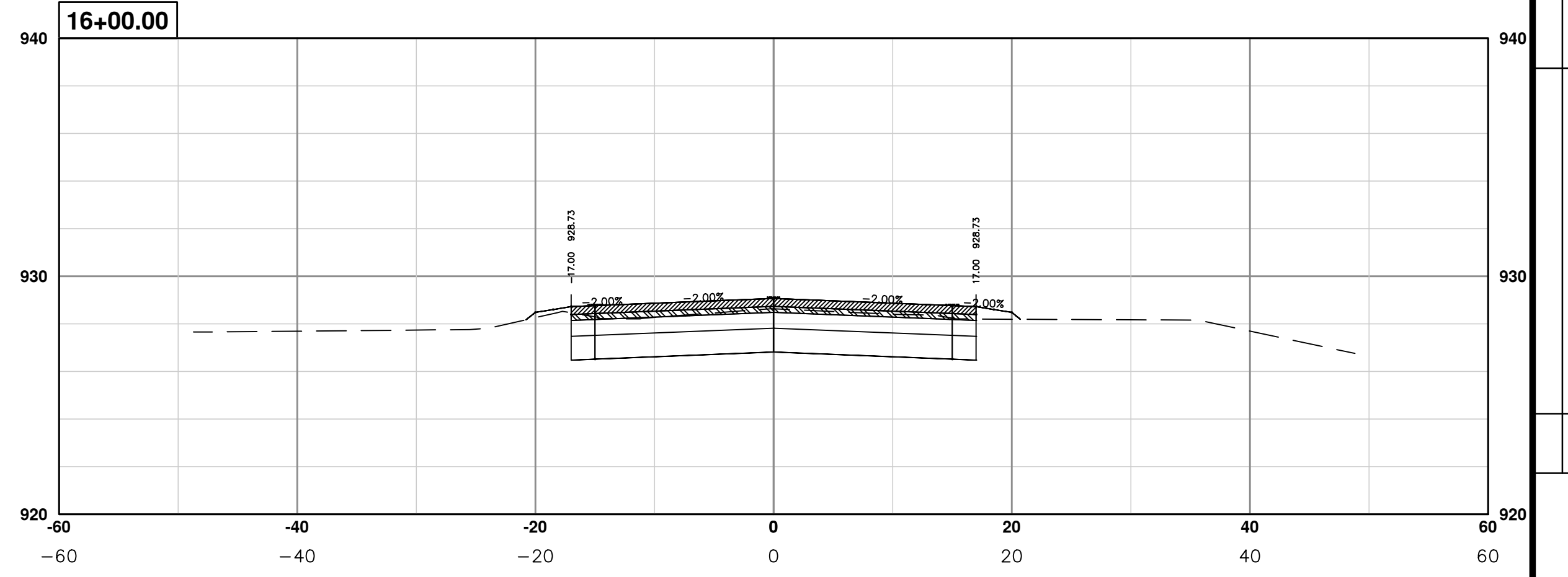
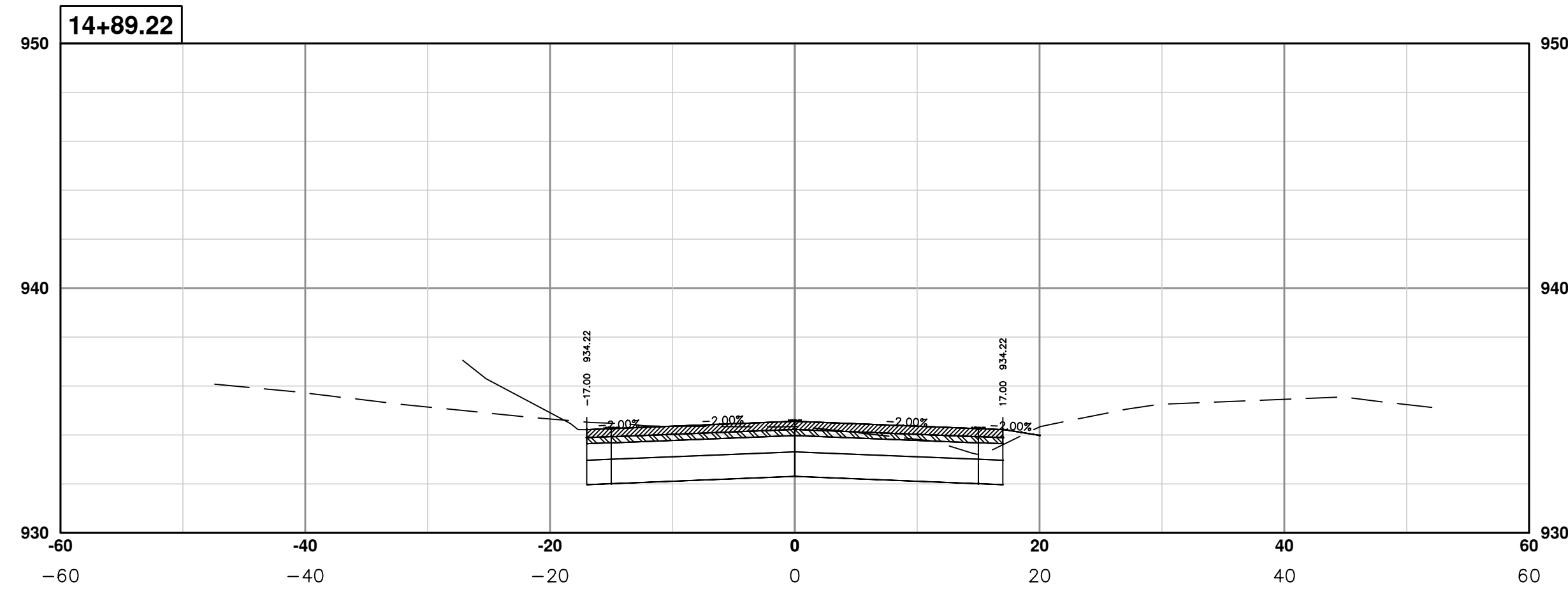
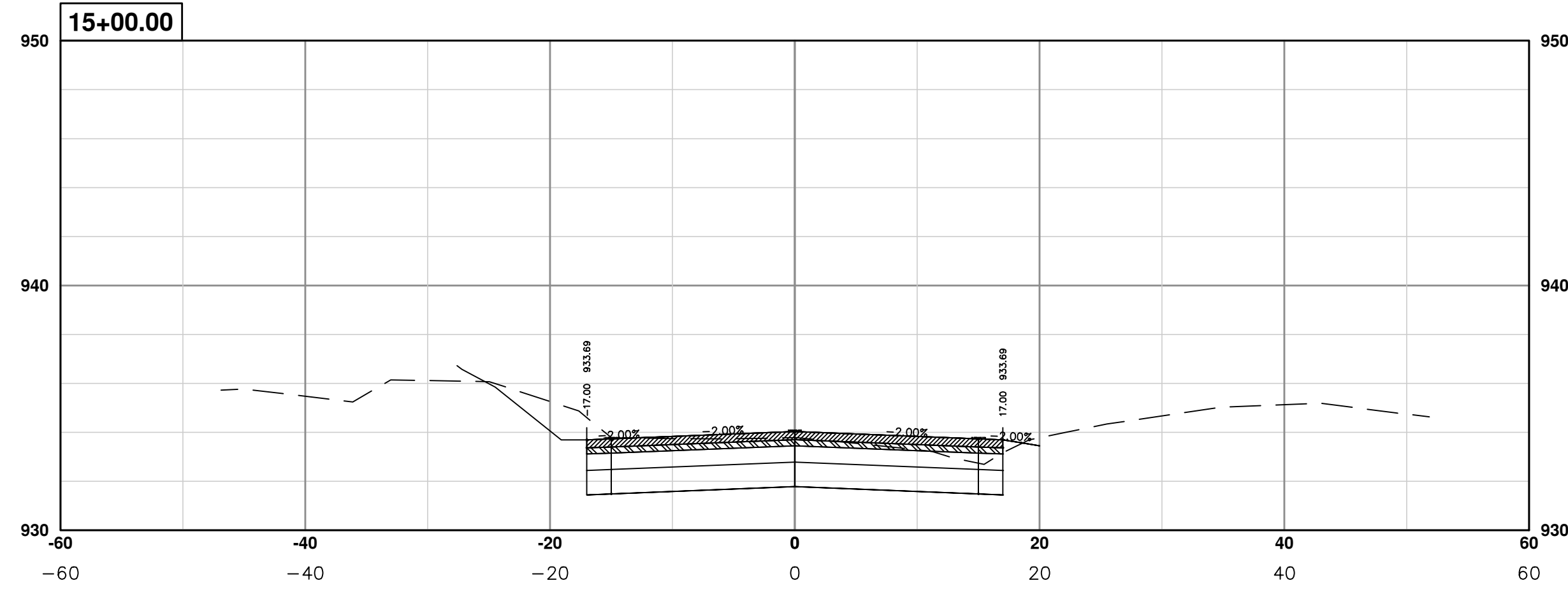
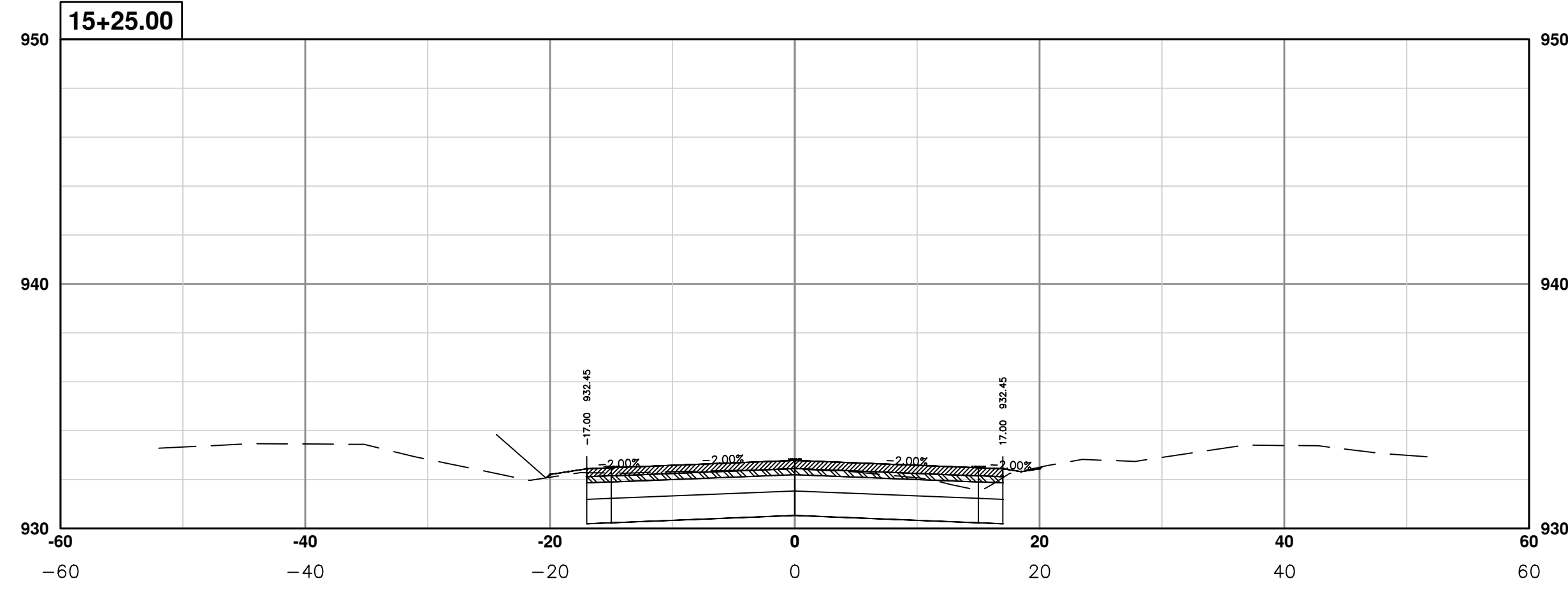
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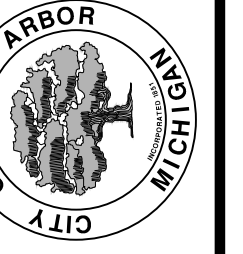
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 SECTION PLANS 11 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
 DRAWING No. 2012028-78
 SHEET No. 78 OF 102

S:\Project Management\Design\2012028 Pontiac Trail\Plan Production\Primary\2012028RD\CS.dwg Dwg Created: 18-Jan-14 - _a2_standard_bw.stb - Plot Date: 19-Mar-14



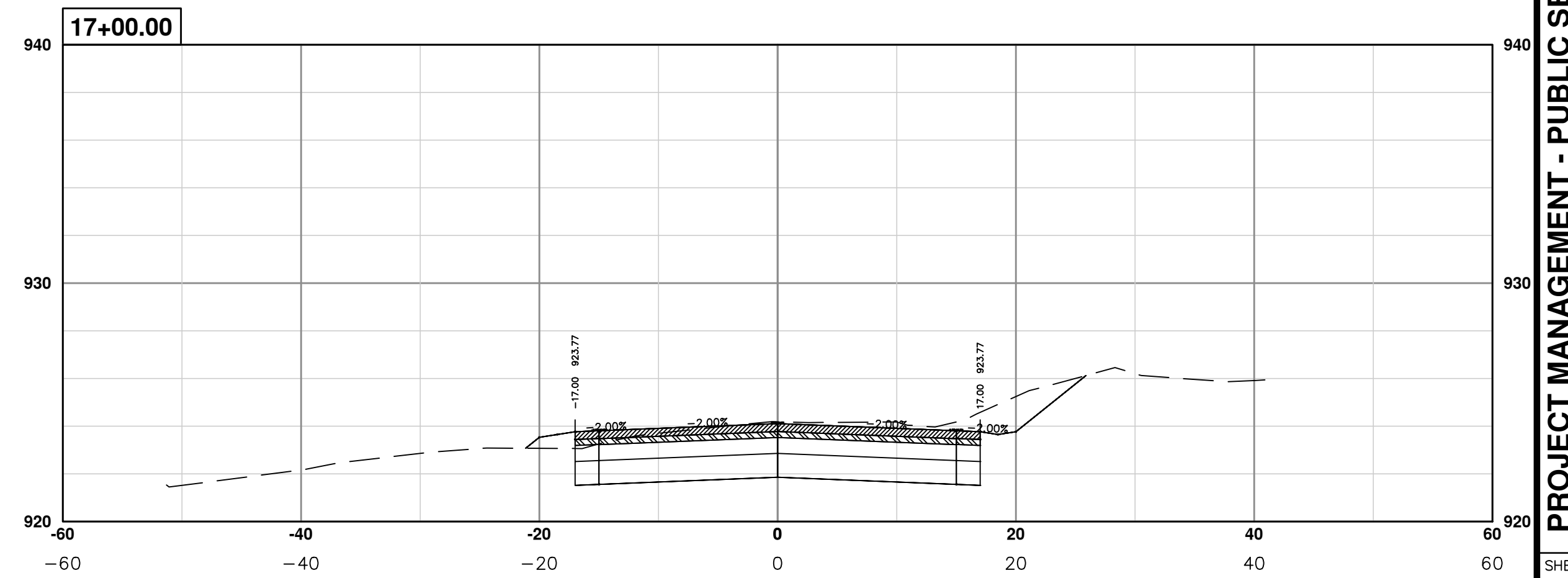
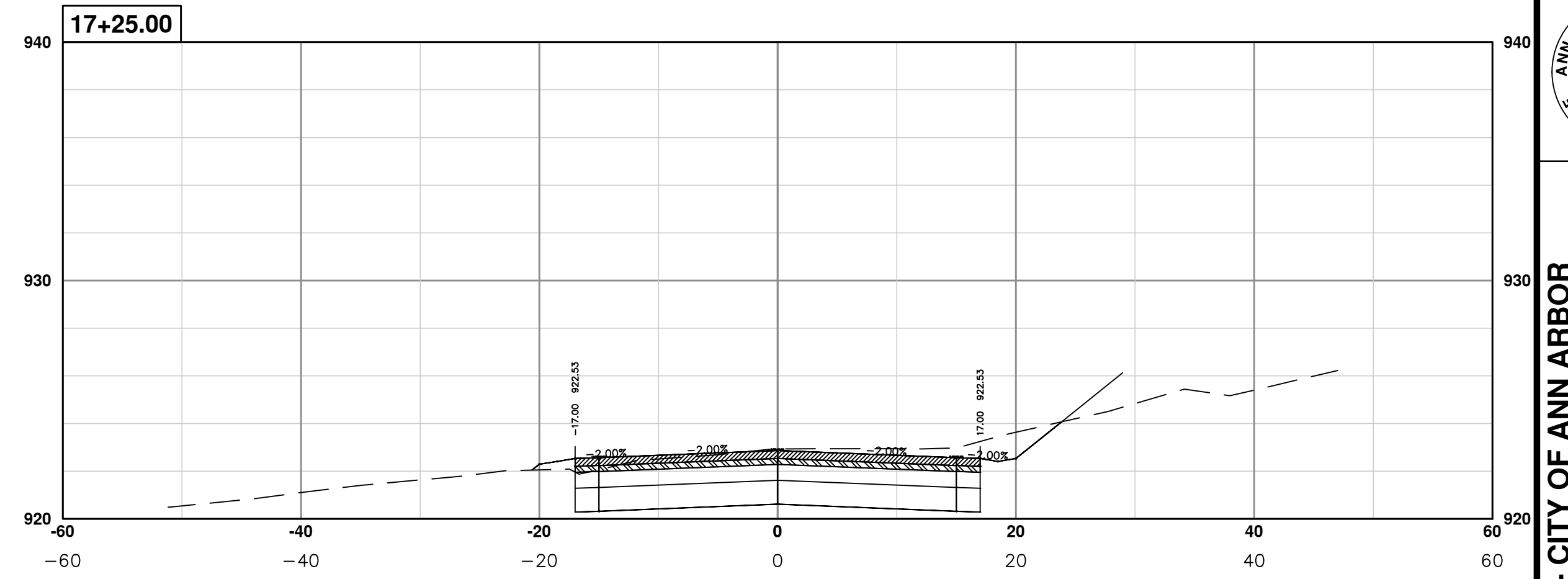
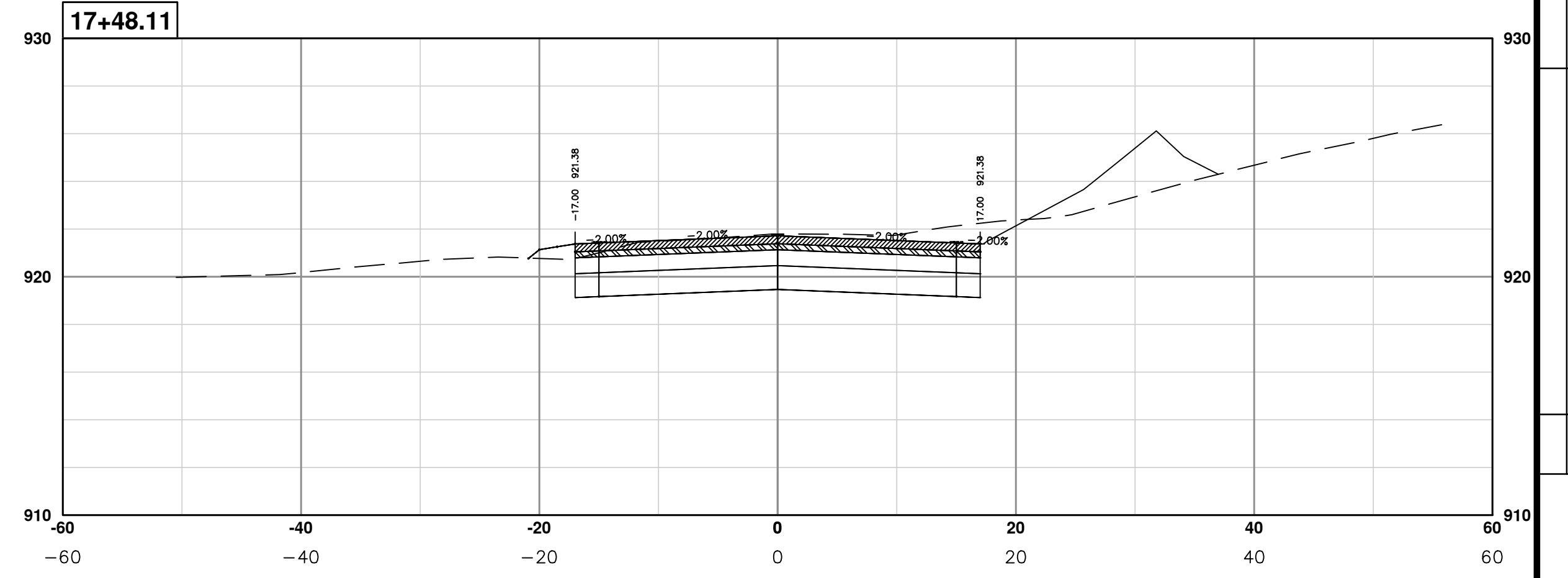
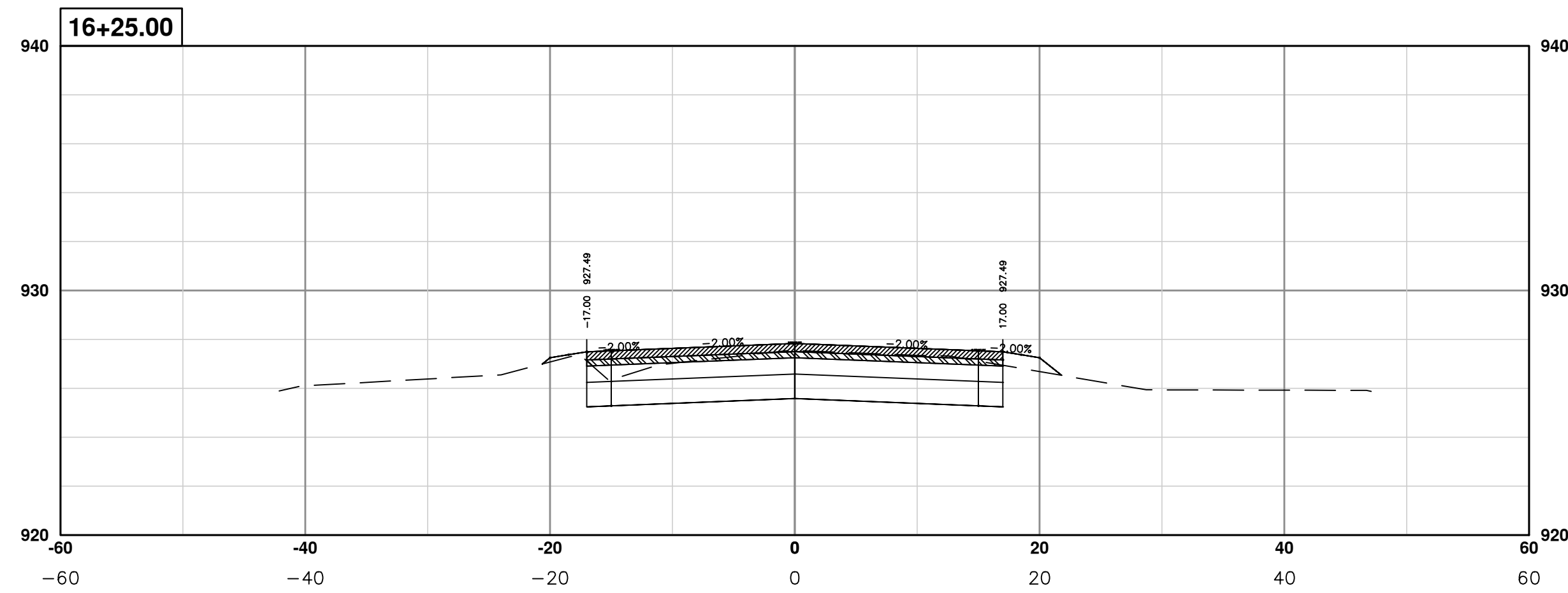
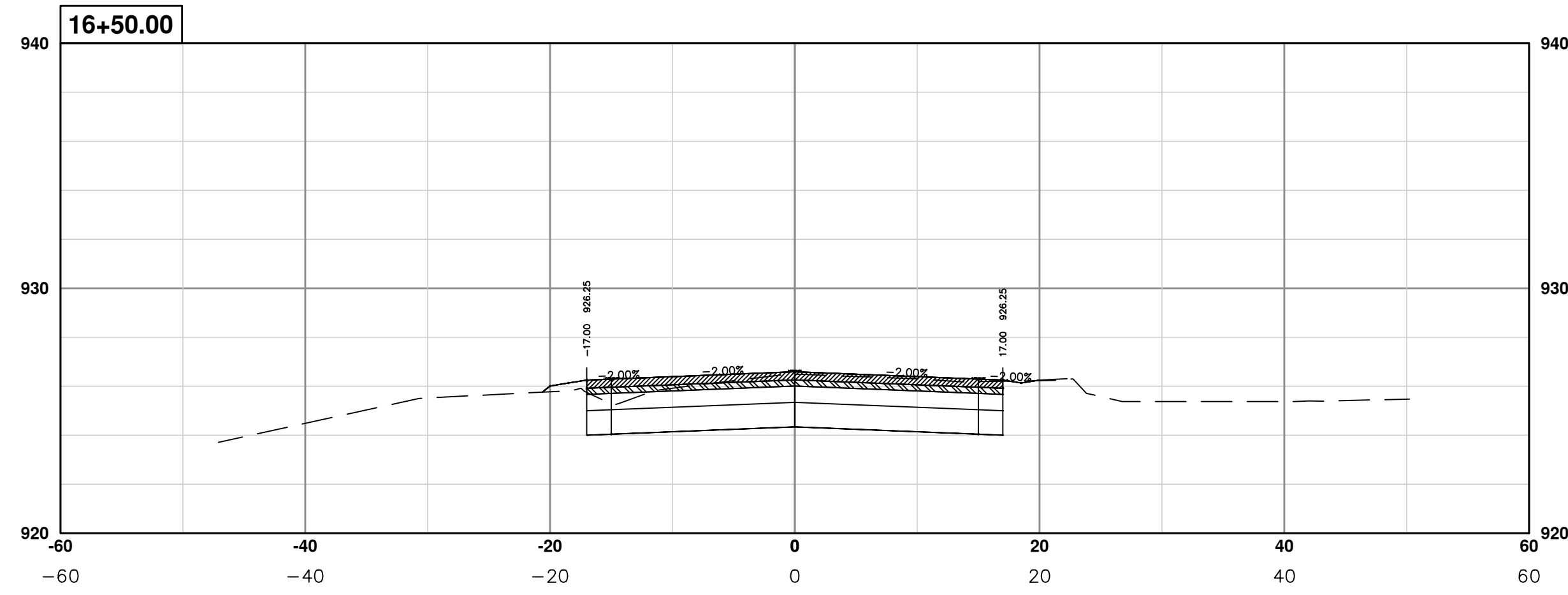
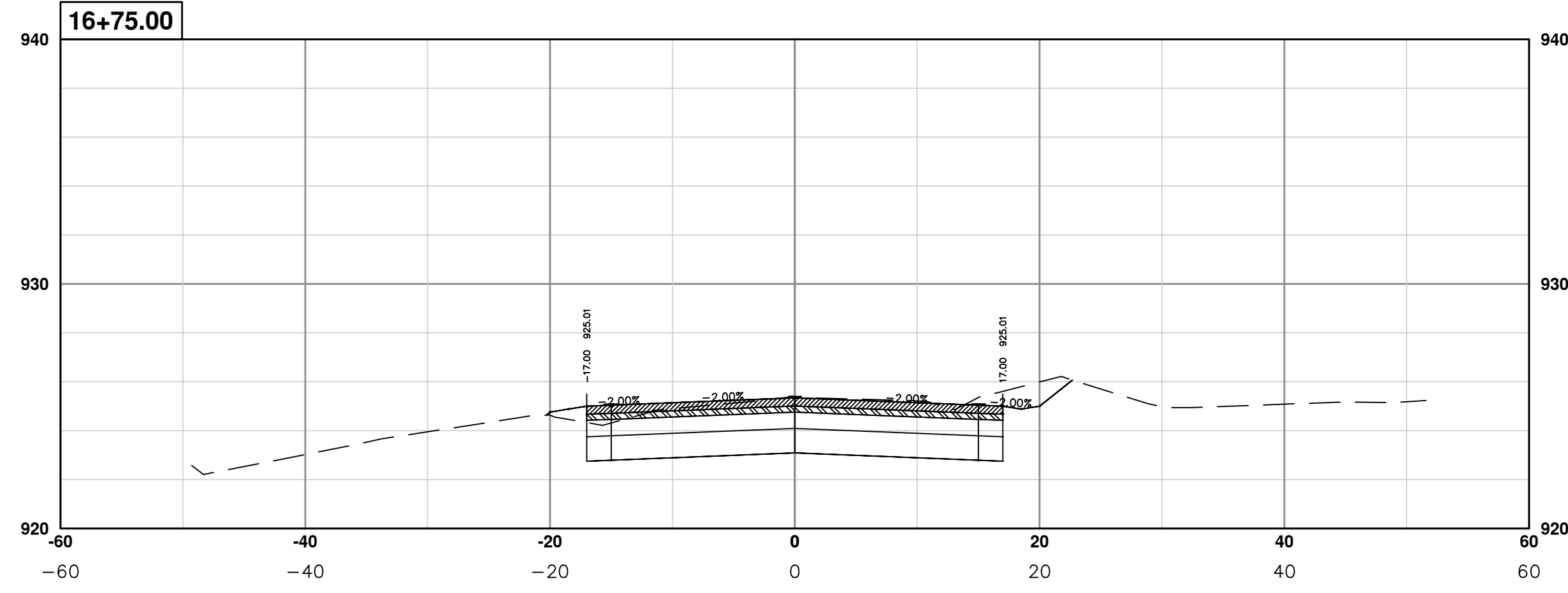
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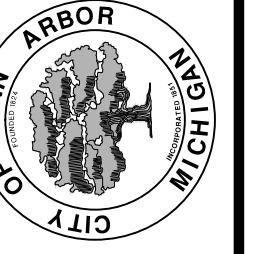
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 SECTION PLANS 12 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
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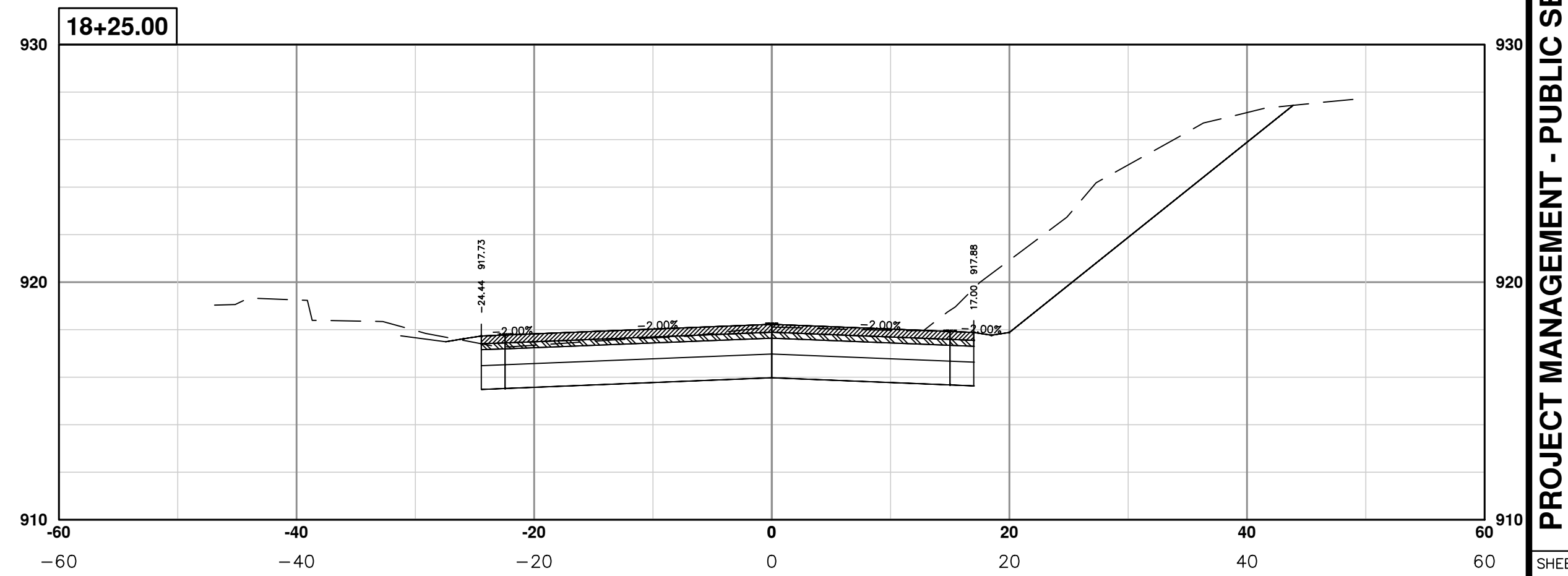
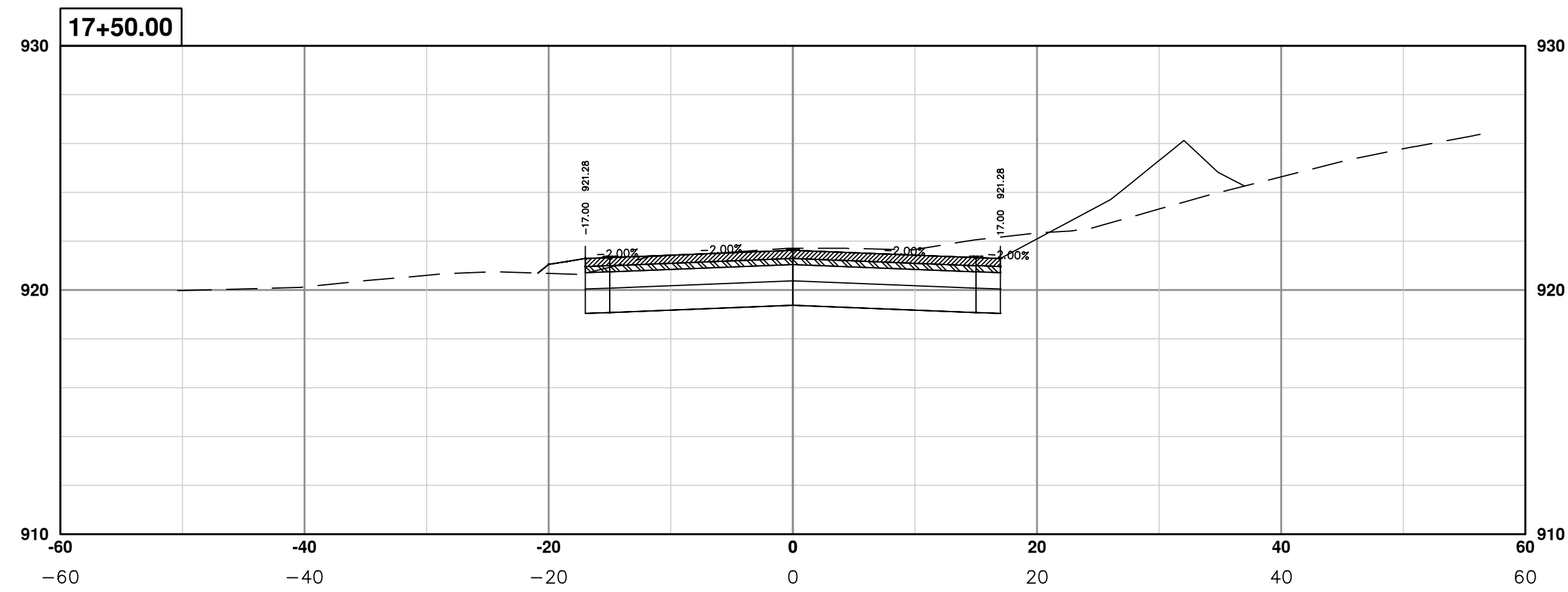
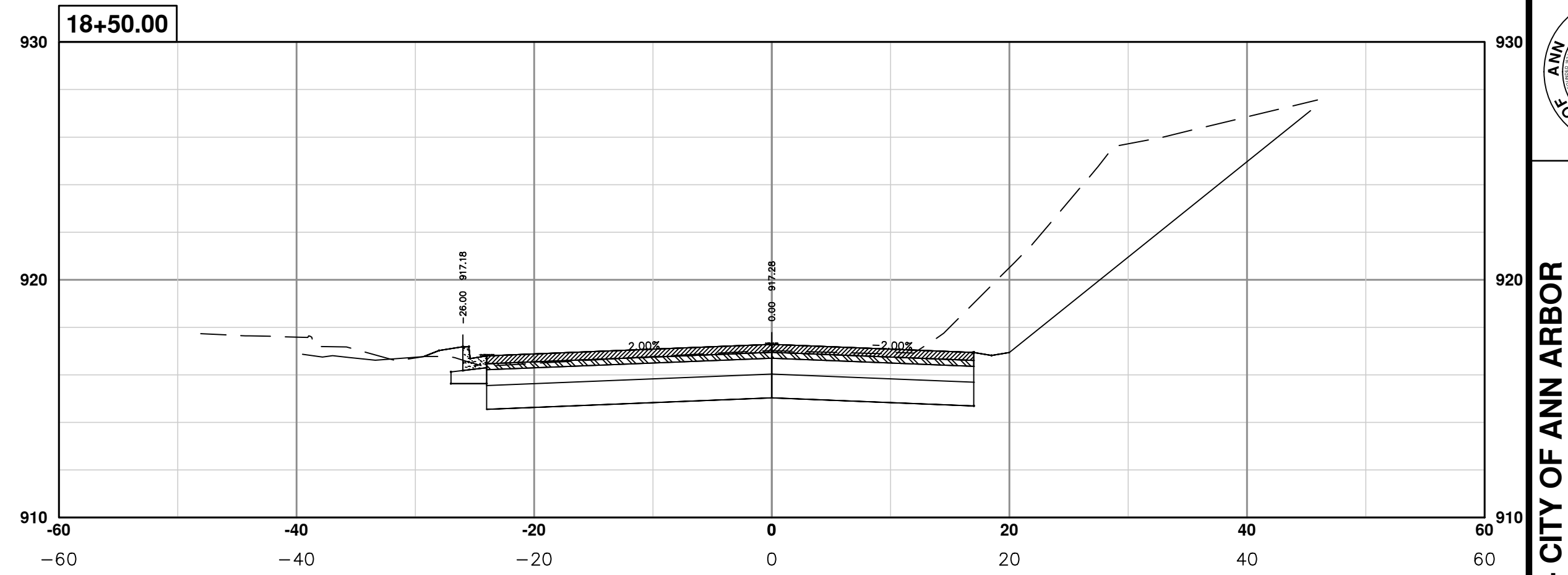
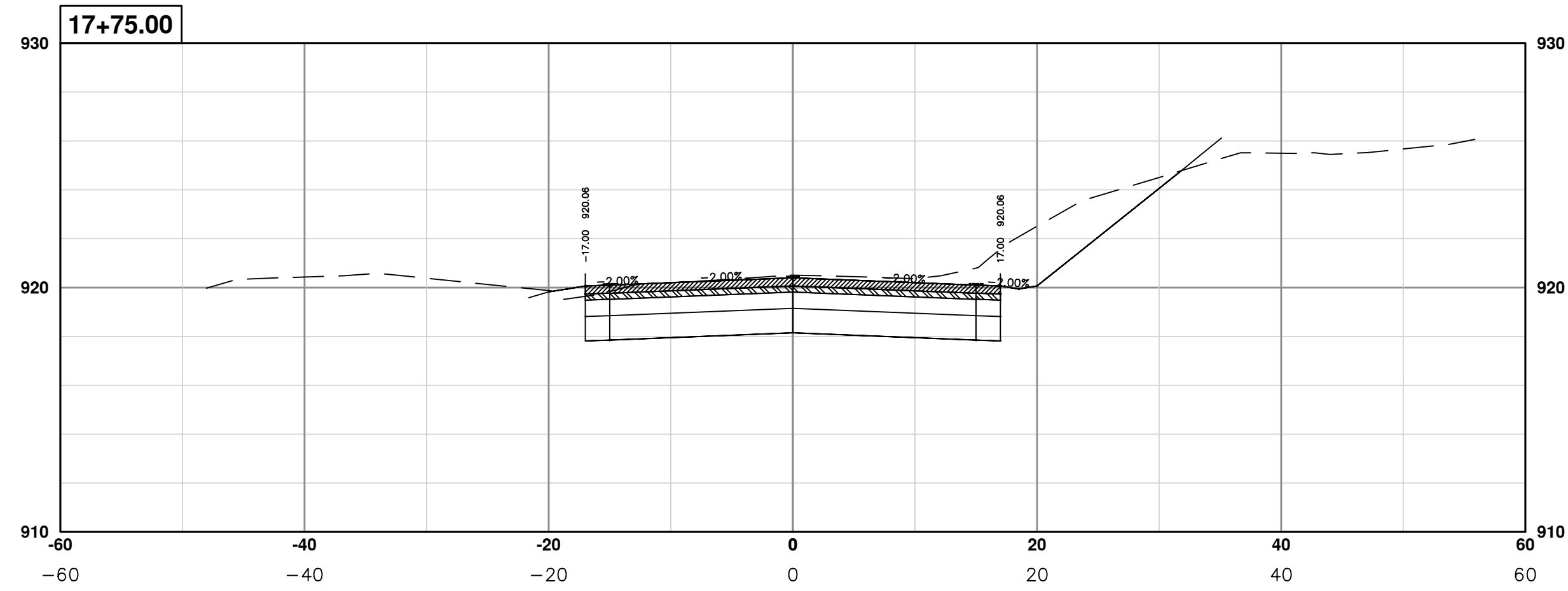
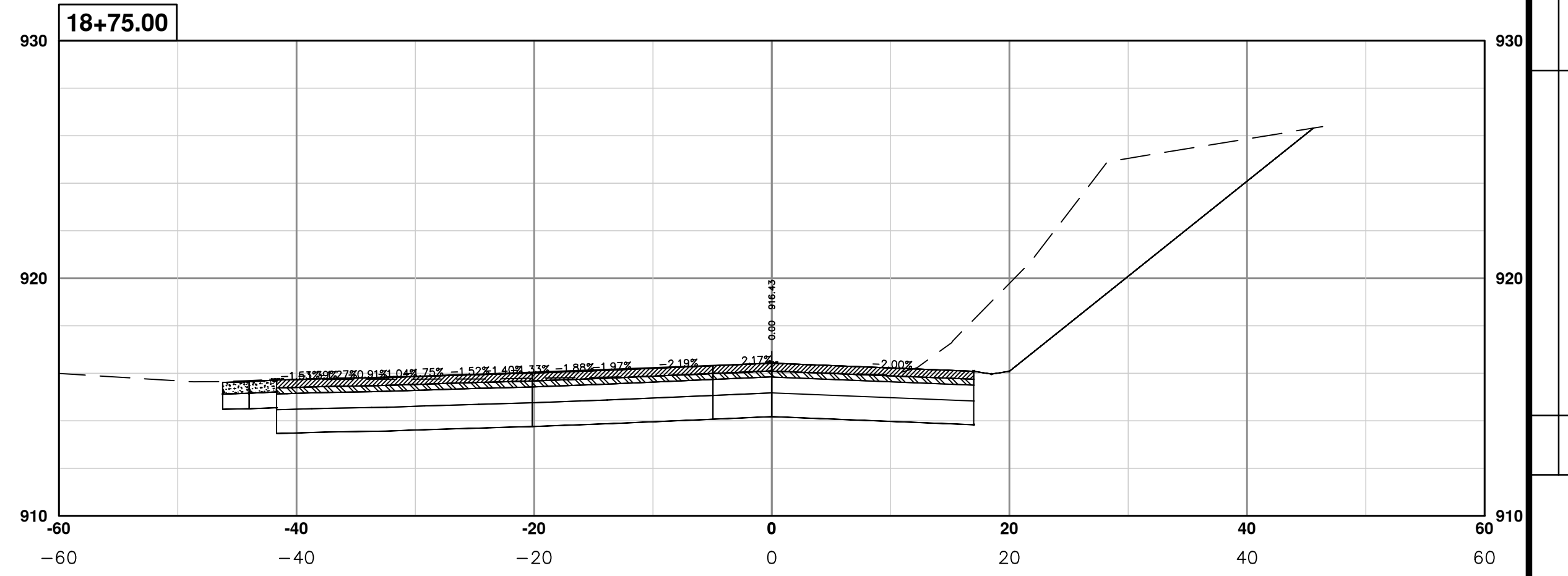
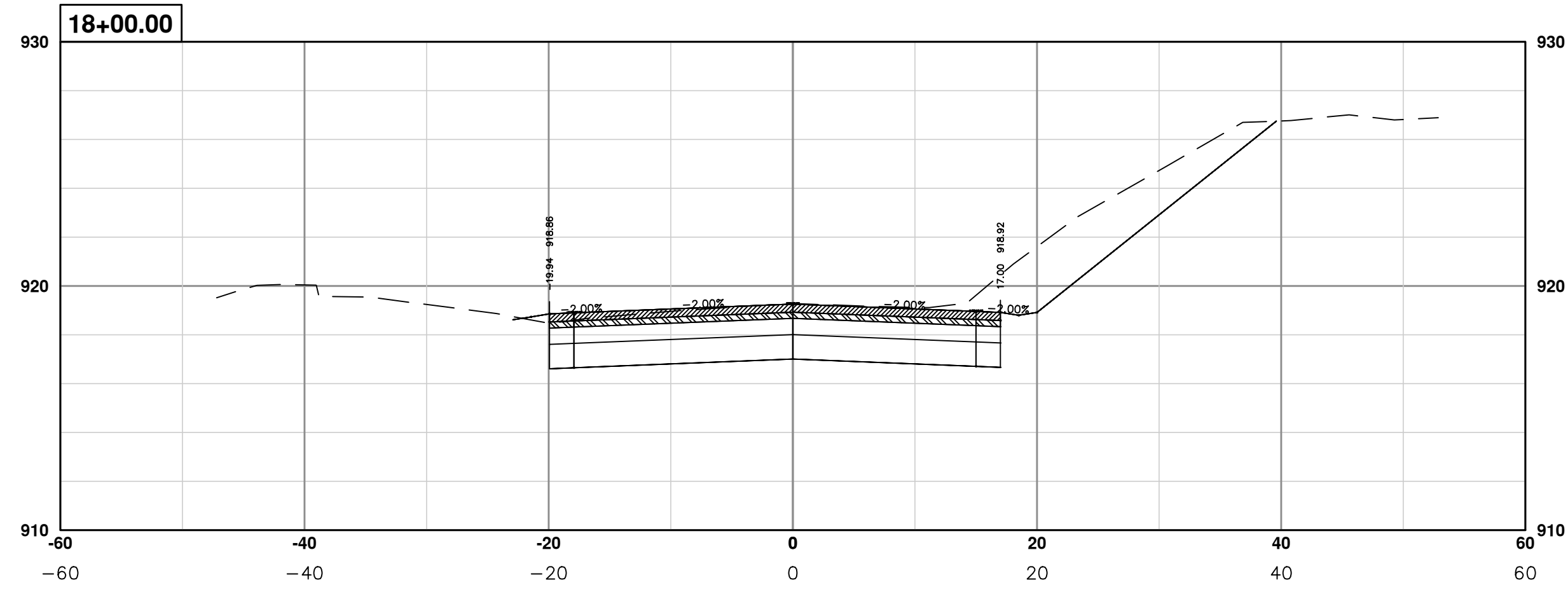
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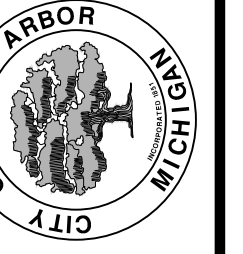
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 SECTION PLANS 13 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4"
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 SHEET No.

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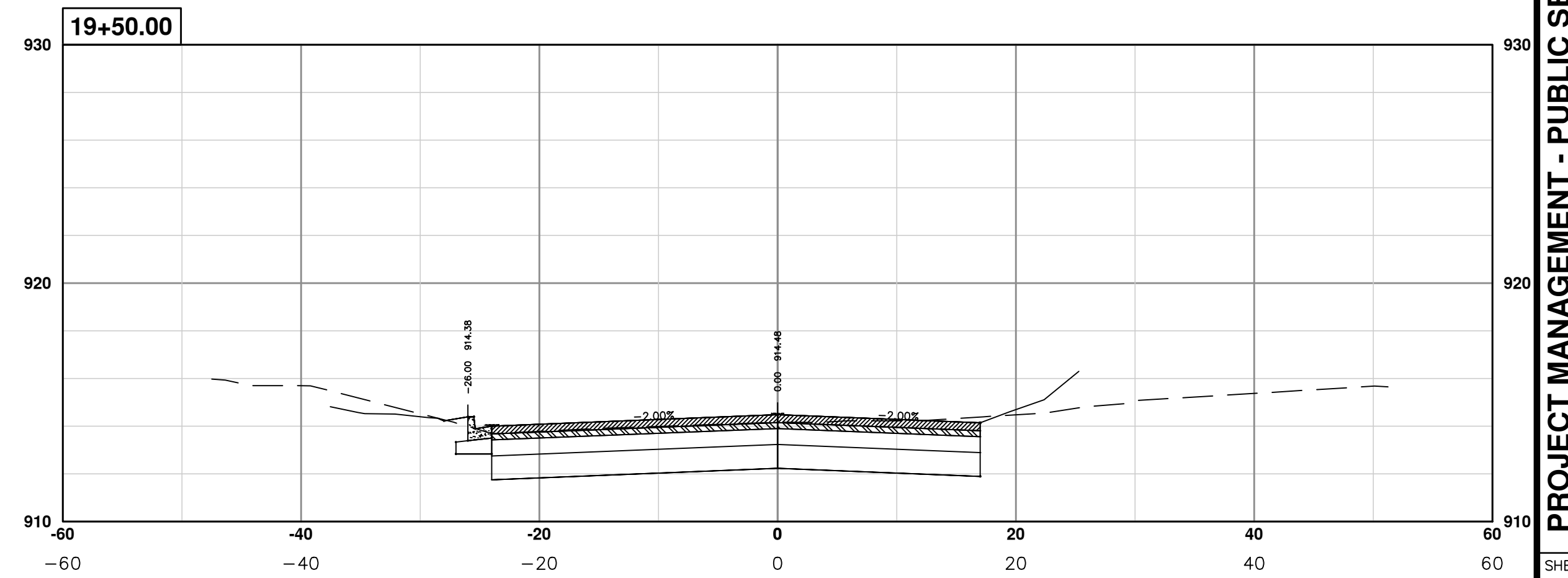
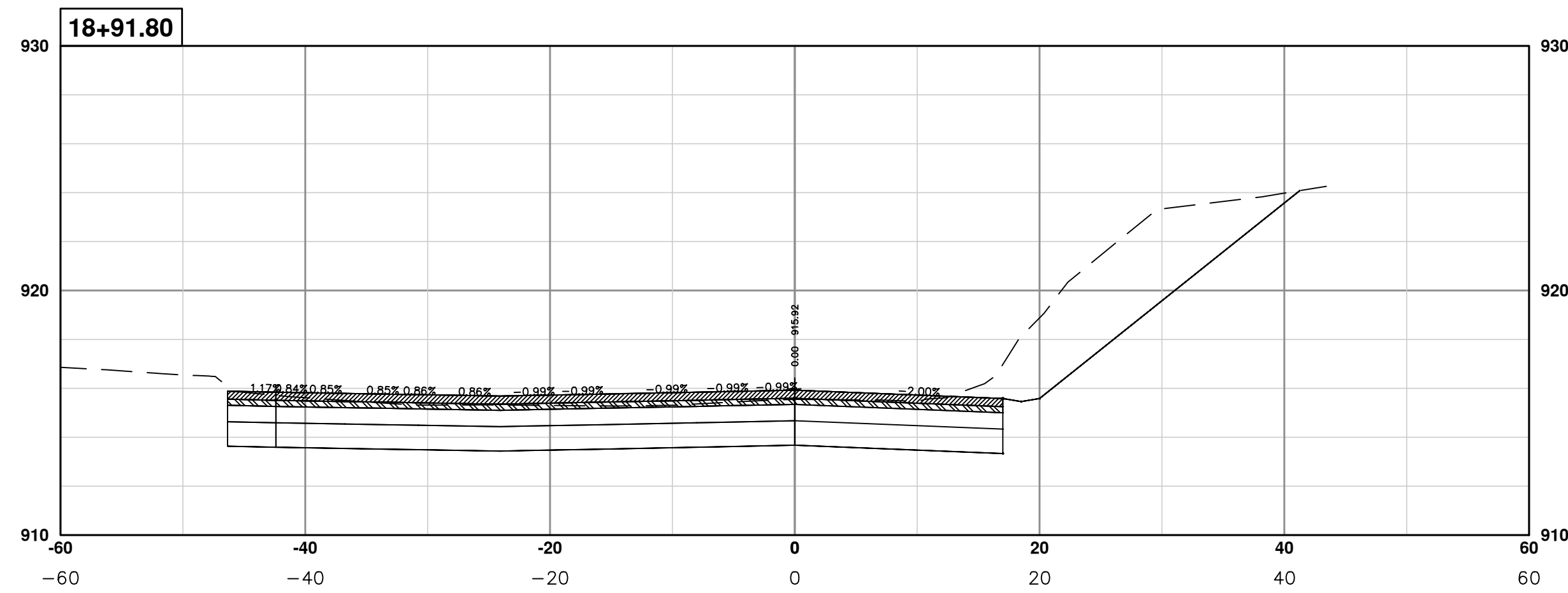
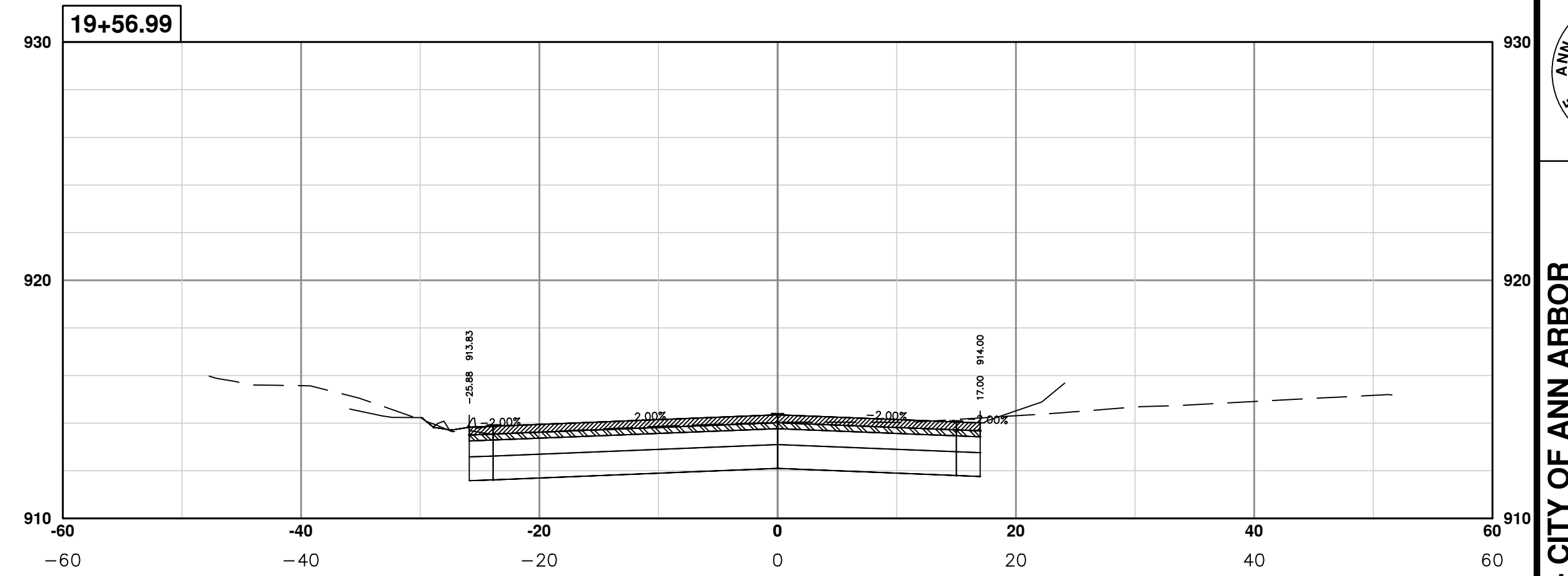
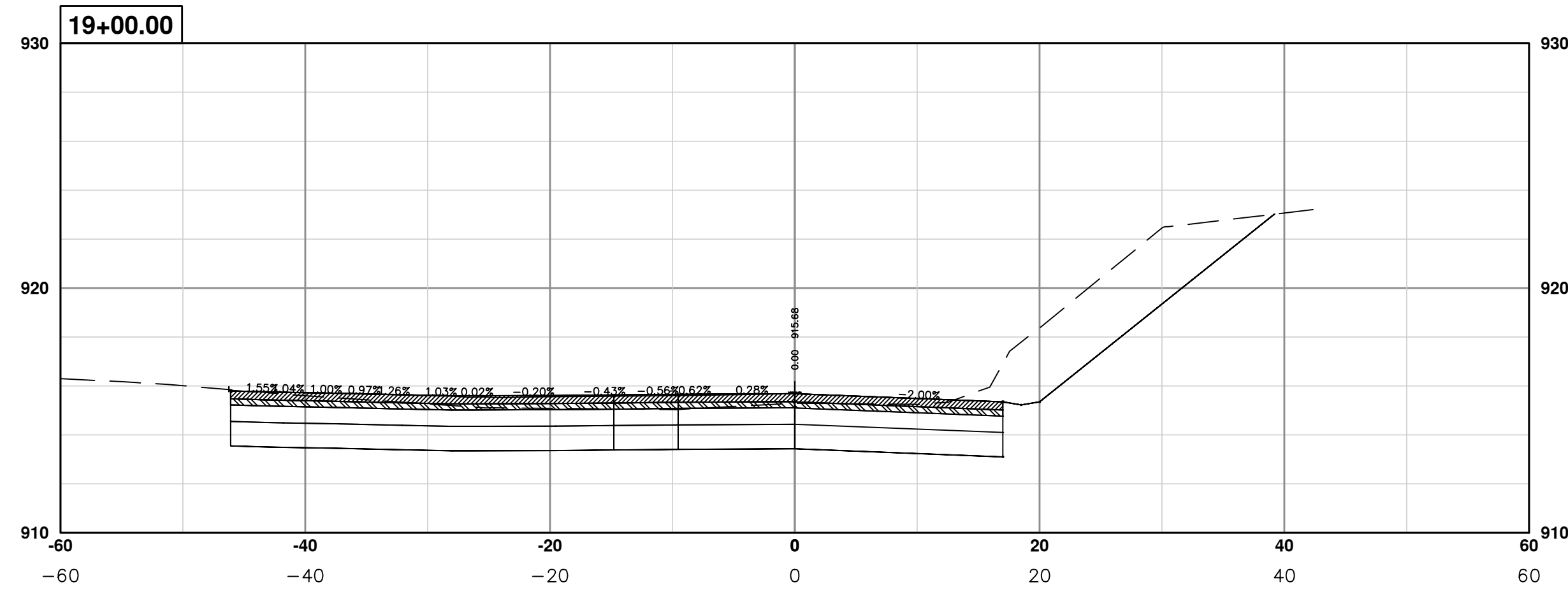
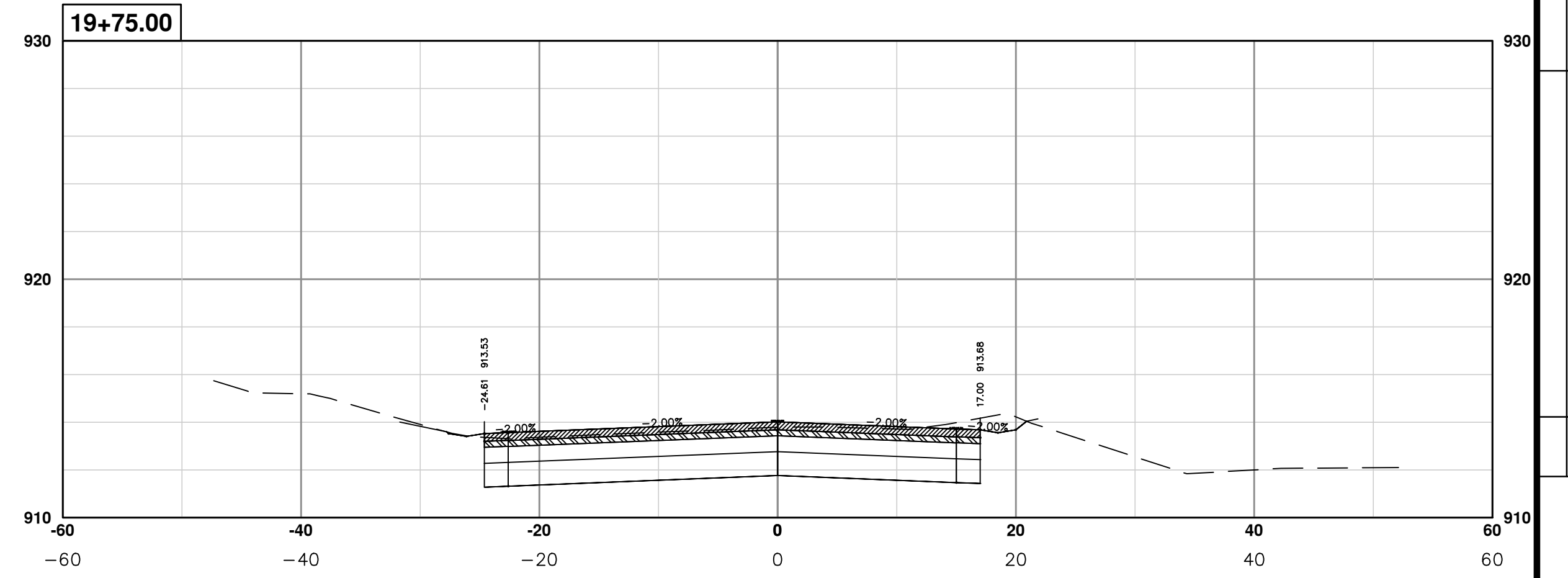
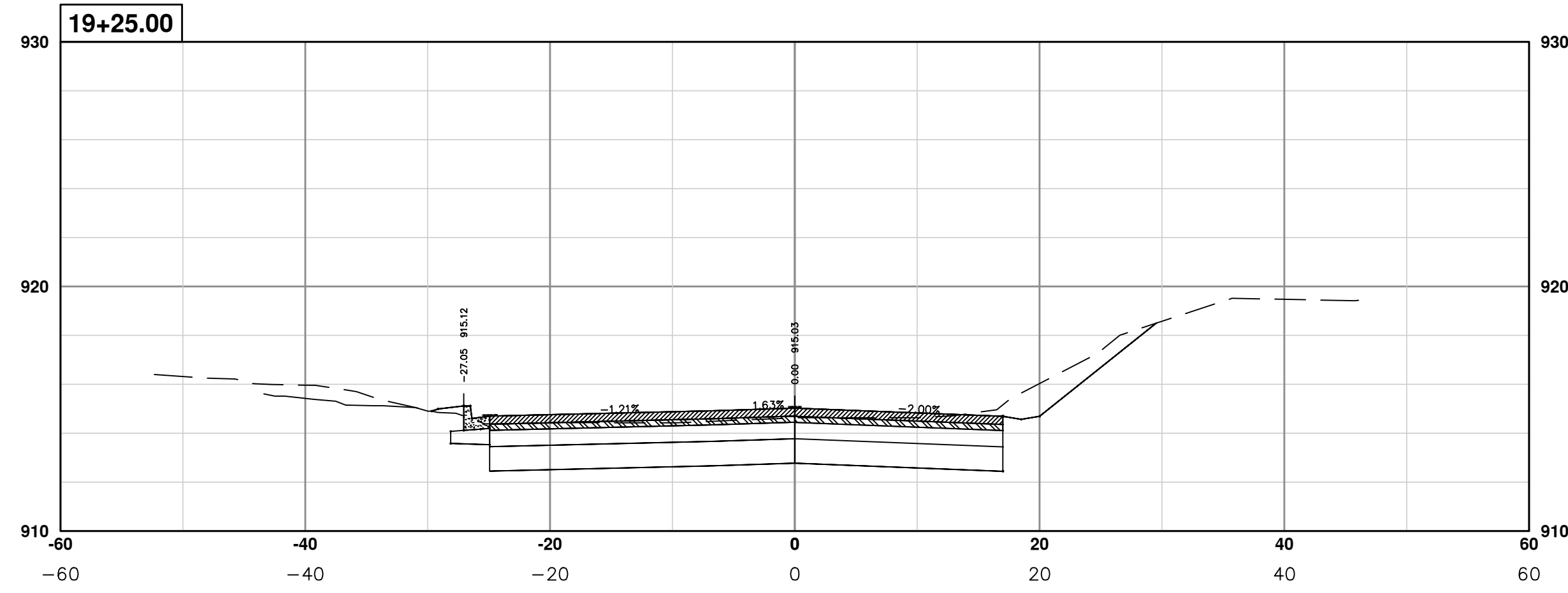
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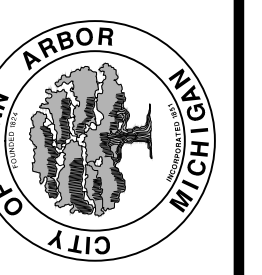
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 SECTION PLANS 14 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
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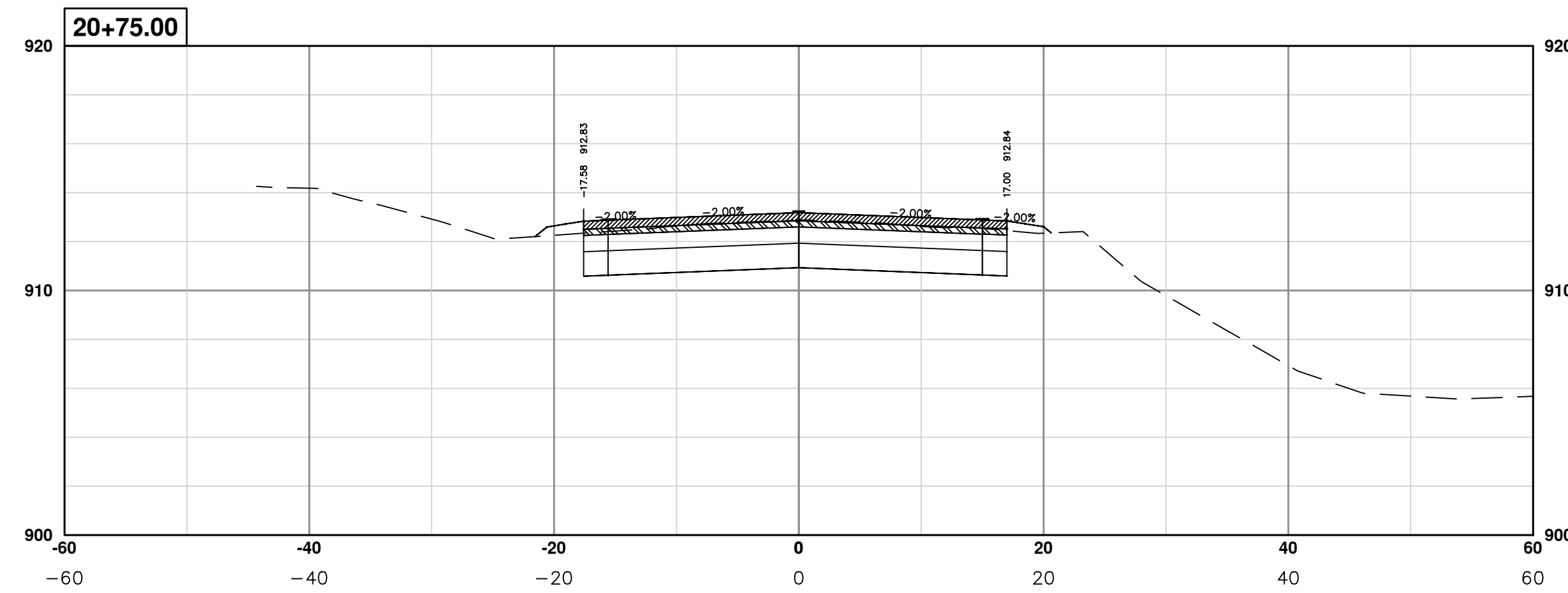
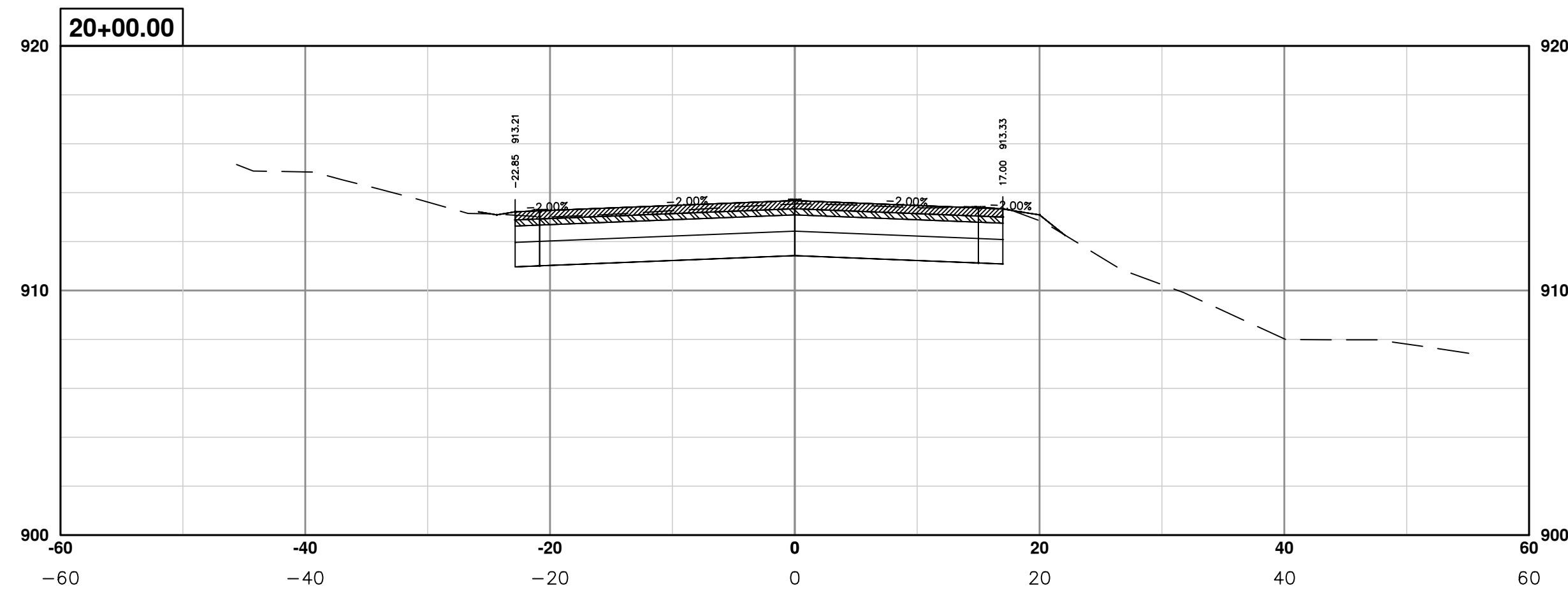
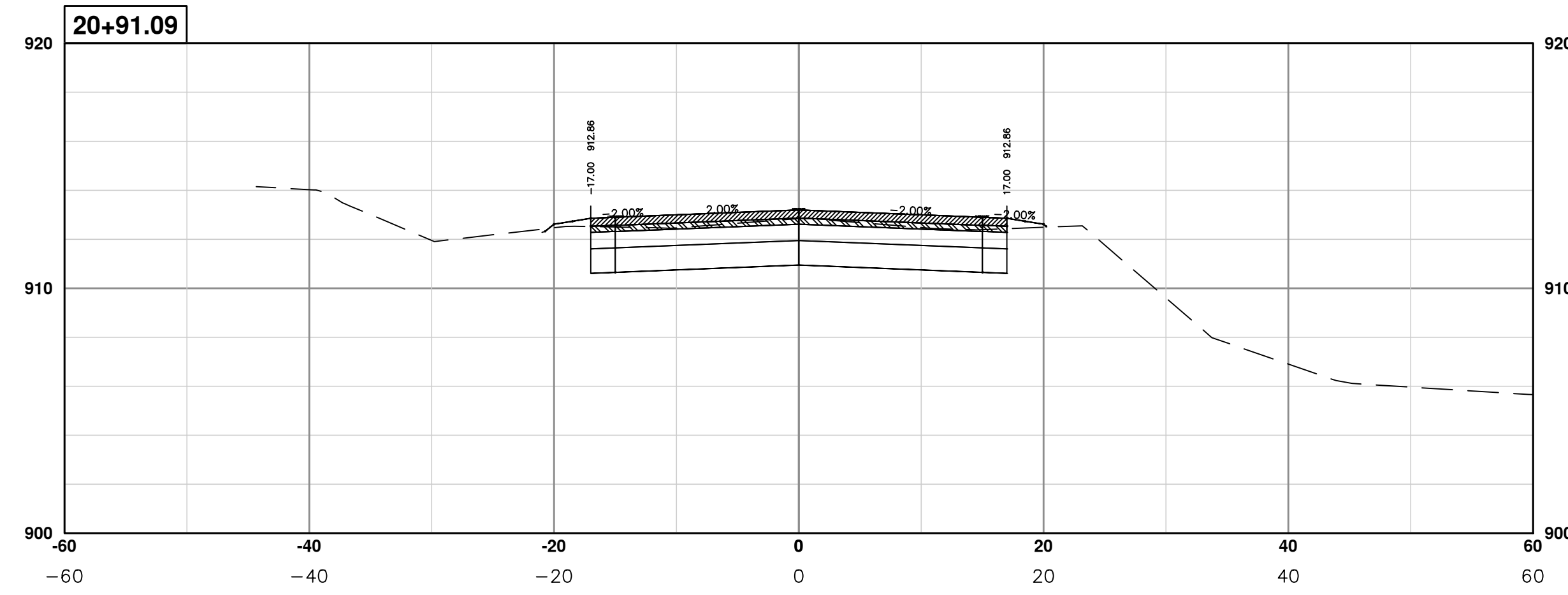
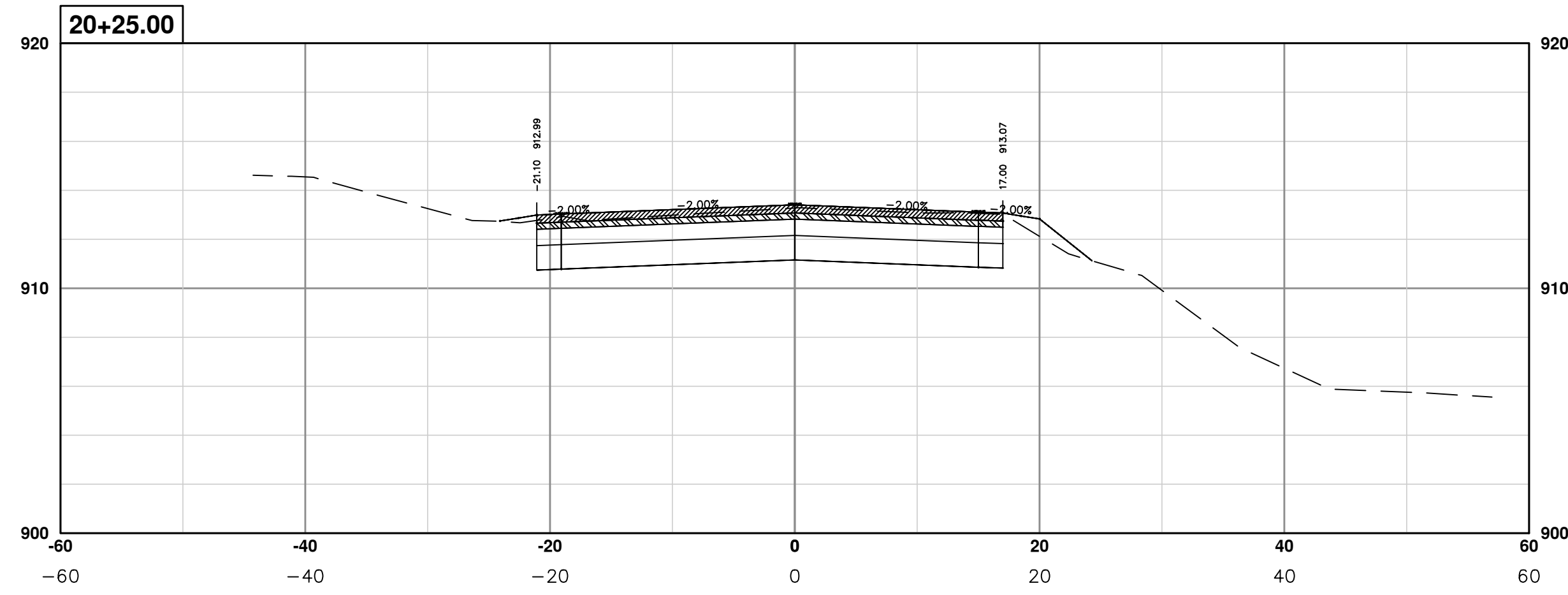
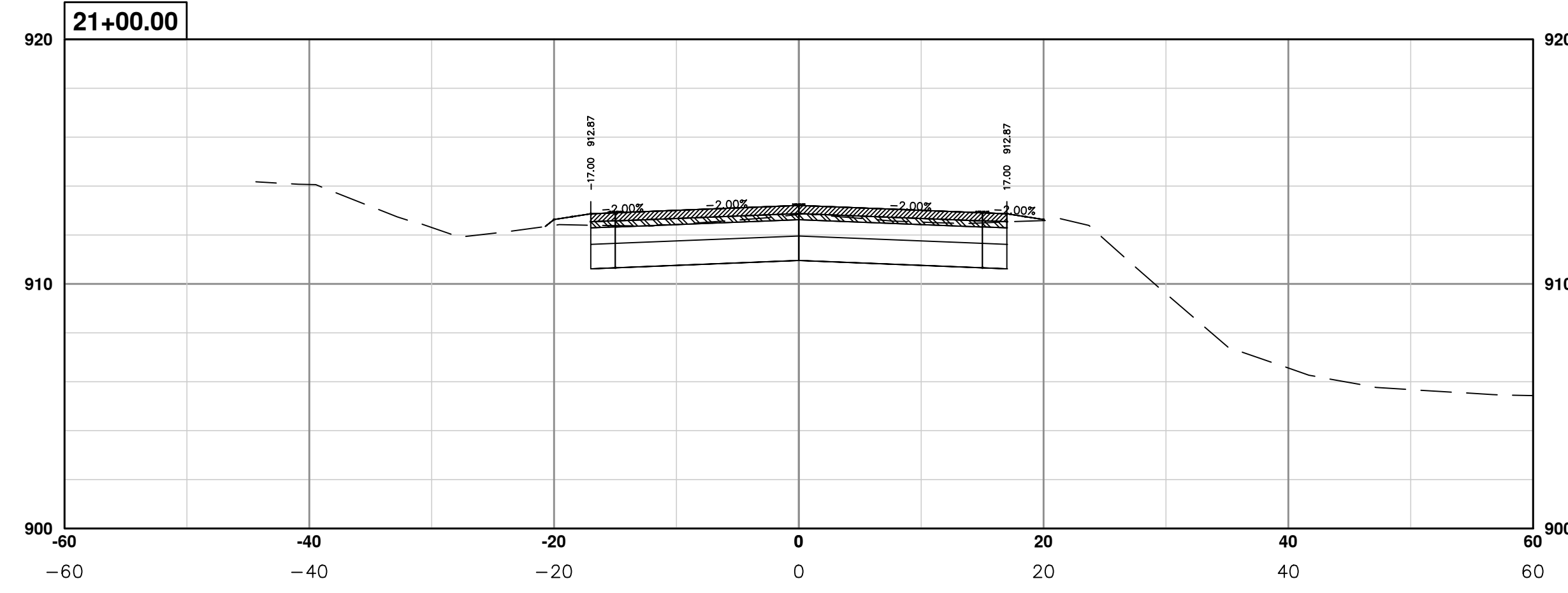
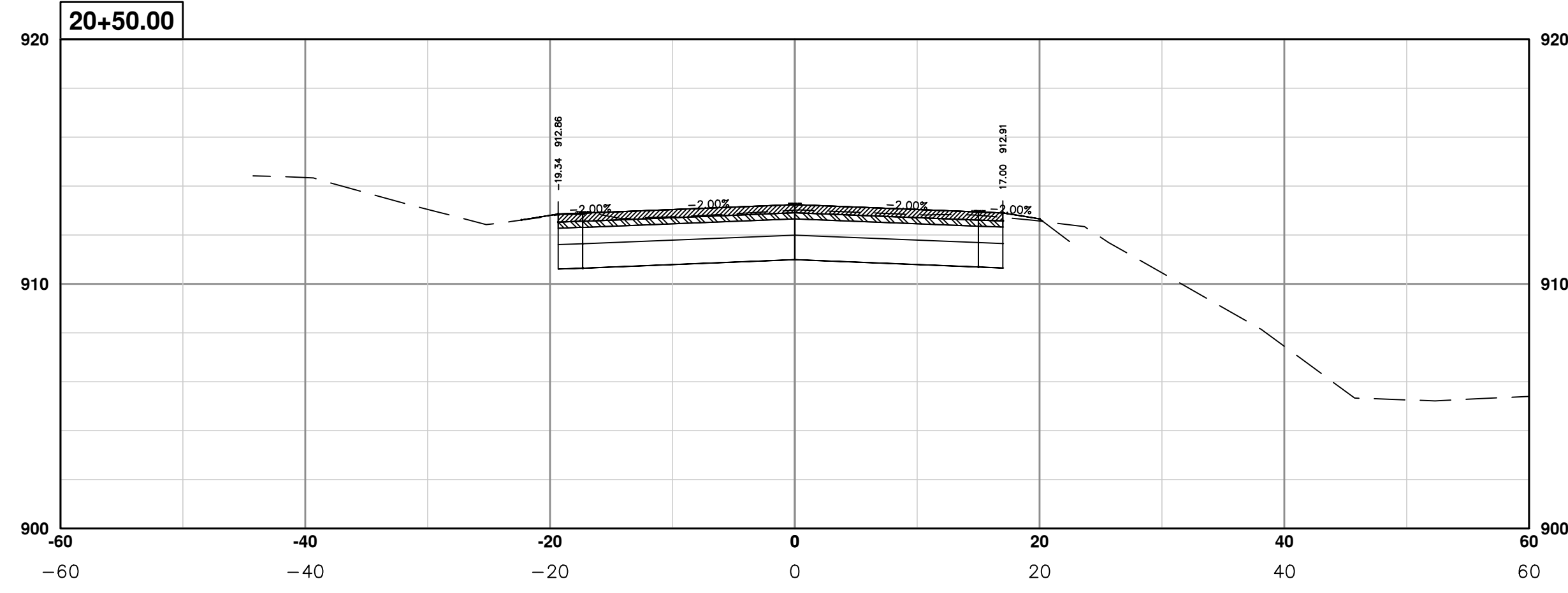
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 15 OF 34

SCALE PLAN: ##### PROFILE: 1"=4'
 DRAWING No. 2012028-62
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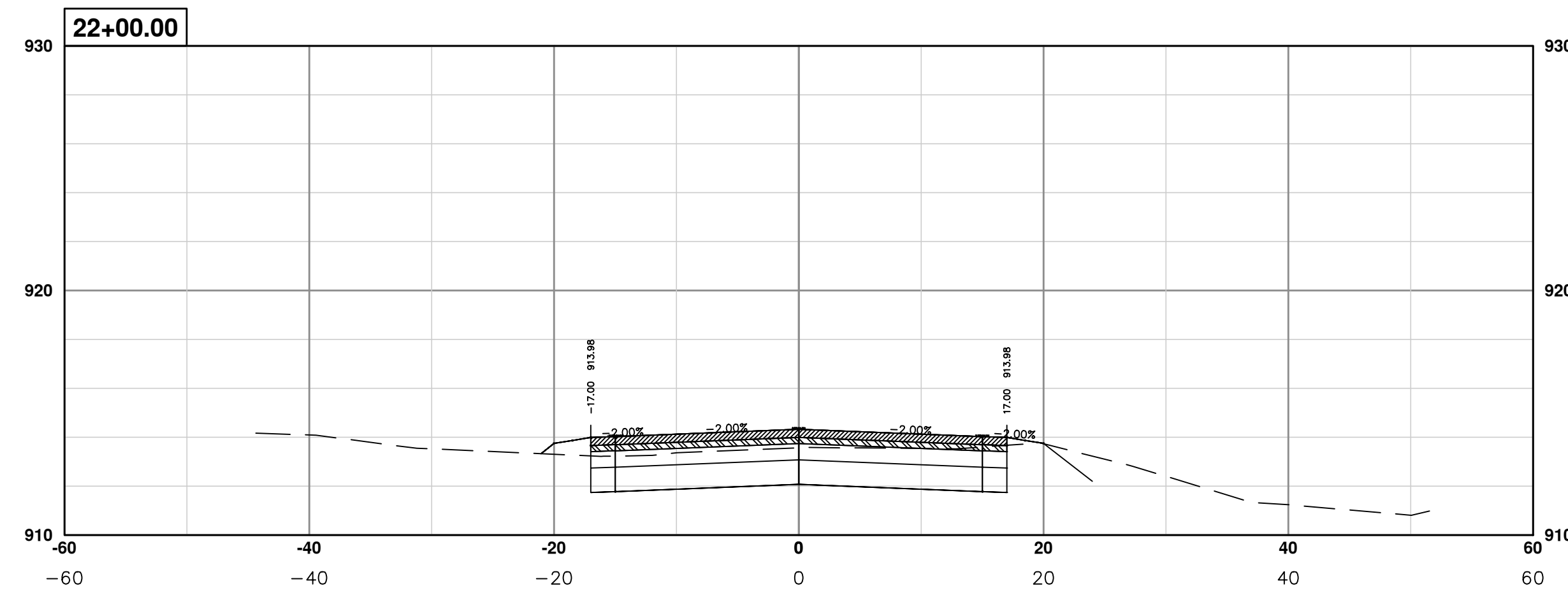
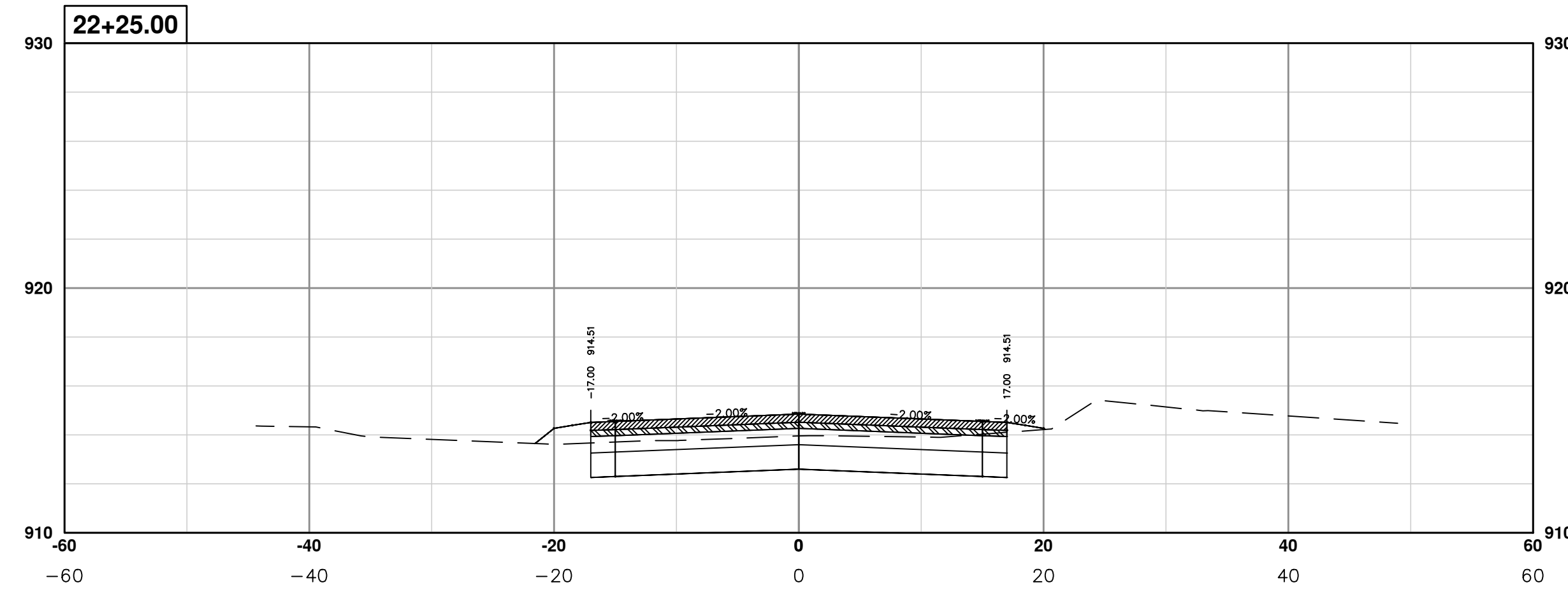
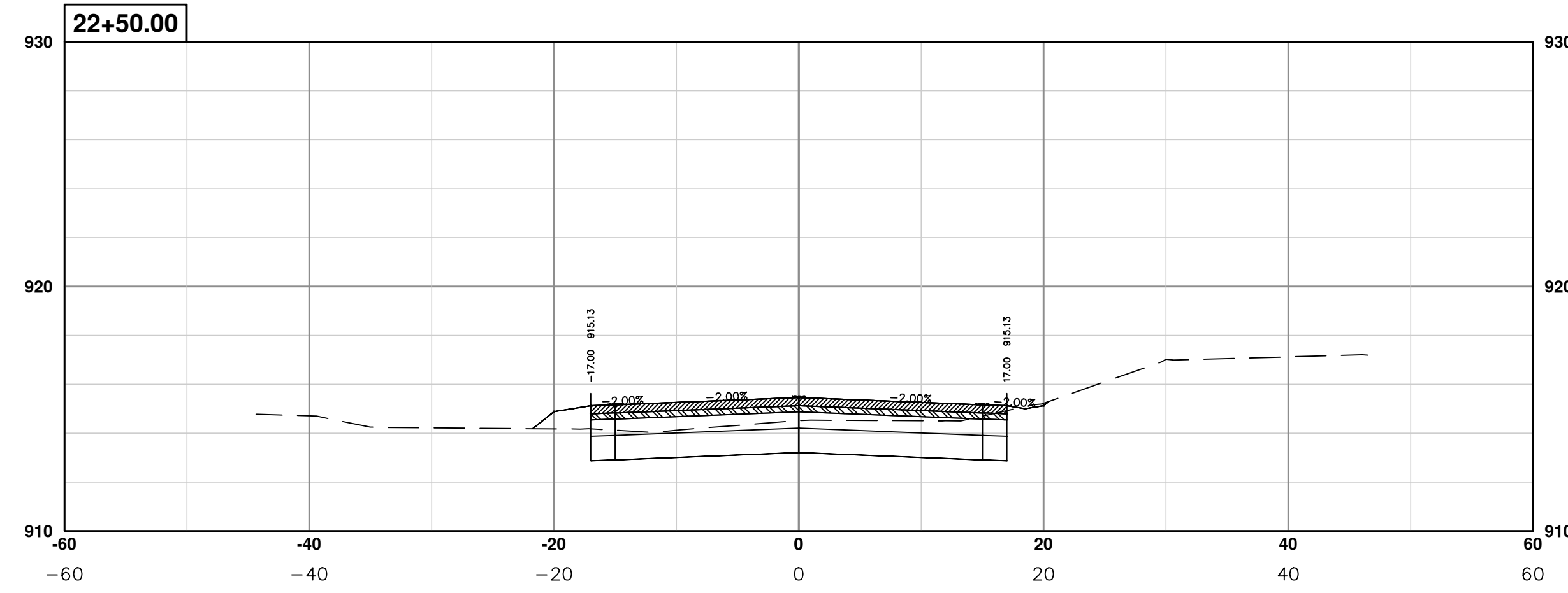
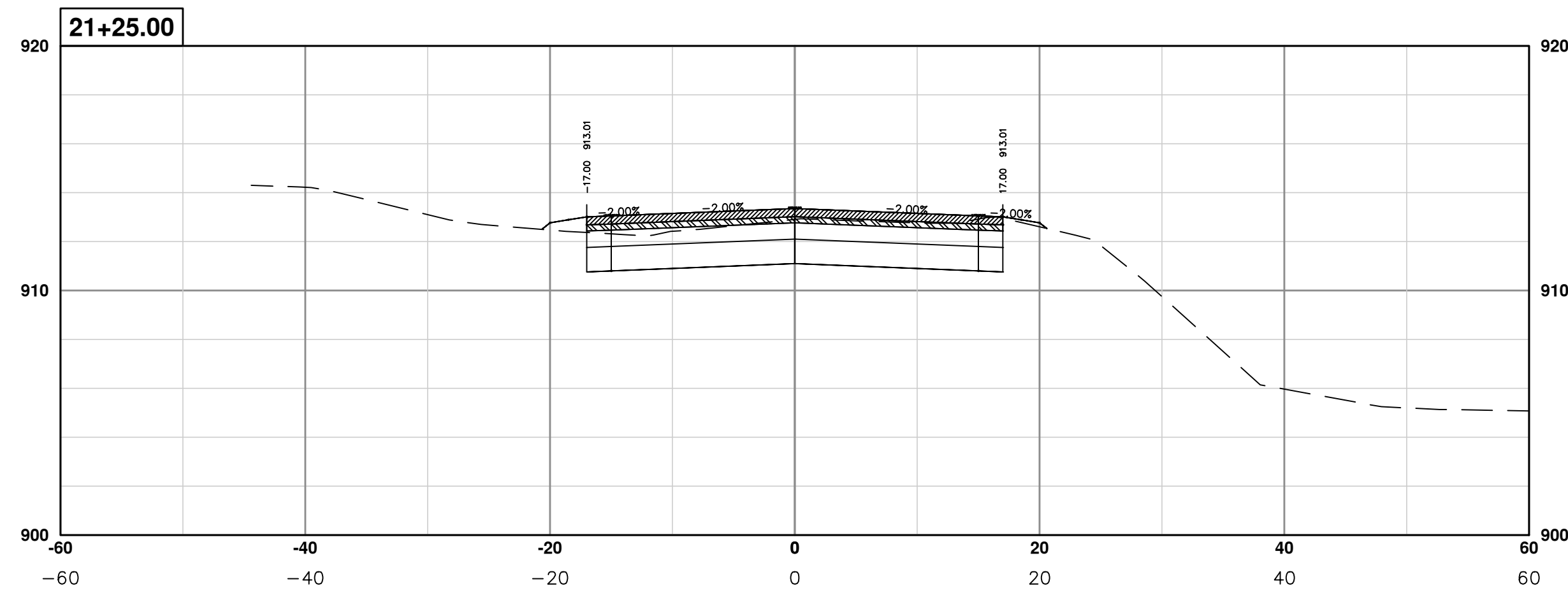
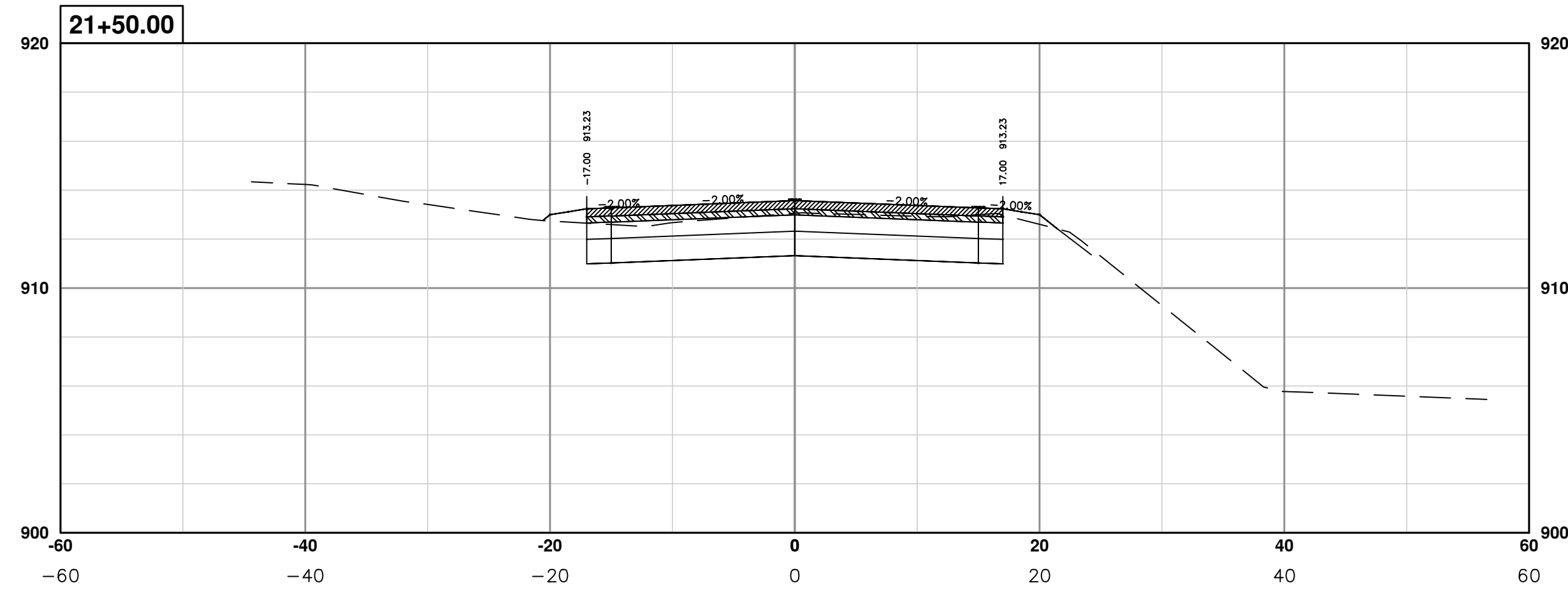
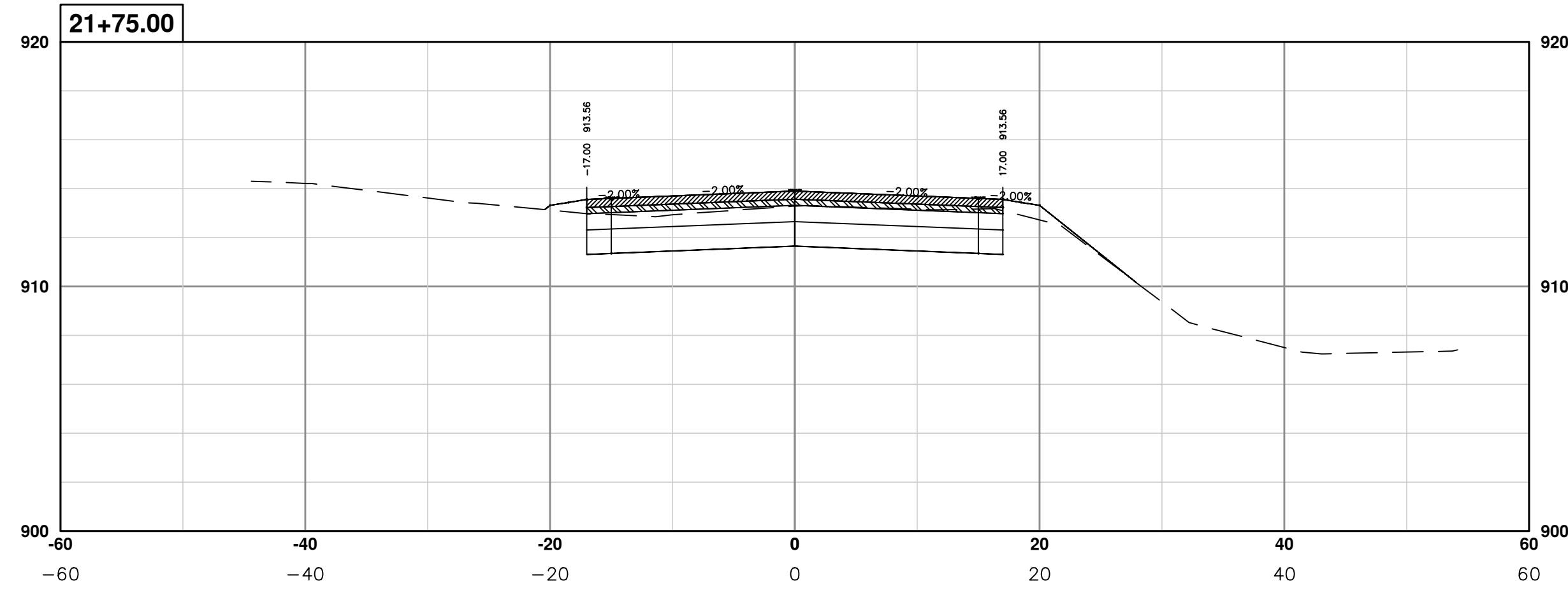
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 16 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
 DRAWING No. 2012028-63
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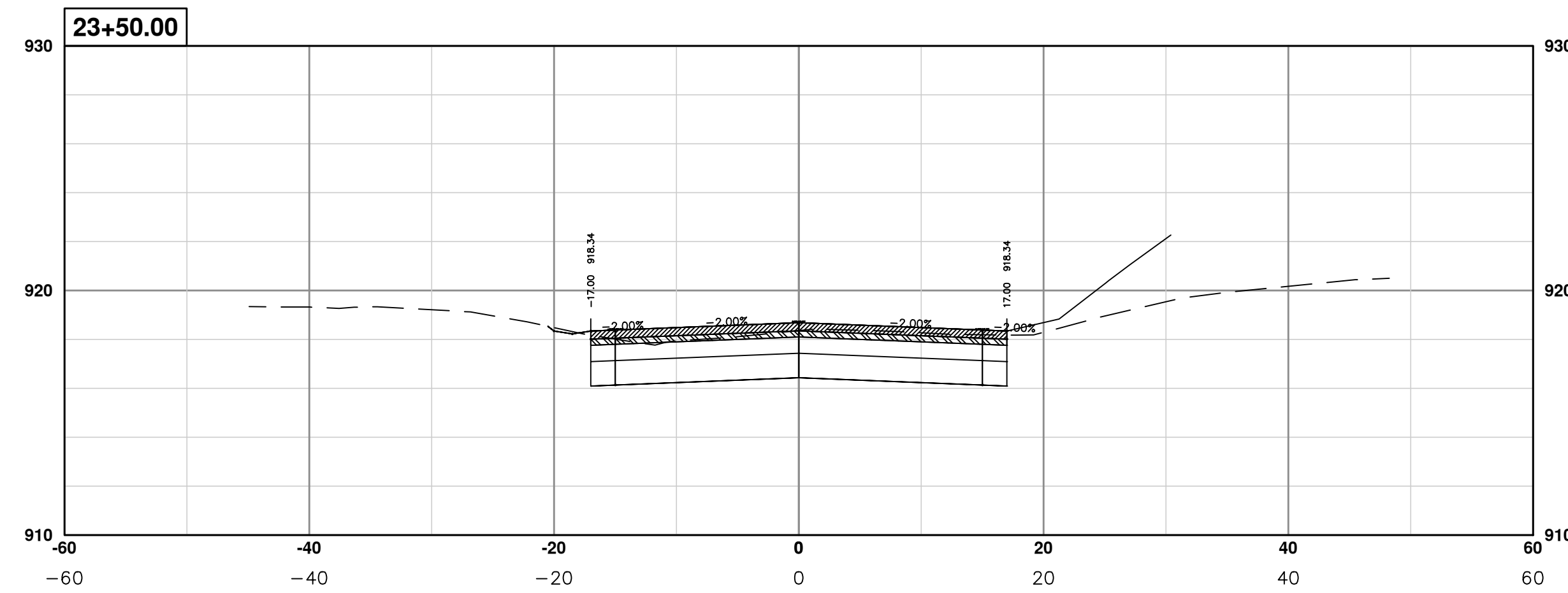
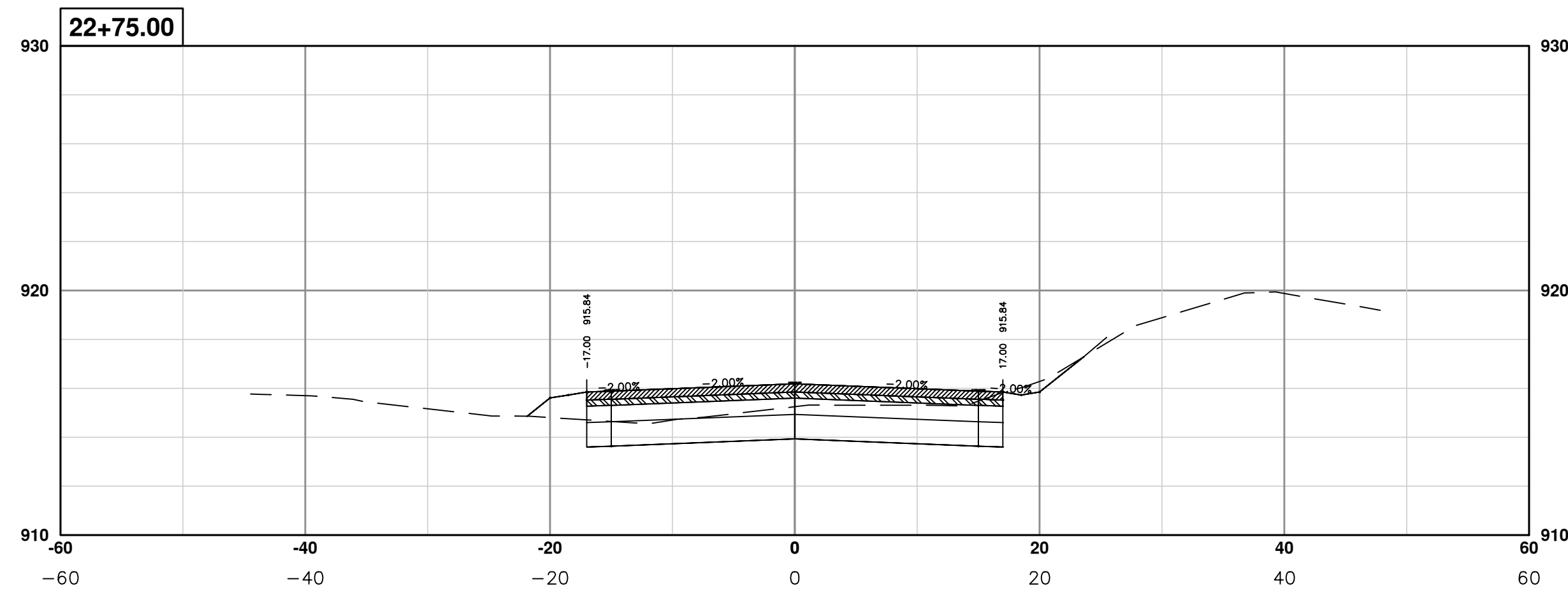
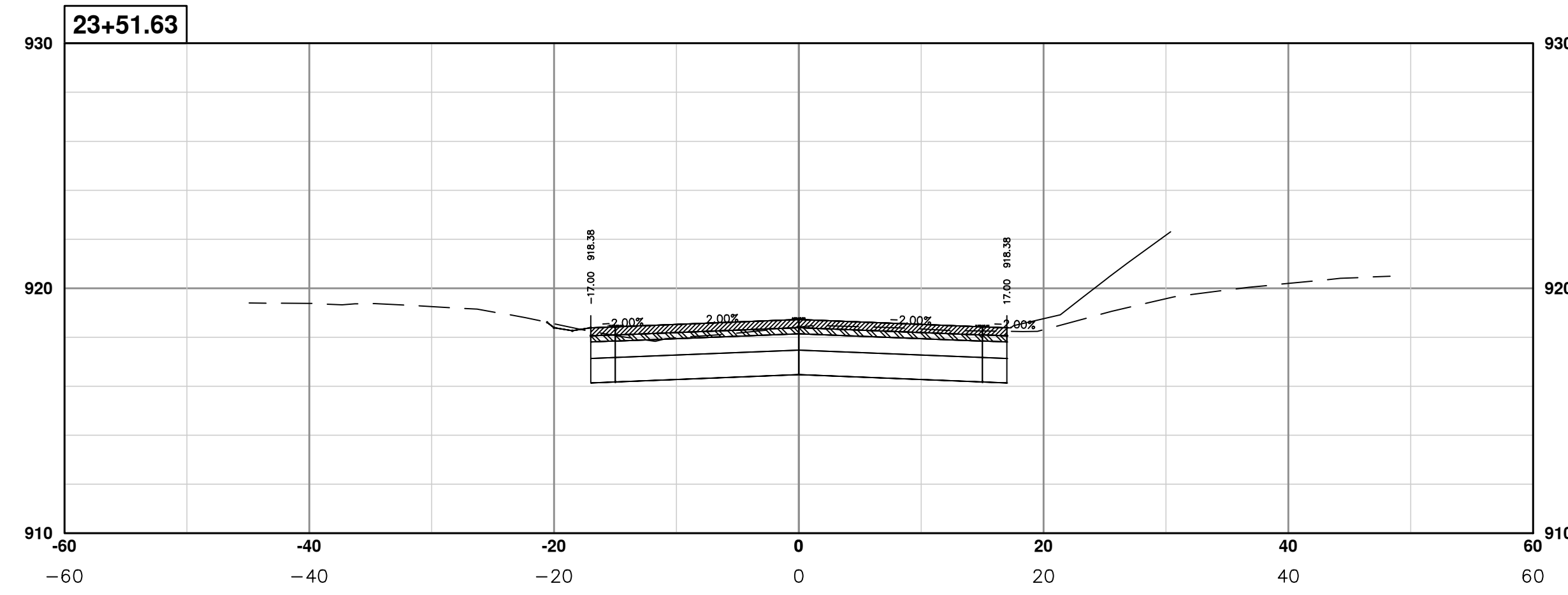
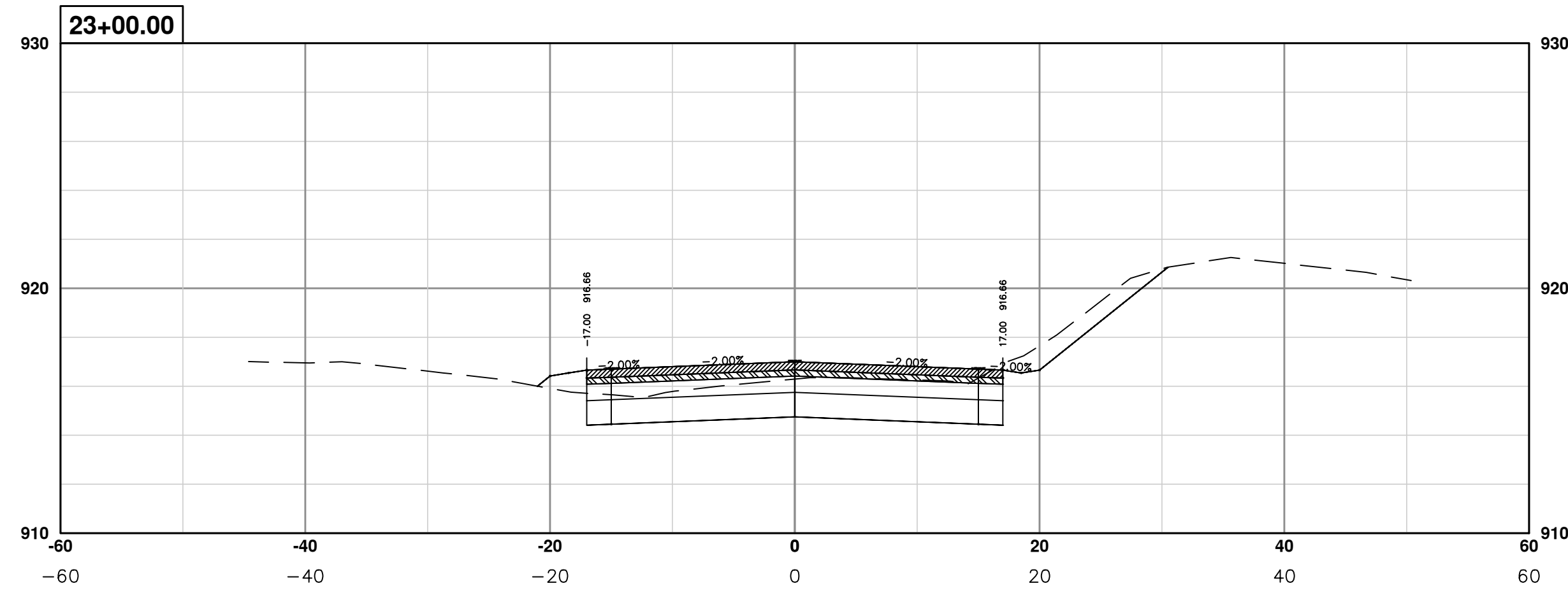
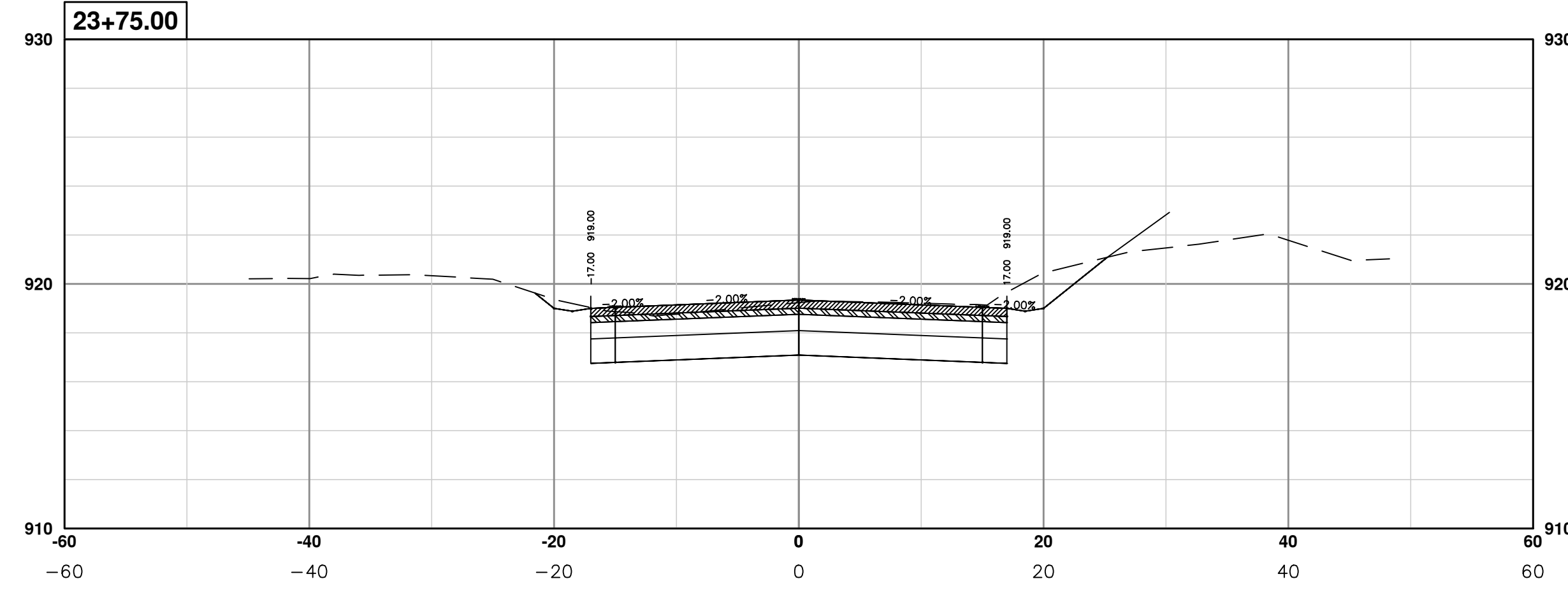
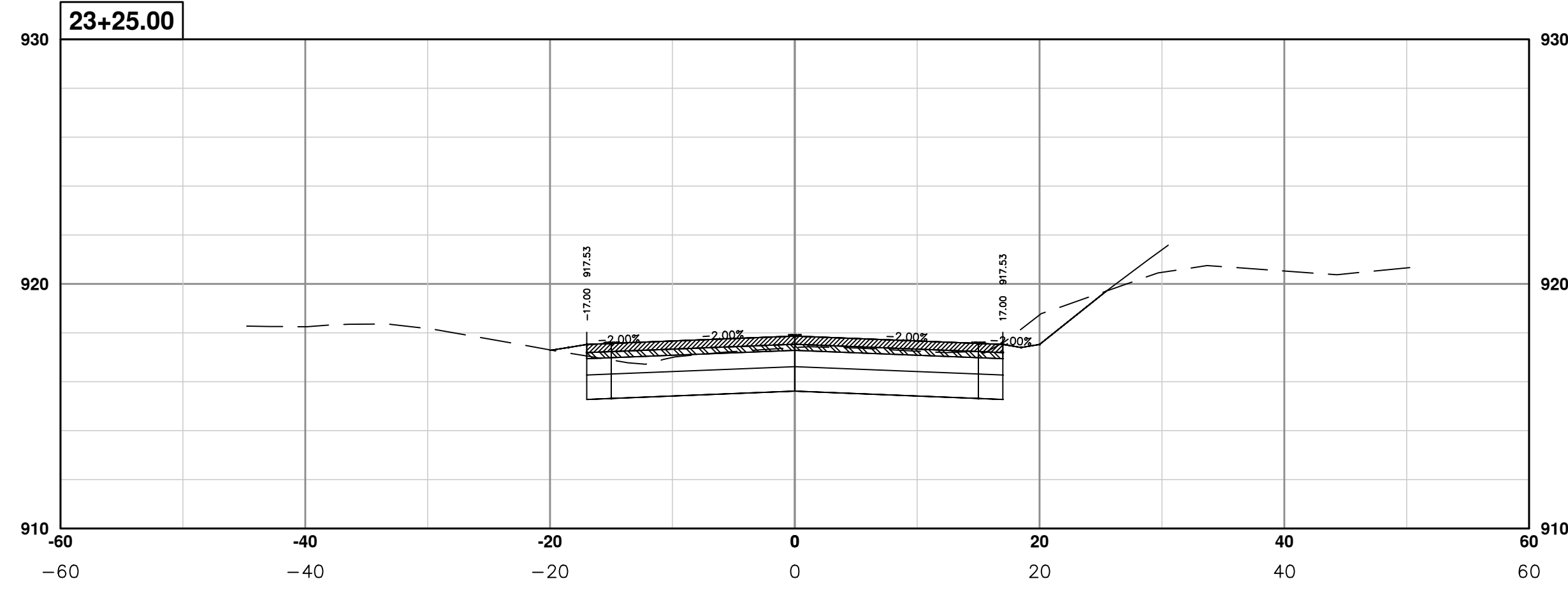


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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 17 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
 DRAWING No. 2012028-64
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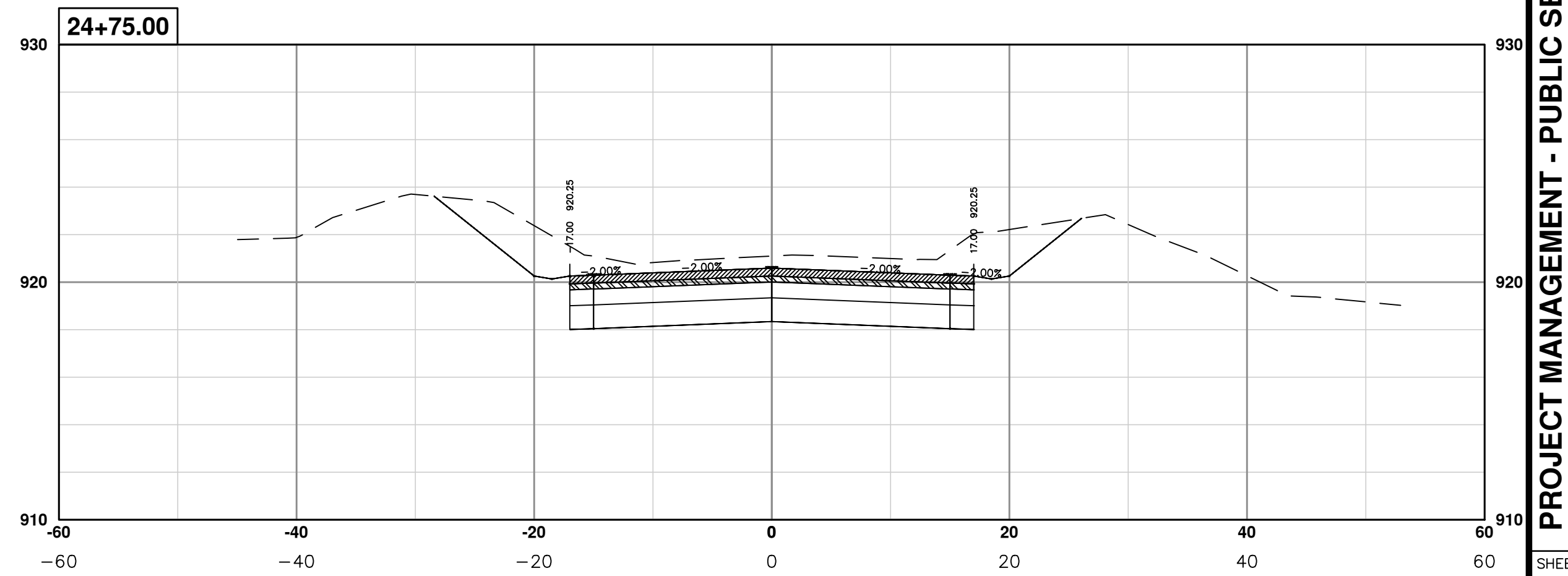
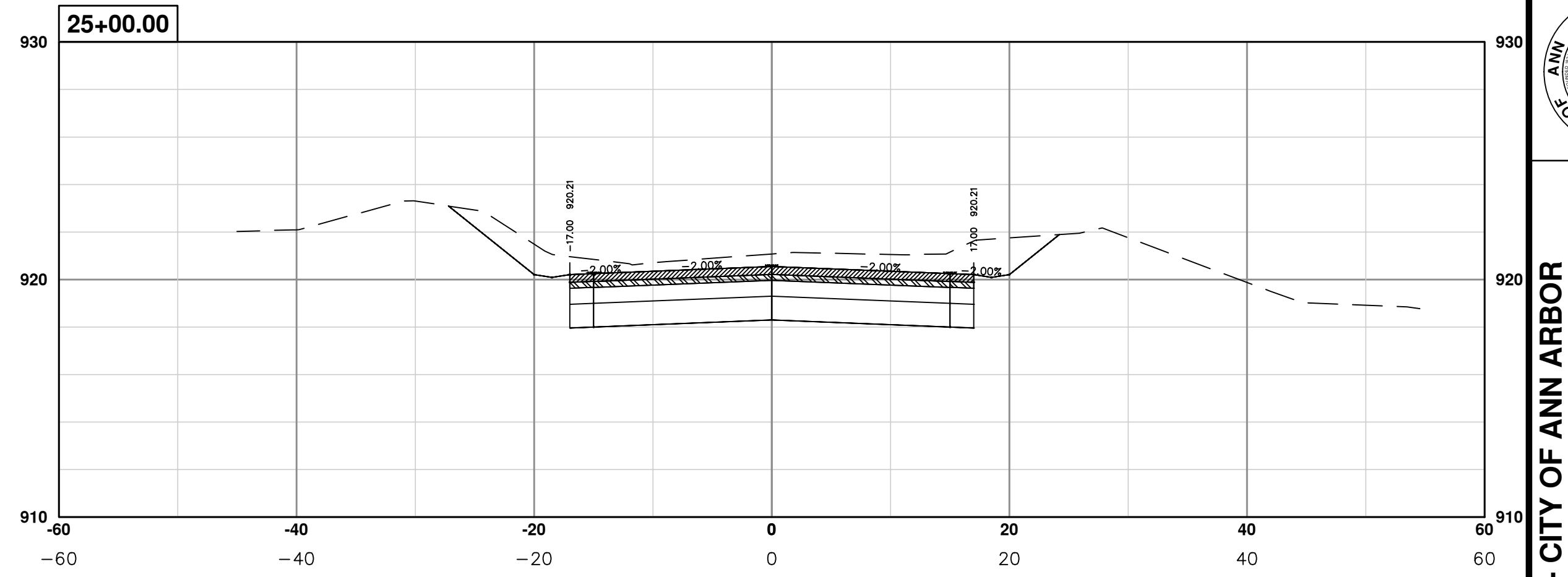
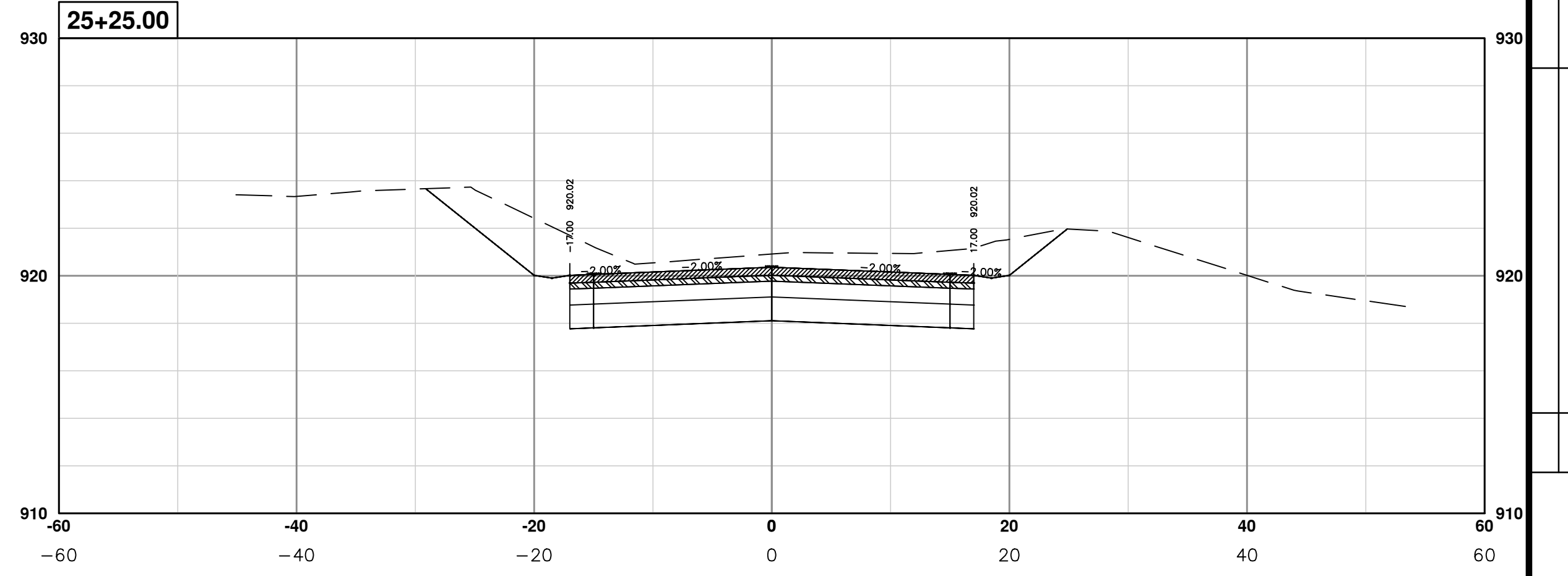
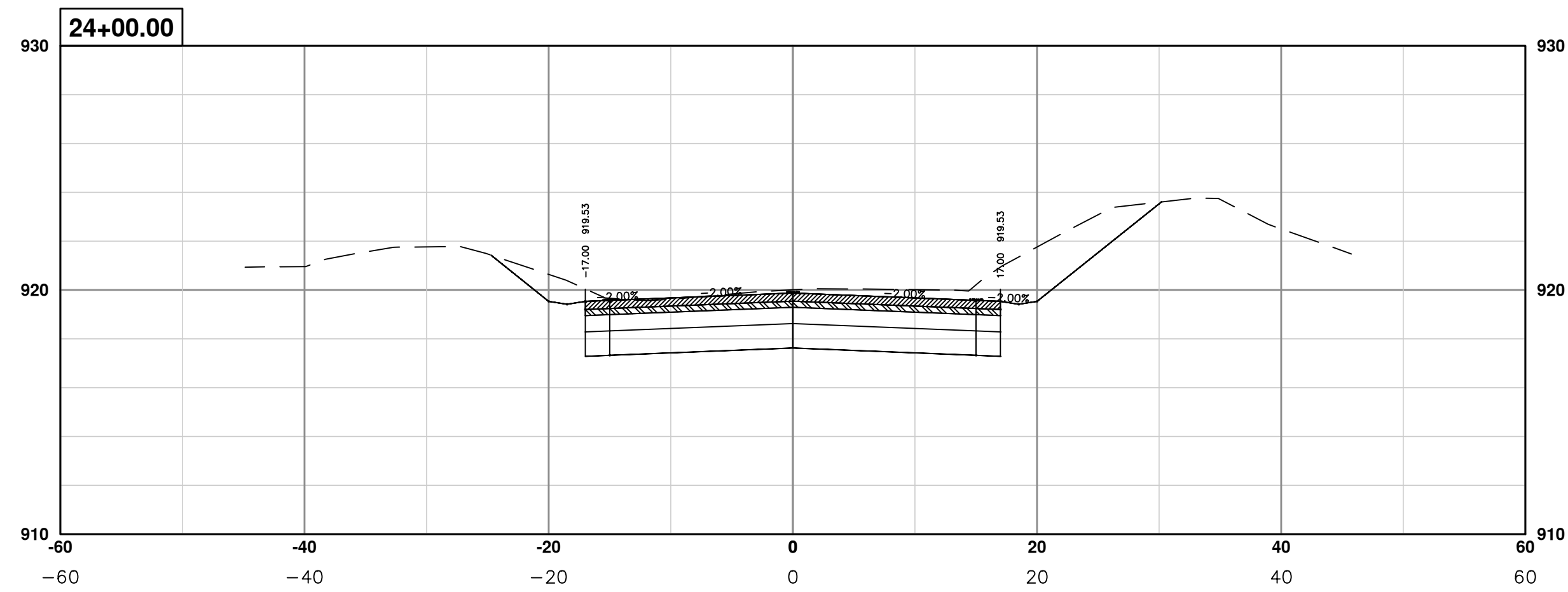
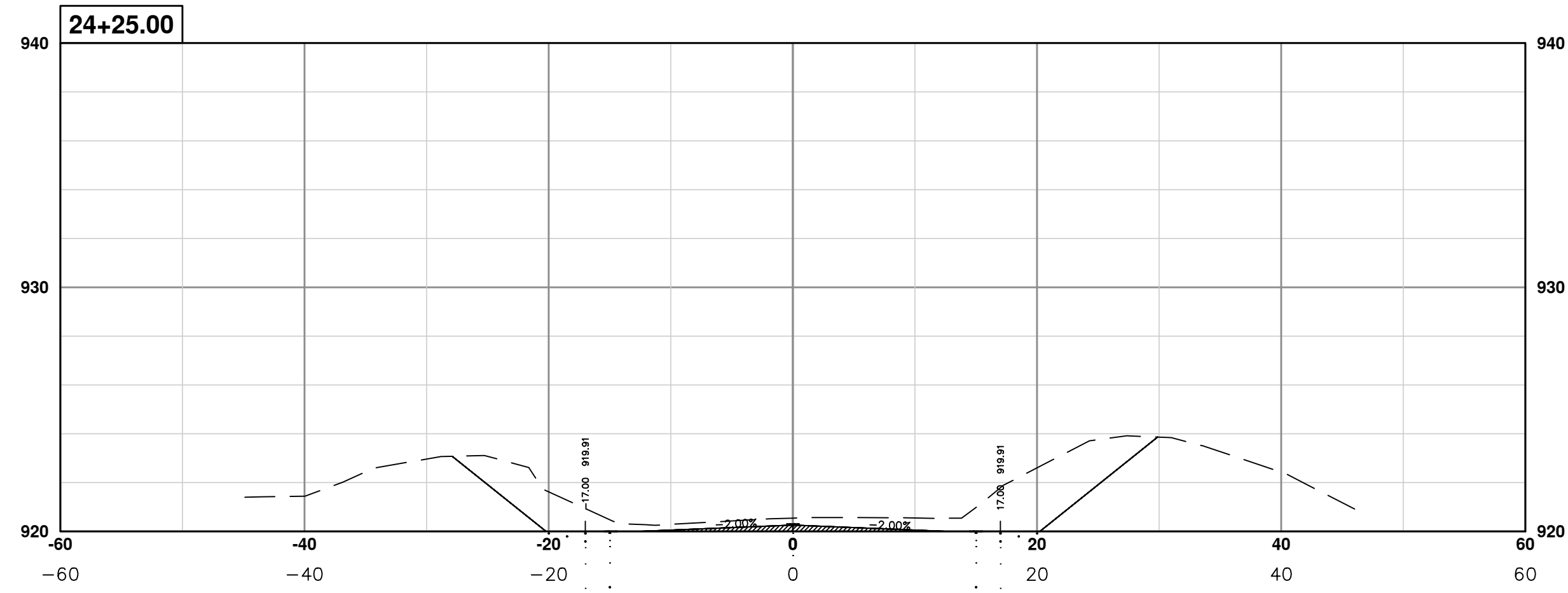
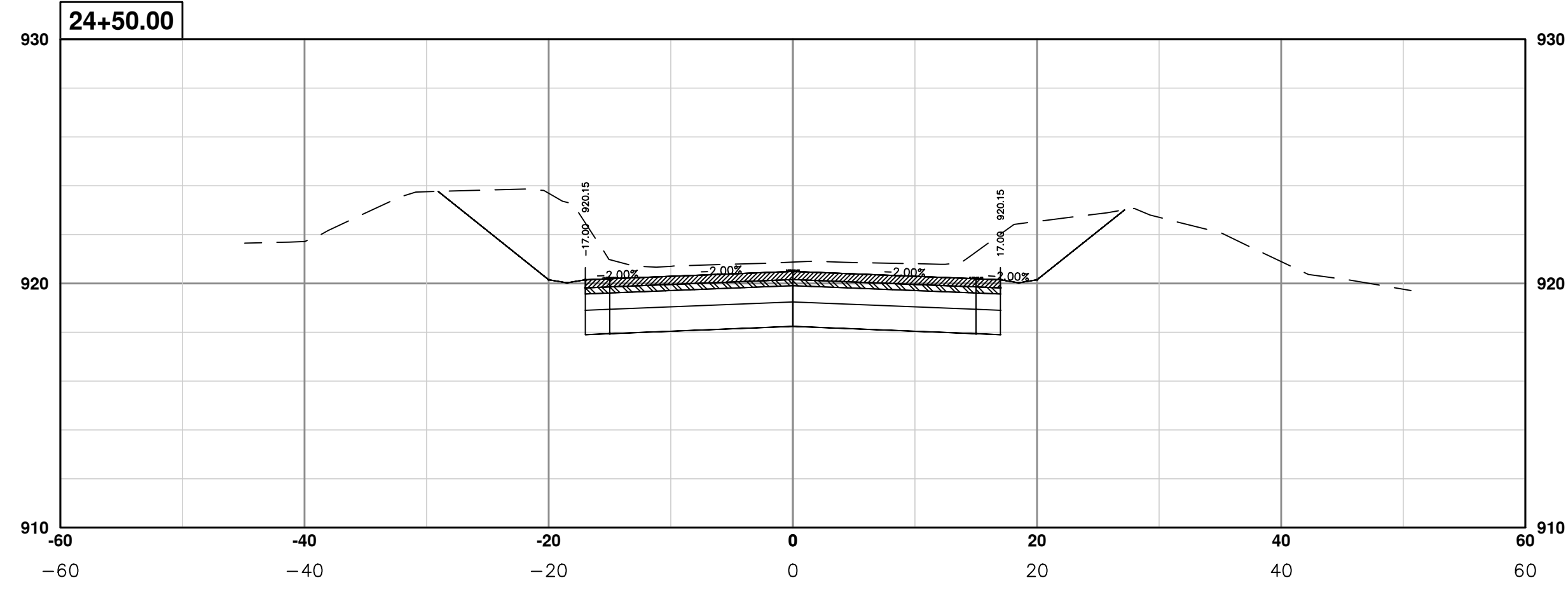
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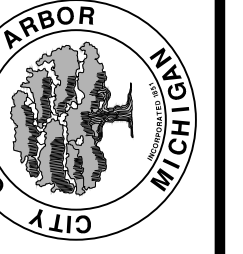
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 18 OF 34

SCALE PLAN: #####
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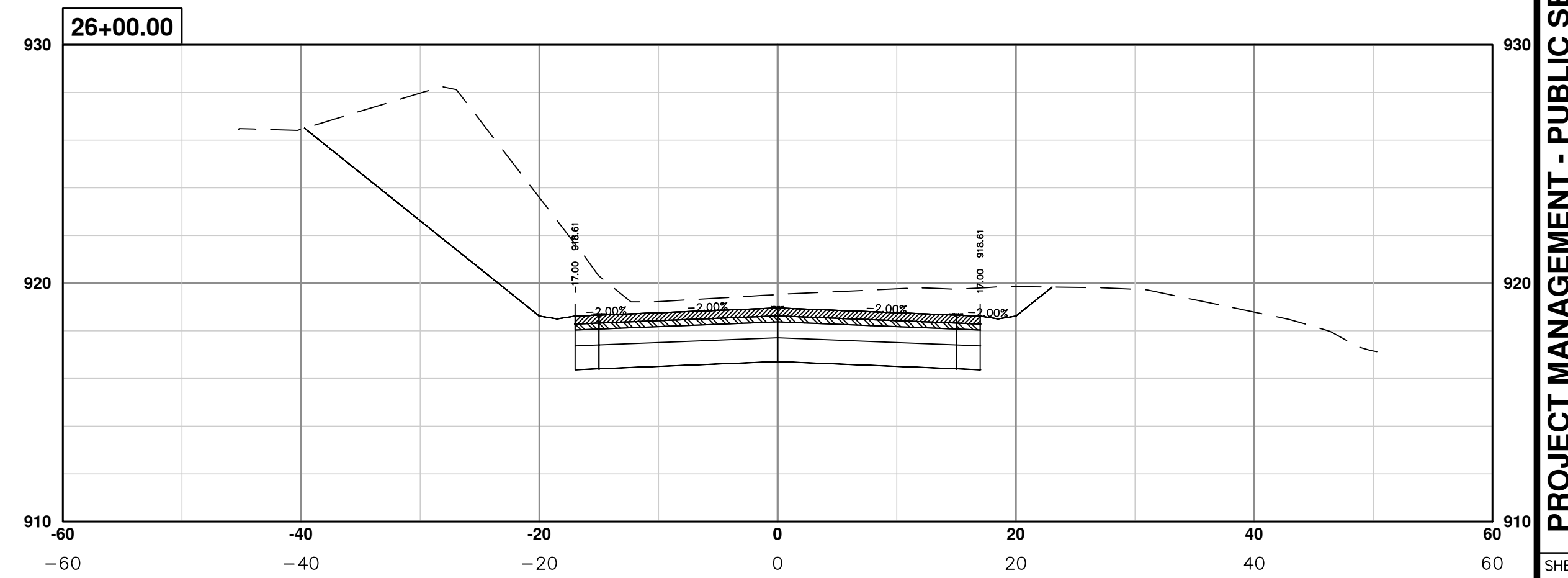
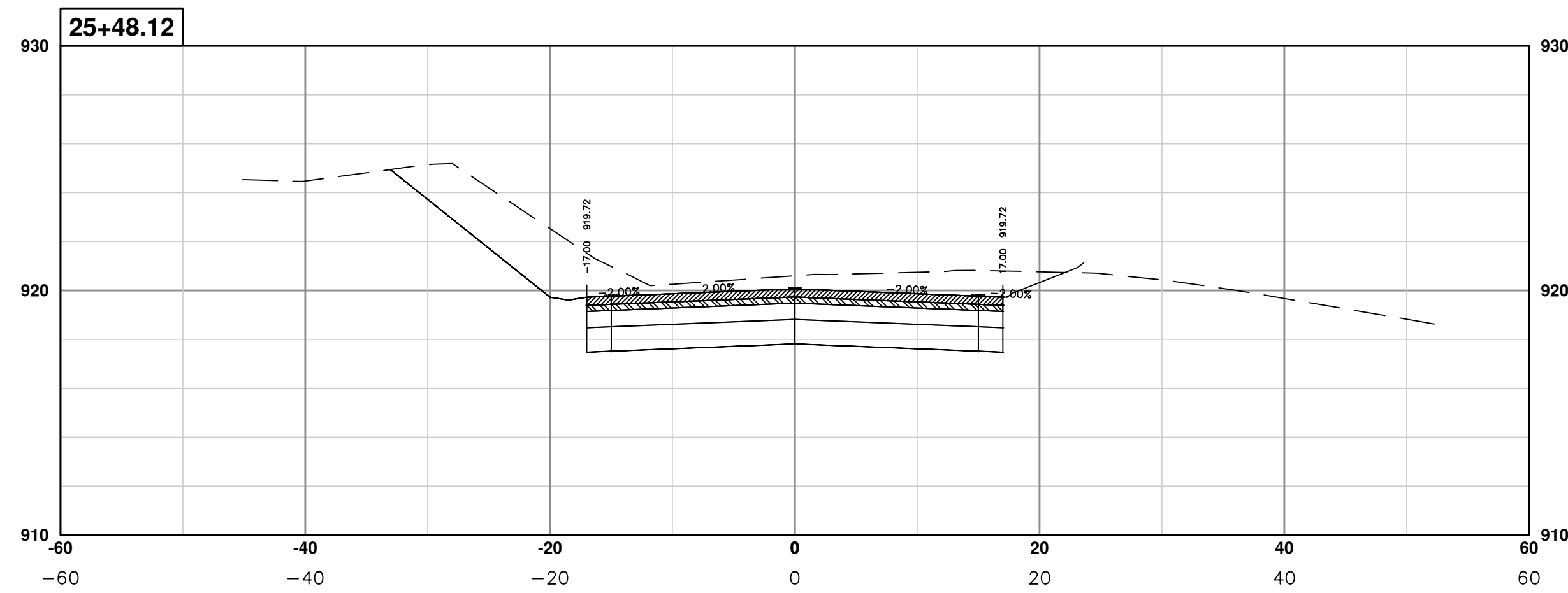
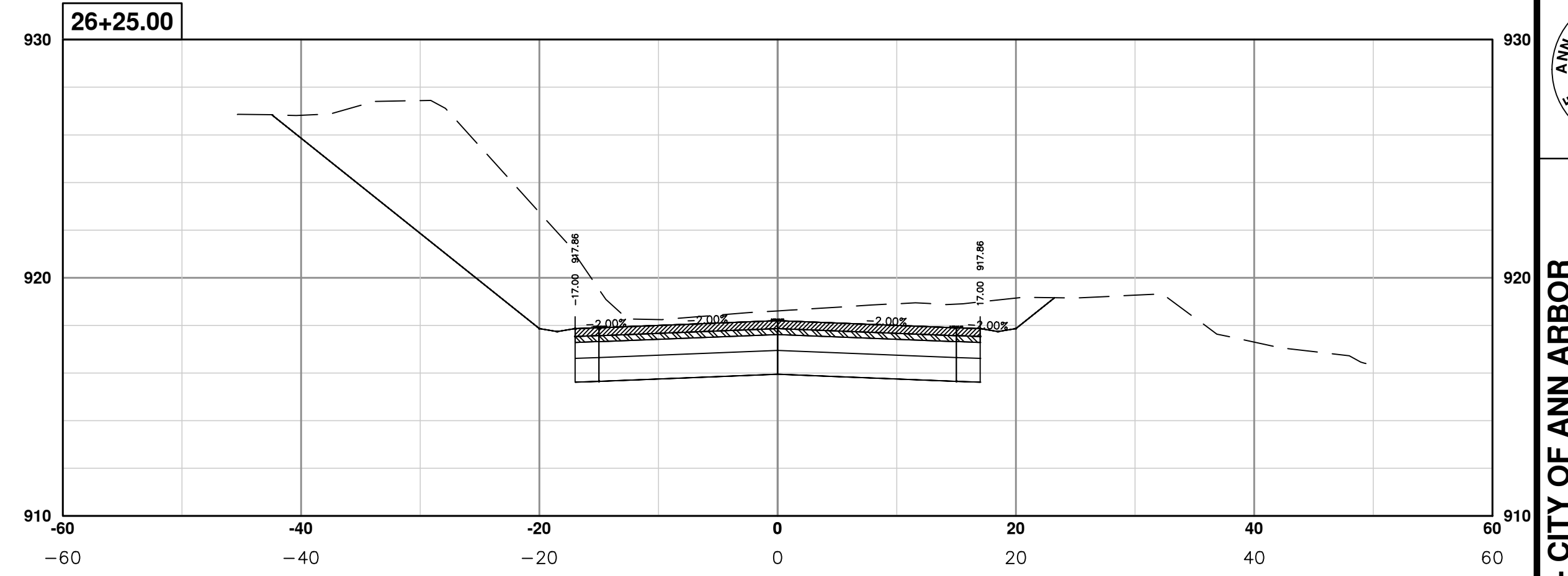
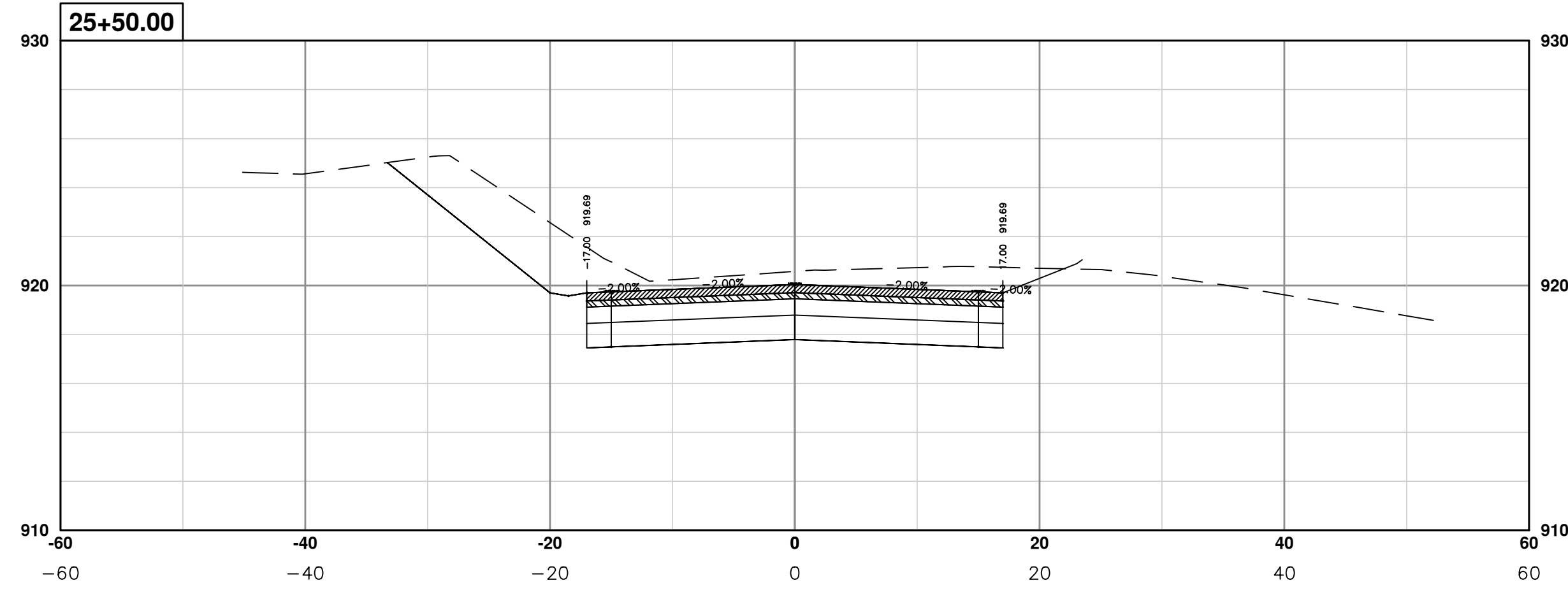
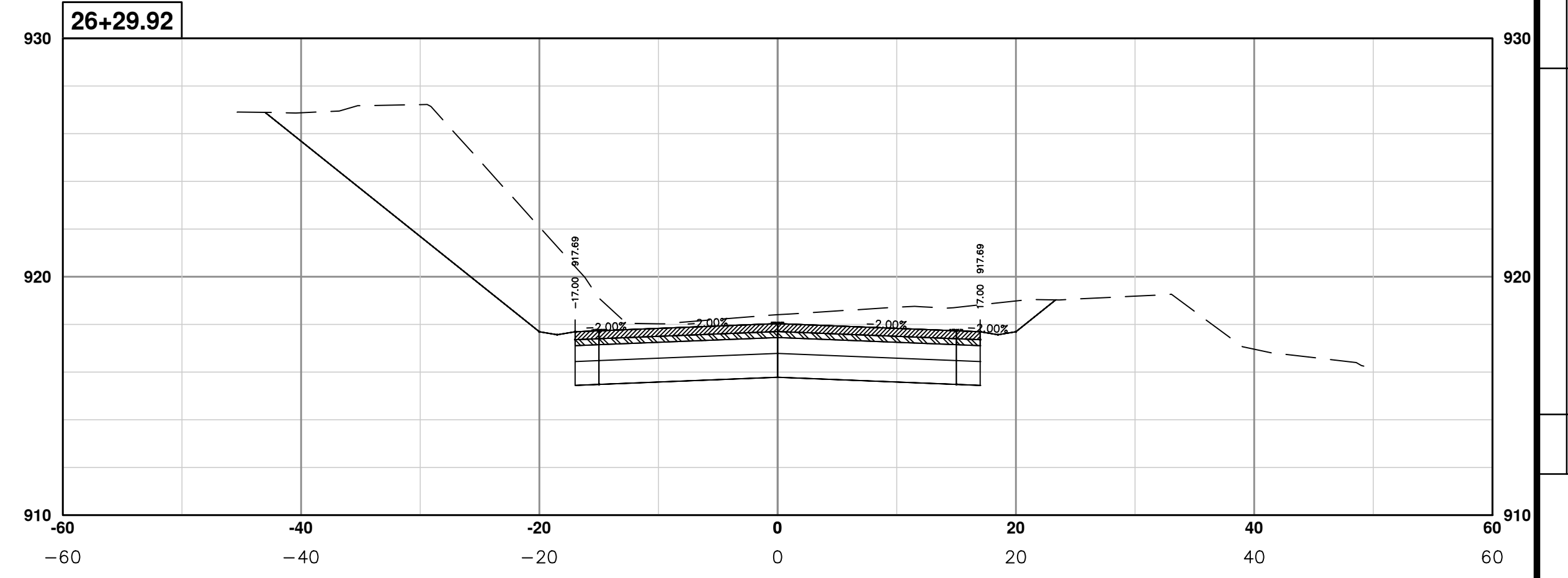
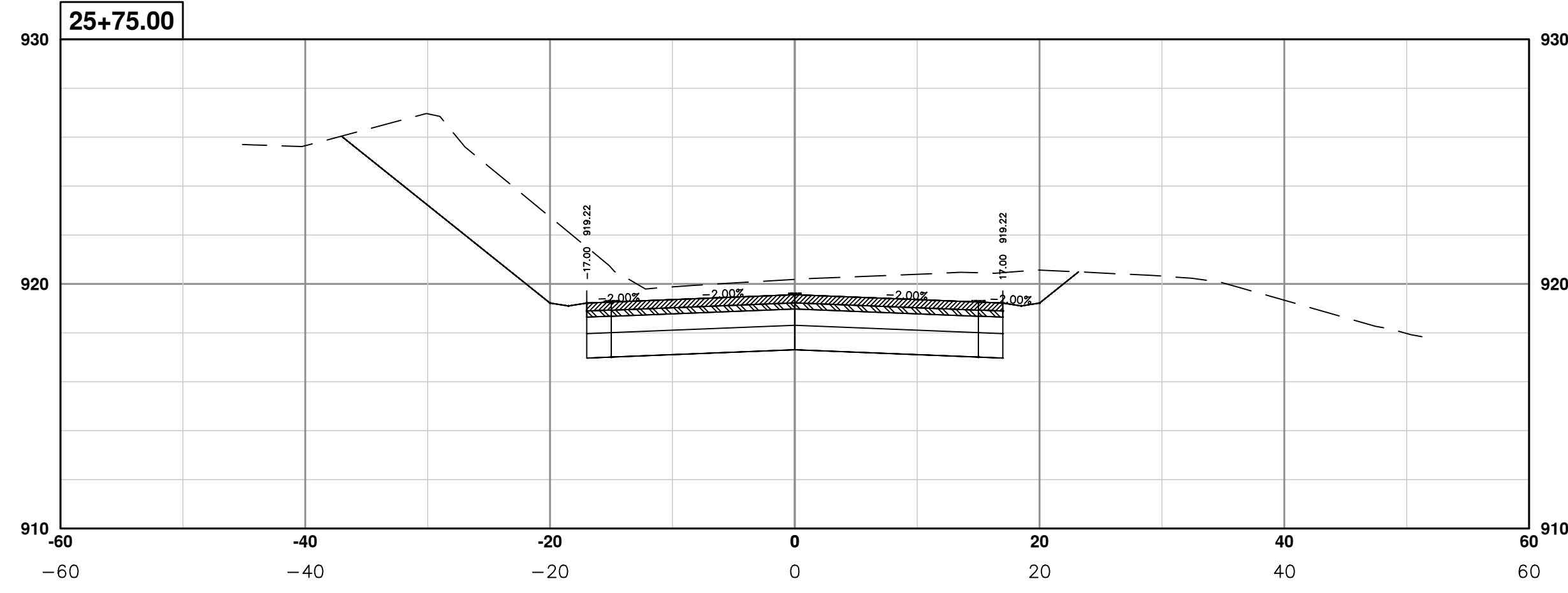
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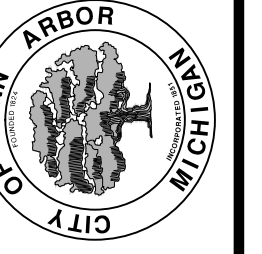
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 19 OF 34

SCALE PLAN: #####
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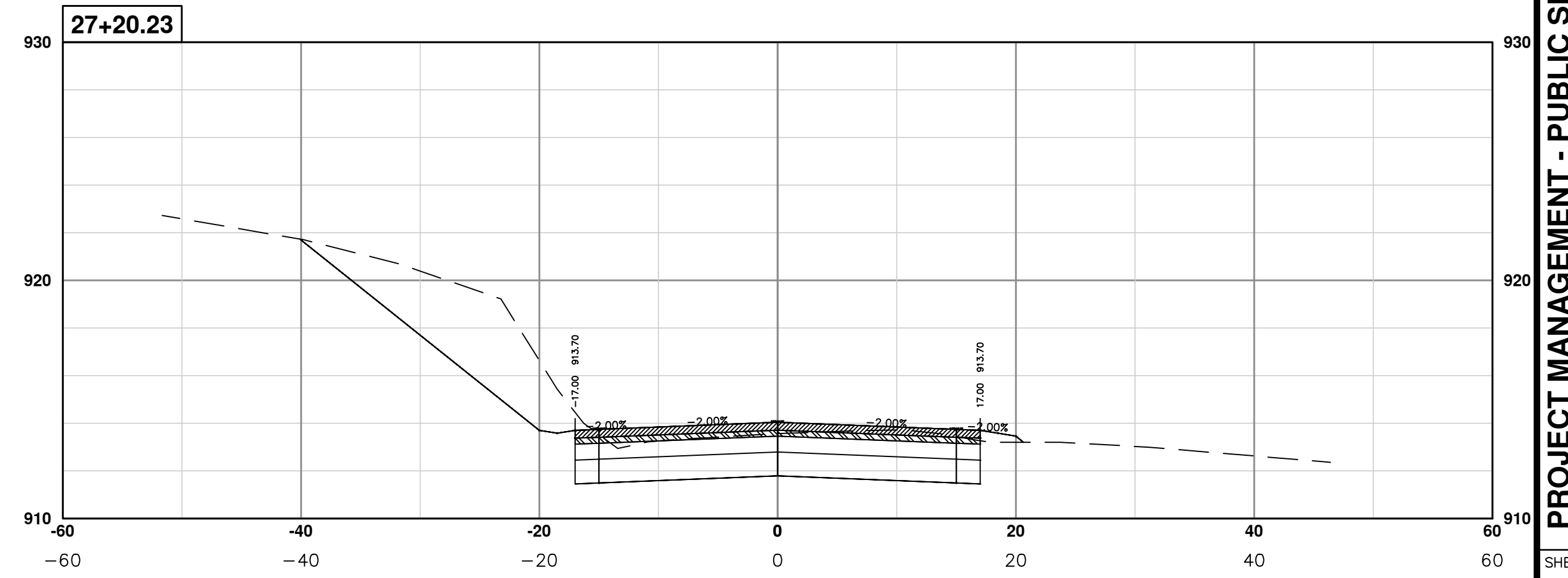
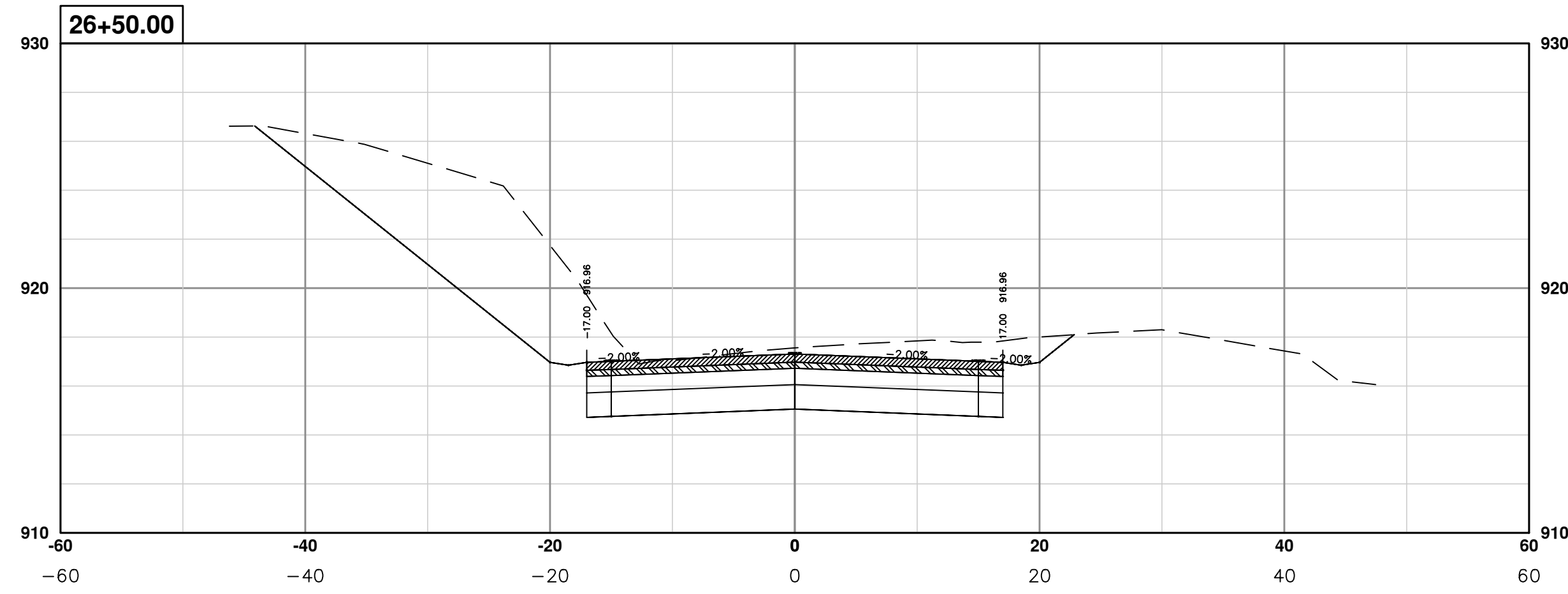
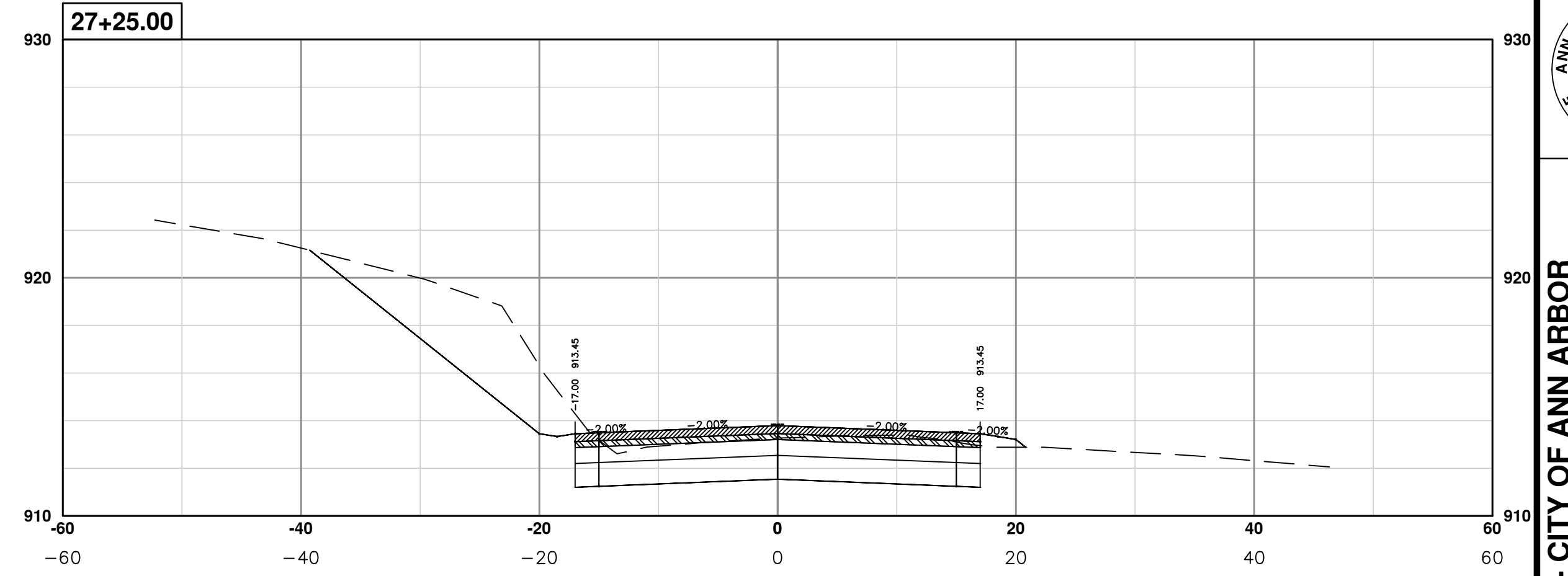
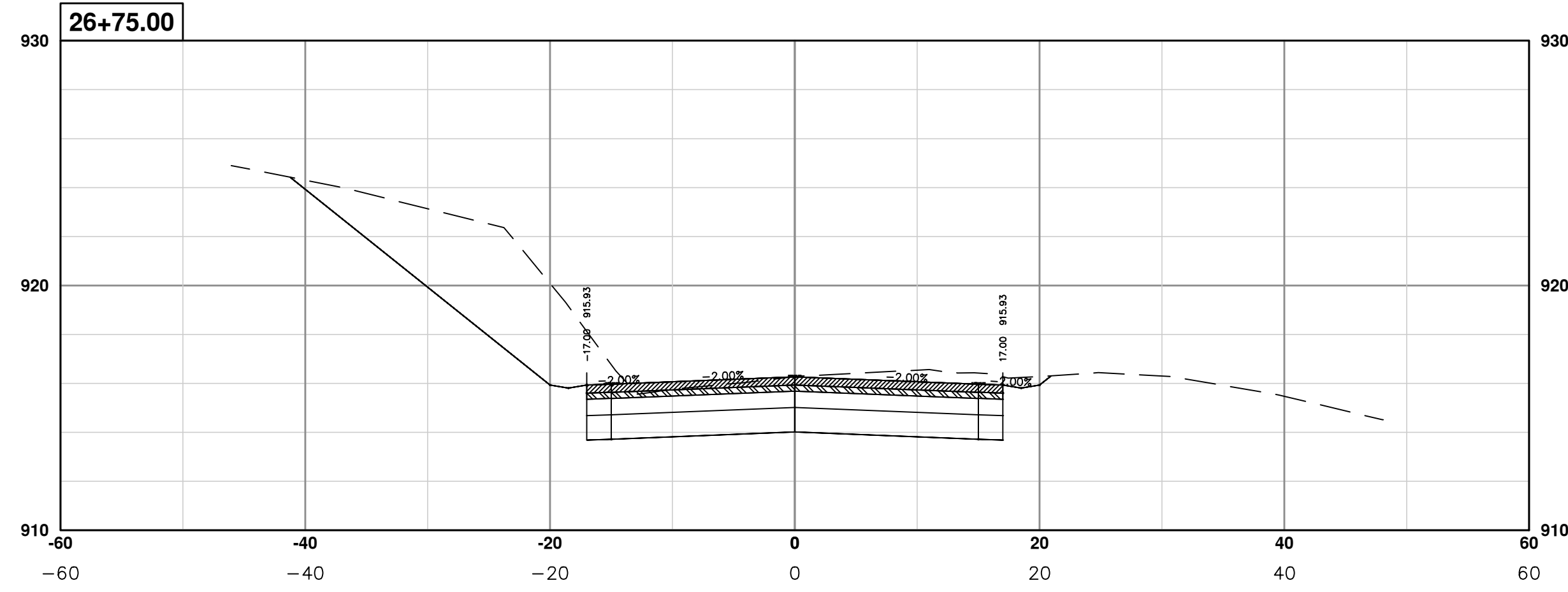
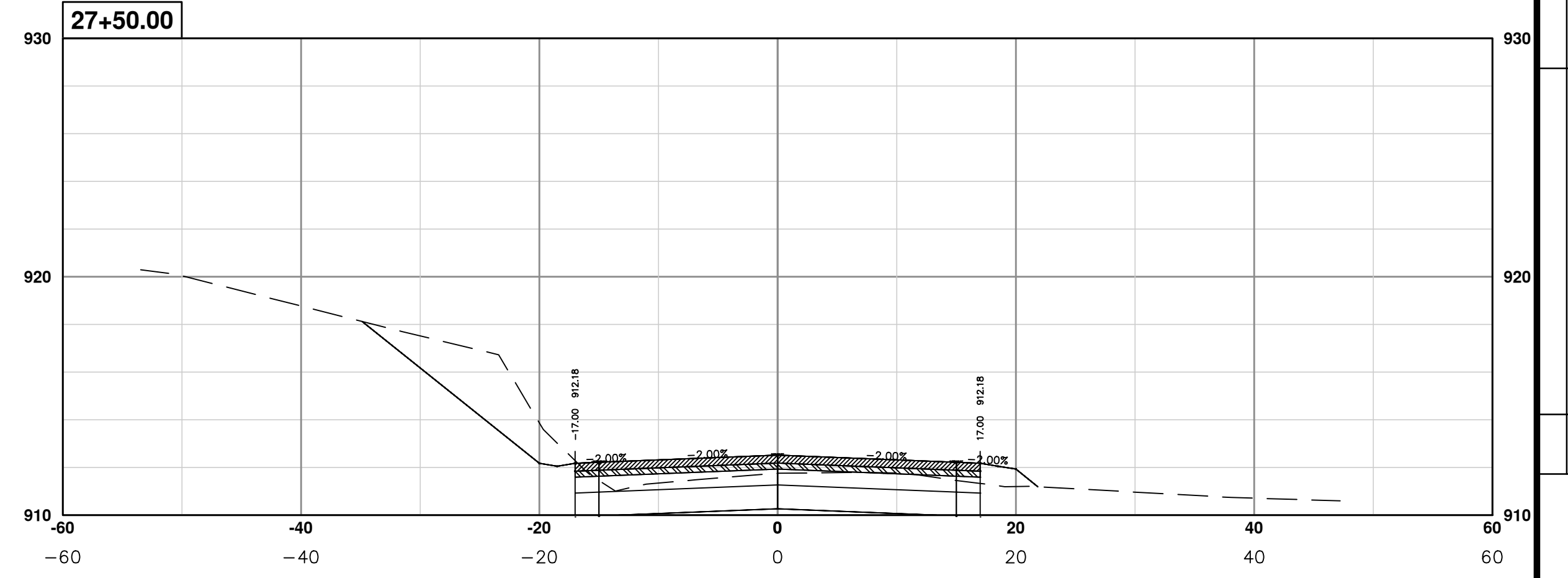
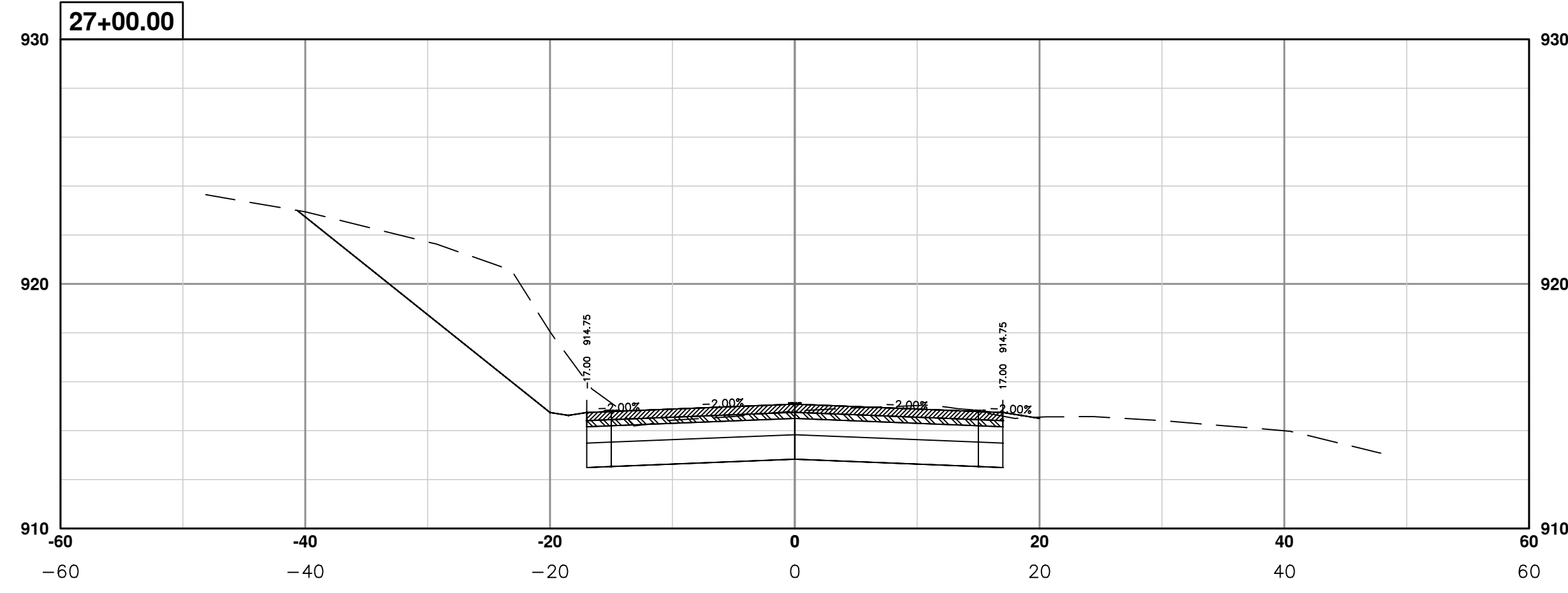


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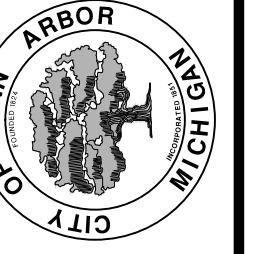


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 20 OF 34

SCALE PLAN: ##### PROFILE: 1" = 4'
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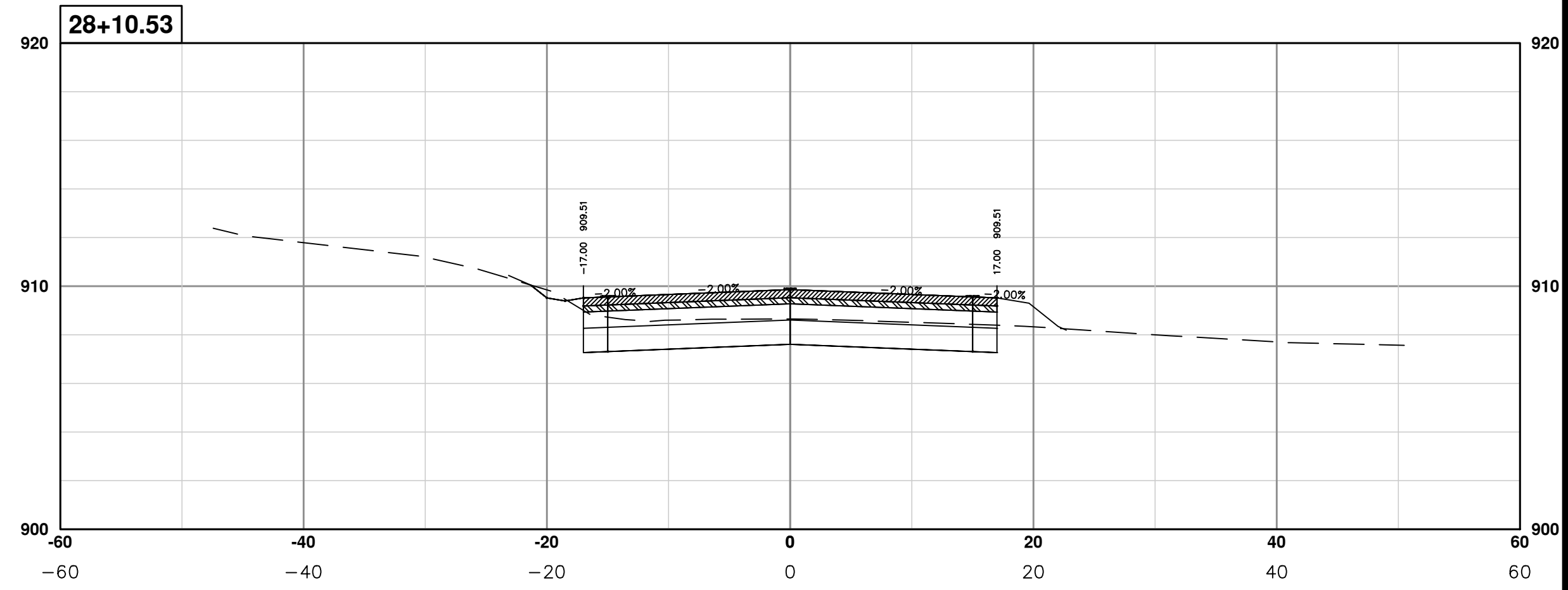
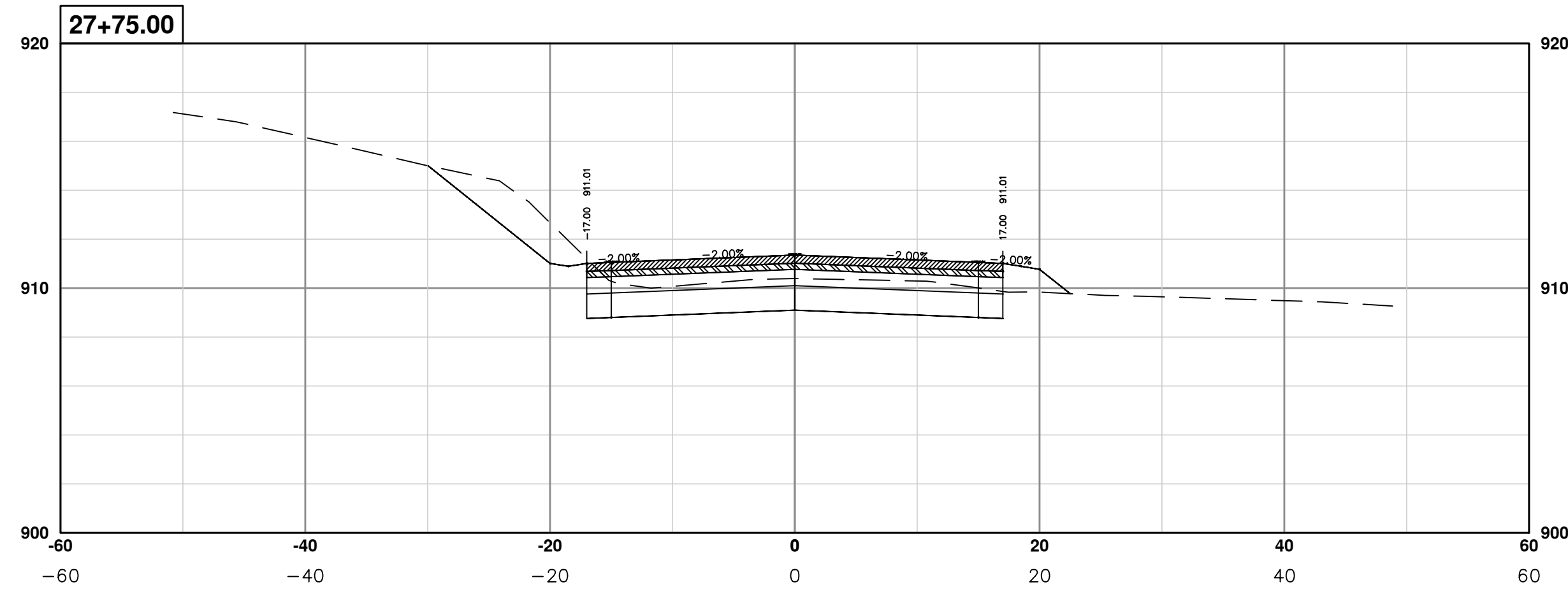
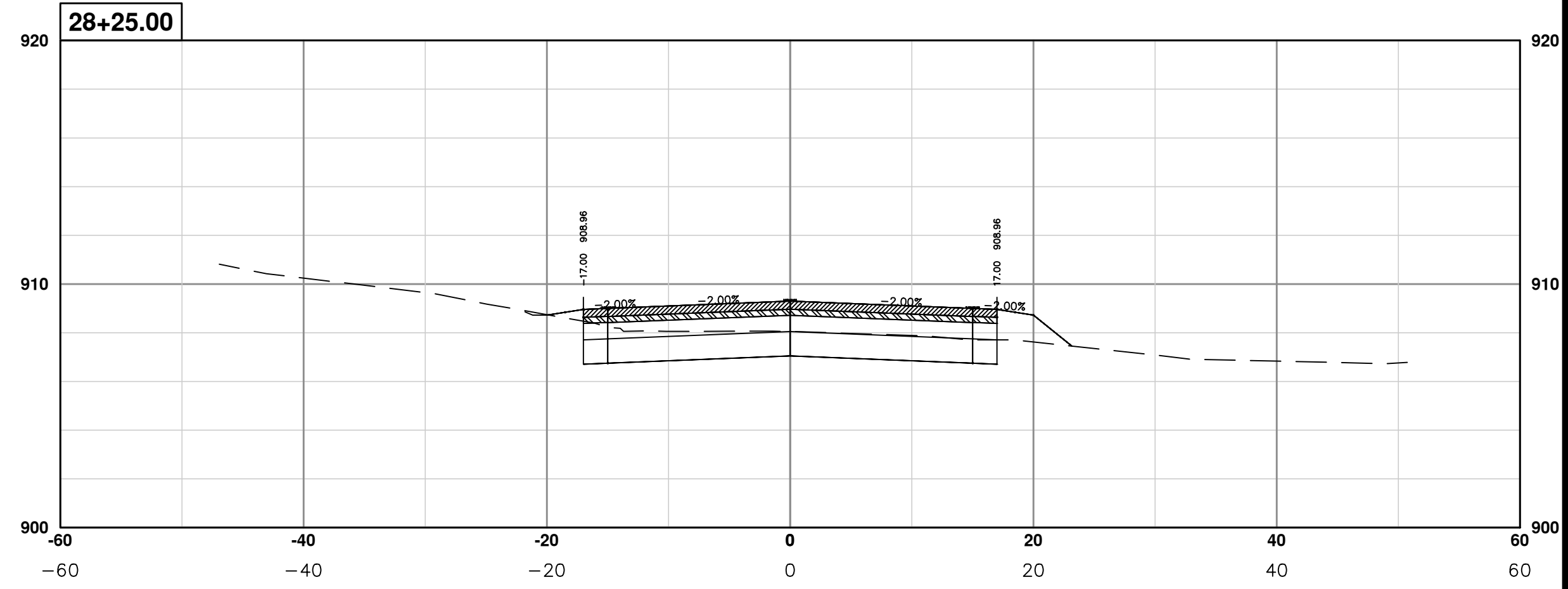
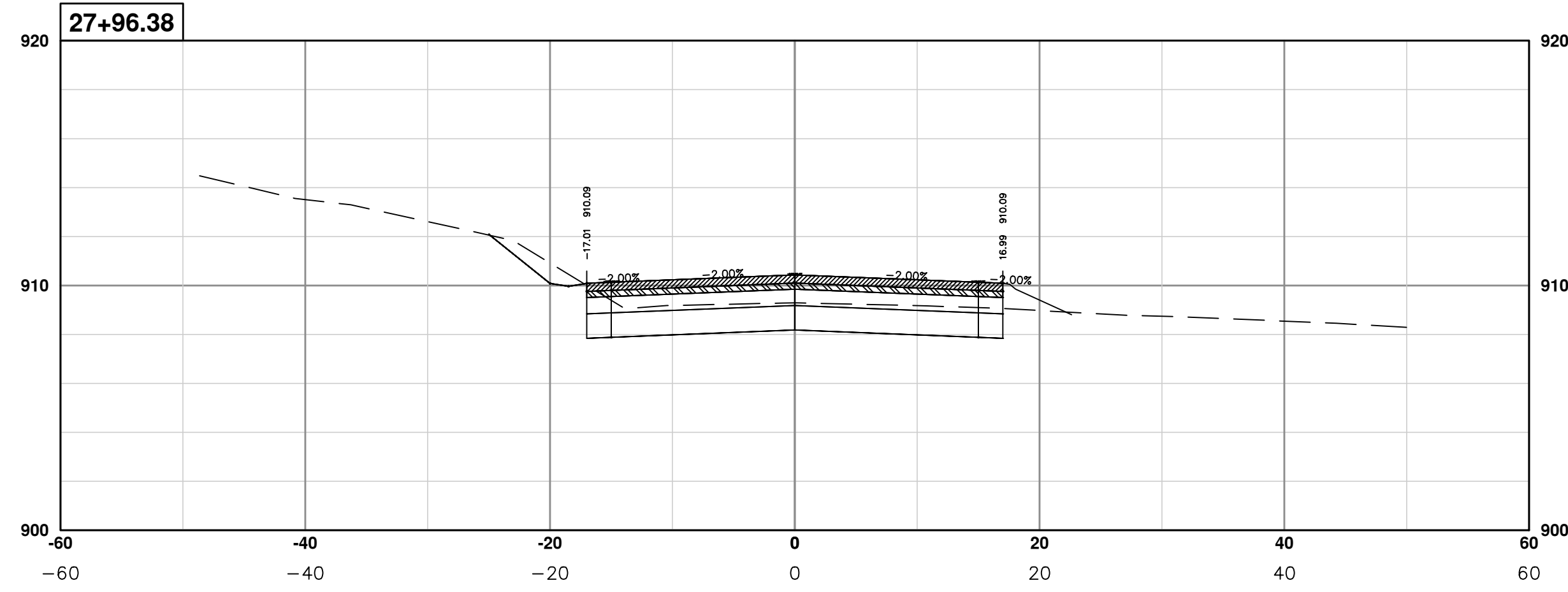
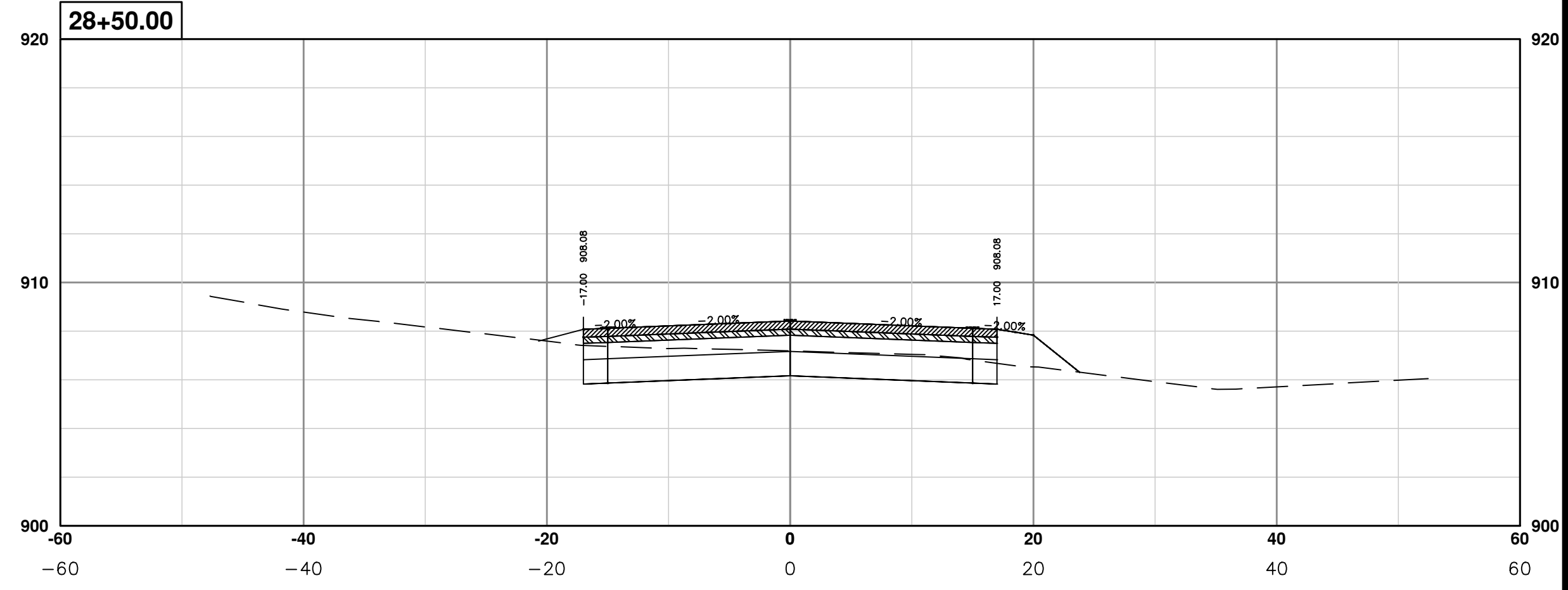
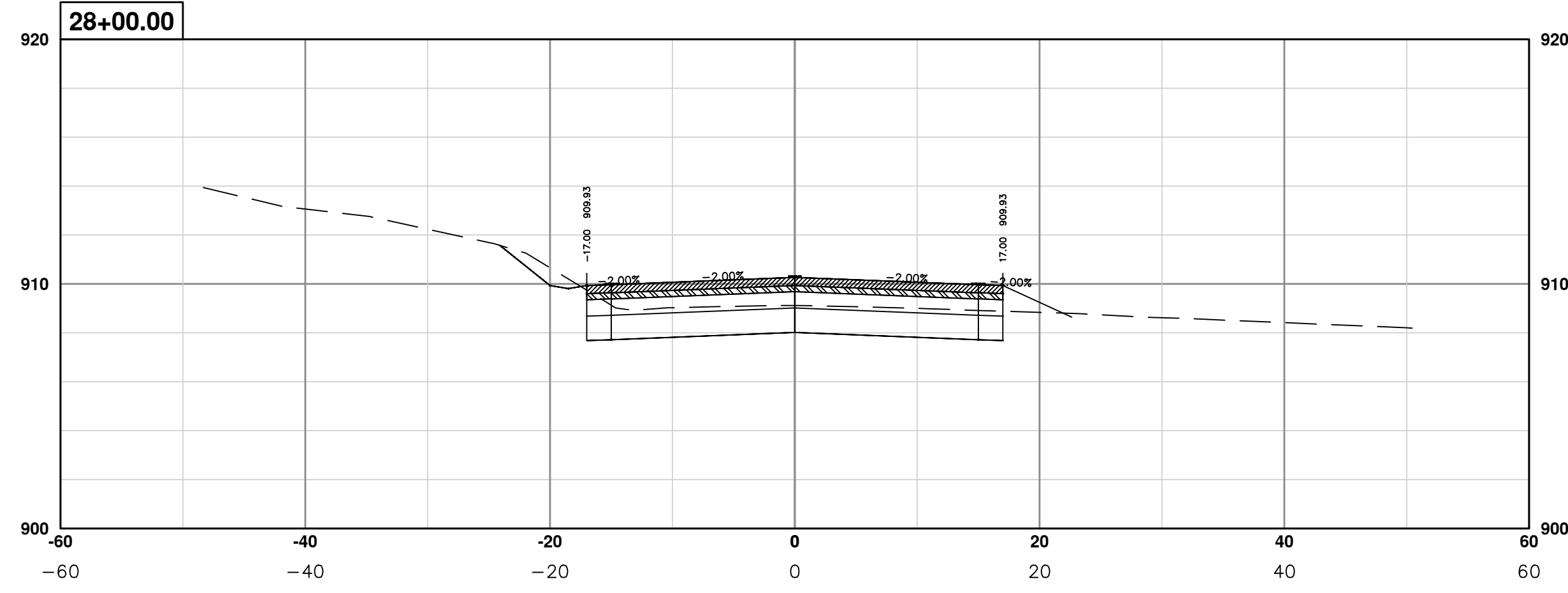


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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 SECTION PLANS 21 OF 34

SCALE PLAN: ##### PROFILE: 1"=4'
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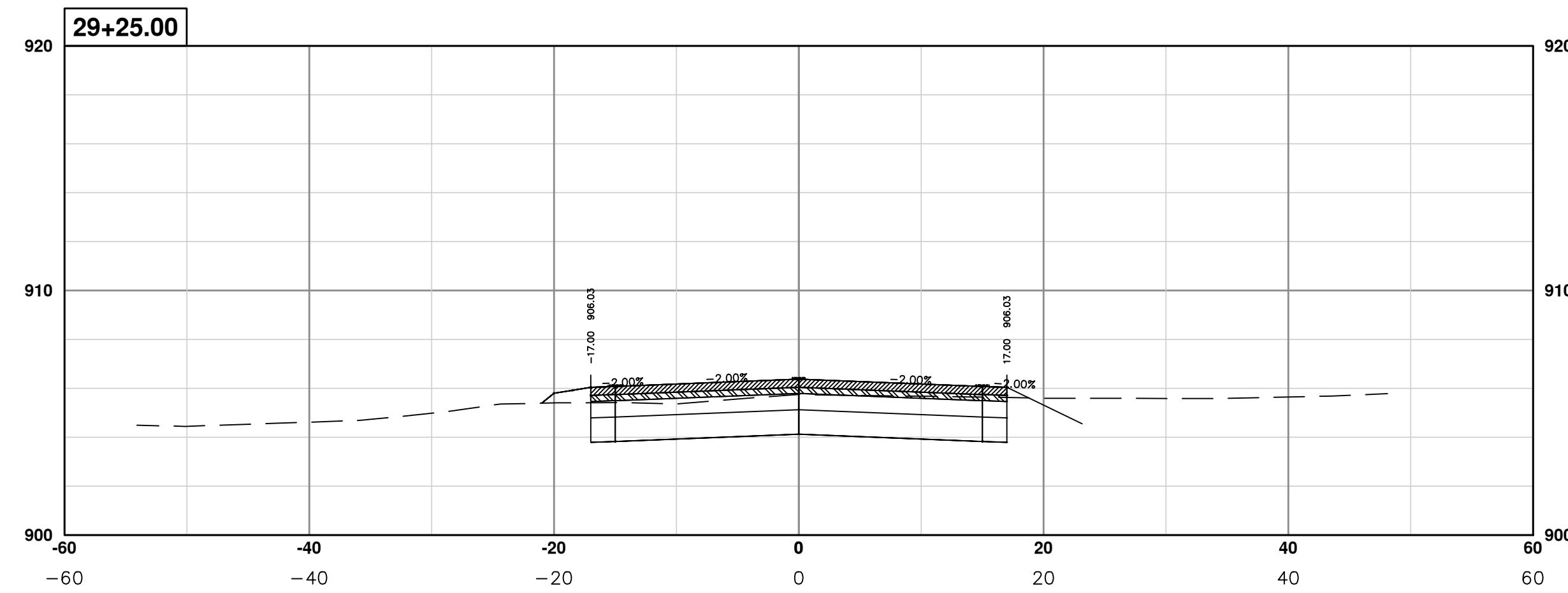
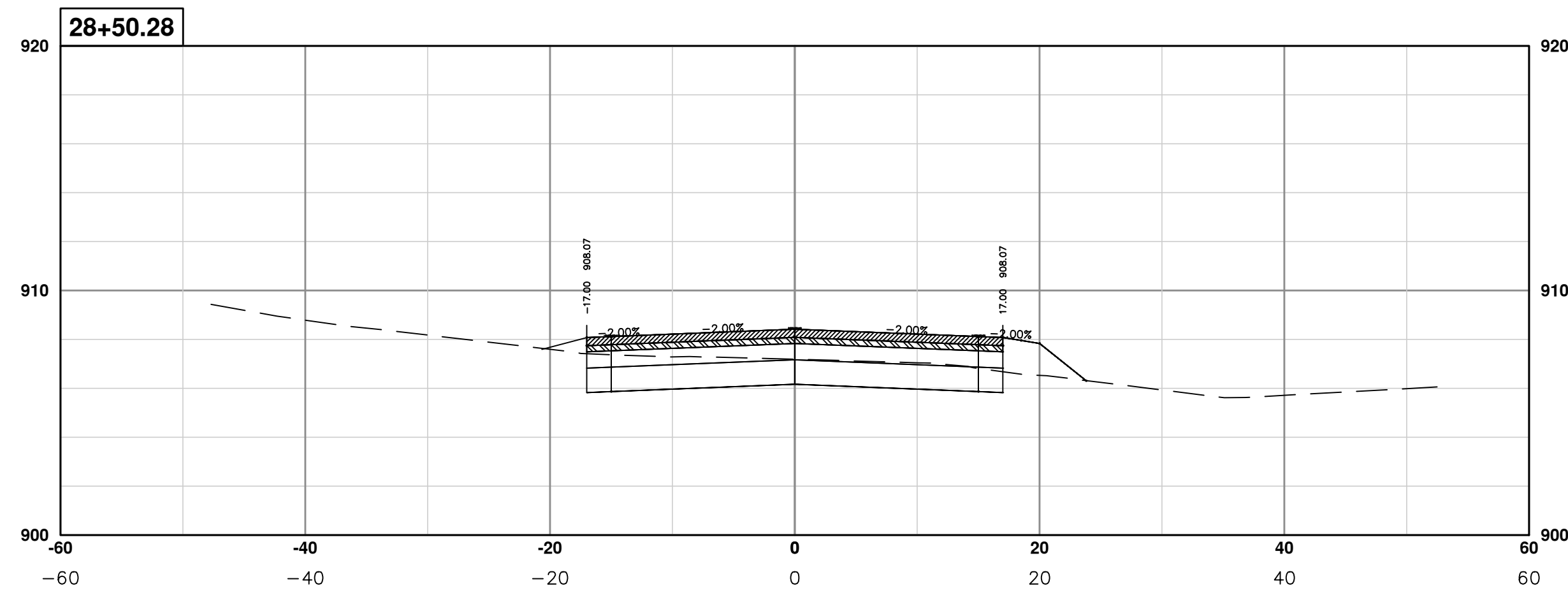
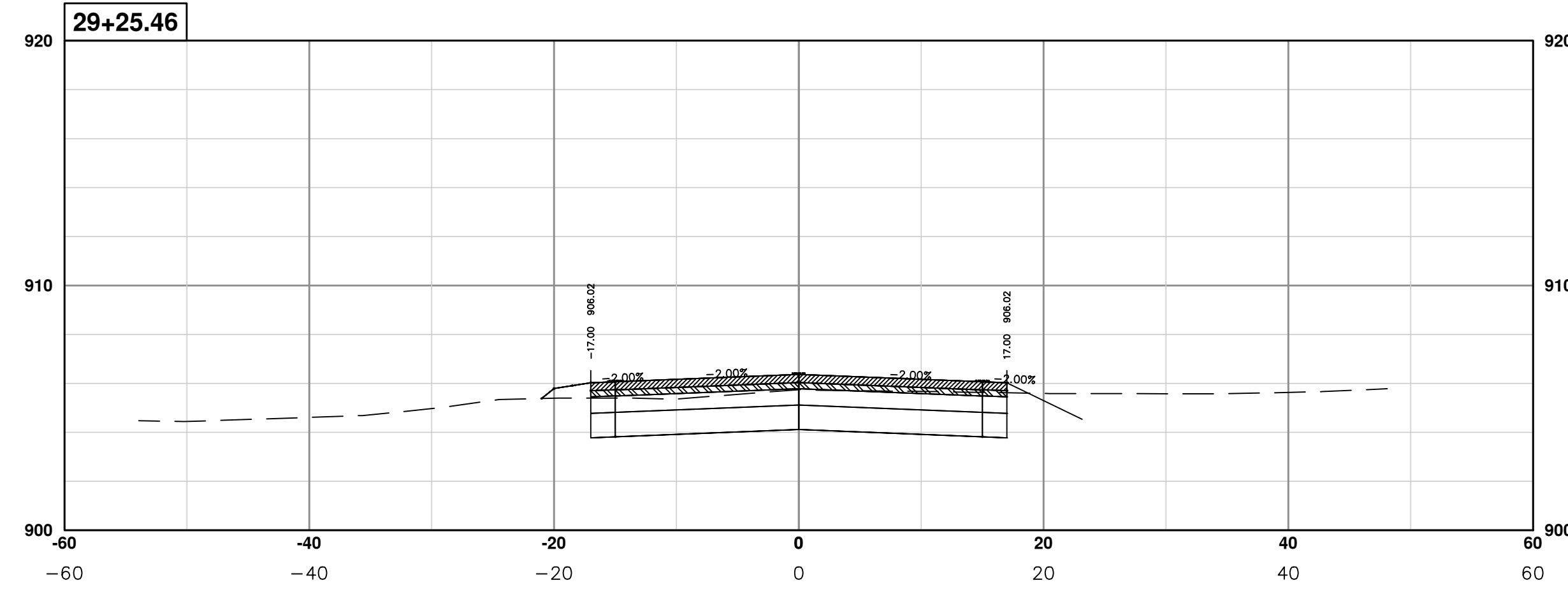
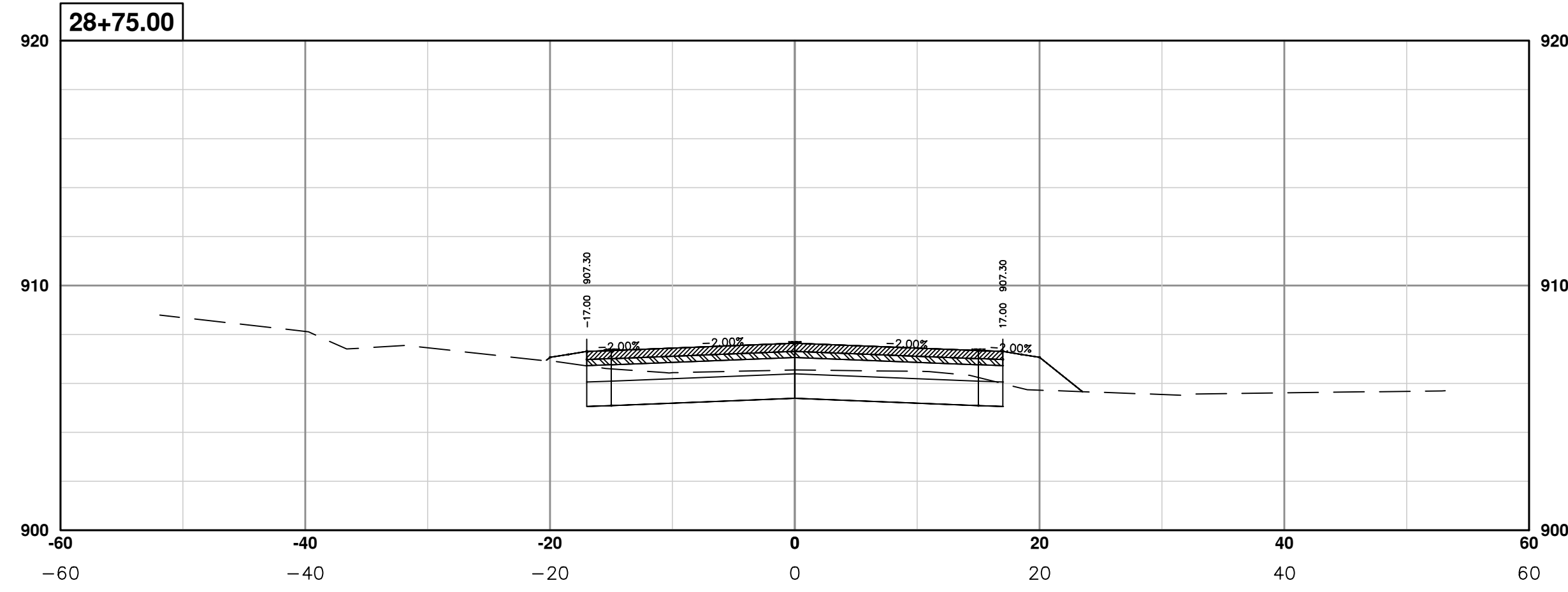
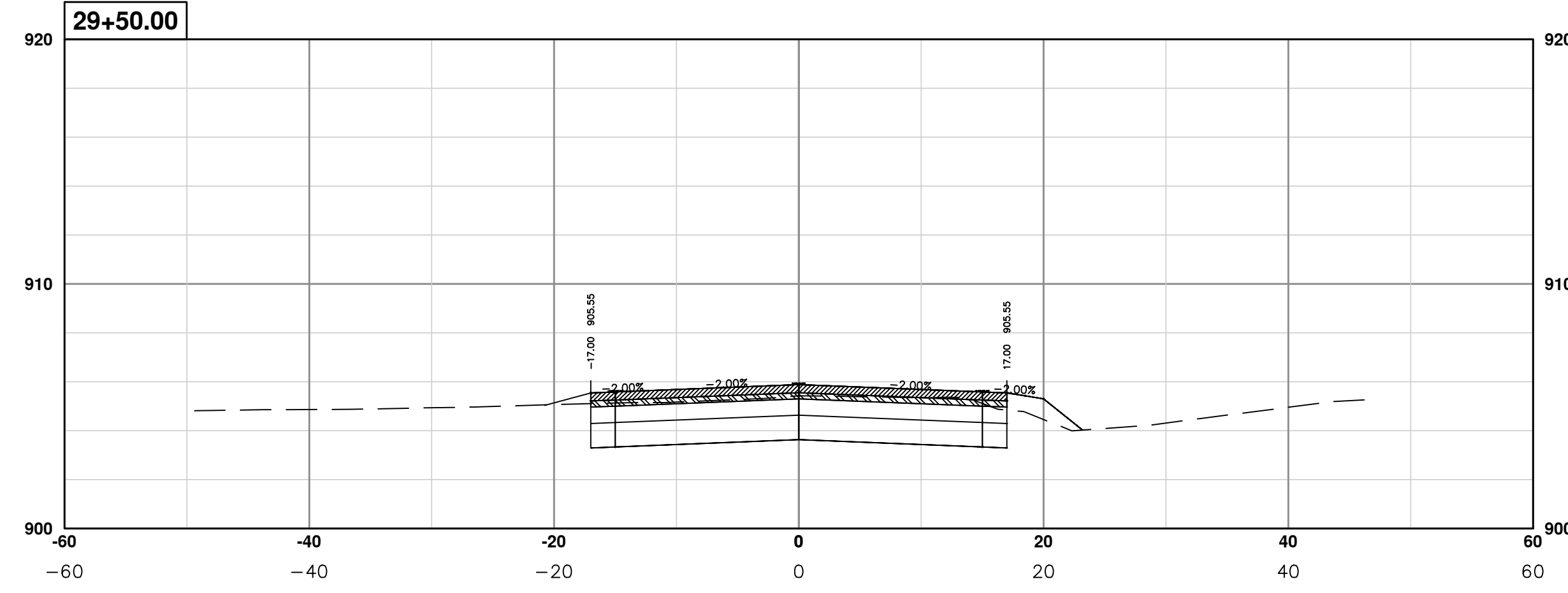
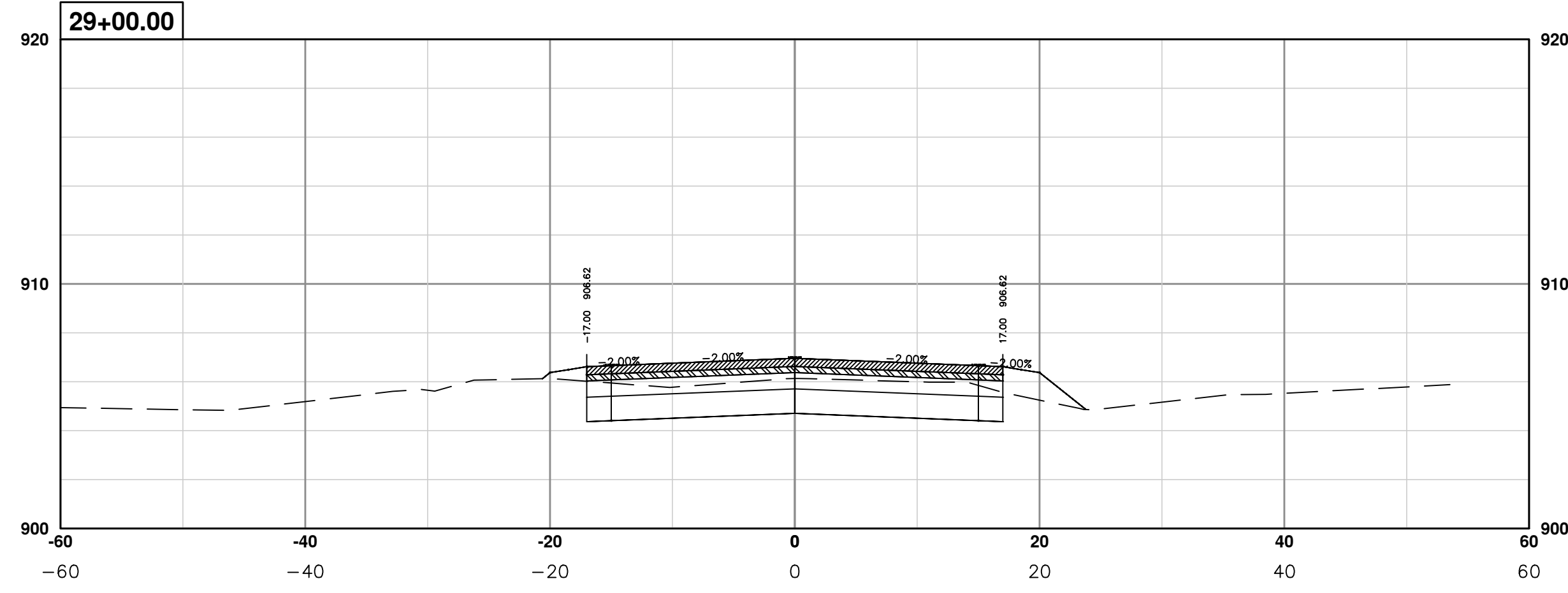
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 22 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
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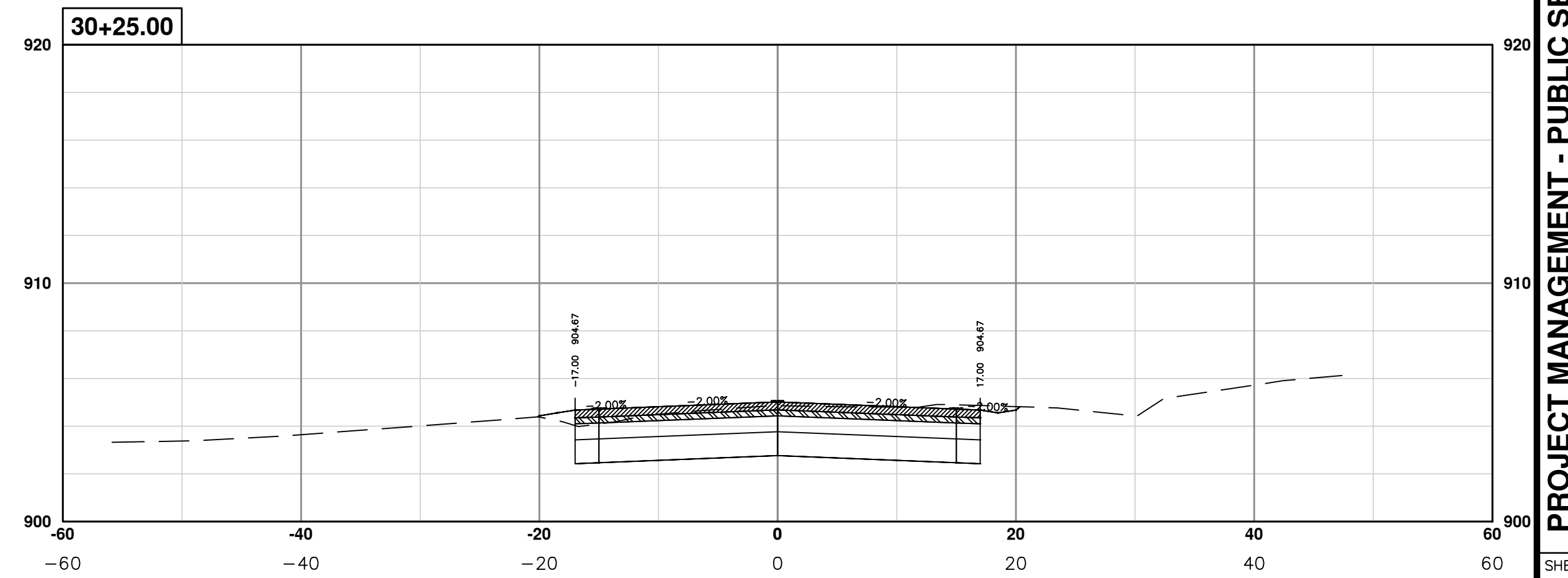
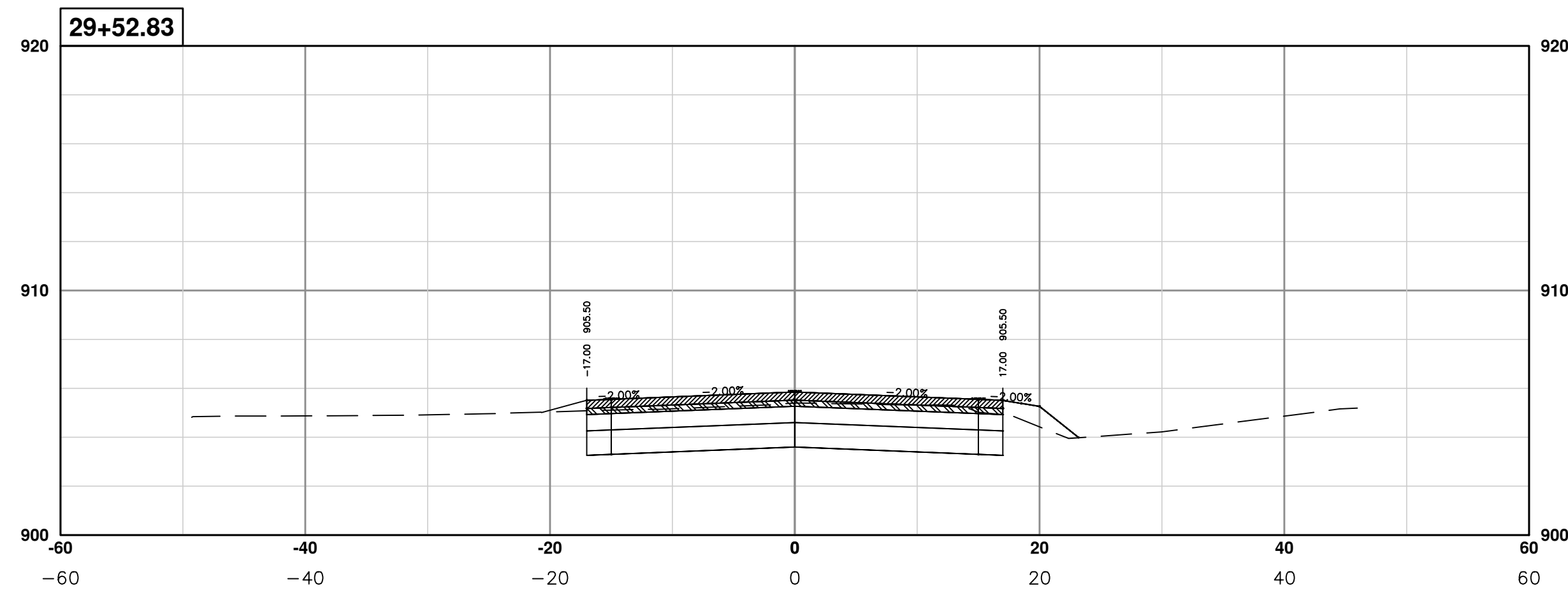
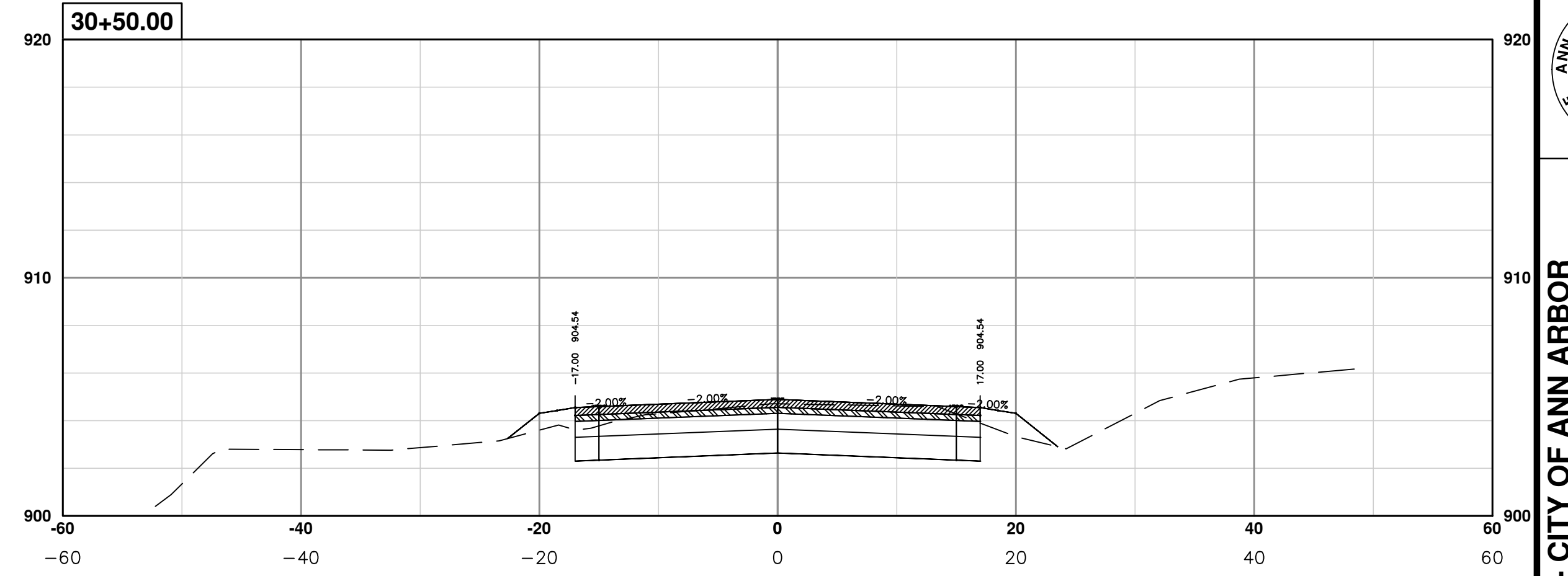
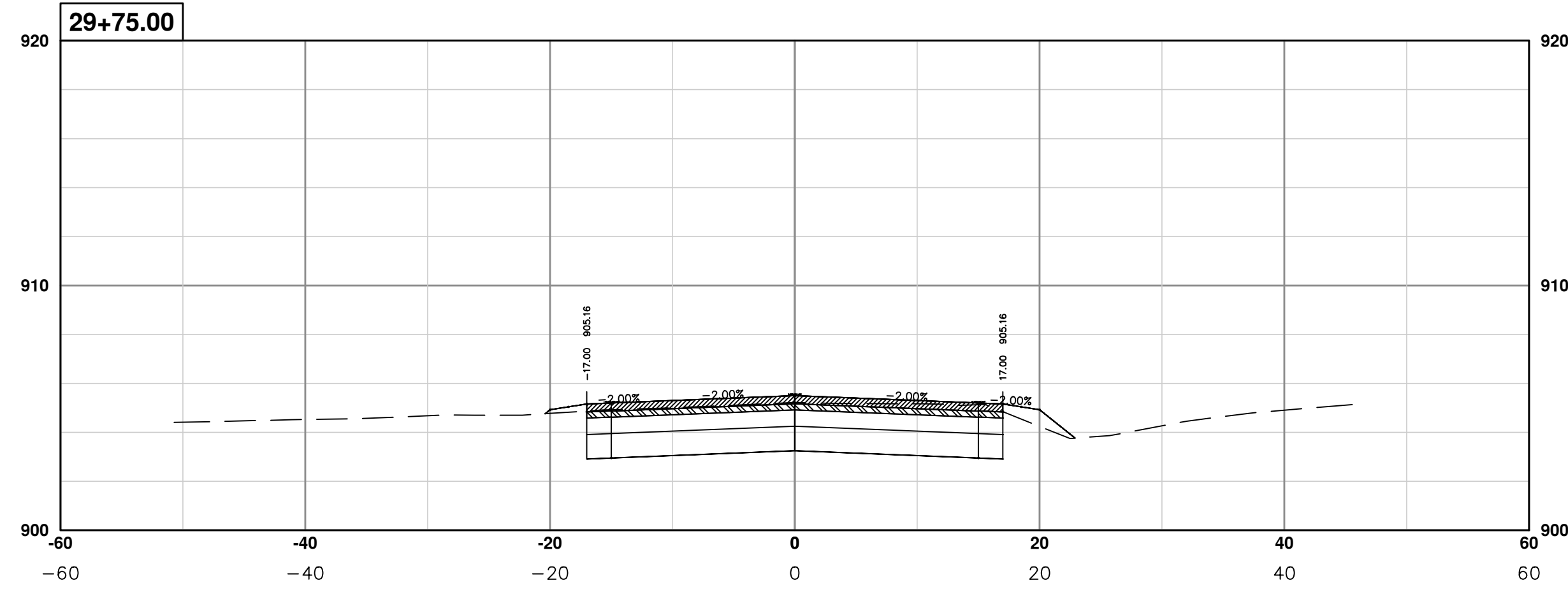
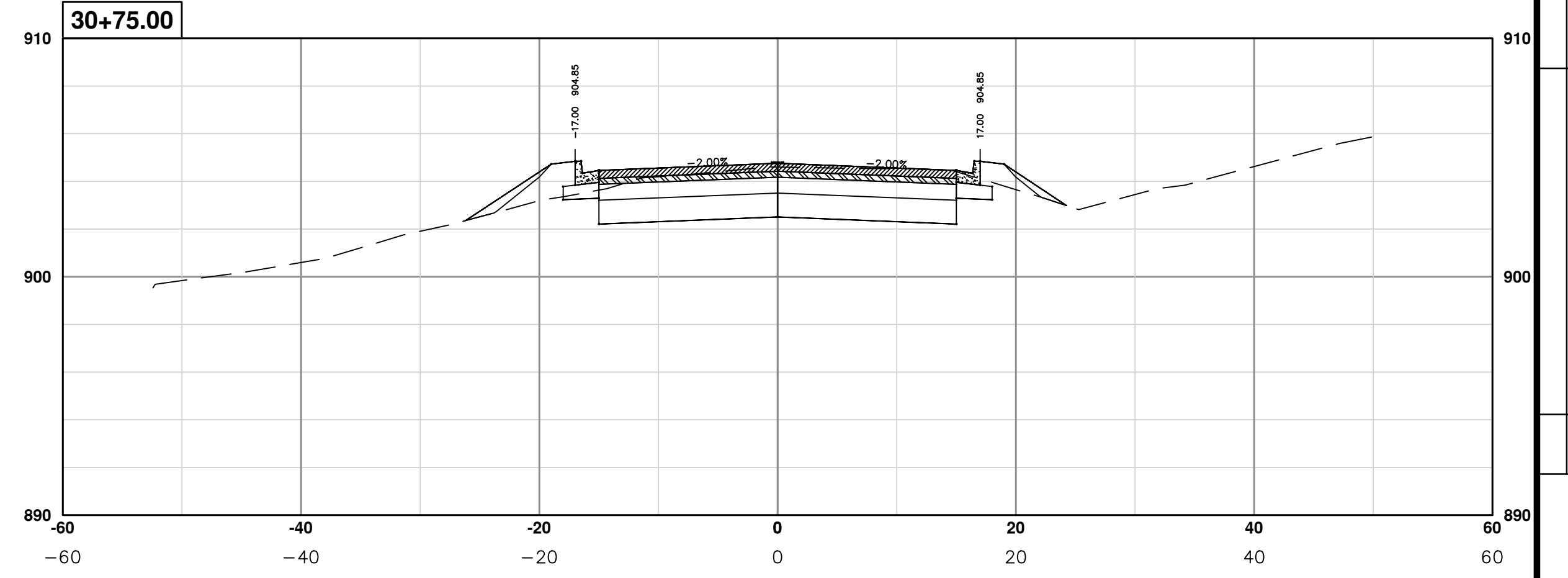
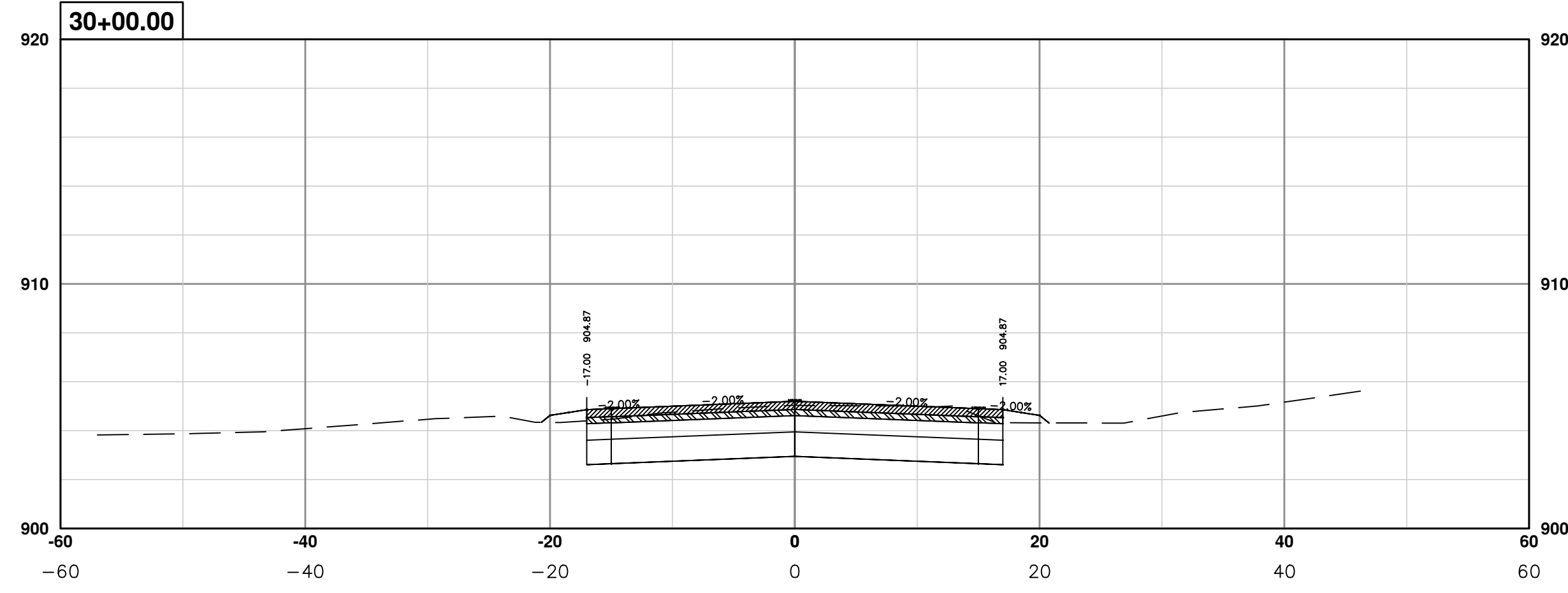
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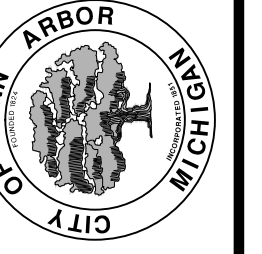
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 23 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
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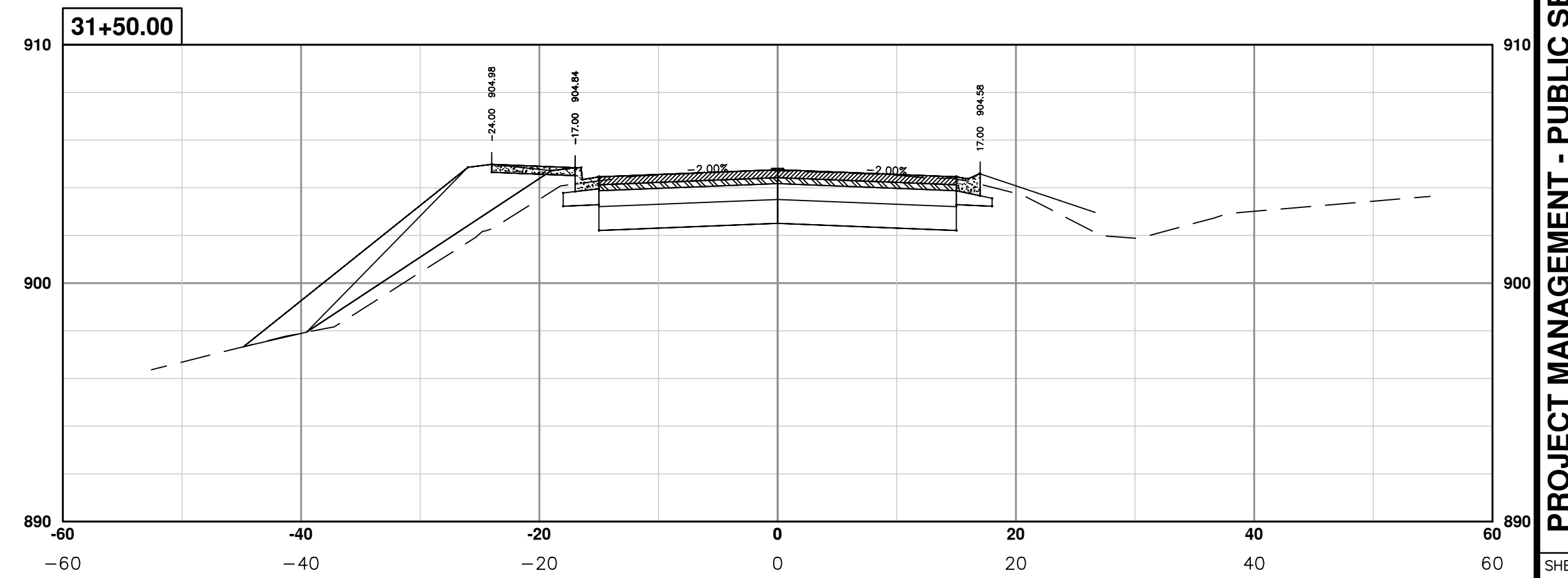
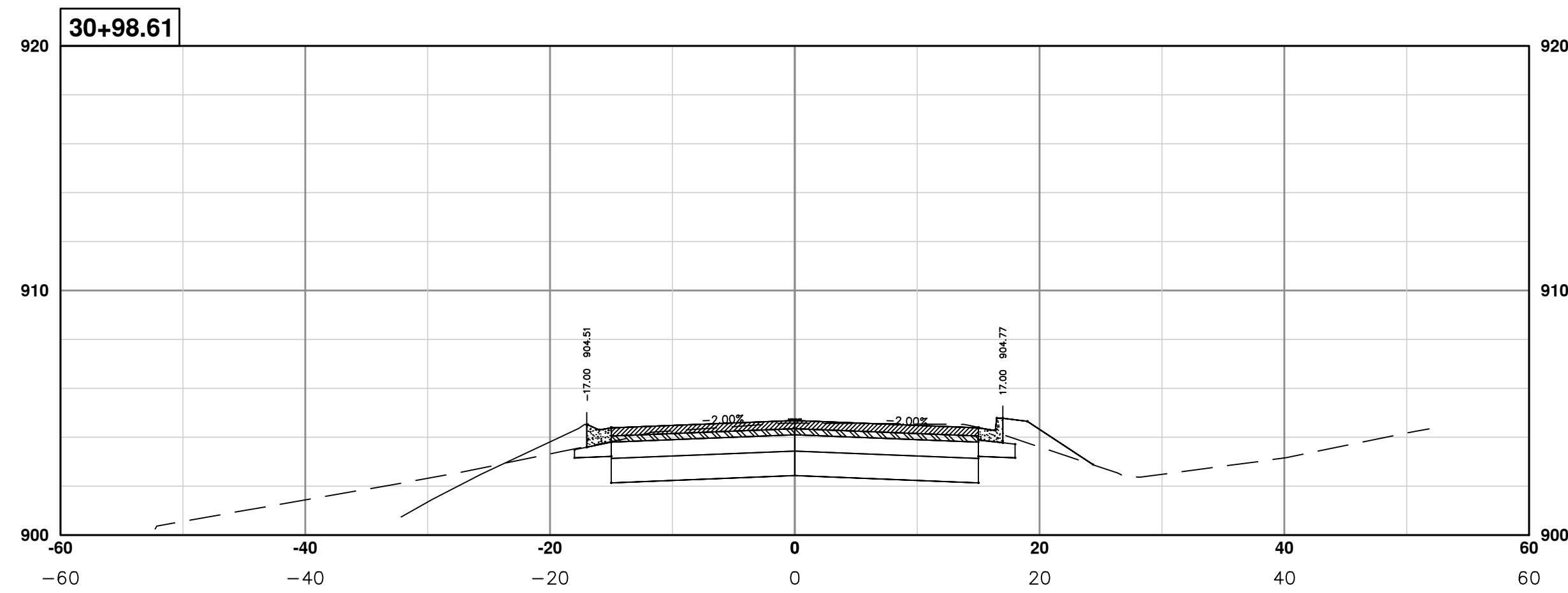
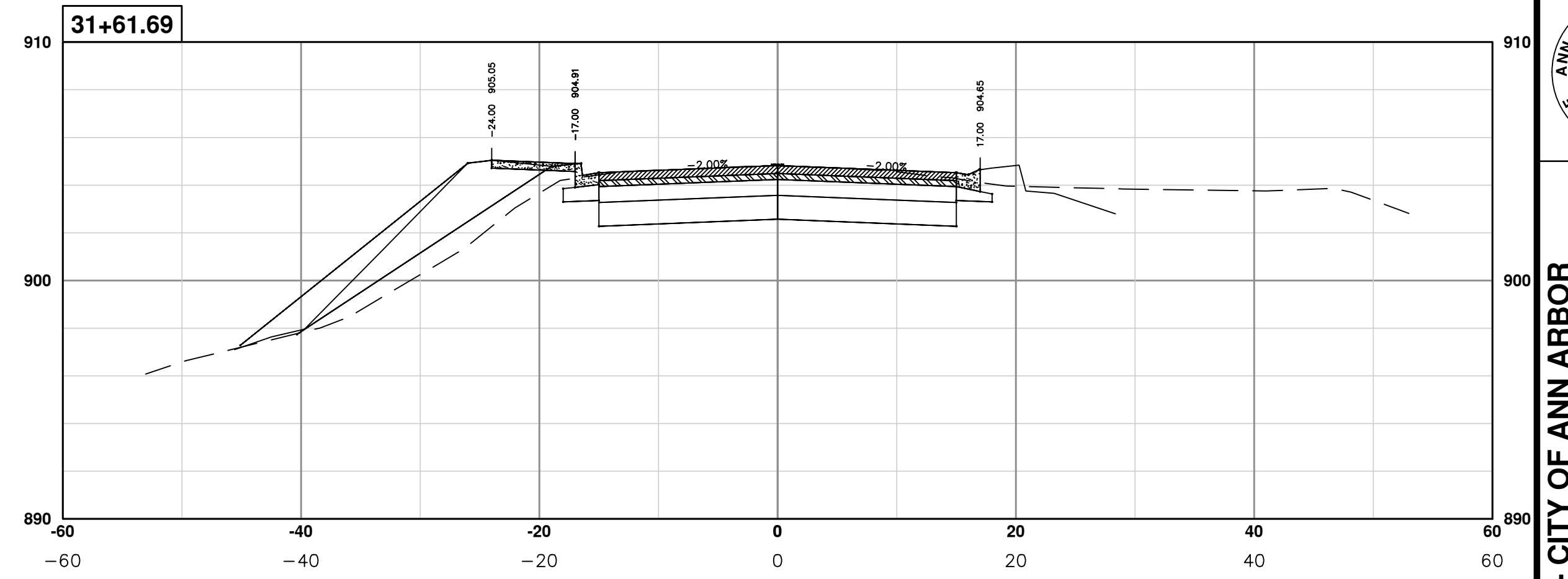
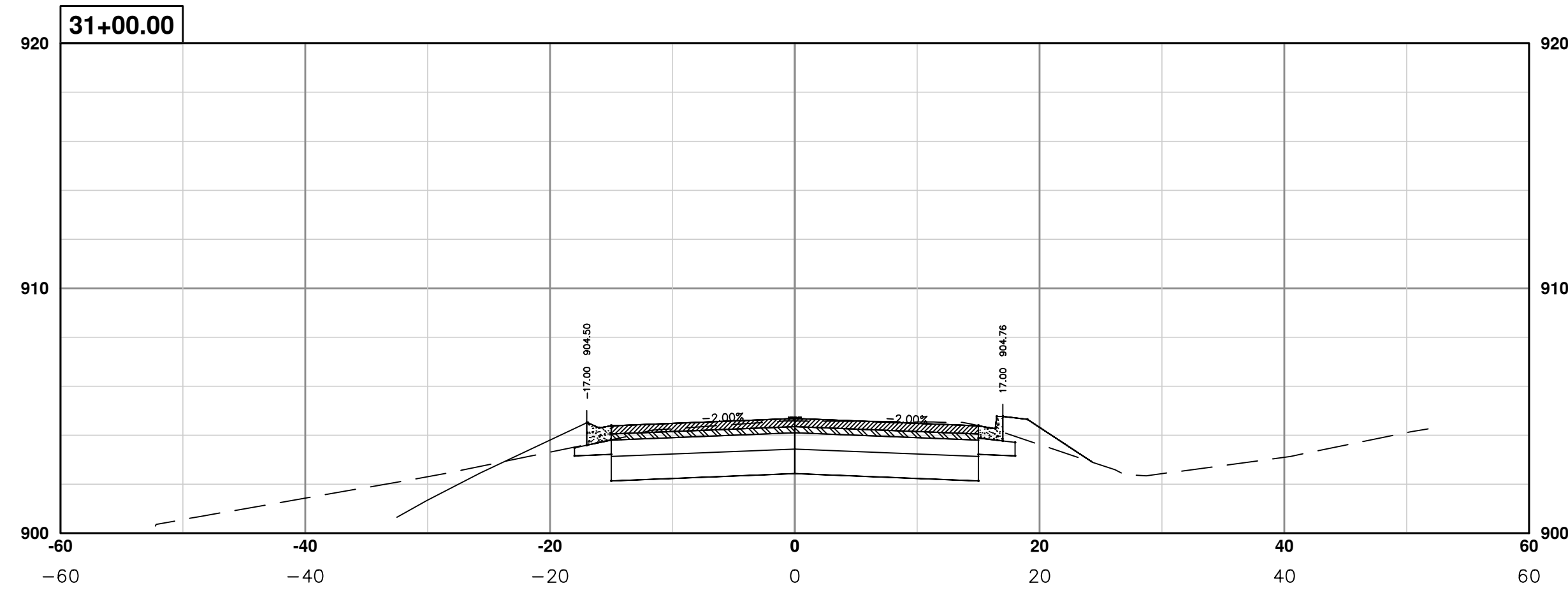
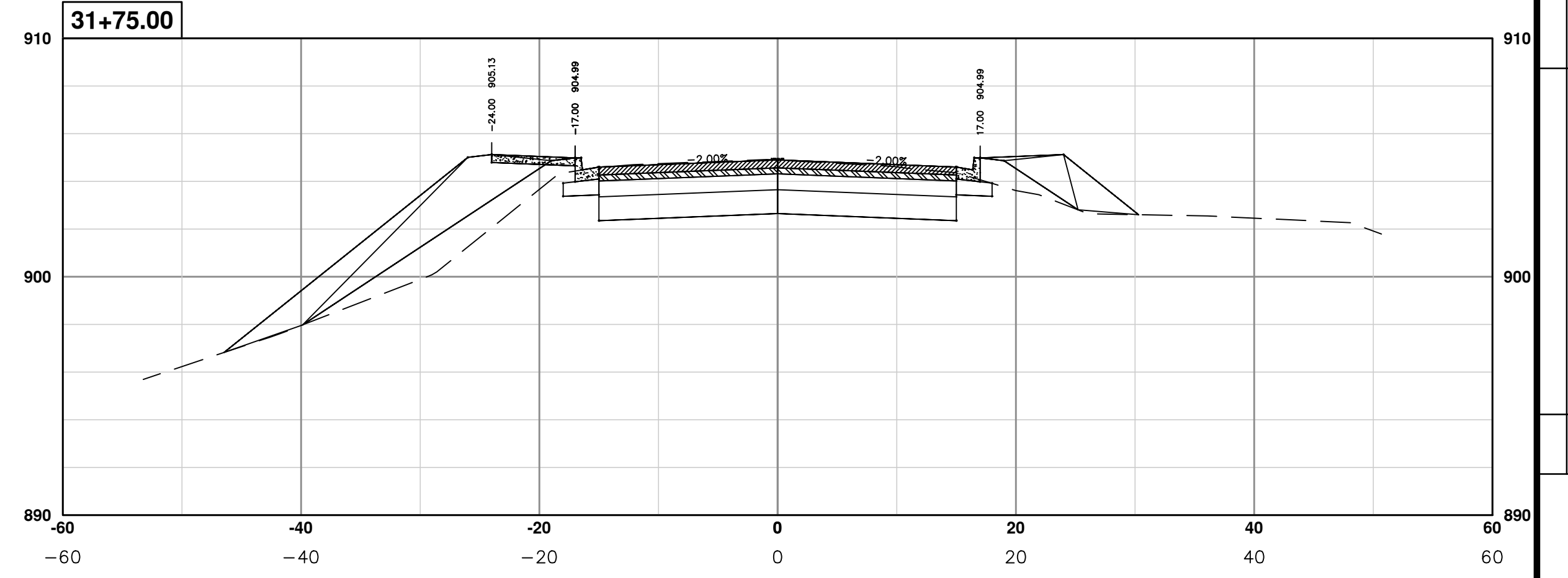
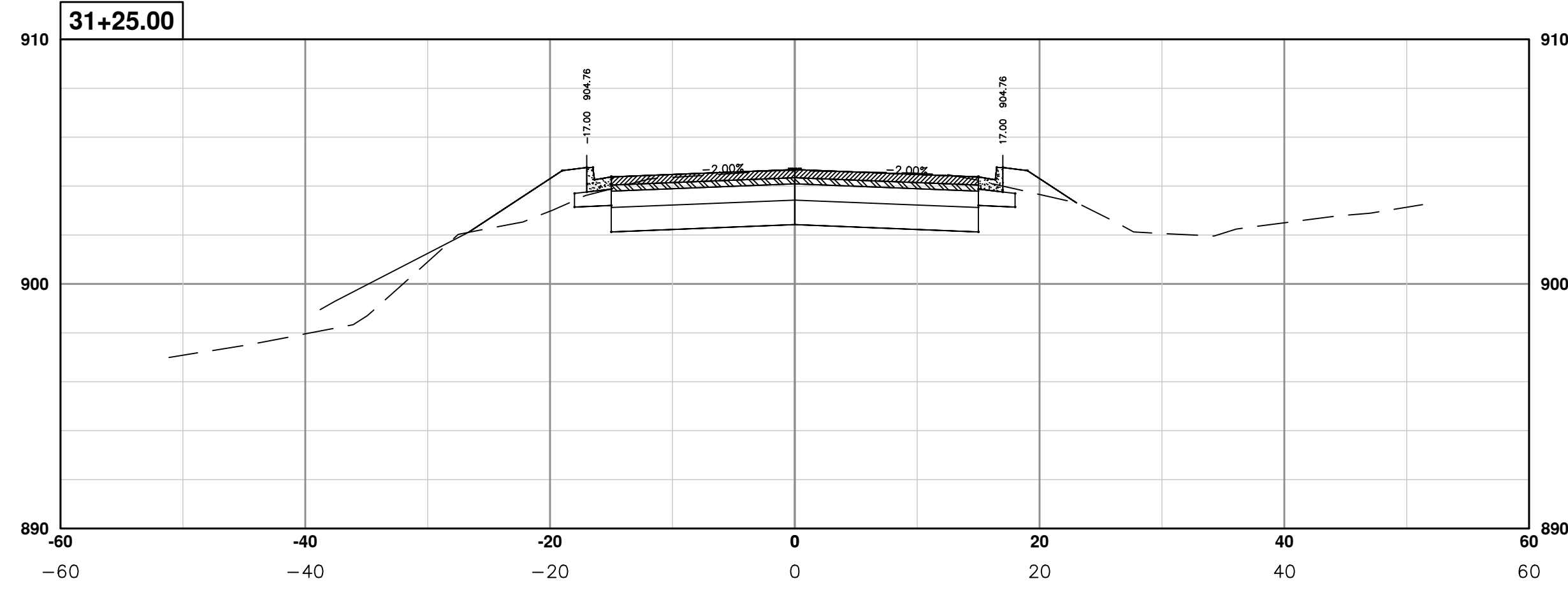
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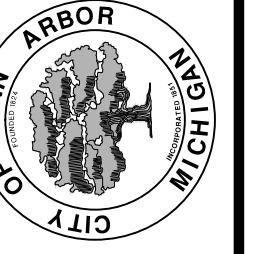
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 SECTION PLANS 24 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
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 SHEET No.

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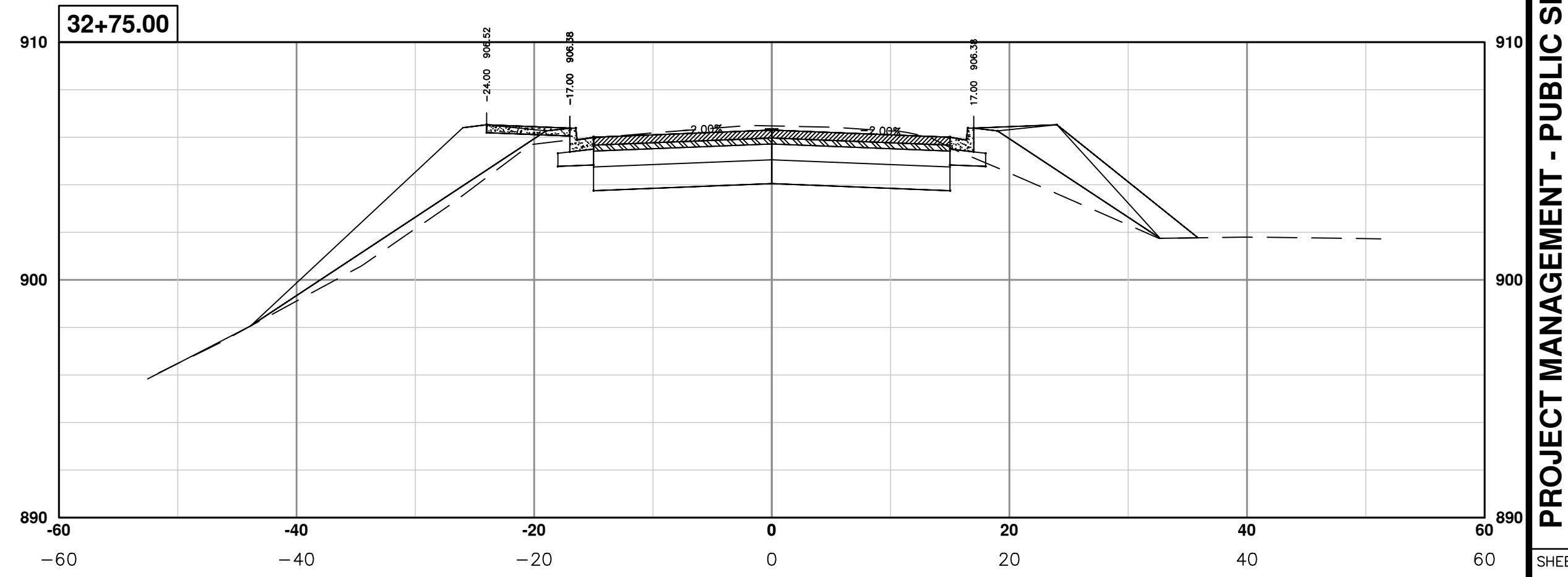
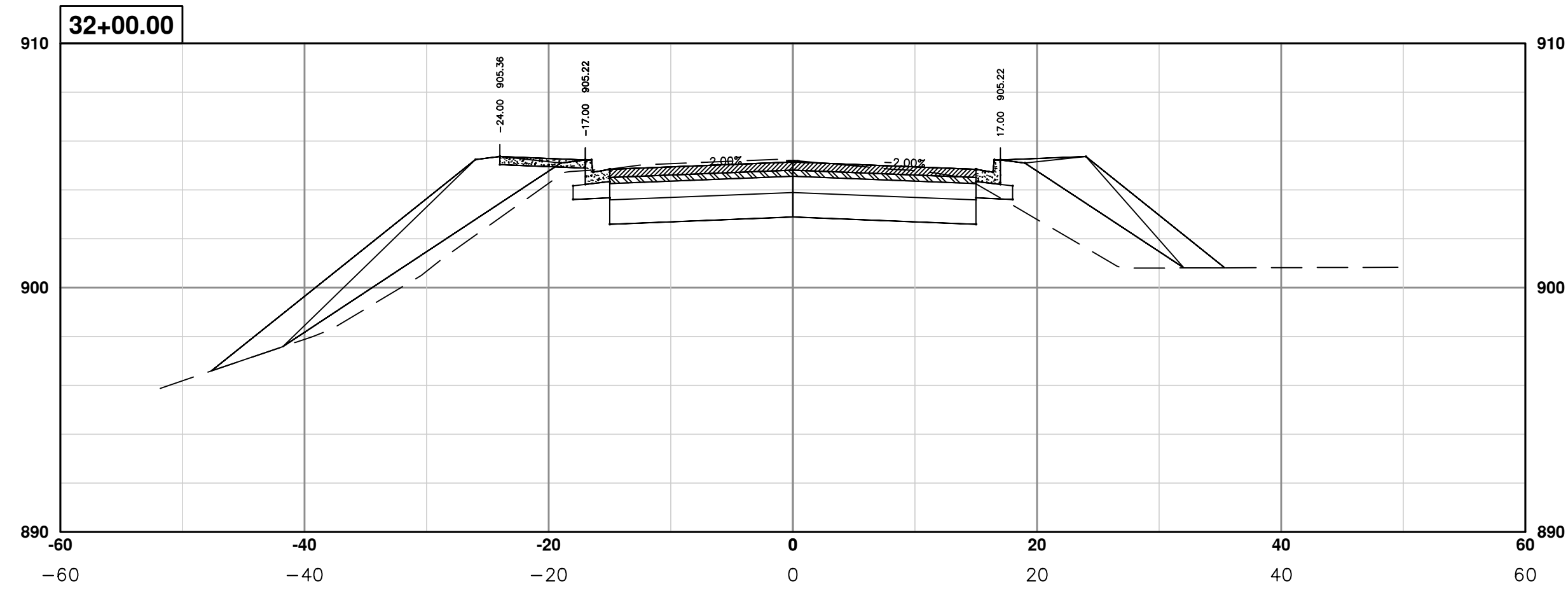
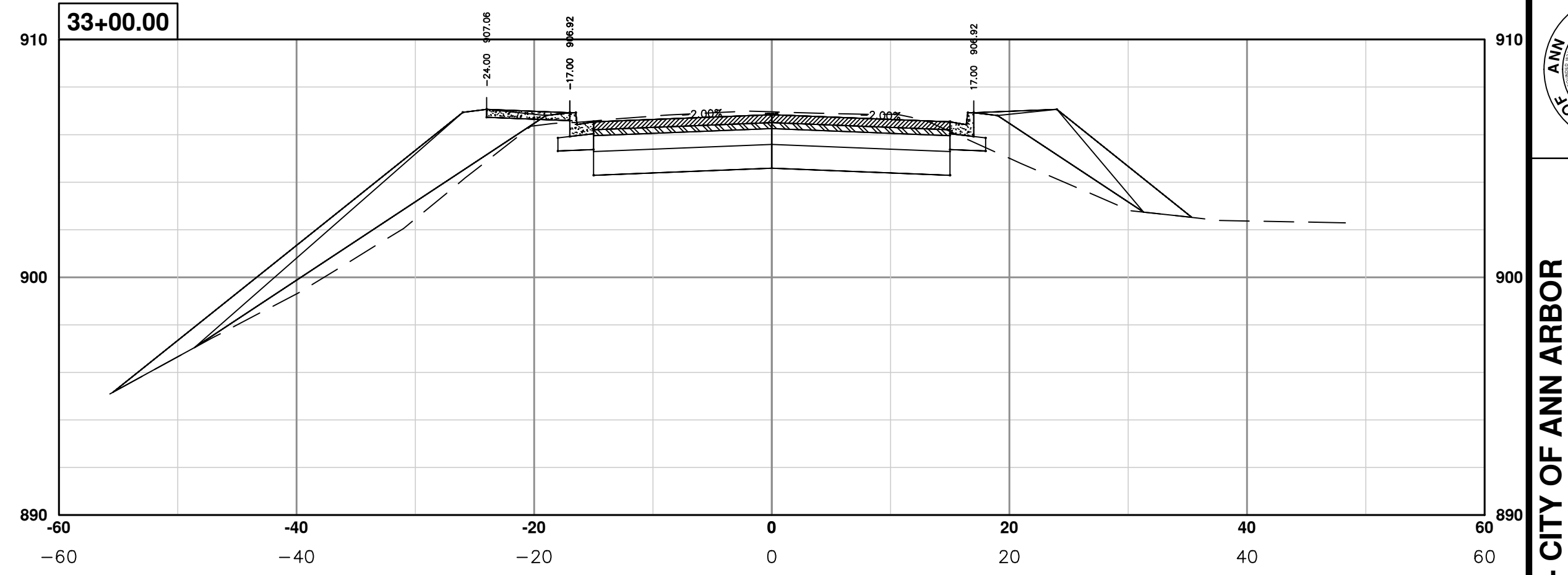
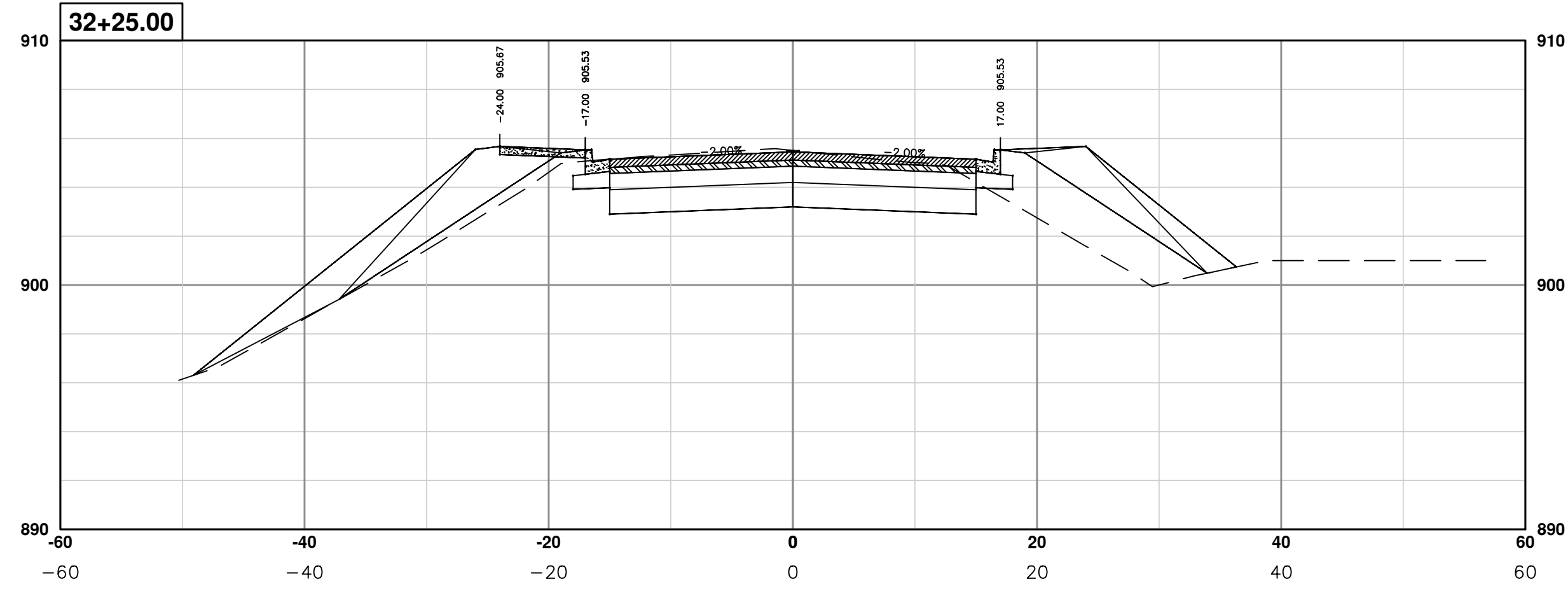
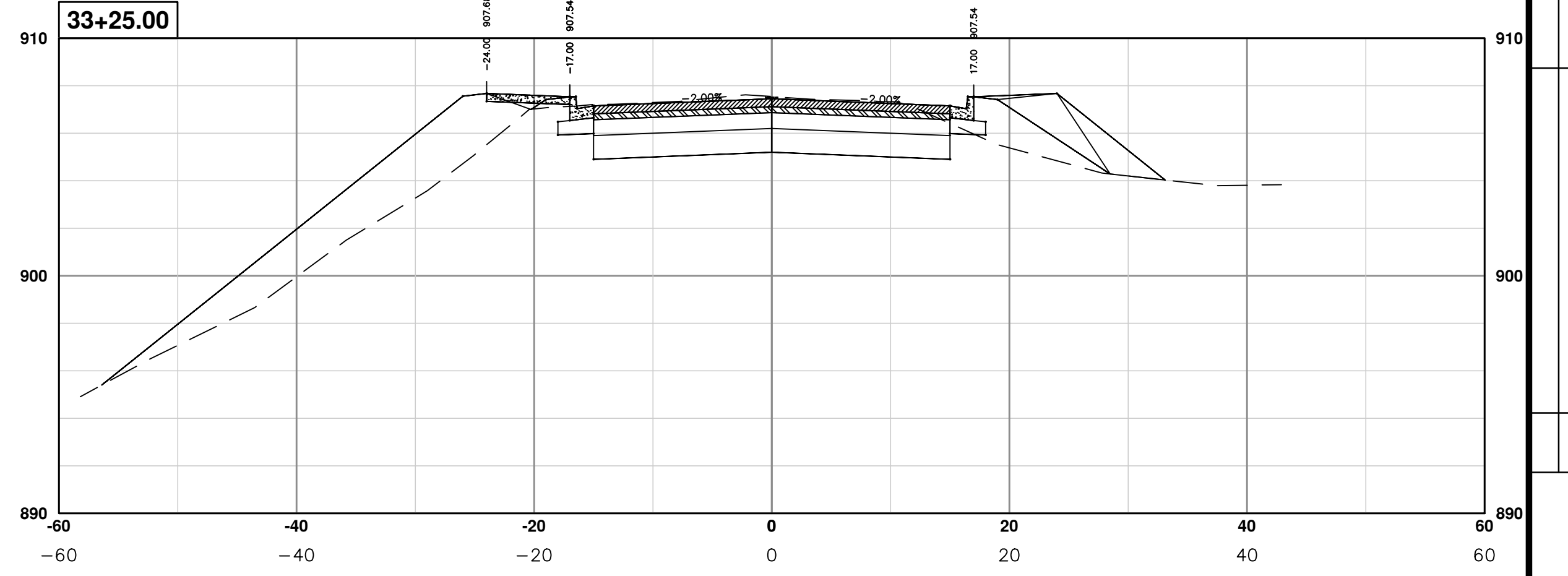
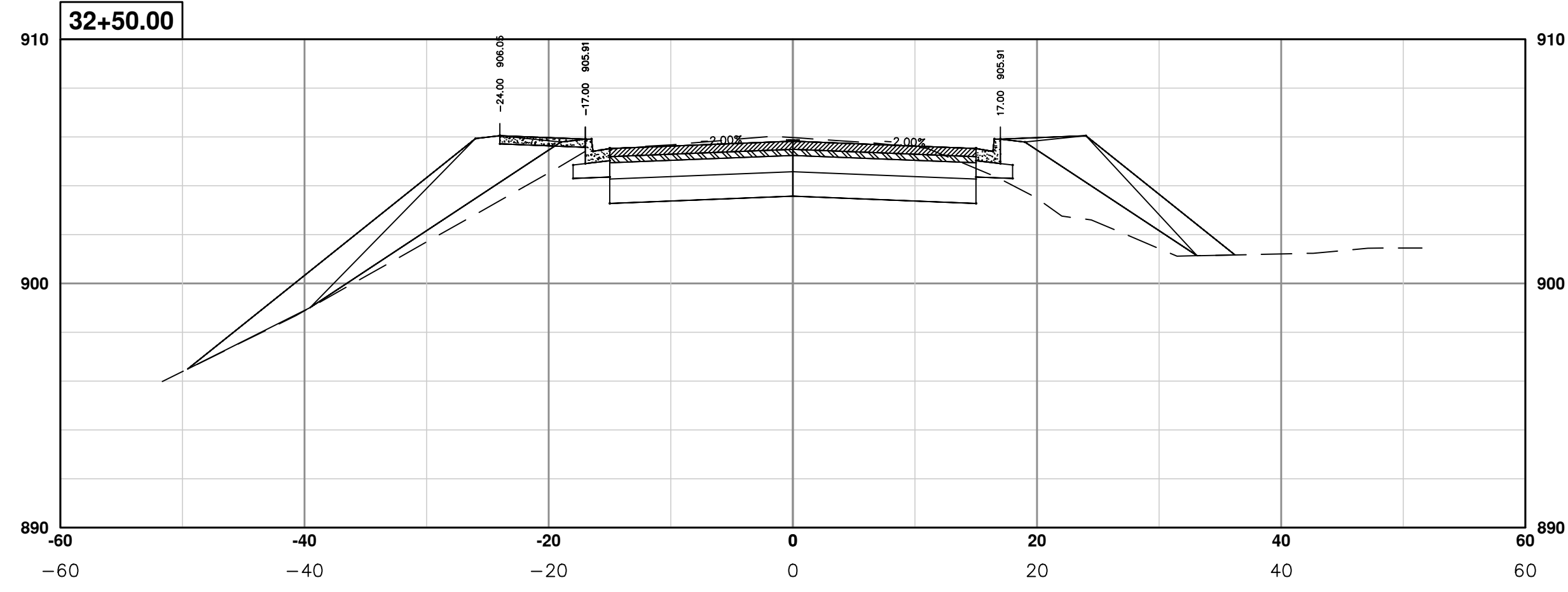
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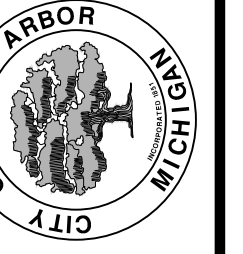
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 25 OF 34

SCALE PLAN: ##### PROFILE: 1" = 4'
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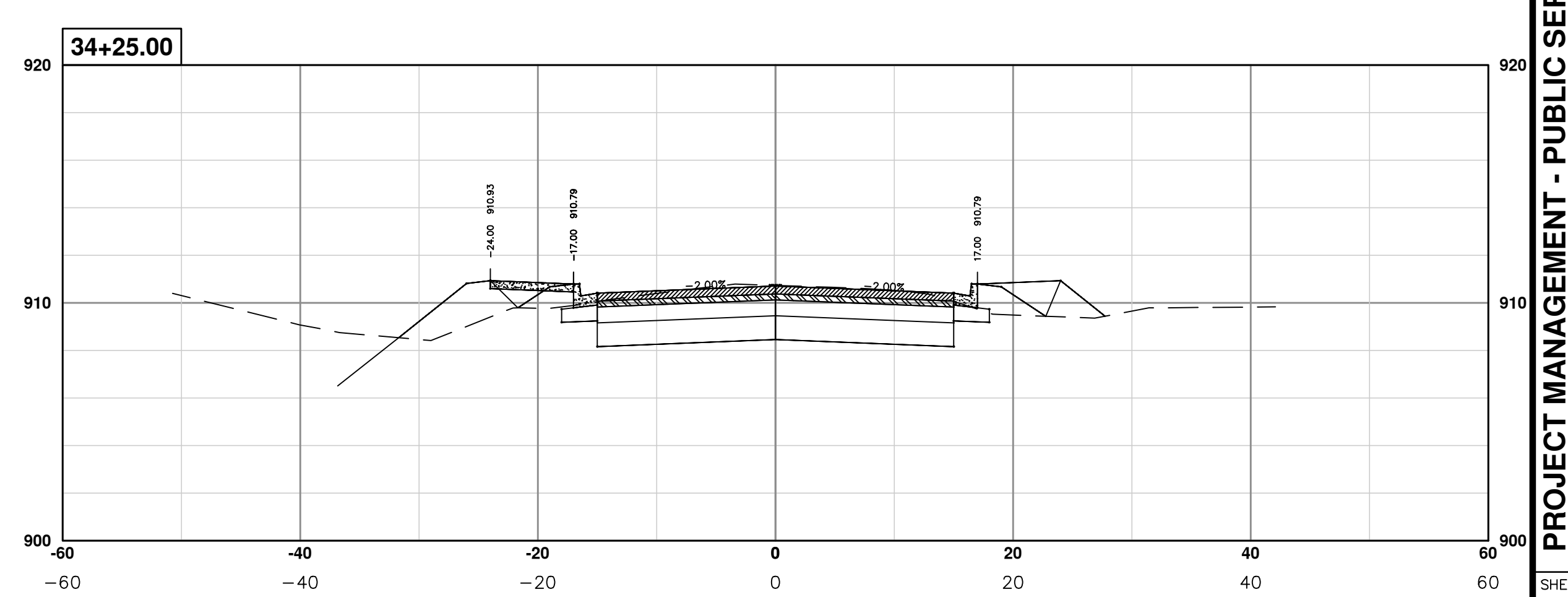
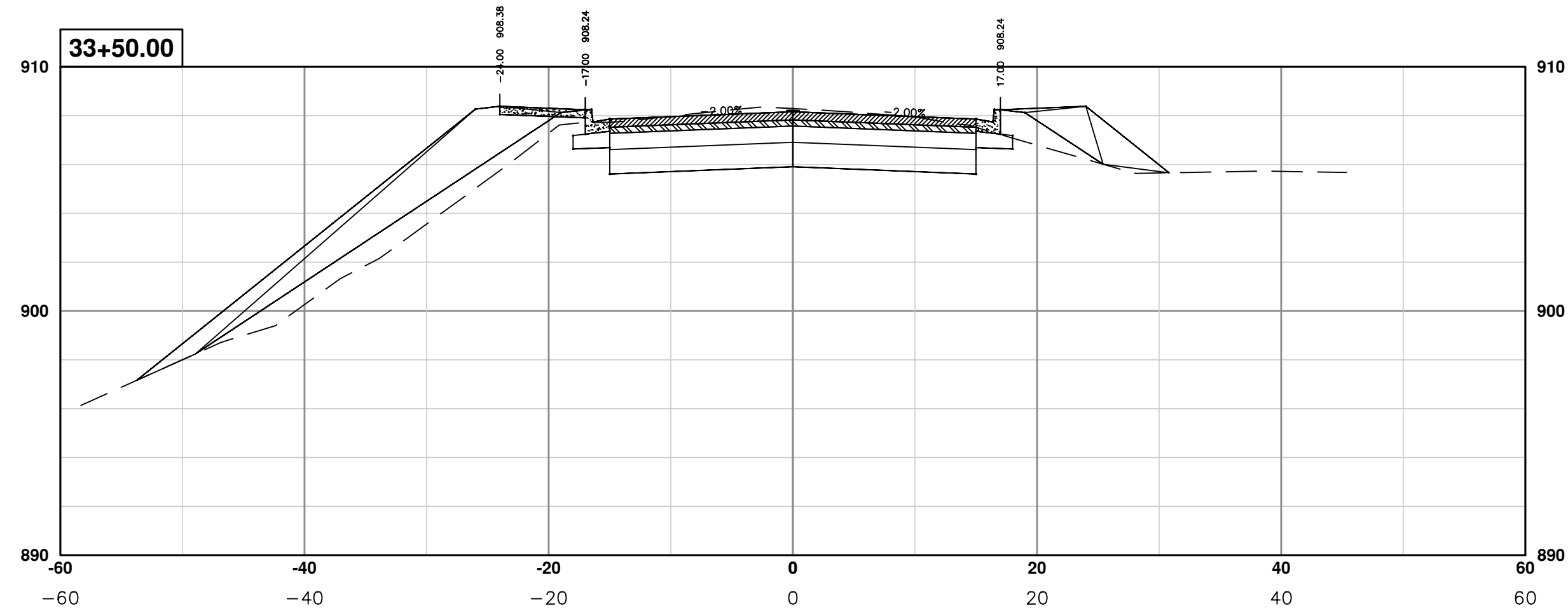
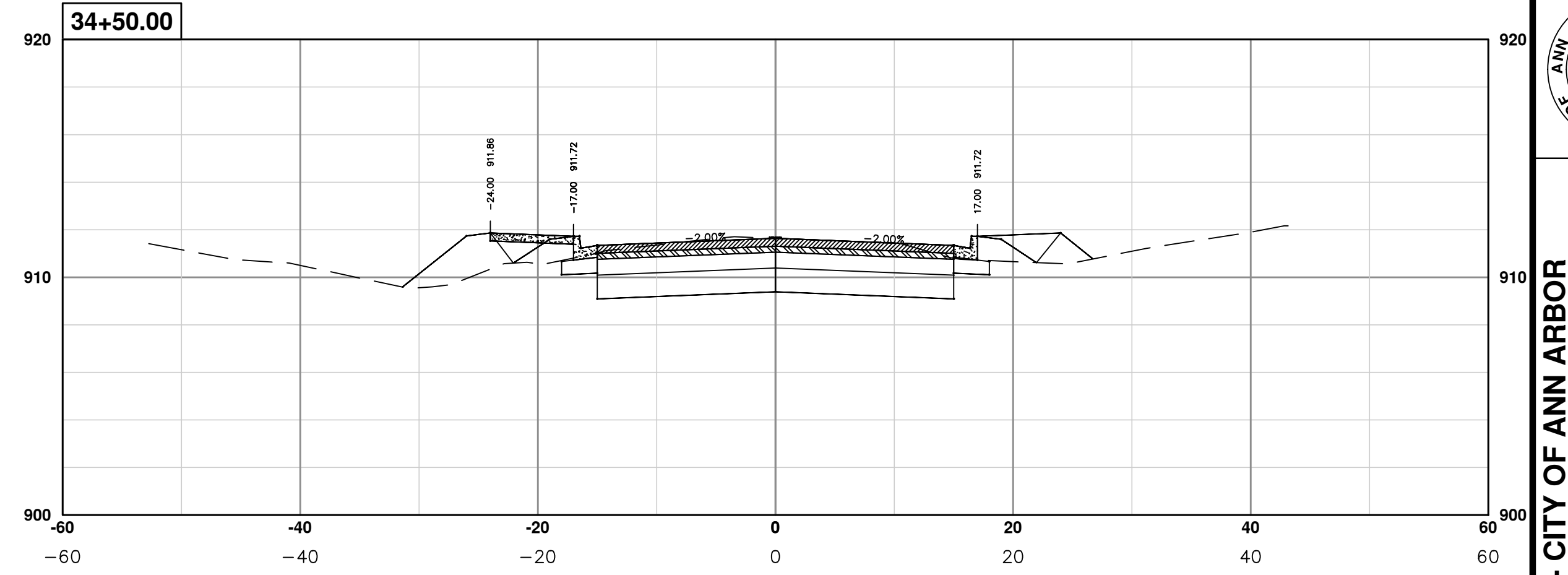
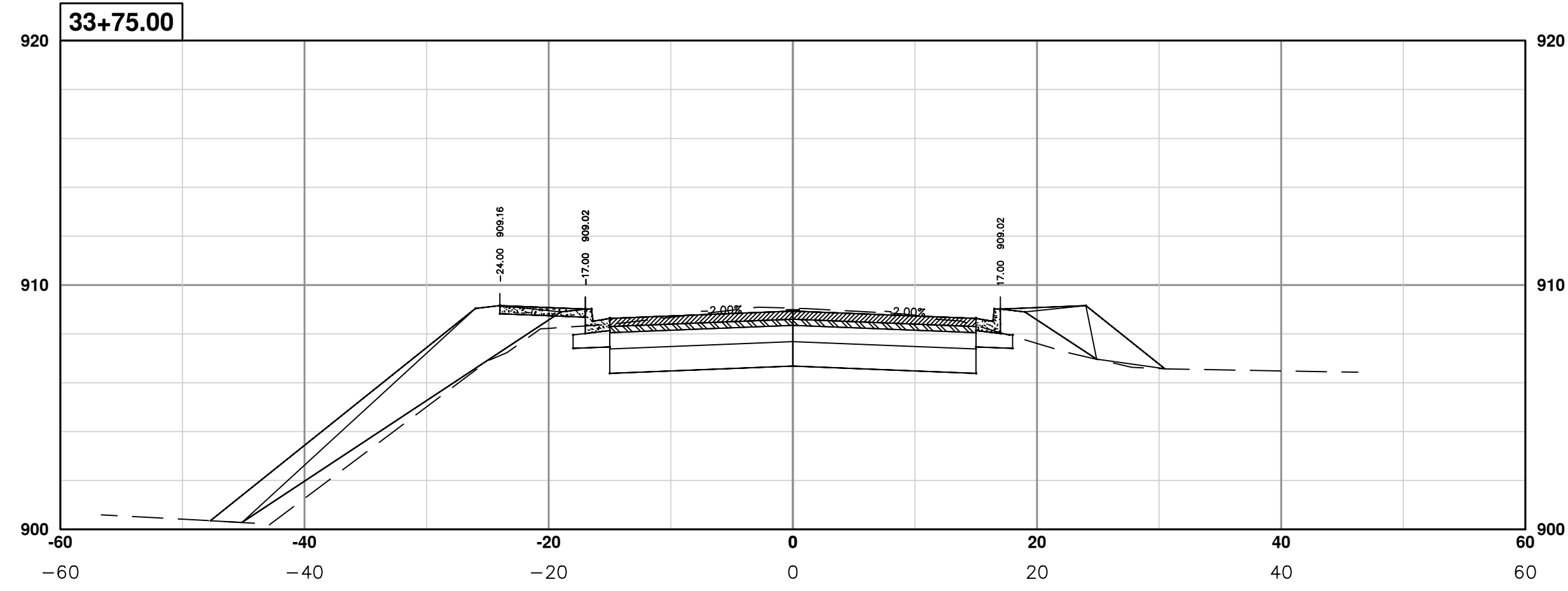
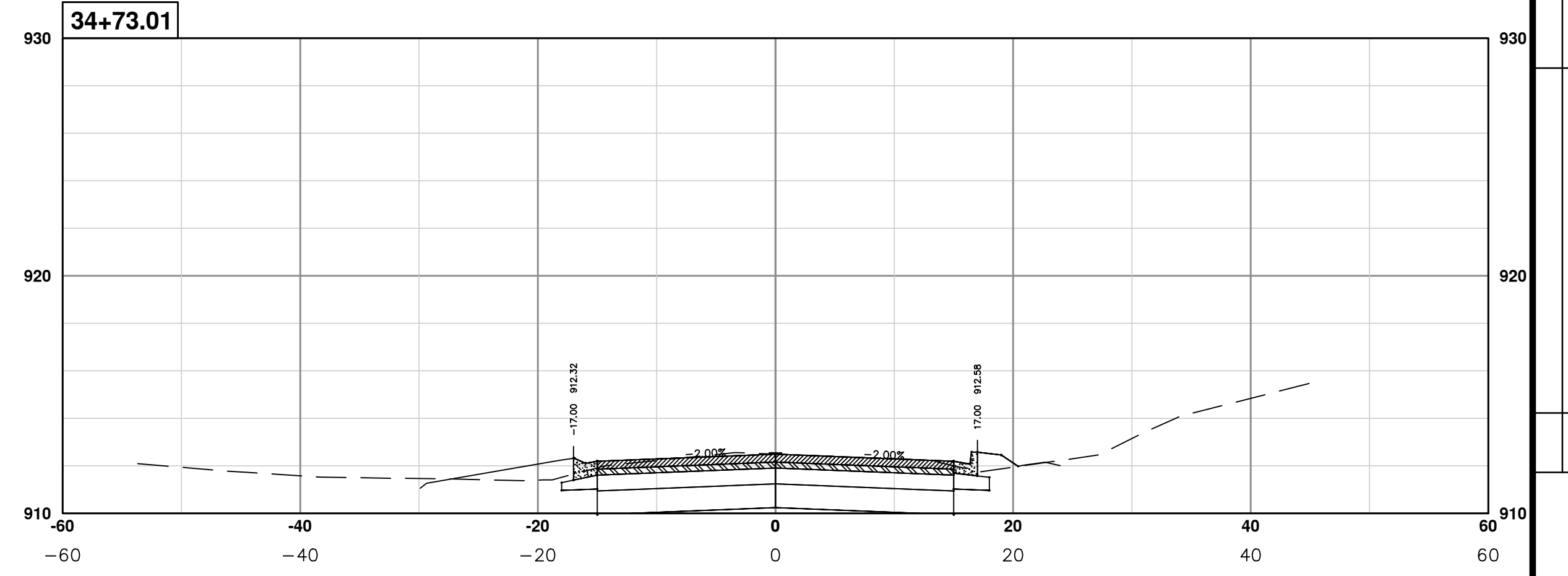
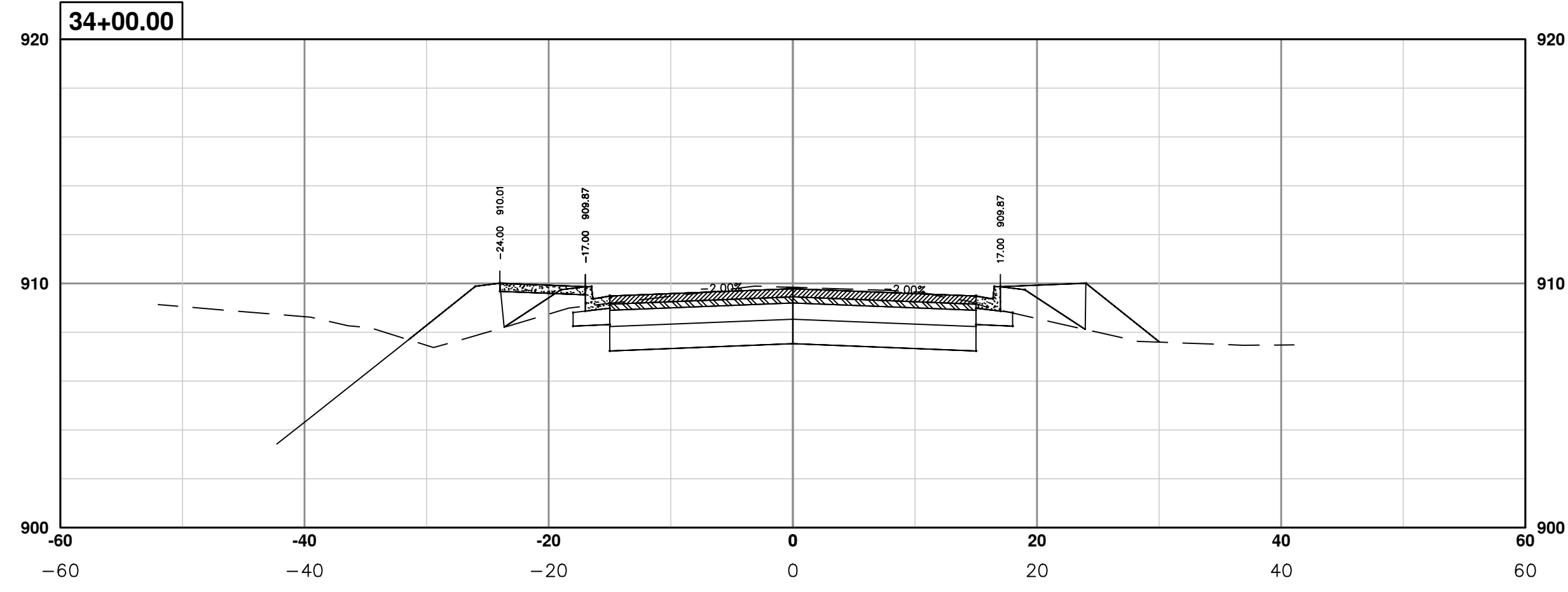
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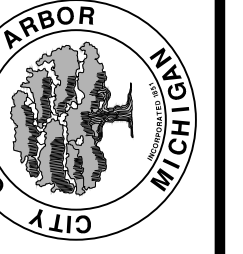
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 26 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
 DRAWING No. 2012028-93
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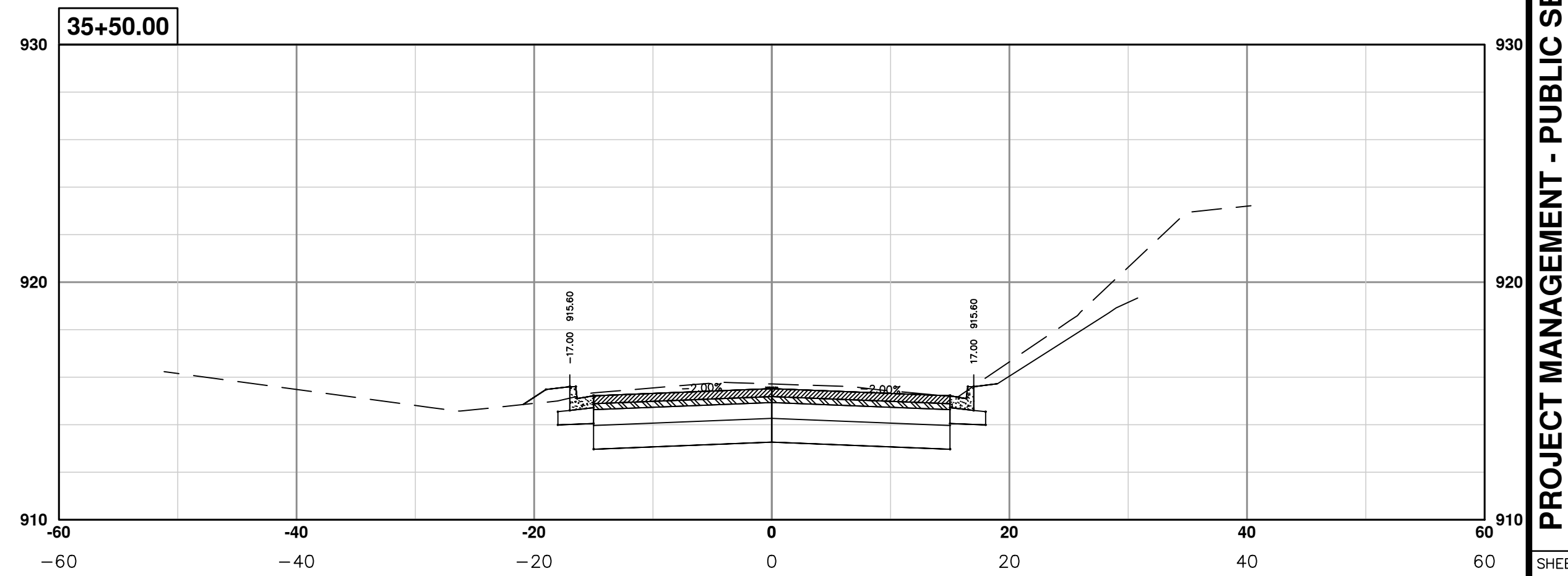
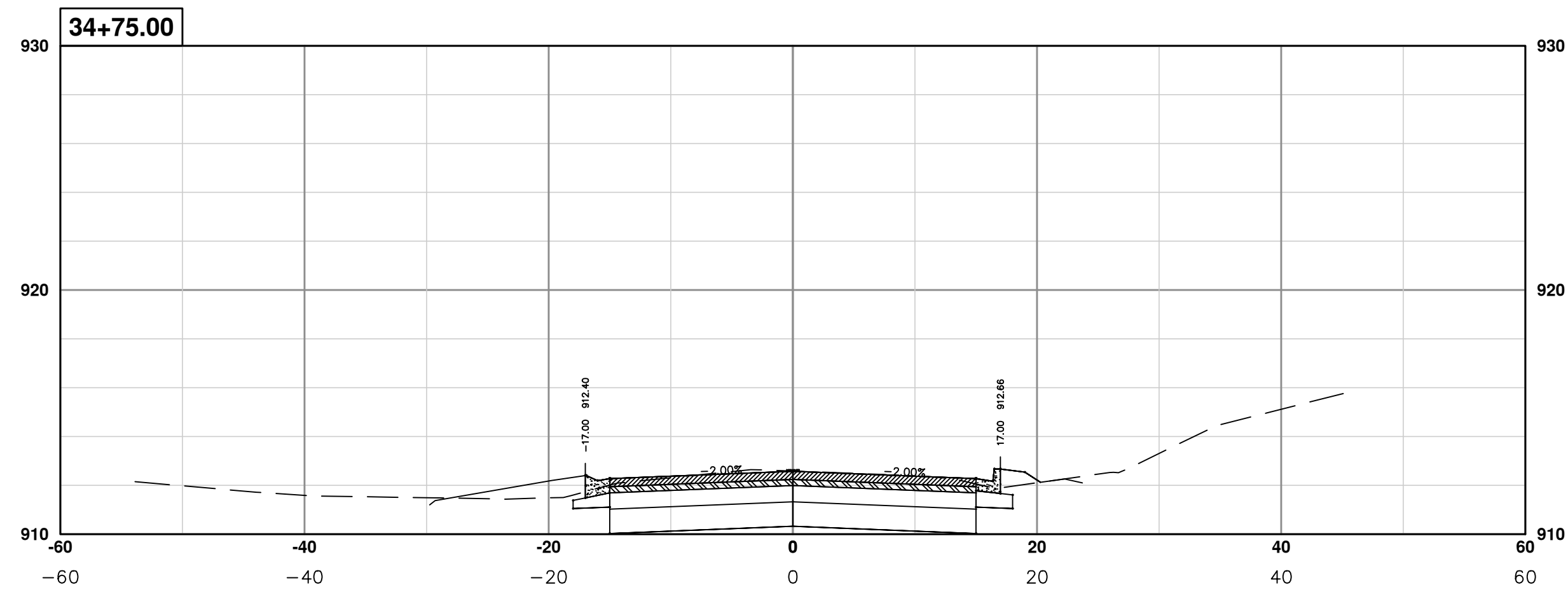
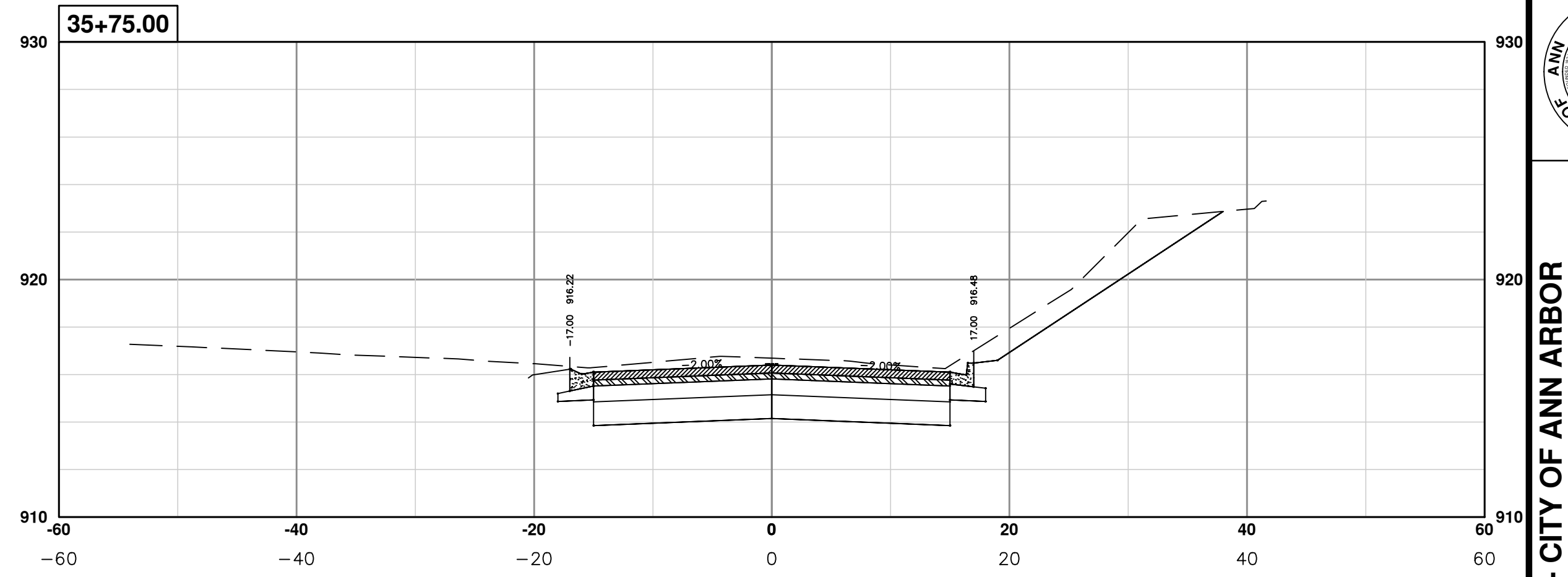
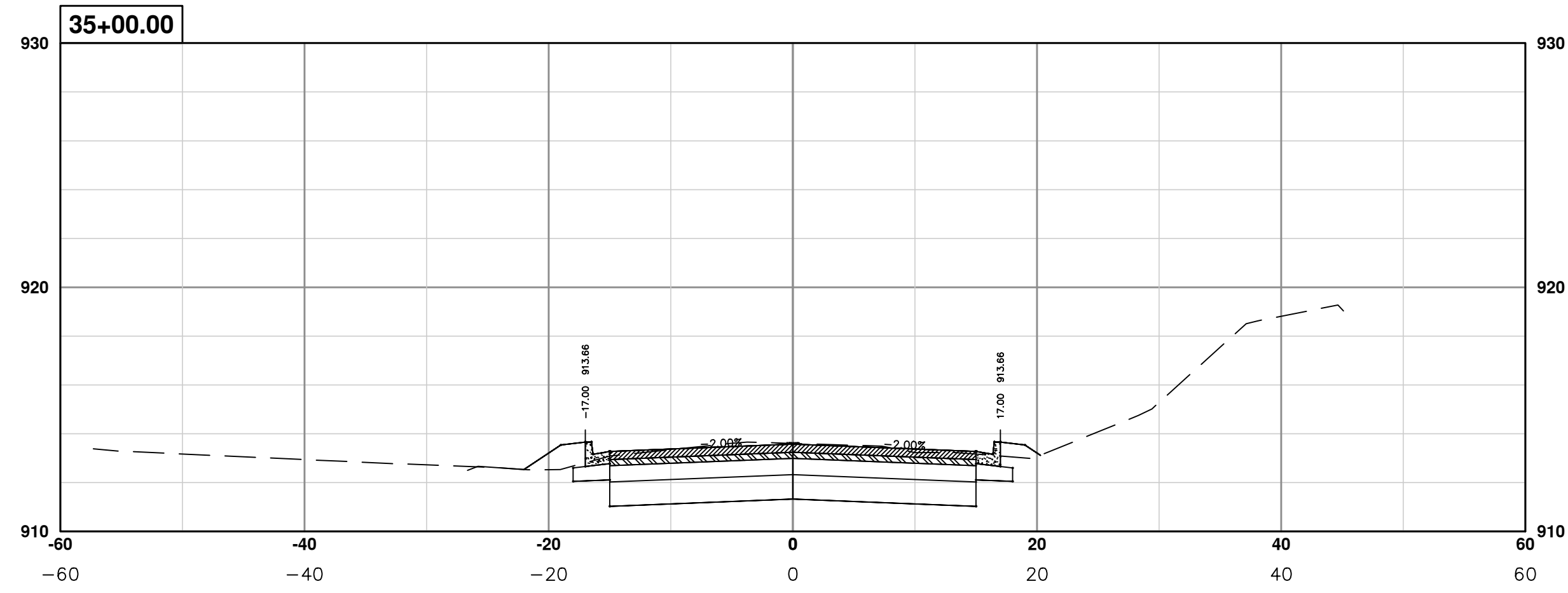
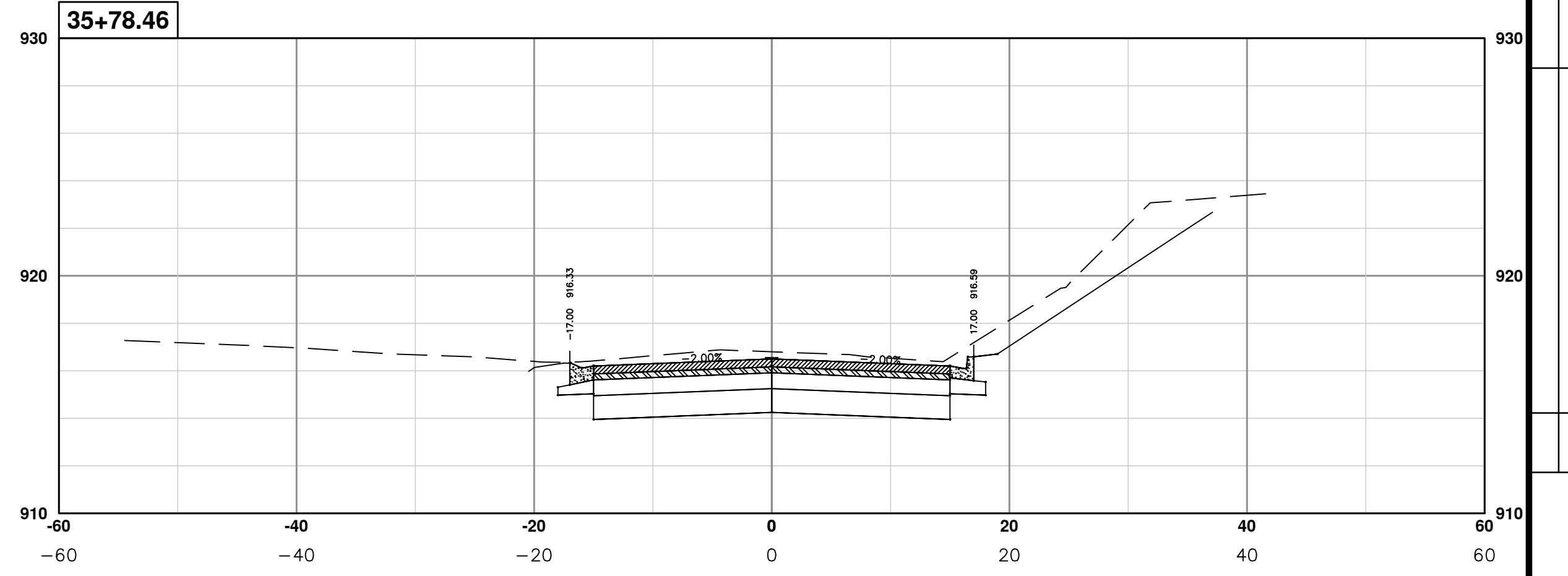
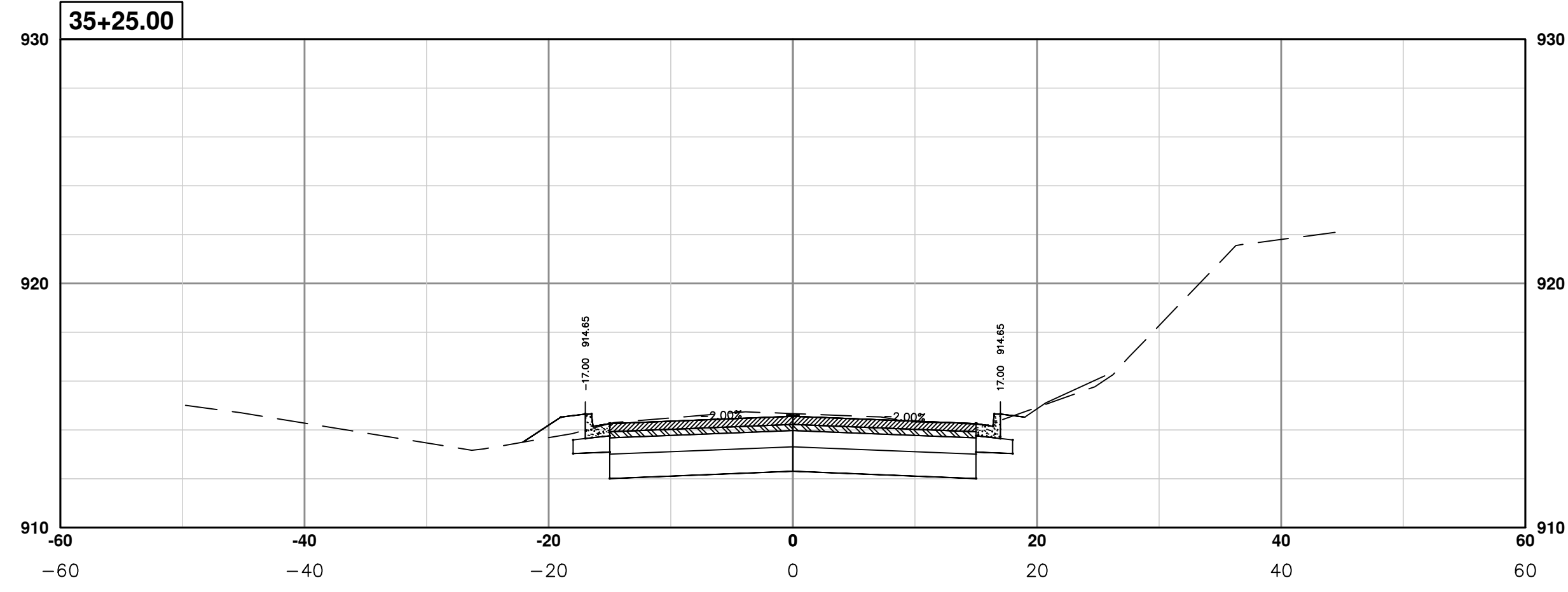
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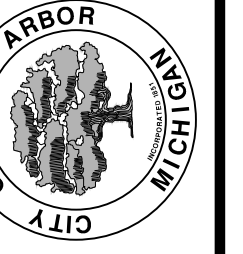
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 27 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
 DRAWING No. 2012028-94
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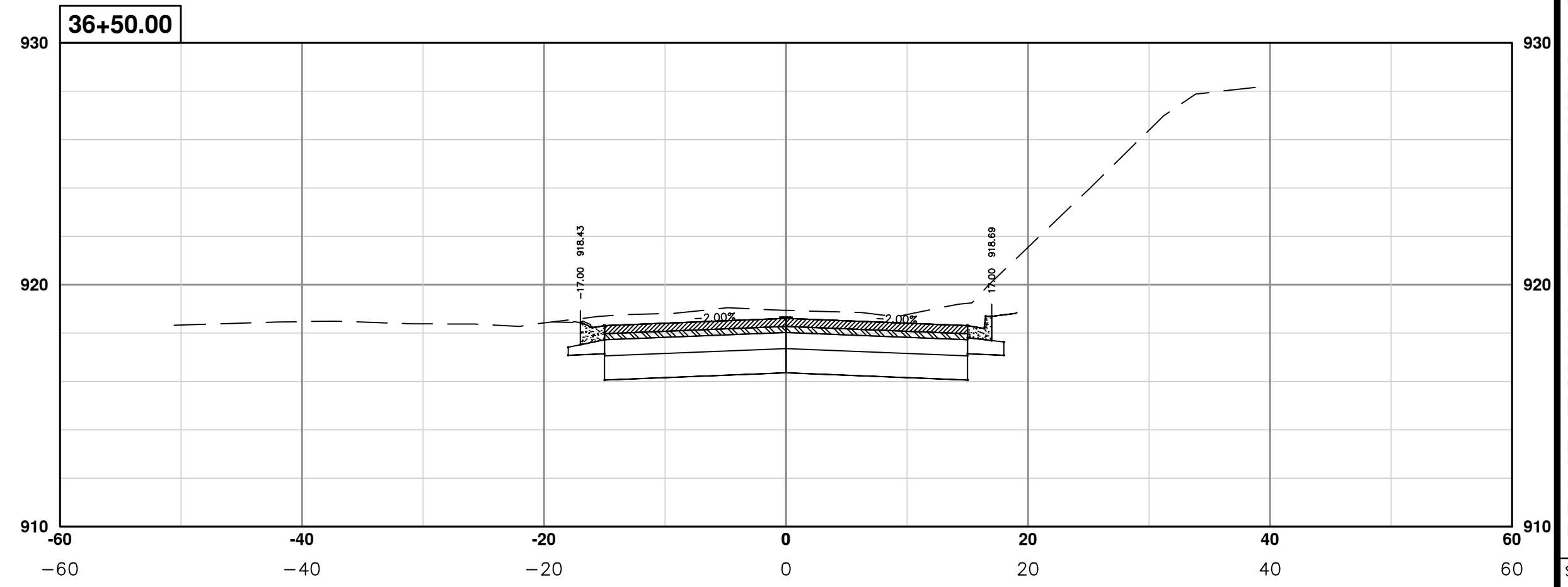
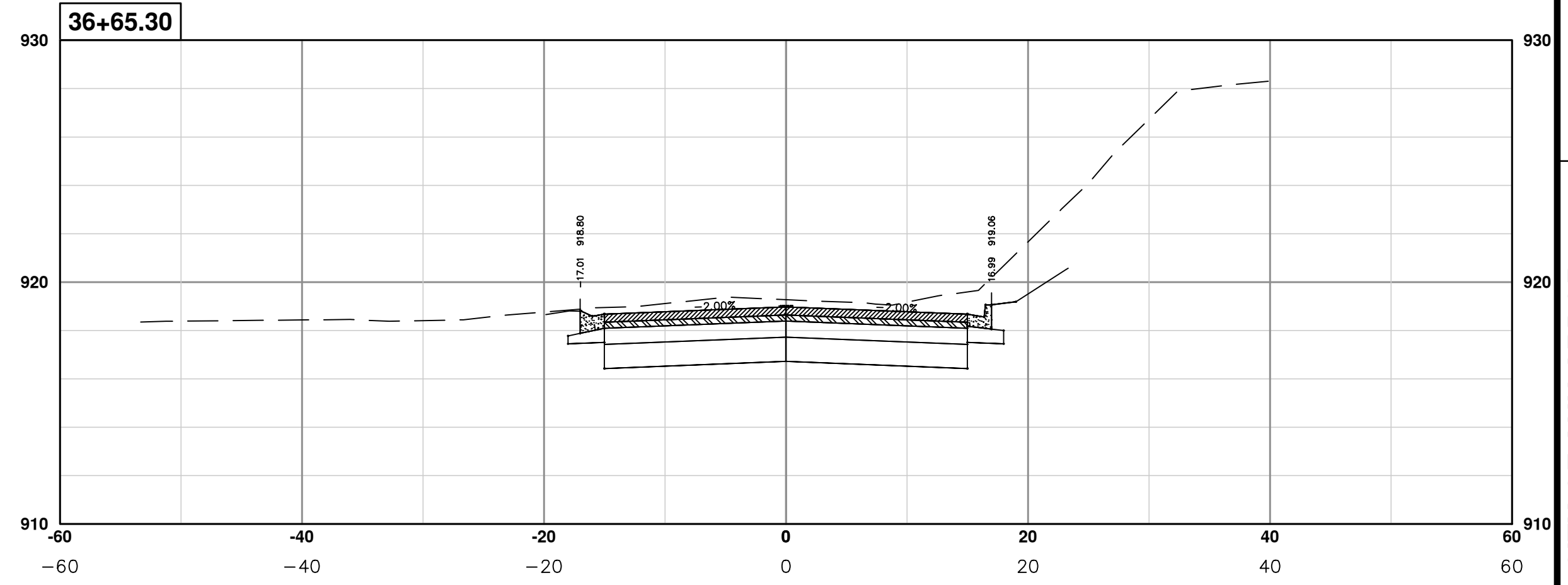
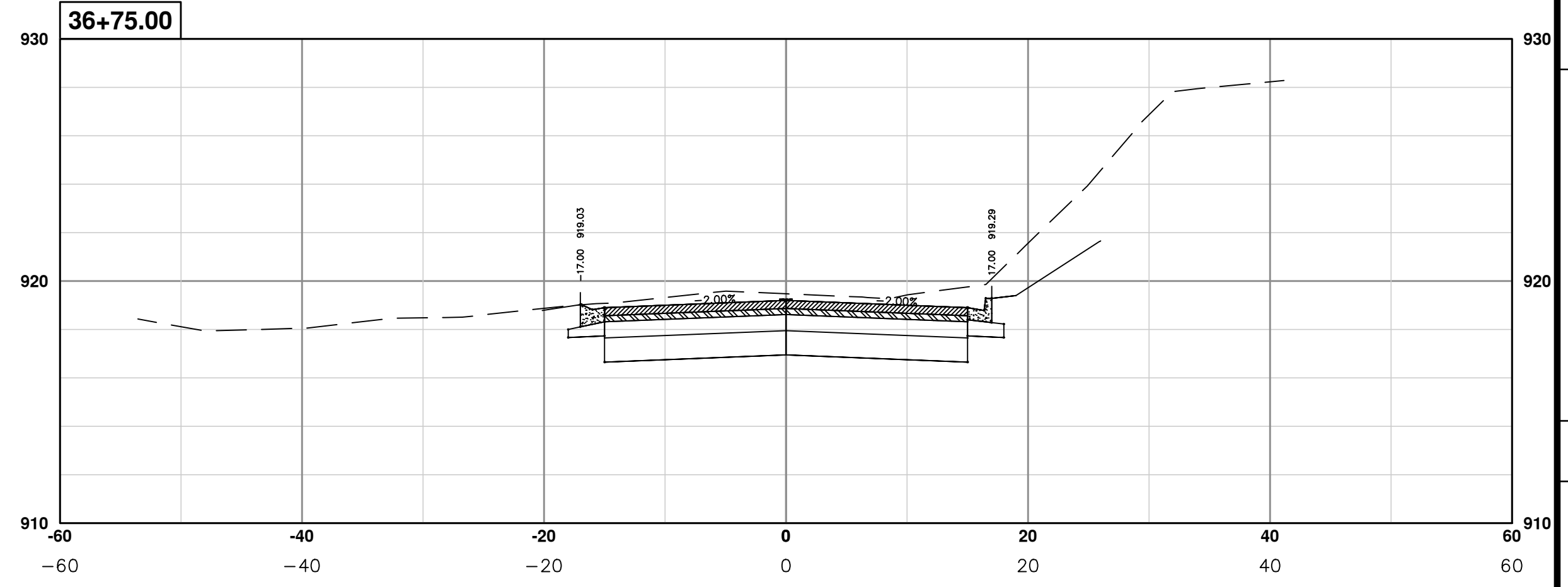
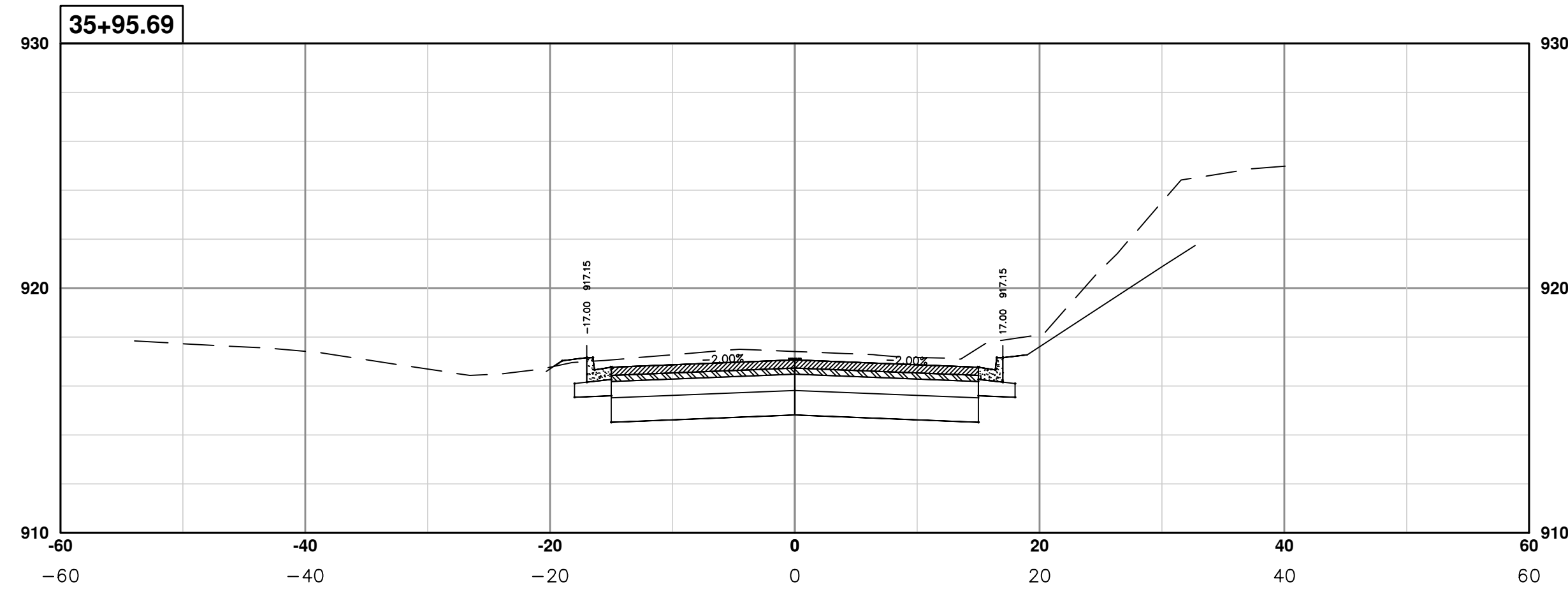
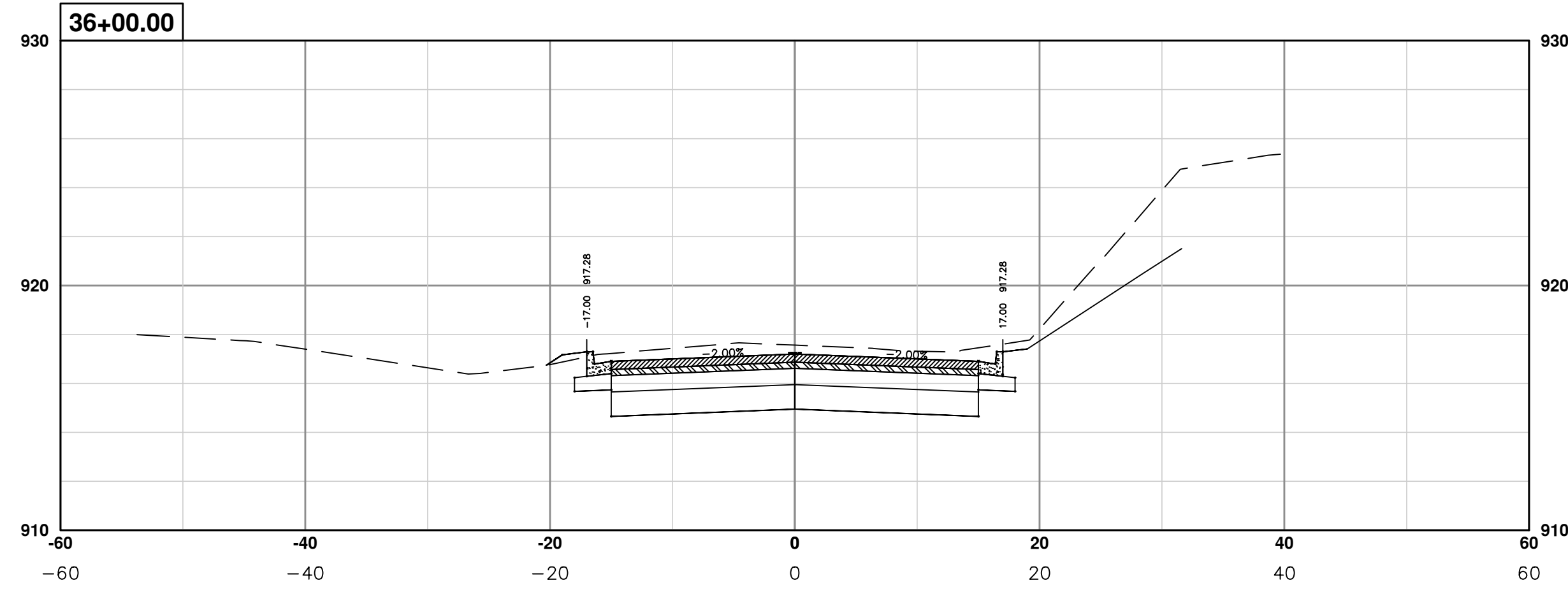
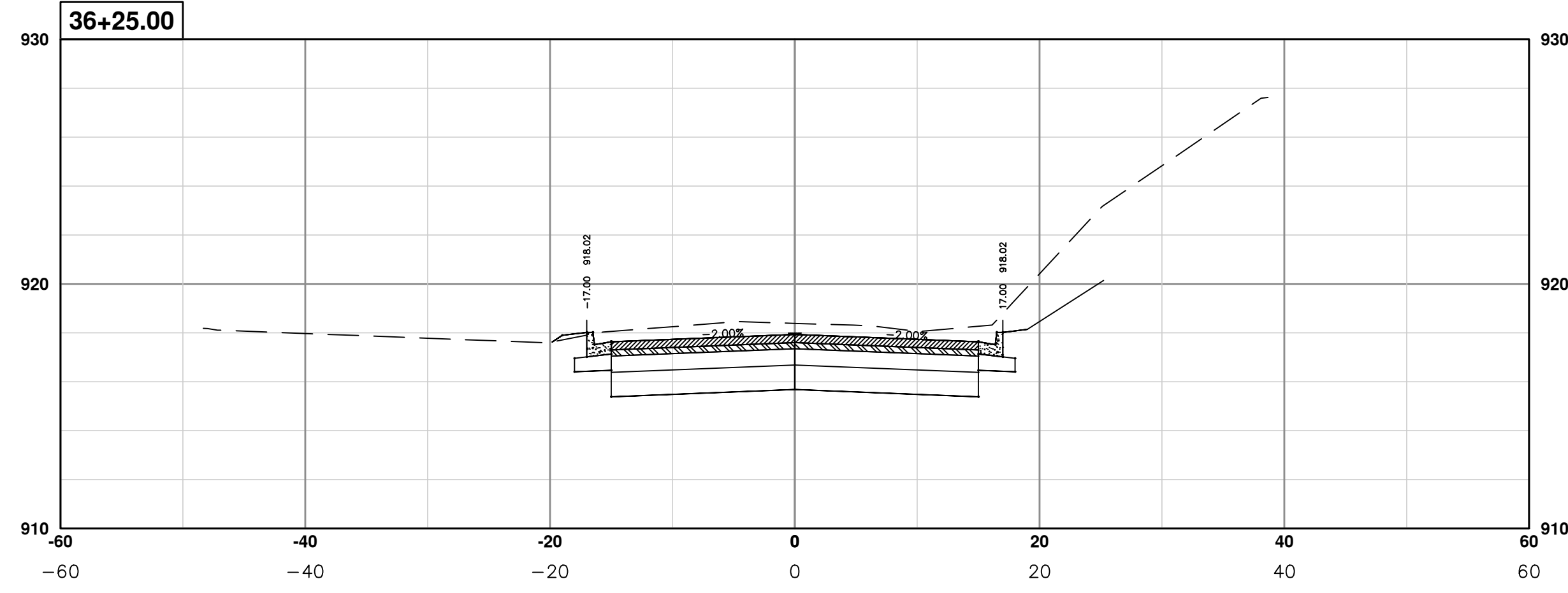
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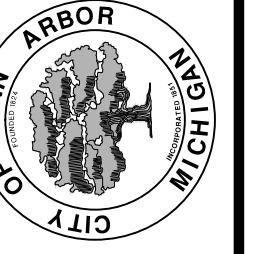
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 28 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
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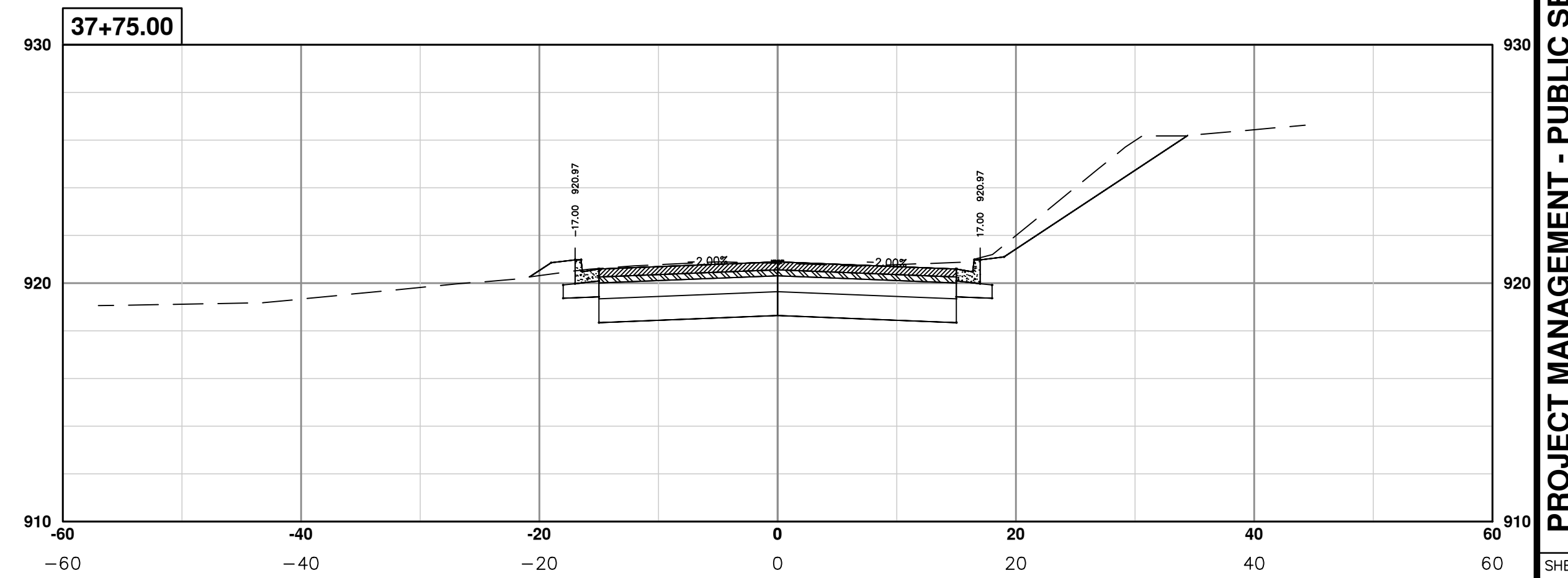
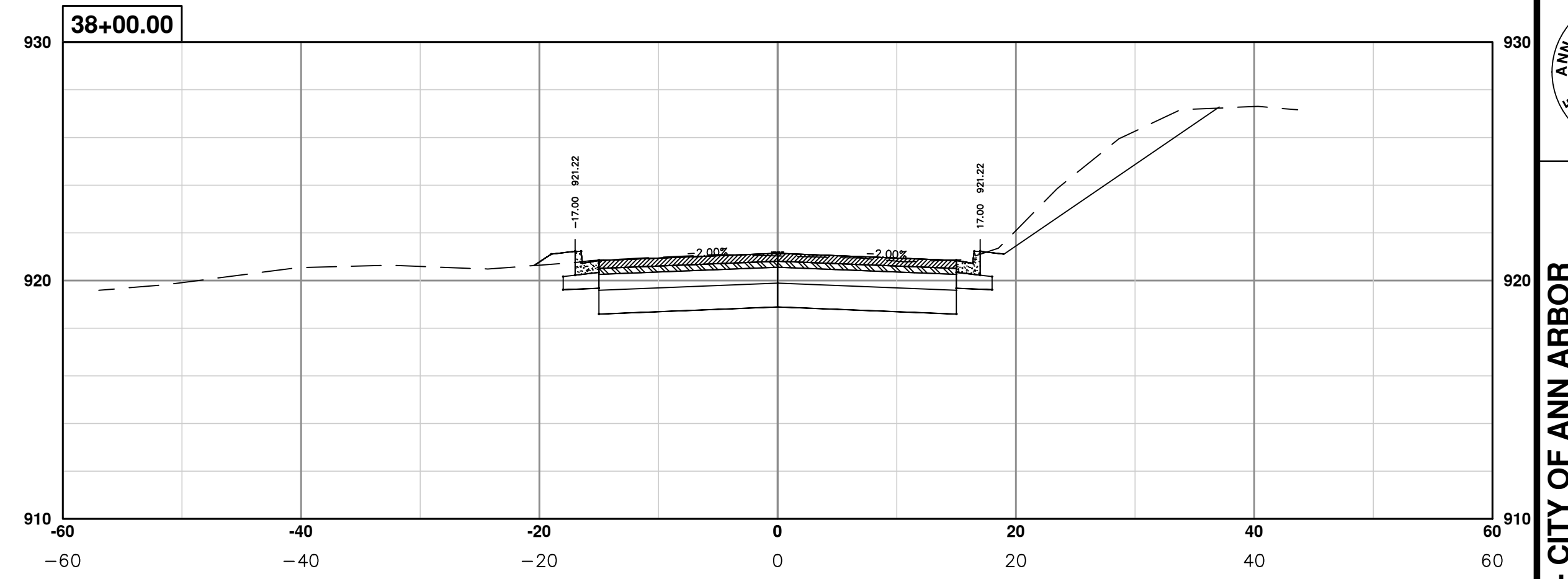
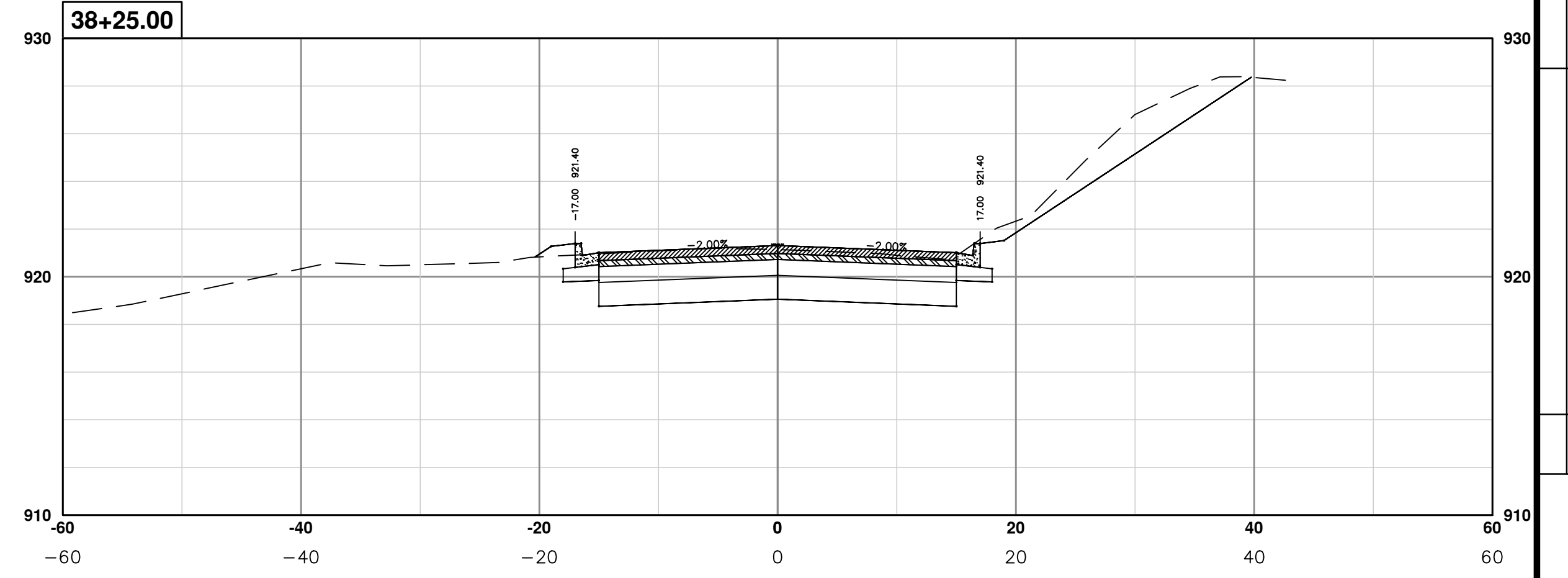
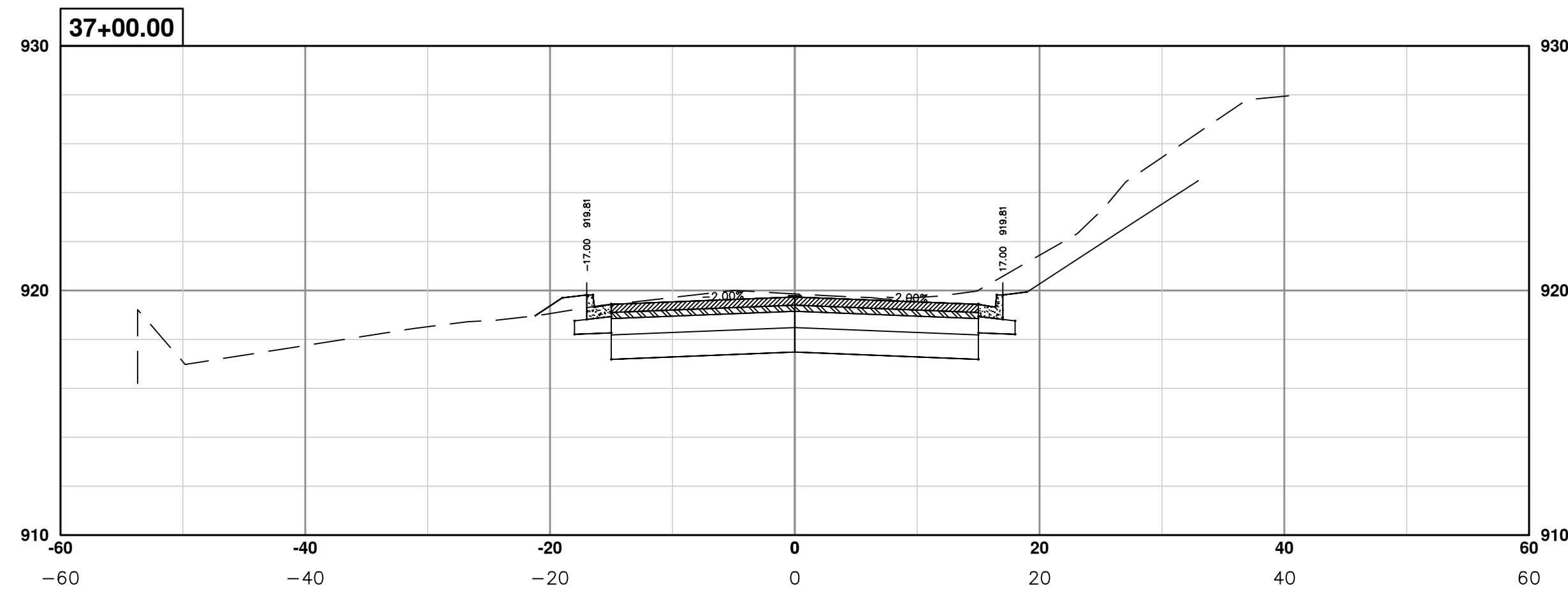
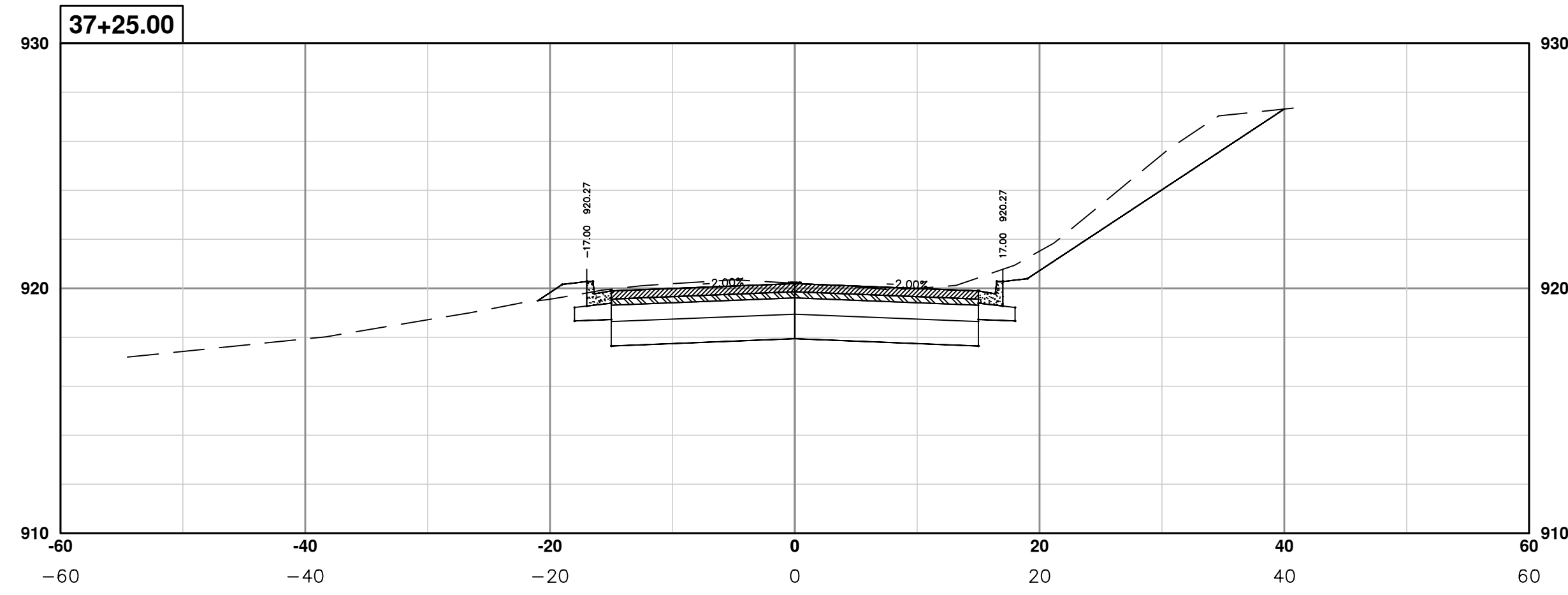
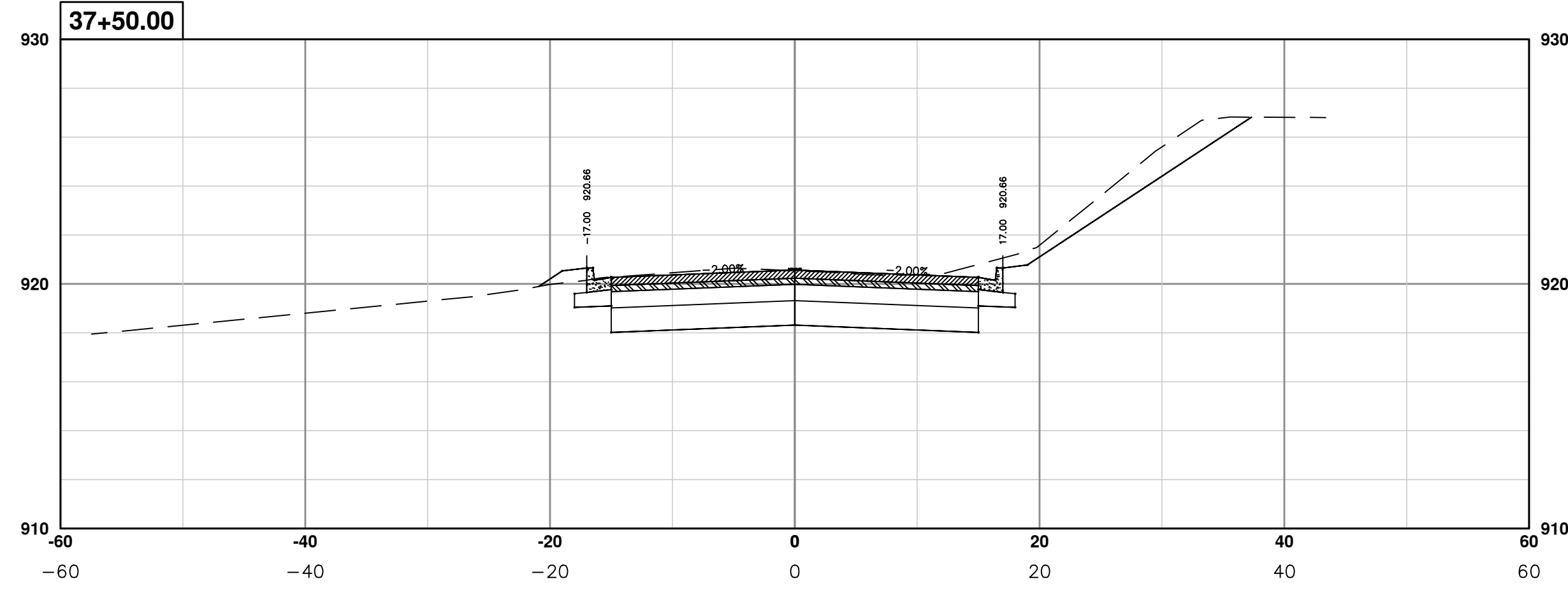
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00	BID SUBMITTAL	03-18-2014	RMLI	DRAWN



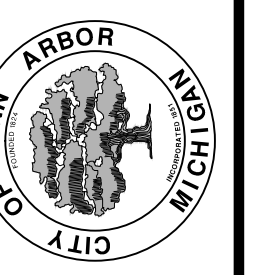
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 28 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
 DRAWING No. 2012028-96
 SHEET No.

S:\Project Management\Design\2012028 Pontiac Trail\Plan Production\Primary\2012028RD\CS.dwg Dwg Created: 18-Jan-14 --_a2_standard_bw.stb -- Plot Date: 19-Mar-14



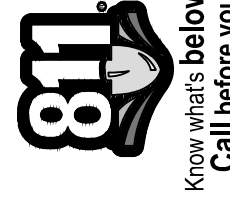
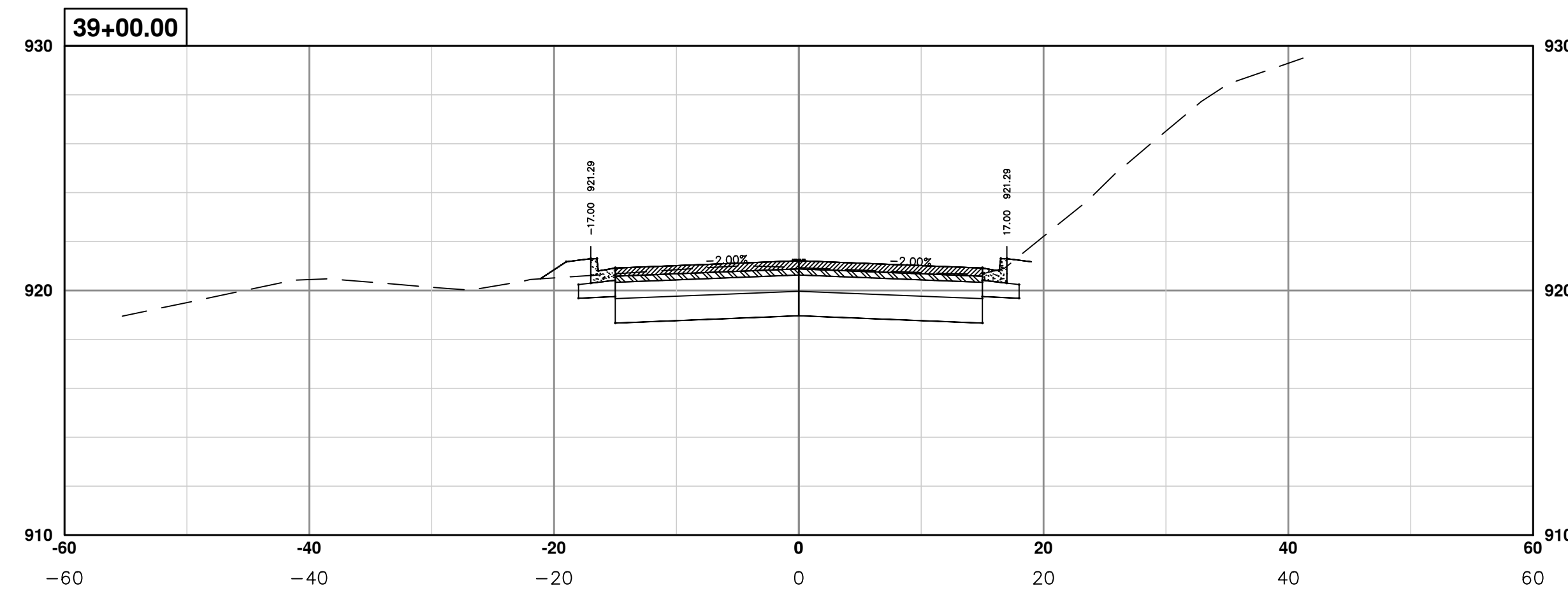
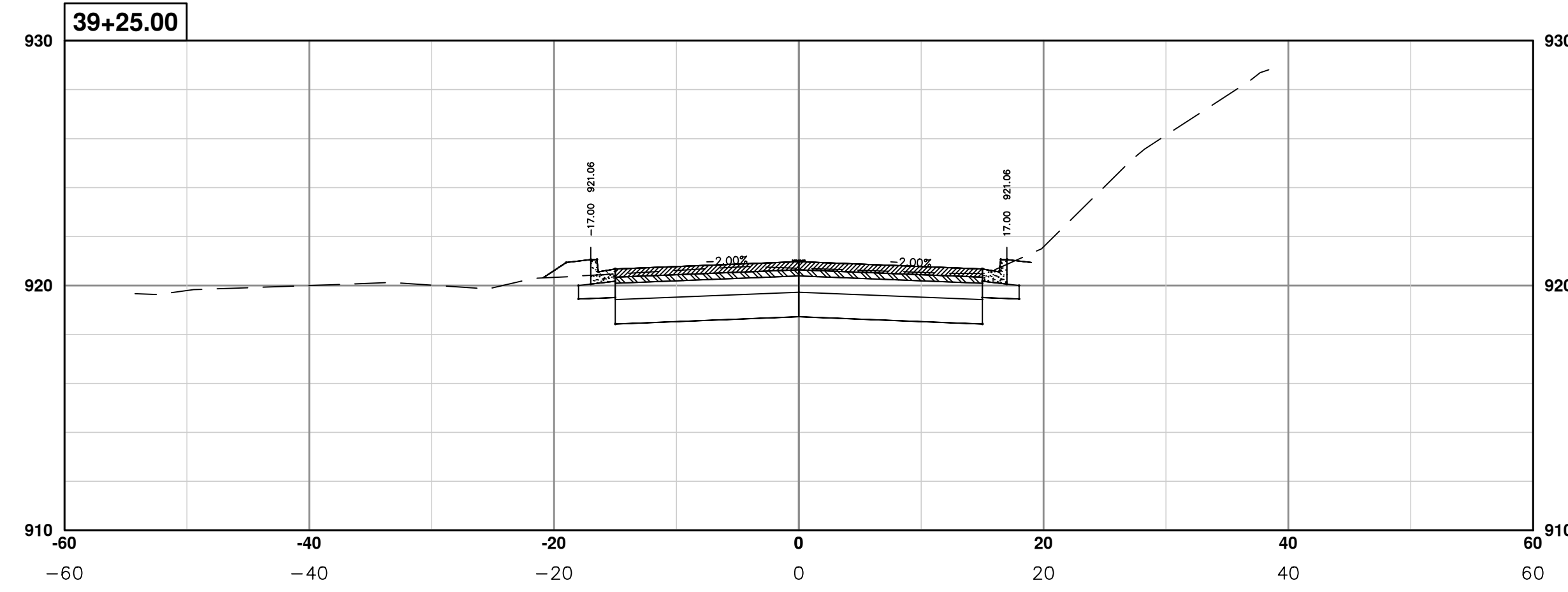
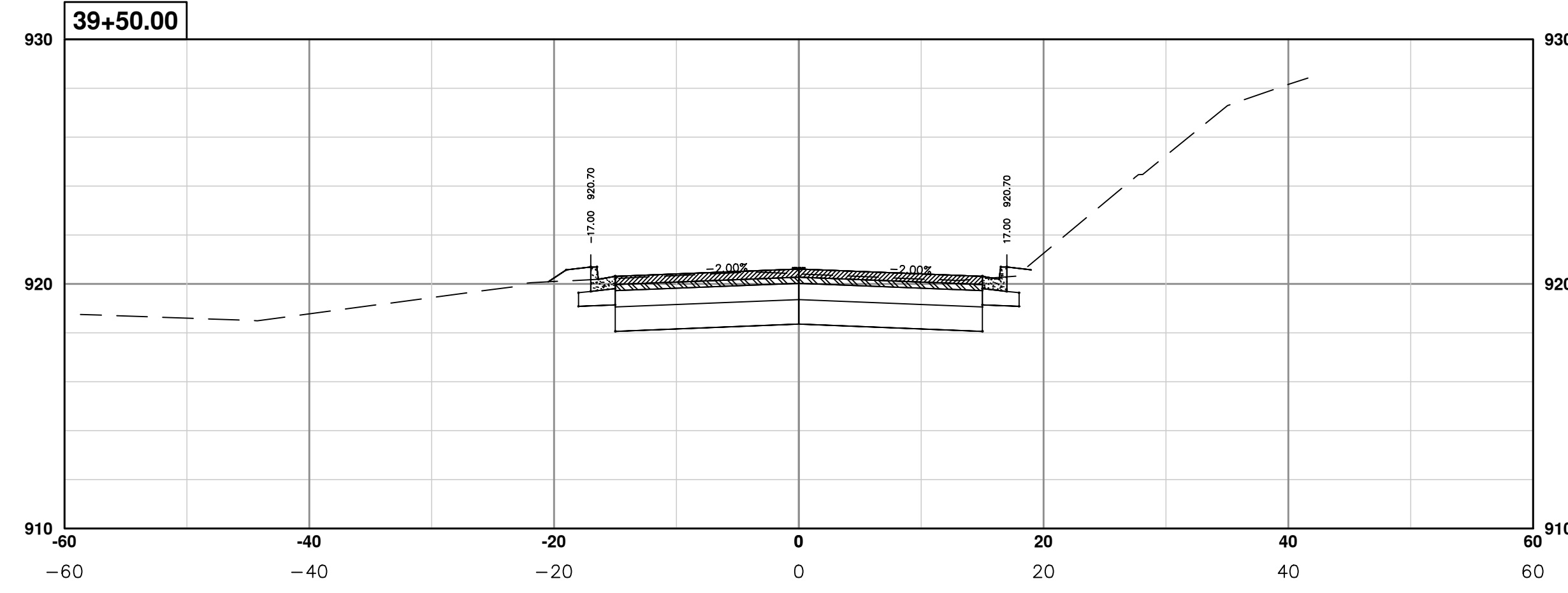
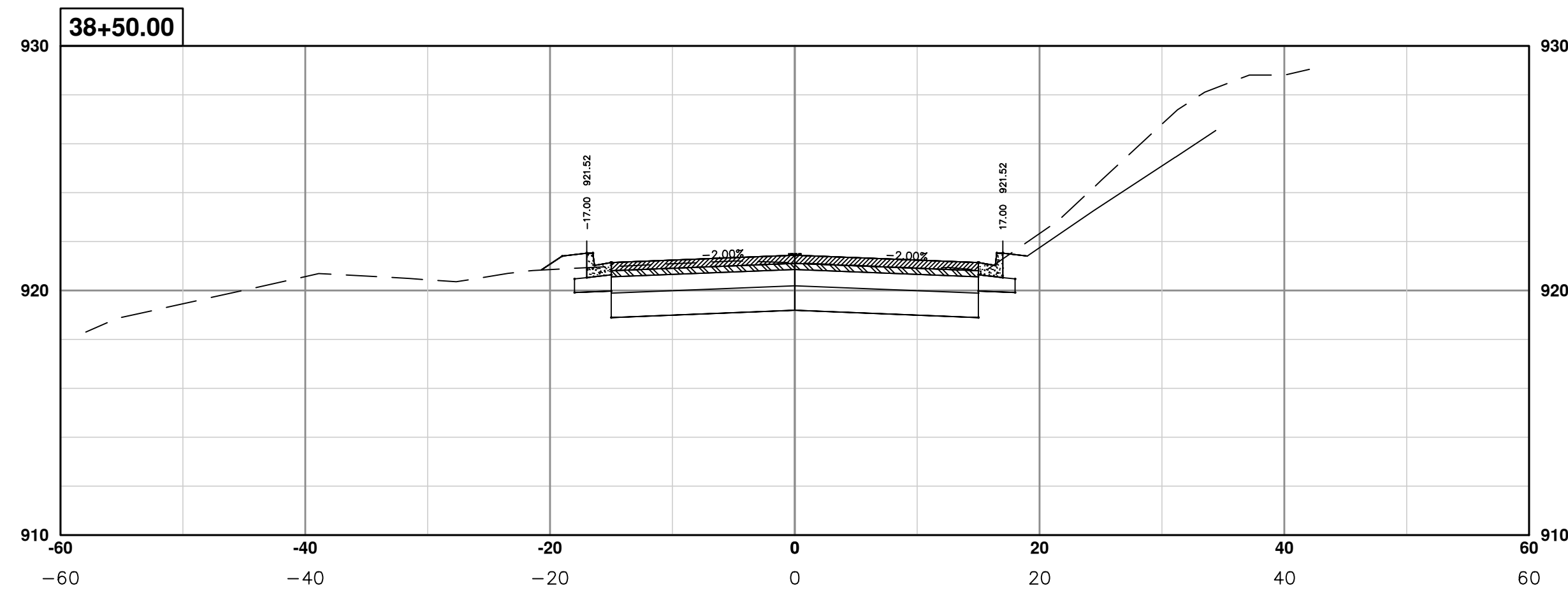
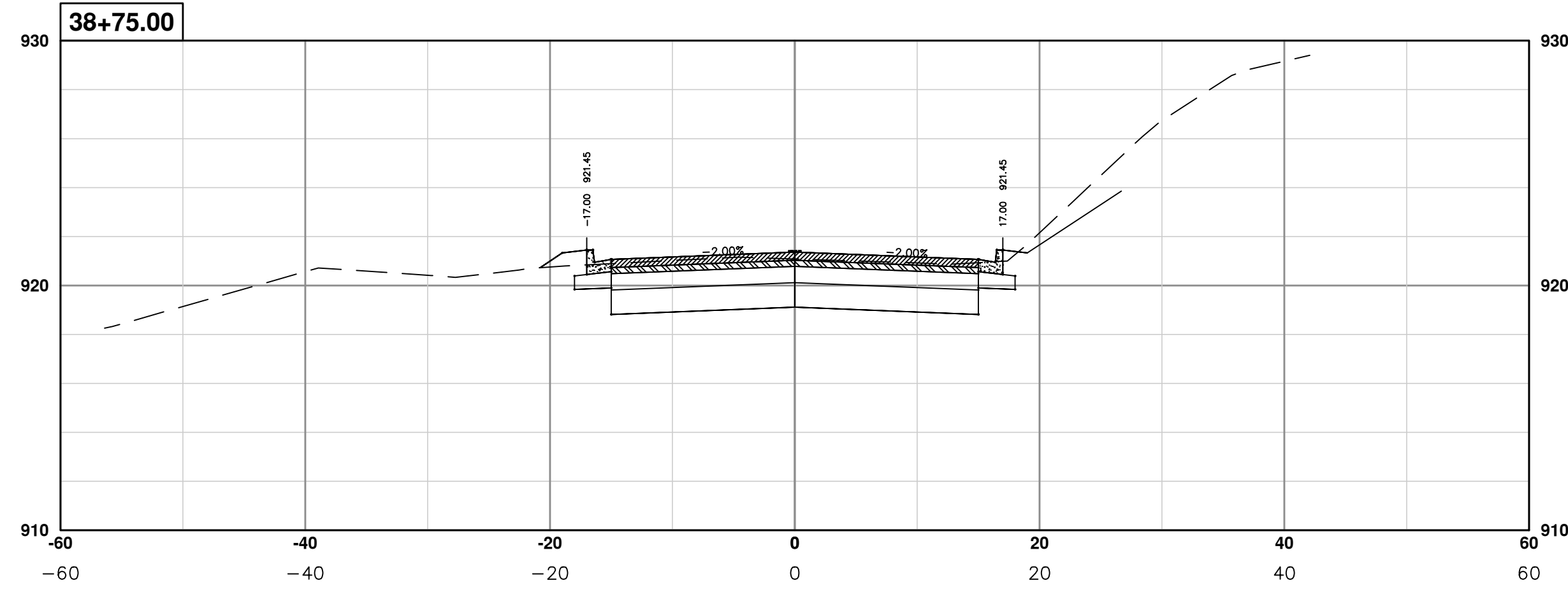
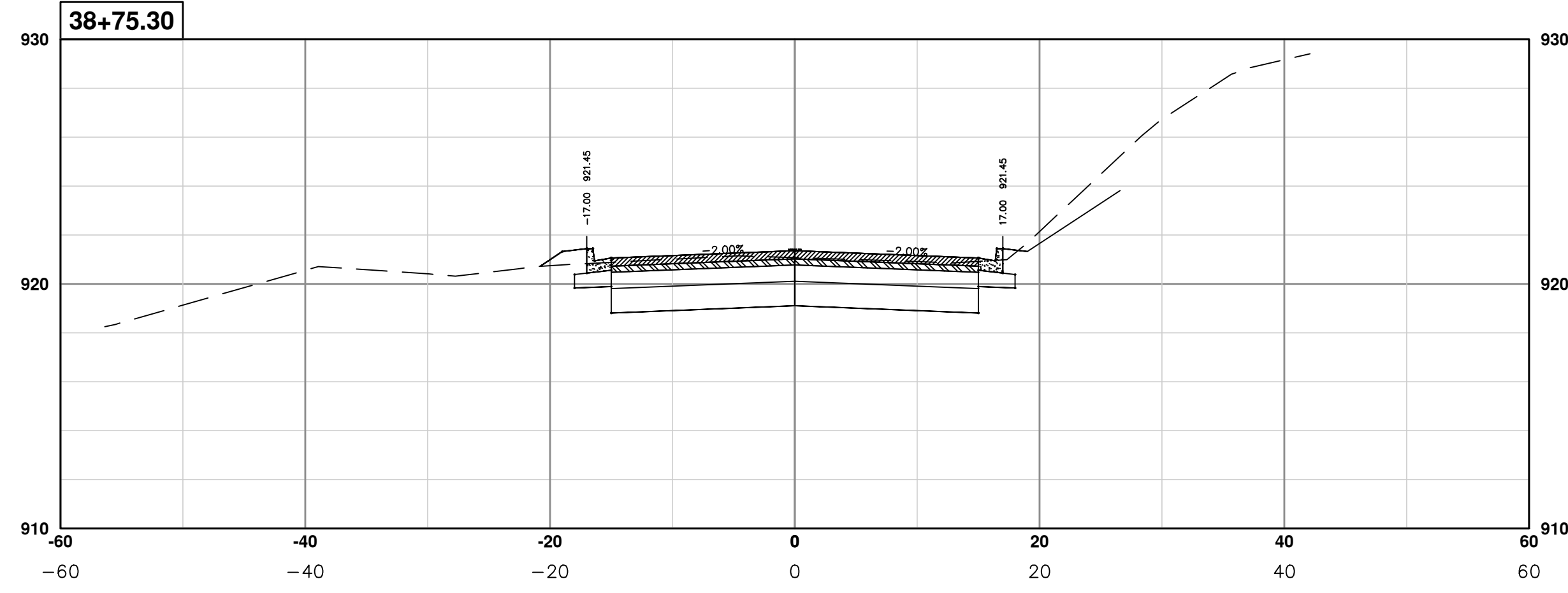
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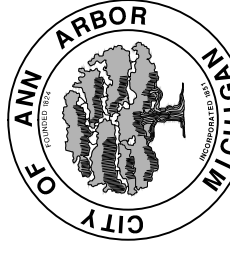
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 30 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
 DRAWING No. 2012028-97
 SHEET No.

S:\Project Management\Design\2012028 Pontiac Trail\Plan Production\Primary\2012028RD05.dwg Dwg Created: 18-Jan-14 -- a2_standard bw.stb -- Plot Date: 19-Mar-14



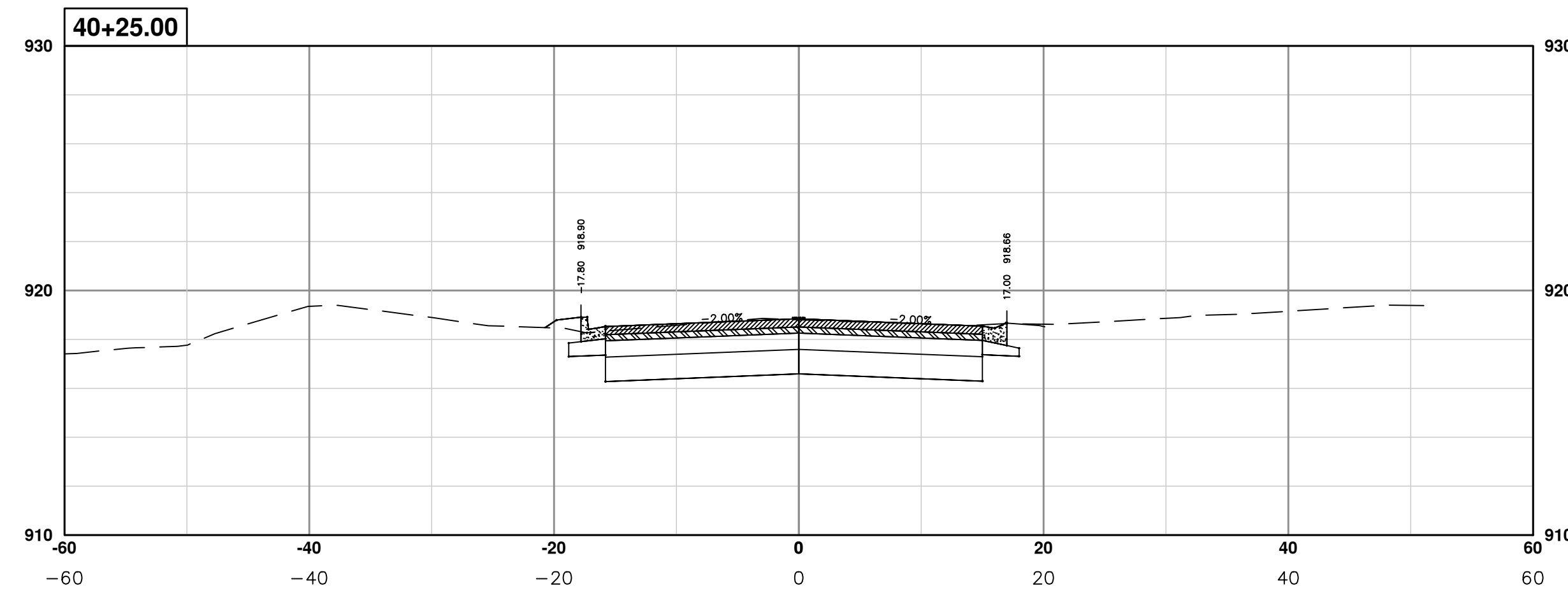
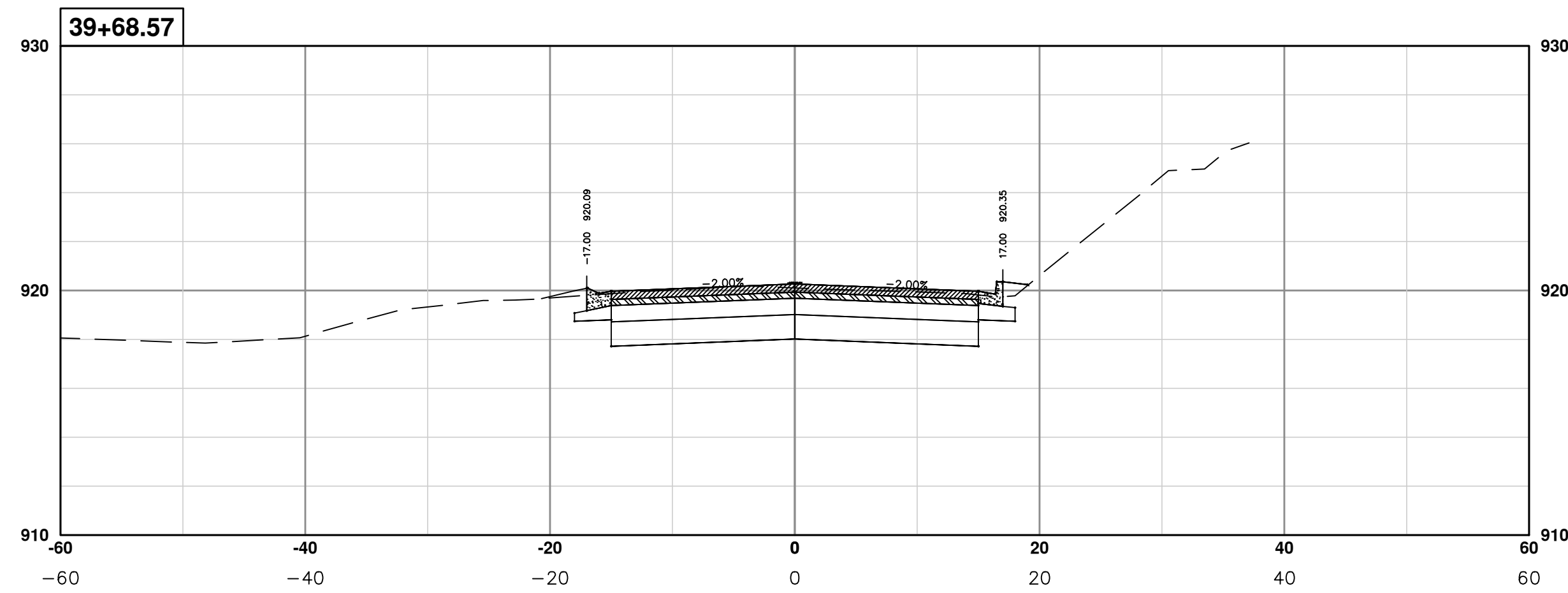
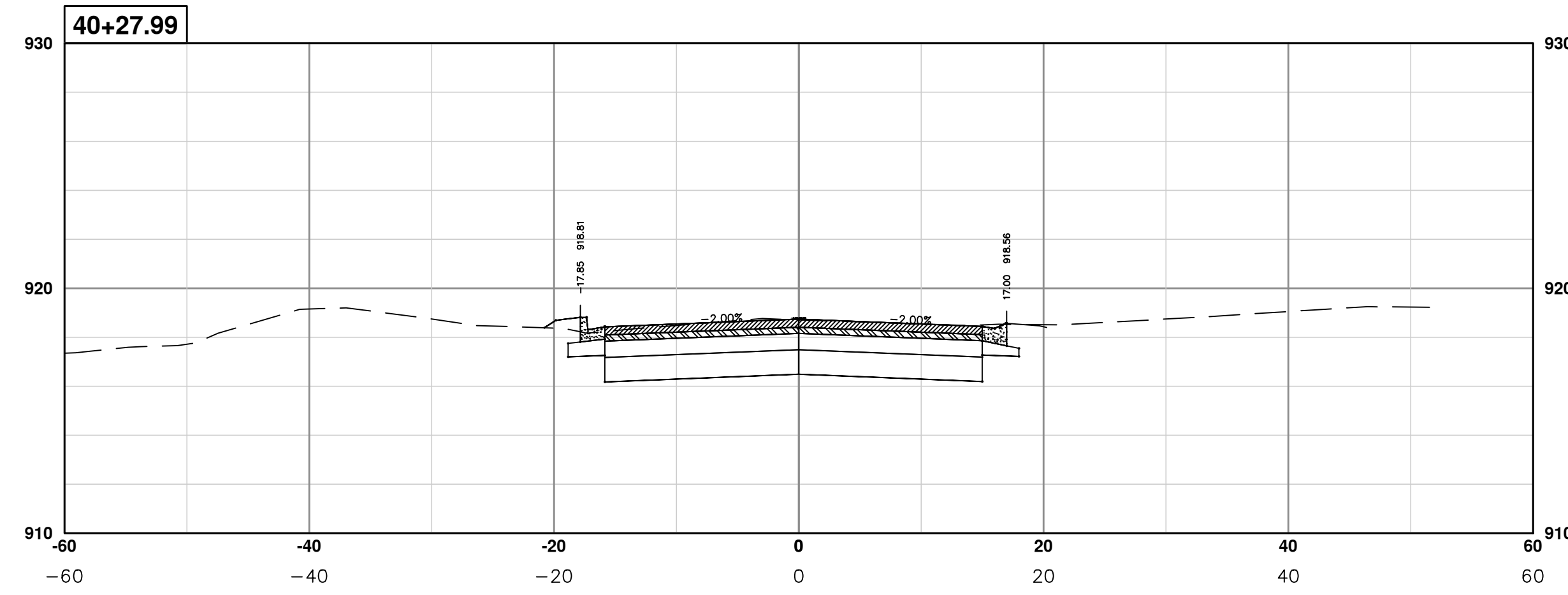
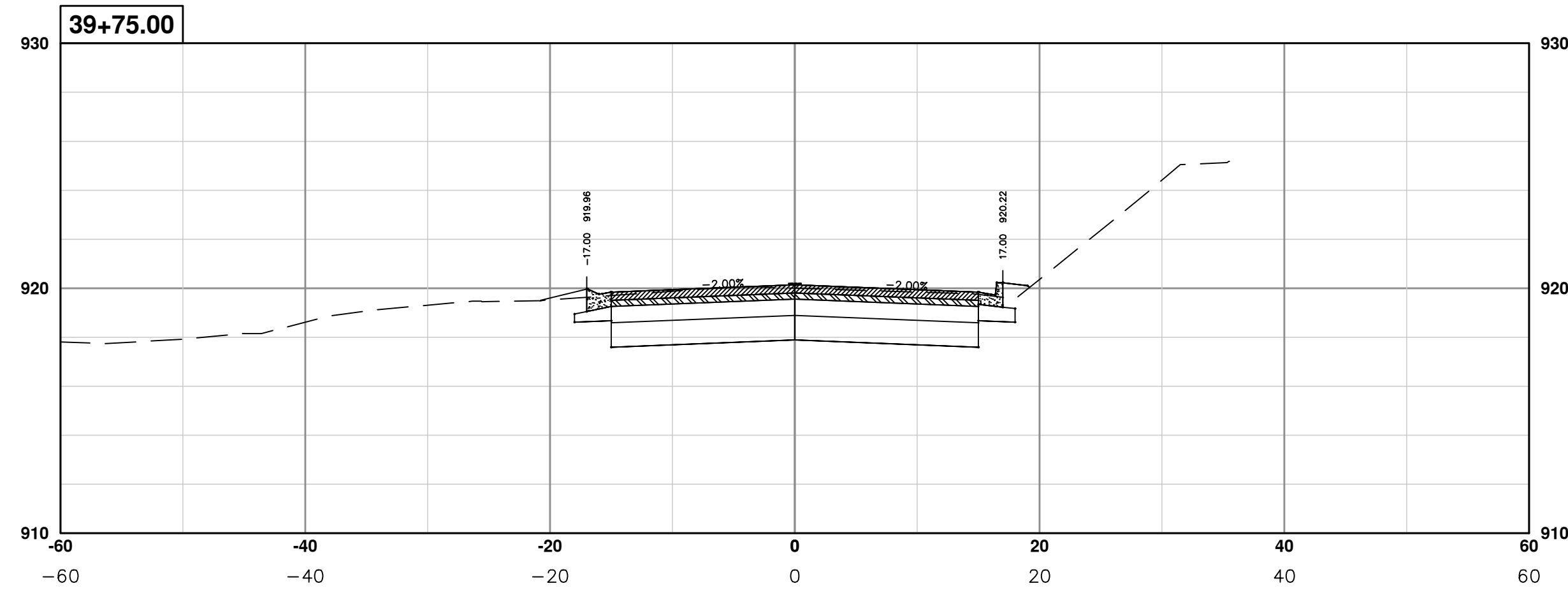
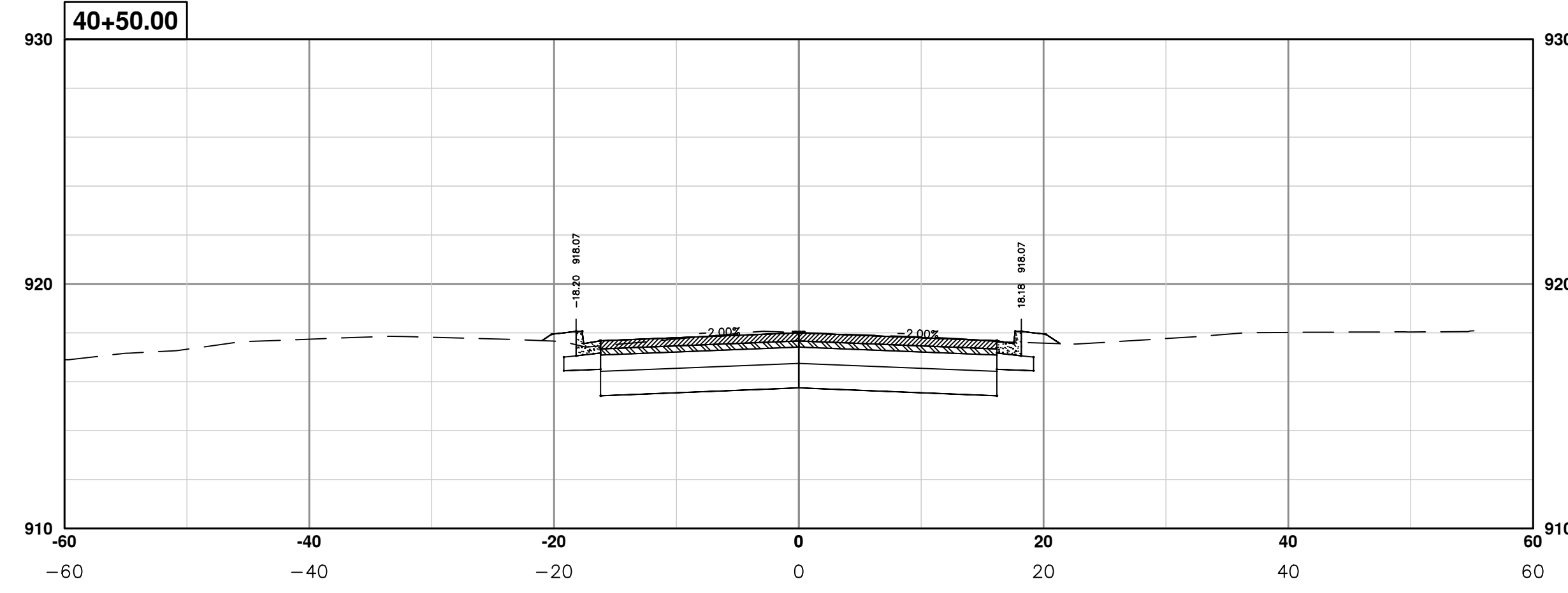
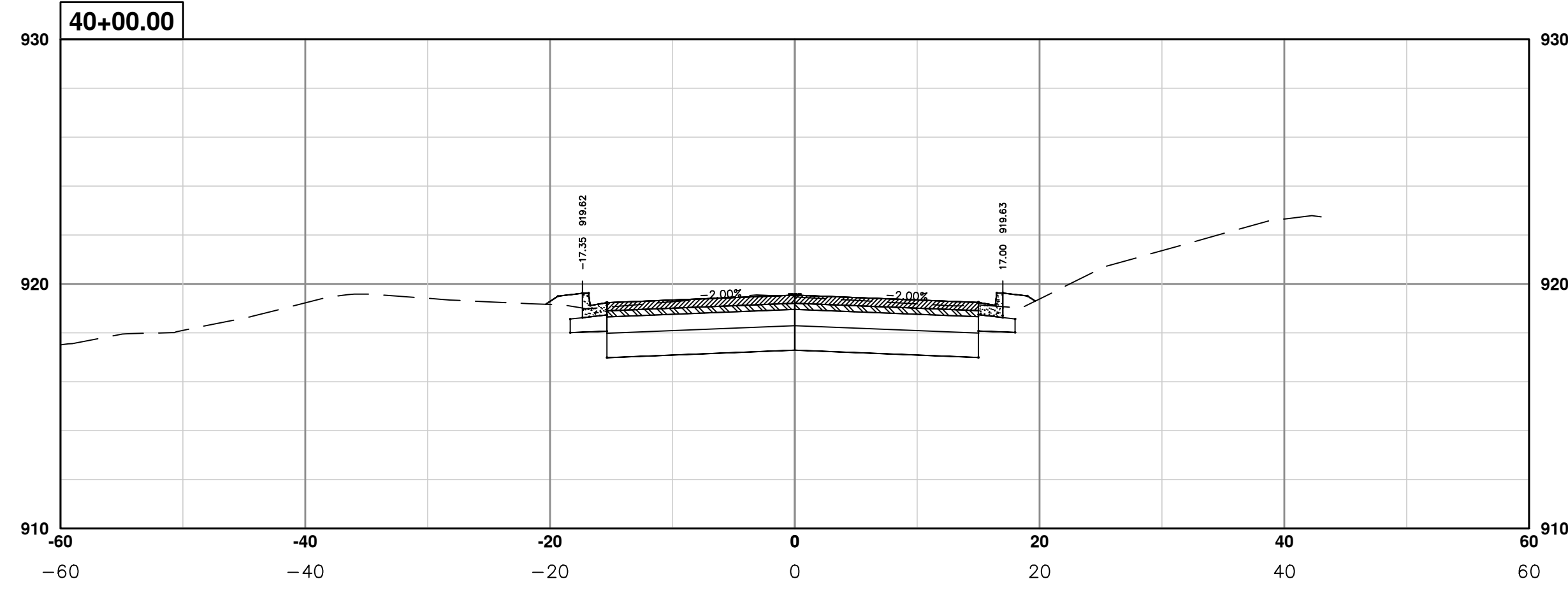
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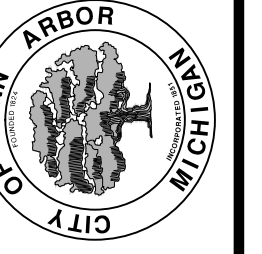
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 31 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
 DRAWING No. 2012028-98
 SHEET No. 98 OF 102

S:\Project Management\Design\2012028 Pontiac Trail\Plan Production\Primary\2012028RD05.dwg Dwg Created: 18-Jan-14 - _a2_standard_bw.stb - Plot Date: 19-Mar-14



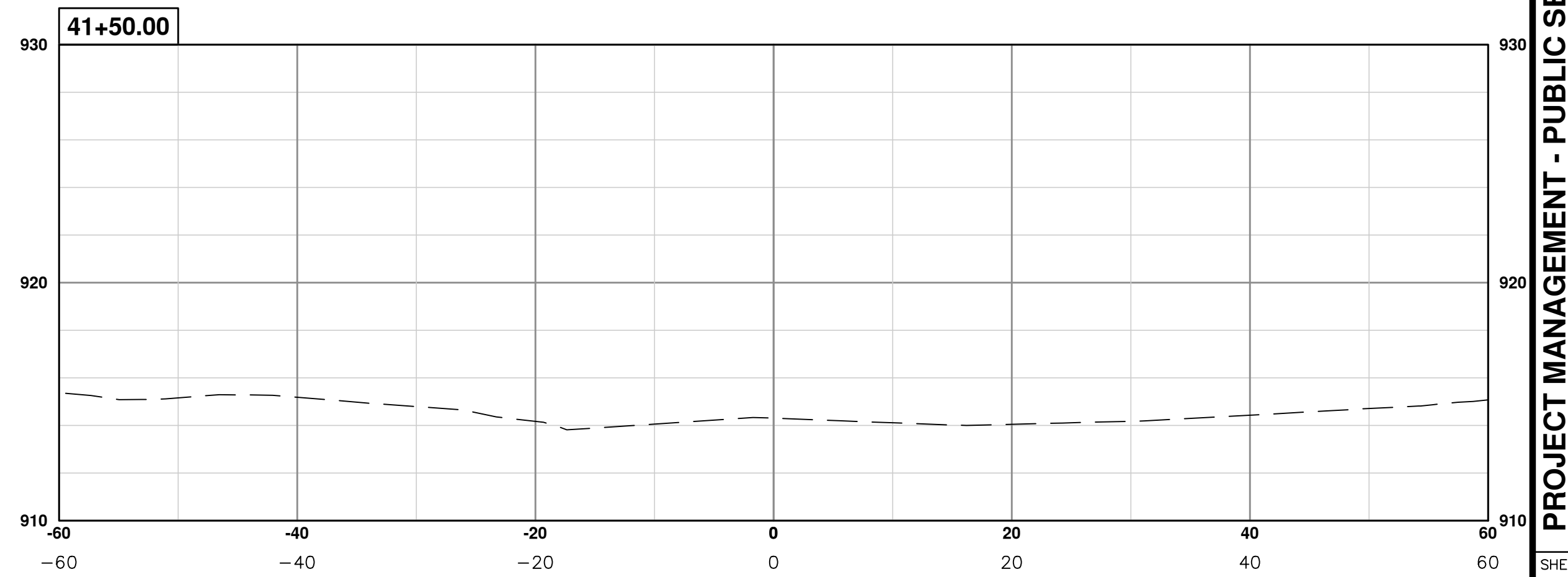
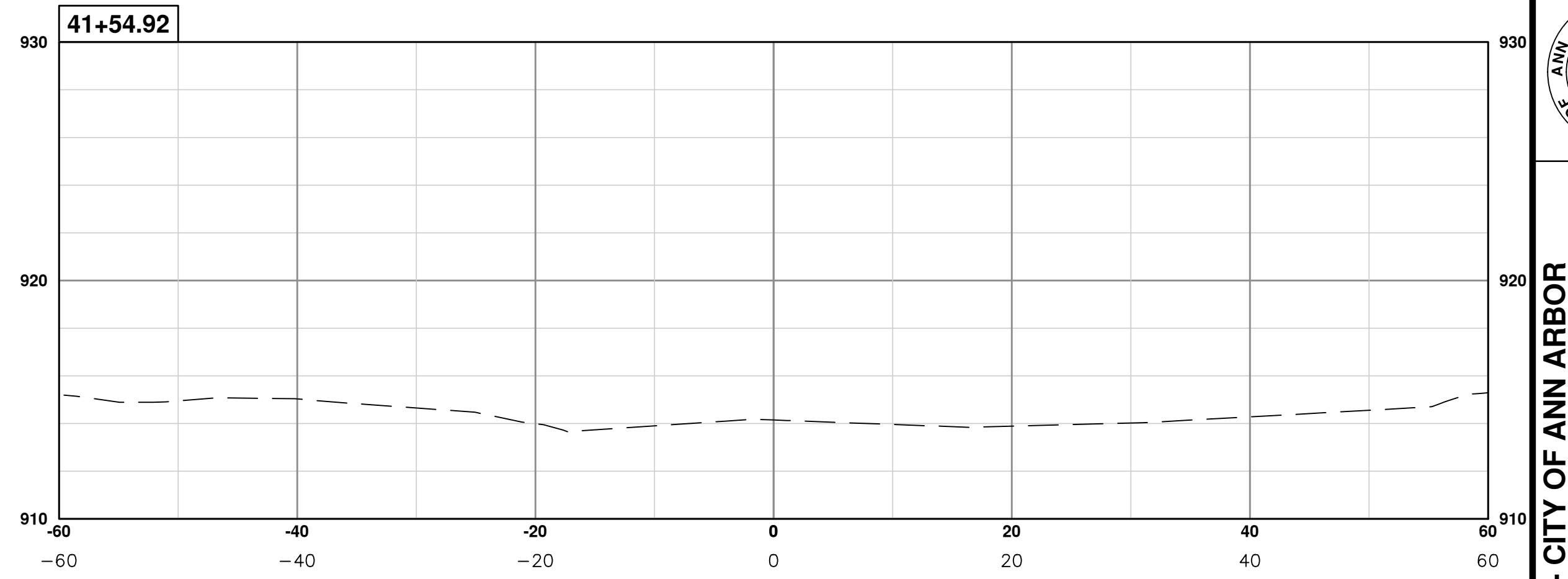
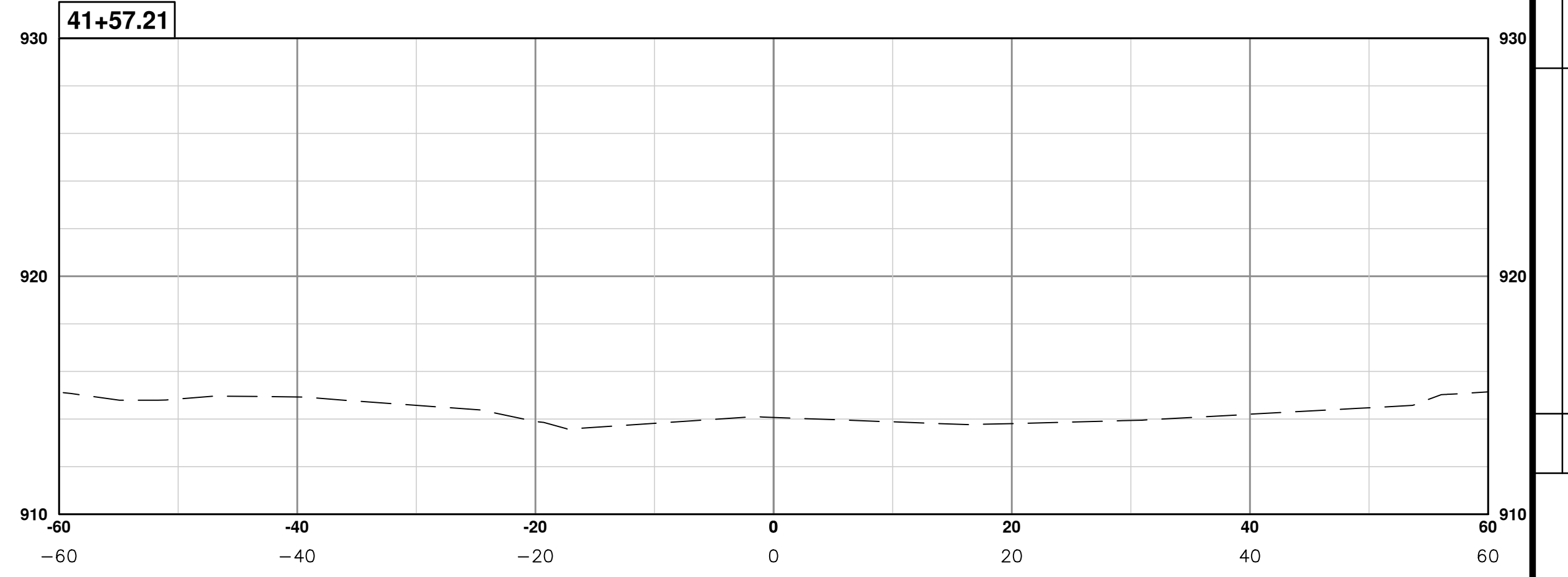
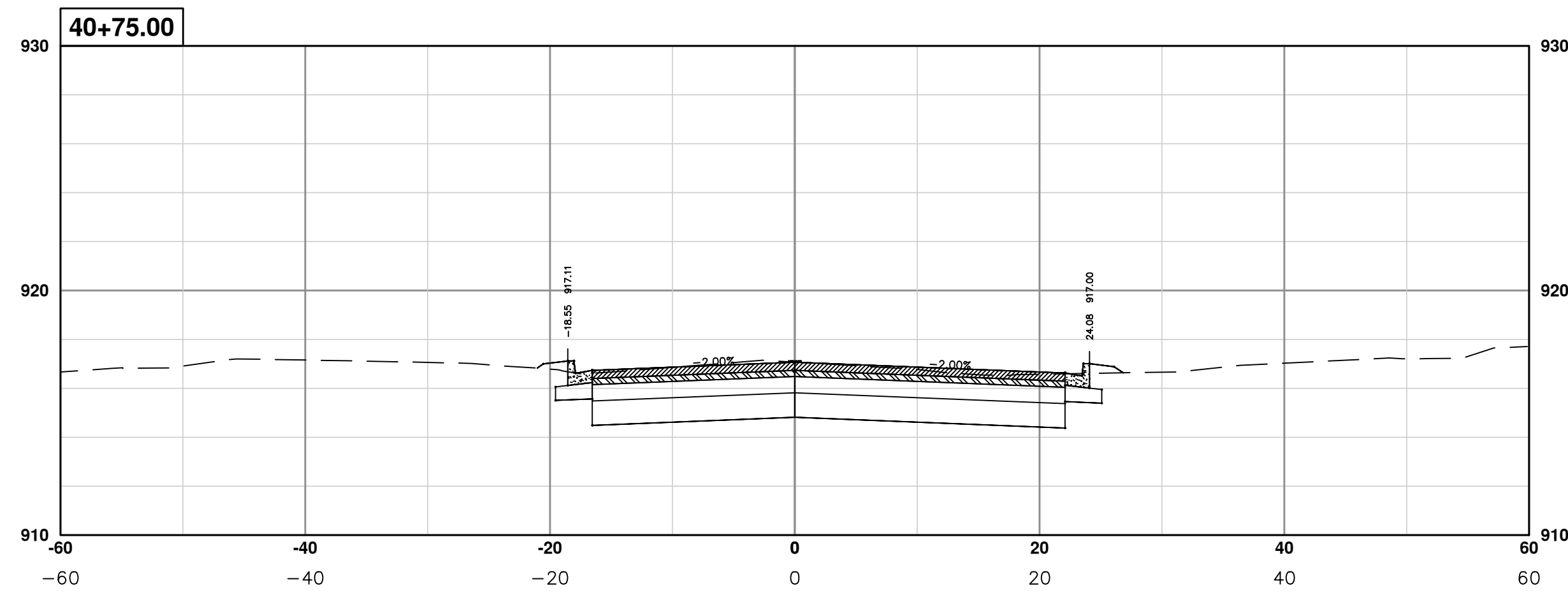
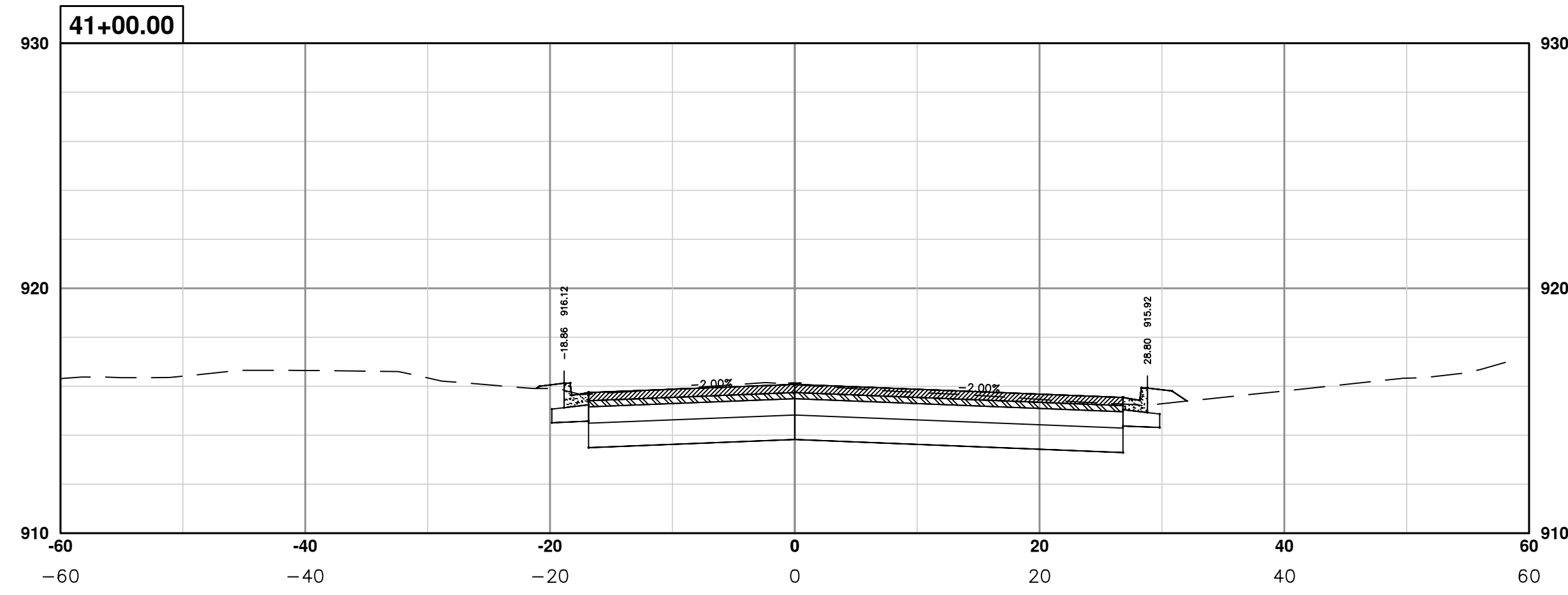
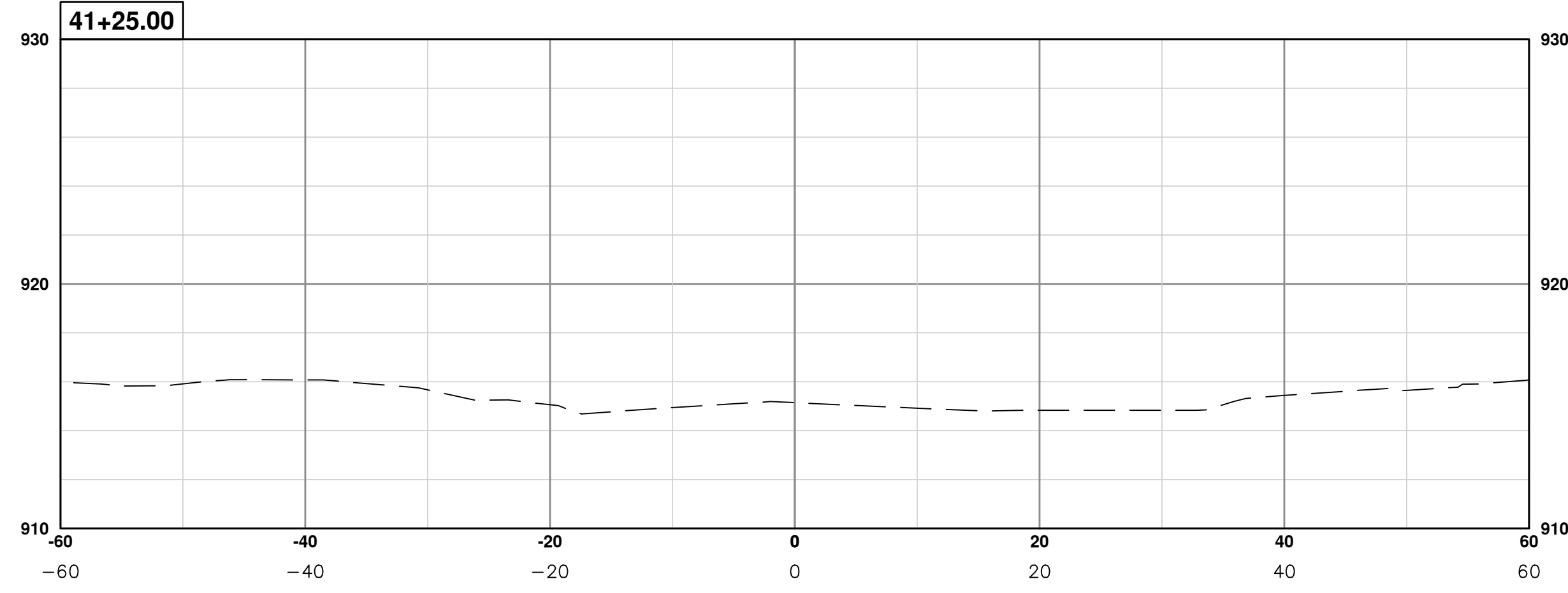
REV.	DESCRIPTION	DATE	BY	CHECKED
00	BID SUBMITTAL	03-18-2014	RMLI	DRAWN



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 32 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
 DRAWING No. 2012028-99
 SHEET No.

S:\Project Management\Design\2012028 Pontiac Trail\Plan Production\Primary\2012028RD\CS.dwg Dwg Created: 18-Jan-14 - _a2_standard_bw.stb - Plot Date: 19-Mar-14



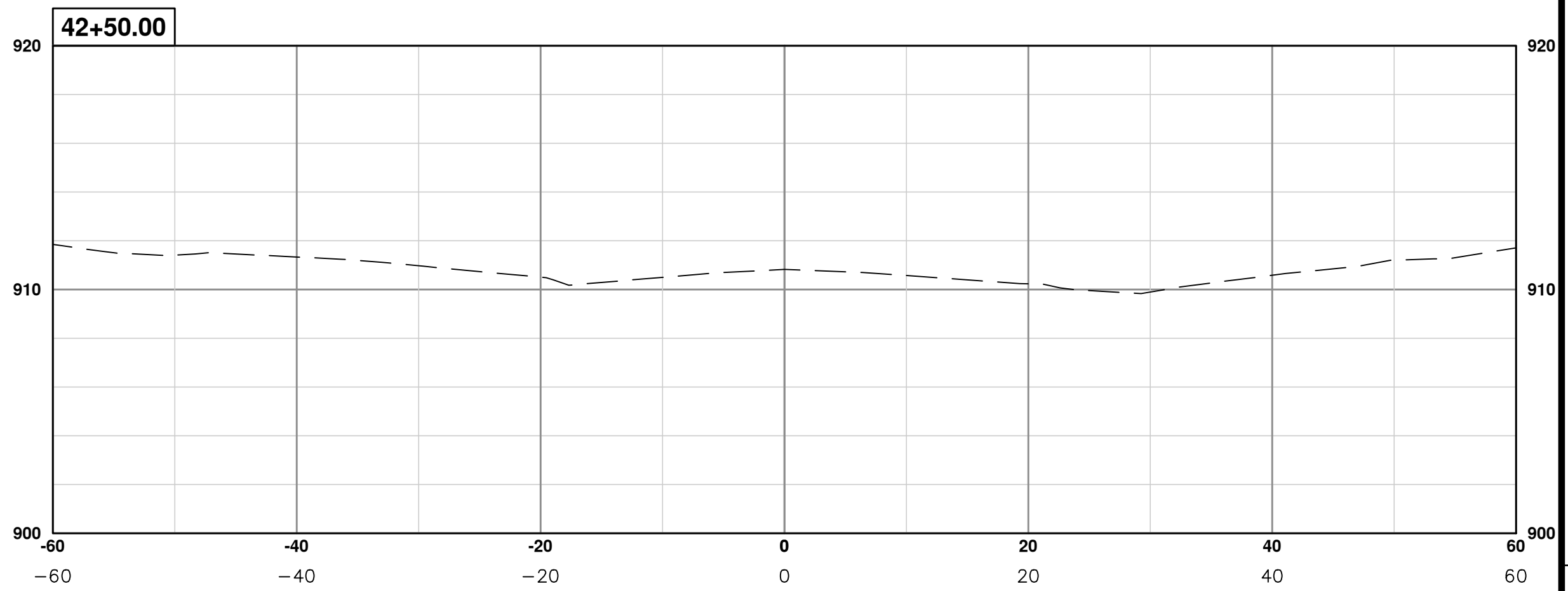
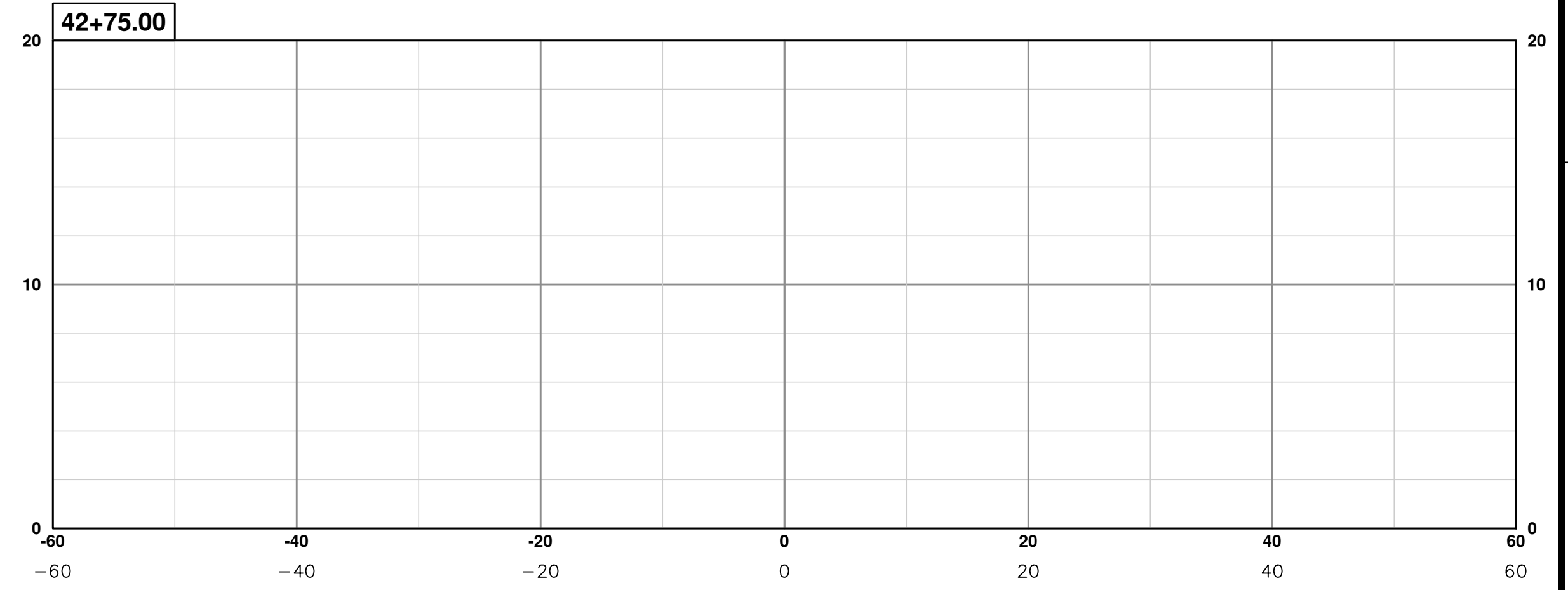
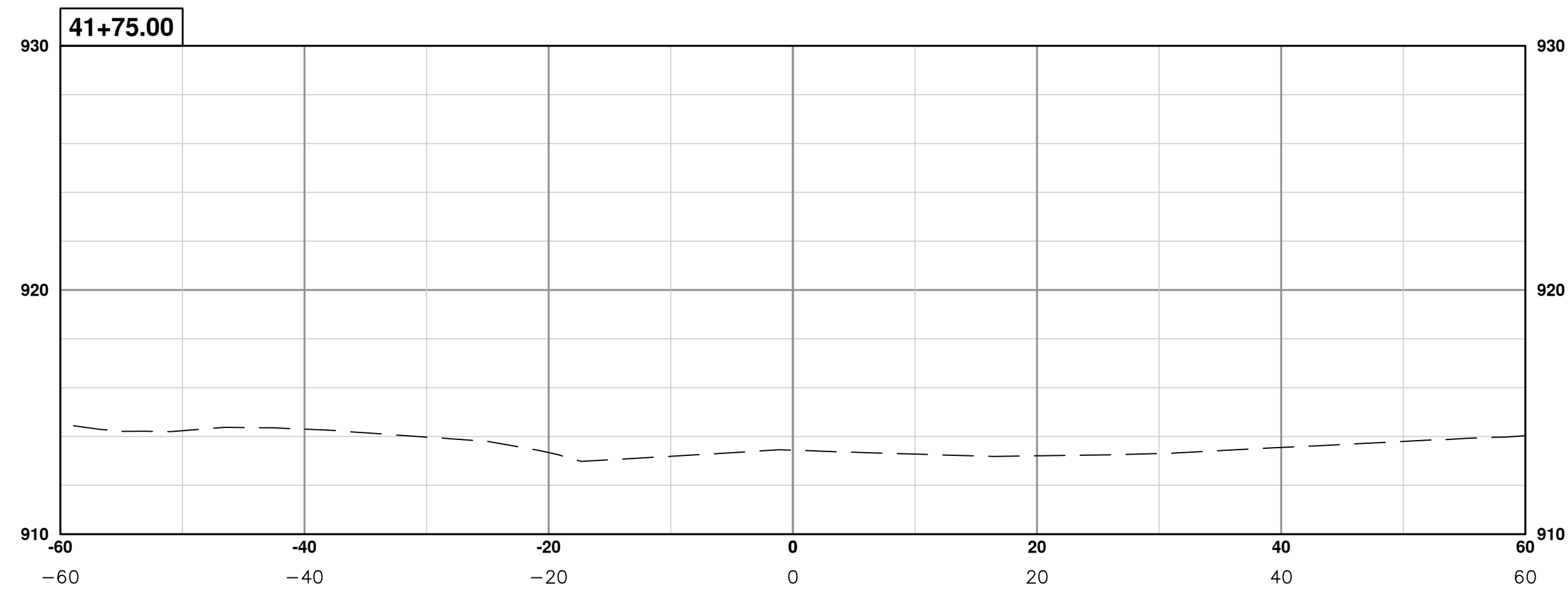
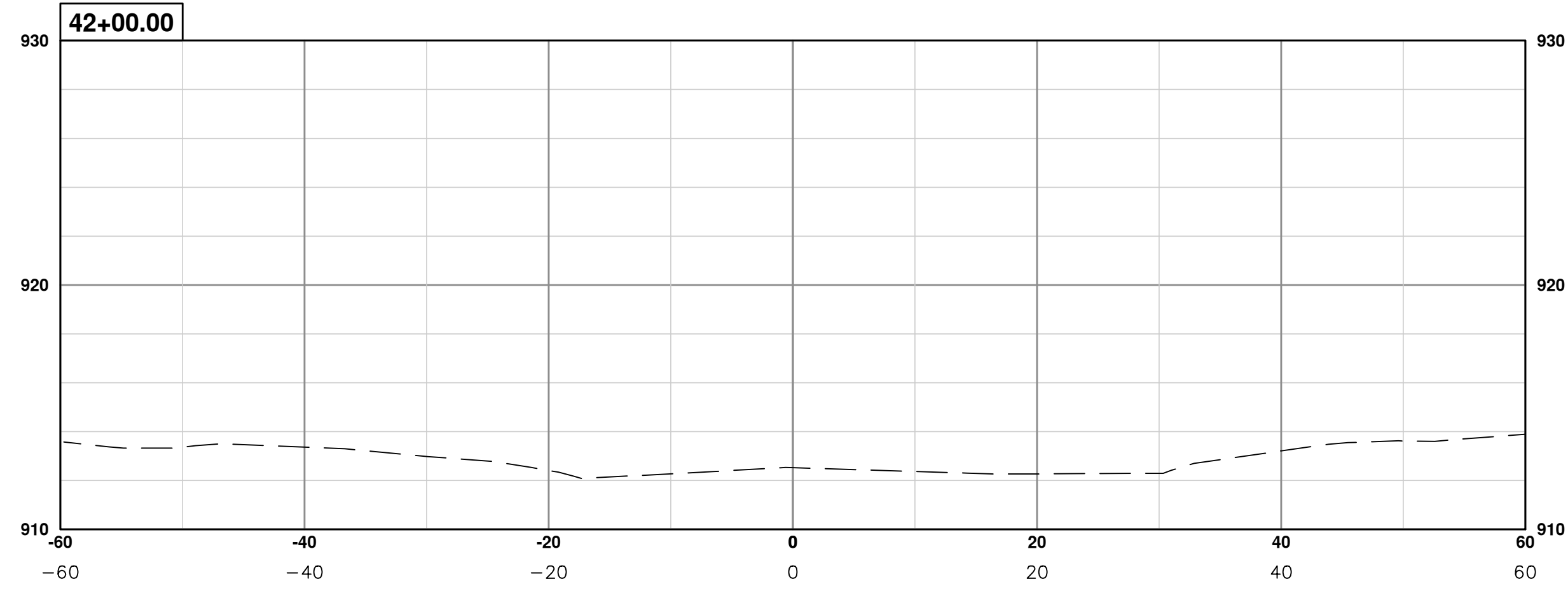
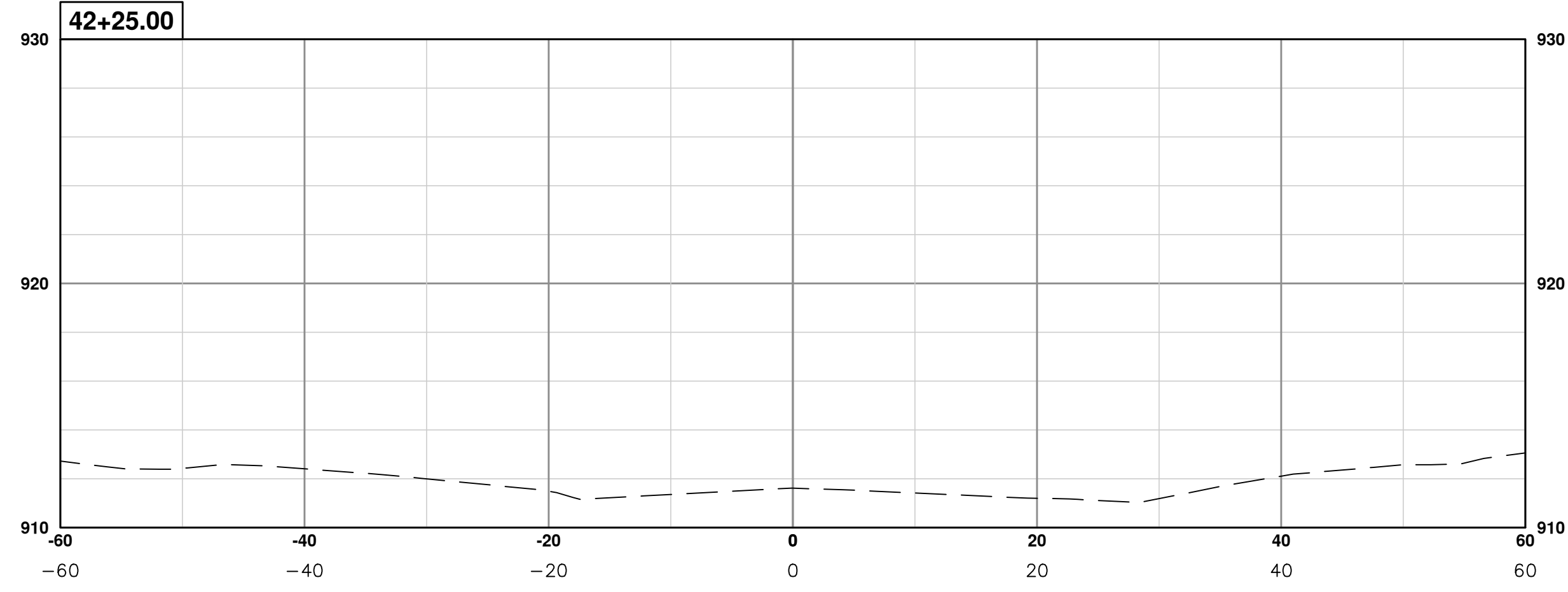
REV.	DATE	DESCRIPTION	BY	CHECKED
00	03-18-2014	BID SUBMITTAL	RMLI	DRAWN



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 33 OF 34

SCALE PLAN: #####
 PROFILE: 1" = 4'
 DRAWING No. 2012028-100

S:\Project Management\Design\2012028 Pontiac Trail\Plan Production\Primary\2012028RD0CS.dwg Dwg Created: 18-Jan-14 --_a2_standard_bw.stb -- Plot Date: 19-Mar-14



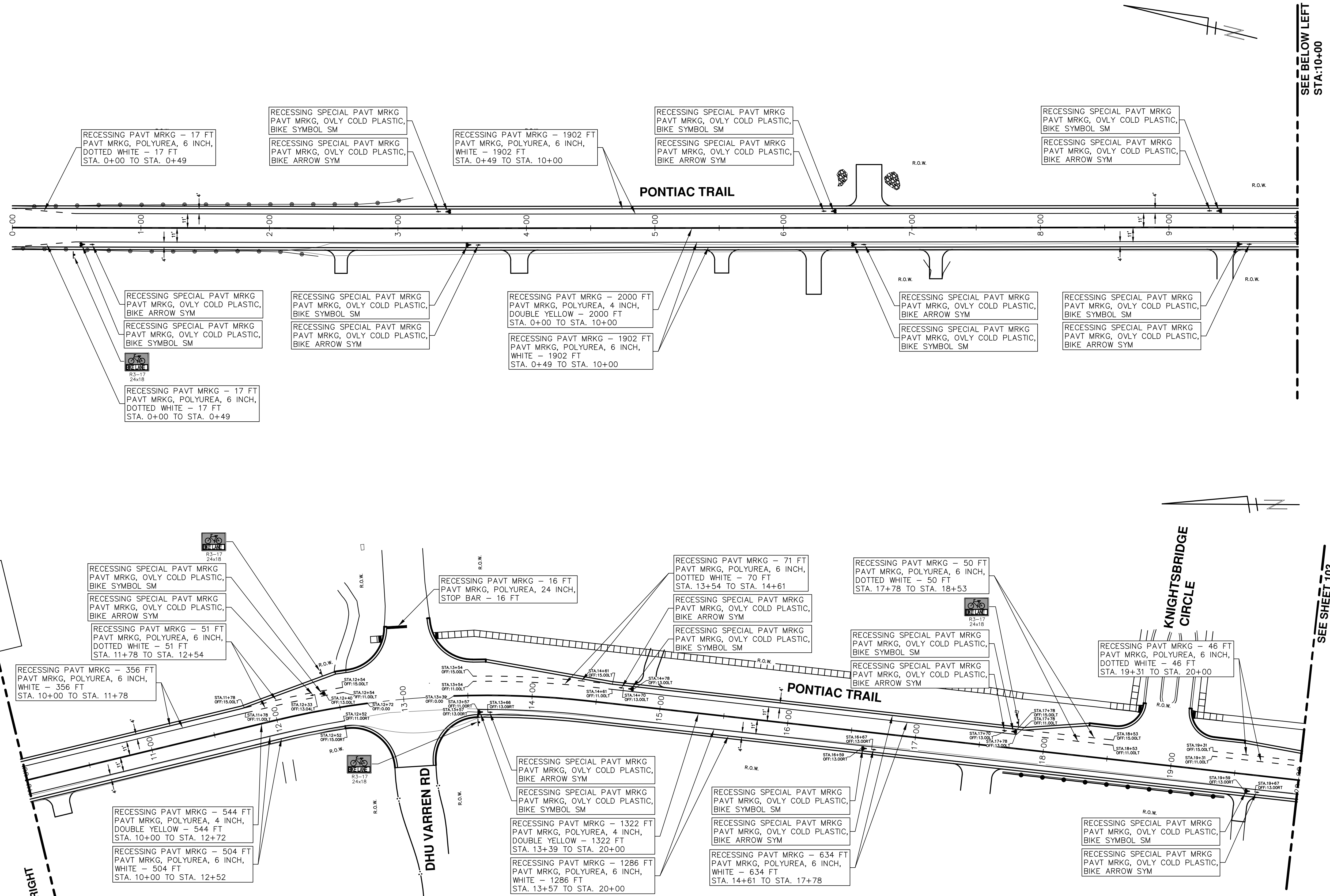
REV.	DESCRIPTION	DATE	BY	CHECKED
00	BID SUBMITTAL	03-18-2014	RMLH	DRAWN



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
 PONTIAC TRAIL ROAD CROSS SECTIONS
 SECTION PLANS 34 OF 34

SCALE PLAN: ##### PROFILE: 1"=4'
 DRAWING No. 2012028-101

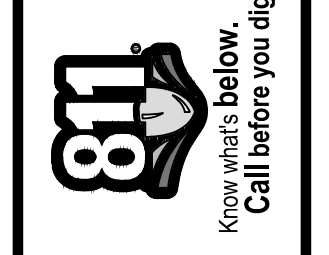
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SEE ABOVE RIGHT
STA: 10+00

SEE SHEET 103
STA: 20+00

SEE BELOW LEFT
STA: 10+00



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	BID SUBMITTAL	03-18-2014	RMLH	

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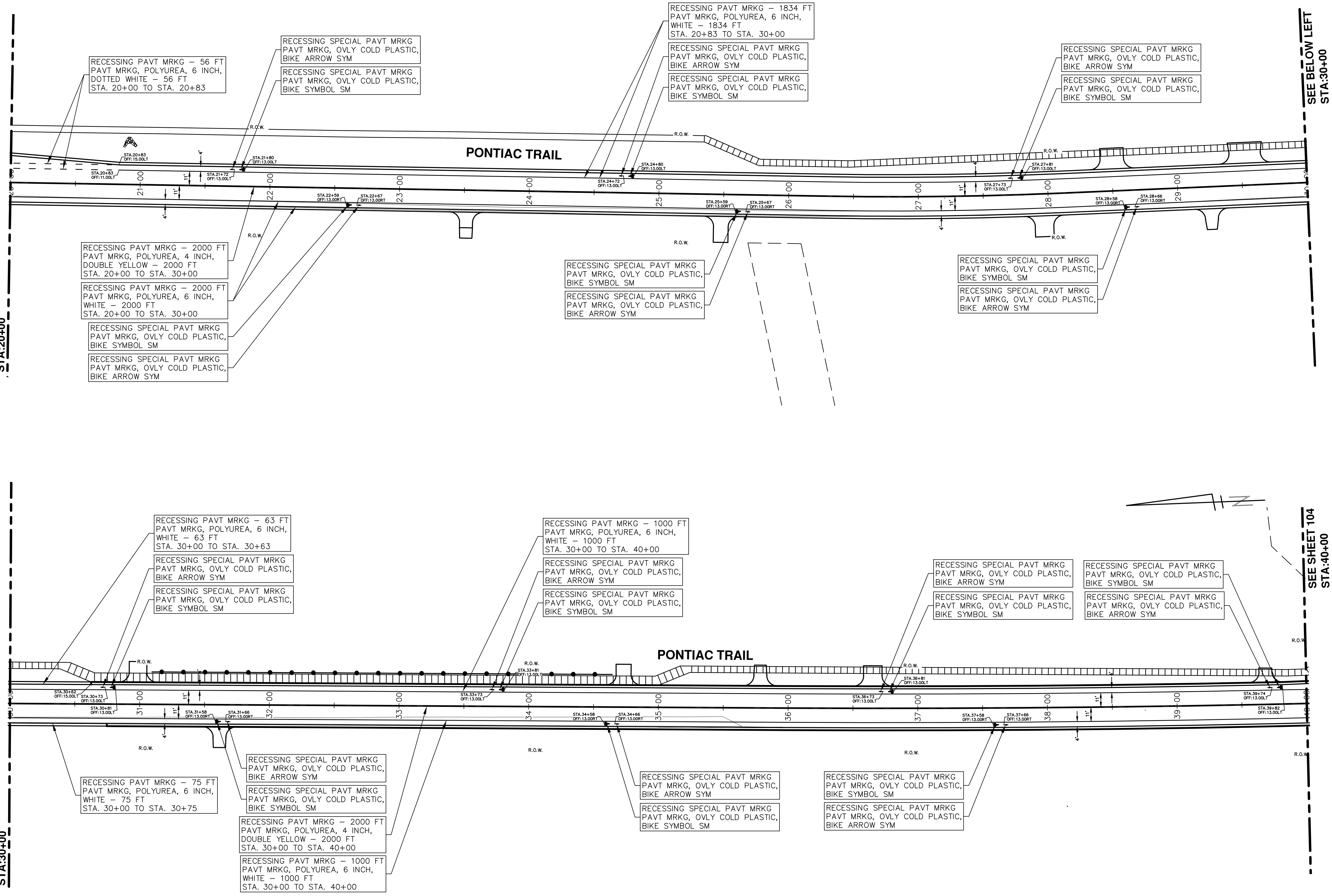


PROJECT MANAGEMENT - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
PAVEMENT MARKINGS
STA. 0+00 TO STA. 20+00

S:\Project Management\Design\2012028 Pontiac Trail\Plan Production\Primary\2012028PMK.dwg Dwg Created: 19-Oct-12 - _a2_standard bw.stb - Plot Date: 19-Mar-14

SEE SHEET 102
STA:20+00

SEE ABOVE RIGHT
STA:30+00

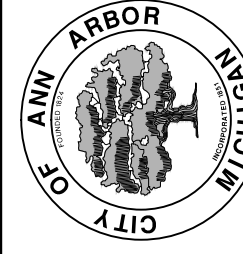


SEE BELOW LEFT
STA:30+00

SEE SHEET 104
STA:40+00



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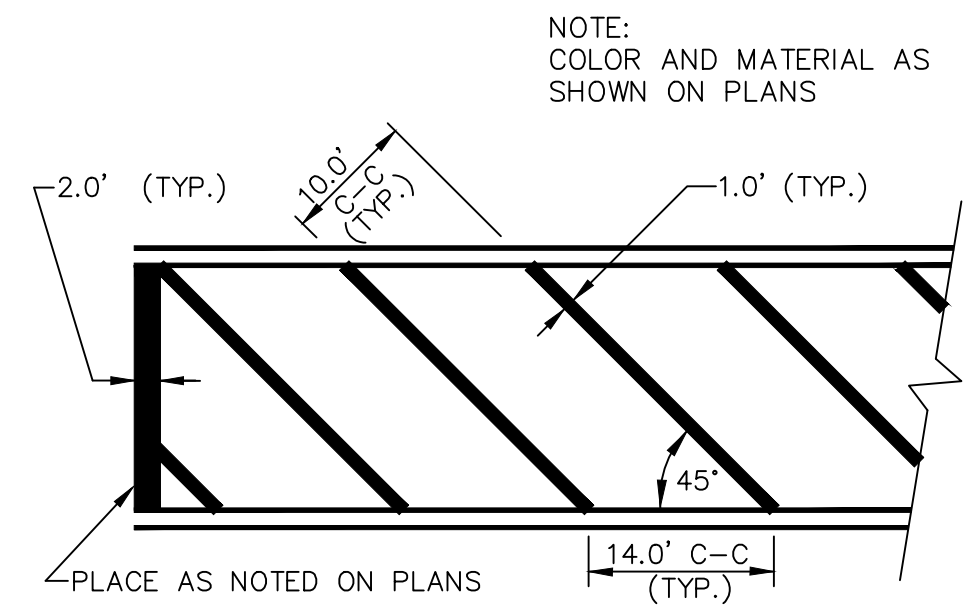
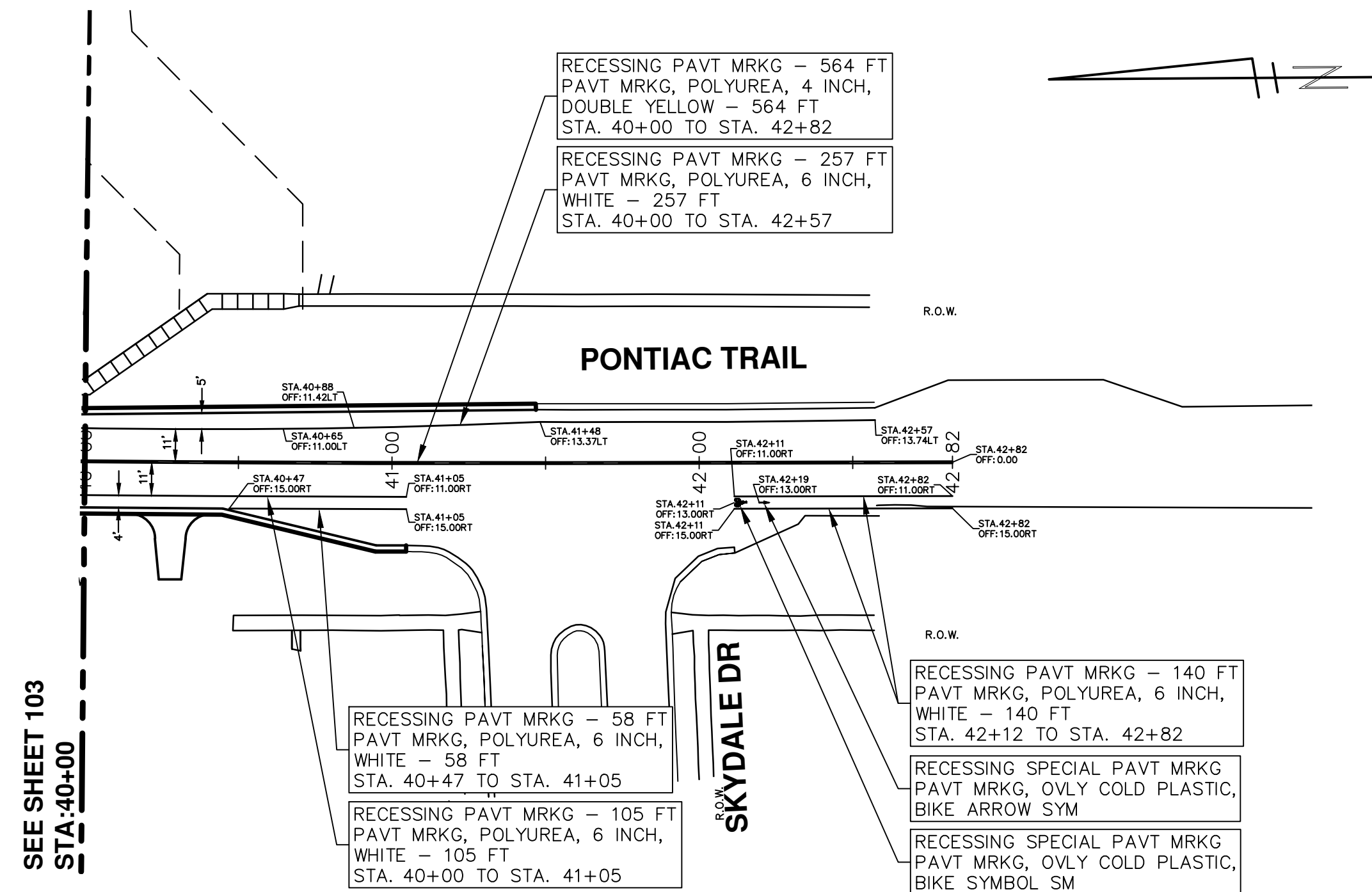


PROJECT MANAGEMENT - CITY OF ANN ARBOR
PONTIAC TRAIL IMPROVEMENTS
PAVEMENT MARKINGS
STA. 20+00 TO STA. 40+00

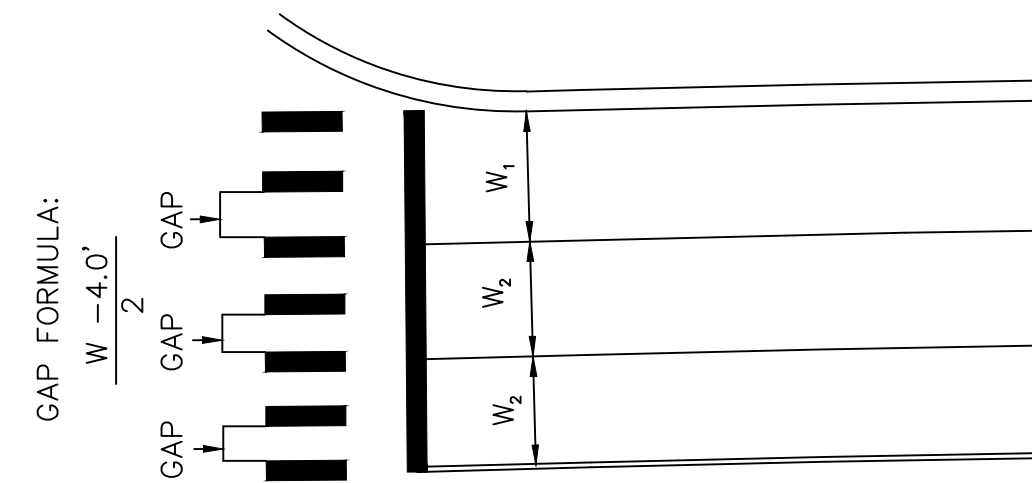
SCALE PLAN: 1" = 40'
DRAWING No. 2012028-103

REV.	DESCRIPTION	DATE	BY	CHECKED
00	BID SUBMITTAL	03-18-2014	RMLH	

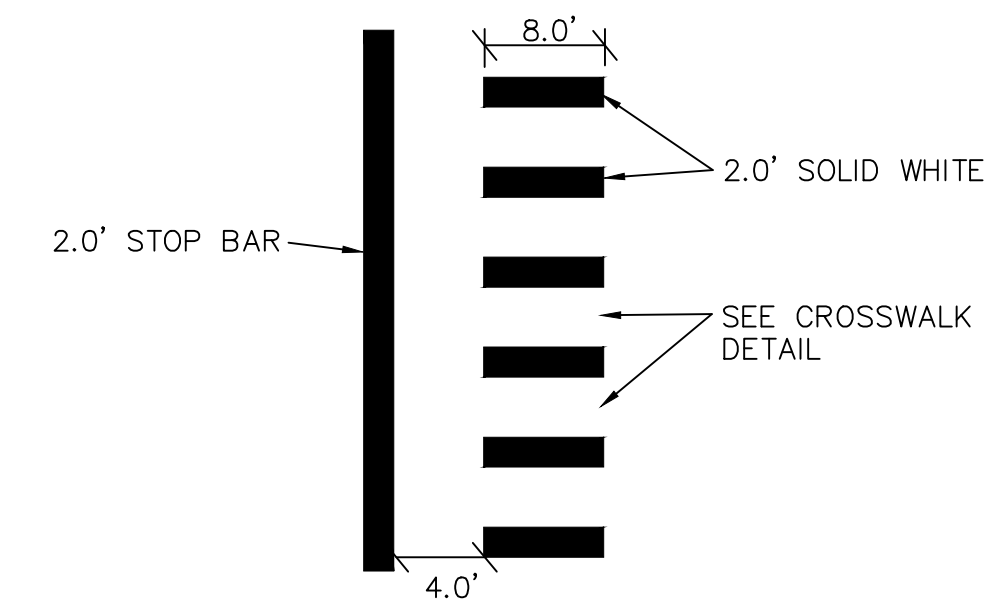
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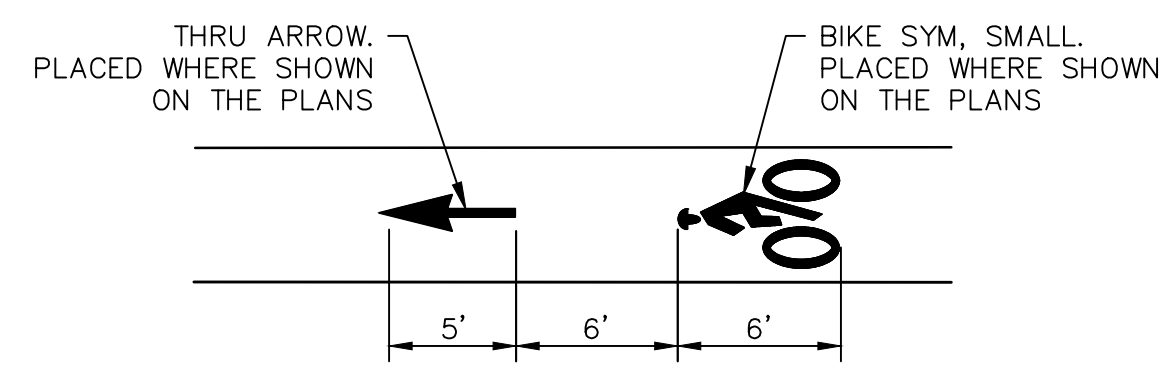
PAVEMENT MARKING CROSS-HATCHING DETAIL



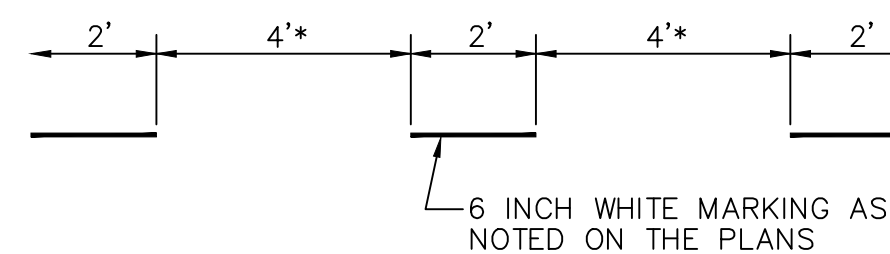
CROSSWALK DETAIL



STOP BAR DETAIL

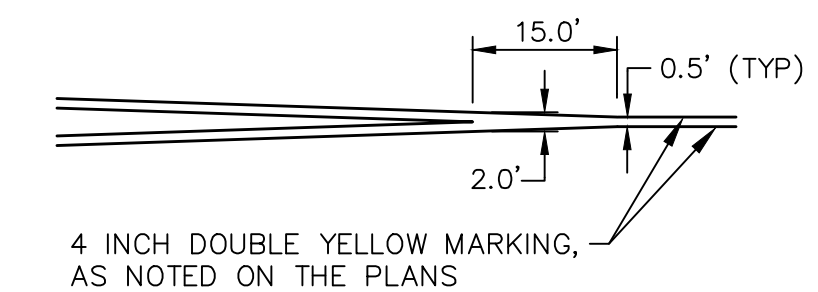


BIKE SYMBOL DETAIL



DOTTED LINE DETAIL

* NOTE FOR BROKEN LINE, USE 6' GAPS.

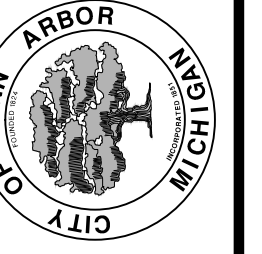


TYPICAL DOUBLE YELLOW SEPARATION DETAIL



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PONTIAC TRAIL IMPROVEMENTS
PAVEMENT MARKINGS
STA. 40+00 TO STA. 42+82

SCALE PLAN: 1" = 40'
DRAWING No. 2012028-104