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CIP# 21012
PRJ-5368

PLANS OF PROPOSED IMPROVEMENT ON THE

URBAN ROAD SYSTEM

City of Davenport

Bridge Replacement - CCS

In the City of Davenport
On Eastern Ave., over Goose Creek
S18 T78 R04E

Revisions

TOTAL
103
PROJECT IDENTIFICATION NUMBER
PIN
PROJECT NUMBER
BRM-1827(698)--8N-82
R.O.W. PROJECT NUMBER
PROJECT DIRECTORY NUMBER

Construct this project according to the requirements of U.S. Army Corps of Engineers Nationwide Permit 3, 13, and 58. Fact Sheet No 9 (IA), that includes all information related to the permit, can be found at the website: <https://www.mvr.usace.army.mil/Missions/Regulatory/Permits/> The U.S. Army Corps of Engineers reserve the right to visit the site without prior notice.

This project is covered by the Iowa Department of Natural Resources NPDES General Permit No. 2. The Contractor shall carry out the terms and conditions of General Permit No. 2 and the Storm Water Pollution Prevention Plan which is a part of these contract documents. Refer to Section 2602 of the Standard Specifications for additional information.

This project is covered by Iowa DNR Flood Plain Development Permit Number 2025-1016FP-01.

This project is covered by Local Flood Plain Development Permit Number 2025-11-20-01.

All working drawings including shop drawings and falsework drawings will be checked by:
WHKS & Co.
3737 Woodland Ave, Suite 111
West Des Moines, IA 50266
(515) 226-8859
desmoines@whks.com
Electronic submittals shall be limited to 10 MB attachment file size.

Refer to the Proposal Form for list of applicable specifications.

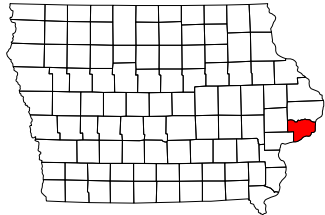
Value Engineering Saves. Refer to Article 1105.13 of the Specifications.

For Utility Contact Information see Sheet D.1.

Bridge Load Rating - In accordance with modified (width) standard 90' CCS
Operating Rating = 1.50
Inventory Rating = 1.16



Note:
The Contractor shall acquire a COSESCO Permit from the City of Davenport prior to starting construction. Visit the City website for additional information. Permit fees will not be charged to the Contractor.



City Engineer

City of Davenport, Iowa

5/6/2026
Date

Mileage Summary

105-1
09-27-94

Div.	Location	Lin. Ft.	Miles
1	Sta. 98+82.56 To Sta. 101+17.44 (Includes One Bridge)	234.88	0.04

Design Data Urban

2022 10,200 V.P.D.
Trucks 1 %

Standard Road Plans

Standard Road Plans are listed on Sheet Number C.10

Structural Design



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

R. Calvin Martin 5/5/2026
Signature Date

Printed or Typed Name R. Calvin Martin

My license renewal date is December 31, 2026

Pages or sheets covered by this seal: Sheets A.1-A.2 & V.1-V.24

Index of Seals

Sheet No.	Name	Type
A.1	Lucas D. Fatka	Roadway Design
A.1	R. Calvin Martin	Structural Design
SPS.1	Joel D. Schluensen	Geotechnical Design

Roadway Design



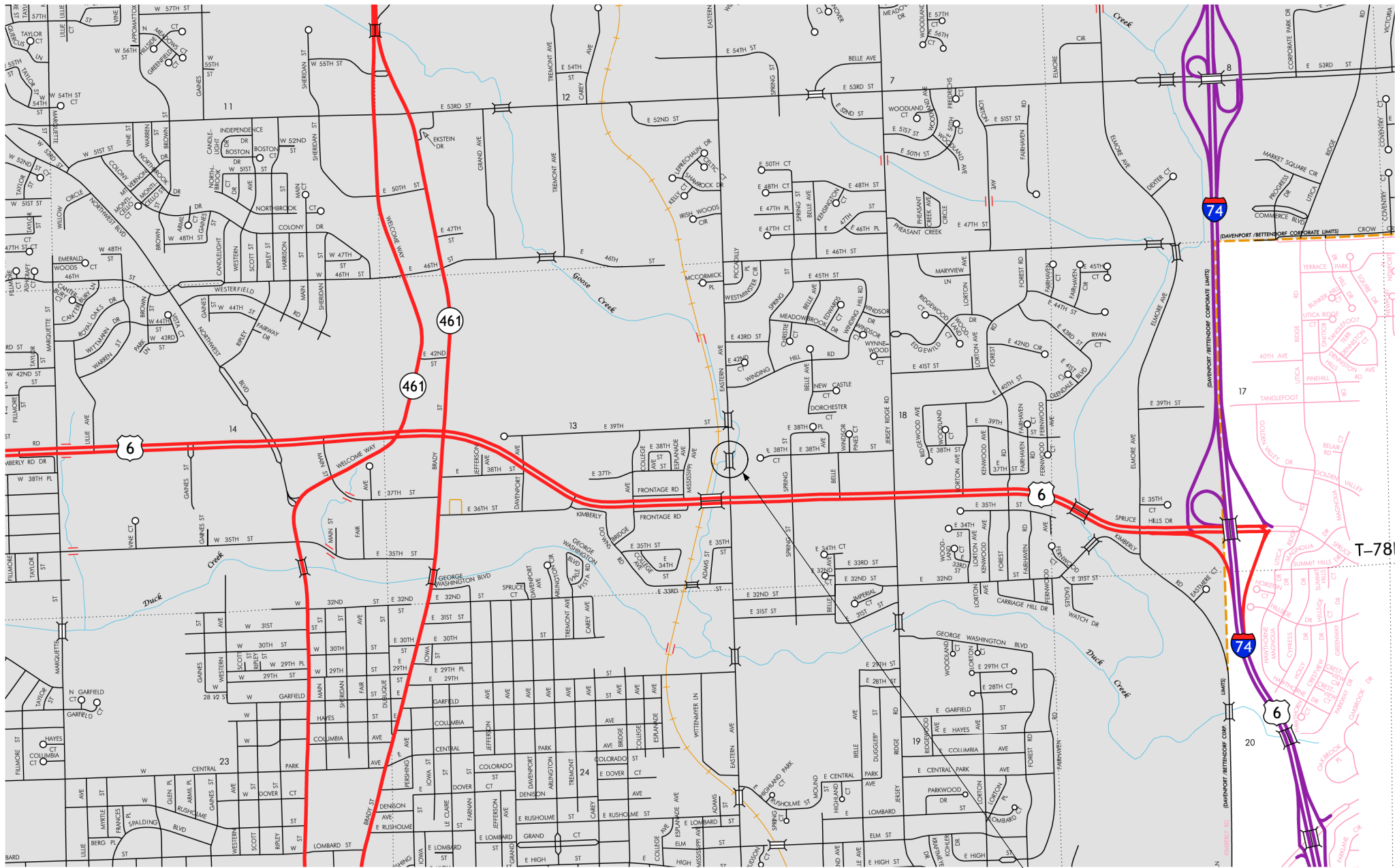
I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Lucas D. Fatka 5/5/2026
Signature Date

Printed or Typed Name Lucas D. Fatka

My license renewal date is December 31, 2027

Pages or sheets covered by this seal: Sheets B.1-B.3, C.1-C.27, D.1-D.2, E.1, G.1
H.1, J.1-J.3, L.1-L.2, M.1-M.4, MSA.1-MSA.6, RC.1-RC.4, RR.1-RR.2, U.1-U.2, W.1-W.9, X.1-X.6



LEGEND

INTERSTATE ROUTE

FREEWAY OR EXPRESSWAY ROUTE

U.S. NUMBERED ROUTE

BUSINESS ROUTE

STATE NUMBERED ROUTE

UNSIGNED ROUTE

COUNTY NUMBERED ROUTE

SECONDARY ROAD OR ADJOINING CITY STREET

CITY STREET

PARK, INSTITUTION, OR FEDERAL ROAD

RAILROAD

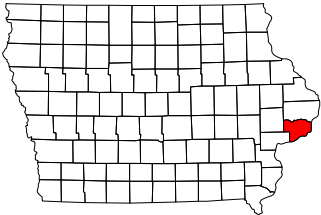
CORPORATION LINE

SECTION LINE

CUL-DE-SAC

SECTION, TOWNSHIP & RANGE NUMBERS

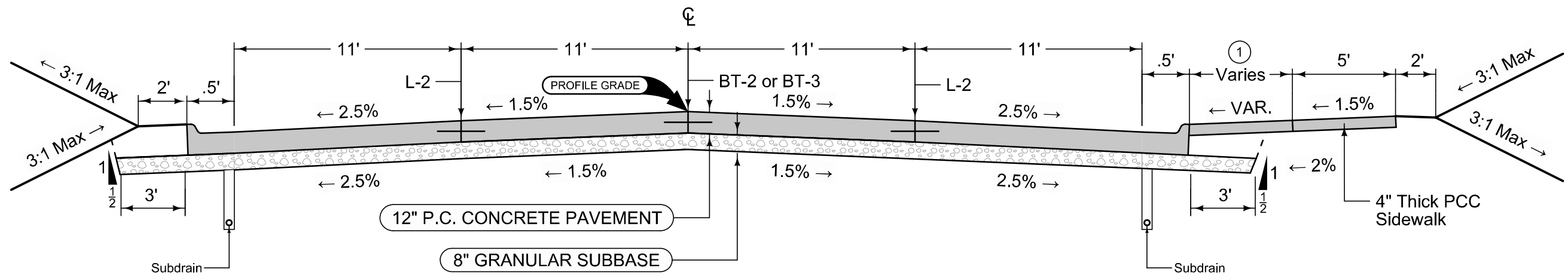
9, T-81N, R-30W



Location Map
Part of City of Davenport

Not To Scale

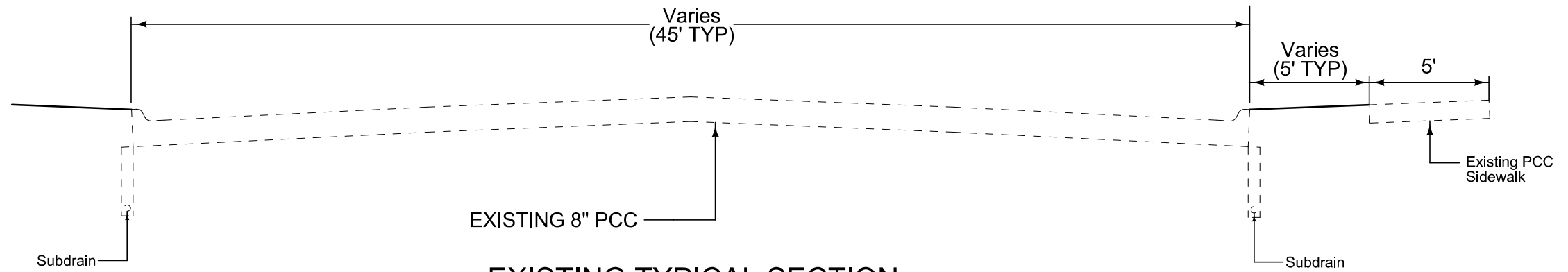
Bridge Replacement
FHWA No. 3380 (Existing)



PROPOSED TYPICAL SECTION EASTERN AVE

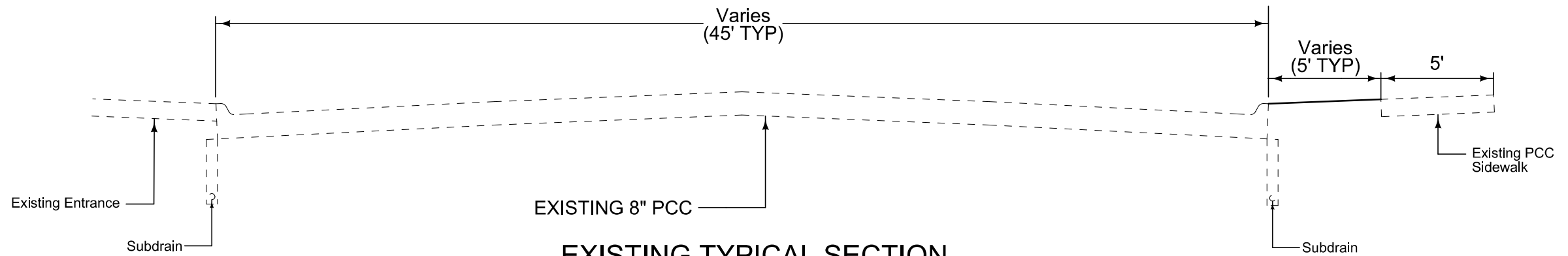
STATION TO STATION	
98+82.56	99+54.58
100+45.42	101+17.44

① See D Sheets for Details



EXISTING TYPICAL SECTION EASTERN AVE

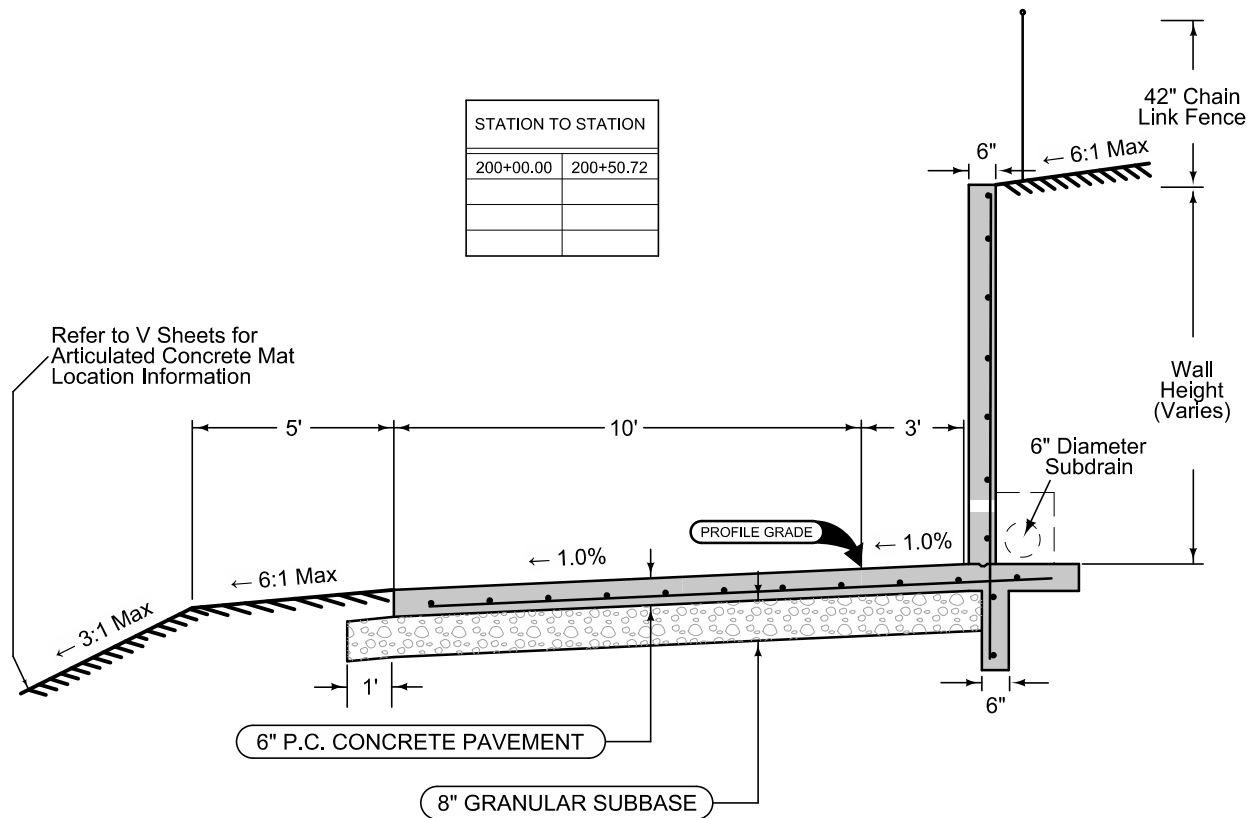
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99+37.00	99+61.00
101+17.44	101+20.08



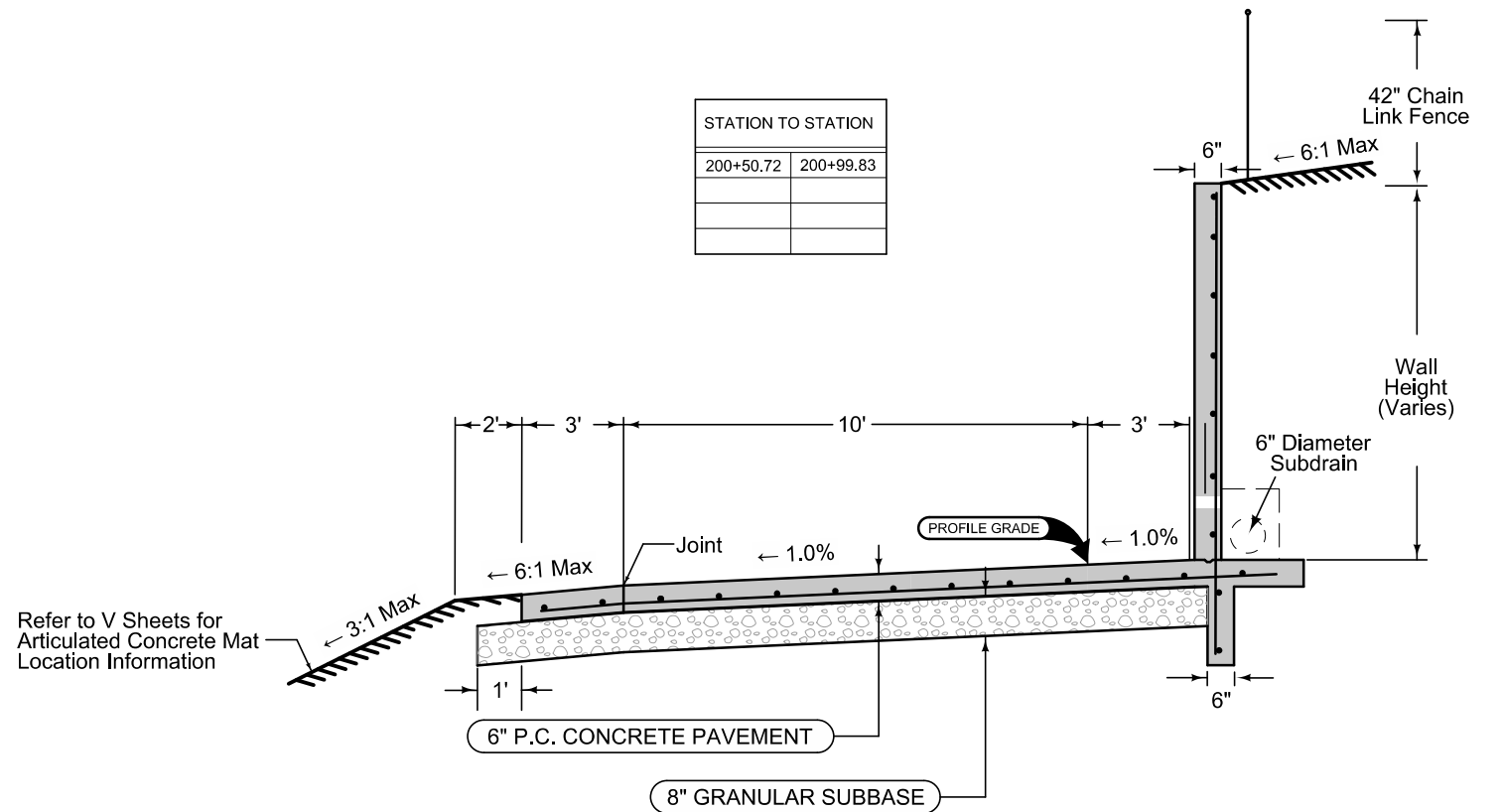
EXISTING TYPICAL SECTION EASTERN AVE

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100+40.00	101+17.44

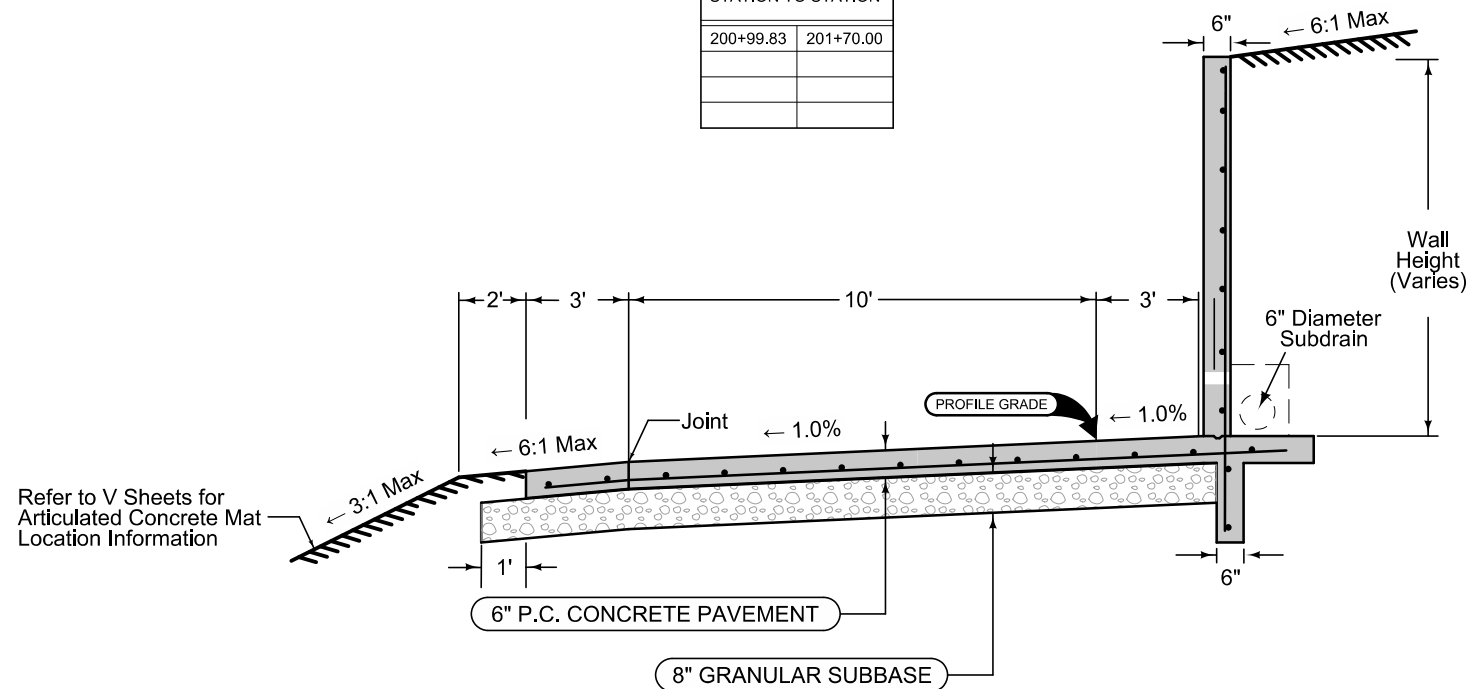
STATION TO STATION	
200+00.00	200+50.72



STATION TO STATION	
200+50.72	200+99.83



STATION TO STATION	
200+99.83	201+70.00



**PROPOSED TYPICAL SECTIONS
SHARED USE PATH**
REFER TO STANDARD ROAD PLAN MI-221 FOR ADDITIONAL DETAILS

ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Item no.	Item Code	Item	Unit	Quantities	Estimate Reference Notes
				Estimated	
				Division 1	
1	2101-0850001	CLEARING AND GRUBBING	ACRE	0.1	Refer to Sheet D.2. All material generated as a result of Clearing and Grubbing shall become the property of the contractor and must be disposed off site. All wood material must be disposed of according to Iowa Department of Agriculture and Land Stewardship Emerald Ash Borer Quarantine Order. For more information see www.iowatreepests.com .
2	2104-2710020	EXCAVATION, CLASS 10, CHANNEL	CY	781.4	Item is for excavation within the channel to shape berms and place revetment protection as shown on Sheet V.5.
3	2105-8425005	TOPSOIL, FURNISH AND SPREAD	CY	124	Spread the topsoil to a 6 inch depth across the grading. Seed the disturbed topsoil area as per section 2601.05 of the standard specification. Seeding of the stockpile areas shall be considered incidental to this bid item.
4	2125-2225050	RESHAPING DITCHES	STA	1.1	Refer to Sheet D.2 for details.
5	2301-0690205	BRIDGE APPROACH, BR-205	SY	779.7	Item is for the construction of Bridge Approach. Refer to Sheet D.2 and W Sheets for details. Refer to Tab. 112_6 for details. Certified Plant Inspection is required for this item and is the responsibility of the Contractor. Subdrain shall be 6" in diameter.
6	2401-6745625	REMOVAL OF EXISTING BRIDGE	LS	1	Includes all work from removal and off-site disposal of the existing bridge in these plans. Any damage to material not to be removed shall be the responsibility of the Contractor and shall be repaired at no extra cost to the City.
7	2401-6745650	REMOVAL OF EXISTING STRUCTURES	LS	1	Refer to Sheet U.1 for details. Refer to Tab. 110_02 for details. This payment shall be full compensation for furnishing all material, equipment, and labor for the performance of all work necessary for removal of the items as described in the Tab.
8	2402-2720000	EXCAVATION, CLASS 20	CY	175	
9	2403-0100010	STRUCTURAL CONCRETE (BRIDGE)	CY	351.5	Includes furnishing and placing subdrain (including excavation), floodable backfill, porous backfill, geotextile fabric, water flooding, and subdrain outlet at abutments. Includes furnishing and placing 3 inch diameter PVC plastic pipe and expanding foam in abutment wings. Includes material and labor associated with providing and installing rigid steel conduit and fittings. Includes approximately 230 ft. of 2" diameter rigid steel conduit in the raised sidewalk. Includes cost of 4 drains at 35 lbs of steel per drain. The Contractor is responsible for certified plant inspection.

10	2404-7775005	REINFORCING STEEL, EPOXY COATED	LB	83,415	
11	2404-7775009	REINFORCING STEEL, STAINLESS STEEL	LB	310	
12	2412-0000100	LONGITUDINAL GROOVING IN CONCRETE, BRIDGE DECK AND/OR APPROACHES	SY	1,232.9	Refer to Tab. 100_28 for details.
13	2414-6425410	CONCRETE BARRIER, REINFORCED, SEPARATION	LF	198	The Contractor is responsible for certified plant inspection.
14	2414-6444100	STEEL PIPE PEDESTRIAN HAND RAILING	LF	97	
15	2416-0100018	APRONS, CONCRETE, 18 IN. DIA.	EACH	1	Refer to M Sheets for details. Refer to Tab. 104_05B for details.
16	2416-0100024	APRONS, CONCRETE, 24 IN. DIA.	EACH	1	Refer to M Sheets for details. Refer to Tab. 104_05B for details.
17	2435-0130172	MANHOLE, SANITARY SEWER, SW-301, 72 IN.	EACH	2	This item includes SW-601 casting. Refer to M and MSA Sheets for details. Refer to Tab. 104_05B for details.
18	2435-0130410	MANHOLE, SANITARY SEWER, SW-304 MODIFIED	EACH	2	This item includes SW-601 casting. Refer to M and MSA Sheets for details. Refer to Tab. 104_05B for details.
19	2435-0140160	MANHOLE, STORM SEWER, SW-401, 60 IN.	EACH	2	This item includes SW-602 casting. Refer to M Sheets for details. Refer to Tab. 104_05B for details.
20	2435-0251218	INTAKE, SW-512, 18 IN.	EACH	1	Refer to M Sheets for details. Refer to Tab. 104_05B for details.
21	2435-0251224	INTAKE, SW-512, 24 IN.	EACH	1	Refer to M Sheets for details. Refer to Tab. 104_05B for details.
22	2435-0700020	CONNECTION TO EXISTING INTAKE	EACH	1	Refer to M Sheets for details.
23	2501-0201042	PILES, STEEL, HP 10 X 42	LF	720	Includes furnishing and installing steel pile points.
24	2501-0201253	PILES, STEEL, HP 12 X 53	LF	880	Includes furnishing and installing steel pile points.
25	2501-5478053	CONCRETE ENCASEMENT OF STEEL H PILES, HP 12 X 53 (P10L TYPE 3)	LF	264	Includes furnishing and placing all material. Includes any necessary excavation. The Contractor is responsible for certified plant inspection.
26	2503-0110018	STORM SEWER GRAVITY MAIN, TRENCHED, 18 IN.	LF	142	Refer to M Sheets for details. Refer to Tab. 104_05B for details.

27	2503-0110024	STORM SEWER GRAVITY MAIN, TRENCHED, 24 IN.	LF	172	Refer to M Sheets for details. Refer to Tab. 104_05B for details.
28	2503-0200036	REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN.	LF	76	Refer to M Sheets and Sheet U.1 for details. Refer to Tab. 110_14 for details.
29	2503-0200341	STORM SEWER ABANDONMENT, FILL AND PLUG, LESS THAN OR EQUAL TO 36 IN. DIA.	LF	239	This item includes 253 LF of 42 pipe with 90.2 CY of flowable mortar. Refer to M and MSA Sheets and Sheet U.1 for details. Refer to Tab. 110_14 for details.
30	2504-0110042	SANITARY SEWER GRAVITY MAIN, TRENCHED, 42 IN.	LF	22	Pipe shall be PVC SDR 35. Refer to M and MSA Sheets for details. Refer to Tab. 104_05B for details.
31	2504-0114024	SANITARY SEWER GRAVITY MAIN, TRENCHED, POLYVINYL CHLORIDE PIPE (PVC), 24 IN.	LF	243	Pipe shall be PVC SDR 35. Refer to M and MSA Sheets for details. Refer to Tab. 104_05B for details.
32	2504-0240237	SANITARY SEWER ABANDONMENT, FILL AND PLUG, GREATER THAN 36 IN. DIA.	LF	47	This item includes 253 LF of 42 pipe with 90.2 CY of flowable mortar. Refer to M and MSA Sheets and Sheet U.1 for details. Refer to Tab. 110_14 for details.
33	2507-2638660	BRIDGE WING ARMORING - MACADAM STONE	SY	10.1	Includes furnishing and placing engineering fabric, macadam stone, 4" x 6" treated timbers, 1/2" diameter steel pins (or rebars), and all required excavating, shaping and compacting for wing armoring.
34	2507-3250005	ENGINEERING FABRIC	SY	616.5	Engineering fabric shall be material as specified for embankment erosion control in accordance with Article 4196.01, B, 3, of the Standard Specification. 22.7 SY of quantity from Rock Erosion Control for Storm Sewer Outlet. Refer to Tab. 100-23 and Sheet V.5 for details.
35	2507-6800061	REVETMENT, CLASS E	TON	509.1	Estimated at 1.6 Ton/CY.
36	2507-8029000	EROSION STONE	TON	11.5	Refer to Sheet M.2 and Tab. 100-23 for details.

37	2507-8500080	FABRIC FORMED CONCRETE REVTMENT, ARTICULATING BLOCK MAT, 8 INCH	SY	104.9	The work shall be performed in conformance with the Developmental Specifications for Fabric Formed Concrete Revetment. Fabric formed revetment articulating mat dimensions shown on the drawings reflect the finished dimension along grade following filling with concrete grout. The mat quantity is based on the finished mat dimensions. The fabric formed revetment quantity includes the form area in anchor, terminal or toe trenches shown on the drawings and all form layers in overlaps shown on the drawings. Labor, equipment and materials required to anchor fabric forms during placement and curing of grout shall be considered incidental to this work. Articulating mat dimensions shown on the drawings are in increments of the specified finished block dimensions, 20 inch in the mill width (mw) direction x 26 inch perpendicular to the mill width direction. Any cable protruding from mat that forms a closed loop shall be cut following placement and initial set of grout to prevent snagging of flood debris by the cable loop. The resultant cable ends protruding from the mat shall not exceed 18 inches in length. Grout shall not be discharged on the top of the mat that will fill the seam 'valley' between blocks. A weakened plane along the seam lines is required to facilitate cracking and articulation.
38	2510-6745850	REMOVAL OF PAVEMENT	SY	794.1	Item includes removal and disposal of existing pavement necessary to complete the proposed improvements. All full-depth saw cuts necessary to preform removals shall be considered incidental to this item. Full-depth saw cut and removal to the nearest joint when practical. All damage to existing pavement to remain shall be repaired by the Contractor at no additional cost to the City. Refer to Tab.110-1 and Sheet U.1 for details.
39	2511-6745900	REMOVAL OF SIDEWALK	SY	94.1	Item includes removal and disposal of existing sidewalk necessary to complete the proposed improvements. All full-depth saw cuts necessary to preform removals shall be considered incidental to this item. Full-depth saw cut and removal to the nearest joint when practical. All damage to existing sidewalk to remain shall be repaired by the Contractor at no additional cost to the City. Refer to Tab.110-1 and Sheet U.1 for details.
40	2511-7526004	SIDEWALK, P.C. CONCRETE, 4 IN.	SY	106.4	Refer to Sheets B.1 and D.2 for details. Refer to Tab. 113_07 for details.
41	2515-2475007	DRIVEWAY, P.C. CONCRETE, 7 IN.	SY	289.6	This item includes all work required for the completion of the driveway and loading dock as shown on Sheet U.2. Payment will be made at the contract unit price and shall constitute full compensation for all labor, materials, equipment, and incidentals necessary to complete the work, including but not limited to excavation and foundation preparation, furnishing and placing concrete and reinforcing steel, joint material, 6" subdrain systems, porous backfill material, suitable backfill material, finishing disturbed areas, and shoring as necessary. Refer to Sheets D.2 and U.2 and W Sheets for details. Refer to Tab. 102_03 for details.
42	2515-6745600	REMOVAL OF PAVED DRIVEWAY	SY	326.7	Item includes removal and disposal of existing driveway pavement necessary to complete the proposed improvements. All full-depth saw cuts necessary to preform removals shall be considered incidental to this item. Full-depth saw cut and removal to the nearest joint when practical. All damage to existing driveway pavement to remain shall be repaired by the Contractor at no additional cost to the City.

43	2516-8625000	COMBINED CONCRETE SIDEWALK AND RETAINING WALL	CY	63.4	Comply with Iowa DOT Standard MI-221 Type B and typical sections on Sheet B.3. Subdrain ends shall be daylighted at beginning and end of concrete wall with rodent guards affixed to the ends.
44	2519-1002042	FENCE, CHAIN LINK, 42 IN. HEIGHT	LF	100	Refer to Sheet B.3 for details.
45	2519-1002048	FENCE, CHAIN LINK, 48 IN. HEIGHT	LF	99	
46	2524-9100030	OBJECT MARKER, TYPE 3	EACH	2	Refer to Tab. 190-25 for locations and details. Signs to be mounted on perforated square steel tube posts. The Object Marker at the SW end of the bridge shall be mounted in a soil breakaway base while the Object Marker at the NE side of the bridge shall be mounted in a concrete breakaway base. Furnishing, fabricating, and erecting the object markers, including posts, reflector units, anchors and all labor necessary to complete the work are incidental to this item.
47	2524-9276010	PERFORATED SQUARE STEEL TUBE POSTS	LF	14	Refer to Tab. 190-51 and Sheet D.2 for locations and details. Install 24" x 24" R5-3 "No Motor Vehicles" sign. Refer to MUTCD 11th Edition, Part 9: Traffic Control for Bicycle Facilities, Section 9B.07.
48	2524-9276021	PERFORATED SQUARE STEEL TUBE POST ANCHOR, BREAK-AWAY SOIL INSTALLATION	EACH	2	Refer to Tab. 190-51 and Sheet D.2 for locations and details. Install 24" x 24" R5-3 "No Motor Vehicles" sign. Refer to MUTCD 11th Edition, Part 9: Traffic Control for Bicycle Facilities, Section 9B.07.
49	2524-9325001	TYPE A SIGNS, SHEET ALUMINUM	SF	13	Refer to Tab. 190-51 and Sheet D.2 for locations and details. Install 24" x 24" R5-3 "No Motor Vehicles" sign. Refer to MUTCD 11th Edition, Part 9: Traffic Control for Bicycle Facilities, Section 9B.07.
50	2524-9325150	INSTALL TYPE A SIGN	EACH	4	Refer to Tab. 190-51 and Sheet D.2 for locations and details. Install 24" x 24" R5-3 "No Motor Vehicles" sign. Refer to MUTCD 11th Edition, Part 9: Traffic Control for Bicycle Facilities, Section 9B.07. The Contractor shall furnish all necessary hardware to install the Type A signs except where noted otherwise. Method of Measurement: The Engineer will count each Type A sign installed. Basis of Payment: The Contractor shall be paid the contract unit price for each Type A sign installed. Payment is full compensation for erecting the signs complete, except for the required posts and foundations.

51	2526-8285010	CONSTRUCTION SURVEY, MONUMENT PRESERVATION	LS	1	
52	2526-8285020	CONSTRUCTION SURVEY, CONTROL POINT SURVEY	LS	1	
53	2526-8285030	CONSTRUCTION SURVEY, RIGHT OF WAY	LS	1	
54	2526-8285040	CONSTRUCTION SURVEY, LOCATION SURVEY	LS	1	
55	2527-9263209	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT- BASED	STA	3.96	Refer to the J sheets and Tab. 108_22 for details.
56	2528-2518000	SAFETY CLOSURE	EACH	3	Refer to J sheets for details. Refer to Tab. 108_13A for details.
57	2528-8445110	TRAFFIC CONTROL	LS	1	Refer to J sheets for details. Refer to Tab. 108_13A , Tab 108_23A, and Tab. 111_01 for details. Access shall be maintained at all times to 3707 Eastern Avenue (Unitarian Church of Davenport). All material, labor and equipment necessary to maintain access shall be considered incidental to this item. This includes, but is not limited to, temporary surfacing such as rock or pavement.
58	2528-9290050	PORTABLE DYNAMIC MESSAGE SIGN (PDMS)	CDAY	14	Item is for installment of PDMS boards at both directions of Eastern Avenue a minimum of 7 calendar days prior to the road closure to warn motorists of the upcoming closure. Contractor to coordinate with engineer prior to placement of PDMS boards. Refer to J Sheets for details.
59	2533-4980005	MOBILIZATION	LS	1	
60	2549-0041060	BYPASS PUMPING <i>Bypass Pumping</i>	LS	1	Refer to M and MSA Sheets for details.
61	2551-0000210	PERMANENT CRASH CUSHION	EACH	2	Refer to Sheet D.2 for details. Crash cushions shall meet TL-2 MASH rating.
62	2552-0000230	SPECIAL PIPE EMBEDMENT OR ENCASEMENT	LF	77	Refer to M and MSA Sheets for details. Includes all material, equipment, and labor to construct the concrete encasement of the sanitary sewer creek crossing as shown on these plans including, but not limited to, excavation, furnishing and installing concrete and reinforcing steel, and protecting the site until concrete reaches 3,000 psi strength. Contractor shall divert flow as necessary to performed work in the dry. Construction may be performed in stages, splice reinforcing as noted. See MSA.3 for details. Concrete mix design shall be C4.
63	2599-9999005	('EACH' ITEM) <i>STAINLESS STEEL FLAP GATE</i>	EACH	3	See Special Provisions for Stainless Steel Gates for Sanitary Sewer Manholes for additional information. Method of measurement and basis of payment for this item is each.

64	2599-9999005	('EACH' ITEM) <i>STAINLESS STEEL SLUICE GATE</i>	EACH	3	See Special Provisions for Stainless Steel Gates for Sanitary Sewer Manholes for additional information. Method of measurement and basis of payment for this item is each.
65	2601-2634100	MULCHING	ACRE	0.3	Perform mulching according to Article 2601.03, E, 2, of the Standard Specifications. Anchor mulch into the soil using mulch anchoring equipment with a minimum of two passes. Item is included for areas requiring reshaping and seedbed preparation. Use mulch that is Certified Noxious Weed Seed Free Mulch as certified by the Iowa Crop Improvement Association or adjacent states Crop Improvement Associations. Mulch Rate: 1 1/2 tons of dry cereal straw or native grass straw per acre. Mulching shall be applied as described in standard specification section 2601. After seeding, mulch all areas disturbed by grading except where slope protection has been applied. Refer to Sheet RR.2 for details.
66	2601-2639010	SODDING	SQ	110	Refer to Sheet RR.2 for details.
67	2601-2642100	STABILIZING CROP - SEEDING AND FERTILIZING	ACRE	0.3	Item is included for disturbed areas. Seed and fertilize all disturbed areas according to Article 2601.03, C, 1, of the Standard Specifications. If permanent seeding cannot be placed due to the restrictive planting dates, stabilizing crop will need to be placed on all disturbed areas as temporary erosion control. Preparation and seeding shall be performed in accordance with Section 2601. Stabilizing crop will not be used when the application dates in Section 2601 allows permanent seeding. If stabilizing crop must be used, place immediately following completions of finished grading. Reseeding of these areas will be required at contractors expense if damage occurs due to contractors negligence during the contract period. It is not necessary to place stabilizing crop in locations that have be covered by Wood Excelsior Mat.
68	2601-2643110	WATERING FOR SOD, SPECIAL DITCH CONTROL, OR SLOPE PROTECTION	MGAL	0.1	Estimate for watering Sod is based on a total of six waterings at a rate of 100 gallons per square.
69	2602-0000312	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN. DIA.	LF	900	Refer to RC and RR Sheets for details. Refer to Tab. 100-19. The tabulation includes estimated locations for placement of "Perimeter and Slope Sediment Control Device, 12 in. dia." to address erosion to be encountered during construction. Verify the specific locations with the Engineer prior to beginning placement. Bid item includes 25% additional quantity for field adjustments and replacements. Use Perimeter and Slope Sediment Control Devices fabricated using wood excelsior.
70	2602-0000351	REMOVAL OF PERIMETER AND SLOPE OR DITCH CHECK SEDIMENT CONTROL DEVICE	LF	900	This item is included for perimeter and slope sediment control device removal to allow for replacement (replacement to be paid separately), or for areas that have achieved 70% permanent growth. Refer to RC and RR Sheets for details. Refer to Tab. 100_19 for details.
71	2602-0000530	GRATE INTAKE SEDIMENT FILTER BAG, EC-604	EACH	2	Refer to RC and RR Sheets for details. Refer to Tab. 100_37 for details. Method of Measurement: The Engineer will measure the number of bags placed. Basis of Payment: The Contractor will be paid the contract unit price per each item. The contract unit price shall be considered full compensation for all labor, equipment, and materials required to place the Grate Intake Sediment Filter Bag, EC-604 according to the contract documents.

72	2602-0000540	MAINTENANCE OF GRATE INTAKE SEDIMENT FILTER BAG	EACH	2	Refer to RC and RR Sheets for details. Refer to Tab. 100_37 for details. Method of Measurement: The Engineer will measure the number of bags maintained. Basis of Payment: The Contractor will be paid the contract unit price per each item. The contract unit price shall be considered full compensation for all labor, equipment, and materials required to maintain the Grate Intake Sediment Filter Bag according to the contract documents.
73	2602-0000550	REMOVAL OF GRATE INTAKE SEDIMENT FILTER BAG	EACH	2	Refer to RC and RR Sheets for details. Refer to Tab. 100_37 for details. Method of Measurement: The Engineer will measure the number of bags removed. Basis of Payment: The Contractor will be paid the contract unit price per each item. The contract unit price shall be considered full compensation for all labor, equipment, and materials required to remove the Grate Intake Sediment Filter Bag according to the contract documents.
74	2602-0010010	MOBILIZATIONS, EROSION CONTROL	EACH	1	Refer to RC and RR Sheets for details. Refer to Tab. 110_12 for details.
75	2602-0010020	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	1	Refer to RC and RR Sheets for details. Refer to Tab. 110_12 for details.

PROJECT DESCRIPTION		100_01D 8/15/22
This project is for the replacement of the Eastern Avenue over Goose Creek Bridge in Davenport, Iowa. The project is located .2 miles north of US Highway 6 (Kimberly Road). The bridge is being replaced with a 90' x 50' CCS with 5' sidewalk.		

105_04 10/20/26 STANDARDS The following Standards apply to construction work on this project.		
Number	Date	Title
BR-205	10-20-26	Double Reinforced 12in Approach (Slab Bridge)
BR-211	04-21-26	Bridge Approach (Abutting PCC or Composite Pavement)
DR-121	04-18-23	Connected Pipe Joints
DR-201	10-17-23	Concrete Aprons
DR-306	10-17-23	Precast Concrete Headwall for Subdrain Outlets
EC-204	10-19-21	Perimeter, Slope and Ditch Check Sediment Control Devices
EC-604	10-17-23	Grate Intake Sediment Filter Bag
EW-105	04-21-15	Reshaping Slopes and Ditches
EW-401	10-20-15	Temporary Stream Crossing, Causeway, or Equipment Pad
MI-102	10-20-15	Chain Link Fence Construction
MI-210	10-21-25	PCC Driveways and Alleys
MI-221	10-21-25	Combined Retaining Wall - Sidewalk
PM-110	10-15-24	Line Types
PV-101	10-20-26	Joints
PV-102	10-21-25	PCC Curb Details
SI-101	04-19-16	Locations - Type 'A' Signs
SI-112	04-19-16	Footings For Steel Breakaway Posts
SI-113	10-15-19	Support Structures - Steel Breakaway Posts
SI-119	10-17-17	Support Structures - Mounting Brackets
SI-131	10-18-16	Installation - Type 'A' Signs
SI-173	04-19-16	Object Markers
SW-101	10-21-25	Trench Bedding and Backfill Zones
SW-102	10-21-25	Rigid Gravity Pipe Trench Bedding
SW-211	10-21-25	Storm Sewer Pipe Connections
SW-301	10-21-25	Circular Sanitary Sewer Manhole
SW-302	10-21-25	Rectangular Sanitary Sewer Manhole
SW-401	10-21-25	Circular Storm Sewer Manhole
SW-512	10-21-25	Circular Area Intake
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-202	04-18-23	Work Within 15 ft of Traveled Way
TC-252	10-20-26	Routes Closed to Traffic
TC-419	04-18-23	Lane Closure on Undivided Highway
TC-601	10-15-19	Pedestrian Detour

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100_04A	ESTIMATE REFERENCE INFORMATION	C.1-8	
100_01D	PROJECT DESCRIPTION	C.9	
105_04	STANDARD ROAD PLANS	C.10	
111_25	INDEX OF TABULATIONS	C.11	
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102_05	EXISTING PAVEMENT	C.14	
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100_23	ROCK EROSION CONTROL	C.24	
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101_16	ALIGNMENT COORDINATES	G.1	
108_23A	TRAFFIC CONTROL PLAN	J.1	
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110_12	POLLUTION PREVENTION PLAN	RC.1-2	
100_19	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	RC.3	
100_37	GRATE INTAKE SEDIMENT FILTER BAG	RC.4	

LONGITUDINAL GROOVING		
Location	Total (SY)	Remarks
98+82.56	381.9	South Bridge Approach
100+00.00	469.1	Bridge Deck
101+17.44	381.9	North Bridge Approach
	469.1	TOTAL: Bridge Deck
	763.8	TOTAL: Approach

100_28
8/15/22

102_03
10/15/24

ACCESS POINTS AND SAFETY RAMPS

Refer to Cross-Sections

Length of Unclassified Pipe calculated is based on using Corrugated Metal Pipe.

(1) Refer to MI-210.

(2) Refer to EW-501.

(3) Refer to EW-501 or EW-502.

*Predetermined for access point not constructed with this project.

Station	Side	Access Type	Curb Length (1) (LF)	Width (FT)	Driveway Surface Type	Driveway Surface Area (SY)	Remarks
97+84.50	Right			30.6	PCC	58.2	Private Entrance - Unitarian Church
							Refer to M Sheets for Pipe Culvert Details
99+17.50	Left	A	38.7	42.1	PCC	95.4	Private Entrance - Jack's Brakes
100+56.87	Left			16.1	PCC	100.0	Loading Bay - Diamond Vogel
100+79.50	Left	A	60.2	62.1	PCC	36.0	Private Entrance - Diamond Vogel
						289.6	TOTAL

102_05 9/29/23																			
EXISTING PAVEMENT																			
County	Route	Direction of Travel	Begin Ref. Location Sign	End Ref. Location Sign	Year	Type	Surface Type	Surface Depth (IN)	Base Type	Base Depth (IN)	Subbase Type	Subbase Depth (IN)	Removal Type	Removal Depth (IN)	Coarse Aggregate Source	Coarse Aggregate Type	Course Aggregate Durability Class	Reinforcement Type	Remarks
Scott	Eastern Ave	Both				PCC	PCC	7.0											
Scott	Eastern Ave	Both			2019	PCC	PCC	8.0			Modified	6.0	Pavement	7.0					Eastern Ave Reconstruction - E. 39th St to E. 43rd

108_13A 3/27/25 SAFETY CLOSURES Refer to Section 2528 of the Standard Specifications			
Station	Road Closure Qty.	Hazard Closure Qty.	Remarks
98+75.00	1		Eastern Ave - South End of Project
101+25.00	1		Eastern Ave - North End of Project
99+50.00	1		Pedestrian Trail - Southeast of Bridge
	3		TOTAL

COMBINED CONCRETE SIDEWALK AND RETAINING WALL												108_16 8/19/22
Station From	Station To	Retaining Wall Type	Retaining Wall Height 1 (FT)	Retaining Wall Height 2 (FT)	Retaining Wall Thickness (FT)	Sidewalk Width 1 (FT)	Sidewalk Width 2 (FT)	Sidewalk Thickness (FT)	Retaining Wall Concrete (CY)	Sidewalk & Footing Concrete (CY)	Porous Backfill (CY)	Reinforcing Steel (LB)
200+00.00	200+50.72	B	0.0	3.2	0.5	13.0	13.0	0.5	1.5	13.6	1.3	441
200+50.72	200+95.00	B	3.2	4.6	0.5	16.0	16.0	0.5	3.2	14.4	1.1	501
200+95.00	201+70.00	B	4.6	4.6	0.5	16.0	16.0	0.5	6.4	24.3	1.9	932
									11.1	52.3	4.3	1874

108_22
10/21/25

PAVEMENT MARKING LINE TYPES

Line factors based on 6-inch wide continuous line.
*BCY4 - Place on the same side of the roadway to match existing markings near the project.
**NPY4 - Estimating purposes only. No Passing Zone Lines will be located in the field.
***MNY6 - Factor of 1.00 includes number of 6-inch passes to cover median nose area.

BCY4: Broken Centerline (Yellow) @ 0.17
CBW6: Crosswalk Bar (White) @ 10.00
CLW6: Crosswalk Line (White) @ 2.00
DLW4: Dotted Line (White) @ 0.22
ELW6: Edge Line Right (White) @ 1.00
MNY6: Median Nose (Yellow) @ 1.00
RLY4: Ramp Edge Line Left (Yellow) @ 0.67
SPW4: Sloped Curb 4" (White) @ 2.16
STY6: Standard Curb 6" (Yellow) @ 2.03

BCY6: Broken Centerline (Yellow) @ 0.25
CHW8: Channelizing Line (White) @ 1.33
DCY4: Double Centerline (Yellow) @ 1.34
DLW6: Dotted Line (White) @ 0.33
ELY4: Edge Line Left (Yellow) @ 0.67
NPY4: No Passing Zone Line (Yellow) @ 0.84
RLY6: Ramp Edge Line Left (Yellow) @ 1.00
SPW6: Sloped Curb 6" (White) @ 2.28
YLW2: Yield Line (White) @ 1.15

BLC6: Broken Line Contrast (White/Black) @ 0.50
CHW10: Channelizing Line (White) @ 1.67
DCY6: Double Centerline (Yellow) @ 2.00
DLY4: Dotted Line (Yellow) @ 0.22
ELY6: Edge Line Left (Yellow) @ 1.00
NPY6: No Passing Zone Line (Yellow) @ 1.25
SLW2: Stop Line (White) @ 4.00
SPY4: Sloped Curb 4" (Yellow) @ 2.16

BLW4: Broken Lane Line (White) @ 0.17
CHY8: Channelizing Line (Yellow) @ 1.33
DDY4: Double Dotted Line (Yellow) @ 0.44
DLY6: Dotted Line (Yellow) @ 0.33
LDW8: Lane Drop (White) @ 0.33
RLW4: Ramp Edge Line Right (White) @ 0.67
SLW4: Solid Lane Line (White) @ 0.67
SPY6: Sloped Curb 6" (Yellow) @ 2.28

BLW6: Broken Lane Line (White) @ 0.25
CHY10: Channelizing Line (Yellow) @ 1.67
DDY6: Double Dotted Line (Yellow) @ 0.67
ELW4: Edge Line Right (White) @ 0.67
LDW10: Lane Drop (White) @ 0.42
RLW6: Ramp Edge Line Right (White) @ 1.00
SLW6: Solid Lane Line (White) @ 1.00
STW6: Standard Curb 6" (Yellow) @ 2.03

Road ID	Station From	Station To	Line Length (STA)	Lane	Marking Type	Left	Center	Right	Groove Marking Needed?	Groove Qty. (STA)	BLW4 Factored (STA)	DCY4 Factored (STA)	Remarks
Eastern Ave	98+82.00	101+18.00	2.36		Waterborne/Solvent Paint		x		No			3.16	Double Centerline (Yellow)
Eastern Ave	98+82.00	101+18.00	2.36	SB	Waterborne/Solvent Paint	x			No		0.40		Broken Lane Line (White)
Eastern Ave	98+82.00	101+18.00	2.36	NB	Waterborne/Solvent Paint			x	No		0.40		Broken Lane Line (White)
													3.96 - TOTAL FACTORED (STA)

FILE NO.

ENGLISH

DESIGN TEAM

WHKS & CO.

CITY OF DAVENPORT

COUNTY

PROJECT NUMBER

BRM-1827(698)--8N-82

SHEET NUMBER

C.17

5/4/2026 12:21:07 PM

JOHN.FELDMANN@IOWAID

110_01 4/5/24 REMOVAL OF PAVEMENT Refer to Tabulation 102-5. * Not a bid item.						
Station From	Station To	Side	Pavement Type	Area (SY)	Saw Cut* (LF)	Remarks
97+84.50	97+84.50	Right	PCC Driveway	58.2	61.0	Remove to 49' Right Offset
99+17.50	99+17.50	Left	PCC Driveway	108.6	49.0	Remove to 48' Left Offset
100+79.50	100+79.50	Left	PCC Driveway	58.1	62.0	Remove to 30' Left Offset
100+48.47	100+64.60	Left	PCC Driveway	101.8	60.0	Remove Driveway and Retaining Wall Prior to
100+48.47	100+64.60	Left	Comb. Retaining Wall			Modification of Driveway and Loading Bay.
98+83.00	99+61.00	All	PCC	401.9	45.0	Remove Existing South Bridge Approach
100+40.00	101+17.00	All	PCC	392.2	45.0	Remove Existing North Bridge Approach
				326.7		TOTAL: Removal of Driveway
				794.1		TOTAL: Removal of Pavement

REMOVAL OF EXISTING STRUCTURES		
Location	Description	Remarks
99+31 - 35' R	Remove Concrete Bollards	At Trail Entrance SE of Bridge (U.1)
99+50 - 42' R	Remove Concrete Erosion Control	At Former Storm Outlet SE of Bridge (U.1)
99+59 - 55' L	Remove Billboard Posts	In Gravel Lot - Others to Remove Billboard (U.1)
99+80 - 50' L	Remove Concrete Encasement	Around San. Sewer Pipe in Stream Channel (U.1) Length of Encasement to be Removed is 50'
100+44 - 56' L	Remove Diamond Vogel Sign	South of Diamond Vogel Lot (U.1)
100+48 - 89' L	Remove Combined Retaining Wall	At Diamond Vogel Loading Bay (U.1 and U.2)

110_02
8/15/22

SIDEWALK REMOVAL				110_05 8/15/22
* Not a bid item				
Station From	Station To	Area (SY)	Saw Cut* (LF)	Remarks
96+82.12	96+92.12	4.4	8.0	Over Storm Sewer Pipe P-13
98+77.56	99+61.34	38.4	4.0	South of Bridge
99+30.00	99+30.00	18.6	11.0	PCC/HMA Trail - Remove to 49' R Offset
100+40.00	101+20.08	37.1	8.0	North of Bridge
		98.5		TOTAL

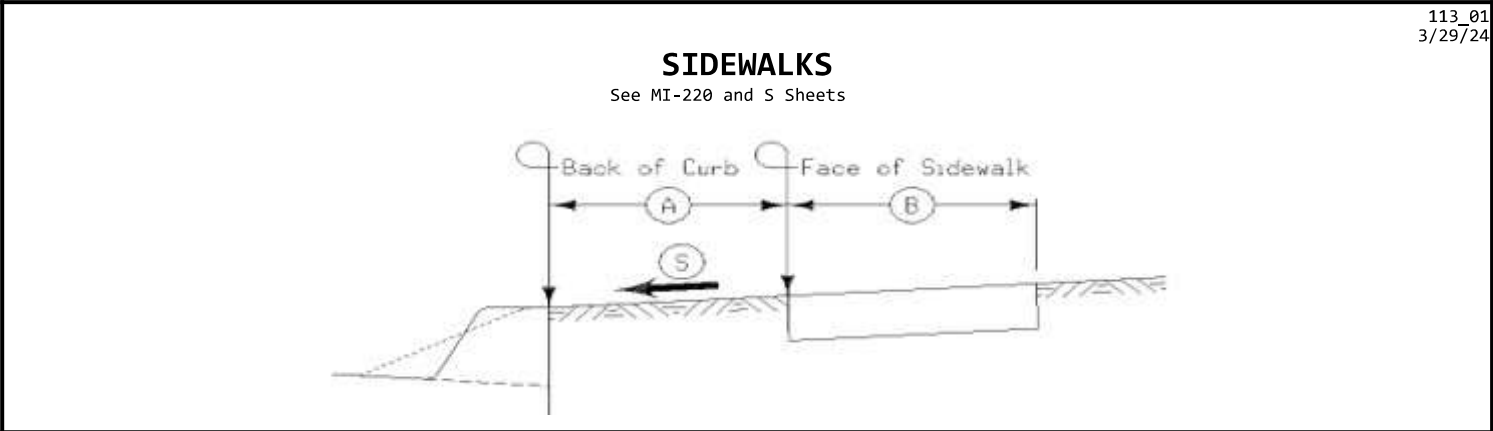
SANITARY OR STORM SEWER ABANDONMENT OR REMOVAL

110_14
7/11/24

* Not a bid item

Location Description	Sewer and Work Type	≤ 36 inch Diameter (LF)	> 36 inch Diameter (LF)	Plug Quantity (EA)	* Flowable Mortar or CLSM (CY)	Remarks
STA 97+63 to 98+13 - 42' R - Under PCC Driveway	Storm Sewer - Removal	50.0				See U Sheets for Details
STA 99+24 to 99+49 - 42' R - Under Ped. Trail	Storm Sewer - Removal	26.0				See U Sheets for Details
STA 97+34 to 99+73	Storm Sewer - Plug and Fill	239.0		2	27.8	See M Sheets for Details
STA 99+51 to 100+48 - 50' L - Under Stream	Sanitary Sewer - Plug and Fill		47.0	4	16.8	This Excludes the Segment of Sewer Being Removed.
						See U Sheets for Details
			47.0			TOTAL - Sanitary Sewer Pipe Fill
		239.0				TOTAL - Storm Sewer Pipe Fill
		76.0				TOTAL - Storm Sewer Pipe Removal

Bridge Station	End	Skew Ahead Left (Degrees)	Skew Ahead Right (Degrees)	(T) Thickness (IN)	Pay Length (FT)	Non-Reinf. Area (SY)	Single-Reinf. Area (SY)	Double-Reinf. Area (SY)	SRP Approach	SRP Abutment Type	SRP Abutting Pavement	Perforated * 4" Subdrain (LF)	Subdrain * Outlet (STA)	Subdrain * Outlet Side	Porous * Backfill (CY)	Modified * Subbase (TON)	Polymer * Grid (SY)	Special * Backfill (TON)	Remarks
100+00.00	S			12.0	72.0	160.4	113.9	115.2	BR-205	Fixed	BR-211	59.0	98+92.56	Right	1.7	352.100	430.9		
100+00.00	N			12.0	72.0	160.4	113.9	115.9	BR-205	Fixed	BR-211	100.0	101+07.44	Right	2.8	353.500	432.0		
					144.0	320.8	227.8	231.1								705.600	862.9		TOTAL - Bridge Approach Area - 779.7 SY



S (%)	Sidewalk Thickness (IN)	Sidewalk Length (FT)	Sidewalk Width (FT)	Sidewalk Area (SY)	Remarks
1.5	4	10.0	4.0	4.4	Over Pipe P-13 - Refer to B.1 and D.2 for Details
1.5	4	71.9	5.0	43.4	S. of Bridge - Refer to B.1 and D.2 for Details
1.5	4	69.6	5.0	44.2	N. of Bridge - Refer to B.1 and D.2 for Details
	4			18.8	Trail S. of Bridge - Refer to D.2 for Details
				110.8	TOTAL

ROCK EROSION CONTROL

Refer to EC-301 and Detail 570-8

100_23
8/15/22

Road Identification	Length (FT)	Width (FT)	Rock Erosion Control Type	Engineering Fabric (SY)	Erosion Stone (TON)	Remarks
						Refer to M Sheets for Storm Sewer Details
Eastern Ave	8.00	13.0	Type 4 - Rock Splash Basin	22.7	11.500	At Storm Sewer Structure 23

190_51
2/10/23

MATERIALS FOR TYPE 'A' SIGNS															
Refer to SI-101, SI-111, SI-119 and N Sheets.															
Sign Number	Dir. of Travel	Sign Location Station	Perf. Sq. Steel Leg 1 (FT)	Perf. Sq. Anchor Type	Anchor Quantity (EA)	Type A Bracket One Post	Type A Bracket Two Post	Type A Bracket Auxiliary	Type A Bracket (H)	Type A Bracket (F)	Type A Bracket (F1)	Install. Type	Install. Dim X (FT)	Install. Signing Notes	Remarks
1	NB	99+24.00	6.0	Soil	1	1						Type A	2.0	Sign Shall be 24" x 24" R5-3 "No Motor Vehicles"	At Trail Entrance. STA 99+22 - 34' Rt.
2	NB	99+38.00	8.0	Soil	1	1						Type A	2.0	Sign Shall be 18" x 18" R1-1 "Stop"	At Trail Exit. STA 99+38 - 34' Rt.
3	NB	99+38.00										Type A	2.0	Sign Shall be 18" Tall I2-2 "Goose Creek"	At Trail Exit. STA 99+38 - 34' Rt.
															Bid Items for Post to be Paid with Sign 2
4	NB	99+38.00										Type A	2.0	Sign Shall be 24 x 18 D11-1 "Bike Route"	At Trail Exit. STA 99+38 - 34' Rt.
															Bid Items for Post to be Paid with Sign 2
					2	2									TOTAL SF = 13

REFERENCE LOCATION SIGNS AND DELINEATORS Refer to SI-171, SI-172 and SI-173.						190_25 2/10/23
Location	Object Marker Type 1 (EA)	Object Marker Type 2 (EA)	Object Marker Type 3 (EA)	Installation Type	Installation Offset	
At SW Corner of Bridge			1	Type 3		
STA 99+49 - 25' Lt.						
At NE Corner of Bridge			1	Type 3		
STA 101+51 - 25' Rt.						
			2	TOTAL		

262_06
9/28/22

UTILITIES (NOT A POINT 25 PROJECT)

This is NOT a POINT 25 project and is not subject to the provisions of IAC 761-115.25.

262_07
10/15/24

TABULATION OF UTILITIES

MIDAMER-GAS
Matt Kovacic
309-793-3704
qclocates@midamerican.com

CENTRAL SCOTT TELEPHONE
Brent Lindle
563-345-8800
outsideplant@cstech.com

CENTURYLINK
SADIE HULL
918-547-0147
sadie.hull@lumen.com

AUREON NETWORK SERVICES
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515-830-0445
jeff.klocko@aureon.com

IOWA AMERICAN WATER COMPANY
Julie Allender
563-468-9222
julie.allender@amwater.com

MIDAMER-ELEC
Erik Rasmussen
563-333-8705
qclocates@midamerican.com

METRO FIBERNET, LLC
LORI KEMPER
812-213-1050
811design@metronet.com

MEDIACOM COMMUNICATIONS CORPOR
Chris Minard
815-597-5103
cminard@mediacomcc.com

CITY OF DAVENPORT
BRYAIN REIST
563-327-5163
gislocate@davenportiowa.com

282_03
9/28/22

TEMPORARY STREAM CROSSING, CAUSEWAY,
OR EQUIPMENT PAD

Standard Road Plan EW-401 is listed in Tabulation 105-4; however, it is included for information purposes only since it is an option. No quantities associated with constructing EW-401 are included in any bid items.

	Interstate Highway Symbol
	U.S. Highway Symbol
	Iowa Highway Symbol
	County Road Highway Symbol
	Evergreen Tree
	Deciduous Tree
	Fruit Tree
	Shrub (Bushes)
	Timber
	Hedge
	Stump
	Swamp
	Rock Outcrop
	Broken Concrete
	Revetment (Rip Rap)
	Cemetery
	Grave
	Cave
	Sink Hole
	Board Fence
	Chain Link or Security Fence
	Wire Fence
	Terrace
	Earth Dam or Dike (Existing)
	Tile Outlet
	Edge of Water
	Existing Drainage
	Right of Way Rail or Lot Corner
	Concrete Monument
	Well
	Windmill
	Beehive Intake
	Existing Intake
	Existing Utility Access (Manhole)
	Fire Hydrant
	Water Hydrant (Rural)

	Septic Tank
	Cistern
	L.P. Gas Tank (No Footing)
	
	Latrine
	Satellite TV Dish
	Water Hook Up
	Radio Tower
	Tower Anchor
	Guardrail (Beam or Cable)
	Guard Post (one or two)
	Guard Post (over two)
	Filler Pipe
	Gas Valve
	Water Valve
	Speed Limit Sign
	Mile Marker Post
	Sign
	Traffic Signal Control Box
	Telephone Switch Box
	Electric Box

— G —	MIDAMER-GAS Matt Kovacic 309-793-3704 qcllocates@midamerican.com
— F03 —	CENTRAL SCOTT TELEPHONE Brent Lindle 563-345-8800 outsideplant@ctestech.com
— T2 —	CENTURYLINK SADIE HULL 918-547-0147 sadie.hull@lumen.com
— F05 —	AUREON NETWORK SERVICES Jeff Klocko 515-830-0445 jeff.klocko@aureon.com
— W —	IOWA AMERICAN WATER COMPANY Julie Allender 563-468-9222 julie.allender@amwater.com
— E1 —	MIDAMER-ELEC Erik Rasmussen 563-333-8705 qcllocates@midamerican.com
— F06 —	METRO FIBERNET, LLC LORI KEMPER 812-213-1050 811design@metronet.com
— T1 —	MEDIACOM COMMUNICATIONS CORPORATION Chris Minard 815-597-5103 cminard@mediacomcc.com
— SAN. (C) —	CITY OF DAVENPORT BRYAIN REIST 563-327-5163 gislocate@davenportiowa.com
— ST S(C) —	

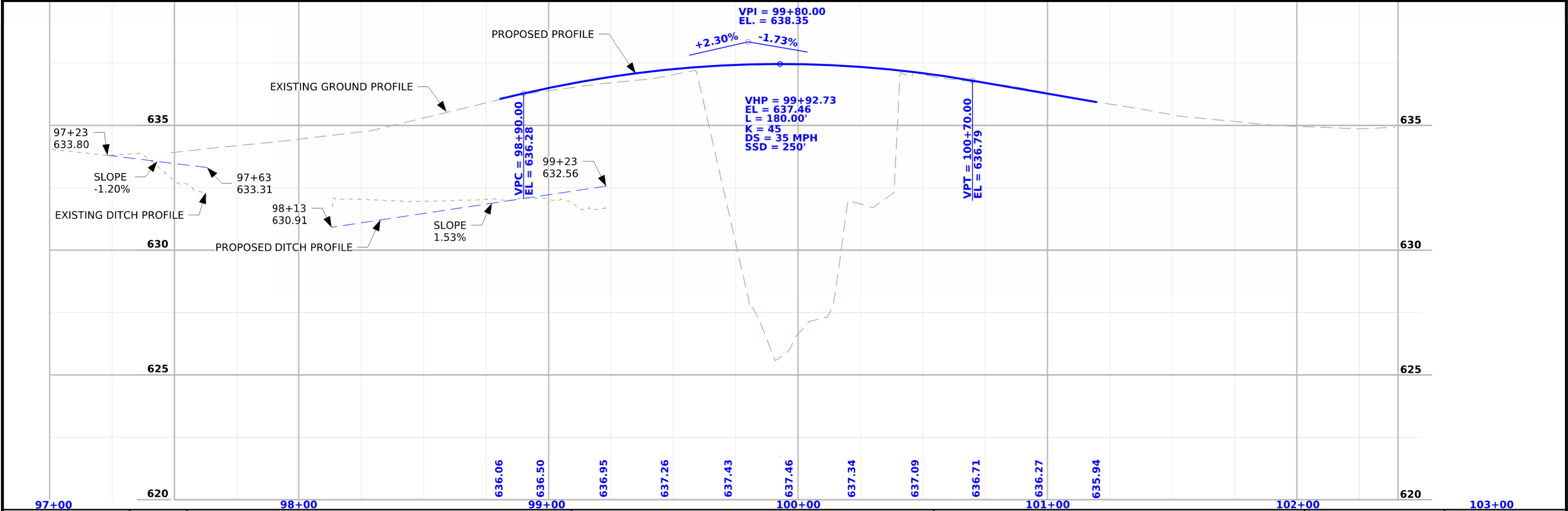
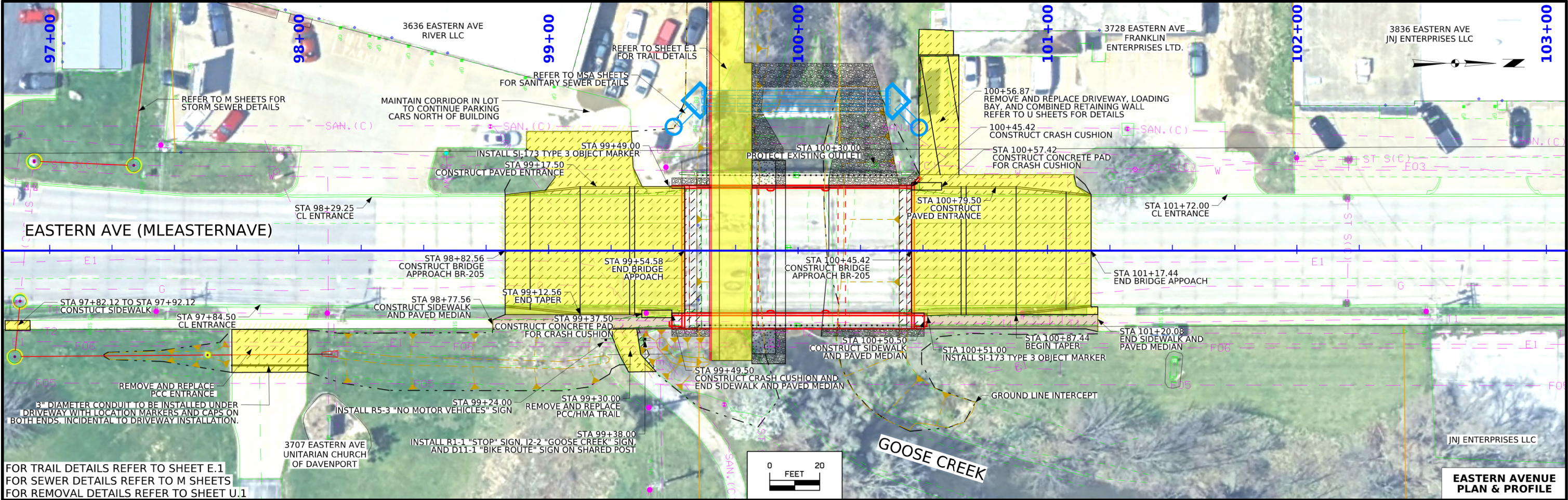
LINEWORK		Design Color No.	
Green	(2)		Existing Topographic Features and Labels
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)		Existing Utilities
SHADING		Design Color No.	Transparency
Pink, Dark	(13)		50%
Yellow	(4)		50%
Orange	(6)		50%
Orange	(70)		50%
Yellow	(68)		50%
Yellow	(132)		50%
Brown, Light	(236)		50%
Orange, Light	(134)		50%
Yellow	(220)		50%
Tan	(8)		50%
Blue, Light	(230)		50%
Pink	(11)		50%
Red	(3)		50%
Red	(3)		0%

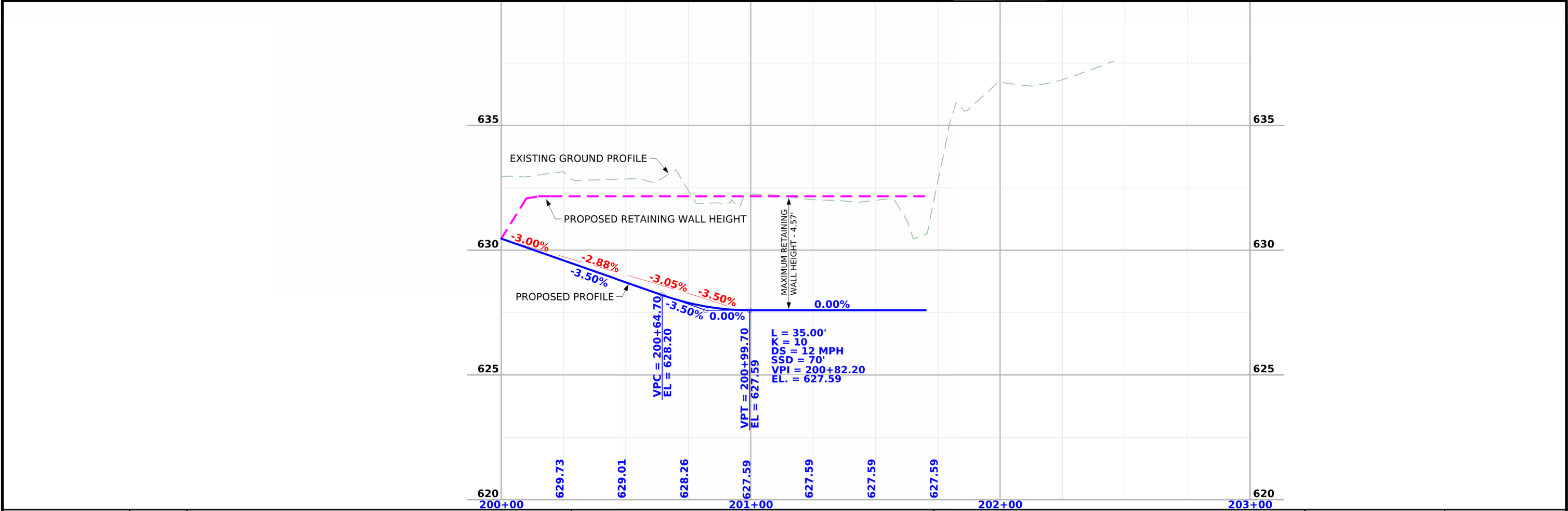
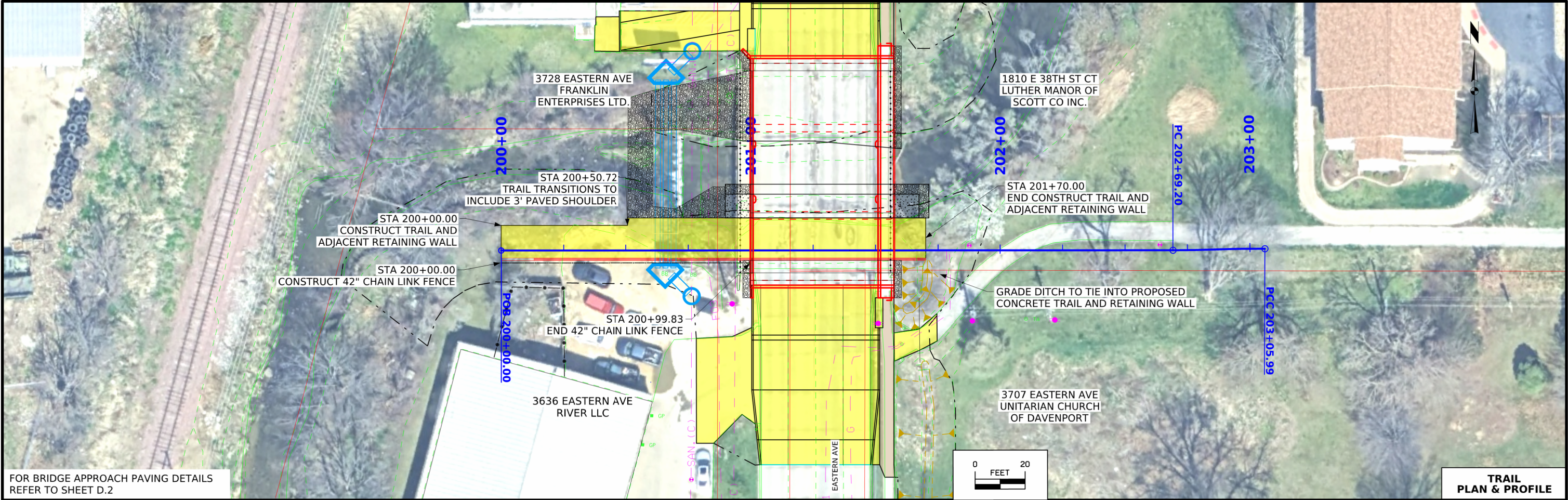
LINEWORK	Design Color No.	
Green	(10)	Existing Ground Line Profile
Blue	(1)	Proposed Profile and Annotation
Magenta	(5)	Existing Utilities
Blue, Light	(230)	Proposed Ditch Grades, Left
Black	(0)	Proposed Ditch Grades, Median
Rust	(14)	Proposed Ditch Grades, Right

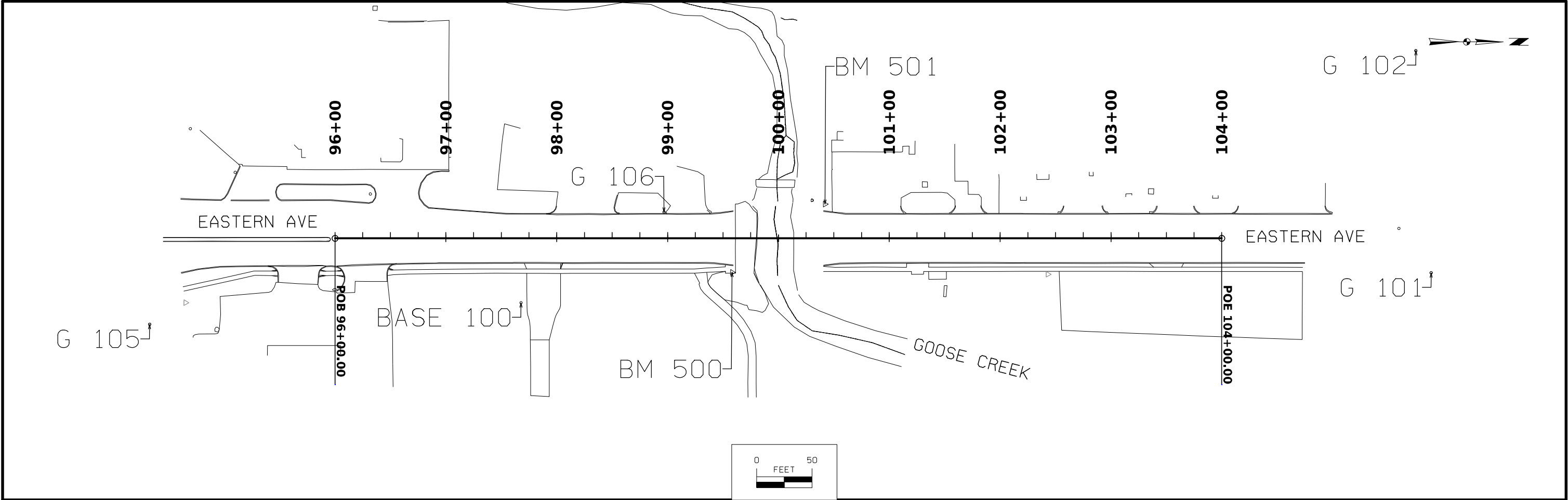
	Station		Reference Point		Survey Line
	Section Corner				
	Ground Line Intercept				
	Saw Cut				
	Guardrail				
	Trench Drain				
	HighTension Cable Guardrail				
	Sheet Pile				
	Pavement Removal		Clearing & Grubbing Area		

- Proposed Right-of-Way Symbol
- Proposed Right-of-Way Line
- Existing Right of Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Easement (Temporary) Symbol
- Easement (Temporary) Line
- Easement
- Access Control
- Property Line Symbol
- Property Line

(COVERS SHEET SERIES D, E, G, H, L, M, MSA, and U)







ALIGNMENT COORDINATES

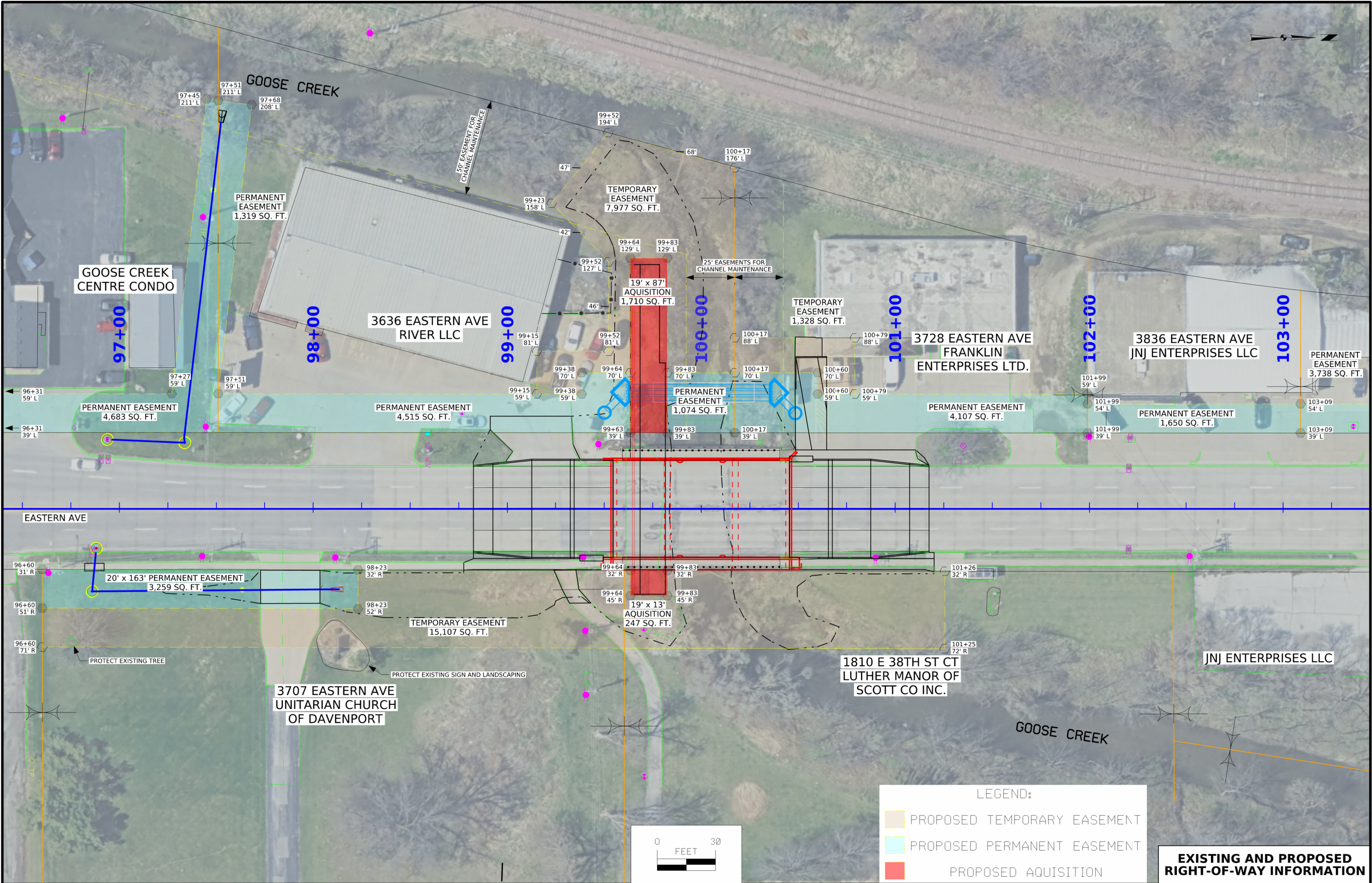
101-16
10-20-09

Name	Location	Point on Tangent			Begin Spiral			Begin Curve			Simple Curve PI or Master PI of SCS			End Curve			End Spiral		
		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates	
			Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)
POB		96+00.00	581,136.988	2,447,258.343															
POT		104+00.00	581,936.628	2,447,234.330															

CONTROL POINTS						
Point No.	Description	Station	Offset	Y (Northing)	X (Easting)	Elevation
BASE100	REBAR	97+67.72	58.09 RT	581,306.375	2,447,311.373	633.764
G101	REBAR			582,126.371	2,447,259.749	640.896
G102	MAG NAIL			582,106.583	2,447,059.838	642.764
G105	REBAR			580,972.111	2,447,340.867	637.718
G106	REBAR	98+96.78	23.73 LT	581,432.924	2,447,225.715	636.198

BENCH MARKS						
Point No.	Description	Station	Offset	Y (Northing)	X (Easting)	Elevation
BM 500	"X" SE Wing of Br					640.186
BM 501	"X" NW Wing of Br					640.201

SURVEY AND ALIGNMENT
INFORMATION



108_23A
8/15/22

TRAFFIC CONTROL PLAN

During the period of time designated as winter work, the bridge may be reduced to at least one lane of traffic in each direction in accordance with TC-419, but may not be closed to traffic.

All sanitary sewer work is required to be completed prior to beginning any work on the bridge.

Eastern Ave will be normally closed to through traffic per Standard Road Plan TC-252.

Traffic shall be detoured onto Jersey Ridge Road. Refer to Sheet J.2 and J.3 for full signage and detour details.

All traffic control devices shall be installed, maintained, and removed by the Contractor.

All changes to the traffic control plan shall be approved by the City of Davenport prior to implementation.

The location for storage and materials by the Contractor and Sub-Contractors shall be approved by the City of Davenport.

PDMS boards shall be installed on both directions of Eastern Avenue a minimum of 7 calendar days prior to the road closure to warn motorists of the upcoming closure. Contractor to coordinate with engineer prior to placement of PDMS boards.

Seven to ten days prior to proposed street closure, contractor shall submit an application for the street closure at www.cityofdavenport/roadwork.

Sidewalks and Trails within project limits to be closed in accordance TC-601.

All detour signs that are expected to be in place for longer than 21 days shall be installed on posts.

111_01
10/14/22

COORDINATED OPERATIONS

Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.

Project	Type of Work
Eastern Ave. over Duck Creek	Bridge Replacement
Coordinate with other projects in the area.	

CROSS SECTION VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS		
SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Lght	(230)	Proposed Pavement Shading
Lavender	(9)	Temporary Pavement Shading
Brown, Med	(237)	Future Proposed Pavement Shading

CROSS SECTION VIEW PATTERN AND SYMBOL LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS			
	Pavement Removal		Proposed Granular Shoulder
	Proposed Granular Subbase		Temporary Shoulder
	Proposed Special Backfill		Existing Shoulder Strengthening
	Temporary Barrier Rail		Permanent Barrier Rail
	Work Area		Channelizing Device

PLAN VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS			
LINEWORK	Design Color No.		
Green	(2)	Existing Topographic Features and Labels	
Magenta	(5)	Pavement Marking Call Outs	
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation	
Yellow	(4)	Pavement Markings, Yellow	
Off White	(254)	Pavement Markings, White	
Violet	(15)	Temporary barrier rail, Unpinned	
Flush Orange	(228)	Temporary barrier rail, Pinned	

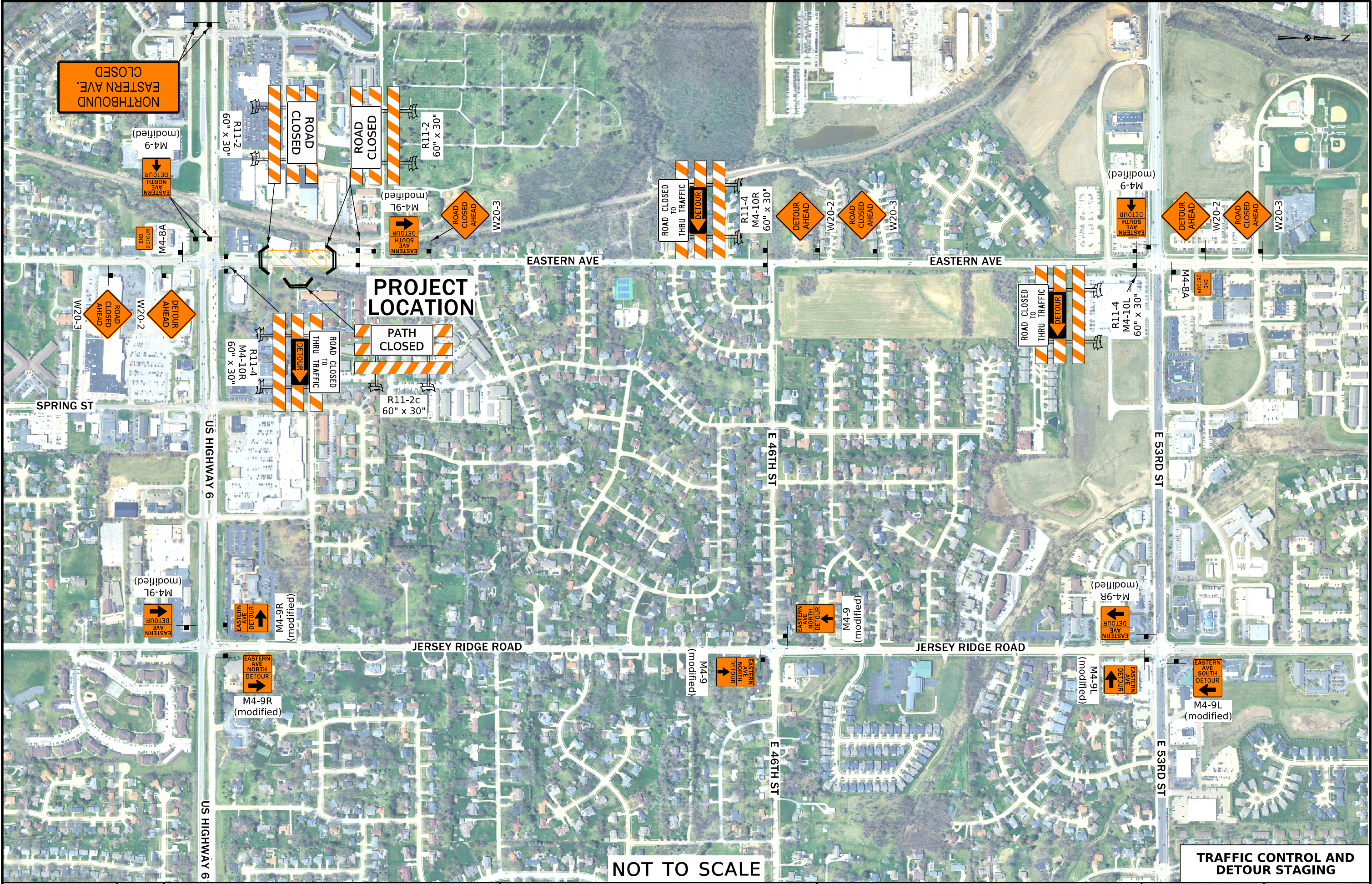
SHADING	Design Color No.		
Green, Light	(225)	Existing Pavement Shading	
Gray, Light	(48)	Previously Constructed Pavement Shading	
Gray, Med	(80)	Proposed Granular Surface Shading	
Gray, Med	(80)	Previously Constructed Granular Surface Shading	
Blue, Light	(230)	Proposed Pavement Shading	
Lavender	(9)	Temporary Pavement Shading	
Brown, Light	(236)	Proposed Grading Limits Shading	
Pink, Dark	(13)	Proposed MSE or CIP Wall Shading	
Red	(3)	Proposed Bridge Shading and Sign Trusses	
Black w/Gray, Light Fill	(0,48)	Previously Constructed Structure	

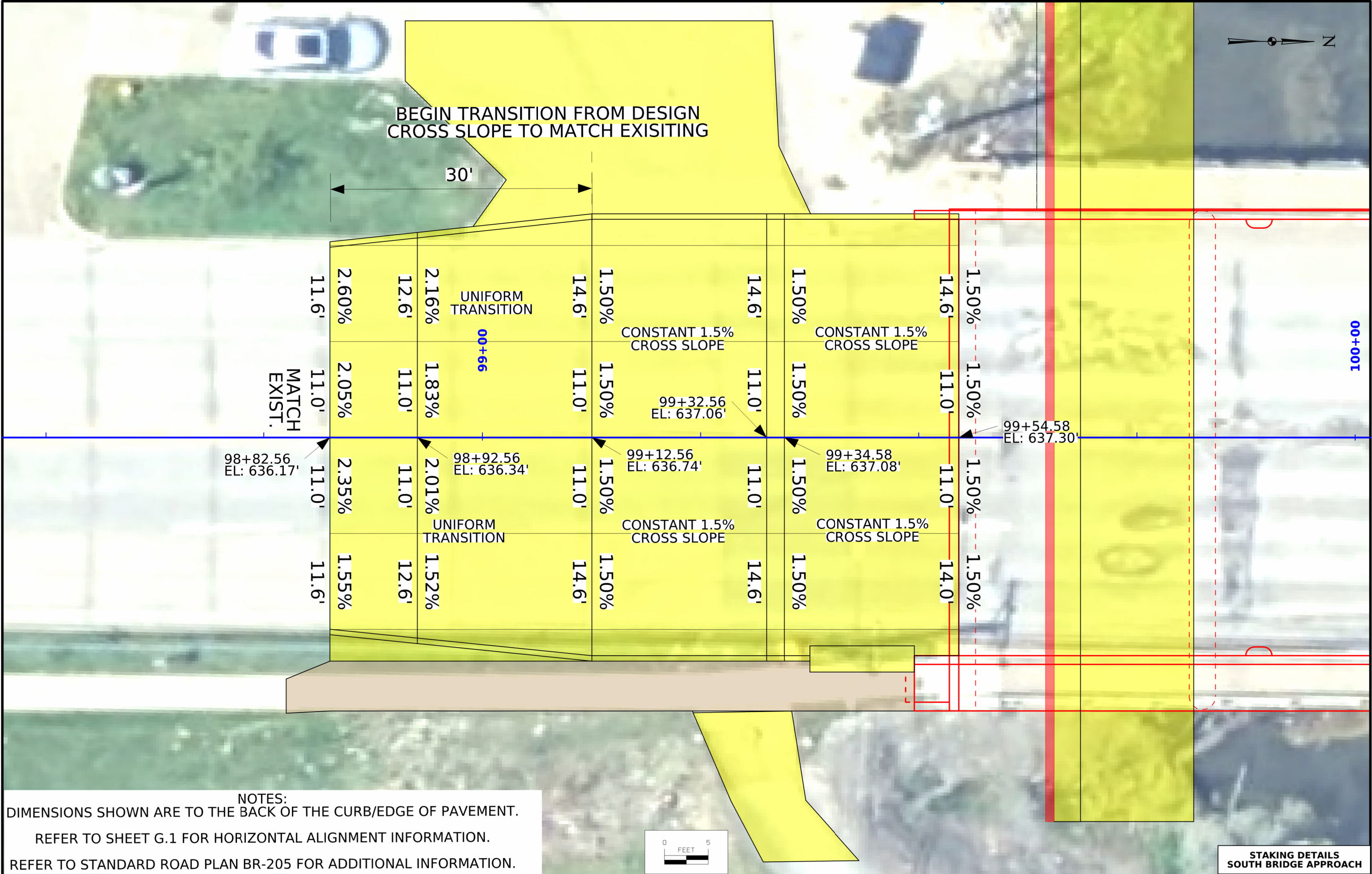
PLAN VIEW PATTERN AND SYMBOL LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS			
	Channelizing Device		Crash Cushion (Temp or Perm)
	Drum		Traffic Signal
	Temporary Lane Separator		Flagger
	Tubular Marker		Temporary Floodlighting
	Channelizer Marker		Traffic Sign
	Concrete Barrier Marker		Type III Barricade
	Delineator		Type A Warning Light
	Temporary Barrier Rail		Direction of Traffic
	Pavement Removal		Safety Closure
	Sand Barrel Layout		Lane Identification

NOTE: Device spacing according to Standard Road Plans unless specifically dimensioned.

TRAFFIC CONTROL
AND
STAGING
LEGEND AND SYMBOL
INFORMATION SHEET

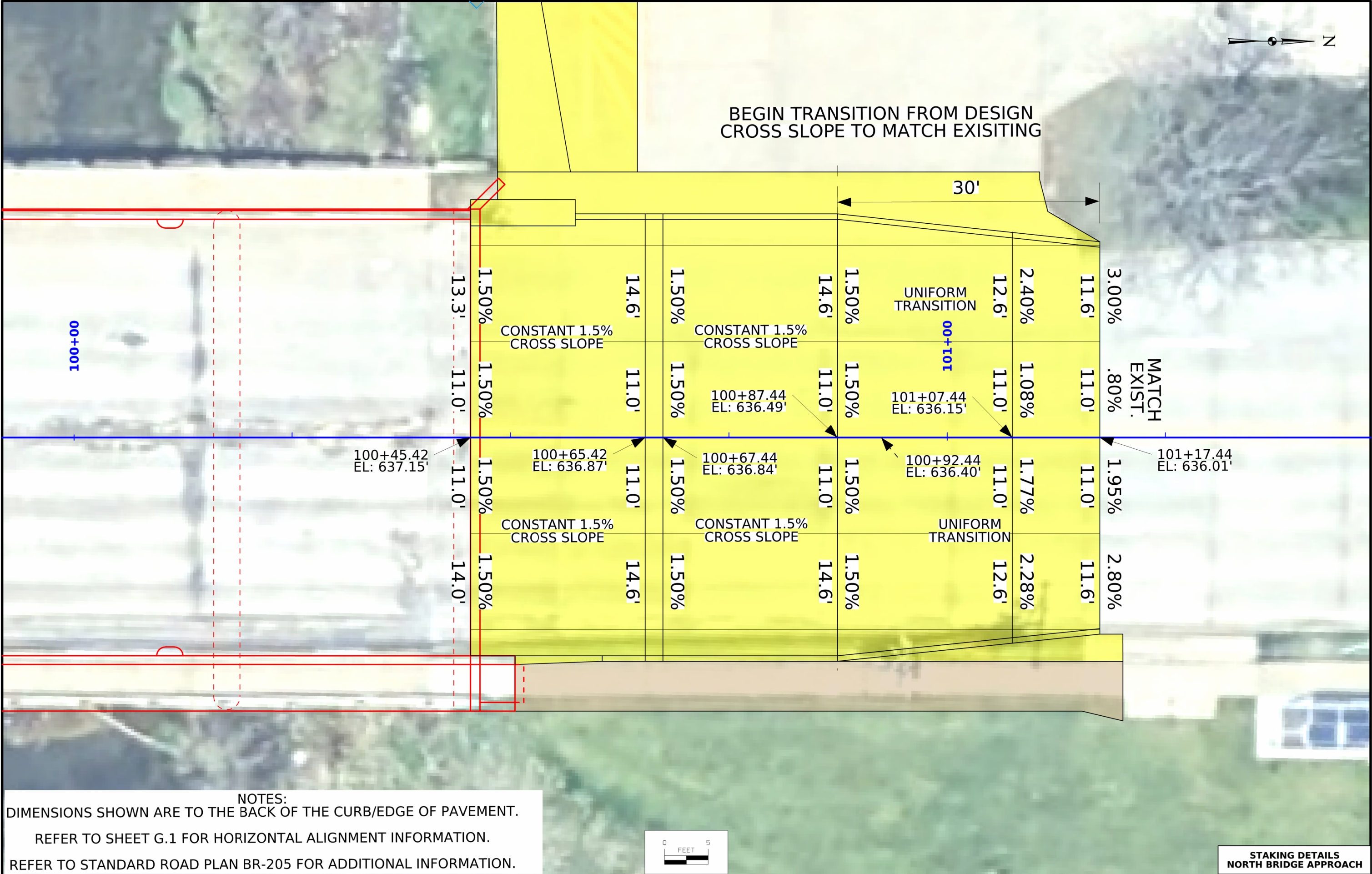
(COVERS SHEET SERIES J)





NOTES:
DIMENSIONS SHOWN ARE TO THE BACK OF THE CURB/EDGE OF PAVEMENT.
REFER TO SHEET G.1 FOR HORIZONTAL ALIGNMENT INFORMATION.
REFER TO STANDARD ROAD PLAN BR-205 FOR ADDITIONAL INFORMATION.

STAKING DETAILS
SOUTH BRIDGE APPROACH

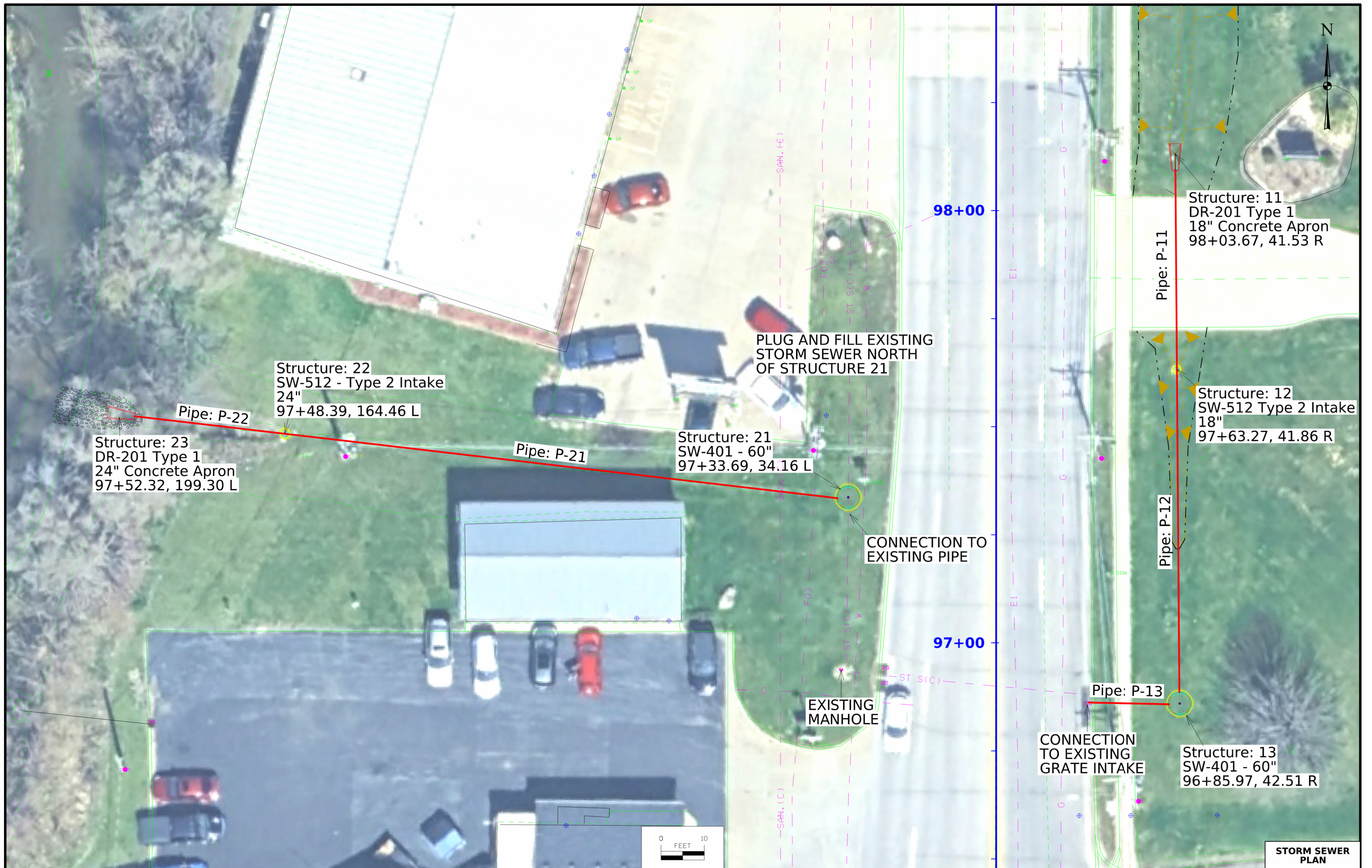


104_05B
3/6/25

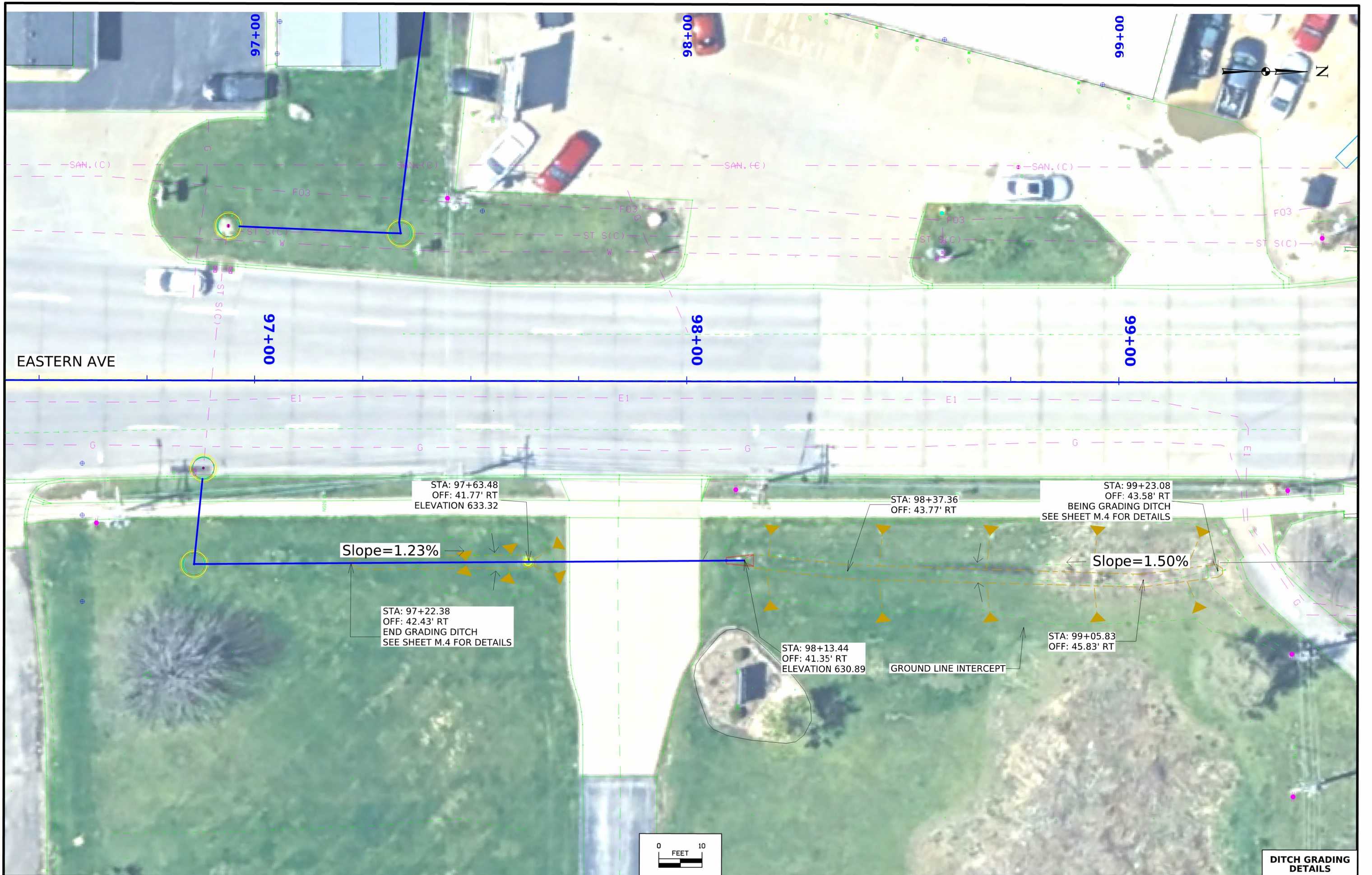
STORM SEWER

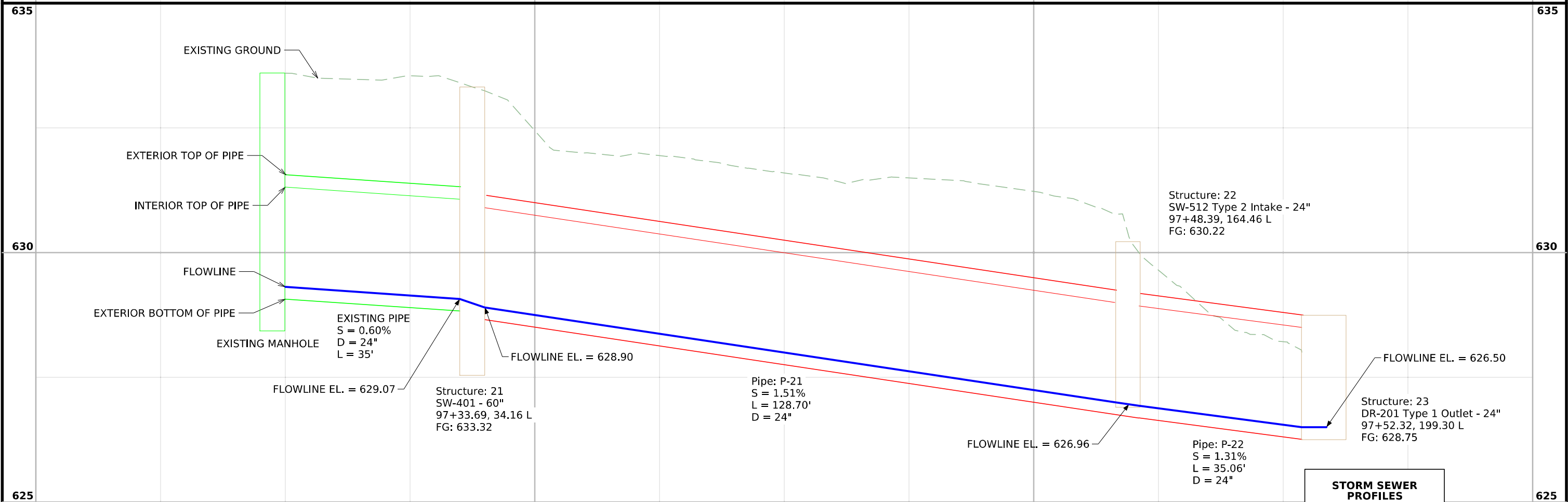
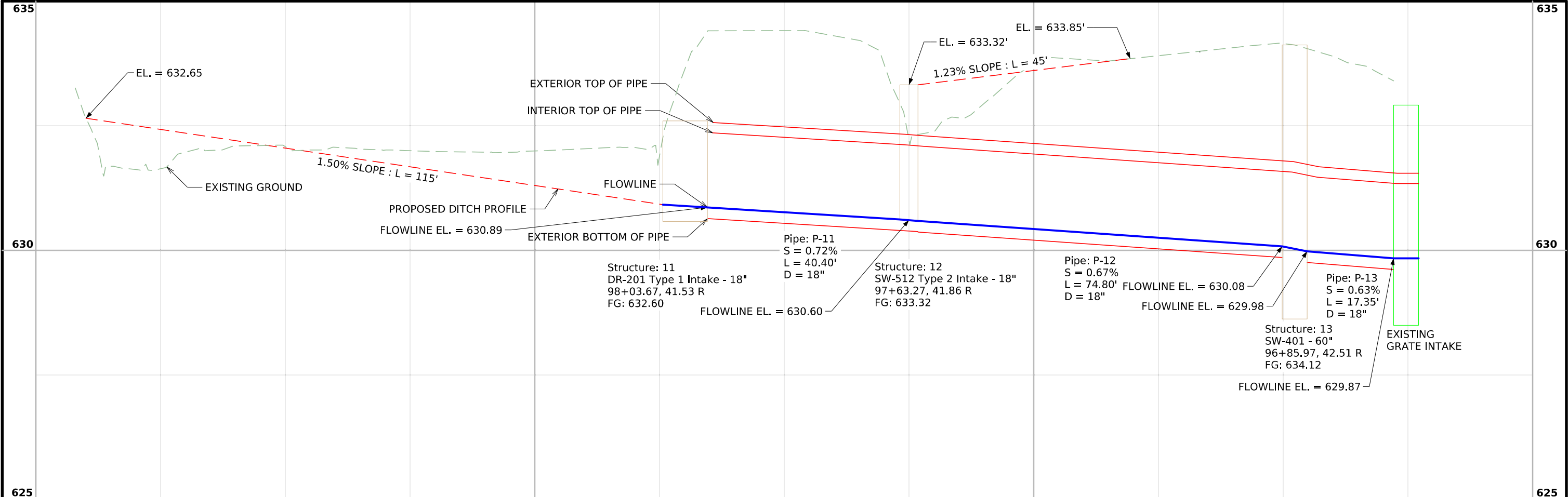
(1) Diameter or equivalent diameter
* Bid Item
** For SW-545
Design Length, Slope, and Flowlines are calculated from inside wall to inside wall along CL of pipe. An additional 2 ft length is added to each end of the Design Length to account for estimated length to center of structures.

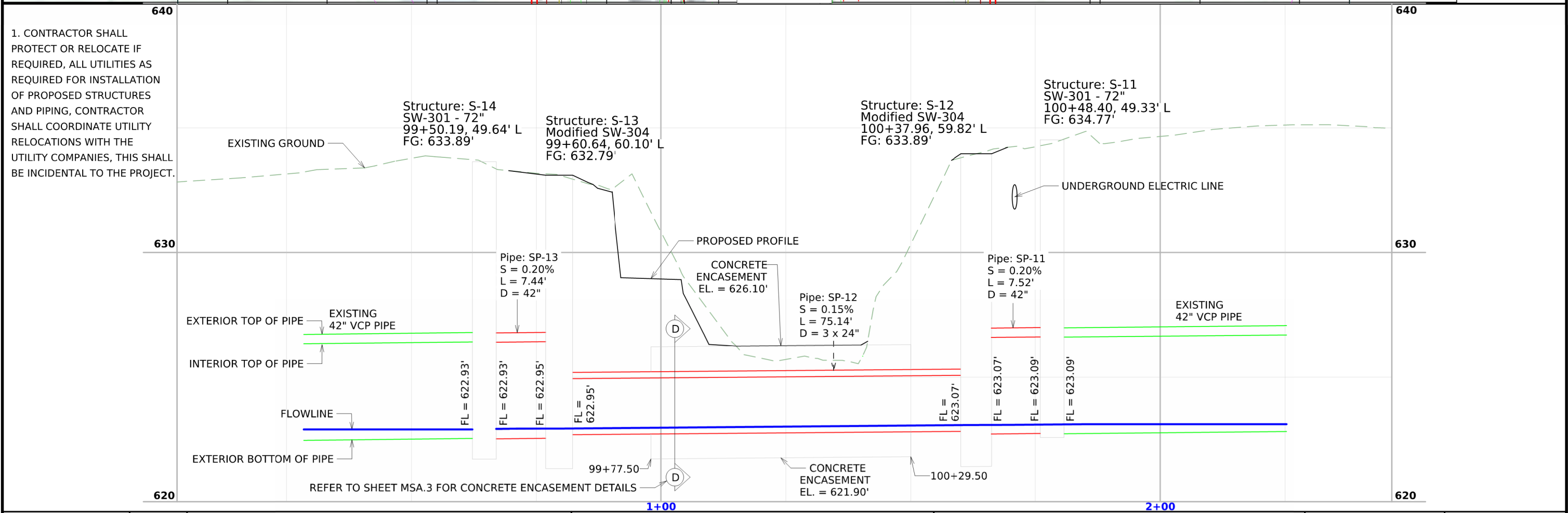
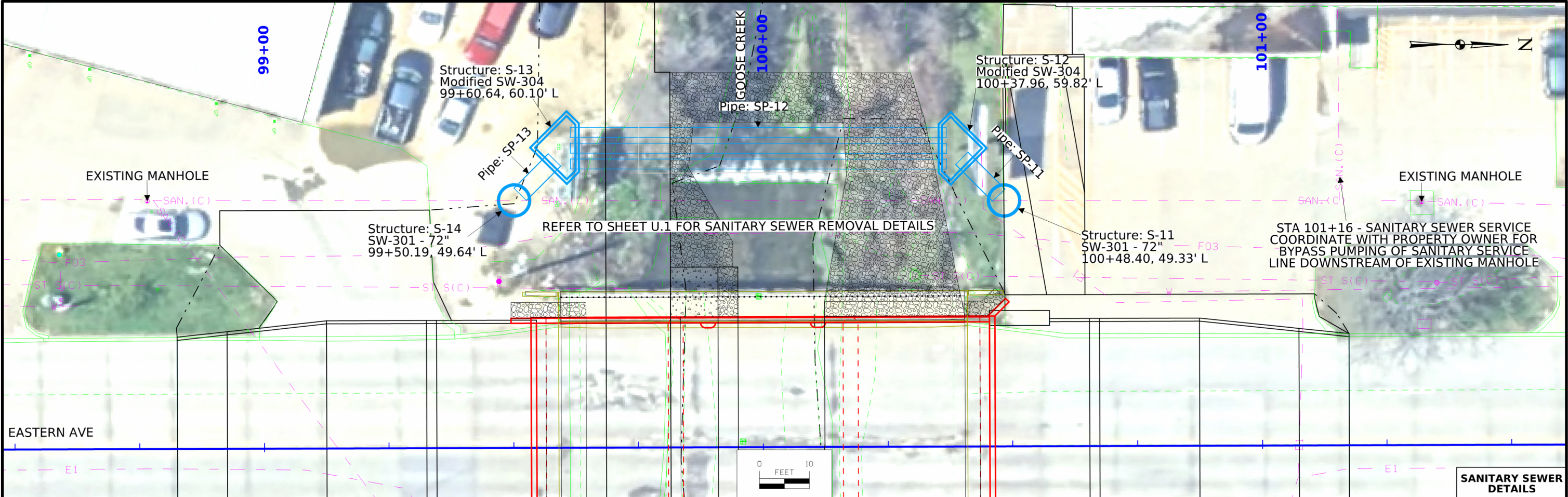
No.	Location Station	Offset	Type or Standard Road Plan*	Form Grade Elev.	Notes	Line Number	Intake / Utility Access No. From	Intake / Utility Access No. To	Pipe Size (1) (IN)	Bid Length* (FT)	Design Length (FT)	Slope %	Connected Pipe Joint (DR-121)	Flow Line Inlet Elev.	Flow Line Outlet Elev.	Notes
																STORM SEWER - Circular RCP
11	98+03.67	41.5	DR-201 Type 1 - 18"	632.60		P-11	11	12	18.0	42	40.4	0.7	Type 3		630.89	
12	97+63.27	41.9	SW-512 Type 2 Intake - 18"	633.32		P-12	12	13	18.0	79	74.8	0.7	Type 3	630.60	630.60	
13	96+85.97	42.5	SW-401 - 60"	634.12		P-13	13		18.0	21	17.4	0.6		630.08	629.98	Connect to Existing Intake at STA 96+86.08 - 21' R
21	97+33.69	34.2	SW-401 - 60"	633.32		P-21	21	22	24.0	133	128.7	1.5	Type 3	629.07	628.90	
22	97+48.39	164.5	SW-512 Type 2 Intake - 24"	630.22		P-22	22	23	24.0	39	35.1	1.3	Type 3	626.96	626.96	
23	97+52.32	199.3	DR-201 Type 1 - 24"	628.75										626.50		
																SANITARY SEWER - Circular PVC
S-11	100+48.40	49.3	SW-301 - 72"	634.77		SP-11	S-11	S-12	42.0	11	7.4	0.2		623.09	623.09	Pipe is SDR 35
S-12	100+37.96	59.8	Modified SW-304	633.89		SP-12	S-12	S-13	24.0	79	75.1	0.2		623.07	623.07	3 x 24" Adjacent Pipes - SDR 26
S-13	99+60.64	60.1	Modified SW-304	632.79		SP-13	S-13	S-14	42.0	12	7.5	0.2		622.95	622.95	Pipe is SDR 35
S-14	99+50.19	49.6	SW-301 - 72"	633.89										622.93	622.93	
										142						TOTAL - 18" RCP
										172						TOTAL - 24" RCP
										243						TOTAL - 24" PVC
										22						TOTAL - 42" PVC
			DR-201 Type 1 - 18"													TOTAL: 1
			DR-201 Type 1 - 24"													TOTAL: 1
			SW-301 - 72"													TOTAL: 2
			Modified SW-304													TOTAL: 2
			SW-401 - 60"													TOTAL: 2
			SW-512 Type 2 Intake - 18"													TOTAL: 1
			SW-512 Type 2 Intake - 24"													TOTAL: 1
			Connect to Existing Intake													TOTAL: 1

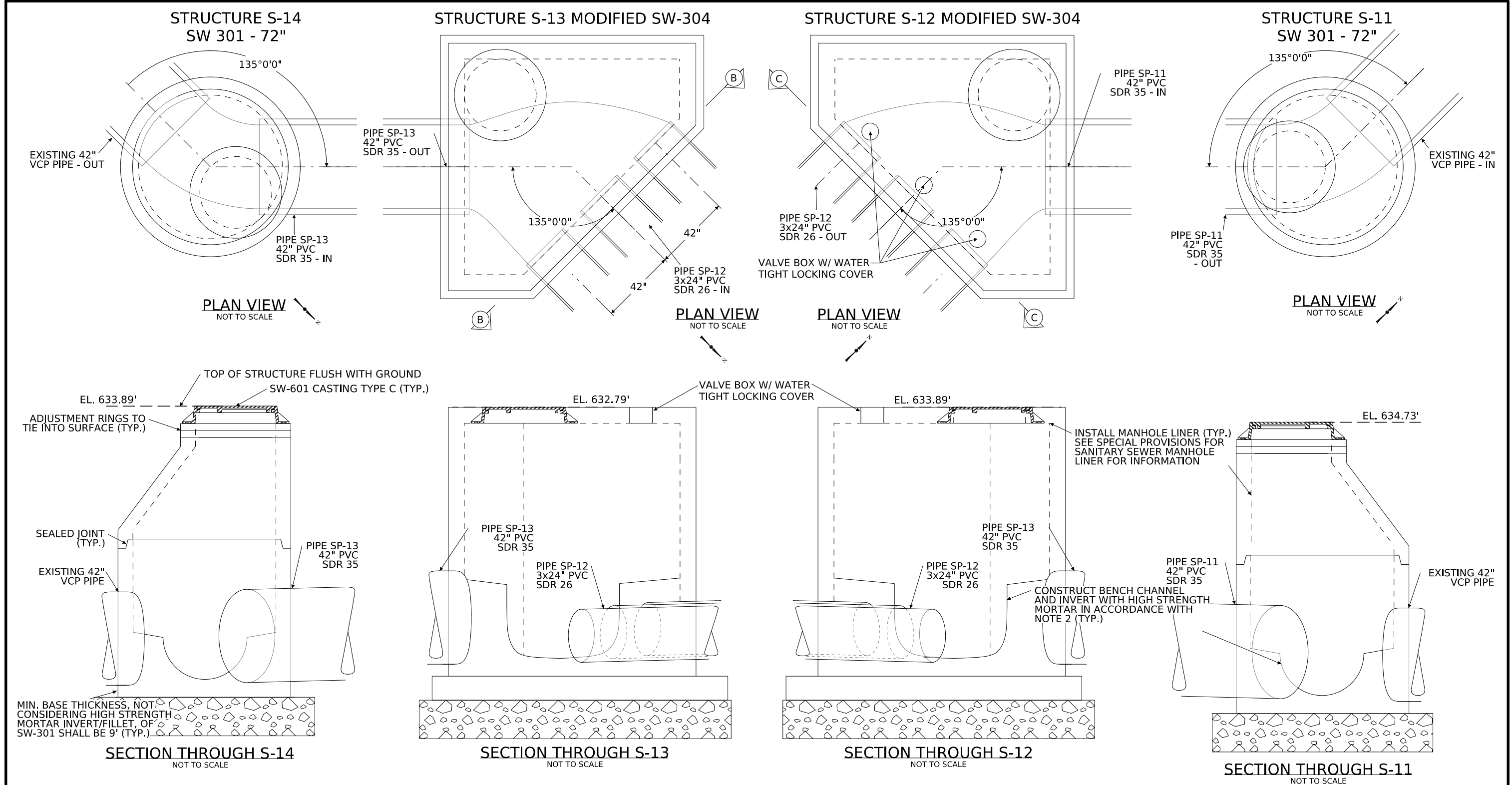


FILE NO.	ENGLISH	DESIGN TEAM WHKS & CO.	CITY OF DAVENPORT COUNTY	PROJECT NUMBER BRM-1827(698)--8N-82	SHEET NUMBER M.2
12:17:56 PM	9/30/2025	jfeldmann	pw:\\whks-pw.bentley.com:whks-pw-01\Documents\Projects\IA\10238\41 CAD\Design\CADD_Files\Sheet_Files\ST_82EASTAVE698_M02.dgn		



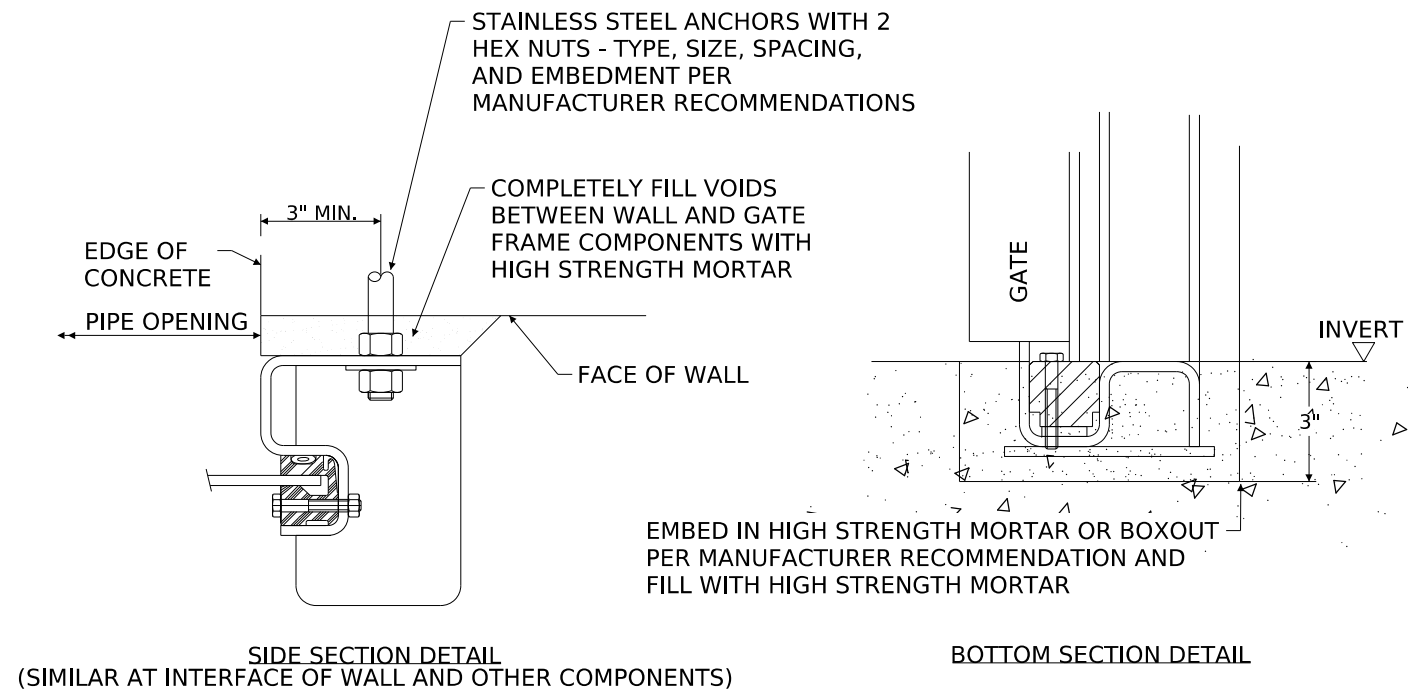




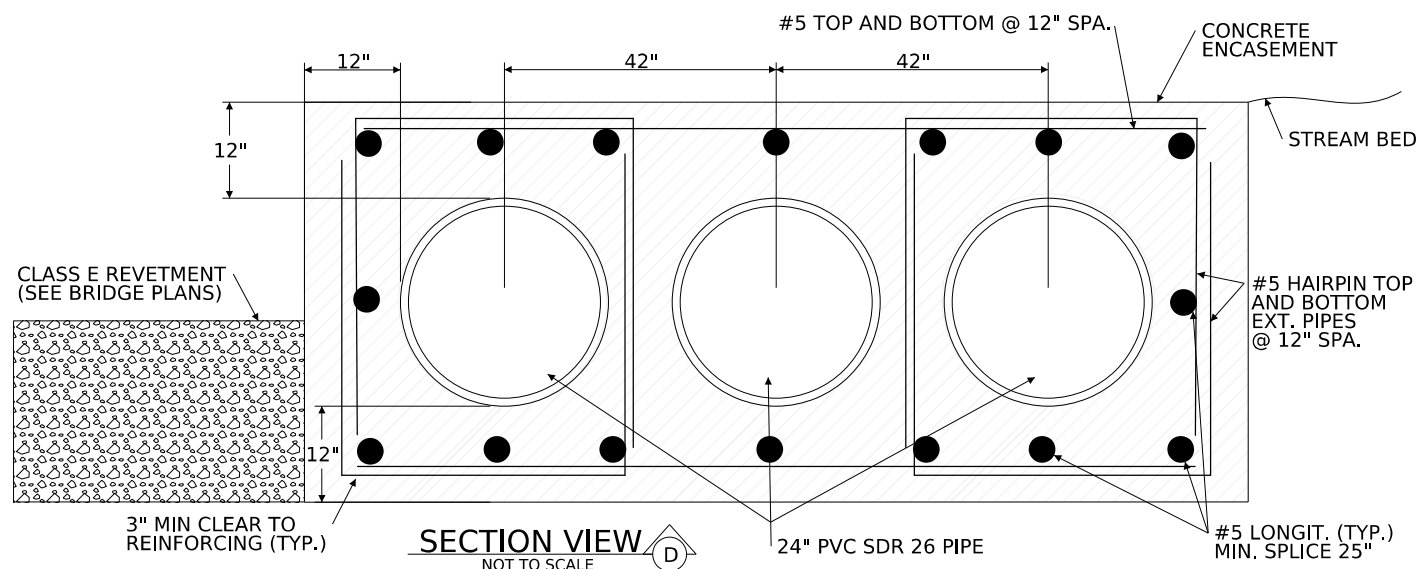


- NOTES:**
1. FURNISH BOLT DOWN FRAME AND COVER WITH STAINLESS STEEL, HEX NUT, RECESSED CAP SCREWS AND SECURE COVER WITH SCREWS, WASHERS, AND RUBBER GASKET SEALS. CASTINGS SHALL BE BOLTED TO THE STRUCTURE.
 2. CONTRACTOR SHALL CONSTRUCT THE BENCH, CHANNEL, AND INVERT IN EACH NEW MANHOLE USING A HIGH STRENGTH MORTAR. MORTAR SHALL BE FORMULATED FOR USE IN WASTEWATER STRUCTURES WITH LOW SLUMP AND HIGH ADHESION TO EXISTING MATERIALS. APPROVED MATERIALS INCLUDE: OCTOCRETE, STRONG-SEAL QSR, QUADEX HYPERFORM, PERMACAST PATCH, OR EQUAL. CONTRACTOR SHALL SUBMIT MATERIAL TYPE, MANUFACTURER, CHEMICAL DATA, MSDS, AND PRODUCT NAMES FOR HIGH STRENGTH MORTAR.

CLEAN THE EXISTING SUBSTRATE AS RECOMMENDED BY THE MANUFACTURER. INSTALL AND CURE HIGH STRENGTH MORTAR PER MANUFACTURER RECOMMENDATIONS. INSTALL HIGH STRENGTH MORTAR AFTER MANHOLE LINER. COORDINATE INSTALLATION OF THE BENCH, CHANNEL, AND INVERT TO ALLOW INSTALLATION AND OPERATION OF STAINLESS STEEL GATES. PERFORM TESTING AS RECOMMENDED BY THE MANUFACTURER AND REPORT RESULTS TO THE ENGINEER.



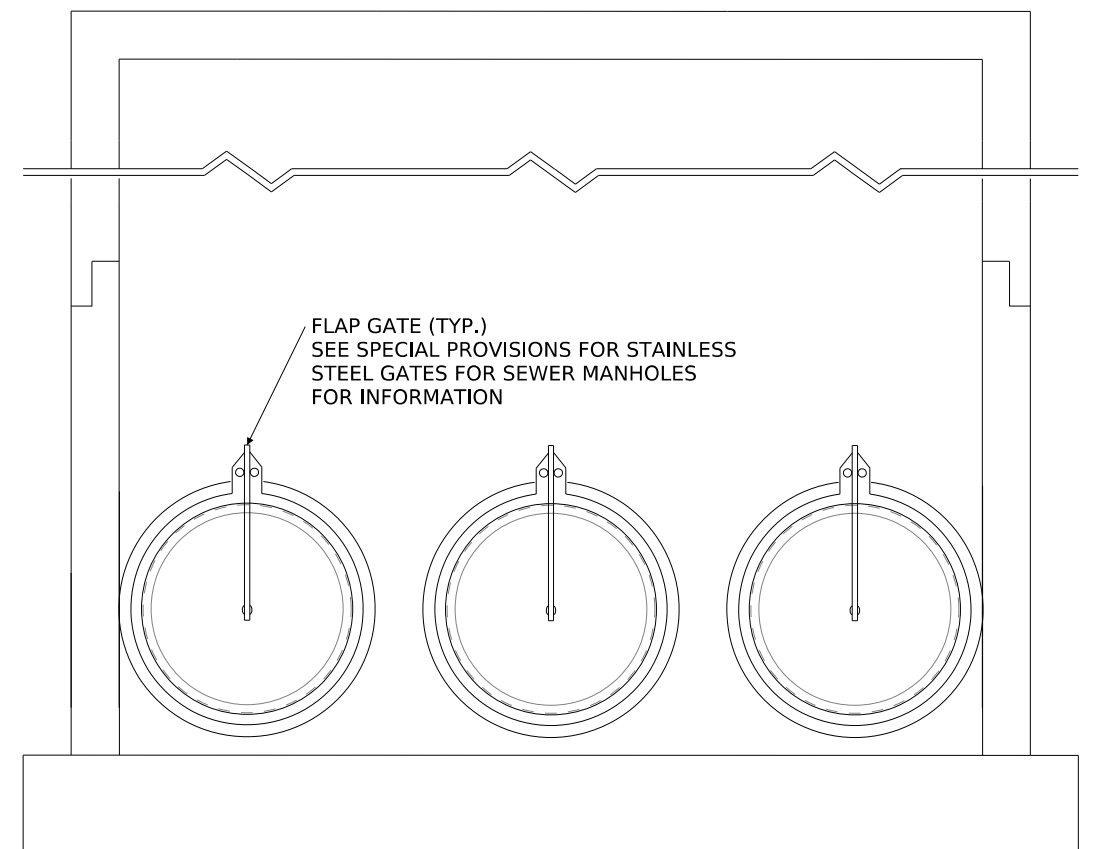
SANITARY SEWER GATE DETAILS



NOTES:

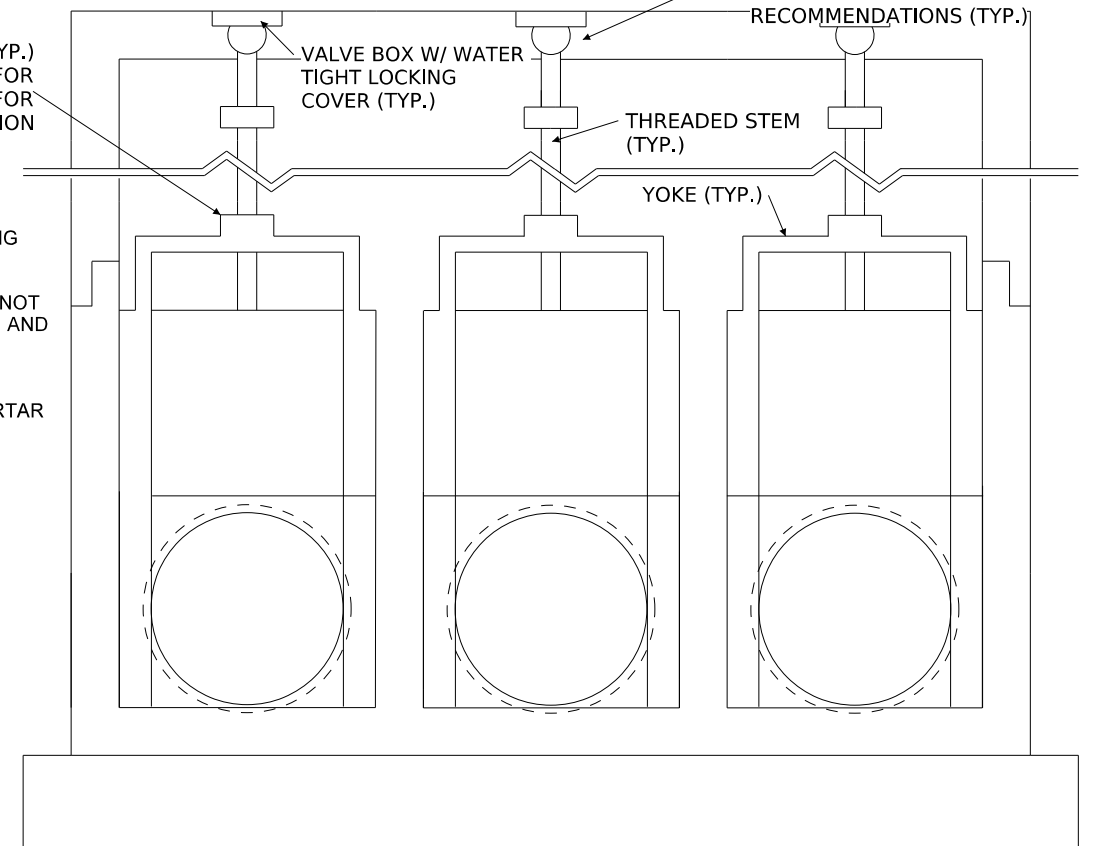
1. PIPES SHALL BE SUPPORTED AND/OR RESTRAINED DURING PLACEMENT OF CONCRETE ENCASEMENT TO MAINTAIN FLOWLINE AS APPROVED BY THE ENGINEER.

SANITARY SEWER CREEK CROSSING PROFILE

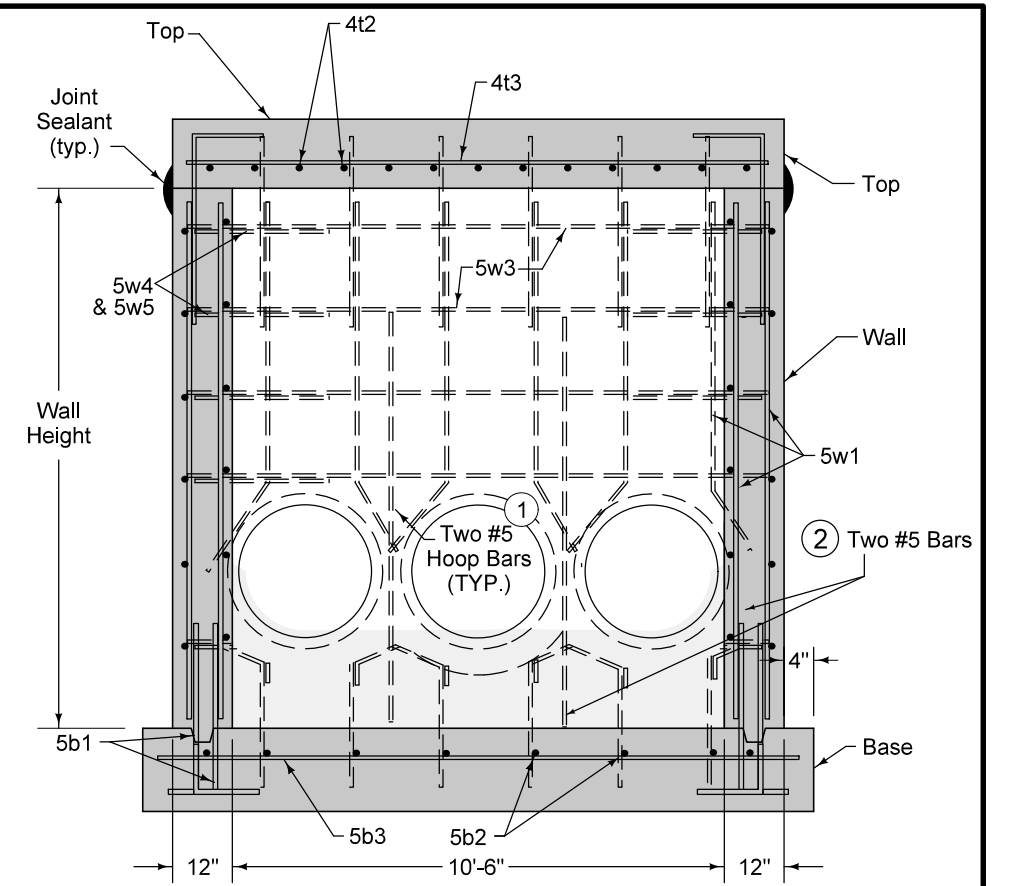
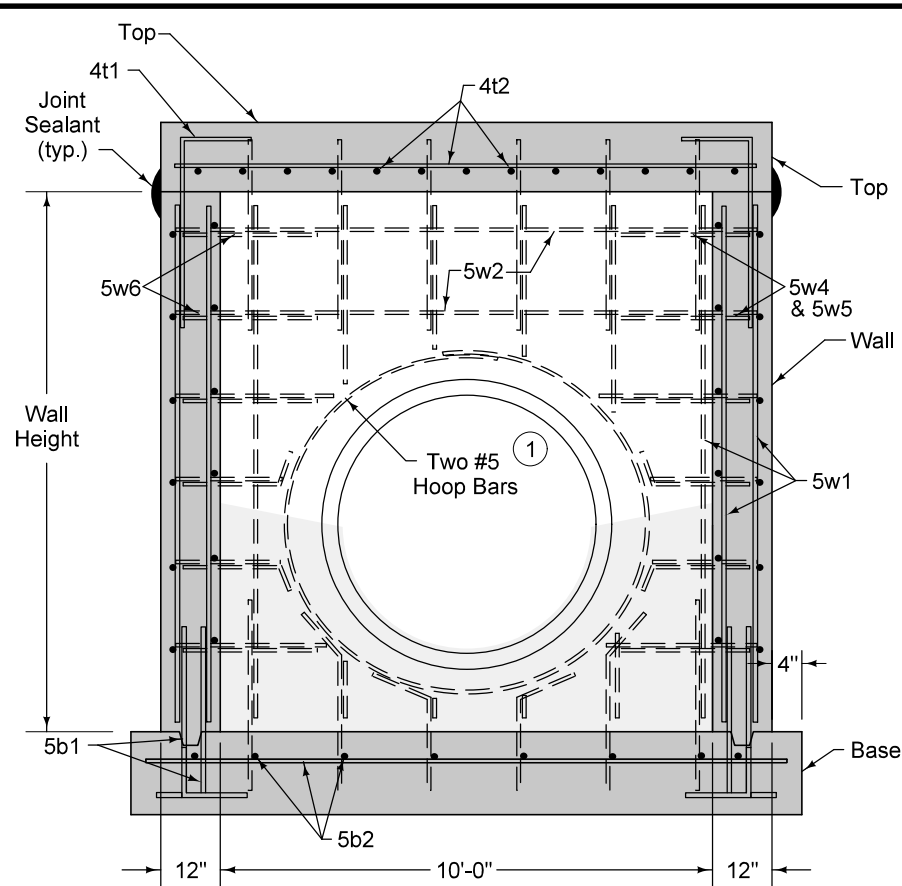
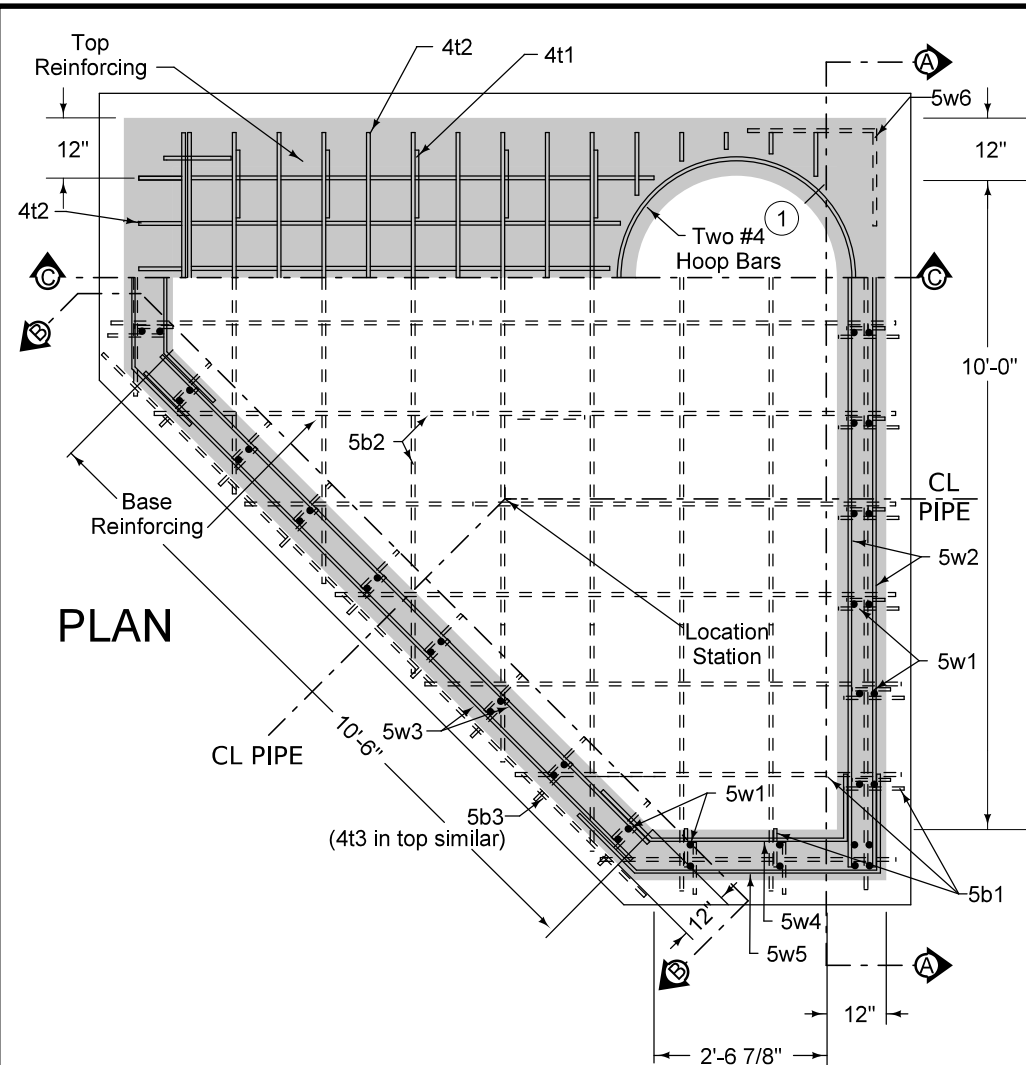


SLUICE GATE (TYP.)
SEE SPECIAL PROVISIONS FOR STAINLESS STEEL GATES FOR SEWER MANHOLES FOR INFORMATION

- NOTES:**
1. GATES SHALL HAVE MINIMUM OPENING MATCHING THE PIPES.
 2. GATE COMPONENTS INCLUDING BUT NOT LIMITED TO FRAME, ANCHORAGE, SEAL, AND OPERATING MECHANISMS SHALL BE DESIGNED BY MANUFACTURER
 3. SEE MSA.2 FOR HIGH STRENGTH MORTAR NOTES



SANITARY SEWER SLUICE GATE AND FLAP GATE DETAILS

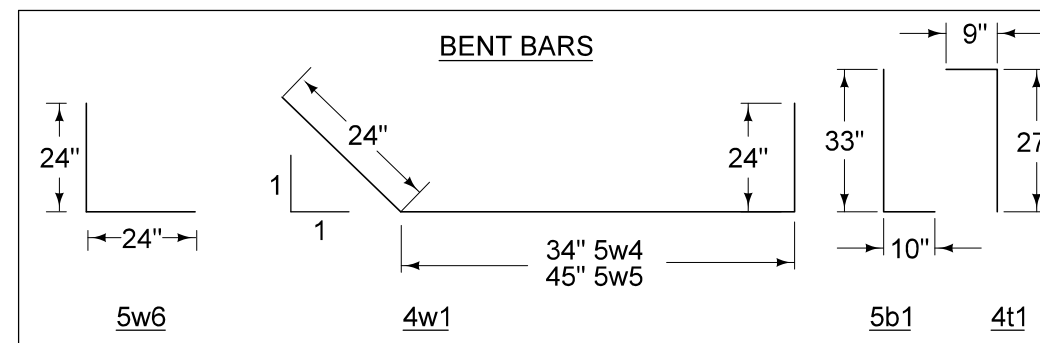


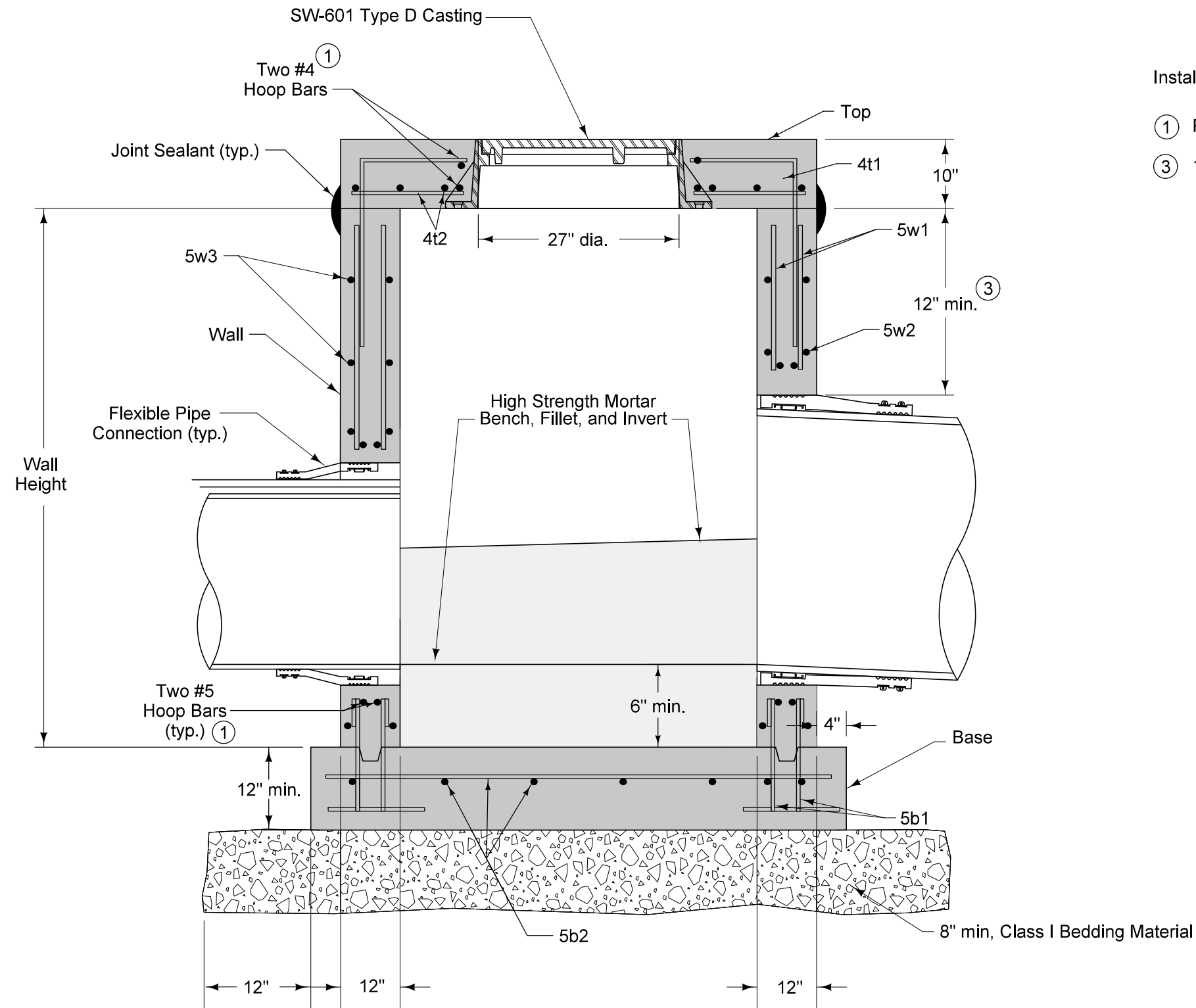
- ① Provide two hoop bars at top opening and at all pipe openings.
- ② Provide two #5 vertical bars outside and between each 24" diameter pipe opening as shown. Length of bar shall be from top of base and extend 36" above top of pipe.

NOTES:
MINIMUM CLEAR AS FOLLOWS
BASE = 3"
WALLS AND TOP = 2"

DETAILS NOT TO SCALE.
SEE REINFORCING BAR LIST FOR SPACING.

REINFORCING BAR LIST					
Mark	Size	Location	Shape	Length	Spacing
5b1	5	Base	└	43"	12"
5b2	5	Base	—	Varies	12"
5b3	5	Base	—	11'-4"	n/a
4t1	4	Top	┐	36"	12"
4t2	4	Top	—	Varies	6"
4t3	4	Top	—	11'-2"	n/a
5w1	5	Wall	—	Wall Height Minus 4"	12"
5w2	5	Wall	—	11'-8"	12"
5w3	5	Wall	—	11'-2"	12"
5w4	5	Wall	┐	6'-10"	12"
5w5	5	Wall	┐	7'-9"	12"
5w6	5	Wall	└	48"	12"





Install infiltration barrier.

- ① Provide two hoop bars at top opening and at all pipe openings.
- ③ 12 inch minimum wall height above all pipe openings.

NOTES:
MINIMUM CLEAR AS FOLLOWS
BASE = 3"
WALLS AND TOP = 2"

DETAILS NOT TO SCALE.
SEE REINFORCING BAR LIST FOR SPACING.

SECTION C-C

BYPASS PUMPING NOTES

Construction of the sanitary sewer shown on these plans will require bypass pumping in accordance with Section 2549.03, A, 4 of the Standard Specifications. The bypass pumping system shall also include the following:

- Firm capacity to handle required flow including a minimum of one pump on standby at all times.
- 24-hour in-person monitoring.
- A minimum of two pipes crossing the creek.
- Each pipe crossing the creek shall have closure valves on each side of the creek

Flow meter data is not available. Bypass pumping shall be designed for full pipe capacity of the existing sewer, estimated to be 29 MGD.

Dewatering of the existing and temporary bypass pipes shall be performed to prevent discharge of sewage into Goose Creek.

The Contractor shall maintain customer vehicle access to properties throughout bypass pumping activities. The Contractor shall coordinate deliveries of goods to affected businesses where delivery vehicles cannot access typical delivery locations due to bypass pumping system, including moving delivered goods from the street to typical delivery locations. Temporary access required to maintain property access not shown elsewhere in the plan shall be considered incidental to Bypass Pumping. Temporary access may include, but is not limited to, ramps or temporary granular access routes through existing easements. Include restoration to preconstruction conditions.

Bypass pumping shall include the costs of modifications, protection, repairs, and restoration to preconstruction condition of all existing fiberglass manholes and surrounding pavement or grade. During bypass pumping open manholes shall be protected with 6-ft locked chain link fence.

Engineer shall have 30 days to review Bypassing Plan. Plan shall include, but is not limited to, the following items:

- Pump sizes, capacities, and contingency for failure or overflow
- Pipe size, material, and layout including creek crossing support details if not carried on the bridge
- Flow calculations
- Emergency plan of action for failure of system, including but not limited to, pump failure or overflow
- Details and/or description of other bypass pumping requirements

The Contractor’s Bypassing Plan shall include a sequence of related work. Suggested sequence includes:

1. Construction Structures S-12 and S-13 and Pipe SP-12.
2. Install gates and apply liner to structures, including precast sections of Structures S-11 and S-14.
3. Install bypass pumping system.
4. Construct Structures S-11 and S-14 and Pipes SP-11 and SP-13, including patching of liner at joints in Structures S-11 and S-14.
5. Install high strength grout in structures.
6. Perform necessary inspection and testing.
7. Dewater and disassemble bypass, restore site.

110_12 1/13/23 POLLUTION PREVENTION PLAN This project is regulated by the requirements of the Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) General Permit No. 2 OR an Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) individual storm water permit. The Contractor shall carry out the terms and conditions of this permit and the Pollution Prevention Plan (PPP). This Base PPP includes information on Roles and Responsibilities, Project Site Description, Controls, Maintenance Procedures, Inspection Requirements, Non-Storm Water Controls, Potential Sources of Off Right-of-Way Pollution, and Definitions. This plan references other documents rather than repeating the information contained in the documents. A copy of this Base Pollution Prevention Plan, amended as needed during construction, will be readily available for review. All contractors shall conduct their operations in a manner that controls pollutants, minimizes erosion, and prevents sediments from entering waters of the state and leaving the highway right-of-way. The Contractor shall be responsible for compliance and implementation of the PPP for their entire contract. This responsibility shall be further shared with subcontractors whose work is a source of potential pollution as defined in this PPP. I. ROLES AND RESPONSIBILITES A. Designer: - Prepares Base PPP included in the project plan. - Prepares Notice of Intent (NOI) submitted to Iowa DNR. - Is signature authority on the Base PPP. If consultant designed, signature from Contracting Authority is also required. B. Contractor: - Signs a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP. All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP. - Designates a Water Pollution Control Manager (WPCM), who has the duties and responsibilities as defined in Section 2602 of the Standard Specifications. - Submits an Erosion Control Implementation Plan (ECIP) and ECIP updates according to Section 2602 of the Standard Specifications. - Installs and maintains appropriate controls. This work may be subcontracted as documented through Subcontractor Request Forms (Form 830231). - Supervises and implements good housekeeping practices according to Paragraph III, C, 2. - Conducts joint required inspections of the site with inspection staff. When Contractor is not mobilized on site, Contractor may delegate this responsibility to a trained or certified subcontractor. Contracting Authority also may waive joint inspection requirement during winter shutdown. In both circumstances, WPCM (or trained or certified delegate from the Contractor) is still responsible to review and sign inspection reports. - Complies with training and certification requirements of Section 2602 of the Standard Specifications. - Submits amended PPP site map according to Section 2602 of the Standard Specifications. C. Subcontractors: - Sign a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP if: responsible for sediment or erosion controls; involved in land disturbing activities; or perorming work that is a source of potential pollution as defined in this PPP. Subcontracted work items are identified in Subcontractor Request Forms (Form 830231). All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP. - Implement good housekeeping practices according to Paragraph III, C, 2. D. RCE/Project Engineer: - Is Project Storm Water Manager. - On projects where DOT is the Contracting Authority, is current with erosion control training or certification. - Takes actions necessary to ensure compliance with storm water requirements including, where appropriate, issuing stop work orders, and directing additional inspections at construction project sites that are experiencing problems with achieving permit compliance. - Orders the taking of measures to cease, correct, prevent, or minimize the consequences of non-compliance with the storm water requirements of the Applicable Permit. - Supervises all work necessary to meet storm water requirements at the Project, including work performed by contractors and subcontractors. - Requires employees, contractors, and subcontractors to take appropriate responsive action to comply with storm water requirements, including requiring any such person to cease or correct a violation of storm water requirements, and to order or recommend such other actions as necessary to meet storm water requirements. - Is familiar with the Project PPP and storm water site map. - On projects where DOT is Contracting Authority, is responsible for periodically monitoring inspection reports to determine whether deficiencies identified in inspection reports were adequately and timely addressed, and if not, has the authority and responsibility to direct immediate actions to correct the deficiencies. - Is the point of contact for the Project for regulatory officials, Inspector, contractors, and subcontractors regarding storm water requirements. - Is signature authority on Notice of Discontinuation. - Maintains an up-to-date record of contractors, subcontractors, and subcontracted work items through Subcontractor Request Forms (Form 830231). - Makes information to determine permit compliance available to the DNR upon their request.				110_12 1/13/23 POLLUTION PREVENTION PLAN E. Inspector: - Updates PPP through fieldbook entries and storm water site inspection reports if there is a change in design, construction, operation, or maintenance which has a significant effect on the discharge of pollutants from the project. - Makes information to determine permit compliance available to the DNR upon their request. - Conducts joint required inspections of the site with the contractor/subcontractor. - Completes an inspection report after each inspection. - Is signature authority on storm water inspection reports. II. PROJECT SITE DESCRIPTION A. This Pollution Prevention Plan (PPP) is for the construction of the Eastern Avenue over Goose Creek Bridge Replacement. B. This PPP covers approximately 1.5 acres with an estimated 1.5 acres being disturbed. The portion of the PPP covered by this contract has 1.5 acres disturbed. C. The PPP is located in an area of 1 soil association (Ackmore silt loam, 2 to 5 percent slopes). The listed runoff class is "Low". D. Storm Water Site Map is located in the R sheets. Proposed slopes are shown in cross sections, details, or standard road plans. Supplemental information is located in the Tabulations in the C or CE sheets. E. The base storm water site map is amended by contract modifications and progress payments (fieldbook entries) of completed erosion control work. Also, due to project phasing, erosion and sediment controls shown on project plans may not be installed until needed, based on site conditions. For example, silt fence ditch checks will typically not be installed until the ditch has been installed. Installed locations may also be modified from tabulation locations by field staff. Installed locations will be documented by fieldbook entries and amended PPP site map. F. Runoff from this work will flow into Goose Creek. III. CONTROLS A. The Contractor’s ECIP specified in Article 2602.03 of the Standard Specifications for accomplishment of storm water controls should clearly describe the intended sequence of major activities, and for each activity define the control measure and the timing during the construction process that the measure will be implemented. B. Preserve vegetation in areas not needed for construction. C. Sections 2601 and 2602 of the Standard Specifications define requirements to implement erosion and sediment control measures. Actual quantities used and installed locations may vary from the Base PPP and amendment of the plan will be documented via fieldbook entries, amended PPP site map, or by contract modification. Additional erosion and sediment control items may be required as determined by the inspector and/or contractor during storm water site inspections. If the work involved is not applicable to any contract items, the work will be paid for according to Article 1109.03 paragraph B of the Standard Specifications. 1. EROSION AND SEDIMENT CONTROLS a. Stabilization Practices - Site plans will ensure that existing vegetation or natural buffers are preserved where attainable and disturbed portions of the site will be stabilized. - Initialize stabilization of disturbed areas immediately after clearing, grading, excavating, or other earth disturbing activities have: - Permanently ceased on any portion of the site, or - Temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. - Staged permanent and/or temporary stabilizing seeding and mulching shall be completed as the disturbed areas are completed. Incomplete areas shall be stabilized according to paragraph III, C, 1, a, 2, b above. - Permanent and Temporary Stabilization practices to be used for this project are located in the storm water site map, Estimated Project Quantities (100-0A, 100-1A, or 100-1C), and Estimate Reference Information (100-4A) located in the C or R sheets. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation (105-4) in the C or R sheets. - Preservation of existing vegetation within right-of-way or easements will act as vegetative buffer strips. - Preservation of topsoil: Bid items to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C or R sheets. Additional information may be found in the Tabulations in the C or T Tabulation sheets, or is referenced in Section 2105 of the Standard Specifications. b. Structural Practices - Structural practices will be implemented to divert flows from exposed soils and detain or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Additionally, structural practices may include: silt basins that provide 3600 cubic feet of storage per acre drained or equivalent sediment controls, outlet structures that withdraw water from surface when discharging basins, and controls to direct storm water to vegetated areas. - Structural practices to be used for this project are located in the storm water site map, Estimated Project Quantities (100-0A, 100-1A, or 100-1C), and Estimate Reference Information (100-4A) located in the C or R sheets, as well as all other item specific Tabulations. Typical drawings detailing construction of the devices to be used on this project can be found on the B or R sheets or are referenced in the Standard Road Plans Tabulation (105-4) located in the C or R sheets. c. Storm Water Management					
FILE NO.	ENGLISH	DESIGN TEAM	WHKS & CO.	CITY OF DAVENPORT COUNTY	PROJECT NUMBER	BRM-1827(698) - -8N-82	SHEET NUMBER	RC.1	

8/25/2025 8:04:30 AM

06HN.FRB@PMANN@IOWAID

POLLUTION PREVENTION PLAN

Measures shall be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. This may include velocity dissipation devices at discharge locations and along length of outfall channel as necessary to provide a non-erosion velocity flow from structure to water course. If included with this project, these items are located in the storm water site map and Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C or R sheets, as well as all other item specific Tabulations. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation. The installation of these devices may be subject to Section 404 of the Clean Water Act.

2. OTHER CONTROLS

- Contractor disposal of unused construction materials and construction material wastes shall comply with applicable state and local waste disposal, sanitary sewer, or septic system regulations. In the event of a conflict with other governmental laws, rules and regulations, the more restrictive laws, rules or regulations shall apply.
- a. Vehicle Entrances and Exits - Construct and maintain entrances and exits to prevent tracking of sediments onto roadways.
 - b. Material Delivery, Storage and Use - Implement practices to prevent discharge of construction materials during delivery, storage, and use.
 - c. Stockpile Management - Install controls to reduce or eliminate pollution of storm water from stockpiles of soil and paving.
 - d. Waste Disposal - Do not discharge any materials, including building materials, into waters of the state, except as authorized by a Section 404 permit.
 - e. Spill Prevention and Control - Implement chemical spill and leak prevention and response procedures to contain and clean up spills and prevent material discharges to the storm drain system and waters of the state.
 - f. Concrete Residuals and Washout Wastes - Waste shall not be discharged to a surface water and is not allowed to adversely affect a water of the state. Designate temporary concrete washout facilities for rinsing out concrete trucks. Provide directions to truck drivers where designated washout facilities are located. Designated washout areas should be located at least 50 feet away from storm drains, streams or other water bodies. Care should be taken to ensure these facilities do not overflow during storm events.
 - g. Concrete Grooving/Grinding Slurry - Do not discharge slurry to a waterbody or storm drain. Slurry may be applied on foreslopes or removed from the project.
 - h. Vehicle and Equipment Storage and Maintenance Areas - Perform on site fueling and maintenance in accordance with all environment laws such as proper storage of onsite fuels and proper disposal of used engine oil or other fluids on site. Employ washing practices that prevent contamination of surface and ground water from wash water. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.
 - i. Litter Management - Ensure employees properly dispose of litter. Minimize exposure of trash if exposure to precipitation or storm water would result in a discharge of pollutants.
 - j. Dewatering - Properly treat water to remove suspended sediment before it re-enters a waterbody or discharges off-site. Measures are also to be taken to prevent scour erosion at dewatering discharge point.

3. APPROVED STATE OR LOCAL PLANS

During the course of this construction, it is possible that situations will arise where unknown materials will be encountered. When such situations are encountered, they will be handled according to all federal, state, and local regulations in effect at the time.

IV. MAINTENANCE PROCEDURES

The Contractor is required to maintain all temporary erosion and sediment control measures in proper working order, including cleaning, repairing, or replacing them throughout the contract period. This shall begin when the features have lost 50% of their capacity.

V. INSPECTION REQUIREMENTS

- A. Inspections shall be made jointly by the Contractor and the Contracting Authority's inspector at least once every seven calendar days. Storm water site inspections will include:
 - 1. Date of the inspection.
 - 2. Summary of the scope of the inspection.
 - 3. Name and qualifications of the personnel making the inspection.
 - 5. Review of erosion and sediment control measures within disturbed areas for the effectiveness in preventing impacts to receiving waters.
 - 6. Major observations related to the implementation of the PPP.
 - 7. Identification of corrective actions required to maintain or modify erosion and sediment control measures.
- B. Include storm water site inspection reports in the Amended PPP. Incorporate any additional erosion and sediment control measures determined as a result of the inspection. Immediately begin corrective actions on all deficiencies found within 3 calendar days of the inspection and complete within 7 calendar days following the inspection. If it is determined that making the corrections less than 72 hours after the inspection is impracticable, it should be documented why it is impracticable and indicate an estimated date by which the corrections will be made.

VI. NON-STORM WATER DISCHARGES

This includes subsurface drains (i.e. longitudinal and standard subdrains) and slope drains. The velocity of the discharge from

POLLUTION PREVENTION PLAN

these features may be controlled by the use of headwalls or blocks, Class A stone, erosion stone or other appropriate materials. This also includes uncontaminated groundwater from dewatering operations, which will be controlled as discussed in Section III of the PPP.

VII. POTENTIAL SOURCES OF OFF RIGHT-OF-WAY (ROW) POLLUTION

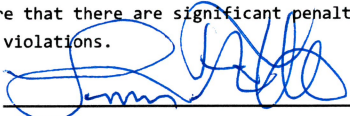
Silts, sediment, and other forms of pollution may be transported onto highway right-of-way (ROW) as a result of a storm event. Potential sources of pollution located outside highway ROW are beyond the control of this PPP. Pollution within highway ROW will be conveyed and controlled per this PPP.

VIII. DEFINITIONS

- A. Base PPP - Initial Pollution Prevention Plan.
- B. Amended PPP - Base PPP amended during construction. May include Plan Revisions or Contract Modifications for new items, storm water site inspection reports, fieldbook entries made by the inspector, amended PPP site map by the Contractor, ECIP, NOI, co-permittee certifications, and Subcontractor Request Forms. Items amending the PPP are stored electronically and are readily available upon request.
- C. Fieldbook Entries - This contains the inspector's daily diary and bid item postings.
- D. Controls - Methods, practices, or measures to minimize or prevent erosion, control sedimentation, control storm water, or minimize contaminants from other types of waste or materials. Also called Best Management Practices (BMPs).
- E. Signature Authority - Representative authorized to sign various storm water documents.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


Signature


Printed or Typed Name

Signature

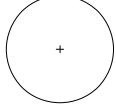
Printed or Typed Name

PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE							
Possible Standards: EC-204							
Line No.	Station From	Station To	Side	Sediment Control Device Type	Diameter Size	Length (LF)	Remarks
							PERIMETER
1.0	99+35.00	99+80.00	Right	Perimeter and Slope	12 inch	90.00	
2.0	99+80.00	99+90.00	Left	Perimeter and Slope	12 inch	170.00	
3.0	100+10.00	100+75.00	Right	Perimeter and Slope	12 inch	90.00	
4.0	100+15.00	100+50.00	Left	Perimeter and Slope	12 inch	110.00	
5.0	98+75.00	98+85.00	Left	Perimeter and Slope	12 inch	30.00	
6.0	101+15.00	101+25.00	Left	Perimeter and Slope	12 inch	20.00	
99.0							
100.0							DITCH CHECK
101.0	98+75.00	98+75.00	Right	Ditch Check	12 inch	30.00	
102.0	98+25.00	98+25.00	Right	Ditch Check	12 inch	30.00	
103.0	97+35.00	97+35.00	Right	Ditch Check	12 inch	30.00	
104.0	97+10.00	97+10.00	Left	Ditch Check	12 inch	30.00	
105.0	97+35.00	97+35.00	Left	Ditch Check	12 inch	30.00	
106.0	97+40.00	97+40.00	Left	Ditch Check	12 inch	30.00	
107.0	97+45.00	97+45.00	Left	Ditch Check	12 inch	30.00	
199.0							
200.0							INLET PERIMETER PROTECTION
201.0	98+05.00	98+05.00	Right	Perimeter and Slope	12 inch	10.00	Structure:11 - DR-201 Type 1 Intake
202.0	97+65.00	97+65.00	Right	Perimeter and Slope	12 inch	10.00	Structure:12 - SW-512 Type 2 Intake
203.0	97+50.00	97+50.00	Left	Perimeter and Slope	12 inch	10.00	Structure:22 - SW-512 Type 2 Intake
203.5							
204.0					12 inch	190.00	25% of Total Value added for Contingency
204.5							
205.0					12 inch	940.00	TOTAL

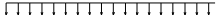
100_19
10/15/24

100_37 4/16/24 GRATE INTAKE SEDIMENT FILTER BAG Possible Standard Road Plan : EC-604					
Location Station	Side	Installation (Each)	Maintenance (Each)	Removal (Each)	Remarks
96+86.00	Right	1.0	1	1.0	
96+92.00	Left	1.0	1	1.0	

LINE STYLE LEGEND OF LANDSCAPE SHEETS	
LINESTYLE	Design Element
-----	Living Snow Fence Single Row
-----	Living Snow Fence Double Row
_____	Mechanical Edge

CELL LEGEND OF LANDSCAPE SHEETS		
CELL	Design Element	Plant Diameter
	Clearing	
	Proposed Shrub	
	Proposed Understory Tree	
	Proposed Conifer Tree	
	Proposed Overstory Tree	

PATTERN LEGEND OF LANDSCAPE SHEETS	
	Brush Clearing
	Spray Area
	Clearing & Grubbing

LINE STYLE LEGEND OF EROSION CONTROL SHEETS	
LINESTYLE	Design Element
	Silt Fence
	Perimeter and Slope Sediment Control Device (9")
	Perimeter and Slope Sediment Control Device (12")
	Perimeter and Slope Sediment Control Device (20")
	Open-Throat Curb Intake Sediment Filter
	Concentrated Flow
	Rock Check and Rock Check Dam
	Sheet Flow

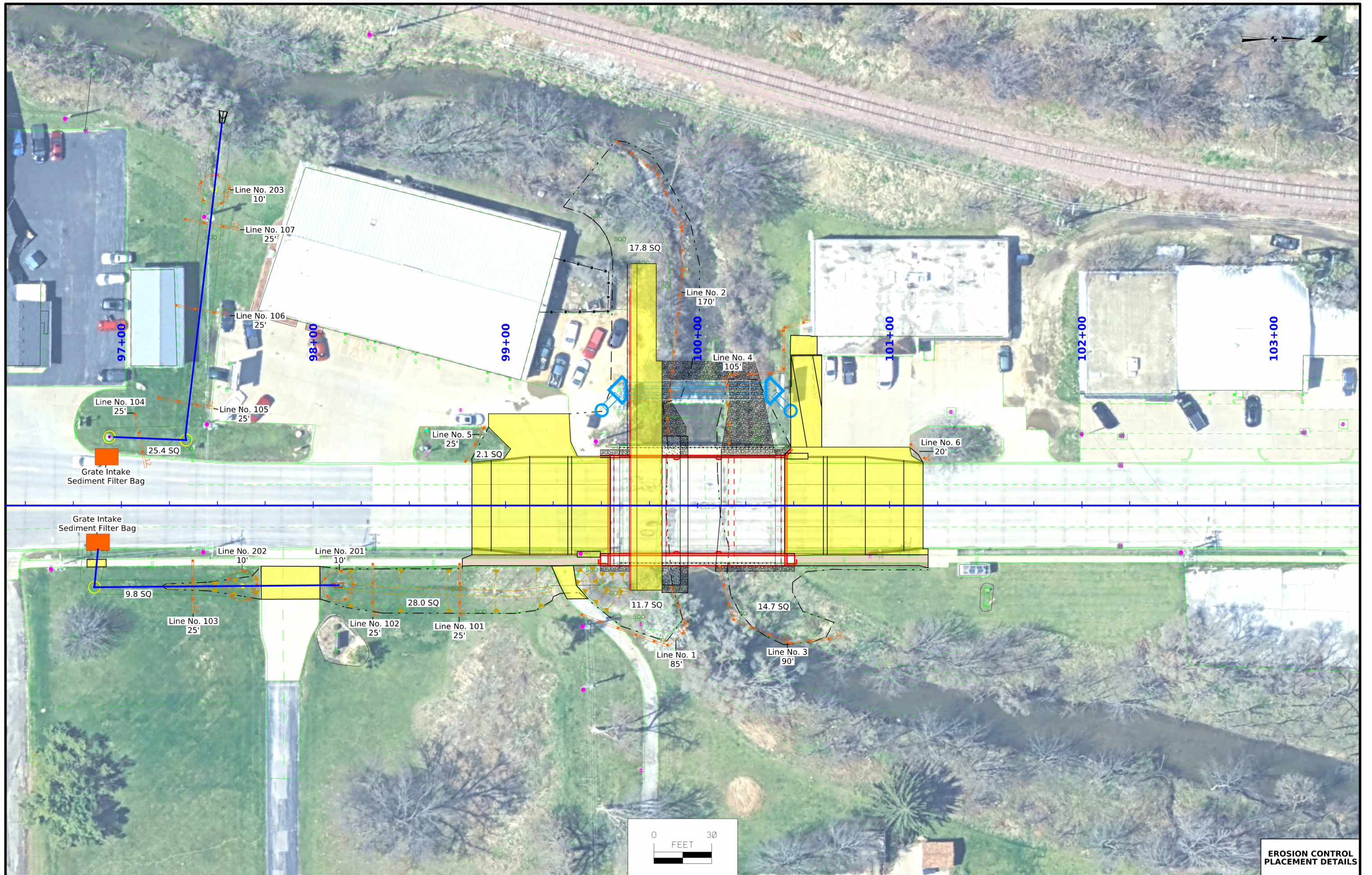
CELL LEGEND OF EROSION CONTROL SHEETS	
CELL	Design Element
	Temporary Sediment Control basin
	Erosion Control for Circular Intake or Manhole Well
	Erosion Control for Rectangular Intake or Manhole Well
	Grate Intake Sediment Filter Bag
	Silt Basin
	Silt Fence Tail
	Stormwater Drainage Basin Discharge Point

PLAN VIEW COLOR LEGEND OF EROSION CONTROL SHEETS				
LINEWORK	Design Color No.			
Green	(2)		Existing Topographic Features and Labels	
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation	
Magenta	(5)		Existing Utilities	
Black	(0)		Permanent Erosion Control Features	
Blaze Orange	(222)		Temporary Erosion Control Features	
SHADING	Design Color No.		Transparency	
Citron	(234)		Mulching, All Types	50%
Light Brown	(238)		Special Ditch Control, Wood Excelsior Mat	0%
Grass Green	(233)		8FT Mow Strip	50%
Red	(3)		Delineates Restricted Areas	0%

PATTERN LEGEND OF EROSION CONTROL SHEETS	
	Seeding and Fertilizing
	Seeding and Fertilizing (Rural)
	Seeding and Fertilizing (Urban)
	Native Grass Seeding
	Salt Tolerant Seeding
	Wetland Grass Seeding
	Wildflower Seeding
	Sodding
	Turf Reinforcement Mat Type 1
	Turf Reinforcement Mat Type 2
	Turf Reinforcement Mat Type 3
	Turf Reinforcement Mat Type 4
	Slope Protection, Wood Excelsior Mat
	Transition Mat
	Rock Features, Permanent
	Rock Features, Temporary

EROSION CONTROL
LEGEND AND SYMBOL
INFORMATION SHEET

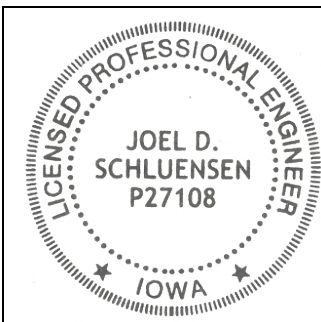
(COVERS SHEET SERIES R)



EROSION CONTROL
PLACEMENT DETAILS

Boring Log No. 1

Model Layer	Graphic Log	Location: See Exploration Plan		Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	Sample ID	Water Content (%)	Atterberg Limits	Percent Fines
		Latitude: 41.5587° Longitude: -90.5515°									LL-PL-PI	
1		Depth (Ft.)		Elevation: 636.9 (Ft.)								
		0.7	CONCRETE , approx. 9"		636.2							
			FILL - SANDY LEAN CLAY , brown, (IaDOT Classification: Stiff Silty Clay Fill)									
2		3.0	FILL - POORLY GRADED SAND , trace gravel, fine to coarse grained, gray, (IaDOT Classification: Silty Sand Fill)		633.9	X	10	2-2-4 N=6	1	22.5		
		5.0	FILL - LEAN CLAY , trace sand, dark gray, (IaDOT Classification: Stiff Silty Clay Fill)		631.9	X	8	3-9-8 N=17	2	10.9		
		7.0	LEAN CLAY (CL) , trace sand, dark gray, (IaDOT Classification: Soft Silty Clay)		629.9	X	10	5-5-7 N=12	3	17.8		
			LEAN CLAY (CL) , with sand, trace organics, dark gray, soft, (IaDOT Classification: Soft Silty Clay)									
		13.5	LEAN CLAY WITH SILT (CL) , trace organics, dark gray and gray, medium stiff to stiff, (IaDOT Classification: Stiff Silty Clay)		623.4	X	14	0-1-1 N=2	4	35.3	39-19-20	73.2
3		23.0	FAT CLAY (CH) , dark gray, medium stiff, (IaDOT Classification: Stiff Silty Clay)		613.9	X	2	5-9-5 N=14	5	18.5		

Facilities | Environmental | **Geotechnical** | Materials

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Joel Schumacher

April 1, 2025

Joel D. Schluensen, P.E.

Date _____

My license renewal date is December 31, 2026.

Pages or sheets covered by this seal: SPS.1-SPS.4

Boring Log No. 1

Model Layer	Graphic Log	Location: See Exploration Plan Latitude: 41.5587° Longitude: -90.5515°	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	Sample ID	Water Content (%)	Atterberg Limits LL-PL-PI	Percent Fines
3		Depth (Ft.)	Elevation: 636.9 (Ft.)								
		32.0	604.9								
		FAT CLAY (CH) , dark gray, stiff to very stiff, (IaDOT Classification: Firm Glacial Clay)									
		37.0	599.9			18	5-6-9 N=15	9	26.6		
		Auger Refusal at 37 Feet				0	50/0*	10			
See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any). See Supporting Information for explanation of symbols and abbreviations. Elevation Reference: Elevations were provided by others.				Water Level Observations Not observed prior to Wash Bore Not recorded after drilling due to Wash Bore				Drill Rig 748 Hammer Type Automatic Driller RP			
Notes				Advancement Method Continuous-Flight Solid-Stem Auger from 0 - 5 feet. Wash Bore from 5 feet to end of boring. Abandonment Method Boring backfilled with auger cuttings upon completion.				Logged by ND Boring Started 01-24-2025 Boring Completed 01-24-2025			

Facilities | Environmental | **Geotechnical** | Materials

Design For 0° Skew

90'-0" x 50'-0" Continuous Concrete
Slab Bridge w/5'-4" Sidewalk

27'-6" End Spans

35'-0" Interior Span

Soil Boring Log

STA. 100+00.00 (Eastern Ave)

Turn-in Date: November 2025

City of Davenport

Boring Log No. 2

Model Layer	Graphic Log	Location: See Exploration Plan Latitude: 41.5586° Longitude: -90.5515°	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	Sample ID	Water Content (%)	Atterberg Limits	
										LL-PL-PI	Percent Fines
1		Depth (Ft.) Elevation: 637.1 (Ft.)									
		CONCRETE BRIDGE DECK , approx. 20"	1.7								
		AIR BETWEEN BRIDGE DECK AND GOOSE CREEK									
		SILTY CLAYEY SAND (SC-SM) , fine to medium grained, dark brown, very loose to loose, (IaDOT Classification: Silty Sand)	7.0								
		SILTY SAND (SM) , with limestone fragments, fine to coarse grained, gray, medium dense, (IaDOT Classification: Fine Sand)	13.0								
		FAT CLAY (CH) , dark gray, medium stiff, (IaDOT Classification: Stiff Silty Clay)	18.0								
		LEAN CLAY WITH SILT (CL) , dark gray, medium stiff, (IaDOT Classification: Stiff Silty Clay)	28.0								
		Auger Refusal at 36 Feet									
		Water Level Observations Not recorded due to Wash Bore									
		Hammer Type Automatic									
		Driller RP									
		Advancement Method Cased from 0 to 7 feet Wash Bore from 7 feet to end of boring									
		Abandonment Method Boring backfilled with auger cuttings upon completion. Bridge deck patched and hole cemented after drilling.									
		Logged by AH									
		Boring Started 02-27-2025									
		Boring Completed 02-27-2025									

Facilities | Environmental | **Geotechnical** | Materials

Boring Log No. 2

Model Layer	Graphic Log	Location: See Exploration Plan Latitude: 41.5586° Longitude: -90.5515°	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	Sample ID	Water Content (%)	Atterberg Limits	
										LL-PL-PI	Percent Fines
3		Depth (Ft.) Elevation: 637.1 (Ft.)									
		FAT CLAY (CH) , trace sand, dark gray, stiff, (IaDOT Classification: Firm Glacial Clay)	32.0								
		Water Level Observations Not recorded due to Wash Bore									
		Hammer Type Automatic									
		Driller RP									
		Advancement Method Cased from 0 to 7 feet Wash Bore from 7 feet to end of boring									
		Abandonment Method Boring backfilled with auger cuttings upon completion. Bridge deck patched and hole cemented after drilling.									
		Logged by AH									
		Boring Started 02-27-2025									
		Boring Completed 02-27-2025									

Facilities | Environmental | **Geotechnical** | Materials

Boring Log No. 3

Model Layer	Graphic Log	Location: See Exploration Plan		Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	Sample ID	Water Content (%)	Atterberg Limits	Percent Fines					
		Latitude: 41.5586° Longitude: -90.5515°	Elevation: 637.0 (Ft.)								LL-PL-PI						
1		CONCRETE BRIDGE DECK , approx. 20"		1.7	635.3												
		AIR BETWEEN BRIDGE DECK AND GOOSE CREEK															
3		10.0 SANDY LEAN CLAY (CL) , trace organics, dark gray, very soft, (IaDOT Classification: Very Soft Silty Clay)		627													
		13.0 LEAN CLAY (CL) , trace sand, dark gray, medium stiff, (IaDOT Classification: Stiff Silty Clay)		624		X	3	0-1-0 N=1	1	32.5							
		15.0 LEAN CLAY WITH SILT (CL) , gray, stiff, (IaDOT Classification: Firm Silty Clay)		622		X	12	2-1-5 N=6	2	23.8							
						X	10	4-6-7 N=13	3	25.4							
		19.5 FAT CLAY (CH) , dark gray, very stiff, (IaDOT Classification: Firm Glacial Clay)		617.5		X	10	4-8-9 N=17	4	21.1							
						X	16	6-7-9 N=16	5	31.6	71-23-48	98.4					
		26.0 LEAN CLAY WITH SILT (CL) , gray, stiff, (IaDOT Classification: Firm Silty Glacial Clay)		611		X	13	4-5-4 N=9	6	25.5							
See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any). See Supporting Information for explanation of symbols and abbreviations. Elevation Reference: Elevations were provided by others.												Water Level Observations Not recorded due to Wash Bore				Drill Rig 416 Hammer Type Automatic Driller RP	
Notes				Advancement Method Cased from 0 to 10 feet Wash Bore from 10 feet to end of boring				Logged by AH Boring Started 02-27-2025 Boring Completed 02-27-2025									
Abandonment Method Boring backfilled with auger cuttings upon completion. Bridge deck patched and hole cemented after drilling.																	

Boring Log No. 4

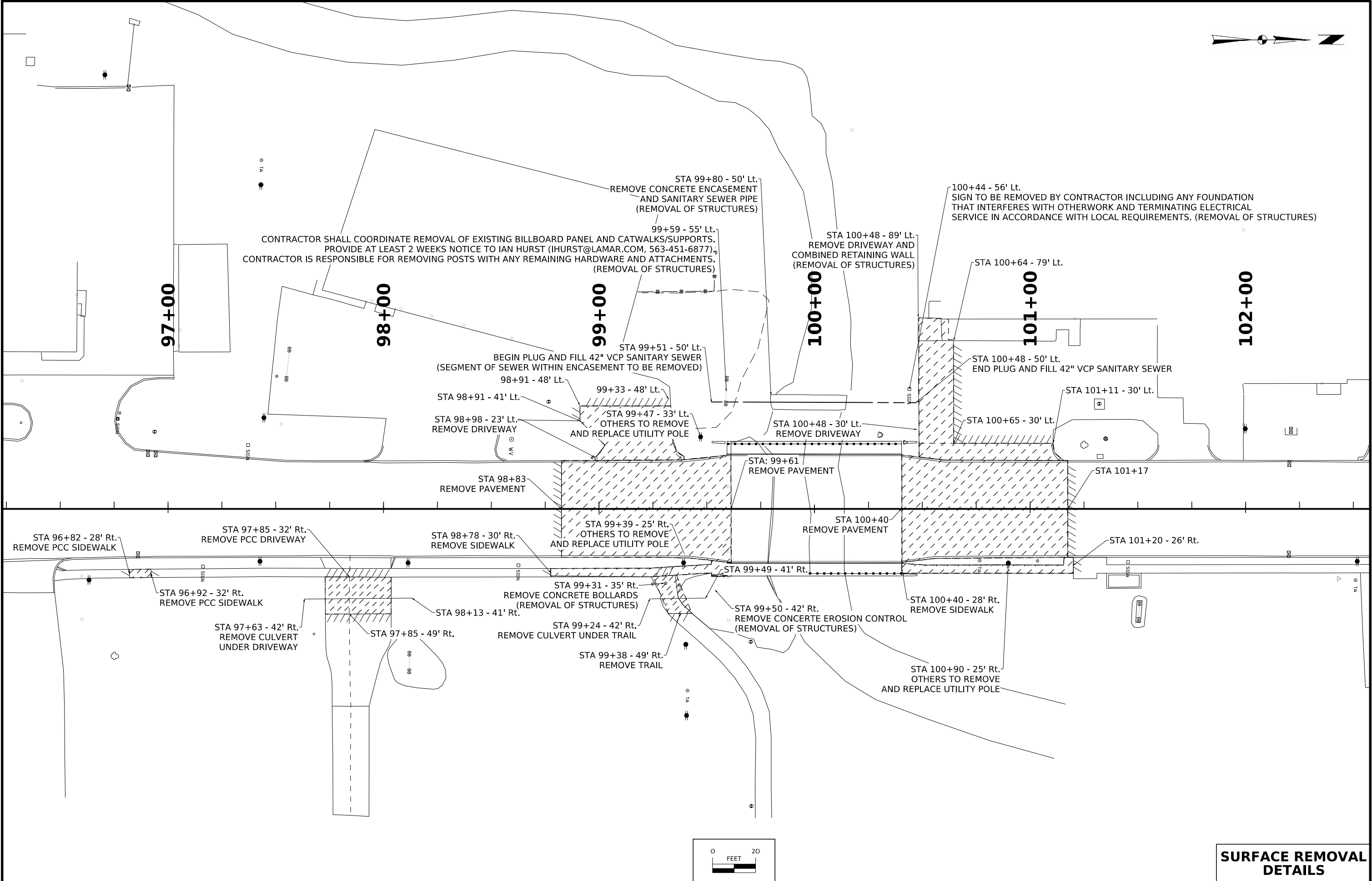
Model Layer	Graphic Log	Location: See Exploration Plan		Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	Sample ID	Water Content (%)	Atterberg Limits		Percent Fines
		Latitude: 41.5585° Longitude: -90.5515°	Elevation: 636.7 (Ft.)								LL-PL-PI		
1		0.7	CONCRETE, approx. 9"	636									
2		1.0	FILL - CRUSHED LIMESTONE, approx. 3" (IaDOT Classification: Gravelly Sand Fill)	635.7									
		3.0	FILL - FAT CLAY, trace sand, gray and dark gray, (IaDOT Classification: Stiff Silty Clay Fill)	633.7		12	5-3-6 N=9	1	19.9				
		5.0	FILL - POORLY GRADED SAND, trace crushed limestone, fine to coarse grained, dark brown, (IaDOT Classification: Fine Sand Fill)	631.7		5	5-14-5 N=19	2	16.9				
		7.0	FILL - LEAN CLAY, trace sand, dark brown, (IaDOT Classification: Stiff Silty Clay)	629.7		4	5-6-7 N=13	3	22.0				
3		17.0	LEAN CLAY (CL), with sand, trace organics and gravel, dark gray, soft to medium stiff, (IaDOT Classification: Soft Silty Clay)	619.7									
		23.0	LEAN CLAY (CL), with sand, gray, stiff, (IaDOT Classification: Firm Silty Clay)	613.7									
		28.0	SILTY SAND (SM), fine grained, gray, medium dense, (IaDOT Classification: Fine Sand)	608.7									
			FAT CLAY (CH), gray, stiff to very stiff, (IaDOT Classification: Firm Silty Clay)										
See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any). See Supporting Information for explanation of symbols and abbreviations. Elevation Reference: Elevations were provided by others.				Water Level Observations ▽ 12" while drilling ▽ 10" after drilling							Drill Rig 748 Hammer Type Automatic Driller RP		
Notes				Advancement Method Continuous-Flight Solid-Stem Auger							Logged by ND		
				Abandonment Method Boring backfilled with auger cuttings upon completion.							Boring Started 01-23-2025 Boring Completed 01-23-2025		

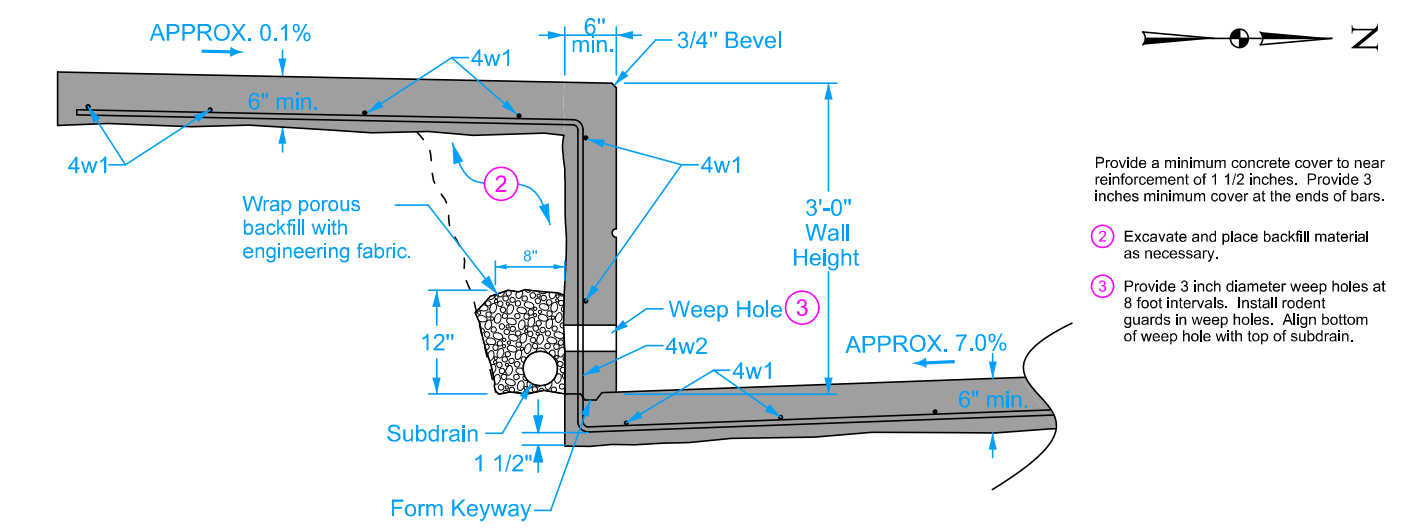
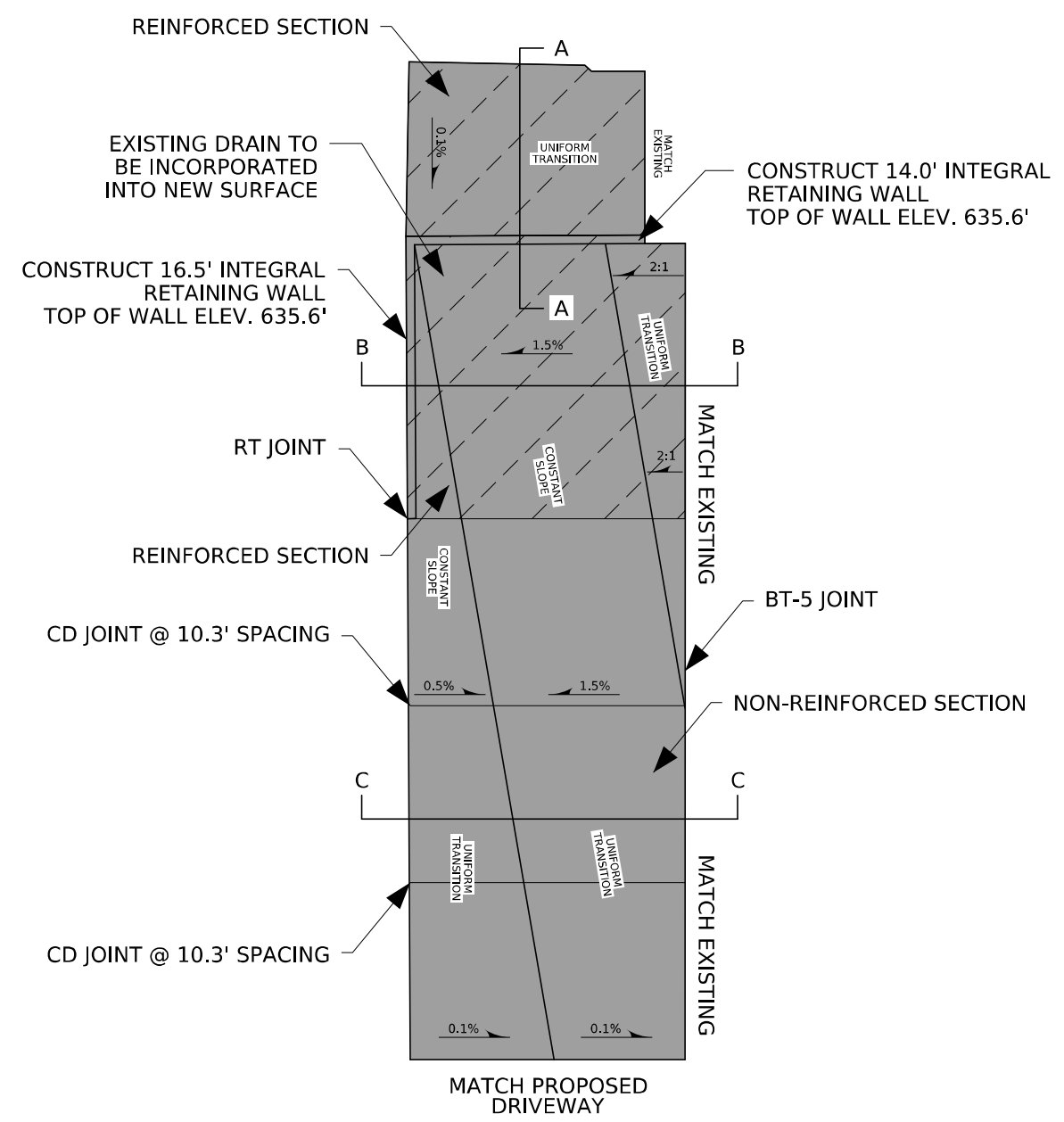
Facilities | Environmental | **Geotechnical** | Materials

Boring Log No. 4

Model Layer		Location: See Exploration Plan	Depth (Ft.)	Elevation: 636.7 (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	Sample ID	Water Content (%)	Atterberg Limits	Percent Fines
Graphic Log		Latitude: 41.5585° Longitude: -90.5515°	Depth (Ft.)	Elevation: 636.7 (Ft.)							LL-PL-PI	
3		FAT CLAY (CH) , gray, stiff to very stiff, (1aDOT Classification: Firm Silty Clay) (<i>continued</i>)	33.0	603.7								
		LEAN CLAY (CL) , gray, medium stiff to stiff, (1aDOT Classification: Stiff Silty Clay)	38.0	598.7								
		SANDY LEAN CLAY (CL) , gray, very stiff, (1aDOT Classification: Firm Sandy Glacial Clay)	43.0	593.7								
4		FAT CLAY (CH) , gray and yellowish brown, hard, (residual soil) (1aDOT Classification: Glacial Material)	43.0	593.7								
		Boring Terminated at 55 Feet	55.0	581.7								
See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any). See Supporting Information for explanation of symbols and abbreviations. Elevation Reference: Elevations were provided by others.					Water Level Observations  12' while drilling  10' after drilling					Drill Rig 748 Hammer Type Automatic Driller RP Logged by ND Boring Started 01-23-2025 Boring Completed 01-23-2025		
Notes					Advancement Method Continuous-Flight Solid-Stem Auger Abandonment Method Boring backfilled with auger cuttings upon completion.							

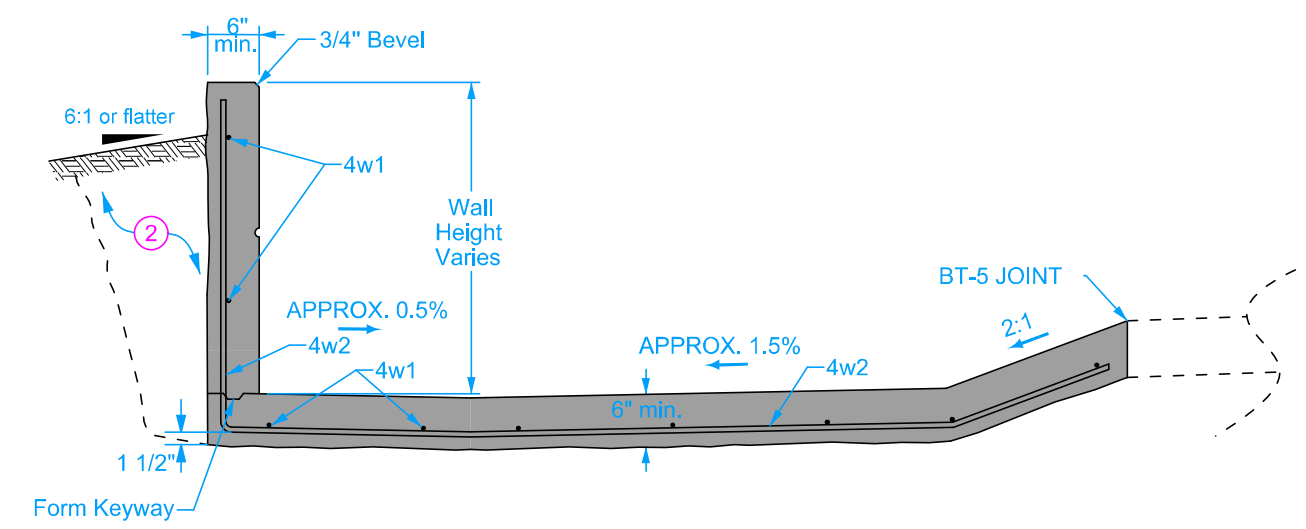
Facilities | Environmental | **Geotechnical** | Materials





- Provide a minimum concrete cover to near reinforcement of 1 1/2 inches. Provide 3 inches minimum cover at the ends of bars.
- 2 Excavate and place backfill material as necessary.
- 3 Provide 3 inch diameter weep holes at 8 foot intervals. Install rodent guards in weep holes. Align bottom of weep hole with top of subdrain.

DETAIL A - A LOADING DOCK WALL TYPICAL SECTION



DETAIL B - B LOADING DOCK WALL TYPICAL SECTION



DETAIL C - C LOADING DOCK PAVEMENT TYPICAL SECTION

LOADING DOCK RECONSTRUCTION DETAILS

NOT TO SCALE

General Notes:

This design is for the replacement of the existing 81’-0” x 48’-0” Concrete Slab Bridge on Eastern Ave (South Bridge), Sta. 100+00.00, over Goose Creek in the City of Davenport, in Scott County, with a year of construction of 1978. Electronic plans of the existing structure are available to the Contractor as part of the e-Files supplied with the contract documents.

The Lump sum bid for "Removal of Existing Bridge" shall include removal, by the Contractor, of the existing bridge and rails. Removals shall be in accordance with Section 2401, of the Standard Specifications.

Faint lines on plans indicate the existing structure.

This bridge is designed for HL-93 Loading, plus 20 lbs. per square foot of roadway for future wearing surface.

The City and Utility Companies whose facilities are shown on the plans or known to be within the construction limits shall be notified by the Bridge Contractor of the construction starting date.

These bridge plans label all reinforcing steel with english notation (5a1 is 5⁄8 inch diameter bar). English reinforcing steel received in the field may display the following "Bar Designation". The "Bar Designation" is the stamped impression on the reinforcing bars, and is equivalent to the bar diameter in millimeters.

English Size	3	4	5	6	7	8	9	10	11
Bar Designation	10	13	16	19	22	25	29	32	36

Minimum clear distance from face of concrete to near reinforcing bar is to be 2” unless otherwise noted or shown.

All reinforcing bars and bars noted as dowels supplied for this structure shall be deformed reinforcement unless otherwise noted or shown.

Keyway dimensions shown on the plans are based on nominal dimensions unless stated otherwise. In addition, the bevel used on the keyway shall be limited to a maximum of 10 degrees from vertical.

Cast in-one-piece steel pile points are required for all piles in accordance with Article 4167.02 of the current Standard Specifications and Materials I.M. 468.

The Bridge Contractor is to clear and/or shape the channel within the approximate limits of the areas as shown on the "Situation Plan" and "Longitudinal Section Along Centerline Roadway" on Sheet V.3.

Class 20 excavation quantities are based on the assumption that the channel excavation is completed prior to starting construction of the abutments.

It shall be the Bridge Contractor's responsibility to provide sites for excess excavated material. No payment for overhaul will be allowed for material hauled to these sites.

Concrete barrier rails placed using the slipform method will require the use of a Class BR Concrete in accordance with Article 2513.03, A, 2, of the Standard Specifications. Cast-in-place barrier rails shall use Class C mix. Class D Concrete is not permitted for concrete barrier rails (cast-in-place or slipformed method).

Where two courses of concrete are required for the sidewalk, the surface of the concrete slab (first course) shall be intentionally roughened, and no curing compounds shall be used on the surface of the concrete slab (first course).

Pier caps shall be monolithic

The Contractor shall build the approaches, see Roadway sheets for details.

Testing for asbestos was performed on this bridge. No asbestos was detected in the samples tested. In the event that asbestos is encountered during construction, cease work and notify the Owner

The Contractor shall provide a certified plant inspection for all structural concrete produced for thisproject at no additional cost to the City.

Bridge Slab Dimension Table

No.	Item	Unit	Quantity
1	Slab Length	L.F.	90.8
2	Slab Width	L.F.	57.5
3	Slab Area	S.F.	5,222.9

1. Slab length is measured from face-to-face of paving notches along the centerline of the roadway.
2. Slab widths are measured from out-to-out of slab perpendicular to the centerline of roadway.
3. Slab area is to be based on the face-to-face paving notch distance and out-to-out slab dimensions.

Specifications:

Design: AASHTO LRFD Bridge Design Specifications, 10th Ed., Series of 2024.
Construction: Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, Series 2023, plus applicable General Supplemental Specifications, Developmental Specifications, Supplemental Specifications and Special Provisions shall apply to construction work on this project.
Developmental Specifications for Fabric Formed Concrete Structure Revetment.

Design Stresses:

Design stresses for the following materials are in accordance with the AASHTO LRFD Bridge Design Specifications, 10th Ed., Series of 2024.
Reinforcing steel in accordance with LRFD AASHTO Section 5, Grade 60, for epoxy and non-coated bars, and Grade 60 or 75 for stainless steel reinforcing
Concrete in accordance with LRFD AASHTO Section 5, f'c = 4,000 psi,
Structural steel in accordance with LRFD AASHTO Section 6. ASTM A709 Grade 36 or Grade 50 (AASHTO M270 Grade 36 or Grade 50).
n = 8 for tension steel
2n = 16 for compression steel
HL-93 live load plus 20 lbs. per sq. ft. for future wearing surface.
End span length is used to calculate equivalent width in live load distribution.
Six foot of approach slab dead & live load included in abutment loads.
Control of cracking by distribution of reinforcement for slab design based on the AASHTO LRFD Bridge Design Specifications, 10th Ed., Series of 2024.

Working Drawing and Calculation Submittals

Working drawings and calculations shall be submitted for the following items shown in the table below. (Note additional working drawings and calculations may be required in accordance with Article 1105.03 of the Standard Specifications.)			
Submittal requirements for working drawings and calculations shall be in accordance with 1105.03 of the Standard Specifications for Highway and Bridge Construction of the Iowa Department of Transportation. The absence of a certification requirement for a submittal does not relieve the Contractor of the responsibility to attain certification.			
Calculation submittals in this table which are associated with working drawing submittals shall be submitted on the same day. Review time for calculation submittals shall be of the same duration as and run concurrently with review time for associated working drawings. The calculation submittals listed in the table are not meant to be an exhaustive list and do not relieve the Contractor from providing additional calculation submittals if requested by the Engineer.			
No.	Working Drawing Description	Working Drawing File Name Convention For Submittal	Certified by Iowa P.E. (Yes/No)
1	Slab Falsework	(698)_Davenport_SlabFalseworkPlans.pdf	Yes
2	Steel Pipe Ped. Hand Rail	(698)_Davenport_SteelPipePedestrianHandRail.pdf	No
3	Back-Mounted Chain Link Fence	(698)_Davenport_Back-MountedChainLinkFence.pdf	No
4	Deck Drains	(698)_Davenport_DeckDrains.pdf	No
No.	Calculation Description	Calculation File Name Convention For Submittal	Certified by Iowa P.E. (Yes/No)
1	Slab Falsework	(698)_Davenport_SlabFalseworkCalculations.pdf	Yes
--			

Pollution Prevention Plan shown elsewhere in these plans.

Traffic Control Plan
The roadway will be closed to thru traffic. Refer to the Traffic Control Plan shown elsewhere in these plans.

Design For 0° Skew
90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk
27'-6" End Spans 35'-0" Interior Span
General Notes
STA. 100+00.00 (Eastern Ave) Turn-in Date: November 2025
City of Davenport



Summary of Concrete Quantities

Location	Structural Concrete
South Abutment Footing	19.2
North Abutment Footing	19.2
Bridge Slab + Abutment Diaphragms + Pier Caps	296.2
Abutment Wings	5.0
Sidewalk + Sidewalk Approach	11.9
Total (Cu. Yds.)	351.5

Summary of Reinforcing Steel

Location	Non-Coated Reinforcing Steel	Stainless Steel Reinforcing Steel	Epoxy Coated Reinforcing Steel
South Abutment Footing			2,806*
North Abutment Footing			2,806*
Bridge Slab + Abutment Diaphragms + Pier Caps + Abutment Wings		278	72,304
West Barrier Rail			2,072
East Barrier Rail			2,122
Barrier Rail End Sections - 4 End Sections			1,077
Sidewalk Approach Slabs - 2 Approach Slabs		32	228
Total (Lbs.)		310	83,415

*Includes 82 Lbs. for spirals and spiral spacers which are to be non-coated reinforcing but may be coated at the Contractor's option and expense.

Summary of Excavation

Location	Class 20 Excavation	Class 10 Excavation
South Abutment Footing	87	
North Abutment Footing	88	
South Berm		76.3
North Berm		154.1
West Channel		111.1
Total (Cu. Yds.)	175	341.5

Summary of Foundations

[illegible]

See C Sheets for Bridge Plan Bid Items
and Estimate Reference Information

Design For 0° Skew

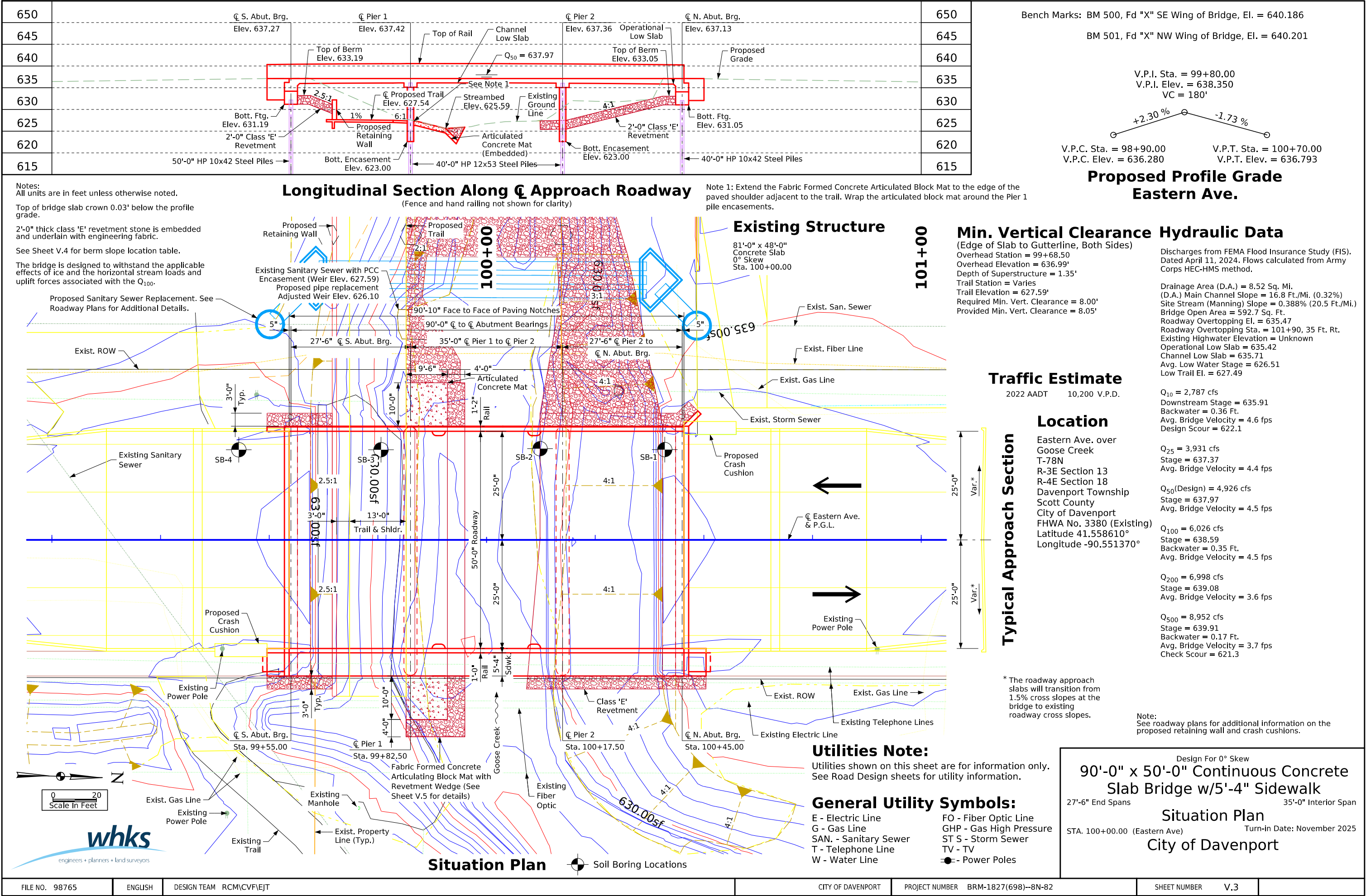
90'-0" x 50'-0" Continuous Concrete
Slab Bridge w/5'-4" Sidewalk

27'-6" End Spans 35'-0" Interior Span

Summary Quantities Sheet

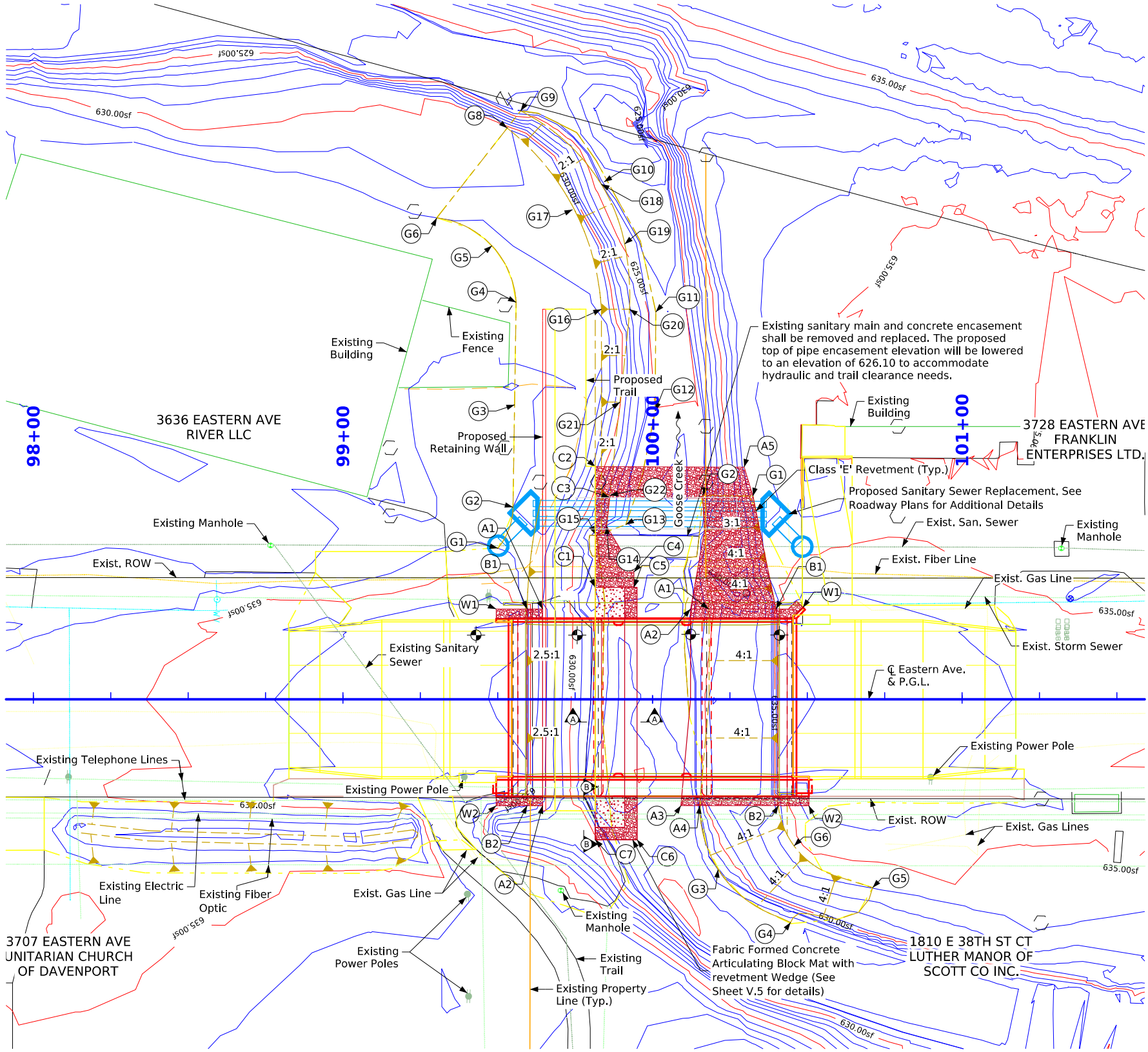
STA. 100+00.00 (Eastern Ave) Turn-in Date: November 2025

City of Davenport

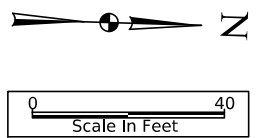


Bench Marks: BM 500, Fd "X" SE Wing of Bridge, El. = 640.186
BM 501, Fd "X" NW Wing of Bridge, El. = 640.201

Berm Slope Location Table						
Points	South Abutment			North Abutment		
	Station	Offset	Elev.	Station	Offset	Elev.
A1	99+64.50	29.17' LT.	631.19	100+18.15	29.17' LT.	627.63
A2	99+64.50	34.33' RT.	631.19	100+12.31	29.17' LT.	627.48
A3	--	--	--	100+09.18	34.33' RT.	626.61
A4	--	--	--	100+15.33	34.33' RT.	626.76
A5	--	--	--	100+29.63	75.02' LT.	633.05
B1	99+59.50	29.17' LT.	633.19	100+39.89	29.17' LT.	633.05
B2	99+59.50	34.33' RT.	633.19	100+40.50	34.33' RT.	633.05
C1	99+81.50	36.17' LT.	627.61	--	--	--
C2	99+81.50	75.19' LT.	628.63	--	--	--
C3	99+86.19	65.17' LT.	626.00	--	--	--
C4	99+94.00	41.16' LT.	627.15	--	--	--
C5	99+94.00	36.17' LT.	627.13	--	--	--
C6	99+95.00	45.33' RT.	626.80	--	--	--
C7	99+81.50	45.33' RT.	627.92	--	--	--
G1	99+50.07	48.81' LT.	634.00	100+32.44	65.69' LT.	633.05
G2	99+54.98	62.09' LT.	633.00	100+16.22	65.88' LT.	633.05
G3	99+55.47	95.14' LT.	633.20	100+21.20	54.88' RT.	626.60
G4	99+55.96	128.18' LT.	632.74	100+44.62	72.02' RT.	626.19
G5	99+48.15	146.51' LT.	632.29	100+71.15	60.81' RT.	634.04
G6	99+30.33	155.52' LT.	632.00	100+45.72	47.29' RT.	634.63
G7	--	--	--	--	--	--
G8	99+53.07	184.54' LT.	630.00	--	--	--
G9	99+57.40	190.09' LT.	624.00	--	--	--
G10	99+84.36	167.16' LT.	623.87	--	--	--
G11	100+01.10	125.15' LT.	624.29	--	--	--
G12	100+00.92	93.21' LT.	625.00	--	--	--
G13	99+91.42	56.46' LT.	626.00	--	--	--
G14	99+85.20	56.02' LT.	626.50	--	--	--
G15	99+81.50	53.04' LT.	628.03	--	--	--
G16	99+83.50	126.04' LT.	629.53	--	--	--
G17	99+74.59	158.54' LT.	630.00	--	--	--
G18	99+83.46	166.39' LT.	624.00	--	--	--
G19	99+91.04	147.08' LT.	624.35	--	--	--
G20	99+92.60	126.04' LT.	624.70	--	--	--
G21	99+89.53	96.04' LT.	625.30	--	--	--
G22	99+86.28	66.04' LT.	626.00	--	--	--
W1	99+49.50	29.17' LT.	636.93	100+48.62	29.70' LT.	636.79
W2	99+49.50	34.33' RT.	637.34	100+50.50	34.33' RT.	637.17



Site Plan



Note:
See Sheet V.5 for Berm Lining Details.
See Sheet V.5 for Sections A-A and B-B.

Design For 0° Skew

90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk

27'-6" End Spans35'-0" Interior Span

Site Plan

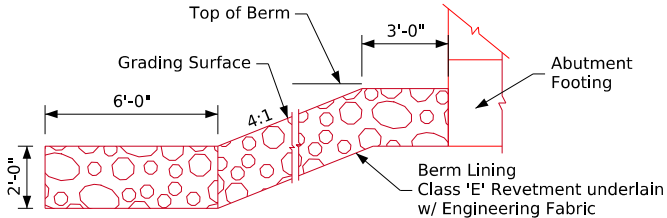
STA. 100+00.00 (Eastern Ave)Turn-in Date: November 2025

City of Davenport

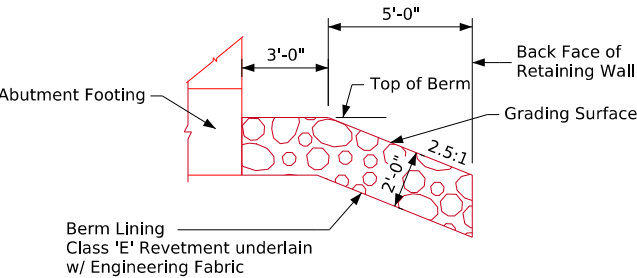
Bench Marks: BM 500, Fd "X" SE Wing of Bridge, El. = 640.186
BM 501, Fd "X" NW Wing of Bridge, El. = 640.201

Estimated Berm Armoring Quantities				
Location	Class E Revetment (Tons)	Articulated Mat (SY)	Engineering Fabric (SY)	Excavation, Class 10 (CY)
South Berm	84.8	104.9	150.5	76.3
North Berm	246.5	--	268.3	154.1
West Channel	177.8	--	175.0	111.1
Total	509.1	104.9	593.8	341.5

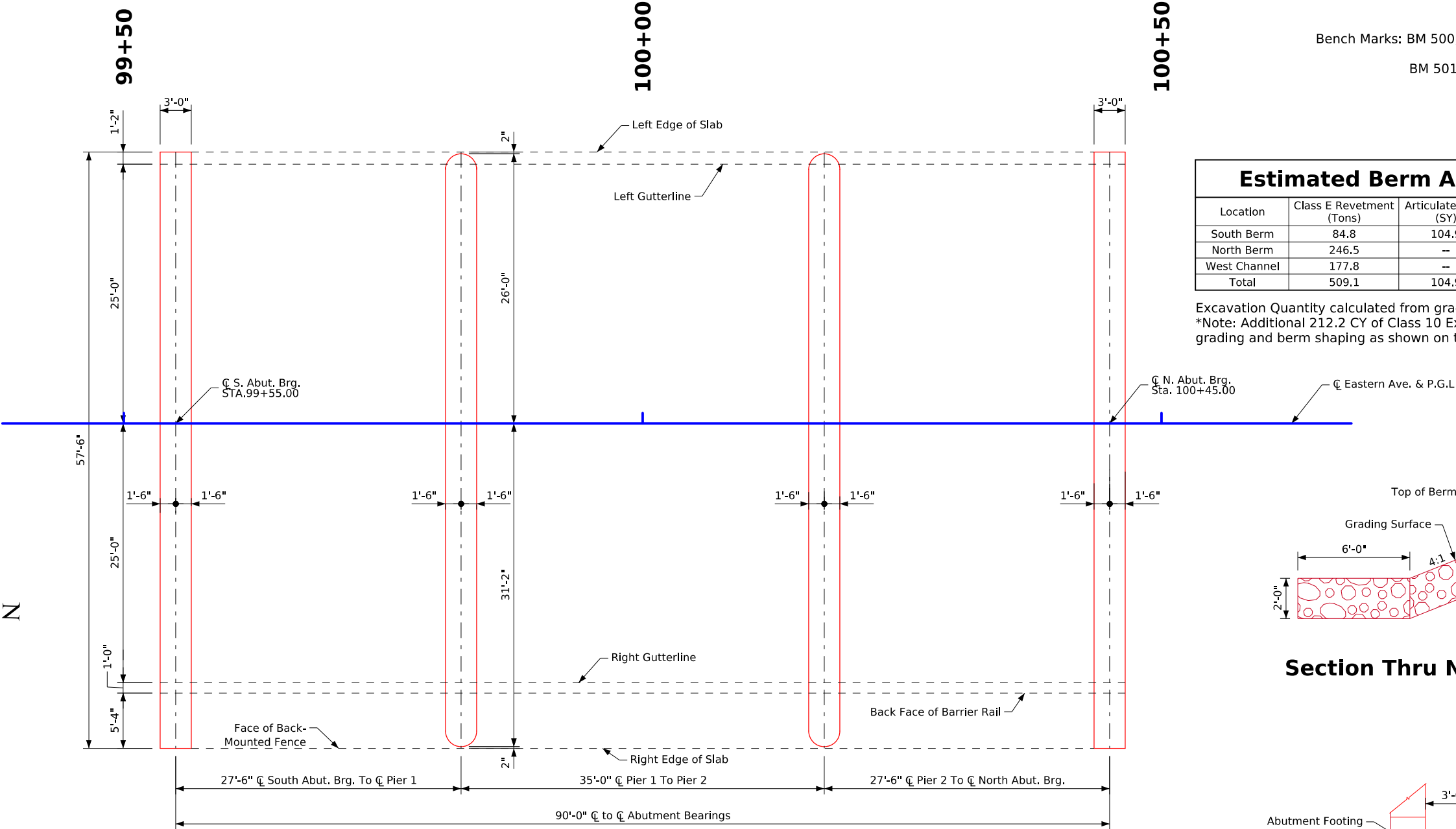
Excavation Quantity calculated from grading surface.
*Note: Additional 212.2 CY of Class 10 Excavation required for channel grading and berm shaping as shown on the Situation Plan Sheet V.3.



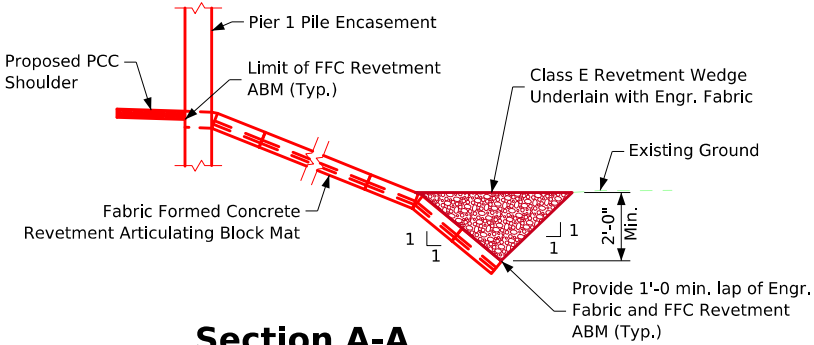
Section Thru North Berm Lining



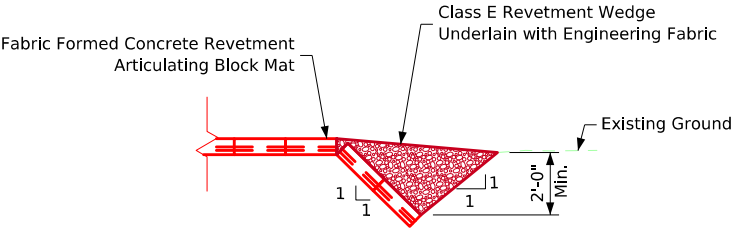
Section Thru South Berm Lining



Staking Diagram



Section A-A



Section B-B

Articulating Block Mat Details

Design For 0° Skew

90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk

27'-6" End Spans35'-0" Interior Span

Staking Diagram

STA. 100+00.00 (Eastern Ave)Turn-in Date: November 2025

City of Davenport



Pier Notes:

All monolithic pier cap reinforcing and concrete is included in Superstructure Estimate of Quantities.

The minimum clear distance from the face of the concrete to the near reinforcing bar is to be 2" unless otherwise noted or shown

All reinforcing steel is to be Grade 60.

Pier piling was designed for HL-93 loading with an allowance for 20 psf future wearing surface.

Steel pile points are required for the steel H-Piles at the piers.

Pier 1 Pile Notes:

The contract length of 40 feet for the Pier 1 piles is based on a cohesive soil classification, a total factored axial load per pile (Pu) of 112 kips, and a geotechnical resistance factor (phi) of 0.65 for soil and 0.7 for rock end bearing.

The nominal axial bearing for construction control was determined from a cohesive soil classification and a geotechnical resistance factor (phi) of 0.7 for soil and 0.7 for rock end bearing. Piles are assumed to be driven from a start elevation at the bottom of each encasement.

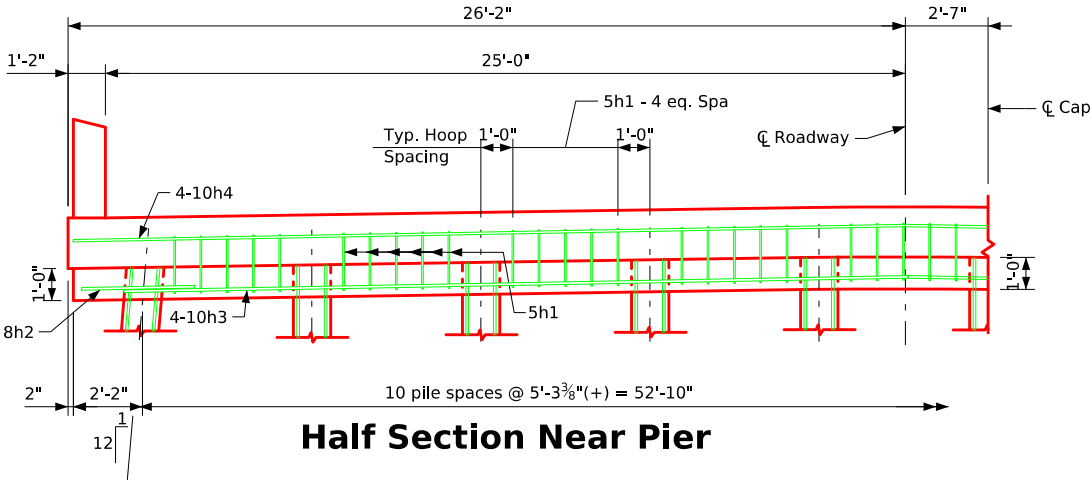
The required nominal axial bearing resistance for Pier 1 piles is 80 tons at the end of drive or retap. The pile contract length shall be driven as per plan unless piles reach refusal. Construction control requires a WEAP analysis with bearing graph.

Pier 2 Pile Notes:

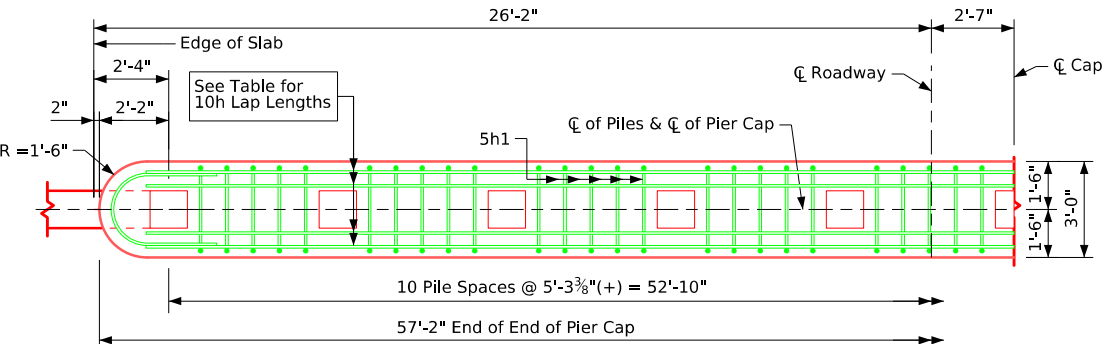
The contract length of 40 feet for the Pier 2 piles is based on a mixed soil classification, a total factored axial load per pile (Pu) of 112 kips, and a geotechnical resistance factor (phi) of 0.65 for soil and 0.7 for rock end bearing.

The nominal axial bearing resistance for construction control was determined from a mixed soil classification and a geotechnical resistance factor (phi) of 0.7 for soil and 0.7 for rock end bearing. Piles are assumed to be driven from a start elevation at the bottom of each encasement.

The required nominal axial bearing resistance for Pier 2 piles is 80 tons at the end of drive or retap. The pile contract length shall be driven as per plan unless piles reach refusal. Construction control requires a WEAP analysis with bearing graph.



Lap Lengths	
10h4	8'-2"
10h3	6'-3"

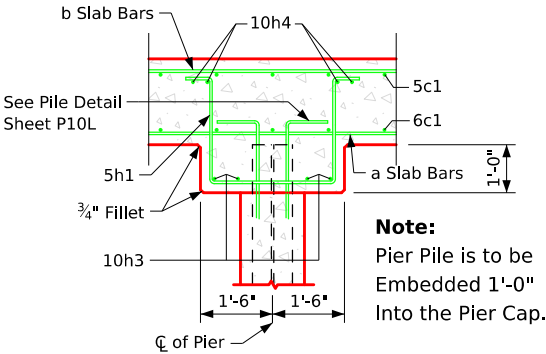


Half Section Plan View

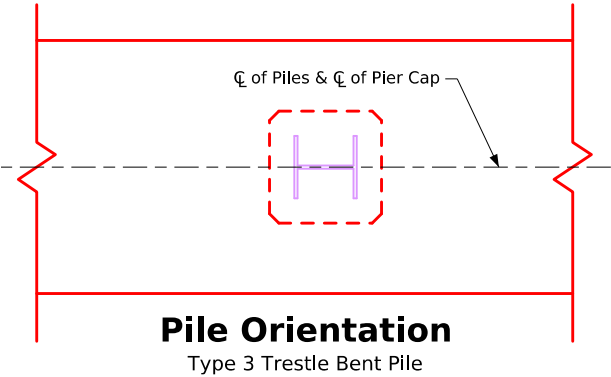
11 - HP 12x53 Steel Piles required at Pier 1
11 - HP 12x53 Steel Piles required at Pier 2

Bottom of Cap Elevation		
Location	Pier 1	Pier 2
West Exterior Pile	634.77	634.71
CL of Roadway	635.07	635.01
East Exterior Pile	634.75	634.69

The bottom of pier cap is to be sloped to compensate for grade. See the table for elevations at the bottom of cap at the CL of roadway and each exterior pile.



Typical Cap Section



Pile Orientation
Type 3 Trestle Bent Pile

Design For 0° Skew

90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk

27'-6" End Spans35'-0" Interior Span

Pier Details

STA. 100+00.00 (Eastern Ave)Turn-in Date: November 2025

City of Davenport



General Notes:

Except as noted elsewhere, material, construction, driving and extensions or build ups when necessary shall be in accordance with Standard Specifications of the Iowa D.O.T. and current Supplemental Specifications and Special Provisions applicable.

Cap steel shall be as detailed on this sheet (D=Pin Diameter).

Cost of all driving points and cap steel is to be included in the price bid per linear foot for piling.

Wire spiral shall conform to ASTM A1064 Grade 70.

Bidding Notes:

The pier piles are HP12x53 in a Type 3 pile bent.
The Contractor may choose the shape of the encasement.

Piles shall be bid designating the size, type and length.

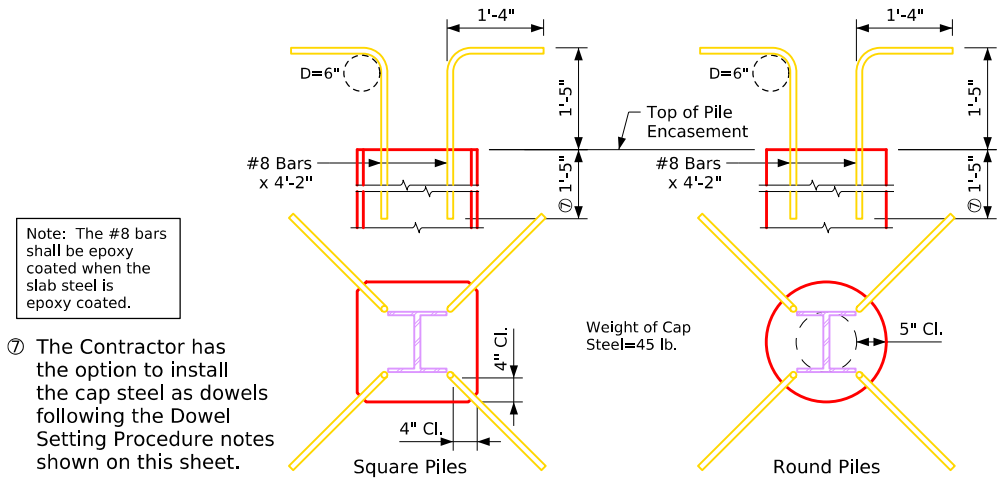
Type 3 piling will be bid per linear foot of pile and linear foot of encasement. Price bid for encasement shall be full payment for necessary excavation and for furnishing and placing all material.

Dowel Setting Procedure:

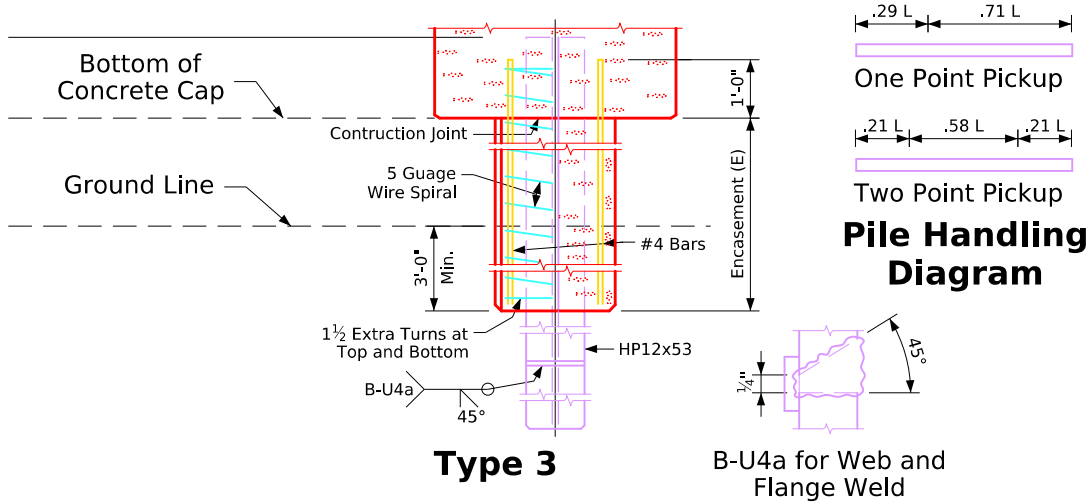
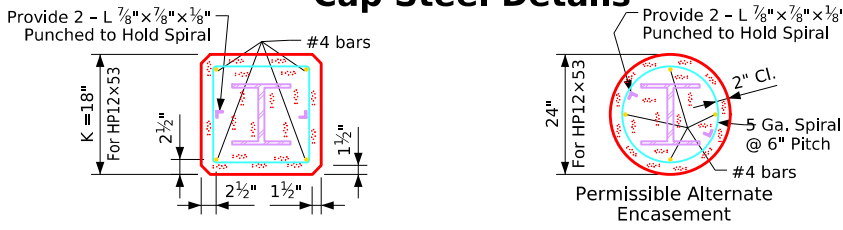
At the Contractors option, the #8 deformed cap steel bars may be set as dowels into the pile encasements with polymer grout in accordance with Article 2301.03, E, of the Standard Specifications or by the following procedure.

- A - Drill hole approximately twice the diameter of the dowel bar and to the depth indicated.
- B - Fill hole with water and allow to stand long enough to thoroughly saturate the surrounding concrete (about four hours).
- C - Blow out all free water and fill hole 2/3 full of mortar.
- D - Insert dowel by driving, if necessary, and manipulate or tap with a hammer to consolidate mortar and secure complete embedment.
- E - Add more mortar, if necessary, to fill hole.
- F - Mortar shall consist of equal parts portland cement and sand with just enough water to make a workable mix.

Concrete Encased Steel H Pile



Cap Steel Details



Steel H Pile			HP12x53
Square	Concrete (E=18')	cy	1.41
	Concrete 1' Change	cy	0.078
	④ Reinforcing (E=18')	lb	99
	④ Reinforcing 1' Change	lb	5.13
Round	Concrete (E=18')	cy	2.02
	Concrete 1' Change	cy	0.112
	④ Reinforcing (E=18')	lb	102
	④ Reinforcing 1' Change	lb	5.26

④ Includes Weight of Punched L 7/8" x 7/8" x 1/8"



Design For 0° Skew

90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk

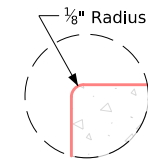
27'-6" End Spans35'-0" Interior Span

Pier Pile Details

STA. 100+00.00 (Eastern Ave)Turn-in Date: November 2025

City of Davenport

BM 501, Fd "X" NW Wing of Bridge, El. = 640.201



8 - HP10x42 steel piling required at each abutment.
The concrete and reinforcing steel for the wings is included with the superstructure.
The minimum clear distance from the face of the concrete to the nearest reinforcing bar is to be 2 inches unless otherwise noted or shown.
Steel abutment piles shall be driven to full penetration if practicable, but in no case to a bearing value less than shown in the design plans.
All reinforcing steel is to be Grade 60.
Abutment piling was designed for HL-93 loading with an allowance for 20 lbs. per sq. ft. future wearing surface.
Steel pile points are required for the steel H-piles at the abutments.

Barrier rails and reinforcement not shown.
Wing reinforcing not shown.
5n wing reinforcing bars shall be placed in the abutment footing before the footing is poured. For additional details, see Sheet V.11.
6e3, 6e4, and 8e1 bars are included in the Superstructure Quantities.



Design For 0° Skew
90'-0" x 50'-0" Continuous Concrete
Slab Bridge w/5'-4" Sidewalk
27'-6" End Spans 35'-0" Interior Span
Abutment Details
STA. 100+00.00 (Eastern Ave) Turn-in Date: November 2025
City of Davenport

South Abutment Pile Notes:

The contract length of 50 feet for the South Abutment piles is based on a cohesive soil classification, a total factored axial load per pile (Pu) of 88 kips, and a geotechnical resistance factor (phi) of 0.65 for soil and 0.7 for rock end bearing.

The nominal axial bearing resistance for construction control was determined from a cohesive soil classification and a geotechnical resistance factor (phi) for 0.7 for soil and 0.7 for rock end bearing. Piles are assumed to be driven from a start elevation at the bottom of footing.

The required nominal axial bearing resistance for South Abutment piles is 63 tons at end of drive or retap. The pile contract length shall be driven as per plan unless piles reach refusal. Construction control requires a WEAP analysis with bearing graph.

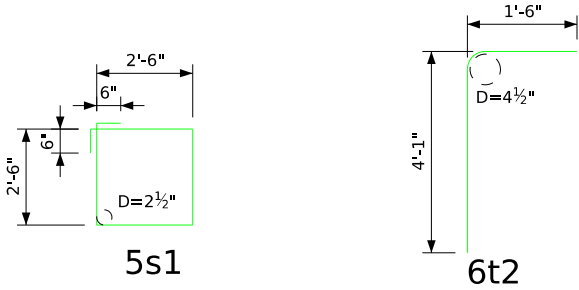
North Abutment Pile Notes:

The contract length of 40 feet for the South Abutment piles is based on a cohesive soil classification, a total factored axial load per pile (Pu) of 88 kips, and a geotechnical resistance factor (phi) of 0.65 for soil and 0.7 for rock end bearing.

The nominal axial bearing resistance for construction control was determined from a cohesive soil classification and a geotechnical resistance factor (phi) for 0.7 for soil and 0.7 for rock end bearing. Piles are assumed to be driven from a start elevation at the bottom of footing.

The required nominal axial bearing resistance for South Abutment piles is 63 tons at end of drive or retap. The pile contract length shall be driven as per plan unless piles reach refusal. Construction control requires a WEAP analysis with bearing graph.

BENT BAR DETAILS



Note: All Dimensions Are Out To Out. D=pin Diameter.

BILL OF REINFORCING STEEL - ONE ABUTMENT

Mark	Location	Shape	Length	No.	Weight
8r1	Abutment Footing Longitudinal		31'-1"	14	1,162
5s1	Abutment Footing Hoops		11'-0"	53	608
6t1	Footing To Slab Bars		5'-0"	60	451
6t2	Footing To Slab Bars		5'-7"	60	503
#2	Pile Spiral		38'-6"	8	51
	Spiral Spacers - L 7/8x7/8x1 1/2x 0.70		1'-10"	24	31
Reinforcing steel epoxy coated - total (lbs.)					2,806

Note: The pile spirals and spiral spacers are to be non-coated reinforcing but may be epoxy-coated at the Contractor's option and expense.

CONCRETE PLACEMENT QUANTITY

Location	Total (CY)
Abutment Footing - 2 @ 19.2 CY	38.4
Total (CY)	38.4

Note: Concrete and reinforcing steel quantities are included on the summary quantities sheet.



Design For 0° Skew

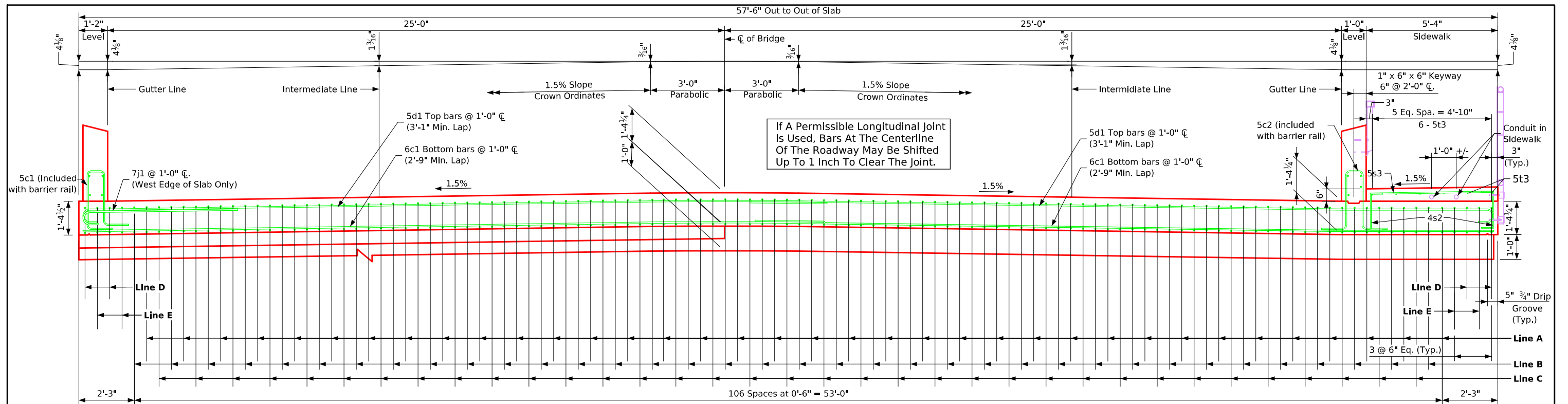
90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk

27'-6" End Spans35'-0" Interior Span

Abutment Details

STA. 100+00.00 (Eastern Ave)Turn-in Date: November 2025

City of Davenport



Half Section Near Abutment

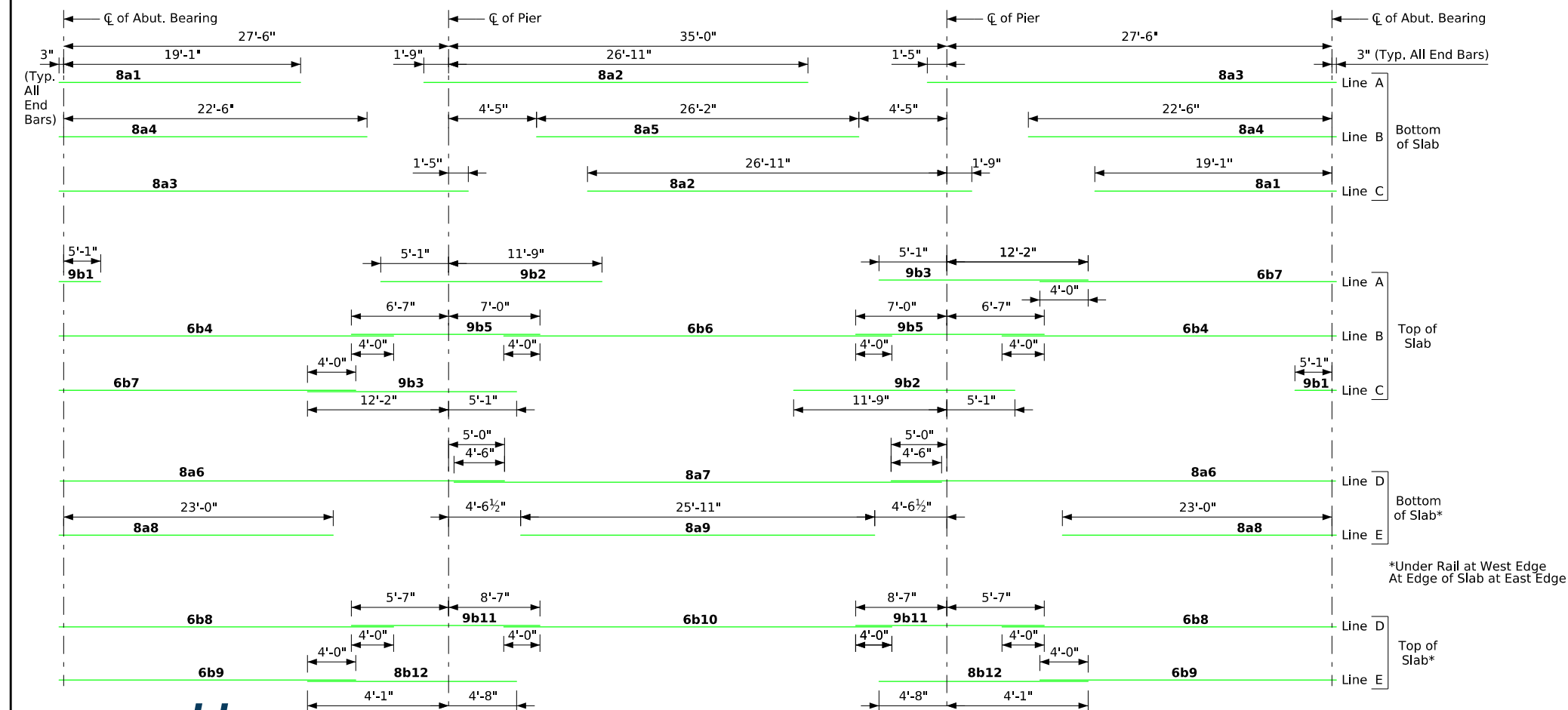
Slab Cross-Section Area = 77.87 sq. ft.

I.M. 451.01
Requirements Shall
Apply For Bar Chairs.

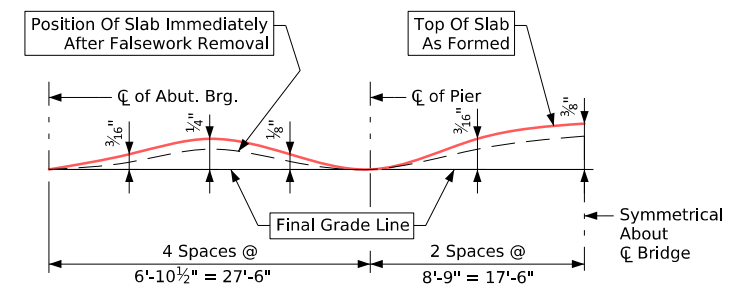
Half Section Near Pier

Note:

Top longitudinal reinforcing steel shall be parallel to and 2 3/4 inches clear below the top of the slab.
Bottom longitudinal reinforcing steel shall be parallel to and 1 1/2 inches clear above the bottom of the slab.
Reinforcing steel shall be securely wired in place and adequately supported on bar chairs before concrete placement.



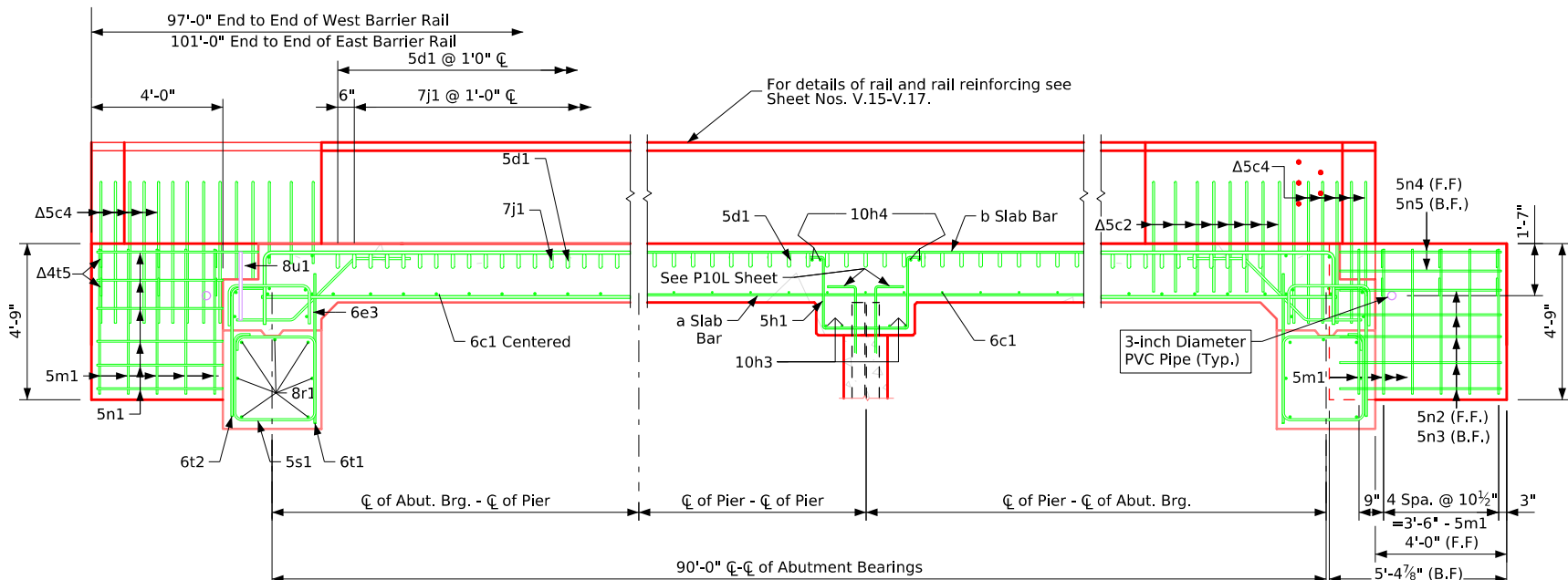
Placement for Longitudinal Reinforcement



Form Camber Diagram

This diagram illustrates the form camber required to compensate for the anticipated ultimate dead load deflection. The dimensions shown do not account for form deflection or falsework settlement.

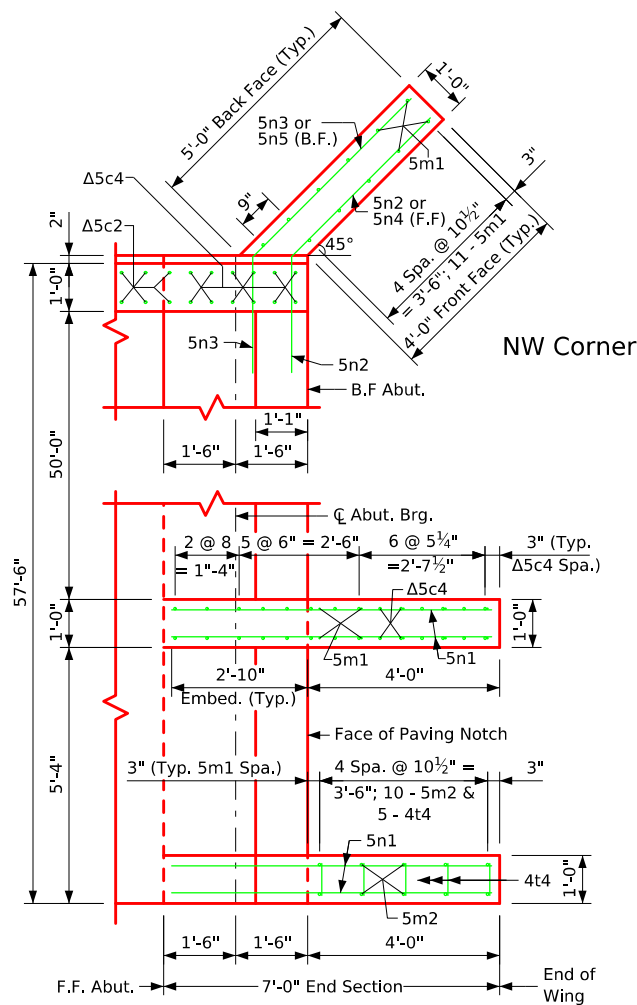
Design For 0° Skew
90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk
27'-6" End Spans 35'-0" Interior Span
Transverse Section
STA. 100+00.00 (Eastern Ave) Turn-in Date: November 2025
City of Davenport



West Gutter Line
(Looking West, SE & NE
Wings at Gutter Line similar)

Part Longitudinal Section Near Gutter Line

West Gutter Line
(Looking West)

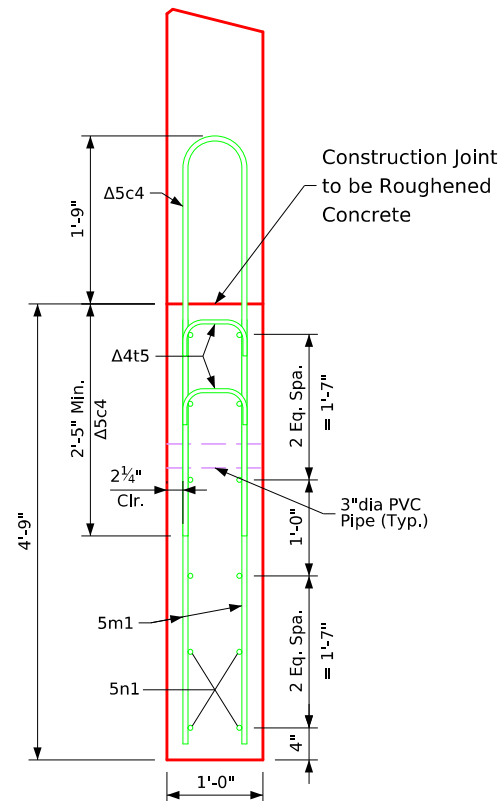


Part Plan

(Railing and Fence not shown)

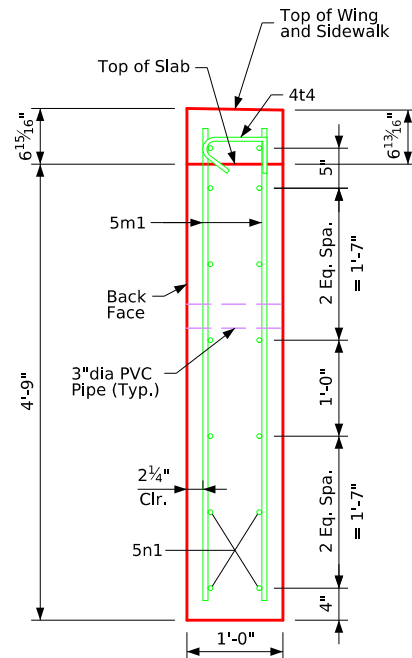
NE Wing at Gutter
(SE & SW Barrier Rail End
Section wings at Gutter similar)

NE Wing at Edge
(SE Wing at Edge similar)



Section A-A

Δ Note: Refer to Sheet V.17 for details of the barrier rail end section. Reinforcing 5c4 and 4t5 are Included In the **End Section reinforcing quantities on Sheet V.17.** Reinforcing 5c2 bars are Included In the **West Barrier Rail reinforcing quantities on Sheet V.15.**
Note: 5m1 and 5n1 are included in the **Superstructure Quantities** sheet.



Section B-B

Note: 5m1 & 5n1 bars are Included in **Superstructure Bar List**. Fence not shown for clarity.

Superstructure Notes:

This bridge is designed for HL-93 loading plus an allowance of 20 pounds per square foot of roadway for a future wearing surface.

The slab, as shown, includes a 3/4-inch integral wearing surface.

The minimum clear distance from the face of concrete to the nearest reinforcing bar shall be 2 inches unless otherwise noted or shown. All reinforcing steel is to be securely wired in place. See **Bar Chair Note**.

All reinforcing shall be Grade 60.

The concrete slab is to be placed with a minimum number of construction joints. Procedures for placing slab concrete shall be submitted for approval, together with a statement of the proposed method and evidence that the Contractor possesses the necessary equipment and facilities to accomplish the required result. Slab falsework shall be removed prior to the construction of the barrier rails unless slab construction is staged.

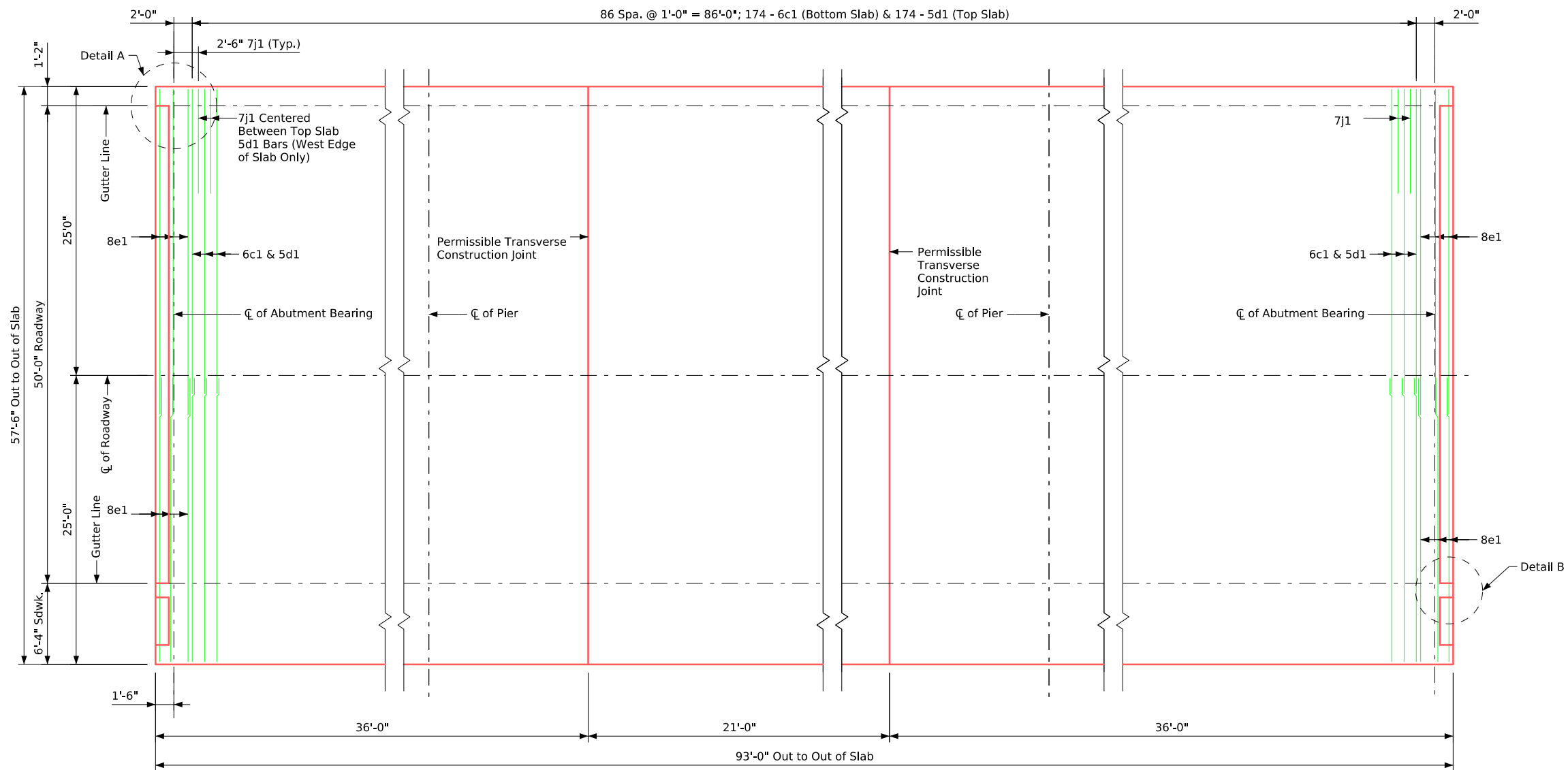
Note that when Portland cement approach pavement is placed, compressible joint material must be used between the pavement and the end of the bridge. If necessary to prevent damage to the end of the bridge slab or backwall from construction equipment, an appropriate method of protection approved by the Engineer shall be provided by the Bridge Contractor at no extra cost to the City.

The cost of furnishing and placing a 3-inch diameter PVC pipe in each wing is included in the price bid for "Structural Concrete (Bridge)".

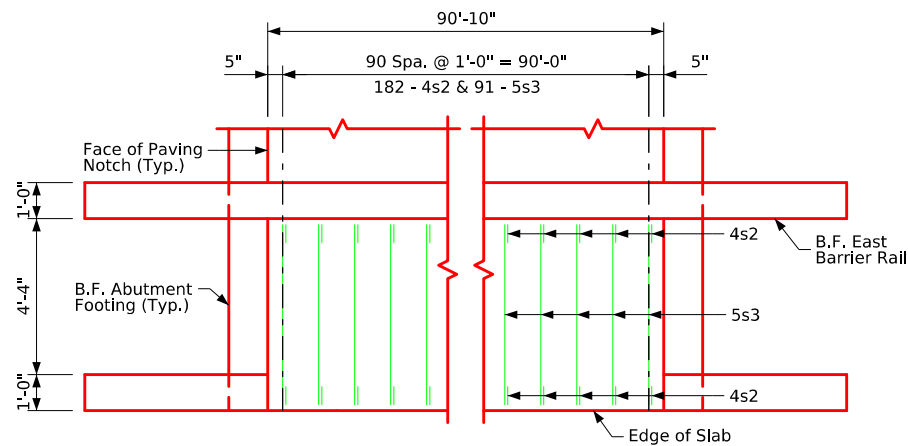
Bar Chair Note:

The top mat of reinforcing steel is to be supported by individual bar chairs spaced at no more than 3'-0" centers longitudinally and transversely. The bottom mat of reinforcing steel is to be supported by individual bar chairs spaced at no more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or slab bolsters spaced 4'-0" apart. **I.M. 451.01** requirements shall apply for bar chairs, bar high chairs, and slab bolsters.

Design For 0° Skew
90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk
27'-6" End Spans 35'-0" Interior Span
Longitudinal Section
STA. 100+00.00 (Eastern Ave) Turn-in Date: November 2025
City of Davenport

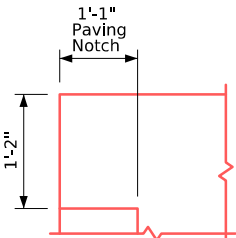


Transverse Reinforcing Steel Layout

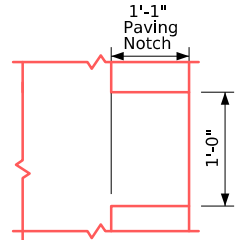


Part Sidewalk Plan
(East Corners)

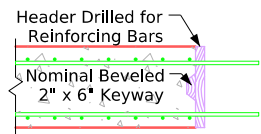
Bench Marks: BM 500, Fd "X" SE Wing of Bridge, El. = 640.186
BM 501, Fd "X" NW Wing of Bridge, El. = 640.201



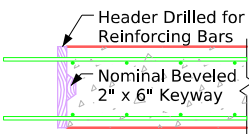
Detail A



Detail B



Longitudinal Construction Joint

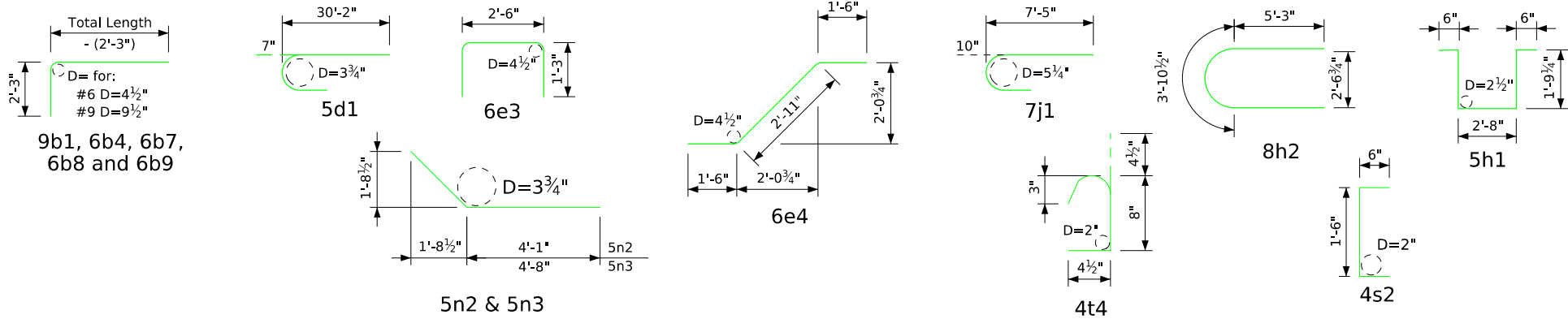


Transverse Construction Joint

Design For 0° Skew
90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk
27'-6" End Spans 35'-0" Interior Span
Transverse Reinforcing Layout
STA. 100+00.00 (Eastern Ave) Turn-in Date: November 2025
City of Davenport



Bent Bar Details



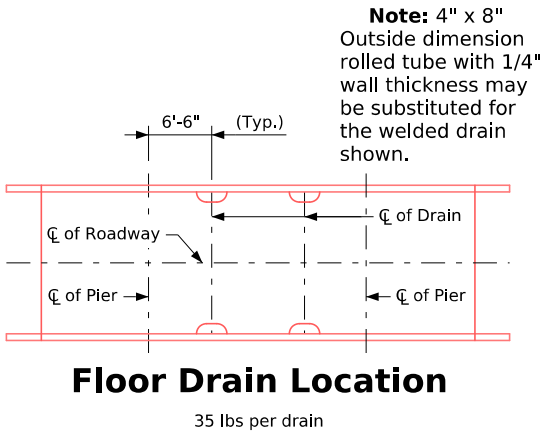
Note: All Dimensions Are Out To Out. D=pin Diameter,

Stainless Steel Reinforcing for Superstructure

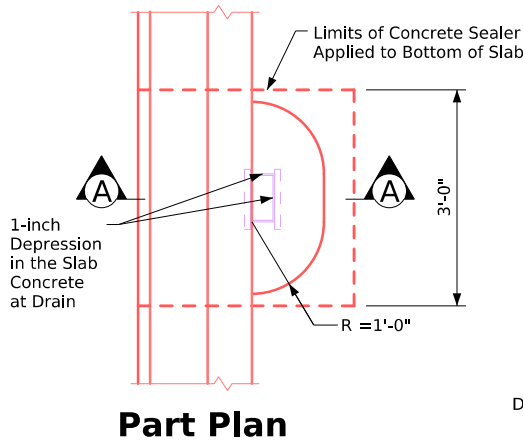
Location	Shape	Bar	No.	Length	Weight
Abutment Paving Notch Bar		8u1	50	2'-1	278

Concrete Placement Quantities

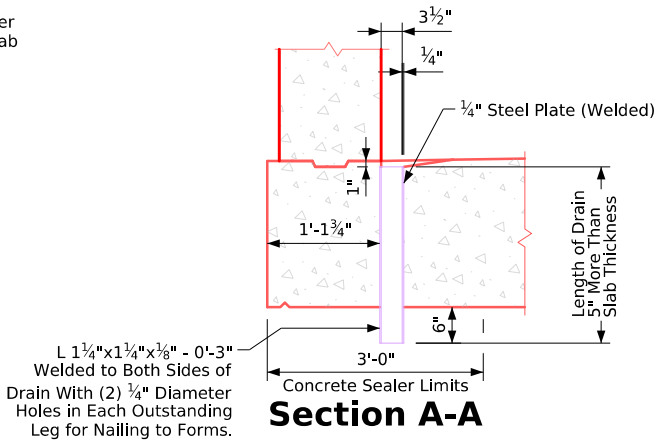
Location	Quantity (CY)
Slab + Abut. Diaph. + Pier Caps	296.2
Sidewalk	9.7
Barrier Rail End Section Wing - 3 @ 0.8 CY	2.4
Flared Abutment Wing (NW Corner) - 1 @ 0.8 CY	0.8
Edge of Slab Wings (NE & SE Corner) - 2 @ 0.9 CY	1.8
Total Structural Concrete (Bridge)	310.9



Note: 4" x 8" Outside dimension rolled tube with 1/4" wall thickness may be substituted for the welded drain shown.



Part Plan



Section A-A

Floor Drain Details

(Use for single slope barrier rail only, not required for open rail.)
Note: Drains are to be galvanized. Include the cost of drains in the price bid for "Structural Concrete Bridge."
(4 Drains Required)

Epoxy Steel Reinforcing for Superstructure

Bar	Location	Shape	No.	Length	Weight
8a1	Slab Longitudinal Bottom		71	19'-4"	3,665
8a2	Slab Longitudinal Bottom		71	28'-8"	5,434
8a3	Slab Longitudinal Bottom		71	29'-2"	5,529
8a4	Slab Longitudinal Bottom		72	22'-9"	4,373
8a5	Slab Longitudinal Bottom		36	26'-2"	2,515
8a6	Slab Longitudinal Bottom, at Rail		8	32'-9"	700
8a7	Slab Longitudinal Bottom, at Rail		4	34'-0"	363
8a8	Slab Longitudinal Bottom, at Rail		8	23'-3"	497
8a9	Slab Longitudinal Bottom, at Rail		4	25'-11"	277
9b1	Slab Longitudinal Top		71	7'-7"	1,831
9b2	Slab Longitudinal Top		71	16'-10"	4,064
9b3	Slab Longitudinal Top		71	17'-3"	4,164
6b4	Slab Longitudinal Top		72	27'-5"	2,965
9b5	Slab Longitudinal Top		72	13'-7"	3,325
6b6	Slab Longitudinal Top		36	29'-0"	1,568
6b7	Slab Longitudinal Top		71	21'-10"	2,328
6b8	Slab Longitudinal Top, at Rail		8	28'-5"	341
6b9	Slab Longitudinal Top, at Rail		8	29'-11"	359
6b10	Slab Longitudinal Top, at Rail		4	25'-10"	155
9b11	Slab Longitudinal Top, at Rail		8	14'-2"	385
8b12	Slab Longitudinal Top, at Rail		8	8'-9"	187
6c1	Slab Transverse Bottom		174	30'-0"	7,840
5d1	Slab Transverse Top		174	30'-9"	5,581
8e1	Slab, Tansverse at Abutment		36	31'-1"	2,988
6e3	Slab, Tansverse at Abutment		120	5'-0"	901
6e4	Slab, Tansverse at Abutment		120	5'-11"	1,066
5h1	Pier Cap, Hoops		100	7'-3"	756
8h2	Pier Cap, Ends		4	14'-5"	154
10h3	Pier Cap, Bottom Longitudinal		16	30'-3"	2,083
10h4	Pier Cap, Top Longitudinal		16	32'-8"	2,249
7j1	Top of Slab, Transverse, at Rail		86	8'-3"	1,450
5m1	Wing, Vertical		41	4'-5"	189
5m2	Wing, Vertical, NE & SE Wings at Edge		20	4'-11"	103
5n1	Straight Wings, Horizontal, Both Faces		64	6'-8"	445
5n2	Flared Wing, Horizontal, Dowel, Front Face		5	6'-6"	34
5n3	Flared Wing, Horizontal, Dowel, Back Face		5	7'-1"	37
5n4	Flared Wing, Horizontal, Traffic Face		2	3'-9"	8
5n5	Flared Wing, Horizontal, Back Face		2	4'-4"	9
4s2	Slab to Raised Sidewalk Tie		182	2'-6"	304
5s3	Raised Sidewalk, Transverse		91	5'-0"	475
5t3	Raised Sidewalk, Longitudinal		18	31'-10"	598
4t4	NE & SE Wings at Edge, Tie Bars		10	1'-5"	9
Epoxy Reinforcing Total Weight (lbs)					72,304

Design For 0° Skew

90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk

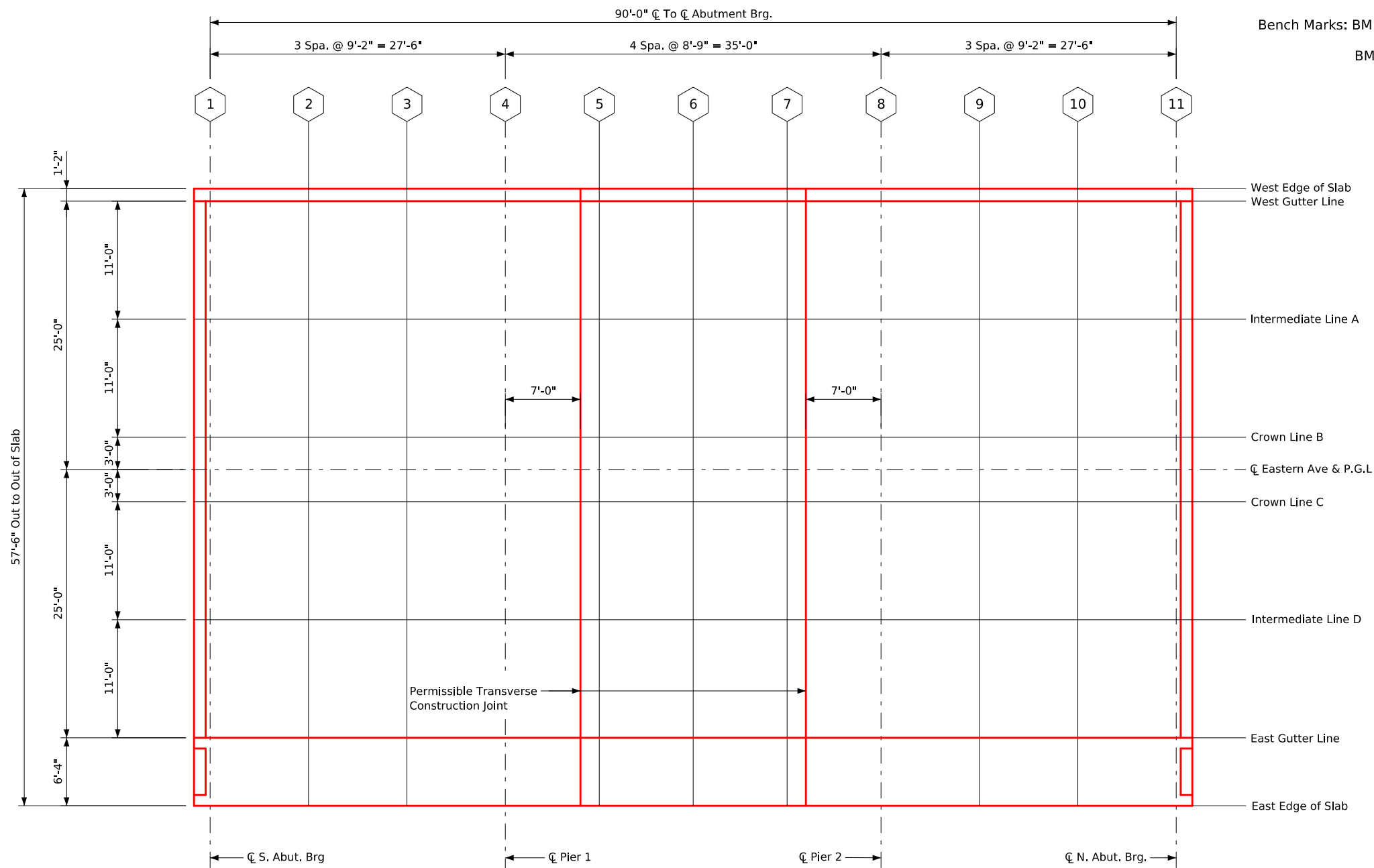
27'-6" End Spans35'-0" Interior Span

Superstructure Details

STA. 100+00.00 (Eastern Ave)Turn-in Date: November 2025

City of Davenport

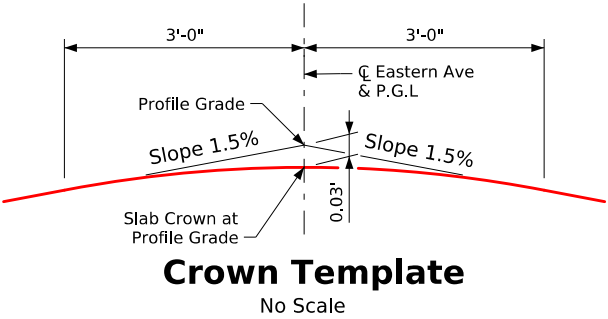




Slab Elevation Plan

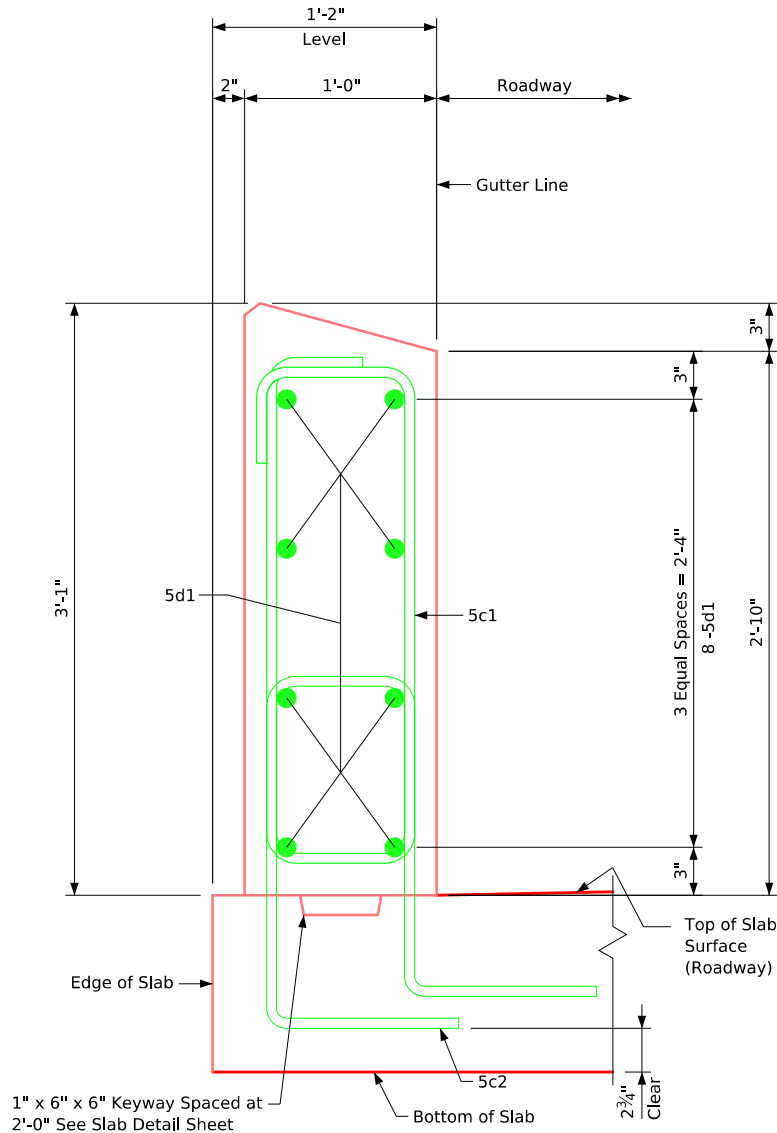
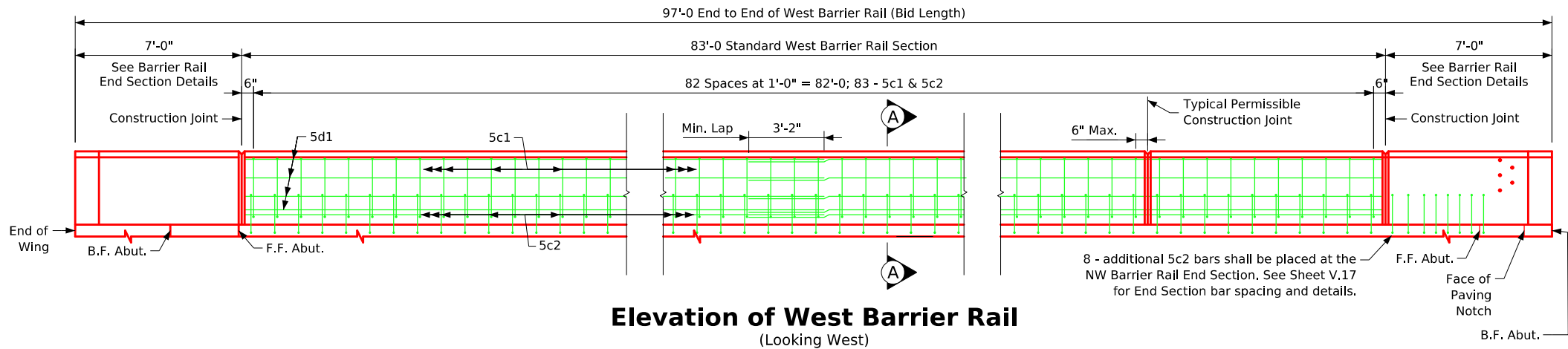
Note:
Slab elevations at East edge of slab are given at top of slab, not top of raised sidewalk.

TOP OF SLAB ELEVATIONS											
LOCATION	☐ S. Abut. Brg.			☐ Pier #1				☐ Pier #2			☐ N. Abut. Brg.
	LINE 1	LINE 2	LINE 3	LINE 4	LINE 5	LINE 6	LINE 7	LINE 8	LINE 9	LINE 10	LINE 11
WEST EDGE OF SLAB	636.93	637.00	637.04	637.07	637.09	637.08	637.06	637.02	636.96	636.88	636.78
WEST GUTTER LINE	636.93	637.00	637.04	637.07	637.09	637.08	637.06	637.02	636.96	636.88	636.78
INTERMEDIATE LINE A	637.09	637.16	637.21	637.24	637.25	637.25	637.22	637.18	637.12	637.04	636.95
CROWN LINE B	637.26	637.33	637.37	637.40	637.42	637.41	637.39	637.35	637.29	637.21	637.11
C.L. APPROACH ROADWAY	637.27	637.34	637.39	637.42	637.43	637.43	637.40	637.36	637.30	637.22	637.13
CROWN LINE C	637.26	637.33	637.37	637.40	637.42	637.41	637.39	637.35	637.29	637.21	637.11
INTERMEDIATE LINE D	637.09	637.16	637.21	637.24	637.25	637.25	637.22	637.18	637.12	637.04	636.95
EAST GUTTER LINE	636.93	637.00	637.04	637.07	637.09	637.08	637.06	637.02	636.96	636.88	636.78
EAST EDGE OF SLAB	636.93	637.00	637.04	637.07	637.09	637.08	637.06	637.02	636.96	636.88	636.78



Design For 0° Skew
90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk
27'-6" End Spans 35'-0" Interior Span
Slab Elevation Plan
STA. 100+00.00 (Eastern Ave) Turn-in Date: November 2025
City of Davenport





Barrier Rail Notes:

Maintain a minimum clear distance of 2" from the concrete face to the nearest reinforcing bar, unless otherwise specified.

Construct permissible construction joints between vertical bars with a minimum spacing of 20 feet, ensuring a minimum distance of 1'-0" from the centerline of any handrail post. Apply an approved bond breaker on construction joint contact surfaces.

The cost of joint sealer and bond breaker is considered incidental to overall construction expenses.

All barrier rail reinforcing steel to be epoxy coated or stainless steel as shown.

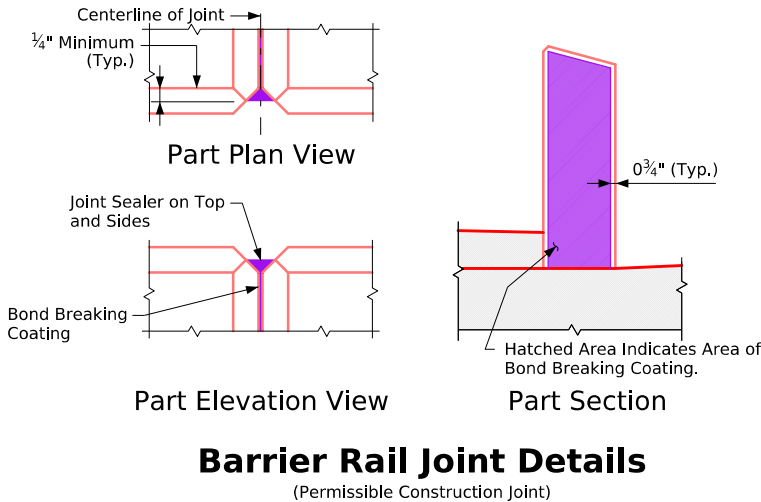
Bid for "Concrete Barrier, Reinforced, Separation" on a lineal foot basis. Payment will be made at the contract priced per linear foot based on plan quantities. The bid includes all material, equipment, and labor for concrete rail construction, including conduit if shown in these plans. Reinforcing steel quantity not included and bid separately.

Use a light gray nonsag latex caulking sealer designed for outdoor use as the joint sealer. No testing or certification is required.

Ensure the top of the barrier rail aligns parallel to the theoretical centerline grade.

Fillet all exposed corners with a 3/4" dressed and beveled strip for corners with a 90 degree or sharper angle.

The cross-sectional area of the separation barrier is 2.96 square feet.

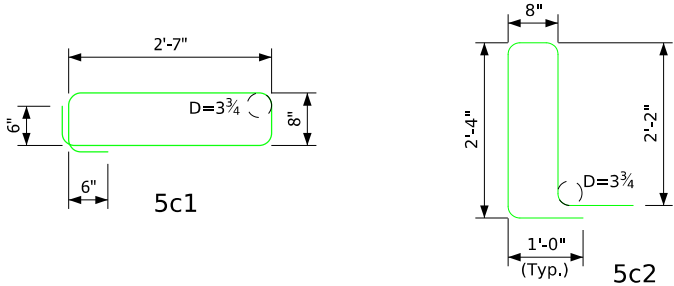


Epoxy Reinf. Steel - West Barrier Rail

Bar	Location	Shape	No.	Length	Weight
5c1	West Rail, Vertical		83	7'-6"	649
5c2	West Rail, Vertical		91	7'-2"	680
5d1	West Rail, Longitudinal		24	29'-8"	743
Epoxy-Coated Reinforcing Steel Total (lbs)					2,072

Note: Reinforcing Steel quantities are included on the "Summary Quantities Sheet"

Bent Bar Details



Note: All dimensions are out to out. D = Pin Diameter

Concrete Placement Summary

Section	Total (CY)
West Barrier Rail 83'-0" @ 0.110 CU. YD. Per FT.	9.1
	9.1

Concrete Separation Barrier Quantity

Item	Unit	Quantity
Concrete Barrier, Reinforced, Separation	L.F.	97.0

Design For 0° Skew

90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk

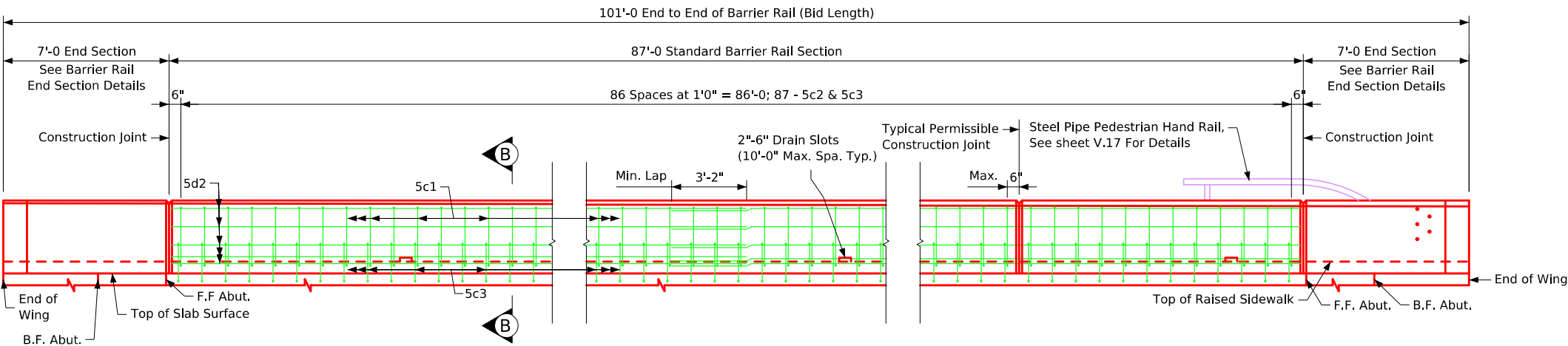
27'-6" End Spans35'-0" Interior Span

West Barrier Rail Details

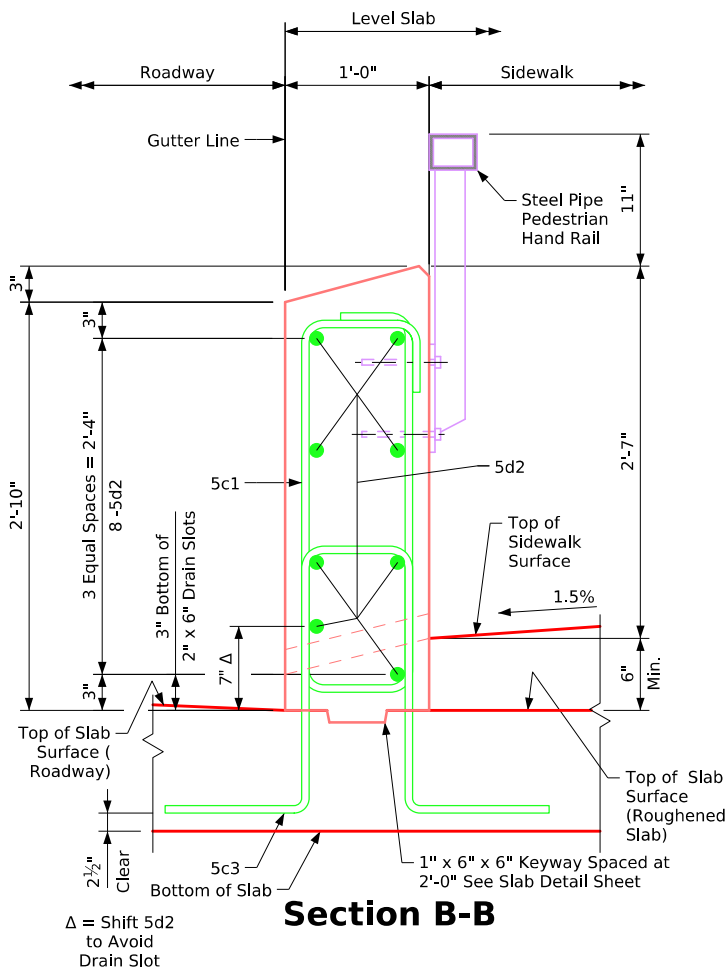
STA. 100+00.00 (Eastern Ave)Turn-in Date: November 2025

City of Davenport





Elevation of East Barrier Rail
(Looking East)



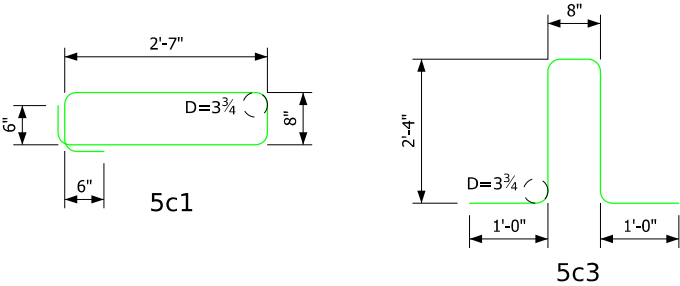
Section B-B

Epoxy Reinf. Steel - East Barrier Rail

Bar	Location	Shape	No.	Length	Weight
5c1	East Rail, Vertical		87	7'-6"	681
5c3	East Rail, Vertical		87	7'-4"	665
5d2	East Rail, Longitudinal		24	31'-0"	776
Epoxy-Coated Reinforcing Steel Total (lbs)					2,122

Note: Reinforcing Steel quantities are included on the "Summary Quantities Sheet"

Bent Bar Details



Note: All dimensions are out to out. D = Pin Diameter

Concrete Placement Summary

Section	Total (CY)
East Barrier Rail	9.6
	9.6

Concrete Separation Barrier Quantity

Section	Unit	Total
Concrete Barrier, Reinforced, Separation	L.F.	101.0

Note:
See Sheet V.15 for Barrier Rail Notes and Joint Details

Design For 0° Skew

90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk

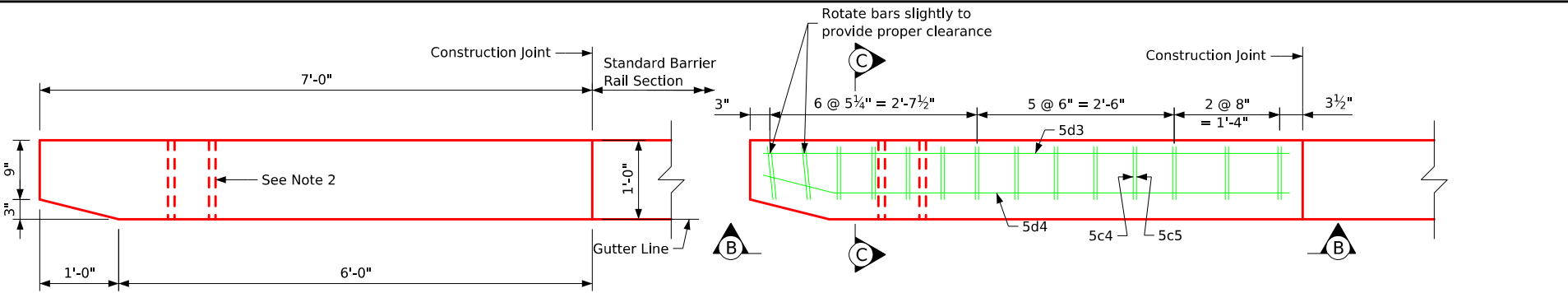
27'-6" End Spans35'-0" Interior Span

East Barrier Rail Details

STA. 100+00.00 (Eastern Ave)Turn-in Date: November 2025

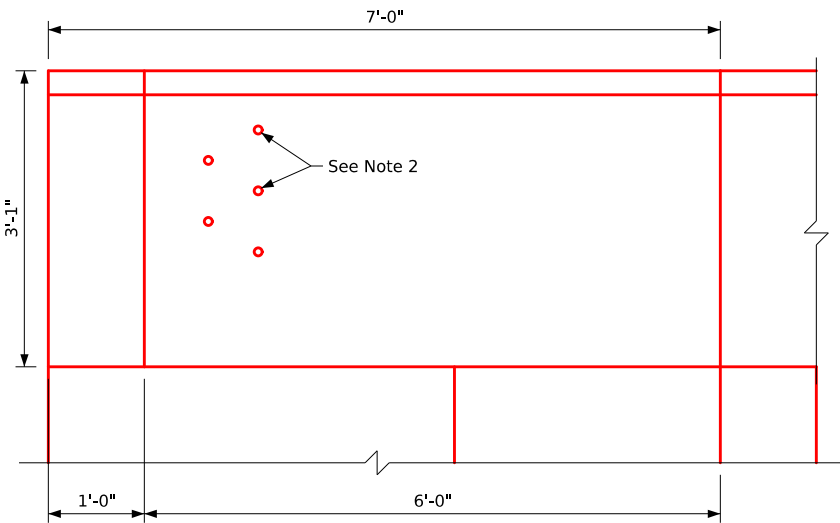
City of Davenport



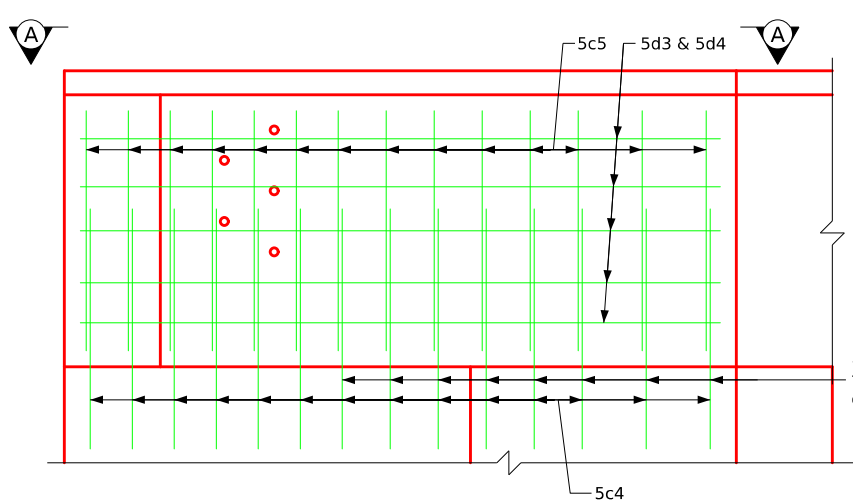


Part Plan View

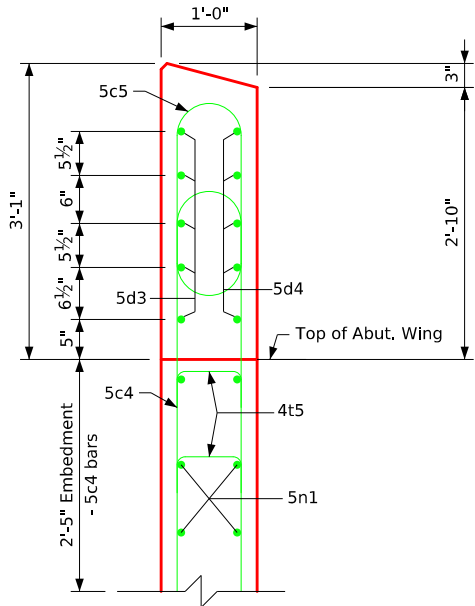
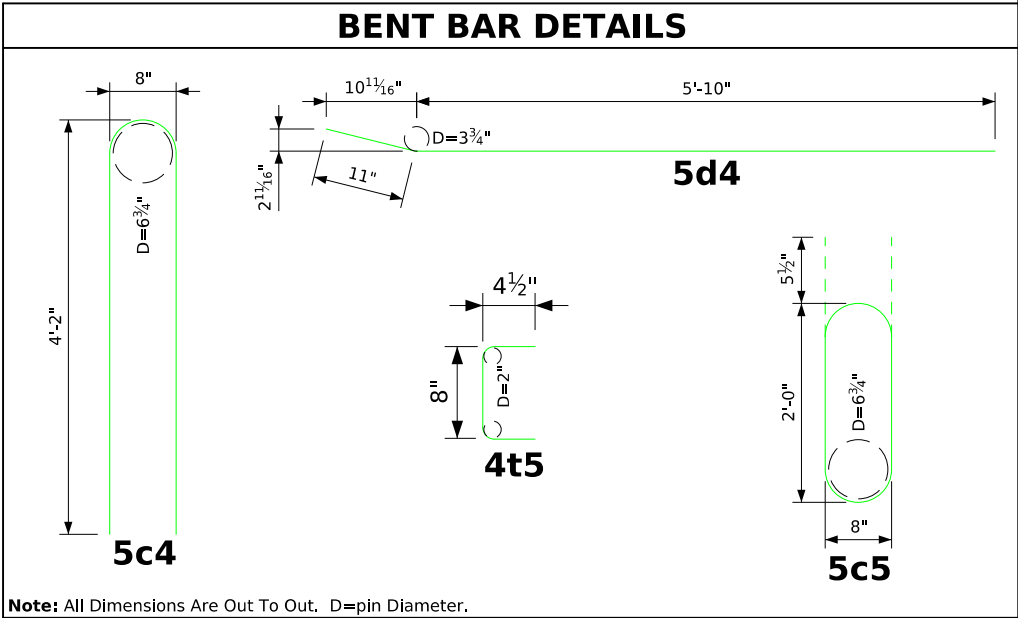
Part View A-A



Part Elevation View



Part View B-B



Section C-C

Note: 5n1 bars are included in the Superstructure Bar List on Sheet V.13.

Note 1:
At the NW Barrier Rail End Section, replace 8-5c4 bars (shown in Part View B-B) with 8-5c2 bars. Space 5c2 bars the same as the 5c4 bars they replace. All 5c2 bars are included in the West Barrier Rail reinforcing quantities on Sheet V.15.

Note 2:
Thru-bolt holes and horizontal 5d bar spacing shown on this sheet are for standard Iowa DOT guardrail connections. Impact attenuator bolt hole locations and spacing may differ. Contractor shall verify specific attenuator connections with the Engineer before placing end sections.

Epoxy Reinf. Steel - Four End Sections

Bar	Location	Shape	No.	Length	Weight
5c4	Vertical		48	8'-8"	434
5c5	Vertical		56	5'-11"	346
5d3	Horizontal, B.F.		20	6'-8"	139
5d4	Horizontal, F.F.		20	6'-9"	141
4t5	Rail, Abutment Wing, Tie Bars		18	1'-5"	17
					1,077

Concrete Placement Summary

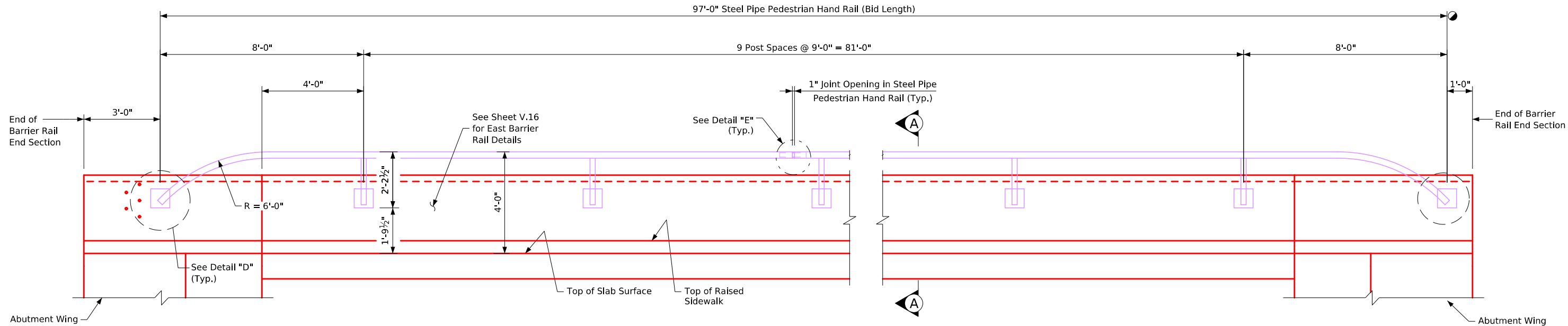
Section	Total (CY)
Barrier Rail End Section	3.0
4 End Sections @ 0.75 Cu. Yd. Per Ft.	3.0

Design For 0° Skew
90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk
27'-6" End Spans 35'-0" Interior Span
Barrier Rail End Section Details
STA. 100+00.00 (Eastern Ave) Turn-in Date: November 2025
City of Davenport



Pedestrian Handrail Placement Quantity

Item	Unit	Total
Steel Pipe Pedestrian Hand Rail	L.F.	97.0

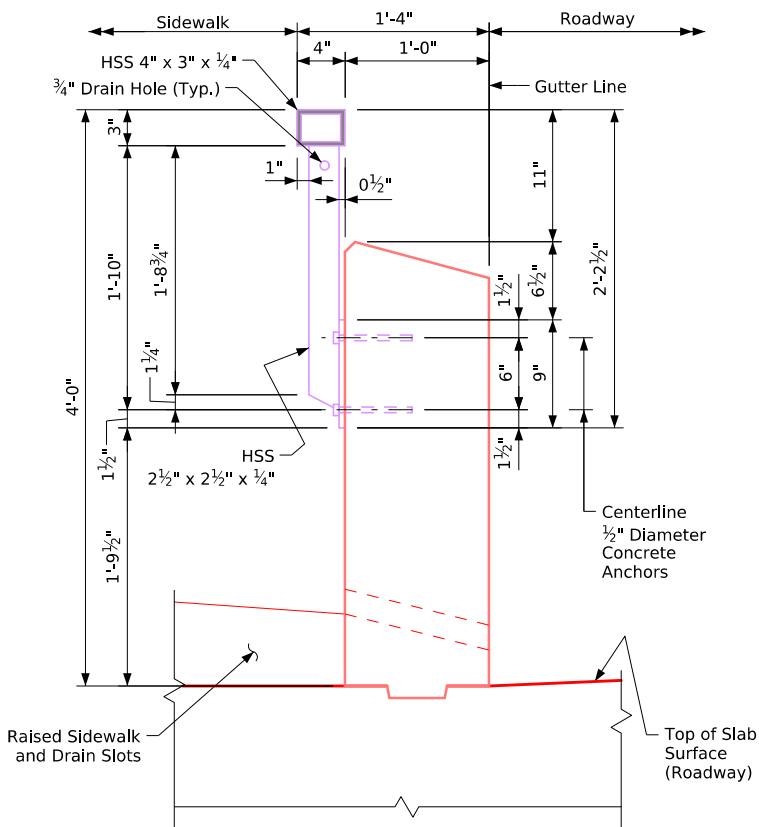


South Abutment

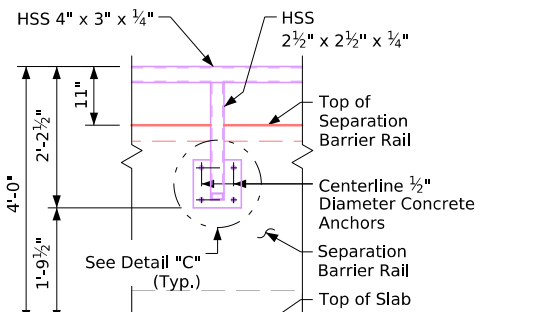
Elevation of Steel Pipe Pedestrian Hand Rail Layout - East Rail

(Looking West)

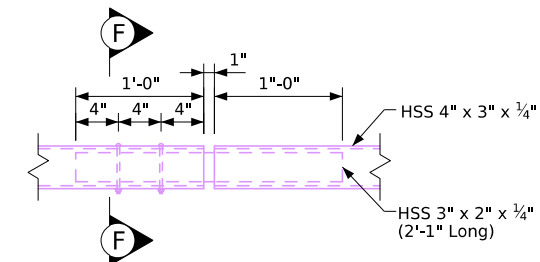
North Abutment



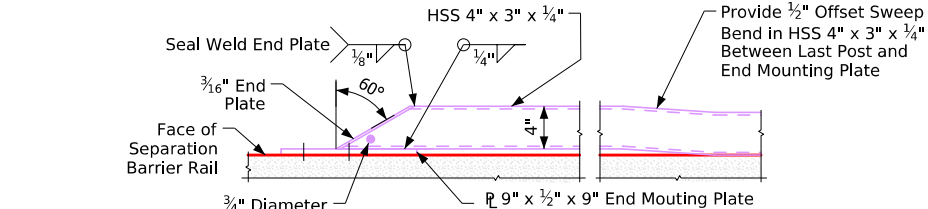
Section A-A



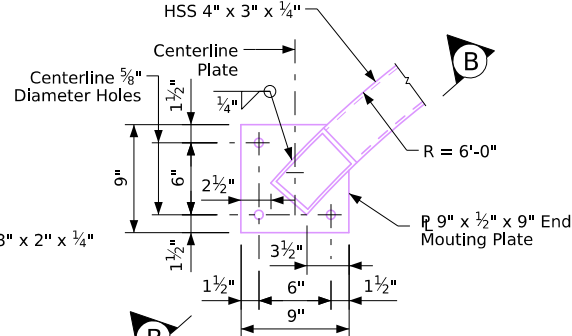
Part Elevation



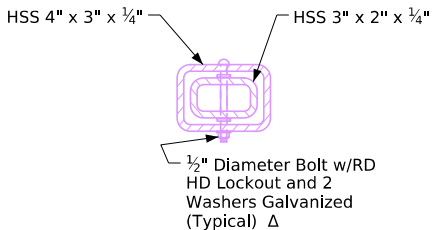
Detail "E"



Section B-B

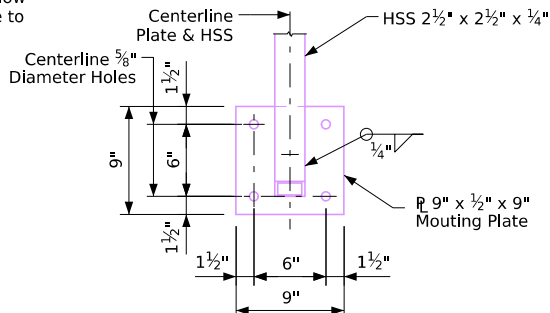


Detail "D"



Section F-F

Note:
Δ Space inner sleeve from outer tube with tack weld standard washer above and below sleeve at each bolt. Holes in inner sleeve to be 3/4" diameter oversized holes.



Detail "C"

Steel Pipe Pedestrian Hand Rail Notes

The Steel Pipe Pedestrian Hand Rail is to be bid on a lineal foot basis measured end to end of rail. The price bid for Steel Pipe Pedestrian Hand Rail shall be full compensation for furnishing all material, including anchor bolts and shims, and all of the equipment and labor required to erect the rail in accordance with these plans and specifications.

Hollow structural sections must meet the requirements of ASTM A500 Grade B. Steel plates and shims must meet ASTM A-36. Panels, splice sections, and end sections are to be galvanized after fabrication in accordance with ASTM A123 specifications.

Ends of rail sections are to be sawed or milled. All cut ends are to be true, smooth, and free of burrs or ragged edges.

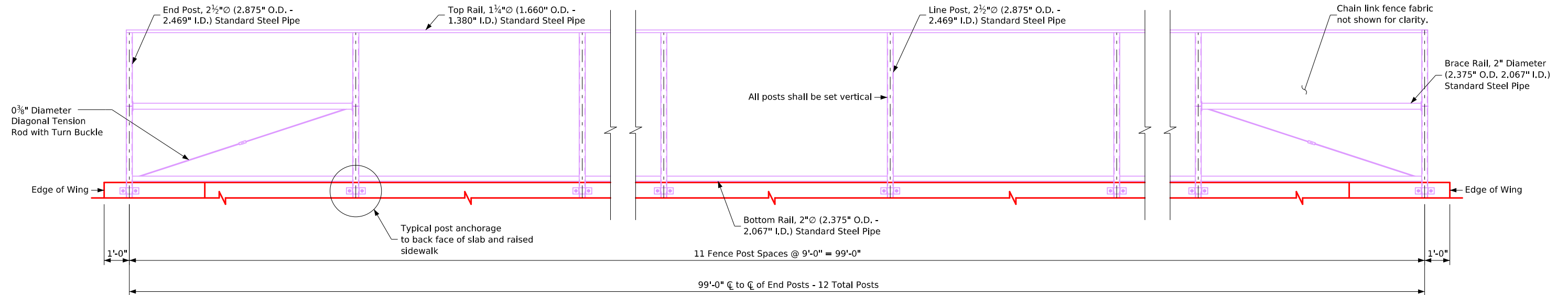
No painting will be required.

The stud concrete anchors shall be galvanized and have a minimum pull out strength of 8000 pounds based on 4000 psi concrete.

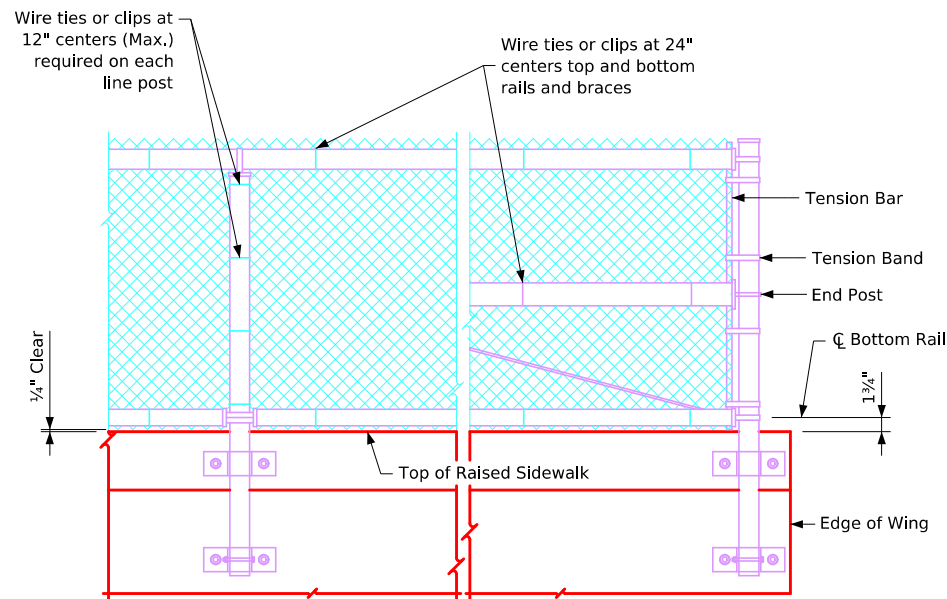
● Dimensions provided are along the back face of the separation barrier rail (Sidewalk Side) and are in the horizontal plane only. The Contractor must adjust for slope and vertical curve to align with the horizontal and vertical alignment of the bridge. Posts shall be set normal to the bridge grade.

Design For 0° Skew
90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk
27'-6" End Spans 35'-0" Interior Span
Back Mounted Ped. Hand Rail
STA. 100+00.00 (Eastern Ave) Turn-in Date: November 2025
City of Davenport



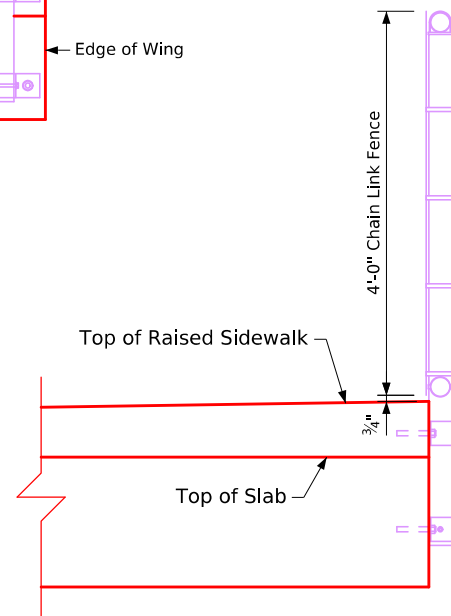


Elevation of Back-Mounted Fence
(Looking West)

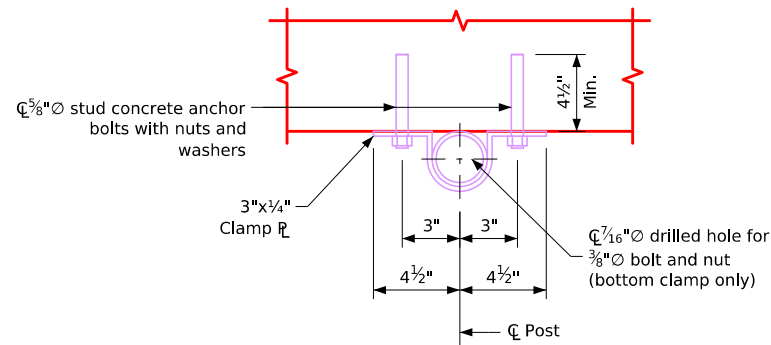


Fence Details

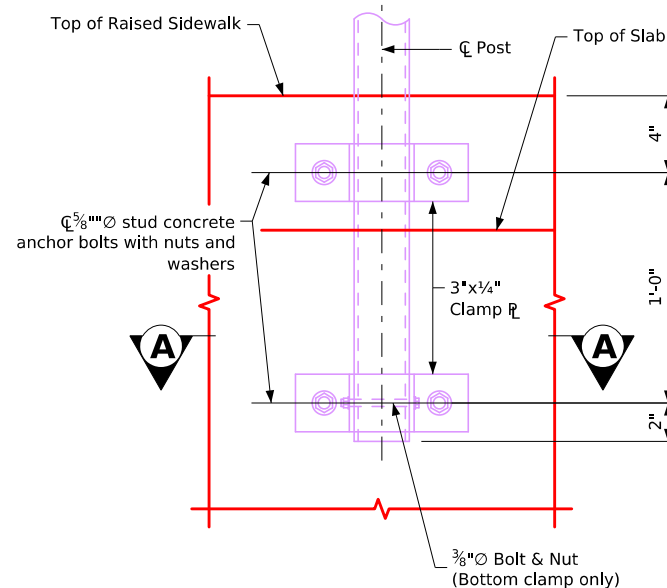
Note:
The price bid for "Fence, Chain Link, 48 in. Height" shall include all costs associated with preparing and submitting shop drawings for the clamp post connection plates.



Typical Section
(Looking North)



Section A-A



Part Elevation - Typical Connection

Back-Mounted Chain Link Fence Notes:

The chain link fence is to be bid on a linear foot basis measured from centerline to centerline of end posts. The price bid for "Fence, Chain Link, 48In. Height" shall be full compensation for furnishing all material, including concrete anchors and shims, and all of the equipment and labor required to erect the fence in accordance with these Plans and Specifications.

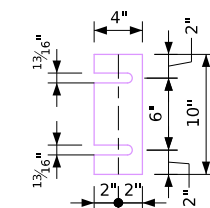
The chain link fence shall be either zinc or aluminum coated fabric, 2" mesh, no.9 wires, 48" height with knuckled selvages top and bottom.

The stud concrete anchors shall be galvanized and have a minimum pullout strength of 8000 pounds based on 4000 psi concrete.

The material for posts, braces and rails shall be steel pipe in accordance with Article 4154.10, A, of the Standards Specifications. As an alternate, ASTM A500 Grade B pipe material may be substituted for the posts. Clamp plates and shims shall meet the requirements of ASTM A36. Posts and plates shall be galvanized, after fabrication, in accordance with the requirements of ASTM A123. Special fittings shall be in accordance with Article 4154.11, of the Standard Specifications, unless otherwise noted.

The fence shall be true to line, taut, and comply with the best practice for fence construction of this type. All ends of wires shall be turned so that they extend away from the sidewalk side of the fence.

Do not attach signs, company advertising, or other insignia to the completed fence.

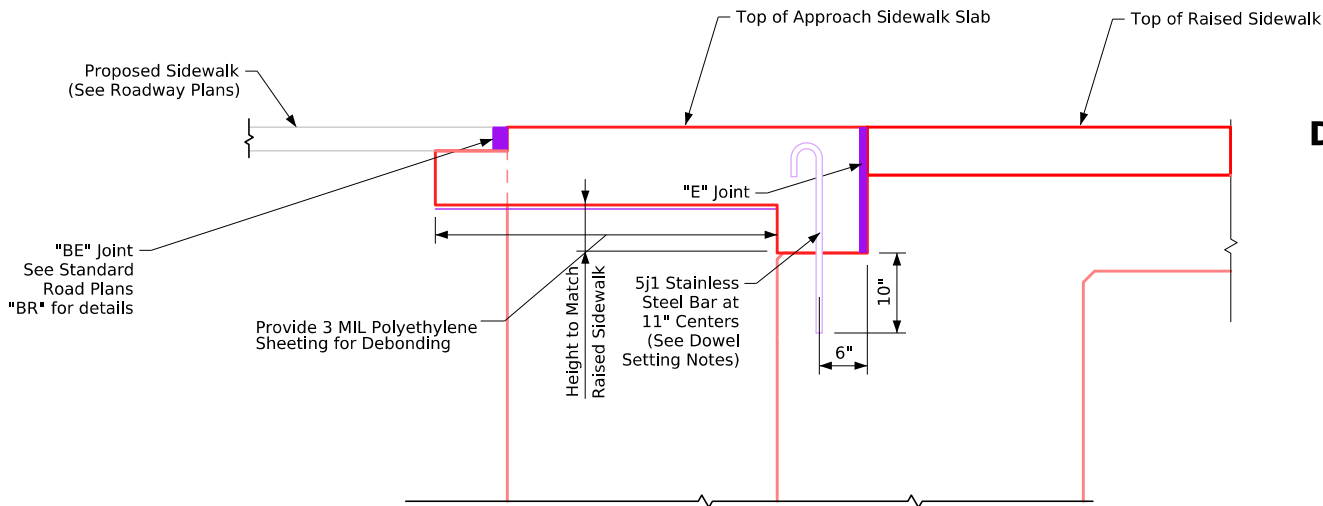


Galvanized Steel Shim

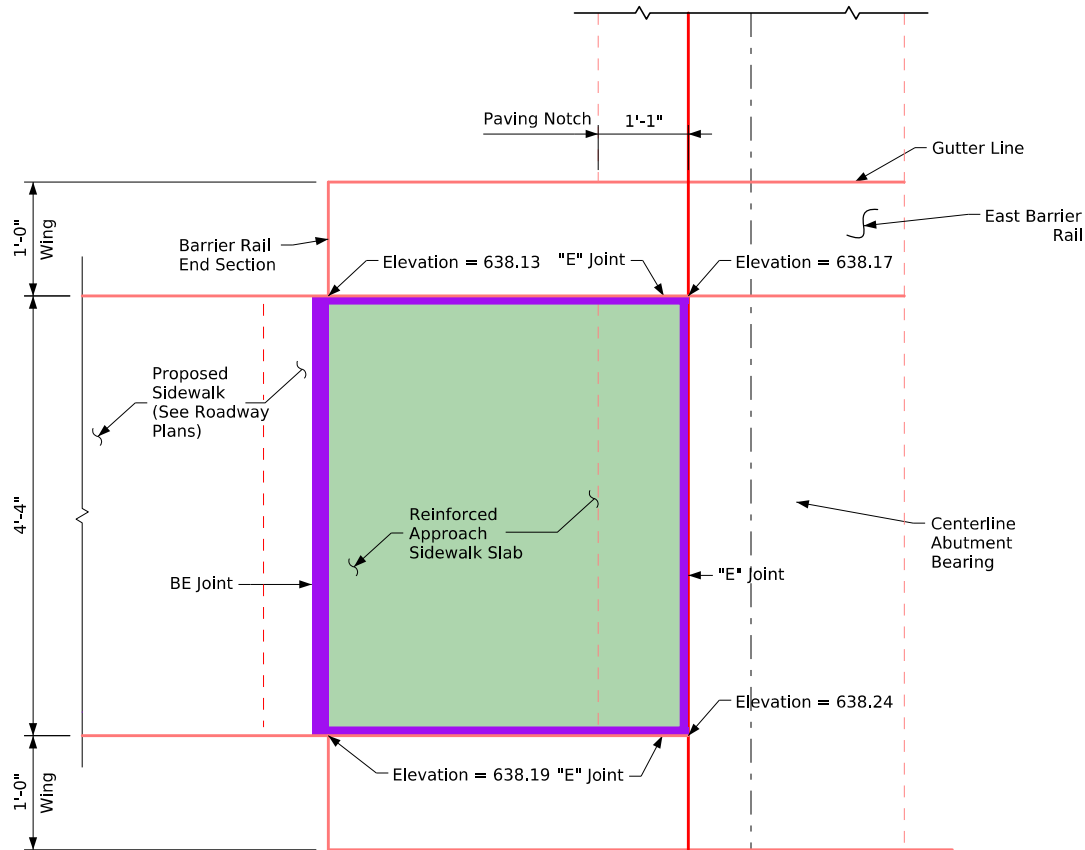
Note:
Provide 4 galvanized ½" steel shims per railing post. Use as needed

Quantities		
Item	Units	Amount
Fence, Chain Link, 48in. Height	Lin. Ft.	99.0

Design For 0° Skew
90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk
27'-6" End Spans 35'-0" Interior Span
Back Mounted Chain Link Fence Details
STA. 100+00.00 (Eastern Ave) Turn-in Date: November 2025
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Part Longitudinal Section Thru Approach Sidewalk Slab
(Chain Link Fence and Steel Pipe Hand Rail NOT shown)
(SE Corner shown, NE Corner similar)



Plan View Approach Sidewalk Slab
(Chain Link Fence and Steel Pipe Hand Rail NOT shown)
(SE Corner shown, NE Corner similar)

Dowel Setting Notes:

The 5j1 bars shall be set as dowels in drilled holes. Holes are to be 10" deep. The dowels shall be installed in accordance with the Manufacturer's recommendations. The following systems shall be used as a bonding agent for the dowels:

A. Polymer grout system in accordance with Article 2301.03, E, of the Standard Specifications.

B. Hydraulic cement grout systems. Drilled holes are to be 2½ times the dowel diameter and are to be blown clean with compressed air immediately prior to placing grout. The hydraulic cement grout shall be one of those approved in Materials I.M. 491.13 and shall be used in accordance with the Manufacturer's recommendations.

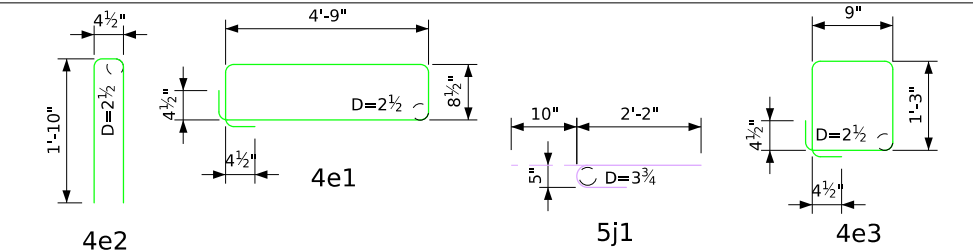
Epoxy-Coated Reinforcing Steel - One Sidewalk Slab

Bar	Location	Shape	No.	Length	Weight
4e1	Sidewalk Slab Hoop		5	11'-8"	39
4e2	Sidewalk Slab Hoop, at Sidewalk Lip		5	4'-1"	14
4e3	Sidewalk Slab Hoop, at Paving Notch		5	4'-9"	16
4m1	Sidewalk Slab transv. Top & Bottom		17	4'-0"	45
Epoxy-Coated Reinforcing Steel Total (lbs)					114

Stainless Steel Reinforcing - One Sidewalk Slab

Bar	Location	Shape	No.	Length	Weight
5j1	Sidewalk Slab Dowel		5	3'-0"	16
Stainless Steel Reinforcing Total (lbs)					16

Bent Bar Details

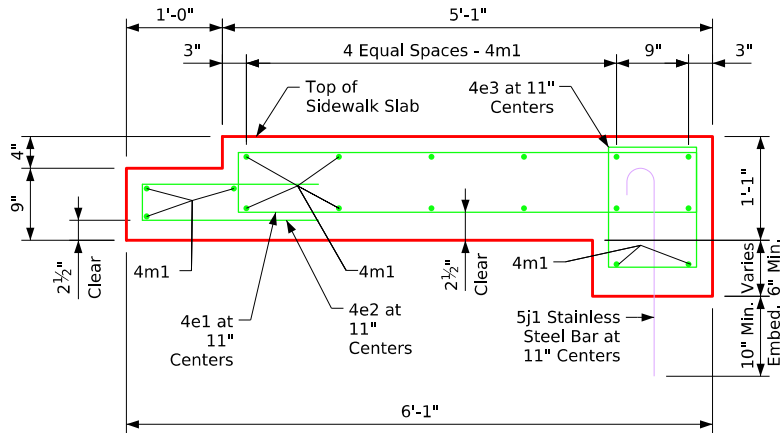


Note: All dimensions are out to out. D = Pin Diameter

Concrete Placement Quantity

Item	Unit	Total
Structural Concrete (Bridge) - 2 Sidewalk Approach Slabs at 1.1 CY per Slab	cu. yd.	2.2

5j1 dowels shall be deformed bar Grade 60, Type 316 LN in accordance with Standard Specifications 4151.03.E.



Longitudinal Section of Approach Sidewalk Slab

Note:
Reinforcing Steel and Structural Concrete (Bridge) quantities are included on the "Summary Quantities Sheet"

Design For 0° Skew

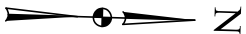
90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk

27'-6" End Spans35'-0" Interior Span

Reinf. Appr. Sdwk. Slab

STA. 100+00.00 (Eastern Ave)Turn-in Date: November 2025

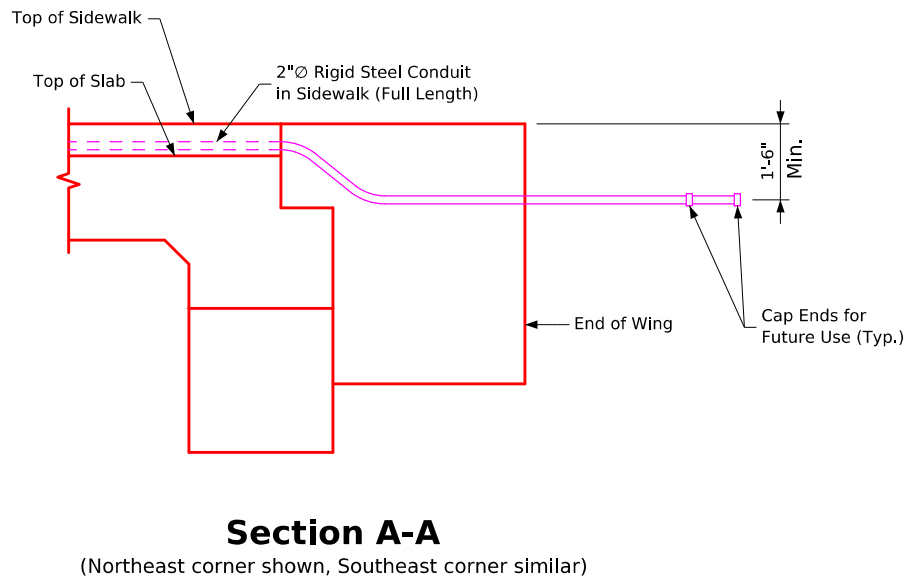
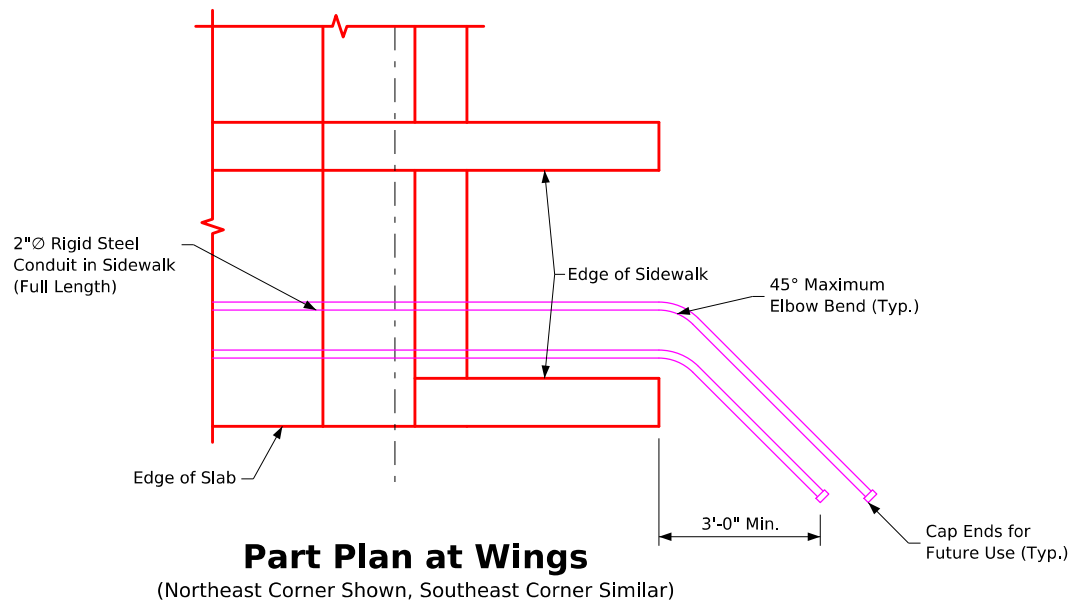
City of Davenport



Conduit Notes:
Construction shall conform to the current Iowa D.O.T. Standard and supplemental specifications and special provisions.

Conduit installation shall be in accordance with article 2523.03, N, of the standard specifications.

The rigid steel conduit and fittings including labor and any additional work to do the installation is considered incidental to the cost of structural concrete (bridge).



Notes:
Fence and rail not shown in details.

See sheet V.10 for details of conduit in transverse section.

Design For 0° Skew

90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk

27'-6" End Spans35'-0" Interior Span

Conduit Details

STA. 100+00.00 (Eastern Ave)Turn-in Date: November 2025

City of Davenport



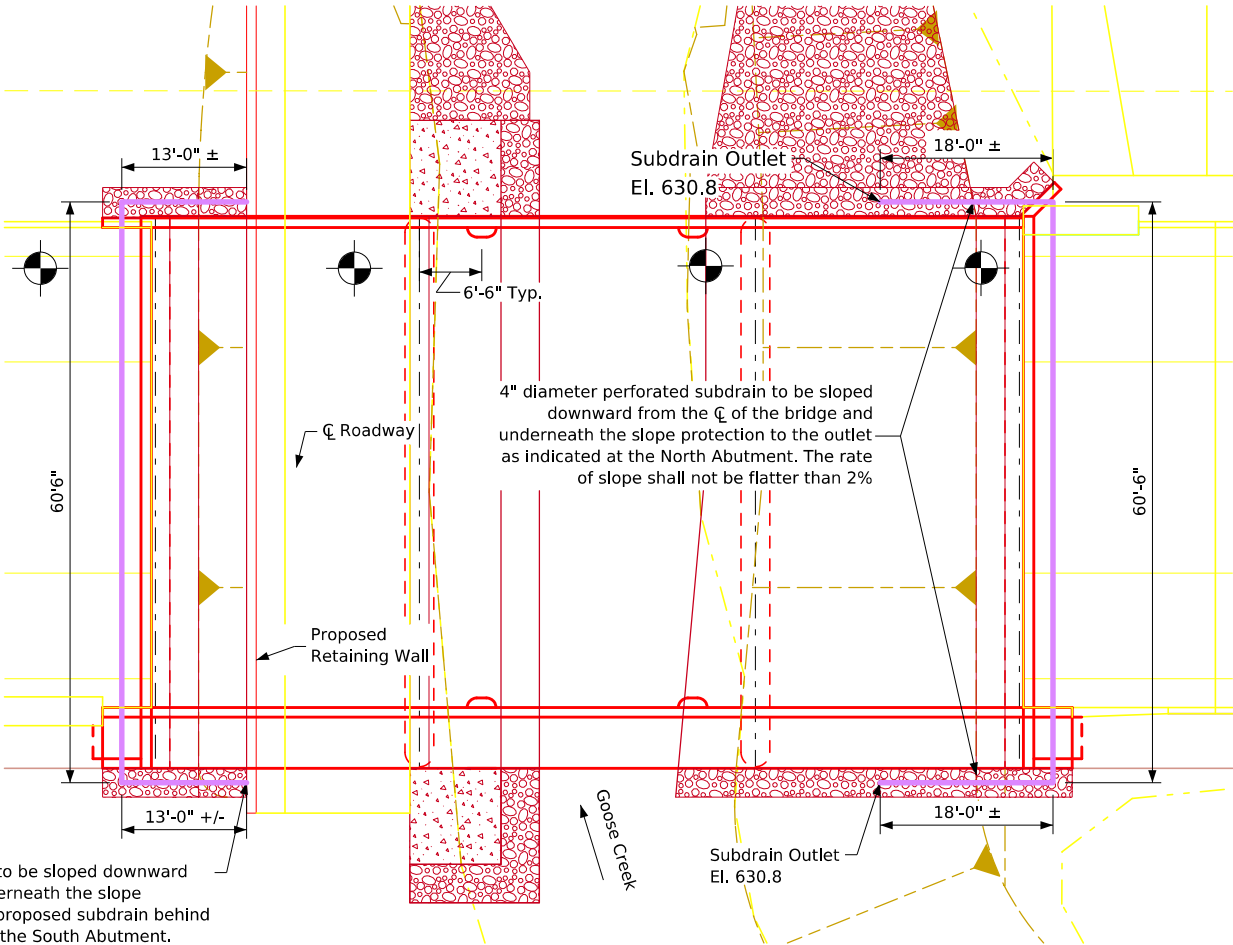
Subdrain Notes:

This plan sheet shows details for placing all subdrains and subdrain outlets required for this structure.

The Bridge Contractor is responsible for installing subdrains behind the abutment. The subdrains shall be 4" in diameter and comply with Article 4143.01, B, of the Standard Specifications. The subdrain outlet shall consist of a 6'-0" length of pipe with a removable rodent guard.

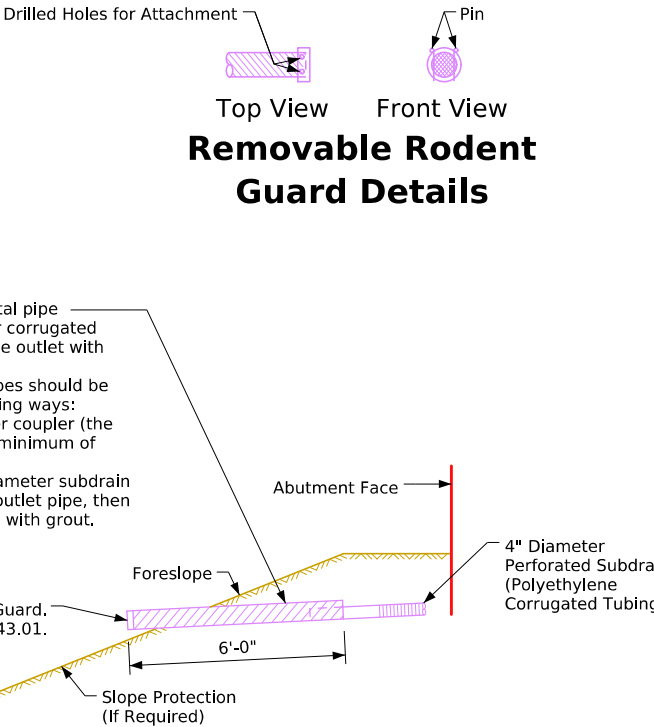
The dimensions shown for the proposed subdrains are based on the grading layout of the bridge berms. These dimensions are for estimating purposes only. Required lengths and general locations of subdrains may change due to field adjustments to the grading layout.

The cost for furnishing and placing the subdrain (including excavation), granular backfill, porous backfill, and subdrain outlet is to be included in the price bid for "Structural Concrete (Bridge)." No additional payment will be made.



Situation Plan

(Showing Subdrain Locations)



Typical Subdrain Outlet Details at North Berm

Design For 0° Skew
90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk
27'-6" End Spans 35'-0" Interior Span
Subdrain Details
STA. 100+00.00 (Eastern Ave) Turn-in Date: November 2025
City of Davenport

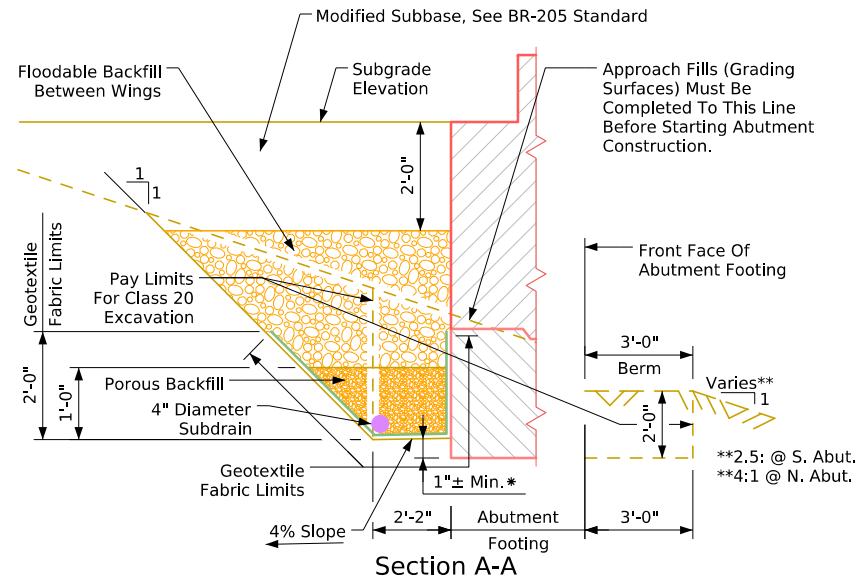


Note:

Subdrain shall slope downward 2% from centerline approach roadway when outletting both sides of the abutment.

The geotextile fabric shall be in accordance with **Article 4196.01, B, 6 of the Standard Specifications**. If the engineering fabric is lapped the laps shall be a minimum of one foot in length, shingle fashion with up slope lap piece on top and stapled for continuity.

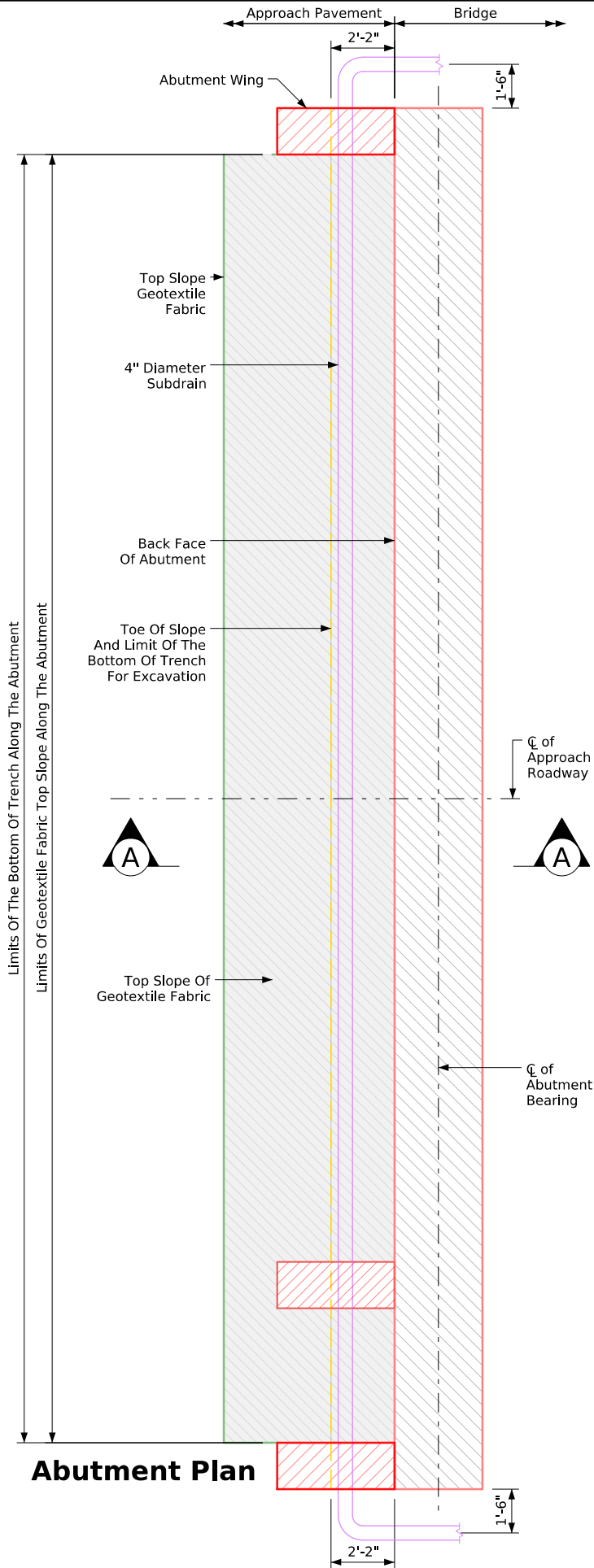
Note: The shaded area indicates the limits of geotextile fabric.



Backfill Details

Note: Geotextile fabric shall be attached to the face of the abutment footing and wings.

* Dimension varies due to the 2% subdrain slope.



Bench Marks: BM 500, Fd "X" SE Wing of Bridge, El. = 640.186

BM 501, Fd "X" NW Wing of Bridge, El. = 640.201

Abutment Backfill Process:

The base of the excavation subgrade behind the abutment shall be graded with a 4% slope away from the abutment footing and a 2% cross slope towards the subdrain outlet. This grading should be completed before the installation of the geotextile and backfill material.

Once the subgrade is shaped, the geotextile fabric shall be installed according to the details shown. The fabric is to be placed at the base of the excavation and extended vertically up the abutment backwall, wing walls, and excavation face, reaching a height approximately 1 to 2 feet higher than the porous backfill, as shown in the "Backfill Details" on this sheet. The fabric strips should overlap by about 1 foot and be pinned in place. The fabric should be attached to the abutment using lath folded into the fabric and secured with shallow concrete nails. The fabric against the excavation face must also be pinned.

After the fabric is installed, the subdrain shall be placed directly on it at the toe of the rear excavation slope. A slot should be cut in the fabric where the subdrain exits near the end of the abutment wing wall.

Porous backfill shall be placed and leveled without compaction.

Next, floodable backfill shall be used, followed by surface flooding and vibratory compaction. The floodable backfill material must conform to the Standard Specifications. It should be placed in lifts, surface flooded, and compacted with vibratory compaction to ensure full consolidation, with a maximum loose lift thickness of 2 feet.

Surface flooding for each lift should start at the high point of the subdrain and proceed to the low point where the subdrain exits the fabric. Water should be applied through a 2-inch diameter hose, sprayed in 6-foot to 8-foot increments for 3 minutes per increment to ensure uniform flooding.

The placement of floodable backfill, flooding, and compaction should continue until the full thickness of the abutment backfill is completed.

Water used for flooding, subdrains, porous backfill, floodable backfill, and geotextile fabric at the bridge abutments will not be measured separately for payment. The cost of this water shall be included in the contract unit price bid for **"Structural Concrete (Bridge)"**.

Note: For additional details not shown on this sheet, see **Subdrain Details** on Sheet V.22.



Design For 0° Skew

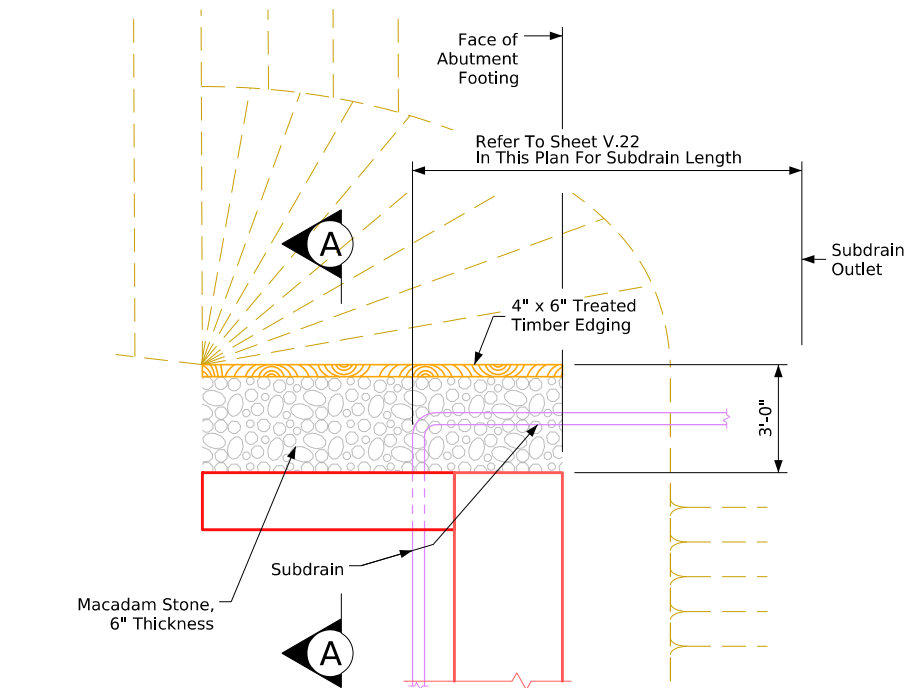
90'-0" x 50'-0" Continuous Concrete Slab Bridge w/5'-4" Sidewalk

27'-6" End Spans 35'-0" Interior Span

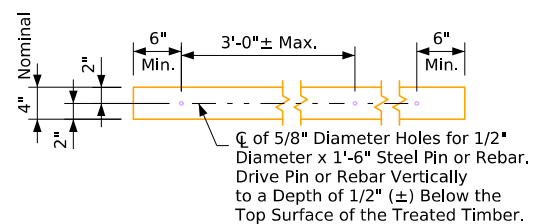
Abutment Backfill Details

STA. 100+00.00 (Eastern Ave) Turn-in Date: November 2025

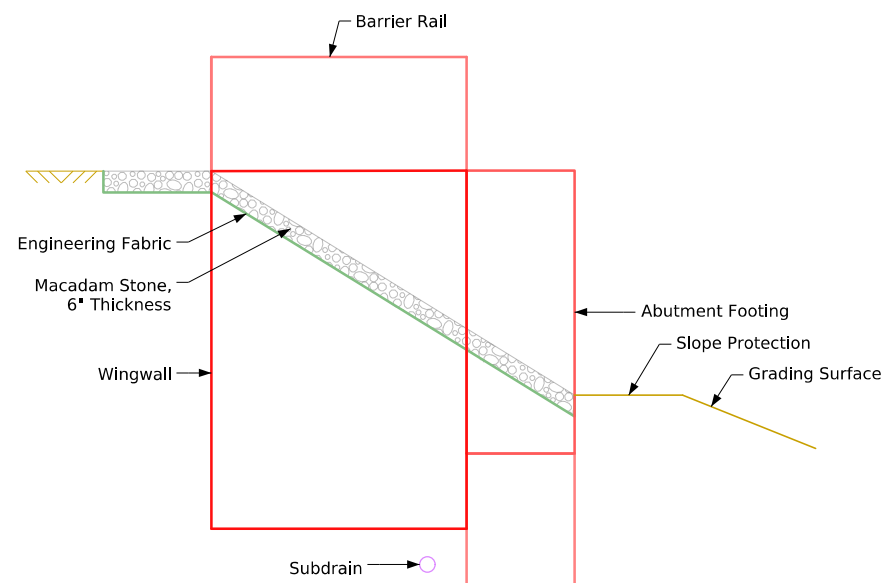
City of Davenport



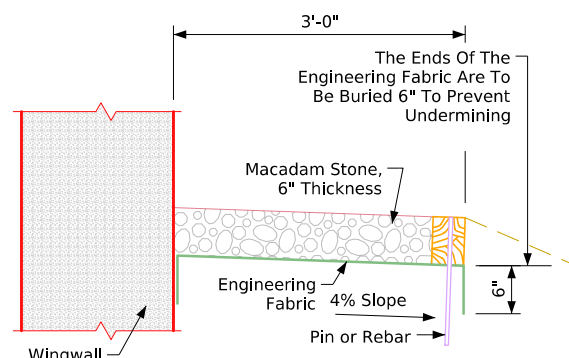
Plan View of Wing Armoring



4" x 6" Treated Timber Edging Details



Elevation View of Wing Armoring



Section A-A

Macadam Stone Wing Armoring Notes:

Macadam stone shall be placed along the side of the wing and abutment footing, typically at each corner of the bridge unless otherwise noted in the plans. This macadam stone shall be underlaid with engineering fabric and comply with **Article 4196.01, B, 3, of the Standard Specifications**.

The bridge berm foreslope shall be compacted and shaped as shown on these plans, the Situation Plan, and as directed by the Engineer. The berm foreslope shall be firm when the engineering fabric and macadam stone are placed.

The engineering fabric shall meet the requirements of **Article 4196.01, B, 3, of the Standard Specifications**. If the fabric is lapped, the laps shall be a minimum of one foot in length, placed in shingle fashion with the upslope lap piece on top and stapled for continuity.

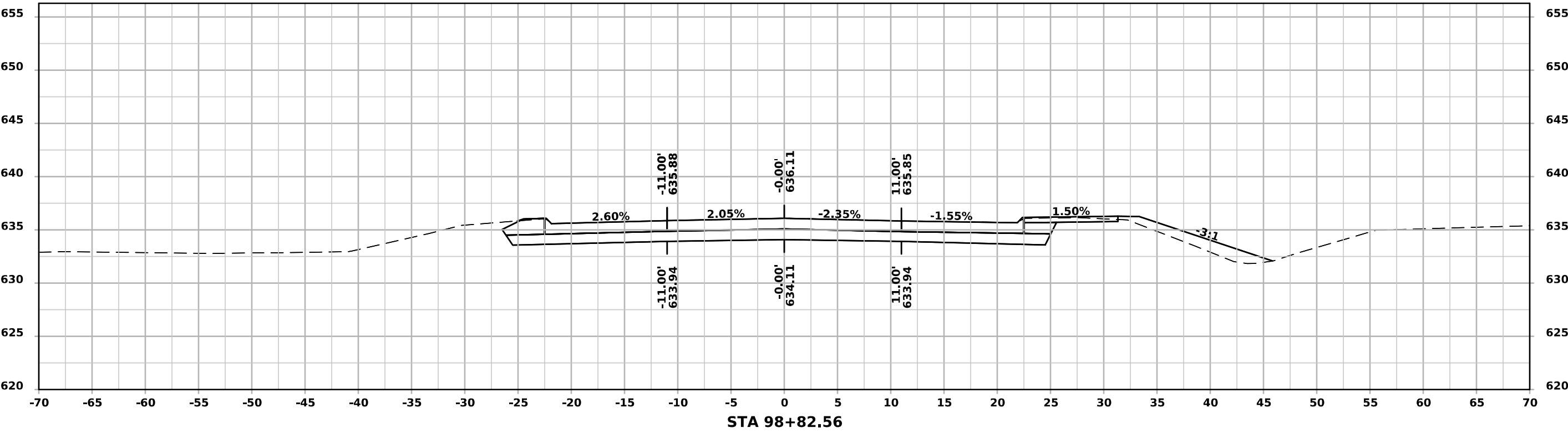
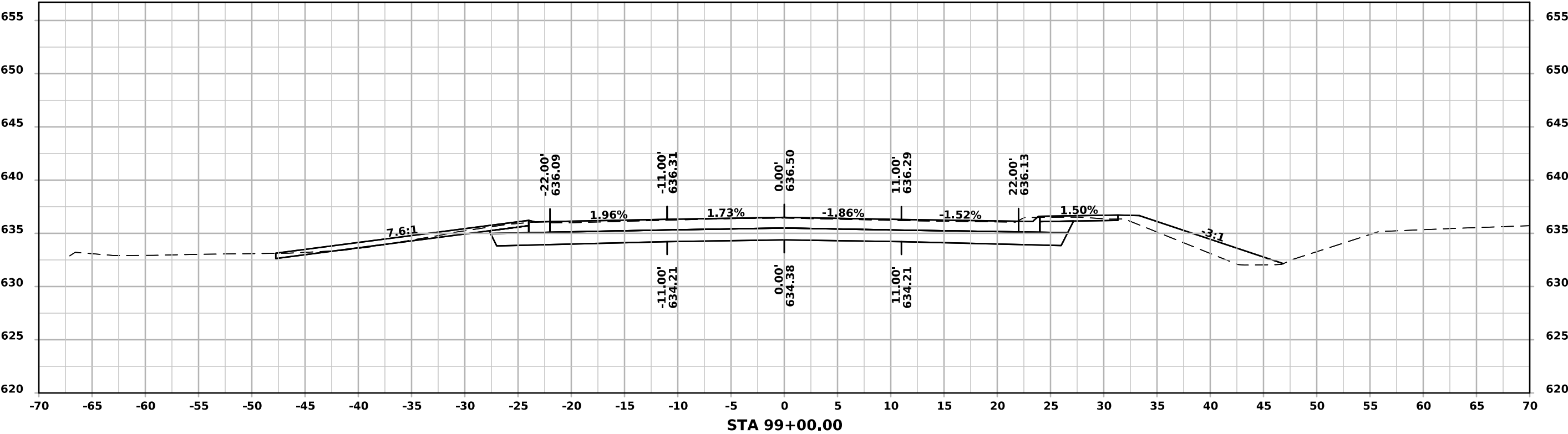
The macadam stone shall comply with **Article 4122.02 of the Standard Specifications** for coarse material (no choke stone allowed).

The wood preservative treatment for the timber edging shall meet the requirements for guardrail posts, sawed four sides, and comply with **Section 4161 of the Standard Specifications**.

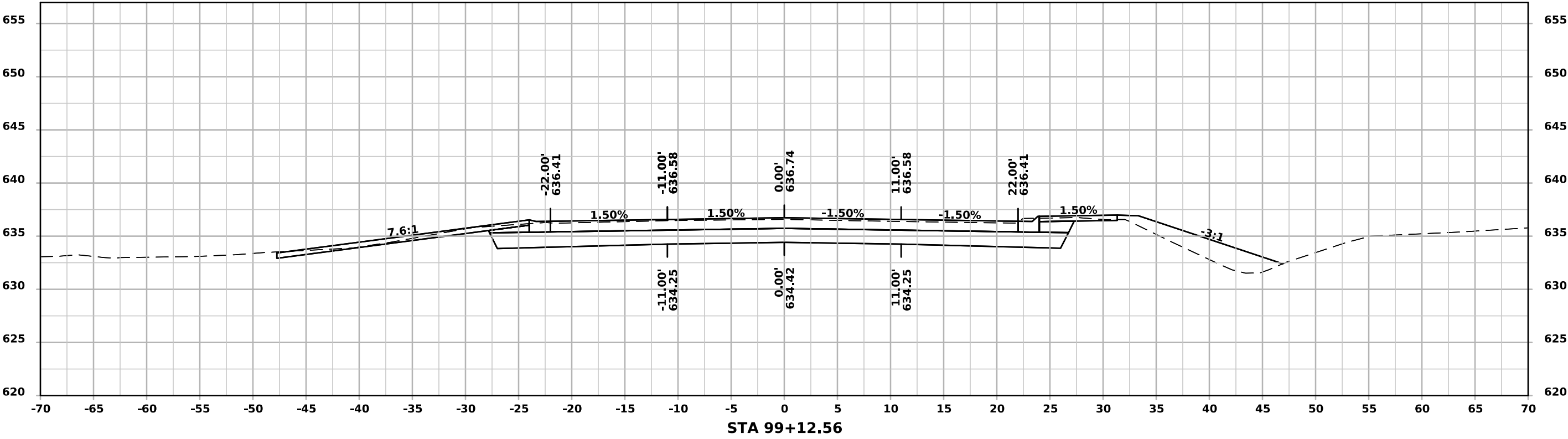
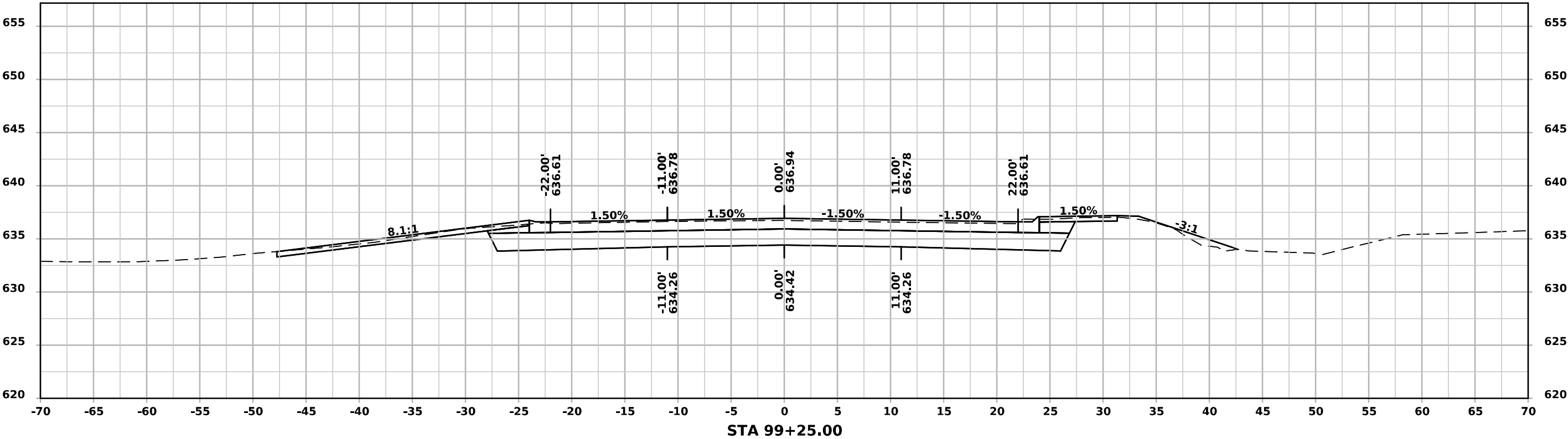
The macadam stone shall be deposited, spread, consolidated, and shaped by mechanical or hand methods to provide uniform depth, density, and surface appearance.

Payment for the bridge wing armoring shall be incidental to the price bid item **"Structural Concrete (Bridge)"** and shall include all material and labor costs to construct the wing armoring as shown in these plans.

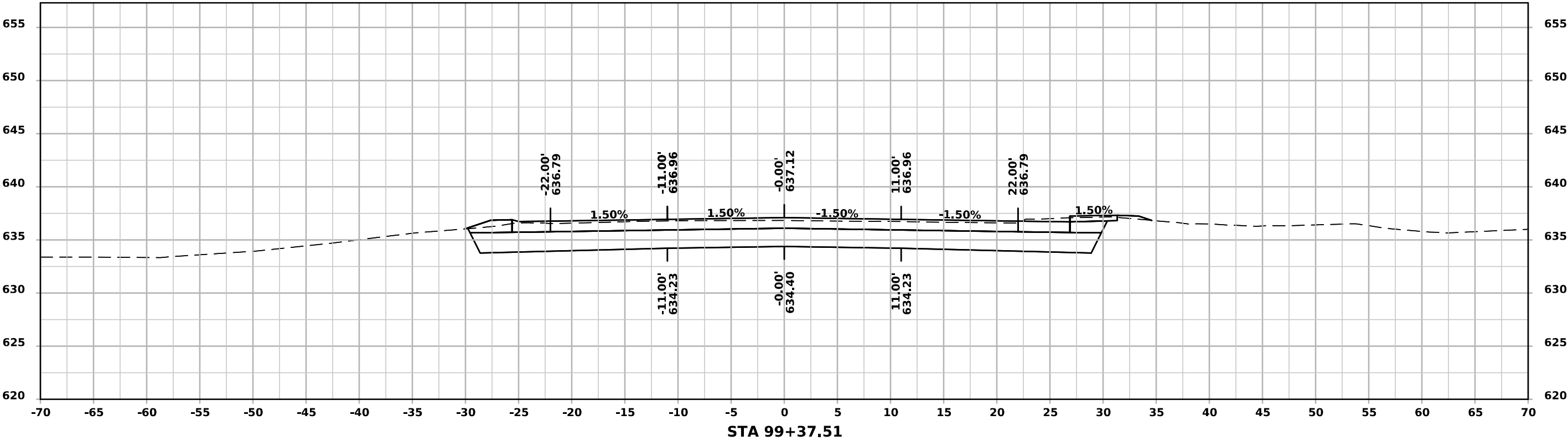
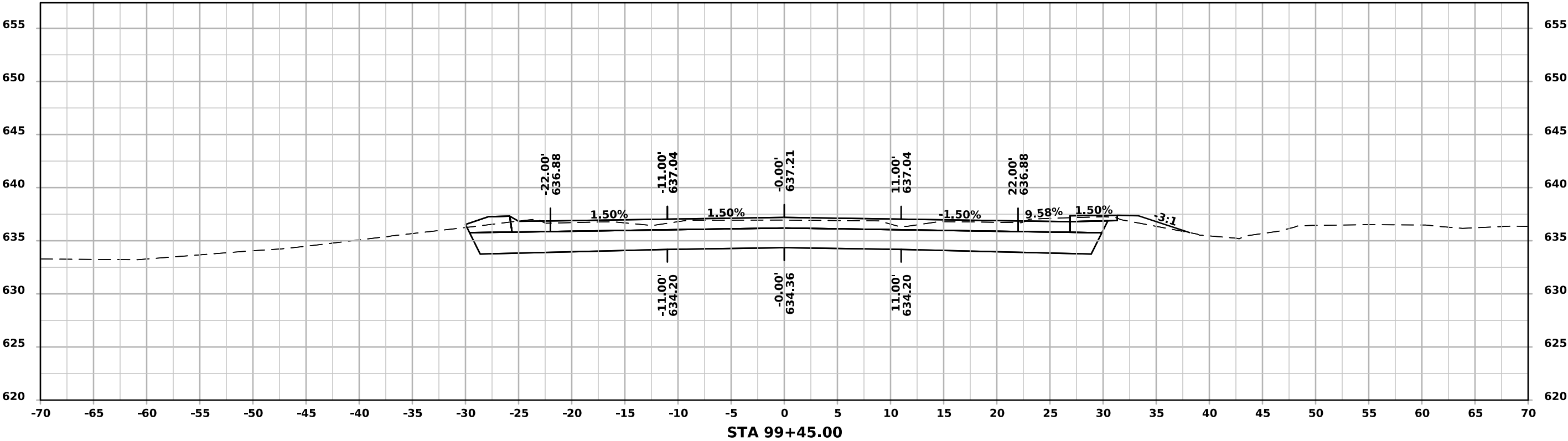
MLEASTERNAVE



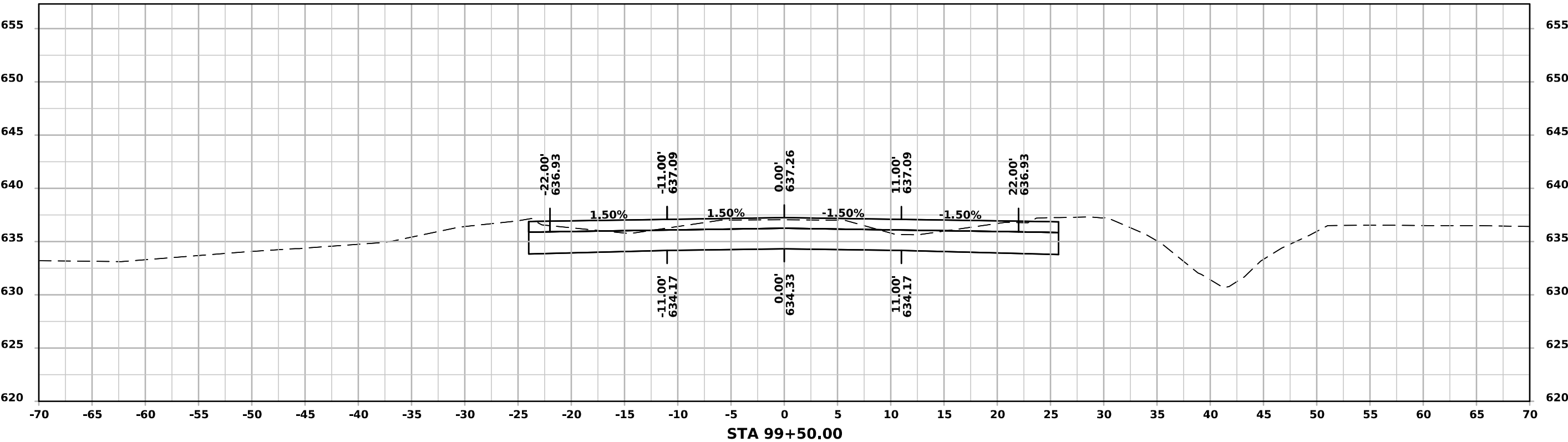
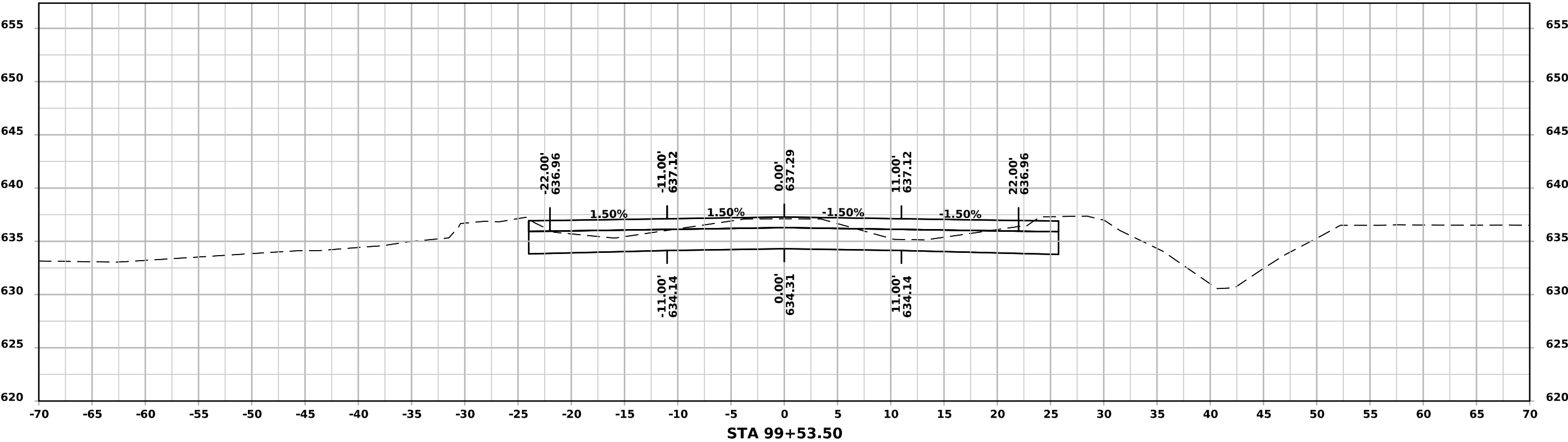
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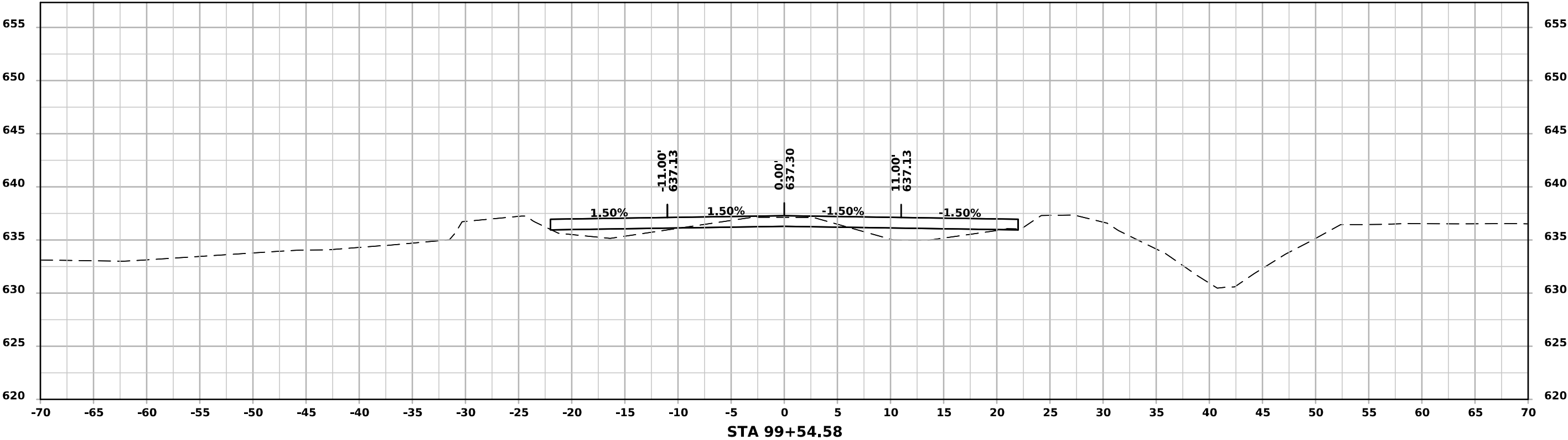
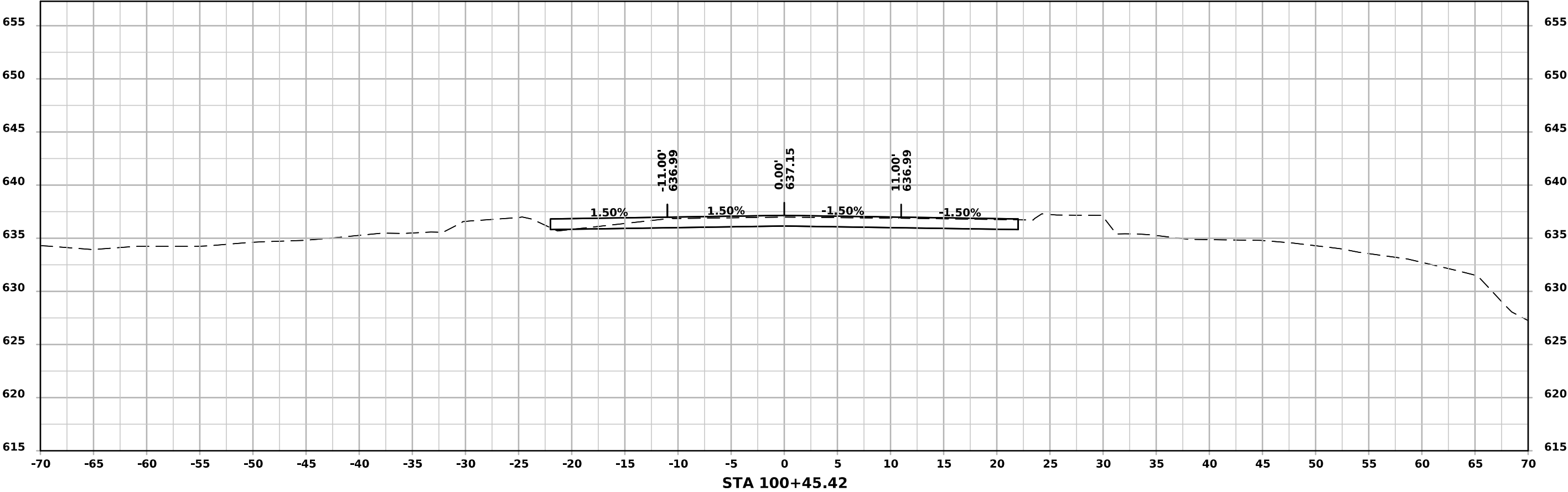
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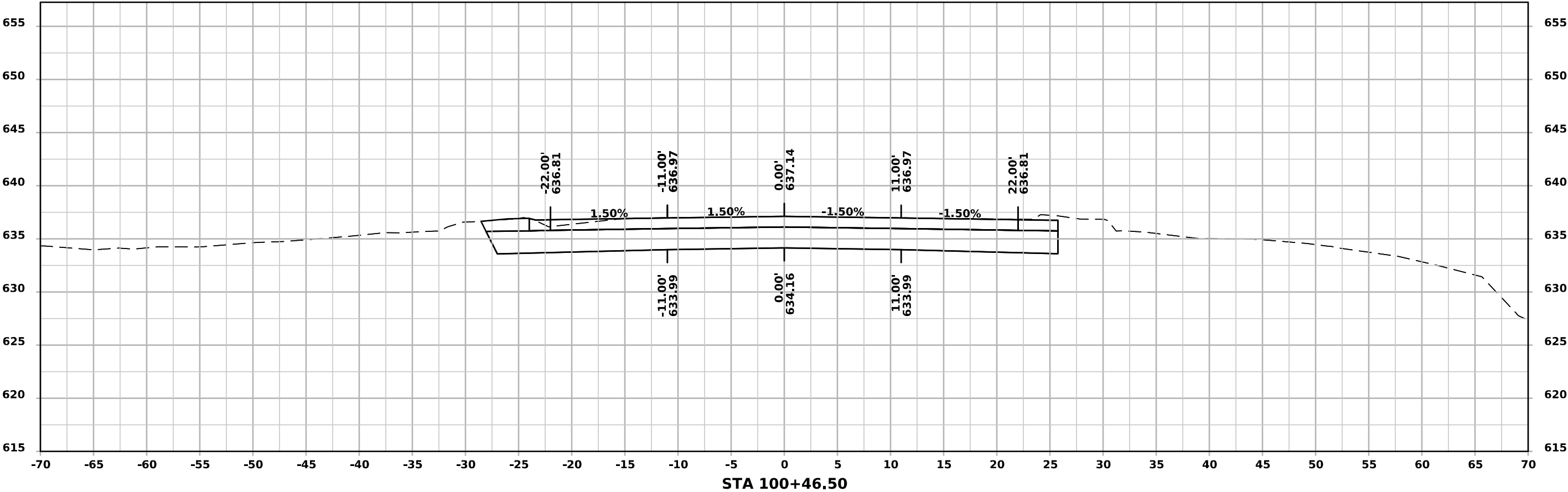
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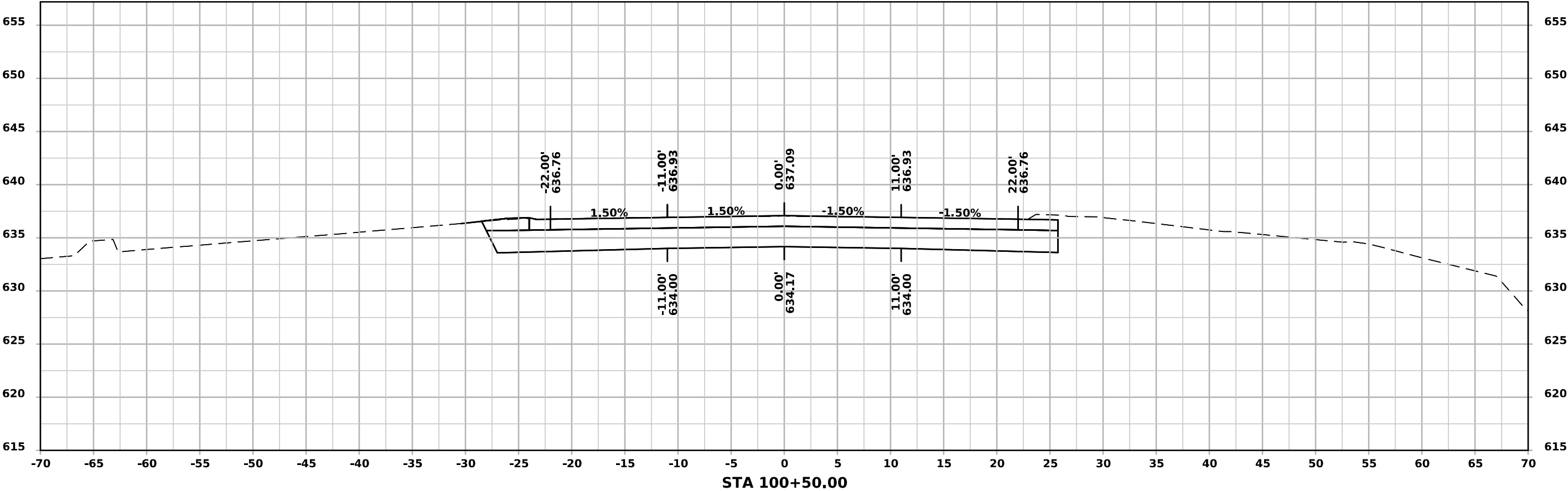
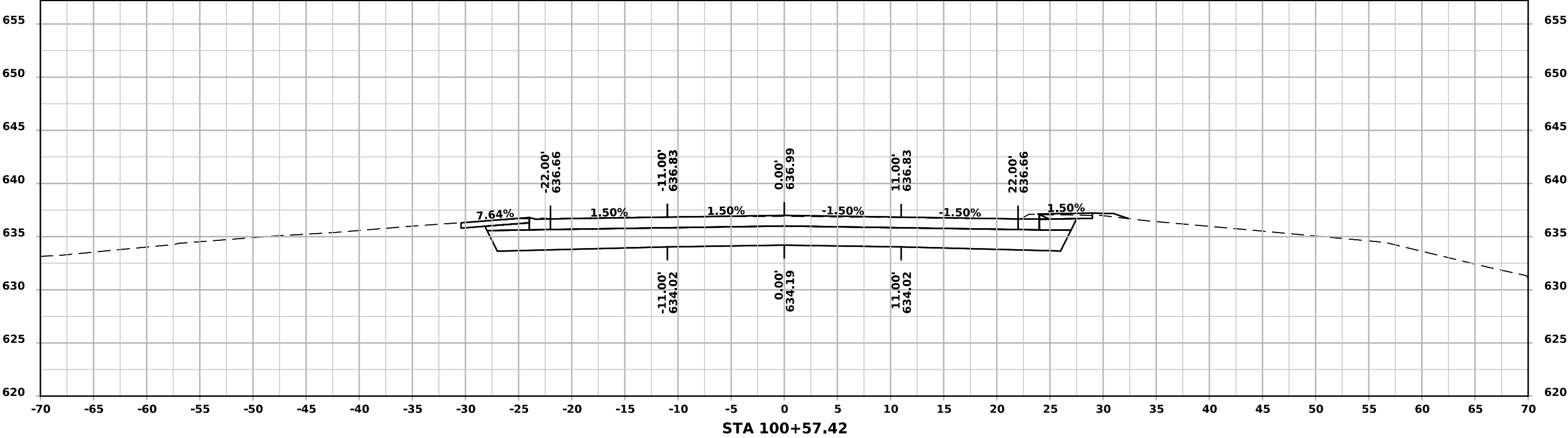
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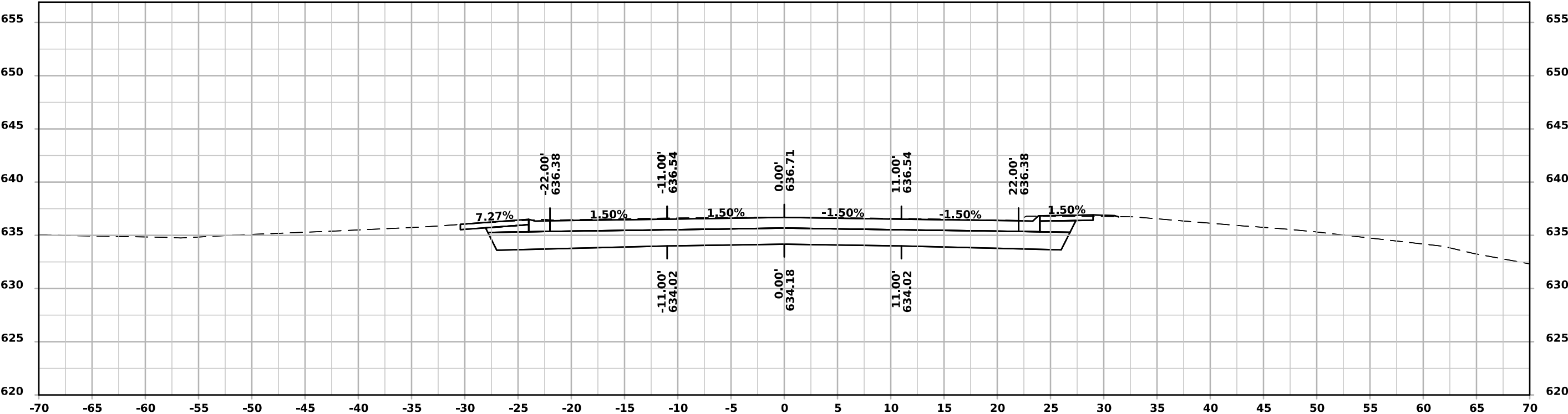
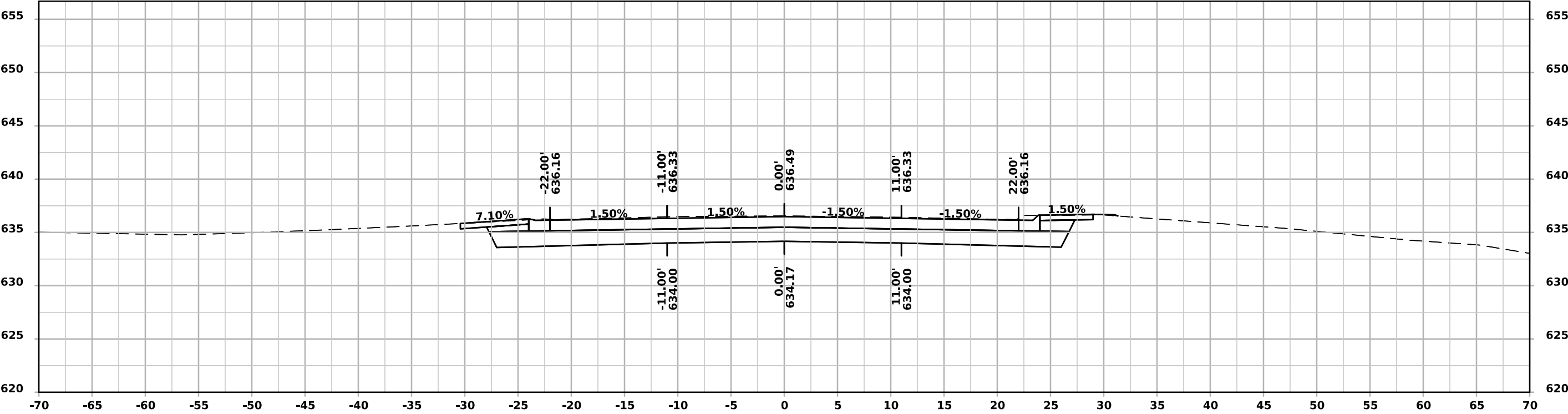
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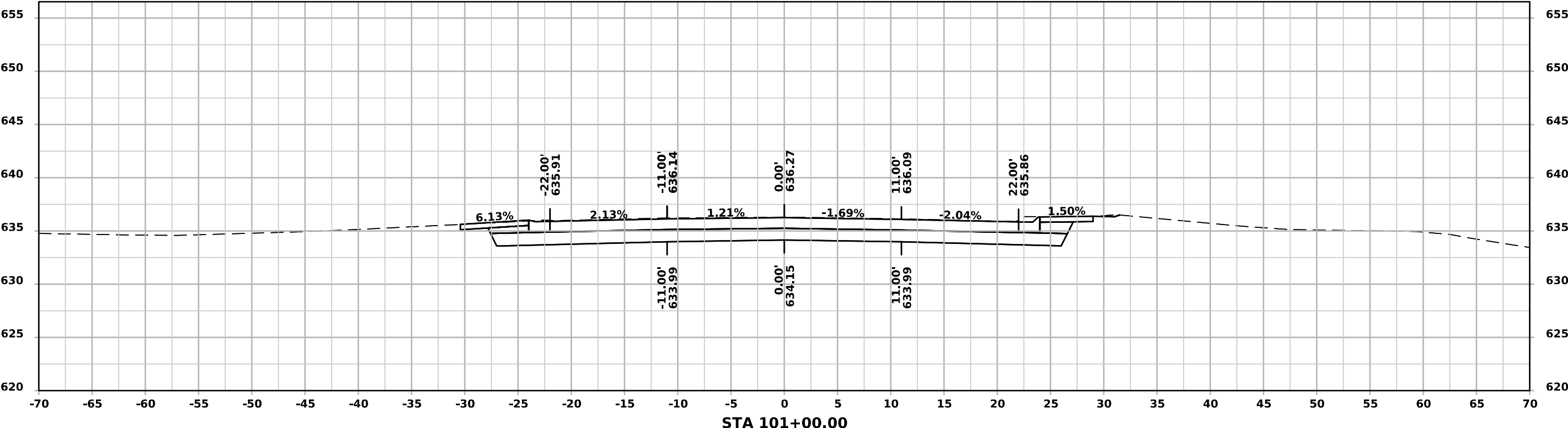
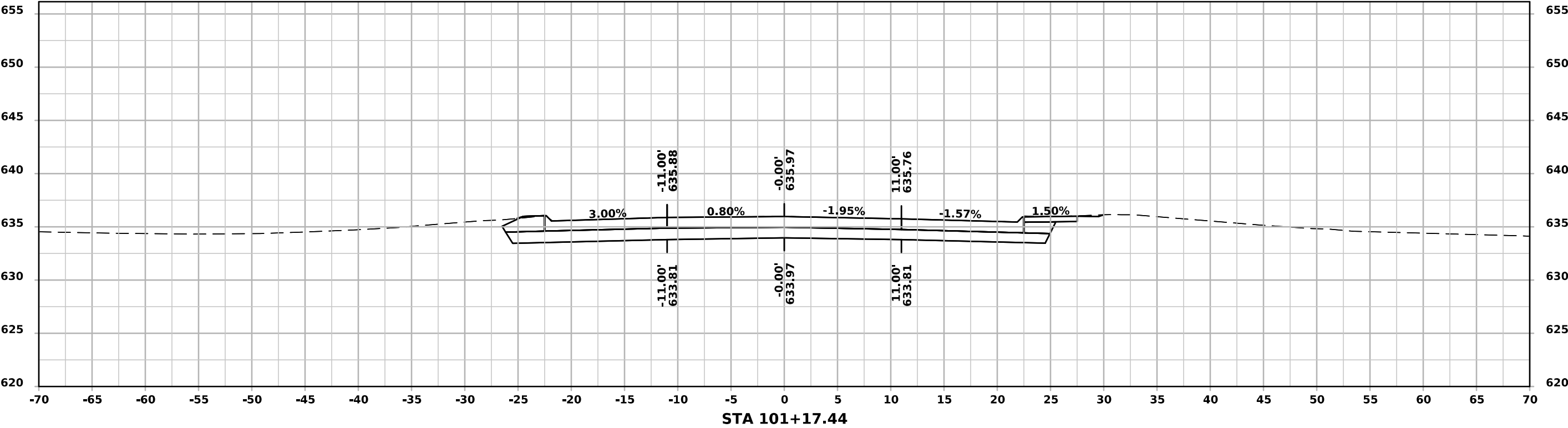
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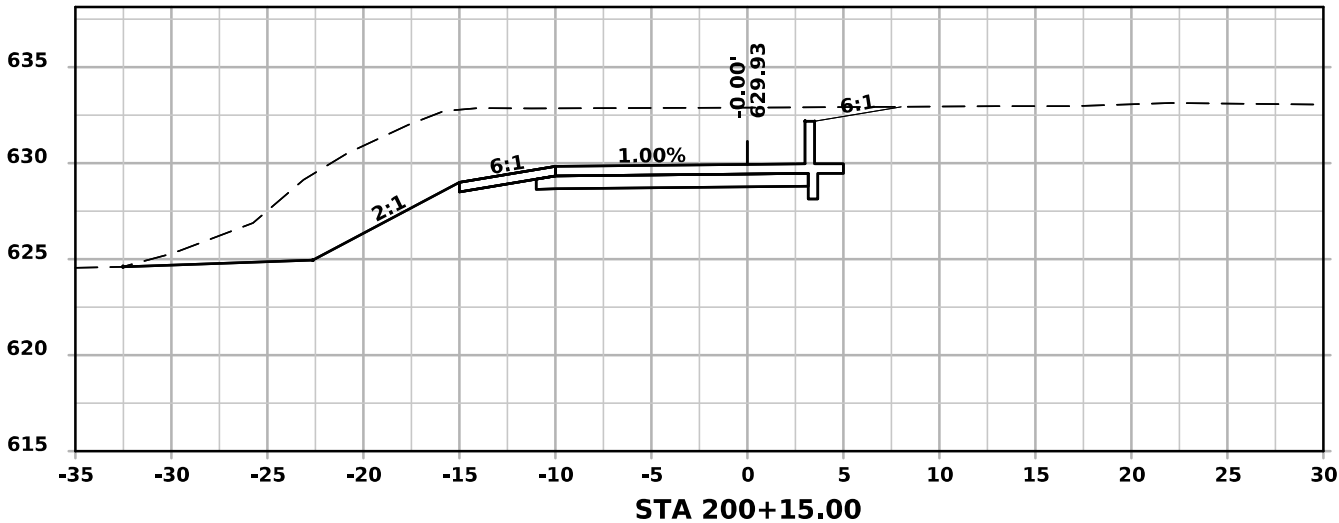
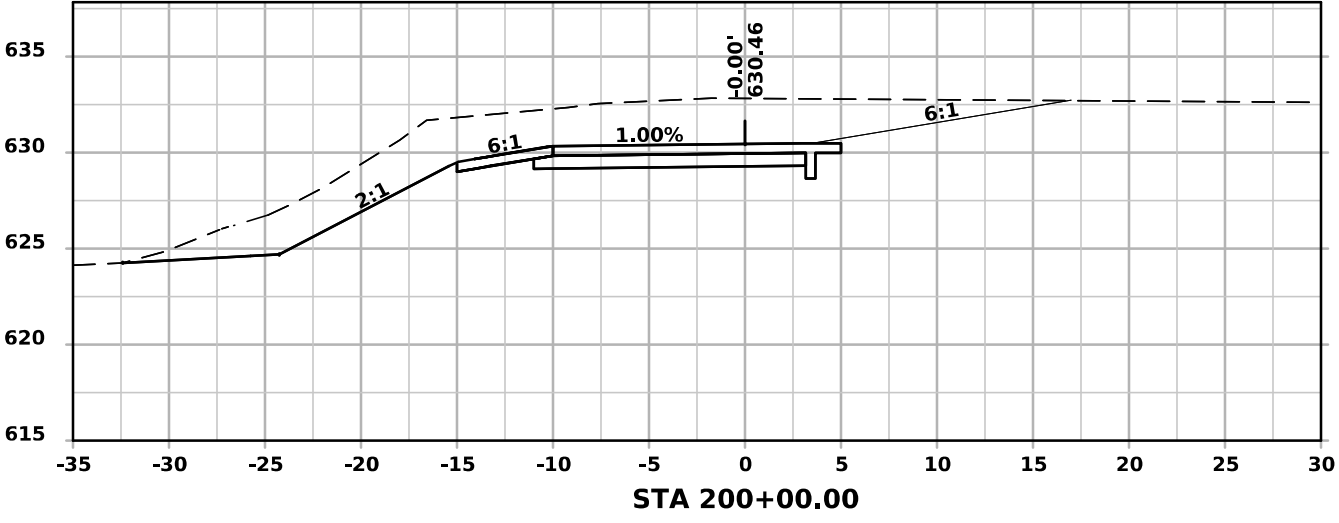
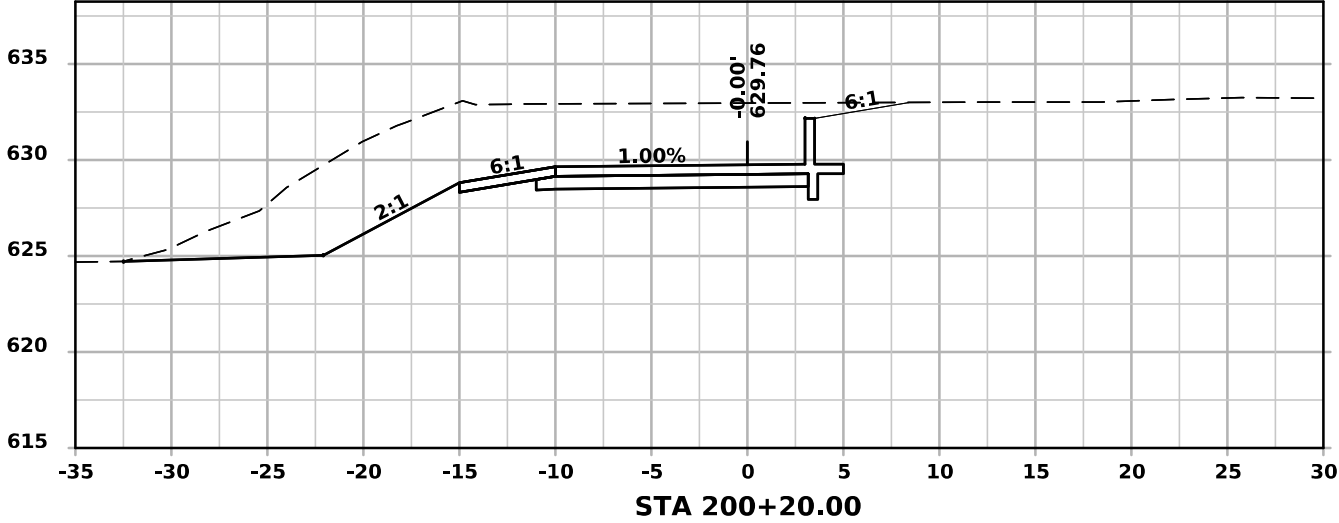
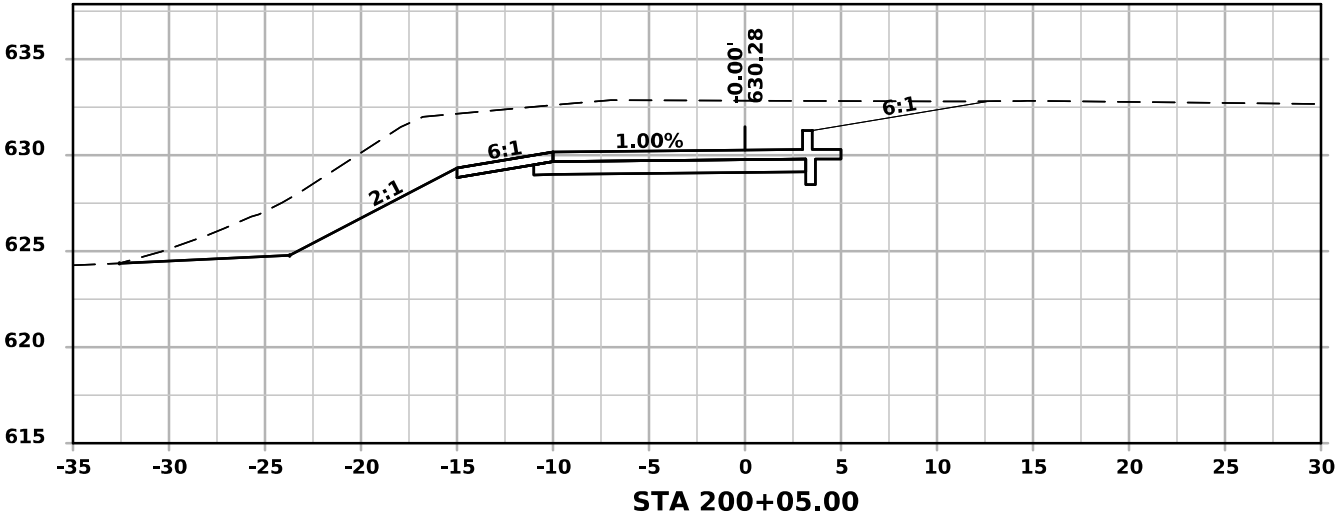
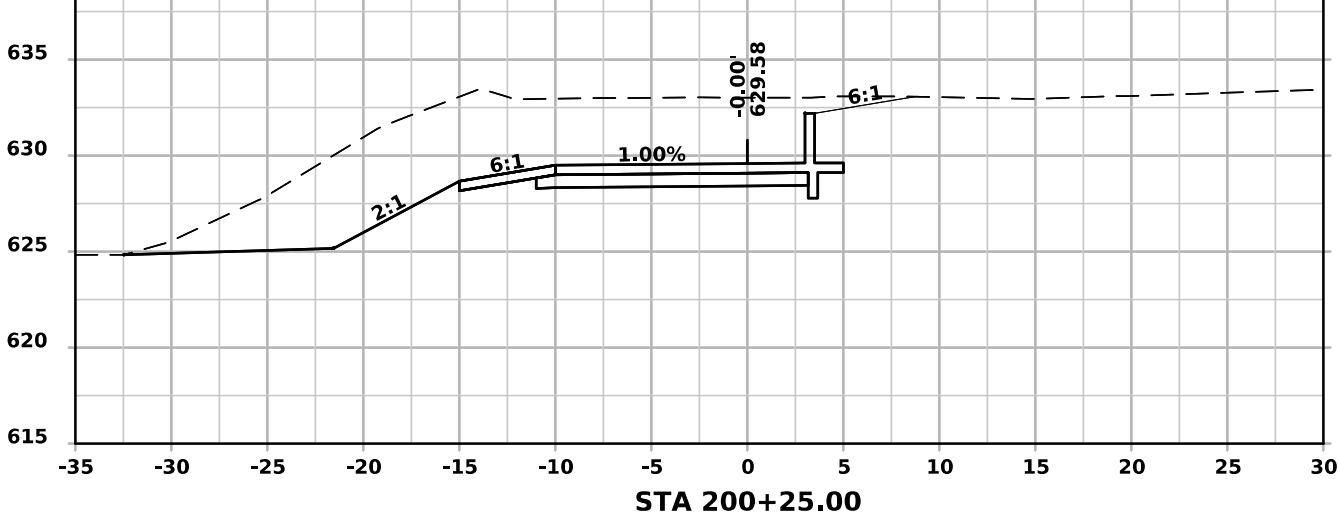
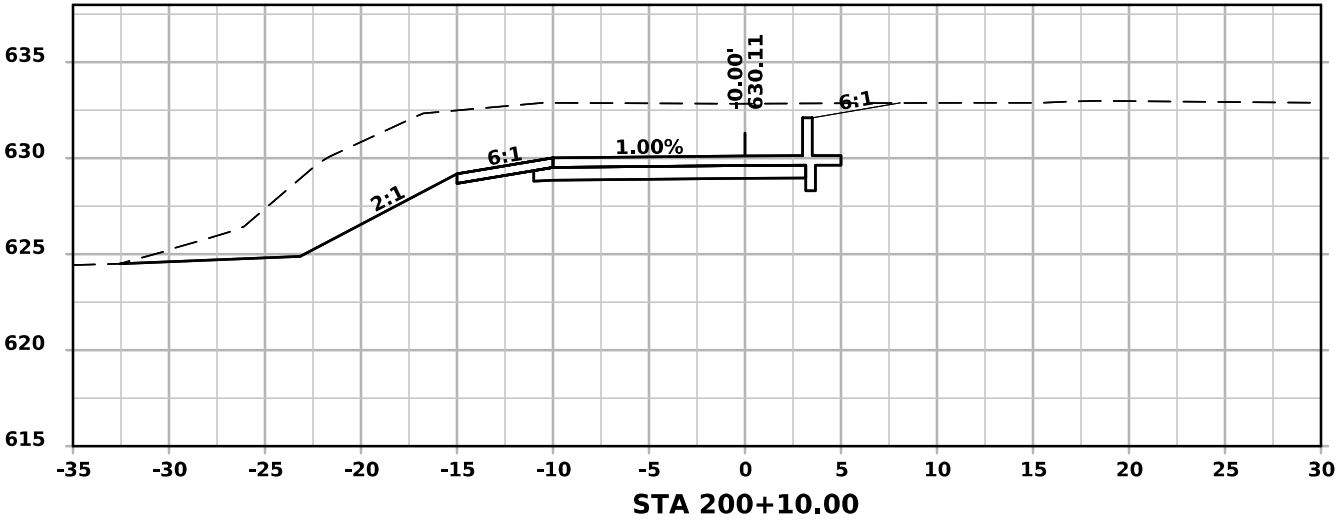
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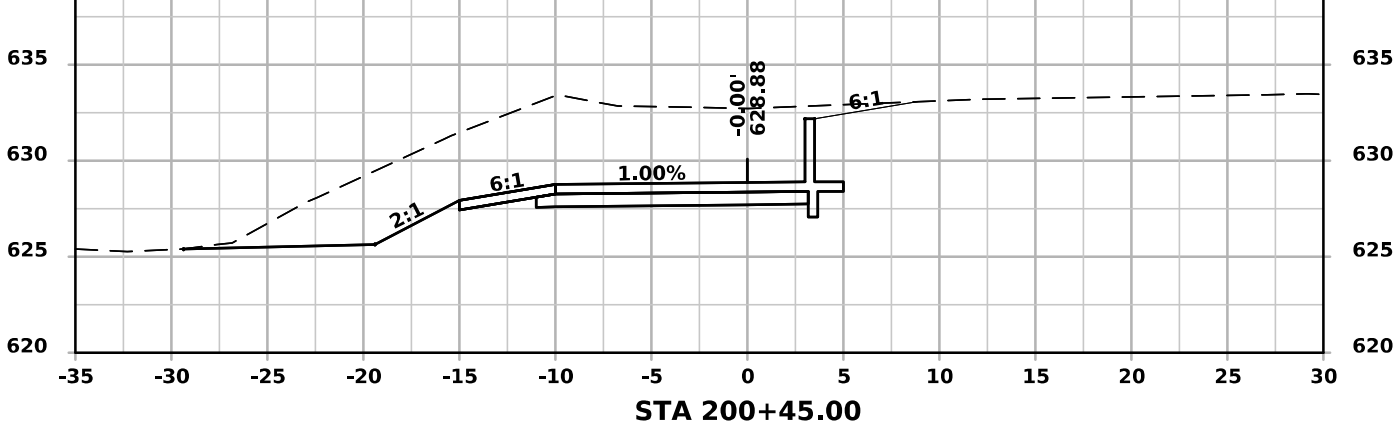
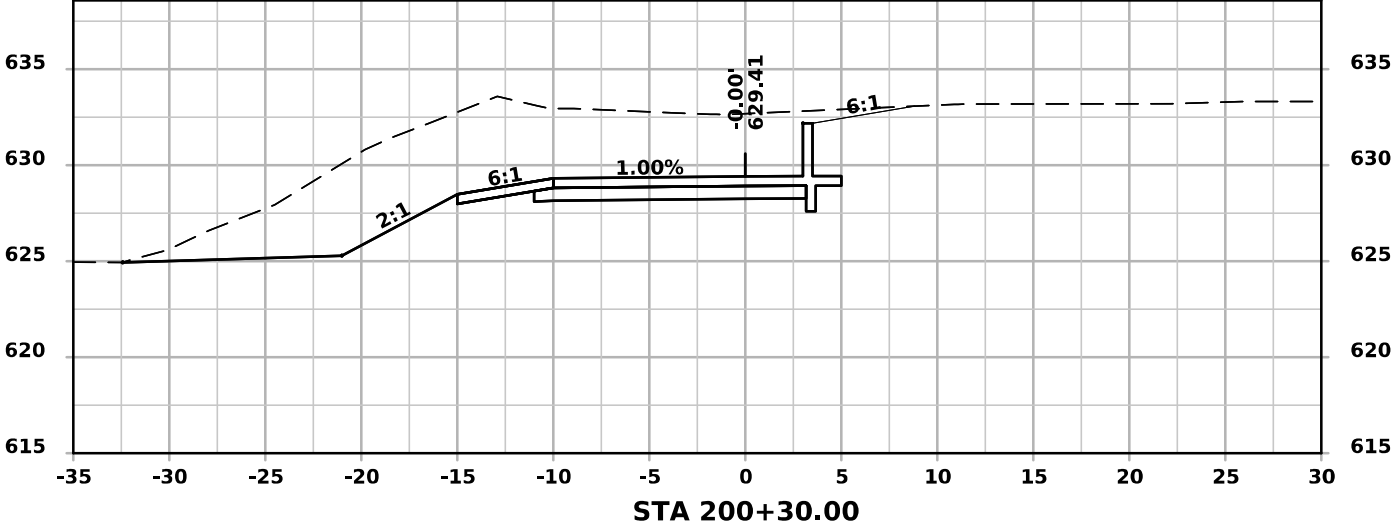
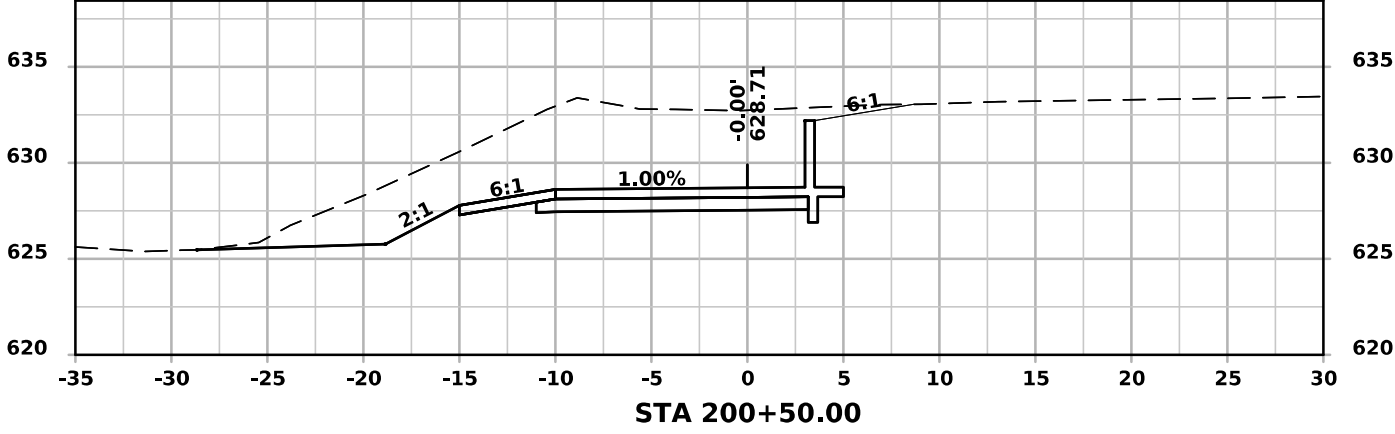
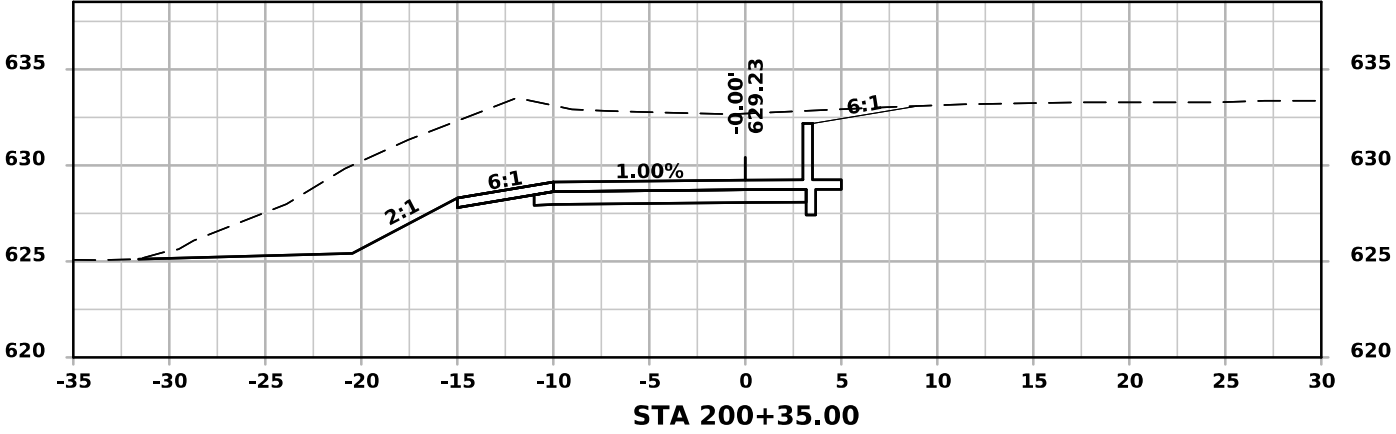
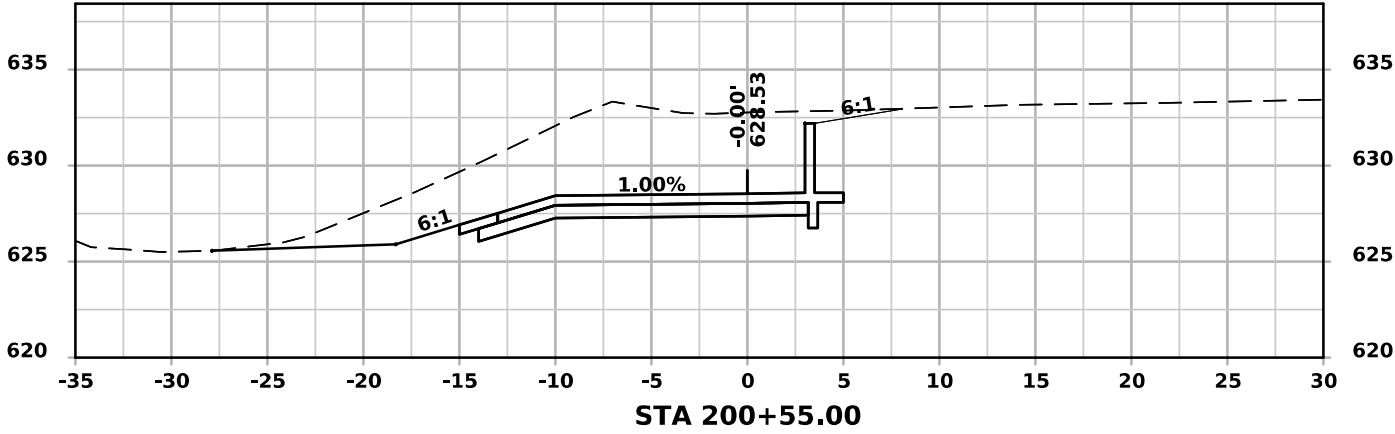
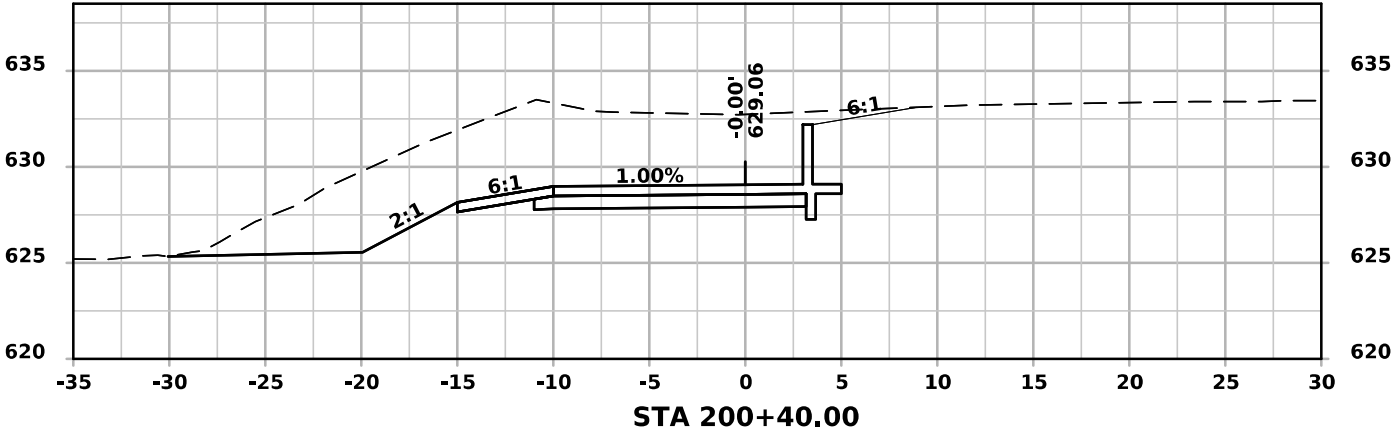
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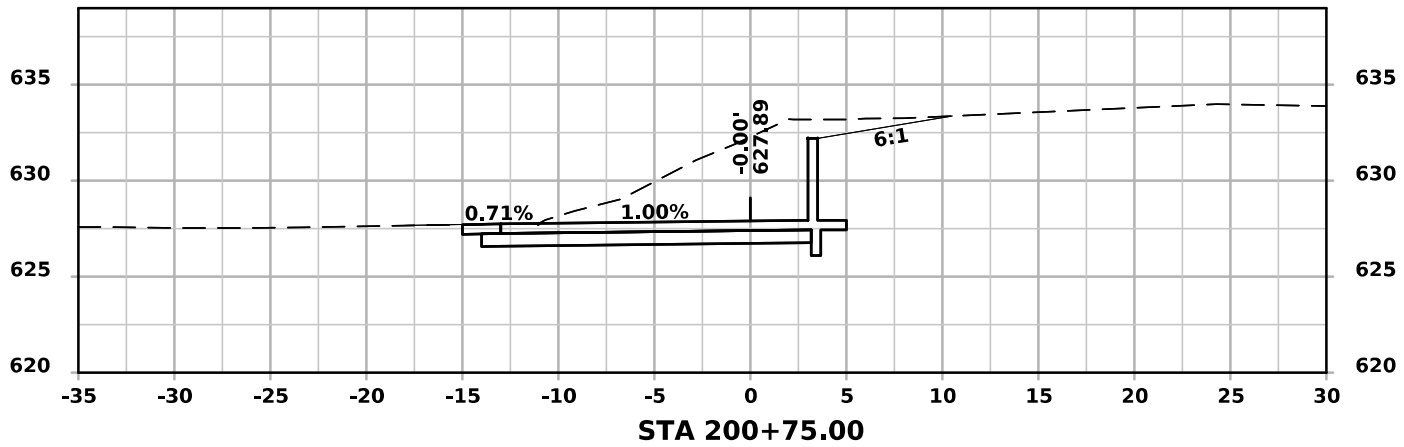
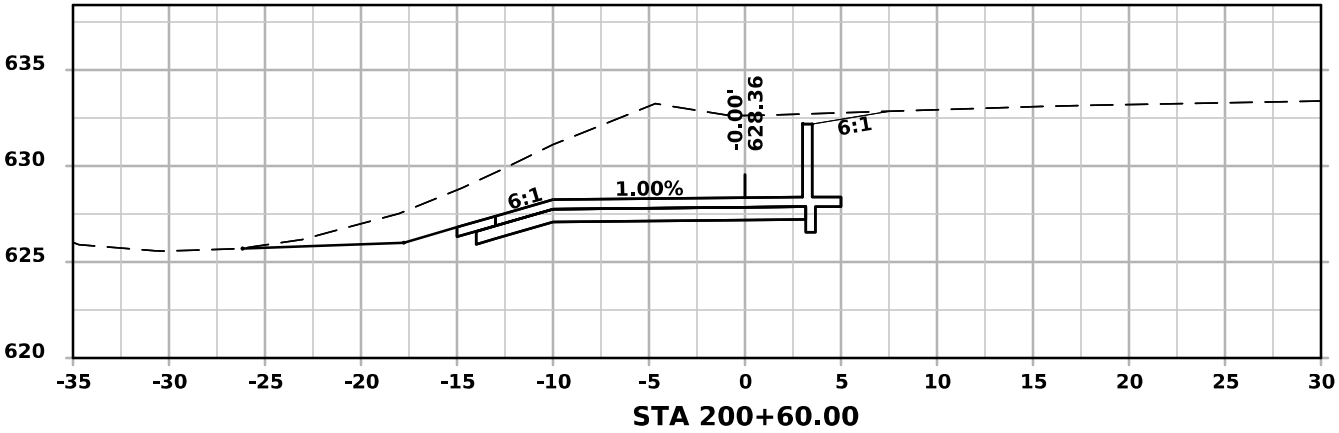
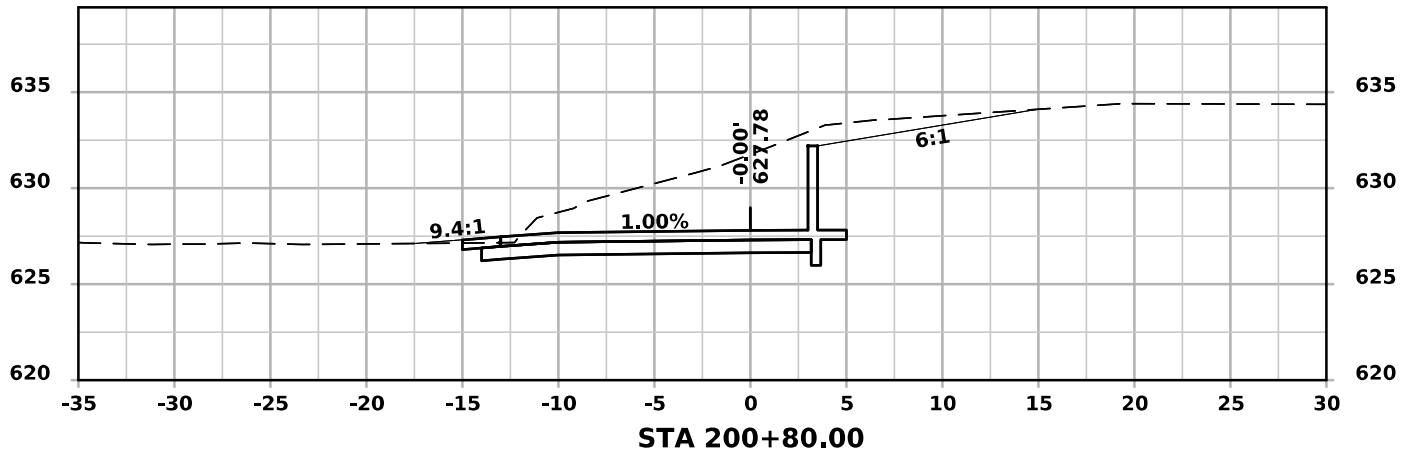
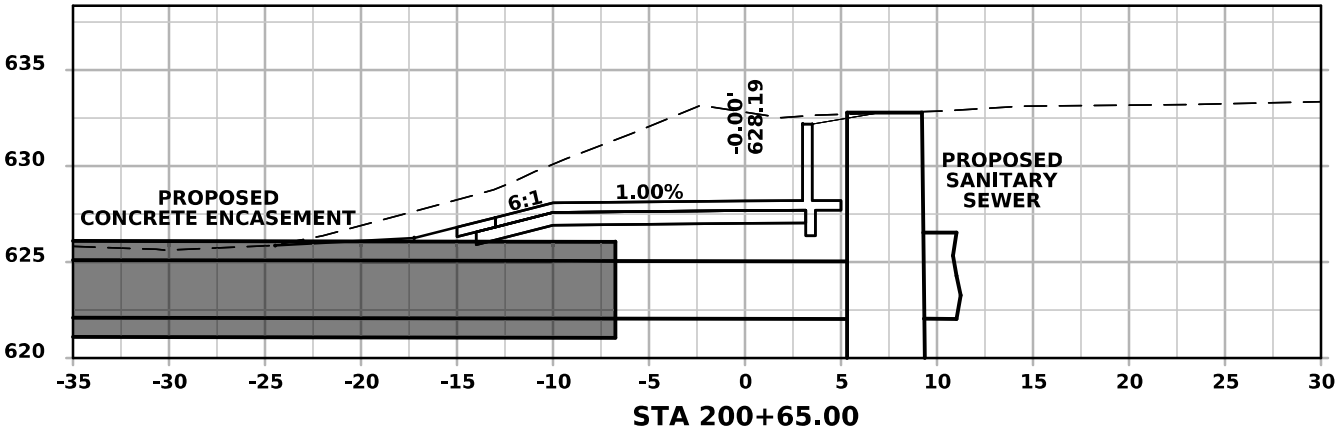
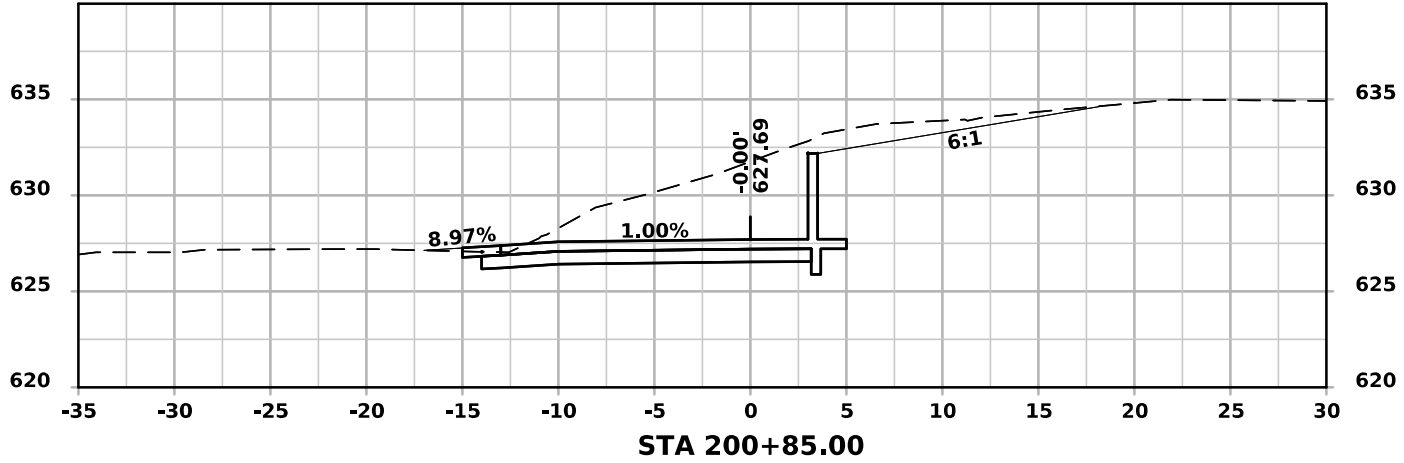
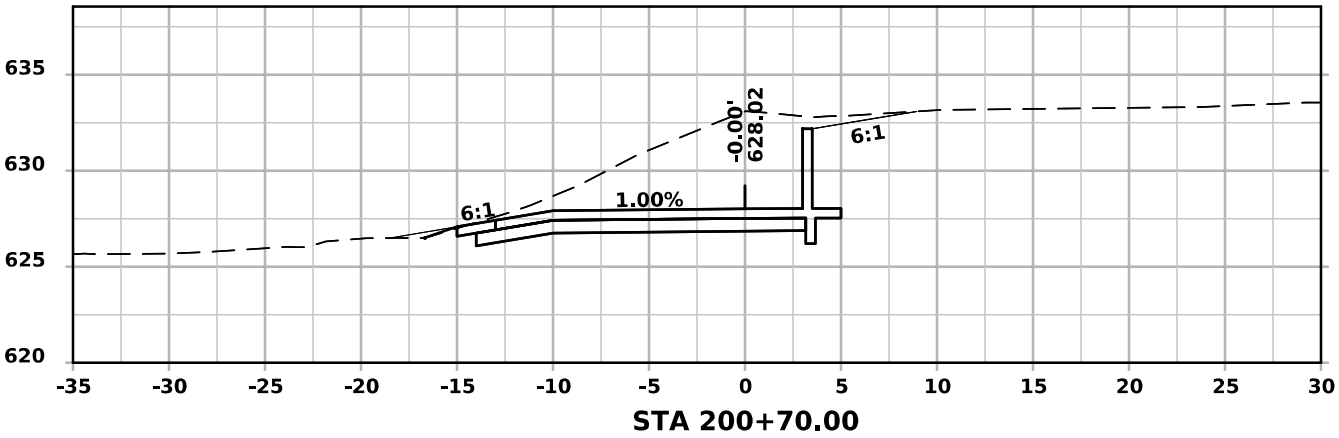
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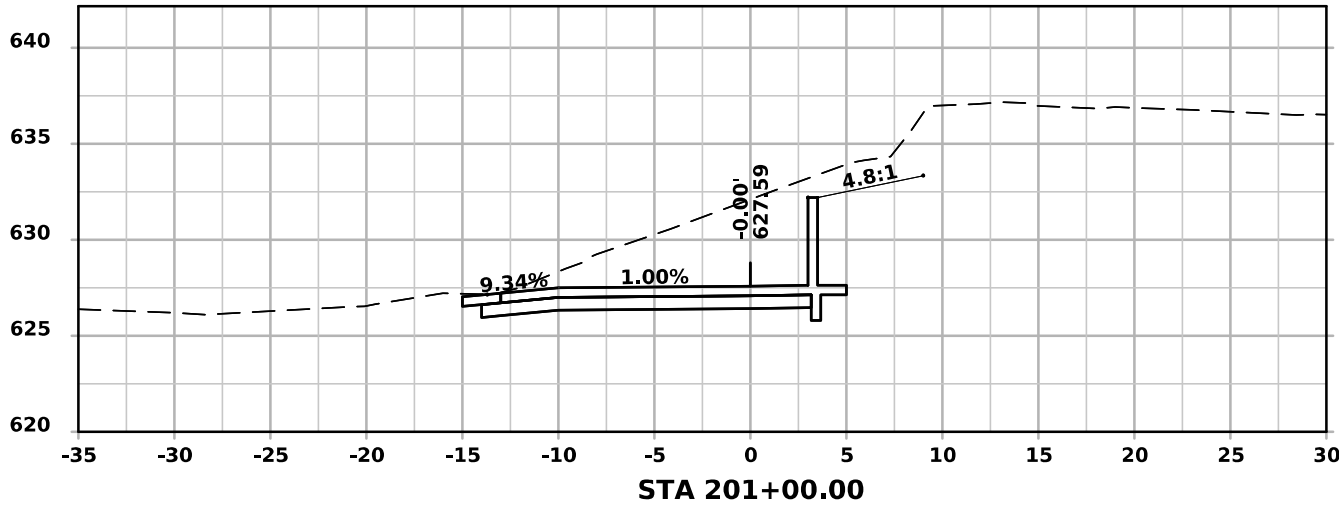
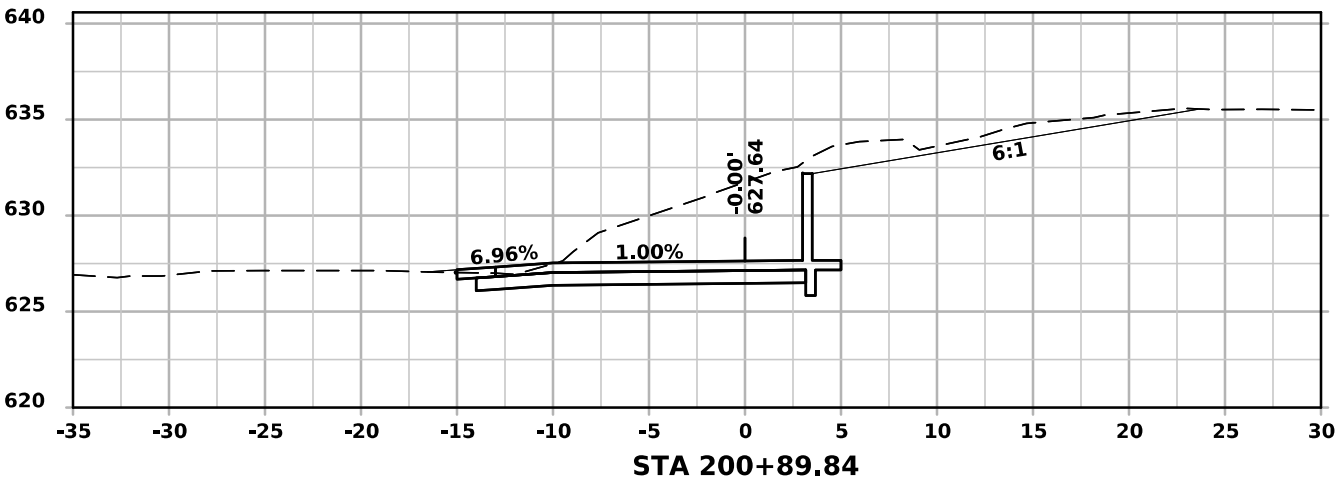
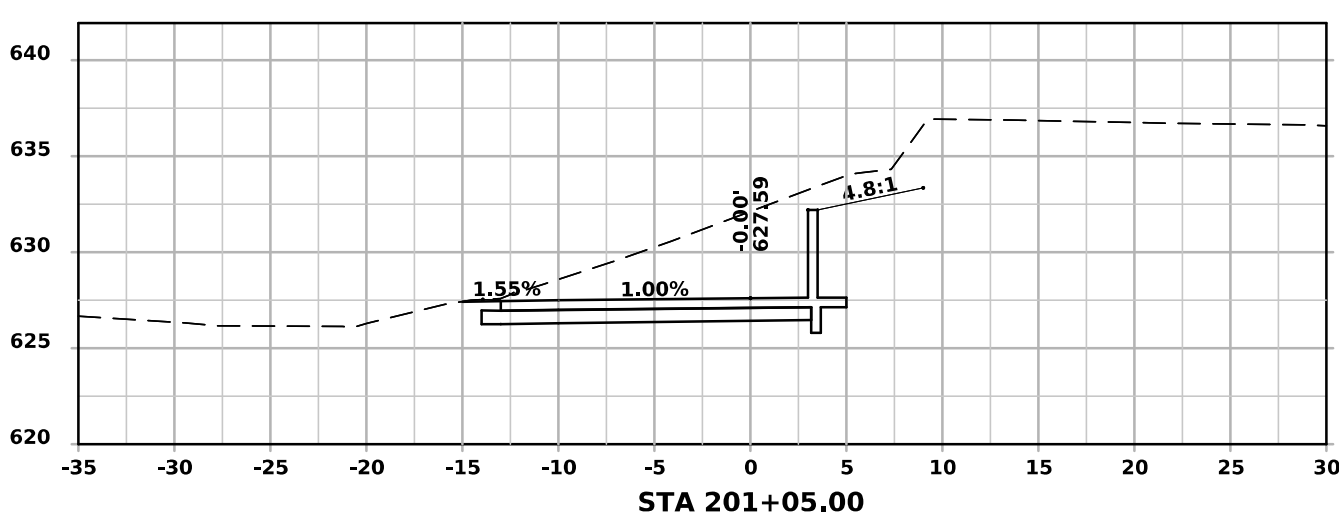
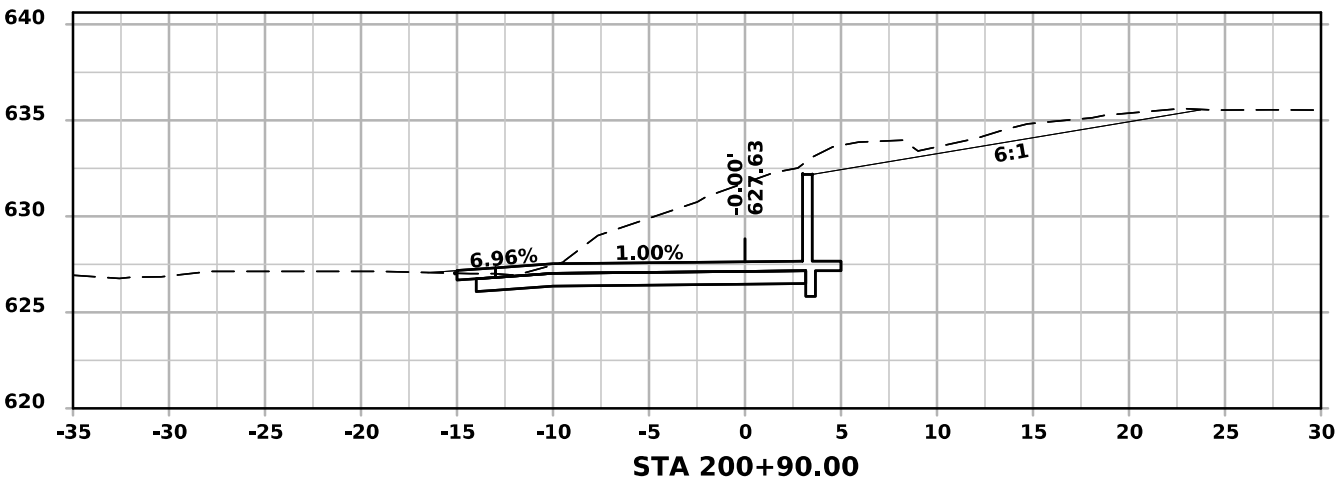
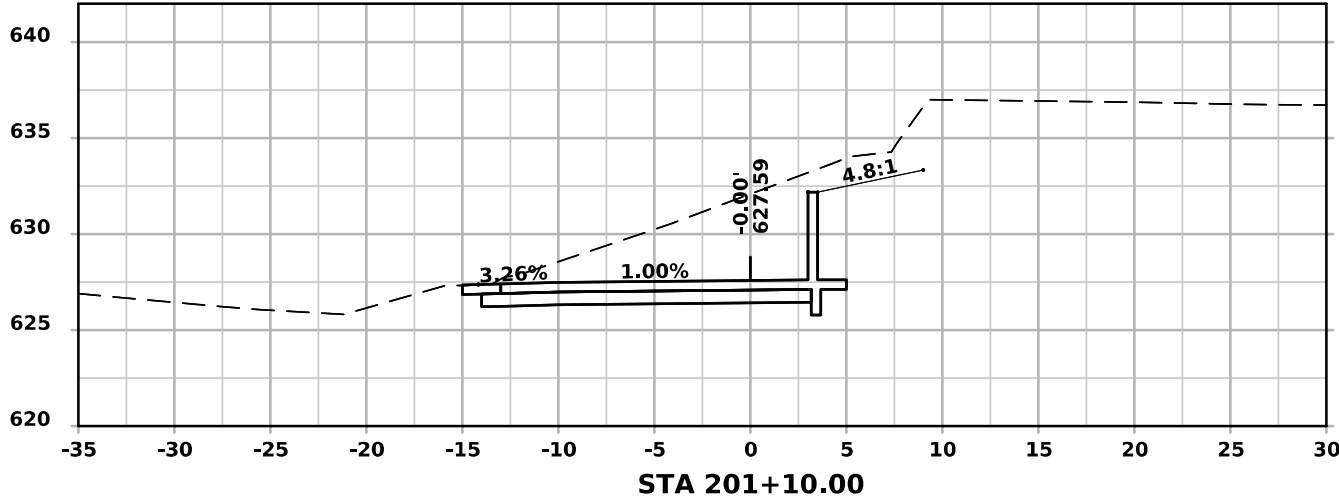
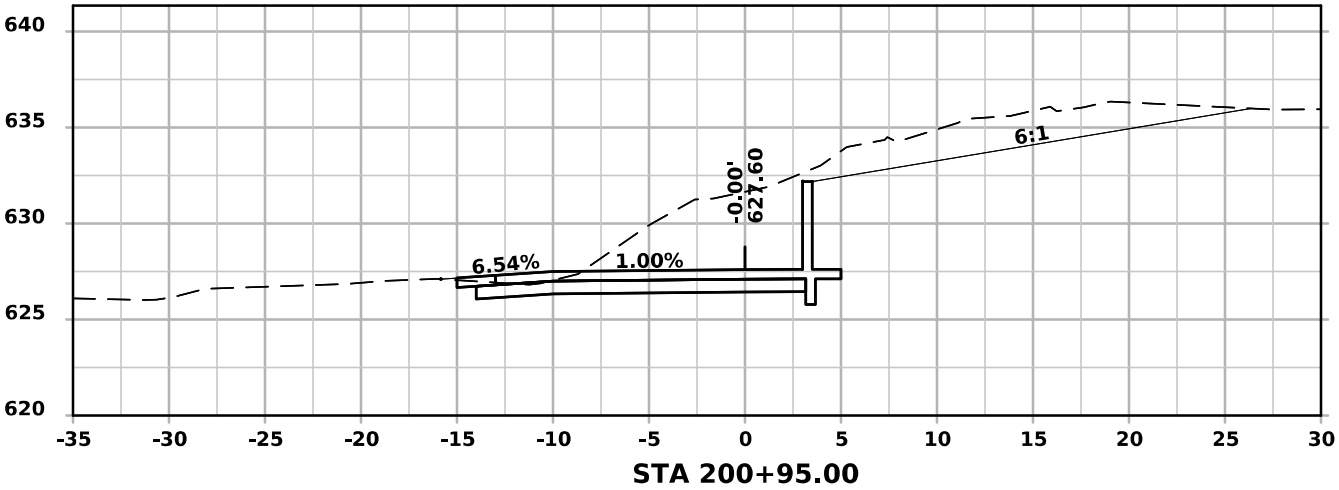
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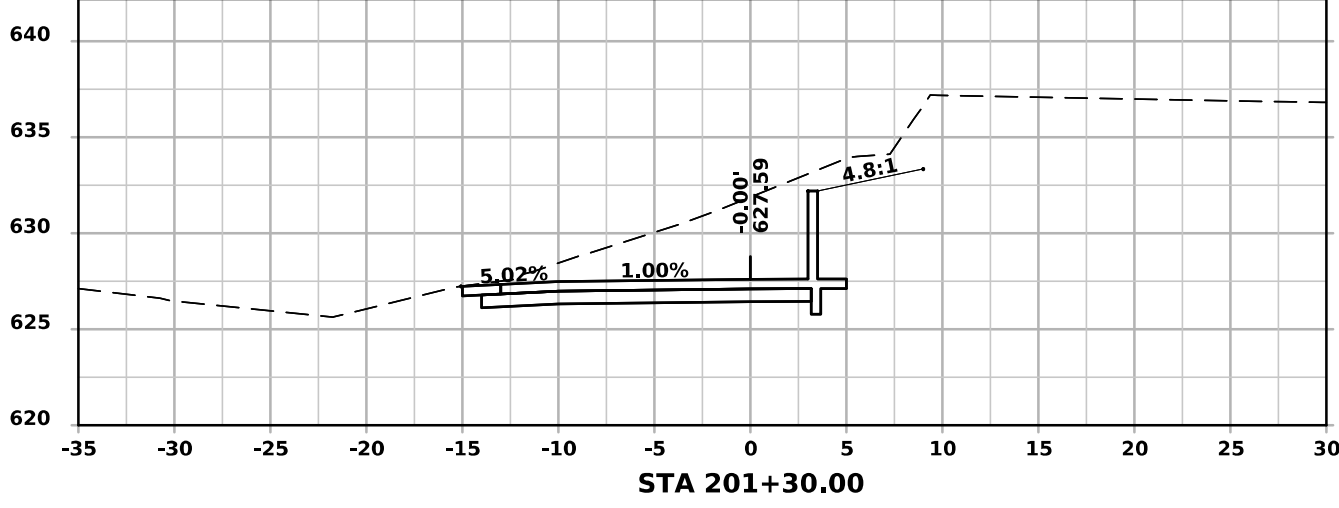
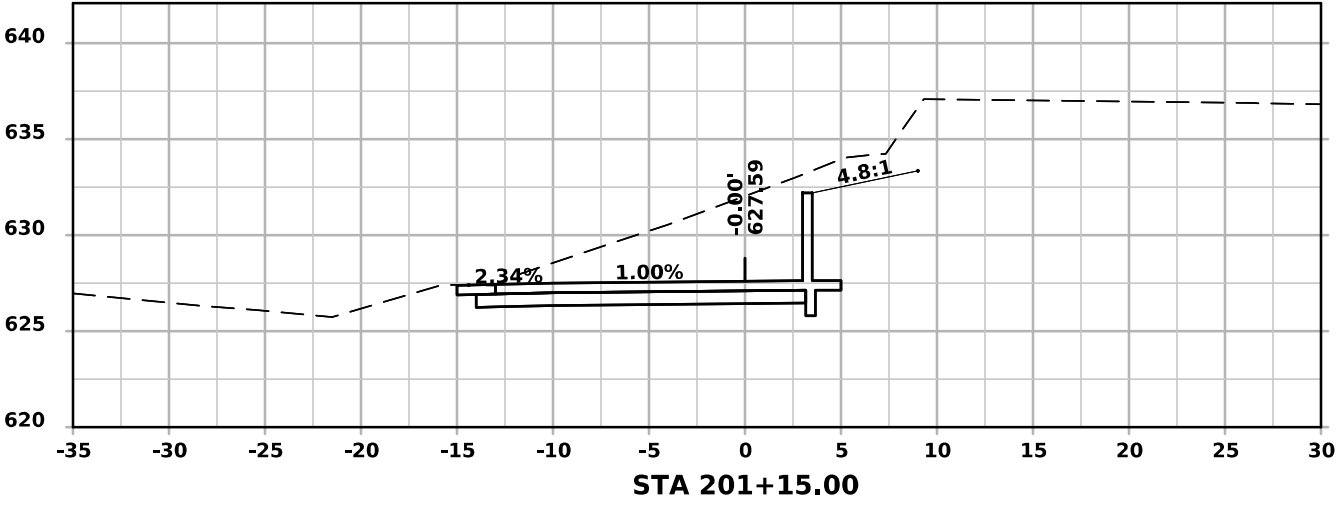
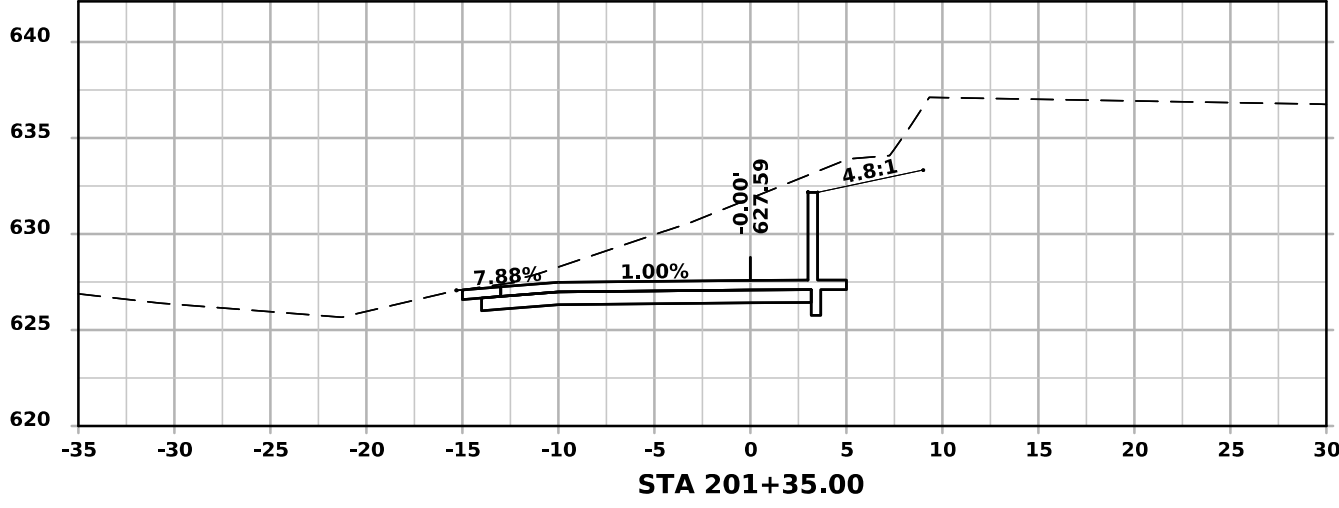
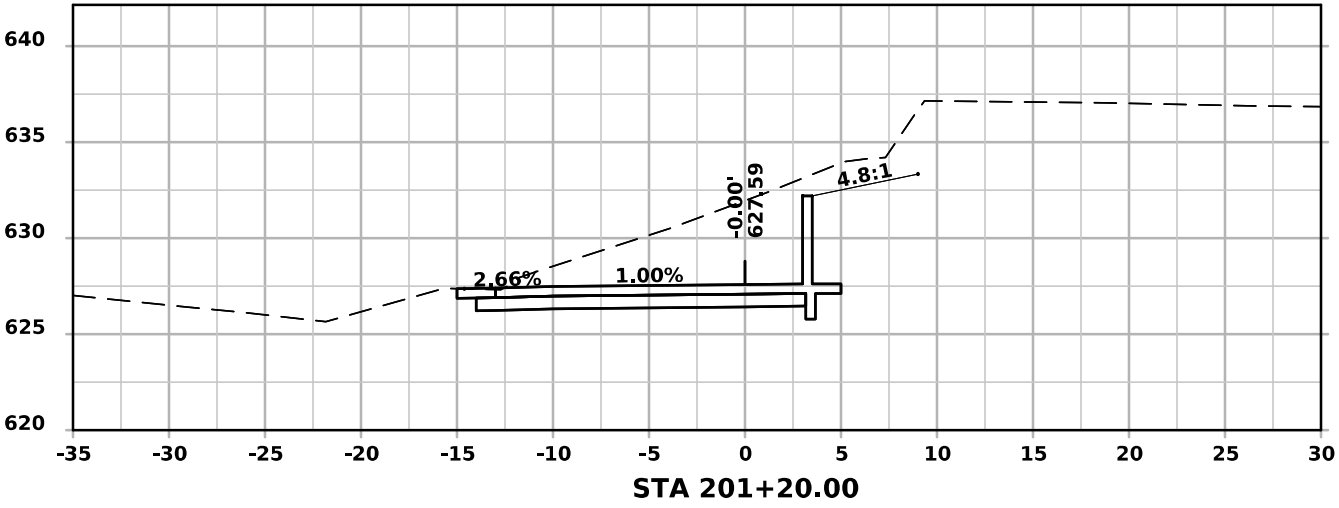
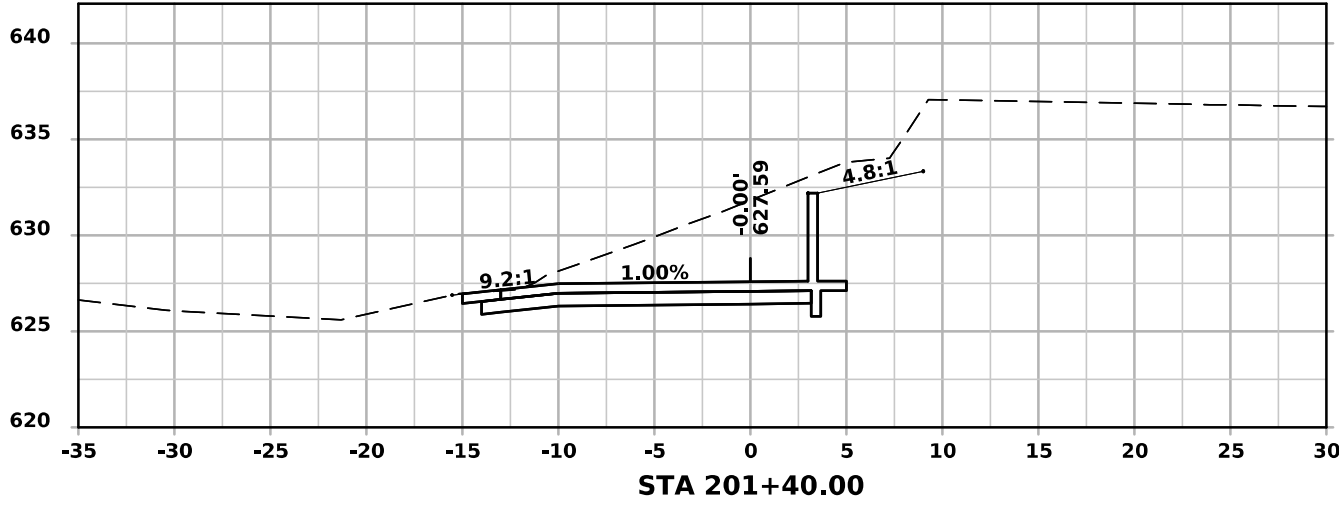
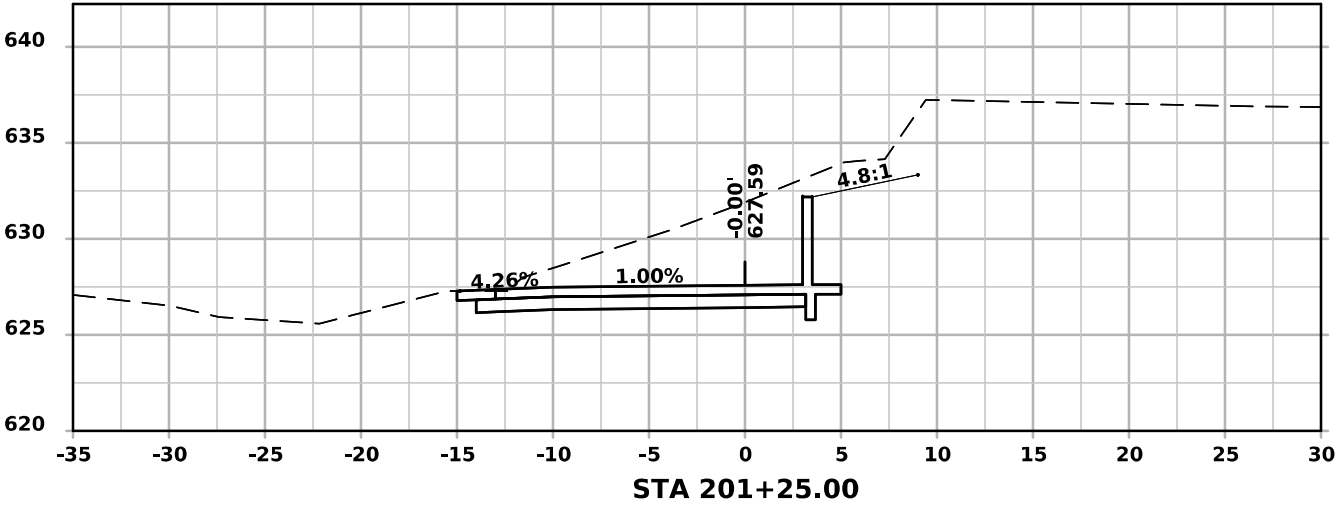
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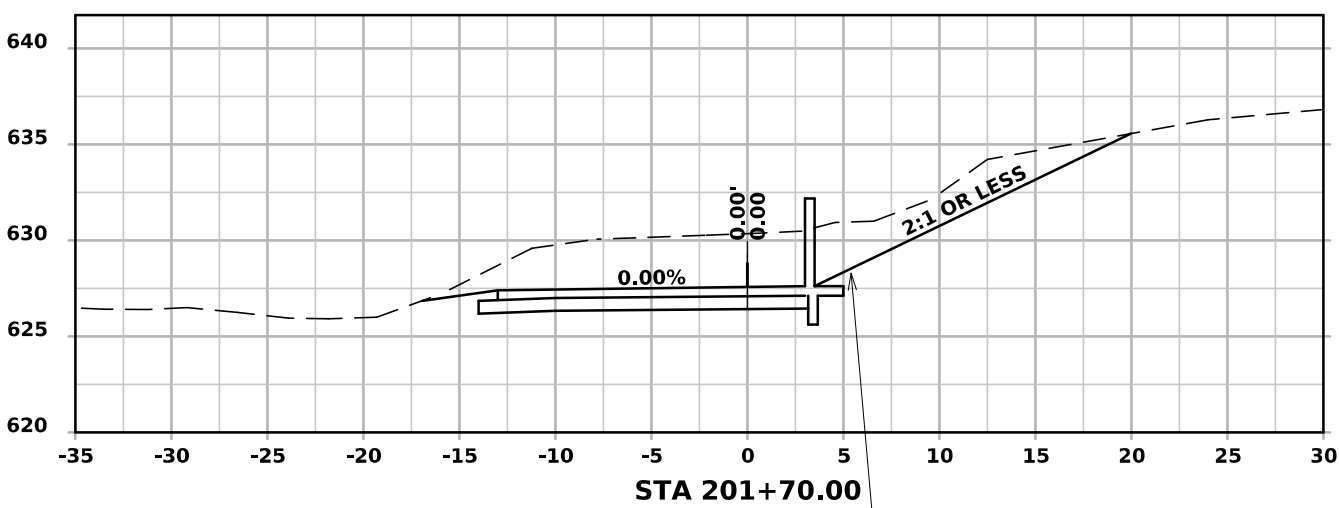
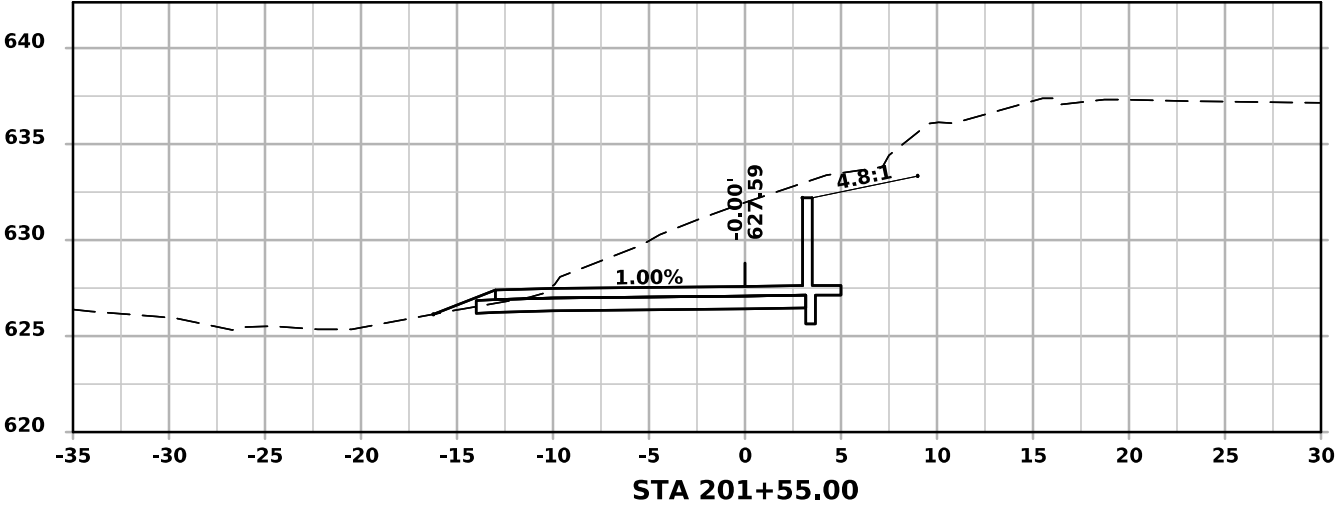
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GRADE BEHIND RETAINING WALL TO
MATCH TRAIL GRADE AT STA 201+70.00
(REFER TO SHEET E.1 FOR DETAILS)

