

PROJECT	DESIGNATION
1700438	1700438
CONTRACT	BRIDGE FILE
B-40166	84-00322

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
84-00322	Continuous Composite Steel Beam Bridge	Two Spans: 68'-4" & 68'-4" 62°54'30" Skew Rt.	Lost Creek	17+86.91 Line "A"

INDIANA DEPARTMENT OF TRANSPORTATION



BRIDGE REHABILITATION PLANS

FOR SPANS OVER 20 FEET

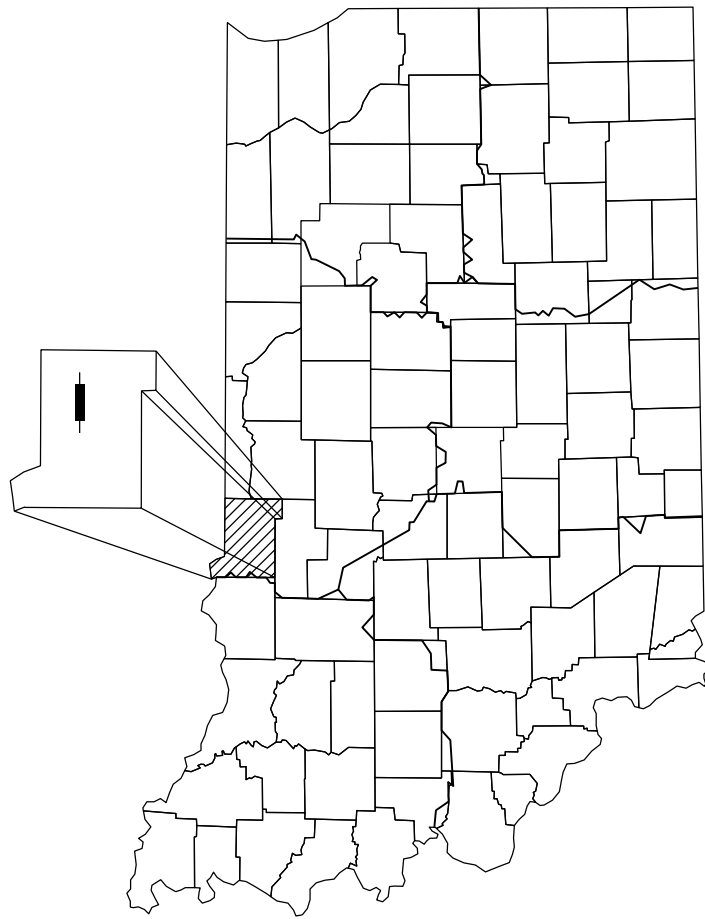
ROUTE: 13TH STREET

PROJECT NO. 1700438 P.E.
1700438 CONST.

NO ADDITIONAL RIGHT-OF-WAY
REQUIRED FOR THIS PROJECT

Bridge Rehabilitation on 13th Street over Lost Creek
Located 0.33 Miles South of Fort Harrison Road
Section 10, T-12-N, R-9-W, Harrison Township, Vigo County, Indiana

TRAFFIC DATA		
A.A.D.T.	(2021)	7500 V.P.D.
A.A.D.T.	(2041)	10000 V.P.D.
D.H.V	(2041)	N/A V.P.H.
DIRECTIONAL DISTRIBUTION		50 %
TRUCKS		2% A.A.D.T. N/A D.H.V.
DESIGN DATA		
DESIGN SPEED	(POSTED)	30 M.P.H.
PROJECT DESIGN CRITERIA		3R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION		MINOR ARTERIAL
RURAL/URBAN		URBAN
TERRAIN		LEVEL
ACCESS CONTROL		NONE



PROJECT LOCATION SHOWN BY
Vigo County

LATITUDE: 39° 30' 07" N LONGITUDE: 87° 23' 53" W

BRIDGE LENGTH: 0.046 MI.
ROADWAY LENGTH: 0.032 MI.
TOTAL LENGTH: 0.078 MI.
MAX. GRADE: -2.591 %

Approved By: Vigo County Board of Commissioners

Brad Anderson
Date

Judy Anderson
Date

Brendan Kearns
Date

Attest:

Jlm Bramble (Auditor)
Date

Recommended for Approval:

Daniel Bennett (Highway Superintendent)
Date

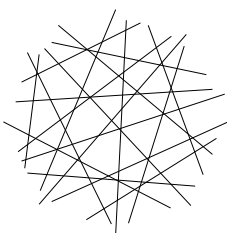
Larry Robbins, P.E. (County Engineer)
Date



1" = 1000'

End Project
Sta. 19+85.00
Vigo County Bridge #322
over Lost Creek
Begin Project
Sta. 15+75.00

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2018
TO BE USED WITH THESE PLANS.



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LAFAYETTE - MUNCIE - NEW ALBANY
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PLANS PREPARED BY: HWC Engineering (317) 347-3663
PHONE NUMBER
CERTIFIED BY: DATE

BRIDGE FILE		
84-00322		
DESIGNATION		
1700438		
REVISION	SHEETS	
N/A	1	of 18
CONTRACT	PROJECT	
B-40166	1700438	

UTILITIES

COMMUNICATIONS:	JOINK 1362 WABASH AVE. TERRE HAUTE, IN 47807 BRYCE BROWN (812) 234-5100, EXT. 114 BRYCE.BROWN@JOINKLLC.COM ZAYO GROUP, LLC 9209 CASTLEGATE DR. INDIANAPOLIS, IN 46256 WAYLON HIGGINS (765) 341-1199 WAYLON.HIGGINS@ZAYO.COM	WATER:	INDIANA AMERICAN WATER 555 E. COUNTY LINE RD., SUITE 201 GREENWOOD, IN 46143 STEPHEN ANDERSON (317) 885-2416 (317) 471-9891 STEPHEN.ANDERSON@AMWATER.COM
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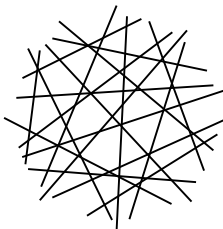
INDEX

SHEET NO.	SUBJECT
1	TITLE SHEET
2	INDEX & GENERAL NOTES
3	TYPICAL CROSS SECTIONS
4	TRAFFIC DETOUR DETAILS
5	PLAN & PROFILE
6	ROADWAY CONSTRUCTION DETAILS
7	INTERSECTION DETAILS
8	EROSION CONTROL
9	LAYOUT
10	GENERAL PLAN
11	END BENT MODIFICATIONS
12	PIER MODIFICATIONS
13	ROAD SUMMARY
14 - 18	CROSS SECTIONS

REVISIONS

SHEET NO.	DATE	REVISED

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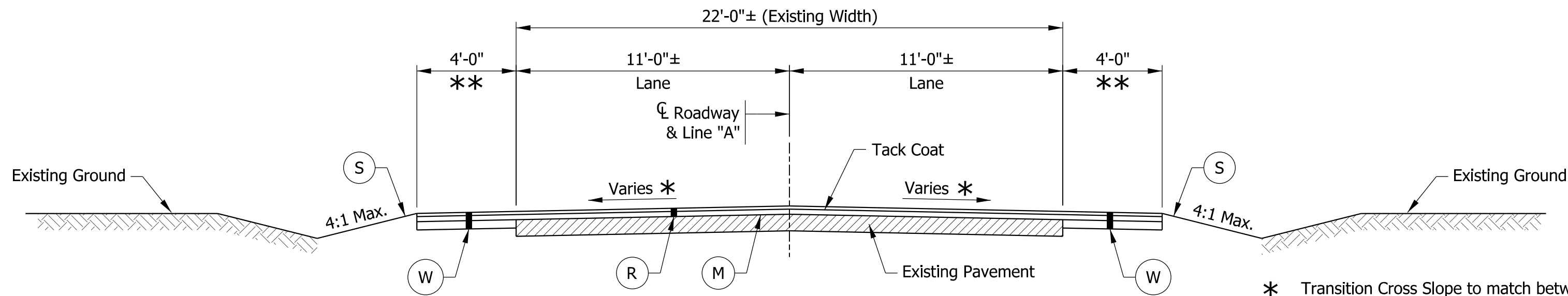
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LAFAYETTE - MUNCIE - NEW ALBANY
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RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	
DESIGNED: <u>LS</u> 02/2020	DRAWN: <u>AJ</u> 02/2020
CHECKED: <u>JJ</u> 02/2020	CHECKED: <u>JJ</u> 02/2020

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

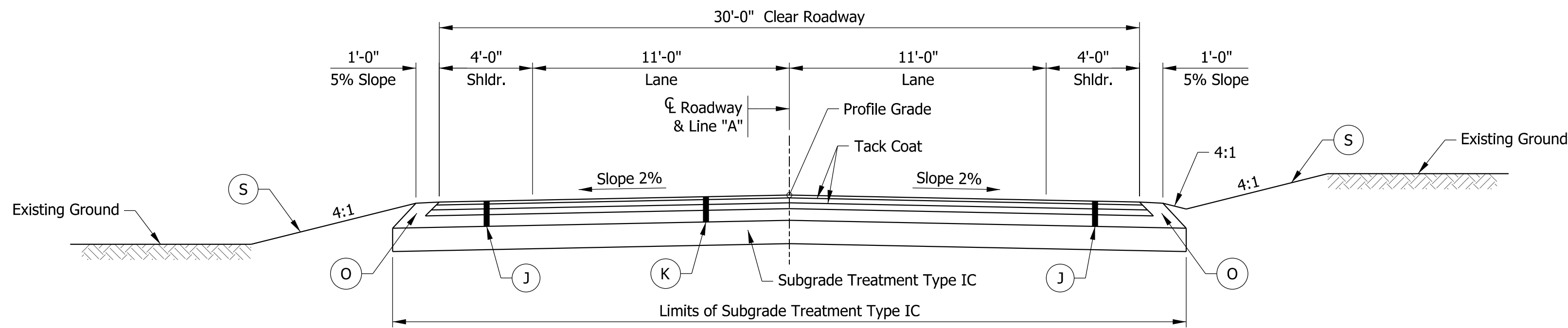
SCALE	BRIDGE FILE
N/A	84-00322
	DESIGNATION
	1700438
SURVEY BOOK	SHEETS
N/A	2 of 18
CONTRACT	PROJECT
B-40166	1700438



INCIDENTAL SECTION

Scale: 1/4" = 1'-0"
Sta. 15+00.00 to Sta. 15+75.00
Sta. 19+85.00 to Sta. 20+50.00

* Transition Cross Slope to match between End of Construction and End of Incidental Construction
** Varies: 0'-0" to 4'-0" Max.

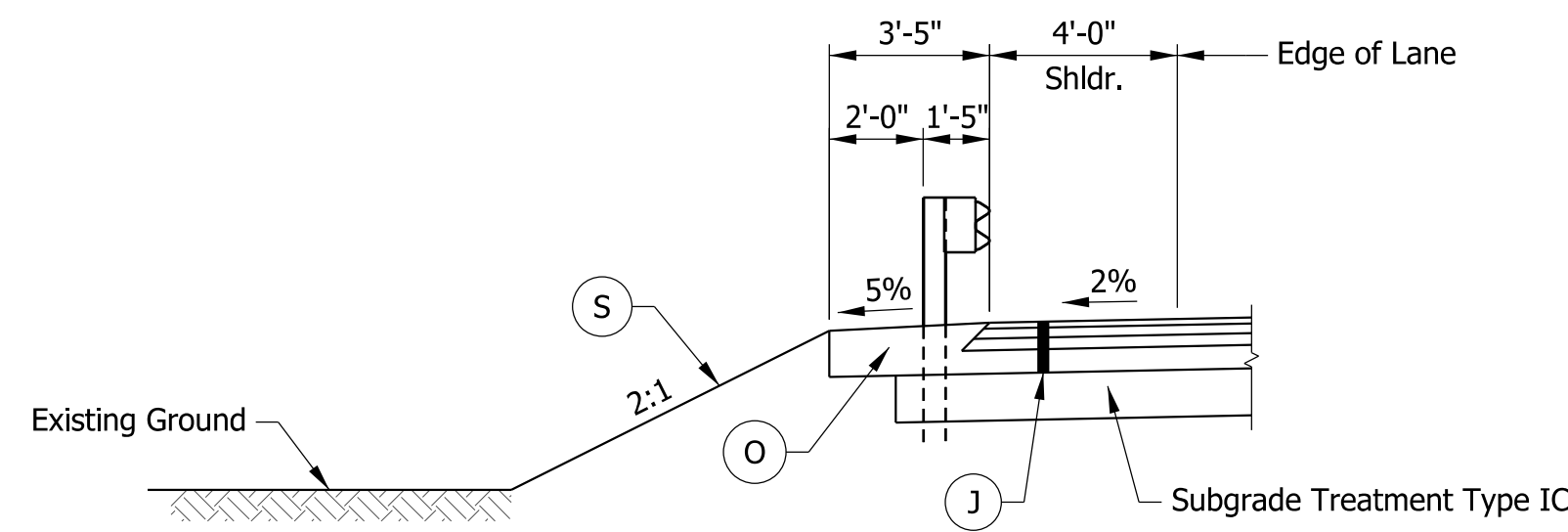


TYPICAL FILL SECTION

TYPICAL FULL DEPTH SECTION

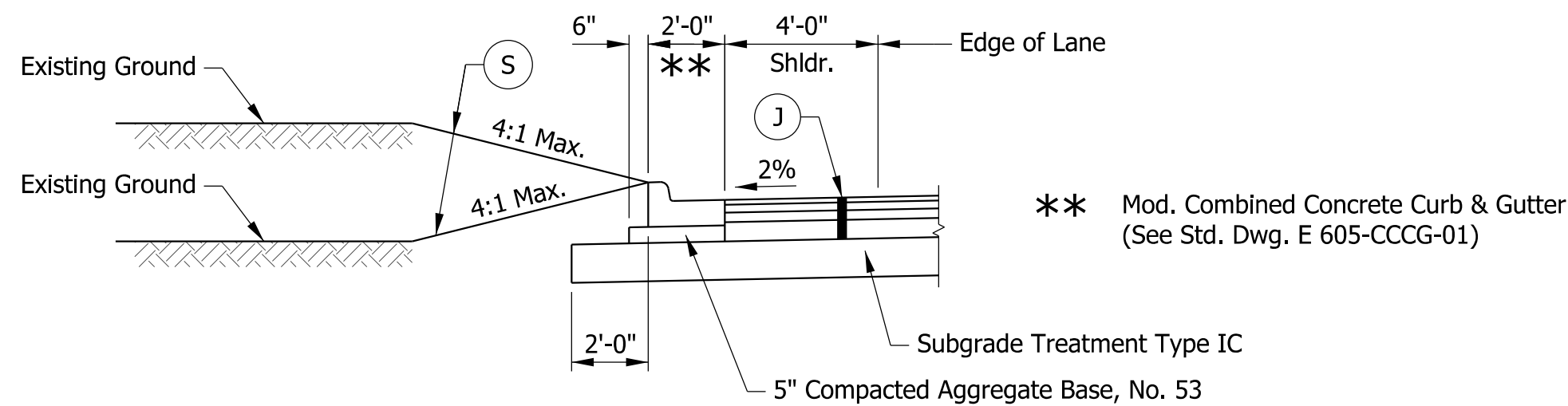
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Sta. 19+07.21 to Sta. 19+85.00

TYPICAL CUT SECTION



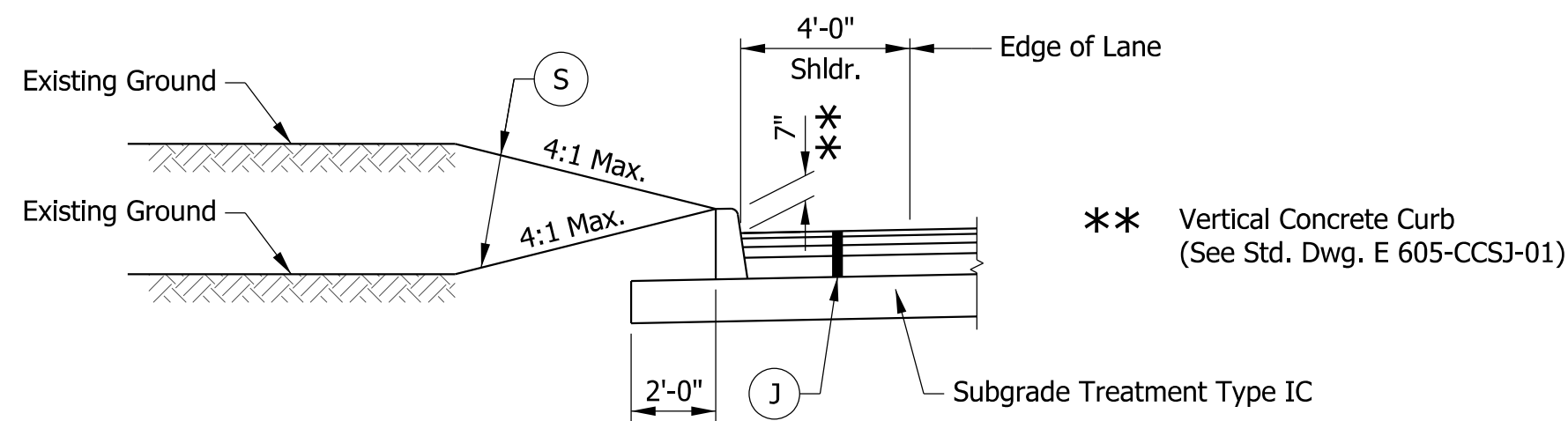
SECTION WITH GUARDRAIL

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Sta. 19+07.21 to Sta. 20+22.83, Lt.



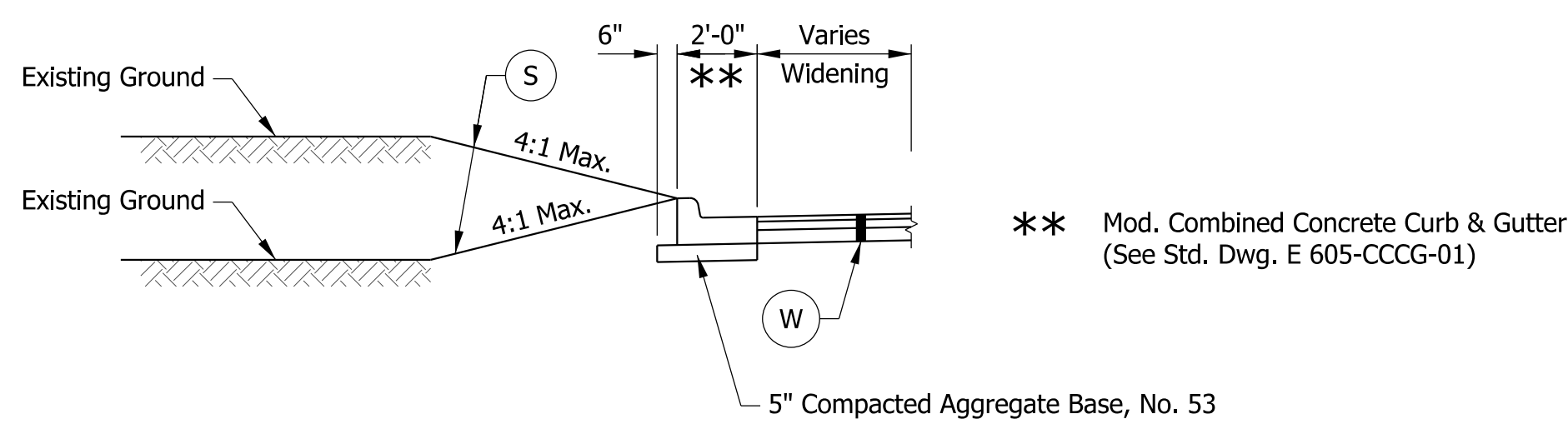
SECTION WITH MOD. CURB & GUTTER

Scale: 1/4" = 1'-0"
Sta. 19+07.21 to Sta. 20+25.00, Rt.



SECTION WITH VERTICAL CURB

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Sta. 15+75.00 to Sta. 16+15.00, Lt.



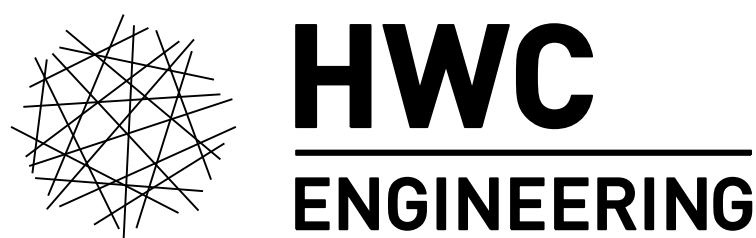
INCIDENTAL SECTION WITH CURB & GUTTER

Scale: 1/4" = 1'-0"
Sta. 20+25.00 to Sta. 20+94.57, Rt.

N.T.R.: Pavement Design to be determined with Geotech

LEGEND

- (J) 165 lb/syd QC/QA-HMA, 2, 64, Surface 9.5 mm on 275 lb/syd QC/QA-HMA, 2, 64, Intermediate 19 mm on 330 lb/syd QC/QA-HMA, 2, 64, Base 25 mm on 6" of Compacted Aggregate Base No. 53
- (K) 165 lb/syd QC/QA-HMA, 2, 64, Surface 9.5 mm on 275 lb/syd QC/QA-HMA, 2, 64, Intermediate 19 mm on 330 lb/syd QC/QA-HMA, 2, 64, Base 25 mm on 6" of Compacted Aggregate Base No. 53
- (M) Transition Milling
- (O) Variable-Depth Compacted Aggregate No. 53
- (R) 165 lb/syd QC/QA-HMA, 2, 64, Surface 9.5 mm on Variable-Depth QC/QA-HMA, 2, 64, Intermediate 12.5 mm (Layer Thickness shall be in accordance with Std. Specifications)
- (S) Mulched Seeding, U and Erosion Control Blankets (See Erosion Control Plan)
- (W) 165 lb/syd QC/QA-HMA, 2, 64, Surface 9.5 mm on 330 lb/syd HMA Widening, Intermediate, Type C on 6" of Compacted Aggregate Base No. 53



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DESIGNED: LS	02/2020	DRAWN: AJ
CHECKED: JI	02/2020	CHECKED: JI

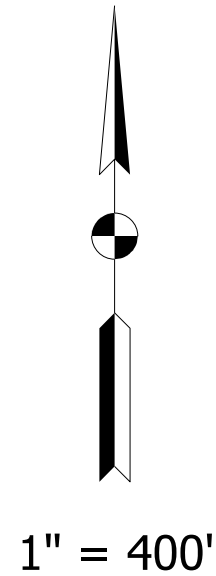
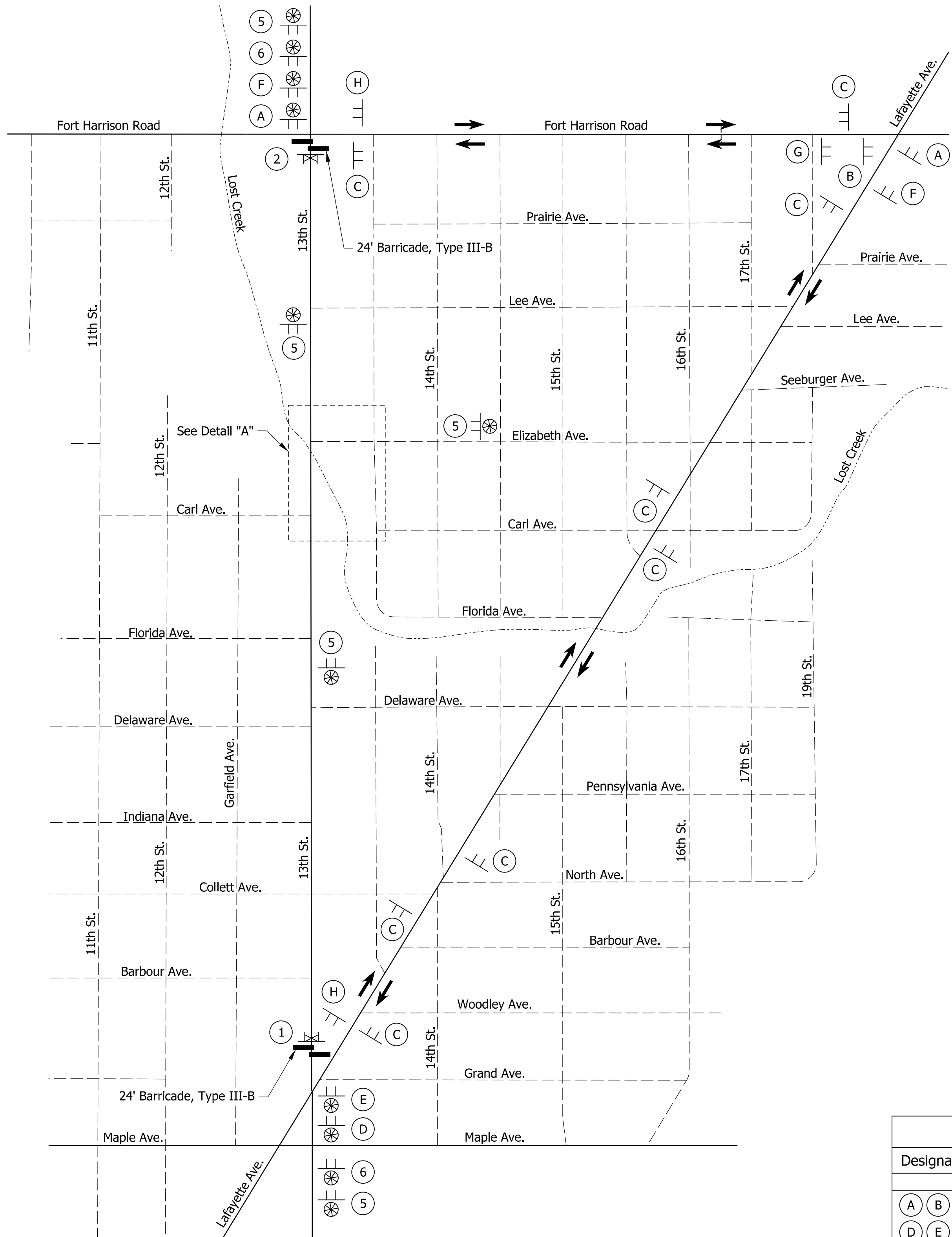
INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

SCALE	BRIDGE FILE
AS NOTED	84-00322
	DESIGNATION
	1700438
SURVEY BOOK	SHEETS
N/A	3 of 18
CONTRACT	PROJECT
B-40166	1700438

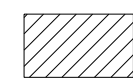
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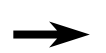


DETAIL "A"
Not to Scale

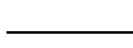
LEGEND



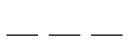
Construction Area



Direction of Detour Traffic



Roadway Functional Class "Minor Arterial" or above



Local Roadway Functional Class below "Minor Arterial"



Typical Sign Standard with Low Intensity
Construction Warning Light, Type A



Typical Sign Standard (Detour Assembly)



Typical Sign Standard (Road Closure Assembly)



Standard Type III-A Barricade as Required



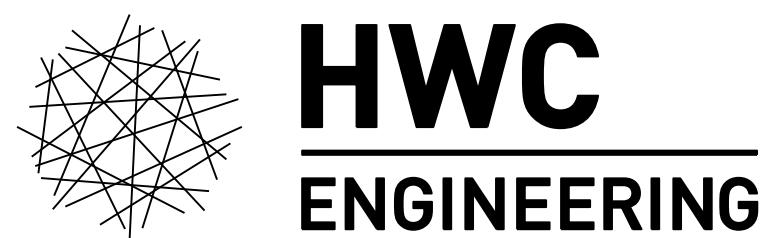
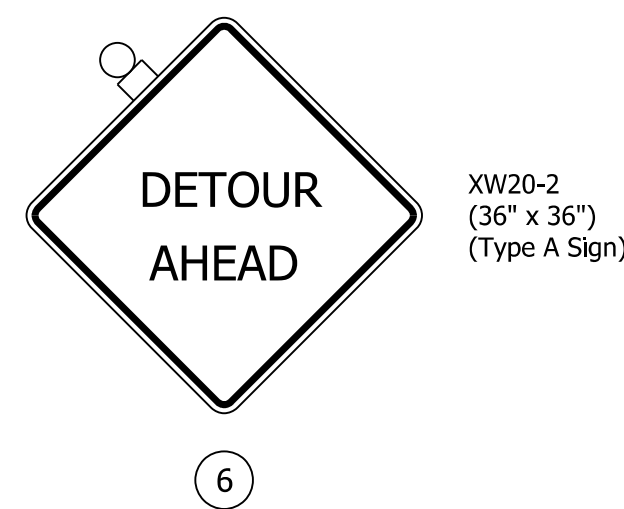
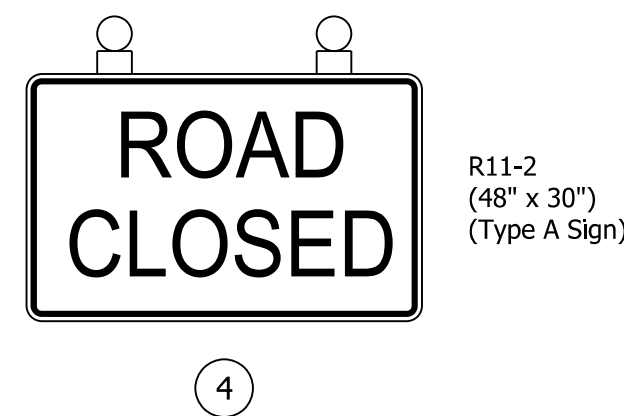
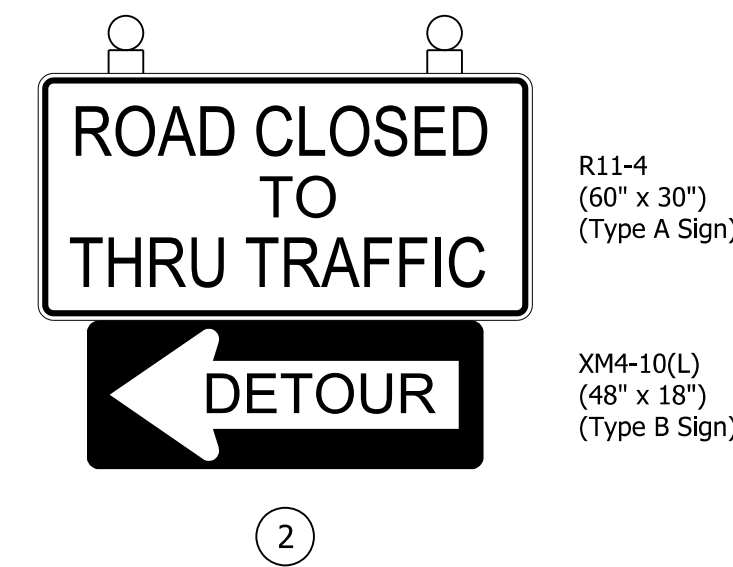
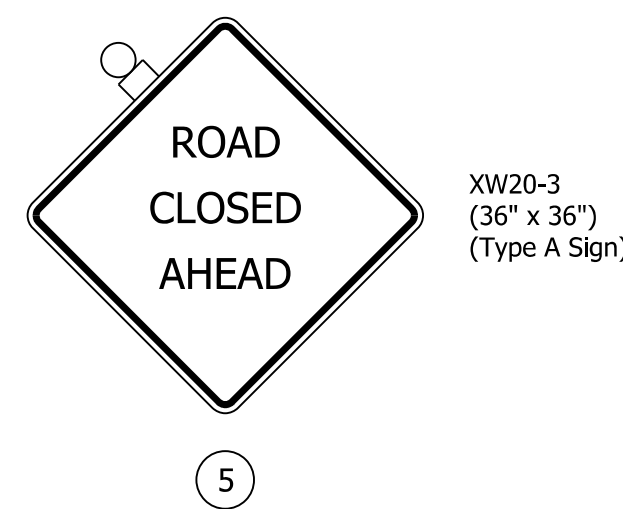
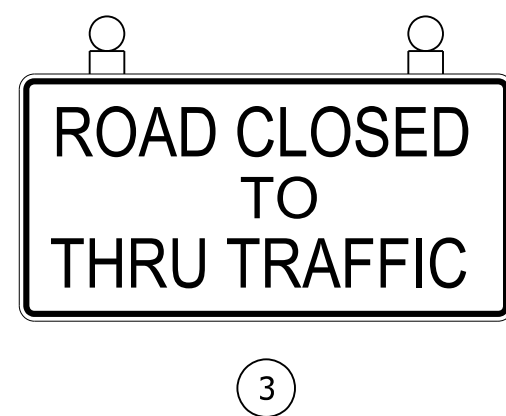
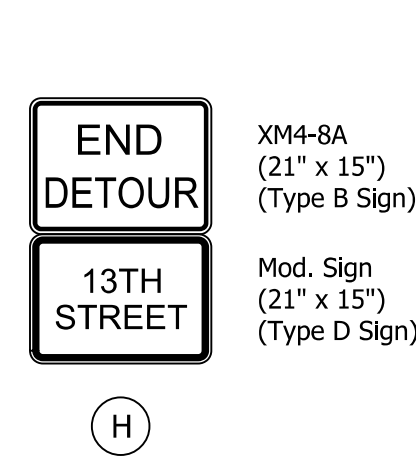
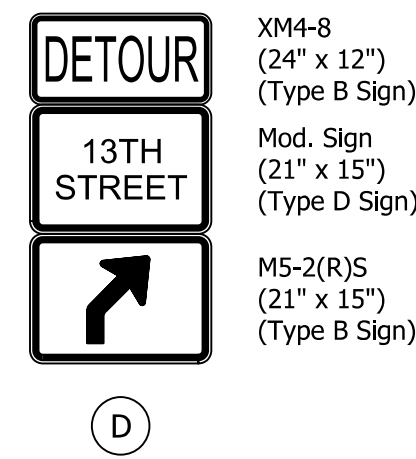
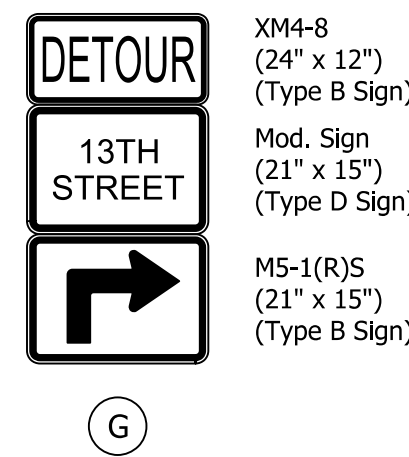
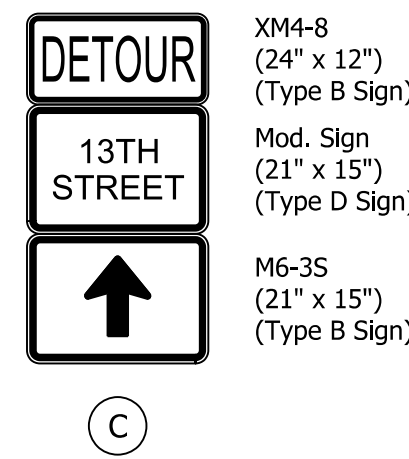
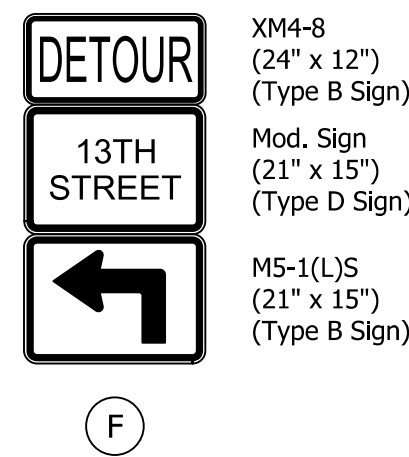
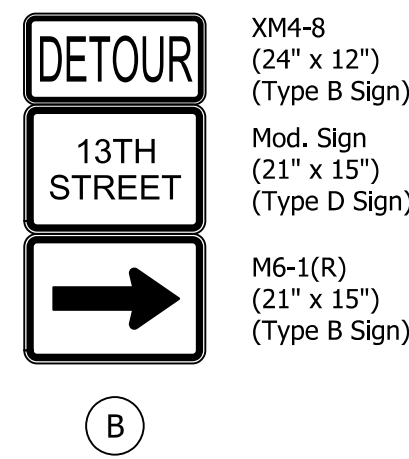
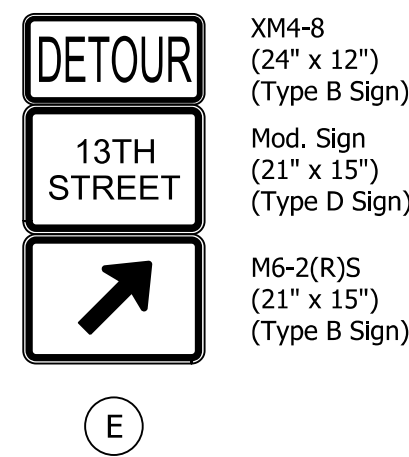
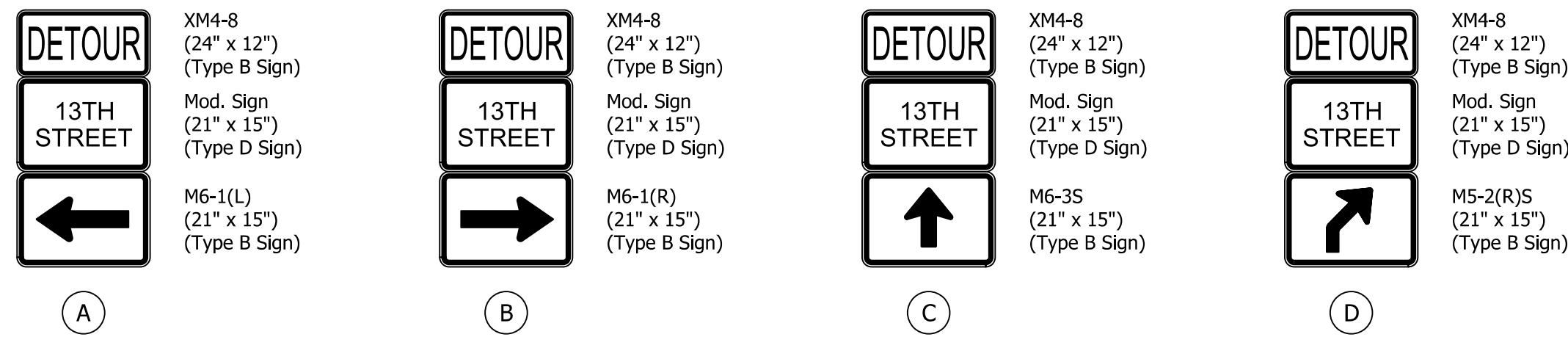
Standard Type III-B Barricade as Required

MOT QUANTITIES

Designation	Item	Unit	Quantity
	Maintaining Traffic	LSum	1
(A) (B) (C) (D) (E) (F) (G) (H)	Detour Route Sign Assembly	Each	18
(1) (2) (3) (4)	Road Closure Sign Assembly	Each	6
(5) (6)	Construction Sign, Type A	Each	7
	Barricade, Type III-A	Lft	72
	Barricade, Type III-B	Lft	72

NOTES:

- Locations for construction signs shown are approximate. For additional information, see INDOT Standard Drawing E 801-TCDT-02. Minimum distances may be varied based on field conditions.
- 13th Street shall require advanced warning signs at least 7 days prior to closure.
- Advance turn detour route marker assemblies shall be located as shown, or after the last cross street prior to the beginning of the detour, as directed.
- Directional detour route marker assemblies shall be located 100 ft. to 200 ft. in advance of all required turns within the detour limits.
- Confirming detour route marker assemblies shall be located 200 ft. past all major intersections, as required, and shall be spaced a maximum 0.5 mi. on each leg of detour route. Confirming detour route marker assemblies shall be placed after a required turn when directed.
- End detour route marker assemblies shall be located 100 ft. to 200 ft. in advance of the final turn of the detour.
- Contractor shall always provide vehicle access to any private residence.



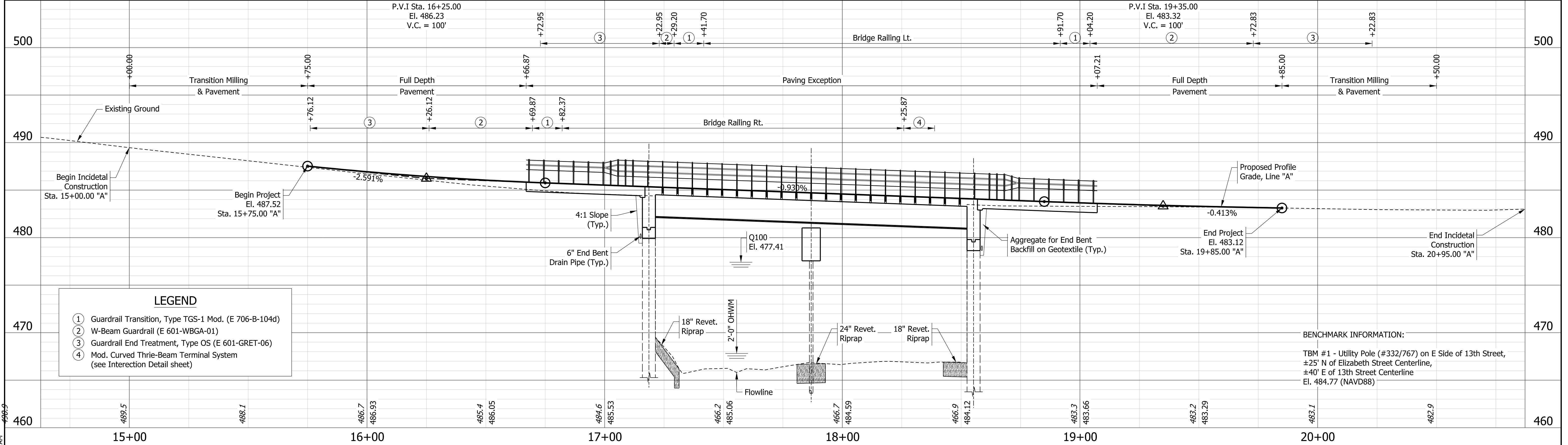
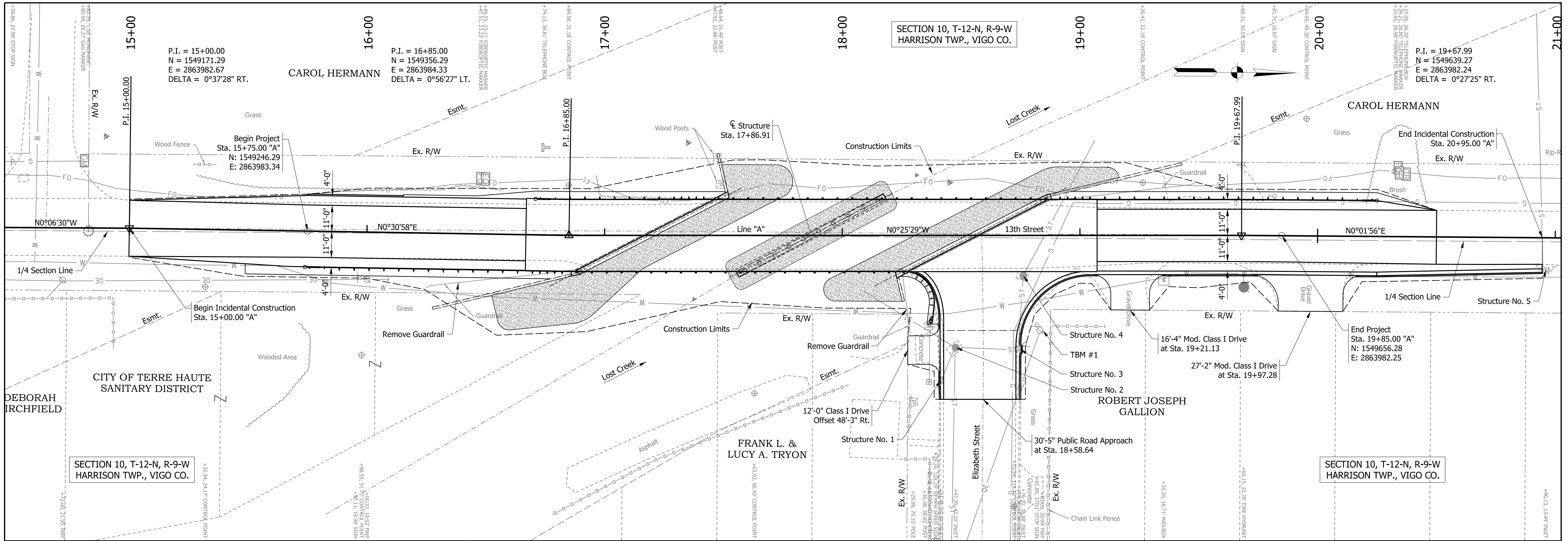
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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: LS	02/2020	DRAWN: AJ 02/2020
CHECKED: JI	02/2020	CHECKED: JI 02/2020

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TRAFFIC DETOUR DETAILS

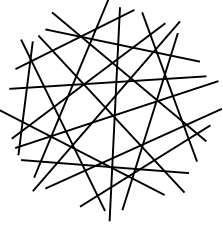
SCALE	BRIDGE FILE
AS NOTED	84-00322
	DESIGNATION
	1700438
SURVEY BOOK	SHEETS
N/A	4 of 18
CONTRACT	PROJECT
B-40166	1700438

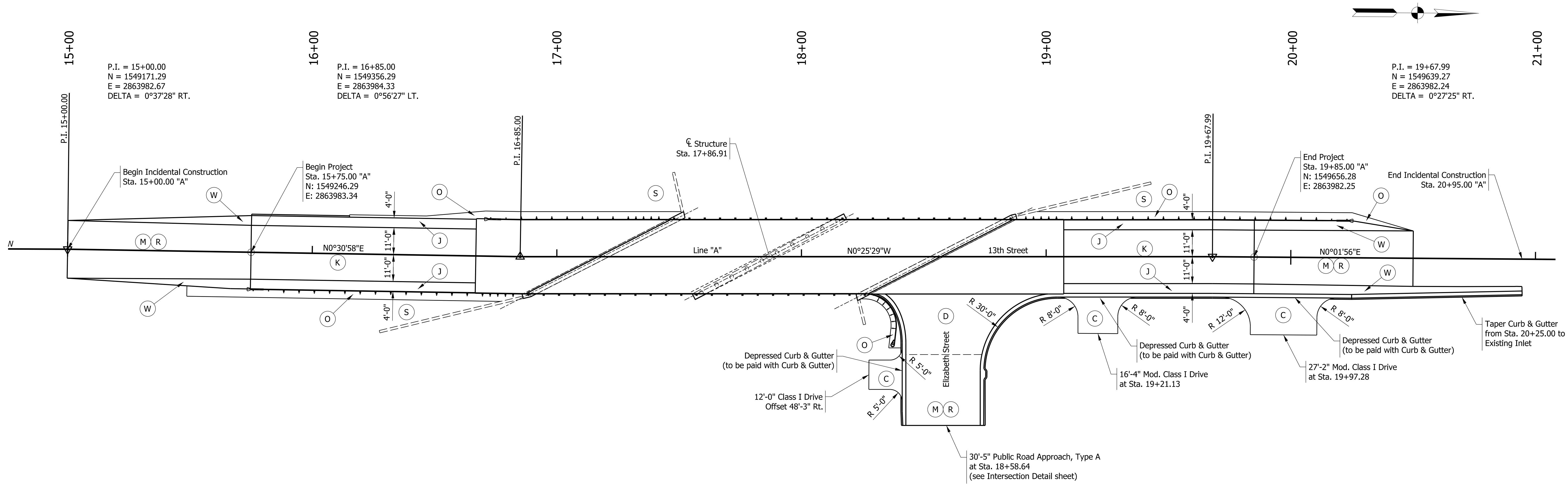


- LEGEND**
- ① Guardrail Transition, Type TGS-1 Mod. (E 706-B-104d)
 - ② W-Beam Guardrail (E 601-WBGA-01)
 - ③ Guardrail End Treatment, Type OS (E 601-GRET-06)
 - ④ Mod. Curved Thrie-Beam Terminal System (see Intersection Detail sheet)

BENCHMARK INFORMATION:

TBM #1 - Utility Pole (#332/767) on E Side of 13th Street, ±25' N of Elizabeth Street Centerline, ±40' E of 13th Street Centerline El. 484.77 (NAVD88)

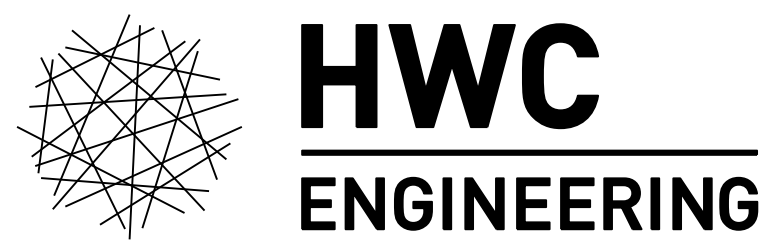
ORIGINATING BENCHMARK Indiana Department of Transportation (INDOT) continuously operating reference station (INCORS) VRS GPS data observation was used to establish the horizontal and vertical datum for the project. TBM #1 was established using conventional survey observations based upon the VRS base point. Vertical datum is on the North American Vertical Datum of 1988 (NAVD88)		 HWC ENGINEERING		INDIANAPOLIS - TERRE HAUTE LAFAYETTE - MUNCIE - NEW ALBANY www.hwcengineering.com		RECOMMENDED FOR APPROVAL DESIGNED: <u>LS</u> 02/2020 CHECKED: <u>JJ</u> 02/2020		INDIANA DEPARTMENT OF TRANSPORTATION PLAN & PROFILE		HORIZONTAL SCALE 1" = 20' VERTICAL SCALE 1" = 5'		BRIDGE FILE 84-00322 DESIGNATION 1700438		SURVEY BOOK N/A CONTRACT B-40166		SHEETS 5 of 18 PROJECT 1700438	
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N.T.R.: Pavement Design to be determined with Geotech

LEGEND

- | | | |
|--|--|--|
| (J) 165 lb/syd QC/QA-HMA, 2, 64, Surface 9.5 mm on 275 lb/syd QC/QA-HMA, 2, 64, Intermediate 19 mm on 330 lb/syd QC/QA-HMA, 2, 64, Base 25 mm on 6" of Compacted Aggregate Base No. 53 | (O) Variable-Depth Compacted Aggregate No. 53 | (C) 6" PCCP for Driveways on Subgrade Treatment Type II |
| (K) 165 lb/syd QC/QA-HMA, 2, 64, Surface 9.5 mm on 275 lb/syd QC/QA-HMA, 2, 64, Intermediate 19 mm on 330 lb/syd QC/QA-HMA, 2, 64, Base 25 mm on 6" of Compacted Aggregate Base No. 53 | (R) 165 lb/syd QC/QA-HMA, 2, 64, Surface 9.5 mm on Variable-Depth QC/QA-HMA, 2, 64, Intermediate 12.5 mm (Layer Thickness shall be in accordance with Std. Specifications) | (D) 165 lb/syd QC/QA-HMA, 2, 64, Surface 9.5 mm on 275 lb/syd QC/QA-HMA, 2, 64, Intermediate 19 mm on 330 lb/syd QC/QA-HMA, 2, 64, Base 25 mm on 6" of Compacted Aggregate Base No. 53 |
| (M) Transition Milling | (S) Mulched Seeding, U and Erosion Control Blankets (See Erosion Control Plan) | |
| | (W) 165 lb/syd QC/QA-HMA, 2, 64, Surface 9.5 mm on 330 lb/syd HMA Widening, Intermediate, Type C on 6" of Compacted Aggregate Base No. 53 | |



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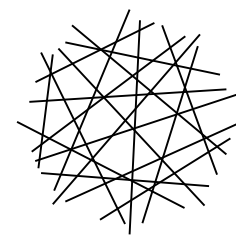
INDIANA
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ROADWAY CONSTRUCTION DETAILS

SCALE 1" = 20'	BRIDGE FILE 84-00322
	DESIGNATION 1700438
SURVEY BOOK N/A	SHEETS 6 of 18
CONTRACT B-40166	PROJECT 1700438

PLOT: 2/4/2020 3:25:25 PM

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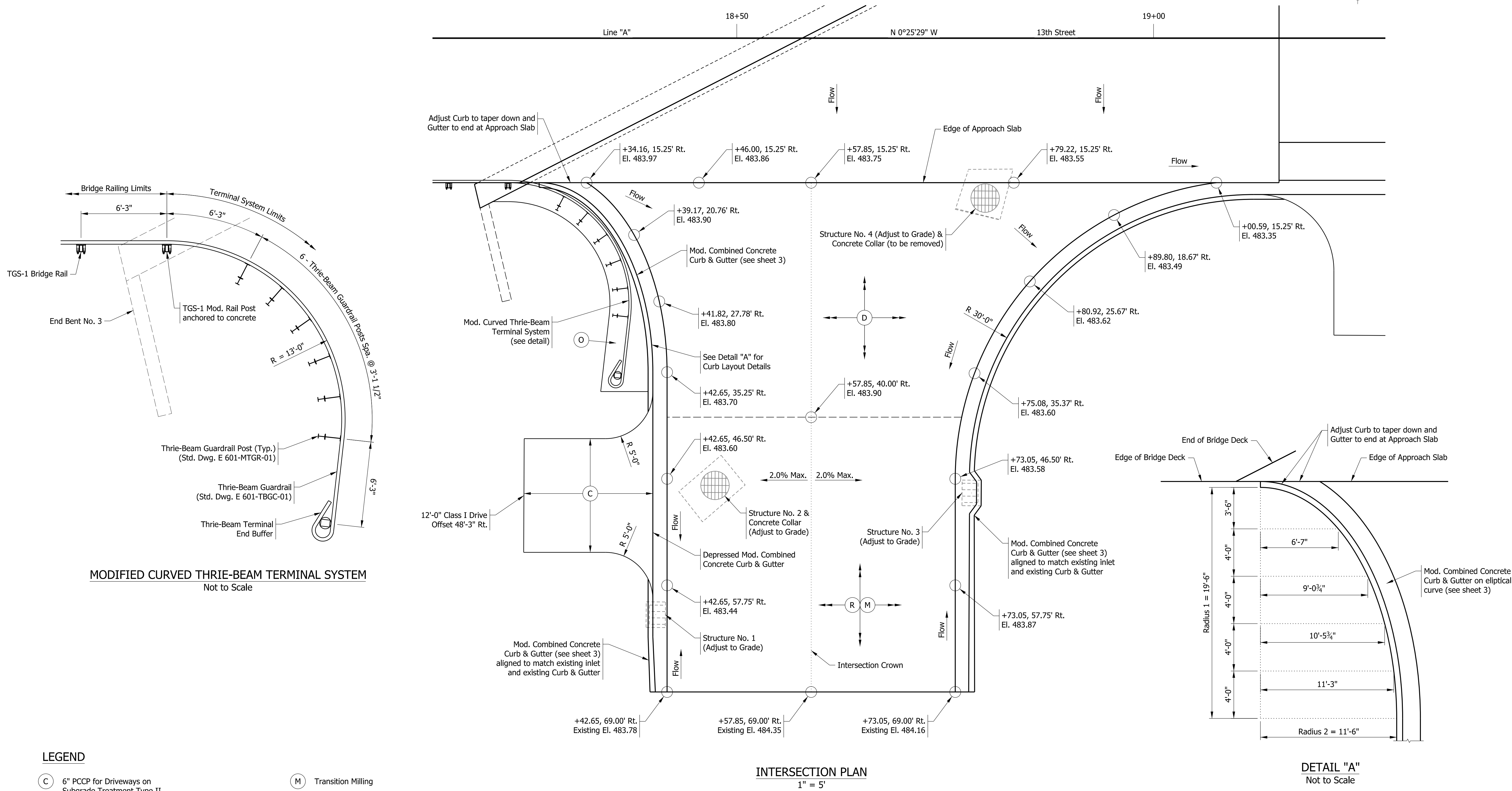
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CHECKED: <u>JJ</u>		CHECKED: <u>JJ</u>		02/2020	

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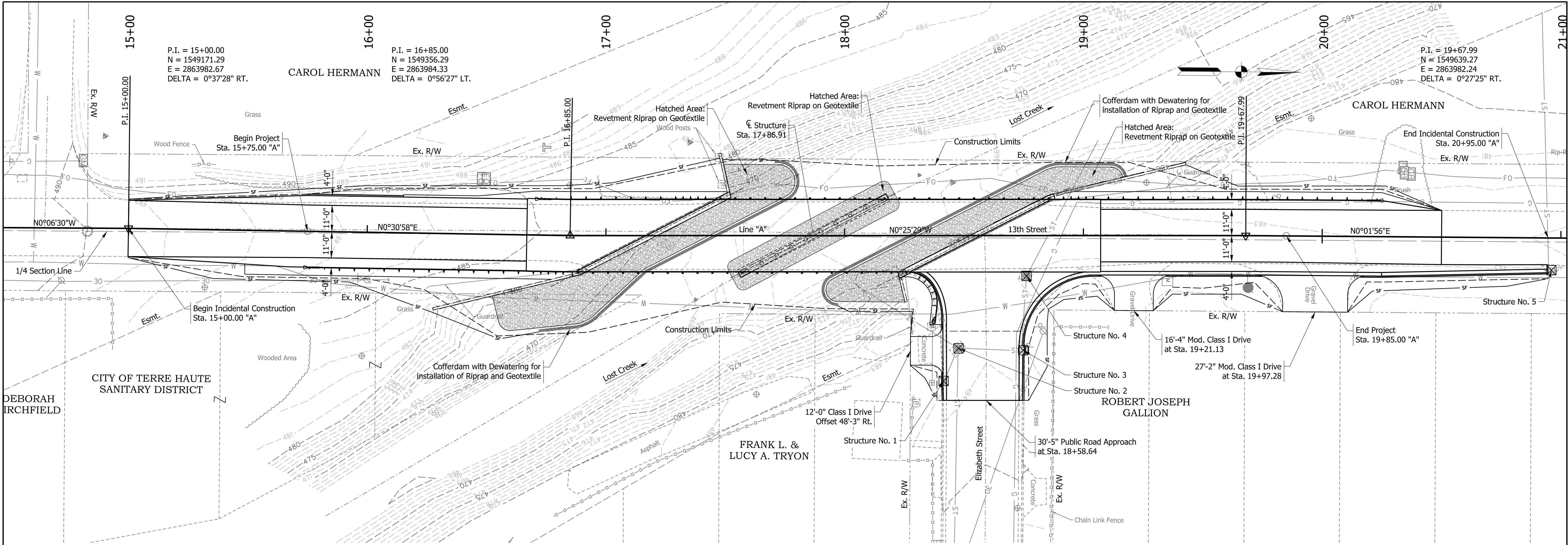
INTERSECTION DETAILS
ELIZABETH STREET

SCALE	BRIDGE FILE	
AS NOTED	84-00322	
	DESIGNATION	
	1700438	
SURVEY BOOK	SHEETS	
N/A	7	of 18
CONTRACT	PROJECT	
B-40166	1700438	



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LEGEND

Revetment Riprap on Geotextile

Silt Fence

Temporary Inlet Protection

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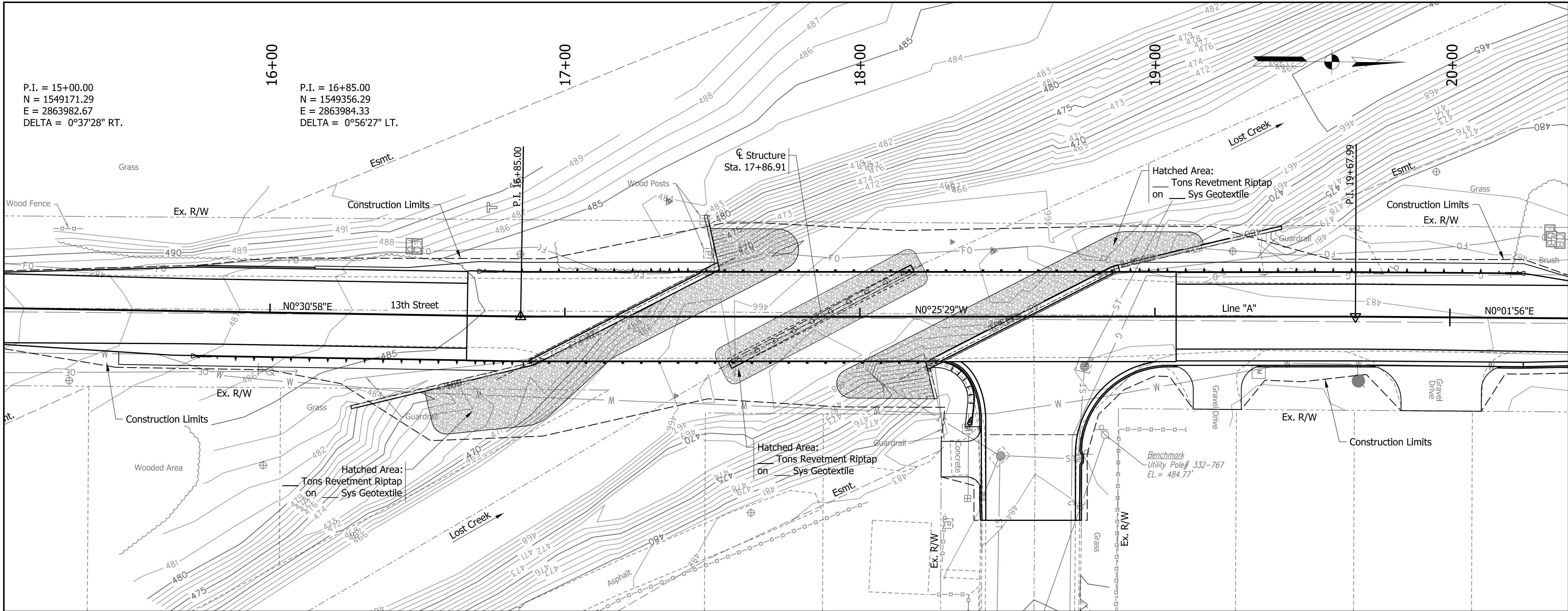
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EROSION CONTROL

SCALE 1" = 20'	BRIDGE FILE 84-00322
	DESIGNATION 1700438
SURVEY BOOK N/A	SHEETS 8 of 18
CONTRACT B-40166	PROJECT 1700438

PLOT: 8/18/2020 9:24:48 AM



EXISTING STRUCTURE

Existing structure is a two-span adjacent concrete box beam bridge with asphalt deck with concrete curbs on full height abutments and open pile bent pier. Existing superstructure to be removed. See details for substructure modifications.

HYDRAULIC DATA

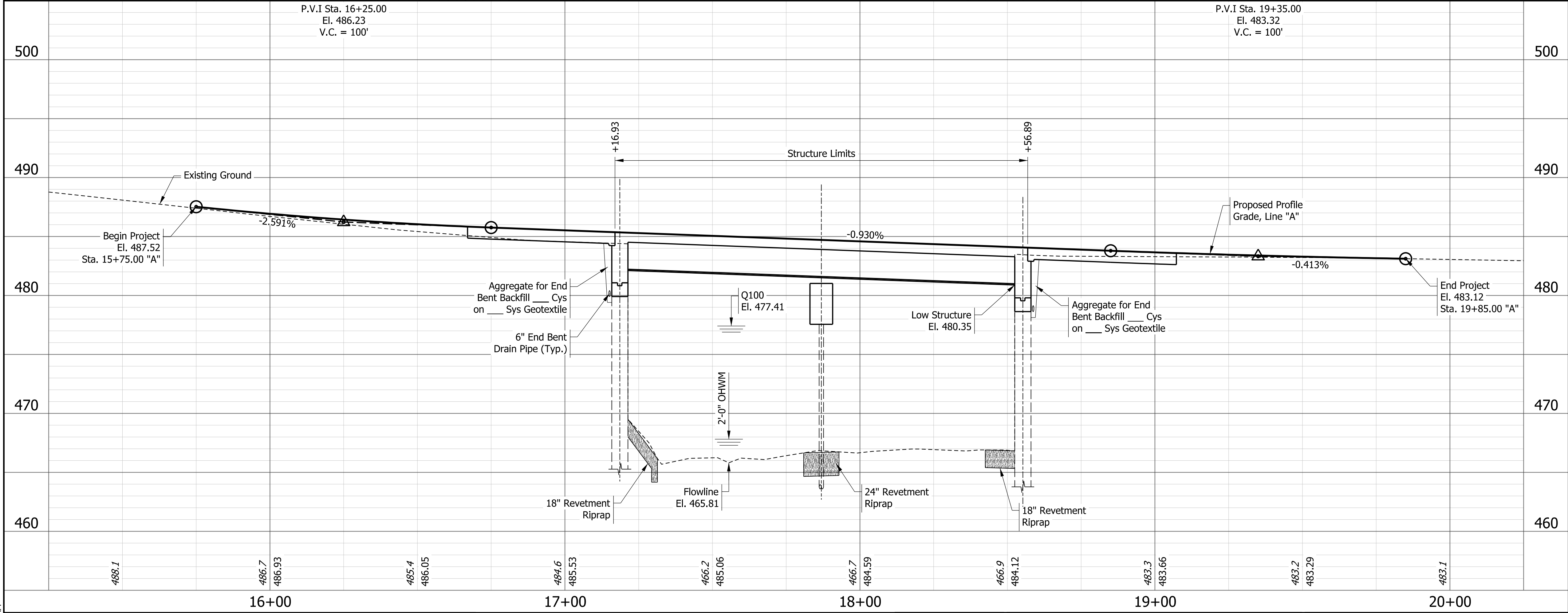
Drainage Area Upstream	22.34	sq mi
Q100 Discharge Upstream	3180	cfs
Proposed Q100 Headwater Elevation	477.35	ft
Existing Q100 Headwater Elevation	477.35	ft
Proposed Q100 Elevation	477.41	ft
Existing Q100 Elevation	477.41	ft
Proposed Q100 Backwater	0.23	ft
Existing Q100 Backwater	0.23	ft
Proposed Gross Waterway Area Opening Below Q100	1165.69	sq ft
Existing Gross Waterway Area Opening Below Q100	N/A	sq ft
Proposed Q100 Max Velocity	4.34	ft/sec
Existing Q100 Max Velocity	4.34	ft/sec
Proposed Q100 Average Velocity	3.76	ft/sec
Existing Q100 Average Velocity	3.76	ft/sec
Proposed Low Structure Elevation	480.35	ft
Existing Low Structure Elevation	480.35	ft
Proposed Skew to Flowline of Waterway	63	deg
Existing Skew to Flowline of Waterway	63	deg

HYDRAULIC SCOUR DATA

	Q100	Q500
Discharge	3180 cfs	3730 cfs
Elevation	477.14 ft	479.25 ft
Contraction Scour Depth	0.00 ft	0.00 ft
Pier Scour Depth	8.60 ft	8.73 ft
Total Scour Depth	8.60 ft	8.73 ft
Flow Line Elevation	465.46 ft	465.46 ft
Low Scour Elevation	456.86 ft	456.73 ft
Maximum Velocity	4.55 ft/sec	4.51 ft/sec

EARTHWORK TABULATION

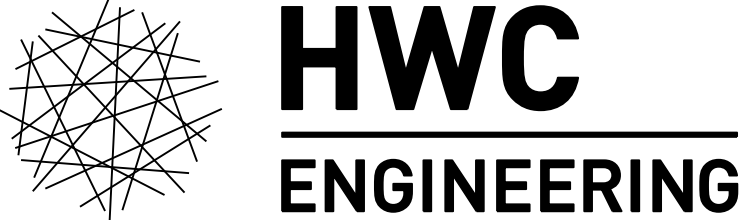
Fill +20%	XXX	Cys
Common Excavation	XXX	Cys
Rock Excavation	XXX	Cys
Foundation Excavation, Unclassified	XXX	Cys
Waste / Surplus	XXX	Cys



CONTINUOUS COMPOSITE STEEL BEAM BRIDGE
TWO SPANS: 68'-4" & 68'-4"
30'-0" CLEAR ROADWAY; 62°54'30" SKEW RT.
13TH STREET OVER LOST CREEK
VIGO COUNTY, IN

PLOT: 8/18/2020 9:25:13 AM

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CHECKED: JJ 02/2020 CHECKED: JJ 02/2020

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LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	84-00322
VERTICAL SCALE	DESIGNATION
1" = 5'	1700438
SURVEY BOOK	SHEETS
N/A	9 of 18
CONTRACT	PROJECT
B-40166	1700438

GENERAL NOTES

Chamfered edges shall be 1" unless noted otherwise

DESIGN DATA

Structure originally designed for HS20 loading.

Superstructure designed for HS-20 and Alternate Military loading, in accordance with AASHTO Standard Specifications, 17th Edition and interims.

DEAD LOAD

Actual weight plus 35 psf for future wearing surface.

FLOOR SLAB

Designed with a 7½" minimal structural depth plus ½" sacrificial wearing surface.

DESIGN STRESSES

CONCRETE

Class C	$f_c = 4,000$ psi
Class B	$f_c = 3,000$ psi
Class A	$f_c = 3,500$ psi

STRUCTURAL STEEL

Grade 50 $f_y = 50 \text{ ksi}$

REINFORCING STEEL

Grade 60 $f_y = 60,000 \text{ psi}$

CONSTRUCTION LOADING

The exterior girder has been checked for strength, deflection, and overturning using the construction loads shown below. Cantilever overhang brackets were assumed for support of the deck overhang past the edge of the exterior girder. Finishing machine was assumed to be supported 6 in. outside the vertical coping form. The top overhang brackets were assumed to be located 6 in. past the edge of the vertical coping form. The bottom overhang brackets were assumed to be braced against the intersection of the girder bottom flange and web.

DECK FALSEWORK LOADS

Designed for 15 psf for permanent metal stay-in-place deck forms and 2 ft. exterior walkway.

CONSTRUCTION LIVE LOAD

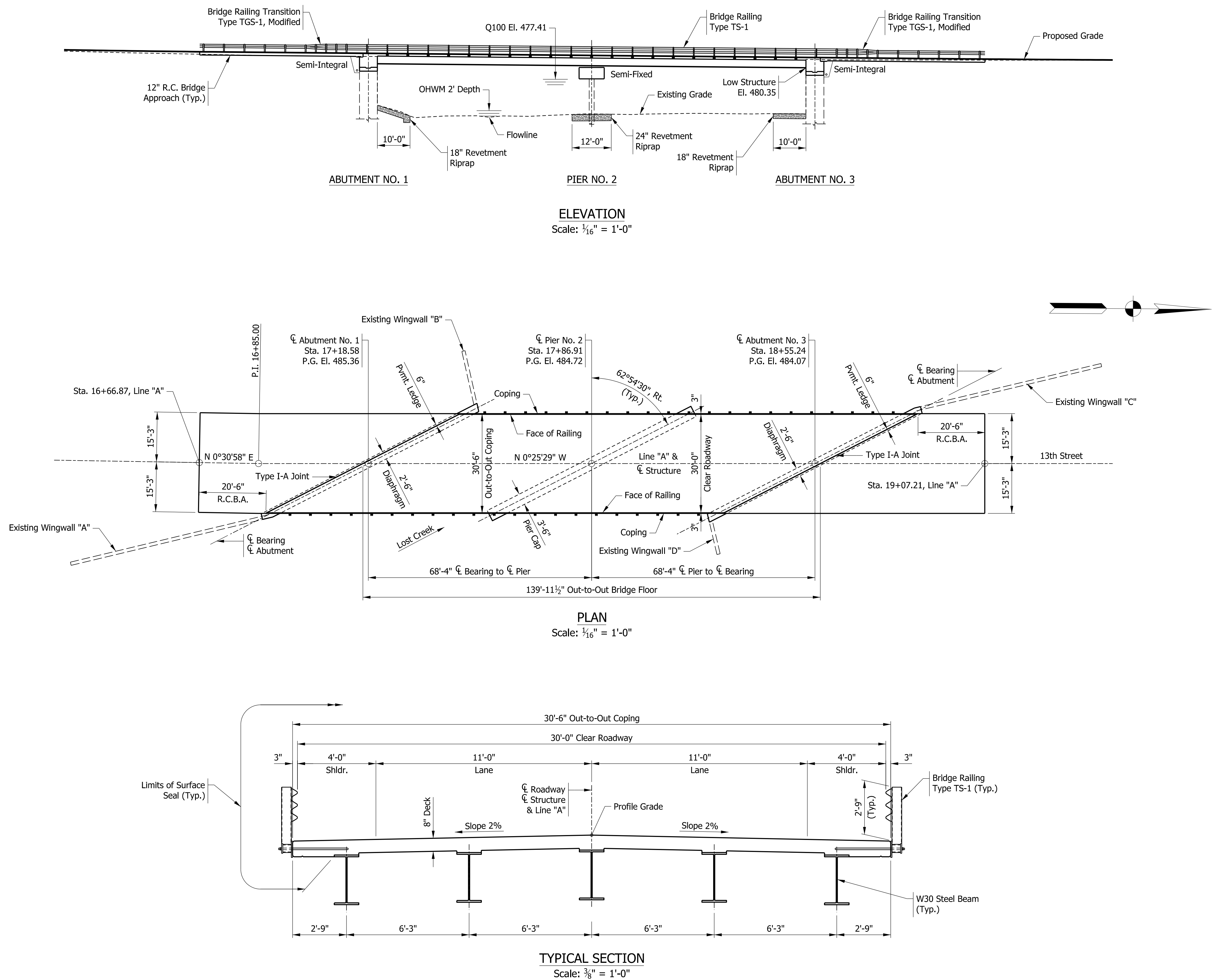
Designed for 20 psf extending 2 ft. past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30 ft. length of the deck centered with the finishing machine.

FINISHING MACHINE LOAD

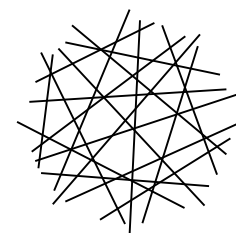
4,500 lb distributed over 10 ft. along the coping.

WIND LOAD

Designed for 70 mph horizontal wind loading in accordance with LRFD 3.8.1.



CONTINUOUS COMPOSITE STEEL BEAM BRIDGE
TWO SPANS: 68'-4" & 68'-4"
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13TH STREET OVER LOST CREEK
VIGO COUNTY, IN



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CHECKED: JI 02/2020

CHECKED: JI 02/2020

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GENERAL PLAN

SCALE	BRIDGE FILE
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AS NOTED	84-00322
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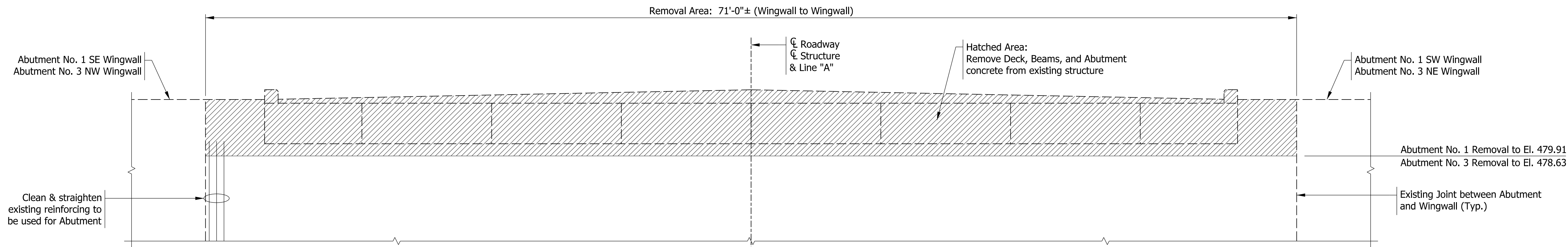
	DESIGNATION
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	1700438
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ORVET DOOR	SHEETS		
N/A	10	of	

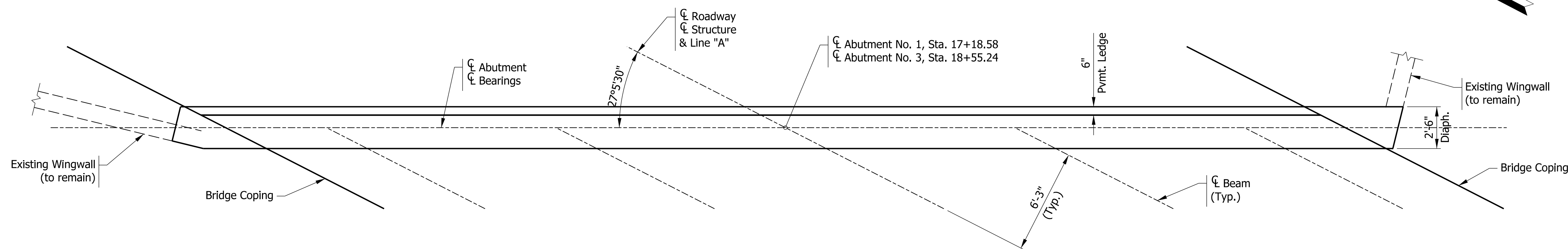
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CONTRACT	PROJECT		

CONTRACT	PROJECT
B 40166	1700438

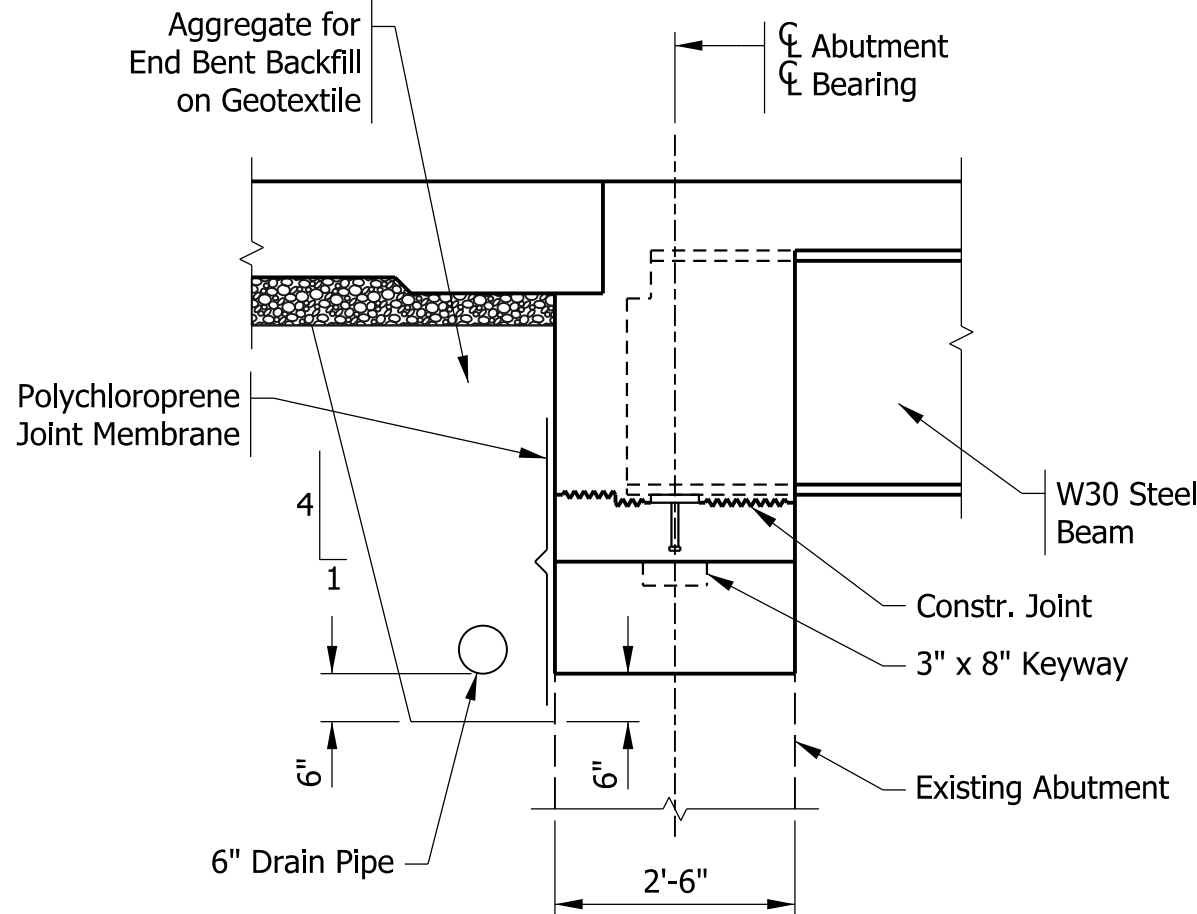


TYPICAL EXISTING ABUTMENT ELEVATION
Scale: 1/4" = 1'-0"
(Looking @ Front Face)

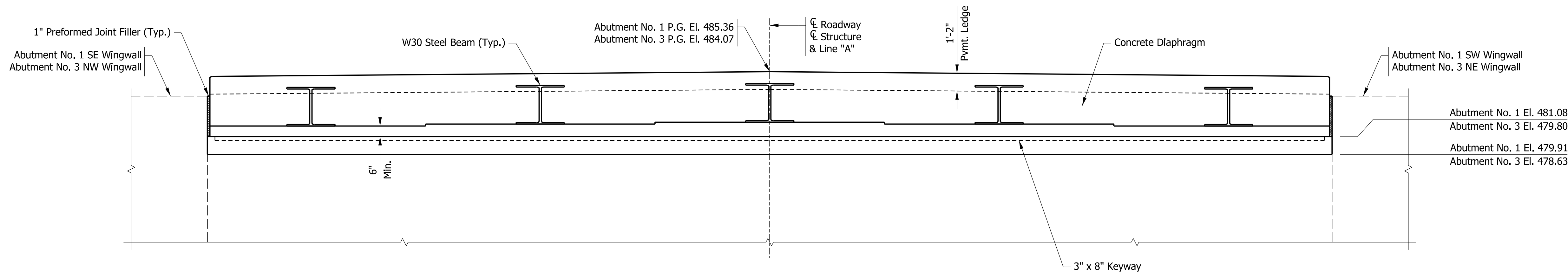
REQUIRED ABUTMENT PATCHING	
LOCATION	AREA (SFT)
Abut. No. 1 Face	8
SW Wingwall	3



TYPICAL PROPOSED ABUTMENT PLAN
Scale: 1/4" = 1'-0"
(Abutment No. 3 Shown, Abutment No. 1 Similar)



TYPICAL PROPOSED SEMI-INTEGRAL ABUTMENT SECTION
Scale: 1/2" = 1'-0"



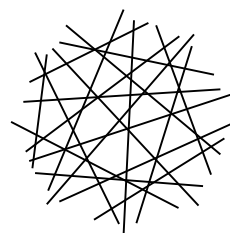
TYPICAL PROPOSED ABUTMENT ELEVATION
Scale: 1/4" = 1'-0"
(Looking @ Front Face)

NOTES

- Proposed Abutment shall be Semi-Integral with beams attached to an Anchor Plate embedded into concrete beam seat (Method 1).
- For additional Proposed Geometry details, see General Plan.

PLOT: 2/4/2020 3:46:25 PM

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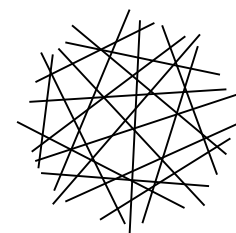
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ABUTMENT MODIFICATION
DETAILS

SCALE	BRIDGE FILE
AS NOTED	84-00322
	DESIGNATION
	1700438
SURVEY BOOK	SHEETS
N/A	11 of 18
CONTRACT	PROJECT
B-40166	1700438

PLOT: 2/4/2020 3:50:04 PM

W:\Vigo County\2017-173 Vigo County Bridge 322\Design\CAD\12 - Pier Substructure Modifications.dgn



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CHECKED: <u>JJ</u> 02/2020		CHECKED: <u>JJ</u> 02/2020			

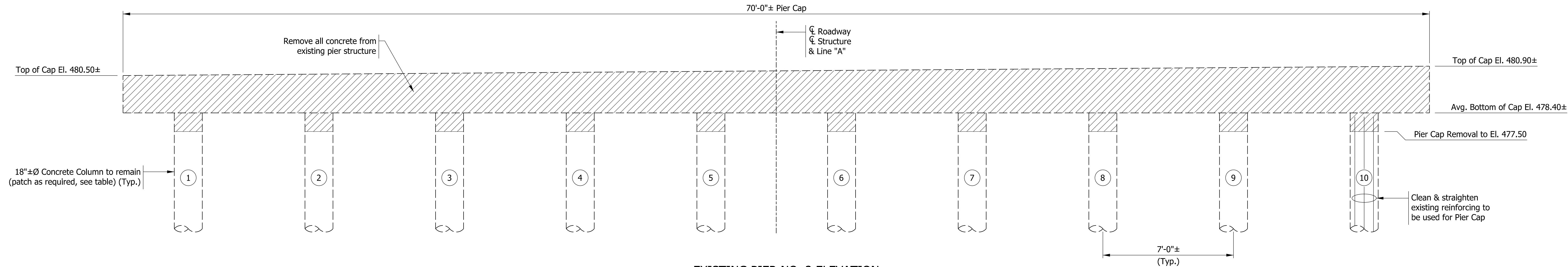
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PIER MODIFICATION
DETAILS

SCALE	BRIDGE FILE		
AS NOTED	84-00322		
	DESIGNATION		
	1700438		
SURVEY BOOK	SHEETS		
N/A	12	of	18
CONTRACT	PROJECT		
B-40166	1700438		

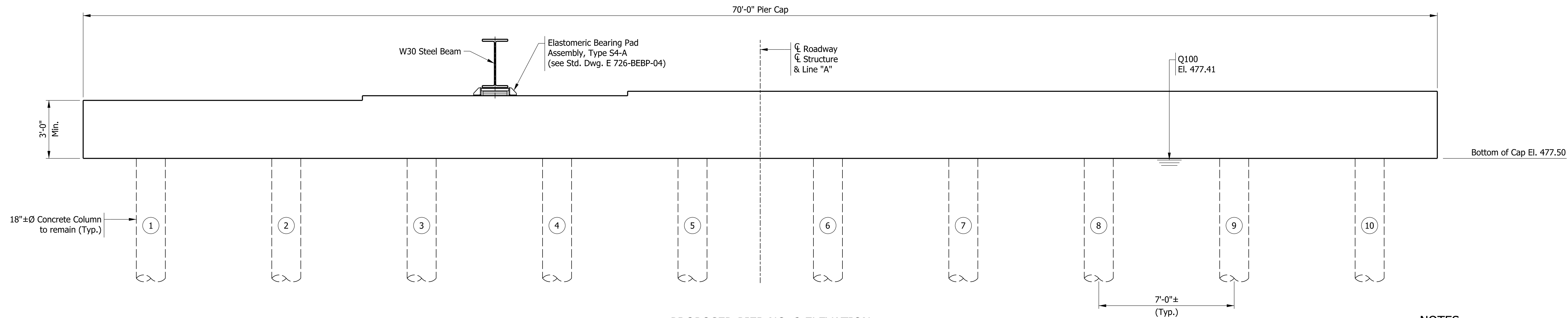
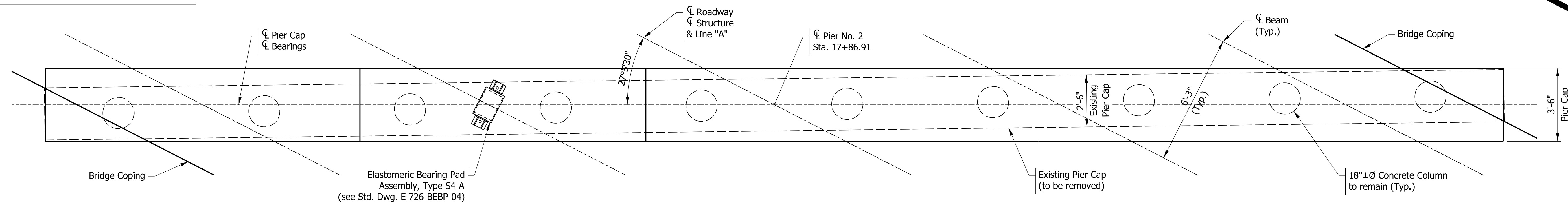
NOTES

- Proposed Pier shall be Semi-Fixed with beams attached to an Elastomeric Bering Pad Assembly, Type S4-A.
- For additional Proposed Geometry details, see General Plan.

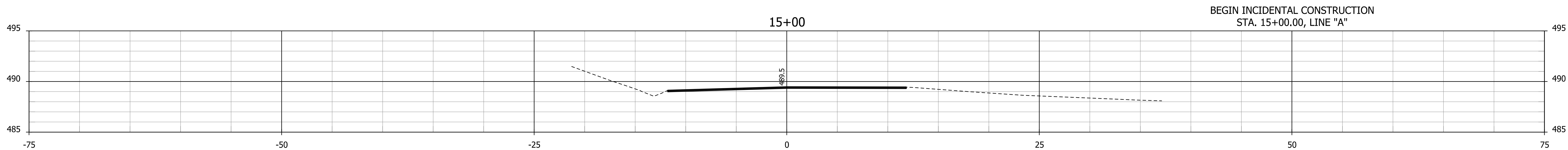
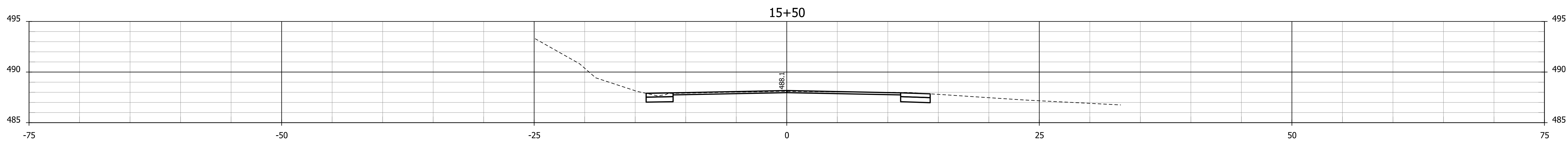
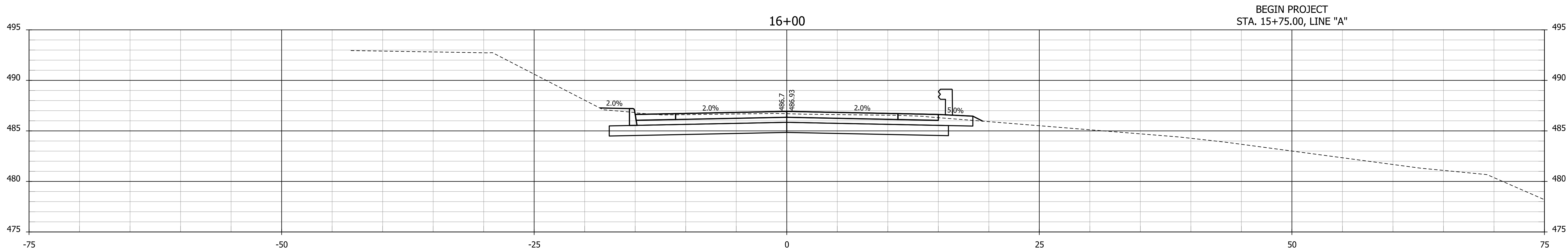


REQUIRED COLUMN PATCHING

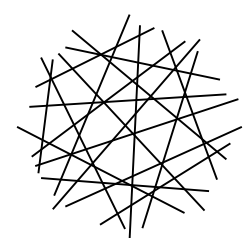
COLUMN	AREA (SFT)
1	10
6	5
7	25
10	20



STRUCTURE DATA																																																		
STRUCTURE NUMBER	LOCATION				SIZE	DESCRIPTION	LENGTH	EXISTING TOP OF CASTING	PROPOSED TOP OF CASTING	RECONSTR. LENGTH	SKEW	FLOW LINE			SERVICE LIFE	SITE DESIGNATION	PH	BACKFILL METHOD	STRUCTURE BACKFILL	TYPE	FLOWABLE BACKFILL	TYPE	GEOTEXTILES	REVTMENT RIPRAP	CONCRETE, CLASS A, FOR STR.	VIDEO INSPECTION	PIPE END SECTION	GRATED BOX END SECTION			SAFETY METAL END SECTION			CONNECT TO STR.	REMARKS															
	STATION	LEFT	RIGHT	CROSS								OFFSET	PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE AND TYPE														LFT	ELEV.	ELEV.	LFT	COVER	UP STREAM			DOWN STREAM	YRS	CYS	CYS	SYS	TON	CYS	LFT	EA.	TYPE	SLOPE	EA.	TYPE	SLOPE	EA.
1	18+41.45	X		60.8	12		EXISTING INLET		483.35	483.35	N/A		479.9	479.8																			2	Adjust to Grade																
2	18+47.70	X		47.2	30		EXISTING INLET		483.62	483.62	N/A		477.0	475.1																			Outlet	Adjust to Grade																
3	18+74.78	X		16.9	12		EXISTING INLET		483.58	483.58	N/A		480.0	479.6																			2	Adjust to Grade																
4	18+76.20	X		48.0	12		EXISTING INLET		483.00	483.54	0.54		479.1	Unknown																			3	Adjust to Grade																
5	20+96.50	X		14.0	6		EXISTING INLET		482.62	482.62	N/A		481.0	Unknown																			Outlet																	



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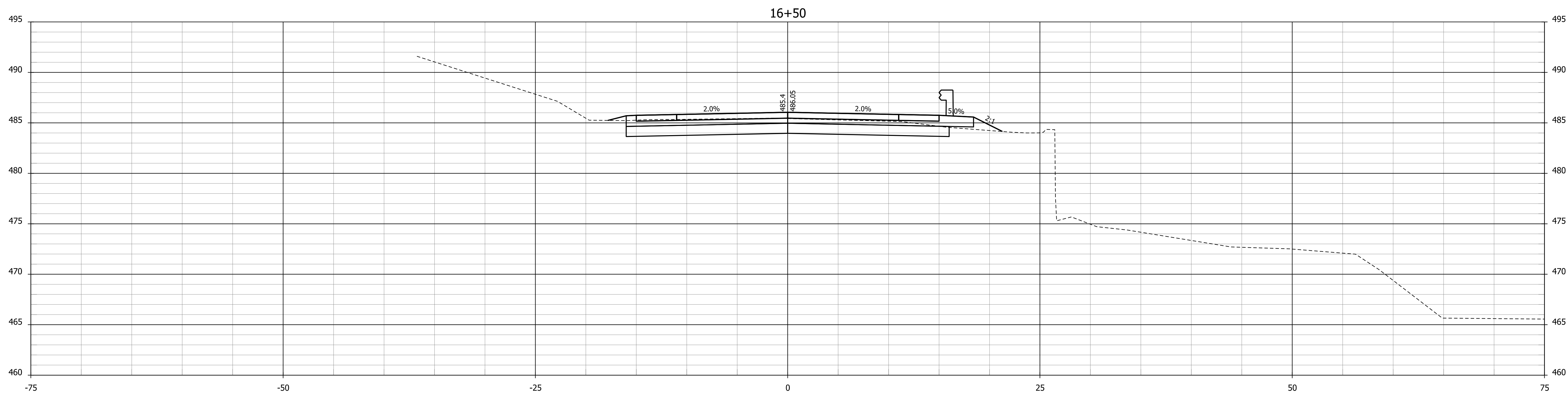
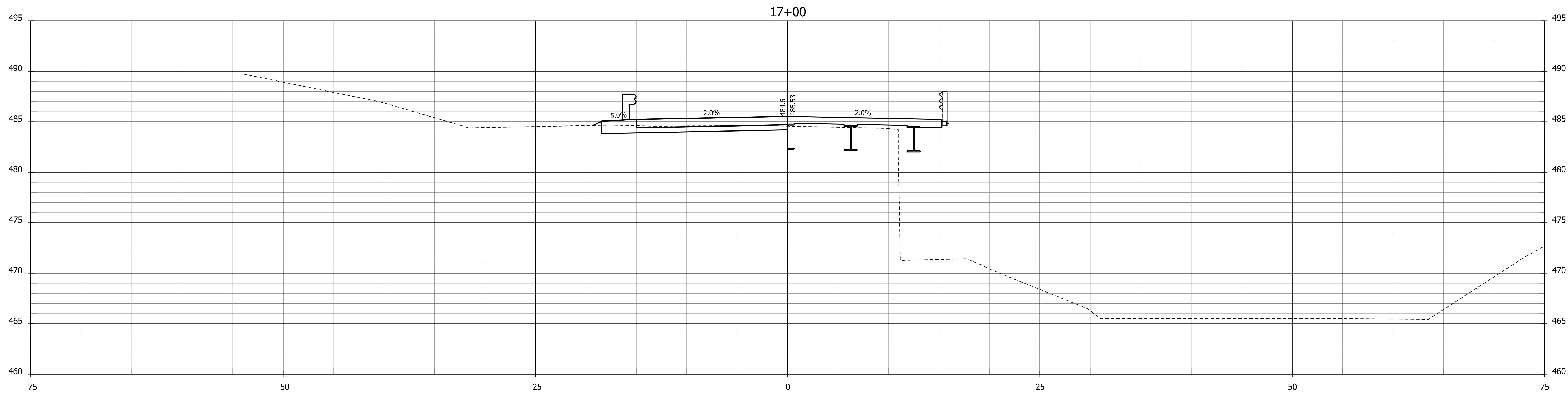
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02/2020		02/2020		02/2020	
CHECKED: <u>JJ</u>		02/2020		CHECKED: <u>JJ</u>	
02/2020		02/2020		02/2020	

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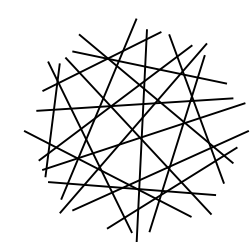
CROSS SECTIONS
STA. 15+00.00 TO STA. 16+00.00

SCALE		BRIDGE FILE	
AS NOTED		84-00322	
		DESIGNATION	
		1700438	
SURVEY BOOK		SHEETS	
N/A		14 of 18	
CONTRACT		PROJECT	
B-40166		1700438	

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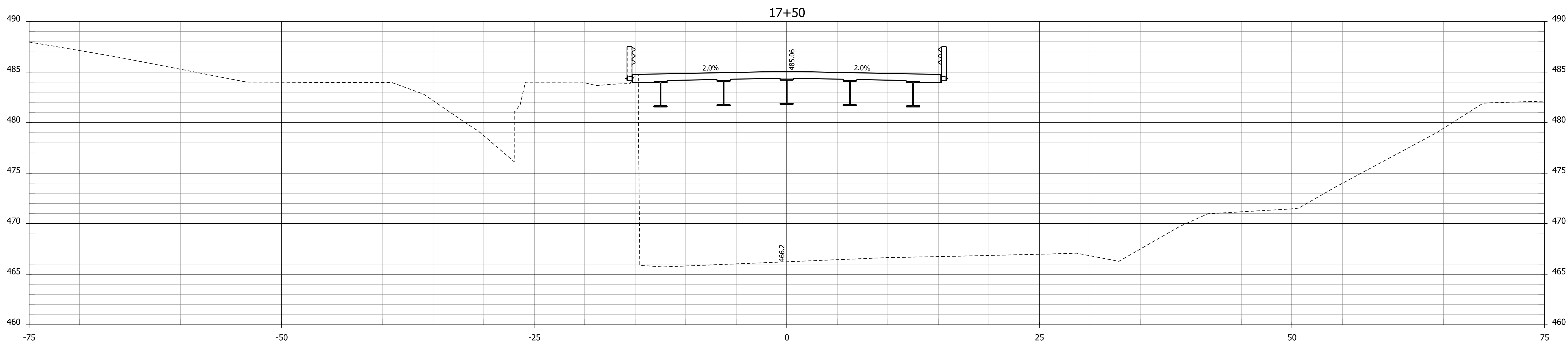
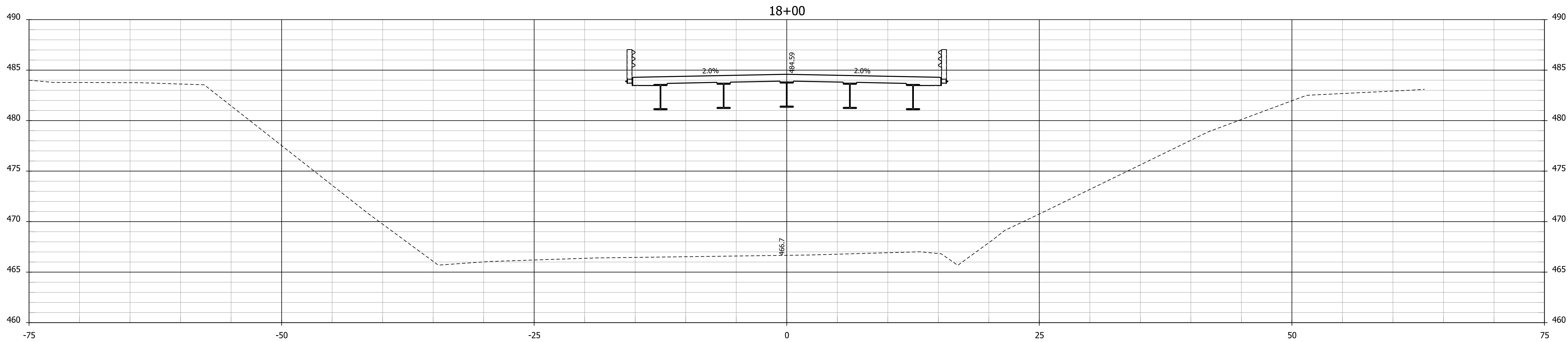
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02/2020		CHECKED: <u>JJ</u>		02/2020	

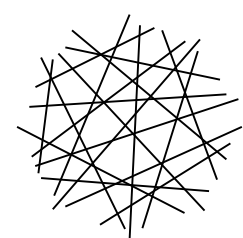
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CROSS SECTIONS
STA. 16+50.00 TO STA. 17+00.00

SCALE	BRIDGE FILE
AS NOTED	84-00322
	DESIGNATION
	1700438
SURVEY BOOK	SHEETS
N/A	15 of 18
CONTRACT	PROJECT
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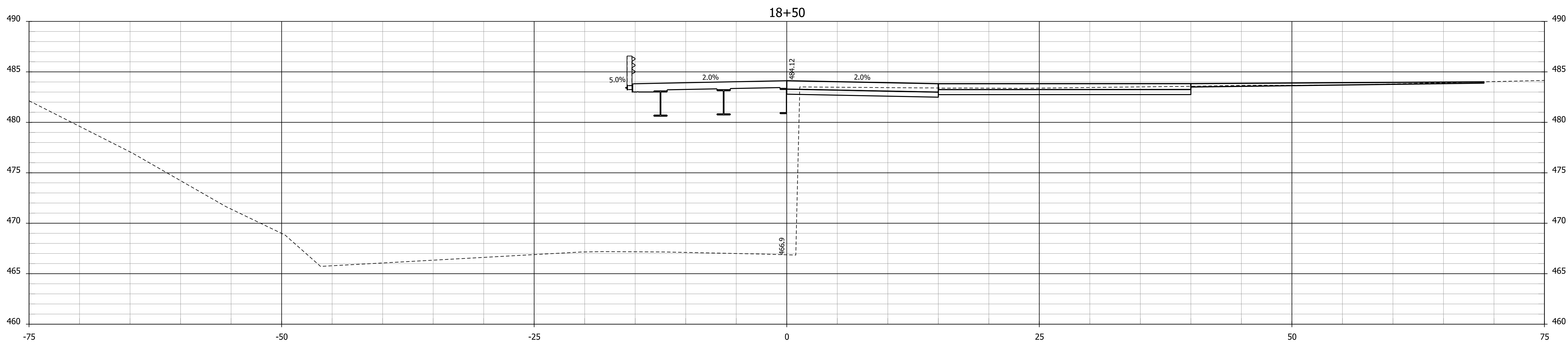
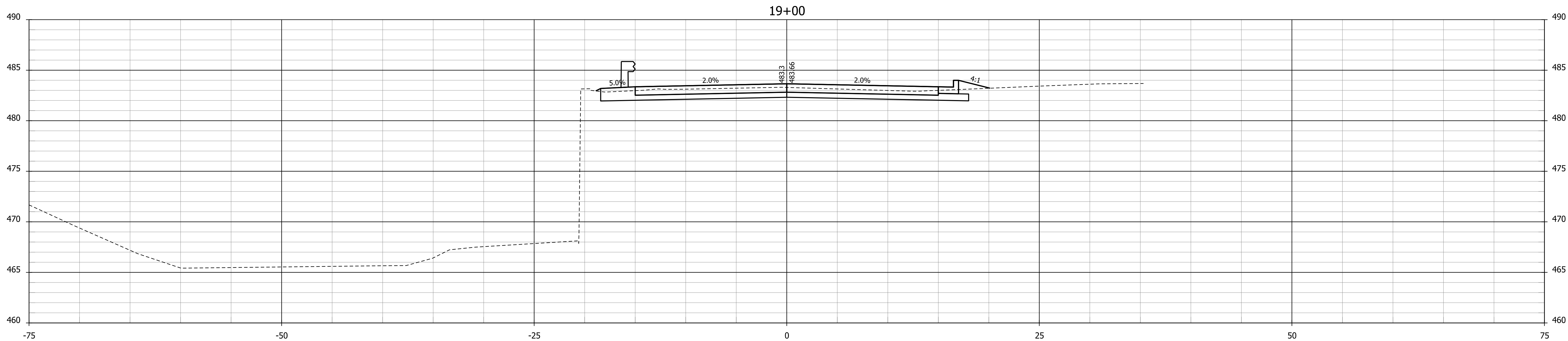
RECOMMENDED FOR APPROVAL	
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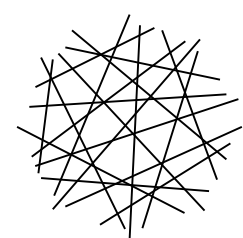
CROSS SECTIONS
STA. 17+50.00 TO STA. 18+00.00

SCALE	BRIDGE FILE
AS NOTED	84-00322
	DESIGNATION
	1700438
SURVEY BOOK	SHEETS
N/A	16 of 18
CONTRACT	PROJECT
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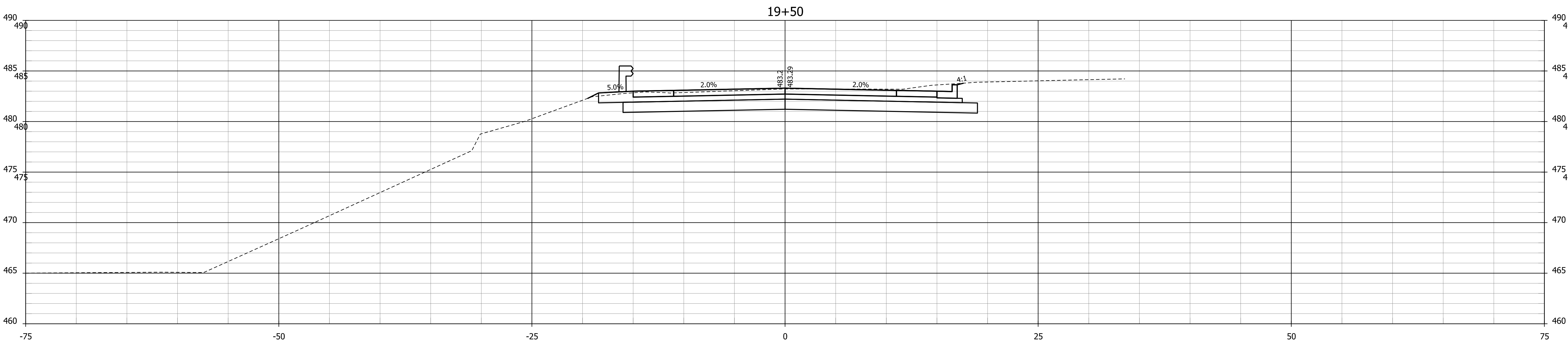
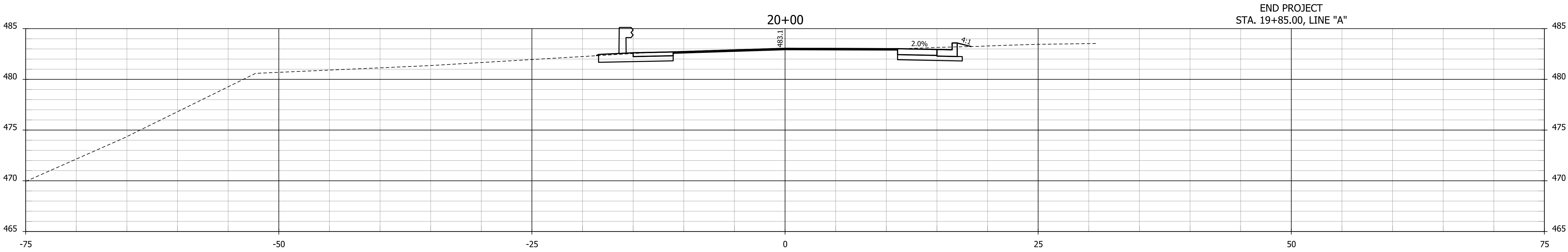
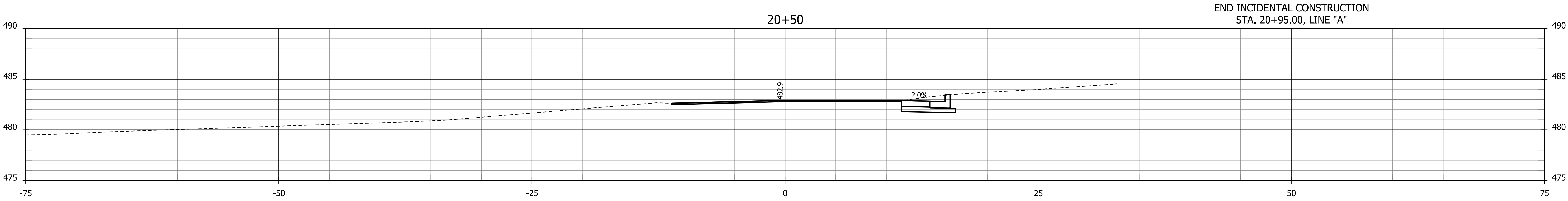
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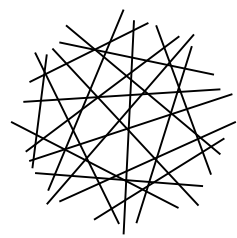
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CROSS SECTIONS
STA. 18+50.00 TO STA. 19+00.00

SCALE AS NOTED	BRIDGE FILE 84-00322
	DESIGNATION 1700438
SURVEY BOOK N/A	SHEETS 17 of 18
CONTRACT B-40166	PROJECT 1700438



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STA. 19+50.00 TO STA. 20+50.00

SCALE	BRIDGE FILE
AS NOTED	84-00322
	DESIGNATION
	1700438
SURVEY BOOK	SHEETS
N/A	18 of 18
CONTRACT	PROJECT
B-40166	1700438