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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS
REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

AS-1-15	REVISED	01-20-2023
AS-2-15	REVISED	07-21-2023
BR-2-15	DATED	01-21-2022
GSD-1-19	DATED	01-15-2021
PCB-91	REVISED	07-17-2020
SICD-1-96	REVISED	07-18-2014
SICD-2-14	DATED	01-15-2021
VPF-1-90	REVISED	07-21-2023

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION:

800-2023 DATED 07-19-2024

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 8TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2017, AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.00 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

DESIGN LOADING

DECK: HL-93 & 0.060 KSF FUTURE WEARING SURFACE

SUPERSTRUCTURE: HL-93 & 0.060 KSF FUTURE WEARING SURFACE

SUBSTRUCTURE:

PROP. PIERS - HL-93 & 0.060 KSF FUTURE WEARING SURFACE
EX. PIERS - CF400 (57) & 0.00 KSF FUTURE WEARING SURFACE
ABUTMENTS - HL-93 & 0.060 KSF FUTURE WEARING SURFACE

FOUNDATIONS:

PROP. PIERS - HL-93 & 0.060 KSF FUTURE WEARING SURFACE
EX. PIERS - CF400 (57) & 0.00 KSF FUTURE WEARING SURFACE
ABUTMENTS - HL-93 & 0.060 KSF FUTURE WEARING SURFACE

DESIGN DATA

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGTH 50 KSI

DECK PROTECTION METHOD

EPOXY COATED REINFORCING STEEL
2.5" CONCRETE COVER

MONOLITHIC WEARING SURFACE

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

CUT LINE CONSTRUCTION JOINT PREPARATION

SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

SUBSTRUCTURE CONCRETE REMOVAL

REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

FOUNDATION BEARING RESISTANCE

ABUTMENT FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LOAD PRESSURE OF 5 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LOAD PRESSURE OF 7 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 16 KIPS PER SQUARE FOOT.

PIER FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LOAD PRESSURE OF 9 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LOAD PRESSURE OF 12 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 25 KIPS PER SQUARE FOOT.

FOOTINGS

FOOTINGS SHALL EXTEND A MINIMUM OF 3 INCHES INTO BEDROCK OR TO THE ELEVATION SHOWN, WHICHEVER IS LOWER. SUBFOUNDATION CONDITION WILL BE ASSESSED AND APPROVED BY THE ENGINEER FOLLOWING EXCAVATION AND PRIOR TO THE PLACEMENT OF FOOTING CONCRETE IN ACCORDANCE WITH ODOT CMS 503.06.

IF NECESSARY DUE TO POOR BEDROCK MATERIAL AT BEARING ELEVATION OR BEDROCK OCCURRING SIGNIFICANTLY LOWER THAN THE PROPOSED FOOTING ELEVATION, EXCAVATION SHALL CONTINUE TO SOUND BEDROCK WITH ANY SOFTENED OR DECOMPOSED ROCK REMOVED. OVER EXCAVATION SHALL BE FILLED WITH CLASS QC1 CONCRETE IN A SEPARATE POUR FROM FOOTING CONCRETE PLACEMENT. CONTINGENCY QUANTITIES FOR CONCRETE FILL OF OVER EXCAVATION HAVE BEEN INCLUDED AS FOLLOWS:

22 CY WITH ITEM 511 - CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING

17 CY WITH ITEM 511 - CLASS QC1 CONCRETE WITH QC/QA, FOOTING

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05, 105.02 AND 513.04. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

DESIGN AND CONSTRUCTION OF TEMPORARY SUPPORT FOR EXCAVATIONS BY THE CONTRACTOR SHALL NOT IMPACT THE EXISTING BURIED UTILITIES TO REMAIN. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO PROVIDE ADEQUATE PROTECTION AND TEMPORARY SUPPORT OF ANY EXISTING FACILITIES IN THE VICINITY OF PROPOSED TEMPORARY SHORING, EXCAVATION, OR OTHER CONSTRUCTION ACTIVITIES.

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN

THIS ITEM SHALL BE AS PER ODOT CMS ITEM 503, EXCEPT THAT THE EXCAVATION LIMITS SHALL BE BOUNDED ON THE SIDES AS DESCRIBED BELOW:

AT NEW ABUTMENT EXTENTIONS AND WINGWALLS: BY 1:1 SLOPES BEGINNING 1 FOOT OUTSIDE OF THE TOE OF THE PROPOSED FOOTING AND 1 FOOT 6 INCHES OUTSIDE OF THE HEEL OF THE PROPOSED FOOTING.

AT PIER FOOTINGS: BY A 1:1 SLOPE BEGINNING 1 FOOT OUTSIDE OF THE TOE OF THE PROPOSED FOOTING EXCEPT FOR FOOTING FACES NEAREST TO THE EXISTING PIER FOOTING. EXCAVATION LIMITS ON THIS SIDE SHALL BE THE OUTSIDE FACE OF THE NEAREST EXISTING PIER FOOTING.

AT EXISTING ABUTMENT BACKWALL AND BEAM SEAT REMOVALS: ON THE BACKSIDE OF THE ABUTMENT ONLY BY A 1:1 SLOPE BEGINNING 1 FOOT BELOW THE PROPOSED SEAT REMOVAL LINE AND 2 FEET OUTSIDE THE LIMITS OF EXISTING POROUS BACKFILL. PAYMENT FOR REMOVAL OF EXISTING POROUS BACKFILL IS INCLUDED WITH ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN (CON'T.)

EXCAVATION BOUNDARIES DESCRIBED ABOVE BEGIN AT TOP OF ROCK SHALE WHERE BOTTOM OF FOOTING ELEVATIONS EXTEND BELOW TOP OF ROCK. QUANTITY OF SHALE EXCAVATION SHALL BE PAID SEPARATELY WITH ITEM 503 - SHALE EXCAVATION.

ITEM 509 - EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING, AS A RESULT OF THIS WORK, ACCORDING TO C&MS 709.00.

ITEM 509 - CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL

THE PAINT SYSTEM SHALL BE IZEU. THE COLOR FOR EXTERIOR BEAMS SHALL BE DARK GREEN GLOSS (595B-14066). THE COLOR FOR INTERIOR BEAMS SHALL BE LIGHT GREEN GLOSS (595B-14516).

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

PRIOR TO THE SURFACE CLEANING SPECIFIED IN C&MS 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

ITEM 607 - VANDAL PROTECTION FENCE, 6' STRAIGHT COATED FABRIC, AS PER PLAN

THIS ITEM SHALL BE AS PER THE DETAILS IN THE PLAN WITH THE APPLICABLE PORTIONS OF STANDARD DRAWING VPF-1-90 AND THE MANUFACTURER'S RECOMMENDATIONS.

THE COLOR OF THE FENCE FABRIC, RAILS, POSTS, PLATES, TIE WIRES, NUTS, BOLTS, CAULK AND ANY ADDITIONAL VISIBLE HARDWARE SHALL BE COATED BLACK ASTM F668 CLASS 2B PVC.

DECK PLACEMENT DESIGN ASSUMPTIONS

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.2 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103 IN.

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65 IN.

CONCRETE PLACEMENT LIMITATIONS

PLACE CONCRETE FOR BRIDGE DECK AND CONCRETE FOR APPROACH SLABS IN SEPARATE POURS. PLACEMENT IN A SINGLE POUR IS NOT PERMITTED.

STRUCTURE GENERAL NOTES - 1

BRIDGE NO. CUY-77-0479
WALLINGS ROAD OVER I-77

CUY-77-4.79
PID No. 106239

2 / 33

169
217

DESIGN AGENCY
OSBORN ENGINEERING
CLEVELAND, OHIO

DATE
05/17/24
REVIEWED
SMK
STRUCTURE FILE NUMBER
1805915

DRAWN
EJW
REVISIONS
-
DESIGNED
EJW
CHECKED
P.J.W.

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ESTIMATED QUANTITIES

CALC. BY: EIW DATE: 03/22/24 CHKD. BY: PJW DATE: 03/22/24

PARTICIPATION		ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET #
02/SAF/13	03/NFP/05										
LS		202	11203	LS	LS	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					2/33 3/33
156		202	22900	156	SY	APPROACH SLAB REMOVED				156	
LS		503	11101	LS	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN					2/33
491		503	21101	491	CY	UNCLASSIFIED EXCAVATION, AS PER PLAN	432	59			2/33
45		503	31120	45	CY	SHALE EXCAVATION	30	15			
180100		509	10001	180100	LB	EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN	8125	16552	142347	13076	2/33
500		509	20001	500	LB	CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT, AS PER PLAN	500				2/33
460		510	10000	460	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	256	204			
4		511	33500	4	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	4				
601		511	34447	601	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN			601		21/33 22/33 24/33
71		511	34451	71	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN				71	29/33
52		511	42012	52	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		52			
149		511	43512	149	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING (*)	149				
57		511	46512	57	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING (*)		57			
	65	511	81100	65	FT	CONCRETE MISC.: 8" PVC CASING PIPE, 748.02	65				3/33
468		512	10050	468	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)			419	49	
1135		512	10100	1135	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	101	316	678	40	
49		512	33000	49	SY	TYPE 2 WATERPROOFING	49				
472428	361	513	10260	472789	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3			472789		3/33
7938		513	20000	7938	EACH	WELDED STUD SHEAR CONNECTORS			7938		
22204		514	00060	22204	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			22204		2/33
22204		514	00066	22204	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			22204		2/33
14		514	10000	14	EACH	FINAL INSPECTION REPAIR			14		
110		516	10010	110	FT	ARMORLESS PREFORMED JOINT SEAL				110	
13		516	13600	13	SF	1" PREFORMED EXPANSION JOINT FILLER	13				
77		516	13900	77	SF	2" PREFORMED EXPANSION JOINT FILLER	77				
117		516	14020	117	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	117				
14		516	44301	14	EACH	(14"X14"X4.47") ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (15"X15"X1.50") (NEOPRENE), AS PER PLAN	14				20/33
21		516	44301	21	EACH	(14"X22"X4.47") ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (15"X23"X2.28") (NEOPRENE), AS PER PLAN		21			20/33
85		518	21200	85	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	85				
77		518	40000	77	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	77				
70		518	40010	70	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	70				
10		519	11101	10	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN		10			2/33 13/33
304		526	25011	304	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15"), AS PER PLAN				304	30/33 31/33
110		526	90031	110	FT	TYPE C INSTALLATION, AS PER PLAN				110	30/33 31/33
610		607	39901	610	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC, AS PER PLAN				610	29/33

(*) - SEE FOOTING NOTE SHEET 2/33.

DESIGN AGENCY
OSBORN ENGINEERING
CLEVELAND, OHIO

REVIEWED DATE
SMK 05/17/24
STRUCTURE FILE NUMBER
1805975

DRAWN DATE
EIW 05/17/24
REVISED

DESIGNED
EIW
CHECKED
PJW

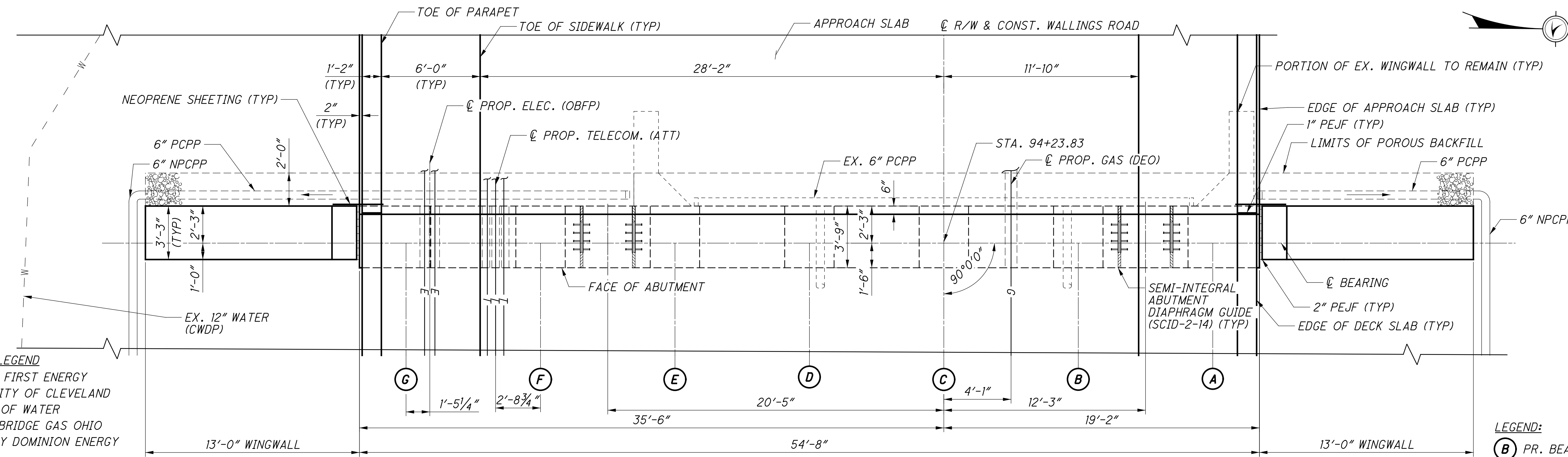
STRUCTURE ESTIMATED QUANTITIES
BRIDGE NO. CUY-77-0479
WALLINGS ROAD OVER I-77

CUY-77-4.79
PID No. 106239

4/33

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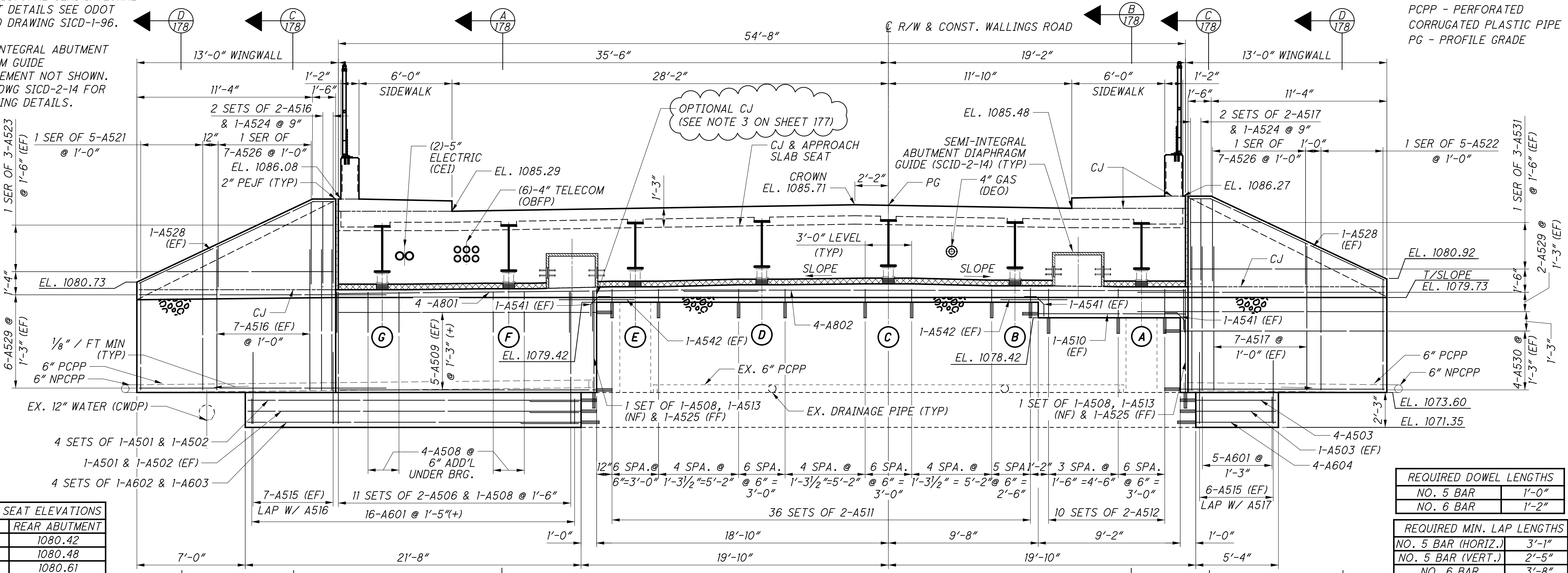
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UTILITY LEGEND
 CEI - CEI FIRST ENERGY
 CWDP - CITY OF CLEVELAND DIVISION OF WATER
 DEO - ENBRIDGE GAS OHIO (FORMERLY DOMINION ENERGY OHIO)
 OBFP - AT&T OHIO

NOTES:
 1. FOR ADDITIONAL SEMI-INTEGRAL ABUTMENT DETAILS SEE ODOT STANDARD DRAWING SICD-1-96.
 2. SEMI-INTEGRAL ABUTMENT DIAPHRAGM GUIDE REINFORCEMENT NOT SHOWN. SEE STD DWG SICD-2-14 FOR REINFORCING DETAILS.

LEGEND:
 (B) PR. BEAM LINE DESIGNATION
 CJ - CONSTRUCTION JOINT
 NPCPP - NON-PERFORATED CORRUGATED PLASTIC PIPE
 PCPP - PERFORATED CORRUGATED PLASTIC PIPE
 PG - PROFILE GRADE



ABUTMENT SEAT ELEVATIONS	
BEAM	REAR ABUTMENT
BEAM A	1080.42
BEAM B	1080.48
BEAM C	1080.61
BEAM D	1080.55
BEAM E	1080.42
BEAM F	1080.29
BEAM G	1080.23

REQUIRED DOWEL LENGTHS	
NO. 5 BAR	1'-0"
NO. 6 BAR	1'-2"

REQUIRED MIN. LAP LENGTHS	
NO. 5 BAR (HORIZ.)	3'-1"
NO. 5 BAR (VERT.)	2'-5"
NO. 6 BAR	3'-8"
NO. 8 BAR	4'-9"

REAR ABUTMENT ELEVATION
 DIMENSIONS & ELEVATIONS SHOWN ARE GIVEN AT THE \bar{C} OF BRG.

UTILITY LEGEND

CEI - CEI FIRST ENERGY
 DEO - ENBRIDGE GAS OHIO (FORMERLY DOMINION ENERGY OHIO)
 OBFP - AT&T OHIO

NOTES:

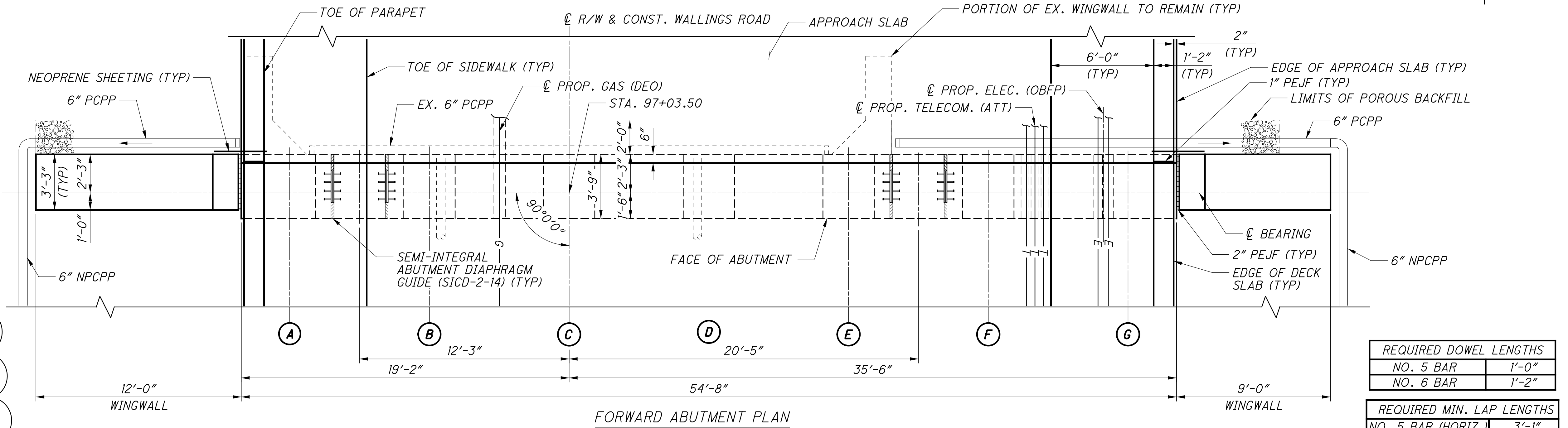
1. FOR ADDITIONAL SEMI-INTEGRAL ABUTMENT DETAILS SEE ODOT STANDARD DRAWING SICD-1-96.

2. SEMI-INTEGRAL ABUTMENT DIAPHRAGM GUIDE REINFORCEMENT NOT SHOWN. SEE STD DWG SICD-2-14 FOR REINFORCING DETAILS.

3. IF THE CONTRACTOR ELECTS TO UTILIZE THE OPTIONAL CONSTRUCTION JOINT TO CONSTRUCT THE ABUTMENT BREASTWALL EXTENSION AND BEAM SEAT MODIFICATIONS IN PHASES, MODIFICATIONS MAY BE REQUIRED TO THE REINFORCING DETAILS SHOWN IN THE PLANS AND WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. USE OF APPROVED MECHANICAL CONNECTORS IS PERMITTED IN CONJUNCTION WITH APPLICATION OF THE OPTIONAL CONSTRUCTION JOINT AT NO ADDITIONAL COST TO THE OWNER.

LEGEND:

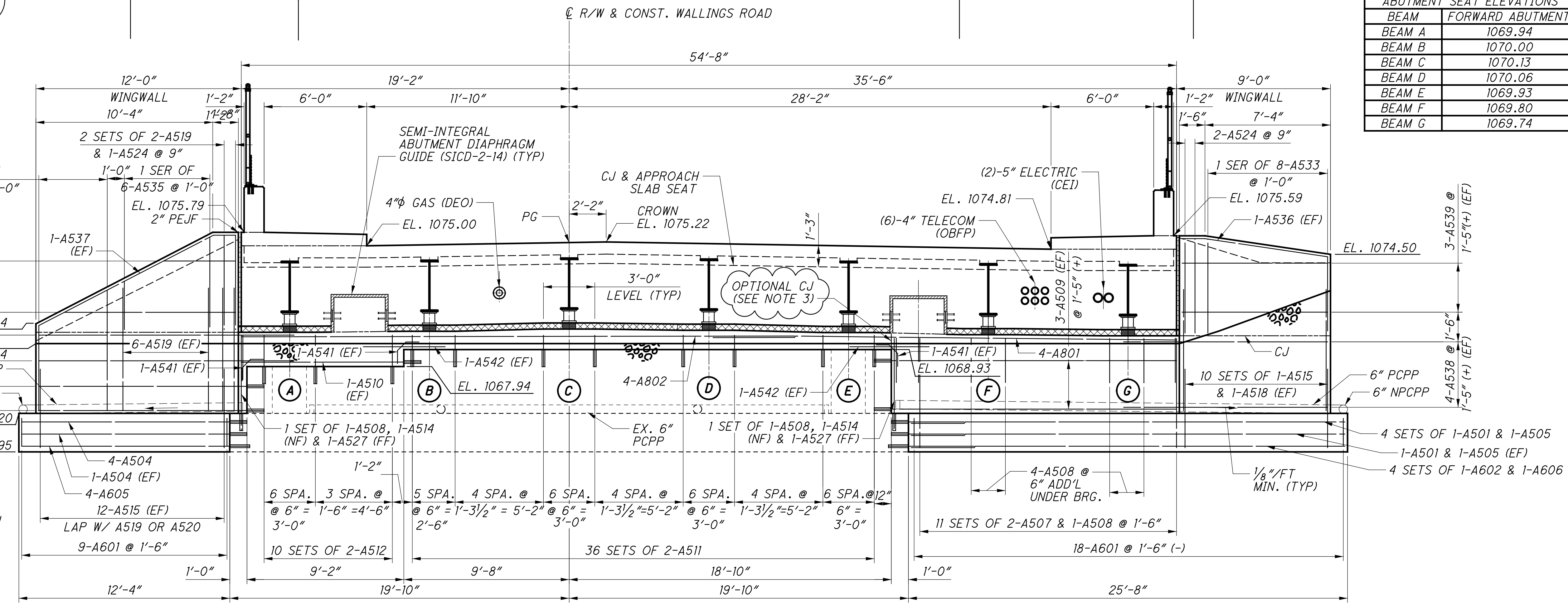
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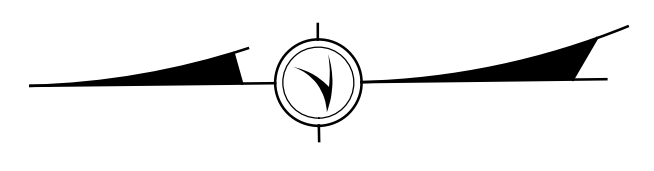
REQUIRED DOWEL LENGTHS	
NO. 5 BAR	1'-0"
NO. 6 BAR	1'-2"

REQUIRED MIN. LAP LENGTHS	
NO. 5 BAR (HORIZ.)	3'-1"
NO. 5 BAR (VERT.)	2'-5"
NO. 6 BAR	3'-8"
NO. 8 BAR	4'-9"

ABUTMENT SEAT ELEVATIONS	
BEAM	FORWARD ABUTMENT
BEAM A	1069.94
BEAM B	1070.00
BEAM C	1070.13
BEAM D	1070.06
BEAM E	1069.93
BEAM F	1069.80
BEAM G	1069.74



FORWARD ABUTMENT ELEVATION



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DESIGN AGENCY
 OSBORN ENGINEERING
 CLEVELAND, OHIO

DATE
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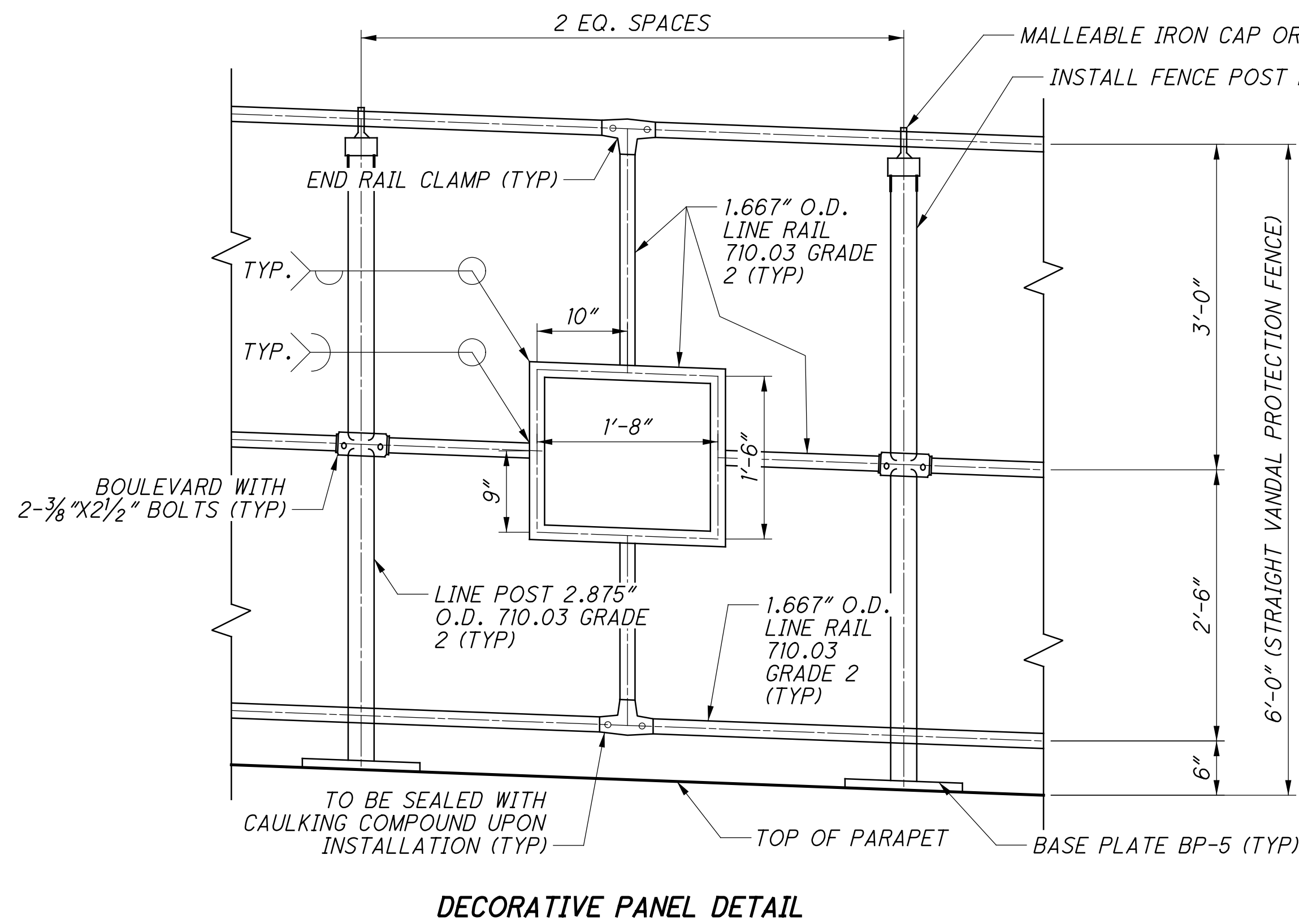
FORWARD ABUTMENT PLAN & ELEVATION
 BRIDGE NO. CUY-77-0479
 WALLINGS ROAD OVER I-77

CUY-77-4.79
 PID No. 106239

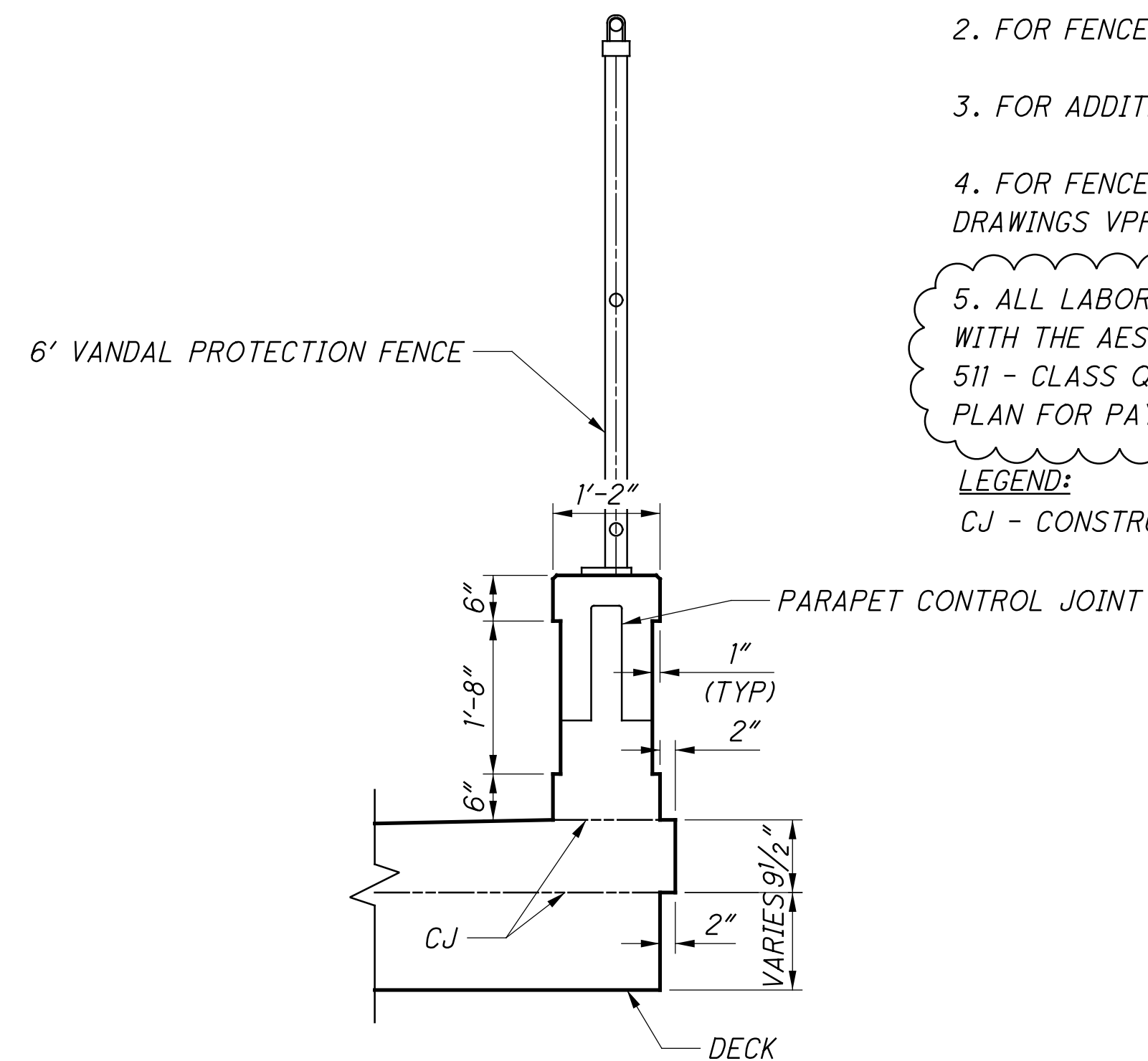
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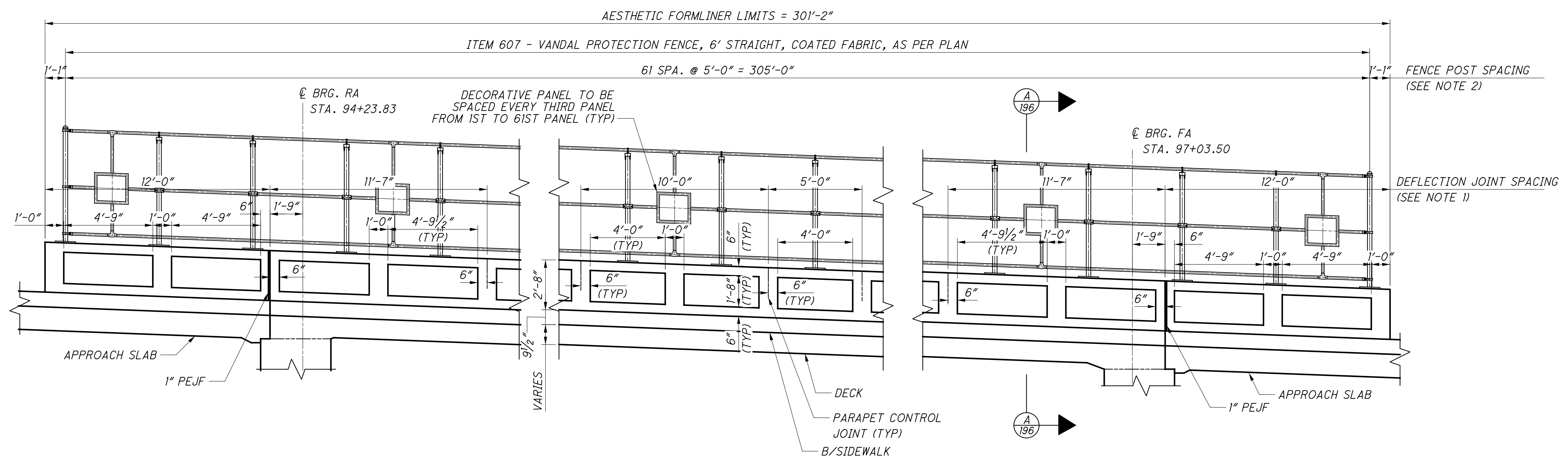
DECORATIVE PANEL DETAIL



A 196 PARAPET FORMLINER SECTION

- NOTES:**
1. DEFLECTION JOINT SPACING SHOWN FOR COORDINATION WITH AESTHETIC FORMLINER PLACEMENT. FOR DEFLECTION JOINT SPACING ALONG ENTIRE BRIDGE LENGTH, SEE SHEET [25/33].
 2. FOR FENCE POST SPACING, SEE SHEET [25/33].
 3. FOR ADDITIONAL PARAPET DETAILS, SEE SHEET [25/33].
 4. FOR FENCE AND PARAPET DETAILS NOT SHOWN, SEE ODOT STANDARD DRAWINGS VPF-1-90 AND BR-2-15.
 5. ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS ASSOCIATED WITH THE AESTHETIC PARAPET FORMLINER IS TO BE INCLUDED WITH ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN FOR PAYMENT.

LEGEND:
CJ - CONSTRUCTION JOINT



PARAPET AESTHETIC DETAIL

OUTSIDE FACE SOUTH PARAPET SHOWN, NORTH PARAPET SIMILAR

DESIGNED	EIW	CHECKED	PJW
DRAWN	EIW	REVISED	-
REVIEWED	SMK	STRUCTURE FILE NUMBER	1805975
DATE	05/17/24	DESIGN AGENCY	OSBORN ENGINEERING CLEVELAND, OHIO
AESTHETIC DETAILS			
BRIDGE NO. CUY-77-0479 WALLINGS ROAD OVER I-77			
CUY-77-4.79			
PID No. 106239			
29/33			
196 217			