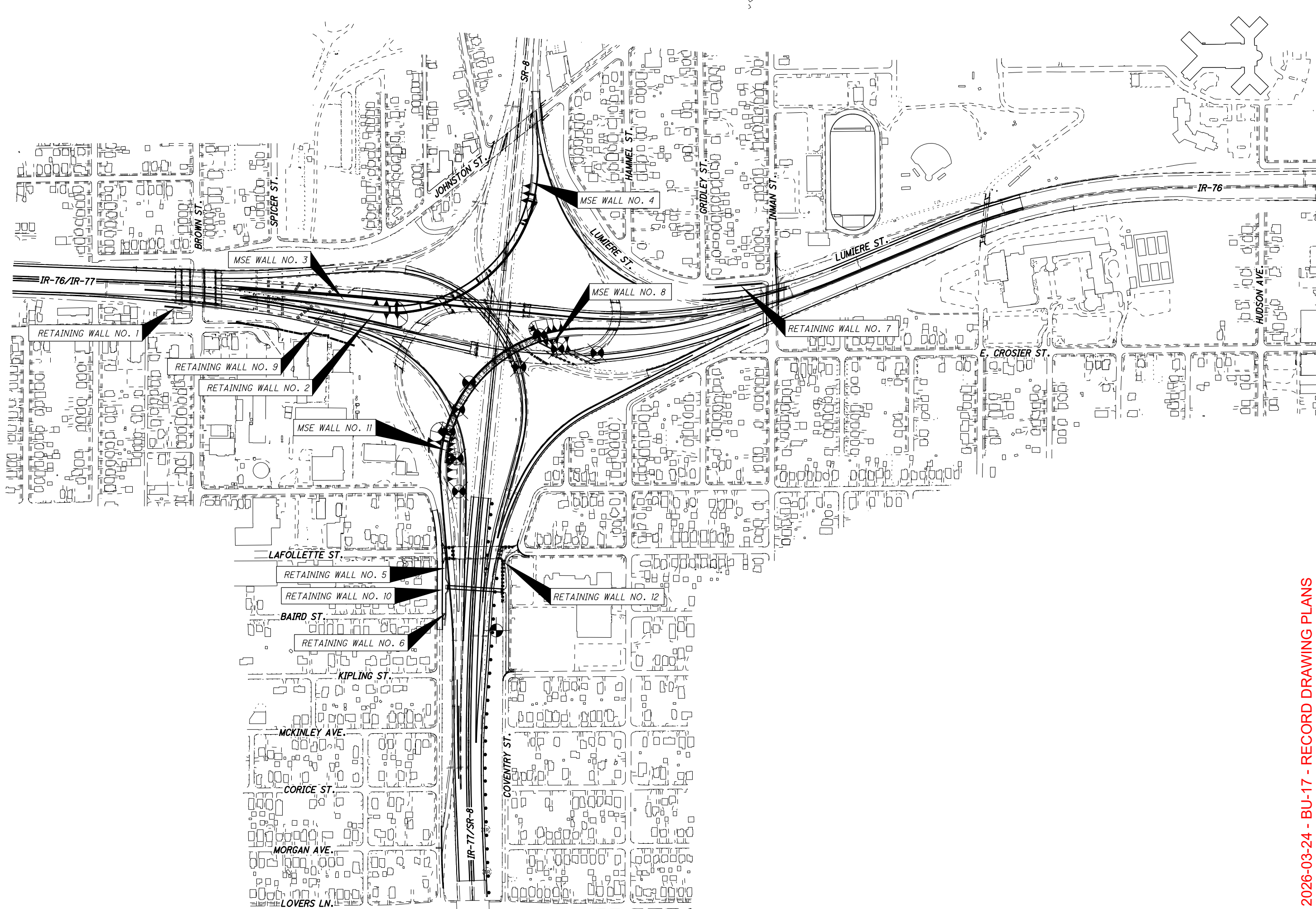
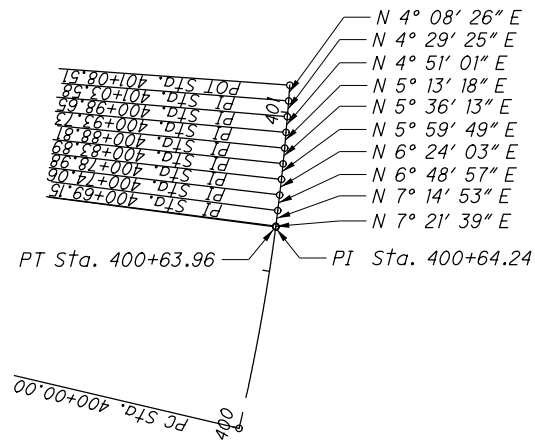
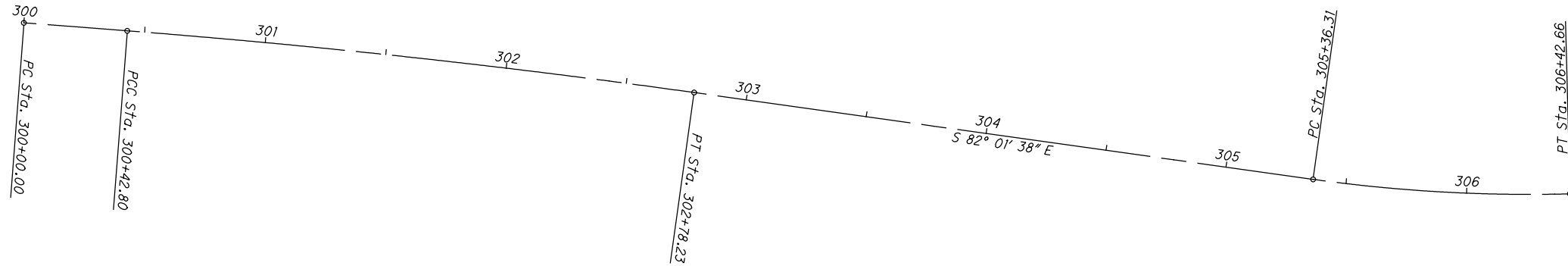
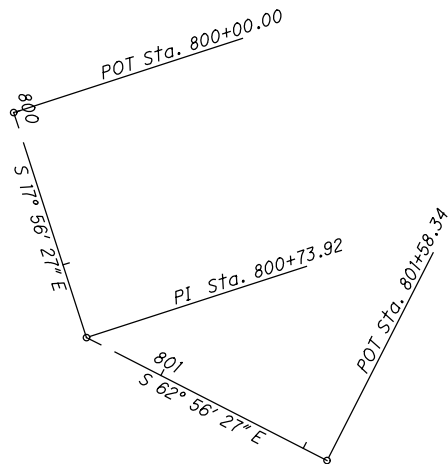
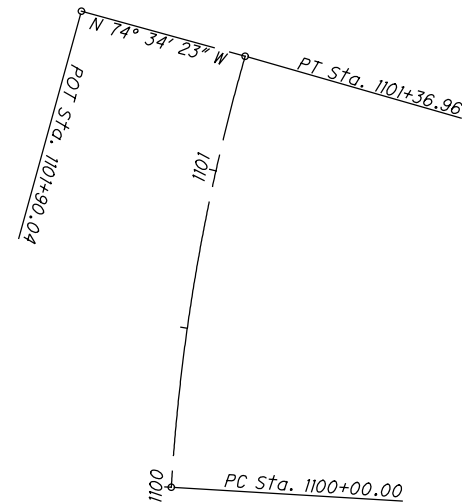


ISSUE RECORD:	
NO.	DESCRIPTION



ISSUE RECORD:		DESCRIPTION
NO.	DATE	
1	9/22/21	UPDATED WALL ALIGNMENTS

MSE WALL 4MSE WALL 3MSE WALL 8MSE WALL 11

ISSUE RECORD:			DESCRIPTION
NO.	DATE		
1	9/22/21		UPDATED WALL ALIGNMENTS
3	3/4/22		REMOVED QA/QC REQUIREMENT FROM QC1 AND QC2 CONCRETE

p:\V\ANV\A01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\Walls (3, 4, 8 & 11)\Miscellaneous Details\101402_000_WN001.dgn Sheet 3/4/2022 2:29:59 PM

STANDARD DRAWINGS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

SBR-1-20 REVISED 7/17/2020

SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING SUPPLEMENT SPECIFICATIONS:

SS840 DATED 4/16/2021

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 9TH EDITION, 2020, AND THE ODOT BRIDGE DESIGN MANUAL, 2020, EXCEPT AS NOTED ELSEWHERE IN THE PLANS.

DESIGN DATA:

- CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (CIP COPING, AND LEVELING PAD)
 - CONCRETE CLASS QC1 WITH QC/QA - COMPRESSIVE STRENGTH 4.0 KSI (CIP MOMENT SLAB)
 - CONCRETE CLASS QC2 WITH QC/QA - COMPRESSIVE STRENGTH 4.5 KSI (PARAPET)
 - EPOXY COATED REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI
- PROPRIETARY RETAINING WALL DATA:

THE PROPRIETARY WALL SUPPLIER SHALL DESIGN THE INTERNAL STABILITY OF A MECHANICALLY STABILIZED EARTH (MSE) WALL IN ACCORDANCE WITH ITEM 840. THE FACTORED BEARING RESISTANCE AT THE BASE OF THE REINFORCED SOIL MASS IS

SHOWN ON SHEET **3 / 104** . FOR ADDITIONAL DETAILS

OF MSE WALLS SUPPORTING RAMP N BRIDGE (SUM-76-1152N), SEE BU-11.

ITEM 840 - DRAINAGE PIPE:

PROVIDE A MINIMUM SLOPE OF 1.00% ON ALL MSE WALL DRAINS UNLESS NOTED OTHERWISE.

LOCATE PIPE AS CLOSE AS POSSIBLE TO THE TOP OF THE LEVELING PAD. IT MAY BE LOCATED ABOVE THE BOTTOM ROW OF REINFORCING STRAPS, HOWEVER, AT NO TIME SHALL THE PIPE BE LOCATED WITHIN 1 FOOT OF THE PROPOSED GROUND LINE.

MSE WALL DESIGN CRITERIA:

THE FACTORED BEARING RESISTANCE FOR EACH MSE WALL IS LISTED IN THE TABLE BELOW:

FOUNDATION BEARING TABLE			
WALL NUMBER	ALIGNMENT	LOCATION	FACTORED BEARING RESISTANCE (KSF)
3	RAMP Q	2527+50	2.83
		2529+00	2.77
		2531+63.90	5.00
4	RAMP Q	2540+46.04	13.53
		2541+35	13.70
8	RAMP N	FORWARD ABUTMENT	9.14
		3338+80	8.91
		3339+06	8.91
		3339+33	8.75
11	RAMP N	3331+50	2.40
		3332+40	16.49
		REAR ABUTMENT	17.88

WALL REINFORCEMENT LENGTH TABLE		
WALL NUMBER	LOCATION	MINIMUM REINFORCEMENT LENGTH
3	2527+50	9 FT.
	2529+00	9.5 FT.
	2531+63.90	15 FT.
4	2540+46.04	16.5 FT.
	2541+35	8 FT.
8	FORWARD ABUTMENT	28 FT.
	3338+80	27.5 FT.
	3339+06	21 FT.
	3339+33	10 FT.
11	3331+50	13 FT.
	3332+40	23 FT.
	REAR ABUTMENT	25 FT.

ITEM SPECIAL - FORM LINER:

USE FORM LINERS AT THE MSE WALLS AS SHOWN ON THE PLANS. FORM LINERS SHALL BE ARCHITECTURAL POLYMERS #9110, LARGE STONE OHIO DRY STACK OR EQUAL AS APPROVED BY THE ENGINEER. THE STONE FORM LINER PATTERN SHALL MATCH OTHER PARTS OF THE PROJECT (ABUTMENTS AND ROADWAY SIDE OF NOISE WALLS) TO ENSURE UNIFORM SURFACE TREATMENTS THROUGHOUT, AS DETERMINED BY THE ENGINEER.

FORM LINERS SHALL BE CAPABLE OF WITHSTANDING ANTICIPATED CONCRETE POUR PRESSURES WITHOUT LEAKAGE OR CAUSING PHYSICAL DEFECTS. FORM LINERS SHALL BE REMOVABLE WITHOUT CAUSING CONCRETE SURFACE DAMAGE. USE A FORM RELEASE PRODUCT AS RECOMMENDED BY THE FORM LINER MANUFACTURER. USE MANUFACTURER'S APPLICATION RATES AND ALL OTHER MANUFACTURER'S INSTRUCTIONS. FORM RELEASE PRODUCTS SHALL BE FULLY COMPATIBLE WITH THE FORM LINER MATERIAL AND THE EPOXY-URETHANE SEALER TO BE APPLIED TO THE FINISHED SURFACES.

ALIGN THE FORM LINER PATTERNS ACROSS ALL EXPANSION, CONTRACTION, AND CONSTRUCTION JOINTS.

FORM LINERS SHALL EXTEND A MINIMUM OF 1'-0" BELOW THE PROPOSED GROUND LINE AT THE FRONT FACE OF THE WALL. FORM LINERS MAY EXTEND MORE THAN 1'-0" BELOW THE PROPOSED GROUND LINE BUT THE PAY LIMITS SHALL BE 1'-0" BELOW THE PROPOSED GROUND LINE.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR ITEM SPECIAL - FORM LINER, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM AS SPECIFIED ABOVE AND IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN:

SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) SHALL BE APPLIED TO ALL EXPOSED SURFACES OF THE CONCRETE PARAPET AND MSE WALL AS SHOWN ON THE PLANS. THE COST OF SEALING THE ADDITIONAL SURFACE AREA OF THE AESTHETIC TREATMENT WILL BE CONSIDERED INCIDENTAL TO THIS ITEM. SEE AESTHETIC PLANS FOR SEALING REQUIREMENTS. SEAL MSE WALL, PARAPETS AND EXPOSED SURFACES OF THE ABUTMENTS OF SUM-76-1148Q WITH AN EPOXY-URETHANE SEALER MATCHING FEDERAL COLOR STANDARD 27769, GENERAL / LIGHT NEUTRAL.

ITEM 840 - CONCRETE COPING:

PROVIDE EPOXY COATED REINFORCING AND CLASS QC1 CONCRETE AS SHOWN IN THE PLANS. CONCRETE AND REINFORCING STEEL IN THE COPING, AND EXPANSION JOINTS SHALL BE INCLUDED IN THE QUANTITY FOR THIS ITEM.

PROPRIETARY MSE WALL DATA (BRIDGE SUM-76-1152N):

THE PROPRIETARY WALL SUPPLIER SHALL DESIGN THE INTERNAL STABILITY OF A MECHANICALLY STABILIZED EARTH (MSE) WALL IN ACCORDANCE WITH SS840 TO SUPPORT THE ABUTMENT. THE DESIGN FOR INTERNAL STABILITY SHALL INCLUDE A NOMINAL (I.E. UNFACTORED) HORIZONTAL STRIP LOAD DUE TO FRICTION (FR) FROM THE SUPERSTRUCTURE OF 7.43 K/FT AT WALL 8 AND 6.14 K/FT AT WALL 11 APPLIED PERPENDICULAR TO THE FACE OF THE WALL AT THE BASE OF THE CONCRETE FOOTING. THIS STRIP LOAD DOES NOT INCLUDE EARTH PRESSURE LOADS FROM THE ABUTMENT BACKFILL. HOWEVER, THE PROPRIETARY WALL SUPPLIER SHALL INCLUDE EARTH PRESSURE LOADS FROM THE ABUTMENT BACKFILL IN THE DESIGN CALCULATIONS.

ABBREVIATIONS:

THE FOLLOWING ABBREVIATIONS HAVE BEEN USED THROUGHOUT THESE PLANS TO INDICATE THE DESIGNATIONS CONTAINED IN THE LEGEND BELOW:

- ABUT. - ABUTMENT
- APPR. - APPROACH
- BOT. - BOTTOM
- BRG. - BEARING
- BRGS. - BEARINGS
- CL - CENTERLINE
- C/C - CENTER TO CENTER
- CB - CATCH BASIN
- CIP - CAST-IN-PLACE
- C.J. - CONSTRUCTION JOINT
- CLR. - CLEARANCE
- CMS - CONSTRUCTION AND MATERIAL SPECIFICATIONS
- CONC. - CONCRETE
- CONST. - CONSTRUCTION
- CU YD - CUBIC YARD
- DIA. - DIAMETER
- E.F. - EACH FACE
- ELEV., EL. - ELEVATION
- EQ. - EQUAL
- EX. - EXISTING
- EXP. - EXPANSION
- F.A. - FORWARD ABUTMENT
- F.F. - FAR FACE
- F.S. - FIELD SPLICE
- FT/FT - FOOT PER FOOT
- FTG. - FOOTING
- FWD. - FORWARD
- GALV. = GALVANIZED
- GEN. - GENERAL
- GR - GUARDRAIL
- LF - LEFT FORWARD
- LT. - LEFT
- MAX. - MAXIMUM
- MGS - MIDWEST GUARDRAIL SYSTEM
- MIN. - MINIMUM
- MISC. - MISCELLANEOUS
- MOT - MAINTENANCE OF TRAFFIC
- N.F. - NEAR FACE
- NPCPP - NON-PERFORATED CORRUGATED PLASTIC PIPE
- NO./# - NUMBER
- O/O - OUT TO OUT
- OVHD - OVERHEAD
- PCPP - PERFORATED CORRUGATED PLASTIC PIPE
- PEJF - PREFORMED EXPANSION JOINT FILLER
- PG - PROFILE GRADE
- PGL - PROFILE GRADE LINE
- PROP. - PROPOSED
- PT - POINT OF TANGENCY
- PVC - POINT OF VERTICAL CURVATURE
- PVI - POINT OF VERTICAL INTERSECTION
- PVT - POINT OF VERTICAL TANGENCY
- R. - RADIUS
- R.A. - REAR ABUTMENT
- RCP - ROCK CHANNEL PROTECTION
- RF - RIGHT FORWARD
- RT. - RIGHT
- R/W - RIGHT OF WAY
- SAN. - SANITARY
- SER. - SERIES
- SHT. - SHEET
- S.O. - SERIES OF
- SPA. - SPACES OR SPACING
- SR - STATE ROUTE
- STA. - STATION
- STD. - STANDARD
- STM. - STORM
- STR. - STRAIGHT
- TBM - TEMPORARY BENCH MARK
- TBR - TO BE REMOVED
- T/C - TOP OF COPING
- TEMP. - TEMPORARY
- T.O.S. - TOE OF SLOPE
- T&B- TOP AND BOTTOM
- T/PARAPET - TOE OF PARAPET
- T/T - TOE TO TOE
- TYP. - TYPICAL
- U.G. - UNDERGROUND
- VAR. - VARIES
- VC - VERTICAL CURVE
- VERT. - VERTICAL
- W/O - WITHOUT

DESIGN AGENCY



PRIMEITY

8415 Parkside Place
Columbus Ohio 43240

DATE

6/14/21

REVIEWED

SAN

STRUCTURE FILE NUMBER

DATE

6/14/21

REVIEWED

SAN

STRUCTURE FILE NUMBER

DESIGNED

KDC

CHECKED

JAT

DRAWN

KDC

REVISED

MSE WALL GENERAL NOTES (1 OF 2)

MSE WALLS 3, 4, 8 & 11

COMMON MSE WALL NOTES

SUM-76/77/8-8.24/9.74/0.00

PID No. 102329

3

104

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

p:\V\ANV\A01P\WINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\Walls (3,4, 8 & 11)\Miscellaneous Details\101402_000_WN002.dgn Sheet 9/22/2021 1:59:34 PM

ITEM SPECIAL - SETTLEMENT PLATFORMS:

SETTLEMENT PLATFORMS SHALL BE PLACED AT THE BOTTOM OF THE EMBANKMENT AT THE LOCATIONS INDICATED BELOW, UNLESS OTHERWISE DIRECTED BY DBT.

CONTRACTOR HAS THE OPTION OF USING EITHER STEEL OR PLYWOOD PLATFORM BASE.

CONTRACTOR SHALL FURNISH MATERIALS AND LABOR TO EXTEND PIPE THROUGH ENTIRE FILL.

SETTLEMENT PLATFORMS SHALL BE ANCHORED BY STAKES DRIVEN AT EACH CORNER TO PREVENT OVERTURNING.

SPECIFICATIONS:

DESCRIPTION:
THIS ITEM CONSISTS OF FURNISHING, CONSTRUCTING, AND MAINTAINING SETTLEMENT PLATFORMS AND OBTAINING SETTLEMENT READINGS AS REQUIRED BY THE PLANS OR AS DIRECTED BY THE DBT. AT THE OPTION AND EXPENSE OF THE CONTRACTOR, ADDITIONAL SETTLEMENT PLATFORMS MAY BE INSTALLED AT ADDITIONAL LOCATIONS.

SETTLEMENT READINGS SHALL BE TAKEN WEEKLY DURING CONSTRUCTION AND AT LEAST 3 TIMES PER WEEK DURING THE SPECIFIED WAITING PERIOD OF 30 TO 45 DAYS. IN ACCORDANCE TO ODOT SPECIFICATIONS, THE WAITING PERIOD IS CONSIDERED COMPLETE WHEN THE SETTLEMENT MEASURED IS EQUAL TO OR LESS THAN 1/8" PER WEEK FOR TWO CONSECUTIVE WEEKS AFTER THE COMPLETION OF THE MSE WALL FILL PLACEMENT. THE READINGS SHALL BE PLOTTED UTILIZING THE "SETTLEMENT PLATFORM READINGS" EXCEL SPREADSHEET AS DEVELOPED BY ODOT'S OFFICE OF GEOTECHNICAL ENGINEERING. A COPY OF EACH CUMULATIVE PLOT SHALL BE SENT TO ODOT, AFTER EACH SETTLEMENT READING IS RECORDED.

VIBRATING WIRE SETTLEMENT MONITORING PLATFORMS MAY BE CONSIDERED IN LIEU OF THE CONVENTIONAL SETTLEMENT PLATFORMS. THE CONTRACTOR SHOULD PROVIDE DETAILS OF THE PROPOSED VIBRATING WIRE SETTLEMENT PLATFORMS AS WELL AS DESIGN DRAWINGS OF THE PROPOSED PLATFORM AND CABLING LAYOUT TO ODOT AT LEAST 14 DAYS PRIOR TO CONSTRUCTION.

THE DESIGN DRAWINGS SHOULD ILLUSTRATE THE PROPOSED SETTLEMENT VIBRATING WIRE SETTLEMENT PLATFORM LOCATIONS WITH ALL EXISTING AND PROPOSED SITE FEATURES TO VERIFY THE PROPOSED CABLING WILL NOT CONFLICT WITH EXISTING FACILITIES, PROPOSED FACILITIES OR UTILITIES.

THE CONTRACTOR SHALL IDENTIFY, SET AND MAINTAIN AN APPROPRIATE NUMBER OF FIXED BENCHMARKS, REFERENCE POINTS, ETC. TO FACILITATE THE SURVEYING OF SETTLEMENT PLATFORMS.

MATERIALS:
SOUND LUMBER SUCH AS 3/4" EXTERIOR GRADE PLYWOOD SHALL BE USED FOR THE BASE. THE PIPE SHALL BE 2-1/2" STANDARD BLACK PIPE WITH THREADED FITTINGS AS SHOWN ON THE PLANS. A STEEL PLATE 3'-0"x 3'-0"x 1/8" MAY BE SUBSTITUTED, FOR THE LUMBER TO CONSTRUCT THE PLATFORMS, AT THE CONTRACTORS OPTION.

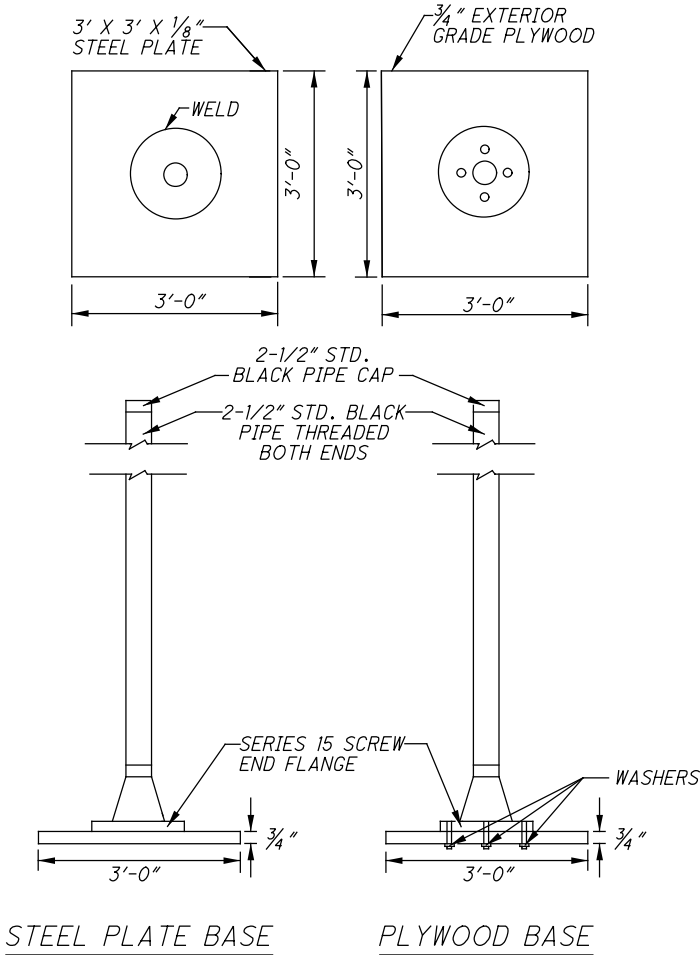
CONSTRUCTION METHODS:
THE PLATFORM SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS. IF EXISTING PAVEMENT IS ENCOUNTERED AT THE SPECIFIED LOCATIONS, THE PAVEMENT (INCLUDING ANY BASE MATERIAL) SHALL BE REMOVED AND THE SETTLEMENT PLATFORM SHALL BE SET ON THE EXPOSED SUBGRADE. THE PLATFORM SHALL BE SET ON A LEVEL SURFACE. THE PIPE SHALL BE FIRMLY SECURED TO THE PLATFORM AND SHALL BE MAINTAINED IN A PLUMB POSITION DURING THE CONSTRUCTION OF THE EMBANKMENT. THE PIPE SHALL BE MARKED AT INTERVALS TO FACILITATE MEASUREMENT OF THE DEPTH OF FILL.

THE CONTRACTOR SHALL PROTECT SETTLEMENT PLATFORMS FROM CONSTRUCTION TRAFFIC/ACTIVITIES USING APPROPRIATE METHODS SUCH AS BARRICADES, CONES, GUARD-STAKES WITH HIGH VISIBILITY RIBBON, ETC. THE CONTRACTOR SHALL STOP WORK IN ANY LOCATIONS WHERE THE SETTLEMENT PLATFORM HAS BEEN DISTURBED OR DAMAGED. PLATFORMS OR PIPES DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR PROPER CONDITION.

PRIOR TO PAVING: THE TOP OF THE SETTLEMENT PLATFORM PIPE SHALL BE CUT OFF TWO FEET BELOW THE FINISHED ELEVATION SURFACE OF THE SUBGRADE OR FINISHED GROUND SURFACE. WHICHEVER IS APPLICABLE.

ITEM SPECIAL - SETTLEMENT PLATFORMS (CONTINUED):

SETTLEMENT PLATE DESIGNATIONS	ALIGNMENT	STATION	OFFSET
P1	RAMP N	3332+40	Ø
P2	RAMP Q	2531+50	5' LT
P3	RAMP Q	2530+00	5' LT



SETTLEMENT PLATFORM DETAILS

ITEM SPECIAL - SETTLEMENT MONUMENTS

SETTLEMENT MONUMENTS SHALL BE PLACED AT THE PLANNED SUBGRADE ELEVATIONS OF RAMP N AT THE LOCATIONS INDICATED BELOW, UNLESS OTHERWISE DIRECTED BY THE DBT.

SETTLEMENT MONUMENT DESIGNATIONS	ALIGNMENT	STATION	OFFSET
M1	RAMP N	3332+30	Ø
M2	RAMP Q	2531+60	5' LT
M3	RAMP Q	2530+10	5' LT

DESCRIPTION:

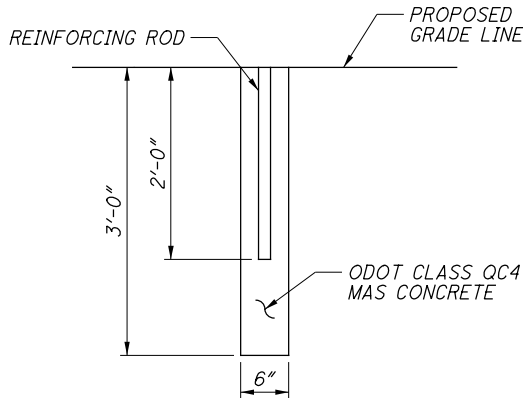
THIS ITEM CONSISTS OF FURNISHING, CONSTRUCTING, AND MAINTAINING SETTLEMENT MONUMENTS, AND OBTAINING SETTLEMENT READINGS AS REQUIRED BY THE PLANS OR AS DIRECTED BY THE DBT. IN ORDER TO MONITOR THE TIME RATE OF SETTLEMENT OF THE EMBANKMENT FILL IN CONJUNCTION WITH THE SETTLEMENT PLATFORMS AND TO DETERMINE WHEN THE COPING FOR THE WALLS CAN BE CONSTRUCTED AND FINAL GRADING PERFORMED IN PREPARATION FOR THE PAVEMENT OPERATIONS. AT THE OPTION AND EXPENSE OF THE CONTRACTOR, ADDITIONAL SETTLEMENT MONUMENTS MAY BE INSTALLED AT ADDITIONAL LOCATIONS.

SETTLEMENT READINGS SHALL BE TAKEN WEEKLY DURING CONSTRUCTION AND AT LEAST 3 TIMES PER WEEK DURING THE SPECIFIED WAITING PERIOD OF 30 TO 45 DAYS. IN ACCORDANCE TO ODOT SPECIFICATIONS, THE WAITING PERIOD IS CONSIDERED COMPLETE WHEN THE SETTLEMENT MEASURED IS EQUAL TO OR LESS THAN 1/8" PER WEEK FOR TWO CONSECUTIVE WEEKS AFTER THE COMPLETION OF THE MSE WALL FILL PLACEMENT. THE READINGS SHALL BE PLOTTED UTILIZING THE "SETTLEMENT PLATFORM READINGS" EXCEL SPREADSHEET AS DEVELOPED BY ODOT'S OFFICE OF GEOTECHNICAL ENGINEERING. A COPY OF EACH CUMULATIVE PLOT SHALL BE SENT TO ODOT, AFTER EACH SETTLEMENT READING IS RECORDED.

THE CONTRACTOR SHALL IDENTIFY THE, SET AND MAINTAIN AN APPROPRIATE NUMBER OF FIXED BENCHMARKS, REFERENCE POINTS, ETC. TO FACILITATE THE SURVEYING OF THE SETTLEMENT MONUMENTS.

MATERIALS:

A 2-FOOT LONG REINFORCING ROD SHALL BE INSTALLED PLUMB WITHIN THE CENTER OF A 6-INCH DIAMETER AND 3-FOOT LONG BOREHOLE THAT IS BACKFILLED WITH ODOT CLASS QC 4 MASS CONCRETE AS INDICATED IN THE SCHEMATIC SHOWN BELOW.

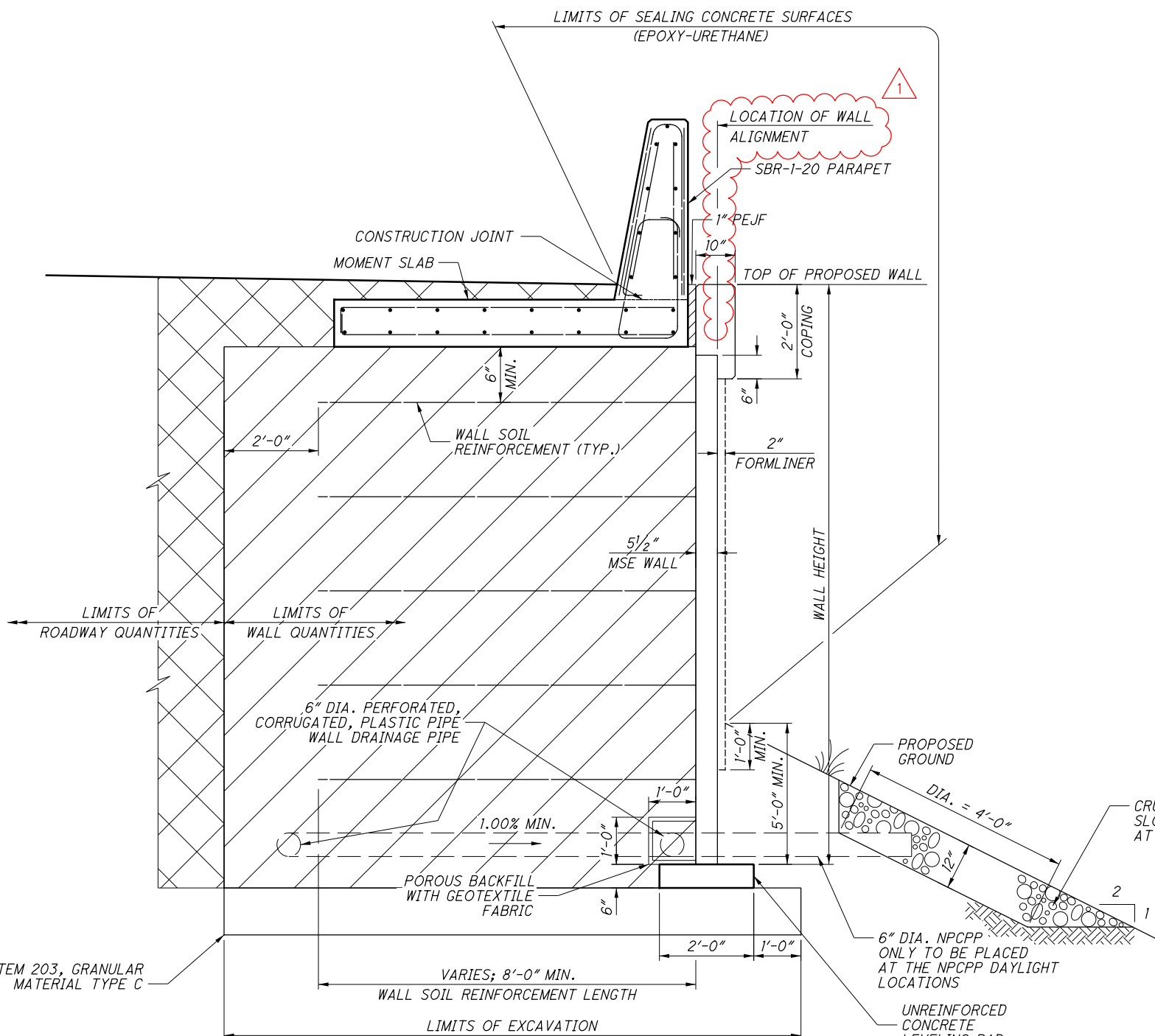


CONSTRUCTION METHOD:

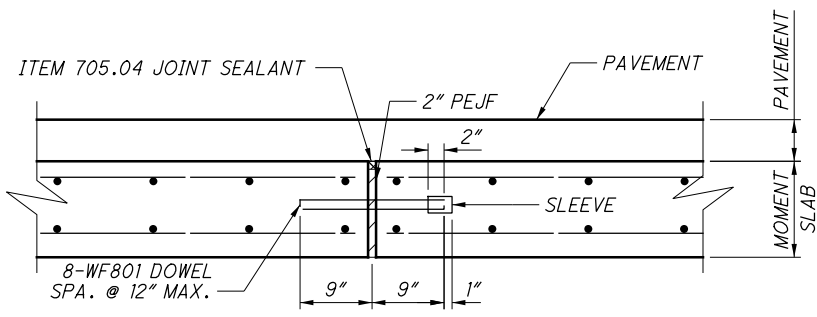
SET AND LEVEL THE SETTLEMENT MONUMENTS AT THE LOCATIONS INDICATED WITHIN A MINIMUM OF 7 DAYS OF COMPLETING THE FULL EMBANKMENT HEIGHT. IN THE EVENT THE MONUMENTS ARE DAMAGED OR DISTURBED DURING CONSTRUCTION OPERATIONS, THE MONUMENT IS TO BE RESTORED TO ITS PROPER CONDITION AND APPROPRIATE METHODS TO PROTECT THE SETTLEMENT MONUMENTS SUCH AS BARRICADES, CONES, GUARD STAKES WITH HIGH VISIBILITY RIBBONS, ETC. RE-ESTABLISHED. THE SURVEYING OF THE MONUMENTS WILL BE CONDUCTED UNTIL THE RATE OF SETTLEMENT HAS SLOWED TO A RATE CONSIDERED ACCEPTABLE TO THE GEOTECHNICAL ENGINEER OF RECORD. ONCE THE WAITING PERIOD HAS BEEN LIFTED BY THE GEOTECHNICAL ENGINEER OF RECORD, THE MONUMENTS ARE TO BE REMOVED.

ISSUE RECORD:			DESCRIPTION
NO.	DATE		UPDATED WALL ALIGNMENTS
1	9/22/21		

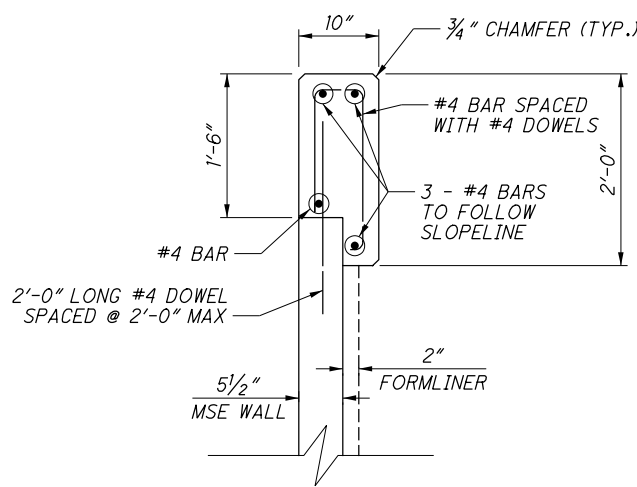
pw:\V\ANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\Walls (3,4, 8 & 11)\Miscellaneous Details\101402_000_WD001.dgn Sheet 9/22/2021 1:59:39 PM



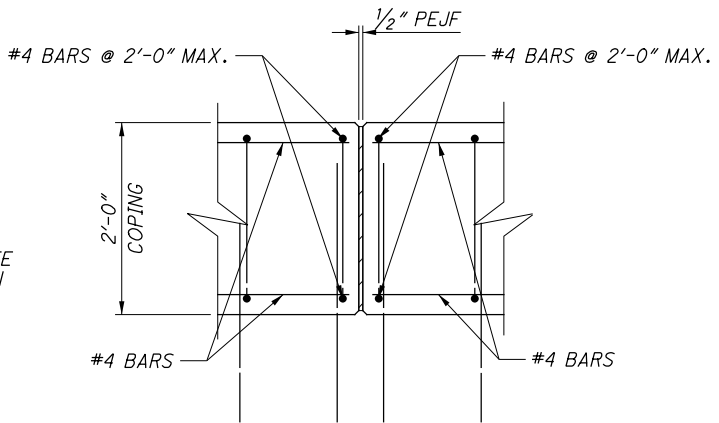
MSE WALL SECTION AT MOMENT SLAB
(MSE WALL 3, 4 AND 11)



MOMENT SLAB JOINT DETAIL



MSE WALL COPING DETAIL



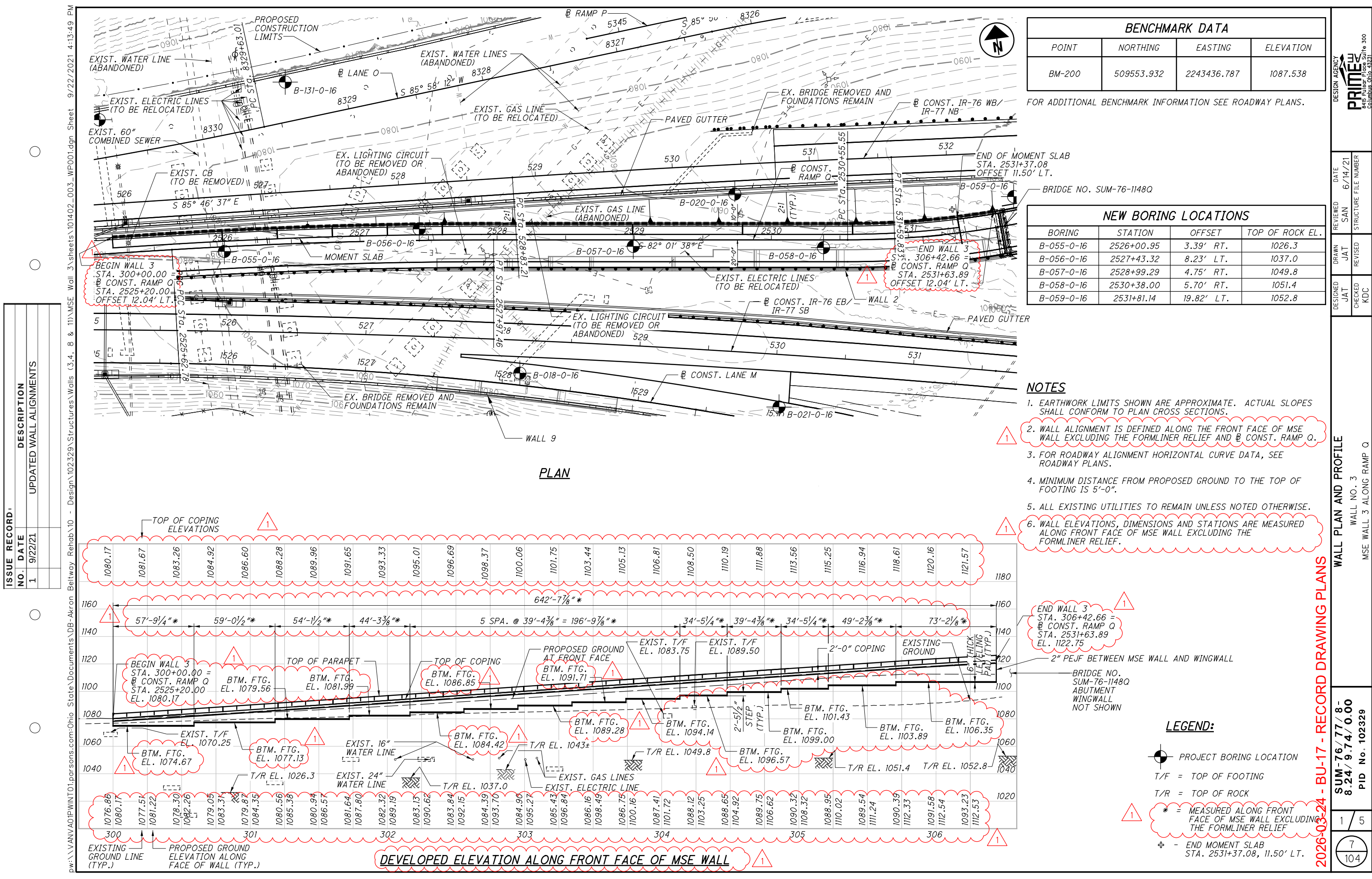
MSE WALL COPING AT WALL PANEL JOINT

LEGEND:

- PAY LIMITS OF WALL QUANTITIES & SELECT GRANULAR MATERIAL
- PAY LIMITS OF ROADWAY QUANTITIES

NOTES:

- AT THE MOMENT SLAB EXPANSION JOINT LOCATIONS, PLACE 2" PEJF BETWEEN THE PARAPET SECTIONS.
- FOR GENERAL NOTES, SEE SHEET 3 / 104 .
- FOR PAVEMENT BUILD-UP, SEE BU-34 PLANS.
- FOR ADDITIONAL MOMENT SLAB JOINT DETAILS, SEE STD. DWG. BP-2.2.



ISSUE RECORD:		DESCRIPTION
NO.	DATE	DESCRIPTION
1	9/22/21	UPDATED WALL ALIGNMENTS

2026-03-24 - BU-17 - RECORD DRAWING PLANS

DESIGN AGENCY

PRIME

4450 State Route 300
Columbus, Ohio 43231

DATE

6/14/21

STRUCTURE FILE NUMBER

104

WALL PLAN AND PROFILE

WALL NO. 3

MSE WALL 3 ALONG RAMP Q

SUM-76/77/8-

8.24/9.74/0.00

PID No. 102329

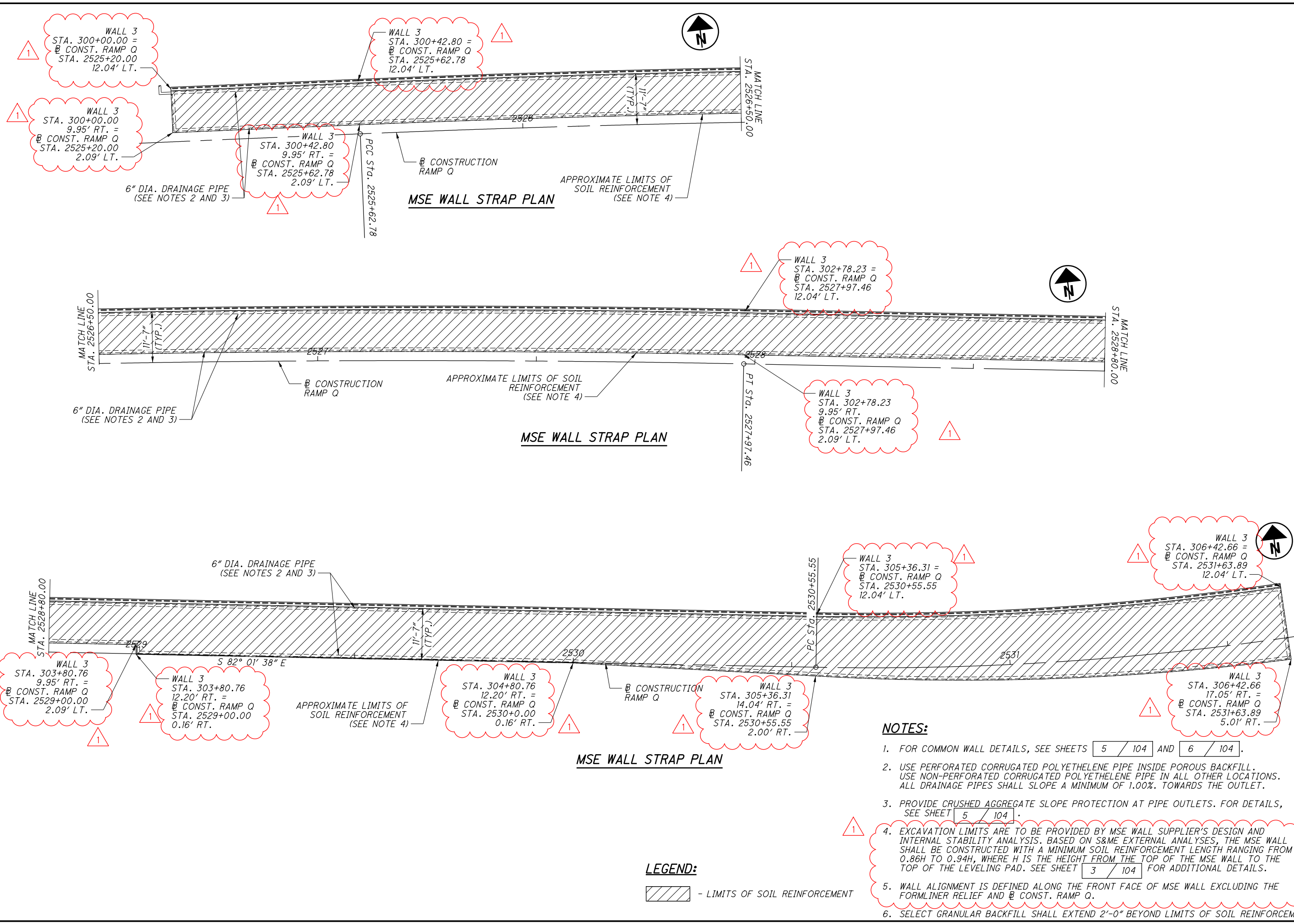
1/5

7

104

ISSUE RECORD:		DESCRIPTION
NO.	DATE	UPDATED WALL ALIGNMENTS
1	9/22/21	

p:\w\ANV A01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\Walls (3,4, 8 & 11)\MSE Wall 3\sheets\102329_003_WT001.dgn Sheet 9/22/2021 1:59:56 PM



- NOTES:**
- FOR COMMON WALL DETAILS, SEE SHEETS 5 / 104 AND 6 / 104.
 - USE PERFORATED CORRUGATED POLYETHELENE PIPE INSIDE POROUS BACKFILL. USE NON-PERFORATED CORRUGATED POLYETHELENE PIPE IN ALL OTHER LOCATIONS. ALL DRAINAGE PIPES SHALL SLOPE A MINIMUM OF 1.00% TOWARDS THE OUTLET.
 - PROVIDE CRUSHED AGGREGATE SLOPE PROTECTION AT PIPE OUTLETS. FOR DETAILS, SEE SHEET 5 / 104.
 - EXCAVATION LIMITS ARE TO BE PROVIDED BY MSE WALL SUPPLIER'S DESIGN AND INTERNAL STABILITY ANALYSIS. BASED ON SOME EXTERNAL ANALYSES, THE MSE WALL SHALL BE CONSTRUCTED WITH A MINIMUM SOIL REINFORCEMENT LENGTH RANGING FROM 0.86H TO 0.94H, WHERE H IS THE HEIGHT FROM THE TOP OF THE MSE WALL TO THE TOP OF THE LEVELING PAD. SEE SHEET 3 / 104 FOR ADDITIONAL DETAILS.
 - WALL ALIGNMENT IS DEFINED ALONG THE FRONT FACE OF MSE WALL EXCLUDING THE FORMLINER RELIEF AND B CONST. RAMP Q.
 - SELECT GRANULAR BACKFILL SHALL EXTEND 2'-0" BEYOND LIMITS OF SOIL REINFORCEMENT.

LEGEND:

▨ - LIMITS OF SOIL REINFORCEMENT

2026-03-24 - BU-17 - RECORD DRAWING PLANS

SUM-76/77/8-8.24/9.74/0.00

PID No. 102329

2 / 5

8 / 104

MSE WALL FOUNDATION AND STRAP PLAN

WALL NO. 3

MSE WALL 3 ALONG RAMP Q

DESIGN AGENCY

PRIME

DATE: 03/24/2026

FILE NUMBER: 102329

DESIGNED

JAT

CHECKED

KDC

DRAWN

JAT

REVIEWED

SAN

DATE

6/14/21

STRUCTURE FILE NUMBER

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\V\ANV\A01PW\N01\parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\Walls (3,4, 8 & 11)\MSE Wall 3\sheets\102329_003_WM001.dgn Sheet 9/22/2021 2:00:12 PM

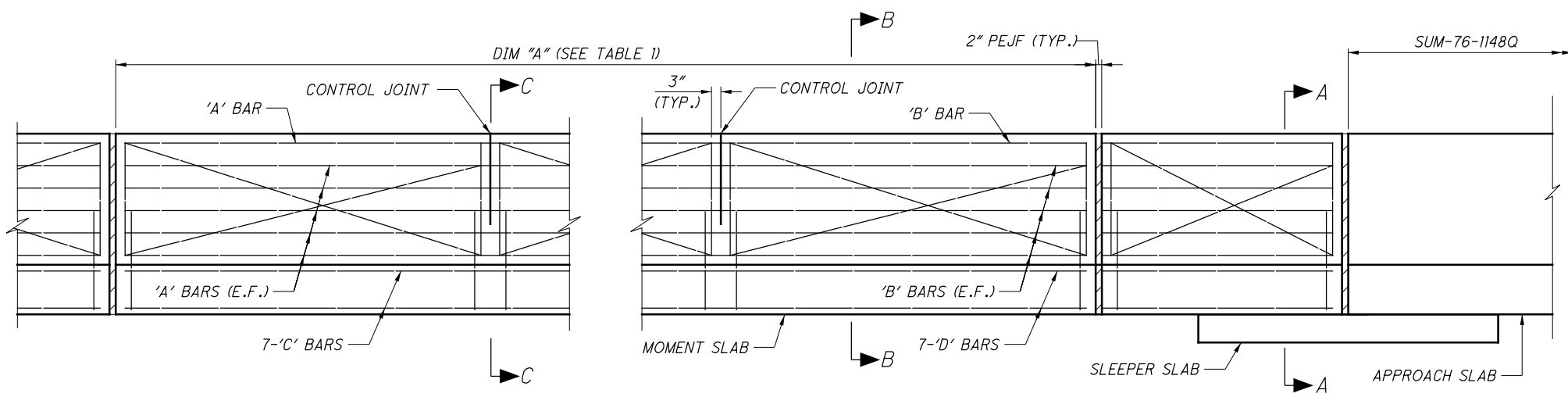


TABLE 1					
*DIM "A"	CONTROL JOINT SPACINGS	'A' BARS	'B' BARS	'C' BARS	'D' BARS
80'-0"	8-SPA. @ 10'-0"	2 SETS OF R402	1-R403	2 SETS OF WF501	WF502
40'-0"	4-SPA. @ 10'-0"	1-R402	1-R404	WF501	WF503
58'-6 7/8"	1-SPA. @ 14'-3 3/8" (+), 3-SPA. @ 10'-0", 1-SPA. @ 14'-3 3/8" (+)	2 SETS OF R402	-	WF501	WF504
76'-4 7/8"	1-SPA. @ 13'-2 3/8" (+), 5-SPA. @ 10'-0", 1-SPA. @ 13'-2 3/8" (+)	2 SETS OF R402	1-R405	2 SETS OF WF501	WF505

* DIM 'A' IS THE DISTANCE BETWEEN EXPANSION JOINTS MEASURED ALONG THE BACK FACE OF PARAPET.

RAILING AND MOMENT SLAB ELEVATION

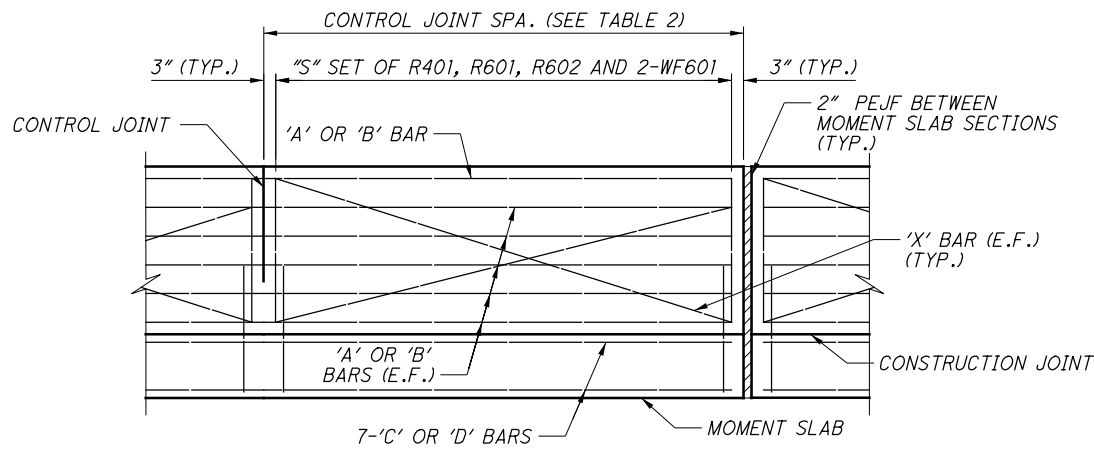
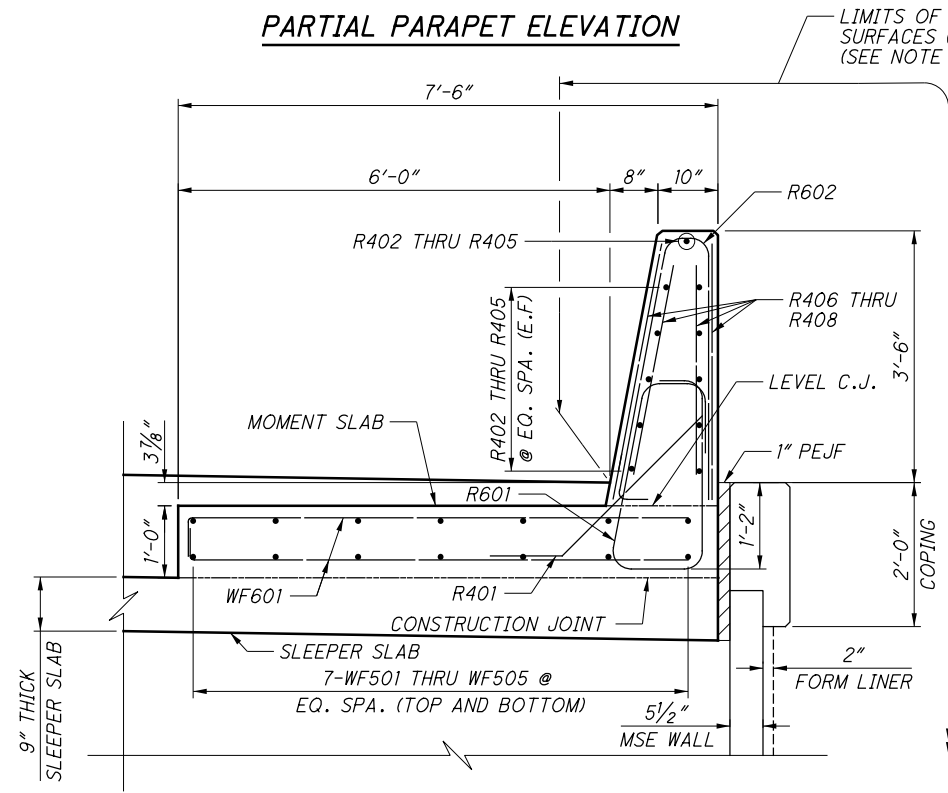
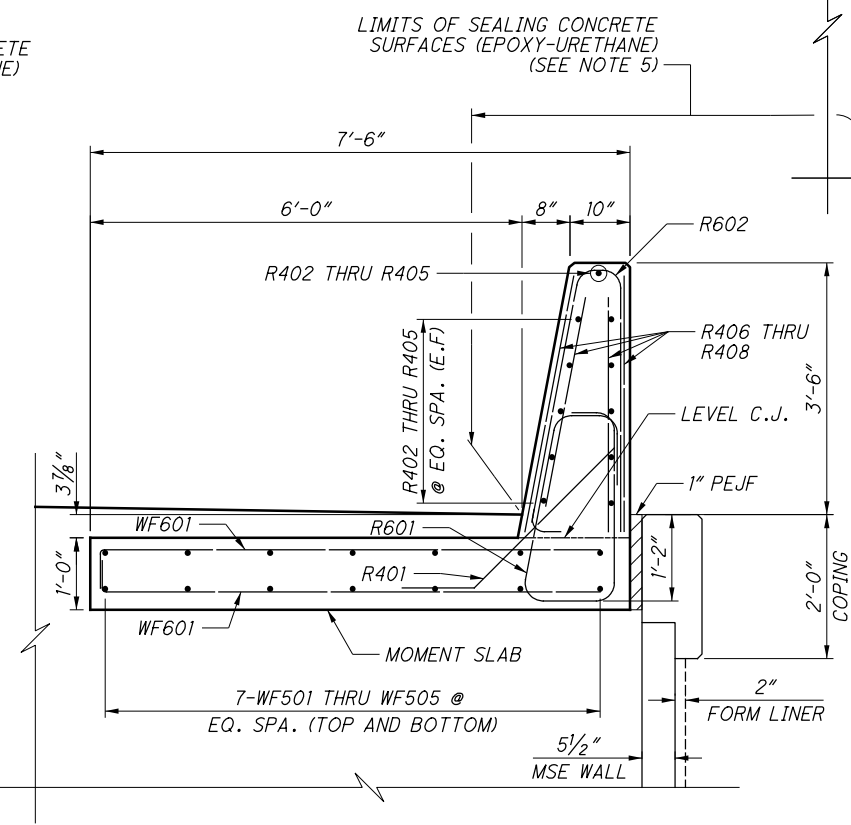


TABLE 2		
CONTROL JT. SPA.	"S" SETS EQ. SPA.	'X' BAR
10'-0"	11	R406
13'-2 3/8"	14	R407
14'-3 3/8"	16	R408

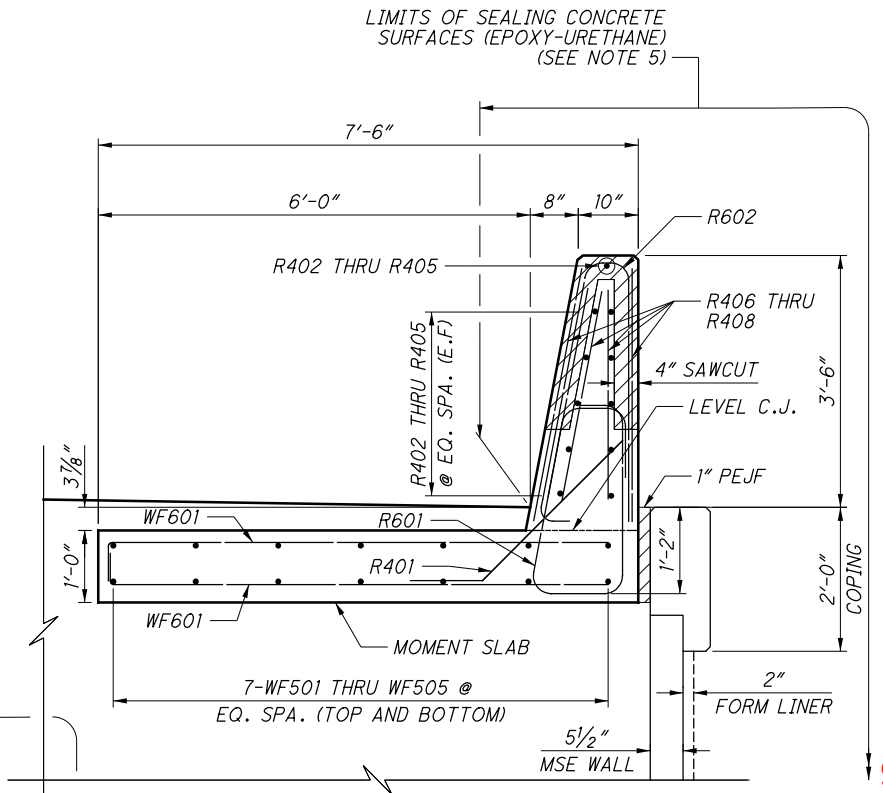
PARTIAL PARAPET ELEVATION



SECTION A-A



SECTION B-B



SECTION C-C

NOTES:

- SEE STD. DWG SBR-1-20 FOR ADDITIONAL NOTES AND DETAILS.
- MIN. REINFORCING STEEL LAP LENGTHS:
#4 BARS = 1'-11"
#5 BARS = 2'-6"
- AT THE MOMENT SLAB EXPANSION JOINT LOCATIONS, PLACE 2" PEJF BETWEEN THE RAILING SECTIONS.
- FOR PAVEMENT BUILD-UP, SEE BU-34 PLANS.
- FOR SEALING NOTES, SEE SHEET 3 / 104.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

SUM-76-77/8-
8.24/9.74/0.00
PID No. 102329

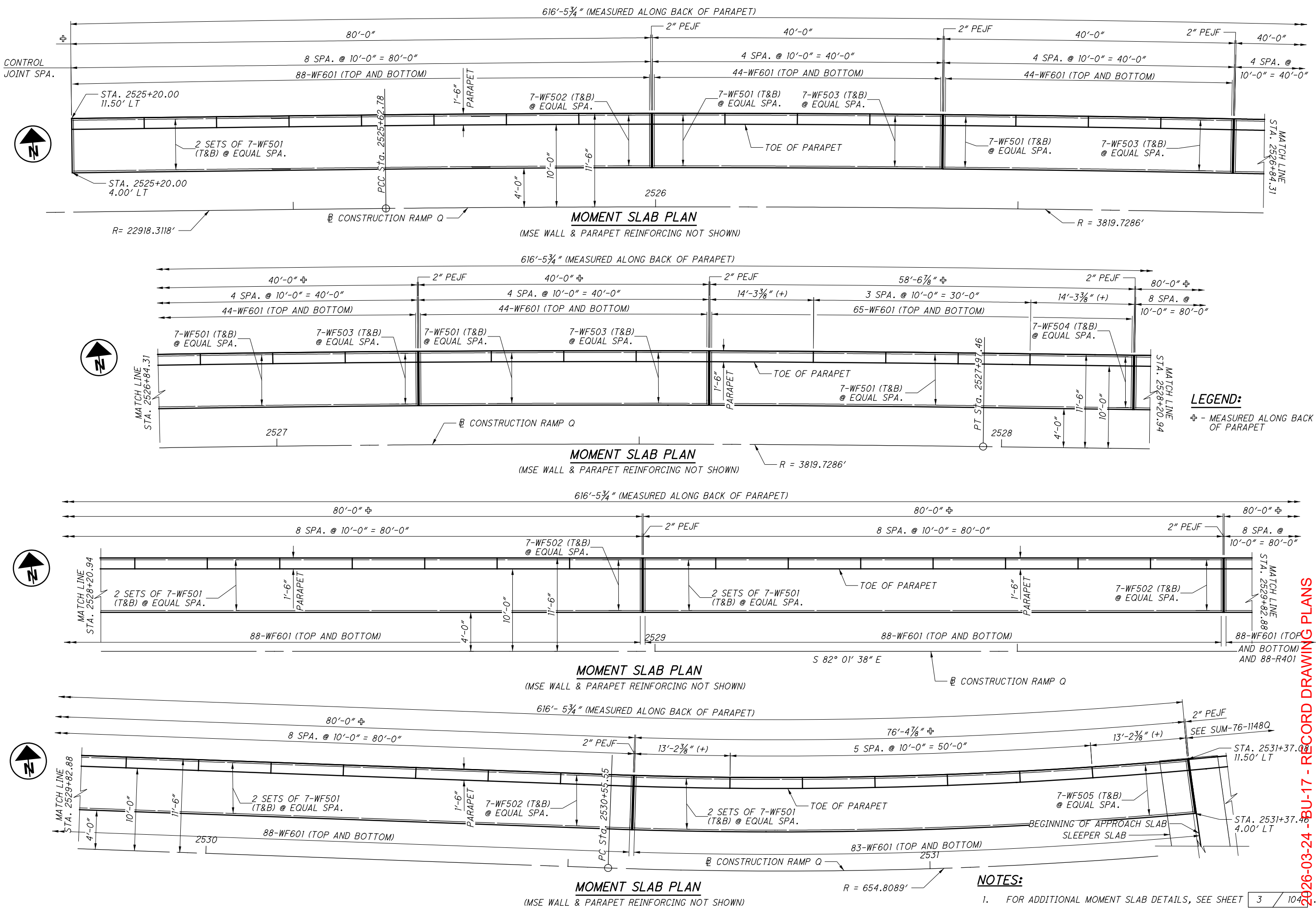
RAILING AND MOMENT SLAB DETAILS
WALL NO. 3
MSE WALL 3 ALONG RAMP Q

DESIGNED JAT
CHECKED KDC
DRAWN JAT
REVIEWED SAN
DATE 6/14/21
STRUCTURE FILE NUMBER

DESIGN AGENCY
PRIME
4445 State Road
Columbus, Ohio 43231

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

p:\w\ANV\A01PW\T01\parsons.com\Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\Walls (3,4, 8 & 11)\MSE Wall 3\sheets\102329_003_WM003.dgn Sheet 9/22/2021 2:00:18 PM



DESIGN AGENCY
PRIME
8415 BATES ROAD
COLUMBUS, OHIO 43231

DATE
6/14/21

REVIEWED
SAN

DRAWN
KDC

DESIGNED
KDC

CHECKED
JAT

STRUCTURE FILE NUMBER

MOMENT SLAB PLAN
WALL NO. 3
MSE WALL 3 ALONG RAMP Q

SUM-76/77/8-
8.24/9.74/0.00
PID No. 102329

4 / 5

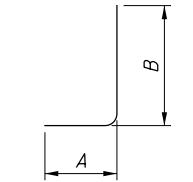
10
104

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

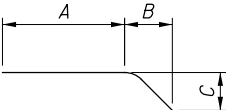
pw:\V\ANV\A01PW\INT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\Walls (3,4, 8 & 11)\MSE Wall 3\sheets\101402_003_WL001.dgn Sheet 9/22/2021 2:00:24 PM

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
	TOTAL				A	B	C	D	E	R	INC
WALL 3 PARAPET AND MOMENT SLAB											
R401	676	3'-9"	1693	19	2'-9"	8 1/2"	8 1/2"				
*R402	176	30'-0"	-	STR							
*R403	44	23'-6"	-	STR							
*R404	44	11'-7"	-	STR							
*R405	11	19'-11"	-	STR							
*R406	224	10'-0"	-	STR							
*R407	8	13'-2"	-	STR							
*R408	8	14'-3"	-	STR							
R601	676	8'-1"	8207	37	9 1/2"	2'-7"	7"	1'-0"			
R602	676	7'-6"	7615	23	6"	3'-6"	3'-6"			2"	
WF501	210	30'-0"	6571	STR							
WF502	56	24'-8"	1441	STR							
WF503	56	12'-2"	711	STR							
WF504	14	30'-9"	449	STR							
WF505	14	21'-1"	308	STR							
WF601	1352	7'-4"	14892	1	7'-0"	6"					
**WF801	80	1'-6"	320	STR							
SUB-TOTAL			42,207								

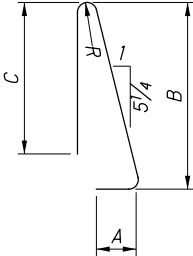
* - DENOTES GFRP REINFORCING BAR
** - DENOTES DOWEL BAR



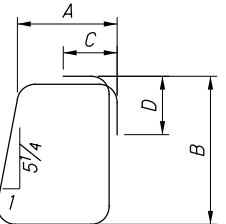
TYPE-1



TYPE-19



TYPE-23



TYPE-37

NOTES:

- ALL REINFORCING STEEL SHALL BE EPOXY COATED.
- BAR SIZE: THE BAR SIZE IS INDICATED IN THE BAR MARK. THE MARK BEGINS WITH TWO OR THREE LETTERS OR NUMBERS THAT IDENTIFY THE BAR LOCATION. THE NEXT ONE OR TWO DIGITS INDICATE THE BAR SIZE, AND THE REMAINING TWO DIGITS ARE THE SEQUENCE NUMBER.

EXAMPLE: SA1001
SA = SUPERSTRUCTURE BAR
10 = #10 BAR
01 = BAR SEQUENCE NUMBER 1
- BAR DIMENSIONS SHOWN ARE OUT-TO-OUT UNLESS OTHERWISE INDICATED.
- STR. IN THE BAR TYPE COLUMN INDICATES A STRAIGHT BAR.
- RAD INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.
- INCR. INDICATES THE LENGTH INCREMENT FOR SERIES BARS.
- STD. WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF A BAR.
- FIELD BEND BARS AS NECESSARY TO MATCH CURVATURE OV ROADWAY.

REINFORCING STEEL LIST

WALL NO. 3

MSE WALL 3 ALONG RAMP Q

SUM-76/77/8-8.24/9.74/0.00

PID No. 102329

5/5

11/104

DESIGN AGENCY

PRIME

6450 N. State Rd. Suite 300
Columbus, Ohio 43231

REVIEWED

DATE

6/14/21

DRAWN

JAT

REVIS

DESIGNED

JAT

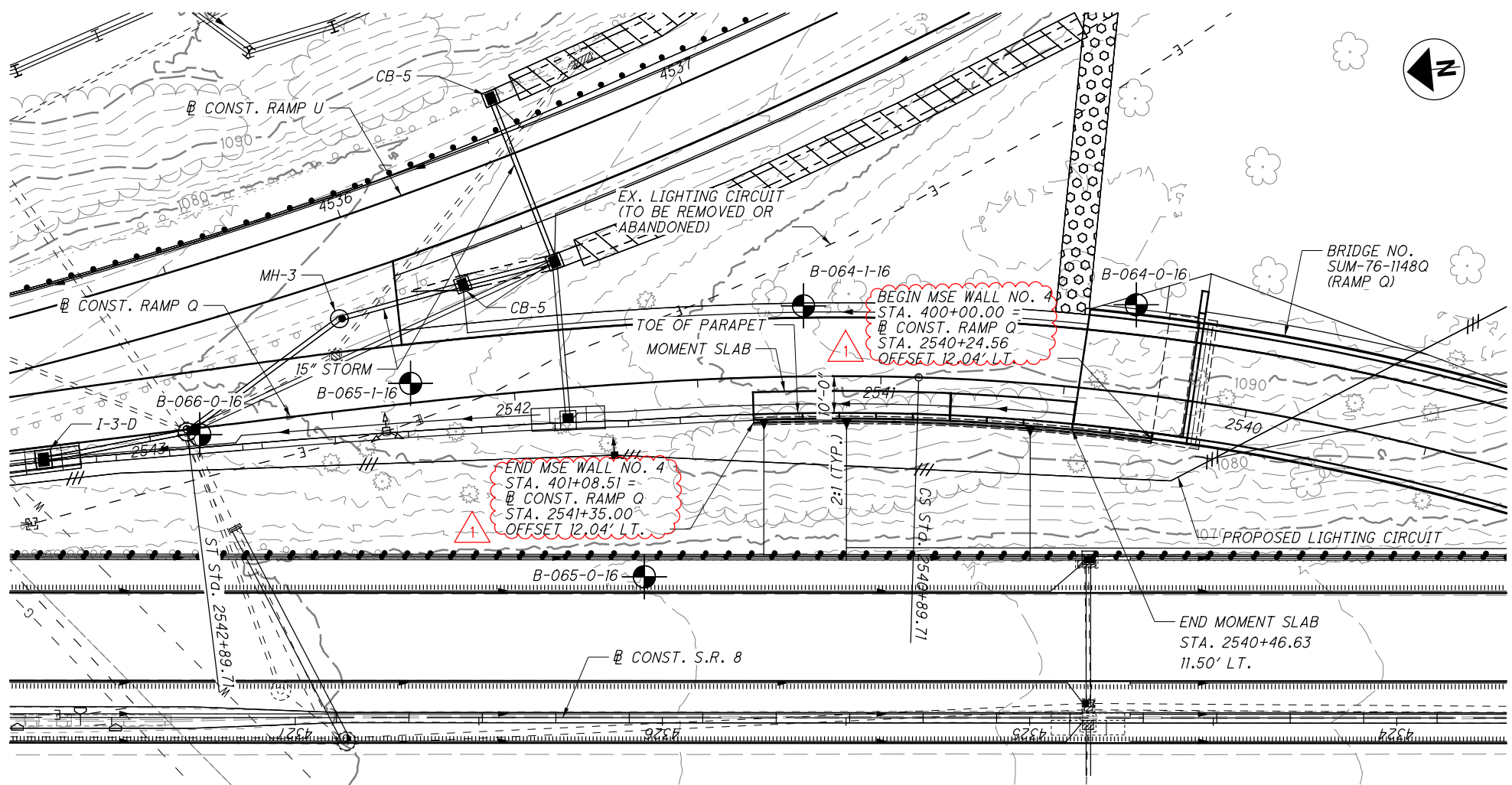
CHECKED

KDC

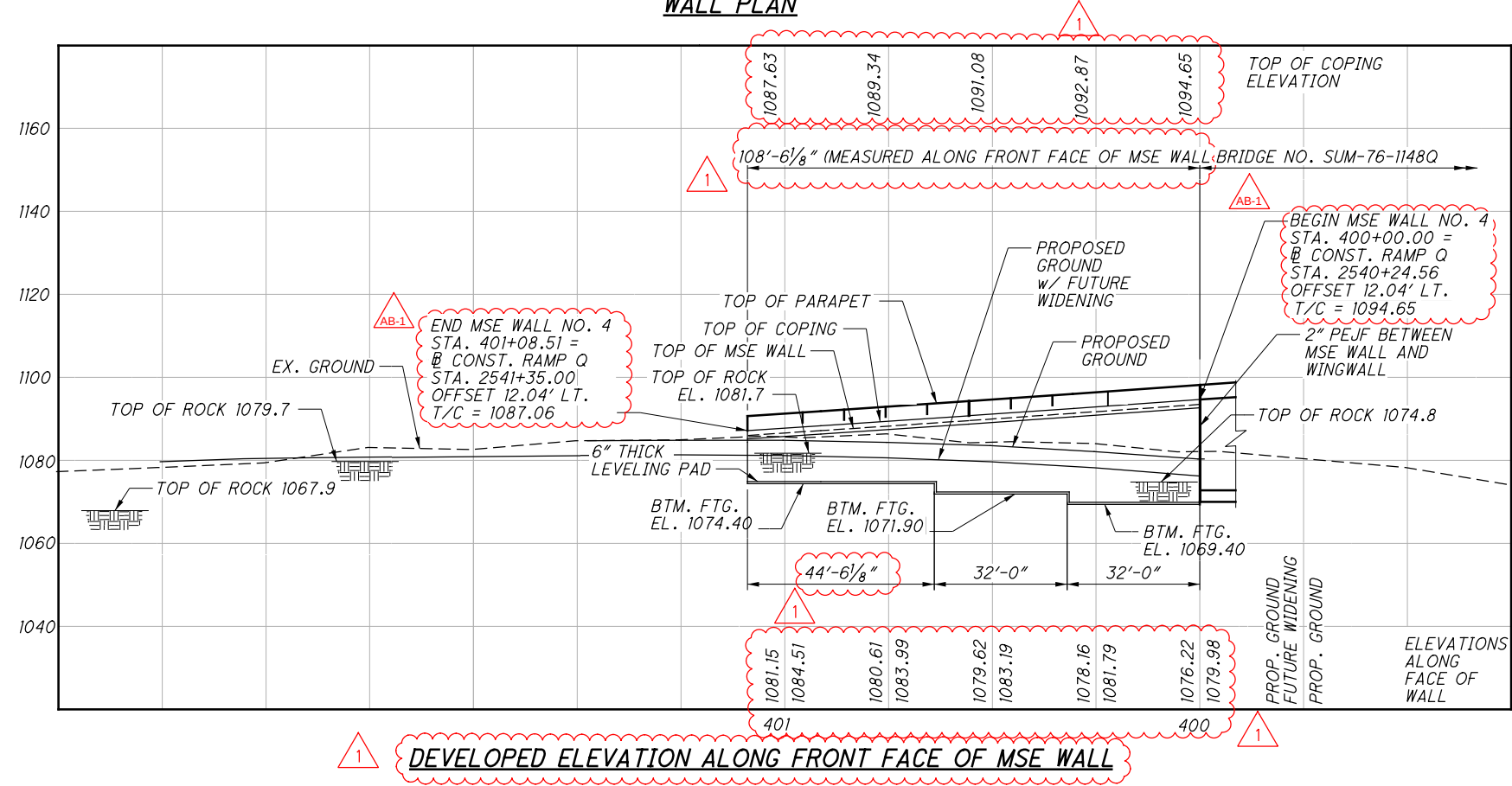
STRUCTURE FILE NUMBER

ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	9/22/21	UPDATED WALL ALIGNMENTS
AB-1	6/2/26	COPING ELEVATION REVISION

p:\V\ANV\A01PWINT01\Parsons.com\Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\Walls (3,4, 8 & 11)\MSE Wall 4\sheets\101402_004_WP001.dgn Sheet 6/2/2026 10:25:27 AM



WALL PLAN



DEVELOPED ELEVATION ALONG FRONT FACE OF MSE WALL

BENCHMARK DATA			
POINT	NORTHING	EASTING	ELEVATION
BM-200	509553.932	2243436.787	1087.538

FOR ADDITIONAL BENCHMARK INFORMATION SEE ROADWAY PLANS.

NEW BORING LOCATIONS			
BORING	STATION	OFFSET	TOP OF ROCK EL.
B-064-0-16	2540+33.10	24.08' RT.	1074.8
B-064-1-16	2541+20.81	19.21' RT.	1081.7
B-065-1-16	2542+27.83	5.35' RT.	1079.7
B-066-0-16	2542+86.41	1.83' LT.	1067.9

LEGEND:

PROJECT BORING LOCATION

NOTES:

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. WALL ALIGNMENT IS DEFINED ALONG THE FRONT FACE OF MSE WALL EXCLUDING THE FORMLINER RELIEF AND B CONSTRUCTION OF RAMP Q.
3. WALL ELEVATIONS, DIMENSIONS AND STATIONS ARE MEASURED ALONG FRONT FACE OF MSE WALL EXCLUDING THE FORMLINER RELIEF.
4. MINIMUM DISTANCE FROM PROPOSED GROUND TO THE TOP OF FOOTING IS 5'-0".
5. ALL EXISTING UTILITIES TO REMAIN UNLESS NOTED OTHERWISE.
6. FOR ROADWAY ALIGNMENT HORIZONTAL CURVE DATA, SEE ROADWAY PLANS.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

DESIGN AGENCY
PRIME
8415 BIRCH RD
COLUMBUS, OHIO 43231

DATE
6/14/21

REVIEWED
SAN

DRAWN
JAT

DESIGNED
JAT

CHECKED
KDC

STRUCTURE FILE NUMBER

WEST SIDE OF RAMP Q NEAR JOHNSTON ST.

WALL NO. 4

WALL PLAN AND PROFILE

SUM-76/77/8-
8.24/9.74/0.00

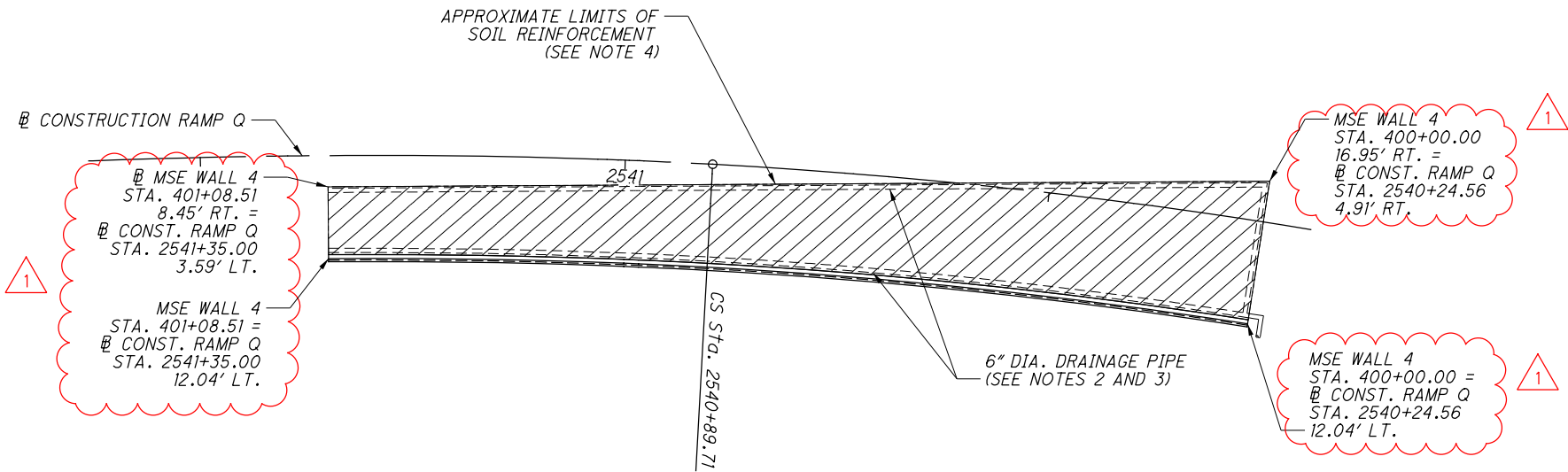
PID No. 102329

1/5

12
104

ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	9/22/21	UPDATED WALL ALIGNMENTS

pw:\\V\\AN\\A01PWINT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\10 - Design\\102329\\Structures\\Walls (3,4, 8 & 11)\\MSE Wall 4\\sheets\\102329_004_WT001.dgn Sheet 9/22/2021 2:00:40 PM



MSE WALL STRAP PLAN

LEGEND:

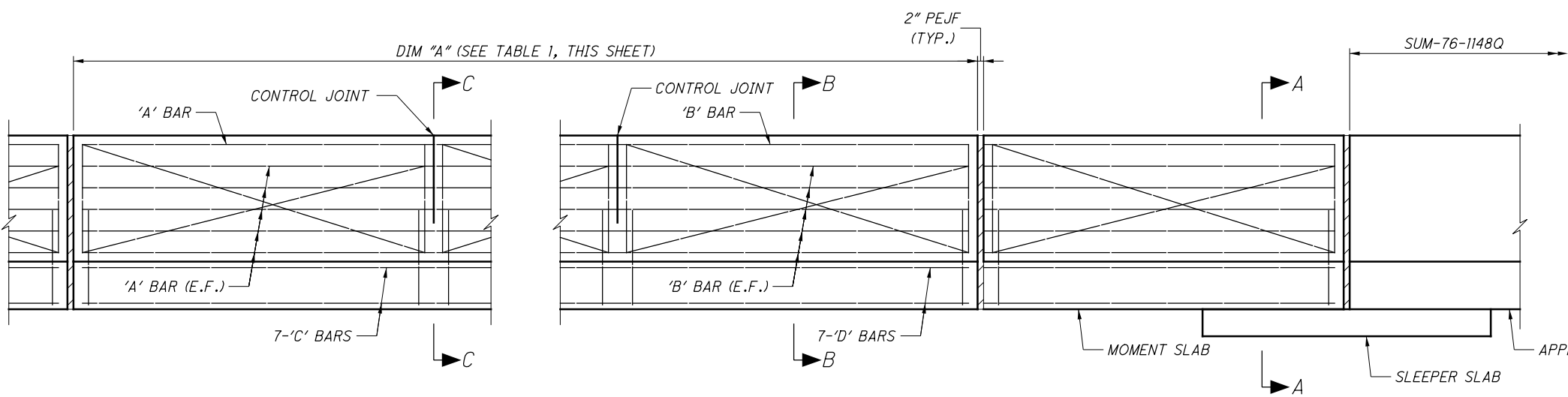
- LIMITS OF SOIL REINFORCEMENT

NOTES:

- FOR COMMON WALL DETAILS, SEE SHEETS 5 / 104 AND 6 / 104
- USE PERFORATED CORRUGATED POLYETHELENE PIPE INSIDE POROUS BACKFILL. USE NON-PERFORATED CORRUGATED POLYETHELENE PIPE IN ALL OTHER LOCATIONS. ALL DRAINAGE PIPES SHALL SLOPE A MINIMUM OF 1.00% TOWARDS THE OUTLET.
- PROVIDE CRUSHED AGGREGATE SLOPE PROTECTION AT PIPE OUTLETS. FOR DETAILS, SEE SHEET 5 / 104
- EXCAVATION LIMITS ARE TO BE PROVIDED BY MSE WALL SUPPLIER'S DESIGN AND INTERNAL STABILITY ANALYSIS. BASED ON S&ME EXTERNAL ANALYSES, THE MSE WALL SHALL BE CONSTRUCTED WITH A MINIMUM SOIL REINFORCEMENT LENGTH RANGING FROM 0.72H TO 1.68H, WHERE H IS THE HEIGHT FROM THE TOP OF THE MSE WALL TO THE TOP OF THE LEVELING PAD. SEE SHEET 3 / 104 FOR ADDITIONAL DETAILS.
- WALL ALIGNMENT IS DEFINED ALONG THE FRONT FACE OF MSE WALL EXCLUDING THE FORMLINER RELIEF AND CONST. RAMP Q.
- SELECT GRANULAR BACKFILL SHALL EXTEND 2'-0" BEYOND LIMITS OF SOIL REINFORCEMENT.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

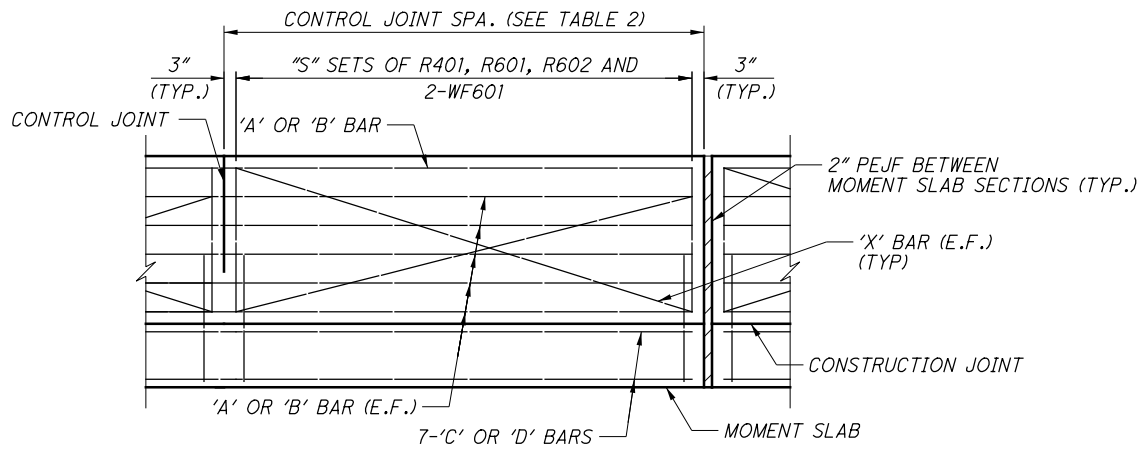
MSE WALL FOUNDATION AND STRAP PLAN			DESIGN AGENCY		
WALL NO. 4			PRIME		
WEST SIDE OF RAMP Q NEAR JOHNSTON ST.			8415 State Road, Suite 300 Columbus, Ohio 43231		
SUM-76/77/8-8.24/9.74/0.00		2 / 5	DESIGNED	REVIEWED	DATE
PID No. 102329			JAT	SAN	6/14/21
			CHECKED	STRUCTURE FILE NUMBER	
			KDC		
			DRAWN		
			JAT		
			REVISED		



RAILING AND MOMENT SLAB ELEVATION

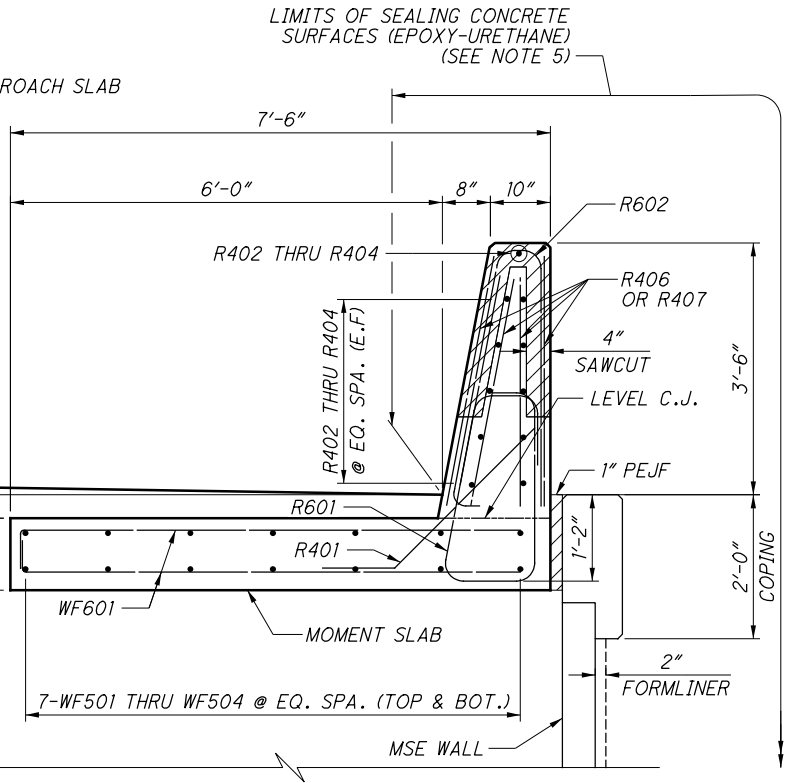
TABLE 1					
*DIM "A"	CONTROL JOINT SPACINGS	'A' BAR	'B' BAR	'C' BARS	'D' BARS
53'-3 1/2"	4-SPA. @ 10'-0" 1-SPA. @ 13'-2 1/2"	1-R402	1-R403	1-WF501	WF502
33'-3 1/2"	2-SPA. @ 10'-0" 1-SPA. @ 13'-3 1/2"	1-R402	1-R404	1-WF501	WF503

* DIM 'A' IS THE DISTANCE BETWEEN EXPANSION JOINTS MEASURED ALONG THE BACK FACE OF PARAPET.

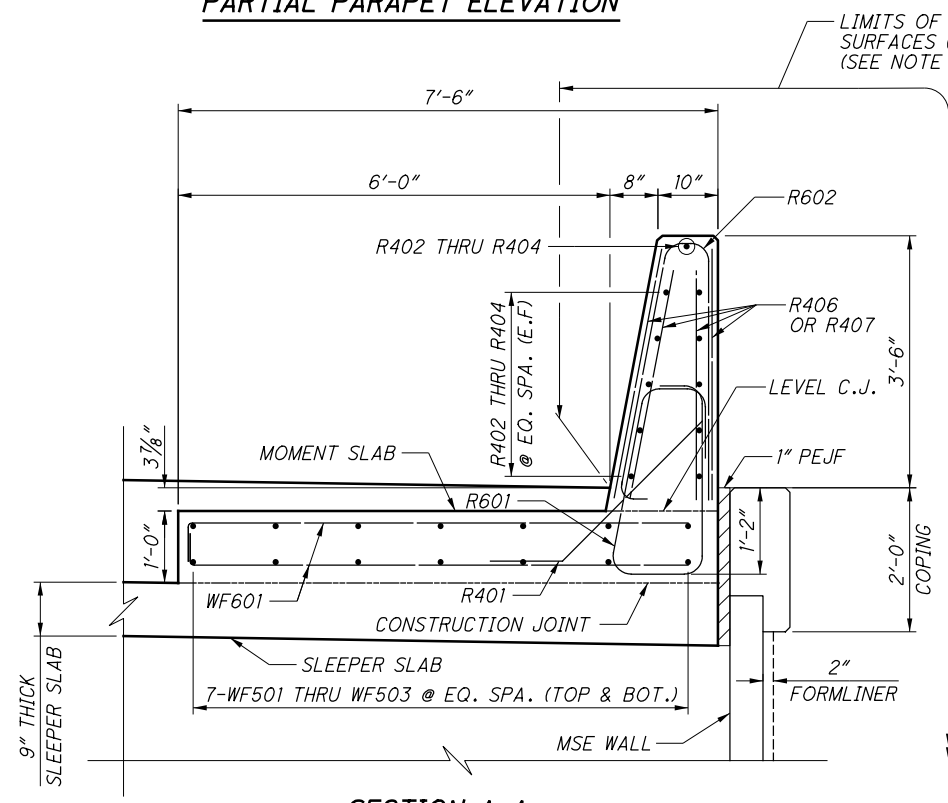


PARTIAL PARAPET ELEVATION

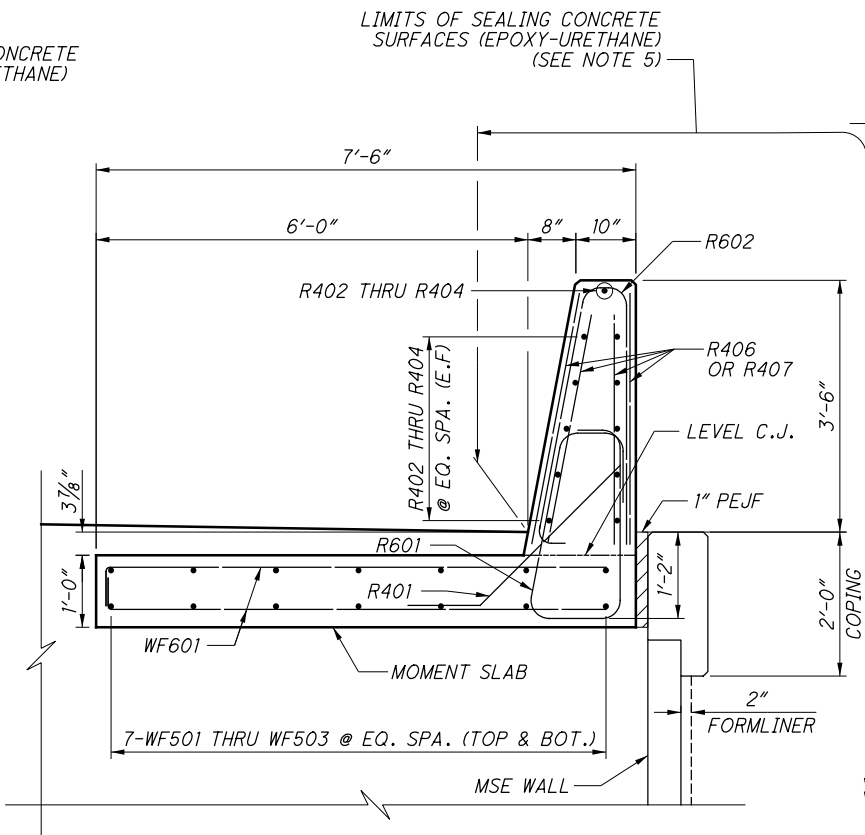
TABLE 2		
CONTROL JT. SPA.	"S" SETS EQ. SPA.	'X' BAR
10'-0"	11	R406
13'-3 1/2"	14	R407



SECTION C-C



SECTION A-A



SECTION B-B

NOTES:

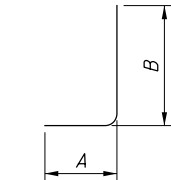
- SEE STD. DWG SBR-I-20 FOR ADDITIONAL NOTES AND DETAILS.
- MIN. REINFORCING STEEL LAP LENGTHS:
#4 BARS = 1'-11"
#5 BARS = 2'-6"
- AT THE MOMENT SLAB EXPANSION JOINT LOCATIONS, PLACE 2" PEJF BETWEEN THE RAILING SECTIONS.
- FOR PAVEMENT BUILD-UP, SEE BU-34 PLANS.
- FOR SEALING NOTES, SEE SHEET 3 / 104 .

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

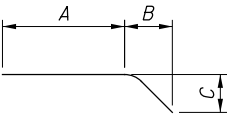
pw:\V\ANV\A01PW\INT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\Walls (3,4, 8 & 11)\MSE Wall 4\sheets\101402_004_WL001.dgn Sheet 9/22/2021 2:00:56 PM

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
	TOTAL				A	B	C	D	E	R	INC
WALL 4 PARAPET AND MOMENT SLAB											
R401	94	3'-9"	235	19	2'-9"	8½"	8½"				
*R402	22	30'-0"	-	STR							
*R403	11	24'-11"	-	STR							
*R404	11	4'-11"	-	STR							
*R405	NOT USED		-	STR							
*R406	24	10'-0"	-	STR							
*R407	8	10'-5"	-	STR							
*R408	NOT USED		-	STR							
R601	94	8'-1"	1141	37	9½"	2'-7"	7"	1'-0"			
R602	94	7'-6"	1059	23	6"	3'-6"	3'-6"			2"	
WF501	28	30'-0"	876	STR							
WF502	14	25'-6"	372	STR							
WF503	14	5'-6"	80	STR							
WF504	NOT USED										
WF601	188	7'-4"	2071	1	7'-0"	6"					
**WF801	16	1'-6"	64	STR							
SUB-TOTAL			5,898								

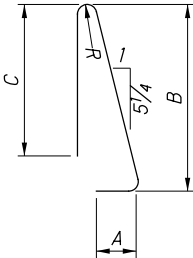
* - DENOTES GFRP REINFORCING BAR
** - DENOTES DOWEL BAR



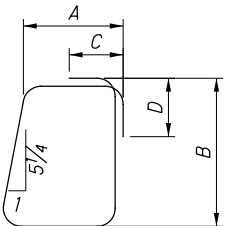
TYPE-1



TYPE-19



TYPE-23



TYPE-37

NOTES:

- ALL REINFORCING STEEL SHALL BE EPOXY COATED.
- BAR SIZE: THE BAR SIZE IS INDICATED IN THE BAR MARK. THE MARK BEGINS WITH TWO OR THREE LETTERS OR NUMBERS THAT IDENTIFY THE BAR LOCATION. THE NEXT ONE OR TWO DIGITS INDICATE THE BAR SIZE, AND THE REMAINING TWO DIGITS ARE THE SEQUENCE NUMBER.

EXAMPLE: SA1001
SA = SUPERSTRUCTURE BAR
10 = #10 BAR
01 = BAR SEQUENCE NUMBER 1
- BAR DIMENSIONS SHOWN ARE OUT-TO-OUT UNLESS OTHERWISE INDICATED.
- STR. IN THE BAR TYPE COLUMN INDICATES A STRAIGHT BAR.
- RAD INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.
- INCR. INDICATES THE LENGTH INCREMENT FOR SERIES BARS.
- STD. WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF A BAR.
- FIELD BEND BARS AS NECESSARY TO MATCH CURVATURE OF ROADWAY.

REINFORCING STEEL LIST

WALL NO. 4

WEST SIDE OF RAMP Q NEAR JOHNSTON ST.

SUM-76/77/8-8.24/9.74/0.00

PID No. 102329

5/5

16/104

DESIGN AGENCY

PRIME

6450 N. State Rd. Suite 300
Columbus, Ohio 43231

REVIEWED

DATE

6/14/21

DRAWN

JAT

REVIS

DESIGNED

JAT

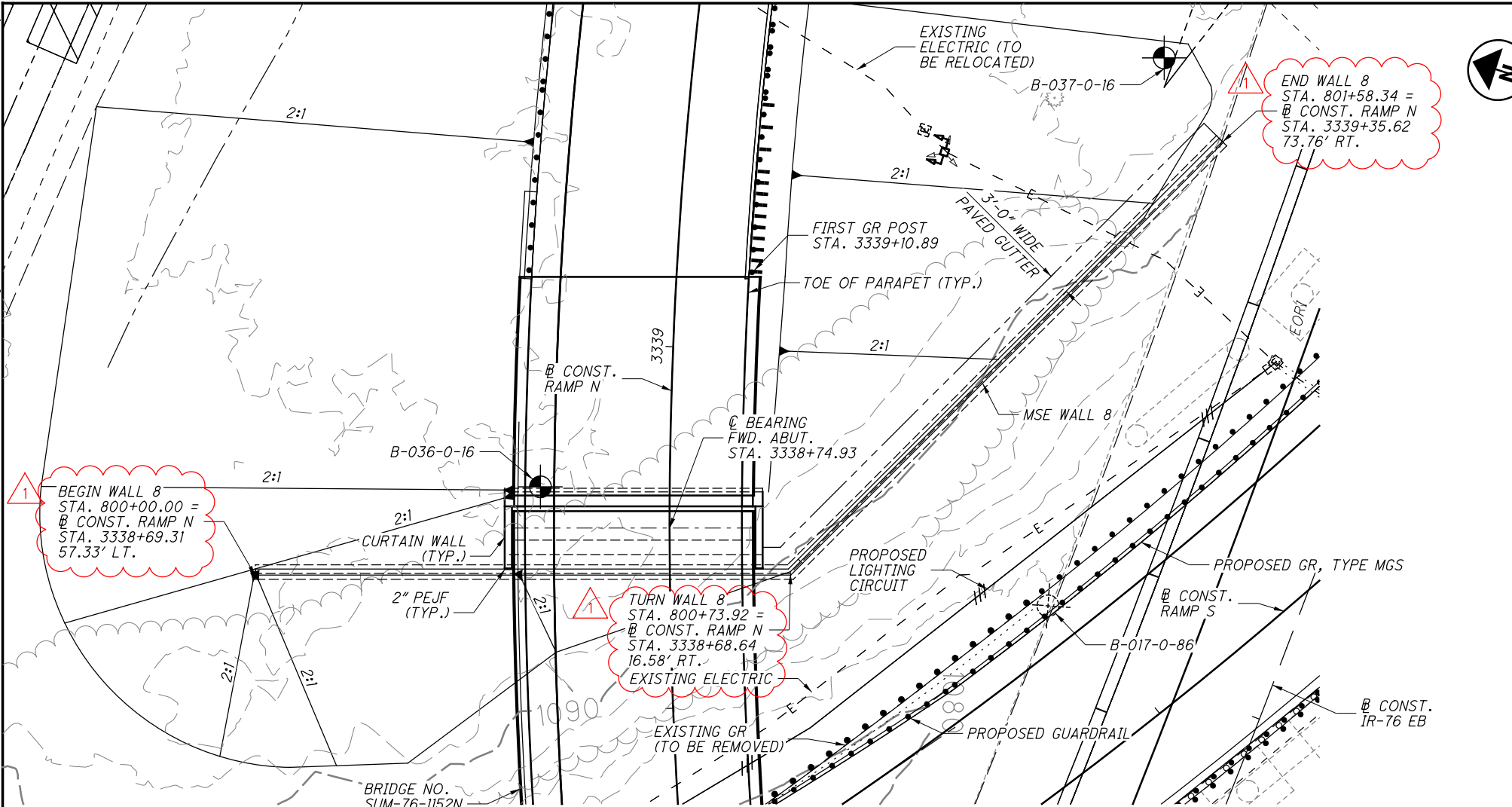
CHECKED

KDC

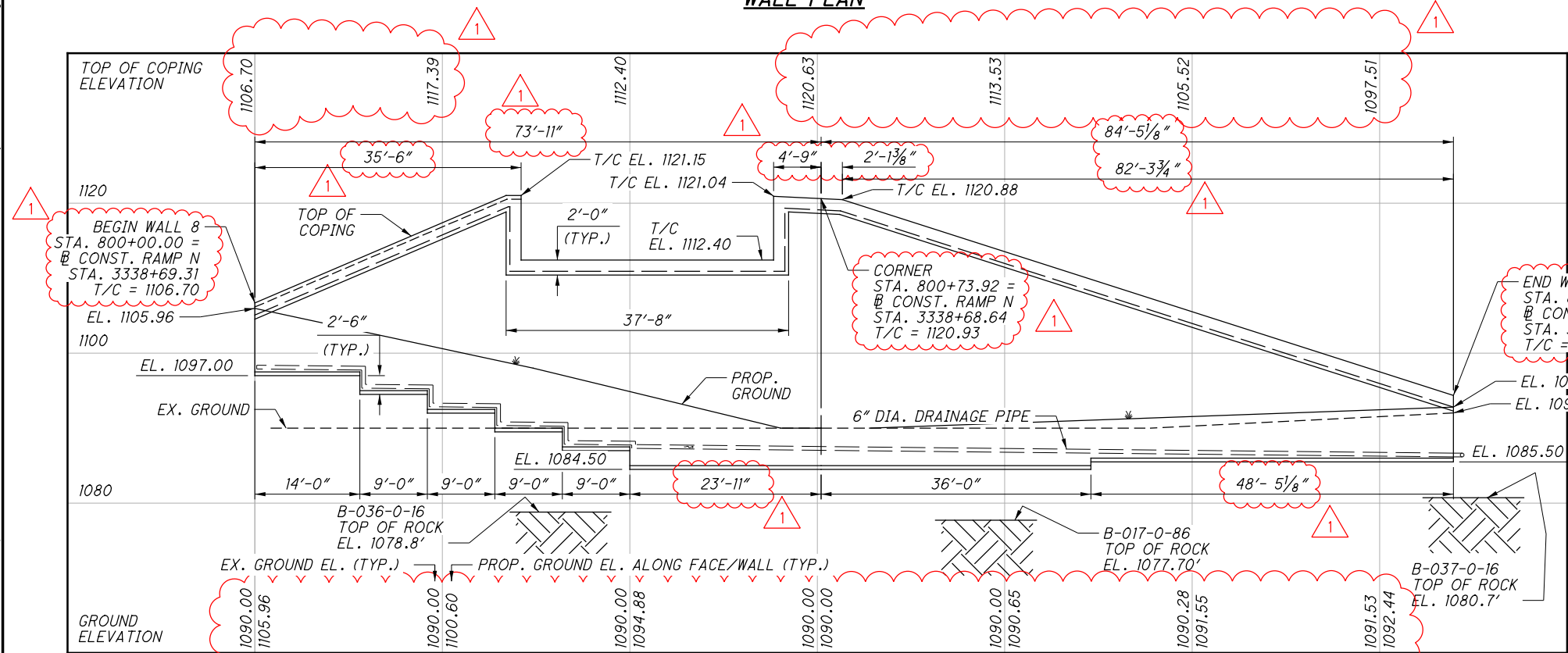
STRUCTURE FILE NUMBER

ISSUE RECORD:		DESCRIPTION
NO.	DATE	UPDATED WALL ALIGNMENTS
1	9/22/21	

pw:\V\ANV\A01PW\INT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\Walls (3,4, 8 & 11)\MSE Wall 8\102329_008_WP001.dgn Sheet 9/22/2021 4:14:32 PM jtreos



WALL PLAN



DEVELOPED ELEVATION ALONG FRONT FACE OF MSE WALL

BENCHMARK DATA			
POINT	NORTHING	EASTING	ELEVATION
BM-200	509553.932	2243436.787	1087.538

FOR ADDITIONAL BENCHMARK INFORMATION SEE ROADWAY PLANS

NEW BORING LOCATIONS			
BORING	RAMP N STATION	OFFSET	TOP OF ROCK EL.
B-036-0-16	3338+80.46	17.9' LT.	1078.8'
B-037-0-16	3339+47.44	64.7' RT.	1080.7'

HISTORIC BORING LOCATIONS			
BORING	RAMP N STATION	OFFSET	TOP OF ROCK EL.
B-017-0-86	3338+63±	52± RT.	1077.70'

LEGEND:

- = PROJECT BORING LOCATION
- = HISTORIC BORING LOCATION

NOTES:

- EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
- WALL ALIGNMENT IS DEFINED ALONG THE FRONT FACE OF THE MSE WALL EXCLUDING THE FORMLINER RELIEF AND B CONST. RAMP N.
- ALL EXISTING UTILITIES TO REMAIN UNLESS NOTED OTHERWISE.
- FOR ROADWAY ALIGNMENT HORIZONTAL CURVE DATA, SEE ROADWAY PLANS.
- MINIMUM DISTANCE FROM PROPOSED GROUND TO THE TOP OF FOOTING IS 5'-0".
- SEE SHEET 3 / 104 FOR COMMON WALL GENERAL NOTES.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

DESIGN AGENCY
PRIMEV
8455 Pauls Road
Columbus Ohio 43240

DATE
6/14/21
REVIEWED
SAN
STRUCTURE FILE NUMBER

DRAWN
JAT
CHECKED
KDC

DESIGNED
JAT

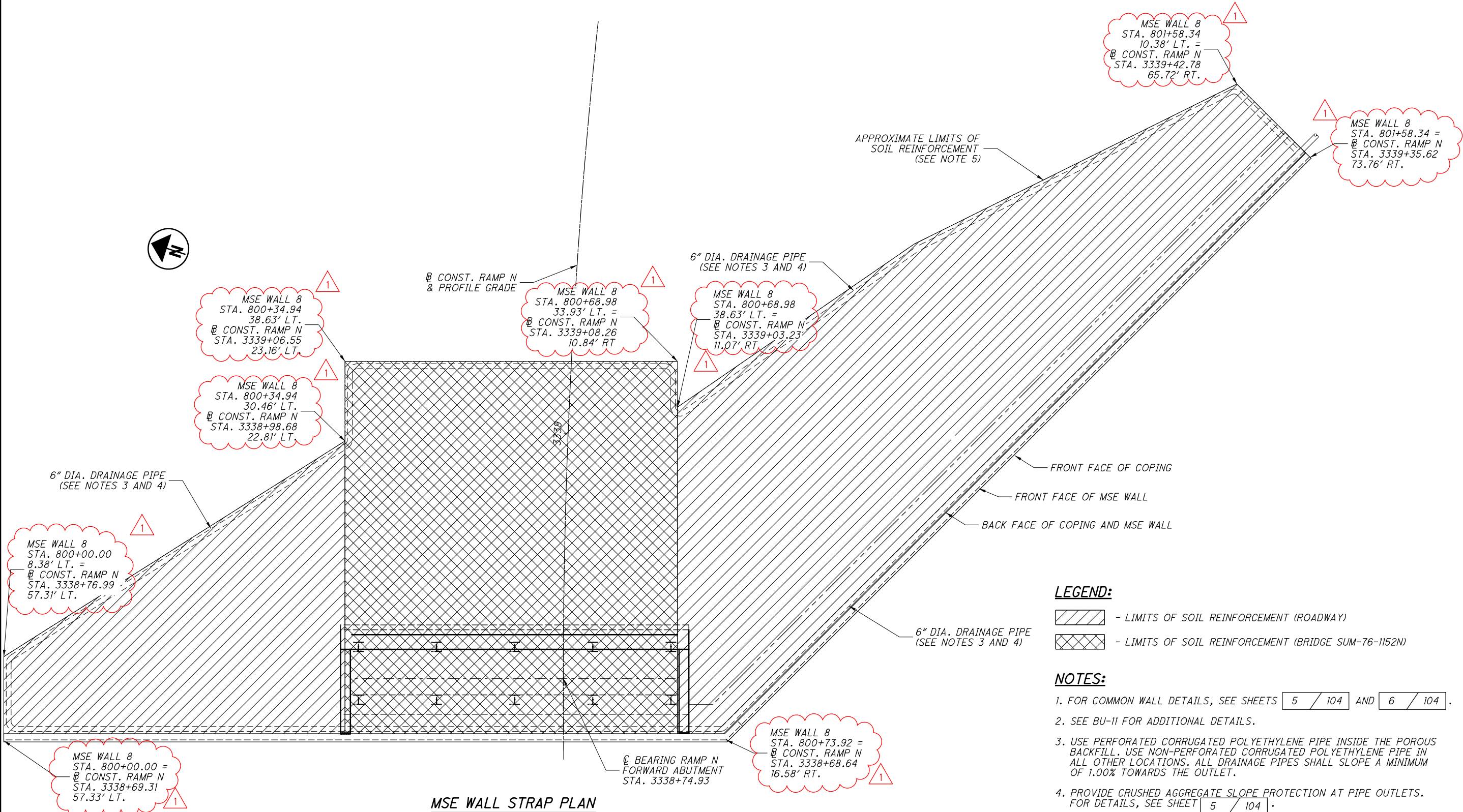
WALL PLAN AND PROFILE
WALL NO. 8
MSE WALL 8 ALONG RAMP N

SUM-76/77/8-
8.24/9.74/0.00
PID No. 102329

1 / 2
17
104

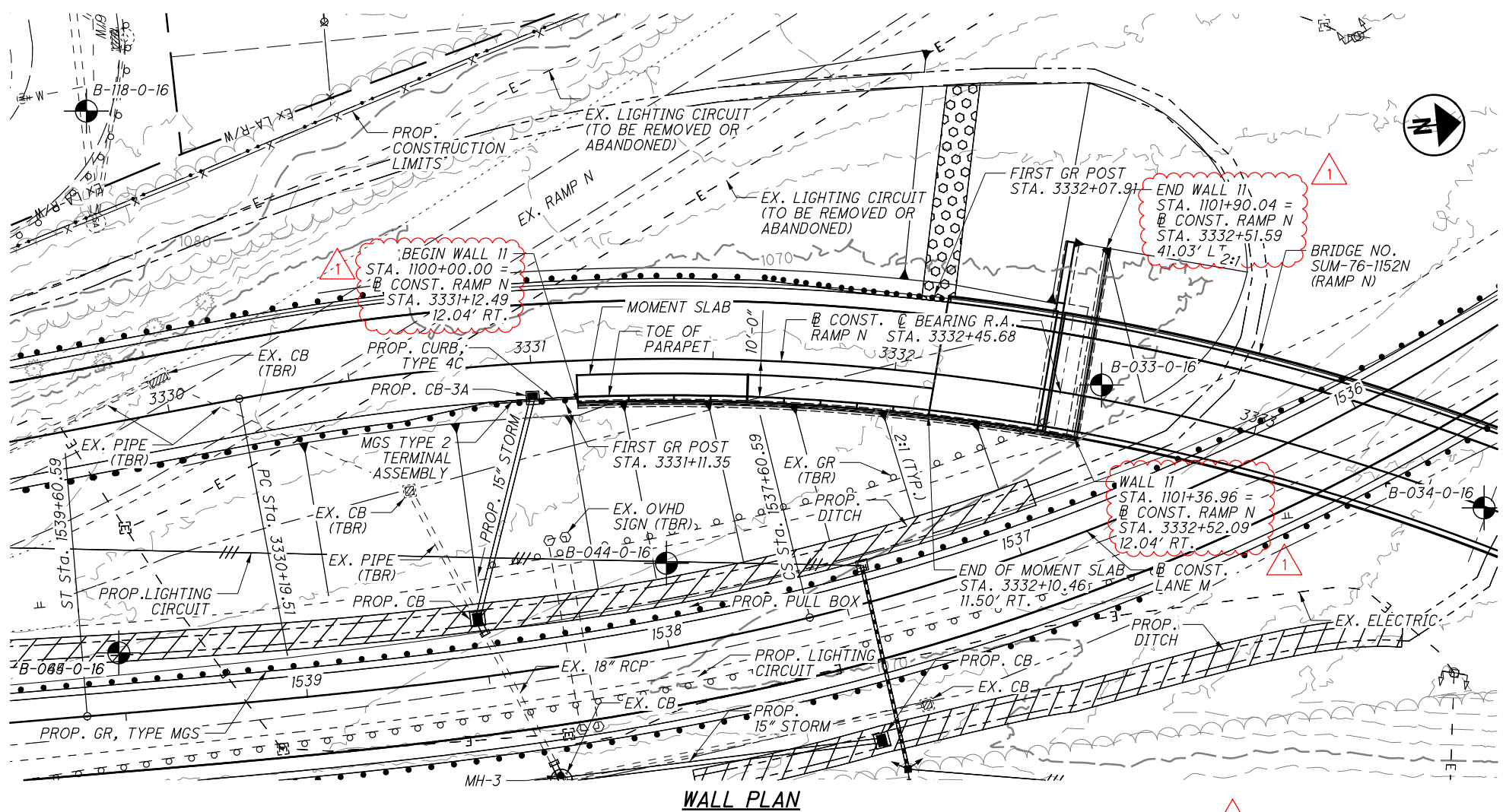
ISSUE RECORD:			DESCRIPTION
NO.	DATE		UPDATED WALL ALIGNMENTS
1	9/22/21		

p:\ANV\A01PWINT01\parsons.com\Ohio_State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\Walls (3,4, 8 & 11)\MSE Wall 8\102329_008_WT001.dgn Sheet 9/22/2021 2:01:12 PM jtreasur



2026-03-24 - BU-17 - RECORD DRAWING PLANS

18 104		2 / 2	SUM-76 / 77 / 8 - 8.24 / 9.74 / 0.00 PID No. 102329	MSE WALL FOUNDATION AND STRAP PLAN WALL NO. 8 MSE WALL 8 ALONG RAMP N				DESIGNED JAT CHECKED KDC		DRAWN JAT REVISED	REVIEWED SAN STRUCTURE FILE NUMBER	DATE 6/14/21	DESIGN AGENCY PRIMEWAY 8415 Pulsar Place Suite 300 Columbus Ohio 43240	
---	--	-------	---	---	--	--	--	--	--	---	--	-----------------	--	--



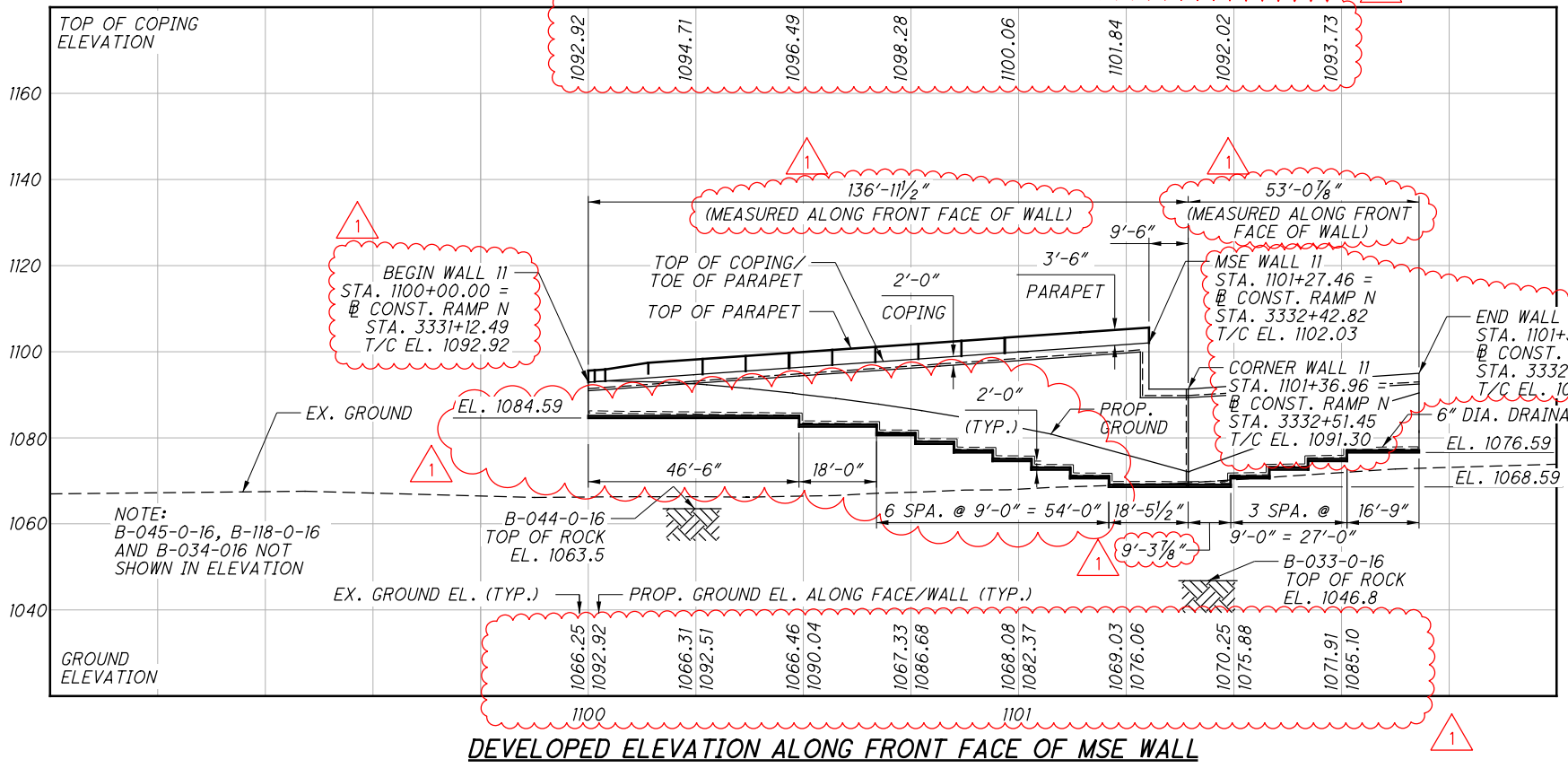
BENCHMARK DATA			
POINT	NORTHING	EASTING	ELEVATION
BM-200	509553.932	2243436.787	1087.538

FOR ADDITIONAL BENCHMARK INFORMATION SEE ROADWAY PLANS

NEW BORING LOCATIONS			
BORING	RAMP N STATION	OFFSET	TOP OF ROCK EL.
B-033-0-16	3332+56.42	3.9' LT.	1046.8
B-034-0-16	3333+66.27	0.4 RT.	1051.7
B-044-0-16	3331+37.19	56.1' RT.	1063.5
B-045-0-16	3329+74.22	62.3' RT.	1062.9
B-118-0-16	3329+92.93	85.2' LT.	1067.1

LEGEND:

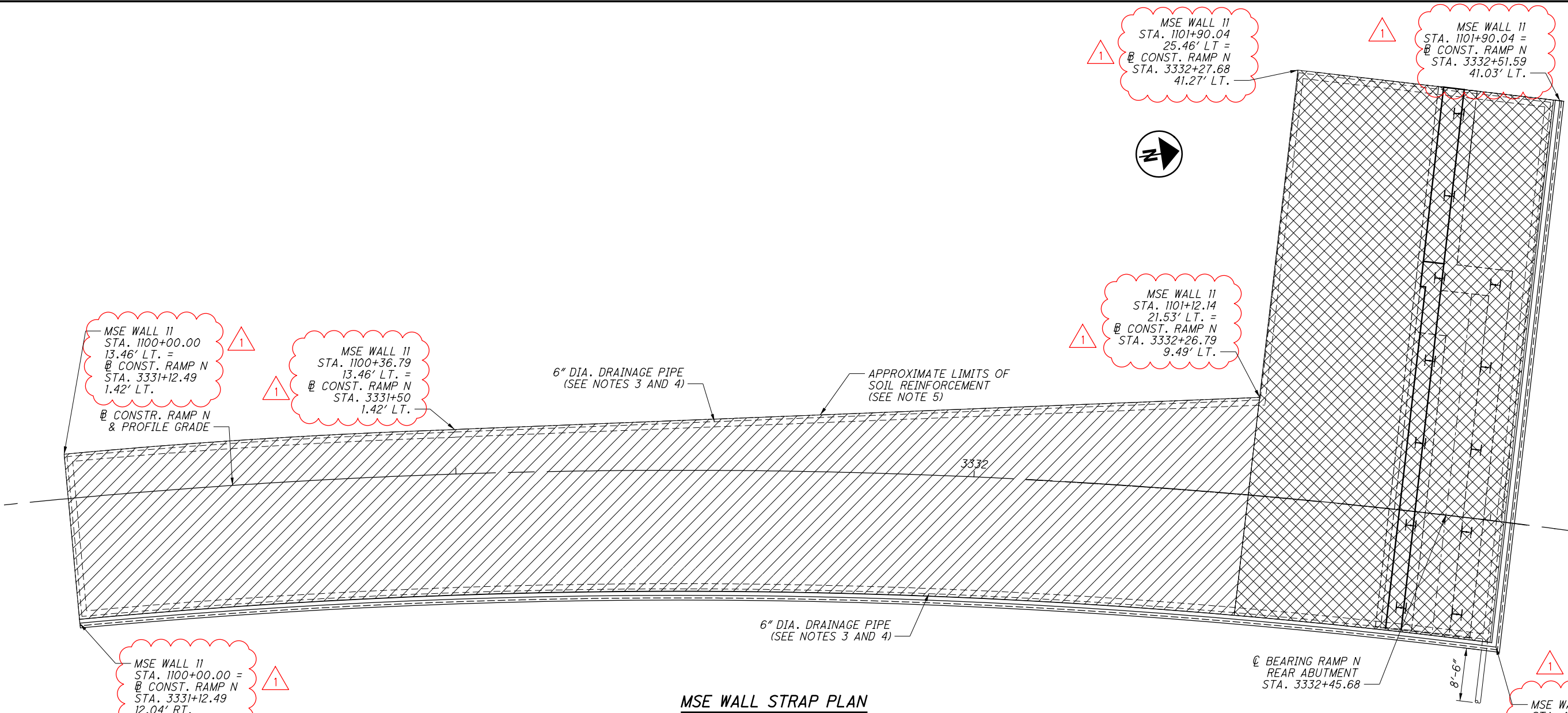
= PROJECT BORING LOCATION



- NOTES:**
- EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
 - WALL ALIGNMENT IS DEFINED ALONG THE FRONT FACE OF THE MSE WALL EXCLUDING THE FORMLINER RELIEF AND CONST. RAMP N.
 - ALL EXISTING UTILITIES TO REMAIN UNLESS NOTED OTHERWISE.
 - FOR ROADWAY ALIGNMENT HORIZONTAL CURVE DATA, SEE ROADWAY PLANS.
 - MINIMUM DISTANCE FROM PROPOSED GROUND TO THE TOP OF FOOTING IS 5'-0".
 - SEE SHEET 3 / 104 FOR COMMON WALL GENERAL NOTES.

ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	9/22/21	UPDATED WALL ALIGNMENTS

p:\V\ANV\A01P\WINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\Walls (3.4, 8 & 11)\MSE Wall 11\sheets\102329_011_WT001.dgn Sheet 9/22/2021 2:01:30 PM



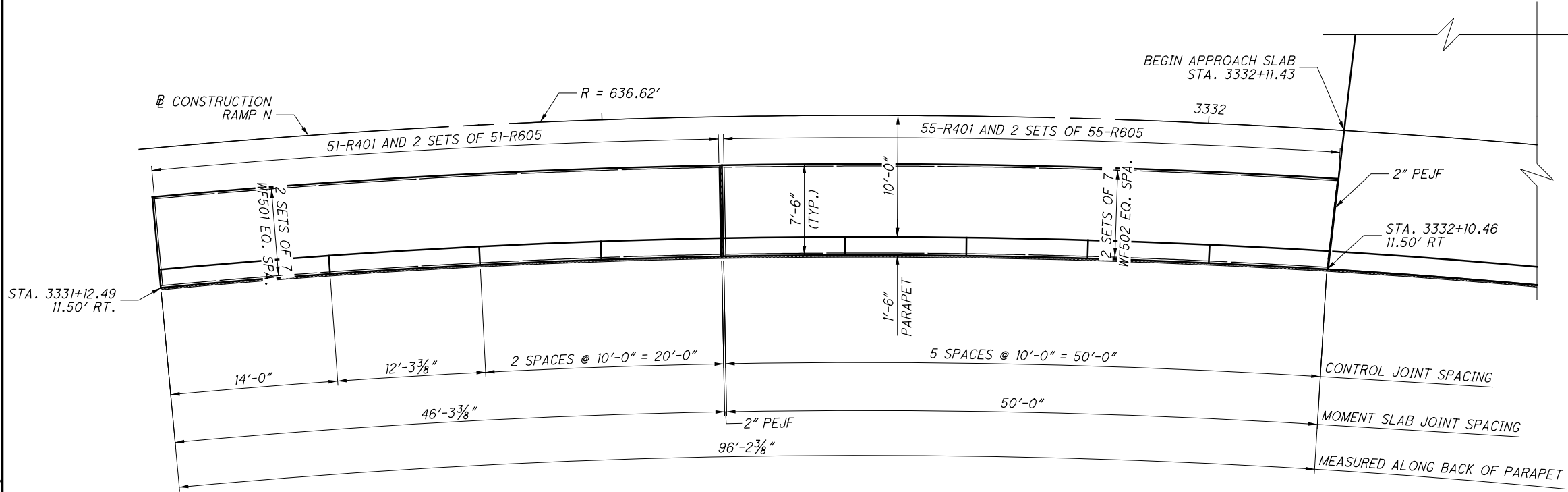
MSE WALL STRAP PLAN

206-93-24-BU-17-RECORD DRAWING PLANS

DESIGN AGENCY PRIME 845 Rouse Place Columbus Ohio 43240	
DESIGNED JAT	REVIEWED SAN
CHECKED KDC	DATE 6/14/21
STRUCTURE FILE NUMBER	
MSE WALL 11 ALONG RAMP N	
WALL NO. 11	
PID No. 102329	
SUM-76/77/8-8.24/9.74/0.00	
2 / 6	
20 / 104	

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\\VANV A01PWINT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\10 - Design\\102329\\Structures\\Walls (3,4, 8 & 11)\\MSE Wall 11\\sheets\\102329_011_WD001.dgn Sheet 9/22/2021 2:01:36 PM



MOMENT SLAB PLAN
(MSE WALL & PARAPET REINFORCING STEEL NOT SHOW)

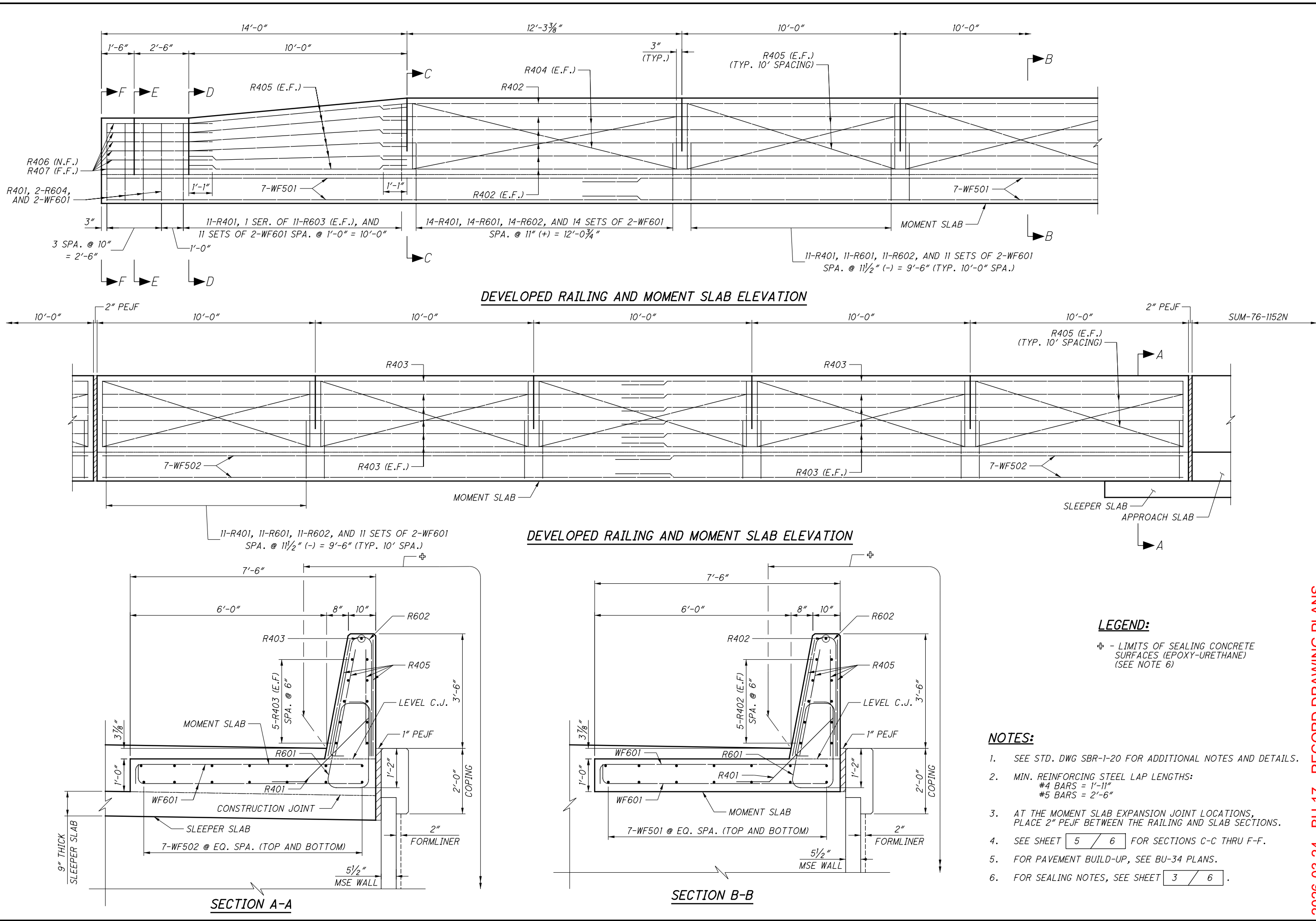
NOTES:

1. FOR ADDITIONAL MOMENT SLAB DETAILS SEE SHEET 4 / 6 .

21 104	3 / 6	SUM-76 / 77 / 8 - 8.24 / 9.74 / 0.00 PID No. 102329	MOMENT SLAB DETAILS WALL NO. 11 MSE WALL 11 ALONG RAMP N					DESIGN AGENCY PRIME 8415 Pulsar Place Suite 300 Columbus Ohio 43240	
				DESIGNED JAT	DRAWN JAT	REVIEWED SAN	DATE 6/14/21		
				CHECKED KDC	REVISED	STRUCTURE FILE NUMBER			

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\ANV\A01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\Walls (3,4, 8 & 11)\MSE Wall 11\sheet102329_011_WM001.dgn Sheet 9/22/2021 2:01:42 PM

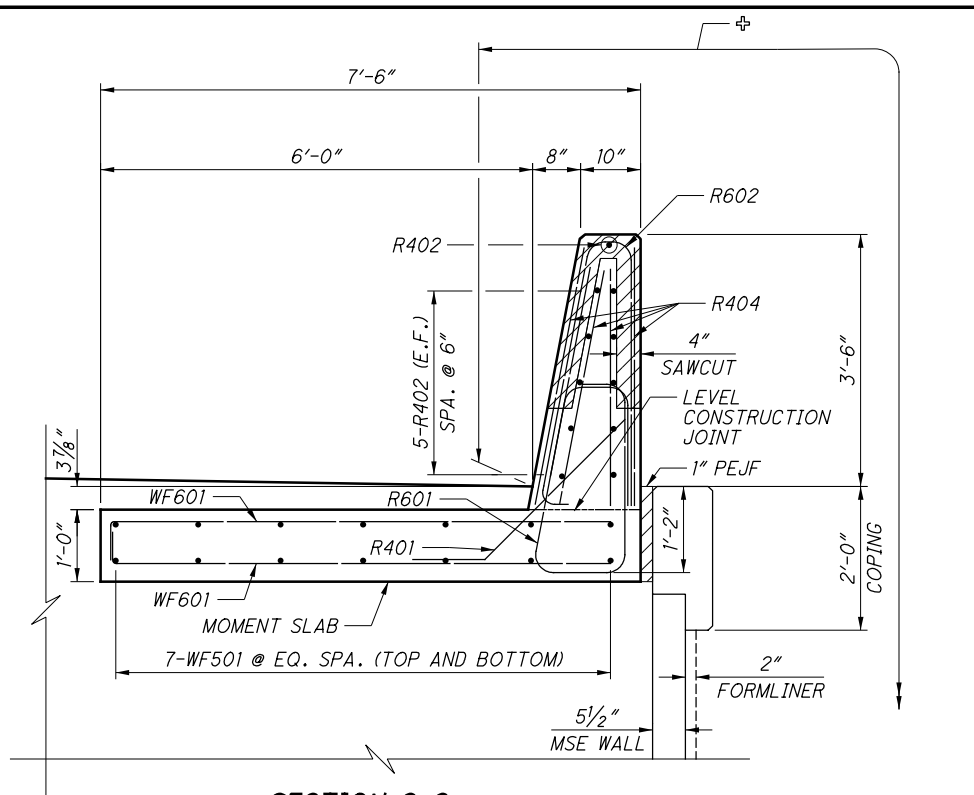


2026-03-24 - BU-17 - RECORD DRAWING PLANS

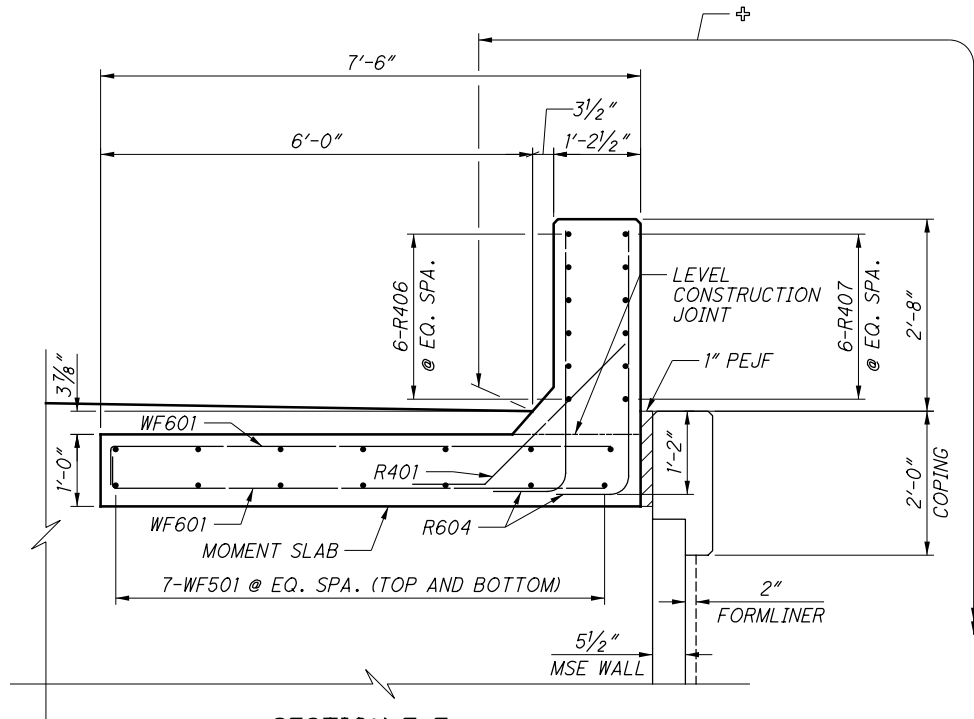
DESIGN AGENCY		DATE		REVIEWED		DRAWN		DESIGNED	
PRIMEWAY		6/14/21		SAN		JAT		JAT	
845 Park Plaza, Suite 300 Columbus, Ohio 43240		STRUCTURE FILE NUMBER		REVISED		KDC		WALL NO. 11	
RAILING AND MOMENT SLAB DETAILS (1 OF 2)		PID No. 102329		MSE WALL 11 ALONG RAMP N		SUM-76-77/8- 8.24/9.74/0.00		4 / 6	
								22 104	

ISSUE RECORD:	
NO.	DESCRIPTION

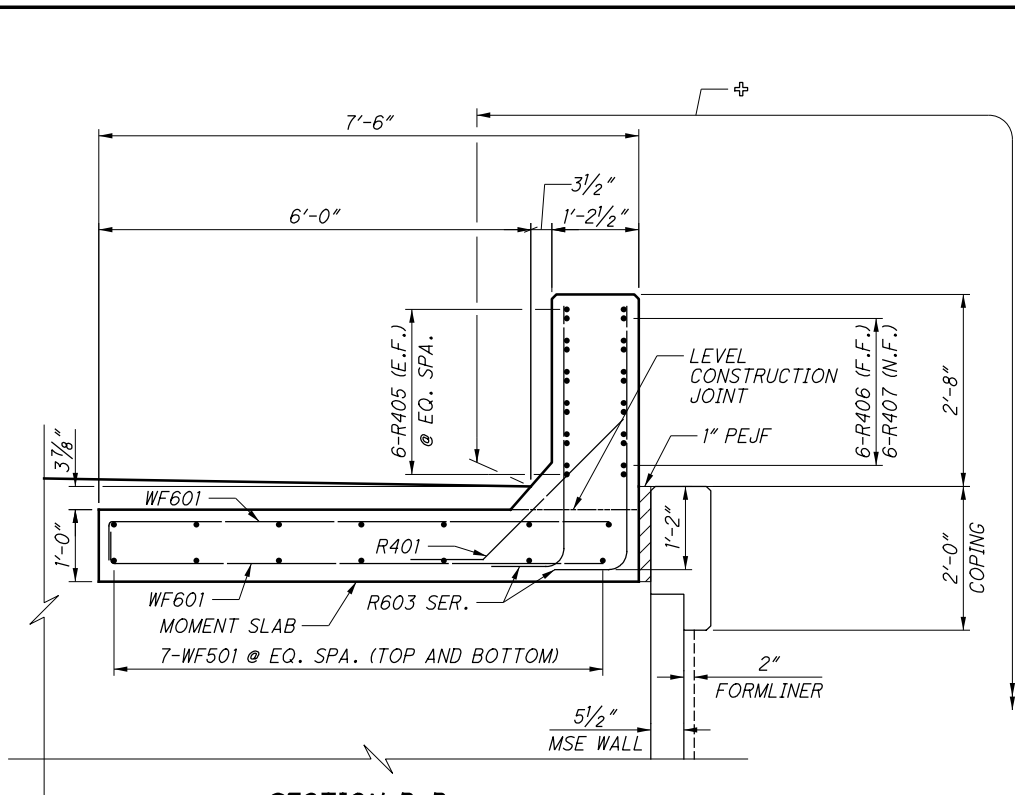
p:\w\ANV\A01PWINT01\parsons.com\Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\Walls (3,4, 8 & 11)\MSE Wall 11\sheet\102329_011_WM002.dgn Sheet 9/22/2021 2:01:47 PM



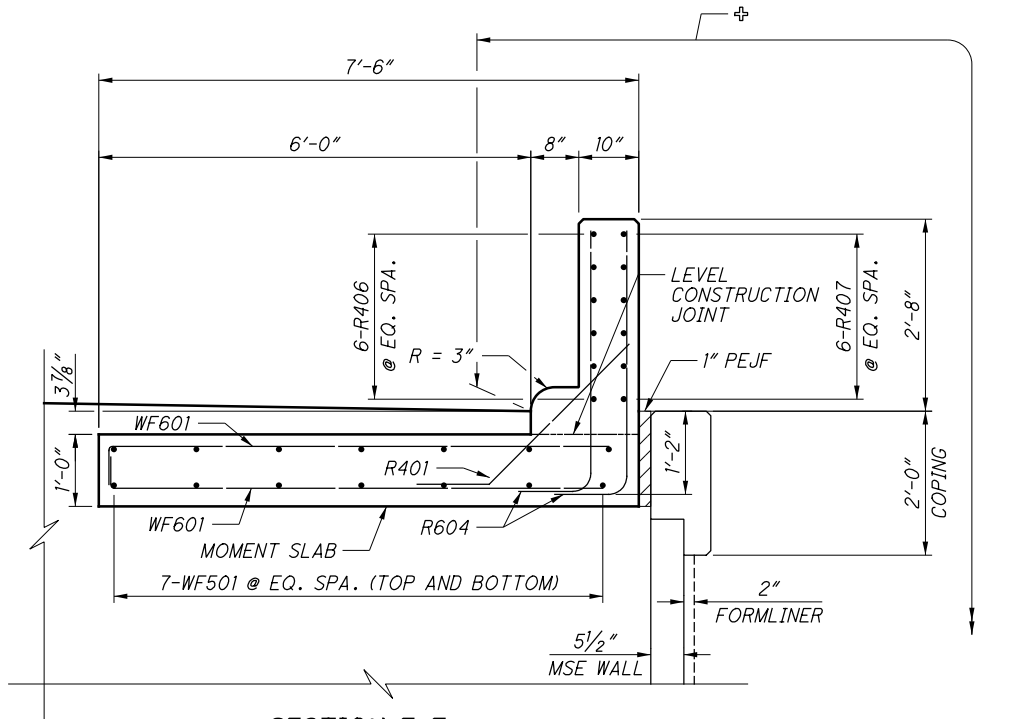
SECTION C-C



SECTION E-E



SECTION D-D



SECTION F-F

LEGEND:

⊕ - LIMITS OF SEALING CONCRETE SURFACES (EPOXY-URETHANE)

NOTES:

- SEE SHEET 4 / 6 FOR LOCATION OF SECTIONS C-C THRU F-F AND ADDITIONAL NOTES.
- FOR PAVEMENT BUILD-UP, SEE BU-34 PLANS.

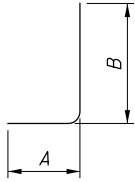
RAILING AND MOMENT SLAB DETAILS (2 OF 2)		DESIGN AGENCY	
WALL NO. 11		PRIMEWAY	
MSE WALL 11 ALONG RAMP N		845 Paine Plaza Columbus Ohio 43240	
SUM-76/77/8-8.24/9.74/0.00		DATE 6/14/21	
PID No. 102329		REVIEWED SAN	
5 / 6		DRAWN JAT	
23 / 104		DESIGNED JAT	
		CHECKED KDC	
		STRUCTURE FILE NUMBER	

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

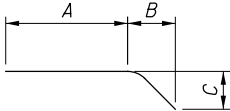
pw:\\V\\AN\\A01PW\\INT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\10 - Design\\102329\\Structures\\Walls (3,4, 8 & 11)\\MSE Wall 11\\sheets\\102329_011_WL001.dgn Sheet 9/22/2021 2:01:58 PM

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
	TOTAL				A	B	C	D	E	R	INC
WALL 11 PARAPET AND MOMENT SLAB											
R401	106	3'-9"	266	19	2'-9"	8½"	8½"				
*R402	11	33'-3"	-	STR							
*R403	22	25'-10"	-	STR							
*R404	4	12'-3"	-	STR							
*R405	40	10'-0"	-	STR							
*R406	6	6'-4"	-	25	2'-6"	2'-5"	1'-4"	1½"	5"		
*R407	6	5'-1"	-	STR							
R601	91	8'-1"	1105	37	9½"	2'-7"	7"	1'-0"			
R602	91	7'-6"	1025	23	6"	3'-6"	3'-3"			2"	
	2 SR	4'-6"				3'-8"					
R603	OF	TO	162	1	1'-0"	TO					1"
	11	5'-4"				4'-6"					
R604	8	4'-6"	54	1	1'-0"	3'-8"					
WF501	28	24'-3"	708	STR							
WF502	28	26'-1"	762	STR							
WF601	212	7'-4"	2335	1	6"	7'-0"					
**WF801	16	1'-6"	64	STR							
SUB-TOTAL			6,469								

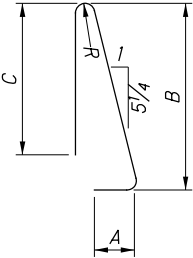
* - DENOTES GFRP REINFORCING BAR
** - DENOTES DOWEL BAR



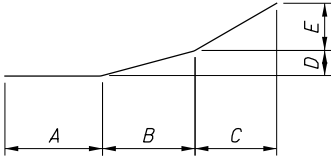
TYPE-1



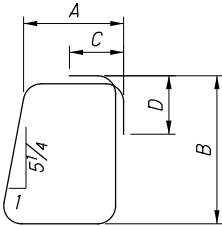
TYPE-19



TYPE-23



TYPE-25



TYPE-37

NOTES:

- ALL REINFORCING STEEL SHALL BE EPOXY COATED.
- BAR SIZE: THE BAR SIZE IS INDICATED IN THE BAR MARK. THE MARK BEGINS WITH TWO OR THREE LETTERS OR NUMBERS THAT IDENTIFY THE BAR LOCATION. THE NEXT ONE OR TWO DIGITS INDICATE THE BAR SIZE, AND THE REMAINING TWO DIGITS ARE THE SEQUENCE NUMBER.

EXAMPLE: SA1001
SA = SUPERSTRUCTURE BAR
10 = #10 BAR
01 = BAR SEQUENCE NUMBER 1
- BAR DIMENSIONS SHOWN ARE OUT-TO-OUT UNLESS OTHERWISE INDICATED.
- STR. IN THE BAR TYPE COLUMN INDICATES A STRAIGHT BAR.
- RAD INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.
- INCR. INDICATES THE LENGTH INCREMENT FOR SERIES BARS.
- STD. WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF A BAR.
- FIELD BEND BARS AS NECESSARY TO MATCH CURVATURE OF ROADWAY.

REINFORCING STEEL LIST

WALL NO. 11

MSE WALL 11 ALONG RAMP N

SUM-76/77/8-8.24/9.74/0.00

PID No. 102329

6/6

24/104

DESIGN AGENCY

PRIMEWAY

845 Park Plaza, Suite 300

Columbus Ohio 43240

REVIEWED

DATE

6/14/21

DRAWN

FILE NUMBER

DESIGNED

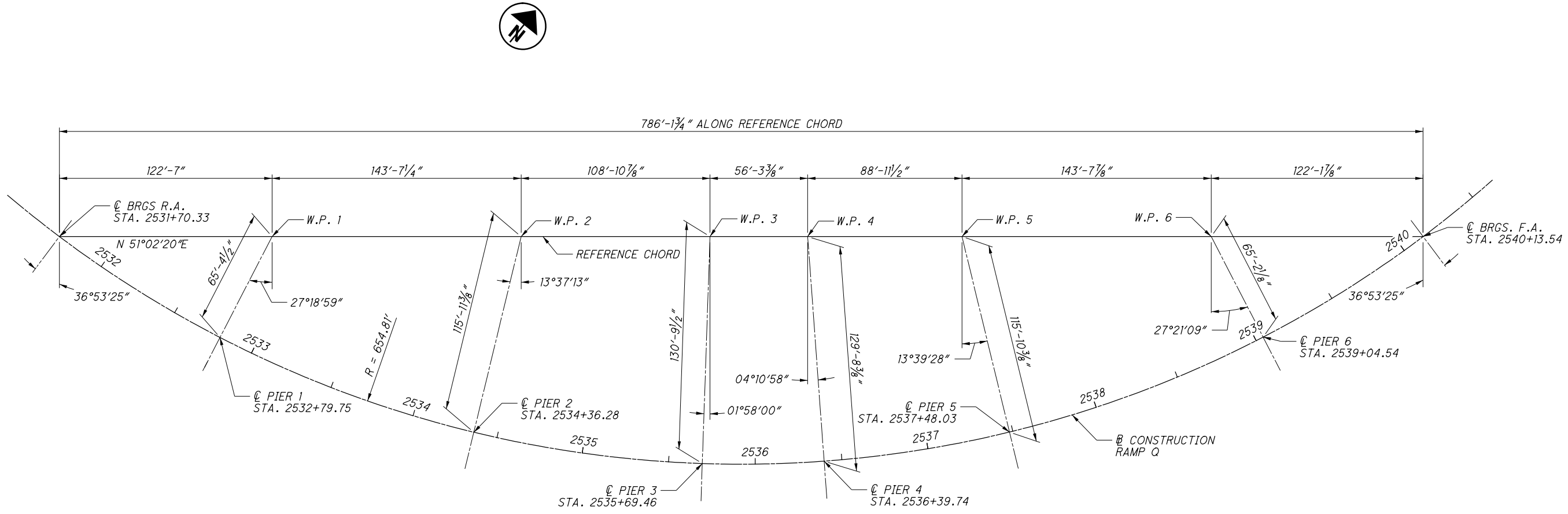
STRUCTURE

FILE NUMBER

CHECKED

KDC

ISSUE RECORD:		DESCRIPTION
NO.	DATE	



BRIDGE LAYOUT DIAGRAM

- NOTES:
- SEE SHEET 1 / 80 FOR RAMP Q CURVE DATA.
 - ALL SUBSTRUCTURES ARE ORIENTED RADially TO CONSTRUCTION RAMP Q.

SUM-76 / 77 / 8 - 10.99 / 11.54 / 0.00 PID No. 101402	BRIDGE LAYOUT DIAGRAM SUM-76-1148Q RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB		DESIGNED BDE	DRAWN BDE	REVIEWED JCS	DATE 4/29/19	BURGESS & NIPL Engineers Architects Planners 5085 REED ROAD, COLUMBUS, OHIO 43220
	3 / 80	CHECKED BES	REVISED	STRUCTURE FILE NUMBER 7706066			

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\\\\ANV\\A01PW\\NT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES\\P2\\Structures\\Sheets\\Ramp_Q\\076_11661_S\\N002.dgn Sheet 6/1

ITEM 513 - STRUCTURAL STEEL MEMBERS, MODULAR EXPANSION JOINT, LEVEL UF, AS PER PLAN:

THE EXPANSION JOINT AT PIER 3 SHALL BE WATSON BOWMAN ACME (WABO® MODULAR), DS BROWN (STEELFLEX® MODULAR), OR APPROVED ALTERNATE.

THE MANUFACTURER SHALL SUBMIT DESIGN CALCULATIONS SHOWING THAT THE DEVICE CAN MEET THE IMPACT AND FATIGUE DESIGN REQUIREMENTS SET FORTH BY THE CURRENT AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

A. DESCRIPTION

FURNISH ALL MATERIALS, SERVICES, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO DESIGN, FABRICATE, INSPECT, TEST AND INSTALL MODULAR EXPANSION JOINTS IN ACCORDANCE WITH THE PLANS AND THESE NOTES. ALL REQUIREMENTS OF 513, UF LEVEL FABRICATION APPLY, UNLESS MODIFIED BY THESE NOTES.

B. DESIGN

- PREPARE AND CHECK THE DESIGN UNDER THE AUTHORITY OF AN OHIO REGISTERED PROFESSIONAL ENGINEER. THE REGISTERED ENGINEER SHALL SEAL, SIGN AND DATE THE DESIGN CALCULATIONS AND SHOP DRAWINGS.
- INCLUDE DESIGN CALCULATIONS WITH THE CONTRACTOR'S SUBMISSION OF SHOP DRAWINGS PER 513.06.
- PROVIDE A DETAILED INSTALLATION PROCEDURE AND INCLUDE ANY SPECIFIC MANUFACTURER'S NOTES NECESSARY FOR COMPLETION OF THE WORK.
- DESIGN AND TEST THE MODULAR JOINT COMPONENTS, JOINT ARMOR AND ANCHORAGES ACCORDING TO THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS.
- DESIGN TEMPORARY AND FIELD CONNECTIONS TO THE BRIDGE TO ACCOMMODATE ADJUSTMENTS FOR ROADWAY GEOMETRY AND VARYING TEMPERATURE.
- DESIGN FOR THE PLAN SPECIFIED MOVEMENT PER AASHTO LRFD 3.12.2 FOR A COLD CLIMATE (TEMPERATE RANGE IS FROM -30° F TO +120° F WITH BASE TEMPERATURE SET TO 60° F).
- SUPPLY SUPPORT BAR BEARINGS TO TRANSFER THE LOAD FROM THE SUPPORT BARS TO THE JOINT ARMOR.
- FOR DESIGN OF THE DECK JOINT AT ALL LIMIT STATES, THE DYNAMIC LOAD ALLOWANCE (IM) SHALL BE TAKEN AS 125% OF THE STATIC EFFECT OF EITHER THE DESIGN TRUCK OR THE DESIGN TANDEM.
- SUPPLY EQUALIZATION SPRINGS TO COUNTER THE COMPRESSION FORCES FROM THE SEALING ELEMENTS AND MAINTAIN EQUAL EXPANSION PROPERTIES FOR EACH SEALING ELEMENT ACROSS THE JOINT.
- SUPPLY CONTROL SPRINGS WHICH WORK LONGITUDINALLY TO MAINTAIN EQUIDISTANT SPACING BETWEEN TRANSVERSE SEPARATION BEAMS.
- SUPPLY SEPARATION BEAMS/TRANSVERSE DIVIDERS/CENTER BEAMS TO LIMIT TOTAL HORIZONTAL MOVEMENT IN ANY INDIVIDUAL STRIP SEAL.
- SUPPLY A STRIP SEAL TYPE SEAL CONNECTED TO MATCHING RETAINERS CONNECTED TO THE JOINT ARMOR AND THE SEPARATION BEAMS. DO NOT EXCEED 3.15 INCHES OF TOTAL HORIZONTAL MOVEMENT IN ANY INDIVIDUAL STRIP SEAL.
- SUPPLY REMOVABLE AND REPLACEABLE NEOPRENE SEALS, SUPPORT BAR BEARINGS AND EQUALIZATION SPRINGS.
- SET SEALS AND RETAINERS 1/8" LOWER THAN THE ROADWAY SURFACE.

C. MATERIALS

- SUPPLY STRUCTURAL STEEL MEETING ASTM A709 GRADE 50. SUPPLY SEPARATION BEAMS/TRANSVERSE DIVIDERS/CENTER BEAMS, EDGE BEAMS AND JOINT ARMOR MEETING CHARPY V NOTCH IMPACT REQUIREMENTS PER ASTM A709 TABLE S1.2 ZONE 2 TEMPERATURE RANGE. SUPPLY TUBE SECTIONS MEETING ASTM A501 OR A500 GRADE B.
- SUPPLY ASTM A240, TYPE 304 STAINLESS STEEL, 13 GAGE MINIMUM THICKNESSES WITH AN 8.0μ IN MIRROR FINISH FOR SLIDING SURFACES IN CONTACT WITH PTFE.
- SUPPLY TESTING AND REPORTS BY THE MANUFACTURER OR AN INDEPENDENT TESTING LABORATORY FOR ALL ELASTOMERIC, PTFE URETHANE AND PREFORMED FABRIC MATERIALS USED IN ALL BEARINGS AND SPRINGS. THE SUBMISSION OF MATERIAL CERTIFICATION AND TESTING DATA SHALL BE PER 513.08. THE MODULAR BRIDGE JOINT SYSTEM SHALL BE TESTED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS APPENDIX A19.
- SUPPLY STRIP SEALS CONFORMING TO ASTM D5973. SUBMIT CERTIFIED TEST DATA PER 513.08 FROM THE MANUFACTURER OR AN ACCREDITED LABORATORY. D5973 SECTION 8, LOT SIZE IS ONE SAMPLE PER JOINT. A SAMPLE IS A PIECE 4 FEET LONG WITH ALL MANUFACTURES' MARKINGS. THE SEAL AND RETAINER ARE AN INTEGRAL SYSTEM SUPPLIED BY ONE MANUFACTURER.
- SEAL RETAINERS: EXTRUDE, HOT ROLL OR MACHINE, STEEL RETAINERS INTO A SOLID SHAPE. RETAINERS MANUFACTURED FROM BENT PLATE OR BUILT UP PIECES ARE NOT ACCEPTABLE. THE INTERNAL DIMENSIONS OF THE RETAINER SHALL BE SPECIFIED BY THE MANUFACTURER TO ACHIEVE POSITIVE SEAL ANCHORAGE.

- SEPARATION BEAMS/TRANSVERSE DIVIDERS/CENTER BEAMS SHALL BE A SOLID, MACHINED OR EXTRUDED STEEL SECTION.
- LUBRICANT - ADHESIVE. ONE PART MOISTURE CURING POLYURETHANE COMPOUND MEETING THE REQUIREMENTS OF ASTM D4070 AND AS SPECIFIED BY THE SEAL MANUFACTURER.
- HARDWARE SHALL BE ASTM F3125, GRADE A325 TYPE 1, GALVANIZED.

D. FABRICATION

- THE MODULAR JOINTS SHALL BE FABRICATED ACCORDING TO C&MS 513.
- SHOP ASSEMBLE THE MODULAR JOINT WITH ALL COMPONENTS EXCEPT, NEOPRENE SEALS, PER 513.24 EXCEPT THAT FULL ASSEMBLY IS REQUIRED WITH PHASED CONSTRUCTION.
- JOINTS IN STRIP SEALS: NO JOINTS ARE ALLOWED.
- JOINTS IN RETAINERS: WELDS ARE WATER TIGHT, PARTIAL PENETRATION WELDS AROUND THE OUTER PERIPHERY OF THE ABUTTING SURFACES. MAKE SPLICES ONLY IN COMPRESSION ZONES OF THE JOINT ARMOR. GRIND FLUSH ALL WELDS IN CONTACT WITH THE SEAL AND JOINT ARMOR. DO NOT USE SHORT PIECES OF RETAINERS LESS THAN 6'-0" LONG, UNLESS REQUIRED AT CURBS OR SIDEWALKS. DO NOT PROVIDE ADDITIONAL SPLICES IN RETAINERS AT CURB OR SIDEWALK SECTIONS OTHER THAN REQUIRED FOR GEOMETRY.
- SHOP OR FIELD WELDS OF CENTER BEAMS , SHALL BE COMPLETE PENETRATION WELDS, GROUND TO PROVIDE SMOOTH TRANSITIONS AND BE 100% ULTRASONICALLY TESTED PER AASHTO/AWS BRIDGE WELDING CODE, WITH TENSION ACCEPTANCE CRITERIA, WITNESSED BY THE DEPARTMENT.
- SUPPORT BAR CONNECTIONS SHALL BE COMPLETE PENETRATION WELDS GROUND TO PROVIDE SMOOTH TRANSITIONS AND BE 100% ULTRASONICALLY TESTED PER AASHTO/AWS BRIDGE WELDING CODE, WITH TENSION ACCEPTANCE CRITERIA, WITNESSED BY THE DEPARTMENT.
- TEMPORARY SUPPORTS: FABRICATOR DESIGNED AND INSTALLED SUPPORTS ARE REQUIRED TO SUPPORT SHIPPING, ERECTION AND CONSTRUCTION FORCES WITHOUT DAMAGE TO THE STEEL ARMOR OR COATINGS. THESE SUPPORTS SHALL BE ADJUSTABLE FOR FIELD TEMPERATURE SETTING. PROVIDE PROTECTIVE LAYERS BETWEEN TEMPORARY SUPPORTS AND COATED SURFACES TO PREVENT DAMAGE.

E. COATING

- GALVANIZE OR METALIZE ALL STEEL SURFACES AND COMPONENTS, EXCEPT AT STAINLESS STEEL AND PTFE SLIDING SURFACES. THESE COATING MAY BE MIXED ON ONE ASSEMBLY, IF ALL SIMILAR COMPONENTS OF THE ASSEMBLY HAVE THE SAME COATING TYPE.
- PROVIDE A GALVANIZED COATING PER ASTM A123, WITH A MINIMUM THICKNESS OF 4 MILS. CLEAN EXCESSIVE GALVANIZING AS NECESSARY TO ACHIEVE MECHANICAL MOVEMENT AND SEAL INSTALLATION.
- PROVIDE A METALIZED COATING PER SOCIETY FOR PROTECTIVE COATINGS (SSPC) SPECIFICATION SSPC-CS23.00 FOR THERMAL SPRAY METALLIC COATINGS. THE COATING SHALL BE A MINIMUM OF 8 MILS THICK. THE METALIZING WIRE SHALL BE 100% ZINC. AREAS OF STRUCTURAL STEEL THAT ARE IN CONTACT WITH CAST-IN-PLACE CONCRETE SHALL HAVE AN ADDITIONAL COATING. THE COATING SHALL BE THE EPOXY INTERMEDIATE COAT SPECIFIED IN CMS 514. THE COATING THICKNESS WILL COVER ALL PEAKS, VALLEYS AND SURFACE ROUGHNESS ATTRIBUTED TO METALIZING.
- COATING REPAIRS: DAMAGED COATINGS SHALL BE REPAIRED BY ASTM A780, ANNEX "A1. REPAIR USING ZINC BASED ALLOYS". THE PROCEDURE SHALL BE AS FOLLOWS: REMOVE SURFACE CONTAMINATES, PREHEAT TO 600 DEGREES F, AND APPLY ZINC COATING BY RUBBING WITH PURE WITH A PURE ZINC STICK OR SPRINKLING ZINC POWDER ON THE PREHEATED SURFACE, TO ACHIEVE A MINIMUM COATING THICKNESS OF 6 MILS. MAKE COATING REPAIRS OF WELDED SURFACES PRIOR TO CONCRETE PLACEMENT OPERATIONS.
- THE METALIZED OR GALVANIZED COATINGS SHOULD NOT BE FIELD PAINTED, EXCEPT FOR AREAS DAMAGED BY CONNECTION TO PAINTED SUPERSTRUCTURE STEEL MEMBERS. THESE AREAS SHALL BE PAINTED USING THE SAME SYSTEM SPECIFIED FOR THE SUPERSTRUCTURE.
- PRIOR TO SHIPPING, RETAINER GROOVES SHALL BE PROTECTED FROM CONSTRUCTION DEBRIS BY THE INSTALLATION OF BACKER RODS OR OTHER EFFECTIVE MASKING TECHNIQUES.

F. INSTALLATION

- A JOINT MANUFACTURER'S TECHNICAL REPRESENTATIVE TO PHYSICALLY OVERSEE THE FABRICATION, INSTALLATION, ADJUSTMENT AND TESTING DURING ALL OPERATIONS. WHERE SPECIAL INSTRUCTIONS ARE NOT CONTAINED HEREIN OR ELSEWHERE IN THESE NOTES, DIRECTION FOR THE INSTALLATION SHALL BE ACCORDING TO THE RECOMMENDATIONS OF THE TECHNICAL REPRESENTATIVE.
- COORDINATE AND SCHEDULE THE TECHNICAL REPRESENTATIVE.

- INSTALL THE SUPERSTRUCTURE SUPPORTING UNITS BEFORE INSTALLING THE MODULAR JOINT. POSITION THE JOINT TO MATCH ROADWAY GEOMETRY SUPERSTRUCTURE CONNECTIONS AND TEMPERATURE OPENING. TAKE CARE TO MAINTAIN EXACT ALIGNMENT OF ADJACENT ENDS OF THE ARMOR AND SEPARATION BEAMS/TRANSVERSE DIVIDERS/CENTER BEAMS FOR FIELD WELDED UNITS. PROVIDE TEMPORARY SUPPORTS AS DIRECTED BY THE MANUFACTURER TO MAINTAIN THE PROPER POSITIONING. FOR PHASED CONSTRUCTION, THE CONTRACTOR'S METHODS FOR INSTALLATION AND TEMPORARY SUPPORTS SHALL ACHIEVE SEPARATION OF THE PHASES AND UNRESTRICTED TEMPERATURE MOVEMENT.
- THE MODULAR EXPANSION JOINTS SHALL BE INSTALLED, ANCHORED, AND FUNCTIONING WITH UNRESTRICTED TEMPERATURE MOVEMENT PRIOR TO ENCASING IN CONCRETE. THE MODULAR EXPANSION JOINTS SHALL BE INSTALLED AFTER PLACING DECK CONCRETE IN THE MID-SPAN REGIONS, BUT PRIOR TO PLACING CONCRETE IN THE BLOCK OUTS.
- PERFORM CONCRETE PLACEMENT USING VIBRATION AND HAND WORK AS NECESSARY TO ACHIEVE CONSOLIDATION AND ELIMINATE AIR VOIDS.
- PLACE THE BLOCK OUT CONCRETE ON THE DECK SIDE FIRST. CHECK THE ABUTMENT OR ADJACENT SPAN SIDE OF THE MODULAR JOINT FOR ALIGNMENT AND TEMPERATURE ADJUSTMENT. TEMPERATURE SHALL BE MEASURED AT THE UNDERSIDE OF THE CONCRETE DECK AT EACH END AND MID-SPAN TO ACHIEVE THE AVERAGE SUPERSTRUCTURE TEMPERATURE. PLACE THE BACKWALL OR ADJACENT SPAN BLOCK OUT CONCRETE SECOND. THE MANUFACTURER'S REPRESENTATIVE SHALL CHECK THAT TEMPERATURE MOVEMENT HAS NOT CAUSED ANY DAMAGE TO THE BOND BETWEEN THE JOINT AND THE CONCRETE.
- EXAMINE SEAL RETAINERS FOR SOIL OR DEFECTS THAT CAN DAMAGE THE SEAL. REPAIR ANY DEFECTS AS DIRECTED BY THE MANUFACTURER'S REPRESENTATIVE.
- SOLVENT CLEAN THE NEOPRENE SEAL ELEMENTS AND THE RETAINER GROOVES TO REMOVE OIL, GREASE OR OTHER SOIL IMMEDIATELY PRIOR TO INSTALLING THE SEALS. INSTALL SEALS USING PROCEDURES AND ADHESIVE SPECIFIED BY THE JOINT MANUFACTURER. KEEP THE BONDING SURFACES CLEAN, DRY AND WARMER THAN 45°F.
- TEST THE INSTALLED MODULAR JOINT FOR LEAKS. FLOOD THE TOTAL EXPANSION JOINT LENGTH WITH WATER FOR A PERIOD OF NOT LESS THAN ONE HOUR. COVER THE ENTIRE JOINT SYSTEM BY EITHER PONDING OR FLOWING WATER. LOCATE ANY POINTS OF LEAKAGE AND TAKE ANY AND ALL MEASURES NECESSARY TO STOP THE LEAKAGE. PERFORM THIS WORK AT THE CONTRACTOR'S EXPENSE. PERFORM A SECOND WATER TEST AFTER ALL REPAIRS HAVE BEEN MADE.

G. METHOD OF MEASUREMENT

THE DEPARTMENT WILL MEASURE EACH ITEM BY THE NUMBER OF FEET HORIZONTALLY ALONG THE JOINT CENTERLINE AND BETWEEN THE OUTER LIMITS OF THE FABRICATED JOINT.

H. BASIS OF PAYMENT

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICES AS FOLLOWS:

ITEM	UNIT	DESCRIPTION
513	FT	STRUCTURAL STEEL MEMBERS, MODULAR EXPANSION JOINT, LEVEL UF, AS PER PLAN

29

104

5 / 80

SUM-76 / 77 / 8-10.99 / 11.54 / 0.00

PID No. 101402

GENERAL NOTES - 2

SUM-76-1148Q

RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

BURGESS & NIPLE

Engineers ■ Architects ■ Planners

5085 REED ROAD, COLUMBUS, OHIO 43220

DATE

4/29/19

REVIEWED

JCS

DRAWN

AAA

DESIGNED

BES

CHECKED

MAB

STRUCTURE FILE NUMBER

7706066

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

p:\V\ANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_11661_SNO03.dgn Sheet 6/1

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 5, AS PER PLAN:

PERFORM THE WORK PER CMS 513, EXCEPT AS NOTED BELOW.

SELECT ONE OF THE TWO OPTIONS DESCRIBED BELOW:

OPTION 1: FIELD PAINTING

APPLY SHOP COATING PER 513.27.

APPLY INTERMEDIATE AND FINISH COATS IN THE FIELD PER CMS 514 TO ALL STRUCTURAL STEEL SURFACES, INCLUDING BUT NOT LIMITED TO GIRDERS, CROSSFRAMES, STIFFENERS, CONNECTION PLATES, SPLICE PLATES, BOLTS, AND BEARING LOAD PLATES.

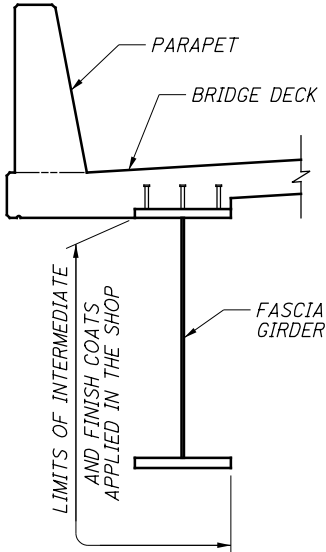
FOR THE URETHANE FINISH COAT, USE FEDERAL COLOR STANDARD NO. 10076.

FOR OPTION 1, SURFACE PREPARATION, PRIME COAT, INTERMEDIATE COAT, FINISH COAT, AND REPAIR WORK ARE CONSIDERED INCIDENTAL TO ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 5, AS PER PLAN. ALL APPLICABLE PROVISIONS OF CMS 514 SHALL APPLY.

OPTION 2: SHOP METALIZING AND SHOP PAINTING OF FASCIA GIRDERS

DELETE THE REQUIREMENTS OF 513.27. SHOP METALIZE ALL STRUCTURAL STEEL SURFACES PER SUPPLEMENTAL SPECIFICATION (SS) 845, INCLUDING BUT NOT LIMITED TO GIRDERS, CROSSFRAMES, STIFFENERS, CONNECTION PLATES, SPLICE PLATES, AND BEARING LOAD PLATES, EXCEPT DO NOT METALIZE THE TOP SURFACE OF GIRDER TOP FLANGES. APPLY A PRIME COAT, 708.01, IN THE SHOP TO THE TOP SURFACE OF GIRDER TOP FLANGES. THE PRIME COAT SHALL BE A MIST COATING FROM 0.5 TO 1.5 MILS.

APPLY INTERMEDIATE AND FINISH COATS IN THE SHOP PER CMS 514 TO THE SURFACES NOTED IN THE FOLLOWING DIAGRAM (APPLIES TO BOTH FASCIA GIRDERS IN EACH SUPERSTRUCTURE UNIT, AND INCLUDES STIFFENERS AND SPLICE PLATES/BOLTS ON THE OUTBOARD (FASCIA) SIDE AND BOTTOM OF FASCIA GIRDERS):



FOR THE URETHANE FINISH COAT, USE FEDERAL COLOR STANDARD NO. 10076.

REPAIR DAMAGE TO THE METALIZING CAUSED DURING STORAGE, TRANSPORTATION, ERECTION, BOLTING, WELDING, FORMING, CONCRETE PLACEMENT, AND FORM REMOVAL OPERATION, ACCORDING TO CMS 711.02. REPAIR DAMAGE TO THE GALVANIZED COATING ON THE NUTS, BOLTS, AND WASHERS, IN THE FIELD DUE TO THE BOLT TIGHTENING OPERATIONS, ACCORDING TO CMS 711.02. EXERCISE EXTREME CARE WHILE HANDLING THE STEEL DURING ERECTION, AND DURING SUBSEQUENT CONSTRUCTION OF THE BRIDGE. INSULATE THE STEEL FROM THE BINDING CHAINS BY SOFTENERS AND PAD ALL HOOKS AND SLINGS THAT ARE USED TO HOIST/ERECT THE STEEL MEMBERS.

FOR OPTION 2, SURFACE PREPARATION, METALIZING, SEALING, PRIME COAT, INTERMEDIATE COAT, FINISH COAT, AND REPAIR WORK ARE CONSIDERED INCIDENTAL TO ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 5, AS PER PLAN. ALL APPLICABLE PROVISIONS OF CMS 514 SHALL APPLY.

ASBESTOS NOTIFICATION:

AN ASBESTOS SURVEY OF BRIDGE NO. SUM-76-1165L WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT.

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, WILL BE PROVIDED TO THE SUCCESSFUL BIDDER AT THE PRECONSTRUCTION MEETING. THE CONTRACTOR SHALL COMPLETE THE FORM AND RETURN IT TO THE DISTRICT CONSTRUCTION ENGINEER ALONG WITH THE PERMIT FEE IF APPLICABLE. THE COMPLETION OF THIS FORM MAY BE PERFORMED AT THE PRECONSTRUCTION MEETING. THE DISTRICT CONSTRUCTION ENGINEER SHALL SUBMIT THE FORM AND CONTRACTOR'S FEE TO THE OEPA DISTRICT OFFICE AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF THE DEMOLITION OF THE BRIDGE. THE DISTRICT CONSTRUCTION ENGINEER SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE CONTRACTOR. THE CONTRACTOR SHALL NOT COMMENCE DEMOLITION OF THE STRUCTURE UNTIL THE ABOVE REQUIREMENTS ARE MET.

INFORMATION ON THIS FORM WILL INCLUDE:
- THE CONTRACTOR'S NAME AND ADDRESS
- THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVALS
- A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHODS TO BE USED

A COPY OF THE OEPA FORM IS AVAILABLE FOR INSPECTION AT THE ODOT, DISTRICT 4 OFFICE AT 2088 S. ARLINGTON ROAD, AKRON, OHIO 44306.

BASIS FOR PAYMENT:
THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE BID ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN:

IN ADDITION TO THE REQUIREMENTS OF CMS 511, THIS ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO FABRICATE AND INSTALL PARAPET AESTHETIC SIGNS AS SHOWN IN THE AESTHETIC PLANS, INCLUDING SIGNS, MOUNTING HARDWARE, SILICONE CAULK AND OTHER INCIDENTALS NECESSARY TO COMPLETE THIS ITEM OF WORK.

STANDARD ABBREVIATIONS LIST:

APPROX. = APPROXIMATE
BOT. = BOTTOM
BRG. = BEARINGS
BRGS. = BEARINGS
B.S. = BOTH SIDES
B# = BEAM NUMBER
c/c = CENTER-TO-CENTER
C.J. = CONSTRUCTION JOINT
CJP = COMPLETE JOINT PENETRATION
CLR. = CLEAR
CMS OR C&MS = CONSTRUCTION AND MATERIALS SPECIFICATIONS
CONST. = CONSTRUCTION
CS = INDICATES BUTT WELD SUBJECT TO COMPRESSIVE STRESSES ONLY
CVN = CHARPY V-NOTCH
DIA. = DIAMETER
EB = EASTBOUND
E.F. = EACH FACE
EL. = ELEVATION
EMBED. = EMBEDMENT
EQ. = EQUAL
EXP. = EXPANSION
F.A. = FORWARD ABUTMENT
F.F. = FAR FACE
F.S. = FIELD SPLICE
FWD = FORWARD
GFRP = GLASS FIBER REINFORCED POLYMER
G# = GIRDER NUMBER
HMWM = HIGH MOLECULAR WEIGHT METHACRYLATE
LT. = LEFT
MAX. = MAXIMUM
M.C. = MECHANICAL CONNECTOR
M.E. = MATCH EXISTING
MIN. = MINIMUM
MGS = MIDWEST GUARDRAIL SYSTEM
NB = NORTHBOUND
N.F. = NEAR FACE
NPCPP = NON-PERFORATED CORRUGATED PLASTIC PIPE
o/o = OUT-TO-OUT
PCB = PORTABLE CONCRETE BARRIER
PCPP = PERFORATED CORRUGATED PLASTIC PIPE
PEJF = PREFORMED EXPANSION JOINT FILLER
P.G. = PROFILE GRADE
R.A. = REAR ABUTMENT
RAD. = RADIUS
RT. = RIGHT
SB = SOUTHBOUND
SHLD. = SHOULDER
SHT. = SHEET
S.O. = SERIES OF
SPA. = SPACES
STA. = STATION
SYMM. = SYMMETRICAL
T&B = TOP AND BOTTOM
T/R = TOP OF ROCK
t/t = TOE-TO-TOE
U.N.O. = UNLESS NOTED OTHERWISE
VAR. = VARIES
WB = WESTBOUND
W.P. = WORK POINT

30

104

6 / 80

SUM-76 / 77 / 8 -
10.99 / 11.54 / 0.00

PID No. 101402

GENERAL NOTES - 3

SUM-76-1148Q

RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

BURGESS & NIPL

Engineers ■ Architects ■ Planners

5085 REED ROAD, COLUMBUS, OHIO 43220

DATE
4/29/19

REVIEWED
JCS

DRAWN
AAA

DESIGNED
BES

CHECKED
MAB

STRUCTURE FILE NUMBER
7706066

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\\V\ANV\A01PW\INT01\parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_1148Q\Sheets\076_11661_SQ001.dgn Sheet 6/1/2021 9:07:34 AM p002694C

ESTIMATED QUANTITIES							CALC.	DATE	CHK'D	DATE
							MDR	5/19/20	JHL	5/19/20
ITEM	ITEM EXT.	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTR.	GENERAL	TOTAL	PARTICIPATION 07/IMS/BR	SHEET REF.
OPTION A										
202	11003	LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	LS	LS	6 , 9 / 80
202	22900	SY	APPROACH SLAB REMOVED				III	III	III	
503	21100	CY	UNCLASSIFIED EXCAVATION	341				341	341	
503	31120	CY	SHALE EXCAVATION	45				45	45	
505	11100	LS	PILE DRIVING EQUIPMENT MOBILIZATION	LS				LS	LS	
507	00100	FT	STEEL PILES HP10X42, FURNISHED	715				715	715	
507	00150	FT	STEEL PILES HP10X42, DRIVEN	660				660	660	
507	92201	FT	PREBORED HOLES, AS PER PLAN	195				195	195	4 / 80
509	10001	LB	EPOXY COATED REINFORCING STEEL, AS PER PLAN	24900	119800	239000	45700	429400	429400	4 / 80
511	34446	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			850		850	850	
511	34451	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN			277		277	277	6 / 80
511	41012	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		109			109	109	
511	44112	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	143				143	143	
511	45602	CY	CLASS QC4 MASS CONCRETE, SUBSTRUCTURE WITH QC/QA		357			357	357	
511	45603	CY	CLASS QC4 MASS CONCRETE, SUBSTRUCTURE WITH QC/QA, AS PER PLAN		44			44	44	4 ,23 / 80
511	46512	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	104				104	104	
512	10100	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	147	1008	1926		3081	3081	
513	10301	LB	STRUCTURAL STEEL MEMBERS, LEVEL 5, AS PER PLAN			1106700		1106700	1106700	6 / 80
513	17001	FT	STRUCTURAL STEEL MEMBERS, MODULAR EXPANSION JOINT, LEVEL UF, AS PER PLAN			34		34	34	5 / 80
513	20000	EACH	WELDED STUD SHEAR CONNECTORS			10379		10379	10379	
513	95030	EACH	STRUCTURAL STEEL, MISC.: PARAPET SLIDING PLATE JOINT			2		2	2	73 / 80
516	11210	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL			67		67	67	
516	13600	SF	1" PREFORMED EXPANSION JOINT FILLER				5	5	5	
516	44001	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (1'-8" x 1'-4" x 1¾")		4			4	4	51-53 / 80
516	44101	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (1'-8" x 1'-4" x 2¾")		8			8	8	51-53 / 80
516	44201	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (1'-4" x 1'-1" x 3¾")		4			4	4	51-53 / 80
516	44201	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (1'-4" x 1'-1" x 3⅞")		4			4	4	51-53 / 80
516	44301	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (1'-2" x 1'-0" x 4⅝")		4			4	4	51-53 / 80
516	44301	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (1'-4" x 1'-1" x 4⅝")	8				8	8	51-53 / 80
518	21200	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	90				90	90	
518	40000	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	97				97	97	
518	40010	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	17				17	17	
524	95100	EACH	DRILLED SHAFTS, MISC.: THERMAL INTEGRITY PROFILER (T.I.P.) WIRE CABLE TESTING OF DRILLED SHAFTS		6			6	6	4 / 80
524	95100	EACH	DRILLED SHAFTS, MISC.: CSL TESTING, 96"/102" DIAMETER SHAFT		4			4	4	4 / 80
524	95435	FT	DRILLED SHAFTS, 36" DIAMETER, INTO BEDROCK WITH QC/QA, AS PER PLAN		39			39	39	4 / 80
524	95443	FT	DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK WITH QC/QA, AS PER PLAN		119			119	119	4 / 80
524	95455	FT	DRILLED SHAFTS, 48" DIAMETER, INTO BEDROCK WITH QC/QA, AS PER PLAN		30			30	30	4 / 80
524	95463	FT	DRILLED SHAFTS, 54" DIAMETER, ABOVE BEDROCK WITH QC/QA, AS PER PLAN		48			48	48	4 / 80
524	95535	FT	DRILLED SHAFTS, 96" DIAMETER, INTO BEDROCK WITH QC/QA, AS PER PLAN		85			85	85	4 / 80
524	95543	FT	DRILLED SHAFTS, 102" DIAMETER, ABOVE BEDROCK WITH QC/QA, AS PER PLAN		23			23	23	4 / 80
526	30011	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (I=17"), AS PER PLAN				220	220	220	4 / 80
526	90010	FT	TYPE A INSTALLATION				67	67	67	
SPECIAL	53000200	LS	STRUCTURE, MISC.: TEMPORARY SUPPORTS FOR GIRDERS AT INTEGRAL PIER				LS	LS	LS	4 / 80
SPECIAL	53013000	SF	FORM LINER	527				527	527	4 / 80
601	20000	SY	CRUSHED AGGREGATE SLOPE PROTECTION	400				400	400	
855	00010	LB	POST-TENSIONING STRAND TENDON		1732			1732	1732	

REVISIONS BY:

PARSONS

100 East Campus View Boulevard, Suite 250
Columbus, OH 43235

ISSUE RECORD: BU-17 STRUCTURES

NO.	DATE	DESCRIPTION
1	03-2021	CIP WALLS TO MSE

2026-03-24 - BU-17 - RECORD DRAWING PLANS

ESTIMATED QUANTITIES - 1

SUM-76-1148Q

RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

SUM-76 / 77 / 8 -
10.99 / 11.54 / 0.00

PID No. 101402

7 / 80

31 / 104

DESIGNED
BES

CHECKED
MAB

DRAWN
AAA

REVIEWED
JCS

DATE
4/29/19

STRUCTURE FILE NUMBER
7706066

BURGESS & NIPLE

Engineers - Architects - Planners

5085 REED ROAD, COLUMBUS, OHIO 43220

ISSUE RECORD:	
NO.	DESCRIPTION

pw:\V\ANV\A01PW\INT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_11661_SQ001A.dgn Sheet 6/

ESTIMATED QUANTITIES							CALC.	DATE	CHK'D	DATE
							MDR	5/19/20	JHL	5/19/20
ITEM	ITEM EXT.	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTR.	GENERAL	TOTAL	PARTICIPATION 07/IMS/BR	SHEET REF.
OPTION B: ATC										
SPECIAL	20299000	LS	STRUCTURE REMOVED				LS	LS	LS	
SPECIAL	51299000	LS	SEALING OF CONCRETE	LS	LS	LS	LS	LS	LS	
SPECIAL	53099010	LS	SUBSTRUCTURE	LS	LS			LS	LS	
SPECIAL	53099020	LS	SUPERSTRUCTURE			LS		LS	LS	

2026-03-24 - BU-17 - RECORD DRAWING PLANS

7A

80

31A

104

SUM-76 / 77 / 8 -
10.99 / 11.54 / 0.00

PID No. 101402

ESTIMATED QUANTITIES - 2

SUM-76-1148Q

RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

DESIGNED
BES

CHECKED
MAB

DRAWN
AAA

REVISED

REVIEWED
JCS

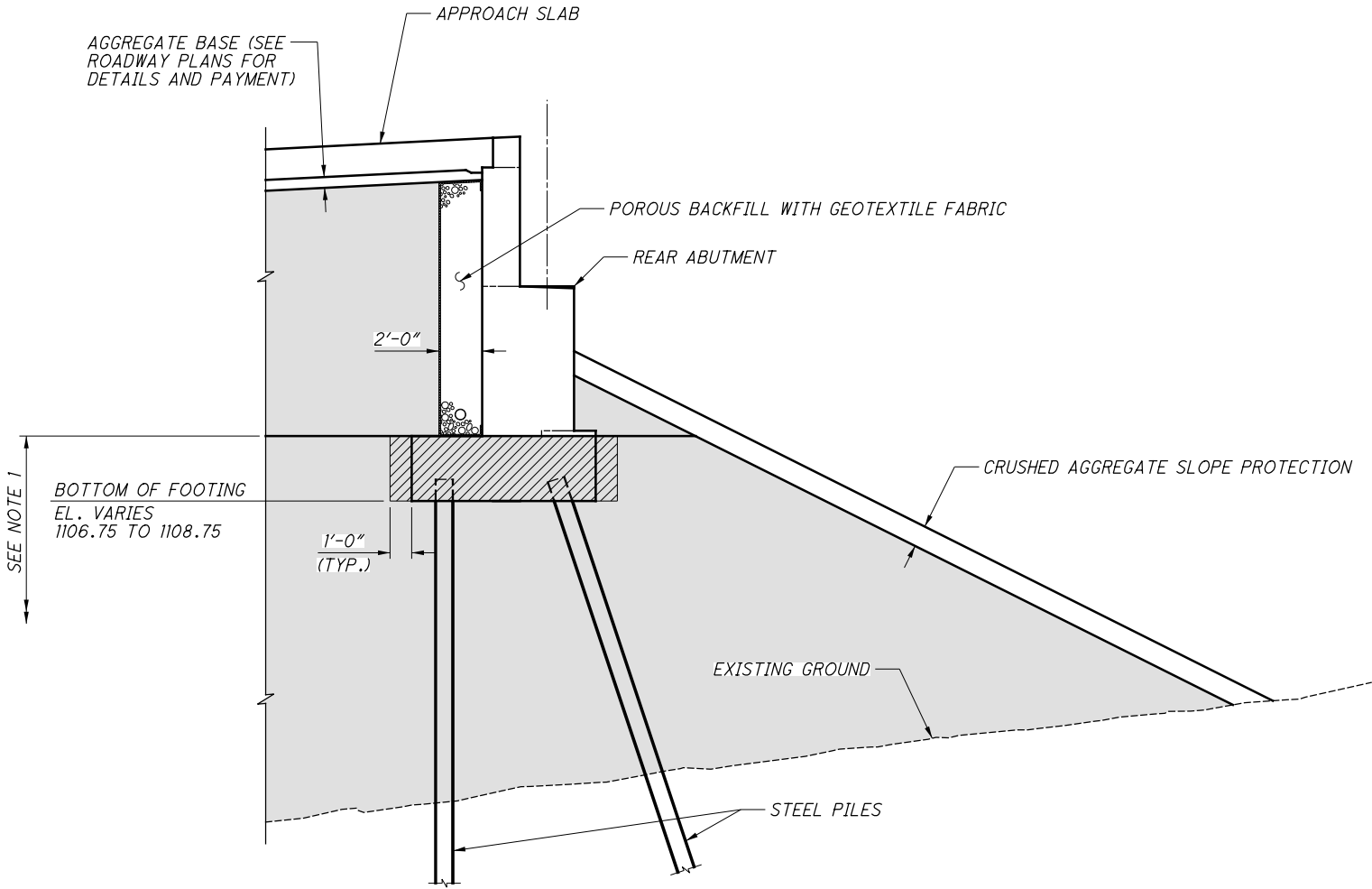
STRUCTURE FILE NUMBER
7706066

DATE
4/29/19

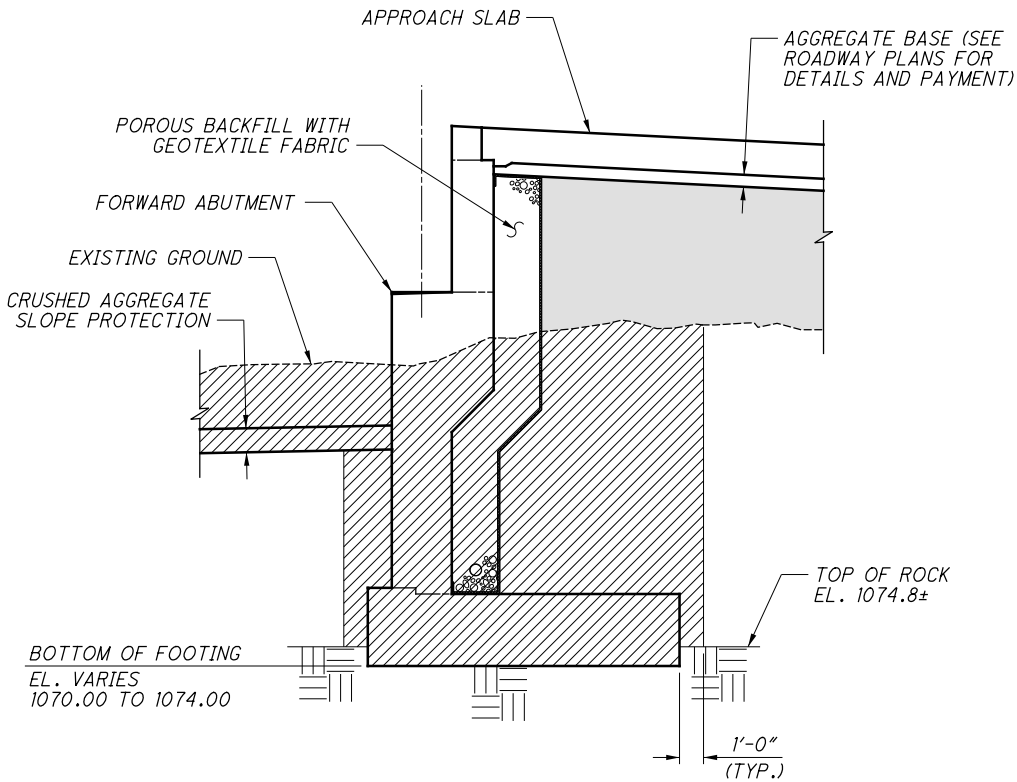
BURGESS & NIPLE
Engineers ■ Architects ■ Planners
5085 REED ROAD, COLUMBUS, OHIO 43220

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

6/1
pw:\\V\\AN\\A01PW\\NT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\\Structures\\Sheets\\Ramp_Q\\076_1166L_SM003.dgn Sheet



EXCAVATION & EMBANKMENT DIAGRAM - REAR ABUTMENT



EXCAVATION & EMBANKMENT DIAGRAM - FORWARD ABUTMENT

LEGEND:

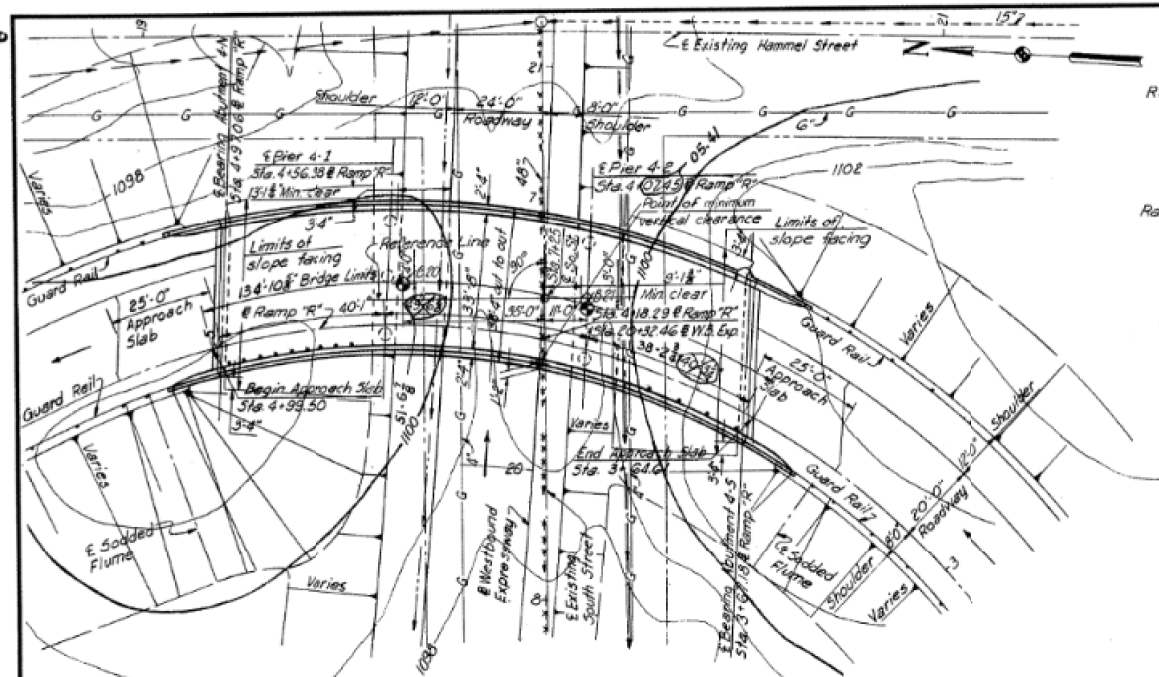
[Solid Gray Box] = LIMITS OF ITEM 203 - EMBANKMENT, AS PER PLAN, SEE ROADWAY PLANS FOR ADDITIONAL DETAILS & PAYMENT

[Hatched Box] = LIMITS OF ITEM 503 - UNCLASSIFIED EXCAVATION

NOTES:

- SEE GENERAL NOTES FOR REQUIREMENTS REGARDING CONSTRUCTION OF EMBANKMENT BELOW TOP OF REAR ABUTMENT FOOTING, AND REQUIRED WAITING PERIOD PRIOR TO DRIVING PILES.

MICROFILMED
NOV 27 1989

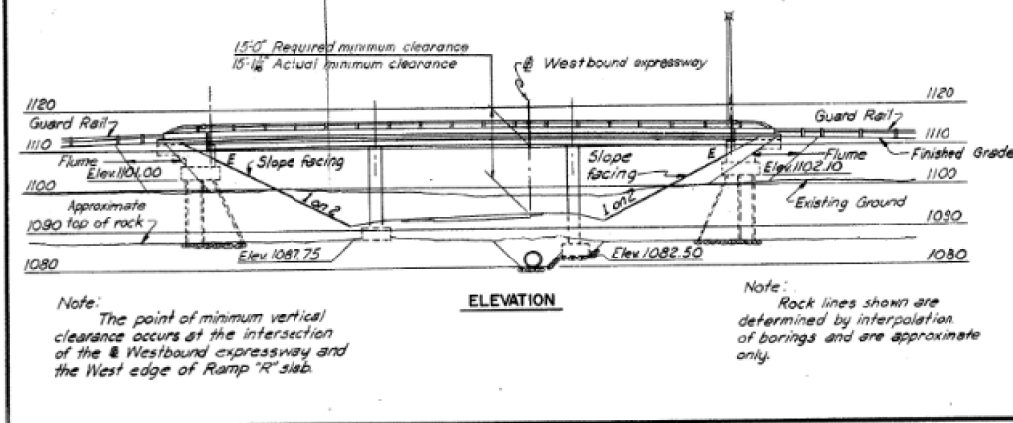
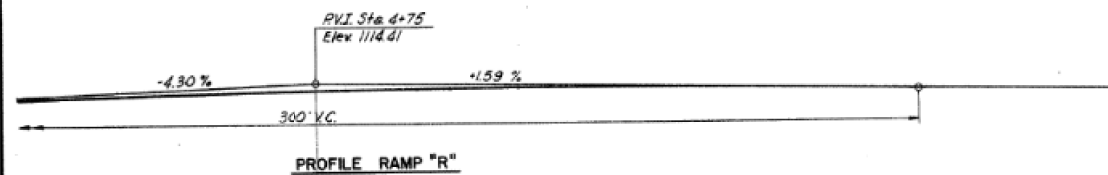


Ramp "R" Curve Data
 $D=31^{\circ}-16'-55''$
 $\Delta=99^{\circ}-22'-45''$
 $R=183.16'$
 $T=215.89'$
 $L=317.69'$

Ramp "R" Curve Data
 $D=9^{\circ}-30'-00''$
 $\Delta=21^{\circ}-00'-00''$
 $R=603.11'$
 $T=111.78'$
 $L=221.05'$

Westbound Expressway Curve Data
 $D=2^{\circ}30'00''$
 $\Delta C=23^{\circ}10'46''$
 $R=2291.83'$
 $T=470.02'$
 $L=927.18'$
 $\theta_s=2^{\circ}30'00''$
 $L_s=200'$
 $L.T.=133.35'$
 $S.T.=66.68'$

PLAN



LEGEND

 Existing Gas Lines
 Existing Sewer
 New Sewer
 Existing Manhole
 Pipe Abandoned
 New Underdrain
 Boring

① These quantities are not included in the summary of lighting on sheet 24 of the highway plans.

Notes:
The following items are not included in the bridge plans.
See Roadway Plans for details.
Removal of existing pavements, etc.
Relocation or removal of existing utilities.
Approach grading, pavements, and slabs.
Guard rails.

All piles to be 12BP53 with an estimated average vertical length of 15'-0" for Abutments 4-N and 4-S. These estimates are based on boring data and are approximate only. The contractor shall assume full responsibility for lengths of piling selected for driving.

Boring information, logs and samples of materials encountered may be examined at the Division Office in Ravenna, Ohio, and at the Bridge Bureau Office at Columbus, Ohio, but the State does not guarantee these borings to present a complete picture of subsurface conditions to be encountered.

Foundation design and foundation quantities are based on a study of the borings.

The slope facing (S-2905) shall be 12" thick, and shall be placed within the limits shown on the plan of the structure.

FED. ROADS DIV. NO.	STATE	FED. AID PROJ. NO.	
2	OHIO		

SUMMIT COUNTY
CITY OF AKRON
AKRON EXPRESSWAY SYSTEM
SUM-8-11.65

131

176

ESTIMATED QUANTITIES								
Item	Description	Unit	Abutments	Piers	Super-structure	General	Total	
E-2	Cofferdams, Crips and Sheet piling	Lump Sum					Lump Sum	
E-2	Excavation for Structures (Unclassified)	Cu Yd	220	(150)	139		(350)	359
E-2	Excavation for Structures (Rock or Shale)	Cu Yd		30			30	
S-1	Class "C" Concrete (Superstructure)	Cu Yd			410		410	
S-1	Class "C" Concrete (Pier Columns)	Cu Yd		36			36	
S-1	Class "E" Concrete (Stub Abutments)	Cu Yd	70				70	
S-1	Class "E" Concrete (Footings)	Cu Yd	67	(33)	38		(60)	105
S-3	Type "C" Waterproofing	Sq Yd			500		500	
S-4	Reinforcing Steel	Lbs	1560	20,040	(20,080)	89,337	(17,480)	118,137
S-9	Structural Steel Expansion Joint	Lbs			7500		7500	
S-9	3" Rolled Phosphor Bronze Sliding Plates	Lbs			240		240	
S-14	Aluminum Handrail (Including Parapet)	Lin Ft	58		264		322	
S-16	First Test Pile	Lump Sum					Lump Sum	
S-10	Steel Bearing Piles (12 BP53)	Lin Ft	510				510	
S-25	2" Rigid Metal Conduit	Lin Ft	30		140		170	
S-29	Porous Backfill	Cu Yd	30				30	
S-29	Subdrainage for Wearing Surface Course	Lin Ft			260		260	
T-35	2 1/2" Asphaltic Concrete Surface Course Type C (40-70)	Cu Yd			34		34	
S-29	4" W. I. Scuppers	Each			13		13	
S-25	Standard 24" x 24" pole with 10'-0" bracket	Each			1		1	
S-29	Slope Facing (S-29.05 type)	Cu Yd	140				140	
S-25	Electrical equipment	Lump Sum					Lump Sum	

PROPOSED STRUCTURE

Type: Three span continuous slab bridge with reinforced concrete deck and substructure.
Spans: 40'-1", 49'-6" and 40'-3" = 129'10"
ctr. to ctr. and bearings.
Advy. 33'-8" $\frac{1}{4}$ 1'-2" safety curbs.
Loading: CF 8000 (Adequate for A.A.S.H.O alternate loading.)
Skew: Vanes 16°/16°/27° to 24°/21°/31.14°
Surface Course: 2" Asphalt concrete
Approach Slabs: A-1-1-54 (25'0" long)

H.N.T.B. BR. NO. 4 PART 10

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

SITE PLAN

WESTBOUND EXPRESSWAY UNDER RAMP "R"
BR. NO. SUM-18-1224 STA. 3+64.61
SCALE: 1" = 20' STA. 4+99.50
AKRON EXPRESSWAY SYSTEM
AKRON SUMMIT COUNTY OHIO

DRAWN SMA TRACED _____
DATE 2-3-58 DATE _____
CHECKED WJL REVIEWED JF REVISED 10-18-59
DATE 8-23-58 DATE 3-3-59 1018 SHEET 151

ORIGINAL CONSTRUCTION
PLANS SHOWN FOR
INFORMATION ONLY

NOTES:

1. THE EXISTING BRIDGE IS TO BE REMOVED AS PER ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.
SEE SHEET  FOR ADDITIONAL REMOVAL REQUIREMENTS.
2. THE EXISTING APPROACH SLABS ARE TO BE REMOVED AS PER ITEM 202 - APPROACH SLAB REMOVED.
3. SUM-18-1224 IS THE HISTORIC BRIDGE NUMBER. THE CURRENT BRIDGE NUMBER IS SUM-76-1165L AND THE STRUCTURE FILE NUMBER IS 7706065.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

**SUM-76/77/8-
10.99/11.54/0.00**

$$\begin{array}{r} 9 \overline{) 80} \end{array}$$
$$\frac{33}{104}$$

BRIDGE REMOVAL DETAILS
SUM-76-1148Q

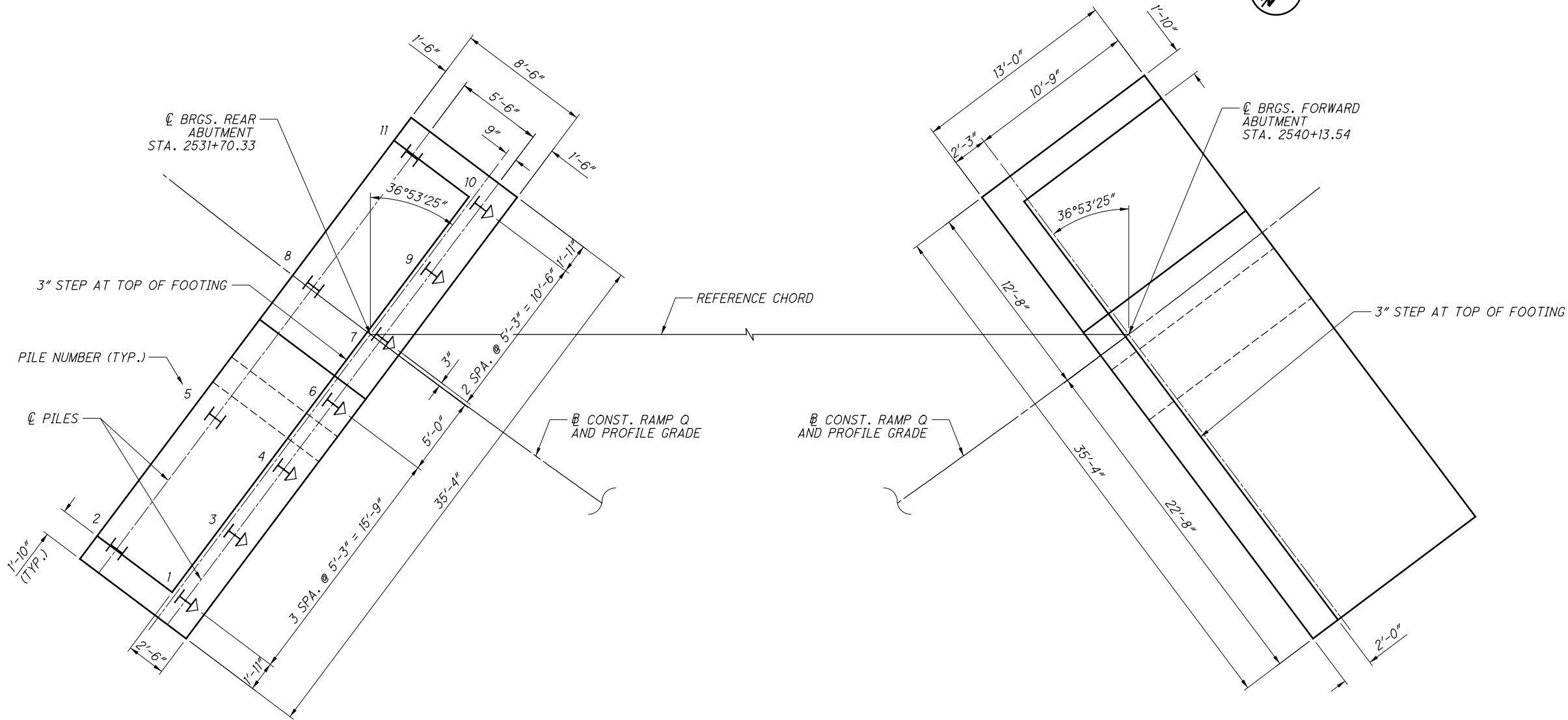
RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

DESIGNED	DRAWN	REVIEWED	DATE
CAS	AAA	JCS	4/29/11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BES		7706066	

BURGESS & NIPLE
Engineers ■ Architects ■ Planners
5085 REED ROAD, COLUMBUS, OHIO 43220

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\\V\\AN\\A01P\\WINT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\\Structures\\Sheets\\Ramp_Q\\076_1166L_S0001.dgn Sheet 6/1



FOUNDATION PLAN - ABUTMENTS

PREBORED HOLE LENGTHS	
PILE NUMBERS	HOLE LENGTH
1-5	21'
6-11	15'

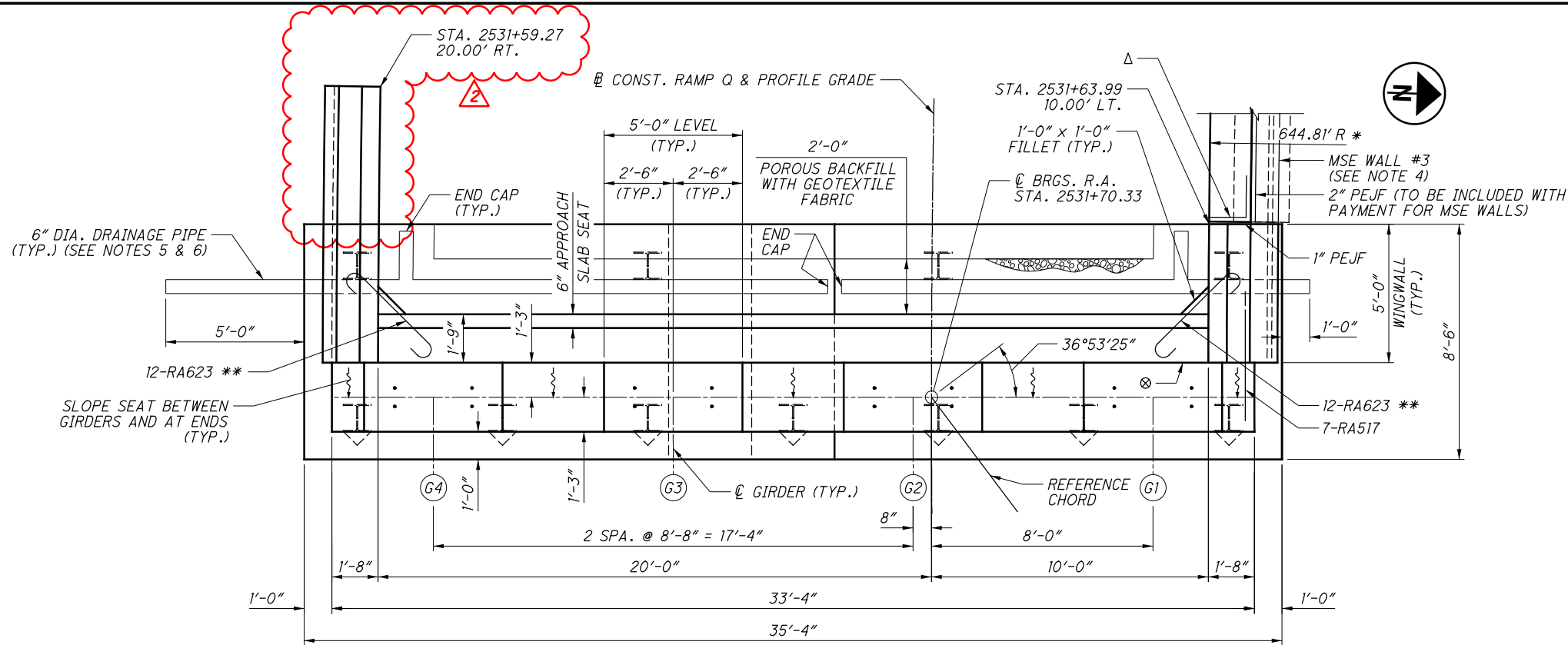
LEGEND:

- = PROPOSED HP10x42 STEEL PILE (VERTICAL)
- = PROPOSED HP10x42 STEEL PILE (BATTERED AT 1:3)

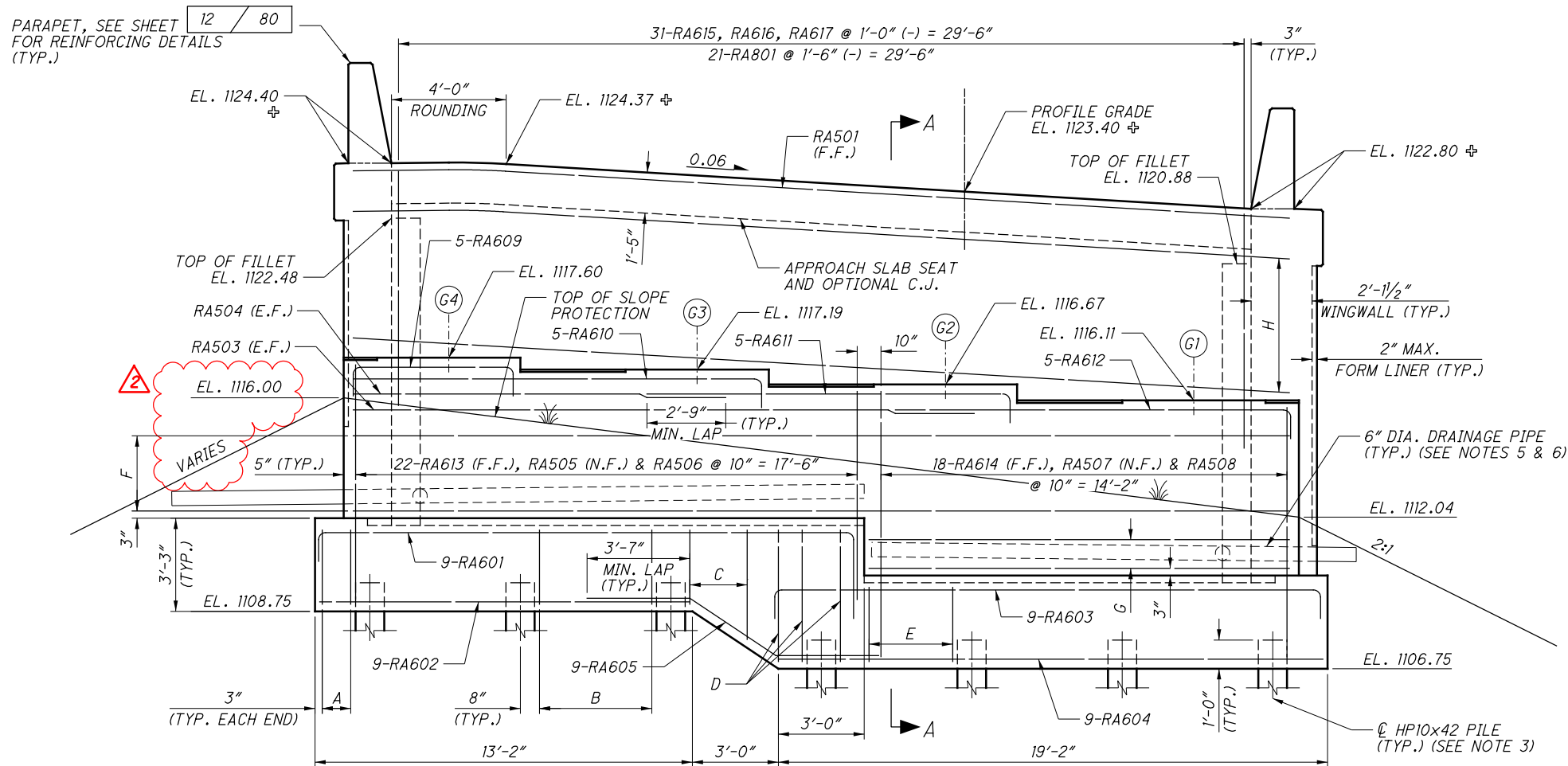
NOTES:

- SEE SHEETS 11 / 80 TO 13 / 80 FOR LOCATIONS AND DETAILS OF REAR ABUTMENT FOOTING STEPS.
- SEE SHEETS 14 / 80 TO 17 / 80 FOR LOCATIONS AND DETAILS OF FORWARD ABUTMENT FOOTING STEPS.
- USE PREBORED HOLES FOR THE PILES AT THE REAR ABUTMENT. SEE TABLE ON THIS SHEET FOR PREBORED HOLE LENGTHS. SEE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS FOR PREBORED HOLES.

p:\ANV\A01P\WINT01\parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_1148Q\Sheets\076_11661_SR001.dgn Sheet 12/13/2021 2:22:49 PM p002694C



REAR ABUTMENT PLAN



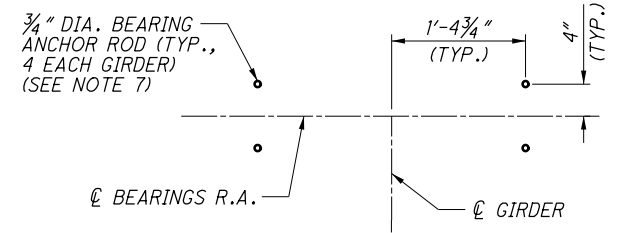
REAR ABUTMENT ELEVATION

REVISIONS BY:

PARSONS
100 East Campus View Boulevard, Suite 250
Columbus, OH 43235

ISSUE RECORD: BU-17 STRUCTURES

NO.	DATE	DESCRIPTION
1	03-2021	CIP WALLS TO MSE
2	12-2021	WINGWALL EXTENDED 5'



BEARING ANCHOR PLAN

LEGEND:

- * = RADIUS SHOWN IS AT BACK FACE OF WINGWALL (TOE OF PARAPET)
- ** = PLACE FILLET BARS WITH HORIZONTAL BARS IN WINGWALL
- Δ = TYPE 2 WATERPROOFING, 3' WIDE, CENTERED ON JOINT BETWEEN WINGWALL AND RETAINING WALL, FROM TOP OF FOOTING TO 6" BELOW BOTTOM OF APPROACH SLAB (INCLUDED IN RETAINING WALL QUANTITIES) (TYP.)
- ⊕ = TOP OF BACKWALL ELEVATIONS ARE GIVEN AT FRONT FACE OF BACKWALL
- ⊗ = FRONT FACE OF BACKWALL
- A = 2-RA606 (T&B) @ 1'-0" (TYP. EACH END)
- B = 5-RA606 (T&B) @ 1'-0" (-) = 3'-11" (TYP. BETWEEN PILES U.N.O.)
- C = 1 S.O. 3-RA607 (T&B) @ 1'-0" = 2'-0"
- D = RA608 (T&B)
- E = 4-RA606 (T&B) @ 1'-0" = 3'-0"
- F = 4-RA501 (E.F.) @ 10 1/2" = 2'-7 1/2"
- G = 2-RA502 (E.F.) @ 1'-0"
- H = 6-RA501 (E.F.) @ 1'-0" MAX.

NOTES:

- SEE SHEET 10 / 80 FOR PILE LAYOUT AND ADDITIONAL FOOTING DIMENSIONS.
- SEE SHEET 12 / 80 FOR WINGWALL ELEVATION VIEWS.
- SEE SHEET 13 / 80 FOR SECTION A-A.
- SEE RETAINING WALL PLANS FOR RETAINING WALL DETAILS & PAYMENT.
- USE PERFORATED CORRUGATED POLYETHYLENE PIPE INSIDE THE POROUS BACKFILL. USE NON-PERFORATED CORRUGATED POLYETHYLENE PIPE IN ALL OTHER LOCATIONS. ALL DRAINAGE PIPES SHALL SLOPE 1/8" PER FT. TOWARDS THE OUTLET.
- PROVIDE CRUSHED AGGREGATE SLOPE PROTECTION AT PIPE OUTLETS PER STANDARD DRAWING A-1-69.
- SEE SHEET 52 / 80 FOR BEARING ANCHOR ROD DETAILS & PAYMENT.

BURGESS & NIPLE
Engineers & Architects
5085 REED ROAD, COLUMBUS, OHIO 43220

DATE 4/29/19
REVIEWED JCS
STRUCTURE FILE NUMBER 7706066

DRAWN BES
CHECKED ODW
DESIGNED BES

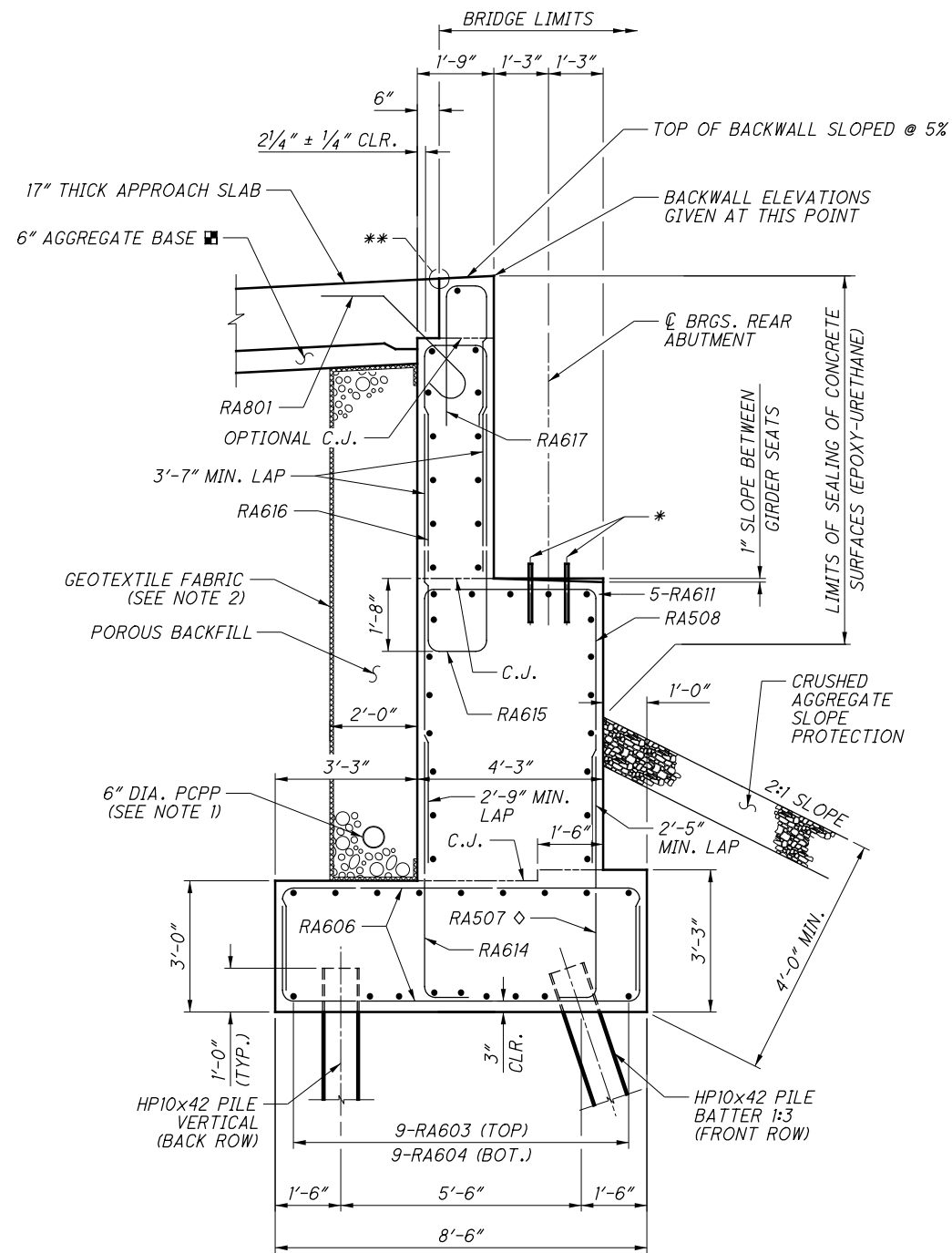
REAR ABUTMENT PLAN AND ELEVATION
SUM-76-1148Q
RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

SUM-76/77/8-
10.99/11.54/0.00
PID No. 101402

11 / 80

35
104

2026-03-24 - BU-17 - RECORD DRAWING PLANS



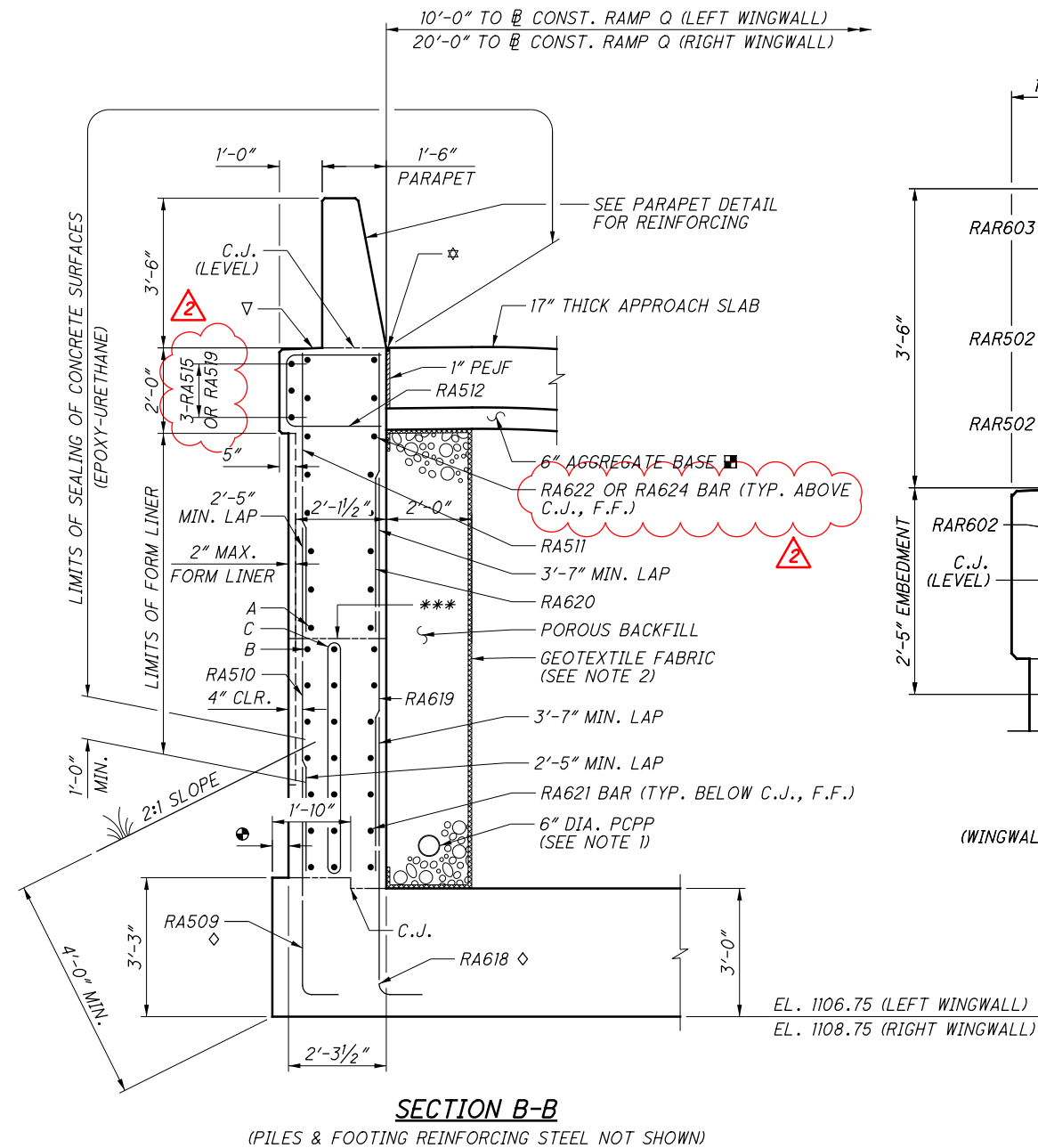
SECTION A-A
(ALL BARS NORMAL TO THE SECTION ARE
RA5 BARS UNLESS NOTED OTHERWISE)

REVISIONS BY:

PARSONS

100 East Campus View Boulevard, Suite 250
Columbus, OH 43235

ISSUE RECORD: BU-17 STRUCTURES		
NO.	DATE	DESCRIPTION
1	03-2021	CIP WALLS TO MSE
2	12-2021	WINGWALL EXTENDED 5'

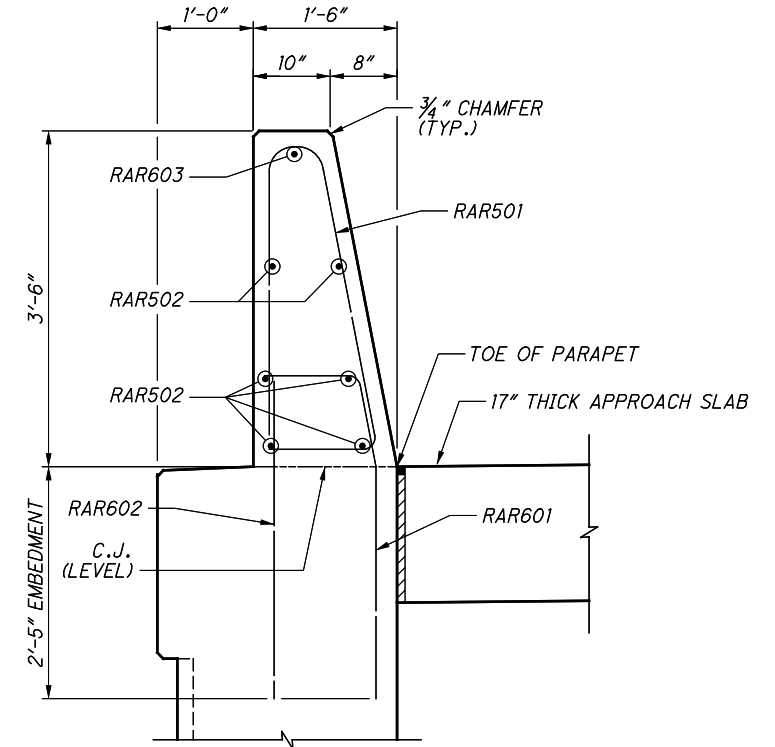


SECTION B-B

(PILES & FOOTING REINFORCING STEEL NOT SHOWN)

LEGEND:

- = DIMENSION VARIES FROM $4\frac{1}{8}"$ TO $4\frac{1}{2}"$ AT LEFT WINGWALL AND FROM $1'-0"$ TO $1'-0\frac{3}{8}"$ AT RIGHT WINGWALL
- ☆ = 1" DEEP x 1" WIDE HOT APPLIED JOINT SEALER, CMS 705.04
- = SEE ROADWAY PLANS FOR DETAILS & PAYMENT
- ◇ = WHERE PILE INTERFERES WITH PLACEMENT OF RA507, RA509 OR RA618, RAISE BAR SO THAT HORIZONTAL LEG IS ABOVE TOP OF PILE, BUT AT LEAST 1'-3" BELOW TOP OF FOOTING
- ▽ = SLOPE LEDGE AT $\frac{1}{2}"$ PER FOOT
- * = $\frac{3}{4}"$ DIA. BEARING ANCHOR RODS, SEE SHEET $\frac{52}{80}$ FOR DETAILS & PAYMENT
- ** = SEE DETAIL B ON STANDARD DRAWING AS-1-15, SHEET 2/2
- *** = C.J., EL. 1116.11 (LEFT WINGWALL), EL. 1117.60 (RIGHT WINGWALL)
- A = RA515 OR RA519 BAR (TYP. ABOVE C.J., F.F.)
- B = RA514 BAR (TYP. BELOW C.J., F.F.)
- C = RA517 BAR (TYP. BELOW C.J.) TIE TO RA507, RA508, AND RA614



PARAPET DETAIL
(WINGWALL REINFORCING STEEL NOT SHOWN)

NOTES:

1. SLOPE 6" DIA. PCPP AT 1/8" PER FOOT TOWARDS THE OUTLET.
2. TURN GEOTEXTILE FABRIC UP 6" AT BASE OF WALL AND DOWN 6" AT TOP OF WALL.
3. SEE GENERAL NOTES FOR ADDITIONAL FORM LINER REQUIREMENTS. SEE AESTHETIC PLANS FOR ELEVATION VIEWS SHOWING LIMITS OF FORM LINER AREAS.
4. BRIDGE SEAT REINFORCING, SETTING ANCHORS: PRE-SET BEARING ANCHORS. PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE PRE-SET BEARING ANCHORS.

--	--	--	--



$\frac{3}{4}$ " DIA. BEARING ANCHOR ROD (TYP., 4 EACH GIRDER) (SEE NOTE 5)
 1'-4 $\frac{3}{4}$ " (TYP.)
 4"
 (TYP.)
 C BEARINGS F.A.
 C GIRDER

REVISIONS BY:

ISSUE RECORD: BU-17 STRUCTURES		
NO.	DATE	DESCRIPTION
1	03-2021	CIP WALLS TO MSE

* = RADIUS SHOWN IS AT BACK FACE OF WINGWALL (TOE OF PARAPET)
 ** = PLACE FILLET BARS WITH HORIZONTAL BARS IN WINGWALL
 Δ = TYPE 2 WATERPROOFING, 3' WIDE, CENTERED ON JOINT BETWEEN WINGWALL AND RETAINING WALL, FROM TOP OF FOOTING TO 6" BELOW BOTTOM OF APPROACH SLAB (INCLUDED IN RETAINING WALL QUANTITIES)
 ⊗ = FRONT FACE OF BACKWALL

1. SEE SHEET

10	/	80
----	---	----

 FOR ADDITIONAL FOOTING DIMENSIONS.
2. SEE RETAINING WALL PLANS FOR RETAINING WALL DETAILS & PAYMENT.
3. USE PERFORATED CORRUGATED POLYETHYLENE PIPE INSIDE THE POROUS BACKFILL. USE NON-PERFORATED CORRUGATED POLYETHYLENE PIPE IN ALL OTHER LOCATIONS. ALL DRAINAGE PIPES SHALL SLOPE $\frac{1}{8}$ " PER FT. TOWARDS THE OUTLET.
4. PROVIDE CRUSHED AGGREGATE SLOPE PROTECTION AT PIPE OUTLET PER STANDARD DRAWING A-1-69.
5. SEE SHEET

52	/	80
----	---	----

 FOR BEARING ANCHOR ROD DETAILS & PAYMENT.
6. SEE SHEETS

15	/	80
----	---	----

 &

16	/	80
----	---	----

 FOR ELEVATION VIEWS.

BURGESS & NIPLÉ
Engineers ■ Architects ■ Planners
5085 REED ROAD, COLUMBUS, OHIO 43220

DESIGNED	ODW	DRAWN	ODW	REVIEWED	JCS	DATE	4/29/19
CHECKED	BES	REVISED		STRUCTURE FILE NUMBER	7706066		

FORWARD ABUTMENT PLAN

SUM-76-1148Q

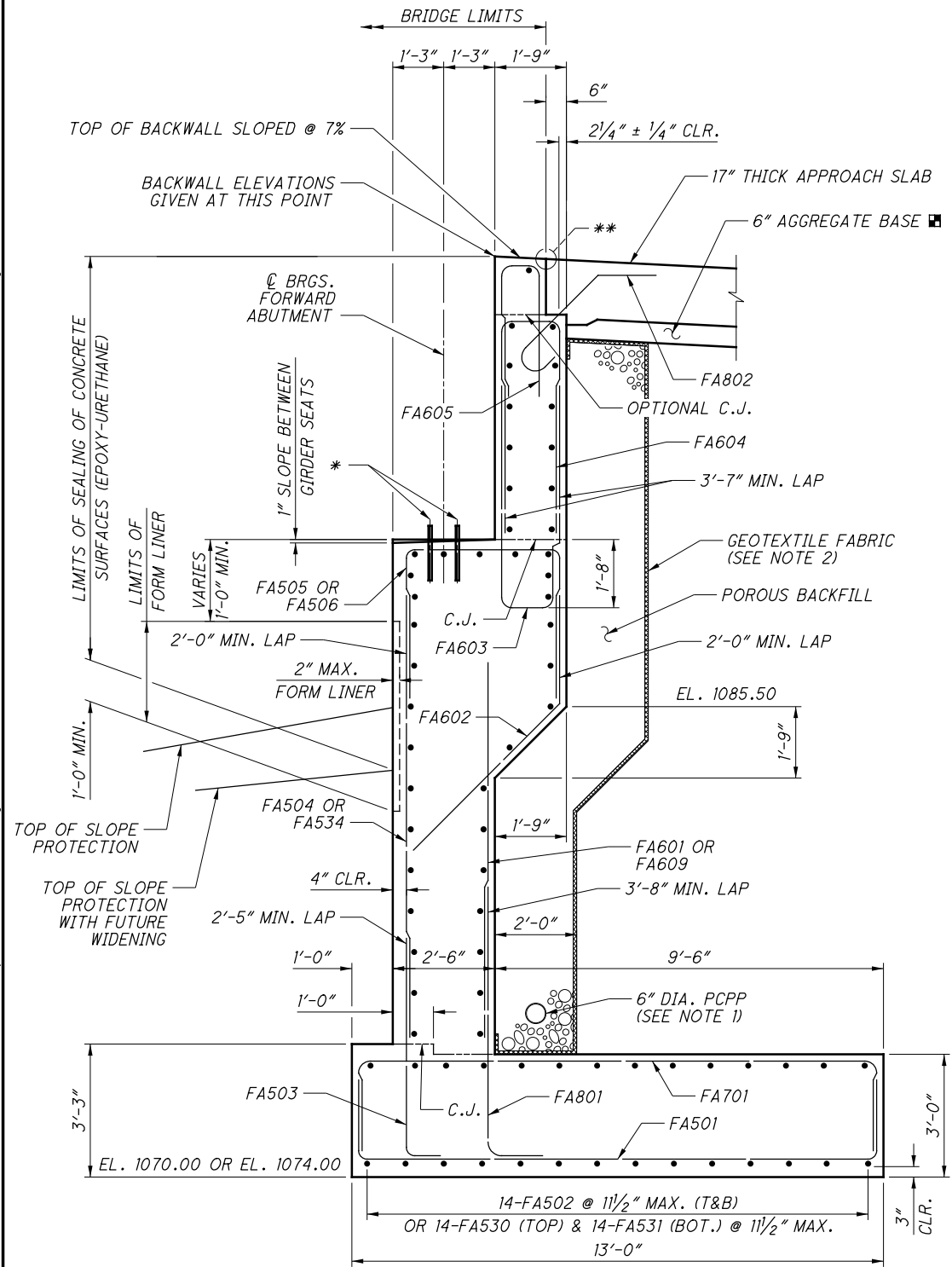
RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

SUM-76/77/8-
10.99/11.54/0.00

$$\frac{14}{80} = \frac{38}{104}$$

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

p:\ANV\A01P\WINT01\parsons.com\Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_1148Q\Sheets\076_11661_SF002.dgn Sheet 6/1/2021 9:09:55 AM p002694C



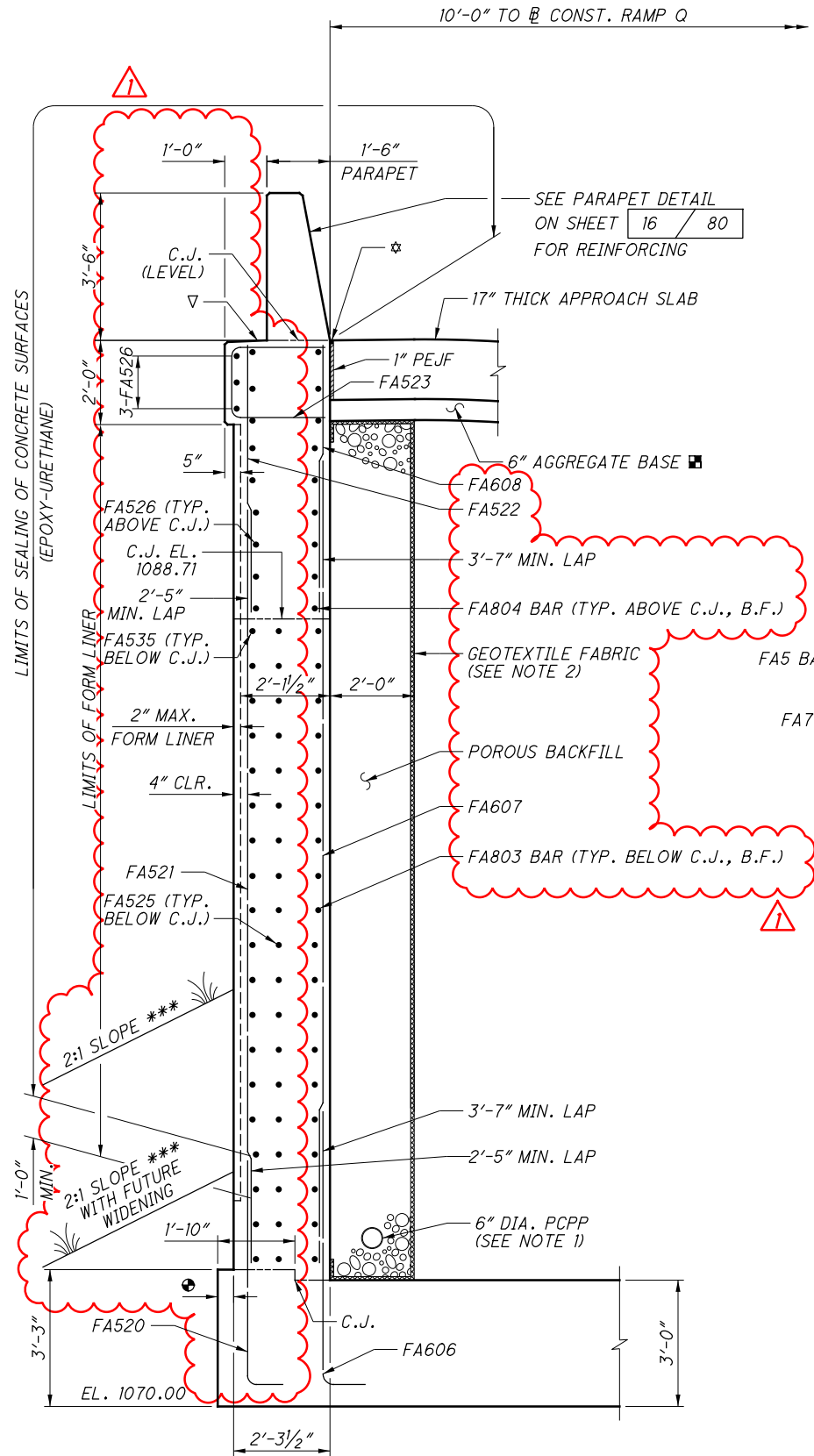
REVISIONS BY:

PARSONS

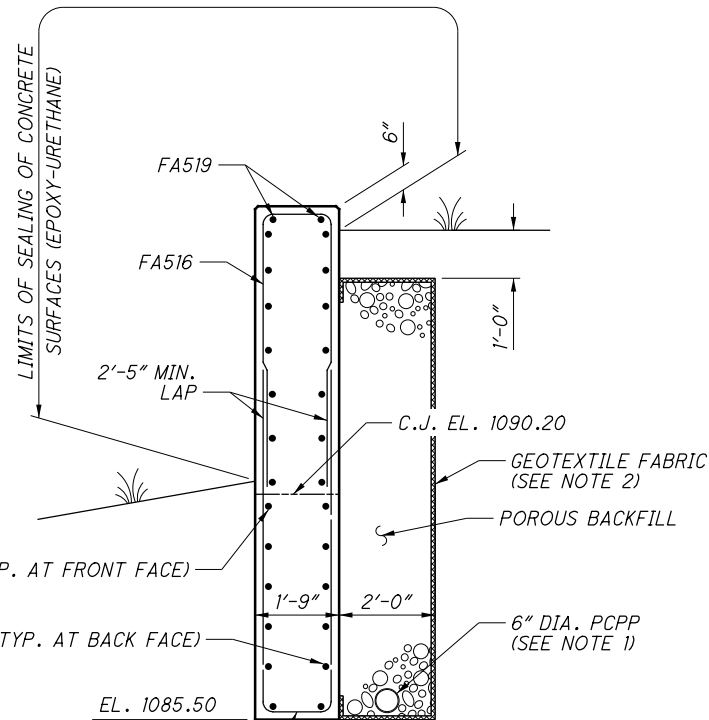
100 East Campus View Boulevard, Suite 250
Columbus, OH 43235

ISSUE RECORD: BU-17 STRUCTURES

NO.	DATE	DESCRIPTION
1	03-2021	CIP WALLS TO MSE



SECTION B-B
(FOOTING REINFORCING NOT SHOWN)



SECTION C-C

LEGEND:

- * = 3/4" DIA. BEARING ANCHOR RODS, SEE SHEET 52 / 80 FOR DETAILS & PAYMENT
- ** = SEE DETAIL B ON STANDARD DRAWING AS-1-15, SHEET 2/2
- *** = MEASURED PERPENDICULAR TO @ CONST. S.R. 8
- ⊕ = DIMENSION VARIES FROM 3 3/8" TO 4 1/2" AT LEFT WINGWALL
- ☆ = 1" DEEP x 1" WIDE HOT APPLIED JOINT SEALER, CMS 705.04
- = SEE ROADWAY PLANS FOR DETAILS & PAYMENT
- ▽ = SLOPE LEDGE AT 1/2" PER FOOT

NOTES:

- SLOPE 6" DIA. PCPP AT 1/8" PER FOOT TOWARDS THE OUTLET.
- TURN GEOTEXTILE FABRIC UP 6" AT BASE OF WALL AND DOWN 6" AT TOP OF WALL.
- SEE GENERAL NOTES FOR ADDITIONAL FORM LINER REQUIREMENTS. SEE AESTHETIC PLANS FOR ELEVATION VIEWS SHOWING LIMITS OF FORM LINER AREAS.
- BRIDGE SEAT REINFORCING, SETTING ANCHORS: PRE-SET BEARING ANCHORS. PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE PRE-SET BEARING ANCHORS.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

FORWARD ABUTMENT DETAILS

SUM-76-1148Q

RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

DATE

4/29/19

REVIEWED

JCS

STRUCTURE FILE NUMBER

7706066

DESIGNED

ODW

CHECKED

BES

ENGINEERS

ARCHITECTS

PLANNERS

BURGESS & NIPLE

5085 REED ROAD, COLUMBUS, OHIO 43220

SUM-76-77/8-

10.99/11.54/0.00

PID No. 101402

17

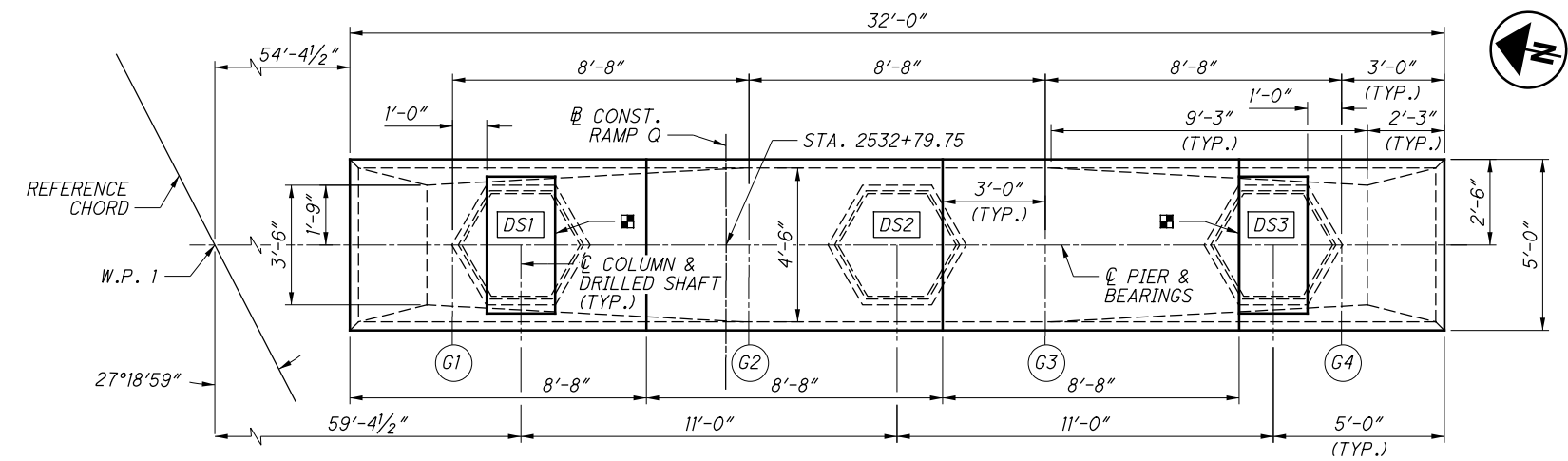
80

41

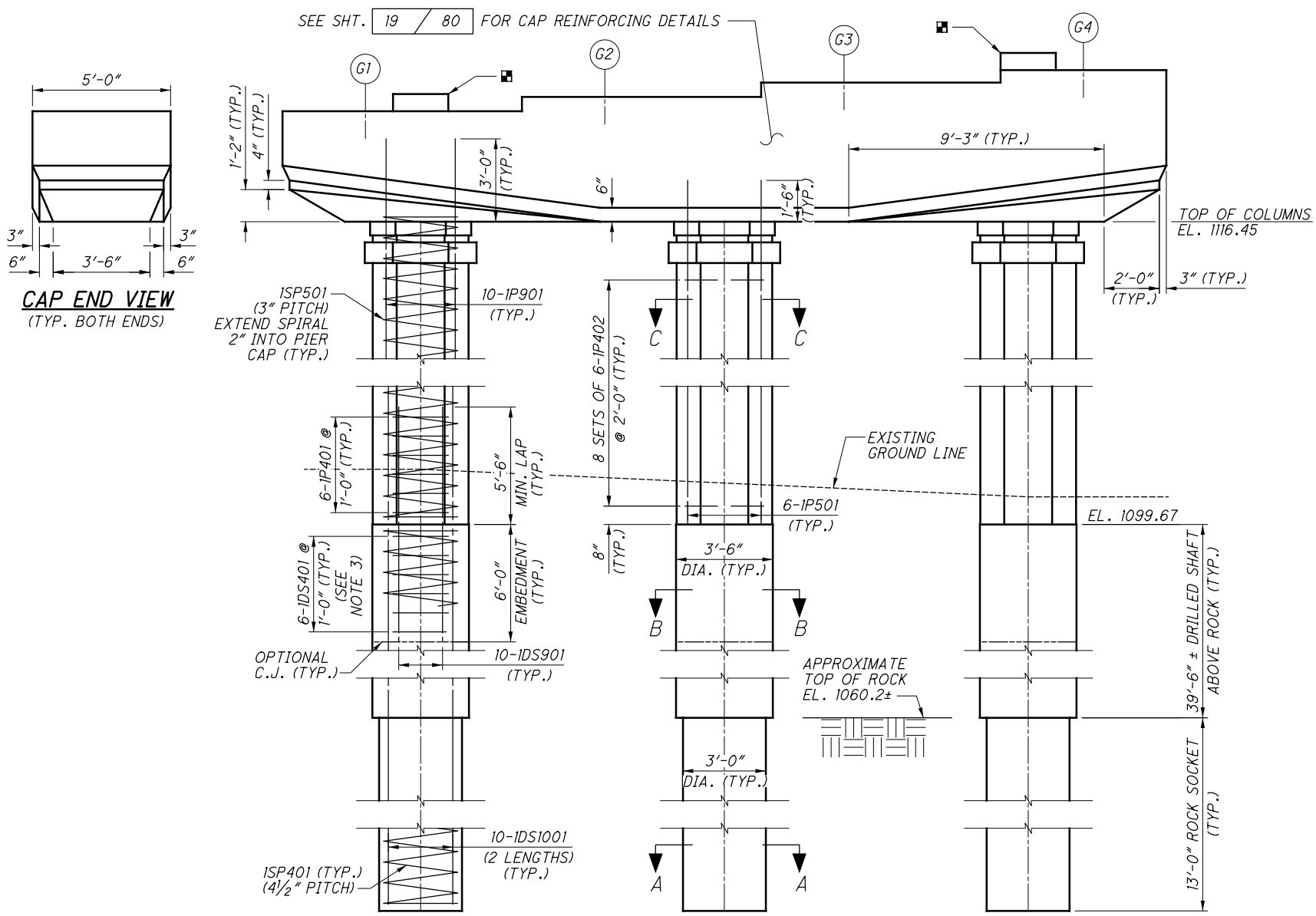
104

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\\V\\AN\\A01PWINT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\\Structures\\Sheets\\Ramp_Q\\076_11661_S1001.dgn Sheet 6/1/19

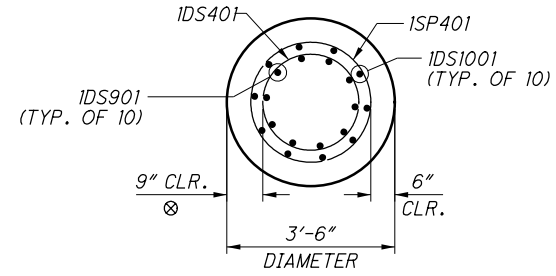


PLAN - PIER 1

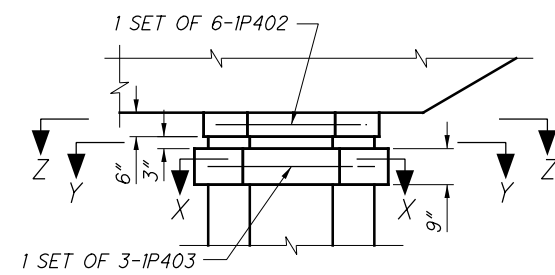


ELEVATION - PIER 1

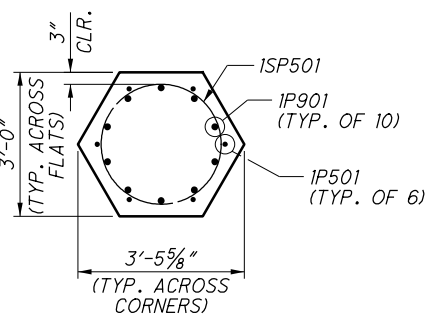
BEARING SEAT ELEVATIONS	
GIRDER	ELEVATION
G1	1120.45
G2	1120.97
G3	1121.49
G4	1121.94



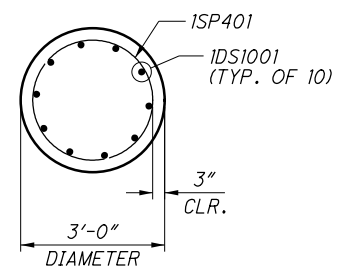
SECTION B-B



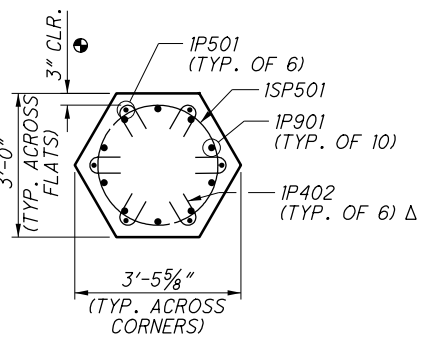
TOP OF COLUMN DETAIL



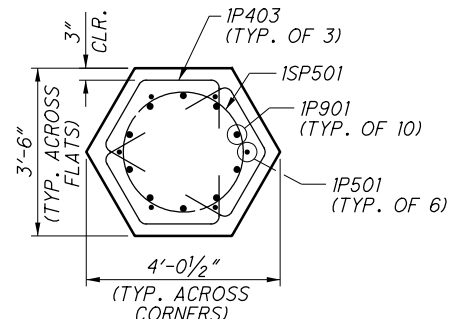
SECTION Y-Y



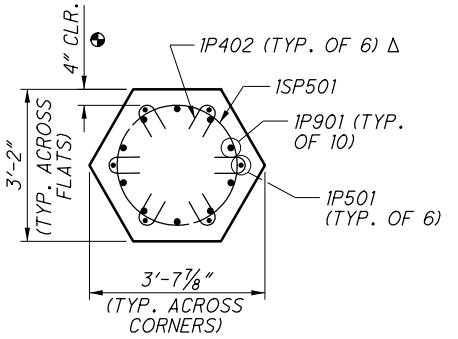
SECTION A-A



SECTION C-C



SECTION X-X



SECTION Z-Z

LEGEND:

- DS# = DRILLED SHAFT NUMBER
- = TYP. FOR MAIN SPIRAL BARS AND SUPPLEMENTAL CORNER BARS
- Δ = ROTATE BARS AS NEEDED TO CLEAR MAIN COLUMN VERTICAL BARS
- ⊗ = ADJUST CLEAR COVER FOR SPLICE CAGE TO ENSURE THAT SPLICE CAGE IS CENTERED ON COLUMN.
- = SEISMIC PEDESTAL. SEE SHEET 19 / 80 FOR DETAILS.

NOTES:

- UNLESS NOTED OTHERWISE, MINIMUM LAP LENGTHS SHALL BE AS SHOWN ON THE PLANS AND AS FOLLOWS:
#10 SHAFT BARS: 6'-0"
- REFER TO GENERAL NOTES FOR LIMITS OF SEALING OF CONCRETE SURFACES.
- IDS401 BARS IN SHAFT MAY BE PARTIALLY OR ENTIRELY REMOVED IF INTERFERENCE WITH OTHER SHAFT REINFORCING STEEL IS ENCOUNTERED.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

SUM-76 / 77 / 8-10.99 / 11.54 / 0.00

PID No. 101402

18 / 80

42 / 104

PIER 1 PLAN AND ELEVATION

SUM-76-1148Q

RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

REVIEWED JCS 4/29/19

DATE 4/29/19

DRAWN RMK

DESIGNED RMK

CHECKED BES

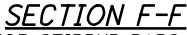
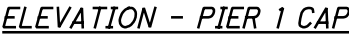
REVIS

STRUCTURE FILE NUMBER 7706066

Engineers Architects Planners

BURGESS & NIPL

5085 REED ROAD, COLUMBUS, OHIO 43220



SECTION G-G



SECTION J-J

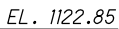


SEISMIC PEDESTAL DETAIL





PLAN - PIER 2
(DECK SLAB NOT SHOWN)



CAP ELEVATION - PIER 2
(LOOKING UPSTATION)
(SEE TABLE FOR DIMENSIONS Yt AND Yb)

BOTTOM OF GIRDER ELEVATIONS AT E PIER	
GIRDER	ELEVATION
G1	1121.97
G2	1122.49
G3	1123.01
G4	1123.43

LEGEND:

DS# = DRILLED SHAFT NUMBER

* = DIMENSION VARIES FROM 6'-0³/₄" DOWNSTATION TO 5'-11⁷/₈" UPSTATION

** = DIMENSION VARIES FROM 5'-10⁵/₈" DOWNSTATION TO 5'-9³/₄" UPSTATION

Δ = DIMENSION TAKEN AT $\mathbb{C}$ PIER

⊕ = SEE END OF CAP REINFORCEMENT DETAIL ON SHEET 23 / 80

G# = GIRDER DESIGNATION

A = 16 SETS OF 4-2P601 & 1-2P501 @ 5 1/4"(-) = 6'-6"

B = 2 SETS OF 1-2P603 (E.F.) & 1-2P502 @ 1'-0" (TYP. AT EACH GIRDER)

C = 8 SETS OF 2-2P602 & 1-2P501 @ 11"(+), SHIFT BARS

AS NEEDED TO CLEAR MAIN COLUMN VERTICAL BARS (SEE NOTE 3)

D = 4 SETS OF 4-2P601 & 1-2P501 @ 5 1/2"(-) = 1'-4" (TYP. AT EACH END)

E = 6-2P801 (E.F.)

NOTES:

1. SEE SHEET

54	/	80
----	---	----

 FOR TYPICAL DECK DETAILS AND DECK SLAB REINFORCEMENT.
2. SEE SHEET

22	/	80
----	---	----

 FOR SECTIONS A-A, B-B AND C-C.
3. SEE SHEET

21	/	80
----	---	----

 FOR COLUMN DETAILS.
4. SEE SHEET

43	/	80
----	---	----

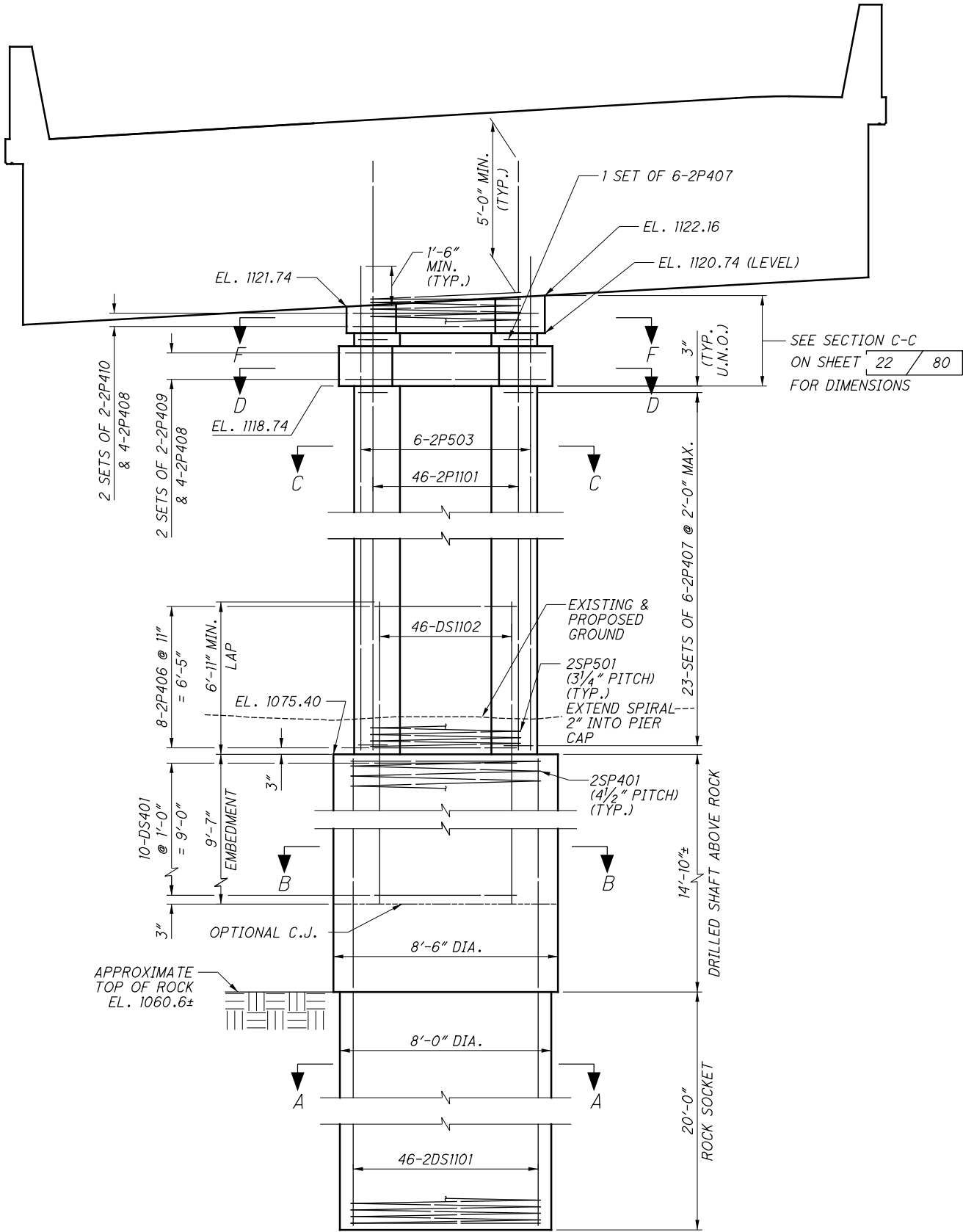
 FOR HOLE AND STUD LOCATIONS IN GIRDER WEBS.

POST-TENSIONING NOTES:

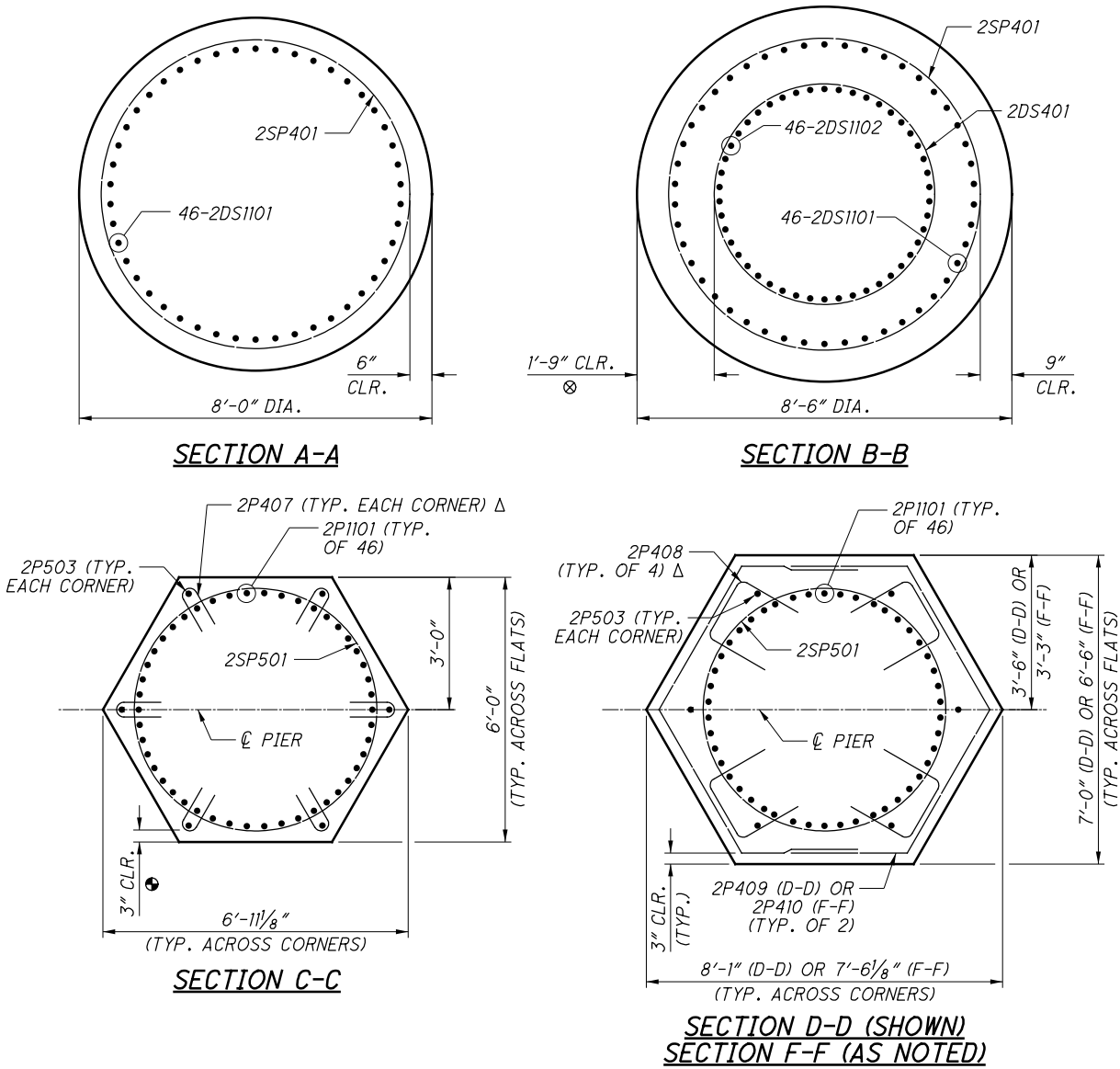
1. ALL TENDONS CONSIST OF 19-0.6" DIAMETER STRANDS WITH A TOTAL AREA OF 4.123".
2. THE INITIAL JACKING FORCE FOR EACH TENDON IS 779 KIPS. JACK THE TENDONS FROM ONE END OF THE CAP (EITHER END).
3. DESIGN ASSUMPTIONS:
FRICTION COEFFICIENT = 0.25
WOBBLE COEFFICIENT = 0.0002
ANCHOR SET = 0.25 INCHES

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\V\ANV\A01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_11661_S1013.dgn Sheet 6/17/2026



COLUMN ELEVATION - PIER 2
(LOOKING UPSTATION)



PIER 2 CAP CONSTRUCTION SEQUENCE:

1. CONSTRUCT TEMPORARY SUPPORTS FOR GIRDER PRIOR TO ERECTION AS SHOWN ON SHEETS 35 / 80 TO 37 / 80 .
2. ERECT STEEL GIRDERS AND CROSSFRAMES.
3. CONSTRUCT PIER CAP FORMS SUPPORTED BY TEMPORARY FALSEWORK.
4. CONSTRUCT PIER 2 CAP TO THE BOTTOM OF THE TOP FLANGE OF THE GIRDERS.
5. WHEN CONCRETE STRENGTH REACHES 4 KSI, COMPLETE POST TENSIONING INCLUDING GROUTING OF DUCTS.
6. REMOVE PIER CAP FALSEWORK AND TEMPORARY SUPPORTS.
7. PLACE CONCRETE DECK AS SHOWN ON SHEET 58 / 80 .

LEGEND:

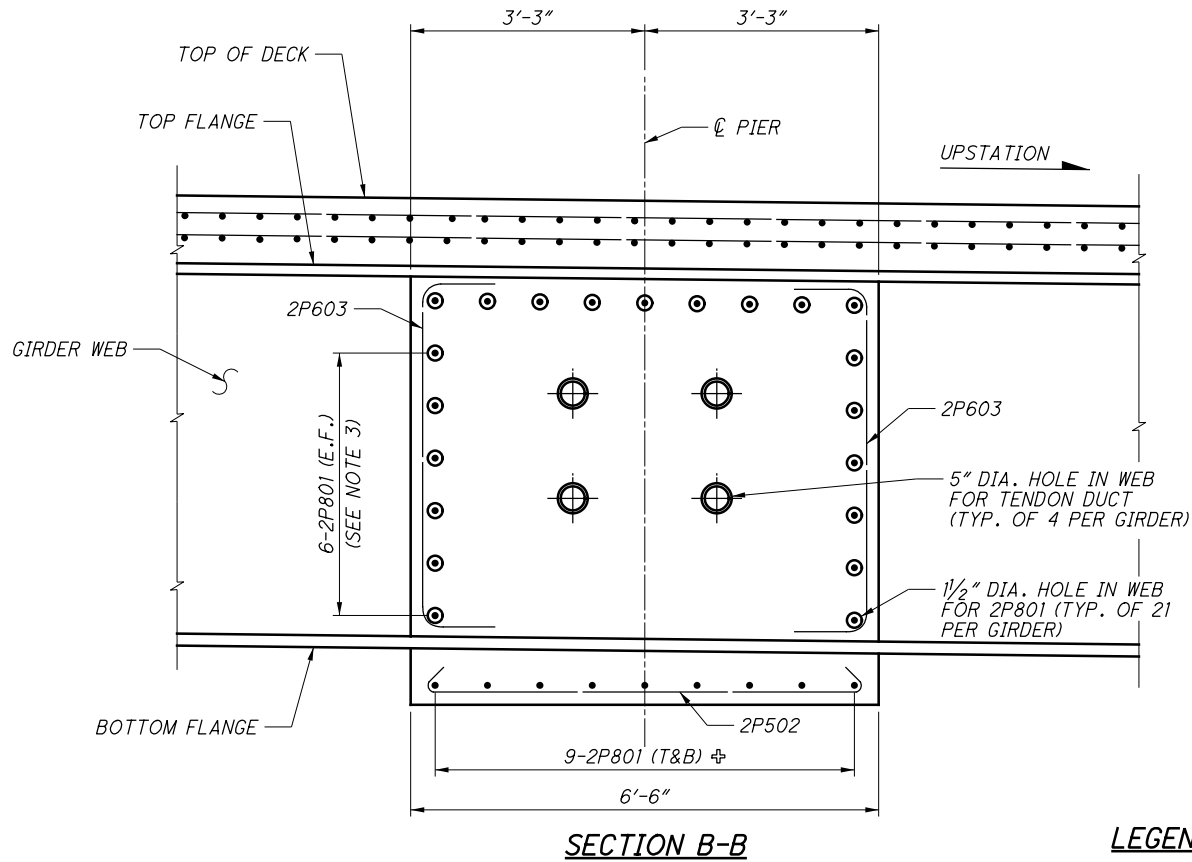
- ⊙ = TYP. FOR MAIN SPIRAL BARS AND SUPPLEMENTAL CORNER BARS
- Δ = SHIFT BARS AS NEEDED TO CLEAR MAIN COLUMN VERTICAL BARS
- ⊗ = ADJUST CLEAR COVER FOR SPLICE CAGE AS NEEDED TO ENSURE THAT SPLICE CAGE IS CENTERED ON COLUMN

NOTES:

1. REFER TO GENERAL NOTES FOR LIMITS OF SEALING OF CONCRETE SURFACES.

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

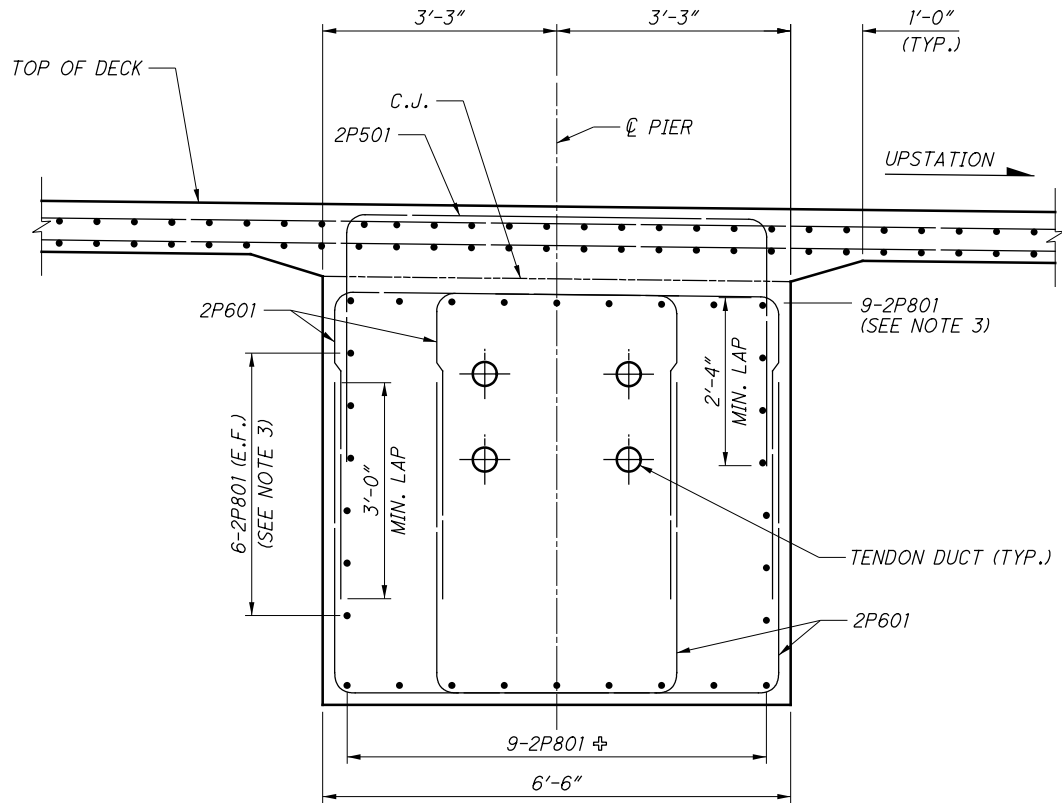
pw:\V\ANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_S1012.dgn Sheet 6/17



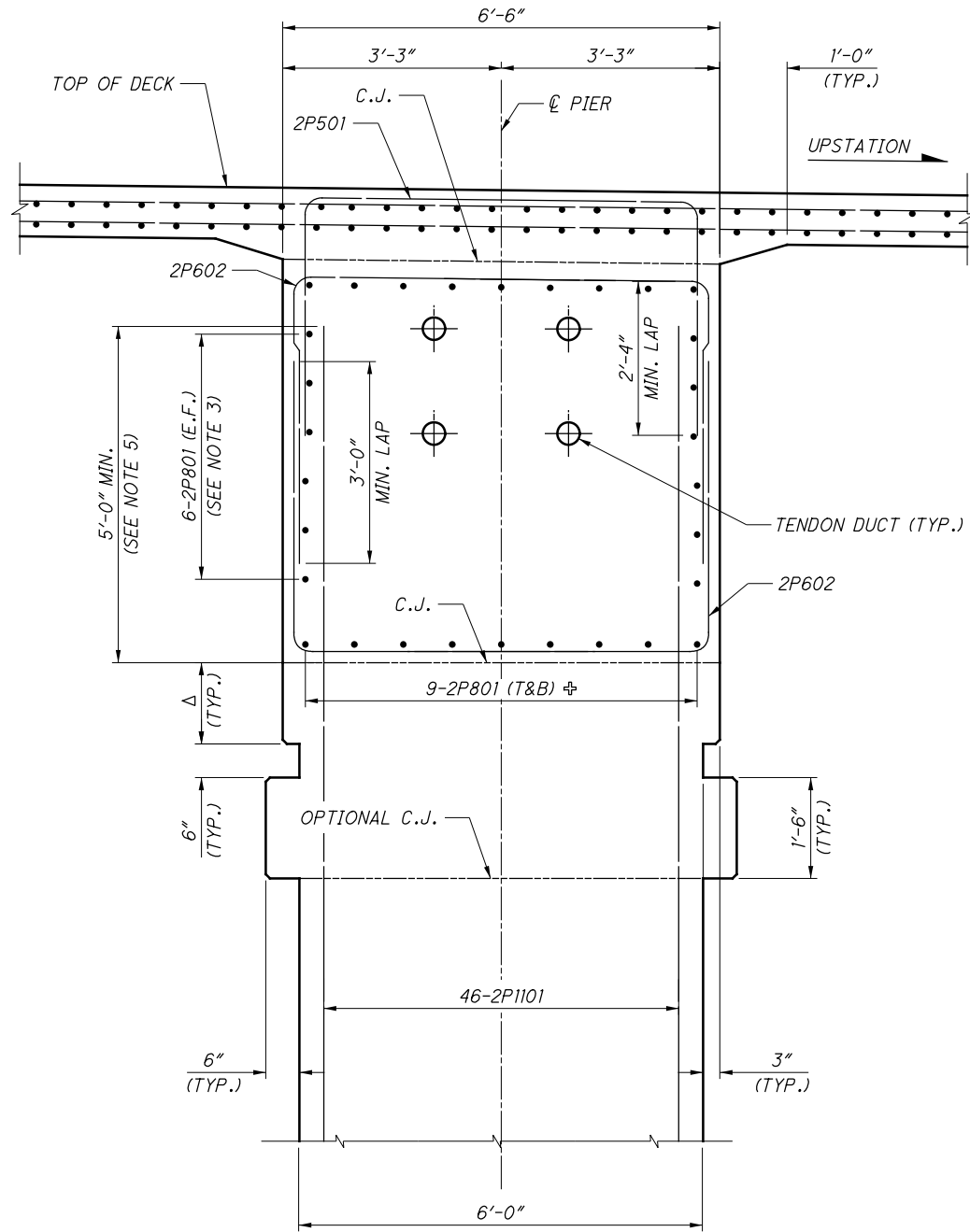
SECTION B-B

LEGEND:

- Δ = DIMENSION VARIES FROM 1'-0" TO 1'-5", SEE SHEET 21 / 80
- $\oplus$ = SHIFT BARS AS NEEDED TO CLEAR MAIN COLUMN VERTICAL BARS



SECTION A-A



SECTION C-C
(SEE NOTE 4)

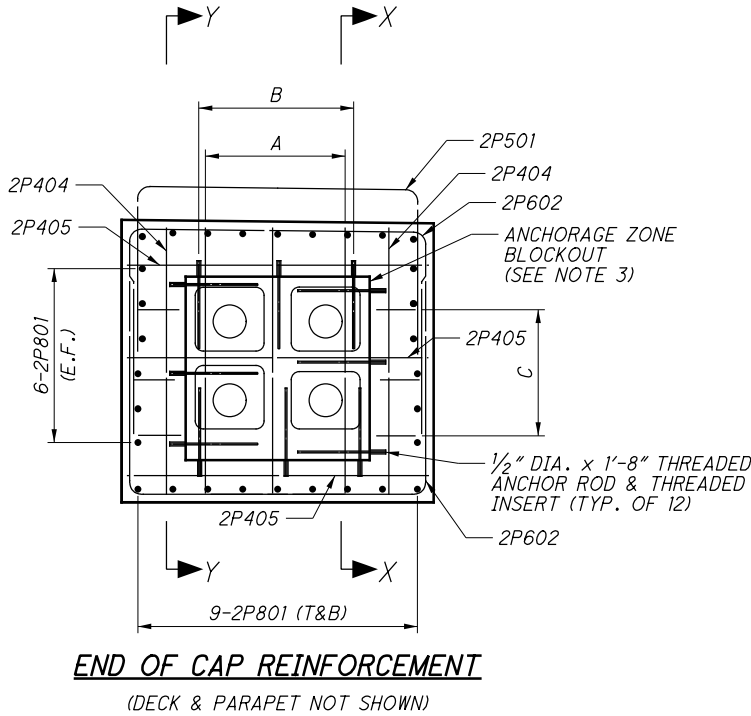
NOTES:

- SEE SHEET 20 / 80 FOR LOCATIONS OF SECTIONS A-A, B-B AND C-C.
- SEE SHEET 54 / 80 FOR DECK REINFORCEMENT DETAILS.
- CAP LONGITUDINAL REBAR SHALL BE CONTINUOUS AND SHALL RUN THROUGH PREDRILLED HOLES IN GIRDER WEBS (EXCEPT THE BOTTOM ROW). SEE SHEET 43 / 80 FOR DETAILS. FIELD BEND REBAR AS NECESSARY TO FIT THROUGH THE HOLES.
- SEE SHEET 21 / 80 FOR COLUMN REINFORCEMENT DETAILS.
- FIELD BEND AND/OR FIELD CUT MAIN COLUMN VERTICAL BARS THAT INTERFERE WITH TENDON DUCTS AS NECESSARY (MAXIMUM OF 8 BARS). REPAIR ALL DAMAGE TO THE EPOXY COATING ACCORDING TO CMS 709.00.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

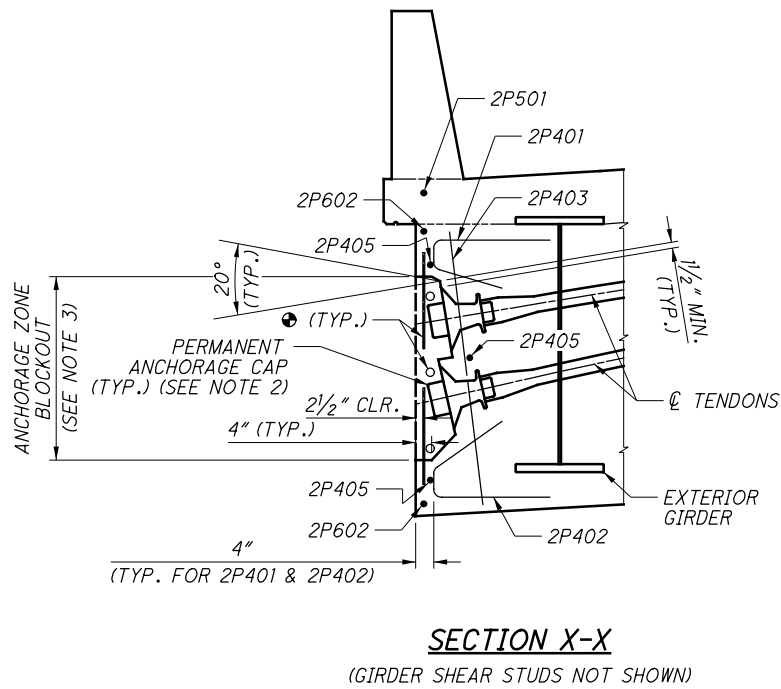
BURGESS & NIPLE Engineers Architects Planners 5085 REED ROAD, COLUMBUS, OHIO 43220		DATE 4/29/19	REVIEWED JCS	DRAWN ODW	CHECKED TMB/RWK
PIER 2 CAP SECTIONS SUM-76-1148Q RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB		STRUCTURE FILE NUMBER 7706066			
SUM-76 / 77 / 8- 10.99 / 11.54 / 0.00 PID No. 101402		22 / 80		46 104	

ISSUE RECORD:		DESCRIPTION
NO.	DATE	



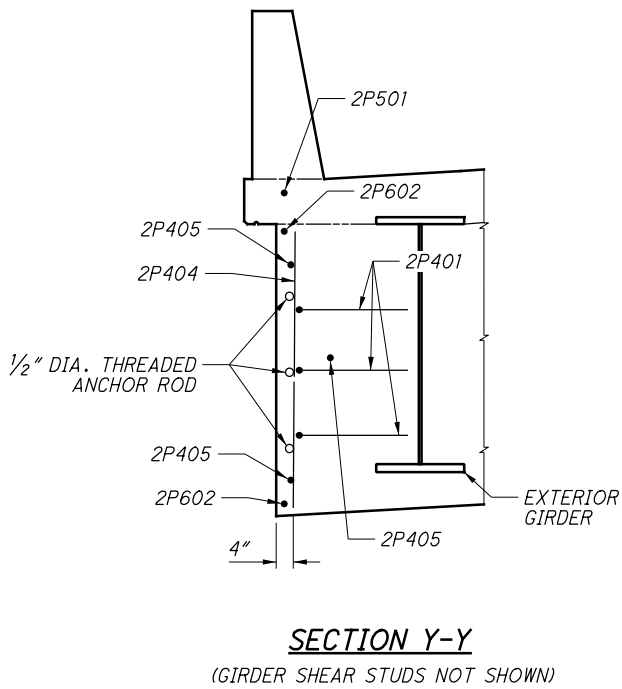
LEGEND:

- = 1/2" DIA. x 1'-8" THREADED ANCHOR ROD & THREADED INSERT (TYP. OF 12)
- A = 3-2P401, 3-2P402 & 3-2P403 SPACED W/ EVERY OTHER 2P801
- B = 3-1/2" DIA. THREADED ANCHOR RODS APPROX. EQ. SPACED (TYP. FOR E.F. OF BLOCKOUT), ADJUST SPACINGS AS NEEDED TO AVOID INTERFERENCE BETWEEN OPPOSITE FACE ANCHORS DURING INSTALLATION
- C = 3-2P401 SPACED W/ EVERY OTHER 2P801 (TYP. E.F.)



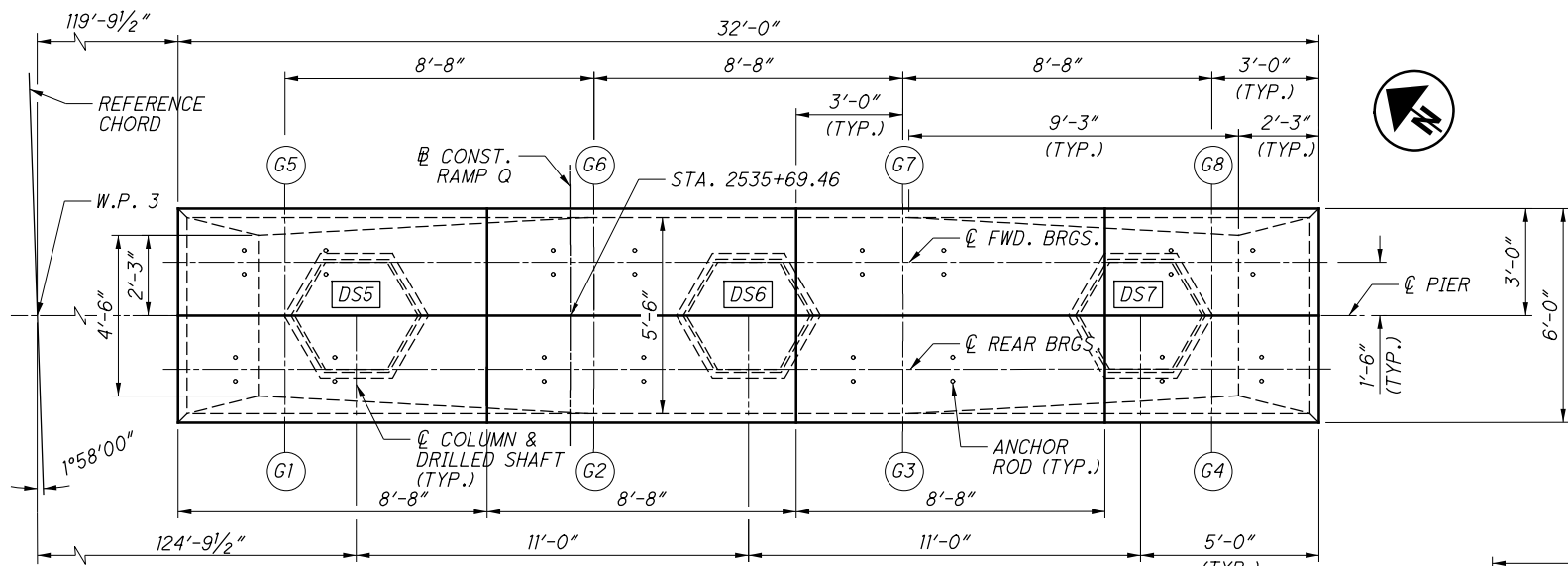
NOTES:

- ONLY ADDITIONAL END CAP REINFORCEMENT SHOWN. SEE SHEET 20 / 80 FOR OTHER REINFORCEMENT DETAILS.
- PROVIDE A MINIMUM OF 3" COVER BETWEEN THE PERMANENT ANCHORAGE CAPS AND THE EDGE OF THE PIER CAP.
- ROUGHEN SIDES OF BLOCKOUT TO AN AMPLITUDE OF 1/8". AFTER TENDONS HAVE BEEN STRESSED, FILL BLOCKOUT WITH EPOXY GROUT ACCORDING TO SUPPLEMENTAL SPECIFICATION 855.
- THREADED ANCHOR RODS AND THREADED INSERTS SHALL BE GALVANIZED. THREADED ANCHOR RODS SHALL CONFORM TO 709.01, 709.03, OR 709.05 WITH THREADS FORMED PRIOR TO GALVANIZING. THREADED INSERTS SHALL HAVE A 3000-LB. MINIMUM WORKING LOAD. THREADED ANCHOR RODS AND THREADED INSERTS SHALL BE INCLUDED FOR PAYMENT WITH ITEM 511 - CLASS QC4 MASS CONCRETE, SUBSTRUCTURE WITH QC/QA, AS PER PLAN.

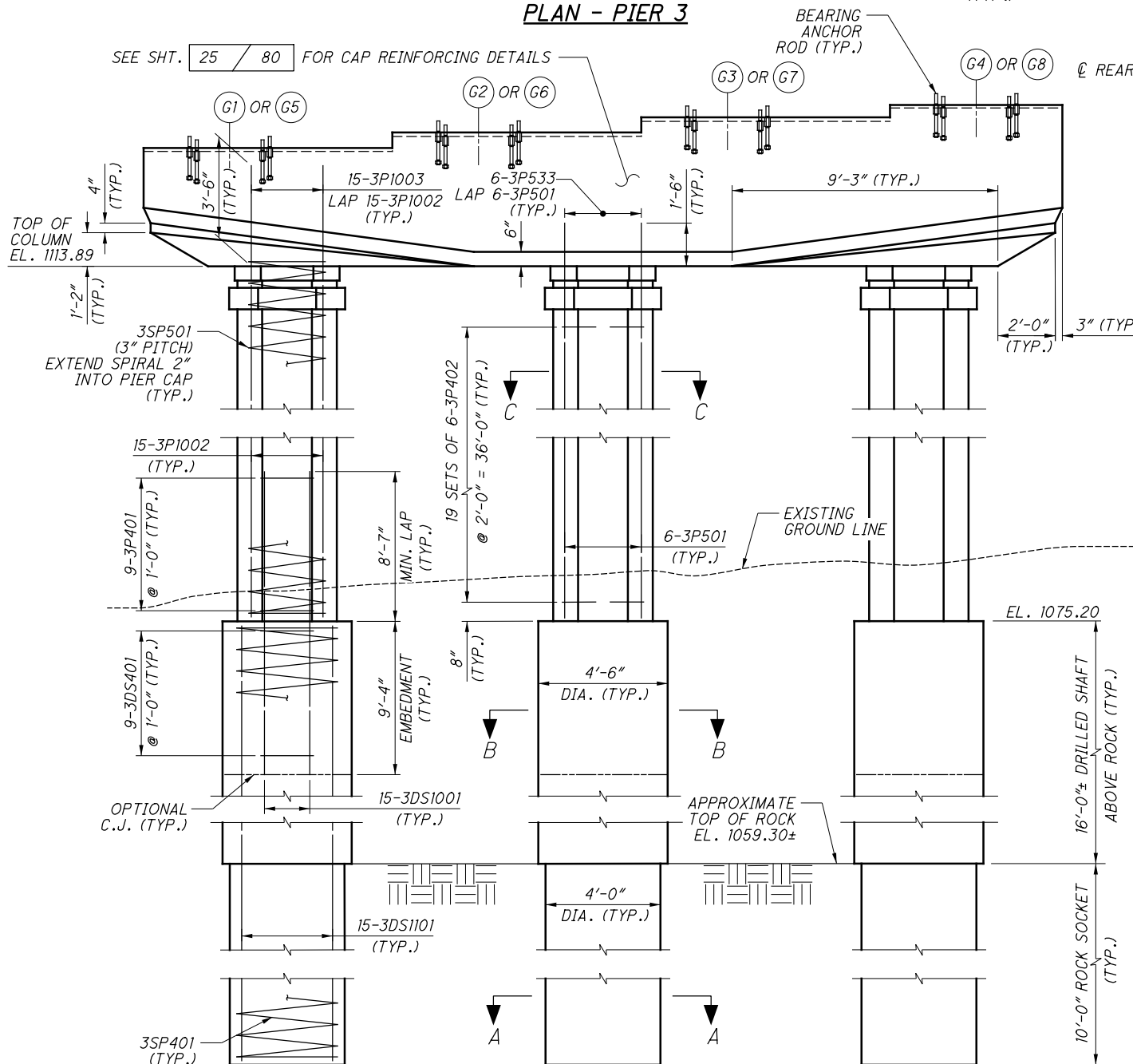


ISSUE RECORD:		DESCRIPTION
NO.	DATE	

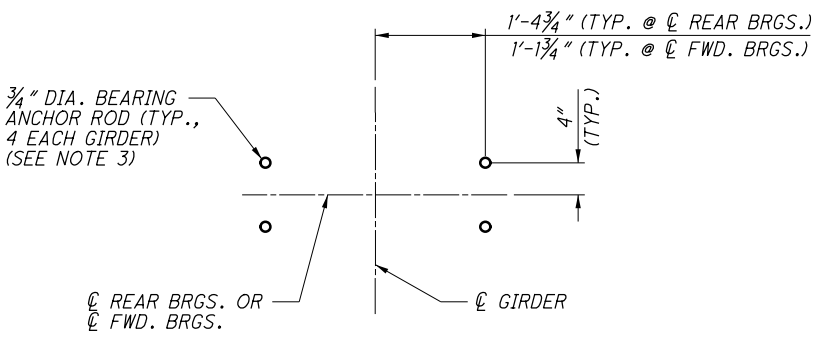
p:\v\ANV\A01PW\INT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_S1003.dgn Sheet 6/17



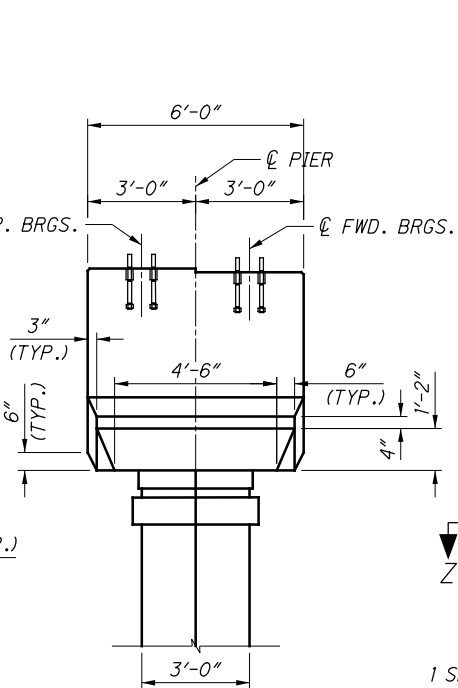
PLAN - PIER 3



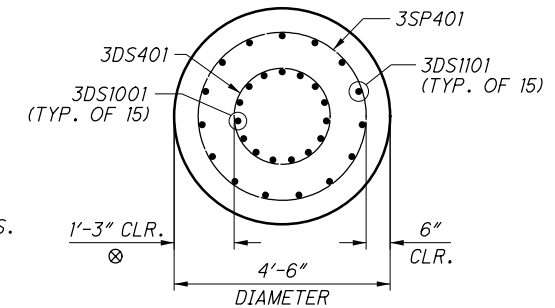
ELEVATION - PIER 3



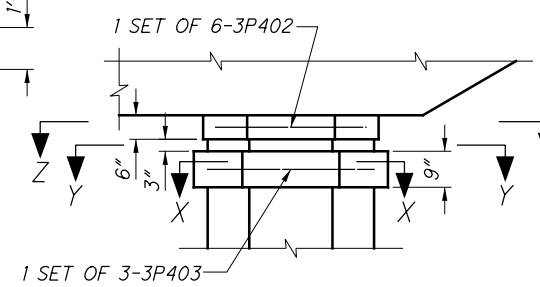
BEARING ANCHOR PLAN



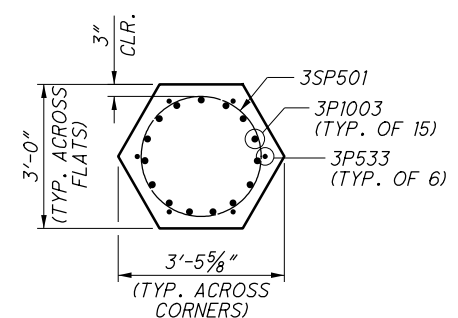
CAP END VIEW



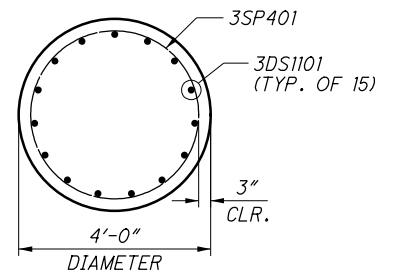
SECTION B-B



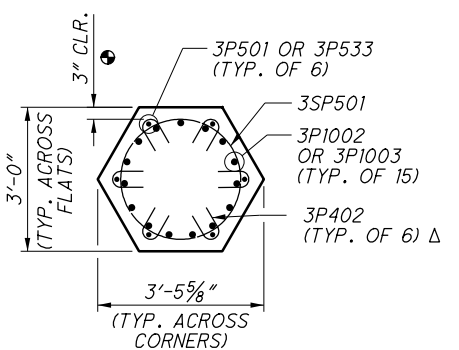
TOP OF COLUMN DETAIL



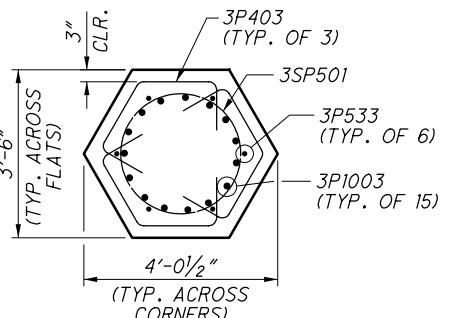
SECTION Y-Y



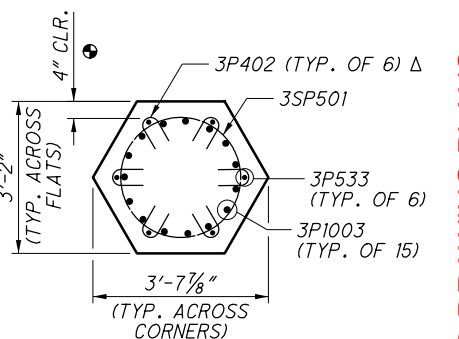
SECTION A-A



SECTION C-C



SECTION X-X



SECTION Z-Z

BEARING SEAT ELEVATIONS			
PIER 3 REAR BRGS.		PIER 3 FWD. BRGS.	
GIRDER	ELEVATION	GIRDER	ELEVATION
G1	1118.01	G5	1117.89
G2	1118.55	G6	1118.41
G3	1119.07	G7	1118.93
G4	1119.50	G8	1119.40

LEGEND:

- DS# = DRILLED SHAFT NUMBER
- = TYP. FOR MAIN SPIRAL BARS AND SUPPLEMENTAL CORNER BARS
- △ = ROTATE BARS AS NEEDED TO CLEAR MAIN COLUMN VERTICAL BARS
- ⊗ = ADJUST CLEAR COVER FOR SPLICE CAGE TO ENSURE THAT SPLICE CAGE IS CENTERED ON COLUMN.

NOTES:

- UNLESS NOTED OTHERWISE, MINIMUM LAP LENGTHS SHALL BE AS SHOWN ON THE PLANS AND AS FOLLOWS:
#5 COLUMN BARS: 1'-3"
#10 COLUMN BARS: 6'-7"
- REFER TO GENERAL NOTES FOR LIMITS OF SEALING OF CONCRETE SURFACES.
- SEE SHEET 52/80 FOR BEARING ANCHOR ROD DETAILS AND PAYMENT.
- BRIDGE SEAT REINFORCING, SETTING ANCHORS: PRE-SET BEARING ANCHORS. PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE PRE-SET BEARING ANCHORS.



BEARING SEAT ELEVATIONS	
GIRDER	ELEVATION
G5	1114.72
G6	1115.24
G7	1115.76
G8	1116.23

PLAN - PIER 4



DS8 = DRILLED SHAFT NUMBER

■ = SEISMIC PEDESTAL, SEE SHEET 27 / 80 FOR DETAILS

A = 8 SETS OF 2-4P610 (TOP) & 2-4P611 (BOT.) @ 11" = 6'-5"

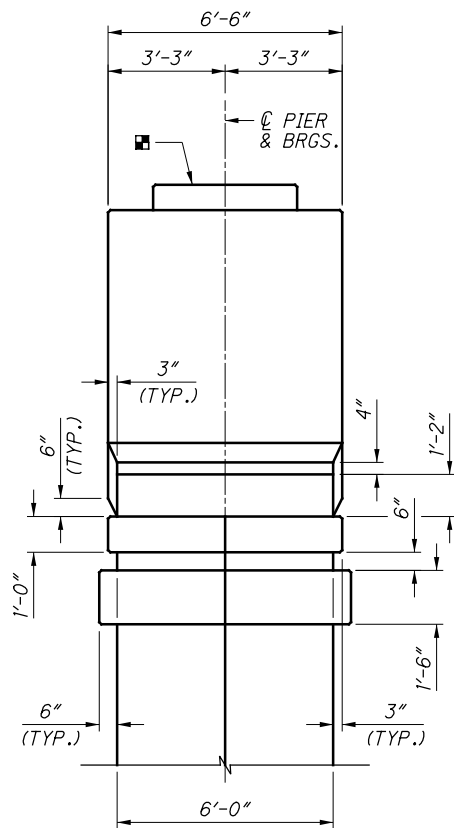
B = 3 SETS OF 2-4P610 (TOP) & 2-4P612 (BOT.) @ 11" = 1'-10"

C = 4 SETS OF 2-4P610 (TOP) & 2-4P613 (BOT.) @ 10" = 2'-6"

D = 5 SETS OF 1-4P618 (TOP) & 1-4P615 (BOT.) @ 11 1/2" = 3'-10"

E = 11 SETS OF 2-4P610 (TOP) & 2-4P614 (BOT.) @ 11" = 9'-2"

CAP ELEVATION - PIER 4



END ELEVATION - PIER 4

NOTES:

1. SEE SHEET

27	/	80
----	---	----

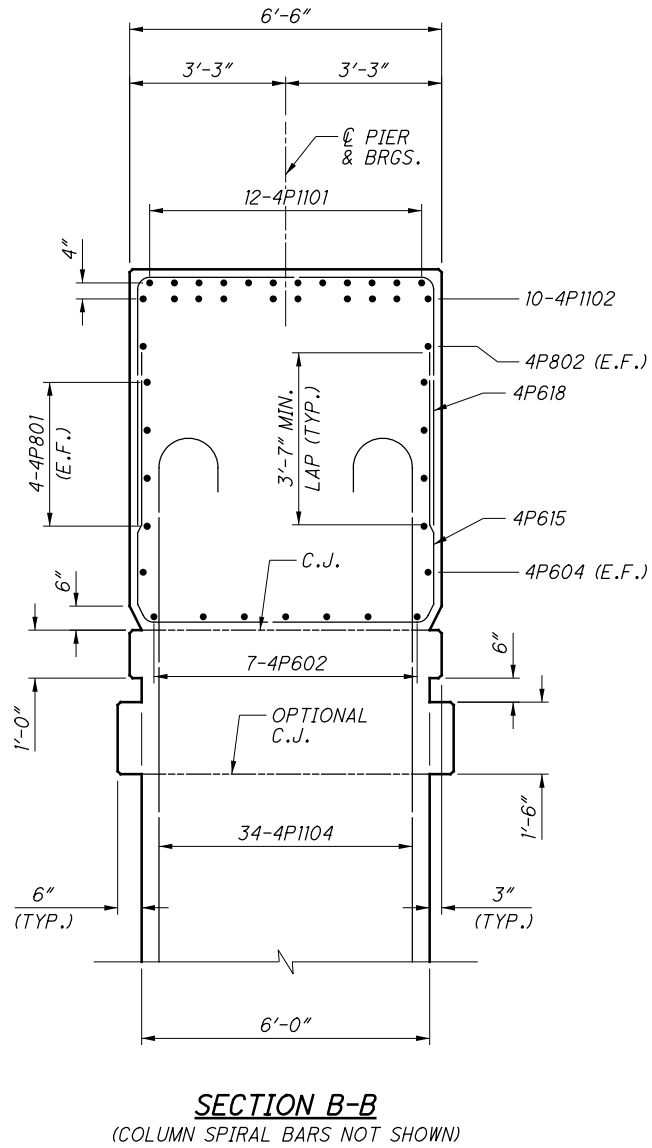
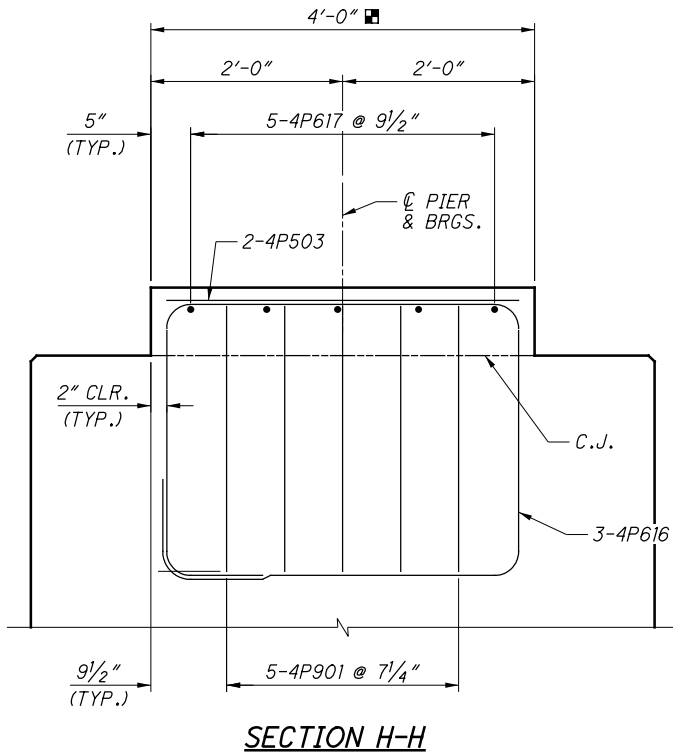
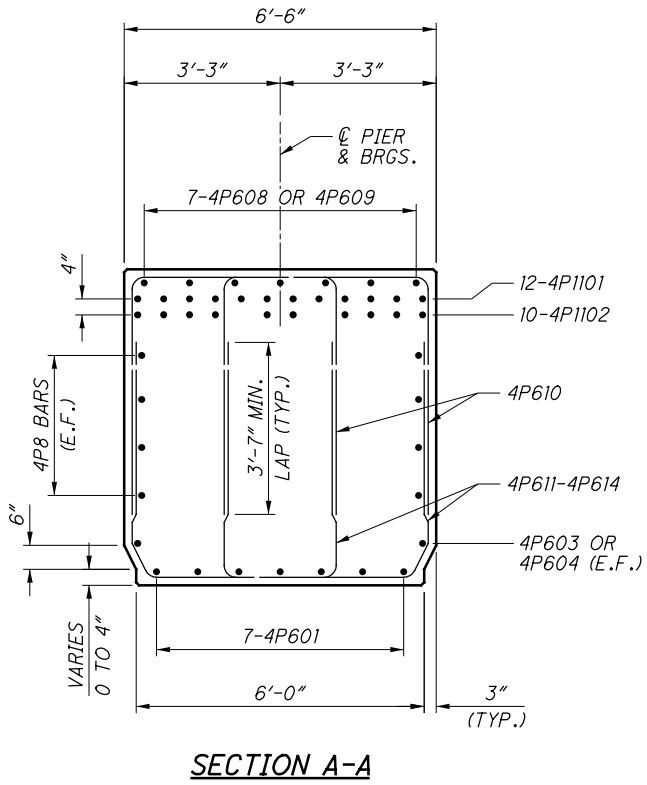
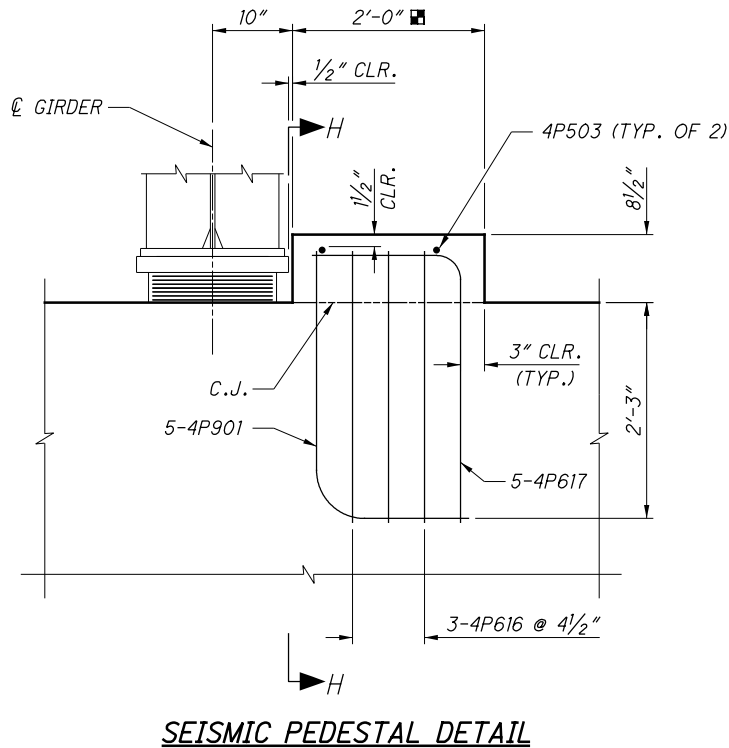
 FOR SECTIONS A-A & B-B.
2. SEE SHEET

28	/	80
----	---	----

 FOR COLUMN DETAILS.
3. REFER TO GENERAL NOTES FOR LIMITS OF SEALING OF CONCRETE SURFACES.
4. MINIMUM LAP LENGTHS SHALL BE AS FOLLOWS:
#6 HORIZONTAL BARS: 1'-6"

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

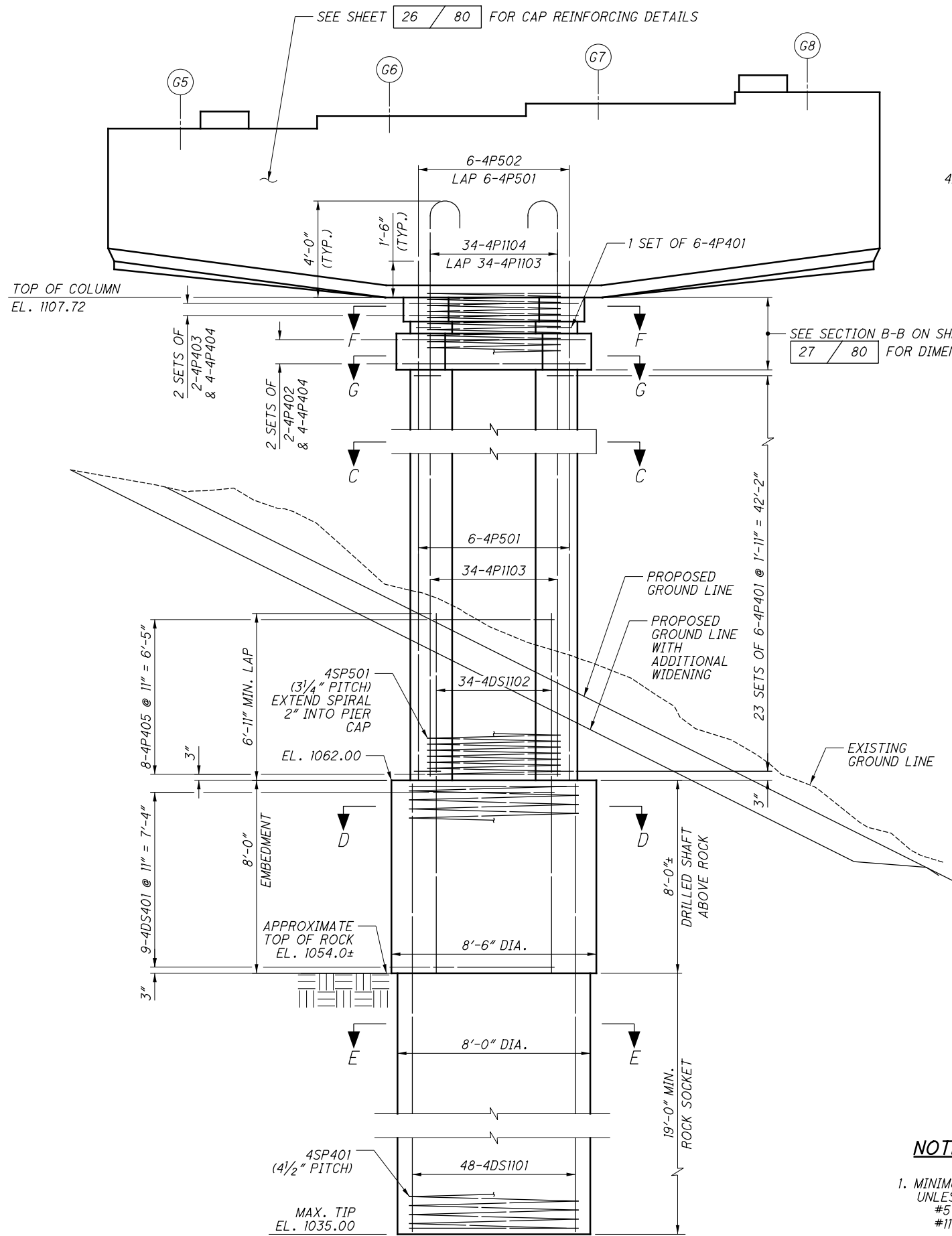
p:\V\ANV\A01P\W\T01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_S1014.dgn Sheet 6/17



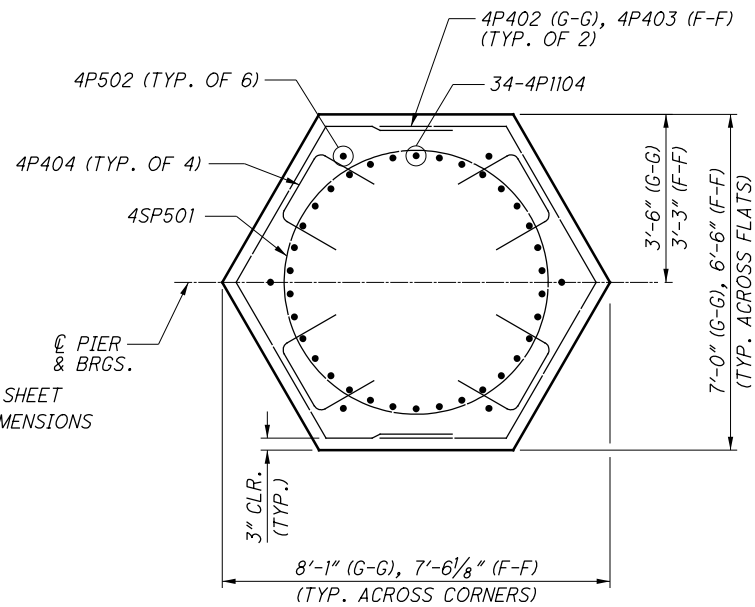
LEGEND:

■ = THE SURFACE OF THE BEAM SEAT C.J. IN THIS AREA SHALL BE FINISHED WITH A SERRATED TROWEL. THE SERRATIONS SHALL BE 1/4" DEEP MINIMUM.

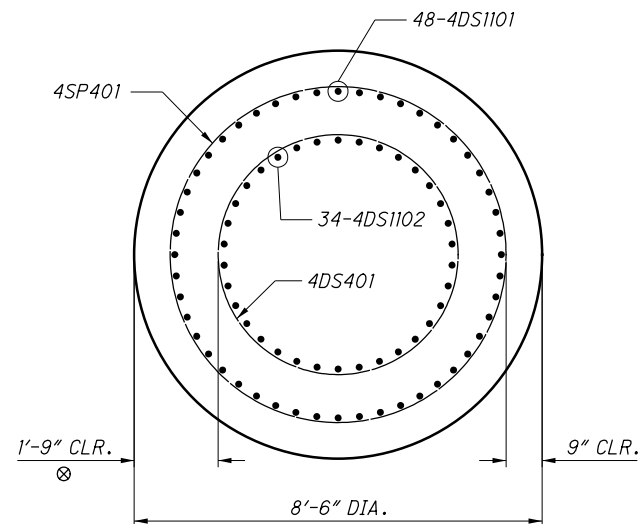
ISSUE RECORD:	
NO.	DATE DESCRIPTION



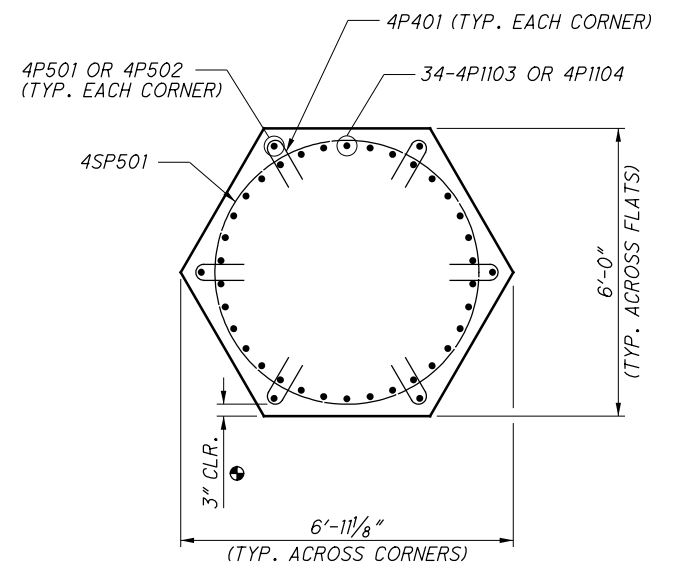
COLUMN ELEVATION - PIER 4



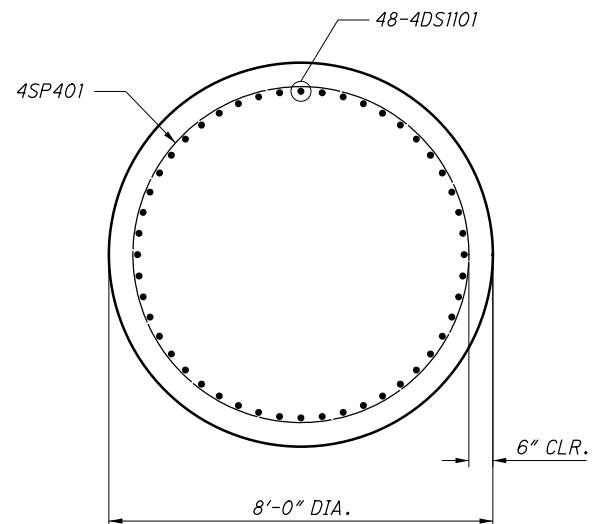
SECTION G-G (SHOWN)
SECTION F-F (AS NOTED)



SECTION D-D



SECTION C-C



SECTION E-E

NOTE:

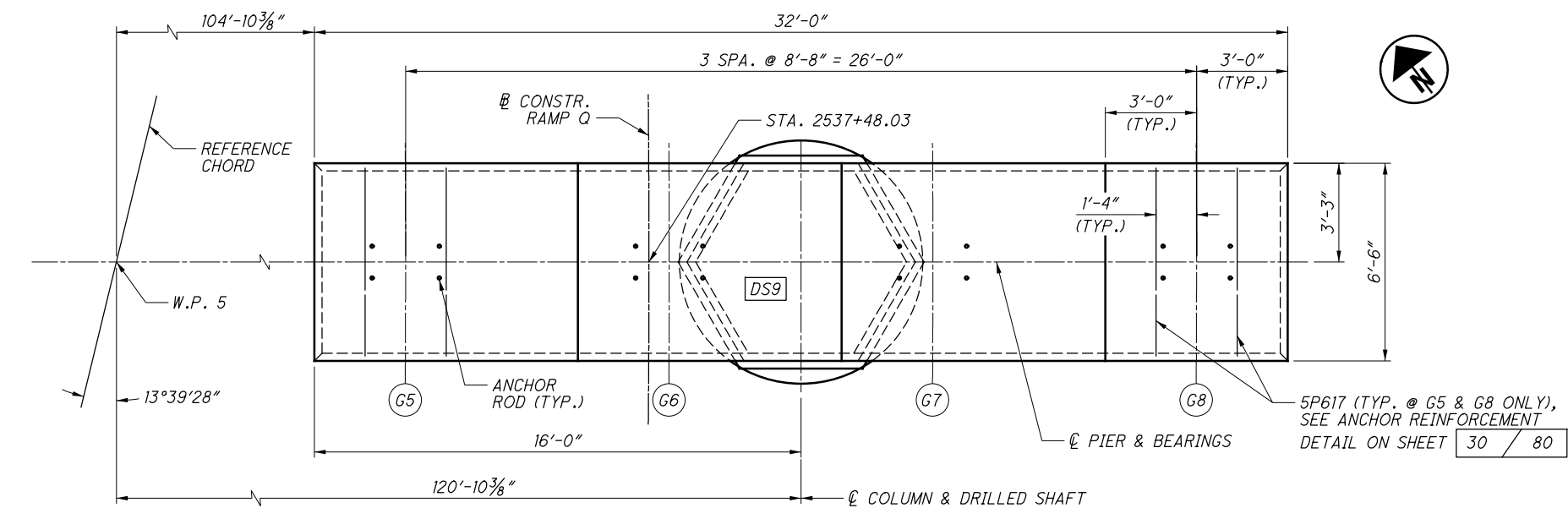
1. MINIMUM LAP LENGTHS SHALL BE AS FOLLOWS,
UNLESS NOTED OTHERWISE:
#5 COLUMN BARS: 1'-3"
#11 COLUMN BARS: 6'-8"

LEGEND:

- = TYP. FOR MAIN SPIRAL BARS AND SUPPLEMENTAL CORNER BARS
- Δ = ROTATE BARS AS NEEDED TO CLEAR MAIN COLUMN VERTICAL BARS
- ⊗ = ADJUST CLEAR COVER FOR SPLICE CAGE AS NEEDED TO ENSURE THAT SPLICE CAGE IS CENTERED ON COLUMN

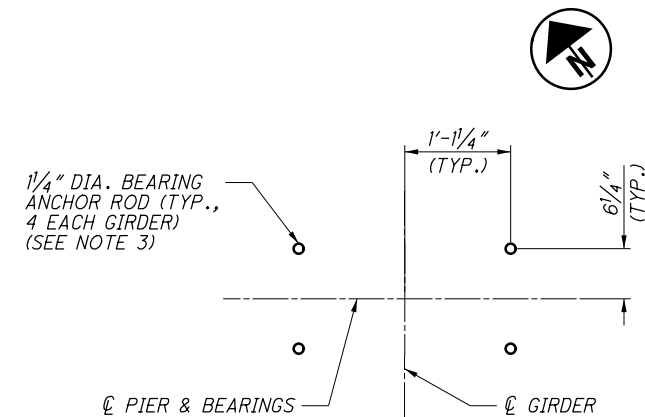
ISSUE RECORD:	
NO.	DESCRIPTION

ISSUE RECORD:	
NO.	DESCRIPTION

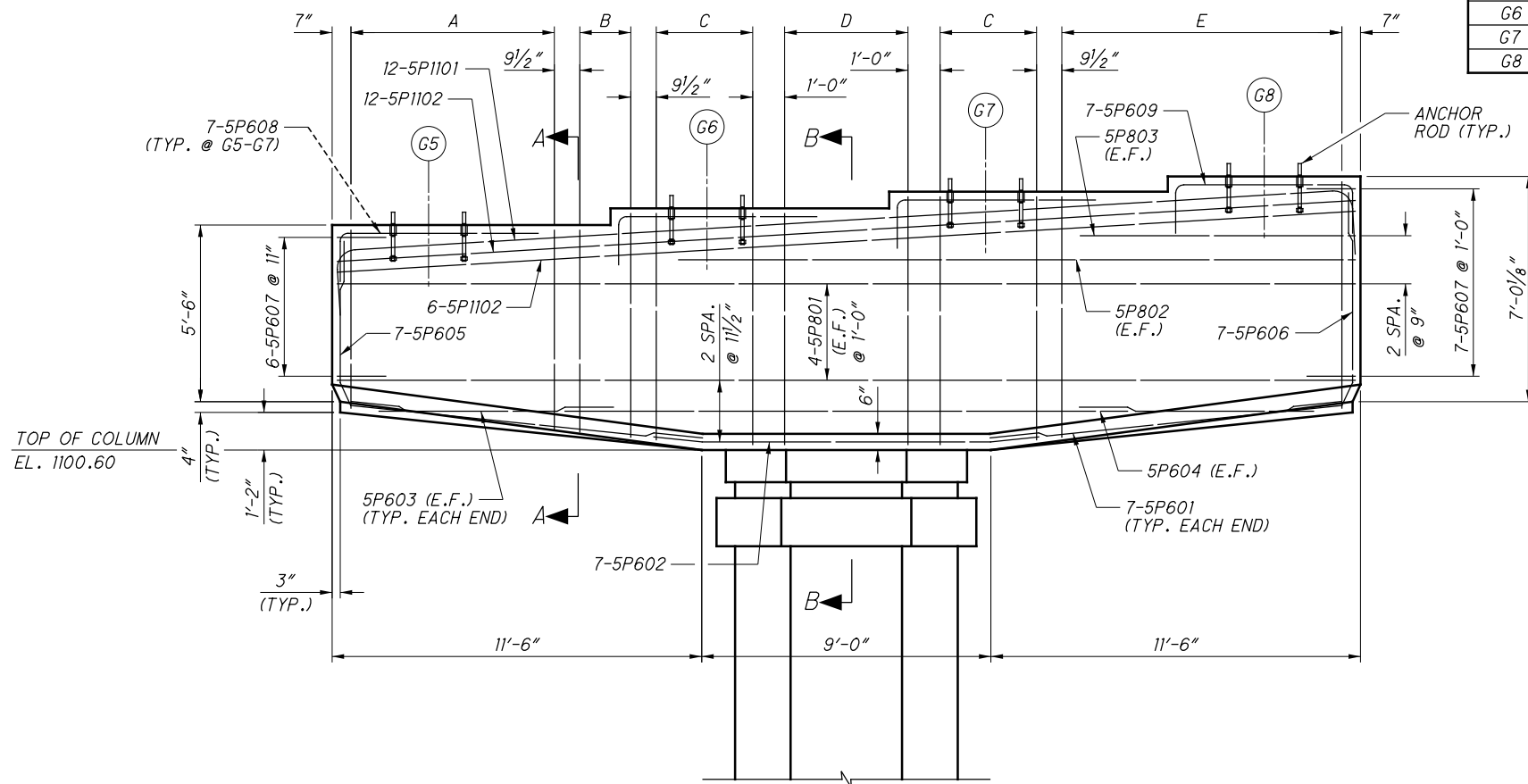


PLAN - PIER 5

BEARING SEAT ELEVATIONS	
GIRDER	ELEVATION
G5	1107.60
G6	1108.12
G7	1108.64
G8	1109.11



BEARING ANCHOR PLAN



CAP ELEVATION - PIER 5

LEGEND:

DS9 = DRILLED SHAFT NUMBER

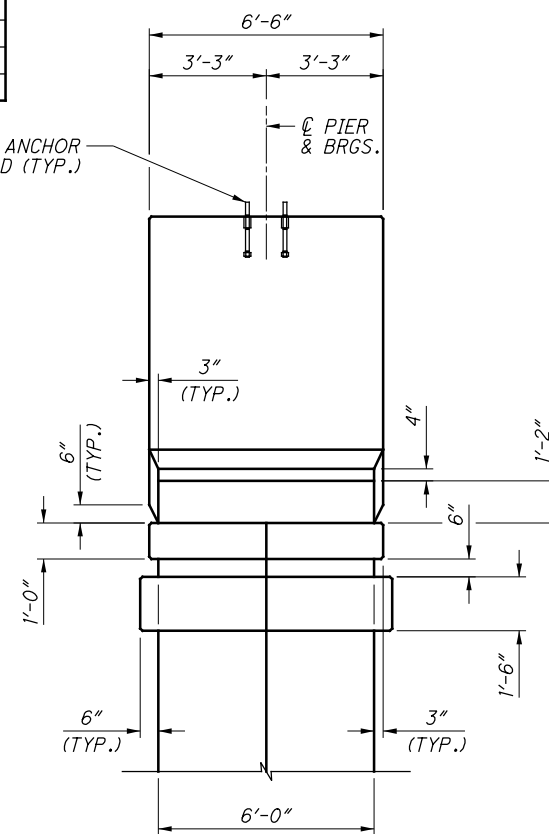
A = 9 SETS OF 2-5P610 (TOP) & 2-5P611 (BOT.) @ $9\frac{1}{2}" = 6'-4"$

B = 3 SETS OF 2-5P610 (TOP) & 2-5P612 (BOT.) @ $9\frac{1}{2}" = 1'-7"$

C = 7 SETS OF 2-5P610 (TOP) & 2-5P613 (BOT.) @ 6" = 3'-0"

D = 5 SETS OF 1-5P616 (TOP) & 1-5P615 (BOT.) @ 11 1/2" = 3'-10"

E = 12 SETS OF 2-5P610 (TOP) & 2-5P614 (BOT.) @ 9 1/2" = 8'-8 1/2"



END ELEVATION - PIER 5

NOTES:

1. SEE SHEET

30	/	80
----	---	----

 FOR SECTIONS A-A & B-B.
2. SEE SHEET

31	/	80
----	---	----

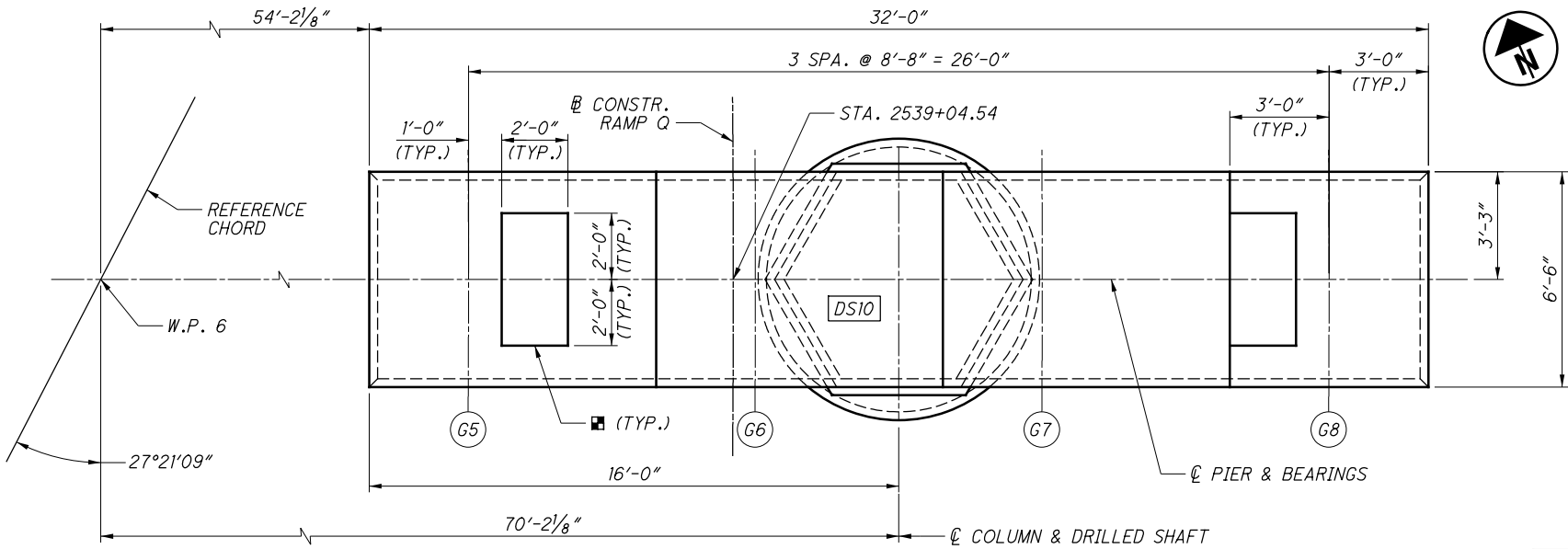
 FOR COLUMN DETAILS.
3. SEE SHEET

51	/	80
----	---	----

 FOR BEARING ANCHOR ROD DETAILS & PAYMENT.
4. BRIDGE SEAT REINFORCING, SETTING ANCHORS: PRE-SET BEARING ANCHORS. PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE PRE-SET BEARING ANCHORS.
5. REFER TO GENERAL NOTES FOR LIMITS OF SEALING OF CONCRETE SURFACES
6. MINIMUM LAP LENGTHS SHALL BE AS FOLLOWS:
#6 HORIZONTAL BARS: 1'-6"

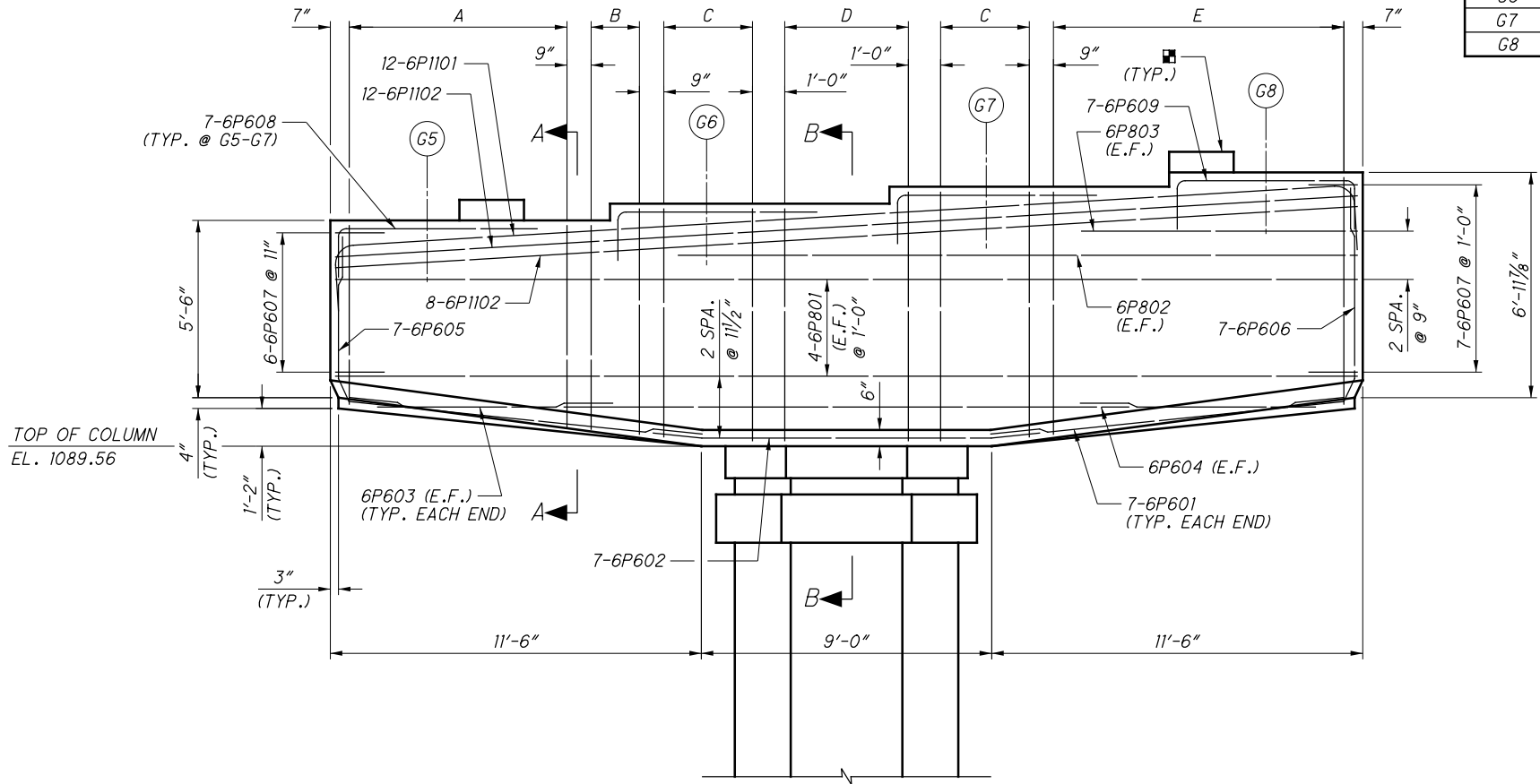
ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\V\ANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2-Structures\Sheets\Ramp_Q\076_1166L_S1006.dgn Sheet 6/1



PLAN - PIER 6

BEARING SEAT ELEVATIONS	
GIRDER	ELEVATION
G5	1096.56
G6	1097.08
G7	1097.60
G8	1098.05



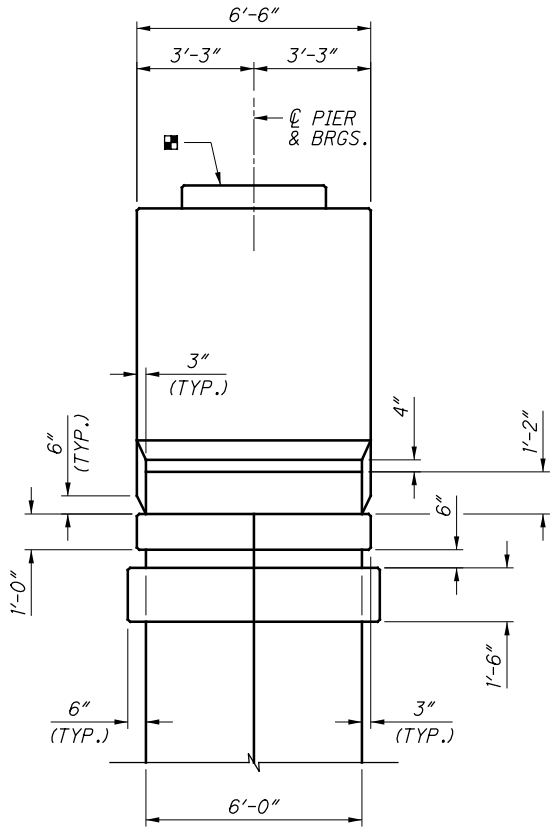
CAP ELEVATION - PIER 6

LEGEND:

DS10 = DRILLED SHAFT NUMBER

SEISMIC PEDESTAL, SEE SHEET 33 / 80 FOR DETAILS

- A = 10 SETS OF 2-6P610 (TOP) & 2-6P611 (BOT.) @ 9" = 6'-9"
- B = 3 SETS OF 2-6P610 (TOP) & 2-6P612 (BOT.) @ 9" = 1'-6"
- C = 7 SETS OF 2-6P610 (TOP) & 2-6P613 (BOT.) @ 5 1/2" = 2'-9"
- D = 5 SETS OF 1-6P618 (TOP) & 1-6P615 (BOT.) @ 11 1/2" = 3'-10"
- E = 13 SETS OF 2-6P610 (TOP) & 2-6P614 (BOT.) @ 9" = 9'-0"



END ELEVATION - PIER 6

NOTES:

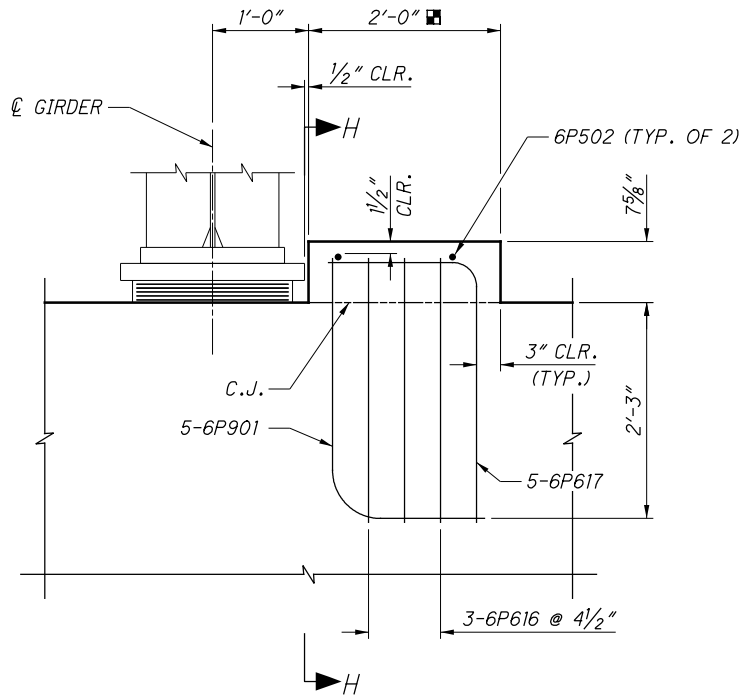
- SEE SHEET 33 / 80 FOR SECTIONS A-A & B-B.
- SEE SHEET 34 / 80 FOR COLUMN DETAILS.
- REFER TO GENERAL NOTES FOR LIMITS OF SEALING OF CONCRETE SURFACES.
- MINIMUM LAP LENGTHS SHALL BE AS FOLLOWS:
#6 HORIZONTAL BARS: 1'-6"

2026-03-24 - BU-17 - RECORD DRAWING PLANS

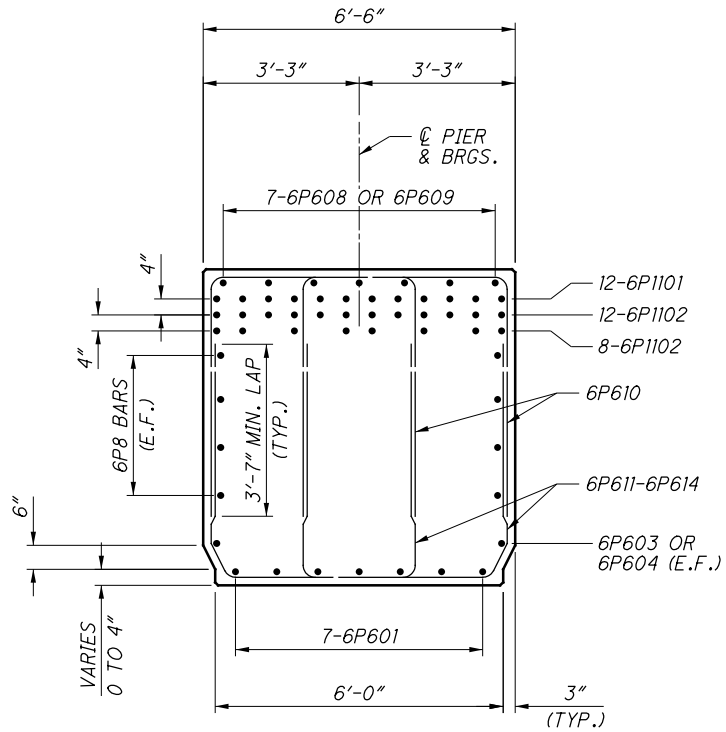
SUM-76 / 77 / 8 - 10.99 / 11.54 / 0.00		PID No. 101402		32 / 80		56 104	
PIER 6 PLAN AND CAP ELEVATION		SUM-76-1148Q		RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB		DESIGNED BES	
DRAWN BES		CHECKED JHL		REVIEWED JCS		DATE 4/29/19	
STRUCTURE FILE NUMBER 7706066		ENGINEERS Architects		PLANNERS		BURGESS & NIPLE	
5085 REED ROAD, COLUMBUS, OHIO 43220							

ISSUE RECORD:		DESCRIPTION	
NO.	DATE		

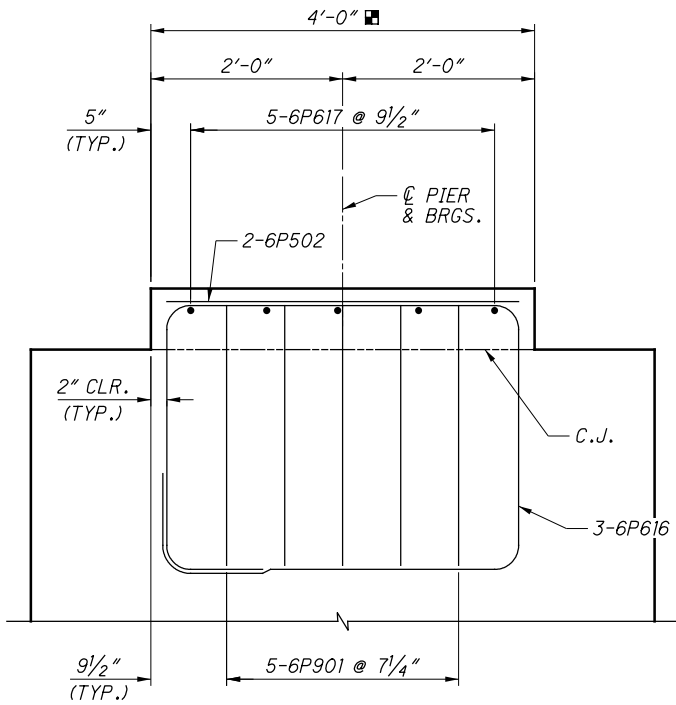
pw:\V\ANV\A01PW\INT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_S1010.dgn Sheet 6/17



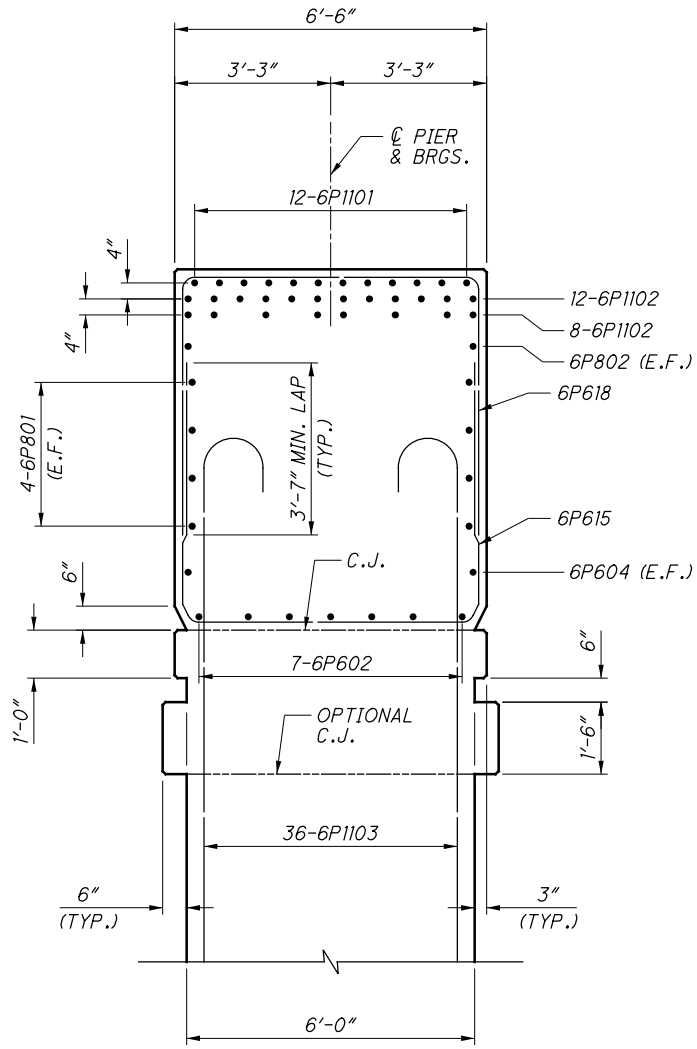
SEISMIC PEDESTAL DETAIL



SECTION A-A



SECTION H-H



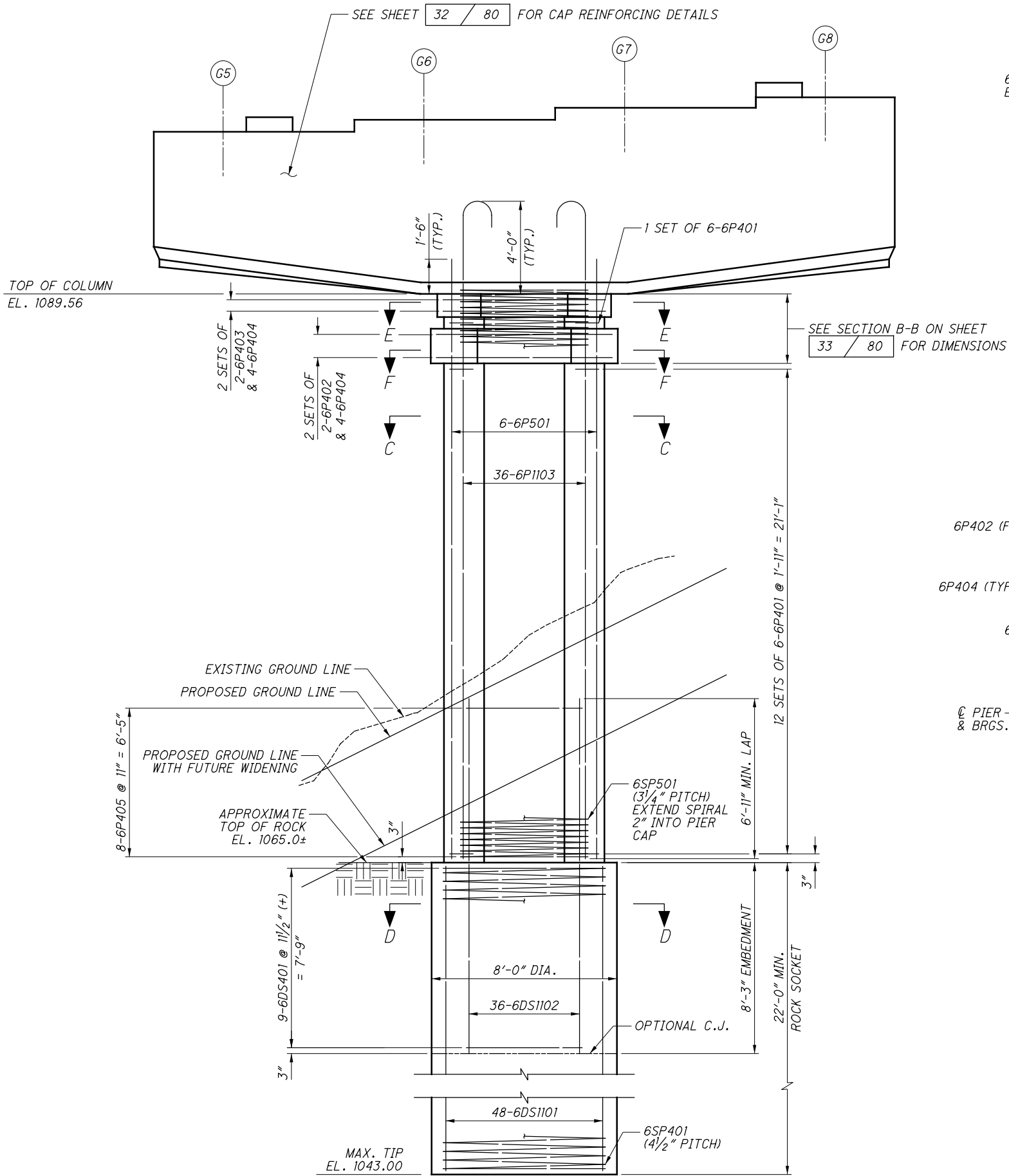
SECTION B-B
(COLUMN SPIRAL BARS NOT SHOWN)

LEGEND:

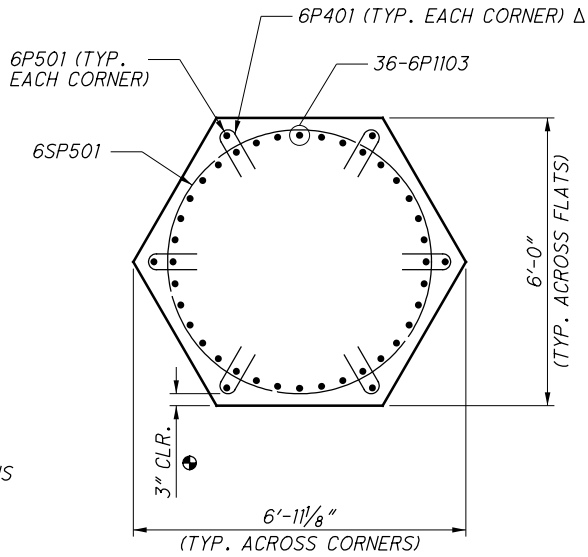
▣ = THE SURFACE OF THE BEAM SEAT C.J. IN THIS AREA SHALL BE FINISHED WITH A SERRATED TROWEL. THE SERRATIONS SHALL BE 1/4" DEEP MINIMUM.

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

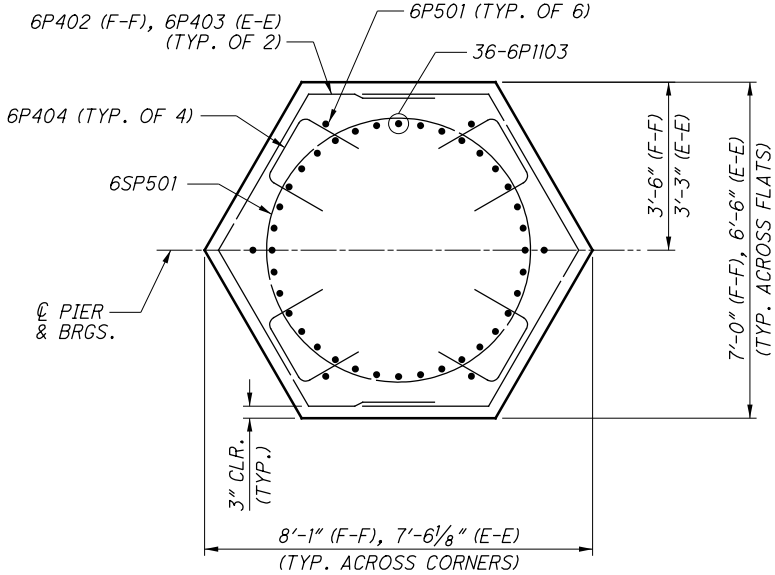
pw:\ANV\A01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_S1008.dgn Sheet 6/1



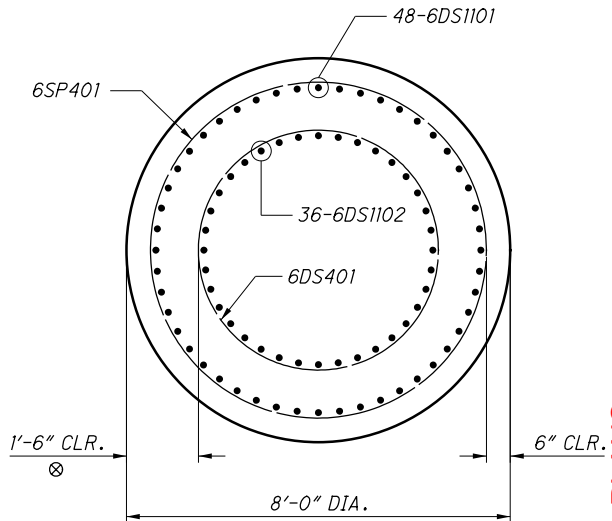
COLUMN ELEVATION - PIER 6



SECTION C-C



SECTION F-F (SHOWN)
SECTION E-E (AS NOTED)



SECTION D-D

LEGEND:

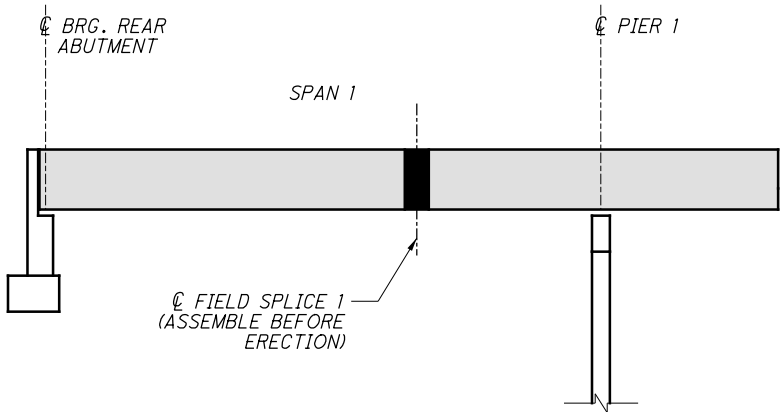
- = TYP. FOR MAIN SPIRAL BARS AND SUPPLEMENTAL CORNER BARS
- Δ = ROTATE BARS AS NEEDED TO CLEAR MAIN COLUMN VERTICAL BARS
- ⊗ = ADJUST CLEAR COVER FOR SPLICE CAGE AS NEEDED TO ENSURE THAT SPLICE CAGE IS CENTERED ON COLUMN

2026-03-24 - BU-17 - RECORD DRAWING PLANS

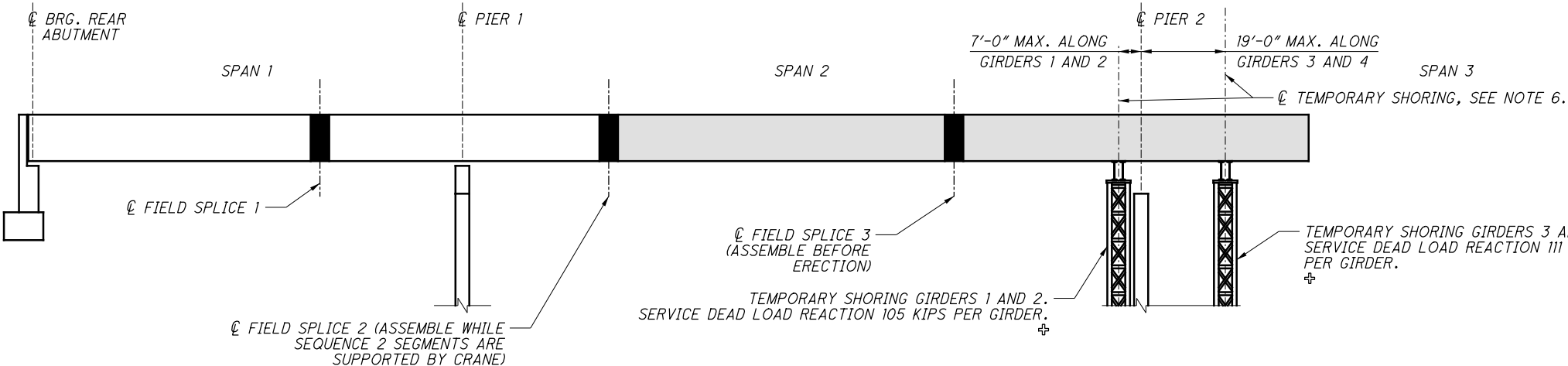
SUM-76 / 77 / 8- 10.99 / 11.54 / 0.00		PID No. 101402		34 / 80		58 104	
PIER 6 COLUMN & DRILLED SHAFT DETAILS				SUM-76-1148Q			
RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB				BURGESS & NIPLE			
Engineers ■ Architects ■ Planners				5085 REED ROAD, COLUMBUS, OHIO 43220			
DESIGNED BES		CHECKED JHL/JDH		DRAWN BES		REVIEWED JCS	
DATE 4/29/19		STRUCTURE FILE NUMBER 7706066		DATE 4/29/19		STRUCTURE FILE NUMBER 7706066	

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

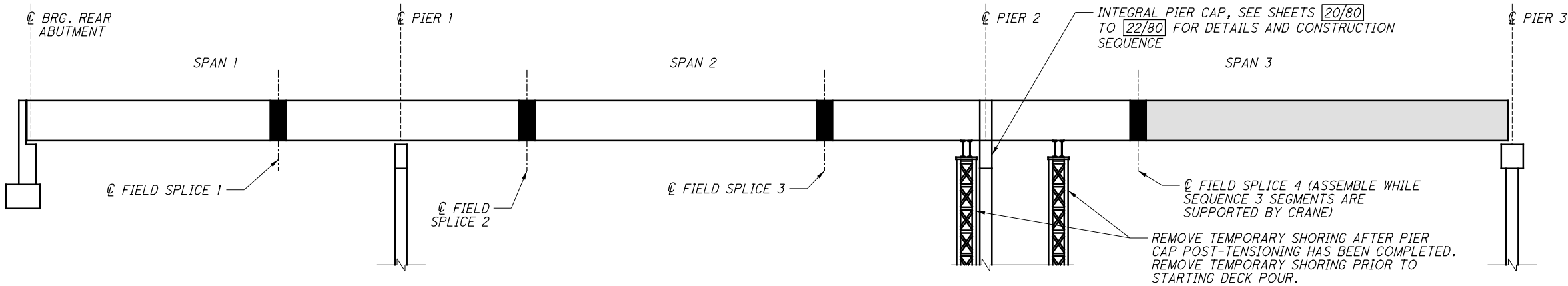
pw:\\V\\AN\\A01P\\W\\T01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\\Structures\\Sheets\\Ramp_Q\\076_1166L_SS019.dgn Sheet 6/1



GIRDER ERECTION - SEQUENCE 1 - UNIT 1



GIRDER ERECTION - SEQUENCE 2 - UNIT 1



GIRDER ERECTION - SEQUENCE 3 - UNIT 1

LEGEND:

⊕ = DESIGN TEMPORARY SHORING IN ACCORDANCE WITH THE AASHTO GUIDE DESIGN SPECIFICATIONS FOR BRIDGE TEMPORARY WORKS, LATEST EDITION. PROVIDE TEMPORARY CROSS BRACING BETWEEN GIRDERS AT TEMPORARY SHORING LOCATIONS. TEMPORARY CROSS BRACING SHALL HAVE ADEQUATE STRENGTH AND STIFFNESS TO RESIST WIND AND CONSTRUCTION LOADS AND SHALL PROVIDE ADEQUATE GIRDER STABILITY. ADDITIONAL PERMANENT STIFFENER PLATES MAY BE NEEDED TO CONNECT TEMPORARY CROSS BRACING TO GIRDERS. REMOVE TEMPORARY CROSS BRACING AFTER PIER CAP POST-TENSIONING HAS BEEN COMPLETED. SUBMIT ENGINEERED DRAWINGS FOR TEMPORARY SHORING AND TEMPORARY CROSS BRACING PER CMS 501.05. PAYMENT FOR DESIGN, INSTALLATION, AND REMOVAL OF TEMPORARY SHORING AND TEMPORARY CROSS BRACING SHALL BE INCLUDED WITH ITEM SPECIAL - STRUCTURE, MISC.: TEMPORARY SUPPORTS FOR GIRDERS AT INTEGRAL PIER.

NOTES:

- THE CONSTRUCTION SEQUENCE SHOWN DEMONSTRATES ONE FEASIBLE ALTERNATIVE TO ERECT THE CURVED GIRDERS. THE CONTRACTOR HAS THE OPTION OF USING AN ALTERNATIVE METHOD OF GIRDER ERECTION.
- SUBMIT ENGINEERED DRAWINGS WITH PROPOSED GIRDER ERECTION DETAILS IN CONFORMANCE WITH CMS 501 AND 513.
- VERTICAL AND HORIZONTAL STABILITY SHALL BE MAINTAINED FOR EACH SEQUENCE BY THE CONTRACTOR PER CMS 501.05.B.4.

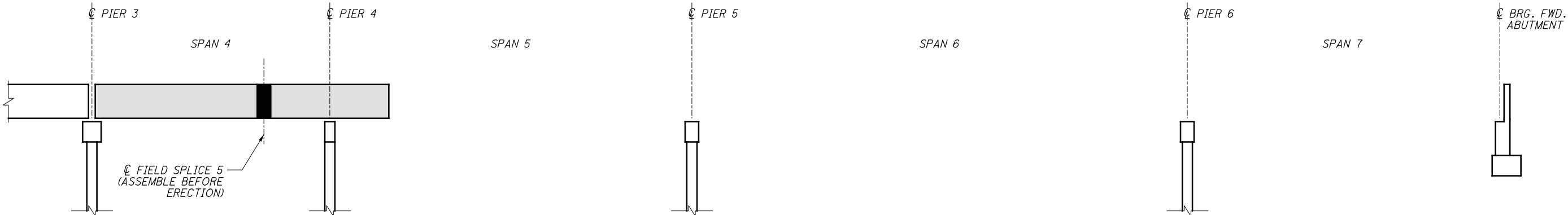
- THE ERECTION OF THE GIRDERS SHALL BE CONDUCTED AS FOLLOWS FOR EACH SEQUENCE:
 - ERECT GIRDERS 3 AND 4 AS A SINGLE UNIT WITH ALL CROSSFRAMES FULLY CONNECTED.
 - ERECT GIRDER 2 AND CONNECT CROSSFRAMES BETWEEN GIRDERS 2 AND 3.
 - ERECT GIRDER 1 AND CONNECT CROSSFRAMES BETWEEN GIRDERS 1 AND 2.
- UNIT 1 SEQUENCE IS INDEPENDENT OF UNIT 2 SEQUENCE. THE CONTRACTOR MAY ELECT TO ERECT EITHER UNIT FIRST.
- FOR TEMPORARY SHORING PLAN VIEW, SEE SHEET 37/80.

2026-03-24 - BU-17- RECORD DRAWING PLANS

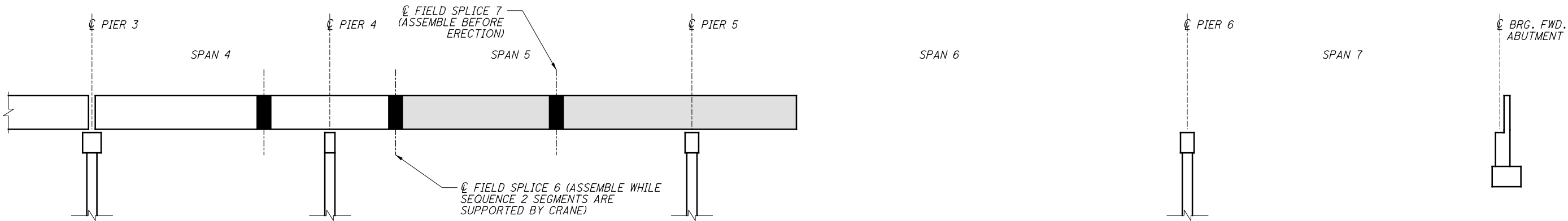
SUM-76/77/8-10.99/11.54/0.00		GIRDER ERECTION SEQUENCE - 1		BURGESS & NIPLE	
PID No. 101402		SUM-76-1148Q		Engineers Architects Planners	
35/80		RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB		5085 REED ROAD, COLUMBUS, OHIO 43220	
59/104		DESIGNED MAB		REVIEWED JCS	
		CHECKED BES		DATE 4/29/19	
				STRUCTURE FILE NUMBER 7706066	

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

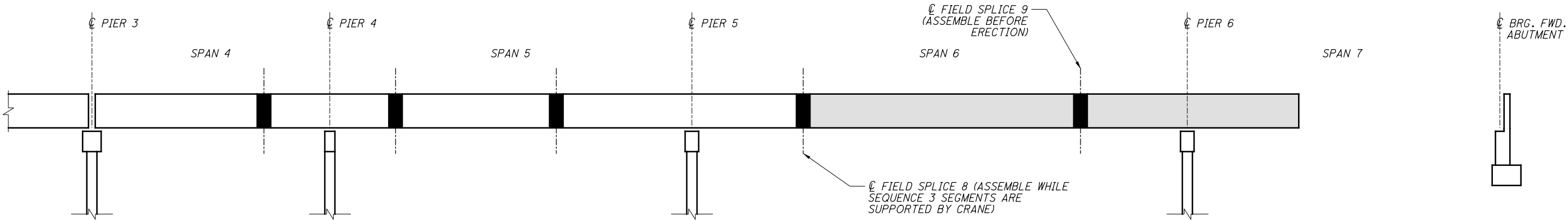
6/1
pw:\\V\ANV\A01P\WINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_SS021.dgn Sheet



GIRDER ERECTION - SEQUENCE 1 - UNIT 2



GIRDER ERECTION - SEQUENCE 2 - UNIT 2



GIRDER ERECTION - SEQUENCE 3 - UNIT 2

- NOTES:**
1. THE CONSTRUCTION SEQUENCE SHOWN DEMONSTRATES ONE FEASIBLE ALTERNATIVE TO ERECT THE CURVED GIRDERS. THE CONTRACTOR HAS THE OPTION OF USING AN ALTERNATIVE METHOD OF GIRDER ERECTION.
 2. SUBMIT ENGINEERED DRAWINGS WITH PROPOSED GIRDER ERECTION DETAILS IN CONFORMANCE WITH CMS 501 AND 513.
 3. VERTICAL AND HORIZONTAL STABILITY SHALL BE MAINTAINED FOR EACH SEQUENCE BY THE CONTRACTOR PER CMS 501.05.B.4.
 4. THE ERECTION OF THE GIRDERS SHALL BE CONDUCTED AS FOLLOWS FOR EACH SEQUENCE:
 - A. ERECT GIRDERS 7 AND 8 AS A SINGLE UNIT WITH ALL CROSSFRAMES FULLY CONNECTED.
 - B. ERECT GIRDER 6 AND CONNECT CROSSFRAMES BETWEEN GIRDERS 6 AND 7.
 - C. ERECT GIRDER 5 AND CONNECT CROSSFRAMES BETWEEN GIRDERS 5 AND 6.
 5. UNIT 2 SEQUENCE IS INDEPENDENT OF UNIT 1 SEQUENCE. THE CONTRACTOR MAY ELECT TO ERECT EITHER UNIT FIRST.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

GIRDER ERECTION SEQUENCE - 2		BURGESS & NIPLE	
SUM-76-1148Q		Engineers, Architects, Planners	
RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB		5085 REED ROAD, COLUMBUS, OHIO 43220	
DESIGNED	MAB	DRAWN	BCS
CHECKED	BES	REVISED	
REVIEWED	JCS	DATE	4/29/19
STRUCTURE FILE NUMBER	7706066		

SUM-76/77/8-10.99/11.54/0.00

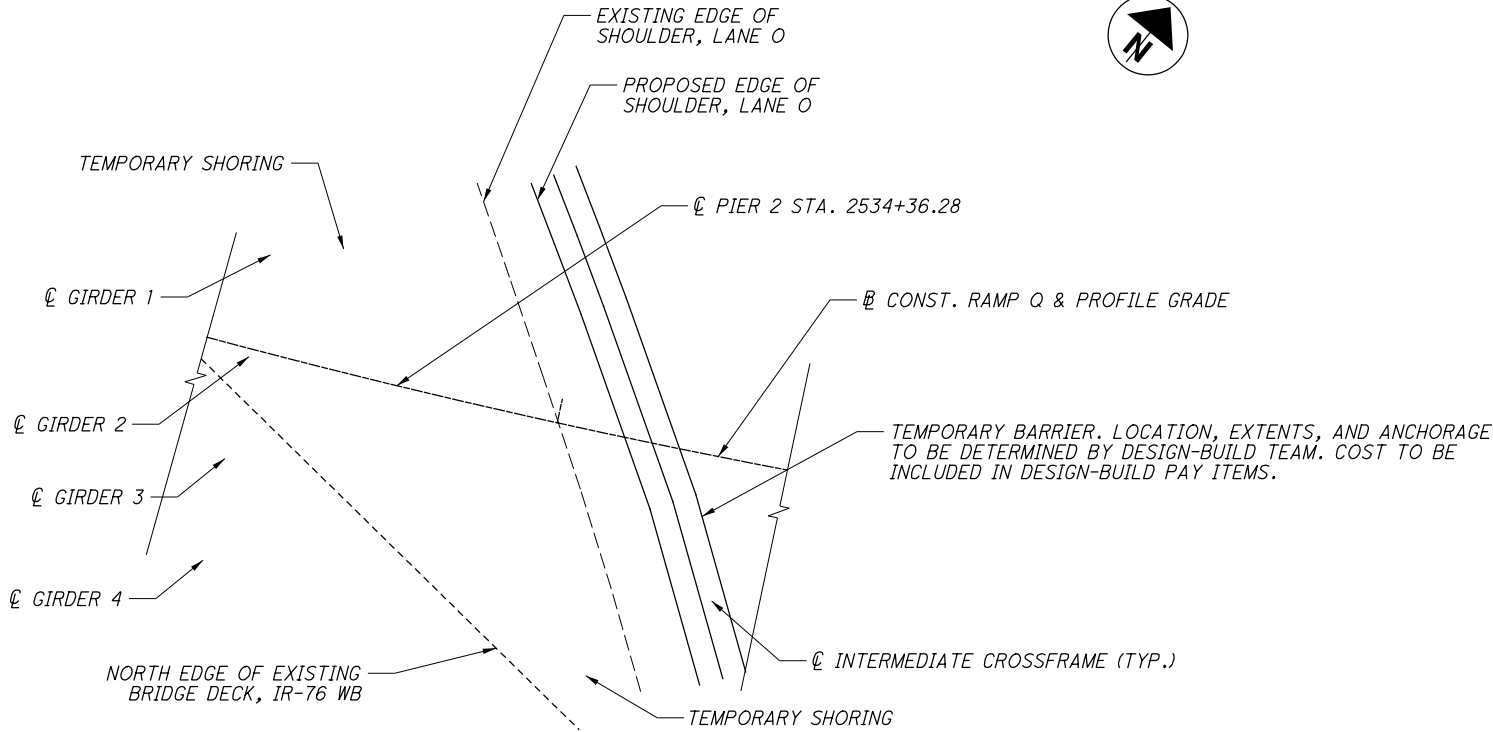
PID No. 101402

36/80

60/104

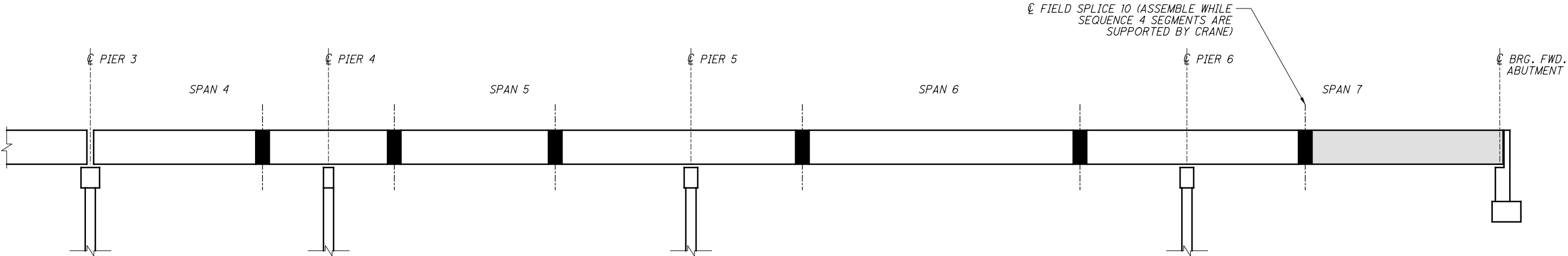
ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\V\ANV\A01PW\INT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_SS022.dgn Sheet 61



PIER 2 TEMPORARY SHORING PLAN VIEW

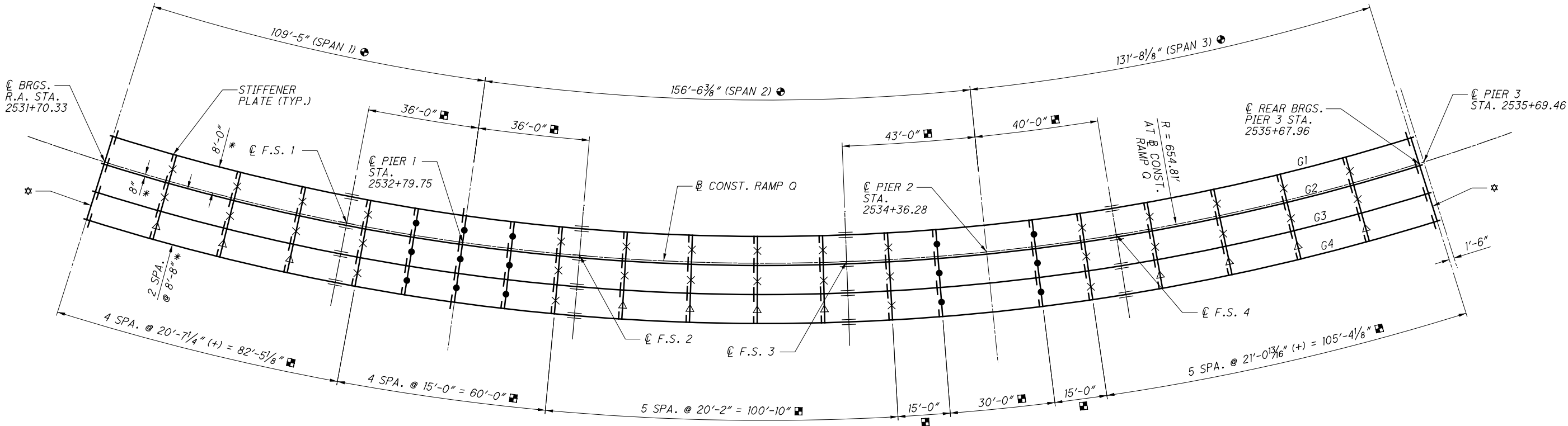
GIRDER ERECTION - SEQUENCE 4 - UNIT 2



SUM-76 / 77 / 8 - 10.99 / 11.54 / 0.00 PID No. 101402	GIRDER ERECTION SEQUENCE - 3 SUM-76-1148Q RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB	DESIGNED MAB	DRAWN BCS	REVIEWED JCS	DATE 4/29/19
		CHECKED BES	REVISED	STRUCTURE FILE NUMBER 7706066	Engineers & Planners BURGESS & NIPLE 5085 REED ROAD, COLUMBUS, OHIO 43220

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\V\ANV\A01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_SS001.dgn Sheet 6/1



FRAMING PLAN - UNIT 1

LEGEND:

- * = MEASURED RADially
- ⊕ = MEASURED ALONG ⊕ CONST. RAMP Q
- = MEASURED ALONG ⊕ GIRDER G4
- ☆ = END CROSSFRAME, SEE SHEET 50 / 80 FOR DETAILS (TYP.)
- = TYPE 1 INTERMEDIATE CROSSFRAME
SEE SHEET 49 / 80 FOR DETAILS
- ✕ = TYPE 2 INTERMEDIATE CROSSFRAME
SEE SHEET 49 / 80 FOR DETAILS
- ⬆ = TYPE 3 INTERMEDIATE CROSSFRAME
SEE SHEET 49 / 80 FOR DETAILS

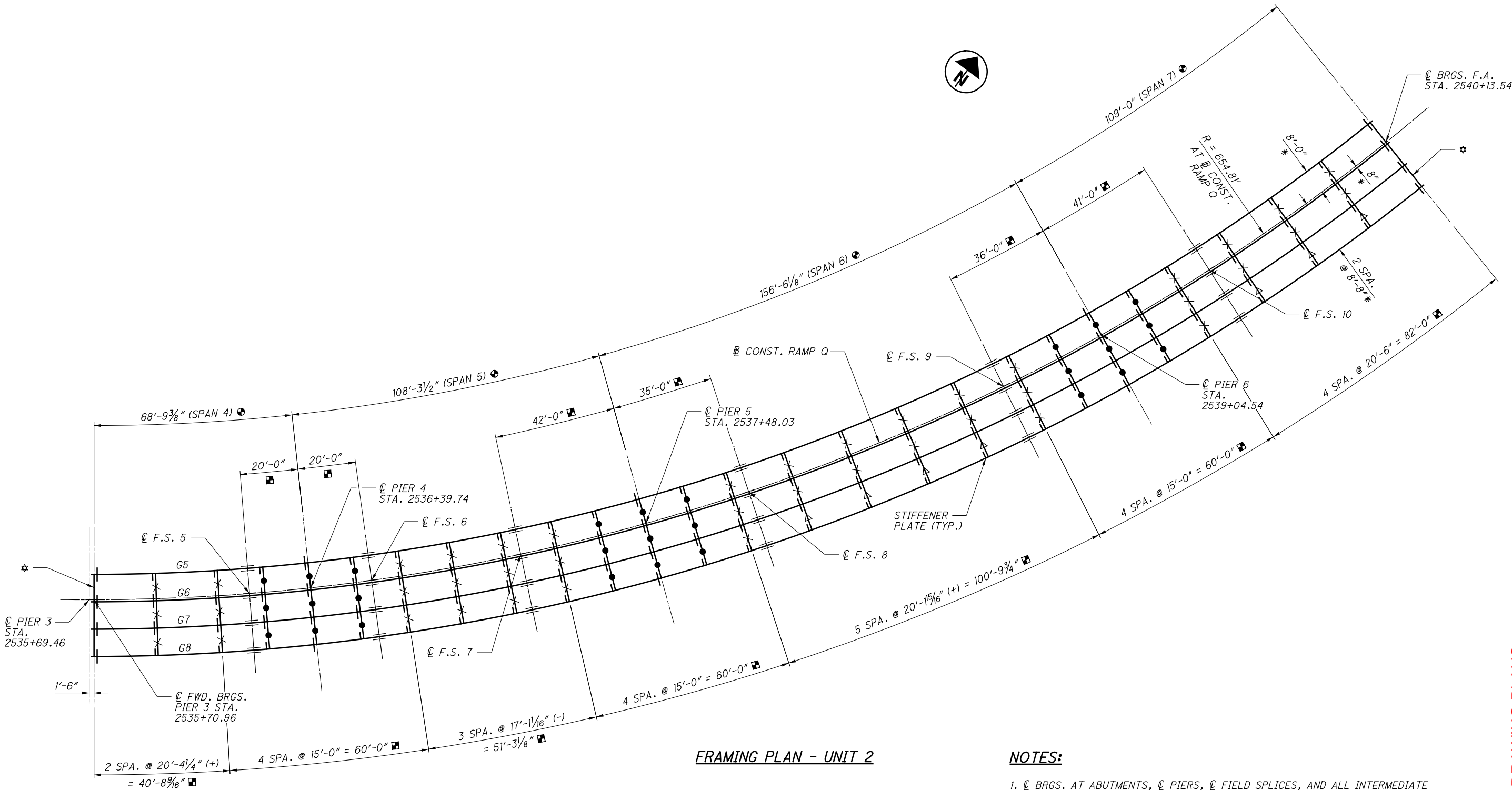
NOTES:

- ⊕ BRGS. AT ABUTMENTS, ⊕ PIERS, ⊕ FIELD SPLICES, AND ALL INTERMEDIATE CROSSFRAMES ARE ORIENTED RADially TO ⊕ CONST. RAMP Q. SEE LAYOUT DIAGRAM ON SHEET 3 / 80 FOR ADDITIONAL SUBSTRUCTURE LAYOUT DETAILS.
- GIRDERS ARE CONCENTRIC WITH ⊕ CONST. RAMP Q.
- ALL DIMENSIONS ARE HORIZONTAL.
- PROVIDE 1" DIA. BOLTS WITH OVERSIZED HOLES (1 1/4" DIA.) AT THE LOCATIONS LISTED:
CROSSFRAME STIFFENERS
BEARING STIFFENERS AT PIER 1
CROSSFRAME CONNECTION PLATES
- BOLTS SHALL BE ASTM F3125, GRADE A325, TYPE 1 (GALVANIZED).
- INSTALL TWO HARDENED WASHERS AT EACH BOLT WITH OVERSIZED HOLES, ONE AT THE BOLT HEAD AND ONE AT THE NUT.
- CYLINDRICAL DRIFT PINS ACCORDING TO ODOT CMS 513.20C WITH A DIAMETER RANGING FROM 1 1/32" TO 1 1/4" SHALL BE USED DURING INSTALLATION OF ALL MEMBERS WITH OVERSIZED HOLES.

SUM-76 / 77 / 8 - 10.99 / 11.54 / 0.00		FRAMING PLAN - UNIT 1 SUM-76-1148Q		DESIGNED BES	DRAWN BES	REVIEWED JCS	DATE 4/29/19	BURGESS & NIPLE Engineers Architects Planners 5085 REED ROAD, COLUMBUS, OHIO 43220	
PID No. 101402		RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB		CHECKED MAB	REVISED		STRUCTURE FILE NUMBER 7706066		
38 / 80									
62 104									

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

6/1
pw:\\V\\AN\\A01PWINT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\\Structures\\Sheets\\Ramp_Q\\076_1166L_SS002.dgn Sheet 6/1



FRAMING PLAN - UNIT 2

LEGEND:

- * = MEASURED RADIALLY
- ⊕ = MEASURED ALONG ⊕ CONST. RAMP Q
- ⊠ = MEASURED ALONG ⊕ GIRDER G8
- ☆ = END CROSSFRAME, SEE SHEET 50 / 80 FOR DETAILS (TYP.)
- = TYPE 1 INTERMEDIATE CROSSFRAME
SEE SHEET 49 / 80 FOR DETAILS
- ✕ = TYPE 2 INTERMEDIATE CROSSFRAME
SEE SHEET 49 / 80 FOR DETAILS
- ▲ = TYPE 3 INTERMEDIATE CROSSFRAME
SEE SHEET 49 / 80 FOR DETAILS

NOTES:

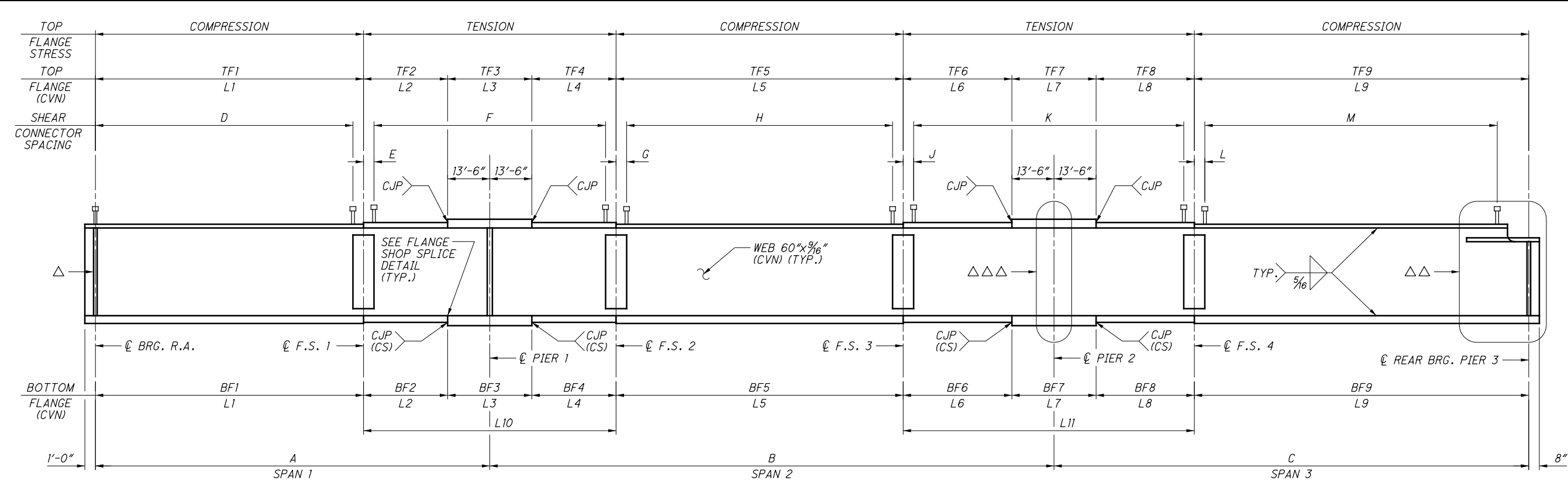
- ⊕ BRGS. AT ABUTMENTS, ⊕ PIERS, ⊕ FIELD SPLICES, AND ALL INTERMEDIATE CROSSFRAMES ARE ORIENTED RADIALLY TO ⊕ CONST. RAMP Q. SEE LAYOUT DIAGRAM ON SHEET 3 / 80 FOR ADDITIONAL SUBSTRUCTURE LAYOUT DETAILS.
- GIRDERS ARE CONCENTRIC WITH ⊕ CONST. RAMP Q.
- ALL DIMENSIONS ARE HORIZONTAL.
- PROVIDE 1" DIA. BOLTS WITH OVERSIZED HOLES (1 1/4" DIA.) AT THE LOCATIONS LISTED:
CROSSFRAME STIFFENERS
BEARING STIFFENERS AT PIERS 4, 5 & 6
CROSSFRAME CONNECTION PLATES
- BOLTS SHALL BE ASTM F3125, GRADE A325, TYPE 1 (GALVANIZED).
- INSTALL TWO HARDENED WASHERS AT EACH BOLT WITH OVERSIZED HOLES, ONE AT THE BOLT HEAD AND ONE AT THE NUT.
- CYLINDRICAL DRIFT PINS ACCORDING TO ODOT CMS 513.20C WITH A DIAMETER RANGING FROM 1 1/32" TO 1 1/4" SHALL BE USED DURING INSTALLATION OF ALL MEMBERS WITH OVERSIZED HOLES.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

FRAMING PLAN - UNIT 2		BURGESS & NIPLE	
SUM-76-77/8-10.99/11.54/0.00		Engineers Architects Planners	
PID No. 101402		5085 REED ROAD, COLUMBUS, OHIO 43220	
39 / 80		7706066	
SUM-76-1148Q		DATE 4/29/19	
RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB		REVIEWED JCS	
		DRAWN BES	
		DESIGNED BES	
		CHECKED MAB	
		STRUCTURE FILE NUMBER	
		7706066	

ISSUE RECORD:		
NO.	DATE	DESCRIPTION

pw:\V\ANV A01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_SS005.dgn Sheet 6/1



GIRDER ELEVATION - UNIT 1

GIRDER	SPAN LENGTHS (FT.)		
	MEASURED ALONG C OF GIRDER		
	A	B	C
G1	108.080	154.615	130.056
G2	109.529	156.687	131.819
G3	110.976	158.758	133.582
G4	112.424	160.830	135.344

GIRDER	GIRDER RADIUS AT C OF GIRDER	
	GIRDER	RADIUS
G1		646.809
G2		655.476
G3		664.142
G4		672.809

GIRDER	SEGMENT LENGTH (FT.) MEASURED ALONG C OF GIRDER										
	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11
G1	73.471	21.109	27.000	21.109	78.668	27.838	27.000	24.954	91.602	69.218	79.792
G2	74.456	21.573	27.000	21.573	79.722	28.392	27.000	25.470	92.849	70.146	80.862
G3	75.440	22.036	27.000	22.036	80.776	28.946	27.000	25.985	94.097	71.072	81.931
G4	76.424	22.500	27.000	22.500	81.830	29.500	27.000	26.500	95.344	72.000	83.000

GIRDER	GIRDER TOP FLANGE DIMENSIONS								
	TF1	TF2	TF3	TF4	TF5	TF6	TF7	TF8	TF9
G1	16" X 0.875"	18" X 1"	18" X 1.75"	18" X 1"	16" X 0.875"	22" X 1"	22" X 1.75"	22" X 1"	16" X 0.875"
G2	16" X 0.875"	18" X 1"	18" X 1.75"	18" X 1"	16" X 0.875"	22" X 1"	22" X 1.75"	22" X 1"	16" X 0.875"
G3	16" X 0.875"	18" X 1"	18" X 1.75"	18" X 1"	16" X 0.875"	22" X 1"	22" X 1.75"	22" X 1"	16" X 0.875"
G4	16" X 0.875"	22" X 1.25"	22" X 2"	22" X 1.25"	18" X 1"	24" X 1.25"	24" X 2.25"	24" X 1.25"	16" X 0.875"

GIRDER	GIRDER BOTTOM FLANGE DIMENSIONS								
	BF1	BF2	BF3	BF4	BF5	BF6	BF7	BF8	BF9
G1	18" X 1.5"	18" X 1.25"	18" X 2"	18" X 1.25"	18" X 1.5"	22" X 1.25"	22" X 2"	22" X 1.25"	20" X 1.5"
G2	18" X 1"	18" X 1.25"	18" X 2"	18" X 1.25"	18" X 1"	22" X 1.25"	22" X 2"	22" X 1.25"	18" X 1.25"
G3	18" X 1"	18" X 1.25"	18" X 2"	18" X 1.25"	18" X 1"	22" X 1.25"	22" X 2"	22" X 1.25"	18" X 1.25"
G4	24" X 1.75"	22" X 1.5"	22" X 2.25"	22" X 1.5"	22" X 1.75"	24" X 1.75"	24" X 2.5"	24" X 1.75"	24" X 1.75"

GIRDER	SHEAR CONNECTOR SPACING									
	D	E	F	G	H	J	K	L	M	
G1	72 SPA @ 12" = 72'-0"	15"	66 SPA @ 12" = 66'-0"	15"	53 SPA @ 17" = 75'-1"	15"	71 SPA @ 13" = 76'-11"	15"	66 SPA @ 16" = 88'-0"	
G2	73 SPA @ 12" = 73'-0"	15"	73 SPA @ 11" = 66'-11"	15"	57 SPA @ 16" = 76'-0"	15"	58 SPA @ 16" = 77'-4"	15"	72 SPA @ 15" = 90'-0"	
G3	59 SPA @ 15" = 73'-9"	15"	48 SPA @ 17" = 68'-0"	15"	55 SPA @ 17" = 77'-11"	15"	59 SPA @ 16" = 78'-8"	15"	73 SPA @ 15" = 91'-3"	
G4	69 SPA @ 13" = 74'-9"	15"	75 SPA @ 11" = 68'-9"	15"	67 SPA @ 14" = 78'-2"	15"	87 SPA @ 11" = 79'-9"	15"	79 SPA @ 14" = 92'-2"	

LEGEND:

△ = BEARING STIFFENER, EACH SIDE OF WEB (TYP. AT ABUTMENTS & PIERS, EXCEPT PIER 2). SEE SHEET 42 / 80 FOR SIZES.

△△ = SEE END CROSSFRAME DETAILS ON SHEET 50 / 80 FOR ADDITIONAL DETAILS AT GIRDER ENDS AT PIER 3.

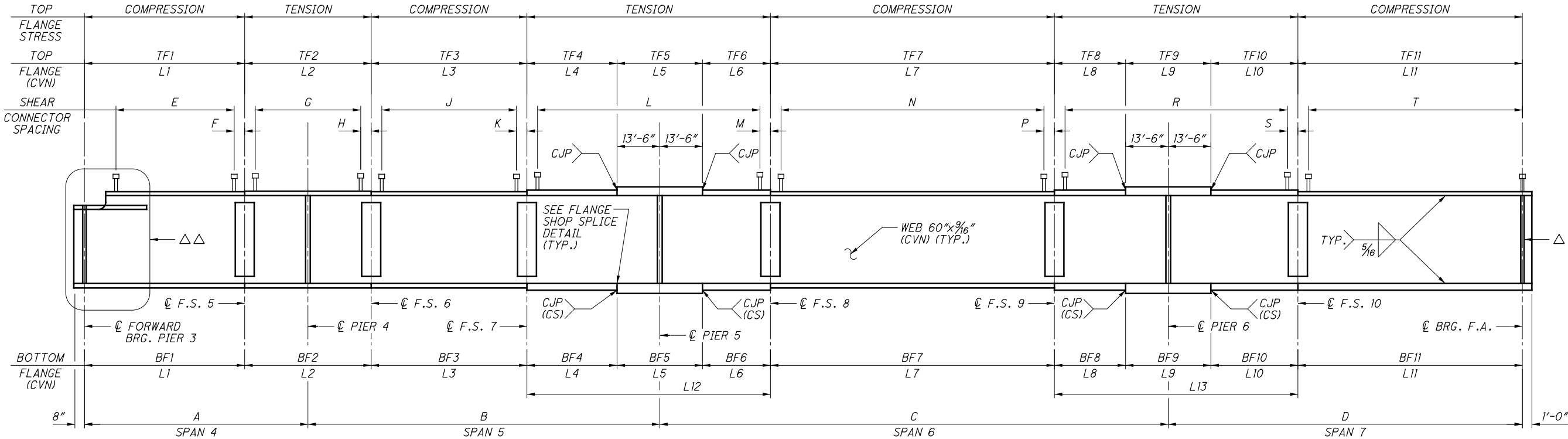
△△△ = SEE SHEET 43 / 80 FOR ADDITIONAL GIRDER DETAILS AT PIER 2.

NOTES:

- ALL DIMENSIONS ARE HORIZONTAL AND REQUIRE ADJUSTMENT FOR CAMBER AND FINISH GRADE.
- WHERE A SHAPE OR PLATE IS DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST 5/16".
- WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST 5/16".
- CROSSFRAME STIFFENERS NOT SHOWN IN ELEVATION. SEE FRAMING PLAN FOR LOCATIONS.
- COMPLETE JOINT PENETRATION WELDS SHALL BE GROUND SMOOTH IN THE LONGITUDINAL DIRECTION TO REMOVE WELD REINFORCEMENT.
- ADJUST SHEAR CONNECTOR SPACING LOCALLY AS REQUIRED TO CLEAR FLANGE SHOP SPLICES.
- ALL STRUCTURAL STEEL SHALL BE ASTM A709, GRADE 50.
- SEE GENERAL NOTES FOR COATING REQUIREMENTS.
- GIRDER ENDS SHALL BE FABRICATED TO BE VERTICAL AFTER ERECTION.
- SEE SHEET 42 / 80 FOR ADDITIONAL GIRDER DETAILS.

ISSUE RECORD:		DESCRIPTION		
NO.	DATE			

pw:\V\ANV\A01PW\INT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_SS006.dgn Sheet 6/1



GIRDER ELEVATION - UNIT 2

GIRDER	SEGMENT LENGTH (FT.) MEASURED ALONG $\varnothing$ OF GIRDER												
	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13
G5	48.694	38.454	47.359	26.877	27.000	20.148	86.342	21.109	27.000	25.916	68.256	74.025	74.025
G6	49.366	38.970	47.994	27.418	27.000	20.598	87.499	21.573	27.000	26.444	69.171	75.016	75.017
G7	50.039	39.485	48.628	27.959	27.000	21.049	88.656	22.036	27.000	26.972	70.085	76.008	76.008
G8	50.711	40.000	49.263	28.500	27.000	21.500	89.813	22.500	27.000	27.500	71.000	77.000	77.000

GIRDER	SPAN LENGTHS (FT.) MEASURED ALONG $\varnothing$ GIRDER			
	A	B	C	D
G5	67.921	106.963	154.599	107.672
G6	68.851	108.397	156.670	109.115
G7	69.782	109.830	158.741	110.557
G8	70.711	111.263	160.813	112.000

GIRDER RADIUS AT $\varnothing$ OF GIRDER	
GIRDER	RADIUS
G5	646.809
G6	655.476
G7	664.142
G8	672.809

GIRDER	GIRDER TOP FLANGE DIMENSIONS										
	TF1	TF2	TF3	TF4	TF5	TF6	TF7	TF8	TF9	TF10	TF11
G5	16" X 0.875"	18" X 1"	16" X 0.875"	18" X 1"	18" X 1.75"	18" X 1"	16" X 0.875"	18" X 1"	18" X 1.75"	18" X 1"	16" X 0.875"
G6	16" X 0.875"	18" X 1"	16" X 0.875"	18" X 1"	18" X 1.75"	18" X 1"	16" X 0.875"	18" X 1"	18" X 1.75"	18" X 1"	16" X 0.875"
G7	16" X 0.875"	18" X 1"	16" X 0.875"	18" X 1"	18" X 1.75"	18" X 1"	16" X 0.875"	18" X 1"	18" X 1.75"	18" X 1"	16" X 0.875"
G8	16" X 0.875"	18" X 1"	16" X 0.875"	22" X 1"	22" X 1.75"	22" X 1"	18" X 1"	22" X 1.25"	22" X 2"	22" X 1.25"	16" X 0.875"

GIRDER	GIRDER BOTTOM FLANGE DIMENSIONS										
	BF1	BF2	BF3	BF4	BF5	BF6	BF7	BF8	BF9	BF10	BF11
G5	16" X 1"	18" X 1"	18" X 1"	18" X 1.25"	18" X 2"	18" X 1.25"	18" X 1.25"	18" X 1.25"	18" X 2"	18" X 1.25"	20" X 1.25"
G6	16" X 1"	18" X 1"	16" X 1"	18" X 1.25"	18" X 2"	18" X 1.25"	16" X 1"	18" X 1.25"	18" X 2"	18" X 1.25"	18" X 1.25"
G7	16" X 1"	18" X 1"	16" X 1"	18" X 1.25"	18" X 2"	18" X 1.25"	16" X 1"	18" X 1.25"	18" X 2"	18" X 1.25"	18" X 1.25"
G8	18" X 1"	18" X 1"	20" X 1.25"	22" X 1.25"	22" X 2"	22" X 1.25"	22" X 1.5"	22" X 1.5"	22" X 2.25"	22" X 1.5"	24" X 1.5"

GIRDER	SHEAR CONNECTOR SPACING														
	E	F	G	H	J	K	L	M	N	P	R	S	T		
G5	79 SPA @ 7" = 46'-1"	15"	61 SPA @ 7" = 35'-7"	15"	44 SPA @ 12" = 44'-0"	15"	78 SPA @ 11" = 71'-6"	15"	59 SPA @ 17" = 83'-7"	15"	71 SPA @ 12" = 71'-0"	15"	67 SPA @ 12" = 67'-0"		
G6	80 SPA @ 7" = 46'-8"	15"	62 SPA @ 7" = 36'-2"	15"	49 SPA @ 11" = 44'-11"	15"	87 SPA @ 10" = 72'-6"	15"	63 SPA @ 16" = 84'-0"	15"	72 SPA @ 12" = 72'-0"	15"	74 SPA @ 11" = 67'-10"		
G7	81 SPA @ 7" = 47'-3"	15"	63 SPA @ 7" = 36'-9"	15"	50 SPA @ 11" = 45'-10"	15"	80 SPA @ 11" = 73'-4"	15"	60 SPA @ 17" = 85'-0"	15"	55 SPA @ 16" = 73'-4"	15"	55 SPA @ 15" = 68'-9"		
G8	82 SPA @ 7" = 47'-10"	15"	64 SPA @ 7" = 37'-4"	15"	46 SPA @ 12" = 46'-0"	15"	81 SPA @ 11" = 74'-3"	15"	74 SPA @ 14" = 86'-4"	15"	81 SPA @ 11" = 74'-3"	15"	59 SPA @ 14" = 68'-10"		

NOTES:

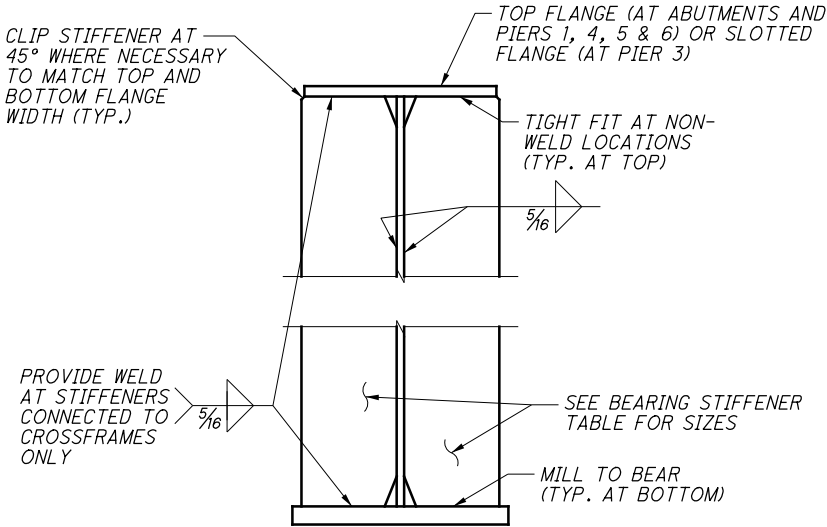
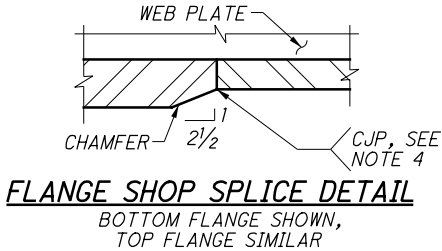
SEE SHEET 40 / 80 FOR NOTES AND LEGEND.

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

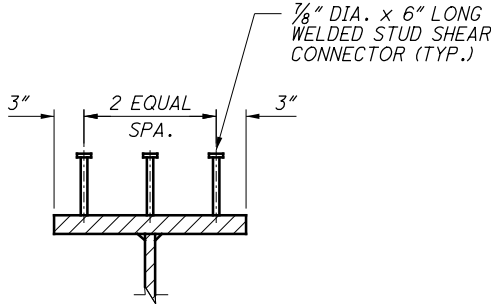
pw:\V\ANV\A01PW\INT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_SS007.dgn Sheet 6/1

BEARING STIFFENERS (UNIT 1)				
LOCATION	GIRDER	WIDTH	THICKNESS	HEIGHT
REAR ABUTMENT	1	8"	7/8"	60"
PIER 1		8"	1"	60"
PIER 3 REAR		9"	7/8"	51 1/4"
REAR ABUTMENT	2	8"	7/8"	60"
PIER 1		8"	1"	60"
PIER 3 REAR		9"	7/8"	51 1/4"
REAR ABUTMENT	3	8"	7/8"	60"
PIER 1		8"	1"	60"
PIER 3 REAR		9"	7/8"	51 1/4"
REAR ABUTMENT	4	11"	1"	60"
PIER 1		10"	1"	60"
PIER 3 REAR		11"	1"	51 1/4"

BEARING STIFFENERS (UNIT 2)				
LOCATION	GIRDER	WIDTH	THICKNESS	HEIGHT
PIER 3 FORWARD	5	9"	7/8"	51 1/4"
PIER 4		8"	1"	60"
PIER 5		8"	1"	60"
PIER 6		8"	1"	60"
FORWARD ABUTMENT	6	9"	7/8"	60"
PIER 3 FORWARD		9"	7/8"	51 1/4"
PIER 4		8"	1"	60"
PIER 5		8"	1"	60"
PIER 6	7	8"	1"	60"
FORWARD ABUTMENT		8"	1"	60"
PIER 3 FORWARD		9"	7/8"	51 1/4"
PIER 4		8"	1"	60"
PIER 5	8	8"	1"	60"
PIER 6		8"	1"	60"
FORWARD ABUTMENT		10"	1"	60"
FORWARD ABUTMENT		11"	1"	60"



BEARING STIFFENER
(CROSSFRAMES NOT SHOWN, SEE NOTE 6)

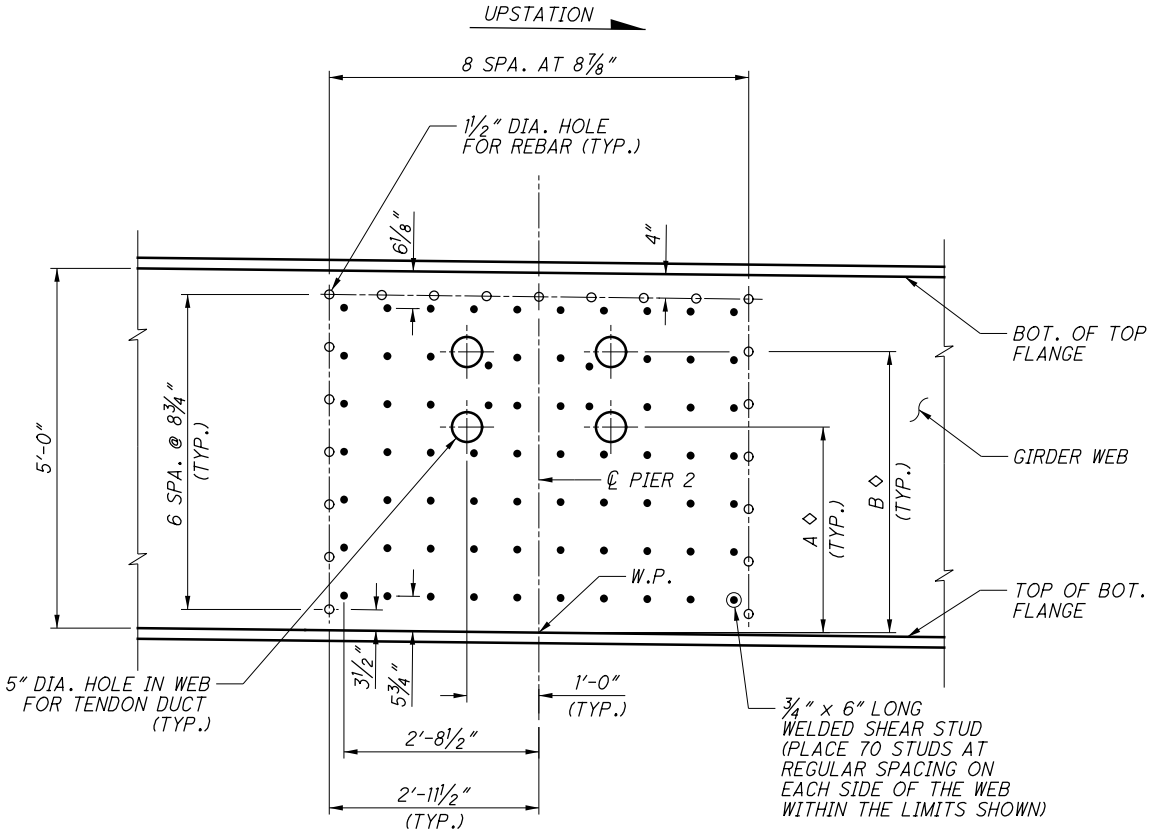


SHEAR CONNECTOR DETAIL

NOTES:

- ALL STRUCTURAL STEEL SHALL BE ASTM A709, GRADE 50.
- SEE GENERAL NOTES FOR COATING REQUIREMENTS.
- WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
- COMPLETE JOINT PENETRATION WELDS SHALL BE GROUND SMOOTH IN THE LONGITUDINAL DIRECTION TO REMOVE WELD REINFORCEMENT.
- INSTALL STIFFENERS ACCORDING TO ODOT CMS 513.13.
- SEE SHEET 49 / 80 FOR CROSSFRAME STIFFENER DETAILS AND ADDITIONAL BEARING STIFFENER DETAILS AT CROSSFRAME LOCATIONS. BEARING STIFFENERS AT CROSSFRAME LOCATIONS SHALL BE DESIGNATED AS (CVN).
- SEE SHEETS 40 / 80 AND 41 / 80 FOR SHEAR STUD SPACING.

ISSUE RECORD:		DESCRIPTION
NO.	DATE	



**HOLE AND SHEAR STUD LOCATIONS
IN GIRDER WEBS**

(PIER 2, ALL GIRDERS)
(SEE TABLE FOR DIMENSIONS A & B)

HOLE LOCATIONS AT PIER 2		
GIRDER	A	B
G1	1.94'	3.40'
G2	2.92'	3.97'
G3	2.88'	3.94'
G4	1.89'	3.35'

LEGEND:

◇ = MEASURED TO W.P. (HOLES IN WEB FOR TENDONS SHALL BE LEVEL AT THE OFFSET DIMENSION FROM THE W.P.)

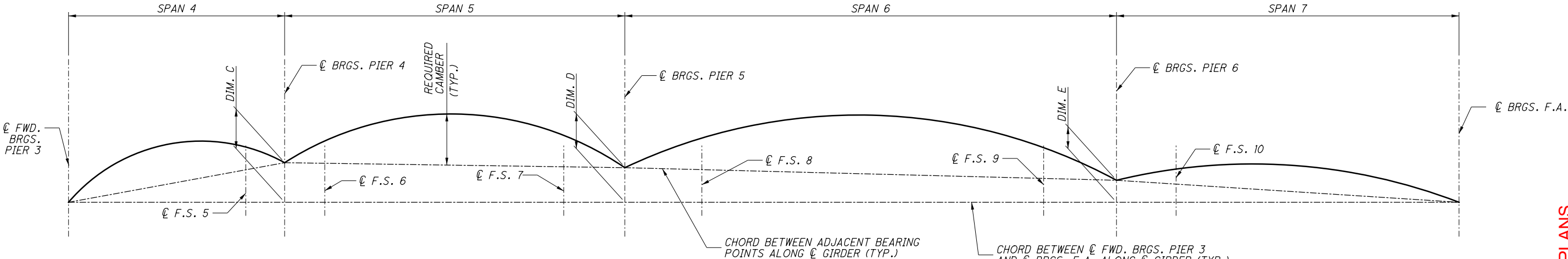
NOTES:

1. MAINTAIN A MINIMUM OF 1" CLEAR DISTANCE FROM EDGE OF SHEAR STUD TO EDGE OF WEB HOLE.
2. FOR THE OUTSIDE FACE OF THE EXTERIOR GIRDERS, DO NOT PLACE STUDS IN LOCATIONS THAT WILL CONFLICT WITH POST-TENSIONING ANCHORAGE HARDWARE. COORDINATE WITH THE POST-TENSIONING SUPPLIER TO IDENTIFY CONFLICTS.

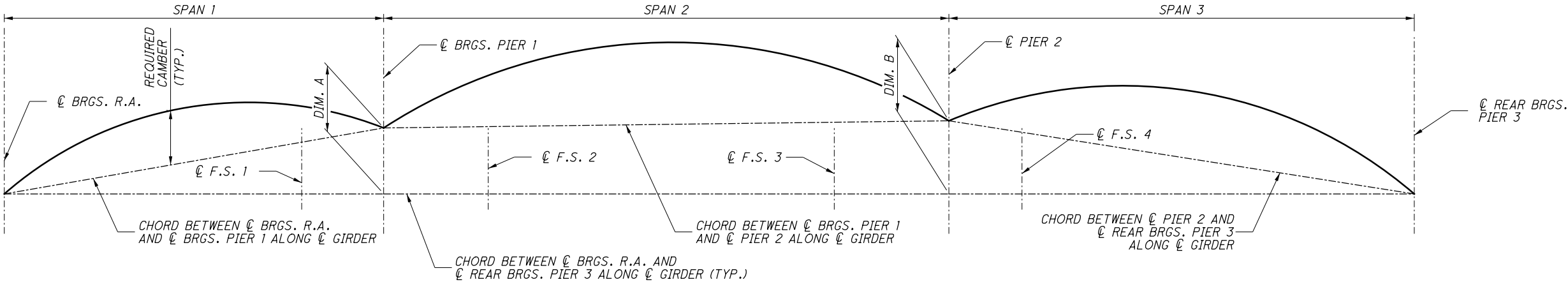
ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pww:\V\ANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_SS013.dgn Sheet 6/11

BLOCKING TABLE (VALUES IN INCHES)						
GIRDER	DIM. "A"	DIM. "B"	GIRDER	DIM. "C"	DIM. "D"	DIM. "E"
G1	43.00	47.75	G5	13.89	13.10	5.38
G2	43.00	47.76	G6	13.89	13.10	5.38
G3	43.01	47.76	G7	13.90	13.10	5.38
G4	43.01	47.77	G8	13.90	13.11	5.38



CAMBER AND BLOCKING DIAGRAM - UNIT 2
(ALL CHORDS REFERENCED TO TOP OF WEB)
(NOT TO SCALE)



CAMBER AND BLOCKING DIAGRAM - UNIT 1
(ALL CHORDS REFERENCED TO TOP OF WEB)
(NOT TO SCALE)

NOTES:

1. POSITIVE CAMBER VALUES INDICATE CAMBER ABOVE CHORD BETWEEN ADJACENT SUPPORTS.
2. SEE SHEETS

60	80
----	----

 AND

61	80
----	----

 FOR GIRDER NUMBER AND CAMBER VALUE LOCATIONS.
3. SEE SHEET

45	80
----	----

 FOR UNIT 1 CAMBER TABLE AND SHEET

46	80
----	----

 FOR UNIT 2 CAMBER TABLE.
4. IF HEAT CURVING IS USED TO FABRICATE THE GIRDERS, THE FABRICATOR SHALL ADJUST GIRDER CAMBER IN THE AFFECTED AREAS AND SUBMIT CALCULATIONS FOR CAMBER ADJSUTMENTS PER CMS 513.15. ADDITIONALLY, THE CONTRACTOR SHALL ADJUST SCREED AND TOP OF HAUNCH ELEVATIONS FOR THE EFFECTS OF HEAT CURVING, IF USED.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

SUM-76/77/8-10.99/11.54/0.00		CAMBER AND BLOCKING DIAGRAMS		BURGESS & NIPLER Engineers Architects Planners 5085 REED ROAD, COLUMBUS, OHIO 43220	
PID No. 101402		SUM-76-1148Q		DATE 4/29/19	
44/80		RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB		REVIEWED JCS	
				DRAWN MAB	
				DESIGNED MAB	
				CHECKED ASG	
				STRUCTURE FILE NUMBER 7706066	

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\\V\ANV\A01P\WINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_SS014.dgn Sheet 6/1

UNIT 1 CAMBER TABLE (VALUE IN INCHES)																										
GIRDER NUMBER		¢ BRG. R.A.	SPAN 1										¢ BRG. PIER 1	SPAN 2												¢ PIER 2
			0.1 SPAN	0.2 SPAN	0.3 SPAN	0.4 SPAN	MIDSPAN	0.6 SPAN	F.S. 1	0.7 SPAN	0.8 SPAN	0.9 SPAN		0.1 SPAN	0.2 SPAN	F.S. 2	0.3 SPAN	0.4 SPAN	MIDSPAN	0.6 SPAN	0.7 SPAN	F.S.3	0.8 SPAN	0.9 SPAN		
¢ GIRDER 1	A	0	0.07	0.14	0.17	0.18	0.17	0.13	0.09	0.08	0.04	0.01	0	0.08	0.21	0.25	0.34	0.43	0.45	0.40	0.30	0.25	0.16	0.05	0	
	B	0	0.31	0.59	0.73	0.80	0.72	0.58	0.41	0.37	0.17	0.03	0	0.35	0.91	1.05	1.47	1.82	1.90	1.71	1.29	1.10	0.71	0.23	0	
	C	0	1.47	2.61	3.43	3.92	4.08	3.92	3.55	3.43	2.61	1.47	0	3.01	5.35	5.80	7.02	8.02	8.35	8.02	7.02	6.55	5.35	3.01	0	
	D	0	1.85	3.34	4.33	4.90	4.97	4.63	4.05	3.88	2.82	1.51	0	3.44	6.47	7.10	8.83	10.27	10.70	10.13	8.61	7.90	6.22	3.29	0	
¢ GIRDER 2	A	0	0.08	0.16	0.19	0.21	0.19	0.15	0.10	0.09	0.04	0.01	0	0.09	0.23	0.26	0.37	0.46	0.48	0.43	0.31	0.26	0.16	0.05	0	
	B	0	0.32	0.60	0.74	0.81	0.73	0.57	0.40	0.35	0.15	0.02	0	0.34	0.89	1.03	1.46	1.81	1.89	1.69	1.24	1.05	0.65	0.19	0	
	C	0	1.47	2.61	3.43	3.92	4.08	3.92	3.55	3.43	2.61	1.47	0	3.01	5.35	5.80	7.02	8.02	8.35	8.02	7.02	6.55	5.35	3.01	0	
	D	0	1.87	3.37	4.36	4.94	5.00	4.64	4.05	3.87	2.80	1.50	0	3.44	6.47	7.09	8.85	10.29	10.72	10.14	8.57	7.86	6.16	3.25	0	
¢ GIRDER 3	A	0	0.09	0.17	0.21	0.23	0.20	0.16	0.11	0.10	0.04	0.01	0	0.09	0.24	0.28	0.39	0.49	0.51	0.45	0.32	0.27	0.16	0.04	0	
	B	0	0.34	0.64	0.78	0.85	0.76	0.60	0.42	0.37	0.16	0.03	0	0.34	0.90	1.04	1.48	1.83	1.90	1.68	1.21	1.02	0.62	0.17	0	
	C	0	1.47	2.61	3.43	3.92	4.08	3.92	3.55	3.43	2.61	1.47	0	3.01	5.35	5.80	7.02	8.02	8.35	8.02	7.02	6.55	5.35	3.01	0	
	D	0	1.90	3.42	4.42	5.00	5.04	4.68	4.08	3.90	2.81	1.51	0	3.44	6.49	7.12	8.89	10.34	10.76	10.15	8.55	7.84	6.13	3.22	0	
¢ GIRDER 4	A	0	0.10	0.19	0.23	0.25	0.22	0.17	0.12	0.11	0.05	0.01	0	0.10	0.25	0.29	0.42	0.51	0.53	0.47	0.33	0.28	0.16	0.04	0	
	B	0	0.37	0.70	0.86	0.93	0.83	0.66	0.47	0.41	0.19	0.04	0	0.36	0.93	1.09	1.53	1.89	1.96	1.72	1.23	1.02	0.61	0.15	0	
	C	0	1.47	2.61	3.43	3.92	4.08	3.92	3.43	3.43	2.61	1.47	0	3.01	5.35	5.35	7.02	8.02	8.35	8.02	7.02	7.02	5.35	3.01	0	
	D	0	1.94	3.50	4.52	5.10	5.13	4.75	4.02	3.95	2.85	1.52	0	3.47	6.53	6.73	8.97	10.42	10.84	10.21	8.58	8.32	6.12	3.20	0	

UNIT 1 CAMBER TABLE (VALUE IN INCHES) (CONT'D)													
GIRDER NUMBER		¢ PIER 2	SPAN 3										¢ REAR BRG. PIER 3
			0.1 SPAN	0.2 SPAN	F.S. 4	0.3 SPAN	0.4 SPAN	MIDSPAN	0.6 SPAN	0.7 SPAN	0.8 SPAN	0.9 SPAN	
¢ GIRDER 1	A	0	0.05	0.14	0.25	0.26	0.36	0.43	0.45	0.42	0.31	0.17	0
	B	0	0.18	0.55	0.99	1.01	1.42	1.71	1.77	1.67	1.25	0.68	0
	C	0	2.13	3.78	4.92	4.97	5.67	5.91	5.67	4.97	3.78	2.13	0
	D	0	2.36	4.47	6.16	6.24	7.45	8.05	7.89	7.06	5.34	2.98	0
¢ GIRDER 2	A	0	0.06	0.17	0.30	0.30	0.42	0.51	0.53	0.50	0.37	0.20	0
	B	0	0.19	0.60	1.08	1.11	1.57	1.89	1.96	1.86	1.38	0.76	0
	C	0	2.13	3.78	4.92	4.97	5.67	5.91	5.67	4.97	3.78	2.13	0
	D	0	2.38	4.55	6.30	6.38	7.66	8.31	8.16	7.33	5.53	3.09	0
¢ GIRDER 3	A	0	0.07	0.19	0.34	0.35	0.49	0.59	0.61	0.57	0.43	0.23	0
	B	0	0.23	0.68	1.21	1.24	1.75	2.11	2.19	2.08	1.55	0.85	0
	C	0	2.13	3.78	4.92	4.97	5.67	5.91	5.67	4.97	3.78	2.13	0
	D	0	2.43	4.65	6.47	6.56	7.91	8.61	8.47	7.62	5.76	3.21	0
¢ GIRDER 4	A	0	0.07	0.22	0.38	0.39	0.55	0.66	0.69	0.65	0.49	0.27	0
	B	0	0.27	0.78	1.37	1.39	1.97	2.39	2.48	2.35	1.76	0.96	0
	C	0	2.13	3.78	4.92	4.97	5.67	5.91	5.67	4.97	3.78	2.13	0
	D	0	2.47	4.78	6.67	6.75	8.19	8.96	8.84	7.97	6.03	3.36	0

LEGEND:

A = DEFLECTION DUE TO WEIGHT OF STEEL
B = DEFLECTION DUE TO REMAINING DEAD LOAD
C = ADJUSTMENT FOR VERTICAL & HORIZONTAL CURVE
D = TOTAL (REQUIRED SHOP CAMBER)

NOTES:

1. SEE SHEET 44 / 80 FOR CAMBER DIAGRAM AND ADDITONAL NOTES

2026-03-24 - BU-17 - RECORD DRAWING PLANS

SUM-76 / 77 / 8 -
10.99 / 11.54 / 0.00

PID No. 101402

45 / 80

69 / 104

CAMBER TABLE - UNIT 1
SUM-76-1148Q

RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

DESIGNED
MAB

CHECKED
ASG

DRAWN
AAA

REVIEWED
JCS

DATE
4/29/19

STRUCTURE FILE NUMBER
7706066

BURGESS & NIPLÉ

Engineers - Architects - Planners

5085 REED ROAD, COLUMBUS, OHIO 43220

ISSUE RECORD:		DESCRIPTION	
NO.	DATE		

pw:\\V\\ANV\\A01P\\WINT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\\Structures\\Sheets\\Ramp_Q\\076_11661_SS017.dgn Sheet 6/1

UNIT 2 CAMBER TABLE (VALUE IN INCHES)																									
GIRDER NUMBER		€ FWD. BRG. PIER 3	SPAN 4										€ BRG. PIER 4	SPAN 5										€ BRG. PIER 5	
			0.1 SPAN	0.2 SPAN	0.3 SPAN	0.4 SPAN	MIDSPAN	0.6 SPAN	0.7 SPAN	F.S. 5	0.8 SPAN	0.9 SPAN		0.1 SPAN	F.S. 6	0.2 SPAN	0.3 SPAN	0.4 SPAN	MIDSPAN	0.6 SPAN	F.S.7	0.7 SPAN	0.8 SPAN		0.9 SPAN
€ GIRDER 5	A	0	0.01	0.03	0.04	0.04	0.04	0.04	0.03	0.02	0.01	0.01	0	0.02	0.02	0.04	0.05	0.05	0.04	0.02	0.02	-0.01	-0.02	-0.02	0
	B	0	0.07	0.14	0.19	0.19	0.19	0.18	0.13	0.12	0.08	0.05	0	0.07	0.08	0.15	0.21	0.23	0.17	0.08	0.06	-0.04	-0.11	-0.10	0
	C	0	0.37	0.89	1.27	1.51	1.61	1.57	1.43	1.39	1.07	0.60	0	1.10	1.88	2.25	2.33	2.46	2.26	1.82	1.36	1.00	0.91	0.45	0
	D	0	0.45	1.06	1.50	1.74	1.84	1.79	1.59	1.53	1.16	0.66	0	1.19	1.98	2.44	2.59	2.74	2.47	1.92	1.44	0.95	0.78	0.33	0
€ GIRDER 6	A	0	0.02	0.03	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.01	0	0.01	0.02	0.03	0.04	0.04	0.03	0.00	0.00	-0.03	-0.04	-0.03	0
	B	0	0.07	0.13	0.19	0.19	0.19	0.17	0.13	0.12	0.08	0.04	0	0.05	0.06	0.10	0.14	0.14	0.08	-0.02	-0.04	-0.13	-0.18	-0.15	0
	C	0	0.37	0.89	1.27	1.51	1.61	1.57	1.43	1.39	1.07	0.60	0	1.10	1.88	2.25	2.33	2.46	2.26	1.82	1.36	1.00	0.91	0.45	0
	D	0	0.46	1.05	1.51	1.75	1.85	1.78	1.59	1.54	1.17	0.65	0	1.16	1.96	2.38	2.51	2.64	2.37	1.80	1.32	0.84	0.69	0.27	0
€ GIRDER 7	A	0	0.02	0.04	0.05	0.05	0.05	0.05	0.04	0.04	0.02	0.01	0	0.01	0.01	0.02	0.03	0.03	0.01	-0.02	-0.02	-0.05	-0.06	-0.05	0
	B	0	0.08	0.15	0.21	0.21	0.21	0.20	0.15	0.15	0.10	0.05	0	0.04	0.04	0.08	0.11	0.09	0.02	-0.08	-0.11	-0.19	-0.23	-0.18	0
	C	0	0.37	0.89	1.27	1.51	1.61	1.57	1.43	1.39	1.07	0.60	0	1.10	1.88	2.25	2.33	2.46	2.26	1.82	1.36	1.00	0.91	0.45	0
	D	0	0.47	1.08	1.53	1.77	1.87	1.82	1.62	1.58	1.19	0.66	0	1.15	1.93	2.35	2.47	2.58	2.29	1.72	1.23	0.76	0.62	0.22	0
€ GIRDER 8	A	0	0.02	0.04	0.06	0.06	0.06	0.06	0.04	0.04	0.03	0.01	0	0.01	0.01	0.02	0.02	0.01	-0.01	-0.04	-0.05	-0.07	-0.08	-0.06	0
	B	0	0.10	0.19	0.28	0.28	0.28	0.27	0.21	0.19	0.13	0.07	0	0.04	0.04	0.08	0.10	0.08	-0.01	-0.12	-0.15	-0.24	-0.27	-0.21	0
	C	0	0.37	0.89	1.27	1.51	1.61	1.57	1.43	1.39	1.07	0.60	0	1.10	1.88	2.25	2.33	2.46	2.26	1.82	1.36	1.00	0.91	0.45	0
	D	0	0.49	1.12	1.61	1.85	1.95	1.90	1.68	1.62	1.23	0.68	0	1.15	1.93	2.35	2.45	2.55	2.24	1.66	1.16	0.69	0.56	0.18	0

UNIT 2 CAMBER TABLE (VALUE IN INCHES) (CONT'D)																									
GIRDER NUMBER		€ BRG. PIER 5	SPAN 6											€ BRG. PIER 6	SPAN 7										
			0.1 SPAN	0.2 SPAN	F.S. 8	0.3 SPAN	0.4 SPAN	MIDSPAN	0.6 SPAN	0.7 SPAN	F.S.9	0.8 SPAN	0.9 SPAN		0.1 SPAN	0.2 SPAN	0.3 SPAN	F.S. 10	0.4 SPAN	MIDSPAN	0.6 SPAN	0.7 SPAN	0.8 SPAN	0.9 SPAN	€ BRG. F.A.
€ GIRDER 5	A	0	0.12	0.29	0.32	0.45	0.56	0.59	0.55	0.43	0.31	0.27	0.11	0	0.00	0.02	0.06	0.09	0.11	0.14	0.16	0.15	0.12	0.07	0
	B	0	0.54	1.27	1.40	1.98	2.44	2.58	2.40	1.91	1.36	1.18	0.48	0	-0.03	0.05	0.21	0.34	0.41	0.55	0.63	0.60	0.49	0.26	0
	C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
	D	0	0.66	1.56	1.72	2.43	3.00	3.17	2.95	2.34	1.67	1.45	0.59	0	-0.03	0.07	0.27	0.43	0.52	0.69	0.79	0.75	0.61	0.33	0
€ GIRDER 6	A	0	0.15	0.34	0.38	0.53	0.65	0.69	0.64	0.50	0.36	0.31	0.12	0	-0.01	0.01	0.05	0.08	0.10	0.14	0.16	0.16	0.13	0.07	0
	B	0	0.59	1.37	1.52	2.15	2.65	2.80	2.59	2.05	1.46	1.26	0.51	0	-0.07	-0.02	0.13	0.26	0.32	0.47	0.57	0.54	0.46	0.24	0
	C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
	D	0	0.74	1.71	1.90	2.68	3.30	3.49	3.23	2.55	1.82	1.57	0.63	0	-0.08	-0.01	0.18	0.34	0.42	0.61	0.73	0.70	0.59	0.31	0
€ GIRDER 7	A	0	0.17	0.39	0.43	0.61	0.75	0.79	0.73	0.57	0.41	0.35	0.14	0	-0.02	0.00	0.04	0.07	0.09	0.13	0.16	0.16	0.13	0.07	0
	B	0	0.65	1.51	1.67	2.35	2.89	3.06	2.83	2.24	1.60	1.38	0.57	0	-0.10	-0.06	0.08	0.21	0.27	0.43	0.54	0.53	0.45	0.24	0
	C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
	D	0	0.82	1.90	2.10	2.96	3.64	3.85	3.56	2.81	2.01	1.73	0.71	0	-0.12	-0.06	0.12	0.28	0.36	0.56	0.70	0.69	0.58	0.31	0
€ GIRDER 8	A	0	0.19	0.44	0.49	0.69	0.84	0.88	0.81	0.64	0.46	0.40	0.16	0	-0.03	-0.02	0.02	0.06	0.08	0.12	0.16	0.16	0.13	0.07	0
	B	0	0.74	1.69	1.87	2.62	3.20	3.37	3.11	2.46	1.76	1.53	0.63	0	-0.12	-0.09	0.05	0.18	0.26	0.43	0.56	0.56	0.48	0.26	0
	C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
	D	0	0.93	2.13	2.36	3.31	4.04	4.25	3.92	3.10	2.22	1.93	0.79	0	-0.15	-0.11	0.07	0.24	0.34	0.55	0.72	0.72	0.61	0.33	0

LEGEND:

A = DEFLECTION DUE TO WEIGHT OF STEEL
B = DEFLECTION DUE TO REMAINING DEAD LOAD
C = ADJUSTMENT FOR VERTICAL & HORIZONTAL CURVE
D = TOTAL (REQUIRED SHOP CAMBER)

NOTES:

1. SEE SHEET 44 / 80 FOR CAMBER DIAGRAM AND ADDITONAL NOTES

2026-03-24 - BU-17 - RECORD DRAWING PLANS

SUM-76 / 77 / 8 -
10.99 / 11.54 / 0.00

PID No. 101402

46 / 80

70
104

CAMBER TABLE - UNIT 2

SUM-76-1148Q

RAMP Q OVER IR- 76 WB, LANE O, RAMP S, SR-8 NB/SB

DESIGNED
MAB

CHECKED
ASG

DRAWN
AAA

REVISED

REVIEWED
JCS

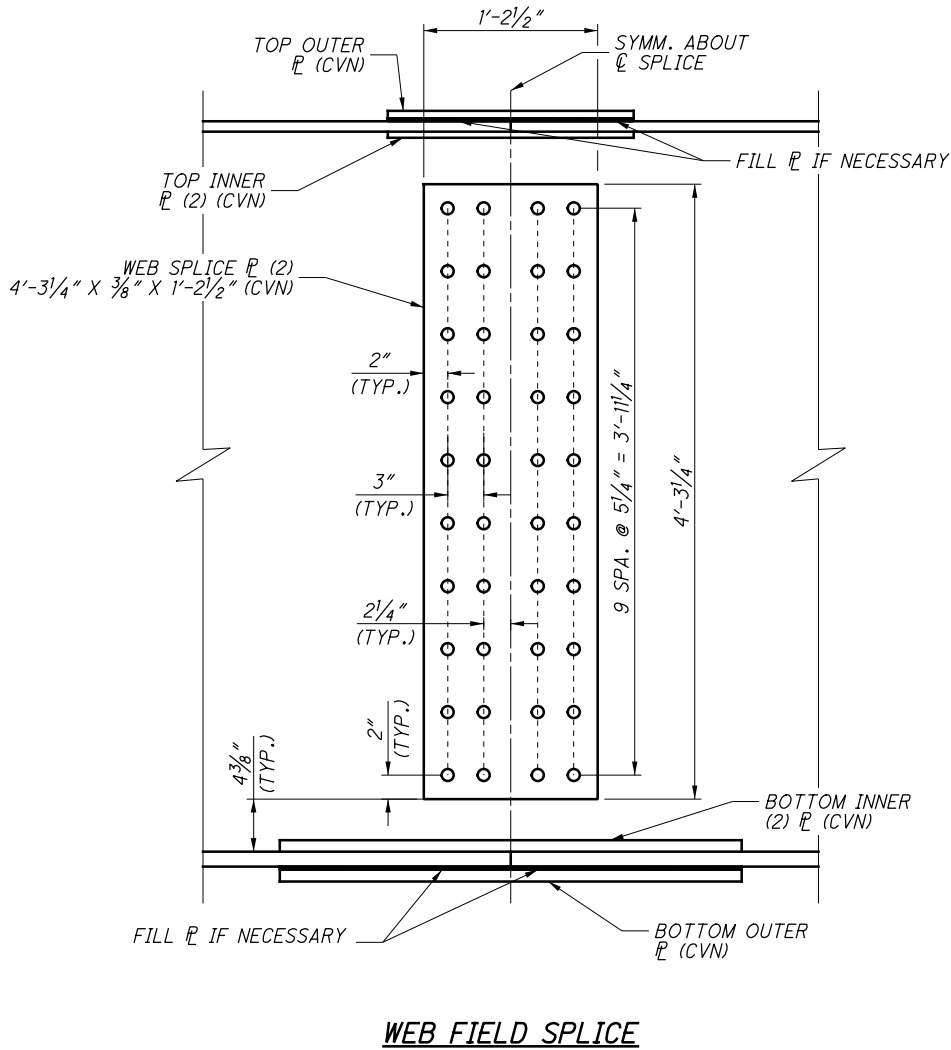
DATE
4/29/19

STRUCTURE FILE NUMBER
7706066

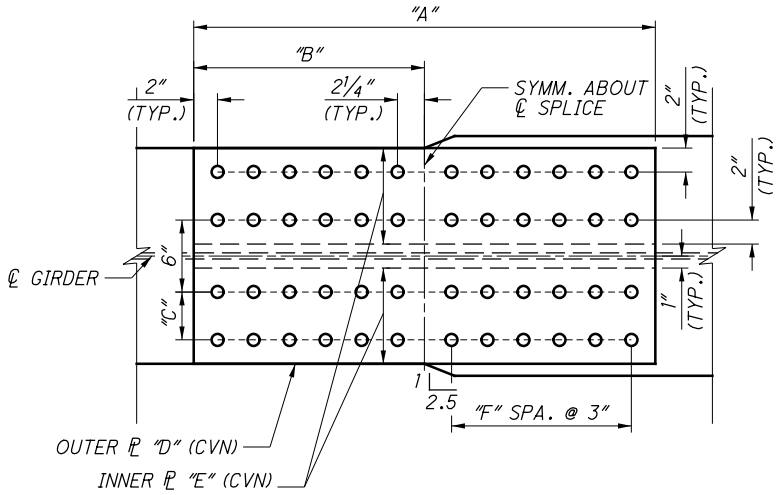
Engineers ■ Architects ■ Planners
5085 REED ROAD, COLUMBUS, OHIO 43220

BURGESS & NIPLER

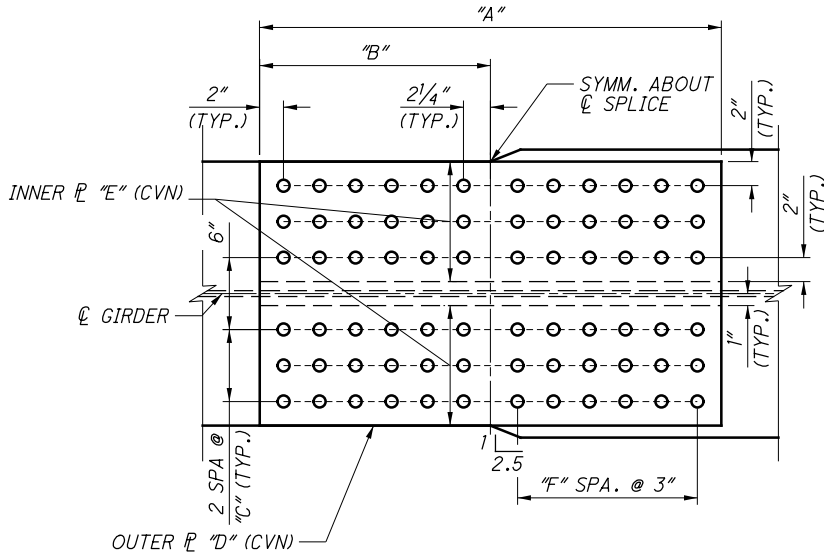
ISSUE RECORD:		DESCRIPTION
NO.	DATE	



WEB FIELD SPLICE



FLANGE SPLICE TYPE A



FLANGE SPLICE TYPE B

NOTES:

- WHERE A PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
- STRUCTURAL STEEL FOR SPLICE PLATES SHALL BE ASTM A709, GRADE 50 (CVN).
- HIGH STRENGTH BOLTS SHALL BE 1" DIAMETER. HOLES SHALL BE 1 1/8" DIAMETER.
- ALL BOLTS, NUTS, AND WASHERS SHALL BE ASTM F3125 GRADE A325, TYPE 1 (GALVANIZED).
- SPLICE PLATES HAVE BEEN DESIGNED FOR BOLT THREADS TO BE INCLUDED IN THE SHEAR PLANE AT ALL CONNECTIONS.
- FOR FIELD SPLICE INFORMATION TABLES SEE SHEET 48 / 80 .

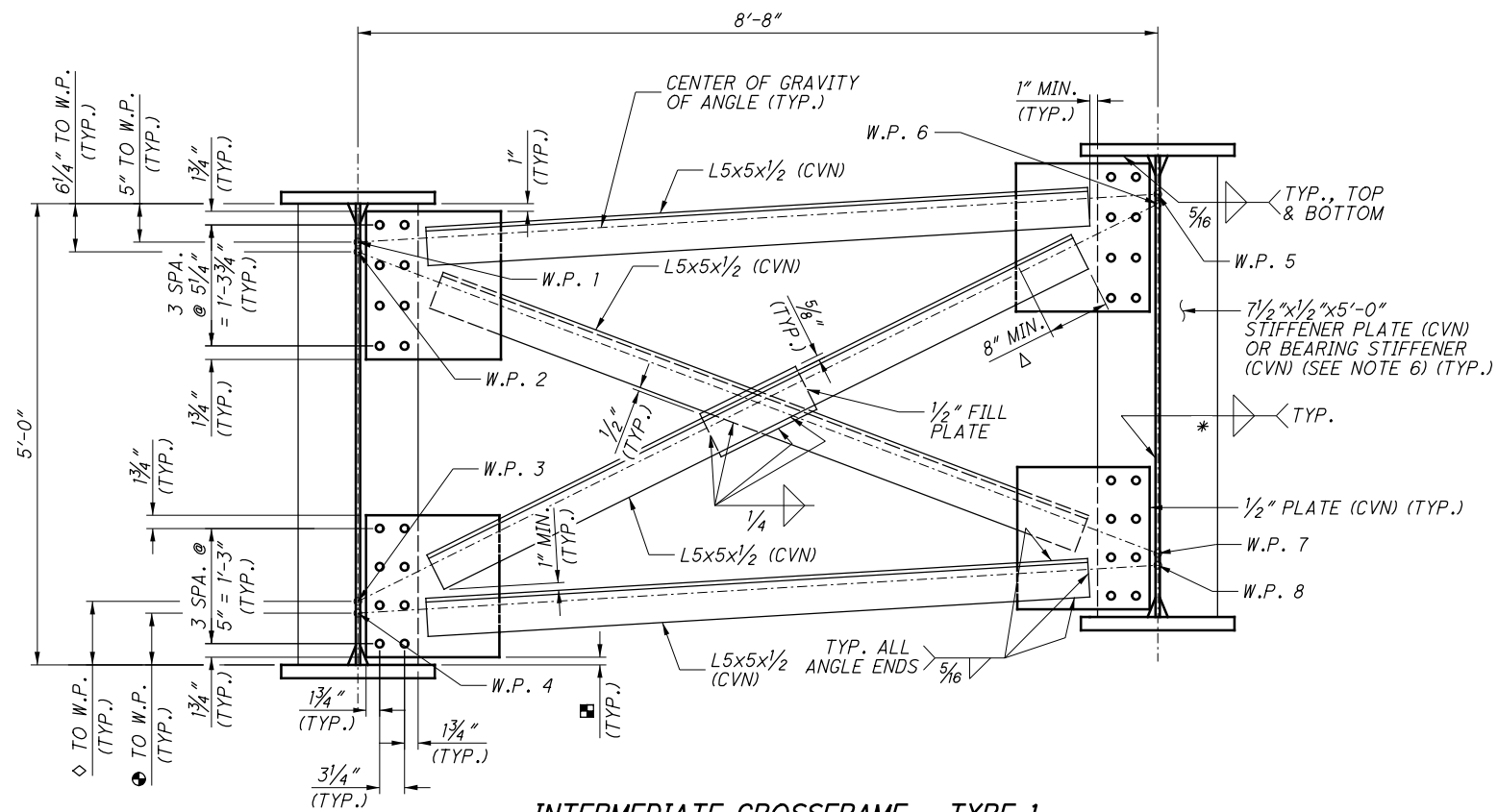
ISSUE RECORD:		DESCRIPTION	
NO.	DATE		

UNIT 1 SPLICE INFORMATION																	
FIELD SPLICE NO.	GIRDER NO.	TOP FLANGE SPLICE DIMENSIONS							BOTTOM FLANGE SPLICE DIMENSIONS						TOP FLANGE FILL PLATE	BOTTOM FLANGE FILL PLATE	
		SPLICE TYPE	A	B	C	D	E	F	SPLICE TYPE	A	B	C	D	E			F
1	1	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	¼" X 1'-7¼" X 1'-6"
1	2	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	¼" X 1'-7¼" X 1'-6"
1	3	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	¼" X 1'-7¼" X 1'-6"
1	4	A	2'-2½"	1'-1¼"	3"	¾" X 1'-4" X 2'-2½"	¾" X 7" X 2'-2½"	3	B	3'-2½"	1'-7¼"	3"	1⅜" X 1'-10" X 3'-2½"	1" X 10" X 3'-2½"	5	⅜" X 1'-1¼" X 1'-4"	¼" X 1'-7¼" X 1'-10"
2	1	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	¼" X 1'-7¼" X 1'-6"
2	2	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	¼" X 1'-7¼" X 1'-6"
2	3	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	¼" X 1'-7¼" X 1'-6"
2	4	A	2'-2½"	1'-1¼"	4"	⅝" X 1'-6" X 2'-2½"	⅝" X 8" X 2'-2½"	3	B	3'-2½"	1'-7¼"	3"	1⅜" X 1'-10" X 3'-2½"	1" X 10" X 3'-2½"	5	¼" X 1'-1¼" X 1'-6"	¼" X 1'-7¼" X 1'-10"
3	1	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	¼" X 1'-7¼" X 1'-6"
3	2	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	¼" X 1'-7¼" X 1'-6"
3	3	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	¼" X 1'-7¼" X 1'-6"
3	4	A	2'-2½"	1'-1¼"	4"	⅝" X 1'-6" X 2'-2½"	⅝" X 8" X 2'-2½"	3	B	3'-2½"	1'-7¼"	3"	1⅜" X 1'-10" X 3'-2½"	1" X 10" X 3'-2½"	5	¼" X 1'-1¼" X 1'-6"	-
4	1	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	5"	⅞" X 1'-8" X 3'-2½"	⅞" X 9" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	¼" X 1'-7¼" X 1'-8"
4	2	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	-
4	3	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	-
4	4	A	2'-2½"	1'-1¼"	3"	¾" X 1'-4" X 2'-2½"	¾" X 7" X 2'-2½"	3	B	3'-2½"	1'-7¼"	3½"	1" X 2'-0" X 3'-2½"	1⅛" X 11" X 3'-2½"	5	⅜" X 1'-1¼" X 1'-4"	-

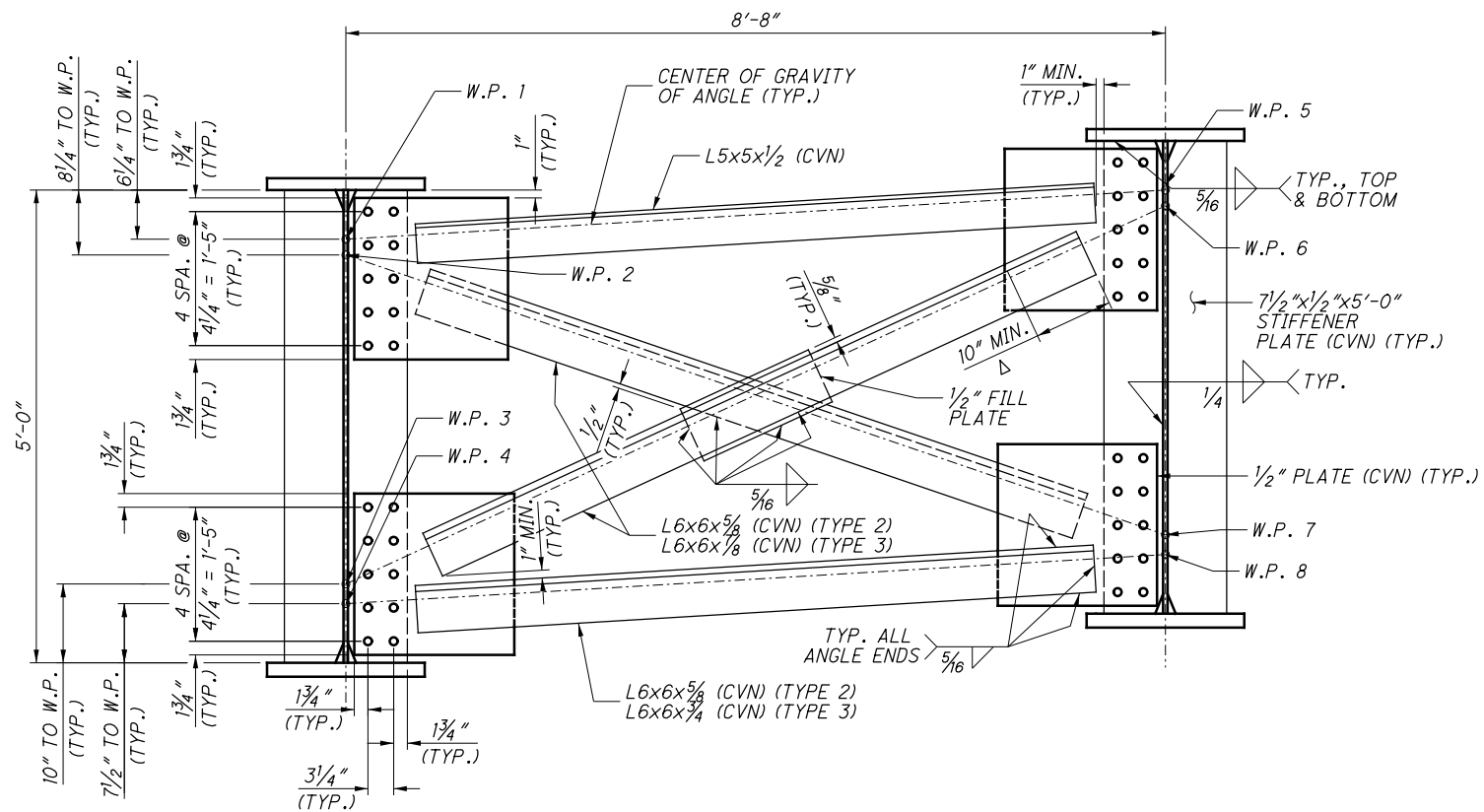
UNIT 2 SPLICE INFORMATION																	
FIELD SPLICE NO.	GIRDER NO.	TOP FLANGE SPLICE DIMENSIONS							BOTTOM FLANGE SPLICE DIMENSIONS							TOP FLANGE FILL PLATE	BOTTOM FLANGE FILL PLATE
		SPLICE TYPE	A	B	C	D	E	F	SPLICE TYPE	A	B	C	D	E	F		
5	1	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	2'-8½"	1'-4¼"	3"	1" X 1'-4" X 2'-8½"	⅞" X 7" X 2'-8½"	4	⅛" X 10¼" X 1'-4"	-
5	2	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	2'-8½"	1'-4¼"	3"	1" X 1'-4" X 2'-8½"	⅞" X 7" X 2'-8½"	4	⅛" X 10¼" X 1'-4"	-
5	3	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	2'-8½"	1'-4¼"	3"	1" X 1'-4" X 2'-8½"	⅞" X 7" X 2'-8½"	4	⅛" X 10¼" X 1'-4"	-
5	4	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	-
6	1	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	-
6	2	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	2'-8½"	1'-4¼"	3"	1" X 1'-4" X 2'-8½"	⅞" X 7" X 2'-8½"	4	⅛" X 10¼" X 1'-4"	-
6	3	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	2'-8½"	1'-4¼"	3"	1" X 1'-4" X 2'-8½"	⅞" X 7" X 2'-8½"	4	⅛" X 10¼" X 1'-4"	-
6	4	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	¼" X 1'-7¼" X 1'-6"
7	1	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	¼" X 1'-7¼" X 1'-6"
7	2	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	2'-8½"	1'-4¼"	3"	1" X 1'-4" X 2'-8½"	⅞" X 7" X 2'-8½"	4	⅛" X 10¼" X 1'-4"	¼" X 1'-4¼" X 1'-4"
7	3	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	2'-8½"	1'-4¼"	3"	1" X 1'-4" X 2'-8½"	⅞" X 7" X 2'-8½"	4	⅛" X 10¼" X 1'-4"	¼" X 1'-4¼" X 1'-4"
7	4	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	5"	⅞" X 1'-8" X 3'-2½"	⅞" X 9" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	-
8	1	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	-
8	2	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	2'-8½"	1'-4¼"	3"	1" X 1'-4" X 2'-8½"	⅞" X 7" X 2'-8½"	4	⅛" X 10¼" X 1'-4"	¼" X 1'-4¼" X 1'-4"
8	3	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	2'-8½"	1'-4¼"	3"	1" X 1'-4" X 2'-8½"	⅞" X 7" X 2'-8½"	4	⅛" X 10¼" X 1'-4"	¼" X 1'-4¼" X 1'-4"
8	4	A	2'-2½"	1'-1¼"	4"	⅝" X 1'-6" X 2'-2½"	⅝" X 8" X 2'-2½"	3	B	3'-2½"	1'-7¼"	3"	1⅜" X 1'-10" X 3'-2½"	1" X 10" X 3'-2½"	5	-	¼" X 1'-7¼" X 1'-10"
9	1	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	-
9	2	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	2'-8½"	1'-4¼"	3"	1" X 1'-4" X 2'-8½"	⅞" X 7" X 2'-8½"	4	⅛" X 10¼" X 1'-4"	¼" X 1'-4¼" X 1'-4"
9	3	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	2'-8½"	1'-4¼"	3"	1" X 1'-4" X 2'-8½"	⅞" X 7" X 2'-8½"	4	⅛" X 10¼" X 1'-4"	¼" X 1'-4¼" X 1'-4"
9	4	A	2'-2½"	1'-1¼"	4"	⅝" X 1'-6" X 2'-2½"	⅝" X 8" X 2'-2½"	3	B	3'-2½"	1'-7¼"	3"	1⅜" X 1'-10" X 3'-2½"	1" X 10" X 3'-2½"	5	¼" X 1'-1¼" X 1'-6"	-
10	1	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	-
10	2	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	-
10	3	A	1'-8½"	10¼"	3"	⅝" X 1'-4" X 1'-8½"	½" X 7" X 1'-8½"	2	A	3'-2½"	1'-7¼"	4"	1" X 1'-6" X 3'-2½"	1" X 8" X 3'-2½"	5	⅛" X 10¼" X 1'-4"	-
10	4	A	2'-2½"	1'-1¼"	3"	¾" X 1'-4" X 2'-2½"	¾" X 7" X 2'-2½"	3	B	3'-2½"	1'-7¼"	3"	1⅜" X 1'-10" X 3'-2½"	1" X 10" X 3'-2½"	5	⅜" X 1'-1¼" X 1'-4"	-

NOTES:

1. FOR FIELD SPLICE DETAILS AND NOTES
SEE SHEET 47 / 80 .

[illegible]

INTERMEDIATE CROSSFRAME - TYPE 1



INTERMEDIATE CROSSFRAME - TYPE 2 & 3

LEGEND:

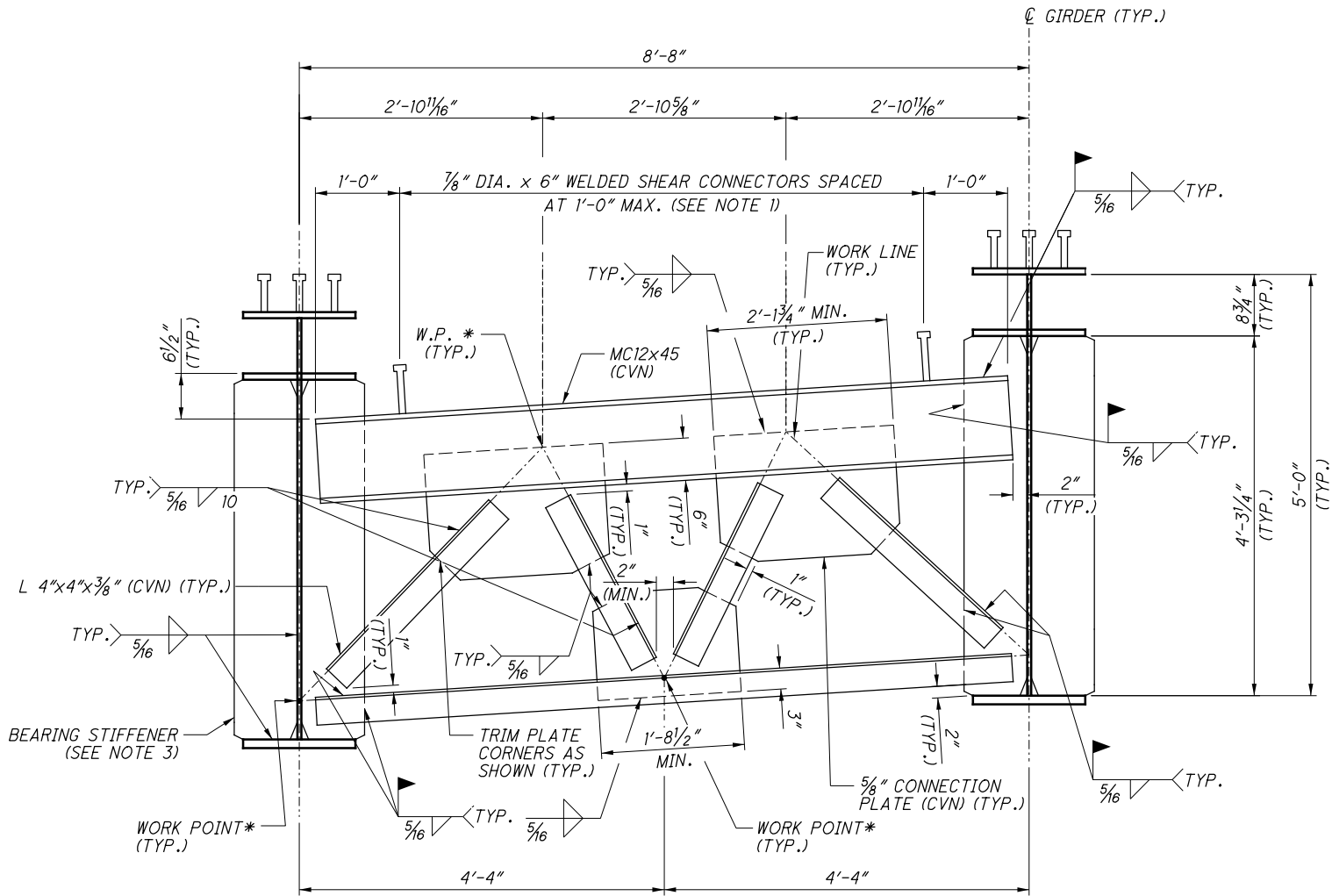
- * = 1/4" WELD FOR INTERMEDIATE STIFFENER PLATE AND
5/16" WELD FOR BEARING STIFFENER PLATE
- Δ = TYP. MINIMUM TOP & BOTTOM WELD LENGTH AT EACH
END OF EACH MEMBER. WELD THE ENTIRE LENGTH OF
THE JOINT ALONG THE THREE EDGES AS SHOWN.
- ◇ = 10 1/4" AT THE FOLLOWING CROSSFRAME LOCATIONS:
 ℄ PIER 1, ℄ PIER 4 AND ℄ PIER 6
- 1 1/4" AT ALL OTHER TYPE 1 CROSSFRAME LOCATIONS.
- ⊕ = 8 3/4" AT THE FOLLOWING CROSSFRAME LOCATIONS:
 ℄ PIER 1, ℄ PIER 4 AND ℄ PIER 6
- 6 3/4" AT ALL OTHER TYPE 1 CROSSFRAME LOCATIONS.
- = 3" AT THE FOLLOWING CROSSFRAME LOCATIONS:
 ℄ PIER 1, ℄ PIER 4 AND ℄ PIER 6
- 1" AT ALL OTHER TYPE 1 CROSSFRAME LOCATIONS.

NOTES:

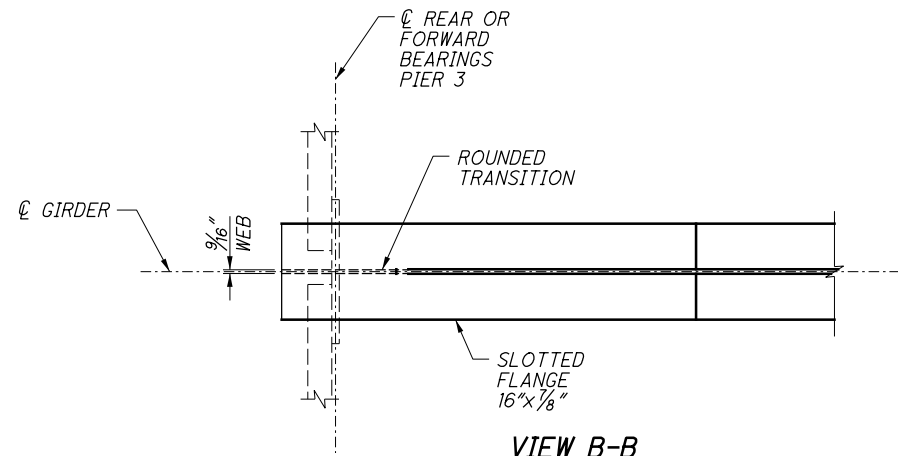
1. SEE SHEET 38 / 80 AND 39 / 80 FOR LOCATION OF CROSSFRAME TYPES AND ADDITIONAL NOTES.
2. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
3. WORK POINTS ARE LOCATED AT THE CENTERLINE OF GIRDERS.
4. ALL STRUCTURAL STEEL SHALL BE ASTM A709, GRADE 50.
5. SEE GENERAL NOTES FOR COATING REQUIREMENTS.
6. SEE SHEET 42 / 80 FOR BEARING STIFFENER SIZES.
7. EXCEPT AS NOTED BELOW, STIFFENER PLATES AT INTERMEDIATE CROSSFRAME LOCATIONS SHALL BE PROVIDED ON BOTH SIDES OF THE WEB FOR INTERIOR GIRDERS AND ONLY ON THE INSIDE FACE OF WEB FOR EXTERIOR GIRDERS. BEARING STIFFENERS SHALL BE PROVIDED ON BOTH SIDES OF THE WEB FOR ALL GIRDERS.

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

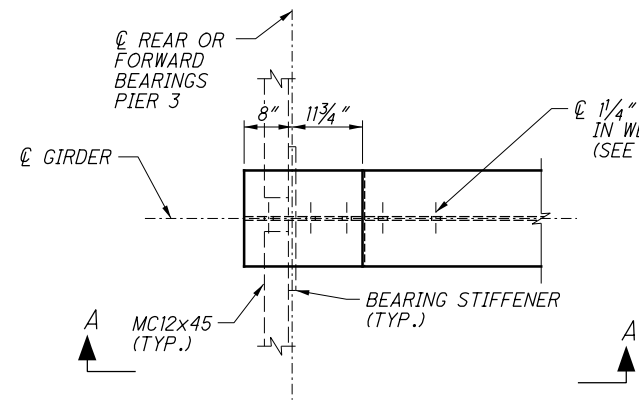
pw:\V\ANV\A01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_SS01.dgn Sheet 6/17



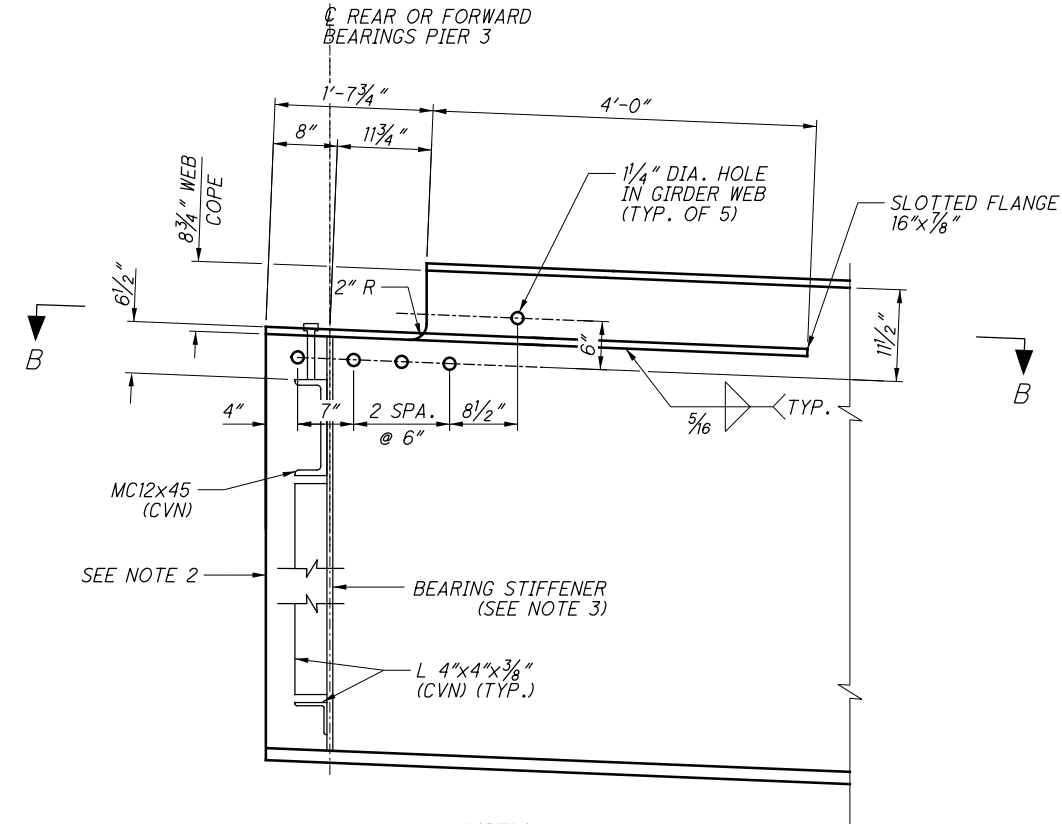
END CROSSFRAME - PIER 3
(UNIT 2 LOOKING UPSTATION, SHOWN
UNIT 1 LOOKING DOWNSTATION, OPPOSITE HAND)



VIEW B-B



GIRDER END DETAIL - PIER 3



VIEW A-A
(UNIT 2 SHOWN, UNIT 1 SIMILAR EXCEPT
GRADE IS UPWARD EXTENDING AWAY FROM
CL BEARINGS TOWARDS MID-SPAN)

LEGEND:

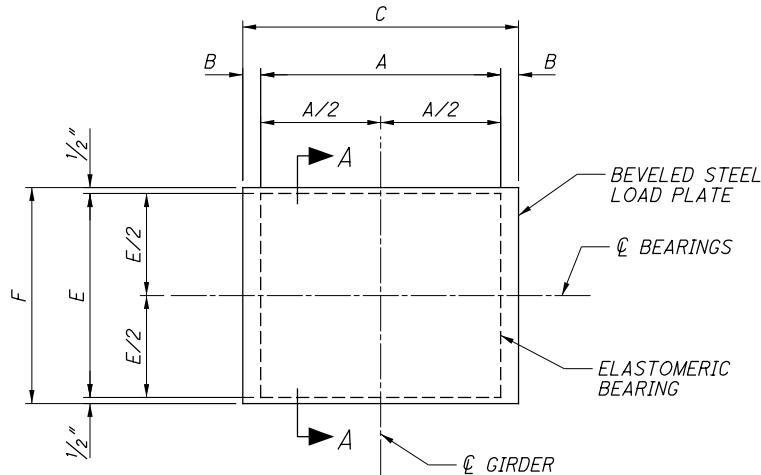
* = THE WORK LINE SHALL BE THE INSIDE FACE OF THE
PROTRUDING ANGLE LEG EXTENDED AS SHOWN

NOTES:

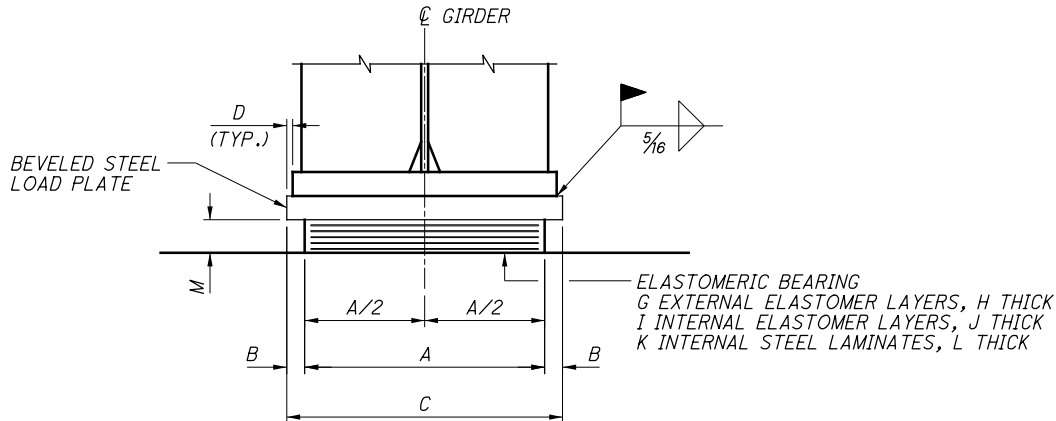
1. SHEAR STUD SPACING MAY BE ADJUSTED TO ACCOMMODATE TEMPORARY SUPPORT AND INSTALLATION OF THE MODULAR EXPANSION JOINT. THE TOTAL NUMBER OF SHEAR STUDS PER MC12X45 SHALL NOT BE REDUCED FROM THAT REQUIRED BY THE INDICATED SPACING.
2. GIRDER ENDS SHALL BE FABRICATED TO BE VERTICAL AFTER ERECTION.
3. SEE SHEET 42 / 80 FOR BEARING STIFFENER SIZES.
4. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
5. SEE STANDARD DRAWING GSD-1-19 FOR END CROSSFRAME DETAILS AT REAR AND FORWARD ABUTMENTS.
6. ALL STRUCTURAL STEEL SHALL BE ASTM A709, GRADE 50.
7. SEE GENERAL NOTES FOR COATING REQUIREMENTS.

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

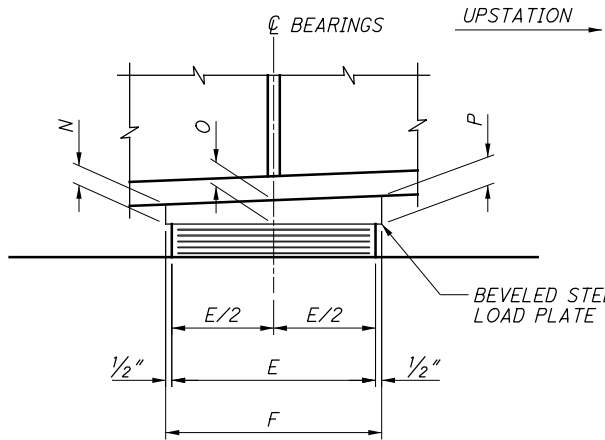
pw:\\V\\AN\\A01PWINT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\\Structures\\Sheets\\Ramp_Q\\076_1166L_SB001.dgn Sheet 6/1



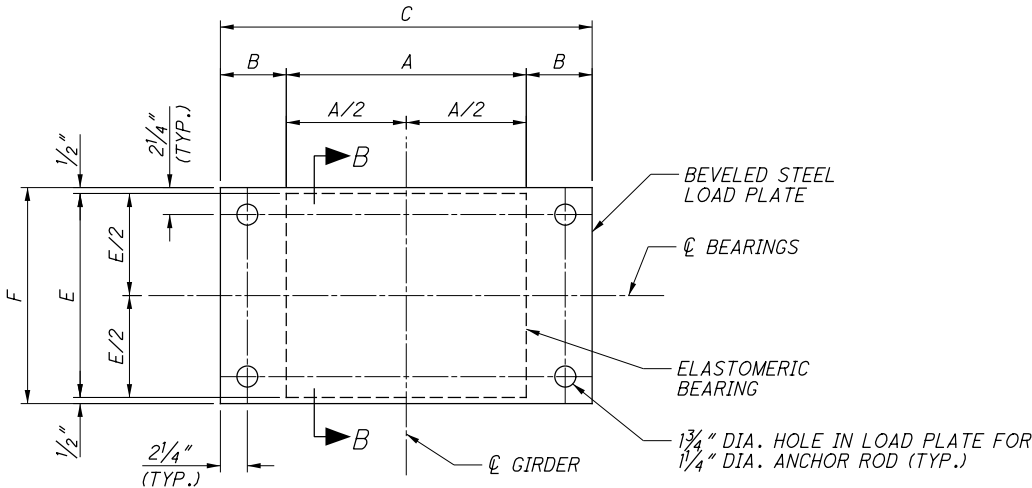
PLAN
(EXPANSION BEARING)
(PIERS 1, 4, AND 6)
(GIRDER NOT SHOWN)



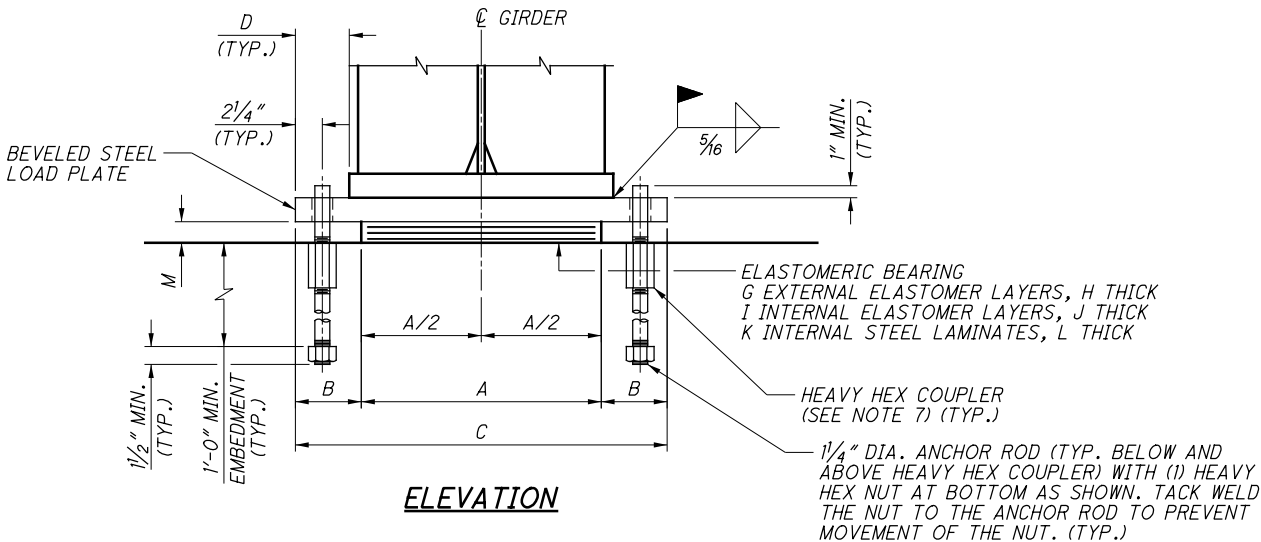
ELEVATION



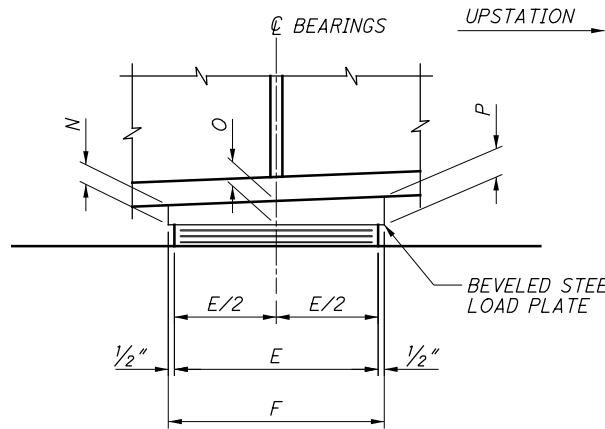
SECTION A-A



PLAN
(FIXED BEARING)
(PIER 5)
(GIRDER NOT SHOWN)



ELEVATION



SECTION B-B
(ANCHOR RODS NOT SHOWN)

NOTES:

1. SEE SHEET 53 / 80 FOR NOTES AND TABLE OF DIMENSIONS.

2026-03-24 - BU-J-17 - RECORD DRAWING PLANS

SUM-76 / 77 / 8 - 10.99 / 11.54 / 0.00		ELASTOMERIC BEARING DETAILS - 1		BURGESS & NIPLE Engineers Architects Planners 5085 REED ROAD, COLUMBUS, OHIO 43220
PID No. 101402		SUM-76-1148Q		Engineers Architects Planners
51 / 80		RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB		Engineers Architects Planners
75 / 104		DESIGNED BES		REVIEWED JCS
		CHECKED SUA		STRUCTURE FILE NUMBER 7706066
		DATE 4/29/19		

ISSUE RECORD:		DESCRIPTION			
NO.	DATE				

pw:\\V\\AN\\A01PWINT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\\Structures\\Sheets\\Ramp_Q\\076_11661_SB003.dgn Sheet 6/1

BEARING DIMENSIONS																						DESIGN LOADS SERVICE LIMIT STATE (KIPS)			
SUBSTRUCTURE	GIRDER	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	DL	LL	TOTAL
REAR ABUTMENT	G1	1'-4"	4½"	2'-1"	3½"	1'-1"	1'-2"	0	--	7	0.597"	6	0.0747"	4⅝"	1⅝"	2"	2¾"	3'-7"	1'-1½"	1'-6"	2½"	1'-4¾"	80.0	70.6	150.5
	G2				3½"																		68.2	79.0	147.2
	G3				3½"																		70.1	75.2	145.3
	G4				0½"																		99.3	96.9	196.1
PIER 1	G1	1'-8"	1½"	1'-11"	2½"	1'-4"	1'-5"	1	0.293"	5	0.418"	5	0.0747"	2¾"	1⅜"	2"	2¾"	--	--	--	--	--	337.0	154.4	491.3
	G2				2½"																		274.5	135.7	410.2
	G3				2½"																		296.5	143.4	439.9
	G4				0½"																		336.9	171.9	508.8
PIER 3 REAR	G1	1'-4"	4½"	2'-1"	2½"	1'-1"	1'-2"	0	--	8	0.418"	7	0.0747"	3⅞"	2⅝"	2"	1⅞"	3'-7"	1'-1½"	1'-6"	2½"	1'-4¾"	98.8	75.9	174.7
	G2				3½"																		93.7	88.1	181.8
	G3				3½"																		98.9	83.7	182.5
	G4				0½"																		135.6	105.2	240.7
PIER 3 FORWARD	G5	1'-2"	2½"	1'-7"	1½"	1'-0"	1'-1"	0	--	7	0.597"	6	0.0747"	4⅝"	2¼"	2"	1¾"	3'-1"	0'-11½"	1'-6"	3"	1'-1¾"	60.2	62.3	122.5
	G6				1½"																		55.3	73.0	128.3
	G7				1½"																		57.0	70.5	127.5
	G8				0½"																		69.7	79.8	149.5
PIER 4	G5	1'-4"	1½"	1'-7"	0½"	1'-1"	1'-2"	1	0.293"	7	0.418"	7	0.0747"	3¾"	2⅜"	2"	1⅝"	--	--	--	--	--	192.1	116.4	308.5
	G6				0½"																		158.4	117.4	275.8
	G7				0½"																		164.9	118.0	282.9
	G8				0½"																		189.3	134.0	323.3
PIER 5	G5	1'-8"	5½"	2'-7"	6½"	1'-4"	1'-5"	1	0.293"	3	0.418"	3	0.0747"	1¾"	2¾"	2⅞"	1½"	--	--	--	--	--	324.1	153.2	477.3
	G6				6½"																		268.5	137.5	406.0
	G7				6½"																		293.9	145.3	439.2
	G8				4½"																		319.0	166.3	485.3
PIER 6	G5	1'-8"	1½"	1'-11"	2½"	1'-4"	1'-5"	1	0.293"	5	0.418"	5	0.0747"	2¾"	2¾"	2⅞"	1½"	--	--	--	--	--	347.5	155.1	502.6
	G6				2½"																		285.7	141.4	427.1
	G7				2½"																		314.1	145.0	459.1
	G8				0½"																		349.2	169.5	518.7
FORWARD ABUTMENT	G5	1'-4"	4½"	2'-1"	2½"	1'-1"	1'-2"	0	--	7	0.597"	6	0.0747"	4⅝"	2½"	2"	1½"	3'-7"	1'-1½"	1'-6"	2½"	1'-4¾"	75.6	69.6	145.3
	G6				3½"																		67.5	80.5	148.0
	G7				3½"																		68.2	76.7	144.9
	G8				0½"																		87.3	92.5	179.8

NOTES:

1. ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.5 (METHOD B) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. PERFORM THE LONG-TERM COMPRESSION PROOF LOAD TEST IN ACCORDANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6 AND 18.7.4.5.
2. STEEL LOAD PLATES, MASONRY PLATES, GUIDE ANGLE ASSEMBLIES, AND PLATE WASHERS SHALL BE ASTM A709, GRADE 50. STEEL LOAD PLATES SHALL BE FIELD PAINTED (ALTERNATE 1) OR GALVANIZED ACCORDING TO 711.02 (ALTERNATE 2). MASONRY PLATES, GUIDE ANGLE ASSEMBLIES, AND PLATE WASHERS SHALL BE GALVANIZED ACCORDING TO 711.02. ANCHOR RODS SHALL BE ASTM F1554, GRADE 105, GALVANIZED ACCORDING TO 711.02. HEAVY HEX NUTS AND COUPLERS SHALL BE ASTM A563, GRADE DH OR DH3, GALVANIZED ACCORDING TO 711.02, AND LUBRICATED WITH A LUBRICANT CONTAINING A VISIBLE DYE.
3. VULCANIZE THE LOAD PLATE AND MASONRY PLATE (WHERE APPLICABLE) TO THE ELASTOMER DURING THE MOLDING PROCESS.
4. SHOP MARK THE LOAD PLATES WITH THE FOLLOWING INFORMATION: TOP, UPSTATION DIRECTION, AND SUBSTRUCTURE LOCATION (R.A., PIER 1, PIER 3 REAR, ETC.). ALL MARKS SHALL BE PERMANENT AND VISIBLE AFTER THE BEARING IS INSTALLED.

NOTES, CONTINUED:

5. WHERE A MASONRY PLATE IS BONDED TO THE ELASTOMER AT THE BOTTOM OF THE BEARING AND A LOAD PLATE IS BONDED TO THE ELASTOMER AT THE TOP OF THE BEARING, ALL ELASTOMER LAYERS SHALL BE DESIGNATED AS INTERNAL LAYERS. WHERE A LOAD PLATE IS BONDED TO THE ELASTOMER AT THE TOP OF THE BEARING, AND NO MASONRY PLATE IS PRESENT, ONLY THE BOTTOM ELASTOMER LAYER SHALL BE DESIGNATED AS AN EXTERIOR LAYER.
6. ANCHOR RODS SHALL BE CAST-IN-PLACE. DRILLING AND GROUTING WILL NOT BE PERMITTED.
7. UPPER AND LOWER ANCHOR RODS SHALL BE THREADED INTO HEAVY HEX COUPLER BY 1" MINIMUM FOR ¾" DIA. ANCHOR RODS AND 1½" MINIMUM FOR 1¼" DIA. ANCHOR RODS.
8. BASIS OF PAYMENT: THE UNIT PRICE INCLUDES ALL MATERIAL, LABOR, TESTING, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS INCLUDING BEVELED STEEL LOAD PLATES, MASONRY PLATES, GUIDE ANGLE ASSEMBLIES, PREFORMED BEARING PADS, ANCHOR RODS, NUTS, AND WASHERS. PAYMENT WILL BE INCLUDED WITH THE APPROPRIATE 516 ITEM.

SUM-76 / 77 / 8 -
10.99 / 11.54 / 0.00

53 / 80

77
104

ELASTOMERIC BEARING DETAILS - 3

RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

DESIGNED
BES

CHECKED
SUA

DRAWN
BES

REVIEWED
JCS

DATE
4/29/19

STRUCTURE FILE NUMBER
7706066

BURGESS & NIPLE

Engineers Architects Planners

5085 REED ROAD, COLUMBUS, OHIO 43220



(TRANSVERSE DIMENSIONS
ARE MEASURED RADially)

DSB = DS BROWN
WBA = WATSON BOWMAN ACME

Δ = SEE TRANSVERSE SECTION FOR SPACING

⊕ = PLACED RADially TO EDGE OF DECK

◇ = DIMENSION VARIES WITH TEMPERATURE. DIMENSION IS SHOWN AT 60°F.

(B) = 6-SA504 (BUNDLE WITH 6-SA506 AT EACH EDGE OF DECK)
@ EQ. SPA. (TOP) & 6-SA505 @ EQ. SPA. (BOT.)

1. SEE TRANSVERSE SECTION ON SHEET

54	/	80
----	---	----

 FOR ADDITIONAL DECK

2. LAP REINFORCING STEEL THE FOLLOWING MINIMUM LENGTHS:
LONGITUDINAL STEEL:
#4 BARS (TOP) = 1'-10"
#5 BARS (BOT) = 2'-3"

3. SEE SHEET

57	/	80
----	---	----

 FOR SECTION A-A AND ADDITIONAL REINFORCING STEEL AT PIER 3 MODULAR JOINT.

4. SEE SHEET

58	/	80
----	---	----

 FOR DECK POUR SEQUENCE.

5. TRANSVERSE BARS SHALL BE PLACED RADIALLY TO THE EDGE OF DECK. SPACINGS ARE PROVIDED ALONG THE RIGHT EDGE OF DECK.

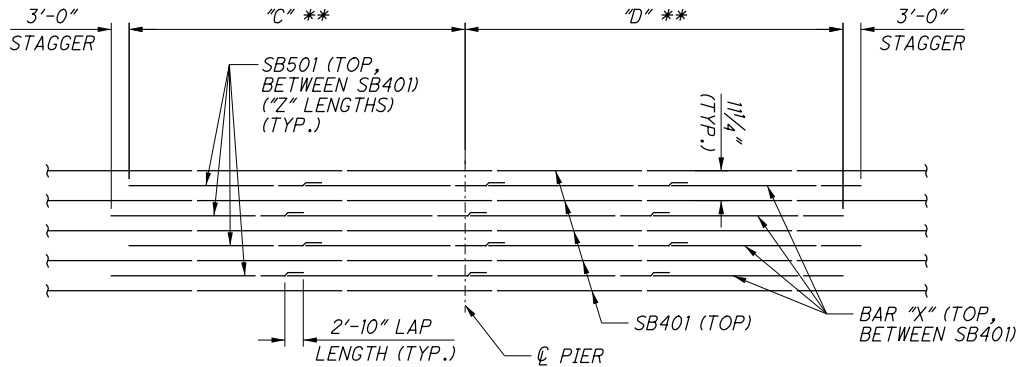


(** = EVERY OTHER BAR)

	PIER 1	PIER 2
DIM. "C"	60'-0"	55'-0"
DIM. "D"	35'-0"	62'-0"
BAR "X"	SA507	SA508
LENGTHS "Z"	3	4

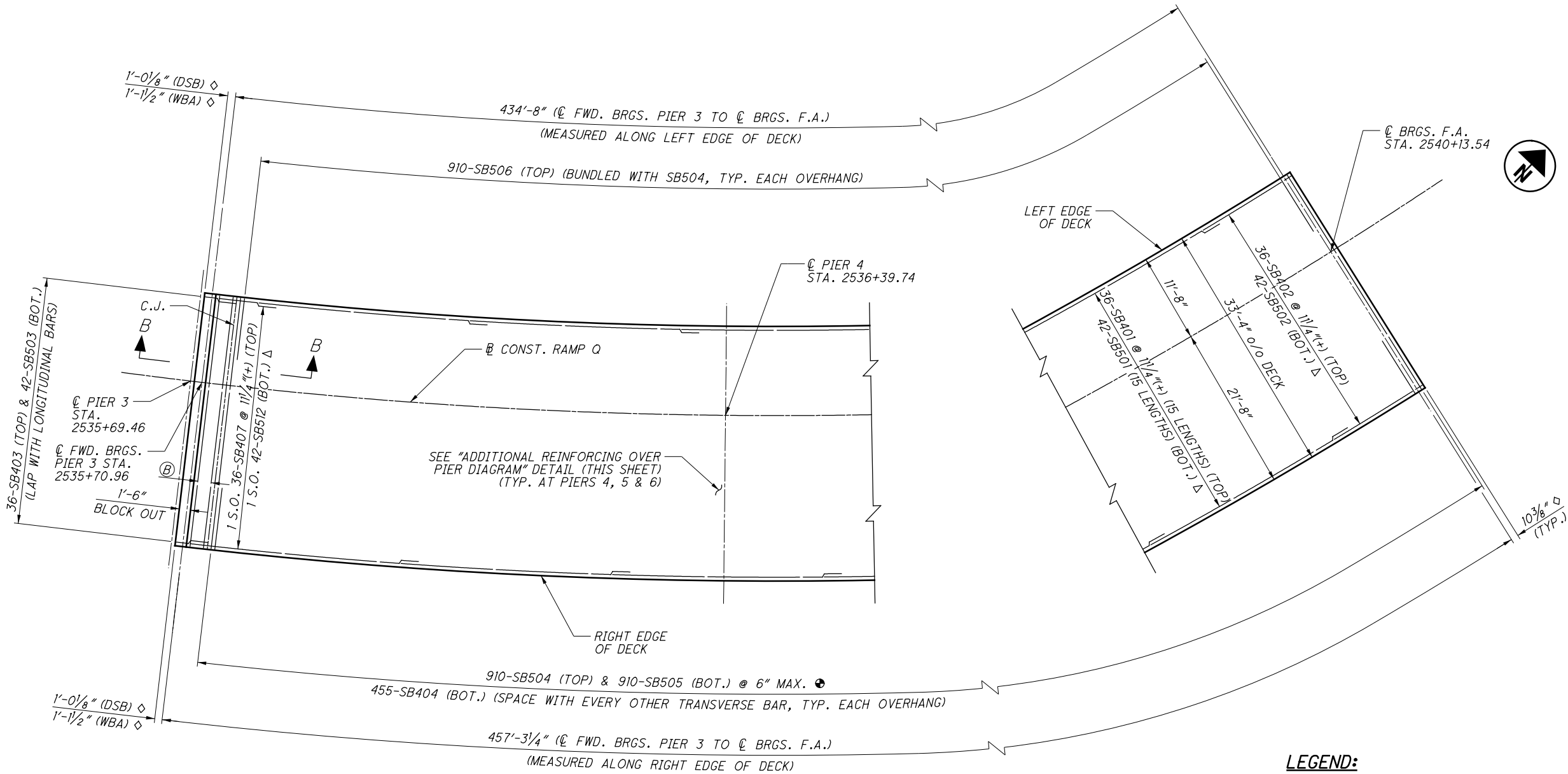
ISSUE RECORD:		DESCRIPTION	
NO.	DATE		

6/1
pw:\\V\\AN\\A01PW\\INT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\\Structures\\Sheets\\Ramp_Q\\076_1166L_SD002.dgn Sheet



ADDITIONAL REINFORCING OVER PIER DIAGRAM
(** = EVERY OTHER BAR)

	PIER 4	PIER 5	PIER 6
DIM. "C"	20'-0"	55'-0"	36'-0"
DIM. "D"	12'-0"	31'-0"	61'-0"
BAR "X"	SB507	SB508	SB509
LENGTHS "Z"	1	3	3



DECK SLAB PLAN - UNIT 2
(TRANSVERSE DIMENSIONS
ARE MEASURED RADIALLY)

- LEGEND:**
- DSB = DS BROWN
 - WBA = WATSON BOWMAN ACME
 - Δ = SEE TRANSVERSE SECTION FOR SPACING
 - = PLACED RADIALLY TO EDGE OF DECK
 - ◇ = DIMENSION VARIES WITH TEMPERATURE. DIMENSION IS SHOWN AT 60°F.
 - ⓑ = 6-SB504 (BUNDLE WITH 6-SB506 AT EACH EDGE OF DECK) @ EQ. SPA. (TOP) & 6-SB505 @ EQ. SPA. (BOT.)

- NOTES:**
- SEE TRANSVERSE SECTION ON SHEET 54 / 80 FOR ADDITIONAL DECK REINFORCING STEEL DETAILS.
 - LAP REINFORCING STEEL THE FOLLOWING MINIMUM LENGTHS:
LONGITUDINAL STEEL:
#4 BARS (TOP) = 1'-10"
#5 BARS (BOT) = 2'-3"
 - SEE SHEET 57 / 80 FOR SECTION B-B AND ADDITIONAL REINFORCING STEEL AT PIER 3 MODULAR JOINT.
 - SEE SHEET 59 / 80 FOR DECK POUR SEQUENCE.
 - TRANSVERSE BARS SHALL BE PLACED RADIALLY TO THE EDGE OF DECK. SPACINGS ARE PROVIDED ALONG THE RIGHT EDGE OF DECK.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

DECK SLAB PLAN - UNIT 2
SUM-76-1148Q
RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

SUM-76/77/8-
10.99/11.54/0.00
PID No. 101402

56/80
80
104

DESIGNED
MAB

CHECKED
BES

DRAWN
MAB

REVIEWED
JCS

DATE
4/29/19

STRUCTURE FILE NUMBER
7706066

BURGESS & NIPL
Engineers Architects Planners
5085 REED ROAD, COLUMBUS, OHIO 43220

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\V\ANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_SD003.dgn Sheet 6/1

2026-03-24 - BU-17 - RECORD DRAWING PLANS

SECTION A-A

(MODULAR JOINT STRIP SEALS AND CENTER BEAMS NOT SHOWN)
(ALL HORIZONTAL DIMENSIONS ARE MEASURED NORMAL TO C BEARINGS)

SECTION B-B

(MODULAR JOINT STRIP SEALS AND CENTER BEAMS NOT SHOWN)
(ALL HORIZONTAL DIMENSIONS ARE MEASURED NORMAL TO C BEARINGS)

LEGEND:

WBA = WATSON BOWMAN ACME

* = GRADE VARIES DUE TO VERTICAL CURVE. THE GRADE SHOWN IS THE INSTANTANEOUS GRADE AT C PIER 3 & C EXPANSION JOINT.

◇ = 1'-0 1/8" (DS BROWN), 1'-1 1/2" (WBA), AT 60° F. SEE SHEET 72 / 80 FOR ADJUSTMENT OF JOINT OPENINGS AT TEMPERATURES OTHER THAN 60° F.

⊗ = LAP WITH LONGITUDINAL DECK BARS (SEE DECK PLANS FOR LAP LENGTHS) AND FIELD CUT AS NECESSARY TO AVOID INTERFERENCE WITH JOINT SUPPORT BOXES. REPAIR FIELD-CUT BAR ENDS PER 509. PLACE SA403 (UNIT 1) OR SB403 (UNIT 2) BARS BELOW TOP TRANSVERSE BARS AS SHOWN.

⊕ = SPACE SA405 (UNIT 1) OR SB405 (UNIT 2) BARS WITH BOTTOM LONGITUDINAL DECK BARS AND OMIT SA405 OR SB405 BARS WHERE INTERFERENCE WITH TOP FLANGE OR JOINT SUPPORT BOXES OCCURS. AS AN ALTERNATIVE TO OMITTING BARS AT JOINT SUPPORT BOXES, THE CONTRACTOR MAY FIELD CUT SA405 OR SB405 BARS AT OR NEAR THE BOTTOM OF THE BLOCK OUT. REPAIR FIELD-CUT BAR ENDS PER 509.

☆ = SPACE DESIGNATED BARS WITH BOTTOM LONGITUDINAL DECK BARS.

■ = SPACE DESIGNATED BARS WITH BOTTOM LONGITUDINAL DECK BARS AND OMIT BARS WHERE INTERFERENCE WITH TOP FLANGE OCCURS.

(A) = SA406 (UNIT 1) OR SB406 (UNIT 2) (TYP. OF 5 WITHIN BLOCK OUT)

(B) = 4-SA504 (UNIT 1) OR SB504 (UNIT 2) (TOP)
5-SA505 (UNIT 1) OR SB505 (UNIT 2) (BOTTOM)
BUNDLE 1-SA506 (UNIT 1) OR 1-SB506 (UNIT 2) WITH TOP BARS AT EACH END, SIMILAR TO HOW SHOWN ON DECK SLAB REINFORCING STEEL DETAILS ON SHEET 54 / 80

NOTES:

1. SEE SHEET 72 / 80 FOR ADDITIONAL MODULAR JOINT DETAILS.

DECK DETAILS

SUM-76-1148Q
RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

SUM-76 / 77 / 8 -
10.99 / 11.54 / 0.00

PID No. 101402

57 / 80

81 / 104

BURGESS & NIPLÉ

Engineers Architects Planners
5085 REED ROAD, COLUMBUS, OHIO 43220

REVIEWED JCS 4/29/19

DATE 4/29/19

STRUCTURE FILE NUMBER 7706066

DRAWN BES

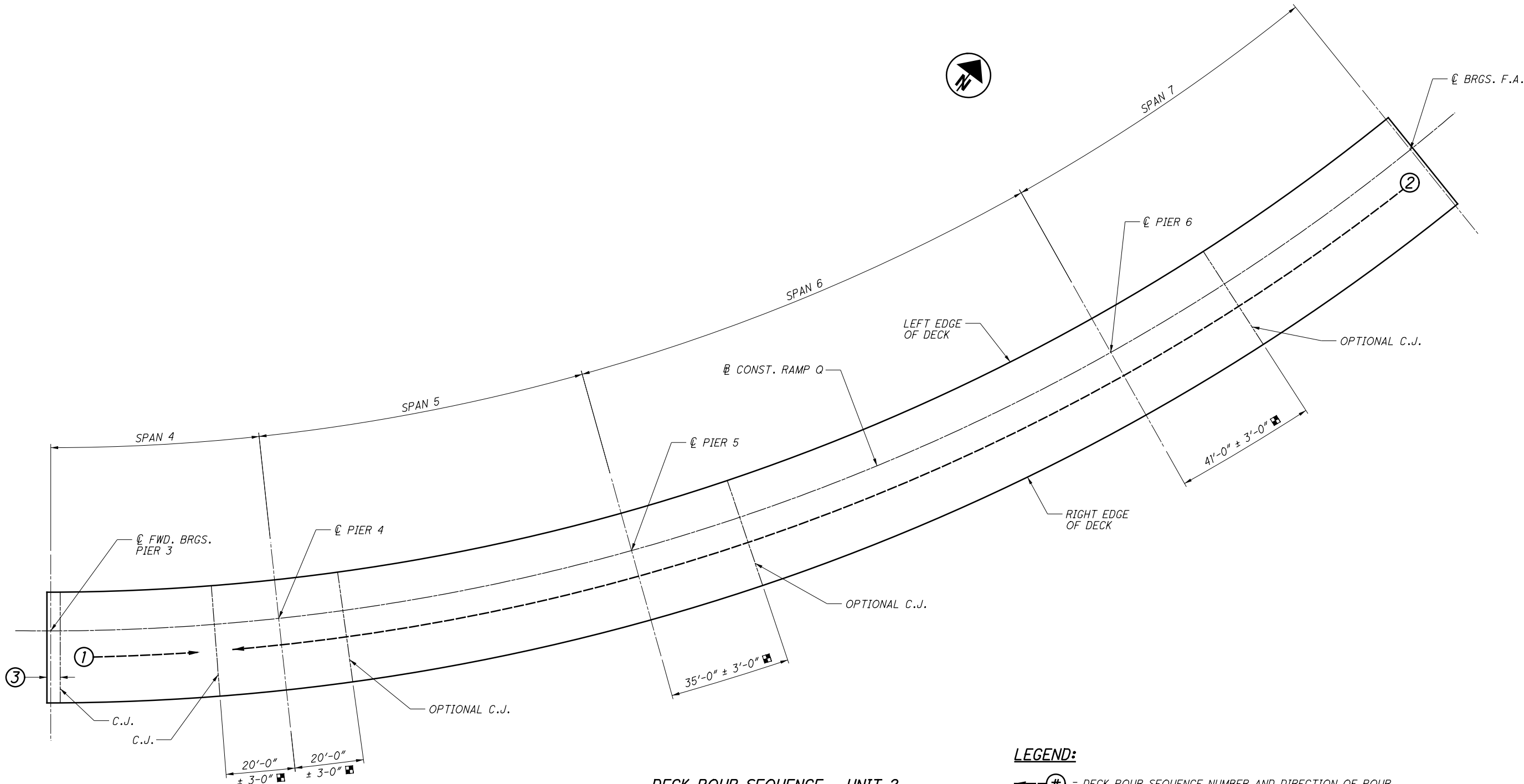
DESIGNED BES

CHECKED MAB

REVIS

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\V\ANV\A01PW\INT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_SD005.dgn Sheet 6/1



DECK POUR SEQUENCE - UNIT 2

LEGEND:

- ← (1) = DECK POUR SEQUENCE NUMBER AND DIRECTION OF POUR
■ = MEASURED ALONG RIGHT EDGE OF DECK

NOTES:

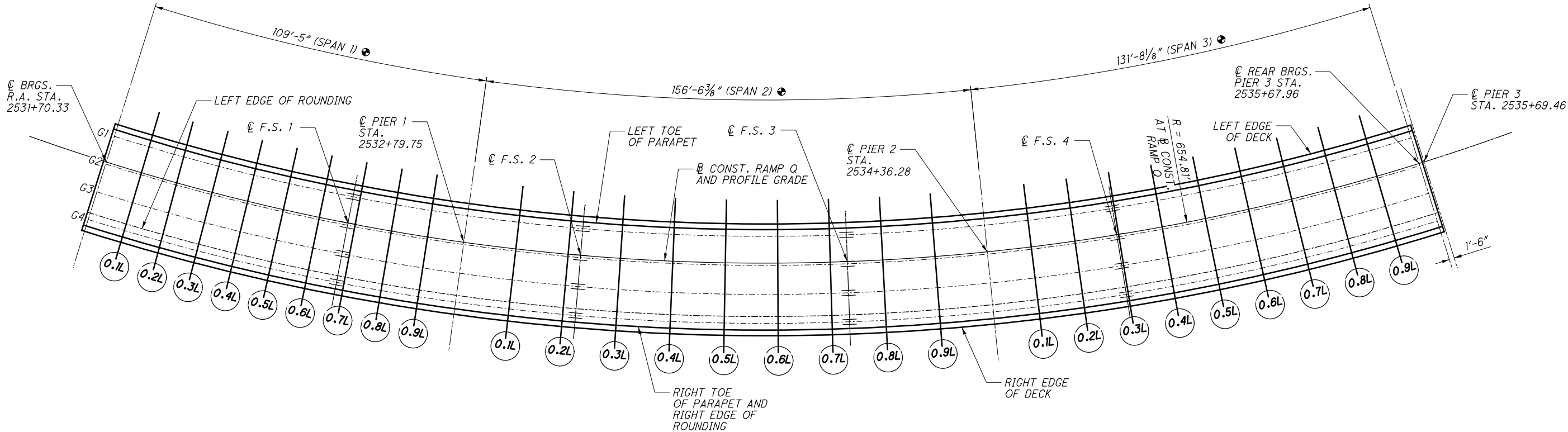
1. THE ENCIRCLED NUMBERS INDICATE THE SEQUENCE FOR PLACING THE SLAB SECTIONS. TRANSVERSE CONSTRUCTION JOINTS ARE PERMITTED ONLY AT THE LOCATIONS SHOWN. CONSTRUCTION JOINTS NOT INDICATED TO BE OPTIONAL ARE REQUIRED.
2. CONTRACTOR PROPOSED CHANGES TO THE DECK PLACEMENT SEQUENCE MUST BE SUBMITTED WITH PLANS AND COMPUTATIONS PREPARED IN ACCORDANCE WITH CMS 501.05. COMPUTATIONS MUST INCLUDE A STRUCTURAL ANALYSIS DEMONSTRATING THAT THE PROPOSED DECK PLACEMENT SEQUENCE WILL NOT CAUSE UPLIFT AT ANY BEARING LOCATION AND THAT THE FORCES PRODUCED IN THE STEEL SUPERSTRUCTURE DO NOT EXCEED THOSE PERMITTED BY THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE STRUCTURAL ANALYSIS SHALL INCLUDE ALL GIRDERS AND CROSSFRAMES (A 2-DIMENSIONAL GRILLAGE MODEL SHALL BE USED AT A MINIMUM).
3. SEE SHEET 57 / 80 FOR DECK DETAILS AT MODULAR EXPANSION JOINT.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

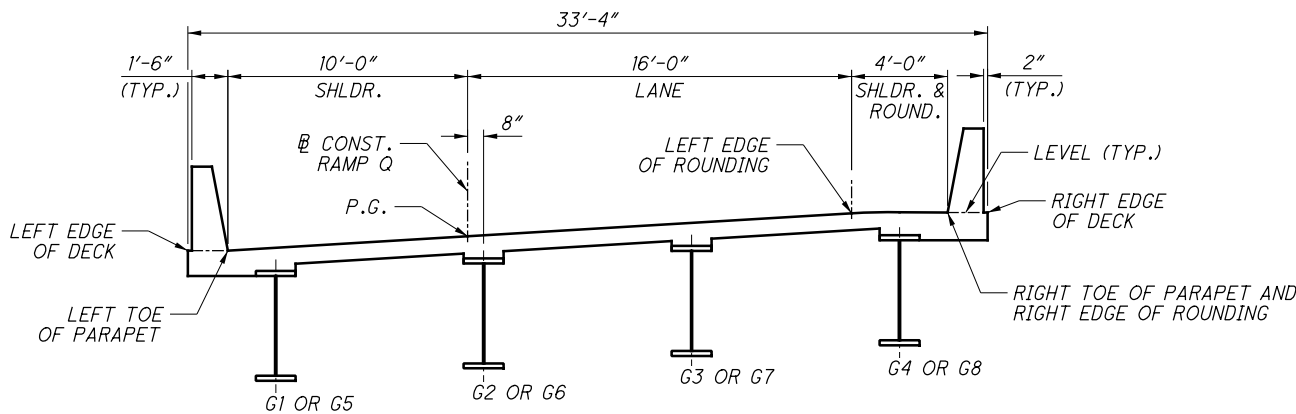
83 104		59 / 80	SUM-76 / 77 / 8- 10.99 / 11.54 / 0.00 PID No. 101402	DECK POUR SEQUENCE - UNIT 2 SUM-76-1148Q RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB				DESIGNED BES CHECKED MAB		DRAWN BES REVISED	REVIEWED JCS STRUCTURE FILE NUMBER 7706066	DATE 4/29/19	BURGESS & NIPLE Engineers ■ Architects ■ Planners 5085 REED ROAD, COLUMBUS, OHIO 43220	
--	--	---------	--	---	--	--	--	--	--	---	--	-----------------	--	--

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

6/1
pw:\\V\\AN\\A01PWINT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2-Structures\\Sheets\\Ramp_Q\\076_1166L_SS003.dgn Sheet



CRITICAL BRIDGE POINTS PLAN - UNIT 1
(FOR USE WITH SCREED, TOP OF HAUNCH
AND FINAL DECK ELEVATION TABLES)



CRITICAL BRIDGE POINTS TRANSVERSE SECTION
(TRANSVERSE DIMENSIONS
ARE MEASURED RADIALY)

LEGEND:

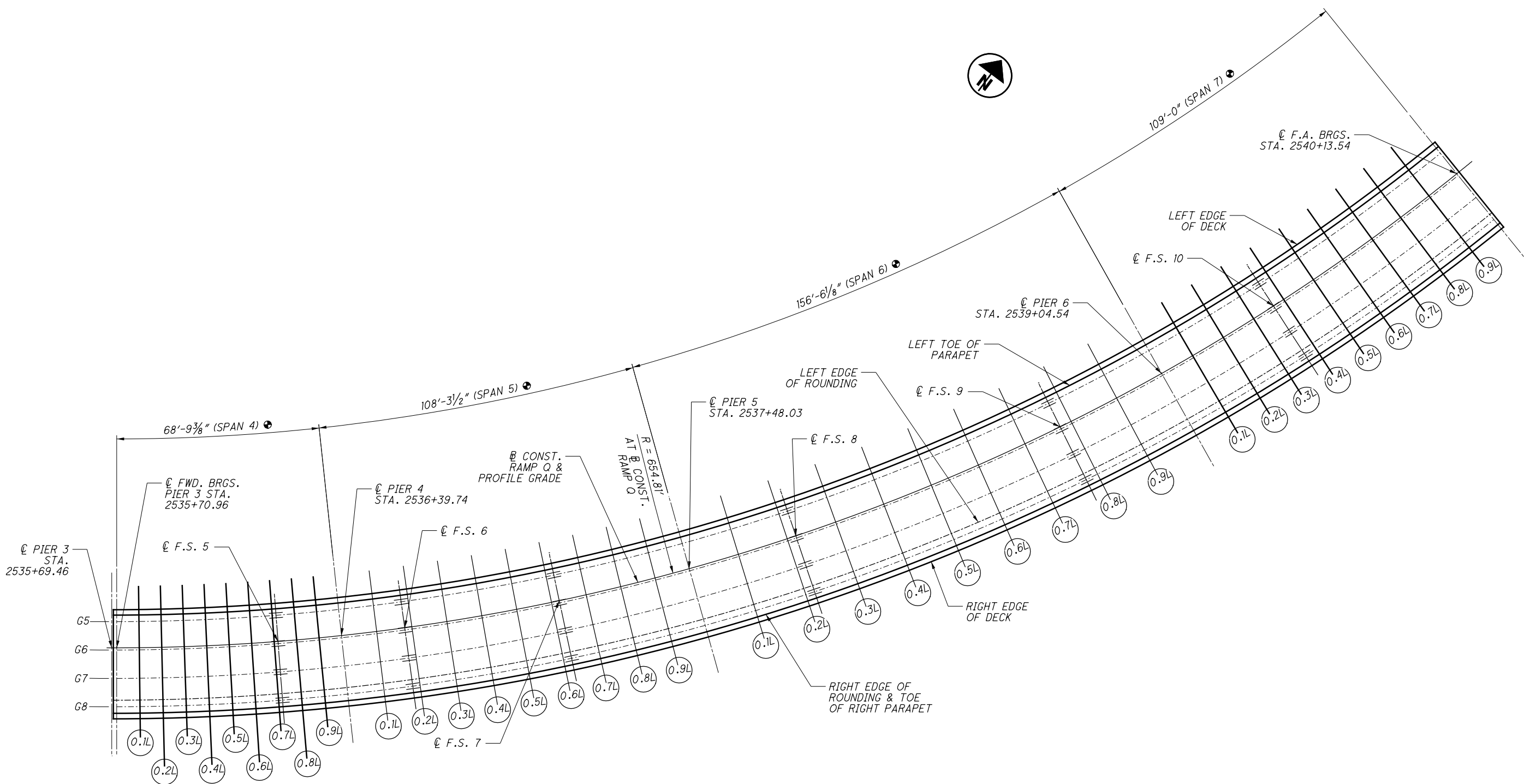
⊕ = MEASURED ALONG $\overline{B}$ CONST. RAMP Q
L = SPAN LENGTH

NOTES:

- SEE SHEET 63 / 80 FOR TOP OF HAUNCH ELEVATION TABLES.
- SEE SHEET 64 / 80 FOR FINISHED DECK ELEVATION TABLES.
- SEE SHEET 62 / 80 FOR SCREED ELEVATION TABLES.

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\V\ANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_SS004.dgn Sheet 6/1



CRITICAL BRIDGE POINTS PLAN - UNIT 2
(FOR USE WITH SCREED, TOP OF HAUNCH
AND FINAL DECK ELEVATION TABLES)

LEGEND:

● = MEASURED ALONG $\overline{B}$ CONST. RAMP Q
L = SPAN LENGTH

NOTES:

- SEE SHEET 63 / 80 FOR TOP OF HAUNCH ELEVATION TABLES.
- SEE SHEET 65 / 80 FOR FINISHED DECK ELEVATION TABLES.
- SEE SHEET 62 / 80 FOR SCREED ELEVATION TABLES.
- SEE SHEET 60 / 80 FOR CRITICAL LOCATIONS TRANSVERSE SECTION.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

61 80		SUM-76 / 77 / 8- 10.99 / 11.54 / 0.00 PID No. 101402	CRITICAL BRIDGE POINTS LOCATION PLAN - UNIT 2					BURGESS & NIPL Engineers ■ Architects ■ Planners 5085 REED ROAD, COLUMBUS, OHIO 43220			
			SUM-76-1148Q					DESIGNED MAB	DRAWN MAB	REVIEWED JCS	DATE 4/29/19
			RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB					CHECKED BDE	REVISED	STRUCTURE FILE NUMBER 7706066	
85 104											

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

p:\V\ANV\A01P\WINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_SS015.dgn Sheet 6/11

SCREED ELEVATIONS - UNIT 1								
LOCATION	TOE OF LEFT PARAPET		PROFILE GRADE		LEFT EDGE OF ROUNDING		RIGHT EDGE OF ROUNDING AND TOE OF RIGHT PARAPET	
	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.
℄ BRGS. R. A.	2531+70.33	1122.87	2531+70.33	1123.47	2531+70.33	1124.43	2531+70.33	1124.46
0.1	2531+81.27	1123.42	2531+81.27	1124.02	2531+81.27	1124.99	2531+81.27	1125.03
0.2	2531+92.21	1123.95	2531+92.21	1124.55	2531+92.21	1125.52	2531+92.21	1125.56
0.3	2532+03.16	1124.44	2532+03.16	1125.04	2532+03.16	1126.01	2532+03.16	1126.05
0.4	2532+14.10	1124.90	2532+14.10	1125.50	2532+14.10	1126.47	2532+14.10	1126.50
0.5	2532+25.04	1125.31	2532+25.04	1125.91	2532+25.04	1126.88	2532+25.04	1126.92
0.6	2532+35.98	1125.69	2532+35.98	1126.29	2532+35.98	1127.26	2532+35.98	1127.30
F.S. 1	2532+44.71	1125.98	2532+44.71	1126.58	2532+44.71	1127.54	2532+44.71	1127.58
0.7	2532+46.92	1126.05	2532+46.92	1126.64	2532+46.92	1127.61	2532+46.92	1127.65
0.8	2532+57.87	1126.37	2532+57.87	1126.97	2532+57.87	1127.93	2532+57.87	1127.97
0.9	2532+68.81	1126.67	2532+68.81	1127.27	2532+68.81	1128.23	2532+68.81	1128.27
℄ PIER 1	2532+79.75	1126.96	2532+79.75	1127.56	2532+79.75	1128.52	2532+79.75	1128.56
0.1	2532+95.40	1127.35	2532+95.40	1127.95	2532+95.40	1128.91	2532+95.40	1128.95
0.2	2533+11.06	1127.70	2533+11.06	1128.30	2533+11.06	1129.26	2533+11.06	1129.30
F.S. 2	2533+14.79	1127.78	2533+14.79	1128.38	2533+14.79	1129.34	2533+14.79	1129.38
0.3	2533+26.71	1128.00	2533+26.71	1128.60	2533+26.71	1129.56	2533+26.71	1129.60
0.4	2533+42.36	1128.22	2533+42.36	1128.82	2533+42.36	1129.79	2533+42.36	1129.83
0.5	2533+58.02	1128.37	2533+58.02	1128.97	2533+58.02	1129.94	2533+58.02	1129.97
0.6	2533+73.67	1128.44	2533+73.67	1129.04	2533+73.67	1130.00	2533+73.67	1130.04
0.7	2533+89.32	1128.43	2533+89.32	1129.03	2533+89.32	1129.99	2533+89.32	1130.02
F.S. 3	2533+94.43	1128.41	2533+94.43	1129.01	2533+94.43	1129.97	2533+94.43	1130.00
0.8	2534+04.97	1128.36	2534+04.97	1128.95	2534+04.97	1129.91	2534+04.97	1129.95
0.9	2534+20.63	1128.23	2534+20.63	1128.83	2534+20.63	1129.79	2534+20.63	1129.82
℄ PIER 2	2534+36.28	1128.08	2534+36.28	1128.68	2534+36.28	1129.64	2534+36.28	1129.68
0.1	2534+49.45	1127.93	2534+49.45	1128.53	2534+49.45	1129.50	2534+49.45	1129.54
0.2	2534+62.61	1127.76	2534+62.62	1128.37	2534+62.62	1129.34	2534+62.63	1129.38
F.S. 4	2534+75.21	1127.57	2534+75.21	1128.18	2534+75.21	1129.16	2534+75.21	1129.20
0.3	2534+75.78	1127.56	2534+75.78	1128.17	2534+75.79	1129.15	2534+75.80	1129.19
0.4	2534+88.94	1127.32	2534+88.95	1127.93	2534+88.97	1128.93	2534+88.97	1128.96
0.5	2535+02.11	1127.03	2535+02.12	1127.64	2535+02.14	1128.64	2535+02.14	1128.68
0.6	2535+15.27	1126.67	2535+15.29	1127.29	2535+15.31	1128.29	2535+15.32	1128.33
0.7	2535+28.44	1126.27	2535+28.46	1126.89	2535+28.48	1127.89	2535+28.49	1127.92
0.8	2535+41.61	1125.80	2535+41.62	1126.41	2535+41.65	1127.40	2535+41.66	1127.44
0.9	2535+54.77	1125.28	2535+54.79	1125.88	2535+54.82	1126.86	2535+54.83	1126.90
℄ REAR BRGS. PIER 3	2535+67.94	1124.71	2535+67.96	1125.31	2535+68.00	1126.27	2535+68.01	1126.30

SCREED ELEVATIONS - UNIT 2								
LOCATION	TOE OF LEFT PARAPET		PROFILE GRADE		LEFT EDGE OF ROUNDING		RIGHT EDGE OF ROUNDING AND TOE OF RIGHT PARAPET	
	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.
℄ FWD. BRGS. PIER 3	2535+70.98	1124.58	2535+70.96	1125.18	2535+70.92	1126.15	2535+70.91	1126.18
0.1	2535+77.86	1124.30	2535+77.84	1124.90	2535+77.81	1125.86	2535+77.80	1125.90
0.2	2535+84.73	1124.00	2535+84.72	1124.61	2535+84.69	1125.57	2535+84.68	1125.61
0.3	2535+91.61	1123.70	2535+91.59	1124.30	2535+91.57	1125.27	2535+91.56	1125.31
0.4	2535+98.49	1123.38	2535+98.47	1123.98	2535+98.45	1124.95	2535+98.44	1124.98
0.5	2536+05.36	1123.05	2536+05.35	1123.65	2536+05.33	1124.61	2536+05.33	1124.65
0.6	2536+12.24	1122.70	2536+12.23	1123.30	2536+12.21	1124.27	2536+12.21	1124.31
0.7	2536+19.11	1122.34	2536+19.11	1122.95	2536+19.10	1123.91	2536+19.09	1123.95
F.S. 5	2536+20.27	1122.28	2536+20.27	1122.88	2536+20.27	1123.85	2536+20.27	1123.89
0.8	2536+25.99	1121.98	2536+25.98	1122.58	2536+25.98	1123.54	2536+25.97	1123.58
0.9	2536+32.86	1121.60	2536+32.86	1122.20	2536+32.86	1123.16	2536+32.86	1123.20
℄ PIER 4	2536+39.74	1121.21	2536+39.74	1121.81	2536+39.74	1122.77	2536+39.74	1122.81
0.1	2536+50.57	1120.59	2536+50.57	1121.18	2536+50.57	1122.14	2536+50.57	1122.18
F.S. 6	2536+59.20	1120.07	2536+59.20	1120.66	2536+59.20	1121.62	2536+59.20	1121.66
0.2	2536+61.40	1119.94	2536+61.40	1120.53	2536+61.40	1121.49	2536+61.40	1121.53
0.3	2536+72.23	1119.26	2536+72.23	1119.85	2536+72.23	1120.81	2536+72.23	1120.85
0.4	2536+83.06	1118.55	2536+83.06	1119.14	2536+83.06	1120.10	2536+83.06	1120.14
0.5	2536+93.89	1117.81	2536+93.89	1118.40	2536+93.89	1119.36	2536+93.89	1119.39
0.6	2537+04.71	1117.05	2537+04.71	1117.64	2537+04.71	1118.59	2537+04.71	1118.63
F.S. 7	2537+07.14	1116.87	2537+07.14	1117.47	2537+07.14	1118.42	2537+07.14	1118.45
0.7	2537+15.54	1116.28	2537+15.54	1116.87	2537+15.54	1117.82	2537+15.54	1117.86
0.8	2537+26.37	1115.52	2537+26.37	1116.11	2537+26.37	1117.06	2537+26.37	1117.10
0.9	2537+37.20	1114.76	2537+37.20	1115.35	2537+37.20	1116.31	2537+37.20	1116.35
℄ PIER 5	2537+48.03	1114.01	2537+48.03	1114.61	2537+48.03	1115.57	2537+48.03	1115.61
0.1	2537+63.68	1112.96	2537+63.68	1113.56	2537+63.68	1114.53	2537+63.68	1114.57
0.2	2537+79.33	1111.92	2537+79.33	1112.53	2537+79.33	1113.52	2537+79.33	1113.55
F.S. 8	2537+82.09	1111.74	2537+82.09	1112.35	2537+82.09	1113.34	2537+82.09	1113.38
0.3	2537+94.98	1110.89	2537+94.98	1111.50	2537+94.98	1112.50	2537+94.98	1112.54
0.4	2538+10.63	1109.83	2538+10.63	1110.45	2538+10.63	1111.45	2538+10.63	1111.49
0.5	2538+26.29	1108.75	2538+26.29	1109.36	2538+26.29	1110.37	2538+26.29	1110.41
0.6	2538+41.94	1107.63	2538+41.94	1108.25	2538+41.94	1109.25	2538+41.94	1109.29
0.7	2538+57.59	1106.50	2538+57.59	1107.11	2538+57.59	1108.10	2538+57.59	1108.14
F.S. 9	2538+69.50	1105.62	2538+69.50	1106.23	2538+69.50	1107.21	2538+69.50	1107.25
0.8	2538+73.24	1105.34	2538+73.24	1105.95	2538+73.24	1106.93	2538+73.24	1106.97
0.9	2538+88.89	1104.19	2538+88.89	1104.79	2538+88.89	1105.76	2538+88.89	1105.80
℄ PIER 6	2539+04.54	1103.05	2539+04.54	1103.65	2539+04.54	1104.61	2539+04.54	1104.65
0.1	2539+15.44	1102.29	2539+15.44	1102.88	2539+15.44	1103.84	2539+15.44	1103.88
0.2	2539+26.34	1101.53	2539+26.34	1102.12	2539+26.34	1103.08	2539+26.34	1103.12
0.3	2539+37.24	1100.78	2539+37.24	1101.37	2539+37.24	1102.33	2539+37.24	1102.36
F.S. 10	2539+44.44	1100.29	2539+44.44	1100.88	2539+44.44	1101.83	2539+44.44	1101.87
0.4	2539+48.14	1100.03	2539+48.14	1100.63	2539+48.14	1101.58	2539+48.14	1101.62
0.5	2539+59.04	1099.28	2539+59.04	1099.88	2539+59.04	1100.83	2539+59.04	1100.87
0.6	2539+69.94	1098.53	2539+69.94	1099.12	2539+69.94	1100.08	2539+69.94	1100.12
0.7	2539+80.84	1097.76	2539+80.84	1098.36	2539+80.84	1099.32	2539+80.84	1099.35
0.8	2539+91.74	1096.99	2539+91.74	1097.59	2539+91.74	1098.55	2539+91.74	1098.58
0.9	2540+02.64	1096.21	2540+02.64	1096.81	2540+02.64	1097.77	2540+02.64	1097.80
℄ BRGS. F.A.	2540+13.54	1095.42	2540+13.54	1096.02	2540+13.54	1096.98	2540+13.54	1097.02

NOTES:

1. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

2. SEE CRITICAL BRIDGE POINTS PLAN ON SHEETS 60 / 80

AND 61 / 80 FOR ELEVATION LOCATIONS.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

SUM-76 / 77 / 8-
10.99 / 11.54 / 0.00

PID No. 101402

62 / 80

86
104

SCREED ELEVATIONS

SUM-76-1148Q

RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

DESIGNED
MAB

CHECKED
ASG

DRAWN
AAA

REVIEWED
JCS

DATE
4/29/19

STRUCTURE FILE NUMBER
7706066

BURGESS & NIPLE

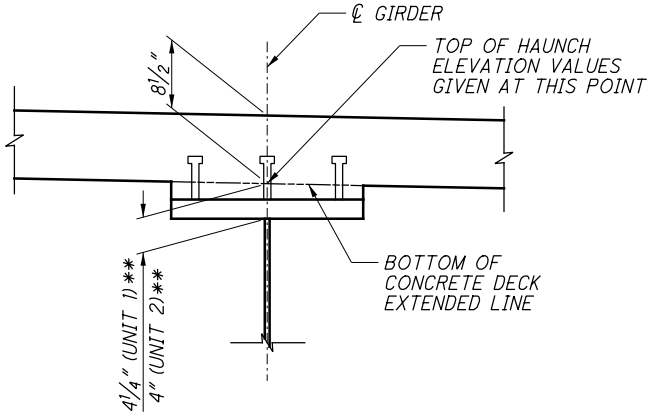
Engineers - Architects - Planners

5085 REED ROAD, COLUMBUS, OHIO 43220

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

p:\V\ANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_SS016.dgn Sheet 6/11

TOP OF HAUNCH ELEVATIONS - UNIT 1								
LOCATION	Ø GIRDER 1		Ø GIRDER 2		Ø GIRDER 3		Ø GIRDER 4	
	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.
Ø BRGS. R. A.	2531+70.33	1122.28	2531+70.33	1122.80	2531+70.33	1123.32	2531+70.33	1123.79
0.1	2531+81.27	1122.84	2531+81.27	1123.36	2531+81.27	1123.88	2531+81.27	1124.35
0.2	2531+92.21	1123.36	2531+92.21	1123.88	2531+92.21	1124.41	2531+92.21	1124.88
0.3	2532+03.16	1123.85	2532+03.16	1124.37	2532+03.16	1124.90	2532+03.16	1125.37
0.4	2532+14.10	1124.31	2532+14.10	1124.83	2532+14.10	1125.35	2532+14.10	1125.83
0.5	2532+25.04	1124.72	2532+25.04	1125.24	2532+25.04	1125.77	2532+25.04	1126.24
0.6	2532+35.98	1125.11	2532+35.98	1125.63	2532+35.98	1126.15	2532+35.98	1126.62
F.S. 1	2532+44.71	1125.39	2532+44.71	1125.91	2532+44.71	1126.43	2532+44.71	1126.90
0.7	2532+46.92	1125.46	2532+46.92	1125.98	2532+46.92	1126.50	2532+46.92	1126.97
0.8	2532+57.87	1125.78	2532+57.87	1126.30	2532+57.87	1126.82	2532+57.87	1127.29
0.9	2532+68.81	1126.08	2532+68.81	1126.60	2532+68.81	1127.12	2532+68.81	1127.59
Ø PIER 1	2532+79.75	1126.37	2532+79.75	1126.89	2532+79.75	1127.41	2532+79.75	1127.88
0.1	2532+95.40	1126.76	2532+95.40	1127.28	2532+95.40	1127.80	2532+95.40	1128.27
0.2	2533+11.06	1127.11	2533+11.06	1127.63	2533+11.06	1128.15	2533+11.06	1128.62
F.S. 2	2533+14.79	1127.19	2533+14.79	1127.71	2533+14.79	1128.23	2533+14.79	1128.70
0.3	2533+26.71	1127.41	2533+26.71	1127.93	2533+26.71	1128.45	2533+26.71	1128.93
0.4	2533+42.36	1127.64	2533+42.36	1128.16	2533+42.36	1128.68	2533+42.36	1129.15
0.5	2533+58.02	1127.78	2533+58.02	1128.30	2533+58.02	1128.82	2533+58.02	1129.30
0.6	2533+73.67	1127.85	2533+73.67	1128.37	2533+73.67	1128.89	2533+73.67	1129.36
0.7	2533+89.32	1127.84	2533+89.32	1128.36	2533+89.32	1128.88	2533+89.32	1129.35
F.S. 3	2533+94.43	1127.83	2533+94.43	1128.34	2533+94.43	1128.86	2533+94.43	1129.33
0.8	2534+04.97	1127.77	2534+04.97	1128.28	2534+04.97	1128.80	2534+04.97	1129.27
0.9	2534+20.63	1127.65	2534+20.63	1128.16	2534+20.63	1128.68	2534+20.63	1129.15
Ø PIER 2	2534+36.28	1127.49	2534+36.28	1128.01	2534+36.28	1128.53	2534+36.28	1129.00
0.1	2534+49.45	1127.34	2534+49.45	1127.86	2534+49.45	1128.39	2534+49.45	1128.86
0.2	2534+62.61	1127.18	2534+62.62	1127.70	2534+62.62	1128.23	2534+62.62	1128.70
F.S. 4	2534+75.21	1126.98	2534+75.21	1127.51	2534+75.21	1128.04	2534+75.21	1128.52
0.3	2534+75.78	1126.97	2534+75.78	1127.50	2534+75.79	1128.03	2534+75.80	1128.52
0.4	2534+88.94	1126.73	2534+88.95	1127.26	2534+88.96	1127.80	2534+88.97	1128.29
0.5	2535+02.11	1126.44	2535+02.12	1126.97	2535+02.13	1127.51	2535+02.14	1128.00
0.6	2535+15.28	1126.09	2535+15.29	1126.62	2535+15.30	1127.16	2535+15.31	1127.65
0.7	2535+28.44	1125.68	2535+28.46	1126.22	2535+28.47	1126.75	2535+28.48	1127.25
0.8	2535+41.61	1125.21	2535+41.63	1125.74	2535+41.64	1126.28	2535+41.66	1126.76
0.9	2535+54.78	1124.69	2535+54.79	1125.22	2535+54.81	1125.74	2535+54.83	1126.22
Ø REAR BRGS. PIER 3	2535+67.94	1122.58*	2535+67.96	1123.10*	2535+67.98	1123.62*	2535+68.00	1124.08*



HAUNCH DETAIL

** = TOP OF WEB TO BOTTOM OF CONCRETE DECK EXTENDED LINE

TOP OF HAUNCH ELEVATIONS - UNIT 2								
LOCATION	Ø GIRDER 5		Ø GIRDER 6		Ø GIRDER 7		Ø GIRDER 8	
	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.
Ø FWD. BRGS. PIER 3	2535+70.98	1122.45*	2535+70.96	1122.97*	2535+70.94	1123.49*	2535+70.92	1123.96*
0.1	2535+77.85	1123.71	2535+77.84	1124.23	2535+77.82	1124.75	2535+77.80	1125.22
0.2	2535+84.73	1123.42	2535+84.71	1123.94	2535+84.70	1124.46	2535+84.68	1124.93
0.3	2535+91.61	1123.11	2535+91.59	1123.63	2535+91.58	1124.15	2535+91.57	1124.63
0.4	2535+98.48	1122.79	2535+98.47	1123.31	2535+98.46	1123.83	2535+98.45	1124.31
0.5	2536+05.36	1122.46	2536+05.35	1122.98	2536+05.34	1123.50	2536+05.33	1123.98
0.6	2536+12.24	1122.11	2536+12.23	1122.63	2536+12.22	1123.16	2536+12.21	1123.63
0.7	2536+19.11	1121.76	2536+19.11	1122.28	2536+19.10	1122.80	2536+19.09	1123.27
F.S. 5	2536+20.27	1121.70	2536+20.27	1122.22	2536+20.27	1122.74	2536+20.27	1123.21
0.8	2536+25.99	1121.39	2536+25.98	1121.91	2536+25.98	1122.43	2536+25.98	1122.90
0.9	2536+32.86	1121.01	2536+32.86	1121.53	2536+32.86	1122.05	2536+32.86	1122.52
Ø PIER 4	2536+39.74	1120.62	2536+39.74	1121.14	2536+39.74	1121.66	2536+39.74	1122.13
0.1	2536+50.57	1120.00	2536+50.57	1120.52	2536+50.57	1121.03	2536+50.57	1121.50
F.S. 6	2536+59.20	1119.48	2536+59.20	1120.00	2536+59.20	1120.51	2536+59.20	1120.98
0.2	2536+61.40	1119.35	2536+61.40	1119.86	2536+61.40	1120.38	2536+61.40	1120.85
0.3	2536+72.23	1118.67	2536+72.23	1119.19	2536+72.23	1119.70	2536+72.23	1120.17
0.4	2536+83.06	1117.96	2536+83.06	1118.48	2536+83.06	1118.99	2536+83.06	1119.46
0.5	2536+93.89	1117.22	2536+93.89	1117.73	2536+93.89	1118.25	2536+93.89	1118.72
0.6	2537+04.71	1116.46	2537+04.71	1116.97	2537+04.71	1117.48	2537+04.71	1117.95
F.S. 7	2537+07.14	1116.29	2537+07.14	1116.80	2537+07.14	1117.31	2537+07.14	1117.78
0.7	2537+15.54	1115.69	2537+15.54	1116.20	2537+15.54	1116.72	2537+15.54	1117.18
0.8	2537+26.37	1114.93	2537+26.37	1115.44	2537+26.37	1115.96	2537+26.37	1116.42
0.9	2537+37.20	1114.17	2537+37.20	1114.69	2537+37.20	1115.20	2537+37.20	1115.67
Ø PIER 5	2537+48.03	1113.42	2537+48.03	1113.94	2537+48.03	1114.46	2537+48.03	1114.93
0.1	2537+63.68	1112.37	2537+63.68	1112.89	2537+63.68	1113.42	2537+63.68	1113.89
0.2	2537+79.33	1111.33	2537+79.33	1111.86	2537+79.33	1112.39	2537+79.33	1112.88
F.S. 8	2537+82.09	1111.15	2537+82.09	1111.68	2537+82.09	1112.21	2537+82.09	1112.70
0.3	2537+94.98	1110.30	2537+94.98	1110.83	2537+94.98	1111.37	2537+94.98	1111.86
0.4	2538+10.63	1109.24	2538+10.63	1109.78	2538+10.63	1110.32	2538+10.63	1110.81
0.5	2538+26.29	1108.16	2538+26.29	1108.70	2538+26.29	1109.24	2538+26.29	1109.73
0.6	2538+41.94	1107.05	2538+41.94	1107.58	2538+41.94	1108.12	2538+41.94	1108.61
0.7	2538+57.59	1105.91	2538+57.59	1106.44	2538+57.59	1106.98	2538+57.59	1107.47
F.S. 9	2538+69.50	1105.03	2538+69.50	1105.56	2538+69.50	1106.09	2538+69.50	1106.57
0.8	2538+73.24	1104.75	2538+73.24	1105.28	2538+73.24	1105.81	2538+73.24	1106.29
0.9	2538+88.89	1103.60	2538+88.89	1104.12	2538+88.89	1104.65	2538+88.89	1105.12
Ø PIER 6	2539+04.54	1102.47	2539+04.54	1102.99	2539+04.54	1103.51	2539+04.54	1103.98
0.1	2539+15.44	1101.70	2539+15.44	1102.21	2539+15.44	1102.73	2539+15.44	1103.20
0.2	2539+26.34	1100.94	2539+26.34	1101.46	2539+26.34	1101.97	2539+26.34	1102.44
0.3	2539+37.24	1100.19	2539+37.24	1100.71	2539+37.24	1101.22	2539+37.24	1101.69
F.S. 10	2539+44.44	1099.70	2539+44.44	1100.21	2539+44.44	1100.73	2539+44.44	1101.20
0.4	2539+48.14	1099.45	2539+48.14	1099.96	2539+48.14	1100.47	2539+48.14	1100.94
0.5	2539+59.04	1098.69	2539+59.04	1099.21	2539+59.04	1099.72	2539+59.04	1100.19
0.6	2539+69.94	1097.94	2539+69.94	1098.45	2539+69.94	1098.97	2539+69.94	1099.44
0.7	2539+80.84	1097.17	2539+80.84	1097.69	2539+80.84	1098.21	2539+80.84	1098.68
0.8	2539+91.74	1096.40	2539+91.74	1096.92	2539+91.74	1097.44	2539+91.74	1097.91
0.9	2540+02.64	1095.62	2540+02.64	1096.14	2540+02.64	1096.66	2540+02.64	1097.13
Ø BRGS. F.A.	2540+13.54	1094.83	2540+13.54	1095.35	2540+13.54	1095.87	2540+13.54	1096.34

LEGEND:

* = BOTTOM OF CONCRETE DECK ELEVATION AT THICKENED DECK, SEE SECTION A-A ON SHEET 72 / 80 .

NOTES:

1. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE Ø OF THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

DESIGNED
MAB

CHECKED
ASG

DRAWN
AAA

REVIEWED
JCS

DATE
4/29/19

STRUCTURE FILE NUMBER
7706066

TOP OF HAUNCH ELEVATIONS

SUM-76-1148Q

RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

SUM-76 / 77 / 8 -
10.99 / 11.54 / 0.00

PID No. 101402

63 / 80

87
104

BURGESS & NIPLE

Engineers - Architects - Planners

5085 REED ROAD, COLUMBUS, OHIO 43220

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\\V\\AN\\A01P\\WINT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\\Structures\\Sheets\\Ramp_Q\\076_1166L_SS008.dgn Sheet 6/1

FINAL DECK SURFACE ELEVATIONS - UNIT 1																
LOCATION	TOE OF LEFT PARAPET		℄ GIRDER 1		PROFILE GRADE		℄ GIRDER 2		℄ GIRDER 3		LEFT EDGE OF ROUNDING		℄ GIRDER 4		RIGHT EDGE OF ROUNDING/ TOE OF RIGHT PARAPET	
	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.
℄ BRGS. R. A.	2531+70.33	1122.87	2531+70.33	1122.99	2531+70.33	1123.47	2531+70.33	1123.51	2531+70.33	1124.03	2531+70.33	1124.43	2531+70.33	1124.50	2531+70.33	1124.46
0.1	2531+81.27	1123.40	2531+81.27	1123.52	2531+81.27	1124.00	2531+81.27	1124.04	2531+81.27	1124.56	2531+81.27	1124.96	2531+81.27	1125.03	2531+81.27	1124.99
0.2	2531+92.21	1123.90	2531+92.21	1124.02	2531+92.21	1124.50	2531+92.21	1124.54	2531+92.21	1125.06	2531+92.21	1125.46	2531+92.21	1125.53	2531+92.21	1125.50
0.3	2532+03.16	1124.38	2532+03.16	1124.50	2532+03.16	1124.98	2532+03.16	1125.02	2532+03.16	1125.54	2532+03.16	1125.94	2532+03.16	1126.01	2532+03.16	1125.98
0.4	2532+14.10	1124.83	2532+14.10	1124.95	2532+14.10	1125.43	2532+14.10	1125.47	2532+14.10	1125.99	2532+14.10	1126.39	2532+14.10	1126.46	2532+14.10	1126.43
0.5	2532+25.04	1125.25	2532+25.04	1125.37	2532+25.04	1125.85	2532+25.04	1125.89	2532+25.04	1126.41	2532+25.04	1126.81	2532+25.04	1126.88	2532+25.04	1126.85
0.6	2532+35.98	1125.65	2532+35.98	1125.77	2532+35.98	1126.25	2532+35.98	1126.29	2532+35.98	1126.81	2532+35.98	1127.21	2532+35.98	1127.28	2532+35.98	1127.24
F.S. 1	2532+44.71	1125.94	2532+44.71	1126.06	2532+44.71	1126.54	2532+44.71	1126.58	2532+44.71	1127.10	2532+44.71	1127.50	2532+44.71	1127.57	2532+44.71	1127.54
0.7	2532+46.92	1126.02	2532+46.92	1126.14	2532+46.92	1126.62	2532+46.92	1126.66	2532+46.92	1127.18	2532+46.92	1127.58	2532+46.92	1127.64	2532+46.92	1127.61
0.8	2532+57.87	1126.36	2532+57.87	1126.48	2532+57.87	1126.96	2532+57.87	1127.00	2532+57.87	1127.52	2532+57.87	1127.92	2532+57.87	1127.99	2532+57.87	1127.95
0.9	2532+68.81	1126.67	2532+68.81	1126.79	2532+68.81	1127.27	2532+68.81	1127.31	2532+68.81	1127.83	2532+68.81	1128.23	2532+68.81	1128.30	2532+68.81	1128.27
℄ PIER 1	2532+79.75	1126.96	2532+79.75	1127.08	2532+79.75	1127.56	2532+79.75	1127.60	2532+79.75	1128.12	2532+79.75	1128.52	2532+79.75	1128.59	2532+79.75	1128.55
0.1	2532+95.40	1127.32	2532+95.40	1127.44	2532+95.40	1127.92	2532+95.40	1127.96	2532+95.40	1128.48	2532+95.40	1128.88	2532+95.40	1128.95	2532+95.40	1128.92
0.2	2533+11.06	1127.63	2533+11.06	1127.75	2533+11.06	1128.23	2533+11.06	1128.27	2533+11.06	1128.79	2533+11.06	1129.19	2533+11.06	1129.25	2533+11.06	1129.22
F.S. 2	2533+14.79	1127.69	2533+14.79	1127.81	2533+14.79	1128.29	2533+14.79	1128.33	2533+14.79	1128.85	2533+14.79	1129.25	2533+14.79	1129.32	2533+14.79	1129.29
0.3	2533+26.71	1127.88	2533+26.71	1128.00	2533+26.71	1128.48	2533+26.71	1128.52	2533+26.71	1129.04	2533+26.71	1129.44	2533+26.71	1129.51	2533+26.71	1129.47
0.4	2533+42.36	1128.07	2533+42.36	1128.19	2533+42.36	1128.67	2533+42.36	1128.71	2533+42.36	1129.23	2533+42.36	1129.63	2533+42.36	1129.70	2533+42.36	1129.67
0.5	2533+58.02	1128.21	2533+58.02	1128.33	2533+58.02	1128.81	2533+58.02	1128.85	2533+58.02	1129.37	2533+58.02	1129.77	2533+58.02	1129.84	2533+58.02	1129.81
0.6	2533+73.67	1128.30	2533+73.67	1128.42	2533+73.67	1128.90	2533+73.67	1128.94	2533+73.67	1129.46	2533+73.67	1129.86	2533+73.67	1129.93	2533+73.67	1129.89
0.7	2533+89.32	1128.32	2533+89.32	1128.44	2533+89.32	1128.92	2533+89.32	1128.96	2533+89.32	1129.48	2533+89.32	1129.88	2533+89.32	1129.95	2533+89.32	1129.92
F.S. 3	2533+94.43	1128.32	2533+94.43	1128.44	2533+94.43	1128.92	2533+94.43	1128.96	2533+94.43	1129.48	2533+94.43	1129.88	2533+94.43	1129.95	2533+94.43	1129.92
0.8	2534+04.97	1128.30	2534+04.97	1128.42	2534+04.97	1128.90	2534+04.97	1128.94	2534+04.97	1129.46	2534+04.97	1129.86	2534+04.97	1129.93	2534+04.97	1129.89
0.9	2534+20.63	1128.21	2534+20.63	1128.33	2534+20.63	1128.81	2534+20.63	1128.85	2534+20.63	1129.37	2534+20.63	1129.77	2534+20.63	1129.84	2534+20.63	1129.81
℄ PIER 2	2534+36.28	1128.08	2534+36.28	1128.20	2534+36.28	1128.68	2534+36.28	1128.72	2534+36.28	1129.24	2534+36.28	1129.64	2534+36.28	1129.71	2534+36.28	1129.67
0.1	2534+49.45	1127.92	2534+49.45	1128.04	2534+49.45	1128.52	2534+49.45	1128.56	2534+49.45	1129.08	2534+49.45	1129.48	2534+49.45	1129.55	2534+49.45	1129.51
0.2	2534+62.61	1127.72	2534+62.61	1127.84	2534+62.62	1128.32	2534+62.62	1128.36	2534+62.62	1128.88	2534+62.62	1129.28	2534+62.62	1129.35	2534+62.63	1129.31
F.S. 4	2534+75.21	1127.49	2534+75.21	1127.61	2534+75.21	1128.09	2534+75.21	1128.13	2534+75.21	1128.65	2534+75.21	1129.05	2534+75.21	1129.12	2534+75.21	1129.09
0.3	2534+75.78	1127.48	2534+75.78	1127.60	2534+75.78	1128.08	2534+75.78	1128.12	2534+75.79	1128.64	2534+75.79	1129.04	2534+75.80	1129.11	2534+75.80	1129.08
0.4	2534+88.94	1127.20	2534+88.94	1127.32	2534+88.95	1127.80	2534+88.95	1127.84	2534+88.96	1128.36	2534+88.97	1128.76	2534+88.97	1128.83	2534+88.97	1128.80
0.5	2535+02.11	1126.88	2535+02.11	1127.00	2535+02.12	1127.48	2535+02.12	1127.52	2535+02.13	1128.04	2535+02.14	1128.44	2535+02.14	1128.51	2535+02.14	1128.48
0.6	2535+15.27	1126.53	2535+15.28	1126.65	2535+15.29	1127.13	2535+15.29	1127.17	2535+15.30	1127.69	2535+15.31	1128.09	2535+15.31	1128.16	2535+15.32	1128.12
0.7	2535+28.44	1126.13	2535+28.44	1126.25	2535+28.46	1126.73	2535+28.46	1126.77	2535+28.47	1127.29	2535+28.48	1127.69	2535+28.48	1127.76	2535+28.49	1127.73
0.8	2535+41.61	1125.70	2535+41.61	1125.82	2535+41.62	1126.30	2535+41.63	1126.34	2535+41.64	1126.85	2535+41.65	1127.25	2535+41.66	1127.32	2535+41.66	1127.29
0.9	2535+54.77	1125.22	2535+54.78	1125.34	2535+54.79	1125.82	2535+54.79	1125.86	2535+54.81	1126.38	2535+54.82	1126.78	2535+54.83	1126.85	2535+54.83	1126.82
℄ REAR BRGS. PIER 3	2535+67.94	1124.71	2535+67.94	1124.83	2535+67.96	1125.31	2535+67.96	1125.35	2535+67.98	1125.87	2535+68.00	1126.26	2535+68.00	1126.33	2535+68.01	1126.30

NOTES:

1. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.
2. SEE CRITICAL BRIDGE POINTS PLAN ON SHEET

60 / 80

 FOR ELEVATION LOCATIONS.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

SUM-76 / 77 / 8 -
10.99 / 11.54 / 0.00

PID No. 101402

64 / 80

88

104

DESIGNED
MAB

CHECKED
BDE

DRAWN
AAA

REVIEWED
JCS

DATE
4/29/19

STRUCTURE FILE NUMBER
7706066

FINAL DECK SURFACE ELEVATIONS - UNIT 1

SUM-76-1148Q
RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

BURGESS & NIPLE

Engineers ■ Architects ■ Planners

5085 REED ROAD, COLUMBUS, OHIO 43220

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

FINAL DECK SURFACE ELEVATIONS - UNIT 2																
LOCATION	TOE OF LEFT PARAPET		Ø GIRDER 5		PROFILE GRADE		Ø GIRDER 6		Ø GIRDER 7		LEFT EDGE OF ROUNDING		Ø GIRDER 8		RIGHT EDGE OF ROUNDING/ TOE OF RIGHT PARAPET	
	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.
Ø FWD. BRGS. PIER 3	2535+70.98	1124.58	2535+70.98	1124.70	2535+70.96	1125.18	2535+70.96	1125.22	2535+70.94	1125.74	2535+70.92	1126.14	2535+70.92	1126.21	2535+70.91	1126.18
0.1	2535+77.86	1124.29	2535+77.85	1124.41	2535+77.84	1124.89	2535+77.84	1124.93	2535+77.82	1125.45	2535+77.81	1125.86	2535+77.80	1125.92	2535+77.80	1125.89
0.2	2535+84.73	1123.99	2535+84.73	1124.11	2535+84.72	1124.59	2535+84.71	1124.63	2535+84.70	1125.16	2535+84.69	1125.56	2535+84.68	1125.63	2535+84.68	1125.59
0.3	2535+91.61	1123.68	2535+91.61	1123.80	2535+91.59	1124.28	2535+91.59	1124.32	2535+91.58	1124.84	2535+91.57	1125.25	2535+91.57	1125.31	2535+91.56	1125.28
0.4	2535+98.49	1123.36	2535+98.48	1123.48	2535+98.47	1123.96	2535+98.47	1124.00	2535+98.46	1124.52	2535+98.45	1124.92	2535+98.45	1124.99	2535+98.44	1124.96
0.5	2536+05.36	1123.03	2536+05.36	1123.15	2536+05.35	1123.63	2536+05.35	1123.67	2536+05.34	1124.19	2536+05.33	1124.59	2536+05.33	1124.66	2536+05.33	1124.63
0.6	2536+12.24	1122.69	2536+12.24	1122.81	2536+12.23	1123.29	2536+12.23	1123.33	2536+12.22	1123.85	2536+12.21	1124.25	2536+12.21	1124.32	2536+12.21	1124.29
0.7	2536+19.11	1122.33	2536+19.11	1122.45	2536+19.11	1122.93	2536+19.11	1122.97	2536+19.10	1123.49	2536+19.10	1123.89	2536+19.09	1123.96	2536+19.09	1123.93
F.S. 5	2536+20.27	1122.27	2536+20.27	1122.39	2536+20.27	1122.87	2536+20.27	1122.91	2536+20.27	1123.43	2536+20.27	1123.83	2536+20.27	1123.90	2536+20.27	1123.87
0.8	2536+25.99	1121.97	2536+25.99	1122.09	2536+25.98	1122.57	2536+25.98	1122.61	2536+25.98	1123.13	2536+25.98	1123.53	2536+25.98	1123.60	2536+25.97	1123.57
0.9	2536+32.86	1121.59	2536+32.86	1121.71	2536+32.86	1122.19	2536+32.86	1122.23	2536+32.86	1122.75	2536+32.86	1123.16	2536+32.86	1123.22	2536+32.86	1123.19
Ø PIER 4	2536+39.74	1121.21	2536+39.74	1121.33	2536+39.74	1121.81	2536+39.74	1121.85	2536+39.74	1122.37	2536+39.74	1122.77	2536+39.74	1122.84	2536+39.74	1122.81
0.1	2536+50.57	1120.58	2536+50.57	1120.70	2536+50.57	1121.18	2536+50.57	1121.22	2536+50.57	1121.74	2536+50.57	1122.14	2536+50.57	1122.21	2536+50.57	1122.18
F.S. 6	2536+59.20	1120.06	2536+59.20	1120.18	2536+59.20	1120.66	2536+59.20	1120.70	2536+59.20	1121.22	2536+59.20	1121.62	2536+59.20	1121.69	2536+59.20	1121.66
0.2	2536+61.40	1119.92	2536+61.40	1120.04	2536+61.40	1120.52	2536+61.40	1120.56	2536+61.40	1121.08	2536+61.40	1121.48	2536+61.40	1121.55	2536+61.40	1121.52
0.3	2536+72.23	1119.24	2536+72.23	1119.36	2536+72.23	1119.84	2536+72.23	1119.88	2536+72.23	1120.40	2536+72.23	1120.80	2536+72.23	1120.87	2536+72.23	1120.84
0.4	2536+83.06	1118.53	2536+83.06	1118.65	2536+83.06	1119.13	2536+83.06	1119.17	2536+83.06	1119.69	2536+83.06	1120.09	2536+83.06	1120.16	2536+83.06	1120.13
0.5	2536+93.89	1117.80	2536+93.89	1117.92	2536+93.89	1118.40	2536+93.89	1118.44	2536+93.89	1118.96	2536+93.89	1119.36	2536+93.89	1119.43	2536+93.89	1119.39
0.6	2537+04.71	1117.04	2537+04.71	1117.16	2537+04.71	1117.64	2537+04.71	1117.68	2537+04.71	1118.20	2537+04.71	1118.60	2537+04.71	1118.67	2537+04.71	1118.64
F.S. 7	2537+07.14	1116.87	2537+07.14	1116.99	2537+07.14	1117.47	2537+07.14	1117.51	2537+07.14	1118.03	2537+07.14	1118.43	2537+07.14	1118.50	2537+07.14	1118.47
0.7	2537+15.54	1116.28	2537+15.54	1116.40	2537+15.54	1116.88	2537+15.54	1116.92	2537+15.54	1117.44	2537+15.54	1117.84	2537+15.54	1117.91	2537+15.54	1117.88
0.8	2537+26.37	1115.52	2537+26.37	1115.64	2537+26.37	1116.12	2537+26.37	1116.16	2537+26.37	1116.68	2537+26.37	1117.08	2537+26.37	1117.15	2537+26.37	1117.12
0.9	2537+37.20	1114.77	2537+37.20	1114.89	2537+37.20	1115.37	2537+37.20	1115.41	2537+37.20	1115.93	2537+37.20	1116.33	2537+37.20	1116.40	2537+37.20	1116.36
Ø PIER 5	2537+48.03	1114.01	2537+48.03	1114.13	2537+48.03	1114.61	2537+48.03	1114.65	2537+48.03	1115.17	2537+48.03	1115.57	2537+48.03	1115.64	2537+48.03	1115.60
0.1	2537+63.68	1112.91	2537+63.68	1113.03	2537+63.68	1113.51	2537+63.68	1113.55	2537+63.68	1114.07	2537+63.68	1114.47	2537+63.68	1114.54	2537+63.68	1114.51
0.2	2537+79.33	1111.82	2537+79.33	1111.94	2537+79.33	1112.42	2537+79.33	1112.46	2537+79.33	1112.98	2537+79.33	1113.38	2537+79.33	1113.45	2537+79.33	1113.41
F.S. 8	2537+82.09	1111.62	2537+82.09	1111.74	2537+82.09	1112.22	2537+82.09	1112.26	2537+82.09	1112.78	2537+82.09	1113.18	2537+82.09	1113.25	2537+82.09	1113.22
0.3	2537+94.98	1110.72	2537+94.98	1110.84	2537+94.98	1111.32	2537+94.98	1111.36	2537+94.98	1111.88	2537+94.98	1112.28	2537+94.98	1112.35	2537+94.98	1112.32
0.4	2538+10.63	1109.63	2538+10.63	1109.75	2538+10.63	1110.23	2538+10.63	1110.27	2538+10.63	1110.79	2538+10.63	1111.19	2538+10.63	1111.25	2538+10.63	1111.22
0.5	2538+26.29	1108.53	2538+26.29	1108.65	2538+26.29	1109.13	2538+26.29	1109.17	2538+26.29	1109.69	2538+26.29	1110.09	2538+26.29	1110.16	2538+26.29	1110.13
0.6	2538+41.94	1107.43	2538+41.94	1107.55	2538+41.94	1108.03	2538+41.94	1108.07	2538+41.94	1108.59	2538+41.94	1108.99	2538+41.94	1109.06	2538+41.94	1109.03
0.7	2538+57.59	1106.34	2538+57.59	1106.46	2538+57.59	1106.94	2538+57.59	1106.98	2538+57.59	1107.50	2538+57.59	1107.90	2538+57.59	1107.97	2538+57.59	1107.94
F.S. 9	2538+69.50	1105.51	2538+69.50	1105.63	2538+69.50	1106.11	2538+69.50	1106.15	2538+69.50	1106.67	2538+69.50	1107.07	2538+69.50	1107.13	2538+69.50	1107.10
0.8	2538+73.24	1105.24	2538+73.24	1105.36	2538+73.24	1105.84	2538+73.24	1105.88	2538+73.24	1106.40	2538+73.24	1106.80	2538+73.24	1106.87	2538+73.24	1106.84
0.9	2538+88.89	1104.15	2538+88.89	1104.27	2538+88.89	1104.75	2538+88.89	1104.79	2538+88.89	1105.31	2538+88.89	1105.71	2538+88.89	1105.78	2538+88.89	1105.74
Ø PIER 6	2539+04.54	1103.05	2539+04.54	1103.17	2539+04.54	1103.65	2539+04.54	1103.69	2539+04.54	1104.21	2539+04.54	1104.61	2539+04.54	1104.68	2539+04.54	1104.65
0.1	2539+15.44	1102.29	2539+15.44	1102.41	2539+15.44	1102.89	2539+15.44	1102.93	2539+15.44	1103.45	2539+15.44	1103.85	2539+15.44	1103.92	2539+15.44	1103.89
0.2	2539+26.34	1101.53	2539+26.34	1101.65	2539+26.34	1102.13	2539+26.34	1102.17	2539+26.34	1102.69	2539+26.34	1103.09	2539+26.34	1103.16	2539+26.34	1103.12
0.3	2539+37.24	1100.76	2539+37.24	1100.88	2539+37.24	1101.36	2539+37.24	1101.40	2539+37.24	1101.92	2539+37.24	1102.32	2539+37.24	1102.39	2539+37.24	1102.36
F.S. 10	2539+44.44	1100.26	2539+44.44	1100.38	2539+44.44	1100.86	2539+44.44	1100.90	2539+44.44	1101.42	2539+44.44	1101.82	2539+44.44	1101.89	2539+44.44	1101.86
0.4	2539+48.14	1100.00	2539+48.14	1100.12	2539+48.14	1100.60	2539+48.14	1100.64	2539+48.14	1101.16	2539+48.14	1101.56	2539+48.14	1101.63	2539+48.14	1101.60
0.5	2539+59.04	1099.24	2539+59.04	1099.36	2539+59.04	1099.84	2539+59.04	1099.88	2539+59.04	1100.40	2539+59.04	1100.80	2539+59.04	1100.87	2539+59.04	1100.83
0.6	2539+69.94	1098.47	2539+69.94	1098.59	2539+69.94	1099.07	2539+69.94	1099.11	2539+69.94	1099.63	2539+69.94	1100.03	2539+69.94	1100.10	2539+69.94	1100.07
0.7	2539+80.84	1097.71	2539+80.84	1097.83												

NOTES:

1. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.

2. SEE CRITICAL BRIDGE POINTS PLAN ON SHEET 61 / 80 FOR ELEVATION LOCATIONS.

SUM-76 / 77 / 8 -
10.99 / 11.54 / 0.00

PID No. 101402

65 / 80

89 / 104

FINAL DECK SURFACE ELEVATIONS - UNIT 2

SUM-76-1148Q
RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

DESIGNED
MAB

CHECKED
BDE

DRAWN
AAA

REVIEWED
JCS

DATE
4/29/19

STRUCTURE FILE NUMBER
7706066

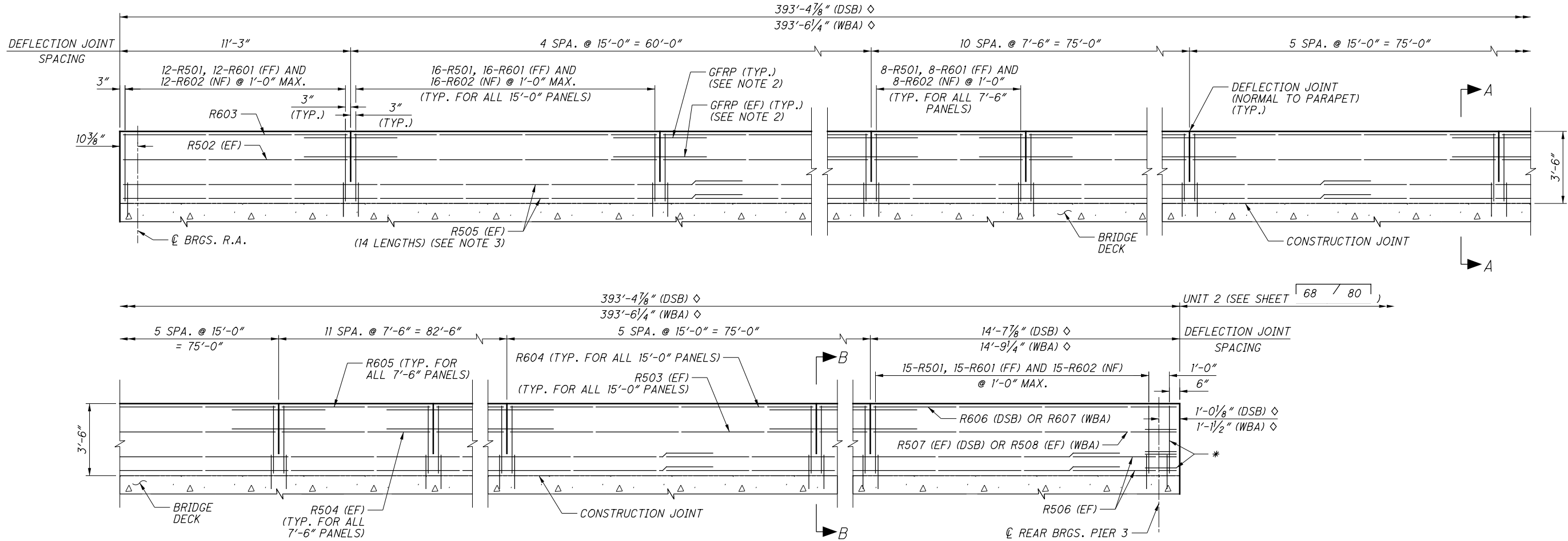
BURGESS & NIPLE

Engineers - Architects - Planners

5085 REED ROAD, COLUMBUS, OHIO 43220

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

6/1
pw:\\V\\AN\\A01PWINT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\\Structures\\Sheets\\Ramp_Q\\076_11661_SAO01.dgn Sheet



UNIT 1 LEFT PARAPET ELEVATION
(LOOKING AT TRAFFIC FACE OF PARAPET)
(ALL DIMENSIONS ARE GIVEN ALONG THE TOE OF THE PARAPET)

LEGEND:

* = SEE DETAIL A ON SHEET 70 / 80

◇ = DIMENSION VARIES WITH TEMPERATURE.
DIMENSION IS SHOWN AT 60°F.

DSB = DS BROWN MODULAR JOINT

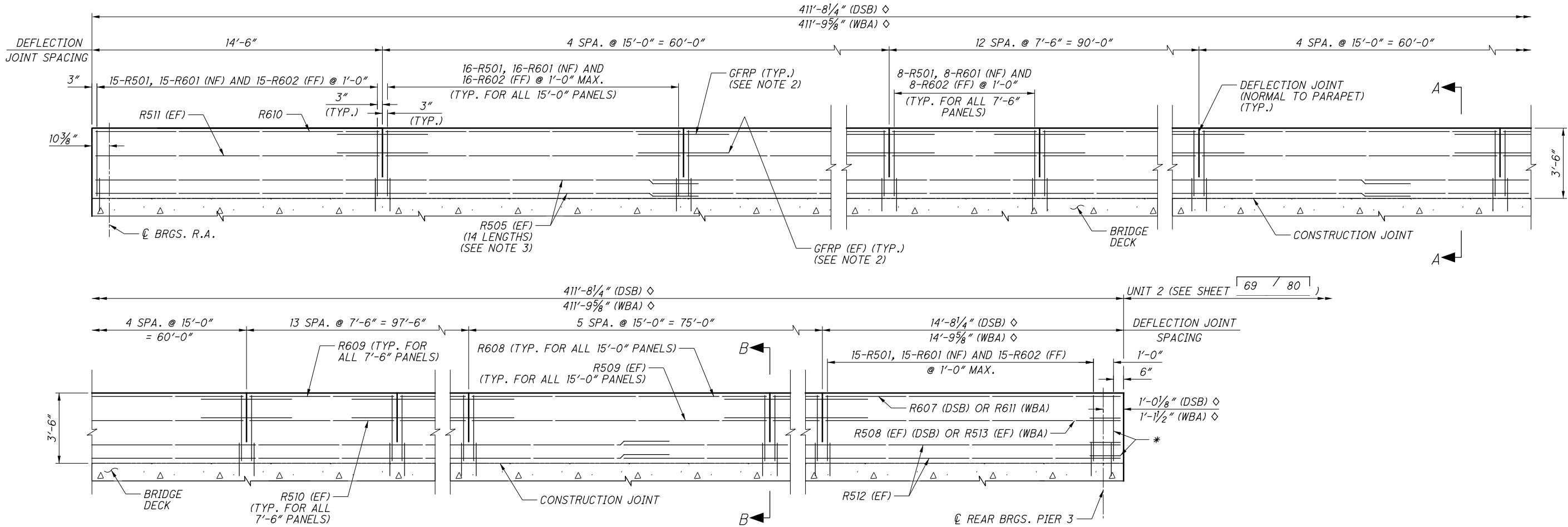
WBA = WATSON BOWMAN ACME MODULAR JOINT

NOTES:

- FOR ADDITIONAL INFORMATION SEE STD. DWG. SBR-1-13.
- 1/2" DIA. GFRP STIFFENING REINFORCEMENT, 4'-6" LONG, A TOTAL OF 108 BARS, TO BE CENTERED ON DEFLECTION JOINT.
- MINIMUM REINFORCING STEEL LAP LENGTH FOR NO. 5 BARS SHALL BE 2'-3".
- SEE SHEET 70 / 80 FOR SECTIONS A-A AND B-B.
- FOR MODULAR JOINT DETAILS, SEE SHEET 72 / 80 .

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

6/1
pw:\\V\\AN\\A01PW\\NT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\\Structures\\Sheets\\Ramp_Q\\076_1166L_SAO02.dgn Sheet



UNIT 1 RIGHT PARAPET ELEVATION
(LOOKING AT OUTSIDE FACE OF PARAPET)
(ALL DIMENSIONS ARE GIVEN ALONG THE TOE OF THE PARAPET)

LEGEND:

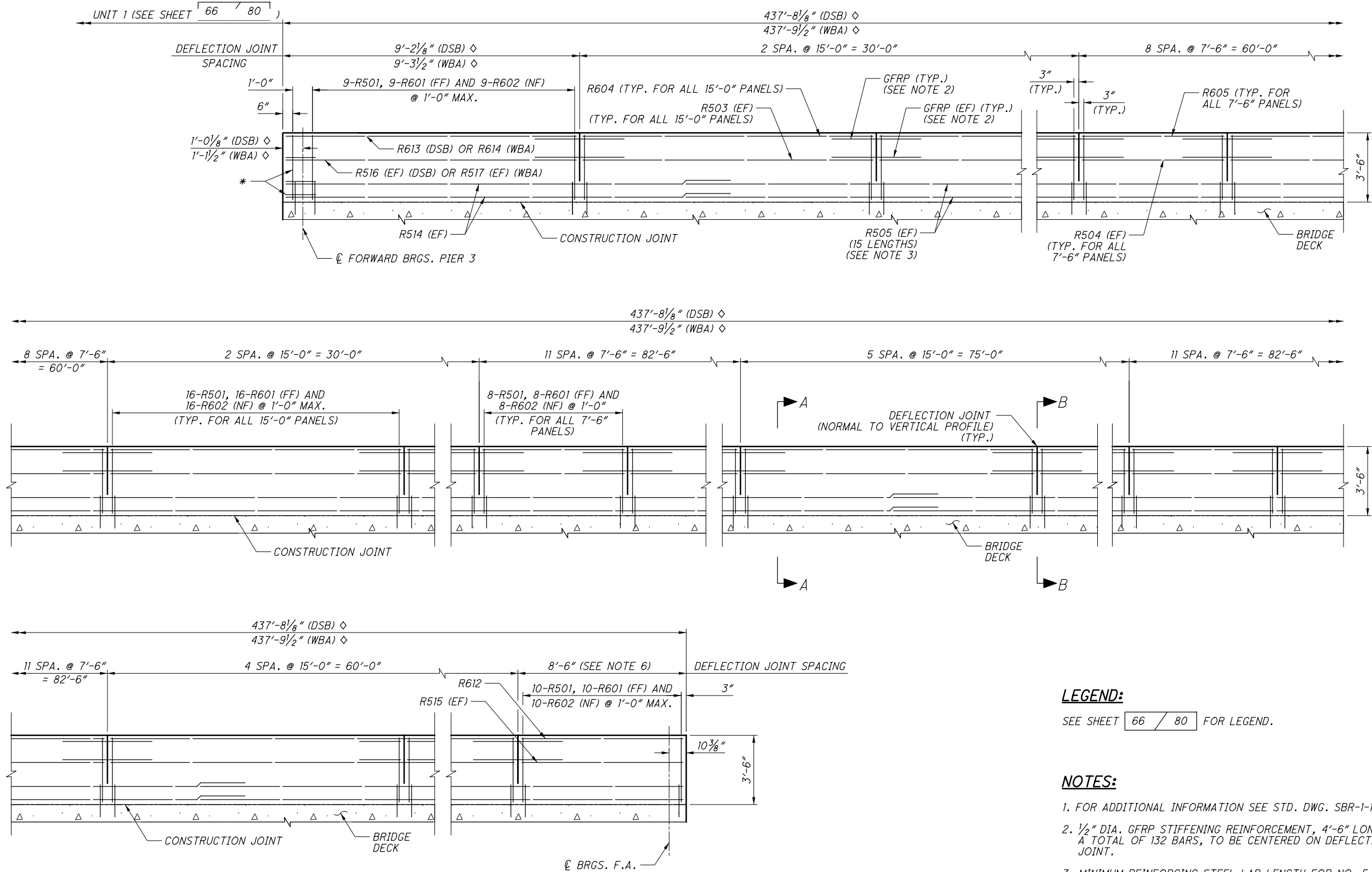
SEE SHEET 66 / 80 FOR LEGEND.

NOTES:

- FOR ADDITIONAL INFORMATION SEE STD. DWG. SBR-I-13.
- 1/2" DIA. GFRP STIFFENING REINFORCEMENT, 4'-6" LONG, A TOTAL OF 117 BARS, TO BE CENTERED ON DEFLECTION JOINT.
- MINIMUM REINFORCING STEEL LAP LENGTH FOR NO. 5 BARS SHALL BE 2'-3".
- SEE SHEET 70 / 80 FOR SECTIONS A-A AND B-B.
- FOR MODULAR JOINT DETAILS, SEE SHEET 72 / 80.

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\V\ANV\A01PW\T01\parsons.com\Ohio_State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_11661_SA003.dgn Sheet 6/1

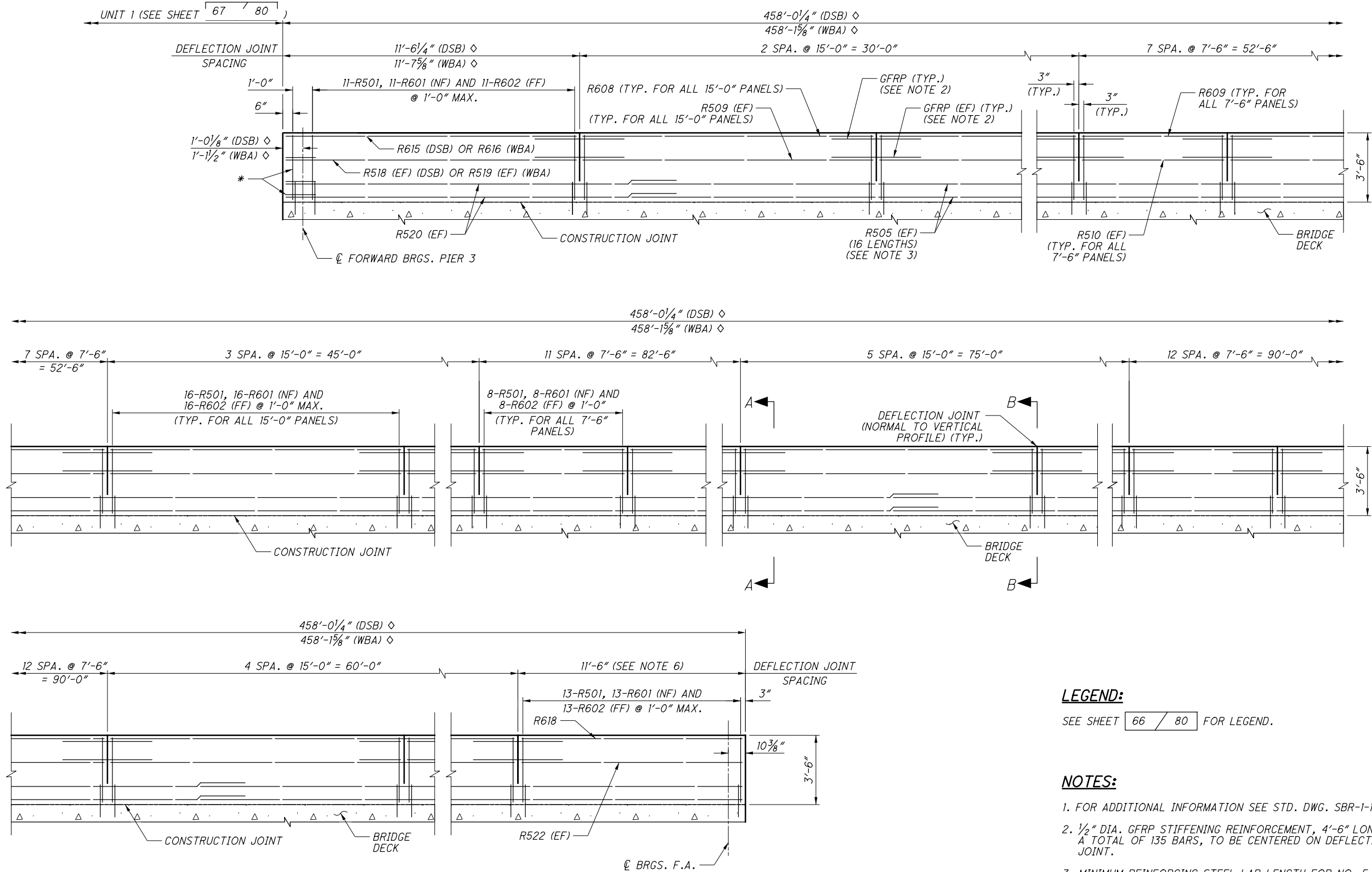


UNIT 2 LEFT PARAPET ELEVATION
(LOOKING AT TRAFFIC FACE OF PARAPET)
(ALL DIMENSIONS ARE GIVEN ALONG THE TOE OF PARAPET)
(ALL DIMENSIONS ARE GIVEN ALONG THE HORIZONTAL)

LEGEND:
SEE SHEET 66 / 80 FOR LEGEND.

- NOTES:**
- FOR ADDITIONAL INFORMATION SEE STD. DWG. SBR-1-13.
 - 1/2" DIA. GFRP STIFFENING REINFORCEMENT, 4'-6" LONG, A TOTAL OF 132 BARS, TO BE CENTERED ON DEFLECTION JOINT.
 - MINIMUM REINFORCING STEEL LAP LENGTH FOR NO. 5 BARS SHALL BE 2'-3".
 - SEE SHEET 70 / 80 FOR SECTIONS A-A AND B-B.
 - FOR MODULAR JOINT DETAILS, SEE SHEET 72 / 80 .
 - DUE TO THE VERTICAL PROFILE OF UNIT 2, THE LENGTH OF THE LAST PANEL IS 11 1/8" LONGER THAN THE DIMENSION SHOWN ALONG THE HORIZONTAL. REINFORCEMENT OF THE LAST PANEL IS DETAILED ACCORDING TO THE ACTUAL LENGTH OF THE PANEL.

ISSUE RECORD:		DESCRIPTION
NO.	DATE	



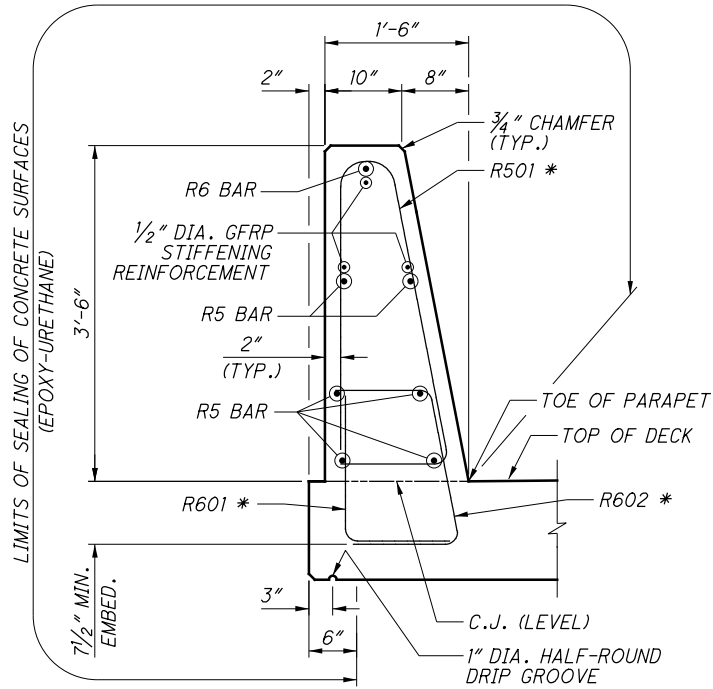
UNIT 2 RIGHT PARAPET ELEVATION
(LOOKING AT OUTSIDE FACE OF PARAPET)
(ALL DIMENSIONS ARE GIVEN ALONG THE TOE OF PARAPET)
(ALL DIMENSIONS ARE GIVEN ALONG THE HORIZONTAL)

LEGEND:
SEE SHEET 66 / 80 FOR LEGEND.

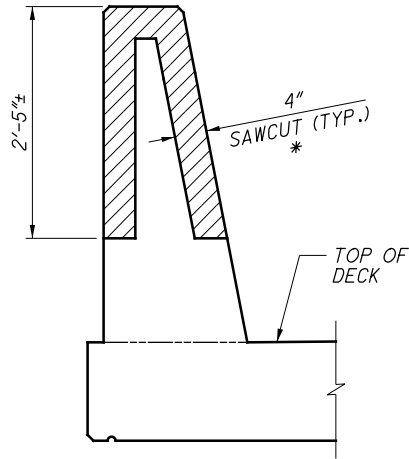
- NOTES:**
- FOR ADDITIONAL INFORMATION SEE STD. DWG. SBR-1-13.
 - 1/2" DIA. GFRP STIFFENING REINFORCEMENT, 4'-6" LONG, A TOTAL OF 135 BARS, TO BE CENTERED ON DEFLECTION JOINT.
 - MINIMUM REINFORCING STEEL LAP LENGTH FOR NO. 5 BARS SHALL BE 2'-3".
 - SEE SHEET 70 / 80 FOR SECTIONS A-A AND B-B.
 - FOR MODULAR JOINT DETAILS, SEE SHEET 72 / 80.
 - DUE TO THE VERTICAL PROFILE OF UNIT 2, THE LENGTH OF THE LAST PANEL IS 11 5/8" LONGER THAN THE DIMENSION SHOWN ALONG THE HORIZONTAL. REINFORCEMENT OF THE LAST PANEL IS DETAILED ACCORDING TO THE ACTUAL LENGTH OF THE PANEL.

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

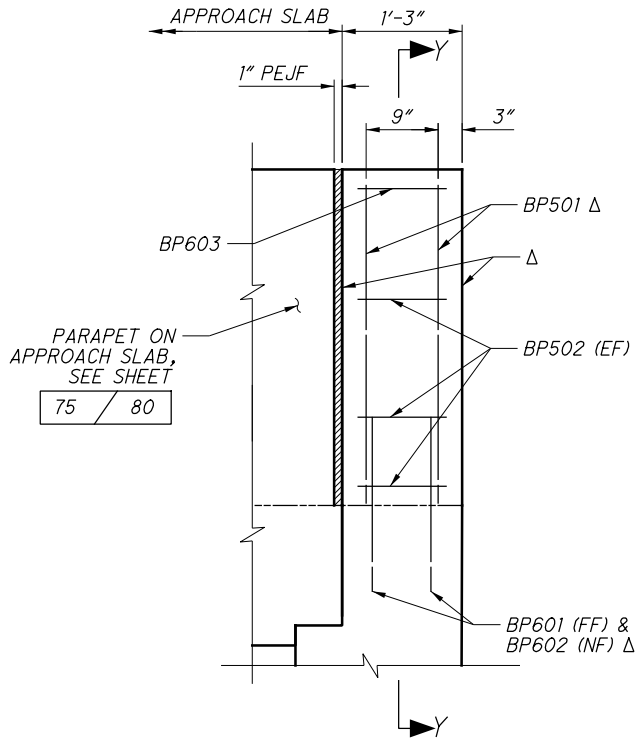
6/1
pw:\\V\\ANV\\A01P\\WINT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\\Structures\\Sheets\\Ramp_Q\\076_1166L_SAO05.dgn Sheet 6/1



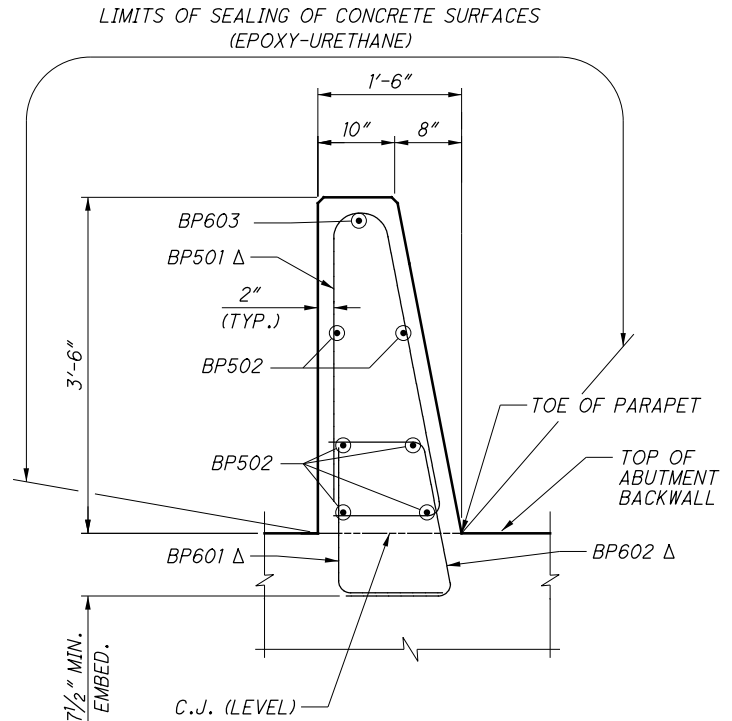
SECTION A-A
(DECK REINFORCING STEEL NOT SHOWN)
(TRANSVERSE DIMENSIONS ARE MEASURED RADIALLY)



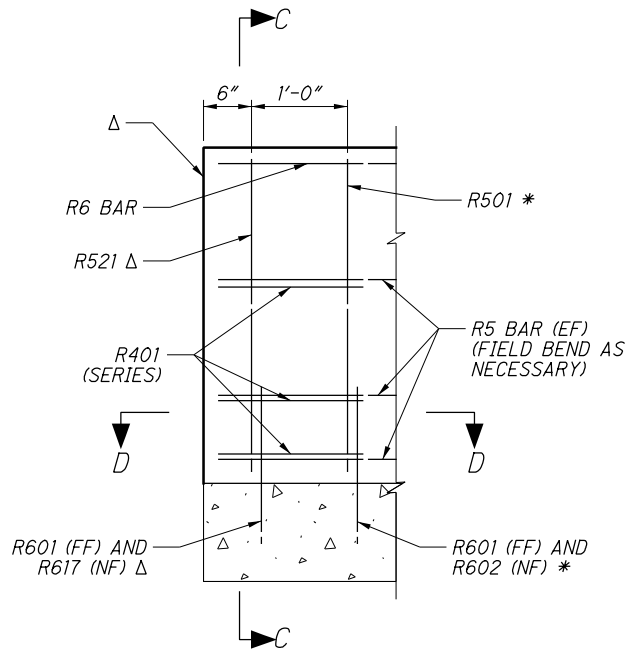
SECTION B-B
(DECK AND PARAPET REINFORCING STEEL NOT SHOWN)



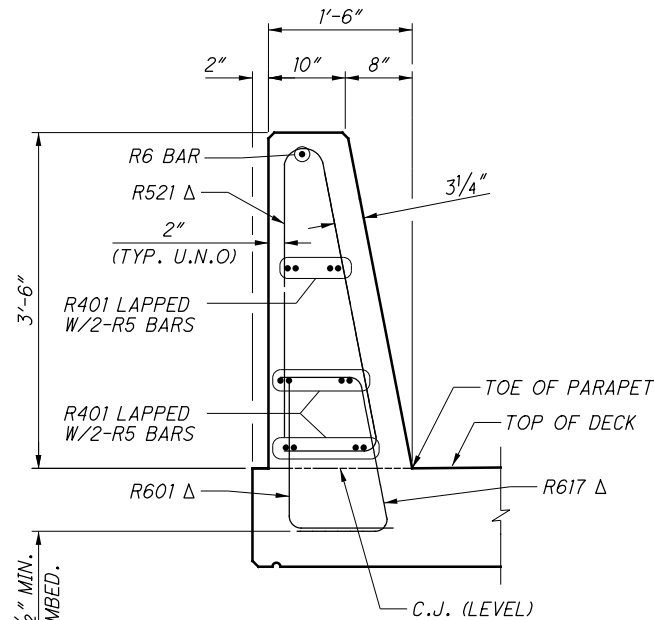
DETAIL X
PARAPET REINFORCING ON
ABUTMENT BACKWALL ELEVATION
(BACKWALL REINFORCING STEEL NOT SHOWN)
(LOOKING AT TRAFFIC FACE OF PARAPET)
(RIGHT PARAPET AT F.A. ONLY)



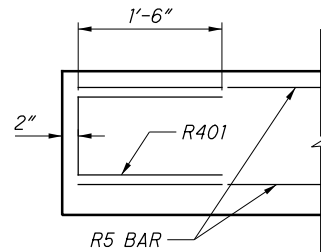
SECTION Y-Y
(BACKWALL & WINGWALL REINFORCING STEEL NOT SHOWN)
(TRANSVERSE DIMENSIONS ARE MEASURED RADIALLY)



DETAIL A
PARAPET REINFORCING AT DECK
ENDS AT PIER 3 - ELEVATION
(DECK REINFORCING STEEL NOT SHOWN)
(LOOKING AT TRAFFIC FACE OF PARAPET)
(SEE NOTE 1)



SECTION C-C
(DECK REINFORCING STEEL NOT SHOWN)
(PLATES AND STUDS EMBEDDED IN THE
PARAPET NOT SHOWN) (SEE NOTE 2)
(TRANSVERSE DIMENSIONS ARE MEASURED RADIALLY)



SECTION D-D
(VERTICAL REBAR NOT SHOWN)
(PLATES AND STUDS EMBEDDED IN THE
PARAPET NOT SHOWN) (SEE NOTE 2)

LEGEND:

* = PLACE DESIGNATED VERTICAL REBAR NORMAL TO THE VERTICAL PROFILE OF THE BRIDGE. PERFORM SAWCUTS NORMAL TO THE VERTICAL PROFILE OF THE BRIDGE.

Δ = CONSTRUCT ENDS OF PARAPETS (MOUNTED ON DECK, BACKWALLS, WINGWALLS, AND APPROACH SLABS) PLUMB. PLACE VERTICAL REBAR PLUMB AT THE FOLLOWING LOCATIONS: ALL VERTICAL BARS IN PARAPETS MOUNTED ON BACKWALLS AND WINGWALLS, AND END VERTICAL BARS IN PARAPETS MOUNTED ON DECK AND APPROACH SLABS.

NOTES:

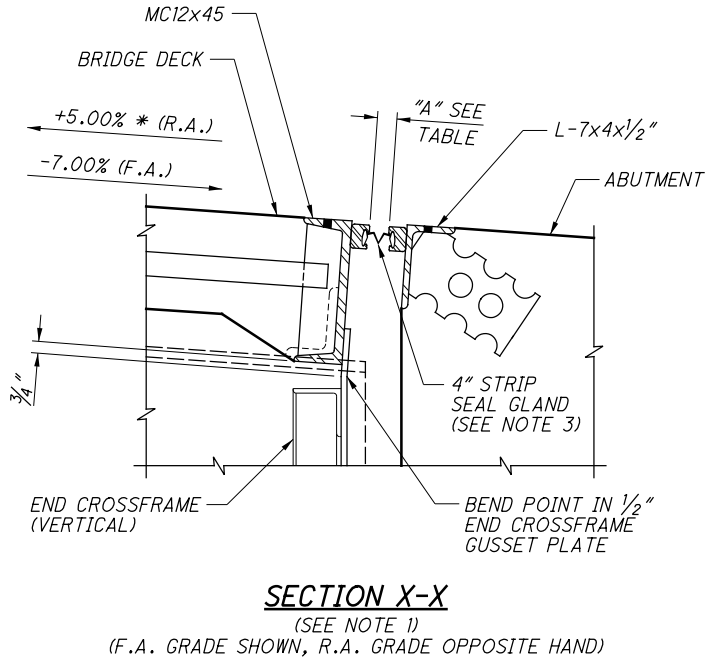
- LEFT PARAPET IN UNIT 2 AND RIGHT PARAPET IN UNIT 1 SHOWN, LEFT PARAPET IN UNIT 1 AND RIGHT PARAPET IN UNIT 2 SHALL BE MIRRORED.
- SEE SHEET 73 / 80 FOR PARAPET SLIDING PLATE JOINT DETAILS.
- PARAPET MOUNTED ON ABUTMENT BACKWALL IS INCLUDED FOR PAYMENT WITH ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET). REINFORCING STEEL FOR PARAPET MOUNTED ON ABUTMENT BACKWALL (ALL BP BARS) IS INCLUDED FOR PAYMENT WITH ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

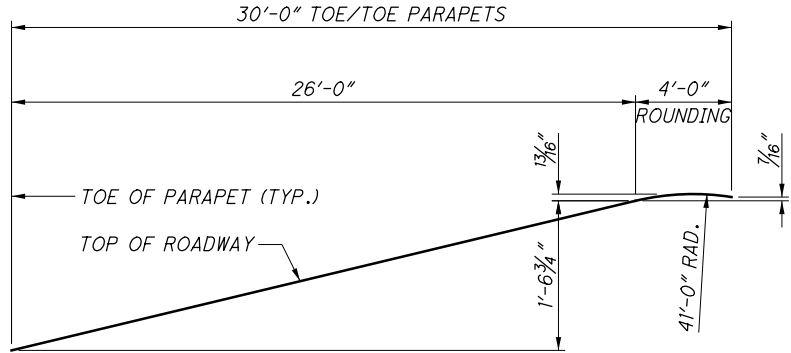
PARAPET DETAILS		BURGESS & NIPLE	
SUM-76-77/8-10.99/11.54/0.00		Engineers Architects Planners	
PID No. 101402		5085 REED ROAD, COLUMBUS, OHIO 43220	
70 / 80		DATE 4/29/19	
94 / 104		REVIEWED JCS	
		DRAWN ODW	
		DESIGNED ODW	
		CHECKED BES	
		STRUCTURE FILE NUMBER 7706066	
		RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB	

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\\V\\AN\\A01PW\\INT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\\Structures\\Sheets\\Ramp_Q\\076_1166L_SX002.dgn Sheet 6/1



EXPANSION JOINT OPENING (DIMENSION "A")		
TEMPERATURE ° F	REAR ABUTMENT	FORWARD ABUTMENT
30	2 9/16"	2 9/16"
40	2 5/16"	2 5/16"
50	2 1/8"	2 1/8"
60	1 7/8"	1 7/8"
70	1 5/8"	1 5/8"
80	1 1/16"	1 1/16"
90	1 3/16"	1 3/16"



JOINT PROFILE
(LOOKING UPSTATION)
(HORIZONTAL DIMENSIONS ARE MEASURED ALONG FRONT FACE OF ABUTMENT BACKWALL)
(JOINT UPTURNS AT PARAPETS NOT SHOWN, SEE ODOT STANDARD DRAWING EXJ-4-87 AND NOTE 2 FOR REQUIREMENTS)
(NOT TO SCALE)

- NOTES:**
- SEE ODOT STANDARD DRAWING EXJ-4-87 FOR ADDITIONAL DETAILS AND NOTES.
 - 1/2" PLATES AT PARAPETS, AS SHOWN IN SECTIONS A-A & B-B ON ODOT STANDARD DRAWING EXJ-4-87, SHALL BE MODIFIED TO ACCOMMODATE THE SINGLE-SLOPE PARAPET SHAPE SHOWN ON SHEET

70	/	80
----	---	----

.
 - ELASTOMERIC STRIP SEALS SHALL BE ONE PIECE ACROSS THE ENTIRE WIDTH OF THE BRIDGE. SPLICES ARE NOT PERMITTED.

LEGEND:

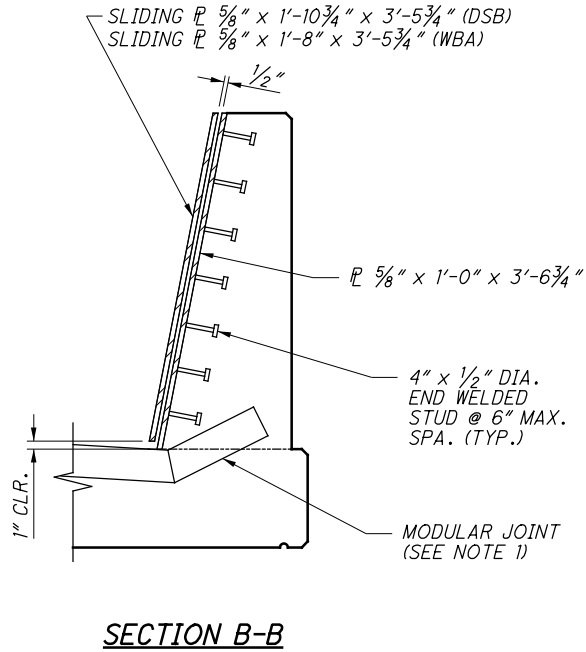
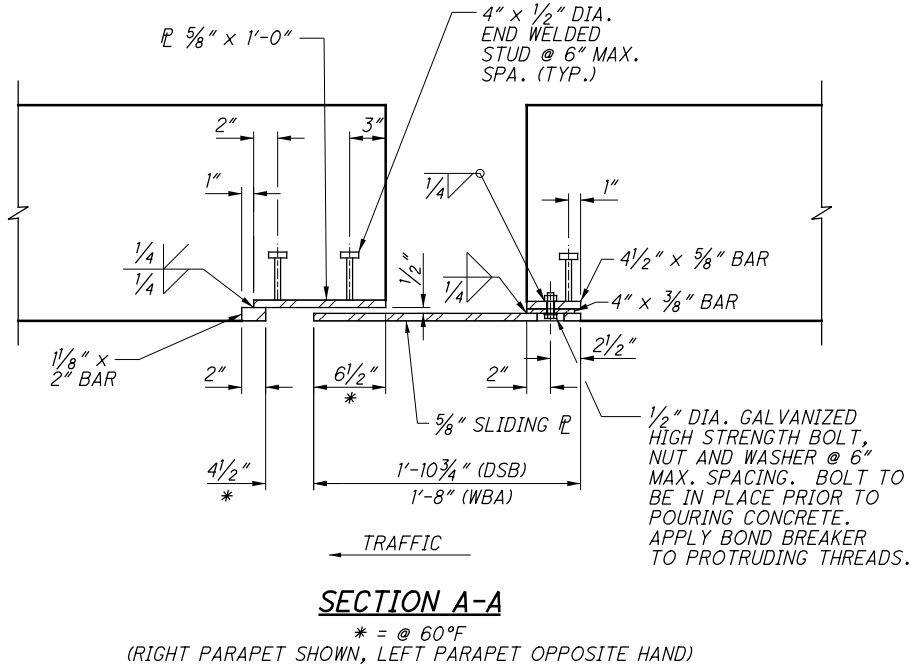
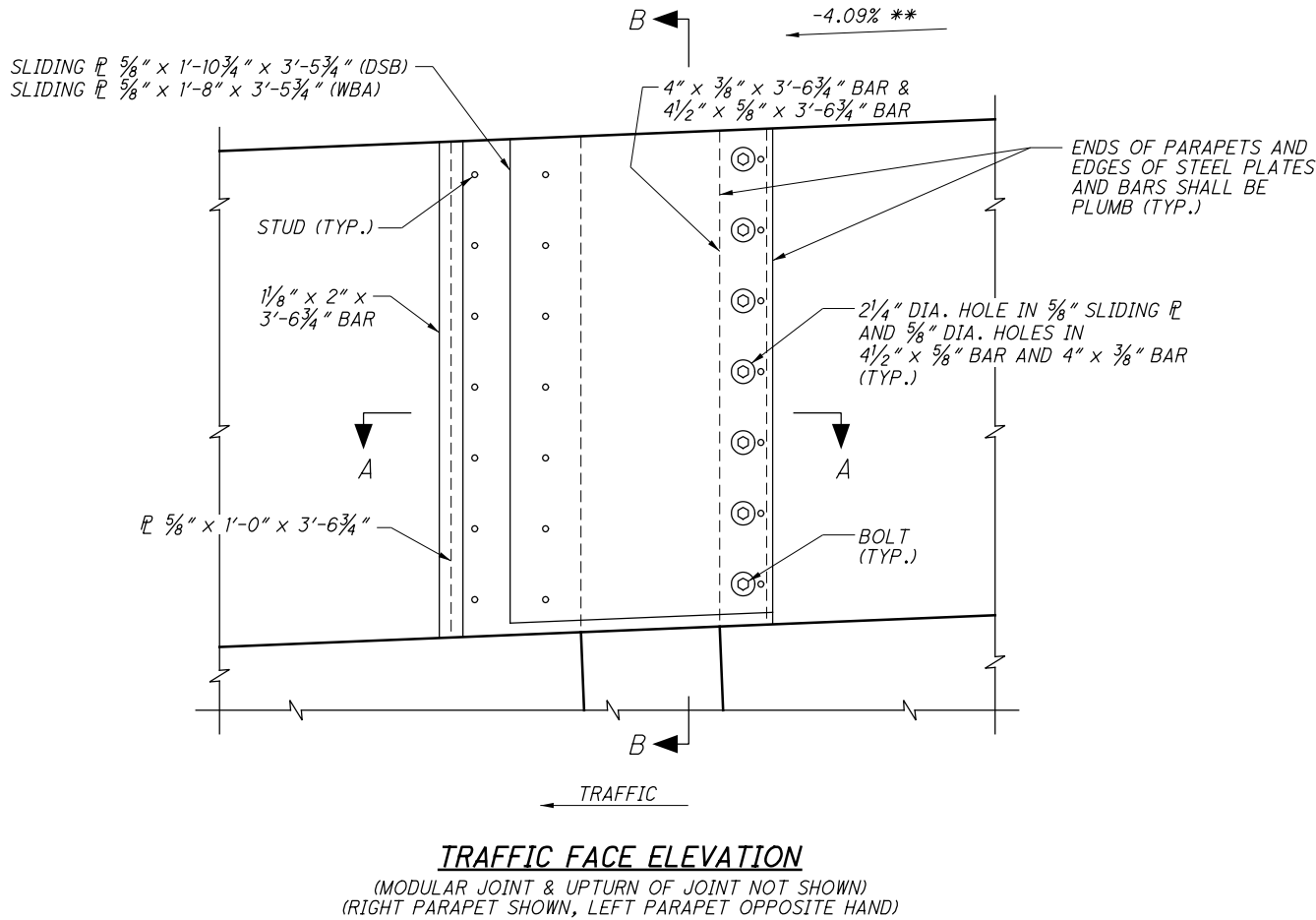
* = GRADE AT REAR ABUTMENT VARIES DUE TO VERTICAL CURVE. THE GRADE SHOWN IS THE INSTANTANEOUS GRADE AT THE FRONT FACE OF THE REAR ABUTMENT BACKWALL.

2026-03-24 - BU-17 - RECORD DRAWING PLANS

SUM-76 / 77 / 8 - 10.99 / 11.54 / 0.00 PID No. 101402	STRIP SEAL JOINT DETAILS - ABUTMENTS SUM-76-1148Q RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB	DESIGNED BES CHECKED MAB	DRAWN BES REVISED	REVIEWED JCS STRUCTURE FILE NUMBER 7706066	DATE 4/29/19	BURGESS & NIPLÉ Engineers ■ Architects ■ Planners 5085 REED ROAD, COLUMBUS, OHIO 43220
---	--	-----------------------------------	-------------------------	---	-----------------	---

ISSUE RECORD:		DESCRIPTION
NO.	DATE	

pw:\V\ANV\A01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_1166L_SX003.dgn Sheet 6/1



NOTES:

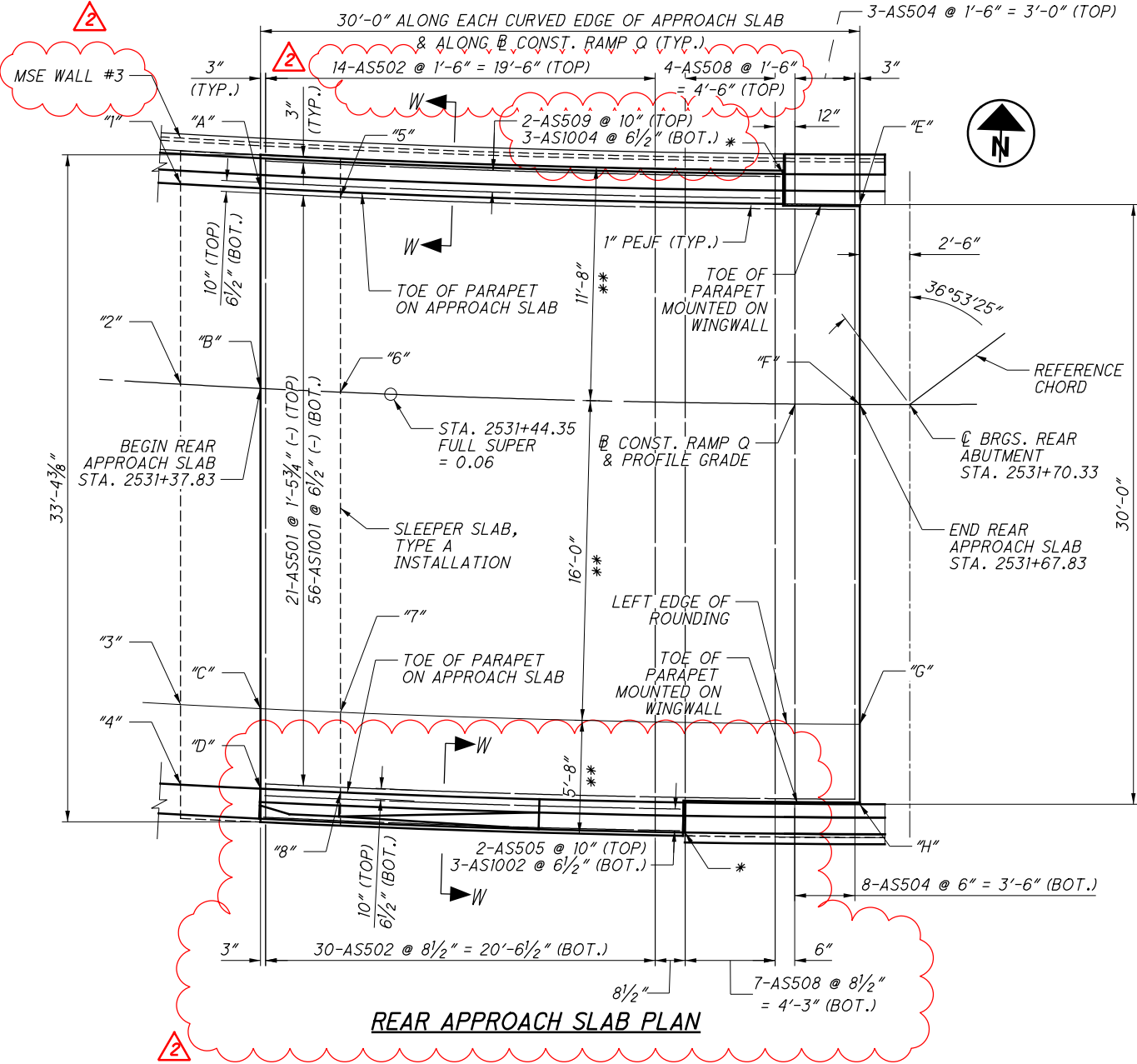
- FOR MODULAR JOINT DETAILS, SEE SHEET 72 / 80.
- ALL STEEL PLATES AND BARS FOR THE SLIDING PLATE JOINT ASSEMBLIES SHALL BE ASTM A709, GRADE 50. THE FINISHED STEEL ASSEMBLIES SHALL BE GALVANIZED OR METALIZED AND SHALL MATCH THE CORROSION PROTECTION USED ON THE MODULAR JOINT. SEE ITEM 513 - STRUCTURAL STEEL MEMBERS, MODULAR EXPANSION JOINT, LEVEL UF, AS PER PLAN FOR ADDITIONAL REQUIREMENTS.
- BOLTS SHALL BE ASTM F3125, GRADE A325, GALVANIZED PER CMS 711.02.
- ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE SLIDING PLATE JOINT ASSEMBLIES SHALL CONFORM WITH 513, LEVEL UF, AND SHALL BE INCLUDED WITH ITEM 513 - STRUCTURAL STEEL, MISC.: PARAPET SLIDING PLATE JOINT FOR PAYMENT.

LEGEND:

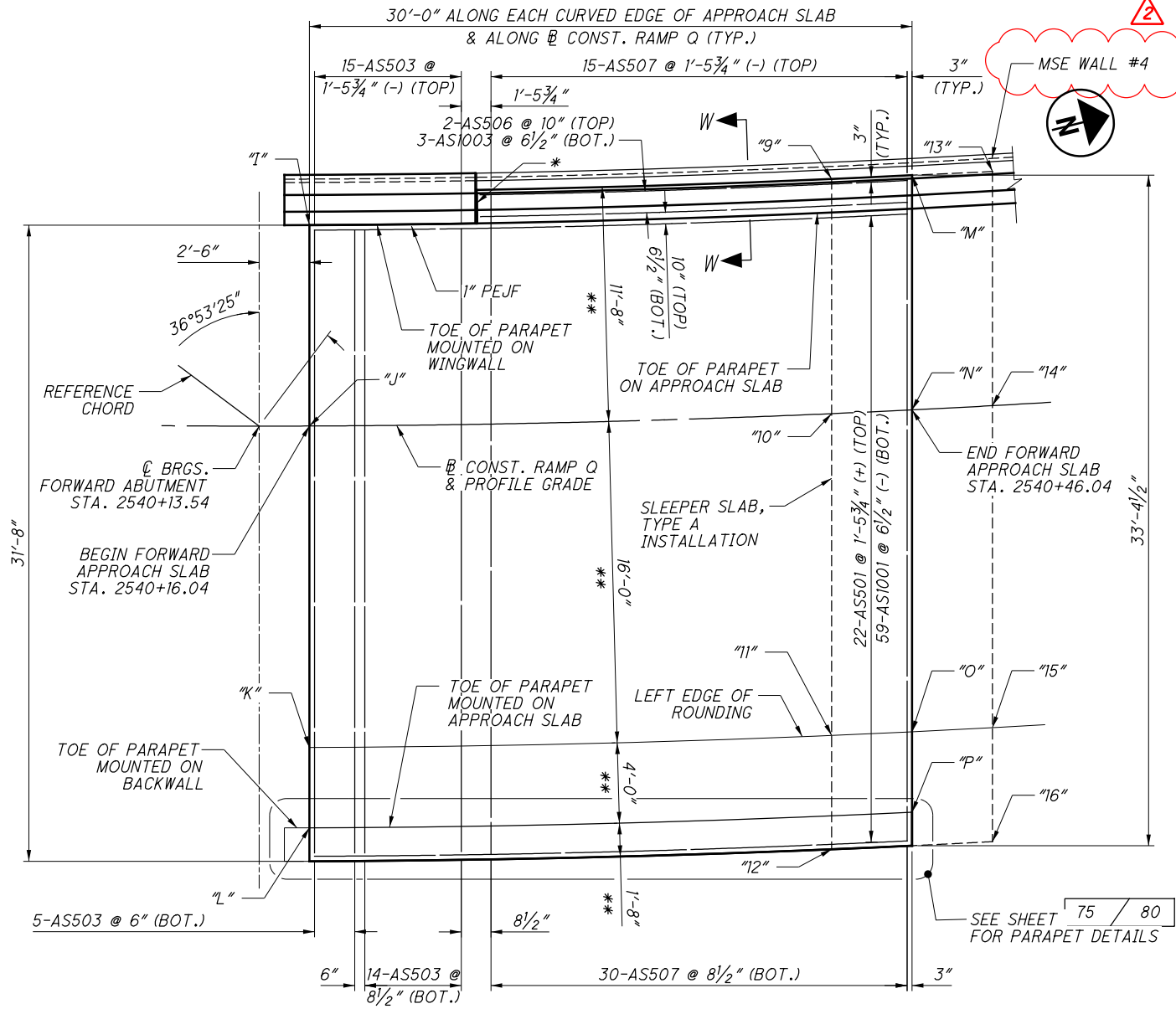
DSB = DS BROWN
WBA = WATSON BOWMAN ACME

** = GRADE VARIES DUE TO VERTICAL CURVE. THE GRADE SHOWN IS THE INSTANTANEOUS GRADE AT ∇ PIER 3 & ∇ EXPANSION JOINT.

p:\ANV\A01P\WINT01\parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_1148Q\Sheets\076_1166L_SUM001.dgn Sheet 12/13/2021 2:24:42 PM p002694C



REAR APPROACH SLAB PLAN



FORWARD APPROACH SLAB PLAN

TOP OF APPROACH SLAB ELEVATIONS

REAR APPROACH SLAB			FORWARD APPROACH SLAB		
LOCATION	STATION	ELEVATION	LOCATION	STATION	ELEVATION
"A"	2531+37.33	1121.12	"I"	2540+16.08	1095.24
"B"	2531+37.83	1121.73	"J"	2540+16.04	1095.85
"C"	2531+38.61	1122.70	"K"	2540+15.98	1096.81
"D"	2531+38.79	1122.75	"L"	2540+15.97	1096.85
"E"	2531+67.79	1122.74	"M"	2540+46.54	1093.11
"F"	2531+67.83	1123.34	"N"	2540+46.04	1093.75
"G"	2531+67.89	1124.30	"O"	2540+45.26	1094.76
"H"	2531+67.90	1124.34	"P"	2540+45.08	1094.81

TOP OF SLEEPER SLAB ELEVATIONS

REAR SLEEPER SLAB			FORWARD SLEEPER SLAB		
LOCATION	STATION	ELEVATION	LOCATION	STATION	ELEVATION
"1"	2531+33.26	1119.49	"9"	2540+42.48	1091.98
"2"	2531+33.83	1120.08	"10"	2540+42.04	1092.61
"3"	2531+34.70	1121.03	"11"	2540+41.36	1093.62
"4"	2531+34.91	1121.08	"12"	2540+41.12	1093.67
"5"	2531+41.40	1119.92	"13"	2540+50.61	1091.41
"6"	2531+41.84	1120.54	"14"	2540+50.05	1092.05
"7"	2531+42.52	1121.53	"15"	2540+49.18	1093.07
"8"	2531+42.68	1121.57	"16"	2540+48.88	1093.13

LEGEND:

* = 1" PEJF

** = MEASURED RADIALLY

NOTES:

- CROSS-SLOPES AND ROUNDING USED ON APPROACH SLABS SHALL MATCH THE BRIDGE DECK SLAB, EXCEPT THE CROSS-SLOPE VARIES FROM 0.058 AT BEGIN REAR APPROACH SLAB TO 0.06 AT STA. 2531+44.35.
- REINFORCING STEEL IN THE APPROACH SLABS SHALL BE AS SHOWN ON THE PLANS. REINFORCING STEEL IN THE SLEEPER SLABS SHALL BE AS SHOWN ON STANDARD DRAWING AS-2-15, EXCEPT AS NOTED ON THE PLANS.
- SEE STD. DWG. AS-1-15 AND STD. DWG. AS-2-15 FOR ADDITIONAL DETAILS AND INFORMATION NOT SHOWN.
- FOR CALCULATING REINFORCING STEEL BAR LENGTHS FOR SLEEPER SLABS PER STD. DWG. AS-2-15, SHEET 1/14, USE APPROACH SLAB WIDTH, W OF 29'-10" (REAR) AND 31'-7" (FORWARD) AND USE SKEW ANGLE OF 0°.
- FOR SECTION W-W, SEE SHEET 75 / 80.

REVISIONS BY:

PARSONS

100 East Campus View Boulevard, Suite 250
Columbus, OH 43235

ISSUE RECORD: BU-17 STRUCTURES

NO.	DATE	DESCRIPTION
1	03-2021	CIP WALLS TO MSE
2	12-2021	WINGWALL EXTENDED 5'

2026-03-24 - BU-17 - RECORD DRAWING PLANS

BURGESS & NIPLE
Engineers & Architects
5085 REED ROAD, COLUMBUS, OHIO 43220

DATE 4/29/19
REVIEWED JCS
STRUCTURE FILE NUMBER 7706066

DRAWN ODW
DESIGNED ODW
CHECKED BES
REVISED

APPROACH SLAB DETAILS - 1

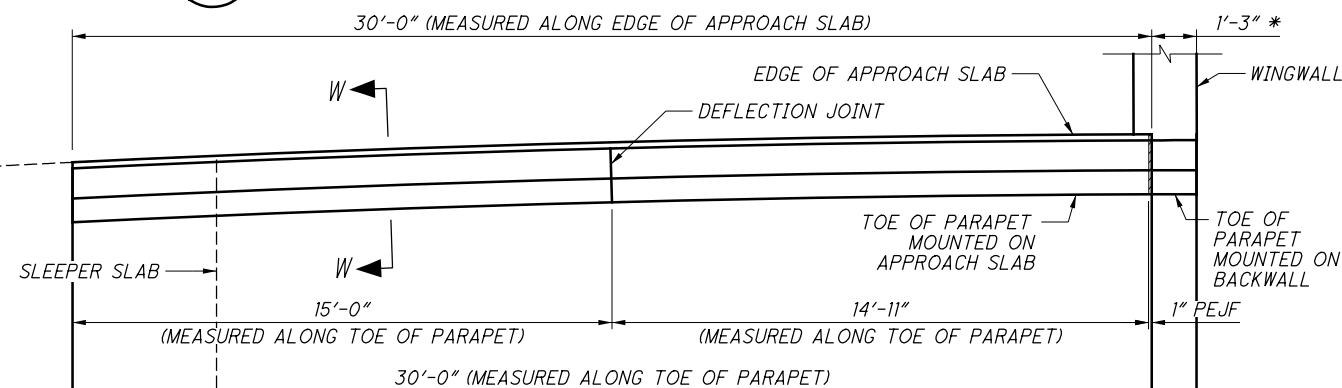
SUM-76-1148Q

RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

SUM-76/77/8-
10.99/11.54/0.00
PID No. 101402

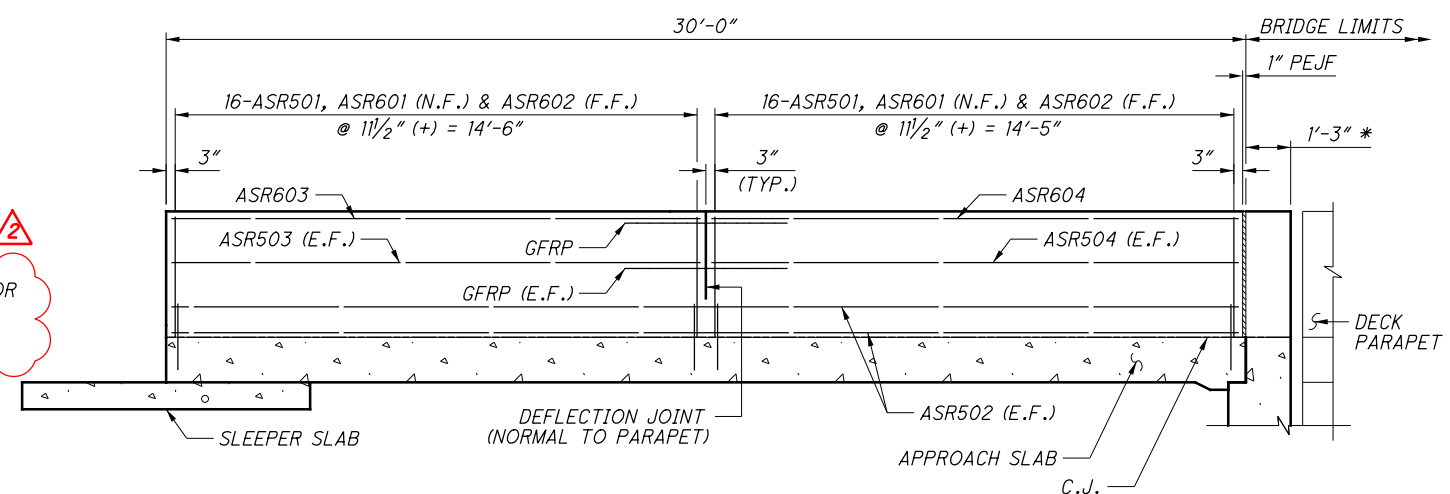
74 / 80

98
104



RIGHT FORWARD APPROACH SLAB PARAPET PLAN

— FRONT FACE OF
BACKWALL



(APPROACH SLAB REINFORCING STEEL NOT SHOWN FOR CLARITY)
(DIMENSIONS ARE GIVEN ALONG THE TOE OF THE PARAPET)

LEFT REAR APPROACH SLAB PARAPET ELEVATION

2

LIMITS OF SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)



(APPROACH SLAB REINFORCING
NOT SHOWN)

1. SEE STD. DWGS. SBR-1-13, AS-1-15 AND AS-2-15 FOR ADDITIONAL DETAILS AND INFORMATION NOT SHOWN.
2. SEE STD. DWG. SBR-1-13 FOR DETAILS REGARDING INSTALLATION AND SEALING OF DEFLECTION JOINTS, AND NOTES FOR THE GFRP STIFFENING REINFORCEMENT. A TOTAL OF 3 GFRP STIFFENING REINFORCEMENT BARS, 1/2" DIA. x 4'-6" LONG ARE REQUIRED FOR THE APPROACH SLAB PARAPETS.
3. PARAPET MOUNTED ON APPROACH SLAB IS INCLUDED FOR PAYMENT WITH ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET). REINFORCING STEEL FOR PARAPET MOUNTED ON APPROACH SLAB IS INCLUDED FOR PAYMENT WITH ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN.
4. FOR BARRIER REINFORCING ON WINGWALL, SEE ABUTMENT SHEETS.

* = SEE DETAIL X ON SHEET

PARSONS

ISSUE RECORD: BU-17 STRUCTURES

2026-03-24 - BU-17 - RECORD DRAWING PLANS

VIEWED	DATE
JCS	4/29/11
STRUCTURE FILE NUMBER	
7706066	

DESIGNED ODW	DRAWN ODW
CHECKED BES	REVISED

APPROACH SLAB DETAILS - 2

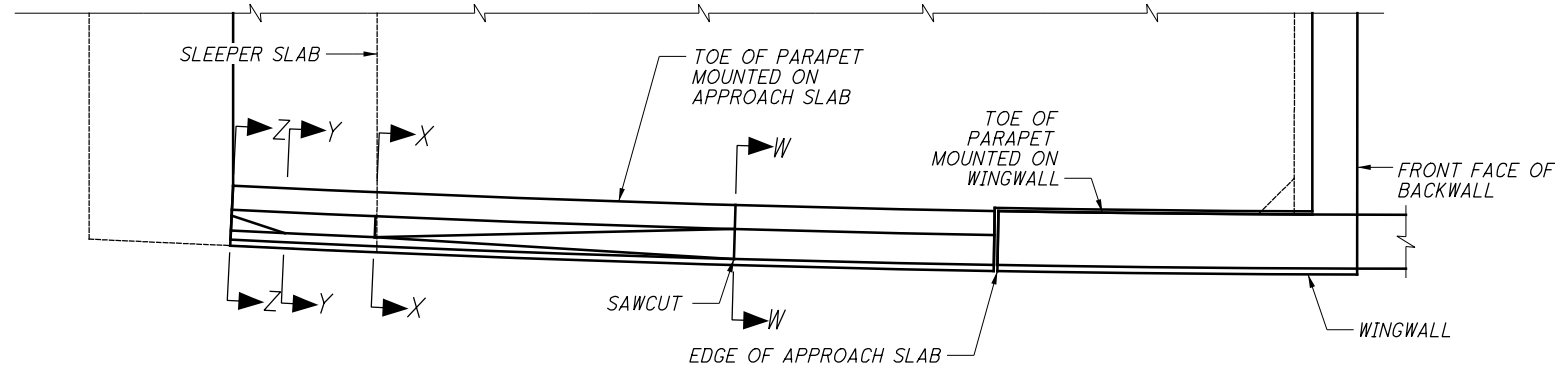
SUM-76-1148Q
RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

SUM - 76 / 77 / 8 -
10.99 / 11.54 / 0.00

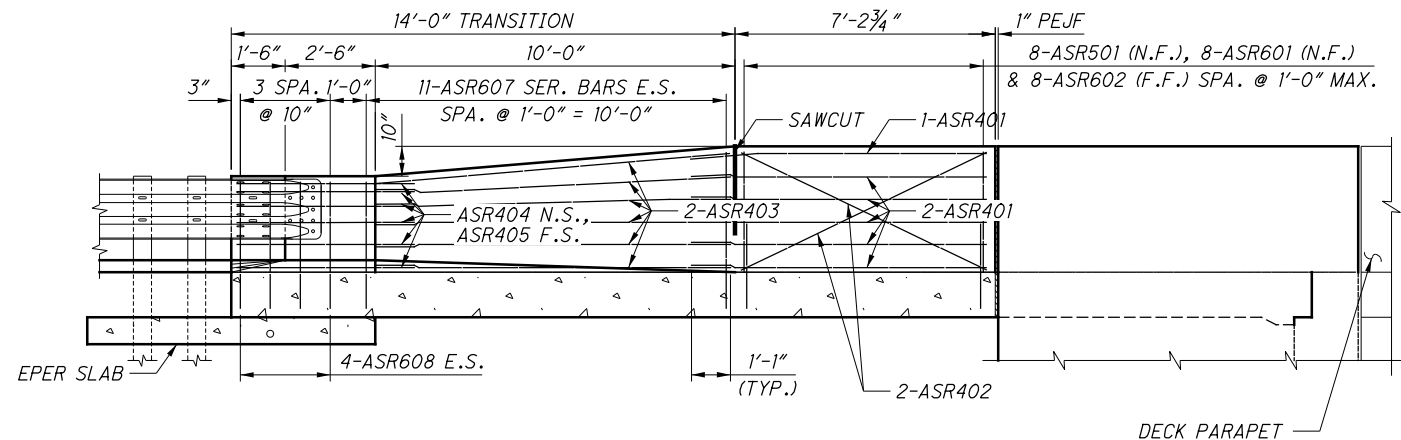
75 / 80

99
104

p:\ANV\A01PWINT01\parsons.com\Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_1148Q\Sheets\076_1166L_SMO02a.dgn Sheet 12/13/2021 3:14:50 PM p002694C

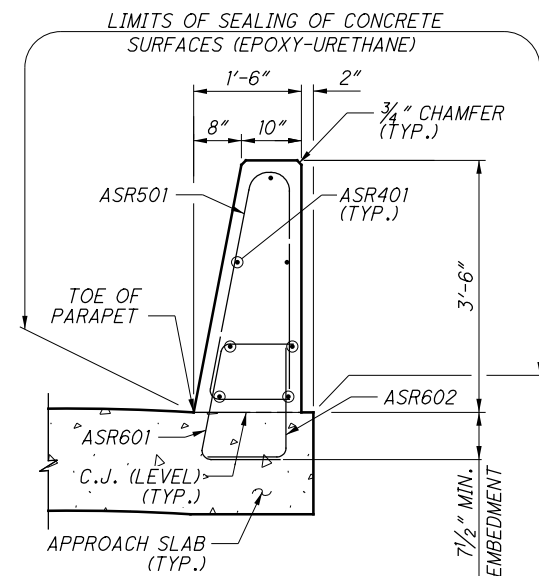


RIGHT REAR APPROACH SLAB PARAPET PLAN



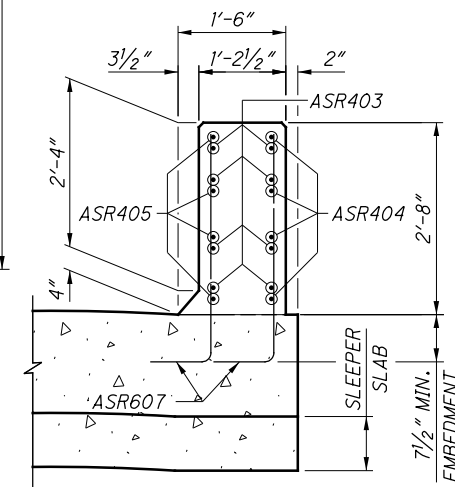
RIGHT REAR APPROACH SLAB PARAPET ELEVATION

(APPROACH SLAB REINFORCING STEEL NOT SHOWN FOR CLARITY)
(DIMENSIONS ARE GIVEN ALONG THE TOE OF THE PARAPET)



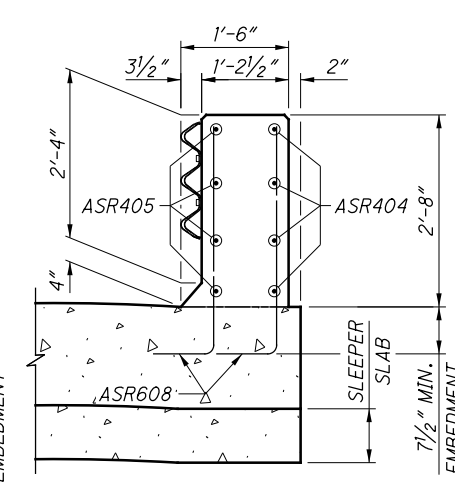
SECTION W-W

(APPROACH SLAB REINFORCING NOT SHOWN)



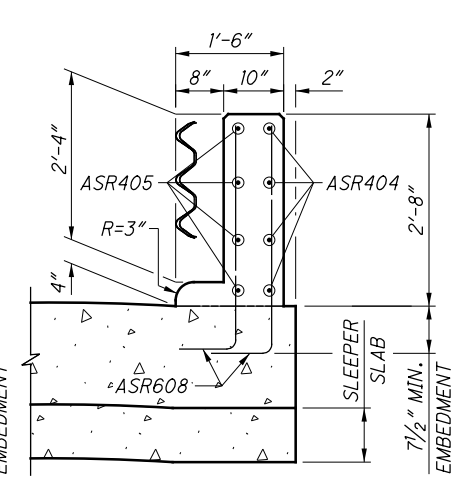
SECTION X-X

(APPROACH SLAB REINFORCING NOT SHOWN)



SECTION Y-Y

(APPROACH SLAB REINFORCING NOT SHOWN)



SECTION Z-Z

(APPROACH SLAB REINFORCING NOT SHOWN)

REVISIONS BY:

PARSONS

100 East Campus View Boulevard, Suite 250
Columbus, OH 43235

ISSUE RECORD: BU-17 STRUCTURES

NO.	DATE	DESCRIPTION
1	03-2021	CIP WALLS TO MSE
2	12-2021	WINGWALL EXTENDED 5'

2026-03-24 - BU-17 - RECORD DRAWING PLANS

SUM-76/77/8-
10.99/11.54/0.00
PID No. 101402

75A/80

99A
104

APPROACH SLAB DETAILS - 3
SUM-76-1148Q
RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

DESIGNED
ODW
CHECKED
BES

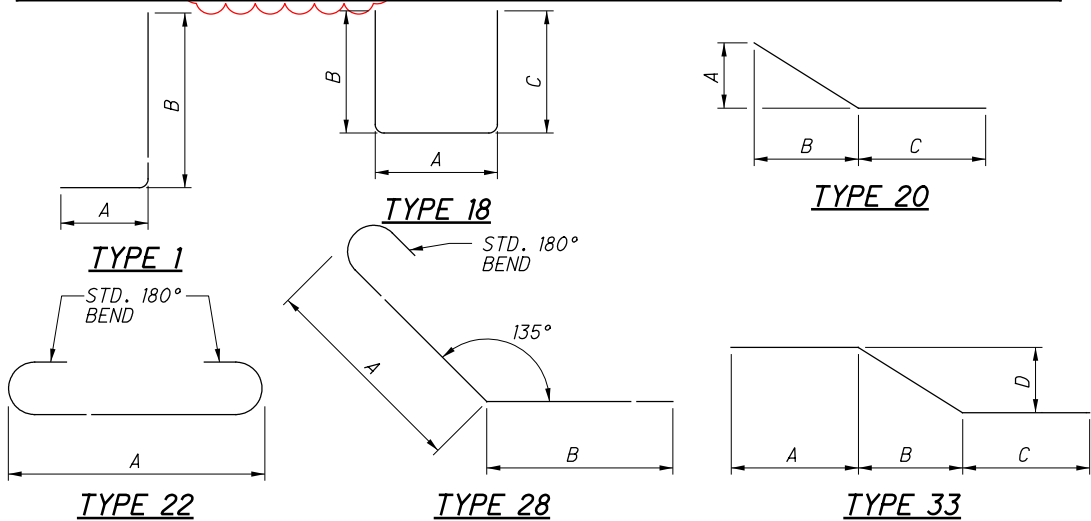
DRAWN
ODW
REVISED

REVIEWED
JCS
DATE
4/29/19

STRUCTURE FILE NUMBER
7706066

BURGESS & NIPLE
Engineers Architects Planners
5085 REED ROAD, COLUMBUS, OHIO 43220

REINFORCING STEEL LIST - REAR ABUTMENT											
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E/RAD.	INCR.	
RA501	21	32'-7"	714	STR							
RA502	4	14'-7"	61	STR							
RA503	2	21'-8"	45	STR							
RA504	2	13'-0"	27	STR							
RA505	22	7'-6"	172	1	0'-10"	6'-9"					
RA506	22	12'-0"	275	18	3'-11"	4'-2"	4'-2"				
RA507	18	7'-1"	133	1	0'-10"	6'-4"					
RA508	18	14'-10"	278	18	3'-11"	5'-7"	5'-7"				
RA509	16	6'-5"	107	1	0'-10"	5'-8"					
RA510	12	8'-11"	112	STR							
RA511	12	6'-1"	76	STR							
RA512	17	5'-9"	102	18	1'-8"	2'-2"	2'-2"				
RA513	2	5'-9"	12	STR							
RA514	14	7'-1"	103	1	2'-6"	4'-8"					
RA515	11	12'-0"	138	1	2'-6"	9'-7"					
RA516	2	5'-3"	11	STR							
RA517	7	4'-8"	34	STR							
RA518	5	13'-6"	70	18	1'-9"	6'-0"	6'-0"				
RA519	11	7'-0"	104	1	2'-6"	6'-0"					
RA601	11	22'-4"	369	18	18'-8"	1'-0"	3'-0"				
RA602	9	13'-2"	178	STR							
RA603	9	20'-8"	279	18	19'-0"	1'-0"	1'-0"				
RA604	9	19'-0"	257	STR							
RA605	9	10'-8"	144	33	3'-7"	3'-0"	3'-7"	2'-0"			
RA606	56	12'-6"	1051	18	8'-2"	2'-4"	2'-4"				
	2	12'-6"				2'-4"	2'-4"				
RA607	S.O.	TO	119	18	8'-2"	TO	TO			0'-8"	
	3	13'-10"				3'-0"	3'-0"				
RA608	6	14'-6"	131	18	8'-2"	3'-4"	3'-4"				
RA609	5	7'-3"	54	18	5'-7"	1'-0"	1'-0"				
RA610	5	15'-1"	113	1	1'-0"	14'-3"					
RA611	5	13'-6"	101	1	1'-0"	12'-8"					
RA612	5	14'-8"	110	1	1'-0"	13'-10"					
RA613	22	7'-11"	262	1	1'-0"	7'-1"					
RA614	18	7'-6"	203	1	1'-0"	6'-8"					
RA615	31	13'-5"	625	18	1'-5"	6'-2"	6'-2"				
RA616	31	10'-7"	493	18	1'-5"	4'-9"	4'-9"				
RA617	31	7'-1"	330	18	0'-11"	3'-3"	3'-3"				
RA618	22	7'-8"	253	1	1'-0"	6'-10"					
RA619	22	10'-1"	333	STR							
RA620	22	6'-1"	201	STR							
RA621	14	7'-1"	149	STR							
RA622	8	11'-0"	132	22	9'-8"						
RA623	24	5'-4"	192	22	4'-6"						
RA624	8	6'-0"	72	STR							
RA801	21	5'-1"	285	28	2'-10"	1'-5"					
		TOTAL	9010								



REINFORCING STEEL LIST - FORWARD ABUTMENT											
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E/RAD.	INCR.	
FA501	30	16'-9"	524	18	12'-8"	2'-2"	2'-2"				
FA502	28	24'-1"	703	STR							
FA503	35	6'-5"	234	1	0'-10"	5'-8"					
FA504	24	10'-11"	273	STR							
FA505	19	9'-0"	178	18	3'-9"	2'-9"	2'-9"				
FA506	15	11'-2"	175	18	3'-9"	3'-10"	3'-10"				
FA507	5	13'-9"	72	STR							
FA508	5	13'-5"	70	1	0'-10"	12'-8"					
FA509	5	15'-2"	79	1	0'-10"	14'-5"					
FA510	5	6'-6"	34	1	0'-10"	5'-9"					
FA511	2	21'-6"	45	STR							
FA512	2	12'-10"	27	STR							
FA513	35	32'-9"	1196	STR							
FA514	9	15'-8"	147	18	1'-5"	7'-3"	7'-3"				
FA515	3	13'-10"	43	18	1'-5"	6'-4"	6'-4"				
	1	8'-2"				3'-6"	3'-6"				
FA516	S.O.	TO	67	18	1'-5"	TO	TO			1'-0"	
	6	13'-2"				6'-0"	6'-0"				
FA517	10	10'-9"	112	STR							
	1	5'-2"									
FA518	S.O.	TO	32	STR						1'-8"	
	4	10'-2"									
FA519	2	6'-8"	14	STR							
FA520	12	6'-5"	80	1	0'-10"	5'-8"					
FA521	10	18'-8"	195	STR							
FA522	10	5'-8"	59	STR							
FA523	10	5'-9"	60	18	1'-8"	2'-2"	2'-2"				
FA524	2	15'-1"	31	STR							
FA525	19	7'-1"	140	1	2'-6"	4'-8"					
FA526	12	11'-6"	144	1	2'-6"	9'-1"					
	1	18'-3"				2'-11"	2'-11"				
FA527	S.O.	TO	89	18	12'-8"	TO	TO			2'-0"	
	4	24'-3"				5'-11"	5'-11"				
FA528	3	24'-9"	77	18	12'-8"	6'-2"	6'-2"				
FA529	8	9'-3"	77	STR							
FA530	14	15'-11"	232	STR							
FA531	14	13'-5"	196	STR							
FA532	14	9'-0"	131	1	3'-6"	5'-7"					
FA533	14	10'-5"	152	33	2'-5"	4'-0"	2'-5"	4'-0"			
FA534	11	14'-11"	171	STR							
FA601	47	9'-6"	671	STR							
FA602	68	7'-8"	783	20	3'-6"	3'-6"	2'-9"				
FA603	33	13'-5"	665	18	1'-5"	6'-2"	6'-2"				
FA604	33	10'-7"	525	18	1'-5"	4'-9"	4'-9"				
FA605	33	7'-1"	351	18	0'-11"	3'-3"	3'-3"				
FA606	19	7'-8"	219	1	1'-0"	6'-10"					
FA607	19	19'-10"	566	STR							
FA608	19	5'-8"	162	STR							
FA609	21	13'-6"	426	STR							
FA701	72	16'-8"	2453	18	12'-8"	2'-2"	2'-2"				
FA702	10	12'-4"	252	STR							
	1	6'-9"									
FA703	S.O.	TO	76	STR						1'-8"	
	4	11'-9"									
FA801	68	8'-0"	1452	1	1'-4"	6'-11"					
FA802	22	5'-1"	299	28	2'-10"	1'-5"					
FA803	19	11'-5"	579	STR							
FA804	9	10'-11"	262	22	9'-1"						
FA805	25	5'-10"	389	22	4'-0"						
FA535	19	9'-2"	182	STR							
		TOTAL	16171								

- NOTES:**
- ALL REINFORCING STEEL SHALL BE EPOXY COATED.
 - BAR SIZE: THE BAR SIZE IS INDICATED IN THE BAR MARK. THE MARK BEGINS WITH TWO OR THREE LETTERS OR NUMBERS THAT IDENTIFY THE BAR LOCATION. THE NEXT ONE OR TWO DIGITS INDICATE THE BAR SIZE, AND THE REMAINING TWO DIGITS ARE THE SEQUENCE NUMBER.

EXAMPLE: SA1001
SA = SUPERSTRUCTURE BAR
10 = #10 BAR
01 = BAR SEQUENCE NUMBER 1
 - BAR DIMENSIONS SHOWN ARE OUT-TO-OUT UNLESS OTHERWISE INDICATED.
 - STR. IN THE BAR TYPE COLUMN INDICATES A STRAIGHT BAR.
 - RAD. INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.
 - INCR. INDICATES THE LENGTH INCREMENT FOR SERIES BARS.
 - STD. WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF A BAR.
 - SPIRAL REINFORCING BARS: THE "LENGTH" SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE LENGTH ALONG THE AXIS OF THE SPIRAL. PROVIDE ONE AND ONE-HALF CLOSED-COIL TURNS AT THE ENDS OF EACH SPIRAL UNIT.

LEGEND:

Δ = REINFORCING BAR IS INCLUDED FOR PAYMENT WITH DRILLED SHAFTS. WEIGHT IS NOT INCLUDED IN TOTAL.

REVISIONS BY:

PARSONS
100 East Campus View Boulevard, Suite 250
Columbus, OH 43235

ISSUE RECORD: BU-17 STRUCTURES		
NO.	DATE	DESCRIPTION
1	03-2021	CIP WALLS TO MSE
2	12-2021	WINGWALL EXTENDED 5'

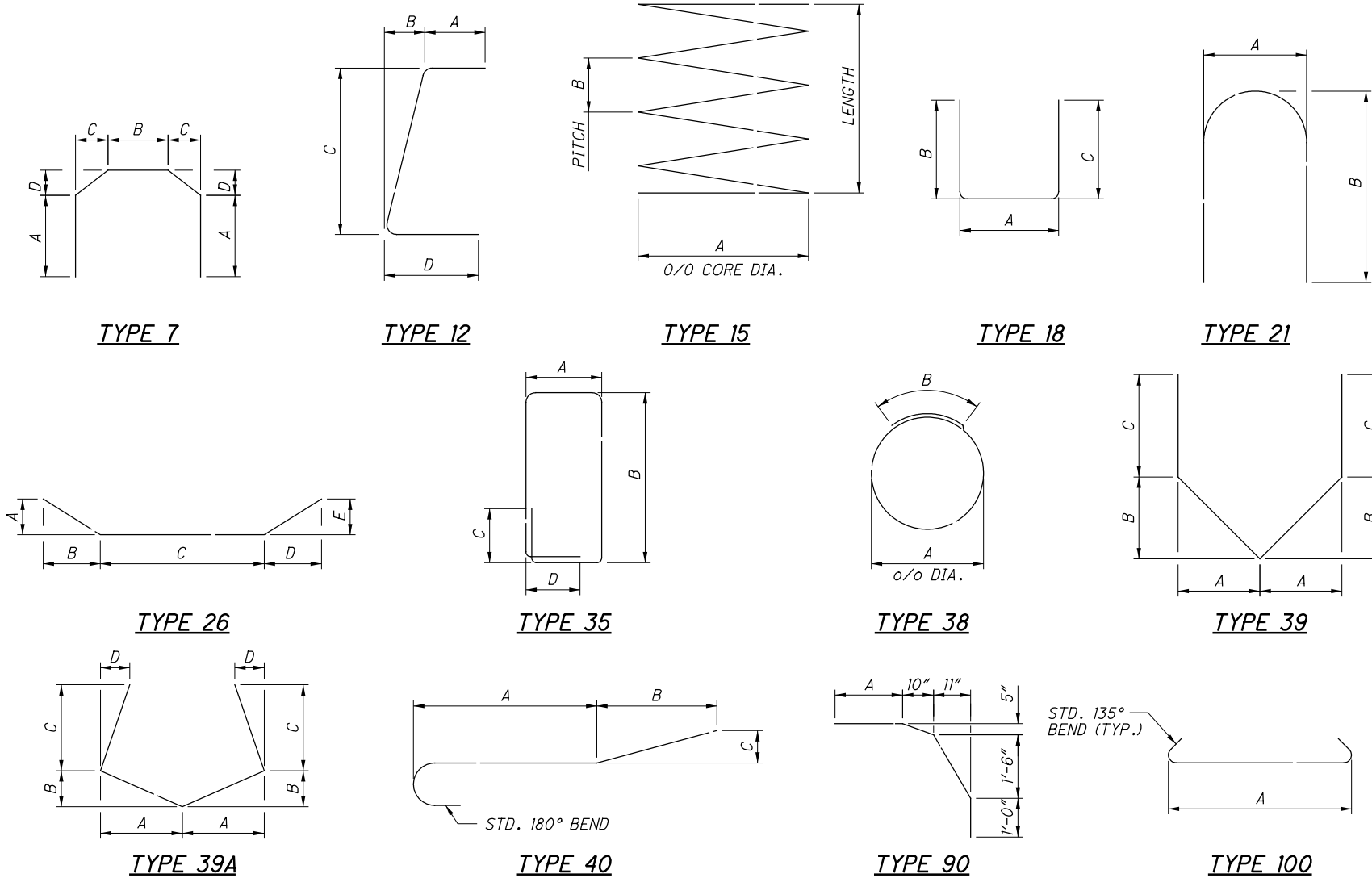
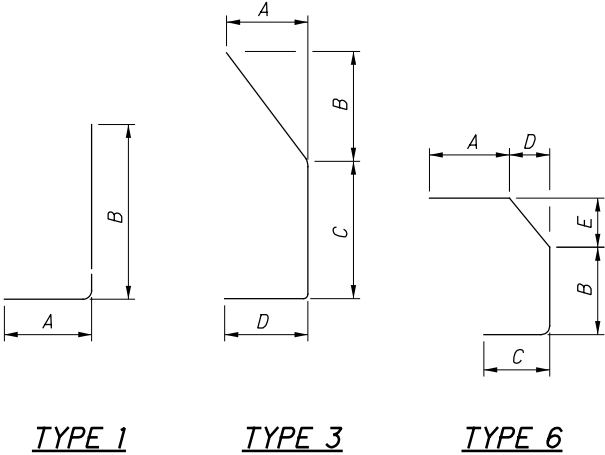
ISSUE RECORD:		DESCRIPTION
NO.	DATE	

REINFORCING STEEL LIST - PIER 1										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E/RAD.	INCR.
IDS1001	60	29'-3"	7552	STR						
IDS401	18	8'-2"	98	38	2'-0"	1'-11"				
IDS901	30	11'-8"	1190	STR						
IP1001	5	27'-7"	593	STR						
IP1101	7	14'-11"	555	40	9'-5"	4'-0"	0'-3"			
IP1102	7	23'-8"	880	1	22'-0"	2'-0"				
IP401	18	8'-2"	98	38	2'-0"	1'-11"				
IP402	162	1'-6"	162	21	0'-4"	0'-8"				
IP403	9	5'-1"	31	39A	1'-4¾"	0'-9¾"	0'-10½"	0'-6"		
IP404	2	12'-5"	17	STR						
IP405	6	31'-7"	127	STR						
IP406	2	24'-0"	32	STR						
IP407	2	15'-3"	20	STR						
IP408	2	31'-8"	42	26	1'-6"	11'-3"	9'-0"	11'-3"	1'-6"	
IP409	4	10'-4"	28	STR						
IP501	18	18'-4"	344	STR						
IP502	14	7'-0"	102	1	6'-3"	0'-10"				
IP503	7	7'-0"	51	18	5'-7"	0'-10"	0'-10"			
IP504	5	5'-5"	28	90	1'-9"					
IP505	5	6'-8"	35	90	3'-0"					
IP506	7	5'-7"	41	18	4'-6"	0'-8"	0'-8"			
IP507	20	9'-9"	203	18	4'-8"	2'-8"	2'-8"			
IP508	14	8'-4"	122	18	3'-3"	2'-8"	2'-8"			
IP509	2	8'-1"	17	18	4'-8"	1'-10"	1'-10"			
IP510	1	8'-10"	9	7	1'-9"	3'-10½"	0'-4¼"	0'-8½"		
IP511	1	9'-7"	10	7	1'-10"	3'-5"	0'-7"	1'-2"		
IP512	8	9'-4"	78	6	1'-10"	2'-7"	3'-5"	1'-7"	0'-7"	
	1	10'-5"			2'-3"	3'-9"	0'-5"	1'-1"		
IP513	S.O.	TO	33	7	TO	TO	TO	TO		0'-2"
	3	10'-9"			2'-8"	3'-11"	0'-4"	0'-9"		
	1	11'-10"			3'-2"	4'-0"	0'-3½"	0'-9"		
IP514	S.O.	TO	37	7	TO	TO	TO	TO		0'-1"
	3	12'-0"			3'-6"	4'-2"	0'-2½"	0'-5"		
IP515	20	10'-0"	209	18	3'-3"	3'-6"	3'-6"			
IP516	20	10'-3"	214	6	3'-3"	3'-1"	3'-8"	0'-4½"	0'-2"	
	1	12'-11"			3'-10"	4'-1"	0'-3"	0'-7"		
IP517	S.O.	TO	27	7	TO	TO	TO	TO		0'-1"
	2	13'-0"			4'-0"	4'-2"	0'-2½"	0'-5"		
	1	12'-7"			3'-4"	3'-9"	0'-5"	1'-1"		
IP518	S.O.	TO	40	7	TO	TO	TO	TO		0'-1½"
	3	12'-10"			3'-9"	3'-11"	0'-4"	0'-8½"		
IP519	6	12'-2"	76	6	3'-3"	2'-7"	4'-10"	1'-7"	0'-7"	
IP520	1	12'-11"	13	7	3'-2"	3'-6"	0'-6½"	1'-6"		
IP521	1	12'-4"	13	7	2'-9"	3'-10"	0'-4½"	1'-6"		
IP522	1	11'-7"	12	7	3'-1"	3'-10"	0'-4½"	0'-9"		
IP523	2	10'-4"	22	7	2'-1"	3'-7"	0'-6"	1'-3"		
IP524	2	12'-0"	25	7	3'-6"	4'-3½"	0'-2¼"	0'-4½"		
IP525	2	13'-4"	28	7	3'-7"	3'-7"	0'-6"	1'-3"		
IP526	2	5'-1"	11	18	4'-0"	0'-8"	0'-8"			
IP527	4	3'-8"	15	STR						
IP601	10	4'-2"	63	1	2'-9"	1'-7"				
IP602	6	14'-2"	128	35	3'-8"	2'-10"	1'-0"	1'-0"		
IP901	30	19'-10"	2023	STR						
IP902	10	4'-0"	136	1	2'-9"	1'-7"				
ISP401	3	52'-2"	2208	15	2'-6"	0'-4½"				
ISP501	3	16'-9"	1689	15	2'-6"	0'-3"				
		TOTAL	8439							

REINFORCING STEEL LIST - PIER 2										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E/RAD.	INCR.
Δ 2DS1101	46	34'-6"	8432	STR						
Δ 2DS1102	46	16'-8"	4073	STR						
Δ 2DS401	10	17'-7"	117	38	5'-0"	1'-11"				
2P1101	46	51'-10"	12668	STR						
2P401	18	4'-4"	52	3	1'-5"	0'-5"	0'-7"	2'-5"		
2P402	6	4'-8"	19	3	1'-5"	1'-0"	0'-7"	2'-5"		
2P403	6	5'-8"	23	STR						
2P404	4	5'-5"	14	STR						
2P405	6	6'-2"	25	STR						
2P406	8	17'-7"	94	38	5'-0"	1'-11"				
2P407	144	2'-2"	208	21	0'-4"	1'-0"				
2P408	16	4'-4"	46	18	1'-6"	1'-6"	1'-6"			
2P409	4	13'-3"	35	39	3'-3"	1'-11"	2'-11"			
2P410	4	12'-4"	33	39	3'-0"	1'-9"	2'-9"			
2P501	50	12'-11"	674	12	3'-6"	0'-0¾"	6'-2"	3'-6"		
2P502	8	7'-1"	59	100	6'-2"					
2P503	6	48'-4"	302	STR						
2P601	160	13'-1"	3144	18	4'-9"	4'-4"	4'-4"			
2P602	20	14'-6"	436	18	6'-2"	4'-4"	4'-4"			
2P603	16	6'-4"	152	18	4'-8"	1'-0"	1'-0"			
2R801	30	31'-7"	2530	STR						
Δ 2SP401	1	34'-6"	1391	15	7'-0"	0'-4½"				
2SP501	1	45'-6"	3036	15	5'-6"	0'-3¼"				
		TOTAL	23550							

NOTES:

1. SEE SHEET 76 / 80 FOR NOTES AND LEGEND.



ISSUE RECORD:		DESCRIPTION
NO.	DATE	

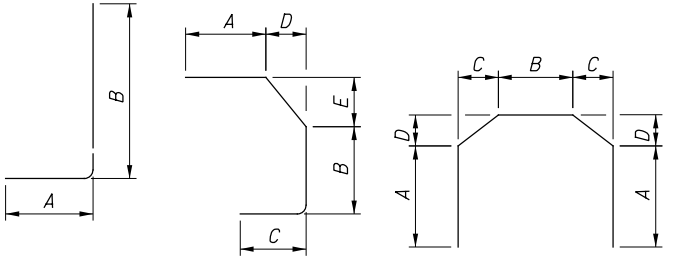
pw:\ANV\A01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\00 - RFP\Reference Files\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\Structures\Sheets\Ramp_Q\076_11661_SL003.dgn Sheet 6/1

REINFORCING STEEL LIST - PIER 3										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E/RAD.	INCR.
Δ 3DS1001	45	18'-1"	3502	STR						
Δ 3DS1101	45	25'-8"	6137	STR						
Δ 3DS401	27	8'-2"	147	38	2'-0"	1'-11"				
3P1001	5	27'-7"	593	STR						
3P1002	45	30'-0"	5809	STR						
3P1003	45	18'-11"	3663	STR						
3P1101	7	14'-11"	555	40	9'-5"	4'-0"	0'-3"			
3P1102	7	23'-8"	880	1	22'-0"	2'-0"				
3P401	27	8'-2"	147	38	2'-0"	1'-11"				
3P402	360	1'-6"	361	21	0'-4"	0'-8"				
3P403	9	5'-1"	31	39A	1'-4 ³ / ₄ "	0'-9 ³ / ₄ "	0'-10 ¹ / ₂ "	0'-6"		
3P501	18	30'-0"	563	STR						
3P502	14	7'-0"	102	1	6'-3"	0'-10"				
3P503	7	7'-0"	51	18	5'-7"	0'-10"	0'-10"			
3P504	5	5'-5"	28	90	1'-9"					
3P505	5	6'-8"	35	90	3'-0"					
3P506	7	6'-7"	48	18	5'-6"	0'-8"	0'-8"			
3P507	21	10'-9"	235	18	5'-8"	2'-8"	2'-8"			
3P508	14	9'-1"	133	18	4'-0"	2'-8"	2'-8"			
3P509	2	9'-1"	19	18	5'-8"	1'-10"	1'-10"			
3P510	1	9'-10"	10	7	1'-9"	4'-10 ¹ / ₂ "	0'-4 ¹ / ₄ "	0'-8 ¹ / ₂ "		
3P511	1	10'-7"	11	7	1'-10"	4'-5"	0'-7"	1'-2"		
3P512	8	10'-2"	85	6	1'-10"	3'-5"	3'-5"	1'-7"	0'-7"	
	1	11'-5"			2'-3"	4'-9"	0'-5"	1'-1"		
3P513	S.O.	TO	36	7	TO	TO	TO	TO		0'-2"
	3	11'-9"			2'-8"	4'-11"	0'-4"	0'-9"		
	1	12'-10"			3'-2"	5'-0"	0'-3 ¹ / ₂ "	0'-9"		
3P514	S.O.	TO	40	7	TO	TO	TO	TO		0'-1"
	3	13'-0"			3'-6"	5'-2"	0'-2 ¹ / ₂ "	0'-5"		
3P515	20	10'-9"	224	18	4'-0"	3'-6"	3'-6"			
3P516	20	11'-0"	229	6	3'-3"	3'-10"	3'-8"	0'-4 ¹ / ₂ "	0'-2"	
	1	13'-11"			3'-10"	5'-1"	0'-3"	0'-7"		
3P517	S.O.	TO	44	7	TO	TO	TO	TO		0'-0 ¹ / ₂ "
	3	14'-0"			4'-0"	5'-2"	0'-2 ¹ / ₂ "	0'-5"		
	1	13'-7"			3'-4"	4'-9"	0'-5"	1'-1"		
3P518	S.O.	TO	43	7	TO	TO	TO	TO		0'-1 ¹ / ₂ "
	3	13'-10"			3'-9"	4'-11"	0'-4"	0'-8 ¹ / ₂ "		
3P519	6	13'-0"	81	6	3'-3"	3'-5"	4'-10"	1'-7"	0'-7"	
3P520	1	13'-11"	15	7	3'-2"	4'-6"	0'-6 ¹ / ₂ "	1'-6"		
3P521	1	13'-4"	14	7	2'-9"	4'-10"	0'-4 ¹ / ₂ "	1'-6"		
3P522	1	12'-7"	13	7	3'-1"	4'-10"	0'-4 ¹ / ₂ "	0'-9"		
3P523	2	11'-4"	24	7	2'-1"	4'-7"	0'-6"	1'-3"		
3P524	2	12'-11"	27	7	3'-6"	5'-3"	0'-2 ¹ / ₄ "	0'-4 ¹ / ₂ "		
3P525	2	14'-4"	30	7	3'-7"	4'-7"	0'-6"	1'-3"		
3P526	2	6'-1"	13	18	5'-0"	0'-8"	0'-8"			
3P527	2	12'-5"	26	STR						
3P528	6	31'-7"	198	STR						
3P529	2	24'-0"	50	STR						
3P530	2	15'-3"	32	STR						
3P531	2	31'-8"	66	26	1'-6"	11'-3"	9'-0"	11'-3"	1'-6"	
3P532	4	10'-4"	43	STR						
3P533	18	11'-6"	216	STR						
Δ 3SP401	3	25'-8"	1561	15	3'-6"	0'-4 ¹ / ₂ "				
Δ 3SP501	3	38'-8"	3806	15	2'-6"	0'-3"				
		TOTAL	18629							

REINFORCING STEEL LIST - PIER 4										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E/RAD.	INCR.
Δ 4DS1101	48	26'-6"	6758	STR						
Δ 4DS1102	34	15'-2"	2740	STR						
Δ 4DS401	9	17'-7"	106	38	5'-0"	1'-11"				
4P1101	12	34'-11"	2226	18	31'-7"	2'-0"	2'-0"			
4P1102	10	31'-7"	1678	STR						
4P1103	34	30'-0"	5419	STR						
4P1104	34	28'-1"	5073	19	26'-6"					
4P401	144	2'-2"	208	21	0'-4"	1'-0"				
4P402	4	13'-3"	35	39	3'-3"	1'-11"	2'-11"			
4P403	4	12'-4"	33	39	3'-0"	1'-9"	2'-9"			
4P404	16	4'-5"	47	18	1'-7"	1'-6"	1'-6"			
4P405	8	17'-7"	94	38	5'-0"	1'-11"				
4P501	6	30'-0"	188	STR						
4P502	6	18'-8"	117	STR						
4P503	4	3'-8"	15	STR						
4P601	14	11'-0"	231	STR						
4P602	7	12'-0"	126	26	0'-2"	1'-6"	9'-0"	1'-6"	0'-2"	
4P603	4	7'-4"	44	STR						
4P604	2	17'-6"	53	STR						
4P605	7	6'-7"	69	11	0'-8"	0'-4"	0'-2"	4'-5"	1'-6"	
4P606	7	8'-1"	85	11	0'-8"	0'-4"	0'-2"	5'-11"	1'-6"	
4P607	13	8'-8"	169	18	6'-0"	1'-6"	1'-6"			
4P608	21	7'-6"	237	1	1'-6"	6'-2"				
4P609	7	8'-2"	86	18	5'-6"	1'-6"	1'-6"			
4P610	60	13'-5"	1209	18	4'-3"	4'-9"	4'-9"			
4P611	16	14'-1"	338	6	4'-6"	3'-11"	5'-2"	0'-8"	0'-4"	
4P612	6	15'-11"	143	6	5'-5"	3'-11"	6'-1"	0'-8"	0'-4"	
4P613	16	17'-3"	415	6	6'-4"	4'-1"	6'-8"	0'-4"	0'-2"	
4P614	22	16'-11"	559	6	5'-11"	3'-11"	6'-7"	0'-8"	0'-4"	
4P615	5	19'-1"	143	7	6'-4"	5'-10"	0'-2"	0'-4"		
4P616	6	14'-4"	129	35	2'-11"	3'-8"	1'-0"	1'-0"		
4P617	10	4'-3"	64	1	1'-7"	2'-10"				
4P618	5	15'-4"	115	18	6'-2"	4'-9"	4'-9"			
4P801	8	31'-7"	675	STR						
4P802	2	25'-3"	135	STR						
4P803	2	11'-5"	61	STR						
4P901	10	4'-1"	139	1	1'-7"	2'-10"				
Δ 4SP401	1	26'-6"	1079	15	7'-0"	0'-4 ¹ / ₂ "				
Δ 4SP501	1	45'-9"	3052	15	5'-6"	0'-3 ¹ / ₄ "				
		TOTAL	23410							

NOTES:

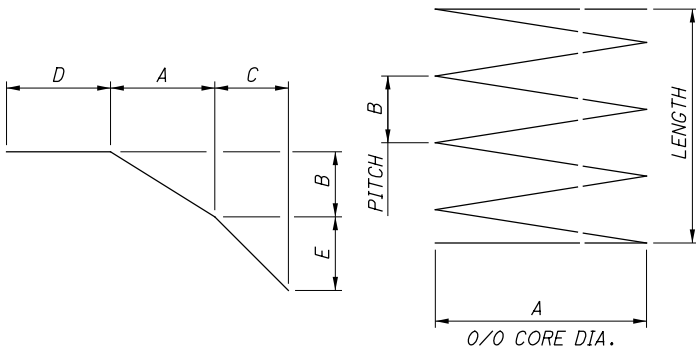
1. SEE SHEET 76 / 80 FOR NOTES AND LEGEND.



TYPE 1

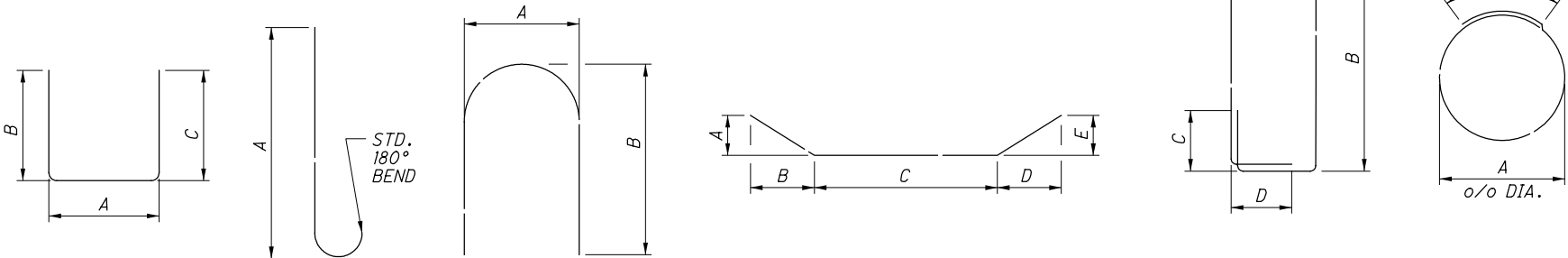
TYPE 6

TYPE 7



TYPE 11

TYPE 15



TYPE 18

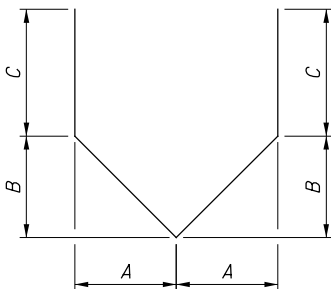
TYPE 19

TYPE 21

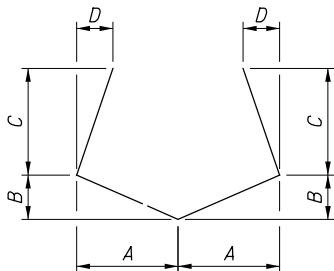
TYPE 26

TYPE 35

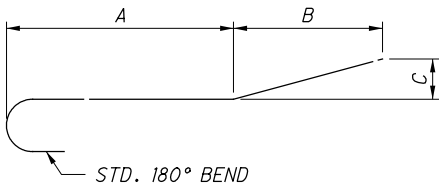
TYPE 38



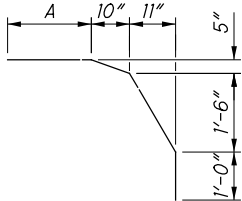
TYPE 39



TYPE 39A



TYPE 40



TYPE 90

2026-03-24 - BU-17 - RECORD DRAWING PLANS

REINFORCING STEEL LIST - 3

SUM-76-1148Q
RAMP Q OVER IR-76 WB, LANE O, RAMP S, SR-8 NB/SB

DATE
4/29/19

REVIEWED
JCS

DRAWN
AAA

DESIGNED
JHL

ENGINEERS
BURGESS & NIPLE
Engineers - Architects - Planners
5085 REED ROAD, COLUMBUS, OHIO 43220

SUM-76/77/8-
10.99/11.54/0.00

PID No. 101402

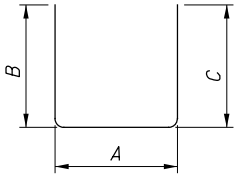
78/80

102
104

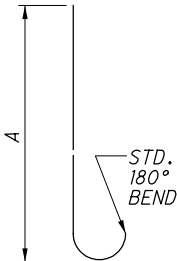
ISSUE RECORD:		DESCRIPTION		
NO.	DATE			

pw:\\V\\ANV\\A01PW\\INT01.parsons.com:Ohio State\\Documents\\DB-Akron Beltway Rehab\\00 - RFP\\Reference Files\\SUM-102329-SOS-Att-T-2-CADD-FILES-P2\\Structures\\Sheets\\Ramp_Q\\076_11661_SL004.dgn Sheet 6/1

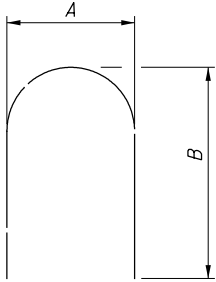
REINFORCING STEEL LIST - PIER 5										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E/RAD.	INCR.
Δ 5DS1101	46	23'-8"	5784	STR						
Δ 5DS1102	46	15'-6"	3788	STR						
Δ 5DS401	9	17'-7"	106	38	5'-0"	1'-11"				
5P1101	12	34'-11"	2226	18	31'-7"	2'-0"	2'-0"			
5P1102	18	31'-7"	3020	STR						
5P1103	46	48'-1"	11751	19	46'-6"					
5P401	132	2'-2"	191	21	0'-4"	1'-0"				
5P402	4	13'-3"	35	39	3'-3"	1'-11"	2'-11"			
5P403	4	12'-4"	33	39	3'-0"	1'-9"	2'-9"			
5P404	16	4'-4"	46	18	1'-6"	1'-6"	1'-6"			
5P405	8	17'-7"	94	38	5'-0"	1'-11"				
5P501	6	30'-0"	188	STR						
5P502	6	15'-3"	95	STR						
5P601	14	11'-0"	231	STR						
5P602	7	12'-0"	126	26	0'-2"	1'-6"	9'-0"	1'-6"	0'-2"	
5P603	4	7'-4"	44	STR						
5P604	2	17'-6"	53	STR						
5P605	7	6'-7"	69	11	0'-8"	0'-4"	0'-2"	4'-5"	1'-6"	
5P606	7	8'-1"	85	11	0'-8"	0'-4"	0'-2"	5'-11"	1'-6"	
5P607	13	8'-8"	169	18	6'-0"	1'-6"	1'-6"			
5P608	21	7'-6"	237	1	1'-6"	6'-2"				
5P609	7	8'-2"	86	18	5'-6"	1'-6"	1'-6"			
5P610	76	13'-5"	1532	18	4'-3"	4'-9"	4'-9"			
5P611	18	14'-1"	381	6	4'-6"	3'-11"	5'-2"	0'-8"	0'-4"	
5P612	6	15'-11"	143	6	5'-5"	3'-11"	6'-1"	0'-8"	0'-4"	
5P613	28	17'-3"	725	6	6'-4"	4'-1"	6'-8"	0'-4"	0'-2"	
5P614	24	16'-11"	610	6	5'-11"	3'-11"	6'-7"	0'-8"	0'-4"	
5P615	5	19'-1"	143	7	6'-4"	5'-10"	0'-2"	0'-4"		
5P616	5	15'-4"	115	18	6'-2"	4'-9"	4'-9"			
5P617	4	8'-10"	53	18	6'-2"	1'-6"	1'-6"			
5P801	8	31'-7"	675	STR						
5P802	2	21'-1"	113	STR						
5P803	2	8'-7"	46	STR						
Δ 5SP501	1	23'-8"	1509	15	7'-0"	0'-4 1/2"				
Δ 5SP502	1	42'-5"	2834	15	5'-6"	0'-3 1/4"				
		TOTAL	26149							



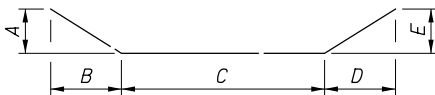
TYPE 18



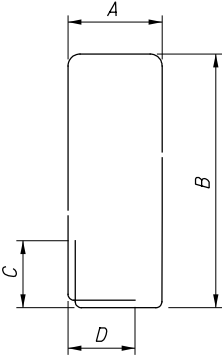
TYPE 19



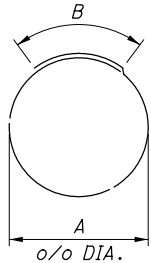
TYPE 21



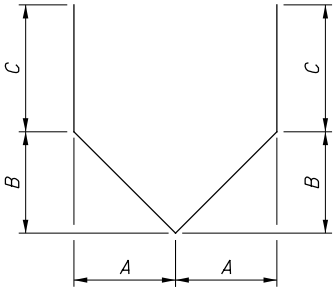
TYPE 26



TYPE 35



TYPE 38

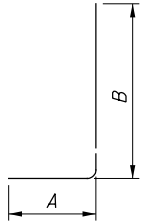


TYPE 39

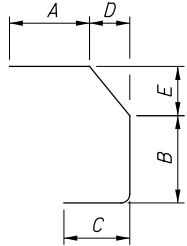
REINFORCING STEEL LIST - PIER 6										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E/RAD.	INCR.
Δ 6DS1101	48	21'-6"	5483	STR						
Δ 6DS1102	36	15'-4"	2933	STR						
Δ 6DS401	9	17'-7"	106	38	5'-0"	1'-11"				
6P1101	12	34'-11"	2226	18	31'-7"	2'-0"	2'-0"			
6P1102	20	31'-7"	3356	STR						
6P1103	36	30'-2"	5770	19	28'-7"					
6P401	78	2'-2"	113	21	0'-4"	1'-0"				
6P402	4	13'-3"	35	39	3'-3"	1'-11"	2'-11"			
6P403	4	12'-4"	33	39	3'-0"	1'-9"	2'-9"			
6P404	16	4'-4"	46	18	1'-6"	1'-6"	1'-6"			
6P405	8	17'-7"	94	38	5'-0"	1'-11"				
6P501	6	26'-2"	164	STR						
6P502	4	3'-8"	15	STR						
6P601	14	11'-0"	231	STR						
6P602	7	12'-0"	126	26	0'-2"	1'-6"	9'-0"	1'-6"	0'-2"	
6P603	4	7'-4"	44	STR						
6P604	2	17'-6"	53	STR						
6P605	7	6'-7"	69	11	0'-8"	0'-4"	0'-2"	4'-5"	1'-6"	
6P606	7	8'-1"	85	11	0'-8"	0'-4"	0'-2"	5'-11"	1'-6"	
6P607	13	8'-8"	169	18	6'-0"	1'-6"	1'-6"			
6P608	21	7'-6"	237	1	1'-6"	6'-2"				
6P609	7	8'-2"	86	18	5'-6"	1'-6"	1'-6"			
6P610	80	13'-5"	1612	18	4'-3"	4'-9"	4'-9"			
6P611	20	14'-1"	423	6	4'-6"	3'-11"	5'-2"	0'-8"	0'-4"	
6P612	6	15'-11"	143	6	5'-5"	3'-11"	6'-1"	0'-8"	0'-4"	
6P613	28	17'-3"	725	6	6'-4"	4'-1"	6'-8"	0'-4"	0'-2"	
6P614	26	16'-11"	661	6	5'-11"	3'-11"	6'-7"	0'-8"	0'-4"	
6P615	5	19'-1"	143	7	6'-4"	5'-10"	0'-2"	0'-4"		
6P616	6	14'-2"	128	35	2'-10"	3'-8"	1'-0"	1'-0"		
6P617	10	4'-2"	63	1	1'-7"	2'-9"				
6P618	5	15'-4"	115	18	6'-2"	4'-9"	4'-9"			
6P801	8	31'-7"	675	STR						
6P802	2	21'-1"	113	STR						
6P803	2	8'-7"	46	STR						
6P901	10	4'-0"	136	1	1'-7"	2'-9"				
Δ 6SP401	1	21'-6"	883	15	7'-0"	0'-4 1/2"				
Δ 6SP501	1	24'-7"	1665	15	5'-6"	0'-3 1/4"				
		TOTAL	19600							

NOTES:

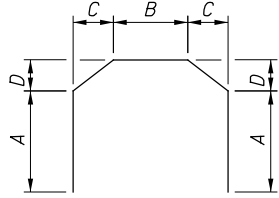
1. SEE SHEET 76 / 80 FOR NOTES AND LEGEND.



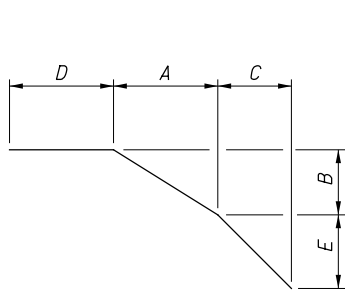
TYPE 1



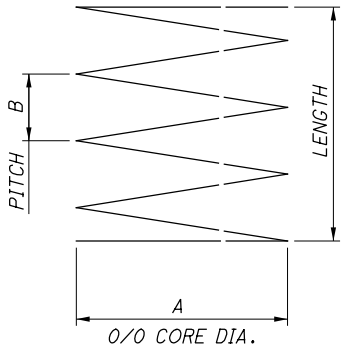
TYPE 6



TYPE 7



TYPE 11



TYPE 15

REINFORCING STEEL LIST - DECK - UNIT 1										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E/RAD.	INCR.
SA401	468	30'-0"	9379	STR						
SA402	36	16'-10"	405	STR						
SA403	36	3'-4"	80	STR						
SA404	818	3'-6"	1912	3	0'-8"	0'-8"	2'-1"	0'-7"		
SA405	34	4'-5"	100	18	1'-1"	1'-9"	1'-9"			
SA406	5	33'-0"	110	STR						
	1	10'-0"								
SA407	S.O.	TO	481	STR						0'-6 ⁷ / ₈ "
	36	30'-0"								
SA501	791	30'-0"	24750	STR						
SA502	42	22'-8"	993	STR						
SA503	42	3'-9"	164	STR						
SA504	828	34'-2"	29506	22	33'-0"					
SA505	830	33'-0"	28568	STR						
SA506	1656	8'-7"	14825	19	8'-0"					
SA507	35	16'-6"	602	STR						
SA508	35	11'-4"	414	STR						
SA509	42	3'-6"	153	19	2'-11"					
SA510	34	4'-10"	171	26	0'-4 ¹ / ₂ "	0'-4 ¹ / ₂ "	2'-2"	1'-8"	1'-5"	
	1	10'-0"								
SA511	S.O.	TO	876	STR						0'-5 ⁷ / ₈ "
	42	30'-0"								
		TOTAL	113489							

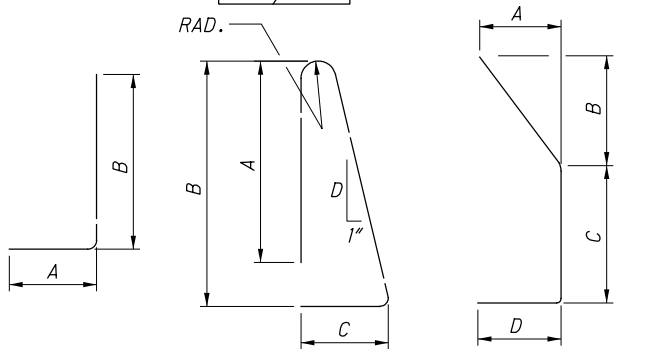
REINFORCING STEEL LIST - DECK - UNIT 2										
SB401	540	30'-0"	10822	STR						
SB402	36	7'-10"	188	STR						
SB403	36	3'-4"	80	STR						
SB404	910	3'-6"	2128	3	0'-8"	0'-8"	2'-1"	0'-7"		
SB405	34	4'-6"	102	18	1'-2"	1'-9"	1'-9"			
SB406	5	33'-0"	110	STR						
	1	7'-6"								
SB407	S.O.	TO	451	STR						0'-7 ³ / ₄ "
	36	30'-0"								
SB501	875	30'-0"	27379	STR						
SB502	42	14'-6"	635	STR						
SB503	42	3'-9"	164	STR						
SB504	920	34'-2"	32785	22	33'-0"					
SB505	922	33'-0"	31734	STR						
SB506	1840	8'-7"	16472	19	8'-0"					
SB507	35	7'-10"	286	STR						
SB508	35	7'-6"	274	STR						
SB509	35	18'-6"	675	STR						
SB510	34	4'-10"	171	26	0'-4 ¹ / ₂ "	0'-4 ¹ / ₂ "	2'-0"	1'-9"	1'-7"	
SB511	42	3'-6"	153	19	2'-11"					
	1	7'-6"								
SB512	S.O.	TO	821	STR						0'-6 ⁵ / ₈ "
	42	30'-0"								
		TOTAL	125430							

REINFORCING STEEL LIST - PARAPETS										
ASR401	11	8'-3"	62	STR						
ASR402	4	7'-6"	20	STR						
ASR403	12	10'-0"	80	STR						
ASR404	6	6'-4"	25	25	2'-6"	2'-5"	1'-4 ¹ / ₄ "	0'-1 ¹ / ₂ "	0'-5"	
ASR405	6	5'-1"	20	STR						
ASR501	92	7'-4"	705	2	3'-0"	3'-3"	0'-11"	0'-5 ¹ / ₄ "	0'-2 ³ / ₄ "	
ASR502	4	29'-7"	123	STR						
ASR503	6	14'-8"	92	STR						
ASR504	2	14'-7"	30	STR						
ASR505	2	10'-10"	28	STR						
ASR506	2	6'-4"	13	STR						
ASR507	2	25'-10"	54	STR						
ASR508	2	21'-4"	45	STR						
ASR601	92	3'-2"	438	12	0'-11"	0'-3 ¹ / ₂ "	1'-6 ¹ / ₂ "	1'-0"		
ASR602	92	2'-5"	334	1	1'-0"	1'-7"				
ASR603	3	14'-8"	66	STR						
ASR604	1	14'-7"	22	STR						

REINFORCING STEEL LIST - PARAPETS										
MARK	NO.	LENGTH	WEIGHT	TYPE	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E/RAD.	INCR.
ASR605	1	10'-10"	16	STR						
ASR606	1	6'-4"	10	STR						
	1	4'-2"				3'-4"				
ASR607	S.O.	TO	76	1	1'-0"	TO				
	11	5'-0"				4'-2"				
ASR608	8	4'-4"	52	1	1'-0"	3'-6"				
BP501	2	7'-4"	15	2	3'-0"	3'-3"	0'-11"	0'-5 ¹ / ₄ "	0'-2 ³ / ₄ "	
BP502	6	0'-11"	6	STR						
BP601	2	2'-5"	7	1	1'-0"	1'-7"				
BP602	2	3'-2"	10	12	0'-11"	0'-3 ¹ / ₂ "	1'-6 ¹ / ₂ "	1'-0"		
BP603	1	0'-11"	1	STR						
FAR501	10	7'-4"	76	2	3'-0"	3'-3"	0'-11"	0'-5 ¹ / ₄ "	0'-2 ³ / ₄ "	
FAR502	6	9'-2"	57	STR						
FAR601	10	4'-2"	63	9	0'-11"	0'-2"	2'-5"	0'-11"		
FAR602	10	3'-4"	50	STR						
FAR603	1	9'-2"	14	STR						
	4	3'-4"			0'-5 ¹ / ₂ "					
R401	S.O.	TO	28	18	TO	1'-6"	1'-6"			0'-2"
	3	3'-8"			0'-9 ¹ / ₂ "					
R501	1812	7'-4"	13859	2	3'-0"	3'-3"	0'-11"	0'-5 ¹ / ₄ "	0'-2 ³ / ₄ "	
R502	2	10'-10"	23	STR						
R503	54	14'-7"	821	STR						
R504	102	7'-1"	754	STR						
R505	236	30'-0"	7384	STR						
R506	4	5'-1"	21	STR						
R507	2	14'-3"	30	STR						
R508	4	14'-4"	60	STR						
R509	54	14'-8"	826	STR						
R510	110	7'-2"	822	STR						
R511	2	14'-2"	30	STR						
R512	4	24'-3"	101	STR						
R513	2	14'-5"	30	STR						
R514	4	22'-7"	94	STR						
R515	2	9'-0"	19	STR						
R516	2	8'-9"	18	STR						
R517	2	8'-11"	19	STR						
R518	2	11'-2"	23	STR						
R519	2	11'-3"	23	STR						
R520	4	15'-2"	63	STR						
R521	4	7'-1"	30	2	3'-0"	3'-3"	0'-10"	0'-5 ¹ / ₄ "	0'-2"	
R522	2	12'-1"	25	STR						
R601	1816	2'-5"	6592	1	1'-0"	1'-7"				
R602	1812	3'-2"	8618	12	0'-11"	0'-3 ¹ / ₂ "	1'-6 ¹ / ₂ "	1'-0"		
R603	1	10'-10"	16	STR						
R604	27	14'-7"	591	STR						
R605	51	7'-1"	543	STR						
R606	1	14'-3"	21	STR						
R607	2	14'-4"	43	STR						
R608	27	14'-8"	595	STR						
R609	55	7'-2"	592	STR						
R610	1	14'-2"	21	STR						
R611	1	14'-5"	22	STR						
R612	1	9'-0"	14	STR						
R613	1	8'-9"	13	STR						
R614	1	8'-11"	13	STR						
R615	1	11'-2"	17	STR						
R616	1	11'-3"	17	STR						
R617	4	3'-0"	18	12	0'-10"	0'-3 ¹ / ₂ "	1'-6 ¹ / ₂ "	0'-11"		
R618	1	12'-1"	18	STR						
RAR501	17	7'-4"	130	2	3'-0"	3'-3"	0'-11"	0'-5 ¹ / ₄ "	0'-2 ³ / ₄ "	
RAR502	6	9'-8"	60	STR						
RAR503	6	4'-8"	29	STR						
RAR601	17	4'-2"	106	9	0'-11"	0'-2"	2'-5"	0'-11"		
RAR602	17	3'-4"	85	STR						
RAR603	1	9'-8"	29	STR						
RAR604	1	4'-8"	7	STR						
		TOTAL	45902							

NOTES:

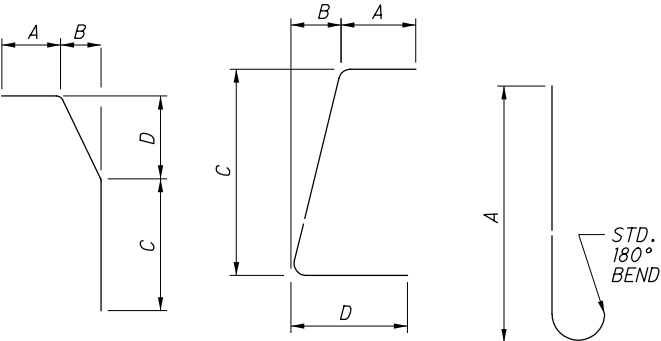
1. SEE SHEET 76 / 80 FOR NOTES AND LEGEND.



TYPE 1

TYPE 2

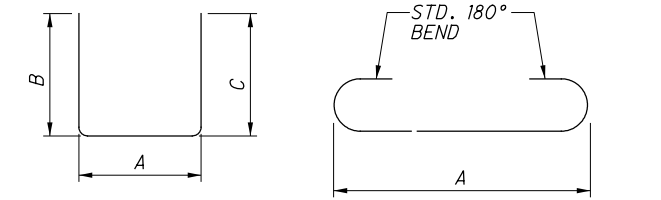
TYPE 3



TYPE 9

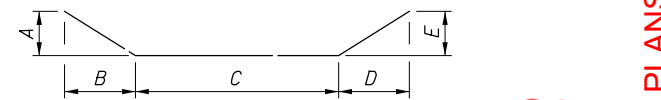
TYPE 12

TYPE 19

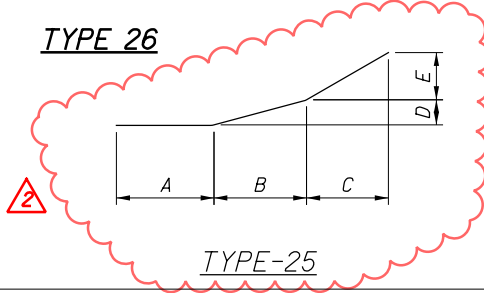


TYPE 18

TYPE 22



TYPE 26



TYPE-25

REVISIONS BY:

PARSONS

100 East Campus View Boulevard, Suite 250
Columbus, OH 43235

ISSUE RECORD: BU-17 STRUCTURES

NO.	DATE	DESCRIPTION
1	03-2021	CIP WALLS TO MSE
2	12-2021	WINGWALL EXTENDED 5'

SUM-76/77/8-10.99/11.54/0.00

PID No. 101402

80/80

104104