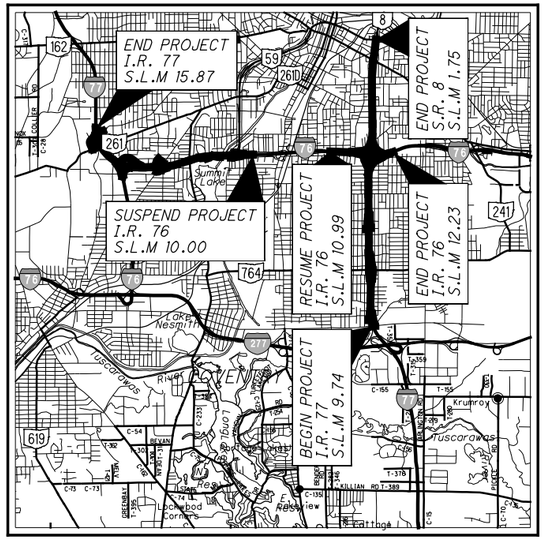
STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

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

CITY OF AKRON

SUMMIT COUNTY



LOCATION MAP

LATITUDE: N 41° 03′ 43″ LONGITUDE: W 81° 30′ 17″

SCALE IN MILES
0 1 2 3 4

N

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

DESIGN DESIGNATION

SEE BU-19

DESIGN EXCEPTIONS

SEE BU-32

INDEX OF SHEETS:

PROJECT DESCRIPTION

THE AKRON CENTRAL INTERCHANGE PROJECT (PID 102329) INCLUDES RECONSTRUCTION OF IR-76 EB/WB PAVEMENT FROM SLM 11.05 (IR-76) TO SLM (IR-76) FOR APPROX. 1.16 MILES OF MAINLINE WORK. THIS PROJECT ALSO INCLUDES REPLACEMENT OF TWO FREEWAY STRUCTURES (RAMP N AND RAMP Q) ON NEW ALIGNMENTS, WIDENING OF TWO EXISTING BRIDGES (IR-76 EB OVER BROWN STREET AND IR-76 WB OVER INMAN STREET), CONSTRUCTION OF A NEW PEDESTRIAN/MULTI-USE OVERPASS SPANNING SR-8, AND CONSTRUCTION OF NOISE BARRIERS AT THE PERIMETER OF THE INTERCHANGE. PORTIONS OF SR-9, LANE O AND LANE S ARE TO BE RESURFACED. THE EXISTING IR-76 WB TO INMAN STREET AND IR-77 SB TO LOVERS LANE WILL BE REMOVED PERMANENTLY, AS WELL AS THE EXISTING LAFOLLETTE STREET BRIDGE OVER SR-8 (SUM-77-1184).

BUILDABLE UNIT 13 DESCRIPTION

THIS BUILDABLE UNIT COVERS THE SUPERSTRUCTURE REPLACEMENT OF BRIDGE NUMBERS SUM-76-0914 (IR-76 OVER MANCHESTER RD.), SUM-76-0954 (IR-76 OVER BOWERY ST.) AND SUM-76-0964 (IR-76 OVER LAKESHORE BLVD.).

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

PLAN PREPARED BY:
PARSONS

ENGINEERS SEAL:
FOR STRUCTURES OVER 20′
STATE OF OHIO
THOMAS E. STORA
E-66834
REGISTERED PROFESSIONAL ENGINEER
SIGNED:
DATE: 11/04/2021

STANDARD CONSTRUCTION DRAWINGS								*SUPPLEMENTAL SPECIFICATIONS*
AS-1-15	*7/17/15*	*HL-50.21*	*1/15/21*					*800-2019 10/16/20*
AS-2-15	*1/18/19*							
GSD-1-19	*1/15/21*							
PCB-91	*7/17/20*							
SBR-1-20	*7/17/20*							
SBR-2-20	*1/15/21*							
SICD-1-96	*7/18/14*							
SICD-2-14	*1/15/21*							
								SPECIAL PROVISIONS

ruhlin SS SHELLY & SANDS
AKRON BELTWAY JV

BU-13
STRUCTURES
BRIDGE NOS.
SUM-76-0914
SUM-76-0954
SUM-76-0964

RELEASED FOR CONSTRUCTION
NOVEMBER 4, 2021

2021-11-04_BU 13 - RFC PLANS

CONSTRUCTION PROJECT NO. **21-3000**
PID NO. **102329**
FEDERAL PROJECT NO. **E180(428)**
RAILROAD INVOLVEMENT **NONE**
SUM-76/77/8-8.24/9.74/0.00
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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED	07-17-15
AS-2-15	REVISED	01-18-19
GSD-1-19	REVISED	01-15-21
PCB-91	REVISED	07-17-20
SBR-1-20	REVISED	07-17-20
SBR-2-20	REVISED	01-15-21
SICD-1-96	DATED	07-18-14
SICD-2-14	REVISED	01-15-21

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

800-2019 DATED 10-16-20

DESIGN SPECIFICATIONS

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

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.05 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING

DESIGN LOADING: HL-93

FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SF

DESIGN DATA

CONCRETE CLASS QC2

-COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1

-COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

REINFORCING STEEL ASTM A615 OR A996, GRADE 60

-MINIMUM YIELD STRENGTH 60,000 PSI

STRUCTURAL STEEL - ASTM A709 GRADE 50

-YIELD STRENGTH 50,000 PSI

STEEL H-PILES - ASTM A572

-YIELD STRENGTH 50,000 PSI

DECK PROTECTION METHOD

EPOXY COATED REINFORCING STEEL

2½" CONCRETE COVER

MONOLITHIC WEARING SURFACE

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

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

UTILITIES

FOR A LIST OF UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS, SEE BU-32

LIGHTING AND ITS

SEE BU-36 FOR REQUIRED LIGHTING AND ITS WORK

MAINTENANCE OF TRAFFIC:

FOR MAINENANCE OF TRAFFIC DETAILS, SEE BU-4.

TEMPORARY SHORING:

ALL TEMPORARY SHORING DESIGN WILL BE PERFORMED IN ACCORDANCE WITH CMS 501 AND SUBMITTED PRIOR TO CONSTRUCTION

PROPOSED WORK

SUM-76-0914 (MANCHESTER ROAD):

1. REMOVE EXISTING DECK OVERLAY, DECK, APPROACH SLABS, PARAPETS, BACKWALLS, PORTIONS OF BEAM SEATS, PORTIONS OF WINGWALLS, EXPANSION JOINTS, CROSS-FRAMES, BEAMS AND BEARINGS PER PLANS.
2. CONSTRUCT NEW ABUTMENT SEATS AND PIER EXTENSIONS AND PATCH EXISTING ABUTMENT, WINGWALLS AND PIERS.
3. PLACE NEW ELASTOMERIC BEARINGS.
4. CONSTRUCT NEW BEAMS AND DIAPHRAGMS.
5. CONSTRUCT DIAPHRAGMS.
6. CONSTRUCT NEW DECK AND APPROACH SLABS.
7. CONSTRUCT NEW PARAPET.
8. OPEN BRIDGE TO TRAFFIC.
9. PREPARE SURFACES AND PAINT BEAMS AND DIAPHRAGMS.

SUM-76-0954 (BOWERY STREET):

1. REMOVE EXISTING DECK OVERLAY, DECK, APPROACH SLABS, PARAPETS, BACKWALLS, ABUTMENTS AND WINGWALLS, EXPANSION JOINTS, CROSS-FRAMES, BEAMS AND BEARINGS PER PLANS.
2. DRIVE PILING AT ABUTMENTS
3. CONSTRUCT NEW ABUTMENTS, WINGWALLS, PIER EXTENSIONS, AND PATCH AND INSTALL FRP WRAPPING AT EXISTING PIERS.
4. PLACE NEW ELASTOMERIC BEARINGS.
5. CONSTRUCT NEW BEAMS AND DIAPHRAGMS.
6. CONSTRUCT DIAPHRAGMS.
7. CONSTRUCT NEW DECK AND APPROACH SLABS.
8. CONSTRUCT NEW PARAPET.
9. OPEN BRIDGE TO TRAFFIC.
10. PREPARE SURFACES AND PAINT BEAMS AND DIAPHRAGMS.

SUM-76-0964 (LAKESHORE BOULEVARD):

1. REMOVE EXISTING DECK OVERLAY, DECK, APPROACH SLABS, PARAPETS, BACKWALLS, ABUTMENTS AND WINGWALLS, EXPANSION JOINTS, CROSS-FRAMES, BEAMS AND BEARINGS PER PLANS.
2. DRIVE PILING AT ABUTMENTS
3. CONSTRUCT NEW ABUTMENTS, WINGWALLS, PIER EXTENSIONS, AND PATCH AND INSTALL FRP WRAPPING AT EXISTING PIERS.
4. PLACE NEW ELASTOMERIC BEARINGS.
5. CONSTRUCT NEW BEAMS AND DIAPHRAGMS.
6. CONSTRUCT NEW CONCRETE END DIAPHRAGMS.
7. CONSTRUCT NEW DECK AND APPROACH SLABS.
8. CONSTRUCT NEW PARAPET.
9. OPEN BRIDGE TO TRAFFIC.
10. PREPARE SURFACES AND PAINT BEAMS AND DIAPHRAGMS.

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

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

CONCRETE DECK REMOVALS (FOR STEEL TO TEMPORARILY REMAIN):

THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECKS INCLUDING PARAPETS, DECK JOINTS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSSFRAMES, ETC.). THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE AS WELL AS THE ROADWAY BELOW. THE USE OF EXPLOSIVES AND HEADACHE BALL TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05 THAT INCLUDE SPECIFIC DETAILS SHOWING SUPPORT OF THE PARAPET SECTIONS DURING FINAL SAW CUTTING AND RELEASE FROM THE DECK.

CONSTRUCTION JOINT PREPARATION:

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

SUBSTRUCTURE CONCRETE REMOVAL (SUM-76-0914 OVER MANCHESTER ROAD):

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

STRUCTURE/CULVERT IDENTIFICATION SIGNS:

STRUCTURE IDENTIFICATION SIGNS (I-H25b) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS AT THE FOLLOWING STRUCTURES: SUM-76-0914, SUM-76-0954 & SUM-76-0964

ITEM SPECIAL - MISC.: VERTICAL CLEARANCE:

BEFORE ANY CONSTRUCTION TAKES PLACE AND AFTER ALL CONSTRUCTION HAS BEEN COMPLETED, A REGISTERED SURVEYOR WILL TAKE VERTICAL CLEARANCE MEASUREMENTS AT LOCATIONS INDICATED ON THE APPROVED ODOT FORM (AVAILABLE IN THE DISTRICT 4 STRUCTURES AND PAVEMENT OFFICE). THE FINAL MEASUREMENTS SHALL BE RECORDED ON THE FORM AND SUBMITTED TO THE PROJECT ENGINEER AND THE DISTRICT 4 STRUCTURES AND PAVEMENT ENGINEER. THE RECORD SHALL BEAR THE SEAL OF THE LICENSED SURVEYOR WHO HAS TAKEN THE MEASUREMENTS. THIS WORK SHALL BE PERFORMED AT THE SUM-76-0914, SUM-76-0954 AND SUM-76-0964 STRUCTURES.

ABBREVIATION LIST

ABUT. = ABUTMENT	FWD. = FORWARD
APP. = APPROACH	INV. = INVERT
BRG. = BEARING	LT. = LEFT
BOTT. = BOTTOM	N.P.C.P.P. = NON-PERFORATED CORRUGATED PLASTIC PIPE
C.I.P. = CAST-IN-PLACE	N.F. = NEAR FACE
C.J. = CONSTRUCTION JOINT	P.C.P.P. = PERFORATED CORRUGATED PLASTIC PIPE
CLR. = CLEARANCE	P.E.F.J. = PREFORMED EXPANSION JOINT FILLER
CONSTR. = CONSTRUCTION	PROP. = PROPOSED
DIAM. = DIAMETER	PT. = POINT
DWG. = DRAWING	RA = REAR ABUTMENT
E.F. = EACH FACE	RT. = RIGHT
EB = EASTBOUND	SHLDR = SHOULDER
EL. = ELEVATION	S.O. = SERIES OF
EQ. = EQUAL	SPA. = SPACES
EXIST. = EXISTING	S.R. = STATE ROUTE
EXP. = EXPANSION	STA. = STATION
FA = FORWARD ABUTMENT	STD. = STANDARD
F.F. = FAR FACE	TLP = TOP OF LEVELING PAD
F.S. = FIELD SPLICE	TYP. = TYPICAL
FTG.= FOOTING	U.N.O. = UNLESS OTHERWISE NOTED
	WB = WESTBOUND

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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

DESIGNED	DRAWN	REVIEWED	DATE
TES	TYW	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CDB			

GENERAL NOTES - 1 OF 3

BRIDGE NO. SUM-76-0914, SUM-76-0954, SUM-76-0964

I.R. 76 OVER MANCHESTER ROAD, BOWERY STREET AND LAKESHORE BOULEVARD

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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2021-11-04_BU 13 - RFC PLANS

DECK PLACEMENT DESIGN ASSUMPTIONS

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

FOR BRIDGE NO. SUM-76-0914 (MANCHESTER ROAD) AN EIGHT WHEEL FINISHING MACHINE WITH MAXIMUM WHEEL LOADS OF:
2.37 KIPS FOR PHASE 3A
2.56 KIPS FOR PHASE 4A
2.33 KIPS FOR PHASE 5A

FOR BRIDGE NO. SUM-76-0954 (BOWERY STREET) AN EIGHT WHEEL FINISHING MACHINE WITH MAXIMUM WHEEL LOADS OF:
3.02 KIPS FOR PHASE 3A
2.62 KIPS FOR PHASE 4A
2.27 KIPS FOR PHASE 5A

FOR BRIDGE NO. SUM-76-0964 (LAKESHORE BOULEVARD) AN EIGHT WHEEL FINISHING MACHINE WITH MAXIMUM WHEEL LOADS OF:
2.24 KIPS FOR PHASE 3A
2.32 KIPS FOR PHASE 4A
2.20 KIPS FOR PHASE 5A

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

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN.

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

ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN:

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING, AS A RESULT OF THIS WORK, ACCORDING TO C&MS 509.09.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN:

THIS WORK WILL CONSIST OF INSPECTING AND MARKING OF DETERIORATED CONCRETE AREAS AT THE EXISTING ABUTMENTS AND PIERS, BY THE CONTRACTOR, TO BE CONFIRMED BY THE ENGINEER IN CHARGE. SPALLS FORMING ARE EVIDENCED BY A VISUAL EDGE. DELAMINATIONS THAT DO NOT HAVE A VISIBLE EDGE WILL BE CONFIRMED AND OUTLINED BY THE ENGINEER IN CHARGE. ALL APPROVED DELINEATED AREAS SHALL BE REPAIRED IN ACCORDANCE WITH ITEM 519 - PATCHING CONCRETE SURFACES. REPAIR OF EXISTING CONCRETE WILL BE PAID FOR AT THE UNIT BID PRICE FOR PATCHING CONCRETE STRUCTURES. THIS PRICE WILL INCLUDE THE COST OF LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

THE FOLLOWING ESTIMATED QUANTITIES WERE PROVIDED BY ODOT AT TIME OF BID:

100SF - SUM-76-0914 (MANCHESTER)
1130SF - SUM-76-0954 (BOWERY)
460SF - SUM-76-0964 (LAKESHORE)

STRUCTURE GROUNDING

THE SUM-76-0914, SUM-76-0954 AND SUM-76-0964 STRUCTURES SHALL BE GROUNDED IN ACCORDANCE WITH STD. DWG. HL-50.21

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):

SUM-76-0954 (BOWERY STREET):
THE ULTIMATE BEARING VALUE IS 225 KIPS PER PILE FOR THE HP10X42 REAR ABUTMENT PILES.
THE ULTIMATE BEARING VALUE IS 242 KIPS PER PILE FOR THE HP10X42 FORWARD ABUTMENT PILES.

ABUTMENT PILES:
38 PILES 50 FEET LONG, ORDER LENGTH (HP10X42 REAR ABUTMENT PILES)
41 PILES 85 FEET LONG, ORDER LENGTH (HP10X42 FORWARD ABUTMENT PILES)
2 DYNAMIC LOAD TESTING ITEMS.

SUM-76-0964 (LAKESHORE BOULEVARD):
THE ULTIMATE BEARING VALUE IS 246 KIPS PER PILE FOR THE HP10X42 REAR ABUTMENT PILES.
THE ULTIMATE BEARING VALUE IS 246 KIPS PER PILE FOR THE HP10X42 FORWARD ABUTMENT PILES.

ABUTMENT PILES:
19 PILES 85 FEET LONG, ORDER LENGTH (HP10X42 REAR ABUTMENT PILES)
20 PILES 60 FEET LONG, ORDER LENGTH (HP10X42 FORWARD ABUTMENT PILES)
1 DYNAMIC LOAD TESTING ITEMS.

PILE SPLICES:

IN LIEU OF USING THE FULL PENETRATION BUTT WELDS SPECIFIED IN C&MS 507.09 TO SPLICE STEEL H-PILES, THE CONTRACTOR MAY USE A MANUFACTURED H-PILE SPLICER. FURNISH SPLICERS FROM THE FOLLOWING MANUFACTURER:

ASSOCIATED PILE AND FITTING CORPORATION
8 WOOD HOLLOW RD. PLAZA 1
PARSIPPANY, NEW JERSEY 07054

INSTALL AND WELD THE SPLICER TO THE PILE SECTIONS IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN ASSEMBLY PROCEDURE SUPPLIED TO THE ENGINEER BEFORE THE WELDING IS PERFORMED.

PILE DRIVING CONSTRAINTS:

BOWERY REAR ABUTMENT AND LAKESHORE FORWARD ABUTMENT:
THE MINIMUM RATED ENERGY OF THE HAMMER USED TO INSTALL THE PILES AT THE REAR ABUTMENT SHALL BE 20,000 FOOT-POUNDS. ENSURE THAT STRESSES IN THE PILES DURING DRIVING DO NOT EXCEED 45,000 POUNDS PER SQUARE INCH.

BOWERY FORWARD ABUTMENT AND LAKESHORE REAR ABUTMENT:
THE MINIMUM RATED ENERGY OF THE HAMMER USED TO INSTALL THE PILES AT THE FORWARD ABUTMENT SHALL BE 30,000 FOOT-POUNDS. ENSURE THAT STRESSES IN THE PILES DURING DRIVING DO NOT EXCEED 45,000 POUNDS PER SQUARE INCH.

PROTECTION OF ADJACENT STRUCTURES:

THE CONTRACTOR SHALL PREPARE A PLAN OF PROTECTION FOR BRIDGE NOS. SUM-59-0070R AND SUM-59-0019L FOR THE REMOVAL OF EXISTING SUPERSTRUCTURE AND ABUTMENTS AND EXCAVATION, PILE DRIVING, ABUTMENT CONSTRUCTION, AND SUPERSTRUCTURE ERECTION FOR THE BOWERY STREET (SUM-76-0914) AND LAKE SHORE BOULEVARD (SUM-76-0964) BRIDGES AND SUBMIT TO THE ENGINEER IN CHARGE FOR APPROVAL.

ASBESTOS NOTIFICATION - SUM-76-0913 (IR-76 OVER MANCHESTER)

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST INSPECTED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION;

THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE STRUCTURE.

THE DEPARTMENT HAS PROVIDED A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM (PARTIALLY COMPLETED) AND THE ASBESTOS INSPECTION REPORT IN THE REFERENCE FILES FOR THIS PROJECT. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO THE OEPA AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. ONLINE SUBMISSION IS AVAILABLE AT http://www.epa.ohio.gov/asbestos AND IS ENCOURAGED OR, THE CONTRACTOR SHALL SUBMIT IT TO ONE OF THE ADDRESSES BELOW:

ASBESTOS PROGRAM
OHIO EPA, DAPC
P.O. BOX 1049
COLUMBUS, OH 43216-1049

-OR-

ASBESTOS PROGRAM
OHIO EPA, DAPC
50 W. TOWN ST., SUITE 700
COLUMBUS, OH 43215

THE FORM SHALL INCLUDE:
1. THE CONTRACTORS NAME AND ADDRESS
2. THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE STRUCTURE DEMOLITION AND/OR RENOVATION
3. DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHODS BE USED
4. ALL NECESSARY FEES

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED NOTIFICATION OF DEMOLITION AND RENOVATION FORM TO THE PROJECT ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIALS NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM.

ASBESTOS NOTIFICATION - SUM-76-0956 (IR-76 OVER BOWERY AND OHIO CANAL) AND SUM-76-0966 (IR-76 OVER LAKESHORE)

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST INSPECTED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION;

THE INSPECTION DETERMINED THAT NO ASBESTOS IS PRESENT. HOWEVER, AN EXISTING 2" ELECTRIC CONDUIT (ASBESTOS-CEMENT, CONCRETE ENCASED) WAS MENTIONED IN THE ORIGINAL BRIDGE PLANS. THIS CONTRACTOR SHALL ASSUME THIS MATERIAL CONTAINS ASBESTOS AND DISPOSE OF IT ACCORDINGLY. THE ASBESTOS CONTAINING MATERIAL SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR SHALL ENSURE THAT THE ABATEMENT, TRANSPORT, AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL IS CONDUCTED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS. THE CONTRACTOR SHALL ENSURE THAT ALL DOCUMENTATION RELATED TO THE ABATEMENT, TRANSPORT, AND DISPOSAL OF ASBESTOS CONTAINING MATERIALS IS SUBMITTED TO THE PROJECT ENGINEER FOR RECORD KEEPING WITHIN 2 WEEKS OF COMPLETION.

THE DEPARTMENT HAS PROVIDED A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM (PARTIALLY COMPLETED) AND THE ASBESTOS INSPECTION REPORT IN THE REFERENCE FILES FOR THIS PROJECT. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO THE OEPA AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. ONLINE SUBMISSION IS AVAILABLE AT http://www.epa.ohio.gov/asbestos AND IS ENCOURAGED OR, THE CONTRACTOR SHALL SUBMIT IT TO ONE OF THE ADDRESSES BELOW:

ASBESTOS PROGRAM
OHIO EPA, DAPC
P.O. BOX 1049
COLUMBUS, OH 43216-1049

-OR-

ASBESTOS PROGRAM
OHIO EPA, DAPC
50 W. TOWN ST., SUITE 700
COLUMBUS, OH 43215

THE FORM SHALL INCLUDE:
1. THE CONTRACTORS NAME AND ADDRESS
2. THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE STRUCTURE DEMOLITION AND/OR RENOVATION
3. DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHODS BE USED
4. ALL NECESSARY FEES

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED NOTIFICATION OF DEMOLITION AND RENOVATION FORM TO THE PROJECT ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIALS NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM.

THE CONTRACTOR SHALL FURNISH ALL THE LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PROPERLY ABATE, TRANSPORT, AND DISPOSE OF ASBESTOS CONTAINING MATERIALS IN A LANDFILL LICENSED BY THE LOCAL HEALTH DEPARTMENT AND PERMITTED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY - DIVISION OF AIR POLLUTION CONTROL TO ACCEPT ASBESTOS CONTAINING MATERIAL.

ITEM 514, FIELD PAINTING STRUCTURAL STEEL, FINISH COAT:

THE FINISH COAT SHALL BE FEDERAL COLOR #10080

BRIDGE PAINTING EQUIPMENT ON SHOULDERS:

IF BRIDGE PAINTING EQUIPMENT IS TO REMAIN ON THE SHOULDERS WHEN THE CONTRACTOR IS NOT WORKING, IT SHALL BE PLACED BEHIND PORTABLE CONCRETE BARRIER (PCB) AND A WORK ZONE IMPACT ATTENUATOR (WZIA) SHALL PROTECT THE LEADING BLUNT END OF THE PCB (SEE OMUTCD, FIGURE 6H-5 "SHOULDER CLOSURE ON FREEWAY" (TYPICAL APPLICATION 5)).

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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TES	TYW	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CDB			

GENERAL NOTES - 2 OF 3
BRIDGE NO. SUM-76-0914, SUM-76-0954, SUM-76-0964
I.R. 76 OVER MANCHESTER ROAD, BOWERY STREET AND LAKESHORE BOULEVARD

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2 / 3

3
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2021-11-04_BU 13 - RFC PLANS

ITEM SPECIAL - STRUCTURES COMPOSITE FIBER WRAP

SYSTEM DESCRIPTION:

THIS WORK SHALL CONSIST OF PROVIDING A FIBER REINFORCED POLYMER (FRP) REINFORCEMENT FOR CONCRETE STRUCTURE STRENGTHENING AND PROTECTION SYSTEM. THE FRP SYSTEM IS TO BE APPLIED TO THE PIER CAP AS DESIGNATED BY THE PROJECT DRAWINGS.

THE CONCRETE IS TO BE CLEANED AND PREPARED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMENDATIONS AND AS OUTLINED IN THE "SURFACE PREPARATION" ON THIS PRIOR TO THE INSTALLATION OF THE FRP SYSTEM.

JOB-SITE CONDITIONS:

A. DO NOT APPLY FRP REINFORCEMENT MATERIALS IF RAINING, SNOWING, OR DEW CONDENSATION IS EXPECTED OR EXISTING CONCRETE SURFACE IS WET OR IF THE AMBIENT OR SURFACE TEMPERATURE ARE BELOW 40 F (4C).

B. THE AMBIENT TEMPERATURE AND TEMPERATURE OF THE EPOXY COMPONENTS SHALL BE BETWEEN 50 F (10C) AND 80 F (27C) AT THE TIME OF MIXING. SEE APPROPRIATE TECHNICAL DATA SHEETS FOR MORE SPECIFIC INSTRUCTIONS.

PRODUCT:

THE PRODUCT TO BE USED WILL BE SIKAWRAP HEX FABRIC (103C) OR APPROVED EQUAL, WITH THE FOLLOWING REQUIREMENTS:

A. FRP REINFORCEMENT FABRIC SHALL BE HIGH STRENGTH, HIGH MODULUS, FIBER FABRIC THAT MAY BE UNIDIRECTIONAL OR WOVEN (IN VARIOUS FIBER ARCHITECTURES) TO SUIT SPECIFIC REPAIR NEEDS.

1. FRP REINFORCEMENT FABRIC SHALL BE OF THE TYPE, SIZE, LAYER AND LOCATION AS INDICATED IN THE DRAWINGS.

2. FRP REINFORCEMENT FABRIC SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:

FIBER REINFORCED POLYMER PROPERTIES		
PROPERTY	**REQUIREMENT**	**ASTM TEST METHOD**
LAMINATE TENSILE STRENGTH	160,900 PSI	D3039
LAMINATE TENSILE STRENGTH, IN PRIMARY FIBER DIRECTION - 1 LAYER, PER INCH WIDTH	6.4 KIPS/IN/PLY	D7565
LAMINATE TENSILE MODULUS, IN PRIMARY FIBER DIRECTION	10.39	D3039
LAMINATE ELONGATION AT BREAK	1.45%	D3039
DRY FABRIC WEIGHT, MINIMUM, PER SQUARE YARD	18 OZ/SQ. YD. (611 G/SQ. M)	
PERCENT LAMINATE TENSILE STRENGTH RETAINED AFTER: 7 DAYS, 100% HUMIDITY, 100°F (38°C) 3,000 HRS EXPOSURE TO ALKALI 3,000 HRS EXPOSURE TO SALT WATER 3,000 HRS EXPOSURE AT 140°F (60°C)	 90% 90% 90% 90%	
VISUAL DEFECTS		D2563

MATERIALS MANUFACTURER:

ONE MANUFACTURER SHALL SUPPLY ALL MATERIALS REQUIRED FOR THE FRP SYSTEM. THE MATERIAL SUPPLIED SHALL BE EQUIVALENT TO SIKAWRAP HEX (103C), SUPPLIED BY SIKA CORPORATION.

THE MATERIAL SUPPLIER SHALL HAVE A HISTORY OF AT LEAST FIVE YEARS OF SUPPLYING SPECIFIED MATERIALS.

SURFACE PREPARATION:

A. ALL CONCRETE SURFACES SHALL BE DRY AND FREE OF SURFACE MOISTURE AND FROST, AND TESTED BY THE CONTRACTOR TO EVALUATE MOISTURE TRANSMISSION IN ACCORDANCE WITH ASTM D4263 "INDICATING MOISTURE IN CONCRETE BY THE PLASTIC SHEET METHOD."

B. ALL CONCRETE SURFACES SHALL BE SOUND. REMOVE DETERIORATED CONCRETE, DUST, LAITANCE, GREASE, PAINT, CURING COMPOUNDS, WAXES, IMPREGNATIONS, FOREIGN PARTICLES, AND OTHER BOND INHIBITING MATERIALS FROM THE SURFACE BY BLAST CLEANING OR EQUIVALENT MECHANICAL MEANS.

C. ALL CONCRETE SURFACES SHALL BE AIR BLASTED AND VACUUMED CLEAN TO A DUST FREE CONDITION.

D. CONCRETE SURFACE IRREGULARITIES LESS THAN ONE INCH SHALL BE GROUND AND SMOOTHED AND/OR FILLED WITH AN APPROVED REPAIR MORTAR WITH THE ADDITION OF 1 PART OVEN DRIED SAND TO MAKE AN EPOXY MORTAR. SURFACE IRREGULARITIES SHALL BE LIMITED TO LESS THAN 0.04 INCHES (1 MM). SURFACE IRREGULARITIES GREATER THAN ONE INCH SHALL BE REPAIRED USING AN APPROVED CEMENTITIOUS REPAIR MORTAR. ANY SHARP EDGES (E.G. FINS, FORM LINES, ETC.) MUST BE GROUND SMOOTH AND FLUSH.

E. SURFACE LEVELNESS - MAXIMUM ALLOWABLE DEVIATION IN 6 FT. SHALL BE LIMITED TO 1/4 IN. (6 MM), BUT NO GREATER THAN 1/8 IN. (3 MM) PER LINEAR FT. (305 MM).

F. EXTERNAL CONCRETE CORNERS SHALL BE ROUNDED TO AT LEAST A 3/4" RADIUS WHEN PERPENDICULAR TO FIBER ORIENTATION AND INTERNAL CORNERS SHALL BE SMOOTHED BY TROWELLING EPOXY MORTAR INTO THE CORNERS.

G. THE CONCRETE SURFACE SHOULD BE PREPARED TO A MINIMUM CONCRETE SURFACE PROFILE (CSP) 3 AS DEFINED BY THE ICRI SURFACE PROFILE CHIPS.

H. THE ADHESIVE STRENGTH OF THE CONCRETE SHALL BE VERIFIED AFTER PREPARATION BY RANDOM PULL-OFF TESTING (ACI 503R OR ASTM D4541) AT THE DIRECTION OF THE ENGINEER. MINIMUM TENSILE STRENGTH IS 200 PSI WITH CONCRETE SUBSTRATE FAILURE, OR AS APPROVED BY THE ENGINEER.

MIXING PRIMER AND SATURANT

A. MIX COMPONENTS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

B. DILUTING IS NOT PERMITTED. PRE-CONDITION MATERIALS AS INDICATED ON TECHNICAL DATA SHEET.

C. MIX ONLY THAT QUANTITY WHICH CAN BE USED WITHIN ITS POT LIFE.

D. DO NOT BATCH DELIVER UNITS INTO SMALLER QUANTITIES. MIX ONLY FULL UNITS.

PRIMER APPLICATION

A. APPLY PRIMER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

B. PRIMER MAY BE APPLIED WITH A BRUSH OR ROLLER. APPLY SECOND COAT AS NECESSARY AFTER FIRST COAT HAS PENETRATED INTO CONCRETE.

C. SURFACE DEPRESSIONS SHALL BE FILLED WITH EPOXY FILLER PER MANUFACTURER'S INSTRUCTIONS.

D. PRIMER MUST BE COVERED WITH FIBER WITHIN 24 HOURS OF APPLICATION, DEPENDING ON TEMPERATURE CONDITIONS. IF 24-HOUR WINDOW IS EXCEEDED, THE PRIMED SURFACES MUST BE SOLVENT WIPED WITH A FAST FLASHING SOLVENT (E.G. MEK) OR ROUGHENED WITH SANDPAPER TO BREAK THE AMINE BLUSH.

FRP REINFORCEMENT APPLICATION:

A. APPLY FRP REINFORCEMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

B. WHEN USING SATURATOR EQUIPMENT, FOLLOW MANUFACTURER'S PROCEDURES FOR PROPER MACHINE SET-UP AND CALIBRATION. ROLLERS SHALL BE CALIBRATED TO SATURATE THE FABRIC WITH THE PROPER RESIN-TO-FABRIC RATIO. THE ROLLER GAP SHALL BE CHECKED DAILY BY A QUALIFIED TECHNICIAN FOR ACCURACY. THE RESIN-TO-FABRIC RATIO SHALL ALSO BE VERIFIED BY RESIN USAGE AND DOCUMENTED ON THE DAILY PROJECT LOGS.

C. ONCE THE FABRIC IS SATURATED, IT MAY THEN EITHER BE SPOOLED FOR EASY HANDLING, OR CUT TO SPECIFIED LENGTHS AND BOOKED FOR HANDLING. CARE MUST BE TAKEN NOT TO DAMAGE THE FIBERS.

D. THE FABRIC MAY THEN BE APPLIED TO THE SURFACE WITH NO DELAY. WORK FROM ONE END TO THE OTHER, TAKING CARE TO ORIENT THE FIBERS AS SPECIFIED. REMOVE ANY AIR ENTRAPPED IN THE FABRIC WITH A RIBBED ROLLER OR SQUEEGEE.

E. SHEETS SHALL BE LAPPED IN THE LONGITUDINAL DIRECTION 6 INCHES MINIMUM OR AS INDICATED ON THE DRAWINGS. NOTE: NO LAPPING IS REQUIRED OF THE SHEETS PARALLEL TO THE DIRECTION OF FIBER ORIENTATION.

REPAIR OF DEFECTS:

A. UPON COMPLETION OF THE CURING PROCESS, THE INSTALLED SYSTEM SHALL BE CHECKED FOR AREAS WHERE SATURANT HAS NOT PENETRATED OR WHERE SATURANT HAS NOT COMPLETELY CURED. SUCH AREAS SHALL BE EPOXY INJECTED TO RE-ESTABLISH BOND SUBJECT TO THE APPROVAL OF THE PROJECT ENGINEER.

B. REPAIR PROCEDURES SHALL BE PERFORMED IN ACCORDANCE WITH GUIDELINES ESTABLISHED BY ACI 440.2R-08 (PARAGRAPH 7.2.3) AND APPROVED BY THE PROJECT ENGINEER. ALL REPAIRS SHALL BE SUBJECT TO THE SAME APPLICATION, CURING AND QUALITY CONTROL SPECIFICATIONS AS THE ORIGINAL WORK.

1. SMALL DELAMINATIONS AND VOIDS LESS THAN 2 IN² EACH ARE PERMISSIBLE AS LONG AS THE DELAMINATED AREA IS LESS THAN 5% OF THE TOTAL LAMINATE AREA AND THERE ARE NO MORE THAN 10 SUCH DELAMINATIONS PER 10 FT².

2. MEDIUM SIZED DELAMINATIONS AND VOIDS GREATER THAN 2 IN² BUT LESS THAN 25 IN² MAY BE REPAIRED BY EPOXY RESIN INJECTION OR PLY REPLACEMENT, DEPENDING ON THE SIZE AND NUMBER OF DELAMINATIONS AND THEIR LOCATION. THE REPAIR PROCEDURE SHOULD BE DETERMINED BY THE PROJECT ENGINEER.

3. LARGER SIZE DELAMINATIONS AND VOIDS GREATER THAN 25 IN² SHOULD BE REPAIRED BY SELECTIVELY CUTTING AWAY THE AFFECTED SHEET AND APPLYING AN OVERLAPPING SHEET PATCH OF EQUIVALENT PLIES. THE OVERLAP SHOULD EXTEND A MINIMUM OF 6 IN. IN ALL DIRECTIONS.

COATING SYSTEM APPLICATION:

AREAS AFTER THE EPOXY SETS YET PRIOR TO THE APPLICATION OF THE URETHANE TOP COAT, ALL DEFECTS (INCLUDING BUBBLES, DELAMINATIONS, AND FABRIC TEARS) MORE THAN 1 SQUARE INCH OF THE SURFACE AREA, OR AS SPECIFIED BY THE PROJECT ENGINEER, SHALL BE REPAIRED AS SUCH:

1. SMALL DEFECTS (ON THE ORDER OF 6" DIAMETER) SHALL BE INJECTED OR BACK FILLED WITH EPOXY.

2. BUBBLES LESS THAN 12" IN DIAMETER SHALL BE REPAIRED BY INJECTING THE EPOXY. TWO HOLES SHALL BE DRILLED INTO THE BUBBLE TO ALLOW INJECTION OF THE EPOXY AND ESCAPE OF THE ENTRAPPED AIR.

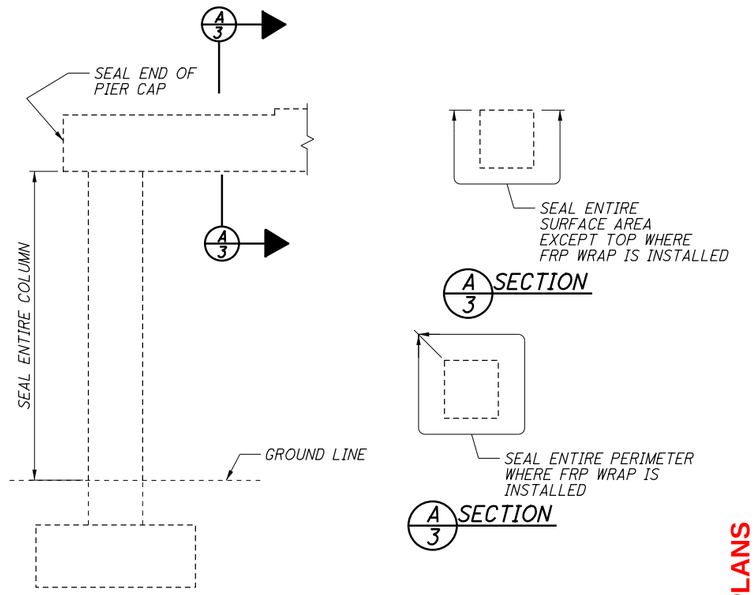
3. BUBBLES, DELAMINATIONS, AND FABRIC TEARS GREATER THAN 12" IN DIAMETER SHALL BE REPAIRED BY REMOVING AND REAPPLYING THE REQUIRED NUMBER OF LAYERS OF THE COMPOSITE AND THE REQUIRED FINISH COATINGS. ALL REPAIRS SHALL BE APPROVED BY THE PROJECT ENGINEER.

4. THE URETHANE TOP COAT SHALL THEN BE APPLIED TO THE FINAL EPOXY COAT, AS DETERMINED BY MANUFACTURER.

ITEM 512 - SEALING OF CONCRETE AS PER PLAN:

THE CONTRACTOR SHALL REMOVE EXISTING COATINGS AND PREPARE SURFACES TO BE SEALED ACCORDING TO C&MS 512. ALL SUPERSTRUCTURE AND ALL EXPOSED SUBSTRUCTURE (AS SHOWN IN THESE PLANS) EXCEPT TOPS OF PIER CAPS, SHALL BE SEALED WITH AN EPOXY-URETHANE SEALER. APPLY THE EPOXY-URETHANE SEALER TO THE EXPOSED CONCRETE SURFACES AT THE PIERS, AS SHOWN IN DETAIL 'A' BELOW. THIS WORK WILL BE DONE IN ACCORDANCE WITH ITEM 512 - TREATING CONCRETE OF THE ODOT C&MS.

EPOXY-URETHANE SEALER WILL BE FEDERAL COLOR NO. 13522



DETAIL A - PIER SEALING LIMITS
(EPOXY-URETHANE SEALANT)

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GENERAL NOTES - 3 OF 3
BRIDGE NO. SUM-76-0914, SUM-76-0954, SUM-76-
I.R. 76 OVER MANCHESTER ROAD, BOWERY STREET AND LAKESH

SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329

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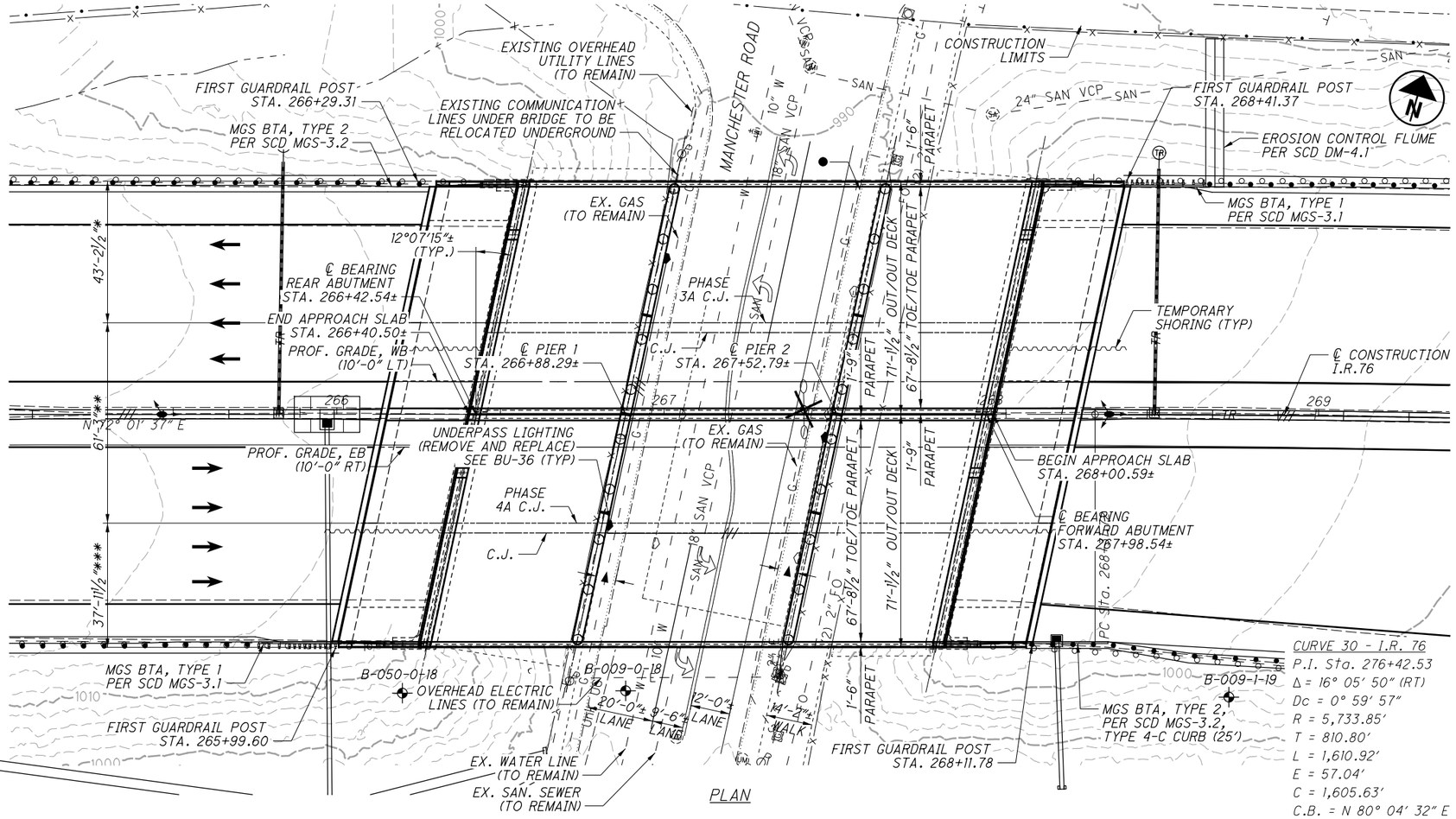
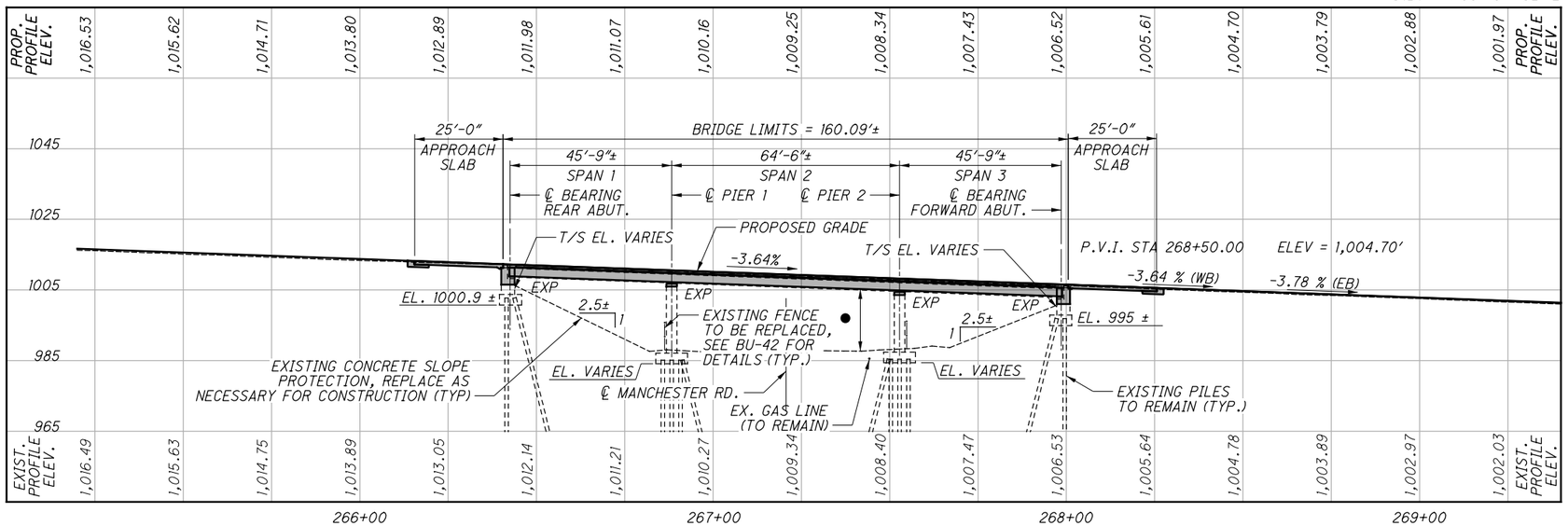
2021-11-04_BU 13 - RFC PLANS



PLAN



PROFILE ALONG PROFILE GRADE OF LEFT AND RIGHT BRIDGE

BENCHMARK DATA

FOR BENCHMARK INFORMATION, SEE BU-19

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

DESIGN TRAFFIC:
2020 ADT = 101,350 2020 ADTT = 13,175
2040 ADT = 95,820 2040 ADTT = 12,457
DIRECTIONAL DISTRIBUTION = 59%

LEGEND

- BORING LOCATION
- * - PHASE 3A CONSTRUCTION
- ** - PHASE 4A CONSTRUCTION
- *** - PHASE 5A CONSTRUCTION

CLEARANCES

- 14'-10⅜"± EXISTING MINIMUM VERTICAL CLEARANCE
- 15'-6" REQUIRED MINIMUM VERTICAL CLEARANCE
- 15'-11 ¾" PROPOSED MINIMUM VERTICAL CLEARANCE
- 5'-8"± EXISTING HORIZ. CLEARANCE (LEFT)
- 6'-1"± EXISTING HORIZ. CLEARANCE (RIGHT)

EXISTING STRUCTURE

TYPE: 3 SPAN CONTINUOUS ROLLED BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: 45'-6"±, 64'-6"±, 45'-6"± (C/C OF BEARINGS)
ROADWAY: 140'-0" F/F PARAPETS W/10' RAISED MEDIAN
LOADING: CF2000(57) - ADEQUATE FOR AASHO ALTERNATE LOADING
SKEW: 12°07'15"± LEFT FORWARD
WEARING SURFFACE: ASPHALT (3" ± THICK)
APPROACH SLABS: 25'-0" (AS-1-54)
ALIGNMENT: TANGENT
CROWN: SUPERELEVATED
STRUCTURAL FILE NUMBER: 7703481
DATE BUILT: 1964±, REHABILITATED 1983±, 2015±
DISPOSITION: SUPERSTRUCTURE TO BE REPLACED. ABUTMENTS TO BE CONVERTED TO SEMI-INTEGRAL. PIERS TO REMAIN.

PROPOSED STRUCTURE

TYPE: NEW CONTINUOUS STEEL BEAMS WITH COMPOSITE REINFORCED CONCRETE DECK ON EXISTING PIERS AND ABUTMENTS MODIFIED TO SEMI-INTEGRAL.
SPANS: 45'-9"±, 64'-6"±, 45'-9"± (C/C OF BEARINGS)
ROADWAY: 67'-8½" TOE/TOE PARAPET (EACH DIRECTION)
LOADING: HL-93 WITH 60 PSF FUTURE WEARING SURFACE
SKEW: 12°07'15"± LEFT FORWARD
APPROACH SLABS: 25'-0" (AS-1-15), TYPE C INSTALLATION (AS-2-15)
ALIGNMENT: TANGENT
CROWN: SUPERELEVATED
COORDINATES: LATITUDE 41° 03' 40.13"
LONGITUDE 81° 33' 02.77"

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RWB		7703481	

SUMMIT COUNTY
STA. 266+40.50±
STA. 268+00.59±

SITE PLAN
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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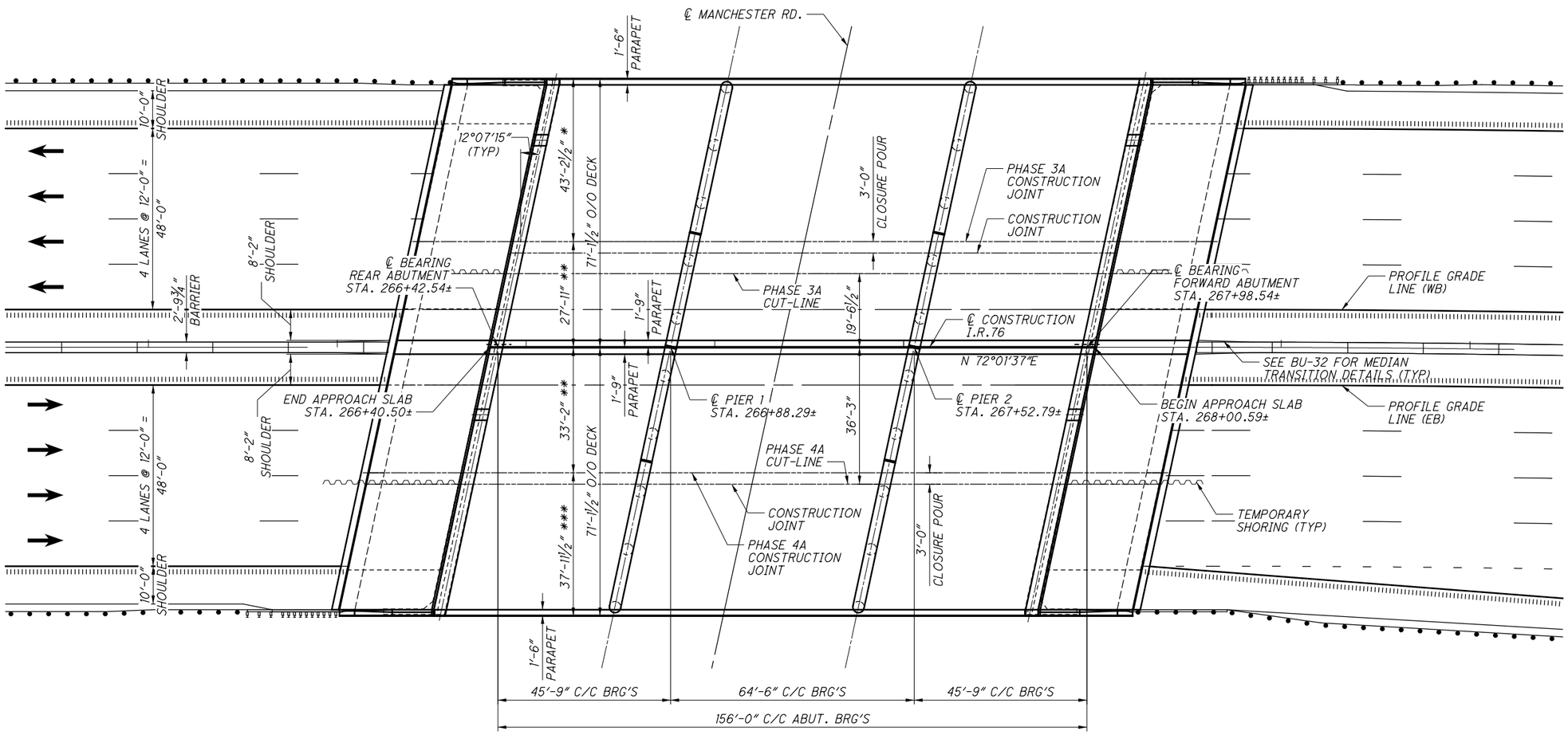

GENERAL PLAN

NOTES

REFER TO THE MAINTENANCE OF TRAFFIC PLANS (BU-4) FOR ADDITIONAL NOTES AND DETAILS NOT SHOWN

LEGEND

* - PHASE 3A CONSTRUCTION
** - PHASE 4A CONSTRUCTION
*** - PHASE 5A CONSTRUCTION

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GENERAL PLAN
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

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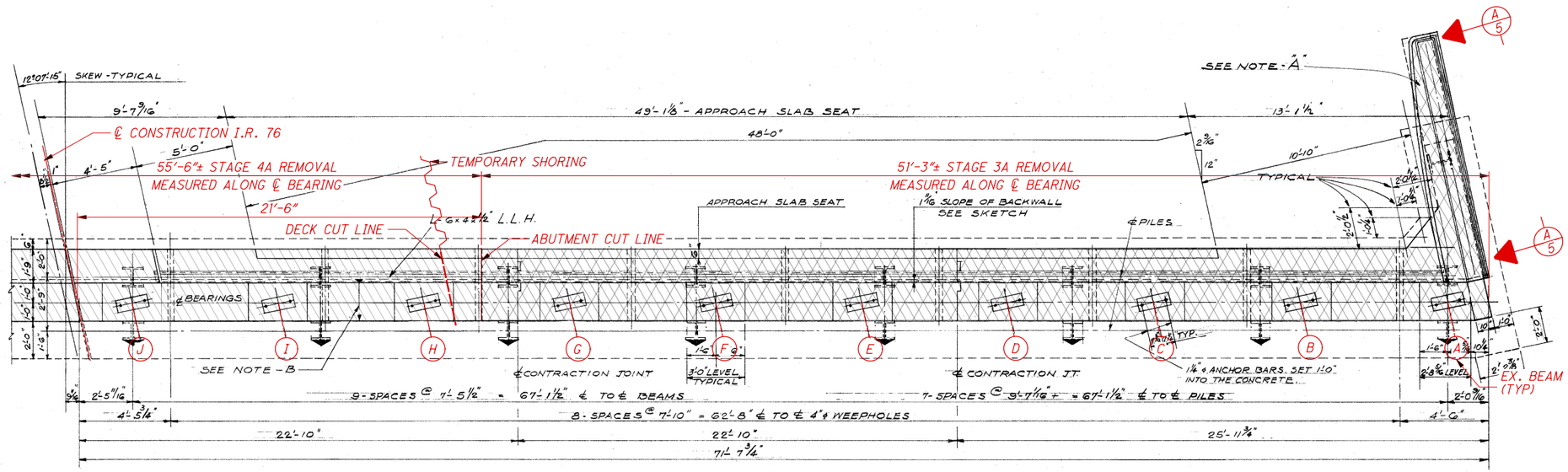
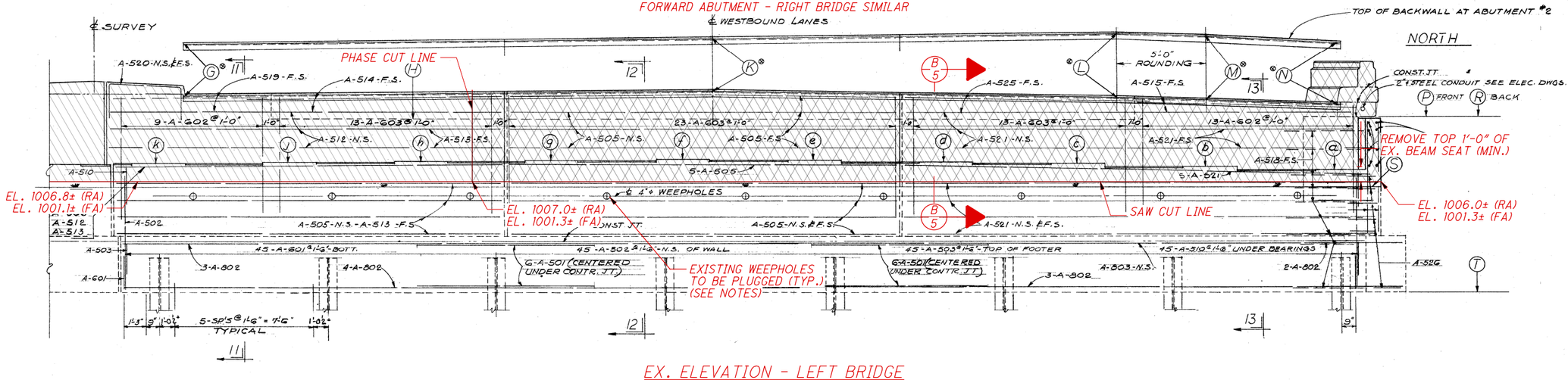


EX. REAR ABUTMENT PLAN - LEFT BRIDGE

FORWARD ABUTMENT - RIGHT BRIDGE SIMILAR



EX. ELEVATION - LEFT BRIDGE

NOTES:

1. CUT OFF AND REMOVE EXISTING BACKWALL AND BEAM SEAT TO LIMITS SHOWN. ABUTMENT BACKWALL AND PARAPET REMOVAL SHALL BE PER ITEM 202 PORTIONS OF STRUCTURE REMOVED, OVER 20 FEET SPAN, AS PER PLAN. FOR ADDTIONAL STRUCTURAL REMOVAL INFORMATION, SEE STRUCTURAL GENERAL NOTES ON SHEET 2/153.
2. CLEAN WEEPHOLES AND FILL WITH NON-SHRINK, NON-METALLIC GROUT. (CMS 510.02)

LEGEND:

INDICATES AREA OF CONCRETE TO BE REMOVED DURING PHASE 3A

INDICATES AREA OF CONCRETE TO BE REMOVED DURING PHASE 4A

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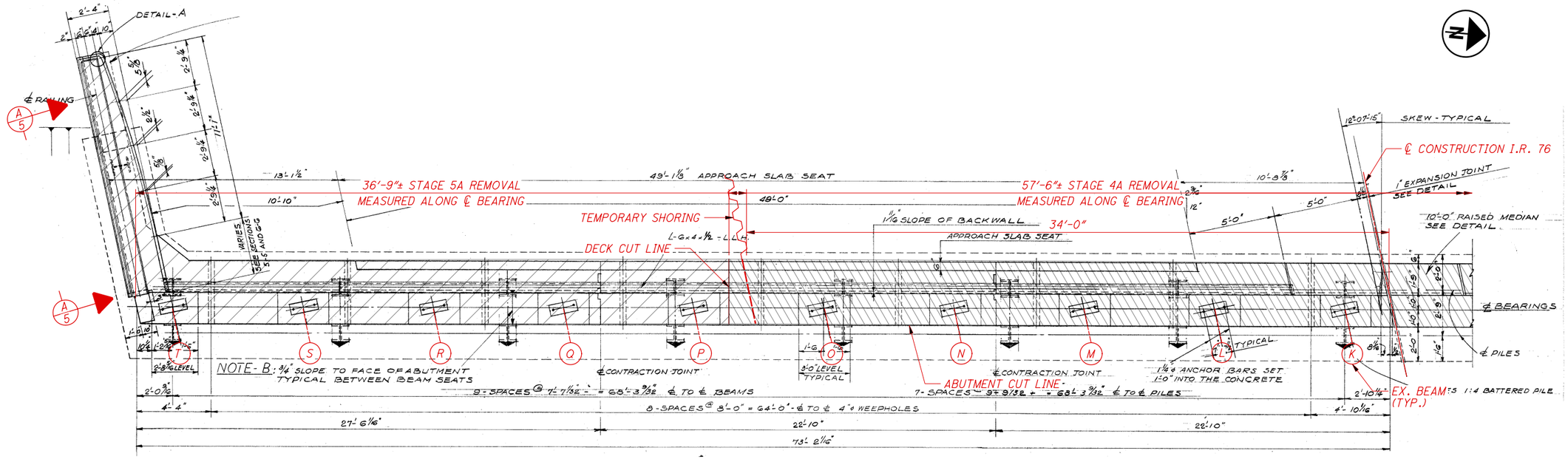
ABUTMENT PLAN AND ELEVATION - REMOVAL DETAILS

BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

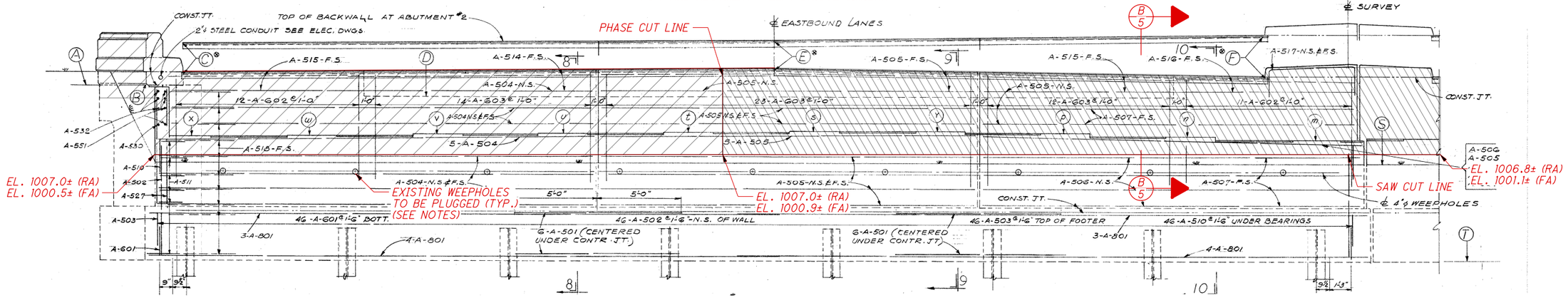
SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

Released for Construction
Thomas J Powell, PE
11/10/2021



EX. REAR ABUTMENT PLAN - RIGHT BRIDGE

FORWARD ABUTMENT - LEFT BRIDGE SIMILAR



EX. ELEVATION - RIGHT BRIDGE

LEGEND:

INDICATES AREA OF CONCRETE TO BE REMOVED DURING PHASE 4A

INDICATES AREA OF CONCRETE TO BE REMOVED DURING PHASE 5A

NOTES:

1. FOR NOTES, SEE SHEET 3/40.

2021-11-04_BU 13 - RFC PLANS

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RWB		7703481	

ABUTMENT PLAN AND ELEVATION - REMOVAL DETAILS

BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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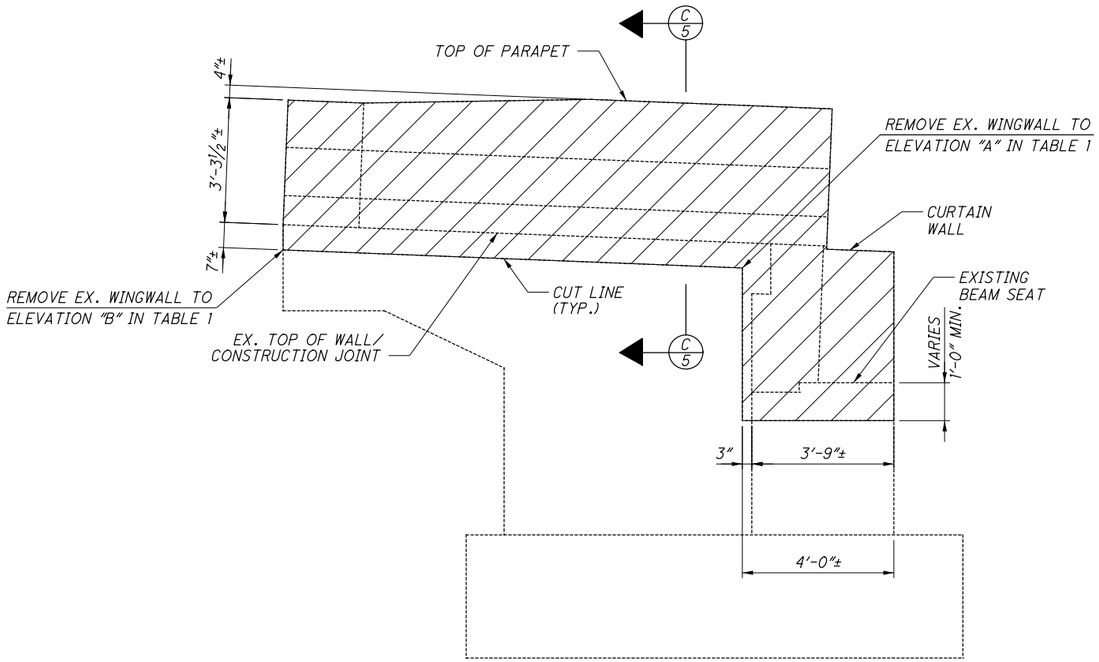


A WINGWALL REMOVAL ELEVATION
3 & 4

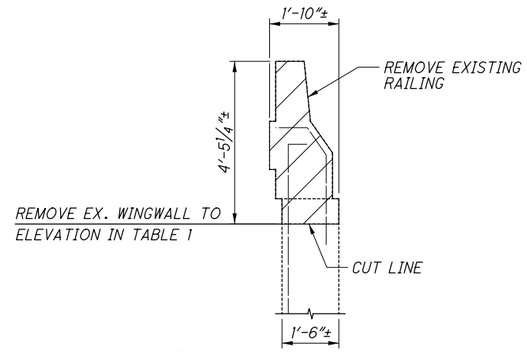
TABLE 1

RA, LEFT WINGWALL:
EL. "A" = 1011.85±
EL. "B" = 1012.21±

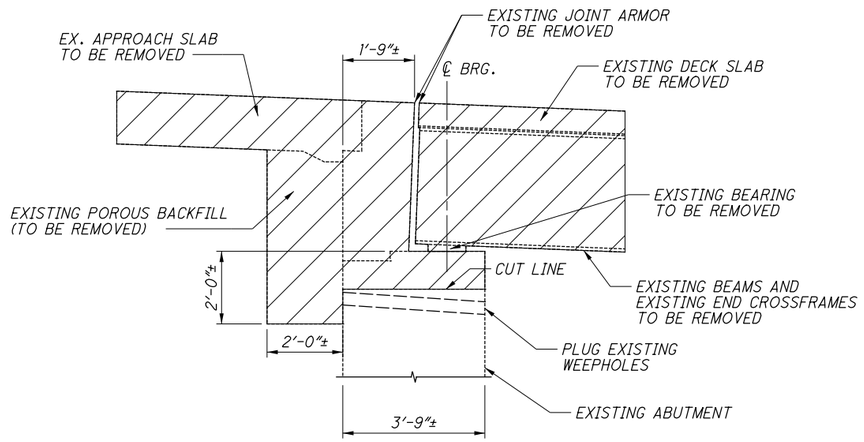
RA, RIGHT WINGWALL:
EL. "A" = 1012.77±
EL. "B" = 1013.27±

FA, LEFT WINGWALL:
EL. "A" = 1007.04±
EL. "B" = 1006.65±

FA, RIGHT WINGWALL:
EL. "A" = 1006.34±
EL. "B" = 1005.84±



C 5 SECTION THRU WINGWALL



B SECTION THRU ABUTMENT REMOVAL
3 &4

NOTES:

1. FOR PLAN AND ELEVATION SHOWING LIMITS OF REMOVAL AND REMOVAL PHASES, SEE SHEETS 3/40 AND 4/40.

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JRE	JRE	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703481	

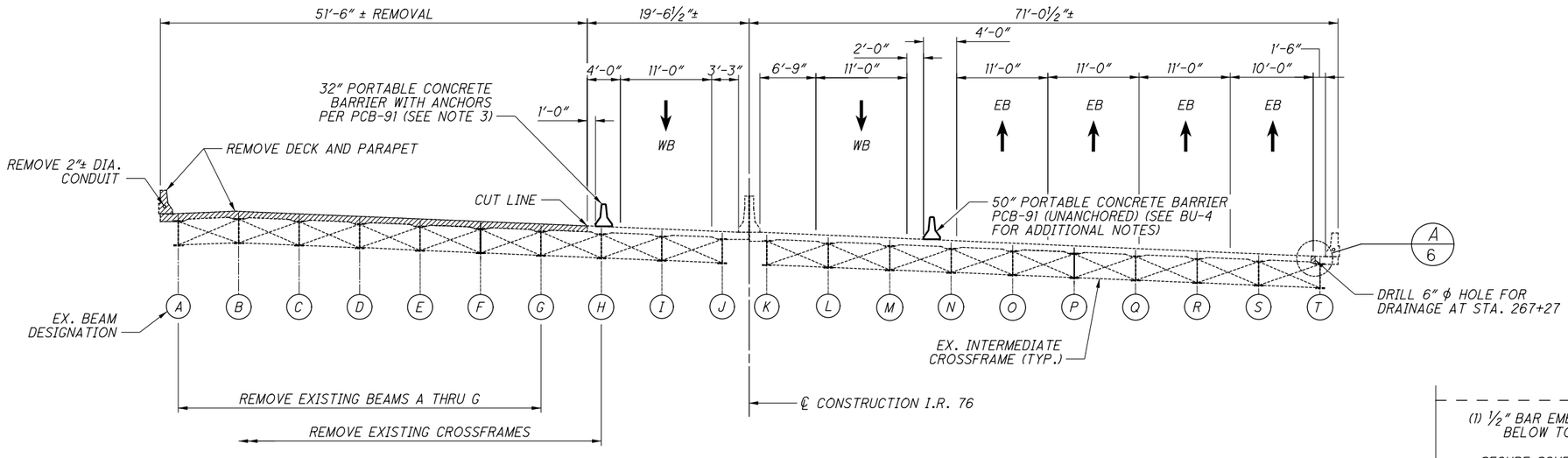
ABUTMENT REMOVAL DETAILS
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

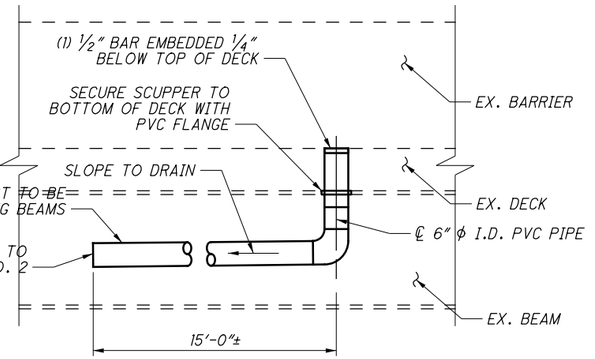
5 / 40

9 / 153

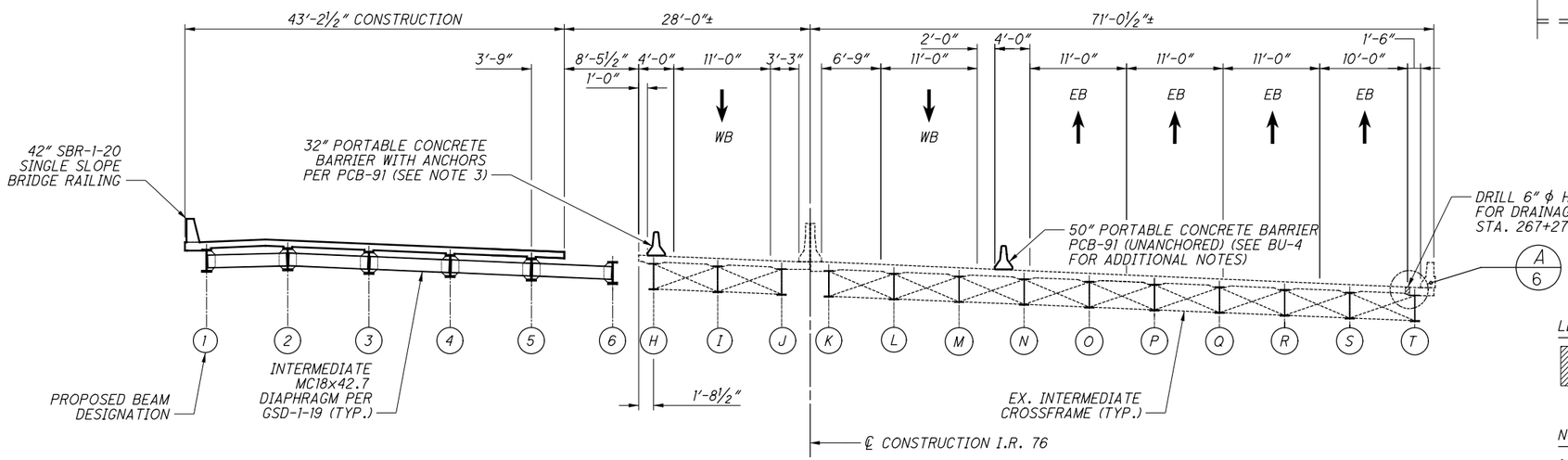
2021-11-04_BU 13 - RFC PLANS



PHASE 3A REMOVAL



A TEMPORARY SCUPPER DETAIL
6 & 7



PHASE 3A CONSTRUCTION

LEGEND:

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

NOTES:

1. FOR PHASE 4A CONSTRUCTION, SEE SHEET 7/40.
2. FOR PHASE 5A CONSTRUCTION, SEE SHEET 8/40.
3. INSTALL ANCHOR BOLTS AS DIRECTED IN ODOT STD. DWG PCB-91 ALONG THE TRAFFIC SIDE OF THE BARRIER. PROVIDE 2 ANCHORS PER BARRIER SEGMENT AS SHOWN ON PCB-91.

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RWB		7703481	

PHASED CONSTRUCTION SECTION - 1 OF 3
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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10 / 153

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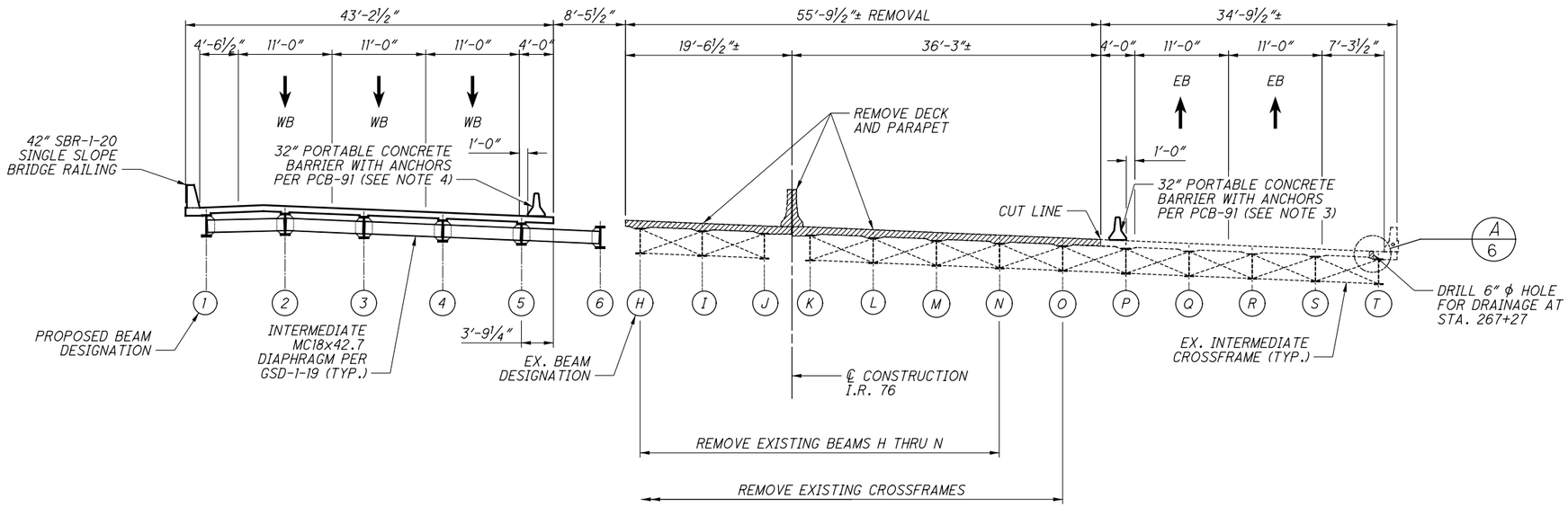
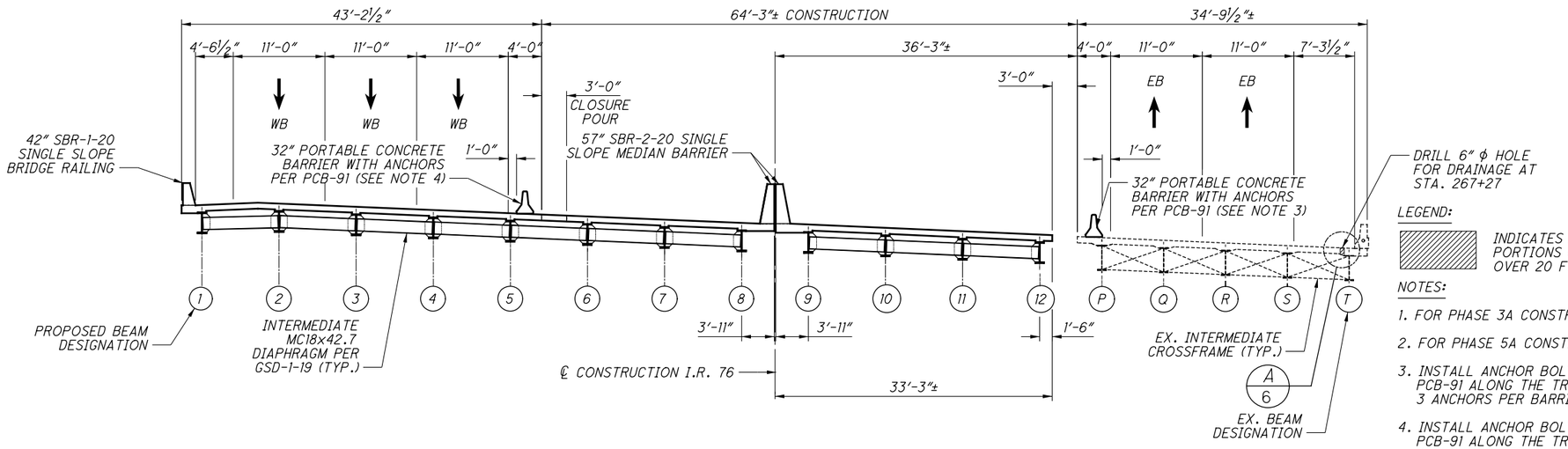


PHASE 4A REMOVAL



PHASE 4A CONSTRUCTION

LEGEND:

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

NOTES:

1. FOR PHASE 3A CONSTRUCTION, SEE SHEET 6/40.
2. FOR PHASE 5A CONSTRUCTION, SEE SHEET 8/40.
3. INSTALL ANCHOR BOLTS AS DIRECTED IN ODOT STD. DWG PCB-91 ALONG THE TRAFFIC SIDE OF THE BARRIER. PROVIDE 3 ANCHORS PER BARRIER SEGMENT AS SHOWN ON PCB-91.
4. INSTALL ANCHOR BOLTS AS DIRECTED IN ODOT STD. DWG PCB-91 ALONG THE TRAFFIC SIDE OF THE BARRIER. PROVIDE 4 ANCHORS PER BARRIER SEGMENT AS SHOWN ON PCB-91.
5. WHEN THE PORTABLE CONCRETE BARRIER IS NO LONGER NEEDED, REMOVE THE ANCHORS AND FILL THE HOLE WITH GROUT CONFORMIMG TO CMS 705.20.

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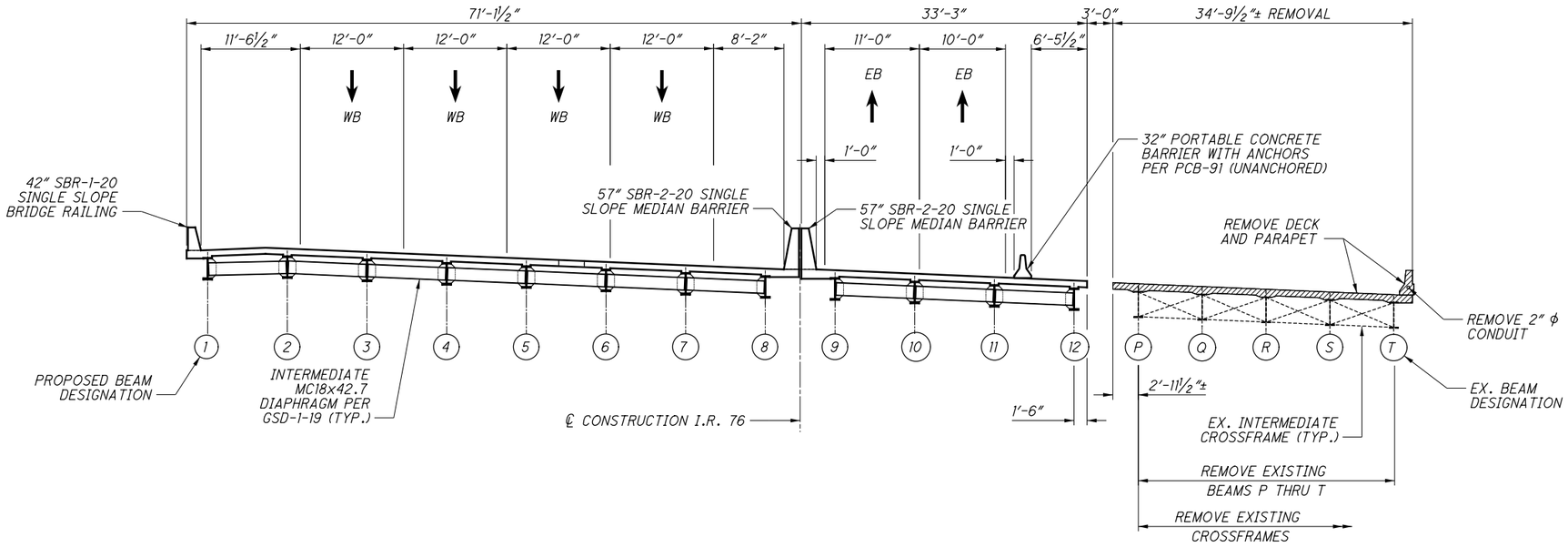
RWB		7703481	

PHASED CONSTRUCTION SECTION - 2 OF 3
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

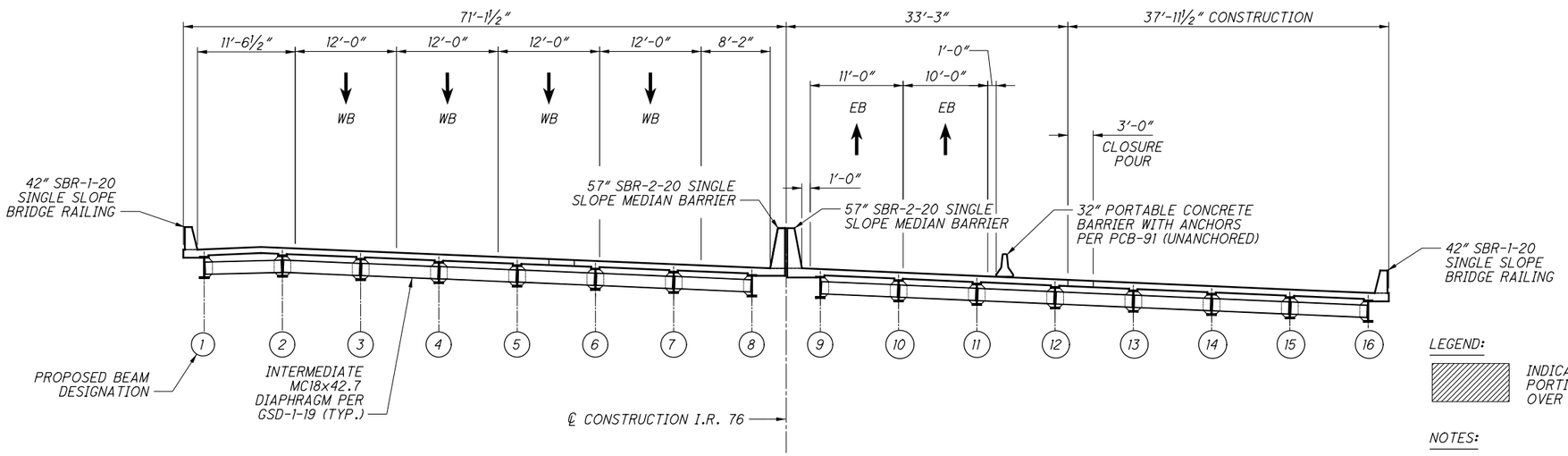
SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

7 / 40

11 / 153



PHASE 5A REMOVAL



PHASE 5A CONSTRUCTION

LEGEND:

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

NOTES:

1. FOR PHASE 3A CONSTRUCTION, SEE SHEET 6/40.
2. FOR PHASE 4A CONSTRUCTION, SEE SHEET 7/40.
3. WHEN THE PORTABLE CONCRETE BARRIER IS NO LONGER NEEDED, REMOVE THE ANCHORS AND FILL THE HOLE WITH GROUT CONFORMIMG TO CMS 705.20.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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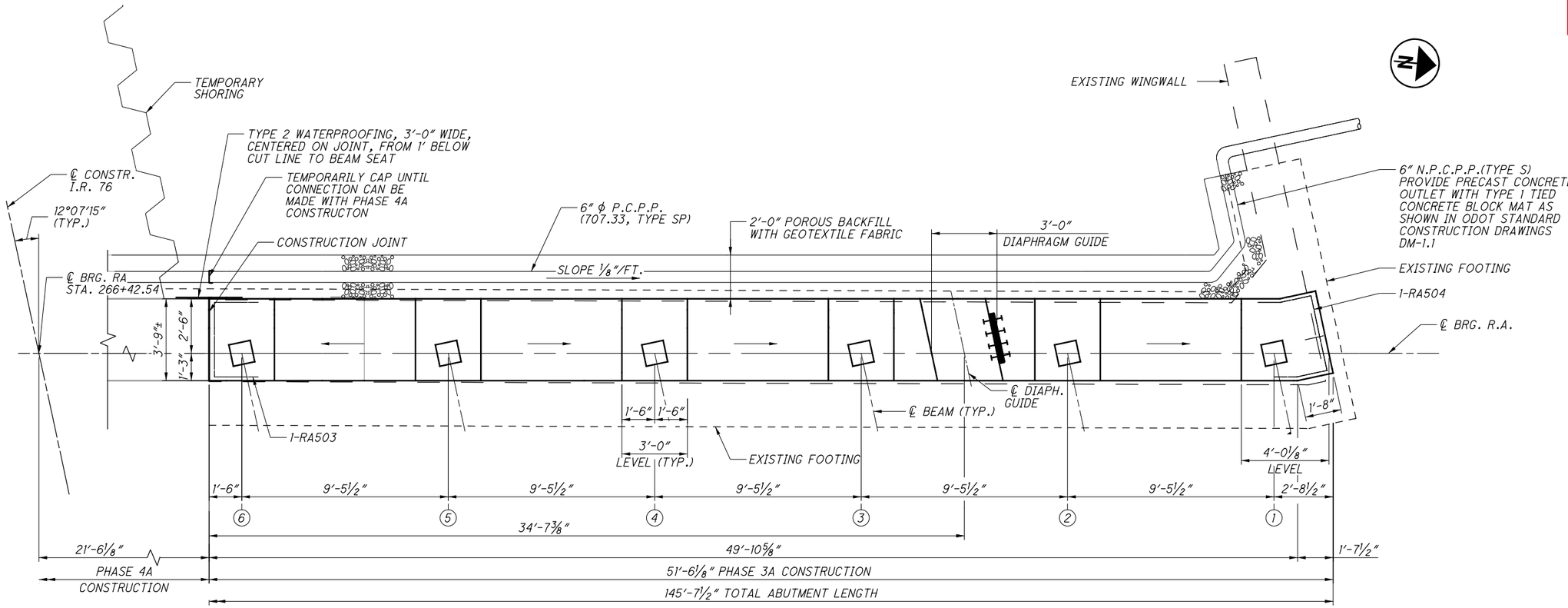
PHASED CONSTRUCTION SECTION - 3 OF 3

BRIDGE NO. SUM-76-0914

I.R. 76 OVER MANCHESTER ROAD S.R. 93

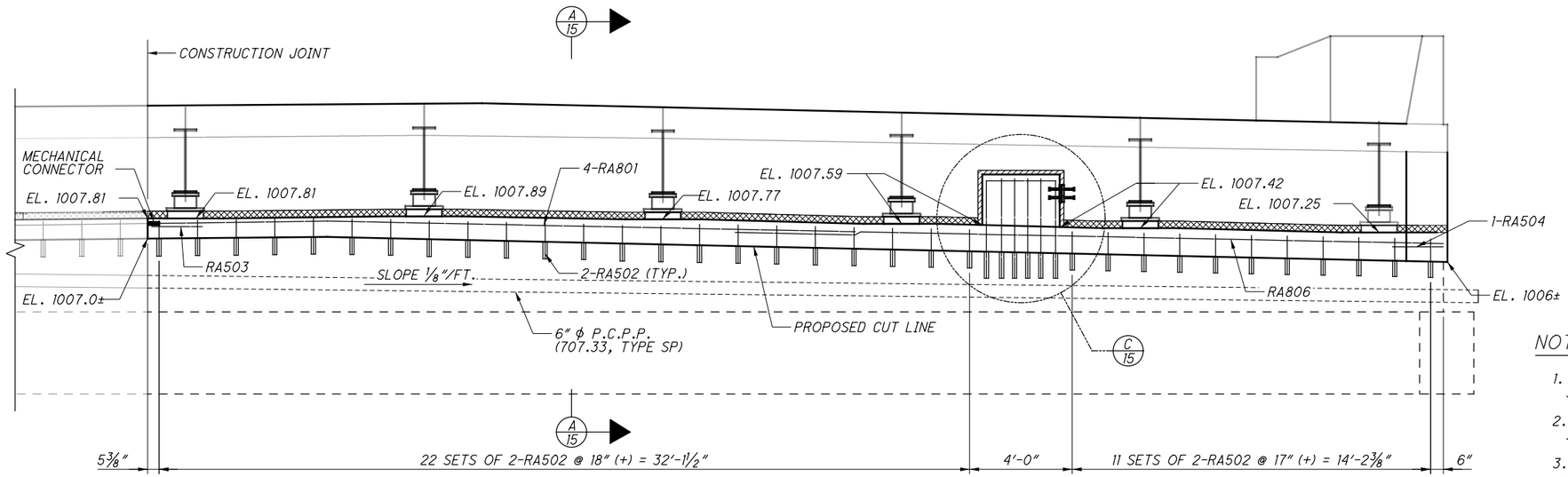
2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329



PLAN - PHASE 3A - REAR ABUTMENT

(DIMENSIONS SHOWN ALONG ℄ BEARING)
(EXISTING REINFORCEMENT NOT SHOWN)



ELEVATION - PHASE 3A - REAR ABUTMENT

(EXISTING REINFORCEMENT NOT SHOWN)
(ELEVATIONS SHOWN ALONG ℄ BEARING)

LAP LENGTHS	
NO. 8 BARS	4'-9"

NOTES:

1. FOR ABUTMENT REMOVAL DETAILS, SEE SHEETS 3/40 THRU 5/40.
2. FOR ABUTMENT DIAPHRAM DETAILS, SEE SHEET 27/40 THRU 29/40.
3. FOR ELASTOMERIC DETAILS, SEE SHEET 23/40.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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DR	

DESIGNED	CHECKED
JRE	RWB

REAR ABUTMENT PLAN AND ELEVATION - 1 OF 3

BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

9 / 40

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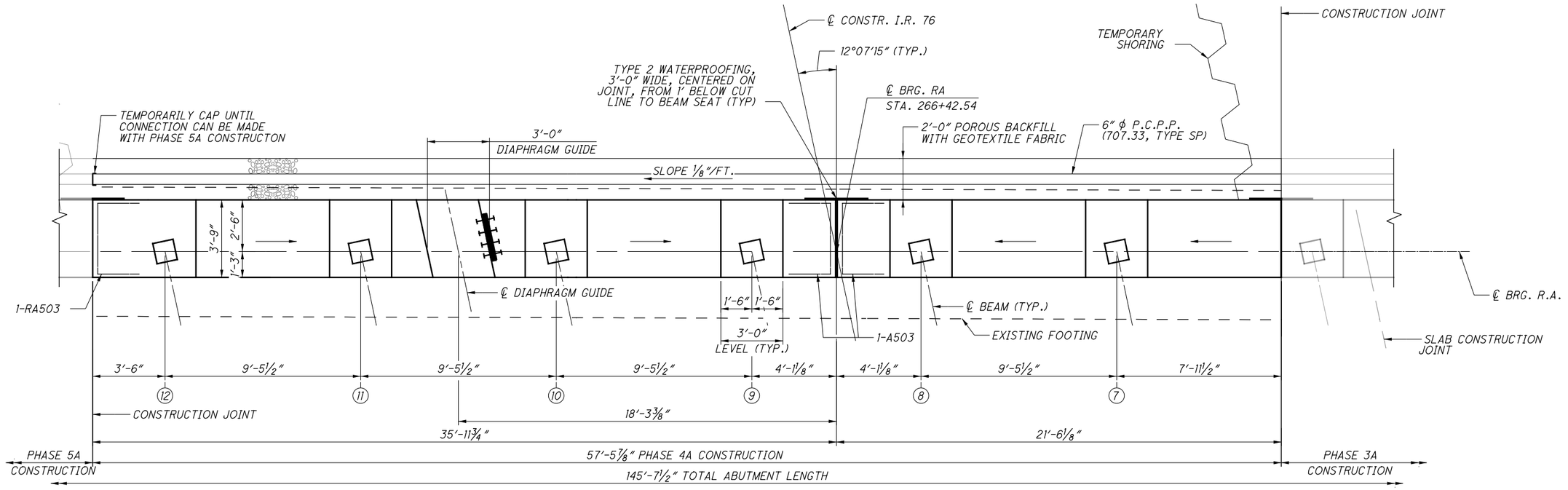
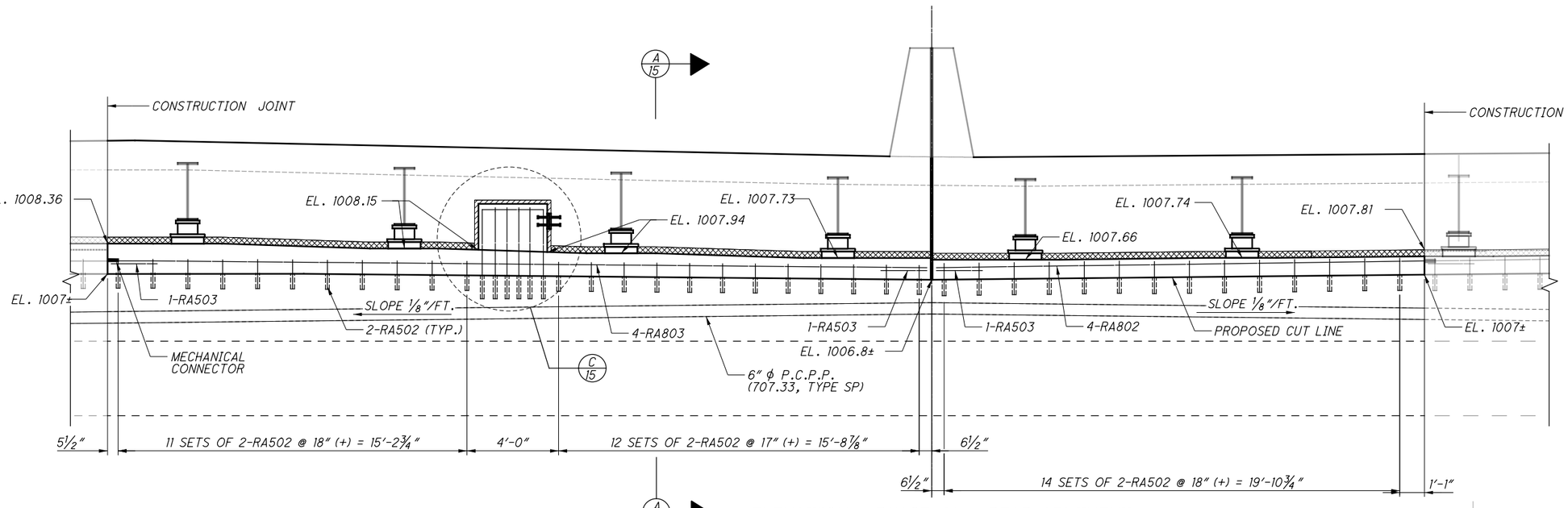


PLAN - PHASE 4A - REAR ABUTMENT

(EXISTING REINFORCEMENT NOT SHOWN)
(DIMENSIONS SHOWN ALONG ℄ BEARING)

LAP LENGTHS	
NO. 8 BARS	4'-9"



ELEVATION - PHASE 4A - REAR ABUTMENT

(EXISTING REINFORCEMENT NOT SHOWN)
(ELEVATIONS SHOWN ALONG ℄ BEARING)

NOTES:

FOR NOTES, SEE SHEET 9/40.

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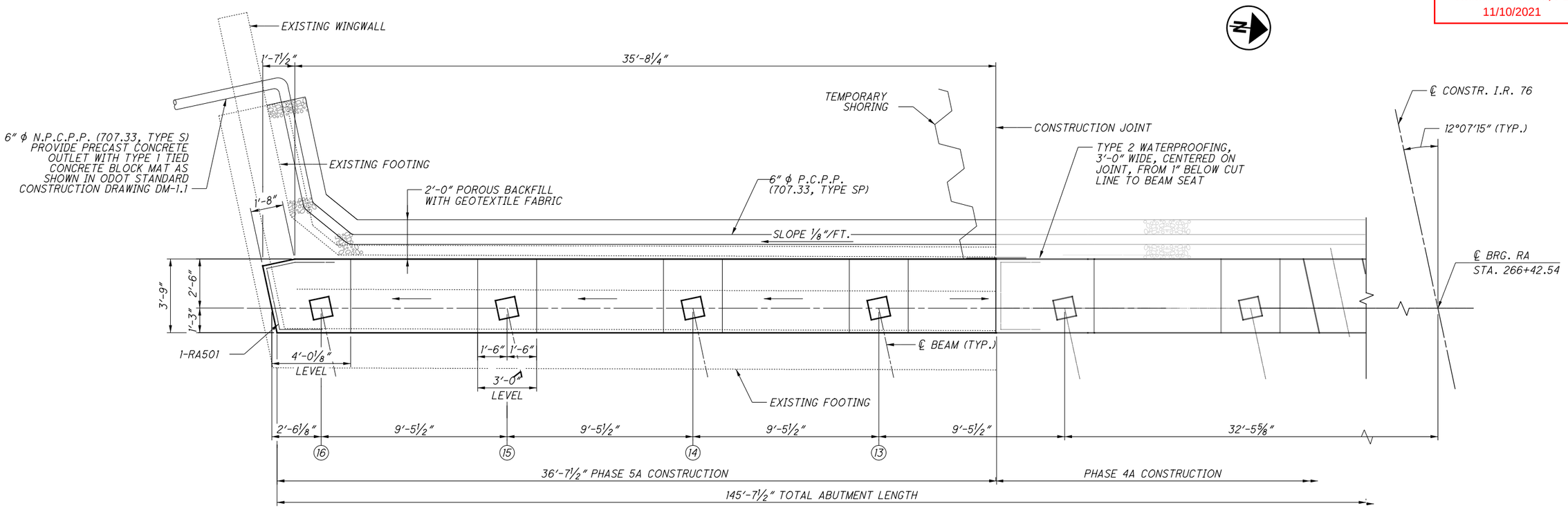
REAR ABUTMENT PLAN AND ELEVATION - 2 OF 3

BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

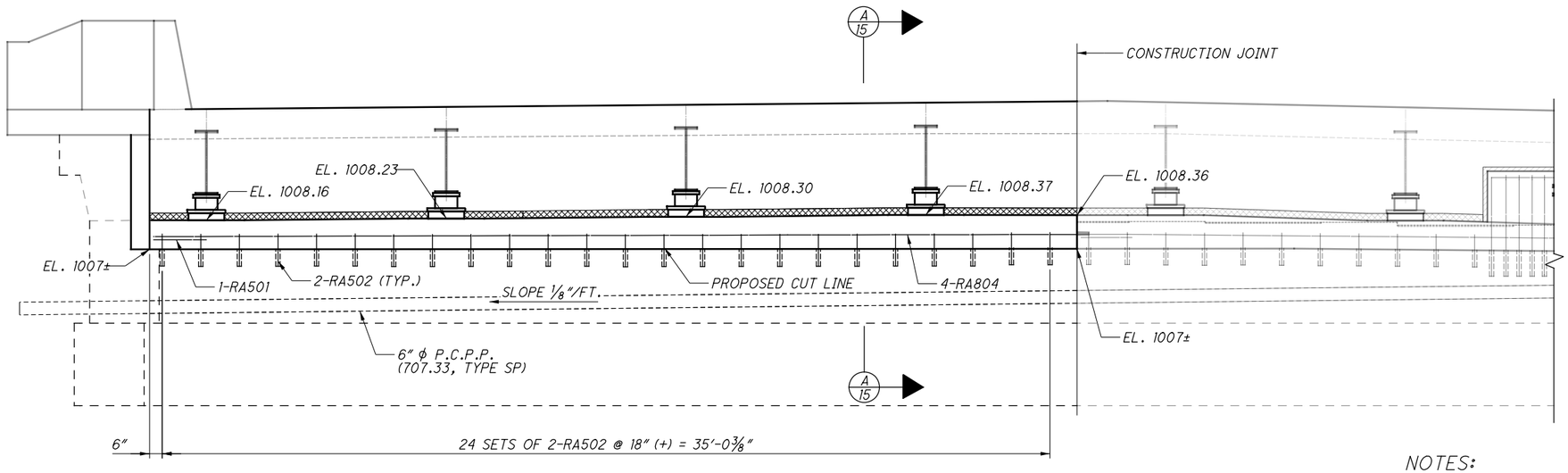
SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2021-11-04_BU 13 - RFC PLANS



PLAN - PHASE 5A - REAR ABUTMENT

(EXISTING REINFORCEMENT NOT SHOWN)
(DIMENSIONS SHOWN ALONG ℄ BEARING)



LAP LENGTHS	
NO. 8 BARS	4'-9"

ELEVATION - PHASE 5A - REAR ABUTMENT

(EXISTING REINFORCEMENT NOT SHOWN)
(ELEVATIONS SHOWN ALONG ℄ BEARING)

NOTES:

FOR NOTES, SEE SHEET 9/40.

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REAR ABUTMENT PLAN AND ELEVATION 3 OF 3

BRIDGE NO. SUM-76-0914
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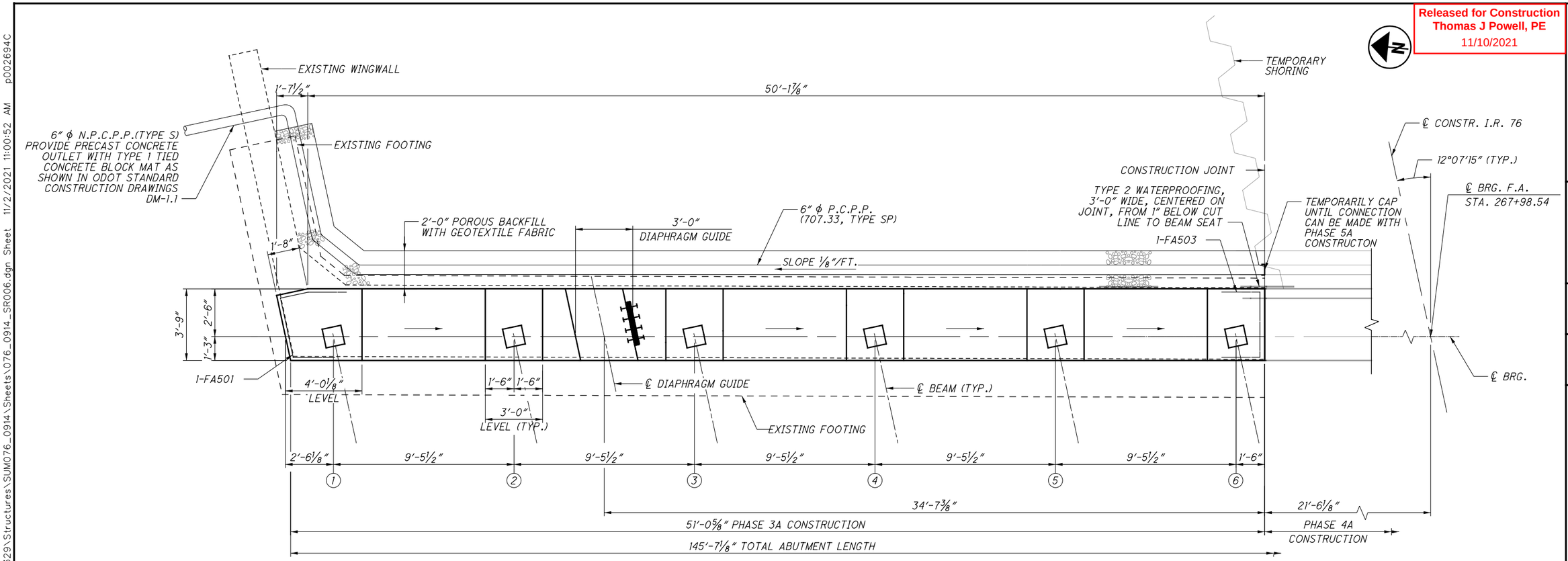
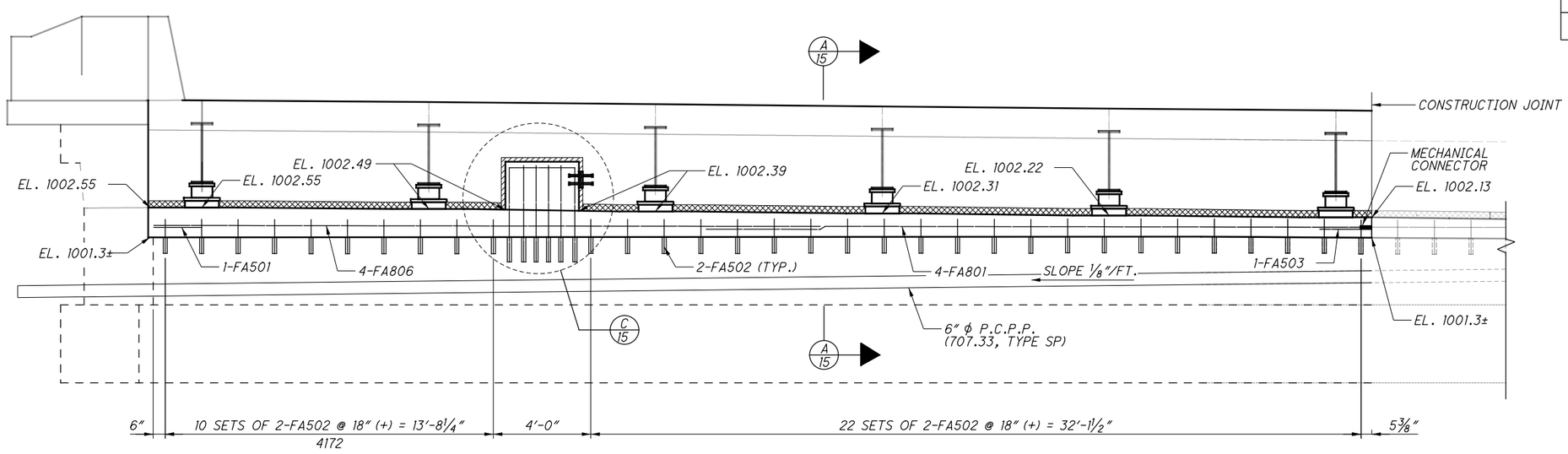
SUM-8/76/77-0.63/9.74/8.42
PID No. 102329



PLAN - PHASE 3A - FORWARD ABUTMENT

(EXISTING REINFORCEMENT NOT SHOWN)
(DIMENSIONS SHOWN ALONG ℄ BEARING)

LAP LENGTHS	
NO. 8 BARS	4'-9"



ELEVATION - PHASE 3A - FORWARD ABUTMENT

(EXISTING REINFORCEMENT NOT SHOWN)
(ELEVATIONS SHOWN ALONG ℄ BEARING)

NOTES:

1. FOR NOTES, SEE SHEETS 9/40.

2021-11-04_BU 13 - RFC PLANS

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FORWARD ABUTMENT PLAN AND ELEVATION - 1 OF 3
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

12/40
16/153

ISSUE RECORD:

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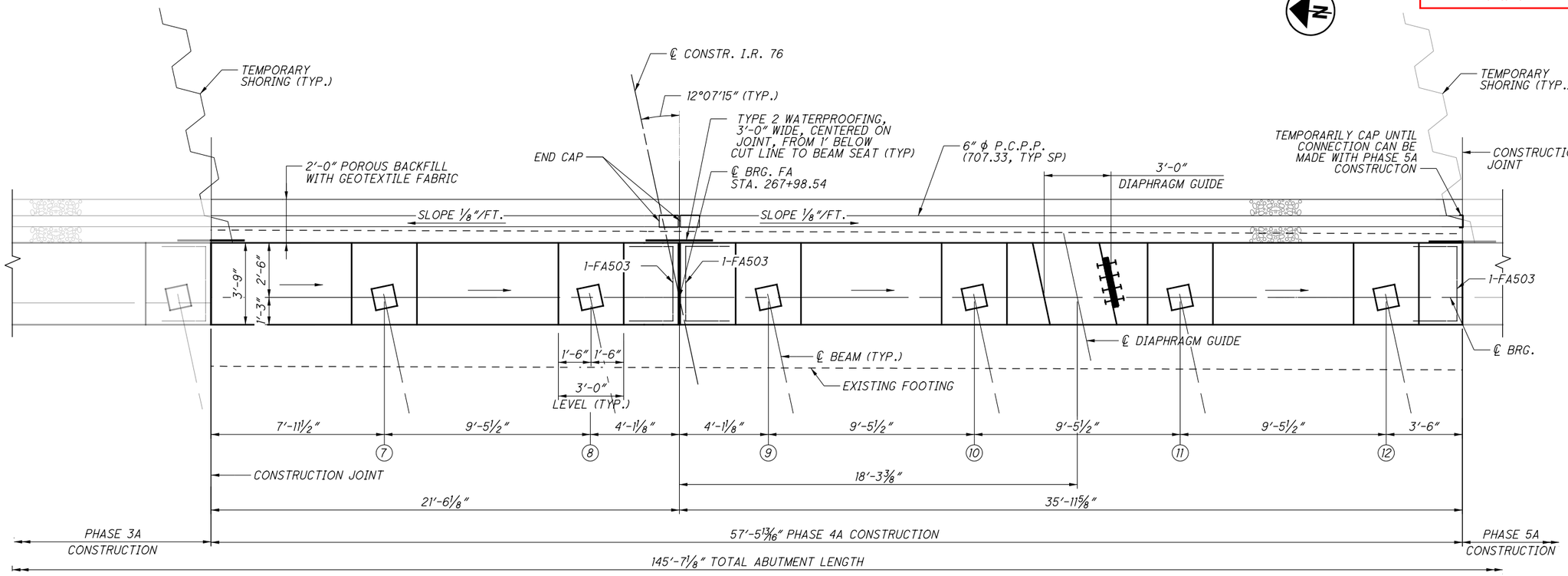
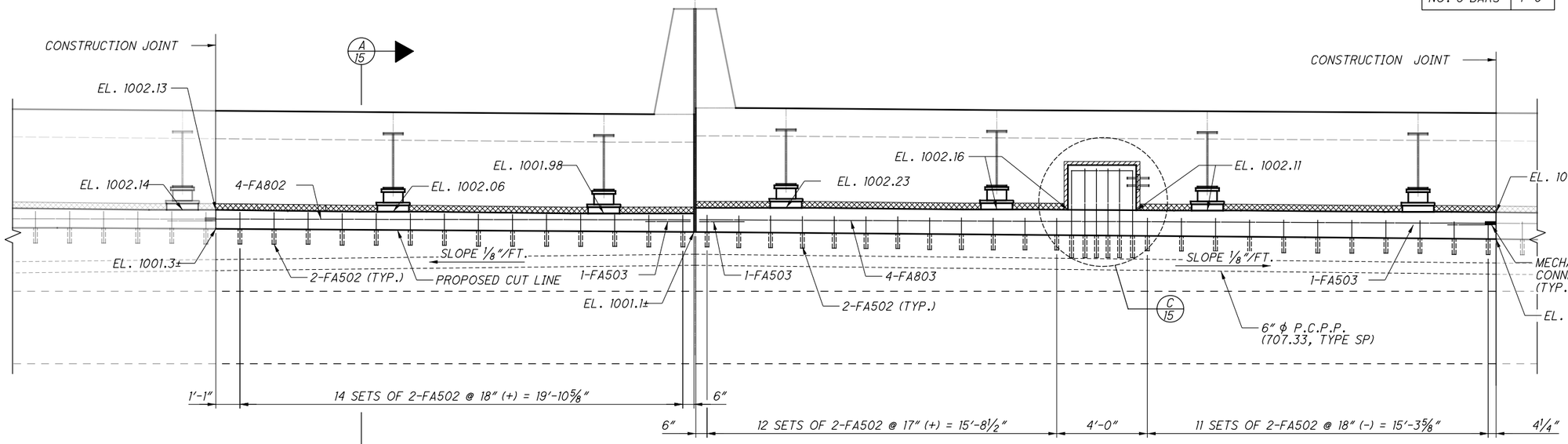


PLAN - PHASE 4A - FORWARD ABUTMENT

(EXISTING REINFORCEMENT NOT SHOWN)
(DIMENSIONS SHOWN ALONG ℄ BEARING)

LAP LENGTHS	
NO. 8 BARS	4'-9"



ELEVATION - PHASE 4A - FORWARD ABUTMENT

(EXISTING REINFORCEMENT NOT SHOWN)
(ELEVATIONS SHOWN ALONG ℄ BEARING)

NOTES:

FOR NOTES, SEE SHEET 9/40.

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FORWARD ABUTMENT PLAN AND ELEVATION - 2 OF 3
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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13/40

17/153

ISSUE RECORD:

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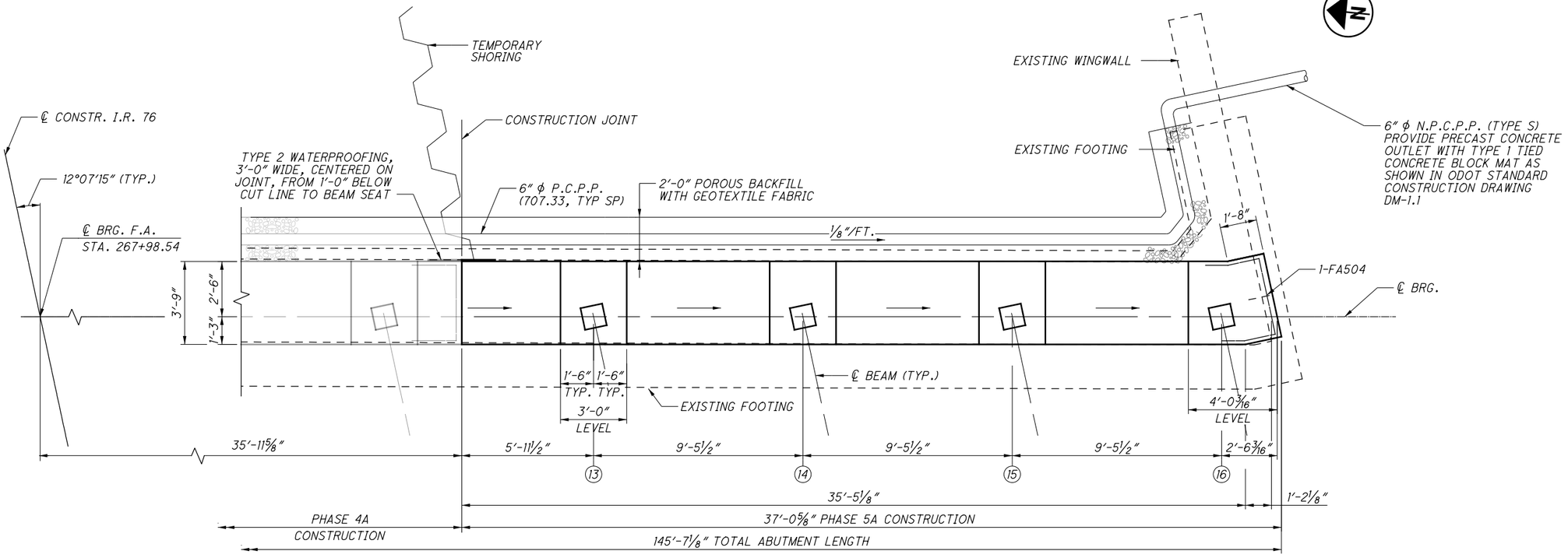
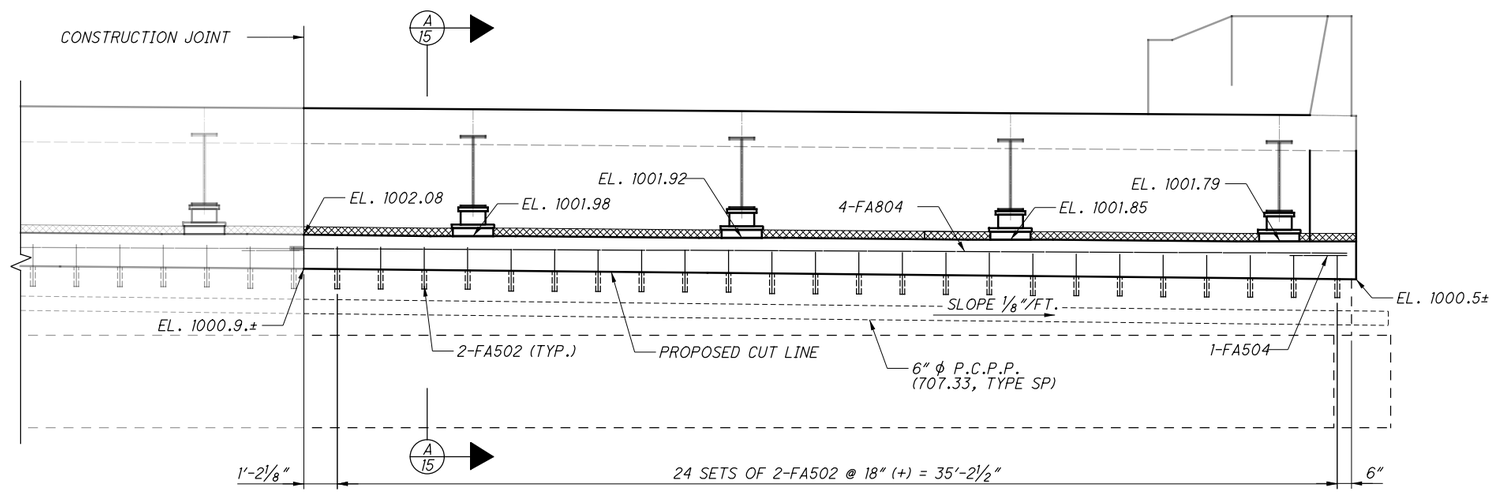


PLAN - PHASE 5A - FORWARD ABUTMENT

(EXISTING REINFORCEMENT NOT SHOWN)



ELEVATION - PHASE 5A - FORWARD ABUTMENT

(EXISTING REINFORCEMENT NOT SHOWN)
(ELEVATIONS SHOWN ALONG ℄ BEARING)

LAP LENGTHS	
NO. 8 BARS	4'-9"

NOTES:

FOR NOTES, SEE SHEET 9/40.

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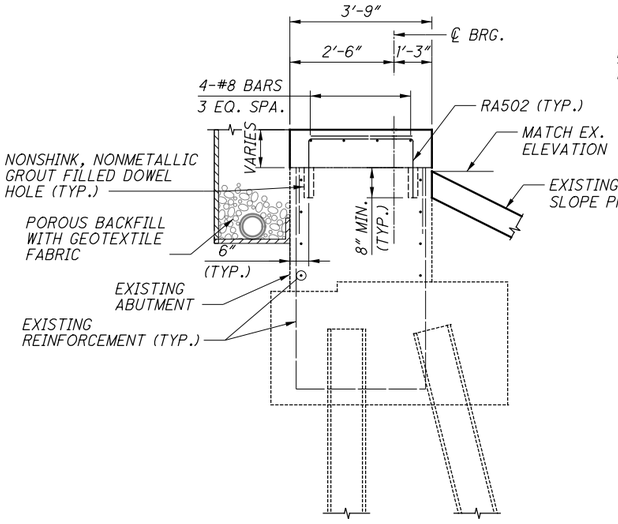
JRE	RWB

ELEVATION 3 OF 3

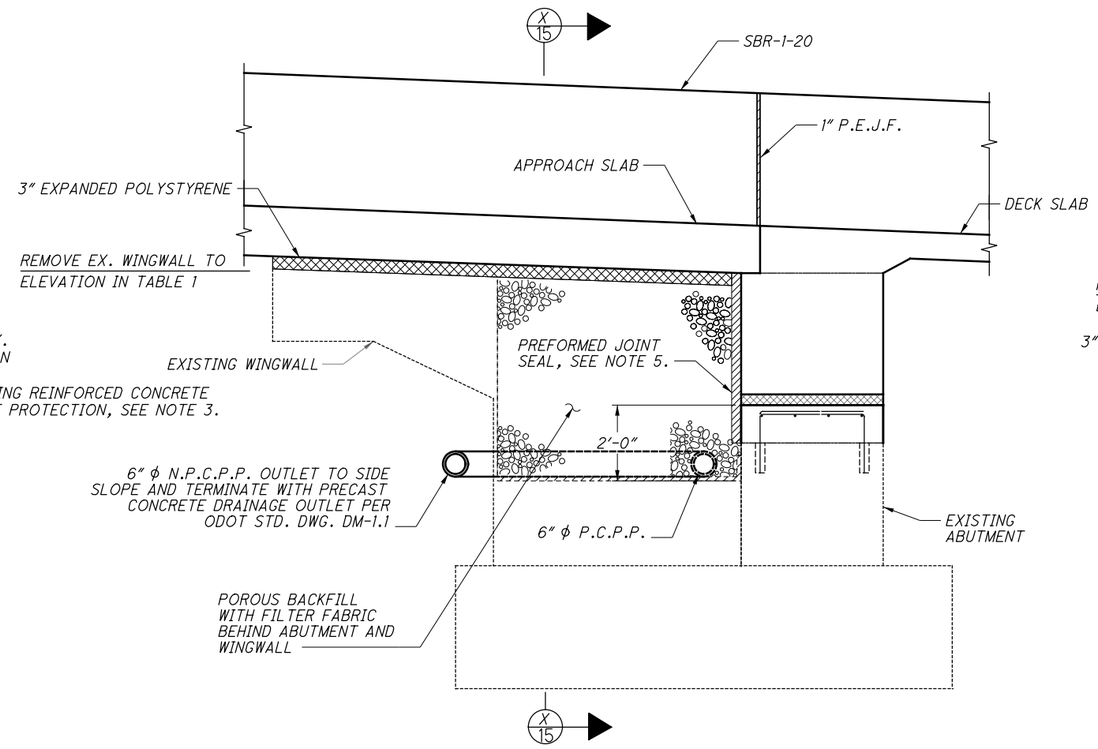
FORWARD ABUTMENT PLAN AND ELE

BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

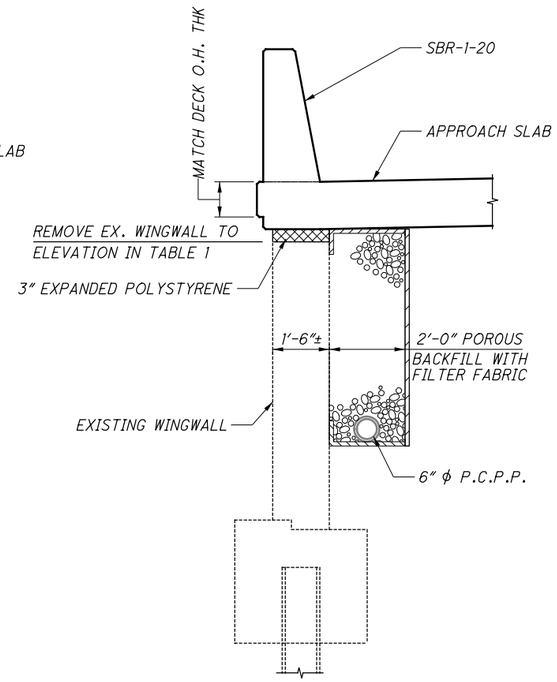
SUM-8/76/77-0.63/9.74/8.42
PID No. 102329



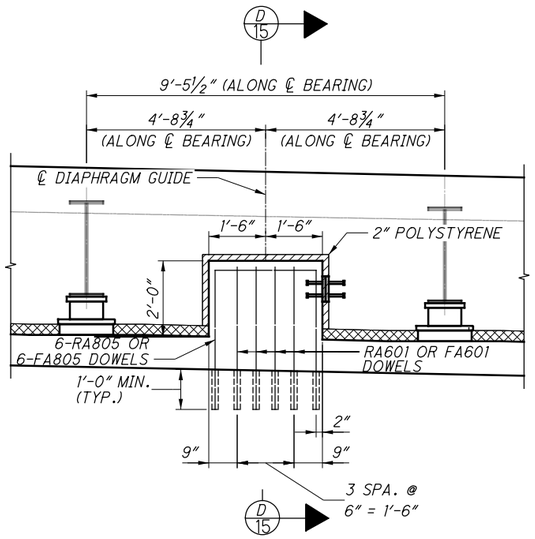
A 15 — SECTION THRU ABUTMENT
9, 10, 11, 12, 13, 14
(REAR ABUTMENT SHOWN; FORWARD ABUTMENT SIMILAR)



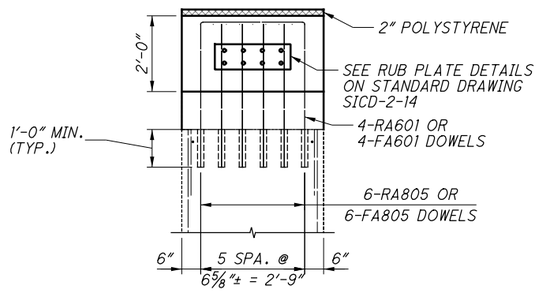
TYPICAL WINGWALL ELEVATION



X 15 — TYPICAL SECTION THRU WINGWALL



C 15 — DIAPHRAGM GUIDE DETAIL
9, 10, 12, 13



D 15 — SECTION THRU DIAPHRAGM GUIDE
NOTE: DIMENSIONS ARE PERPENDICULAR TO ABUTMENT

NOTES:

1. FOR ABUTMENT NOTES, SEE SHEET 9/40.
2. FOR ADDITIONAL DETAILS OF PARAPET ON APPROACH SLAB INCLUDING REINFORCING AND SEALING LIMITS, SEE SHEETS 37/40 THRU 38/40.
3. IN ADDITION TO REPAIRING THE EXISTING CONCRETE SLOPE PROTECTION DURING CONSTRUCTION, PATCHING SHALL BE PERFORMED AS DIRECTED BY THE ENGINEER.
4. SEE STD. DWG. SICD-2-14 FOR ADDITIONAL DETAILS.
5. INSTALL WABO XPE 5000 (5" X 3 1/2") PREFORMED JOINT SEAL, BY WATSON BOWEN ACME, OR APPROVED EQUAL. INSTALL FROM BOTTOM OF APPROACH SLAB TO 1-FOOT BELOW THE BEAM SEAT

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CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703481	

ABUTMENT DETAILS
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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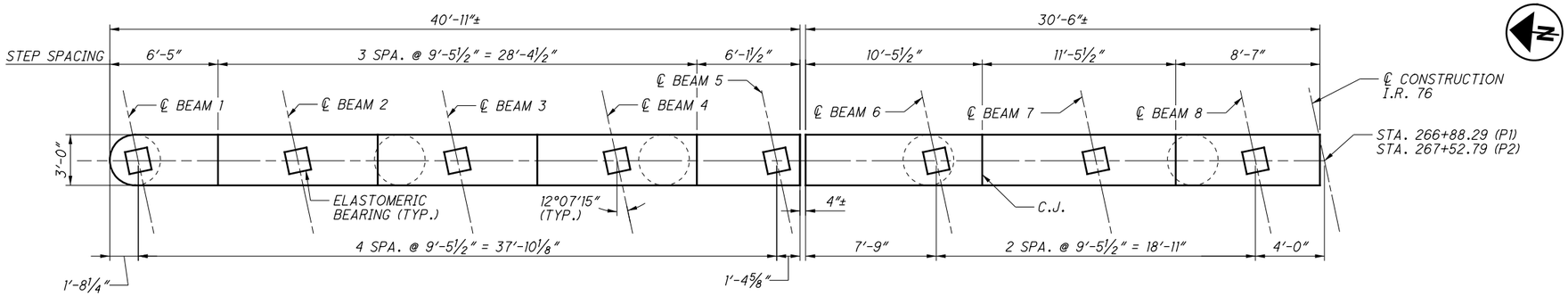
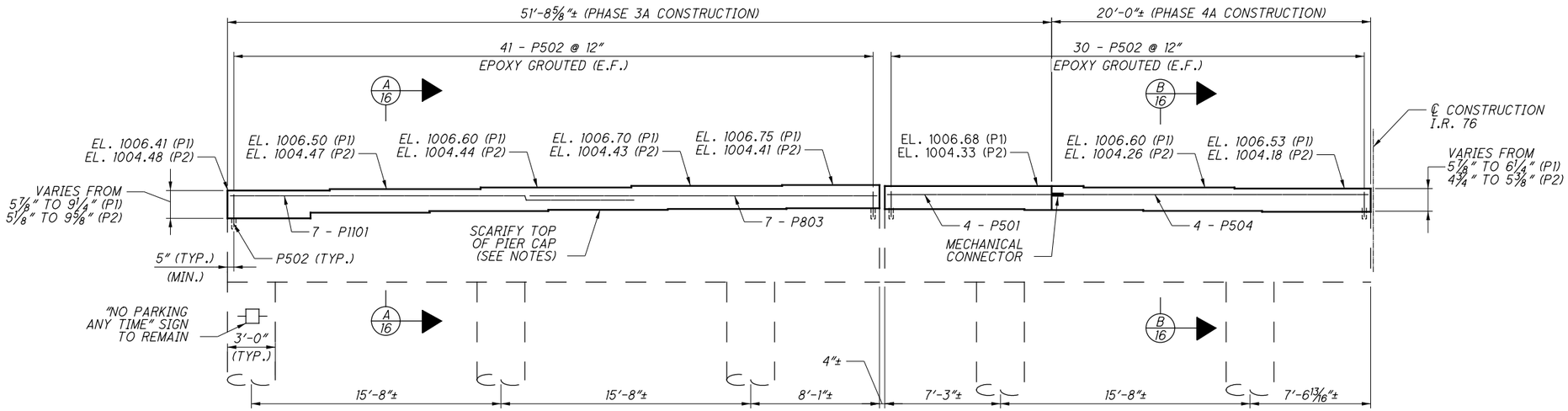


PLAN - LEFT BRIDGE

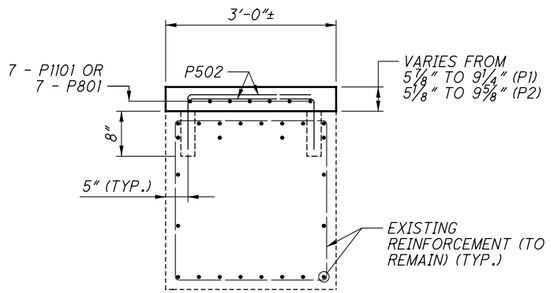
(EXISTING REINFORCEMENT NOT SHOWN)



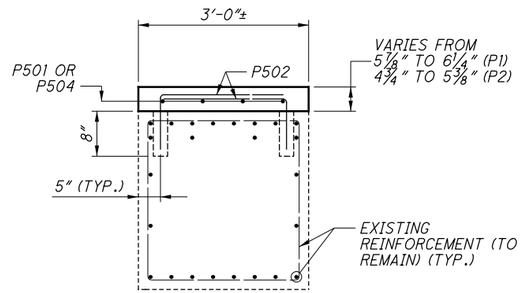
ELEVATION - LEFT BRIDGE

(LOOKING UPSTATION)
(EXISTING REINFORCEMENT NOT SHOWN)

LAP LENGTHS	
NO. 5 BARS	2'-7"
NO. 8 BARS	6'-8"



A 16 SECTION THRU PIER CAP



B 16 SECTION THRU PIER CAP

NOTES:

1. ALL EXPOSED SURFACES OF THE PIERS EXCEPT THE TOP OF THE PIER CAP SHALL BE SEALED WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY - URETHANE). SEE SHEET 4/153 FOR ADDITIONAL NOTES AND DETAILS.
2. ALL REINFORCING BAR CLEARANCES SHALL BE 2" MINIMUM UNLESS NOTED OTHERWISE.
3. DRILL DOWEL HOLES WHERE SHOWN IN THE PLANS. INSTALL REINFORCING STEEL ACCORDING TO ITEM 510 USING EPOXY GROUT, 705.20. IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, MOVE THE DOWEL HOLE TO EITHER SIDE OF THE EXISTING BAR.
4. SCARIFY EXISTING CONCRETE BRIDGE SEAT AREA TO ROUGH SURFACE APPROXIMATELY ¼" DEEP. ABRASIVELY CLEAN THE JOINT SURFACE AND REMOVE ANY LOOSE CONCRETE AND RUST. CONCRETE BONDING SURFACE SHALL BE WET AS CONCRETE IS PLACED.
5. EXISTING PIERS TO BE PATCHED. SEE GENERAL NOTES, SHEET 3/153 FOR ADDITIONAL NOTES.
6. EXISTING UNDERPASS LIGHTING TO BE REMOVED AND REPLACED.

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PARSONS
100 East Campus View Boulevard, Suite 250
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CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703481	

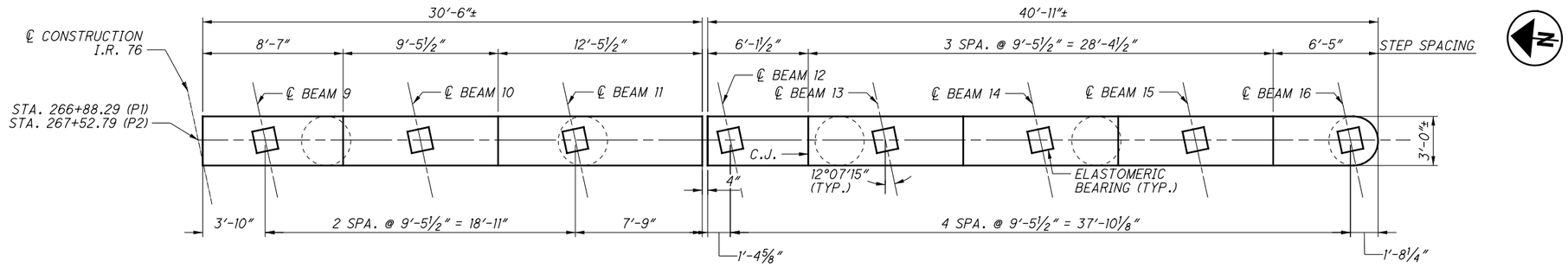
PIER DETAILS - LEFT BRIDGE
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

16 / 40

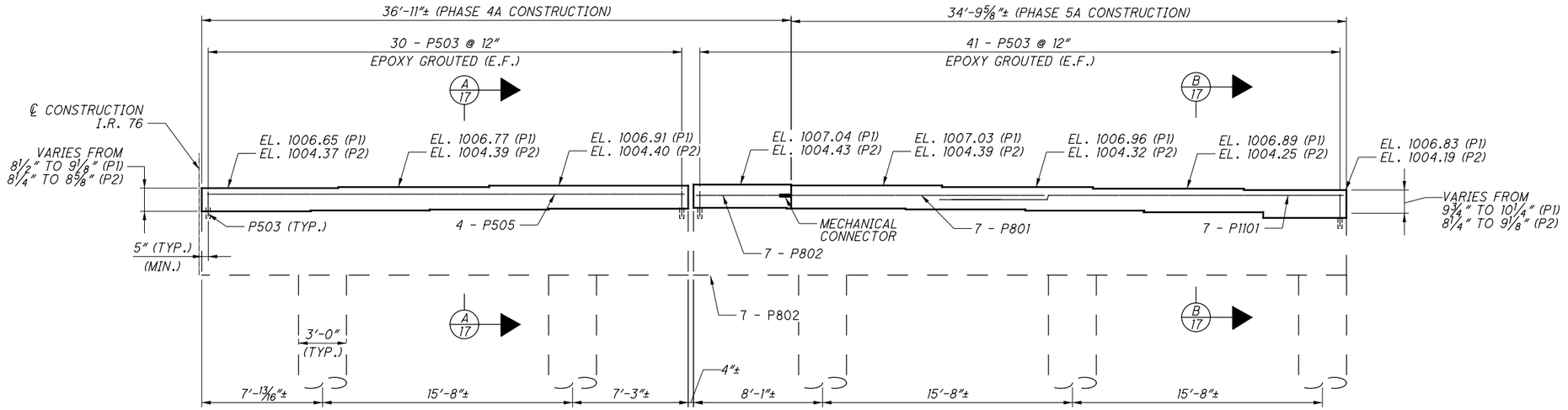
20 / 153

2021-11-04_BU 13 - RFC PLANS



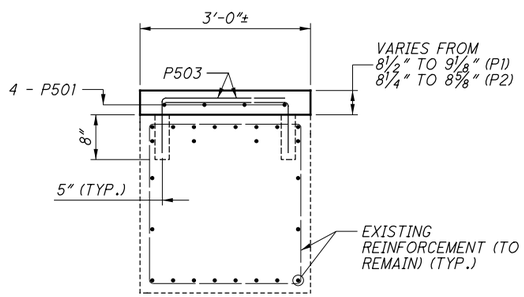
PLAN - RIGHT BRIDGE

(EXISTING REINFORCEMENT NOT SHOWN)

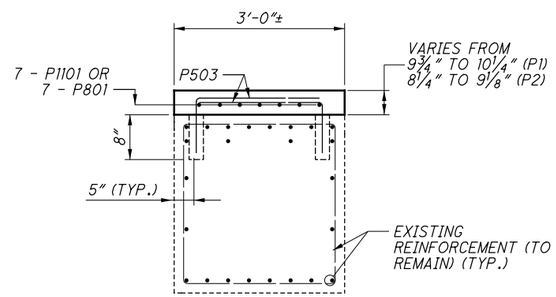


ELEVATION - RIGHT BRIDGE

(LOOKING UPSTATION)
(EXISTING REINFORCEMENT NOT SHOWN)



A 17 SECTION THRU PIER CAP



B 17 SECTION THRU PIER CAP

LAP LENGTHS	
NO. 5 BARS	2'-7"
NO. 8 BARS	6'-8"

NOTES:

1. FOR NOTES, SEE SHEET 16/40.

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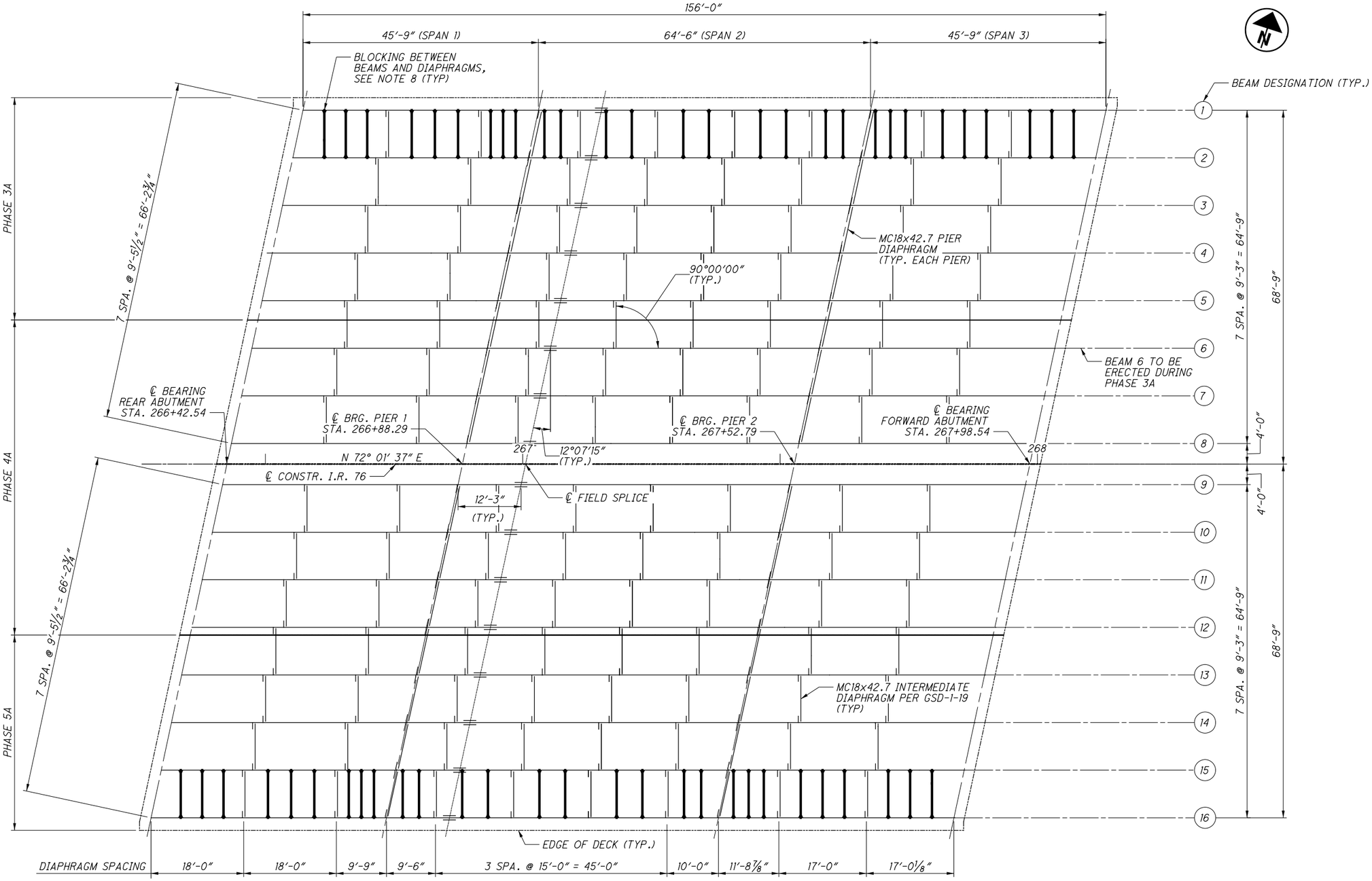
RWB		7703481	

PIER DETAILS - RIGHT BRIDGE
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2021-11-04_BU 13 - RFC PLANS



FRAMING PLAN

NOTES:

1. FOR BEAM ELEVATION CAMBER DIAGRAM AND ADDITIONAL NOTES, SEE SHEET 19/153.
2. FOR FIELD SPLICE DETAILS AND SHEAR STUD DETAILS, SEE SHEET 22/40.
3. FOR TRANSVERSE SECTION INCLUDING OVERHANG DIMENSIONS, SEE SHEET 24/40.
4. FOR INTERMEDIATE DIAPHRAGM DETAILS, SEE SHEET ODOT STANDARD DRAWINGS GSD-1-19, SHEET 2 OF 4.
5. FOR PIER DIAPHRAGM CONNECTION PLATE, SEE SHEET 22/40
6. DO NOT PERMANENTLY ATTACH INTERMEDIATE DIAPHRAGM BETWEEN BEAMS 5 AND 6 AND BEAMS 12 AND 13 UNTIL THE CONCRETE POURS ON BOTH SIDES OF THE CLOSURE POUR LOCATION HAVE BEEN COMPLETED.
7. THE FABRICATOR SHALL DETAIL THE DIAPHRAGMS, BETWEEN BEAMS 5 AND 6, AND 12 AND 13, TO FIT AT THE COMPLETION OF DECK PLACEMENT ON EACH SIDE OF THE CLOSURE POUR.
8. FOR THE CONSTRUCTION OF PHASE 3A, 4" x 4" LAGGING SHALL BE PLACED BETWEEN BEAMS 1 AND 2, AT QUARTER POINTS IN SPANS 1 AND 3 AND THIRD POINTS IN SPAN 2 BETWEEN DIAPHRAGMS AND FINISHING MACHINE RAILS SHALL BE PLACED OVER BEAM 5. FOR PHASE 5A CONSTRUCTION, 4" x 4" LAGGING SHALL BE PLACED BETWEEN BEAMS 15 AND 16, AT QUARTER POINTS IN SPANS 1 AND 3 AND THIRD POINTS IN SPAN 2 BETWEEN DIAPHRAGMS. THE CONTRACTOR ALSO HAS THE OPTION OF RUNNING THE FINISHING MACHINE RAILS OVER BEAMS 1 AND 16.

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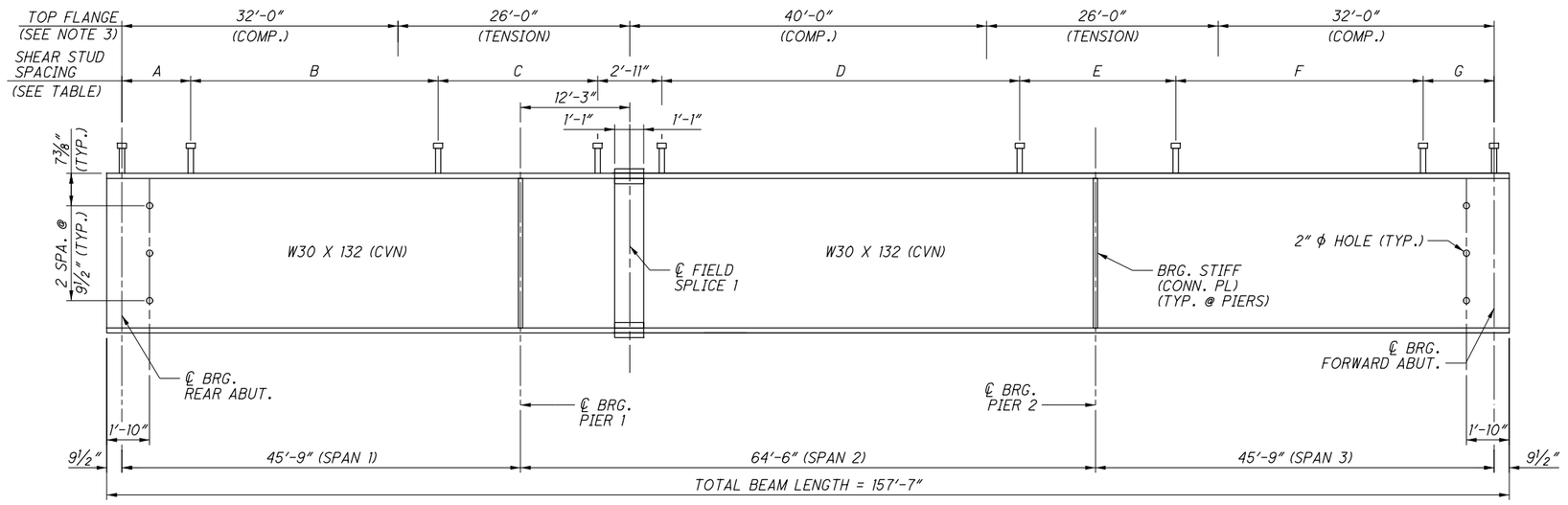
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CDB		7703481	

2021-11-04_BU 13 - RFC PLANS

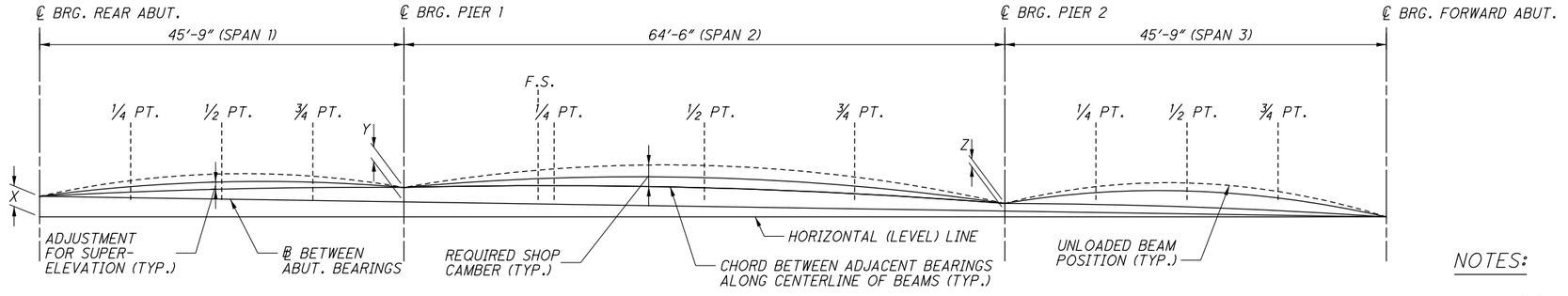
FRAMING PLAN
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329



TYPICAL BEAM ELEVATION

SHEAR STUD SPACING	
DIMENSION	SPACING
A	14 SPA. @ 7½" = 8'-9"
B	37 SPA. @ 9" = 27'-9"
C	17 SPA. @ 14" = 19'-10"
D	57 SPA. @ 9" = 42'-9"
E	15 SPA. @ 14" = 17'-6"
F	37 SPA. @ 9" = 27'-9"
G	14 SPA. @ 7½" = 8'-9"



CAMBER DIAGRAM

VERICAL OFFSETS AT SUPPORTS			
BEAM NO.	X	Y	Z
1	4'-8⅜"	⅛"	¼"
2	4'-11⅜"	0"	⅛"
3	5'-2⅝"	0"	⅛"
4	5'-5¾"	0"	0"
5	5'-8⅛"	0"	0"
6	5'-8⅛"	0"	0"
7	5'-8⅛"	0"	0"
8	5'-8⅛"	0"	0"

VERICAL OFFSETS AT SUPPORTS			
BEAM NO.	X	Y	Z
9	5'-6"	0"	0"
10	5'-9¼"	0"	0"
11	6'-0½"	0"	0"
12	6'-3¾"	0"	0"
13	6'-4⅝"	0"	0"
14	6'-4⅝"	0"	0"
15	6'-4½"	0"	0"
16	6'-4⅜"	⅛"	0"

NOTES:

1. WELDED SHEAR CONNECTORS SHALL NOT BE PLACED WITHIN TWO INCHES OF FIELD SPLICE PLATES OR WITHIN FOUR DIAMETERS, MEASURED CENTER TO CENTER, OF ANOTHER SHEAR CONNECTOR.
2. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
3. WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA BEAM 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 ¼" FOR THICKNESS UP TO ¾" OR ⅝" FOR GREATER THAN ¾" THICK.
4. ALL STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 50 (PAINTED).
5. FOR FRAMING PLAN SEE SHEET 18/40.
6. FOR SPLICE AND PIER CONNECTION PLATE DETAILS, SEE SHEET 22/40.
7. FOR SHEAR STUD DETAIL, SEE SHEET 22/40.
8. FOR DEFLECTION AND CAMBER TABLES SEE SHEETS 20/40 AND 21/40.
9. A POSITIVE VERTICAL OFFSET INDICATES AN OFFSET ABOVE THE BASELINE BETWEEN ABUTMENT BEARINGS.

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CDB		7703481	

BEAM ELEVATION AND CAMBER DIAGRAM

BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

Released for Construction
Thomas J Powell, PE
11/10/2021

LEFT BRIDGE DEFLECTION AND CAMBER

BEAM	DEFLECTION COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT		F.S. #1	1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	
			IN.	IN.	IN.		IN.	IN.	IN.	IN.		IN.	IN.	IN.	
BEAM 1	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	3/16	3/16	1/16	0	5/16	7/16	11/16	7/16	0	1/16	3/16	3/16	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	-1/16	-3/16	-1/4	0
	TOTAL CAMBER	0	3/16	3/16	1/16	0	3/8	1/2	13/16	1/2	0	0	0	-1/16	0
BEAM 2	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	3/16	3/16	1/16	0	5/16	7/16	11/16	7/16	0	1/16	3/16	3/16	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	-1/16	-1/8	0
	TOTAL CAMBER	0	3/16	3/16	1/16	0	3/8	1/2	13/16	1/2	0	1/16	1/8	1/16	0
BEAM 3	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/4	3/8	5/8	3/8	0	1/16	3/16	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	-1/16	-1/8	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	5/16	7/16	3/4	7/16	0	1/16	1/8	0	0
BEAM 4	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/4	3/8	5/8	3/8	0	1/16	3/16	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	5/16	7/16	3/4	7/16	0	1/16	3/16	1/8	0
BEAM 5	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/4	3/8	5/8	3/8	0	1/16	3/16	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	5/16	7/16	3/4	7/16	0	1/16	3/16	1/8	0
BEAM 6	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	5/16	3/8	5/8	3/8	0	1/16	3/16	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	3/8	7/16	3/4	7/16	0	1/16	3/16	1/8	0
BEAM 7	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	3/16	3/16	1/16	0	5/16	7/16	11/16	7/16	0	1/16	3/16	3/16	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	3/16	3/16	1/16	0	3/8	1/2	13/16	1/2	0	1/16	3/16	3/16	0
BEAM 8	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/4	3/8	5/8	3/8	0	1/16	3/16	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	5/16	7/16	3/4	7/16	0	1/16	3/16	1/8	0

NOTES:

1. FOR BEAM ELEVATION AND CAMBER DIAGRAM, SEE SHEET 19/40.
2. THERE IS NO ADJUSTMENT FOR VERTICAL CURVE SINCE THE PROFILE GRADE IS ON A CONSTANT LONGITUDINAL SLOPE.
3. ALL DEFLECTION AND CAMBER VALUES GIVEN TO NEAREST 1/16".
4. NEGATIVE VALUES FOR DEFLECTIONS INDICATE DEFLECTIONS UPWARD. NEGATIVE VALUES FOR SUPERELEVATION ADJUSTMENT INDICATE VALUES BELOW THE CHORD LINE.

2021-11-04_BU 13 - RFC PLANS

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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pw:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0914\Sheets\076_0914_SS003.dgn Sheet 11/2/2021 11:02:15 AM p002694C

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DESIGNED JRE | DRAWN TYW | REVIEWED TES | DATE 09/01/21
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DEFLECTION AND CAMBER TABLE - LEFT BRIDGE

SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329

BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

20/40

24/153

RIGHT BRIDGE DEFLECTION AND CAMBER

BEAM	DEFLECTION COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT		F.S. #1	1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	
			IN.	IN.	IN.		IN.	IN.	IN.	IN.		IN.	IN.	IN.	
BEAM 9	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	3/16	3/16	1/16	0	5/16	7/16	11/16	7/16	0	1/16	3/16	3/16	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	3/16	3/16	1/16	0	3/8	1/2	13/16	1/2	0	1/16	3/16	3/16	0
BEAM 10	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	3/16	3/16	1/16	0	5/16	7/16	11/16	7/16	0	1/16	3/16	3/16	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	3/16	3/16	1/16	0	3/8	1/2	13/16	1/2	0	1/16	3/16	3/16	0
BEAM 11	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/4	3/8	5/8	3/8	0	1/16	3/16	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	5/16	7/16	3/4	7/16	0	1/16	3/16	1/8	0
BEAM 12	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/4	3/8	5/8	3/8	0	1/16	3/16	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	5/16	7/16	3/4	7/16	0	1/16	3/16	1/8	0
BEAM 13	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/4	3/8	5/8	3/8	0	1/16	3/16	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	5/16	7/16	3/4	7/16	0	1/16	3/16	1/8	0
BEAM 14	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	5/16	3/8	5/8	3/8	0	1/16	3/16	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	3/8	7/16	3/4	7/16	0	1/16	3/16	1/8	0
BEAM 15	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	3/16	3/16	1/16	0	5/16	7/16	11/16	7/16	0	1/16	3/16	3/16	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	3/16	3/16	1/16	0	3/8	1/2	13/16	1/2	0	1/16	3/16	3/16	0
BEAM 16	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/4	3/8	5/8	3/8	0	1/16	3/16	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	-1/16	-1/16	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/16	1/8	1/16	0	5/16	7/16	3/4	7/16	0	1/16	3/16	1/8	0

1. FOR BEAM ELEVATION AND CAMBER DIAGRAM, SEE SHEET 19/40.
2. THERE IS NO ADJUSTMENT FOR VERTICAL CURVE SINCE THE PROFILE GRADE IS ON A CONSTANT LONGITUDINAL SLOPE.
3. ALL DEFLECTION AND CAMBER VALUES GIVEN TO NEAREST 1/16".
4. NEGATIVE VALUES FOR DEFLECTIONS INDICATE DEFLECTIONS UPWARD. NEGATIVE VALUES FOR SUPERELEVATION ADJUSTMENT INDICATE VALUES BELOW THE CHORD LINE.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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

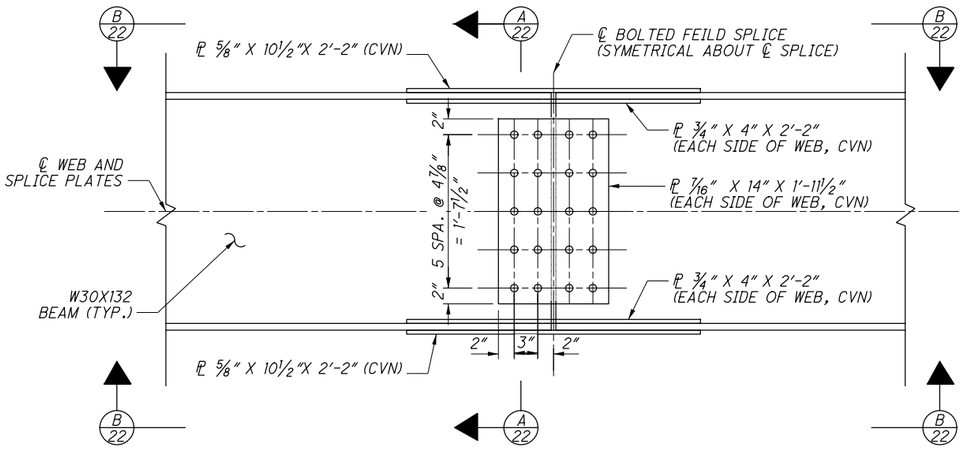
REVIEWED TES 09/01/21 | DATE
STRUCTURE FILE NUMBER 7703481
DRAWN TYW | REVISED
DESIGNED JRE | CHECKED CDB

DEFLECTION AND CAMBER TABLE - RIGHT BRIDGE

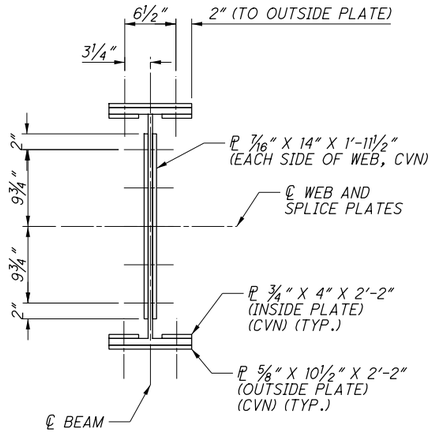
SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

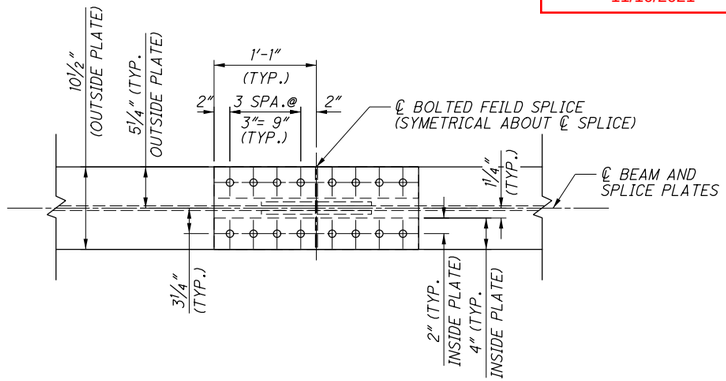
2021-11-04_BU 13 - RFC PLANS



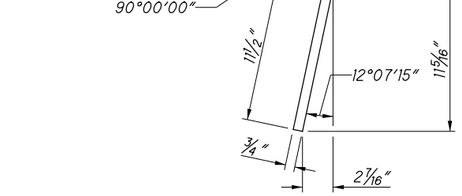
TYPICAL FIELD SPLICE



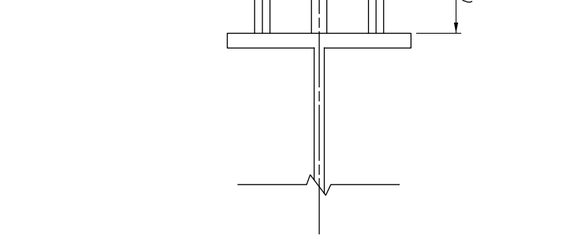
A 22 SECTION THRU BEAM



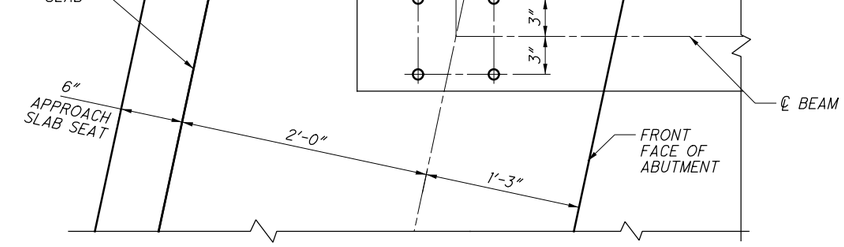
B 22 VIEW
(1 OUTSIDE PLATE AND 2 INSIDE PLATES)



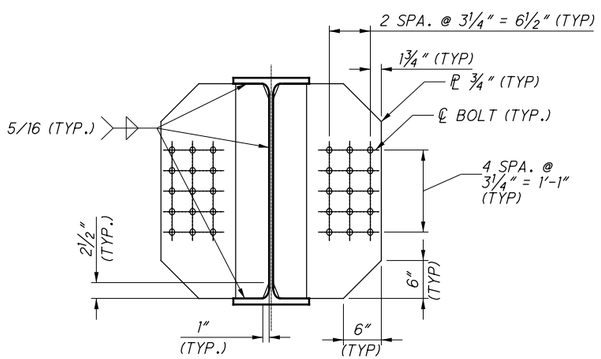
PIER CONNECTION PLATE PLAN



SHEAR STUD CONNECTOR
(SEE NOTE 1)



VENT HOLE PLACEMENT DETAIL
(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)



PIER CONNECTION PLATE DETAIL
FOR ADDITIONAL INFORMATION, SEE STD. DWG. GS-1-19

NOTES:

1. WELDED SHEAR CONNECTORS SHALL NOT BE PLACED WITHIN TWO INCHES OF FIELD SPLICE PLATES OR WITHIN FOUR DIAMETERS, MEASURED CENTER TO CENTER, OF ANOTHER SHEAR CONNECTOR.
2. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
3. ALL STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 50. (PAINTED)
4. FOR LOCATION OF FIELD SPLICES, SEE SHEET 18/40.
5. FOR BEAM ELEVATIONS, SEE SHEET 19/40.
6. ALL BOLTS FOR FIELD SPLICES SHALL BE 1" DIAMETER HIGH STRENGTH, ASTM F3125, GRADE A325 TYPE 1.
7. FOR ELASTOMERIC BEARING DETAILS, SEE SHEET 23/40.

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STEEL DETAILS
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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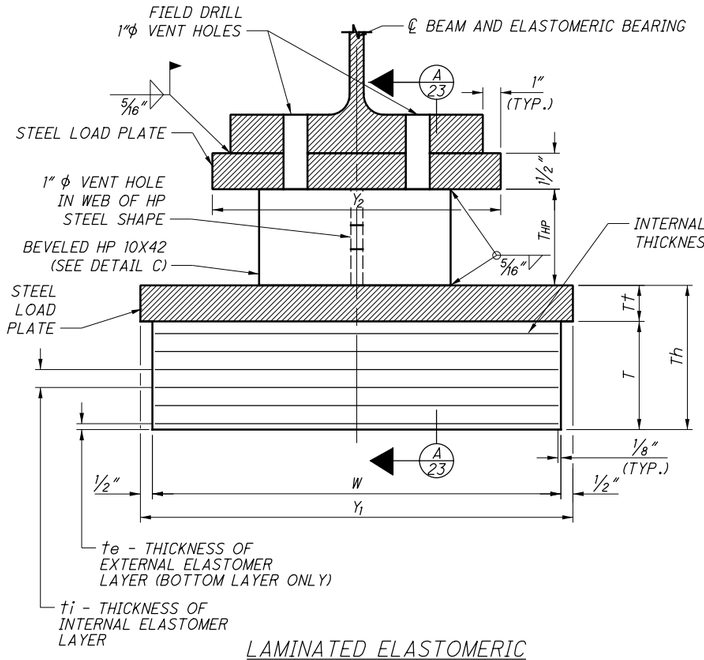
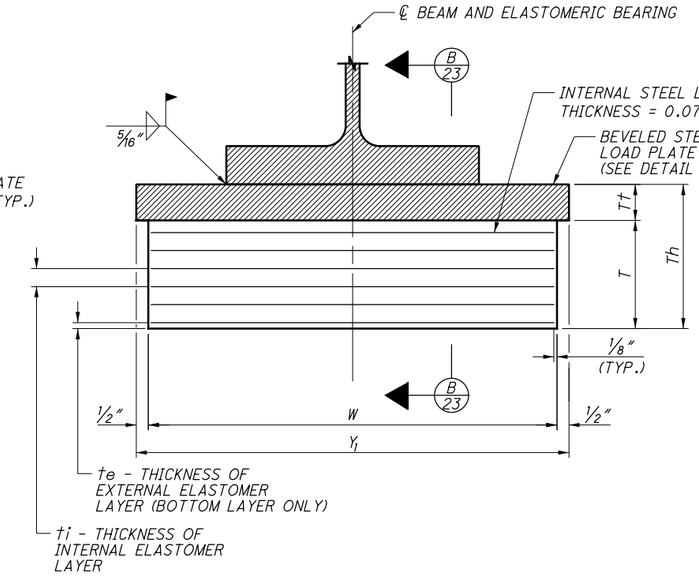
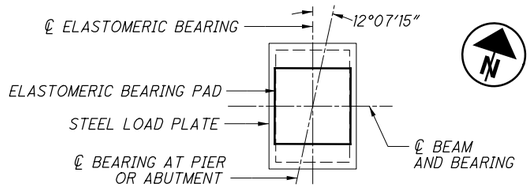


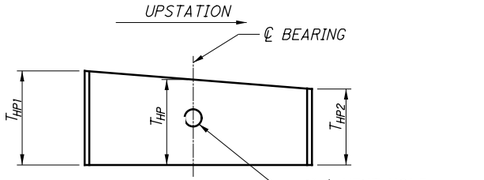
LAMINATED ELASTOMERIC EXPANSION BEARING AT ABUTMENTS



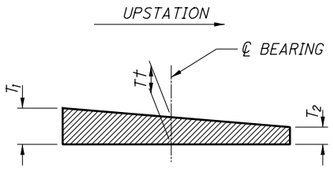
LAMINATED ELASTOMERIC EXPANSION BEARING AT PIERS



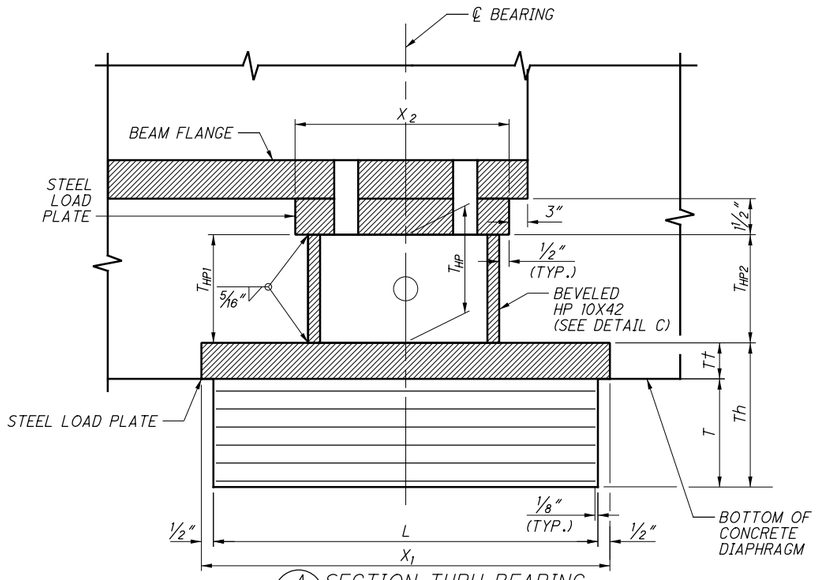
BEARING ORIENTATION PLAN



DETAIL C
BEVELED HP SHAPE

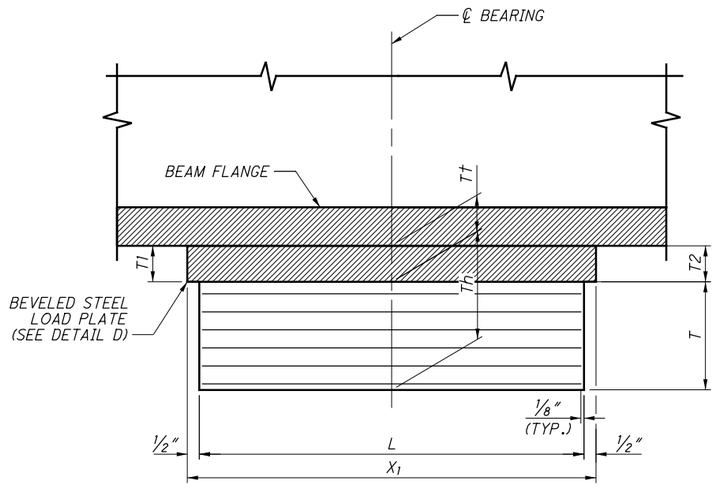


DETAIL D
BEVELED LOAD PLATE



A 23 SECTION THRU BEARING (AT ABUTMENTS)

NOTE:
T1 & T_{HP1} — UPSTATION → T2 & T_{HP2}



B 23 SECTION THRU BEARING (AT PIERS)

NOTE:
T1 — UPSTATION → T2

ELASTOMERIC BEARING DATA

LOCATION	TYPE	NO. REQ'D.	DL (KIP)	LL W/O IMPACT (KIP)	MAXDESIGN LOAD (KIP)	L (IN.)	W (IN.)	ti (IN.)	te (IN.)	NO OF ti's	NO. INTERNAL LAMINATES	T (IN.)	STEEL LOAD PLATES								HP SECTION		
													X_1 (IN.)	Y_1 (IN.)	T1 (IN.)	T2 (IN.)	Tt (IN.)	Th (IN.)	X_2 (IN.)	Y_2 (IN.)	T_{HP1} (IN.)	T_{HP} (IN.)	T_{HP2} (IN.)
ABUTMENT	EXP	32	50.0	62.0	111.9	12	12	0.375	0.25	7	7	3.398	13	13	1.50	1.50	1.50	4.898	10.75	12.50	6.18	6.00	5.82
PIERS	EXP	32	129.5	102.4	231.9	16	16	0.500	0.25	7	7	4.273	17	17	2.19	1.50	1.81	6.023	–	–	–	–	–

NOTES:

1. THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGES.
2. THE STEEL LOAD PLATES AND HP SHAPES SHALL BE ASTM A709 GRADE 50 STEEL AND PRIME PAINTED IN ACCORDANCE WITH ITEM 513. THE STEEL LOAD PLATES AT THE PIERS SHALL ALSO BE PAINTED IN ACCORDANCE WITH ITEM 514 TO MATCH BEAM COLOR.
3. THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS. CONTROL WELDING SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300°F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
4. BEARING REPOSITIONING: IF THE STEEL IS ERECTED AT AN AMBIENT TEMPERATURE HIGHER THAN 80°F OR LOWER THAN 40° AND THE BEARING SHEAR DEFLECTION EXCEEDS 1/6 OF THE BEARING HEIGHT AT 60°F± 10°F, RAISE THE BEAMS TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 60°F± 10°F.
5. TOTAL DESIGN LOAD FOR BEARINGS EQUALS THE SUM OF THE DEAD LOADS AND LIVE LOADS TABULATED IN THE BEARING TABLE. IMPACTED IS NOT INCLUDED.
6. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND VISIBLE AFTER THE BEARING IS INSTALLED.

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BEARING DETAILS
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2021-11-04_BU 13 - RFC PLANS

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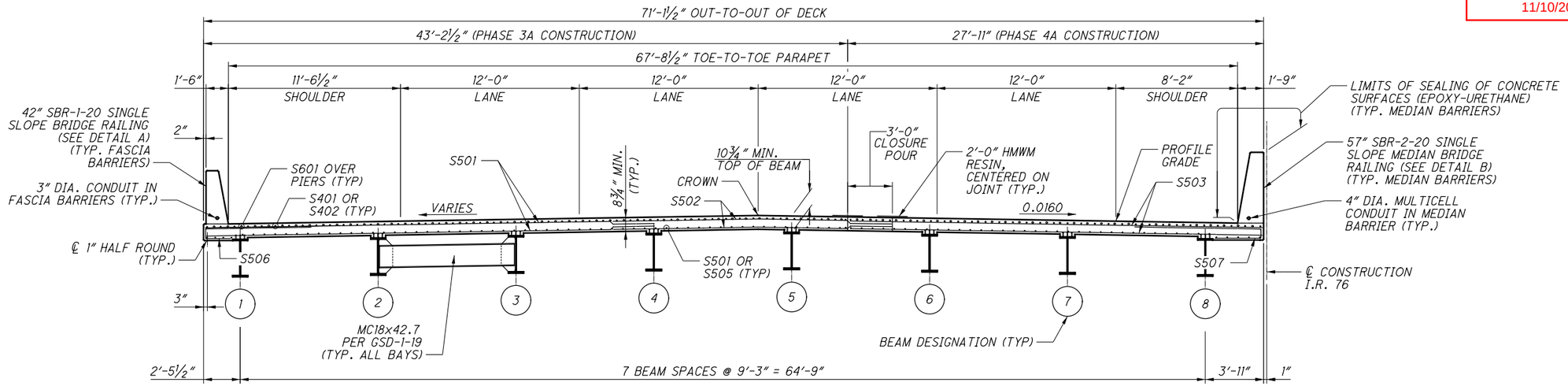
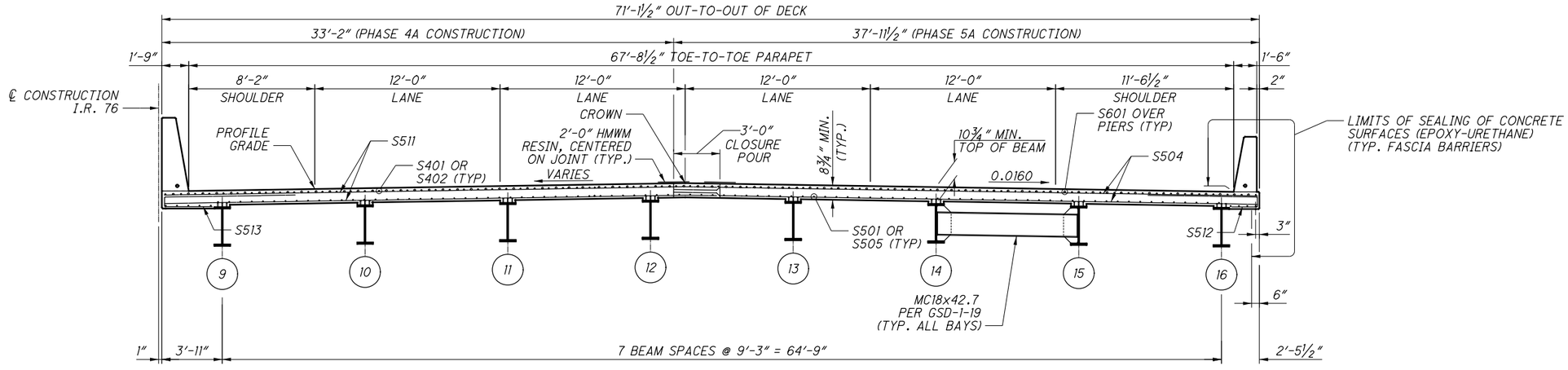
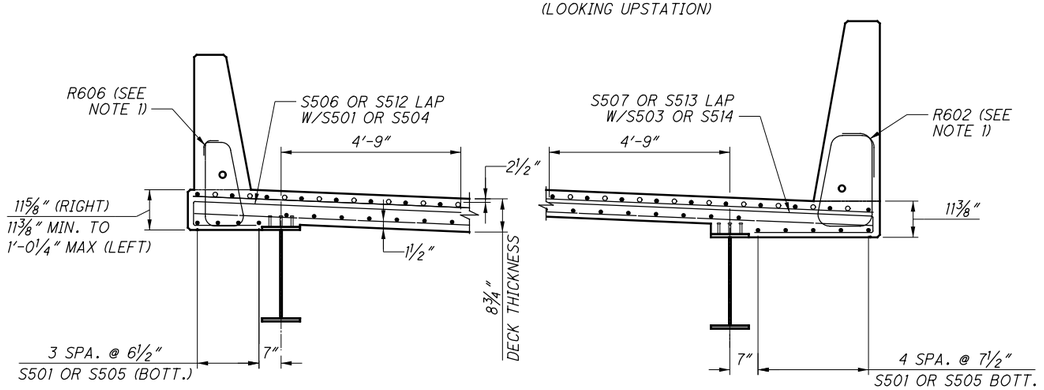


TRANSVERSE SECTION - LEFT BRIDGE



TRANSVERSE SECTION - RIGHT BRIDGE

(LOOKING UPSTATION)



DETAIL A
(EXTERIOR OVERHANG)

DETAIL B
(MEDIAN OVERHANG)

NOTES:

1. FOR ADDITIONAL PARAPET AND MEDIAN BARRIER DETAILS INCLUDING REINFORCEMENT CAST WITH THE DECK POUR, SEE SHEET 36/40.
2. FOR REINFORCING STEEL LIST SEE SHEET 40/40.
3. FOR TOP OF DECK PLAN, SEE SHEET 25/40.
4. FOR BOTTOM OF DECK PLAN, SEE SHEET 26/40.

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TRANSVERSE SECTION
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24 / 40

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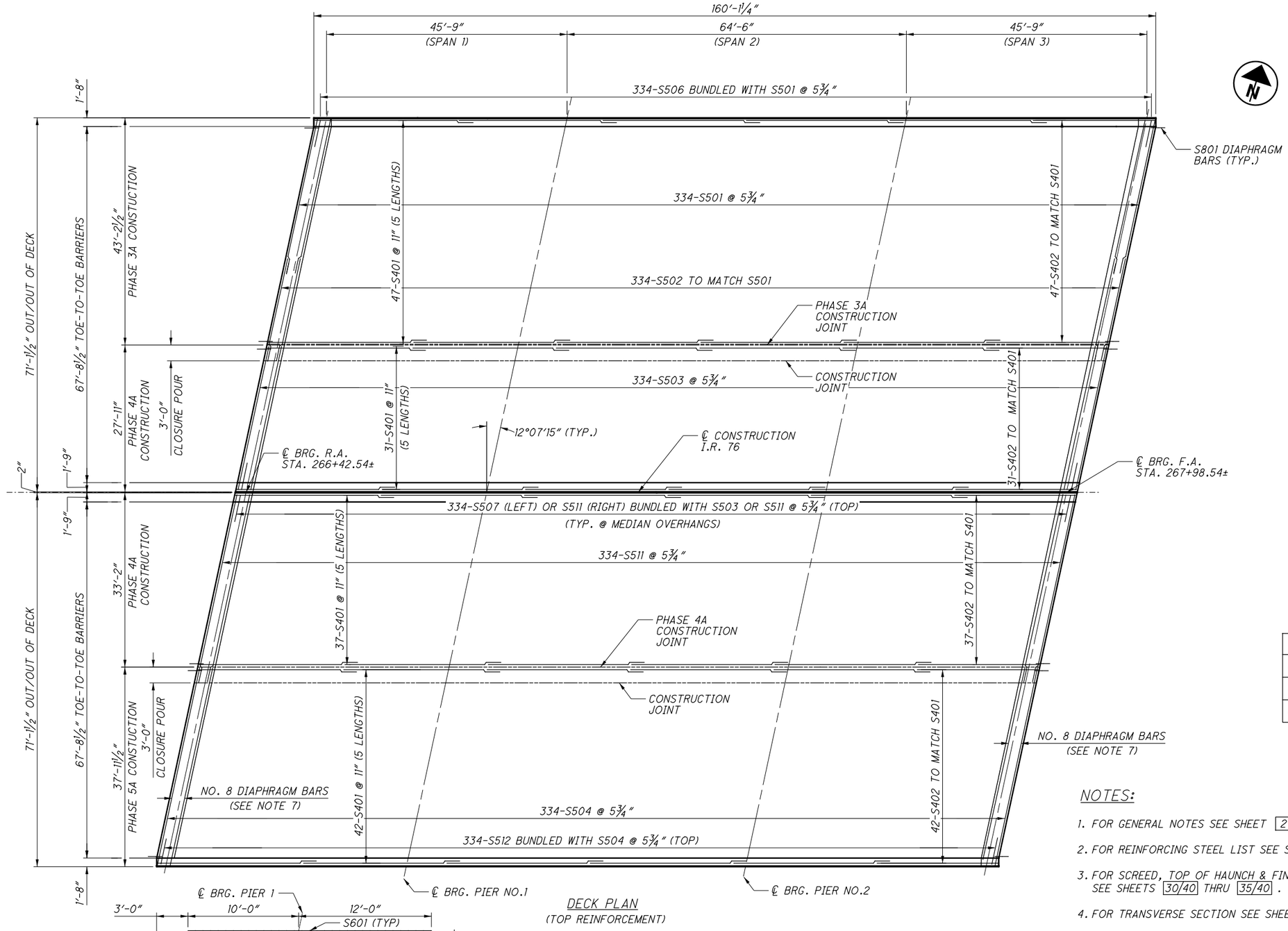
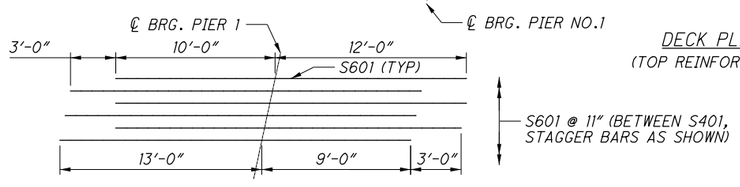


DECK PLAN
(TOP REINFORCEMENT)



ADDITIONAL PIER REINFORCEMENT DETAIL
(PIER 1 SHOWN, PIER 2 OPPOSITE)

LAP LENGTHS	
NO. 4 BARS	1'-11"
NO. 5 BARS	2'-10"
NO. 6 BARS	3'-6"

NOTES:

1. FOR GENERAL NOTES SEE SHEET 2/153.
2. FOR REINFORCING STEEL LIST SEE SHEETS 40/40.
3. FOR SCREED, TOP OF HAUNCH & FINAL DECK SURFACE ELEVATIONS SEE SHEETS 30/40 THRU 35/40.
4. FOR TRANSVERSE SECTION SEE SHEET 24/40.
5. FOR PARAPET TRANSITION NOTES AND DETAILS INCLUDING REINFORCING STEEL CAST WITH THE DECK POUR, SEE ODOT STANDARD DRAWINGS SBR-1-20, SBR-2-20 & SHEET 36/40.
6. FOR PLAN OF BOTTOM DECK REINFORCEMENT, SEE SHEET 26/40.
7. FOR REAR AND FORWARD ABUTMENT DIAPHRAGM DETAILS INCLUDING REINFORCEMENT, SEE SHEETS 27/40 THRU 29/40.

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DECK PLAN
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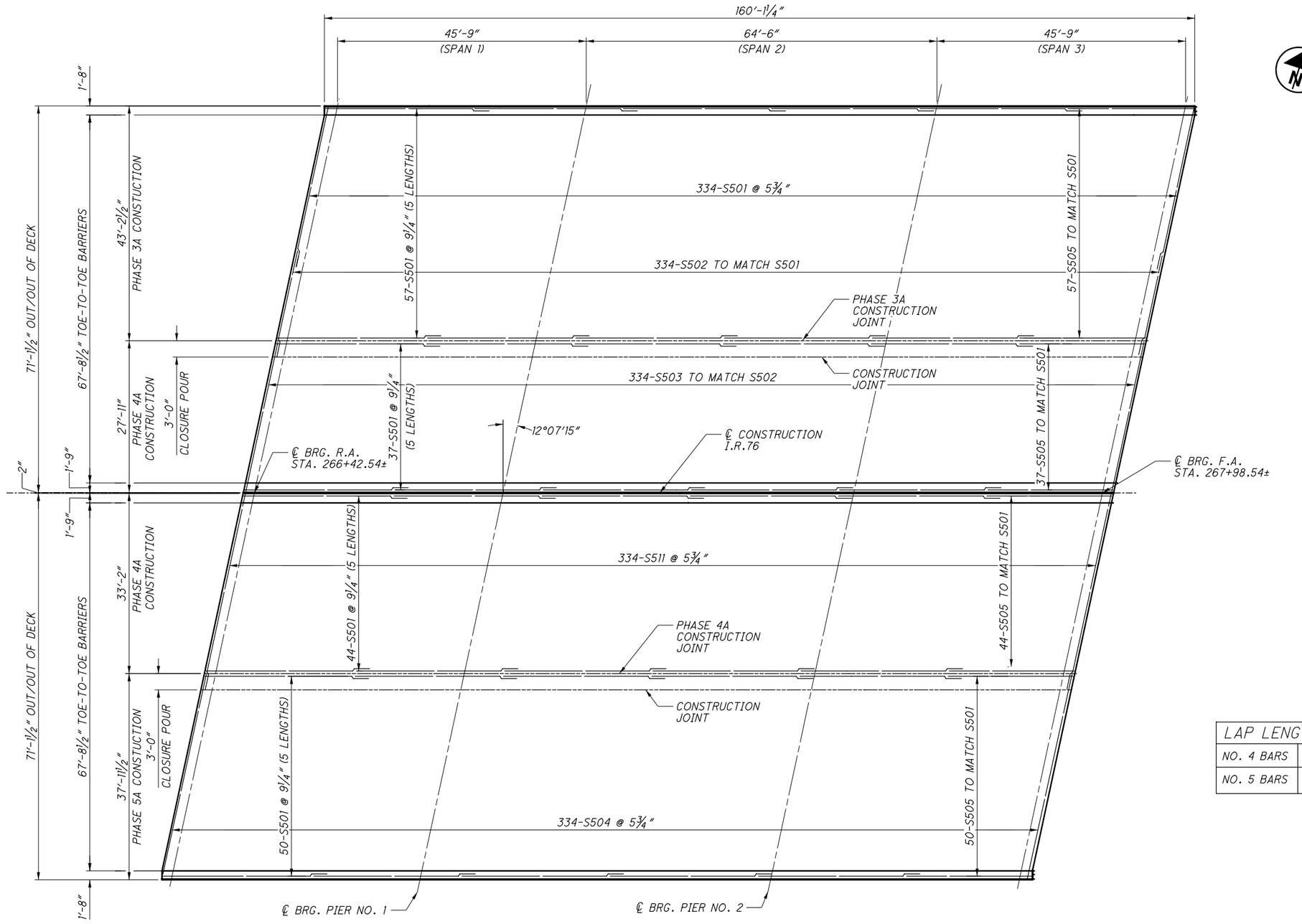
29/153



DECK PLAN
(BOTTOM REINFORCEMENT)

LAP LENGTHS	
NO. 4 BARS	1'-11"
NO. 5 BARS	2'-10"

NOTES:

1. FOR PLAN SHOWING TOP REINFORCEMENT AND ADDTIONAL NOTES, SEE SHEET 25/40.

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DECK PLAN
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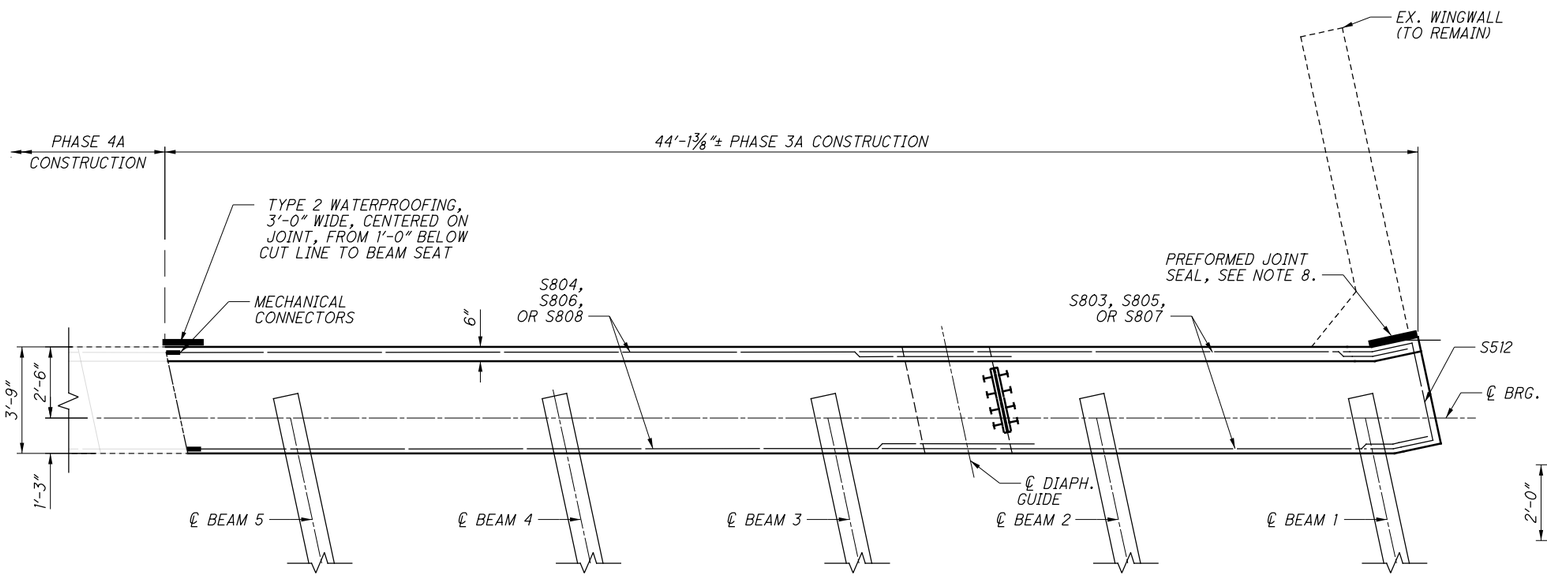
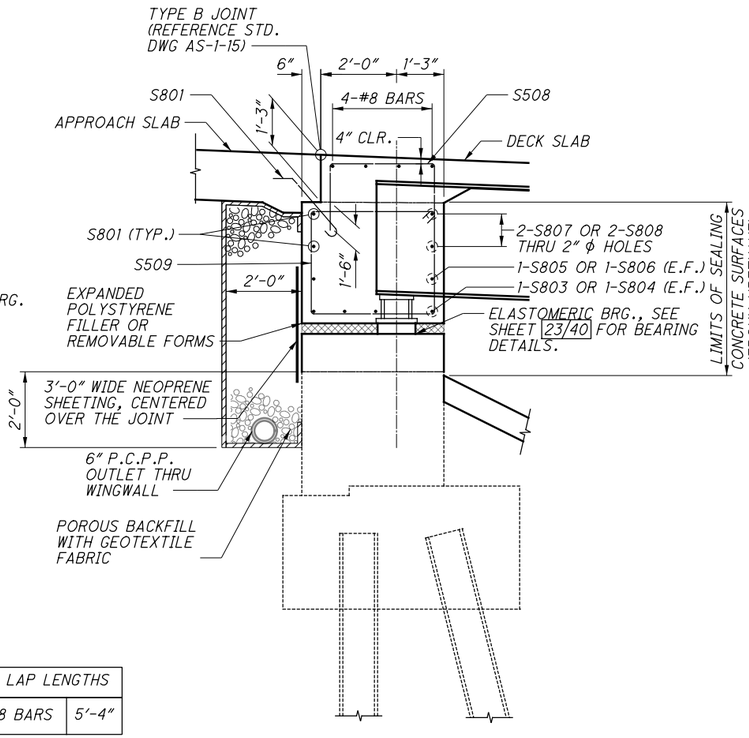
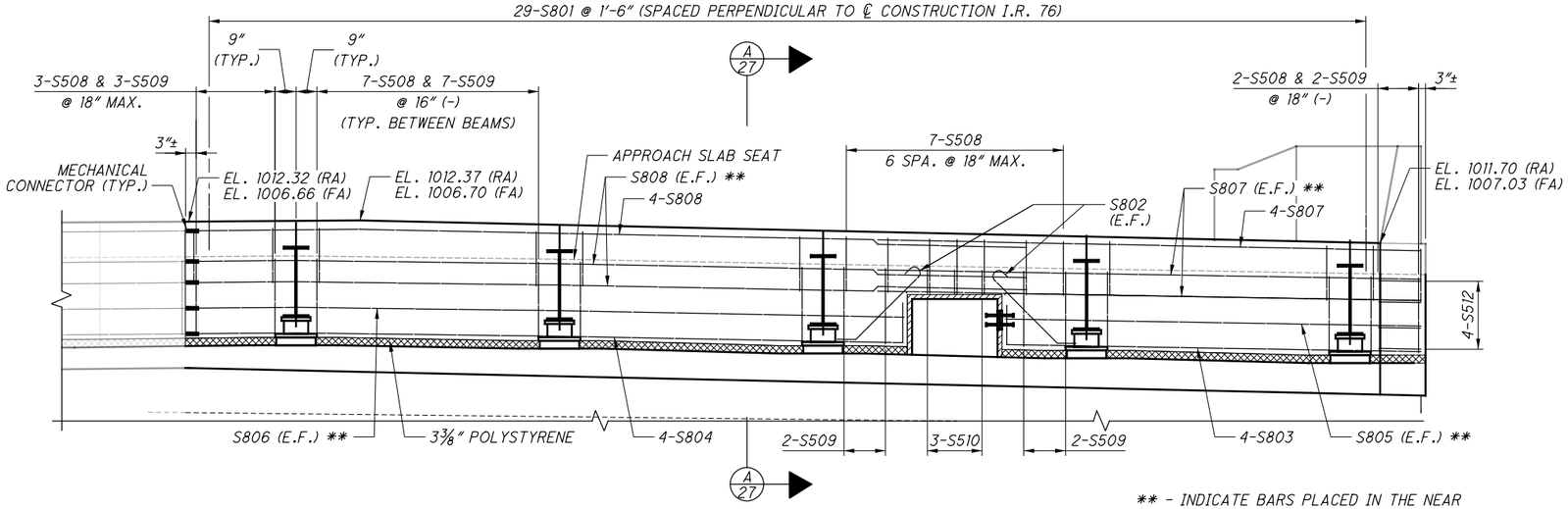


PLAN - PHASE 3A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)



MIN. LAP LENGTHS	
NO. 8 BARS	5'-4"



ELEVATION - PHASE 3A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)

** - INDICATE BARS PLACED IN THE NEAR FACE THRU HOLES IN THE WEB

A/27 SECTION THRU ABUTMENT

NOTES:

1. ABUTMENT DIAPHRAGM CONCRETE, PHASED CONSTRUCTION: PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS WITH THE DECK CONCETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPERATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN ON SICD-1-96 AND PLACE REMAINING DIAPHRAGM CONCRETE WITH DECK. PLACE CLOSURE POUR CONCRETE IN THE DIAPHRAGM AND DECK CONCURRENTLY.
2. FOR ABUTMENT PLANS AND ELEVATIONS INCLUDING SEAT ELEVATIONS SEE SHEETS 9/40 THRU 14/40.
3. FOR DETAILS NOT SHOWN, SEE ODOT STD. DRAWINGS SICD-1-96 AND SICD-2-14.
4. FOR BEAM ELEVATION INCLUDING WEB HOLES, SEE SHEET 19/40.
5. FOR PARAPET PLAN AND ELEVATION, SEE SHEETS 2/40 AND 36/40.
6. PLACE S508 AND S509 BARS PARALLEL TO BEAMS.
7. FOR ELASTOMERIC BEARING DETAILS, SEE SHEET 23/40.
8. INSTALL WABO XPE 5000 (5" X 3 1/2") PREFORMED JOINT SEAL, BY WATSON BOWEN ACME, OR APPROVED EQUAL. INSTALL FROM BOTTOM OF APPROACH SLAB TO 1-FOOT BELOW THE BEAM SEAT

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ABUTMENT DIAPHRAGM DETAILS

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27/40

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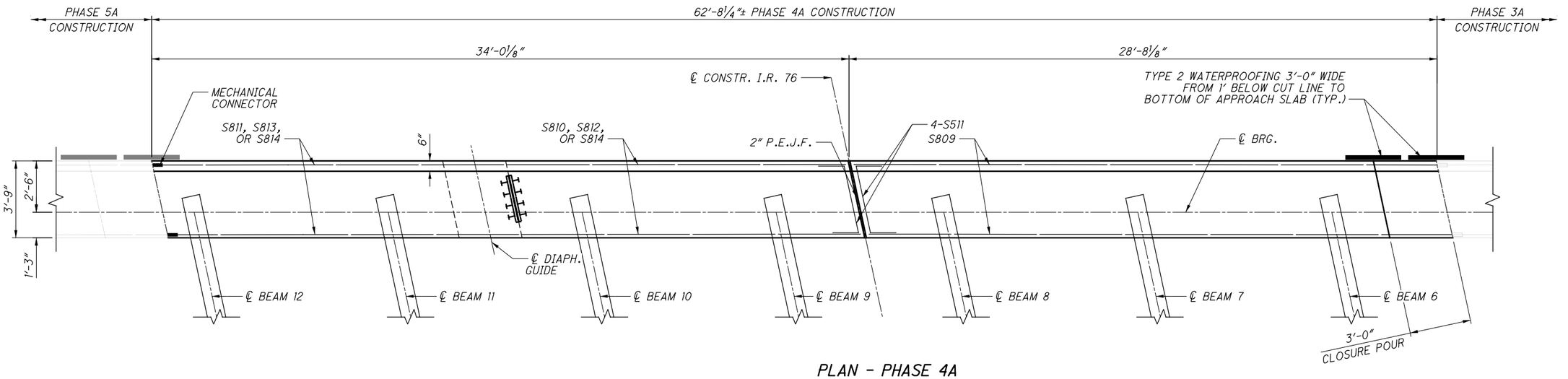
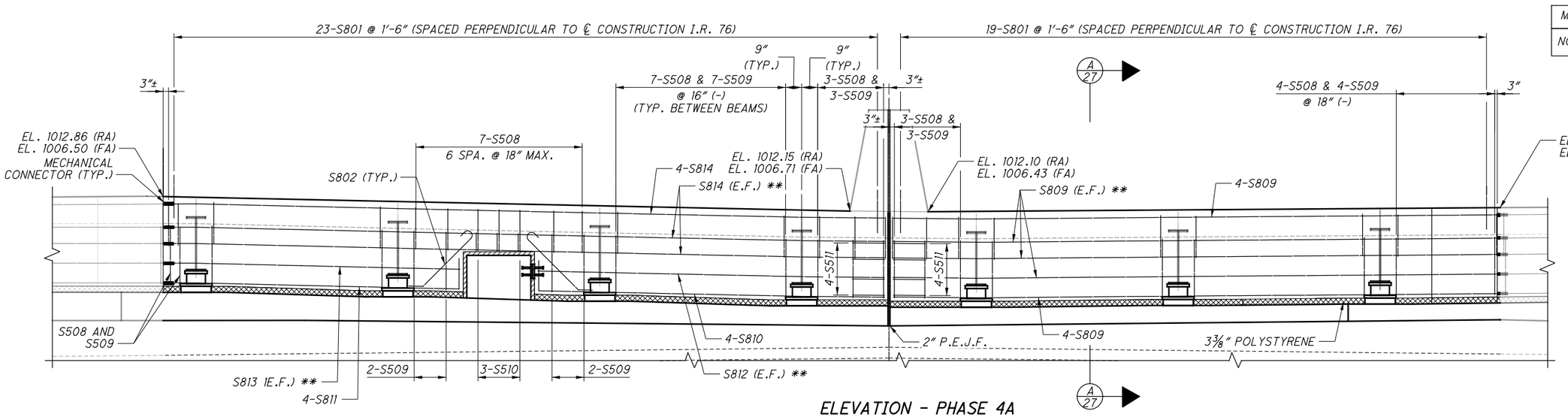


PLAN - PHASE 4A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)

MIN. LAP LENGTHS	
NO. 8 BARS	5'-4"



ELEVATION - PHASE 4A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)

** - INDICATE BARS PLACED IN THE NEAR FACE THRU HOLES IN THE WEB

NOTES:

1. FOR DIAPHRAGM NOTES, SEE SHEET 27/40.

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ABUTMENT DIAPHRAGM DETAILS
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PID No. 102329

28/40

32/153

ISSUE RECORD:		
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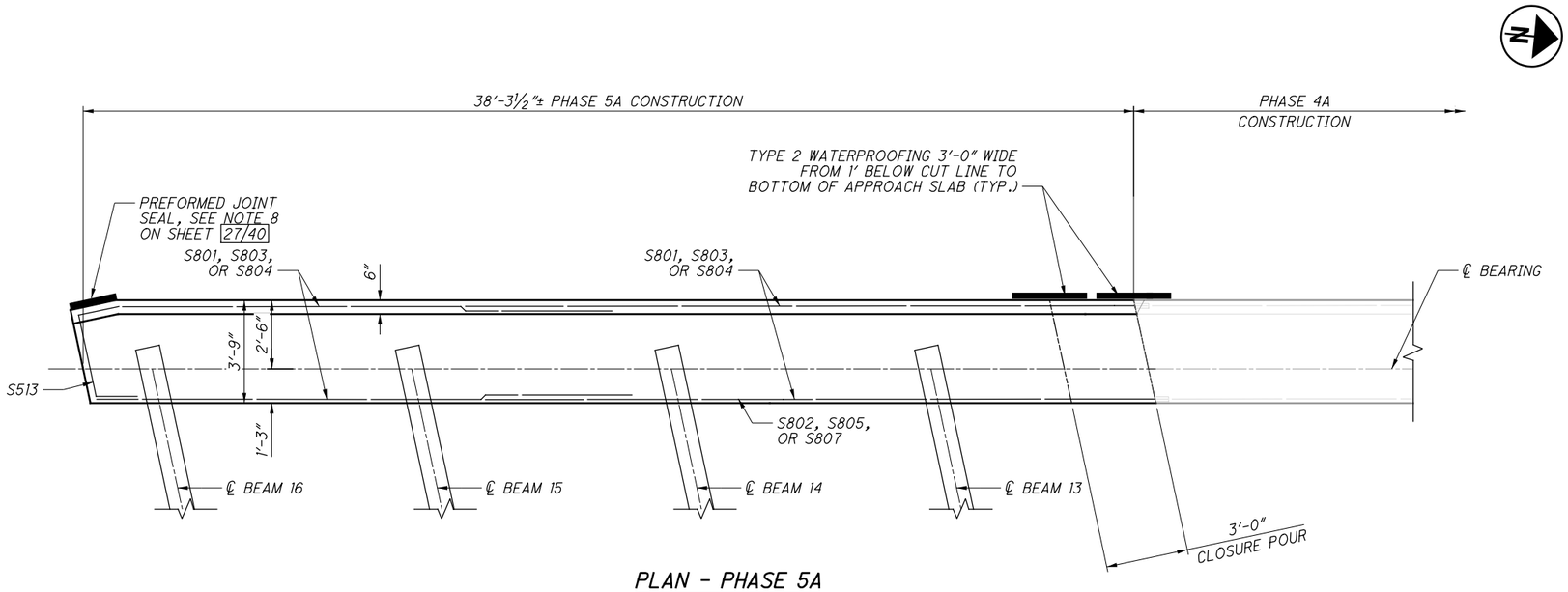
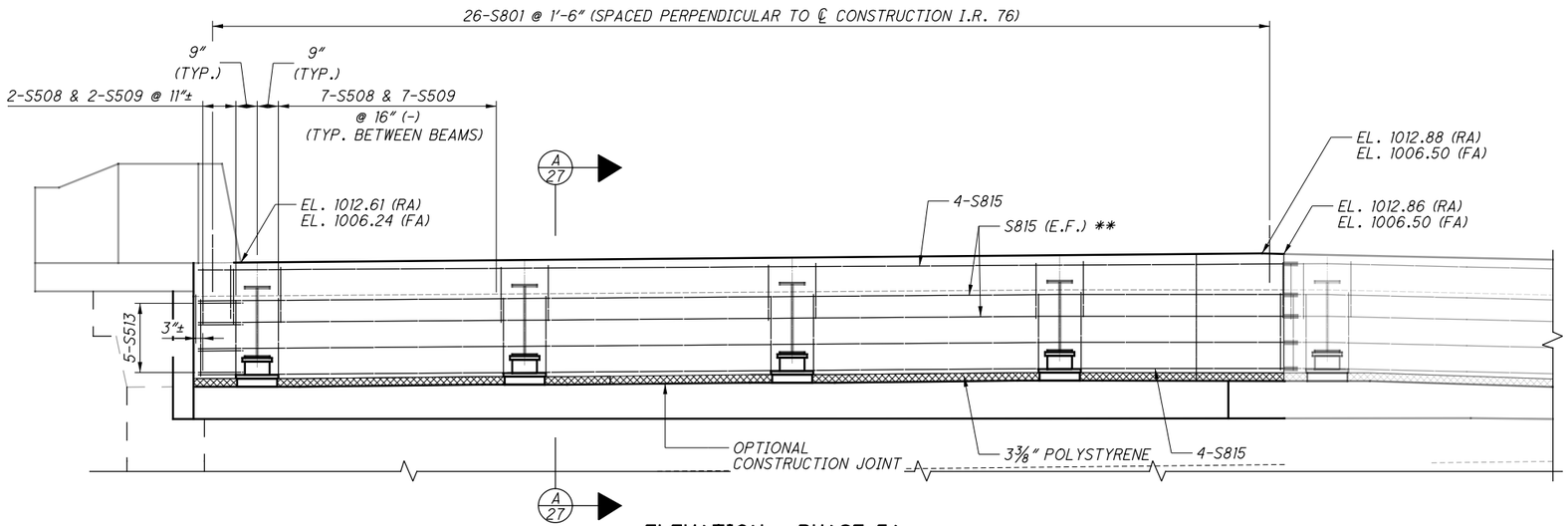


PLAN - PHASE 5A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)



ELEVATION - PHASE 5A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)

MIN. LAP LENGTHS	
NO. 8 BARS	5'-4"

NOTES:

1. FOR DIAPHRAGM NOTES, SEE SHEET 27/40.

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ABUTMENT DIAPHRAGM DETAILS
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PID No. 102329

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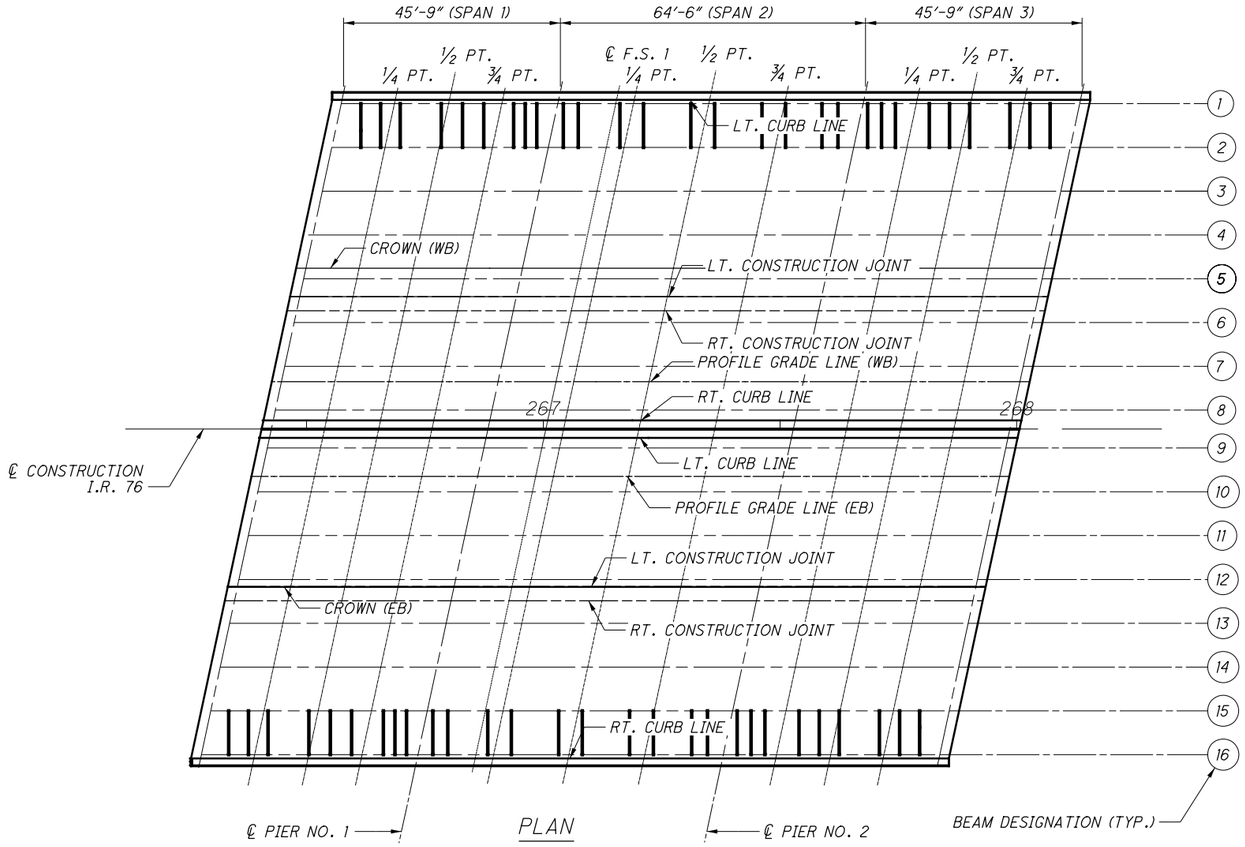
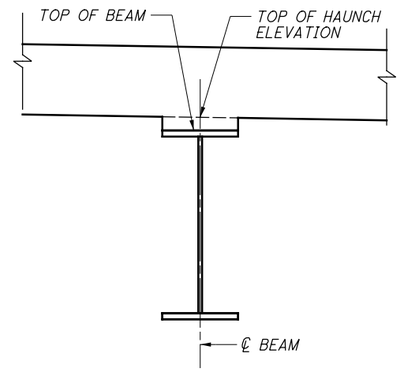
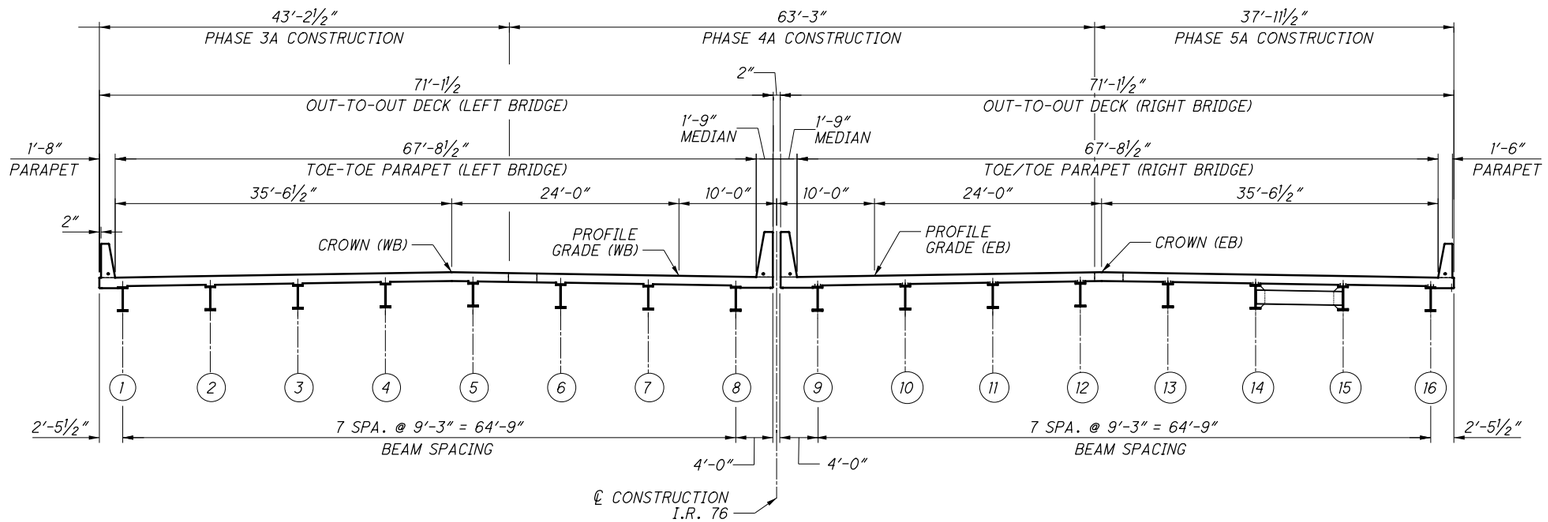
33/153



PLAN



TOP OF HAUNCH DETAIL



TRANSVERSE SECTION

NOTES:

1. FOR SCREED ELEVATIONS, SEE SHEET 31/40.
2. FOR TOP OF HAUNCH ELEVATIONS,SEE SHEET 32/40.
3. FOR FINAL DECK SURFACE ELEVATIONS, SEE SHEET 34/40 AND 35/40.
4. FOR DECK PLAN, SEE SHEETS 25/40 AND 26/40.
5. FOR TRANSVERSE SECTION, SEE SHEET 24/40.
6. FOR FRAMING PLAN, SEE SHEET 18/40.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	TYW	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703481	

ELEVATIONS LOCATION PLAN
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329

2021-11-04_BU 13 - RFC PLANS

LEFT BRIDGE SCREED ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT		F.S. #1	1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	
LEFT CURB LINE	STATION	266+57.48	266+68.91	266+80.35	266+91.79	267+03.23	267+15.48	267+19.35	267+35.48	267+51.60	267+67.73	267+79.16	267+90.60	268+02.04	268+13.48
	SCREED ELEVATION	1011.70	1011.38	1011.04	1010.69	1010.34	1010.01	1009.90	1009.45	1008.94	1008.43	1008.09	1007.76	1007.42	1007.05
CROWN	STATION	266+49.84	266+61.28	266+72.72	266+84.16	266+95.59	267+07.84	267+11.72	267+27.84	267+43.97	267+60.09	267+71.53	267+82.97	267+94.41	268+05.84
	SCREED ELEVATION	1012.37	1011.97	1011.55	1011.13	1010.70	1010.29	1010.15	1009.59	1008.98	1008.36	1007.94	1007.54	1007.12	1006.70
LEFT CONSTRUCTION JOINT	STATION	266+48.56	266+59.99	266+71.43	266+82.87	266+94.31	267+06.56	267+10.43	267+26.56	267+42.68	267+58.81	267+70.24	267+81.68	267+93.12	268+04.56
	SCREED ELEVATION	1012.32	1011.92	1011.50	1011.08	1010.66	1010.24	1010.11	1009.54	1008.93	1008.31	1007.90	1007.49	1007.07	1006.65
RIGHT CONSTRUCTION JOINT	STATION	266+47.91	266+59.35	266+70.79	266+82.22	266+93.66	267+05.91	267+09.79	267+25.91	267+42.04	267+58.16	267+69.60	267+81.04	267+92.47	268+03.91
	SCREED ELEVATION	1012.30	1011.89	1011.48	1011.05	1010.63	1010.21	1010.08	1009.52	1008.91	1008.28	1007.87	1007.47	1007.05	1006.62
PROFILE GRADE LINE	STATION	266+44.69	266+56.13	266+67.57	266+79.00	266+90.44	267+02.69	267+06.57	267+22.69	267+38.82	267+54.94	267+66.38	267+77.82	267+89.25	268+00.69
	SCREED ELEVATION	1012.17	1011.77	1011.36	1010.93	1010.51	1010.09	1009.96	1009.40	1008.79	1008.16	1007.75	1007.34	1006.93	1006.49
RIGHT CURB LINE	STATION	266+42.94	266+54.37	266+65.81	266+77.25	266+88.69	267+00.94	267+04.81	267+20.94	267+37.06	267+53.19	267+64.62	267+76.06	267+87.50	267+98.94
	SCREED ELEVATION	1012.11	1011.70	1011.29	1010.86	1010.44	1010.02	1009.89	1009.46	1008.72	1008.09	1007.68	1007.28	1006.86	1006.43

RIGHT BRIDGE SCREED ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT		F.S. #1	1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	
LEFT CURB LINE	STATION	266+42.15	266+53.59	266+65.02	266+76.46	266+87.90	267+00.15	267+04.02	267+20.15	267+36.27	267+52.40	267+63.84	267+75.27	267+86.71	267+98.15
	SCREED ELEVATION	1012.15	1011.77	1011.37	1010.96	1010.56	1010.16	1010.03	1009.50	1008.91	1008.31	1007.91	1007.53	1007.13	1006.71
PROFILE GRADE LINE	STATION	266+40.39	266+51.83	266+63.27	266+74.71	266+86.14	266+98.39	267+02.27	267+18.39	267+34.52	267+50.64	267+62.08	267+73.52	267+84.96	267+96.39
	SCREED ELEVATION	1012.33	1011.93	1011.51	1011.09	1010.66	1010.25	1010.12	1009.56	1008.94	1008.32	1007.90	1007.50	1007.08	1006.65
LEFT CONSTRUCTION JOINT	STATION	266+35.40	266+46.84	266+58.28	266+69.71	266+81.15	266+93.40	266+97.28	267+13.40	267+29.53	267+45.65	267+57.09	267+68.53	267+79.96	267+91.40
	SCREED ELEVATION	1012.86	1012.41	1011.94	1011.47	1011.00	1010.52	1010.38	1009.74	1009.06	1008.37	1007.90	1007.45	1006.98	1006.50
CROWN	STATION	266+35.24	266+46.68	266+58.12	266+69.55	266+80.99	266+93.24	266+97.12	267+13.24	267+29.37	267+45.49	267+56.93	267+68.37	267+79.80	267+91.24
	SCREED ELEVATION	1012.88	1012.43	1011.96	1011.48	1011.01	1010.53	1010.38	1009.75	1009.07	1008.37	1007.91	1007.45	1006.98	1006.50
RIGHT CONSTRUCTION JOINT	STATION	266+34.76	266+46.19	266+57.63	266+69.07	266+80.51	266+92.76	266+96.63	267+12.76	267+28.88	267+45.01	267+56.44	267+67.88	267+79.32	267+90.76
	SCREED ELEVATION	1012.86	1012.41	1011.94	1011.46	1010.99	1010.52	1010.37	1009.73	1009.05	1008.35	1007.89	1007.43	1006.96	1006.48
RIGHT CURB LINE	STATION	266+27.61	266+39.04	266+50.48	266+61.92	266+73.36	266+85.61	266+89.48	267+05.61	267+21.73	267+37.86	267+49.29	267+60.73	267+72.17	267+83.61
	SCREED ELEVATION	1012.61	1012.17	1011.70	1011.22	1010.75	1010.28	1010.13	1009.49	1008.81	1008.11	1007.65	1007.19	1006.72	1006.24

NOTES:

1. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. FOR DECK PLAN, SEE SHEETS 25/40 AND 26/40 .
3. FOR TOP OF HAUNCH ELEVATIONS,SEE SHEET 32/40.
4. FOR FINAL DECK SURFACE ELEVATIONS, SEE SHEET 34/40 AND 35/40.
5. FOR ELEVATION LOCATIONS AND HAUNCH DETAIL, SEE SHEET 30/40.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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

REVIEWED TES DATE 09/01/21
DRAWN TYW REVISED
DESIGNED JRE CHECKED RWB
STRUCTURE FILE NUMBER 7703481

SCREED ELEVATIONS
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

Released for Construction
Thomas J Powell, PE
11/10/2021

LEFT BRIDGE TOP OF HAUNCH ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT		F.S. #1	1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	
BEAM 1	STATION	266+57.31	266+68.74	266+80.18	266+91.62	267+03.06	267+15.31	267+19.18	267+35.31	267+51.43	267+67.56	267+78.99	267+90.43	268+01.87	268+13.31
	TOP OF HAUNCH ELEVATION	1010.99	1010.66	1010.32	1009.97	1009.62	1009.28	1009.18	1008.72	1008.22	1007.69	1007.36	1007.03	1006.68	1006.32
BEAM 2	STATION	266+55.32	266+66.76	266+78.20	266+89.63	267+01.07	267+13.32	267+17.20	267+33.32	267+49.45	267+65.57	267+77.01	267+88.45	267+99.88	268+11.32
	TOP OF HAUNCH ELEVATION	1011.15	1010.81	1010.45	1010.07	1009.71	1009.35	1009.24	1008.75	1008.22	1007.67	1007.31	1006.96	1006.60	1006.22
BEAM 3	STATION	266+53.33	266+64.77	266+76.21	266+87.65	266+99.08	267+11.33	267+15.21	267+31.33	267+47.46	267+63.58	267+75.02	267+86.46	267+97.90	268+09.33
	TOP OF HAUNCH ELEVATION	1011.32	1010.96	1010.58	1010.18	1009.80	1009.42	1009.30	1008.78	1008.22	1007.65	1007.27	1006.90	1006.52	1006.11
BEAM 4	STATION	266+51.35	266+62.79	266+74.22	266+85.66	266+97.10	267+09.35	267+13.22	267+29.35	267+45.47	267+61.60	267+73.04	267+84.47	267+95.91	268+07.35
	TOP OF HAUNCH ELEVATION	1011.50	1011.11	1010.71	1010.30	1009.90	1009.49	1009.37	1008.83	1008.24	1007.63	1007.24	1006.85	1006.44	1006.04
BEAM 5	STATION	266+49.36	266+60.80	266+72.24	266+83.67	266+95.11	267+07.36	267+11.24	267+27.36	267+43.49	267+59.61	267+71.05	267+82.49	267+93.92	268+05.36
	TOP OF HAUNCH ELEVATION	1011.62	1011.22	1010.81	1010.38	1009.96	1009.54	1009.41	1008.84	1008.23	1007.61	1007.20	1006.79	1006.37	1005.95
BEAM 6	STATION	266+47.37	266+58.81	266+70.25	266+81.69	266+93.12	267+05.37	267+09.25	267+25.37	267+41.50	267+57.62	267+69.06	267+80.50	267+91.94	268+03.37
	TOP OF HAUNCH ELEVATION	1011.55	1011.14	1010.73	1010.30	1009.88	1009.46	1009.33	1008.77	1008.16	1007.53	1007.12	1006.72	1006.30	1005.87
BEAM 7	STATION	266+45.39	266+56.83	266+68.26	266+79.70	266+91.14	267+03.39	267+07.26	267+23.39	267+39.51	267+55.64	267+67.08	267+78.51	267+89.95	268+01.39
	TOP OF HAUNCH ELEVATION	1011.47	1011.07	1010.66	1010.23	1009.81	1009.39	1009.26	1008.70	1008.09	1007.46	1007.05	1006.64	1006.22	1005.79
BEAM 8	STATION	266+43.40	266+54.84	266+66.28	266+77.71	266+89.15	267+01.40	267+05.28	267+21.40	267+37.53	267+53.65	267+65.09	267+76.53	267+87.96	267+99.40
	TOP OF HAUNCH ELEVATION	1011.40	1010.99	1010.58	1010.15	1009.73	1009.31	1009.18	1008.62	1008.01	1007.38	1006.97	1006.56	1006.15	1005.72

RIGHT BRIDGE TOP OF HAUNCH ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT		F.S. #1	1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	
BEAM 9	STATION	266+41.68	266+53.12	266+64.56	266+76.00	266+87.43	266+99.68	267+03.56	267+19.68	267+35.81	267+51.93	267+63.37	267+74.81	267+86.25	267+97.68
	TOP OF HAUNCH ELEVATION	1011.47	1011.08	1010.68	1010.26	1009.86	1009.45	1009.33	1008.78	1008.19	1007.58	1007.18	1006.79	1006.39	1005.97
BEAM 10	STATION	266+39.70	266+51.13	266+62.57	266+74.01	266+85.45	266+97.70	267+01.57	267+17.70	267+33.82	267+49.95	267+61.38	267+72.82	267+84.26	267+95.70
	TOP OF HAUNCH ELEVATION	1011.67	1011.26	1010.84	1010.41	1009.98	1009.55	1009.42	1008.85	1008.23	1007.59	1007.17	1006.76	1006.34	1005.90
BEAM 11	STATION	266+37.71	266+49.15	266+60.58	266+72.02	266+83.46	266+95.71	266+99.58	267+15.71	267+31.83	267+47.96	267+59.40	267+70.83	267+82.27	267+93.71
	TOP OF HAUNCH ELEVATION	1011.88	1011.45	1011.01	1010.56	1010.11	1009.66	1009.52	1008.92	1008.27	1007.61	1007.17	1006.74	1006.29	1005.84
BEAM 12	STATION	266+35.72	266+47.16	266+58.60	266+70.04	266+81.47	266+93.72	266+97.60	267+13.72	267+29.85	267+45.97	267+57.41	267+68.85	267+80.29	267+91.72
	TOP OF HAUNCH ELEVATION	1012.10	1011.65	1011.19	1010.71	1010.24	1009.78	1009.63	1009.00	1008.32	1007.63	1007.17	1006.72	1006.26	1005.78
BEAM 13	STATION	266+33.74	266+45.17	266+56.61	266+68.05	266+79.49	266+91.74	266+95.61	267+11.74	267+27.86	267+43.99	267+55.42	267+66.86	267+78.30	267+89.74
	TOP OF HAUNCH ELEVATION	1012.10	1011.65	1011.18	1010.70	1010.23	1009.75	1009.61	1008.97	1008.29	1007.59	1007.13	1006.67	1006.20	1005.72
BEAM 14	STATION	266+31.75	266+43.19	266+54.63	266+66.06	266+77.50	266+89.75	266+93.63	267+09.75	267+25.88	267+42.00	267+53.44	267+64.88	267+76.31	267+87.75
	TOP OF HAUNCH ELEVATION	1012.03	1011.58	1011.11	1010.63	1010.16	1009.69	1009.54	1008.90	1008.22	1007.52	1007.06	1006.60	1006.13	1005.65
BEAM 15	STATION	266+29.76	266+41.20	266+52.64	266+64.08	266+75.51	266+87.76	266+91.64	267+07.76	267+23.89	267+40.01	267+51.45	267+62.89	267+74.33	267+85.76
	TOP OF HAUNCH ELEVATION	1011.96	1011.51	1011.05	1010.57	1010.09	1009.62	1009.48	1008.84	1008.16	1007.46	1006.99	1006.54	1006.07	1005.58
BEAM 16	STATION	266+27.78	266+39.21	266+50.65	266+62.09	266+73.53	266+85.78	266+89.65	267+05.78	267+21.90	267+38.03	267+49.46	267+60.90	267+72.34	267+83.78
	TOP OF HAUNCH ELEVATION	1011.89	1011.45	1010.98	1010.50	1010.03	1009.55	1009.40	1008.77	1008.09	1007.39	1006.93	1006.47	1006.00	1005.52

NOTES:

1. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. FOR DECK PLAN, SEE SHEETS 25/40 AND 26/40 .
3. FOR SCREED ELEVATIONS,SEE SHEET 31/40.
4. FOR FINAL DECK SURFACE ELEVATIONS, SEE SHEET 34/40 AND 35/40.
5. FOR ELEVATION LOCATIONS AND HAUNCH DETAIL, SEE SHEET 30/40.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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

DESIGNED JRE | DRAWN TYW | CHECKED CDB | REVIEWED TES 09/01/21 | REVISED | DATE | STRUCTURE FILE NUMBER 7703481

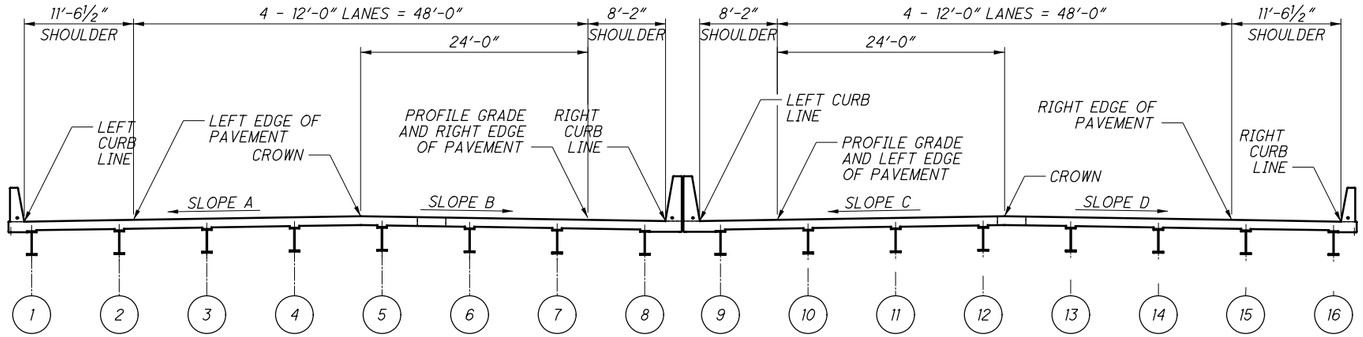
TOP OF HAUNCH ELEVATIONS
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

2021-11-04_BU 13 - RFC PLANS

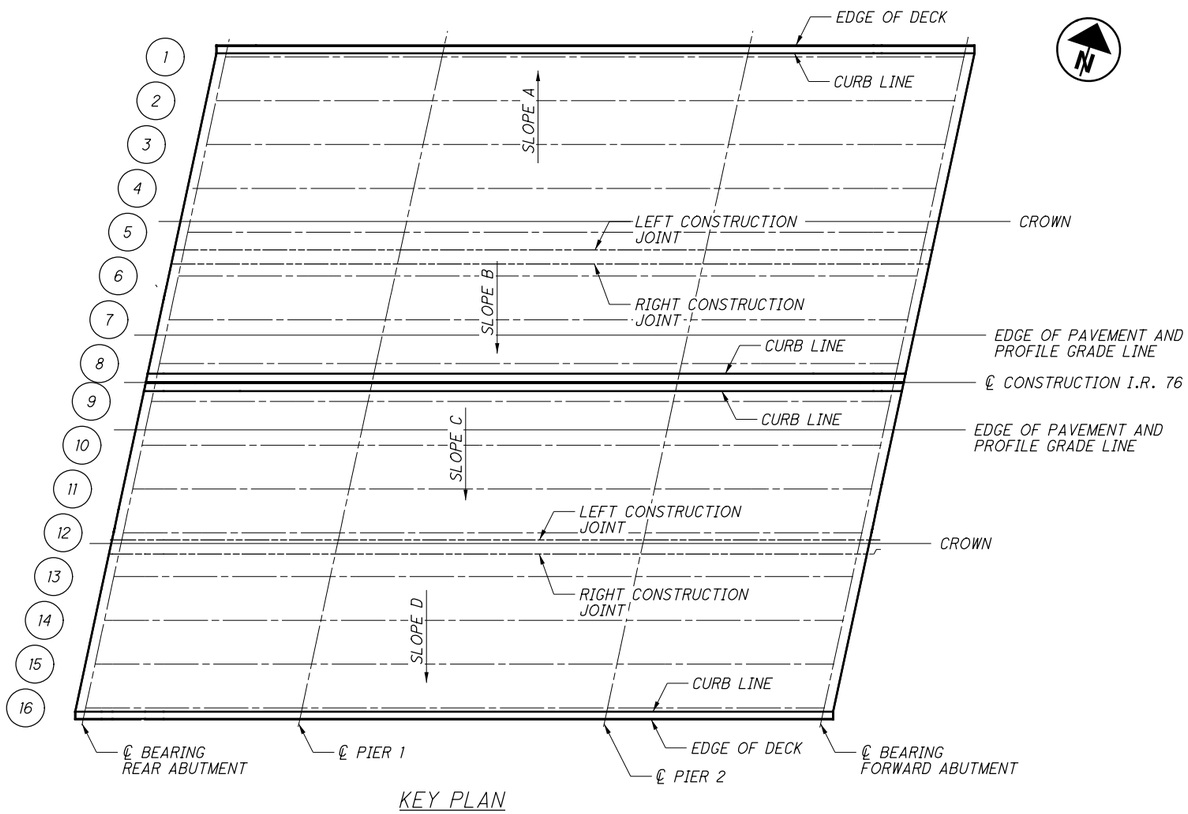
SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

32/40

36/153



TYPICAL CROSS SECTION



KEY PLAN

LEFT BRIDGE SUPERELEVATION SLOPES

LOCATION	DIAGRAM	STATION	SLOPE A	SLOPE B
BEGIN REAR APPROACH SLAB	FASCIA CURB / MEDIAN CURB / CROWN	266+17.64	0.016	0.016
SUPERELEVATION TRANSITION		266+30.32	0.016	0.016
END REAR APPROACH SLAB		266+42.64	0.014	0.016
℄ BEARING REAR ABUT.		266+44.69	0.013	0.016
℄ PIER 1		266+90.44	0.005	0.016
LEVEL CROSS SLOPE		267+15.57	0.000	0.016
℄ PIER 2		267+54.94	0.007	0.016
℄ BEARING FORWARD ABUT.		268+00.69	0.016	0.016
SUPERELEVATION TRANSITION		268+00.81	0.016	0.016
BEGIN FORWARD APPROACH SLAB		268+02.74	0.016	0.016
BEGIN SHOULDER TRANSITION		268+15.53	0.017	0.017
END FORWARD APPROACH SLAB	SHOULDER LINE	268+27.74	-0.018*	0.019
		* INDICATES REVERSE SLOPE		

RIGHT BRIDGE SUPERELEVATION SLOPES

LOCATION	DIAGRAM	STATION	SLOPE C	SLOPE D
BEGIN REAR APPROACH SLAB	FASCIA CURB / MEDIAN CURB / CROWN	266+13.35	0.016	0.016
SUPERELEVATION TRANSITION		266+30.32	0.016	0.016
END REAR APPROACH SLAB		266+38.35	0.015	0.016
℄ BEARING REAR ABUT.		266+40.39	0.014	0.016
℄ PIER 1		266+86.14	0.006	0.016
LEVEL CROSS SLOPE		267+15.57	0.000	0.016
℄ PIER 2		267+50.64	0.007	0.016
℄ BEARING FORWARD ABUT.		267+96.39	0.015	0.016
BEGIN FORWARD APPROACH SLAB		267+98.45	0.016	0.016
BEGIN SHOULDER TRANSITION		268+00.20	0.016	0.016
SUPERELEVATION TRANSITION		268+00.81	0.016	0.016
END FORWARD APPROACH SLAB	SHOULDER LINE	268+23.45	0.018	0.018

NOTES:

1. FOR BEAM ELEVATION AND CAMBER DIAGRAM, SEE SHEETS 19/40 THRU 21/40.
2. FOR TRANSVERSE SECTION, SEE SHEET 24/40.
3. FOR APPROACH SLAB PLANS, SEE SHEETS 37/40 THRU 38/40.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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

DESIGNED JRE | DRAWN JRE | REVIEWED TES | DATE 09/01/21 | CHECKED RWB | REVISED | STRUCTURE FILE NUMBER 7703481

SUPERELEVATION TRANSITION DETAILS
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2021-11-04_BU 13 - RFC PLANS

Released for Construction
Thomas J Powell, PE
11/10/2021

LEFT BRIDGE FINAL DECK ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT		F.S. #1	1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	
LEFT CURB LINE	STATION	266+57.48	266+68.91	266+80.35	266+91.79	267+03.23	267+15.48	267+19.35	267+35.48	267+51.60	267+67.73	267+79.16	267+90.60	268+02.04	268+13.48
	FINAL DECK ELEVATION	1011.70	1011.36	1011.02	1010.68	1010.34	1009.98	1009.86	1009.39	1008.91	1008.43	1008.09	1007.75	1007.41	1007.05
BEAM 1	STATION	266+57.31	266+68.74	266+80.18	266+91.62	267+03.06	267+15.31	267+19.18	267+35.31	267+51.43	267+67.56	267+78.99	267+90.43	268+01.87	268+13.31
	FINAL DECK ELEVATION	1011.72	1011.38	1011.03	1010.69	1010.35	1009.99	1009.87	1009.39	1008.91	1008.42	1008.08	1007.74	1007.40	1007.04
BEAM 2	STATION	266+55.32	266+66.76	266+78.20	266+89.63	267+01.07	267+13.32	267+17.20	267+33.32	267+49.45	267+65.57	267+77.01	267+88.45	267+99.88	268+11.32
	FINAL DECK ELEVATION	1011.88	1011.52	1011.16	1010.80	1010.44	1010.05	1009.93	1009.42	1008.91	1008.40	1008.03	1007.67	1007.31	1006.95
BEAM 3	STATION	266+53.33	266+64.77	266+76.21	266+87.65	266+99.08	267+11.33	267+15.21	267+31.33	267+47.46	267+63.58	267+75.02	267+86.46	267+97.90	268+09.33
	FINAL DECK ELEVATION	1012.05	1011.67	1011.29	1010.91	1010.53	1010.12	1009.99	1009.45	1008.91	1008.38	1007.99	1007.61	1007.23	1006.84
BEAM 4	STATION	266+51.35	266+62.79	266+74.22	266+85.66	266+97.10	267+09.35	267+13.22	267+29.35	267+45.47	267+61.60	267+73.04	267+84.47	267+95.91	268+07.35
	FINAL DECK ELEVATION	1012.23	1011.83	1011.43	1011.03	1010.63	1010.20	1010.06	1009.49	1008.93	1008.36	1007.96	1007.56	1007.16	1006.77
CROWN	STATION	266+49.84	266+61.28	266+72.72	266+84.16	266+95.59	267+07.84	267+11.72	267+27.84	267+43.97	267+60.09	267+71.53	267+82.97	267+94.41	268+05.84
	FINAL DECK ELEVATION	1012.37	1011.95	1011.54	1011.12	1010.70	1010.26	1010.12	1009.53	1008.94	1008.36	1007.94	1007.52	1007.11	1006.70
BEAM 5	STATION	266+49.36	266+60.80	266+72.24	266+83.67	266+95.11	267+07.36	267+11.24	267+27.36	267+43.49	267+59.61	267+71.05	267+82.49	267+93.92	268+05.36
	FINAL DECK ELEVATION	1012.35	1011.93	1011.52	1011.10	1010.69	1010.24	1010.10	1009.51	1008.93	1008.34	1007.92	1007.51	1007.09	1006.68
LEFT CONSTRUCTION JOINT	STATION	266+48.56	266+59.99	266+71.43	266+82.87	266+94.31	267+06.56	267+10.43	267+26.56	267+42.68	267+58.81	267+70.24	267+81.68	267+93.12	268+04.56
	FINAL DECK ELEVATION	1012.32	1011.90	1011.49	1011.07	1010.66	1010.21	1010.07	1009.48	1008.89	1008.31	1007.89	1007.47	1007.06	1006.65
RIGHT CONSTRUCTION JOINT	STATION	266+47.91	266+59.35	266+70.79	266+82.22	266+93.66	267+05.91	267+09.79	267+25.91	267+42.04	267+58.16	267+69.60	267+81.04	267+92.47	268+03.91
	FINAL DECK ELEVATION	1012.30	1011.88	1011.46	1011.05	1010.63	1010.18	1010.04	1009.46	1008.87	1008.28	1007.87	1007.45	1007.03	1006.62
BEAM 6	STATION	266+47.37	266+58.81	266+70.25	266+81.69	266+93.12	267+05.37	267+09.25	267+25.37	267+41.50	267+57.62	267+69.06	267+80.50	267+91.94	268+03.37
	FINAL DECK ELEVATION	1012.28	1011.86	1011.44	1011.03	1010.61	1010.16	1010.02	1009.44	1008.85	1008.26	1007.85	1007.43	1007.01	1006.60
BEAM 7	STATION	266+45.39	266+56.83	266+68.26	266+79.70	266+91.14	267+03.39	267+07.26	267+23.39	267+39.51	267+55.64	267+67.08	267+78.51	267+89.95	268+01.39
	FINAL DECK ELEVATION	1012.20	1011.78	1011.37	1010.95	1010.53	1010.09	1009.95	1009.36	1008.77	1008.19	1007.77	1007.35	1006.94	1006.52
PROFILE GRADE LINE	STATION	266+44.69	266+56.13	266+67.57	266+79.00	266+90.44	267+02.69	267+06.57	267+22.69	267+38.82	267+54.94	267+66.38	267+77.82	267+89.25	268+00.69
	FINAL DECK ELEVATION	1012.17	1011.76	1011.34	1010.92	1010.51	1010.06	1009.92	1009.33	1008.75	1008.16	1007.74	1007.33	1006.91	1006.49
BEAM 8	STATION	266+43.40	266+54.84	266+66.28	266+77.71	266+89.15	267+01.40	267+05.28	267+21.40	267+37.53	267+53.65	267+65.09	267+76.53	267+87.96	267+99.40
	FINAL DECK ELEVATION	1012.12	1011.71	1011.29	1010.88	1010.46	1010.01	1009.87	1009.28	1008.70	1008.11	1007.69	1007.28	1006.86	1006.45
RIGHT CURB LINE	STATION	266+42.94	266+54.37	266+65.81	266+77.25	266+88.69	267+00.94	267+04.81	267+20.94	267+37.06	267+53.19	267+64.62	267+76.06	267+87.50	267+98.94
	FINAL DECK ELEVATION	1012.11	1011.69	1011.27	1010.86	1010.44	1010.00	1009.85	1009.40	1008.68	1008.09	1007.68	1007.26	1006.84	1006.43

NOTES:

1. FINAL DECK ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.
2. FOR DECK PLAN, SEE SHEETS 25/40 AND 26/40 .
3. FOR SCREED ELEVATIONS, SEE SHEET 31/40.
4. FOR TOP OF HAUNCH ELEVATIONS,SEE SHEET 32/40.
5. FOR ELEVATION LOCATIONS AND HAUNCH DETAIL, SEE SHEET 30/40.

2021-11-04_BU 13 - RFC PLANS

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FINAL DECK ELEVATIONS 1 OF 2
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

34/40

38
153

ISSUE RECORD:

NO.	DATE	DESCRIPTION

Released for Construction
Thomas J Powell, PE
11/10/2021

RIGHT BRIDGE FINAL DECK ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT		F.S. #1	1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	
LEFT CURB LINE	STATION	266+42.15	266+53.59	266+65.02	266+76.46	266+87.90	267+00.15	267+04.02	267+20.15	267+36.27	267+52.40	267+63.84	267+75.27	267+86.71	267+98.15
	FINAL DECK ELEVATION	1012.15	1011.75	1011.36	1010.96	1010.56	1010.13	1010.00	1009.43	1008.87	1008.31	1007.91	1007.51	1007.11	1006.71
BEAM 9	STATION	266+41.68	266+53.12	266+64.56	266+76.00	266+87.43	266+99.68	267+03.56	267+19.68	267+35.81	267+51.93	267+63.37	267+74.81	267+86.25	267+97.68
	FINAL DECK ELEVATION	1012.20	1011.80	1011.39	1010.99	1010.59	1010.15	1010.02	1009.45	1008.88	1008.31	1007.91	1007.50	1007.10	1006.70
PROFILE GRADE LINE	STATION	266+40.39	266+51.83	266+63.27	266+74.71	266+86.14	266+98.39	267+02.27	267+18.39	267+34.52	267+50.64	267+62.08	267+73.52	267+84.96	267+96.39
	FINAL DECK ELEVATION	1012.33	1011.91	1011.50	1011.08	1010.66	1010.22	1010.08	1009.49	1008.90	1008.32	1007.90	1007.48	1007.07	1006.65
BEAM 10	STATION	266+39.70	266+51.13	266+62.57	266+74.01	266+85.45	266+97.70	267+01.57	267+17.70	267+33.82	267+49.95	267+61.38	267+72.82	267+84.26	267+95.70
	FINAL DECK ELEVATION	1012.40	1011.98	1011.55	1011.13	1010.71	1010.25	1010.11	1009.51	1008.92	1008.32	1007.90	1007.47	1007.05	1006.63
BEAM 11	STATION	266+37.71	266+49.15	266+60.58	266+72.02	266+83.46	266+95.71	266+99.58	267+15.71	267+31.83	267+47.96	267+59.40	267+70.83	267+82.27	267+93.71
	FINAL DECK ELEVATION	1012.61	1012.17	1011.72	1011.28	1010.84	1010.36	1010.21	1009.59	1008.96	1008.34	1007.90	1007.45	1007.01	1006.57
BEAM 12	STATION	266+35.72	266+47.16	266+58.60	266+70.04	266+81.47	266+93.72	266+97.60	267+13.72	267+29.85	267+45.97	267+57.41	267+68.85	267+80.29	267+91.72
	FINAL DECK ELEVATION	1012.83	1012.36	1011.90	1011.44	1010.97	1010.48	1010.32	1009.67	1009.02	1008.36	1007.90	1007.44	1006.97	1006.51
LEFT CONSTRUCTION JOINT	STATION	266+35.40	266+46.84	266+58.28	266+69.71	266+81.15	266+93.40	266+97.28	267+13.40	267+29.53	267+45.65	267+57.09	267+68.53	267+79.96	267+91.40
	FINAL DECK ELEVATION	1012.86	1012.39	1011.93	1011.46	1011.00	1010.50	1010.34	1009.68	1009.02	1008.37	1007.90	1007.43	1006.97	1006.50
CROWN	STATION	266+35.24	266+46.68	266+58.12	266+69.55	266+80.99	266+93.24	266+97.12	267+13.24	267+29.37	267+45.49	267+56.93	267+68.37	267+79.80	267+91.24
	FINAL DECK ELEVATION	1012.88	1012.41	1011.94	1011.48	1011.01	1010.51	1010.35	1009.69	1009.03	1008.37	1007.90	1007.43	1006.97	1006.50
RIGHT CONSTRUCTION JOINT	STATION	266+34.76	266+46.19	266+57.63	266+69.07	266+80.51	266+92.76	266+96.63	267+12.76	267+28.88	267+45.01	267+56.44	267+67.88	267+79.32	267+90.76
	FINAL DECK ELEVATION	1012.86	1012.40	1011.93	1011.46	1010.99	1010.49	1010.33	1009.67	1009.01	1008.35	1007.89	1007.42	1006.95	1006.48
BEAM 13	STATION	266+33.74	266+45.17	266+56.61	266+68.05	266+79.49	266+91.74	266+95.61	267+11.74	267+27.86	267+43.99	267+55.42	267+66.86	267+78.30	267+89.74
	FINAL DECK ELEVATION	1012.83	1012.36	1011.89	1011.43	1010.96	1010.46	1010.30	1009.64	1008.98	1008.32	1007.85	1007.38	1006.92	1006.45
BEAM 14	STATION	266+31.75	266+43.19	266+54.63	266+66.06	266+77.50	266+89.75	266+93.63	267+09.75	267+25.88	267+42.00	267+53.44	267+64.88	267+76.31	267+87.75
	FINAL DECK ELEVATION	1012.76	1012.29	1011.83	1011.36	1010.89	1010.39	1010.23	1009.57	1008.91	1008.25	1007.78	1007.32	1006.85	1006.38
BEAM 15	STATION	266+29.76	266+41.20	266+52.64	266+64.08	266+75.51	266+87.76	266+91.64	267+07.76	267+23.89	267+40.01	267+51.45	267+62.89	267+74.33	267+85.76
	FINAL DECK ELEVATION	1012.69	1012.23	1011.76	1011.29	1010.82	1010.32	1010.16	1009.50	1008.84	1008.19	1007.72	1007.25	1006.78	1006.31
BEAM 16	STATION	266+27.78	266+39.21	266+50.65	266+62.09	266+73.53	266+85.78	266+89.65	267+05.78	267+21.90	267+38.03	267+49.46	267+60.90	267+72.34	267+83.78
	FINAL DECK ELEVATION	1012.62	1012.16	1011.69	1011.22	1010.76	1010.26	1010.10	1009.44	1008.78	1008.12	1007.65	1007.18	1006.72	1006.25
RIGHT CURB LINE	STATION	266+27.61	266+39.04	266+50.48	266+61.92	266+73.36	266+85.61	266+89.48	267+05.61	267+21.73	267+37.86	267+49.29	267+60.73	267+72.17	267+83.61
	FINAL DECK ELEVATION	1012.61	1012.15	1011.69	1011.22	1010.75	1010.25	1010.09	1009.43	1008.77	1008.11	1007.65	1007.18	1006.71	1006.24

NOTES:

1. FOR FINAL DECK ELEVATION NOTES SEE SHEET 34/40.

2021-11-04_BU 13 - RFC PLANS

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FINAL DECK ELEVATIONS 2 OF 2
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
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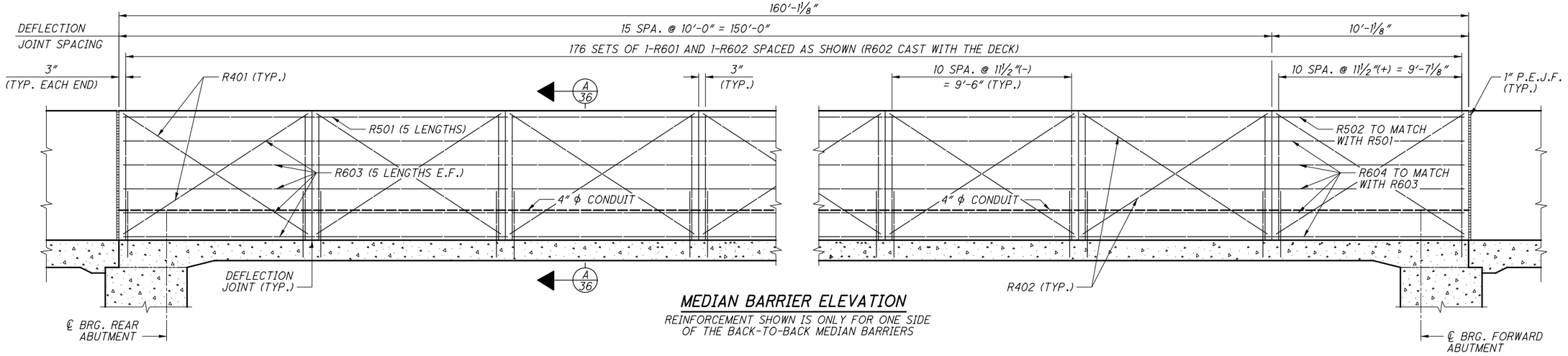
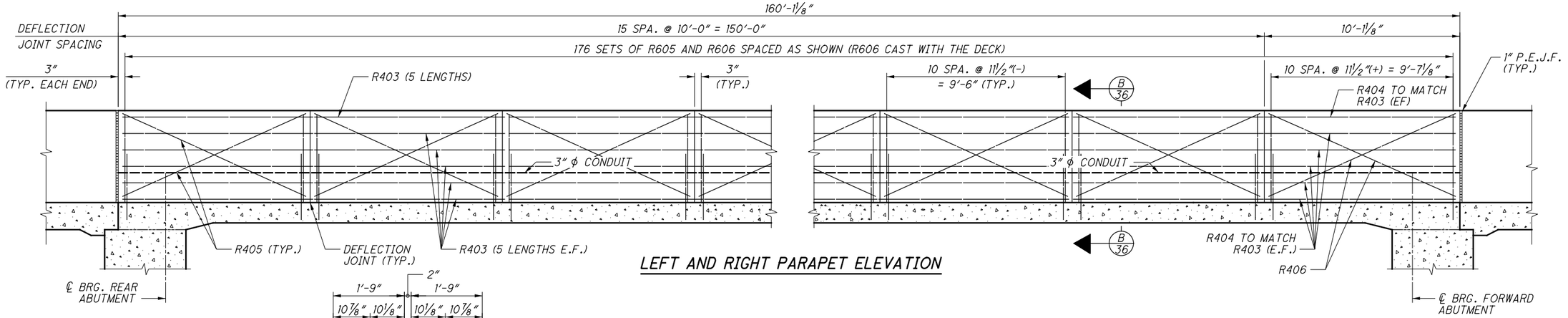
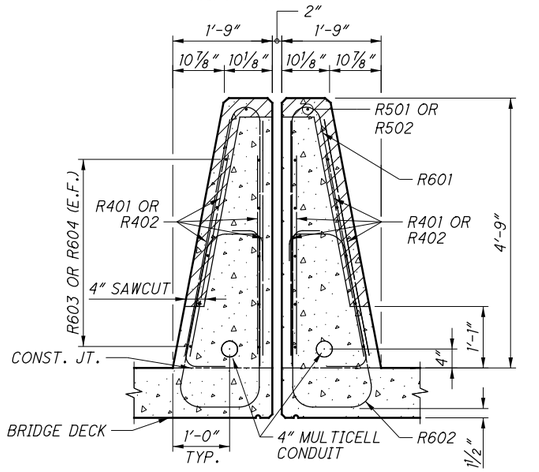


MEDIAN BARRIER ELEVATION

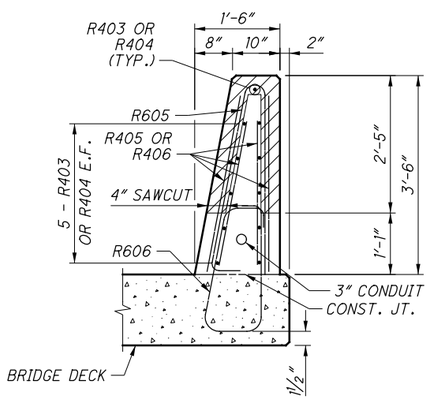
REINFORCEMENT SHOWN IS ONLY FOR ONE SIDE OF THE BACK-TO-BACK MEDIAN BARRIERS



LEFT AND RIGHT PARAPET ELEVATION



A 36 SECTION THRU MEDIAN BARRRIER



B 36 SECTION THRU PARAPET

MIN. LAP LENGTHS	
NO. 4 BARS	1'-11"
NO. 5 BARS	2'-5"
NO. 6 BARS	3'-6"

NOTES:

1. FOR APPROACH SLAB PARAPETS, SEE SHEET 38/39.
2. FOR TRANSVERSE SECTION AND SEALING LIMITS, SEE SHEET 24/39.
3. FOR LIGHTING AND ITS DETAILS, SEE BU-36.

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PARAPET DETAILS
BRIDGE NO. SUM-76-0914
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2021-11-04_BU 13 - RFC PLANS

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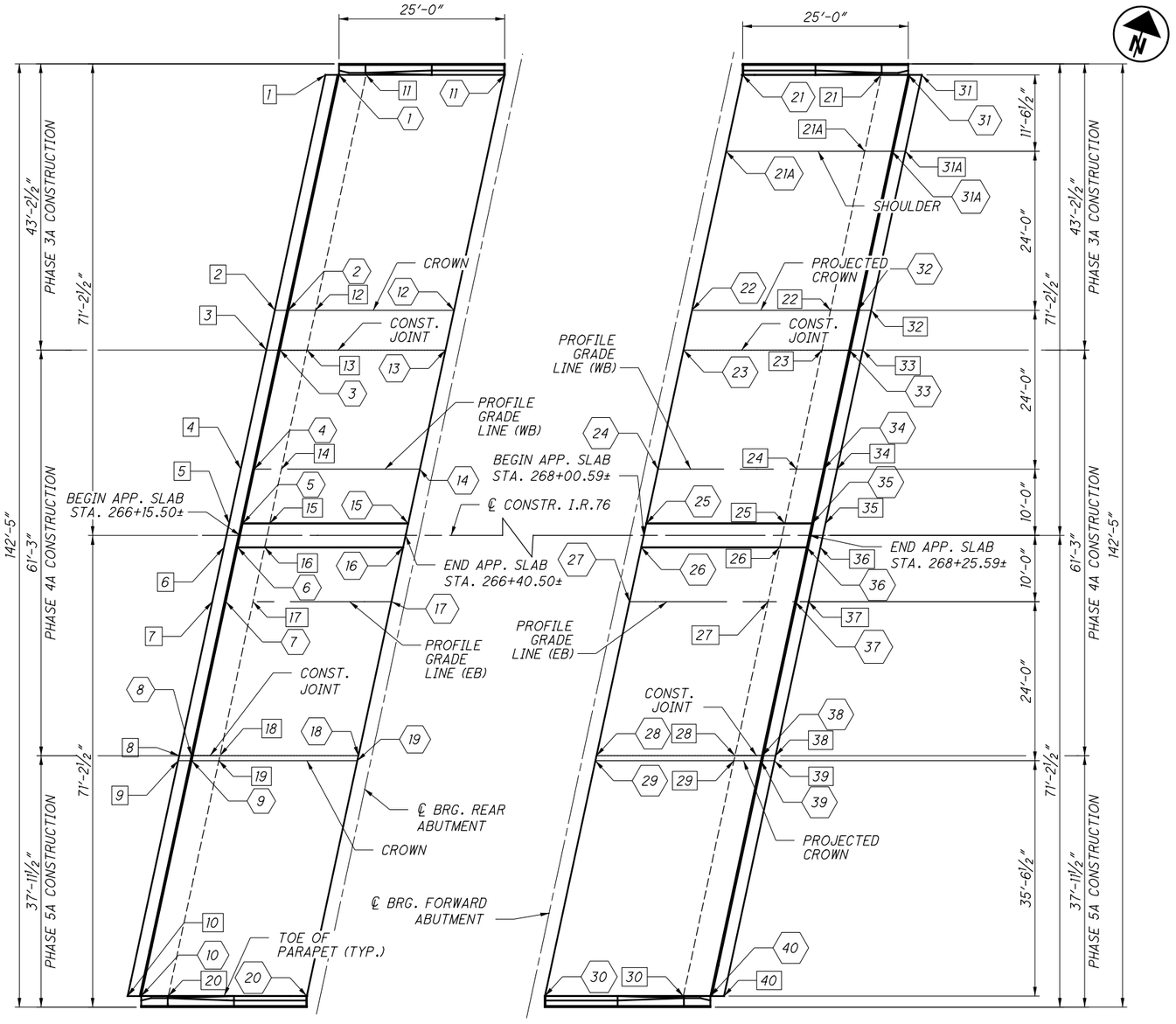

REAR APPROACH SLAB PLAN

FORWARD APPROACH SLAB PLAN

APPROACH SLAB ELEVATIONS

LOC.	ELEV	LOC.	ELEV	LOC.	ELEV	LOC.	ELEV
1	1012.51	11	1011.76	21	1006.99	31	1005.75
	———		———	21A	1006.87	31A	1006.06
2	1013.35	12	1012.44	22	1006.63	32	1005.76
3	1013.30	13	1012.39	23	1006.58	33	1005.71
4	1013.16	14	1012.25	24	1006.42	34	1005.51
5	1013.09	15	1012.18	25	1006.35	35	1005.42
6	1013.12	16	1012.22	26	1006.64	36	1005.43
7	1013.31	17	1012.40	27	1006.58	37	1005.66
8	1013.87	18	1012.94	28	1006.42	38	1005.44
9	1013.88	19	1012.96	29	1006.41	39	1005.43
10	1013.59	20	1012.68	30	1006.16	40	1005.12

SLEEPER SLAB ELEVATIONS

LOC.	ELEV	LOC.	ELEV	LOC.	ELEV	LOC.	ELEV
1	1012.58	11	1011.14	21	1004.69	31	1005.68
	———		———	21A	1004.95	31A	1006.01
2	1013.43	12	1011.95	22	1004.67	32	1005.71
3	1013.38	13	1011.90	23	1004.60	33	1005.64
4	1013.23	14	1011.76	24	1004.41	34	1005.43
5	1013.16	15	1011.69	25	1004.32	35	1005.35
6	1013.19	16	1011.72	26	1004.27	36	1005.34
7	1013.39	17	1011.91	27	1004.57	37	1005.59
8	1013.94	18	1012.47	28	1004.34	38	1005.36
9	1013.96	19	1012.48	29	1004.34	39	1005.35
10	1013.67	20	1012.19	30	1004.04	40	1005.04

LEGEND:

(x) - APPROACH SLAB ELEVATION

[x] - SLEEPER SLAB ELEVATION

NOTES:

1. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE STANDARD DRAWINGS AS-1-15 AND AS-2-15.
2. FOR APPROACH SLAB PARAPET AND MEDIAN DETAILS SEE SHEET [39/40] .
3. FOR CROSS SLOPES, SEE SUPERELEVATION TRANSITION TABLE, SEE SHEET [33/40].

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APPROACH SLAB PLAN
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

2021-11-04_BU 13 - RFC PLANS

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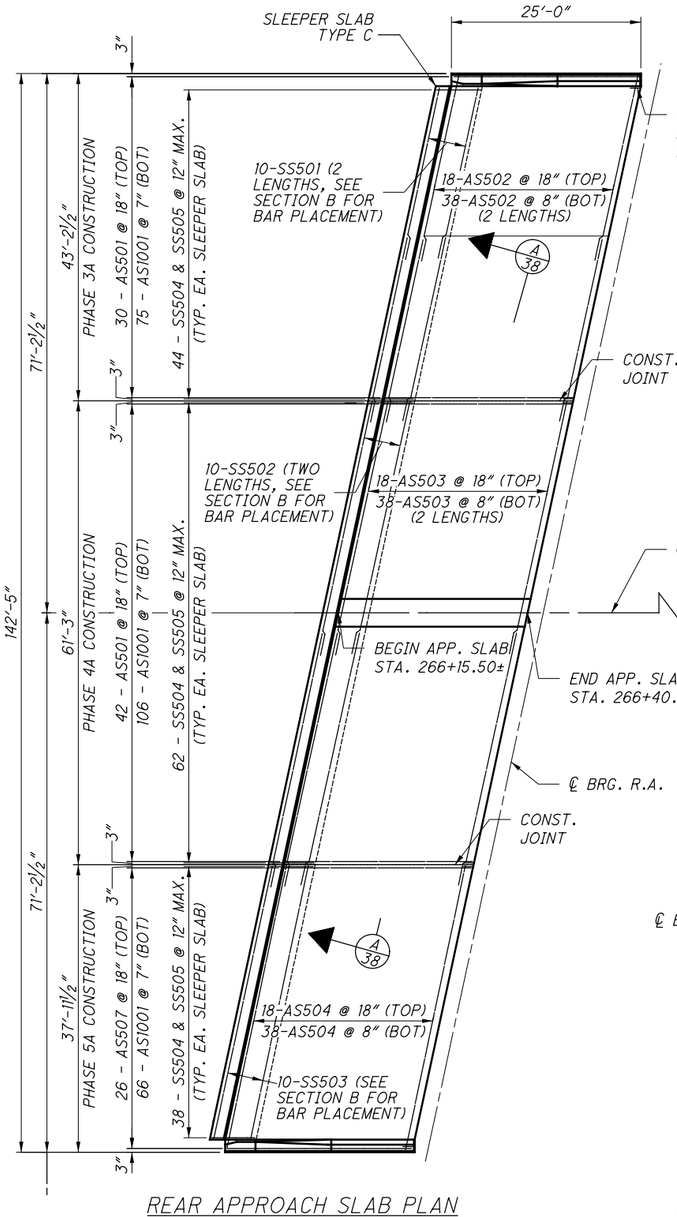
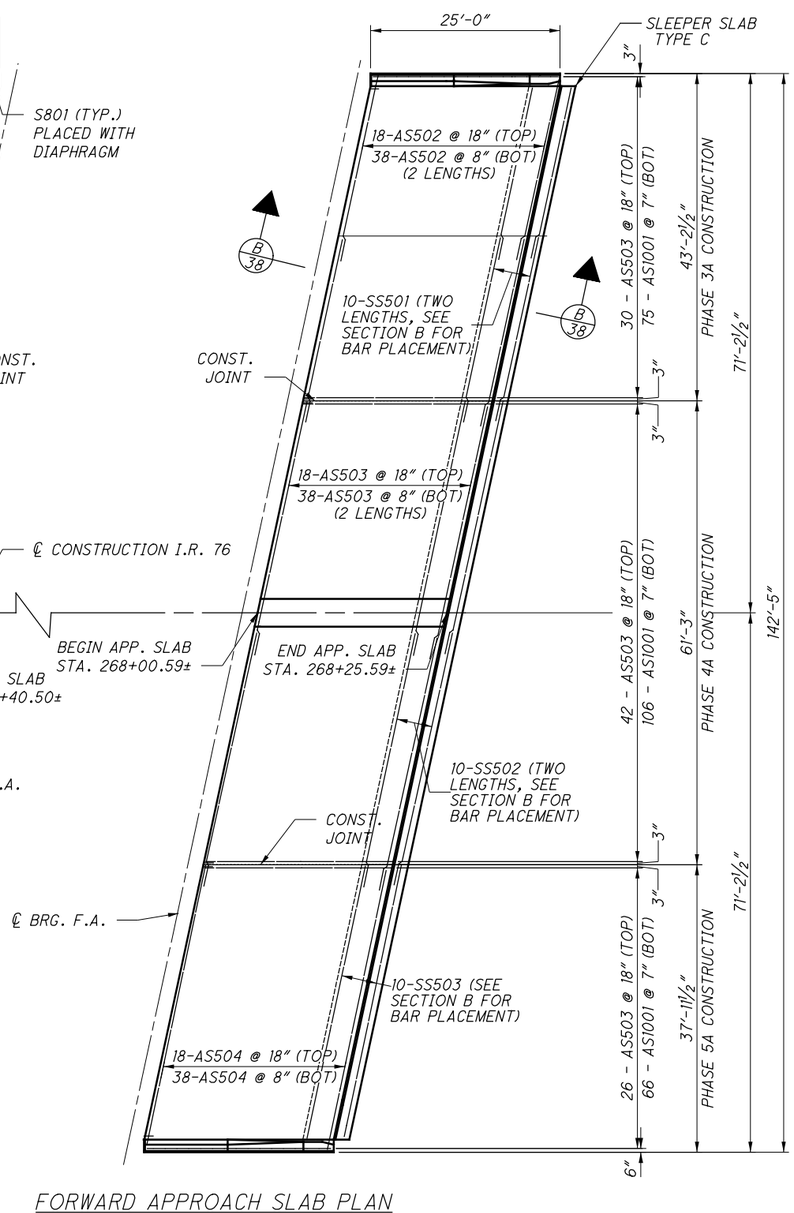
153



REAR APPROACH SLAB PLAN

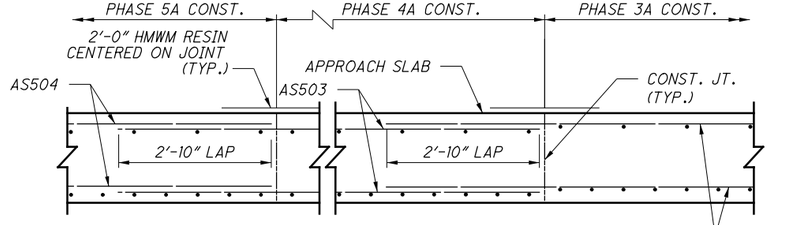


FORWARD APPROACH SLAB PLAN

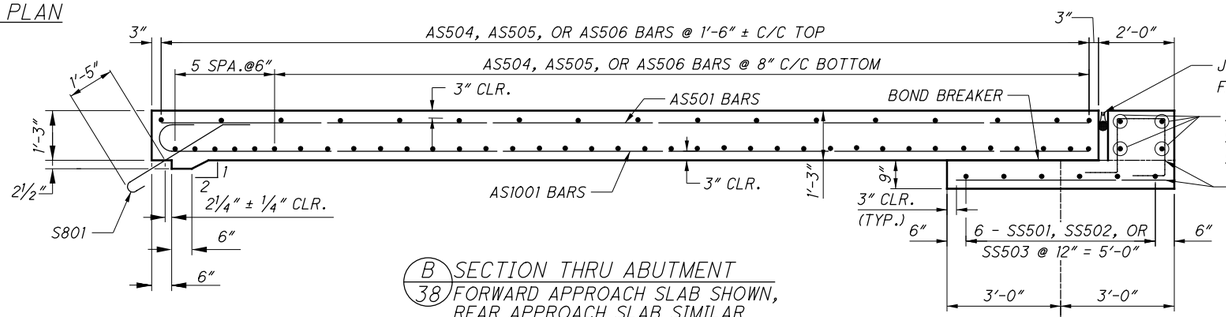
NOTE:

FOR NOTES AND APPROACH SLAB ELEVATIONS, SEE SHEET 37/40.

LAP LENGTHS	
NO. 5 BARS	2'-10"



A 38 SECTION THRU APPROACH



B 38 SECTION THRU ABUTMENT
FORWARD APPROACH SLAB SHOWN, REAR APPROACH SLAB SIMILAR

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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p:\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0914\Sheets\076_0914_SD003.dgn Sheet 11/2/2021 11:06:45 AM p0026694C

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	JRE/TYW	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703481	

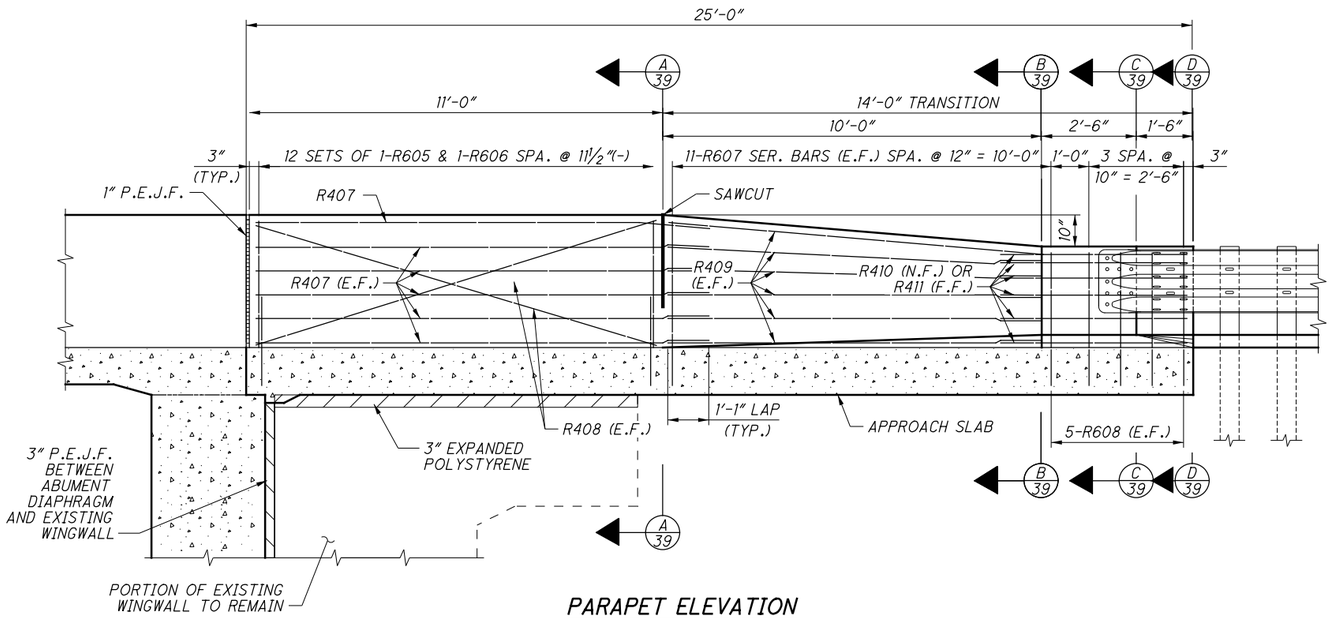
APPROACH SLAB DETAILS
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

38 / 40

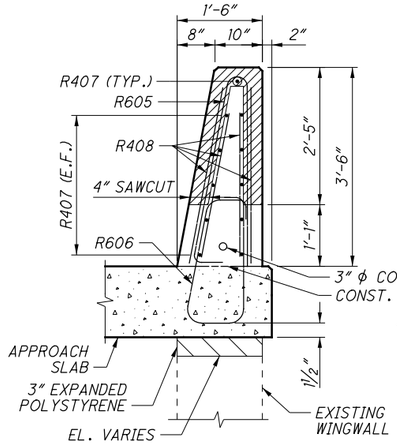
42 / 153

2021-11-04 BU 13 - RFC PLANS

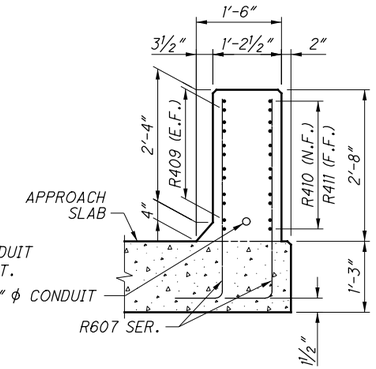


PARAPET ELEVATION

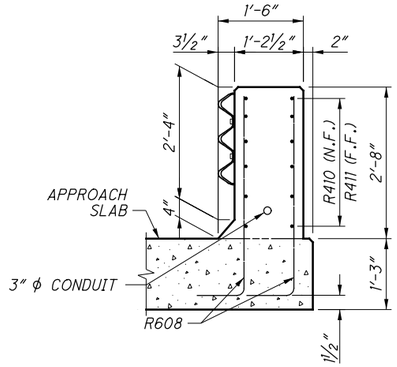
RIGHT FORWARD APPROACH AND LEFT REAR APPROACH
(LEFT FORWARD AND RIGHT REAR SAME BY OPPOSITE HAND)



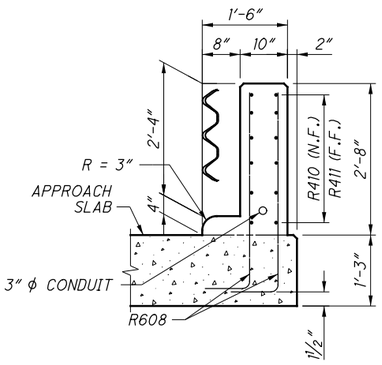
A 39 SECTION THRU PARAPET



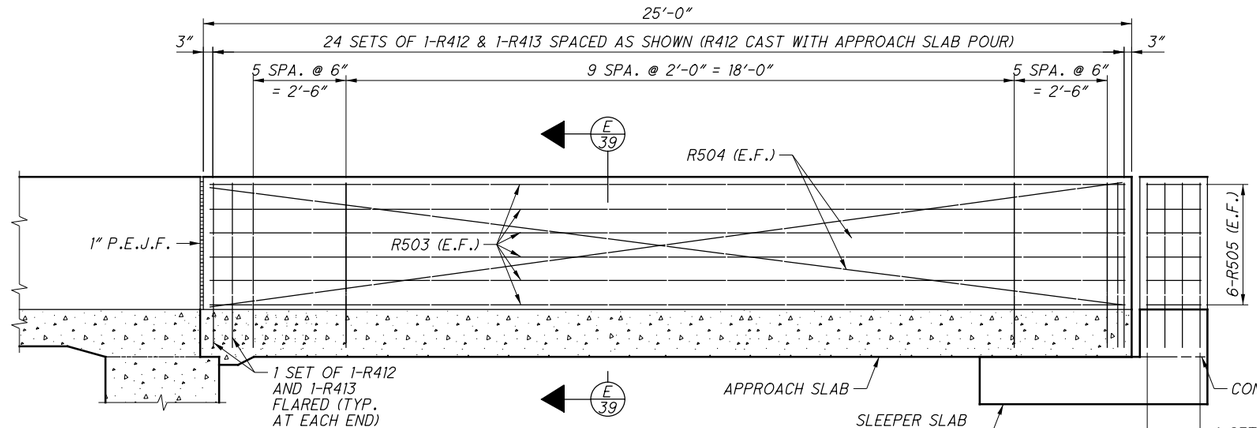
B 39 SECTION THRU PARAPET



C 39 SECTION THRU PARAPET

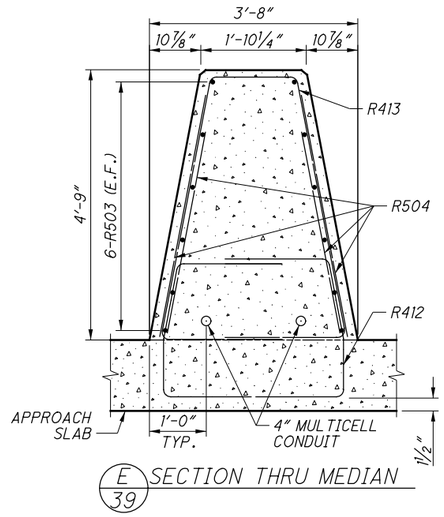


D 39 SECTION THRU PARAPET



MEDIAN BARRIER ELEVATION

FORWARD APPROACH SHOWN
(REAR SAME BY OPPOSITE HAND)



E 39 SECTION THRU MEDIAN

NOTES:

1. FOR ADDITIONAL DETAILS, SEE ODOT STANDARD DRAWINGS SBR-1-20 AND SBR-2-20.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	JRE/TYW	TES	09/01/21

REVISED
STRUCTURE FILE NUMBER 7703481
CHECKED RWB

APPROACH PARAPET DETAILS
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

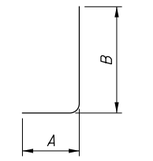
39 / 40

43 / 153

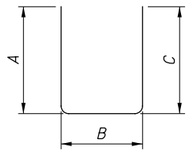
Released for Construction
Thomas J Powell, PE
11/10/2021

MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
ABUTMENTS											
RA501	1	8'-2"	9	44	0'-8"	3'-1 1/4"	1'-5 1/2"	0'-3 3/4"			
RA502	186	3'-11"	760	1	1'-3"	2'-9"					
RA503	4	7'-2"	30	2	2'-0"	3'-5"	2'-0"				
RA504	1	7'-10"	8	42	3'-6"	1'-5"	0'-11"	0'-2 1/2"			
RA601	8	10'-2"	122	2	3'-10"	2'-9 3/4"	3'-10"				
*RA801	4	28'-1"	300	STR							
**RA802	4	21'-3"	227	STR							
*RA803	4	35'-9"	382	STR							
**RA804	4	36'-8"	392	STR							
RA805	12	9'-9"	312	2	3'-9"	2'-8"	3'-9"				
RA806	4	28'-1"	300	STR							
FA501	1	8'-2"	9	44	0'-8"	3'-1 1/4"	1'-5 1/2"	0'-3 3/4"			
FA502	186	3'-11"	760	1	1'-3"	2'-9"					
FA503	4	7'-2"	30	2	2'-0"	3'-5"	2'-0"				
FA504	1	7'-10"	8	42	3'-6"	1'-5"	0'-11"	0'-2 1/2"			
FA601	8	10'-2"	122	2	3'-10"	2'-9 3/4"	3'-10"				
*FA801	4	28'-1"	300	STR							
**FA802	4	21'-3"	227	STR							
*FA803	4	35'-9"	382	STR							
**FA804	4	36'-8"	392	STR							
FA805	12	9'-9"	312	2	3'-9"	2'-8"	3'-9"				
FA806	4	28'-1"	300	STR							
SUBTOTAL			5675								
PIERS											
*P501	8	10'-3"	86	STR							
P502	284	3'-0"	889	1	2'-2"	0'-11"					
P503	284	3'-3"	963	1	2'-2"	1'-2"					
**P504	8	19'-10"	165	STR							
P505	8	29'-10"	249	STR							
**P801	14	15'-10"	592	STR							
*P802	14	5'-11"	221	STR							
P803	14	21'-9"	813	STR							
P1101	28	25'-3"	3756	STR							
SUBTOTAL			7734								
SUPERSTRUCTURE											
S401	785	30'-0"	15731	STR							
S402	157	19'-6"	2045	STR							
S501	1578	30'-0"	49376	STR							
S502	668	20'-0"	13934	STR							
S503	668	28'-0"	19508	STR							
S504	668	38'-4"	26708	STR							
S505	182	24'-0"	4556	STR							
S506	334	9'-1"	3164	9	0'-1"	7'-0"	0'-5"	1'-11"			
S507	334	11'-9"	4093	10	0'-1 1/2"	8'-5"	0'-5"	3'-2"			
S508	220	8'-1"	1855	2	1'-3"	2'-11"					
S509	208	12'-9"	2766	3	2'-8"	3'-5"					
S510	12	9'-1"	114	3	0'-10"	3'-5"					
S511	668	36'-8"	25547	STR	8'-7"						
S512	334	9'-1"	3164	10	0'-1"	7'-0"	0'-5"	1'-11"			
S513	334	11'-9"	4093	9	0'-1"	8'-5"	0'-5"	3'-2"			
S601	310	22'-0"	10244	STR							
S801	194	5'-5"	2806	18	3'-1"	1'-0"	1'-0"				
S802	16	5'-5"	231	18	3'-3"	1'-0"	1'-0"				
S803	8	15'-11"	340	1	14'-8"	1'-6"					
S804	8	27'-1"	578	1	25'-9"	1'-6"					
S805	4	14'-8"	157	STR	14'-8"						
S806	4	25'-9"	275	STR	25'-9"						
S807	16	19'-6"	833	STR	19'-6"						
S808	16	30'-2"	1289	STR	30'-2"						
S809	28	28'-6"	2131	STR	28'-6"						
S810	8	17'-10"	381	1	16'-6"	1'-6"					
S811	8	15'-4"	328	1	14'-0"	1'-6"					
S812	4	16'-6"	176	STR	16'-6"						
S813	4	14'-0"	150	STR	14'-0"						
S814	16	33'-10"	1445	STR	33'-10"						
S815	28	38'-1"	2847	STR	38'-1"						
SUBTOTAL			200865								

MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
APPROACH AND SLEEPER SLABS											
SS501	40	24'-0"	1001	STR							
SS502	40	34'-2"	1425	STR							
SS503	20	36'-7"	763	STR							
SS504	288	5'-9"	1727	43	1'-5"	1'-7"					
SS505	288	5'-7"	1677	STR							
AS501	196	24'-6"	5008	STR							
AS502	224	24'-10"	5802	STR							
AS503	224	34'-2"	7982	STR							
AS504	112	38'-3"	4468	STR							
AS1001	494	25'-11"	55091	16	24'-6"						
SUBTOTAL			84944								
PARAPETS											
R401	48	11'-6"	369	40	1'-0"	1'-0"	3'-2"	1'-4"			
R402	8	14'-10"	79	41	4'-6"	1'-6"	3'-2"				
***R403	110	30'-0"	2204	STR							
***R404	22	19'-4"	284	STR							
***R405	60	10'-0"	401	STR							
***R406	8	10'-1"	54	STR							
***R407	44	12'-6"	367	STR							
***R408	16	11'-2"	119	STR							
***R409	48	9'-10"	315	STR							
***R410	24	5'-9"	92	25	2'-6"	2'-5"	1'-4 1/4"	0'-1 1/2"	0'-5"		
***R411	24	5'-6"	88	STR							
R412	56	14'-10"	555	38		1'-6"	3'-2"				
R413	56	11'-6"	430	39	1'-0"	1'-0"	3'-2"				
R501	24	24'-6"	613	STR							
R502	8	25'-1"	209	STR							
R503	24	24'-8"	617	STR							
R504	8	24'-9"	207	STR							
R505	24	3'-3"	81	2	1'-0"	1'-6"	1'-0"				
R601	352	10'-10"	5728	40	4'-7"	0'-10"					
R602	352	8'-5"	4450	41	0'-8"	1'-0"	2'-4"	1'-2"	0'-6"		
***R603	110	30'-0"	4957	STR							
***R604	22	27'-3"	900	STR							
R605	400	7'-2"	4306	40	3'-4"	0'-10"					
R606	400	6'-9"	4055	41	0'-8"	0'-7"	1'-5"	1'-0"	0'-7"		
	4	4'-2"				3'-4"					
R607	SER OF	TO	303	1	1'-0"	TO					
	11	5'-0"				4'-2"					
R608	40	4'-4"	260	1	1'-0"	3'-6"					
***R609	120	10'-6"	1893	STR							
***R610	8	10'-7"	127	STR							
SUBTOTAL			34063								
TOTAL WEIGHT			333281								



TYPE-1



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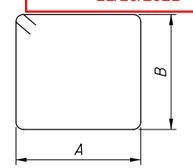
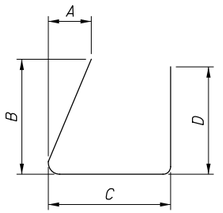
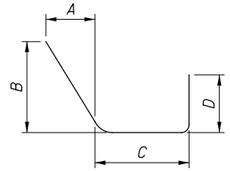


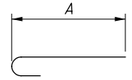
TYPE-3



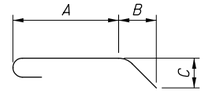
TYPE-9



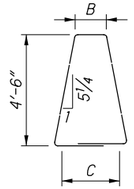
TYPE-10



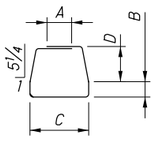
TYPE-16



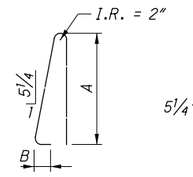
TYPE-18



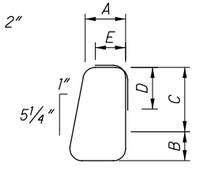
TYPE 38



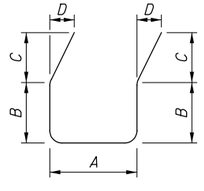
TYPE 39



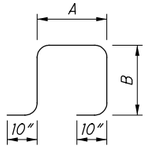
TYPE 40



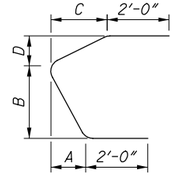
TYPE 41



TYPE 42



TYPE 43



TYPE 44

* INDICATES BARS WITH A MECHANICAL CONNECTOR. DIMENSION PROVIDED IS TO THE END OF THE CONNECTOR.

** INDICATES BARS TO BE THREADED INTO A MECHANICAL CONNECTOR. DIMENSION PROVIDED DOES NOT INCLUDE PORTION THREADED INTO CONNECTOR.

***INDICATES GLASS FIBER REINFORCED POLYMER (GFRP) BARS ACCORDING TO STANDARD DRAWINGS SBR-1-20 & SBR-2-20.

NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, S601:

   S: LOCATION OF THE BAR IN THE STRUCTURE (MOMENT SLAB)
   6: BAR SIZE DIMENSION NO. 6
   01: SEQUENCE NUMBER

2. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. STRAIGHT BARS ARE INDICATED BY "STR".

3. ALL REINFORCING IS TO BE EPOXY COATED.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

PARSONS
p:\\VANVA01PWINT01.parsons.com\Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0914\Sheets\076_0914_SL001.dgn Sheet 11/2/2021 11:09:30 AM p002694C

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

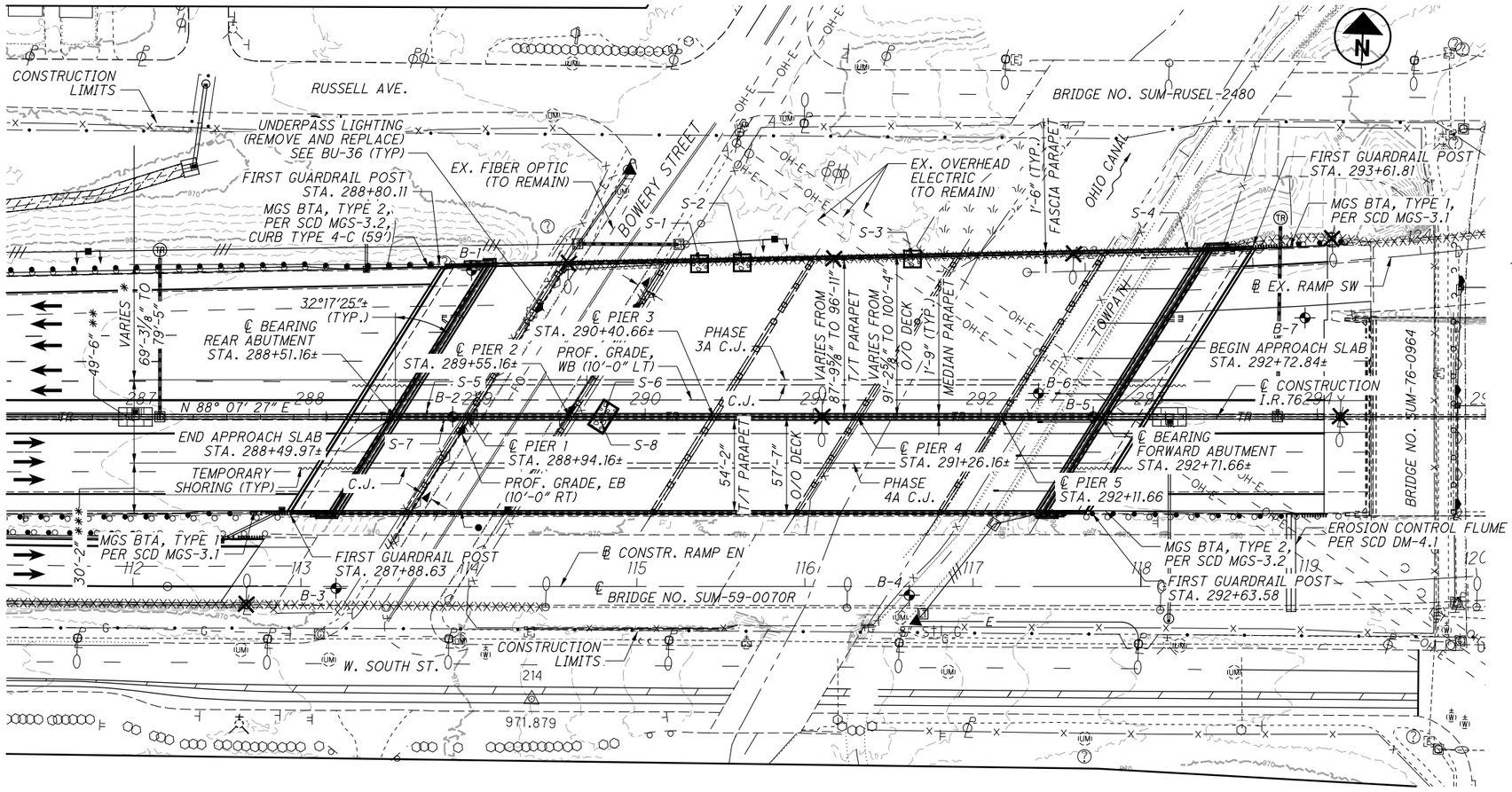
DESIGNED	DRAWN	REVIEWED	DATE
JRE	TYW	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703481	

REINFORCING STEEL LIST - 1
BRIDGE NO. SUM-76-0914
I.R. 76 OVER MANCHESTER ROAD S.R. 93

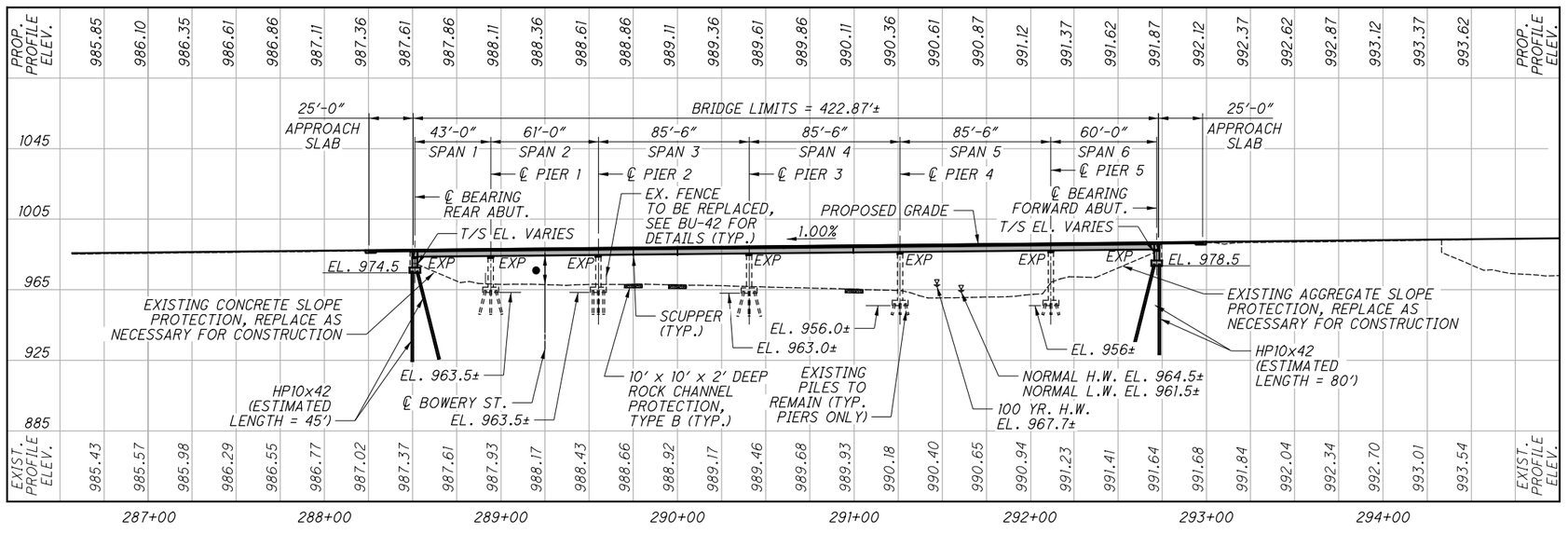
2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329

40/40
44/153



PLAN



PROFILE ALONG PROFILE GRADE OF LEFT AND RIGHT BRIDGE

BENCHMARK DATA

FOR BENCHMARK INFORMATION, SEE BU-19

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

DESIGN TRAFFIC:

2020 ADT = 101,350 2020 ADTT = 13,175
2040 ADT = 95,820 2040 ADTT = 12,457
DIRECTIONAL DISTRIBUTION = 59%

LEGEND

BORING LOCATIONS:
B-1 = B-014-1-19 B-5 = B-021-7-61
B-2 = H-027-0-61 B-6 = B-021-6-61
B-3 = S-006-0-79 B-7 = B-014-3-19
B-4 = S-010-0-79

* - PHASE 3A CONSTRUCTION
** - PHASE 4A CONSTRUCTION
*** - PHASE 5A CONSTRUCTION

CLEARANCES:
- 14'-11¼" EXISTING MINIMUM VERTICAL CLEARANCE
- 14'-11¼" REQUIRED MINIMUM VERTICAL CLEARANCE
- 15'-4⅝" PROPOSED MINIMUM VERTICAL CLEARANCE
- ▲ 5'-11"± EXISTING HORIZ. CLEARANCE (LEFT)
- ▲ 6'-8"± EXISTING HORIZ. CLEARANCE (RIGHT)

SCUPPERS:

TYPE 1:
S-1: STA. 290+32.40, 91.78' LT
S-2: STA. 290+57.70, 91.32' LT
S-3: STA. 291+59.10, 93.49' LT
S-4: STA. 293+23.30, 96.99' LT

TYPE 2:
S-5: STA. 288+70.00, 3.75' LT
S-6: STA. 289+77.40, 3.75' LT
S-7: STA. 288+80.00, 3.5' RT
S-8: STA. 289+72.80, 3.5' RT

EXISTING STRUCTURE

TYPE: 6 SPAN CONTINUOUS ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: 43'-0"±, 61'-0"±, 85'-6"±, 85'-6"±, 85'-6"±, 60'-0"± (C/C OF BEARING)
ROADWAY: VARIES F/F SAFETY CURB
LOADING: HS20
SKEW: 32°17'25"±
WEARING SURFACE: ASPHALT (3" ± THICK)
APPROACH SLABS: 25'-0" (AS-1-81)
ALIGNMENT: TANGENT & SPIRAL
CROWN: 0.016 FT/FT
STRUCTURAL FILE NUMBER: 7703457
DATE BUILT: 1964± / REHABILITATED 1983
DISPOSITION: PIERS TO BE REHABILITATED; ALL ELSE TO BE REPLACED

PROPOSED STRUCTURE

TYPE: NEW CONTINUOUS STEEL BEAMS WITH COMPOSITE REINFORCED CONCRETE DECK ON EXISTING PIERS AND NEW SEMI-INTEGRAL ABUTMENTS
SPANS: 43'-0"±, 61'-0"±, 85'-6"±, 85'-6"±, 85'-6"±, 60'-0"± (C/C OF BEARING)
ROADWAY: LEFT: VARIES FROM 87'-9⅝" TO 96'-11" T/T PARAPET
RIGHT: 54'-2" T/T PARAPET
LOADING: HL93 WITH 60 PSF FUTURE WEARING SURFACE
SKEW: 32°17'25"± L.F.
APPROACH SLABS: 25'-0" LONG (AS-1-15)
TYPE C INSTALLATION (AS-2-15)
ALIGNMENT: TANGENT
CROWN: 0.016 FT/FT
COORDINATES: LATITUDE 41° 03' 42.6"
LONGITUDE 81° 32' 34.39"

2021-11-04_BU 13 - RFC PLANS

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

REVIEWED	DATE
TES	09/01/21
STRUCTURE FILE NUMBER	
7703457	
DRAWN	REVISED
JRE/TYW	
DESIGNED	CHECKED
JRE	RWB

SUMMIT COUNTY
STA. 288+49.97±
STA. 292+72.84±

SITE PLAN
SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329

1 / 70

45
153

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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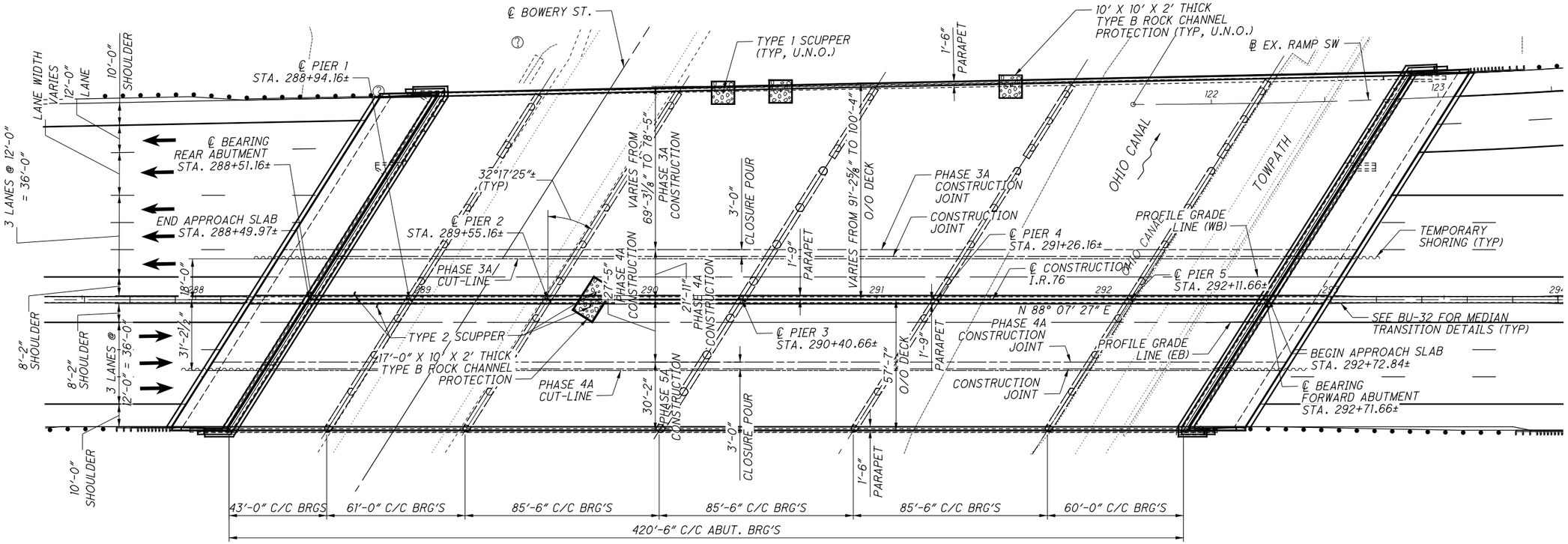

GENERAL PLAN

NOTES

REFER TO THE MAINTENANCE OF TRAFFIC PLANS (BU-4) FOR ADDITIONAL NOTES AND DETAILS NOT SHOWN

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NO.	DATE	DESCRIPTION

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RWB		7703457

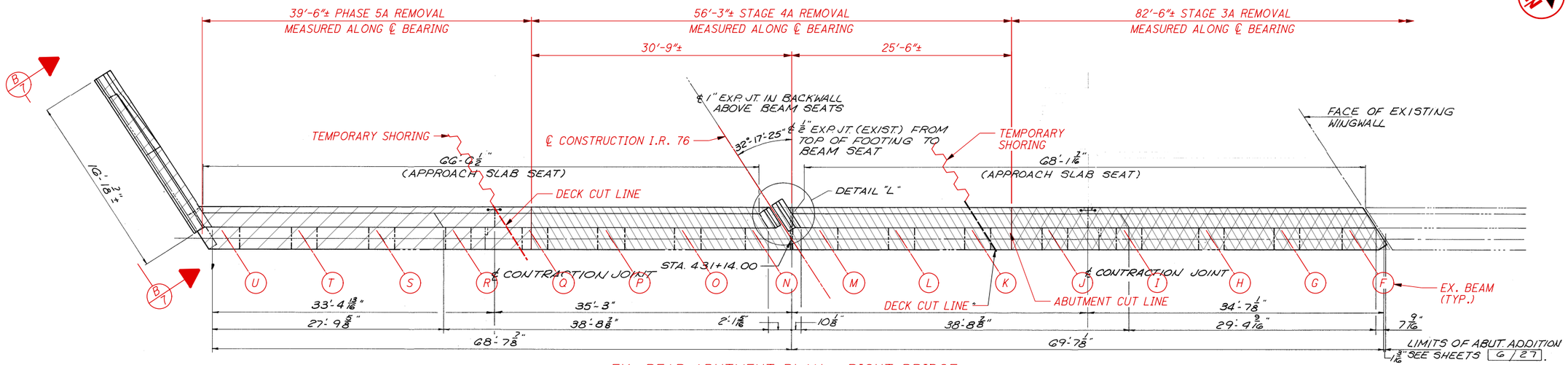
GENERAL PLAN
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

2021-11-04_BU 13 - RFC PLANS

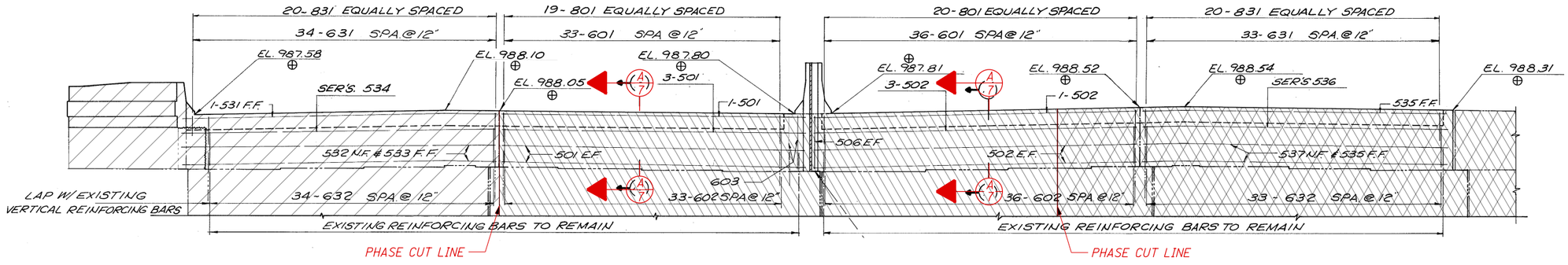
SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2 / 70

46
153



EX. REAR ABUTMENT PLAN - RIGHT BRIDGE



ELEVATION

LEGEND:

- INDICATES AREA OF CONCRETE TO BE REMOVED DURING PHASE 3A
- INDICATES AREA OF CONCRETE TO BE REMOVED DURING PHASE 4A
- INDICATES AREA OF CONCRETE TO BE REMOVED DURING PHASE 5A

NOTES:

1. ABUTMENT AND PARAPET REMOVAL SHALL BE PER ITEM 202 PORTIONS OF STRUCTURE REMOVED, OVER 20 FEET SPAN, AS PER PLAN. FOR ADDTIONAL STRUCTURAL REMOVAL INFORMATION, SEE STRUCTURAL GENERAL NOTES ON SHEET 2/153.

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ABUTMENT PLAN AND ELEVATION REMOVAL DETAILS

BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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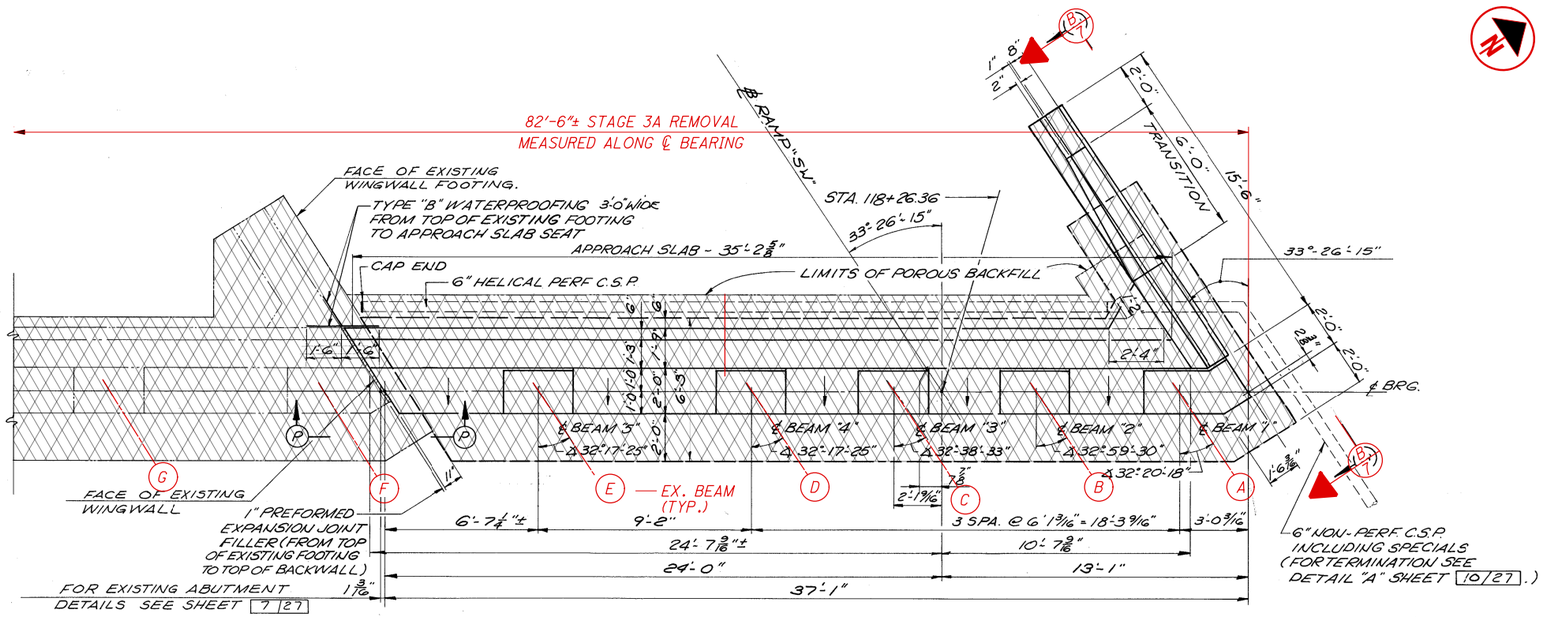
2021-11-04_BU 13 - RFC PLANS



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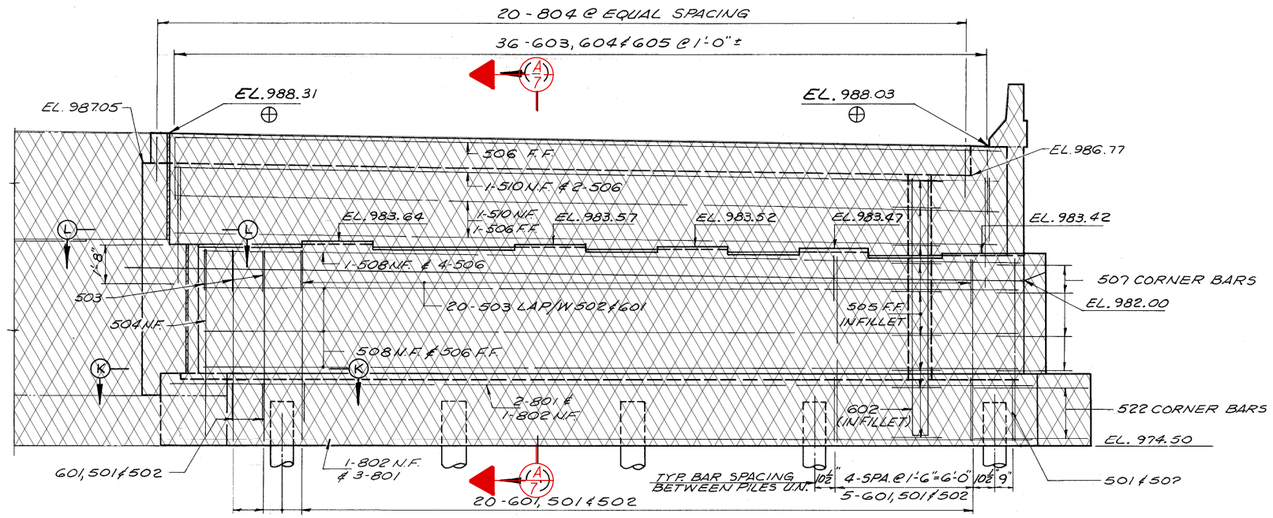

ELEVATION

LEGEND:

INDICATES AREA OF CONCRETE TO BE REMOVED DURING PHASE 3A

NOTES:

1. EXISTING PILES TO REMAIN. CUT OFF TOP OF PILES TO ELEVATION 974.00±
2. FOR ADDITIONAL ABUTMENT NOTES, SEE SHEET 3/70.

ISSUE RECORD:

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ABUTMENT PLAN AND ELEVATION REMOVAL DETAILS
BRIDGE NO. SUM-76-0954
I-R. 76 OVER BOWERY STREET & OHIO CANAL

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-
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PID No. 102329

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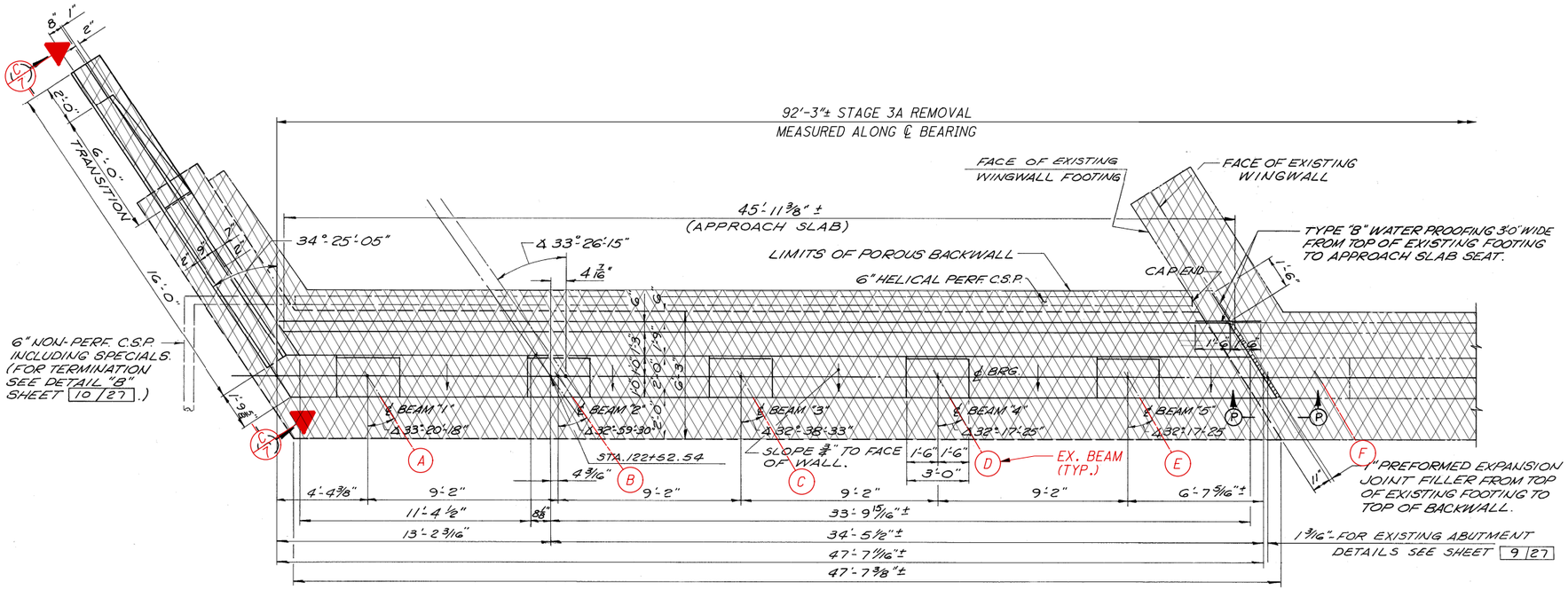
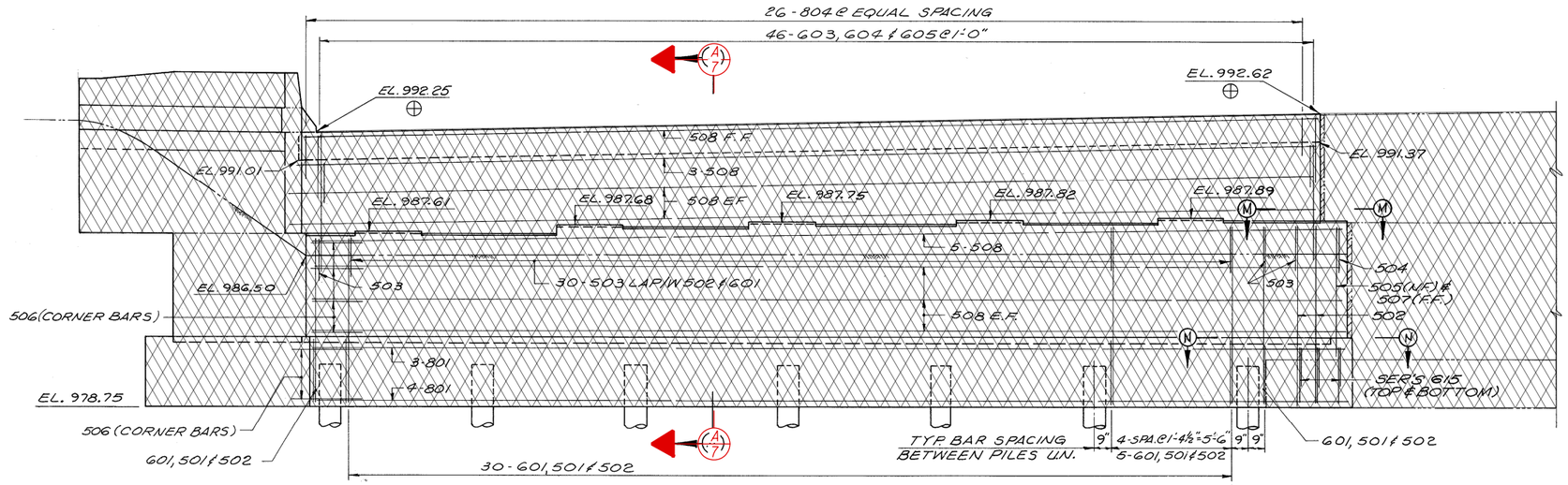
153

Released for Construction
Thomas J Powell, PE
11/10/2021



EX. FORWARD ABUTMENT PLAN - WIDENING



ELEVATION

LEGEND:

INDICATES AREA OF CONCRETE TO BE REMOVED DURING PHASE 3A

NOTES:

1. EXISTING PILES TO REMAIN. CUT OFF TOP OF PILES TO ELEVATION 978.00±
2. FOR ADDITIONAL ABUTMENT NOTES, SEE SHEET 3/70.

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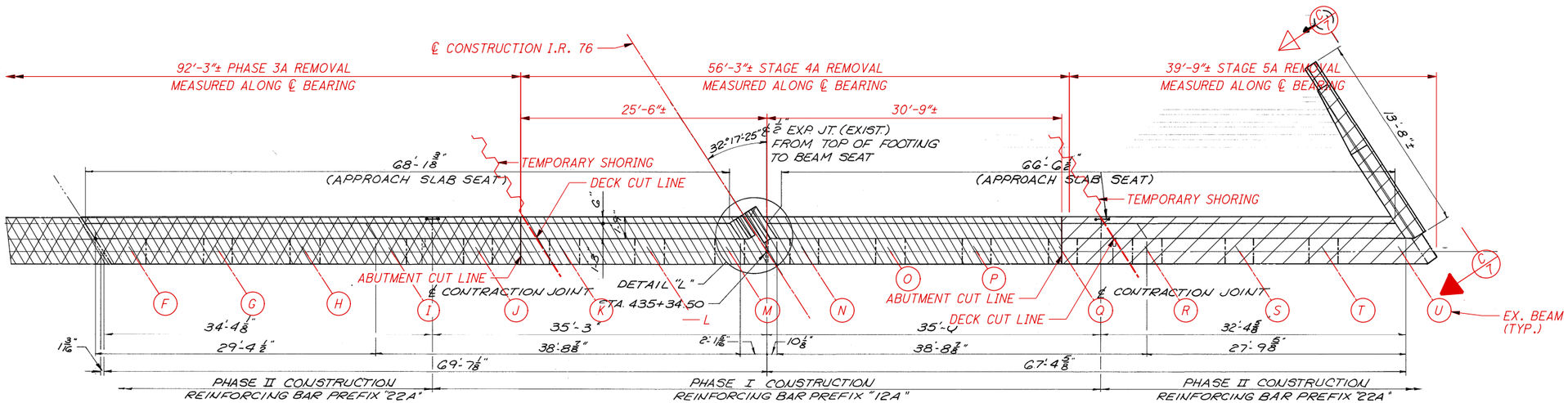
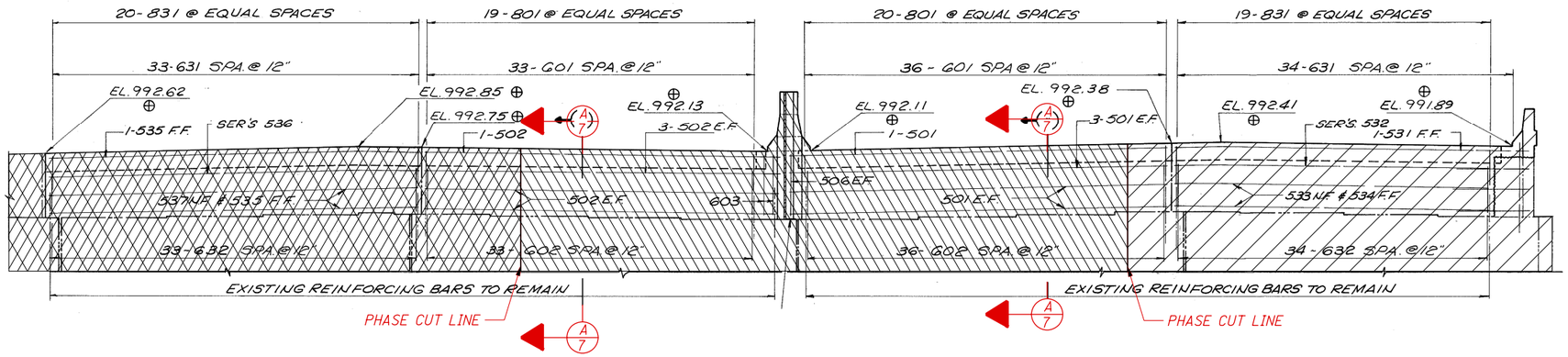
ABUTMENT PLAN AND ELEVATION REMOVAL DETAILS
BRIDGE NO. SUM-76-0954
I-R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329



EX. FORWARD ABUTMENT PLAN - RIGHT BRIDGE



ELEVATION

LEGEND:

- INDICATES AREA OF CONCRETE TO BE REMOVED DURING PHASE 3A
- INDICATES AREA OF CONCRETE TO BE REMOVED DURING PHASE 4A
- INDICATES AREA OF CONCRETE TO BE REMOVED DURING PHASE 5A

NOTES:

1. FOR ADDITIONAL ABUTMENT NOTES, SEE SHEET 3/70.

ISSUE RECORD:

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ABUTMENT PLAN AND ELEVATION REMOVAL DETAILS

BRIDGE NO. SUM-76-0954
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SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2021-11-04_BU 13 - RFC PLANS

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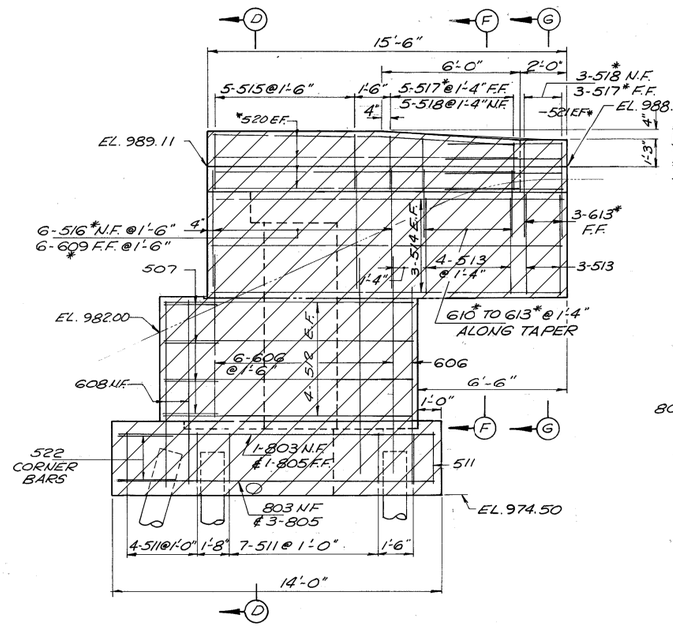
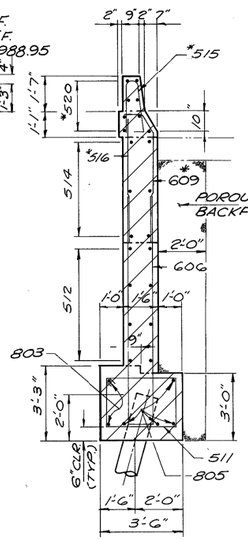
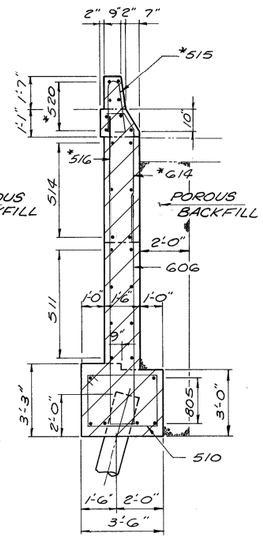


VIEW B-B



SECTION D-D



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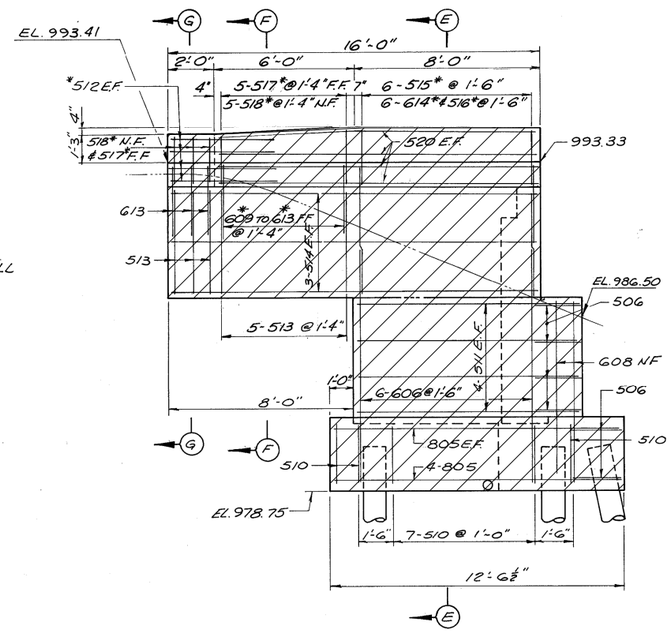
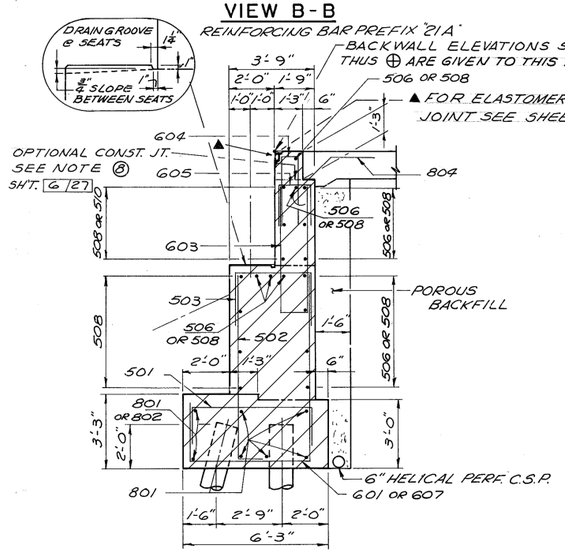


VIEW C-C
REINFORCING BAR PREFIX "22A"



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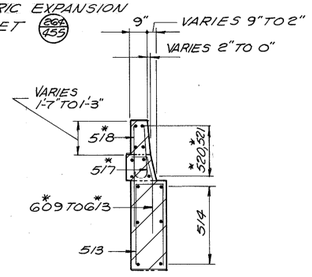

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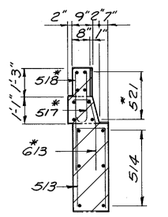

SECTION G-G

LEGEND:

INDICATES AREA OF CONCRETE TO BE REMOVED

NOTES:

1. FOR PORTIONS OF ABUTMENT TO BE REMOVED DURING EACH CONSTRUCTION PHASE AND PILE CUT OFF ELEVATIONS, SEE SHEETS 3/70 THRU 6/70.
2. FOR ADDITIONAL ABUTMENT NOTES, SEE SHEET 3/70.

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ABUTMENT REMOVAL DETAILS
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

2021-11-04_BU 13 - RFC PLANS

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PID No. 102329

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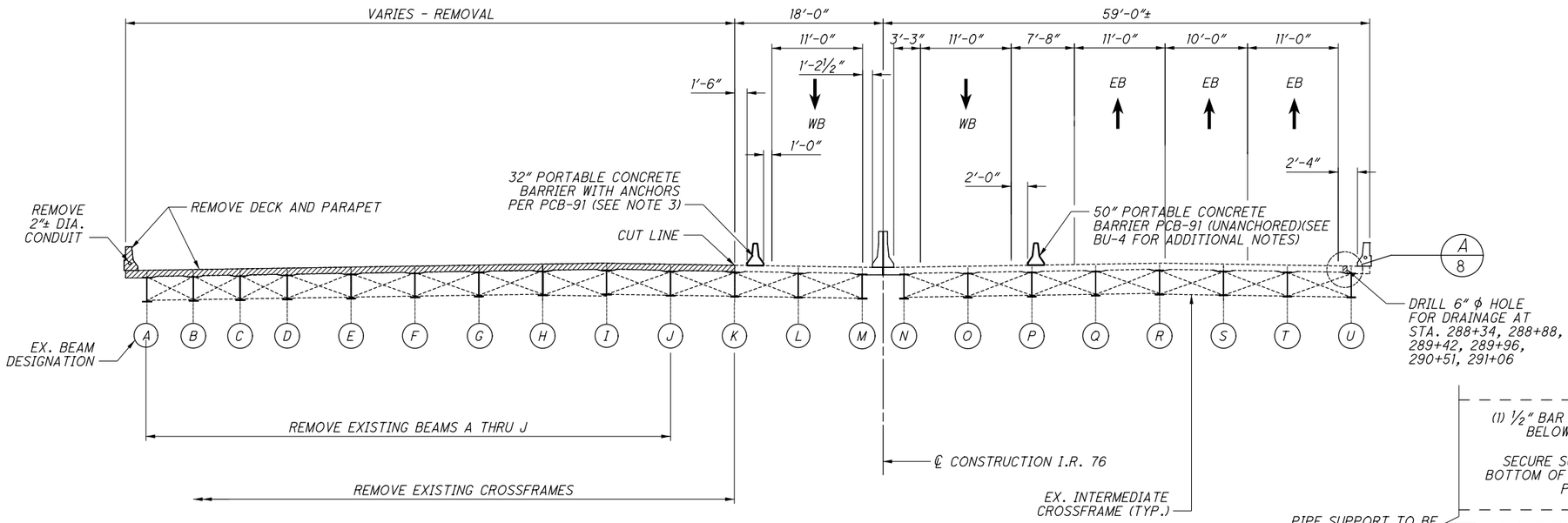
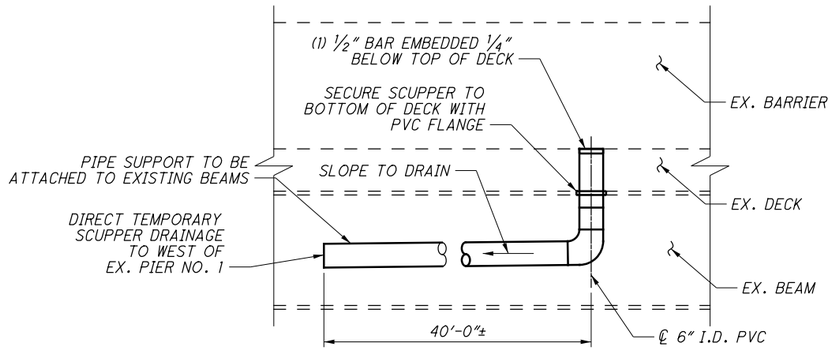
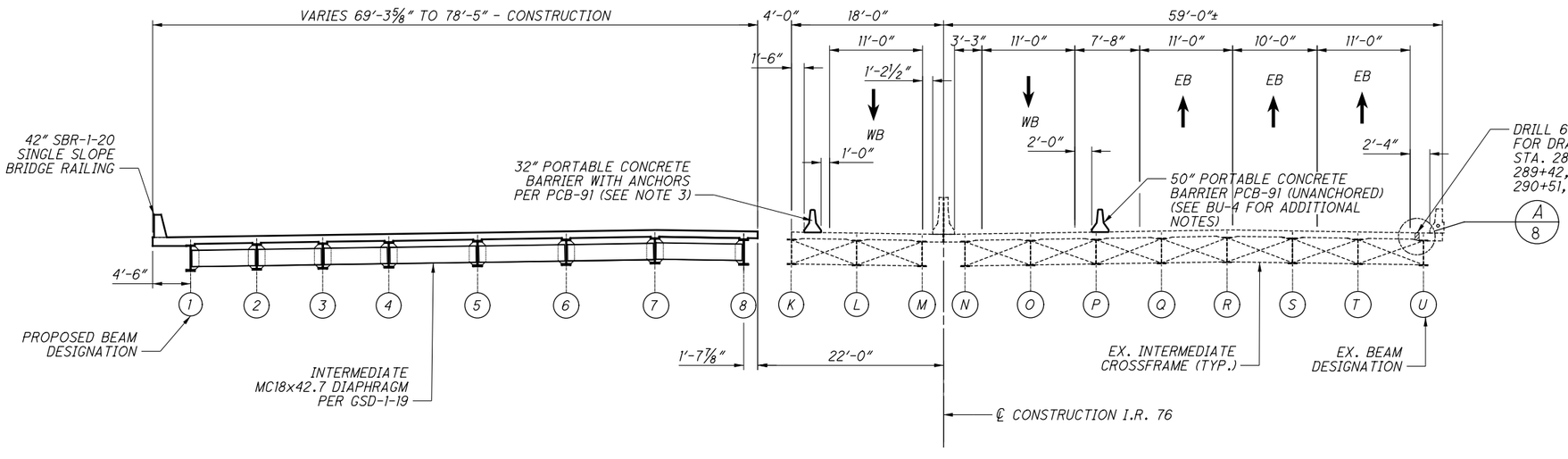
51/153



PHASE 3A REMOVAL



A TEMPORARY SCUPPER DETAIL AT STA. 288+88 ONLY
8 & 9



PHASE 3A CONSTRUCTION

LEGEND:

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

NOTES:

1. FOR PHASE 4A CONSTRUCTION, SEE SHEET 9/70.
2. FOR PHASE 5A CONSTRUCTION, SEE SHEET 10/70.
3. INSTALL ANCHOR BOLTS AS DIRECTED IN ODOT STD. DWG PCB-91 ALONG THE TRAFFIC SIDE OF THE BARRIER. PROVIDE 2 ANCHORS PER BARRIER SEGMENT AS SHOWN ON PCB-91.

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PHASED CONSTRUCTION SECTION - 1 OF 3
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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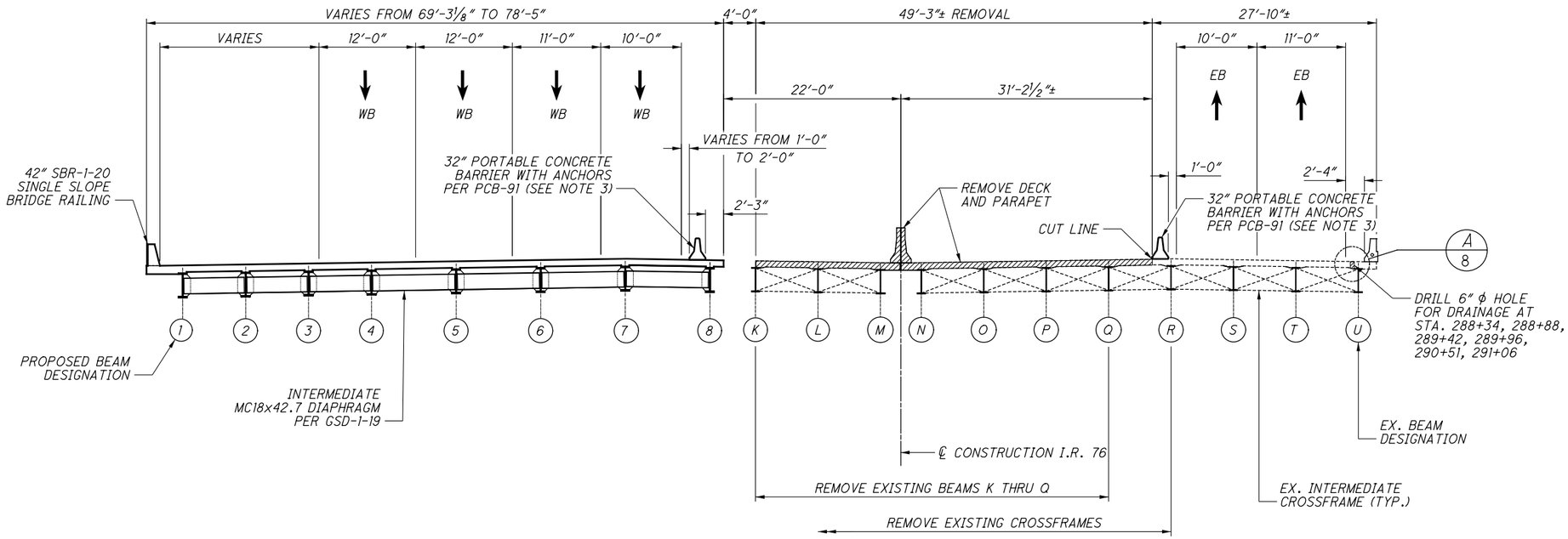
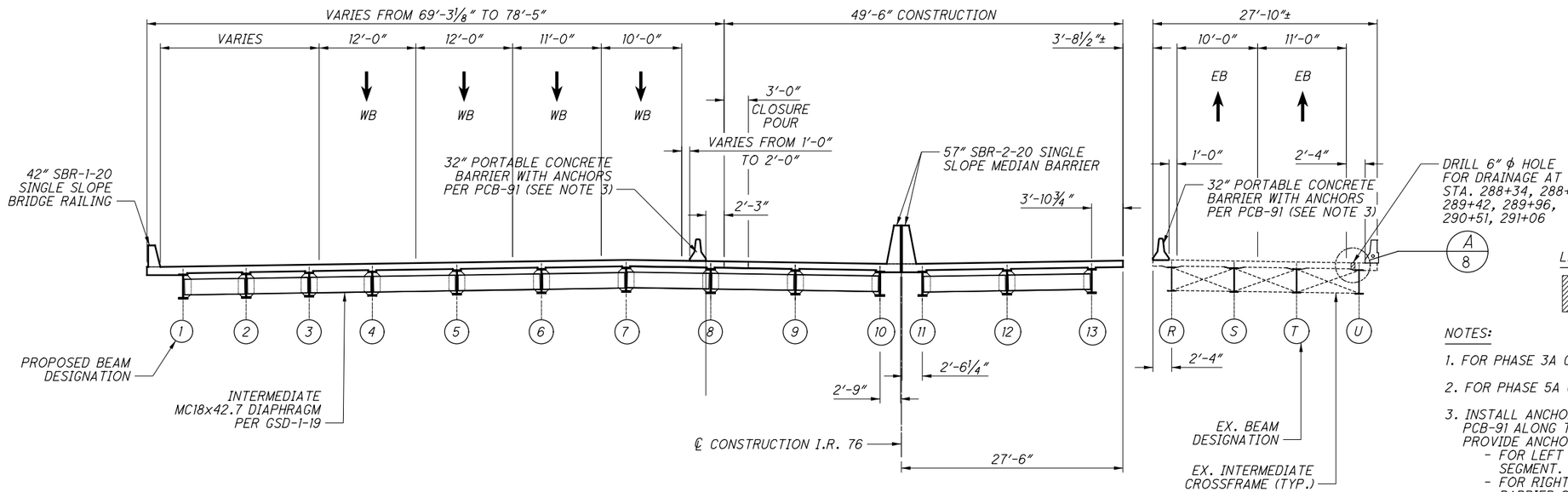
ISSUE RECORD:

NO.	DATE	DESCRIPTION



PHASE 4A REMOVAL



PHASE 4A CONSTRUCTION

LEGEND:

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

NOTES:

1. FOR PHASE 3A CONSTRUCTION, SEE SHEET 8/70.
2. FOR PHASE 5A CONSTRUCTION, SEE SHEET 10/70.
3. INSTALL ANCHOR BOLTS AS DIRECTED IN ODOT STD. DWG PCB-91 ALONG THE TRAFFIC SIDE OF THE BARRIER. PROVIDE ANCHORS AS SHOWN ON PCB-91.
   - FOR LEFT BRIDGE: 4 ANCHORS REQUIRED PER BARRIER SEGMENT.
   - FOR RIGHT BRIDGE: 4 ANCHORS REQUIRED PER BARRIER SEGMENT.
4. WHEN THE PORTABLE CONCRETE BARRIER IS NO LONGER NEEDED, REMOVE THE ANCHORS AND FILL THE HOLE WITH GROUT CONFORMIMG TO CMS 705.20.

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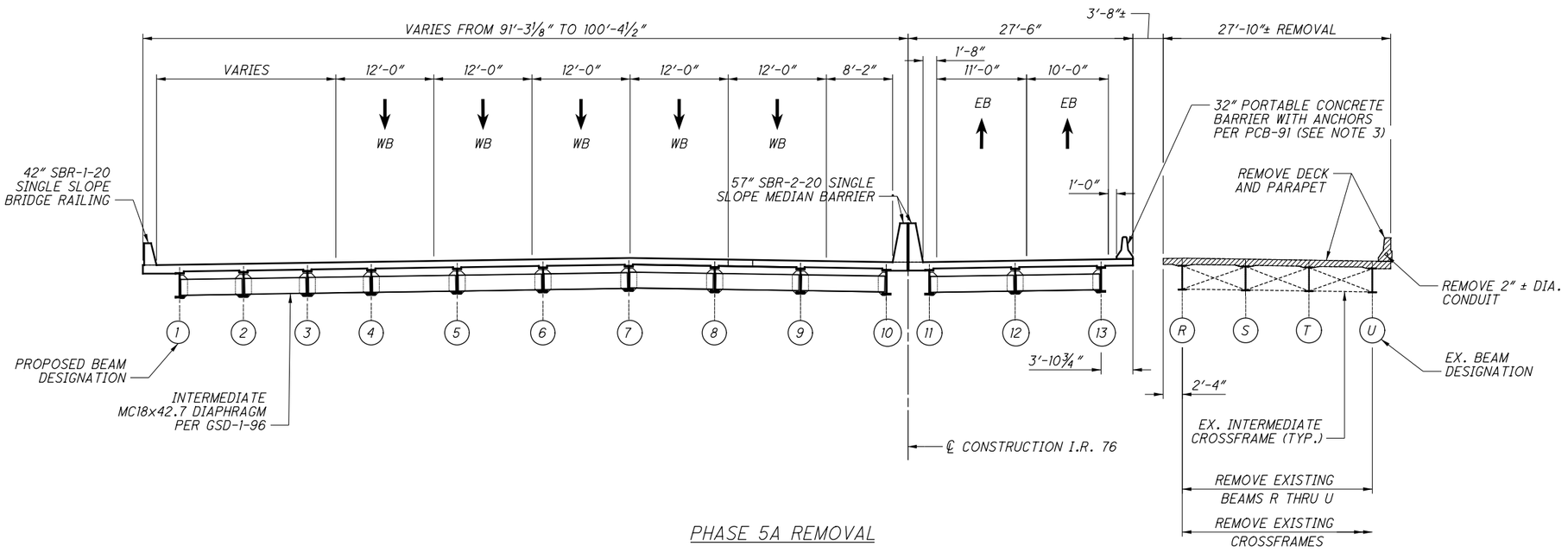
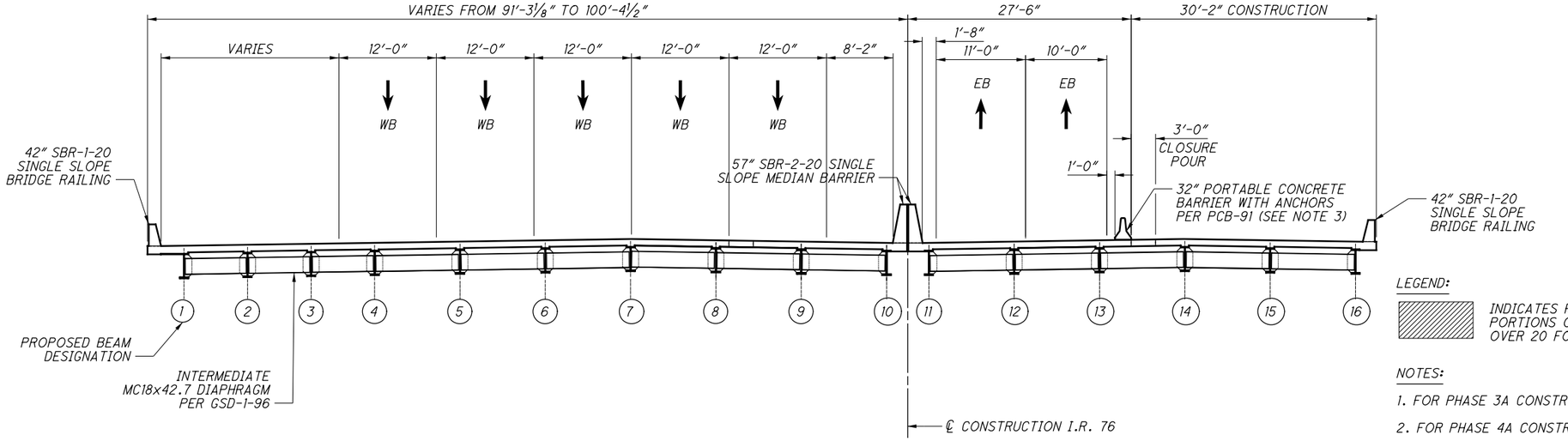
PHASED CONSTRUCTION SECTION - 2 OF 3
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329



PHASE 5A REMOVAL



PHASE 5A CONSTRUCTION

LEGEND:

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

NOTES:

1. FOR PHASE 3A CONSTRUCTION, SEE SHEET 8/70.
2. FOR PHASE 4A CONSTRUCTION, SEE SHEET 9/70.
3. INSTALL ANCHOR BOLTS AS DIRECTED IN ODOT STD. DWG PCB-91 ALONG THE TRAFFIC SIDE OF THE BARRIER. PROVIDE 4 ANCHORS PER BARRIER SEGMENT AS SHOWN ON PCB-91.
4. WHEN THE PORTABLE CONCRETE BARRIER IS NO LONGER NEEDED, REMOVE THE ANCHORS AND FILL THE HOLE WITH GROUT CONFORMIMG TO CMS 705.20.

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PHASED CONSTRUCTION SECTION - 3 OF 3
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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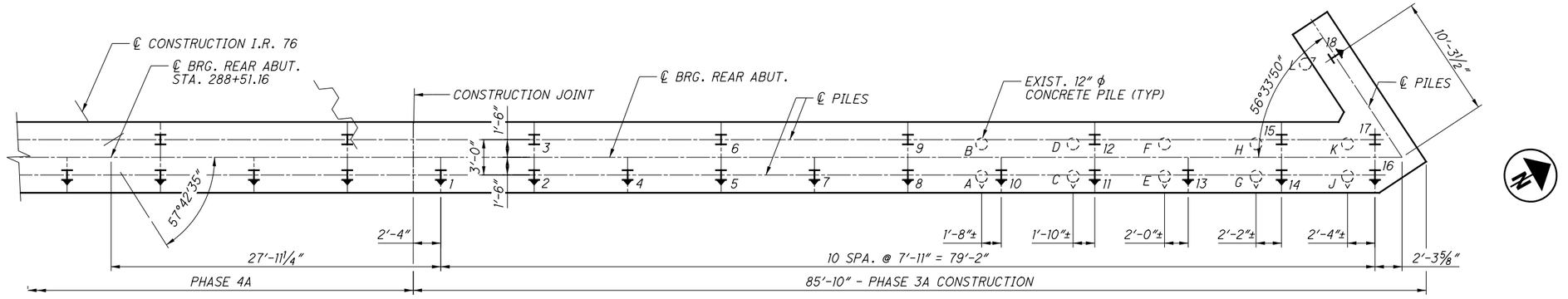
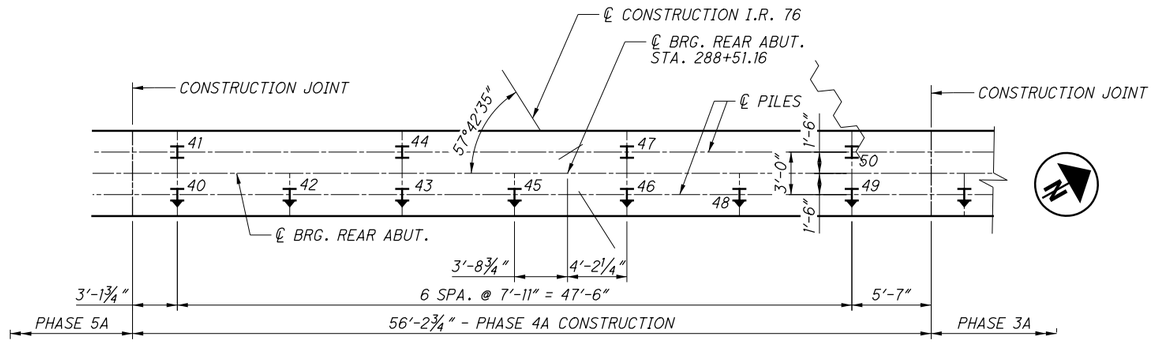
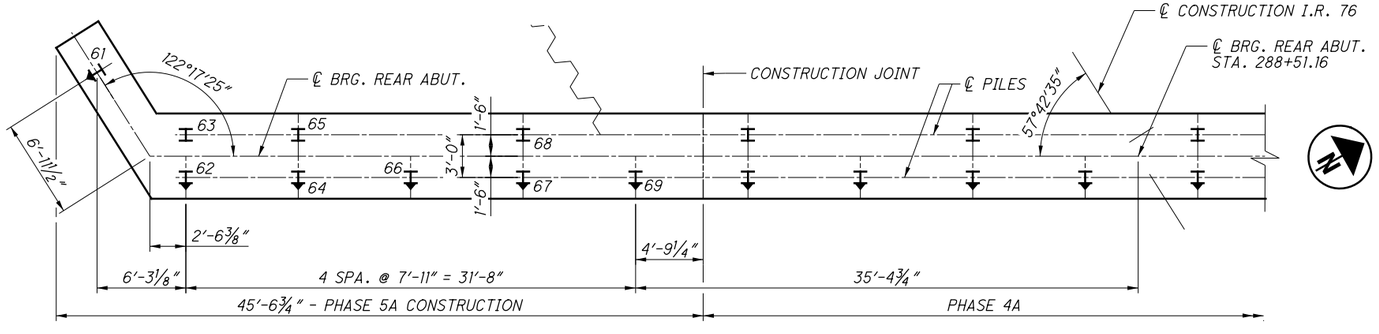


PILING PLAN - PHASE 3A



PILING PLAN - PHASE 4A



PILING PLAN - PHASE 5A

NOTES:

1. FOR ADDITIONAL PILE NOTES, SEE SHEET 3/153.
2. FOR REAR ABUTMENT FOOTING DETAILS, SEE SHEETS 13/70 THRU 16/70.

LEGEND:

(1) - INDICATED PILE NUMBER

H - INDICATES PROPOSED VERTICAL PILE HP10X42

H - INDICATES PROPOSED PILE HP10X42 BATTERED 1(H):4(V) IN THE DIRECTION SHOWN

- INDICATES EXISTING VERTICAL PILE 12" ϕ (TO REMAIN)

- INDICATES EXISTING BATTERED PILE 12" ϕ (TO REMAIN)

- TEMPORARY SHORING

REAR ABUTMENT PILE DATA

LOCATION	PILE TYPE	PILE NUMBER	PILE CUTOFF ELEVATION	ESTIMATED PILE LENGTH (EACH) (FEET)
REAR ABUTMENT EXISTING PILES PHASE 3A	12" ϕ CONCRETE	A - L	974±	N/A
REAR ABUTMENT PHASE 3A	HP10x42	1 - 18	975.5	45
REAR ABUTMENT PHASE 4A	HP10x42	41 - 50	975.5	45
REAR ABUTMENT PHASE 5A	HP10x42	61 - 69	975.5	45

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DESIGNED JRE CHECKED RWB

PILING PLAN - REAR ABUTMENT
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

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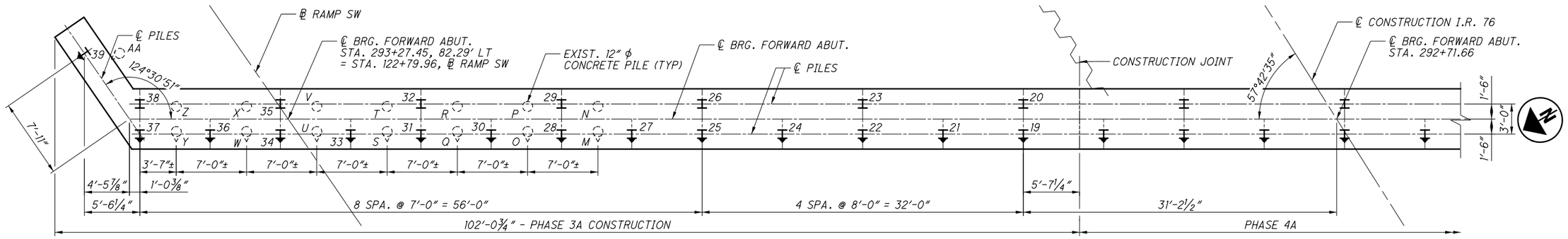
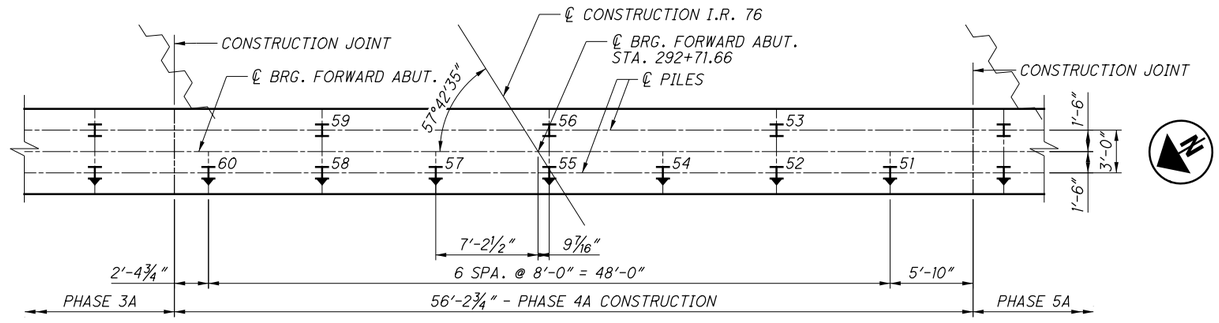
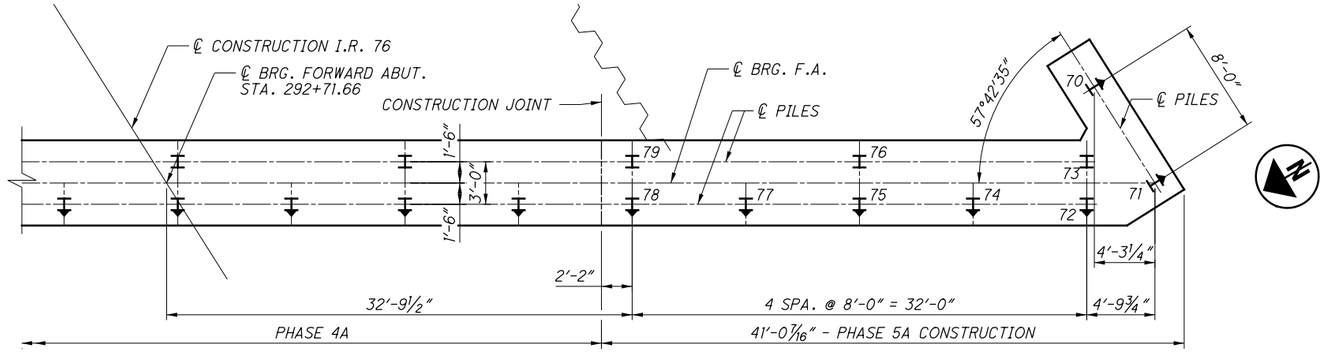
PID No. 102329



PILING PLAN - PHASE 3A



PILING PLAN - PHASE 4A



PILING PLAN - PHASE 5A

NOTES:

1. FOR ADDITIONAL PILE NOTES, SEE SHEET 3/153.
2. FOR FORWARD ABUTMENT FOOTING DETAILS, SEE SHEETS 13/70 THRU 16/70.

LEGEND:

- (1) - INDICATED PILE NUMBER
- H - INDICATES PROPOSED VERTICAL PILE HP10X42
- H - INDICATES PROPOSED PILE HP10X42 BATTERED 1(H):4(V) IN THE DIRECTION SHOWN
- ◌ - INDICATES EXISTING VERTICAL PILE 12" ϕ (TO REMAIN)
- ◌ - INDICATES EXISTING BATTERED PILE 12" ϕ (TO REMAIN)
- ~ - TEMPORARY SHORING

FORWARD ABUTMENT PILE DATA				
LOCATION	PILE TYPE	PILE NUMBER	PILE CUTOFF ELEVATION	ESTIMATED PILE LENGTH (EACH) (FEET)
FORWARD ABUTMENT EXISTING PILES PHASE 3A	12" ϕ CONCRETE	M - AA	978±	N/A
FORWARD ABUTMENT PHASE 3A	HP10x42	19 - 39	979.5	80
FORWARD ABUTMENT PHASE 4A	HP10x42	51 - 60	979.5	80
FORWARD ABUTMENT PHASE 5A	HP10x42	70 - 79	979.5	80

DESCRIPTION
ISSUE RECORD:
NO. DATE

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Columbus, OH 43235

DESIGNED JRE | DRAWN JRE | REVIEWED TES | DATE 09/01/21
CHECKED RWB | REVISED | STRUCTURE FILE NUMBER 7703457

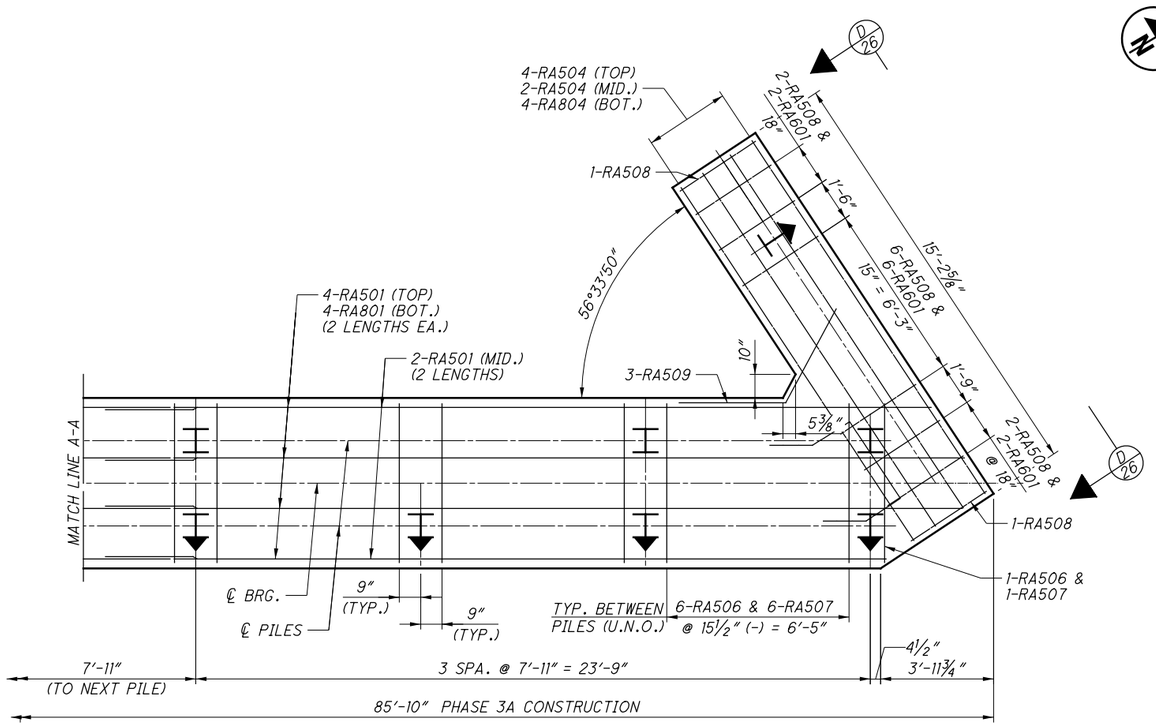
PILING PLAN - FORWARD ABUTMENT
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

12/70
56/153

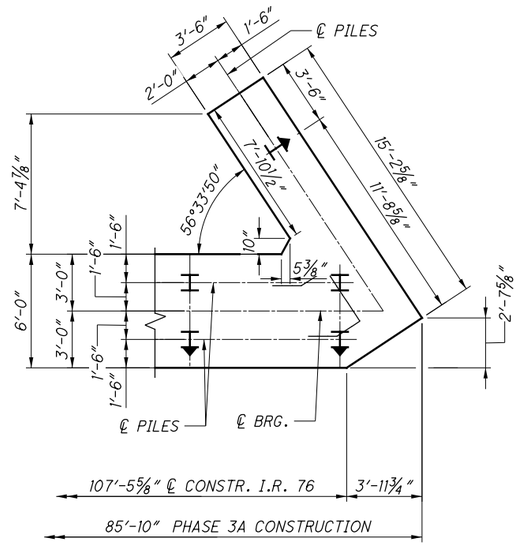
2021-11-04_BU 13 - RFC PLANS

Released for Construction
Thomas J Powell, PE
11/10/2021

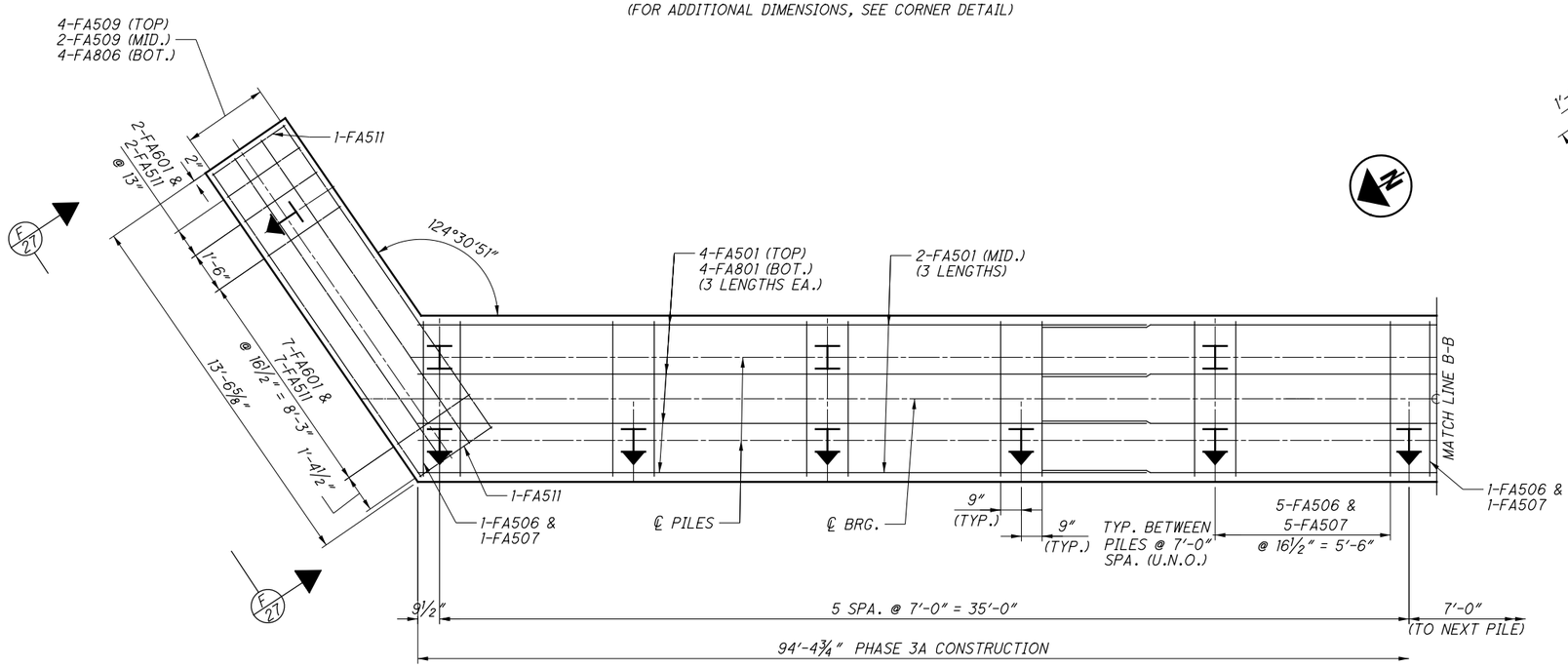


REAR ABUTMENT FOOTING PLAN - PHASE 3A

(FOR ADDITIONAL DIMENSIONS, SEE CORNER DETAIL)

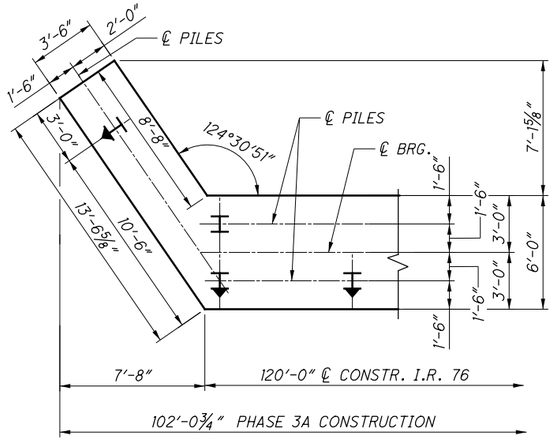


CORNER DETAIL -
REAR ABUTMENT FOOTING PLAN



FORWARD ABUTMENT FOOTING PLAN - PHASE 3A

(FOR ADDITIONAL DIMENSIONS, SEE CORNER DETAIL)



CORNER DETAIL -
FORWARD ABUTMENT FOOTING PLAN

MIN LAP TABLE	
#5 BAR	3'-1"
#8 BAR	4'-9"

LEGEND

- HP10x42 PILE
- BATTERED HP10x42 PILE

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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2021-11-04_BU 13 - RFC PLANS

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RWB		7703457	

REAR AND FORWARD ABUTMENT FOOTING PLAN - 1 OF 4

BRIDGE NO. SUM-76-0954

I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329

13 / 70

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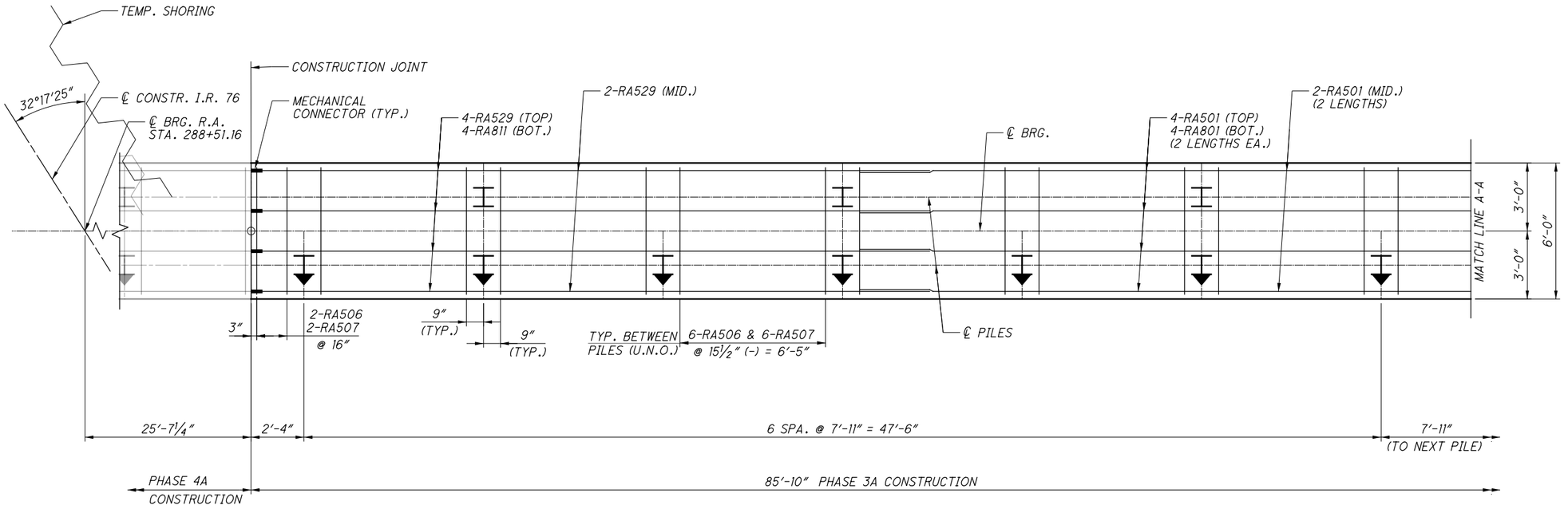
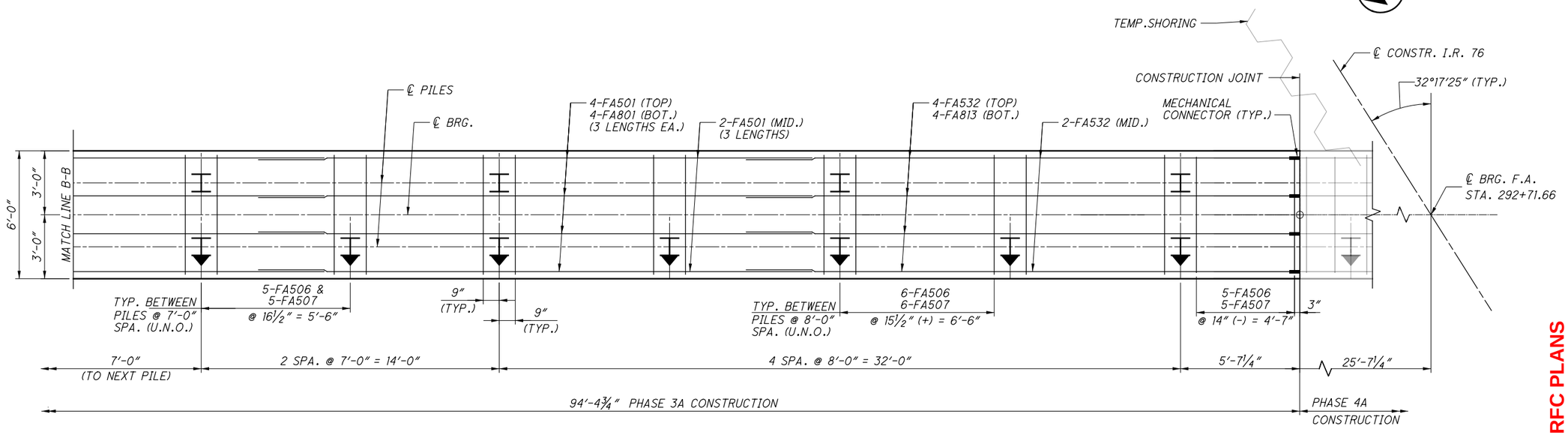
153



REAR ABUTMENT FOOTING PLAN - PHASE 3A



FORWARD ABUTMENT FOOTING PLAN - PHASE 3A

MIN LAP TABLE	
#5 BAR	3'-1"
#8 BAR	4'-9"

LEGEND

- HP10x42 PILE
- BATTERED HP10x42 PILE

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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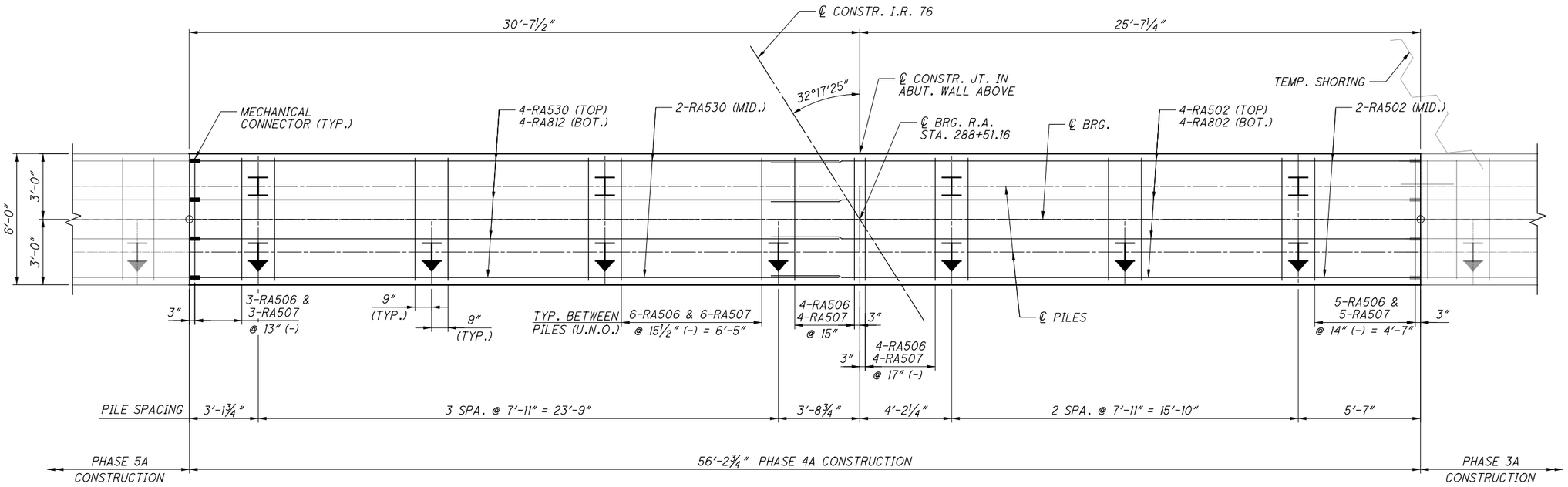
REAR AND FORWARD ABUTMENT FOOTING PLAN - 2 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

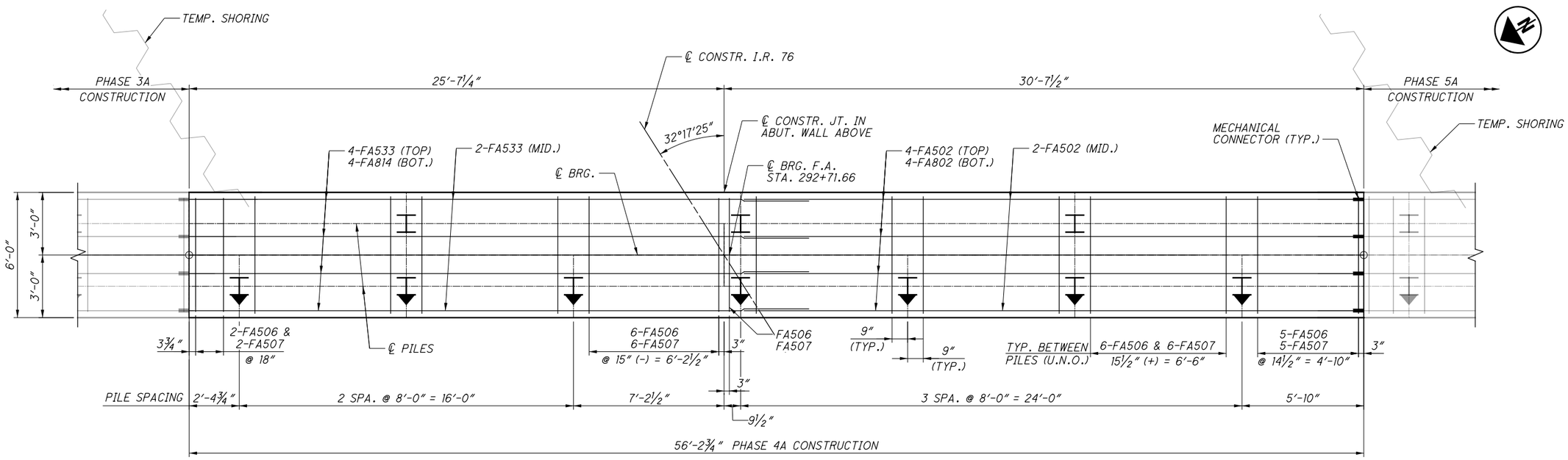
SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2021-11-04_BU 13 - RFC PLANS

Released for Construction
Thomas J Powell, PE
11/10/2021



REAR ABUTMENT FOOTING PLAN - PHASE 4A



FORWARD ABUTMENT FOOTING PLAN - PHASE 4A

MIN LAP TABLE	
#5 BAR	3′-1″
#8 BAR	4′-9″

LEGEND

- HP10×42 PILE
- BATTERED HP10×42 PILE

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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RWB		7703457	

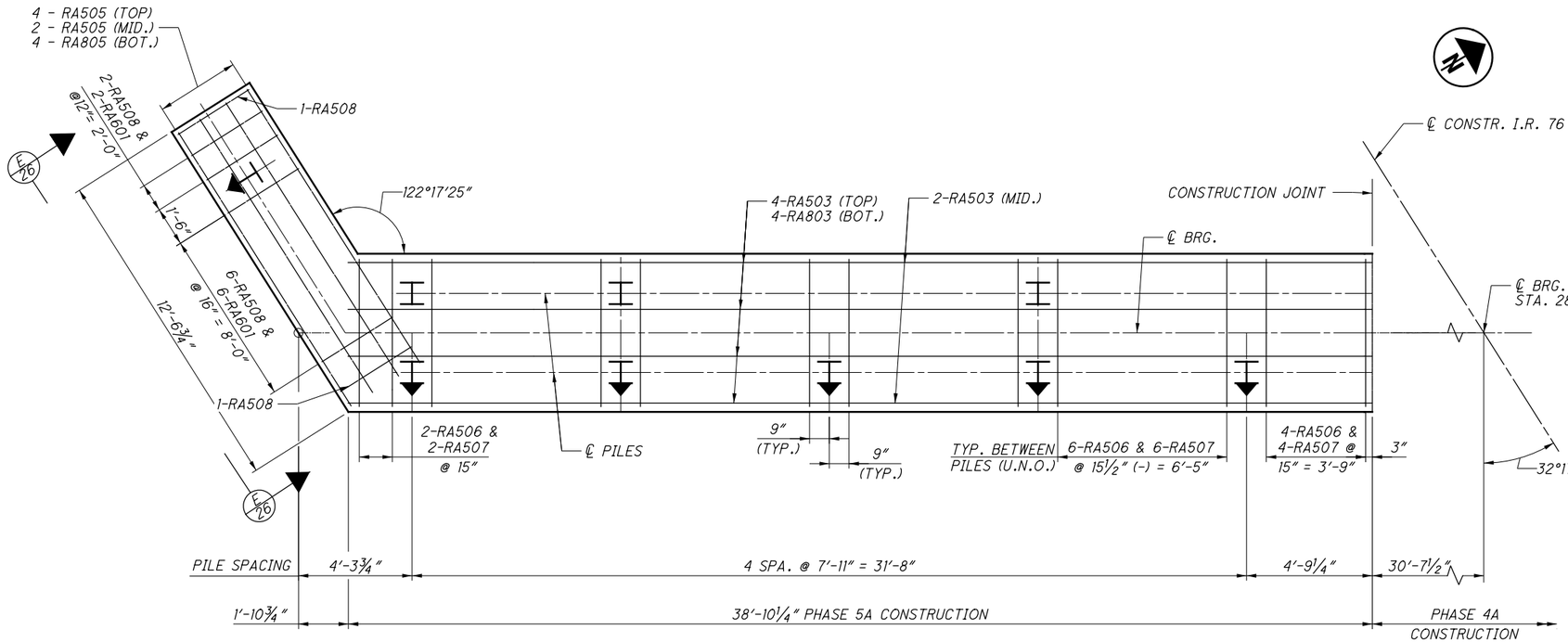
2021-11-04_BU 13 - RFC PLANS

REAR AND FORWARD ABUTMENT FOOTING PLAN - 3 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

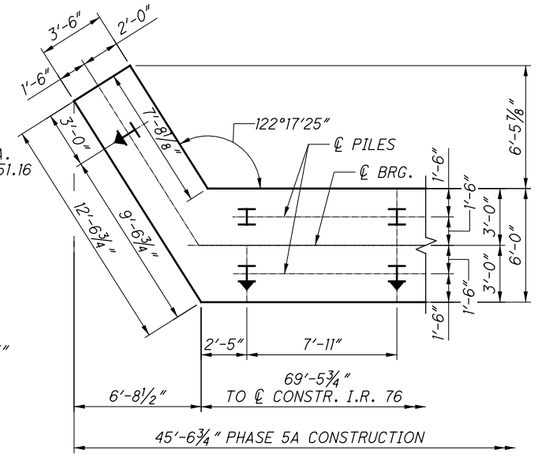
SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

15 / 70

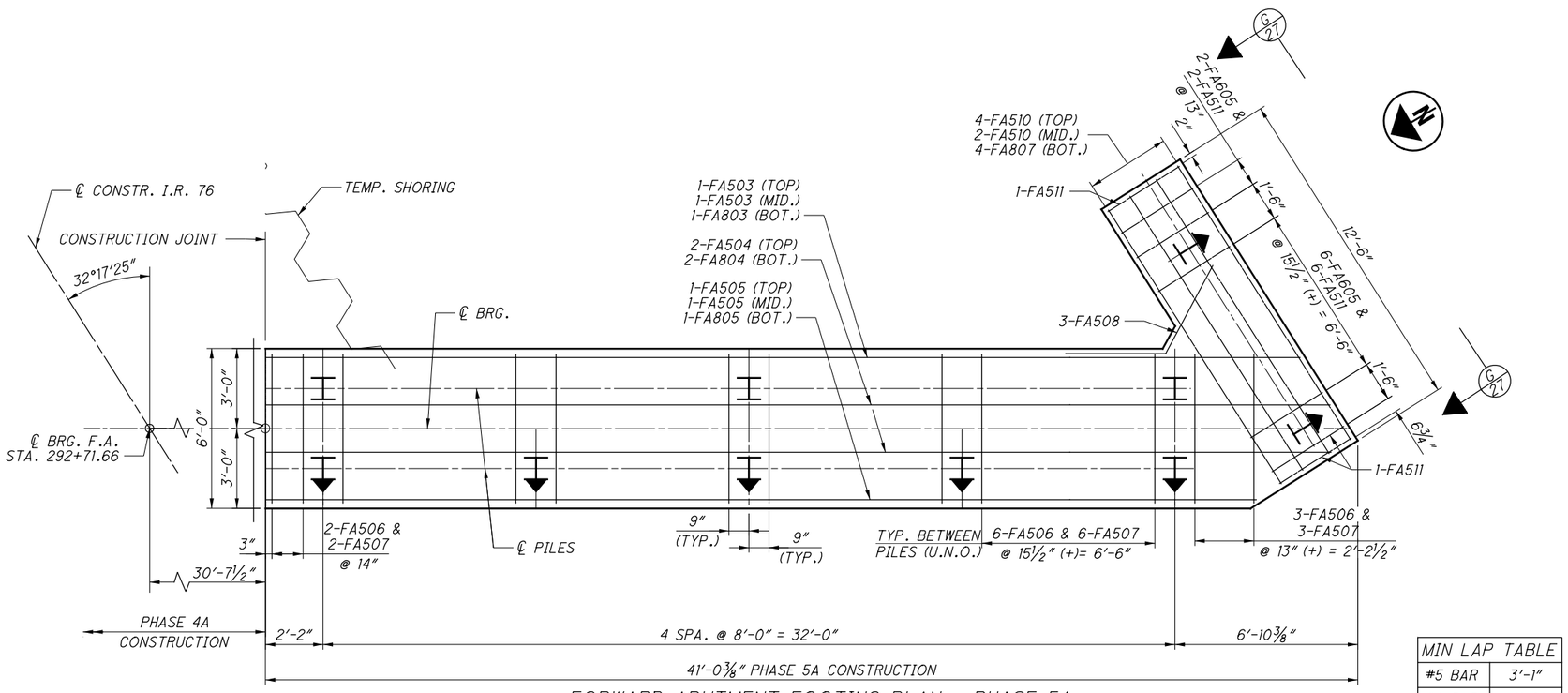
59 / 153



REAR ABUTMENT FOOTING PLAN - PHASE 5A

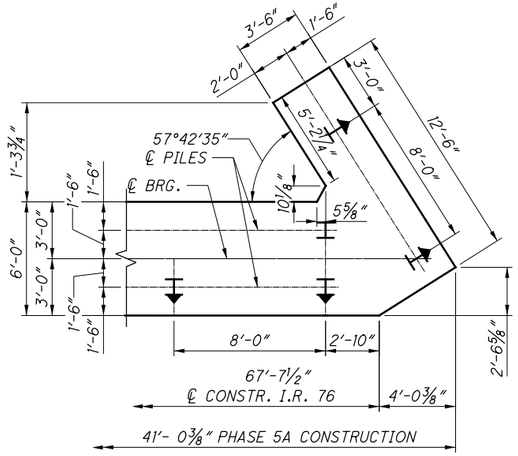


CORNER DETAIL-
REAR ABUTMENT FOOTING PLAN



FORWARD ABUTMENT FOOTING PLAN - PHASE 5A

MIN LAP TABLE	
#5 BAR	3'-1"
#8 BAR	4'-9"



CORNER DETAIL-
FORWARD ABUTMENT FOOTING PLAN

LEGEND

- HP HP10x42 PILE
- BATTERED HP HP10x42 PILE

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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RWB		7703457	

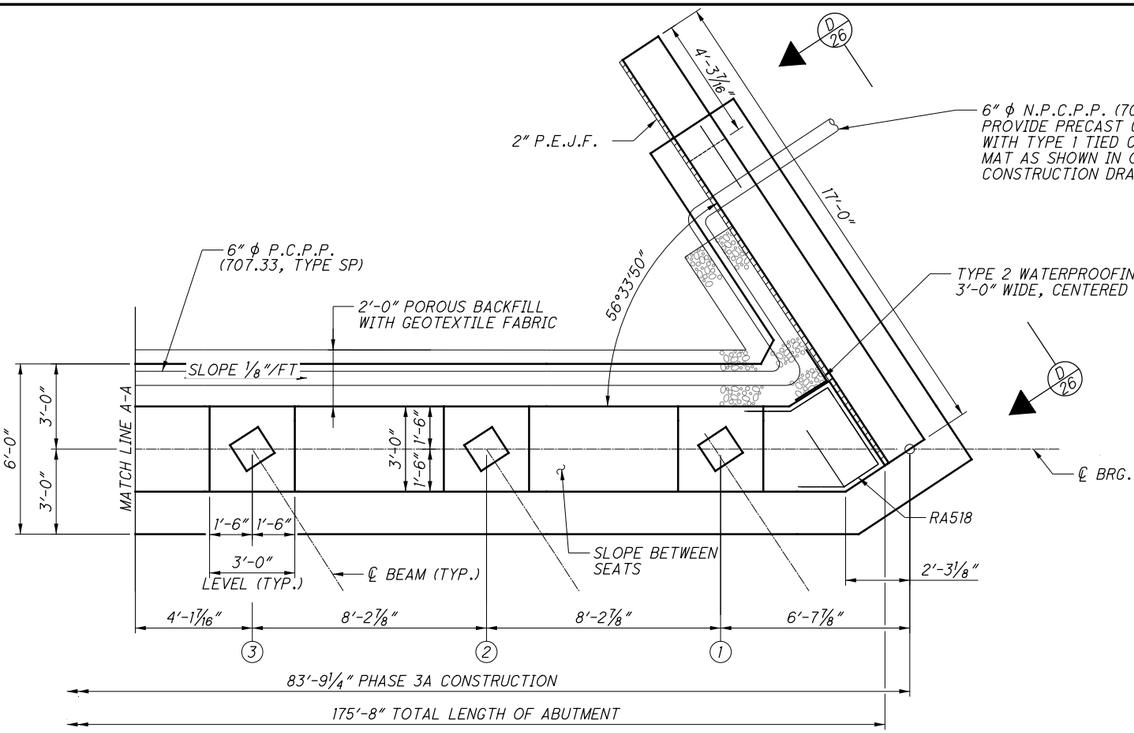
2021-11-04_BU 13 - RFC PLANS

REAR AND FORWARD ABUTMENT FOOTING PLAN - 4 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

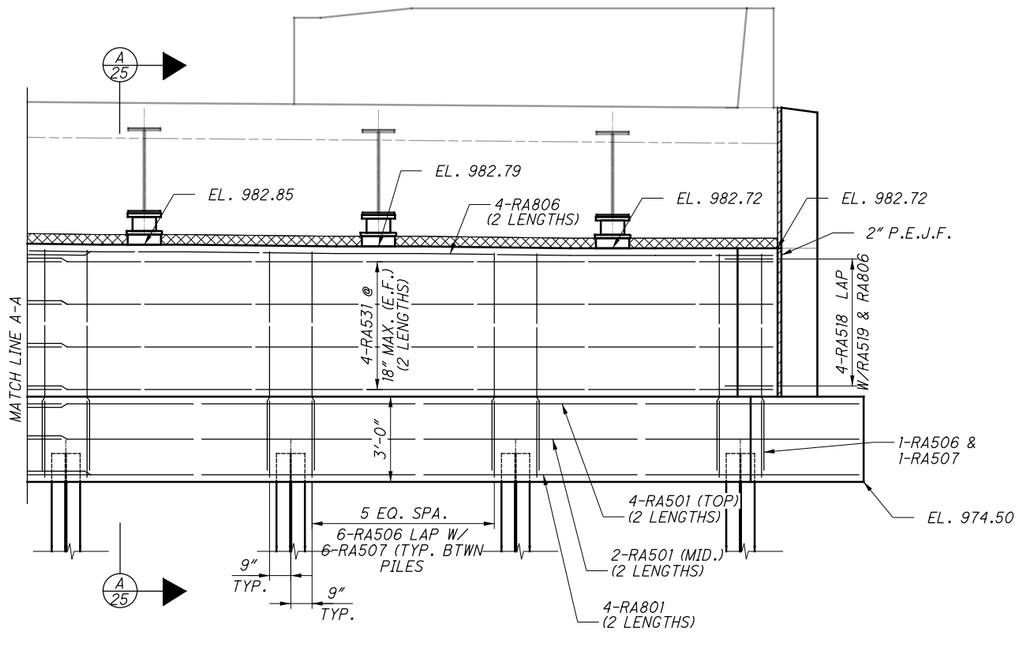
16 / 70

60
153



PLAN - PHASE 3A CONT.- REAR ABUTMENT

(DIMENSIONS SHOWN ALONG ℄ BEARING)
(PILES NOT SHOWN FOR CLARITY)



ELEVATION - PHASE 3A - REAR ABUTMENT

(ELEVATIONS SHOWN ALONG ℄ BEARING)

MIN LAP TABLE	
#5 BAR	3'-1"
#8 BAR	4'-9"

NOTES:

1. FOR ABUTMENT REMOVAL DETAILS, SEE SHEETS 3/70 THRU 7/70.
2. FOR ABUTMENT DIAPHRAGM DETAILS, SEE SHEETS 51/70 THRU 53/70.
3. FOR ELASTOMERIC BEARING DETAILS, SEE SHEET 47/70.
4. FOR PILING PLAN, SEE SHEET 11/70.
5. FOR FOOTING PLAN AND FOOTING REINFORCEMENT DETAILS, SEE SHEETS 13/70 THRU 16/70.

ISSUE RECORD:

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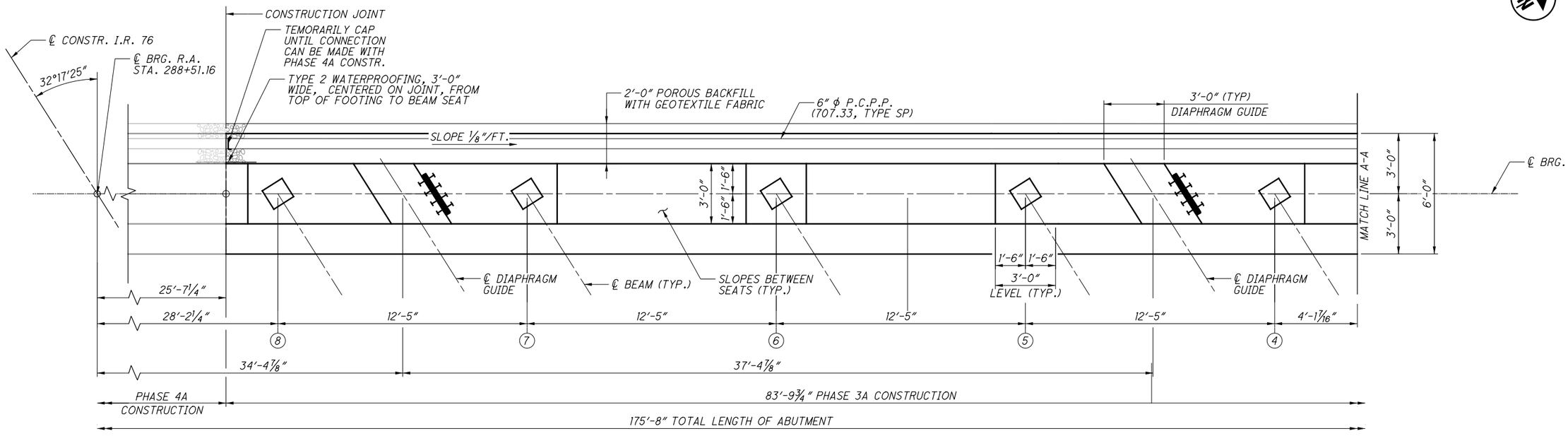
REAR ABUTMENT PLAN AND ELEVATION - 1 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

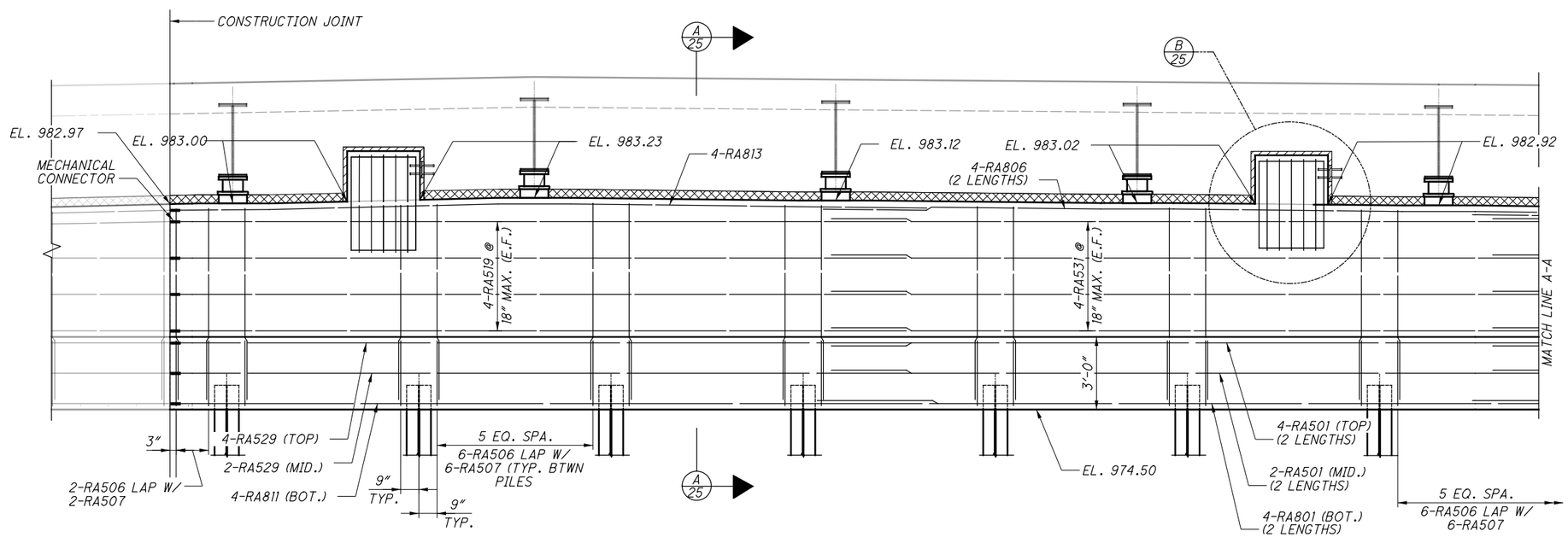
17 / 70

61
153



PLAN - PHASE 3A - REAR ABUTMENT

(DIMENSIONS SHOWN ALONG ℄ BEARING)
(PILES NOT SHOWN FOR CLARITY)



ELEVATION - PHASE 3A - REAR ABUTMENT

(ELEVATIONS SHOWN ALONG ℄ BEARING)

MIN LAP TABLE	
#5 BAR	3'-1"
#8 BAR	4'-9"

NOTES:

1. FOR REAR ABUTMENT NOTES, SEE SHEETS 17/70.

2021-11-04_BU 13 - RFC PLANS

REAR ABUTMENT PLAN AND ELEVATION - 2 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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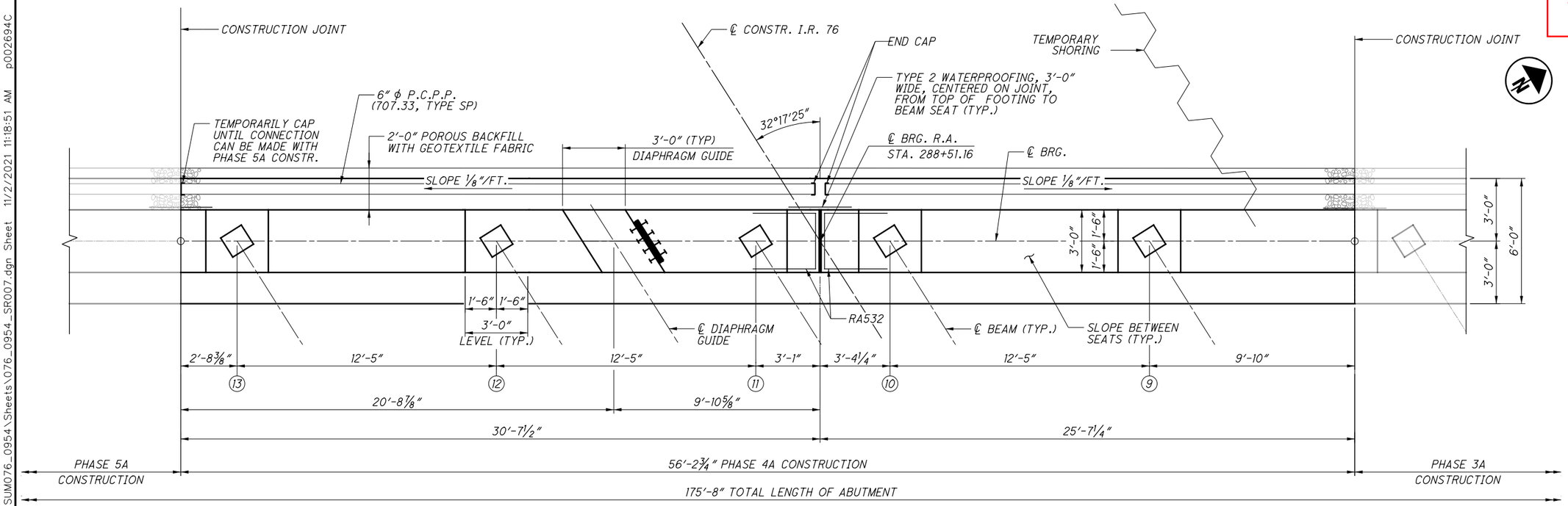
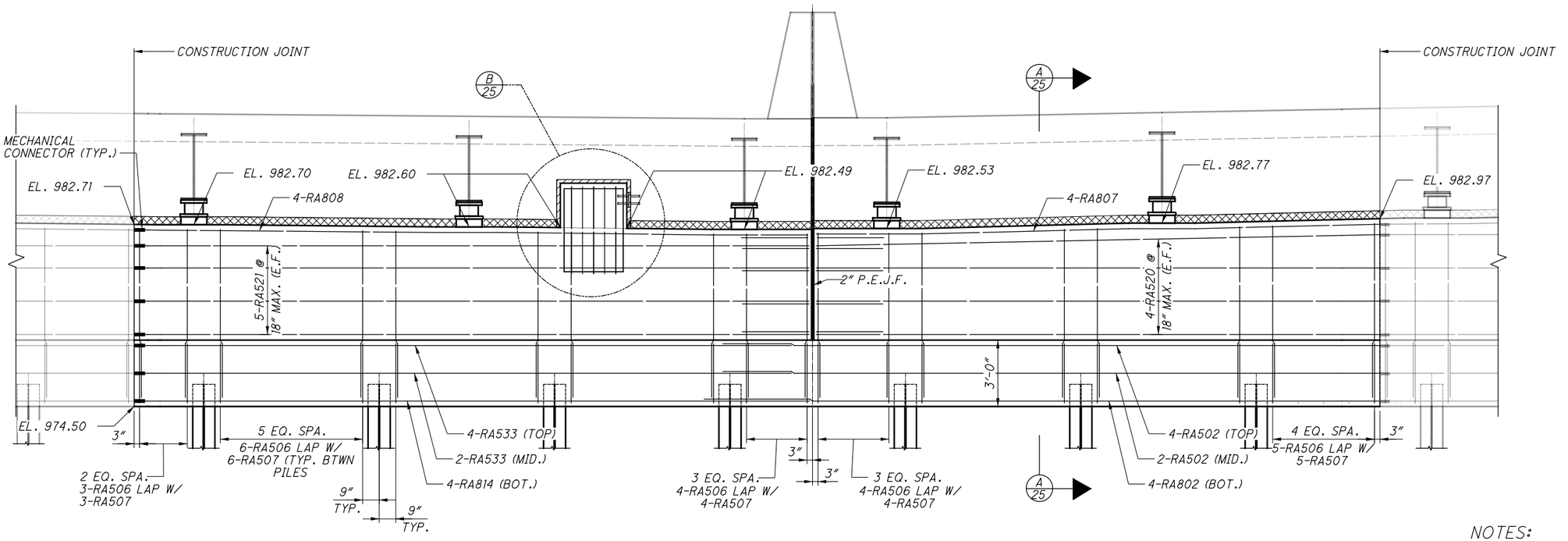


PLAN - PHASE 4A - REAR ABUTMENT

(DIMENSIONS SHOWN ALONG ℄ OF BEARING)
(PILES NOT SHOWN FOR CLARITY)



MIN LAP TABLE	
#5 BAR	3'-1"
#8 BAR	4'-9"

ELEVATION - PHASE 4A - REAR ABUTMENT

(ELEVATIONS SHOWN ALONG ℄ OF BEARING)

NOTES:

1. FOR REAR ABUTMENT NOTES, SEE SHEETS 17/70 .

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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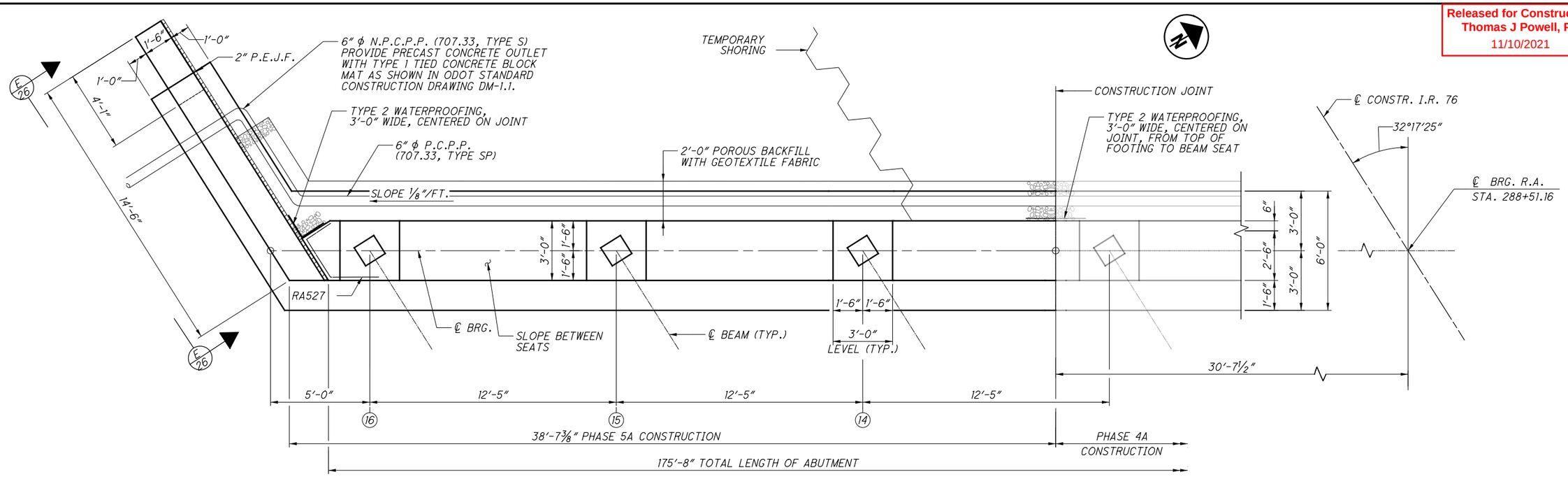
REAR ABUTMENT PLAN AND ELEVATION - 3 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

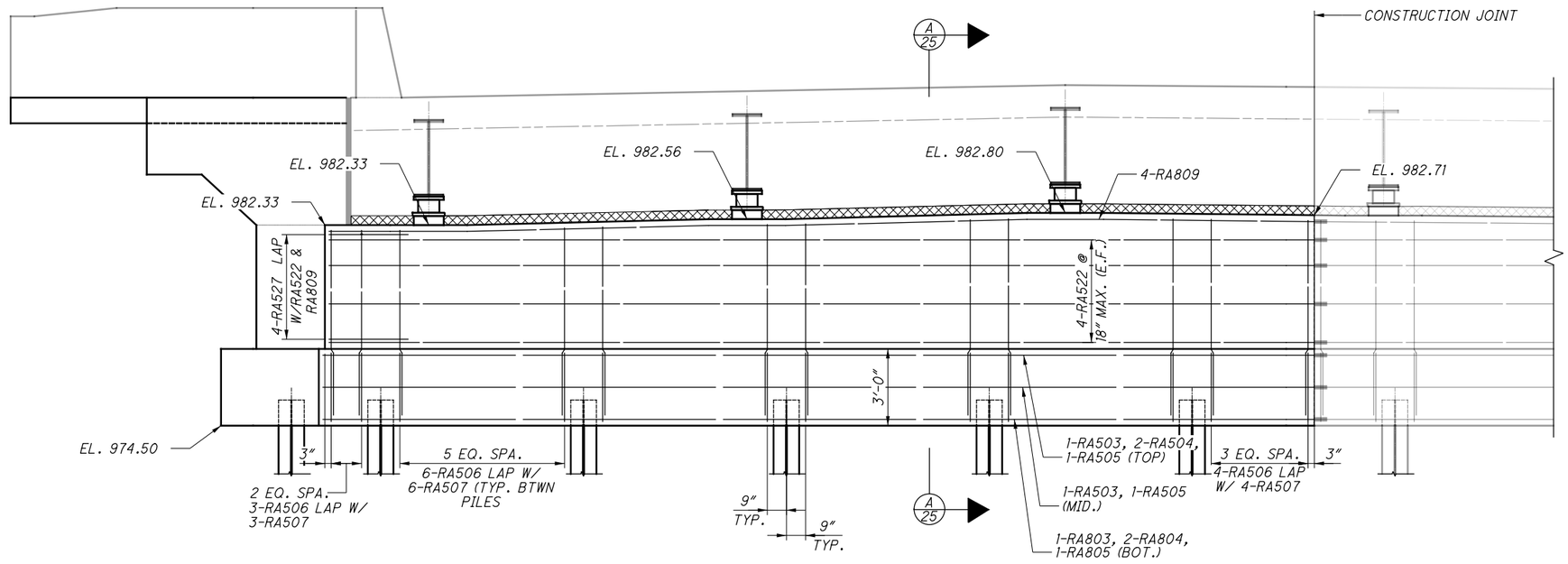
19 / 70

63
153



PLAN - PHASE 5A - REAR ABUTMENT

(DIMENSIONS SHOWN ALONG ℄ BEARING)
(PILES NOT SHOWN FOR CLARITY)



ELEVATION - PHASE 5A - REAR ABUTMENT

(ELEVATIONS SHOWN ALONG ℄ BEARING)

NOTES:

1. FOR REAR ABUTMENT NOTES, SEE SHEETS 17/70.

ISSUE RECORD:

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REAR ABUTMENT PLAN AND ELEVATION - 4 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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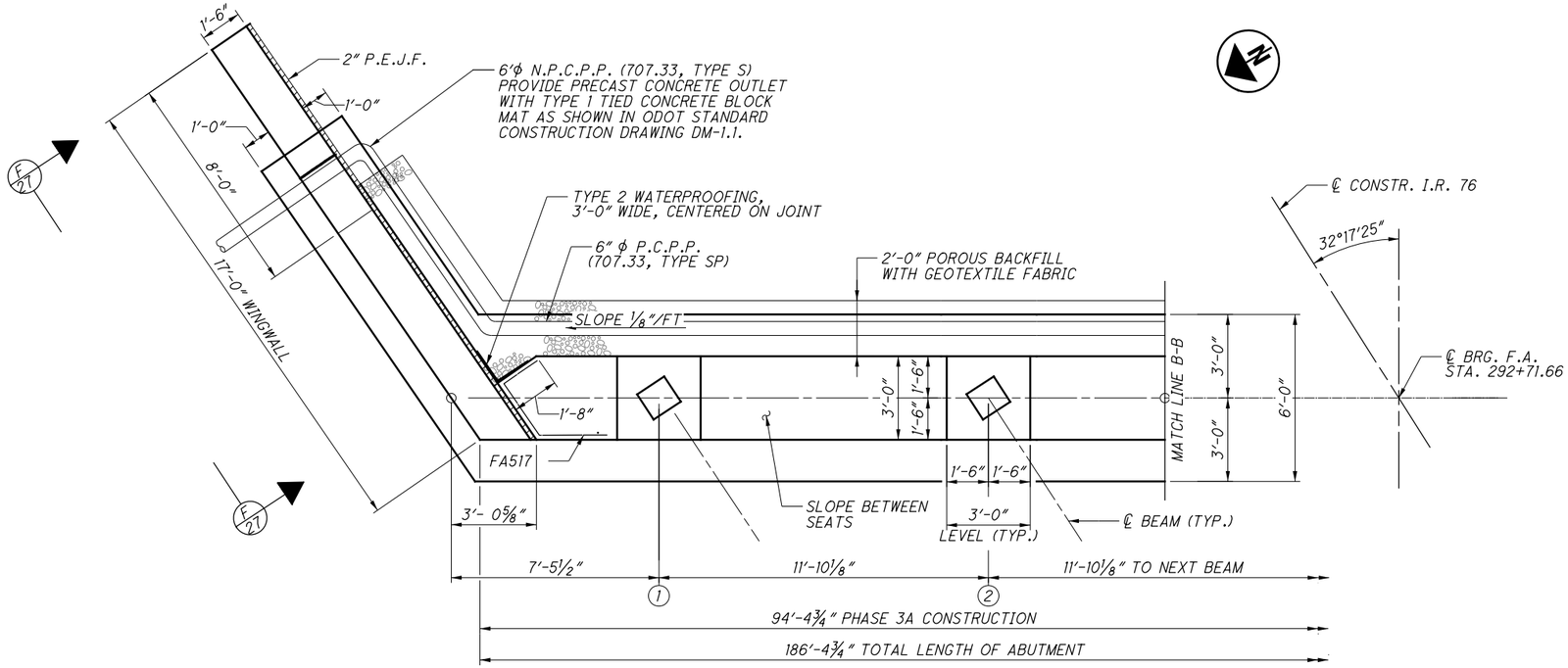
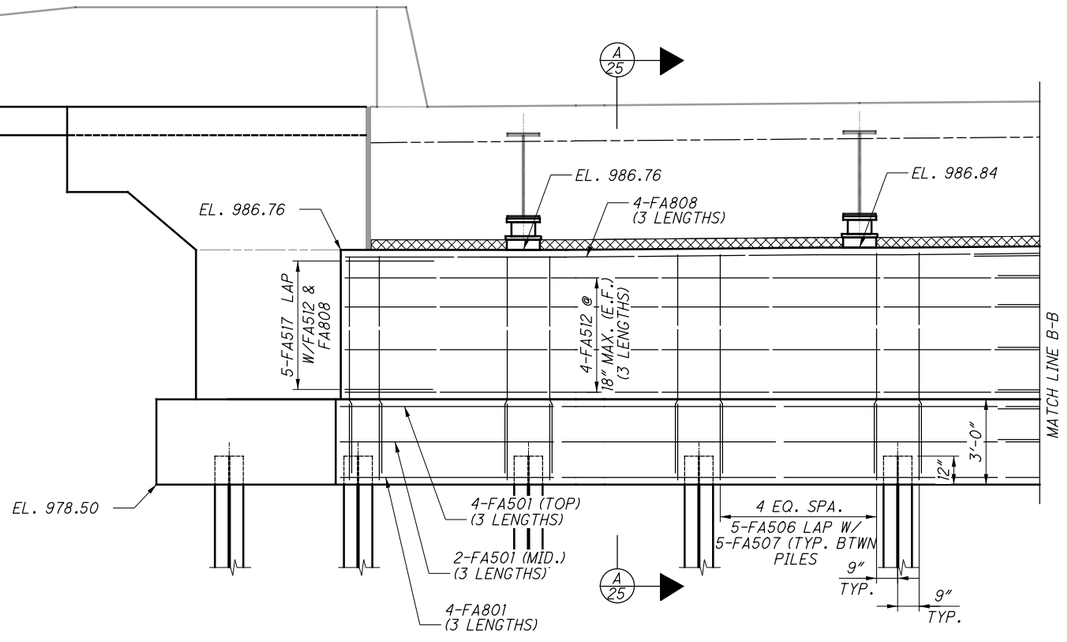


PLAN - PHASE 3A CONT. - FORWARD ABUTMENT

(DIMENSIONS SHOWN ALONG ℄ BEARING)
(PILES NOT SHOWN FOR CLARITY)



ELEVATION - PHASE 3A CONT. - FORWARD ABUTMENT

(ELEVATIONS SHOWN ALONG ℄ BEARING)

MIN LAP TABLE	
#5 BAR	3'-1"
#8 BAR	4'-9"

NOTES:

1. FOR ABUTMENT REMOVAL DETAILS, SEE SHEETS 3/70 THRU 7/70.
2. FOR ABUTMENT DIAPHRAGM DETAILS, SEE SHEETS 51/70 THRU 53/70.
3. FOR ELASTOMERIC BEARING DETAILS, SEE SHEET 47/70.
4. FOR PILING PLAN, SEE SHEET 12/70.
5. FOR FOOTING PLAN AND FOOTING REINFORCEMENT DETAILS, SEE SHEETS 13/70 THRU 16/70.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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2021-11-04_BU 13 - RFC PLANS

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DR	

DESIGNED	CHECKED
CDB	RWB

FORWARD ABUTMENT PLAN AND ELEVATION - 1 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
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21/70

65/153

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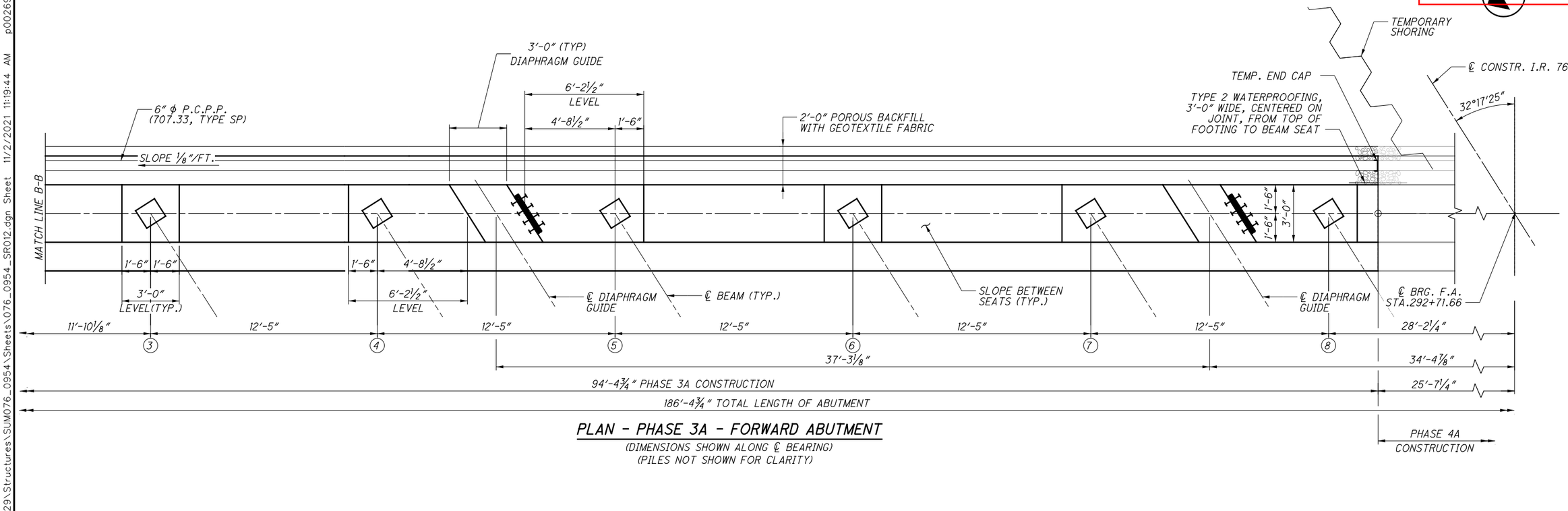
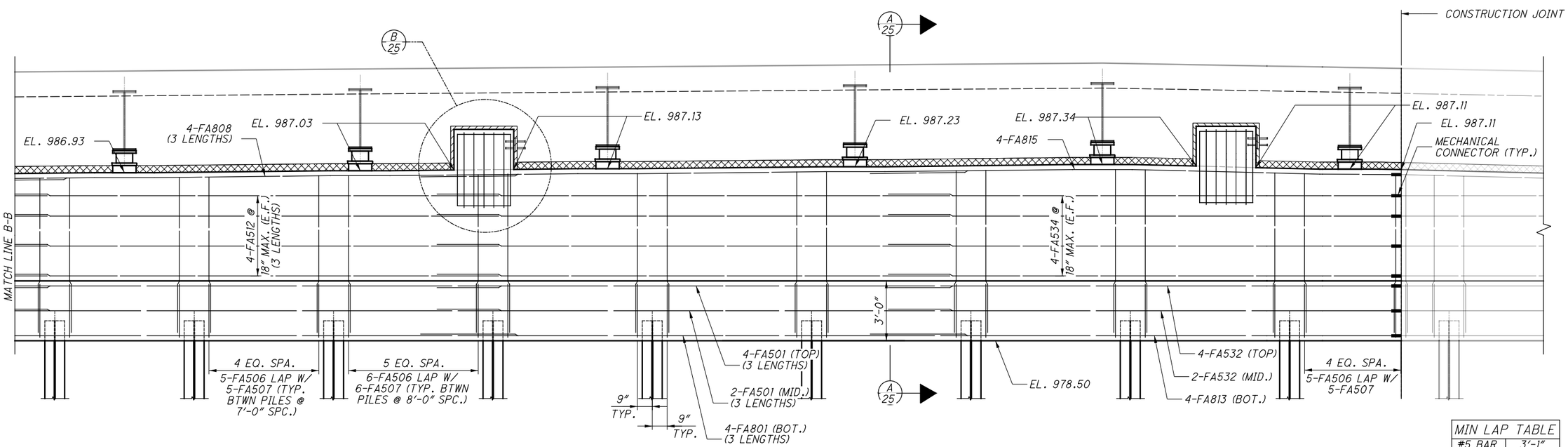
Thomas J Powell, PE
11/1/2021



PLAN - PHASE 3A - FORWARD ABUTMENT

(DIMENSIONS SHOWN ALONG ℄ BEARING)
(PILES NOT SHOWN FOR CLARITY)



MIN LAP TABLE	
#5 BAR	3'-1"
#8 BAR	4'-9"

ELEVATION - PHASE 3A - FORWARD ABUTMENT

(ELEVATIONS SHOWN ALONG ℄ BEARING)

NOTES:

1. FOR FORWARD ABUTMENT NOTES, SEE SHEETS 21/70.

2021-11-04_BU 13 - RFC PLANS

ISSUE RECORD:

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Columbus, OH 43235

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CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703457	

FORWARD ABUTMENT PLAN AND ELEVATION - 2 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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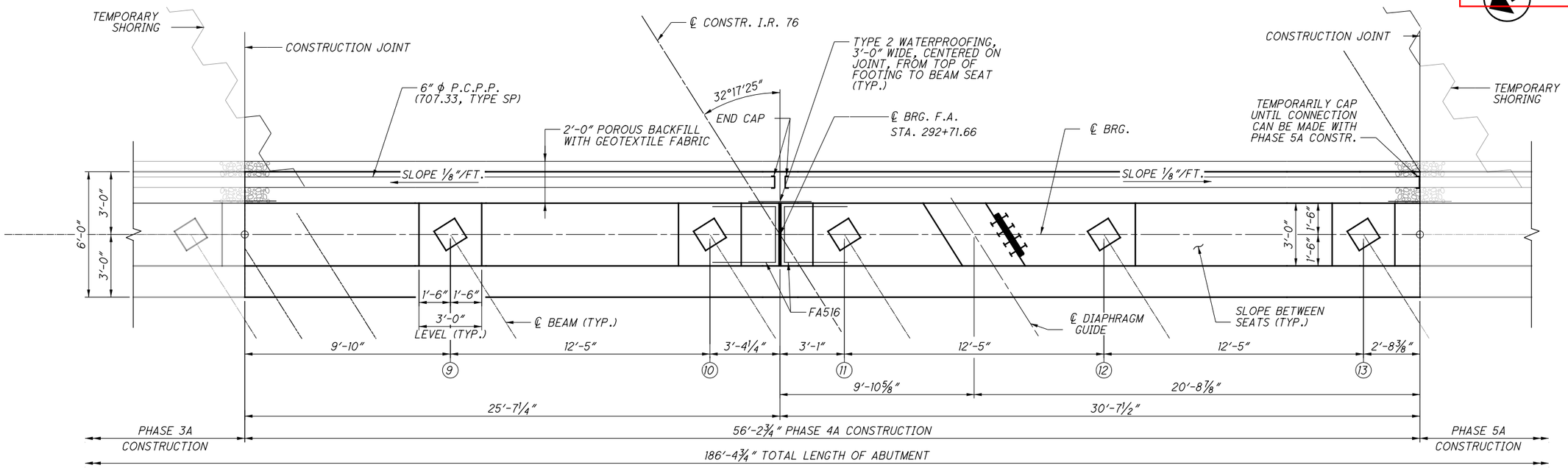
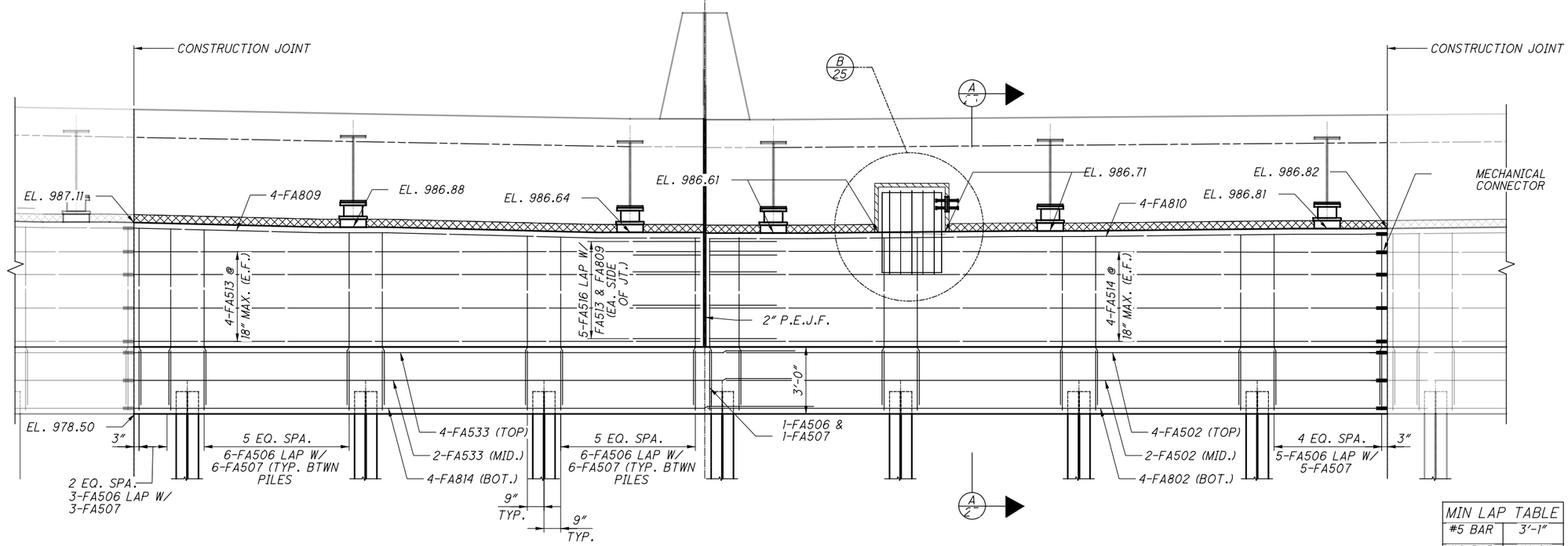


PLAN - PHASE 4A - FORWARD ABUTMENT

(DIMENSIONS SHOWN ALONG ℄ BEARING)
(PILES NOT SHOWN FOR CLARITY)



ELEVATION - PHASE 4A - FORWARD ABUTMENT

(ELEVATIONS SHOWN ALONG ℄ BEARING)

NOTES:

1. FOR FORWARD ABUTMENT NOTES, SEE SHEETS 21/70.

2021-11-04_BU 13 - RFC PLANS

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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

DESIGNED	DRAWN	REVIEWED	DATE
CDB	DR	TES	09/01/21
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RWB		7703457	

FORWARD ABUTMENT PLAN AND ELEVATION - 3 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

23/70
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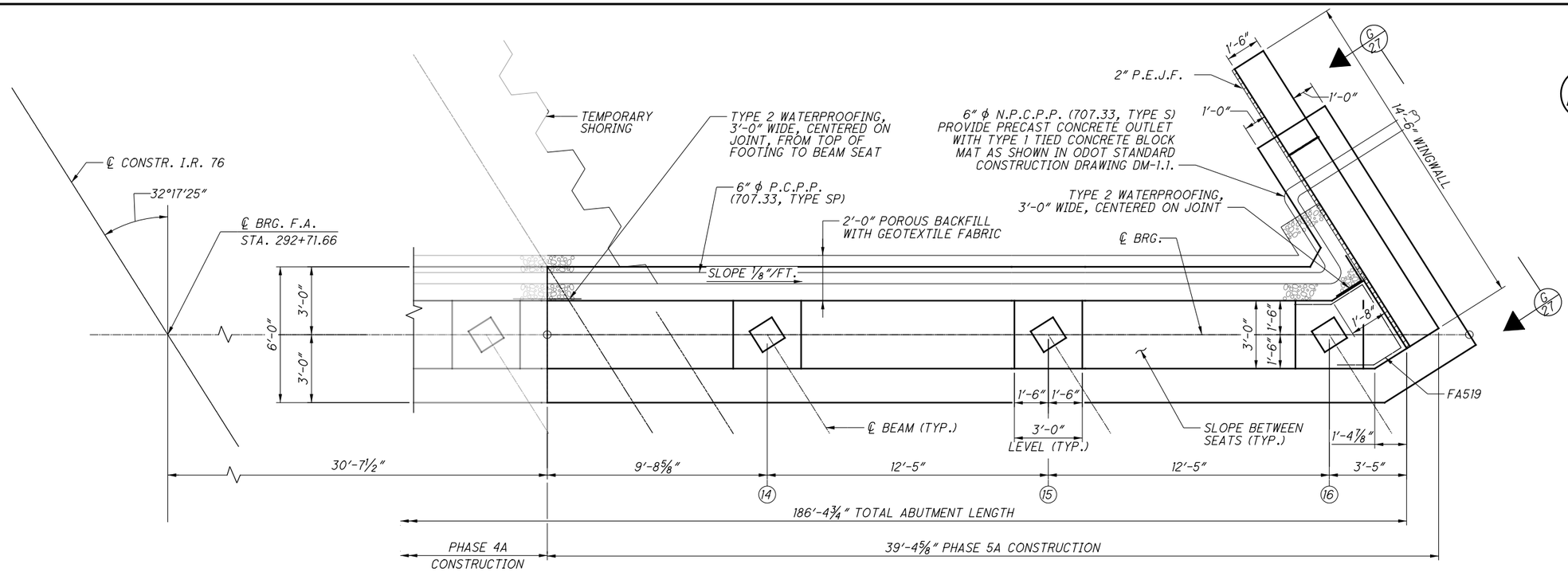
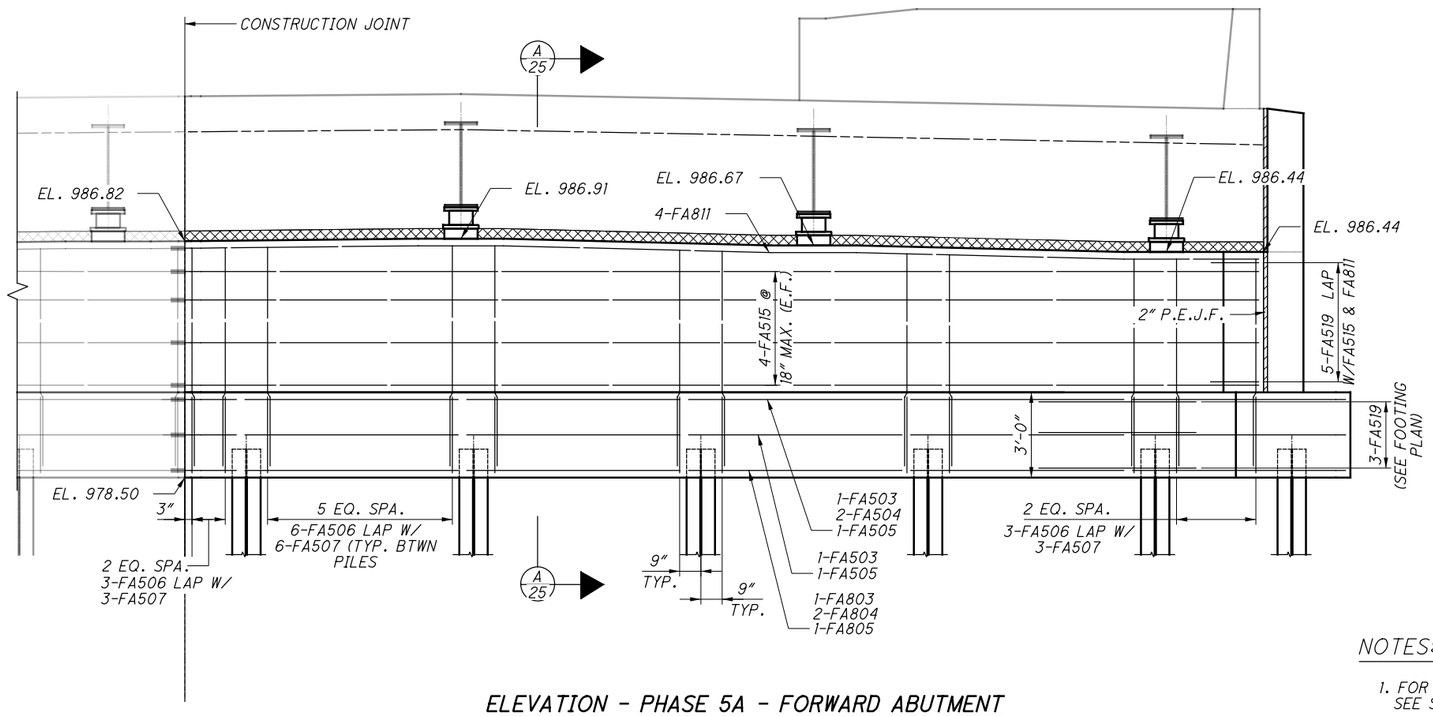


PLAN - PHASE 5A - FORWARD ABUTMENT

(DIMENSIONS SHOWN ALONG ℄ BEARING)
(PILES NOT SHOWN FOR CLARITY)



ELEVATION - PHASE 5A - FORWARD ABUTMENT

(ELEVATIONS SHOWN ALONG ℄ BEARING)

MIN LAP TABLE	
#5 BAR	3'-1"
#8 BAR	4'-9"

NOTES:

1. FOR FORWARD ABUTMENT NOTES, SEE SHEETS 21/70.

2021-11-04_BU 13 - RFC PLANS

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RWB		7703457	

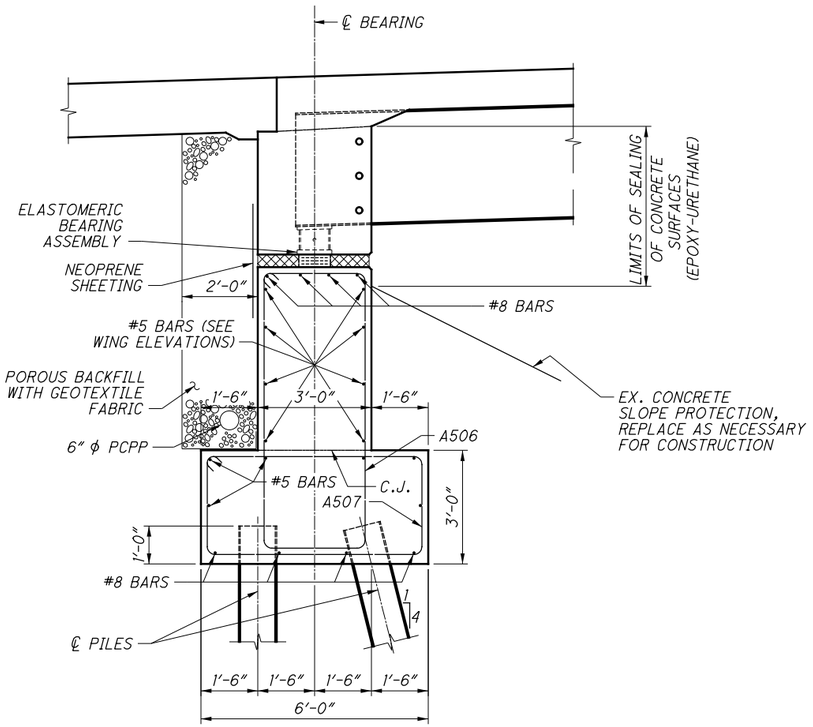
FORWARD ABUTMENT PLAN AND ELEVATION - 4 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

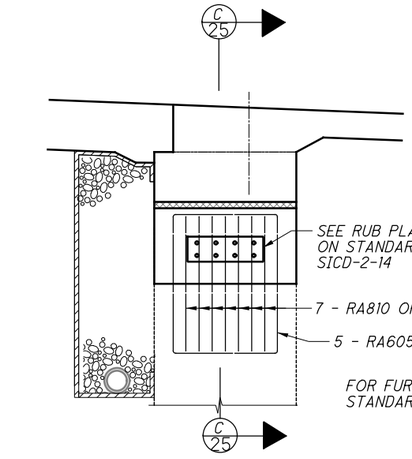
24/70
68/153

ISSUE RECORD:

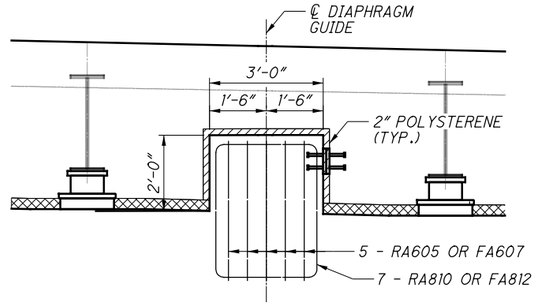
NO.	DATE	DESCRIPTION



A 17-24 SECTION THRU ABUTMENT



B DIAPHRAGM GUIDE DETAIL
18, 19, 22, 23



C 25 SECTION THRU DIAPHRAGM GUIDE

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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p:\\VANV A01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0954\Sheets\076_0954_SR001.dgn Sheet 11/2/2021 11:20:28 AM p002694C

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RWB		7703457	

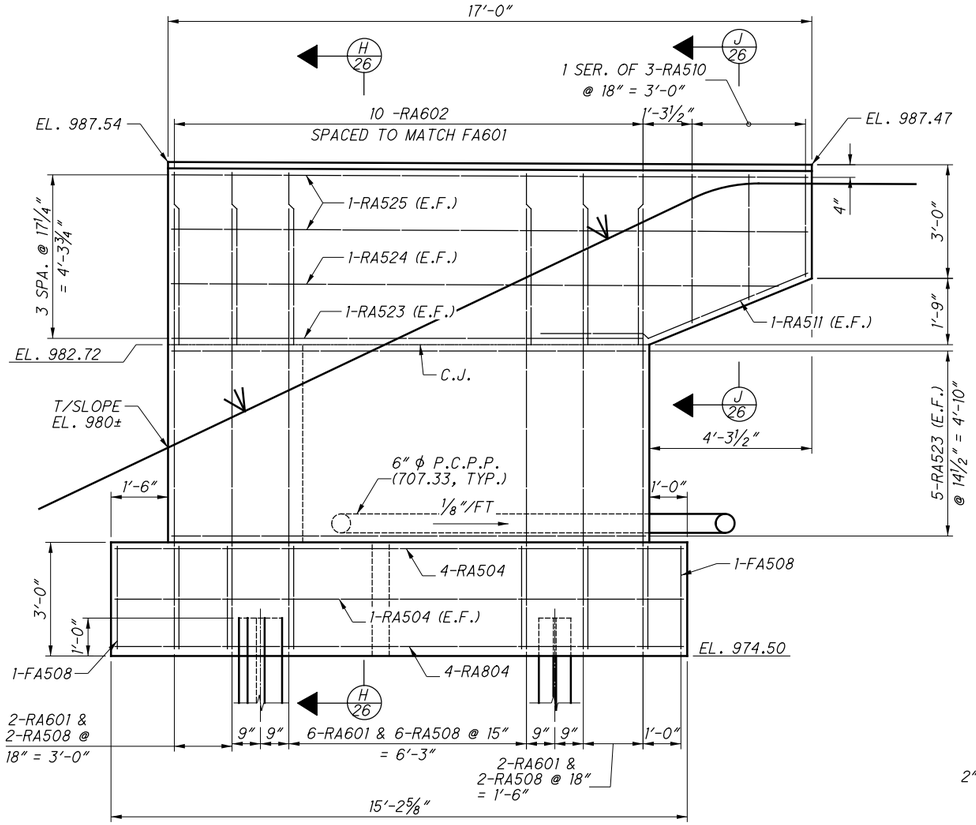
ABUTMENT DETAILS
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

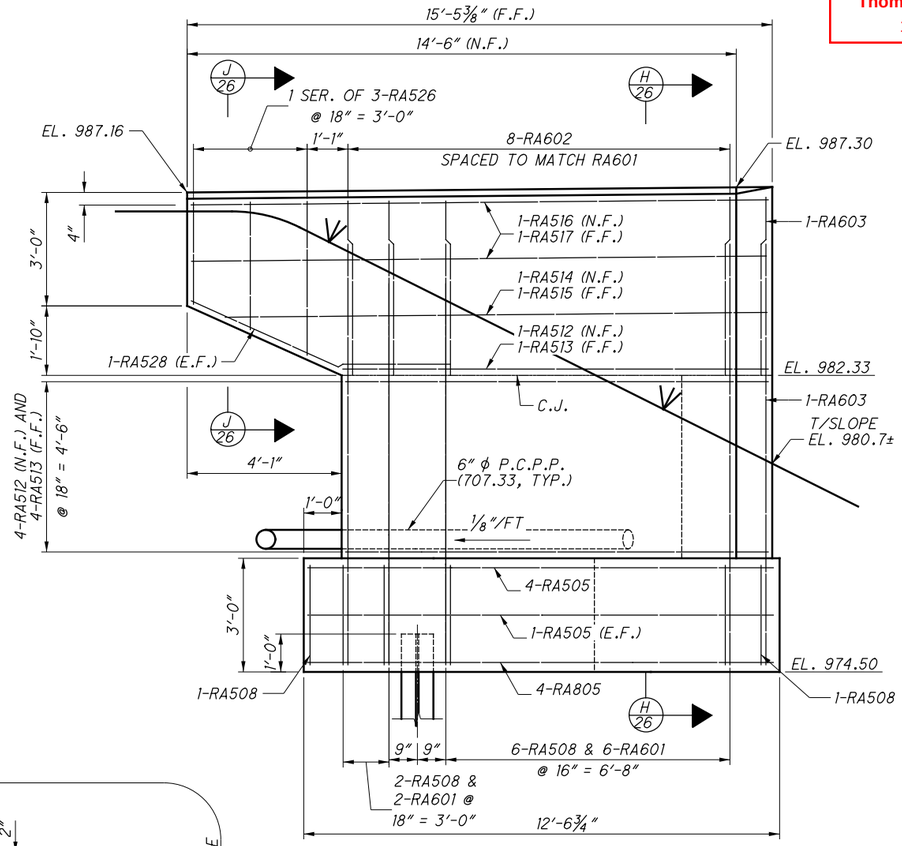
25 / 70

69 / 153

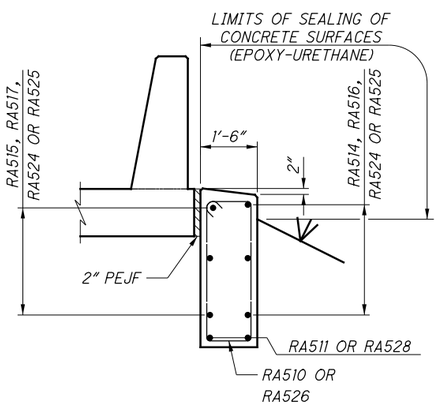
2021-11-04_BU 13 - RFC PLANS



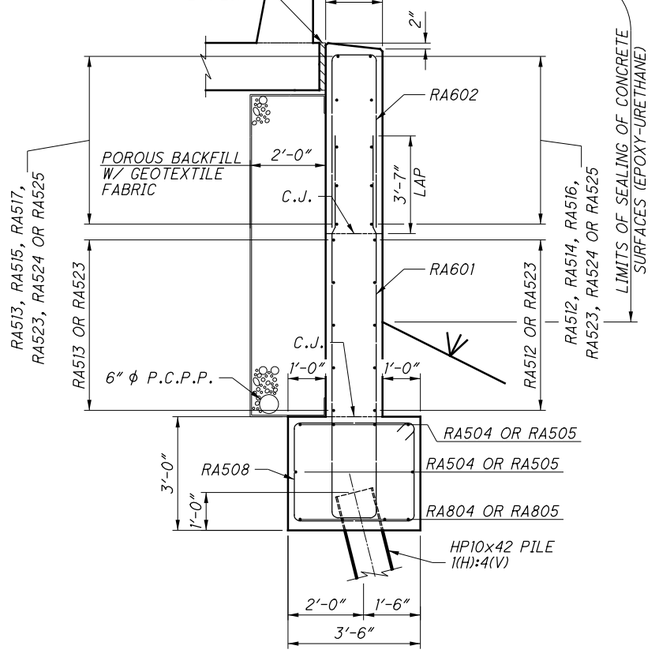
D WINGWALL ELEVATION
(REAR ABUTMENT, LEFT)
13 & 17



E WINGWALL ELEVATION
(REAR ABUTMENT, RIGHT)
16 & 20



J 26 SECTION THRU WINGWALL



H 26 SECTION THRU WINGWALL

NOTES

1. FOR REAR ABUTMENT PLANS AND ELEVATIONS, SEE SHEETS 17/70 THRU 20/70.

ISSUE RECORD:

NO.	DATE

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DRAWN	REVISED
JRE	
DESIGNED	CHECKED
JRE	RWB

REAR ABUTMENT WINGWALL DETAILS

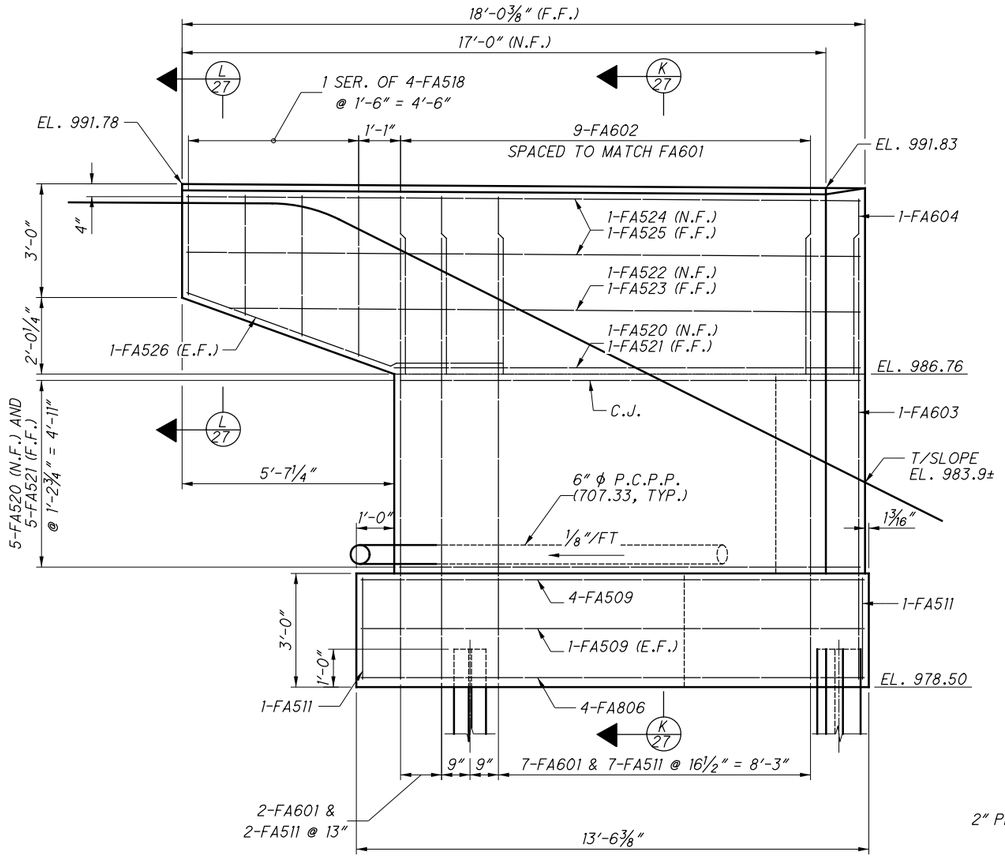
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

2021-11-04_BU 13 - RFC PLANS

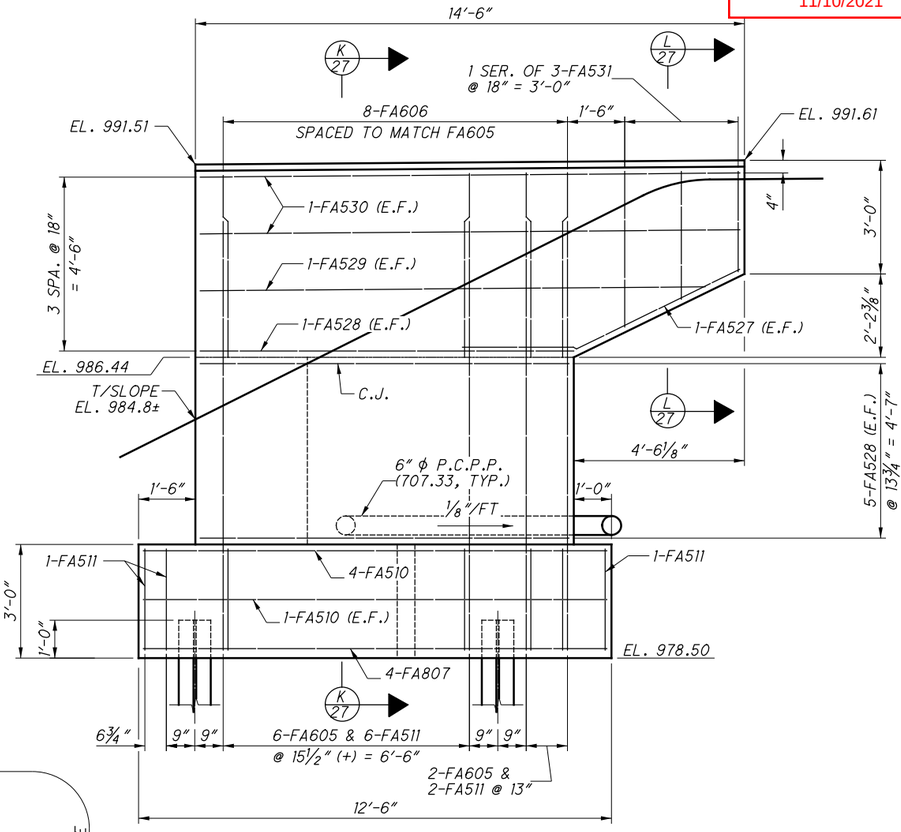
SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329

26 / 70

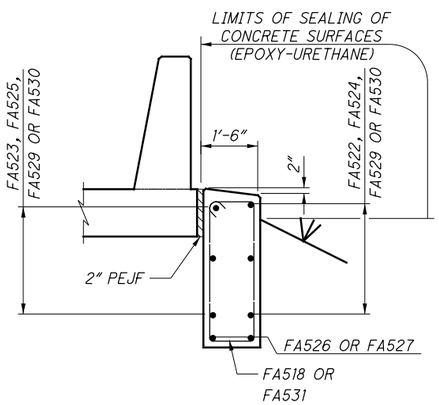
70
153



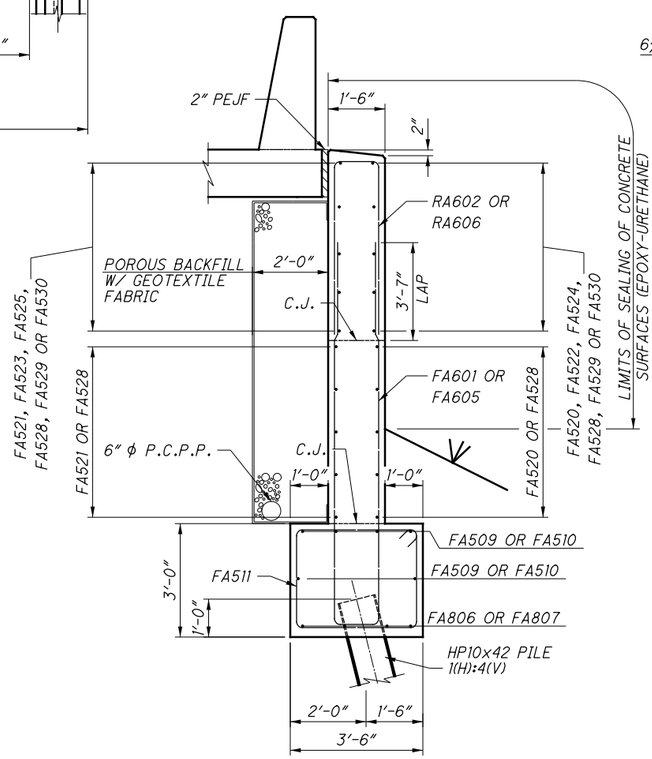
F WINGWALL ELEVATION
(FORWARD ABUTMENT, LEFT)
13 & 21



G WINGWALL ELEVATION
(FORWARD ABUTMENT, RIGHT)
16 & 24



L 27 SECTION THRU WINGWALL



K 27 SECTION THRU WINGWALL

NOTES

1. FOR FORWARD ABUTMENT PLANS AND ELEVATIONS, SEE SHEETS 21/70 THRU 24/70 .

ISSUE RECORD:		
NO.	DATE	DESCRIPTION

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FORWARD ABUTMENT WINGWALL DETAILS

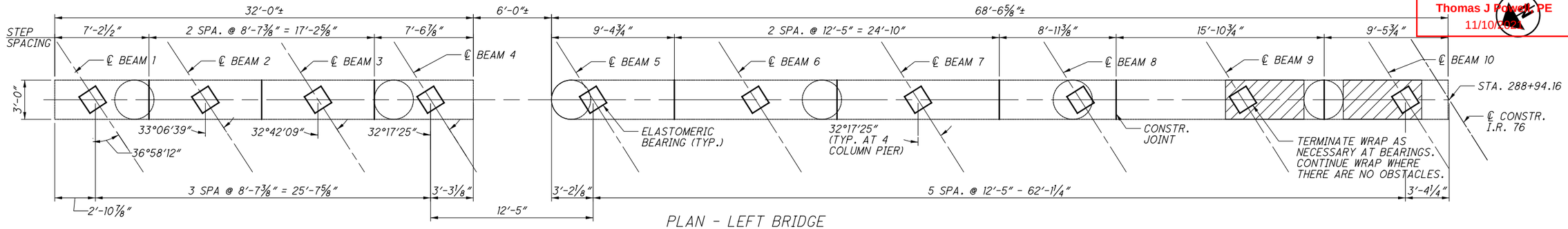
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329

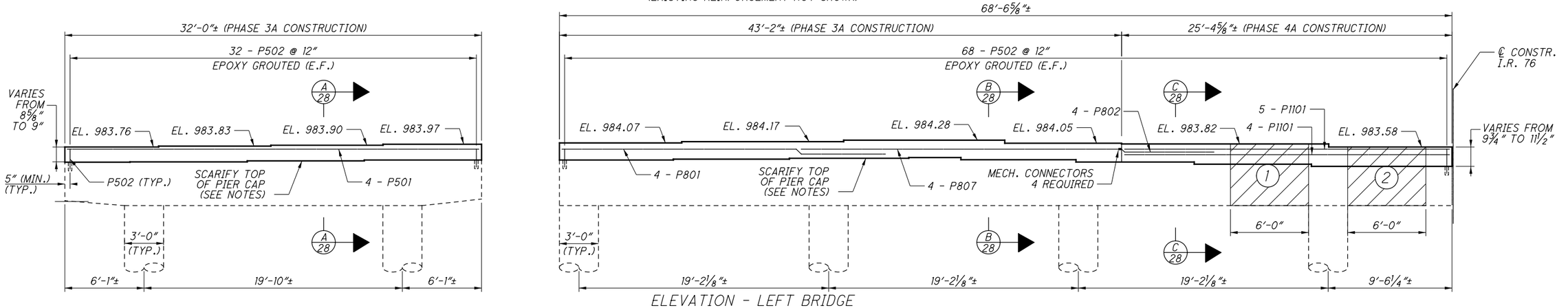
27/70

71
153



PLAN - LEFT BRIDGE

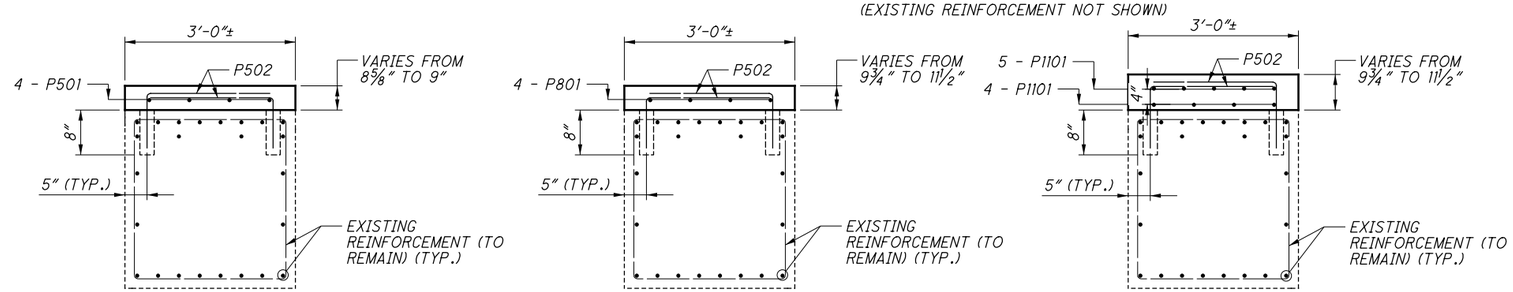
(EXISTING REINFORCEMENT NOT SHOWN)



ELEVATION - LEFT BRIDGE

(LOOKING UPSTATION)
(EXISTING REINFORCEMENT NOT SHOWN)

LAP LENGTHS	
NO. 5 BARS	2'-7"
NO. 8 BARS	6'-8"

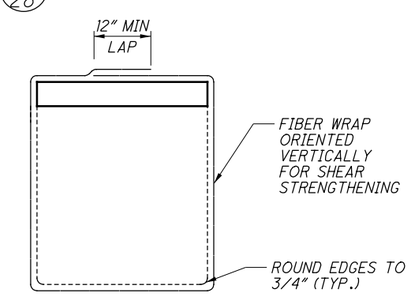


A 28 SECTION THRU PIER CAP

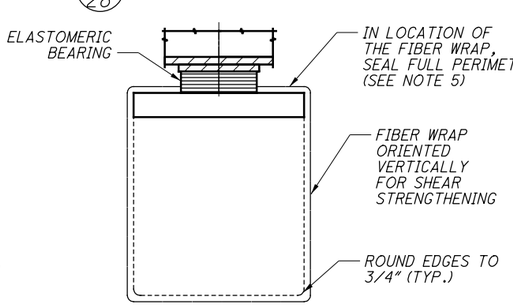
B 28 SECTION THRU PIER CAP

C 28 SECTION THRU PIER CAP

- INDICATES LIMITS OF COMPOSITE FIBER WRAP SYSTEM. USE SIKAWRAP HEX 103C OR APPROVED EQUAL. SEE TABLE FOR NUMBER OF LAYERS AND SHEAR CAPACITY REQUIRED.



TYPICAL FIBER WRAP SECTION



FIBER WRAP SECTION AT BEARING

FIBER WRAP REQUIREMENTS*			
LOCATION	NO. OF LAYERS	MINIMUM WIDTH	** KIPS REQUIRED
1	1	6'-0"	90
2	1	6'-0"	70

* - 1/2 SikaWrap Hex 103C - 25" (12.5 in) OR AN APPROVED EQUAL. EACH LAYER IS 12.5" IN WIDTH AND SPACED @ 12.5" O.C.

** - REQUIRED INCREASE IN FACTORED SHEAR CAPACITY OF PIER CAP

NOTES:

1. ALL EXPOSED SURFACES OF THE PIERS EXCEPT THE TOP OF THE PIER CAP SHALL BE SEALED WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY - URETHANE). SEE SHEET 4/153 FOR ADDITIONAL NOTES AND DETAILS.
2. ALL REINFORCING BAR CLEARANCES SHALL BE 2" MINIMUM UNLESS NOTED OTHERWISE.
3. DRILL DOWEL HOLES WHERE SHOWN IN THE PLANS. INSTALL REINFORCING STEEL ACCORDING TO ITEM 510 USING EPOXY GROUT, 705.20. IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, MOVE THE DOWEL HOLE TO EITHER SIDE OF THE EXISTING BAR.
4. FOR SPECIFICATIONS OF THE FRP FIBER WRAP, SEE SHEET 4/153
5. WHERE WRAP IS LOCATED, SEAL FULL PERIMETER OF PIER CAP WITH AN EPOXY-URETHANE SEALER. WAIT 72 HOURS AFTER THE FIBER WRAP HAS BEEN PLACED BEFORE SEALING.
6. SCARIFY EXISTING CONCRETE BRIDGE SEAT AREA TO ROUGH SURFACE APPROXIMATELY ¼" DEEP. ABRASIVELY CLEAN THE JOINT SURFACE AND REMOVE ANY LOOSE CONCRETE AND RUST. CONCRETE BONDING SURFACE SHALL BE WET AS CONCRETE IS PLACED.
7. EXISTING PIERS TO BE PATCHED. SEE GENERAL NOTES, SHEET 3/153 FOR ADDITIONAL NOTES.
8. EXISTING UNDERPASS LIGHTING TO BE REMOVED AND REPLACED.

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DWB		7703457	

PIER 1 DETAILS - LEFT BRIDGE
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2021-11-04_BU 13 - RFC PLANS

28 / 70

72 / 153

NOTES:

1. FOR NOTES, SEE SHEET 28/70.

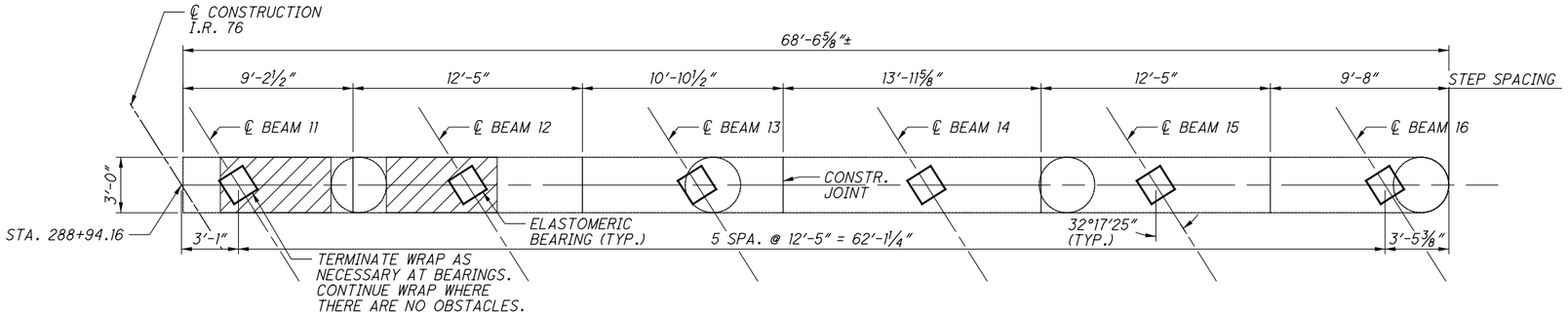
LAP LENGTHS	
NO. 5 BARS	2′-7″
NO. 8 BARS	6′-8″

▨ - INDICATES LIMITS OF COMPOSITE FIBER WRAP SYSTEM. USE SIKAWRAP HEX 103C OR APPROVED EQUAL. SEE TABLE FOR NUMBER OF LAYERS AND SHEAR CAPACITY REQUIRED.

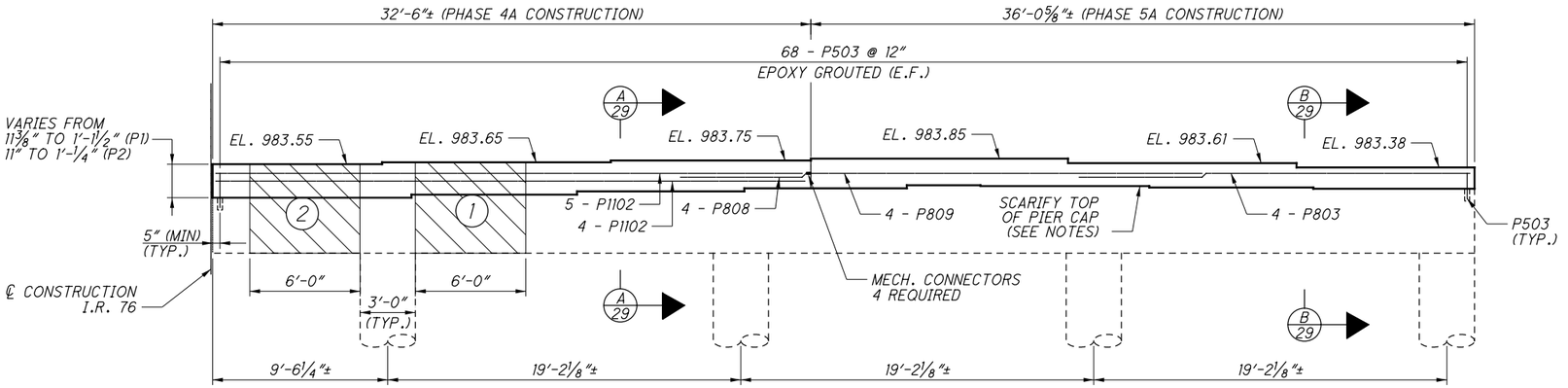
FIBER WRAP REQUIREMENTS*			
LOCATION	NO. OF LAYERS	MINIMUM WIDTH	** KIPS REQUIRED
1	1	6′-0″	90
2	1	6′-0″	70

* - 1/2 SikaWrap Hex 103C - 25″ (12.5 in) OR AN APPROVED EQUAL. EACH LAYER IS 12.5″ IN WIDTH AND SPACED @ 12.5″ O.C.

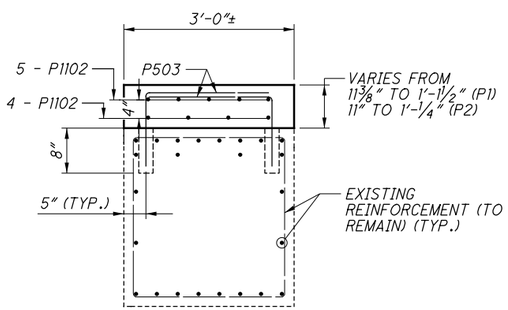
** - REQUIRED INCREASE IN FACTORED SHEAR CAPACITY OF PIER CAP



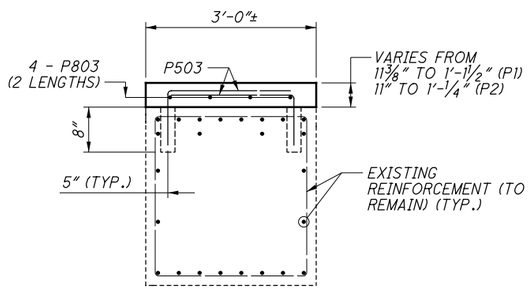
PLAN - RIGHT BRIDGE
(EXISTING REINFORCEMENT NOT SHOWN)



ELEVATION - RIGHT BRIDGE
(LOOKING UPSTATION)
(EXISTING REINFORCEMENT NOT SHOWN)



A 29 SECTION THRU PIER



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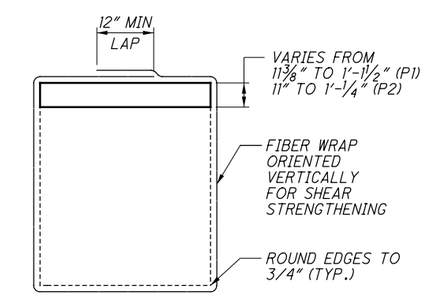
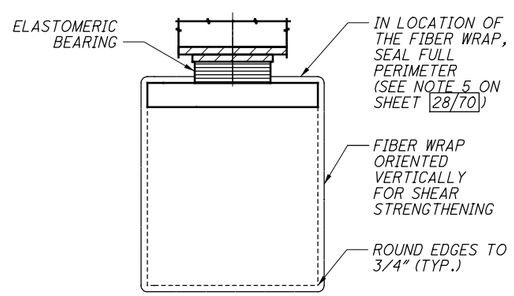


TYPICAL FIBER WRAP SECTION



FIBER WRAP SECTION AT BEARING

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PIER 1 DETAILS - RIGHT BRIDGE
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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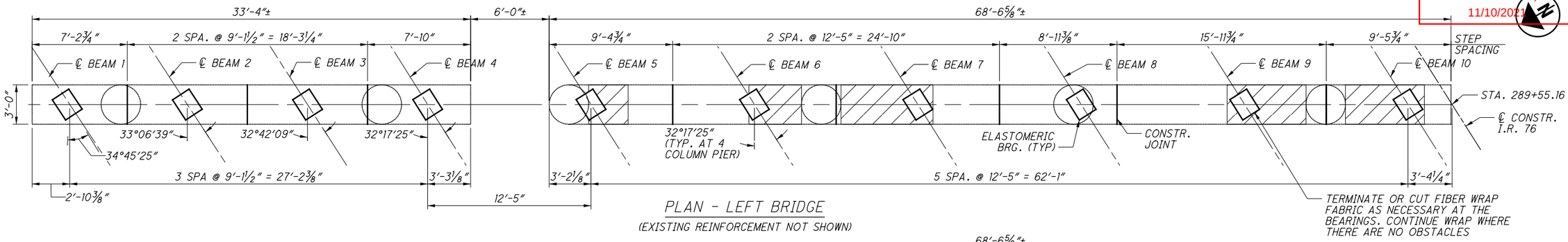
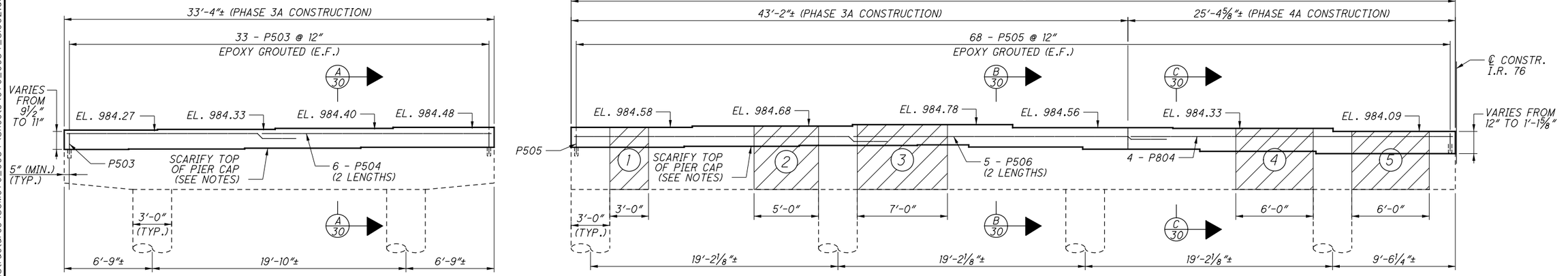


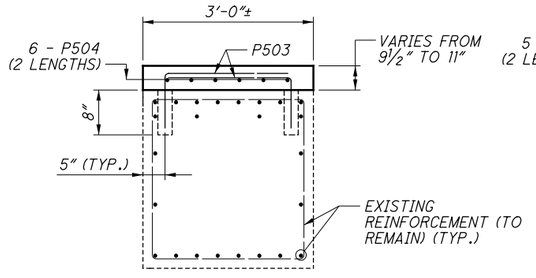
PLAN - LEFT BRIDGE

(EXISTING REINFORCEMENT NOT SHOWN)

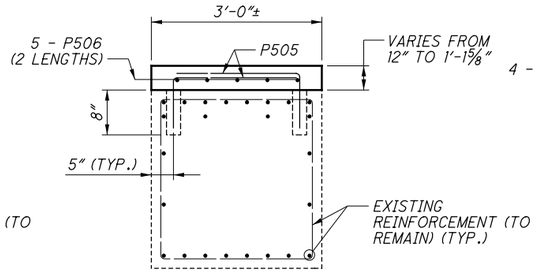


ELEVATION - LEFT BRIDGE

(LOOKING UPSTATION)
(EXISTING REINFORCEMENT NOT SHOWN)



A 30 SECTION THRU PIER CAP



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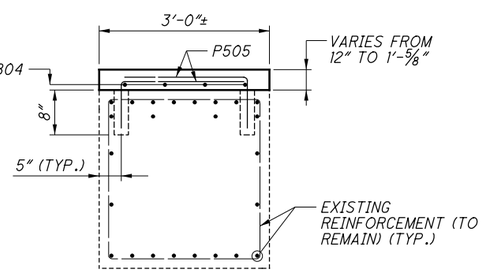


C 30 SECTION THRU PIER CAP

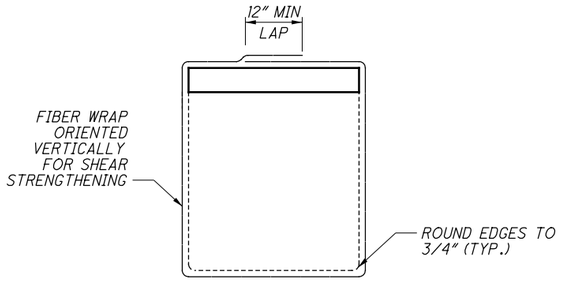
LAP LENGTHS	
NO. 5 BARS	2'-7"
NO. 8 BARS	6'-8"

FIBER WRAP REQUIREMENTS*			
LOCATION	NO. OF LAYERS	MINIMUM WIDTH	** KIPS REQUIRED
1	2	3'-0"	180
2	2	5'-0"	190
3	2	7'-0"	180
4	2	6'-0"	200
5	1	6'-0"	80

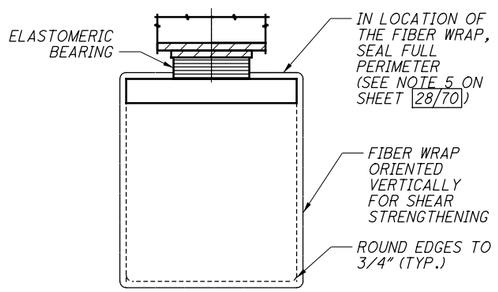
* - 1/2 SikaWrap Hex 103C - 25" (12.5 in) OR AN APPROVED EQUAL. EACH LAYER IS 12.5" IN WIDTH AND SPACED @ 12.5" O.C.

** - REQUIRED INCREASE IN FACTORED SHEAR CAPACITY OF PIER CAP

- INDICATES LIMITS OF COMPOSITE FIBER WRAP SYSTEM. USE SIKAWRAP HEX 103C OR APPROVED EQUAL. SEE TABLE FOR NUMBER OF LAYERS AND SHEAR CAPACITY REQUIRED.



TYPICAL FIBER WRAP SECTION



FIBER WRAP SECTION AT BEARING

NOTES:

1. FOR NOTES, SEE SHEET 28/70.

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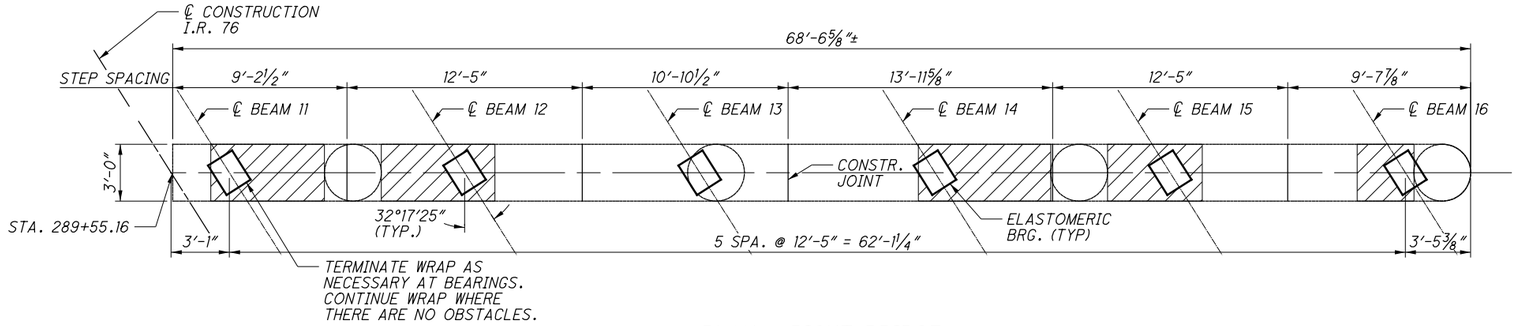
PIER 2 DETAILS - LEFT BRIDGE
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

30/70

74/153



PLAN - RIGHT BRIDGE

(EXISTING REINFORCEMENT NOT SHOWN)

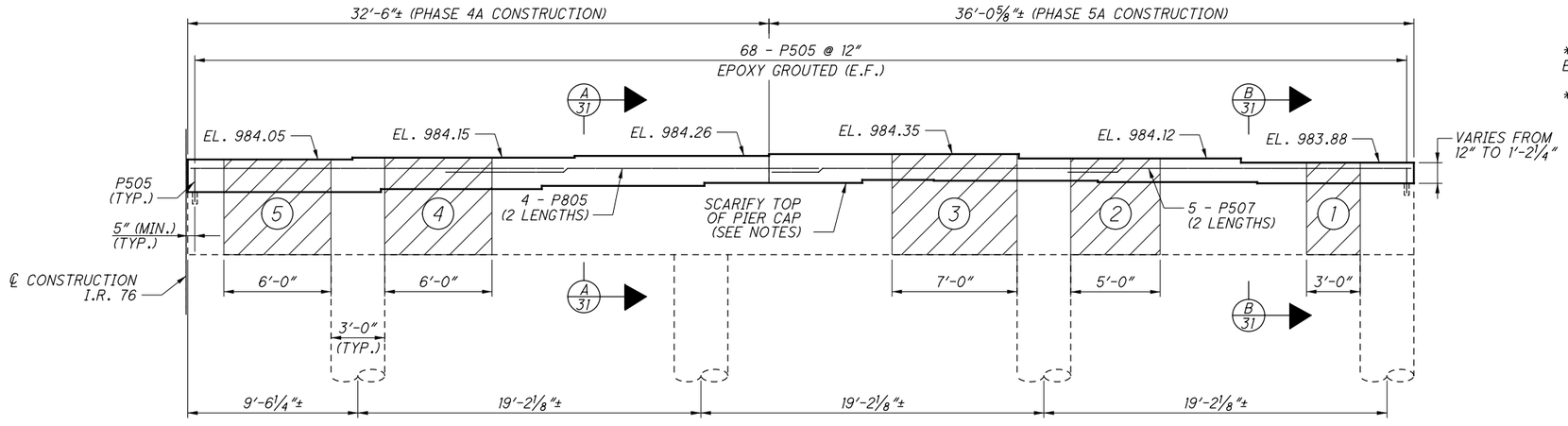
LAP LENGTHS	
NO. 5 BARS	2'-7"
NO. 8 BARS	6'-8"

- INDICATES LIMITS OF COMPOSITE FIBER WRAP SYSTEM. USE SIKAWRAP HEX 103C OR APPROVED EQUAL. SEE TABLE FOR NUMBER OF LAYERS AND SHEAR CAPACITY REQUIRED.

FIBER WRAP REQUIREMENTS*			
LOCATION	NO. OF LAYERS	MINIMUM WIDTH	** KIPS REQUIRED
1	2	3'-0"	180
2	2	5'-0"	190
3	2	7'-0"	180
4	2	6'-0"	200
5	1	6'-0"	80

* - 1/2 SikaWrap Hex 103C - 25" (12.5 in) OR AN APPROVED EQUAL. EACH LAYER IS 12.5" IN WIDTH AND SPACED @ 12.5" O.C.

** - REQUIRED INCREASE IN FACTORED SHEAR CAPACITY OF PIER CAP

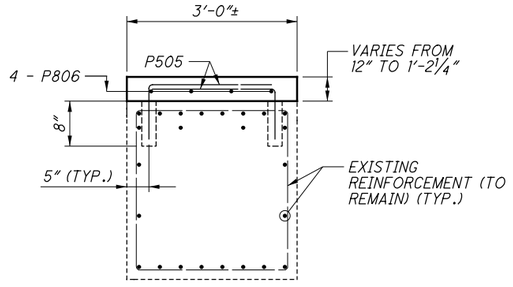


ELEVATION - RIGHT BRIDGE

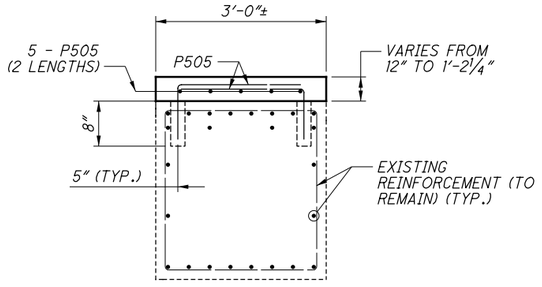
(LOOKING UPSTATION)
(EXISTING REINFORCEMENT NOT SHOWN)

NOTES:

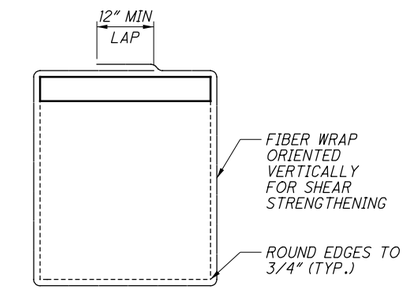
1. FOR NOTES, SEE SHEET 28/70.



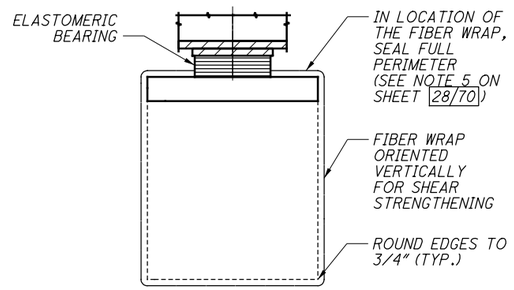
A 31 SECTION THRU PIER CAP



B 31 SECTION THRU PIER CAP



TYPICAL FIBER WRAP SECTION



FIBER WRAP SECTION AT BEARING

DESCRIPTION

ISSUE RECORD:

NO.	DATE

PARSONS
p:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0954\Sheets\076_0954_SI007.dgn Sheet 11/2/2021 11:22:02 AM p002694C

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

DESIGNED	DRAWN	REVIEWED	DATE
CDB	JRE	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DWB		7703457	

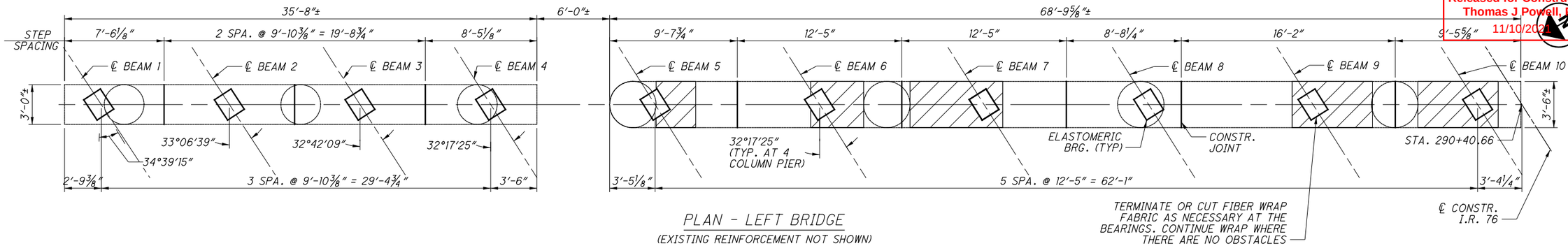
PIER 2 DETAILS - RIGHT BRIDGE
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

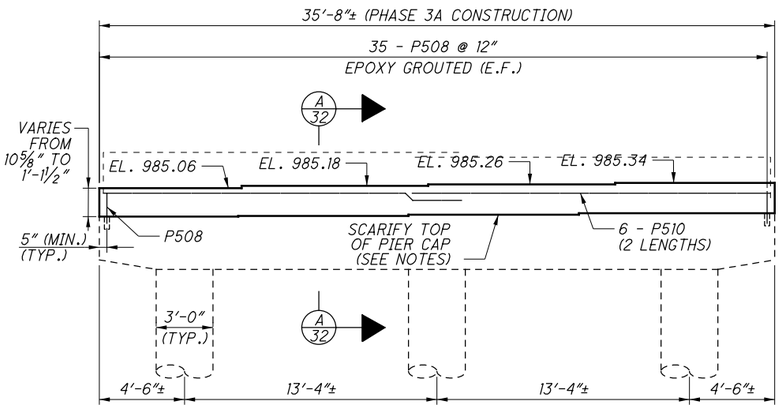
31 / 70

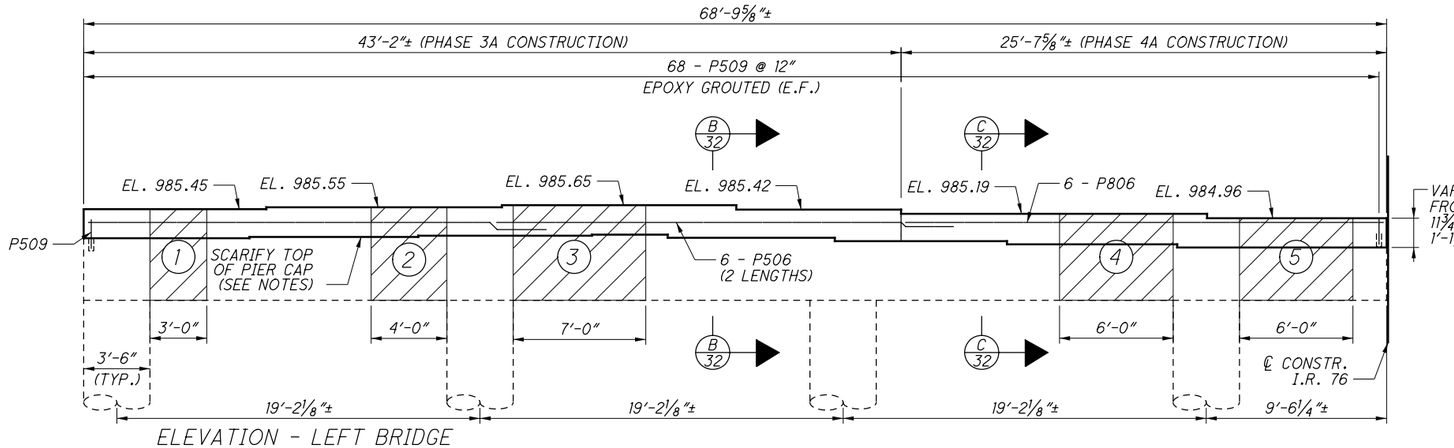
75 / 153



PLAN - LEFT BRIDGE

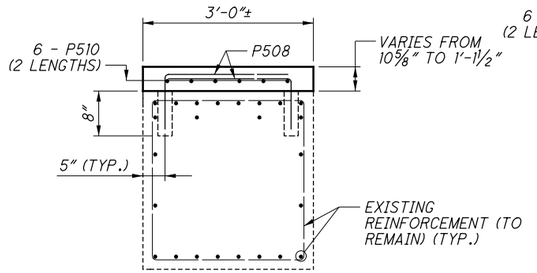
(EXISTING REINFORCEMENT NOT SHOWN)



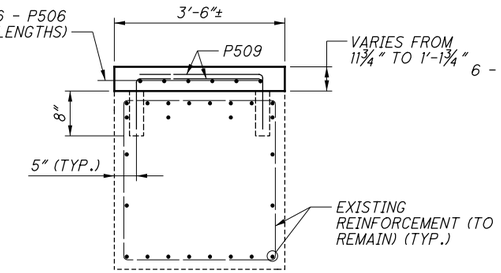


ELEVATION - LEFT BRIDGE

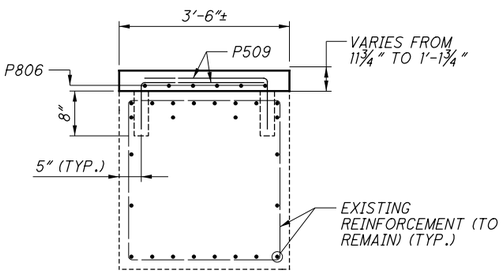
(LOOKING UPSTATION)
(EXISTING REINFORCEMENT NOT SHOWN)



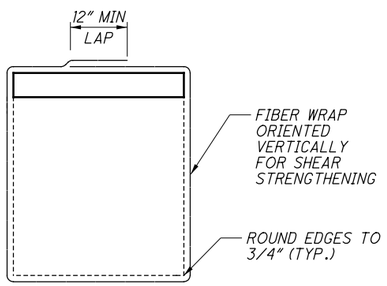
A 32 SECTION THRU PIER CAP



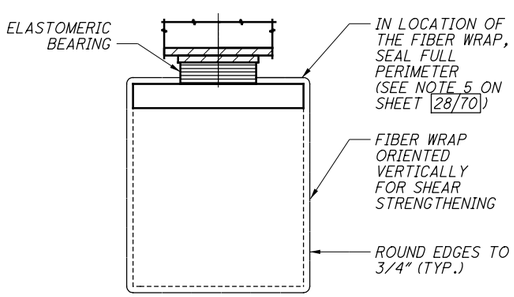
B 32 SECTION THRU PIER CAP



C 32 SECTION THRU PIER CAP



TYPICAL FIBER WRAP SECTION



FIBER WRAP SECTION AT BEARING

LAP LENGTHS	
NO. 5 BARS	2'-7"
NO. 8 BARS	6'-8"

FIBER WRAP REQUIREMENTS*			
LOCATION	NO. OF LAYERS	MINIMUM WIDTH	** KIPS REQUIRED
1	3	3'-0"	250
2	2	4'-0"	150
3	2	7'-0"	150
4	2	6'-0"	160
5	1	6'-0"	90

* - 1/2 SikaWrap Hex 103C - 25" (12.5 in) OR AN APPROVED EQUAL. EACH LAYER IS 12.5" IN WIDTH AND SPACED @ 12.5" O.C.

** - REQUIRED INCREASE IN FACTORED SHEAR CAPACITY OF PIER CAP

▨ - INDICATES LIMITS OF COMPOSITE FIBER WRAP SYSTEM. USE SIKAWRAP HEX 103C OR APPROVED EQUAL. SEE TABLE FOR NUMBER OF LAYERS AND SHEAR CAPACITY REQUIRED.

NOTES:

1. FOR NOTES, SEE SHEET 28/70.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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DESIGNED	DRAWN	REVIEWED	DATE
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CHECKED	REVISED	STRUCTURE FILE NUMBER	
DWB		7703457	

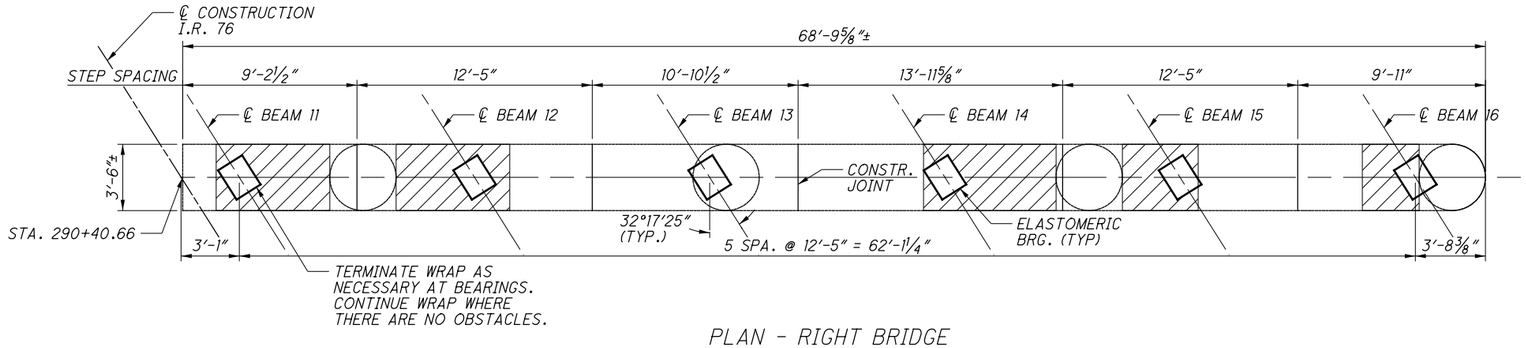
PIER 3 DETAILS - LEFT BRIDGE
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

32/70

76/153

2021-11-04_BU 13 - RFC PLANS



PLAN - RIGHT BRIDGE

(EXISTING REINFORCEMENT NOT SHOWN)

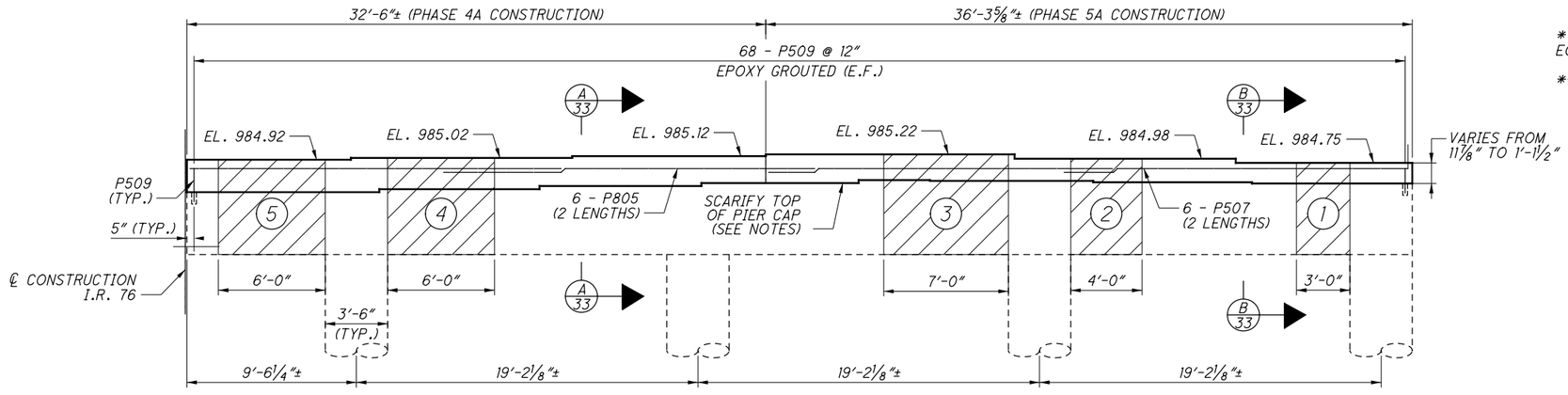
LAP LENGTHS	
NO. 5 BARS	2'-7"
NO. 8 BARS	6'-8"

- INDICATES LIMITS OF COMPOSITE FIBER WRAP SYSTEM. USE SIKAWRAP HEX 103C OR APPROVED EQUAL. SEE TABLE FOR NUMBER OF LAYERS AND SHEAR CAPACITY REQUIRED.

FIBER WRAP REQUIREMENTS*			
LOCATION	NO. OF LAYERS	MINIMUM WIDTH	** KIPS REQUIRED
1	3	3'-0"	250
2	2	4'-0"	150
3	2	7'-0"	150
4	2	6'-0"	160
5	1	6'-0"	90

* - 1/2 SikaWrap Hex 103C - 25" (12.5 in) OR AN APPROVED EQUAL. EACH LAYER IS 12.5" IN WIDTH AND SPACED @ 12.5" O.C.

** - REQUIRED INCREASE IN FACTORED SHEAR CAPACITY OF PIER CAP

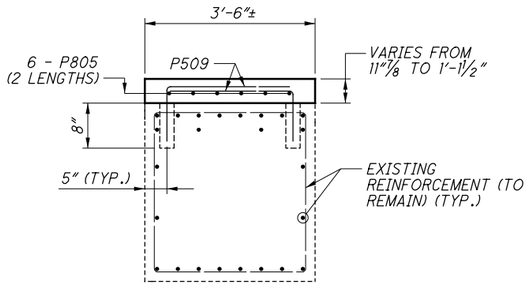


ELEVATION - RIGHT BRIDGE

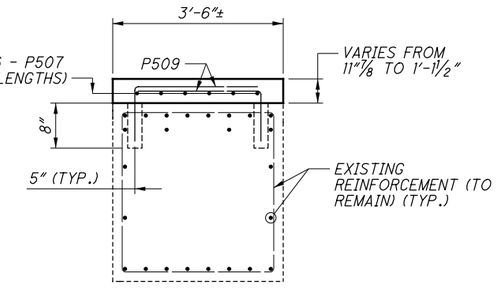
(LOOKING UPSTATION)
(EXISTING REINFORCEMENT NOT SHOWN)

NOTES:

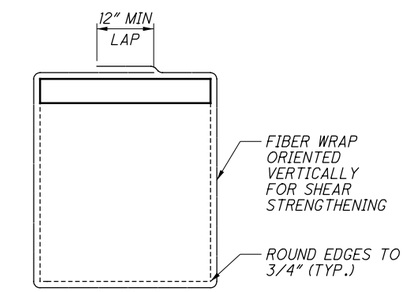
1. FOR NOTES, SEE SHEET 28/70.



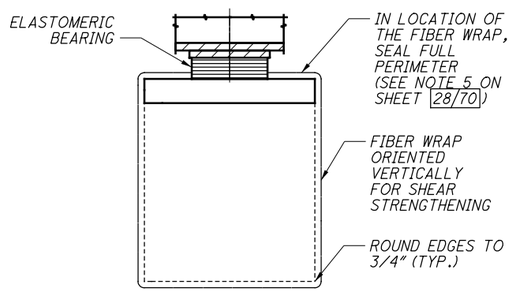
A 33 SECTION THRU PIER CAP



B 33 SECTION THRU PIER CAP



TYPICAL FIBER WRAP SECTION



FIBER WRAP SECTION AT BEARING

DESCRIPTION

ISSUE RECORD:

NO.	DATE

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p:\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0954\Sheets\076_0954_SI008.dgn 11/2/2021 11:22:45 AM p002694C

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Columbus, OH 43235

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DWB		7703457	

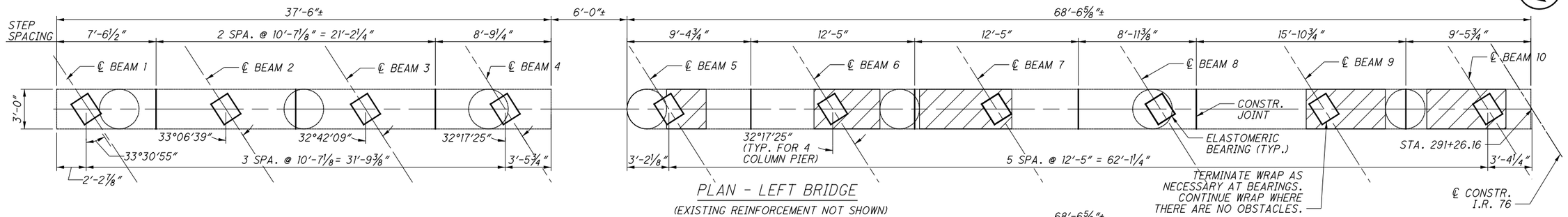
PIER 3 DETAILS - RIGHT BRIDGE
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2021-11-04_BU 13 - RFC PLANS

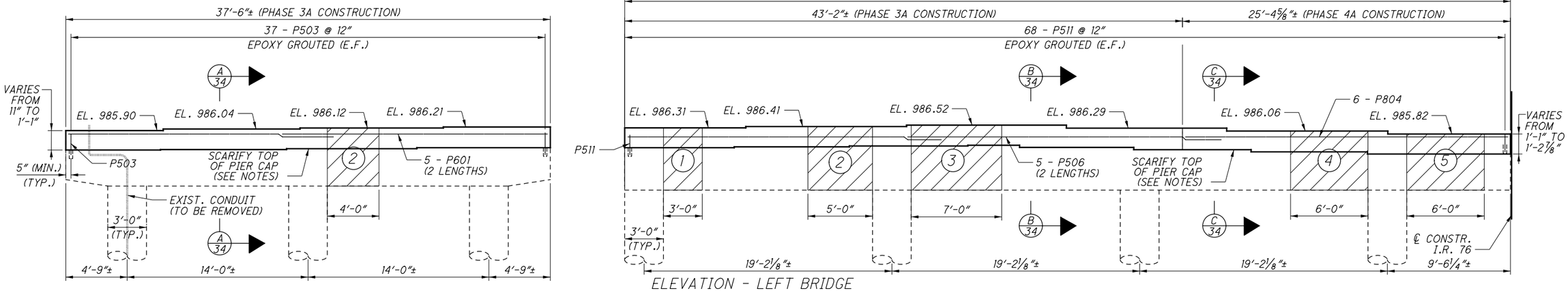
33 / 70

77 / 153



PLAN - LEFT BRIDGE

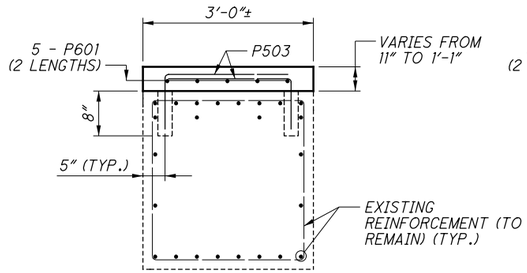
(EXISTING REINFORCEMENT NOT SHOWN)



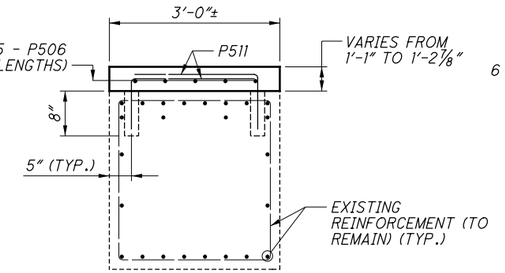
ELEVATION - LEFT BRIDGE

(LOOKING UPSTATION)

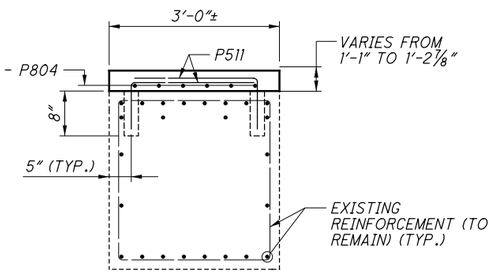
(EXISTING REINFORCEMENT NOT SHOWN)



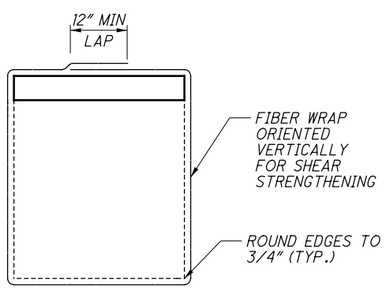
A 34 SECTION THRU PIER CAP



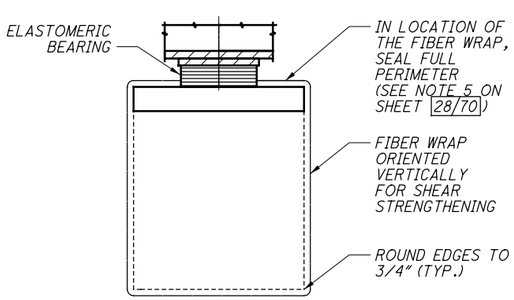
B 34 SECTION THRU PIER CAP



C 34 SECTION THRU PIER CAP



TYPICAL FIBER WRAP SECTION



FIBER WRAP SECTION AT BEARING

LAP LENGTHS	
NO. 5 BARS	2'-7"
NO. 6 BARS	4'-0"
NO. 8 BARS	6'-8"

FIBER WRAP REQUIREMENTS*			
LOCATION	NO. OF LAYERS	MINIMUM WIDTH	** KIPS REQUIRED
1	2	3'-0"	190
2	3	5'-0"	230
3	2	7'-0"	190
4	2	6'-0"	190
5	2	6'-0"	120

* - 1/2 SikaWrap Hex 103C - 25" (12.5 in) OR AN APPROVED EQUAL. EACH LAYER IS 12.5" IN WIDTH AND SPACED @ 12.5" O.C.

** - REQUIRED INCREASE IN FACTORED SHEAR CAPACITY OF PIER CAP

- INDICATES LIMITS OF COMPOSITE FIBER WRAP SYSTEM. USE SIKAWRAP HEX 103C OR APPROVED EQUAL. SEE TABLE FOR NUMBER OF LAYERS AND SHEAR CAPACITY REQUIRED.

NOTES:

1. FOR NOTES, SEE SHEET 28/70.

ISSUE RECORD:

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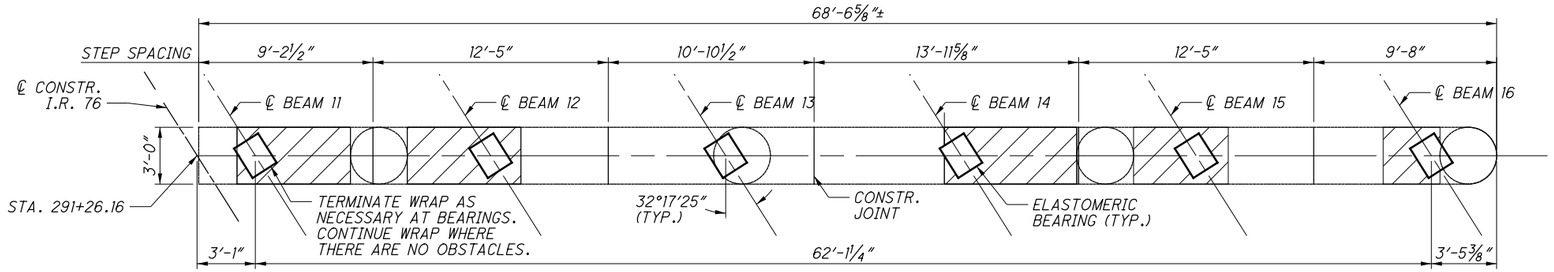
CDB	JRE	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DWB		7703457	

PIER 4 DETAILS - LEFT BRIDGE

BRIDGE NO. SUM-76-0954

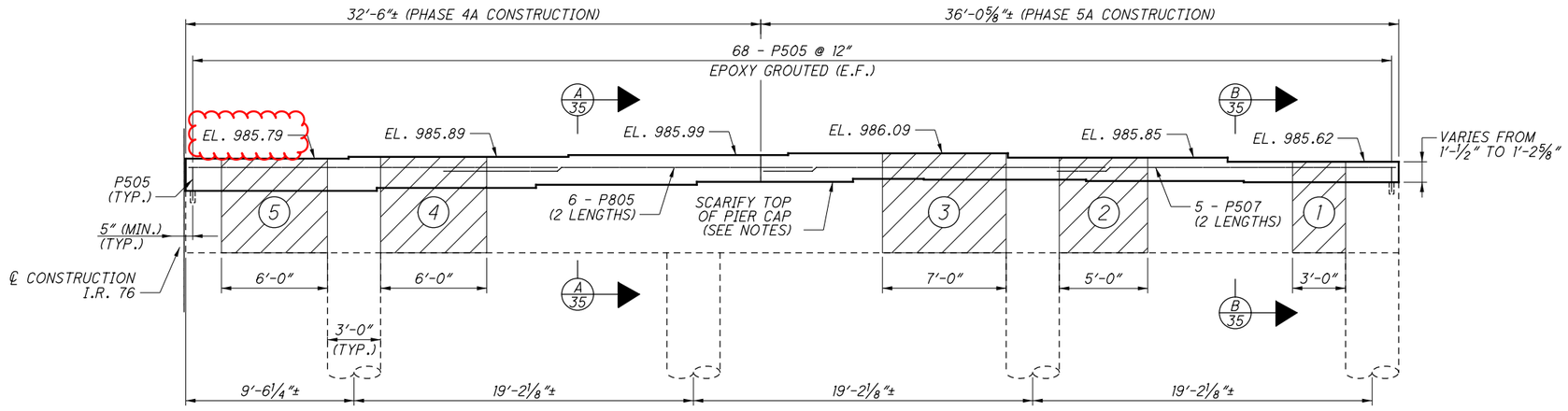
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329



PLAN - RIGHT BRIDGE

(EXISTING REINFORCEMENT NOT SHOWN)



ELEVATION - RIGHT BRIDGE

(LOOKING UPSTATION)
(EXISTING REINFORCEMENT NOT SHOWN)

LAP LENGTHS	
NO. 5 BARS	2'-7"
NO. 8 BARS	6'-8"

- INDICATES LIMITS OF COMPOSITE FIBER WRAP SYSTEM. USE SIKAWRAP HEX 103C OR APPROVED EQUAL. SEE TABLE FOR NUMBER OF LAYERS AND SHEAR CAPACITY REQUIRED.

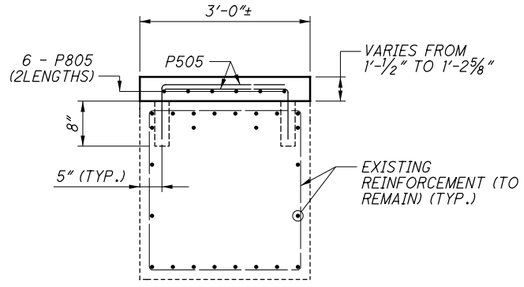
FIBER WRAP REQUIREMENTS*			
LOCATION	NO. OF LAYERS	MINIMUM WIDTH	** KIPS REQUIRED
1	2	3'-0"	190
2	3	5'-0"	230
3	2	7'-0"	190
4	2	6'-0"	190
5	2	6'-0"	120

* - 1/2 SikaWrap Hex 103C - 25" (12.5 in) OR AN APPROVED EQUAL. EACH LAYER IS 12.5" IN WIDTH AND SPACED @ 12.5" O.C.

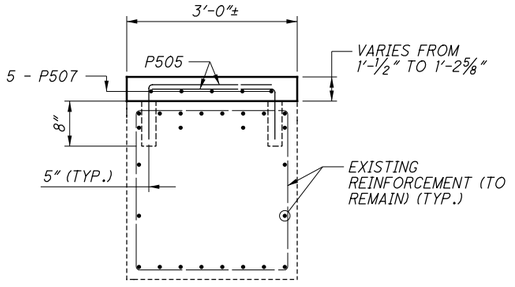
** - REQUIRED INCREASE IN FACTORED SHEAR CAPACITY OF PIER CAP

NOTES:

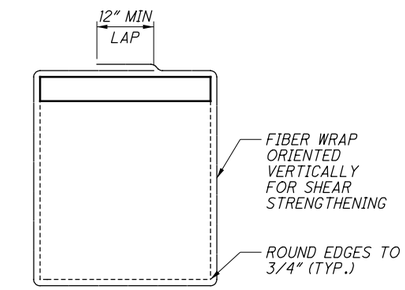
1. FOR NOTES, SEE SHEET 28/70.



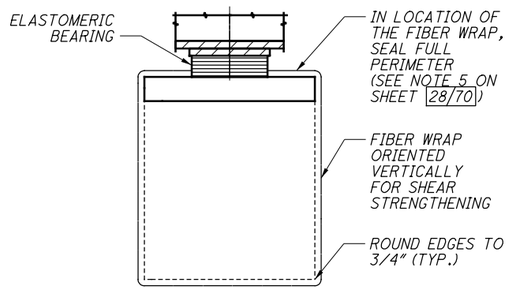
A 35 SECTION THRU PIER CAP



B 35 SECTION THRU PIER CAP



TYPICAL FIBER WRAP SECTION



FIBER WRAP SECTION AT BEARING

ISSUE RECORD:

NO.	DATE	DESCRIPTION
1	12/16/2021	ELEVATION REVISION

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

REVIEWED TES DATE 09/01/21
STRUCTURE FILE NUMBER 7703457
DRAWN JRE REVISED
DESIGNED CDB CHECKED DWB

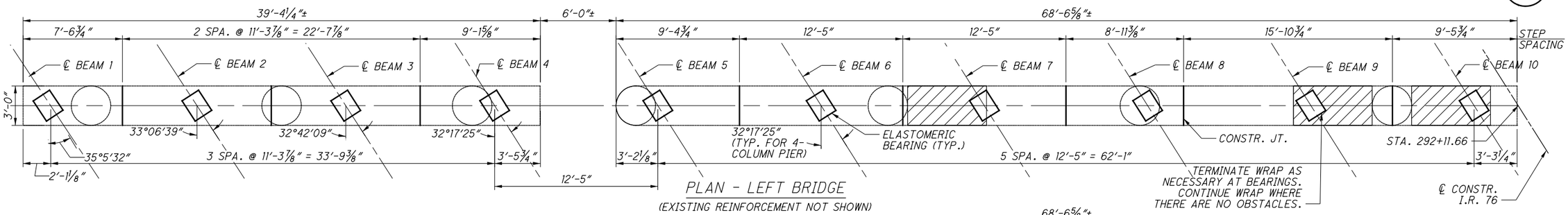
PIER 4 DETAILS - RIGHT BRIDGE
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

35 / 70

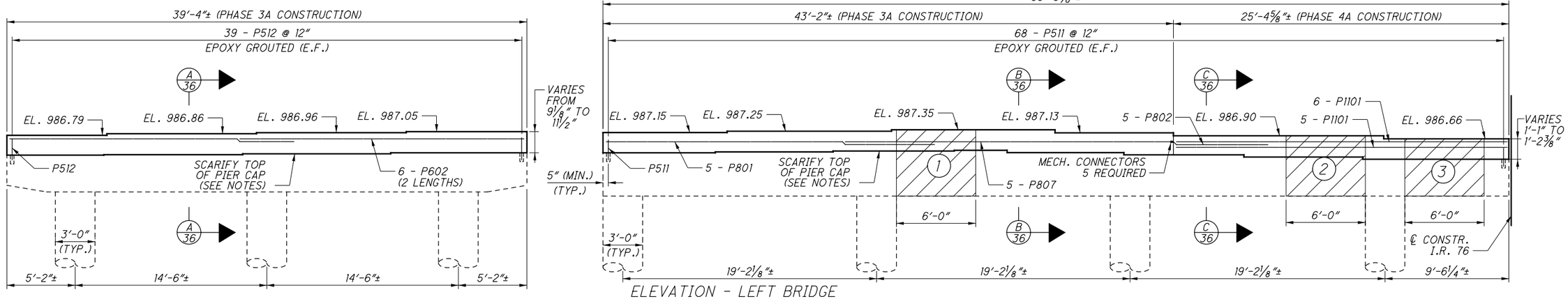
79 / 153

2021-12-16_BU-13 - RFC PLANS REV01



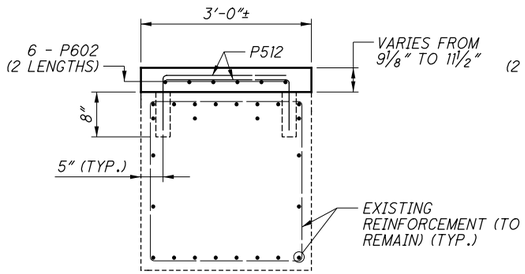
PLAN - LEFT BRIDGE

(EXISTING REINFORCEMENT NOT SHOWN)

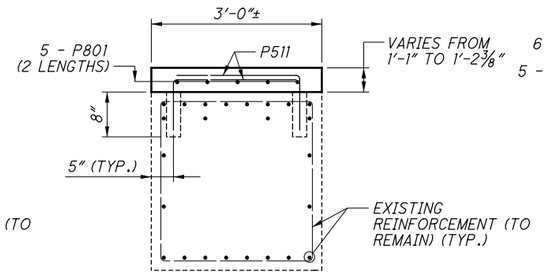


ELEVATION - LEFT BRIDGE

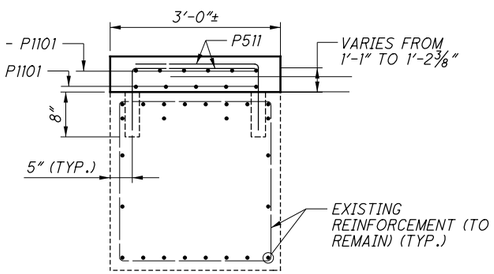
(LOOKING UPSTATION)
(EXISTING REINFORCEMENT NOT SHOWN)



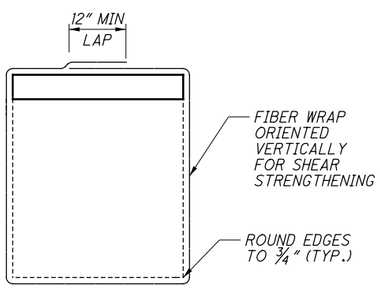
A 36 SECTION THRU PIER CAP



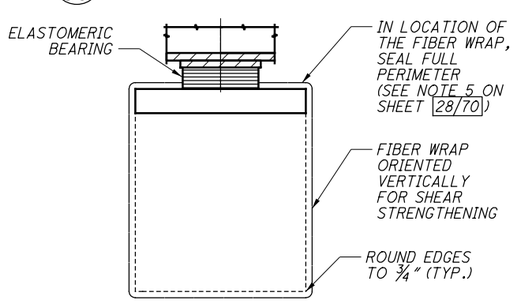
B 36 SECTION THRU PIER CAP



C 36 SECTION THRU PIER CAP



TYPICAL FIBER WRAP SECTION



FIBER WRAP SECTION AT BEARING

LAP LENGTHS	
NO. 5 BARS	2'-7"
NO. 6 BARS	4'-0"
NO. 8 BARS	6'-8"

FIBER WRAP REQUIREMENTS*			
LOCATION	NO. OF LAYERS	MINIMUM WIDTH	** KIPS REQUIRED
1	2	6'-0"	200
2	3	6'-0"	310
3	3	6'-0"	300

* - 1/2 SikaWrap Hex 103C - 25" (12.5 in) OR AN APPROVED EQUAL. EACH LAYER IS 12.5" IN WIDTH AND SPACED @ 12½" O.C.

** - REQUIRED INCREASE IN FACTORED SHEAR CAPACITY OF PIER CAP

▨ - INDICATES LIMITS OF COMPOSITE FIBER WRAP SYSTEM. USE SIKAWRAP HEX 103C OR APPROVED EQUAL. SEE TABLE FOR NUMBER OF LAYERS AND SHEAR CAPACITY REQUIRED.

NOTES:

1. FOR NOTES, SEE SHEET 28/70.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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pw:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\OB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0954\Sheets\076_0954_SI005.dgn Sheet 11/2/2021 11:23:39 AM p0026940

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TES	09/01/21

STRUCTURE FILE NUMBER 7703457

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JRE	

DESIGNED	CHECKED
CDB	DWB

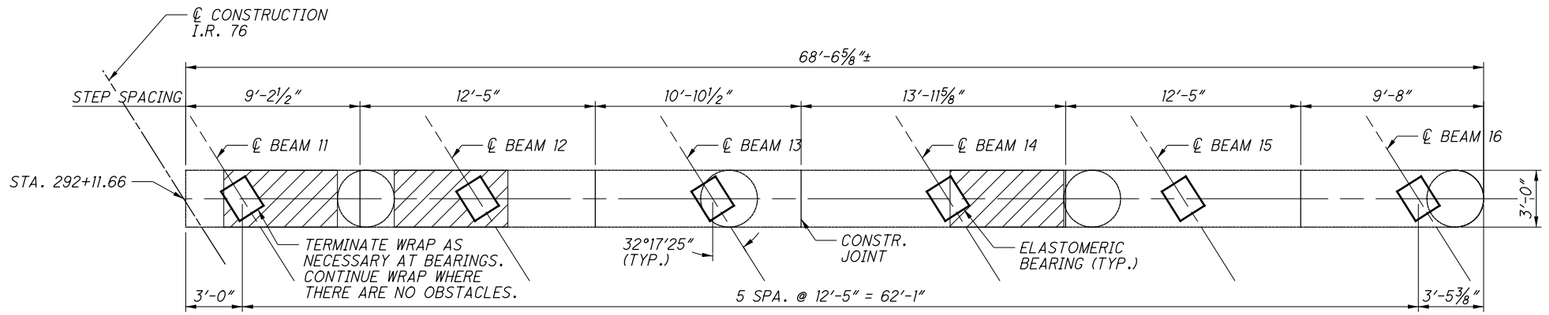
PIER 5 DETAILS - LEFT BRIDGE
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2021-11-04_BU 13 - RFC PLANS

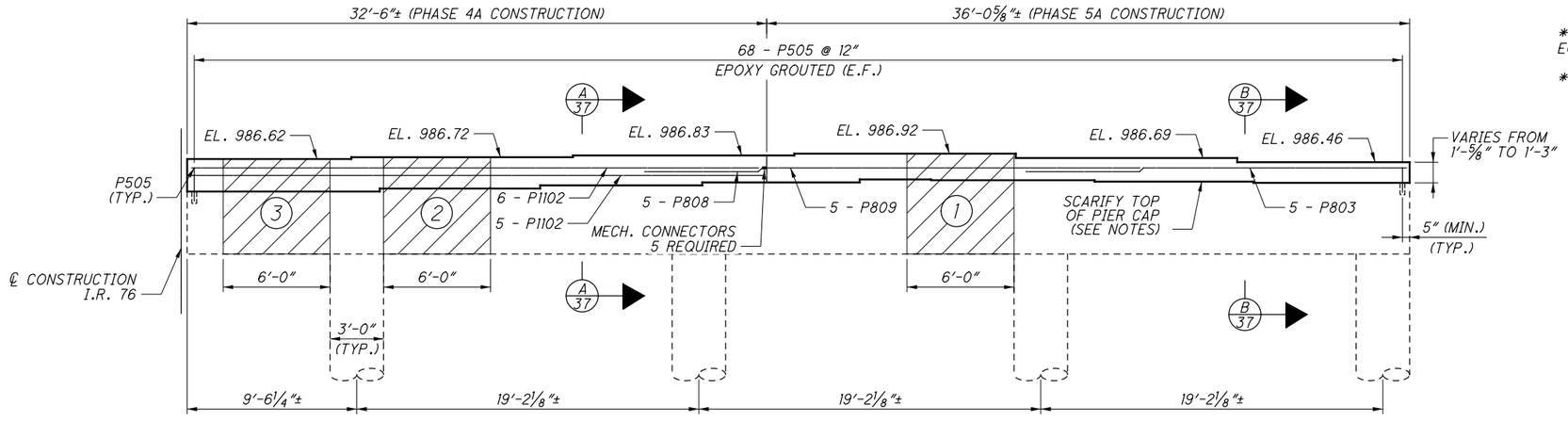
36/70

80/153



PLAN - RIGHT BRIDGE

(EXISTING REINFORCEMENT NOT SHOWN)



ELEVATION - RIGHT BRIDGE

(LOOKING UPSTATION)
(EXISTING REINFORCEMENT NOT SHOWN)

▨ - INDICATES LIMITS OF COMPOSITE FIBER WRAP SYSTEM. USE SIKAWRAP HEX 103C OR APPROVED EQUAL. SEE TABLE FOR NUMBER OF LAYERS AND SHEAR CAPACITY REQUIRED.

LAP LENGTHS	
NO. 5 BARS	2'-7"
NO. 8 BARS	6'-8"

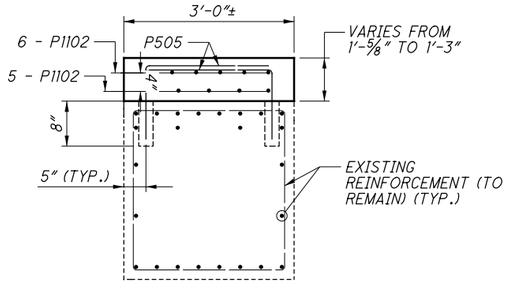
FIBER WRAP REQUIREMENTS*			
LOCATION	NO. OF LAYERS	MINIMUM WIDTH	** KIPS REQUIRED
1	2	6'-0"	200
2	3	6'-0"	310
3	3	6'-0"	300

* - 1/2 SikaWrap Hex 103C - 25" (12.5 in) OR AN APPROVED EQUAL. EACH LAYER IS 12.5" IN WIDTH AND SPACED @ 12.5" O.C.

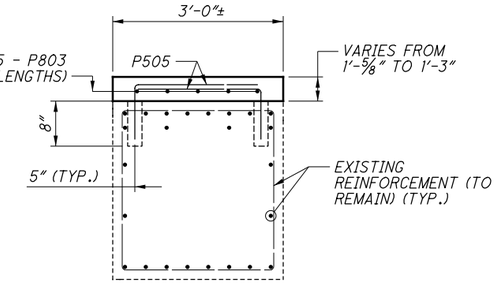
** - REQUIRED INCREASE IN FACTORED SHEAR CAPACITY OF PIER CAP

NOTES:

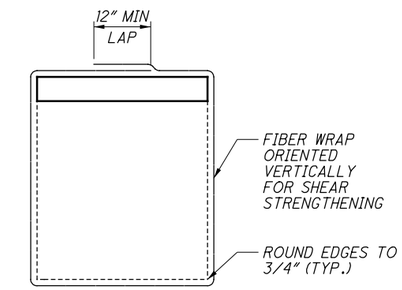
1. FOR NOTES, SEE SHEET 28/70.



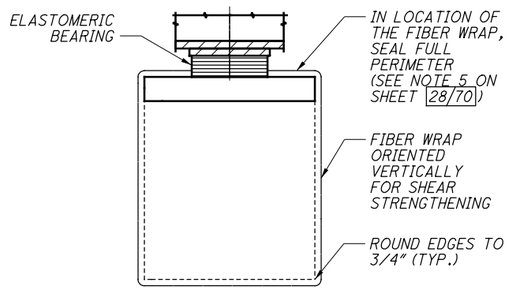
A 37 SECTION THRU PIER CAP



B 37 SECTION THRU PIER CAP



TYPICAL FIBER WRAP SECTION



FIBER WRAP SECTION AT BEARING

DESCRIPTION

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DWB		7703457	

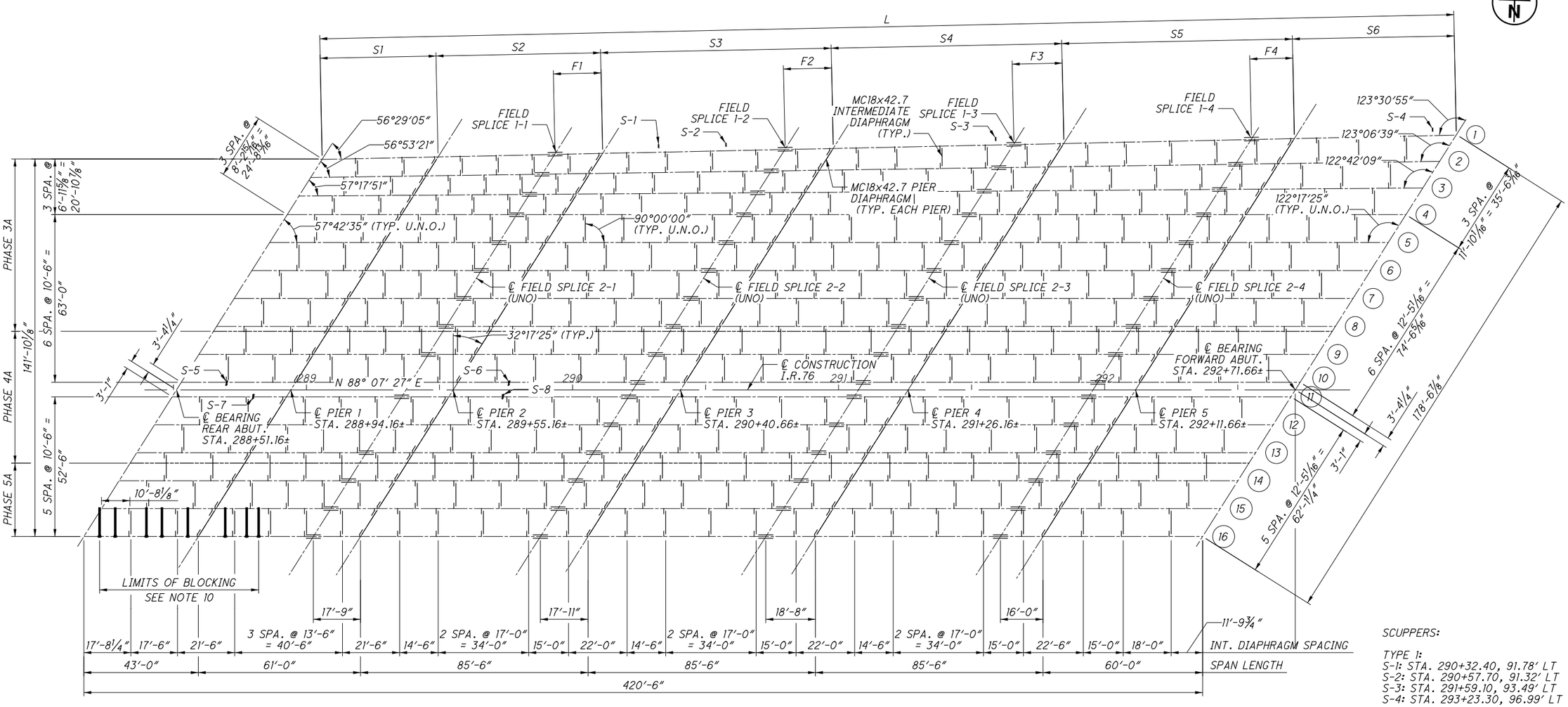
PIER 5 DETAILS - RIGHT BRIDGE
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2021-11-04_BU 13 - RFC PLANS

37 / 70

81
153



FRAMING PLAN

SCUPPERS:

TYPE 1:
S-1: STA. 290+32.40, 91.78' LT
S-2: STA. 290+57.70, 91.32' LT
S-3: STA. 291+59.10, 93.49' LT
S-4: STA. 293+23.30, 96.99' LT

TYPE 2:
S-5: STA. 288+70.00, 3.75' LT
S-6: STA. 289+77.40, 3.75' LT
S-7: STA. 288+80.00, 3.5' RT
S-8: STA. 289+72.80, 3.5' RT

NOTES:

1. FOR BEAM ELEVATIONS AND NOTES, SEE SHEET 39/70.
2. FOR INTERMEDIATE DIAPHRAGM DETAILS, SEE ODOT STANDARD DRAWING GSD-1-19, SHEET 2 OF 4.
3. FOR PIER DIAPHRAGM CONNECTION PLATE, SEE SHEET 46/70
4. FOR FIELD SPLICE DETAILS, SEE SHEETS 43/70 THRU 46/70.
5. FOR TRANSVERSE SECTION INCLUDING OVERHANG DIMENSIONS, SEE SHEET 48/70.
6. FOR TABLE OF DIMENSIONS FOR THE FLARED BEAMS MEASURED ALONG THE BEAM LINE, SEE SHEET 40/70.
7. FOR BEAM ELEVATION CAMBER DIAGRAM AND ADDTIONAL NOTES, SEE SHEET 41/70 AND 42/70
8. DO NOT PERMANENTLY ATTACH INTERMEDIATE DIAPHRAGMS BETWEEN BEAMS 8 AND 9 AND BEAMS 13 AND 14 UNTIL THE CONCRETE POURS ON BOTH SIDES OF THE CLOSURE POUR LOCATION HAVE BEEN COMPLETED.
9. THE FABRICATOR SHALL DETAIL THE DIAPHRAGMS TO FIT AT THE COMPLETION OF DECK PLACEMENT ON EACH SIDE OF THE CLOSURE POUR.
10. FOR THE CONSTRUCTION OF PHASE 3A, FINISHING MACHINE RAILS SHALL BE PLACED OVER BEAM 1. FOR PHASE 4A CONSTRUCTION, FINISHING MACHINE RAILS SHALL BE PLACED OVER BEAM 13. FOR PHASE 5A, 4" x 4" TIMBER LAGGING SHALL BE PLACED BETWEEN BEAMS 15 AND 16 AS SHOWN.

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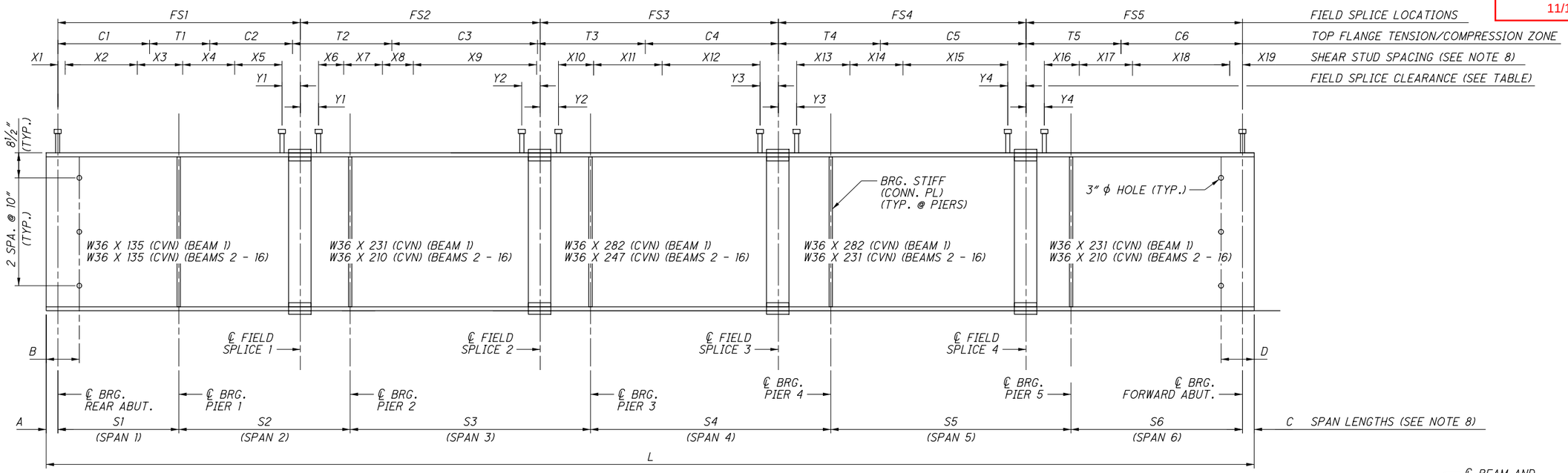
FRAMING PLAN
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

38/70

82/153



TYPICAL BEAM ELEVATION

FIELD SPLICE CLEARANCE

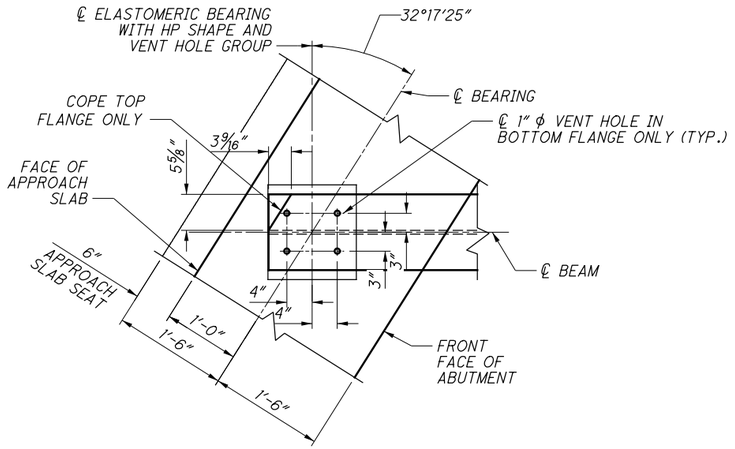
DIMENSION	BEAM 1	BEAM 2	BEAM 3	BEAMS 4 - 16
Y1	1'-6⅛"	1'-6⅛"	1'-6⅛"	1'-6⅛"
Y2	1'-3⅛"	1'-9⅛"	1'-9⅛"	1'-9⅛"
Y3	1'-3⅛"	1'-3⅛"	1'-3⅛"	1'-3⅛"
Y4	1'-3⅛"	1'-9⅛"	1'-9⅛"	1'-9⅛"

BEAM END DIMENSIONS

DIMENSION	BEAM 1	BEAM 2	BEAM 3	BEAMS 4 - 16
A	7"	6 15/16"	6 15/16"	6 15/16"
B	2'-0 13/16"	2'-0¾"	2'-0⅝"	2'-0½"
C	6 15/16"	6⅛"	6⅛"	6 13/16"
D	2'-0¾"	2'-0⅝"	2'-0 9/16"	2'-0½"

TOP FLANGE TENSION/COMPRESSION ZONES

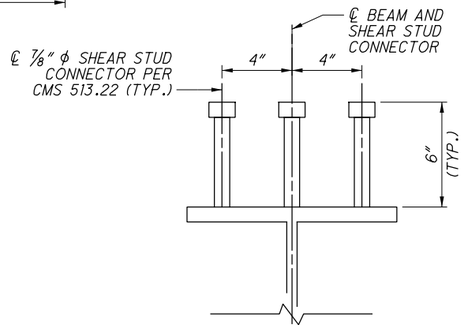
DIMENSION	BEAM 1	BEAM 2	BEAM 3	BEAMS 4 - 16
C1	33'-1½"	32'-11½"	32'-9⅜"	32'-7¼"
T1	21'-6⅛"	21'-5¾"	21'-5⅜"	21'-5"
C2	29'-9¼"	29'-7⅛"	29'-6⅝"	29'-5¼"
T2	35'-9⅝"	35'-7¾"	35'-6"	35'-4¼"
C3	53'-0⅛"	52'-7½"	52'-2⅞"	51'-10⅜"
T3	38'-1¾"	38'-2½"	38'-3⅜"	38'-4⅛"
C4	47'-11⅜"	47'-9¼"	47'-7"	47'-4¾"
T4	37'-1⅜"	36'-9¾"	36'-6¼"	36'-2¾"
C5	53'-10¼"	53'-5"	52'-11¾"	52'-6½"
T5	32'-9"	32'-10⅜"	32'-11¾"	33'-1¼"
C6	43'-4"	42'-10⅜"	42'-6"	42'-2⅝"



VENT HOLE PLACEMENT AND COPING DETAIL
(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)

FIELD SPLICE LOCATIONS

DIMENSION	BEAM 1	BEAM 2	BEAM 3	BEAMS 4 - 16
FS1	87'-6"	87'-0"	86'-8"	86'-3"
FS2	86'-6"	86'-2"	85'-9"	85'-4"
FS3	86'-0"	85'-5"	85'-2"	84'-9"
FS4	89-4"	89'-0"	88'-6"	88'-2"
FS5	77'-0¼"	76'-8⅝"	76'-4¼"	76'-0"



SHEAR STUD CONNECTOR
(SEE NOTE 1)

NOTES:

1. WELDED SHEAR CONNECTORS SHALL NOT BE PLACED WITHIN TWO INCHES OF FIELD SPLICE PLATES OR WITHIN FOUR DIAMETERS, MEASURED CENTER TO CENTER, OF ANOTHER SHEAR CONNECTOR.
2. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
3. WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA BEAM 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 ¼" FOR THICKNESS UP TO ¾" OR 5/16" FOR GREATER THAN ¾" THICK.
4. ALL STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 50 (PAINTED).
5. FOR FRAMING PLAN SEE SHEET 38/70.
6. FOR SPLICE DETAILS SEE SHEET 43/70 THRU 46/70.
7. FOR DEFLECTION AND CAMBER DATA SEE SHEET 41/70 AND 42/70.
8. FOR SHEAR STUD SPACING TABLE AND SPAN LENGTHS ALONG BEAMS TABLE, SEE SHEET 40/70.
9. FOR PIER CONNECTION PLATE DETAILS, SEE SHEET 46/70.

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BEAM ELEVATION
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

39/70
83/153

DIMENSIONS ALONG BEAMS

BEAM NO.	S1	S2	S3	S4	S5	S6	L	F1	F2	F3	F4
1	43'-7 3/16"	61'-10 3/16"	86'-8 5/16"	86'-8 5/16"	86'-8 5/16"	60'-10 1/16"	426'-4 5/16"	17'-11 3/8"	18'-1 1/16"	18'-10"	16'-2 1/4"
2	43'-4 3/4"	61'-6 9/16"	86'-3 1/2"	86'-3 1/2"	86'-3 1/2"	60'-6 5/8"	424'-4 5/8"	17'-11 9/16"	18'-1"	18'-10 1/2"	16'-1 15/16"
3	43'-2 3/8"	61'-3 3/8"	85'-10 11/16"	85'-10 11/16"	85'-10 11/16"	60'-3 5/16"	422'-5 3/16"	17'-9 3/4"	17'-11 7/16"	18'-8 3/16"	16'-0 7/8"
4 - 16	43'-0"	61'-0"	85'-6"	85'-6"	85'-6"	60'-0"	420'-6"	17'-9"	17'-11"	18'-8"	16'-0"

INTERMEDIATE DIAPHRAGM SPACING ALONG FLARED BEAMS (MEASURED ALONG RIGHT BEAM)

	TO I.D. 1	TO I.D. 2	TO I.D. 3	TO I.D. 4	TO I.D. 5	TO I.D. 6	TO I.D. 7	TO I.D. 8	TO I.D. 9	TO I.D. 10	TO I.D. 11	TO I.D. 12
BAY 1	20'-2 1/4"	15'-0"	21'-10 3/4"	13'-6"	13'-6"	13'-6"	22'-0 3/4"	14'-6"	17'-0"	17'-0"	15'-0"	22'-9 1/2"
BAY 2	20'-2 1/4"	15'-0"	21'-8 3/8"	13'-6"	13'-6"	13'-6"	21'-9 3/8"	14'-6"	17'-0"	17'-0"	15'-0"	22'-4 11/16"
BAY 3	20'-2 3/16"	15'-0"	21'-6"	13'-6"	13'-6"	13'-6"	21'-6"	14'-6"	17'-0"	17'-0"	15'-0"	22'-0"

	TO I.D. 13	TO I.D. 14	TO I.D. 15	TO I.D. 16	TO I.D. 17	TO I.D. 18	TO I.D. 19	TO I.D. 20	TO I.D. 21	TO I.D. 22	TO I.D. 23	TO I.D. 24
BAY 1	14'-6"	17'-0"	17'-0"	15'-0"	22'-9 1/2"	14'-6"	17'-0"	17'-0"	15'-0"	23'-3 1/2"	15'-0"	20'-0"
BAY 2	14'-6"	17'-0"	17'-0"	15'-0"	22'-4 11/16"	14'-6"	17'-0"	17'-0"	15'-0"	22'-10 11/16"	15'-0"	20'-0"
BAY 3	14'-6"	17'-0"	17'-0"	15'-0"	22'-0"	14'-6"	17'-0"	17'-0"	15'-0"	22'-6"	15'-0"	20'-0"

SHEAR STUD SPACING

DIMENSION	BEAM 1 SPACING	BEAM 2 SPACING	BEAM 3 SPACING	BEAMS 4 - 16 SPACING
X1	10 SPA. @ 6" = 5'-0"	5 SPA. @ 8" = 3'-4"	5 SPA. @ 8" = 3'-4"	5 SPA. @ 8" = 3'-4"
X2	32 SPA. @ 10"(-) = 26'-8"	37 SPA. @ 10" = 30'-10"	37 SPA. @ 10" = 30'-10"	37 SPA. @ 10" = 30'-10"
X3	23 SPA. @ 8" = 15'-4"	38 SPA. @ 8" = 25'-4"	38 SPA. @ 8" = 25'-4"	38 SPA. @ 8" = 25'-4"
X4	37 SPA. @ 6" = 18'-6"	32 SPA. @ 9 3/4"(-) = 25'-11 7/8"	31 SPA. @ 10"(-) = 25'-7 7/8"	30 SPA. @ 9 3/4"(-) = 24'-2 7/8"
X5	25 SPA. @ 10"(-) = 20'-8"	-	-	-
X6	7 SPA. @ 10" = 5'-10"	8 SPA. @ 10" = 6'-8"	8 SPA. @ 10" = 6'-8"	9 SPA. @ 10" = 7'-6"
X7	16 SPA. @ 11 5/8"(-) = 15'-6 3/4"	11 SPA. @ 15 3/8"(-) = 14'-0 3/4"	9 SPA. @ 16" = 12'-0"	9 SPA. @ 16" = 12'-0"
X8	22 SPA. @ 6" = 11'-0"	27 SPA. @ 8" = 18'-0"	29 SPA. @ 8" = 19'-4"	29 SPA. @ 8"(-) = 19'-2 3/4"
X9	77 SPA. @ 8" = 51'-4"	53 SPA. @ 10" = 44'-2"	54 SPA. @ 10"(-) = 44'-5 3/4"	52 SPA. @ 10" = 44'-4"
X10	6 SPA. @ 10" = 5'-0"	3 SPA. @ 12" = 3'-0"	3 SPA. @ 12" = 3'-0"	4 SPA. @ 12" = 4'-0"
X11	16 SPA. @ 17 3/8"(-) = 23'-1 3/4"	17 SPA. @ 18"(-) = 25'-3 3/4"	17 SPA. @ 17 5/8"(+) = 24'-11 3/4"	18 SPA. @ 18"(-) = 26'-10 3/4"
X12	83 SPA. @ 8" = 55'-4"	65 SPA. @ 10" = 54'-2"	65 SPA. @ 10" = 54'-2"	61 SPA. @ 10" = 50'-10"
X13	7 SPA. @ 10" = 5'-10"	6 SPA. @ 10" = 5'-0"	6 SPA. @ 10" = 5'-0"	7 SPA. @ 10" = 5'-10"
X14	19 SPA. @ 15 3/8" (+) = 24'-3 3/4"	17 SPA. @ 17 3/4" (+) = 25'-1 3/4"	17 SPA. @ 17 3/8" (+) = 24'-7 3/4"	17 SPA. @ 17 3/4" (+) = 25'-1 3/4"
X15	68 SPA. @ 10" = 56'-8"	67 SPA. @ 10" = 55'-10"	67 SPA. @ 10" = 55'-10"	65 SPA. @ 10" = 54'-2"
X16	11 SPA. @ 10" = 9'-2"	11 SPA. @ 10" = 9'-2"	11 SPA. @ 10" = 9'-2"	11 SPA. @ 10" = 9'-2"
X17	17 SPA. @ 11 1/2"(-) = 16'-3 1/4"	18 SPA. @ 11 3/8"(+) = 17'-1 1/2"	17 SPA. @ 11 7/8"(-) = 16'-9 1/8"	18 SPA. @ 11 5/8"(-) = 17'-5 7/8"
X18	65 SPA. @ 8" = 43'-4"	50 SPA. @ 10" = 41'-8"	50 SPA. @ 10" = 41'-8"	50 SPA. @ 10" = 41'-8"
X19	14 SPA. @ 6" = 7'-0"	14 SPA. @ 6" = 7'-0"	14 SPA. @ 6" = 7'-0"	14 SPA. @ 6" = 7'-0"

NOTES:

1. FOR LOCATIONS OF DIMENSIONS ALONG BEAMS AND INTERMEDIATE DIAPHRAGM SPACING ALONG FLARED BEAMS, SEE FRAMING PLAN ON SHEET 38/70.
2. FOR SHEAR STUD SPACING DIAGRAM, SEE TYPICAL BEAM ELEVATION ON SHEET 39/70.

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BEAM ELEVATION DIMENSION TABLES
BRIDGE NO. SUM-76-0954
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40/70

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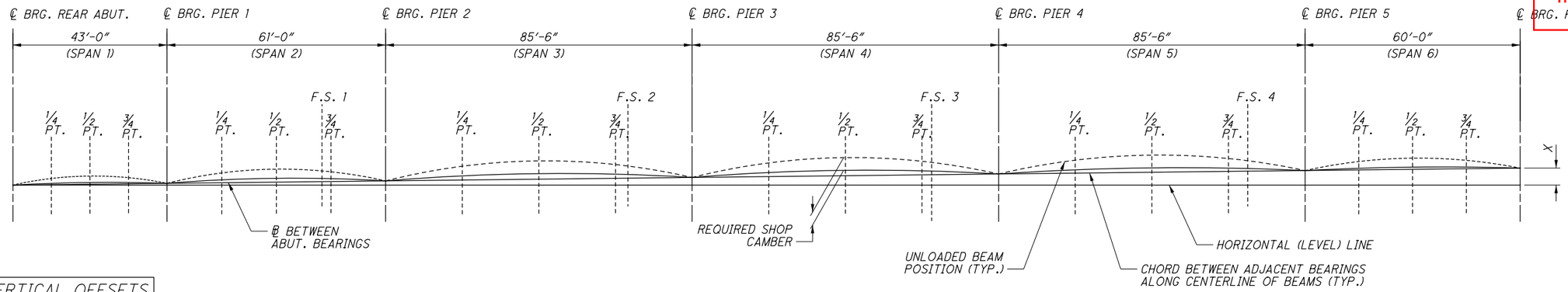


CAMBER DIAGRAM

VERTICAL OFFSETS AT SUPPORTS	
BEAM NO.	X
1	1'-10 1/4"
2	1'-10 3/8"
3	1'-10 5/8"
4	1'-10 3/4"
5	1'-10 3/4"
6	1'-10 3/4"
7	1'-10 3/4"
8	1'-10 3/4"
9	1'-10 3/4"
10	1'-10 3/4"

VERTICAL OFFSETS AT SUPPORTS	
BEAM NO.	X
11	1'-10 3/4"
12	1'-10 3/4"
13	1'-10 3/4"
14	1'-10 3/4"
15	1'-10 3/4"
16	1'-10 3/4"

BECAUSE THE PROFILE GRADE IS ON A CONSTANT LONGITUDINAL SLOPE, THERE IS NO DIFFERENCE BETWEEN THE CHORDS OF ADJACENT SUPPORTS AND THE CHORD BETWEEN ABUTMENTS.

NOTES:

1. FOR FRAMING PLAN, SEE SHEET 38/70.
2. FOR DEFLECTION AND CAMBER TABLE FOR LEFT BRIDGE, SEE SHEET 42/70.
3. FOR BEAM ELEVATION, SEE SHEET 39/70.
4. ALL DEFLECTION AND CAMBER VALUES GIVEN TO NEAREST 1/16"
5. THERE IS NO ADJUSTMENT FOR VERTICAL CURVE SINCE THE PROFILE GRADE IS ON A CONSTANT LONGITUDINAL SLOPE.

RIGHT BRIDGE DEFLECTION AND CAMBER

BEAM	DEFLECTION COMPONENT	BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3				℄ BEARING PIER 3	SPAN 4				℄ BEARING PIER 4	SPAN 5				℄ BEARING PIER 5	SPAN 6			℄ BEARING FORWARD ABUTMENT
			¼ PT.	½ PT	¾ PT		¼ PT.	½ PT	F.S.#1	¾ PT		¼ PT.	½ PT	¾ PT	F.S.#2		¼ PT.	½ PT	¾ PT	F.S.#3		¼ PT.	½ PT	¾ PT	F.S.#4		¼ PT.	½ PT	¾ PT	
			IN.	IN.	IN.		IN.	IN.	IN.	IN.		IN.	IN.	IN.	IN.		IN.	IN.	IN.	IN.		IN.	IN.	IN.	IN.		IN.	IN.	IN.	
BEAM 11	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/8	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	1/8	1/16	0	1/16	1/8	1/16	0	0	1/2	13/16	1/2	3/8	0	3/16	7/16	1/4	3/16	0	3/8	3/4	1/2	3/8	0	1/16	1/4	3/16	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	1/8	1/16	0	1/16	1/8	1/16	0	0	5/8	1	5/8	7/16	0	1/4	9/16	5/16	1/4	0	1/2	15/16	5/8	7/16	0	1/16	5/16	1/4	0
BEAM 12	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/8	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	5/8	1	9/16	7/16	0	1/4	9/16	5/16	1/4	0	1/2	7/8	9/16	3/8	0	1/8	5/16	1/4	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	3/4	1 3/16	11/16	1/2	0	5/16	11/16	3/8	5/16	0	5/8	1 1/16	11/16	7/16	0	1/8	3/8	5/16	0
BEAM 13	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/8	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/8	1/8	1/16	0	0	9/16	15/16	1/2	7/16	0	1/4	1/2	1/4	3/16	0	1/2	13/16	1/2	3/8	0	1/16	1/4	1/4	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	1/8	1/8	1/16	0	0	11/16	1 1/8	5/8	1/2	0	5/16	5/8	5/16	1/4	0	5/8	1	5/8	7/16	0	1/16	5/16	5/16	0
BEAM 14	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/8	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/8	1/8	1/16	0	0	5/8	15/16	1/2	7/16	0	1/4	1/2	1/4	3/16	0	1/2	13/16	1/2	3/8	0	1/16	1/4	1/4	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	1/8	1/8	1/16	0	0	3/4	1 1/8	5/8	1/2	0	5/16	5/8	5/16	1/4	0	5/8	1	5/8	7/16	0	1/16	5/16	5/16	0
BEAM 15	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/8	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	3/16	3/16	1/16	0	1/8	3/16	1/16	0	0	5/8	1	9/16	7/16	0	1/4	9/16	5/16	1/4	0	1/2	15/16	9/16	3/8	0	1/8	5/16	1/4	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	3/16	3/16	1/16	0	1/8	3/16	1/16	0	0	3/4	1 3/16	11/16	1/2	0	5/16	11/16	3/8	5/16	0	5/8	1 1/8	11/16	7/16	0	1/8	3/8	5/16	0
BEAM 16	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/8	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/16	1/8	1/16	0	0	9/16	7/8	1/2	7/16	0	1/4	1/2	1/4	1/4	0	7/16	13/16	1/2	3/8	0	1/16	1/4	1/4	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	1/16	1/8	1/16	0	0	11/16	1 1/16	5/8	1/2	0	5/16	5/8	5/16	5/16	0	9/16	1	5/8	7/16	0	1/16	5/16	5/16	0

2021-11-04_BU 13 - RFC PLANS

CAMBER DIAGRAM & DEFLECTION AND CAMBER TABLE
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

41 / 70

85 / 153

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

REVIEWED TES 09/01/21
DRAWN TYW
DESIGNED TYW
CHECKED JER
STRUCTURE FILE NUMBER 7703457
REVISED

ISSUE RECORD:

NO.	DATE	DESCRIPTION

LEFT BRIDGE DEFLECTION AND CAMBER

BEAM	DEFLECTION COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3				℄ BEARING PIER 3	SPAN 4				℄ BEARING PIER 4	SPAN 5				℄ BEARING PIER 5	SPAN 6			℄ BEARING FORWARD ABUTMENT
			¼ PT.	½ PT	¾ PT		¼ PT.	½ PT	F.S.#1	¾ PT		¼ PT.	½ PT	¾ PT	F.S.#2		¼ PT.	½ PT	¾ PT	F.S.#3		¼ PT.	½ PT	¾ PT	F.S.#4		¼ PT.	½ PT	¾ PT	
			IN.	IN.	IN.		IN.	IN.	IN.	IN.		IN.	IN.	IN.	IN.		IN.	IN.	IN.	IN.		IN.	IN.	IN.	IN.		IN.	IN.	IN.	
BEAM 1	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/16	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	1/8	1/16	0	1/8	1/8	1/16	0	0	1/2	3/4	7/16	5/16	0	3/16	7/16	3/16	3/16	0	3/8	11/16	7/16	5/16	0	1/16	1/4	3/16	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	1/8	1/16	0	1/8	1/8	1/16	0	0	5/8	15/16	1/2	3/8	0	1/4	9/16	1/4	1/4	0	1/2	7/8	9/16	3/8	0	1/16	5/16	1/4	0
BEAM 2	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/8	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	5/8	1	9/16	7/16	0	1/4	9/16	5/16	1/4	0	1/2	7/8	9/16	3/8	0	1/8	5/16	1/4	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	3/4	1 3/16	11/16	1/2	0	5/16	11/16	3/8	5/16	0	5/8	1 1/16	11/16	7/16	0	1/8	3/8	5/16	0
BEAM 3	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/8	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	5/8	1	9/16	7/16	0	1/4	9/16	5/16	1/4	0	1/2	7/8	9/16	3/8	0	1/8	5/16	1/4	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	-1/16	0	0	0	0	-1/8	0	0	0	0	-3/16	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	3/4	1 3/16	11/16	7/16	0	5/16	11/16	3/8	3/16	0	5/8	1 1/16	11/16	1/4	0	1/8	3/8	5/16	0
BEAM 4	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/8	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	5/8	1	9/16	7/16	0	1/4	9/16	5/16	1/4	0	1/2	7/8	9/16	3/8	0	1/8	5/16	1/4	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	3/4	1 3/16	11/16	1/2	0	5/16	11/16	3/8	5/16	0	5/8	1 1/16	11/16	7/16	0	1/8	3/8	5/16	0
BEAM 5	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/8	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	5/8	1	9/16	7/16	0	1/4	9/16	5/16	1/4	0	1/2	7/8	9/16	3/8	0	1/8	5/16	1/4	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	3/4	1 3/16	11/16	1/2	0	5/16	11/16	3/8	5/16	0	5/8	1 1/16	11/16	7/16	0	1/8	3/8	5/16	0
BEAM 6	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/8	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	5/8	1	9/16	7/16	0	1/4	9/16	5/16	1/4	0	1/2	7/8	9/16	3/8	0	1/8	5/16	1/4	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	3/4	1 3/16	11/16	1/2	0	5/16	11/16	3/8	5/16	0	5/8	1 1/16	11/16	7/16	0	1/8	3/8	5/16	0
BEAM 7	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/8	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	5/8	1	9/16	7/16	0	1/4	9/16	5/16	1/4	0	1/2	7/8	9/16	3/8	0	1/8	5/16	1/4	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	3/4	1 3/16	11/16	1/2	0	5/16	11/16	3/8	5/16	0	5/8	1 1/16	11/16	7/16	0	1/8	3/8	5/16	0
BEAM 8	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/8	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	5/8	1	9/16	7/16	0	1/4	9/16	5/16	1/4	0	1/2	7/8	9/16	3/8	0	1/8	5/16	1/4	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	3/4	1 3/16	11/16	1/2	0	5/16	11/16	3/8	5/16	0	5/8	1 1/16	11/16	7/16	0	1/8	3/8	5/16	0
BEAM 9	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/8	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	5/8	1	9/16	7/16	0	1/4	9/16	5/16	1/4	0	1/2	7/8	9/16	3/8	0	1/8	5/16	1/4	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	1/8	3/16	1/16	0	0	3/4	1 3/16	11/16	1/2	0	5/16	11/16	3/8	5/16	0	5/8	1 1/16	11/16	7/16	0	1/8	3/8	5/16	0
BEAM 10	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	1/8	3/16	1/8	1/16	0	1/16	1/8	1/16	1/16	0	1/8	3/16	1/8	1/16	0	0	1/16	1/16	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	1/8	1/8	1/16	0	0	9/16	7/8	1/2	3/8	0	1/4	1/2	1/4	3/16	0	7/16	13/16	1/2	3/8	0	1/16	1/4	1/4	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	1/8	1/8	1/16	0	0	11/16	1 1/16	5/8	7/16	0	5/16	5/8	5/16	1/4	0	9/16	1	5/8	7/16	0	1/16	5/16	5/16	0

NOTES:

1. FOR FRAMING PLAN, SEE SHEET 38/70.
2. FOR CAMBER DIAGRAM, SEE SHEET 41/70.
3. FOR BEAM ELEVATION, SEE SHEET 39/70.
4. ALL DEFLECTION AND CAMBER VALUES GIVEN TO NEAREST 1/16".
5. THERE IS NO ADJUSTMENT FOR VERTICAL CURVE SINCE THE PROFILE GRADE IS ON A CONSTANT LONGITUDINAL SLOPE.

2021-11-04_BU 13 - RFC PLANS

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

DESIGNED TYW | DRAWN TYW | REVIEWED TES 09/01/21 | DATE | STRUCTURE FILE NUMBER 7703457 | CHECKED JER | REVISED

DEFLECTION AND CAMBER TABLE
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

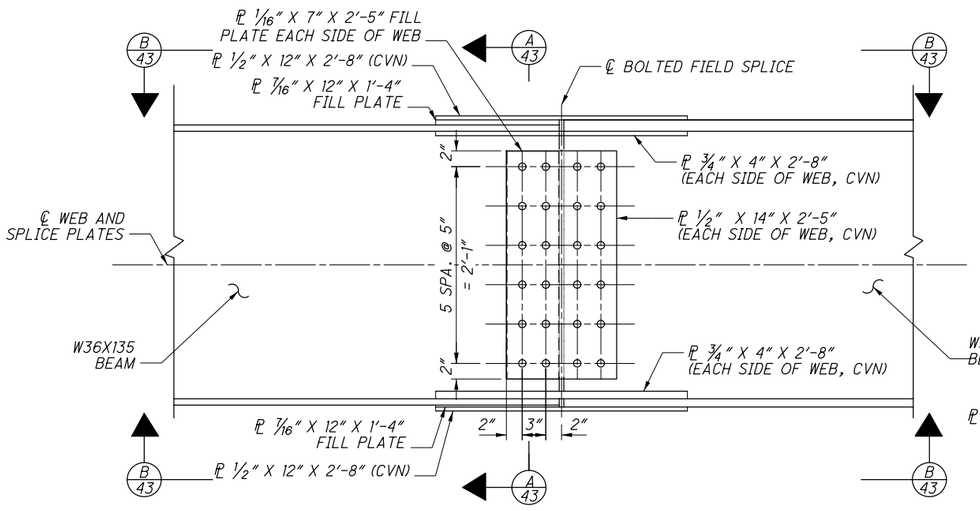
SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

42/70

86/153

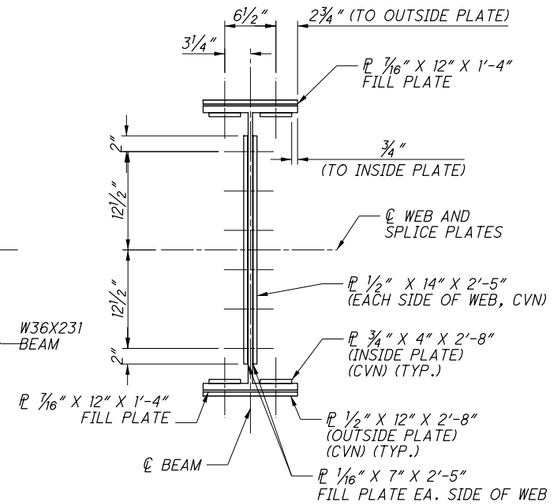
ISSUE RECORD:

NO.	DATE	DESCRIPTION

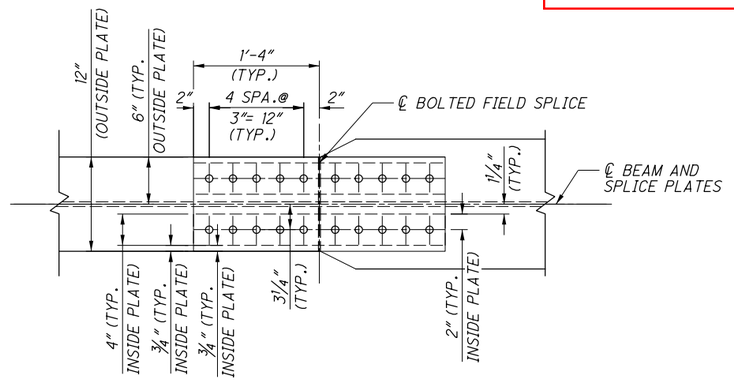


TYPICAL FIELD SPLICE DETAIL

AHEAD STATION

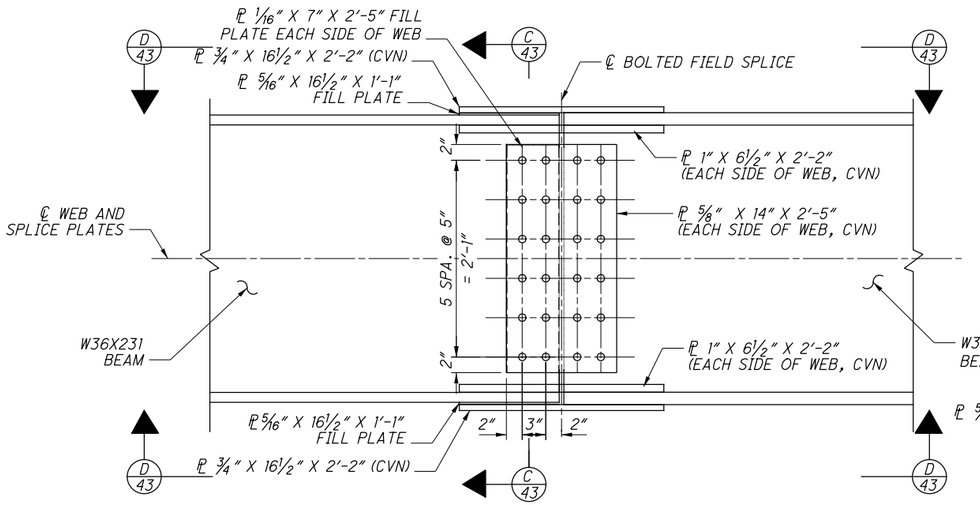


A 43 SECTION THRU BEAM



B 43 VIEW
(1 OUTSIDE PLATE AND 2 INSIDE PLATES)
AHEAD STATION

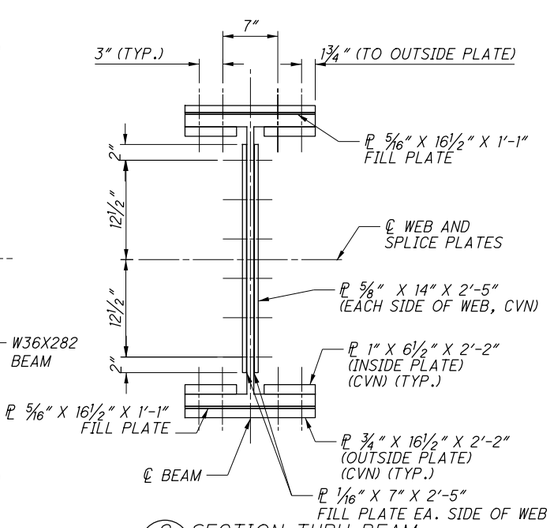
FIELD SPLICE 1-1
(BEAM 1, SPLICE 1)



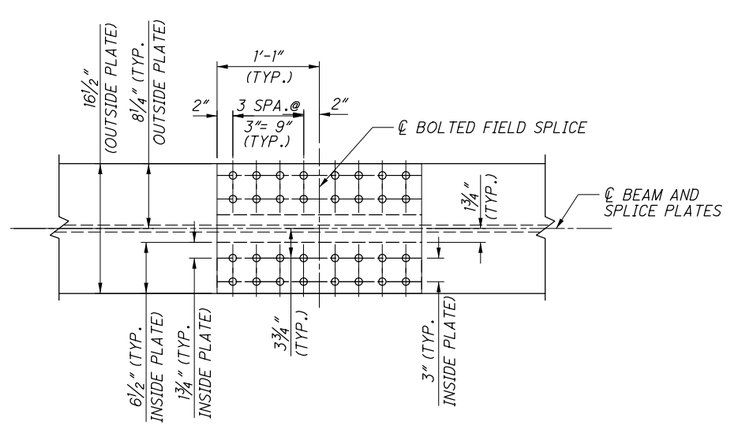
TYPICAL FIELD SPLICE DETAIL

(FIELD SPLICE 1-2 SHOWN, FIELD SPLICE 1-4 SAME BY OPPOSITE HAND)

AHEAD STATION



C 43 SECTION THRU BEAM



D 43 VIEW
(1 OUTSIDE PLATE AND 2 INSIDE PLATES)
AHEAD STATION

FIELD SPLICE 1-2 AND 1-4

(BEAM 1, SPLICE 2 AND BEAM 1, SPLICE 4)
(FIELD SPLICE 1-2 SHOWN, FIELD SPLICE 1-4 SAME BY OPPOSITE HAND)

NOTES:

1. WELDED SHEAR CONNECTORS SHALL NOT BE PLACED WITHIN TWO INCHES OF FIELD SPLICE PLATES OR WITHIN FOUR DIAMETERS, MEASURED CENTER TO CENTER, OF ANOTHER SHEAR CONNECTOR.
2. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
3. ALL STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 50 (PAINTED).
4. FOR LOCATION OF FIELD SPLICES, SEE SHEET 38/70.
5. FOR BEAM ELEVATION, SEE SHEET 39/70.
6. FOR ELASTOMERIC BEARING DETAILS, SEE SHEET 47/70.
7. ALL BOLTS FOR FIELD SPLICES SHALL BE 1" ϕ HIGH STRENGTH, ASTM F3125, GRADE A325 TYPE 1.

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STRUCTURAL STEEL DETAILS 1 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

43/70

87/153

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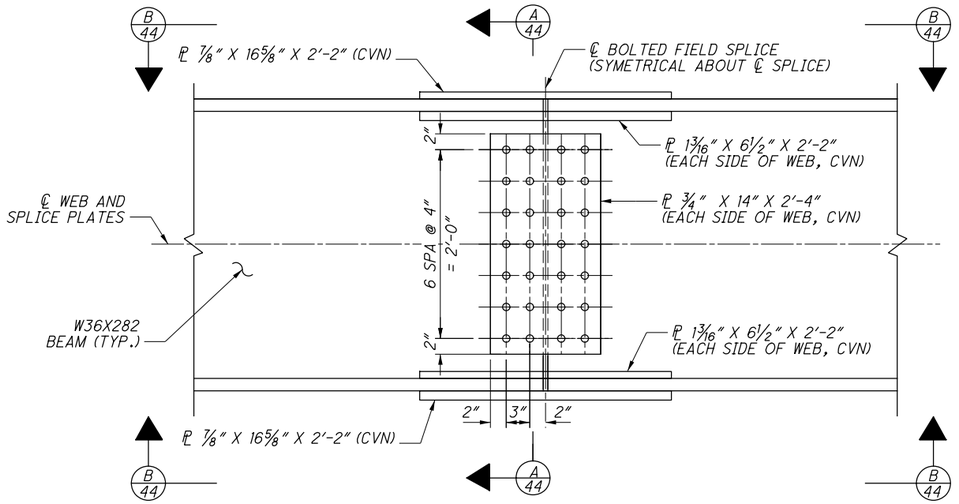
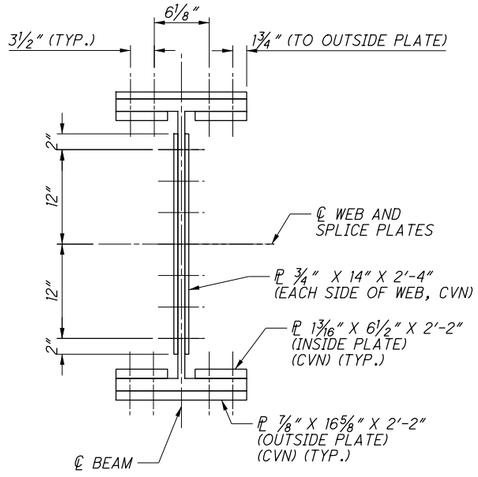
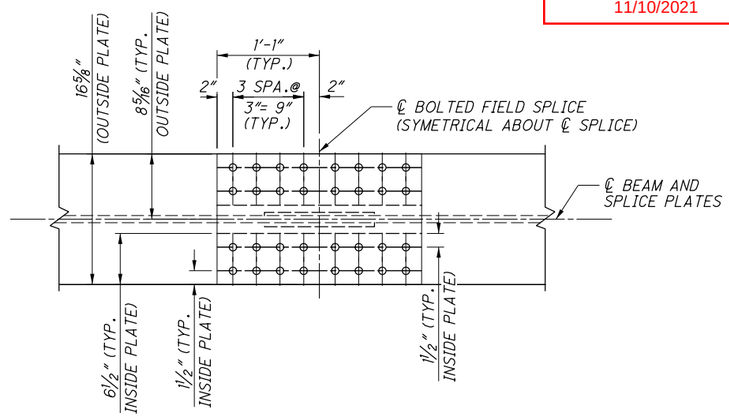


TYPICAL FIELD SPLICE DETAIL

AHEAD STATION

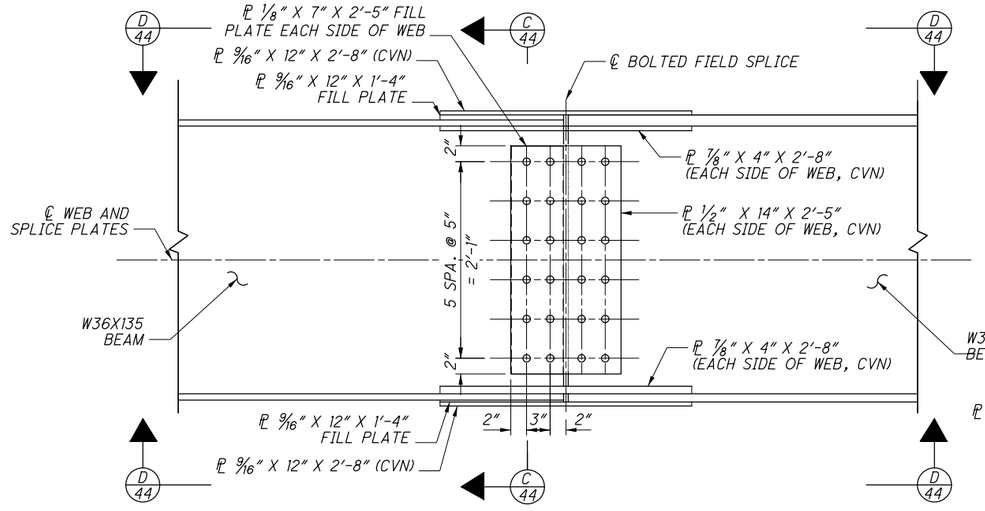


A 44 SECTION THRU BEAM



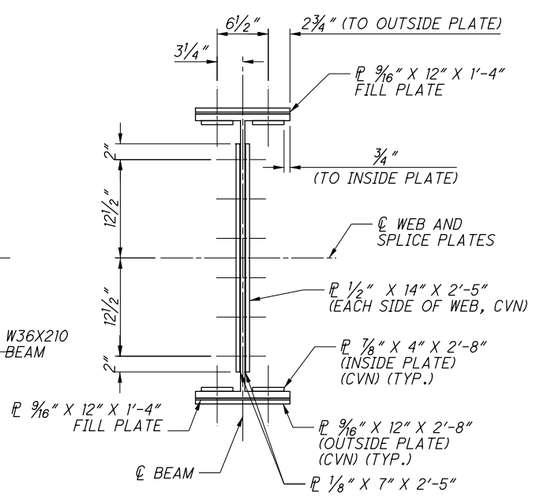
B 44 VIEW
(1 OUTSIDE PLATE AND 2 INSIDE PLATES)
AHEAD STATION

FIELD SPLICE 1-3
(BEAM 1, SPICE 3)

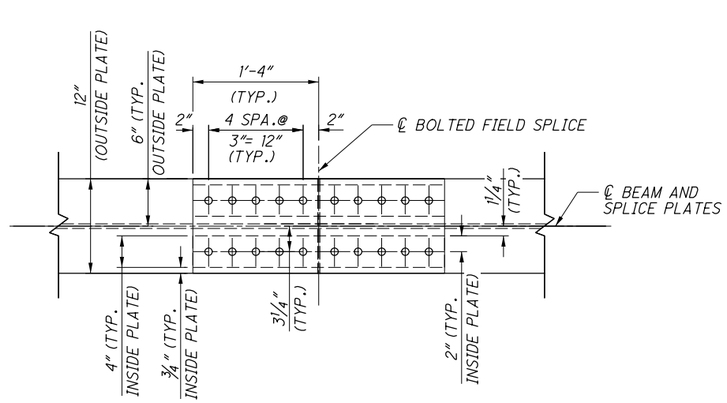


TYPICAL FIELD SPLICE DETAIL

AHEAD STATION



C 44 SECTION THRU BEAM



D 44 VIEW
(1 OUTSIDE PLATE AND 2 INSIDE PLATES)
AHEAD STATION

FIELD SPLICE 2-1
(BEAMS 2-16, SPLICE 1)

NOTES:

1. FOR NOTES, SEE SHEET 43/70.

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STRUCTURAL STEEL DETAILS 2 OF 4
BRIDGE NO. SUM-76-0954
I-R. 76 OVER BOWERY STREET & OHIO CANAL

2021-11-04_BU 13 - RFC PLANS

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PID No. 102329

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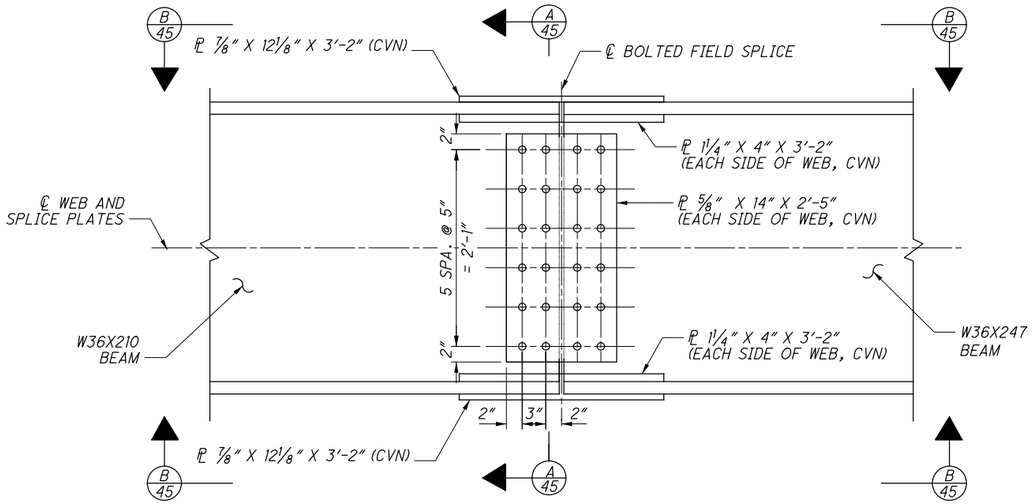
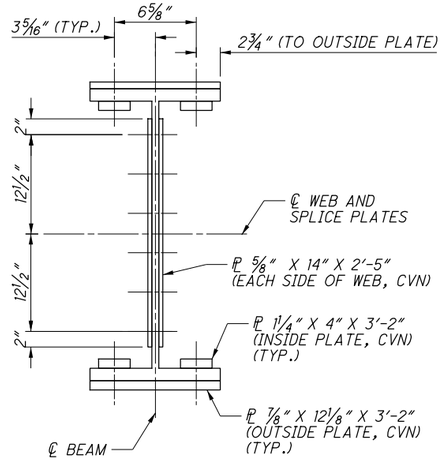
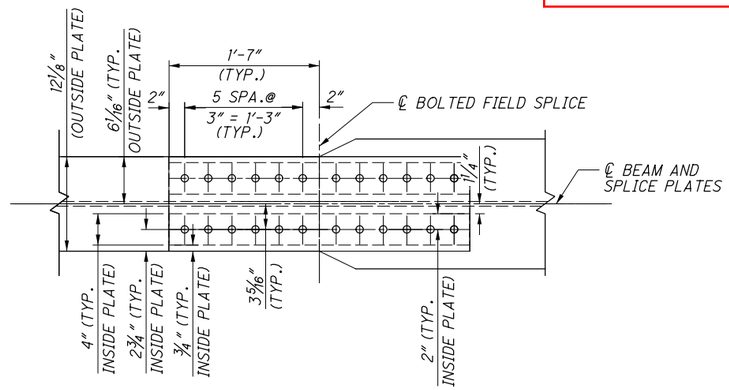


TYPICAL FIELD SPLICE DETAIL

AHEAD STATION



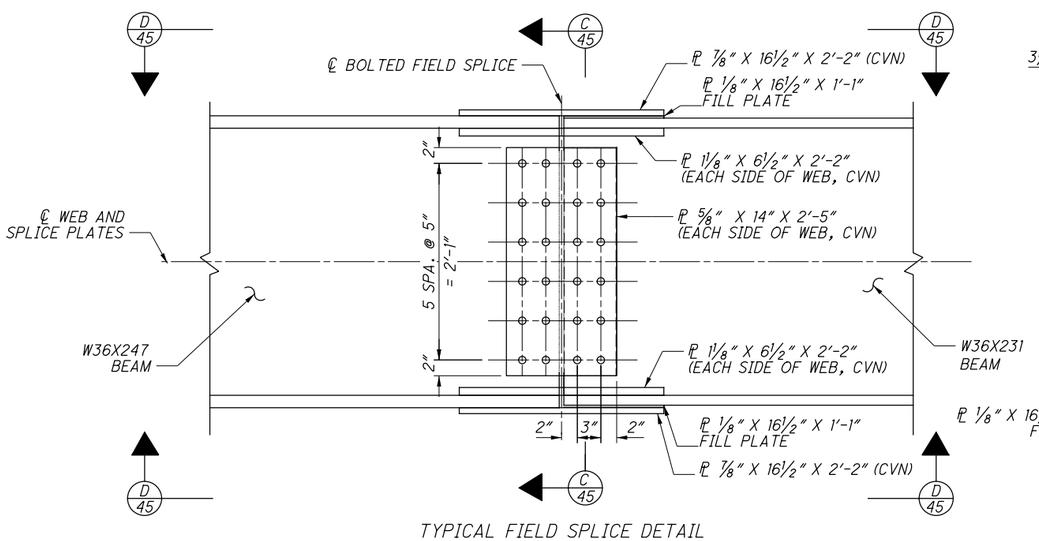
A 45 SECTION THRU BEAM



B 45 VIEW
(1 OUTSIDE PLATE AND 2 INSIDE PLATES)
AHEAD STATION

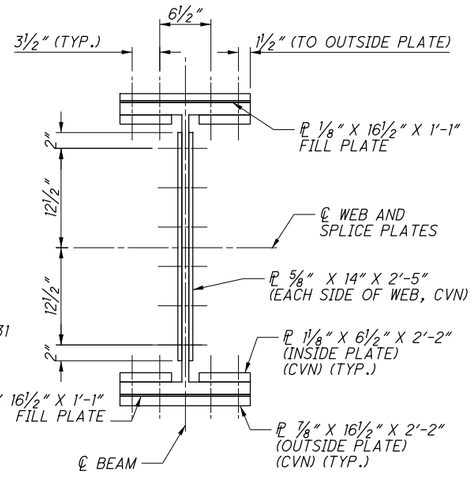
FIELD SPLICE 2-2

(BEAMS 2-16, SPLICE 2)

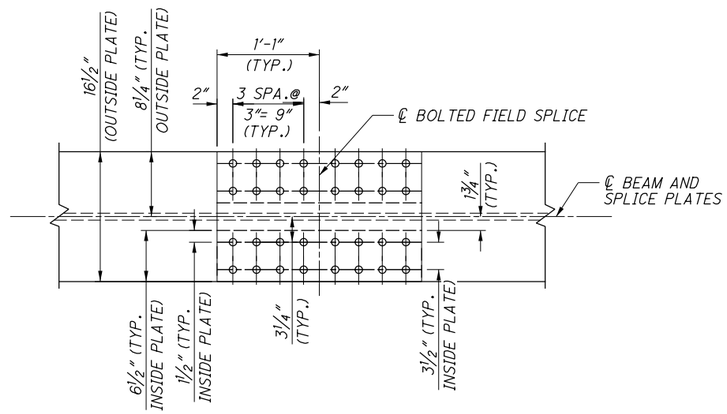


TYPICAL FIELD SPLICE DETAIL

AHEAD STATION



C 45 SECTION THRU BEAM



D 45 VIEW
(1 OUTSIDE PLATE AND 2 INSIDE PLATES)
AHEAD STATION

FIELD SPLICE 2-3

(BEAMS 2-16, SPLICE 3)

NOTES:

1. FOR NOTES, SEE SHEET 43/70.

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STRUCTURAL STEEL DETAILS 3 OF 4

BRIDGE NO. SUM-76-0954

I.R. 76 OVER BOWERY STREET & OHIO CANAL

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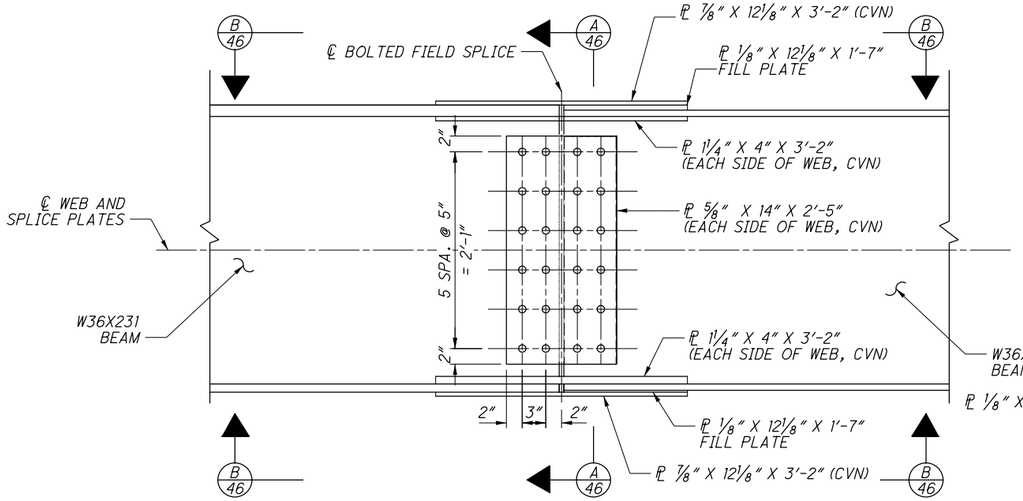
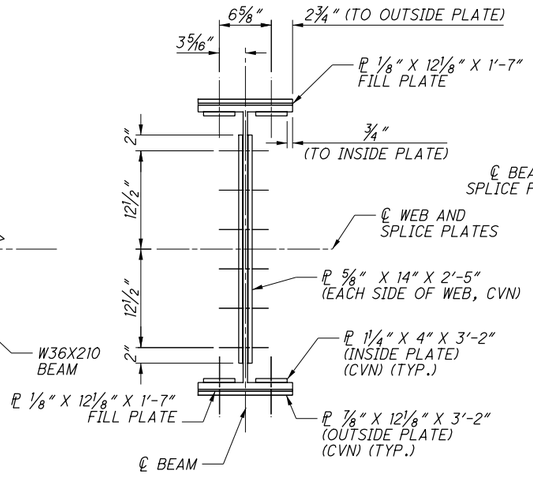
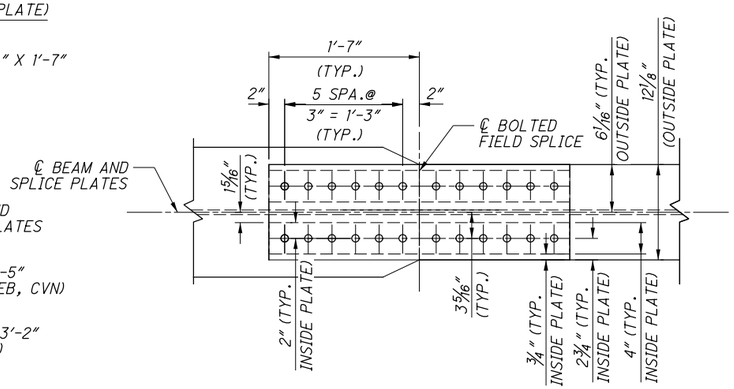


TYPICAL FIELD SPLICE DETAIL

AHEAD STATION

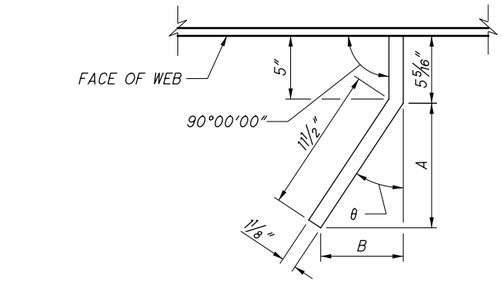


A 46 SECTION THRU BEAM SPLICE

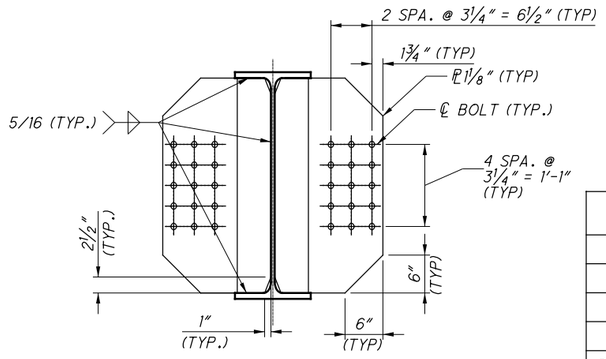


B 46 VIEW
(1 OUTSIDE PLATE AND 2 INSIDE PLATES)
AHEAD STATION

FIELD SPLICE 2-4
(BEAMS 2-16, SPLICE 4)



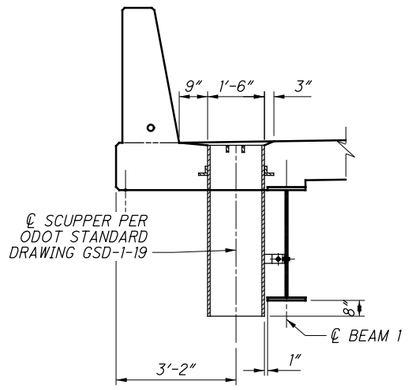
PIER CONNECTION PLATE PLAN



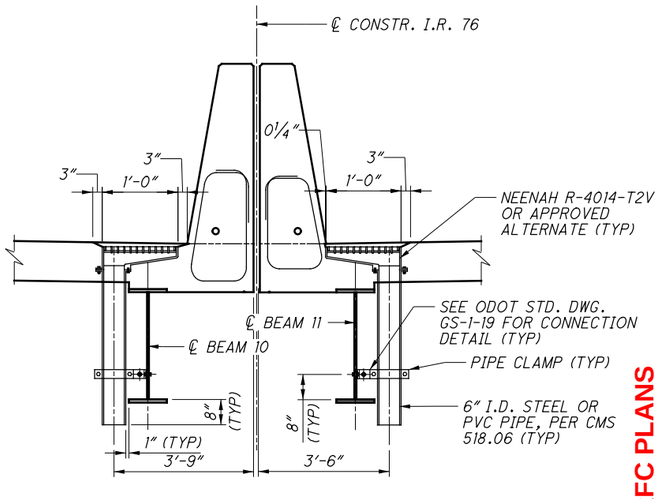
PIER CONNECTION PLATE DETAIL

FOR ADDITIONAL INFORMATION, SEE STD. DWG. GS-1-19

PIER CONNECTION PLATE DIMENSIONS			
LOCATION	A	B	θ
BEAM 1	9 7/8"	6 9/16"	33°30'55"
BEAM 2	9 15/16"	6 7/16"	33°06'39"
BEAM 3	9 15/16"	6 3/8"	33°42'08"
BEAMS 4 - 16	10"	6 5/16"	32°17'25"



TYPE 1 SCUPPER



TYPE 2 SCUPPER

NOTES:

1. FOR LOCATIONS OF SCUPPERS, SEE DECK PLAN SHEET 2/70 AND 49/70.
2. TYPE 1 SCUPPERS ARE LOCATED ALONG BEAM 1 ON LEFT BRIDGE. TYPE 2 SCUPPERS ARE LOCATED ALONG BEAMS 10 AND 11 AT MEDIAN SHOULDERS.
3. FOR ADDITIONAL SCUPPER DETAILS, SEE STD. DWG. GS-1-19.
4. FOR ADDITIONAL NOTES, SEE SHEET 43/70.

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STRUCTURAL STEEL DETAILS 4 OF 4
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2021-11-04_BU 13 - RFC PLANS

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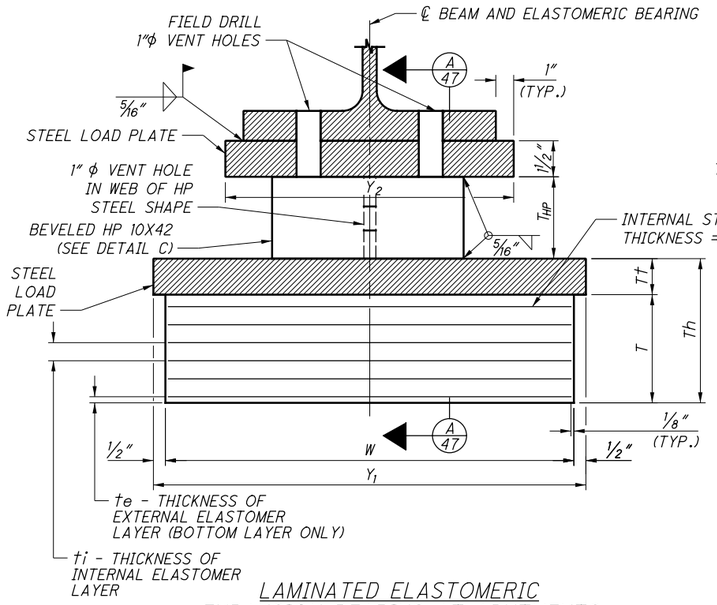
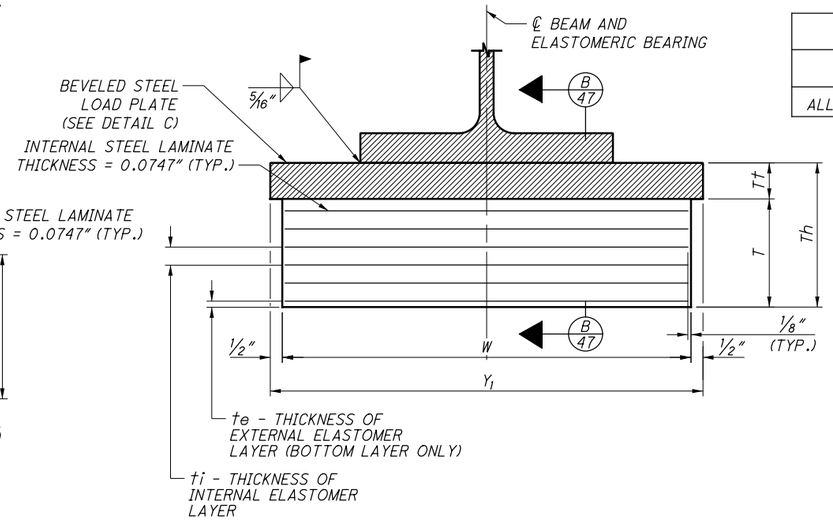
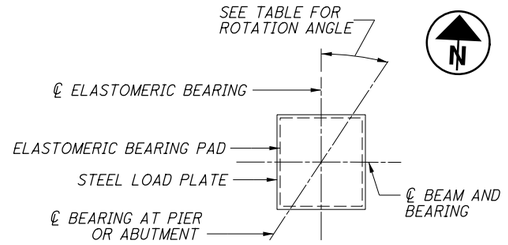


LAMINATED ELASTOMERIC
EXPANSION BEARING AT ABUTMENTS

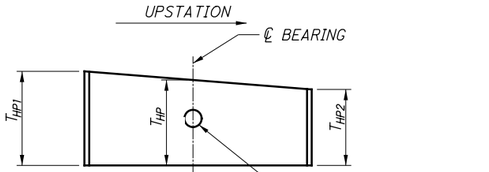


LAMINATED ELASTOMERIC
EXPANSION BEARING AT PIERS

ROTATION ANGLE				
LOCATION	BEAM 1	BEAM 2	BEAM 3	BEAMS 4-16
ALL SUBSTRUCTURES	33°30'55"	33°06'39"	32°42'09"	32°17'25"

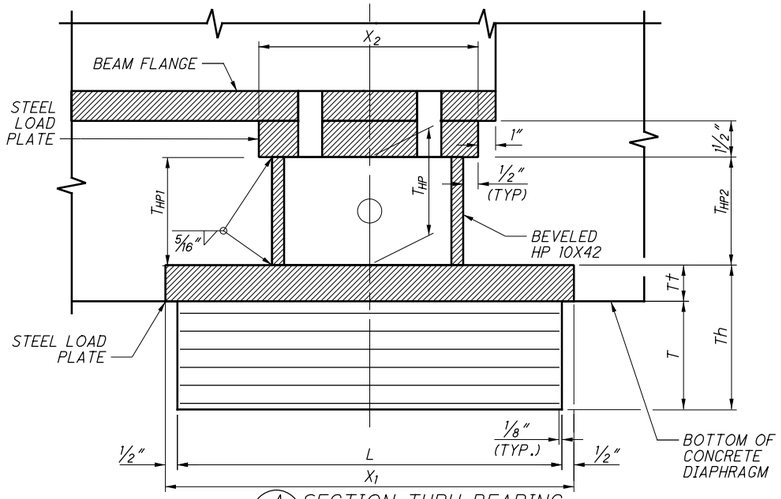


BEARING ORIENTATION PLAN



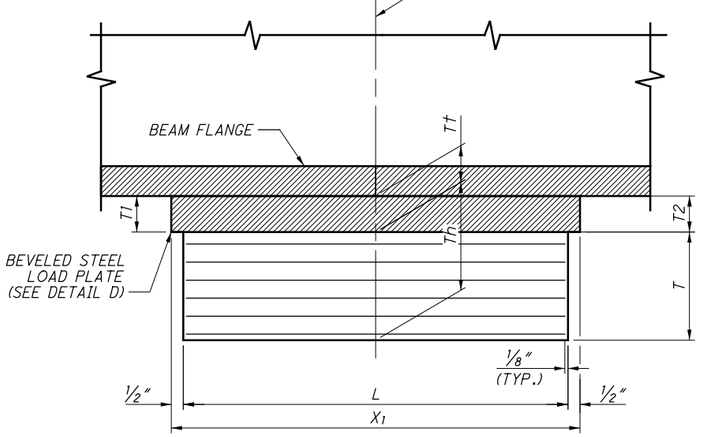
DETAIL C
BEVELED HP SHAPE

DETAIL D
BEVELED LOAD PLATE



A 47 SECTION THRU BEARING (AT ABUTMENTS)

NOTE:
T1 & T_{HP1} UPSTATION T2 & T_{HP2}



B 47 SECTION THRU BEARING (AT PIERS)

NOTE:
T1 UPSTATION T2

ELASTOMERIC BEARING DATA

LOCATION	TYPE	NO. REQ.D	DL (KIP)	LL W/O IMPACT (KIP)	MAXDESIGN LOAD (DL+LL) (KIP)	L (IN.)	W (IN.)	ti (IN.)	te (IN.)	NO OF ti's	NO. INTERNAL LAMINATES	T (IN.)	STEEL LOAD PLATES								HP SECTION		
													X_1 (IN.)	Y_1 (IN.)	T1 (IN.)	T2 (IN.)	Tt (IN.)	Th (IN.)	X_2 (IN.)	Y_2 (IN.)	T_{HP1} (IN.)	T_{HP} (IN.)	T_{HP2} (IN.)
*ABUTMENTS	EXP	31	70.9	75.3	146.3	13	14	0.500	0.25	7	7	4.273	14	15	1.50	1.50	1.50	5.773	10.75	14.00	5.95	6.00	6.05
ABUTMENT	EXP	1	70.9	75.3	146.2	13	14	0.500	0.25	7	7	4.273	14	15	1.50	1.50	1.50	5.773	10.75	18.50	5.95	6.00	6.05
PIER 1	EXP	16	125.5	112.1	237.6	16	18	0.500	0.25	7	7	4.273	17	19	1.50	1.67	1.59	5.773	-	-	-	-	-
PIERS 2-5	EXP	64	216.5	132.7	349.2	20	18	0.500	0.25	7	7	4.273	21	19	1.50	1.71	1.61	5.773	-	-	-	-	-

* APPLIES TO ALL ABUTMENT BEARINGS EXCEPT AT BEAM 1 (WB) AT FORWARD ABUTMENT.

NOTES:

1. THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGES.
2. THE STEEL LOAD PLATES AND HP SHAPES SHALL BE ASTM A709 GRADE 50 STEEL AND PRIME PAINTED IN ACCORDANCE WITH ITEM 513. THE STEEL LOAD PLATES AT THE PIERS SHALL ALSO BE PAINTED IN ACCORDANCE WITH ITEM 514 TO MATCH BEAM COLOR.
3. THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS. CONTROL WELDING SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300°F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
4. BEARING REPOSITIONING: IF THE STEEL IS ERECTED AT AN AMBIENT TEMPERATURE HIGHER THAN 80°F OR LOWER THAN 40° AND THE BEARING SHEAR DEFLECTION EXCEEDS 1/8 OF THE BEARING HEIGHT AT 60°F± 10°F, RAISE THE BEAMS TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 60°F± 10°F.
5. TOTAL DESIGN LOAD FOR BEARINGS EQUALS THE SUM OF THE DEAD LOADS AND LIVE LOADS TABULATED IN THE BEARING TABLE. IMPACTED IS NOT INCLUDED.
6. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND VISIBLE AFTER THE BEARING IS INSTALLED.

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BEARING DETAILS
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2021-11-04_BU 13 - RFC PLANS

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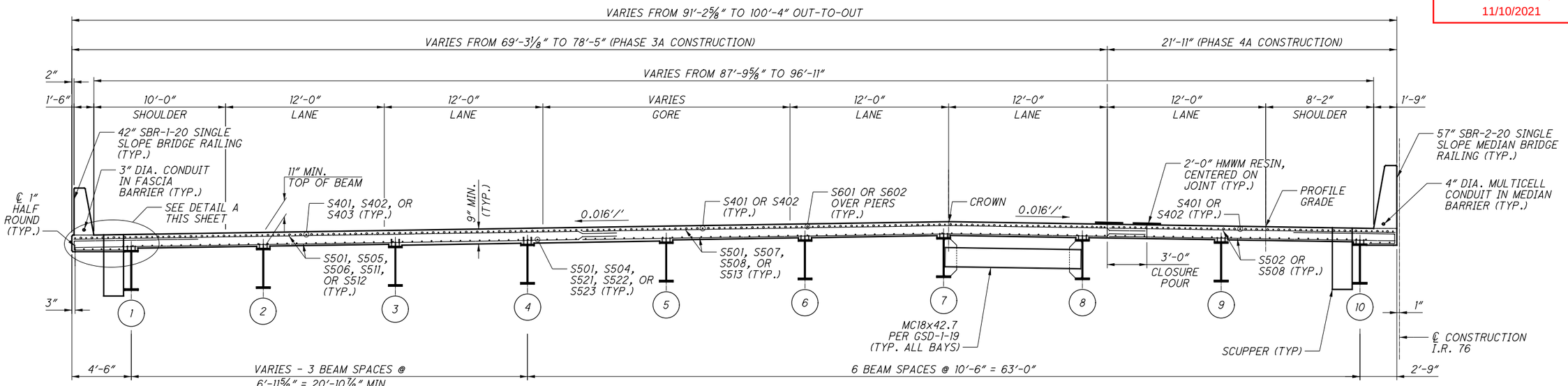
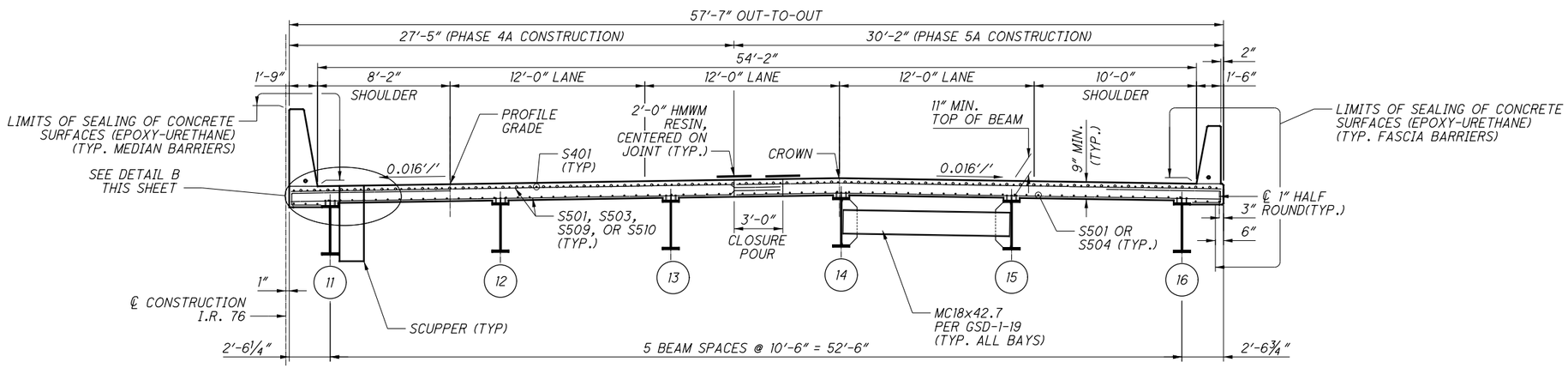
PID No. 102329



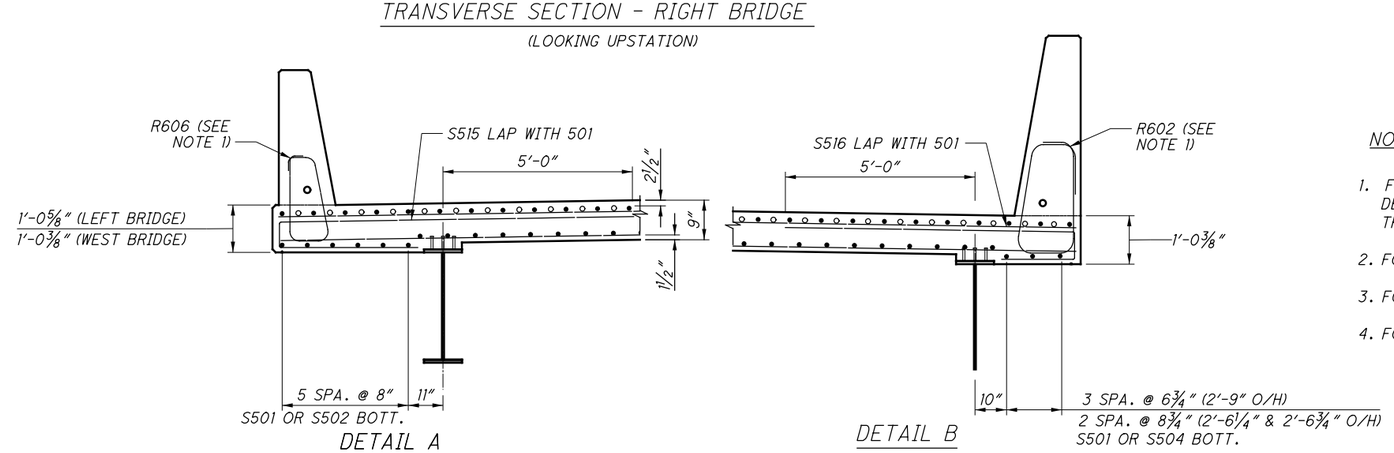
TRANSVERSE SECTION - LEFT BRIDGE

(LOOKING UPSTATION)



TRANSVERSE SECTION - RIGHT BRIDGE

(LOOKING UPSTATION)



NOTES:

1. FOR ADDITIONAL PARAPET AND MEDIAN BARRIER DETAILS INCLUDING REINFORCEMENT CAST WITH THE DECK POUR, SEE SHEET 65/70.
2. FOR REINFORCING STEEL LIST SEE SHEET 69/70.
3. FOR TOP OF DECK PLAN, SEE SHEET 49/70.
4. FOR BOTTOM OF DECK PLAN, SEE SHEET 50/70.

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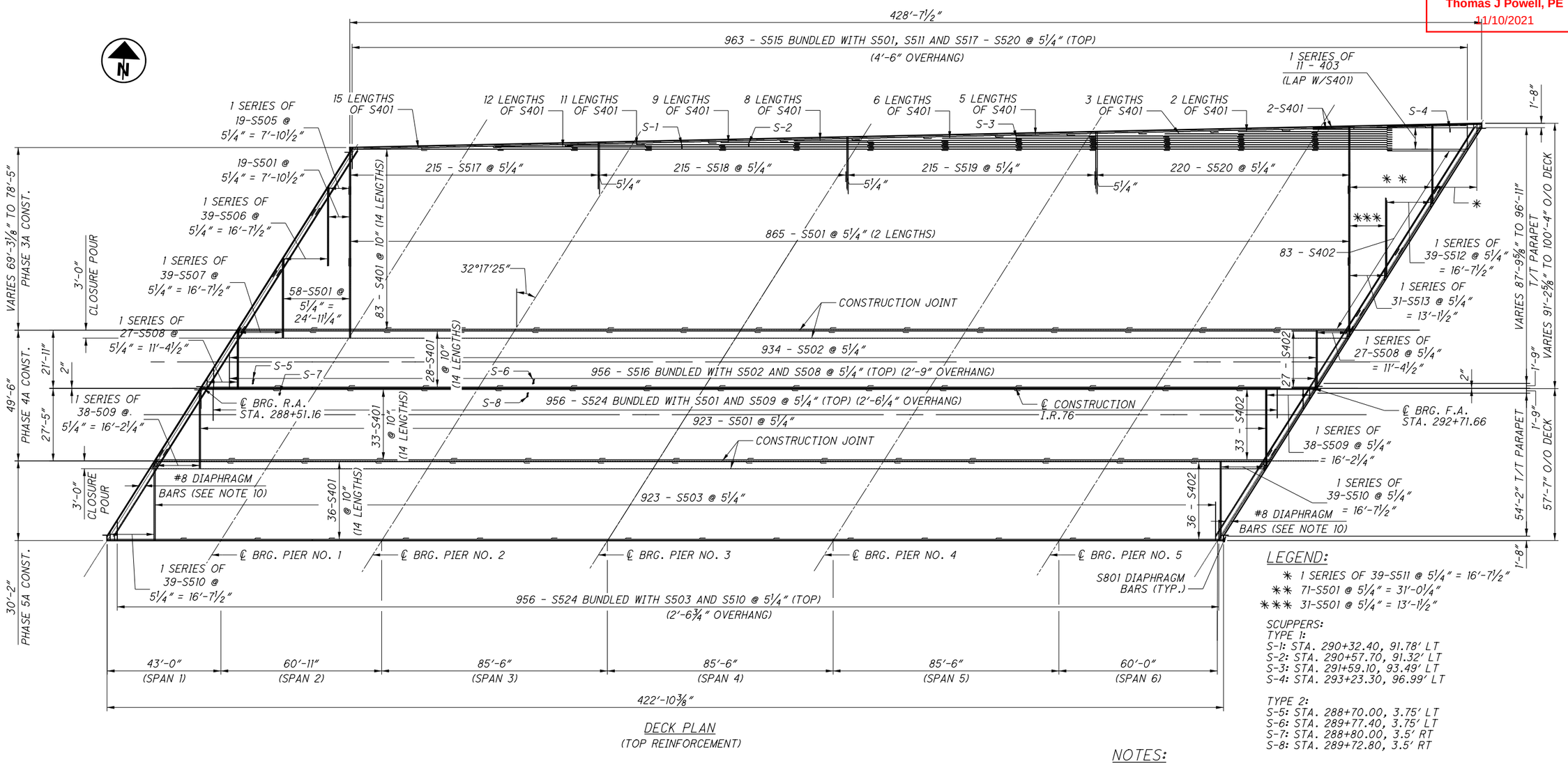
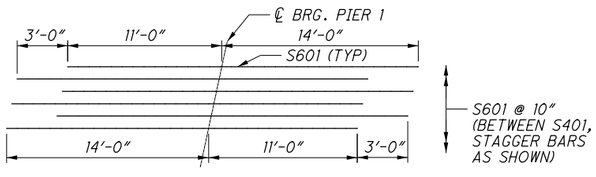
48/70

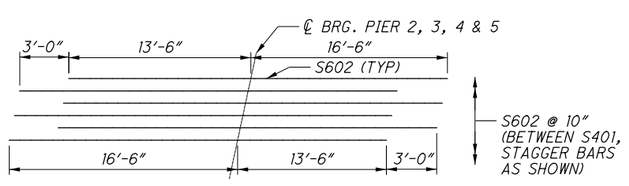
92/153



DECK PLAN
(TOP REINFORCEMENT)



ADDITIONAL PIER REINFORCEMENT DETAIL



ADDITIONAL PIER REINFORCEMENT DETAIL

LAP LENGTHS	
NO. 4 BARS	1'-11"
NO. 5 BARS	2'-10"

LEGEND:

* 1 SERIES OF 39-S511 @ 5¼" = 16'-7½"
** 71-S501 @ 5¼" = 31'-0¼"
*** 31-S501 @ 5¼" = 13'-1½"

SCUPPERS:
TYPE 1:
S-1: STA. 290+32.40, 91.78' LT
S-2: STA. 290+57.70, 91.32' LT
S-3: STA. 291+59.10, 93.49' LT
S-4: STA. 293+23.30, 96.99' LT

TYPE 2:
S-5: STA. 288+70.00, 3.75' LT
S-6: STA. 289+77.40, 3.75' LT
S-7: STA. 288+80.00, 3.5' RT
S-8: STA. 289+72.80, 3.5' RT

NOTES:

1. FOR GENERAL NOTES SEE SHEET 2/153 AND 3/153.
2. FOR REINFORCING STEEL LIST SEE SHEETS 69/70 - 70/70.
3. FOR SCREED, TOP OF HAUNCH & FINAL DECK SURFACE ELEVATIONS SEE SHEETS 55/70 THRU 64/70.
4. FOR TRANSVERSE SECTION SEE SHEET 48/70.
5. FOR PARAPET NOTES AND DETAILS INCLUDING REINFORCING STEEL CAST WITH THE DECK POUR, SEE ODOT STANDARD DRAWINGS SBR-1-20 AND SBR-2-20 & SHEET 65/70.
6. REBAR CLEARANCE MEASURED TO THE FACE OF CONCRETE SHALL BE 2" UNLESS OTHERWISE NOTED.
7. FOR TYPE 1 AND TYPE 2 SCUPPER DETAILS, SEE SHEET 46/70.
8. FOR REINFORCING DETAILS AT SCUPPERS, SEE SHEET 50/70.
9. FOR BOTTOM DECK REINFORCING, SEE SHEET 50/70.
10. FOR REAR AND FORWARD ABUTMENT DIAPHRAGM DETAILS INCLUDING REINFORCEMENT, SEE SHEETS 51/70 THRU 54/70.

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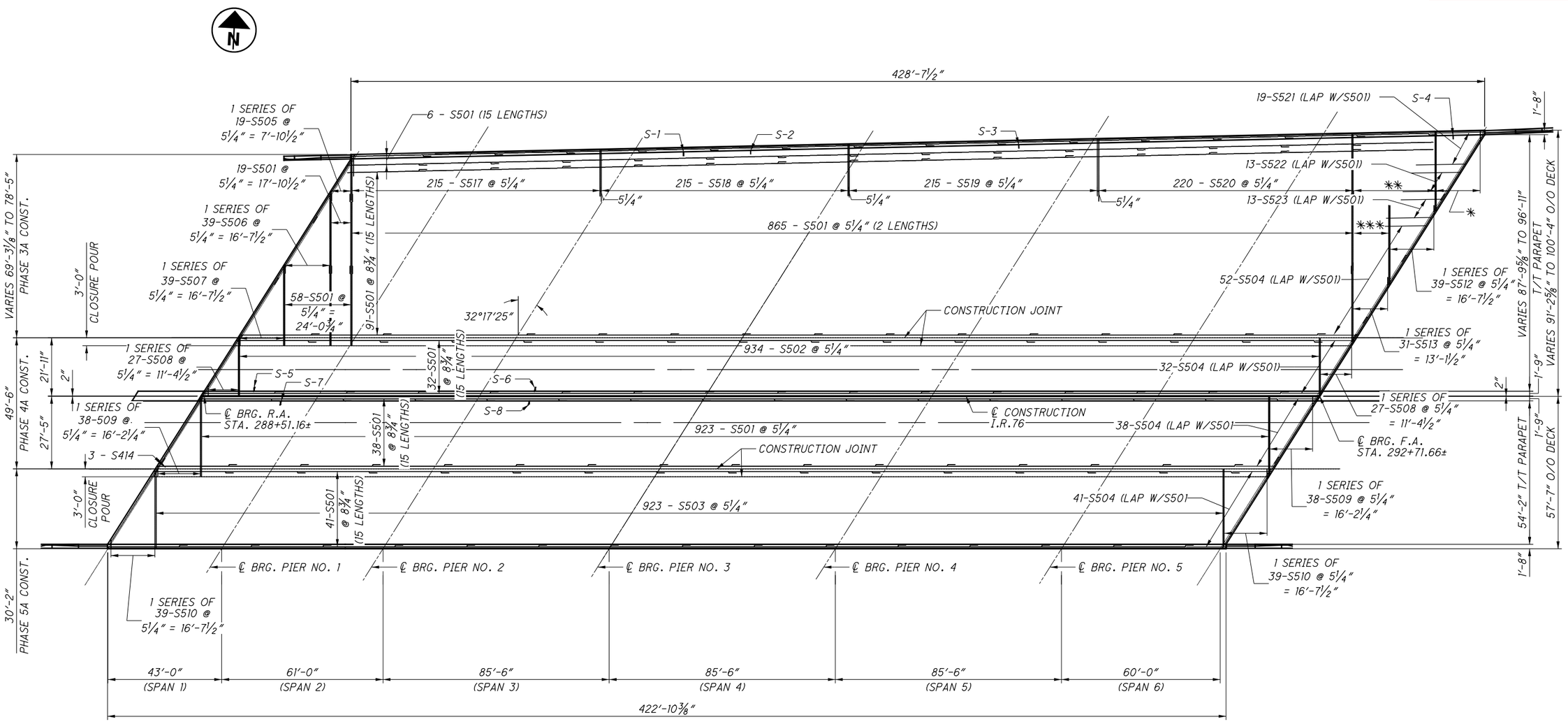
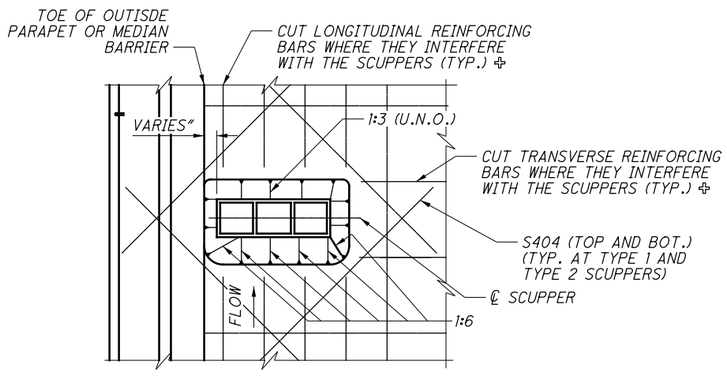
DECK PLAN
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2021-11-04_BU 13 - RFC PLANS



DECK PLAN
(BOTTOM REINFORCEMENT)



REINFORCING AT TYPE 1 AND TYPE 2 SCUPPERS

LAP LENGTHS	
NO. 4 BARS	1'-11"
NO. 5 BARS	2'-10"

LEGEND:

* 1 SERIES OF 39-S511 @ 5¼" = 16'-7½"
** 71-S501 @ 5¼" = 30'-7½"
*** 31-S501 @ 5¼" = 13'-1½"

✣ - ANY DAMAGE DONE TO THE EPOXY COATING ON THE REINFORCING STEEL WHILE PERFOMING THIS WORK SHALL BE REPAIRED PER CMS 509.09

NOTES:

1. FOR DECK NOTES SEE SHEET 49/70.
2. FOR TOP DECK REFINFORCING, SEE SHEET 49/70.

2021-11-04_BU 13 - RFC PLANS

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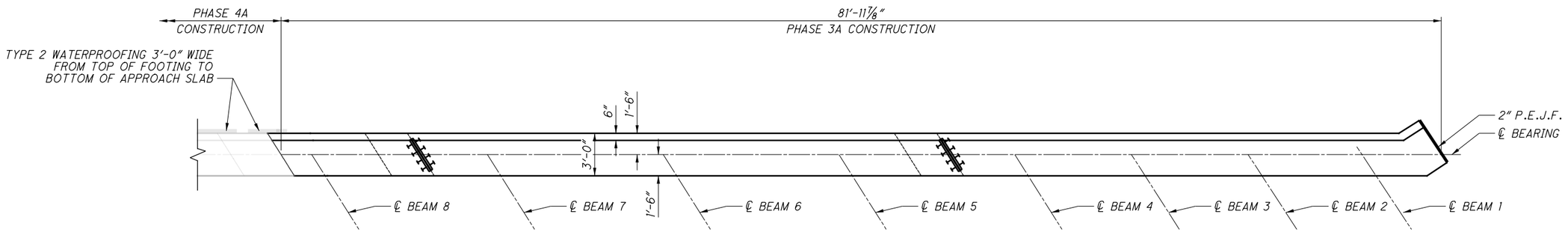
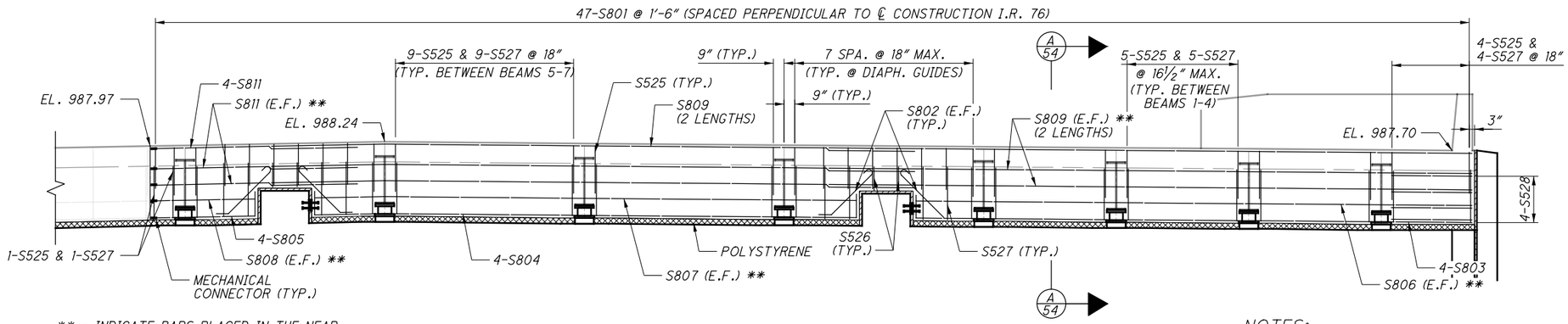
DECK PLAN
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329



PLAN - PHASE 3A
(REAR ABUTMENT SHOWN)



** - INDICATE BARS PLACED IN THE NEAR FACE THRU HOLES IN THE WEB

ELEVATION - PHASE 3A
(REAR ABUTMENT SHOWN)

MIN. LAP LENGTHS	
NO. 8 BARS	5'-4"

NOTES:

1. ABUTMENT DIAPHRAGM CONCRETE, PHASED CONSTRUCTION: PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS AFTER THE DECK PLACEMENT IN THE ADJACENT SPAN IS COMPLETE. PROCEDURES THAT PLACE THE ABUTMENT DIAPHRAGM WITH THE DECK MAY BE APPROVED BY THE ENGINEER IF THE PLACEMENT SUBMITTAL CAN ASSURE THAT THE DECK CONCRETE IN ADJACENT SPAN WILL BE PLACED BEFORE CONCRETE IN THE DIAPHRAGM HAS REACHED IT'S INITIAL SET. PLACE CLOSURE POUR CONCRETE IN THE DIAPHRAGM AND DECK CONCURRENTLY.
2. FOR ABUTMENT PLANS AND ELEVATIONS INCLUDING SEAT ELEVATIONS SEE SHEETS 17/70 THRU 24/70.
3. FOR DETAILS NOT SHOWN, SEE ODOT STD. DRAWING SICD-1-96 & SICD-2-14.
4. FOR BEAM ELEVATION INCLUDING WEB HOLES, SEE SHEET 39/70.
5. FOR PARAPET PLAN AND ELEVATION, SEE SHEETS 2/70 AND 65/70.
6. PLACE VERTICAL BARS PARALLEL TO BEAMS.
7. PLACE DIAPHRAGM REINFORCING BEFORE CONSTRUCTING WINGWALLS.
8. FOR ELASTOMERIC BEARING DETAILS, SEE SHEET 47/70.

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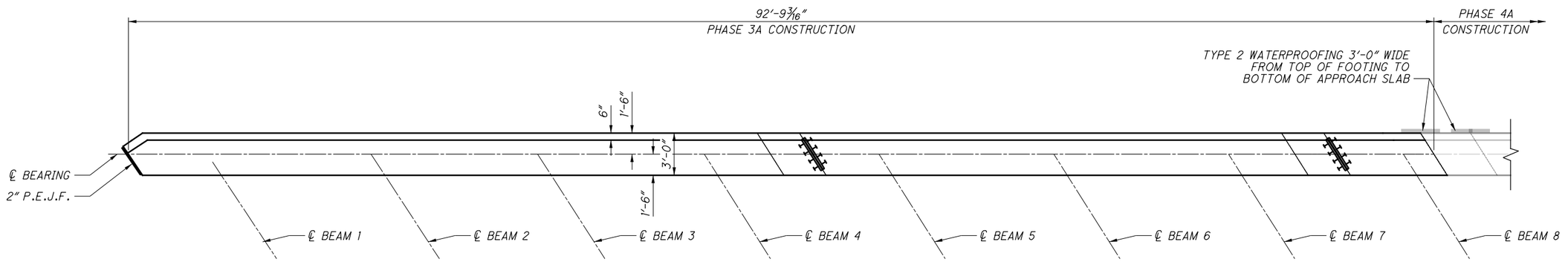
REAR ABUTMENT DIAPHRAGM DETAILS
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

51/70

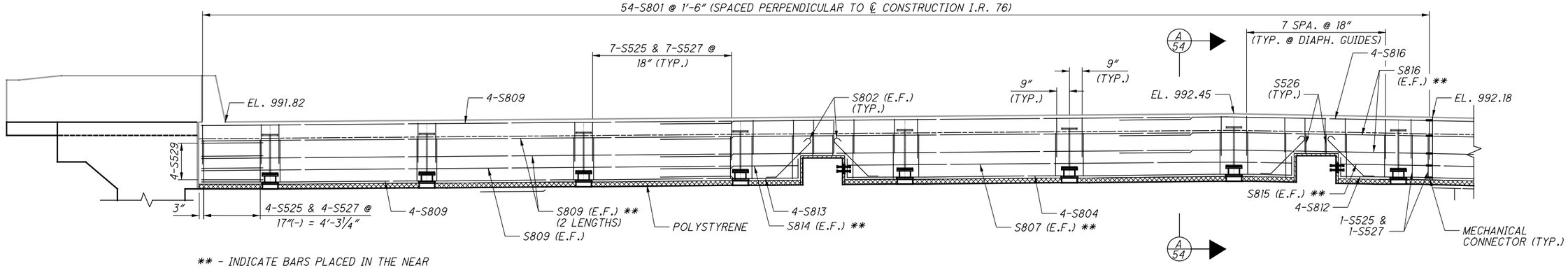
95/153

2021-11-04_BU 13 - RFC PLANS



PLAN - PHASE 3A

(FORWARD ABUTMENT SHOWN)



** - INDICATE BARS PLACED IN THE NEAR FACE THRU HOLES IN THE WEB

ELEVATION - PHASE 3A

(FORWARD ABUTMENT SHOWN)

MIN. LAP LENGTHS	
NO. 8 BARS	5′-4″

NOTES:

1. FOR ADDITIONAL DIAPHRAGM NOTES, SEE SHEET 51/70.

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FORWARD ABUTMENT DIAPHRAGM DETAILS
BRIDGE NO. SUM-76-0954
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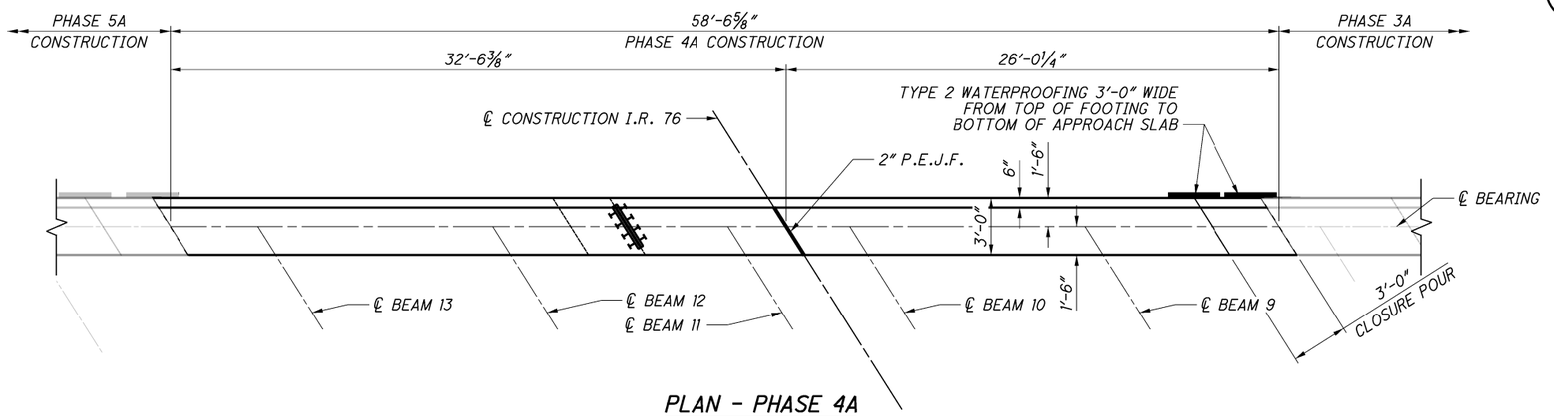
0.63/9.74/8.42
PID No. 102329

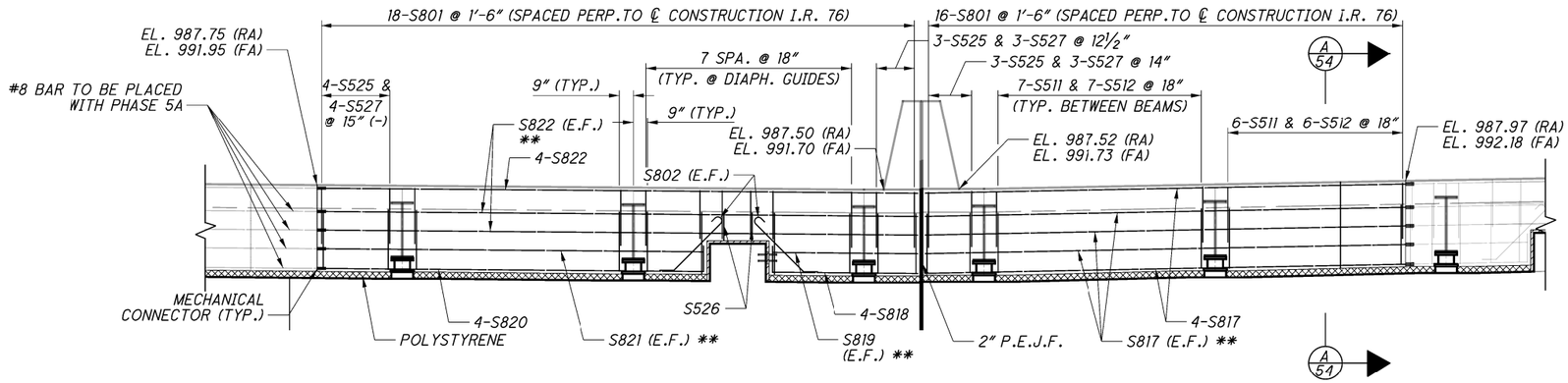
52 / 70

96
153



PLAN - PHASE 4A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)



** - INDICATE BARS PLACED IN THE NEAR FACE THRU HOLES IN THE WEB

ELEVATION - PHASE 4A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)

MIN. LAP LENGTHS	
NO. 8 BARS	5'-4"

NOTES:

1. FOR ADDITIONAL DIAPHRAGM NOTES, SEE SHEET 51/70.

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REAR ABUTMENT DIAPHRAGM DETAILS
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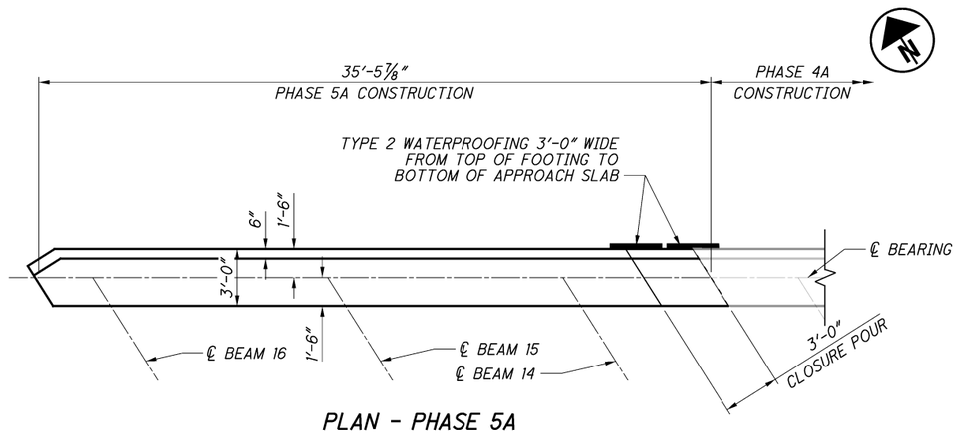
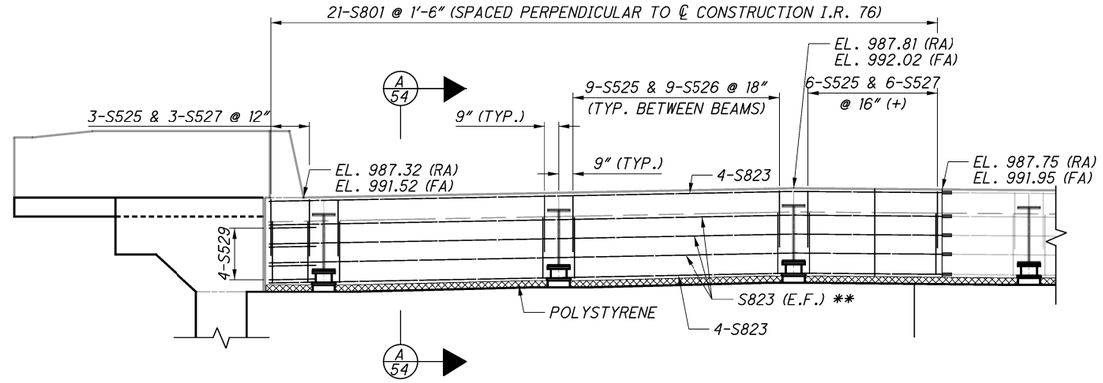


PLAN - PHASE 5A

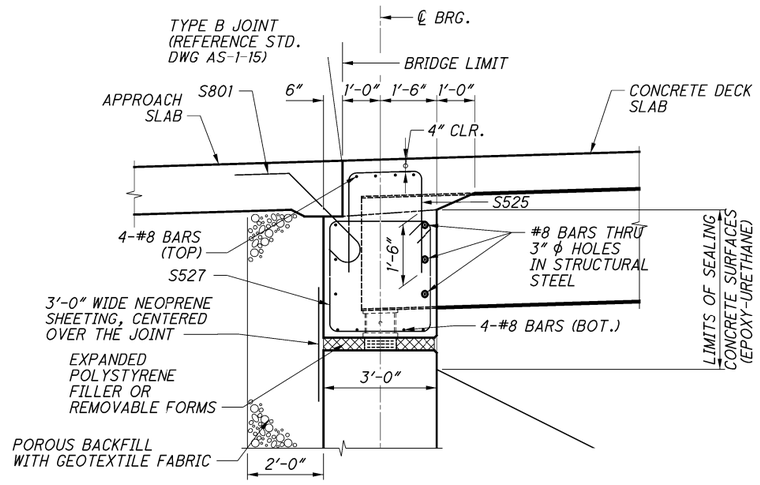
(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)



** - INDICATE BARS PLACED IN THE NEAR FACE THRU HOLES IN THE WEB

ELEVATION - PHASE 5A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)



A — SECTION THRU DIAPHRAGM

51, 52, 53 & 54

NOTES:

1. FOR ADDITIONAL DIAPHRAGM NOTES, SEE SHEET 51/70.

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REAR ABUTMENT DIAPHRAGM DETAILS
BRIDGE NO. SUM-76-0954
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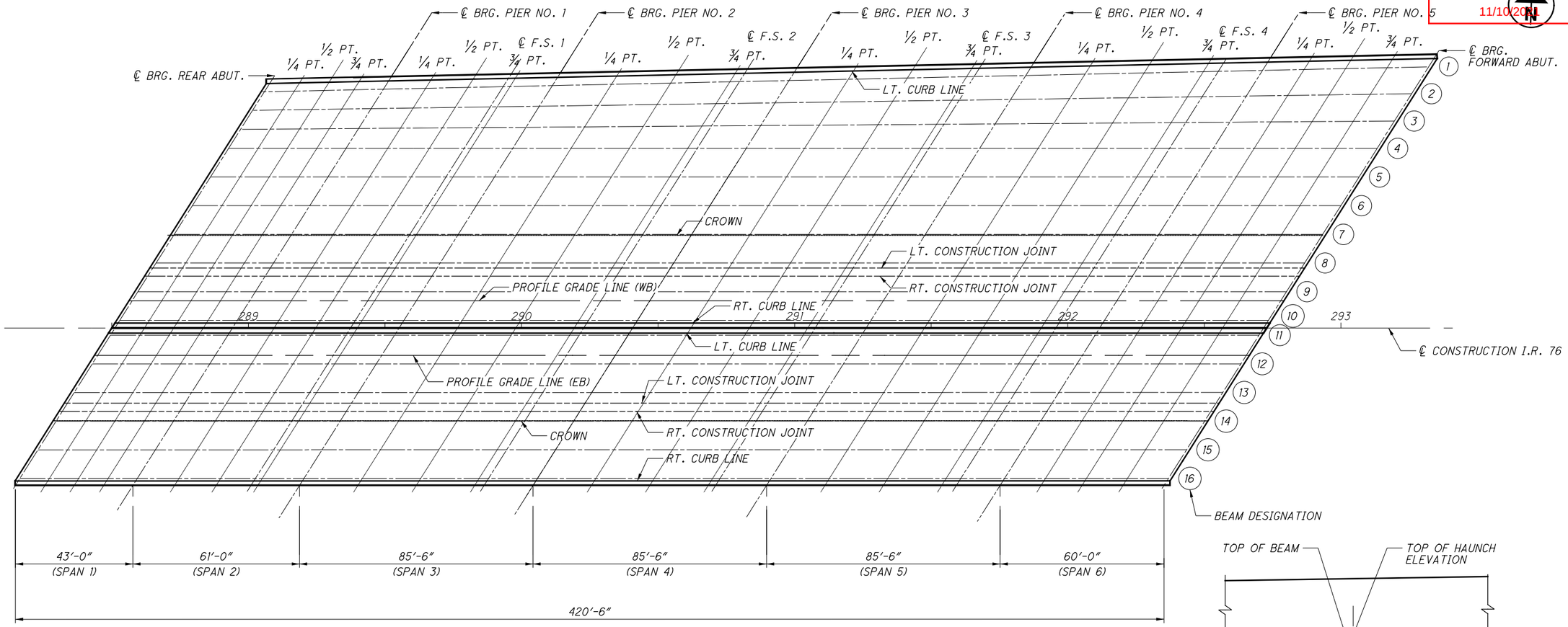
PID No. 102329

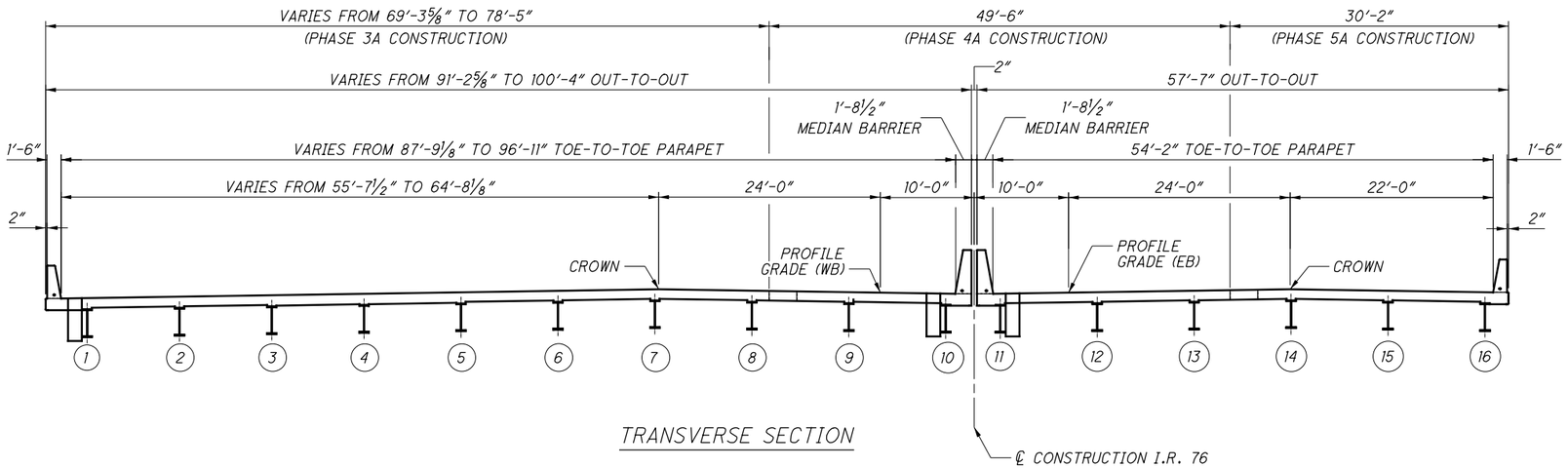
54 / 70

98
153

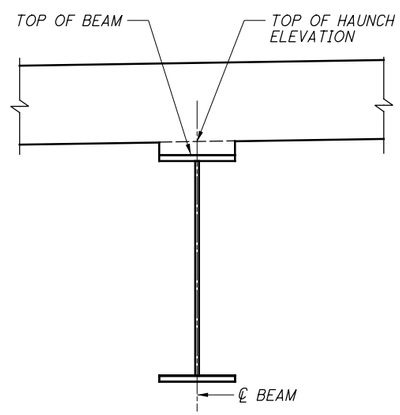
2021-11-04_BU 13 - RFC PLANS



PLAN



TRANSVERSE SECTION



TOP OF HAUNCH DETAIL

NOTES:

1. FOR SCREED ELEVATIONS, SEE SHEET 56/70 AND 57/70.
2. FOR TOP OF HAUNCH ELEVATIONS, SEE SHEET 58/70 THRU 60/70.
3. FOR FINAL DECK SURFACE ELEVATIONS, SEE SHEET 61/70 THRU 64/70.
4. FOR DECK PLAN, SEE SHEETS 49/70 AND 50/70 .
5. FOR TRANSVERSE SECTION, SEE SHEET 48/70.
6. FOR FRAMING PLAN, SEE SHEET 38/70.

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ELEVATION LOCATION PLAN
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2021-11-04_BU 13 - RFC PLANS

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LEFT BRIDGE SCREED ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			
			1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	F.S. #1	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	F.S. #2
LEFT CURB LINE	STATION	289+07.79	289+18.69	289+29.58	289+40.48	289+51.38	289+66.84	289+82.29	289+94.04	289+97.75	290+13.21	290+34.88	290+56.55	290+78.21	290+79.37
	SCREED ELEVATION	987.70	987.82	987.93	988.03	988.12	988.28	988.43	988.54	988.57	988.72	988.98	989.22	989.39	989.39
PROFILE GRADE LINE	STATION	288+72.64	288+83.39	288+94.14	289+04.89	289+15.64	289+30.89	289+46.14	289+58.89	289+61.39	289+76.64	289+98.02	290+19.39	290+40.77	290+44.22
	SCREED ELEVATION	988.24	988.36	988.47	988.57	988.67	988.83	988.99	989.11	989.13	989.28	989.56	989.81	989.98	990.00
LEFT CONSTRUCTION JOINT	STATION	288+65.06	288+75.81	288+86.56	288+97.31	289+08.06	289+23.31	289+38.56	289+51.31	289+53.81	289+69.06	289+90.43	290+11.81	290+33.18	290+36.64
	SCREED ELEVATION	987.97	988.09	988.20	988.30	988.40	988.57	988.72	988.84	988.86	989.01	989.29	989.54	989.71	989.73
RIGHT CONSTRUCTION JOINT	STATION	288+63.16	288+73.91	288+84.66	288+95.41	289+06.16	289+21.41	289+36.66	289+49.41	289+51.91	289+67.16	289+88.54	290+09.91	290+31.29	290+34.75
	SCREED ELEVATION	987.91	988.03	988.14	988.24	988.34	988.50	988.66	988.77	988.79	988.95	989.22	989.47	989.64	989.66
CROWN	STATION	288+57.48	288+68.23	288+78.98	288+89.73	289+00.48	289+15.73	289+30.98	289+43.73	289+46.23	289+61.48	289+82.85	290+04.23	290+25.60	290+29.06
	SCREED ELEVATION	987.70	987.83	987.94	988.04	988.13	988.30	988.45	988.57	988.59	988.74	989.02	989.27	989.44	989.46
RIGHT CURB LINE	STATION	288+52.29	288+63.04	288+73.79	288+84.54	288+95.29	289+10.54	289+25.79	289+38.54	289+41.04	289+56.29	289+77.66	289+99.04	290+20.41	290+23.87
	SCREED ELEVATION	987.52	987.64	987.75	987.85	987.95	988.11	988.27	988.39	988.41	988.56	988.83	989.08	989.25	989.28

LEFT BRIDGE SCREED ELEVATIONS

LOCATION	COMPONENT	℄ BEARING PIER 3	SPAN 4				℄ BEARING PIER 4	SPAN 5				℄ BEARING PIER 5	SPAN 6			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT	F.S. #3		1/4 PT.	1/2 PT	3/4 PT	F.S. #4		1/4 PT.	1/2 PT	3/4 PT	
LEFT CURB LINE	STATION	290+99.88	291+21.55	291+43.22	291+64.89	291+64.12	291+86.55	292+08.22	292+29.89	292+51.56	292+52.29	292+73.22	292+88.43	293+03.64	293+18.84	293+34.05
	SCREED ELEVATION	989.56	989.79	990.02	990.21	990.20	990.39	990.64	990.88	991.07	991.06	991.23	991.39	991.55	991.69	991.82
CROWN	STATION	290+62.14	290+83.52	291+04.89	291+26.27	291+28.97	291+47.64	291+69.02	291+90.39	292+11.77	292+17.14	292+33.14	292+48.14	292+63.14	292+78.14	292+93.14
	SCREED ELEVATION	990.14	990.38	990.62	990.81	990.83	990.99	991.25	991.51	991.69	991.72	991.85	992.01	992.18	992.32	992.45
LEFT CONSTRUCTION JOINT	STATION	290+54.56	290+75.93	290+97.31	291+18.68	291+21.39	291+40.06	291+61.43	291+82.81	292+04.18	292+09.56	292+25.56	292+40.56	292+55.56	292+70.56	292+85.56
	SCREED ELEVATION	989.87	990.11	990.35	990.54	990.56	990.72	990.99	991.24	991.42	991.46	991.58	991.74	991.91	992.05	992.18
RIGHT CONSTRUCTION JOINT	STATION	290+52.66	290+74.04	290+95.41	291+16.79	291+19.50	291+38.16	291+59.54	291+80.91	292+02.29	292+07.66	292+23.66	292+38.66	292+53.66	292+68.66	292+83.66
	SCREED ELEVATION	989.80	990.04	990.28	990.47	990.49	990.66	990.92	991.17	991.35	991.39	991.51	991.67	991.84	991.99	992.11
PROFILE GRADE LINE	STATION	290+46.98	290+68.35	290+89.73	291+11.10	291+13.81	291+32.48	291+53.85	291+75.23	291+96.60	292+01.98	292+17.98	292+32.98	292+47.98	292+62.98	292+77.98
	SCREED ELEVATION	989.60	989.84	990.08	990.27	990.29	990.45	990.72	990.97	991.15	991.19	991.31	991.47	991.64	991.79	991.91
RIGHT CURB LINE	STATION	290+41.79	290+63.16	290+84.54	291+05.91	291+08.62	291+27.29	291+48.66	291+70.04	291+91.41	291+96.79	292+12.79	292+27.79	292+42.79	292+57.79	292+72.79
	SCREED ELEVATION	989.42	989.66	989.90	990.09	990.11	990.27	990.53	990.78	990.96	991.00	991.13	991.29	991.45	991.60	991.73

NOTES:

1. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. FOR DECK PLAN, SEE SHEETS 49/70 AND 50/70 .
3. FOR TOP OF HAUNCH ELEVATIONS, SEE SHEET 58/70 THRU 60/70.
4. FOR FINAL DECK SURFACE ELEVATIONS, SEE SHEET 61/70 THRU 64/70.
5. FOR ELEVATION LOCATIONS AND HAUNCH DETAIL, SEE SHEET 55/70.

2021-11-04_BU 13 - RFC PLANS

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SCREED ELEVATIONS - 1 OF 2
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329

56/70

100
153

Released for Construction
Thomas J Powell, PE
11/10/2021

RIGHT BRIDGE SCREED ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3				℄ BEARING PIER 3
			1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	F.S. #1	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	F.S. #2	
LEFT CURB LINE	STATION	288+50.02	288+60.77	288+71.52	288+82.27	288+93.02	289+08.27	289+23.52	289+34.27	289+38.77	289+54.02	289+75.40	289+96.77	290+18.15	290+21.61	290+39.52
	SCREED ELEVATION	987.50	987.62	987.73	987.83	987.93	988.09	988.25	988.35	988.39	988.54	988.81	989.05	989.23	989.25	989.39
PROFILE GRADE LINE	STATION	288+44.84	288+55.59	288+66.34	288+77.09	288+87.84	289+03.09	289+18.34	289+29.09	289+33.59	289+48.84	289+70.21	289+91.59	290+12.96	290+16.42	290+34.34
	SCREED ELEVATION	987.58	987.70	987.81	987.91	988.01	988.17	988.33	988.43	988.47	988.62	988.89	989.14	989.31	989.34	989.47
LEFT CONSTRUCTION JOINT	STATION	288+33.78	288+44.53	288+55.28	288+66.03	288+76.78	288+92.03	289+07.28	289+18.03	289+22.53	289+37.78	289+59.15	289+80.53	290+01.90	290+05.36	290+23.28
	SCREED ELEVATION	987.75	987.87	987.98	988.08	988.18	988.34	988.50	988.59	988.64	988.79	989.06	989.31	989.48	989.51	989.64
RIGHT CONSTRUCTION JOINT	STATION	288+31.88	288+42.63	288+53.38	288+64.13	288+74.88	288+90.13	289+05.38	289+16.13	289+20.63	289+35.88	289+57.26	289+78.63	290+00.01	290+03.47	290+21.38
	SCREED ELEVATION	987.78	987.90	988.01	988.11	988.21	988.37	988.53	988.62	988.67	988.82	989.09	989.34	989.51	989.53	989.67
CROWN	STATION	288+29.67	288+40.42	288+51.17	288+61.92	288+72.67	288+87.92	289+03.17	289+13.92	289+18.42	289+33.67	289+55.05	289+76.42	289+97.80	290+01.25	290+19.17
	SCREED ELEVATION	987.81	987.93	988.04	988.14	988.24	988.40	988.56	988.66	988.70	988.85	989.13	989.37	989.54	989.57	989.71
RIGHT CURB LINE	STATION	288+15.77	288+26.52	288+37.27	288+48.02	288+58.77	288+74.02	288+89.27	289+00.02	289+04.52	289+19.77	289+41.14	289+62.52	289+83.89	289+87.35	290+05.27
	SCREED ELEVATION	987.32	987.44	987.55	987.65	987.75	987.91	988.07	988.17	988.21	988.36	988.63	988.88	989.05	989.08	989.21

RIGHT BRIDGE SCREED ELEVATIONS

LOCATION	COMPONENT	SPAN 4				℄ BEARING PIER 4	SPAN 5				℄ BEARING PIER 5	SPAN 6			℄ BEARING FORWARD ABUTMENT
		1/4 PT.	1/2 PT	3/4 PT	F.S. #3		1/4 PT.	1/2 PT	3/4 PT	F.S. #4		1/4 PT.	1/2 PT	3/4 PT	
LEFT CURB LINE	STATION	290+60.90	290+82.27	291+03.65	291+06.36	291+25.02	291+46.40	291+67.77	291+89.15	291+94.52	292+10.52	292+25.52	292+40.52	292+55.52	292+70.52
	SCREED ELEVATION	989.63	989.87	990.06	990.09	990.25	990.50	990.75	990.94	990.98	991.10	991.26	991.43	991.58	991.70
PROFILE GRADE LINE	STATION	290+55.71	290+77.09	290+98.46	291+01.17	291+19.84	291+41.21	291+62.59	291+83.96	291+89.34	292+05.34	292+20.34	292+35.34	292+50.34	292+65.34
	SCREED ELEVATION	989.72	989.96	990.14	990.17	990.33	990.59	990.84	991.02	991.06	991.18	991.34	991.51	991.66	991.78
LEFT CONSTRUCTION JOINT	STATION	290+44.65	290+66.03	290+87.40	290+90.11	291+08.78	291+30.15	291+51.53	291+72.90	291+78.28	291+94.28	292+09.28	292+24.28	292+39.28	292+54.28
	SCREED ELEVATION	989.88	990.12	990.31	990.33	990.50	990.76	991.01	991.19	991.23	991.35	991.51	991.68	991.83	991.95
RIGHT CONSTRUCTION JOINT	STATION	290+42.76	290+64.13	290+85.51	290+88.22	291+06.88	291+28.26	291+49.63	291+71.01	291+76.38	291+92.38	292+07.38	292+22.38	292+37.38	292+52.38
	SCREED ELEVATION	989.91	990.15	990.34	990.36	990.53	990.79	991.04	991.22	991.26	991.38	991.54	991.71	991.86	991.98
CROWN	STATION	290+40.55	290+61.92	290+83.30	290+86.00	291+04.67	291+26.05	291+47.42	291+68.80	291+74.17	291+90.17	292+05.17	292+20.17	292+35.17	292+50.17
	SCREED ELEVATION	989.95	990.19	990.38	990.40	990.56	990.82	991.07	991.25	991.29	991.42	991.57	991.74	991.89	992.02
RIGHT CURB LINE	STATION	290+26.64	290+48.02	290+69.39	290+72.10	290+90.77	291+12.14	291+33.52	291+54.89	291+60.27	291+76.27	291+91.27	292+06.27	292+21.27	292+36.27
	SCREED ELEVATION	989.45	989.69	989.88	989.91	990.07	990.33	990.58	990.76	990.80	990.92	991.08	991.25	991.40	991.52

NOTES:

1. FOR NOTES, SEE SHEET 56/70.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

PARSONS
pw:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0954\Sheets\076_0954_SD007.dgn Sheet 11/2/2021 11:33:19 AM p002694C

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	TYW	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CDB		7703457	

SCREED ELEVATIONS - 2 OF 2
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2021-11-04_BU 13 - RFC PLANS

LEFT BRIDGE TOP OF HAUNCH ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			
			1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	F.S. #1	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	F.S. #2
BEAM 1	STATION	289+05.97	289+16.87	289+27.76	289+38.66	289+49.56	289+65.02	289+80.48	289+93.45	289+95.94	290+11.39	290+33.06	290+54.73	290+76.40	290+79.93
	TOP OF HAUNCH ELEVATION	986.98	987.10	987.21	987.30	987.40	987.56	987.71	987.83	987.85	988.00	988.26	988.49	988.67	988.69
BEAM 2	STATION	289+01.57	289+12.41	289+23.26	289+34.11	289+44.96	289+60.35	289+75.74	289+88.56	289+91.13	290+06.52	290+28.09	290+49.66	290+71.23	290+74.71
	TOP OF HAUNCH ELEVATION	987.05	987.17	987.28	987.37	987.47	987.63	987.79	987.90	987.92	988.07	988.35	988.59	988.76	988.78
BEAM 3	STATION	288+97.16	289+07.96	289+18.76	289+29.56	289+40.36	289+55.68	289+71.00	289+84.16	289+86.32	290+01.64	290+23.11	290+44.58	290+66.05	290+70.32
	TOP OF HAUNCH ELEVATION	987.11	987.24	987.35	987.44	987.54	987.70	987.86	987.98	988.00	988.15	988.42	988.67	988.84	988.87
BEAM 4	STATION	288+92.76	289+03.51	289+14.26	289+25.01	289+35.76	289+51.01	289+66.26	289+79.01	289+81.51	289+96.76	290+18.13	290+39.51	290+60.88	290+64.34
	TOP OF HAUNCH ELEVATION	987.18	987.30	987.41	987.51	987.61	987.78	987.93	988.05	988.07	988.22	988.50	988.75	988.92	988.94
BEAM 5	STATION	288+86.12	288+96.87	289+07.62	289+18.37	289+29.12	289+44.37	289+59.62	289+72.37	289+74.87	289+90.12	290+11.50	290+32.87	290+54.25	290+57.71
	TOP OF HAUNCH ELEVATION	987.28	987.41	987.52	987.61	987.71	987.88	988.03	988.15	988.17	988.32	988.60	988.85	989.02	989.04
BEAM 6	STATION	288+79.49	288+90.24	289+00.99	289+11.74	289+22.49	289+37.74	289+52.99	289+65.74	289+68.24	289+83.49	290+04.86	290+26.24	290+47.61	290+51.07
	TOP OF HAUNCH ELEVATION	987.39	987.51	987.62	987.72	987.82	987.98	988.14	988.25	988.27	988.43	988.70	988.95	989.12	989.14
BEAM 7	STATION	288+72.85	288+83.60	288+94.35	289+05.10	289+15.85	289+31.10	289+46.35	289+59.10	289+61.60	289+76.85	289+98.23	290+19.60	290+40.98	290+44.43
	TOP OF HAUNCH ELEVATION	987.49	987.61	987.72	987.82	987.92	988.08	988.24	988.35	988.38	988.53	988.80	989.05	989.22	989.25
BEAM 8	STATION	288+66.22	288+76.97	288+87.72	288+98.47	289+09.22	289+24.47	289+39.72	289+52.47	289+54.97	289+70.22	289+91.59	290+12.97	290+34.34	290+37.80
	TOP OF HAUNCH ELEVATION	987.26	987.39	987.50	987.59	987.69	987.86	988.01	988.13	988.15	988.30	988.58	988.83	989.00	989.02
BEAM 9	STATION	288+59.58	288+70.33	288+81.08	288+91.83	289+02.58	289+17.83	289+33.08	289+45.83	289+48.33	289+63.58	289+84.96	290+06.33	290+27.71	290+31.16
	TOP OF HAUNCH ELEVATION	987.03	987.15	987.26	987.36	987.46	987.62	987.78	987.90	987.92	988.07	988.35	988.60	988.76	988.79
BEAM 10	STATION	288+52.95	288+63.70	288+74.45	288+85.20	288+95.95	289+11.20	289+26.45	289+39.20	289+41.70	289+56.95	289+78.32	289+99.70	290+21.07	290+24.53
	TOP OF HAUNCH ELEVATION	986.79	986.92	987.03	987.12	987.22	987.39	987.54	987.66	987.68	987.83	988.11	988.35	988.53	988.55

NOTES:

1. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. FOR DECK PLAN, SEE SHEETS 49/70 AND 50/70.
3. FOR SCREED ELEVATIONS, SEE SHEET 56/70 AND 57/70.
4. FOR FINAL DECK SURFACE ELEVATIONS, SEE SHEET 61/70 THRU 64/70.
5. FOR ELEVATION LOCATIONS AND HAUNCH DETAIL, SEE SHEET 55/70.

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STRUCTURE FILE NUMBER 7703457

TOP OF HAUNCH ELEVATIONS - 1 OF 3
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

58/70

102/153

ISSUE RECORD:

NO.	DATE	DESCRIPTION

Released for Construction
Thomas J Powell, PE
11/10/2021

LEFT BRIDGE TOP OF HAUNCH ELEVATIONS

LOCATION	COMPONENT	℄ BEARING PIER 3	SPAN 4				℄ BEARING PIER 4	SPAN 5				℄ BEARING PIER 5	SPAN 6			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT	F.S. #3		1/4 PT.	1/2 PT	3/4 PT	F.S. #4		1/4 PT.	1/2 PT	3/4 PT	
BEAM 1	STATION	290+98.07	291+19.73	291+41.40	291+63.07	291+65.91	291+84.74	292+06.41	292+28.07	292+49.74	292+55.22	292+71.41	292+86.61	293+01.82	293+17.02	293+32.23
	TOP OF HAUNCH ELEVATION	988.84	989.07	989.30	989.49	989.51	989.67	989.92	990.16	990.34	990.38	990.51	990.66	990.83	990.97	991.10
BEAM 2	STATION	290+92.80	291+14.37	291+35.94	291+57.51	291+60.21	291+79.08	292+00.65	292+22.22	292+43.79	292+49.20	292+65.36	292+80.50	292+95.63	293+10.77	293+25.91
	TOP OF HAUNCH ELEVATION	988.92	989.15	989.39	989.58	989.60	989.76	990.02	990.27	990.45	990.48	990.60	990.76	990.93	991.07	991.19
BEAM 3	STATION	290+87.53	291+09.00	291+30.47	291+51.94	291+55.82	291+73.42	291+94.89	292+16.36	292+37.84	292+44.82	292+59.31	292+74.38	292+89.44	293+04.51	293+19.58
	TOP OF HAUNCH ELEVATION	989.00	989.24	989.48	989.66	989.70	989.85	990.11	990.36	990.54	990.59	990.69	990.85	991.02	991.17	991.29
BEAM 4	STATION	290+82.26	291+03.63	291+25.01	291+46.38	291+49.09	291+67.76	291+89.13	292+10.51	292+31.88	292+37.26	292+53.26	292+68.26	292+83.26	292+98.26	293+13.26
	TOP OF HAUNCH ELEVATION	989.08	989.32	989.56	989.75	989.77	989.93	990.20	990.45	990.63	990.67	990.79	990.95	991.12	991.26	991.39
BEAM 5	STATION	290+75.62	290+97.00	291+18.37	291+39.75	291+42.46	291+61.12	291+82.50	292+03.87	292+25.25	292+30.62	292+46.62	292+61.62	292+76.62	292+91.62	293+06.62
	TOP OF HAUNCH ELEVATION	989.18	989.42	989.66	989.85	989.87	990.03	990.30	990.55	990.73	990.77	990.89	991.05	991.22	991.37	991.49
BEAM 6	STATION	290+68.99	290+90.36	291+11.74	291+33.11	291+35.82	291+54.49	291+75.86	291+97.24	292+18.61	292+23.99	292+39.99	292+54.99	292+69.99	292+84.99	292+99.99
	TOP OF HAUNCH ELEVATION	989.28	989.52	989.76	989.95	989.97	990.14	990.40	990.65	990.83	990.87	990.99	991.15	991.32	991.47	991.59
BEAM 7	STATION	290+62.35	290+83.73	291+05.10	291+26.48	291+29.18	291+47.85	291+69.23	291+90.60	292+11.98	292+17.35	292+33.35	292+48.35	292+63.35	292+78.35	292+93.35
	TOP OF HAUNCH ELEVATION	989.38	989.62	989.87	990.05	990.07	990.24	990.50	990.75	990.93	990.97	991.09	991.25	991.42	991.57	991.69
BEAM 8	STATION	290+55.72	290+77.09	290+98.47	291+19.84	291+22.55	291+41.22	291+62.59	291+83.97	292+05.34	292+10.72	292+26.72	292+41.72	292+56.72	292+71.72	292+86.72
	TOP OF HAUNCH ELEVATION	989.16	989.40	989.64	989.83	989.85	990.01	990.28	990.53	990.71	990.75	990.87	991.03	991.20	991.35	991.47
BEAM 9	STATION	290+49.08	290+70.46	290+91.83	291+13.21	291+15.91	291+34.58	291+55.96	291+77.33	291+98.71	292+04.08	292+20.08	292+35.08	292+50.08	292+65.08	292+80.08
	TOP OF HAUNCH ELEVATION	988.92	989.17	989.41	989.60	989.62	989.78	990.04	990.29	990.48	990.51	990.63	990.79	990.96	991.11	991.23
BEAM 10	STATION	290+42.45	290+63.82	290+85.20	291+06.57	291+09.28	291+27.95	291+49.32	291+70.70	291+92.07	291+97.45	292+13.45	292+28.45	292+43.45	292+58.45	292+73.45
	TOP OF HAUNCH ELEVATION	988.69	988.93	989.17	989.36	989.38	989.54	989.80	990.05	990.24	990.28	990.40	990.56	990.73	990.87	991.00

NOTES:

1. FOR NOTES, SEE SHEET 58/70.

2021-11-04_BU 13 - RFC PLANS

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DESIGNED	DRAWN	REVIEWED	DATE
JRE	TYW	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CDB		7703457	

TOP OF HAUNCH ELEVATIONS - 2 OF 3
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

59/70

103
153

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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pw:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0954\Sheets\076_0954_SD013.dgn Sheet 11/2/2021 11:34:54 AM p002694C

Released for Construction
Thomas J Powell, PE
11/10/2021

RIGHT BRIDGE TOP OF HAUNCH ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			
			1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	F.S. #1	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	F.S. #2
BEAM 11	STATION	288+49.51	288+60.26	288+71.01	288+81.76	288+92.51	289+07.76	289+23.01	289+33.76	289+38.26	289+53.51	289+74.89	289+96.26	290+17.64	290+21.09
	TOP OF HAUNCH ELEVATION	986.76	986.88	986.99	987.09	987.19	987.35	987.50	987.60	987.65	987.80	988.06	988.31	988.49	988.51
BEAM 12	STATION	288+42.88	288+53.63	288+64.38	288+75.13	288+85.88	289+01.13	289+16.38	289+27.13	289+31.63	289+46.88	289+68.25	289+89.63	290+11.00	290+14.46
	TOP OF HAUNCH ELEVATION	986.86	986.98	987.09	987.19	987.29	987.45	987.61	987.71	987.75	987.90	988.18	988.42	988.59	988.62
BEAM 13	STATION	288+36.24	288+46.99	288+57.74	288+68.49	288+79.24	288+94.49	289+09.74	289+20.49	289+24.99	289+40.24	289+61.62	289+82.99	290+04.37	290+07.82
	TOP OF HAUNCH ELEVATION	986.96	987.08	987.19	987.29	987.39	987.55	987.71	987.81	987.85	988.00	988.27	988.52	988.69	988.72
BEAM 14	STATION	288+29.60	288+40.35	288+51.10	288+61.85	288+72.60	288+87.85	289+03.10	289+13.85	289+18.35	289+33.60	289+54.98	289+76.35	289+97.73	290+01.19
	TOP OF HAUNCH ELEVATION	987.06	987.18	987.29	987.39	987.49	987.65	987.81	987.91	987.95	988.10	988.37	988.62	988.79	988.82
BEAM 15	STATION	288+22.97	288+33.72	288+44.47	288+55.22	288+65.97	288+81.22	288+96.47	289+07.22	289+11.72	289+26.97	289+48.34	289+69.72	289+91.09	289+94.55
	TOP OF HAUNCH ELEVATION	986.82	986.95	987.06	987.16	987.25	987.42	987.57	987.67	987.71	987.86	988.14	988.39	988.56	988.58
BEAM 16	STATION	288+16.33	288+27.08	288+37.83	288+48.58	288+59.33	288+74.58	288+89.83	289+00.58	289+05.08	289+20.33	289+41.71	289+63.08	289+84.46	289+87.92
	TOP OF HAUNCH ELEVATION	986.59	986.71	986.82	986.92	987.02	987.18	987.34	987.44	987.48	987.63	987.90	988.15	988.32	988.35

RIGHT BRIDGE TOP OF HAUNCH ELEVATIONS

LOCATION	COMPONENT	℄ BEARING PIER 3	SPAN 4				℄ BEARING PIER 4	SPAN 5				℄ BEARING PIER 5	SPAN 6			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT	F.S. #3		1/4 PT.	1/2 PT	3/4 PT	F.S. #4		1/4 PT.	1/2 PT	3/4 PT	
BEAM 11	STATION	290+39.01	290+60.39	290+81.76	291+03.14	291+05.84	291+24.51	291+45.89	291+67.26	291+88.64	291+94.01	292+10.01	292+25.01	292+40.01	292+55.01	292+70.01
	TOP OF HAUNCH ELEVATION	988.65	988.89	989.13	989.32	989.34	989.51	989.76	990.01	990.20	990.24	990.36	990.52	990.69	990.83	990.96
BEAM 12	STATION	290+32.38	290+53.75	290+75.13	290+96.50	290+99.21	291+17.88	291+39.25	291+60.63	291+82.00	291+87.38	292+03.38	292+18.38	292+33.38	292+48.38	292+63.38
	TOP OF HAUNCH ELEVATION	988.75	989.00	989.24	989.42	989.45	989.61	989.87	990.12	990.30	990.34	990.46	990.62	990.79	990.94	991.06
BEAM 13	STATION	290+25.74	290+47.12	290+68.49	290+89.87	290+92.57	291+11.24	291+32.62	291+53.99	291+75.37	291+80.74	291+96.74	292+11.74	292+26.74	292+41.74	292+56.74
	TOP OF HAUNCH ELEVATION	988.86	989.10	989.33	989.52	989.55	989.71	989.97	990.22	990.40	990.44	990.57	990.72	990.89	991.04	991.17
BEAM 14	STATION	290+19.10	290+40.48	290+61.85	290+83.23	290+85.94	291+04.60	291+25.98	291+47.35	291+68.73	291+74.10	291+90.10	292+05.10	292+20.10	292+35.10	292+50.10
	TOP OF HAUNCH ELEVATION	988.95	989.19	989.43	989.62	989.64	989.81	990.07	990.32	990.50	990.54	990.66	990.82	990.99	991.14	991.26
BEAM 15	STATION	290+12.47	290+33.84	290+55.22	290+76.59	290+79.30	290+97.97	291+19.34	291+40.72	291+62.09	291+67.47	291+83.47	291+98.47	292+13.47	292+28.47	292+43.47
	TOP OF HAUNCH ELEVATION	988.72	988.96	989.20	989.39	989.41	989.57	989.84	990.09	990.27	990.31	990.43	990.59	990.76	990.91	991.03
BEAM 16	STATION	290+05.83	290+27.21	290+48.58	290+69.96	290+72.67	290+91.33	291+12.71	291+34.08	291+55.46	291+60.83	291+76.83	291+91.83	292+06.83	292+21.83	292+36.83
	TOP OF HAUNCH ELEVATION	988.48	988.72	988.96	989.15	989.18	989.34	989.60	989.85	990.03	990.07	990.19	990.35	990.52	990.67	990.79

NOTES:

1. FOR NOTES, SEE SHEET 58/70.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

PARSONS
p:\VANVA01PWINT01.parsons.com\Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0954\Sheets\076_0954_SD014.dgn Sheet 11/2/2021 11:35:01 AM p0026940

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	TYW	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CDB		7703457	

TOP OF HAUNCH ELEVATIONS - 3 OF 3
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329

60/70

104/153

LEFT BRIDGE FINAL DECK ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3				℄ BEARING PIER 3
			1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	F.S. #1	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	F.S. #2	
LEFT CURB LINE	STATION	289+07.79	289+18.69	289+29.58	289+40.48	289+51.38	289+66.84	289+82.29	289+94.04	289+97.75	290+13.21	290+34.88	290+56.55	290+78.21	290+79.37	290+99.88
	FINAL DECK ELEVATION	987.70	987.81	987.91	988.02	988.12	988.27	988.42	988.54	988.57	988.72	988.93	989.14	989.35	989.36	989.56
BEAM 1	STATION	289+05.97	289+16.87	289+27.76	289+38.66	289+49.56	289+65.02	289+80.48	289+93.45	289+95.94	290+11.39	290+33.06	290+54.73	290+76.40	290+79.93	290+98.07
	FINAL DECK ELEVATION	987.73	987.84	987.94	988.05	988.15	988.30	988.45	988.57	988.60	988.75	988.96	989.17	989.38	989.41	989.59
BEAM 2	STATION	289+01.57	289+12.41	289+23.26	289+34.11	289+44.96	289+60.35	289+75.74	289+88.56	289+91.13	290+06.52	290+28.09	290+49.66	290+71.23	290+74.71	290+92.80
	FINAL DECK ELEVATION	987.80	987.90	988.01	988.12	988.22	988.37	988.52	988.65	988.67	988.82	989.03	989.24	989.46	989.49	989.67
BEAM 3	STATION	288+97.16	289+07.96	289+18.76	289+29.56	289+40.36	289+55.68	289+71.00	289+84.16	289+86.32	290+01.64	290+23.11	290+44.58	290+66.05	290+70.32	290+87.53
	FINAL DECK ELEVATION	987.86	987.97	988.08	988.19	988.29	988.44	988.59	988.72	988.75	988.90	989.11	989.32	989.53	989.58	989.75
BEAM 4	STATION	288+92.76	289+03.51	289+14.26	289+25.01	289+35.76	289+51.01	289+66.26	289+79.01	289+81.51	289+96.76	290+18.13	290+39.51	290+60.88	290+64.34	290+82.26
	FINAL DECK ELEVATION	987.93	988.04	988.15	988.25	988.36	988.51	988.67	988.79	988.82	988.97	989.19	989.40	989.61	989.65	989.83
BEAM 5	STATION	288+86.12	288+96.87	289+07.62	289+18.37	289+29.12	289+44.37	289+59.62	289+72.37	289+74.87	289+90.12	290+11.50	290+32.87	290+54.25	290+57.71	290+75.62
	FINAL DECK ELEVATION	988.03	988.14	988.25	988.36	988.46	988.62	988.77	988.90	988.92	989.07	989.29	989.50	989.72	989.75	989.93
BEAM 6	STATION	288+79.49	288+90.24	289+00.99	289+11.74	289+22.49	289+37.74	289+52.99	289+65.74	289+68.24	289+83.49	290+04.86	290+26.24	290+47.61	290+51.07	290+68.99
	FINAL DECK ELEVATION	988.14	988.24	988.35	988.46	988.57	988.72	988.87	989.00	989.02	989.18	989.39	989.60	989.82	989.85	990.03
BEAM 7	STATION	288+72.85	288+83.60	288+94.35	289+05.10	289+15.85	289+31.10	289+46.35	289+59.10	289+61.60	289+76.85	289+98.23	290+19.60	290+40.98	290+44.43	290+62.35
	FINAL DECK ELEVATION	988.24	988.34	988.45	988.56	988.67	988.82	988.97	989.10	989.12	989.28	989.49	989.70	989.92	989.95	990.13
CROWN	STATION	288+72.64	288+83.39	288+94.14	289+04.89	289+15.64	289+30.89	289+46.14	289+58.89	289+61.39	289+76.64	289+98.02	290+19.39	290+40.77	290+44.22	290+62.14
	FINAL DECK ELEVATION	988.24	988.35	988.46	988.56	988.67	988.82	988.98	989.10	989.13	989.28	989.49	989.71	989.92	989.96	990.14
BEAM 8	STATION	288+66.22	288+76.97	288+87.72	288+98.47	289+09.22	289+24.47	289+39.72	289+52.47	289+54.97	289+70.22	289+91.59	290+12.97	290+34.34	290+37.80	290+55.72
	FINAL DECK ELEVATION	988.01	988.12	988.23	988.34	988.44	988.60	988.75	988.88	988.90	989.05	989.27	989.48	989.69	989.73	989.91
LEFT CONSTRUCTION JOINT	STATION	288+65.06	288+75.81	288+86.56	288+97.31	289+08.06	289+23.31	289+38.56	289+51.31	289+53.81	289+69.06	289+90.43	290+11.81	290+33.18	290+36.64	290+54.56
	FINAL DECK ELEVATION	987.97	988.08	988.19	988.30	988.40	988.56	988.71	988.84	988.86	989.01	989.23	989.44	989.65	989.69	989.87
RIGHT CONSTRUCTION JOINT	STATION	288+63.16	288+73.91	288+84.66	288+95.41	289+06.16	289+21.41	289+36.66	289+49.41	289+51.91	289+67.16	289+88.54	290+09.91	290+31.29	290+34.75	290+52.66
	FINAL DECK ELEVATION	987.91	988.01	988.12	988.23	988.34	988.49	988.64	988.77	988.79	988.95	989.16	989.37	989.59	989.62	989.80
BEAM 9	STATION	288+59.58	288+70.33	288+81.08	288+91.83	289+02.58	289+17.83	289+33.08	289+45.83	289+48.33	289+63.58	289+84.96	290+06.33	290+27.71	290+31.16	290+49.08
	FINAL DECK ELEVATION	987.78	987.89	987.99	988.10	988.21	988.36	988.51	988.64	988.67	988.82	989.03	989.25	989.46	989.49	989.67
PROFILE GRADE LINE	STATION	288+57.48	288+68.23	288+78.98	288+89.73	289+00.48	289+15.73	289+30.98	289+43.73	289+46.23	289+61.48	289+82.85	290+04.23	290+25.60	290+29.06	290+46.98
	FINAL DECK ELEVATION	987.70	987.81	987.92	988.03	988.13	988.29	988.44	988.57	988.59	988.74	988.96	989.17	989.39	989.42	989.60
BEAM 10	STATION	288+52.95	288+63.70	288+74.45	288+85.20	288+95.95	289+11.20	289+26.45	289+39.20	289+41.70	289+56.95	289+78.32	289+99.70	290+21.07	290+24.53	290+42.45
	FINAL DECK ELEVATION	987.54	987.65	987.76	987.87	987.97	988.13	988.28	988.41	988.43	988.58	988.80	989.01	989.23	989.26	989.44
RIGHT CURB LINE	STATION	288+52.29	288+63.04	288+73.79	288+84.54	288+95.29	289+10.54	289+25.79	289+38.54	289+41.04	289+56.29	289+77.66	289+99.04	290+20.41	290+23.87	290+41.79
	FINAL DECK ELEVATION	987.52	987.63	987.74	987.84	987.95	988.10	988.26	988.38	988.41	988.56	988.78	988.99	989.20	989.24	989.42

NOTES:

1. FINAL DECK ELEVATIONS SHOWN REPRESENT THE SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.
2. FOR DECK PLAN, SEE SHEETS 49/70 AND 50/70.
3. FOR SCREED ELEVATIONS, SEE SHEETS 56/70 AND 57/70.
4. FOR TOP OF HAUNCH ELEVATIONS, SEE SHEET 58/70 THRU 60/70.
5. FOR ELEVATION LOCATION PLAN, SEE SHEET 55/70.

Released for Construction
Thomas J Powell, PE
11/10/2021

2021-11-04_BU 13 - RFC PLANS

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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

DESIGNED JRE | DRAWN TYW | CHECKED CDB | REVIEWED TES 09/01/21 | REVISED | DATE | STRUCTURE FILE NUMBER 7703457

FINAL DECK SURFACE ELEVATIONS - 1 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

61 / 70

105 / 153

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LEFT BRIDGE FINAL DECK ELEVATIONS

LOCATION	COMPONENT	SPAN 4				℄ BEARING PIER 4	SPAN 5				℄ BEARING PIER 5	SPAN 6			℄ BEARING FORWARD ABUTMENT
		1/4 PT.	1/2 PT	3/4 PT	F.S. #3		1/4 PT.	1/2 PT	3/4 PT	F.S. #4		1/4 PT.	1/2 PT	3/4 PT	
LEFT CURB LINE	STATION	291+21.55	291+43.22	291+64.89	291+64.12	291+86.55	292+08.22	292+29.89	292+51.56	292+52.29	292+73.22	292+88.43	293+03.64	293+18.84	293+34.05
	FINAL DECK ELEVATION	989.77	989.98	990.19	990.18	990.39	990.60	990.81	991.02	991.03	991.23	991.38	991.53	991.67	991.82
BEAM 1	STATION	291+19.73	291+41.40	291+63.07	291+65.91	291+84.74	292+06.41	292+28.07	292+49.74	292+55.22	292+71.41	292+86.61	293+01.82	293+17.02	293+32.23
	FINAL DECK ELEVATION	989.79	990.00	990.21	990.24	990.42	990.63	990.84	991.05	991.10	991.26	991.41	991.55	991.70	991.85
BEAM 2	STATION	291+14.37	291+35.94	291+57.51	291+60.21	291+79.08	292+00.65	292+22.22	292+43.79	292+49.20	292+65.36	292+80.50	292+95.63	293+10.77	293+25.91
	FINAL DECK ELEVATION	989.88	990.09	990.30	990.32	990.51	990.72	990.93	991.14	991.19	991.35	991.50	991.65	991.80	991.94
BEAM 3	STATION	291+09.00	291+30.47	291+51.94	291+55.82	291+73.42	291+94.89	292+16.36	292+37.84	292+44.82	292+59.31	292+74.38	292+89.44	293+04.51	293+19.58
	FINAL DECK ELEVATION	989.96	990.17	990.38	990.42	990.60	990.81	991.02	991.23	991.30	991.44	991.59	991.74	991.89	992.04
BEAM 4	STATION	291+03.63	291+25.01	291+46.38	291+49.09	291+67.76	291+89.13	292+10.51	292+31.88	292+37.26	292+53.26	292+68.26	292+83.26	292+98.26	293+13.26
	FINAL DECK ELEVATION	990.04	990.25	990.47	990.50	990.68	990.90	991.11	991.32	991.38	991.54	991.69	991.84	991.99	992.14
BEAM 5	STATION	290+97.00	291+18.37	291+39.75	291+42.46	291+61.12	291+82.50	292+03.87	292+25.25	292+30.62	292+46.62	292+61.62	292+76.62	292+91.62	293+06.62
	FINAL DECK ELEVATION	990.14	990.36	990.57	990.60	990.78	991.00	991.21	991.43	991.48	991.64	991.79	991.94	992.09	992.24
BEAM 6	STATION	290+90.36	291+11.74	291+33.11	291+35.82	291+54.49	291+75.86	291+97.24	292+18.61	292+23.99	292+39.99	292+54.99	292+69.99	292+84.99	292+99.99
	FINAL DECK ELEVATION	990.24	990.46	990.67	990.70	990.89	991.10	991.31	991.53	991.58	991.74	991.89	992.04	992.19	992.34
BEAM 7	STATION	290+83.73	291+05.10	291+26.48	291+29.18	291+47.85	291+69.23	291+90.60	292+11.98	292+17.35	292+33.35	292+48.35	292+63.35	292+78.35	292+93.35
	FINAL DECK ELEVATION	990.35	990.56	990.77	990.80	990.99	991.20	991.41	991.63	991.68	991.84	991.99	992.14	992.29	992.44
CROWN	STATION	290+83.52	291+04.89	291+26.27	291+28.97	291+47.64	291+69.02	291+90.39	292+11.77	292+17.14	292+33.14	292+48.14	292+63.14	292+78.14	292+93.14
	FINAL DECK ELEVATION	990.35	990.56	990.78	990.80	990.99	991.20	991.42	991.63	991.69	991.85	992.00	992.15	992.30	992.45
BEAM 8	STATION	290+77.09	290+98.47	291+19.84	291+22.55	291+41.22	291+62.59	291+83.97	292+05.34	292+10.72	292+26.72	292+41.72	292+56.72	292+71.72	292+86.72
	FINAL DECK ELEVATION	990.12	990.34	990.55	990.58	990.76	990.98	991.19	991.40	991.46	991.62	991.77	991.92	992.07	992.22
LEFT CONSTRUCTION JOINT	STATION	290+75.93	290+97.31	291+18.68	291+21.39	291+40.06	291+61.43	291+82.81	292+04.18	292+09.56	292+25.56	292+40.56	292+55.56	292+70.56	292+85.56
	FINAL DECK ELEVATION	990.08	990.30	990.51	990.54	990.72	990.94	991.15	991.36	991.42	991.58	991.73	991.88	992.03	992.18
RIGHT CONSTRUCTION JOINT	STATION	290+74.04	290+95.41	291+16.79	291+19.50	291+38.16	291+59.54	291+80.91	292+02.29	292+07.66	292+23.66	292+38.66	292+53.66	292+68.66	292+83.66
	FINAL DECK ELEVATION	990.01	990.23	990.44	990.47	990.66	990.87	991.08	991.30	991.35	991.51	991.66	991.81	991.96	992.11
BEAM 9	STATION	290+70.46	290+91.83	291+13.21	291+15.91	291+34.58	291+55.96	291+77.33	291+98.71	292+04.08	292+20.08	292+35.08	292+50.08	292+65.08	292+80.08
	FINAL DECK ELEVATION	989.89	990.10	990.32	990.34	990.53	990.74	990.96	991.17	991.22	991.38	991.53	991.68	991.83	991.98
PROFILE GRADE LINE	STATION	290+68.35	290+89.73	291+11.10	291+13.81	291+32.48	291+53.85	291+75.23	291+96.60	292+01.98	292+17.98	292+32.98	292+47.98	292+62.98	292+77.98
	FINAL DECK ELEVATION	989.81	990.03	990.24	990.27	990.45	990.67	990.88	991.10	991.15	991.31	991.46	991.61	991.76	991.91
BEAM 10	STATION	290+63.82	290+85.20	291+06.57	291+09.28	291+27.95	291+49.32	291+70.70	291+92.07	291+97.45	292+13.45	292+28.45	292+43.45	292+58.45	292+73.45
	FINAL DECK ELEVATION	989.65	989.87	990.08	990.11	990.29	990.51	990.72	990.94	990.99	991.15	991.30	991.45	991.60	991.75
RIGHT CURB LINE	STATION	290+63.16	290+84.54	291+05.91	291+08.62	291+27.29	291+48.66	291+70.04	291+91.41	291+96.79	292+12.79	292+27.79	292+42.79	292+57.79	292+72.79
	FINAL DECK ELEVATION	989.63	989.84	990.06	990.08	990.27	990.49	990.70	990.91	990.97	991.13	991.28	991.43	991.58	991.73

NOTES:

1. FOR NOTES, SEE SHEET 61/70.

2021-11-04_BU 13 - RFC PLANS

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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p:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0954\Sheets\076_0954_SD009.dgn Sheet 11/2/2021 11:35:15 AM p002694C

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	TYW	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CDB		7703457	

FINAL DECK SURFACE ELEVATIONS - 2 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

62/70

106
153

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11/10/2021

RIGHT BRIDGE FINAL DECK ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			
			1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	F.S. #1	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	F.S. #2
LEFT CURB LINE	STATION	288+50.02	288+60.77	288+71.52	288+82.27	288+93.02	289+08.27	289+23.52	289+34.27	289+38.77	289+54.02	289+75.40	289+96.77	290+18.15	290+21.61
	FINAL DECK ELEVATION	987.50	987.61	987.71	987.82	987.93	988.08	988.23	988.34	988.39	988.54	988.75	988.97	989.18	989.21
BEAM 11	STATION	288+49.51	288+60.26	288+71.01	288+81.76	288+92.51	289+07.76	289+23.01	289+33.76	289+38.26	289+53.51	289+74.89	289+96.26	290+17.64	290+21.09
	FINAL DECK ELEVATION	987.51	987.61	987.72	987.83	987.94	988.09	988.24	988.35	988.39	988.55	988.76	988.97	989.19	989.22
PROFILE GRADE LINE	STATION	288+44.84	288+55.59	288+66.34	288+77.09	288+87.84	289+03.09	289+18.34	289+29.09	289+33.59	289+48.84	289+70.21	289+91.59	290+12.96	290+16.42
	FINAL DECK ELEVATION	987.58	987.69	987.79	987.90	988.01	988.16	988.31	988.42	988.47	988.62	988.83	989.05	989.26	989.29
BEAM 12	STATION	288+42.88	288+53.63	288+64.38	288+75.13	288+85.88	289+01.13	289+16.38	289+27.13	289+31.63	289+46.88	289+68.25	289+89.63	290+11.00	290+14.46
	FINAL DECK ELEVATION	987.61	987.72	987.82	987.93	988.04	988.19	988.34	988.45	988.50	988.65	988.86	989.08	989.29	989.32
BEAM 13	STATION	288+36.24	288+46.99	288+57.74	288+68.49	288+79.24	288+94.49	289+09.74	289+20.49	289+24.99	289+40.24	289+61.62	289+82.99	290+04.37	290+07.82
	FINAL DECK ELEVATION	987.71	987.82	987.93	988.03	988.14	988.29	988.45	988.55	988.60	988.75	988.96	989.18	989.39	989.43
LEFT CONSTRUCTION JOINT	STATION	288+33.78	288+44.53	288+55.28	288+66.03	288+76.78	288+92.03	289+07.28	289+18.03	289+22.53	289+37.78	289+59.15	289+80.53	290+01.90	290+05.36
	FINAL DECK ELEVATION	987.75	987.86	987.96	988.07	988.18	988.33	988.48	988.59	988.64	988.79	989.00	989.22	989.43	989.46
RIGHT CONSTRUCTION JOINT	STATION	288+31.88	288+42.63	288+53.38	288+64.13	288+74.88	288+90.13	289+05.38	289+16.13	289+20.63	289+35.88	289+57.26	289+78.63	290+00.01	290+03.47
	FINAL DECK ELEVATION	987.78	987.88	987.99	988.10	988.21	988.36	988.51	988.62	988.66	988.82	989.03	989.24	989.46	989.49
CROWN	STATION	288+29.67	288+40.42	288+51.17	288+61.92	288+72.67	288+87.92	289+03.17	289+13.92	289+18.42	289+33.67	289+55.05	289+76.42	289+97.80	290+01.25
	FINAL DECK ELEVATION	987.81	987.92	988.03	988.13	988.24	988.39	988.55	988.65	988.70	988.85	989.06	989.28	989.49	989.53
BEAM 14	STATION	288+29.60	288+40.35	288+51.10	288+61.85	288+72.60	288+87.85	289+03.10	289+13.85	289+18.35	289+33.60	289+54.98	289+76.35	289+97.73	290+01.19
	FINAL DECK ELEVATION	987.81	987.92	988.02	988.13	988.24	988.39	988.54	988.65	988.70	988.85	989.06	989.28	989.49	989.52
BEAM 15	STATION	288+22.97	288+33.72	288+44.47	288+55.22	288+65.97	288+81.22	288+96.47	289+07.22	289+11.72	289+26.97	289+48.34	289+69.72	289+91.09	289+94.55
	FINAL DECK ELEVATION	987.57	987.68	987.79	987.90	988.00	988.16	988.31	988.42	988.46	988.61	988.83	989.04	989.26	989.29
BEAM 16	STATION	288+16.33	288+27.08	288+37.83	288+48.58	288+59.33	288+74.58	288+89.83	289+00.58	289+05.08	289+20.33	289+41.71	289+63.08	289+84.46	289+87.92
	FINAL DECK ELEVATION	987.34	987.45	987.55	987.66	987.77	987.92	988.07	988.18	988.23	988.38	988.59	988.81	989.02	989.06
RIGHT CURB LINE	STATION	288+15.77	288+26.52	288+37.27	288+48.02	288+58.77	288+74.02	288+89.27	289+00.02	289+04.52	289+19.77	289+41.14	289+62.52	289+83.89	289+87.35
	FINAL DECK ELEVATION	987.32	987.43	987.53	987.64	987.75	987.90	988.05	988.16	988.21	988.36	988.57	988.79	989.00	989.04

NOTES:

1. FOR NOTES, SEE SHEET 61/70.

2021-11-04_BU 13 - RFC PLANS

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	TYW	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CDB		7703457	

FINAL DECK SURFACE ELEVATIONS - 3 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

63/70

107/153

ISSUE RECORD:

NO.	DATE	DESCRIPTION

RIGHT BRIDGE FINAL DECK ELEVATIONS

LOCATION	COMPONENT	℄ BEARING PIER 3	SPAN 4				℄ BEARING PIER 4	SPAN 5				℄ BEARING PIER 5	SPAN 6			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT	F.S. #3		1/4 PT.	1/2 PT	3/4 PT	F.S. #4		1/4 PT.	1/2 PT	3/4 PT	
LEFT CURB LINE	STATION	290+39.52	290+60.90	290+82.27	291+03.65	291+06.36	291+25.02	291+46.40	291+67.77	291+89.15	291+94.52	292+10.52	292+25.52	292+40.52	292+55.52	292+70.52
	FINAL DECK ELEVATION	989.39	989.61	989.82	990.04	990.06	990.25	990.46	990.68	990.89	990.94	991.10	991.25	991.40	991.55	991.70
BEAM 11	STATION	290+39.01	290+60.39	290+81.76	291+03.14	291+05.84	291+24.51	291+45.89	291+67.26	291+88.64	291+94.01	292+10.01	292+25.01	292+40.01	292+55.01	292+70.01
	FINAL DECK ELEVATION	989.40	989.62	989.83	990.04	990.07	990.26	990.47	990.68	990.90	990.95	991.11	991.26	991.41	991.56	991.71
PROFILE GRADE LINE	STATION	290+34.34	290+55.71	290+77.09	290+98.46	291+01.17	291+19.84	291+41.21	291+62.59	291+83.96	291+89.34	292+05.34	292+20.34	292+35.34	292+50.34	292+65.34
	FINAL DECK ELEVATION	989.47	989.69	989.90	990.11	990.14	990.33	990.54	990.76	990.97	991.02	991.18	991.33	991.48	991.63	991.78
BEAM 12	STATION	290+32.38	290+53.75	290+75.13	290+96.50	290+99.21	291+17.88	291+39.25	291+60.63	291+82.00	291+87.38	292+03.38	292+18.38	292+33.38	292+48.38	292+63.38
	FINAL DECK ELEVATION	989.50	989.72	989.93	990.14	990.17	990.36	990.57	990.79	991.00	991.05	991.21	991.36	991.51	991.66	991.81
BEAM 13	STATION	290+25.74	290+47.12	290+68.49	290+89.87	290+92.57	291+11.24	291+32.62	291+53.99	291+75.37	291+80.74	291+96.74	292+11.74	292+26.74	292+41.74	292+56.74
	FINAL DECK ELEVATION	989.61	989.82	990.03	990.25	990.27	990.46	990.67	990.89	991.10	991.16	991.32	991.47	991.62	991.77	991.92
LEFT CONSTRUCTION JOINT	STATION	290+23.28	290+44.65	290+66.03	290+87.40	290+90.11	291+08.78	291+30.15	291+51.53	291+72.90	291+78.28	291+94.28	292+09.28	292+24.28	292+39.28	292+54.28
	FINAL DECK ELEVATION	989.64	989.86	990.07	990.28	990.31	990.50	990.71	990.93	991.14	991.19	991.35	991.50	991.65	991.80	991.95
RIGHT CONSTRUCTION JOINT	STATION	290+21.38	290+42.76	290+64.13	290+85.51	290+88.22	291+06.88	291+28.26	291+49.63	291+71.01	291+76.38	291+92.38	292+07.38	292+22.38	292+37.38	292+52.38
	FINAL DECK ELEVATION	989.67	989.89	990.10	990.31	990.34	990.53	990.74	990.95	991.17	991.22	991.38	991.53	991.68	991.83	991.98
CROWN	STATION	290+19.17	290+40.55	290+61.92	290+83.30	290+86.00	291+04.67	291+26.05	291+47.42	291+68.80	291+74.17	291+90.17	292+05.17	292+20.17	292+35.17	292+50.17
	FINAL DECK ELEVATION	989.71	989.92	990.13	990.35	990.37	990.56	990.77	990.99	991.20	991.26	991.42	991.57	991.72	991.87	992.02
BEAM 14	STATION	290+19.10	290+40.48	290+61.85	290+83.23	290+85.94	291+04.60	291+25.98	291+47.35	291+68.73	291+74.10	291+90.10	292+05.10	292+20.10	292+35.10	292+50.10
	FINAL DECK ELEVATION	989.70	989.92	990.13	990.34	990.37	990.56	990.77	990.99	991.20	991.25	991.41	991.56	991.71	991.86	992.01
BEAM 15	STATION	290+12.47	290+33.84	290+55.22	290+76.59	290+79.30	290+97.97	291+19.34	291+40.72	291+62.09	291+67.47	291+83.47	291+98.47	292+13.47	292+28.47	292+43.47
	FINAL DECK ELEVATION	989.47	989.68	989.90	990.11	990.14	990.32	990.54	990.75	990.97	991.02	991.18	991.33	991.48	991.63	991.78
BEAM 16	STATION	290+05.83	290+27.21	290+48.58	290+69.96	290+72.67	290+91.33	291+12.71	291+34.08	291+55.46	291+60.83	291+76.83	291+91.83	292+06.83	292+21.83	292+36.83
	FINAL DECK ELEVATION	989.23	989.45	989.66	989.88	989.90	990.09	990.30	990.52	990.73	990.78	990.94	991.09	991.24	991.39	991.54
RIGHT CURB LINE	STATION	290+05.27	290+26.64	290+48.02	290+69.39	290+72.10	290+90.77	291+12.14	291+33.52	291+54.89	291+60.27	291+76.27	291+91.27	292+06.27	292+21.27	292+36.27
	FINAL DECK ELEVATION	989.21	989.43	989.64	989.86	989.88	990.07	990.28	990.50	990.71	990.76	990.92	991.07	991.22	991.37	991.52

NOTES:

1. FOR NOTES, SEE SHEET 61/70.

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

DESIGNED JRE | DRAWN TYW | CHECKED CDB | REVIEWED TES 09/01/21 | DATE | REVISED | STRUCTURE FILE NUMBER 7703457

FINAL DECK SURFACE ELEVATIONS - 4 OF 4
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

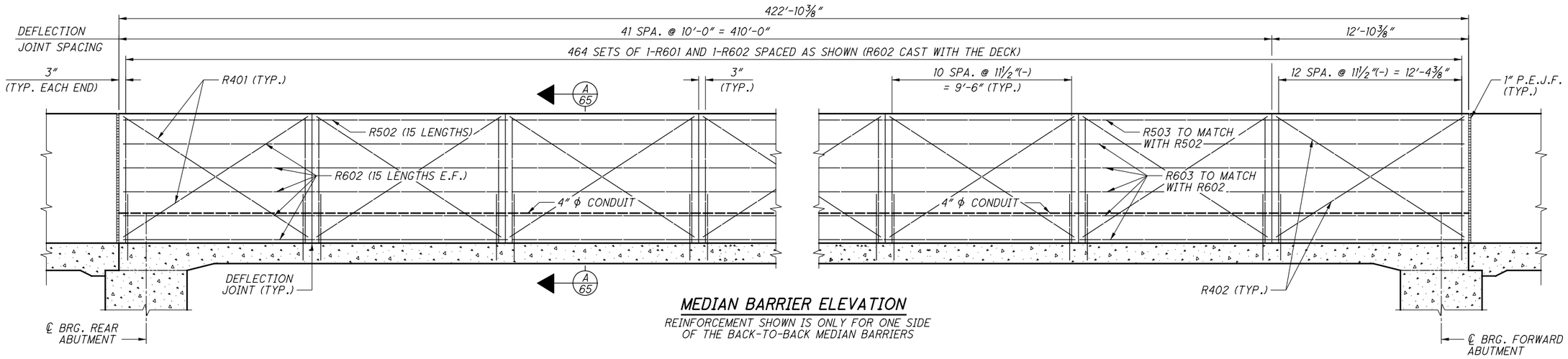
SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

64/70

108/153

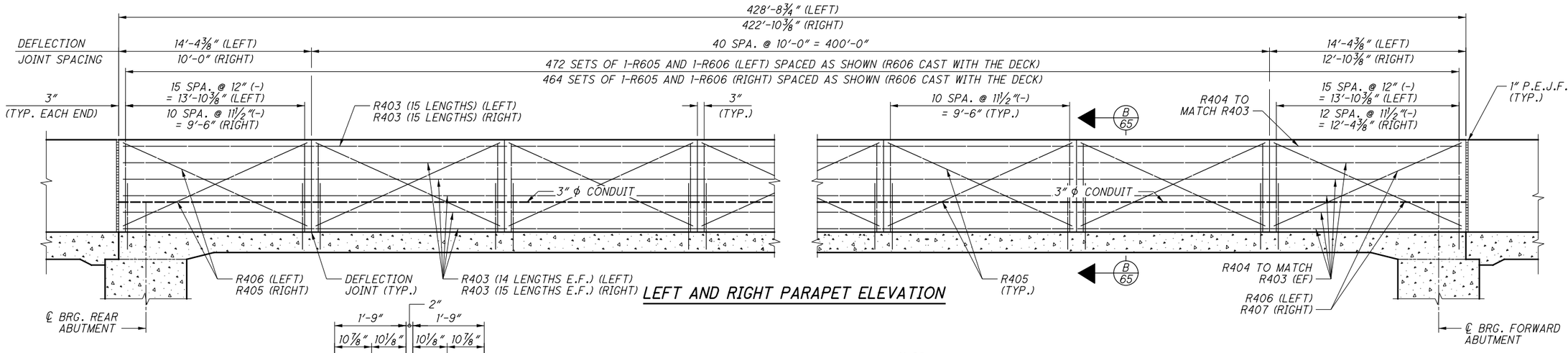
ISSUE RECORD:

NO.	DATE	DESCRIPTION

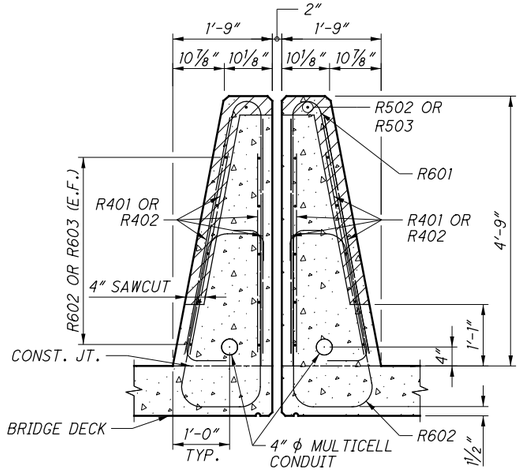


MEDIAN BARRIER ELEVATION

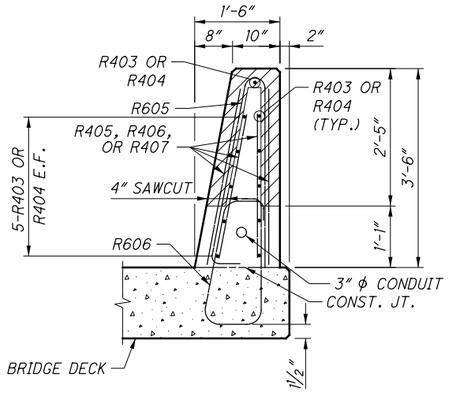
REINFORCEMENT SHOWN IS ONLY FOR ONE SIDE OF THE BACK-TO-BACK MEDIAN BARRIERS



LEFT AND RIGHT PARAPET ELEVATION



A 65 SECTION THRU MEDIAN BARRRIER



B 65 SECTION THRU PARAPET

MIN. LAP LENGTHS	
NO. 4 BARS	1′-11″
NO. 5 BARS	2′-5″
NO. 6 BARS	3′-6″

NOTES:

1. FOR APPROACH SLAB PARAPETS, SEE SHEET 68/70.
2. FOR TRANSVERSE SECTION AND SEALING LIMITS, SEE SHEET 48/70.
3. FOR LIGHTING AND ITS DETAILS, SEE BU-36.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

PARSONS
p:\\VANV401PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0954\Sheets\076_0954_SA002.dgn Sheet 11/2/2021 11:35:37 AM p002694C

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	TYW	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703457	

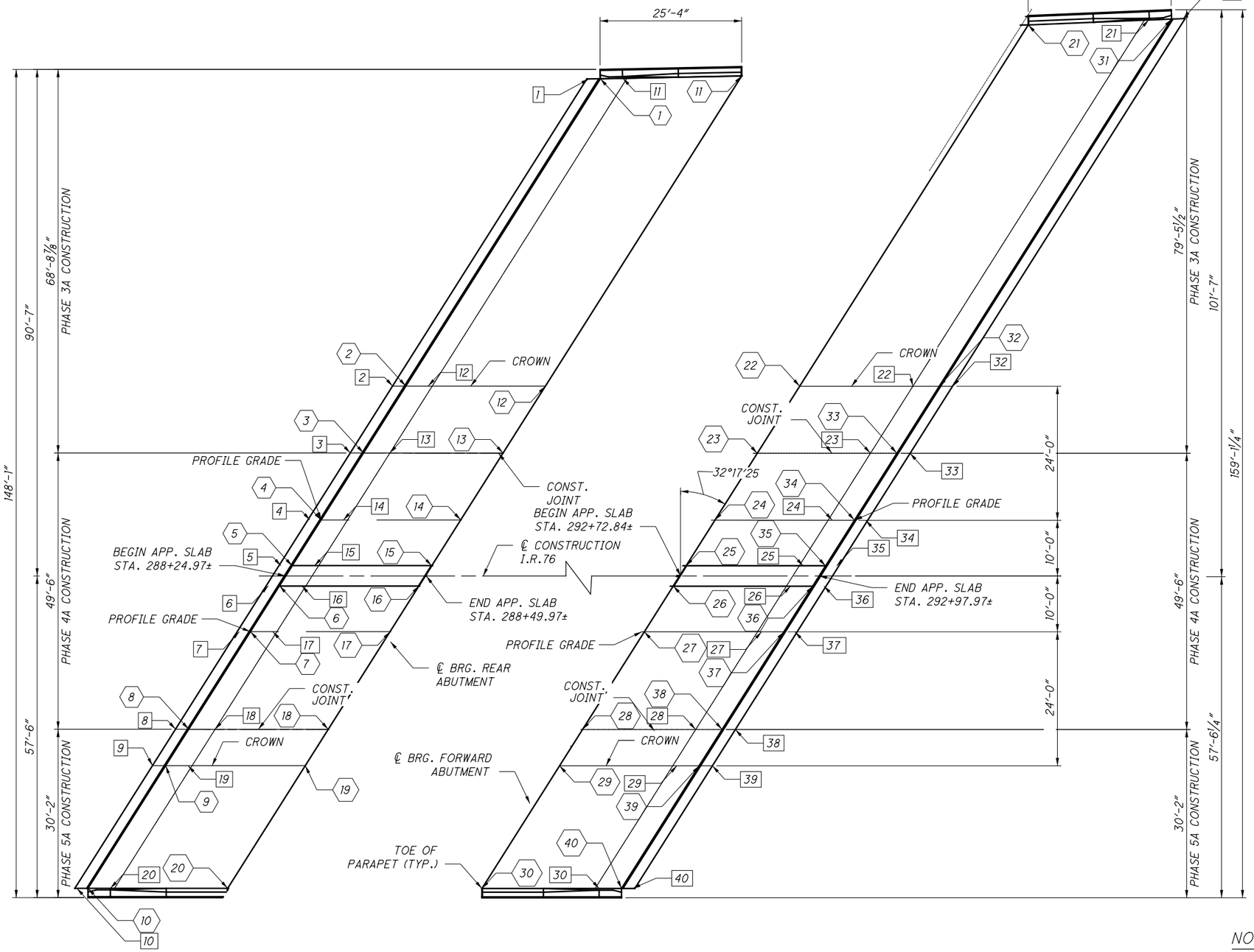
PARAPET DETAILS
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

65 / 70

109
153



TOP OF APPROACH SLAB ELEVATIONS

LOC.	ELEV	LOC.	ELEV	LOC.	ELEV	LOC.	ELEV
1	987.42	11	987.67	21	991.81	31	991.84
2	987.96	12	988.21	22	992.44	32	992.70
3	987.69	13	987.94	23	992.18	33	992.43
4	987.42	14	987.67	24	991.91	34	992.16
5	987.24	15	987.49	25	991.73	35	991.98
6	987.21	16	987.46	26	991.70	36	991.95
7	987.29	17	987.54	27	991.78	37	992.03
8	987.46	18	987.71	28	991.95	38	992.20
9	987.53	19	987.78	29	992.01	39	992.26
10	987.03	20	987.28	30	991.52	40	991.77

TOP OF SLEEPER SLAB ELEVATIONS

LOC.	ELEV	LOC.	ELEV	LOC.	ELEV	LOC.	ELEV
1	987.40	11	986.21	21	990.76	31	991.84
2	987.93	12	986.75	22	991.40	32	992.72
3	987.66	13	986.48	23	991.13	33	992.45
4	987.40	14	986.22	24	990.86	34	992.18
5	987.21	15	986.03	25	990.68	35	992.00
6	987.19	16	986.01	26	990.66	36	991.98
7	987.27	17	986.09	27	990.74	37	992.06
8	987.44	18	986.25	28	990.90	38	992.22
9	987.50	19	986.32	29	990.97	39	992.29
10	987.00	20	985.83	30	990.48	40	991.80

LEGEND:

- (x) - APPROACH SLAB ELEVATION
- [x] - SLEEPER SLAB ELEVATION

NOTES:

1. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE STANDARD DRAWINGS AS-1-15 AND AS-2-15.
2. FOR APPROACH SLAB PARAPET AND MEDIAN DETAILS, SEE SHEET [68/70].

ISSUE RECORD:

NO.	DATE	DESCRIPTION

PARSONS
p:\\VANV\A01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0954\Sheets\076_0954_SD004.dgn Sheet 11/2/2021 11:35:45 AM p002694C

2021-11-04_BU 13 - RFC PLANS

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

DESIGNED JRE | DRAWN JRE/TYW | REVIEWED TES 09/01/21 | DATE | CHECKED RWB | REVISED | STRUCTURE FILE NUMBER 7703457

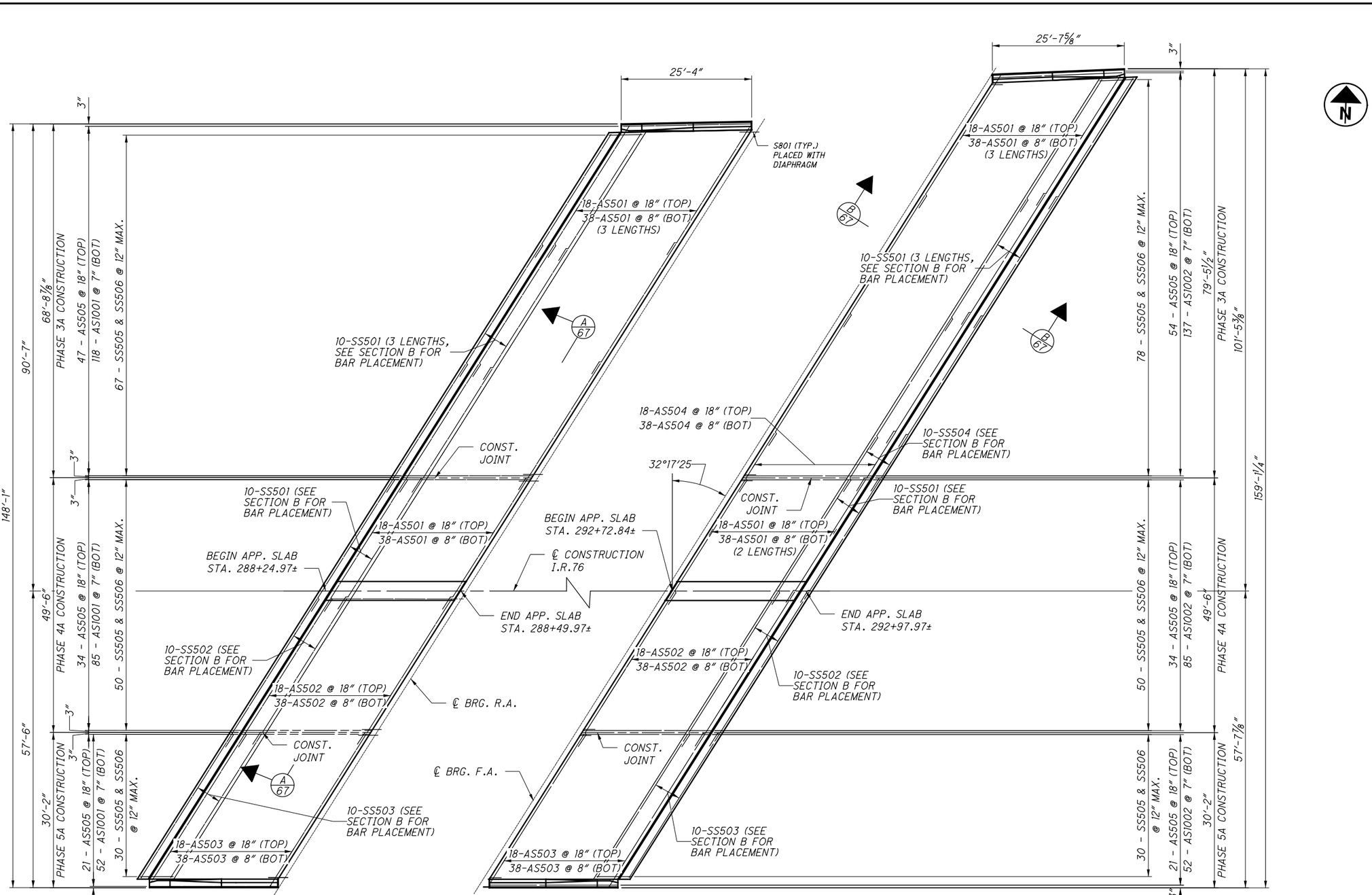
APPROACH SLAB PLAN
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

66/70

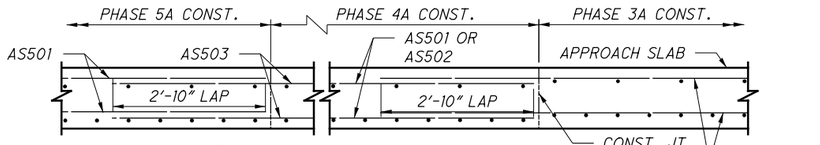
110/153

Released for Construction
Thomas J Powell, PE
11/10/2021

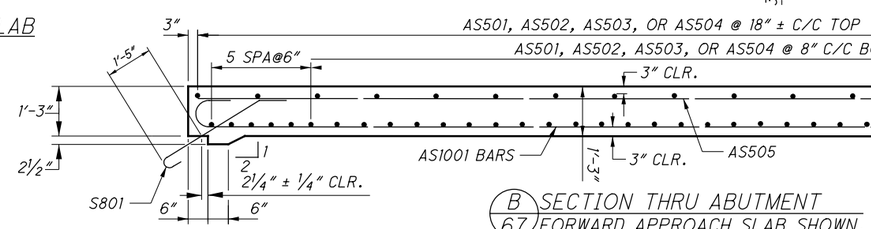


REAR APPROACH SLAB

FORWARD APPROACH SLAB



A 67 SECTION THRU APPROACH
SEE STD. DWG. AS-1-15 FOR DETAILS



B 67 SECTION THRU ABUTMENT
FORWARD APPROACH SLAB SHOWN, REAR APPROACH SLAB SIMILAR

2021-11-04_BU 13 - RFC PLANS

PARSONS
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APPROACH SLAB DETAILS
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

DESIGNED	DRAWN	REVIEWED	DATE
JRE	JRE/TYW	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703457	

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

67 / 70

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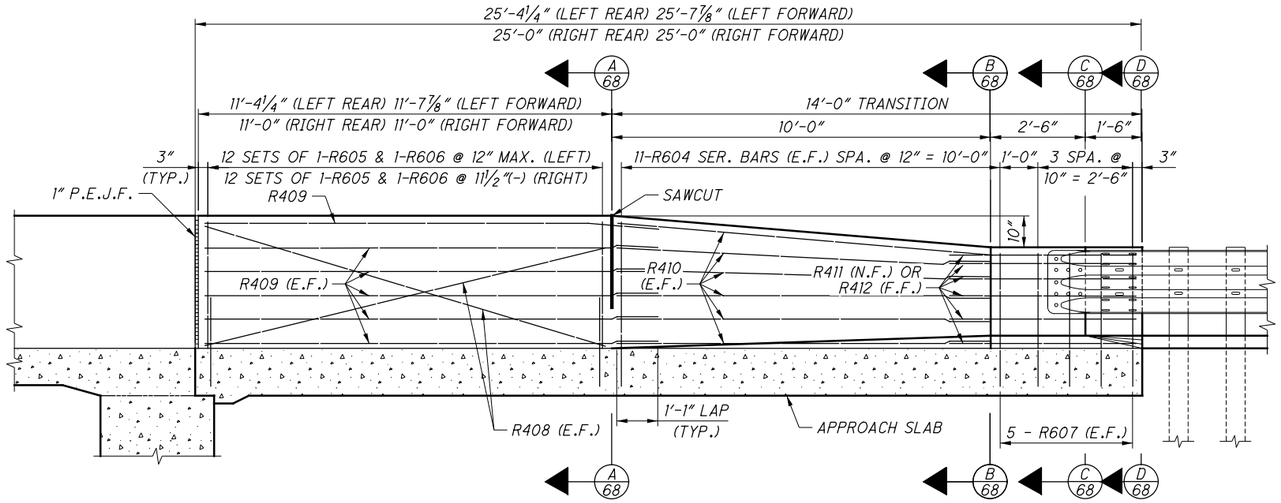
ISSUE RECORD:

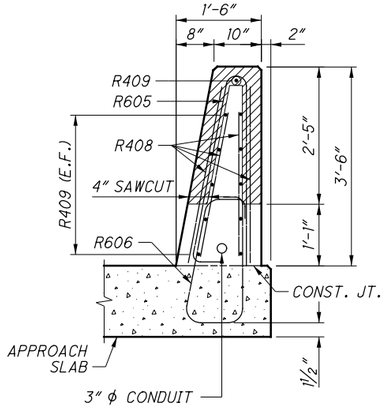
NO.	DATE	DESCRIPTION

PARSONS
p:\\VANV\A01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0954\Sheets\076_0954_SD003.dgn Sheet 11/2/2021 11:35:53 AM p002694C

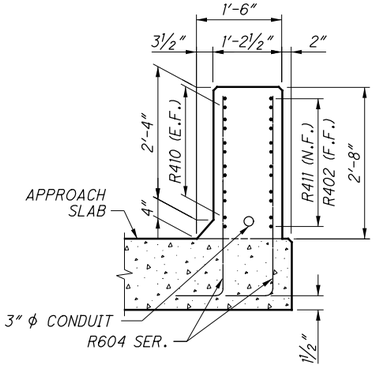


PARAPET ELEVATION

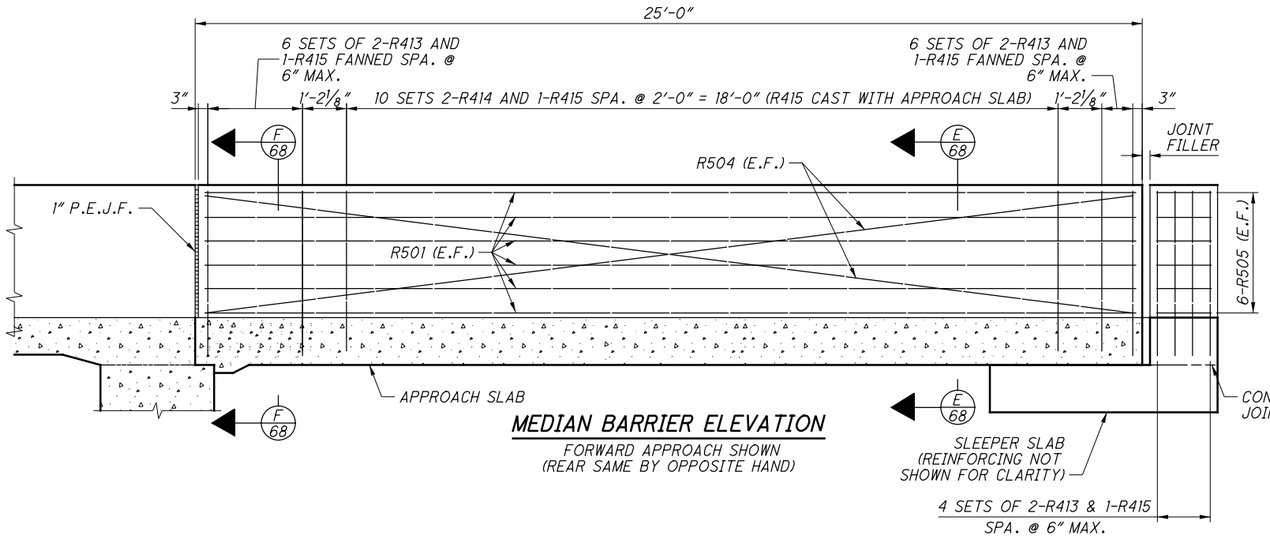
LOOKING AT EXTERIOR FACE
RIGHT FORWARD APPROACH AND LEFT REAR APPROACH SHOWN
(LEFT FORWARD AND RIGHT REAR SAME BY OPPOSITE HAND)



A 68 SECTION THRU PARAPET

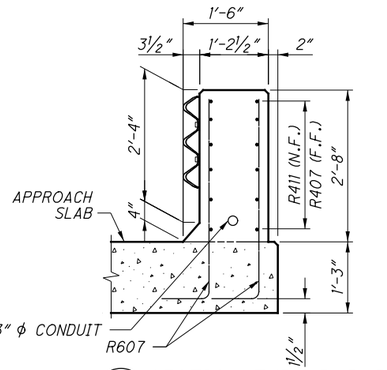


B 68 SECTION THRU PARAPET

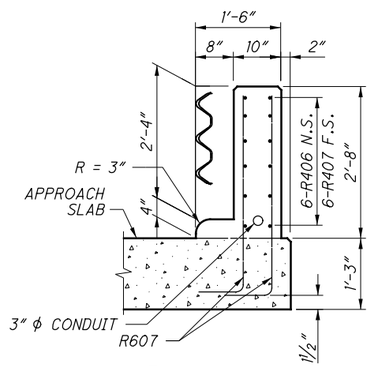


MEDIAN BARRIER ELEVATION

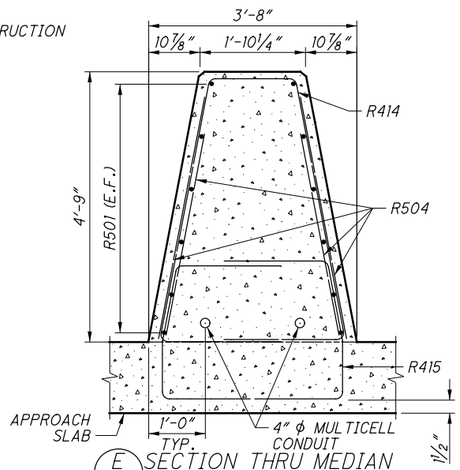
FORWARD APPROACH SHOWN
(REAR SAME BY OPPOSITE HAND)



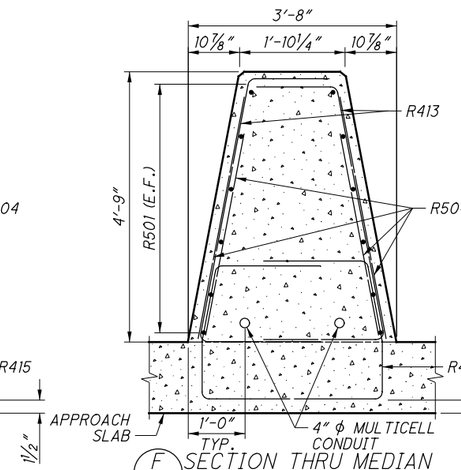
C 68 SECTION THRU PARAPET



D 68 SECTION THRU PARAPET



E 68 SECTION THRU MEDIAN



F 68 SECTION THRU MEDIAN AT ENDS

NOTES:

1. FOR ADDITIONAL DETAILS, SEE ODOT STANDARD DRAWINGS SBR-1-20 AND SBR-2-20.

2021-11-04_BU 13 - RFC PLANS

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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

DESIGNED JRE | DRAWN JRE/TYW | REVIEWED TES 09/01/21 | DATE | STRUCTURE FILE NUMBER 7703457 | CHECKED RWB | REVISED

APPROACH PARAPET DETAILS
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

68 / 70

112 / 153

MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
ABUTMENTS											
RA501	12	30'-4"	380	STR							
**RA502	6	29'-8"	186	STR							
**RA503	6	38'-8"	242	STR							
RA504	6	14'-10"	93	STR							
RA505	6	12'-3"	77	STR							
RA506	139	21'-1"	3057	3	2'-8"	7'-7"					
RA507	139	17'-1"	2477	3	5'-8"	2'-7"					
RA508	22	12'-1"	277	3	3'-2"	2'-7"					
RA509	3	7'-4"	23	19	3'-9"	1'-9"	3'-3"				
	1	7'-11"				2'-6"					
RA510	SER	TO	29	3	1'-2"	TO					0'-7 1/2"
	OF 3	10'-5"				3'-9"					
RA511	2	7'-1"	15	19	2'-10"	4'-1"	1'-8"				
RA512	5	10'-1"	53	STR							
RA513	5	11'-0"	57	STR							
RA514	1	13'-3"	14	STR							
RA515	1	14'-2"	15	STR							
RA516	2	14'-1"	29	STR							
RA517	2	15'-0"	31	STR							
RA518	4	7'-3"	30	42	3'-2"	1'-5"	0'-10"	1'-4"			
*RA519	8	29'-8"	248	STR							
**RA520	8	25'-4"	211	STR							
*RA521	8	30'-4"	253	STR							
**RA522	8	38'-4"	320	STR							
RA523	12	12'-4"	154	STR							
RA524	2	15'-10"	33	STR							
RA525	4	16'-7"	69	STR							
	1	7'-11"				2'-6"					
RA526	SER	TO	29	3	1'-2"	TO					0'-8 1/2"
	OF 3	10'-9"				3'-11"					
RA527	4	5'-9"	24	10	1'-4"	2'-0"	2'-3"	1'-6"			
RA528	2	7'-0"	15	19	2'-10"	3'-11"	1'-9"				
*RA529	6	30'-4"	190	STR							
*RA530	6	29'-8"	186	STR							
RA531	16	29'-8"	495	STR							
RA532	10	6'-5"	67	2	2'-0"	2'-8"	2'-0"				
RA601	18	23'-10"	644	2	11'-6"	1'-2"	11'-6"				
RA602	18	9'-8"	261	2	4'-5"	1'-2"	4'-5"				
RA603	1	11'-0"	17	STR							
RA604	1	4'-5"	7	STR							
RA605	15	13'-3"	299	3	3'-2"	3'-8 1/2"					
RA801	8	31'-5"	671	STR							
**RA802	4	30'-6"	326	STR							
**RA803	4	38'-8"	413	STR							
RA804	4	14'-10"	158	STR							
RA805	4	12'-3"	131	STR							
RA806	8	30'-9"	657	STR							
**RA807	4	25'-4"	271	STR							
*RA808	4	30'-4"	324	STR							
**RA809	4	38'-4"	409	STR							
RA810	21	13'-8"	766	5	2'-8"	3'-7"	2'-4"				
*RA811	4	31'-5"	336	STR							
*RA812	4	30'-6"	326	STR							
*RA813	4	30'-9"	328	STR							
FA501	18	26'-0"	488	STR							
*FA502	6	29'-8"	186	STR							
**FA503	2	38'-10"	81	STR							
**FA504	2	40'-0"	83	STR							
**FA505	2	37'-2"	78	STR							
FA506	143	21'-1"	3145	3	2'-8"	7'-7"					
FA507	143	17'-1"	2548	3	5'-8"	2'-7"					
FA508	3	7'-4"	23	19	3'-9"	1'-9"	3'-3"				
FA509	6	13'-3"	83	STR							
FA510	6	12'-2"	76	STR							
FA511	22	12'-1"	277	3	3'-2"	2'-7"					
FA512	24	25'-10"	647	STR							
**FA513	8	25'-4"	211	STR							
*FA514	8	30'-4"	253	STR							
**FA515	8	37'-2"	310	STR							
FA516	10	6'-5"	67	2	2'-0"	2'-8"	2'-0"				
FA517	5	5'-9"	30	10	1'-4"	2'-0"	2'-3"	1'-6"			
	1	7'-11"				2'-6"					
FA518	SER	TO	40	3	1'-2"	TO					0'-6 1/4"
	OF 4	11'-1"				4'-1"					
FA519	5	7'-3"	38	42	3'-2"	1'-5"	0'-10"	1'-4"			
FA520	6	11'-0"	69	STR							
FA521	6	12'-0"	75	STR							
FA522	1	15'-6"	16	STR							
FA523	1	16'-6"	17	STR							
FA524	2	16'-7"	35	STR							
FA525	2	17'-7"	37	STR							
FA526	2	8'-3"	17	19	2'-10"	5'-3"	1'-11"				

MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
ABUTMENTS CONTINUED											
FA527	2	7'-5"	15	19	2'-10"	4'-3"	2'-0"				
FA528	12	9'-7"	120	STR							
FA529	2	13'-3"	28	STR							
FA530	4	14'-2"	59	STR							
	1	7'-11"				2'-6"					
FA531	SER	TO	29	3	1'-2"	TO					0'-9"
	OF 3	10'-11"				4'-0"					
*FA532	6	26'-0"	163	STR							
**FA533	6	29'-8"	186	STR							
*FA534	8	25'-10"	216	STR							
FA601	9	23'-10"	322	2	11'-6"	1'-2"	11'-6"				
**FA602	9	10'-0"	135	2	4'-7"	1'-2"	4'-7"				
FA603	1	11'-6"	17	STR							
FA604	1	4'-7"	7	STR							
FA605	8	12'-1"	145	2	11'-3"	1'-2"	11'-3"				
FA606	8	5'-6"	66	2	4'-8"	1'-2"	4'-8"				
FA607	15	13'-3"	299	3	3'-2"	3'-8 1/2"					
FA801	12	27'-2"	870	STR							
*FA802	4	30'-6"	326	STR							
**FA803	1	38'-10"	104	STR							
**FA804	2	40'-0"	214	STR							
**FA805	1	37'-2"	99	STR							
FA806	4	13'-3"	142	STR							
FA807	4	12'-2"	130	STR							
FA808	12	27'-2"	870	STR							
**FA809	4	25'-4"	271	STR							
*FA810	4	30'-4"	324	STR							
**FA811	4	37'-9"	403	STR							
FA812	21	13'-8"	766	5	2'-8"	3'-7"	2'-4"				
*FA813	4	27'-2"	290	STR							
**FA814	4	30'-6"	326	STR							
*FA815	4	27'-2"	290	STR							
SUBTOTAL		31885									

MARK	NUMBER PIER 1	PIER 2	PIER 3	PIER 4	PIER 5	TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
PIERS																
P501	4					4	31'-6"	131	STR							
P502	200					200	3'-3"	678	1	2'-2"	1'-2"					
P503	136	66		74		276	3'-6"	1008	1	2'-2"	1'-5"					
P504		12	11	5	11	39	17'-9"	722	STR							
P505		272		136	136	544	3'-7"	2033	1	2'-2"	1'-6"					
P506		10	12	10		32	24'-3"	809	STR							
P507		10	12	10		32	19'-3"	642	STR							
P508			70			70	3'-5"	249	1	2'-2"	1'-4"					
P509			272			272	4'-0"	1135	1	2'-8"	1'-5"					
P510			12			12	18'-11"	237	STR							
P511				136	136	272	3'-8"	1040	1	2'-2"	1'-7"					
P512					78	78	3'-4"	271	1	2'-2"	1'-3"					
P601				10		10	20'-6"	308	STR							
P602					12	12	21'-6"	388	STR							
P801	4				5	9	24'-10"	597	STR							
**P802	4				5	9	6'-10"	164	STR							
P803	4				5	9	21'-3"	511	STR							
P804		4		6		10	25'-0"	668	STR							
P805		8	12	12		32	20'-10"	1780	STR							
P806			6			6	25'-3"	405	STR							
*P807	4				5	9	24'-10"	597	STR							
*P808	4				5	9	6'-10"	164	STR							
**P809	4				5	9	21'-3"	511	STR							
P1101	9				11	20	25'-0"	2657	STR							
P1102	9				11	20	32'-0"	3400	STR							
							SUBTOTAL	21105								

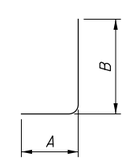
* INDICATES BARS WITH A MECHANICAL CONNECTOR. DIMENSION PROVIDED IS TO THE END OF THE CONNECTOR.

** INDICATES BARS TO BE THREADED INTO A MECHANICAL CONNECTOR. DIMENSION PROVIDED DOES NOT INCLUDE PORTION THREADED INTO CONNECTOR.

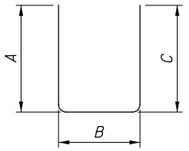
***INDICATES GLASS FIBER REINFORCED POLYMER (GFRP) BARS ACCORDING TO STANDARD DRAWINGS SBR-1-20 & SBR-2-20.

NOTES:

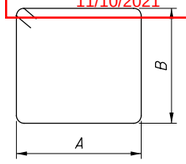
1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, M601:
   - M: LOCATION OF THE BAR IN THE STRUCTURE (MOMENT SLAB)
   - 6: BAR SIZE DIMENSION NO. 6
   - 01: SEQUENCE NUMBER
2. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. STRAIGHT BARS ARE INDICATED BY "STR".
3. ALL REINFORCING IS TO BE EPOXY COATED.



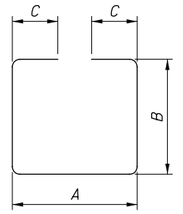
TYPE-1



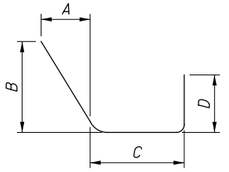
TYPE-2



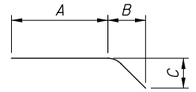
TYPE-3



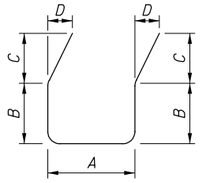
TYPE-5



TYPE-10



TYPE-19



TYPE 42

Released for Construction
Thomas J Powell, PE
11/10/2021

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	TYW	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703457	

REINFORCING STEEL LIST - 1 OF 2
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

69 / 70

113 / 153

2021-11-04_BU 13 - RFC PLANS

ISSUE RECORD:

NO.	DATE	DESCRIPTION

PARSONS
pw:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0954\Sheets\076_0954_SL001.dgn 11/2/2021 11:36:08 AM p002694C

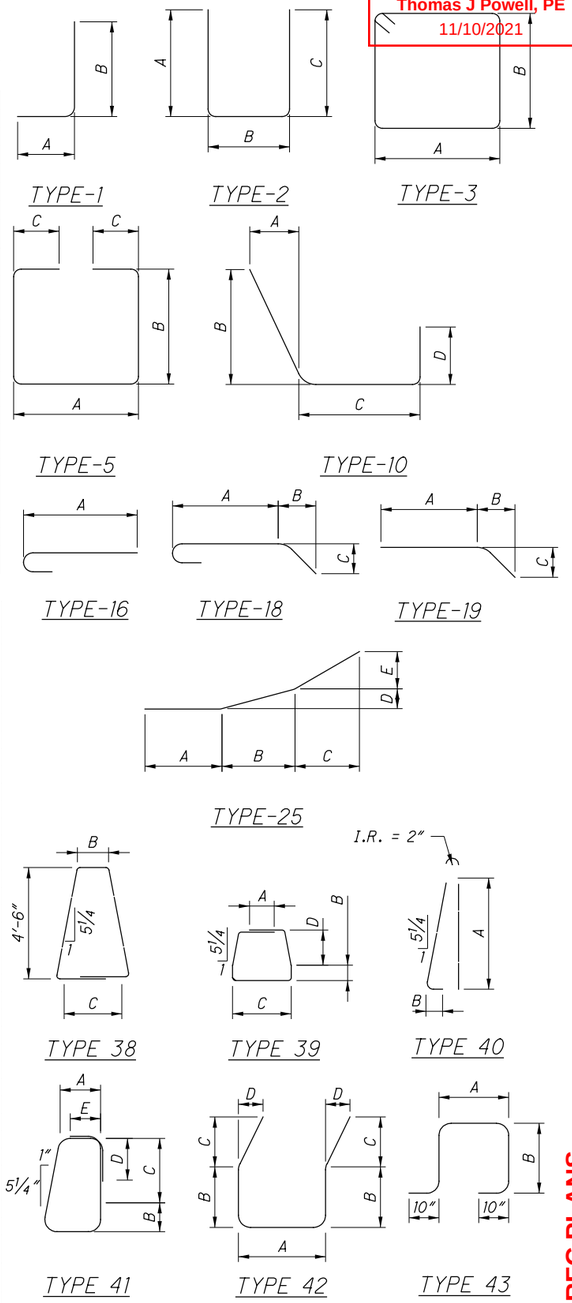
MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
SUPERSTRUCTURE											
S401	2593	30'-0"	51964	STR							
S402	179	29'-5"	3517	STR							
	1	30'-2"									
S403	SER OF	TO	240	STR							0'-5 ¾"(-)
	11	35'-3"									
S404	64	4'-0"	171	STR							
S501	8784	30'-0"	274851	STR							
S502	1868	22'-10"	44486	STR							
S503	1846	29'-10"	57440	STR							
S504	163	15'-1"	2564	STR							
	2	3'-6"									
S505	SER OF	TO	372	STR							0'-7 ⅜"(+)
	19	15'-3"									
	2	4'-2"									
S506	SER OF	TO	1380	STR							0'-7 ⅞
	39	29'-9"									
	2	3'-7"									
S507	SER OF	TO	1356	STR							0'-8 ½"(+)
	39	29'-9"									
	4	3'-8"									
S508	SER OF	TO	1422	STR							0'-8"(-)
	27	21'-7"									
	4	3'-6"									
S509	SER OF	TO	2616	STR							0'-8 ¼"(-)
	38	29'-6"									
	4	3'-2"									
S510	SER OF	TO	2664	STR							0'-8 ⅛"
	39	29'-7"									
	2	3'-11"									
S511	SER OF	TO	1373	STR							0'-8"(-)
	39	29'-10"									
	2	3'-5"									
S512	SER OF	TO	1346	STR							0'-8 ⅛"(-)
	39	29'-8"									
	2	3'-11"									
S513	SER OF	TO	924	STR							0'-8"(+)
	31	24'-8"									
S514	NOT USED										
S515	968	13'-5"	13546	10	0'-2"	9'-6"	0'-7"	3'-7"			
S516	967	9'-8"	9750	10	0'-2"	7'-6"	0'-7"	1'-10"			
S517	430	17'-6"	7849	STR							
S518	430	19'-6"	8746	STR							
S519	430	21'-6"	9643	STR							
S520	440	23'-6"	10785	STR							
S521	19	20'-11"	415	STR							
S522	13	19'-0"	258	STR							
S523	13	17'-0"	231	STR							
S524	1955	9'-5"	19202	10	0'-2"	7'-6"	0'-7"	1'-7"			
S525	256	7'-5"	1980	2	2'-6"	2'-8"	2'-6"				
S526	12	8'-5"	105	3	1'-3"	2'-8"					
S527	244	11'-9"	2990	3	2'-11"	2'-8"					
S528	8	7'-3"	60	42	3'-2"	1'-5"	0'-10"	1'-5"			
S529	8	5'-10"	49	10	1'-4"	2'-3"	2'-0"	1'-6"			
S601	178	25'-0"	6684	STR							
S602	736	30'-0"	33164	STR							
S801	211	5'-5"	3052	18	3'-1"	1'-0"	1'-0"				
S802	24	5'-5"	347	18	3'-3"	1'-0"	1'-0"				
S803	4	35'-8"	381	1	34'-4"	1'-6"					
S804	8	36'-7"	781	2	1'-6"	34'-0"	1'-6"				
S805	4	8'-0"	85	1	6'-8"	1'-6"					
S806	2	34'-4"	183	STR							
S807	4	34'-0"	363	STR							
S808	2	6'-8"	36	STR							
S809	34	40'-0"	3631	STR							
S810	BAR MARK NOT USED										
S811	8	12'-11"	276	STR							
S812	4	8'-3"	88	1	6'-11"	1'-6"					
S813	4	1'-4"	14	1	0'-0"	1'-6"					
S814	2	10'-6"	56	STR							
S815	2	6'-8"	36	STR							
S816	8	23'-6"	502	STR							
S817	28	24'-10"	1857	STR							

MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
SUPERSTRUCTURE CONTINUED											
S818	8	9'-4"	199	1	8'-0"	1'-6"					
S819	4	8'-0"	85	STR							
S820	8	22'-4"	477	1	21'-0"	1'-6"					
S821	4	21'-0"	224	STR							
S822	16	32'-4"	1381	STR							
S823	28	35'-3"	2635	STR							
		SUBTOTAL	590832								
APPROACH AND SLEEPER SLABS											
SS501	80	30'-0"	2503	STR							
SS502	20	34'-4"	716	STR							
SS503	20	34'-10"	727	STR							
SS504	10	14'-0"	146	STR							
SS505	305	5'-9"	1829	43	1'-5"	1'-7"					
SS506	305	6'-7"	2094	STR							
AS501	448	30'-0"	14018	STR							
AS502	112	34'-4"	4011	STR							
AS503	112	34'-10"	4069	STR							
AS504	56	14'-0"	818	STR							
AS505	211	24'-6"	5392	STR							
AS1001	529	25'-11"	58994	16	24'-6"						
		SUBTOTAL	95317								
PARAPETS											
R401	20	14'-5"	193	38		1'-5"	3'-1"				
R402	44	11'-9"	345	39	1'-0"	1'-1 ½"	3'-2"	1'-5"			
***R403	308	30'-0"	6172	STR							
***R404	22	35'-3"	518	STR							
***R405	328	10'-0"	2191	STR							
***R406	8	14'-4"	77	STR							
***R407	4	12'-11"	35	STR							
***R408	16	11'-1"	118	STR							
***R409	44	12'-7"	370	STR							
***R410	48	10'-0"	321	STR							
***R411	24	6'-4"	102	25	2'-6"	2'-5"	1'-4 ¼"	0'-1 ½"	0'-5"		
***R412	24	5'-1"	81	STR							
R413	64	6'-10"	292	19	4'-5"	1'-0"	1'-8"				
R414	40	14'-10"	396	38		1'-6"	3'-2"				
R415	52	11'-6"	399	39	1'-0"	1'-0"	3'-2"				
R501	24	24'-8"	617	STR							
R502	8	25'-0"	209	STR							
***R503	2	9'-0"	19	STR							
R504	8	25'-2"	210	STR							
R505	24	3'-3"	81	2	1'-0"	1'-6"	1'-0"				
R601	928	9'-6"	13242	40	4'-6"	0'-10"					
R602	928	6'-10"	9525	41	0'-7"	0'-9"	1'-5"	1'-0"	0'-7"		
***R603	330	30'-0"	14870	STR							
***R604	44	24'-10"	1641	STR							
	4	4'-5"				3'-4"					
R605	SER OF	TO	40	1	1'-0"	TO					0'-1"
	11	5'-3"				4'-2"					
R606	984	6'-9"	9976	41	0'-9 ½"	0'-7"	1'-5"	1'-0"	0'-7"		
R607	984	7'-2"	10592	40	3'-3"	0'-10"					
R608	40	4'-5"	265	1	1'-0"	3'-5"					
R609	328	10'-6"	5173	STR							
R610	8	13'-3"	159	STR							
		SUBTOTAL	78229								
		TOTAL WEIGHT	817368								

* INDICATES BARS WITH A MECHANICAL CONNECTOR. DIMENSION PROVIDED IS TO THE END OF THE CONNECTOR.

** INDICATES BARS TO BE THREADED INTO A MECHANICAL CONNECTOR. DIMENSION PROVIDED DOES NOT INCLUDE PORTION THREADED INTO CONNECTOR.

***INDICATES GLASS FIBER REINFORCED POLYMER (GFRP) BARS ACCORDING TO STANDARD DRAWINGS SBR-1-20 & SBR-2-20.



NOTES:

1. FOR BAR LIST NOTES, SEE SHEET 69/70.

Released for Construction
Thomas J Powell, PE
11/10/2021

2021-11-04_BU 13 - RFC PLANS

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	TYW	TES	09/01/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703457	

REINFORCING STEEL LIST - SHEET 2 OF 2
BRIDGE NO. SUM-76-0954
I.R. 76 OVER BOWERY STREET & OHIO CANAL

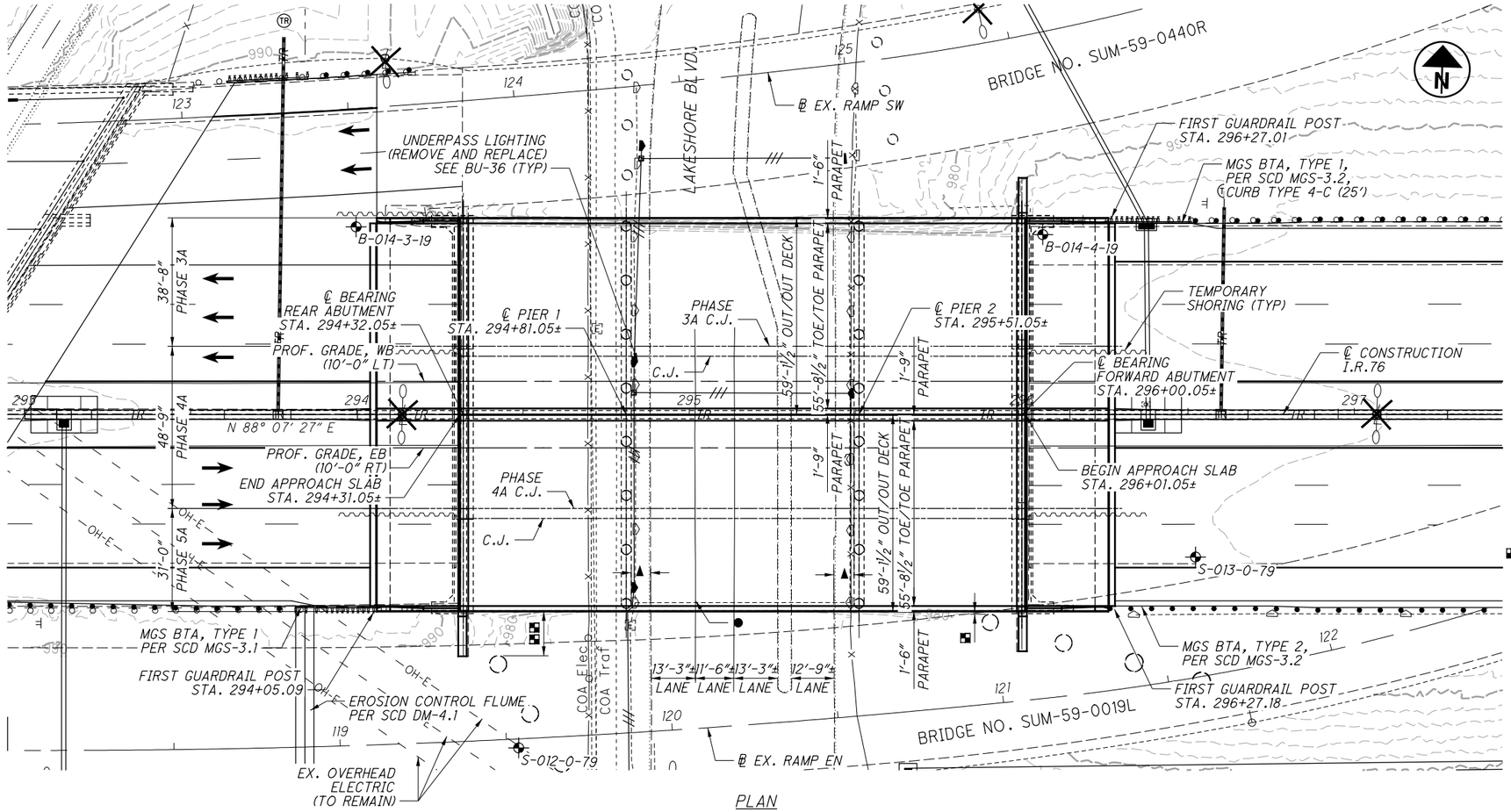
SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

70/70
114/153

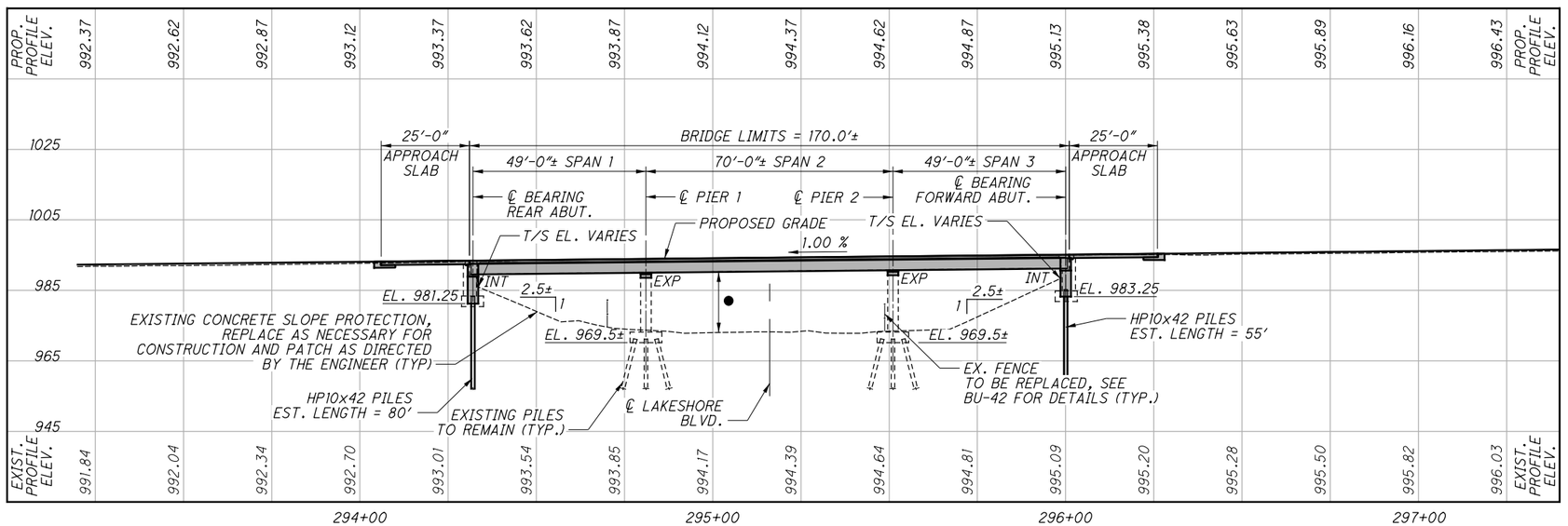
ISSUE RECORD:

NO.	DATE	DESCRIPTION

PARSONS
pw:\\VANVAO1PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0954\Sheets\076_0954_SL002.dgn Sheet 11/2/2021 11:36:16 AM p002694C



PLAN



PROFILE ALONG PROFILE GRADE OF LEFT AND RIGHT BRIDGE

BENCHMARK DATA

FOR BENCHMARK INFORMATION, SEE BU-19

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

DESIGN TRAFFIC:
2020 ADT = 101,350 2020 ADTT = 13,175
2040 ADT = 95,820 2040 ADTT = 12,457
DIRECTIONAL DISTRIBUTION = 59%

LEGEND

- BORING LOCATION

CLEARANCES:
- ● 16'-5⅝"± EXISTING MINIMUM VERTICAL CLEARANCE
  16'-5⅝"± REQUIRED MINIMUM VERTICAL CLEARANCE
  16'-10¼"± PROPOSED MINIMUM VERTICAL CLEARANCE
- ▲ 6'-11"± EXISTING HORIZ. CLEARANCE (LEFT)
  5'-8"± EXISTING HORIZ. CLEARANCE (RIGHT)
- ■ - 1'-0"± EXISTING HORIZ. CLEARANCE
  10"± PROPOSED HORIZ. CLEARANCE
- ■■ - 13'-6"± EXISTING HORIZ. CLEARANCE
  13'-2"± PROPOSED HORIZ. CLEARANCE

EXISTING STRUCTURE

TYPE: 3 SPAN CONTINUOUS ROLLED BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: 49'-0"±, 70'-0"±, 49'-0"± (C/C OF BEARINGS)
ROADWAY: 116'-0" F/F PARAPETS
LOADING: CF2000(57) - ADEQUATE FOR AASHO ALTERNATE LOADING
SKEW: NONE
WEARING SURFFACE: ASPHALT (3" ± THICK)
APPROACH SLABS: 25'-0" (AS-1-54)
ALIGNMENT: TANGENT
CROWN: 0.016 FT/FT
STRUCTURAL FILE NUMBER: 7703392
DATE BUILT: 1964±
DISPOSITION: REMOVE AND REPLACE EXISTING SUPERSTRUCTURE AND ABUTMENTS. EXISTING PIERS TO REMAIN.

PROPOSED STRUCTURE

TYPE: NEW CONTINUOUS STEEL BEAMS WITH COMPOSITE REINFORCED CONCRETE DECK ON EXISTING PIERS AND NEW INTEGRAL ABUTMENTS
SPANS: 49'-0"±, 70'-0"±, 49'-0"± (C/C OF BEARINGS)
ROADWAY: 55'-8½" TOE/TOE PARAPET (EACH DIRECTION)
LOADING: HL93 WITH 60 PSF FUTURE WEARING SURFACE
SKEW: NONE
APPROACH SLABS: 25'-0" (AS-1-15) TYPE C INSTALLATION (AS-2-15)
ALIGNMENT: TANGENT
CROWN: 0.016 FT/FT
COORDINATES: LATITUDE 41° 03' 43.36"
LONGITUDE 81° 32' 26.76"

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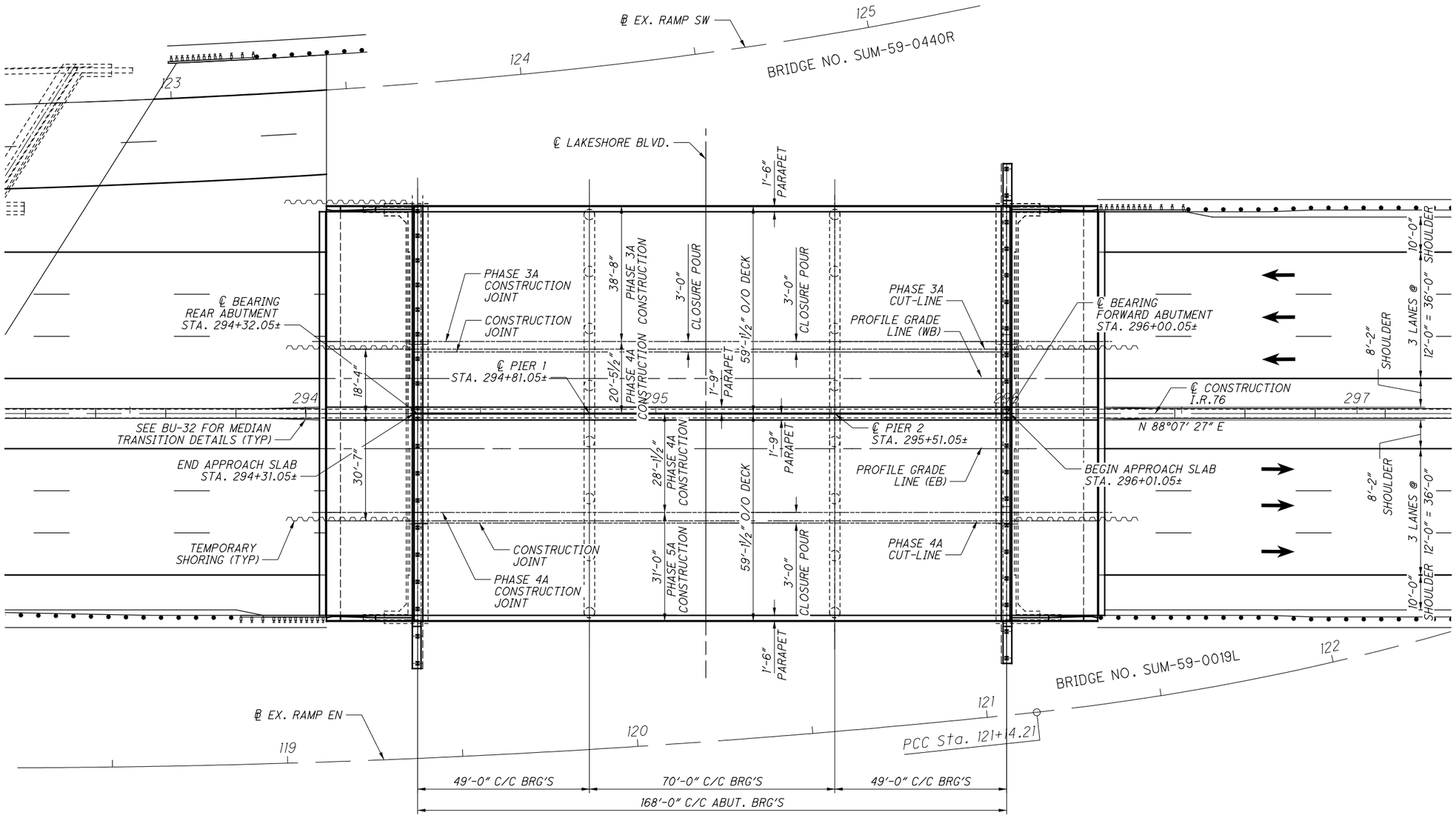
RWB		7703392	

SUMMIT COUNTY
STA. 294+31.05±
STA. 296+01.05±

SITE PLAN
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329



GENERAL PLAN

NOTES

REFER TO THE MAINTENANCE OF TRAFFIC PLANS (BU-4) FOR ADDITIONAL NOTES AND DETAILS NOT SHOWN

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GENERAL PLAN
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329

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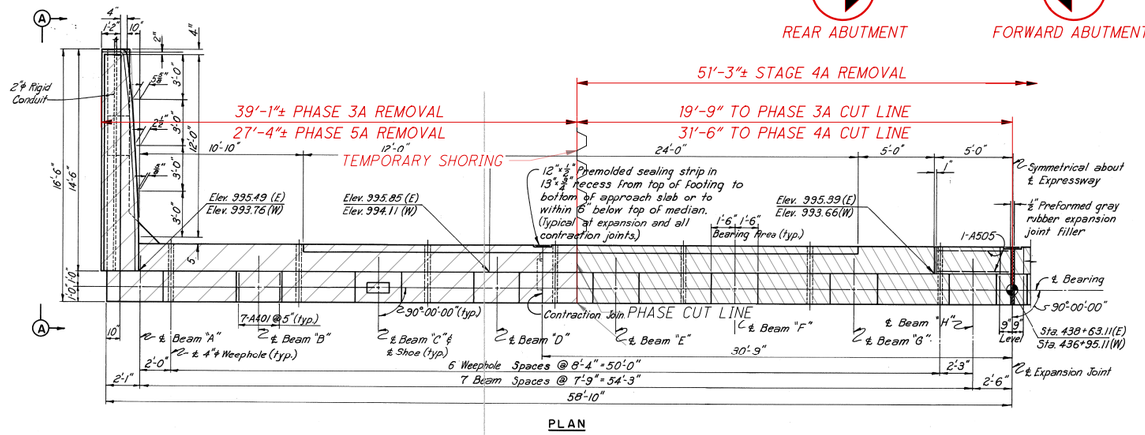

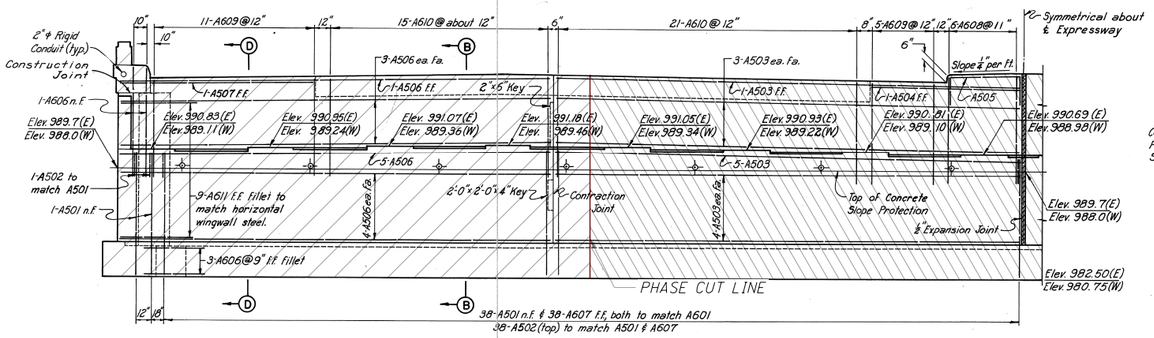

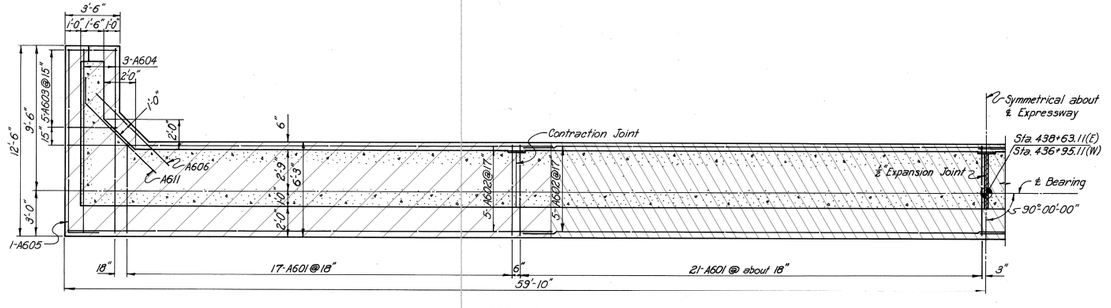

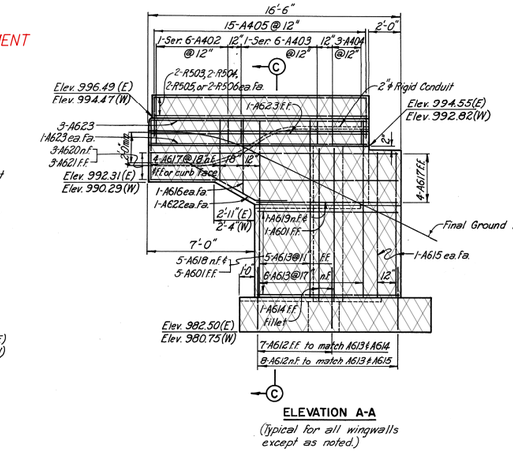

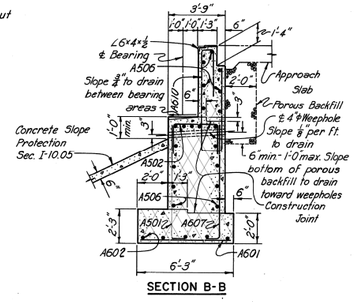

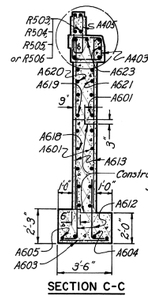

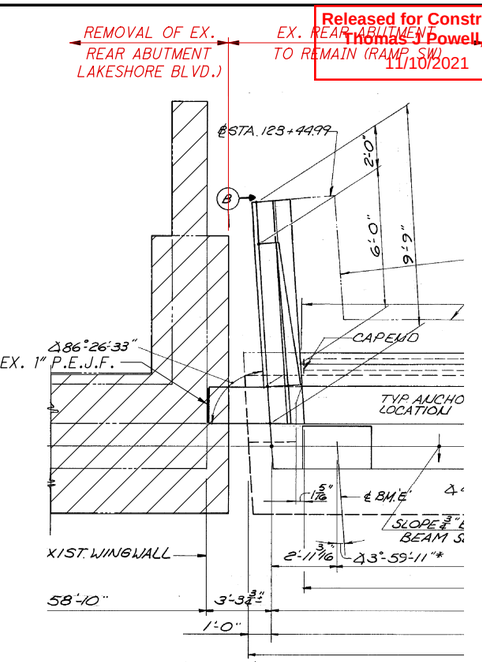

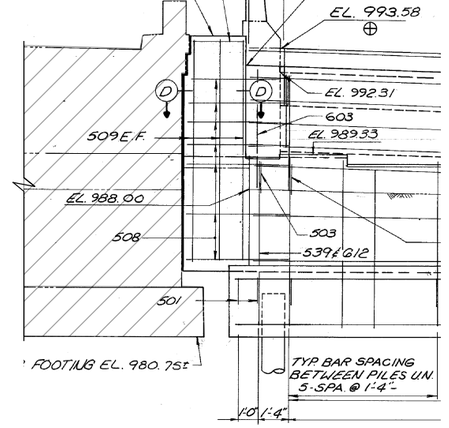

LEGEND:

- INDICATES AREA OF CONCRETE TO BE REMOVED (SEE PLAN AND ELEVATION FOR PHASE)
- INDICATES AREA OF CONCRETE TO BE REMOVED DURING PHASE 3A OR PHASE 5A
- INDICATES AREA OF CONCRETE TO BE REMOVED DURING PHASE 4A

NOTES:

1. ABUTMENT AND PARAPET REMOVAL SHALL BE PER ITEM 202 PORTIONS OF STRUCTURE REMOVED, OVER 20 FEET SPAN, AS PER PLAN. FOR ADDTIONAL STRUCTURAL REMOVAL INFORMATION, SEE STRUCTURAL GENERAL NOTES ON SHEET (2/153) THRU (3/153).
2. REAR ABUTMENT ON THE RIGHT BRIDGE SHOWN. REAR ABUTMENT FOR LEFT BRIDGE AND FORWARD ABUTMENTS ARE SIMILAR.
3. DIMENSIONS MEASURED ALONG EX. ℄ BEARING.

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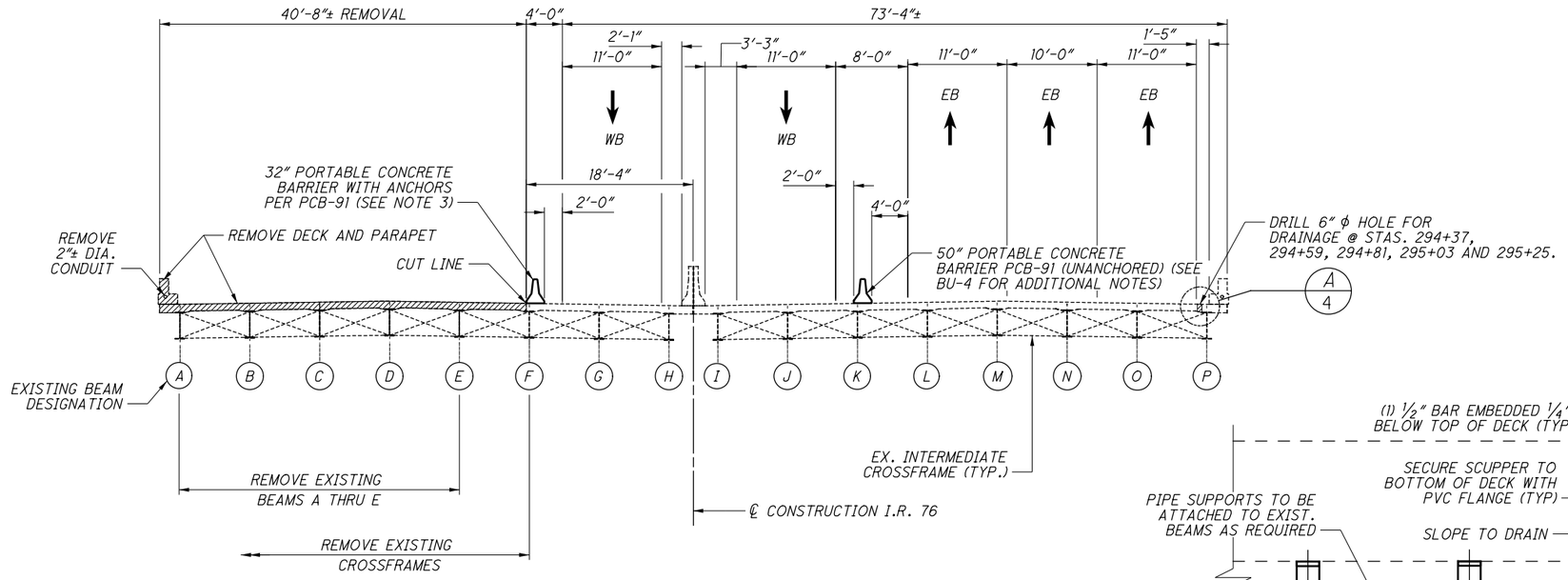
ABUTMENT PLAN AND ELEVATION REMOVAL DETAILS

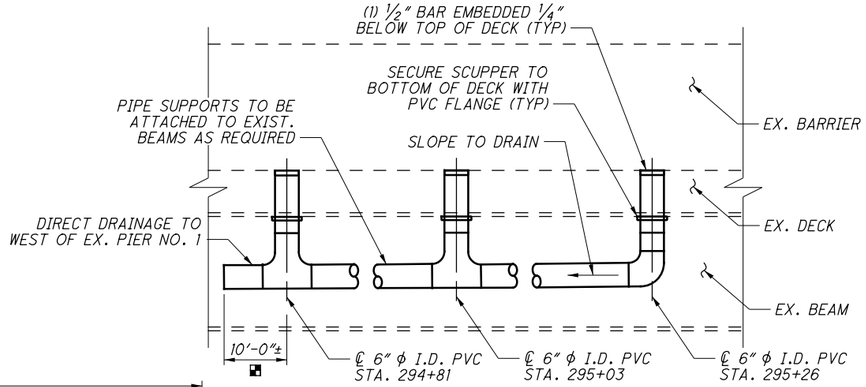
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2021-11-04_BU 13 - RFC PLANS

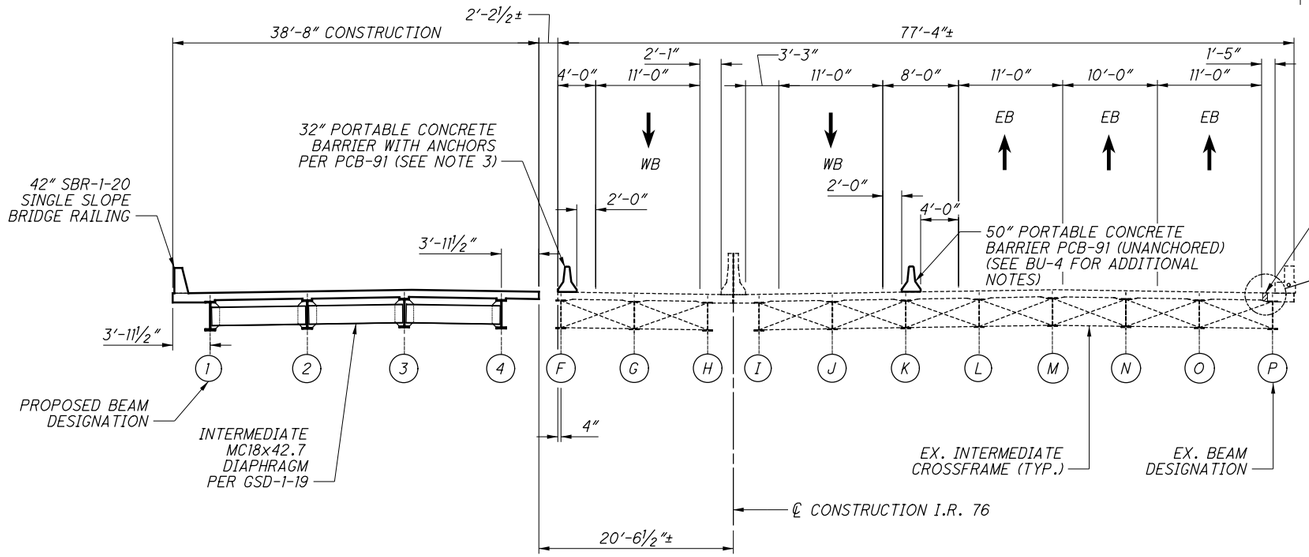


PHASE 3A REMOVAL



■- DIRECT DRAINAGE TO WEST OF PIER NO. 1

A TEMPORARY SCUPPER DETAIL
AT STAS. 294+81, 295+03 AND 295+26 ONLY
4 & 5



PHASE 3A CONSTRUCTION

LEGEND:

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

NOTES:

1. FOR PHASE 4A CONSTRUCTION, SEE SHEET 5/39 .
2. FOR PHASE 5A CONSTRUCTION, SEE SHEET 6/39 .
3. INSTALL ANCHOR BOLTS AS DIRECTED IN ODOT STD. DWG PCB-91 ALONG THE TRAFFIC SIDE OF THE BARRIER. PROVIDE 4 ANCHORS PER BARRIER SEGMENT AS SHOWN ON PCB-91.

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PHASED CONSTRUCTION SECTION - 1 OF 3
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-0.63/9.74/8.42
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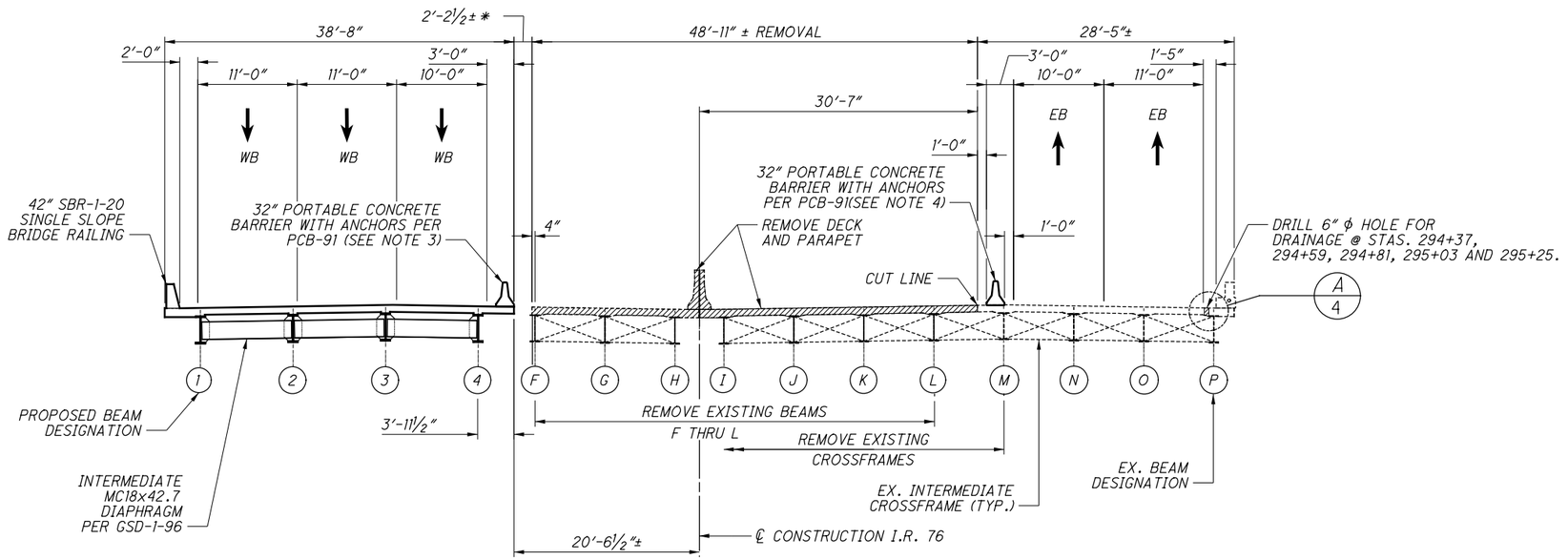
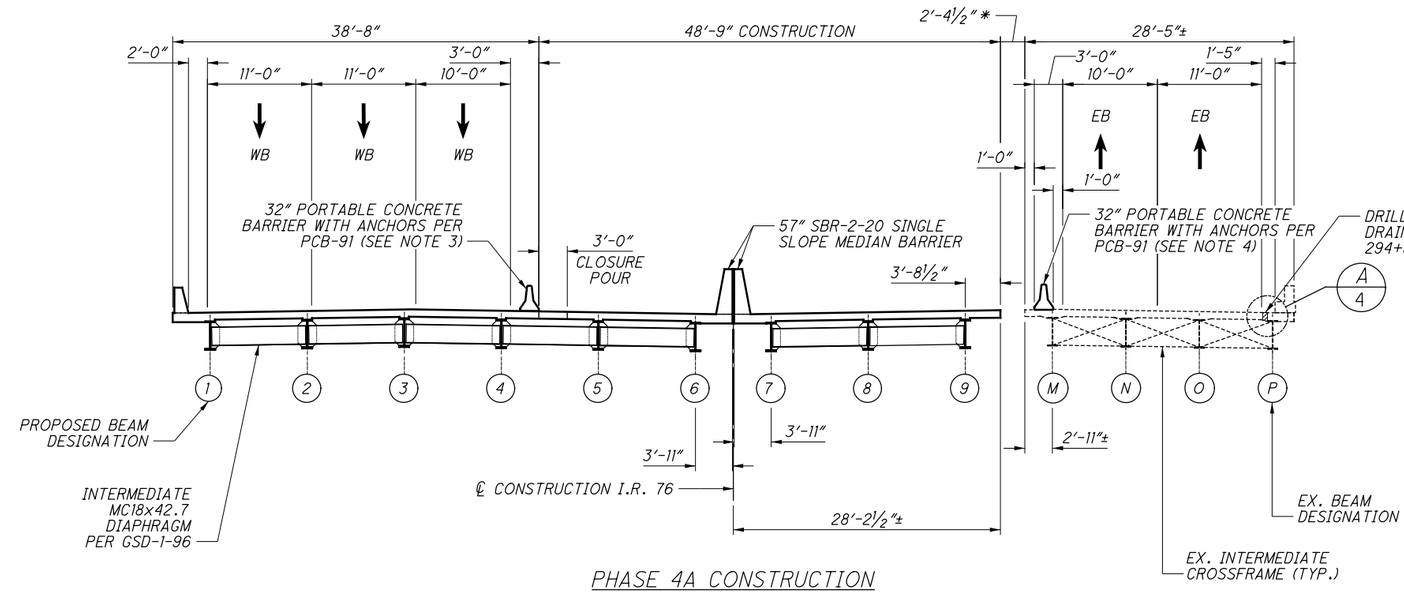


PHASE 4A REMOVAL



PHASE 4A CONSTRUCTION

LEGEND:

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

NOTES:

1. FOR PHASE 3A CONSTRUCTION, SEE SHEET 4/39.
2. FOR PHASE 5A CONSTRUCTION, SEE SHEET 6/39.
3. INSTALL ANCHOR BOLTS AS DIRECTED IN ODOT STD. DWG PCB-91 ALONG THE TRAFFIC SIDE OF THE BARRIER. PROVIDE 6 ANCHORS PER BARRIER SEGMENT AS SHOWN ON PCB-91.
4. INSTALL ANCHOR BOLTS AS DIRECTED IN ODOT STD. DWG PCB-91 ALONG THE TRAFFIC SIDE OF THE BARRIER. PROVIDE 2 ANCHORS PER BARRIER SEGMENT AS SHOWN ON PCB-91.
5. WHEN THE PORTABLE CONCRETE BARRIER IS NO LONGER NEEDED, REMOVE THE ANCHORS AND FILL THE HOLE WITH GROUT CONFORMIMG TO CMS 705.20.

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PHASED CONSTRUCTION SECTION - 2 OF 3
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-0.63/9.74/8.42
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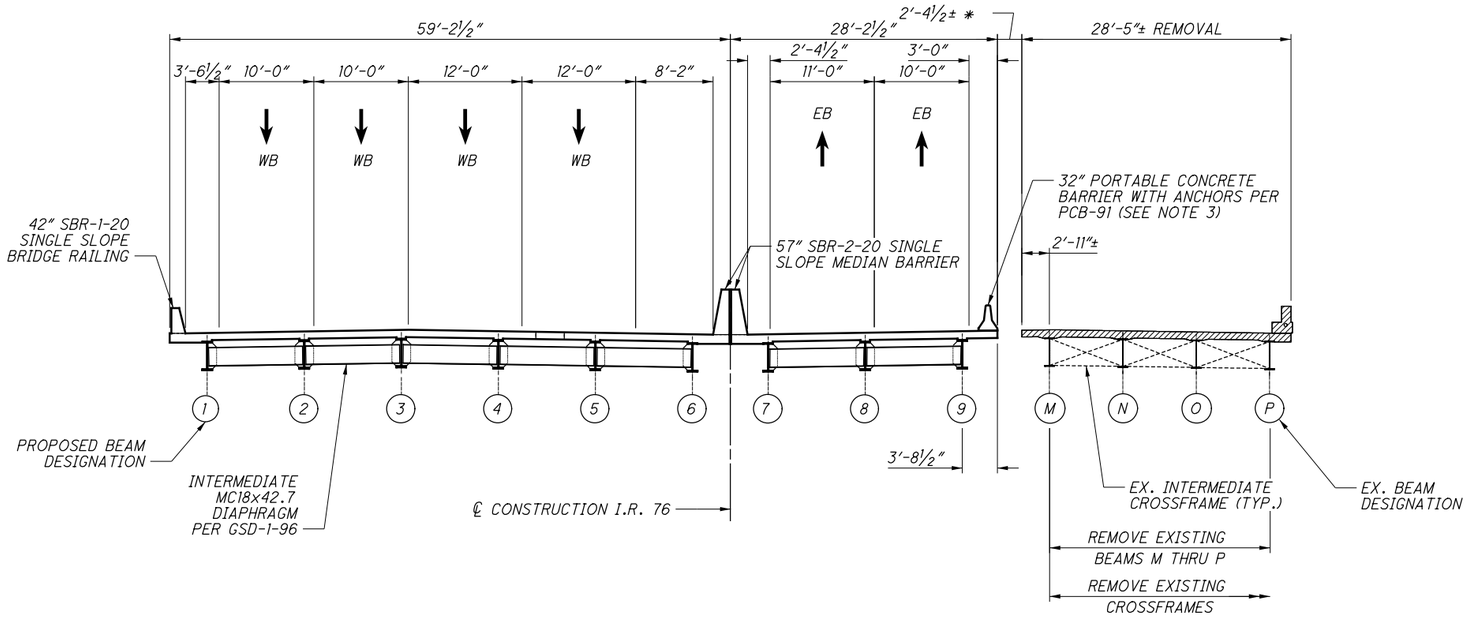
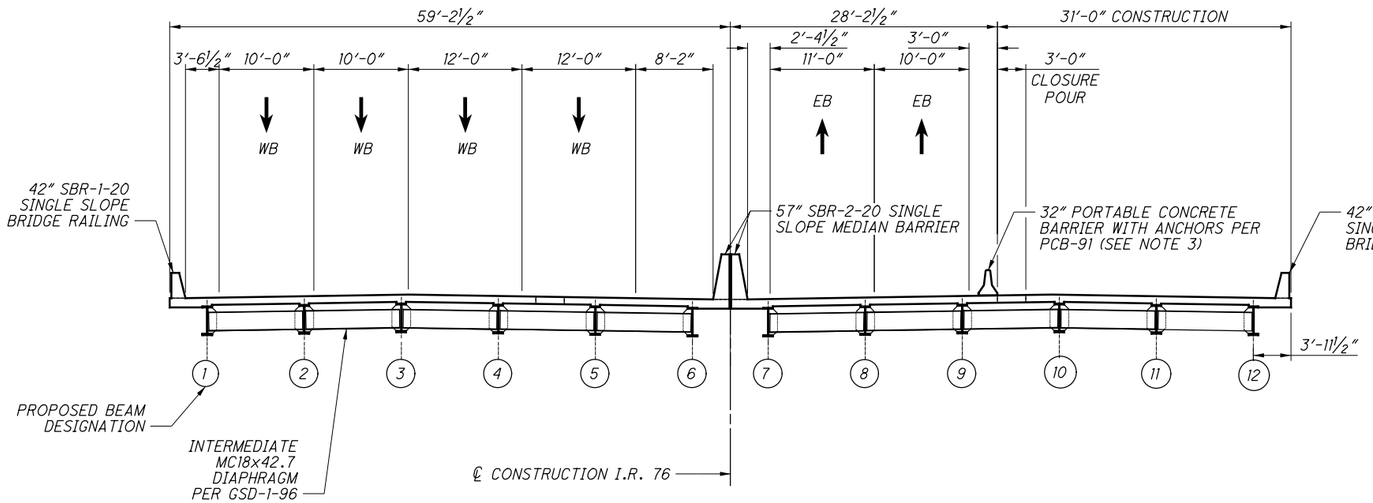


PHASE 5A REMOVAL



PHASE 5A CONSTRUCTION

LEGEND:

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

NOTES:

1. FOR PHASE 3A CONSTRUCTION, SEE SHEET 4/39.
2. FOR PHASE 4A CONSTRUCTION, SEE SHEET 5/39.
3. INSTALL ANCHOR BOLTS AS DIRECTED IN ODOT STD. DWG PCB-91 ALONG THE TRAFFIC SIDE OF THE BARRIER. PROVIDE 6 ANCHORS PER BARRIER SEGMENT AS SHOWN ON PCB-91.
4. WHEN THE PORTABLE CONCRETE BARRIER IS NO LONGER NEEDED, REMOVE THE ANCHORS AND FILL THE HOLE WITH GROUT CONFORMIMG TO CMS 705.20.

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PHASED CONSTRUCTION SECTION - 3 OF 3
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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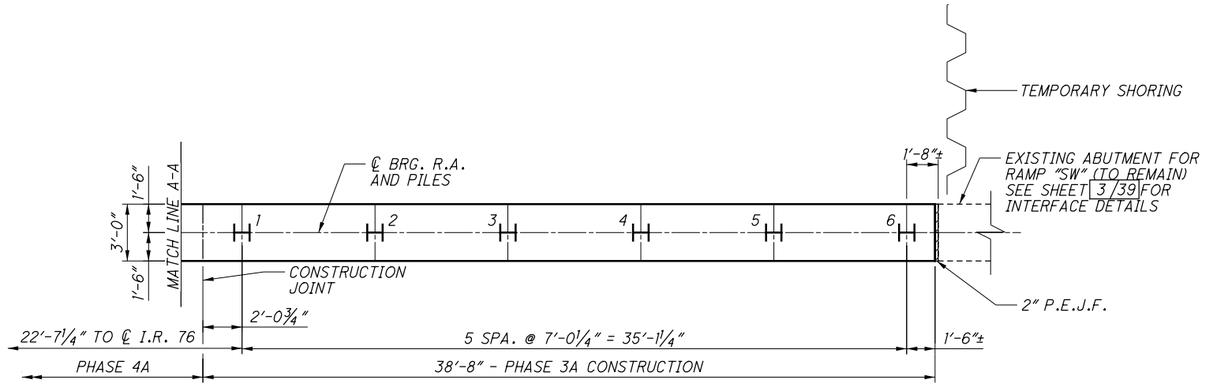
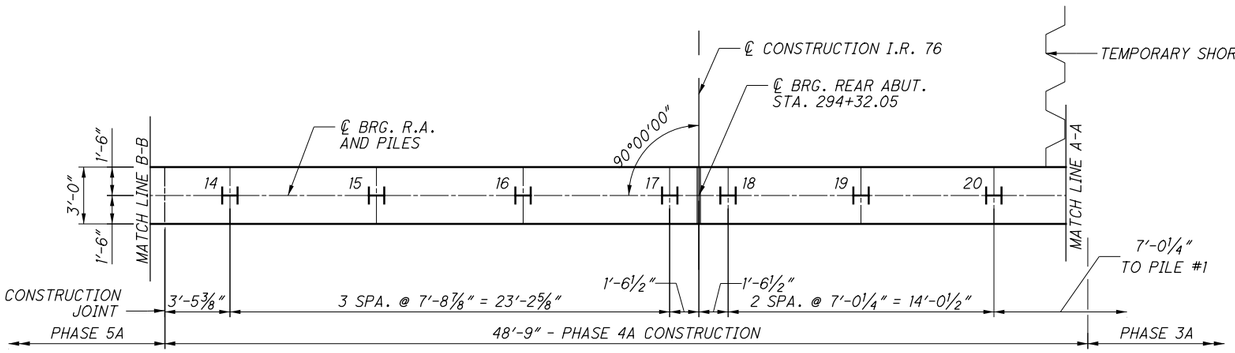
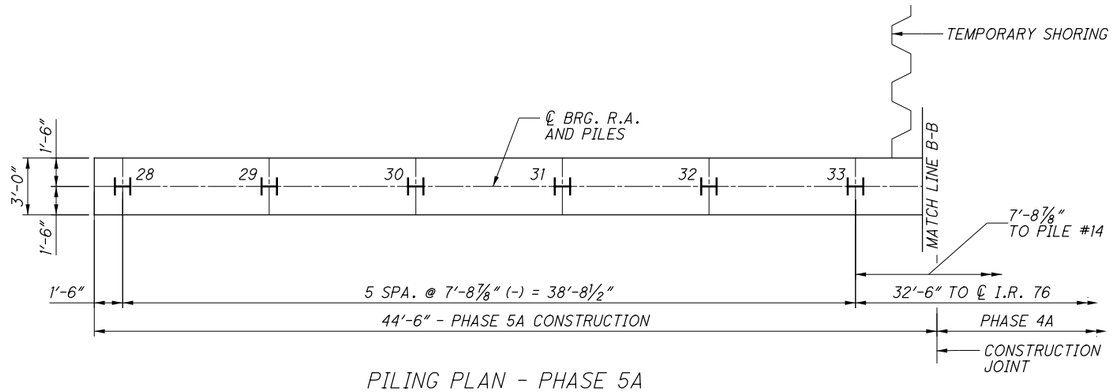
2021-11-04_BU 13 - RFC PLANS



PILING PLAN - PHASE 3A



PILING PLAN - PHASE 4A



PILING PLAN - PHASE 5A

NOTES:

1. FOR ADDITIONAL PILE NOTES, SEE SHEET (3/153).

LEGEND:

(1) - INDICATES PILE NUMBER

H - INDICATES PROPOSED VERTICAL PILE HP10X42

- TEMPORARY SHORING

PILE DATA				
LOCATION	PILE TYPE	PILE NUMBER	PILE CUTOFF ELEVATION	ESTIMATED PILE LENGTH (EACH) (FEET)
REAR ABUTMENT PHASE 3A	HP10x42	1 - 6	983.25	80
REAR ABUTMENT PHASE 4A	HP10x42	14 - 20	983.25	80
REAR ABUTMENT PHASE 5A	HP10x42	28 - 33	983.25	80

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PILING PLAN - REAR ABUTMENT
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

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PID No. 102329

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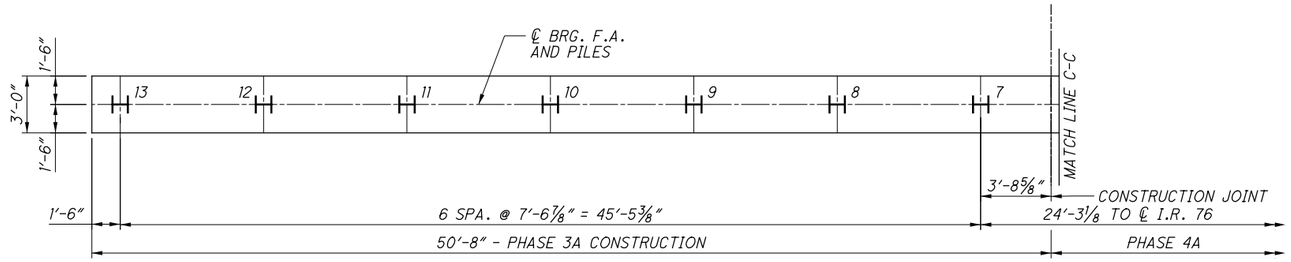
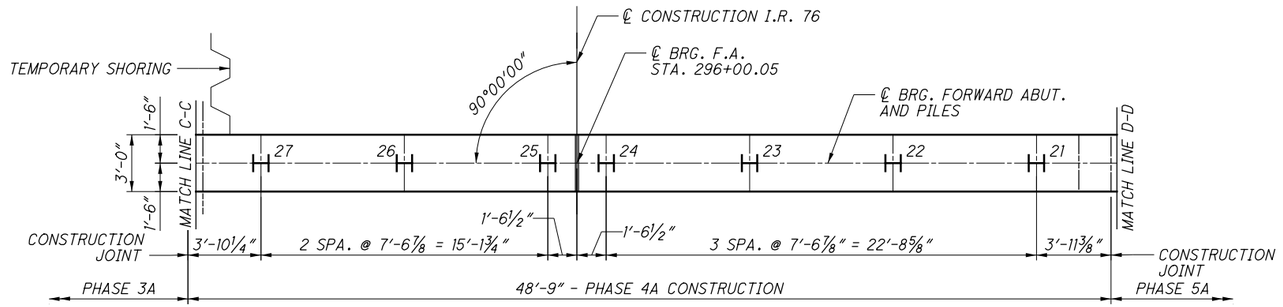
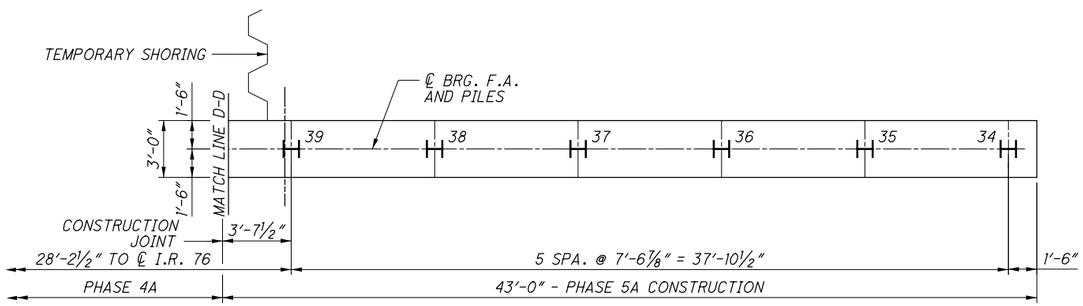


PILING PLAN - PHASE 3A



PILING PLAN - PHASE 4A

PILE DATA				
LOCATION	PILE TYPE	PILE NUMBER	PILE CUTOFF ELEVATION	ESTIMATED PILE LENGTH (EACH) (FEET)
FORWARD ABUTMENT PHASE 3A	HP10x42	7 - 13	985.25	55
FORWARD ABUTMENT PHASE 4A	HP10x42	21 - 27	985.25	55
FORWARD ABUTMENT PHASE 5A	HP10x42	34 - 39	985.25	55



PILING PLAN - PHASE 5A

NOTES:

1. FOR ADDITIONAL PILE NOTES, SEE SHEET (3/153) .

LEGEND:

(1) - INDICATES PILE NUMBER

H - INDICATES PROPOSED VERTICAL PILE HP10X42

~~~ - TEMPORARY SHORING

ISSUE RECORD:

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PILING PLAN - FORWARD ABUTMENT
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

2021-11-04_BU 13 - RFC PLANS

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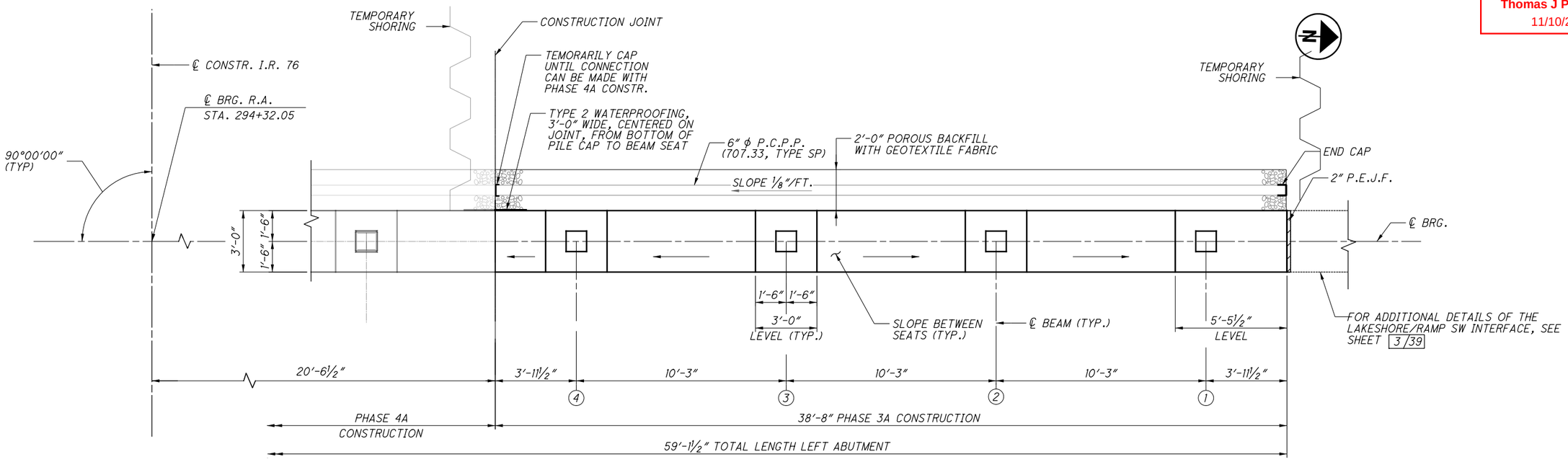
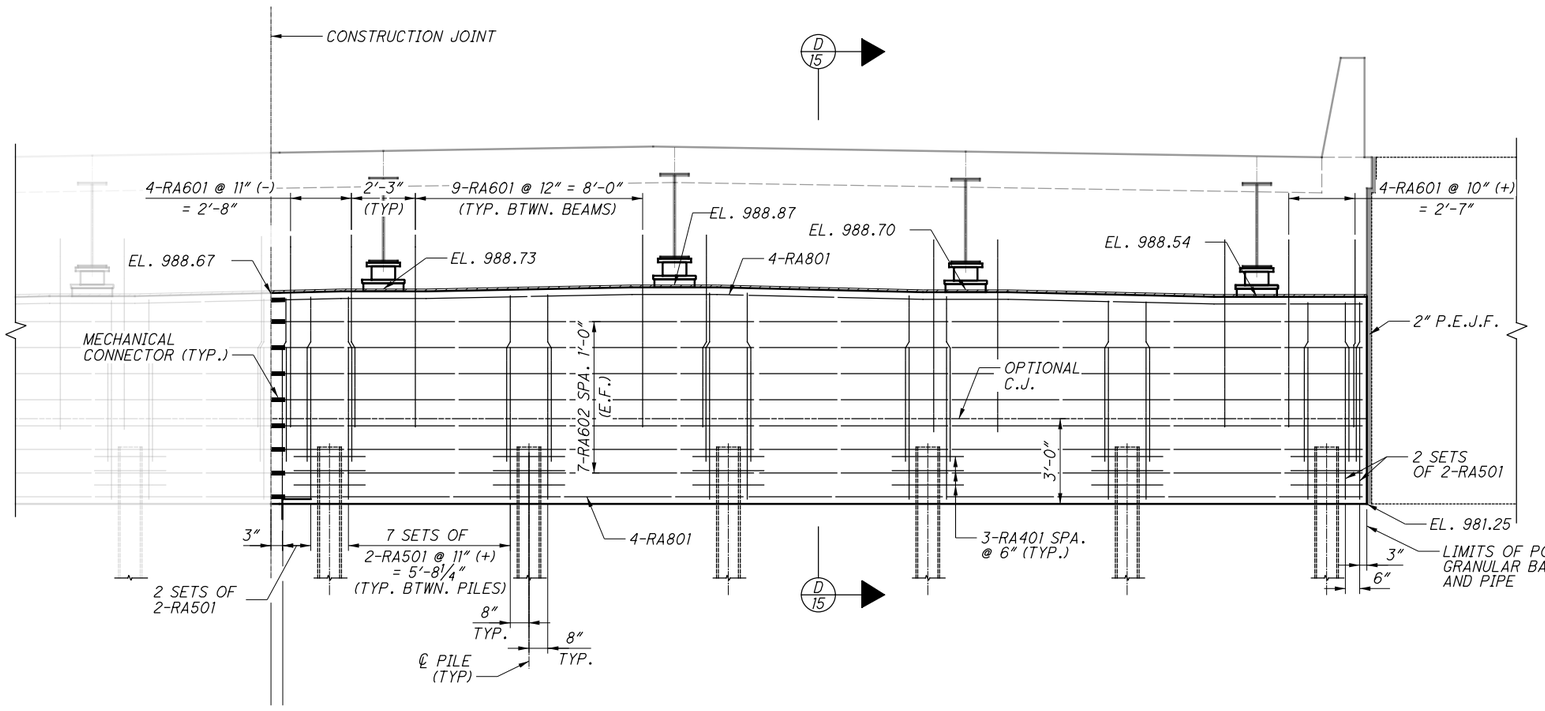


PLAN - PHASE 3A - REAR ABUTMENT

(DIMENSIONS SHOWN ALONG ℄ BEARING)
(PILES NOT SHOWN FOR CLARITY)



MIN LAP TABLE	
#5 BAR (VERT.)	2'-5"
#6 BAR (HORIZ.)	4'-0"
#8 BAR (HORIZ.)	4'-9"

ELEVATION - PHASE 3A - REAR ABUTMENT

(ELEVATIONS SHOWN ALONG ℄ BEARING)

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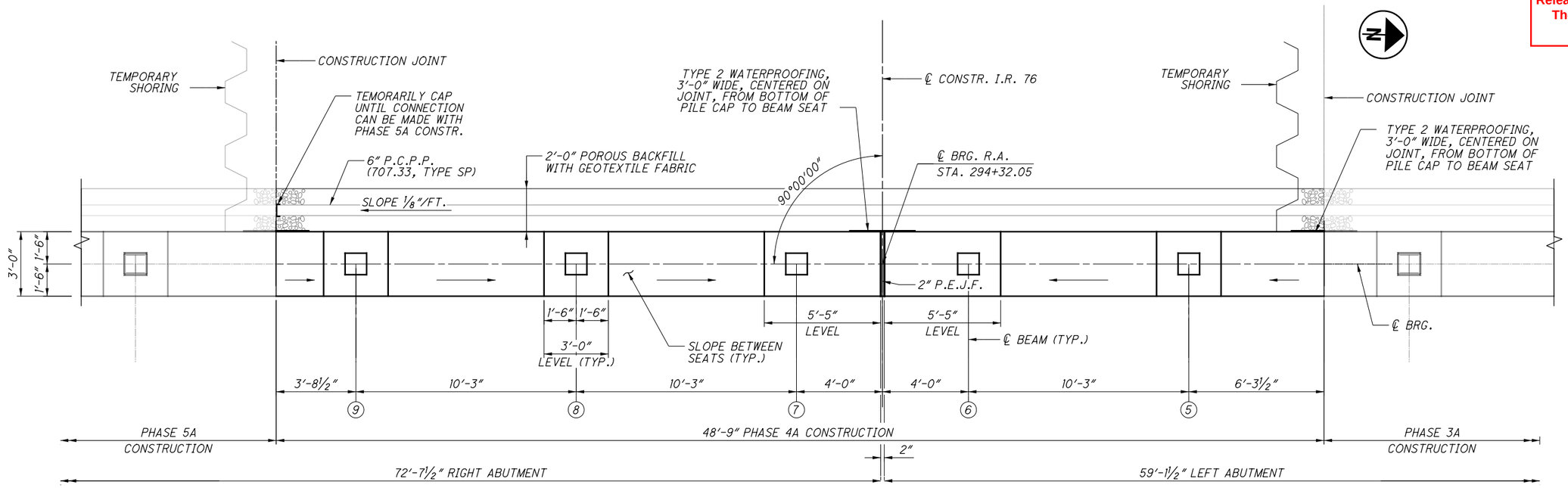
REAR ABUTMENT PLAN AND ELEVATION 1 OF 3
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

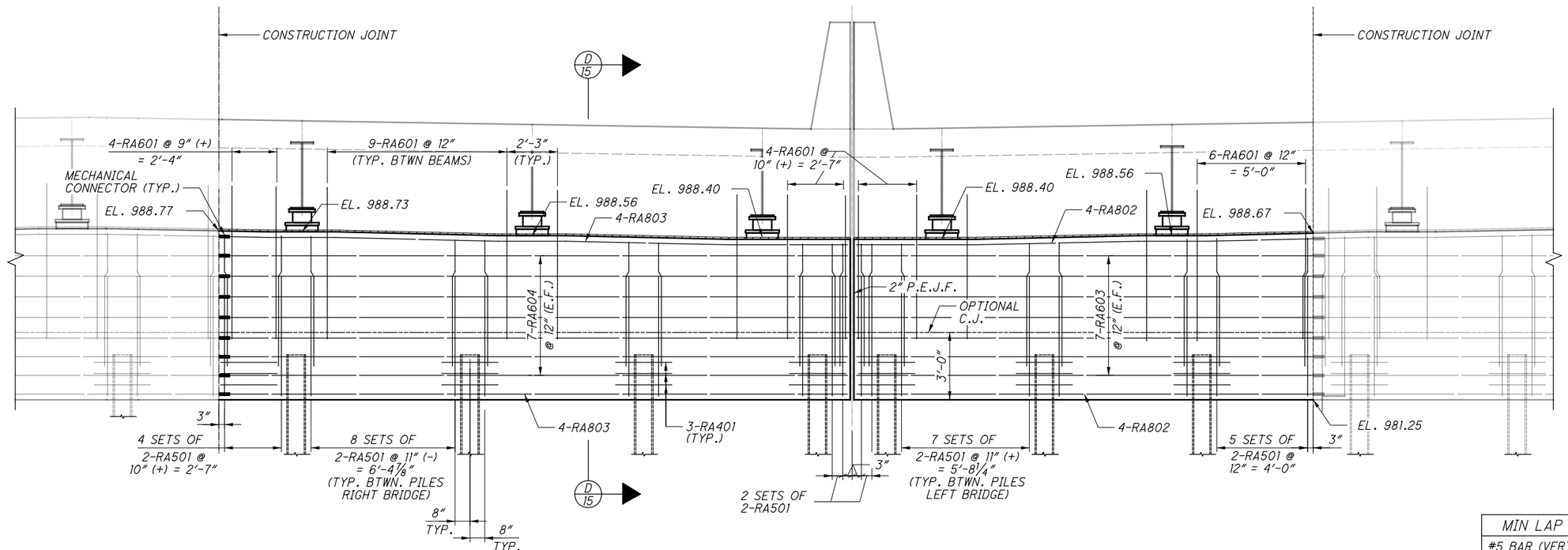
2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329



PLAN - PHASE 4A - REAR ABUTMENT

(DIMENSIONS SHOWN ALONG ℄ BEARING)
(PILES NOT SHOWN FOR CLARITY)



ELEVATION - PHASE 4A - REAR ABUTMENT

(ELEVATIONS SHOWN ALONG ℄ BEARING)

MIN LAP TABLE	
#5 BAR (VERT.)	2'-5"
#6 BAR (HORIZ.)	4'-0"
#8 BAR (HORIZ.)	4'-9"

ISSUE RECORD:

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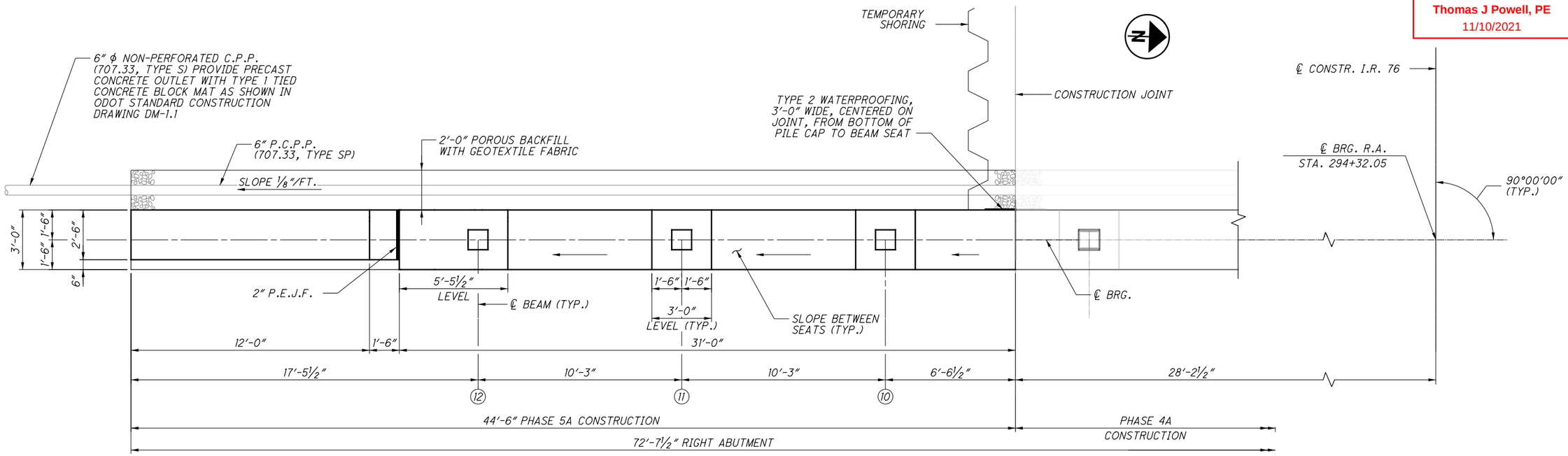
REAR ABUTMENT PLAN AND ELEVATION - 2 OF 3
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

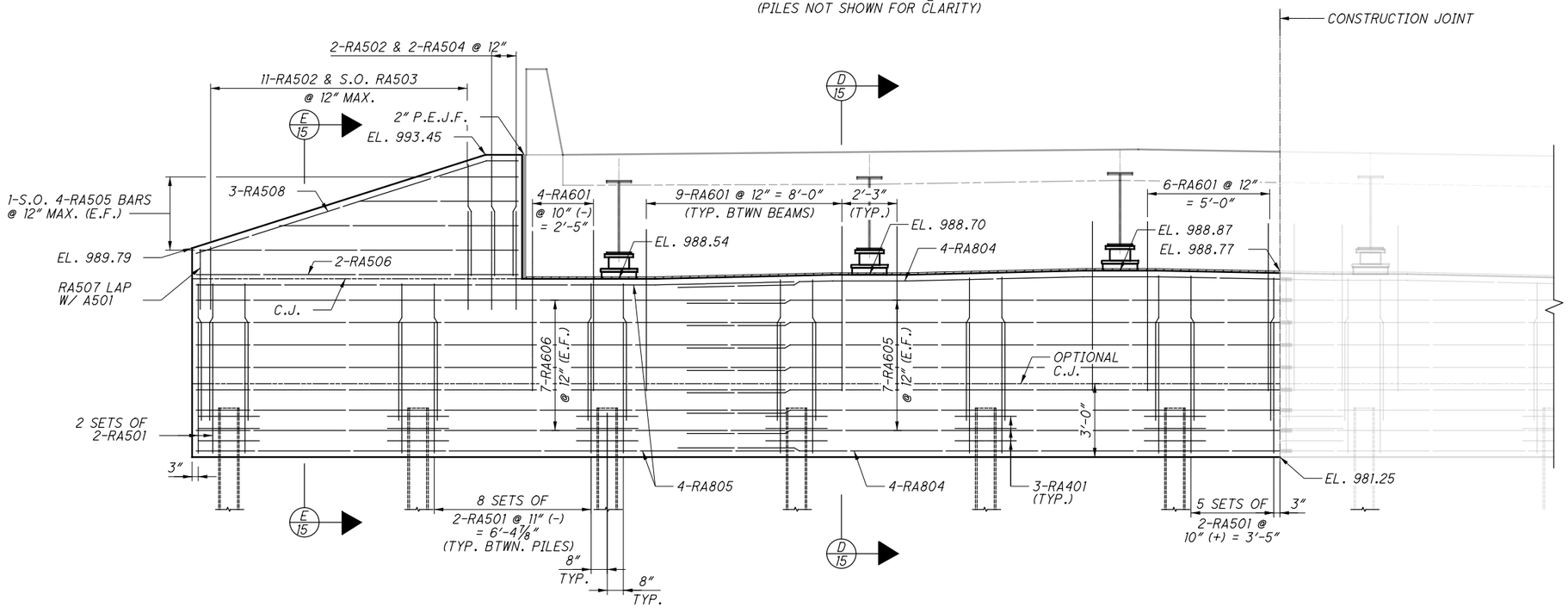
SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

2021-11-04_BU 13 - RFC PLANS



PLAN - PHASE 5A - REAR ABUTMENT

(DIMENSIONS SHOWN ALONG ℄ BEARING)
(PILES NOT SHOWN FOR CLARITY)



ELEVATION - PHASE 5A - REAR ABUTMENT

(ELEVATIONS SHOWN ALONG ℄ BEARING)

MIN LAP TABLE	
#5 BAR (VERT.)	2'-5"
#6 BAR (HORIZ.)	4'-0"
#8 BAR (HORIZ.)	4'-9"

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REAR ABUTMENT PLAN AND ELEVATION - 3 OF 3
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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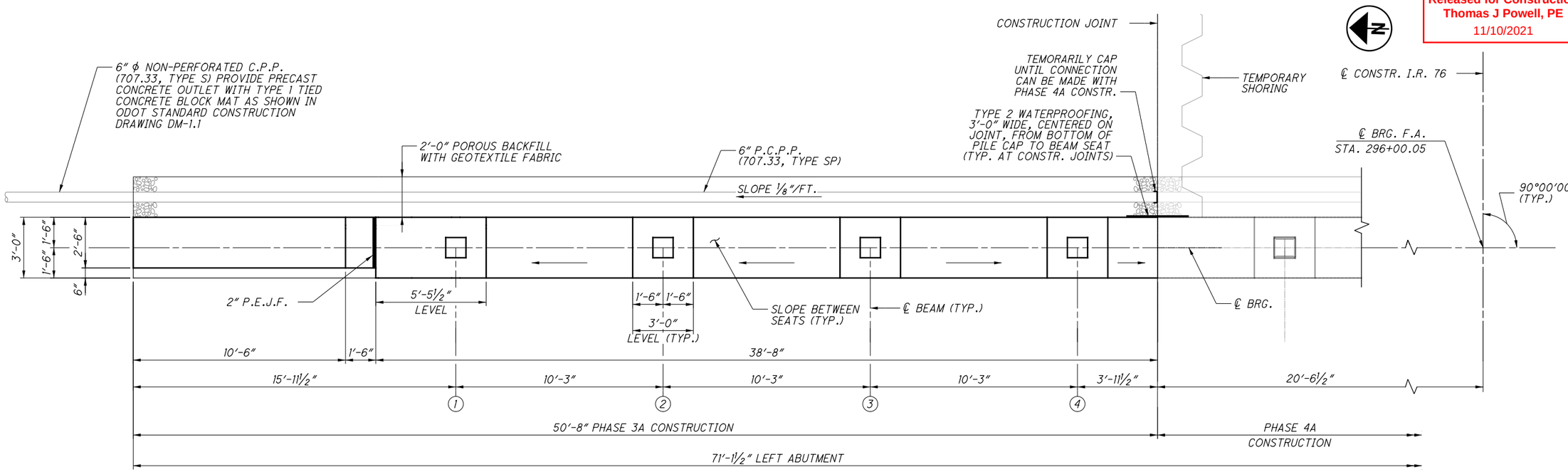
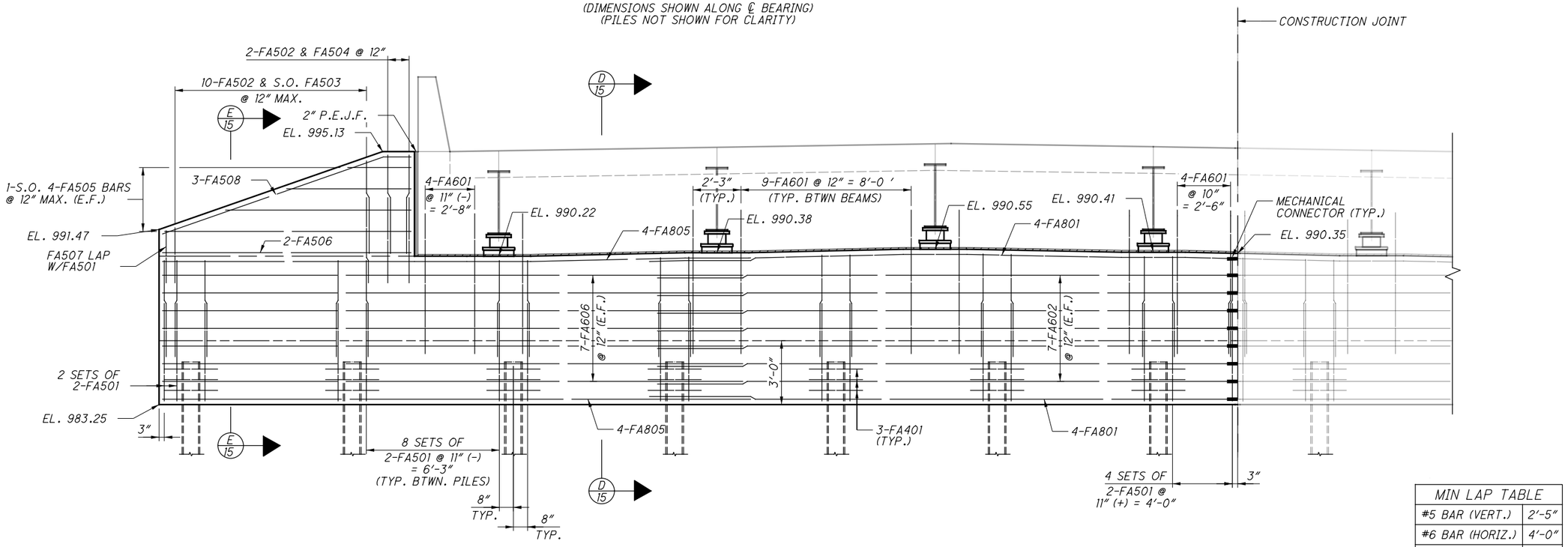


PLAN - PHASE 3A - FORWARD ABUTMENT

(DIMENSIONS SHOWN ALONG ℄ BEARING)
(PILES NOT SHOWN FOR CLARITY)



ELEVATION - PHASE 3A - FORWARD ABUTMENT

(ELEVATIONS SHOWN ALONG ℄ BEARING)

MIN LAP TABLE	
#5 BAR (VERT.)	2'-5"
#6 BAR (HORIZ.)	4'-0"
#8 BAR (HORIZ.)	4'-9"

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FORWARD ABUTMENT PLAN AND ELEVATION - 1 OF 3
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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153

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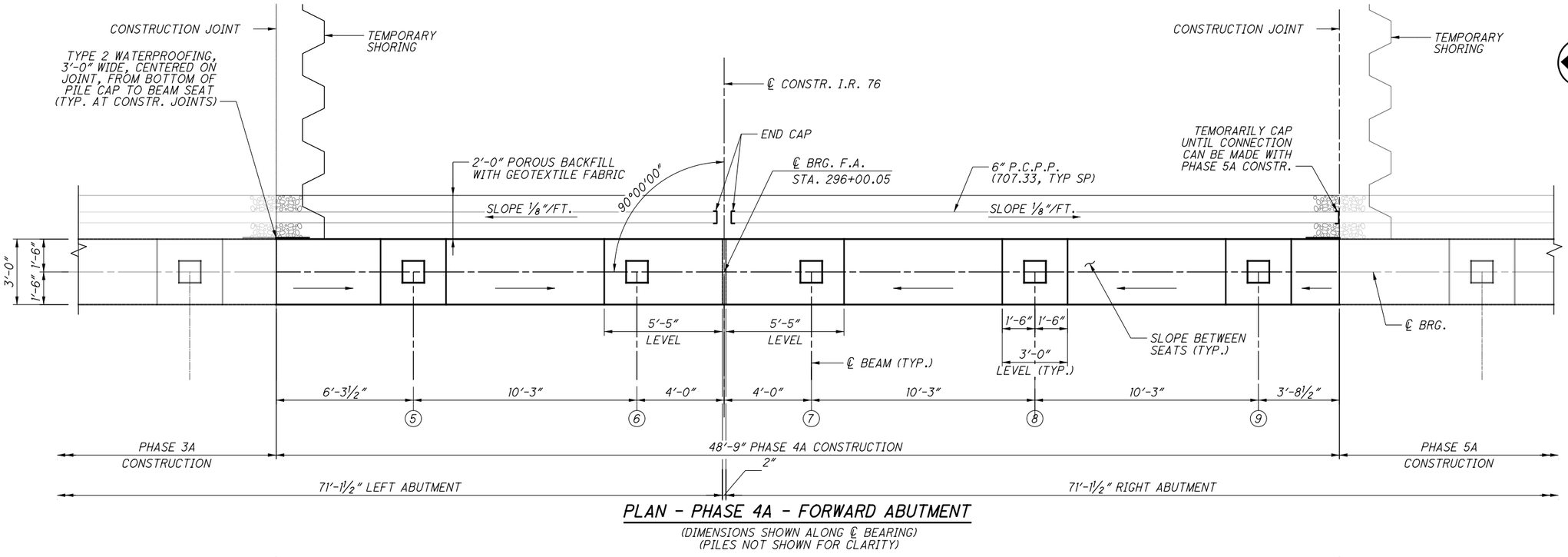
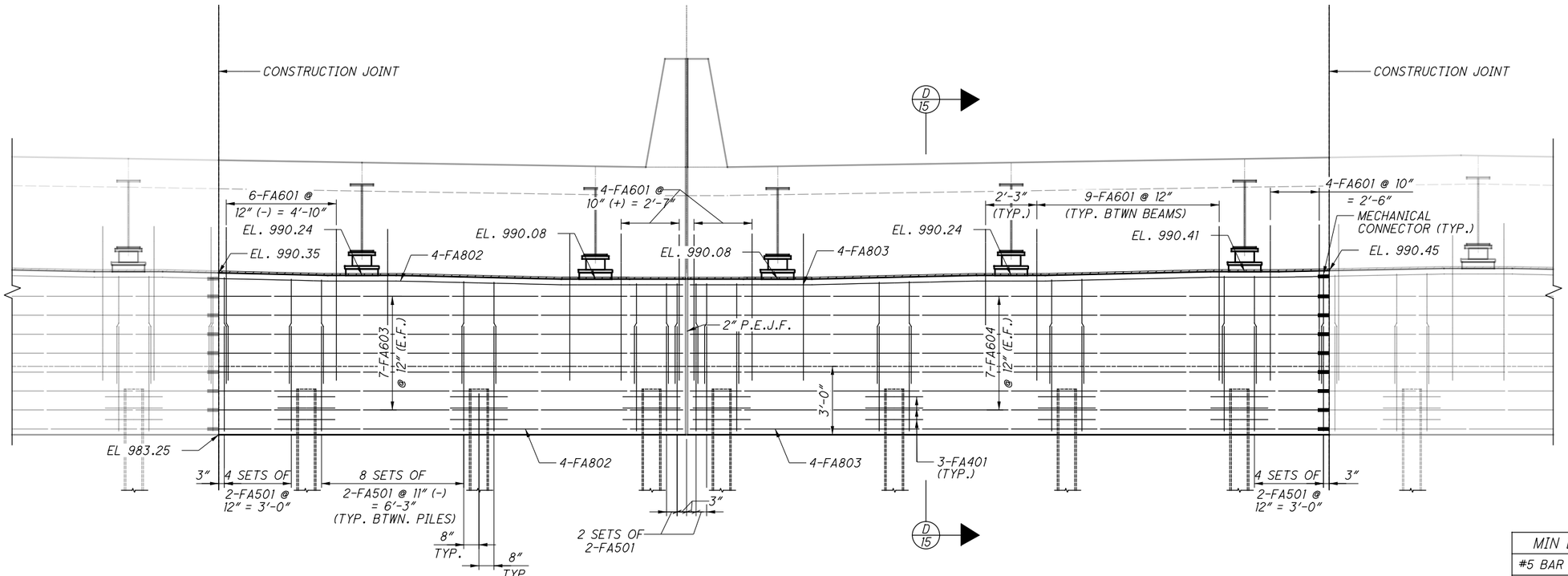


PLAN - PHASE 4A - FORWARD ABUTMENT

(DIMENSIONS SHOWN ALONG ℄ BEARING)
(PILES NOT SHOWN FOR CLARITY)



ELEVATION - PHASE 4A - FORWARD ABUTMENT

(ELEVATIONS SHOWN ALONG ℄ BEARING)

MIN LAP TABLE	
#5 BAR (VERT.)	2'-5"
#6 BAR (HORIZ.)	4'-0"
#8 BAR (HORIZ.)	4'-9"

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FORWARD ABUTMENT PLAN AND ELEVATION - 2 OF 3
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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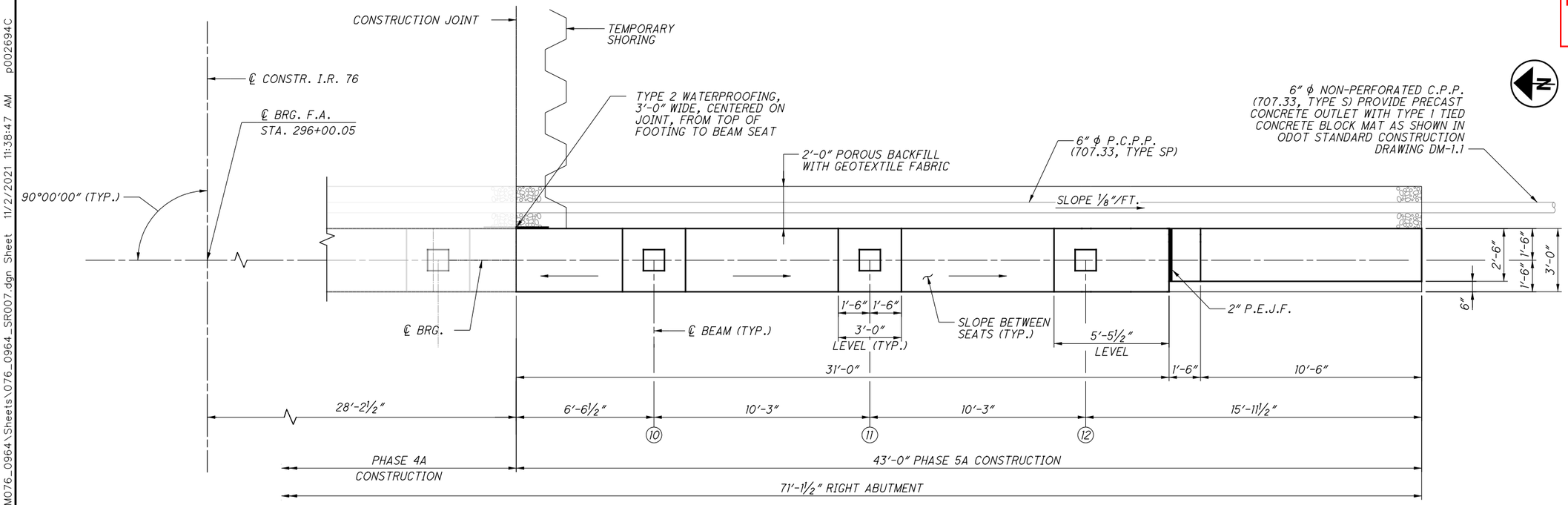
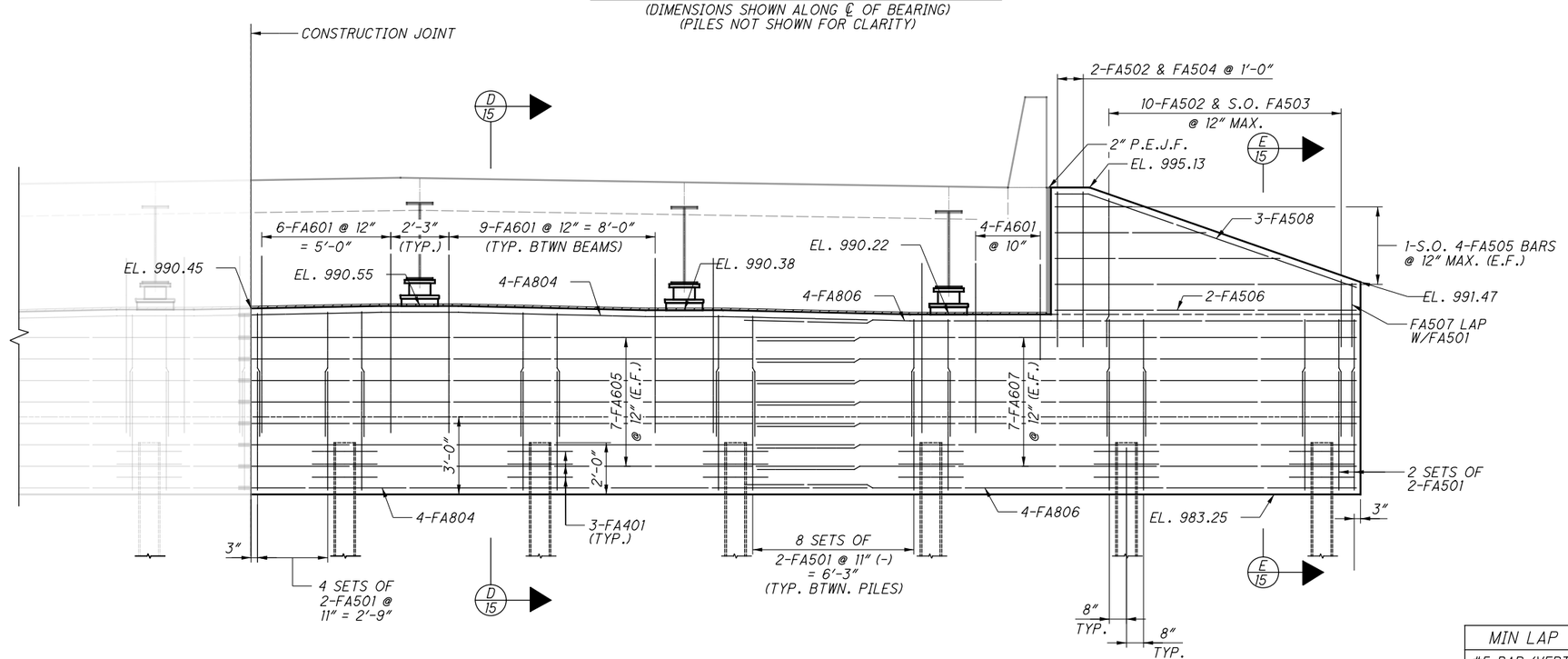


PLAN - PHASE 5A - FORWARD ABUTMENT

(DIMENSIONS SHOWN ALONG ℄ OF BEARING)
(PILES NOT SHOWN FOR CLARITY)



ELEVATION - PHASE 5A - FORWARD ABUTMENT

(ELEVATIONS SHOWN ALONG ℄ BEARING)

MIN LAP TABLE	
#5 BAR (VERT.)	2'-5"
#6 BAR (HORIZ.)	4'-0"
#8 BAR (HORIZ.)	4'-9"

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FORWARD ABUTMENT PLAN AND ELEVATION - 3 OF 3
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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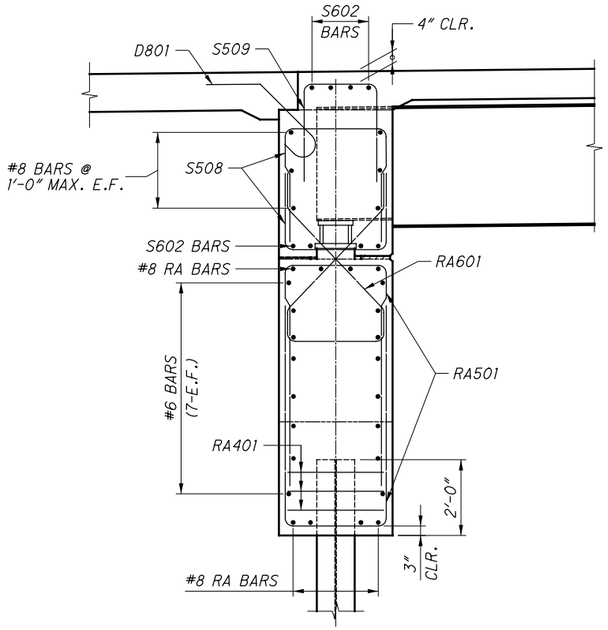
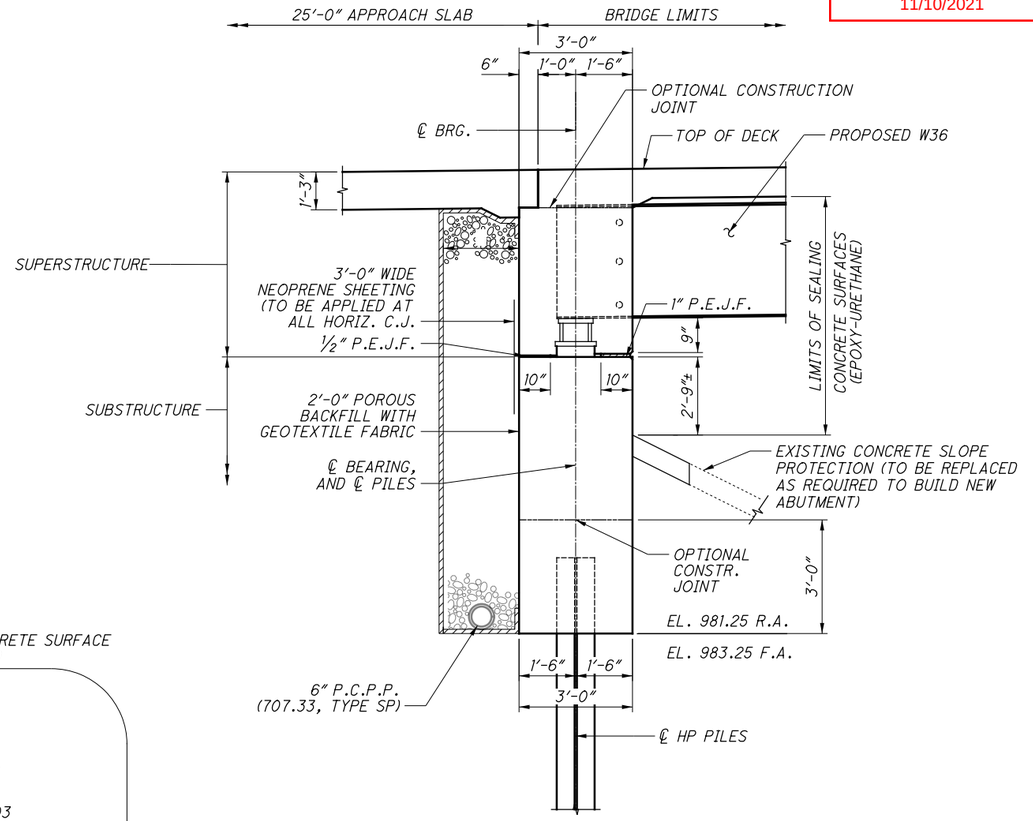
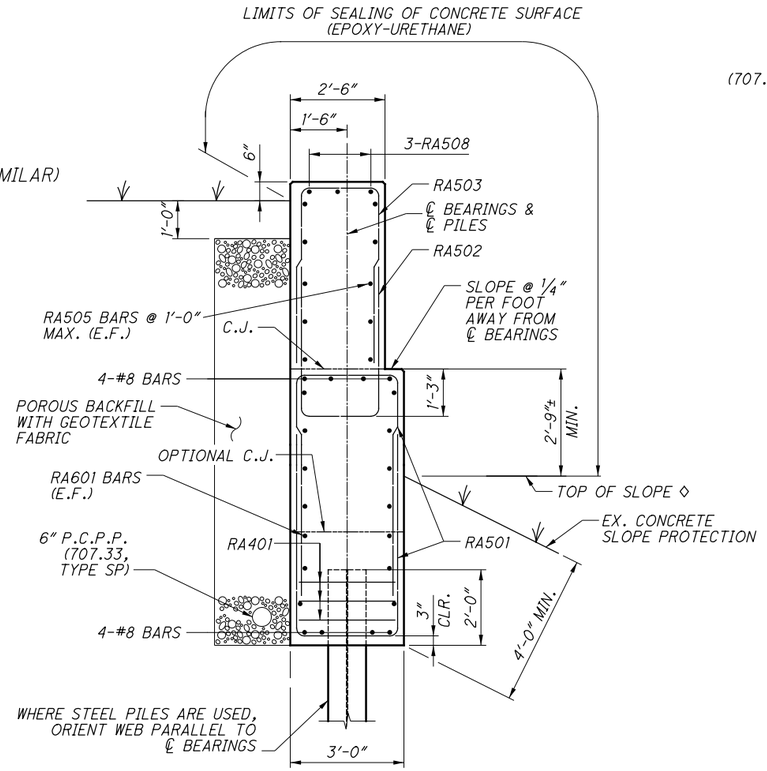


D SECTION THRU ABUTMENT (REINFORCING)
(REAR ABUTMENT SHOWN; FORWARD ABUTMENT SHOWN)
9, 10, 11, 12, 13, & 14



D SECTION THRU ABUTMENT (DIMENSIONS)
(REAR ABUTMENT SHOWN; FORWARD ABUTMENT SHOWN)
9, 10, 11, 12, 13, & 14



E SECTION THRU WINGWALL
(REAR ABUTMENT SHOWN; FORWARD ABUTMENT SHOWN)
11, 12 & 14

NOTES:

1. FOR ADDITIONAL INTEGRAL ABUTMENT DETAILS, SEE ODOT STD. DRG. ICD-1-20.

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ABUTMENT DETAILS
BRIDGE NO. SUM-76-0964
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2021-11-04_BU 13 - RFC PLANS

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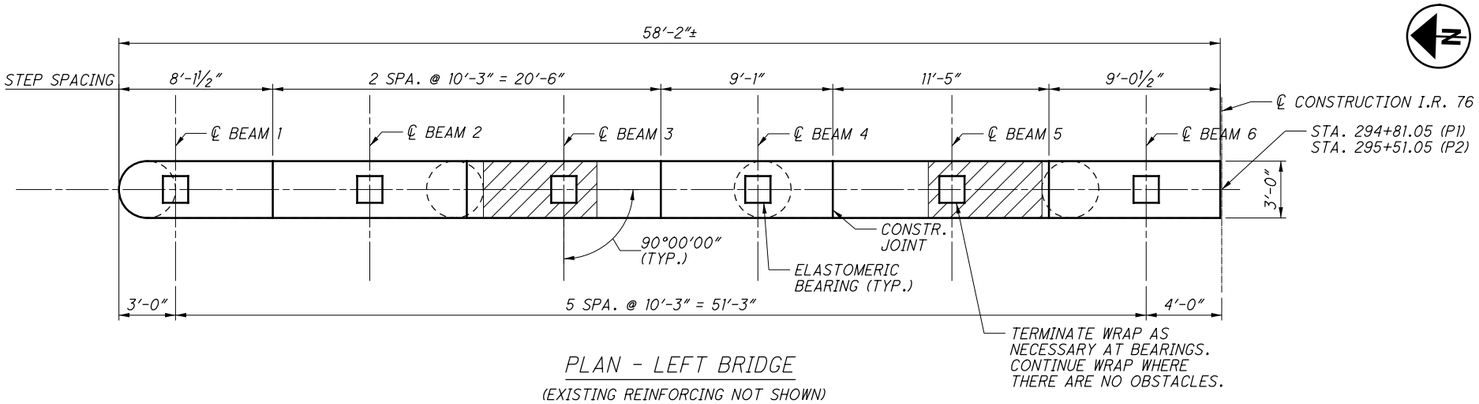
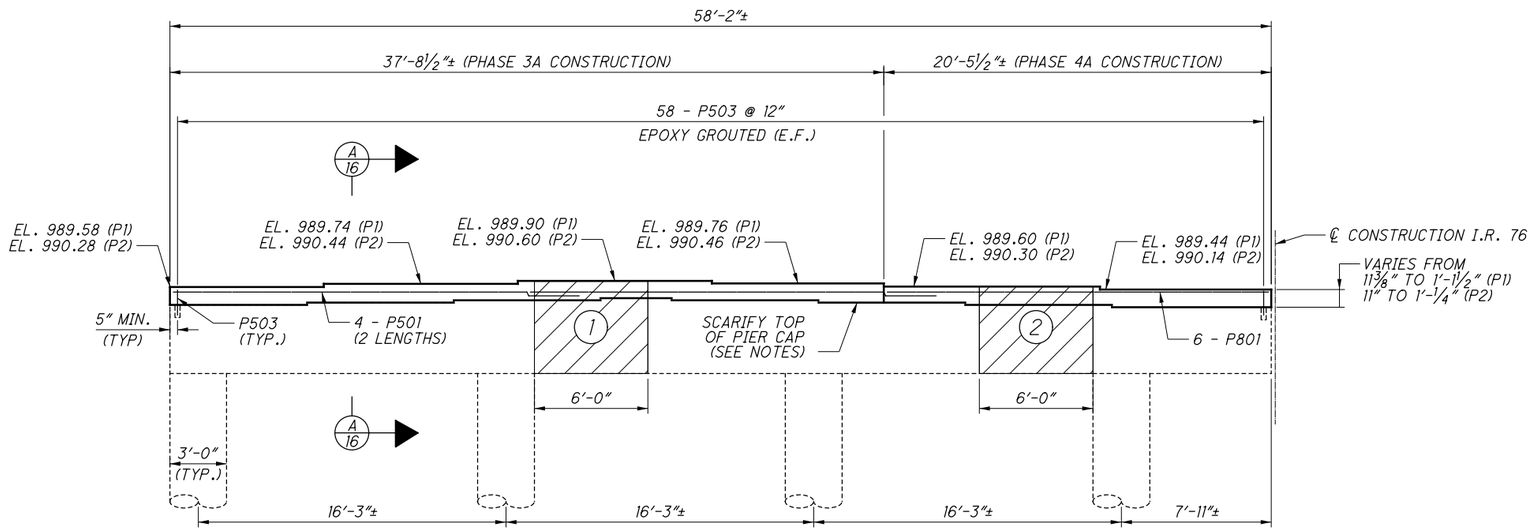
PID No. 102329



PLAN - LEFT BRIDGE

(EXISTING REINFORCING NOT SHOWN)



ELEVATION - LEFT BRIDGE

(LOOKING UPSTATION)

(EXISTING REINFORCING NOT SHOWN)

NOTES:

1. ALL EXPOSED SURFACES OF THE PIERS EXCEPT THE TOP OF THE PIER CAP SHALL BE SEALED WITH ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY - URETHANE). SEE SHEET 4/153 FOR ADDITIONAL NOTES AND DETAILS.
2. ALL REINFORCING BAR CLEARANCES SHALL BE 2" MINIMUM UNLESS NOTED OTHERWISE.
3. DRILL DOWEL HOLES WHERE SHOWN IN THE PLANS. INSTALL REINFORCING STEEL ACCORDING TO ITEM 510 USING EPOXY GROUT, 705.20. IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, MOVE THE DOWEL HOLE TO EITHER SIDE OF THE EXISTING BAR.
4. FOR SPECIFICATIONS OF THE FRP FIBER WRAP, SEE SHEET 4/153.
5. WHERE WRAP IS LOCATED, SEAL FULL PERIMETER OF PIER CAP WITH AN EPOXY-URETHANE SEALER. WAIT 72 HOURS AFTER THE FIBER WRAP HAS BEEN PLACED BEFORE SEALING.
6. SCARIFY EXISTING CONCRETE BRIDGE SEAT AREA TO ROUGH SURFACE APPROXIMATELY 1#4" DEEP. ABRASIVELY CLEAN THE JOINT SURFACE AND REMOVE ANY LOOSE CONCRETE AND RUST. CONCRETE BONDING SURFACE SHALL BE WET AS CONCRETE IS PLACED.
7. EXISTING PIERS TO BE PATCHED. SEE GENERAL NOTES, SHEET 3/153 FOR ADDITIONAL NOTES.
8. EXISTING UNDERPASS LIGHTING TO BE REMOVED AND REPLACED.

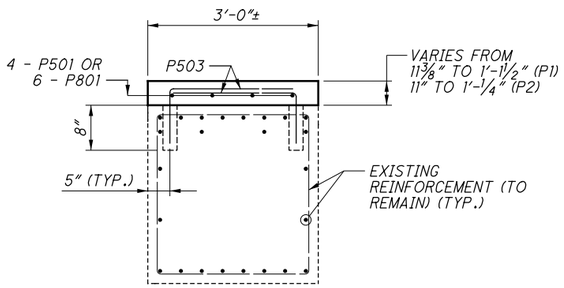
▨ - INDICATES LIMITS OF COMPOSITE FIBER WRAP SYSTEM. USE SIKAWRAP HEX 103C OR APPROVED EQUAL. SEE TABLE FOR NUMBER OF LAYERS AND SHEAR CAPACITY REQUIRED.

LAP LENGTHS	
NO. 5 BARS	2'-7"

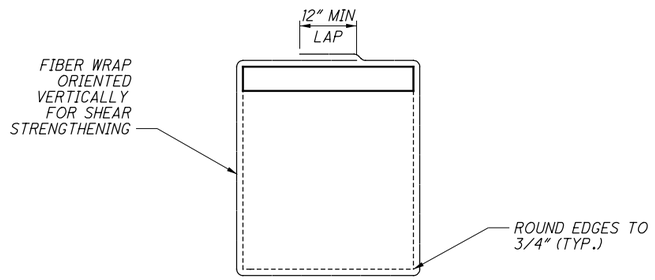
FIBER WRAP REQUIREMENTS*			
LOCATION	NO. OF LAYERS	MINIMUM WIDTH	** KIPS REQUIRED
1	1	6'-0"	60
2	2	6'-0"	170

* - 1/2 SikaWrap Hex 103C - 25" (12.5 in) OR AN APPROVED EQUAL. EACH LAYER IS 12.5" IN WIDTH AND SPACED @ 12.5" O.C.

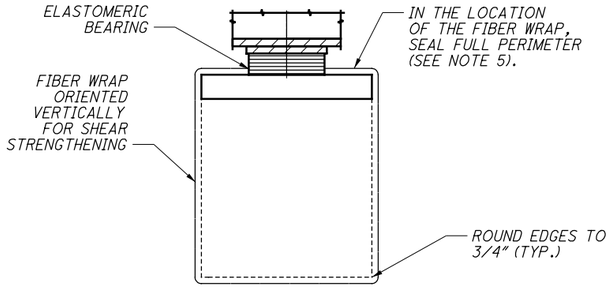
** - REQUIRED INCREASE IN FACTORED SHEAR CAPACITY OF PIER CAP



A/16 SECTION THRU PIER CAP



TYPICAL FIBER WRAP SECTION



FIBER WRAP SECTION AT BEARING

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PIER DETAILS - LEFT BRIDGE
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

2021-11-04_BU 13 - RFC PLANS

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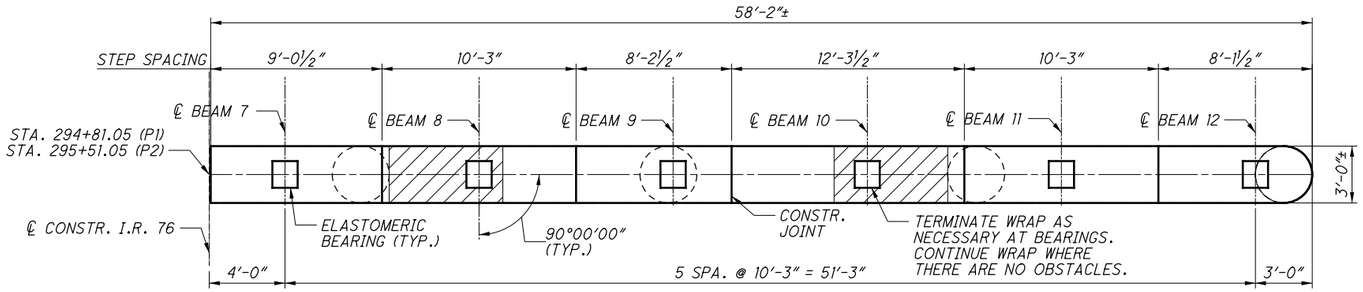
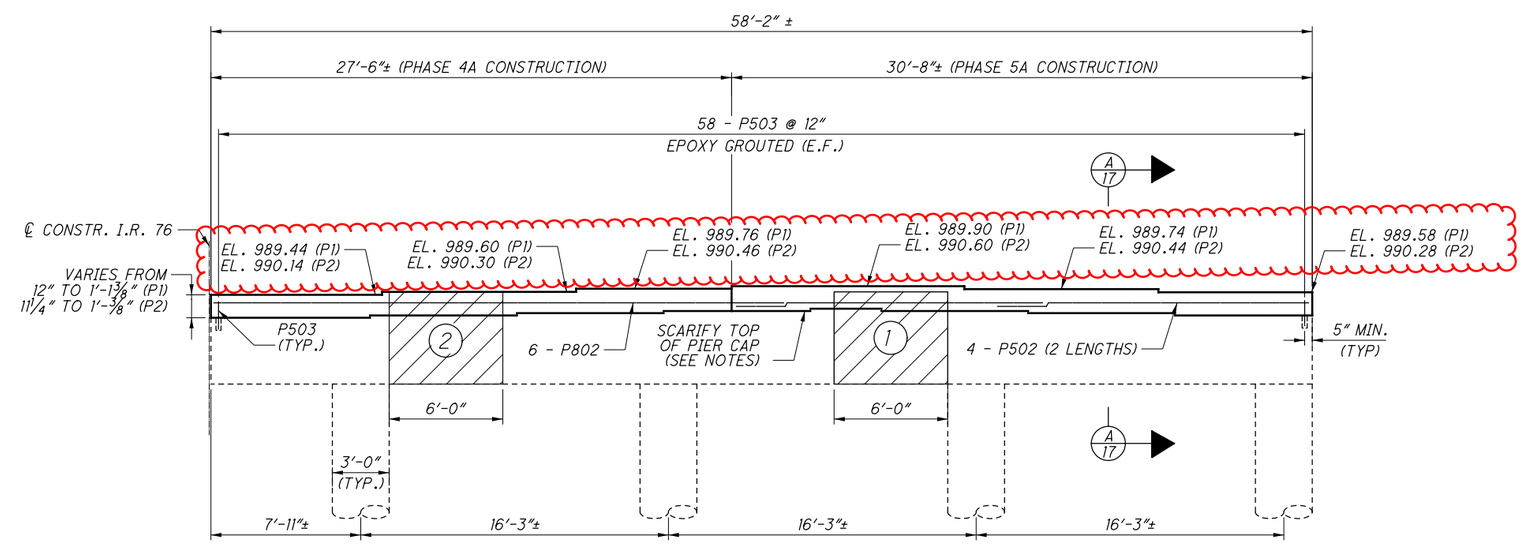


PLAN - RIGHT BRIDGE

(EXISTING REINFORCING NOT SHOWN)



ELEVATION - RIGHT BRIDGE

(LOOKING UPSTATION)

(EXISTING REINFORCING NOT SHOWN)

- INDICATES LIMITS OF COMPOSITE FIBER WRAP SYSTEM. USE SIKAWRAP HEX 103C OR APPROVED EQUAL. SEE TABLE FOR NUMBER OF LAYERS AND SHEAR CAPACITY REQUIRED.

LAP LENGTHS	
NO. 5 BARS	2'-7"

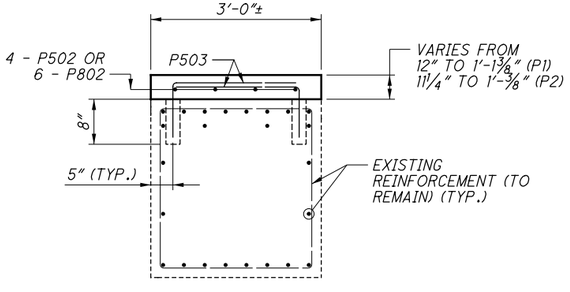
FIBER WRAP REQUIREMENTS*			
LOCATION	NO. OF LAYERS	MINIMUM WIDTH	** KIPS REQUIRED
1	1	6'-0"	60
2	2	6'-0"	170

* - 1/2 SikaWrap Hex 103C - 25" (12.5 in) OR AN APPROVED EQUAL. EACH LAYER IS 12.5" IN WIDTH AND SPACED @ 12.5" O.C.

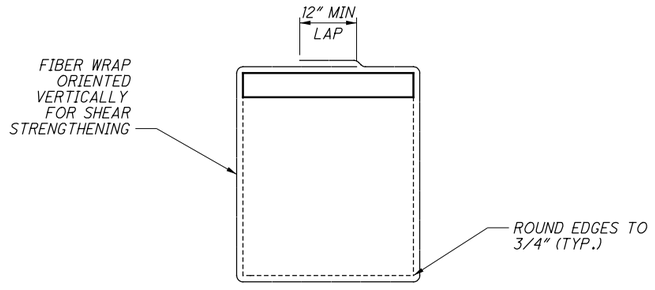
** - REQUIRED INCREASE IN FACTORED SHEAR CAPACITY OF PIER CAP

NOTES:

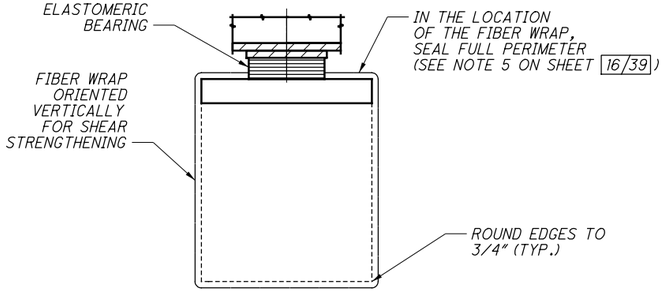
1. FOR NOTES, SEE SHEET 16/39.



A/17 SECTION THRU PIER CAP



TYPICAL FIBER WRAP SECTION



FIBER WRAP SECTION AT BEARING

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1	12/16/2021	ELEVATION REVISION

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PIER DETAILS - RIGHT BRIDGE
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

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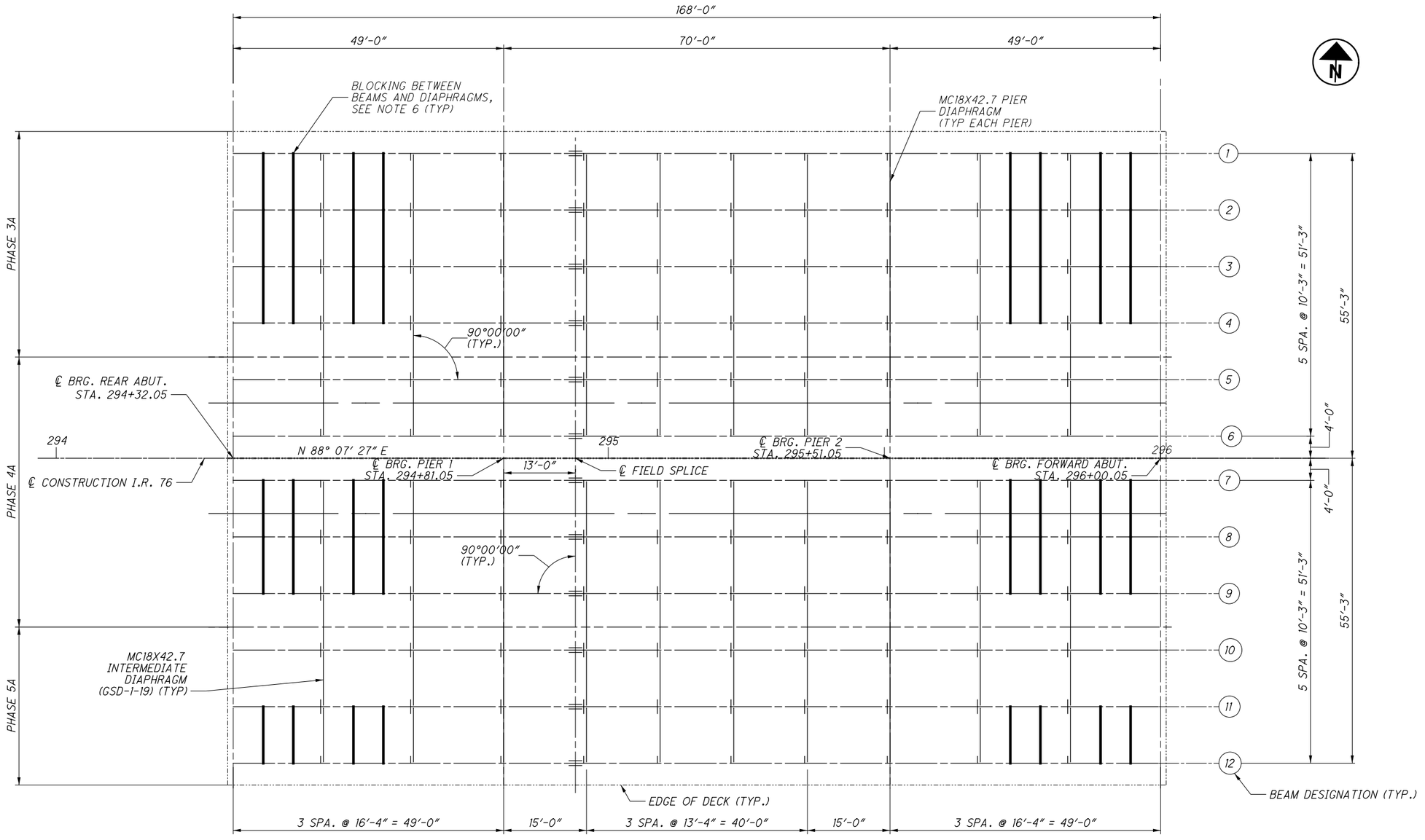

FRAMING PLAN

NOTES:

1. FOR BEAM ELEVATION CAMBER DIAGRAM AND ADDITIONAL NOTES, SEE SHEET 19/39.
2. FOR FIELD SPLICE DETAILS AND SHEAR STUD DETAILS, SEE SHEET 22/39.
3. FOR TRANSVERSE SECTION INCLUDING OVERHANG DIMENSIONS, SEE SHEET 24/39.
4. FOR INTERMEDIATE DIAPHRAGM DETAILS, SEE STANDARD DRAWINGS GSD-1-19 SHEET 2 OF 4.
5. FOR PIER DIAPHRAGM CONNECTION PLATE, SEE SHEET 22/39
6. FOR THE CONSTRUCTION OF PHASE 3A, 4" x 4" TIMBER LAGGING SHALL BE PLACED BETWEEN BEAMS 1 AND 2, 2 AND 3, AND 3 AND 4 AT THIRD POINTS IN ALL SPANS, BETWEEN DIAPHRAGMS. FOR PHASE 4A, 4" x 4" LAGGING SHALL BE PLACED BETWEEN BEAMS 7 AND 8 AND 8 AND 9 AT THIRD POINTS IN ALL SPANS, BETWEEN DIAPHRAGMS. FOR PHASE 5A CONSTRUCTION, 4" x 4" LAGGING SHALL BE PLACED BETWEEN BEAMS 11 AND 12, AT THIRD POINTS IN ALL SPANS BETWEEN DIAPHRAGMS. THE CONTRACTOR ALSO HAS THE OPTION OF RUNNING THE FINISHING MACHINE RAILS OVER BEAMS 1, 4, 9 AND 12.
7. DO NOT PERMANENTLY ATTACH INTERMEDIATE DIAPHRAGM BETWEEN BEAMS 4 AND 5 AND BETWEEN 9 AND 10 UNTIL THE CONCRETE POURS ON BOTH SIDES OF THE CLOSURE POUR LOCATION HAVE BEEN COMPLETED.
8. THE FABRICATOR SHALL DETAIL THE DIAPHRAGMS TO FIT AT THE COMPLETION OF DECK PLACEMENT ON EACH SIDE OF THE CLOSURE POUR.

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FRAMING PLAN
BRIDGE NO. SUM-76-0964
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0.63/9.74/8.42
PID No. 102329

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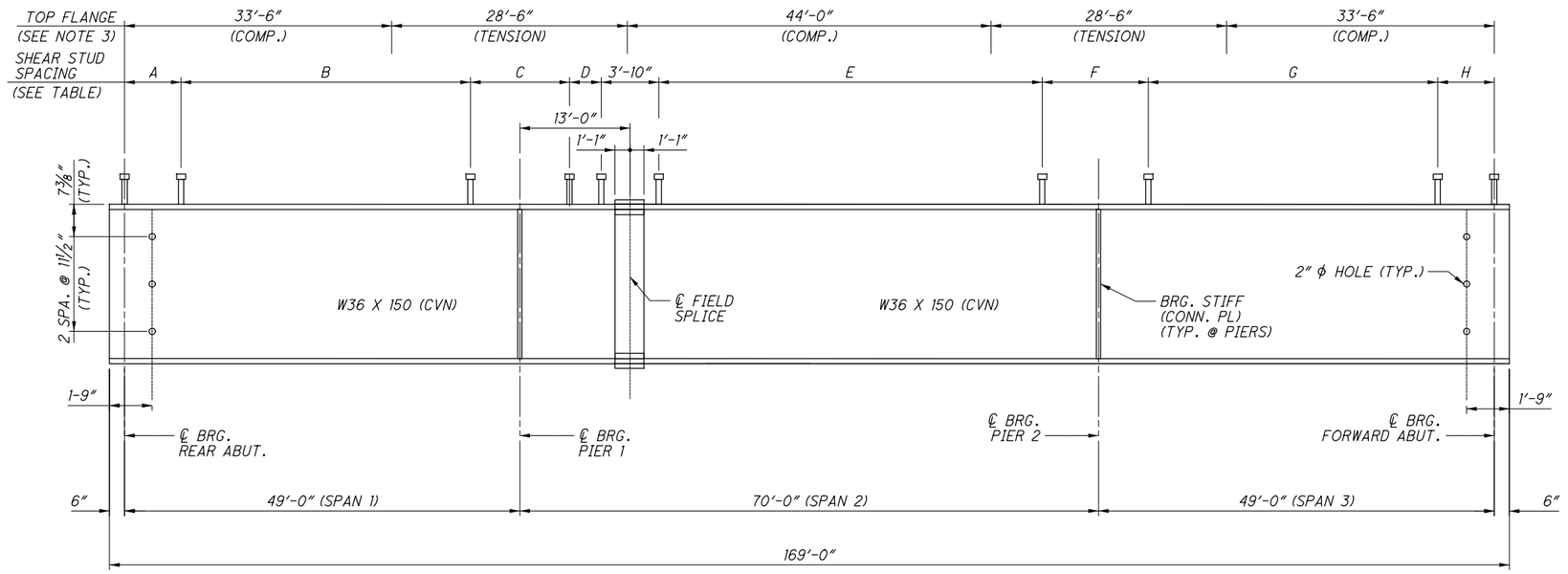
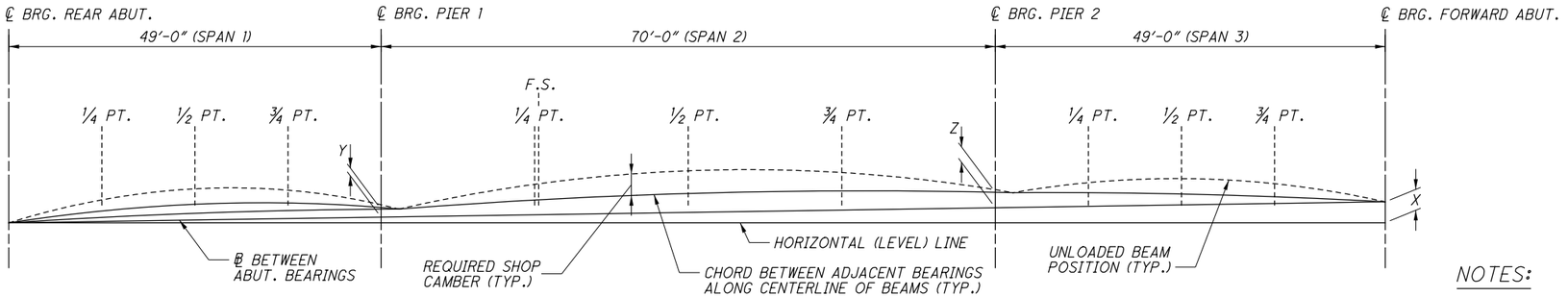


TYPICAL BEAM ELEVATION

SHEAR STUD SPACING	
DIMENSION	SPACING
A	12 SPA @ 8" = 8'-0"
B	42 SPA. @ 10" = 35'-0"
C	11 SPA. @ 14" = 12'-10"
D	5 SPA. @ 10" = 4'-2"
E	58 SPA. @ 10" = 48'-4"
F	11 SPA @ 14" = 12'-10"
G	42 SPA. @ 10" = 35'-0"
H	12 SPA. @ 8" = 8'-0"



CAMBER DIAGRAM

VERICAL OFFSETS AT SUPPORTS			
BEAM NO.	X	Y	Z
1	1'-8 1/4"	0"	0"
2	1'-8 1/4"	0"	0"
3	1'-8 1/4"	0"	0"
4	1'-8 1/4"	0"	0"
5	1'-8 1/4"	0"	0"
6	1'-8 1/4"	0"	0"

VERICAL OFFSETS AT SUPPORTS			
BEAM NO.	X	Y	Z
7	1'-8 1/4"	0"	0"
8	1'-8 1/4"	0"	0"
9	1'-8 1/4"	0"	0"
10	1'-8 1/4"	0"	0"
11	1'-8 1/4"	0"	0"
12	1'-8 1/4"	0"	0"

NOTES:

1. WELDED SHEAR CONNECTORS SHALL NOT BE PLACED WITHIN TWO INCHES OF FIELD SPLICE PLATES OR WITHIN FOUR DIAMETERS, MEASURED CENTER TO CENTER, OF ANOTHER SHEAR CONNECTOR.
2. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
3. WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA BEAM 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 1/4" FOR THICKNESS UP TO 3/4" OR 5/16" FOR GREATER THAN 3/4" THICK.
4. ALL STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 50 (PAINTED).
5. FOR FRAMING PLAN SEE SHEET 18/39.
6. FOR SPLICE DETAILS SEE SHEET 22/39.
7. FOR SHEAR STUD DETAIL, SEE SHEET 22/39.
8. FOR DEFLECTION AND CAMBER TABLES SEE SHEETS 20/39 THRU 21/39.
9. A POSITIVE VERTICAL OFFSET INDICATES AN OFFSET ABOVE THE BASELINE BETWEEN ABUTMENT BEARINGS.

Released for Construction
Thomas J Powell, PE
11/10/2021

2021-11-04_BU 13 - RFC PLANS

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BEAM ELEVATIONS AND CAMBER DIAGRAM
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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LEFT BRIDGE DEFLECTION AND CAMBER

BEAM	DEFLECTION COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT		F.S. #1	1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	
			IN.	IN.	IN.		IN.	IN.	IN.	IN.		IN.	IN.	IN.	
BEAM 1	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	1/8	1/16	0	5/16	3/8	5/8	3/8	0	1/16	1/8	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	1/8	1/16	0	3/8	7/16	3/4	7/16	0	1/16	1/8	1/8	0
BEAM 2	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	1/8	1/16	0	5/16	7/16	11/16	7/16	0	1/16	1/8	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	1/8	1/16	0	3/8	1/2	13/16	1/2	0	1/16	1/8	1/8	0
BEAM 3	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	1/8	1/16	0	5/16	7/16	11/16	7/16	0	1/16	1/8	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	1/8	1/16	0	3/8	1/2	13/16	1/2	0	1/16	1/8	1/8	0
BEAM 4	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	5/16	7/16	11/16	7/16	0	1/16	3/16	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	3/8	1/2	13/16	1/2	0	1/16	3/16	1/8	0
BEAM 5	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	5/16	7/16	11/16	7/16	0	1/16	3/16	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	3/8	1/2	13/16	1/2	0	1/16	3/16	1/8	0
BEAM 6	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	1/8	1/16	0	5/16	7/16	11/16	7/16	0	1/16	1/8	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	1/8	1/16	0	3/8	1/2	13/16	1/2	0	1/16	1/8	1/8	0

NOTES:

1. FOR BEAM ELEVATION AND CAMBER DIAGRAM, SEE SHEET 19/39.
2. THERE IS NO ADJUSTMENT FOR VERTICAL CURVE SINCE THE PROFILE GRADE IS ON A CONSTANT LONGITUDINAL SLOPE.
3. ALL DEFLECTION AND CAMBER VALUES GIVEN TO NEAREST 1/16".
4. NEGATIVE VALUES FOR DEFLECTIONS INDICATE DEFLECTIONS UPWARD. NEGATIVE VALUES FOR SUPERELEVATION ADJUSTMENT INDICATE VALUES BELOW THE CHORD LINE.

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2021-11-04_BU 13 - RFC PLANS

DEFLECTION AND CAMBER TABLE - LEFT BRIDGE
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

20/39
134/153

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RIGHT BRIDGE DEFLECTION AND CAMBER

BEAM	DEFLECTION COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1 ¼ PT.	SPAN 1 ½ PT	SPAN 1 ¾ PT	℄ BEARING PIER 1	SPAN 2 F.S. #1	SPAN 2 ¼ PT.	SPAN 2 ½ PT	SPAN 2 ¾ PT	℄ BEARING PIER 2	SPAN 3 ¼ PT.	SPAN 3 ½ PT	SPAN 3 ¾ PT	℄ BEARING FORWARD ABUTMENT
		IN.	IN.	IN.	IN.		IN.	IN.	IN.	IN.		IN.	IN.	IN.	
BEAM 7	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	1/8	1/16	0	5/16	3/8	5/8	3/8	0	1/16	1/8	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	1/8	1/16	0	3/8	7/16	3/4	7/16	0	1/16	1/8	1/8	0
BEAM 8	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	1/8	1/16	0	5/16	7/16	11/16	7/16	0	1/16	1/8	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	1/8	1/16	0	3/8	1/2	13/16	1/2	0	1/16	1/8	1/8	0
BEAM 9	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	1/8	1/16	0	5/16	7/16	11/16	7/16	0	1/16	1/8	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	1/8	1/16	0	3/8	1/2	13/16	1/2	0	1/16	1/8	1/8	0
BEAM 10	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	5/16	7/16	11/16	7/16	0	1/16	3/16	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	3/8	1/2	13/16	1/2	0	1/16	3/16	1/8	0
BEAM 11	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	1/16	1/16	1/8	1/16	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	3/16	1/16	0	5/16	7/16	11/16	7/16	0	1/16	3/16	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	3/16	1/16	0	3/8	1/2	13/16	1/2	0	1/16	3/16	1/8	0
BEAM 12	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	1/8	1/16	0	5/16	7/16	11/16	7/16	0	1/16	1/8	1/8	0
	ADJUSTMENT FOR SUPER ELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CAMBER	0	1/8	1/8	1/16	0	3/8	1/2	13/16	1/2	0	1/16	1/8	1/8	0

NOTES:

1. FOR BEAM ELEVATION AND CAMBER DIAGRAM, SEE SHEET 19/39.
2. THERE IS NO ADJUSTMENT FOR VERTICAL CURVE SINCE THE PROFILE GRADE IS ON A CONSTANT LONGITUDINAL SLOPE.
3. ALL DEFLECTION AND CAMBER VALUES GIVEN TO NEAREST 1/16".
4. NEGATIVE VALUES FOR DEFLECTIONS INDICATE DEFLECTIONS UPWARD. NEGATIVE VALUES FOR SUPERELEVATION ADJUSTMENT INDICATE VALUES BELOW THE CHORD LINE.

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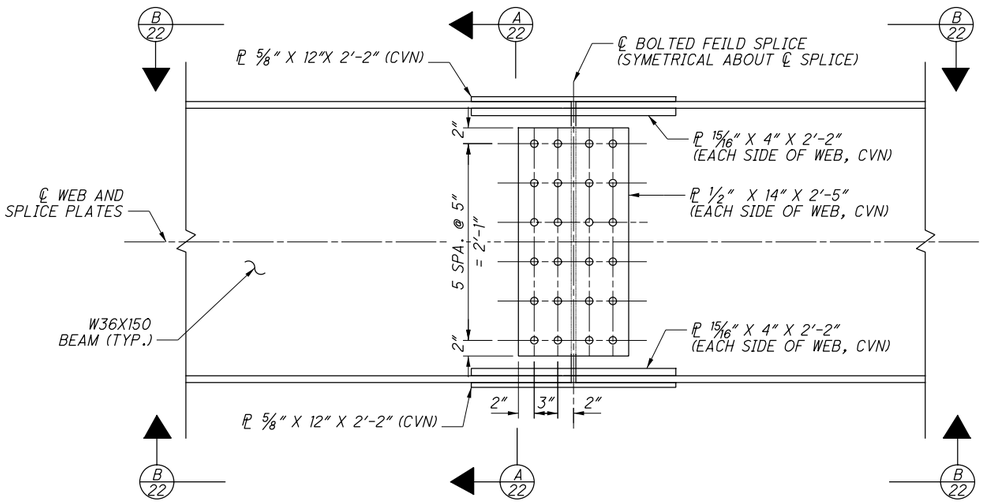
2021-11-04_BU 13 - RFC PLANS

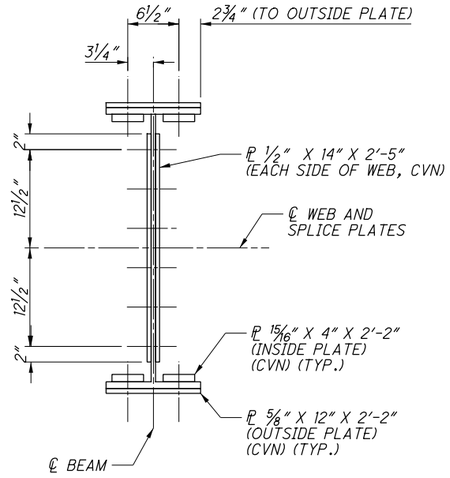
RIGHT BRIDGE DEFLECTION AND CAMBER TABLE - RIGHT BRIDGE

BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

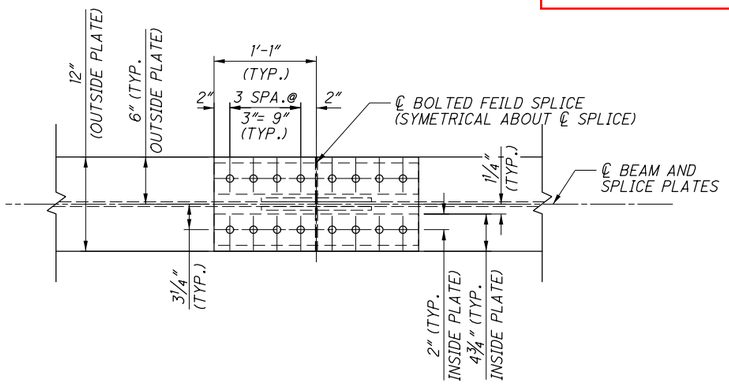
SUM-8/76/77-0.63/9.74/8.42
PID No. 102329



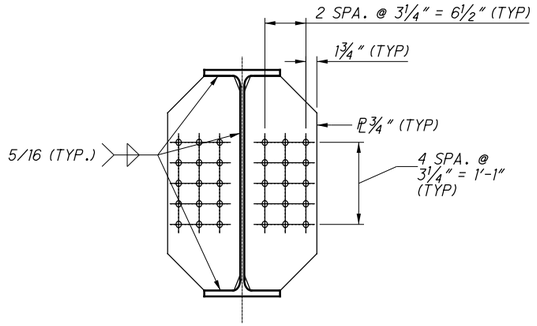
TYPICAL FEILD SPLICE



A 22 SECTION THRU BEAM

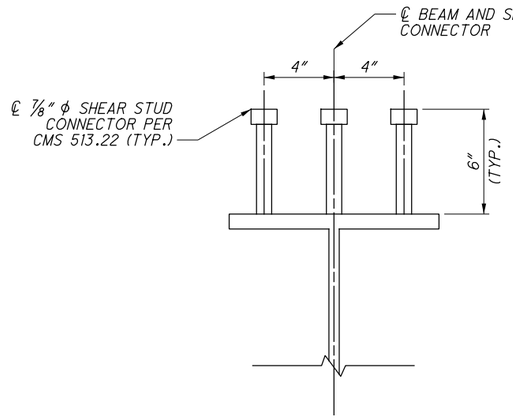


B 22 VIEW
(1 OUTSIDE PLATE AND 2 INSIDE PLATES)



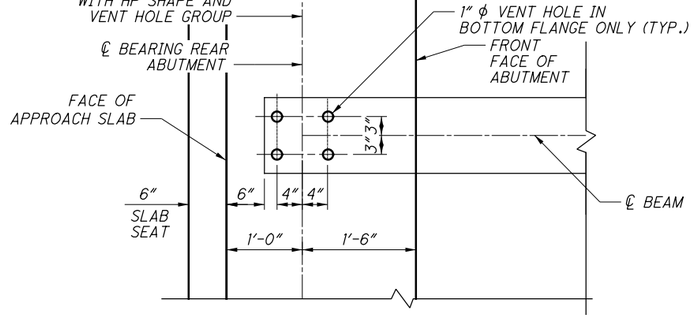
PIER CONNECTION PLATE DETAIL

FOR ADDITIONAL INFORMATION, SEE STD. DWG. GS-1-19



SHEAR STUD CONNECTOR

(SEE NOTE 1)



VENT HOLE PLACEMENT DETAIL

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)

NOTES:

1. WELDED SHEAR CONNECTORS SHALL NOT BE PLACED WITHIN TWO INCHES OF FIELD SPLICE PLATES OR WITHIN FOUR DIAMETERS, MEASURED CENTER TO CENTER, OF ANOTHER SHEAR CONNECTOR.
2. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
3. ALL STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 50. (PAINTED)
4. FOR LOCATION OF FIELD SPLICES, SEE SHEET 18/39.
5. FOR BEAM ELEVATIONS AND CAMBER DIAGRAM, SEE SHEET 19/39.
6. ALL BOLTS FOR FIELD SPLICES SHALL BE 1" DIAMETER HIGH STRENGTH, ASTM A325 TYPE 1, AND GALVANIZED PER CMS 711.02.
7. FOR ELASTOMERIC BEARING DETAILS, SEE SHEET 23/39.

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STEEL DETAILS
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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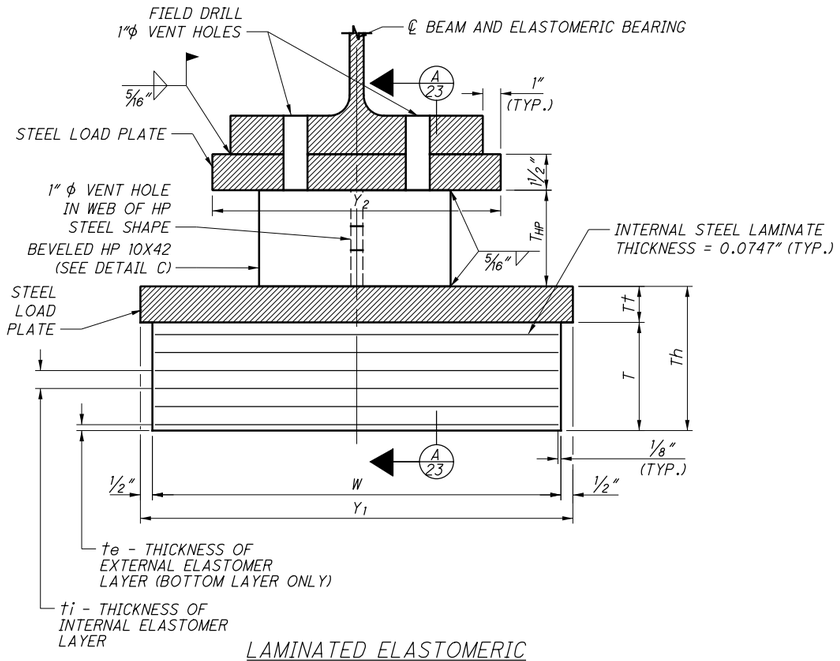
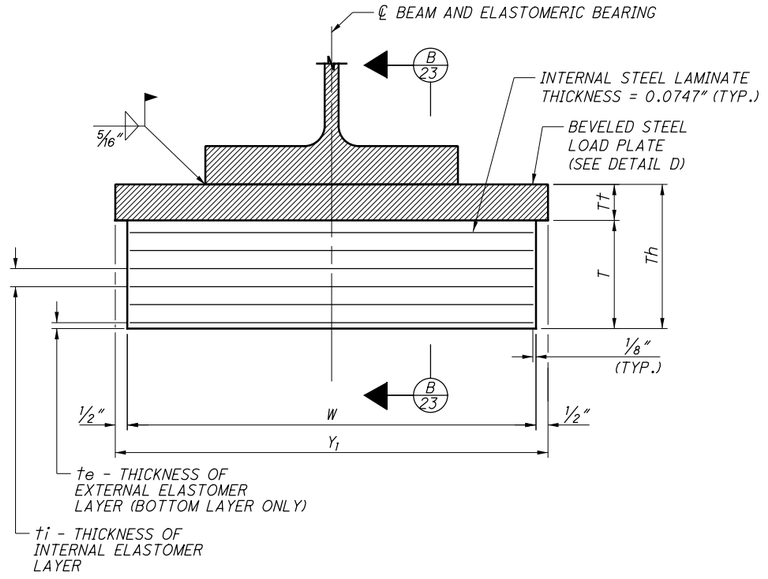
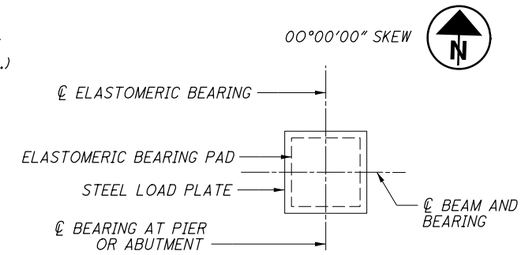


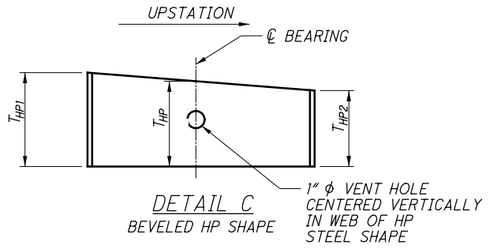
LAMINATED ELASTOMERIC EXPANSION BEARING AT ABUTMENTS



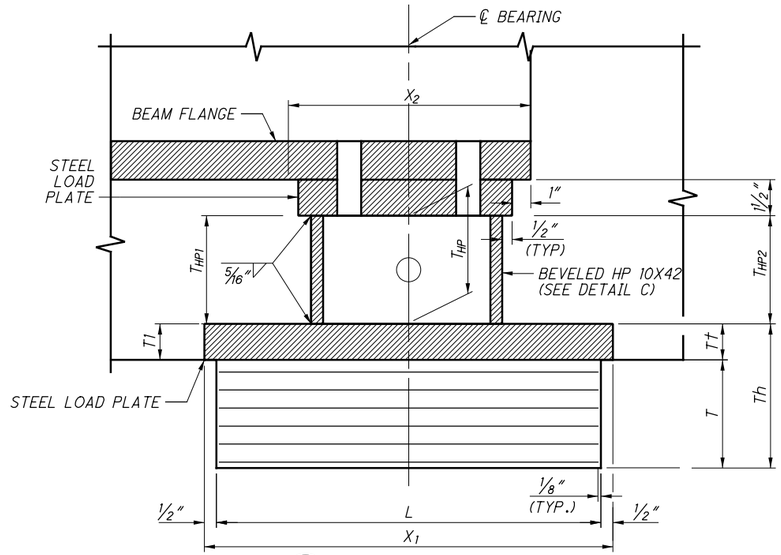
LAMINATED ELASTOMERIC EXPANSION BEARING AT PIERS



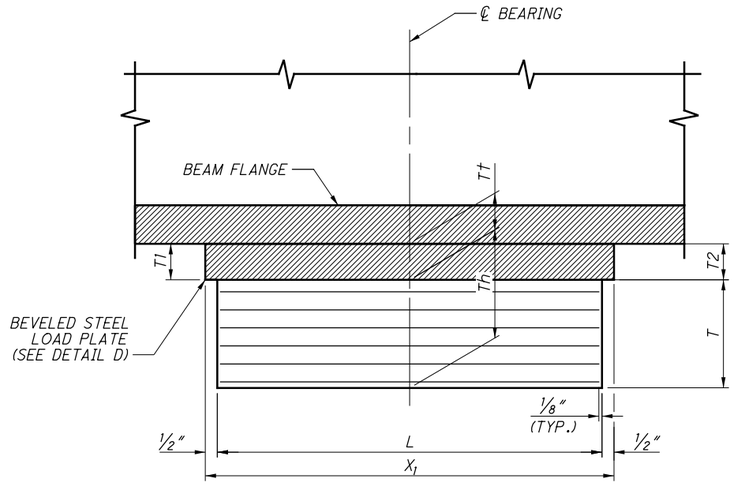
BEARING ORIENTATION PLAN



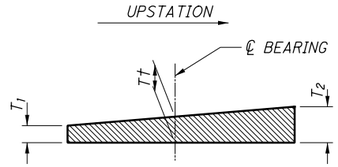
DETAIL C
BEVELED HP SHAPE



A 23 SECTION THRU BEARING (AT ABUTMENTS)



B 23 SECTION THRU BEARING (AT PIERS)



DETAIL D
BEVELED LOAD PLATE

NOTE:
T1 & T_{HP1} UPSTATION T2 & T_{HP2}

ELASTOMERIC BEARING DATA

LOCATION	TYPE	NO. REQ.D	DL (KIP)	LL W/O IMPACT (KIP)	MAXDESIGN LOAD (DL+LL) (KIP)	L (IN.)	W (IN.)	ti (IN.)	te (IN.)	NO OF ti's	NO. INTERNAL LAMINATES	T (IN.)	STEEL LOAD PLATES X_1 (IN.)	Y_1 (IN.)	T1 (IN.)	T2 (IN.)	Tt (IN.)	Th (IN.)	X_2 (IN.)	Y_2 (IN.)	HP SECTION T_{HP1} (IN.)	T_{HP} (IN.)	T_{HP2} (IN.)
ABUTMENTS	EXP	24	57.0	67.7	124.8	12	12	0.375	0.25	7	7	3.398	13	13	1.50	1.50	1.50	4.898	10.75	14.00	5.95	6	6.05
PIERS	EXP	24	143.3	111.5	254.8	17	16	0.500	0.25	7	7	4.273	18	17	1.50	1.68	1.59	5.836	-	-	-	-	-

NOTE:
T1 UPSTATION T2

NOTES:

1. THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGES.
2. THE STEEL LOAD PLATES AND HP SHAPES SHALL BE ASTM A709 GRADE 50 STEEL AND PRIME PAINTED IN ACCORDANCE WITH ITEM 513. THE STEEL LOAD PLATES AT THE PIERS SHALL ALSO BE PAINTED IN ACCORDANCE WITH ITEM 514 TO MATCH BEAM COLOR.
3. THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS. CONTROL WELDING SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300°F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
4. BEARING REPOSITIONING: IF THE STEEL IS ERECTED AT AN AMBIENT TEMPERATURE HIGHER THAN 80°F OR LOWER THAN 40° AND THE BEARING SHEAR DEFLECTION EXCEEDS 1/8 OF THE BEARING HEIGHT AT 60°F± 10°F, RAISE THE BEAMS TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 60°F± 10°F.
5. TOTAL DESIGN LOAD FOR BEARINGS EQUALS THE SUM OF THE DEAD LOADS AND LIVE LOADS TABULATED IN THE BEARING TABLE. IMPACTED IS NOT INCLUDED.
6. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND VISIBLE AFTER THE BEARING IS INSTALLED.

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BEARING DETAILS
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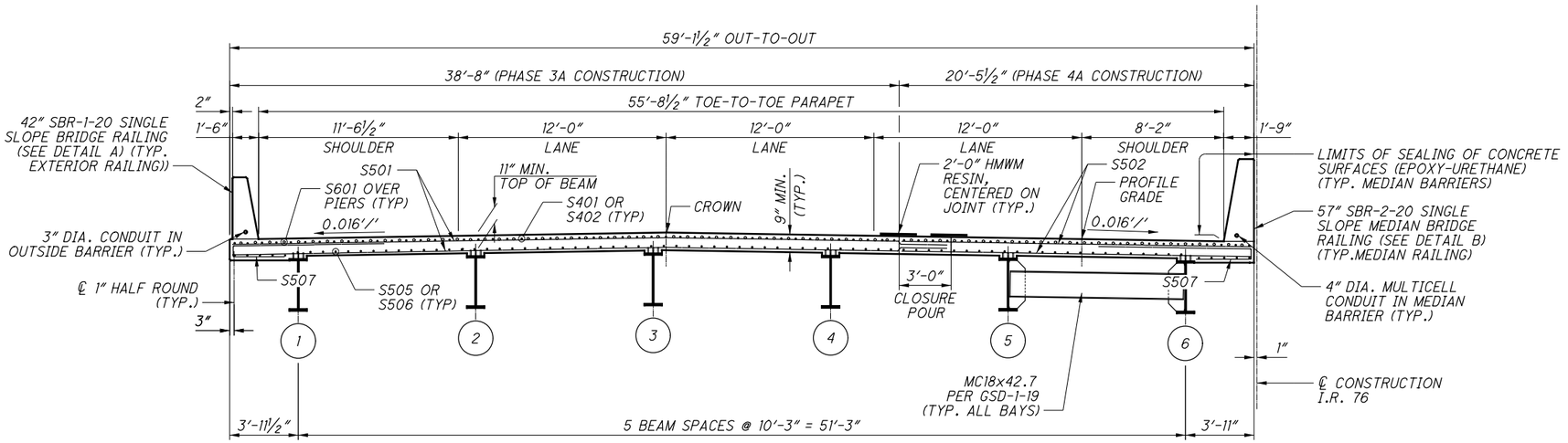
I.R. 76 OVER LAKESHORE BOULEVARD

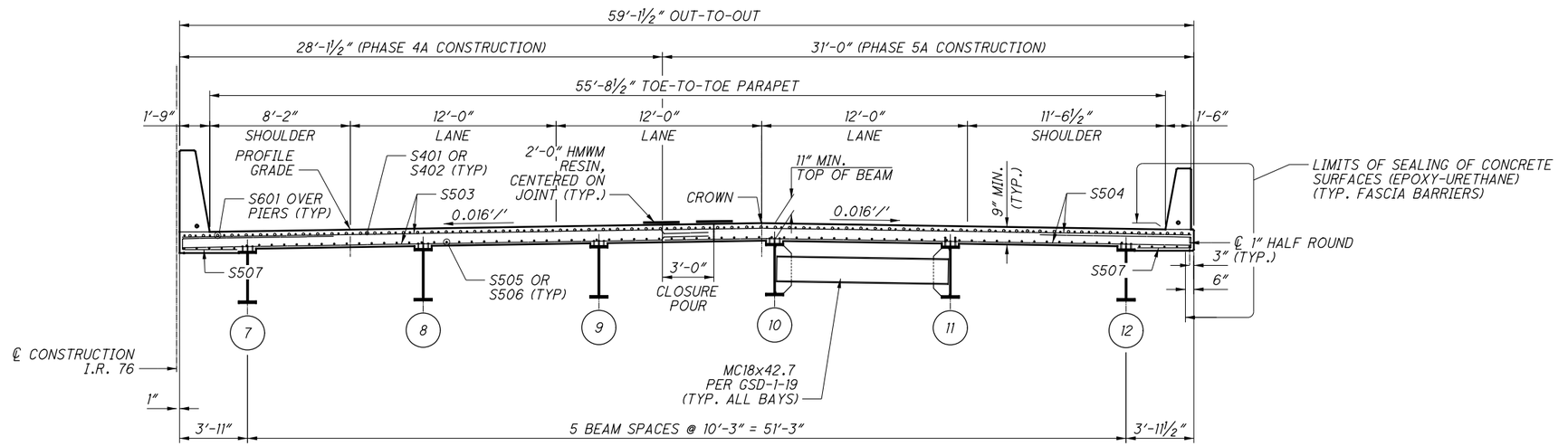
2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

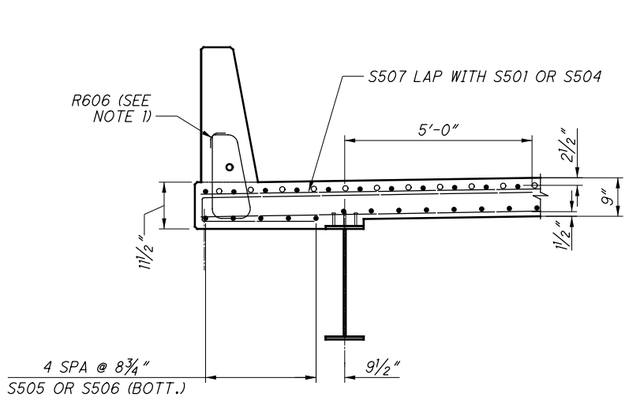
23 | 39
137
153



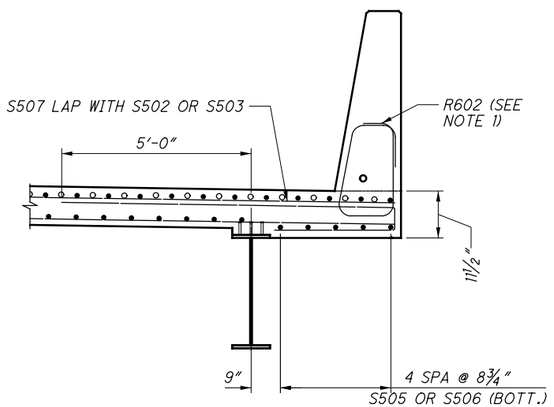
TRANSVERSE SECTION - LEFT BRIDGE (WB)



TRANSVERSE SECTION - RIGHT BRIDGE (EB)



DETAIL A
(EXTERIOR OVERHANG)



DETAIL B
(MEDIAN OVERHANG)

NOTES:

1. FOR ADDITIONAL PARAPET AND MEDIAN BARRIER DETAILS INCLUDING REINFORCEMENT CAST WITH THE DECK POUR, SEE SHEET 35/39.
2. FOR REINFORCING STEEL LIST SEE SHEET 39/39.
3. FOR TOP OF DECK PLAN, SEE SHEET 25/39.
4. FOR BOTTOM OF DECK PLAN, SEE SHEET 26/39.

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TRANSVERSE SECTION
BRIDGE NO. SUM-76-0964
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2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
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138
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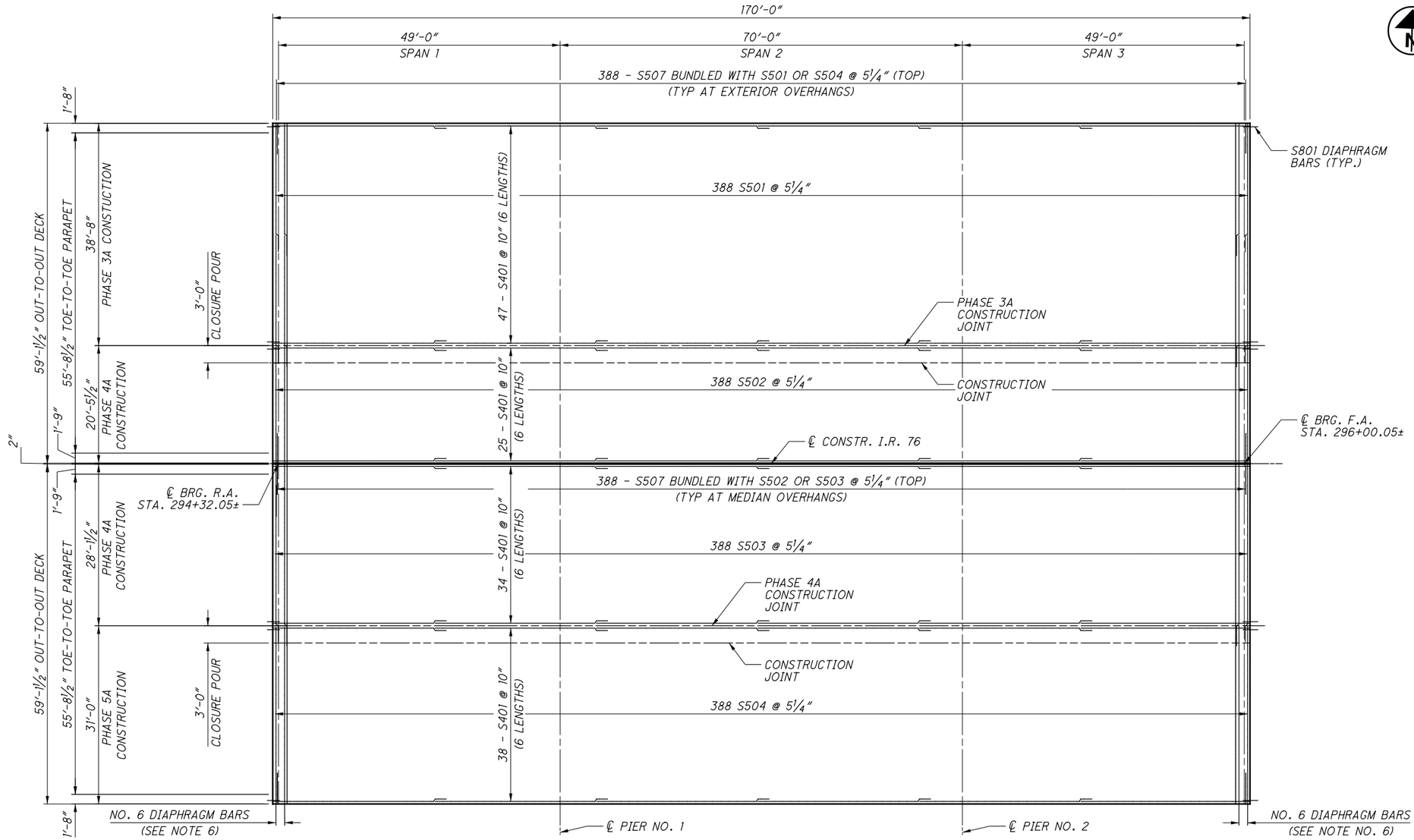
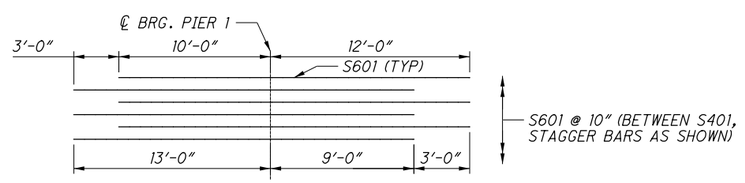


DECK PLAN
(TOP REINFORCEMENT)

LAP LENGTHS	
NO. 4 BARS	1'-11"
NO. 5 BARS	2'-10"
NO. 6 BARS	3'-6"



ADDITIONAL PIER REINFORCEMENT DETAIL
(PIER 1 SHOWN, PIER 2 OPPOSITE)

NOTES:

1. FOR GENERAL NOTES SEE SHEET 2/153.
2. FOR REINFORCING STEEL LIST SEE SHEET 39/39
3. FOR SCREED, TOP OF HAUNCH & FINAL DECK SURFACE ELEVATIONS SEE SHEETS 31/39 THRU 34/39 .
4. FOR TRANSVERSE SECTION SEE SHEET 24/39.
5. FOR PARAPET NOTES AND DETAILS INCLUDING REINFORCING STEEL INCLUDING CAST WITH THE DECK POUR, SEE ODOT STANDARD DRAWINGS SBR-1-20 & SBR-2-20 AND SHEET 35/39.
6. FOR REAR AND FORWARD ABUTMENT DIAPHRAGM DETAILS INCLUDING REINFORCEMENT, SEE SHEETS 27/39 THRU 29/39.
7. FOR BOTTOM DECK REINFORCING, SEE SHEET 26/39 .

ISSUE RECORD:

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PARSONS
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Columbus, OH 43235

DESIGNED	DRAWN	REVIEWED	DATE
JRE	JRE/TYW	TES	08/17/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703392	

DECK PLAN
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

25/39
139/153

2021-11-04_BU 13 - RFC PLANS

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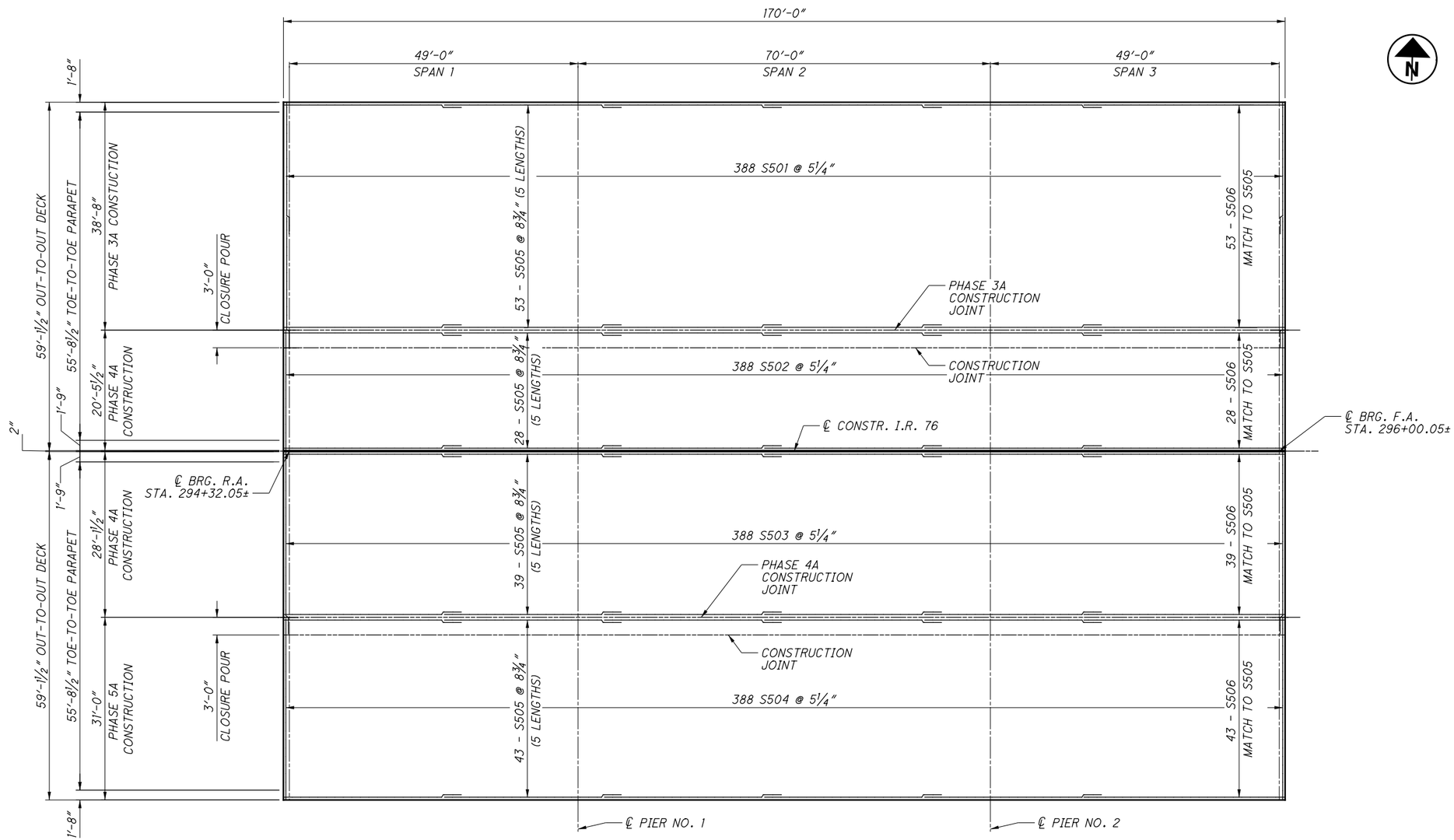

DECK PLAN
(BOTTOM REINFORCEMENT)

LAP LENGTHS	
NO. 4 BARS	1'-11"
NO. 5 BARS	2'-10"

NOTES:

1. FOR TOP OF DECK REINFORCING AND NOTES, SEE SHEET 25/39.

ISSUE RECORD:

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PARSONS
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JRE	JRE/TYW	TES	08/17/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703392	

DECK PLAN
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329

26/39

140/153

2021-11-04_BU 13 - RFC PLANS

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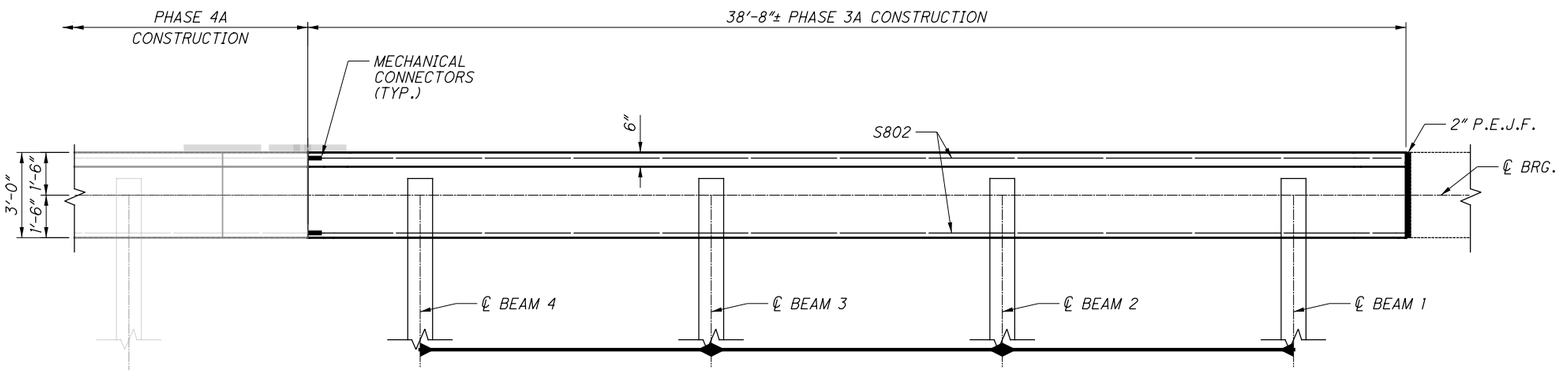
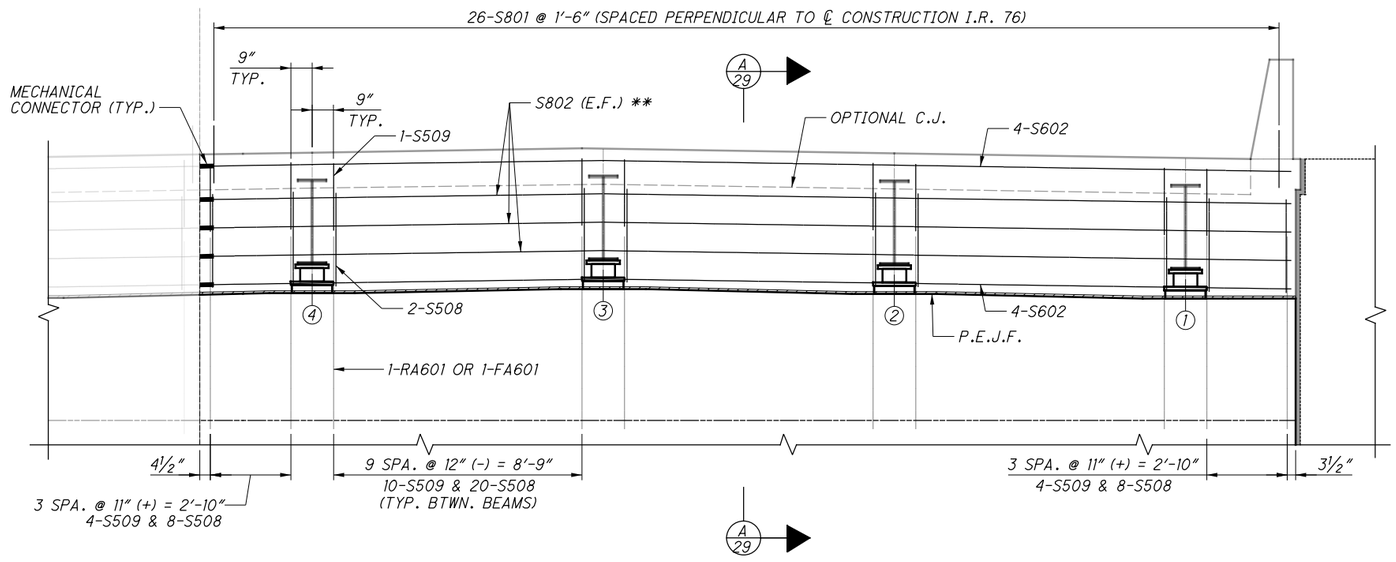


PLAN - PHASE 3A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)



ELEVATION - PHASE 3A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)

** - INDICATES BARS PLACED IN THE NEAR FACE THRU HOLES IN THE WEB

MIN. LAP LENGTHS	
NO. 8 BARS	5'-4"

NOTES:

1. ABUTMENT DIAPHRAGM CONCRETE, PHASED CONSTRUCTION:
   PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS WITH THE DECK CONCETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN ON 29/39 AND PLACE REMAINING DIAPHRAGM CONCRETE WITH DECK. PLACE CLOSURE POUR CONCRETE IN THE DIAPHRAGM AND DECK CONCURRENTLY.
2. FOR ABUTMENT PLANS AND ELEVATIONS INCLUDING SEAT ELEVATIONS, SEE SHEETS 9/39 THRU 14/39.
3. FOR BEAM ELEVATION INCLUDING WEB HOLES, SEE SHEET 19/39.
4. FOR PARAPET PLAN AND ELEVATION, SEE SHEETS 2/39 AND 35/39.
5. PLACE VERTICAL BARS PARALLEL TO BEAMS.
6. PLACE DIAPHRAGM REINFORCING BEFORE CONSTRUCTING WINGWALLS.
7. FOR ELASTOMERIC BEARING DETAILS, SEE SHEET 23/39.

ISSUE RECORD:

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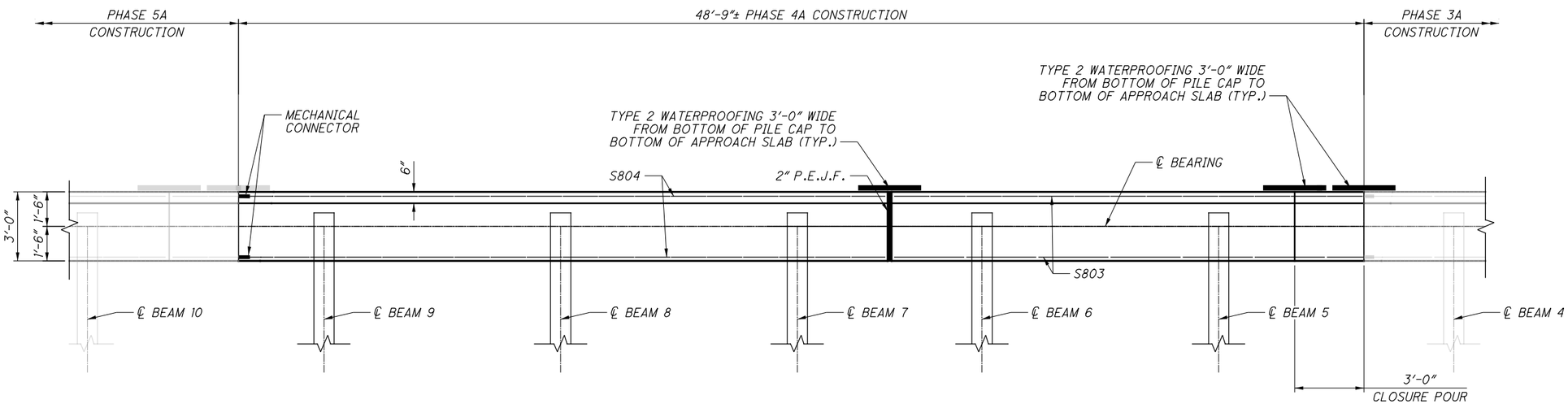
JRE		7703392	

REAR ABUTMENTS DIAPHRAM DETAILS
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

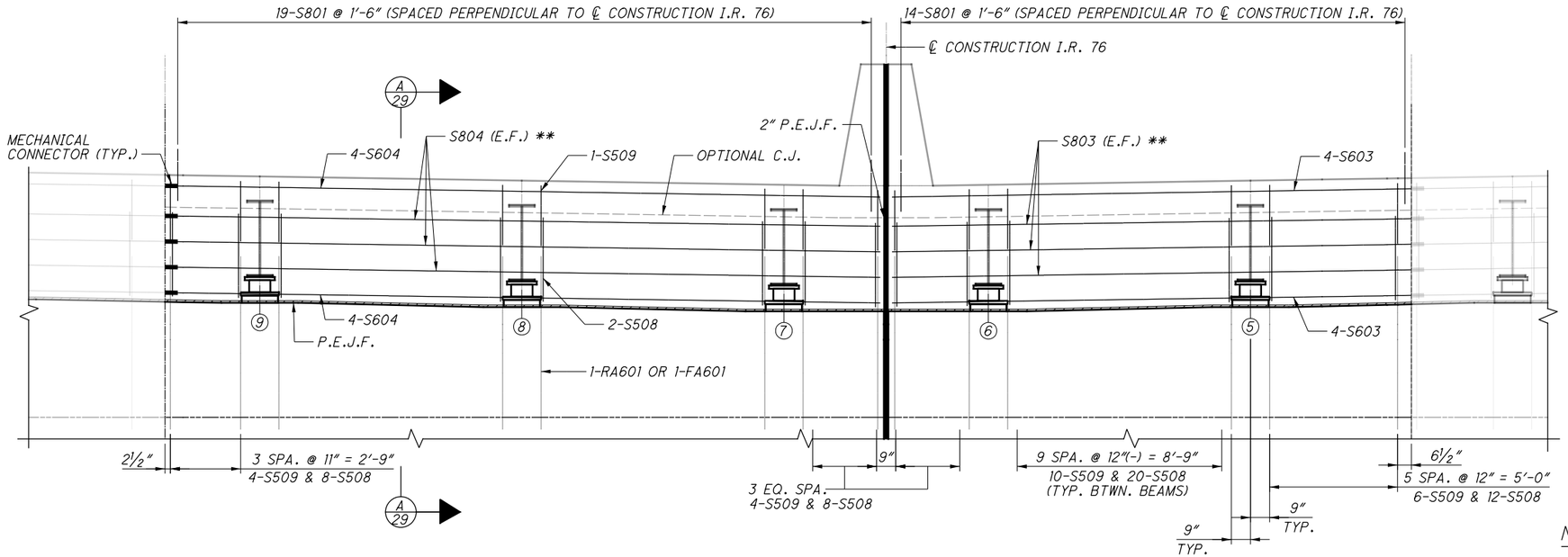
2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329



PLAN - PHASE 4A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)



ELEVATION - PHASE 4A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)

** - INDICATES BARS PLACED IN THE NEAR FACE THRU HOLES IN THE WEB

MIN. LAP LENGTHS	
NO. 8 BARS	5'-4"

NOTES:

1. FOR ADDITIONAL DIAPHRAGM NOTES, SEE SHEET 27/40.

ISSUE RECORD:

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CDB		7703392	

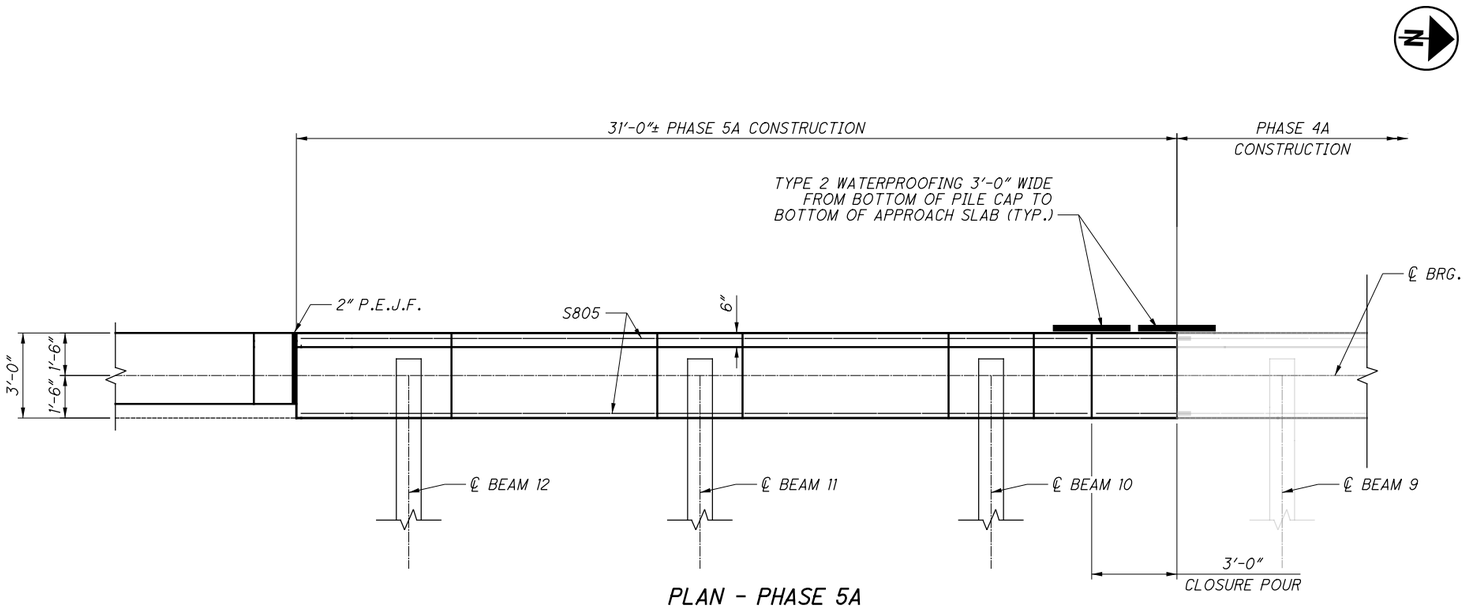
REAR ABUTMENTS DIAPHRAM DETAILS
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

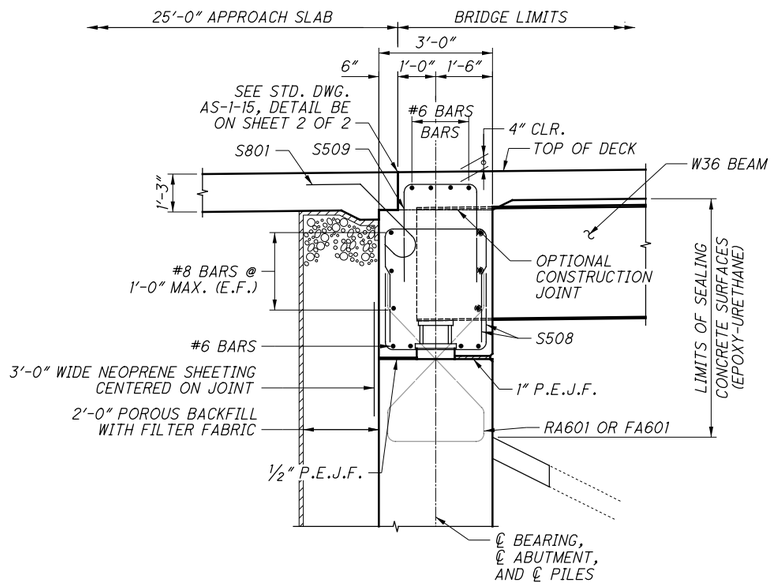
28/39

142/153

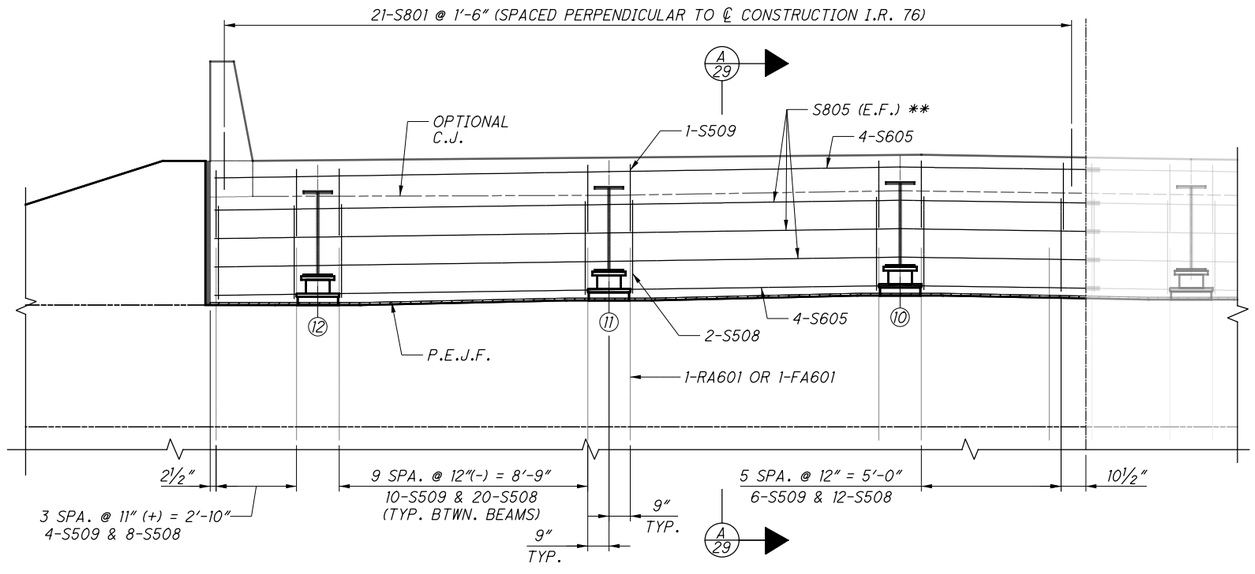


PLAN - PHASE 5A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)



A / 27 SECTION THRU DIAPHRAGM



** - INDICATES BARS PLACED IN THE NEAR FACE THRU HOLES IN THE WEB

ELEVATION - PHASE 5A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)

MIN. LAP LENGTHS	
NO. 6 BARS	3'-6"

NOTES:

1. FOR ADDITIONAL DIAPHRAGM NOTES, SEE SHEET 27/39.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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JRE		7703392	

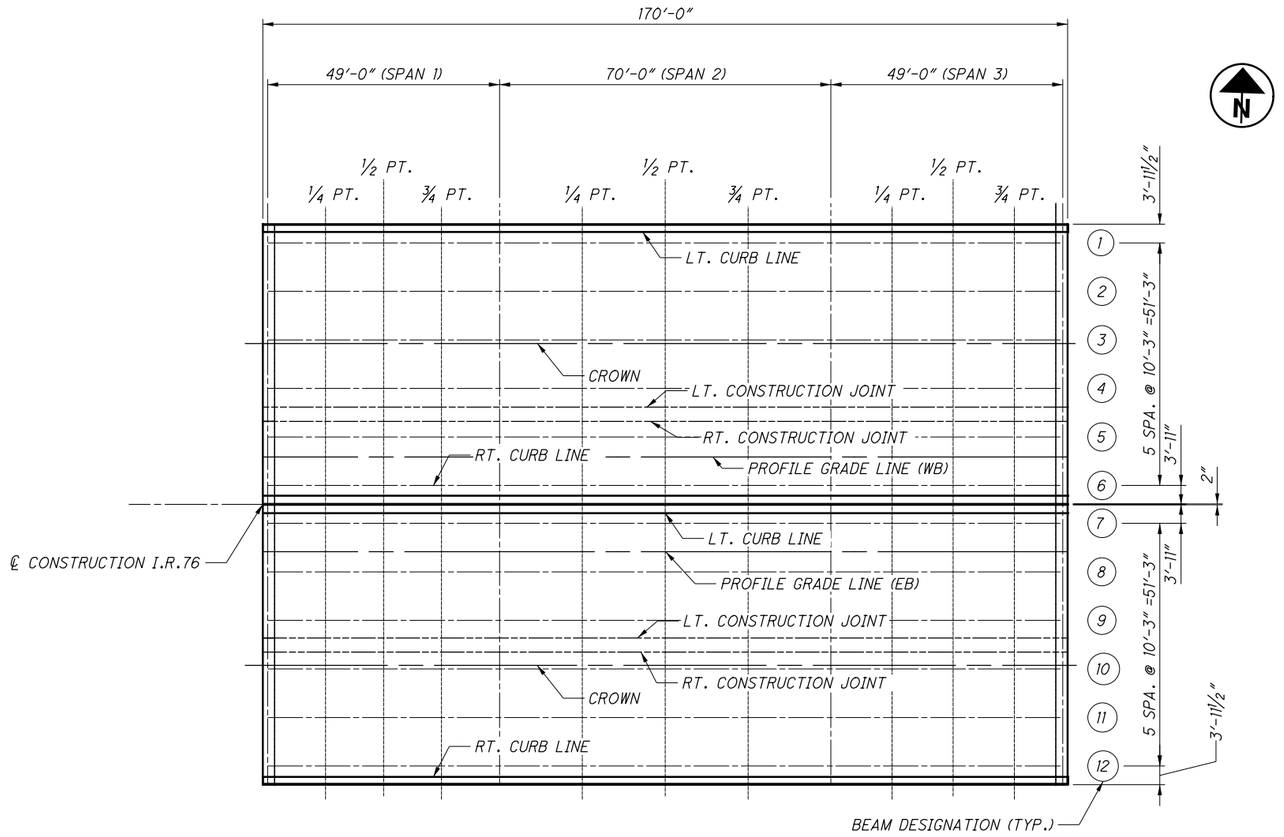
REAR ABUTMENTS DIAPHRAM DETAILS
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

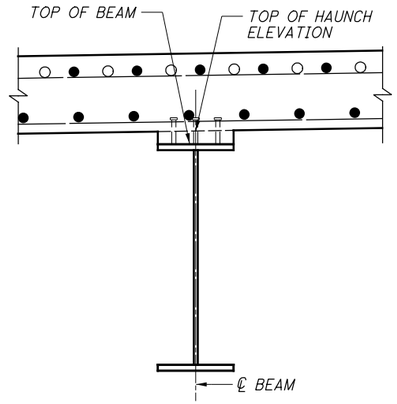
2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

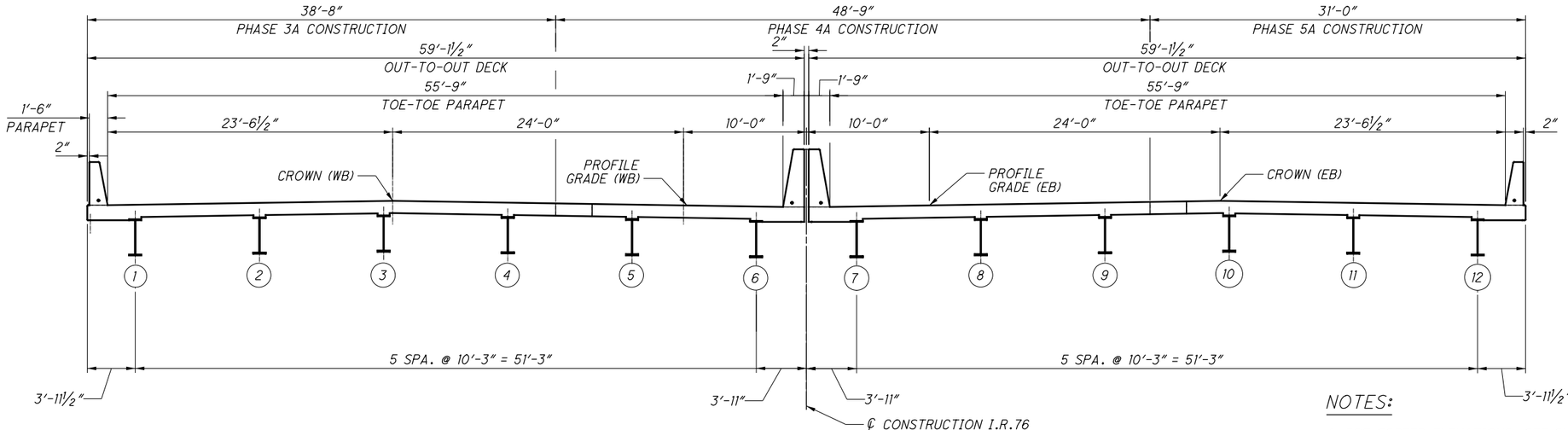
29 / 39

143
153





TOP OF HAUNCH DETAIL



TRANSVERSE SECTION

NOTES:

1. FOR SCREED ELEVATIONS, SEE SHEET 31/39 .
2. FOR TOP OF HAUNCH ELEVATIONS,SEE SHEET 32/39.
3. FOR FINAL DECK SURFACE ELEVATIONS, SEE SHEET 33/39 AND 34/39
4. FOR DECK PLAN, SEE SHEETS 25/39 AND 26/39 .
5. FOR TRANSVERSE SECTION, SEE SHEET 24/39.
6. FOR FRAMING PLAN, SEE SHEET 18/39.

ISSUE RECORD:

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ELEVATION LOCATION PLAN
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329

LEFT BRIDGE SCREED ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT		F.S.#1	1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	
LEFT CURB LINE	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	SCREED ELEVATION	993.45	993.59	993.71	993.82	993.94	994.10	994.15	994.35	994.50	994.64	994.77	994.90	995.02	995.13
CROWN	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	SCREED ELEVATION	993.83	993.96	994.09	994.20	994.32	994.48	994.53	994.73	994.88	995.02	995.15	995.28	995.40	995.51
LEFT CONSTRUCTION JOINT	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	SCREED ELEVATION	993.61	993.75	993.87	993.98	994.10	994.26	994.32	994.52	994.67	994.80	994.93	995.06	995.19	995.29
RIGHT CONSTRUCTION JOINT	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	SCREED ELEVATION	993.57	993.71	993.83	993.94	994.06	994.22	994.27	994.48	994.63	994.76	994.89	995.02	995.14	995.25
PROFILE GRADE LINE	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	SCREED ELEVATION	993.44	993.58	993.70	993.81	993.93	994.09	994.15	994.35	994.50	994.63	994.76	994.90	995.02	995.13
RIGHT CURB LINE	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	SCREED ELEVATION	993.31	993.45	993.57	993.68	993.80	993.96	994.02	994.22	994.37	994.50	994.63	994.76	994.89	994.99

RIGHT BRIDGE SCREED ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT		F.S. #1	1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	
LEFT CURB LINE	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	SCREED ELEVATION	993.31	993.45	993.57	993.68	993.80	993.96	994.01	994.22	994.37	994.50	994.63	994.76	994.89	994.99
PROFILE GRADE LINE	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	SCREED ELEVATION	993.44	993.58	993.70	993.81	993.93	994.09	994.15	994.35	994.50	994.63	994.76	994.90	995.02	995.13
LEFT CONSTRUCTION JOINT	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	SCREED ELEVATION	993.73	993.87	993.99	994.11	994.22	994.38	994.44	994.64	994.79	994.93	995.05	995.19	995.31	995.42
RIGHT CONSTRUCTION JOINT	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	SCREED ELEVATION	993.78	993.91	994.04	994.15	994.27	994.43	994.48	994.68	994.83	994.97	995.10	995.23	995.35	995.46
CROWN	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	SCREED ELEVATION	993.83	993.96	994.09	994.20	994.32	994.48	994.53	994.73	994.88	995.02	995.15	995.28	995.40	995.51
RIGHT CURB LINE	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	SCREED ELEVATION	993.45	993.59	993.71	993.82	993.94	994.10	994.16	994.36	994.51	994.64	994.77	994.90	995.02	995.13

NOTES:

1. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. FOR DECK PLAN, SEE SHEETS 25/39 AND 26/39.
3. FOR TOP OF HAUNCH ELEVATIONS, SEE SHEET 32/39.
4. FOR FINAL DECK SURFACE ELEVATIONS, SEE SHEET 33/39 AND 34/39
5. FOR ELEVATION LOCATIONS AND HAUNCH DETAIL, SEE SHEET 30/39.

2021-11-04_BU 13 - RFC PLANS

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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

DESIGNED JRE | DRAWN TYW | CHECKED RWB | REVIEWED TES | DATE 08/17/21 | REVISED | STRUCTURE FILE NUMBER 7703392

SCREED ELEVATION
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

Released for Construction
Thomas J Powell, PE
11/10/2021

LEFT BRIDGE TOP OF HAUNCH ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT		F.S.# 1	1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	
BEAM 1	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	TOP OF HAUNCH ELEVATION	992.74	992.87	993.00	993.11	993.23	993.38	993.44	993.64	993.79	993.93	994.05	994.19	994.31	994.42
BEAM 2	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	TOP OF HAUNCH ELEVATION	992.90	993.04	993.16	993.27	993.39	993.55	993.61	993.81	993.96	994.09	994.22	994.35	994.48	994.58
BEAM 3	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	TOP OF HAUNCH ELEVATION	993.06	993.20	993.32	993.44	993.56	993.71	993.77	993.97	994.12	994.26	994.38	994.52	994.64	994.75
BEAM 4	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	TOP OF HAUNCH ELEVATION	992.92	993.06	993.18	993.30	993.42	993.57	993.63	993.83	993.98	994.12	994.24	994.38	994.50	994.61
BEAM 5	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	TOP OF HAUNCH ELEVATION	992.76	992.90	993.02	993.13	993.25	993.41	993.47	993.67	993.82	993.95	994.08	994.21	994.34	994.44
BEAM 6	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	TOP OF HAUNCH ELEVATION	992.60	992.73	992.86	992.97	993.09	993.25	993.30	993.50	993.65	993.79	993.91	994.05	994.17	994.28

RIGHT BRIDGE TOP OF HAUNCH ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT		F.S.# 1	1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	
BEAM 7	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	TOP OF HAUNCH ELEVATION	992.60	992.73	992.86	992.97	993.09	993.24	993.30	993.50	993.65	993.79	993.91	994.05	994.17	994.28
BEAM 8	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	TOP OF HAUNCH ELEVATION	992.76	992.90	993.02	993.13	993.25	993.41	993.47	993.67	993.82	993.95	994.08	994.21	994.34	994.44
BEAM 9	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	TOP OF HAUNCH ELEVATION	992.92	993.06	993.18	993.30	993.42	993.57	993.63	993.83	993.98	994.12	994.24	994.38	994.50	994.61
BEAM 10	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	TOP OF HAUNCH ELEVATION	993.06	993.20	993.32	993.44	993.56	993.71	993.77	993.97	994.12	994.26	994.38	994.52	994.64	994.75
BEAM 11	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	TOP OF HAUNCH ELEVATION	992.90	993.04	993.16	993.27	993.39	993.55	993.61	993.81	993.96	994.09	994.22	994.35	994.48	994.58
BEAM 12	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	TOP OF HAUNCH ELEVATION	992.74	992.87	993.00	993.11	993.23	993.39	993.44	993.64	993.79	993.93	994.05	994.19	994.31	994.42

NOTES:

1. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. FOR DECK PLAN, SEE SHEETS 25/39 AND 26/39.
3. FOR SCREED ELEVATIONS,SEE SHEET 31/39.
4. FOR FINAL DECK SURFACE ELEVATIONS, SEE SHEET 33/39 THRU 34/39.
5. FOR ELEVATION LOCATIONS AND HAUNCH DETAIL, SEE SHEET 30/39.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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

DESIGNED JRE | DRAWN TYW | CHECKED RWB | REVIEWED TES | DATE 08/17/21 | REVISED | STRUCTURE FILE NUMBER 7703392

TOP OF HAUNCH ELEVATIONS
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

32/39

146/153

Released for Construction
Thomas J Powell, PE
11/10/2021

LEFT BRIDGE FINAL DECK ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT		F.S.# 1	1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	
LEFT CURB LINE	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.45	993.57	993.69	993.82	993.94	994.07	994.12	994.29	994.47	994.64	994.76	994.89	995.01	995.13
BEAM 1	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.49	993.61	993.73	993.85	993.98	994.11	994.15	994.33	994.50	994.68	994.80	994.92	995.05	995.17
BEAM 2	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.65	993.77	993.90	994.02	994.14	994.27	994.32	994.49	994.67	994.84	994.97	995.09	995.21	995.33
BEAM 3	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.81	993.94	994.06	994.18	994.31	994.44	994.48	994.66	994.83	995.01	995.13	995.25	995.37	995.50
CROWN	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.83	993.95	994.07	994.19	994.32	994.45	994.49	994.67	994.84	995.02	995.14	995.26	995.39	995.51
BEAM 4	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.67	993.80	993.92	994.04	994.17	994.30	994.34	994.52	994.69	994.87	994.99	995.11	995.23	995.36
LEFT CONSTRUCTION JOINT	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.61	993.73	993.86	993.98	994.10	994.23	994.28	994.45	994.63	994.80	994.93	995.05	995.17	995.29
RIGHT CONSTRUCTION JOINT	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.57	993.69	993.81	993.94	994.06	994.19	994.23	994.41	994.59	994.76	994.88	995.01	995.13	995.25
BEAM 5	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.51	993.63	993.76	993.88	994.00	994.13	994.18	994.35	994.53	994.70	994.83	994.95	995.07	995.19
PROFILE GRADE	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.44	993.56	993.69	993.81	993.93	994.06	994.11	994.28	994.46	994.63	994.76	994.88	995.00	995.13
BEAM 6	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.35	993.47	993.59	993.71	993.84	993.97	994.01	994.19	994.36	994.54	994.66	994.78	994.91	995.03
RIGHT CURB LINE	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.31	993.43	993.56	993.68	993.80	993.93	993.98	994.15	994.33	994.50	994.63	994.75	994.87	994.99

NOTES:

1. FINAL DECK ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.
2. FOR DECK PLAN, SEE SHEETS 25/39 AND 26/39 .
3. FOR SCREED ELEVATIONS, SEE SHEET 31/39.
4. FOR TOP OF HAUNCH ELEVATIONS,SEE SHEET 32/39.
5. FOR ELEVATION LOCATIONS AND HAUNCH DETAIL, SEE SHEET 30/39.

2021-11-04_BU 13 - RFC PLANS

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	TYW	TES	08/17/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703392	

FINAL DECK ELEVATIONS - 1 OF 2
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329

33 / 39

147
153

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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pw:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0964\Sheets\076_0964_SD007.dgn Sheet 11/2/2021 11:41:08 AM p002694C

RIGHT BRIDGE FINAL DECK ELEVATIONS

LOCATION	COMPONENT	℄ BEARING REAR ABUTMENT	SPAN 1			℄ BEARING PIER 1	SPAN 2				℄ BEARING PIER 2	SPAN 3			℄ BEARING FORWARD ABUTMENT
			1/4 PT.	1/2 PT	3/4 PT		F.S.# 1	1/4 PT.	1/2 PT	3/4 PT		1/4 PT.	1/2 PT	3/4 PT	
LEFT CURB LINE	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.31	993.43	993.56	993.68	993.80	993.93	993.98	994.15	994.33	994.50	994.63	994.75	994.87	994.99
BEAM 7	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.35	993.47	993.59	993.71	993.84	993.97	994.01	994.19	994.36	994.54	994.66	994.78	994.91	995.03
PROFILE GRADE	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.44	993.56	993.69	993.81	993.93	994.06	994.11	994.28	994.46	994.63	994.76	994.88	995.00	995.12
BEAM 8	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.51	993.63	993.75	993.88	994.00	994.13	994.18	994.35	994.53	994.70	994.82	994.95	995.07	995.19
BEAM 9	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.67	993.80	993.92	994.04	994.16	994.29	994.34	994.51	994.69	994.87	994.99	995.11	995.23	995.36
LEFT CONSTRUCTION JOINT	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.73	993.86	993.98	994.10	994.22	994.35	994.40	994.57	994.75	994.93	995.05	995.17	995.29	995.42
RIGHT CONSTRUCTION JOINT	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.78	993.90	994.02	994.14	994.27	994.40	994.44	994.62	994.79	994.97	995.09	995.21	995.34	995.46
CROWN	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.83	993.95	994.07	994.19	994.32	994.45	994.49	994.67	994.84	995.02	995.14	995.26	995.39	995.51
BEAM 10	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.81	993.94	994.06	994.18	994.30	994.43	994.48	994.65	994.83	995.01	995.13	995.25	995.37	995.50
BEAM 11	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.65	993.77	993.89	994.02	994.14	994.27	994.32	994.49	994.67	994.84	994.96	995.09	995.21	995.33
BEAM 12	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.49	993.61	993.73	993.85	993.98	994.11	994.15	994.33	994.50	994.68	994.80	994.92	995.05	995.17
RIGHT CURB LINE	STATION	294+32.05	294+44.30	294+56.55	294+68.80	294+81.05	294+94.05	294+98.55	295+16.05	295+33.55	295+51.05	295+63.30	295+75.55	295+87.80	296+00.05
	FINAL DECK ELEVATION	993.45	993.57	993.69	993.82	993.94	994.07	994.11	994.29	994.47	994.64	994.76	994.89	995.01	995.13

NOTES:

1. FOR NOTES, SEE SHEET 33/39.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

PARSONS
pw:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0964\Sheets\076_0964_SD008.dgn Sheet 11/2/2021 11:41:15 AM p002694C

2021-11-04_BU 13 - RFC PLANS

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

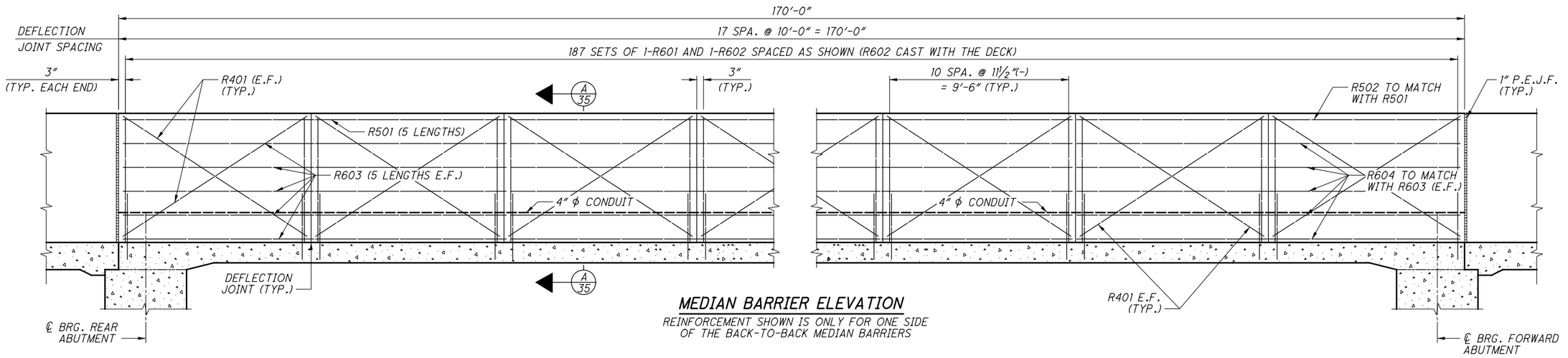
DESIGNED	DRAWN	REVIEWED	DATE
TYW	TYW	TES	08/17/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JER		7703392	

FINAL DECK ELEVATIONS - 2 OF 2
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-
0.63/9.74/8.42
PID No. 102329

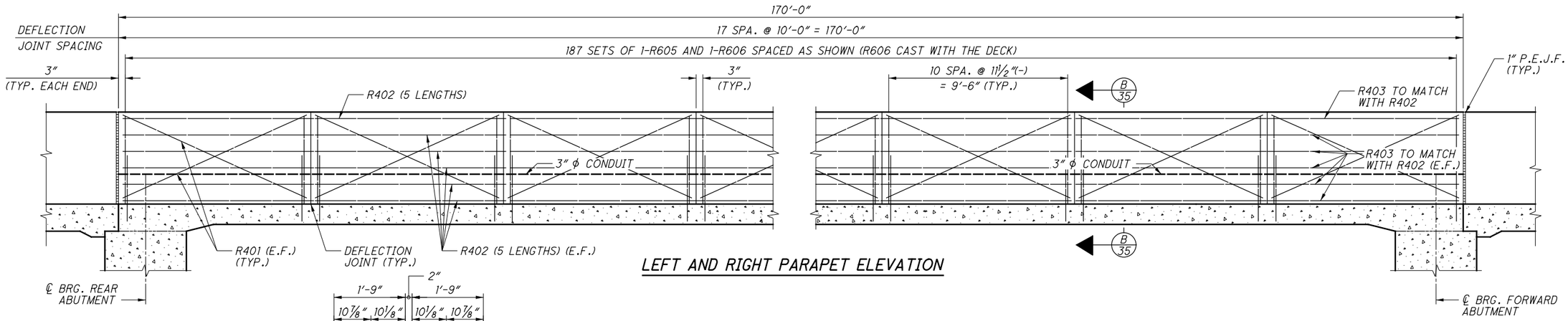
34/39

148
153

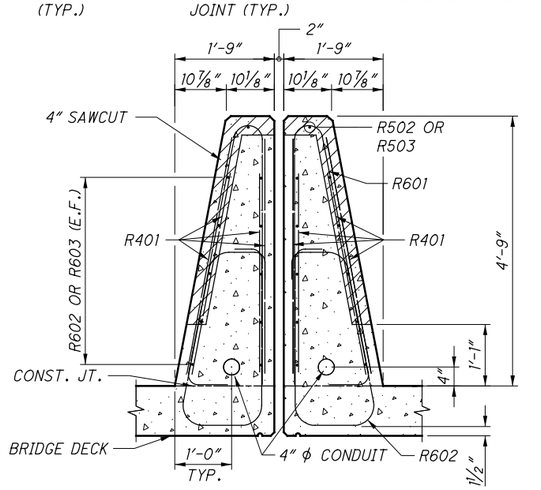


MEDIAN BARRIER ELEVATION

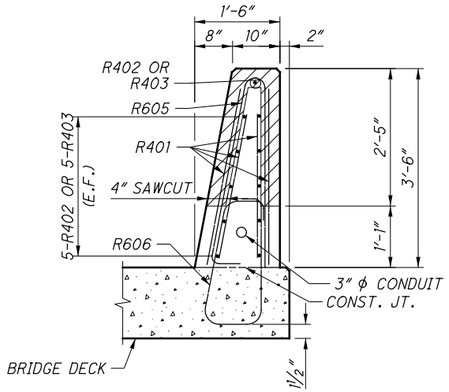
REINFORCEMENT SHOWN IS ONLY FOR ONE SIDE OF THE BACK-TO-BACK MEDIAN BARRIERS



LEFT AND RIGHT PARAPET ELEVATION



A 35 SECTION THRU MEDIAN BARRRIER



B 35 SECTION THRU PARAPET

MIN. LAP LENGTHS	
NO. 4 BARS	1'-11"
NO. 5 BARS	2'-5"
NO. 6 BARS	3'-6"

NOTES:

1. FOR APPROACH SLAB PARAPETS, SEE SHEET 38/39.
2. FOR TRANSVERSE SECTION AND SEALING LIMITS, SEE SHEET 24/39.
3. FOR LIGHTING AND ITS DETAILS, SEE BU-36.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	JRE/TYW	TES	08/17/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703392	

PARAPET DETAILS
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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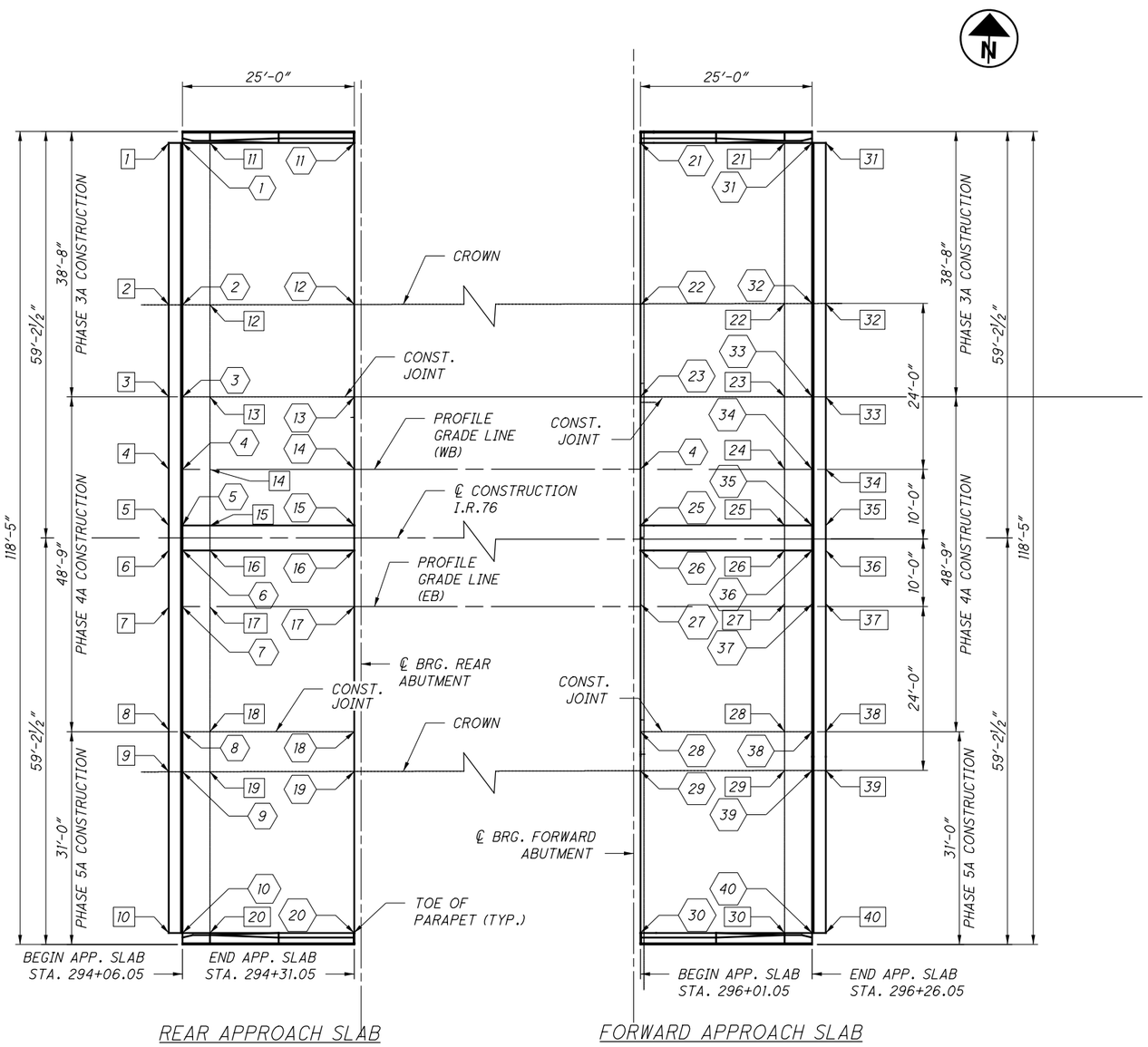

TOP OF APPROACH SLAB ELEVATIONS

LOC.	ELEV	LOC.	ELEV	LOC.	ELEV	LOC.	ELEV
⟨1⟩	993.19	⟨11⟩	993.44	⟨21⟩	995.14	⟨31⟩	995.39
⟨2⟩	993.57	⟨12⟩	993.82	⟨22⟩	995.52	⟨32⟩	995.77
⟨3⟩	993.35	⟨13⟩	993.60	⟨23⟩	995.30	⟨33⟩	995.56
⟨4⟩	993.18	⟨14⟩	993.43	⟨24⟩	995.14	⟨34⟩	995.39
⟨5⟩	993.05	⟨15⟩	993.30	⟨25⟩	995.00	⟨35⟩	995.26
⟨6⟩	993.05	⟨16⟩	993.30	⟨26⟩	995.00	⟨36⟩	995.26
⟨7⟩	993.18	⟨17⟩	993.43	⟨27⟩	995.14	⟨37⟩	995.39
⟨8⟩	993.47	⟨18⟩	993.72	⟨28⟩	995.43	⟨38⟩	995.68
⟨9⟩	993.57	⟨19⟩	993.82	⟨29⟩	995.52	⟨39⟩	995.77
⟨10⟩	993.19	⟨20⟩	993.44	⟨30⟩	995.14	⟨40⟩	995.39

TOP OF SLEEPER SLAB ELEVATIONS

LOC.	ELEV	LOC.	ELEV	LOC.	ELEV	LOC.	ELEV
[1]	993.17	[11]	991.98	[21]	994.10	[31]	995.42
[2]	993.55	[12]	992.36	[22]	994.48	[32]	995.79
[3]	993.33	[13]	992.14	[23]	994.27	[33]	995.58
[4]	993.16	[14]	991.97	[24]	994.10	[34]	995.41
[5]	993.03	[15]	991.84	[25]	993.97	[35]	995.28
[6]	993.03	[16]	991.84	[26]	993.97	[36]	995.28
[7]	993.16	[17]	991.97	[27]	994.10	[37]	995.41
[8]	993.45	[18]	992.26	[28]	994.39	[38]	995.70
[9]	993.55	[19]	992.36	[29]	994.48	[39]	995.79
[10]	993.17	[20]	991.98	[30]	994.10	[40]	995.42

LEGEND:

⟨x⟩ - APPROACH SLAB ELEVATION

[x] - SLEEPER SLAB ELEVATION

NOTES:

1. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE STANDARD DRAWINGS AS-1-15 AND AS-2-15.
2. FOR APPROACH SLAB PARAPET AND MEDIAN DETAILS, SEE SHEET [38/39].

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	JRE	TES	08/17/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703392	

APPROACH SLAB PLAN
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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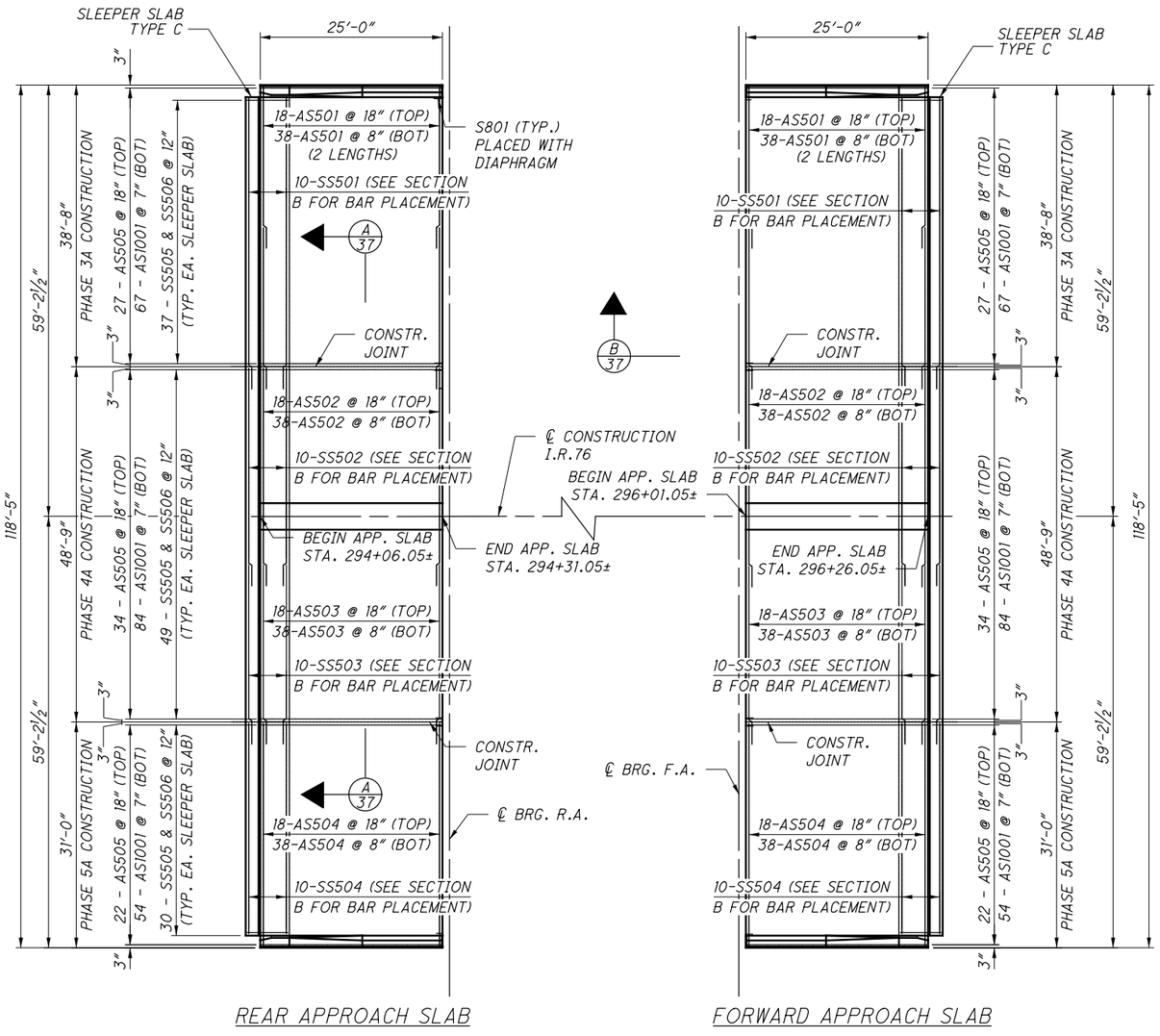
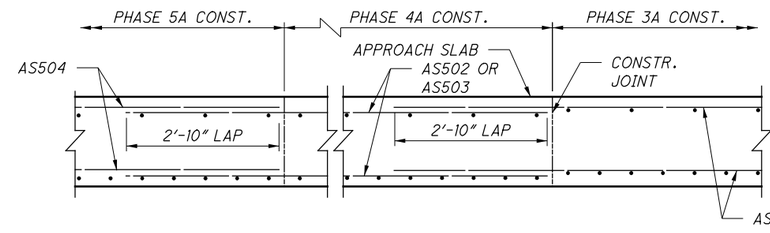
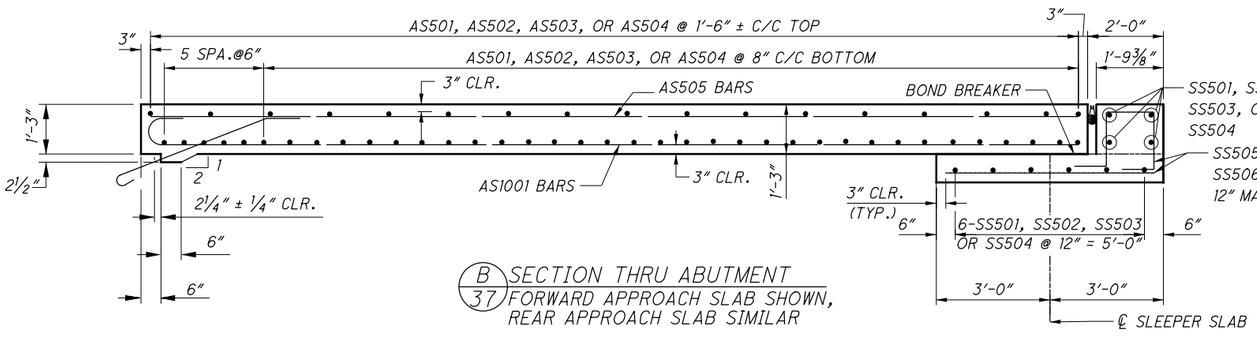




A 37 SECTION THRU APPROACH
SEE STD. DWG. AS-1-15 FOR DETAILS



B 37 SECTION THRU ABUTMENT
FORWARD APPROACH SLAB SHOWN, REAR APPROACH SLAB SIMILAR

2021-11-04_BU 13 - RFC PLANS

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	JRE/TYW	TES	08/17/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703392	

APPROACH SLAB DETAILS 1 OF 2
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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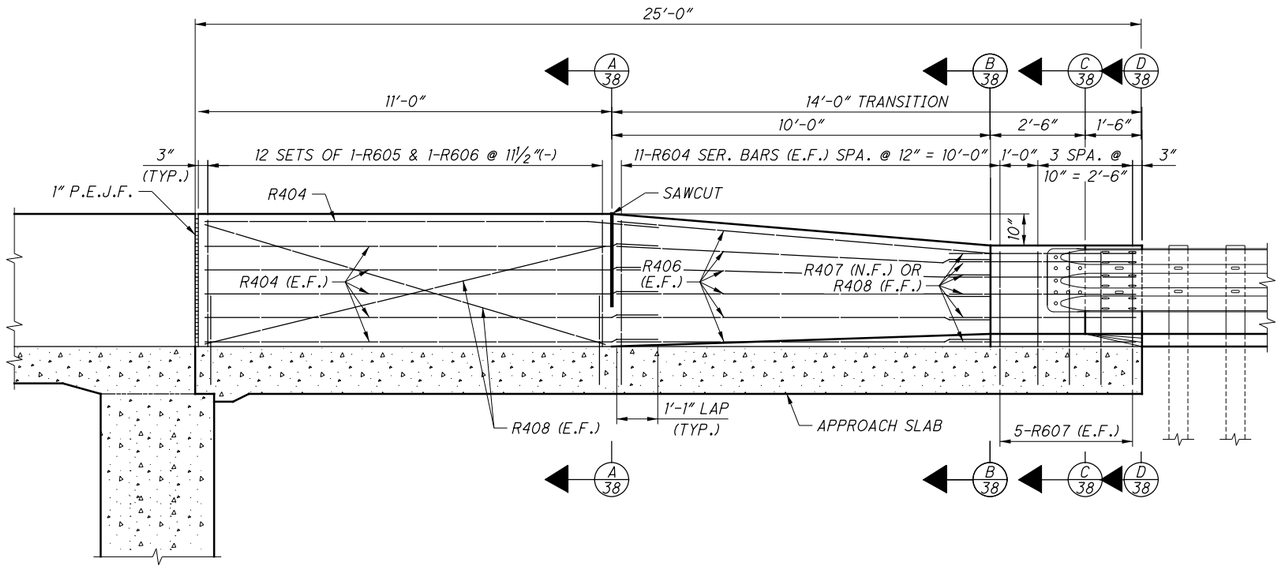
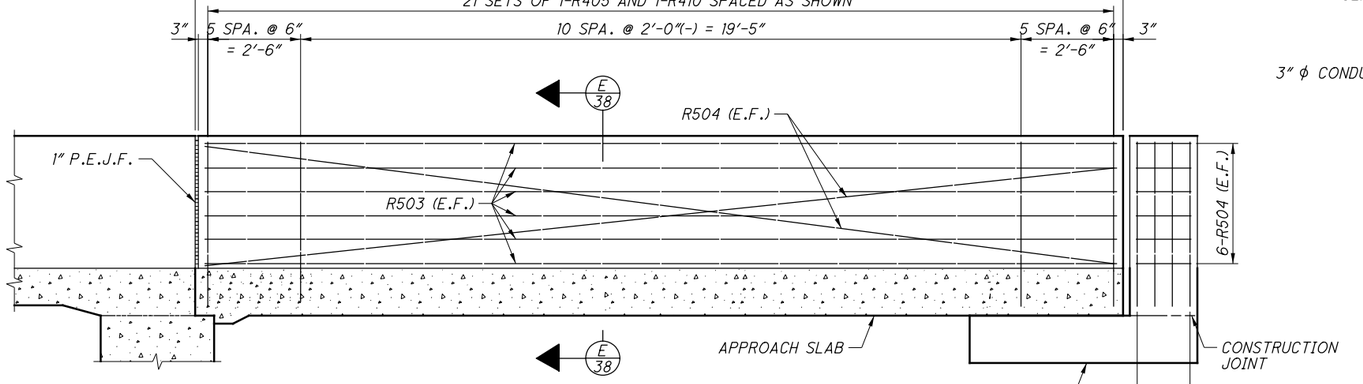


PARAPET ELEVATION

RIGHT FORWARD APPROACH AND LEFT REAR APPROACH
(LEFT FORWARD AND RIGHT REAR SAME BY OPPOSITE HAND)

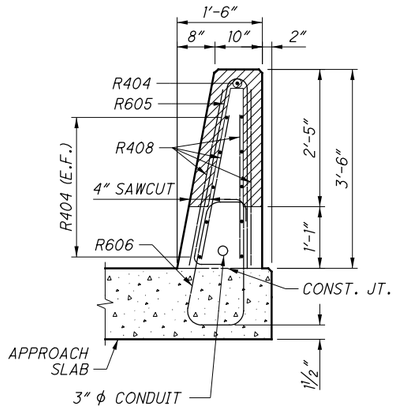


MEDIAN BARRIER ELEVATION

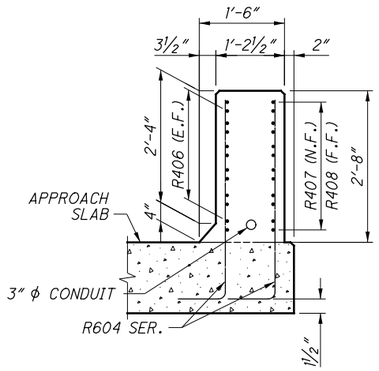
FORWARD APPROACH SHOWN
(REAR SAME BY OPPOSITE HAND)

NOTES:

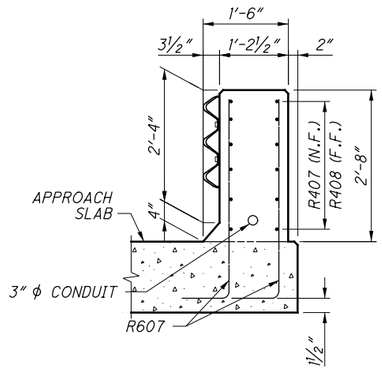
1. FOR ADDITIONAL DETAILS, SEE ODOT STANDARD DRAWINGS SBR-1-20 AND SBR-2-20.



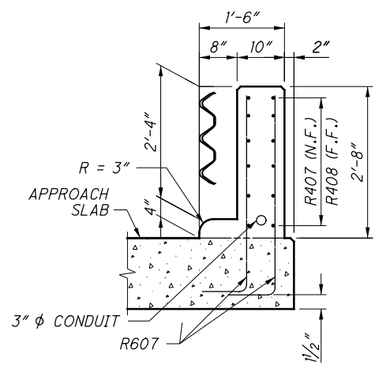
A 38 SECTION THRU PARAPET



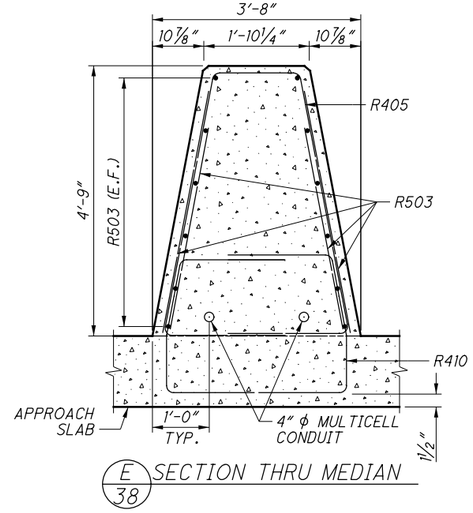
B 38 SECTION THRU PARAPET



C 38 SECTION THRU PARAPET



D 38 SECTION THRU PARAPET



E 38 SECTION THRU MEDIAN

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NO.	DATE	DESCRIPTION

PARSONS
pw:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\SUM076_0964\Sheets\076_0964_SA001.dgn Sheet 11/2/2021 11:41:44 AM p0026694C

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	JRE/TYW	TES	08/17/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
RWB		7703392	

PARAPET DETAILS
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

2021-11-04_BU 13 - RFC PLANS

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

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Released for Construction
Thomas J Powell, PE
11/10/2021

MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
ABUTMENTS											
RA401	57	9′-6″	362	3	2′-6″	2′-0″					
RA501	274	13′-1″	3739	2	5′-4″	2′-8″	5′-4″				
RA502	13	9′-5″	128	2	3′-9″	2′-2″	3′-9″				
	1	6′-11″			2′-6″		2′-6″				
RA503	SER	TO	103	2	TO	2′-2″	TO				0′-2 ½″
	OF 11	11′-1″			4′-7″		4′-7″				
RA504	2	11′-5″	24	2	4′-9″	2′-2″	4′-9″				
	2	3′-3″									
RA505	SER	TO	68	STR							3′-3″
	OF 4	13′-0″									
RA506	2	13′-2″	27	STR							
RA507	1	6′-9″	7	2	2′-5″	2′-2″	2′-5″				
RA508	3	13′-7″	43	19	12′-5″	1′-3″	0′-5″				
RA601	108	13′-7″	2203	26	2′-8″	0′-10″	2′-8″	0′-10″	2′-8″		
*RA602	14	38′-5″	808	STR							
**RA603	14	20′-4″	428	STR							
*RA604	14	28′-0″	589	STR							
**RA605	14	24′-2″	508	STR							
RA606	14	24′-2″	508	STR							
*RA801	8	38′-5″	821	STR							
**RA802	8	20′-4″	434	STR							
*RA803	8	28′-0″	598	STR							
**RA804	8	24′-7″	525	STR							
RA805	8	24′-7″	525	STR							
FA401	60	9′-6″	381	3	2′-6″	2′-0″					
FA501	304	13′-1″	4148	2	5′-4″	2′-8″	5′-4″				
FA502	24	9′-5″	236	2	3′-9″	2′-2″	3′-9″				
	2	6′-11″			2′-6″		2′-6″				
FA503	SER	TO	94	2	TO	2′-2″	TO				0′-2 ¾″
	OF 10	11′-1″			4′-7″		4′-7″				
FA504	4	11′-5″	48	2	4′-9″	2′-2″	4′-9″				
	4	3′-0″									
FA505	SER	TO	122	STR							2′-10″
	OF 4	11′-7″									
FA506	4	11′-8″	49	STR							
FA507	2	6′-9″	14	2	2′-5″	2′-2″	2′-5″				
FA508	6	12′-1″	76	19	11′-0″	1′-3″	0′-5″				
FA601	108	13′-7″	2203	26	2′-8″	0′-10″	2′-8″	0′-10″	2′-8″		
*FA602	14	27′-3″	573	STR							
**FA603	14	20′-4″	428	STR							
*FA604	14	28′-0″	589	STR							
**FA605	14	23′-5″	492	STR							
FA606	14	27′-3″	573	STR							
FA607	14	23′-5″	492	STR							
*FA801	8	27′-8″	591	STR							
**FA802	8	20′-4″	434	STR							
*FA803	8	28′-0″	598	STR							
**FA804	8	23′-10″	509	STR							
FA805	8	27′-8″	591	STR							
FA806	8	23′-10″	509	STR							
	SUBTOTAL		26198								

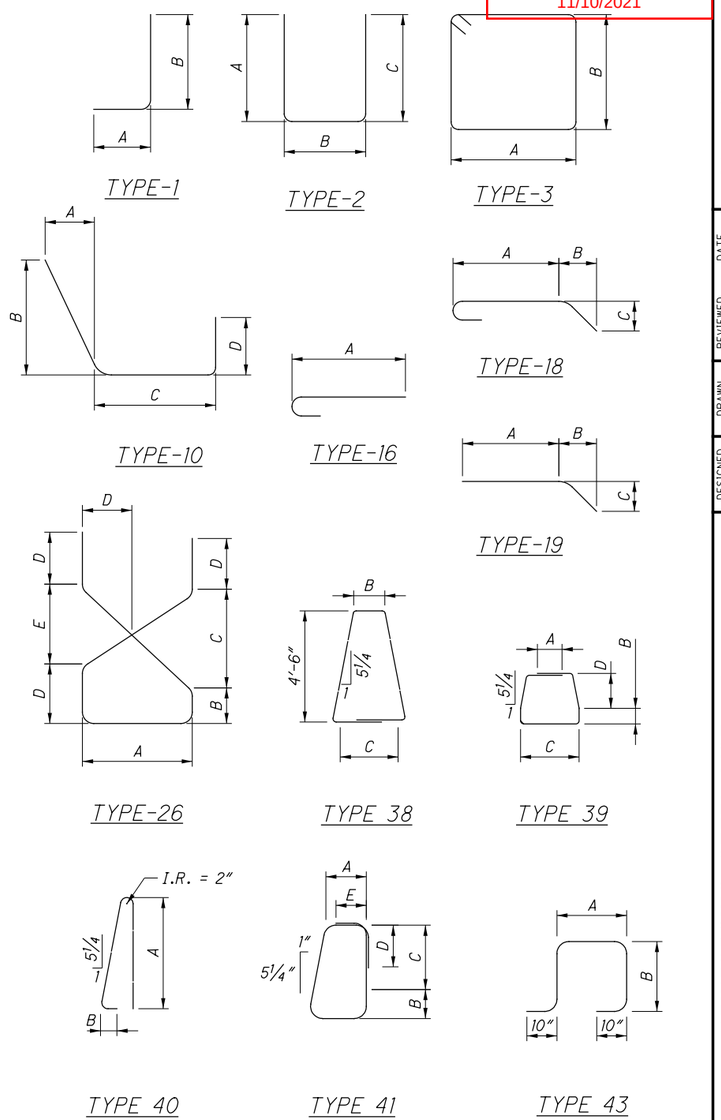
MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
PIERS											
P501	16	21′-6″	359	STR							
P502	16	16′-6″	275	STR	2′-2″	1′-0″					
P503	464	3′-6″	1694	1	2′-2″	1′-5″					
P801	12	20′-3″	649	STR							
P802	12	30′-0″	961	STR							
	SUBTOTAL		3938								

* INDICATES BARS WITH A MECHANICAL CONNECTOR. DIMENSION PROVIDED IS TO THE END OF THE CONNECTOR.

** INDICATES BARS TO BE THREADED INTO A MECHANICAL CONNECTOR. DIMENSION PROVIDED DOES NOT INCLUDE PORTION THREADED INTO CONNECTOR.

***INDICATES GLASS FIBER REINFORCED POLYMER (GFRP) BARS ACCORDING TO STANDARD DRAWINGS SBR-1-20 & SBR-2-20.

MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
SUPERSTRUCTURE											
S401	864	30′-0″	17315	STR							
S501	1552	22′-2″	35883	STR							
S502	776	20′-1″	16255	STR							
S503	776	30′-9″	24888	STR							
S504	776	30′-7″	24753	STR							
S505	815	30′-0″	25501	STR							
S506	163	33′-10″	5752	STR							
S507	1552	12′-3″	19830	10	0′-2″	8′-9″	0′-7″	3′-2″			
S508	432	6′-11″	3117	2	2′-3″	2′-8″	2′-3″				
S509	216	7′-5″	1671	2	2′-9″	2′-2″	2′-9″				
S601	284	22′-0″	9384	STR							
S602	16	38′-6″	925	STR							
S603	16	20′-3″	487	STR							
S604	16	27′-11″	671	STR							
S605	16	30′-10″	741	STR							
S801	166	5′-5″	2314	18	3′-1″	1′-0″	1′-0″				
S802	12	38′-6″	1234	STR							
S803	12	20′-3″	649	STR							
S804	12	27′-11″	894	STR							
S805	12	30′-10″	988	STR							
		SUBTOTAL	193252								
APPROACH AND SLEEPER SLABS											
SS501	20	39′-11″	833	STR							
SS502	20	30′-0″	626	STR							
SS503	20	24′-8″	515	STR							
SS504	20	28′-10″	601	STR							
SS505	232	5′-9″	1391	43	1′-5″	1′-7″					
SS506	232	5′-6″	1331	STR							
AS501	224	22′-3″	5198	STR							
AS502	112	30′-0″	3504	STR							
AS503	112	24′-8″	2881	STR							
AS504	112	30′-8″	3582	STR							
AS505	166	24′-6″	4242	STR							
AS1001	410	25′-11″	45723	16	24′-6″						
		SUBTOTAL	70427								
PARAPETS											
***R401	16	11′-0″	118	STR							
***R402	110	30′-0″	2204	STR							
***R403	22	31′-9″	467	STR							
***R404	44	13′-0″	382	STR							
R405	50	14′-10″	495	38		1′-6″	3′-2″				
***R406	48	10′-0″	321	STR							
***R407	24	6′-4″	102	25	2′-6″	2′-5″	1′-4 ¼″	0′-1 ½″	0′-5″		
***R408	24	5′-1″	81	STR							
***R409	136	10′-0″	908	STR							
R410	50	11′-6″	384	39	1′-0″	1′-0″	3′-2″				
R501	24	24′-8″	617	STR							
R502	8	25′-1″	209	STR							
R503	24	24′-8″	617	STR							
R504	8	25′-2″	210	STR							
R505	24	3′-3″	81	2	1′-0″	1′-6″	1′-0″				
R601	374	9′-6″	5337	40	4′-6″	0′-10″					
R602	374	8′-5″	4728	41	1′-0 ¼″	1′-0″	2′-4″	1′-0″	0′-7″		
***R603	110	30′-0″	4957	STR							
***R604	22	37′-2″	1228	STR							
R605	422	7′-8″	4859	40	3′-4″	0′-10″					
R606	422	7′-2″	4543	41	1′-0 ¼″	1′-0″	1′-5″	1′-0″	0′-7″		
R607	40	4′-5″	265	1	1′-0″	3′-7″					
	4	4′-2″				3′-4″					
R608	SER OF	TO	303	1	1′-0″	TO					
	11	5′-0″				4′-2″					
***R609	136	10′-6″	2145	STR							
		SUBTOTAL	35561								
		TOTAL WEIGHT	329376								



NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, M601:

   M: LOCATION OF THE BAR IN THE STRUCTURE (MOMENT SLAB)
   6: BAR SIZE DIMENSION NO. 6
   01: SEQUENCE NUMBER

2. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. STRAIGHT BARS ARE INDICATED BY "STR".

3. ALL REINFORCING IS TO BE EPOXY COATED.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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2021-11-04_BU 13 - RFC PLANS

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

DESIGNED	DRAWN	REVIEWED	DATE
JRE	TYW		08/17/21
CHECKED	REVISED		STRUCTURE FILE NUMBER
RWB			7703392

REINFORCING STEEL LIST - 1
BRIDGE NO. SUM-76-0964
I.R. 76 OVER LAKESHORE BOULEVARD

SUM-8/76/77-0.63/9.74/8.42
PID No. 102329

39/39

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