

PENNDOT PROJECT MANAGER - MICHAEL J. KRAJCOVIC, PE
 CONSULTANT PROJECT MANAGER - CHRIS VOLLMER, PE
 GANNETT FLEMING, INC

DISTRICT	COUNTY	TOWNSHIP	BOROUGH	ROUTE	SECTION	TOTAL SHEETS
11	ALLEGHENY	STOWE	McKEES ROCKS	3104	A03	23
		CITY OF PITTSBURGH				

S. R. 3104 PREVIOUSLY KNOWN AS LR 76 SPUR 2

MPMS NO. 28344

COMMONWEALTH OF PENNSYLVANIA



DEPARTMENT OF TRANSPORTATION

DRAWINGS

FOR CONSTRUCTION

OF

STATE ROUTE 3104 SECTION A03

IN ALLEGHENY COUNTY

FROM STA. 0+00.00 TO STA. 59+00.00 LENGTH 5820.54 FT. 1.102 MI.

FROM SEG. 0010 OFFSET 0000 TO SEG. 0300 OFFSET 3844

FROM SEG. 0011 OFFSET 0000

ALSO INCLUDED:

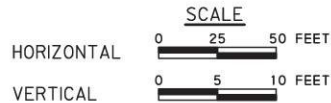
TRAFFIC CONTROL PLAN	33 SHEETS
STRUCTURE PLANS	13 SHEETS
S-39125	47 SHEETS
S-39126	10 SHEETS
CROSS SECTIONS	10 SHEETS
EXISTING STRUCTURE PLANS	100 SHEETS
ORIGINAL MCKEES ROCKS BRIDGE, DATED 1929	
S-7536 MCKEES ROCKS BRIDGE REHABILITATION, DATED 1965	3 SHEETS
S-13747 MCKEES ROCKS BRIDGE REHABILITATION, DATED 1980	8 SHEETS
S-16190 MCKEES ROCKS BRIDGE REHABILITATION, DATED 1985	151 SHEETS
S-28040 MCKEES ROCKS BRIDGE REHABILITATION, DATED 2008	27 SHEETS
S-28041 MCKEES ROCKS BRIDGE REHABILITATION, DATED 2008	38 SHEETS
FABRICATION DRAWINGS, DATED 1986, 2008, 2009, 2010	223 SHEETS

ALSO

STATE ROUTE 8130

Docket A-2020-3020667

CERTIFIED CORRECT PLANS	
<i>David R. Hollenbach</i>	Professional Engineer
Approved by Bureau of Technical Utility Services	
PA PUBLIC UTILITY COMMISSION	
ATTEST <i>Christina J. Smith</i>	Secretary



DESIGN DESIGNATION

SR 3104

HIGHWAY CLASSIFICATION - URBAN PRINCIPAL ARTERIAL
 ROADWAY TYPOLOGY - REGIONAL ARTERIAL
 DESIGN SPEED - 35 MPH (POSTED)
 PAVEMENT WIDTH - VARIES 40'-0"-50'-0" (CURB TO CURB)
 SHOULDER WIDTH - N/A

TRAFFIC DATA

CURRENT A. D. T. - 22,598 (2022)
 DESIGN YEAR A. D. T. - 22,598 (2042)
 D. H. V. - 1,808
 D - 54%
 T - 3%

PREPARED BY Gannett Fleming PITTSBURGH, PA	RECOMMENDED _____ 20____ Cheryl Moon-Sirianni, P.E. Digitally signed by Cheryl Moon-Sirianni, P.E. Date: 2022.09.03 11:30:19 -0400 DISTRICT EXECUTIVE
 Tyson Alan Boarts REG. PROF. ENGINEER 4-29-2022 DATE	RECOMMENDED _____ 20____ DEPUTY SECRETARY
	SECRETARY OF TRANSPORTATION IN BEHALF OF THE GOVERNOR AS WELL AS THE SECRETARY

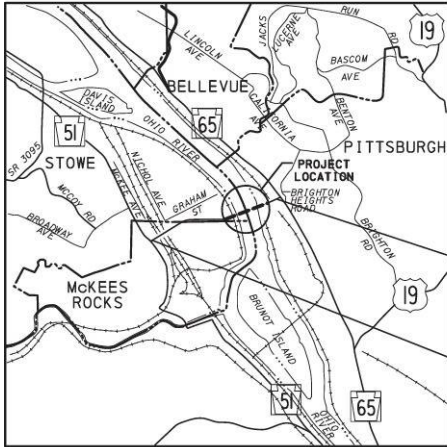
LIST OF PUBLIC UTILITIES

- T** VERIZON
2713 WEST STATE STREET
NEW CASTLE, PA 16101
ATTN: ARIN BIONDI
PHONE: 724-652-4175
ar.in.p.blond@verizon.com
- CTV** COMCAST
1530 CHARTIERS AVE.
PITTSBURGH, PA 15204
ATTN: TIM GAZDA
PHONE: 412-875-1388
tim.gazda@comcast.com
- G1** PEOPLES NATURAL GAS
4536 ROUTE 136, SUITE 1
GREENSBURG, PA 15601
ATTN: GARY BAIRD
PHONE: 724-837-1057
gbaird@psse.com
- G** COLUMBIA GAS OF PA
400 ENERGY DRIVE
BRIDGEVILLE, PA 15017
ATTN: STEPHANIE LEWIS
PHONE: 412-584-5015
sklewis@source.com

PENNSYLVANIA ONE CALL SYSTEM INC.
TOLL FREE TELEPHONE NO. 1-800-242-1776 SERIAL NO.

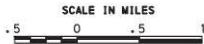
PRELIMINARY DESIGN
20172281379 CITY OF PITTSBURGH, WARD 27
20172281380, 20180523062 McKEES ROCKS BOROUGH
20172281381 STOWE TOWNSHIP

FINAL DESIGN
20211280317 McKEES ROCKS BOROUGH
20211280318 STOWE TOWNSHIP
20211280319 CITY OF PITTSBURGH, WARD 27



LIMIT OF WORK
STA 59+00.00
SEC 0030 OFFSET 3844
SR 3104 SEC A03
CITY OF PITTSBURGH
ALLEGHENY COUNTY

LIMIT OF WORK
STA 0+00.00
SEC 0010 OFFSET 0000
SEC 0011 OFFSET 0000
SR 3104 SEC A03
McKEES ROCKS BOROUGH
ALLEGHENY COUNTY



LEGEND

- PROJECT LOCATION
- ==== INTERSTATE HIGHWAYS
- ==== STATE HIGHWAYS
- ==== LOCAL ROADS

LIST OF EQUALITIES

POT STA 8+90.13 SR 3104 SURV & CONSTR C =
PC STA 8+85.04 SR 8130 (NORTH RAMP) CONSTR B, 20' LT

POT STA 8+90.13 SR 3104 SURV & CONSTR C =
PC STA 8+86.46 SR 8130 (SOUTH RAMP) CONSTR B, 20' RT

POT STA 20+34.10 SR 3104 SURV & CONSTR C =
POE STA 20+56.26 SR 8130 (NORTH RAMP) CONSTR B, 20' LT

POT STA 20+34.10 SR 3104 SURV & CONSTR C =
POE STA 20+13.60 SR 8130 (SOUTH RAMP) CONSTR B, 20' RT

TABULATION OF OVERALL LENGTH

0+00.00 TO 59+00.00 = 5900.00 FT. 1.117 MI.

TABULATION OF CONSTRUCTION LENGTH

0+61.69 TO 58+82.23 = 5820.54 FT. 1.102 MI.

SUMMARY OF PROJECT COORDINATES

BASED ON PA STATE PLANE COORDINATE SYSTEM (SOUTH ZONE)
COMBINED SCALE FACTOR 0.99992329

ROUTE	STATION	POINT	COORDINATES		BEARING	
			NORTH	EAST		
SR 3104 SURV & CONSTR C	0+00.00	POB	423747.1842	1325195.8927		
	14+61.68	PC	424489.3249	1326455.1527	N59°29'14"E	
	17+39.27	PI	424630.2638	1326694.2970		
	20+03.22	PT	424627.7691	1326971.8714		
	30+97.84	PC	424617.9313	1328066.4477	S89°29'06"E	
	32+62.79	PI	424616.4488	1328231.3981		
	34+23.79	PT	424676.1360	1328385.1787		
	59+00.00	POE	425572.2887	1330694.0644	N68°47'14"E	
	SR 0051 SURV & CONSTR C	7+00.00	POB	423521.4337	1325378.0032	
		9+03.28	PI	423699.5759	1325280.0842	N28°47'46"W
12+00.00		POE	423845.6299	1325021.7995	N60°30'46"W	
SR 0065 SURV & CONSTR C		70+00.00	POB	425353.6768	1330809.2051	
	72+47.08	PI	425572.2887	1330694.0644	N27°46'31"W	
	76+00.00	POE	425848.4855	1330474.3649	N38°30'01"W	
	SR 8130 (NORTH RAMP) CONSTR B	8+85.04	PC	424216.2581	1325952.6611	
9+01.79		PI	424224.7633	1325967.0941	N59°29'24"E	
9+17.60		PRC	424239.7972	1325974.4853	N26°10'50"E	
9+47.75		PI	424266.9192	1325987.6692		
9+76.17		PT	424282.2306	1326013.6496		
14+61.68		PC	424528.7393	1326431.9240	N59°29'14"E	
15+97.82		PI	424597.8599	1326549.2075		
17+32.43		PCC	424634.6497	1326680.2785	N74°19'17"E	
17+78.67		PI	424647.1455	1326724.7974		
18+24.35		PT	424647.2620	1326771.0366	N89°51'21"E	
SR 8130 (SOUTH RAMP) CONSTR B	20+56.26	POE	424647.8461	1327002.9496	N89°51'21"E	
	8+86.46	PC	424182.1252	1325972.7751	N64°05'43"E	
	9+04.92	PI	424190.1912	1325989.3826		
	9+22.67	PRC	424188.6260	1326007.8370	S88°14'45"E	
	9+50.15	PI	424188.7848	1326035.3047		
	9+76.17	PT	424203.4020	1326060.1070	N59°29'14"E	
	14+61.68	PC	424449.9106	1326478.3814		
	15+97.97	PI	424519.1096	1326595.7978		
	17+32.43	PT	424552.6724	1326727.8911		
	18+77.95	PC	424590.4086	1326868.4356	N75°44'38"E	
19+46.19	PI	424608.1055	1326934.3451			
20+13.60	POE/PT	424607.4922	1327002.5869	S89°29'06"E		

NOTE: FOUR (4) PLACE COORDINATES ARE USED FOR COMPUTATIONAL PURPOSES ONLY AND DO NOT IMPLY A PRECISION BEYOND TWO (2) PLACES.

EARTHWORK SUMMARY ENTIRE PROJECT

THE INFORMATION ON ESTIMATED AMOUNTS OF EARTHWORK HAS BEEN USED IN THE PRELIMINARY ESTIMATE. DO NOT USE AS A WAIVER OF ANY PROVISIONS OF THE SPECIFICATIONS AND CONTRACTS.						
CUBIC YARDS OF EXCAVATION						
CLASS 1	CLASS 1B	CLASS 2	CLASS 3	CLASS 4	CUBIC YARDS OF COMPLETED EMBANKMENT	CUBIC YARDS OF TOPSOIL
5,182	-	-	-	-	-	-
					CUBIC YARDS OF FOREIGN BORROW	CUBIC YARDS OF WASTE
					-	5,182

GENERAL NOTES

THE LEGAL RIGHT-OF-WAY ON SR 3014, FORMERLY LR 76 2, FROM STATION 0+28.00 TO STATION 58+47.00 IS VARIABLE, BASED ON DRAWINGS AUTHORIZING ACQUISITION OF RIGHT-OF-WAY AND RE-ESTABLISHING THE LEGAL RIGHT-OF-WAY FOR LEG ROUTE 76 SPUR 2, SECTION 007 R/W, SIGNED ON APRIL 2, 1985, AND RECORDED ON JUNE 3, 1985, IN THE OFFICE OF THE DEPARTMENT OF REAL ESTATE IN ALLEGHENY COUNTY IN STATE HIGHWAY PLAN VOL. 93, PAGES 49 TO 55.

CONSTRUCT PROJECT IN ACCORDANCE WITH PUBLICATION 408 SPECIFICATIONS, DATED 2020. DO NOT INTERFERE WITH THE OPERATION OF ANY FIRE HYDRANT, FIRE CALL BOX, OR POLICE CALL BOX.

THREE TO TEN WORKING DAYS PRIOR TO EXCAVATION BASED ON THE COMPLEXITY OF THE PROJECT, THE CONTRACTOR MUST CONTACT THE PA ONE CALL SYSTEM, INC., PHONE 1-800-242-1776,
SERIAL NO. _____ FOR CITY OF PITTSBURGH, WARD 27
SERIAL NO. _____ FOR McKEES ROCKS BOROUGH
SERIAL NO. _____ FOR STOWE TOWNSHIP
ADDITIONAL INFORMATION AVAILABLE AT <https://www.pa1call.org/PAB11/PUBLIC/>.

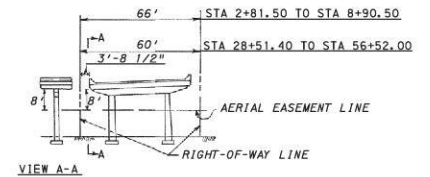
THE CONTRACTOR IS REQUIRED TO NOTIFY THE DEPARTMENT AND SUBMIT AN ALLEGED VIOLATION REPORT (AVR) TO THE PA PUBLIC UTILITY COMMISSION THROUGH THE PA ONE CALL SYSTEM, WWW.PA1CALL.ORG WITHIN TEN (10) BUSINESS DAYS AFTER A UTILITY LINE IS STRUCK, DAMAGED, OR PREVIOUS DAMAGE IS DISCOVERED AS REQUIRED BY PENNSYLVANIA'S UNDERGROUND UTILITY LINE PROTECTION LAW ACT 50 (P.L.852, NO. 287 AMENDED OCT. 30, 2017).

THE DEPARTMENT OF TRANSPORTATION DOES NOT GUARANTEE THE ACCURACY OF THE LOCATIONS OF EXISTING SUBSURFACE UTILITY STRUCTURES SHOWN ON THE PLANS, NOR DOES THE DEPARTMENT GUARANTEE THAT ALL SUBSURFACE STRUCTURES ARE SHOWN.

VERTICAL DATUM FOR THESE PLANS IS BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD 88). THE HORIZONTAL CONTROL IS TIED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, (NAD83). (COMBINED SCALE FACTOR 0.99992329).

ALL CURVE DATA IS BASED ON ARC DEFINITION UNLESS OTHERWISE NOTED.

WHERE AN AERIAL EASEMENT EXISTS, IT INCLUDES A SURFACE EASEMENT UNLIMITED IN VERTICAL DIMENSION FOR THE ACCOMMODATION OF PIERS AND OTHER APPURTENANCES.



USE OF THE AIRSPACE BENEATH GRADELINE OF THE HIGHWAY SHALL PROVIDE SUFFICIENT VERTICAL AND HORIZONTAL CLEARANCES FOR THE CONSTRUCTION OPERATION, MAINTENANCE, VENTILATION AND SAFETY OF THE HIGHWAY FACILITY THE ESTATE ACQUIRED ABOVE THE AERIAL EASEMENT LINE MAY BE ENCROACHED ON BY MOVING VEHICLES SUCH AS TRUCKS OR RAILROAD ROLLING STOCK.

DETAILS OTHER THAN THOSE INDICATED, ARE ON THE FOLLOWING STANDARD DRAWINGS:

NO.	DATE	NO.	DATE
RC-10W	JUNE 1, 2010	BC-701M	FEBRUARY 19, 2021
RC-11M	JUNE 1, 2010	BC-722M	FEBRUARY 19, 2021
RC-12M	FEBRUARY 8, 2019	BC-734M	FEBRUARY 19, 2021
RC-13M	JUNE 1, 2010	BC-736M	JANUARY 31, 2019
RC-20M	NOVEMBER 30, 2021	BC-752M	FEBRUARY 19, 2021
RC-23M	FEBRUARY 8, 2019	BC-762M	JANUARY 31, 2019
RC-24M	FEBRUARY 19, 2021	BC-765M	JANUARY 31, 2019
RC-25M	NOVEMBER 30, 2021	BC-767M	FEBRUARY 19, 2021
RC-26M	NOVEMBER 30, 2021	BC-783M	JANUARY 31, 2019
RC-27M	NOVEMBER 30, 2021	BC-788M	JANUARY 31, 2019
RC-30M	NOVEMBER 30, 2021		
RC-45M	FEBRUARY 19, 2021	TC-8600	JUNE 13, 2013
RC-46M	FEBRUARY 19, 2021	TC-8716	JUNE 13, 2013
RC-58M	AUGUST 4, 2011		
RC-64M	FEBRUARY 19, 2021		
RC-65M	DECEMBER 17, 2019		
RC-77M	FEBRUARY 19, 2021		
RC-12M	FEBRUARY 19, 2021		

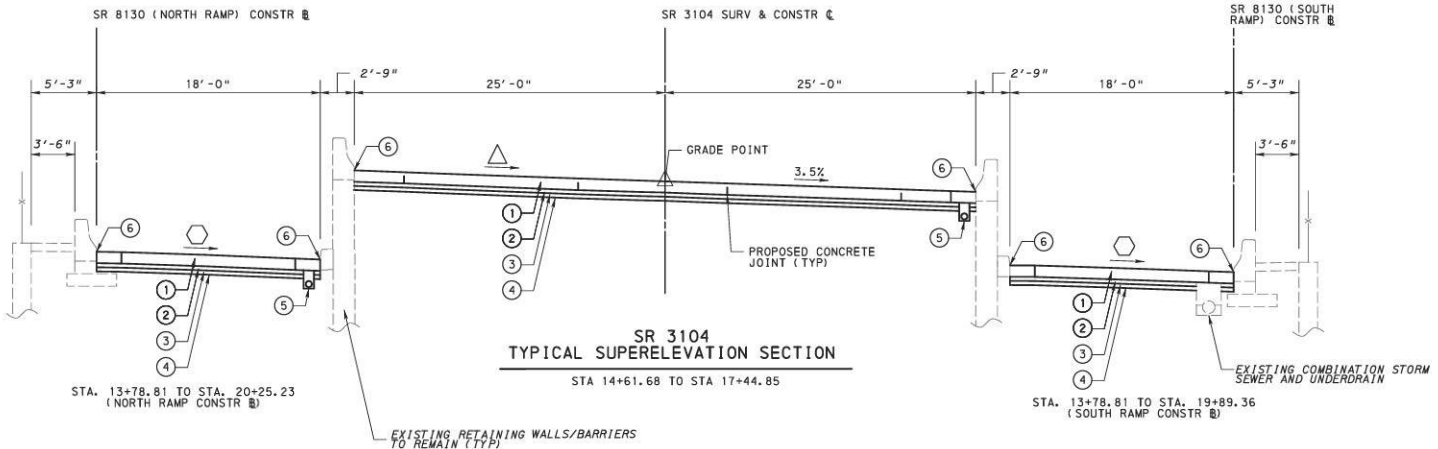
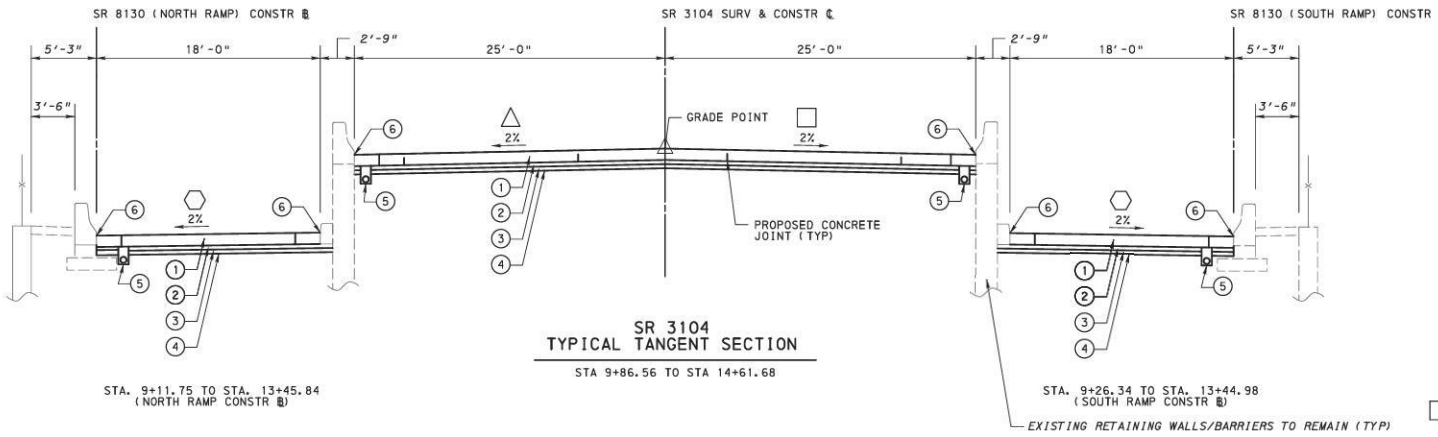
LOCATION MAP *David R. Hallock* **NOTES**
Professional Engineer
Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION

ATTEST *Rosemary Schmitt*
Secretary



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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	ALLEGHENY	3104	A03	5 OF 23
STOWE TWP/MCKEES ROCKS BOROUGH/CITY OF PITTSBURGH				
REVISION NUMBER	REVISIONS	DATE	BY	



LEGEND

- ① PLAIN CEMENT CONCRETE PAVEMENT, 11" DEPTH (ITEM NO. 0501-0034)
 - ② EITHER: CEMENT TREATED PERMEABLE BASE COURSE, 4" DEPTH (ITEM NO. 0303-0001) OR: ASPHALT TREATED PERMEABLE BASE COURSE, 4" DEPTH (ITEM NO. 0360-0001)
 - ③ SUBBASE 4" DEPTH (NO. 2A) (ITEM NO. 0350-0104)
 - ④ GEOTEXTILE, CLASS 4, TYPE A (ITEM NO. 0212-0014)
 - ⑤ 6" PAVEMENT BASE DRAIN (ITEM NO. 0610-7002) GEOTEXTILE, CLASS 1 (ITEM NO. 0212-0001)
 - ⑥ FULL DEPTH EXPANSION (INCIDENTAL TO 0501-0034)
- ◻ MATCH EXISTING CROSS SLOPE
 - △ SUPERELEVATION RATE VARIES FROM -2.0% TO 3.5% FROM STA 12+00.00 TO STA 15+00.00, MATCH TO EXISTING EDGE OF PAVEMENT.
 - ◻ SUPERELEVATION RATE VARIES FROM -2.0% TO 3.5% FROM STA 13+00.00 TO STA 14+00.00, MATCH TO EXISTING EDGE OF PAVEMENT.
 - ◻ CROSS SLOPE TO TRANSITION FROM EXISTING ELEVATION AT INTERSECTION WITH HELEN STREET TO MATCHING EXISTING PAVEMENT CROSS SLOPE ON STRUCTURE.

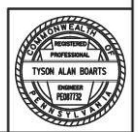
CERTIFIED CORRECT PLANS


 Daniel R. Hillrich
 Professional Engineer

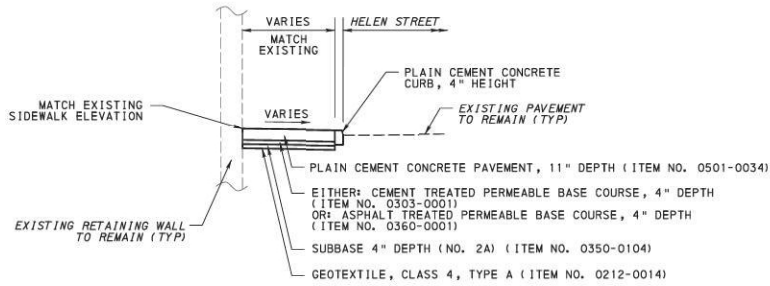
Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION

ATTEST 
 Secretary

TYPICAL SECTIONS

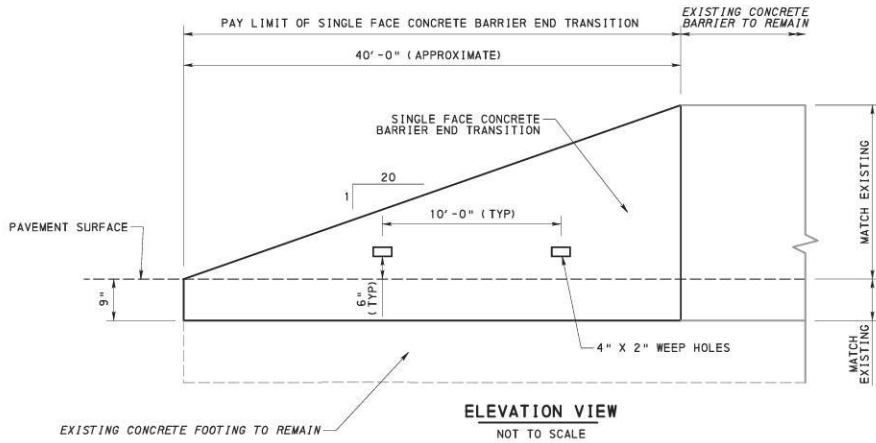


DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	ALLEGHENY	3104	A03	7 OF 23
STOWE TWP/MCKEES ROCKS BOROUGH/CITY OF PITTSBURGH				
REVISION NUMBER	REVISIONS	DATE	BY	

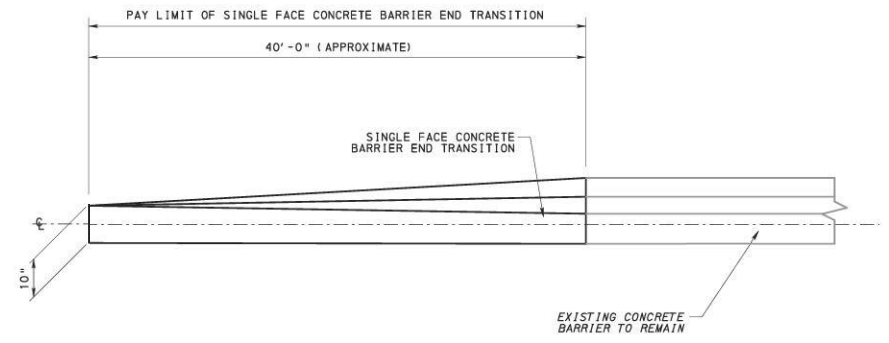


**DETAIL
HELEN STREET SIDEWALK REPLACEMENT (LT/RT)**
NOT TO SCALE

CERTIFIED CORRECT PLANS
David R. Hillisch
Professional Engineer
Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
ATTEST *Rosemary Chioda*
Secretary



ELEVATION VIEW
NOT TO SCALE



PLAN VIEW
NOT TO SCALE

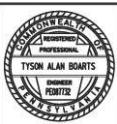
NOTE:

- PRESERVE ANY EXISTING REINFORCEMENT PROJECTING FROM THE EXISTING BARRIER OR BARRIER FOOTING TO REMAIN. MODIFY EXISTING REINFORCEMENT (TO REMAIN) AS REQUIRED TO CONFIGURE TO THE NEW BARRIER TRANSITION.

**DETAIL
END TRANSITION, SINGLE FACE CONCRETE BARRIER
S.R. 8130 (SOUTH RAMP)**

NOT TO SCALE
(ITEM NO. 9000-0016)
S.R. 8130 (SOUTH RAMP) STA. 14+21.68 TO STA. 14+61.68 SURVEY & CONSTR. 2

SPECIAL DETAILS



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DATE: 07/22/2022 11:58:33 AM

TCP - TRAFFIC CONTROL PLAN
STR1 - STRUCTURE PLANS (S-39125)
STR2 - STRUCTURE PLANS (S-39126)
◆ - SEE SPECIAL PROVISIONS

SUMMARY

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY	3104	A03	9 OF 23
STOWE TWP/PMCKES ROCKS BOROUGH/CITY OF PITTSBURGH								

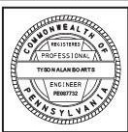
QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET
UNIT	UNIT				UNIT	UNIT				UNIT	UNIT				UNIT	UNIT			
5182	0203 0001	CLASS 1 EXCAVATION	11		8884	0627 3019	TEMPORARY BARRIER, TEST LEVEL 3, BARRIER DEFLECTION DISTANCE < I=1'		TCP	14914	0901 0331	6" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE		TCP	99	1002 0143	MECHANICAL SPLICE SYSTEM FOR NO. 6 REINFORCEMENT BARS, EPOXY COATED		STR2
	CY				LF	LF					LF			EACH	EACH				
745	0203 0006	SAW CUTTING	11		7419	0628 3019	RESET TEMPORARY BARRIER, TEST LEVEL 3, BARRIER DEFLECTION DISTANCE < I=1'		TCP	146	0901 0334	24" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE		TCP	1302	5018 0102	SIDEWALK PROTECTIVE FENCE STEEL (REPLACEMENT - S-39126)		STR2
	LF				LF	LF					LF			LF	LF				
2030	0212 0001	GEOTEXTILE, CLASS 1	12		136	0630 0025	PLAIN CEMENT CONCRETE CURB, 4" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB		11	6	0901 0450	3-LINE CHANGEABLE MESSAGE SIGN WITH TELECOMMUNICATIONS		TCP	633	5018 0110	RAILROAD PROTECTIVE FENCE, STEEL (SIDEWALK CONNECTION)		STR1, STR2
	LF				LF	LF					EACH			LF	LF				
9822	0212 0014	GEOTEXTILE, CLASS 4, TYPE A	11		144	0630 0045	PLAIN CEMENT CONCRETE CURB, 8" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB		11	1	4952 3000	CONTROLLER MODIFICATION, RETIMING MODIFIED		NO TAB	5018 0050	REMOVAL OF PORTION OF EXISTING BRIDGE, (S-39125)			STR1
	SY				LF	LF					EACH			LS	LS				
ETHER	0303 0001	CEMENT TREATED PERMEABLE BASE COURSE, 4" DEPTH	1	11	76	4578 0001	CEMENT CONCRETE SIDEWALK MODIFIED		11	1	4956 0801	RADAR DETECTOR MODIFIED		NO TAB	5018 0053	REMOVAL OF PORTION OF EXISTING BRIDGE, (S-39126)			STR2
	SY				SY	SY					EACH			LS	LS				
OR	0360 0001	ASPHALT TREATED PERMEABLE BASE COURSE, 4" DEPTH	1	11		0895 0030	CONSTRUCTION SURVEYING, TYPE B, MODIFIED		NO TAB	2	0958 0341	TEMPORARY MODIFICATIONS TO EXISTING PERMANENT TRAFFIC SIGNAL (3 APPROACHES)		TCP	827	1019 0050	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, BRIDGE SUPERSTRUCTURE)		STR1, STR2
	SY				LS	LS					EACH			SY	SY				
9822	0360 0104	SUBBASE 4" DEPTH (NO. 2A)		11		0895 0060	CONSTRUCTION SURVEYING, TYPE D, MODIFIED		NO TAB	513	0960 0021	24" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS		13	34	1040 0030	CONCRETE BRIDGE DECK REPAIR, TYPE 3		STR2
	SY				LS	LS					LF			SF	SF				
785	0360 0108	SUBBASE 8" DEPTH (NO. 2A)		11		0895 0005	CPM SCHEDULE, WITH UPDATES		NO TAB	39037	4962 1001	6" WHITE WATERBORNE PAVEMENT MARKINGS MODIFIED		13	110	1040 0200	CONCRETE BRIDGE BARRIER REPAIR, TYPE 2		STR1
	SY				LS	LS					LF			SF	SF				
1771	0413 0297	SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 645-22, 3 TO < 10 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-E		11	6000	0690 0002	SEMI-FORMAL FACILITATION		NO TAB	26380	4962 1005	4" YELLOW WATERBORNE PAVEMENT MARKINGS MODIFIED		13	1020	5040 0200	CONCRETE BRIDGE BARRIER REPAIR, TYPE 2 (FRONT FACE)		STR2
	DO				DOLLA	DOLLA					LF			SF	SF				
192	0413 0055	SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 645-22, 3 TO < 10 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH		11	151	0695 0002	DETECTABLE WARNING SURFACE, CAST IRON	2	11	28207	0961 0001	PAVEMENT MARKING REMOVAL		TCP	830	5040 0201	CONCRETE BRIDGE BARRIER REPAIR, TYPE 2 (REAR FACE)		STR2
	DO				SF	SF					SF			SF	SF				
3734	0460 0003	ASPHALT TACK COAT (NT/CONT)		11	OR	0695 0003	DETECTABLE WARNING SURFACE, POLYMER CONCRETE	2	11	15000	0964 0002	4" YELLOW EPOXY PAVEMENT MARKINGS		TCP	65500	1050 0020	FABRICATED STRUCTURAL STEEL		STR2
	SY				LS	LS					LF			LS	LS				
1579	0491 0012	MILLING OF ASPHALT PAVEMENT SURFACE, 1 1/2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR		11	OR	0695 0004	DETECTABLE WARNING SURFACE, POLYMER COMPOSITE	2	11	20000	0964 0005	6" WHITE EPOXY PAVEMENT MARKINGS		TCP	15400	5050 0021	FABRICATED STRUCTURAL STEEL (INCLUDES EXPANSION ANCHORS)		STR2
	SY				LS	LS					LF			LS	LS				
192	0491 0017	MILLING OF ASPHALT PAVEMENT SURFACE, 4" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR		11	5	0696 0580	TEMPORARY IMPACT ATTENUATING DEVICE, TYPE IV, TEST LEVEL 3		TCP	2000	0964 0007	6" BLACK EPOXY PAVEMENT MARKINGS		TCP	50000	1050 0100	UNFORESEEN FABRICATED STRUCTURAL STEEL REPAIRS		STR2
	SY				EACH	EACH					LF			DOLLA	DOLLA				
9822	0501 0034	PLAIN CEMENT CONCRETE PAVEMENT, 11" DEPTH		11	9	0697 0580	RESET TEMPORARY IMPACT ATTENUATING DEVICE, TYPE IV, TEST LEVEL 3		TCP	60	0964 0021	24" WHITE EPOXY PAVEMENT MARKINGS		13, TCP		5070 0300	ZONE PAINTING EXISTING STRUCTURAL STEEL (INCLUDES REPAIR STEEL)		STR2
	SY				EACH	EACH					LF			LS	LS				
1	0605 2731	TYPE M CONCRETE TOP UNIT AND BICYCLE SAFE GRATE		12	2	4802 0001	TOPSOIL FURNISHED AND PLACED MODIFIED		11	113	0964 0022	24" YELLOW EPOXY PAVEMENT MARKINGS		13		1072 0100	CONTAINMENT		STR2
	SET				CY	CY					LF			LS	LS				
1	0605 2850	STANDARD INLET BOX, HEIGHT < I= 10'		12	2	0804 0001	SEEDING AND SOIL SUPPLEMENTS - FORMULA B, INCLUDING MULCH		11	15	0964 0101	WHITE EPOXY LEGEND, "ONLY", 8' - 0"		13, TCP		1072 0200	WASTE MANAGEMENT		STR2
	EACH				LB	LB					EACH			LS	LS				
19	0606 0050	GRADE ADJUSTMENT OF EXISTING INLETS		12	5000	0845 0001	UNFORESEEN WATER POLLUTION CONTROL		NO TAB	5	0964 0220	WHITE EPOXY LEGEND, "STRAIGHT ARROW", 12' - 0" X 3' - 0" - 8"		13		1072 0300	WORKER HEALTH AND SAFETY		STR2
	SET				DOLLA	DOLLA					EACH			LS	LS				
12	0606 0150	GRADE ADJUSTMENT OF EXISTING MANHOLES		12	15	0880 0200	INLET FILTER BAG FOR TYPE M INLET		12	7	0964 0222	WHITE EPOXY LEGEND, "RIGHT ARROW", 12' - 0" X 3' - 0"		13, TCP	132	5090 1006	STANDARD EXPANSION DAM REPLACEMENT, 3" MOVEMENT (INCLUDES BACKWALL)		STR2
	SET				EACH	EACH					LF			LS	LS				
	0608 0001	MOBILIZATION		NO TAB	5	0880 0002	INLET FILTER BAG FOR TYPE C INLET		12	7	0964 0224	WHITE EPOXY LEGEND, "LEFT ARROW", 12' - 0" X 3' - 0"		13, TCP	42	1090 1017	NEOPRENE STRIP SEAL GLAND REPLACEMENT		STR2
	LS				EACH	EACH					EACH			LF	LF				
	0609 0002	INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, TYPE A		NO TAB		0901 0001	MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION		TCP	413	1001 1080	CLASS AA CEMENT CONCRETE		STR1, STR2	40	1091 0331	EPOXY INJECTION CRACK SEAL		STR2
	LS				LS	LS					CY			LF	LF				
	0609 0009	EQUIPMENT PACKAGE		NO TAB	10	0901 0231	ADDITIONAL WARNING LIGHTS, TYPE B		TCP	84900	1002 0052	REINFORCEMENT BARS, EPOXY COATED		STR1, STR2	2000	1999 0000	TRAINEES FOR PROJECTS 100% STATE FUNDED		NO TAB
	LF				DAY	DAY					LB			HOUR	HOUR				
2030	0610 7002	6" PAVEMENT BASE DRAIN		12	20	0901 0232	ADDITIONAL WARNING LIGHTS, TYPE C		TCP	64	1002 0140	MECHANICAL SPLICE SYSTEM FOR NO. 5 REINFORCEMENT BARS, EPOXY COATED		STR1					
	LF				DAY	DAY					EACH								
4	0619 0741	PERMANENT IMPACT ATTENUATING DEVICE, TYPE V, TEST LEVEL 2, MASH, WIDTHS LESS THAN OR EQUAL TO 36 INCHES		11	200	0901 0240	ADDITIONAL TRAFFIC CONTROL SIGNS		TCP	46	1002 0141	MECHANICAL SPLICE SYSTEM FOR NO. 5 REINFORCEMENT BARS, EPOXY COATED		STR2					
	EACH				SF	SF					EACH								
50	0623 0275	REMOVAL OF EXISTING CONCRETE MEDIAN BARRIER		11	46104	0901 0320	4" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, YELLOW		TCP	119	1002 0142	MECHANICAL SPLICE SYSTEM FOR NO. 6 REINFORCEMENT BARS, EPOXY COATED		STR1					
	LF				LF	LF					EACH								

CERTIFIED CORRECT PLANS

David B. Hildner
Professional Engineer

Approved by *Raymond Shultz*
Secretary

PA PUBLIC UTILITY COMMISSION



TCP - TRAFFIC CONTROL PLAN
 STR1 - STRUCTURE PLANS (S-39125)
 STR2 - STRUCTURE PLANS (S-39126)

SUMMARY

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY	3104	A03	10 OF 23
STOWE TWP/MCKEES ROCKS BOROUGH/CITY OF PITTSBURGH								

◆ - SEE SPECIAL PROVISIONS

QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	
																				UNIT
44	9000 0001 LF	REPLACE DRAIN TROUGH AT EXISTING TOOTH DAM, PIER 1		STR1	3	9000 0025 EACH	STEEL REPAIR - TYPE 3		STR2											
30000	9000 0002 DOLLA	MISC. UNFORESEEN BRIDGE REPAIRS, (S-39125)		STR1	170	9000 0026 EACH	STEEL REPAIR - TYPE 4		STR2											
28440	9000 0003 SF	CONCRETE FILLED STEEL BEAM SIDEWALK DECKING		STR2	64	9000 0027 EACH	STEEL REPAIR - TYPE 5		STR2											
1360	9000 0004 LF	CONCRETE BRIDGE BARRIER REPLACEMENT		STR2	65	9000 0028 EACH	STEEL REPAIR - TYPE 6		STR2											
4	9000 0005 EACH	REMOVE, STORE, AND RE-INSTALL LIGHT POLE		STR2	112	9000 0029 EACH	STEEL REPAIR - TYPE 7		STR2											
6	9000 0006 EACH	PEDESTRIAN RAILING REPAIR		STR2	13	9000 0030 EACH	STEEL REPAIR - TYPE 9		STR2											
5	9000 0007 CF	REPAIR DETERIORATED CONCRETE		STR2	2	9000 0031 EACH	STEEL REPAIR - TYPE 10		STR2											
3742	9000 0008 LF	CONCRETE BRIDGE DECK OVERHANG REPAIR		STR2	83	9000 0032 EACH	STEEL REPAIR - TYPE 12A		STR2											
1	9000 0009 EACH	TRUSS GUSSET PLATE REPAIR 1		STR2	166	9000 0033 EACH	STEEL REPAIR - TYPE 12B		STR2											
1	9000 0010 EACH	TRUSS GUSSET PLATE REPAIR 2		STR2	37	9000 0034 EACH	STEEL REPAIR - TYPE 13		STR2											
1	9000 0011 EACH	TRUSS GUSSET PLATE REPAIR 3		STR2	9	9000 0035 EACH	STEEL REPAIR - TYPE 14		STR2											
6	9000 0012 EACH	TRUSS GUSSET PLATE REPAIR 4		STR2	11	9000 5001 EACH	DESIGN OF CONCRETE CURB RAMP		11											
9	9000 0013 EACH	TRUSS GUSSET PLATE REPAIR 5		STR2	25000	9000 9011 DOLLA	OFF DUTY UNIFORMED POLICE OFFICER		TCP											
1	9000 0014 EACH	TRUSS GUSSET PLATE REPAIR 6		STR2	5000	9000 9015 DOLLA	REPAIR OF TEMPORARY IMPACT ATTENUATING DEVICE		TCP											
250000	9000 0015 DOLLA	MISC. UNFORESEEN BRIDGE REPAIRS, (S-39126)		STR2																
1	9000 0016 EACH	END TRANSITION, SINGLE FACE CONCRETE BARRIER		11																
1	9000 0017 LS	16" DIA. GAS LINE - TEMPORARY SUPPORT DURING CONSTRUCTION		STR2																
1	9000 0018 SET	HARNESSES, DOUBLE LANYARDS AND SELF RETRACTING LIFELINES - FALL PROTECTION		STR2																
1	9000 0019 EACH	PEDESTRIAN RAILING REPLACEMENT		STR2																
100	9000 0020 EACH	PEOPLES NATURAL GAS - 16" DIA. GAS LINE HANGER ASSEMBLY REPLACEMENTS		STR2																
1	9000 0021 LS	PEOPLES NATURAL GAS - PAINT EXISTING 16" DIA. GAS LINE		STR2																
2	9000 0022 EACH	PEOPLES NATURAL GAS - SIDEWALK ACCESS HATCHES		STR2																
2	9000 0023 EACH	STEEL REPAIR - TYPE 1		STR2																
3	9000 0024 EACH	STEEL REPAIR - TYPE 2		STR2																

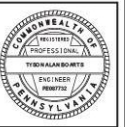
CERTIFIED CORRECT PLANS

David R. Helfrich
 Professional Engineer

Approved by Bureau of Technical Utility Services

PA PUBLIC UTILITY COMMISSION

ATTEST *Rosanna Chantla*
 Secretary



TABULATION OF QUANTITIES DRAINAGE

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				11	ALLEGHENY	3104	A03	12 OF 23
STOWE TWP/MCKEES ROCKS BOROUGH/CITY OF PITTSBURGH								

0212 0001	LF	0605 TYPE M CONCRETE TOP UNIT AND BICYCLE SAFE GRATE	0605 2731	SET	0605 2850	STANDARD INLET BOX, HEIGHT <= 10"	0606 0050	GRADE ADJUSTMENT OF EXISTING INLETS	0606 0150	GRADE ADJUSTMENT OF EXISTING MANHOLES	0610 7002	6" PAVEMENT BASE DRAIN	0600 0000	LF	0600 0000	INLET FILTER BAG FOR TYPE M INLET	0600 0002	INLET FILTER BAG FOR TYPE C INLET	REMARKS	SIDE	STATIONS
																		SR 3104			
																			RT	0+91.00	
																			RT	1+08.00	
								1											RT	1+10.00	
										1									RT	2+46.00	
																			CL	2+46.00	
																			LT	2+46.00	
		1		1															RT	2+49.00	
										1									REBUILD INLET	RT	2+55.00
										1									RT	8+99.00	
302															302				LT	9+17.00 to 12+19.00	
295															295				RT	9+25.00 to 12+20.00	
										1									RT	9+70.00	
										1									RT	12+19.00	
										1									LT	12+21.00	
										1									RT	12+22.00	
114															114				LT	12+23.00 to 13+37.00	
113															113				RT	12+24.00 to 13+37.00	
14															14				RT	13+87.00 to 14+01.00	
								1											RT	14+03.00	
										1									RT	14+04.00	
147															147				RT	14+05.00 to 15+52.00	
										1									RT	15+54.00	
																			RT	15+54.00	
60															60				RT	15+56.00 to 16+16.00	
										1									RT	16+18.00	
										1									RT	16+18.00	
48															48				RT	16+20.00 to 16+68.00	
TOTALS																					

SHEET 1 OF 1

0212 0001	LF	0605 TYPE M CONCRETE TOP UNIT AND BICYCLE SAFE GRATE	0605 2731	SET	0605 2850	STANDARD INLET BOX, HEIGHT <= 10"	0606 0050	GRADE ADJUSTMENT OF EXISTING INLETS	0606 0150	GRADE ADJUSTMENT OF EXISTING MANHOLES	0610 7002	6" PAVEMENT BASE DRAIN	0600 0000	LF	0600 0000	INLET FILTER BAG FOR TYPE M INLET	0600 0002	INLET FILTER BAG FOR TYPE C INLET	REMARKS	SIDE	STATIONS	
																					RT	16+70.00
								1													RT	16+70.00
74																					RT	16+72.00 to 17+46.00
																					RT	17+41.00
134																					LT	18+76.00 to 20+10.00
																					LT	58+15.00
																					LT	58+23.00
																					RT	58+23.00
																					RT	58+29.00
																					SR 8130 (NORTH RAMP)	
																					CL	9+70.00
248																					RT	9+72.00 to 12+20.00
235																					RT	15+10.00 to 17+45.00
																					SR 8130 (SOUTH RAMP)	
																					CL	9+71.00
246																					LT	9+72.00 to 12+18.00
																					CL	12+20.00
																					CL	13+32.00
																					CL	14+19.00
																					CL	17+28.00
																					CL	18+56.00
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PROJECT ID: 4480

MPMS: 28344

ECMS: 28344

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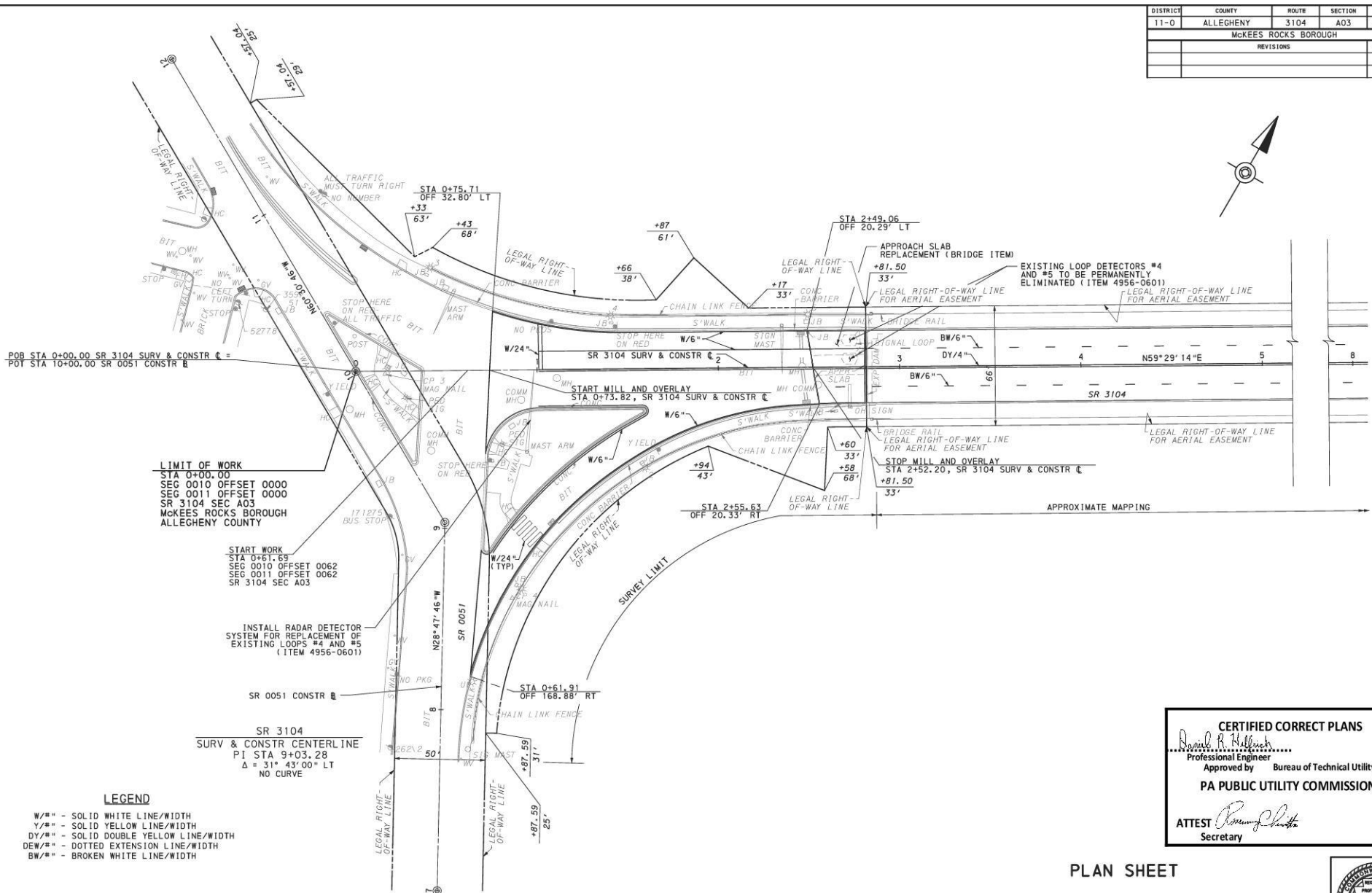
CERTIFIED CORRECT PLANS

David R. Hallock
Professional Engineer
Approved by Bureau of Technical Utility Services

TOTAL SPA PUBLIC UTILITY COMMISSION

ATTEST *Rosanne L. ...*
Secretary

DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
11-0	ALLEGHENY	3104	A03	14 OF 23	
McKEES ROCKS BOROUGH					
REVISIONS				DATE	BY



SEE SHEET 15

LIMIT OF WORK
 STA 0+00.00
 SEG 0010 OFFSET 0000
 SEG 0011 OFFSET 0000
 SR 3104 SEC A03
 McKEES ROCKS BOROUGH
 ALLEGHENY COUNTY

START WORK
 STA 0+61.69
 SEG 0010 OFFSET 0062
 SEG 0011 OFFSET 0062
 SR 3104 SEC A03

**INSTALL RADAR DETECTOR
 SYSTEM FOR REPLACEMENT OF
 EXISTING LOOPS #4 AND #5
 (ITEM 4956-0601)**

**SR 3104
 SURV & CONSTR CENTERLINE**
 PI STA 9+03.28
 $\Delta = 31^\circ 43' 00''$ LT
 NO CURVE

LEGEND
 W/"" - SOLID WHITE LINE/WIDTH
 Y/"" - SOLID YELLOW LINE/WIDTH
 DY/"" - SOLID DOUBLE YELLOW LINE/WIDTH
 DEW/"" - DOTTED EXTENSION LINE/WIDTH
 BW/"" - BROKEN WHITE LINE/WIDTH

CERTIFIED CORRECT PLANS

Daniel R. Hollenbach
 Professional Engineer
 Approved by Bureau of Technical Utility Services

PA PUBLIC UTILITY COMMISSION

ATTEST *Rosemary Schuster*
 Secretary

PLAN SHEET

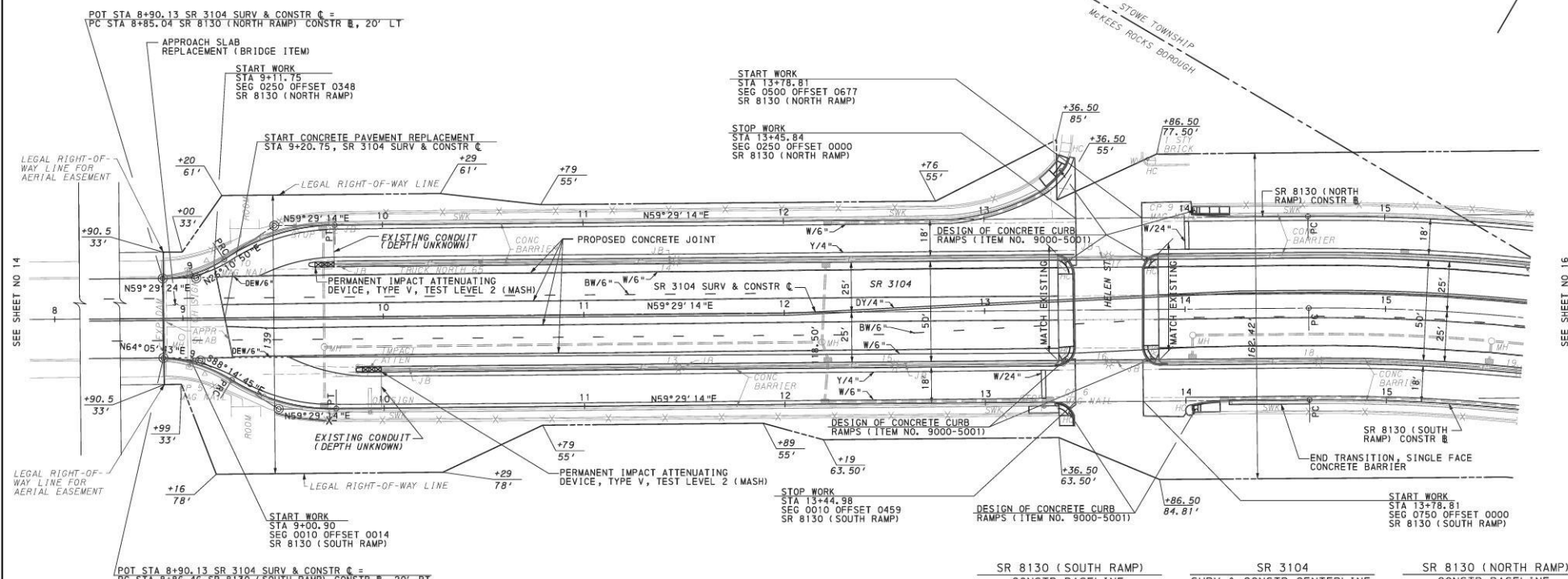


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DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
11-0	ALLEGHENY	3104	A03	15 OF 23	
STOWE TWP/McKEES ROCKS BOROUGH					
REVISIONS				DATE	BY

SR 8130 (NORTH RAMP)
 CONSTR BASELINE
 PI STA 9+01.79
 $\Delta = 33^{\circ}18'34"$ LT
 $D = 102^{\circ}18'50"$
 $T = 16.75'$
 $L = 32.56'$
 $R = 56.00'$
 $E = 2.45'$
 SE MATCH EXISTING
 PC STA 8+85.04
 PRC STA 9+11.60

SR 8130 (NORTH RAMP)
 CONSTR BASELINE
 PI STA 9+47.75
 $\Delta = 33^{\circ}33'47"$ RT
 $D = 87^{\circ}17'45"$
 $T = 30.16'$
 $L = 58.58'$
 $R = 100.00'$
 $E = 4.45'$
 SE MATCH EXISTING
 PRC STA 9+17.60
 PT STA 9+76.17



SR 8130 (SOUTH RAMP)
 CONSTR BASELINE
 PI STA 9+04.92
 $\Delta = 27^{\circ}39'33"$ RT
 $D = 76^{\circ}23'40"$
 $T = 18.46'$
 $L = 36.21'$
 $R = 75.00'$
 $E = 2.24'$
 SE MATCH EXISTING
 PC STA 8+86.46
 PRC STA 9+22.67

SR 8130 (SOUTH RAMP)
 CONSTR BASELINE
 PI STA 9+50.15
 $\Delta = 32^{\circ}16'02"$ LT
 $D = 60^{\circ}18'41"$
 $T = 27.48'$
 $L = 53.50'$
 $R = 95.00'$
 $E = 3.89'$
 SE MATCH EXISTING
 PC STA 9+22.67
 PT STA 9+76.17

SR 8130 (SOUTH RAMP)
 CONSTR BASELINE
 PI STA 15+97.97
 $\Delta = 16^{\circ}15'24"$ RT
 $D = 6^{\circ}00'16"$
 $T = 136.23'$
 $L = 270.75'$
 $R = 954.25'$
 $E = 9.68'$
 SE MATCH EXISTING
 PC STA 14+61.68
 PCC STA 17+32.43

SR 3104
 SURV & CONSTR CENTERLINE
 PI STA 17+39.27
 $\Delta = 31^{\circ}01'40"$ RT
 $D = 5^{\circ}43'47"$
 $T = 277.89'$
 $L = 541.54'$
 $R = 1000.00'$
 $E = 37.81'$
 SE MATCH EXISTING
 PC STA 14+61.68
 PT STA 20+03.22

SR 8130 (NORTH RAMP)
 CONSTR BASELINE
 PI STA 15+97.82
 $\Delta = 14^{\circ}50'03"$ RT
 $D = 5^{\circ}28'44"$
 $T = 136.14'$
 $L = 270.75'$
 $R = 1045.75'$
 $E = 8.92'$
 SE MATCH EXISTING
 PC STA 14+61.68
 PCC STA 17+32.43

LEGEND
 W/#" - SOLID WHITE LINE/WIDTH
 Y/#" - SOLID YELLOW LINE/WIDTH
 DY/#" - SOLID DOUBLE YELLOW LINE/WIDTH
 DEW/#" - DOTTED EXTENSION LINE/WIDTH
 BW/#" - BROKEN WHITE LINE/WIDTH

CERTIFIED CORRECT PLANS
Donald P. Hellreich
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST: *Robert J. Schantz*
 Secretary

PLAN SHEET



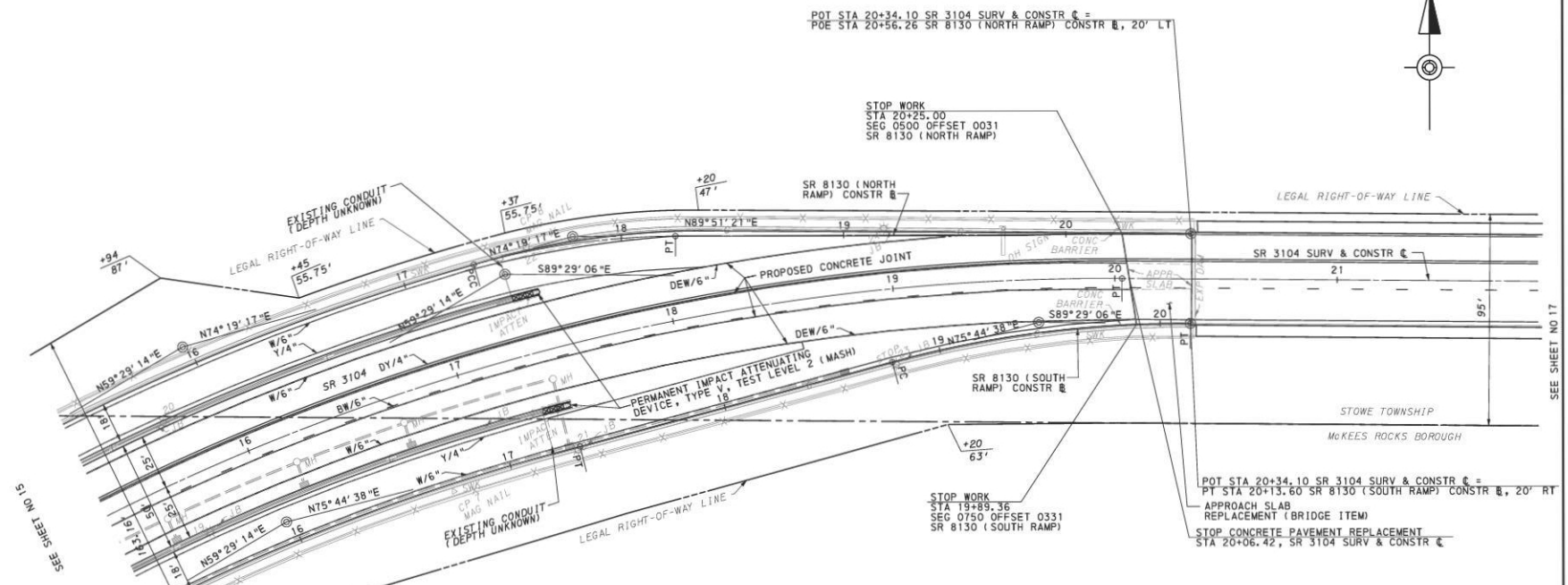
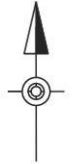
FOR SR 3104 PROFILE, SEE SHEET NO 18
 FOR SR 8130 (SOUTH RAMP) PROFILE, SEE SHEET NO 22
 FOR SR 8130 (NORTH RAMP) PROFILE, SEE SHEET NO 20

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SEE SHEET NO 16

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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	ALLEGHENY	3104	A03	16 OF 23
STOWE TWP/McKEES ROCKS BOROUGH				
REVISIONS		DATE	BY	



SEE SHEET NO 15

SEE SHEET NO 17

SR 8130 (SOUTH RAMP)
 CONSTR BASELINE
 PI STA 15+97.97
 $\Delta = 16^{\circ}15'24''$ RT
 $D = 6^{\circ}00'16''$
 $T = 136.14'$
 $L = 270.75'$
 $R = 954.25'$
 $E = 9.68'$
 SE MATCH EXISTING
 PC STA 14+61.68
 PCC STA 17+32.43

SR 3104
 SURV & CONSTR CENTERLINE
 PI STA 17+39.27
 $\Delta = 31^{\circ}01'40''$ RT
 $D = 5^{\circ}43'47''$
 $T = 277.59'$
 $L = 541.54'$
 $R = 1000.00'$
 $E = 37.81'$
 SE MATCH EXISTING
 PC STA 14+61.68
 PT STA 20+03.22

SR 8130 (SOUTH RAMP)
 CONSTR BASELINE
 PI STA 19+46.19
 $\Delta = 15^{\circ}32'40''$ RT
 $D = 11^{\circ}27'33''$
 $T = 68.24'$
 $L = 135.65'$
 $R = 500.00'$
 $E = 4.64'$
 SE MATCH EXISTING
 PC STA 18+77.95
 PT STA 20+13.60

SR 8130 (NORTH RAMP)
 CONSTR BASELINE
 PI STA 15+97.82
 $\Delta = 14^{\circ}50'03''$ RT
 $D = 5^{\circ}28'44''$
 $T = 136.14'$
 $L = 270.75'$
 $R = 1045.75'$
 $E = 8.82'$
 SE MATCH EXISTING
 PC STA 14+61.68
 PCC STA 17+32.43

SR 8130 (NORTH RAMP)
 CONSTR BASELINE
 PI STA 17+78.67
 $\Delta = 15^{\circ}32'04''$ RT
 $D = 16^{\circ}54'05''$
 $T = 46.24'$
 $L = 91.91'$
 $R = 339.00'$
 $E = 3.14'$
 SE MATCH EXISTING
 PC STA 17+32.43
 PT STA 18+24.35

LEGEND
 W/## - SOLID WHITE LINE/WIDTH
 Y/## - SOLID YELLOW LINE/WIDTH
 DY/## - SOLID DOUBLE YELLOW LINE/WIDTH
 DEW/## - DOTTED EXTENSION LINE/WIDTH
 BW/## - BROKEN WHITE LINE/WIDTH

FOR SR 3104 PROFILE, SEE SHEET NO 19
FOR SR 8130 (SOUTH RAMP) PROFILE, SEE SHEET NO 23
FOR SR 8130 (NORTH RAMP) PROFILE, SEE SHEET NO 21

CERTIFIED CORRECT PLANS

David P. Hilber
 Professional Engineer

Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION

ATTEST *Rosemary H. Smith*
 Secretary

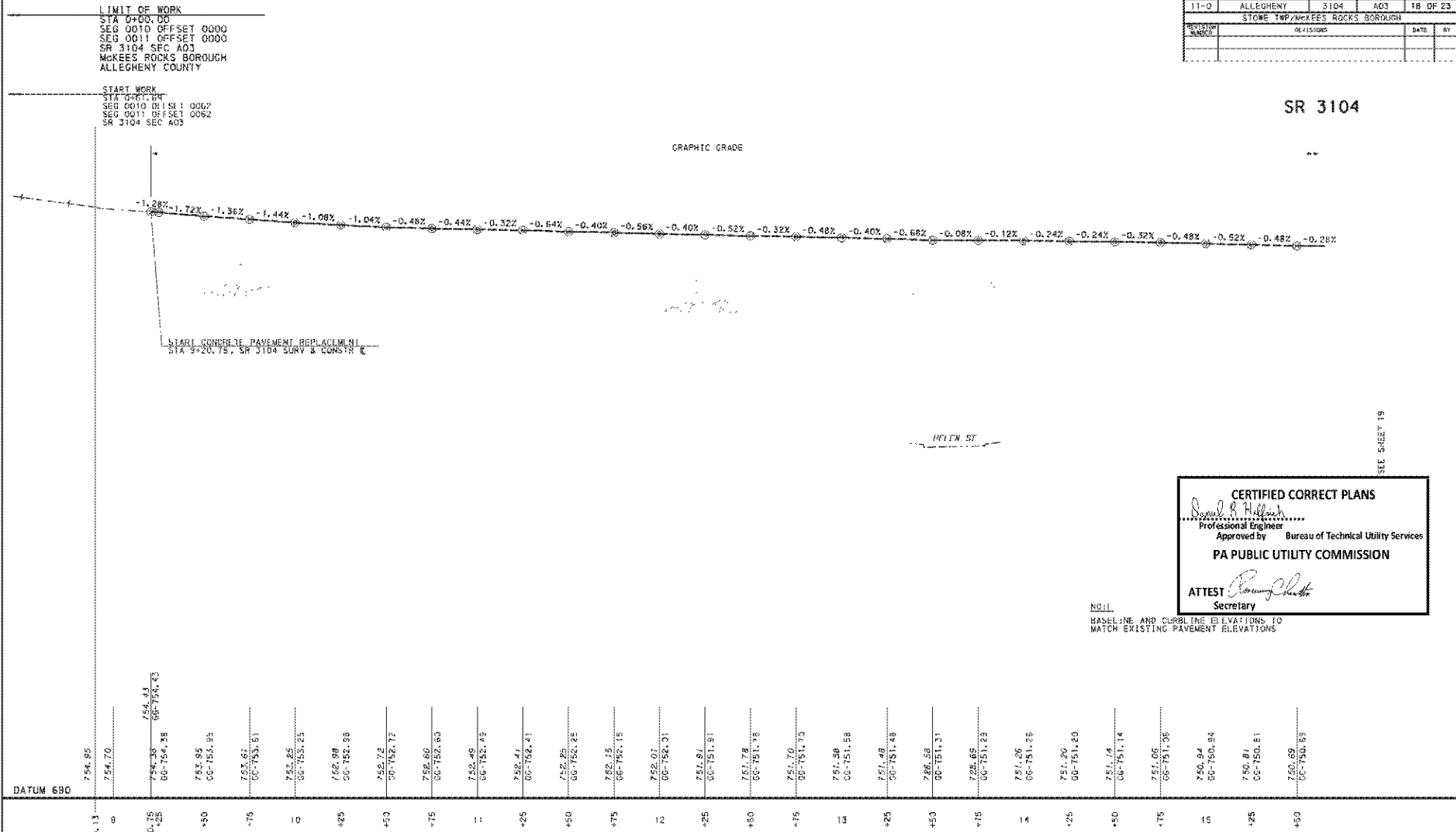
PLAN SHEET



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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	ALLEGHENY	3104	A03	1B OF 23
STONE TWP/McKEES ROCKS BOROUGH				
REVISION NUMBER	DESCRIPTION	DATE	BY	

SR 3104



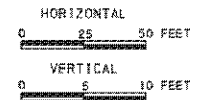
CERTIFIED CORRECT PLANS
David R. Hillen
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST *Ronny Chilton*
 Secretary

NO. 11
 BASELINE AND CURBLINE ELEVATIONS TO
 MATCH EXISTING PAVEMENT ELEVATIONS.

90.13	0	754.95
90.25	25	754.70
90.30	30	754.43
90.35	35	754.28
90.40	40	754.28
90.45	45	754.28
90.50	50	754.28
90.55	55	754.28
90.60	60	754.28
90.65	65	754.28
90.70	70	754.28
90.75	75	754.28
90.80	80	754.28
90.85	85	754.28
90.90	90	754.28
90.95	95	754.28
91.00	100	754.28
91.05	105	754.28
91.10	110	754.28
91.15	115	754.28
91.20	120	754.28
91.25	125	754.28
91.30	130	754.28
91.35	135	754.28
91.40	140	754.28
91.45	145	754.28
91.50	150	754.28
91.55	155	754.28
91.60	160	754.28
91.65	165	754.28
91.70	170	754.28
91.75	175	754.28
91.80	180	754.28
91.85	185	754.28
91.90	190	754.28
91.95	195	754.28
92.00	200	754.28

POT STA 8+90.13 SR 3104 SURV & CONSTR E
 PC STA 8+95.04 SR 8+30 (NORTH RAMP) CONSTR E, 20' LT
 POT STA 8+90.15 SR 3104 SURV & CONSTR E
 PC STA 8+86.46 SR 8+30 (SOUTH RAMP) CONSTR E, 20' RT

PROFILE



FOR PLAN, SEE SHEET 15

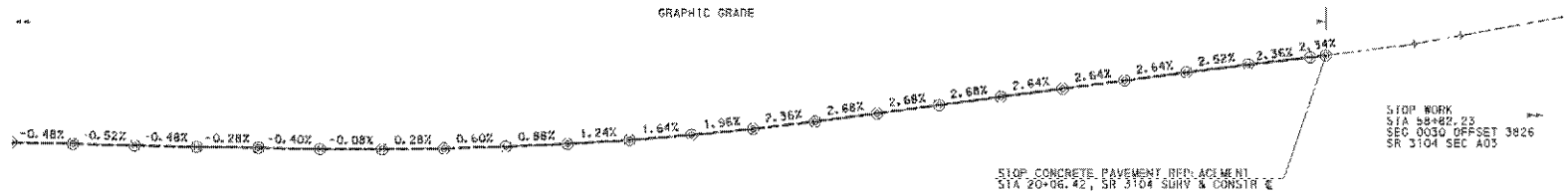


SEE SHEET 15

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	ALLEGHENY	3104	A03	19 OF 23
STONE TWP/MCKEE'S ROCKS BOROUGH				
REVISION	DATE	BY		

LIMIT OF WORK
 STA 59+00.00
 SEG 0030 OFFSET 3844
 SR 3104 SEC A03
 CITY OF PITTSBURGH
 ALLEGHENY COUNTY

SR 3104



STOP WORK
 STA 59+02.23
 SEG 0030 OFFSET 3826
 SR 3104 SEC A03

SEE SHEET 18

NO. 11
 BASELINE AND CURBLINE ELEVATIONS TO
 MATCH EXISTING PAVEMENT ELEVATIONS

DATUM 690

750.94 06-750.84	750.87 06-750.81	750.69 06-750.63	750.62 06-750.56	750.52 06-750.52	750.50 06-750.53	750.57 06-750.57	750.72 06-750.72	750.94 06-750.84	751.25 06-751.25	751.66 06-751.66	752.15 06-752.15	752.74 06-752.74	753.41 06-753.41	754.08 06-754.08	754.75 06-754.75	755.41 06-755.41	756.07 06-756.07	756.73 06-756.73	757.36 06-757.36	757.99 06-757.99	758.72 06-758.72	
15	+25	+50	+75	16	+25	+50	+75	17	+25	+50	+75	18	+25	+50	+75	19	+25	+50	+75	20	+25	+50

CERTIFIED CORRECT PLANS

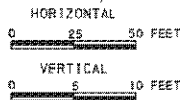
Donald R. Hallock
 Professional Engineer
 Approved by Bureau of Technical Utility Services

PA PUBLIC UTILITY COMMISSION

ATTEST *Rosemary...*
 Secretary

POT STA 20+34.10 SR 3104 SURV & CONSTR E
 POE STA 20+56.28 SR 8130 (NORTH RAMP) CONSTR E, 20' RT
 POT STA 20+34.10 SR 3104 SURV & CONSTR E
 PI STA 20+13.60 SR 8130 (SOUTH RAMP) CONSTR E, 20' RT

PROFILE



FOR PLAN, SEE SHEET 18

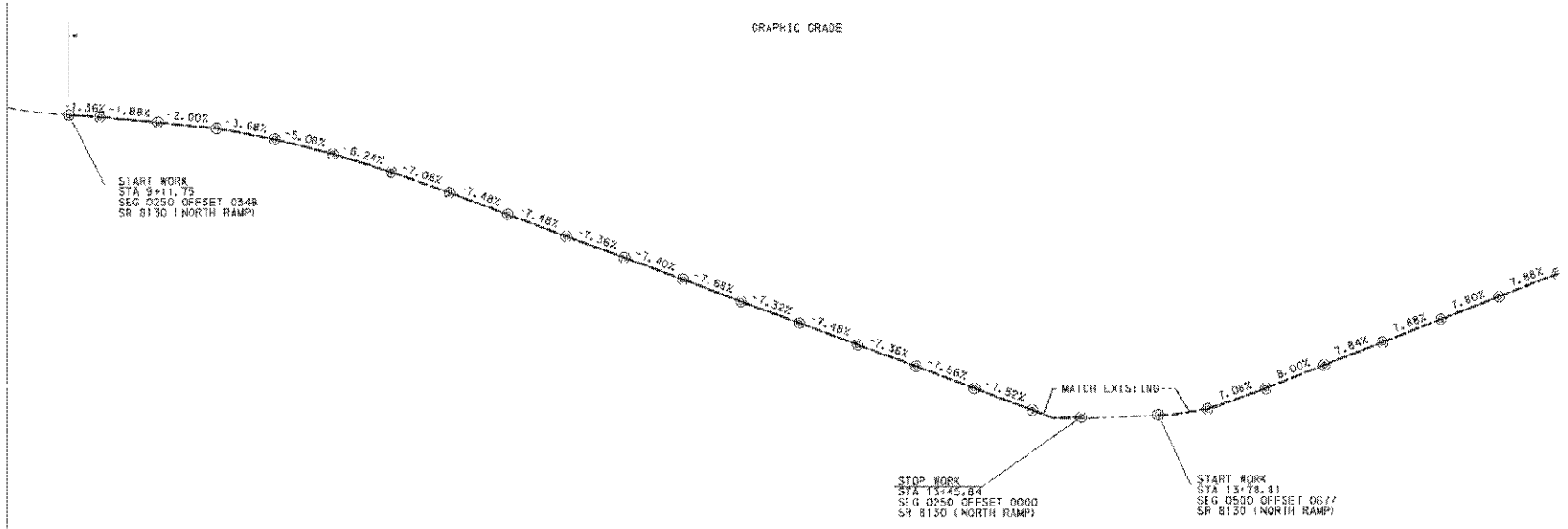
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 User: p.d...
 Date: 11/12/23

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	ALLEGHENY	3104	AG3	20 OF 23
STONE TWP/MCKEE'S ROCKS BOROUGH				
DESIGN NUMBER	REVISIONS	DATE	BY	

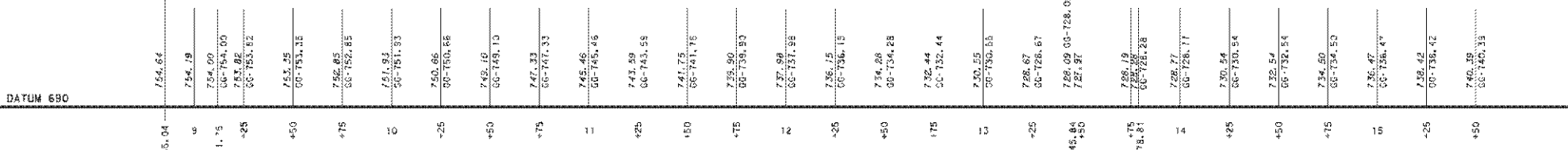
SR 8130 (NORTH RAMP)

GRAPHIC GRADE



CERTIFIED CORRECT PLANS
 Daniel R. Hillen
 Professional Engineer
 Approved by
 Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST
 Secretary

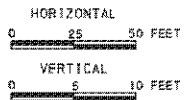
NO. 11
 BASELINE AND CURBLINE ELEVATIONS TO
 MATCH EXISTING PAVEMENT ELEVATIONS



DATUM 690

POT STA 8+90.13 SR 3104 SURV & CONSTR C
 PC STA 8+85.04 SR 8130 (NORTH RAMP) CONSTR B, 20' LT

PROFILE



FOR PLAN, SEE SHEET 15



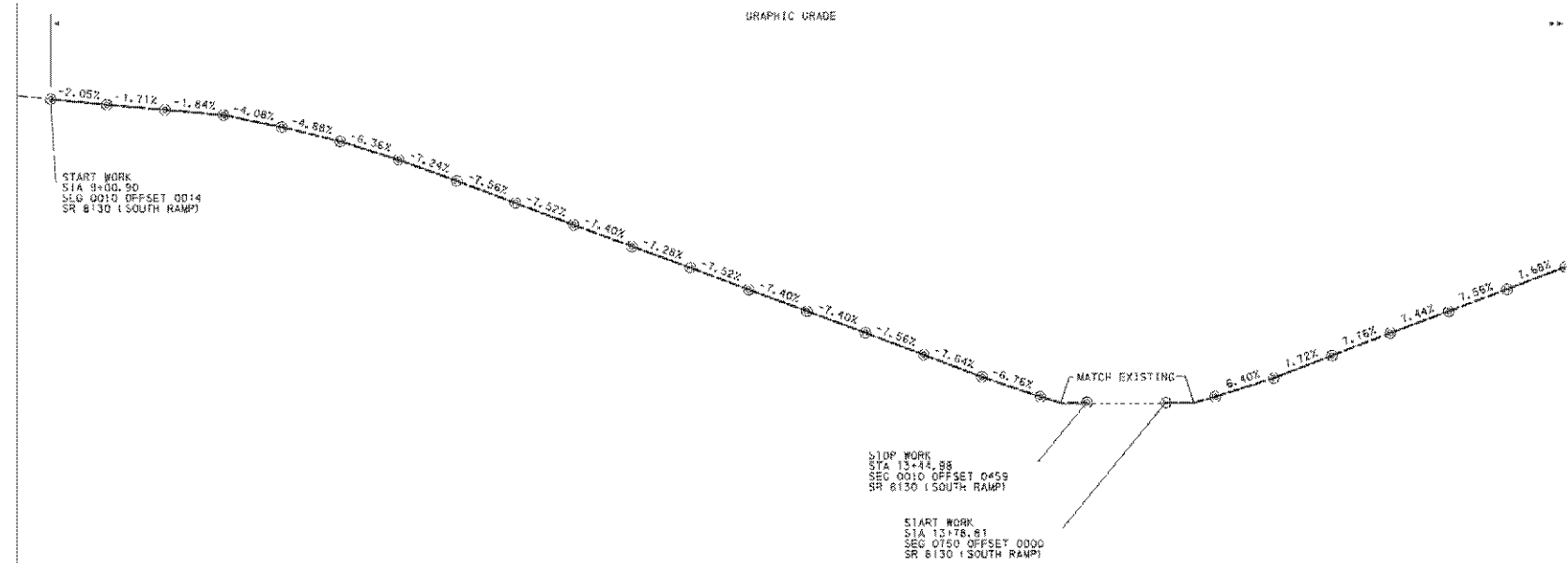
SEE SHEET 21

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 Date: 11/15/23

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	ALLEGHENY	5104	AG3	22 OF 23
STONE TWP/MCKEE'S ROCKS BOROUGH				
REVISION NUMBER	DESCRIPTION	DATE	BY	

SR 8130 (SOUTH RAMP)

GRAPHIC GRADE



SEE SHEET 23

NO. 11
 BASELINE AND CURBLINE
 MATCH EXISTING PAVEMENT

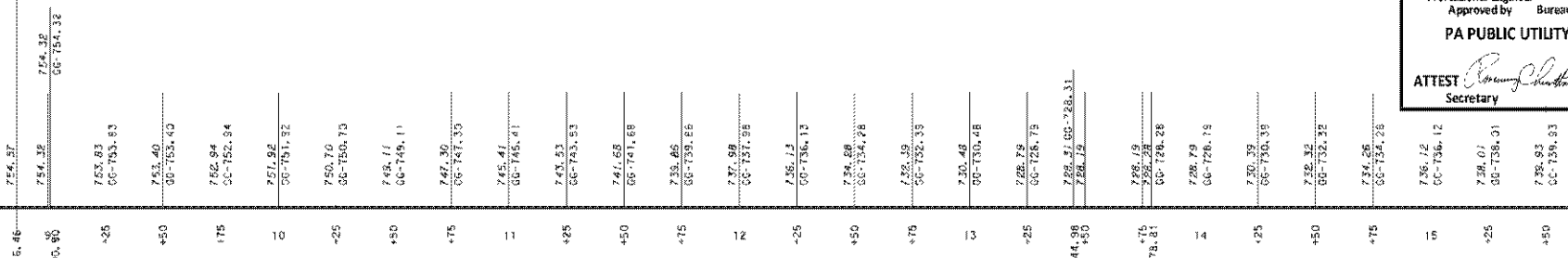
CERTIFIED CORRECT PLANS

David R. Helmer
 Professional Engineer

Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION

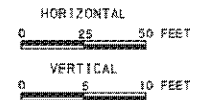
ATTEST *Christina*
 Secretary

DATUM 690



POT STA 8+30.13 SR 3104 SURV & CONSTR 4
 TC STA 8+88.46 SR 8130 (SOUTH RAMP) CONSTR 6, 20' RT

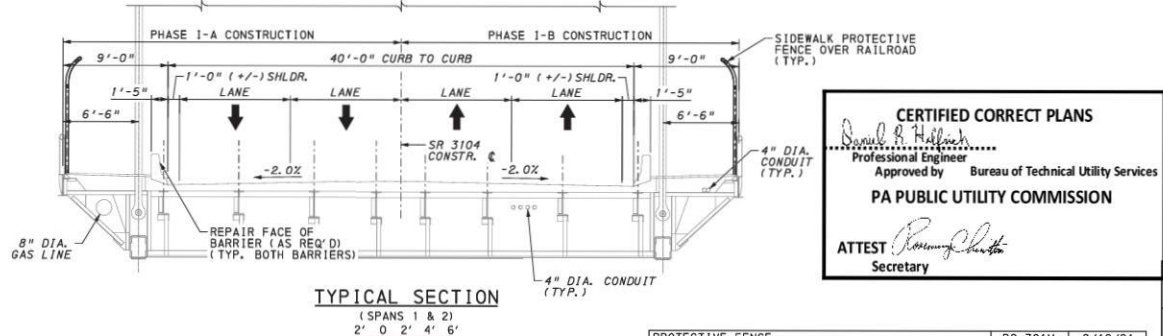
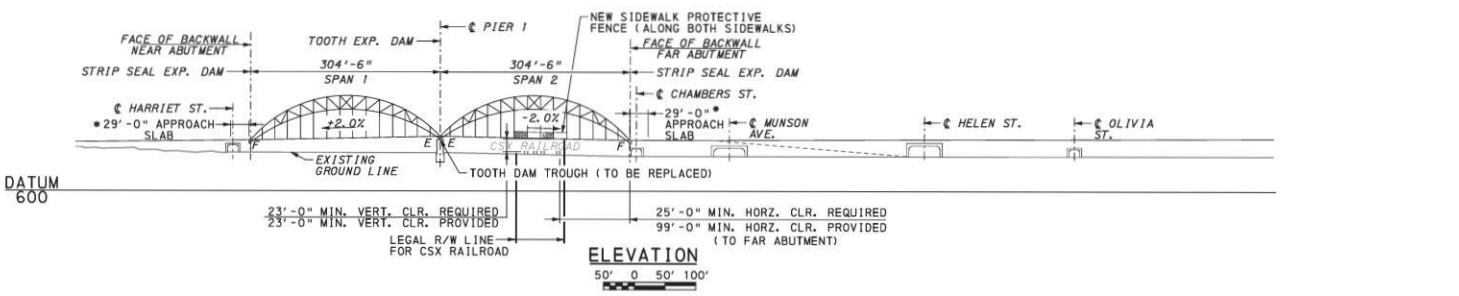
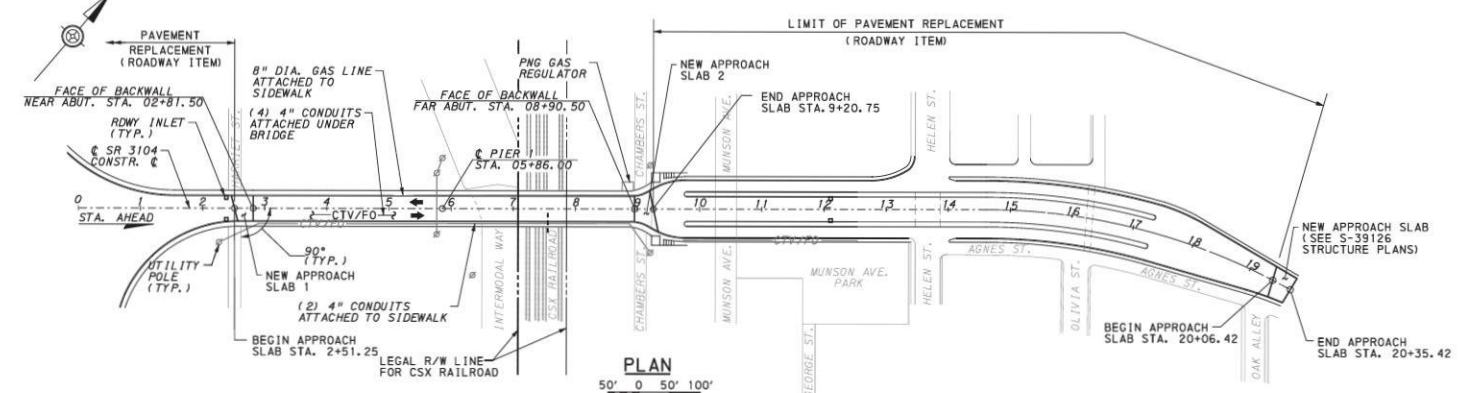
PROFILE



FOR PLAN, SEE SHEET 15



P:\21510222 - Proj - RPAUG - CADDD Structures\PAUF\NAL\Reg11road BR.rdg\SHD101-03.TSD101.dgn



INDEX OF DRAWINGS	
SHEET NO.	TITLE
1	GENERAL PLAN & ELEVATION
2	GENERAL NOTES & QUANTITIES
3	BARRIER REPAIR PLAN
4	CONCRETE REPAIR DETAILS
5	FENCE PLAN & DETAILS
6	TOOTH DAM REPAIR DETAILS - PIER 1
7	APPROACH SLAB 1 PLAN
8	APPROACH SLAB 2 PLAN
9	APPROACH SLAB SECTIONS - 1
10	APPROACH SLAB SECTIONS - 2
11	APPROACH SLAB 1 BAR SCHEDULE
12	APPROACH SLAB 2 BAR SCHEDULE-1
13	APPROACH SLAB 2 BAR SCHEDULE-2

- SCOPE OF WORK:**
- PIER 1 - REPLACE TORN TOOTH EXPANSION DAM DRAINAGE TROUGH.
 - REPLACE APPROACH SLABS 1 AND 2 AT NEAR AND FAR ABUTMENTS RESPECTIVELY.
 - REPAIR FACE OF BRIDGE DECK CONCRETE BARRIERS
 - INSTALL NEW RAILROAD PROTECTIVE FENCE TO THE UPSTREAM AND DOWNSTREAM PORTIONS OF THE SIDEWALK OVER THE RAILROAD
- LEGEND:**
- F - FIXED PIN BEARING
 - E - EXPANSION ROCKER BEARING
 - EXP. - EXPANSION
 - STA. - STATION
 - ➔ - TRAFFIC DIRECTION
 - * - MEASURED ALONG THE CONSTR. C

- NOTES:**
1. FOR GENERAL NOTES, SEE SHEET 2.
 2. FOR CONSTRUCTION PHASING, SEE TRAFFIC CONTROL PLANS.

CERTIFIED CORRECT PLANS
Daniel R. Heflich
Professional Engineer
Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
ATTEST *Secretary*
Secretary

Mark	Description	By	Chk'd.	Rec'd.	Date
REVISIONS					

BMS NO. 02-3104-0010-0320 BRKEY 1868
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
S.R. 3104 SECTION A03
SEG 0010 OFFSET 0320
S.R. 3104 STA. 5+86
OVER CSX TRANSPORTATION
PRESERVATION OF MULTI-SPAN TIED-ARCH BRIDGE
GENERAL PLAN & ELEVATION

PREPARED BY:
GANNETT FLEMING, INC.
FOSTER PLAZA 8, SUITE 400
730 HOLIDAY DRIVE
PITTSBURGH, PA 15220

Christopher T. Vollmer
3-31-22

PROTECTIVE FENCE	BC-701M	2/19/21
ANCHOR SYSTEMS	BC-734M	2/19/21
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	1/31/19
TOOTH EXPANSION DAM FOR PRESTRESSED CONCRETE & STEEL BEAM BRIDGES	BC-762M	1/31/19
PREFORMED NEOPRENE COMPRESSION SEAL JOINT FOR APPROACH SLABS	BC-766M	1/31/19
REINFORCED CONCRETE REPAIR	BC-783M	1/31/19
TYPICAL WATERPROOFING AND EXPANSION DETAILS	BC-788M	1/31/19
CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	6/1/10
BACKFILL AT STRUCTURES	RC-12M	2/8/19
PAVEMENT RELIEF JOINT	RC-24M	2/19/21
DESCRIPTION	DWG. NO.	APP. DATE

RECOMMENDED: *[Signature]*
District Bridge Engineer

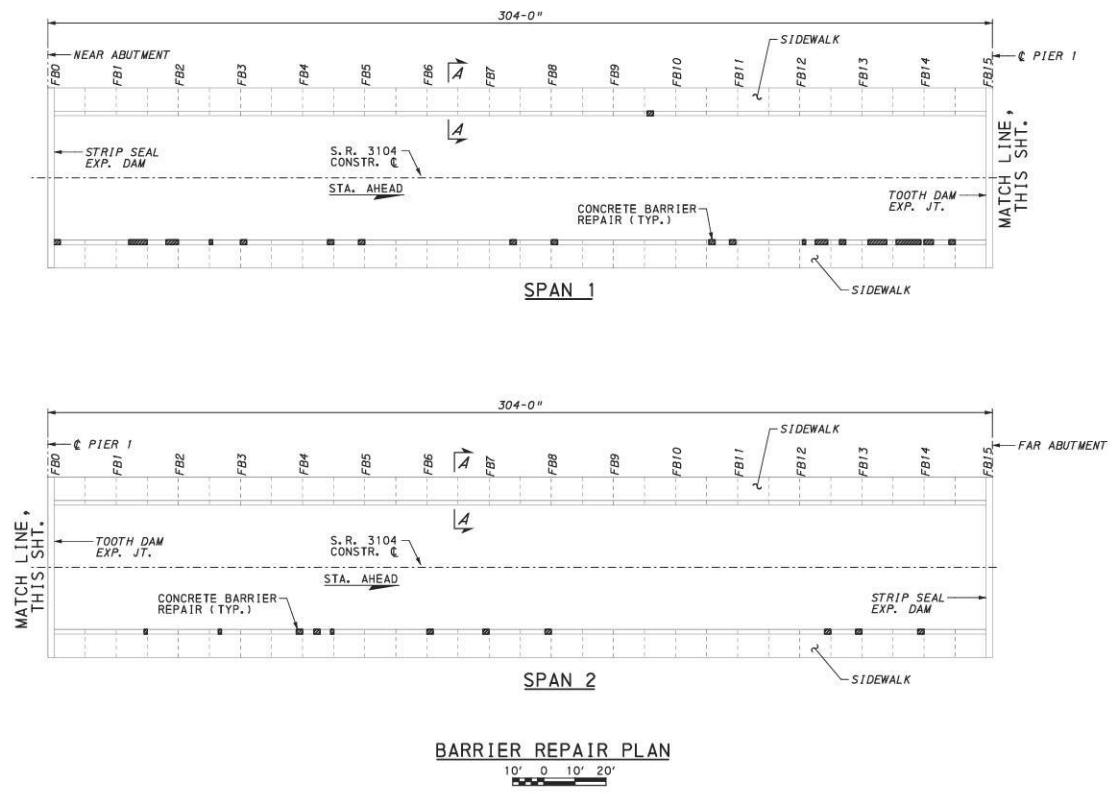
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Date: 2022.04.08 09:52:14 -0400

SHEET 1 OF 13
+SUPPLEMENTAL DRAWINGS
S-39125

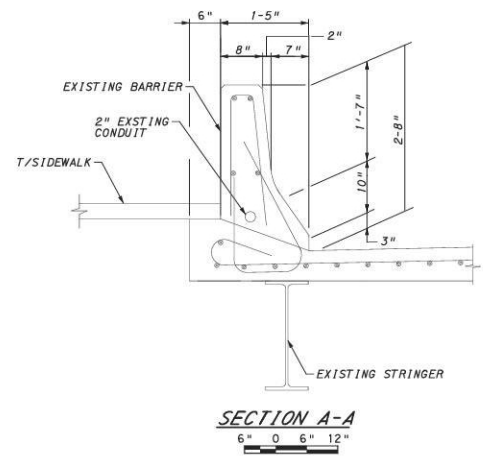
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SUPPLEMENTAL DRAWINGS

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BARRIER REPAIR PLAN
 10' 0 10' 20'



SECTION A-A
 6" 0 6" 12"

- NOTES:**
- REPAIR LOCATIONS SHOWN REPRESENT APPROXIMATE SPALLED OR DELAMINATED SURFACE AREAS. ACTUAL REPAIR DIMENSIONS AND LOCATIONS SHALL BE DETERMINED BY THE REPRESENTATIVE.
 - FOR CONCRETE REPAIR DETAILS, SEE SHEET 4.

LEGEND:

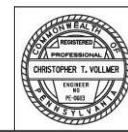
- FB1 - FLOORBEAM NUMBER
- CONCRETE BARRIER REPAIR

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0010-0320 BRKEY 1868
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
 SEGMENT 0010 OFFSET 0320
 S.R. 3104 STA. 5+86
 OVER CSX TRANSPORTATION
 PRESERVATION OF MULTI-SPAN TIED-ARCH BRIDGE
BARRIER REPAIR PLAN

RECOMMENDED APRIL 26, 2022 SHEET 3 OF 13

CERTIFIED CORRECT PLANS
David R. Halberich
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST *Christopher T. Vullmer*
 Secretary



CONSTRUCTION PROCEDURE

REMOVAL, REPAIR AREA PREPARATION, AND REINFORCEMENT INSTALLATION.

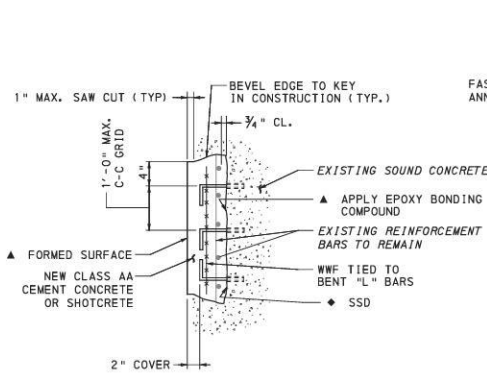
- PROVIDE SATISFACTORY PROTECTIVE SHIELDING BELOW REPAIR AREAS.
- PROVIDE MEANS TO COLLECT CONCRETE AND DEBRIS FROM REMOVAL OPERATIONS AND ABRASIVE BLAST MEDIA USED TO CLEAN THE REPAIR AREAS.
- SOUND AND DETERMINE EXTENT OF REPAIR AREAS IN THE PRESENCE OF A REPRESENTATIVE.
- OUTLINE EDGE OF THE DESIGNATED REPAIR AREAS WITH A 1" MAXIMUM DEPTH SAWCUT.
- WITHIN THE OUTLINED REPAIR AREAS, REMOVE DETERIORATED CONCRETE TO A DEPTH OF 3/4" INCH BEHIND THE FIRST MAT OF REINFORCEMENT BARS TO SOUND CONCRETE. ALLOW UNCOVERED OR EXPOSED REINFORCEMENT BARS TO HAVE A 1/4" INCH CLEARANCE ALL AROUND. IF CONCRETE IS UNSOUND AT A DEPTH OF 3/4" INCH BEHIND REINFORCEMENT BARS, DO NOT REMOVE ADDITIONAL CONCRETE WITHOUT APPROVAL OF THE STRUCTURE CONTROL ENGINEER.
- SQUARE-OUT/BEVEL EDGE OF REPAIR AREAS TO KEY IN CONSTRUCTION. USE HAND TOOLS FOR REMOVING DETERIORATED CONCRETE. USE PNEUMATIC HAMMERS, IF REQUIRED, NOT EXCEEDING AN IMPACT RATING OF 30 FOOT POUNDS, IF DETERIORATED CONCRETE EXTENDS BEYOND THE INITIALLY OUTLINED REPAIR AREA, ENLARGE AREA AS DIRECTED BY THE REPRESENTATIVE.
- AFTER REMOVAL OPERATIONS ARE COMPLETE, REMOVE DEBRIS AND LOOSE MATERIALS. IMMEDIATELY BEFORE WET ABRASIVE BLASTING (WAB), WET REPAIR AREAS WITH LOW PRESSURE WATER. CLEAN REPAIR AREAS, PREPARED SUBSTRATE AND REINFORCEMENT BARS, BY WAB. WAB EXPOSED REINFORCEMENT BARS TO NEAR-WHITE METAL ACCORDING TO SSPC-SP 10 (WAB). ONCE WAB IS COMPLETE, FLUSH REPAIR AREAS WITH WATER TO REMOVE ANY REMAINING ABRASIVE BLAST MEDIA. ENSURE REPAIR AREAS ARE DRY AND FREE OF SPENT ABRASIVE. THEN EPOXY COAT EXPOSED REINFORCEMENT BARS WITHIN THE SAME WORKDAY AS WAB. REBLAST REINFORCEMENT THAT ARE NOT EPOXY COATED WITHIN THE SAME WORKDAY OR DO NOT MEET SSPC-SP 10 (WAB). SPLICE DAMAGED OR HEAVILY CORRODED REINFORCEMENT BARS AT 50% OR MORE SECTION LOSS AS SHOWN ON STANDARD DRAWING BC-136M. IF ENOUGH SPLICE LENGTH IS NOT AVAILABLE, DRILL NEW DOWEL HOLES AND PLACE DOWEL BARS AS DIRECTED.
- PLACE EPOXY COATED NO. 4 BENT "L" REINFORCEMENT BARS IN A 1'-0" CENTER-TO-CENTER MAXIMUM SPACED GRID. ANCHOR INTO SOUND CONCRETE WITH EPOXY ANCHORING SYSTEM.
- ATTACH WWF TO THE BENT "L" REINFORCEMENT BARS WITH ANNEALED IRON WIRE AT A MAXIMUM SPACING OF 1'-0" IN EACH DIRECTION. IF USING 6X6 WWF, PLACE A SECOND LAYER OF 6X6 WWF AND STAGGER TO ACHIEVE A 3X3 GRID SPACING.
- REPAIR CONCRETE DAMAGED DURING REPAIR OPERATIONS TO THE SATISFACTION OF THE REPRESENTATIVE AT NO ADDITIONAL COST TO THE DEPARTMENT.
- PROPERLY DISPOSE COLLECTED CONCRETE, DEBRIS, AND ABRASIVE BLAST MEDIA.

CONCRETE PLACEMENT

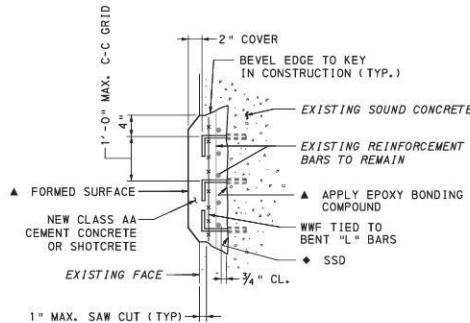
- ▲ : CONVENTIONAL METHOD
- SET FORMS TO PROVIDE MINIMUM CONCRETE COVER OF 2 INCHES. IF ENOUGH CONCRETE COVER ON EXISTING REINFORCEMENT BARS IS NOT AVAILABLE, HAUNCH REPAIR OUTWARD.
- MAINTAIN EXISTING CHAMFERS.
- AIR-BLAST REPAIR AREAS WITH OIL-FREE COMPRESSED AIR TO REMOVE ANY REMAINING CONTAMINANTS DETRIMENTAL TO THE BOND OF NEW CONCRETE. APPLY EPOXY BONDING COMPOUND TO REPAIR AREAS WHILE EPOXY BONDING COMPOUND IS STILL TACKY. PLACE CLASS AA CEMENT CONCRETE WITH NO. 8 COARSE AGGREGATE. DO NOT PLACE CONCRETE IF COMPOUND IS NO LONGER TACKY OR HAS HARDENED. RECOAT COMPOUND THAT IS NO LONGER TACKY. WIRE BRUSH HARDENED COMPOUND AND RECOAT REPAIR AREA.
- WATER CURE REPAIR AREAS.
- ◆ : SHOTCRETE METHOD
- PROVIDE MINIMUM CONCRETE COVER OF 2 INCHES. IF ENOUGH CONCRETE COVER ON EXISTING REINFORCEMENT BARS IS NOT AVAILABLE, HAUNCH REPAIR OUTWARD.
- MAINTAIN EXISTING CHAMFERS.
- AIR-BLAST REPAIR AREAS WITH OIL-FREE COMPRESSED AIR TO REMOVE ANY REMAINING CONTAMINANTS DETRIMENTAL TO THE BOND OF NEW CONCRETE.
- SATURATE PREPARED CONCRETE SUBSTRATE WITH CLEAN WATER THE DAY BEFORE SHOTCRETE APPLICATION. BRING WETTED SURFACES TO A SATURATED SURFACE DRY (SSD) CONDITION BEFORE APPLICATION OF SHOTCRETE. DO NOT APPLY SHOTCRETE TO A DRY SURFACE, OR TO A SURFACE WITH FREE SURFACE WATER.
- WATER CURE REPAIR AREAS. LIQUID MEMBRANE CURING COMPOUND MAY BE USED ONLY WHEN ACCEPTED BY THE REPRESENTATIVE.

REPAIR DETERIORATED CONCRETE (FOR INFORMATION ONLY)	
(THIS ITEM INCLUDES PAYMENT FOR THE FOLLOWING MATERIALS AND THEIR INSTALLATIONS)	
DOWEL HOLES	SECTION 1003, DIAMETER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS
REINFORCEMENT BARS (EPOXY COATED)	SECTION 709.1
EPOXY ANCHORING SYSTEM	BULLETIN 15 AND MANUFACTURER'S RECOMMENDATIONS
WELDED WIRE FABRIC (WWF) EPOXY OR GALVANIZED	SECTION 709.3, 3x3, 4x4, OR 6x6 WWF MADE OF 8, 10, OR 11 GAUGE WIRE
ANNEALED IRON WIRE	ASTM A684
▲ FORMS	SECTION 1001.2(h)
▲ EPOXY BONDING COMPOUND	ASTM C881 TYPE II, GRADE 2
▲ CLASS AA CEMENT CONCRETE	SECTION 704 EXCEPT USE NO. 8 COARSE AGGREGATE
◆ SHOTCRETE	SECTION 1043.2(c)

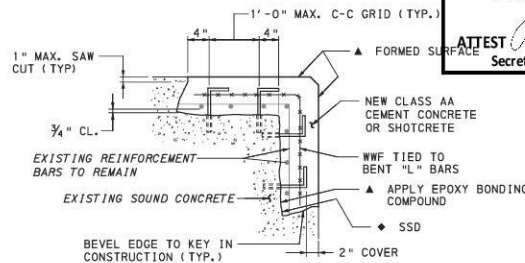
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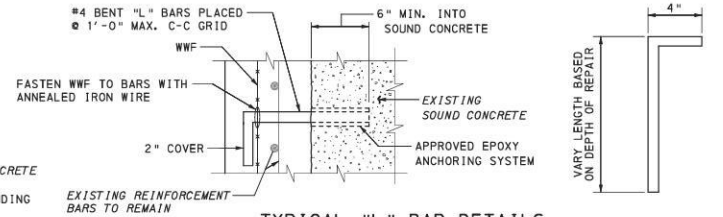
TYPICAL REPAIR DETAIL
(NOT TO SCALE)



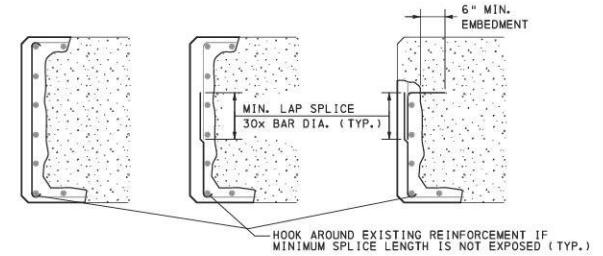
REPAIR FOR LESS THAN 2\"/>



TYPICAL CORNER REPAIR DETAIL
(NOT TO SCALE)



TYPICAL "L" BAR DETAILS
(NOT TO SCALE)



SPLICE DETAILS FOR PIER CAP STIRRUPS WITH ≥ 50% SECTION LOSS
(NOT TO SCALE)

LEGEND

- ▲ : CONVENTIONAL METHOD (FORM AND PLACE) ONLY
- ◆ : SHOTCRETE METHOD ONLY
- SSD : SATURATED SURFACE DRY
- WWF : WELDED WIRE FABRIC

NOTES

CERTIFIED CORRECT PLANS.

David R. Hillrich
Professional Engineer
Approved by Bureau of Technical Utility Services

PA PUBLIC UTILITY COMMISSION

ATTEST
Christopher T. Vollmer
Secretary

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0010-0320 BRKEY 1868

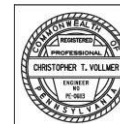
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
S.R. 3104 SECTION A03

SEGMENT 0010 OFFSET 0320
S.R. 3104 STA. 5+86

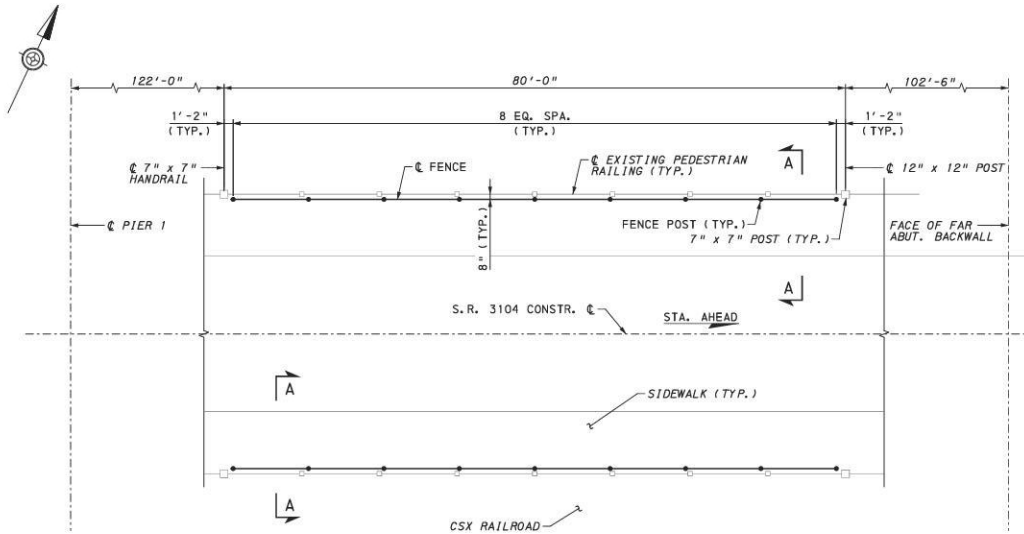
PRESERVATION OF MULTI-SPAN TIED-ARCH BRIDGE CONCRETE REPAIR DETAILS

RECOMMENDED APRIL 26, 2022 SHEET 4 OF 13

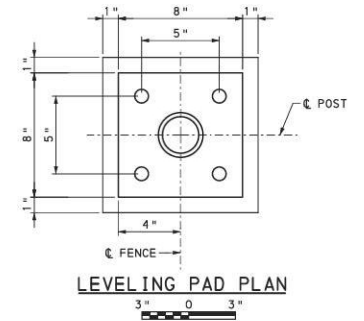


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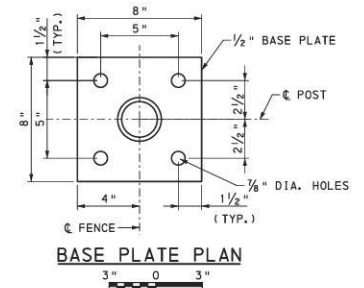
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FENCE LAYOUT PLAN
(SPAN 2)
2' 0" 4' 8'

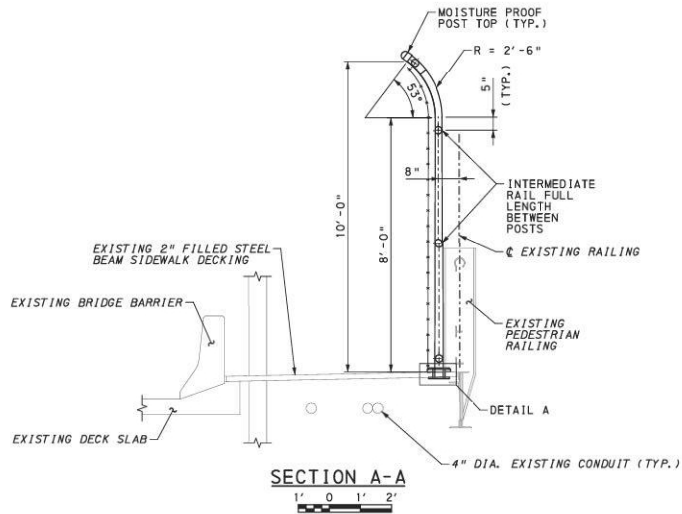


LEVELING PAD PLAN

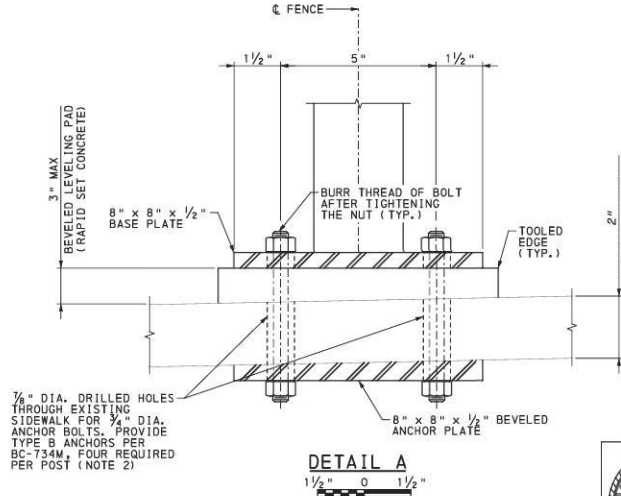


BASE PLATE PLAN

CERTIFIED CORRECT PLANS
Donald R. Hillman
Professional Engineer
Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
ATTEST *Rebecca Shuster*
Secretary



SECTION A-A



DETAIL A

NOTES:

- FOR ADDITIONAL DETAILS, SEE BC-701M.
- USE TEMPLATE FOR DRILLING HOLES THROUGH EXISTING SIDEWALK.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0010-0320 BRKEY 1868

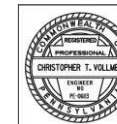
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
S.R. 3104 SECTION A03

SEGMENT 0010 OFFSET 0320
S.R. 3104 STA. 5+86

OVER CSX TRANSPORTATION
PRESERVATION OF MULTI-SPAN TIED-ARCH BRIDGE
FENCE PLAN & DETAILS

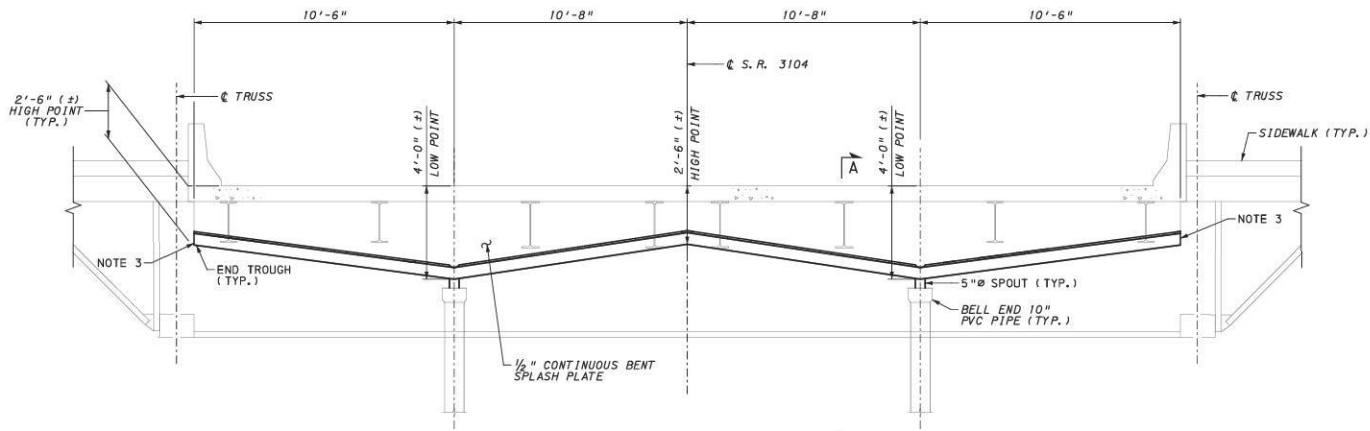
RECOMMENDED APRIL 26, 2022 SHEET 5 OF 13



DES: CMC DWN: CMC CHK: CTV

S-39125

P:\Vg\me-pw\5691\ey.com\g\me1-pw-01\Documents\Pr-j\secta\60361\2020_Response\A\2\NE_Prj\WPA\cadd\Structural\INAL\Railroad Br 1\cadd\SH16_Tooth Dam.dgn
 3/31/2022 10:02:29 AM



TOOTH DAM ELEVATION



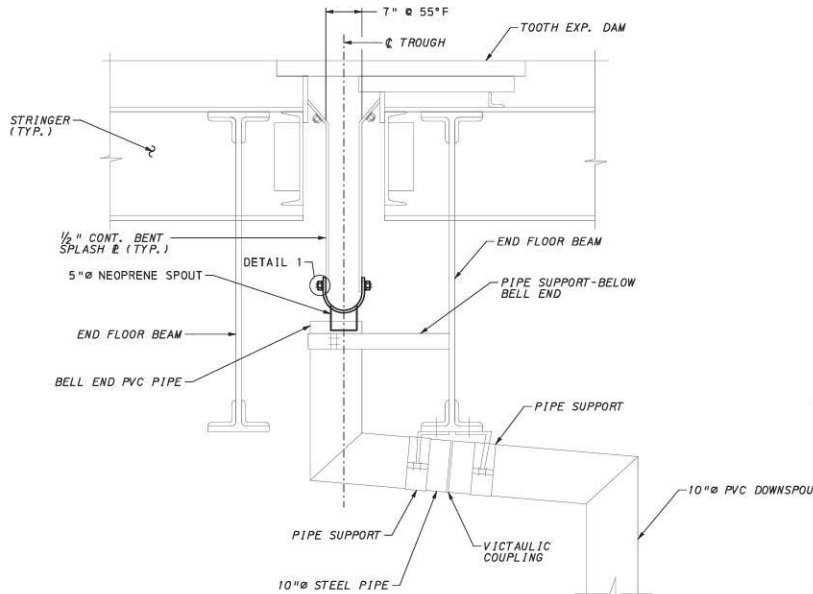
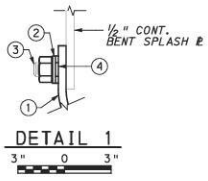
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NOTES:

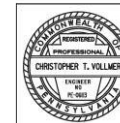
1. FIELD MEASURE THE EXISTING TROUGH LAYOUT AND CONNECTING ELEMENTS PRIOR TO SHOP DRAWING DEVELOPMENT AND FABRICATION OF THE NEW TROUGH.
2. ACCESS THE TOOTH DAM TO PERFORM REPAIRS FROM S.R. 3104 ABOVE. PROVIDE PLATFORM SYSTEM IF REQUIRED (INCIDENTAL TO ITEM 9000-0001).
3. ENDS OF DRAIN TROUGH TO BE CLOSED AND MADE WATER TIGHT IN A MANNER ACCEPTABLE TO THE DEPARTMENT.
4. SEE SPECIAL PROVISION FOR ADDITIONAL REQUIREMENTS.
5. WORK ON TOOTH DAM TO BE COMPLETE UNDER PHASE 1-A CONSTRUCTION.

LEGEND:

- ① - NEW DRAINAGE TROUGH. SEE SPECIAL PROVISION AND PUBLICATION 408 SECTION 1020.2 FOR MATERIAL SPECIFICATION
- ② - 3/4" X 3" Ø STAINLESS STEEL (TYPE 304), FULL LENGTH OF DRAIN TROUGH. MATCH EXISTING HOLE SPACING.
- ③ - EXISTING 3/4" DIA. STAINLESS STEEL STUDS TO REMAIN. REPLACE NUTS AND WASHERS WITH NEW SELF-LOCKING NUT AND WASHER.
- ④ - APPLY 1/4" BEAD OF AN EXTERIOR RATED SILICONE CAULK SEALANT PRIOR TO ASSEMBLY.



CERTIFIED CORRECT PLANS
David R. Hillerich
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST *Christopher T. Vollmer*
 Secretary



Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0010-0320 BRKEY 1868

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
 S.R. 3104 SECTION A03

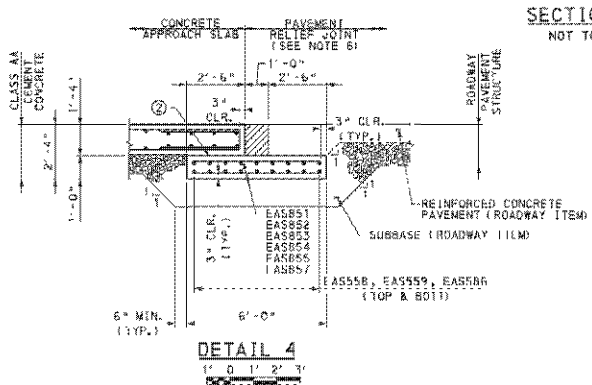
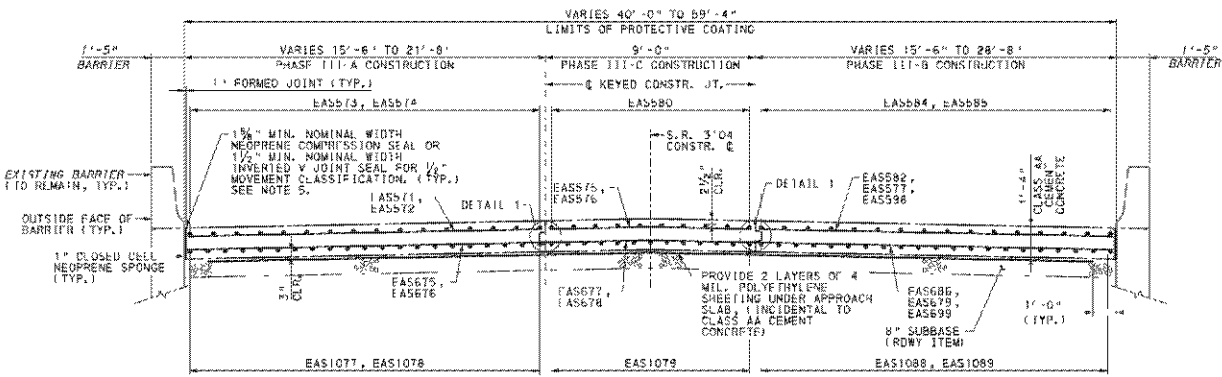
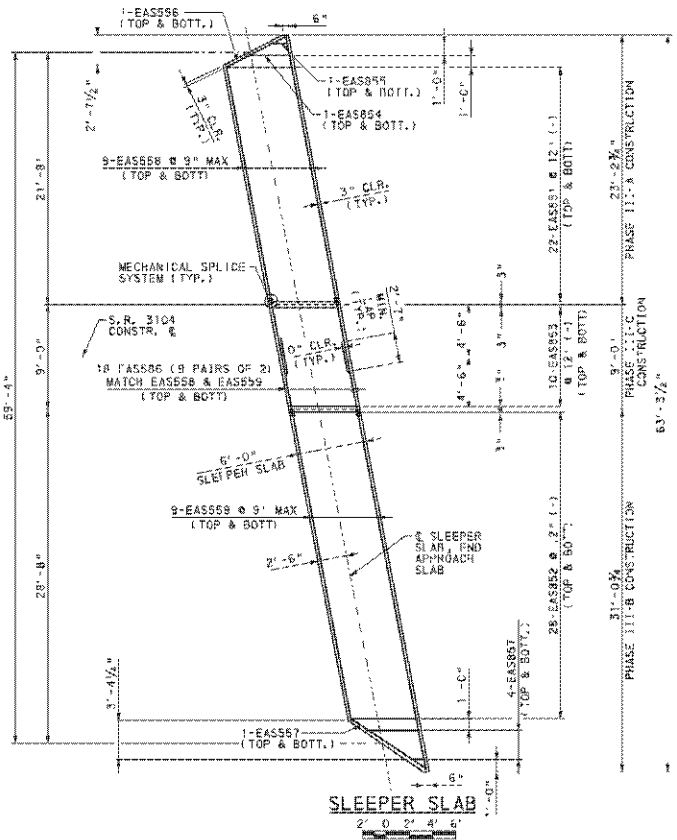
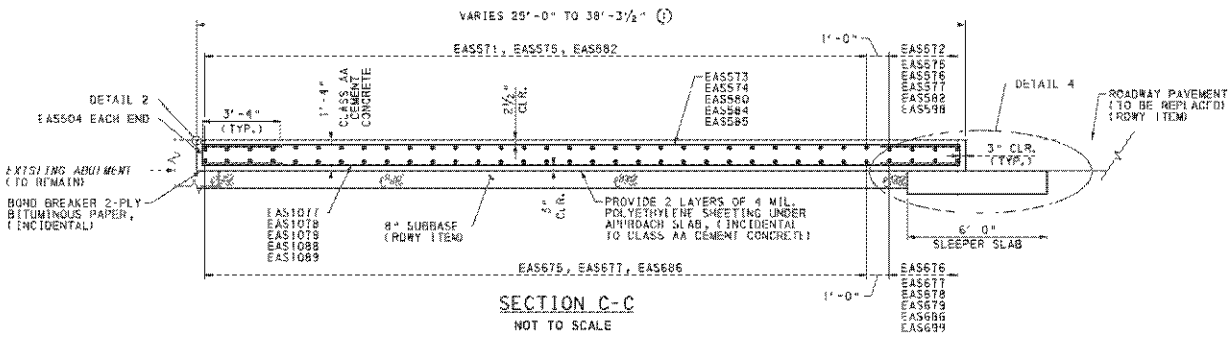
SEGMENT 0010 OFFSET 0320
 S.R. 3104 STA. 5+86

OVER CSX TRANSPORTATION
 PRESERVATION OF MULTI-SPAN TIED-ARCH BRIDGE
TOOTH DAM REPAIR DETAILS - PIER 1

RECOMMENDED APRIL 26, 2022 SHEET 6 OF 13

S-39125

DATE: 02-26-2013 11:29:39 AM BY: CMC 11/26/2013 11:29:39 AM...
BY: CMC | DWN: CMC | CHK: CTV



NOTES:

- 1. FOR REINFORCEMENT BAR SCHEDULES, SEE SHEETS 12 AND 13.
- 2. MATCH EXISTING TOP OF SLAB ELEVATIONS AND CROSS SLOPES.
- 3. FOR DETAIL 1, SEE SHEET 7.
- 4. FOR DETAIL 2, SEE SHEET 9.
- 5. USE ONLY APPROVED SEALS, AS LISTED IN SHEET 15. INSTALL JOINT SEALS TO A MINIMUM DEPTH WITH THE TOP OF THE SEAL FROM 1/4" TO 1/2" BELOW THE LEVEL OF THE PAVEMENT SURFACE. MAKE THE TOP EDGES OF THE CONTACT SURFACES ON BOTH SIDES OF THE SEAL AT THE SAME ELEVATION.
- 6. FOR DETAILS NOT SHOWN, REFER TO RC-24H.

LEGEND:

- ① MATCH EXISTING DIMENSIONS. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION OF REINFORCEMENT BARS.
- ② TROWEL SMOOTH AND PLACE 2 LAYERS OF 4 MIL. POLYETHYLENE SHEETING AS BOND BREAKER (INCIDENTAL).

Mark	Description	By	CHK'd	Rev'd	Date
REVISIONS					

BMS NO. 02-3104-0010-0320 BRKEY 1868

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
S.R. 3104 SECTION A03
 SEGMENT 0010 OFF-SE1 0320
 S.R. 3104 STA. 5+86
 OVER CSX TRANSPORTATION
 PRESERVATION OF MULTI-SPAN TIED-ARCH BRIDGE
APPROACH SLAB SECTIONS - 2

SHEET 10 OF 13

RECOMMENDED APRIL 26, 2006

CERTIFIED CORRECT PLANS

Professional Engineer

Approved by Bureau of Technical Utility Services

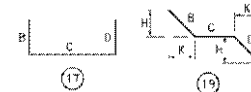
PA PUBLIC UTILITY COMMISSION

ATTEST Secretary



REINFORCEMENT BAR SCHEDULE

MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	F/R	G	H	J	K	REMARKS
PHASE															
PHASE 1-A															
EAS501	5	4	1'-0" TO 12'-9"	STR											VARY 1 EA. @ 3'-11"
EAS502	5	30	13'-1"	STR											
EAS505	5	14	29'-10" TO 32'-5 1/2"	STR											VARY 1 EA. @ 2 1/2"
EAS512	5	14	13'-6"	STR											MECHANICAL SPLICE SYSTEM ONE END
EAS513	5	28	7'-6 1/2"	1/		3-4"	10 1/2"	3-4"							
EAS601	6	4	1'-0" TO 12'-9"	STR											VARY 1 EA. @ 3'-11"
EAS602	6	30	13'-3"	STR											MECHANICAL SPLICE SYSTEM ONE END
EAS801	8	28	4'-8"	STR											
EAS1002	10	19	29'-10" TO 32'-5 1/2"	STR											VARY 1 EA. @ 1 1/2"
PHASE 1-B															
EAS401	4	2	4'-0"	STR											
EAS402	4	2	6'-10"	1/		2'-1"	4'-9"								
EAS503	5	3	1'-4" TO 11'-4"	STR											VARY 1 EA. @ 5'-0"
EAS504	5	25	13'-1"	STR											
EAS506	5	14	24'-6 1/2" TO 27'-1 1/2"	STR											VARY 1 EA. @ 2 1/2"
EAS515	5	28	7'-6 1/2"	1/		3-4"	10 1/2"	3-4"							
EAS514	5	14	13'-6"	STR											MECHANICAL SPLICE SYSTEM ONE END
EAS603	6	3	1'-4" TO 11'-4"	STR											VARY 1 EA. @ 5'-0"
EAS604	6	25	13'-3"	STR											MECHANICAL SPLICE SYSTEM ONE END
EAS802	8	28	4'-8"	STR											
EAS1001	10	19	24'-6 1/2" TO 27'-1 1/2"	STR											VARY 1 EA. @ 1 1/2"
PHASE 11-C															
EAS401	4	2	4'-0"	STR											
EAS402	4	2	6'-10"	1/		2'-1"	4'-9"								
EAS403	4	2	6'-8"	1/		5'-8"	1'-0"			5'-1 1/2"		4'-8 1/2"			
EAS509	5	14	21'-3" TO 29'-9"	STR											VARY 1 EA. @ 2 1/4"
EAS510	5	28	12'-10"	STR											VARY 1 EA. @ 5'-0"
EAS511	5	2	4'-4" TO 9'-4"	STR											
EAS513	5	28	7'-6 1/2"	1/		3-4"	10 1/2"	3-4"							THREAD ONE END BY 3"
EAS516	5	28	8'-3"	STR											
EAS605	6	56	3'-4"	STR											THREAD ONE END BY 3"
EAS906	6	2	4'-8" TO 9'-8"	STR											VARY 1 EA. @ 5'-0"
															THREAD ONE END BY 3"
EAS803	8	28	4'-8"	STR											
EAS1003	10	19	27'-3" TO 29'-9"	STR											VARY 1 EA. @ 1 1/2"



CERTIFIED CORRECT PLANS
David R. Hallinan
Professional Engineer
Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
ATTEST *Ramona Smith*
Secretary

BAR MARK LEGEND

CODE LETTERS FOR BAR MARKS

NOTES:



EAS = APPROACH SLAB

ALL DIMENSIONS ARE OUT-TO-OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180° AND 135° HOOKS.

ALL DIMENSIONS ON 180° HOOKS ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOK SIZES ARE REQUIRED.

FIGURES IN CIRCLES SHOW TYPES.

FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-136M.

REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY PRIOR TO BIDDING AND FABRICATION.

3" THREAD LENGTH, INCLUDED IN DETAIL DIMENSIONS.

Mark	Description	By	CHK'd	Revs'd	Date

BMS NO. 02-3104-0010-0320 BRKEY 1868

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
S.R. 3104 SECTION A03

SEGMENT 0010 OFFSEI 0320
S.R. 3104 STA. 5+86

OVER CSX TRANSPORTATION
PRESERVATION OF MULTI-SPAN TIED-ARCH BRIDGE
APPROACH SLAB 1 BAR SCHEDULE

RECOMMENDED APRIL 26, 2022

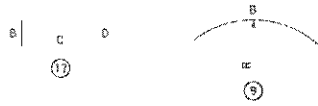
SHEET 11 OF 13



PA 1/2" DIA. 20' SPAN BRIDGE OVER CSX TRANSPORTATION PRESERVATION OF MULTI-SPAN TIED-ARCH BRIDGE APPROACH SLAB 2 BAR SCHEDULE 2020-07
 PROJECT NO. 02-3104-0010-0320 BRKEY 1868
 DRAWING NO. 12 OF 13
 DATE: 04/26/2022

REINFORCEMENT BAR SCHEDULE

MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	F/R	G	H	J	K	REMARKS
PHASE III-A															
EAS504	5	37	7'-6 1/2"	17		3'-4"	10 1/2"	3'-4"							
EAS556	5	2	9'-9"	STR											
EAS598	5	18	20'-10" TO 23'-4 1/2"	STR											VARY 2 EACH @ 3 3/8" MECHANICAL SPLICE SYSTEM ONE END
EAS571	5	24	14'-7" TO 20'-9"	STR											VARY 1 EACH @ 3 1/4" (-)
EAS572	5	5	3'-1" TO 16'-7"	STR											VARY 1 EACH @ 3'-4 1/2"
EAS573	5	16	24'-6" TO 27'-3"	STR											VARY 1 EACH @ 2 1/2" (-)
EAS574	5	5	2'-11" TO 17'-1"	STR											VARY 1 EACH @ 3'-6 1/2"
EAS593	5	1	24'-2"	9		24'-2"				R = 62'-7 3/8"					
EAS599	5	1	21'-2 1/2"	STR											
EAS675	6	24	14'-8" TO 20'-11"	STR											VARY 1 EACH @ 3 1/4" (-) MECHANICAL SPLICE SYSTEM ONE END
EAS676	6	5	3'-3" TO 16'-9"	STR											VARY 1 EACH @ 3'-4 1/2" MECHANICAL SPLICE SYSTEM ONE END
EAS694	6	1	24'-0 1/2"	9		24'-0 1/2"				R = 62'-7 3/8"					
EAS696	6	1	21'-4 1/2"	SM											MECHANICAL SPLICE SYSTEM ONE END
EAS851	8	44	5'-9"	STR											
EAS854	8	2	3'-8 1/4"	STR											
EAS855	8	2	1'-6"	STR											
EAS1077	10	21	24'-6" TO 27'-3"	STR											VARY 1 EACH @ 1 3/4"
EAS1078	10	6	2'-11" TO 17'-1"	STR											VARY 1 EACH @ 2'-10"
PHASE III-B															
EAS461	4	8	6'-4"	STR											
EAS504	5	41	7'-6 1/2"	17		3'-4"	10 1/2"	3'-4"							
EAS555	5	1	4'-10 1/2"	17		2'-0"	10 1/2"	2'-0"							
EAS557	5	2	7'-11"	STR											
EAS559	5	18	27'-2 1/2" TO 31'-6 1/2"	STR											VARY 2 EACH @ 5 3/8" MECHANICAL SPLICE SYSTEM ONE END
EAS577	5	2	25'-2" TO 23'-10"	STR											VARY 1 EACH @ 8"
EAS582	5	20	14'-9" TO 22'-7 1/2"	STR											VARY 1 EACH @ 3 3/4"
EAS584	5	16	29'-3" TO 31'-11"	STR											VARY 1 EACH @ 2 7/8"
EAS585	5	10	3'-11" TO 25'-8"	STR											VARY 1 EACH @ 2'-5"
EAS597	5	1	37'-5 1/2"	9		37'-5 1/2"				R = 62'-7 1/2"					
EAS598	5	5	2'-3" TO 20'-3"	STR											VARY 1 EACH @ 4'-6"
EAS599	5	1	28'-1"	STR											
EAS670	6	2	23'-4" TO 24'-0"	SM											VARY 1 EACH @ 8" MECHANICAL SPLICE SYSTEM ONE END
EAS686	6	28	14'-11" TO 22'-9 1/2"	STR											VARY 1 EACH @ 3 1/2" MECHANICAL SPLICE SYSTEM ONE END
EAS697	6	1	28'-3"	STR											MECHANICAL SPLICE SYSTEM ONE END
EAS698	6	1	37'-5 1/2"	9		37'-5 1/2"				R = 62'-7 1/2"					
EAS699	6	5	2'-3" TO 20'-3"	STR											VARY 1 EACH @ 4'-6"
EAS852	8	55	5'-9"	STR											
EAS857	8	8	1'-0" TO 4'-6"	STR											VARY 1 EACH @ 1'-2"
EAS1088	10	21	29'-3" TO 31'-11"	STR											VARY 1 EACH @ 1 3/4"
EAS1089	10	12	3'-11" TO 25'-8"	STR											VARY 1 EACH @ 1'-11 1/2"



CERTIFIED CORRECT PLANS

David R. Hillisch
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST *Robert J. Smith*
 Secretary



CODE LETTERS FOR BAR MARKS
 EAS = APPROACH SLAB

NOTES:
 ALL DIMENSIONS ARE OUT-TO-OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180° AND 135° HOOKS.
 "J" DIMENSIONS ON 180° HOOKS ONLY WHEN NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOK SIZES ARE REQUIRED.
 FIGURES IN CIRCLES SHOW TYPES.
 FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-756M.
 REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY PRIOR TO BIDDING AND FABRICATION.
 "J" THREAD LENGTH INCLUDED IN DETAIL DIMENSION AS APPLICABLE.



Mark	Description	By	CHK'd	Rev'd	Date

BMS NO. 02-3104-0010-0320 BRKEY 1868
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
 SEGMENT 0010 OFFSEI 0320
 S.R. 3104 STA. 5+86
 OVER CSX TRANSPORTATION
 PRESERVATION OF MULTI-SPAN TIED-ARCH BRIDGE
APPROACH SLAB 2 BAR SCHEDULE-1

RECOMMENDED: _____ APRIL 26, 2022 _____ SHEET 12 OF 13

P:\A\02-3104-0010-0320 BRKEY 1868\APPROX SLAB 2 BAR SCHEDULE 2 2002.dwg
 DES: CMC | CHN: CMC | CHK: CTV |
 DATE: 10/25/10
 PLOT DATE: 02/28/2011
 PLOT TIME: 10:28:34 AM

REINFORCEMENT BAR SCHEDULE

MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	F/R	G	H	J	K	REMARKS
EAS504	5	20	7'-6 1/2"	IT		3'-4"	10 1/2"	3'-4"							
EAS573	5	28	8'-8"	STR											
EAS576	5	2	1'-2" TO 6'-1"	STR											VARY 1 EACH @ 4'-11"
EAS560	5	1	8'-10"	STR											VARY 1 EACH @ 2 1/4' (-) TIRREAD ONE END BY 3"
EAS580	5	10	27'-5 1/2" TO 29'-2"	STR											TIRREAD ONE END BY 3"
EAS586	5	36	6'-2"	STR											VARY 1 EACH @ 4'-11" TIRREAD ONE END BY 3"
EAS677	6	50	6'-4"	STR											TIRREAD ONE END BY 3"
EAS678	6	2	1'-5" TO 6'-4"	STR											VARY 1 EACH @ 4'-11" TIRREAD ONE END BY 3"
EAS660	6	2	6'-5"	STR											TIRREAD ONE END BY 3"
EAS853	8	20	5'-9"	STR											
EAS1079	10	13	27'-6 1/2" TO 29'-2"	STR											VARY 1 EACH @ 1 3/4"

BAR MARK LEGEND EAS501 EPOXY COATED CODE LETTER SIZE NUMBERING	CODE LETTERS FOR BAR MARKS (AS = APPROACH SLAB)
--------------------------------------------------------------------------------------	-----------------------------------------------------------

- NOTES:**
- ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180° AND 150° HOOKS.
 - "J" DIMENSIONS ON 180° HOOKS ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOK SIZES ARE REQUIRED.
 - FIGURES IN CIRCLES SHOW TYPES.
 - FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
 - REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY PRIOR TO BIDDING AND FABRICATION.
 - 3" THREAD LENGTH INCLUDED IN DETAIL DIMENSION AS APPLICABLE.

B | c | D
 11

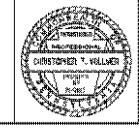
CERTIFIED CORRECT PLANS

David R. Hildebrand
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION

ATTEST *Barbara J. Smith*
 Secretary

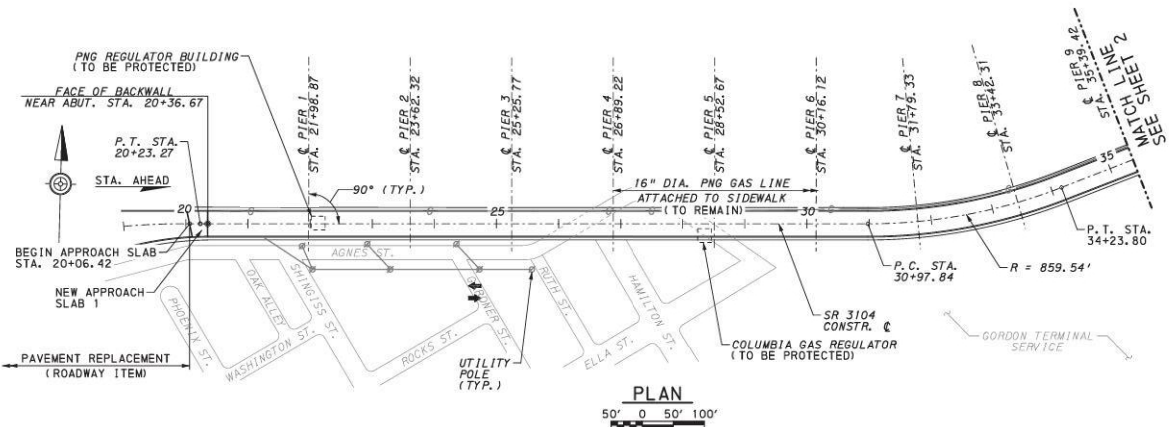
Mark	Description	By	CHK'd	Revised	Date
REVISIONS					

BMS NO. 02-3104-0010-0320 BRKEY 1868
 COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
 ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
 SEGMENT 0010 OFFSE1 0320
 S.R. 3104 STA. 5+86
 OVER CSX TRANSPORTATION
 PRESERVATION OF MULTI-SPAN TIED-ARCH BRIDGE
 APPROACH SLAB 2 BAR SCHEDULE-2

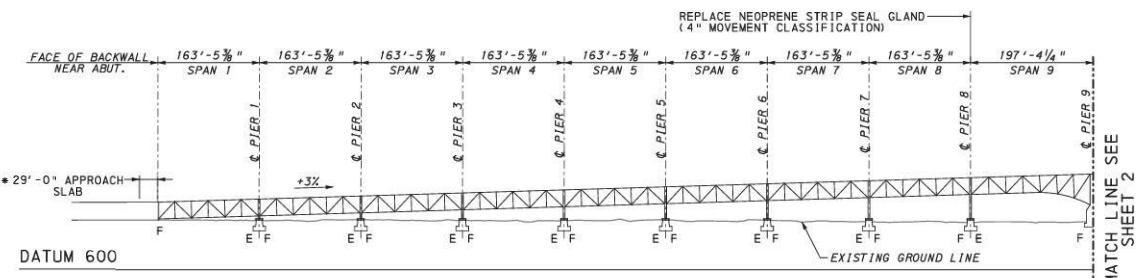


RECOMMENDED	APRIL 26, 2012	SHEET 13 OF 13
		S-39125

DES: CMC | CHN: CMC | CHK: CTV |



PLAN
50' 0 50' 100'



ELEVATION
50' 0 50' 100'

SCOPE OF WORK:

- REMOVE AND DISPOSE OF EXISTING NETTING UNDER EACH SIDEWALK INCLUDING ALL DEBRIS CONTAINED IN THE NETTING.
- SIDEWALKS - REPLACE SIDEWALKS WITH CONCRETE FILLED STEEL BEAM SIDEWALK DECKING AND REPAIR SUPPORTING ELEMENTS AS REQUIRED IN SPANS 1 THRU 10 AND SPANS 12 THRU 15.
- REPLACE THE CONCRETE BARRIER ON THE DOWNSTREAM SIDE OF THE BRIDGE IN SPANS 2 THRU 9.
- REPLACE OVERHANG DECK CONCRETE WITH TYPE 2 CONCRETE REPAIRS ALONG BOTH THE UPSTREAM AND DOWNSTREAM SIDEWALKS AS INDICATED (EXCEPT WHERE THE BARRIER IS BEING REPLACED AND IN SPAN 11).
- PIER 8 - REPLACE NEOPRENE STRIP SEAL DAM.
- FAR ABUTMENT - REPLACE NEOPRENE STRIP SEAL DAM.
- FAR ABUTMENT - REPLACE THE TOP OF THE BACKWALL AND PERFORM CONCRETE REPAIRS TO THE REMAINING BACKWALL.
- PEDESTRIAN RAIL - REPAIR RIGHT HORIZONTAL RAIL ELEMENTS AT PANEL POINT 17, SPAN 11.
- GUSSET PLATES - REPAIR THE FOLLOWING UPPER CHORD GUSSET PLATES BY ADDING SUPPLEMENTAL PLATES:
SPAN 6, JOINT U5, DS TRUSS, LEFT PLATE
SPAN 7, JOINT U1, DS TRUSS, LEFT PLATE
- GUSSET PLATES - REPAIR SEVENTEEN (17) UPPER CHORD GUSSET PLATES BY STIFFENING THE PLATE EDGES.
- ZONE PAINT SIDEWALK SUPPORT ELEMENTS, TOP CHORD AND GUSSET PLATES ADJACENT TO THE SIDEWALK IN SPANS 1 THROUGH 10 AND 12 THROUGH 15.
- FULL PAINT THE PEDESTRIAN RAILING IN ALL SPANS ALONG BOTH SIDEWALKS.
- REPLACE THE APPROACH SLABS AT NEAR AND FAR ABUTMENTS.
- PERFORM DECK SPALL REPAIRS AT ONE LOCATION IN BOTH SPANS 11 AND 13.
- REPAIR FRONT FACE AND REAR FACE OF BRIDGE DECK CONCRETE BARRIERS.
- INSTALL NEW RAILROAD PROTECTIVE FENCE TO THE UPSTREAM AND DOWNSTREAM SIDEWALKS IN PORTIONS OF SPANS 10 AND 14 OVER THE RAILROAD.

SCOPE OF WORK (CON'T):

- REPLACE EXISTING SIDEWALK PROTECTIVE FENCE ALONG THE UPSTREAM AND DOWNSTREAM SIDEWALKS IN SPANS 12, 13 AND 14 AS INDICATED.
- FULL PAINT OF THE PEOPLES NATURAL GAS 16" DIAMETER GAS LINE, AND SUPPORTING ELEMENTS, LOCATED DIRECTLY UNDER THE SIDEWALK ALONG THE DOWNSTREAM SIDE OF THE BRIDGE.
- REPLACEMENT OF THE PEOPLES NATURAL GAS 16" DIAMETER GAS LINE U-BOLT HANGERS (AS-DIRECTED).

LEGEND:

- F - FIXED PIN BEARING
- E - EXPANSION ROCKER BEARING
- STA. - STATION
- ➔ - TRAFFIC DIRECTION
- PNG - PEOPLES NATURAL GAS
- * - MEASURED ALONG CONSTR. C
- U. S. - UPSTREAM
- D. S. - DOWNSTREAM

NOTES:

- FOR GENERAL NOTES, SEE SHEET 5.
- FOR TYPICAL SECTIONS, SEE SHEETS 3 AND 4.
- FOR CONSTRUCTION PHASING, SEE TRAFFIC CONTROL PLANS.



PREPARED BY:
GANNETT FLEMING, INC.
FOSTER PLAZA 8, SUITE 400
730 HOLIDAY DRIVE
PITTSBURGH, PA 15220

Christopher T. Vollmer 3-31-22

DESCRIPTION	DWG. NO.	APP. DATE
PROTECTIVE FENCE	BC-701M	1/31/19
LIGHTING POLE ANCHORAGE	BC-722M	2/19/21
ANCHOR SYSTEMS	BC-734M	1/31/19
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	1/31/19
CONCRETE DECK SLAB DETAILS	BC-752M	2/19/21
PERFORMED NEOPRENE COMPRESSION SEAL JOINT FOR APPROACH SLABS	BC-766M	1/31/19
NEOPRENE STRIP SEAL DAM FOR PRESTRESSED CONCRETE & STEEL I-BEAM BRIDGES	BC-767M	2/19/21
REINFORCED CONCRETE REPAIR	BC-783M	1/31/19
TYPICAL WATERPROOFING AND EXPANSION DETAILS	BC-788M	1/31/19
CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	6/1/10
BACKFILL AT STRUCTURES	RC-12M	2/8/19

SUPPLEMENTAL DRAWINGS

INDEX OF DRAWINGS

SHEET NO.	TITLE
1	GENERAL PLAN & ELEVATION - 1
2	GENERAL PLAN & ELEVATION - 2
3	TYPICAL SECTION - 1
4	TYPICAL SECTION - 2
5	GENERAL NOTES
6	SUMMARY OF QUANTITIES
7	SUBSTRUCTURE CONC. REPAIRS - FAR ABUT.
8	CONCRETE REPAIR DETAILS
9	FRAMING PLAN - SPANS 1 THRU 5
10	FRAMING PLAN - SPANS 6 THRU 9
11	FRAMING PLAN - SPANS 10 & 11
12	FRAMING PLAN - SPANS 11 & 12
13	FRAMING PLAN - SPANS 13 THRU 15
14	SIDEWALK SUPPORT REPAIR DETAILS - 1
15	SIDEWALK SUPPORT REPAIR DETAILS - 2
16	SIDEWALK SUPPORT REPAIR DETAILS - 3
17	PIER 10 & 11 SIDEWALK FRAMING
18	TRUSS GUSSET PLATE REPAIRS - 1
19	TRUSS GUSSET PLATE REPAIRS - 2
20	SIDEWALK/BARRIER PLAN - SPANS 1 - 6
21	SIDEWALK/BARRIER PLAN - SPANS 7 - 9
22	SIDEWALK/BARRIER PLAN - SPANS 10 & 11
23	SIDEWALK/BARRIER PLAN - SPANS 11 & 12
24	SIDEWALK/BARRIER PLAN - SPANS 13 THRU 15
25	BARRIER REPAIR DETAILS - 1
26	BARRIER REPAIR DETAILS - 2
27	LIGHT POLE BLISTER DETAILS
28	BARRIER DRAINAGE DETAILS
29	SIDEWALK EXP. DAM REPAIRS - 1
30	SIDEWALK EXP. DAM REPAIRS - 2
31	RAILING REPAIR DETAILS
32	FENCE PLAN - SPANS 10 & 12-14
33	FENCE DETAILS
34	PIER 8 - EXPANSION DAM REPAIR
35	APPROACH SLAB 1 PLAN
36	APPROACH SLAB 1 SECTIONS
37	APPROACH SLAB 1 BAR SCHEDULE
38	APPROACH SLAB 2 KEY PLAN
39	APPROACH SLAB 2A PLAN
40	APPROACH SLAB 2B PLAN
41	APPROACH SLAB 2C PLAN
42	APPROACH SLAB 2 SECTIONS
43	APPROACH SLAB 2 DETAILS
44	APPROACH SLAB 2A BAR SCHEDULE
45	APPROACH SLAB 2B BAR SCHEDULE
46	APPROACH SLAB 2C BAR SCHEDULE
47	PEOPLES NATURAL GAS - REHAB. DETAILS

CERTIFIED CORRECT PLANS
Donald R. Hill
Professional Engineer
Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
ATTEST *Rosemary Shultz*
Secretary

Description	By	Chk'd	Recm'd	Date
REVISIONS				

BMS NO. 02-3104-0030-0000 BRKEY 1876
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
S.R. 3104 SECTION A03
SEGMENT 0030 OFFSET 0000
S.R. 3104 STA. 38+75
OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
GENERAL PLAN & ELEVATION - 1

RECOMMENDED: *[Signature]*
District Bridge Engineer
DISTRICT BRIDGE ENGINEER

SHEET 1 OF 47
+ SUPPLEMENTAL DRAWINGS
S-39126

DES:CTV DWN:CJP CHK:CTV

GENERAL NOTES

PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH SPECIFICATIONS, PUBLICATION 406/2020, AASHTO/AWS D1.5/D1.5-2015 BRIDGE WELDING CODE, AND CONTRACT SPECIAL PROVISIONS. USE ANSI/AASHTO/AWS D1.1-2015 FOR WELDING NOT COVERED IN ANSI/AASHTO/AWS D1.5-2015.

DESIGN SPECIFICATIONS

ALLOWABLE STRESS DESIGN - 2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SEVENTH EDITION, INCLUDING INTERIM REVISIONS AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4, 1996 FOR ANALYSIS OF EXISTING MEMBERS AND MEMBER REPAIRS.

LOAD AND RESISTANCE FACTOR DESIGN - AASHTO LRFD 7TH EDITION, 2014 AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4, 2015 FOR NEW SIDEWALK ELEMENTS AND APPROACH SLABS.

DESIGN LOADINGS

DESIGN LIVE LOAD:

H20, HS20, ML60 AND TK527 SIDEWALK - 90 PSF

DEAD LOADS:

INCLUDES 83 LBS PER FOOT FOR 16 DIA. GAS LINE UNDER THE DOWNSTREAM SIDEWALK.

INCLUDES 6 LBS PER FOOT FOR 2 1/2" DIA. CONDUIT UNDER THE SIDEWALKS.

INCLUDES 6 LBS PER FOOT FOR INTERMEDIATE UTILITY SUPPORTS AND CONNECTION PLATE UNDER THE SIDEWALK.

GENERAL

PROVIDE STRUCTURAL STEEL CONFORMING TO AASHTO M270/M270M (ASTM A709/A709M), EXCEPT WHEN NOTED OTHERWISE.

ZONE PAINT STRUCTURAL STEEL IN ACCORDANCE WITH PUBLICATION 406, SECTION 107.0, AND SPECIAL PROVISION. FINAL COAT TO BE AWS-STD-398A NO. 15490 (AIR SUPERIMMUNITY BLEND).

PROVIDE 2 IN. CONCRETE COVER ON REINFORCEMENT BARS, EXCEPT AS NOTED.

USE CLASS AA CEMENT CONCRETE IN APPROACH SLABS.

USE CLASS AA CEMENT CONCRETE, EXCEPT USE NO. 8 COARSE AGGREGATE IN SIDEWALKS AND PARKER REPAIRS.

USE CLASS AA4P CEMENT CONCRETE IN DECK SLAB ADJACENT TO EXPANSION DAM REPLACEMENT.

A HIGHER CLASS CONCRETE MAY BE SUBSTITUTED FOR A LOWER CLASS CONCRETE AT NO ADDITIONAL COST TO THE DEPARTMENT, IF APPROVED BY THE DISTRICT BRIDGE ENGINEER.

PROVIDE GRADE 60 REINFORCING STEEL BARS THAT MEET THE REQUIREMENTS OF ASTM A615/A615M, A996/A996M OR A706/A706M. DO NOT WELD GRADE 60 REINFORCING STEEL BARS UNLESS SPECIFIED. GRADE 40 REINFORCING STEEL BARS MAY BE SUBSTITUTED WITH A PROPORTIONAL INCREASE IN CROSS-SECTIONAL AREA, IF APPROVED BY THE CHIEF BRIDGE ENGINEER. DO NOT USE RAIL STEEL A996/A996M REINFORCEMENT BARS.

WELDING OF REINFORCEMENT BARS DURING FABRICATION OR CONSTRUCTION IS NOT PERMITTED UNLESS SPECIFIED.

USE EPOXY-COATED REINFORCEMENT BARS FOR ALL REINFORCEMENT.

GALVANIZED REINFORCING STEEL MAY BE SUBSTITUTED FOR EPOXY-COATED REINFORCING STEEL BARS AT NO ADDITIONAL COST TO THE DEPARTMENT.

RAKE-FINISH ALL HORIZONTAL CONSTRUCTION JOINTS, EXCEPT AS INDICATED.

VERIFY ALL DIMENSIONS AND GEOMETRY OF THE EXISTING STRUCTURE IN THE FIELD AS NECESSARY FROM PLANS OF THE PROPOSED CONSTRUCTION.

CHAMFER EXPOSED CONCRETE EDGES 1/4" BY 1/4", EXCEPT AS NOTED.

ALL DIMENSIONS SHOWN ARE HORIZONTAL, EXCEPT AS NOTED.

SUPERSTRUCTURE DIMENSIONS SHOWN ARE FOR A NORMAL TEMPERATURE OF 68°F.

PROVIDE MINIMUM EMBEDMENT AND SPLICE LENGTHS IN ACCORDANCE WITH STANDARD DRAWING BC-756M, UNLESS OTHERWISE INDICATED.

DO NOT USE ADHESIVE ANCHORS IN TENSION APPLICATION FOR PERMANENT INSTALLATIONS.

DO NOT USE ADHESIVE ANCHORS IN SUSTAINED TENSION APPLICATION FOR TEMPORARY INSTALLATIONS, INCLUDING DURING CONSTRUCTION.

PROVIDE CLASS B FINISH SURFACE FOR THE CONTACT AREA OF ALL JOINT PARTS. USE A CLASS B SURFACE CONDITION APPROVED CHIMER ON THE CONTACT AREAS.

PERFORM BLAST CLEANING, APPLY PRIMER, AND VERIFY REPAIR LIMITS WITH THE DEPARTMENT REPRESENTATIVE PRIOR TO ORDERING STEEL FOR STEEL REPAIRS.

FIELD REAM EXISTING HOLES, AS REQUIRED, WHERE EXISTING RIVETS OR BOLTS ARE BEING REPLACED WITH NEW HIGH STRENGTH BOLTS.

USE NEW HIGH STRENGTH BOLTS FOR ALL WORK REQUIRING BOLTED CONNECTIONS. RE-USE OF EXISTING FASTENERS IS NOT PERMITTED.

FOR EXISTING FASTENERS DESIGNATED FOR REPLACEMENT, REPLACE EXISTING FASTENERS WITH NEW MECHANICALLY GALVANIZED, ASTM F435 GRADE 420S HIGH STRENGTH BOLTS OF THE SAME DIAMETER AS THE EXISTING FASTENER, UNLESS OTHERWISE INDICATED.

FIELD CONDITIONS MAY DIFFER FROM THOSE INDICATED BY THE DESIGNATIONS FOR EXISTING RIVETS AND BOLTS SHOWN ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF STEEL, AS INDICATED OR AS DIRECTED REGARDLESS OF FASTENER TYPE. REMOVAL OF EXISTING FASTENERS IS INCIDENTAL TO OR INCLUDED IN THE ITEMS OF WORK.

THE CONTRACTOR IS RESPONSIBLE FOR SAFETY AND ADEQUATELY SUPPORTING ALL STEEL MEMBERS DURING THEIR FULL OR PARTIAL REMOVAL, SHIPPING, HANDLING AND ERECTION, INCLUDING MEMBER REMOVAL, SUCH THAT ALL ALLOWABLE STRESSES, IN ACCORDANCE WITH AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES, ARE NOT EXCEEDED.

STABILITY OF PARTIAL EXISTING STRUCTURAL MEMBERS AND REMAINING STRUCTURAL MEMBERS IS TO BE MAINTAINED BY THE CONTRACTOR DURING ERECTION. UNTIL ALL STEEL MEMBERS ARE IN PLACE AND ALL BOLTS ARE PROPERLY INSTALLED, ERECTION LOADS INCLUDING SELF WEIGHT OF THE STEEL MEMBERS, WIND LOADING AND CONSTRUCTION LIVE LOAD EFFECTS ARE TO BE EVALUATED BY THE CONTRACTOR FOR STABILITY, STRESSES AND DEFLECTIONS ON THE STEEL MEMBERS DURING ANY STAGE OF CONSTRUCTION.

WELDING NOTES

DO NOT FIELD-WELD ON ANY PART OF THE EXISTING BRIDGE, EXCEPT WHERE SHOWN ON THE DRAWINGS, WITHOUT PRIOR APPROVAL OF THE DISTRICT BRIDGE ENGINEER.

USE THE SHIELDING METAL ARC PROCESS AND LOW HYDROGEN ELECTRODES WHICH ARE COMPATIBLE WITH THE BASE METAL AS SPECIFIED, AND IN ACCORDANCE WITH AN APPROVED WELD PROCEDURE SPECIFICATION.

MAKE TACK WELDS WITH THE SAME TYPE OF ELECTRODE AND INCORPORATE IN THE FINAL WELD. NO OTHER TACK WELDING WILL BE PERMITTED.

DO NOT WELD WHEN SURFACES TO BE WELDED ARE MOIST OR EXPOSED TO RAIN, SNOW, OR WIND, OR WHEN WELDERS ARE EXPOSED TO INCIDENT CONDITIONS THAT WILL ADVERSELY AFFECT THE QUALITY OF THE WORK.

DO NOT WELD OR BURN WHEN THE TEMPERATURE IS BELOW 0°F. PREHEAT AND MAINTAIN THE TEMPERATURE OF THE METAL TO AT LEAST 70°F WHEN THE TEMPERATURE OF THE METAL IS BETWEEN 0°F AND 22°F DURING WELDING OR BURNING.

PREHEAT THE STEEL TO THE SPECIFIED MINIMUM TEMPERATURE FOR A DISTANCE EQUAL TO THE THICKNESS OF THE PART BEING WELDED, BUT NOT LESS THAN 3 IN. IN ALL DIRECTIONS FROM THE POINT OF WELDING.

REMOVE BY APPLICATION OF HEAT ANY MOISTURE PRESENT AT POINT OF WELD. PROVIDE WINDBREAKS FOR PROTECTION FROM DIRECT WIND.

PRIOR TO PLACING THE WELD, THOROUGHLY CLEAN ALL PORTIONS OF THE NEW AND EXISTING SURFACES TO RECEIVE WELDS OF ALL FOREIGN MATTER, INCLUDING PAINT FILM, FOR A DISTANCE OF 2 IN. FROM EACH SIDE OF THE OUTSIDE LINES OF THE WELD.

TEST COMPLETED WELDS USING VISUAL AND NONDESTRUCTIVE METHODS IN ACCORDANCE WITH AASHTO/AWS D1.5/D1.5 BRIDGE WELDING QUAL CRITERIA G.

UTILITY NOTES

COORDINATE, LOCATE AND CONDUCT A WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH PUBLICATION 406 SECTIONS 105.06 AND 107.12.

PNG GAS LINE UNDER THE DOWNSTREAM SIDEWALK FROM STA. 26+09 TO S.R. 3104 IS TO BE TEMPORARILY SUPPORTED DURING CONSTRUCTION AND REPLACEMENT OF THE SIDEWALK.

RAILROAD NOTES

NO EQUIPMENT WILL BE PERMITTED TO BE STORED ON NORFOLK SOUTHERN PROPERTY WITHOUT PERMISSION FROM THE NORFOLK SOUTHERN RAILROAD ENGINEER IN ACCORDANCE WITH SECTION E.S.R.1 OF THE NS PUBLIC PROJECTS MANUAL.

THE CONTRACTOR IS TO NOTIFY GENESSEE & WYOMING PUBLIC PROJECTS DEPARTMENT 30 DAYS PRIOR TO THE START OF CONSTRUCTION.

GENESSEE & WYOMING FLAGGING SERVICES WILL BE REQUIRED FOR ALL WORK WITHIN GENESSEE & WYOMING RIGHT-OF-WAY OR ANY WORK THAT HAS A 'POTENTIAL TO FOUL'.

THE CONTRACTOR IS NOT PERMITTED TO USE GENESSEE & WYOMING RIGHT-OF-WAY FOR STORAGE OF MATERIALS OR EQUIPMENT DURING CONSTRUCTION. THE RAILROAD RIGHT-OF-WAY MUST BE CLEAR AT ALL TIMES. THE CONTRACTOR MUST PLAN AND PERFORM THE WORK IN A MANNER SUCH THAT THE RAILROAD TRACKS AT THE PROJECT LOCATION REMAIN FULLY CAPABLE OF OPERATING RAIL TRAFFIC THROUGHOUT THE WORK PERIOD AND RAIL TRAFFIC IS NOT DELAYED OR OTHERWISE IMPACTED DUE TO THE WORK BEING PERFORMED.

WORK RESTRICTIONS

WORK BETWEEN PIERS 9 AND 17, INCLUDING SPANS 10, 11 AND 12 CANNOT BE PERFORMED FROM FEBRUARY 15 THROUGH JULY 31 DUE TO PERRERICH FALCON NESTING SEASON.

ANY CONTAINMENT OR TEMPORARY SHIELDING/STAGING PLATFORM REQUIREMENTS IN SPAN 11 CANNOT EXTEND MORE THAN 5 FEET BELOW THE BOTTOM OF LOW STEEL OVER THE NAVIGATION CHANNEL.

NO WORK OR STAGING IS PERMITTED IN THE RIVER.

ACCESS FOR COMPLETING ALL CONSTRUCTION WORK IS TO BE FROM THE BRIDGE DECK.

DO NOT STAGE WORK, EQUIPMENT OR MATERIALS BELOW THE BRIDGE THAT WOULD IMPACT THE ACCESS TO THE GORDON TERMINAL SERVICE FACILITY ALONG AGNER STREET.

BRIDGE REHABILITATION NOTES

DO NOT CONSIDER ANY OF THE DATA ON THE EXISTING STRUCTURE SUPPLIED IN THE ORIGINAL DESIGN DRAWINGS OR MADE AVAILABLE TO YOU BY THE DEPARTMENT OR ITS AUTHORIZED AGENTS AS POSITIVE REPRESENTATIONS OF ANY OF THE CONDITIONS THAT YOU WILL ENCOUNTER IN THE FIELD.

THE INFORMATION SHOWN ON THE PLANS FOR THE EXISTING BRIDGE IS NOT PART OF THE PLANS, PROPOSAL, OR CONTRACT AND IS NOT TO BE CONSIDERED A BASIS FOR THE COMPUTATION OF THE UNIT PRICES USED FOR BIDDING PURPOSES. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT INFORMATION IS CORRECTLY SHOWN. THE BIDDER IS NOT TO RELY ON THIS INFORMATION, BUT IS TO ASSUME THE POSSIBILITY THAT CONDITIONS AFFECTING THE COST AND/OR QUANTITIES OF WORK TO BE PERFORMED MAY DIFFER FROM THOSE INDICATED.

THE EXISTING BRIDGE STRUCTURAL MEMBERS DO CONTAIN LEAD PAINT AND CHROMIUM BASED ON LABORATORY TESTING.

ORIGINAL DESIGN PLANS

DEPARTMENT OF PUBLIC WORKS ALLEGHENY COUNTY BUREAU OF BRIDGES MCCREES ROCKS BRIDGE S-12481, DATED 1929

REHABILITATION PLANS

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION BUREAU OF DESIGN ALLEGHENY COUNTY LR 16 SECTION 6 STA. 30+00 S-13747, DATED 1980

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DESIGN ALLEGHENY COUNTY LR 16-SPUR 2-007 STA. 30+36 S-16190, DATED 1985

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DESIGN ALLEGHENY COUNTY S.R. 3104 SECTION A02, STA. 30+36.00 MCCREES ROCKS BRIDGE, S-28041, DATED 2008

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DESIGN ALLEGHENY COUNTY S.R. 3104 SECTION A03, STA. 30+36.00 MCCREES ROCKS BRIDGE, S-28041, DATED 2008

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DESIGN ALLEGHENY COUNTY S.R. 3104 SECTION A03, STA. 30+36.00 MCCREES ROCKS BRIDGE, S-28041, DATED 2008

FABRICATION PLANS

FABRICATION DRAWINGS, MISCELLANEOUS ITEMS, DATED 1984, 2008, 2009 AND 2010

CONSTRUCTION LOADING NOTES

BRIDGE IS NOT WEIGHT RESTRICTED. SEE PUBLICATION 406 SECTION 105.17 FOR CONSTRUCTION LOADING LIMITS AND THE FOLLOWING ADDITIONAL LOAD NOTES AS APPLICABLE.

PRELIMINARY ANALYSIS INDICATES THAT AN OPERATING RATING FACTOR OF 1.0 FOR SPAN 10 COULD NOT BE MAINTAINED WITH THE CRIT RECYCLER CONFIGURED WITH THE AXLE SPACING AND LOADS AS SHOWN.

REVISIONS

Mark Description By Checked Revised Date

REVISIONS

BMS NO. 02-3104-0030-0000 BRKEY 1876

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY S.R. 3104 SECTION A03

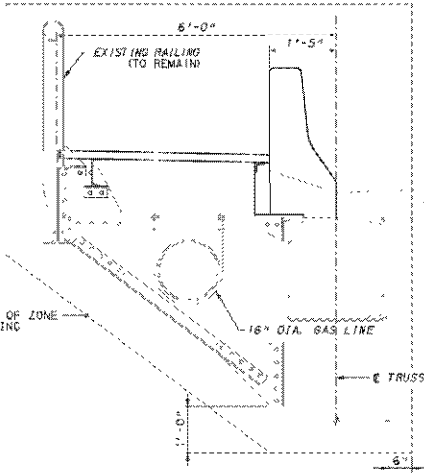
SEGMENT 0030 OFFSET 0000 S.R. 3104 STA. 38+75

OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE

GENERAL NOTES

RECOMMENDED APRIL 26, 2022 SHEET 5 OF 47

S-39126



LIMITS OF ZONE PAINTING

(SPAN 1 THRU 10 DOWNSTREAM SHOWN - OTHER LOCATIONS SIMILAR)

NOT TO SCALE

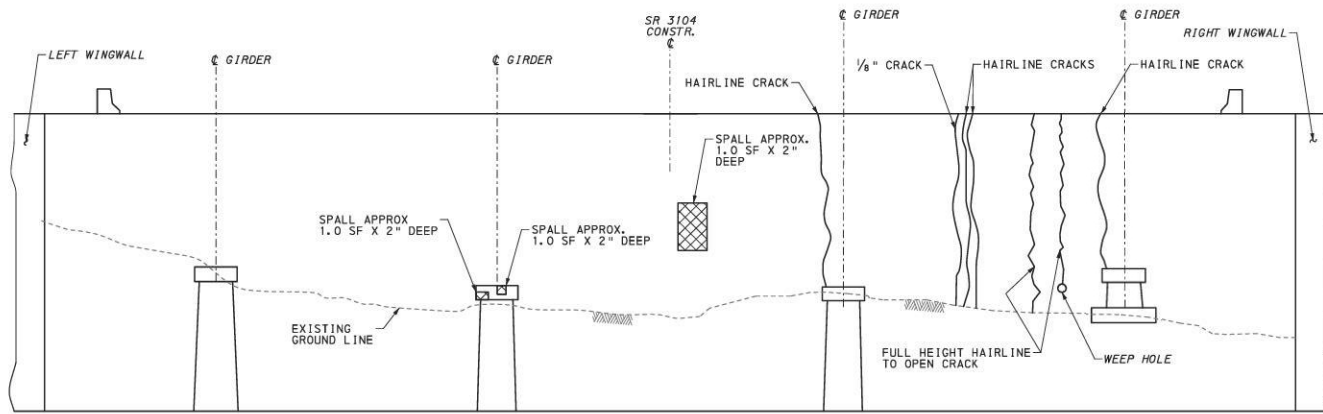
NOTE: ZONE PAINTING LIMITS EXTEND ALONG BOTH THE UPSTREAM AND DOWNSTREAM SIDEWALKS, IN ALL SPANS, FROM THE NEAR ABUTMENT TO THE FAR ABUTMENT.

Certified Correct Plans stamp for David R. Hillman, Professional Engineer, Approved by Bureau of Technical Utility Services, PA Public Utility Commission, Attest Secretary.



Vertical text on the left margin: P:\2022\3104\39126\39126.dwg 11/1/2022 10:11:00 AM E:\3104\39126\39126.dwg 11/1/2022 10:11:00 AM

DES: CTV | DRN: CJP | CHK: CTV



FAR ABUTMENT ELEVATION
NOT TO SCALE

LEGEND:

- LIMITS OF REPAIR DETERIORATED CONCRETE (ITEM 9000-0007)
- LIMITS OF EPOXY INJECTION CRACK REPAIR (ITEM 1091-0331)

NOTES:

1. FOR CONCRETE REPAIR DETAILS, SEE SHEET 8 AND BC-783M.
2. LIMITS OF CRACKS AND SPALLS SHOWN ARE APPROXIMATE. COORDINATE WITH THE REPRESENTATIVE ON FINAL REPAIR LIMITS.

Mark	Description	By	Chk'd	Rec'd	Date
REVISIONS					

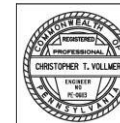
BMS NO. 02-3104-0030-0000 BRKEY 1876

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
 SEGMENT 0030 OFFSET 0000
 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
SUBSTRUCTURE CONC. REPAIRS - FAR ABUT.

CERTIFIED CORRECT PLANS
Daniel R. Hillebrand
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION

 ATTEST *Christopher T. Vollmer*
 Secretary



RECOMMENDED _____	APRIL 26, 2022	SHEET 7 OF 47
		S-39126

CONSTRUCTION PROCEDURE

- REMOVAL, REPAIR AREA PREPARATION, AND REINFORCEMENT INSTALLATION.
- PROVIDE SATISFACTORY PROTECTIVE SHIELDING BELOW REPAIR AREAS.
- PROVIDE MEANS TO COLLECT CONCRETE AND DEBRIS FROM REMOVAL OPERATIONS AND ABRASIVE BLAST MEDIA USED TO CLEAN THE REPAIR AREAS.
- SOUND AND DETERMINE EXTENT OF REPAIR AREAS IN THE PRESENCE OF A REPRESENTATIVE.
- OUTLINE EDGE OF THE DESIGNATED REPAIR AREAS WITH A 1" MAXIMUM DEPTH SAWCUT.

- WITHIN THE OUTLINED REPAIR AREAS, REMOVE DETERIORATED CONCRETE TO A DEPTH OF 1/4-INCH BEHIND THE FIRST MAT OF REINFORCEMENT BARS TO SOUND CONCRETE. ALLOW UNCOVERED OR EXPOSED REINFORCEMENT BARS TO HAVE A 1/4-INCH CLEARANCE ALL AROUND. IF CONCRETE IS UNSOUND AT A DEPTH OF 3/8-INCH BEHIND REINFORCEMENT BARS, DO NOT REMOVE ADDITIONAL CONCRETE WITHOUT APPROVAL OF THE STRUCTURE CONTROL ENGINEER.
- SQUARE-OUT/BEVEL EDGE OF REPAIR AREAS TO KEY IN CONSTRUCTION. USE HAND TOOLS FOR REMOVING DETERIORATED CONCRETE. USE PNEUMATIC HAMMERS, IF REQUIRED, NOT EXCEEDING AN IMPACT RATING OF 30 FOOT POUNDS, IF DETERIORATED CONCRETE EXTENDS BEYOND THE INITIALLY OUTLINED REPAIR AREA, ENLARGE AREA AS DIRECTED BY THE REPRESENTATIVE.

- AFTER REMOVAL OPERATIONS ARE COMPLETE, REMOVE DEBRIS AND LOOSE MATERIALS. IMMEDIATELY BEFORE WET ABRASIVE BLASTING (WAB), WET REPAIR AREAS WITH LOW PRESSURE WATER. CLEAN REPAIR AREAS, PREPARED SUBSTRATE AND REINFORCEMENT BARS, BY WAB. WAB EXPOSED REINFORCEMENT BARS TO NEAR-WHITE METAL ACCORDING TO SSPC-SP 10 (WAB). ONCE WAB IS COMPLETE, FLUSH REPAIR AREAS WITH WATER TO REMOVE ANY REMAINING ABRASIVE BLAST MEDIA. ENSURE REPAIR AREAS ARE DRY AND FREE OF SPENT ABRASIVE. THEN EPOXY COAT EXPOSED REINFORCEMENT BARS WITHIN THE SAME WORKDAY AS WAB. REBLAST REINFORCEMENT THAT ARE NOT EPOXY COATED WITHIN THE SAME WORKDAY OR DO NOT MEET SSPC-SP 10 (WAB). SPLICE DAMAGED OR HEAVILY CORRODED REINFORCEMENT BARS AT 50% OR MORE SECTION LOSS AS SHOWN ON STANDARD DRAWING BC-136M. IF ENOUGH SPLICE LENGTH IS NOT AVAILABLE, DRILL NEW DOWEL HOLES AND PLACE DOWEL BARS AS DIRECTED.

- PLACE EPOXY COATED NO. 4 BENT "L" REINFORCEMENT BARS IN A 1'-0" CENTER-TO-CENTER MAXIMUM SPACED GRID. ANCHOR INTO SOUND CONCRETE WITH EPOXY ANCHORING SYSTEM.
- ATTACH WWF TO THE BENT "L" REINFORCEMENT BARS WITH ANNEALED IRON WIRE AT A MAXIMUM SPACING OF 1'-0" IN EACH DIRECTION. IF USING 6X6 WWF, PLACE A SECOND LAYER OF 6X6 WWF AND STAGGER TO ACHIEVE A 3X3 GRID SPACING.

- REPAIR CONCRETE DAMAGED DURING REPAIR OPERATIONS TO THE SATISFACTION OF THE REPRESENTATIVE AT NO ADDITIONAL COST TO THE DEPARTMENT.
- PROPERLY DISPOSE COLLECTED CONCRETE, DEBRIS, AND ABRASIVE BLAST MEDIA.

CONCRETE PLACEMENT
- SET FORMS TO PROVIDE MINIMUM CONCRETE COVER OF 2 INCHES. IF ENOUGH CONCRETE COVER ON EXISTING REINFORCEMENT BARS IS NOT AVAILABLE, HAUNCH REPAIR OUTWARD.

- MAINTAIN EXISTING CHAMFERS.
- AIR-BLAST REPAIR AREAS WITH OIL-FREE COMPRESSED AIR TO REMOVE ANY REMAINING CONTAMINANTS DETRIMENTAL TO THE BOND OF NEW CONCRETE. APPLY EPOXY BONDING COMPOUND TO REPAIR AREAS WHILE EPOXY BONDING COMPOUND IS STILL TACKY. PLACE CLASS AA CEMENT CONCRETE WITH NO. 8 COARSE AGGREGATE. DO NOT PLACE CONCRETE IF COMPOUND IS NO LONGER TACKY OR HAS HARDENED. RECOAT COMPOUND THAT IS NO LONGER TACKY. WIRE BRUSH HARDENED COMPOUND AND RECOAT REPAIR AREA.

- WATER CURE REPAIR AREAS.
- PROVIDE MINIMUM CONCRETE COVER OF 2 INCHES. IF ENOUGH CONCRETE COVER ON EXISTING REINFORCEMENT BARS IS NOT AVAILABLE, HAUNCH REPAIR OUTWARD.

- MAINTAIN EXISTING CHAMFERS.
- AIR-BLAST REPAIR AREAS WITH OIL-FREE COMPRESSED AIR TO REMOVE ANY REMAINING CONTAMINANTS DETRIMENTAL TO THE BOND OF NEW CONCRETE.

- SATURATE PREPARED CONCRETE SUBSTRATE WITH CLEAN WATER THE DAY BEFORE SHOTCRETE APPLICATION. BRING WETTED SURFACES TO A SATURATED SURFACE DRY (SSD) CONDITION BEFORE APPLICATION OF SHOTCRETE. DO NOT APPLY SHOTCRETE TO A DRY SURFACE, OR TO A SURFACE WITH FREE SURFACE WATER.

- WATER CURE REPAIR AREAS. LIQUID MEMBRANE CURING COMPOUND MAY BE USED ONLY WHEN ACCEPTED BY THE REPRESENTATIVE.

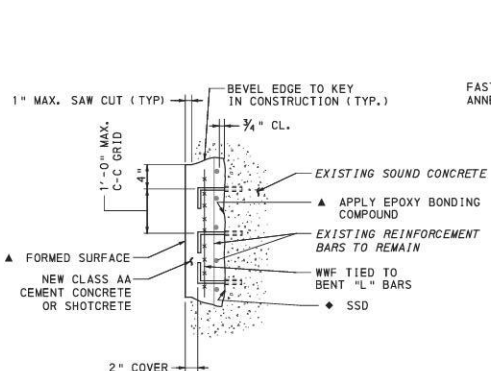
- MAINTAIN EXISTING CHAMFERS.

REPAIR DETERIORATED CONCRETE (FOR INFORMATION ONLY)

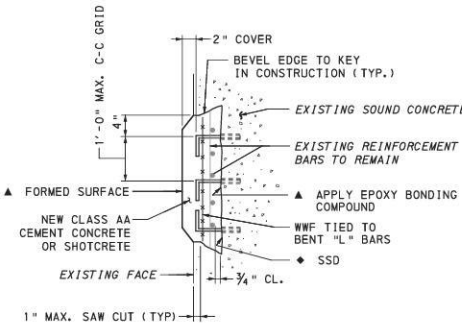
(THIS ITEM INCLUDES PAYMENT FOR THE FOLLOWING MATERIALS AND THEIR INSTALLATIONS)

Table with 2 columns: Item and Reference. Includes rows for Dowel Holes, Reinforcement Bars, Epoxy Anchoring System, Welded Wire Fabric, Annealed Iron Wire, Forms, Epoxy Bonding Compound, Class AA Cement Concrete, and Shotcrete.

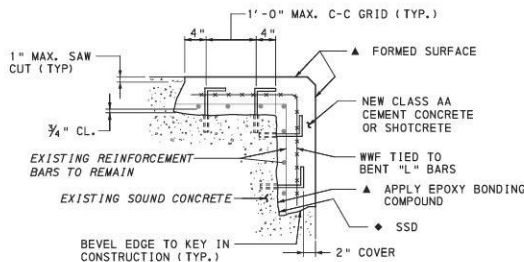
NOTE: ANY ADDITIONAL REINFORCING STEEL IS INCIDENTAL TO ITEM 9000-0007.



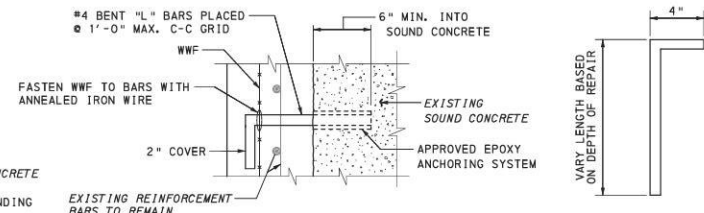
TYPICAL REPAIR DETAIL (NOT TO SCALE)



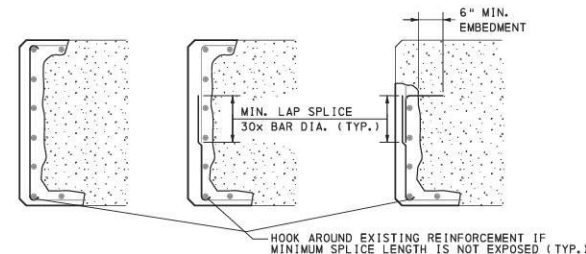
REPAIR FOR LESS THAN 2" COVER (NOT TO SCALE)



TYPICAL CORNER REPAIR DETAIL (NOT TO SCALE)



TYPICAL "L" BAR DETAILS (NOT TO SCALE)



SPLICE DETAILS FOR PIER CAP STIRRUPS WITH >= 50% SECTION LOSS (NOT TO SCALE)

LEGEND

- ▲ : CONVENTIONAL METHOD (FORM AND PLACE) ONLY
◆ : SHOTCRETE METHOD ONLY
SSD : SATURATED SURFACE DRY
WWF : WELDED WIRE FABRIC

NOTES

- 1. USE A PACHOMETER TO LOCATE EXISTING REINFORCEMENT WHEN DRILLING DOWEL HOLES TO AVOID DRILLING THRU EXISTING BARS.

Table with 5 columns: Mark, Description, By, Chk'd, Recm'd, Date. Includes a REVISIONS section.

BMS NO. 02-3104-0030-0000 BRKEY 1876

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY S.R. 3104 SECTION A03

SEGMENT 0030 OFFSET 0000 S.R. 3104 STA. 38+75

OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE

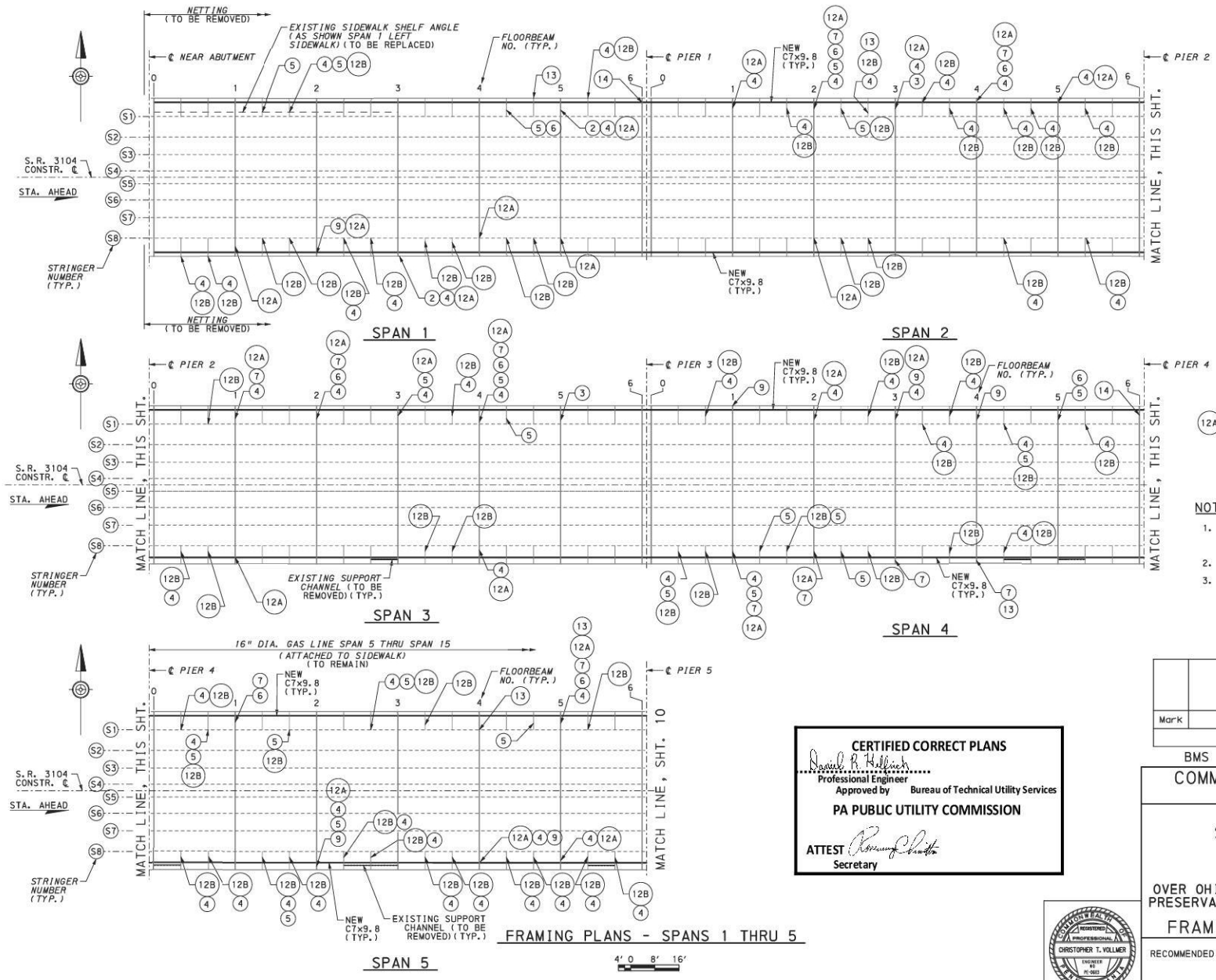
CONCRETE REPAIR DETAILS

Professional Engineer stamp for Christopher T. Vulliamy and project information including 'CERTIFIED CORRECT PLANS' and 'SHEET 8 OF 47'.

Approved by Bureau of Technical Utility Services PA PUBLIC UTILITY COMMISSION

ATTEST [Signature] Secretary

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REPAIR LEGEND:

- ② REPAIR BOTTOM CONNECTION WITH NEW CONNECTION PLATE AND BOLTS (AS APPLICABLE)
- ③ REPLACE BOTTOM CONNECTION WITH NEW CONNECTION PLATE, ANGLES AND BOLTS (AS APPLICABLE)
- ④ REPLACE HORIZONTAL STRUT ANGLE(S) AND RIVETS (AS APPLICABLE)
- ⑤ REPLACE CONNECTION PLATE AT FASCIA STRINGER AND RIVETS (AS APPLICABLE)
- ⑥ REPLACE STRINGER CONNECTION ANGLES AND RIVETS (AS APPLICABLE)
- ⑦ REPAIR FASCIA STRINGER WEB WITH NEW STIFFENING PLATE
- ⑨ REPAIR VERTICAL STRUT CONNECTION WITH NEW BOLTS
- ⑫ REPAIR HORIZONTAL STRUT CONNECTION AT TOP CHORD WITH NEW PLATE AND BOLTS (AS APPLICABLE)
- ⑬ STRENGTHEN FASCIA STRINGER INSIDE BOTTOM FLANGE ANGLE WITH NEW PLATE AND BOLTS (AS APPLICABLE)
- ⑭ REPLACE FASCIA STRINGER SLIDER PLATE AND RIVETS (AS APPLICABLE)

NOTES:

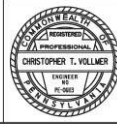
1. SIDEWALK TO BE REPLACED WITH CONCRETE FILLED STEEL BEAM SIDEWALK DECKING, ON BOTH SIDES, SPANS 1 THRU 10 AND 12 THRU 15.
2. FOR SIDEWALK REPAIR DETAILS, SEE SHEETS 14 THRU 17.
3. CONCRETE FILLED STEEL BEAM SIDEWALK DECKING TO BE DETAILED AND FABRICATED CONSIDERING EXISTING JUNCTION BOX OPENINGS, RAILING POSTS, LIGHT POLE BLISTERS, ETC. SEE SHEETS 20 THRU 24 FOR EXISTING ELEMENTS AND FIELD VERIFY PRIOR TO DEVELOPMENT OF SHOP DRAWINGS.

Mark	Description	By	Chk'd	Rec'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876
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 S.R. 3104 SECTION A03
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 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
FRAMING PLAN - SPANS 1 THRU 5
 RECOMMENDED _____ APRIL 26, 2022 _____
 SHEET 9 OF 47
S-39126

CERTIFIED CORRECT PLANS

 Donald B. Hollick
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST
 Christopher T. Vollmer
 Secretary

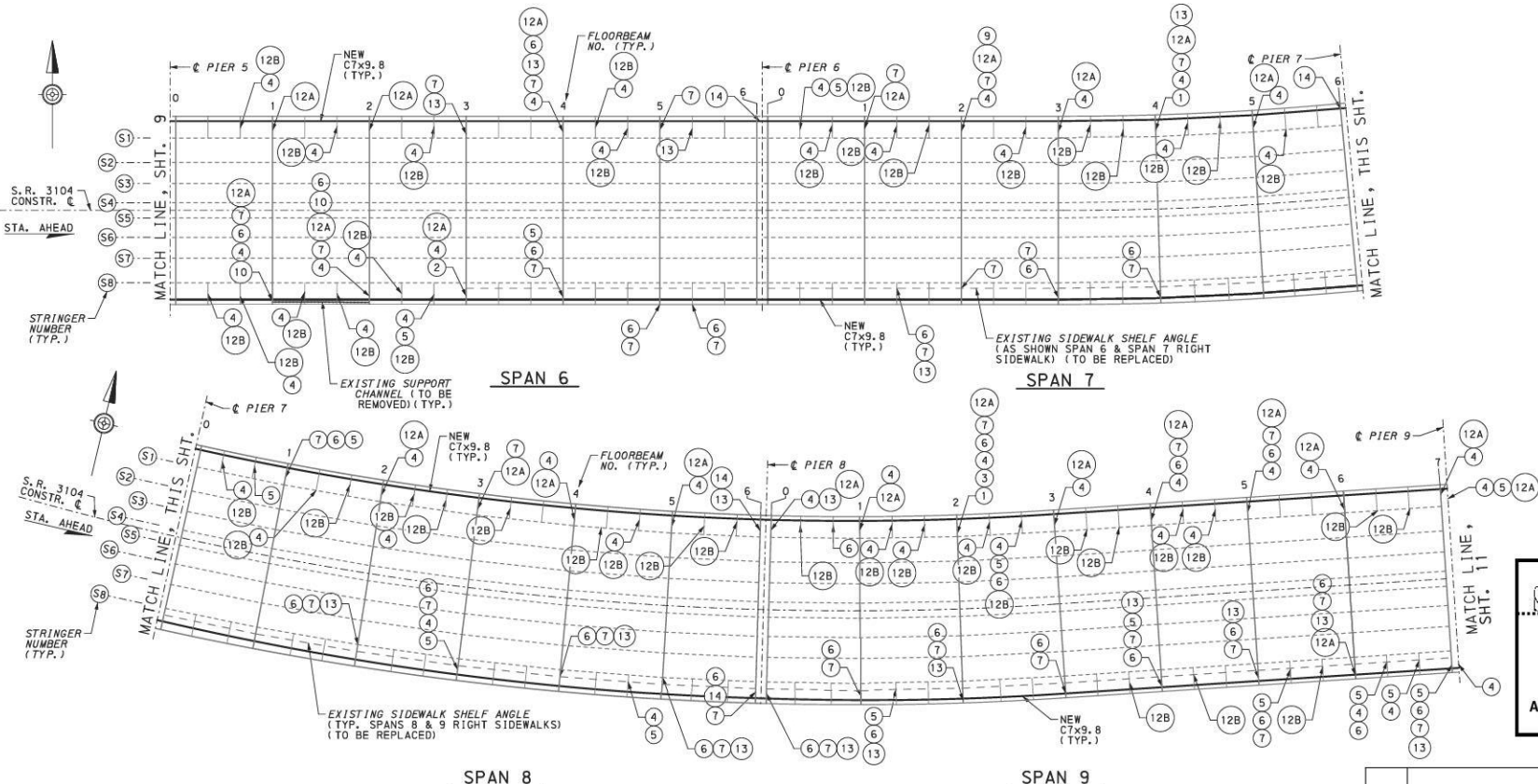


FRAMING PLANS - SPANS 1 THRU 5



DES: JMB DWN: CJP CHK: CTV

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 S.R. 3104 CONST. STA. AHEAD



FRAMING PLANS - SPANS 6 THRU 9



REPAIR LEGEND:

- | | |
|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| ① REPLACE DIAGONAL STRUT WITH NEW ANGLES AND BOLTS (AS APPLICABLE) | ⑨ REPAIR VERTICAL STRUT CONNECTION WITH NEW BOLTS |
| ③ REPLACE BOTTOM CONNECTION WITH NEW CONNECTION PLATE, ANGLES AND BOLTS (AS APPLICABLE) | ⑩ REPLACE VERTICAL STRUT WITH NEW ANGLES AND BOLTS (AS APPLICABLE) |
| ④ REPLACE HORIZONTAL STRUT ANGLE(S) AND RIVETS (AS APPLICABLE) | ⑫A ⑫B REPAIR HORIZONTAL STRUT CONNECTION AT TOP CHORD WITH NEW PLATE AND BOLTS (AS APPLICABLE) |
| ⑤ REPLACE CONNECTION PLATE AT FASCIA STRINGER AND RIVETS (AS APPLICABLE) | ⑬ STRENGTHEN FASCIA STRINGER INSIDE BOTTOM FLANGE ANGLE WITH NEW PLATE AND BOLTS (AS APPLICABLE) |
| ⑥ REPLACE STRINGER CONNECTION ANGLES AND RIVETS (AS APPLICABLE) | ⑭ REPLACE FASCIA STRINGER SLIDER PLATE AND RIVETS (AS APPLICABLE) |
| ⑦ REPAIR FASCIA STRINGER WEB WITH NEW STIFFENING PLATE | |

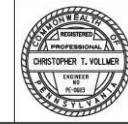
NOTES:

- SIDEWALK TO BE REPLACED WITH CONCRETE FILLED STEEL BEAM SIDEWALK DECKING, ON BOTH SIDES, SPANS 1 THRU 10 AND 12 THRU 15.
- FOR SIDEWALK REPAIR DETAILS, SEE SHEETS 14 THRU 17.
- CONCRETE FILLED STEEL BEAM SIDEWALK DECKING TO BE DETAILED AND FABRICATED CONSIDERING EXISTING JUNCTION BOX OPENINGS, RAILING POSTS, LIGHT POLE BULBSTERS, ETC. SEE SHEETS 20 THRU 24 FOR EXISTING ELEMENTS AND FIELD VERIFY PRIOR TO DEVELOPMENT OF SHOP DRAWINGS.

CERTIFIED CORRECT PLANS
 Daniel R. Hoffsch
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST
 Secretary

Mark	Description	By	Chk'd	Rec'd	Date
REVISIONS					

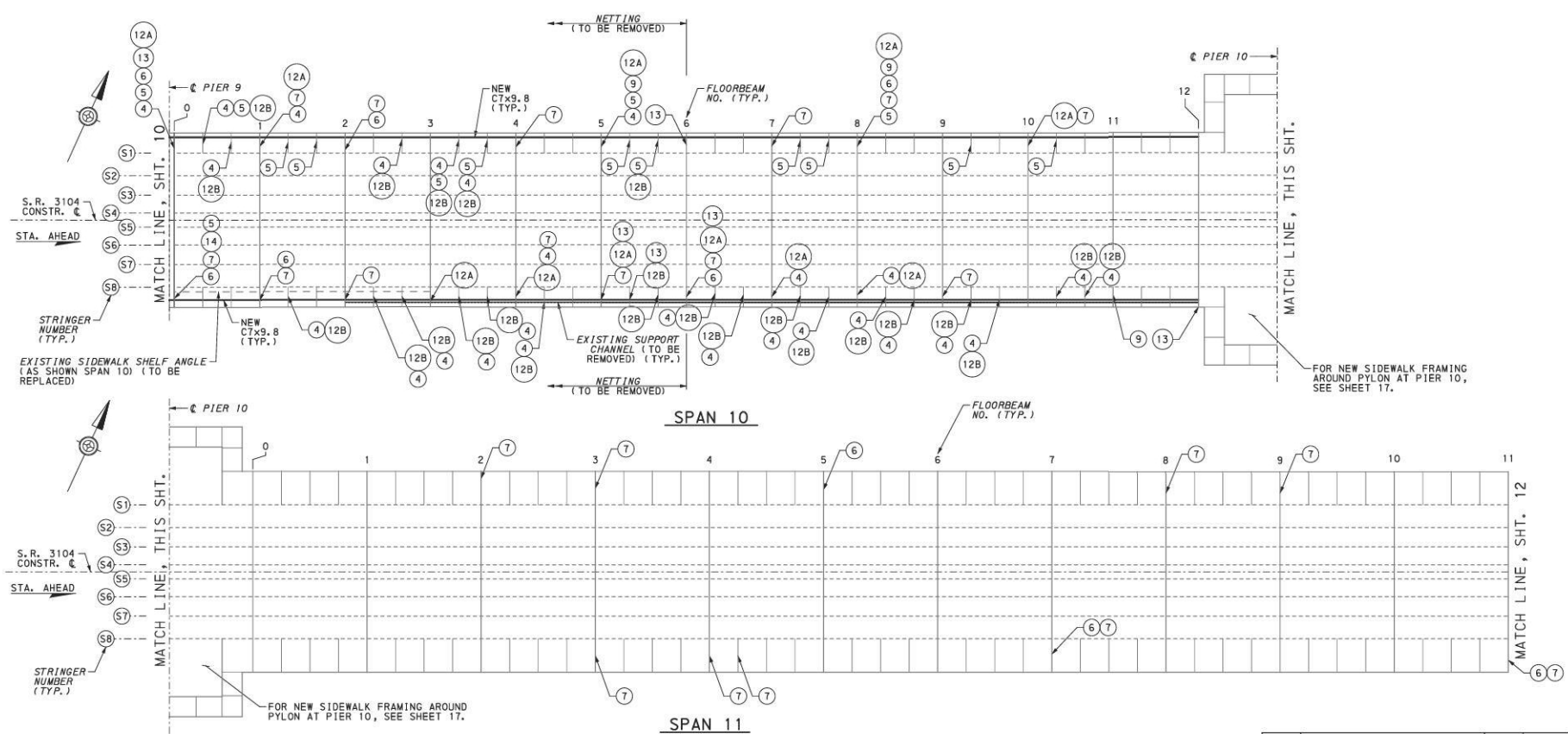
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 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
FRAMING PLAN - SPANS 6 THRU 9



RECOMMENDED APRIL 26, 2022 SHEET 10 OF 47

S-39126

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FRAMING PLANS - SPANS 10 & 11



REPAIR LEGEND:

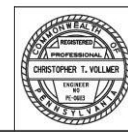
- | | |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| ④ REPLACE HORIZONTAL STRUT ANGLE(S) AND RIVETS (AS APPLICABLE) | ⑨ REPAIR VERTICAL STRUT CONNECTION WITH NEW BOLTS |
| ⑤ REPLACE CONNECTION PLATE AT FASCIA STRINGER AND RIVETS (AS APPLICABLE) | ⑫⑬ REPAIR HORIZONTAL STRUT CONNECTION AT TOP CHORD WITH NEW PLATE AND BOLTS (AS APPLICABLE) |
| ⑥ REPLACE STRINGER CONNECTION ANGLES AND RIVETS (AS APPLICABLE) | ⑬ STRENGTHEN FASCIA STRINGER INSIDE BOTTOM FLANGE ANGLE WITH NEW PLATE AND BOLTS (AS APPLICABLE) |
| ⑦ REPAIR FASCIA STRINGER WEB WITH NEW STIFFENING PLATE | ⑭ REPLACE FASCIA STRINGER SLIDER PLATE AND RIVETS (AS APPLICABLE) |

NOTES:

- SIDEWALK TO BE REPLACED WITH CONCRETE FILLED STEEL BEAM SIDEWALK DECKING, ON BOTH SIDES, SPANS 1 THRU 10 AND 12 THRU 15.
- FOR SIDEWALK REPAIR DETAILS, SEE SHEETS 14 THRU 17.
- CONCRETE FILLED STEEL BEAM SIDEWALK DECKING TO BE DETAILED AND FABRICATED CONSIDERING EXISTING JUNCTION BOX OPENINGS, RAILING POSTS, LIGHT POLE BLISTERS, ETC. SEE SHEETS 20 THRU 24 FOR EXISTING ELEMENTS AND FIELD VERIFY PRIOR TO DEVELOPMENT OF SHOP DRAWINGS.

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 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
FRAMING PLAN - SPANS 10 & 11



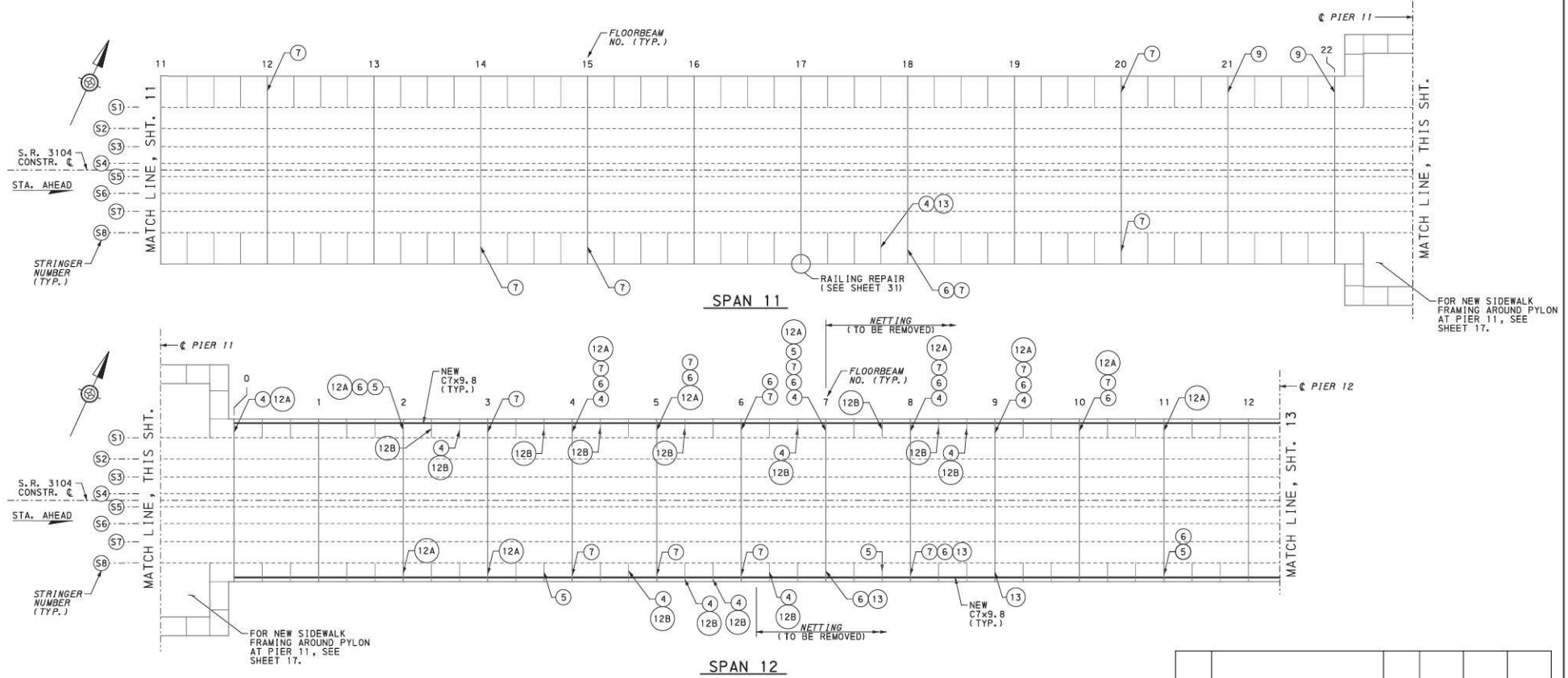
RECOMMENDED APRIL 26, 2022 SHEET 11 OF 47
CERTIFIED CORRECT PLANS
 David R. Hallinan
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION

ATTEST *Patricia M. Schmitt*
 Secretary

DES: JMB DWN: CJP CHK: CTV

S-39126

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FRAMING PLANS - SPANS 11 & 12



- REPAIR LEGEND:**
- (4) REPLACE HORIZONTAL STRUT ANGLE(S) AND RIVETS (AS APPLICABLE)
 - (5) REPLACE CONNECTION PLATE AT FASCIA STRINGER AND RIVETS (AS APPLICABLE)
 - (6) REPLACE STRINGER CONNECTION ANGLES AND RIVETS (AS APPLICABLE)
 - (7) REPAIR FASCIA STRINGER WEB WITH NEW STIFFENING PLATE
 - (9) REPAIR VERTICAL STRUT CONNECTION WITH NEW BOLTS
 - (12A) (12B) REPAIR HORIZONTAL STRUT CONNECTION AT TOP CHORD WITH NEW PLATE AND BOLTS (AS APPLICABLE)
 - (13) STRENGTHEN FASCIA STRINGER INSIDE BOTTOM FLANGE ANGLE WITH NEW PLATE AND BOLTS (AS APPLICABLE)

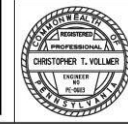
- NOTES:**
1. SIDEWALK TO BE REPLACED WITH CONCRETE FILLED STEEL BEAM SIDEWALK DECKING, ON BOTH SIDES, SPANS 1 THRU 10 AND 12 THRU 15.
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 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
FRAMING PLAN - SPANS 11 & 12

CERTIFIED CORRECT PLANS

 Donald R. Hallsch
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST 
 Christopher T. Vullmer
 Secretary

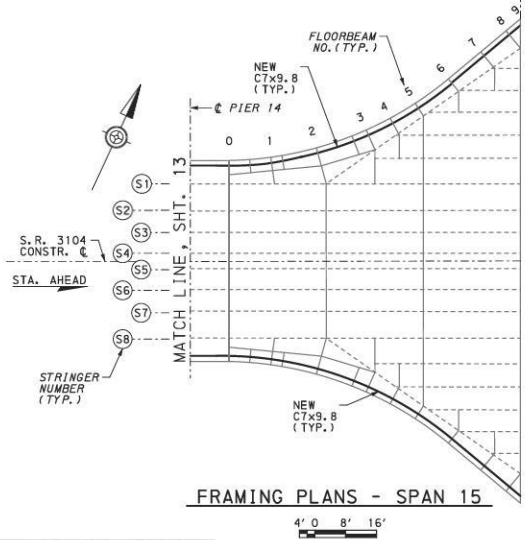
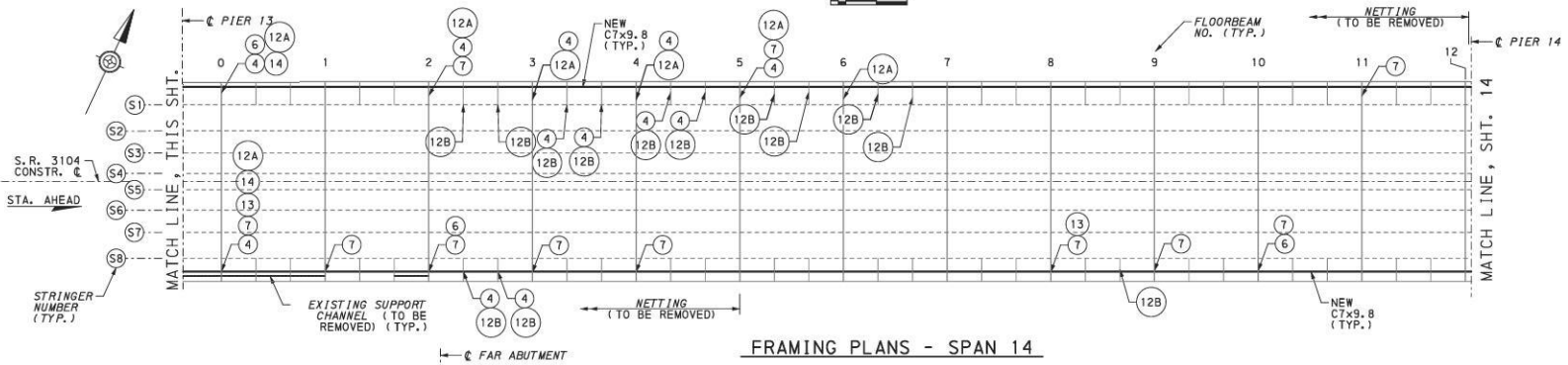
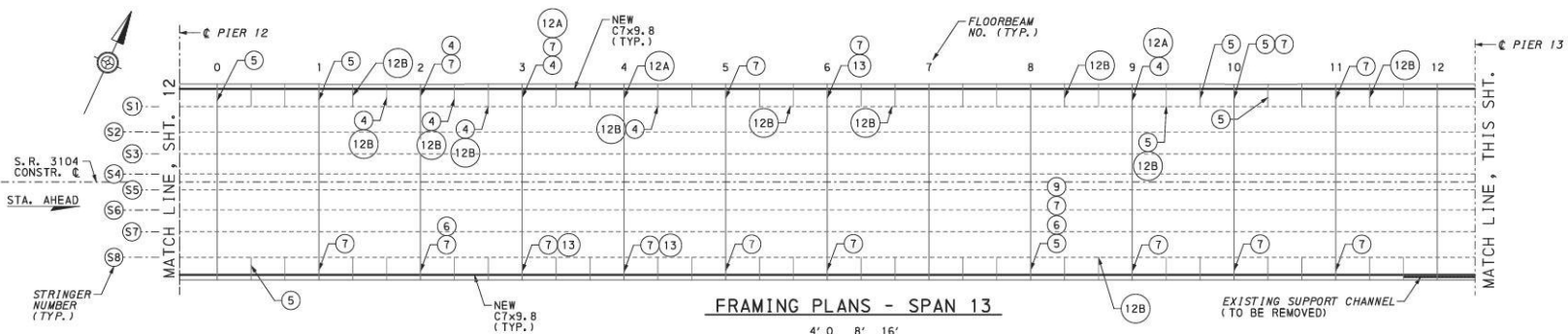


RECOMMENDED APRIL 26, 2022 SHEET 12 OF 47

S-39126

DES: JMB DWN: CJP CHK: CTV

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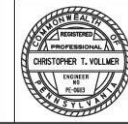
REPAIR LEGEND:

- ④ REPLACE HORIZONTAL STRUT ANGLE(S) AND RIVETS (AS APPLICABLE)
- ⑤ REPLACE CONNECTION PLATE AT FASCIA STRINGER AND RIVETS (AS APPLICABLE)
- ⑥ REPLACE STRINGER CONNECTION ANGLES AND RIVETS (AS APPLICABLE)
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- ⑧ REPAIR VERTICAL STRUT CONNECTION WITH NEW BOLTS
- ⑨ REPLACE HORIZONTAL STRUT CONNECTION AT TOP CHORD WITH NEW PLATE AND BOLTS (AS APPLICABLE)
- ⑬ STRENGTHEN FASCIA STRINGER INSIDE BOTTOM FLANGE ANGLE WITH NEW PLATE AND BOLTS (AS APPLICABLE)
- ⑭ REPLACE FASCIA STRINGER SLIDER PLATE AND RIVETS (AS APPLICABLE)
- ⑫①②①③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮⑯⑰⑱⑲⑳㉑㉒㉓㉔㉕㉖㉗㉘㉙㉚㉛㉜㉝㉞㉟㊱㊲㊳㊴㊵㊶㊷㊸㊹㊺

NOTES:

1. SIDEWALK TO BE REPLACED WITH CONCRETE FILLED STEEL BEAM SIDEWALK DECKING, ON BOTH SIDES, SPANS 1 THRU 10 AND 12 THRU 15.
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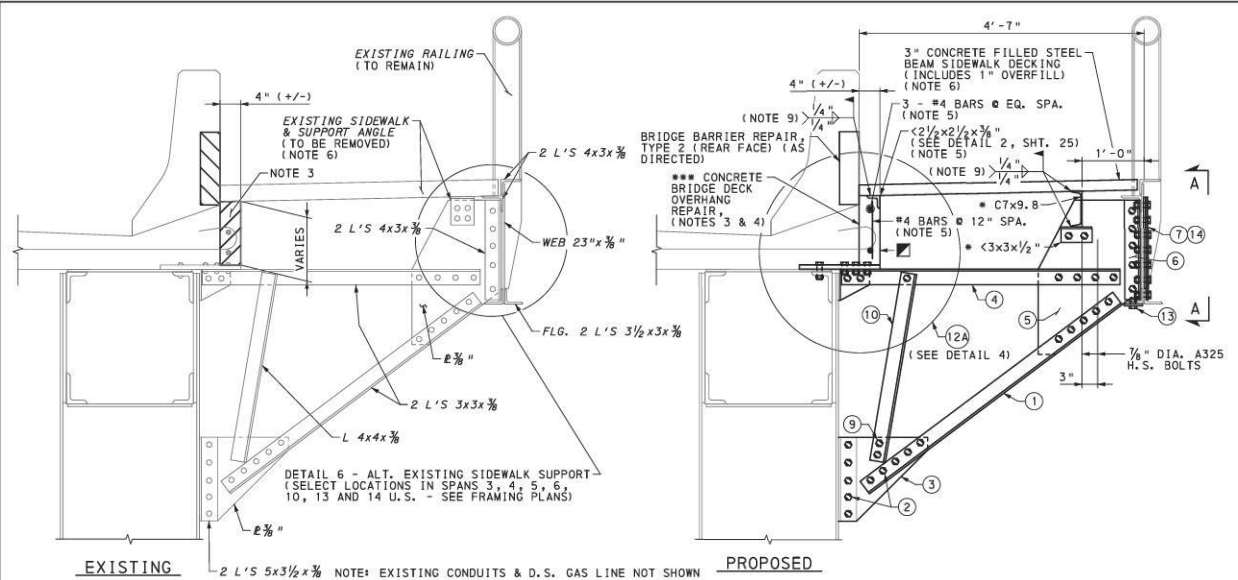
CERTIFIED CORRECT PLANS
 David R. Hillman
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST *Christopher T. Vulliamy*
 Secretary



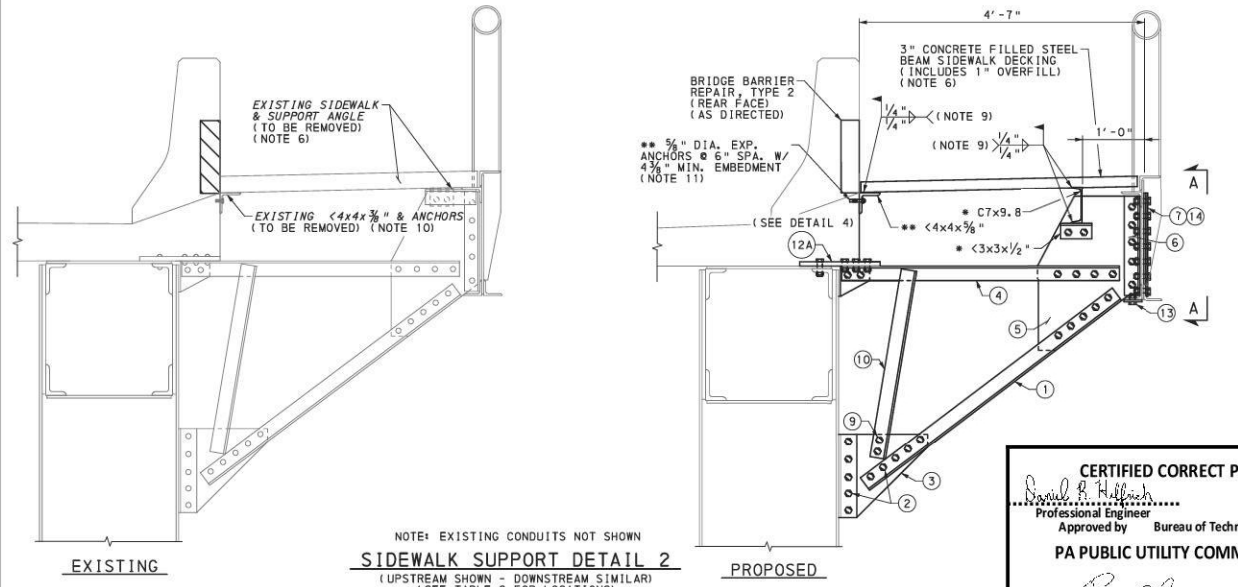
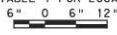
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REVISIONS					

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 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
FRAMING PLAN - SPANS 13 THRU 15
 RECOMMENDED APRIL 26, 2022 SHEET 13 OF 47
 S-39126

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SIDEWALK SUPPORT DETAIL 1
 (UPSTREAM SHOWN - DOWNSTREAM SIMILAR)
 (SEE TABLE 1 FOR LOCATIONS)



SIDEWALK SUPPORT DETAIL 2
 (UPSTREAM SHOWN - DOWNSTREAM SIMILAR)
 (SEE TABLE 2 FOR LOCATIONS)
 (FOR INFORMATION NOT SHOWN, SEE DETAIL 1)

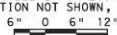


TABLE 1	
SPAN	LOCATION
1	D.S. - FB 3 THRU FB 6
2 THRU 10	D.S. - FULL SPAN ***
12 THRU 15	D.S. - FULL SPAN
1 THRU 5	U.S. - FB 0 THRU FB 3
6	U.S. - FB 0 THRU FB 3
10	U.S. - FB 3 THRU FB 12
12 THRU 15	U.S. - FULL SPAN

TABLE 2	
SPAN	LOCATION
1	D.S. - FB 0 THRU FB 3
10	U.S. - FB 0 THRU FB 3

STEEL REPAIR TABLE		
STEEL REPAIR TYPE	ITEM NO.	APPROX. STEEL WT. (LBS)
1	9000-0023	72
2	9000-0024	20
3	9000-0025	46
4	9000-0026	45
5	9000-0027	43
6	9000-0028	26
7	9000-0029	69
9	9000-0030	BOLTS ONLY
10	9000-0031	30
12A	9000-0032	28
12B	9000-0033	13
13	9000-0034	16
14	9000-0035	156

NOTE: THE WEIGHT DOES NOT INCLUDE THE WEIGHT OF ANY BOLTS/RIVETS.

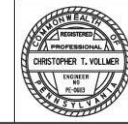
- NOTES:**
- AS DESIGNATED AND DIRECTED REPLACE EXISTING SIDEWALK SUPPORT ELEMENTS IN-KIND. AS NEEDED FOR ELEMENT REPAIRS, REPLACE EXISTING RIVETS WITH NEW 7/8" DIAMETER ASTM F3125 GRADE A325 HIGH STRENGTH BOLTS.
 - STRUCTURAL STEEL REPAIR AND REPLACEMENT ELEMENTS, UNLESS NOTED OTHERWISE, ARE INCIDENTAL TO ITEMS 9000-0023 THRU 9000-0035 (AS APPLICABLE).
 - EXISTING REINFORCEMENT PROJECTING OUT OF THE EXISTING DECK SLAB TO REMAIN AND TO BE CLEANED AND COATED IN ACCORDANCE WITH THE SPECIFICATIONS. INCIDENTAL TO ITEM 9000-0008.
 - CLEAN FREE OF DIRT AND DEBRIS, AND APPLY EPOXY BONDING COMPOUND BETWEEN NEW AND EXISTING CONCRETE. INCIDENTAL TO ITEM 9000-0008.
 - NEW REINFORCEMENT, SUPPORT ANGLES AND STUDS ARE INCIDENTAL TO ITEM 9000-0008 EXCEPT IN SPANS 2 THRU 9 DOWNSTREAM WHERE THEY ARE INCIDENTAL TO ITEM 9000-0034.
 - TOP OF NEW SIDEWALK DECKING TO MATCH THE EXISTING TOP OF SIDEWALK ELEVATIONS. SURVEY THE EXISTING SIDEWALK ELEVATIONS PRIOR TO REMOVAL (INCIDENTAL TO ITEM 5018-0051). ADJUST THE POSITION OF THE SUPPORT CHANNELS AND ANGLES ACCORDINGLY.
 - FOR SECTION A-A, DETAIL 4, AND DETAIL 6, SEE SHEET 16.
 - PROVIDE TEMPORARY SUPPORT OF THE SIDEWALK FASCIA STRINGER WHILE REPAIRS ARE BEING PERFORMED AND MEMBERS ARE DISCONNECTED WITH THE SUPPORT BRACKETS. TEMPORARY SUPPORT IS INCIDENTAL TO ITEM 1050-0100 OR ITEMS 9000-0023 THRU 9000-0035 AS APPLICABLE.
 - LENGTH OF WELD TO BE A MINIMUM OF 1 1/2" ON EACH SIDE OF THE CONNECTED PART.
 - CUT EXISTING SUPPORT ANGLE ANCHORS FLUSH WITH FACE OF CONCRETE (INCIDENTAL TO ITEM 5018-0051).
 - SPACE NEW EXPANSION ANCHORS BETWEEN EXISTING ANCHOR LOCATIONS. PROVIDE NEW EXPANSION ANCHORS WITH A MINIMUM FACTORED SHEAR RESISTANCE OF 500 LBS. INSTALL ANCHORS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

- LEGEND:**
- ① STRUCTURAL STEEL REPAIR/REPLACEMENT DESIGNATION (SEE FRAMING PLANS FOR LOCATIONS & DESCRIPTIONS. NOTE THAT REPAIRS 12A & 12B ARE REPRESENTED BY REPAIR 12 ON THE FRAMING PLANS.)
 - ☐ APPROXIMATE LIMITS OF REMOVAL FOR CONCRETE BRIDGE DECK OVERHANG REPAIR TYPE 2 AS INCLUDED WITH ITEM 9000-0008. MODIFY LIMITS AT TOP HORIZONTAL STRUT REPAIRS.
 - ☐ APPROXIMATE LIMITS OF REMOVAL FOR CONCRETE BRIDGE BARRIER REPAIR, TYPE 2 (REAR FACE) AS INCLUDED WITH ITEM 5040-0201. REMOVAL LIMITS VARY.
 - * INCLUDED WITH ITEM 1050-0020
 - ** INCLUDED WITH ITEM 5050-0021
 - *** DOWNSTREAM BARRIER IN SPANS 2 THRU 9 WILL BE REPLACED AND INCLUDED WITH ITEM 9000-0004. SEE SECTION A-A ON SHEET 25.
 - ☑ APPLY PROTECTIVE COATING TO THE EXPOSED SURFACE OF THE CONCRETE OVERHANG REPAIR (INCIDENTAL TO ITEM 9000-0008)

Mark	Description	By	Chk'd	Rec'd	Date
REVISIONS					

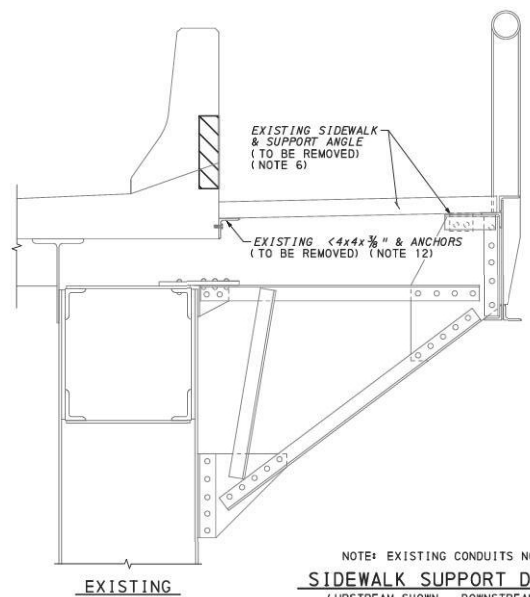
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 ATTEST *Rosemary Chynoweth*
 Secretary



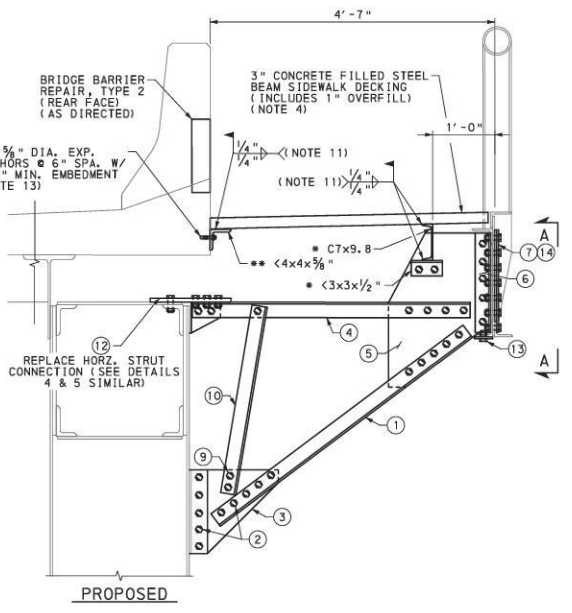
SIDEWALK SUPPORT REPAIR DETAILS - 1
 RECOMMENDED _____ APRIL 26, 2022 _____
 SHEET 14 OF 47
 S-39126

P:\312022\11231244 PM\312022\11231244 PM\1\Documents\Prj\01 Documents\Prj\01\secta\60361\2020_Response\NO.2\NE. Prj\RF\Co. CAD\Structural\INAL\River Bridge\SHXX SIDEWALK DETAILS 2.dgn

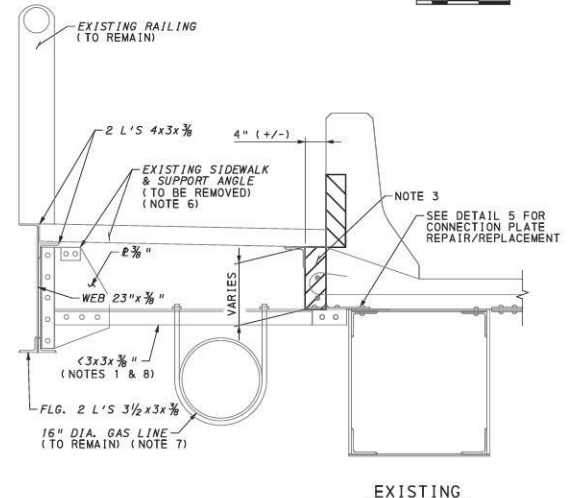


EXISTING SIDEWALK SUPPORT DETAIL 3

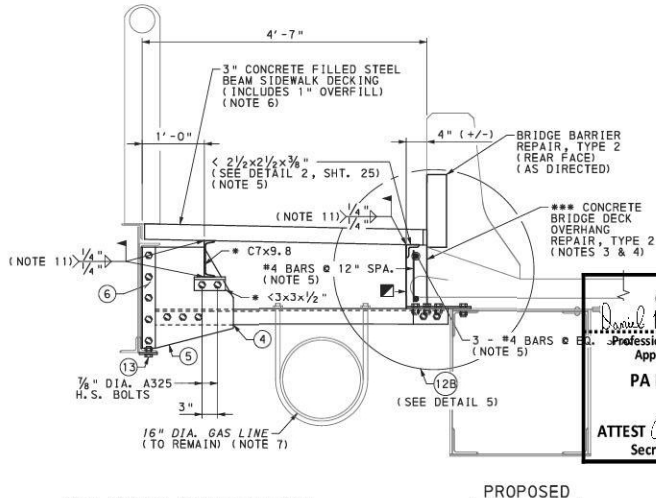
NOTE: EXISTING CONDUITS NOT SHOWN
 (UPSTREAM SHOWN - DOWNSTREAM SIMILAR)
 (SEE TABLE 3 FOR LOCATIONS)
 (FOR INFORMATION NOT SHOWN, SEE DETAIL 1 ON SHEET 14)



PROPOSED



EXISTING



PROPOSED

INTERMEDIATE SIDEWALK SUPPORT DETAIL

NOTE: EXISTING CONDUITS NOT SHOWN
 (DOWNSTREAM SHOWN - UPSTREAM SIMILAR)
 (SEE TABLE 1 FOR LOCATIONS - OTHER LOCATIONS SIMILAR)



NOTES:

- AS DESIGNATED AND DIRECTED REPLACE EXISTING SIDEWALK SUPPORT ELEMENTS IN-KIND. AS NEEDED FOR ELEMENT REPAIRS, REPLACE EXISTING RIVETS WITH NEW 7/8" DIAMETER ASTM F3125 GRADE A325 HIGH STRENGTH BOLTS.
- STRUCTURAL STEEL REPAIR AND REPLACEMENT ELEMENTS, UNLESS NOTED OTHERWISE, ARE INCIDENTAL TO ITEMS 9000-0023 THRU 9000-0035 (AS APPLICABLE).
- EXISTING REINFORCEMENT PROJECTING OUT OF THE EXISTING DECK SLAB TO REMAIN AND TO BE CLEANED AND COATED IN ACCORDANCE WITH THE SPECIFICATIONS. INCIDENTAL TO ITEM 9000-0008.
- CLEAN FREE OF DIRT AND DEBRIS, AND APPLY EPOXY BONDING COMPOUND BETWEEN NEW AND EXISTING CONCRETE. INCIDENTAL TO ITEM 9000-0008.
- NEW REINFORCEMENT, SUPPORT ANGLES AND STUDS ARE INCIDENTAL TO ITEM 9000-0008 EXCEPT IN SPANS 2 THRU 9 DOWNSTREAM WHERE THEY ARE INCIDENTAL TO ITEM 9000-0004.
- TOP OF NEW SIDEWALK DECKING TO MATCH THE EXISTING TOP OF SIDEWALK ELEVATIONS. SURVEY THE EXISTING SIDEWALK ELEVATIONS PRIOR TO REMOVAL (INCIDENTAL TO ITEM 5018-0051). ADJUST THE POSITION OF THE SUPPORT CHANNELS AND ANGLES ACCORDINGLY.
- WHEN EXISTING SUPPORT ANGLE(S) ARE BEING REMOVED OR REPLACED TEMPORARILY SUPPORT THE GAS LINE AS PART OF ITEM 9000-0017.
- DO NOT REMOVE MORE THAN ONE (1) INTERMEDIATE SUPPORT BRACE (HORIZ. STRUT) BETWEEN EXISTING SUPPORT BRACKETS AT ANY ONE TIME (APPROX. BRACKET SPA. = 27'-0"). IF MORE THAN ONE BRACE IS REMOVED WITHIN THE 27'-0" SPAN, TEMPORARILY BRACE THE SIDEWALK FASCIA STRINGER (INCIDENTAL TO ITEMS 1050-0100 OR ITEMS 9000-0023 THRU 9000-0035 AS APPLICABLE).
- FOR SECTION A-A, DETAIL 4, AND DETAIL 5, SEE SHEET 16.
- PROVIDE TEMPORARY SUPPORT OF THE SIDEWALK FASCIA STRINGER WHILE REPAIRS ARE BEING PERFORMED AND MEMBERS ARE DISCONNECTED WITH THE SUPPORT BRACKETS. TEMPORARY SUPPORT IS INCIDENTAL TO ITEM 1050-0100 OR ITEMS 9000-0023 THRU 9000-0035 AS APPLICABLE.
- LENGTH OF WELD TO BE A MINIMUM OF 1 1/2" ON EACH SIDE OF THE CONNECTED PART.
- CUT EXISTING SUPPORT ANGLE ANCHORS FLUSH WITH FACE OF CONCRETE (INCIDENTAL TO ITEM 5018-0051).
- SPACE NEW EXPANSION ANCHORS BETWEEN EXISTING ANCHOR LOCATIONS. PROVIDE NEW EXPANSION ANCHORS WITH A MINIMUM FACTORED SHEAR RESISTANCE OF 500 LBS. INSTALL ANCHORS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- FOR TABLE 1 AND STEEL REPAIR TABLE SEE SHEET 14.

LEGEND:

- ① STRUCTURAL STEEL REPAIR/REPLACEMENT DESIGNATION (SEE FRAMING PLANS FOR LOCATIONS & DESCRIPTIONS). NOTE THAT REPAIRS 12A & 12B ARE REPRESENTED BY REPAIR 12 ON THE FRAMING PLANS.
- ☑ APPROXIMATE LIMITS OF REMOVAL FOR CONCRETE BRIDGE DECK OVERHANG REPAIR, TYPE 2 AS INCLUDED WITH ITEM 9000-0008. MODIFY LIMITS AT TOP HORIZONTAL STRUT REPAIRS.
- ☑ APPROXIMATE LIMITS OF REMOVAL FOR CONCRETE BRIDGE BARRIER REPAIR, TYPE 2 (REAR FACE) AS INCLUDED WITH ITEM 5040-0201. REMOVAL LIMITS VARY.
- * INCLUDED WITH ITEM 1050-0020
- ** INCLUDED WITH ITEM 5050-0021
- *** DOWNSTREAM BARRIER IN SPANS 2 THRU 9 WILL BE REPLACED AND INCLUDED WITH ITEM 9000-0004. SEE SECTION A-A ON SHEET 25.
- ☑ APPLY PROTECTIVE COATING TO THE EXPOSED SURFACE OF THE CONCRETE OVERHANG REPAIR (INCIDENTAL TO ITEM 9000-0008)

TABLE 3	
SPAN	LOCATION
6	U.S. - FB 3 THRU FB 6
7 THRU 9	U.S. - FULL SPAN

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

CERTIFIED CORRECT PLANS

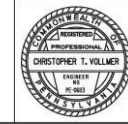
Approved by *David R. Hollenbeck*
 Professional Engineer
 Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION

ATTEST *Christopher T. Vulliamy*
 Secretary

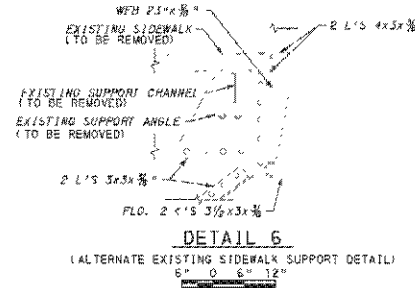
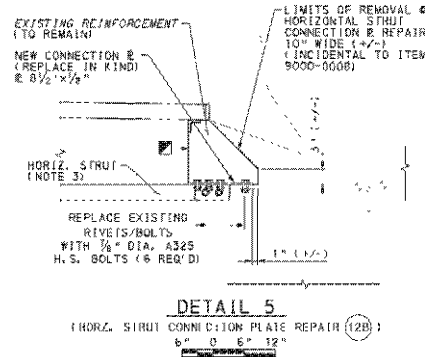
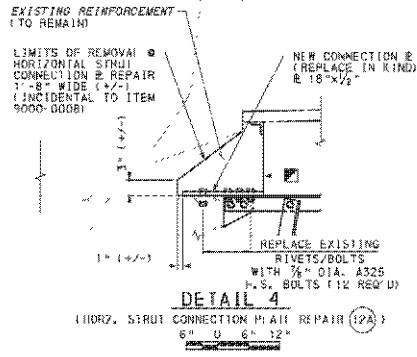
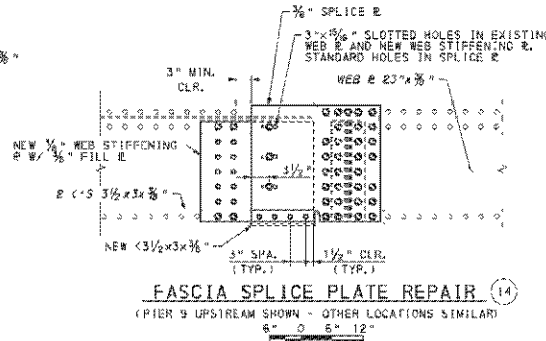
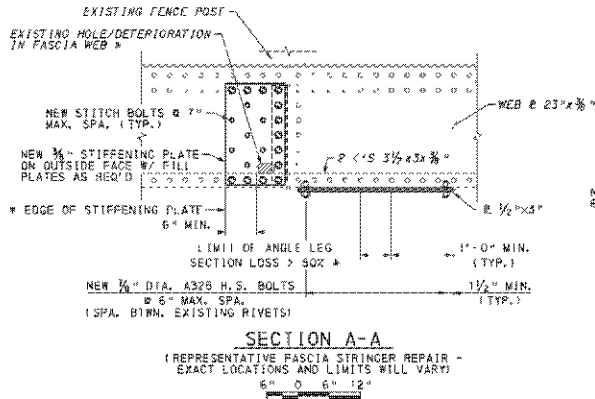
BMS NO. 02-3104-0030-0000 BRKEY 1876
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
S.R. 3104 SECTION A03
 SEGMENT 0030 OFFSET 0000
 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE

SIDEWALK SUPPORT REPAIR DETAILS - 2

RECOMMENDED _____ APRIL 26, 2022 _____ SHEET 15 OF 47



B:\Projects\2022\220222\220222.dwg | Job: 220222 | 11/21/2022 10:23:45 AM | P1: RYAN CARROLL | PLOT: 220222 | PLOT DATE: 11/21/2022 10:23:45 AM | PLOT SCALE: 1.0000 | PLOT SHEET: 3 OF 3 | PLOT BY: RYAN CARROLL



NOTES:

1. AS DESIGNATED AND DIRECTED REPLACE EXISTING SIDEWALK SUPPORT ELEMENTS IN KIND, AS NEEDED FOR ELEMENT REPAIRS, REPLACE EXISTING RIVETS WITH NEW 7/8" DIAMETER ASTM F3125 GRADE A325 HIGH STRENGTH BOLTS.
2. STRUCTURAL STEEL REPAIR AND REPLACEMENT ELEMENTS, UNLESS NOTED OTHERWISE, ARE INCIDENTAL TO ITEMS 9000-0023 THRU 9000-0035 (AS APPLICABLE).
3. DO NOT REMOVE MORE THAN ONE (1) INTERMEDIATE SUPPORT BRACE (HORIZ. STRUT) BETWEEN EXISTING SUPPORT BRACKETS AT ANY ONE TIME (APPROX. BRACKET SPA. = 27'-0" MIN. IF MORE THAN ONE BRACE IS REMOVED WITHIN THE 27'-0" SPAN, TEMPORARILY BRACE THE SIDEWALK FASCIA STRINGER (INCIDENTAL TO ITEMS 1050-0100 OR ITEMS 9000-0023 THRU 9000-0035 AS APPLICABLE).

LEGEND:

- LIMITS OF DETERIORATION AND REPAIR TO BE DETERMINED AFTER BLASTING
- ◊ INDICATES EXISTING RIVETS/HOLES TO BE REPLACED WITH NEW ASTM F3125 GRADE A325 BOLTS OF THE SAME DIAMETER.
- ◊ INDICATES NEW 7/8" DIA. ASTM F3125 GRADE A325 BOLTS.
- ◊ INDICATES EXISTING RIVETS/BOLTS TO REMAIN.
- APPLY PROTECTIVE COATING TO THE EXPOSED SURFACE OF THE CONCRETE OVERHEAD REPAIR (INCIDENTAL TO ITEM 9000-0008)

Mark	Description	By	CHK'd	Rev'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
 S.R. 3104 SECTION A03

SEGMENT 0050 OFFSET 0000
 S.R. 3104 STA. 38+75

OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE

SIDEWALK SUPPORT REPAIR DETAILS - 3

RECOMMENDED: APRIL 26, 2022

SHEET 16 OF 47

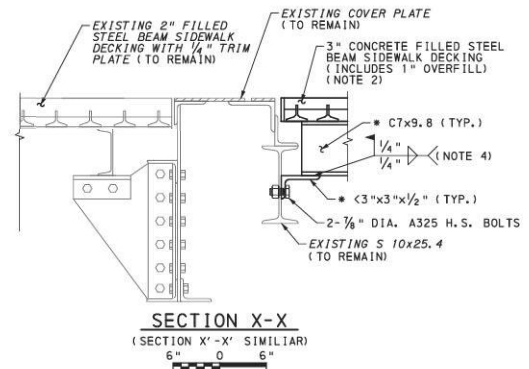
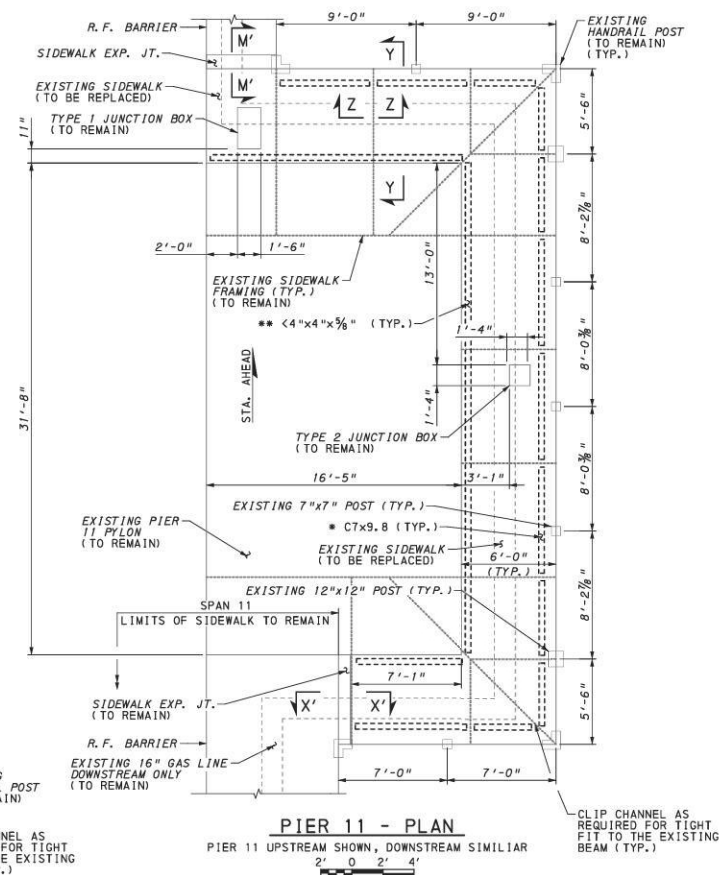
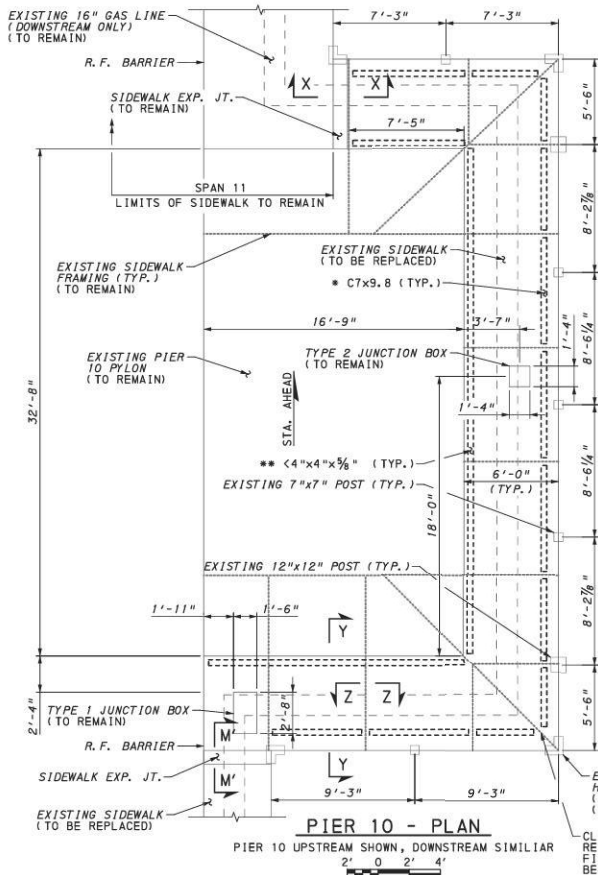
S-39126

CERTIFIED CORRECT PLANS

David P. Wallace
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST:
 Secretary



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- NOTES:**
- FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS AS NECESSARY PRIOR TO FABRICATION AND CONSTRUCTION.
 - TOP OF NEW SIDEWALK DECKING TO MATCH THE EXISTING TOP OF SIDEWALK ELEVATIONS. SURVEY THE EXISTING SIDEWALK ELEVATIONS PRIOR TO REMOVAL (INCIDENTAL TO ITEM 5018-0051). SET SUPPORT CHANNELS AND ANGLES ACCORDINGLY.
 - PROVIDE EXPANSION ANCHORS WITH A MINIMUM FACTORED SHEAR RESISTANCE OF 500 LBS. INSTALL ANCHORS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 - LENGTH OF WELD TO BE A MINIMUM OF 1 1/2" ON EACH SIDE OF THE CONNECTED PART.
 - PROVIDE SILICONE JOINT SEALING MATERIAL IN ACCORDANCE WITH PUB. 408, SECTION 705.4(c).
 - PREPARE SURFACE OF MASONRY PYLON SUCH THAT THE NEW SIDEWALK SUPPORT ANGLE SITS FLUSH WITH THE SURFACE OF THE PYLON AND ALLOWS PROPER EMBEDMENT OF THE ANCHORS. THIS WORK IS INCIDENTAL TO ITEM 5050-0021.
 - FOR SECTION M'-M', SEE SHEET 30.

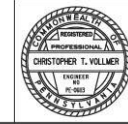
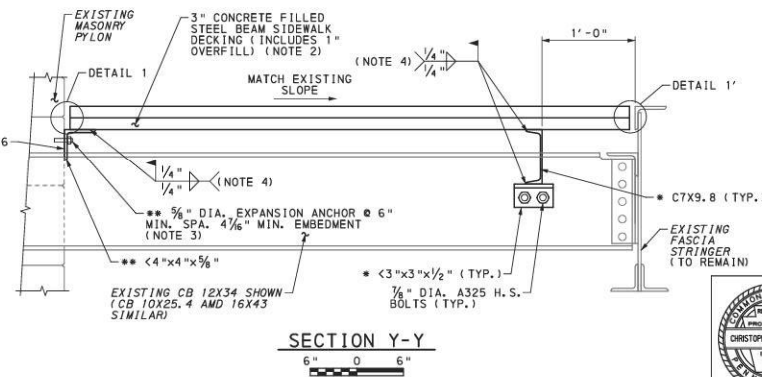
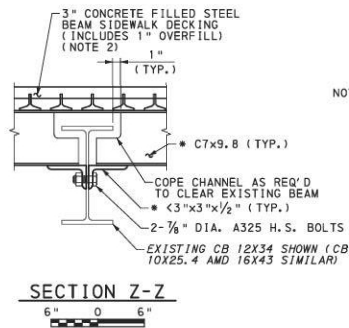
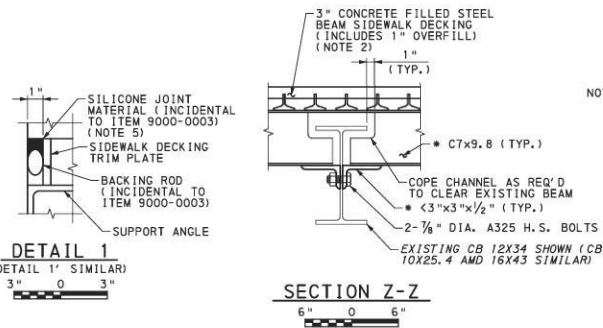
- LEGEND:**
- * INCLUDED WITH ITEM 1050-0020
 - ** INCLUDED WITH ITEM 5050-0021

Mark	Description	By	Chk'd	Rec'd	Date
REVISIONS					

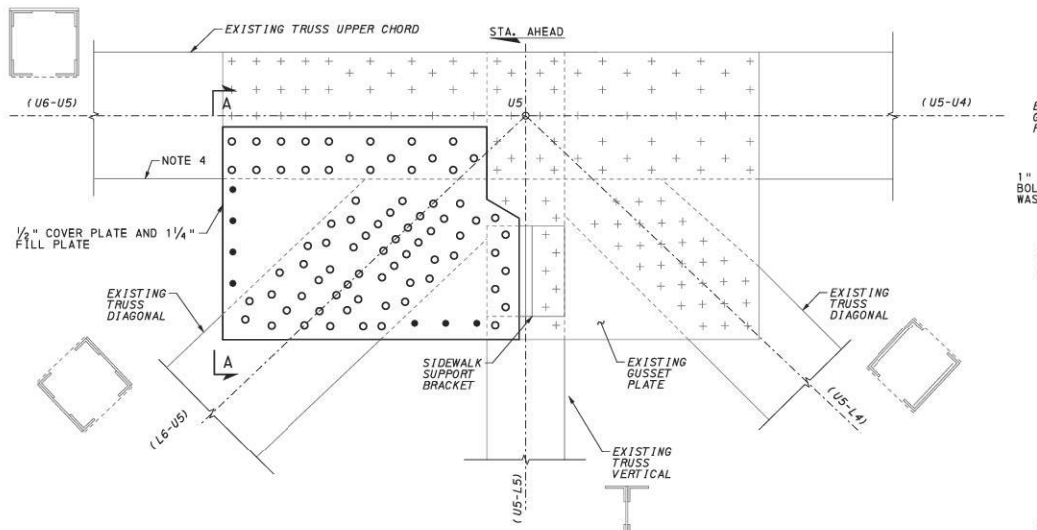
BMS NO. 02-3104-0030-0000 BRKEY 1876
 COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
 ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
 SEGMENT 0030 OFFSET 0000
 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
 PIER 10 & 11 SIDEWALK FRAMING

RECOMMENDED APRIL 26, 2022
CERTIFIED CORRECT PLANS
 David R. Hillman
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST *Secretary*
 Secretary

SHEET 17 OF 47
S-39126

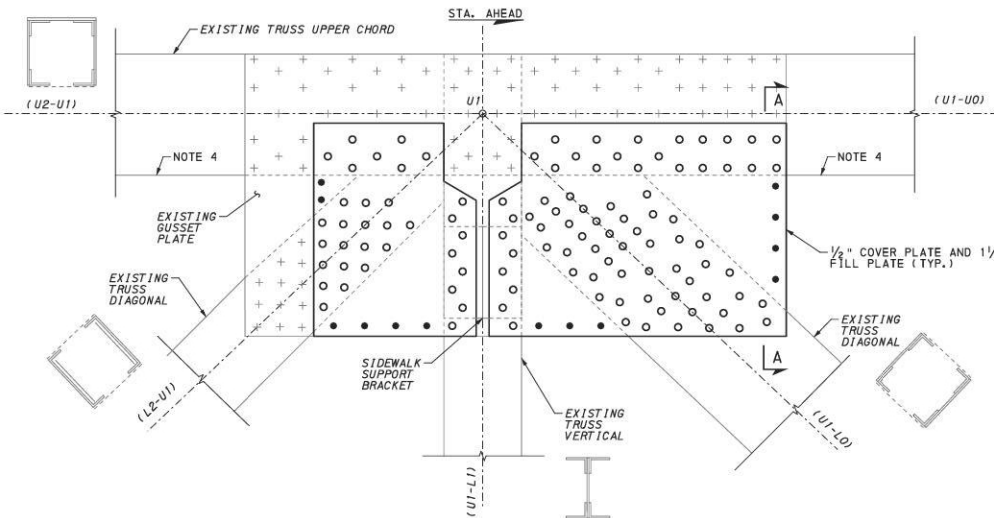


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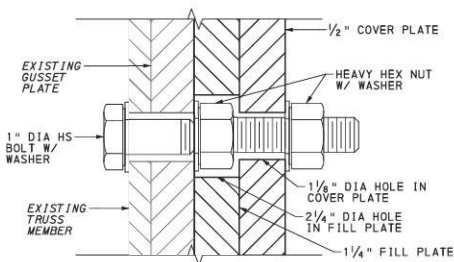
TRUSS GUSSET PLATE REPAIR 1			
JOINT NO.	SPAN	TRUSS	PLATE
U5	6	DOWNSTREAM	LEFT

TRUSS GUSSET PLATE REPAIR 1
NOT TO SCALE

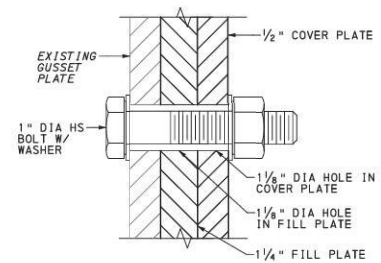


TRUSS GUSSET PLATE REPAIR 2			
JOINT NO.	SPAN	TRUSS	PLATE
U1	7	DOWNSTREAM	LEFT

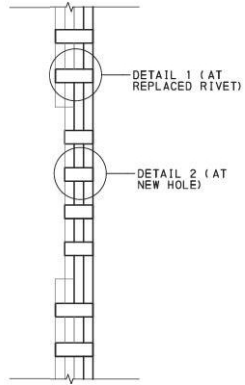
TRUSS GUSSET PLATE REPAIR 2
NOT TO SCALE



DETAIL 1
(AT REPLACED RIVET)
NOT TO SCALE



DETAIL 2
(AT NEW HOLE)
NOT TO SCALE



NOTES:

- FOR GENERAL NOTES, SEE SHEET 5.
- THE MAXIMUM BOLT SPACING FOR SEALING AND STITCH REQUIREMENTS IS 6". MINIMUM BOLT SPACING IS 2 3/8" AND MINIMUM EDGE DISTANCE IS 1 1/2".
- FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
- REMOVE LACING BARS AS REQUIRED FOR ACCESS TO CONNECT THE NEW COVER PLATE. RE-INSTALL LACING BARS WITH NEW HS BOLTS. LIMIT LACING BAR REMOVAL LENGTH TO 5-FEET AND COORDINATE WITH THE REPRESENTATIVE IF ADDITIONAL LACING BARS NEED REMOVED FOR ACCESS.
- ALL NEW GUSSET PLATE MATERIAL INCLUDING ANGLES AND PLATES ARE TO BE DESIGNATED STRUCTURALLY REDUNDANT MEMBERS.
- PREPARE EXISTING STEEL SURFACES THAT COME IN CONTACT WITH NEW STEEL IN ACCORDANCE WITH SPECIAL PROVISION FOR ITEM 9000-0016.

REPAIR PROCEDURE

- FIELD VERIFY EXISTING RIVET PATTERN. DRILL HOLES IN FILL PLATES AND COVER PLATES TO MATCH EXISTING RIVET PATTERN.
- REPLACE INDIVIDUAL RIVETS WITH NEW HS BOLTS. A MAXIMUM OF 4 RIVETS MAY BE REMOVED FROM A MEMBER AT ANY GIVEN TIME. STAGGER REMOVAL OF RIVETS SO THAT NO TWO ADJACENT RIVETS ARE REMOVED FROM THE CONNECTION AT THE SAME TIME.
- INSTALL NEW FILL PLATES AND COVER PLATES. INSTALL SECOND NUT ON HS BOLT.
- DRILL NEW HOLES AND INSTALL NEW HS BOLTS AS SHOWN AROUND PERIMETER OF NEW COVER PLATE, SEE NOTE 2.

LEGEND:

- + EXISTING RIVET
- o EXISTING RIVET TO BE REPLACED WITH 1" DIA HS BOLT
- NEW 1 1/8" HOLE FOR 1" DIA HS BOLT

ESTIMATED QUANTITIES

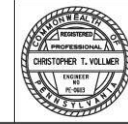
DESCRIPTION	UNIT	REPAIR 1		REPAIR 2	
		ITEM 9000-0009	ITEM 9000-0010	ITEM 9000-0010	ITEM 9000-0010
STRUCTURAL STEEL	LBS	1125	1726		
NEW 1" DIA. HIGH STRENGTH BOLT	EA	7	13		
NEW 1" DIA. HIGH STRENGTH BOLT IN PLACE OF RIVET	EA	77	109		

QUANTITIES ARE FOR CONTRACTOR'S INFORMATION ONLY AND ARE SUBSIDIARY TO THE TABULATION OF QUANTITIES (SEE SHEET 6)

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
 SEGMENT 0030 OFFSET 0000
 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
TRUSS GUSSET PLATE REPAIRS - 1

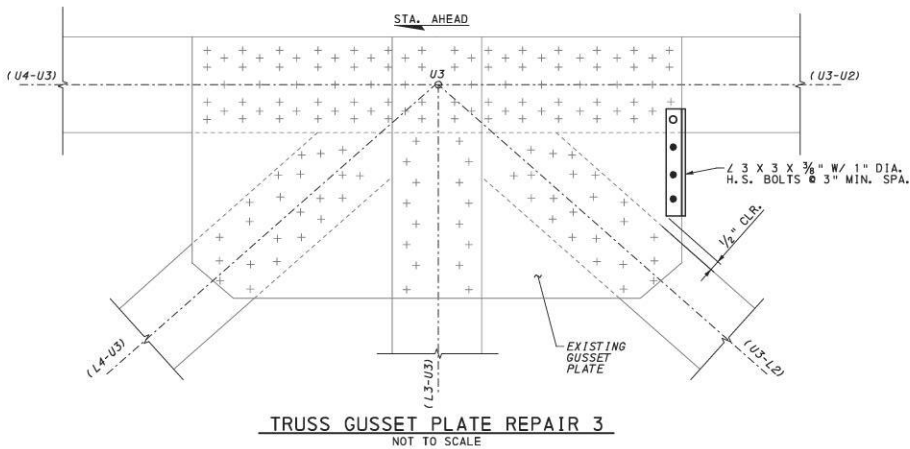


APRIL 28, 2022
CERTIFIED CORRECT PLANS
 Daniel R. Hillenbach
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST *Rosemary Chatter*
 Secretary

SHEET 18 OF 47
 S-39126

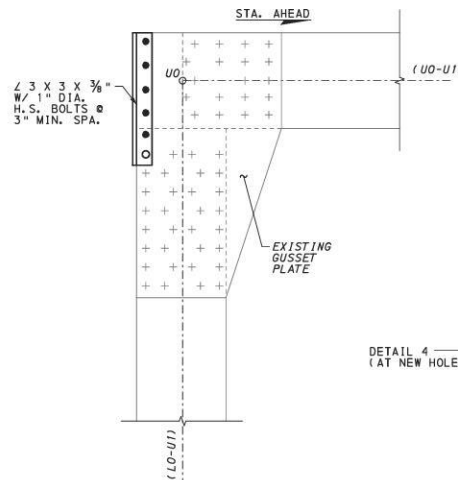
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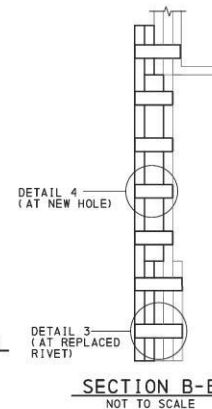
TRUSS GUSSET PLATE REPAIR 3
NOT TO SCALE

JOINT NO.	SPAN	TRUSS	PLATE	PLATE EDGE
U3	9	UPSTREAM	LEFT	BACK STA.



TRUSS GUSSET PLATE REPAIR 6
NOT TO SCALE

JOINT NO.	SPAN	TRUSS	PLATE
UO	2	UPSTREAM	RIGHT



SECTION B-B
NOT TO SCALE

NOTES:

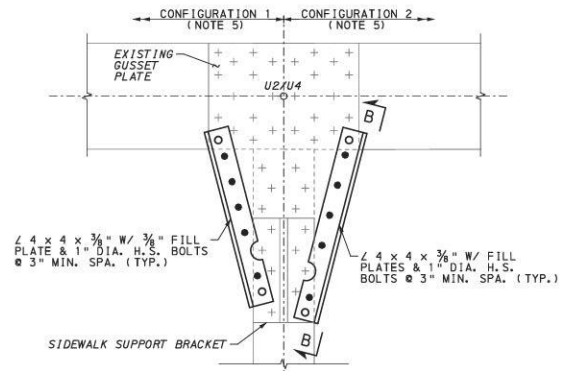
- FOR GENERAL NOTES, SEE SHEET 5.
- FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
- THE MAXIMUM BOLT SPACING FOR SEALING AND STITCH REQUIREMENTS IS 6". MINIMUM BOLT SPACING IS 2 1/2" AND MINIMUM EDGE DISTANCE IS 1 1/2".
- REPAIR 5 LOCATION IS ADJACENT TO THE FLOORBEAM CONNECTION AND NOT THE SIDEWALK BRACKET. REVISE CONNECTION OF ANGLE ACCORDINGLY.
- UTILIZE CONFIGURATION 1 OR 2 BASED ON EXISTING RIVET CONFIGURATION.
- ALL NEW GUSSET PLATE MATERIAL INCLUDING ANGLES AND PLATES ARE TO BE DESIGNATED STRUCTURALLY REDUNDANT MEMBERS.
- PREPARE EXISTING STEEL SURFACES THAT COME IN CONTACT WITH NEW STEEL IN ACCORDANCE WITH SPECIAL PROVISION FOR ITEM 9000-0016.

REPAIR PROCEDURE

- FIELD VERIFY EXISTING RIVET PATTERN. DRILL HOLES IN FILL PLATES AND STIFFENING ANGLES TO MATCH EXISTING RIVET PATTERN.
- REPLACE INDIVIDUAL RIVETS WITH NEW HS BOLTS. A MAXIMUM OF 1 RIVET MAY BE REMOVED FROM A MEMBER AT ANY GIVEN TIME.
- INSTALL NEW FILL PLATES AND STIFFENING ANGLES. INSTALL SECOND NUT ON HS BOLT.
- DRILL NEW HOLES AND INSTALL NEW HS BOLTS AS SHOWN, SEE NOTE 3.

LEGEND:

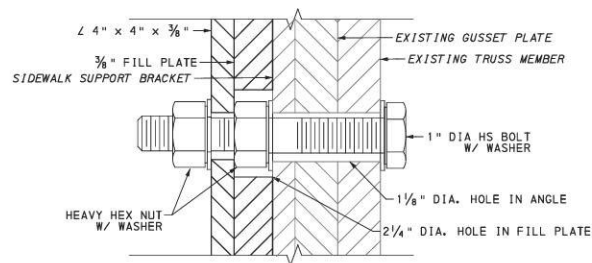
- + EXISTING RIVET
 - o EXISTING RIVET TO BE REPLACED WITH 1" DIA HS BOLT
 - NEW 1 1/8" HOLE FOR 1" DIA HS BOLT
- STA. STATION



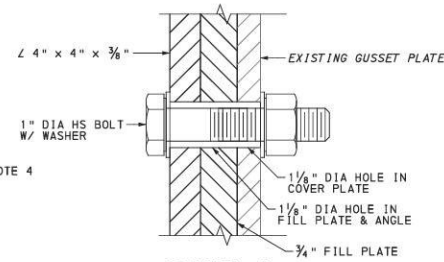
TRUSS GUSSET PLATE REPAIRS 4 & 5
NOT TO SCALE

JOINT NO.	SPAN	TRUSS	PLATE	PLATE EDGE
U2	3	UPSTREAM	RIGHT	BOTH
U4	4	UPSTREAM	RIGHT	BOTH
U2	8	UPSTREAM	RIGHT	BOTH
U4	7	DOWNSTREAM	LEFT	BOTH
U4	8	DOWNSTREAM	LEFT	BOTH
U4	9	DOWNSTREAM	LEFT	BOTH

JOINT NO.	SPAN	TRUSS	PLATE	PLATE EDGE
U4	2	UPSTREAM	RIGHT	AHEAD STA.
U4	2	UPSTREAM	LEFT	BACK STA.
U4	3	UPSTREAM	RIGHT	BACK STA.
U2	4	UPSTREAM	RIGHT	BACK STA.
U2	5	UPSTREAM	RIGHT	BACK STA.
U4	8	UPSTREAM	RIGHT	BACK STA.
U2	6	DOWNSTREAM	LEFT	AHEAD STA.
U2	8	DOWNSTREAM	LEFT	AHEAD STA.
U2	9	DOWNSTREAM	LEFT	AHEAD STA.



DETAIL 3
(AT REPLACED RIVET)
NOT TO SCALE



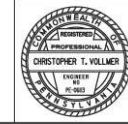
DETAIL 4
(AT NEW HOLE)
NOT TO SCALE

ESTIMATED QUANTITIES					
DESCRIPTION	UNIT	REPAIR 3 ITEM 9000-0011	REPAIR 4 ITEM 9000-0012	REPAIR 5 ITEM 9000-0013	REPAIR 6 ITEM 9000-0014
STRUCTURAL STEEL	LBS	13	642	482	16
NEW 1" DIA. HIGH STRENGTH BOLT	EA	3	60	45	5
NEW 1" DIA. HIGH STRENGTH BOLT IN PLACE OF RIVET	EA	1	24	18	1

QUANTITIES ARE FOR CONTRACTOR'S INFORMATION ONLY AND ARE SUBSIDIARY TO THE TABULATION OF QUANTITIES (SEE SHEET 6)

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
 SEGMENT 0030 OFFSET 0000
 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE



TRUSS GUSSET PLATE REPAIRS - 2

RECOMMENDED APRIL 26, 2022 SHEET 19 OF 47

CERTIFIED CORRECT PLANS

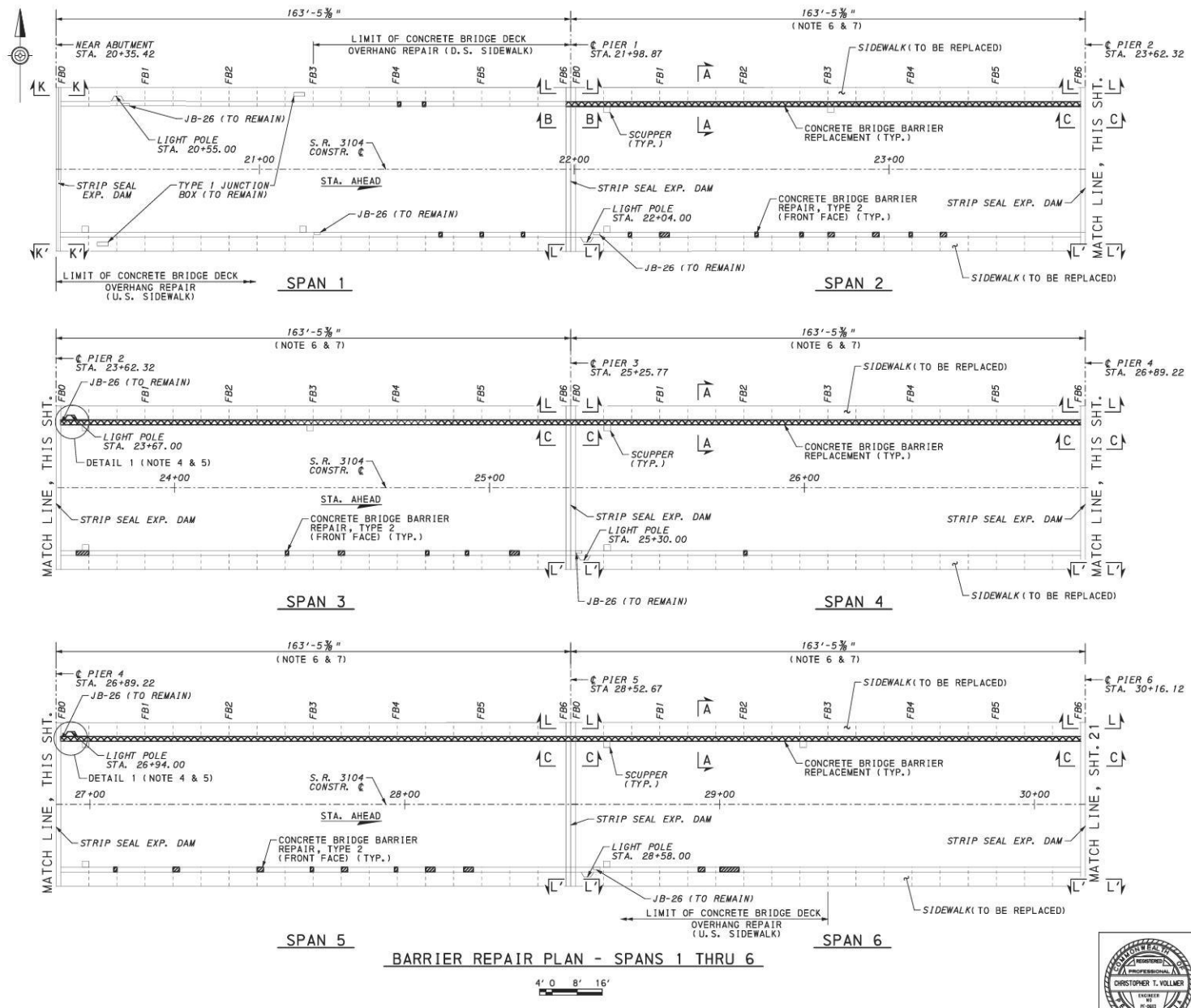
David P. Hallock
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION

Secretary

S-39126

DES: CMC DWN: CMC CHK: CTV

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CERTIFIED CORRECT PLANS
David R. Hall
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
Robert J. Smith
 Secretary

- NOTES:**
1. BARRIER REPAIR LOCATIONS SHOWN REPRESENT APPROXIMATE SPALLED OR DELAMINATED SURFACE AREAS. ACTUAL REPAIR DIMENSIONS AND LOCATIONS SHALL BE DETERMINED BY THE REPRESENTATIVE.
 2. PROVIDE BARRIER DEFLECTION JOINTS AT 15'-0" MAX. SPACING IN NEW BARRIER.
 3. CONSTRUCT 4" X 8" DRAINAGE SLOTS IN NEW BARRIER AT A MINIMUM 10'-0" SPACING. SEE DETAILS ON SHEET 28.
 4. FOR DETAIL 1, SEE SHEET 27.
 5. REMOVE, STORE AND RE-INSTALL LIGHT POLE AS PART OF ITEM 9000-0005.
 6. FOR CONCRETE REPAIR DETAILS, SEE SHEET 8.
 7. FOR SECTION A-A, SEE SHEET 25.
 8. FOR VIEWS B-B AND C-C SEE SHEET 26.
 9. FOR SECTIONS K-K (K'-K') AND L-L (L'-L'), SEE SHEETS 29 AND 30 RESPECTFULLY.

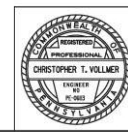
- LEGEND:**
- ☒ ITEM 9000-0004
CONCRETE BRIDGE BARRIER REPLACEMENT
 - FBI FLOORBEAM NUMBER
 - ▨ ITEM 5040-0200
CONCRETE BRIDGE BARRIER REPAIR, TYPE 2 (FRONT FACE)
 - D.S. DOWNSTREAM
 - U.S. UPSTREAM

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
 SEGMENT 0030 OFFSET 0000
 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
SIDEWALK/BARRIER PLAN-SPANS 1 - 6

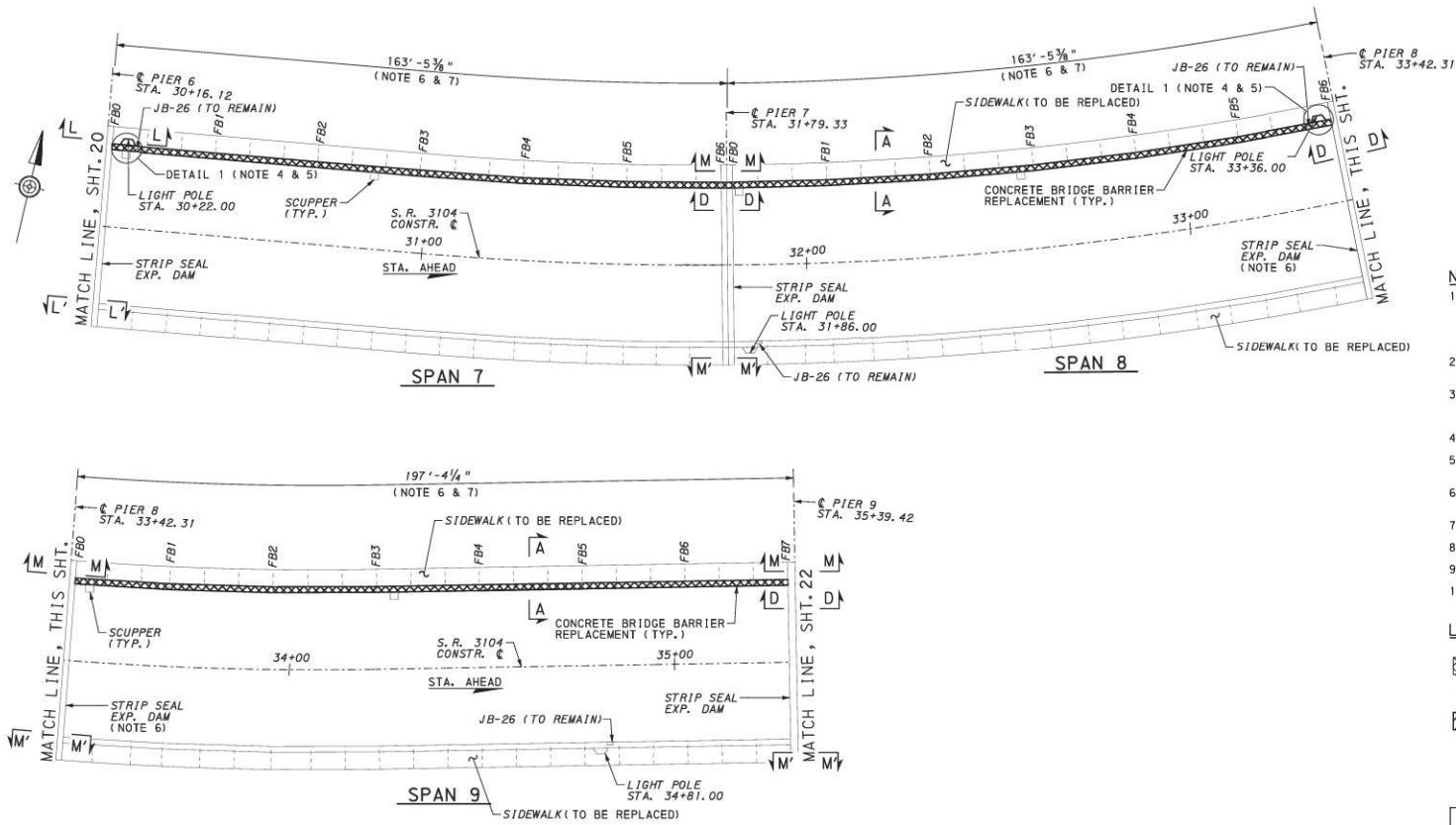
RECOMMENDED _____ APRIL 26, 2022 _____ SHEET 20 OF 47

S-39126



DES: JMB DWN: JMB CHK: CTV

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BARRIER REPAIR PLAN - SPANS 7 THRU 9

4' 0" 8' 16"

- NOTES:**
1. BARRIER REPAIR LOCATIONS SHOWN REPRESENT APPROXIMATE SPALLED OR DELAMINATED SURFACE AREAS. ACTUAL REPAIR DIMENSIONS AND LOCATIONS SHALL BE DETERMINED BY THE REPRESENTATIVE.
 2. PROVIDE BARRIER DEFLECTION JOINTS AT 15'-0" MAX. SPACING IN NEW BARRIER.
 3. CONSTRUCT 4" X 8" DRAINAGE SLOTS IN NEW BARRIER AT A MAXIMUM 10'-0" SPACING. SEE DETAILS ON SHEET 28.
 4. FOR DETAIL 1, SEE SHEET 27.
 5. REMOVE, STORE AND RE-INSTALL LIGHT POLE AS PART OF ITEM 9000-0005.
 6. REPLACE EXISTING STRIP SEAL GLAND AS PART OF ITEM 1090-1017. SEE SHEET 34 FOR DETAILS.
 7. FOR CONCRETE REPAIR DETAILS, SEE SHEET 8.
 8. FOR SECTION A-A, SEE SHEET 25.
 9. FOR VIEW D-D, SEE SHEET 26.
 10. FOR SECTIONS L-L (L'-L') AND M-M (M'-M'), SEE SHEET 30.

- LEGEND:**
- ☒ ITEM 9000-0004 CONCRETE BRIDGE BARRIER REPLACEMENT
 - FB1 FLOORBEAM NUMBER
 - ▨ ITEM 5040-0200 CONCRETE BRIDGE BARRIER REPAIR, TYPE 2 (FRONT FACE)
 - D.S. DOWNSTREAM
 - U.S. UPSTREAM

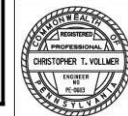
Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
 SEGMENT 0030 OFFSET 0000
 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
SIDEWALK/BARRIER PLAN-SPANS 7 - 9

RECOMMENDED _____ APRIL 26, 2022 _____ SHEET 21 OF 47

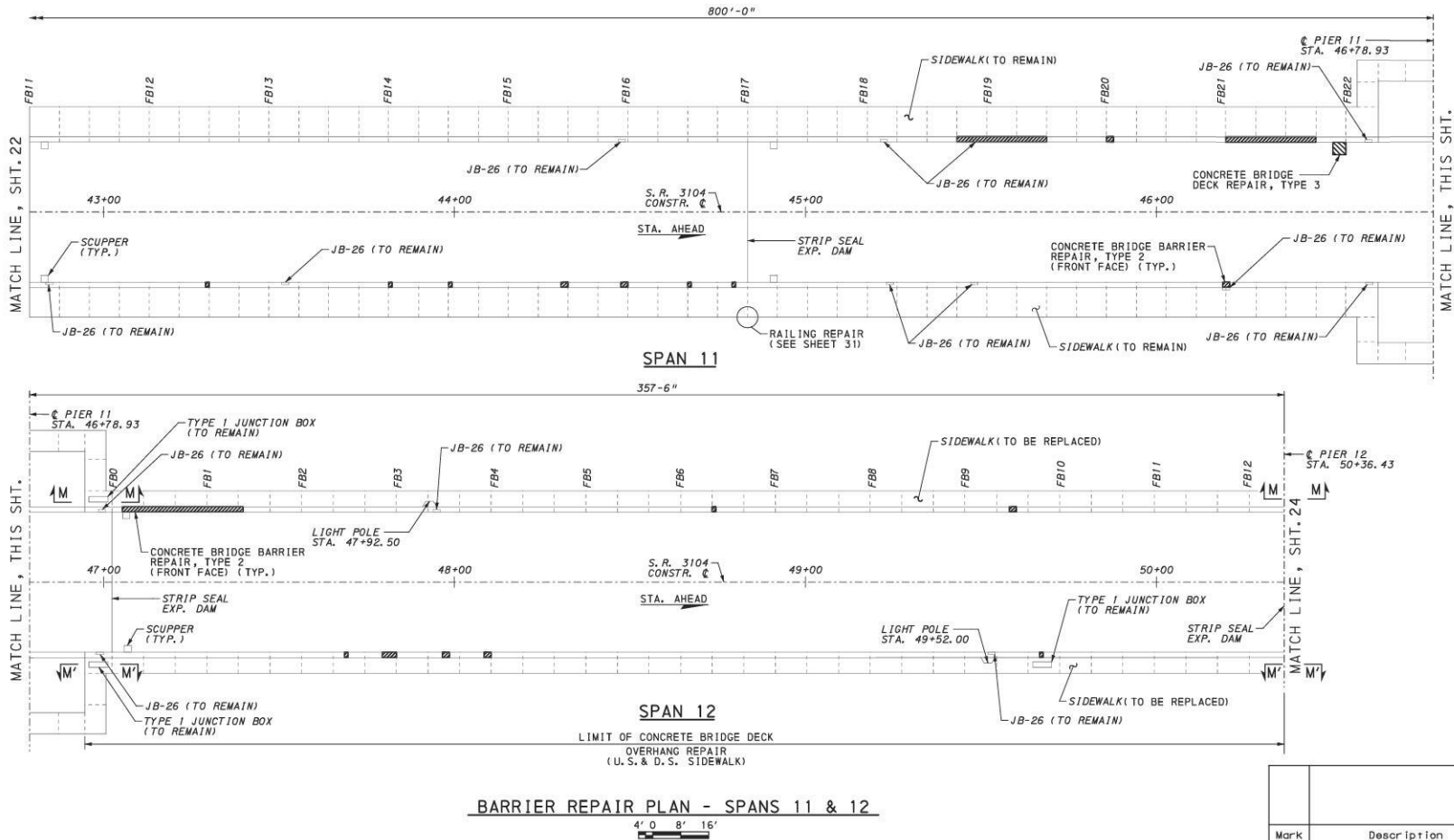
S-39126

CERTIFIED CORRECT PLANS
David R. Hallbach
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
Christopher T. Vollmer
 Secretary



DES: JMB DWN: JMB CHK: CTV

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BARRIER REPAIR PLAN - SPANS 11 & 12

NOTES:

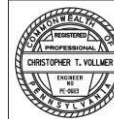
- REPAIR LOCATIONS SHOWN REPRESENT APPROXIMATE SPALLED OR DELAMINATED SURFACE AREAS. ACTUAL REPAIR DIMENSIONS AND LOCATIONS SHALL BE DETERMINED BY THE REPRESENTATIVE.
- FOR CONCRETE REPAIR DETAILS, SEE SHEET 8.
- FOR SECTION M-M (M'-M'), SEE SHEET 30.

LEGEND:

- ITEM 1040-0030 CONCRETE BRIDGE DECK REPAIR, TYPE 3
- FBI FLOORBEAM NUMBER
- ITEM 5040-0200 CONCRETE BRIDGE BARRIER REPAIR, TYPE 2 (FRONT FACE)
- D. S. DOWNSTREAM
- U. S. UPSTREAM

CERTIFIED CORRECT PLANS

 Daniel P. Hillenrich
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST
 Christopher T. Vollmer
 Secretary

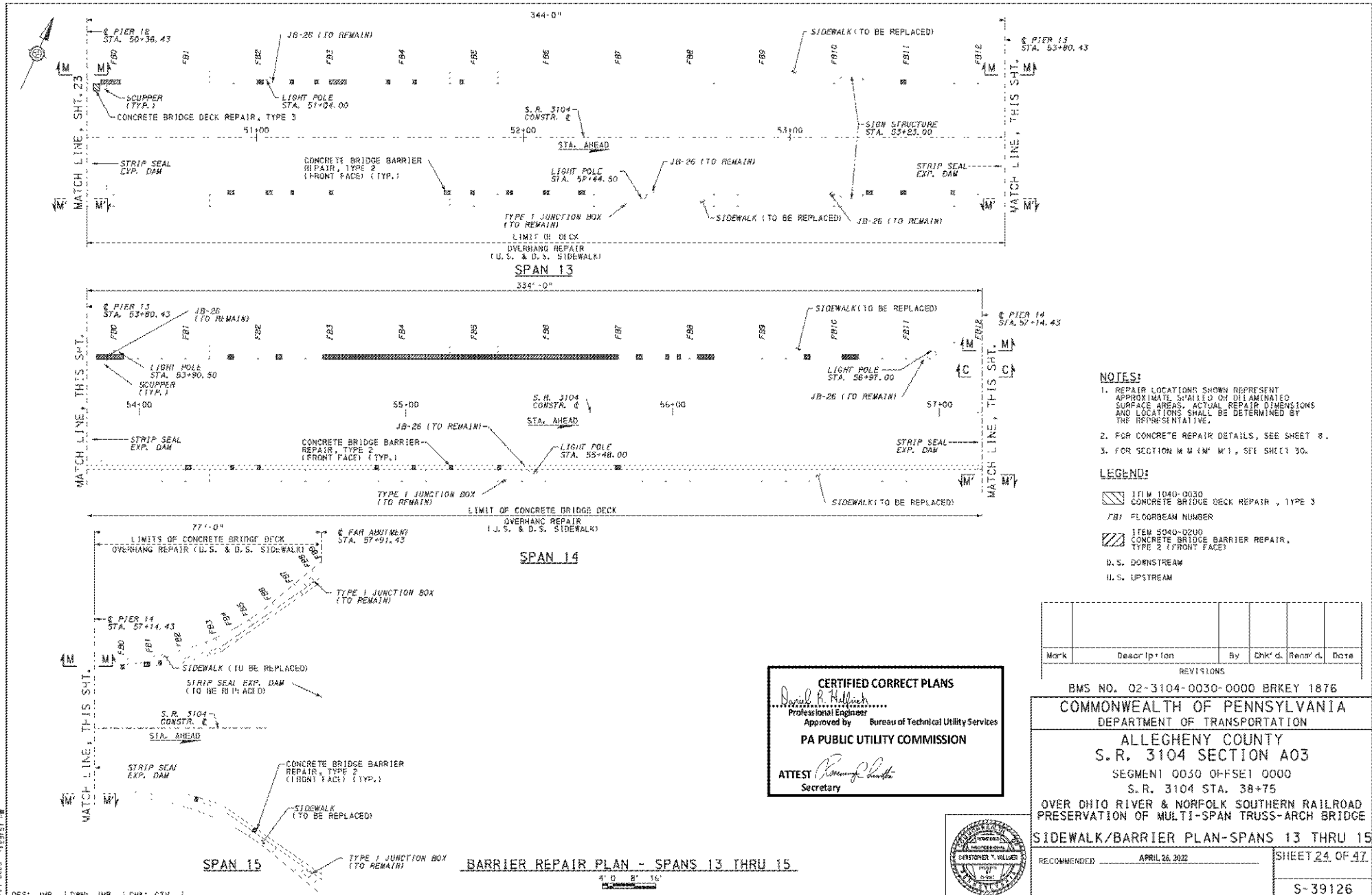


Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
 SEGMENT 0030 OFFSET 0000
 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
SIDEWALK/BARRIER PLAN-SPANS 11&12
 RECOMMENDED APRIL 26, 2022 SHEET 23 OF 47
 S-39126

DES: JMB DWN: JMB CHK: CTV

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NOTES:

1. REPAIR LOCATIONS SHOWN REPRESENT APPROXIMATE SPALLED OR DIAMETERED SURFACE AREAS. ACTUAL REPAIR DIMENSIONS AND LOCATIONS SHALL BE DETERMINED BY THE REPRESENTATIVE.
2. FOR CONCRETE REPAIR DETAILS, SEE SHEET 8.
3. FOR SECTION M M (4' X 1' W), SEE SHEET 30.

LEGEND:

- [Hatched Pattern] ITEM 1040-0030 CONCRETE BRIDGE DECK REPAIR, TYPE 3
- [Hatched Pattern] FB/ FLOORBEAM NUMBER
- [Hatched Pattern] ITEM 8040-0200 CONCRETE BRIDGE BARRIER REPAIR, TYPE 2 (FRONT FACE)
- D.S. DOWNSTREAM
- U.S. UPSTREAM

Mark	Description	By	CHK'd	Revised	Date
REVISIONS					

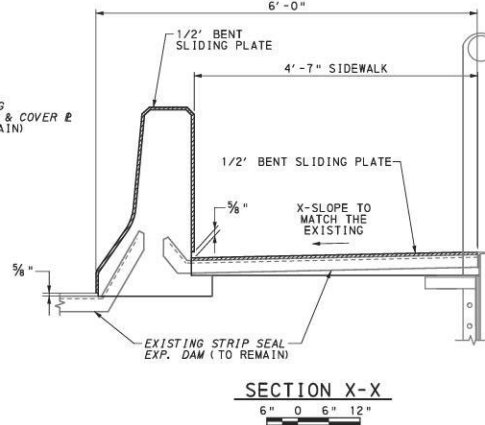
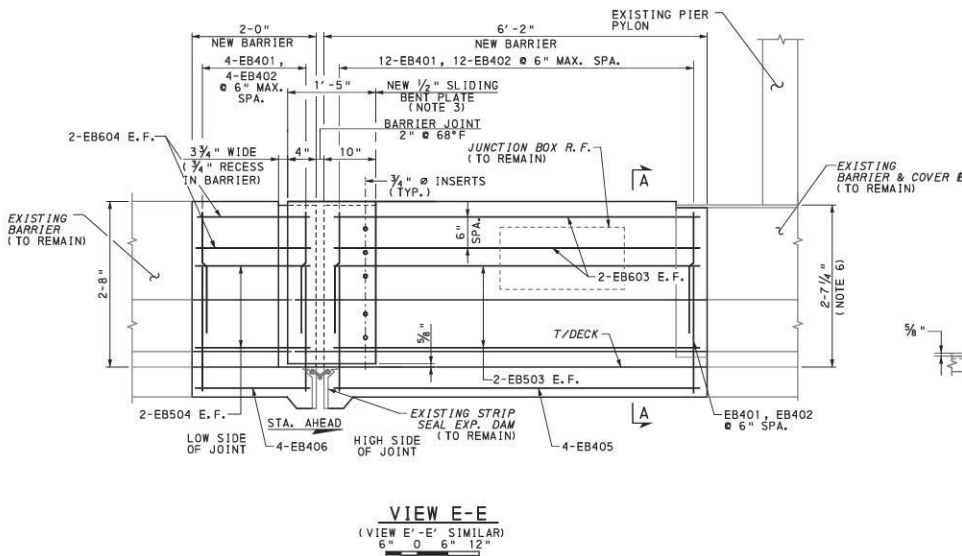
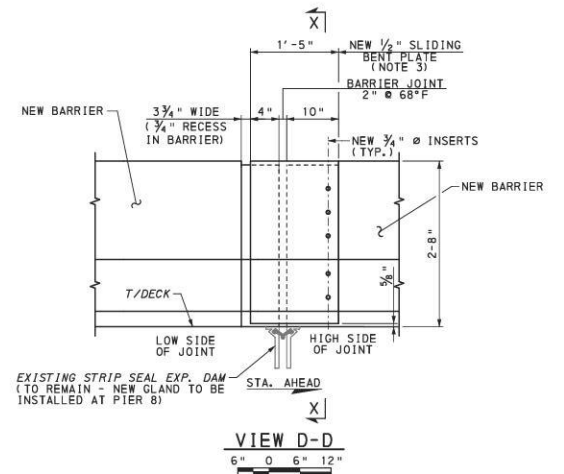
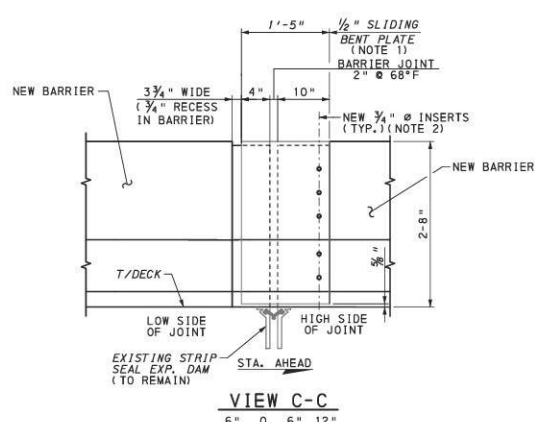
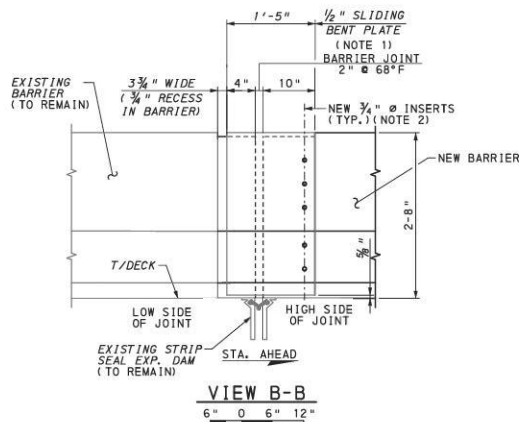
CERTIFIED CORRECT PLANS
 David R. Halyuk
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST *[Signature]*
 Secretary

BMS NO. 02-3104-0030-0000 BRKEY 1876
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
 ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
 SEGMENT 0030 OFF-SEI 0000
 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE

SIDEWALK/BARRIER PLAN-SPANS 13 THRU 15

RECOMMENDED	APRIL 26, 2022	SHEET 24 OF 47
DES: JMB DWN: JMB CHK: CTY		S-39126

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NOTES:

1. REMOVE, STORE AND RE-INSTALL EXISTING SLIDING PLATE INCIDENTAL TO BARRIER REPLACEMENT.
2. VERIFY THE NUMBER AND SPACING OF EXISTING INSERTS AND INSTALL NEW INSERTS TO MATCH EXISTING SLIDING PLATE. NEW INSERTS ARE INCIDENTAL TO BARRIER REPLACEMENT.
3. NEW SLIDING PLATE IS INCIDENTAL TO BARRIER REPLACEMENT.
4. FOR BARRIER DRAINAGE DETAILS, SEE SHEET 28.
5. FOR BAR SCHEDULE AND SECTION A-A, SEE SHEET 25.
6. VERIFY EXISTING BARRIER HEIGHT AND COVER PLATE DIMENSIONS PRIOR TO MODIFYING THE BARRIER. REVISE THE NEW BARRIER TIE-IN AS REQUIRED TO MATCH THE BARRIER TO REMAIN. REMOVE, STORE AND RE-INSTALL THE COVER PLATE AS REQUIRED TO REPAIR THE BARRIER (INCIDENTAL).

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
S.R. 3104 SECTION A03

SEGMENT 0030 OFFSET 0000
S.R. 3104 STA. 38+75

OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE

BARRIER REPAIR DETAILS - 2

RECOMMENDED APRIL 26, 2022

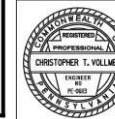
SHEET 26 OF 47

S-39126

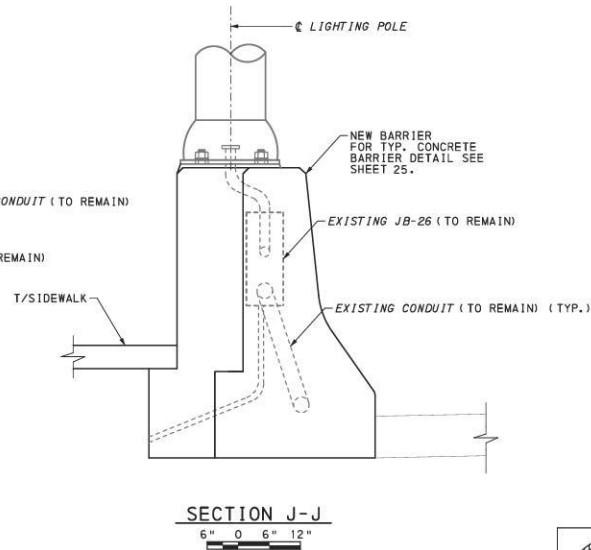
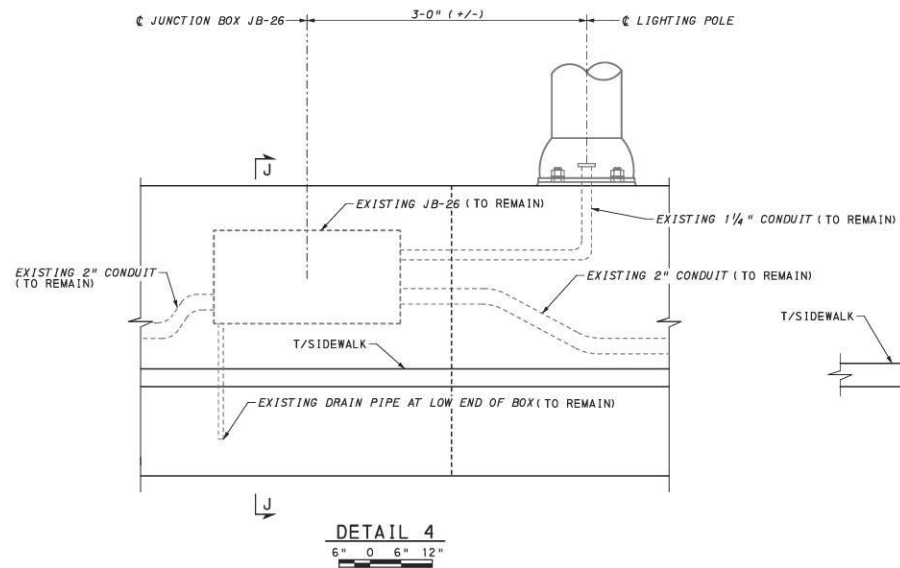
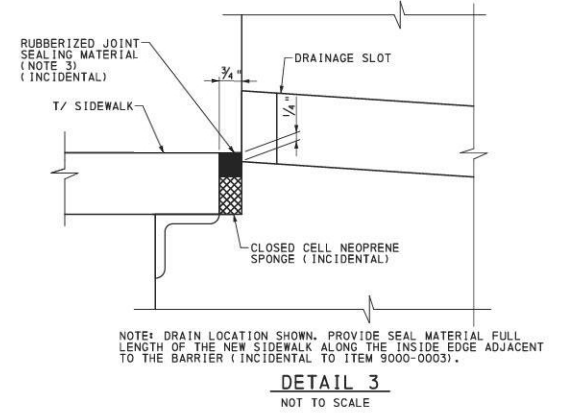
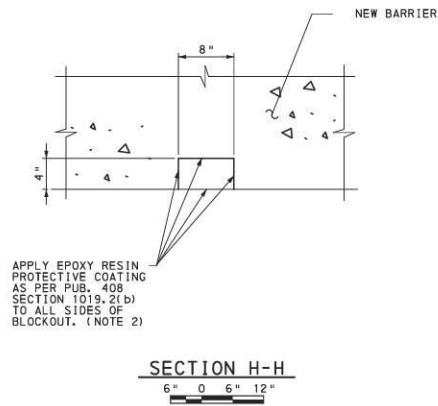
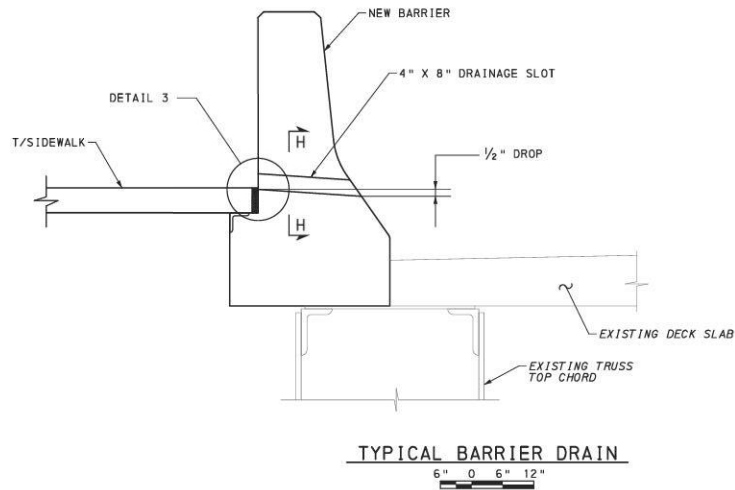
CERTIFIED CORRECT PLANS

Daniel R. Kallman
Professional Engineer
Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION

ATTEST *Christopher T. Vulliamy*
Secretary



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NOTES:

1. CONSTRUCT 4" X 8" DRAINAGE SLOTS AT A MAXIMUM SPACING OF 10'-0". SPACE AROUND LIGHT POLES.
2. EPOXY RESIN IS INCIDENTAL TO BARRIER REPLACEMENT.
3. PROVIDE RUBBERIZED JOINT SEALING MATERIAL IN ACCORDANCE WITH PUB. 408, SECTION 705.4(b).

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

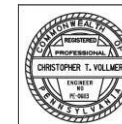
ALLEGHENY COUNTY
S.R. 3104 SECTION A03

SEGMENT 0030 OFFSET 0000
S.R. 3104 STA. 38+75

OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE

BARRIER DRAINAGE DETAILS

SHEET 28 OF 47



RECOMMENDED APRIL 20, 2022

CERTIFIED CORRECT PLANS

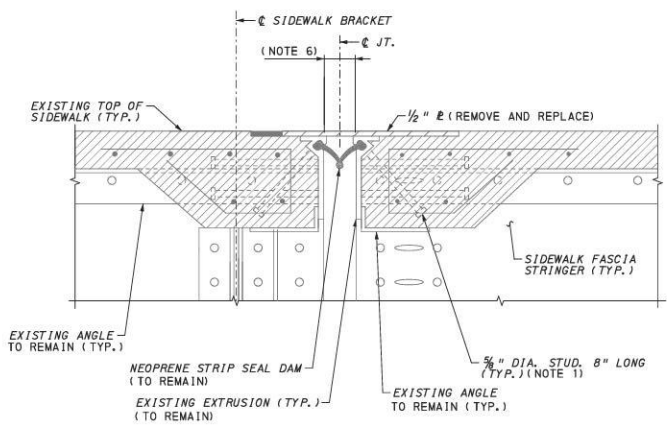
David P. Hefner
Professional Engineer

Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION

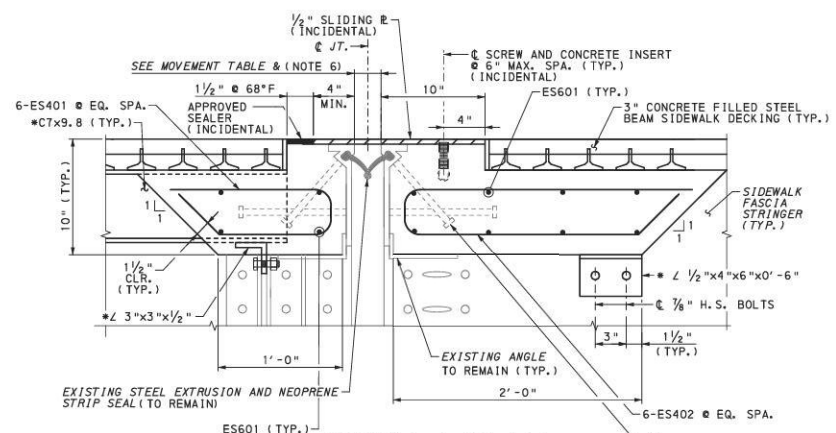
ATTEST *Christopher T. Voller*
Secretary

S-39126

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SECTION L-L (L'-L')
(EXISTING- PIERS 1 THRU 6 SIDEWALK EXP. DAM)
NOT TO SCALE



SECTION L-L (L'-L')
(PROPOSED- PIERS 1 THRU 6 SIDEWALK EXP. DAM)
NOT TO SCALE

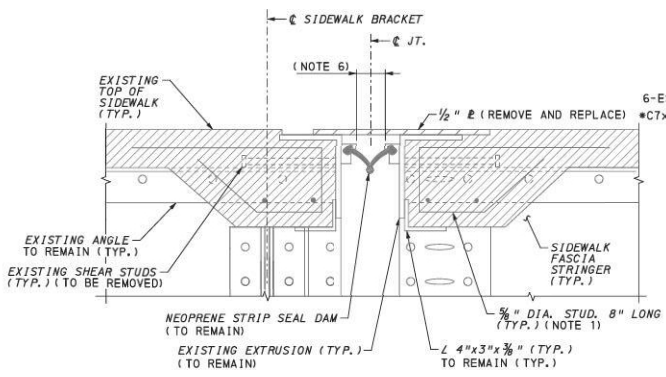
MOVEMENT TABLE	
PIER NO.	MOVEMENT CLASS
1-7	3"
8	3 1/2"
9	3"
12 & 13	4"
14	3"

NOTES:

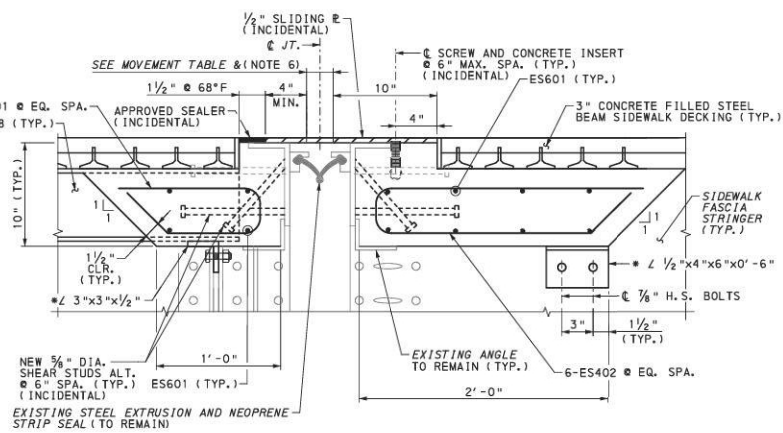
- OMIT STUDS WHERE REQUIRED FOR INSTALLATION OF NEW SIDEWALK DECKING.
- FOR STRIP SEAL GENERAL NOTES AND DETAILS NOT SHOWN, SEE BC-767M.
- FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS AS NECESSARY PRIOR TO CONSTRUCTION.
- SECTIONS L-L (L'-L') AND M-M (M'-M') SHOW DOWNSTREAM SIDEWALK EXPANSION DAM, UPSTREAM SIDEWALK EXPANSION DAM SIMILAR.
- FOR REINFORCEMENT BAR SCHEDULE, SEE SHEET 29.
- MEASURE THE EXISTING JOINT OPENING AND CORRESPONDING AMBIENT TEMPERATURE PRIOR TO FABRICATION AND CONSTRUCTION.

LEGEND:

- INDICATES AREA OF EXISTING SIDEWALK TO BE REMOVED
- INCLUDED WITH 1050-0020.



SECTION M-M (M'-M')
(EXISTING - PIERS 7 THRU 14 SIDEWALK EXP. DAM)
(PIERS 11 & 12 SIMILAR)
NOT TO SCALE



SECTION M-M (M'-M')
(PROPOSED - PIERS 7 THRU 14 SIDEWALK EXP. DAM)
(PIERS 11 & 12 SIMILAR)
NOT TO SCALE

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
S.R. 3104 SECTION A03

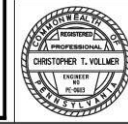
SEGMENT 0030 OFFSET 0000
S.R. 3104 STA. 38+75
OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE

SIDEWALK EXP. DAM REPAIRS - 2

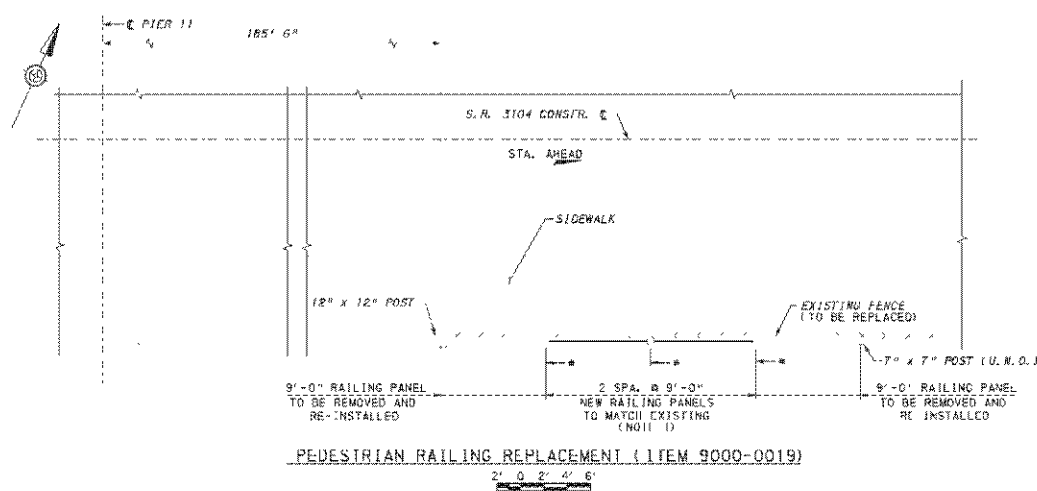
RECOMMENDED _____ APRIL 26, 2022 _____ SHEET 30 OF 47

CERTIFIED CORRECT PLANS

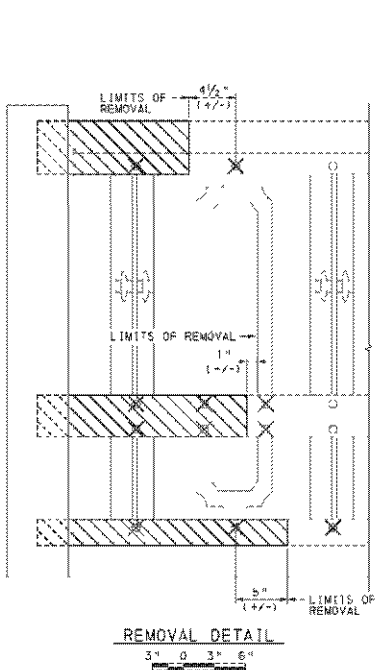
Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST
 Secretary



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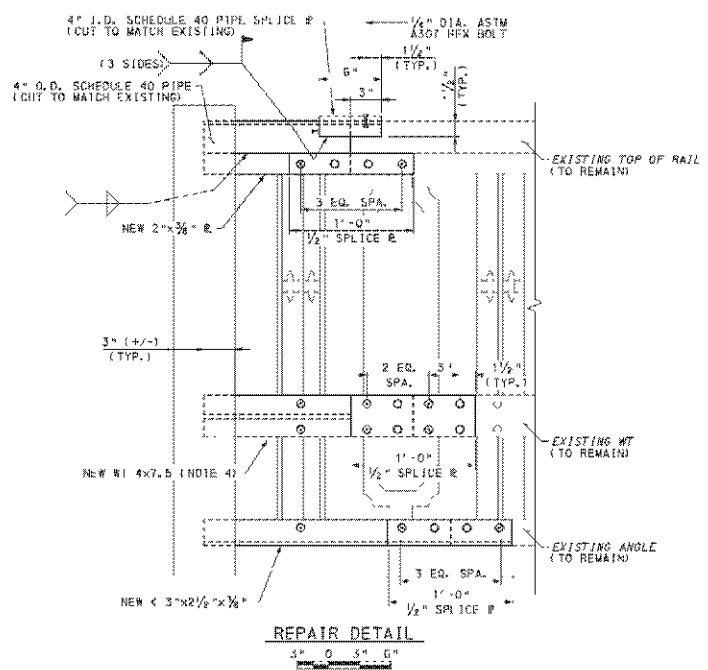


PEDESTRIAN RAILING REPLACEMENT (ITEM 9000-0019)



REMOVAL DETAIL

5' 0" 3" 6"



REPAIR DETAIL

3' 0" 3" 6"

PEDESTRIAN RAILING REPAIR (ITEM 9000-0006)

(SPAN 11, PP 17, U.S. SHOWN - OTHER LOCATIONS SIMILAR)

CERTIFIED CORRECT PLANS

Donald R. Hallock
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION

ATTEST *[Signature]*
 Secretary

- NOTES:**
- FABRICATE AND INSTALL NEW RAILING PANELS IN-KIND MATCHING THE EXISTING RAILING DETAILS. SEE HANDRAILING DETAILS IN THE ORIGINAL DRAWINGS (DATED 1929).
 - NEW RAILING FILLETS ARE TO BE CONNECTED WITH 1/4" DIA. ASTM A307, GRADE A HEX BOLTS IN LIEU OF RIVETS.
 - RAILING ELEMENTS ARE TO BE COMPISED OF STRUCTURAL STEEL CONFORMING TO AASHTO M270 (ASTM A709), GRADE 36.
 - TRIM NEW BY SFTM TO MATCH EXISTING.

- LEGEND:**
- * REMOVE AND RESET EXISTING POSTS. RE-INSTALL POSTS IN LIEU. ANY MODIFICATIONS REQUIRED TO RE-INSTALL THE POSTS ARE INCIDENTAL TO ITEM 9000-0019. REPLACE EXISTING RIVETS WITH H.S. BOLTS (AS APPLICABLE).
 - ▨ LIMITS OF RAILING REMOVAL.
 - ✗ EXISTING RIVETS TO BE REMOVED.
 - ⊙ EXISTING RIVETS TO BE REPLACED WITH 1/4" DIA. ASTM A307, GRADE A HEX BOLTS.
 - NEW 1/4" DIA. ASTM A307, GRADE A HEX BOLTS.

Mark	Description	By	CHK'd	Revs'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
S.R. 3104 SECTION A03
 SEGMENT 0030 OFFSET 0000
 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE

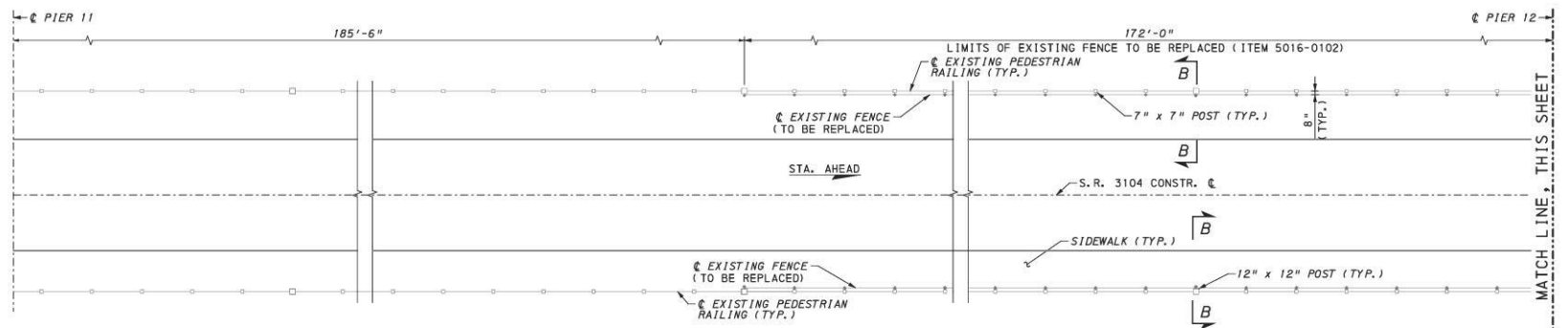
RAILING REPAIR DETAILS

RECOMMENDED APRIL 26, 2022 SHEET 31 OF 47

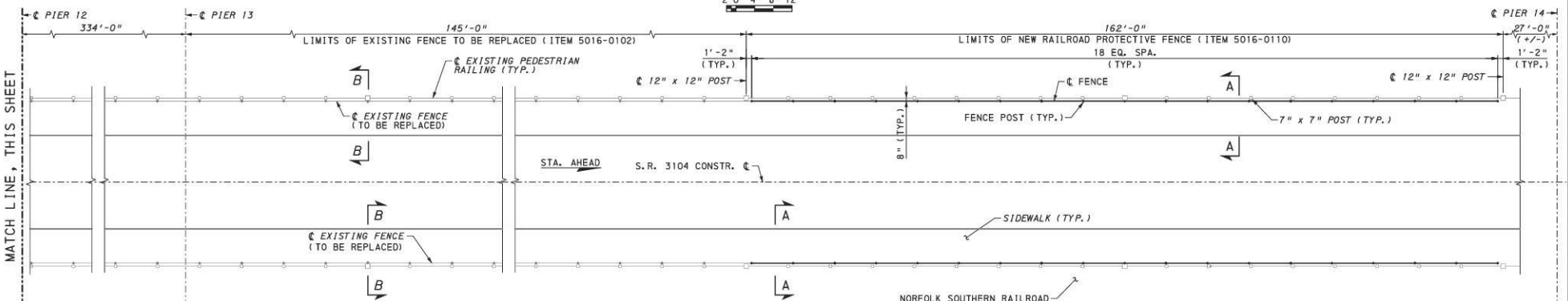


S-39126

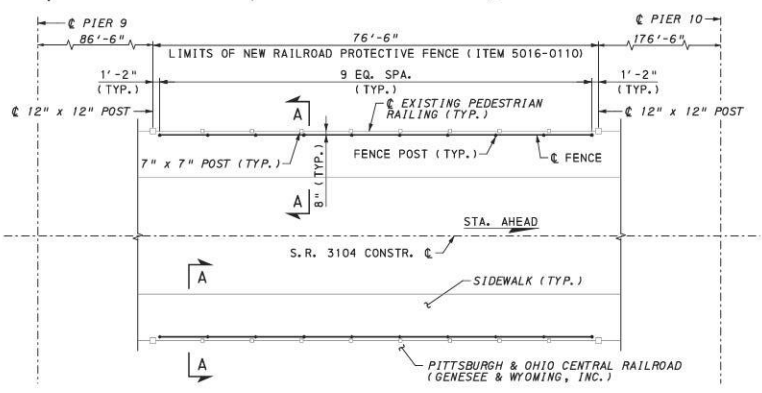
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FENCE LAYOUT PLAN
(SPAN 12)
2' 0" 4' 8" 12'



FENCE LAYOUT PLAN
(SPANS 13 & 14)
2' 0" 4' 8" 12'

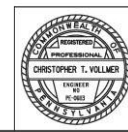


FENCE LAYOUT PLAN
(SPAN 10)
2' 0" 4' 8" 12'

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
 SEGMENT 0030 OFFSET 0000
 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
FENCE PLAN - SPANS 10 & 12-14

CERTIFIED CORRECT PLANS
David B. Hillrich
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST *Rosemary Shantz*
 Secretary

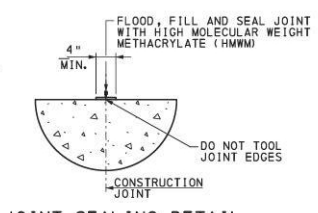
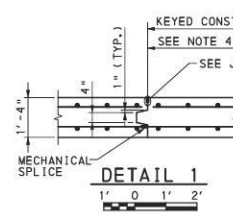
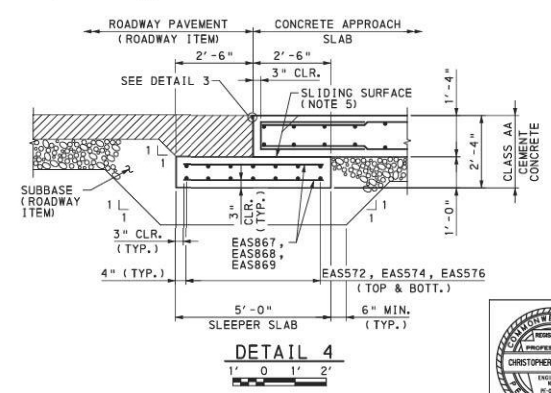
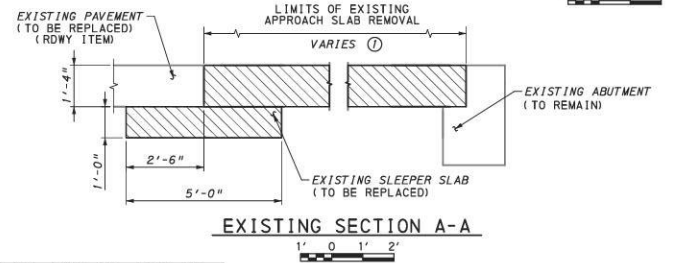
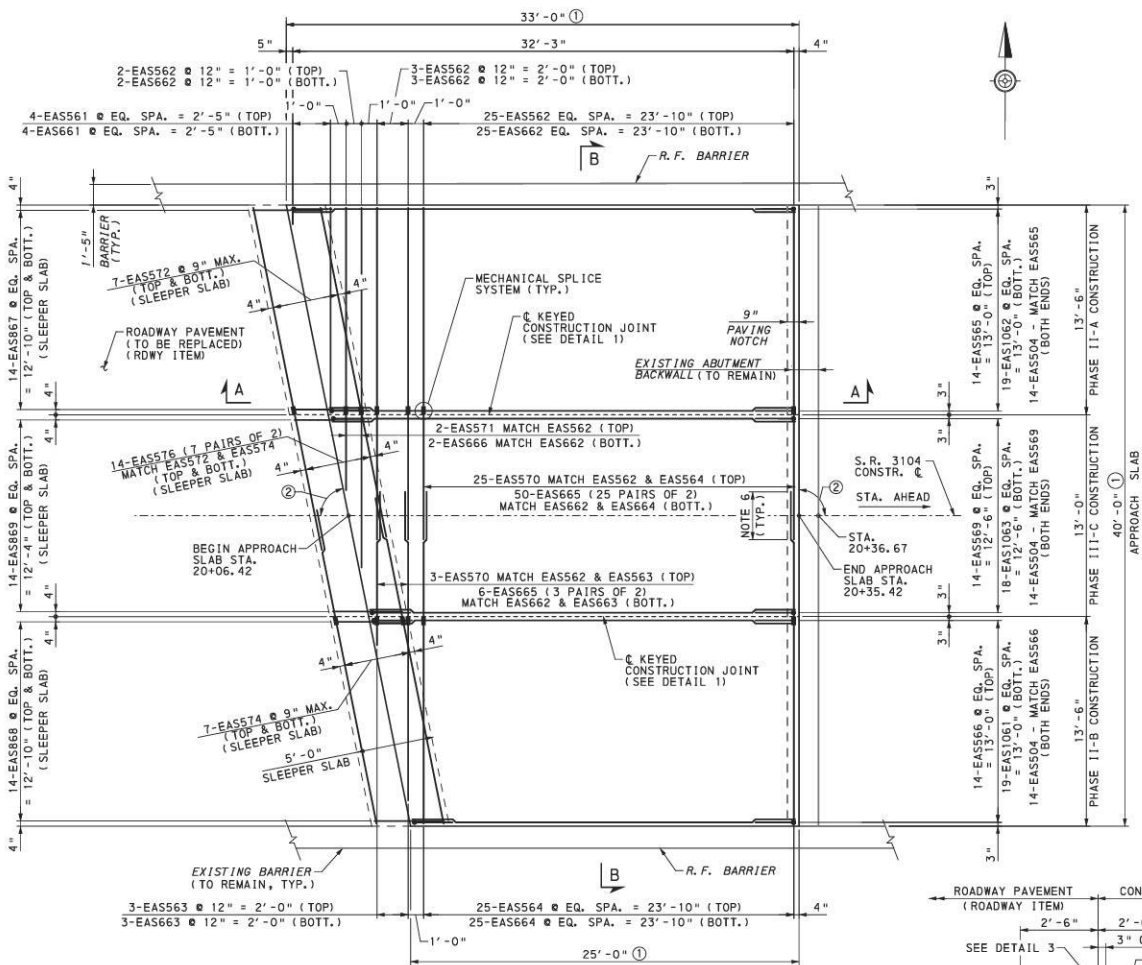


- NOTES:**
- FOR ADDITIONAL DETAILS, SEE BC-701M.
 - FOR SECTIONS A-A AND B-B, SEE SHEET 33.

RECOMMENDED _____ APRIL 26, 2022 _____
 SHEET 32 OF 47
 S-39126

DES+ CMC DWN+ CMC CHK+ CTV

P:\1\2022\3/23/2022\p\w\39011.dwg, com g\met-pw-01\Documents\FR-d\secta6361\2020_Response\NO.2\NE. Prj\RFAC.dwg, CAD\Drawings\FINAL\River Br-Ide\SHITTO_APPR_SLAB 1.dwg



JOINT SEALING NOTES:

- FOR STAGED CONSTRUCTION, FLOOD, FILL AND SEAL LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINTS IN APPROACH SLABS WITH HIGH MOLECULAR WEIGHT METHACRYLATE (HMM) IN ACCORDANCE WITH PUBLICATION 408 SECTION 1001.3(1) FOR APPROACH SLABS.
- PROVIDE CONSTRUCTION JOINTS ONLY WHERE INDICATED. DO NOT ADD LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINTS.

LEGEND:

- [Hatched Area] LIMITS OF REMOVAL OF PORTION OF EXISTING BRIDGE.
- ① MATCH EXISTING DIMENSIONS. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION OF REINFORCEMENT BARS.
- ② MATCH EXISTING. CONTRACTOR TO VERIFY.
- R.F. INDICATES REAR FACE

NOTES:

- FOR SECTIONS A-A, B-B, AND DETAIL 3, SEE SHEET 36.
- FOR REINFORCEMENT BAR SCHEDULE, SEE SHEET 37.
- MATCH EXISTING TOP OF SLAB ELEVATIONS AND CROSS SLOPES.
- TOP REINFORCEMENT NOT CONTINUOUS THROUGH JOINT. BOTTOM REINFORCEMENT CONTINUOUS THROUGH JOINT WITH USE OF MECHANICAL SPLICE AS SHOWN.
- TROWEL SMOOTH AND PLACE 2 LAYERS OF 4 MIL. POLYETHYLENE SHEETING AS BOND BREAKER (INCIDENTAL).
- APPROACH SLAB SPLICE LENGTHS:
#5 BAR = 2'-7"
#6 BAR = 3'-1"

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
 SEGMENT 0030 OFFSET 0000
 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE

APPROACH SLAB 1 PLAN

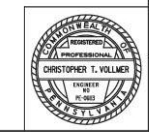
RECOMMENDED APRIL 26, 2022 SHEET 35 OF 47

CERTIFIED CORRECT PLANS

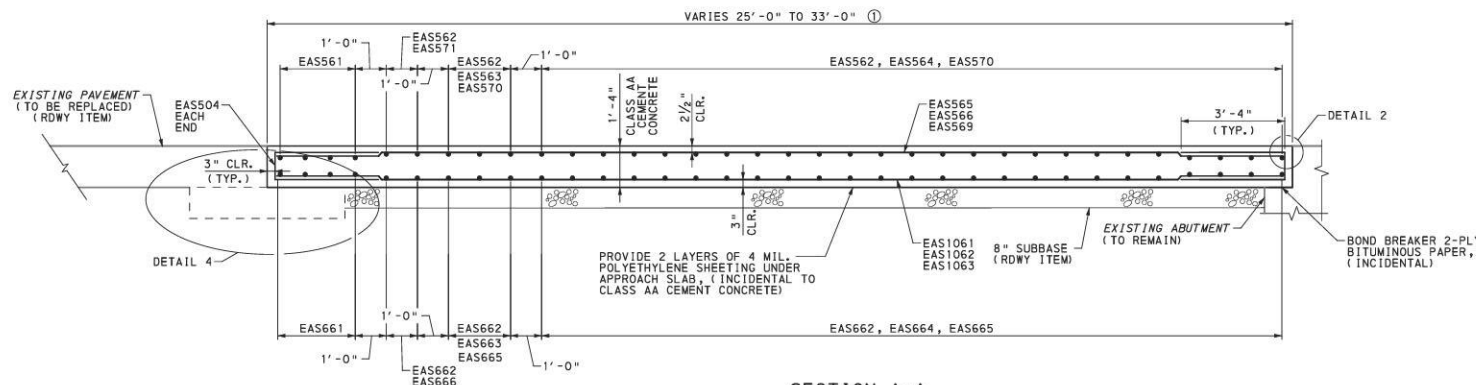
Daniel R. Hillman
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION

ATTEST *[Signature]*
 Secretary

S-39126



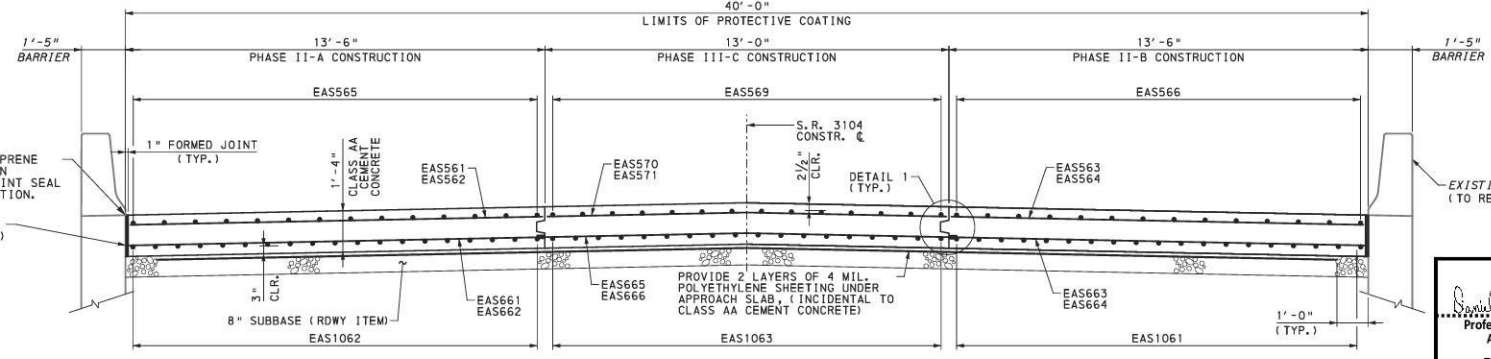
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SECTION A-A
NOT TO SCALE

LEGEND:
 ① MATCH EXISTING DIMENSIONS. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION OF REINFORCEMENT BARS.

- NOTES:**
- FOR REINFORCEMENT BAR SCHEDULES, SEE SHEET 37.
 - MATCH EXISTING TOP OF SLAB ELEVATIONS AND CROSS SLOPES.
 - FOR DETAIL 1, SEE SHEET 35.
 - USE ONLY APPROVED SEALS, AS LISTED IN BULLETIN 15. INSTALL JOINT SEALS TO A UNIFORM DEPTH WITH THE TOP OF THE SEAL FROM $\frac{1}{4}$ " TO $\frac{1}{2}$ " BELOW THE LEVEL OF THE PAVEMENT SURFACE. MAKE THE TOP EDGES OF THE CONTACT SURFACES ON BOTH SIDES OF THE SEAL AT THE SAME ELEVATION.
 - FOR DETAIL 4, SEE SHEET 35.



SECTION B-B
NOT TO SCALE

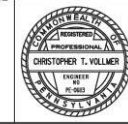
1 1/2" MIN. NOMINAL WIDTH NEOPRENE COMPRESSION SEAL OR 1 1/2" MIN. NOMINAL WIDTH INVERTED V JOINT SEAL FOR 1/2" MOVEMENT CLASSIFICATION. (TYP.) (SEE NOTE 4)
 1" CLOSED CELL NEOPRENE SPONGE (INCIDENTAL) (TYP.)

- JOINT PREPARATION NOTES:**
- FORM THE JOINT OPENING BY A TWO-STAGE SAWING OPERATION WHERE ACCESSIBLE. WHERE ACCESSIBILITY IS LIMITED, FORM THE JOINT OPENING. THE FIRST SAW CUT IS DESIGNED TO CONTROL CRACKING. THE SECOND SAW CUT IS MADE USING A DOUBLE-BLADED WATER-COOLED SAW CAPABLE OF HOLDING A TOLERANCE OF $\pm \frac{1}{16}$ " TO CREATE THE PROPER OPENING FOR THE PREFORMED NEOPRENE COMPRESSION SEAL.
 - WATER BLAST OPENING IMMEDIATELY FOLLOWING SAW CUTTING OPERATION TO REMOVE ANY RESIDUAL SLURRY BEFORE IT DRIES.
 - THE DEPTH OF THE JOINT OPENING EQUALS THE HEIGHT OF THE SEAL PLUS 1". ADJUST THE WIDTH OF THE SECOND SAW CUT TO ACCOUNT FOR THE CONCRETE SURFACE TEMPERATURE AT THE TIME OF SAWING, SEE MANUFACTURER'S PRODUCT INFORMATION.
 - BEFORE INSTALLING THE SEAL, ABRASIVE BLAST THE BONDING SURFACES TO THOROUGHLY CLEAN THE JOINT OPENING AND REMOVE FOREIGN MATERIAL, INCLUDING BROKEN CONCRETE. USE WATER AND OIL FREE COMPRESSED AIR TO BLOW OUT RESIDUE FROM THE SEAL GROOVE OPENING.
 - PREPARE BONDING SURFACES AND INSTALL JOINT SEAL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 - DO NOT EXCEED 3% ELONGATION OF THE SEAL, IF STRETCHING OCCURS.

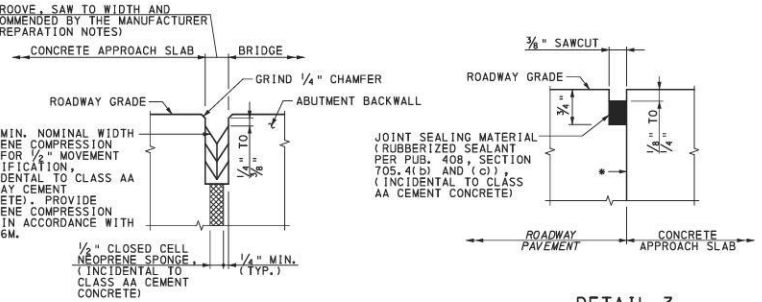
CERTIFIED CORRECT PLANS
David R. Hultsch
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST *Robert J. Schmitt*
 Secretary

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

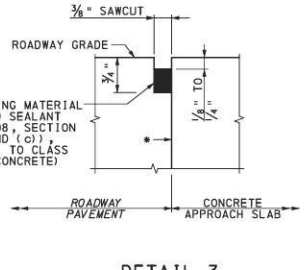
BMS NO. 02-3104-0030-0000 BRKEY 1876
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
 SEGMENT 0030 OFFSET 0000
 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
APPROACH SLAB 1 SECTIONS



RECOMMENDED APRIL 26, 2022 SHEET 36 OF 47



DETAIL 2
NOT TO SCALE



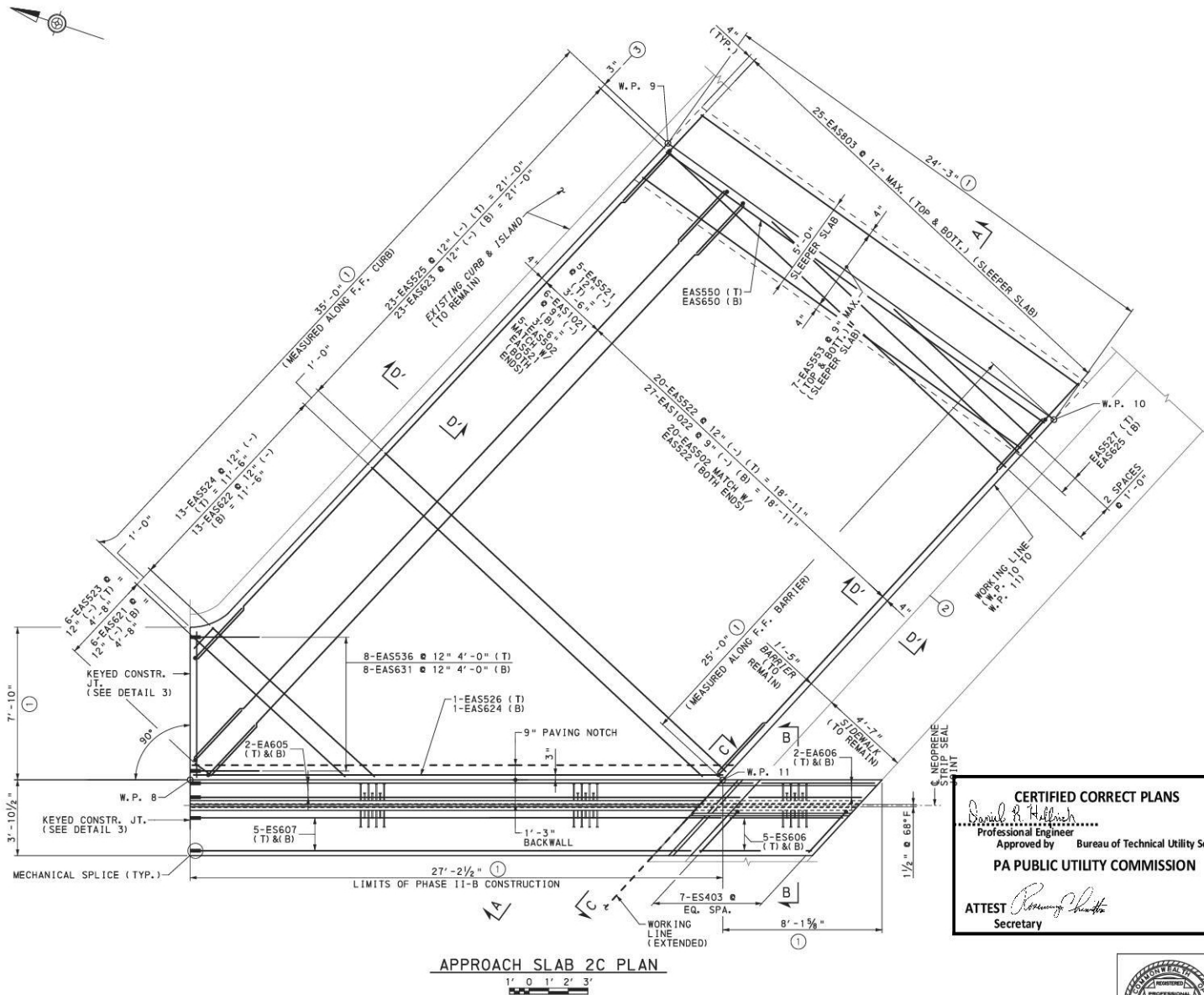
DETAIL 3
NOT TO SCALE

* COAT WITH BOND BREAKER PRIOR TO PLACING APPROACH SLAB CONCRETE (INCIDENTAL).

DES: CMC DWN: CMC CHK: CTV

S-39126

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NOTES:

1. FOR APPROACH SLAB 2 KEY PLAN, SEE SHEET 38.
2. FOR SECTIONS A-A AND B-B, SEE SHEET 42.
3. FOR VIEW C-C, SEE SHEET 43.
4. FOR SECTION D-D, SEE SHEET 39.
5. FOR DETAIL 3, SEE SHEET 40.
6. FOR REINFORCEMENT BAR SCHEDULE, SEE SHEET 46.
7. MATCH EXISTING APPROACH SLAB ELEVATIONS AND CROSS SLOPES.
8. FOR LIMITS OF REMOVAL, SEE SHEET 42.

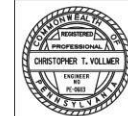
LEGEND:

- (T) TOP BARS
- (B) BOTTOM BARS
- F.F. INDICATES FRONT FACE.
- ① MATCH EXISTING DIMENSIONS, MEASURE AND VERIFY DIMENSIONS IN FIELD PRIOR TO DEMOLITION AND FABRICATION OF REINFORCEMENT BARS.
- ② MEASURED NORMAL TO WORKING LINE.
- ③ MEASURED ALONG WORKING LINE OR WORKING LINE (EXTENDED).

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

CERTIFIED CORRECT PLANS
David R. Hillman
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST *Christopher T. Vollmer*
 Secretary

BMS NO. 02-3104-0030-0000 BRKEY 1876
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
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 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
APPROACH SLAB 2C PLAN

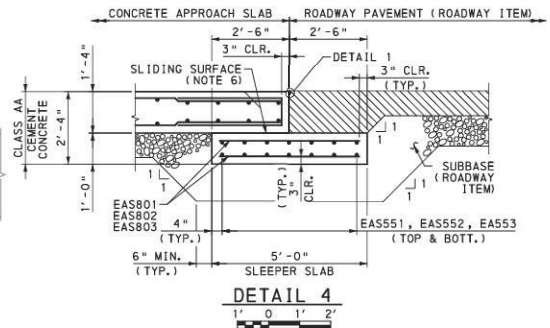
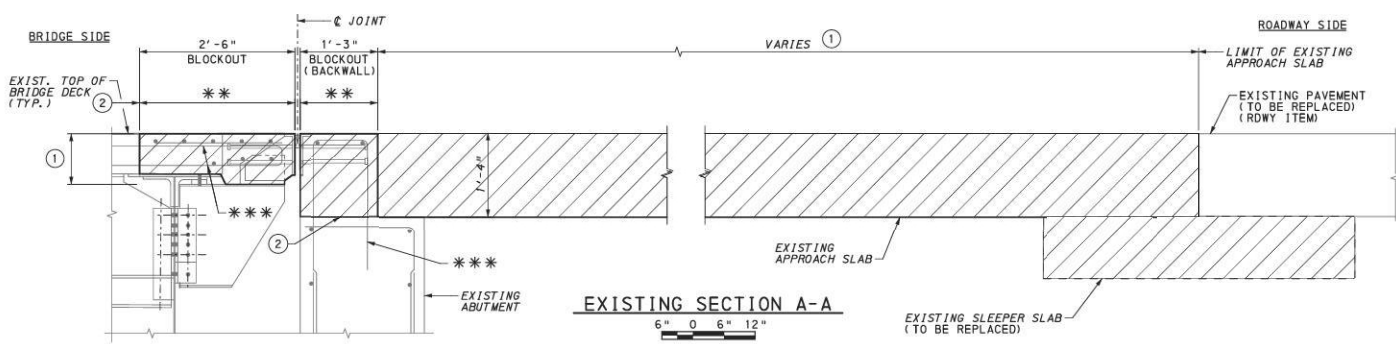


RECOMMENDED APRIL 26, 2022 SHEET 41 OF 47

S-39126

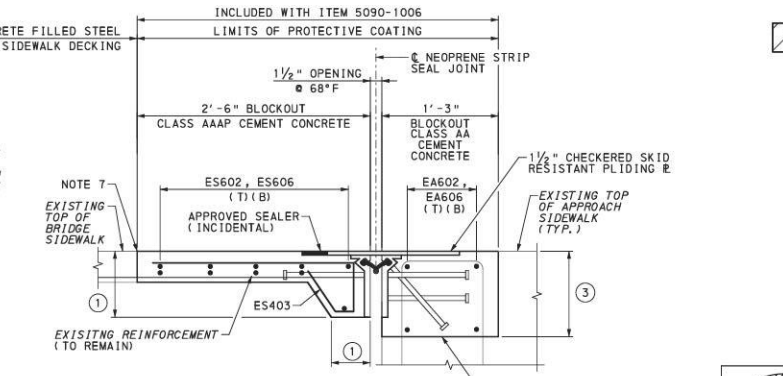
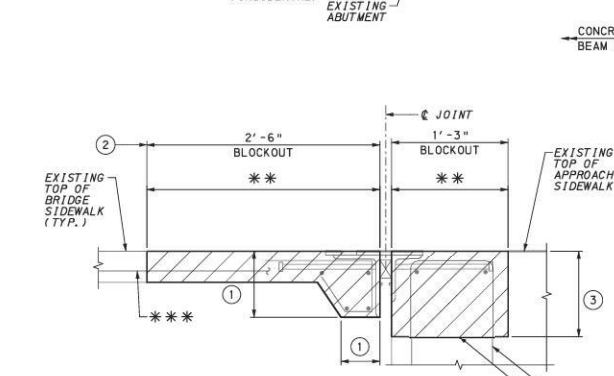
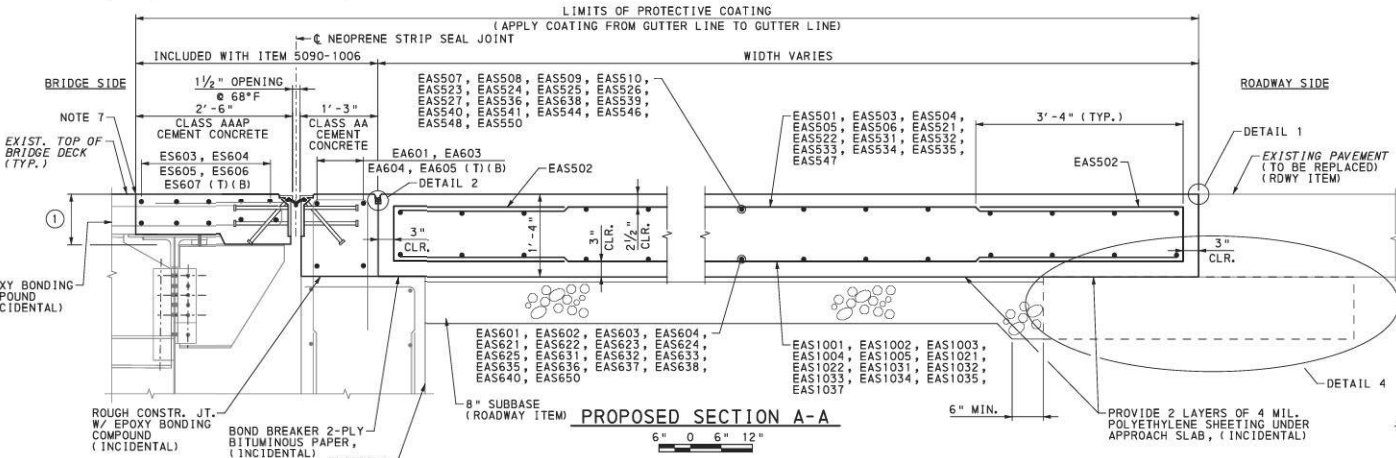
DES: CJP DWN: CJP CHK: CTV

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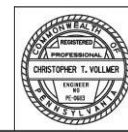
- NOTES:**
- FOR REINFORCEMENT BAR SCHEDULES, SEE SHEETS 44 TO 46.
 - FOR DETAIL 1 AND DETAIL 2, SEE SHEET 43.
 - MATCH EXISTING APPROACH SLAB ELEVATIONS AND CROSS SLOPES.
 - FOR NEOPRENE STRIP SEAL JOINT GENERAL NOTES AND DETAILS NOT SHOWN, SEE STANDARD DWG. BC-767M.
 - FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS AS NECESSARY FOR PROPER FIT OF THE PROPOSED CONSTRUCTION AND PRIOR TO FABRICATION OF ALL STRIP SEAL ELEMENTS.
 - TROWEL SMOOTH AND PLACE 2 LAYERS OF 4 MIL. POLYETHYLENE SHEETING AS BOND BREAKER (INCIDENTAL).
 - FINISH THE BLOCKOUT FLUSH WITH THE EXISTING DECK. DO NOT TOOL THE COLD JOINT DURING FINISHING. AFTER CURING, THE JOINT IS TO BE CLEANED TO REMOVE LAITANCE THEN FILLED/SEALED WITH HIGH MOLECULAR WEIGHT METHACRYLATE (HMMM) (INCIDENTAL).

- LEGEND:**
- MATCH EXISTING DIMENSIONS. MEASURE AND VERIFY DIMENSIONS IN FIELD PRIOR TO DEMOLITION AND FABRICATION OF REINFORCEMENT BARS
 - SAW CUT LINE (TYP.)
 - AS REQUIRED FOR PROPER INSTALLATION OF THE STRIP SEAL JOINT.
 - (T) TOP BARS
 - (B) BOTTOM BARS
 - ALL EXISTING TRANSVERSE BARS IN BLOCKOUT AREA TO BE REMOVED.
 - EXISTING REINFORCEMENT BARS TO REMAIN. AFTER REMOVAL OF EXISTING CONCRETE, CLEAN EXPOSED PORTION OF EXISTING BARS OF ALL RUST AND CONCRETE. PAINT EXPOSED PORTION OF EXISTING BARS WITH AN APPROVED EPOXY PAINT (TYP.) (INCIDENTAL)
 - INDICATES AREA OF EXISTING BRIDGE DECK, ABUTMENT BACKWALL, APPROACH SLAB, AND SIDEWALK TO BE REMOVED. (REMOVAL OF PORTION OF EXISTING BRIDGE)



Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
S.R. 3104 SECTION A03
 SEGMENT 0030 OFFSET 0000
 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
APPROACH SLAB 2 SECTIONS

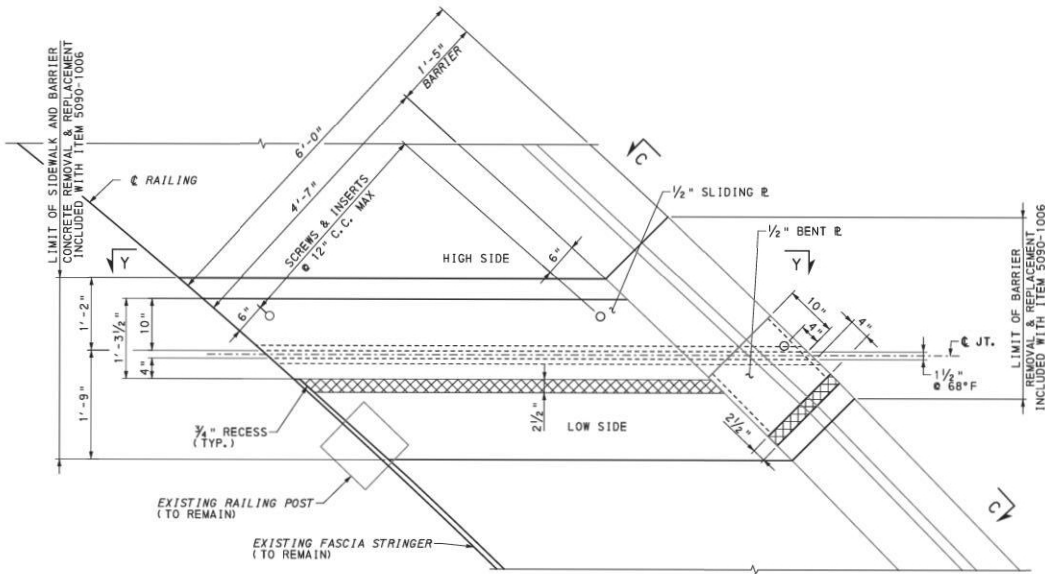


SHEET 42 OF 47
 RECOMMENDED APRIL 26, 2022
CERTIFIED CORRECT PLANS
 Daniel R. Walker
 Professional Engineer

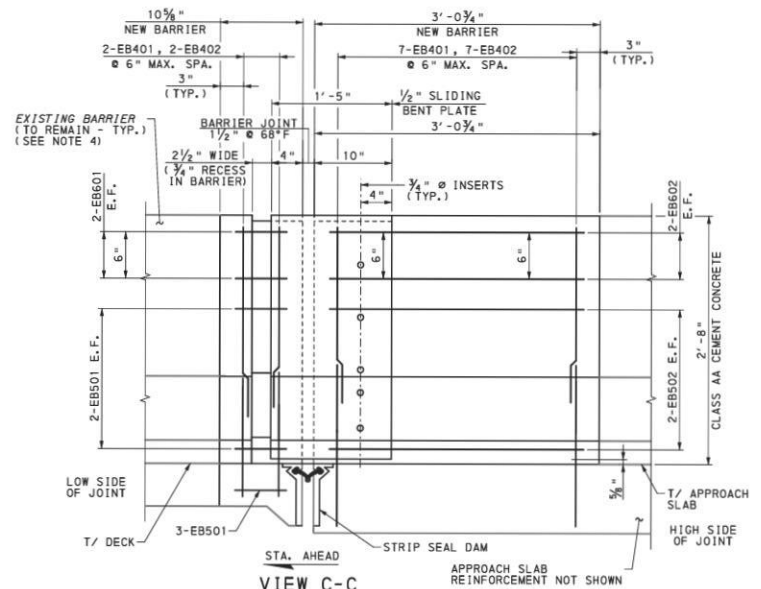
Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST *Robert J. Smith*
 Secretary

DES: CJP DWN: CJP CHK: CTV

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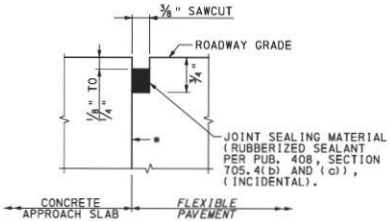


BARRIER/SIDEWALK PLAN
 (EASTBOUND SHOWN, WESTBOUND SIMILAR)
 6" 0 6" 12"



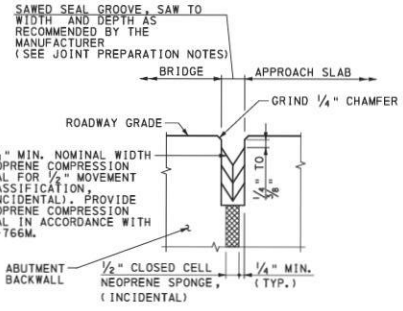
VIEW C-C
 (EASTBOUND BARRIER SHOWN, WESTBOUND SIMILAR)
 6" 0 6"

- LEGEND:**
- EXISTING SIDEWALK REINFORCEMENT TO REMAIN
- NOTES:**
- FOR REINFORCEMENT BAR SCHEDULES, SEE SHEETS 44 AND 46.
 - FOR STRIP SEAL GENERAL NOTES AND DETAILS NOT SHOWN, SEE STANDARD DWG. BC-767M.
 - FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS AS NECESSARY FOR PROPER FIT OF THE PROPOSED CONSTRUCTION AND PRIOR TO FABRICATION OF ALL STRIP SEAL ELEMENTS.
 - LONGITUDINAL BARRIER REINFORCEMENT TO REMAIN AND PROJECT INTO NEW BARRIER ADJACENT TO THE STRIP SEAL JOINT (TYPICAL FROM EACH SIDE). CUT EXISTING REINFORCEMENT AS REQUIRED FOR FIT.



DETAIL 1
NOT TO SCALE

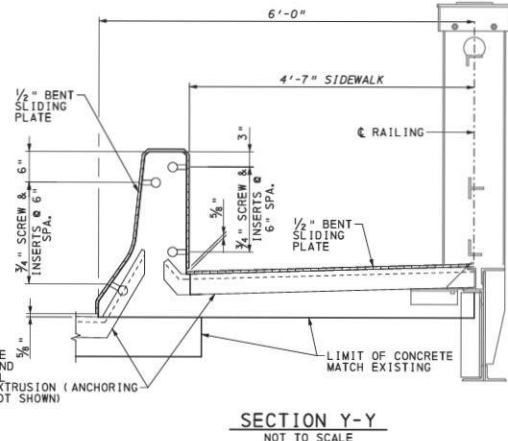
* COAT WITH BOND BREAKER PRIOR TO PLACING APPROACH SLAB CONCRETE (INCIDENTAL).



DETAIL 2
NOT TO SCALE

JOINT PREPARATION NOTES:

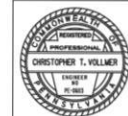
- FORM THE JOINT OPENING BY A TWO-STAGE SAWING OPERATION WHERE ACCESSIBLE. WHERE ACCESSIBILITY IS LIMITED, FORM THE JOINT OPENING. THE FIRST SAW CUT IS DESIGNED TO CONTROL CRACKING. THE SECOND SAW CUT IS MADE USING A DOUBLE-BLADED WATER-COOLED SAW CAPABLE OF HOLDING A TOLERANCE OF ± 1/8" TO CREATE THE PROPER OPENING FOR THE PREFORMED NEOPRENE COMPRESSION SEAL.
- WATER BLAST OPENING IMMEDIATELY FOLLOWING SAW CUTTING OPERATION TO REMOVE ANY RESIDUAL SLURRY BEFORE IT DRIES.
- THE DEPTH OF THE JOINT OPENING EQUALS THE HEIGHT OF THE SEAL PLUS 1". ADJUST THE WIDTH OF THE SECOND SAW CUT TO ACCOUNT FOR THE CONCRETE SURFACE TEMPERATURE AT THE TIME OF SAWING, SEE MANUFACTURER'S PRODUCT INFORMATION.
- BEFORE INSTALLING THE SEAL, ABRASIVE BLAST THE BONDING SURFACES TO THOROUGHLY CLEAN THE JOINT OPENING AND REMOVE FOREIGN MATERIAL, INCLUDING BROKEN CONCRETE. USE WATER AND OIL FREE COMPRESSED AIR TO BLOW OUT RESIDUE FROM THE SEAL GROOVE OPENING.
- PREPARE BONDING SURFACES AND INSTALL JOINT SEAL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- DO NOT EXCEED 3% ELONGATION OF THE SEAL, IF STRETCHING OCCURS.



SECTION Y-Y
NOT TO SCALE

Mark	Description	By	Chk'd	Rec'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
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 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
APPROACH SLAB 2 DETAILS



RECOMMENDED APRIL 26, 2022
CERTIFIED CORRECT PLANS
Donald R. Heflich
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 SHEET 43 OF 47
 S-39126

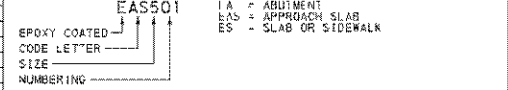
ATTEST *Robert G. Shultz*
 Secretary

DES: CJP DWN: CJP CHK: GTK

APPROACH SLAB 2B BAR SCHEDULE

MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	D	E	F/R	G	H	J	K	REMARKS
EAS03	6	4	55'-10"	STR											
EAS04	6	8	3'-4"	STR											
EAS509	5	103	7'-6 1/2"	17			10 1/2"	3'-4"							
EAS511	5	1	24'-6"	9		24'-5"				R = 173'-8"					
EAS532	5	48	33'-8" TO 24'-9"	STR											VARY 1 EA. BY 2 1/4"
EAS533	5	1	33'-11"	9		33'-11"				R = 308'-7"					
EAS534	5	1	4'-4"	STR											
EAS535	5	3	7'-8 1/2"	STR											
LAS537	5	3	34' 0" TO 17' 10"	STR											VARY 1 EA. BY 8' 1"
EAS538	5	5	55'-10"	STR											MECHANICAL SPLICE SYSTEM ONE END
EAS539	5	18	51' 4"	STR											THREAD ONE END BY 3"
EAS540	5	13	2' 10"	STR											
EAS541	5	3	54'-8 1/2"	STR											
EAS544	5	5	45'-7" TO 24'-10 1/2"	STR											VARY 1 EA. BY 5'-9 1/2"
EAS545	5	5	19'-5 1/2" TO 2'-2 1/2"	STR											VARY 1 EA. BY 2'-3 1/2"
EAS548	5	1	51'-3"	STR											
EAS552	5	14	50'-10 1/2"	STR											
EAS632	5	18	51'-4"	STR											
EAS633	5	3	54'-4 1/2"	STR											
EAS639	5	5	45'-7" TO 24'-10 1/2"	STR											VARY 1 EA. BY 5'-5 1/2"
EAS646	5	5	55'-6"	STR											
EAS637	5	5	19'-5 1/2" TO 2'-2 1/2"	STR											VARY 1 EA. BY 4'-3 1/2"
EAS638	5	1	51'-3"	STR											
EAS640	5	13	3' 4"	STR											THREAD ONE END BY 3"
EAS809	8	104	4'-6"	STR											
EAS1031	10	1	24'-5"	9		24'-5"				R = 173'-8"					
EAS1032	10	64	33'-8" TO 24'-9"	STR											VARY 1 EA. BY 1 3/4"
EAS1033	10	1	33'-11"	9		33'-11"				R = 308'-7"					
EAS1034	10	1	4'-4"	STR											
EAS1035	10	4	7'-8 1/2"	STR											
EAS1037	10	4	33'-11" TO 18'-10 1/2"	STR											VARY 1 EA. BY 5'-0 1/2"
L5603	5	10	55'-10"	STR											
L5604	5	20	3'-4"	STR											THREAD ONE END BY 3"

BAR MARK LEGEND CODE LETTERS FOR BAR MARKS



NOTES:
 ALL DIMENSIONS ARE OUT-TO-OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180° AND 135° HOOKS.
 "J" DIMENSIONS ON 180° HOOKS ONLY WHILE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOK SIZES ARE REQUIRED.
 FIGURES IN CIRCLES SHOW TYPES.
 FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-756M.
 REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY PRIOR TO BIDDING AND FABRICATION.
 3" THREAD LENGTH INCLUDED IN DETAIL DIMENSION.



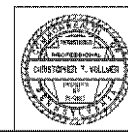
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Mark	Description	By	CHK'd	Rev'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ALLEGHENY COUNTY
 S.R. 3104 SECTION A03
 SEGMENT 0030 OFFSET 0000
 S.R. 3104 STA. 38+75
 OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE
APPROACH SLAB 2B BAR SCHEDULE

CERTIFIED CORRECT PLANS

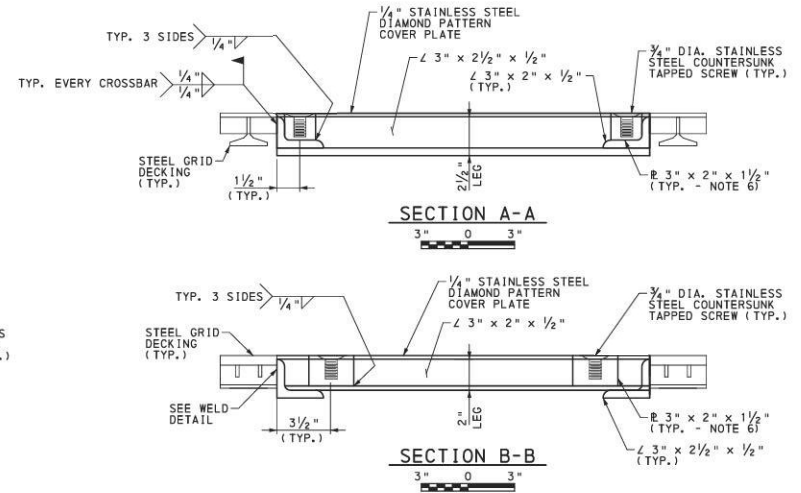
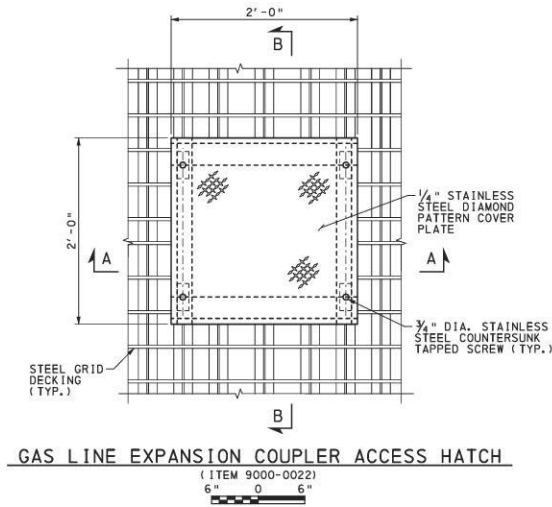
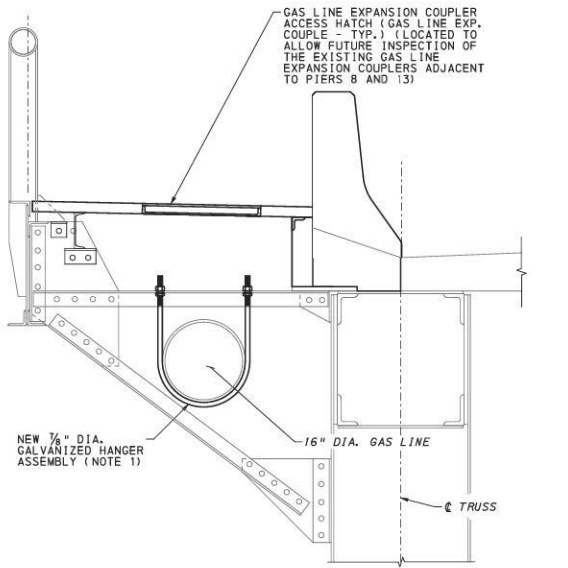
 Daniel R. Hollerich
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST
 Christopher T. Hillier
 Secretary



RECOMMENDED APRIL 26, 2022 SHEET 45 OF 47

S-39126

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NOTES:

- HANGER ASSEMBLY REPLACEMENT LOCATIONS WILL BE DETERMINED BY THE REPRESENTATIVE PER THE SPECIFICATION FOR ITEM 9000-0020. COORDINATE WITH PEOPLES NATURAL GAS BEFORE REPLACING ANY OF THE EXISTING U-BOLTS ASSEMBLIES.
- HANGER ASSEMBLIES WILL BE PROVIDED BY PEOPLES NATURAL GAS COMPANY.
- ACCESS HATCHES ARE TO BE FABRICATED AS PART OF THE STEEL BEAM SIDEWALK DECKING.
- ACCESS HATCHES ARE TO BE LOCATED OVER THE EXISTING GAS LINE EXPANSION COUPLINGS ADJACENT TO PIERS 8 AND 13. PRIOR TO FABRICATION VERIFY THE LOCATIONS AND COORDINATE WITH THE STEEL BEAM SIDEWALK DECKING FABRICATOR. OFFSET HATCHES FROM THE SIDEWALK EXPANSION JOINTS AND COORDINATE DETAILS WITH EXPANSION JOINT REPLACEMENT DETAILS ON SHEET 30 AS APPLICABLE.
- TEMPORARY SUPPORT OF THE GAS LINE FOR HANGER ASSEMBLY REPLACEMENT IS INCIDENTAL TO ITEM 9000-0017.
- MACHINE STEEL BLOCKS TO ACCEPT 3/4" DIA. TAPPED SCREWS.
- PAINT EXISTING GAS LINE, COUPLER, AND HANGER ASSEMBLIES. WORK ASSOCIATED WITH PAINTING THESE ELEMENTS IS INCIDENTAL TO ITEM 9000-0021 (SEE SPECIAL PROVISION). SEE SHEET 5 FOR PAINTING LIMITS.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

BMS NO. 02-3104-0030-0000 BRKEY 1876

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
 S.R. 3104 SECTION A03

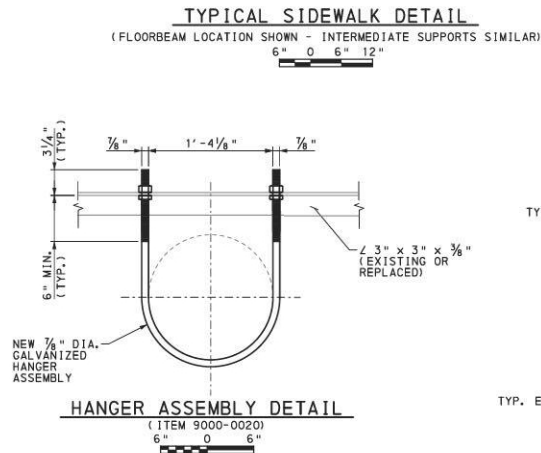
SEGMENT 0030 OFFSET 0000
 S.R. 3104 STA. 38+75

OVER OHIO RIVER & NORFOLK SOUTHERN RAILROAD
 PRESERVATION OF MULTI-SPAN TRUSS-ARCH BRIDGE

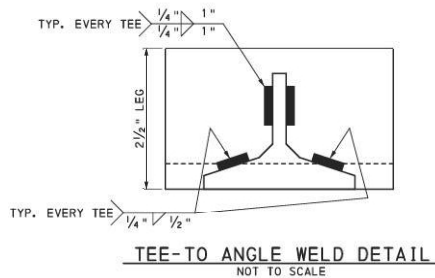
PEOPLES NATURAL GAS - REHAB. DETAILS

RECOMMENDED APRIL 26, 2022 SHEET 47 OF 47

S-39126



U-BOLT HANGER REPLACEMENT CRITERIA:
 ACCORDANCE WITH THE SPECIAL PROVISION FOR ITEM 9000-0020 REPLACE EXISTING HANGER ASSEMBLIES HAVING EXCESSIVE CORROSION EXCEEDING 25% OF THE MINOR DIAMETER OF THE U-BOLT(S).



CERTIFIED CORRECT PLANS
 David R. Hallbach
 Professional Engineer
 Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION
 ATTEST
 Christopher T. Voller
 Secretary

