PLOTTED: 10/11/2022 2:14:39 PM

FILE NAME: G:\17-048B New Kensington Final\CADD\Roadway\ARD00010FX.dgn

**PLAN PREPARATION:**

DISTRICT 11-0 PROJECT MANAGER: MICHAEL L. SZURLEY, P.E.
DESIGNER: MARKOSKY ENGINEERING

| DISTRICT | COUNTY | TOWNSHIP | BOROUGH | ROUTE | SECTION | TOTAL SHEETS |
|---|---|---|---|---|---|---|
| 11-0 | ALLEGHENY | EAST DEER | --- | 1038 | A01 | 19 |
| | WESTMORELAND | --- | NEW KENSINGTON | 0056 | A01 | |

SR 1038 PREVIOUSLY KNOWN AS LR 188
SR 0056 PREVIOUSLY KNOWN AS LR 188

ECMS NO.: 63515

# COMMONWEALTH OF PENNSYLVANIA

# DEPARTMENT OF TRANSPORTATION

## DRAWINGS
FOR
## CONSTRUCTION
OF

**ALSO INCLUDED:**

| | |
|---|---|
| TRAFFIC CONTROL PLAN | 17 SHEETS |
| AIDS TO NAVIGATION PLAN | 3 SHEETS |
| SIGNING, PAVEMENT MARKING AND DELINEATION PLAN | 7 SHEETS |
| UTILITY RELOCATION PLAN - COMCAST | 4 SHEETS |
| EROSION AND SEDIMENT POLLUTION CONTROL PLAN | 7 SHEETS |
| LIGHTING PLAN | 9 SHEETS |
| SIGN STRUCTURE PLAN S-40254 | 3 SHEETS |
| STRUCTURE PLAN S-40253 | 124 SHEETS |

**STATE ROUTE** 1038 **SECTION** A01

**IN** ALLEGHENY **COUNTY**

FROM STA. 0+00.00 TO STA. 5+92.00 LENGTH 592.00 FT. 0.112 MI.
FROM SEG. 0010 OFFSET 0000 TO SEG. 0010 OFFSET 0592

**AND**

**STATE ROUTE** 1038 **SECTION** A01

**IN** WESTMORELAND **COUNTY**

FROM STA. 0+00.00 TO STA. 10+10.00 LENGTH 1010.00 FT. 0.191 MI.
FROM SEG. 0010 OFFSET 0592 TO SEG. 0010 OFFSET 1010

**AND**

**STATE ROUTE** 0056 **SECTION** A01

**IN** WESTMORELAND **COUNTY**

FROM STA. 10+10.00 TO STA. 11+30.00 LENGTH 70.00 FT. 0.013 MI.
FROM SEG. 0004 OFFSET 0000 TO SEG. 0004 OFFSET 0120

**AND**

**STATE ROUTE** 1001 **SECTION** A01

**IN** ALLEGHENY **COUNTY**

FROM STA. 973+50.00 TO STA. 984+67.00 LENGTH 1017.00 FT. 0.193 MI.
FROM SEG. 0320 OFFSET 2594 TO SEG. 0330 OFFSET 0589

**ALSO**

**STATE ROUTE** 9109 **SECTION** A01

**IN** ALLEGHENY **COUNTY**

SCALE
HORIZONTAL 0 25 50 FEET

**DESIGN DESIGNATION - SR 1038 & SR 0056**

| | |
|---|---|
| HIGHWAY CLASSIFICATION | - OTHER PRINCIPAL ARTERIAL |
| DESIGN SPEED | - 35 MPH |
| PAVEMENT WIDTH | - 24' (2-12' LANES) |
| SHOULDER WIDTH | - 0' |

**TRAFFIC DATA**

| | |
|---|---|
| CURRENT ADT | - 15,851 (2023) |
| DESIGN YEAR ADT | - 15,851 (2043) |
| DHV | - 2,060 |
| D | - 55% |
| T | - 7% |

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

Prepared by:
MARKOSKY
3689 Route 711
Ligonier, PA 15658

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL NICHOLAS AARON WAGNER ENGINEER No. PE074498

NICHOLAS A. WAGNER, PE
DATE: OCTOBER 13, 2022

RECOMMENDED DATE: _____
DISTRICT EXECUTIVE

RECOMMENDED DATE: _____
DEPUTY SECRETARY

APPROVED DATE: _____
ACTING SECRETARY OF TRANSPORTATION
(ON BEHALF OF THE GOVERNOR AS WELL AS THE SECRETARY)

Docket A-2019-3010031

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| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|
| 11-0 | * | 1038 AND 0056 | A01 | 2 OF 19 |
| | * | | | |

| REV NO | REVISIONS | DATE | BY | APPD |
|---|---|---|---|---|
| | | | | |
| | | | | |

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

## LIST OF SEGMENT EQUALITIES

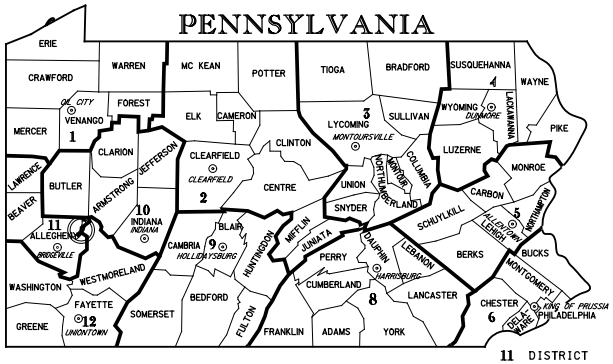
LIMIT OF WORK SR 1038 STA 0+00.00 = SEGMENT 0010 OFFSET 0000

SEGMENT 0010 OFFSET 1602 = SR 1038 STA 10+10.00 BK =
SEGMENT 0004 OFFSET 0000 = SR 0056 STA 10+10.00 AHD

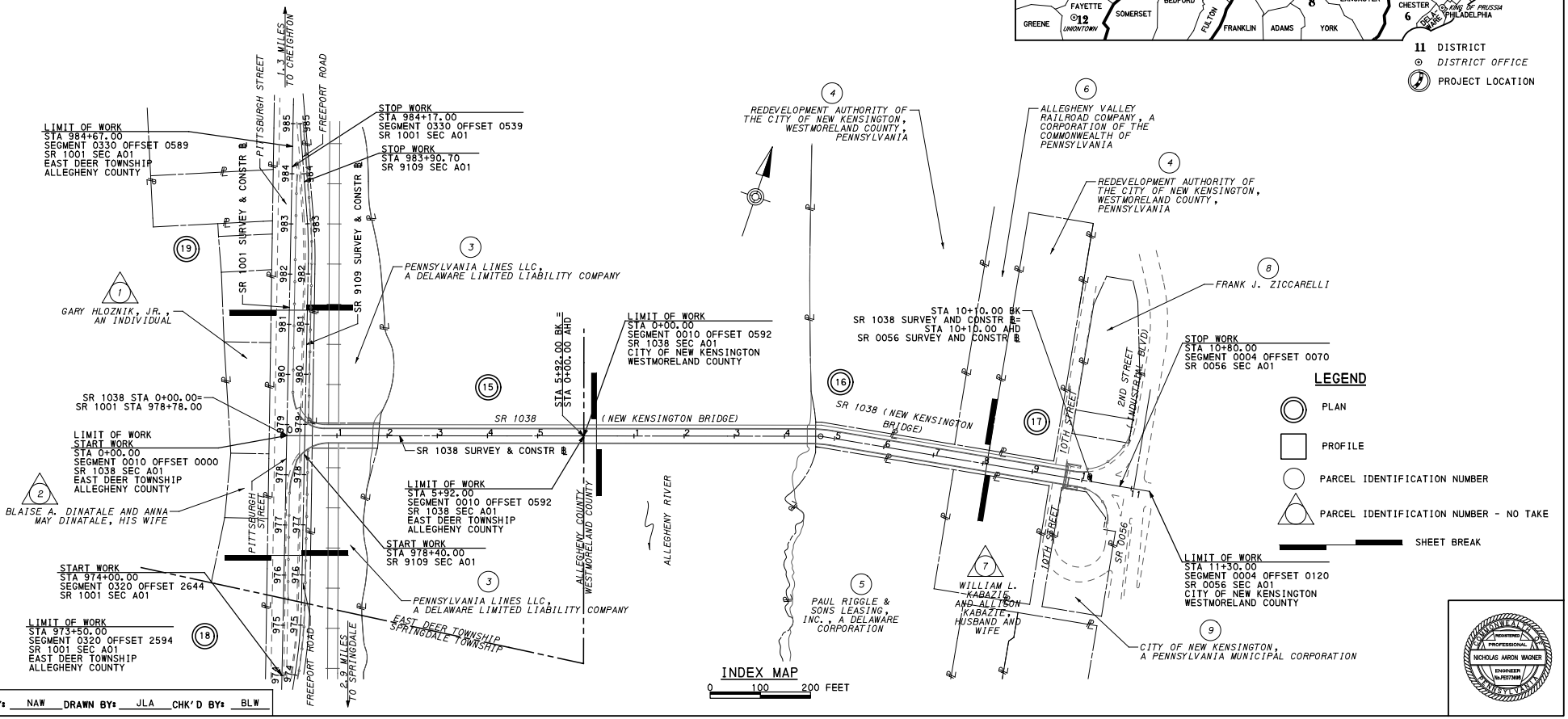
LIMIT OF WORK SR 1001 STA 973+50.00 = SEGMENT 0320 OFFSET 2594

SR 1001 STA 978+78.00 = SEGMENT 0320 OFFSET 3122
SEGMENT 0330 OFFSET 0000

| SHEET INDEX BLOCK | |
|---|---|
| DESCRIPTION | SHEET |
| TITLE SHEET | 1 |
| INDEX MAP | 2 |
| LOCATION MAP AND GENERAL NOTES | 3 |
| LIST OF PUBLIC UTILITIES | 4 |
| TYPICAL SECTIONS | 5 |
| DETAILS | 6-7 |
| DRAINAGE DITCH DETAIL | 8 |
| SUMMARY SHEETS | 9-11 |
| TABULATION SHEETS | 12-14 |
| PLAN SHEETS | 15-19 |




11 DISTRICT
DISTRICT OFFICE
PROJECT LOCATION




DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
NICHOLAS AARON WAGNER
ENGINEER
No.PE073688

PLOTTED: 10/11/2022 12:55:17 PM

FILE NAME: G:\17-048B New Kensington Final\CADD\Roadway\AR000030FX.dgn

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|
| 11-0 | * | 1038 AND 0056 | A01 | 3 OF 19 |

*

| REV NO | REVISIONS | DATE | BY | APPD |
|---|---|---|---|---|
| | | | | |
| | | | | |

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

FOR LIST OF PUBLIC UTILITIES SEE SHEET 4

## SUMMARY OF PROJECT COORDINATES

BASED ON PENNSYLVANIA STATE PLANE COORDINATE SYSTEM

| ROUTE | STATION | POINT | COORDINATES NORTH | COORDINATES EAST | BEARING |
|---|---|---|---|---|---|
| SR 1038 AND SR 0056 SURVEY & CONSTR ℄ | 0+00.00 | POT | 454622.1777 | 1406125.3579 | N71°16′34"E |
| | 5+92.00 | EQNBK | 454812.2151 | 1406686.0269 | |
| | 0+00.00 | EQNAHD | 454812.2151 | 1406686.0269 | |
| | 4+72.00 | PI | 454963.7314 | 1407133.0469 | N80°43′34"E |
| | 11+36.67 | POT | 455076.5401 | 1407823.8972 | |
| SR 1001 SURVEY & CONSTR ℄ | 970+00.00 | POT | 453785.1416 | 1406394.0295 | N17°54′56"W |
| | 985+03.29 | POT | 455217.4285 | 1405937.4706 | |
| SR 9109 SURVEY & CONSTR ℄ | 972+50.40 | POT | 454028.0071 | 1406321.7687 | N9°38′41"W |
| | 974+04.31 | PC | 454179.7443 | 1406295.9823 | N17°54′56"W |
| | 974+72.93 | PI | 454247.3888 | 1406284.4867 | |
| | 975+41.32 | PT | 454312.7565 | 1406263.6305 | N17°54′56"W |
| | 982+21.13 | PC | 454960.4563 | 1406057.1684 | |
| | 982+68.78 | PI | 455005.8533 | 1406042.6841 | N17°41′45"W |
| | 983+16.36 | PT | 455049.6673 | 1406023.9487 | |
| | 985+00.00 | POT | 455218.5216 | 1405951.7447 | N23°09′08"W |

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

## TABULATION OF OVERALL LENGTH

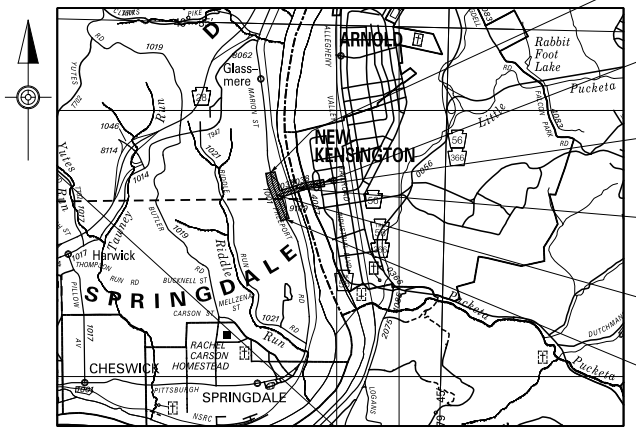
SR 1038 STA 0+00.00 TO STA 5+92.00 = 592.00 FEET = 0.112 MILES
SR 1038 STA 0+00.00 TO STA 10+10.00 = 1010.00 FEET = 0.191 MILES
SR 0056 STA 10+10.00 TO STA 11+30.00 = 120.00 FEET = 0.023 MILES
SR 1001 STA 973+50.00 TO STA 984+67.00 = 1117.00 FEET = 0.212 MILES
TOTAL = 2839.00 FEET = 0.538 MILES

## TABULATION OF CONSTRUCTION LENGTH

SR 1038 STA 0+00.00 TO STA 5+92.00 = 592.00 FEET = 0.112 MILES
SR 1038 STA 0+00.00 TO STA 10+10.00 = 1010.00 FEET = 0.191 MILES
SR 0056 STA 10+10.00 TO STA 10+80.00 = 70.00 FEET = 0.013 MILES
SR 1001 STA 974+00.00 TO STA 984+17.00 = 1017.00 FEET = 0.193 MILES
TOTAL = 2689.00 FEET = 0.509 MILES

## LIST OF EQUALITIES

SR 1038 SURVEY & CONSTR ℄ STA 0+00.00 = SR 1001 SURVEY & CONSTR ℄ STA 978+78.00
SR 1038 SURVEY & CONSTR ℄ STA 5+92.00 BK = SR 1038 SURVEY & CONSTR ℄ STA 0+00.00 AHD
SR 1038 SURVEY & CONSTR ℄ STA 10+10.00 = SR 0056 SURVEY & CONSTR ℄ STA 10+10.00




LIMIT OF WORK
STA 984+67.00
SEGMENT 0330 OFFSET 0589
SR 1001 SEC A01
EAST DEER TOWNSHIP
ALLEGHENY COUNTY

LIMIT OF WORK
STA 11+30.00
SEGMENT 0004 OFFSET 0120
SR 0056 SEC A01
CITY OF NEW KENSINGTON
WESTMORELAND COUNTY

LIMIT OF WORK
STA 0+00.00
SEGMENT 0010 OFFSET 0592
SR 1038 SEC A01
CITY OF NEW KENSINGTON
WESTMORELAND COUNTY

LIMIT OF WORK
STA 5+92.00
SEGMENT 0010 OFFSET 0592
SR 1038 SEC A01
EAST DEER TOWNSHIP
ALLEGHENY COUNTY

LIMIT OF WORK
STA 0+00.00
SEGMENT 0010 OFFSET 0000
SR 1038 SEC A01
EAST DEER TOWNSHIP
ALLEGHENY COUNTY

LIMIT OF WORK
STA 973+50.00
SEGMENT 0320 OFFSET 2594
SR 1001 SEC A01
EAST DEER TOWNSHIP
ALLEGHENY COUNTY

LEGEND

PROJECT
STATE HIGHWAY
TOWNSHIP ROAD

LOCATION MAP

0 0.5 1
SCALE IN MILES

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

| | | | |
|---|---|---|---|
| RC-10M | JUN 01, 2010 | BC-721M | FEB 19, 2021 |
| RC-11M | JUN 01, 2010 | BC-734M | FEB 19, 2021 |
| RC-12M | FEB 08, 2019 | BC-735M | SEP 30, 2016 |
| RC-13M | JUN 01, 2010 | BC-736M | JAN 31, 2019 |
| RC-23M | FEB 08, 2019 | BC-751M | JAN 31, 2019 |
| RC-28M | FEB 08, 2019 | BC-752M | FEB 19, 2021 |
| RC-50M | FEB 19, 2021 | BC-753M | JAN 31, 2019 |
| RC-51M | NOV 30, 2021 | BC-762M | JAN 31, 2019 |
| RC-54M | NOV 30, 2021 | BC-767M | FEB 19, 2021 |
| RC-58M | AUG 04, 2017 | BC-783M | JAN 31, 2019 |
| RC-64M | FEB 19, 2021 | BC-788M | JAN 31, 2019 |
| RC-67M | FEB 19, 2021 | TC-8600 | JUN 13, 2013 |
| RC-70M | FEB 08, 2019 | TC-8604 | AUG 17, 2021 |
| RC-72M | FEB 08, 2019 | TC-8702B | JUN 13, 2013 |
| RC-73M | FEB 08, 2019 | TC-8702C | JUN 13, 2013 |
| BC-701M | FEB 19, 2021 | TC-8716 | JUN 13, 2013 |
| BC-719M | JAN 31, 2019 | TC-8717 | JUN 13, 2013 |

## GENERAL NOTES

THE LEGAL RIGHT-OF-WAY ON SR 1038, FORMERLY KNOWN AS LR 188, FROM STATION 0+51.00 TO STATION 1+88.00 IS FIFTY (50) FEET BASED ON THE PLAN OF LR 188, SECTION 007 R/W, SIGNED ON JUNE 29, 1987, AND RECORDED ON OCTOBER 27, 1987, IN THE ALLEGHENY RECORDER'S OFFICE IN STATE HIGHWAY BOOK 98, PAGE 24.

THE LEGAL RIGHT-OF-WAY ON SR 1038, FORMERLY KNOWN AS LR 188, FROM STATION 4+62.00 TO STATION 8+03.00 IS FIFTY (50) FEET BASED ON TECH PLAN OF SR 1038, SECTION 007, SIGNED ON MARY 16, 1988.

THE LEGAL RIGHT-OF-WAY ON SR 0056, FORMERLY KNOWN AS LR 188, FROM STATION 10+13.00 TO STATION 10+79.93 VARIES IN WIDTH BASED ON THE PLAN OF SR 1038, SECTION 007, SIGNED ON MAY 16, 1988.

THE LEGAL RIGHT-OF-WAY ON SR 1001, FORMERLY KNOWN AS LR 70, AND ON SR 9109, FORMERLY KNOWN AS LR 70 EB, VARIES IN WIDTH BASED ON THE PLAN OF LR 199, SECTION 007 R/W, SIGNED ON JUNE 29, 1987, AND RECORDED ON OCTOBER 27, 1987, IN THE ALLEGHENY RECORDER'S OFFICE IN STATE HIGHWAY BOOK 98, PAGE 24.

PRIVATE PROPERTY LINES ARE PLOTTED FROM THE DEED OF RECORD, RECORDED SUBDIVISION OR LOT PLANS, EXISTING TOPOGRAPHICAL FEATURES AND LIMITED FIELD DATA. PRIVATE PROPERTY LINES WERE NOT SURVEYED BY THE PROFESSIONAL LAND SURVEYOR RESPONSIBLE FOR THE PROJECT.

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 NEW KENSINGTON, WESTMORELAND COUNTY, SERIAL NO. _____ FOR EAST DEER TOWNSHIP, ALLEGHENY COUNTY. ADDITIONAL INFORMATION IS AVAILABLE AT https://www.paiall.org/PA811/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.PAICALL.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).

TEMPORARY CONSTRUCTION EASEMENT. AN EASEMENT TO USE THE LAND AS NECESSARY DURING CONSTRUCTION OF THE PROJECT. THE EASEMENT IS REQUIRED ONLY UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER RELINQUISHED IN WRITING BY THE DEPARTMENT.

SLOPE EASEMENT. AN EASEMENT FOR THE SUPPORT AND PROTECTION OF THE HIGHWAY, INCLUDING THE RIGHT TO CONSTRUCT, INSPECT, MAINTAIN, REPAIR, RECONSTRUCT AND ALTER DRAINAGE FACILITIES AND THE CONTOUR OF THE LAND. THE EASEMENT SHALL NOT PREVENT THE PROPERTY OWNER FROM MAKING ANY LEGAL USE OF THE AREA WHICH IS NOT DETRIMENTAL TO THE NECESSARY SUPPORT AND PROTECTION OF THE HIGHWAY RIGHT-OF-WAY AND THE SAFETY OF THE TRAVELING PUBLIC.

LEGAL RIGHT-OF-WAY CONVERTED TO AERIAL EASEMENT. PROPERTY IN WHICH THE DEPARTMENT INTENDS TO VACATE ITS EXISTING SURFACE EASEMENT FOR HIGHWAY PURPOSES AND RETAIN AN AERIAL EASEMENT AS DEFINED ELSEWHERE ON THIS PLAN. SUBJECT TO THE APPROVAL OF THIS PLAN BY THE GOVERNOR, THE FILING OF THIS PLAN AS A PUBLIC RECORD IN THE OFFICE OF THE DEPARTMENT AND THE RECORDING OF THIS PLAN IN THE COUNTY RECORDER OF DEEDS OFFICE, THIS NOTE SHALL CONSTITUTE AN ORDER OF VACATION PURSUANT TO SECTION 210 OF THE STATE HIGHWAY LAW, 36 P.S. SECTION 670-210, AS TO THE SURFACE EASEMENT FOR HIGHWAY PURPOSES, EFFECTIVE WHEN THE CONSTRUCTION IS COMPLETED.

HORIZONTAL CONTROL IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SPCS 83) (SOUTH ZONE).

VERTICAL CONTROL IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

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

SR 1038 AND SR 0056 PREVIOUSLY KNOWN AS LR 188.

THE ALLEGHENY RIVER IS NAVIGABLE.

## 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 | | | | | | CUBIC YARDS OF COMPLETED EMBANKMENT | CUBIC YARDS OF BORROW EXCAVATION | CUBIC YARDS OF SELECTED BORROW EXC, ROCK, CLASS R-4 | CUBIC YARDS OF SELECTED BORROW EXC., STR BACKFIL | CUBIC YARDS OF WASTE |
|---|---|---|---|---|---|---|---|---|---|---|
| CLASS 1 | CLASS 1A | CLASS 1B | CLASS 2 | CLASS 3** | CLASS 4 | | | | | |
| | | 63 | 333 | | | | | 203 | | 396 |
| | | | | | | | | | | |
| | | | | | | | | | | |

* INCLUDES ALL BORROW ITEMS
** CY PART OF LUMP SUM STRUCTURE ITEM

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

## LOCATION MAP AND GENERAL NOTES

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL NICHOLAS AARON WAGNER ENGINEER No.PE073688

PLOTTED: 10/11/2022 12:55:17 PM

FILE NAME: G:\17-0488 New Kensington Final\CADD\Roadway\AR000040FX.dgn

PA ONE CALL SYSTEM, INC. PHONE 1-800-242-1776
PRELIMINARY ENGINEERING
CITY OF NEW KENSIGNTON, WESTMORELAND COUNTY
DESIGN SERIAL NO. 20180181983

LOWER BURRELL CITY, WESTMORELAND COUNTY
DESIGN SERIAL NO. 20180181984

EAST DEER TOWNSHIP, ALLEGHENY COUNTY
DESIGN SERIAL NO. 20180181998

FINAL DESIGN
CITY OF NEW KENSIGNTON, WESTMORELAND COUNTY
DESIGN SERIAL NO. 20222560097

LOWER BURRELL CITY, WESTMORELAND COUNTY
DESIGN SERIAL NO. 20222560100

EAST DEER TOWNSHIP, ALLEGHENY COUNTY
DESIGN SERIAL NO. 20222560099

SPRINGDALE TOWNSHIP, ALLEGHENY COUNTY
DESIGN SERIAL NO. 20222560098

## LIST OF PUBLIC UTILITIES

| SYMBOL | UTILITY COMPANY | TELEPHONE | MAILING ADDRESS |
|---|---|---|---|
| —FO—<br>—FOU— | AT&T LOCAL SERVICE<br>ATTN: JAMES SCHRENK<br>METROPOLITAN COMMUNICATIONS GROUP<br>JS9723@ATT.COM OR JSCHRENK@ATT.COM | PHONE: 412-316-9930<br>412-670-4949 (CELL) | 2500 ALLEGHENY CENTER<br>PITTSBURGH, PA 15212 |
| —FO—<br>—FOU—<br>—CTV— | COMCAST<br>ATTN: MR. RICK MOSLEN<br>RICHARD_MOSLEN@COMCAST.COM | PHONE: 412-999-0590 | 1530 CHARTIERS AVE.<br>PITTSBURGH, PA 15204 |
| —FO2—<br>—FOU2— | CROWN CASTLE (SUNESYS)<br>ATTN: ROBERT PACHOLARZ<br>ROBERT.PACHOLARZ@CROWNCASTLE.COM | PHONE: 724-231-3803<br>732-718-9078 (CELL) | 2000 CORPORATE DR.<br>CANONSBURG, PA 15317 |
| —FO4—<br>—FOU4— | DQE COMMUNICATIONS, LLC<br>ATTN: ADAM NULPH<br>ACNULPH@DQE.COM | PHONE: 724-919-7258 | 424 SOUTH 27TH STREET<br>SUITE 220<br>PITTSBURGH, PA 15203 |
| — W — | NEW KENSINGTON WATER AUTHORITY<br>ATTN: ED SALIBA<br>ESALIBA@NEWKENWATER.NET | PHONE: 724-337-3577 | 920 BARNES STREET<br>PO BOX 577<br>NEW KENSINGTON, PA 15068 |
| — S — | NEW KENSINGTON CITY SANITARY MUNICIPAL AUTHORITY<br>ATTN: DANIEL H. ROWE, JR., AUTHORITY MANAGER<br>DROWE@MSANK.ORG | PHONE: 724-335-9813 | 120 LOGANS FERRY ROAD<br>NEW KENSINGTON, PA 15068 |
| — G — | PEOPLE NATURAL GAS COMPANY<br>ATTN: BOB LAYHEW (WEST)<br>ATTN: DAVE HILTY (EAST) | PHONE: 724-444-3231<br>PHONE: 412-208-7205 | 432 HYDE PARK ROAD<br>LEECHBURG, PA 15656 |
| — G — | LENNON, SMITH, SOULERET ENGINEEERING, INC.<br>REPRESENTING PEOPLES NATURAL GAS COMPANY<br>ATTN: GARY M. BAIRD, PROJECT MANAGER<br>GBAIRD@LSSE.COM | PHONE: 724-837-1057 X 104<br>412-260-5601 (CELL) | 4536 ROUTE 136, SUITE 1<br>GREENSBURG, PA 15601 |
| — T —<br>—TU— | VERIZON PENNSYLVANIA, LLC<br>ATTN: ARIN P. BIONDI<br>ARIN.P.BIONDI@VERIZON.COM | PHONE: 724-652-4175<br>724-406-5443 (CELL) | 508 OLD FRANKSTOWN ROAD<br>MONROEVILLE, PA 15146 |
| — E —<br>—EU— | WEST PENN POWER COMPANY<br>ATTN: RICHARD P. HOBBINS<br>RHOBBIN@FIRSTENERGYCORP.COM | PHONE: 724-334-5237 | 2127 KENNETH AVENUE<br>ARNOLD, PA 15068 |
| —FOU3— | WINDSTREAM ENTERPRISE<br>ATTN: FRANK HALAS<br>FRANK.HALAS@WINDSTREAM.COM<br>ATTN: LARRY GOGLIN - CONSTRUCTION MANAGER III<br>LARRY.GOGLIN@WINDSTREAM.COM | PHONE: 315-706-9799<br>PHONE: 814-849-3551<br>814-715-1692 (CELL) | 98 INDUSTRIAL PARK ROAD<br>BROOKVILLE, PA 15825 |
| —FOI—<br>—FOUI— | ZAYO GROUP (ALLEGHENY COMMUNITY CONNECT)<br>ATTN: JOHN LYNCH, OPERATION MANAGER<br>JOHN.LYNCH@ZAYOCOM | PHONE: 724-838-6999<br>724-972-5667 (CELL) | 800 CABIN HILL DRIVE, ROOM M213<br>GREENSBURG, PA 15601 |
| —FO3—<br>—FOUI— | SALSGIVER, INC.<br>ATTN: DAVID SALSGIVER<br>DAVID@SALSGIVER.COM | PHONE: 724-295-1970 X 112 | 301, 5TH STREET<br>FREEPORT, PA 16229 |

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|
| 11-0 | * | 1038 AND 0056 | A01 | 4 OF 19 |
| | | * | | |

| REV NO | REVISIONS | DATE | BY | APPD |
|---|---|---|---|---|
| | | | | |
| | | | | |

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

# LIST OF PUBLIC UTILITIES

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

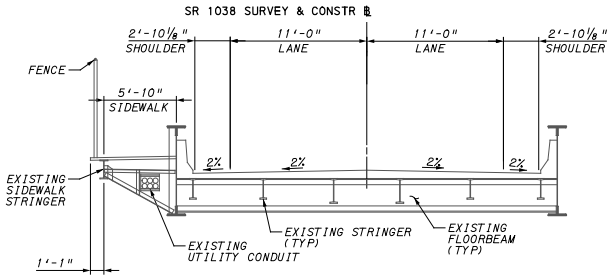
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
NICHOLAS AARON WAGNER
ENGINEER
No.PE073688

PLOTTED: 10/11/2022 12:55:18 PM
FILE NAME: G:\17-0488 New Kensington Final\CADD\Roadway\AR000050FX.dgn

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|
| 11-0 | * | 1038 AND 0056 | A01 | 5 OF 19 |
| | | * | | |

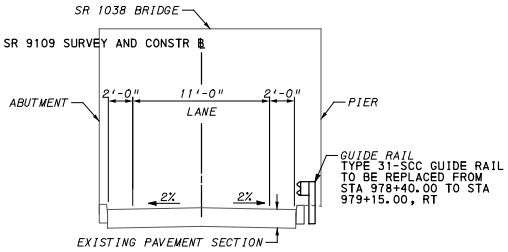
| REV NO | REVISIONS | DATE | BY | APPD |
|---|---|---|---|---|
| | | | | |
| | | | | |

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY



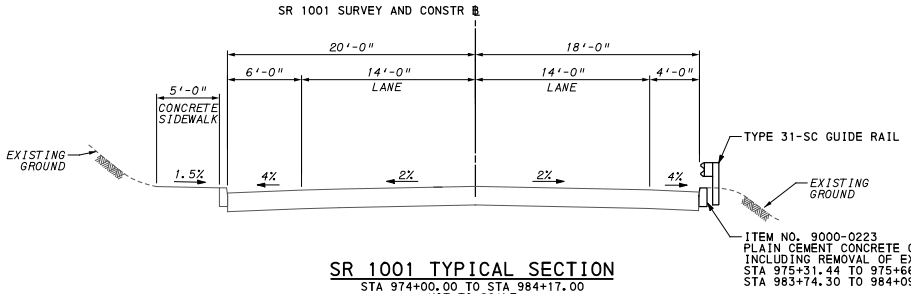

## SR 1038 TYPICAL SECTION

STA 0+00.00 TO STA 10+10.00
NOT TO SCALE



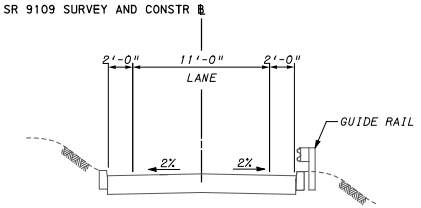

## SR 9109 TYPICAL SECTION

STA 978+40.00 TO STA 979+15.00
NOT TO SCALE




## SR 1001 TYPICAL SECTION

STA 974+00.00 TO STA 984+17.00
NOT TO SCALE




## SR 9109 TYPICAL SECTION

STA 974+00.00 TO STA 978+40.00
STA 979+15.00 TO STA 984+00.00
NOT TO SCALE

# TYPICAL SECTIONS

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

PLOTTED: 10/11/2022 12:55:19 PM

FILE NAME: G:\17-0488 New Kensington Final\CADD\Roadway\AR000060FX.dgn

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|
| 11-0 | * | 1038 AND 0056 | A01 | 6 OF 19 |
| | | * | | |

| REV NO. | REVISIONS | DATE | BY | APPD |
|---|---|---|---|---|
| | | | | |
| | | | | |

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

## PAVEMENT LEGEND:

(A) SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H

(B) SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH

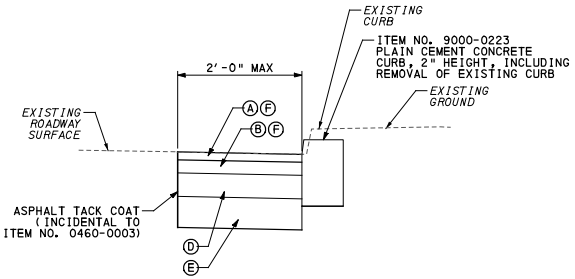
(C) SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 19.0 MM MIX, (3 1/2" MIN DEPTH)

(D) SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 25.0 MM MIX, 5 1/2" DEPTH

(E) SUBBASE 8" DEPTH (NO. 2A)

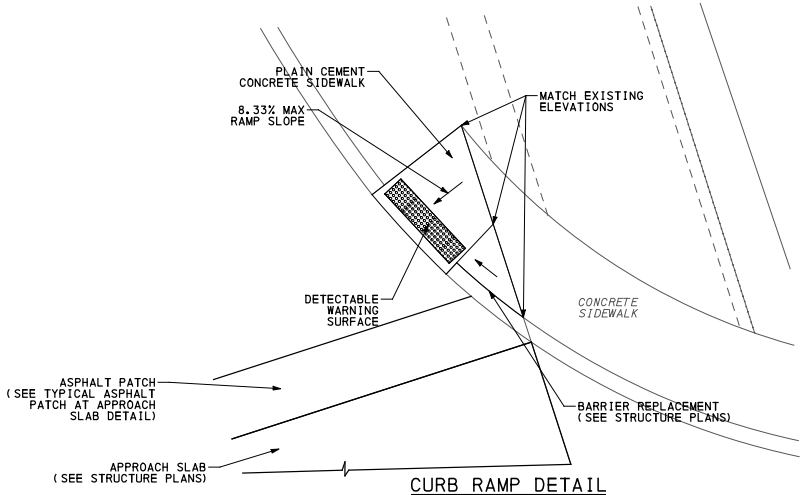
(F) APPLY SEPARATE LAYER OF ASPHALT TACK COAT FOR EACH PAVING COURSE, INCLUDING MULTIPLE LIFTS OF THE SAME MATERIAL.

(G) MILLING OF ASPHALT PAVEMENT SURFACE, 1 1/2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR

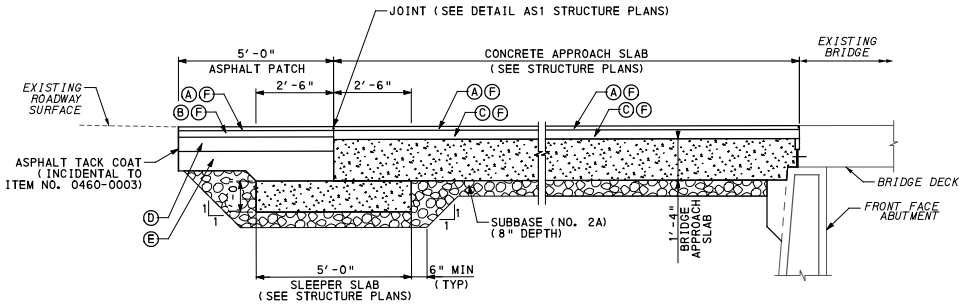



### TYPICAL ASPHALT PATCH AT CURB DETAIL

STA 975+31.44 TO STA 975+66.44, RT
STA 983+74.30 TO STA 984+09.30, RT
NOT TO SCALE

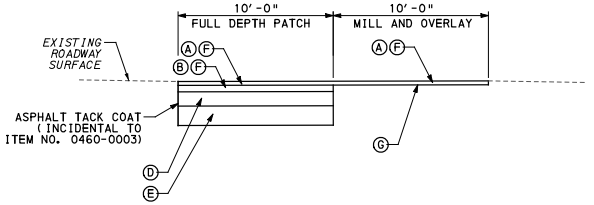



### CURB RAMP DETAIL




### TYPICAL ASPHALT PATCH AT APPROACH SLAB

STA 978+18.00 TO STA 979+38.00, RT
NOT TO SCALE




### TYPICAL ASPHALT PATCH AT APPROACH SLAB

STA 9+92.72 TO 10+13.00
NOT TO SCALE

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

## DETAILS

NICHOLAS AARON WAGNER
ENGINEER
PROFESSIONAL

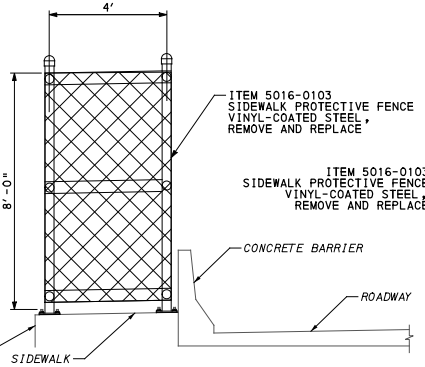
PLOTTED: 10/11/2022 2:16:20 PM
FILE NAME: G:\17-048B New Kensington Final\CADD\Roadway\AR000070FX.dgn

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|
| 11-0 | * | 1038 AND 0056 | A01 | 7 OF 19 |

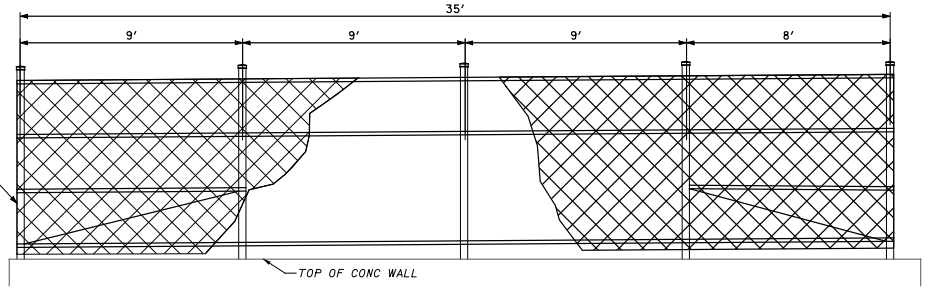
*

| REV NO | REVISIONS | DATE | BY | APPD |
|---|---|---|---|---|
| | | | | |

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY



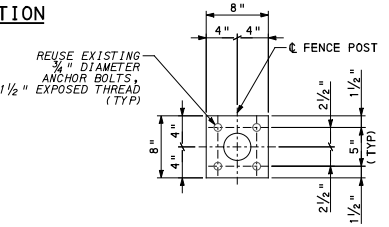

## FENCE SECTION
NOT TO SCALE



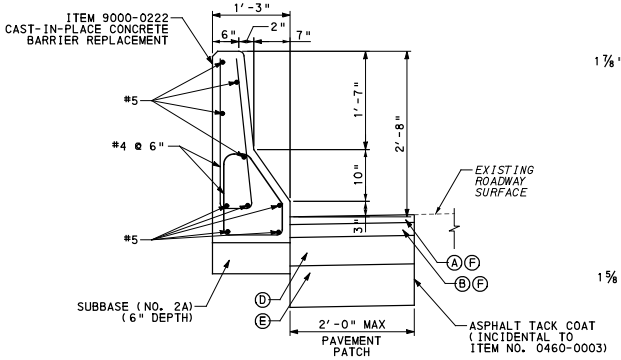

## FENCE ELEVATION SECTION
NOT TO SCALE

NOTE:
EXISTING "WELCOME TO NEW KENSINGTON" SIGN MOUNTED TO PROTECTIVE FENCE TO BE REMOVE AND REPLACED REUSING EXISTING MOUNTING HARDWARE.

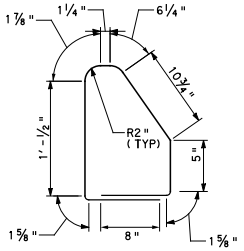
## EXISTING FENCE BASE PLATE

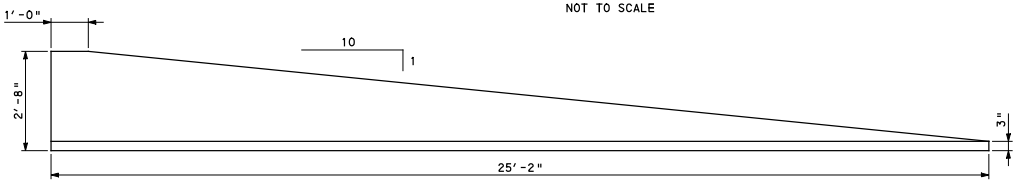



## FENCE BASE PLATE SECTION
NOT TO SCALE

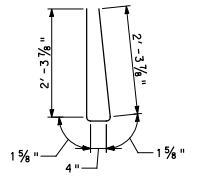



## CONCRETE BARRIER CROSS SECTION
NOT TO SCALE




## FAR APPROACH BARRIER SIDE VIEW
STA 9+92.72 TO 10+17.89, LT
NOT TO SCALE




## REINFORCEMENT BAR BEND DETAILS
NOT TO SCALE

## PAVEMENT LEGEND:

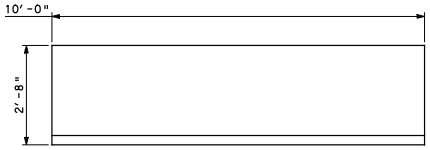
(A) SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H

(B) SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH

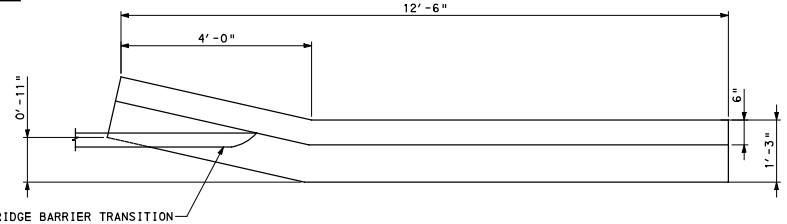
(D) SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO <3 MILLION ESALS, 25.0 MM MIX, 5 1/2" DEPTH

(E) SUBBASE 8" DEPTH (NO. 2A)

(F) APPLY SEPARATE LAYER OF ASPHALT TACK COAT FOR EACH PAVING COURSE, INCLUDING MULTIPLE LIFTS OF THE SAME MATERIAL.




## NEAR APPROACH BARRIER SIDE VIEW
STA 0+20 TO 0+25, RT
NOT TO SCALE




## FAR APPROACH BARRIER TOP VIEW
STA 9+74.26 TO 9+86.76, RT
NOT TO SCALE

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

# DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
NICHOLAS AARON WAGNER
ENGINEER
No.PE073688

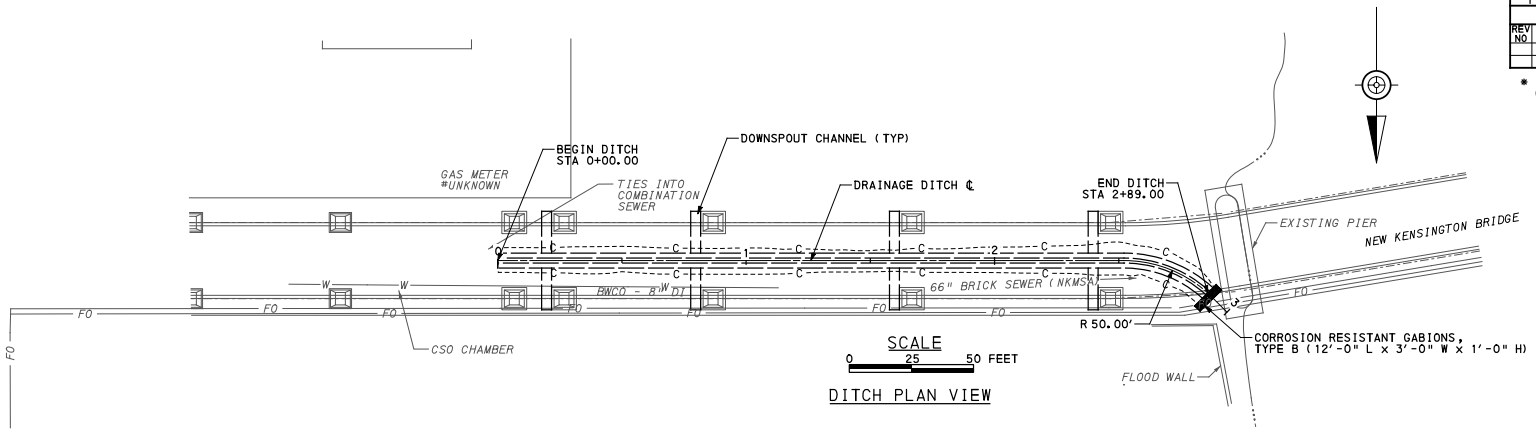
PLOTTED: 10/11/2022 12:55:22 PM

FILE NAME: G:\17-0488 New Kensington Final\CADD\Roadway\AR000080FX.dgn

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|
| 11-0 | * | 1038 AND 0056 | A01 | 8 OF 19 |
| | | * | | |

| REV NO | REVISIONS | DATE | BY | APPD |
|---|---|---|---|---|
| | | | | |

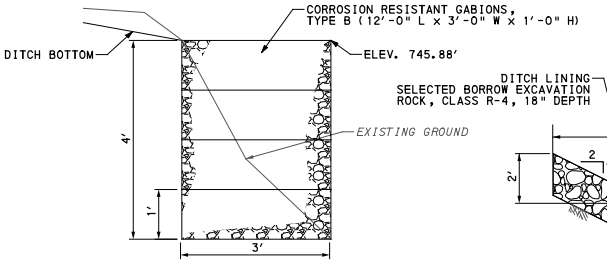
* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY



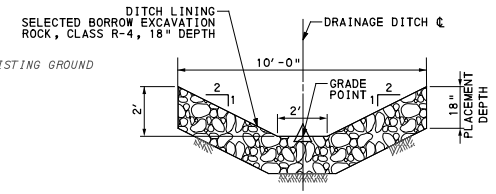

SCALE
0 25 50 FEET

DITCH PLAN VIEW

| ROUTE | STATION | POINT | COORDINATES | | BEARING |
|---|---|---|---|---|---|
| | | | NORTH | EAST | |
| DRAINAGE DITCH ℄ | 0+00.00 | POT | 455007.9983 | 1407404.1414 | |
| | 2+52.10 | PC | 454967.3715 | 1407155.3394 | S 80°43'34"W |
| | 2+72.90 | PI | 454964.0198 | 1407134.8130 | |
| | 2+91.52 | PT | 454976.2145 | 1407117.9650 | N 54°06'10"W |
| | 3+00.00 | POT | 454981.1887 | 1407111.0927 | |

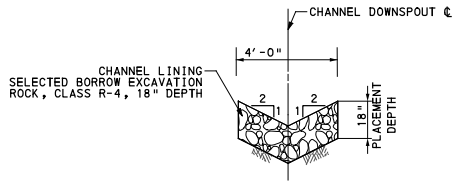



DITCH OUTLET DETAIL

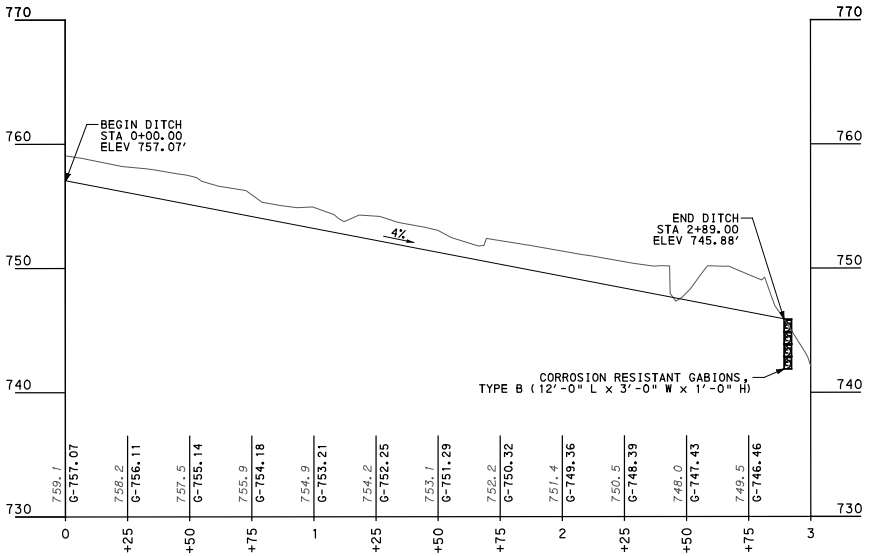



DITCH CROSS-SECTION

| SWALE NUMBER | STATION | TO | STATION | SIDE | DIMENSIONS (FT) | | DITCH SLOPE | DITCH LINING |
|---|---|---|---|---|---|---|---|---|
| | | | | | BOTTOM WIDTH B | DEPTH D | | |
| SW-1 | 0+00 | TO | 2+89 | LT/RT | 2.0 | 2.0 | 4.0% | R-4 |




DOWNSPOUT CHANNEL CROSS-SECTION




SCALE
HORIZONTAL 0 25 50 FEET
VERTICAL 0 5 10 FEET

DITCH PROFILE

DRAINAGE DITCH DETAIL

NICHOLAS AARON WAGNER
ENGINEER
PROFESSIONAL
No.PE073688

DES BY: ZTH DRAWN BY: ZTH CHK'D BY: NAW

TCP - TRAFFIC CONTROL PLAN
S & PMP - SIGNING, PAV'T MARKING AND DELIN PLAN
STR - STRUCTURE PLANS
♦ - SEE SPECIAL PROVISIONS

# SUMMARY

LP - LIGHTING PLAN
SSP - SIGN STRUCTURE PLAN

| REVISION NO | REVISIONS | DATE | BY | DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|---|---|---|---|
| | | | | 11 | ALLEGHENY & WESTMORELAND | 1038 & 0056 | A01 | 9 OF 19 |
| | | | | EAST DEER TOWNSHIP & CITY OF NEW KENSINGTON | | | | |

| QUANTITY | ITEM NO / UNIT | DESCRIPTION | DESIGN NO | FOR TAB SEE SHEET |
|---|---|---|---|---|
| 63 | 0203 0004 / CY | CLASS 1B EXCAVATION | | 12-13 |
| 333 | 0204 0001 / CY | CLASS 2 EXCAVATION | | 14 |
| 203 | 0205 0264 / CY | SELECTED BORROW EXCAVATION ROCK, CLASS R-4 | | 14 |
| 8 | 0212 0014 / SY | GEOTEXTILE, CLASS 4, TYPE A | | 14 |
| 1000 | 0213 0002 / DOLLA | TEMPORARY PROJECT AIR POLLUTION CONTROL | | NO TAB |
| 129 | 0313 0425 / SY | SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 5 1/2" DEPTH | | 12-13 |
| 129 | 0350 0108 / SY | SUBBASE 8" DEPTH (NO. 2A) | | 12-13 |
| 141 | 0350 0121 / TON | SUBBASE (NO. 2A) | | 12-13 |
| 393 | 0413 0245 / SY | SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H | | 12-13 |
| 129 | 0413 6045 / SY | SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH | | 12-13 |
| 48 | 0413 6047 / TON | SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX | | 12-13 |
| 258 | 0460 0003 / SY | ASPHALT TACK COAT (NTT/CNTT) | | 12-13 |
| 37 | 0491 0012 / SY | MILLING OF ASPHALT PAVEMENT SURFACE, 1 1/2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR | | 12-13 |
| | 0608 0001 / LS | MOBILIZATION | | NO TAB |
| | 0609 0003 / LS | INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, TYPE B | | NO TAB |
| | 0609 0009 / LS | EQUIPMENT PACKAGE ♦ | | NO TAB |
| 2 | 0619 0459 / EACH | PERMANENT IMPACT ATTENUATING DEVICE, TYPE II, TEST LEVEL 3, TANGENT (MASH) | | 12-13 |
| 943 | 0620 0503 / LF | REMOVE EXISTING GUIDE RAIL (CONTRACTOR'S PROPERTY) | | 12-13 |
| 1 | 0620 0872 / EACH | BURIED-IN-BACKSLOPE TERMINAL, SINGLE PANEL | | 12-13 |
| 138 | 0620 1600 / LF | TYPE 31-S GUIDE RAIL | | 12-13 |
| 588 | 0620 1625 / LF | TYPE 31-SC GUIDE RAIL | | 12-13 |
| 75 | 0620 1635 / LF | TYPE 31-SCC GUIDE RAIL | | 12-13 |
| 4 | 0620 1660 / EACH | TYPE 31-STRONG POST ANCHOR TERMINAL | | 12-13 |
| 1 | 0620 1670 / EACH | TYPE 31-STRONG POST IN-LINE ANCHOR | | 12-13 |
| 3 | 0620 2011 / EACH | THRIE-BEAM GUIDE RAIL TO CONCRETE BRIDGE BARRIER TRANSITION WITH CURB AND INLET | | 12-13 |
| 6 | 0626 0030 / CY | CORROSION RESISTANT GABIONS, TYPE B | | 14 |
| 1 | 0627 0011 / EACH | TEMPORARY END TRANSITION | | TCP |
| 410 | 0627 3019 / LF | TEMPORARY BARRIER, TEST LEVEL 3, BARRIER DEFLECTION DISTANCE < /=1' | | TCP |
| 9 | 4676 0001 / SY | CEMENT CONCRETE SIDEWALK FOR ADA RAMPS ♦ | | 12-13 |
| | 0686 0030 / LS | CONSTRUCTION SURVEYING, TYPE B, MODIFIED | | NO TAB |
| | 0686 0060 / LS | CONSTRUCTION SURVEYING, TYPE D, MODIFIED | | NO TAB |
| | 0689 0005 / LS | CPM SCHEDULE, WITH UPDATES | | NO TAB |
| EITHER 14 | 0695 0004 / SF | DETECTABLE WARNING SURFACE, POLYMER COMPOSITE | 1 | 12-13 |
| OR 14 | 0695 0003 / SF | DETECTABLE WARNING SURFACE, POLYMER CONCRETE | 1 | 12-13 |
| OR 14 | 0695 0002 / SF | DETECTABLE WARNING SURFACE, CAST IRON | 1 | 12-13 |
| 1 | 0696 0610 / EACH | TEMPORARY IMPACT ATTENUATING DEVICE, TYPE V (STANDARD), TEST LEVEL 3 | | TCP |
| 1 | 0703 0025 / CY | NO. 57 COARSE AGGREGATE | | 14 |
| 800 | 0811 0003 / LF | TEMPORARY PROTECTIVE FENCE | | 14 |
| 1000 | 0845 0001 / DOLLA | UNFORESEEN WATER POLLUTION CONTROL | | NO TAB |
| 2 | 0850 0031 / CY | ROCK, CLASS R-3 | | 14 |
| 1 | 0856 0001 / EACH | REMOVAL SEDIMENT AND ROCK BARRIER | | 14 |
| 1 | 0860 0000 / EACH | INLET FILTER BAG FOR TYPE M INLET | | 14 |
| 8 | 0860 0002 / EACH | INLET FILTER BAG FOR TYPE C INLET | | 14 |
| 87 | 0867 0012 / LF | COMPOST FILTER SOCK, 12" DIAMETER | | 14 |
| | 0901 0001 / LS | MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION ♦ | | TCP |
| 2 | 0901 0203 / EACH | ARROW PANEL | | TCP |
| 50 | 0901 0231 / DAY | ADDITIONAL WARNING LIGHTS, TYPE B | | TCP |
| 50 | 0901 0232 / DAY | ADDITIONAL WARNING LIGHTS, TYPE C | | TCP |
| 750 | 0901 0240 / SF | ADDITIONAL TRAFFIC CONTROL SIGNS | | TCP |
| 4820 | 4901 0320 / LF | 4" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, YELLOW MODIFIED ♦ | | TCP |
| 2232 | 4901 0331 / LF | 6" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE MODIFIED ♦ | | TCP |
| 6 | 0901 0450 / EACH | 3-LINE CHANGEABLE MESSAGE SIGN WITH TELECOMMUNICATIONS | | TCP |
| 12 | 0910 0006 / EACH | JUNCTION BOXES J.B.-25 | | 12-13 |
| 5800 | 0910 4115 / LF | AWG 6 UNDERGROUND CABLE, COPPER, 1 CONDUCTOR | | NO TAB |
| 7200 | 0910 4116 / LF | AWG 8 UNDERGROUND CABLE, COPPER, 1 CONDUCTOR | | NO TAB |
| 127 | 0910 5255 / LF | 2" CONDUIT IN STRUCTURE | | NO TAB |
| 2 | 0910 7020 / EACH | COMPLETE POWER SUPPLY SYSTEM | 1 | 12-13 |
| | 0910 7210 / LS | TESTING OF ENTIRE LIGHTING SYSTEM | 1 | 12-13 |
| 59 | 0931 0001 / SF | POST MOUNTED SIGNS, TYPE B | | 14 |
| 30 | 0932 0001 / SF | POST MOUNTED SIGNS, TYPE C | | TCP |
| 27 | 0935 0001 / SF | POST MOUNTED SIGNS, TYPE F | | 14 |
| 245 | 0936 0200 / SF | STRUCTURE MOUNTED FLAT SHEET ALUMINUM SIGNS | | 14 |
| 18 | 0937 0106 / EACH | GUIDE RAIL MOUNTED DELINEATOR TYPE B, (W/B) | | NO TAB |
| 9 | 0945 0001 / EACH | RESET POST MOUNTED SIGNS, TYPE F | | 14 |
| | 4948 0300 / LS | STEEL SIGN STRUCTURE - CANTILEVER, AS DESIGNED, S-40254 ♦ | 2 | SSP |
| 1 | 0958 0341 / EACH | TEMPORARY MODIFICATIONS TO EXISTING PERMANENT TRAFFIC SIGNAL (3 APPROACHES) | | TCP |
| 1 | 0958 0361 / EACH | TEMPORARY MODIFICATIONS TO EXISTING PERMANENT TRAFFIC SIGNAL (4 OR MORE APPROACHES) | | TCP |
| 394 | 0962 1002 / LF | 8" WHITE WATERBORNE PAVEMENT MARKINGS | | TCP |
| 231 | 0962 1004 / LF | 24" WHITE WATERBORNE PAVEMENT MARKINGS | | TCP |
| 6432 | 0962 1005 / LF | 4" YELLOW WATERBORNE PAVEMENT MARKINGS | | S & PMP |
| 40 | 0962 1009 / LF | 24" YELLOW WATERBORNE PAVEMENT MARKINGS | | TCP |
| 30 | 0962 1019 / LF | 24" WHITE WATERBORNE TRANSVERSE PAVEMENT MARKINGS | | S & PMP |
| 3716 | 0963 0001 / SF | PAVEMENT MARKING REMOVAL | | TCP |
| 10 | 1001 0500 / EACH | LIGHTING POLE, ANCHORAGE | | STR |
| 4849 | 1001 0970 / SY | MECHANICAL TEXTURING WITH TRANSVERSE SAWED GROOVES | | STR |
| 160 | 1001 1100 / CY | CLASS AA CEMENT CONCRETE, ACCELERATED | | STR |
| 32400 | 1002 0052 / LB | REINFORCEMENT BARS, EPOXY COATED | | STR |
| 160 | 1003 0005 / EACH | DOWEL HOLES, 12" DEPTH | | STR |
| 92 | 5016 0006 / LF | BARRIER PROTECTIVE FENCE, VINYL-COATED STEEL, REMOVE AND REPLACE ♦ | | STR |
| 1585 | 5016 0103 / LF | SIDEWALK PROTECTIVE FENCE VINYL-COATED STEEL, REMOVE AND REPLACE ♦ | | STR, 12-13 |
| | 1018 0050 / LS | REMOVAL OF PORTION OF EXISTING BRIDGE | | STR |
| | 1018 0051 / LS | REMOVAL OF PORTION OF EXISTING BRIDGE | 2 | SSP |
| 3223 | 1019 0040 / SY | PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, REINFORCED CONCRETE SUBSTRUCTURE SURFACES) | | STR |
| 569 | 1019 0050 / SY | PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, BRIDGE SUPERSTRUCTURE) | | STR |
| 8600 | 5020 0002 / LB | TOOTH EXPANSION DAM WITH DRAIN TROUGH, REMOVE AND REPLACE ♦ | | STR |
| 4849 | 1039 0010 / SY | CONCRETE BRIDGE DECK SURFACE PREPARATION, HYDRODEMOLITION | | STR |
| 92 | 1040 0120 / SF | CONCRETE BRIDGE DECK REPAIR ACCELERATED, TYPE 2 USING ASC | | STR |
| 28 | 1040 0210 / SF | CONCRETE BRIDGE BARRIER REPAIR ACCELERATED, TYPE 2 USING ASC | | STR |
| 9698 | 1041 0020 / SY | SCARIFICATION, 1/2" DEPTH | | STR |
| 4849 | 1042 0030 / SY | 3 HOUR ACCELERATED LATEX MODIFIED CONCRETE WEARING SURFACE, 1 1/4" DEPTH | | STR |
| 168 | 1042 0070 / CY | 3 HOUR ACCELERATED LATEX MODIFIED CONCRETE, VARIABLE DEPTH | | STR |
| 1021 | 1046 0010 / SY | EPOXY OVERLAY | | STR |
| 815 | 1050 0020 / LB | FABRICATED STRUCTURAL STEEL | | STR |

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — NICHOLAS AARON WAGNER — PE037090


PROJECT ID: 4316
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TCP - TRAFFIC CONTROL PLAN
S & PMP - SIGNING, PAV'T MARKING AND DELIN PLAN
STR - STRUCTURE PLANS
♦ - SEE SPECIAL PROVISIONS

# SUMMARY

LP - LIGHTING PLAN
SSP - SIGN STRUCTURE PLAN

| REVISION NO | REVISIONS | DATE | BY | DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|---|---|---|---|
| | | | | 11 | ALLEGHENY & WESTMORELAND | 1038 & 0056 | A01 | 10 OF 19 |
| | | | | EAST DEER TOWNSHIP & CITY OF NEW KENSINGTON | | | | |

| QUANTITY | ITEM NO / UNIT | DESCRIPTION | DESIGN NO | FOR TAB SEE SHEET |
|---|---|---|---|---|
| 780 | 1050 0021 / LB | FABRICATED STRUCTURAL STEEL | 2 | SSP |
| 2 | 1050 0085 / EACH | LAMINATED NEOPRENE BEARING PAD | | STR |
| 36 | 1050 0089 / EACH | SHEAR CONNECTORS | | STR |
| 500000 | 1050 0100 / DOLLA | UNFORESEEN FABRICATED STRUCTURAL STEEL REPAIRS | | STR |
| 3738 | 1050 0110 / LB | FABRICATED STRUCTURAL STEEL REPAIR | | STR |
| 447 | 1050 0111 / LB | FABRICATED STRUCTURAL STEEL REPAIR | | STR |
| 1803 | 1050 0112 / LB | FABRICATED STRUCTURAL STEEL REPAIR | | STR |
| 1072 | 1050 0113 / LB | FABRICATED STRUCTURAL STEEL REPAIR | | STR |
| 145 | 1050 0114 / LB | FABRICATED STRUCTURAL STEEL REPAIR | | STR |
| 443 | 1050 0115 / LB | FABRICATED STRUCTURAL STEEL REPAIR | | STR |
| 20 | 1050 0116 / LB | FABRICATED STRUCTURAL STEEL REPAIR | | STR |
| 2111 | 1050 0117 / LB | FABRICATED STRUCTURAL STEEL REPAIR | | STR |
| 525 | 1050 0118 / LB | FABRICATED STRUCTURAL STEEL REPAIR | | STR |
| 35 | 1050 0119 / LB | FABRICATED STRUCTURAL STEEL REPAIR | | STR |
| 26 | 1050 0201 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 1 | | STR |
| 3 | 1050 0202 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 2 | | STR |
| 23 | 1050 0203 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 3 | | STR |
| 4 | 1050 0204 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 4 | | STR |
| 1 | 1050 0205 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 5 | | STR |
| 2 | 1050 0206 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 6 | | STR |
| 4 | 1050 0207 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 7 | | STR |
| 2 | 1050 0208 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 8 | | STR |
| 14 | 1050 0210 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 10 | | STR |
| 3 | 1050 0211 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 11 | | STR |
| 10 | 1050 0212 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 12 | | STR |
| 15 | 1050 0213 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 13 | | STR |
| 2 | 1050 0214 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 14 | | STR |
| 23 | 1050 0215 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 15 | | STR |
| 2 | 1050 0216 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 16 | | STR |
| 14 | 1050 0217 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 17 | | STR |
| 86 | 1050 0218 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 18 | | STR |
| 9 | 1050 0219 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 19 | | STR |
| 7 | 1050 0220 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 20 | | STR |
| 9 | 1050 0221 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 21 | | STR |
| 1445 | 1050 0222 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 22 | | STR |
| 47 | 1050 0223 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 23 | | STR |
| 249 | 1050 0224 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 24 | | STR |
| 29 | 1050 0225 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 25 | | STR |
| 23 | 1050 0226 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 26 | | STR |
| 1299 | 1050 0227 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 27 | | STR |
| 1247 | 1050 0228 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 28 | | STR |
| 28 | 1050 0229 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 29 | | STR |
| 20 | 1050 0230 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 30 | | STR |
| 9 | 1050 0231 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 31 | | STR |
| 1 | 1050 0232 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 32 | | STR |
| 1 | 1050 0233 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 33 | | STR |
| 480 | 1050 0234 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 34 | | STR |
| 24 | 1050 0235 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 35 | | STR |
| 330 | 1050 0236 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 36 | | STR |
| 11 | 1050 0237 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 37 | | STR |
| 9 | 1050 0238 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 38 | | STR |
| 13 | 1050 0239 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 39 | | STR |
| 5 | 1050 0240 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 40 | | STR |
| 294 | 1050 0241 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 41 | | STR |
| 14 | 1050 0242 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 42 | | STR |
| 2 | 1050 0243 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 43 | | STR |
| 12 | 1050 0244 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 44 | | STR |
| 1 | 1050 0245 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 45 | | STR |
| 20 | 1050 0246 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 46 | | STR |
| 11 | 1050 0247 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 47 | | STR |
| 7 | 1050 0248 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 48 | | STR |
| 629 | 1050 0249 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 49 | | STR |
| 32 | 1050 0250 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 50 | | STR |
| 75 | 1050 0251 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 51 | | STR |
| 6 | 1050 0252 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 52 | | STR |
| 10 | 1050 0253 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 53 | | STR |
| 9 | 1050 0254 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 54 | | STR |
| 3 | 1050 0255 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 55 | | STR |
| 1 | 1050 0256 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 56 | | STR |
| 1 | 1050 0257 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 57 | | STR |
| 4 | 1050 0258 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 58 | | STR |
| 2 | 1050 0259 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 59 | | STR |
| 28 | 1050 0260 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 60 | | STR |
| 2 | 1050 0261 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 61 | | STR |
| 1 | 1050 0262 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 62 | | STR |
| 670 | 1050 0263 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 63 | | STR |
| 62 | 1050 0264 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 64 | | STR |
| 11 | 1050 0265 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 65 | | STR |
| 1 | 1050 0266 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 66 | | STR |
| 6 | 1050 0267 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 67 | | STR |
| 1 | 1050 0268 / EACH | FABRICATED STRUCTURAL STEEL REPAIR 68 | | STR |
| 800 | 5051 0000 / LF | DOWNSPOUTING, GALVANIZED, REMOVE AND REPLACE ♦ | | STR |
| | 1070 0200 / LS | PAINTING EXISTING STRUCTURAL STEEL | | STR |
| | 1070 0325 / LS | PRIMING TOP FLANGES | | STR |
| 220000 | 1070 0350 / DOLLA | PENETRATING SEALER AND CAULKING APPLICATION | | STR |
| | 1072 0100 / LS | CONTAINMENT ♦ | | STR |
| | 1072 0200 / LS | WASTE MANAGEMENT ♦ | | STR |
| | 1072 0300 / LS | WORKER HEALTH AND SAFETY ♦ | | STR |
| 31 | 1090 1014 / LF | ACCELERATED EXPANSION DAM REPLACEMENT, 3" MOVEMENT | | STR |
| 62 | 5090 1015 / LF | ACCELERATED EXPANSION DAM REPLACEMENT, 3 1/2" MOVEMENT, NON-STANDARD RETAINER ♦ | | STR |
| 31 | 5090 1016 / LF | ACCELERATED EXPANSION DAM REPLACEMENT, 4" MOVEMENT, NON-STANDARD RETAINER ♦ | | STR |
| 203 | 1091 0331 / LF | EPOXY INJECTION CRACK SEAL | | STR |
| 1008 | 9000 0120 / HOUR | PEDESTRIAN SHUTTLE SERVICE DURING CONSTRUCTION ♦ | | TCP |

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# SUMMARY

LP - LIGHTING PLAN
SSP - SIGN STRUCTURE PLAN

| REVISION NO | REVISIONS | DATE | BY | DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|---|---|---|---|
| | | | | 11 | ALLEGHENY & WESTMORELAND | 1038 & 0056 | A01 | 11 OF 19 |
| | | | | EAST DEER TOWNSHIP & CITY OF NEW KENSINGTON | | | | |

| QUANTITY | ITEM NO / UNIT | DESCRIPTION | DESIGN NO | FOR TAB SEE SHEET | QUANTITY | ITEM NO / UNIT | DESCRIPTION | DESIGN NO | FOR TAB SEE SHEET | QUANTITY | ITEM NO / UNIT | DESCRIPTION | DESIGN NO | FOR TAB SEE SHEET | QUANTITY | ITEM NO / UNIT | DESCRIPTION | DESIGN NO | FOR TAB SEE SHEET |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 843 | 9000 0121 HOUR | BUS SHUTTLE SERVICE DURING CONSTRUCTION ♦ | | TCP | 11 | 9000 0224 EACH | LED DECORATIVE LUMINAIRE ♦ | | LP | | | | | | | | | | |
| 28 | 9000 0201 EACH | PACK RUST REPAIRS, EYE BARS ♦ | | STR | | 9000 0225 LS | REMOVE EXISTING LIGHTING ♦ | | LP | | | | | | | | | | |
| 57 | 9000 0202 EACH | PACK RUST REPAIR, JOINT OR CHORD ♦ | | STR | | 9000 0226 LS | COMPLETE NAVIGATION LIGHTING SYSTEM ♦ | | LP | | | | | | | | | | |
| | 9000 0203 LS | JACKING BRIDGE SUPERSTRUCTURE ♦ | | STR | 10 | 9000 0227 EACH | DECORATIVE LIGHTING POLE WITH 4-FOOT DECORATIVE BRACKET ARM (28 1/2-FT MOUNTING HEIGHT) ♦ | | LP | | | | | | | | | | |
| 8 | 9000 0204 EACH | CLEAN AND LUBRICATE BEARINGS ♦ | | STR | 1 | 9000 0228 EACH | 4-FOOT DECORATIVE BRACKET ARM (28 1/2-FT MOUNTING HEIGHT) AND WIRING ASSEMBLY ♦ | | LP | | | | | | | | | | |
| 2 | 9000 0205 EACH | CLEAN AND FLUSH BRIDGE SEATS ♦ | | STR | 1 | 9000 5001 EACH | DESIGN OF CEMENT CONCRETE CURB RAMPS ♦ | | 12-13 | | | | | | | | | | |
| 90 | 9000 0206 LF | REPLACE WALL EXPANSION JOINT MATERIAL ♦ | | STR | 1893 | 9000 9002 CF | REPAIR DETERIORATED CONCRETE ♦ | | STR | | | | | | | | | | |
| 524 | 9000 0207 LF | INSTALL BARRIER FLASHING ♦ | | STR | 37500 | 9000 9011 DOLLA | OFF DUTY UNIFORMED POLICE OFFICER ♦ | | TCP | | | | | | | | | | |
| | 9000 0208 LS | REMOVE VEGETATION ♦ | | STR | 6500 | 9000 9015 DOLLA | REPAIR OF TEMPORARY IMPACT ATTENUATING DEVICE ♦ | | TCP | | | | | | | | | | |
| 14 | 9000 0209 EACH | INSTALL SPLASH BLOCK ♦ | | STR | | | | | | | | | | | | | | | |
| 90 | 9000 0210 LF | REPLACE CONDUIT ♦ | | STR | | | | | | | | | | | | | | | |
| 38 | 9000 0211 EACH | CORE NEW WEEPHOLE AND INSTALL WEEPHOLE FILTER ♦ | | STR | | | | | | | | | | | | | | | |
| | 9000 0212 LS | REMOVE EXISTING UTILITY LINES AND CONDUIT ♦ | | STR | | | | | | | | | | | | | | | |
| | 9000 0213 LS | INSTALL COMCAST CONDUIT ♦ | | STR | | | | | | | | | | | | | | | |
| 1 | 9000 0214 EACH | SEAL BEARING ♦ | | STR | | | | | | | | | | | | | | | |
| 6 | 9000 0215 EACH | SCUPPER, TYPE 1, NEW INSTALLATION ♦ | | STR | | | | | | | | | | | | | | | |
| 6 | 9000 0216 EACH | SCUPPER, TYPE 1, REPLACEMENT INSTALLATION ♦ | | STR | | | | | | | | | | | | | | | |
| 4 | 9000 0217 EACH | SCUPPER REMOVAL ♦ | | STR | | | | | | | | | | | | | | | |
| 62 | 9000 0218 LF | ACCELERATED EXPANSION DAM REPLACEMENT, 5" MOVEMENT, NON-STANDARD RETAINER ♦ | | STR | | | | | | | | | | | | | | | |
| 2 | 9000 0219 CALL | TEMPORARY TIMING REVISIONS ♦ | | TCP | | | | | | | | | | | | | | | |
| 5000 | 9000 0220 DOLLA | REPAIR OF DETOUR ROUTE ♦ | | TCP | | | | | | | | | | | | | | | |
| 31 | 9000 0221 LF | REMOVAL OF PORTION OF EXISTING CONCRETE BARRIER ♦ | | 12-13 | | | | | | | | | | | | | | | |
| 48 | 9000 0222 LF | CAST-IN-PLACE CONCRETE BARRIER REPLACEMENT ♦ | | 12-13 | | | | | | | | | | | | | | | |
| 70 | 9000 0223 LF | PLAIN CEMENT CONCRETE CURB, 2" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB ♦ | | 12-13 | | | | | | | | | | | | | | | |

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER NICHOLAS AARON WAGNER PE037000



PROJECT ID: 4316 MPMS: 63515 ECMS: 63515 10/12/2022 5:21:56 PM

# TABULATION OF QUANTITIES

## ROADWAY

(+) SEE SUMMARY SHEET FOR COMPLETE ITEM NUMBERS

| REVISION NO | REVISIONS | DATE | BY | DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|---|---|---|---|
| | | | | 11 | ALLEGHENY & WESTMORELAND | 1038 & 0056 | A01 | 12 OF 19 |
| | | | | EAST DEER TOWNSHIP & CITY OF NEW KENSINGTON | | | | |

| CLASS 1B EXCAVATION<br>0203 0004 CY | SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 5 1/2" DEPTH<br>0313 0425 SY | SUBBASE 8" DEPTH (NO. 2A)<br>0350 0108 SY | SUBBASE (NO. 2A)<br>0350 0121 TON | SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H<br>0413 0245 SY | SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH<br>0413 6045 SY | SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX<br>0413 6047 TON | ASPHALT TACK COAT (NTT/CNTT)<br>0460 0003 SY | MILLING OF ASPHALT PAVEMENT SURFACE, 1 1/2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR<br>0491 0012 SY | PERMANENT IMPACT ATTENUATING DEVICE, TYPE II, TEST LEVEL 3, TANGENT (MASH)<br>0619 0459 EACH | REMOVE EXISTING GUIDE RAIL (CONTRACTOR'S PROPERTY)<br>0620 0503 LF | BURIED-IN-BACKSLOPE TERMINAL, SINGLE PANEL<br>0620 0822 EACH | TYPE 31-S GUIDE RAIL<br>0620 1600 LF | TYPE 31-SC GUIDE RAIL<br>0620 1625 LF | TYPE 31-SCC GUIDE RAIL<br>0620 1635 LF | TYPE 31-STRONG POST ANCHOR TERMINAL<br>0620 1660 EACH | TYPE 31-STRONG POST IN-LINE ANCHOR<br>0620 1670 EACH | THRIE-BEAM GUIDE RAIL TO CONCRETE BRIDGE BARRIER TRANSITION WITH CURB AND INLET<br>0620 2011 EACH | CEMENT CONCRETE SIDEWALK FOR ADA RAMPS<br>4676 0001 SY | DETECTABLE WARNING SURFAC DESIGN NO. 1<br>0695 (+) SF | SIDEWALK PROTECTIVE FENCE VINYL-COATED STEEL, REMOVE AND REPLACE<br>5016 0103 LF | REMOVAL OF PORTION OF EXISTING CONCRETE BARRIER<br>9000 0221 LF | CAST-IN-PLACE CONCRETE BARRIER REPLACEMENT<br>9000 0222 LF | PLAIN CEMENT CONCRETE CURB, 2" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB<br>9000 0223 LF | DESIGN OF CEMENT CONCRETE CURB RAMPS<br>9000 5001 EACH | | | | ITEM NUMBER / UNIT | REMARKS | SIDE | STATIONS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SR 1001 SECTION A01 | | |
| 4 | 8 | 8 | | 8 | 8 | | 16 | | | | | | | | | | | | | | | 35 | | | | | | CURB REPLACEMENT WITH FULL DEPTH PAVEMENT PATCH | RT | 975+31.44 to 975+66.44 |
| | | | | | | | | | 1 | | | | 162.5 | | | | | 1 | | | | | | | | | | | BRIDGE BARRIER TRANSITION, TYPE 31-SC, PERMANENT IMPACT ATTENUATOR | RT | 975+41.44 to 977+66.44 |
| | | | | | | | | | | 215 | | | | | | | | | | | | | | | | | | | | RT | 975+50.64 to 977+66.44 |
| 37 | 76 | 76 | | 76 | 76 | | 152 | | | | | | | | | | | | | | | | | | | | | | FULL DEPTH PAVEMENT PATCH AT APPROACH SLAB | RT | 978+33.00 to 979+21.00 |
| | | | | | | | | | 1 | 436 | | | 375 | | | | | 1 | | | | | | | | | | | BRIDGE BARRIER TRANSITION, TYPE 31-SC, PERMANENT IMPACT ATTENUATOR | RT | 979+61.80 to 983+99.30 |
| 4 | 8 | 8 | | 8 | 8 | | 16 | | | | | | | | | | | | | | | 35 | | | | | | CURB REPLACEMENT WITH FULL DEPTH PAVEMENT PATCH | RT | 983+74.30 to 984+09.30 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SR 9109 SECTION A01 | | |
| | | | | | | | | | | 75 | | | | | 75 | | | | | | | | | | | | | | REMOVE AND REPLACE FOR CONSTRUCTION ACCESS | RT | 978+40.00 to 979+15.00 |
| | | | | | | | | | | | 1 | 62.5 | | | | 1 | | | | | | | | | | | | | BURIED-IN-BACKSLOPE TERMINAL, TYPE 31-S, TYPE 31 STRONG POST ANCHOR TERMINAL | LT | 983+06.50 to 983+90.70 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SR 1038 SECTION A01 (ALLEGHENY COUNTY) | | |
| | | | 141 | 227 | | 48 | | | | | | | | | | | | | | | | | | | | | | | ASPHALT OVERLAY AND SUBBASE BELOW APPROACH SLAB/SLEEPER SLAB | RT | 0+00.00 to 0+25.83 |
| 1 | 3 | 3 | | 3 | 3 | | 6 | | | | | | | | | | | | | 9 | 14 | | | | | 1 | | | CURB RAMP WITH FULL DEPTH PAVEMENT PATCH | LT | 0+18.00 to 0+26.50 |
| 1 | 1 | 1 | | 1 | 1 | | 2 | | | | | | | | | | | | | | | | | 10 | 10 | | | | CONCRETE BARRIER REPLACEMENT WITH FULL DEPTH PAVEMENT PATCH | RT | 0+20.00 to 0+25.00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SR 1038 SECTION A01 (WESTMORELAND COUNTY) | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | DRAINAGE DITCH | LT | 4+56.00 to 7+47.00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | LT | 4+69.00 to 8+01.00 |
| | | | | | | | | | | | | | | | | | | | | | | | 39 | | | | | | SIDEWALK PROTECTIVE FENCE | RT | 9+68.00 to 9+92.00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | 12.5 | | | | CONCRETE BARRIER REPLACEMENT | RT | 9+74.26 to 9+86.76 |
| | | | | | | | | | | | | | | | | | | | | | | | | 20.5 | 25 | | | | CONCRETE BARRIER REPLACEMENT | LT | 9+86.76 to 10+11.47 |
| | | | | | | | | | | 100 | | | 50 | | | 1 | | 1 | | | | | | | | | | | BRIDGE BARRIER TRANSITION, TYPE 31-SC, TYPE 31 STRONG POST ANCHOR TERMINAL | RT | 9+86.76 to 10+62.50 |
| 16 | 33 | 33 | | 33 | 33 | | 66 | | | | | | | | | | | | | | | | | | | | | | FULL DEPTH PAVEMENT | LT / RT | 9+92.72 to 10+03.00 |

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — NICHOLAS AARON WAGNER — ENGINEER — PE073666



PROJECT ID: 4316 MPMS: 63515 ECMS: 63515 10/11/2022 9:05:28 AM

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(+) SEE SUMMARY SHEET FOR COMPLETE ITEM NUMBERS

| REVISION NO | REVISIONS | DATE | BY | DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|---|---|---|---|
| | | | | 11 | ALLEGHENY & WESTMORELAND | 1038 & 0056 | A01 | 13 OF 19 |
| | | | | EAST DEER TOWNSHIP & CITY OF NEW KENSINGTON | | | | |

| CLASS 1B EXCAVATION | SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 5 1/2" DEPTH | SUBBASE 8" DEPTH (NO. 2A) | SUBBASE (NO. 2A) | SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SKL-H | SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH | SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX | ASPHALT TACK COAT (NTT/CNTT) | MILLING OF ASPHALT PAVEMENT SURFACE, 1 1/2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR | PERMANENT IMPACT ATTENUATING DEVICE, TYPE II, TEST LEVEL 3, TANGENT (MASH) | REMOVE EXISTING GUIDE RAIL (CONTRACTOR'S PROPERTY) | BURIED-IN-BACKSLOPE TERMINAL, SINGLE PANEL | TYPE 31-S GUIDE RAIL | TYPE 31-SC GUIDE RAIL | TYPE 31-SCC GUIDE RAIL | TYPE 31-STRONG POST ANCHOR TERMINAL | TYPE 31-STRONG POST IN-LINE ANCHOR | THRIE-BEAM GUIDE RAIL TO CONCRETE BRIDGE BARRIER TRANSITION WITH CURB AND INLET | CEMENT CONCRETE SIDEWALK FOR ADA RAMPS | DETECTABLE WARNING SURFAC DESIGN NO. 1 | SIDEWALK PROTECTIVE FENCE VINYL-COATED STEEL, REMOVE AND REPLACE | REMOVAL OF PORTION OF EXISTING CONCRETE BARRIER | CAST-IN-PLACE CONCRETE BARRIER REPLACEMENT | PLAIN CEMENT CONCRETE CURB, 2" HEIGHT, INCLUDING REMOVAL OF EXISTING CURB | DESIGN OF CEMENT CONCRETE CURB RAMPS | | | REMARKS | SIDE | STATIONS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0203 0004 CY | 0313 0425 SY | 0350 0108 SY | 0350 0121 TON | 0413 0245 SY | 0413 6045 SY | 0413 6047 TON | 0460 0003 SY | 0491 0012 SY | 0619 0459 EACH | 0620 0503 LF | 0620 0822 EACH | 0620 1600 LF | 0620 1625 LF | 0620 1635 LF | 0620 1660 EACH | 0620 1670 EACH | 0620 2011 EACH | 4676 0001 SY | 0695 (+) SF | 5016 0103 LF | 9000 0221 LF | 9000 0222 LF | 9000 0223 LF | 9000 5001 EACH | | | ITEM NUMBER UNIT | | |
| | | | | 37 | | | | 37 | | | | | | | | | | | | | | | | | | | MILL AND OVERLAY | LT / RT | 10+03.00 to 10+13.00 |
| | | | | | | | | | | | | 75 | | | 2 | 1 | | | | | | | | | | | TYPE 31 STRONG POST ANCHOR TERMINAL, TYPE 31-S, TYPE 31 STRONG POST ANCHOR TERMINAL | LT | 10+04.09 to 10+67.10 |
| | | | | | | | | | | 117 | | | | | | | | | | | | | | | | | | LT | 10+04.09 to 10+79.43 |
| 63 | 129 | 129 | 141 | 393 | 129 | 48 | 258 | 37 | 2 | 943 | 1 | 137.5 | 587.5 | 75 | 4 | 1 | 3 | 9 | 14 | 39 | 30.5 | 47.5 | 70 | 1 | | | TOTALS | | |



PROJECT ID: 4316 MPMS: 63515 ECMS: 63515 10/11/2022 9:05:28 AM

# TABULATION OF QUANTITIES
## EROSION AND SEDIMENT POLLUTION CONTROL

| REVISION NO | REVISIONS | DATE | BY | DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|---|---|---|---|
| | | | | 11 | ALLEGHENY & WESTMORELAND | 1038 & 0056 | A01 | 14 OF 19 |
| | | | | EAST DEER TOWNSHIP & CITY OF NEW KENSINGTON | | | | |

| 0204 0001 CLASS 2 EXCAVATION CY | 0205 0264 SELECTED BORROW EXCAVATION ROCK, CLASS R-4 CY | 0212 0014 GEOTEXTILE, CLASS 4, TYPE A SY | 0626 0030 CORROSION RESISTANT GABIONS, TYPE B CY | 0703 0025 NO. 57 COARSE AGGREGATE CY | 0811 0003 TEMPORARY PROTECTIVE FENCE LF | 0850 0031 ROCK, CLASS R-3 CY | 0856 0001 REMOVAL SEDIMENT AND ROCK BARRIER EACH | 0860 0000 INLET FILTER BAG FOR TYPE M INLET EACH | 0860 0002 INLET FILTER BAG FOR TYPE C INLET EACH | 0867 0012 COMPOST FILTER SOCK, 12" DIAMETER LF | ITEM NUMBER UNIT REMARKS | SIDE | STATIONS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | SR 1001 SECTION A01 | | |
| | | | | | | | | | 1 | | | RT | 974+02.00 |
| | | | | | | | | | | 47 | AT CURB REPLACEMENT | RT | 975+28.00 to 984+11.00 |
| | | | | | | | | | 1 | | | RT | 976+95.00 |
| | | | | | | | | | 1 | | | RT | 980+06.00 |
| | | | | | | | | | 1 | | | RT | 982+49.00 |
| | | | | | | | | 1 | | | | RT | 984+12.00 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | SR 9109 SECTION A01 | | |
| | | | | | | | | | 1 | 20 | FOR DISCHARGE OF HYDRO DEMOLITION WATER | RT | 980+06.00 |
| | | | | | | | | | 1 | | | LT | 980+11.00 |
| | | | | | | | | | 1 | | | LT | 983+73.00 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | SR 1038 SECTION A01 (WESTMORELAND COUNTY) | | |
| 333 | 203 | | 6 | | | | | | | | DRAINAGE DITCH | LT | 4+56.00 to 7+47.00 |
| | | 8 | | 1 | | 2 | 1 | | | | ROCK BARRIER | LT | 4+60.00 |
| | | | | | 800 | | | | | | PROTECTIVE FENCE | LT | 4+69.00 to 8+01.00 |
| | | | | | | | | | 1 | 20 | FOR DISCHARGE OF HYDRO DEMOLITION WATER | LT | 9+65.00 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
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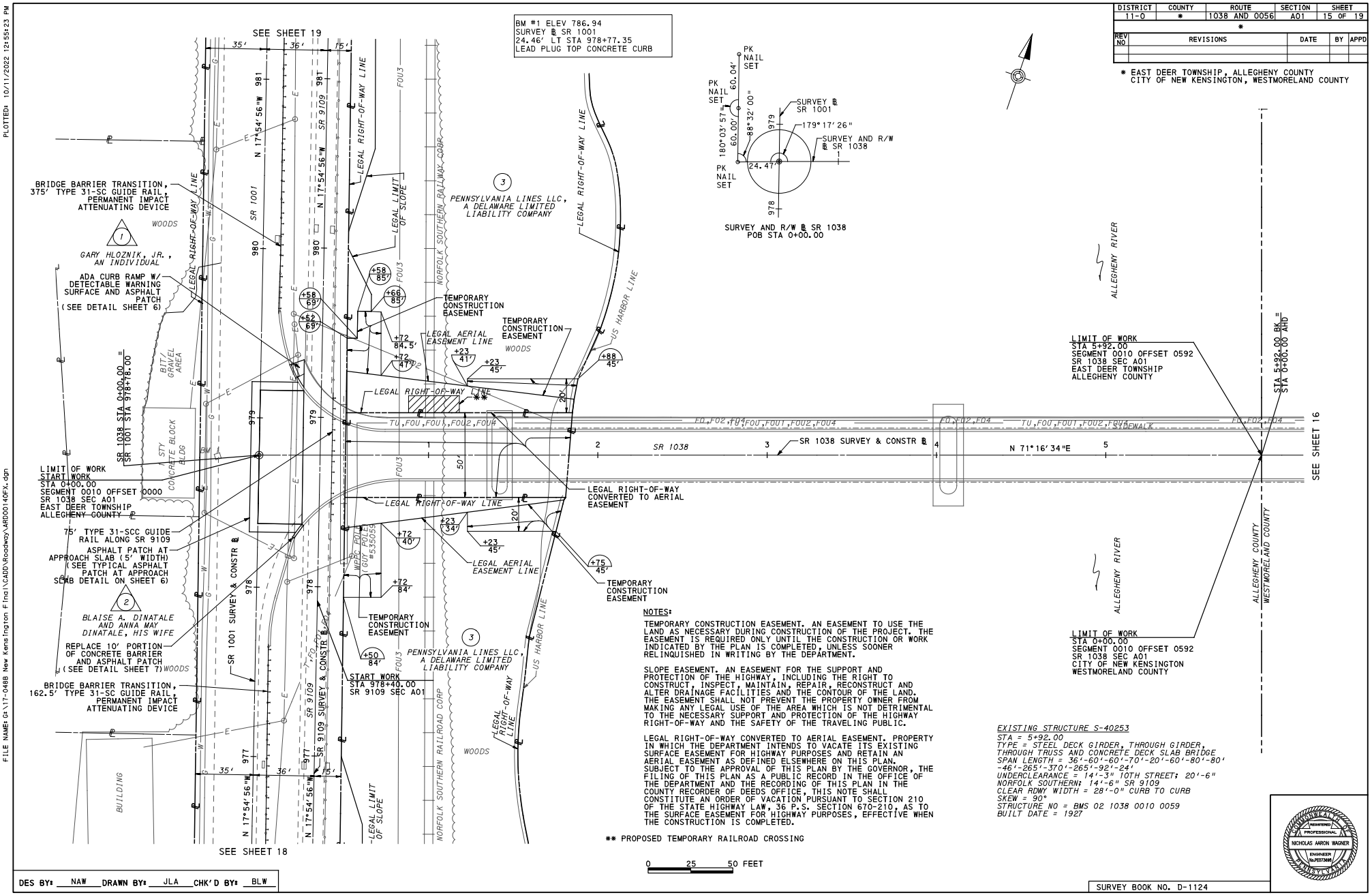
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 333 | 203 | 8 | 6 | 1 | 800 | 2 | 1 | 1 | 8 | 87 | TOTALS | | |



PROJECT ID: 4316 MPMS: 63515 ECMS: 63515 10/11/2022 9:06:44 AM




| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|
| 11-0 | * | 1038 AND 0056 | A01 | 15 OF 19 |

| REV NO | REVISIONS | DATE | BY | APPD |
|---|---|---|---|---|
| | | | | |

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

SURVEY BOOK NO. D-1124

NICHOLAS AARON WAGNER ENGINEER PE073688

PLOTTED: 10/11/2022 12:55:23 PM

FILE NAME: G:\17-0488 New Kensington Final\CADD\Roadway\AR000140FX.dgn

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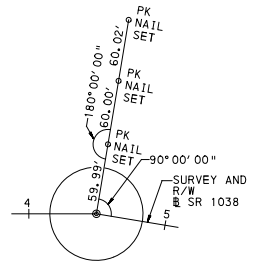
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|
| 11-0 | * | 1038 AND 0056 | A01 | 16 OF 19 |

| REV NO | REVISIONS | DATE | BY | APPD |
|---|---|---|---|---|
| | | | | |

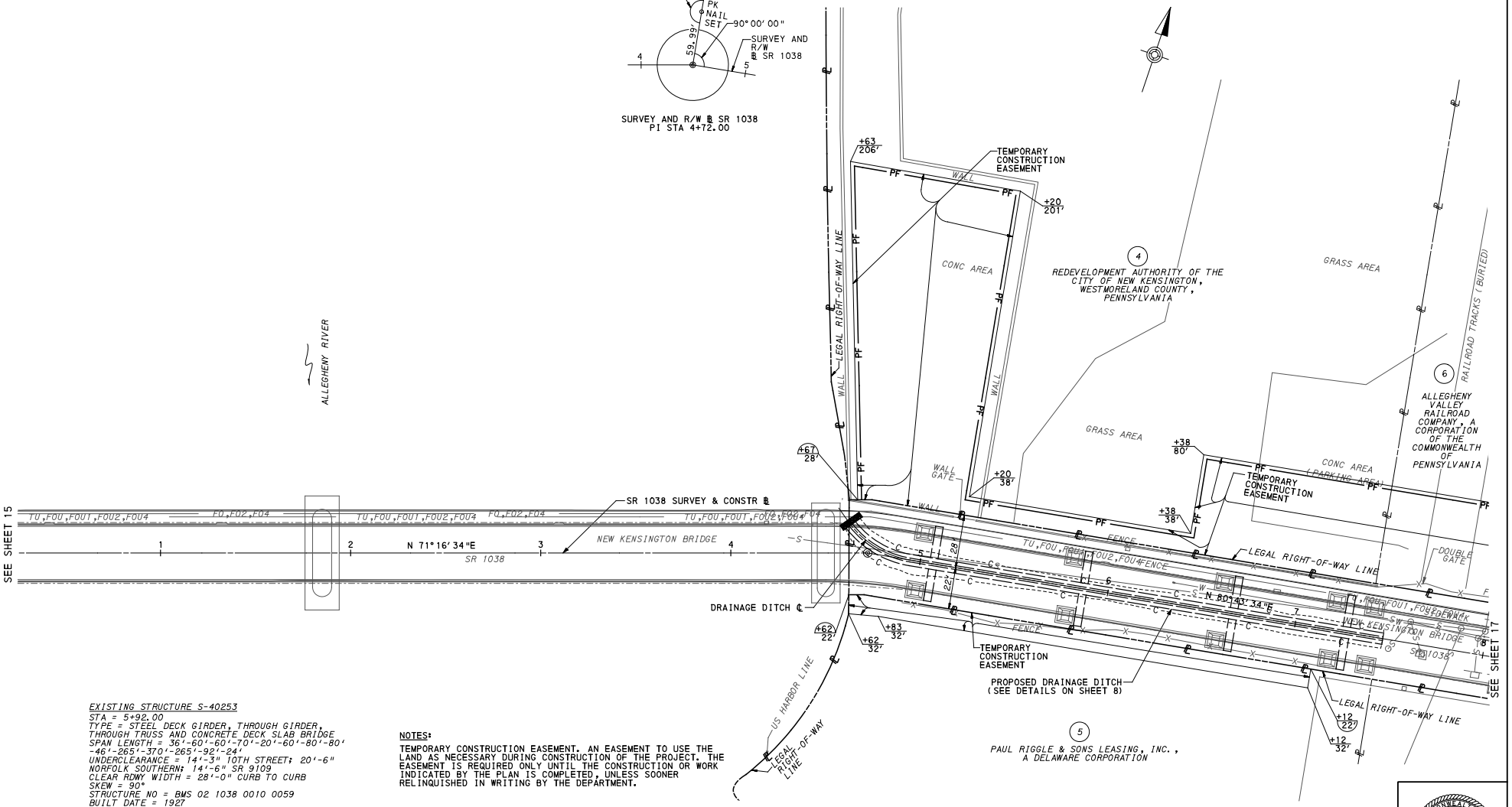
* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

## LEGEND

PF —— TEMPORARY PROTECTIVE FENCE




SURVEY AND R/W ℄ SR 1038
PI STA 4+72.00




*EXISTING STRUCTURE S-40253*
*STA = 5+92.00*
*TYPE = STEEL DECK GIRDER, THROUGH GIRDER, THROUGH TRUSS AND CONCRETE DECK SLAB BRIDGE*
*SPAN LENGTH = 36'-60'-60'-70'-20'-60'-80'-80'-46'-265'-370'-265'-92'-24'*
*UNDERCLEARANCE = 14'-3" 10TH STREET; 20'-6"*
*NORFOLK SOUTHERN; 14'-6" SR 9109*
*CLEAR RDWY WIDTH = 28'-0" CURB TO CURB*
*SKEW = 90°*
*STRUCTURE NO = BMS 02 1038 0010 0059*
*BUILT DATE = 1927*

NOTES:

TEMPORARY CONSTRUCTION EASEMENT. AN EASEMENT TO USE THE LAND AS NECESSARY DURING CONSTRUCTION OF THE PROJECT. THE EASEMENT IS REQUIRED ONLY UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER RELINQUISHED IN WRITING BY THE DEPARTMENT.

0 25 50 FEET

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

SURVEY BOOK NO. D-1124

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL NICHOLAS AARON WAGNER ENGINEER No.PE073688

PLOTTED: 10/11/2022 12:55:24 PM

FILE NAME: G:\17-048B New Kensington Final\CADD\Roadway\AR000160FX.dgn

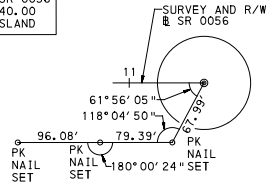
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|
| 11-0 | * | 1038 AND 0056 | A01 | 17 OF 19 |

*

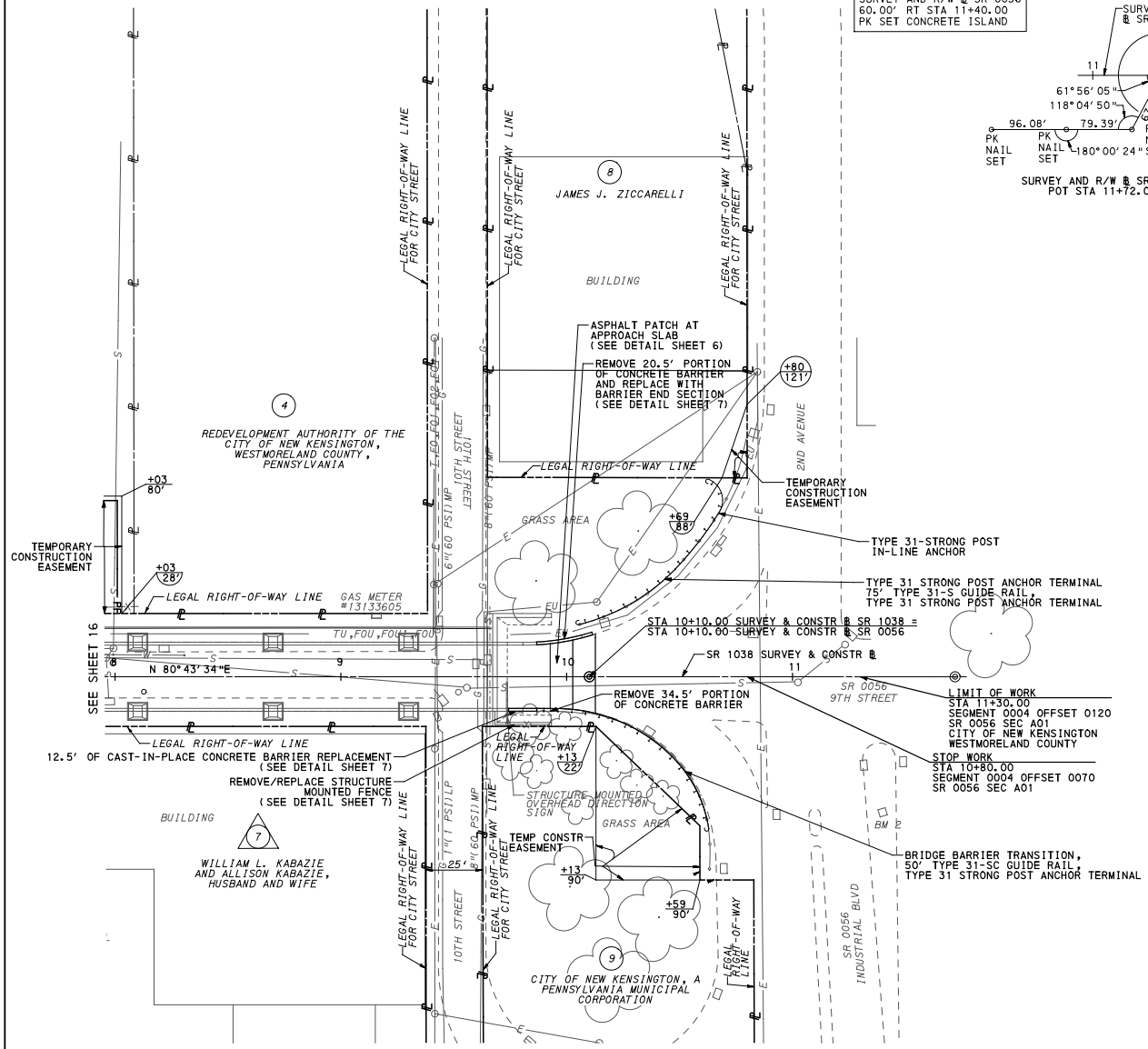
| REV NO. | REVISIONS | DATE | BY | APPD |
|---|---|---|---|---|
| | | | | |
| | | | | |

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

BM #2 ELEV 770.33
SURVEY AND R/W ℄ SR 0056
60.00' RT STA 11+40.00
PK SET CONCRETE ISLAND




SURVEY AND R/W ℄ SR 0056
POT STA 11+72.00




## LEGEND

PF —— TEMPORARY PROTECTIVE FENCE

NOTES:

TEMPORARY CONSTRUCTION EASEMENT. AN EASEMENT TO USE THE LAND AS NECESSARY DURING CONSTRUCTION OF THE PROJECT. THE EASEMENT IS REQUIRED ONLY UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER RELINQUISHED IN WRITING BY THE DEPARTMENT.

*EXISTING STRUCTURE S-40253*
*STA = 5+92.00*
*TYPE = STEEL DECK GIRDER, THROUGH GIRDER, THROUGH TRUSS AND CONCRETE DECK SLAB BRIDGE*
*SPAN LENGTH = 36'-60'-60'-70'-20'-60'-80'-80'-46'-265'-370'-265'-92'-24'*
*UNDERCLEARANCE = 14'-3" 10TH STREET; 20'-6" NORFOLK SOUTHERN; 14'-6" SR 9109*
*CLEAR RDWY WIDTH = 28'-0" CURB TO CURB*
*SKEW = 90°*
*STRUCTURE NO = BMS 02 1038 0010 0059*
*BUILT DATE = 1927*

0 25 50 FEET

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

SURVEY BOOK NO. D-1124

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL NICHOLAS AARON WAGNER ENGINEER No.PE073688

PLOTTED: 10/11/2022 12:55:25 PM

FILE NAME: G:\17-048B New Kensington Final\CADD\Roadway\AR000170FX.dgn

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|
| 11-0 | * | 1038 AND 0056 | A01 | 18 OF 19 |

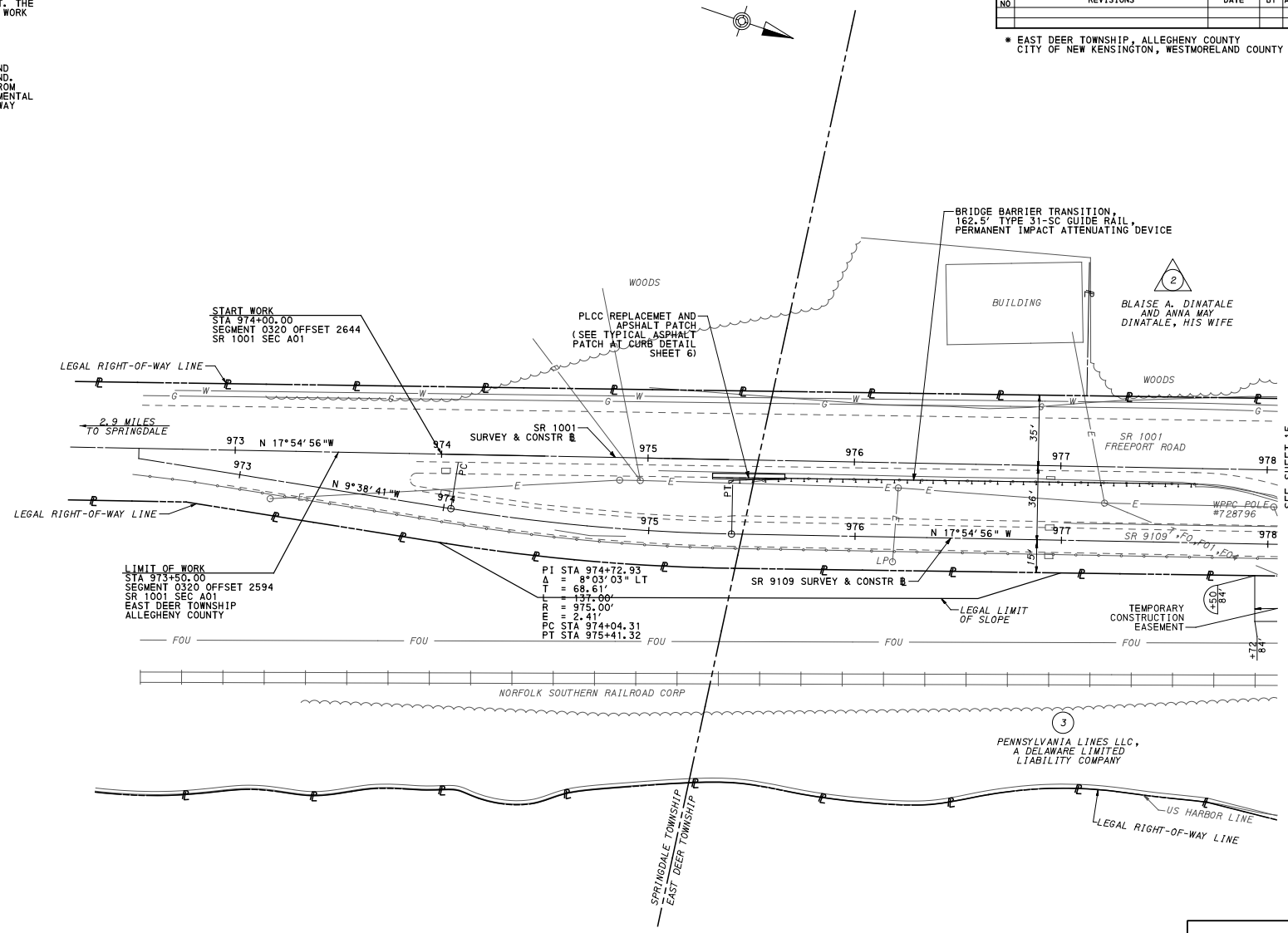
| REV NO. | REVISIONS | DATE | BY | APPD |
|---|---|---|---|---|
| | | | | |
| | | | | |

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

**NOTES:**

TEMPORARY CONSTRUCTION EASEMENT. AN EASEMENT TO USE THE LAND AS NECESSARY DURING CONSTRUCTION OF THE PROJECT. THE EASEMENT IS REQUIRED ONLY UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER RELINQUISHED IN WRITING BY THE DEPARTMENT.

SLOPE EASEMENT. AN EASEMENT FOR THE SUPPORT AND PROTECTION OF THE HIGHWAY, INCLUDING THE RIGHT TO CONSTRUCT, INSPECT, MAINTAIN, REPAIR, RECONSTRUCT AND ALTER DRAINAGE FACILITIES AND THE CONTOUR OF THE LAND. THE EASEMENT SHALL NOT PREVENT THE PROPERTY OWNER FROM MAKING ANY LEGAL USE OF THE AREA WHICH IS NOT DETRIMENTAL TO THE NECESSARY SUPPORT AND PROTECTION OF THE HIGHWAY RIGHT-OF-WAY AND THE SAFETY OF THE TRAVELING PUBLIC.




0 25 50 FEET

DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

SURVEY BOOK NO. D-1124

NICHOLAS AARON WAGNER
ENGINEER
PROFESSIONAL

PLOTTED: 10/11/2022 12:55:25 PM

FILE NAME: G:\17-0488 New Kensington Final\CADD\Roadway\AR000180FX.dgn

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|---|---|---|---|---|
| 11-0 | * | 1038 AND 0056 | A01 | 19 OF 19 |

*

| REV NO. | REVISIONS | DATE | BY | APPD |
|---|---|---|---|---|
| | | | | |
| | | | | |

* EAST DEER TOWNSHIP, ALLEGHENY COUNTY
CITY OF NEW KENSINGTON, WESTMORELAND COUNTY

BM #1 ELEV 786.94
SURVEY ℄ SR 1001
24.46' LT STA 978+77.35
LEAD PLUG TOP CONCRETE CURB

PK NAIL SET
180°03'57"
60.00'
60.04'
88°32'00"
24.47'
978
979
SURVEY ℄ SR 1001
179°17'26"
SURVEY AND R/W ℄ SR 1038

SURVEY AND R/W ℄ SR 1038
POB STA 0+00.00

LIMIT OF WORK
START WORK
STA 0+00.00
SEGMENT 0010 OFFSET 0000
SR 1038 SEC A01
EAST DEER TOWNSHIP
ALLEGHENY COUNTY

SR 1038 STA 0+00.00 =
SR 1001 STA 978+78.00

1
GARY HLOZNIK, JR., AN INDIVIDUAL

ADA CURB RAMP W/ DETECTABLE WARNING SURFACE (SEE DETAIL SHEET 6)

BRIDGE BARRIER TRANSITION, 375' TYPE 31-SC GUIDE RAIL, PERMANENT IMPACT ATTENUATING DEVICE

PLCC REPLACEMET AND APSHALT PATCH (SEE TYPICAL ASPHALT PATCH AT CURB DETAIL SHEET 6)

LIMIT OF WORK
STA 984+67.00
SEGMENT 0330 OFFSET 0589
SR 1001 SEC A01
EAST DEER TOWNSHIP
ALLEGHENY COUNTY

1 STY CONCRETE BLOCK BLDG
BIT./ GRAVEL AREA
WOODS
LEGAL RIGHT-OF-WAY LINE
FREEPORT ROAD SR 1001
SR 1001 SURVEY & CONSTR ℄
1.3 MILES TO CREIGHTON

SEE SHEET 18

75' TYPE 31-SCC GUIDE RAIL ALONG SR 9109

N 17°54'56"W
N 17°41'45"W
35'
15'
PC
PT

START WORK
STA 978+40.00
SR 9109 SEC A01

TEMPORARY CONSTUCTION EASEMENT
WPEC POLE (GUY POLE #535059)
SR 9109
SR 9109 SURVEY & CONSTR ℄
LEGAL RIGHT-OF-WAY LINE
LEGAL LIMIT OF SLOPE
FOU

PI STA 982+68.78
Δ = 5°27'23" LT
T = 47.65'
L = 95.23'
R = 1000.00'
E = 1.13'
PC STA 982+21.13
PT STA 983+16.36

STOP WORK
STA 983+90.70
SR 9109 SEC A01

STOP WORK
STA 984+17.00
SEGMENT 0330 OFFSET 0539
SR 1001 SEC A01

BURIED-IN-BACKSLOPE TERMINAL, SINGLE PANEL, 62.5' TYPE 31-S GUIDE RAIL, TYPE 31 STRONG POST ANCHOR TERMINAL

LEGAL AERIAL EASEMENT LINE
LEGAL RIGHT-OF-WAY LINE
TEMPORARY CONSTRUCTION EASEMENT
NORFOLK SOUTHERN RAILWAY CORP
50'
20'
SODOM

3
PENNSYLVANIA LINES LLC, A DELAWARE LIMITED LIABILITY COMPANY

TEMPORARY CONSTRUCTION EASEMENT
LEGAL RIGHT-OF-WAY LINE
TEMPORARY CONSTRUCTION EASEMENT
LEGAL RIGHT-OF-WAY CONVERTED TO AERIAL EASEMENT

2

SEE SHEET 15

** PROPOSED TEMPORARY RAILROAD CROSSING

0 25 50 FEET

NOTES:

TEMPORARY CONSTRUCTION EASEMENT. AN EASEMENT TO USE THE LAND AS NECESSARY DURING CONSTRUCTION OF THE PROJECT. THE EASEMENT IS REQUIRED ONLY UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER RELINQUISHED IN WRITING BY THE DEPARTMENT.

SLOPE EASEMENT. AN EASEMENT FOR THE SUPPORT AND PROTECTION OF THE HIGHWAY, INCLUDING THE RIGHT TO CONSTRUCT, INSPECT, MAINTAIN, REPAIR, RECONSTRUCT AND ALTER DRAINAGE FACILITIES AND THE CONTOUR OF THE LAND. THE EASEMENT SHALL NOT PREVENT THE PROPERTY OWNER FROM MAKING ANY LEGAL USE OF THE AREA WHICH IS NOT DETRIMENTAL TO THE NECESSARY SUPPORT AND PROTECTION OF THE HIGHWAY RIGHT-OF-WAY AND THE SAFETY OF THE TRAVELING PUBLIC.

LEGAL RIGHT-OF-WAY CONVERTED TO AERIAL EASEMENT. PROPERTY IN WHICH THE DEPARTMENT INTENDS TO VACATE ITS EXISTING SURFACE EASEMENT FOR HIGHWAY PURPOSES AND RETAIN AN AERIAL EASEMENT AS DEFINED ELSEWHERE ON THIS PLAN. SUBJECT TO THE APPROVAL OF THIS PLAN BY THE GOVERNOR, THE FILING OF THIS PLAN AS A PUBLIC RECORD IN THE OFFICE OF THE DEPARTMENT AND THE RECORDING OF THIS PLAN IN THE COUNTY RECORDER OF DEEDS OFFICE, THIS NOTE SHALL CONSTITUTE AN ORDER OF VACATION PURSUANT TO SECTION 210 OF THE STATE HIGHWAY LAW, 36 P.S. SECTION 670-210, AS TO THE SURFACE EASEMENT FOR HIGHWAY PURPOSES, EFFECTIVE WHEN THE CONSTRUCTION IS COMPLETED.

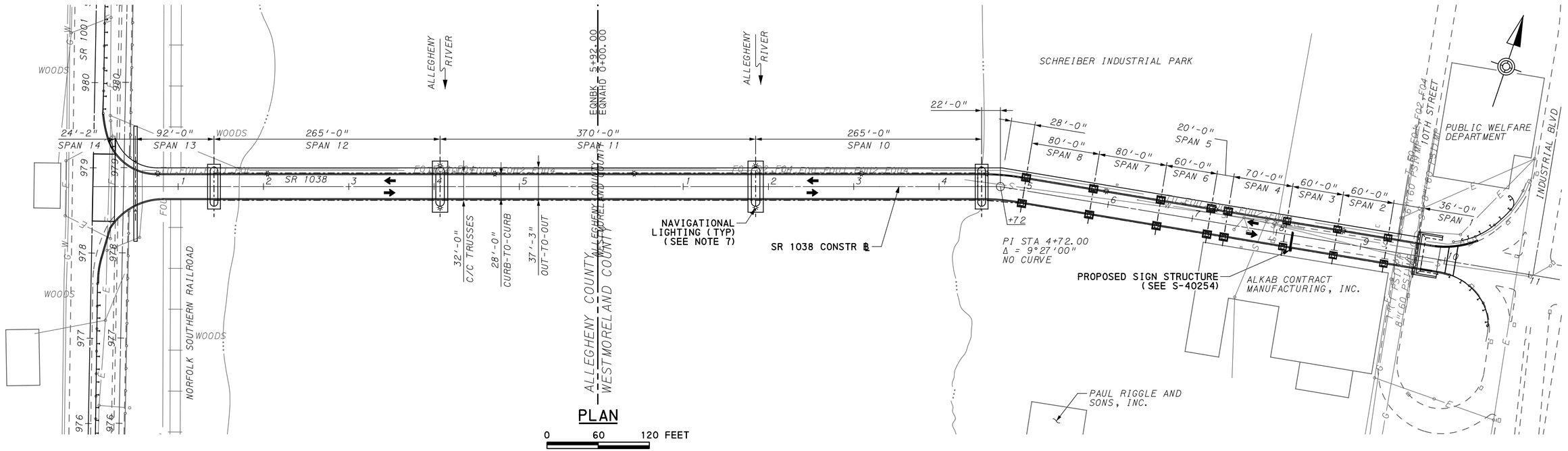
DES BY: NAW DRAWN BY: JLA CHK'D BY: BLW

SURVEY BOOK NO. D-1124

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
NICHOLAS AARON WAGNER
ENGINEER
No.PE073688

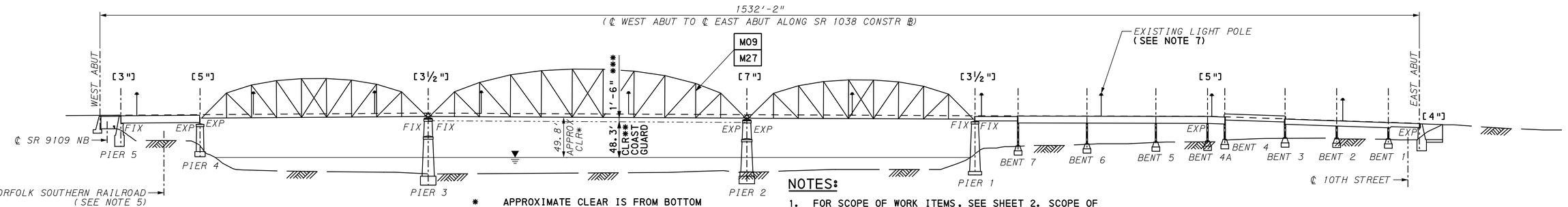
PLOTTED: 10/26/2022 7:52:26 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_GPE.dgn




PLAN

0 60 120 FEET




ELEVATION

0 60 120 FEET

* APPROXIMATE CLEAR IS FROM BOTTOM OF STRUCTURE TO NORMAL POOL

** MINIMUM CLEAR REQUIRED BY COAST GUARD

*** BOTTOM OF TEMPORARY SHIELDING/STAGING PLATFORM TO EXTEND MAXIMUM OF 1'-6" BELOW BOTTOM OF STEEL

## LEGEND:

➔ DIRECTION OF TRAFFIC

EXISTING GROUND LINE

[XX] EXPANSION DAM MOVEMENT CLASSIFICATION

## NOTES:

1. FOR SCOPE OF WORK ITEMS, SEE SHEET 2. SCOPE OF WORK ITEMS SHOWN ARE FOR GENERAL REPAIRS ONLY. FOR DETAILED REPAIR TYPES SEE SHEET 6.
2. FOR TYPICAL SECTIONS, SEE SHEET 2.
3. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
4. FOR SUMMARY OF BRIDGE RATINGS, SEE SHEET 5.
5. FOR EXISTING AND PROPOSED VERTICAL AND HORIZONTAL CLEARANCE REQUIREMENTS AT NORFOLK SOUTHERN, SEE SHEET 11.
6. FOR ADDITIONAL INFORMATION REGARDING RESTRICTION WITHIN RIVER CHANNEL, SEE AIDS TO NAVIGATION PLAN.
7. FOR NEW LIGHT POLE DETAILS AND NAVIGATION LIGHTING DETAILS, SEE LIGHTING PLANS.

## STRUCTURE DESCRIPTION

| SPAN | DESCRIPTION |
|---|---|
| 1 - 3, 5 - 9, 13 | SIMPLE, RIVETED STEEL BUILT-UP DECK GIRDER |
| 4 | SIMPLE, RIVETED STEEL THROUGH GIRDER |
| 10, 11, 12 | SIMPLE, RIVETED STEEL BUILT-UP, PIN CONNECTED THROUGH TRUSS |
| 14 | SIMPLE REINFORCED CONCRETE DECK SLAB |
| | |
| SUBSTRUCTURE UNIT | DESCRIPTION |
| EAST ABUTMENT | RC CANTILEVER ABUTMENT ON SPREAD FOOTING |
| WEST ABUTMENT | RC CANTILEVER ABUTMENT ON SPREAD FOOTING |
| BENTS 1 - 7 | RIVETED STEEL BUILT-UP BENT ON SPREAD FOOTING |
| PIERS 1 - 5 | RC SOLID SHAFT PIER ON SPREAD FOOTING |

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

Docket A-2019-3010031

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

Prepared by:
MARKOSKY
3689 Route 711
Ligonier, PA 15658

SIGNATURE

10/26/2022
DATE

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

SR 1038 PREVIOUSLY KNOWN AS LR 188

BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

| DESCRIPTION | DWG NO. | APP DATE |
|---|---|---|
| SUPPLEMENTAL DRAWINGS | | |
| PROTECTIVE FENCE | BC-701M | 2/19/21 |
| TEMPORARY CONCRETE BARRIER, STRUCTURE MOUNTED | BC-719M | 1/31/19 |
| ELECTRICAL DETAILS | BC-721M | 2/19/21 |
| LIGHTING POLE ANCHORAGE | BC-722M | 2/19/21 |
| ANCHOR SYSTEMS | BC-734M | 2/19/21 |
| WALL CONSTR & EXP JOINT DETAILS | BC-735M | 9/30/16 |
| REINFORCEMENT BAR FABRICATION DETAILS | BC-736M | 1/31/19 |
| BRIDGE DRAINAGE | BC-751M | 1/31/19 |
| CONCRETE DECK SLAB DETAILS | BC-752M | 2/19/21 |
| STEEL GIRDER DETAILS | BC-753M | 1/31/19 |
| TOOTH EXPANSION DAM FOR PRESTRESSED CONCRETE & STEEL BEAM BRIDGES | BC-762M | 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 |

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
# GENERAL PLAN AND ELEVATION

RECOMMENDED
Digitally signed by Shane Szalankiewicz, P.E.
Date: 2022.10.26 20:32:31-04'00'
DISTRICT BRIDGE ENGINEER

SHEET 1 OF 124
+SUPPLEMENTAL DRAWINGS
S - 40253

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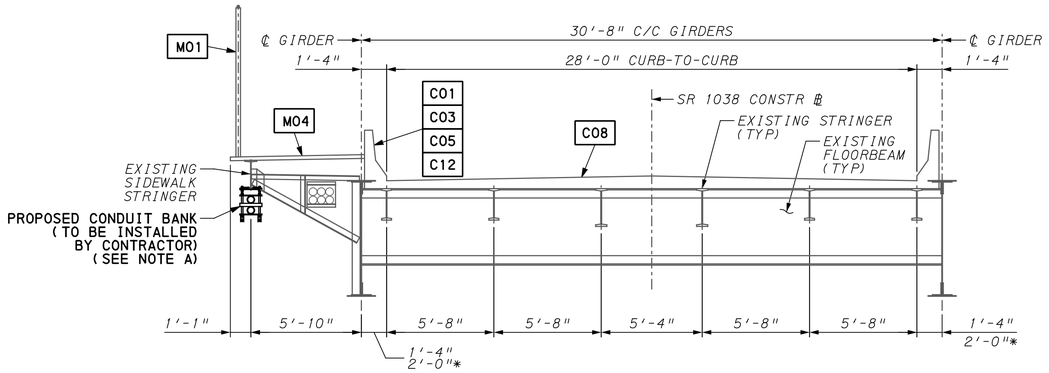
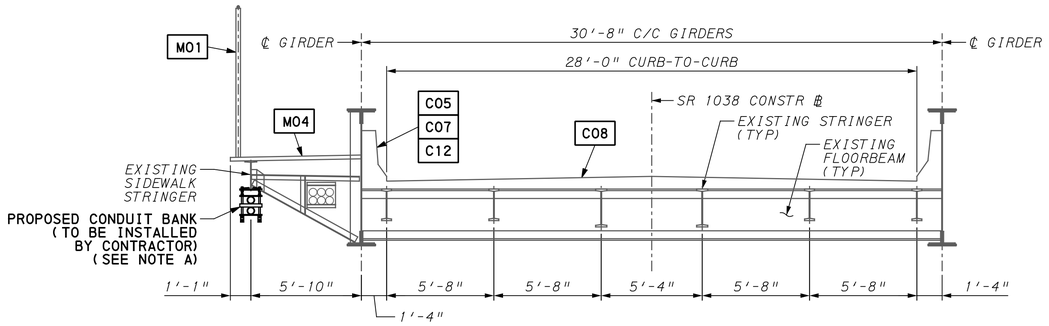



## EXISTING TYPICAL SECTION - SPANS 1-3, 5-8, 13

(LOOKING AHEAD STATION)

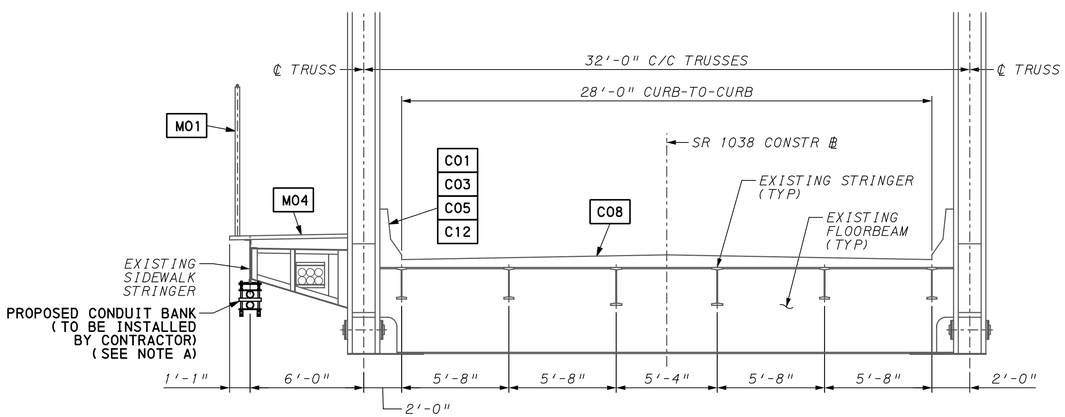
0 2 4 6 FEET




## EXISTING TYPICAL SECTION - SPAN 4

(LOOKING AHEAD STATION)

0 2 4 6 FEET




## EXISTING TYPICAL SECTION - SPANS 10-12

(LOOKING AHEAD STATION)

0 2 4 6 FEET

## SCOPE OF WORK:

### SUBSTRUCTURE REPAIRS:

REPAIR DETERIORATED CONCRETE, SUBSTRUCTURE

EPOXY INJECTION CRACK SEAL, SUBSTRUCTURE

APPLY CONCRETE SURFACE TREATMENT, SUBSTRUCTURE

CLEAN AND FLUSH ABUTMENT WEEPHOLES; INSTALL WEEPHOLE FILTERS

CLEAN AND PAINT STRUCTURAL STEEL

MISCELLANEOUS STRUCTURAL STEEL REPAIR

### DECK REPAIRS:

CONCRETE BRIDGE BARRIER REPAIR, TYPE 2

EPOXY INJECTION CRACK SEAL, BARRIERS

INSTALL NEW EPOXY OVERLAY ON SIDEWALK

INSTALL NEW PROTECTIVE FENCE

REPLACE EXISTING EXPANSION DAM WITH NEOPRENE STRIP SEAL EXPANSION DAM

REPLACE EXISTING EXPANSION DAM WITH TOOTH EXPANSION DAM

PLACE 1¼" LATEX MODIFIED CONCRETE OVERLAY INCLUDING VARIABLE DEPTH LMC, SCARIFICATION, HYDRO-DEMOLITION, AND TEXTURING

REPLACE CONCRETE BARRIERS THAT ARE REMOVED IN PROCESS OF STRUCTURAL STEEL REPAIRS

APPLY CONCRETE SURFACE TREATMENT, BARRIERS

REPLACE SCUPPER

REMOVE SCUPPER AND REPAIR DECK

CONSTRUCT NEW SCUPPER

REPLACE BARRIERS AND PROVIDE NEW LIGHT POLE ANCHORS AND JUNCTION BOX

### SUPERSTRUCTURE REPAIRS:

CLEAN AND PAINT STRUCTURAL STEEL

MISCELLANEOUS STRUCTURAL STEEL REPAIR

RECONSTRUCT DECK JOINT SUPPORT STRUCTURE

REMOVE CLAMP AND REPLACE PIN RETAINING ROD

APPLY CONCRETE SURFACE TREATMENT, SUPERSTRUCTURE

REPLACE PIN SPACER TUBES

CLEAN BEAM SEAT; LUBRICATE BEARINGS

CLEAN BEAM SEAT; REPLACE BEARINGS

INSTALL NEW STIFFENERS

### MISCELLANEOUS REPAIRS:

REMOVE VEGETATION

INSTALL SPLASH BLOCKS

REPLACE DETERIORATED UTILITY CONDUIT

INSTALL ROCK LINED DRAINAGE (ROADWAY ITEM)

REMOVE AND REPLACE DOWNSPOUTING

CONSTRUCT NEW HORIZONTAL DOWNSPOUT RUN

INSTALL FLASHING BEHIND BARRIER

INSTALL NEW ADA CURB RAMP (ROADWAY ITEM)

REPLACE MERCURY VAPOR LIGHT FIXTURE WITH LED LIGHT FIXTURE (ROADWAY ITEM)

INSTALL NEW APPROACH SLAB

CONSTRUCT NEW SIGN STRUCTURE (SEE S-40254)

REMOVE EXISTING UTILITIES AND INSTALL CONDUIT AND SUPPORTS (MATERIALS BY OTHERS)

### NOTES:

1. FOR GENERAL PLAN AND ELEVATION, SEE SHEET 1.

### NOTE:

A. NEW CONDUIT BANK TO BE INSTALLED BY CONTRACTOR. SEE SPECIAL PROVISIONS FOR ITEMS 9000-0212 AND 9000-0213. FOR DETAILS OF EXISTING UTILITY REMOVAL AND CONDUIT BANK INSTALLATION, REFER TO SHEETS 7 AND 9, AND COMCAST PLANS.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188

BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## TYPICAL SECTIONS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 2 OF 124

S - 40253

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## DESIGN SPECIFICATIONS

AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SEVENTEENTH EDITION, 2002, AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4, DECEMBER 2019.

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 8TH EDITION, 2017, AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4, DECEMBER 2019 WHERE NOTED ON THE PLANS.

LIVE LOAD DISTRIBUTION TO STRINGERS IS BASED UPON MODIFIED DISTRIBUTION FACTORS CALCULATED USING A GRID ANALYSIS METHOD. LIVE LOAD DISTRIBUTION TO FLOORBEAMS, GIRDERS AND TRUSS MEMBERS ARE BASED ON DM-4 DISTRIBUTION FACTORS AND METHOD.

DESIGN IS IN ACCORDANCE WITH THE LFD METHOD EXCEPT WHERE NOTED. LOAD RATINGS ARE CALCULATED IN ACCORDANCE WITH PENNDOT PUBLICATION 238.

NEW ELEMENTS INCLUDING BEARINGS ARE DESIGNED IN ACCORDANCE WITH THE LRFD METHOD.

## DESIGN LIVE LOADS

HS-20, H-20, ML-80, AND TK527.

FATIGUE DESIGN IS BASED ON THE FOLLOWING:

STEEL STRUCTURES:

ADTT 1,110 (2024, ANTICIPATED DATE FOR COMPLETION OF REHABILITATION)

FATIGUE DESIGN IS BASED ON INFINITE LIFE FOR NEW BEARINGS.

## DEAD LOADS

INCLUDES SURFACE AREA DENSITY OF 0.030 KSF FOR FUTURE WEARING SURFACE ON THE DECK SLAB. NOTE THAT THE SURFACE AREA DENSITY OF THE LMC OVERLAY IS CONSIDERED AS PART OF THE ORIGINAL DECK.

INCLUDES A SURFACE AREA DENSITY OF 15.4 PSF FOR BUCKLE PLATES FOR THE ROADWAY FLOOR SYSTEM.

INCLUDES AN EQUIVALENT SURFACE AREA DENSITY OF 47 PSF FOR SIDEWALK FLOORING AND SUPPORTS ON THE NORTH TRUSS.

## GENERAL

PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH SPECIFICATIONS, PUBLICATION 408/2020, AASHTO/AWS D1.5M/D1.5 2015 BRIDGE WELDING CODE, AND CONTRACT SPECIAL PROVISIONS.

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

STATIONS AND ELEVATIONS ARE GIVEN IN FEET UNLESS OTHERWISE NOTED.

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

USE ACCELERATED STRUCTURAL CONCRETE (ASC) FOR BRIDGE DECK.

USE CLASS AA ACCELERATED CEMENT CONCRETE IN SIDEWALK, BACKWALLS, CURBS, APPROACH SLAB, SLEEPER SLAB, CORBEL AND BARRIERS.

FOR CONCRETE BARRIER REPAIRS UNDER ITEM 1040-0210, PROVIDE TYPE 2 REPAIRS USING ASC, EXCEPT USE NO. 8 COARSE AGGREGATE. USE CLASS AA CEMENT CONCRETE IN ALL OTHER CONCRETE REPAIRS, EXCEPT USE NO. 8 COARSE AGGREGATE.

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 A 615/A 615M, A 996/A 996M OR A 706/A 706M. DO NOT WELD GRADE 60 REINFORCING BARS UNLESS SPECIFIED. GRADE 40 REINFORCING BARS MAY BE SUBSTITUTED WITH A PROPORTIONAL INCREASE IN CROSS-SECTIONAL AREA, IF APPROVED BY THE CHIEF BRIDGE ENGINEER. DO NOT USE RAIL STEEL A 996/A 996M REINFORCEMENT BARS IN DECK SLAB, BRIDGE PIERS, ABUTMENTS, BARRIERS OR WHERE BENDING OR WELDING OF THE REINFORCEMENT BARS IS INDICATED.

USE EPOXY-COATED REINFORCEMENT BARS IN THE DECK SLAB, BARRIERS, SIDEWALK, ABUTMENT BACKWALLS, APPROACH SLAB, SLEEPER SLAB, CORBELS, AND CONCRETE REPAIRS.

GALVANIZED REINFORCING STEEL BARS 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 FOR PROPER FIT OF THE PROPOSED CONSTRUCTION.

## GENERAL (CONT'D)

CONSTRUCT DECK SLAB TRANSVERSE CONSTRUCTION JOINTS PARALLEL TO BRIDGE CENTERLINE OF BEARINGS.

CHAMFER EXPOSED CONCRETE EDGES 1 INCH BY 1 INCH, EXCEPT AS NOTED.

ALL DIMENSIONS ARE HORIZONTAL EXCEPT AS NOTED.

DECK SLAB THICKNESS INCLUDES A ½ INCH INTEGRAL WEARING SURFACE.

USE EITHER PERMANENT METAL FORMS TO MATCH EXISTING FORMS OR REMOVABLE FORMS TO CONSTRUCT THE DECK SLAB.

SUPERSTRUCTURE DIMENSIONS ARE FOR A NORMAL TEMPERATURE OF 68 DEGREES F.

PROVIDE MINIMUM EMBEDMENT AND SPLICE LENGTHS IN ACCORDANCE WITH STANDARD DRAWING BC-736M, UNLESS OTHERWISE INDICATED.

PREPARE BEARING AREAS AS SPECIFIED IN PUBLICATION 408, SECTION 1001.3(k)9.

PREPARE EXISTING CONCRETE SURFACES AGAINST WHICH NEW CONCRETE WILL BE PLACED AS SPECIFIED IN PUBLICATION 408, SECTION 1001.3(m) (INCIDENTAL TO NEW CONCRETE).

BRIDGE IS NOT WEIGHT RESTRICTED. SEE PUBLICATION 408 SECTION 105.17 FOR CONSTRUCTION LOADING LIMITS.

DO NOT USE FORM SUPPORT SYSTEMS THAT WILL CAUSE UNACCEPTABLE OVERSTRESS OR DEFORMATION TO PERMANENT BRIDGE MEMBERS.

DESIGN THE TEMPORARY OVERHANG OR DECK SLAB SUPPORT SYSTEM FOR THE APPROPRIATE LOADING AND HAVE IT SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA. SUBMIT IT FOR REVIEW AND APPROVAL.

## 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 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.

## ORIGINAL DESIGN PLANS

DEPARTMENT OF PUBLIC WORKS, ALLEGHENY COUNTY
BUREAU OF BRIDGES
NEW KENSINGTON BRIDGE
NO. 10 ALLEGHENY RIVER
JULY 1927
NO S- NUMBER FOR PLAN SET

## REHABILITATION PLANS

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN
ALLEGHENY COUNTY
L.R. 188 STA 7+54
NEW KENSINGTON BRIDGE
DECK REPLACEMENT
S-11350
(APPROVED SEPTEMBER 20, 1972)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN
ALLEGHENY COUNTY
L.R. 188 SEC. 5M
L.R. 188 STA. 5+97 NEW KENSINGTON BRIDGE
OVER ALLEGHENY RIVER
BRIDGE REHABILITATION
S-13211
(APPROVED JANUARY 5, 1978)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
ALLEGHENY AND WESTMORELAND COUNTIES
S.R. 1038 SECTION 007
S.R. 1038 STATION 5+97 OVER ALLEGHENY RIVER & CONRAIL TRACKS
REHABILITATION
S-16125
(APPROVED APRIL 21, 1988)

FIELD-VERIFY INFORMATION PRESENTED. THE DATA SHOWN HEREIN IS NOT A PART OF THE PLANS, PROPOSAL, OR CONTRACT, AND IS NOT TO BE CONSIDERED AS A BASIS FOR COMPUTATION OF FOR ANY PURPOSE.

## REHABILITATION PLANS (CONT'D)

EXERCISE CARE DURING THE DEMOLITION OF THE EXISTING STRUCTURE TO AVOID DAMAGE TO ANY PORTION DESIGNATED TO BE REUSED OR TO REMAIN. REPAIR ANY DAMAGED MATERIALS TO THE SATISFACTION OF THE REPRESENTATIVE AT NO ADDITIONAL COST TO THE DEPARTMENT.

DETERMINE THE QUANTITIES FOR DETERIORATED CONCRETE REPAIR FROM MEASUREMENTS OF THE VOLUMES OF THE RESPECTIVE PATCHES TAKEN BY THE REPRESENTATIVE AND CHECKED BY THE CONTRACTOR BEFORE THE PATCHES ARE FILLED WITH NEW CONCRETE.

PRIOR TO PERFORMING CONCRETE SPALL REPAIR TO AREAS NOT DELINEATED ON THE CONTRACT DRAWINGS (I.E. ADDITIONAL AREAS OF DETERIORATED CONCRETE REPAIR) THE DISTRICT'S BRIDGE DESIGN UNIT IS TO BE NOTIFIED AND APPROVAL GRANTED PRIOR TO PERFORMING THE REPAIR. REPAIRS PERFORMED WITHOUT WRITTEN PERMISSION WILL NOT BE PAID FOR.

SHOP DRAWINGS MUST INDICATE THAT EXISTING DIMENSIONS THAT RELATE TO THE AFFECTED WORK HAVE BEEN VERIFIED FOR PROPER FIT IN THE FIELD BY THE CONTRACTOR PRIOR TO SHOP DRAWINGS BEING APPROVED BY THE DEPARTMENT.

## STRUCTURAL STEEL

REAM SUBDRILLED OR SUBPUNCHED HOLES FOR FIELD CONNECTIONS IN THE FABRICATION SHOP.

ALL FASTENERS ARE 7/8 INCH DIAMETER HS BOLTS, EXCEPT AS NOTED

DO NOT WELD ANY ATTACHMENT TO STRINGERS OR FLOORBEAM FLANGES IN TENSION AREAS; TO BOTTOM TRUSS CHORD MEMBERS, OR TO TRUSS DIAGONALS.

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

FABRICATE ALL MEMBERS OR MEMBER COMPONENTS DESIGNATED AS FRACTURE CRITICAL MEMBERS (FCM) TO CONFORM TO THE REQUIREMENTS OF DESIGN MANUAL, PART 4, SECTION 6, ARTICLE D6.6.2, AND AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 6.6.2, AND PUBLICATION 408, SECTIONS 1105.02(a)5 AND 1105.03(m)9. MEET THE BASE METAL CHARPY V-NOTCH (CVN) REQUIREMENTS FOR ZONE 2.

STABILITY OF ALL STRUCTURAL MEMBERS DURING REPAIRS IS TO BE MAINTAINED BY THE CONTRACTOR DURING ERECTION UNTIL ALL REPAIR MEMBERS 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 REPAIR MEMBERS DURING ANY STAGE OF ERECTION.

## FASTENERS

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 A325 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 SPECIFIED, REGARDLESS OF FASTENER TYPE. REMOVAL OF EXISTING FASTENERS IS INCIDENTAL TO OR INCLUDED IN THE ITEMS OF WORK.

ALL HIGH STRENGTH FASTENERS MAY BE PROVIDED WITH THREADS INCLUDED IN THE SHEAR PLANES.

## WELDING NOTES

WELDING SPECIFICATIONS: AASHTO/AWS/D1.5M/D1.5-2015 BRIDGE WELDING CODE CONSISTENT WITH PUBLICATION 408 1105.03(M) AND THE CONTRACT SPECIAL PROVISIONS. DO NOT FIELD WELD ON ANY PART OF THE EXISTING BRIDGE, EXCEPT WHERE SHOWN ON THE DRAWINGS, WITHOUT PRIOR APPROVAL OF THE REPRESENTATIVE.

WELDING OF EXISTING STRUCTURAL STEEL: USE THE SHIELDED 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 INCLEMENT CONDITIONS THAT WILL ADVERSELY AFFECT THE QUALITY OF THE WORK.

DO NOT WELD OR BURN WHEN THE TEMPERATURE IS BELOW 0 DEGREES F. PREHEAT AND MAINTAIN THE TEMPERATURE OF THE METAL TO AT LEAST 70 DEGREES F WHEN THE TEMPERATURE OF THE METAL IS BETWEEN 0 DEGREES F AND 32 DEGREES 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 INCHES 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 NEW AND
EXISTING SURFACES TO RECEIVE WELDS OF ALL FOREIGN MATTER, INCLUDING PAINT FILM, FOR A DISTANCE OF 2 INCHES FROM EACH SIDE OF THE OUTSIDE LINES OF THE WELD.

TEST COMPLETED WELDS USING VISUAL AND NONDESTRUCTIVE METHODS IN ACCORDANCE WITH AASHTO/AWS D1.5M/D1.5 BRIDGE WELDING CODE CHAPTER 6.

NOTES:

1. WORK THIS SHEET WITH SHEET 4.

| Mark | Description | By | Chk'd. | Recm'd. | Date |
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SR 1038 PREVIOUSLY KNOWN AS LR 188

BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

GENERAL NOTES

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 3 OF 124

S - 40253

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## UTILITY NOTES

COORDINATE, LOCATE, AND CONDUCT ALL WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH PUBLICATION 408, SECTIONS 105.06 AND 107.12.

PRIOR TO ANY EXCAVATION OR DEMOLITION WORK, CONTACT THE PA ONE CALL SYSTEM, INC. AT 1-800-242-1776 AND COMPLY WITH THE PROVISIONS OF PA ACT 287 OF 1994 AS AMENDED BY ACT 187 OF 1996. IDENTIFY ALL OVERHEAD LINES AND NOTIFY AND COMPLY WITH THE APPLICABLE UTILITY OWNER'S CLEARANCE REQUIREMENTS.

VERIFY AND LOCATE ALL EXISTING UTILITIES PRIOR TO STARTING WORK. CONDUCT OPERATIONS IN A MANNER WHICH ENSURES THAT THE UTILITIES WILL NOT BE DISTURBED OR ENDANGERED AND ASSUME FULL RESPONSIBILITY FOR ANY DAMAGE TO UTILITIES DURING CONSTRUCTION. PENNDOT OR FHWA DOES NOT ASSUME RESPONSIBILITY FOR REIMBURSEMENT, PARTICIPATION IN DESIGN AND/OR REVISIONS OR LIABILITY FOR ACCURACY OF TYPE, SIZE, AND LOCATION OF ANY UTILITY.

## RAILROAD NOTES

COMPLY WITH NORFOLK SOUTHERN RAILROAD SPECIAL PROVISIONS.

SEE SPAN 13 CONSTRUCTION CLEARANCES SHEET AND SPECIAL PROVISIONS FOR REQUIREMENTS OF TEMPORARY CLEARANCE ENVELOPES FOR NORFOLK SOUTHERN.

THE CONTRACTOR SHALL PROVIDE OPEN ACCESS ALONG NORFOLK SOUTHERN MAINTENANCE WAY THROUGHOUT CONSTRUCTION.

PROVIDE THE FOLLOWING RAILROAD CONSTRUCTION CLEARANCES:
HORIZONTAL: 15'-0" MINIMUM FROM CENTERLINE OF TRACKS
VERTICAL: 20'-6" MINIMUM EXISTING VERTICAL CLEARANCE TO SPAN 13 EXCEPT DURING THE 21 CALENDAR DAY WORK WINDOW NOTED ON THE PLANS AND SPECIAL PROVISIONS WHEN THE VERTICAL CLEARANCE MAY BE REDUCED TO 19'-0".

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.5.K.1 OF THE NORFOLK SOUTHERN SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS, JANUARY 1, 2022.

CONTACT THE FOLLOWING RAILROAD COMPANY REPRESENTATIVE TO REQUEST PROTECTIVE SERVICES REQUIRED BY THE SPECIAL PROVISIONS ENTITIED "MAINTENANCE AND PROTECTION OF RAILROAD TRAFFIC":

NORFOLK SOUTHERN
JOE SPADONE, NORFOLK SOUTHERN DIVISION ENGINEER
218 NORTH ENOLA ROAD
ENOLA, PA 17025
JOSEPH.SPADONE@NSCORP.COM
(717) 856-8188 (CELL)

NORFOLK SOUTHERN
D. SHAWN STARLING, P.E.
SENIOR ENGINEER, PUBLIC IMPROVEMENTS
650 WEST PEACHTREE STREET NW - BOX 45
ATLANTA, GA 30308
PHONE: (470) 463-6721
EMAIL: DOUGLAS.STARLING@NSCORP.COM

## BRIDGE PAINT

THE EXISTING BRIDGE STRUCTURAL MEMBERS CONTAIN LEAD PAINT AND OTHER TOXIC MATERIALS SUCH AS CHROMIUM AND CADMIUM BASED ON LABORATORY TESTING.

LABORATORY TESTS INDICATED THE FOLLOWING LEVELS OF TOXIC METALS:

LEAD: 79,300 PPM
CADMIUM: 70 MG/KG
CHROMIUM: 726 MG/KG

PAINT STRUCTURAL STEEL AS SPECIFIED IN PUBLICATION 408, SECTION 1070. FINISH COAT COLOR TO BE AMS-STD-595A COLOR NO. 25109. IF THE COLOR NUMBER INDICATES A FINISH OTHER THAN SEMI-GLOSS, PROVIDE A SEMI-GLOSS FINISHCOAT. DO NOT OBTAIN FINISH COAT MATERIAL UNTIL ACCEPTANCE OF THE COLOR AND GLOSS LEVEL.

PERFORM HIGH PRESSURE CLEANING OF PACK RUST AREAS OF EYE BARS IN ACCORDANCE WITH THE SPECIAL PROVISIONS AT THE LOCATIONS INDICATED PRIOR TO PAINTING.

COORDINATE ALL WORK FOR THE PAINTING OF THE STRUCTURE WITH THE PROPOSED COMCAST CONDUIT REMOVAL AND INSTALLATION.

PROTECT ALL UTILITIES TO REMAIN DURING ALL CLEANING AND PAINTING OPERATIONS. THE CONTRACTOR IS RESPONSIBLE TO CONTACT AND COORDINATE THE REMOVAL OF ANY UTILITIES WHICH WOULD INTERFERE WITH CLEANING OR PAINTING OPERATIONS PRIOR TO THE START OF ABRASIVE CLEANING. THE CONTRACTOR IS ALSO RESPONSIBLE TO NOTIFY THE UTILITY OWNER UPON COMPLETION OF ALL PAINTING WORK SO THAT UTILITIES CAN BE REINSTALLED IF REQUIRED.

| INDEX OF DRAWINGS | |
|---|---|
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| 1 | GENERAL PLAN AND ELEVATION |
| 2 | TYPICAL SECTIONS |
| 3 | GENERAL NOTES |
| 4 | GENERAL NOTES & INDEX OF DRAWINGS |
| 5 | SUMMARY OF BRIDGE RATINGS |
| 6 | BRIDGE REPAIR CODES |
| 7 | SUMMARY OF QUANTITIES 1 |
| 8 | SUMMARY OF QUANTITIES 2 |
| 9 | SUMMARY OF QUANTITIES 3 |
| 10 | TRAFFIC CONTROL PHASING |
| 11 | SPAN 13 CONSTRUCTION CLEARANCES |
| 12 | EAST ABUTMENT ELEVATION & REPAIRS |
| 13 | PIER 1 ELEVATION & REPAIRS |
| 14 | PIER 2 ELEVATION & REPAIRS |
| 15 | PIER 3 ELEVATION & REPAIRS |
| 16 | PIER 4 ELEVATION & REPAIRS |
| 17 | PIER 5 ELEVATION & REPAIRS |
| 18 | PIER 5 WALL ELEVATIONS AND REPAIRS |
| 19 | WEST ABUTMENT ELEVATION & REPAIRS |
| 20 | CONCRETE REPAIR DETAILS |
| 21 | EAST APPROACH OVERALL PLAN AND ELEVATION |
| 22 | BENT 1 ELEVATION AND REPAIRS |
| 23 | BENT 2 ELEVATION AND REPAIRS |
| 24 | BENT 3 ELEVATION AND REPAIRS |
| 25 | BENT 4 & 4A ELEVATION AND REPAIRS |
| 26 | BENT 4-4A BRACING ELEVATIONS AND REPAIRS |
| 27 | BENT 5 ELEVATION AND REPAIRS |
| 28 | BENT 6 ELEVATION AND REPAIRS |
| 29 | BENT 7 ELEVATION AND REPAIRS |
| 30 | FRAMING PLAN SPANS 1 TO 2 |
| 31 | FRAMING PLAN SPAN 3 |
| 32 | FRAMING PLAN SPAN 4 |
| 33 | FRAMING PLAN SPANS 5 TO 6 |
| 34 | FRAMING PLAN SPAN 7 |
| 35 | FRAMING PLAN SPAN 8 |
| 36 | FRAMING PLAN SPAN 9 |
| 37 | SPAN 10 FRAMING & BRACING PLAN |
| 38 | SPAN 10 NORTH TRUSS ELEVATION |
| 39 | SPAN 10 SOUTH TRUSS ELEVATION |
| 40 | SPAN 11 FRAMING & BRACING PLAN |
| 41 | SPAN 11 NORTH TRUSS ELEVATION |
| 42 | SPAN 11 SOUTH TRUSS ELEVATION |
| 43 | SPAN 12 FRAMING & BRACING PLAN |

| INDEX OF DRAWINGS | |
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| 44 | SPAN 12 NORTH TRUSS ELEVATION |
| 45 | SPAN 12 SOUTH TRUSS ELEVATION |
| 46 | SP 13 FRAMING & SP 14 SLAB PLAN |
| 47 | REPAIR TM01 - SEAT & BEAM PIER 4 |
| 48 | REPAIR TM01 DETAILS |
| 49 | REPAIR TM02 - SEAT & BEAM PIER 2 |
| 50 | TYPICAL LACING BAR REPAIRS |
| 51 | TYPICAL BATTEN PLATE REPAIRS |
| 52 | TYPICAL ANGLE COVER PLATE REPAIRS |
| 53 | TYPICAL WEB COVER PLATE REPAIRS 1 |
| 54 | TYPICAL WEB COVER PLATE REPAIRS 2 |
| 55 | TYPICAL WEB COVER PLATE REPAIRS 3 |
| 56 | TYPICAL FLANGE COVER PLATE REPAIRS |
| 57 | TYPICAL WEB STIFFENER REPAIRS 1 |
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| 59 | END PORTAL BRACING REPAIRS |
| 60 | SWAY BRACE ANGLE REPAIRS |
| 61 | BOTTOM FLANGE CONNECTION REPAIR |
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| 63 | CLIP ANGLE REPAIRS |
| 64 | STRINGER CLIP ANGLE REPAIR |
| 65 | TYPICAL RIVET REPLACEMENT AND BOLT REPAIRS |
| 66 | TYPICAL PACK RUST REPAIRS 1 |
| 67 | TYPICAL PACK RUST REPAIRS 2 |
| 68 | TYPICAL PIN ROD AND TOP CHORD PLATE REPAIRS |
| 69 | SIDEWALK STRUCTURE REPAIRS |
| 70 | BENT REPAIR DETAILS 1 |
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| 72 | SIDEWALK STRINGER REPAIR DETAILS |
| 73 | MISCELLANEOUS STEEL REPAIRS |
| 74 | BEARING REPLACEMENT EAST ABUTMENT |
| 75 | BEARING DETAILS |
| 76 | DECK AND SIDEWALK PLAN, SP 1 - 3 |
| 77 | DECK AND SIDEWALK PLAN, SP 4 - 9 |
| 78 | DECK AND SIDEWALK PLAN, SP 10 & 11 |
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| 80 | BARRIER DETAILS SPAN 4 |
| 81 | SCUPPER DETAILS 1 |
| 82 | SCUPPER DETAILS 2 |
| 83 | EXPANSION DAM EAST ABUTMENT |
| 84 | EXPANSION DAM BENT 4A |
| 85 | EXPANSION DAM PIER 1 |
| 86 | EXPANSION DAM PIER 3 |

| INDEX OF DRAWINGS | |
|---|---|
| SHEET NO. | TITLE |
| 87 | TOOTH EXPANSION JOINT PIER 2 |
| 88 | TOOTH JOINT DETAILS 1 |
| 89 | TOOTH JOINT DETAILS 2 |
| 90 | EXPANSION DAM PIER 4 |
| 91 | EXPANSION DAM PIER 5 |
| 92 | STRIP SEAL DAM DETAILS 1 |
| 93 | STRIP SEAL DAM DETAILS 2 |
| 94 | STRIP SEAL DAM DETAILS 3 |
| 95 | STRIP SEAL DAM DETAILS 4 |
| 96 | STRIP SEAL DAM DETAILS 5 |
| 97 | APPROACH SLAB PLAN |
| 98 | APPROACH SLAB SECTIONS AND DETAILS |
| 99 | SLEEPER SLAB PLAN |
| 100 | APPROACH SLAB REINFORCEMENT SCHEDULE |
| 101 | STRUCTURE MOUNTED FENCE DETAILS 1 |
| 102 | STRUCTURE MOUNTED FENCE DETAILS 2 |
| 103 | BENTS 1 & 2 DRAINAGE DETAILS 1 |
| 104 | BENTS 1 & 2 DRAINAGE DETAILS 2 |
| 105 | BENTS 3 & 4A DRAINAGE DETAILS |
| 106 | BENTS 5 & 6 DRAINAGE DETAILS |
| 107 | BENT 7 DRAINAGE DETAILS |
| 108 | PIERS 1 & 2 DRAINAGE DETAILS |
| 109 | PIERS 4 & 5 DRAINAGE DETAILS |
| 110 | DOWNSPOUT SUPPORT DETAILS |
| 111 | LIGHT POLE BARRIER DETAILS - LP1 |
| 112 | LIGHT POLE BARRIER DETAILS - LP2 |
| 113 | LIGHT POLE BARRIER DETAILS - LP3 |
| 114 | LIGHT POLE BARRIER DETAILS - LP4 |
| 115 | LIGHT POLE BARRIER DETAILS - LP5 |
| 116 | LIGHT POLE BARRIER DETAILS - LP7 |
| 117 | LIGHT POLE BARRIER DETAILS - LP8 |
| 118 | LIGHT POLE BARRIER DETAILS - LP9 |
| 119 | LIGHT POLE BARRIER DETAILS - LP10 |
| 120 | LIGHT POLE BARRIER DETAILS - LP11 |
| 121 | LIGHT POLE BARRIER SECTIONS |
| 122 | BARRIER DETAIL - REPAIR C13 |
| 123 | LIGHT POLE BARRIER REINFORCEMENT SCHEDULE |
| 124 | EXP DAM & SCUPPER REINFORCEMENT SCHEDULE |

## BRIDGE PAINT (CONT'D)

COORDINATE ALL PAINTING OPERATIONS WITH THE REQUIREMENTS FOR TRACK CLEARANCE AND ACCESS FOR SPAN 13 OVER NORFOLK SOUTHERN. SEE PLANS AND SPECIFICATIONS FOR FURTHER REQUIREMENTS.

SURFACE PREPARATION AND PRIMING OF THE TOP SURFACE OF THE BUCKLE PLATES IN AREAS OF DECK REPLACEMENT IS INCLUDED UNDER ITEM 1070-0325. SURFACE PREPARATION, PRIMING, INTERMEDIATE COATS AND PAINTING OF THE EXPOSED SURFACES OF THE BUCKLE PLATES IS INCLUDED IN ITEM 1070-0200. CONTAINMENT, WASTE MANAGEMENT, AND WORKER HEALTH AND SAFETY REQUIREMENTS IN ITEMS 1072-0100, 1072-0200, AND 1072-0300 ARE ALSO APPLICABLE TO ALL OPERATIONS INVOLVING THE BUCKLE PLATES.

PRIOR TO BEGINNING ANY BLASTING OR PAINTING OPERATIONS, OBTAIN AN ABRASIVE BLASTING PERMIT FROM THE ALLEGHENY COUNTY HEALTH DEPARTMENT.

ALL FAYING SURFACES ARE CONSIDERED SLIP-CRITICAL UNLESS OTHERWISE INDICATED. STEEL REPAIRS THAT ARE NOTED AS NON-SLIP-CRITICAL REQUIRE THE PRIMER TO DRY TO TOUCH BEFORE MATING THE STEEL AND DO NOT REQUIRE FULL CURE OF THE PRIMER. SEE SHEET 6 OF 124 FOR SLIP-CRITICAL AND NON-SLIP-CRITICAL STEEL REPAIRS.

NOTES:

1. WORK THIS SHEET WITH SHEET 3.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# GENERAL NOTES & INDEX OF DRAWINGS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 4 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

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FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_TS&L Ratings.dgn

## CONTROLLING GIRDER (SPANS 1-9, 13)

| | | WITHOUT FUTURE WEARING SURFACE | | | | WITH FUTURE WEARING SURFACE | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | H20 | HS20 | TK-527 | ML-80 | H20 | HS20 | TK-527 | ML-80 |
| INVENTORY RATING (IR) | SPAN(S) | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 |
| | LOCATION (FT) | 80.00 | 80.00 | 80.00 | 80.00 | 80.00 | 80.00 | 80.00 | 80.00 |
| | RATING FACTOR | 1.27 (V) | 1.03 (V) | 0.91 (V) | 0.95 (V) | 1.13 (V) | 0.92 (V) | 0.81 (V) | 0.84 (V) |
| OPERATING RATING (OR) | SPAN(S) | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 |
| | LOCATION (FT) | 80.00 | 80.00 | 80.00 | 80.00 | 80.00 | 80.00 | 80.00 | 80.00 |
| | RATING FACTOR | 2.12 (V) | 1.72 (V) | 1.52 (V) | 1.58 (V) | 1.88 (V) | 1.53 (V) | 1.35 (V) | 1.40 (V) |

## CONTROLLING FLOORBEAM (SPANS 1-9, 13)

| | | WITHOUT FUTURE WEARING SURFACE | | | | WITH FUTURE WEARING SURFACE | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | H20 | HS20 | TK-527 | ML-80 | H20 | HS20 | TK-527 | ML-80 |
| INVENTORY RATING (IR) | SPAN(S) | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 |
| | LOCATION (FT) | 15.33 | 15.33 | 15.33 | 15.33 | 15.33 | 15.33 | 15.33 | 15.33 |
| | RATING FACTOR | 1.64 (M) | 1.45 (M) | 1.19 (M) | 1.10 (M) | 1.56 (M) | 1.38 (M) | 1.13 (M) | 1.05 (M) |
| OPERATING RATING (OR) | SPAN | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 | 7 & 8 |
| | LOCATION (FT) | 15.33 | 15.33 | 15.33 | 15.33 | 15.33 | 15.33 | 15.33 | 15.33 |
| | RATING FACTOR | 2.73 (M) | 2.41 (M) | 1.98 (M) | 1.84 (M) | 2.61 (M) | 2.30 (M) | 1.89 (M) | 1.75 (M) |

## CONTROLLING STRINGER (SPANS 1-9, 13)

| | | WITHOUT FUTURE WEARING SURFACE | | | | WITH FUTURE WEARING SURFACE | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | H20 | HS20 | TK-527 | ML-80 | H20 | HS20 | TK-527 | ML-80 |
| INVENTORY RATING (IR) | STRINGER | 2ND INT | 2ND INT | 2ND INT | 2ND INT | 2ND INT | 2ND INT | 2ND INT | 2ND INT |
| | SPAN(S) | 2 & 3 | 2 & 3 | 2 & 3 | 2 & 3 | 2 & 3 | 2 & 3 | 2 & 3 | 2 & 3 |
| | LOCATION (FT) | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| | RATING FACTOR | 1.43 (M) | 1.43 (M) | 1.15 (M) | 1.01 (M) | 1.39 (M) | 1.39 (M) | 1.13 (M) | 0.98 (M) |
| OPERATING RATING (OR) | STRINGER | 2ND INT | 2ND INT | 2ND INT | 2ND INT | 2ND INT | 2ND INT | 2ND INT | 2ND INT |
| | SPAN(S) | 2 & 3 | 2 & 3 | 2 & 3 | 2 & 3 | 2 & 3 | 2 & 3 | 2 & 3 | 2 & 3 |
| | LOCATION (FT) | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| | RATING FACTOR | 2.38 (M) | 2.38 (M) | 1.92 (M) | 1.68 (M) | 2.32 (M) | 2.32 (M) | 1.88 (M) | 1.64 (M) |

## CONTROLLING TRUSS MEMBERS (SPANS 10-12)

| | | WITHOUT FUTURE WEARING SURFACE | | | | WITH FUTURE WEARING SURFACE | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | H20 | HS20 | TK-527 | ML-80 | H20 | HS20 | TK-527 | ML-80 |
| INVENTORY RATING (IR) | SPAN(S) | 10 | 11 | 11 | 11 | 10 | 11 | 11 | 11 |
| | MEMBER | L8-L9 | L1-U1 | L1-U1 | L1-U1 | L8-L9 | L1-U1 | L1-U1 | L1-U1 |
| | RATING FACTOR | 1.23 | 1.15 | 1.01 | 0.96 | 1.23 | 1.15 | 1.01 | 0.96 |
| OPERATING RATING (OR) | SPAN(S) | 10 | 11 | 11 | 11 | 10 | 11 | 11 | 11 |
| | MEMBER | U5-U6 | L1-U1 | L1-U1 | L1-U1 | U5-U6 | L1-U1 | L1-U1 | L1-U1 |
| | RATING FACTOR | 2.24 | 2.00 | 1.76 | 1.67 | 2.24 | 2.00 | 1.76 | 1.67 |

## CONTROLLING FLOORBEAM (SPANS 10-12)

| | | WITHOUT FUTURE WEARING SURFACE | | | | WITH FUTURE WEARING SURFACE | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | H20 | HS20 | TK-527 | ML-80 | H20 | HS20 | TK-527 | ML-80 |
| INVENTORY RATING (IR) | SPAN(S) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| | LOCATION (FT) | 16.00 | 11.00 | 11.00 | 11.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | RATING FACTOR | 1.68 (M) | 1.36 (V) | 1.20 (V) | 1.14 (V) | 1.55 (V) | 1.31 (V) | 1.15 (V) | 1.10 (V) |
| OPERATING RATING (OR) | SPAN | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| | LOCATION (FT) | 16.00 | 11.00 | 11.00 | 11.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | RATING FACTOR | 2.80 (M) | 2.27 (V) | 2.00 (V) | 1.90 (V) | 2.59 (V) | 2.19 (V) | 1.92 (V) | 1.83 (V) |

## CONTROLLING STRINGER (SPANS 10-12)

| | | WITHOUT FUTURE WEARING SURFACE | | | | WITH FUTURE WEARING SURFACE | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | H20 | HS20 | TK-527 | ML-80 | H20 | HS20 | TK-527 | ML-80 |
| INVENTORY RATING (IR) | STRINGER | 1ST INT | 1ST INT | 1ST INT | 1ST INT | 1ST INT | 1ST INT | 1ST INT | 1ST INT |
| | SPAN(S) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| | LOCATION (FT) | 14.52 | 17.42 | 14.52 | 14.52 | 14.52 | 17.42 | 14.52 | 14.52 |
| | RATING FACTOR | 1.43 (M) | 1.27 (M) | 0.99 (M) | 0.90 (M) | 1.34 (M) | 1.20 (M) | 0.93 (M) | 0.85 (M) |
| OPERATING RATING (OR) | STRINGER | 1ST INT | 1ST INT | 1ST INT | 1ST INT | 1ST INT | 1ST INT | 1ST INT | 1ST INT |
| | SPAN(S) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| | LOCATION (FT) | 14.52 | 17.42 | 14.52 | 14.52 | 14.52 | 17.42 | 14.52 | 14.52 |
| | RATING FACTOR | 2.38 (M) | 2.12 (M) | 1.65 (M) | 1.51 (M) | 2.24 (M) | 2.00 (M) | 1.55 (M) | 1.42 (M) |

## REINFORCED CONCRETE SLAB (SPAN 14)

| | | WITHOUT FUTURE WEARING SURFACE | | | | WITH FUTURE WEARING SURFACE | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | H20 | HS20 | TK-527 | ML-80 | H20 | HS20 | TK-527 | ML-80 |
| INVENTORY RATING (IR) | LOCATION (FT) | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| | RATING FACTOR | 1.26 (V) | 1.01 (V) | 0.89 (V) | 0.83 (V) | 1.21 (V) | 0.97 (V) | 0.86 (V) | 0.80 (V) |
| OPERATING RATING (OR) | LOCATION (FT) | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| | RATING FACTOR | 2.10 (V) | 1.68 (V) | 1.48 (V) | 1.38 (V) | 2.02 (V) | 1.62 (V) | 1.43 (V) | 1.33 (V) |

## RATING NOTES:

1. RATINGS INCLUDE FUTURE WEARING SURFACE OF 30 PSF WHERE INDICATED.
2. RATINGS OBTAINED FROM PENNDOT'S BRIDGE ANALYSIS AND RATING PROGRAM, BAR7, VERSION 7.15.0.0, DATED FEBRUARY 2018. LOAD RATINGS FOR THE STRINGERS ARE BASED ON MODIFIED DISTRIBUTION FACTORS DERIVED FROM A FINITE ELEMENT ANALYSIS OF THE FLOOR SYSTEM.
3. RATINGS FOR GIRDERS, FLOORBEAMS, STRINGERS, AND THE REINFORCED CONCRETE SLAB ARE LOAD FACTOR DESIGN (LFD) RATINGS.
4. RATINGS FOR THE TRUSS ARE ALLOWABLE STRESS DESIGN (ASD) RATINGS.
5. (M) DENOTES RATING CONTROLLED BY MOMENT.
6. (V) DENOTES RATING CONTROLLED BY SHEAR.

## NOTES:

1. FOR GENERAL PLAN AND ELEVATION, SEE SHEET 1.
2. FOR TYPICAL SECTIONS, SEE SHEET 2.
3. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SUMMARY OF BRIDGE RATINGS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 5 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

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FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\SR1038_TS&L Repair Codes.dgn

## SUPERSTRUCTURE REPAIRS

| CODE | DESCRIPTION | | UNIT | ITEM NUMBER | DETAIL SHEETS |
|---|---|---|---|---|---|
| S01 | WEB COVER PLATE, STRINGER | SC | EA | 1050-0201 | 53 |
| S02 | FLANGE COVER PLATE, STRINGER | SC | EA | 1050-0202 | 56 |
| S03 | STIFFENER REPAIR, STRINGER | NSC | EA | 1050-0203 | 57 |
| S04 | ARREST HOLE WITH WEB COVER PLATE, STRINGER | | EA | 1050-0204 | 54 |
| S05 | REPLACE SIDEWALK STRINGER | SC | LB | 1050-0110 | 72 |
| S06 | REPLACE SIDEWALK STRINGER EXPANSION ASSEMBLY | SC | EA | 1050-0205 | 72 |
| S07 | REPLACE STRINGER STOOL ANGLE AND CLIP PLATE | SC | EA | 1050-0206 | 31 |
| S08 | REPLACE STRINGER SEAT ANGLE AND SHIM STACK | SC | EA | 1050-0207 | 31 |
| S09 | REPLACE STRINGER CLIP ANGLE | NSC | EA | 1050-0267 | 64 |
| | | | | | |
| F01 | WEB COVER PLATE, FLOORBEAM | SC | EA | 1050-0208 | 55 |
| F02 | FLANGE COVER PLATE, FLOORBEAM | SC | LB | 1050-0111 | 56 |
| F03 | NOT USED | | - | - | - |
| F04 | BOTTOM FLANGE CONNECTION REPAIR, FLOORBEAM | SC | EA | 1050-0210 | 61 |
| F05 | STIFFENER REPAIR, FLOORBEAM | NSC | EA | 1050-0211 | 57 |
| F06 | STIFFENER RETROFIT, FLOORBEAM | NSC | EA | 1050-0212 | 58 |
| F07 | BEARING SEAT STIFFENER REPAIR, FLOORBEAM | SC | EA | 1050-0213 | 58 |
| F08 | FLOORBEAM WEB PATCH PLATE | SC | EA | 1050-0214 | 30 |
| F09 | REPLACE RIVET, FLOORBEAM | | EA | 1050-0215 | 65 |
| F10 | REPAIR ENDS OF SPAN 9 LATTICE STRUT | SC | EA | 1050-0216 | 36 |
| | | | | | |
| G01 | BOTTOM FLANGE COVER PLATE, GIRDER | NSC | LB | 1050-0112 | 56 |
| G02 | TOP FLANGE COVER PLATE, GIRDER | NSC | LB | 1050-0113 | 56 |
| G03 | WEB COVER PLATE, GIRDER | NSC | EA | 1050-0217 | 53 |
| G04 | STIFFENER REPAIR, GIRDER | NSC | EA | 1050-0218 | 57 |
| G05 | STIFFENER ADDITION, GIRDER | NSC | EA | 1050-0219 | 58 |
| G06 | REPLACE GIRDER PIN SPACER TUBE | | EA | 1050-0220 | 70 |
| G07 | REPLACE GIRDER SEAT | NSC | EA | 1050-0221 | 31 |
| G08 | REPLACE RIVET, GIRDER | | EA | 1050-0222 | 65 |
| G09 | REMOVE DETERIORATED GIRDER COVER PLATE | | LB | 1050-0114 | 30 |
| | | | | | |
| T01 | LACING BAR REPAIR TYPE 1, TRUSS | NSC | EA | 1050-0223 | 50 |
| T02 | LACING BAR REPAIR TYPE 2, TRUSS | NSC | EA | 1050-0224 | 50 |
| T03 | BATTEN PLATE REPAIR TYPE 1, TRUSS | NSC | EA | 1050-0225 | 51 |
| T04 | BATTEN PLATE REPAIR TYPE 2, TRUSS | NSC | EA | 1050-0226 | 51 |
| T05 | REPLACE RIVET, TRUSS | | EA | 1050-0227 | 65 |
| T06 | INSTALL HIGH STRENGTH BOLT, TRUSS | | EA | 1050-0228 | 51 |
| T07 | ANGLE COVER PLATE, TRUSS | NSC | LB | 1050-0115 | 52 |
| T08 | CONNECTION ANGLE REPAIR, TRUSS | SC | EA | 1050-0229 | 61 |
| T09 | FLOORBEAM CONNECTION ANGLE REPAIR, TRUSS | SC | EA | 1050-0230 | 62 |
| T10 | FLOORBEAM CONNECTION PLATE REPAIR, TRUSS | SC | EA | 1050-0231 | 62 |
| T11 | REPLACE CLIP ANGLE | SC | EA | 1050-0232 | 63 |
| T12 | REPLACE CLIP ANGLE AND GUSSET PLATE | SC | EA | 1050-0233 | 63 |
| | | | | | |
| TC01 | LACING BAR REPAIR, CHORD | NSC | EA | 1050-0234 | 50 |
| TC02 | BATTEN PLATE REPAIR, CHORD | NSC | EA | 1050-0235 | 51 |
| TC03 | REPLACE RIVET, CHORD | | EA | 1050-0236 | 65 |
| TC04 | ANGLE COVER PLATE, CHORD | NSC | LB | 1050-0116 | 52 |
| TC05 | REPLACE PIN ROD | | EA | 1050-0237 | 68 |
| TC06 | REPAIR TOP CHORD PIN PLATE | | EA | 1050-0238 | 68 |
| | | | | | |
| TB01 | LACING BAR REPAIR, END PORTAL | NSC | EA | 1050-0239 | 59 |
| TB02 | BATTEN PLATE REPAIR, BRACING | NSC | EA | 1050-0240 | 51 |
| TB03 | REPLACE RIVET, BRACING | | EA | 1050-0241 | 65 |
| TB04 | END SWAY BRACING ANGLE REPLACEMENT | NSC | EA | 1050-0242 | 60 |
| TB05 | MID SWAY BRACING ANGLE REPLACEMENT | NSC | EA | 1050-0243 | 60 |
| TB06 | END PORTAL STRUT REPAIR | NSC | EA | 1050-0244 | 59 |
| TB07 | SWAY BRACING ANGLE REPLACEMENT | NSC | EA | 1050-0245 | 60 |
| | | | | | |
| TM01 | REPLACE SEAT AND BEAM | SC | LB | 1050-0117 | 47 |
| TM02 | REPLACE EXP DAM SEAT | SC | LB | 1050-0118 | 49 |
| TM03 | SIDEWALK GUSSET PLATE REPAIR | SC | EA | 1050-0246 | 69 |
| TM04 | SIDEWALK ANGLE BRACING REPAIR | SC | EA | 1050-0247 | 69 |
| | | | | | |
| PR01 | PACK RUST REPAIR, GIRDER OR FLOORBEAM | | LF | 1070-0350 | 66 |
| PR02 | PACK RUST REPAIR, TRUSS MEMBER | | LF | 1070-0350 | 66 |
| PR03 | PACK RUST REPAIR, EYE BARS | | EA | 9000-0201 | 67 |
| PR04 | PACK RUST REPAIR, JOINT OR CHORD | | EA | 9000-0202 | 67 |
| PR05 | PACK RUST REPAIR, STRINGER BEARING SEAT | | EA | 1070-0350 | 66 |
| PR06 | PACK RUST REPAIR, BENT | | LF | 1070-0350 | 66 |
| PR07 | PACK RUST REPAIR, TRUSS END PORTAL | | LF | 1070-0350 | 66 |
| | | | | | |
| BR01 | REPLACE EXPANSION BEARING | | EA | (1) | 74 |
| BR02 | CLEAN AND LUBRICATE BEARING | | EA | 9000-0204 | 75 |
| BR03 | CLEAN AND FLUSH BEAM SEATS | | EA | 9000-0205 | N/A |
| BR04 | SEAL BEARING | | EA | 9000-0214 | 16 |

## DECK & MISCELLANEOUS REPAIRS

| CODE | DESCRIPTION | UNIT | ITEM NUMBER | DETAIL SHEETS |
|---|---|---|---|---|
| M01 | REPLACE SIDEWALK FENCE | LF | 5016-0103 | 101 |
| M02 | REPLACE BARRIER FENCE | LF | 5016-0006 | 102 |
| M03 | REPLACE APPROACH FENCE | LF | RDWY ITEM | 101 |
| M04 | REPLACE SIDEWALK OVERLAY | SF | (2) | N/A |
| M05 | INSTALL BARRIER FLASHING | LF | 9000-0207 | 30 |
| M06 | REPLACE DOWNSPOUTING | LF | 5051-0000 | 103 TO 110 |
| M07 | REPLACE DOWNSPOUTING SUPPORT | EA | 5051-0000 | 109 |
| M08 | REMOVE EXISTING TAB PLATE | EA | 1050-0260 | 73 |
| M09 | INSTALL LIGHT MAST AND FIXTURE | EA | RWDY ITEM | 73 |
| M10 | REPLACE PIER WALKWAY RAILING | EA | 1050-0261 | 14 |
| M11 | REPLACE SCUPPER | EA | 9000-0216 | 81 |
| M12 | INSTALL NEW SCUPPER | EA | 9000-0215 | 81 |
| M13 | REMOVE EXISTING SCUPPER AND REPAIR DECK | EA | 9000-0217 | 81 |
| M14 | INSTALL NEW DOWNSPOUT RUN | LF | 5051-0000 | 103 |
| M15 | REMOVE KICKER BEAM | EA | 1050-0262 | 73 |
| M16 | INSTALL BOLTS OPEN HOLES | EA | 1050-0263 | 46 |
| M17 | INSTALL NEW LIGHT POLE AND FIXTURE | EA | RDWY ITEM | N/A |
| M18 | REMOVE VEGETATION | LS | 9000-0208 | 16 |
| M19 | INSTALL SPLASH BLOCK | EA | 9000-0209 | 109 |
| M20 | REPLACE CONDUIT | LF | 9000-0210 | 12 |
| M21 | CORE WEEPHOLES AND INSTALL WEEPHOLE FILTER | EA | 9000-0211 | 19 |
| M22 | REMOVE ABANDONED UTILITY BRACKET OR CONNECTION | EA | 1050-0264 | 27 |
| M23 | REPAIR BUCKLE PLATE BLOWOUT | EA | 1050-0265 | 32 |
| M24 | REMOVE ABANDONED UTILITY BOX FROM GIRDER WEB | EA | 1050-0266 | 34 |
| M25 | REMOVE EXISTING UTILITY LINES AND CONDUIT | LS | 9000-0212 | 9 |
| M26 | INSTALL COMCAST CONDUIT | LS | 9000-0213 | SEE NOTE 4 |
| M27 | REPLACE LIGHT MAST PLATE | EA | 1050-0268 | 73 |

## CONCRETE & SUBSTRUCTURE REPAIRS

| CODE | DESCRIPTION | UNIT | ITEM NUMBER | DETAIL SHEETS |
|---|---|---|---|---|
| C01 | BARRIER SPALL REPAIR | CF | (3) | 20 |
| C02 | SUBSTRUCTURE SPALL REPAIR | CF | 9000-9002 | 20 |
| C03 | EPOXY INJECTION CRACK SEAL | LF | 1091-0331 | N/A |
| C04 | REPLACE WALL EXPANSION JOINT MATERIAL | LF | 9000-0206 | N/A |
| C05 | PROTECTIVE COATING, PENETRATING SEALER | SF | (4) | N/A |
| C06 | TYPE 2 DECK REPAIR, SIDEWALK | SF | 1040-0120 | N/A |
| C07 | REPLACE EXISTING BARRIER | LF | (5) | 80 |
| C08 | PLACE LMC OVERLAY | SF | (6) | N/A |
| C09 | REPLACE STRIP SEAL EXPANSION DAM | LF | (7) | 83 TO 86 |
| C10 | REPLACE TOOTH EXPANSION DAM | LS | 5020-0002 | 87 TO 89 |
| C11 | CONSTRUCT APPROACH SLAB | LS | (8) | 97 TO 100 |
| C12 | REPLACE BARRIERS AND LIGHT POLE ANCHORAGE | EA | (9) | 111 TO 121 |
| C13 | REPLACE BARRIER AND JUNCTION BOX | EA | (10) | 122 |
| | | | | |
| B01 | REMOVE ABANDONED DOWNSPOUT BRACKET | EA | 1050-0248 | 22 |
| B02 | REPLACE RIVET, BENT | EA | 1050-0249 | 65 |
| B03 | LACING BAR REPAIR TYPE 1, BENT NSC | EA | 1050-0250 | 50 |
| B04 | LACING BAR REPAIR TYPE 2, BENT NSC | EA | 1050-0251 | 50 |
| B05 | REPLACE BATTEN PLATE, TYPE 1, BENT NSC | EA | 1050-0252 | 51 |
| B06 | REPLACE BATTEN PLATE, TYPE 2, BENT NSC | EA | 1050-0253 | 51 |
| B07 | COLUMN STAY PLATE REPAIR, BENT SC | EA | 1050-0254 | 24 |
| B08 | REPLACE SWAY BRACE ANGLE NSC | EA | 1050-0255 | 70 |
| B09 | INSTALL COLUMN COVER PLATE SC | EA | 1050-0256 | 71 |
| B10 | INSTALL GUSSET COVER PLATE SC | EA | 1050-0257 | 23 |
| B11 | REPLACE BENT 4-4A BRACING GUSSET PLATE, TYPE 1 SC | EA | 1050-0258 | 26 |
| B12 | REPLACE BENT 4-4A BRACING GUSSET PLATE, TYPE 2 SC | EA | 1050-0259 | 71 |
| B13 | REPLACE CONNECTION ANGLE (L4x4x1/2) SC | LB | 1050-0119 | 71 |

NOTES: UNITS INDICATED MAY NOT CORRESPOND TO ACTUAL PAY QUANTITY UNITS.

REPAIR [F03], ITEM NUMBER 1050-0209, IS NOT USED.

THE FOLLOWING ITEM NUMBERS ARE APPLICABLE TO THE NOTED REPAIRS:

(1) 1018-0050; 1050-0020; 1050-0085; 9000-0203
(2) 1018-0050; 1046-0010
(3) 1040-0210;
(4) 1019-0040; 1019-0050
(5) 1018-0050; 1001-1100; 1002-0052
(6) 1039-0010; 1041-0020; 1042-0030; 1042-0070; 1001-0970
(7) 1090-1014; 1050-0089; 5090-1015; 5090-1016; 9000-0218
(8) 1001-1100; 1002-0052; 1001-0970; 1018-0050
(9) 1001-1100; 1002-0052; 0910-5255; 1001-0500; 0910-0006
(10) 1001-1100; 1002-0052; 0910-5255; 0910-0006

SC DENOTES SLIP-CRITICAL REPAIR
NSC DENOTES NON-SLIP-CRITICAL REPAIR

NOTES:

1. FOR GENERAL PLAN AND ELEVATION, SEE SHEET 1.
2. FOR TYPICAL SECTIONS, SEE SHEET 2.
3. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
4. FOR DETAILS OF THE COMCAST CONDUIT BANK, SEE SHEET 7 AND COMCAST PLANS.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## BRIDGE REPAIR CODES

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 6 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

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FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Quantities 1.dgn

## APPROXIMATE QUANTITIES - BRIDGE STRUCTURE, AS DESIGNED

| ITEM NO. | DESCRIPTION - S-40253 NEW KENSINGTON BRIDGE | UNIT | EAST ABUTMENT | EAST APPROACH BENTS | PIER 1 | PIER 2 | PIER 3 | PIER 4 | PIER 5 | WEST ABUTMENT | EAST APPROACH SUPER-STRUCTURE | SPANS 10 THRU 12 SUPER-STRUCTURE | SPANS 13 AND 14 SUPER-STRUCTURE | EAST APPROACH SLAB | WEST APPROACH SLAB | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0910-0006 | JUNCTION BOXES J.B.-25 | EACH | | | | | | | | | 5 | 5 | 2 | | | 12 |
| 0910-5255 | 2" CONDUIT IN STRUCTURE | LF | | | | | | | | | 52 | 61 | 14 | | | 127 |
| 1001-0500 | LIGHTING POLE, ANCHORAGE | EACH | | | | | | | | | 4 | 5 | 1 | | | 10 |
| 1001-0970 | MECHANICAL TEXTURING WITH TRANSVERSE SAWED GROOVES | SY | | | | | | | | | 1605 | 2800 | 361 | 82 | | 4849 |
| 1001-1100 | CLASS AA CEMENT CONCRETE, ACCELERATED (2) | CY | | | | | | | | | 25 | 9 | 2 | | 125 | 160 |
| 1002-0052 | REINFORCEMENT BARS, EPOXY COATED (2) | LB | | | | | | | | | 3800 | 1450 | 350 | | 26800 | 32400 |
| 1003-0005 | DOWEL HOLES, 12" DEPTH | EACH | | | | | | | | 160 | | | | | | 160 |
| 5016-0006 | BARRIER PROTECTIVE FENCE, VINYL-COATED STEEL, REMOVE AND REPLACE (1) | LF | | | | | | | | | | | 92 | | | 92 |
| 5016-0103 | SIDEWALK PROTECTIVE FENCE VINYL-COATED STEEL, REMOVE AND REPLACE (1) | LF | | | | | | | | | 516 | 900 | 130 | | | 1546 |
| 1018-0050 | REMOVAL OF PORTION OF EXISTING BRIDGE (1) | LS | | | | | | | | | | | | | | X |
| 1019-0040 | PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, REINFORCED CONCRETE SUBSTRUCTURE SURFACES) | SY | 222 | | 511 | 578 | 567 | 444 | 446 | 456 | | | | | | 3223 |
| 1019-0050 | PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, BRIDGE SUPERSTRUCTURE) | SY | | | | | | | | | 190 | 326 | 43 | 10 | | 569 |
| 5020-0002 | TOOTH EXPANSION DAM WITH DRAINAGE TROUGH, REMOVE AND REPLACE (1) | LB | | | | | | | | | | 8600 | | | | 8600 |
| 1039-0010 | CONCRETE BRIDGE DECK SURFACE PREPARATION, HYDRODEMOLITION | SY | | | | | | | | | 1605 | 2800 | 361 | 82 | | 4849 |
| 1040-0120 | CONCRETE BRIDGE DECK REPAIR ACCELERATED, TYPE 2 USING ASC | SF | | | | | | | | | 31 | 54 | 7 | | | 92 |
| 1040-0210 | CONCRETE BRIDGE BARRIER REPAIR ACCELERATED, TYPE 2 USING ASC | SF | | | | | | | | | 8 | 14 | 6 | | | 28 |
| 1041-0020 | SCARIFICATION, 1/2" DEPTH | SY | | | | | | | | | 3211 | 5600 | 723 | 165 | | 9698 |
| 1042-0030 | 3 HOUR ACCELERATED LATEX MODIFIED CONCRETE WEARING SURFACE, 1 1/4" DEPTH | SY | | | | | | | | | 1605 | 2800 | 361 | 82 | | 4849 |
| 1042-0070 | 3 HOUR ACCELERATED LATEX MODIFIED CONCRETE, VARIABLE DEPTH | CY | | | | | | | | | 56 | 97 | 13 | 3 | | 168 |
| 1046-0010 | EPOXY OVERLAY | SY | | | | | | | | | 344 | 600 | 77 | | | 1021 |
| 1050-0020 | FABRICATED STRUCTURAL STEEL (4) | LB | | | | | | | | | 815 | | | | | 815 |
| 1050-0085 | LAMINATED NEOPRENE BEARING PAD | EACH | 2 | | | | | | | | | | | | | 2 |
| 1050-0089 | SHEAR CONNECTORS | EACH | | | | | | | | | | 36 | | | | 36 |
| 9000-0215 | SCUPPER, TYPE 1, NEW INSTALLATION (1) | EACH | | | | | | | | | | 6 | | | | 6 |
| 9000-0216 | SCUPPER, TYPE 1, REPLACEMENT INSTALLATION (1) | EACH | | | | | | | | | 6 | | | | | 6 |
| 9000-0217 | SCUPPER REMOVAL (1) | EACH | | | | | | | | | 2 | | 2 | | | 4 |

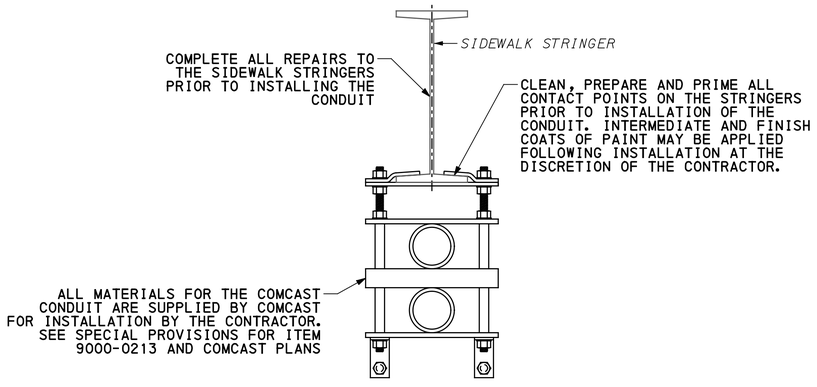
QUANTITY NOTES:

(1) SEE CONTRACT SPECIAL PROVISIONS

(2) INCLUDES CONCRETE AND REINFORCEMENT IN APPROACH SLAB, BARRIER REPLACEMENT IN SPAN 4, AND BARRIER REPLACEMENTS AT LIGHT POLES AND JUNCTION BOXES

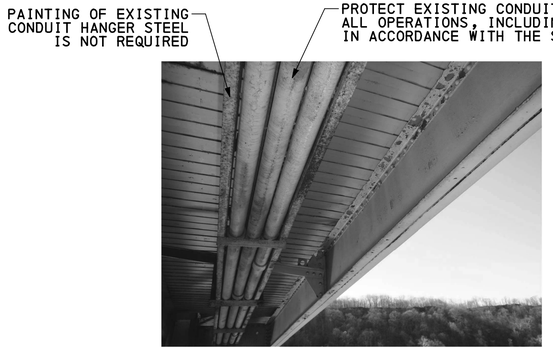
(3) SEE STRUCTURE REPAIR MASTER LIST FOR CROSS REFERENCES OF REPAIR TYPES TO ITEM NUMBERS

(4) FABRICATED STRUCTURAL STEEL INCLUDED WITH THIS ITEM AS
BEARING PLATES AT EAST ABUTMENT = 715 LB
ANCHOR BOLTS AT EAST ABUTMENT = 100 LB




PROPOSED COMCAST CONDUIT

NOT TO SCALE




EXISTING UTILITY BANK

REPRESENTATIVE PHOTO

NOTES:

1. WORK THIS SHEET WITH SHEETS 8 AND 9.
2. FOR STRUCTURE REPAIR MASTER LIST SEE SHEET 6.
3. FOR ADDITIONAL DETAILS OF CONDUIT, SEE COMCAST PLANS.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SUMMARY OF QUANTITIES 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 7 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

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## APPROXIMATE QUANTITIES - BRIDGE STRUCTURE, AS DESIGNED

| ITEM NO. | DESCRIPTION - S-40253 NEW KENSINGTON BRIDGE | UNIT | PIER 2 | EAST APPROACH SUPER-STRUCTURE | SPANS 10 THRU 12 SUPER-STRUCTURE | SPANS 13 AND 14 SUPER-STRUCTURE | TOTAL |
|---|---|---|---|---|---|---|---|
| 1050-0100 | UNFORESEEN FABRICATED STRUCTURAL STEEL REPAIRS | DOLLAR | | | | | 500000 |
| 1050-0110 | FABRICATED STRUCTURAL STEEL REPAIR (3) | LB | | 3738 | | | 3738 |
| 1050-0111 | FABRICATED STRUCTURAL STEEL REPAIR (3) | LB | | | 447 | | 447 |
| 1050-0112 | FABRICATED STRUCTURAL STEEL REPAIR (3) | LB | | 1803 | | | 1803 |
| 1050-0113 | FABRICATED STRUCTURAL STEEL REPAIR (3) | LB | | 1072 | | | 1072 |
| 1050-0114 | FABRICATED STRUCTURAL STEEL REPAIR (3) | LB | | 145 | | | 145 |
| 1050-0115 | FABRICATED STRUCTURAL STEEL REPAIR (3) | LB | | | 443 | | 443 |
| 1050-0116 | FABRICATED STRUCTURAL STEEL REPAIR (3) | LB | | | 20 | | 20 |
| 1050-0117 | FABRICATED STRUCTURAL STEEL REPAIR (3) | LB | | | 2111 | | 2111 |
| 1050-0118 | FABRICATED STRUCTURAL STEEL REPAIR (3) | LB | | | 525 | | 525 |
| 1050-0119 | FABRICATED STRUCTURAL STEEL REPAIR (3) | LB | | 35 | | | 35 |
| 1050-0201 | FABRICATED STRUCTURAL STEEL REPAIR 1 (3) | EACH | | 4 | 22 | | 26 |
| 1050-0202 | FABRICATED STRUCTURAL STEEL REPAIR 2 (3) | EACH | | 2 | | 1 | 3 |
| 1050-0203 | FABRICATED STRUCTURAL STEEL REPAIR 3 (3) | EACH | | | 23 | | 23 |
| 1050-0204 | FABRICATED STRUCTURAL STEEL REPAIR 4 (3) | EACH | | | 4 | | 4 |
| 1050-0205 | FABRICATED STRUCTURAL STEEL REPAIR 5 (3) | EACH | | 1 | | | 1 |
| 1050-0206 | FABRICATED STRUCTURAL STEEL REPAIR 6 (3) | EACH | | 2 | | | 2 |
| 1050-0207 | FABRICATED STRUCTURAL STEEL REPAIR 7 (3) | EACH | | 4 | | | 4 |
| 1050-0208 | FABRICATED STRUCTURAL STEEL REPAIR 8 (3) | EACH | | | 2 | | 2 |
| 1050-0209 | NOT USED, SEE NOTE 4 | | | | | | |
| 1050-0210 | FABRICATED STRUCTURAL STEEL REPAIR 10 (3) | EACH | | | 14 | | 14 |
| 1050-0211 | FABRICATED STRUCTURAL STEEL REPAIR 11 (3) | EACH | | 2 | | 1 | 3 |
| 1050-0212 | FABRICATED STRUCTURAL STEEL REPAIR 12 (3) | EACH | | | 8 | 2 | 10 |
| 1050-0213 | FABRICATED STRUCTURAL STEEL REPAIR 13 (3) | EACH | | | 15 | | 15 |
| 1050-0214 | FABRICATED STRUCTURAL STEEL REPAIR 14 (3) | EACH | | 2 | | | 2 |
| 1050-0215 | FABRICATED STRUCTURAL STEEL REPAIR 15 (3) | EACH | | 23 | | | 23 |
| 1050-0216 | FABRICATED STRUCTURAL STEEL REPAIR 16 (3) | EACH | | 2 | | | 2 |
| 1050-0217 | FABRICATED STRUCTURAL STEEL REPAIR 17 (3) | EACH | | 14 | | | 14 |
| 1050-0218 | FABRICATED STRUCTURAL STEEL REPAIR 18 (3) | EACH | | 81 | | 5 | 86 |
| 1050-0219 | FABRICATED STRUCTURAL STEEL REPAIR 19 (3) | EACH | | 9 | | | 9 |
| 1050-0220 | FABRICATED STRUCTURAL STEEL REPAIR 20 (3) | EACH | | 7 | | | 7 |
| 1050-0221 | FABRICATED STRUCTURAL STEEL REPAIR 21 (3) | EACH | | 9 | | | 9 |
| 1050-0222 | FABRICATED STRUCTURAL STEEL REPAIR 22 (3) | EACH | | 1445 | | | 1445 |
| 1050-0223 | FABRICATED STRUCTURAL STEEL REPAIR 23 (3) | EACH | | | 47 | | 47 |
| 1050-0224 | FABRICATED STRUCTURAL STEEL REPAIR 24 (3) | EACH | | | 249 | | 249 |
| 1050-0225 | FABRICATED STRUCTURAL STEEL REPAIR 25 (3) | EACH | | | 29 | | 29 |
| 1050-0226 | FABRICATED STRUCTURAL STEEL REPAIR 26 (3) | EACH | | | 23 | | 23 |
| 1050-0227 | FABRICATED STRUCTURAL STEEL REPAIR 27 (3) | EACH | | | 1299 | | 1299 |
| 1050-0228 | FABRICATED STRUCTURAL STEEL REPAIR 28 (3) | EACH | | | 1247 | | 1247 |
| 1050-0229 | FABRICATED STRUCTURAL STEEL REPAIR 29 (3) | EACH | | | 28 | | 28 |
| 1050-0230 | FABRICATED STRUCTURAL STEEL REPAIR 30 (3) | EACH | | | 20 | | 20 |
| 1050-0231 | FABRICATED STRUCTURAL STEEL REPAIR 31 (3) | EACH | | | 9 | | 9 |
| 1050-0232 | FABRICATED STRUCTURAL STEEL REPAIR 32 (3) | EACH | | | 1 | | 1 |
| 1050-0233 | FABRICATED STRUCTURAL STEEL REPAIR 33 (3) | EACH | | | 1 | | 1 |
| 1050-0234 | FABRICATED STRUCTURAL STEEL REPAIR 34 (3) | EACH | | | 480 | | 480 |
| 1050-0235 | FABRICATED STRUCTURAL STEEL REPAIR 35 (3) | EACH | | | 24 | | 24 |
| 1050-0236 | FABRICATED STRUCTURAL STEEL REPAIR 36 (3) | EACH | | | 330 | | 330 |
| 1050-0237 | FABRICATED STRUCTURAL STEEL REPAIR 37 (3) | EACH | | | 11 | | 11 |
| 1050-0238 | FABRICATED STRUCTURAL STEEL REPAIR 38 (3) | EACH | | | 9 | | 9 |
| 1050-0239 | FABRICATED STRUCTURAL STEEL REPAIR 39 (3) | EACH | | | 13 | | 13 |
| 1050-0240 | FABRICATED STRUCTURAL STEEL REPAIR 40 (3) | EACH | | | 5 | | 5 |
| 1050-0241 | FABRICATED STRUCTURAL STEEL REPAIR 41 (3) | EACH | | | 294 | | 294 |
| 1050-0242 | FABRICATED STRUCTURAL STEEL REPAIR 42 (3) | EACH | | | 14 | | 14 |
| 1050-0243 | FABRICATED STRUCTURAL STEEL REPAIR 43 (3) | EACH | | | 2 | | 2 |
| 1050-0244 | FABRICATED STRUCTURAL STEEL REPAIR 44 (3) | EACH | | | 12 | | 12 |
| 1050-0245 | FABRICATED STRUCTURAL STEEL REPAIR 45 (3) | EACH | | | 1 | | 1 |
| 1050-0246 | FABRICATED STRUCTURAL STEEL REPAIR 46 (3) | EACH | | | 20 | | 20 |
| 1050-0247 | FABRICATED STRUCTURAL STEEL REPAIR 47 (3) | EACH | | | 11 | | 11 |

## APPROXIMATE QUANTITIES - BRIDGE STRUCTURE, AS DESIGNED

| ITEM NO. | DESCRIPTION - S-40253 NEW KENSINGTON BRIDGE | UNIT | PIER 2 | EAST APPROACH SUPER-STRUCTURE | SPANS 10 THRU 12 SUPER-STRUCTURE | SPANS 13 AND 14 SUPER-STRUCTURE | TOTAL |
|---|---|---|---|---|---|---|---|
| 1050-0248 | FABRICATED STRUCTURAL STEEL REPAIR 48 (3) | EACH | | 7 | | | 7 |
| 1050-0249 | FABRICATED STRUCTURAL STEEL REPAIR 49 (3) | EACH | | 629 | | | 629 |
| 1050-0250 | FABRICATED STRUCTURAL STEEL REPAIR 50 (3) | EACH | | 32 | | | 32 |
| 1050-0251 | FABRICATED STRUCTURAL STEEL REPAIR 51 (3) | EACH | | 75 | | | 75 |
| 1050-0252 | FABRICATED STRUCTURAL STEEL REPAIR 52 (3) | EACH | | 6 | | | 6 |
| 1050-0253 | FABRICATED STRUCTURAL STEEL REPAIR 53 (3) | EACH | | 10 | | | 10 |
| 1050-0254 | FABRICATED STRUCTURAL STEEL REPAIR 54 (3) | EACH | | 9 | | | 9 |
| 1050-0255 | FABRICATED STRUCTURAL STEEL REPAIR 55 (3) | EACH | | 3 | | | 3 |
| 1050-0256 | FABRICATED STRUCTURAL STEEL REPAIR 56 (3) | EACH | | 1 | | | 1 |
| 1050-0257 | FABRICATED STRUCTURAL STEEL REPAIR 57 (3) | EACH | | 1 | | | 1 |
| 1050-0258 | FABRICATED STRUCTURAL STEEL REPAIR 58 (3) | EACH | | 4 | | | 4 |
| 1050-0259 | FABRICATED STRUCTURAL STEEL REPAIR 59 (3) | EACH | | 2 | | | 2 |
| 1050-0260 | FABRICATED STRUCTURAL STEEL REPAIR 60 (3) | EACH | | | 28 | | 28 |
| 1050-0261 | FABRICATED STRUCTURAL STEEL REPAIR 61 (3) | EACH | 2 | | | | 2 |
| 1050-0262 | FABRICATED STRUCTURAL STEEL REPAIR 62 (3) | EACH | | | | 1 | 1 |
| 1050-0263 | FABRICATED STRUCTURAL STEEL REPAIR 63 (3) | EACH | | 6 | | 664 | 670 |
| 1050-0264 | FABRICATED STRUCTURAL STEEL REPAIR 64 (3) | EACH | | 62 | | | 62 |
| 1050-0265 | FABRICATED STRUCTURAL STEEL REPAIR 65 (3) | EACH | | 11 | | | 11 |
| 1050-0266 | FABRICATED STRUCTURAL STEEL REPAIR 66 (3) | EACH | | 1 | | | 1 |
| 1050-0267 | FABRICATED STRUCTURAL STEEL REPAIR 67 (3) | EACH | | 6 | | | 6 |
| 1050-0268 | FABRICATED STRUCTURAL STEEL REPAIR 68 (3) | EACH | | | 1 | | 1 |

QUANTITY NOTES:

(1) SEE CONTRACT SPECIAL PROVISIONS

(2) INCLUDES CONCRETE AND REINFORCEMENT IN APPROACH SLAB, BARRIER REPLACEMENT IN SPAN 4, AND BARRIER REPLACEMENTS AT LIGHT POLES AND JUNCTION BOXES

(3) SEE STRUCTURE REPAIR MASTER LIST FOR CROSS REFERENCES OF REPAIR TYPES TO ITEM NUMBERS

NOTES:

1. WORK THIS SHEET WITH SHEETS 7 AND 9.
2. FOR STRUCTURE REPAIR MASTER LIST SEE SHEET 6.
3. FOR THIS SHEET ONLY, COLUMNS WHERE REPAIRS DO NOT OCCUR HAVE BEEN OMITTED FOR CLARITY.
4. ITEM 1050-0209 HAS BEEN OMITTED.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SUMMARY OF QUANTITIES 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 8 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
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## APPROXIMATE QUANTITIES - BRIDGE STRUCTURE, AS DESIGNED

| ITEM NO. | DESCRIPTION - S-40253 NEW KENSINGTON BRIDGE | UNIT | EAST ABUTMENT | EAST APPROACH BENTS | PIER 1 | PIER 2 | PIER 3 | PIER 4 | PIER 5 | WEST ABUTMENT | EAST APPROACH SUPER-STRUCTURE | SPANS 10 THRU 12 SUPER-STRUCTURE | SPANS 13 AND 14 SUPER-STRUCTURE | EAST APPROACH SLAB | WEST APPROACH SLAB | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5051-0000 | DOWNSPOUTING, GALVANIZED, REMOVE AND REPLACE (1) | LF | | 490 | 94 | 106 | | 80 | 30 | | | | | | | 800 |
| 1070-0200 | PAINTING EXISTING STRUCTURAL STEEL | LS | | | | | | | | | | | | | | |
| 1070-0325 | PRIMING TOP FLANGES | LS | | | | | | | | | | | | | | |
| 1070-0350 | PENETRATING SEALER AND CAULKING APPLICATION (3) | DOLLAR | | | | | | | | | 100000 | 110000 | 10000 | | | 220000 |
| 1072-0100 | CONTAINMENT | LS | | | | | | | | | | | | | | |
| 1072-0200 | WASTE MANAGEMENT | LS | | | | | | | | | | | | | | |
| 1072-0300 | WORKER HEALTH AND SAFETY | LS | | | | | | | | | | | | | | |
| 1090-1014 | ACCELERATED EXPANSION DAM REPLACEMENT, 3" MOVEMENT | LF | | | | | | | | | | | 31 | | | 31 |
| 5090-1015 | ACCELERATED EXPANSION DAM REPLACEMENT, 3 1/2" MOVEMENT, NON-STANDARD RETAINER (1) | LF | | | | | | | | | | 62 | | | | 62 |
| 5090-1016 | ACCELERATED EXPANSION DAM REPLACEMENT, 4" MOVEMENT, NON-STANDARD RETAINER (1) | LF | | | | | | | | | 31 | | | | | 31 |
| 9000-0218 | ACCELERATED EXPANSION DAM REPLACEMENT, 5" MOVEMENT, NON-STANDARD RETAINER (1) | LF | | | | | | | | | 31 | 31 | | | | 62 |
| 1091-0331 | EPOXY INJECTION CRACK SEAL | LF | 4 | | | 35 | 34 | 18 | 39 | 73 | | | | | | 203 |
| 9000-0201 | PACK RUST REPAIRS, EYE BARS (1) | EACH | | | | | | | | | | 28 | | | | 28 |
| 9000-0202 | PACK RUST REPAIR, JOINT OR CHORD (1) | EACH | | | | | | | | | | 57 | | | | 57 |
| 9000-0203 | JACKING BRIDGE SUPERSTRUCTURE (1) | LS | | | | | | | | | | | | | | |
| 9000-0204 | CLEAN AND LUBRICATE BEARING (1) | EACH | | | | 4 | | 4 | | | | | | | | 8 |
| 9000-0205 | CLEAN AND FLUSH BRIDGE SEATS (1) | EACH | 1 | | | | | 1 | | | | | | | | 2 |
| 9000-0206 | REPLACE WALL EXPANSION JOINT MATERIAL (1) | LF | | | | | | | | 90 | | | | | | 90 |
| 9000-0207 | INSTALL BARRIER FLASHING (1) | LF | | | | | | | | | 444 | | 80 | | | 524 |
| 9000-0208 | REMOVE VEGETATION (1) | LS | | | | | | | | | | | | | | |
| 9000-0209 | INSTALL SPLASH BLOCK (1) | EACH | | 12 | | | | | 2 | | | | | | | 14 |
| 9000-0210 | REPLACE CONDUIT (1) | LF | 90 | | | | | | | | | | | | | 90 |
| 9000-0211 | CORE NEW WEEPHOLE AND INSTALL WEEPHOLE FILTER (1) | EACH | | | | | | | | 38 | | | | | | 38 |
| 9000-0212 | REMOVE EXISTING UTILITY LINES AND CONDUIT (1) | LS | | | | | | | | | | | | | | |
| 9000-0213 | INSTALL COMCAST CONDUIT (1) | LS | | | | | | | | | | | | | | |
| 9000-0214 | SEAL BEARING (1) | EACH | | | | | | 1 | | | | | | | | 1 |
| 9000-9002 | REPAIR DETERIORATED CONCRETE (1) | CF | 5 | | 321 | 604 | 312 | 231 | 235 | 185 | | | | | | 1893 |

QUANTITY NOTES:

(1) SEE CONTRACT SPECIAL PROVISIONS

(2) INCLUDES CONCRETE AND REINFORCEMENT IN APPROACH SLAB, BARRIER REPLACEMENT IN SPAN 4, AND BARRIER REPLACEMENTS AT LIGHT POLES AND JUNCTION BOXES

(3) SEE STRUCTURE REPAIR MASTER LIST FOR CROSS REFERENCES OF REPAIR TYPES TO ITEM NUMBERS

*EXISTING CONDUIT BANK (TO REMAIN)*

*EXISTING UTILITY LINES AND SUPPORTS (TO BE REMOVED)*

**REPAIR M25**

ITEM 9000-0212
REMOVAL IN APPROACH SPANS
REPAIR M25 - REMOVE EXISTING
UTILITY LINES AND CONDUIT

*EXISTING CONDUIT AND EXPOSED UTILITIES (TO BE REMOVED)*

**REPAIR M25**

ITEM 9000-0212
REMOVAL IN SPAN 10 AT TRUSS END DIAGONAL
REPAIR M25 - REMOVE EXISTING
UTILITY LINES AND CONDUIT

*EXISTING UTILITY LINES AND SUPPORTS (TO BE REMOVED)*

**REPAIR M25**

ITEM 9000-0212
REMOVAL IN TRUSS SPANS, SPAN 13 SIMILAR
REPAIR M25 - REMOVE EXISTING
UTILITY LINES AND CONDUIT

NOTES:

1. WORK THIS SHEET WITH SHEETS 7 AND 8.
2. FOR STRUCTURE REPAIR MASTER LIST SEE SHEET 6.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SUMMARY OF QUANTITIES 3

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
PENNSYLVANIA

RECOMMENDED
OCTOBER 26, 2022

SHEET 9 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
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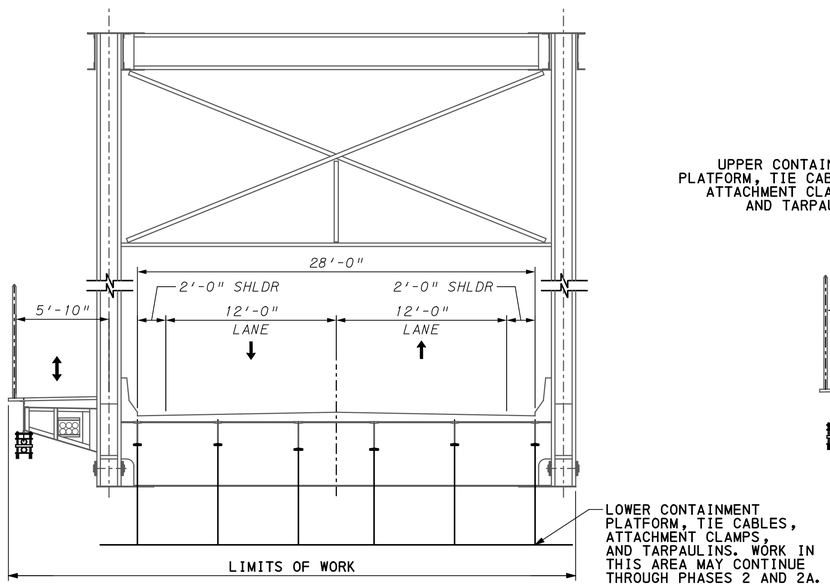
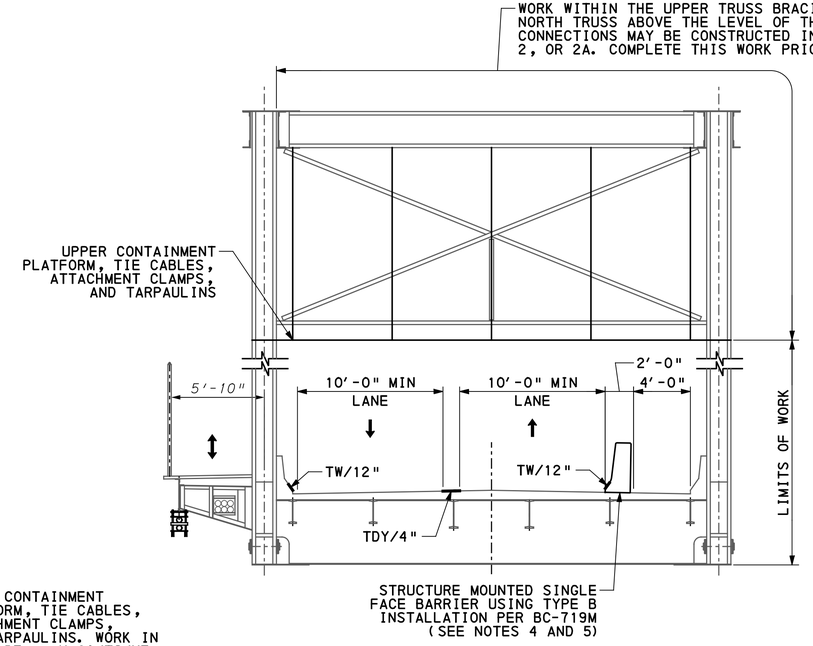


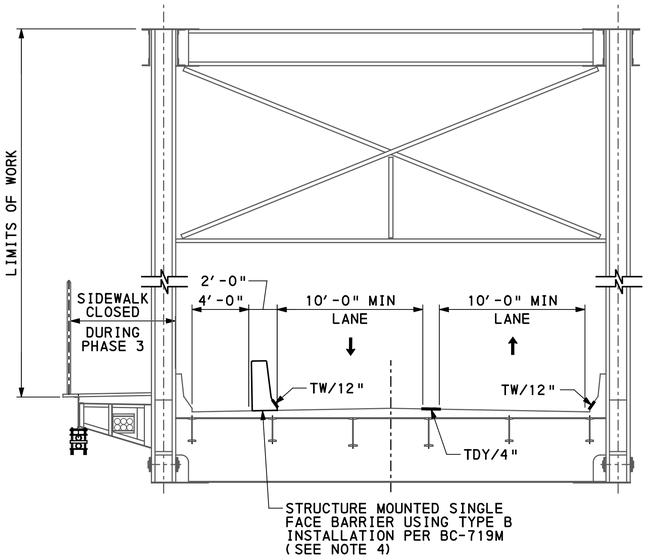

## PHASE 1 - TRAFFIC CONTROL

TRUSS SPAN SHOWN; APPROACH SPANS SIMILAR
(LOOKING AHEAD STATION)
0 5 10 FEET




## PHASE 2 - TRAFFIC CONTROL

TRUSS SPAN SHOWN; APPROACH SPANS SIMILAR
(LOOKING AHEAD STATION)
0 5 10 FEET




## PHASE 3 - TRAFFIC CONTROL

TRUSS SPAN SHOWN; APPROACH SPANS SIMILAR
(LOOKING AHEAD STATION)
0 5 10 FEET

## CONSTRUCTION PHASING NOTES:

1. FOR FURTHER DETAILS OF TRAFFIC CONTROL PHASING, SEE TRAFFIC CONTROL PLANS.
2. PHASE 1 CONSTRUCTION INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING AREAS OF THE PROJECT:
   - ALL STRUCTURAL STEEL REPAIRS AND PAINTING INCLUDING THE BENTS OF SPANS 1 THROUGH 9.
   - ALL STRUCTURAL STEEL REPAIRS AND PAINTING OF THE AREAS FROM THE TOP OF THE REAR FACE OF THE BARRIER ON THE NORTH SIDE OF THE BRIDGE TO THE EDGE OF THE UNDERSIDE OF THE SIDEWALK AS SHOWN. THIS AREA INCLUDES ALL TRUSS ELEMENTS AND FLOOR SYSTEM.
   - ALL STEEL AND OTHER REPAIRS IN SPAN 13.
   - MODIFICATIONS TO AND RECONSTRUCTION OF ALL DOWNSPOUTING INCLUDING SUPPORTS, EXCEPT WHERE NEW SCUPPERS ARE INDICATED.
   - CONSTRUCTION OF THE COMCAST CONDUIT HANGER SUPPORTS AND DUCTS (MATERIAL SUPPLIED BY OTHERS).
   - BEARING REPLACEMENT IN SPAN 1.
   - REPAIRS TO THE EAST ABUTMENT, THE WEST ABUTMENT AND THE ROADWAY FACE OF PIER 5.
   - REMOVAL OF EXISTING COMCAST UTILITIES AND CONSTRUCTION OF NEW CONDUIT DUCT BANK
   - PHASE 1 WORK MAY EXTEND INTO PHASE 2. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION REGARDING MILESTONE DATES.
3. OVERHEAD TRUSS WORK MAY COMMENCE IN PHASE 1 AND CONTINUE THROUGH PHASE 2A.
   - THE SWAY AND OTHER BRACING, INCLUDING THE PORTAL BRACING, ABOVE THE ROADWAY.
   - PROVIDE A MINIMUM OF 14'-6" VERTICAL CLEARANCE FOR ALL WORK PLATFORMS AND PAINT CONTAINMENT OVER THE ROADWAY.
4. PHASE 2 CONSTRUCTION INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING AREAS OF THE PROJECT:
   - STEEL REPAIRS AND PAINTING ON ALL REMAINING PORTIONS OF THE SOUTH TRUSS NOT COMPLETED IN PHASE 1.
   - STEEL REPAIRS AND PAINTING OF THE THROUGH GIRDER IN SPAN 4 ON THE SOUTH SIDE OF THE BRIDGE MAY BE CONDUCTED DURING THIS PHASE. REPLACEMENT OF THE BARRIER ALONG THE SOUTH GIRDER MAY ALSO BE CONDUCTED IN THIS PHASE.
   - CONSTRUCTION OF THE BARRIER FLASHING.
   - CONSTRUCTION OF BARRIER PROTECTIVE FENCE IN SPAN 13. NOTE THAT ANY WORK IN SPAN 13 OVER THE RAILROAD MUST COMPLY WITH APPROPRIATE NORFOLK SOUTHERN REQUIREMENTS.
5. PHASE 2A CONSTRUCTION WILL BE CONDUCTED UNDER A FULL BRIDGE CLOSURE AND INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING AREAS OF THE PROJECT:
   - ALL REPAIRS TO SPAN 14 INCLUDING TEMPORARY SHORING AND CONSTRUCTION OF THE JOINT REPLACEMENT AT PIER 5.
   - CONSTRUCTION OF THE WEST APPROACH SLAB.
   - ALL WORK ON THE BRIDGE DECK INCLUDING BUT NOT LIMITED TO EXPANSION JOINT REPLACEMENTS, LMC OVERLAY CONSTRUCTION, AND MODIFICATIONS TO THE DECK DRAINAGE SYSTEM.
   - REMOVAL OF EXISTING HIGHWAY LIGHTING (RDWY ITEM).
   - RECONSTRUCTION OF BARRIERS AT LIGHT POLES INCLUDING LIGHT POLE ANCHORS AND JUNCTION BOXES.
   - STRUCTURAL REPAIRS AT NEW EXPANSION JOINTS AT PIERS 2 AND 4.
6. PHASE 3 CONSTRUCTION INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING AREAS OF THE PROJECT:
   - STEEL REPAIRS AND PAINTING ON ALL REMAINING PORTIONS OF THE NORTH TRUSS NOT COMPLETED IN PREVIOUS PHASES.
   - STEEL REPAIRS AND PAINTING OF THE THROUGH GIRDER IN SPAN 4 ON THE NORTH SIDE OF THE BRIDGE MAY BE CONDUCTED DURING THIS PHASE. REPLACEMENT OF THE BARRIER ALONG THE NORTH GIRDER MAY ALSO BE CONDUCTED IN THIS PHASE.
   - REMOVAL OF THE SIDEWALK PROTECTIVE FENCE AND INSTALLATION OF NEW FENCE.
   - REMOVAL OF THE SIDEWALK OVERLAY AND PLACEMENT OF THE NEW OVERLAY.
   - COORDINATE AND CONDUCT ANY WORK REQUIRED FOR THE BRIDGE LIGHTING WITH THIS PHASE OF CONSTRUCTION.
   - COORDINATE AND CONDUCT ANY WORK REQUIRED FOR THE BRIDGE LIGHTING WITH THIS PHASE OF CONSTRUCTION.
7. OTHER WORK REQUIRED FOR PIERS 1, 2, 3 AND 4, AND FOR THE RAILROAD FACE OF PIER 5, MAY BE CONDUCTED DURING ANY PHASE OF THE PROJECT AT THE CONTRACTOR'S DISCRETION. WORK SHALL BE COORDINATED WITH OTHER WORK SPECIFICALLY BEING PERFORMED IN NOTED PHASES.

## NOTES:

1. FOR GENERAL PLAN AND ELEVATION, SEE SHEET 1.
2. TRUSS SPANS SHOWN; APPROACH SPANS SIMILAR.
3. FOR ADDITIONAL REQUIREMENTS OF WORK IN SPAN 13 OVER RAILROAD, SEE SPECIAL PROVISIONS.
4. PROVIDE ADHESIVE ANCHORS FOR TEMPORARY BARRIER SIMILAR TO THE DETAILS SHOWN FOR ADHESIVE ANCHORS ON COMPOSITE ADJACENT BOX BEAMS ON BC-719M SHEET 3 OF 9.
5. COMPLETE ALL WORK FOR PHASE 2 PRIOR TO BEGINNING PHASE 2A. PHASE 2 TRAFFIC CONTROL MAY NOT BE RE-IMPLEMENTED FOLLOWING PHASE 2A.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
TRAFFIC CONTROL PHASING

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 10 OF 124

S - 40253

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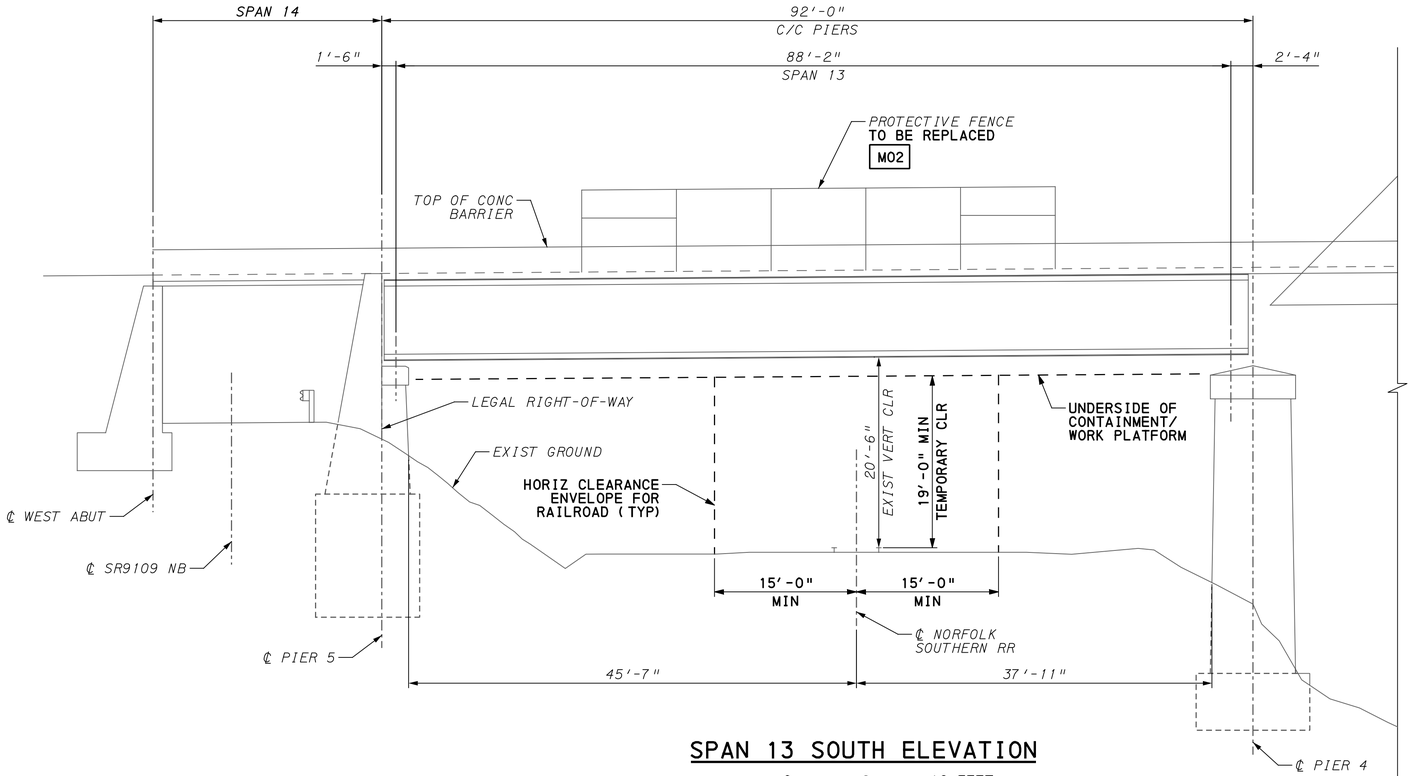
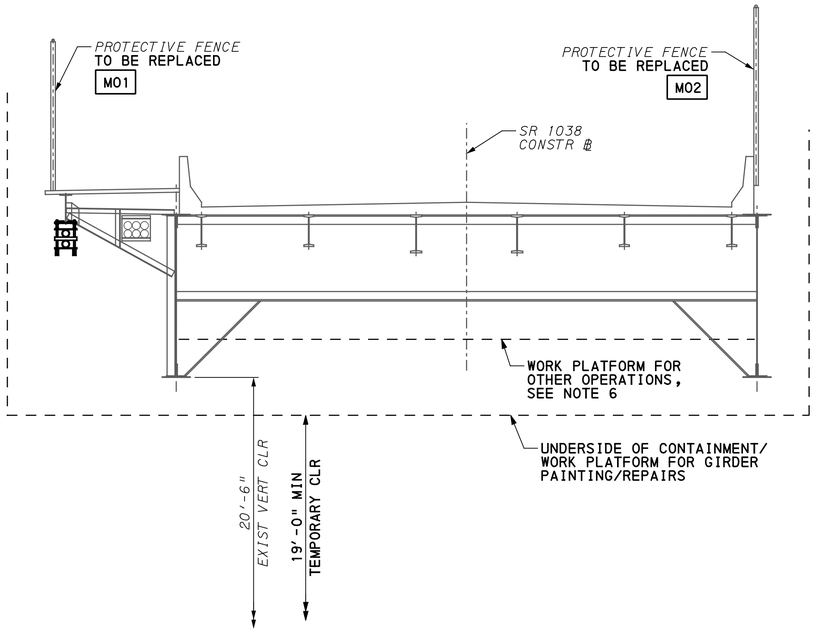



## SPAN 13 SOUTH ELEVATION

0 8 16 FEET




## SPAN 13 TYPICAL SECTION

0 2 4 6 FEET

## NOTES:

1. CONDUCT ALL WORK IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND NORFOLK SOUTHERN PUBLIC PROJECTS MANUAL, JANUARY 1, 2022.
2. DO NOT PLACE ANY MATERIALS, EQUIPMENT, SHORING OR OTHER ITEMS WITHIN THE DESIGNATED HORIZONTAL CLEARANCE ENVELOPE.
3. DO NOT STORE ANY HAZARDOUS OR FLAMMABLE MATERIALS UNDER THE BRIDGE OR WITHIN RAILROAD RIGHT OF WAY.
4. CONSTRUCTION AND PAINTING OPERATIONS UNDER THE STRUCTURE, INCLUDING OPERATIONS WITHIN THE CONTAINMENT OR THE WORK PLATFORM, MAY ONLY BE CONDUCTED UNDER FLAGGING OPERATIONS.
5. COMPLETE ALL WORK WHICH REQUIRES THE USE OF THE WORK PLATFORM AND CONTAINMENT IN SPAN 13 WITHIN TWENTY-ONE (21) CALENDAR DAYS. WORK INCLUDES PLACEMENT AND REMOVAL OF THE PLATFORM, STEEL REPAIRS, BLASTING AND PAINTING OPERATIONS. THIS WORK MUST OCCUR BETWEEN SEPTEMBER 10, 2023 AND SEPTEMBER 30, 2023 UNLESS OTHERWISE APPROVED BY NORFOLK SOUTHERN.
6. UNDERDECK SHIELDING OR OTHER FALL PROTECTION REQUIRED FOR OTHER CONSTRUCTION OPERATIONS NOT PERFORMED WITHIN THE 21 DAY TIME FRAME SHALL BE PLACED ABOVE THE TOP OF THE BOTTOM FLANGE OF THE EXISTING GIRDER SO TO NOT REDUCE THE EXISTING VERTICAL CLEARANCE.
7. THE CONTRACTOR IS TO RESUBMIT A REQUEST FOR A REDUCED TEMPORARY CLEARANCE FOR REVIEW AND APPROVAL BY NORFOLK SOUTHERN A MINIMUM OF 60 DAYS IN ADVANCE OF THE WORK.
8. ALL UTILITY INSTALLATIONS OR RELOCATIONS THAT ARE REQUIRED IN CONJUNCTION WITH THIS PROJECT CAN BE INSTALLED OR RELOCATED AS PART OF THE PROJECT PROVIDED THE CONSTRUCTION IS PERFORMED BY THE PROJECT CONTRACTOR OR PROJECT CONTRACTOR'S SUB-CONTRACTOR. HOWEVER, THE UTILITY MUST SUBMIT AN APPLICATION FOR THE INSTALLATION OR RELOCATION TO NS PIPE AND WIRE FOR APPROPRIATE HANDLING FOR LICENSE AGREEMENT AND APPLICABLE FEES. FOR UTILITY APPLICATIONS GO TO: HTTP://WWW.NSCORP.COM/CONTENT/NSCORP/EN/REAL-ESTATE/NORFOLK-SOUTHERN-SERVICES/WIRE-PIPELINE-FIBER-OPTIC-PROJECTS.HTML. NOTE: LICENSE AGREEMENT MUST BE EXECUTED PRIOR TO UTILITY BEING INSTALLED OR RELOCATED.

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR QUANTITIES AND LIMITS OF REPAIRS, SEE FRAMING, SUBSTRUCTURE AND DECK PLANS.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SPAN 13 CONSTRUCTION CLEARANCES

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 11 OF 124

S - 40253

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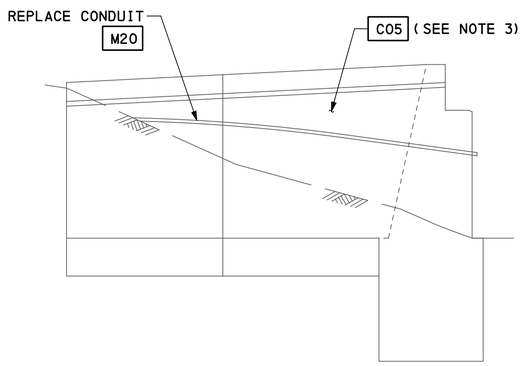
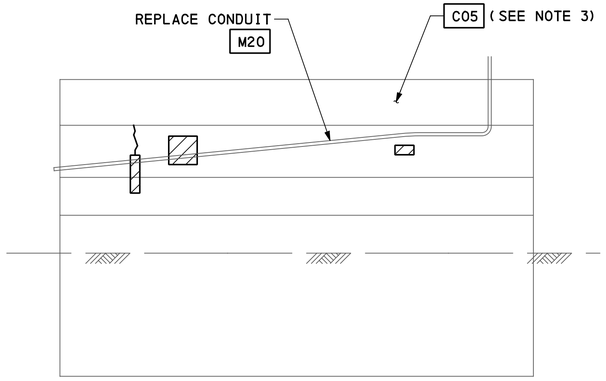


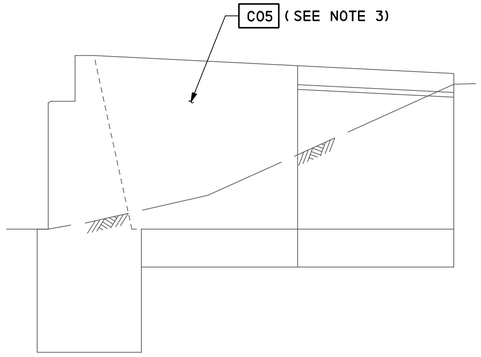

NORTHEAST WINGWALL ELEVATION

0 8 16 FEET




EAST ABUTMENT ELEVATION

0 8 16 FEET




SOUTHEAST WINGWALL ELEVATION

0 8 16 FEET

## LEGEND:

- C00 — DENOTES REPAIR
- EPOXY INJECTION CRACK SEAL (C03)
- REPAIR DETERIORATED CONCRETE (C02)

REPAIR M20

ITEM 9000-0210
REPAIR M20 - REPLACE CONDUIT

REPAIR M20

ITEM 9000-0210
REPAIR M20 - REPLACE CONDUIT

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE ABUTMENT, INCLUDING THE BEAM SEAT. APPLY COATING TO THE GROUND LINE.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

### REPAIR DESCRIPTION AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| C02 | SUBSTRUCTURE SPALL REPAIR | 20 | CF | 5 |
| C03 | EPOXY INJECTION CRACK SEAL | N/A | LF | 4 |
| C05 | PROTECTIVE COATING, PENETRATING SEALER | N/A | SF | 2000 |
| M20 | REPLACE CONDUIT | 12 | LF | 90 |

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

COMMONWEALTH OF PENNSYLVANIA
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PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# EAST ABUTMENT ELEVATION & REPAIRS

RECOMMENDED

OCTOBER 26, 2022



S - 40253

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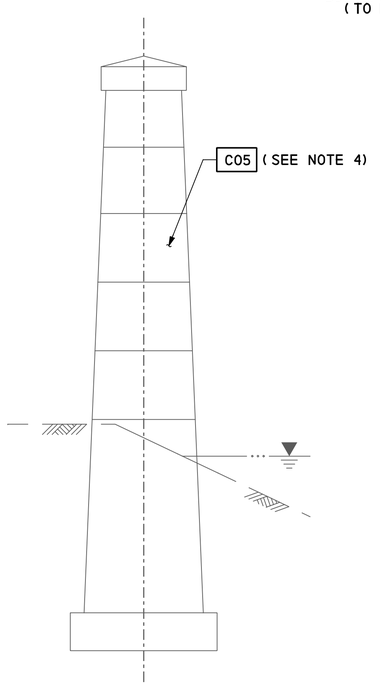
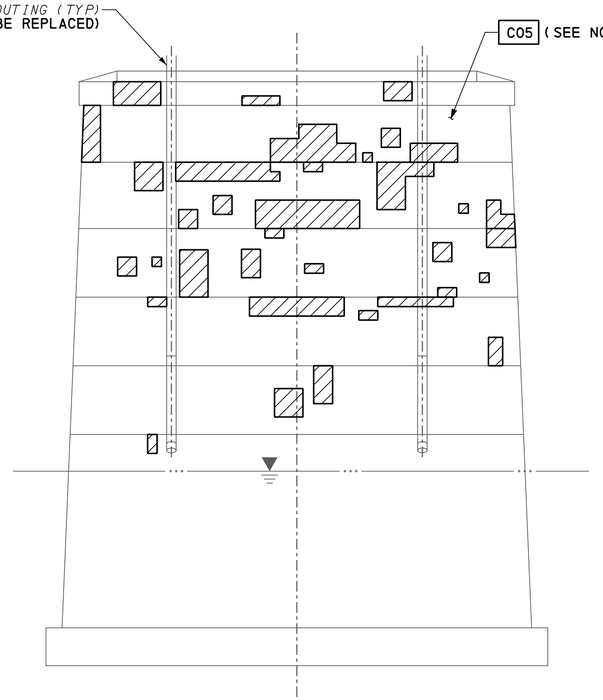


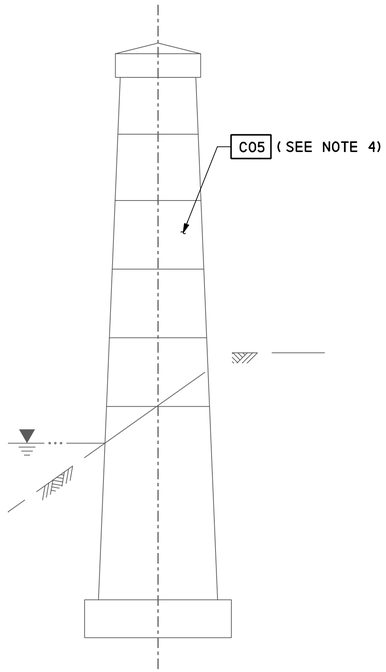

PIER 1 - NORTH FACE

0 8 16 FEET



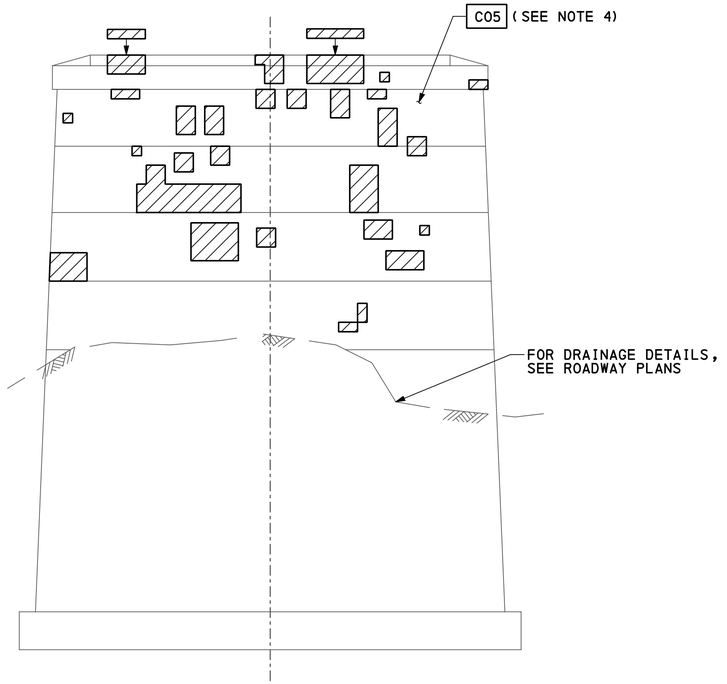

PIER 1 - WEST FACE

0 8 16 FEET




PIER 1 - SOUTH FACE

0 8 16 FEET




PIER 1 - EAST FACE

0 8 16 FEET

## LEGEND:

- C00 — DENOTES REPAIR
- EPOXY INJECTION CRACK SEAL (C03)
- REPAIR DETERIORATED CONCRETE (C02)

| REPAIR DESCRIPTION AND QUANTITIES | | | | |
|---|---|---|---|---|
| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
| C02 | SUBSTRUCTURE SPALL REPAIR | 20 | CF | 321 |
| C05 | PROTECTIVE COATING, PENETRATING SEALER | N/A | SF | 4600 |

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEET 108.
4. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE PIER, INCLUDING THE BEAM SEAT. APPLY COATING TO THE GROUND LINE AND APPROXIMATELY ONE FOOT ABOVE NORMAL POOL ELEVATION.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# PIER 1 ELEVATION & REPAIRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

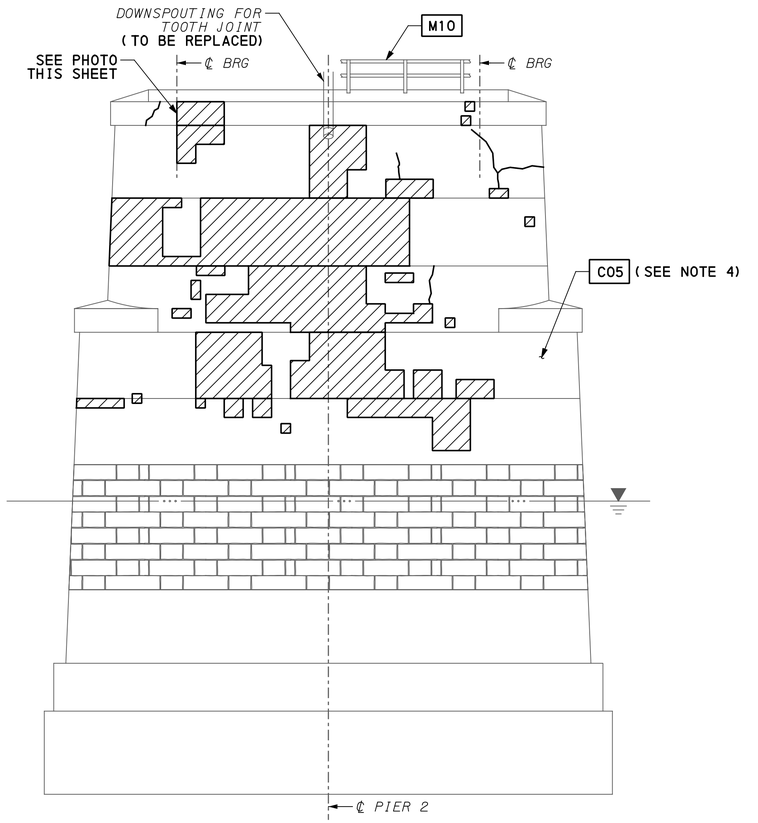
OCTOBER 26, 2022

SHEET 13 OF 124

S - 40253

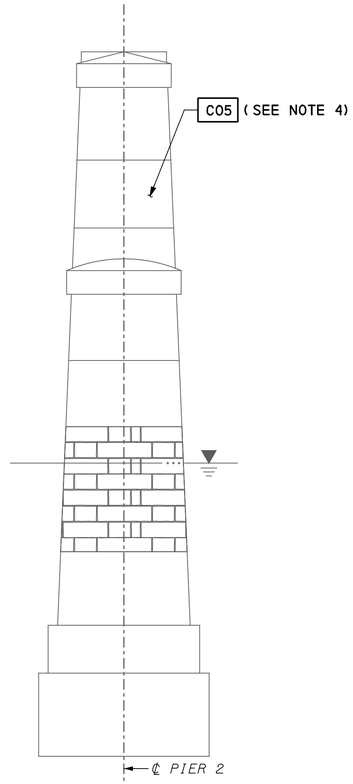
| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 7:54:46 AM



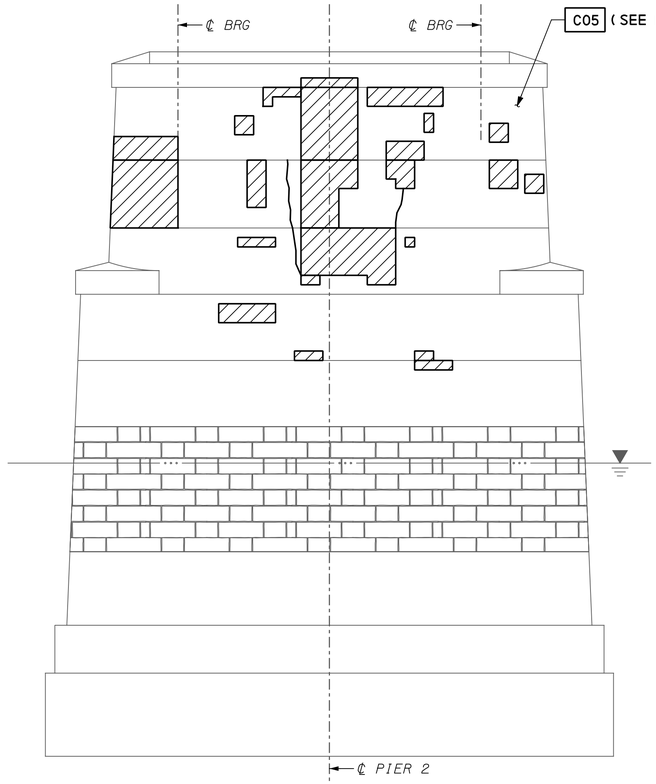

PIER 2 - WEST FACE

0 8 16 FEET



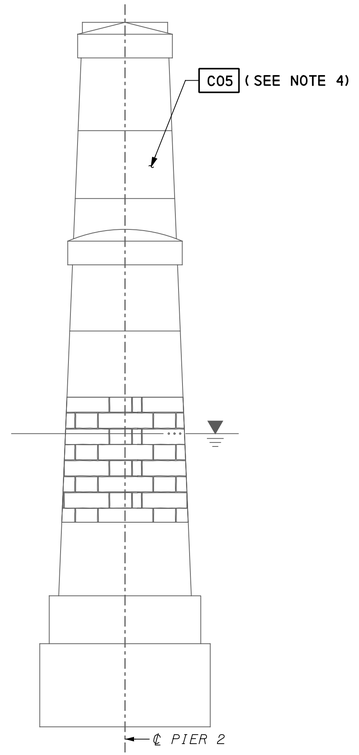

PIER 2 - SOUTH FACE

0 8 16 FEET




PIER 2 - EAST FACE

0 8 16 FEET




PIER 2 - NORTH FACE

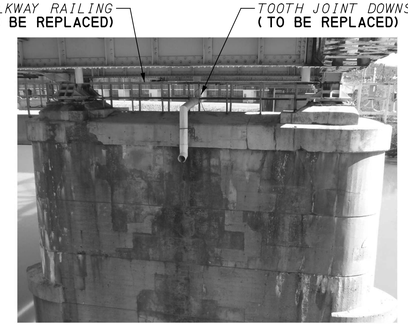
0 8 16 FEET

## LEGEND:

- C00 — DENOTES REPAIR
- EPOXY INJECTION CRACK SEAL (C03)
- REPAIR DETERIORATED CONCRETE (C02)

REPAIR C02

PIER 2 WEST FACE NEAR NORTH TRUSS BEARING




REPAIR M10

ITEM 1050-0261
REPAIR M10 - REPLACE PIER WALKWAY RAILING

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEET 108.
4. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE PIER, INCLUDING THE BEAM SEAT. APPLY COATING TO APPROXIMATELY ONE FOOT ABOVE NORMAL POOL ELEVATION.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

## REPAIR DESCRIPTION AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| C02 | SUBSTRUCTURE SPALL REPAIR | 20 | CF | 604 |
| C03 | EPOXY INJECTION CRACK SEAL | N/A | LF | 35 |
| C05 | PROTECTIVE COATING, PENETRATING SEALER | N/A | SF | 5200 |
| M10 | REPLACE PIER WALKWAY RAILING | 14 | EA | 2 |

## NOTE:

A. VERIFY SOUNDNESS OF CONCRETE AT BEARING PEDESTAL. REPORT FINDINGS TO THE REPRESENTATIVE.

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# PIER 2 ELEVATION & REPAIRS

RECOMMENDED

OCTOBER 26, 2022

SHEET 14 OF 124

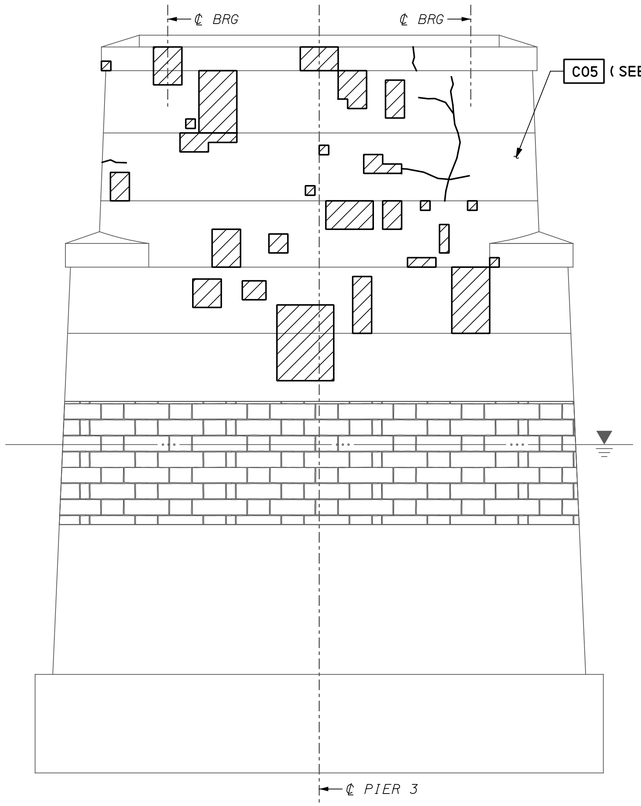
S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

FILE NAME: G:\17-048B New Kensington Final\CADD\Structures\Pier 2.dgn

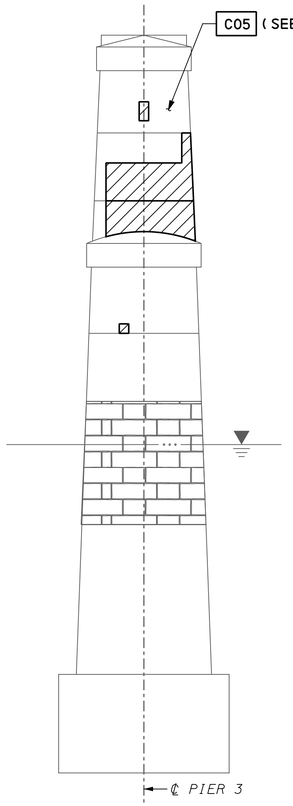
PLOTTED: 10/26/2022 7:54:54 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Pier 3.dgn



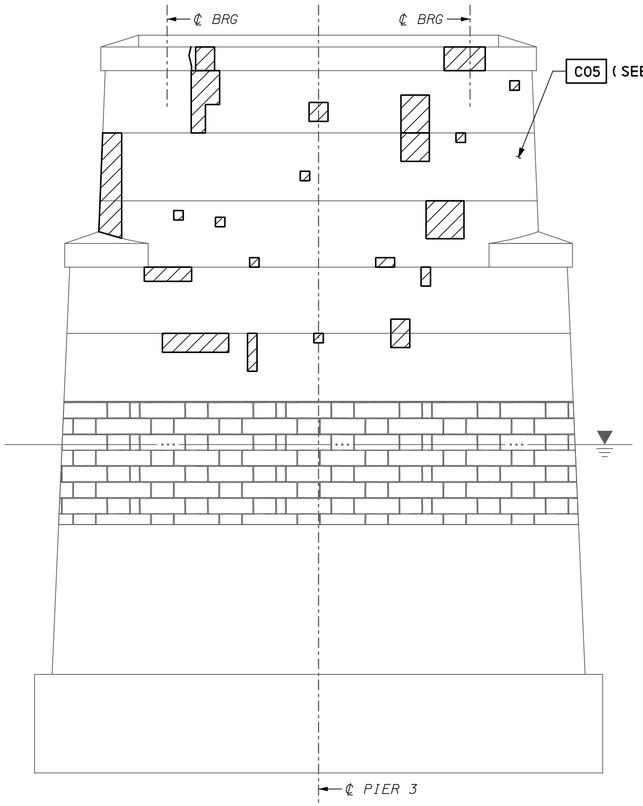

PIER 3 - WEST FACE

0 8 16 FEET



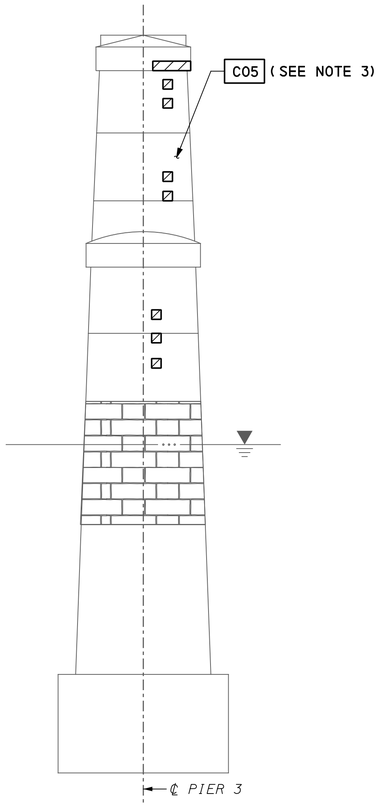

PIER 3 - SOUTH FACE

0 8 16 FEET




PIER 3 - EAST FACE

0 8 16 FEET




PIER 3 - NORTH FACE

0 8 16 FEET

NOTES:

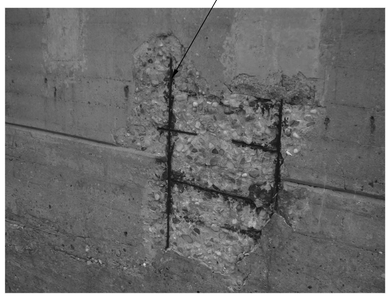
1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE PIER, INCLUDING THE BEAM SEAT. APPLY COATING TO APPROXIMATELY ONE FOOT ABOVE NORMAL POOL ELEVATION.

LEGEND:

- C00 — DENOTES REPAIR
- EPOXY INJECTION CRACK SEAL (C03)
- REPAIR DETERIORATED CONCRETE (C02)

REPAIR DESCRIPTION AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| C02 | SUBSTRUCTURE SPALL REPAIR | 20 | CF | 312 |
| C03 | EPOXY INJECTION CRACK SEAL | N/A | LF | 34 |
| C05 | PROTECTIVE COATING, PENETRATING SEALER | N/A | SF | 5100 |




REPAIR C02

PIER 3 WEST FACE

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

SR 1038 PREVIOUSLY KNOWN AS LR 188

BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# PIER 3 ELEVATION & REPAIRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

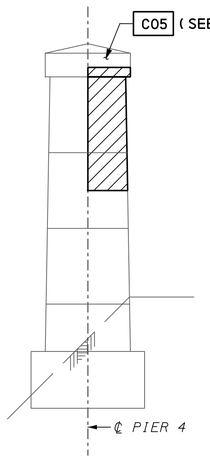
OCTOBER 26, 2022

SHEET 15 OF 124

S - 40253

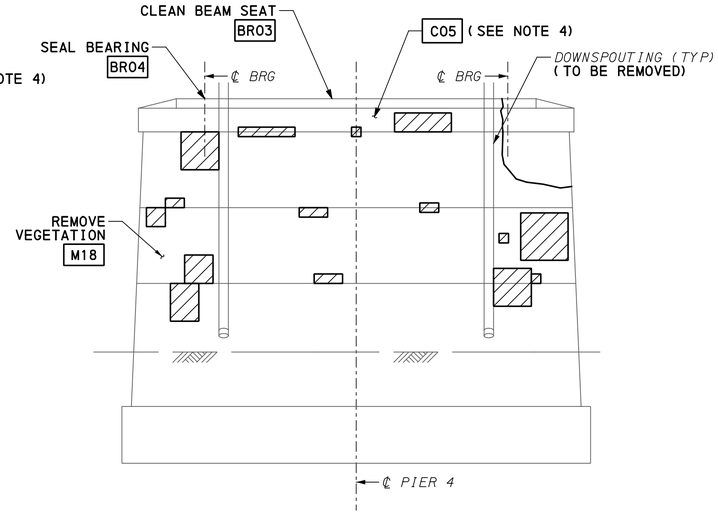
DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

PLOTTED: 10/26/2022 7:54:58 AM



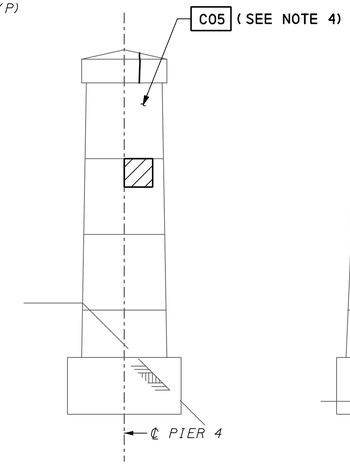

PIER 4 - NORTH FACE

0 8 16 FEET



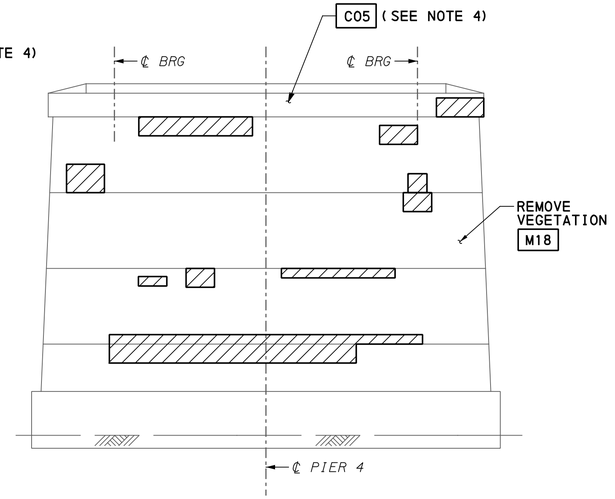

PIER 4 - WEST FACE

0 8 16 FEET




PIER 4 - SOUTH FACE

0 8 16 FEET




PIER 4 - EAST FACE

0 8 16 FEET

DURING VEGETATION REMOVAL ON THE WEST FACE OF PIER 4, DO NOT DISTURB EXISTING GROUND LINE OR IMPACT DRAINAGE ON RAILROAD PROPERTY. REMOVE VEGETATION AT GROUND LEVEL.

## LEGEND:

C00 DENOTES REPAIR

EPOXY INJECTION CRACK SEAL (C03)

REPAIR DETERIORATED CONCRETE (C02)

REPAIR M18

ITEM 9000-0208
REPAIR M18 - REMOVE VEGETATION
SEE SPECIAL PROVISIONS

REPAIR BR04

ITEM 9000-0214
REPAIR BR04 - SEAL BEARING
SEE SPECIAL PROVISIONS

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEET 109.
4. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE PIER, INCLUDING THE BEAM SEAT. APPLY COATING TO THE GROUND LINE AND APPROXIMATELY ONE FOOT ABOVE NORMAL POOL ELEVATION.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

## REPAIR DESCRIPTION AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| BR03 | CLEAN BEAM SEAT | N/A | EA | 1 |
| BR04 | SEAL BEARING | N/A | EA | 1 |
| C02 | SUBSTRUCTURE SPALL REPAIR | 20 | CF | 231 |
| C03 | EPOXY INJECTION CRACK SEAL | N/A | LF | 18 |
| C05 | PROTECTIVE COATING, PENETRATING SEALER | N/A | SF | 4000 |
| M18 | REMOVE VEGETATION | N/A | LS | |

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# PIER 4 ELEVATION & REPAIRS

RECOMMENDED

OCTOBER 26, 2022

SHEET 16 OF 124

S - 40253

DES: EAL | CKD: TSA | DWG: EAL | CKD: TSA

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Pier 4.dgn

PLOTTED: 10/26/2022 7:55:04 AM

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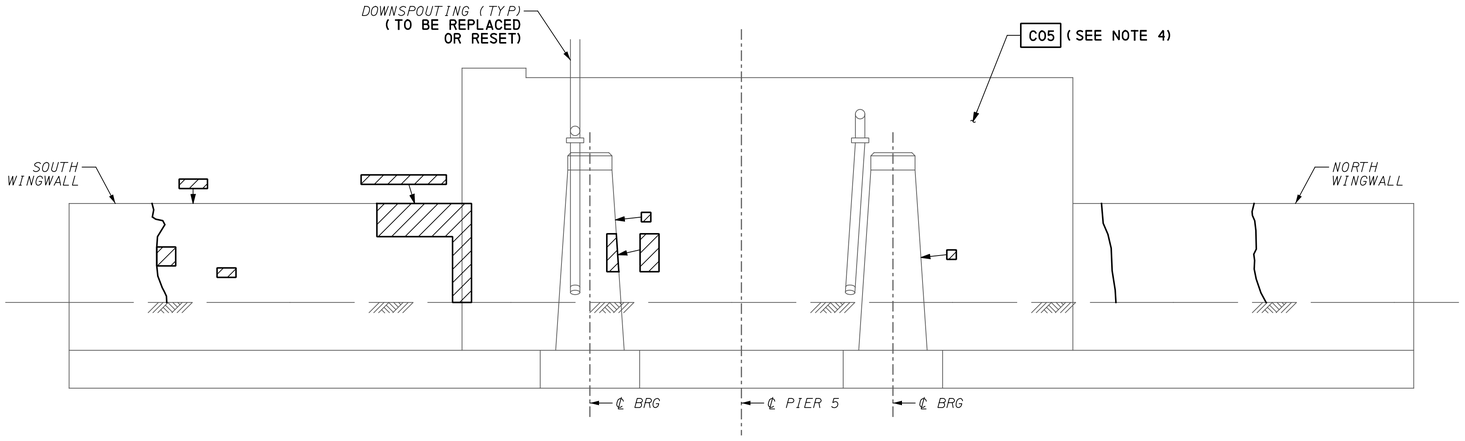
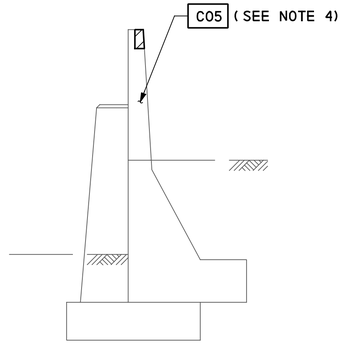


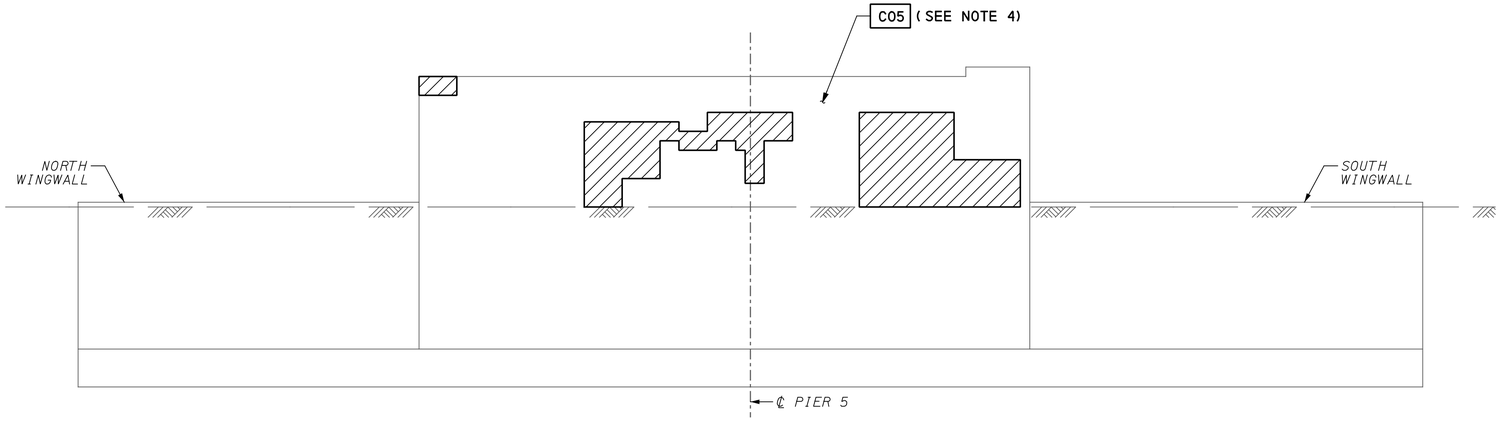

PIER 5 - EAST FACE

0 8 16 FEET




PIER 5 - NORTH FACE

0 8 16 FEET




PIER 5 - WEST FACE

0 8 16 FEET

| REPAIR DESCRIPTION AND QUANTITIES | | | | |
|---|---|---|---|---|
| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
| C02 | SUBSTRUCTURE SPALL REPAIR | 20 | CF | 223 |
| C03 | EPOXY INJECTION CRACK SEAL | N/A | LF | 34 |
| C05 | PROTECTIVE COATING, PENETRATING SEALER | N/A | SF | 3750 |

## LEGEND:

- C00 — DENOTES REPAIR
- ~~~ — EPOXY INJECTION CRACK SEAL (C03)
- ▨ — REPAIR DETERIORATED CONCRETE (C02)

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEET 109.
4. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE PIER, INCLUDING THE BEAM SEAT. APPLY COATING TO THE GROUND LINE.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
# PIER 5 ELEVATION & REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER
NO.
PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 17 OF 124

S - 40253

DES: EAL | CKD: TSA | DWG: EAL | CKD: TSA

PLOTTED: 10/26/2022 7:55:05 AM

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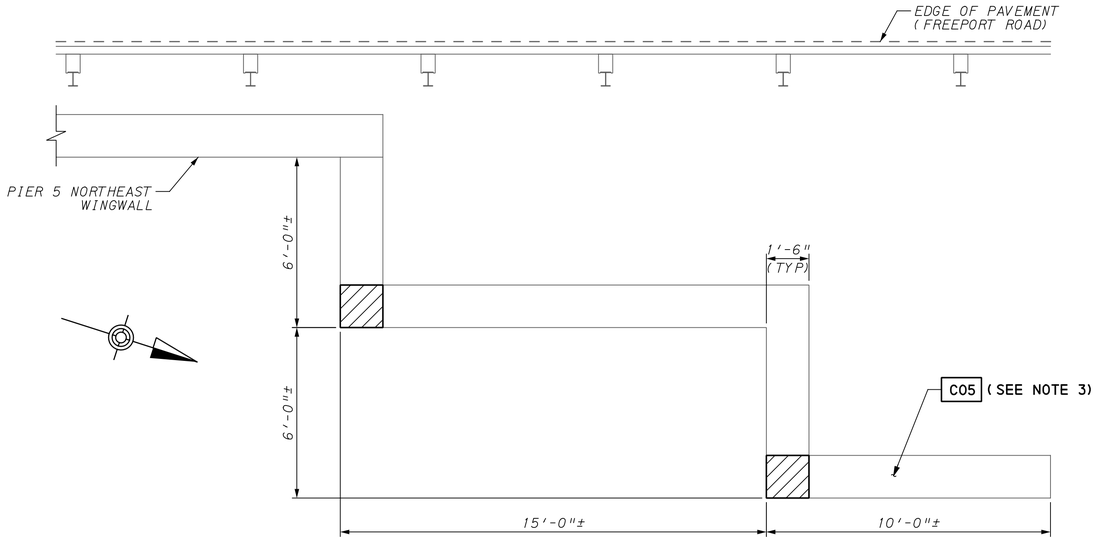
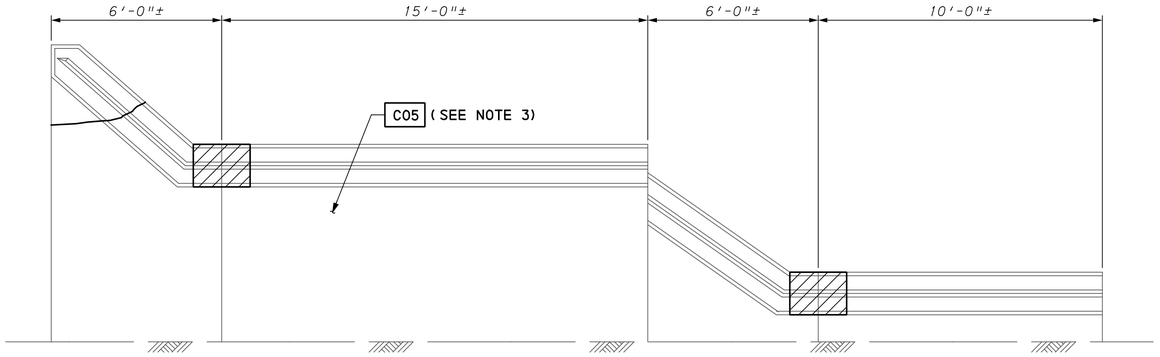



## PIER 5 WALL - PLAN

0 2 4 FEET




## PIER 5 WALL - DEVELOPED EAST AND NORTH FACE

0 2 4 FEET

| REPAIR DESCRIPTION AND QUANTITIES | | | | |
|---|---|---|---|---|
| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
| C02 | SUBSTRUCTURE SPALL REPAIR | 20 | CF | 12 |
| C03 | EPOXY INJECTION CRACK SEAL | N/A | LF | 5 |
| C05 | PROTECTIVE COATING, PENETRATING SEALER | N/A | SF | 260 |

## LEGEND:

C00 — DENOTES REPAIR

~ — EPOXY INJECTION CRACK SEAL (C03)

▨ — REPAIR DETERIORATED CONCRETE (C02)

## REPAIR C02, C03 AT PIER 5 WALL

ITEM 9000-9002 REPAIR DETERIORATED CONCRETE
ITEM 1091-0331 EPOXY INJECTION CRACK SEAL

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE WALL. APPLY COATING TO THE GROUND LINE.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
PIER 5 WALL ELEVATIONS AND REPAIRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 18 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 7:55:13 AM

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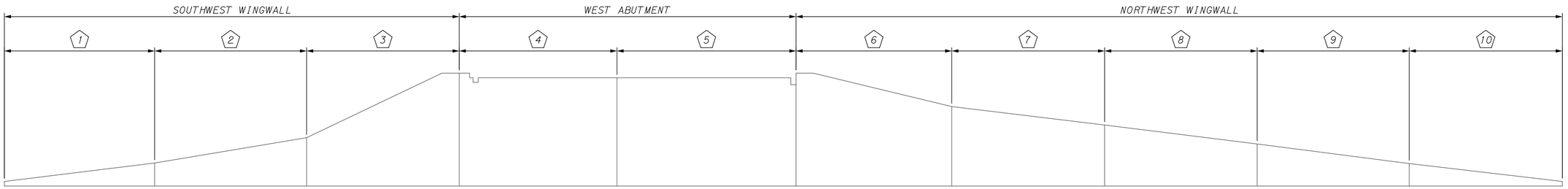
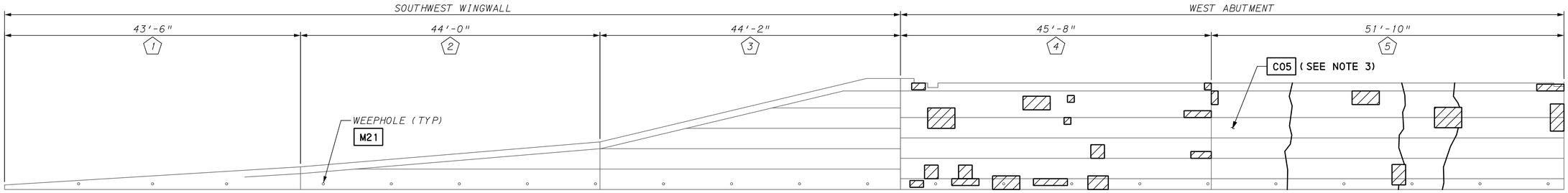


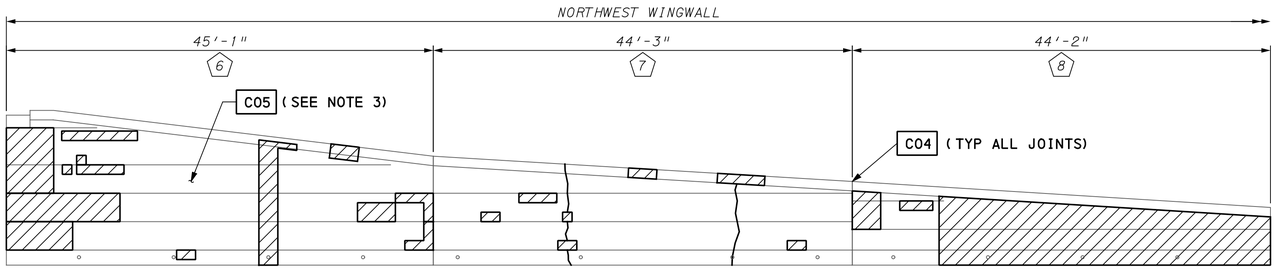

## WEST ABUTMENT & WINGWALL SCHEMATIC

NOT TO SCALE



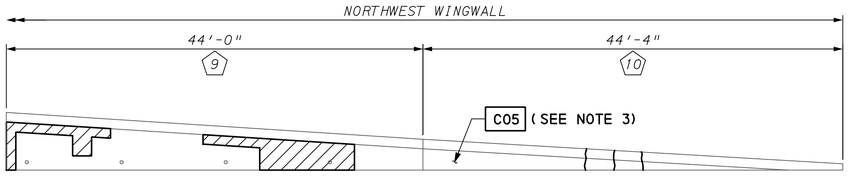

## WEST ABUTMENT & WINGWALL ELEVATION

0 8 16 FEET




## WEST ABUTMENT & WINGWALL ELEVATION

0 8 16 FEET




## WEST ABUTMENT & WINGWALL ELEVATION

0 8 16 FEET

## REPAIR M21

ITEM 9000-0211
REPAIR M21 - CORE WEEPHOLES AND INSTALL WEEPHOLE FILTER
REPRESENTATIVE CONDITIONS

## REPAIR DESCRIPTION AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| C02 | SUBSTRUCTURE SPALL REPAIR | 20 | CF | 185 |
| C03 | EPOXY INJECTION CRACK SEAL | N/A | LF | 73 |
| C04 | REPLACE WALL EXPANSION JOINT MATERIAL | N/A | LF | 90 |
| C05 | PROTECTIVE COATING, PENETRATING SEALER | N/A | SF | 4100 |
| M21 | CORE WEEPHOLES AND INSTALL WEEPHOLE FILTER | 19 | EA | 38 |

## LEGEND:

- C00 — DENOTES REPAIR
- EPOXY INJECTION CRACK SEAL (C03)
- REPAIR DETERIORATED CONCRETE (C02)
- 5 — WINGWALL PANEL NUMBER

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETERIORATED CONCRETE REPAIR DETAILS, SEE SHEET 20.
3. APPLY C05 TO ALL VERTICAL AND HORIZONTAL SURFACES OF THE ABUTMENT, INCLUDING THE BEAM SEAT. APPLY COATING TO THE GROUND LINE.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# WEST ABUTMENT ELEVATION & REPAIRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 19 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | EAL | CKD: | TSA |
|---|---|---|---|---|---|---|---|

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FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\Concrete Repair Details.dgn

## 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 ¾-INCH BEHIND THE FIRST MAT OF REINFORCEMENT BARS TO SOUND CONCRETE. ALLOW UNCOVERED OR EXPOSED REINFORCEMENT BARS TO HAVE A ¾-INCH CLEARANCE ALL AROUND. IF CONCRETE IS UNSOUND AT A DEPTH OF ¾-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-736M. IF ENOUGH SPLICE LENGTH IN 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

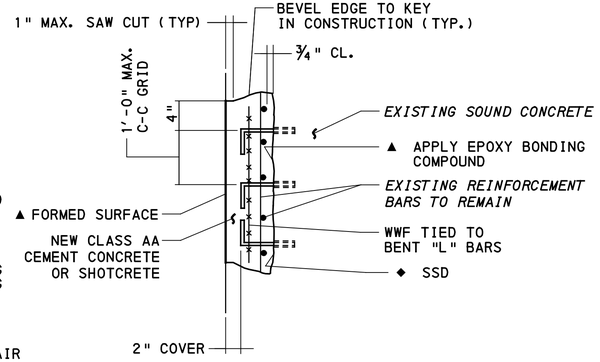
- SET FORMS TO PROVIDE MINIMUM CONCRETE COVER OF 2 INCHES. IF ENOUGH CONCRETE COVER ON EXISTING REINFORCEMENT BARS IS NOT AVAILABLE, HAUNCH REPAIR OUTWARD.
- MAINTAIN EXISTING CHAMFERS.
- AIR-BLAST REPAIR AREAS WITH OIL-FREE COMPRESSED AIR TO REMOVE ANY REMAINING CONTAMINANTS DETRIMENTAL TO THE BOND 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

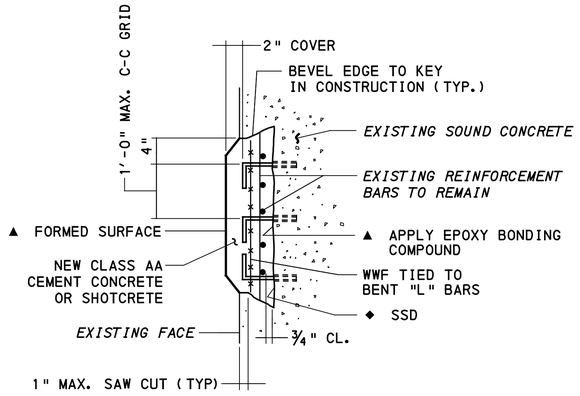
- PROVIDE MINIMUM CONCRETE COVER OF 2 INCHES. IF ENOUGH CONCRETE COVER ON EXISTING REINFORCEMENT BARS IS NOT AVAILABLE, HAUNCH REPAIR OUTWARD.
- MAINTAIN EXISTING CHAMFERS.
- AIR-BLAST REPAIR AREAS WITH OIL-FREE COMPRESSED AIR TO REMOVE ANY REMAINING CONTAMINANTS DETRIMENTAL TO THE BOND OF NEW CONCRETE.
- 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.

| ITEM 9000-9002 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 MANUFACTURES'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 | ASTM A185 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(a) |

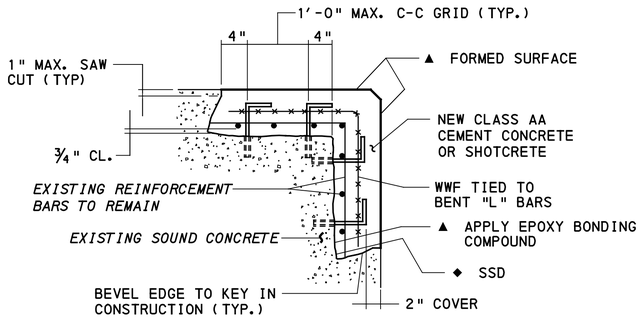
NOTE: ANY ADDITIONAL REINFORCING STEEL IS INCIDENTAL TO ITEM 9000-9002.



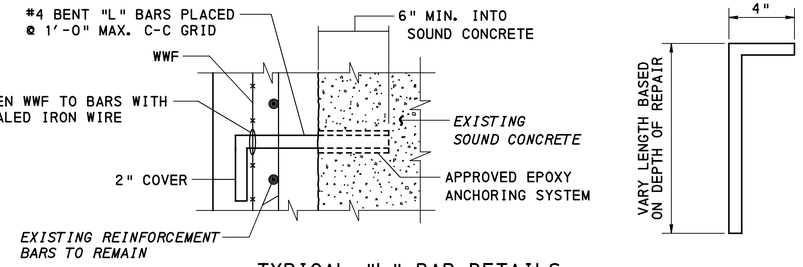

TYPICAL REPAIR DETAIL
(NOT TO SCALE)



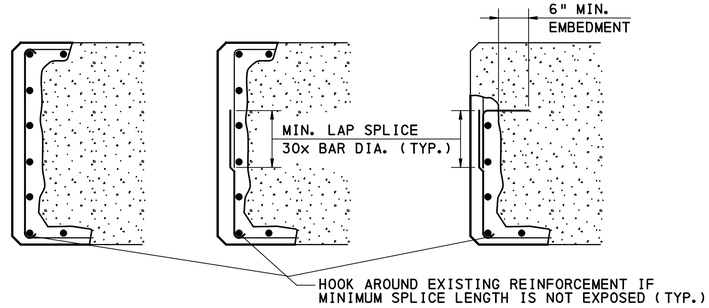

REPAIR FOR LESS THAN 2" COVER
(NOT TO SCALE)




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

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

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01

SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

## DETERIORATED CONCRETE REPAIR DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 20 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
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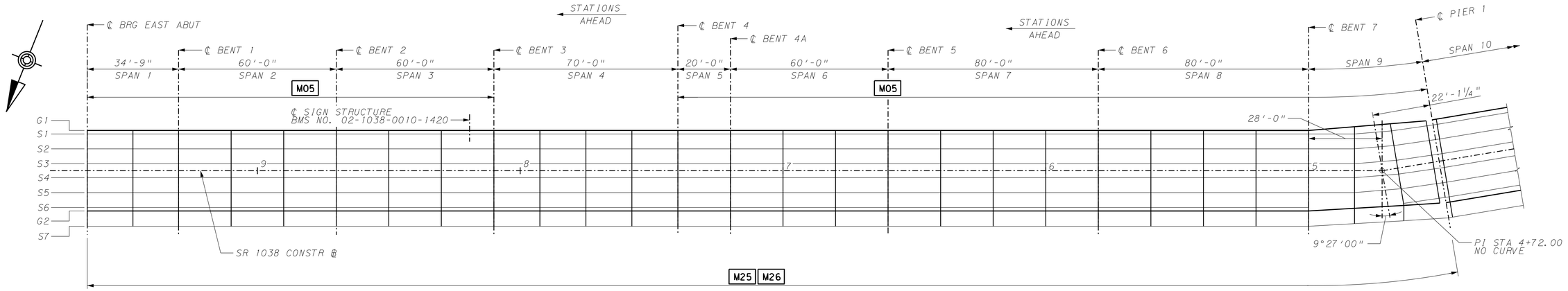
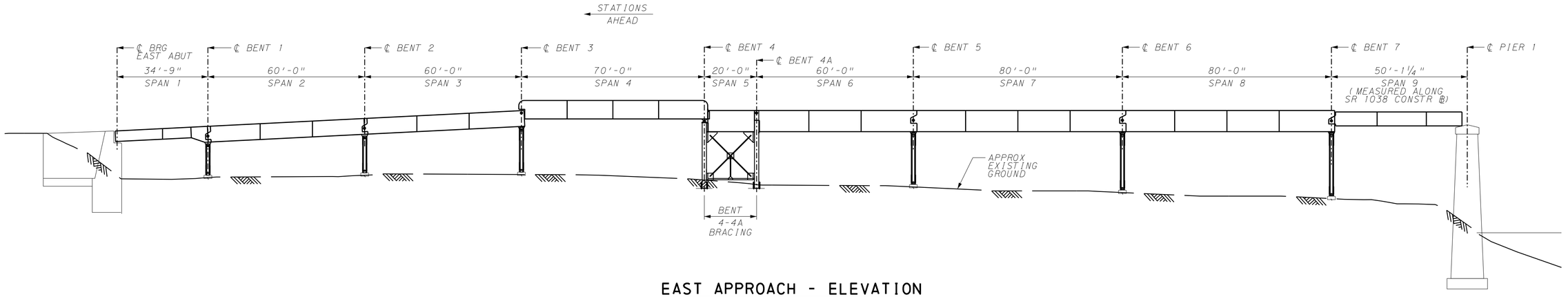



## EAST APPROACH - PLAN

0 20 40 FEET




## EAST APPROACH - ELEVATION

0 20 40 FEET

### REPAIR DESCRIPTIONS AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| M05 | INSTALL BARRIER FLASHING | 30 | LF | 444 |
| M25 | REMOVE EXISTING UTILITY LINES AND CONDUIT | 9 | LS | |
| M26 | INSTALL COMCAST CONDUIT | 7 | LS | |

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR BENT ELEVATIONS AND REPAIRS, SEE SHEETS 22 - 29.
3. FOR APPROACH SPAN FRAMING PLANS AND REPAIRS, SEE SHEETS 30 - 36.
4. FOR REPAIR TYPE [M05] DETAILS, SEE SHEET 30.
5. FOR REPAIR TYPE [M25] & [M26] DETAILS, SEE SHEETS 7 & 9.

### LEGEND:

[M05] DENOTES REPAIR

| DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS |
|---|---|---|---|

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01

SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

## EAST APPROACH OVERALL PLAN AND ELEVATION

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 21 OF 124

S - 40253

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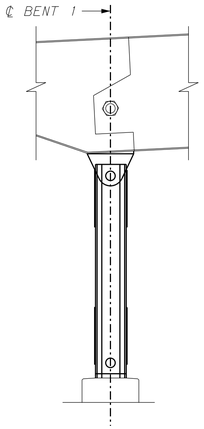
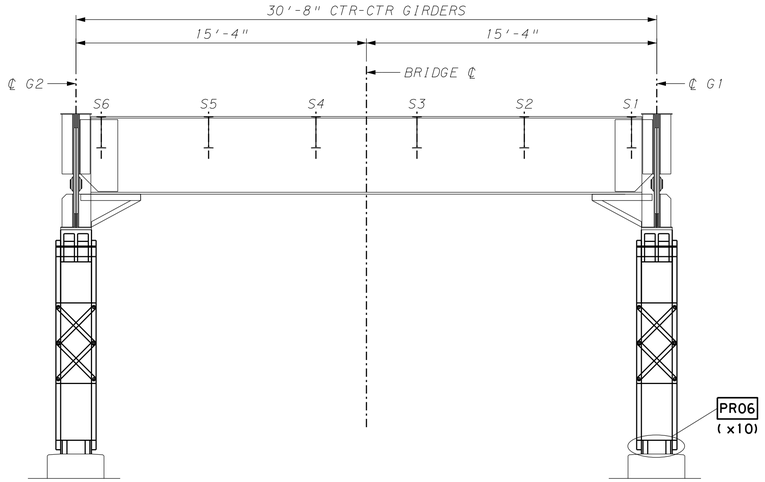
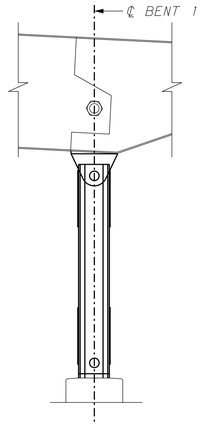


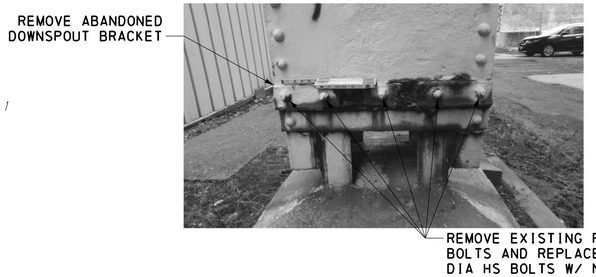

END VIEW
NORTH FACE LOOKING SOUTH




ELEVATION
WEST FACE LOOKING EAST
0 2 4 6 FEET




END VIEW
SOUTH FACE LOOKING NORTH

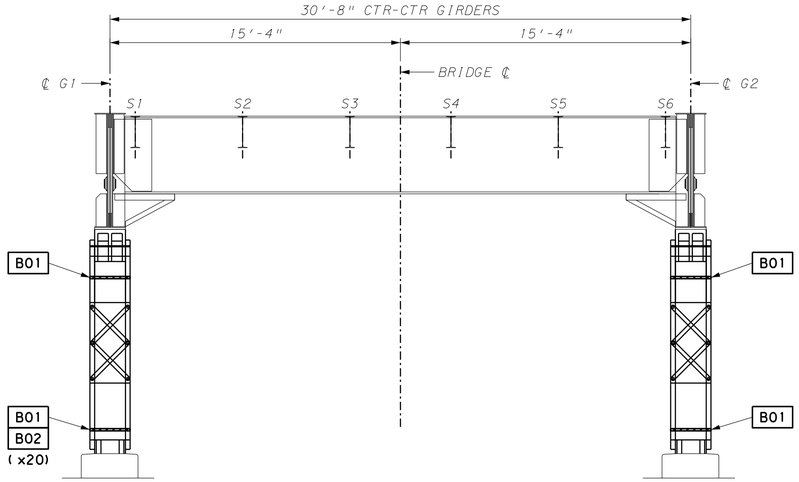



## REPAIR B01

ITEM 1050-0248
REMOVE ABANDONED DOWNSPOUT BRACKET
REPRESENTATIVE PHOTO

## REPAIR B01 - PROCEDURE AND NOTES

1. REMOVE EXISTING RIVETS OR BOLTS ATTACHING THE EXISTING ABANDONED DOWNSPOUT BRACKET TO THE BENT COLUMN.
2. REMOVE BRACKET ANGLE OR PLATE AND DISCARD.
3. REAM HOLES AS REQUIRED, USING HOLE IN OUTER-MOST PLY AS A TEMPLATE. INSTALL NEW ⅞"Ø HIGH STRENGTH BOLTS IN ALL OPEN HOLES.




ELEVATION
EAST FACE LOOKING WEST
0 2 4 6 FEET

| REPAIR DESCRIPTIONS AND QUANTITIES | | | | |
|---|---|---|---|---|
| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
| B01 | REMOVE ABANDONED DOWNSPOUT BRACKET | 22 | EA | 4 |
| B02 | REPLACE RIVET, BENT | 65 | EA | 20 |
| PR06 | PACK RUST REPAIR, BENT | 66 | LF | 10 |

LEGEND:
F00 DENOTES REPAIR

NOTES:
1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103- 110.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT 1 ELEVATION AND REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 22 OF 124

S - 40253

| DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS |
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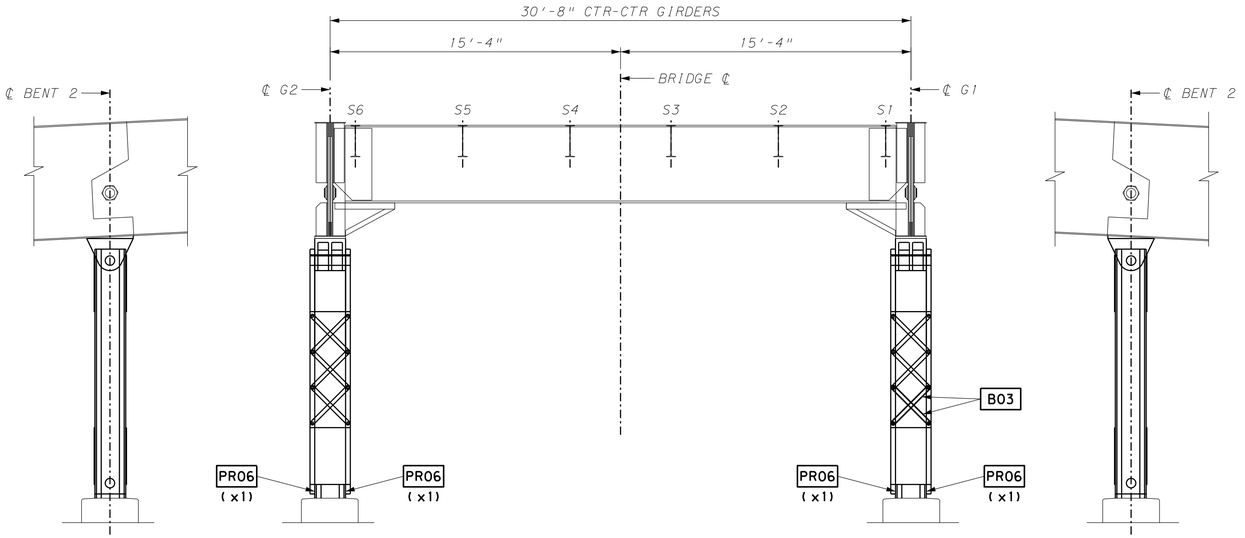
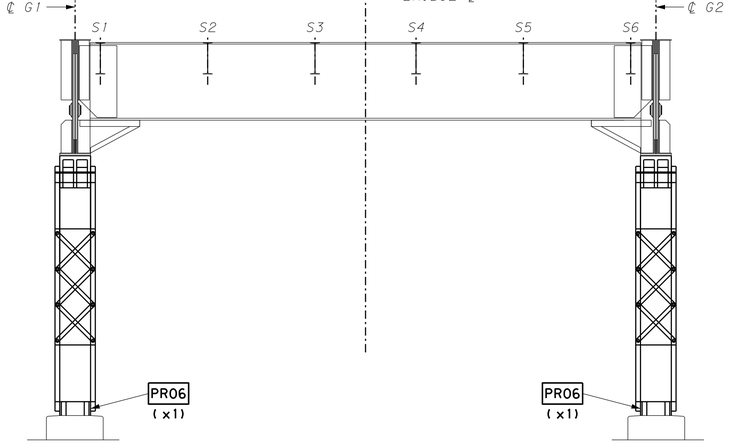


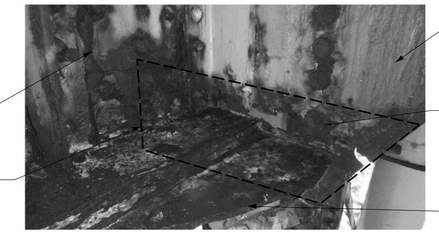

**END VIEW**
NORTH FACE LOOKING SOUTH

**ELEVATION**
WEST FACE LOOKING EAST
0 2 4 6 FEET

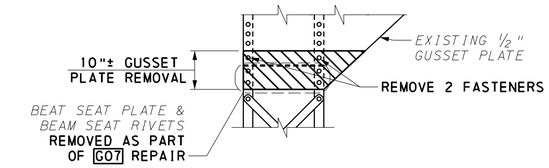
**END VIEW**
SOUTH FACE LOOKING NORTH



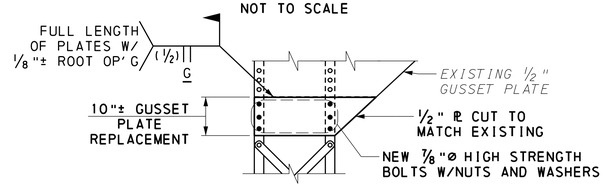

**ELEVATION**
EAST FACE LOOKING WEST
0 2 4 6 FEET




**REPAIR B10**
ITEM 1050-0257
REPAIR GUSSET PLATE
REPRESENTATIVE PHOTO




**GUSSET PLATE REMOVAL**
NOT TO SCALE




**GUSSET PLATE REPLACEMENT**
NOT TO SCALE

## REPAIR B10 - PROCEDURE AND NOTES

1. REMOVE GIRDER SEAT PLATE AND ASSOCIATED RIVETS AS PART OF REPAIR G07.
2. REMOVE EXISTING ½" GUSSET PLATE AS INDICATED OR AS DIRECTED BY THE REPRESENTATIVE AFTER ABRASIVE BLASTING OPERATIONS HAVE BEEN COMPLETED.
3. CUT NEW ½" GUSSET PLATE TO MATCH EXISTING GUSSET PLATE SHAPE. INSTALL GUSSET PLATE USING NEW ⅞"ø HIGH STRENGTH BOLTS W/NUTS AND WASHERS. REAM HOLES AS REQUIRED USING OUTERMOST PLY AS A TEMPLATE.
4. WELD SEAM BETWEEN EXISTING AND NEW GUSSET PLATES AS INDICATED. WELDING MAY BE PERFORMED FROM EITHER SIDE OF GUSSET PLATE.

| REPAIR DESCRIPTIONS AND QUANTITIES | | | | |
|---|---|---|---|---|
| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
| B03 | LACING BAR REPAIR TYPE 1, BENT | 50 | EA | 2 |
| PR06 | PACK RUST REPAIR, BENT | 66 | LF | 6 |

**NOTES:**

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103 - 110.

**LEGEND:**

F00 DENOTES REPAIR

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT 2 ELEVATION AND REPAIRS

RECOMMENDED
OCTOBER 26, 2022

SHEET 23 OF 124
S - 40253

| DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS |
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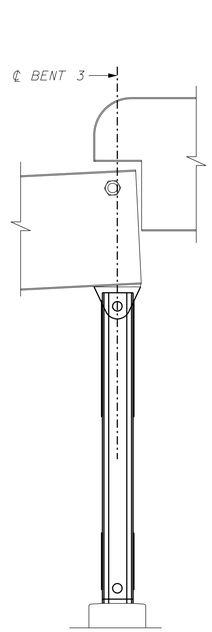
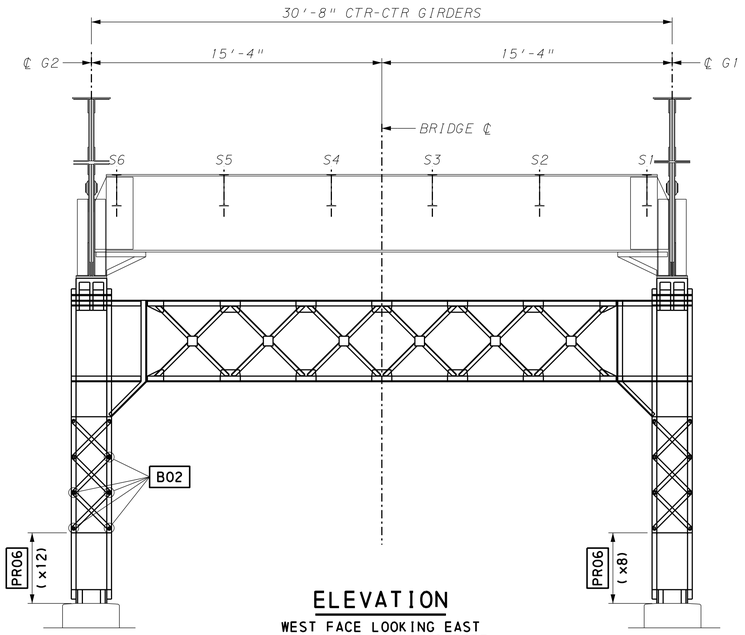
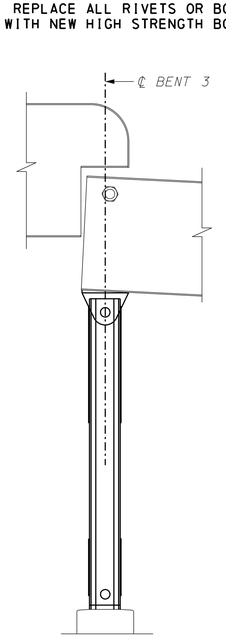


END VIEW
NORTH FACE LOOKING SOUTH




ELEVATION
WEST FACE LOOKING EAST
0 2 4 6 FEET



END VIEW
SOUTH FACE LOOKING NORTH

REPLACE ALL RIVETS OR BOLTS WITH NEW HIGH STRENGTH BOLTS

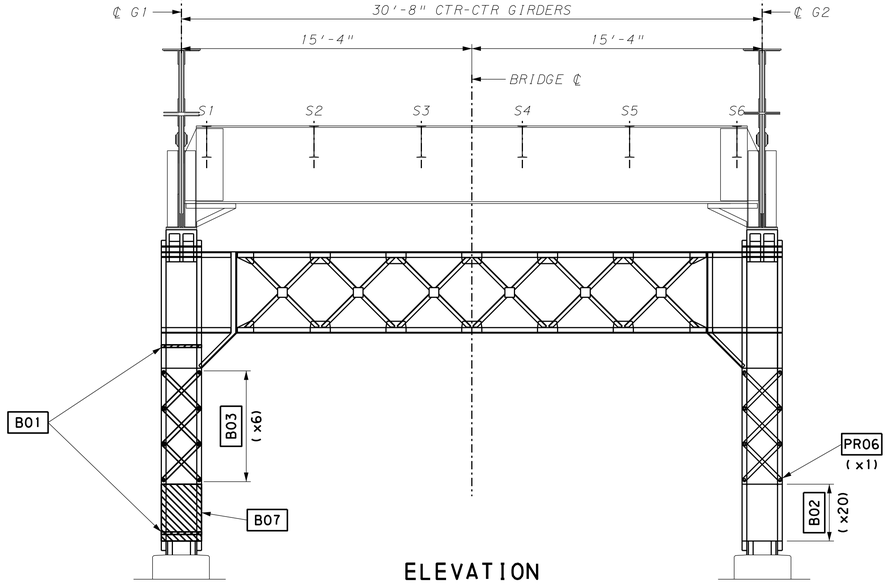
REMOVE DETERIORATED COLUMN STAY PLATE

## REPAIR B07

ITEM 1050-0254
COLUMN STAY PLATE REPAIR, BENT
REPRESENTATIVE PHOTO

## REPAIR B07 - PROCEDURE AND NOTES

1. REMOVE EXISTING RIVETS OR BOLTS ATTACHING THE EXISTING COLUMN STAY PLATE(S) TO THE COLUMN.
2. REMOVE STAY PLATE AND DISCARD.
3. REAM HOLES AS REQUIRED, USING HOLE IN OUTER-MOST PLY AS A TEMPLATE.
4. INSTALL NEW STAY PLATE. INSTALL NEW 7/8"ø HIGH STRENGTH BOLTS IN ALL OPEN HOLES.




ELEVATION
EAST FACE LOOKING WEST
0 2 4 6 FEET

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103 - 110.

## LEGEND:

F00 DENOTES REPAIR

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

## REPAIR DESCRIPTION AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| B01 | REMOVE ABANDONED DOWNSPOUT BRACKET | 22 | EA | 2 |
| B02 | REPLACE RIVET, BENT | 65 | EA | 25 |
| B03 | LACING BAR REPAIR TYPE 1, BENT | 50 | EA | 6 |
| B07 | COLUMN STAY PLATE REPAIR, BENT | 24 | EA | 1 |
| PR06 | PACK RUST REPAIR, BENT | 66 | LF | 21 |

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT 3 ELEVATION AND REPAIRS

RECOMMENDED
OCTOBER 26, 2022

SHEET 24 OF 124
S - 40253

| DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS |
|---|---|---|---|

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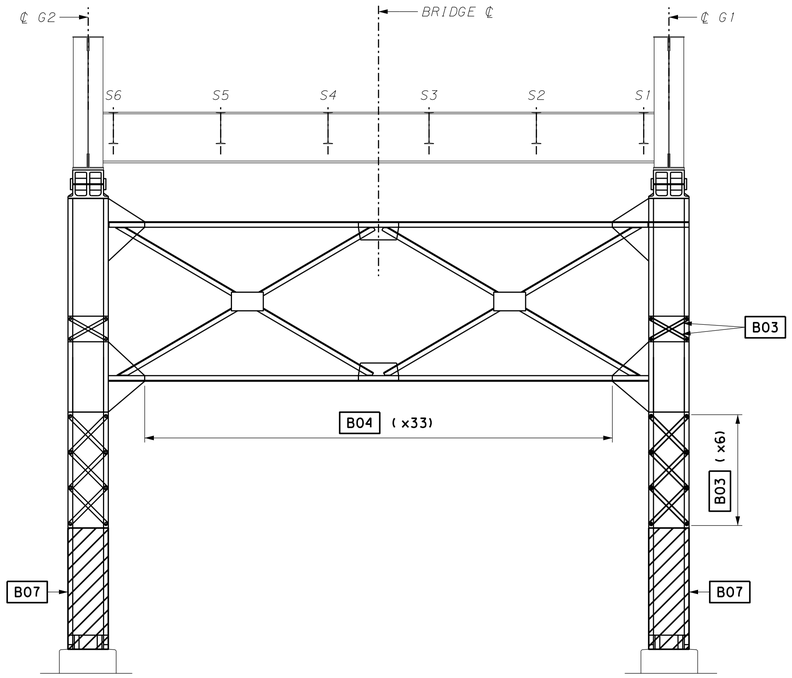
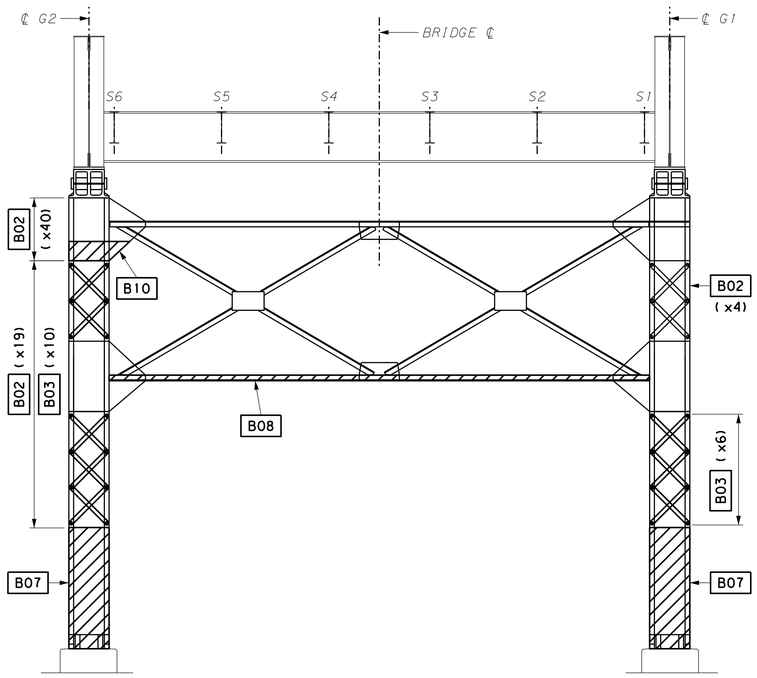



## BENT 4 ELEVATION

WEST FACE LOOKING EAST
0 2 4 6 FEET




## BENT 4A ELEVATION

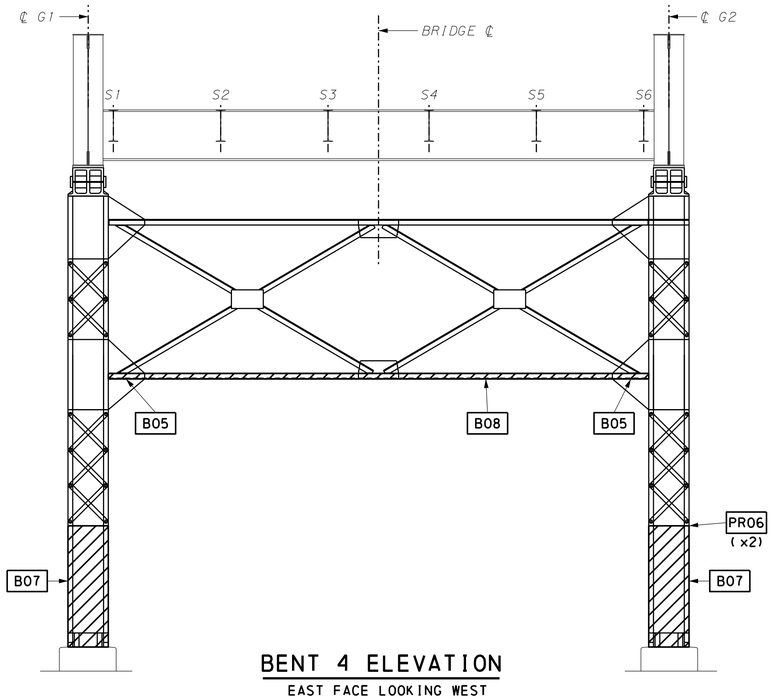
WEST FACE LOOKING EAST
0 2 4 6 FEET

| BENT 4 REPAIR DESCRIPTION AND QUANTITIES | | | | |
|---|---|---|---|---|
| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
| B03 | LACING BAR REPAIR TYPE 1, BENT | 50 | EA | 8 |
| B04 | LACING BAR REPAIR TYPE 2, BENT | 50 | EA | 33 |
| B05 | REPLACE BATTEN PLATE, TYPE 1, BENT | 51 | EA | 2 |
| B07 | COLUMN STAY PLATE REPAIR, BENT | 24 | EA | 4 |
| B08 | REPLACE SWAY BRACE ANGLE | 70 | EA | 1 |
| PR06 | PACK RUST REPAIR, BENT | 66 | LF | 2 |

| BENT 4A REPAIR DESCRIPTION AND QUANTITIES | | | | |
|---|---|---|---|---|
| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
| B02 | REPLACE RIVET, BENT | 65 | EA | 70 |
| B03 | LACING BAR REPAIR TYPE 1, BENT | 50 | EA | 16 |
| B04 | LACING BAR REPAIR TYPE 2, BENT | 50 | EA | 42 |
| B05 | REPLACE BATTEN PLATE, TYPE 1, BENT | 51 | EA | 4 |
| B06 | REPLACE BATTEN PLATE, TYPE 2, BENT | 51 | EA | 8 |
| B07 | COLUMN STAY PLATE REPAIR, BENT | 24 | EA | 4 |
| B08 | REPLACE SWAY BRACE ANGLE | 70 | EA | 2 |
| B10 | REPAIR GUSSET PLATE | 23 | EA | 1 |
| M22 | REMOVE ABANDONED UTILITY BRACKET OR CONNECTION | 27 | EA | 1 |
| PR06 | PACK RUST REPAIR, BENT | 66 | LF | 7 |

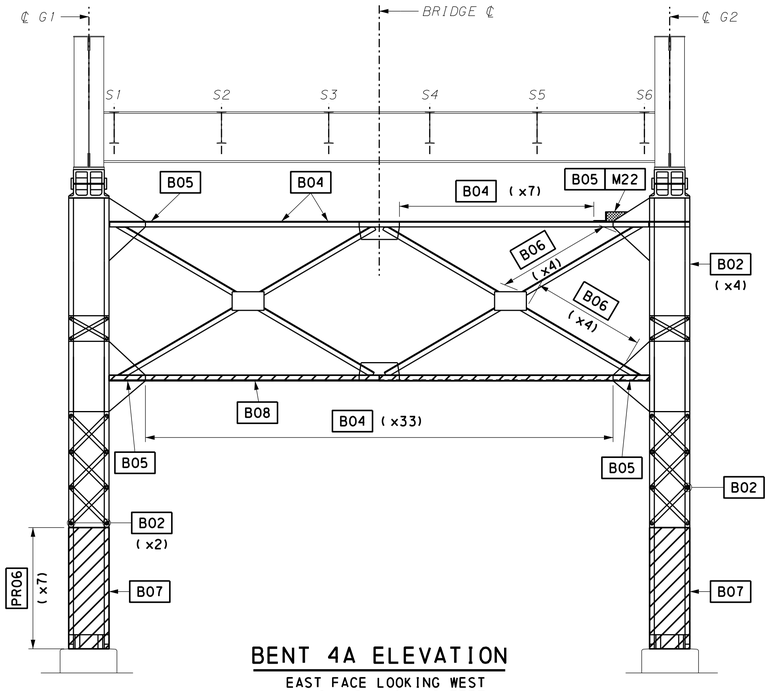
## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103 - 110.
3. SEE SHEET 26 FOR BENT 4-BENT 4A BRACING ELEVATIONS AND REPAIRS.
4. THE BENT COLUMN BASES AT BENTS 4 & 4A HAVE BEEN FILLED WITH CONCRETE. REMOVE CONCRETE FILL AT ONE BENT COLUMN AT A TIME TO FACILITATE INSPECTION OF THE BENT COLUMNS AT THESE LOCATIONS. REMOVAL OF EXISTING CONCRETE INCLUDED IN ITEM 1018-0050 REMOVAL OF PORTION OF EXISTING BRIDGE.




## BENT 4 ELEVATION

EAST FACE LOOKING WEST
0 2 4 6 FEET




## BENT 4A ELEVATION

EAST FACE LOOKING WEST
0 2 4 6 FEET

LEGEND:

F00 DENOTES REPAIR

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01

SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

## BENTS 4 & 4A ELEVATIONS AND REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 25 OF 124

S - 40253

| DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS |
|---|---|---|---|

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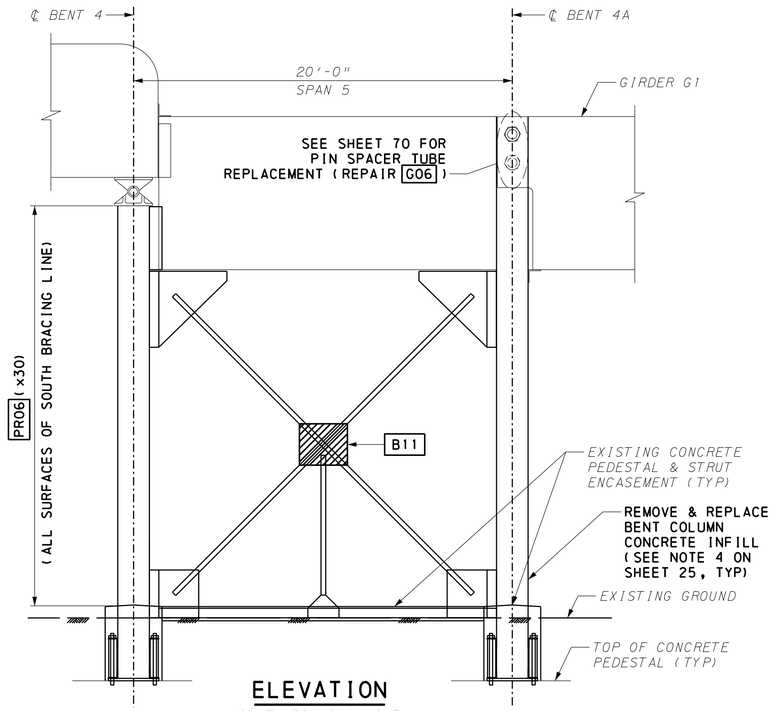
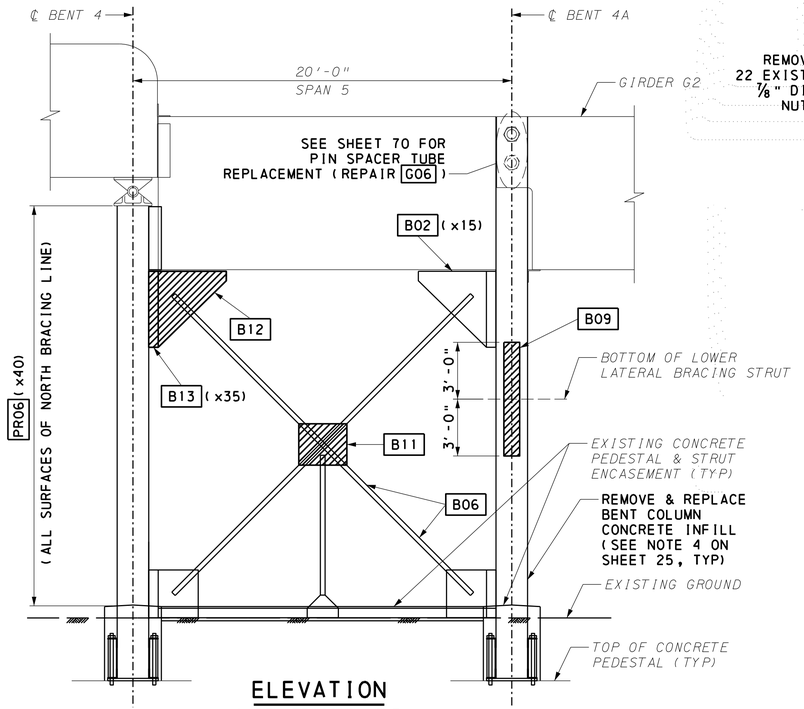



## ELEVATION

SOUTH BRACING LINE
NORTH FACE LOOKING SOUTH
0 2 4 6 FEET




## ELEVATION

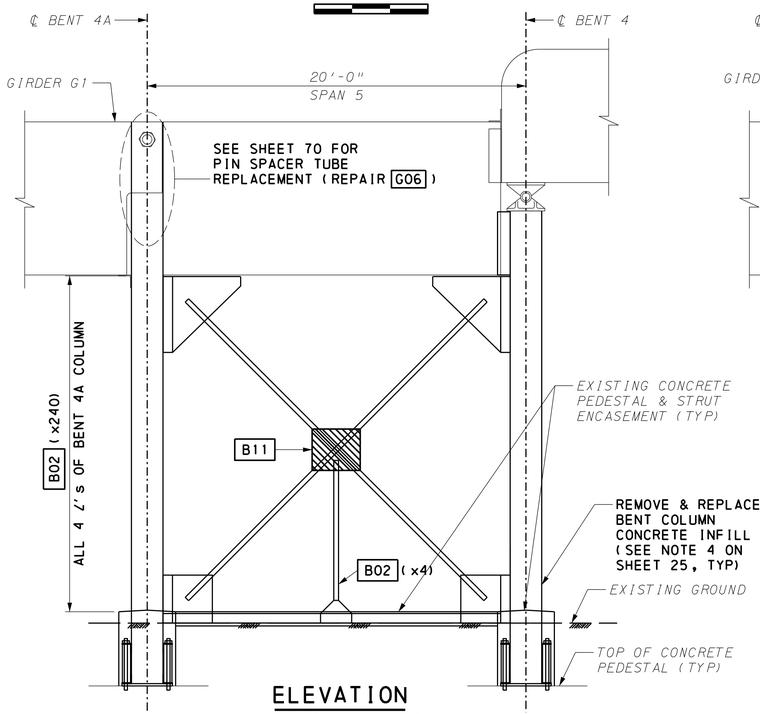
NORTH BRACING LINE
NORTH FACE LOOKING SOUTH
0 2 4 6 FEET

## REPAIR B11

ITEM 1050-0258
REPLACE BENT4-4A BRACING GUSSET PLATE, TYPE 1
REPRESENTATIVE PHOTO

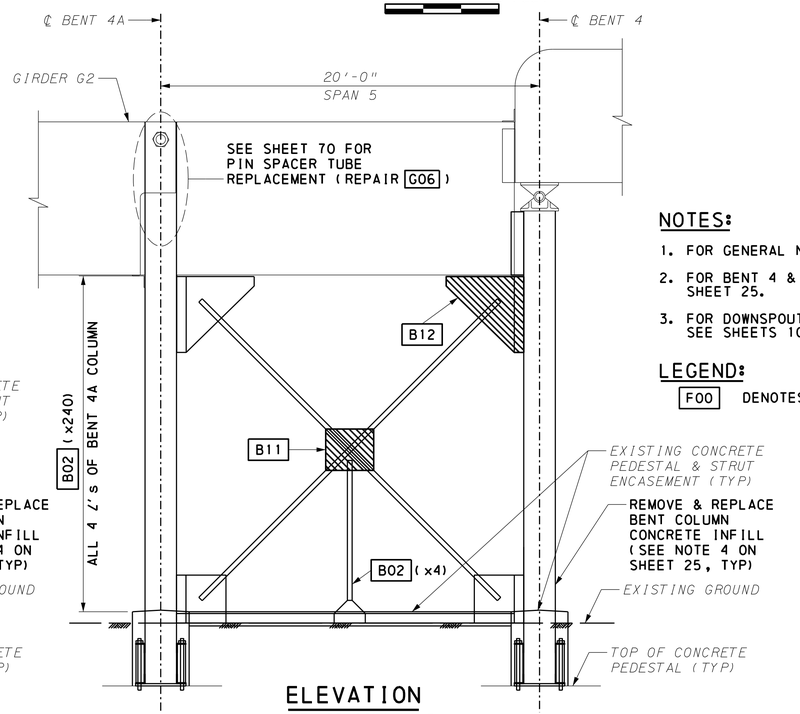
## REPAIR B11 - PROCEDURE AND NOTES

1. REMOVE EXISTING RIVETS ATTACHING THE EXISTING GUSSET PLATE TO THE BENT 4-4A BRACING.
2. REMOVE GUSSET PLATE AND DISCARD. REMOVE AND REPLACE GUSSET PLATES ONE AT A TIME.
3. REAM HOLES AS REQUIRED. HOLES MAY BE DRILLED IN THE GUSSET PLATE USING THE EXISTING HOLES IN THE BRACING MEMBERS AS A TEMPLATE.
4. INSTALL NEW ⅞" DIA HS BOLTS W/ NUTS AND WASHERS IN ALL OPEN HOLES.




## ELEVATION

SOUTH BRACING LINE
SOUTH FACE LOOKING NORTH
0 2 4 6 FEET




## ELEVATION

NORTH BRACING LINE
SOUTH FACE LOOKING NORTH
0 2 4 6 FEET

## REPAIR DESCRIPTION AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| B02 | REPLACE RIVET, BENT | 65 | EA | 503 |
| B06 | REPLACE BATTEN PLATE TYPE 1, BENT | 51 | EA | 2 |
| B09 | INSTALL COLUMN COVER PLATE | 71 | EA | 1 |
| B11 | REPLACE BENT 4-4A BRACING GUSSET PLATE, TYPE 1 | 26 | EA | 4 |
| B12 | REPLACE BENT 4-4A BRACING GUSSET PLATE, TYPE 2 | 71 | EA | 2 |
| B13 | REPLACE CONNECTION ANGLES (L4x4x1/2) | 71 | LB | 35 |
| G06 | REPLACE GIRDER PIN SPACER TUBE | 70 | EA | 7 |
| PR06 | PACK RUST REPAIR, BENT | 66 | LF | 70 |

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR BENT 4 & BENT 4A ELEVATIONS, SEE SHEET 25.
3. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103 - 110.

## LEGEND:

F00 DENOTES REPAIR

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT 4-4A BRACING ELEVATIONS AND REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 26 OF 124

S - 40253

| DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS |
|---|---|---|---|

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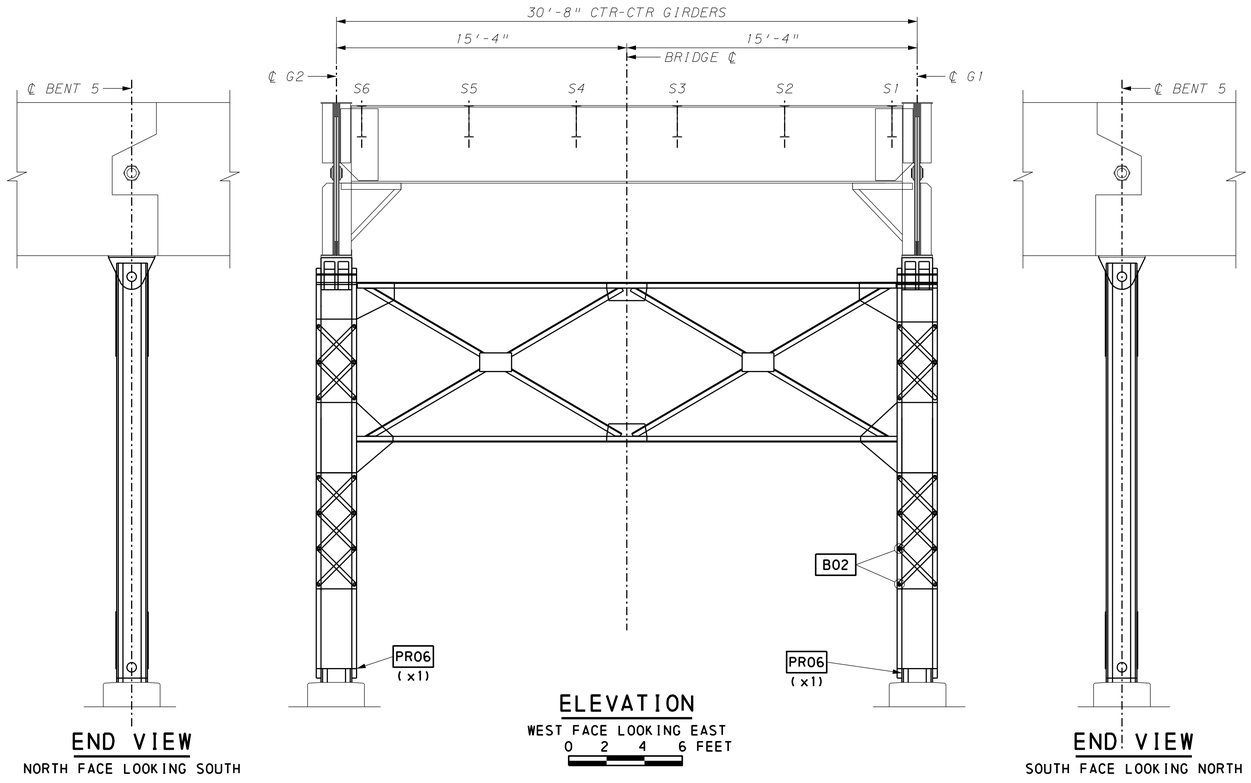
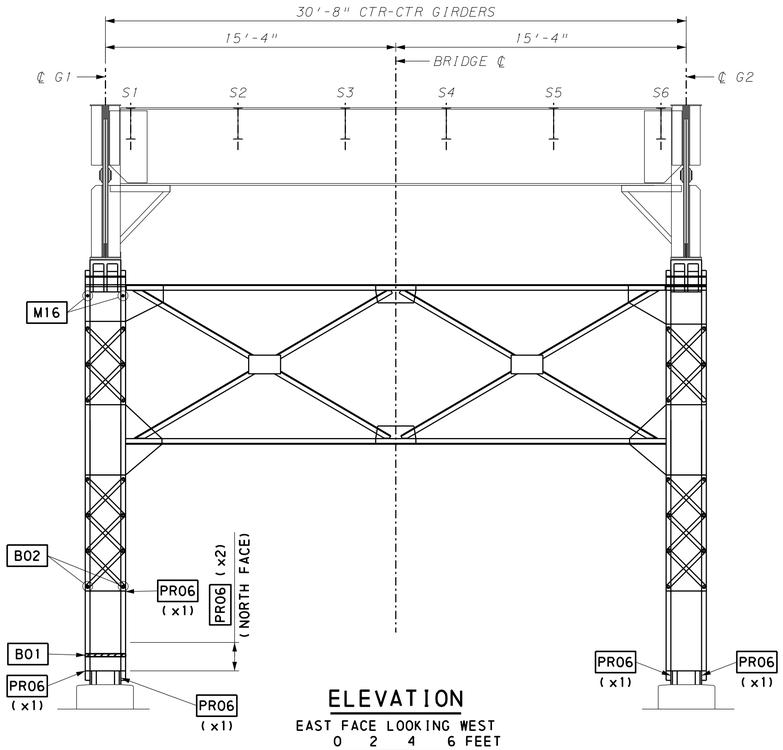



END VIEW
NORTH FACE LOOKING SOUTH

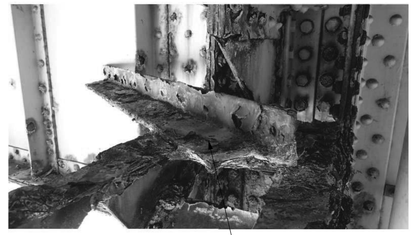
ELEVATION
WEST FACE LOOKING EAST
0 2 4 6 FEET

END VIEW
SOUTH FACE LOOKING NORTH




ELEVATION
EAST FACE LOOKING WEST
0 2 4 6 FEET

REMOVE ABANDONED UTILITY BRACKETS



REMOVE ABANDONED UTILITY BRACKET

## REPAIR M22

ITEM 1050-0264
REMOVE ABANDONED UTILITY BRACKET OR CONNECTION
REPRESENTATIVE PHOTOS

## REPAIR M22 - PROCEDURE AND NOTES

1. REMOVE ABANDONED UTILITY BRACKET OR CONNECTION MATERIAL BY UNBOLTING OR BY GRINDING OUT EXISTING WELDS. GRIND WELDS IN THE DIRECTION OF PRIMARY STRESS IN THE SUPPORTING MEMBER. CONFIRM THE DIRECTION OF PRIMARY STRESS WITH THE REPRESENTATIVE BEFORE PERFORMING GRINDING.
2. REAM UNUSED HOLES TO $^{15}/_{16}$" DIA FOR $^{7}/_{8}$" DIA HS BOLTS.
3. INSTALL $^{7}/_{8}$" DIA HS BOLTS W/NUTS AND WASHERS IN ALL UNUSED HOLES.
4. EXERCISE EXTREME CARE TO AVOID NICKING OR GOUGING EXISTING STEEL DURING UTILTY BRACKET REMOVAL. IF NICKS OR GOUGES OCCUR, THE ENGINEER MAY SUSPEND ACTIVITIES UNTIL APPROPRIATE ADJUSTMENTS TO THE PROCEDURE ARE MADE TO PREVENT RE-OCCURRENCE.
5. ABANDONED UTILITY BRACKETS AND CONNECTIONS ARE LOCATED THROUGHOUT THE APPROACH SPANS (SPANS 1 - 9). REFER TO FRAMING PLAN SHEETS AND BENT DETAIL SHEETS FOR LOCATIONS OF ABANDONED UTILITY BRACKETS OR CONNECTIONS TO BE REMOVED.

## REPAIR DESCRIPTIONS AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| B01 | REMOVE ABANDONED DOWNSPOUT BRACKET | 22 | EA | 1 |
| B02 | REPLACE RIVET, BENT | 65 | EA | 4 |
| M16 | INSTALL BOLTS OPEN HOLES | 46 | EA | 2 |
| PR06 | PACK RUST REPAIR, BENT | 66 | LF | 9 |

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103 - 110.

## LEGEND:

F00 DENOTES REPAIR

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT 5 ELEVATION AND REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 27 OF 124

S - 40253

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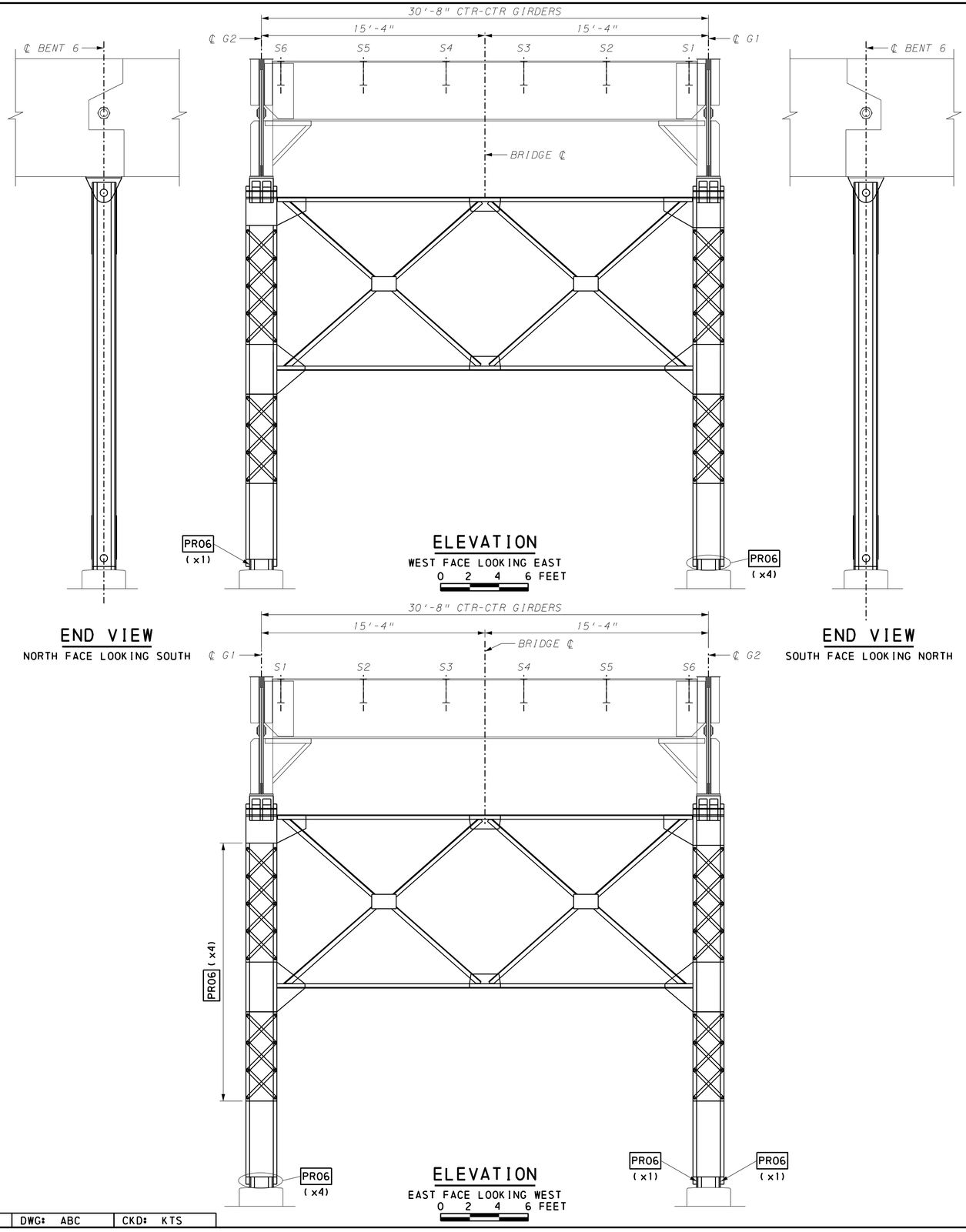


## ELEVATION
WEST FACE LOOKING EAST
0 2 4 6 FEET

## END VIEW
NORTH FACE LOOKING SOUTH

## END VIEW
SOUTH FACE LOOKING NORTH

## ELEVATION
EAST FACE LOOKING WEST
0 2 4 6 FEET

| REPAIR DESCRIPTIONS AND QUANTITIES | | | | |
|---|---|---|---|---|
| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
| PR06 | PACK RUST REPAIR, BENT | 66 | LF | 15 |

**NOTES:**

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103 - 110.

**LEGEND:**

F00 DENOTES REPAIR

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT 6 ELEVATION AND REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 28 OF 124

S - 40253

DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS

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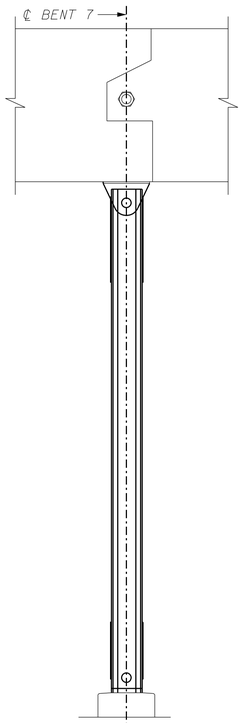
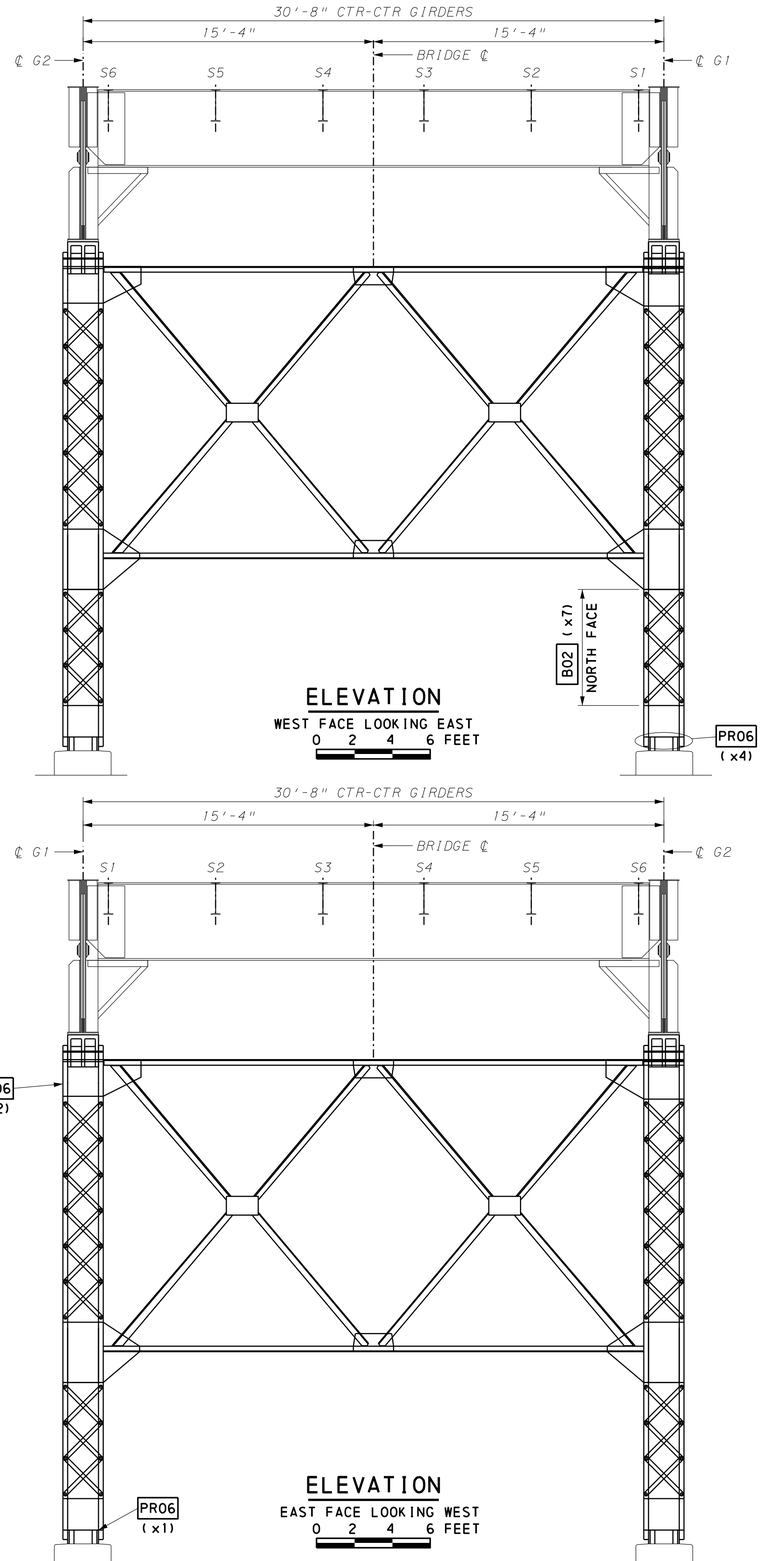
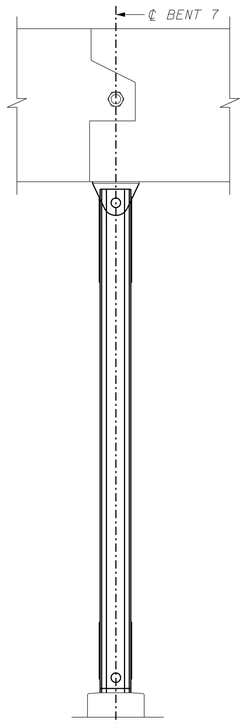



END VIEW
NORTH FACE LOOKING SOUTH




ELEVATION
WEST FACE LOOKING EAST
0 2 4 6 FEET

ELEVATION
EAST FACE LOOKING WEST
0 2 4 6 FEET




END VIEW
SOUTH FACE LOOKING NORTH

## REPAIR DESCRIPTIONS AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| B02 | REPLACE RIVET, BENT | 65 | EA | 7 |
| PR06 | PACK RUST REPAIR, BENT | 66 | LF | 7 |

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DOWNSPOUTING DETAILS AND QUANTITIES, SEE SHEETS 103 - 110.

## LEGEND:

F00 DENOTES REPAIR

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## BENT 7 ELEVATION AND REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 29 OF 124

S - 40253

| DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS |
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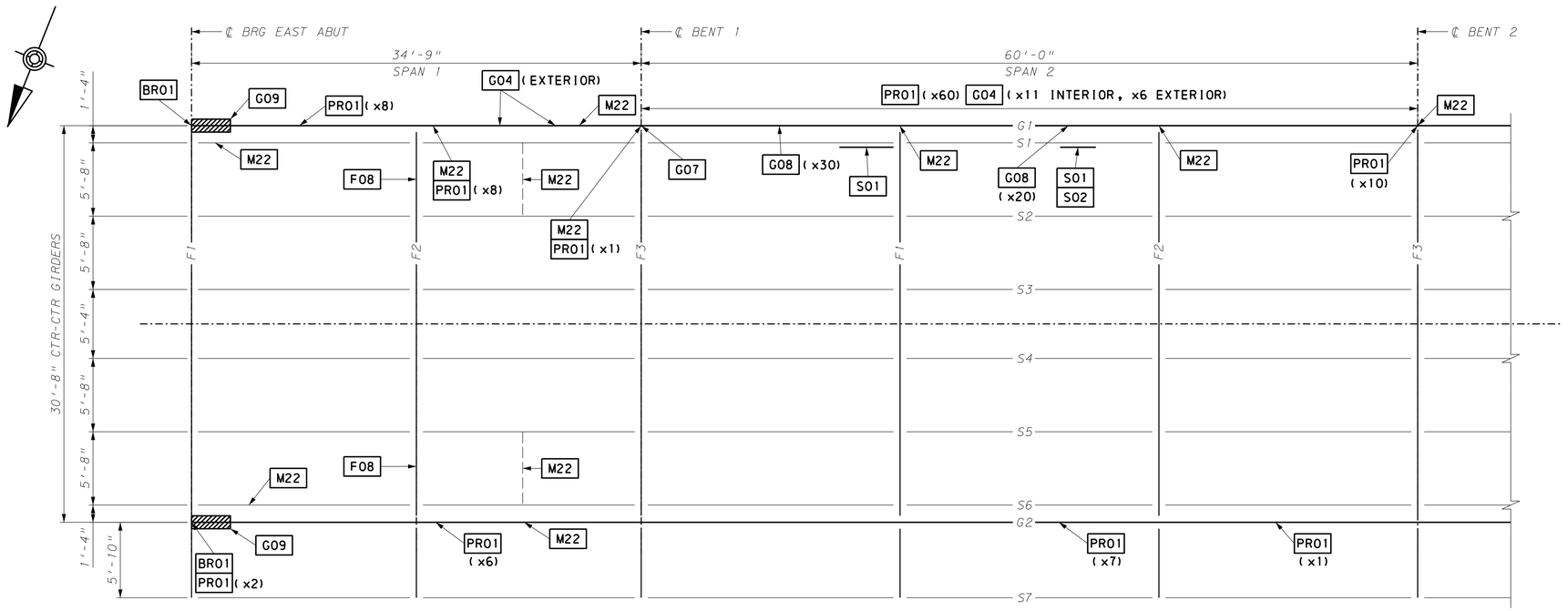
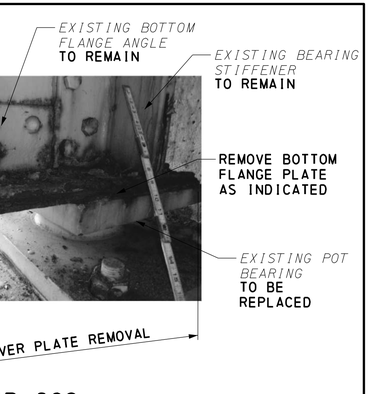



## PARTIAL FRAMING PLAN - SPANS 1 & 2

0 5 10 FEET

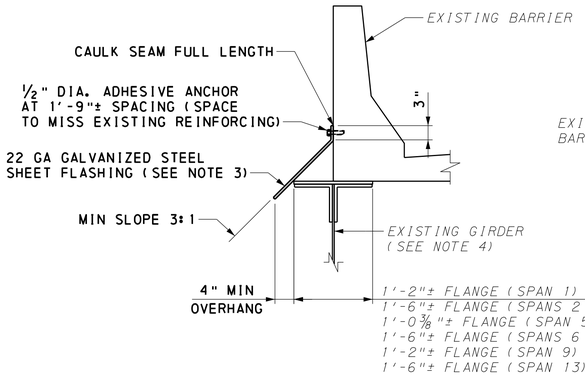



## REPAIR G09

ITEM 1050-0105
REMOVE DETERIORATED GIRDER COVER PLATE
REPRESENTATIVE PHOTO

## REPAIR G09 - PROCEDURE AND NOTES

1. REMOVAL OF THE POT BEARING AND TEMPORARILY SUPPORTING THE GIRDER ARE INCLUDED IN OTHER ITEMS.
2. REMOVE BOTTOM FLANGE RIVETS WITHIN THE AREA OF BOTTOM FLANGE REMOVAL. THE REPRESENTATIVE WILL DELINEATE THE FINAL REMOVAL LIMITS IN THE FIELD.
3. SAWCUT THE BOTTOM FLANGE COVER PLATE TO A DEPTH NOT EXCEEDING ⅔ OF THE FLANGE COVER PLATE THICKNESS. COMPLETE REMOVAL OF THE PLATE USING HAND TOOLS ONLY.
4. DO NOT DAMAGE THE BOTTOM FLANGE ANGLES TO REMAIN. ANY DAMAGE TO THE FLANGE ANGLES RESULTING FROM THE REMOVAL OPERATIONS SHALL BE REPAIRED TO THE SATISFACTION OF THE REPRESENTATIVE, AT NO COST TO THE DEPARTMENT.

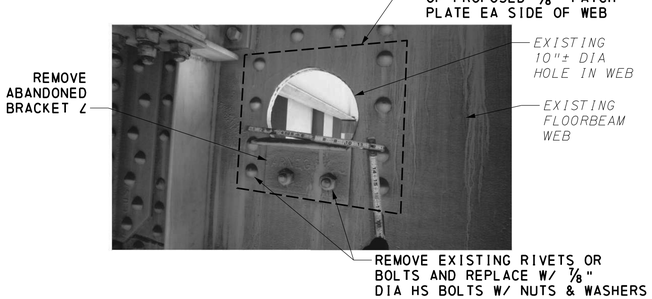



## REPAIR M05

ITEM 9000-0207
INSTALL BARRIER FLASHING
0 1 2 FEET

## REPAIR M05

ITEM 9000-0207
INSTALL BARRIER FLASHING
REPRESENTATIVE PHOTO




## REPAIR F08

ITEM 1050-0214
REMOVE ABANDONED DOWNSPOUT BRACKET
REPRESENTATIVE PHOTO

## REPAIR F08 - PROCEDURE AND NOTES

1. REMOVE EXISTING RIVETS SURROUNDING THE OPEN HOLE, REMOVE ABANDONED BRACKETS AND DISCARD.
2. PROVIDE A ⅜" PATCH PLATE ON EACH SIDE OF THE FLOORBEAM WEB. MAINTAIN AASHTO MINIMUM EDGE SPACING FOR FASTENERS.
3. REAM HOLES AS REQUIRED, USING HOLE IN OUTER-MOST PLY AS A TEMPLATE. INSTALL NEW ⅞"ø HIGH STRENGTH BOLTS IN ALL OPEN HOLES.

## REPAIR DESCRIPTIONS AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| BR01 | REPLACE EXPANSION BEARING | 74 | EA | 2 |
| F08 | FLOORBEAM WEB PATCH PLATE | 30 | EA | 2 |
| G04 | STIFFENER REPAIR, GIRDER | 57 | EA | 19 |
| G07 | REPLACE GIRDER SEAT | 31 | EA | 1 |
| G08 | REPLACE RIVET, GIRDER | 65 | EA | 50 |
| G09 | REMOVE DETERIORATED GIRDER COVER PLATE | 30 | LB | 145 |
| M22 | REMOVE ABANDONED UTILITY BRACKET OR CONNECTION | 27 | EA | 11 |
| PR01 | PACK RUST REPAIR, GIRDER OR FLOORBEAM | 66 | LF | 103 |
| S01 | WEB COVER PLATE, STRINGER | 53 | EA | 2 |
| S02 | FLANGE COVER PLATE, STRINGER | 56 | EA | 1 |

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPANS 3 - 9 FRAMING PLANS, SEE SHEETS 31 - 36.
3. PROVIDE GALVANIZED STEEL SHEET FLASHING CONFORMING TO ASTM A653, CS TYPE A, WITH MINIMUM G40 COATING.
4. GIRDER G9B FLARES OUT FROM UNDER BRIDGE DECK IN SPAN 9. EXTEND FLASHING OVER GIRDER TO MAINTAIN MINIMUM 4" OVERHANG OVER GIRDER FLANGE EDGE.

## LEGEND:

—G1— GIRDER
—F1— FLOORBEAM
—S1— STRINGER
F00 DENOTES REPAIR

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## FRAMING PLAN SPANS 1 TO 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL AARON BRUCE COLORITO ENGINEER PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 30 OF 124

S - 40253

DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS

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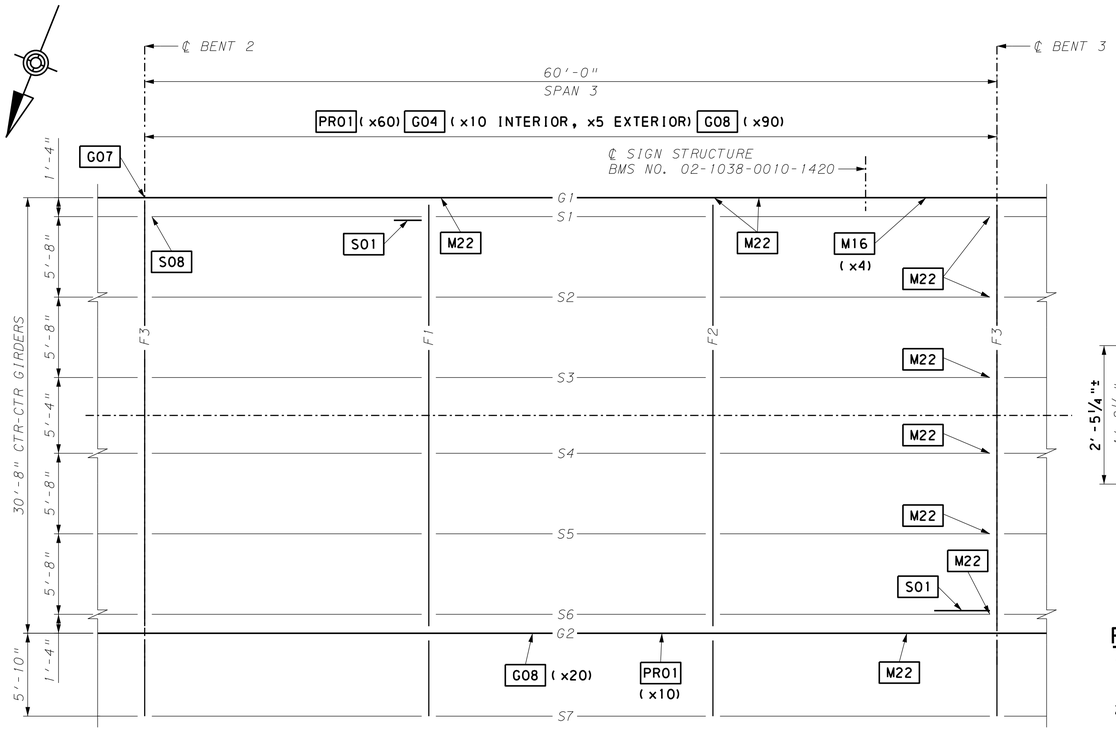
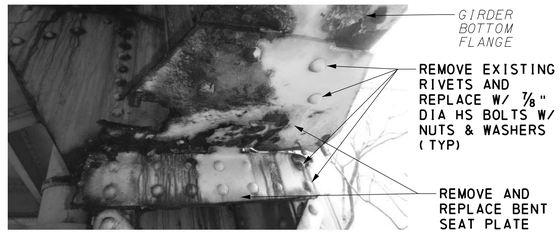



## PARTIAL FRAMING PLAN - SPAN 3

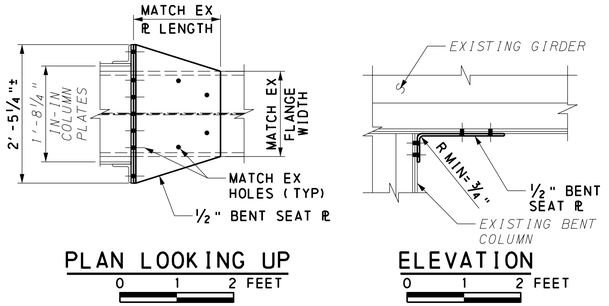
0 5 10 FEET

| REPAIR DESCRIPTIONS AND QUANTITIES | | | | |
|---|---|---|---|---|
| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
| G04 | STIFFENER REPAIR, GIRDER | 57 | EA | 15 |
| G07 | REPLACE GIRDER SEAT | 31 | EA | 1 |
| G08 | REPLACE RIVET, GIRDER | 65 | EA | 110 |
| M16 | INSTALL BOLTS OPEN HOLES | 46 | EA | 4 |
| M22 | REMOVE ABANDONED UTILITY BRACKET OR CONNECTION | 27 | EA | 10 |
| PR01 | PACK RUST REPAIR, GIRDER OR FLOORBEAM | 66 | LF | 70 |
| S01 | WEB COVER PLATE, STRINGER | 53 | EA | 2 |
| S08 | REPLACE STRINGER SEAT ANGLE AND SHIM STACK | 31 | EA | 1 |




## REPAIR G07

ITEM 1050-0221
REPLACE GIRDER SEAT
REPRESENTATIVE PHOTO




PLAN LOOKING UP
0 1 2 FEET

ELEVATION
0 1 2 FEET

## REPAIR G07 - PROCEDURE AND NOTES

1. FABRICATE NEW 1/2" BENT SEAT PLATE TO MATCH EXISTING SEAT PLATE.
2. REMOVE EXISTING RIVETS ATTACHING THE GIRDER SEAT PLATE TO THE GIRDER BOTTOM FLANGE AND BENT COLUMN, REMOVE BENT SEAT PLATE AND DISCARD.
3. INSTALL NEW 1/2" BENT SEAT PLATE.
4. REAM HOLES AS REQUIRED, USING HOLE IN OUTERMOST PLY AS A TEMPLATE. INSTALL NEW 7/8"Ø HIGH STRENGTH BOLTS IN ALL OPEN HOLES.

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR FRAMING PLANS FOR SPANS 1 - 2, SEE SHEET 30.
3. FOR FRAMING PLANS FOR SPANS 4 - 9, SEE SHEETS 32 - 36.

## LEGEND:

—G1— GIRDER

—F1— FLOORBEAM

—S1— STRINGER

F00 DENOTES REPAIR

## REPAIR S07

ITEM 1050-0206
REPLACE STRINGER STOOL ANGLE AND CLIP PLATE
REPRESENTATIVE PHOTO

## REPAIR S08

ITEM 1050-0207
REPLACE STRINGER SEAT ANGLE AND SHIM STACK
REPRESENTATIVE PHOTO

## REPAIR S07, S08 - PROCEDURE AND NOTES

1. FABRICATE NEW MATERIAL TO MATCH EXISTING AS INDICATED AND AS DIRECTED. PROVIDE LONG-SLOTTED HOLES IN BENT CLIP PLATES ON STRINGER FACE OF PLATES (REPAIR S07 ONLY).
2. REMOVE EXISTING RIVETS OR BOLTS AND REMOVE MATERIAL AS INDICATED AND AS DIRECTED AND DISCARD.
3. REAM HOLES AS REQUIRED, USING HOLE IN OUTERMOST PLY AS A TEMPLATE. INSTALL NEW 7/8"Ø HIGH STRENGTH BOLTS IN ALL OPEN HOLES. INSTALL BOLTS IN SLOTTED HOLES USING WASHERS UNDER THE HEAD END AND HEX NUT END OF EACH BOLT. TIGHTEN NUTS FINGER-TIGHT, BACK OFF 1/4 TURN AND BURR THREADS AT NUT.
4. PROVIDE SHIMS THAT MATCH STRINGER BOTTOM FLANGE WIDTH. PROVIDE SHIMS IN SUFFICIENT QUANTITIES TO ENSURE FULL BEARING BETWEEN THE STRINGER AND SEAT ANGLE.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
FRAMING PLAN SPAN 3

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 31 OF 124

S - 40253

DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS

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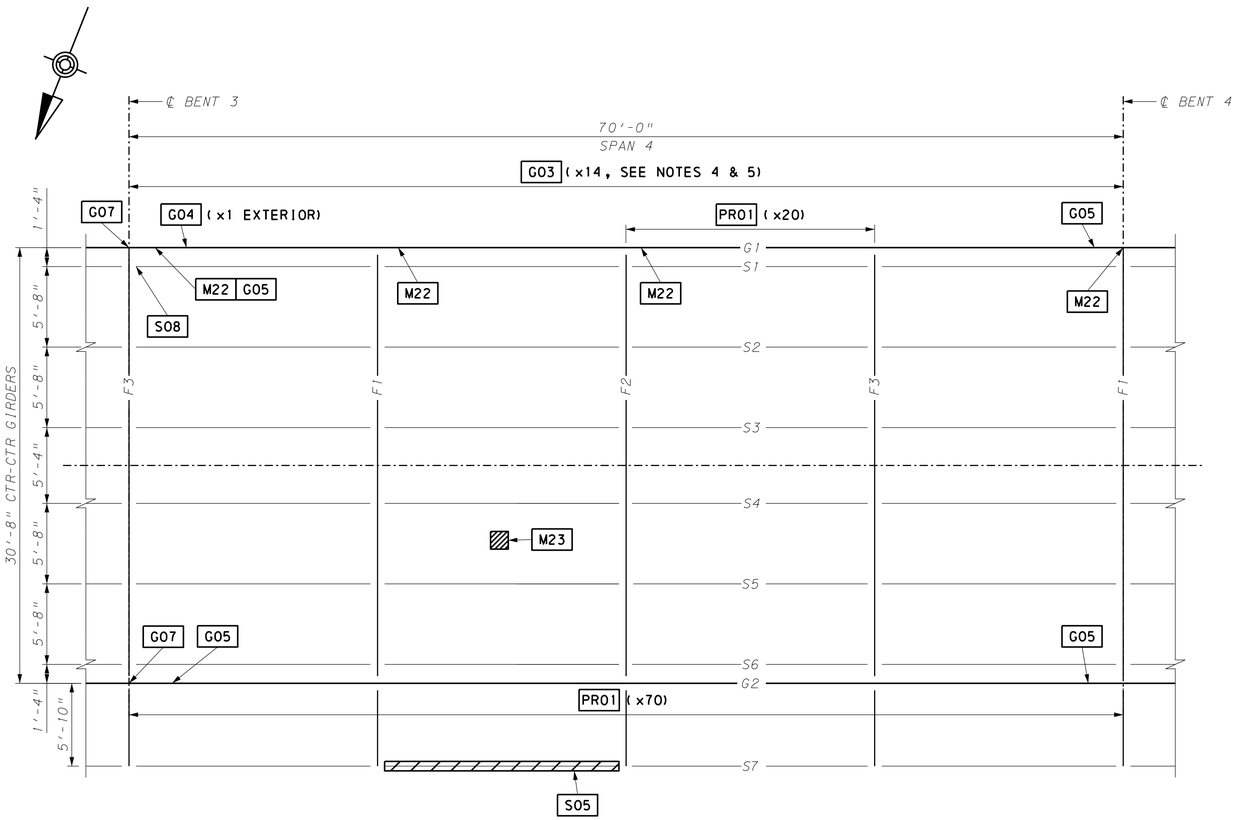


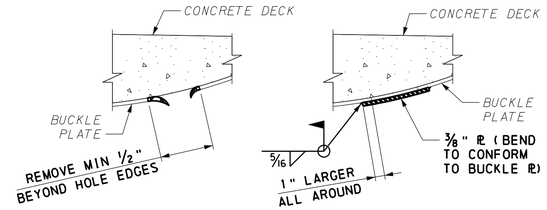

## PARTIAL FRAMING PLAN - SPAN 4

0 5 10 FEET

| REPAIR DESCRIPTION AND QUANTITIES | | | | |
|---|---|---|---|---|
| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
| G03 | WEB COVER PLATE, GIRDER | 53 | EA | 14 |
| G04 | STIFFENER REPAIR, GIRDER | 57 | EA | 1 |
| G05 | STIFFENER ADDITION, GIRDER | 58 | EA | 4 |
| G07 | REPLACE GIRDER SEAT | 31 | EA | 2 |
| M22 | REMOVE ABANDONED UTILITY BRACKET OR CONNECTION | 27 | EA | 4 |
| M23 | REPAIR BUCKLE PLATE BLOWOUT | 32 | EA | 1 |
| PR01 | PACK RUST REPAIR, GIRDER OR FLOORBEAM | 66 | LF | 90 |
| S05 | REPLACE SIDEWALK STRINGER | 72 | LB | 1138 |
| S08 | REPLACE STRINGER SEAT ANGLE AND SHIM STACK | 31 | EA | 1 |

## REPAIR M23

ITEM 1050-0265
REPAIR BUCKLE PLATE BLOWOUT
REPRESENTATIVE PHOTO




**REMOVAL**
NOT TO SCALE

**REPAIR**
NOT TO SCALE

## REPAIR M23 - PROCEDURE AND NOTES

1. REMOVE DAMAGED BUCKLE PLATE MATERIAL 1/2" MINIMUM BEYOND EDGES OF THE EXISTING HOLE.
2. CUT 3/8" REPAIR PLATE MINIMUM 1" LARGER THAN REMOVAL AREA IN ALL DIRECTIONS.
3. BEND REPAIR PLATE TO CONFORM TO EXISTING BUCKLE PLATE SURFACE. FILLET WELD ALL AROUND AS INDICATED.
4. DO NOT DAMAGE BUCKLE PLATE MATERIAL TO REMAIN. ENLARGE REMOVAL AREA TO ENCOMPASS ANY DAMAGED MATERIAL AT NO ADDITIONAL COST TO THE DEPARTMENT.
5. REPAIR PLATE TO CONFORM TO AASHTO M270 GRADE 36, MINIMUM.

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR FRAMING PLANS FOR SPANS 1 - 3, SEE SHEETS 30 - 31.
3. FOR FRAMING PLANS FOR SPANS 5 - 9, SEE SHEETS 33 - 36.
4. WEB COVER PLATE REPAIR REGIONS FOR GIRDER G1 ARE ASSUMED BASED ON EXISTING VISIBLE DETERIORATION. THE CONTRACTOR SHALL CONTACT THE ENGINEER AFTER EXISTING CONCRETE BARRIER IS REMOVED AND ABRASIVE BLASTING OPERATIONS ARE COMPLETED ALONG GIRDER G1 TO IDENTIFY ANY ADDITIONAL AREAS REQUIRING REPAIR AND REPAIR LIMITS.
5. PROPOSED GIRDER WEB REPAIR PLATES (REPAIR TYPE G03) MAY REQUIRE THE REMOVAL AND REPLACEMENT OF GIRDER STIFFENERS, CONNECTION ANGLES OR OTHER MATERIAL AS REQUIRED TO INSTALL REPAIR MATERIAL. FINAL CONFIGURATIONS OF MATERIAL TO BE DETERMINED IN THE FIELD.

## LEGEND:

—G1— GIRDER

—F1— FLOORBEAM

—S1— STRINGER

F00 DENOTES REPAIR

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
FRAMING PLAN SPAN 4

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 32 OF 124

S - 40253

| DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS |
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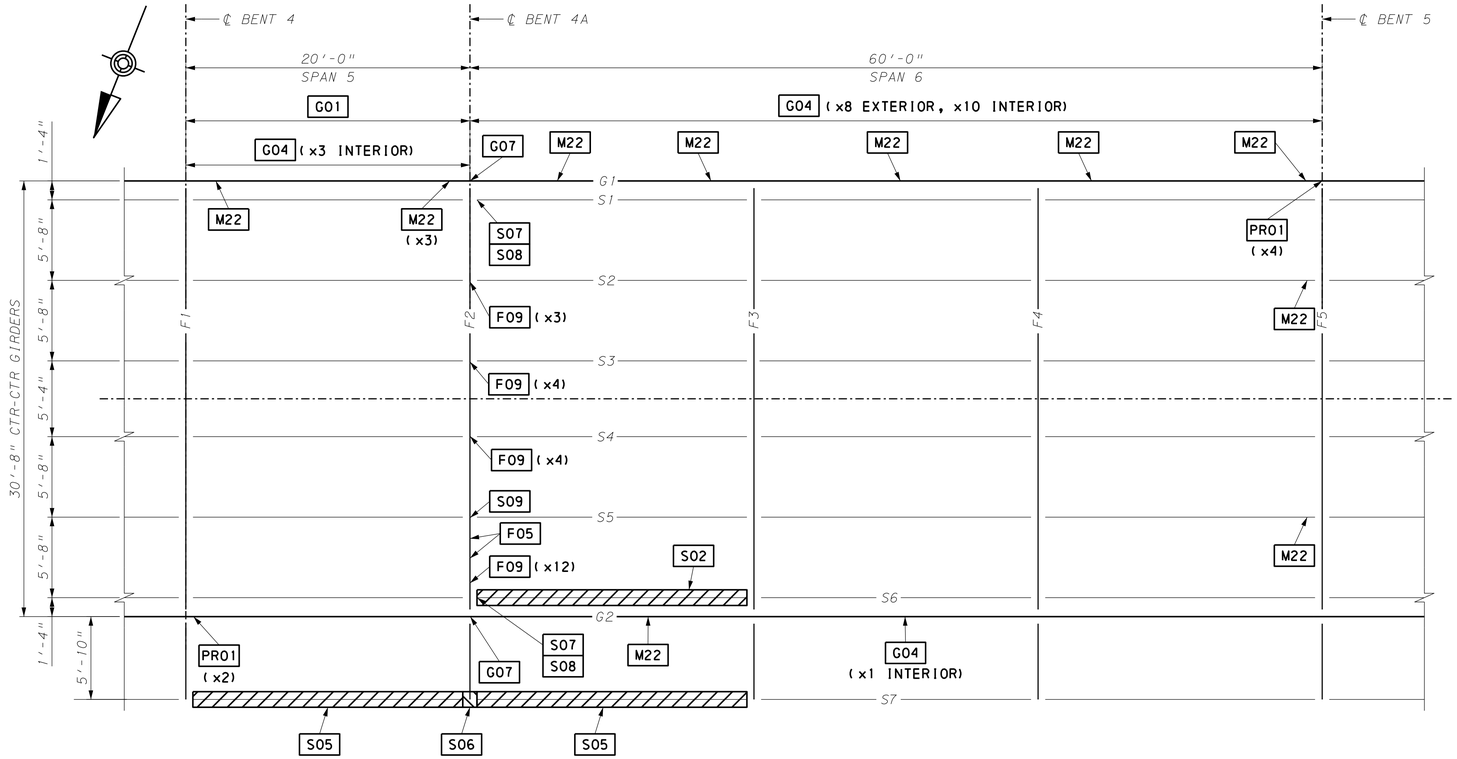


## PARTIAL FRAMING PLAN - SPANS 5 & 6

0 5 10 FEET

| REPAIR DESCRIPTIONS AND QUANTITIES | | | | |
|---|---|---|---|---|
| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
| F05 | STIFFENER REPAIR, FLOORBEAM | 57 | EA | 2 |
| F09 | REPLACE RIVET, FLOORBEAM | 65 | EA | 23 |
| G01 | BOTTOM FLANGE COVER PLATE, GIRDER | 56 | LB | 455 |
| G04 | STIFFENER REPAIR, GIRDER | 57 | EA | 22 |
| G07 | REPLACE GIRDER SEAT | 31 | EA | 2 |
| S02 | FLANGE COVER PLATE, STRINGER | 56 | EA | 1 |
| S05 | REPLACE SIDEWALK STRINGER | 72 | LB | 2600 |
| S06 | REPLACE SIDEWALK STRINGER EXPANSION ASSEMBLY | 72 | EA | 1 |
| S07 | REPLACE STRINGER STOOL ANGLE AND CLIP PLATE | 31 | EA | 2 |
| S08 | REPLACE STRINGER SEAT ANGLE AND SHIM STACK | 31 | EA | 2 |
| S09 | REPLACE STRINGER CLIP ANGLE | 64 | EA | 1 |
| M22 | REMOVE ABANDONED UTILITY BRACKET OR CONNECTION | 27 | EA | 12 |
| PR01 | PACK RUST REPAIR, GIRDER OR FLOORBEAM | 66 | LF | 6 |

DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS

LEGEND:
- —G1— GIRDER
- —F1— FLOORBEAM
- —S1— STRINGER
- F00 DENOTES REPAIR

NOTES:
1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR FRAMING PLANS FOR SPANS 1 - 4, SEE SHEETS 30 - 32.
3. FOR FRAMING PLANS FOR SPANS 7 - 9, SEE SHEETS 34 - 36.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
FRAMING PLAN SPANS 5 TO 6

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL AARON BRUCE COLORITO ENGINEER PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 33 OF 124

S - 40253

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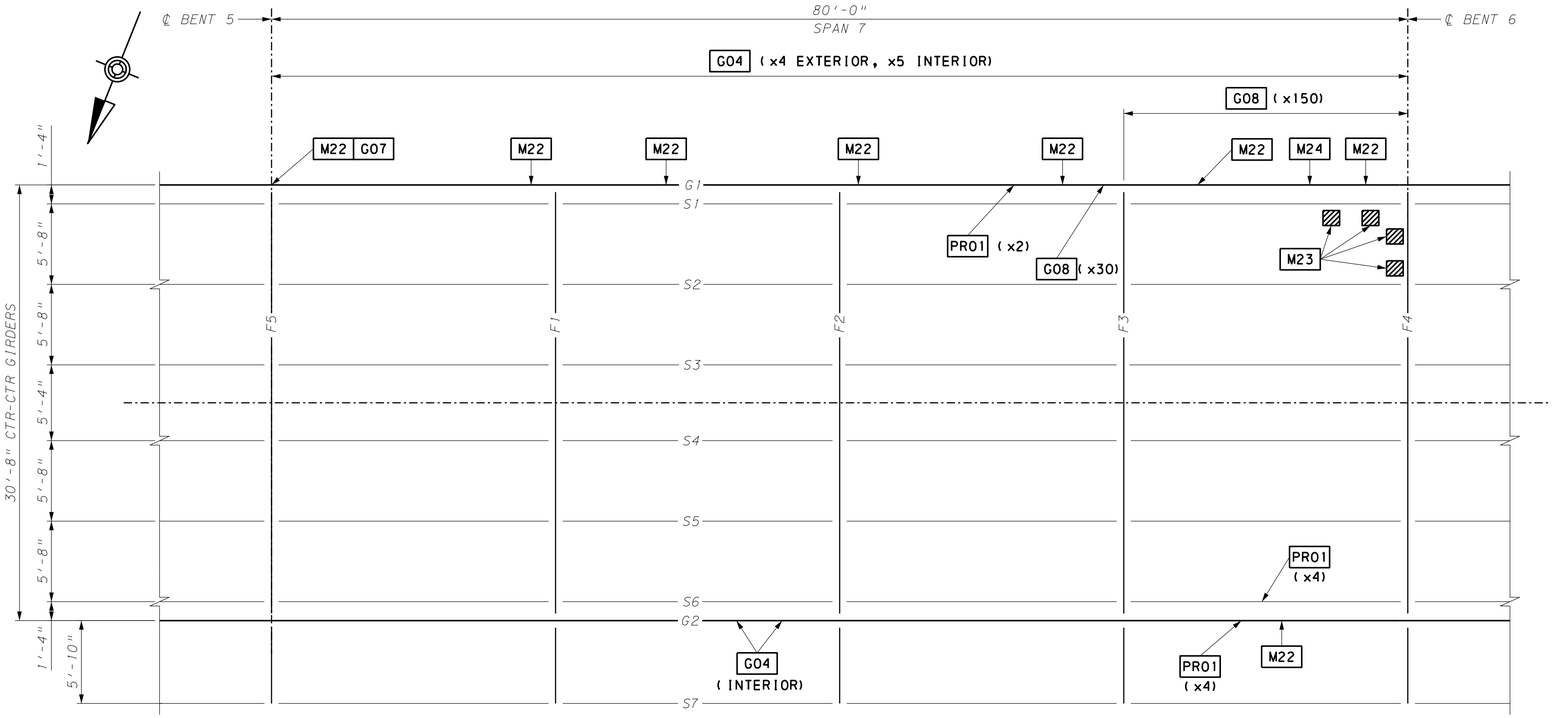


## PARTIAL FRAMING PLAN - SPAN 7

0 5 10 FEET

## REPAIR M24

ITEM 1050-0266
REMOVE ABANDONED UTILITY BOX FROM GIRDER WEB

## REPAIR M24 - PROCEDURE AND NOTES

1. OPEN EXISTING UTILTY BOX AND DETERMINE LIMITS OF UTILITY BOX ATTACHEMENT TO GIRDER WEB.
2. COMPLETELY REMOVE EXISTING UTILITY BOX FROM GIRDER WEB.
3. GRIND REMAINING WELDS ON THE GIRDER WEB SMOOTH WITH GIRDER WEB FACE. EXERCISE EXTREME CAUTION TO AVOID NICKING OR DAMAGING THE GIRDER WEB. WHERE NICKS OR GOUGES OCCUR, FAIR OUT THE DAMAGE BY GRINDING IN THE DIRECTION OF PRIMARY STRESS, AT A MAXIMUM SLOPE OF 1:10, TO THE SATISFACTION OF THE REPRESENTATIVE AT NO ADDITIONAL COST TO THE DEPARTMENT.

## REPAIR DESCRIPTIONS AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| G04 | STIFFENER REPAIR, GIRDER | 57 | EA | 11 |
| G07 | REPLACE GIRDER SEAT | 31 | EA | 1 |
| G08 | REPLACE RIVET, GIRDER | 65 | EA | 180 |
| M22 | REMOVE ABANDONED UTILITY BRACKET OR CONNECTION | 27 | EA | 8 |
| M23 | REPAIR BUCKLE PLATE BLOWOUT | 32 | EA | 4 |
| M24 | REMOVE ABANDONED UTILITY BOX FROM GIRDER WEB | 34 | EA | 1 |
| PR01 | PACK RUST REPAIR, GIRDER OR FLOORBEAM | 66 | LF | 10 |

LEGEND:
- G1 — GIRDER
- F1 — FLOORBEAM
- S1 — STRINGER
- F00 DENOTES REPAIR

NOTES:
1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR FRAMING PLANS OF SPANS 1 - 6, SEE SHEETS 30 - 33.
3. FOR FRAMING PLANS OF SPANS 8 - 9, SEE SHEETS 35 - 36.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
FRAMING PLAN SPAN 7

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL AARON BRUCE COLORITO ENGINEER PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 34 OF 124

S - 40253

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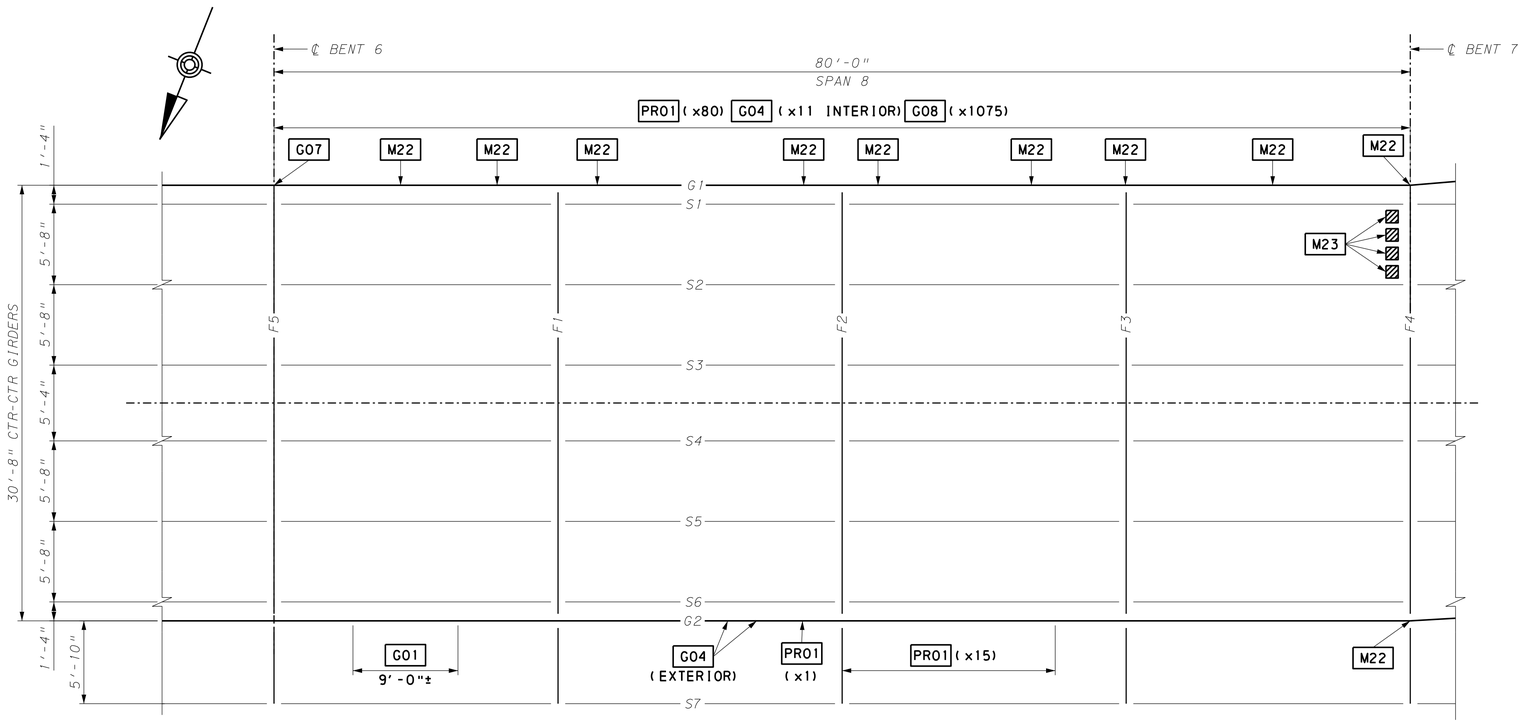


## PARTIAL FRAMING PLAN - SPAN 8

0 5 10 FEET

| REPAIR DESCRIPTIONS AND QUANTITIES | | | | |
|---|---|---|---|---|
| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
| G01 | BOTTOM FLANGE COVER PLATE, GIRDER | 56 | LB | 276 |
| G04 | STIFFENER REPAIR, GIRDER | 57 | EA | 13 |
| G07 | REPLACE GIRDER SEAT | 31 | EA | 1 |
| G08 | REPLACE RIVET, GIRDER | 65 | EA | 1075 |
| M22 | REMOVE ABANDONED UTILITY BRACKET OR CONNECTION | 27 | EA | 10 |
| M23 | REPAIR BUCKLE PLATE BLOWOUT | 32 | EA | 4 |
| PR01 | PACK RUST REPAIR, GIRDER OR FLOORBEAM | 66 | LF | 96 |

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR FRAMING PLANS OF SPANS 1 - 7, SEE SHEETS 30 - 34.
3. FOR FRAMING PLAN OF SPAN 9, SEE SHEET 36.

LEGEND:

—G1— GIRDER
—F1— FLOORBEAM
—S1— STRINGER
F00 DENOTES REPAIR

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
FRAMING PLAN SPAN 8

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 35 OF 124

S - 40253

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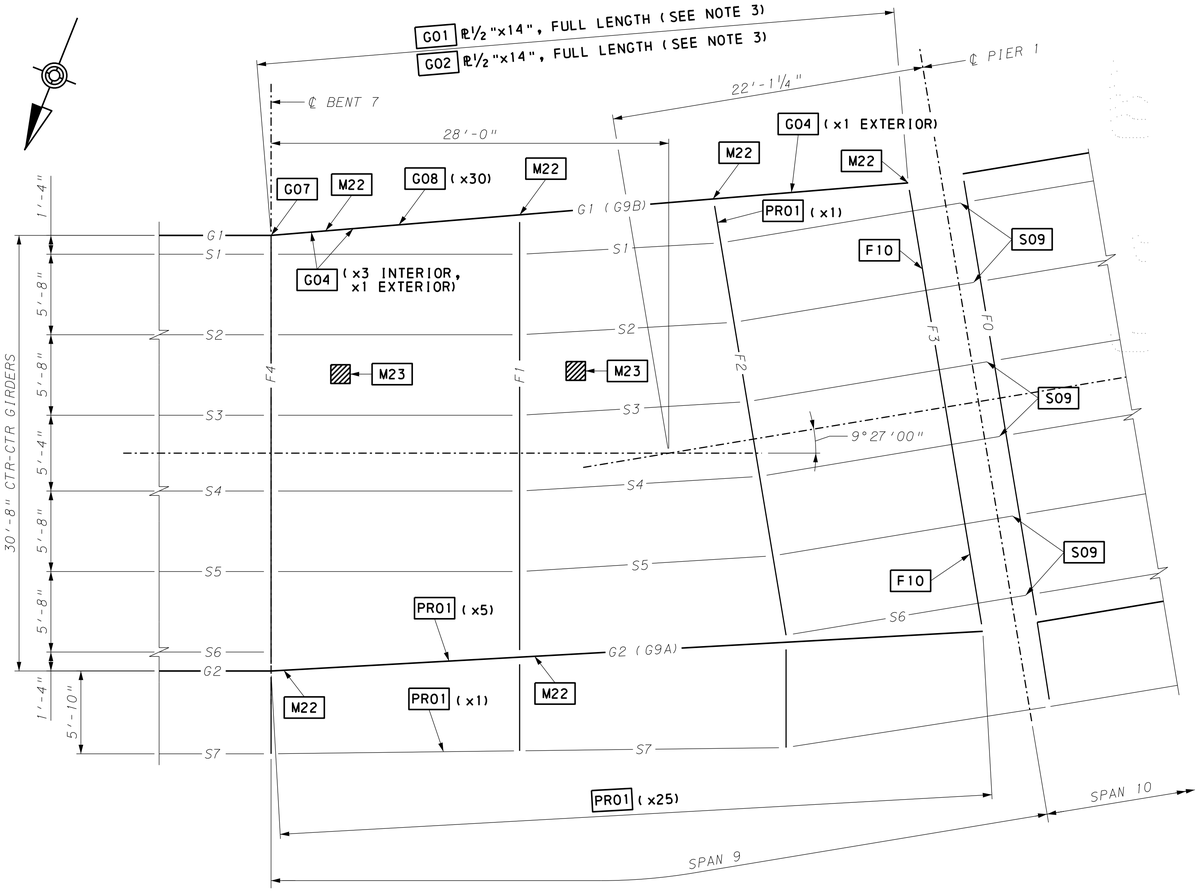



## PARTIAL FRAMING PLAN - SPAN 9

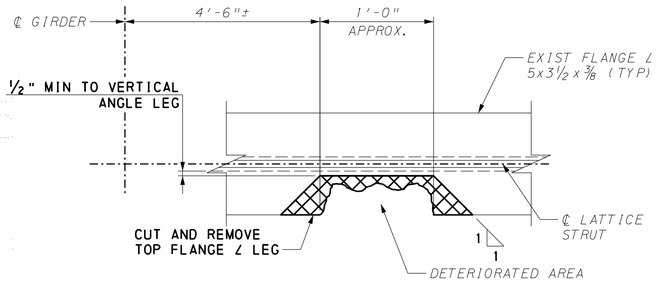
0 5 10 FEET

## REPAIR F10

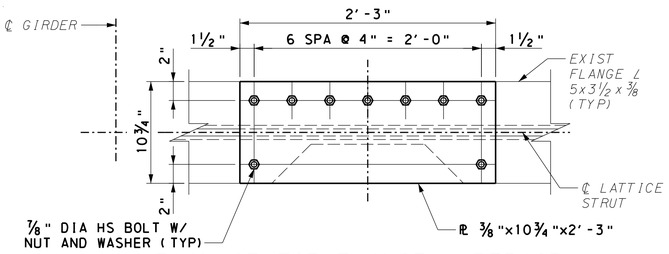
ITEM 1050-0216
REPAIR ENDS OF
SPAN 9 LATTICE STRUT

## REPAIR F10 - PROCEDURE AND NOTES

1. THE REPRESENTATIVE WILL DELINEATE THE EXTENTS OF REMOVAL IN THE FIELD.
2. REMOVE THE DETERIORATED FLANGE AREA AS INDICATED AND AS DIRECTED.
3. INSTALL REPAIR PLATE CENTERED ON THE REMOVAL AREA. DRILL HOLES IN THE EXISTING FLANGE ANGLES USING THE REPAIR PLATE AS A TEMPLATE.
4. DO NOT DAMAGE MATERIAL THAT IS TO REMAIN. DAMAGED MATERIAL SHALL BE REPLACED AT NO COST TO THE DEPARTMENT.




## PLAN OF TOP FLANGE - REMOVAL




## PLAN OF TOP FLANGE - REPAIR

## REPAIR F10

ITEM 1050-0216
REPAIR ENDS OF
SPAN 9 LATTICE STRUT

0 6 1 FOOT

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR FRAMING PLANS OF SPANS 1 - 8, SEE SHEETS 30 - 35.
3. REMOVE EXISTING TOP AND BOTTOM FLANGE COVER PLATES ½"x14"x25'-0". REPLACE WITH FULL LENGTH COVER PLATES OF SIZES INDICATED FOR TOP AND BOTTOM FLANGES. MATCH EXISTING RIVET HOLES. SEE SHEET 56 FOR ADDITIONAL REPAIR INFORMATION.

## LEGEND:

- G1 — GIRDER
- F1 — FLOORBEAM
- S1 — STRINGER
- F00 DENOTES REPAIR

## REPAIR DESCRIPTIONS AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| F10 | REPAIR ENDS OF SPAN 9 LATTICE STRUT | 36 | EA | 2 |
| G01 | BOTTOM FLANGE COVER PLATE, GIRDER | 56 | LB | 1072 |
| G02 | TOP FLANGE COVER PLATE, GIRDER | 56 | LB | 1072 |
| G04 | STIFFENER REPAIR, GIRDER | 57 | EA | 5 |
| G07 | REPLACE GIRDER SEAT | 31 | EA | 1 |
| G08 | REPLACE RIVET, GIRDER | 65 | EA | 30 |
| M22 | REMOVE ABANDONED UTILITY BRACKET OR CONNECTION | 27 | EA | 6 |
| M23 | REPAIR BUCKLE PLATE BLOWOUT | 32 | EA | 2 |
| PR01 | PACK RUST REPAIR, GIRDER OR FLOORBEAM | 66 | LF | 32 |
| S09 | REPLACE STRINGER CLIP ANGLE | 64 | EA | 6 |

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
FRAMING PLAN SPAN 9

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 36 OF 124

S - 40253

| DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS |
|---|---|---|---|

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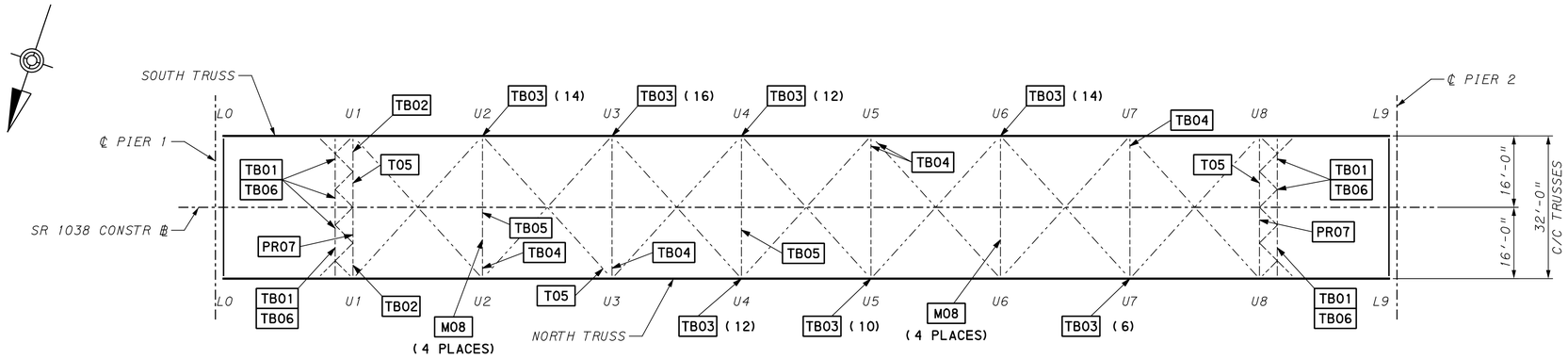
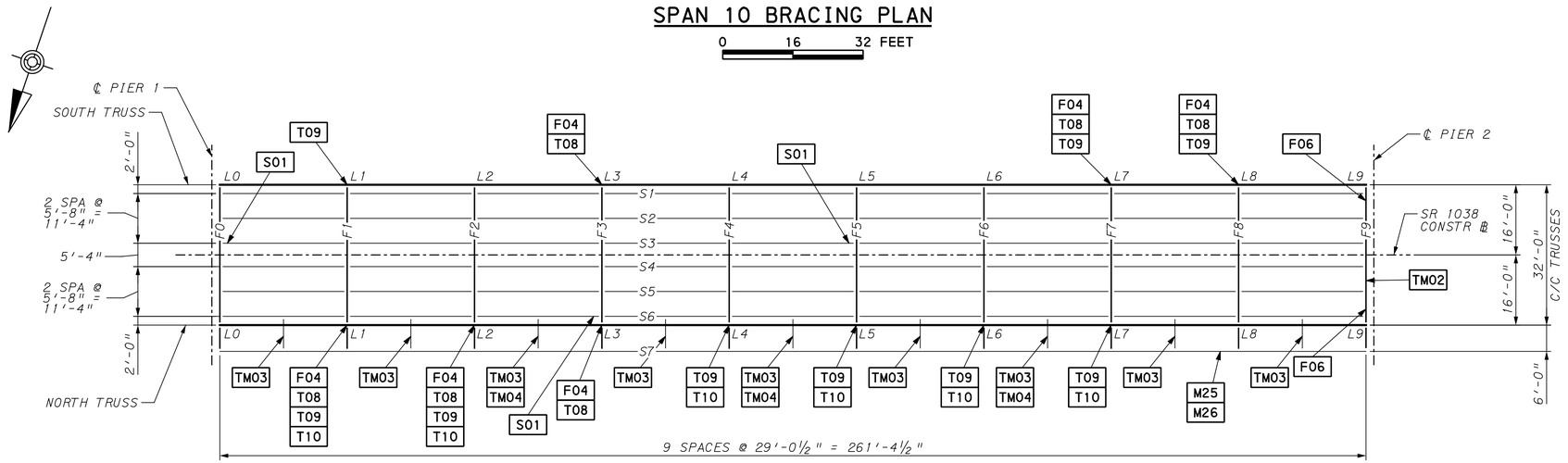
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\Sp 10 Framing-Bracing.dgn




## SPAN 10 BRACING PLAN

0 16 32 FEET




## SPAN 10 FRAMING PLAN

0 16 32 FEET

## SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 10 FLOOR SYSTEM & BRACING

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| F04 | BOTTOM FLANGE CONNECTION REPAIR, FLOORBEAM | 61 | EA | 6 |
| F06 | STIFFENER RETROFIT, FLOORBEAM | 58 | EA | 2 |
| S01 | WEB COVER PLATE, STRINGER | 53 | SF | 3 |
| T05 | REPLACE RIVET, TRUSS | 65 | EA | 68 |
| T08 | CONNECTION ANGLE REPAIR, TRUSS | 61 | EA | 12 |
| T09 | FLOORBEAM CONNECTION ANGLE REPAIR, TRUSS | 62 | EA | 9 |
| T10 | FLOORBEAM CONNECTION PLATE REPAIR, TRUSS | 62 | EA | 6 |
| TB01 | LACING BAR REPAIR, END PORTAL | 59 | EA | 4 |
| TB02 | BATTEN PLATE REPAIR, BRACING | 51 | EA | 2 |
| TB03 | REPLACE RIVET, BRACING | 65 | EA | 84 |
| TB04 | END SWAY BRACE ANGLE REPLACEMENT | 60 | EA | 5 |
| TB05 | MID SWAY BRACE ANGLE REPLACEMENT | 60 | EA | 2 |
| TB06 | END PORTAL STRUT REPAIR | 59 | EA | 4 |
| TM02 | REPLACE EXP DAM SEAT | 49 | LB | 525 |
| TM03 | SIDEWALK GUSSET PLATE REPAIR | 69 | EA | 9 |
| TM04 | SIDEWALK ANGLE BRACING REPAIR | 69 | EA | 3 |
| M08 | REMOVE EXISTING TAB PLATE | 73 | EA | 8 |
| M25 | REMOVE EXISTING UTILITY LINES AND CONDUIT | 9 | LS | |
| M26 | INSTALL COMCAST CONDUIT | 7 | LS | |
| PR07 | PACK RUST REPAIR, TRUSS END PORTAL | 66 | LF | 64 |

## LEGEND:

- TRUSS - TOP & BOTTOM CHORD MEMBER
- F5 FLOORBEAM
- S2 STRINGER
- SWAY BRACING
- LATERAL BRACING
- F00 DENOTES REPAIR

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 10 NORTH TRUSS ELEVATION, SEE SHEET 38.
3. FOR SPAN 10 SOUTH TRUSS ELEVATION, SEE SHEET 39.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# SPAN 10 FRAMING & BRACING PLAN

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 37 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | EAL | CKD: | TSA |
|---|---|---|---|---|---|---|---|

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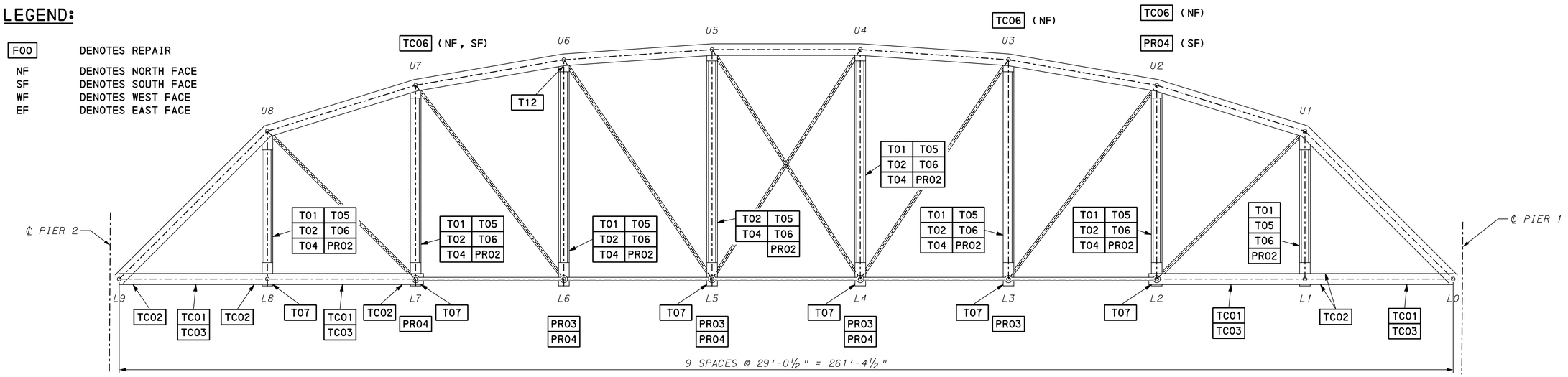
## LEGEND:

| | |
|---|---|
| F00 | DENOTES REPAIR |
| NF | DENOTES NORTH FACE |
| SF | DENOTES SOUTH FACE |
| WF | DENOTES WEST FACE |
| EF | DENOTES EAST FACE |




## SPAN 10 NORTH TRUSS ELEVATION

(SOUTH FACE OF TRUSS VIEWED FROM ℄ BRIDGE)
NOT TO SCALE

### REPAIR DESCRIPTION & QTY BY MEMBER SPAN 10, NORTH TRUSS

| TRUSS VERTICALS | LOCATION | REPAIR TYPE PR02 (LF) | T01 (EA) | T02 (EA) | T04 (EA) | T05 (EA) | T06 (EA) | T07 (LF) |
|---|---|---|---|---|---|---|---|---|
| L1U1 | NF | 4 | 3 | | | 27 | | |
| | SF | | | | | | 16 | |
| | WF | | | 4 | | | | |
| | EF | | | 1 | | | 14 | |
| L2U2 | NF | 14 | 3 | | | 45 | | |
| | SF | | 3 | | | | 16 | |
| | WF | | | 5 | | | | 4 |
| | EF | | | 7 | 1 | | | 4 |
| L3U3 | NF | 4 | 3 | | | 31 | | |
| | SF | | | | | | 16 | |
| | WF | | | 4 | | | | 4 |
| | EF | | | 4 | 1 | | 11 | |
| L4U4 | NF | 4 | | | | 23 | 18 | |
| | SF | | 3 | | | | 10 | |
| | WF | | | 2 | | | 5 | 2 |
| | EF | | | 6 | 1 | | 11 | 1 |
| L5U5 | NF | 4 | | | | 5 | 10 | |
| | SF | | | | | | 10 | |
| | WF | | | | | | 10 | |
| | EF | | | 4 | 1 | | 8 | 4 |
| L6U6 | NF | 4 | | | | 30 | | |
| | SF | | 3 | | | | 10 | |
| | WF | | | 4 | | | | |
| | EF | | | 5 | 1 | | 14 | |
| L7U7 | NF | 4 | | | | 21 | 10 | |
| | SF | | 3 | | | | 16 | |
| | WF | | | | | | 10 | 4 |
| | EF | | | 8 | 1 | | | 4 |
| L8U8 | NF | 4 | | | | 34 | | |
| | SF | | 4 | | | | 10 | |
| | WF | | | | | | | 2 |
| | EF | | | 6 | 1 | | | 2 |
| TOTAL | | 42 | 25 | 60 | 7 | 216 | 225 | 31 |

### REPAIR DESCRIPTION & QTY BY MEMBER SPAN 10, NORTH TRUSS

| TRUSS CHORDS | REPAIR TYPE TC01 (EA) | TC02 (EA) | TC03 (EA) | T04 (EA) | T05 (EA) | T06 (EA) |
|---|---|---|---|---|---|---|
| L0L1 | 8 | 2 | 6 | | | |
| L1L2 | 4 | | 4 | | | |
| L7L8 | 4 | 2 | 15 | | | |
| L8L9 | 8 | 2 | 10 | | | |
| L0U1 | | | | | | |
| U1U2 | | | | | | |
| U2U3 | | | | | | |
| U3U4 | | | | | | |
| U4U5 | | | | | | |
| U5U6 | | | | | | |
| U6U7 | | | | | | |
| U7U8 | | | | | | |
| U8L9 | | | | | | |
| TOTAL | 24 | 6 | 35 | 0 | 0 | 0 |

### SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 10, NORTH TRUSS

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| T01 | LACING BAR REPAIR TYPE 1, TRUSS | 50 | EA | 25 |
| T02 | LACING BAR REPAIR TYPE 2, TRUSS | 50 | EA | 60 |
| T04 | BATTEN PLATE REPAIR TYPE 2, TRUSS | 51 | EA | 7 |
| T05 | REPLACE RIVET, TRUSS | 65 | EA | 216 |
| T06 | INSTALL HIGH STRENGTH BOLT, TRUSS | 51 | EA | 225 |
| T07 | ANGLE COVER PLATE, TRUSS | 52 | LF | 31 |
| T12 | REPLACE CLIP ANGLE AND GUSSET PLATE | 63 | EA | 1 |
| TC01 | LACING BAR REPAIR, CHORD | 50 | EA | 24 |
| TC02 | BATTEN PLATE REPAIR, CHORD | 51 | EA | 6 |
| TC03 | REPLACE RIVET, CHORD | 65 | EA | 35 |
| TC06 | REPAIR TOP CHORD PIN PLATE | 68 | EA | 4 |
| PR02 | PACK RUST REPAIR, TRUSS VERTICAL | 66 | LF | 42 |
| PR03 | PACK RUST REPAIR, EYE BARS | 67 | EA | 4 |
| PR04 | PACK RUST REPAIR, JOINT OR CHORD | 67 | EA | 5 |

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 10 FRAMING & BRACING PLAN, SEE SHEET 37.
3. FOR SPAN 10 SOUTH TRUSS ELEVATION, SEE SHEET 39.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SPAN 10 NORTH TRUSS ELEVATION

RECOMMENDED
OCTOBER 26, 2022

SHEET 38 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

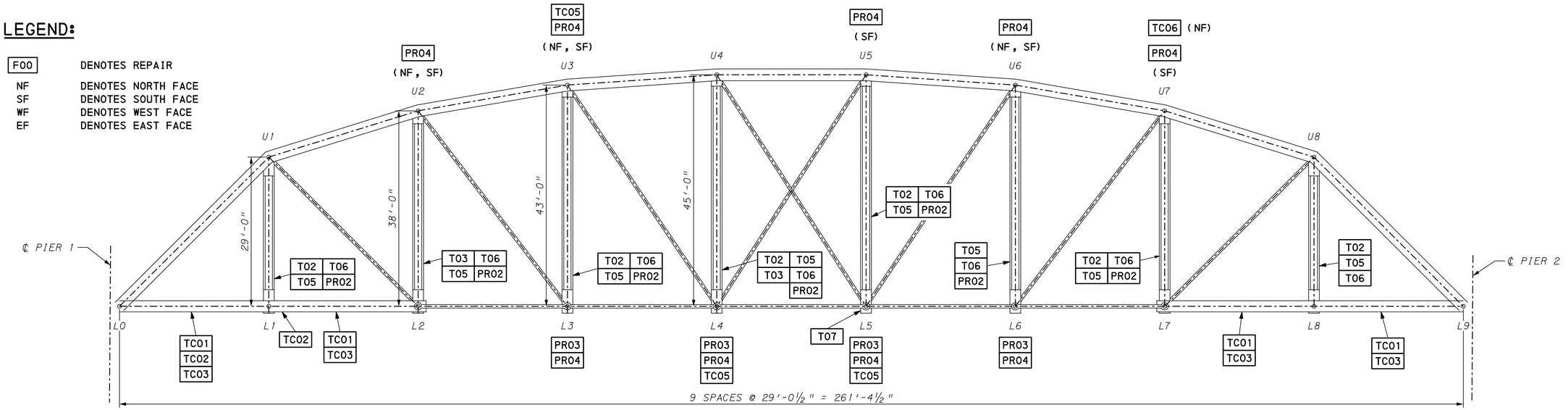
FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\Sp 10 North Truss.dgn

PLOTTED: 10/26/2022 7:55:22 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Sp 10 South Truss.dgn

## LEGEND:

| | |
|---|---|
| F00 | DENOTES REPAIR |
| NF | DENOTES NORTH FACE |
| SF | DENOTES SOUTH FACE |
| WF | DENOTES WEST FACE |
| EF | DENOTES EAST FACE |




## SPAN 10 SOUTH TRUSS ELEVATION

(NORTH FACE OF TRUSS VIEWED FROM ℄ BRIDGE)
NOT TO SCALE

### REPAIR DESCRIPTION & QTY BY MEMBER SPAN 10, SOUTH TRUSS

| TRUSS VERTICALS | LOCATION | REPAIR TYPE PR02 (LF) | TO1 (EA) | TO2 (EA) | TO3 (EA) | TO5 (EA) | TO6 (EA) | TO7 (LF) |
|---|---|---|---|---|---|---|---|---|
| L1U1 | NF | 2 | | | | 39 | 10 | |
| | SF | | | | | | | |
| | WF | | | 5 | | | 2 | |
| | EF | | | | | | 10 | |
| L2U2 | NF | 8 | | | | 20 | 10 | |
| | SF | | | | | | | |
| | WF | | | | 1 | | 6 | |
| | EF | | | | | | 6 | |
| L3U3 | NF | 4 | | | | 12 | 8 | |
| | SF | | | | | | | |
| | WF | | | 2 | 1 | | 10 | |
| | EF | | | 6 | | | 5 | |
| L4U4 | NF | 6 | | | | 10 | 12 | |
| | SF | | | | | | | |
| | WF | | | 2 | 1 | | 14 | |
| | EF | | | | | | 8 | |
| L5U5 | NF | 6 | | | | 23 | 12 | |
| | SF | | | | | | | |
| | WF | | | 1 | | | 21 | |
| | EF | | | 3 | | | 10 | 1 |
| L6U6 | NF | 4 | | | | 12 | 10 | |
| | SF | | | | | | | |
| | WF | | | | | | 15 | |
| | EF | | | | | | 15 | |
| L7U7 | NF | 10 | | | | 15 | 12 | |
| | SF | | | | | | | |
| | WF | | | 3 | | | 12 | |
| | EF | | | | | | | |
| L8U8 | NF | 7 | | 3 | | 17 | 8 | |
| | SF | | | | | | | |
| | WF | | | 7 | | | 8 | |
| | EF | | | | | | | |
| TOTAL | | 47 | 0 | 32 | 3 | 148 | 224 | 1 |

### REPAIR DESCRIPTION & QTY BY MEMBER SPAN 10, SOUTH TRUSS

| TRUSS CHORDS | REPAIR TYPE TC01 (EA) | TC02 (EA) | TC03 (EA) | TO4 (EA) | TO5 (EA) | TO6 (EA) |
|---|---|---|---|---|---|---|
| L0L1 | 32 | 1 | 20 | | | |
| L1L2 | 40 | 1 | 10 | | | |
| L7L8 | 40 | | 15 | | | |
| L8L9 | 32 | | 10 | | | |
| L0U1 | | | | | | |
| U1U2 | | | | | | |
| U2U3 | | | | | | |
| U3U4 | | | | | | |
| U4U5 | | | | | | |
| U5U6 | | | | | | |
| U6U7 | | | | | | |
| U7U8 | | | | | | |
| U8L9 | | | | | | |
| TOTAL | 144 | 2 | 55 | 0 | 0 | 0 |

### SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 10, SOUTH TRUSS

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| TO2 | REPLACE LACING BAR TYPE 2, TRUSS | 50 | EA | 32 |
| TO3 | REPLACE BATTEN PLATE TYPE 1, TRUSS | 51 | EA | 3 |
| TO5 | REPLACE RIVET, TRUSS | 65 | EA | 148 |
| TO6 | INSTALL HIGH STRENGTH BOLT, TRUSS | 51 | EA | 224 |
| TO7 | ANGLE COVER PLATE, TRUSS | 52 | LF | 1 |
| TC01 | LACING BAR REPAIR, CHORD | 50 | EA | 144 |
| TC02 | BATTEN PLATE REPAIR, CHORD | 51 | EA | 2 |
| TC03 | REPLACE RIVET, TRUSS CHORD | 65 | EA | 55 |
| TC05 | REPLACE PIN ROD | 68 | EA | 3 |
| TC06 | REPAIR TOP CHORD PIN PLATE | 68 | EA | 1 |
| PR02 | PACK RUST REPAIR, TRUSS VERTICAL | 66 | LF | 47 |
| PR03 | PACK RUST REPAIR, EYE BARS | 67 | EA | 4 |
| PR04 | PACK RUST REPAIR, JOINT OR CHORD | 67 | EA | 12 |

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 10 FRAMING & BRACING PLAN, SEE SHEET 37.
3. FOR SPAN 10 NORTH TRUSS ELEVATION, SEE SHEET 38.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

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SR 1038-A01 STA 5+92.00
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PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SPAN 10 SOUTH TRUSS ELEVATION

RECOMMENDED
OCTOBER 26, 2022

SHEET 39 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 7:55:25 AM
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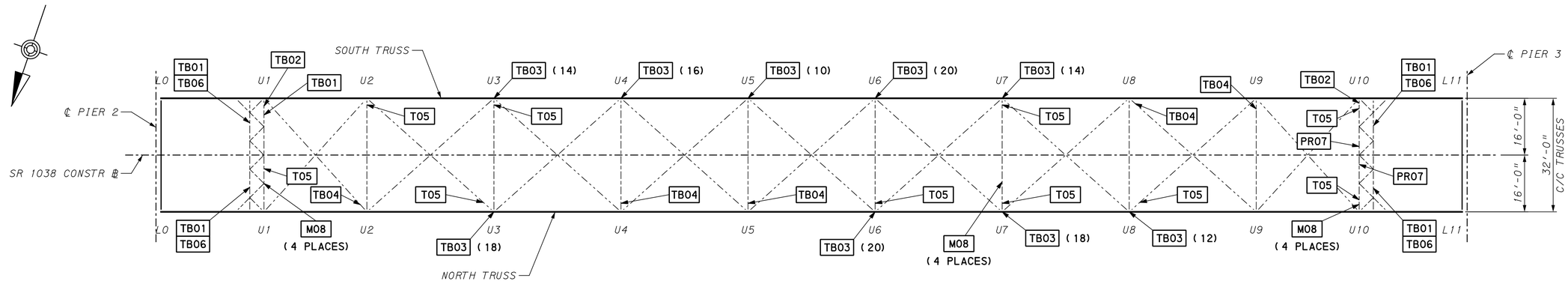
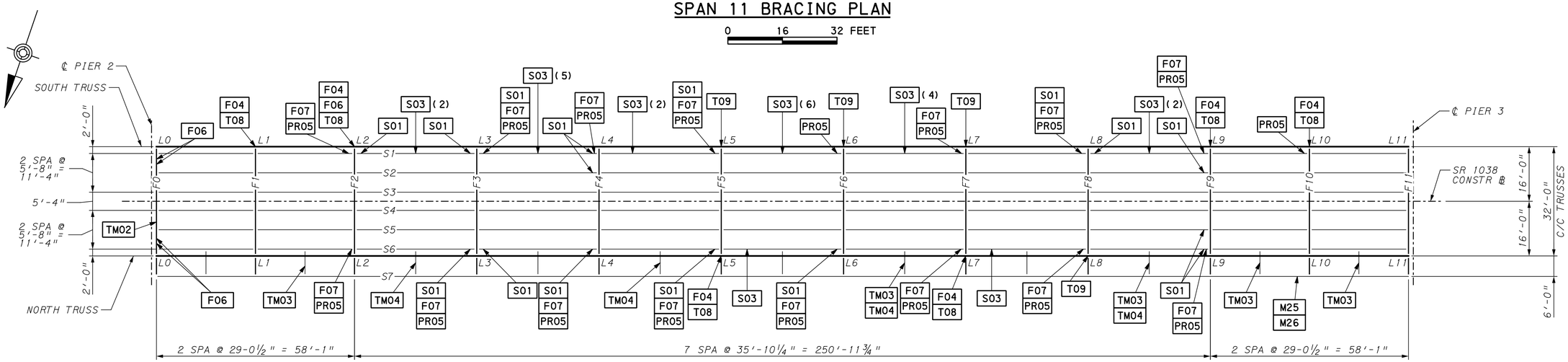



## SPAN 11 BRACING PLAN

0 16 32 FEET




## SPAN 11 FRAMING PLAN

0 16 32 FEET

### SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 11 FLOOR SYSTEM & BRACING

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| F04 | BOTTOM FLANGE CONNECTION REPAIR, FLOORBEAM | 61 | EA | 6 |
| F06 | STIFFENER RETROFIT, FLOORBEAM | 58 | EA | 4 |
| F07 | BEARING SEAT STIFFENER REPAIR, FLOORBEAM | 58 | EA | 15 |
| S01 | WEB COVER PLATE, STRINGER | 53 | EA | 16 |
| S03 | STIFFENER REPAIR, STRINGER | 57 | EA | 23 |
| T05 | REPLACE RIVET, TRUSS | 65 | EA | 80 |
| T08 | CONNECTION ANGLE REPAIR, TRUSS | 61 | EA | 12 |
| T09 | FLOORBEAM CONNECTION ANGLE REPAIR, TRUSS | 62 | EA | 4 |
| TB01 | LACING BAR REPAIR, END PORTAL | 59 | EA | 5 |
| TB02 | BATTEN PLATE REPAIR, BRACING | 51 | EA | 2 |
| TB03 | REPLACE RIVET, BRACING | 65 | EA | 142 |
| TB04 | END SWAY BRACING ANGLE REPLACEMENT | 60 | EA | 5 |
| TB06 | END PORTAL STRUT REPAIR | 59 | EA | 4 |
| TM03 | REPAIR GUSSET PLATE, SIDEWALK SUPPORT | 69 | EA | 4 |
| TM04 | REPAIR ANGLE BRACING, SIDEWALK SUPPORT | 69 | EA | 4 |
| M08 | REMOVE EXISTING TAB PLATE | 73 | EA | 12 |
| M25 | REMOVE EXISTING UTILITY LINES AND CONDUIT | 9 | LS | |
| M26 | INSTALL COMCAST CONDUIT | 7 | LS | |
| PR05 | PACK RUST REPAIR, STRINGER BEARING SEAT | 66 | EA | 17 |
| PR07 | PACK RUST REPAIR, TRUSS END PORTAL | 66 | LF | 64 |

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 11 NORTH TRUSS ELEVATION, SEE SHEET 41.
3. FOR SPAN 11 SOUTH TRUSS ELEVATION, SEE SHEET 42.
4. FOR REPAIR [TM02] QUANTITY, SEE SHEET 37.

### LEGEND:

- TRUSS - TOP & BOTTOM CHORD MEMBER
- —F5— FLOORBEAM
- —S2— STRINGER
- SWAY BRACING
- LATERAL BRACING
- [F00] DENOTES REPAIR

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## SPAN 11 FRAMING & BRACING PLAN

RECOMMENDED
OCTOBER 26, 2022

SHEET 40 OF 124
S - 40253

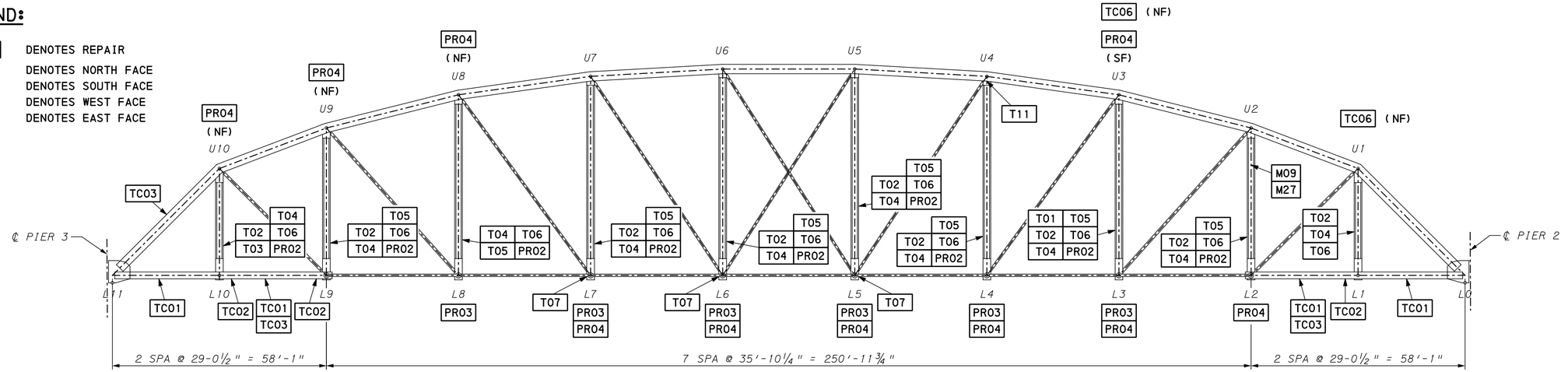
DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

PLOTTED: 10/26/2022 7:55:27 AM

FILE NAME: G:\17-048B New Kensington Fina\CADD\Structure\Sp 11 North Truss.dgn

## LEGEND:

| | |
|---|---|
| F00 | DENOTES REPAIR |
| NF | DENOTES NORTH FACE |
| SF | DENOTES SOUTH FACE |
| WF | DENOTES WEST FACE |
| EF | DENOTES EAST FACE |




## SPAN 11 NORTH TRUSS ELEVATION

(SOUTH FACE OF TRUSS VIEWED FROM ℄ BRIDGE)
NOT TO SCALE

### REPAIR DESCRIPTION & QTY BY MEMBER SPAN 11, NORTH TRUSS

| TRUSS VERTICALS | LOCATION | REPAIR TYPE PR02 (LF) | T01 (EA) | T02 (EA) | T03 (EA) | T04 (EA) | T05 (EA) | T06 (EA) | T07 (LF) |
|---|---|---|---|---|---|---|---|---|---|
| L1U1 | NF | | | | | | | | |
| | SF | | | | | | | 16 | |
| | WF | | | | | | | | |
| | EF | | | 5 | | 1 | | 5 | |
| L2U2 | NF | | | | | | | 12 | |
| | SF | 4 | | | | | 31 | 10 | |
| | WF | | | | | | | 8 | |
| | EF | | | 4 | | 1 | | | |
| L3U3 | NF | | 3 | | | | | | |
| | SF | 4 | | | | | 38 | 10 | |
| | WF | | | 6 | | | | | |
| | EF | | | 8 | | 1 | | | |
| L4U4 | NF | | | | | | | 12 | |
| | SF | 4 | | | | | 34 | 10 | |
| | WF | | | | | | | 6 | |
| | EF | | | 3 | | 1 | | 12 | |
| L5U5 | NF | | | | | | | 14 | |
| | SF | 4 | | | | | 22 | 10 | |
| | WF | | | 2 | | | | | |
| | EF | | | 8 | | 1 | | | 1 |
| L6U6 | NF | | | | | | | 14 | |
| | SF | 4 | | | | | 15 | 10 | |
| | WF | | | | | | | 8 | 2 |
| | EF | | | 6 | | 1 | | | |
| L7U7 | NF | | | | | | | 18 | |
| | SF | 4 | | | | | 12 | 10 | |
| | WF | | | | | | | 11 | 1 |
| | EF | | | 6 | | 1 | | 5 | 1 |
| L8U8 | NF | | | | | | | 12 | |
| | SF | 8 | | | | | 11 | 16 | |
| | WF | | | | | | | 8 | |
| | EF | | | | | 1 | | 11 | |
| L9U9 | NF | | | | | | | 12 | |
| | SF | 9 | | | | | 9 | 10 | |
| | WF | | | | | | | 6 | |
| | EF | | | 8 | | 1 | | | |
| L10U10 | NF | | | | | | | | |
| | SF | 4 | | | | | | 10 | |
| | WF | | | | | | | | |
| | EF | | | 7 | 1 | 1 | | | |
| TOTAL | | 45 | 3 | 63 | 1 | 10 | 172 | 286 | 5 |

### REPAIR DESCRIPTION & QTY BY MEMBER SPAN 11, NORTH TRUSS

| TRUSS CHORDS | REPAIR TYPE TC01 (EA) | TC02 (EA) | TC03 (EA) | T04 (EA) | T05 (EA) | T06 (EA) |
|---|---|---|---|---|---|---|
| L0L1 | 2 | | | | | |
| L1L2 | 10 | 3 | 20 | | | |
| L9L10 | 4 | 2 | 12 | | | |
| L10L11 | 8 | | | | | |
| L0U1 | | | | | | |
| U1U2 | | | | | | |
| U2U3 | | | | | | |
| U3U4 | | | | | | |
| U4U5 | | | | | | |
| U5U6 | | | | | | |
| U6U7 | | | | | | |
| U7U8 | | | | | | |
| U8U9 | | | | | | |
| U9U10 | | | | | | |
| U10L11 | | | 30 | | | |
| TOTAL | 24 | 5 | 62 | 0 | 0 | 0 |

### SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 11, NORTH TRUSS

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| T01 | LACING BAR REPAIR TYPE 1, TRUSS | 50 | EA | 3 |
| T02 | LACING BAR REPAIR TYPE 2, TRUSS | 50 | EA | 63 |
| T03 | BATTEN PLATE REPAIR TYPE 1, TRUSS | 51 | EA | 1 |
| T04 | BATTEN PLATE REPAIR TYPE 2, TRUSS | 51 | EA | 10 |
| T05 | REPLACE RIVET, TRUSS | 65 | EA | 172 |
| T06 | INSTALL HIGH STRENGTH BOLT, TRUSS | 51 | EA | 286 |
| T07 | ANGLE COVER PLATE, TRUSS | 52 | LF | 5 |
| T11 | REPLACE CLIP ANGLE | 63 | EA | 1 |
| TC01 | LACING BAR REPAIR, CHORD | 50 | EA | 24 |
| TC02 | BATTEN PLATE REPAIR, CHORD | 51 | EA | 5 |
| TC03 | REPLACE RIVET, CHORD | 65 | EA | 62 |
| TC06 | REPAIR TOP CHORD PIN PLATE | 68 | EA | 2 |
| PR02 | PACK RUST REPAIR, TRUSS VERTICAL | 66 | LF | 45 |
| PR03 | PACK RUST REPAIR, EYE BARS | 67 | EA | 6 |
| PR04 | PACK RUST REPAIR, JOINT OR CHORD | 67 | EA | 10 |
| M09 | INSTALL LIGHT MAST AND FIXTURE | 73 | EA | 1 |
| M27 | REPLACE LIGHT MAST PLATE | 73 | EA | 1 |

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 11 FRAMING & BRACING PLAN, SEE SHEET 40.
3. FOR SPAN 11 SOUTH TRUSS ELEVATION, SEE SHEET 42.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SPAN 11 NORTH TRUSS ELEVATION

RECOMMENDED
OCTOBER 26, 2022

SHEET 41 OF 124

S - 40253

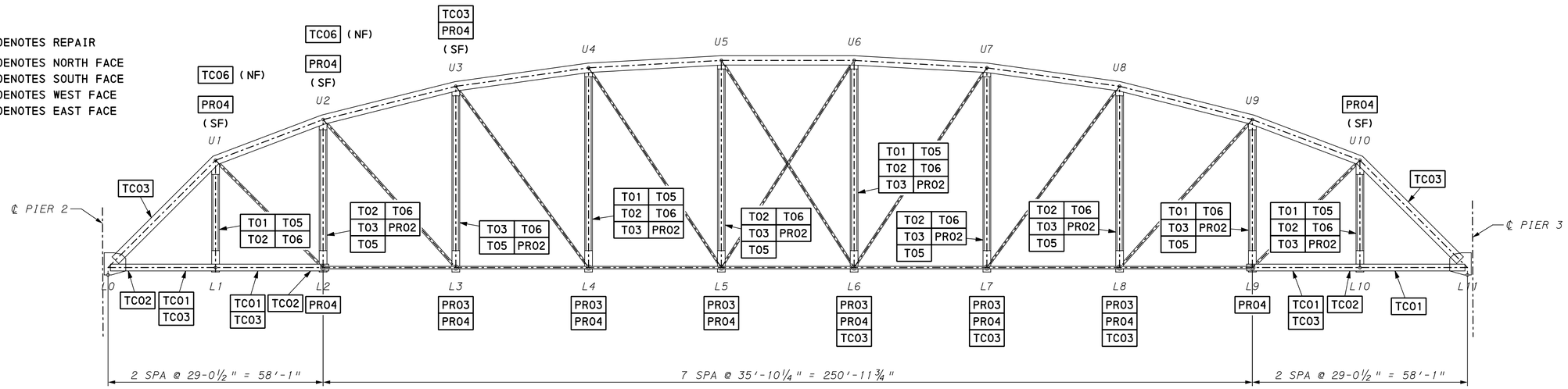
| DES: | TJH | CKD: | TSA | DWG: | EAL | CKD: | TSA |
|---|---|---|---|---|---|---|---|

PLOTTED: 10/26/2022 7:55:29 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Sp 11 South Truss.dgn

## LEGEND:

| | |
|---|---|
| F00 | DENOTES REPAIR |
| NF | DENOTES NORTH FACE |
| SF | DENOTES SOUTH FACE |
| WF | DENOTES WEST FACE |
| EF | DENOTES EAST FACE |




## SPAN 11 SOUTH TRUSS ELEVATION

(NORTH FACE OF TRUSS VIEWED FROM ℄ BRIDGE)
NOT TO SCALE

### REPAIR DESCRIPTION & QTY BY MEMBER SPAN 11, SOUTH TRUSS

| TRUSS VERTICALS | LOCATION | REPAIR TYPE PR02 (LF) | T01 (EA) | T02 (EA) | T03 (EA) | T04 (EA) | T05 (EA) | T06 (EA) | T07 (LF) |
|---|---|---|---|---|---|---|---|---|---|
| L1U1 | NF | | | | | | | 4 | |
| | SF | | | | | | 22 | | |
| | WF | | | 7 | | | | 2 | |
| | EF | | | | | | | | |
| L2U2 | NF | | | | | | | 4 | |
| | SF | 8 | | | | | 76 | | |
| | WF | | | 4 | 1 | | | | |
| | EF | | | 2 | | | | | |
| L3U3 | NF | | | | | | | 4 | |
| | SF | 4 | | | | | 44 | | |
| | WF | | | | 1 | | | 16 | |
| | EF | | | | 1 | | | 5 | |
| L4U4 | NF | | | | | | | 4 | |
| | SF | 4 | 2 | | | | 14 | | |
| | WF | | | 4 | 1 | | | 11 | |
| | EF | | | | | | | | |
| L5U5 | NF | | | | | | | 4 | |
| | SF | 4 | | | | | 20 | | |
| | WF | | | 3 | 1 | | | 14 | |
| | EF | | | | | | | | |
| L6U6 | NF | | 3 | | | | | 8 | |
| | SF | 4 | | | | | 21 | | |
| | WF | | | 5 | 1 | | | 8 | |
| | EF | | | | | | | | |
| L7U7 | NF | | | | 1 | | | 4 | |
| | SF | 6 | | | | | 23 | | |
| | WF | | | 5 | 1 | | | 8 | |
| | EF | | | | | | | 14 | |
| L8U8 | NF | | | | 1 | | | 4 | |
| | SF | 14 | | | | | 85 | | |
| | WF | | | 3 | 1 | | | 8 | |
| | EF | | | 3 | | | | 8 | |
| L9U9 | NF | | | | | | | 4 | |
| | SF | 8 | 2 | | | | 8 | | |
| | WF | | | | 1 | | | 8 | |
| | EF | | | | 1 | | | 5 | |
| L10U10 | NF | | 3 | | | | | 10 | |
| | SF | 10 | | | | | 12 | | |
| | WF | | | 7 | 2 | | | | |
| | EF | | | | | | | | |
| TOTAL | | 62 | 10 | 43 | 14 | 0 | 325 | 157 | 0 |

### REPAIR DESCRIPTION & QTY BY MEMBER SPAN 11, SOUTH TRUSS

| TRUSS CHORDS | REPAIR TYPE TC01 (EA) | TC02 (EA) | TC03 (EA) | T04 (EA) | T05 (EA) | T06 (EA) |
|---|---|---|---|---|---|---|
| L0L1 | 28 | 4 | 10 | | | |
| L1L2 | 36 | 2 | 30 | | | |
| L9L10 | 36 | 1 | 30 | | | |
| L10L11 | 28 | | | | | |
| L0U1 | | | 40 | | | |
| U1U2 | | | | | | |
| U2U3 | | | | | | |
| U3U4 | | | | | | |
| U4U5 | | | | | | |
| U5U6 | | | | | | |
| U6U7 | | | | | | |
| U7U8 | | | | | | |
| U8U9 | | | | | | |
| U9U10 | | | | | | |
| U10L11 | | | 13 | | | |
| TOTAL | 128 | 7 | 123 | 0 | 0 | 0 |

### SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 11, SOUTH TRUSS

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| T01 | LACING BAR REPAIR TYPE 1, TRUSS | 50 | EA | 10 |
| T02 | LACING BAR REPAIR TYPE 2, TRUSS | 50 | EA | 43 |
| T03 | BATTEN PLATE REPAIR TYPE 1, TRUSS | 51 | EA | 14 |
| T05 | REPLACE RIVET, TRUSS | 65 | EA | 325 |
| T06 | INSTALL HIGH STRENGTH BOLT, TRUSS | 51 | EA | 157 |
| TC01 | LACING BAR REPAIR, CHORD | 50 | EA | 128 |
| TC02 | BATTEN PLATE REPAIR, CHORD | 51 | EA | 7 |
| TC03 | REPLACE RIVET, CHORD | 65 | EA | 123 |
| TC06 | REPAIR TOP CHORD PIN PLATE | 68 | EA | 2 |
| TC05 | REPLACE PIN ROD | 68 | EA | 4 |
| PR02 | PACK RUST REPAIR, TRUSS VERTICAL | 66 | LF | 62 |
| PR03 | PACK RUST REPAIR, EYE BARS | 67 | EA | 6 |
| PR04 | PACK RUST REPAIR, JOINT OR CHORD | 67 | EA | 12 |

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 11 FRAMING & BRACING PLAN, SEE SHEET 40.
3. FOR SPAN 11 NORTH TRUSS ELEVATION, SEE SHEET 41.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER
PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SPAN 11 SOUTH TRUSS ELEVATION

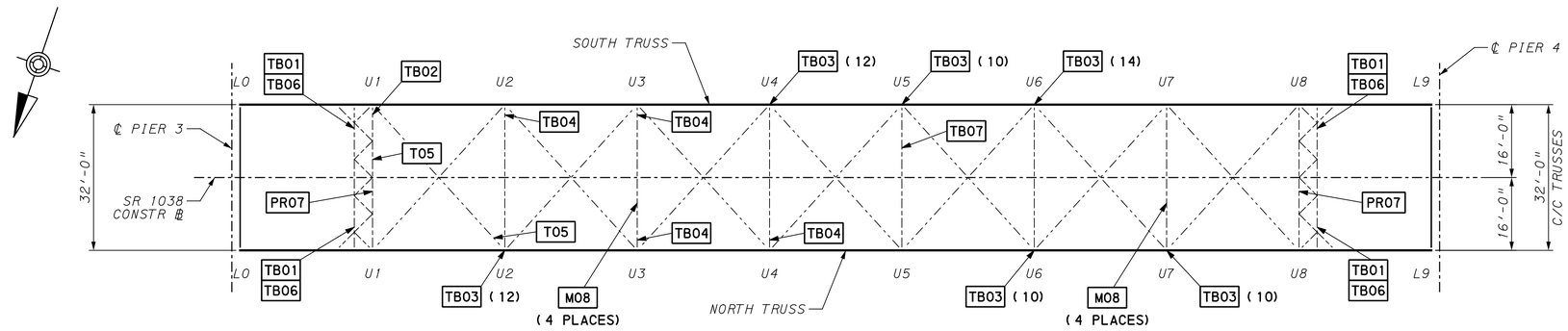
RECOMMENDED
OCTOBER 26, 2022

SHEET 42 OF 124

S - 40253

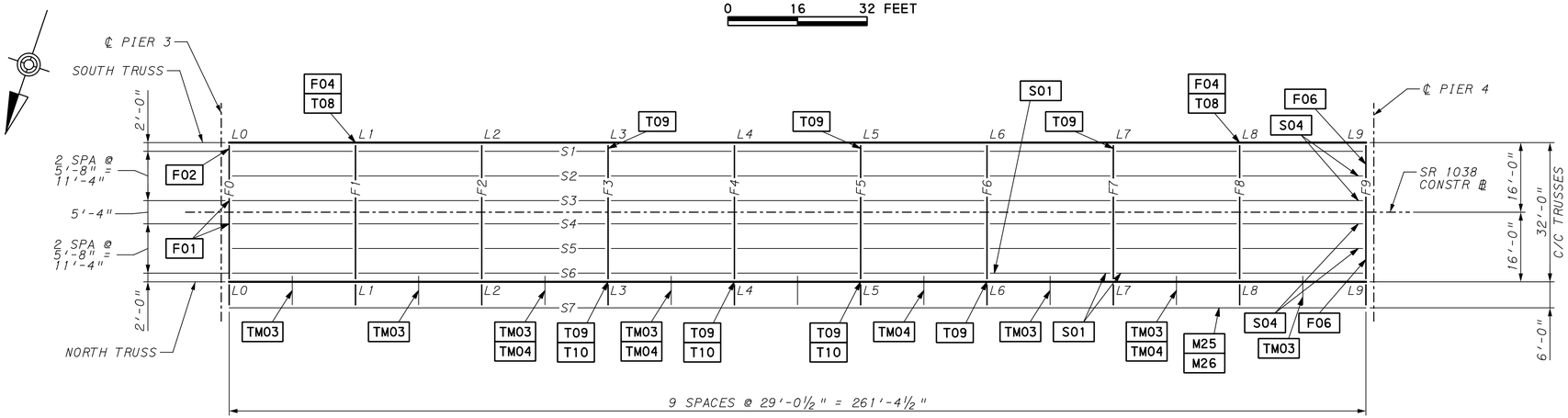
| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 7:55:30 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Sp 12 Framing-Bracing.dgn




## SPAN 12 BRACING PLAN

0 16 32 FEET




## SPAN 12 FRAMING PLAN

0 16 32 FEET

## SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 12 FLOOR SYSTEM & BRACING

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| F01 | WEB COVER PLATE, FLOORBEAM | 55 | EA | 2 |
| F02 | FLANGE COVER PLATE, FLOORBEAM | 56 | LF | 3 |
| F04 | BOTTOM FLANGE CONNECTION REPAIR, FLOORBEAM | 61 | EA | 2 |
| F06 | STIFFENER RETROFIT, FLOORBEAM | 58 | EA | 2 |
| S01 | WEB COVER PLATE, STRINGER | 53 | EA | 3 |
| S04 | ARREST HOLE WITH WEB COVER PLATE, STRINGER | 54 | EA | 4 |
| T05 | REPLACE RIVET, TRUSS | 65 | EA | 75 |
| T08 | CONNECTION ANGLE REPAIR, TRUSS | 61 | EA | 4 |
| T09 | FLOORBEAM CONNECTION ANGLE REPAIR, TRUSS | 62 | EA | 7 |
| T10 | FLOORBEAM CONNECTION PLATE REPAIR, TRUSS | 62 | EA | 3 |
| TM03 | REPAIR GUSSET PLATE, SIDEWALK SUPPORT | 69 | EA | 7 |
| TM04 | REPAIR ANGLE BRACING, SIDEWALK SUPPORT | 69 | EA | 4 |
| M08 | REMOVE EXISTING TAB PLATE | 73 | EA | 8 |
| M25 | REMOVE EXISTING UTILITY LINES AND CONDUIT | 9 | LS | |
| M26 | INSTALL COMCAST CONDUIT | 7 | LS | |
| TB01 | LACING BAR REPAIR, END PORTAL | 59 | EA | 4 |
| TB02 | BATTEN PLATE REPAIR, BRACING | 51 | EA | 1 |
| TB03 | REPLACE RIVET, BRACING | 65 | EA | 68 |
| TB04 | END SWAY BRACING ANGLE REPLACEMENT | 60 | EA | 4 |
| TB06 | END PORTAL STRUT REPAIR | 59 | EA | 4 |
| TB07 | SWAY BRACING ANGLE REPLACEMENT | 60 | EA | 1 |
| PR07 | PACK RUST REPAIR, TRUSS END PORTAL | 66 | LF | 64 |

## LEGEND:

- TRUSS - TOP & BOTTOM CHORD MEMBER
- F5 FLOORBEAM
- S2 STRINGER
- SWAY BRACING
- LATERAL BRACING
- F00 DENOTES REPAIR

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 12 NORTH TRUSS ELEVATION, SEE SHEET 44.
3. FOR SPAN 12 SOUTH TRUSS ELEVATION, SEE SHEET 45.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SPAN 12 FRAMING & BRACING PLAN

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 43 OF 124

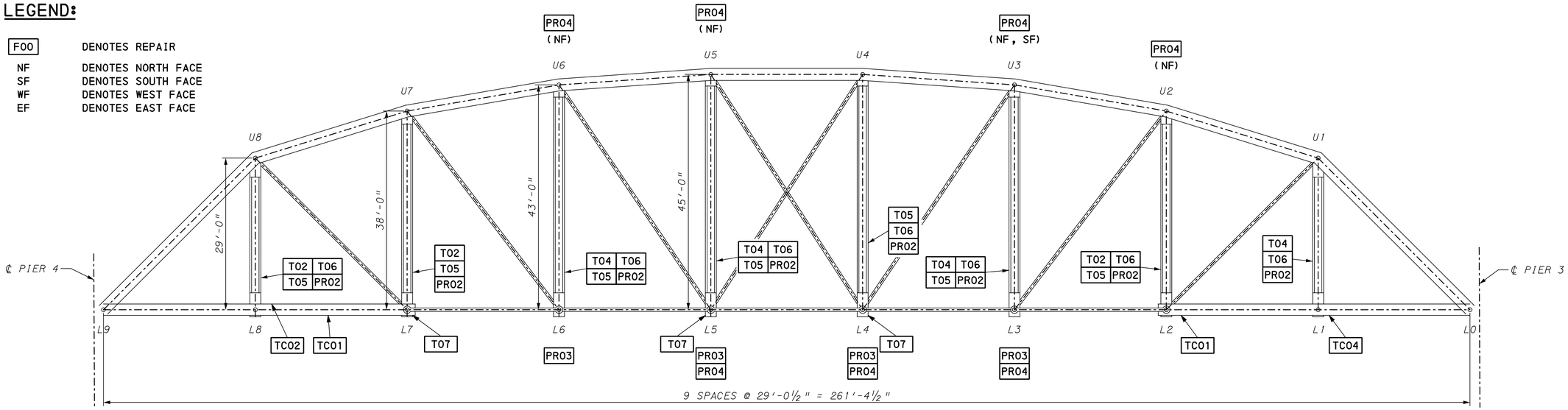
S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 7:55:31 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Sp 12 North Truss.dgn

## LEGEND:

| | |
|---|---|
| F00 | DENOTES REPAIR |
| NF | DENOTES NORTH FACE |
| SF | DENOTES SOUTH FACE |
| WF | DENOTES WEST FACE |
| EF | DENOTES EAST FACE |




## SPAN 12 NORTH TRUSS ELEVATION

(SOUTH FACE OF TRUSS VIEWED FROM ℄ BRIDGE)
NOT TO SCALE

### REPAIR DESCRIPTION & QTY BY MEMBER SPAN 12, NORTH TRUSS

| TRUSS VERTICALS | LOCATION | REPAIR TYPE PR02 (LF) | T01 (EA) | T02 (EA) | T04 (EA) | T05 (EA) | T06 (EA) | T07 (LF) |
|---|---|---|---|---|---|---|---|---|
| L1U1 | NF | 12 | | | | | | |
| | SF | | | | | | 4 | |
| | WF | | | | | | 6 | |
| | EF | | | | 1 | | 18 | |
| L2U2 | NF | 8 | | | | 9 | 18 | |
| | SF | | | | | | 10 | |
| | WF | | | 3 | | | 10 | |
| | EF | | | | | | 8 | |
| L3U3 | NF | 4 | | | | 10 | 18 | |
| | SF | | | | | | 10 | |
| | WF | | | | 1 | | 14 | |
| | EF | | | | 1 | | 8 | |
| L4U4 | NF | 4 | | | | 15 | 8 | |
| | SF | | | | | | 16 | |
| | WF | | | | | | 2 | 2 |
| | EF | | | | | | 8 | |
| L5U5 | NF | 4 | | | | | 12 | |
| | SF | | | | | | 12 | |
| | WF | | | | 1 | | 11 | 2 |
| | EF | | | | 1 | | 5 | 2 |
| L6U6 | NF | 4 | | | | 10 | | |
| | SF | | | | | | 4 | |
| | WF | | | | | | 8 | |
| | EF | | | | 1 | | 11 | |
| L7U7 | NF | 12 | | | | 5 | | |
| | SF | | | | | | | |
| | WF | | | | | | | 2 |
| | EF | | | 5 | | | | |
| L8U8 | NF | 2 | | | | 6 | | |
| | SF | | | | | | 4 | |
| | WF | | | | | | | |
| | EF | | | 6 | | | 5 | |
| TOTAL | | 50 | 0 | 14 | 6 | 55 | 230 | 8 |

### REPAIR DESCRIPTION & QTY BY MEMBER SPAN 12, NORTH TRUSS

| TRUSS CHORDS | REPAIR TYPE TC01 (EA) | TC02 (EA) | TC03 (EA) | TC04 (LB) | T04 (EA) | T05 (EA) | T06 (EA) |
|---|---|---|---|---|---|---|---|
| L0L1 | | | | 20 | | | |
| L1L2 | 4 | | | | | | |
| L7L8 | 8 | 1 | | | | | |
| L8L9 | | | | | | | |
| L0U1 | | | | | | | |
| U1U2 | | | | | | | |
| U2U3 | | | | | | | |
| U3U4 | | | | | | | |
| U4U5 | | | | | | | |
| U5U6 | | | | | | | |
| U6U7 | | | | | | | |
| U7U8 | | | | | | | |
| U8L9 | | | | | | | |
| TOTAL | 12 | 1 | 0 | 20 | 0 | 0 | 0 |

### SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 12, NORTH TRUSS

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| T02 | LACING BAR REPAIR TYPE 2, TRUSS | 50 | EA | 14 |
| T04 | BATTEN PLATE REPAIR TYPE 2, TRUSS | 51 | EA | 6 |
| T05 | REPLACE RIVET, TRUSS | 65 | EA | 55 |
| T06 | INSTALL HIGH STRENGTH BOLT, TRUSS | 51 | EA | 230 |
| T07 | ANGLE COVER PLATE, TRUSS | 52 | LF | 8 |
| TC01 | LACING BAR REPAIR, CHORD | 50 | EA | 12 |
| TC02 | BATTEN PLATE REPAIR, CHORD | 51 | EA | 1 |
| TC04 | ANGLE COVER PLATE, CHORD | 52 | LB | 20 |
| PR02 | PACK RUST REPAIR, TRUSS VERTICAL | 66 | LF | 50 |
| PR03 | PACK RUST REPAIR, EYE BARS | 67 | EA | 4 |
| PR04 | PACK RUST REPAIR, JOINT OR CHORD | 67 | EA | 9 |

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 12 FRAMING & BRACING PLAN, SEE SHEET 43.
3. FOR SPAN 12 SOUTH TRUSS ELEVATION, SEE SHEET 45.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SPAN 12 NORTH TRUSS ELEVATION

RECOMMENDED
OCTOBER 26, 2022

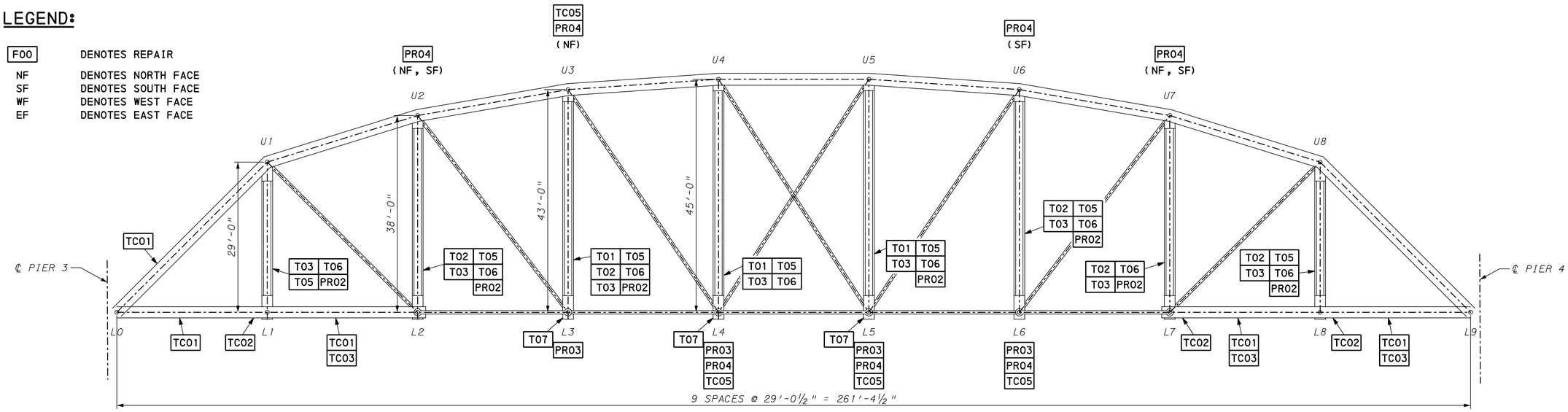
SHEET 44 OF 124
S - 40253

| DES: | TJH | CKD: | TSA | DWG: | EAL | CKD: | TSA |
|---|---|---|---|---|---|---|---|

PLOTTED: 10/26/2022 7:55:33 AM

## LEGEND:

| | |
|---|---|
| F00 | DENOTES REPAIR |
| NF | DENOTES NORTH FACE |
| SF | DENOTES SOUTH FACE |
| WF | DENOTES WEST FACE |
| EF | DENOTES EAST FACE |




## SPAN 12 SOUTH TRUSS ELEVATION

(NORTH FACE OF TRUSS VIEWED FROM ℄ BRIDGE)
NOT TO SCALE

### REPAIR DESCRIPTION & QTY BY MEMBER SPAN 12, SOUTH TRUSS

| TRUSS VERTICALS | LOCATION | REPAIR TYPE | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | PR02 (LF) | T01 (EA) | T02 (EA) | T03 (EA) | T05 (EA) | T06 (EA) | T07 (LF) |
| L1U1 | NF | 10 | | | | 20 | 14 | |
| | SF | | | | | | | |
| | WF | | | | 1 | | 9 | |
| | EF | | | | | | | |
| L2U2 | NF | 6 | | | 1 | 20 | 10 | |
| | SF | | | | | | | |
| | WF | | | 5 | 1 | | 12 | |
| | EF | | | 7 | | | | |
| L3U3 | NF | 7 | | | | 29 | 4 | |
| | SF | | 4 | | | | | |
| | WF | | | | 1 | | 11 | 1 |
| | EF | | | 7 | | | | 1 |
| L4U4 | NF | | | | | 18 | 4 | |
| | SF | | 2 | | | | | |
| | WF | | | | 1 | | 20 | 2 |
| | EF | | | 3 | | | | 1 |
| L5U5 | NF | 4 | | | 1 | 28 | 4 | |
| | SF | | 3 | | | | | |
| | WF | | | | 1 | | 8 | 1 |
| | EF | | | | 1 | | | 1 |
| L6U6 | NF | 8 | | | | 30 | 4 | |
| | SF | | | | | | | |
| | WF | | | 4 | 1 | | 6 | |
| | EF | | | | | | 2 | |
| L7U7 | NF | 6 | | | | | 4 | |
| | SF | | | | | | | |
| | WF | | | | 1 | | 9 | |
| | EF | | | 4 | | | | |
| L8U8 | NF | 2 | | | | 15 | 4 | |
| | SF | | | | | | | |
| | WF | | | 7 | 1 | | | |
| | EF | | | | | | | |
| TOTAL | | 43 | 9 | 37 | 11 | 160 | 125 | 7 |

### REPAIR DESCRIPTION & QTY BY MEMBER SPAN 12, SOUTH TRUSS

| TRUSS CHORDS | REPAIR TYPE | | | | | |
|---|---|---|---|---|---|---|
| | TC01 (EA) | TC02 (EA) | TC03 (EA) | T04 (EA) | T05 (EA) | T06 (EA) |
| L0L1 | 32 | 1 | | | | |
| L1L2 | 40 | | 8 | | | |
| L7L8 | 40 | 1 | 26 | | | |
| L8L9 | 32 | 1 | 21 | | | |
| L0U1 | 4 | | | | | |
| U1U2 | | | | | | |
| U2U3 | | | | | | |
| U3U4 | | | | | | |
| U4U5 | | | | | | |
| U5U6 | | | | | | |
| U6U7 | | | | | | |
| U7U8 | | | | | | |
| U8L9 | | | | | | |
| TOTAL | 148 | 3 | 55 | 0 | 0 | 0 |

### SUMMARY OF REPAIR DESCRIPTION AND QUANTITIES SPAN 12, SOUTH TRUSS

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| T01 | LACING BAR REPAIR TYPE 1, TRUSS | 50 | EA | 9 |
| T02 | LACING BAR REPAIR TYPE 2, TRUSS | 50 | EA | 37 |
| T03 | BATTEN PLATE REPAIR TYPE 1, TRUSS | 51 | EA | 11 |
| T05 | REPLACE RIVET, TRUSS | 65 | EA | 160 |
| T06 | INSTALL HIGH STRENGTH BOLT, TRUSS | 51 | EA | 125 |
| T07 | ANGLE COVER PLATE, TRUSS | 52 | LF | 7 |
| TC01 | LACING BAR REPAIR, CHORD | 50 | EA | 148 |
| TC02 | BATTEN PLATE REPAIR, CHORD | 51 | EA | 3 |
| TC03 | REPLACE RIVET, CHORD | 65 | EA | 55 |
| TC05 | REPLACE PIN ROD | 68 | EA | 4 |
| PR02 | PACK RUST REPAIR, TRUSS VERTICAL | 66 | LF | 43 |
| PR03 | PACK RUST REPAIR, EYE BARS | 67 | EA | 4 |
| PR04 | PACK RUST REPAIR, JOINT OR CHORD | 67 | EA | 9 |

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SPAN 12 FRAMING & BRACING PLAN, SEE SHEET 43.
3. FOR SPAN 12 NORTH TRUSS ELEVATION, SEE SHEET 44.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER
NO. PE-052090-E
PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SPAN 12 SOUTH TRUSS ELEVATION

RECOMMENDED
OCTOBER 26, 2022

SHEET 45 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Sp 12 South Truss.dgn

PLOTTED: 10/26/2022 9:07:24 AM
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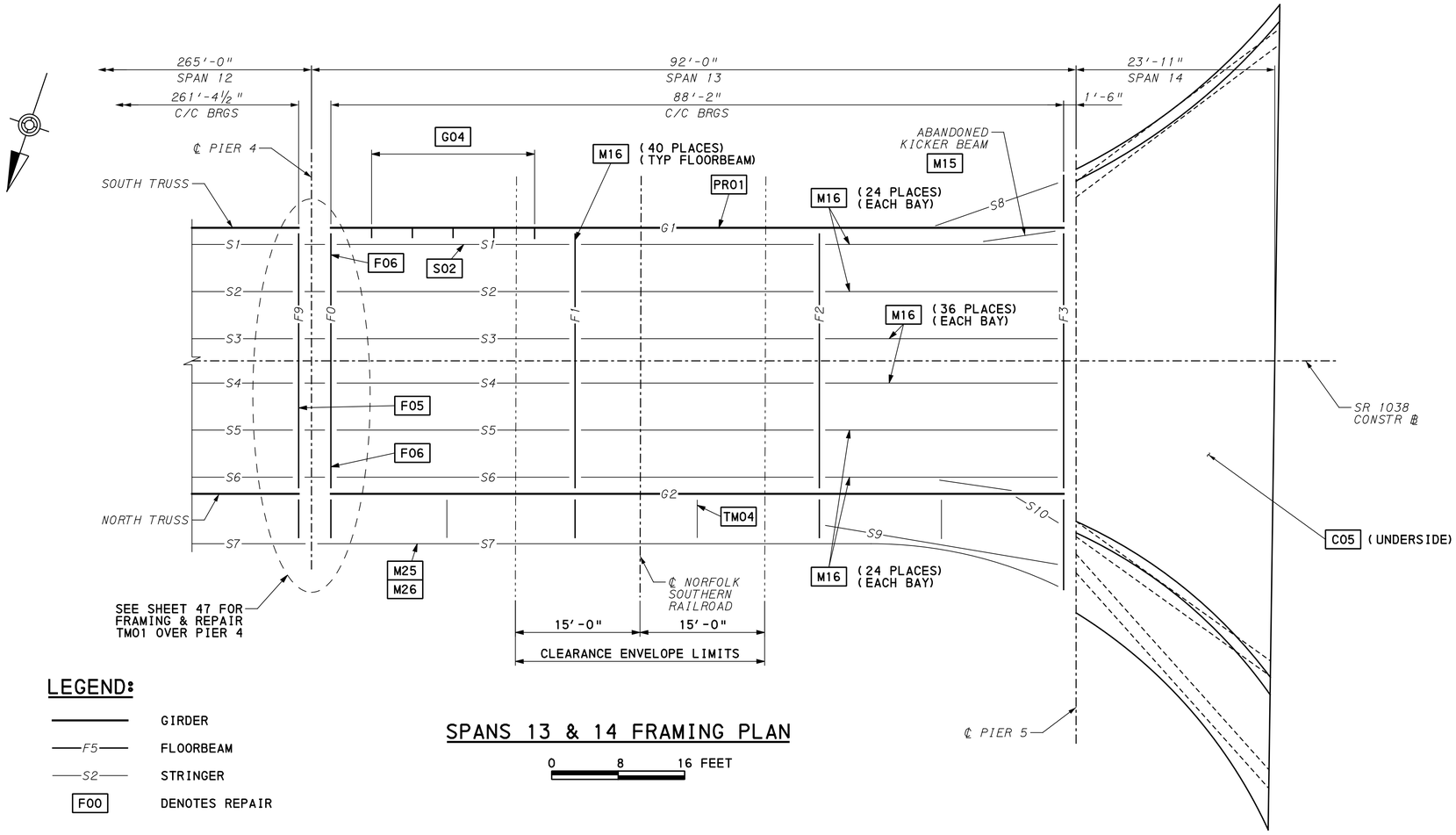
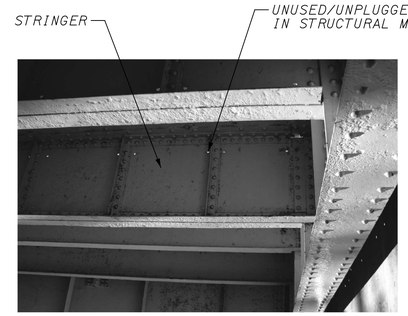



## SPANS 13 & 14 FRAMING PLAN

0 8 16 FEET

## LEGEND:

- GIRDER
- F5 FLOORBEAM
- S2 STRINGER
- F00 DENOTES REPAIR




## REPAIR M16

ITEM 1050-0263
REPAIR M16 - INSTALL BOLTS OPEN HOLES
REPRESENTATIVE CONDITIONS

## REPAIR M16 - PROCEDURE

1. VISUALLY INSPECT EXISTING HOLES FOR ANY EVIDENCE OF CRACKS. REPORT FINDINGS TO THE REPRESENTATIVE.
2. CLEAN AND PREPARE STEEL SURFACES ADJACENT TO THE OPEN HOLES IN ACCORDANCE WITH THE SPECIFICATIONS AND THE SPECIAL PROVISIONS AND APPLY ONE COAT OF PRIMER. ALLOW PRIMER TO CURE.
3. REAM HOLES TO 13/16" DIAMETER.
4. INSTALL 3/4" DIAMETER HIGH STRENGTH BOLT, WITH NUT AND WASHER. PROVIDE OVERSIZED WASHER IF REQUIRED. TIGHTEN SNUG TIGHT.

## REPAIR DESCRIPTION AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| C05 | PROTECTIVE COATING, PENETRATING SEALER | N/A | SF | 1700 |
| F05 | STIFFENER REPAIR, FLOORBEAM | 57 | EA | 1 |
| F06 | STIFFENER RETROFIT, FLOORBEAM | 58 | EA | 2 |
| G04 | STIFFENER REPAIR, GIRDER | 57 | EA | 5 |
| TM04 | SIDEWALK ANGLE BRACING REPAIR | 69 | EA | 1 |
| M15 | REMOVE KICKER BEAM | 73 | EA | 1 |
| M16 | INSTALL BOLTS OPEN HOLES | 46 | EA | 664 |
| M25 | REMOVE EXISTING UTILITY LINES AND CONDUIT | 9 | LS | |
| M26 | INSTALL COMCAST CONDUIT | 7 | LS | |
| PR01 | PACK RUST REPAIR, GIRDER OR FLOORBEAM | 66 | LF | 30 |

## REPAIR C05

REPAIR C05 - PROTECTIVE COATING, PENETRATING SEALER

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01

SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

## SP 13 FRAMING & SP 14 SLAB PLAN

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 46 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

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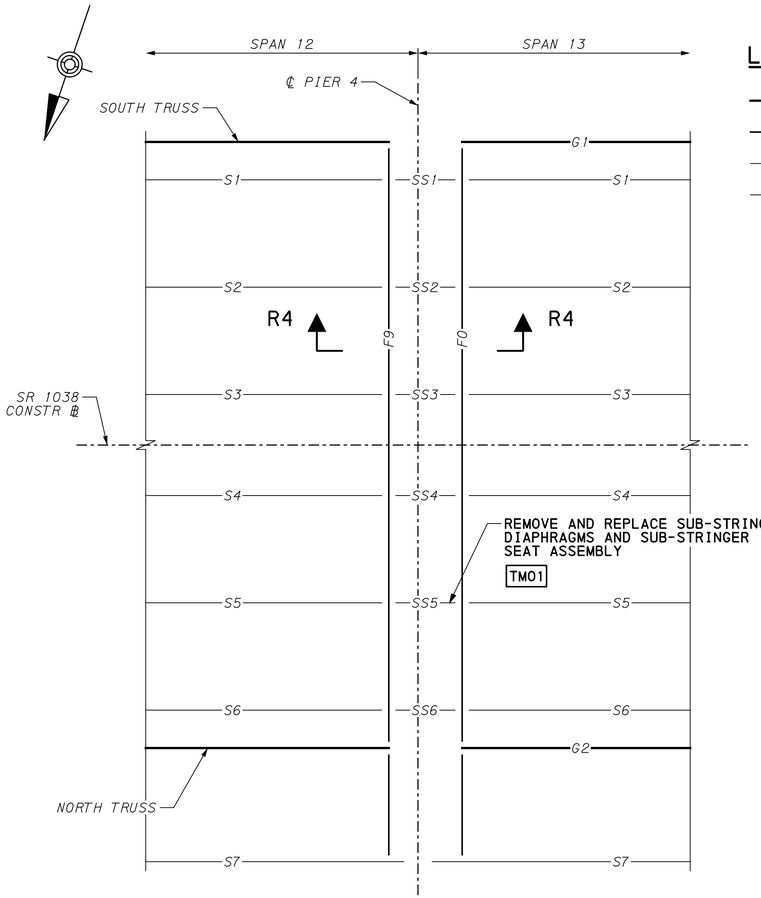


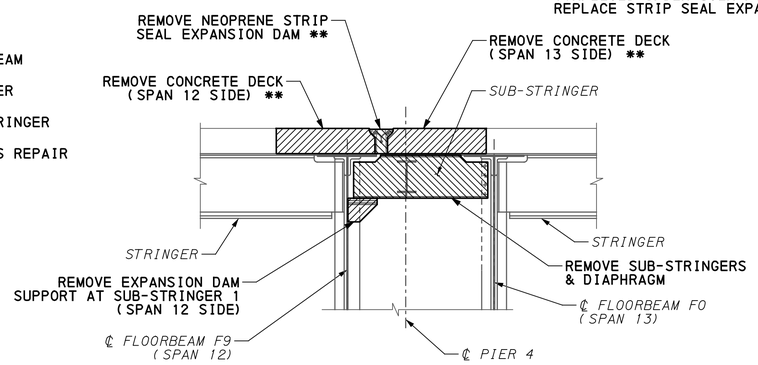

## PARTIAL FRAMING PLAN - REPAIR TM01

0 2 4 6 FEET

## LEGEND:

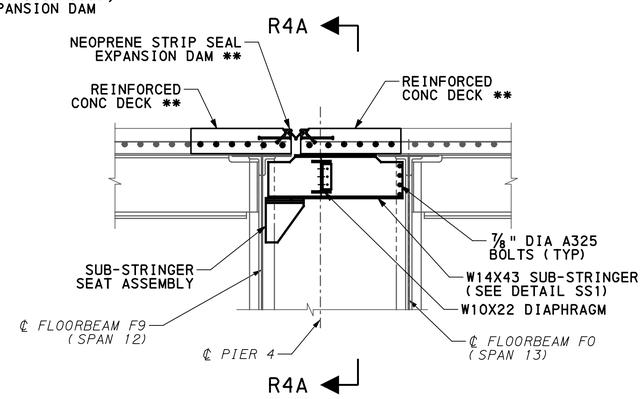
| | |
|---|---|
| G2 | GIRDER |
| F5 | FLOORBEAM |
| S2 | STRINGER |
| SS3 | SUB-STRINGER |
| F00 | DENOTES REPAIR |

** REMOVAL AND REPLACEMENT OF CONCRETE DECK AND NEOPRENE STRIP SEAL EXPANSION DAM ARE TO BE COMPLETED UNDER ITEM NO 5090-1019, REPLACE STRIP SEAL EXPANSION DAM




## SECTION R4-R4 (REMOVAL)

0 2 4 FEET




## SECTION R4-R4 (PROPOSED)

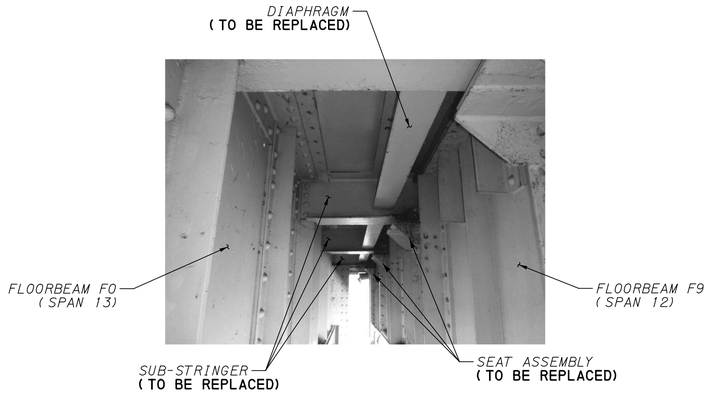
0 2 4 FEET

## REPAIR TM01 - PROCEDURE

1. COORDINATE ALL WORK ASSOCIATED WITH THIS REPAIR WITH THE REPLACEMENT OF THE EXPANSION JOINT AT PIER 4.
2. REMOVE THE EXISTING DIAPHRAGM BEAMS. REMOVE THE EXISTING SUB-STRINGERS AND SEAT ASSEMBLIES FROM THE SPAN 12 FLOORBEAM.
3. BLAST CLEAN AND PREPARE THE FAYING SURFACES OF THE CONNECTING ELEMENTS OF THE PROPOSED REPLACEMENT COMPONENTS IN ACCORDANCE WITH THE SPECIFICATIONS. IF EXCESSIVE DETERIORATION (GREATER THAN 33% SECTION LOSS) OF ANY CONNECTING ELEMENT TO REMAIN IN FOUND, IMMEDIATELY CONTACT THE ENGINEER.
4. PREPARE THE CONNECTING ELEMENTS BY DRILLING AND / OR REAMING HOLES FOR BOLTED CONNECTIONS. THE NEW SUB-STRINGERS MAY BE MATCH DRILLED IN THE FIELD.
5. INSTALL THE NEW SEAT ASSEMBLIES. FIELD WELD TO EXISTING STIFFENERS AS SHOWN. INSTALL THE BRONZE PLATE AND PTFE SLIDING SURFACE ON THE NEW SEAT ASSEMBLIES AND INSTALL THE NEW SUB-STRINGERS. INSTALL THE NEW DIAPHRAGM BEAMS. COMPLETE ANY SPOT ZONE PAINTING REQUIRED TO COMPLETE THE REPAIR. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.
6. COMPLETE THE REPLACEMENT OF THE EXPANSION JOINT.

## REPAIR TM01

ITEM 1050-0117
REPAIR TM01 - REPLACE SEAT AND BEAM
REPRESENTATIVE CONDITIONS




## REPAIR TM01

ITEM 1050-0117
REPAIR TM01 - REPLACE SEAT AND BEAM
REPRESENTATIVE CONDITIONS

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SECTION R4A-R4A, DETAIL DC1, SUB-STRINGER SEAT ASSEMBLY, AND DETAIL SS1 SEE SHEET 48.
3. FOR DETAILS OF EXPANSION JOINT REPLACEMENT, SEE SHEET 90.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01

SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# REPAIR TM01 - SEAT & BEAM PIER 4

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 47 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | EAL | CKD: | TSA |
|---|---|---|---|---|---|---|---|

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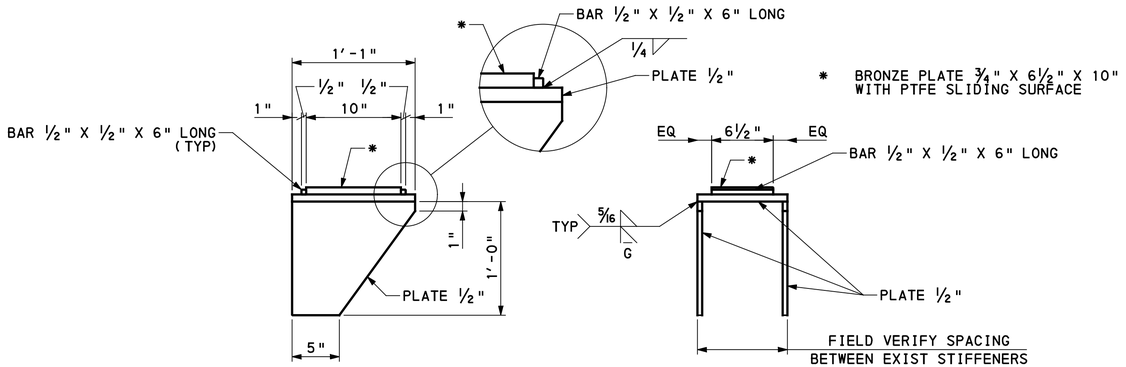
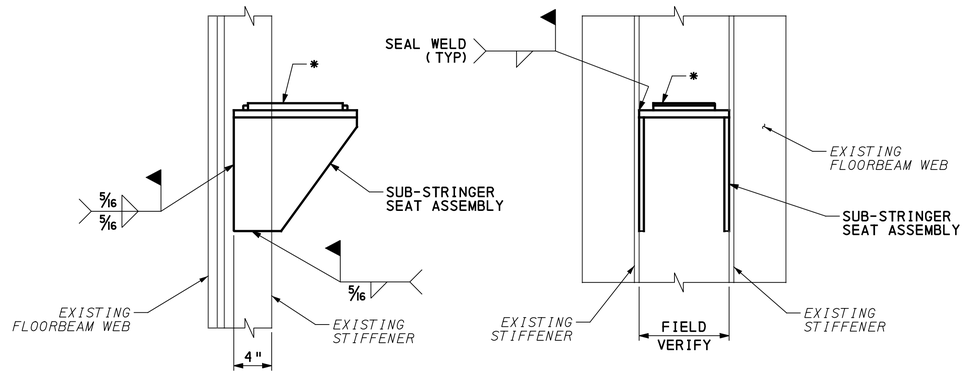


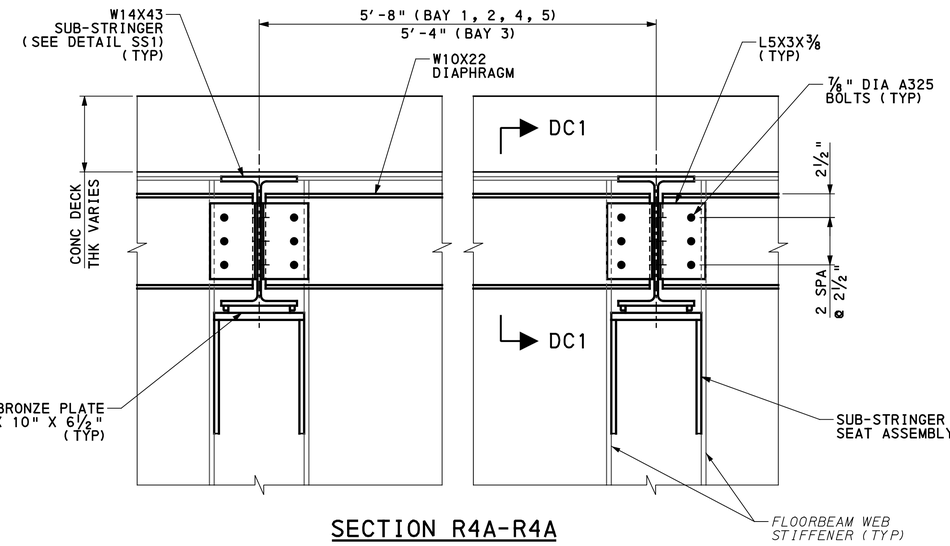

## SUB-STRINGER SEAT ASSEMBLY

0 6 1 FOOT



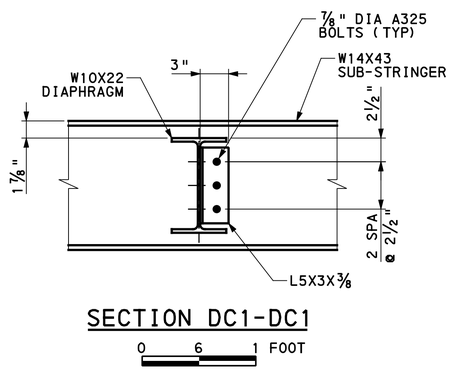

## SUB-STRINGER SEAT ASSEMBLY - ERECTION

0 6 1 FOOT



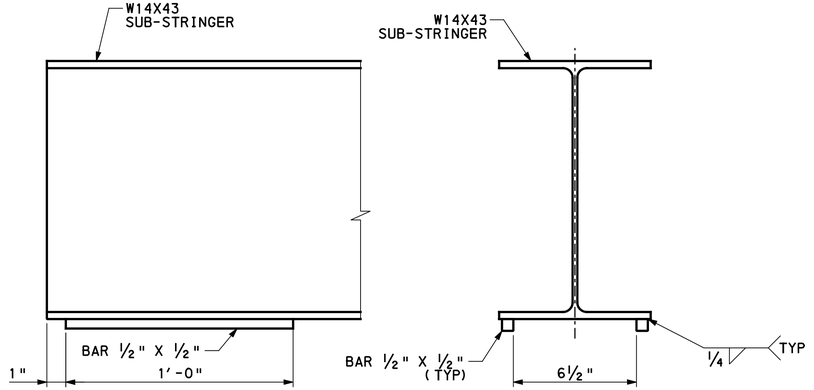

## SECTION R4A-R4A

0 6 1 FOOT




## SECTION DC1-DC1

0 6 1 FOOT




## DETAIL SS1

0 3 6 9 1 FOOT

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 47.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
# REPAIR TM01 DETAILS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 48 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | EAL | CKD: | TSA |
|---|---|---|---|---|---|---|---|

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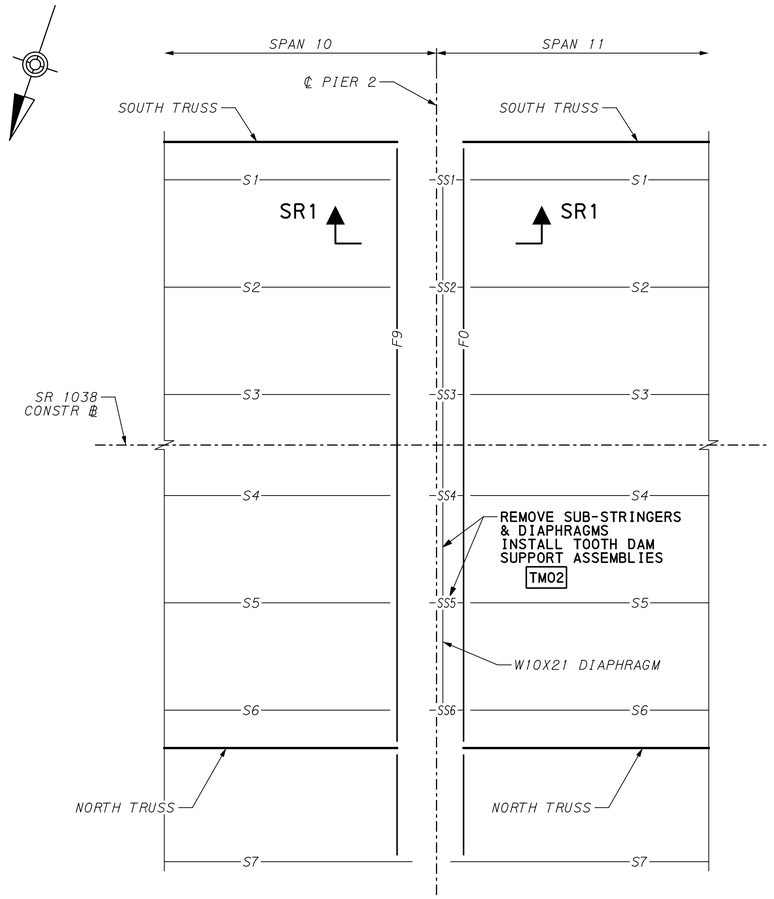



## PARTIAL FRAMING PLAN - REPAIR TM02

0 2 4 6 FEET

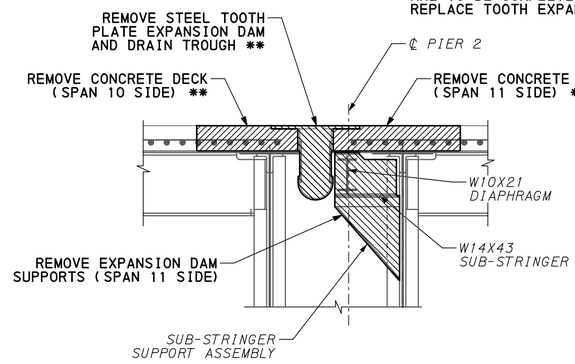
## LEGEND:

| | |
|---|---|
| G2 | GIRDER |
| F5 | FLOORBEAM |
| S2 | STRINGER |
| SS3 | SUB-STRINGER |
| F00 | DENOTES REPAIR |

## REPAIR TM02

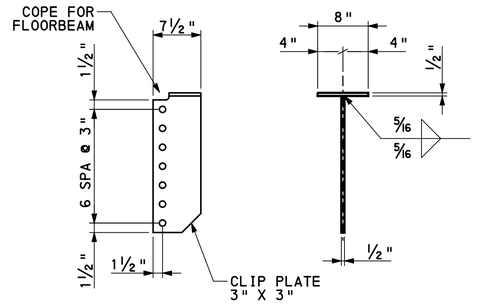
ITEM 1050-0118
REPAIR TM02 - REPLACE SEAT AND BEAM
REPRESENTATIVE CONDITIONS

** REMOVAL AND REPLACEMENT OF CONCRETE DECK AND STEEL TOOTH PLATE EXPANSION DAM & DRAIN TROUGH ARE TO BE COMPLETED UNDER ITEM NO 5020-0002, REPLACE TOOTH EXPANSION DAM



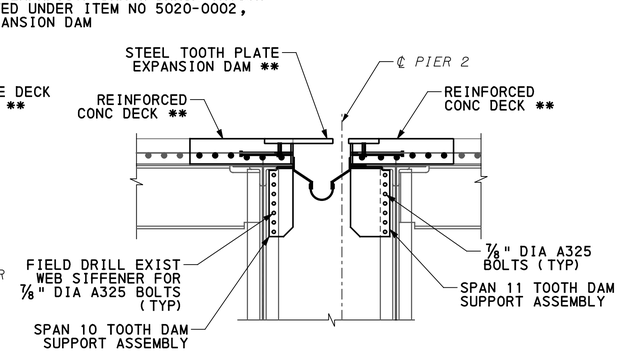

## SECTION SR1-SR1 (REMOVAL)

0 2 4 FEET



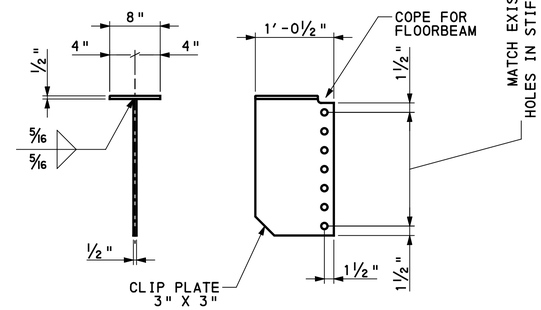

## SPAN 10 TOOTH DAM SUPPPORT ASSEMBLY

0 1 2 FEET




## SECTION SR1-SR1 (PROPOSED)

0 2 4 FEET




## SPAN 11 TOOTH DAM SUPPPORT ASSEMBLY

0 1 2 FEET

## REPAIR TM02 - PROCEDURE

1. COORDINATE ALL WORK ASSOCIATED WITH THIS REPAIR WITH THE REPLACEMENT OF THE EXPANSION JOINT AT PIER 2.
2. REMOVE THE EXISTING DIAPHRAGM BEAMS. REMOVE THE EXISTING SUB-STRINGERS.
3. BLAST CLEAN AND PREPARE THE FAYING SURFACES OF THE CONNECTING ELEMENTS OF THE PROPOSED REPLACEMENT COMPONENTS IN ACCORDANCE WITH THE SPECIFICATIONS. IF EXCESSIVE DETERIORATION (GREATER THAN 33% SECTION LOSS) OF ANY CONNECTING ELEMENT TO REMAIN IS FOUND, IMMEDIATELY CONTACT THE ENGINEER.
4. PREPARE THE CONNECTING ELEMENTS BY DRILLING AND / OR REAMING HOLES FOR NEW CONNECTIONS. THE TOOTH DAM SUPPORT ASSEMBLIES MAY BE MATCH DRILLED IN THE FIELD.
5. INSTALL THE NEW TOOTH DAM SUPPORT ASSEMBLIES. COMPLETE ANY SPOT ZONE PAINTING REQUIRED TO COMPLETE THE REPAIR. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.
6. COMPLETE THE REPLACEMENT OF THE EXPANSION JOINT.

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DETAILS OF EXPANSION DAM REPLACEMENT, SEE SHEET 87.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
REPAIR TM02 - SEAT & BEAM PIER 2

RECOMMENDED
OCTOBER 26, 2022

SHEET 49 OF 124
S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

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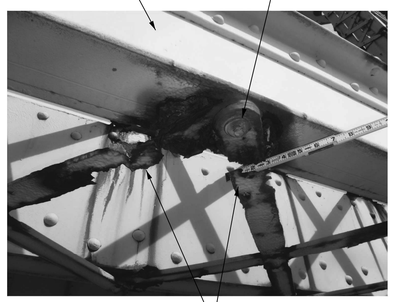



## REPAIR TC01

ITEM 1050-0234
REPAIR TC01 - LACING BAR REPAIR, CHORD
REPRESENTATIVE CONDITIONS

## REPAIR T01

ITEM 1050-0223
REPAIR T01 - LACING BAR REPAIR TYPE 1, TRUSS
REPRESENTATIVE CONDITIONS

## REPAIR T02

ITEM 1050-0224
REPAIR T02 - LACING BAR REPAIR TYPE 2, TRUSS
REPRESENTATIVE CONDITIONS

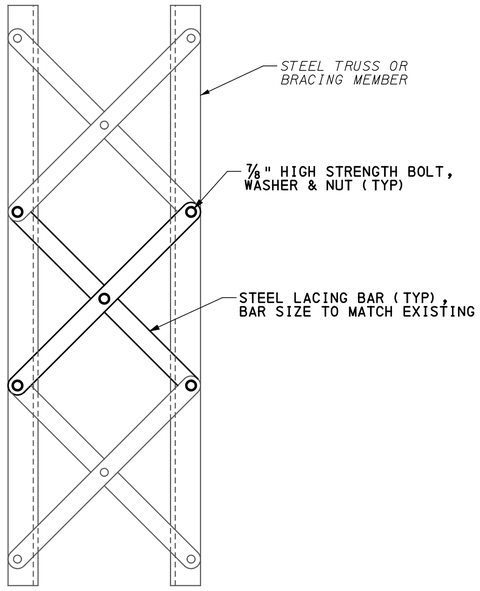
* DETERIORATION IS DEFINED AS SECTION LOSS GREATER THAN 25% OF THE CROSS SECTIONAL AREA IN THE LACING BAR.

## REPAIR B03

ITEM 1050-0250
REPAIR B03 - LACING BAR REPAIR TYPE 1, BENT
REPRESENTATIVE CONDITIONS

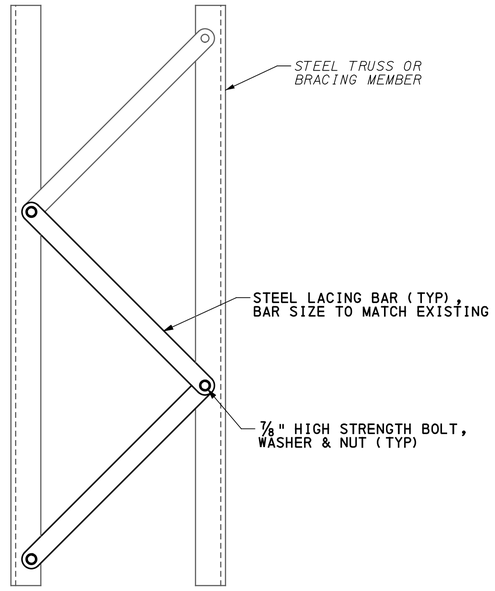
## REPAIR B04

ITEM 1050-0251
REPAIR B04 - LACING BAR REPAIR TYPE 2, BENT
REPRESENTATIVE CONDITIONS




## REPAIR TC01, T02, B03 LACING BAR REPLACEMENT

NOT TO SCALE




## REPAIR T01, B04 LACING BAR REPLACEMENT

NOT TO SCALE

## REPAIR T01, T02, TC01, TB01, B03 & B04 - PROCEDURE & NOTES

1. FIELD VERIFY EXISTING RIVET PATTERN, RIVET SIZE, AND LACING BAR DIMENSIONS PRIOR TO FABRICATION.
2. PROVIDE TEMPORARY SUPPORT AND BRACING OF ANY MAIN MEMBER IN ANY LOCATION OR DIRECTION WHEN MORE THAN THREE (3) CONSECUTIVE LACING BARS ARE REMOVED. DO NOT REMOVE LACING BARS IN MORE THAN ONE PLANE OR FACE OF ANY MEMBER AT ONE TIME.
3. REMOVE DETERIORATED LACING BARS AND RIVETS WITHOUT DAMAGING CONNECTED MEMBERS. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. PERFORM ANY REPAIRS TO CONNECTED MATERIAL PRIOR TO INSTALLING NEW LACING BARS. EVALUATE THE CONDITION OF THE CONNECTED MATERIAL WITH THE REPRESENTATIVE TO DETERMINE IF REPAIRS ARE REQUIRED.
5. INSTALL NEW LACING BARS. REAM HOLES FOR NEW BOLTS AS REQUIRED. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# TYPICAL LACING BAR REPAIR

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

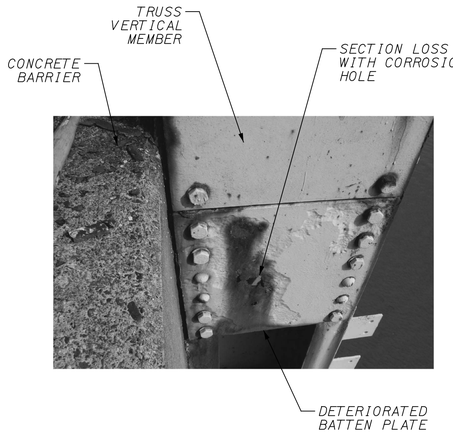
RECOMMENDED
OCTOBER 26, 2022

SHEET 50 OF 124

S - 40253

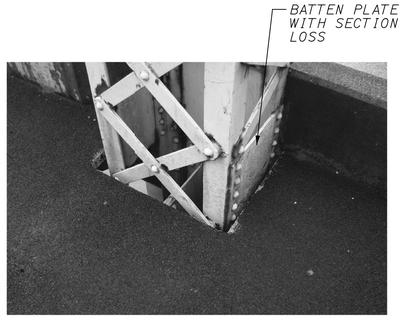
| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 7:57:31 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Batten Plate Repair.dgn



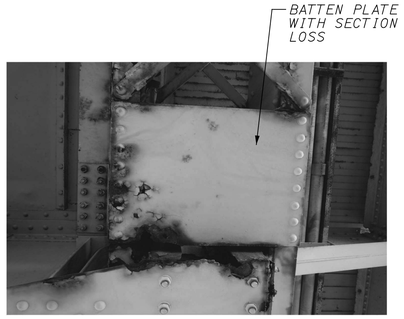

## REPAIR T03

ITEM 1050-0225
REPAIR T03 - BATTEN PLATE REPAIR
TYPE 1, TRUSS
REPRESENTATIVE CONDITIONS




## REPAIR T04

ITEM 1050-0226
REPAIR T04 - BATTEN PLATE REPAIR
TYPE 2, TRUSS
REPRESENTATIVE CONDITIONS

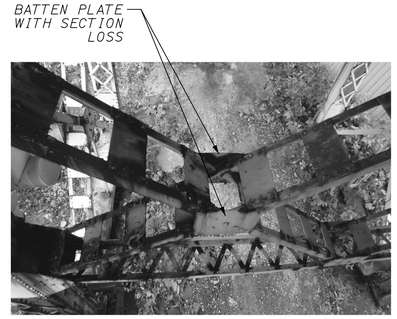



## REPAIR TC02

ITEM 1050-0235
REPAIR TC02 - BATTEN PLATE REPAIR, CHORD
REPRESENTATIVE CONDITIONS

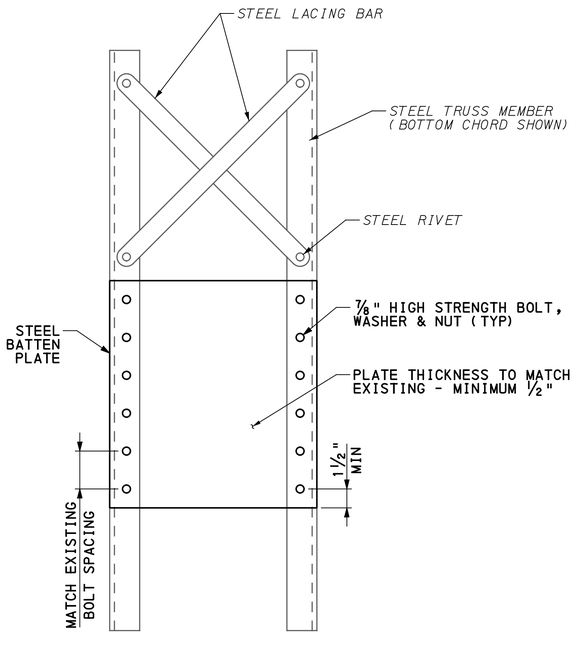
## REPAIR B05

ITEM 1050-0252
REPAIR B05 - REPLACE BATTEN PLATE, TYPE 1, BENT
REPRESENTATIVE CONDITIONS



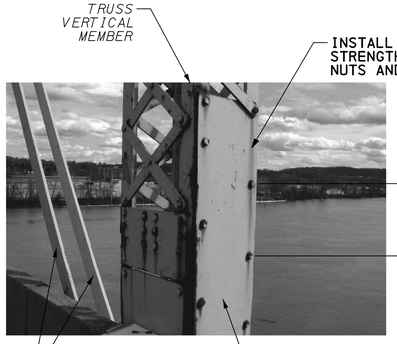

## REPAIR B06

ITEM 1050-0253
REPAIR B06 - REPLACE BATTEN PLATE, TYPE 2, BENT
REPRESENTATIVE CONDITIONS




## TYPICAL BATTEN PLATE REPLACEMENT

NOT TO SCALE




## REPAIR T06

ITEM 1050-0228
REPAIR T06 - INSTALL HIGH STRENGTH BOLT, TRUSS
REPRESENTATIVE CONDITIONS

## REPAIR TB02

ITEM 1050-0240
REPAIR TB02 - BATTEN PLATE REPAIR, BRACING
REPRESENTATIVE CONDITIONS

## REPAIRS T03, T04, TC02, TB02, B05, B06 - PROCEDURE AND NOTES

1. FIELD VERIFY EXISTING RIVET PATTERN, RIVET SIZE, AND BATTEN PLATE DIMENSIONS PRIOR TO FABRICATION.
2. REMOVE EXISTING BATTEN PLATE. REMOVAL OF THE BATTEN PLATE MAY BE PERFORMED IN CONJUNCTION WITH THE REPLACEMENT OF LACING BAR WHICH OVERLAPS THE PLATE, HOWEVER, IF ADJACENT LACING BARS DO NOT OVERLAP THE PLATE, THE REPAIRS MUST NOT BE PERFORMED SIMULTANEOUSLY.
3. REMOVE DETERIORATED BATTEN PLATE AND RIVETS WITHOUT DAMAGING CONNECTED MEMBERS. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. PERFORM ANY REPAIRS TO CONNECTED MATERIAL PRIOR TO INSTALLING NEW BATTEN PLATE. EVALUATE THE CONDITION OF THE CONNECTED MATERIAL WITH THE REPRESENTATIVE TO DETERMINE IF REPAIRS ARE REQUIRED.
5. INSTALL NEW BATTEN PLATE. MATCH BOLT PATTERNS TO THE EXISTING BOLT PATTERN WHERE FEASIBLE. REAM HOLES FOR NEW BOLTS AS REQUIRED. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

CRTERIA FOR BATTEN PLATE REPLACEMENT AS FOLLOWS:

- REPLACE PLATES AT ALL LOCATIONS INDICATED AS A MINIMUM
- PLATES WITH AREAS OF 100% SECTION LOSS
- PLATES WITH AREAS OF MINIMUM 50% PLATE THICKNESS LOSS GREATER THAN 4 IN² IN AREA
- PLATES WITH AREAS OF MINIMUM 25% PLATE THICKNESS LOSS GREATER THAN 12 IN² OR ONE QUARTER THE SURFACE AREA OF THE PLATE, WHICHEVER IS SMALLER

## REPAIR T06 - PROCEDURE AND NOTES

1. FIELD VERIFY EXISTING RIVET OR BOLT SPACING ALONG EACH FASTENER LINE..
2. PRIOR TO COMPLETING REPAIR, PERFORM ANY CLEANING REQUIRED FOR PACK RUST CONDITIONS AT THE INTERFACE OF THE PLATE TO THE MEMBER ANGLE.
3. DETERMINE SPACING OF NEW BOLTS. BOLTS SHALL BE SPACED AT A MAXIMUM OF 5" SPACING BETWEEN EXISTING FASTENERS IN ANY FASTENER LINE.
4. DRILL AND REAM HOLES IN EXISTING MEMBERS FOR THE PROPOSED FASTENERS IN ACCORDANCE WITH THE SPECIFICATIONS. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# TYPICAL BATTEN PLATE REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

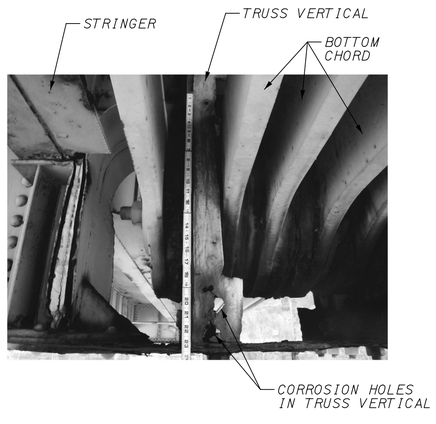
RECOMMENDED
OCTOBER 26, 2022

SHEET 51 OF 124
S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

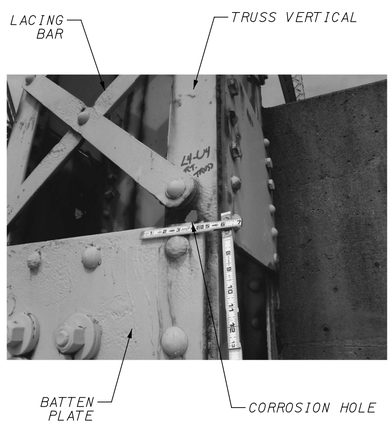
PLOTTED: 10/26/2022 7:57:55 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Angle Cover Plate.dgn




## REPAIR T07

ITEM 1050-0115
REPAIR T07 - ANGLE COVER PLATE, TRUSS
REPRESENTATIVE CONDITIONS




## REPAIR T07

ITEM 1050-0115
REPAIR T07 - ANGLE COVER PLATE, TRUSS
REPRESENTATIVE CONDITIONS

## REPAIR TC04

ITEM 1050-0116
REPAIR TC04 - ANGLE COVER PLATE, CHORD
REPRESENTATIVE CONDITIONS

## REPAIR T07 - PROCEDURE AND NOTES

1. FIELD VERIFY THE LIMITS OF DETERIORATION IN THE ANGLE LEG. EXTEND THE LIMITS OF THE REPAIR A MINIMUM OF 6" BEYOND THE LIMIT OF DETERIORATION ALONG THE LENGTH OF THE MEMBER WHERE POSSIBLE.
2. WHEN FABRICATING COVER PLATES, ENSURE THAT PROPER EDGE DISTANCES FOR BOLTS AT THE ENDS OF THE PLATES ARE ACHIEVED. FABRICATE PLATES FOR BOTH THE EXTERIOR AND INTERIOR SIDES OF THE DETERIORATED ANGLE LEG.
3. REMOVE AND REPLACE EFFECTED LACING BARS WITHIN LIMITS OF THE REPAIR. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. REAM EXISTING RIVET HOLES AS REQUIRED FOR INSTALLATION. INSTALL THE COVER PLATE WITH NEW HIGH STRENGTH BOLTS. FIELD DRILL THE EXISTING ANGLE LEG USING THE COVER PLATE AS A TEMPLATE.
5. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

## REPAIR TC04 - PROCEDURE AND NOTES

1. FIELD VERIFY THE LIMITS OF DETERIORATION IN THE ANGLE LEG. EXTEND THE LIMITS OF THE REPAIR A MINIMUM OF 6" BEYOND THE LIMIT OF DETERIORATION ALONG THE LENGTH OF THE MEMBER WHERE POSSIBLE.
2. WHEN FABRICATING COVER PLATES, ENSURE THAT PROPER EDGE DISTANCES FOR BOLTS AT THE ENDS OF THE PLATES ARE ACHIEVED. FABRICATE PLATES FOR BOTH THE EXTERIOR AND INTERIOR SIDES OF THE DETERIORATED ANGLE LEG.
3. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. REAM EXISTING RIVET HOLES AS REQUIRED FOR INSTALLATION. INSTALL THE COVER PLATE WITH NEW HIGH STRENGTH BOLTS. FIELD DRILL THE EXISTING ANGLE LEG USING THE COVER PLATE AS A TEMPLATE.
5. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# TYPICAL ANGLE COVER PLATE REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 52 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 7:58:11 AM
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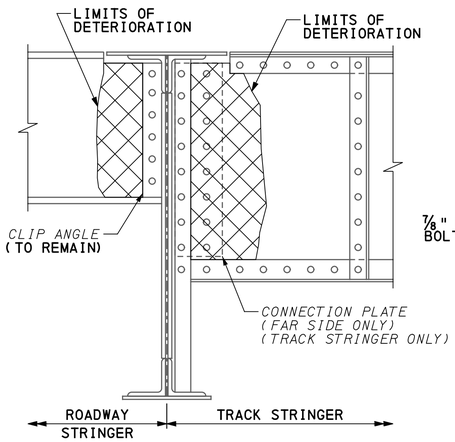
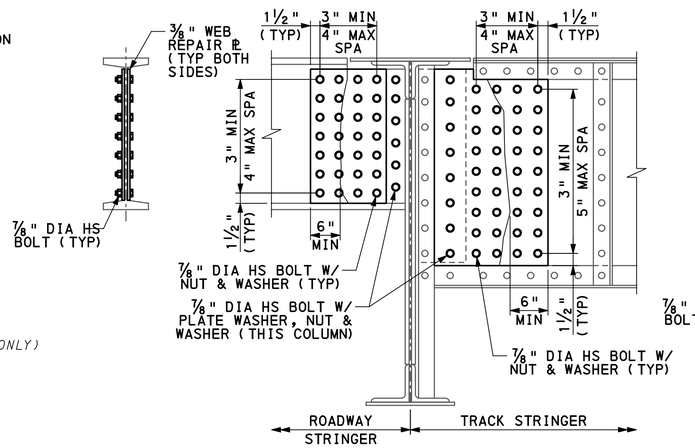
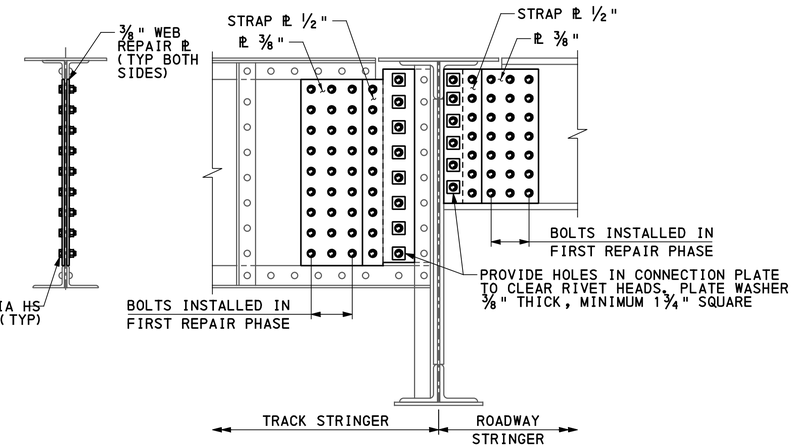



EXISTING CONDITION




PROPOSED NEAR SIDE

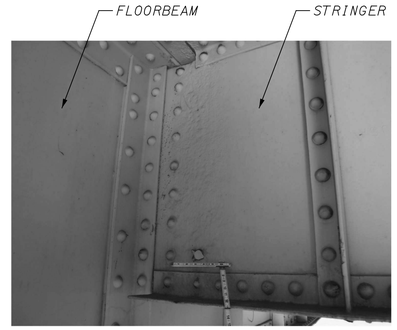



PROPOSED FAR SIDE

## REPAIR S01

STRINGERS WITHOUT SEAT ANGLES SHOWN; STRINGERS WITH SEAT ANGLES SIMILAR

0 1 2 FEET

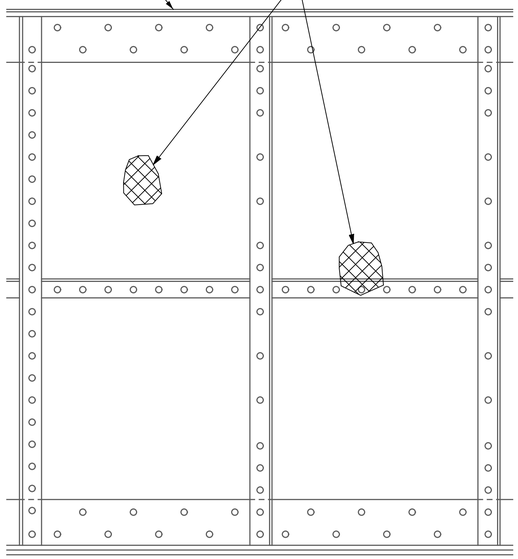



## REPAIR S01

ITEM 1050-0201
REPAIR S01 - WEB COVER PLATE, STRINGER
REPRESENTATIVE CONDITIONS

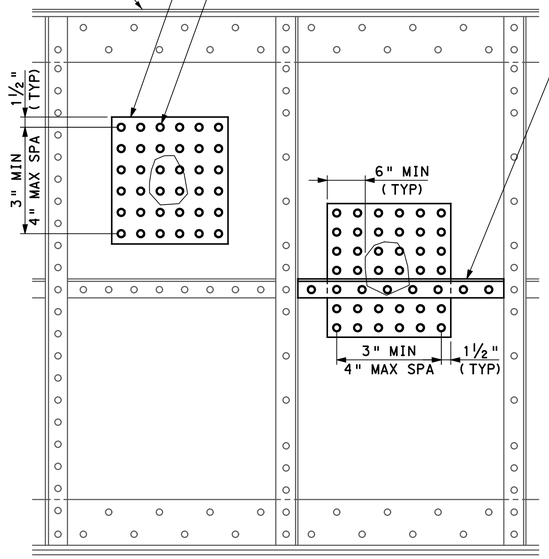
## REPAIR G03

ITEM 1050-0217
REPAIR G03 - WEB COVER PLATE, GIRDER
REPRESENTATIVE CONDITIONS




EXISTING CONDITION

REPAIRS WITH AND WITHOUT STIFFENER REPLACEMENT SHOWN




PROPOSED

REPAIRS WITH AND WITHOUT STIFFENER REPLACEMENT SHOWN

## REPAIR G03

0 1 2 FEET

## REPAIR S01, G03 - PROCEDURE

1. FIELD VERIFY THE LIMITS OF DETERIORATION IN THE WEB. EXTEND THE WEB COVER PLATE A MINIMUM OF 6" BEYOND THE LIMIT OF DETERIORATION HORIZONTALLY. ALSO FIELD VERIFY THE EXISTING CONNECTION RIVET SPACING, SIZE AND EDGE DISTANCES FOR USE IN DETAILING THE STRAP PLATE.
2. FABRICATE THE STRAP PLATE TO ENGAGE THE CONNECTION PLATE OR ANGLE WITH HOLES OF ADEQUATE SIZE TO FIT OVER THE EXISTING RIVETS IN THE CONNECTION.
3. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. INSTALL THE WEB COVER PLATES. FIELD DRILL HOLES IN THE EXISTING WEB USING THE COVER PLATE AS A TEMPLATE. INSTALL BOLTS IN ALL HOLES EXCEPT FOR THE BOLTS TO ATTACH THE STRAP PLATE TO THE COVER PLATE.
5. INSTALL THE STRAP PLATE TO THE WEB COVER PLATE ONLY. BEGIN REMOVAL OF THE RIVETS ATTACHING THE MEMBER TO THE CONNECTION ANGLE OR PLATE ONE AT A TIME. AS RIVETS ARE REMOVED, REAM HOLES AS NEEDED AND INSTALL NEW HIGH STRENGTH BOLTS WITH PLATE WASHERS AT THE STRAP PLATE.
6. COMPLETE THE INSTALLATION OF THE STRAP PLATE. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
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ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
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OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# TYPICAL WEB COVER PLATE REPAIR 1

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — THOMAS SCOTT ANTHONY — ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 53 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | TJH | CKD: | TSA |
|---|---|---|---|---|---|---|---|

PLOTTED: 10/26/2022 7:58:22 AM
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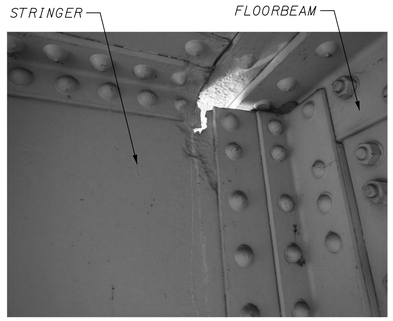
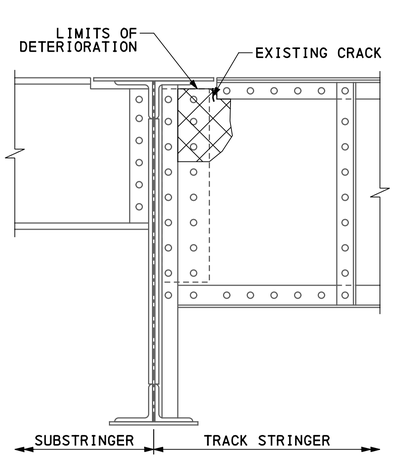



## REPAIR S04

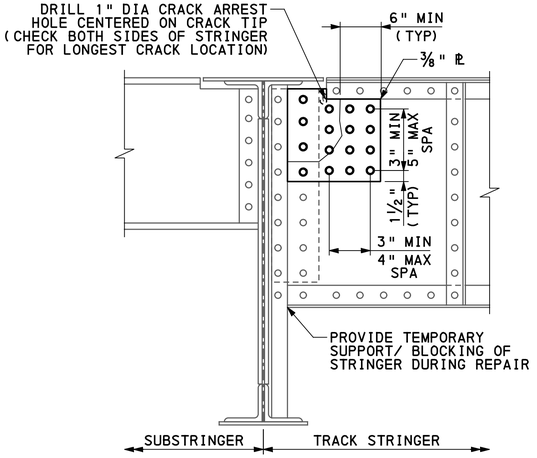
ITEM 1050-0204
REPAIR S04 - ARREST HOLE WITH WEB COVER PLATE, STRINGER REPRESENTATIVE CONDITIONS

## REPAIR S04 - PROCEDURE

1. FIELD VERIFY THE LIMITS OF DETERIORATION IN THE WEB. EXTEND THE WEB COVER PLATE A MINIMUM OF 6" BEYOND THE LIMIT OF DETERIORATION HORIZONTALLY. ALSO FIELD VERIFY THE EXISTING CONNECTION RIVET SPACING, SIZE AND EDGE DISTANCES.
2. VERIFY EXISTING CRACK LIMIT. PROVIDE ULTRASONIC OR SIMILAR TESTING TO CONFIRM CRACK LIMITS AND COORDINATE TESTING RESULTS WITH THE REPRESENTATIVE AND ENGINEER. DRILL 1" DIAMETER CRACK ARREST HOLE CENTERED ON THE CRACK TIP.
3. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. PROVIDE TEMPORARY SUPPORT OR BLOCKING OF STRINGER DURING REPAIR. PERFORM REPAIR INSTALLATION ON ONLY ONE STRINGER AT A TIME IN THE CROSS SECTION. REMOVE RIVETS FOLLOWING INSTALLATION OF TEMPORARY SUPPORT.
5. INSTALL THE WEB COVER PLATES AND FILL PLATE. FIELD DRILL HOLES IN THE EXISTING WEB USING THE COVER PLATE AS A TEMPLATE. INSTALL BOLTS IN ALL HOLES.
6. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS. FOLLOWING COMPLETION OF THE BOLT INSTALLATION, REMOVE THE TEMPORARY SUPPORT.



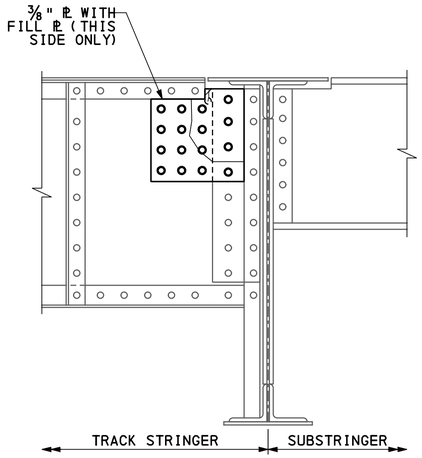

EXISTING CONDITION




PROPOSED NEAR SIDE

REPAIR S04

0 1 2 FEET




PROPOSED FAR SIDE

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
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SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

TYPICAL WEB COVER PLATE REPAIR 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 54 OF 124

S - 40253

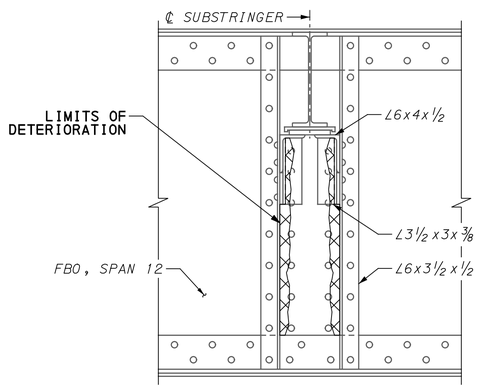
| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

## REPAIR F01

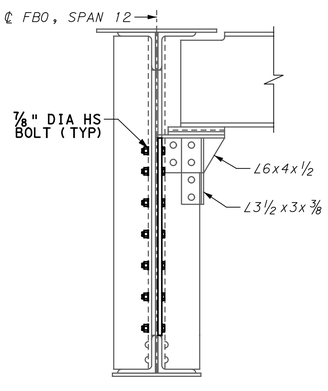
ITEM 1050-0208
REPAIR F01 - WEB COVER PLATE, FLOORBEAM
REPRESENTATIVE CONDITIONS

## REPAIR F01 - PROCEDURE

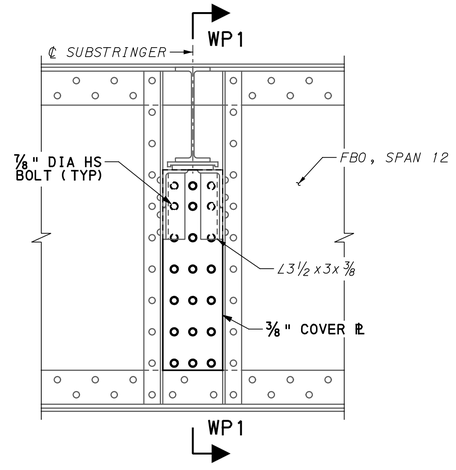
1. FIELD VERIFY THE LIMITS OF DETERIORATION IN THE WEB. EXTEND THE COVER PLATE THE ENTIRE AREA BETWEEN THE EXISTING STIFFENERS. ALSO FIELD VERIFY THE EXISTING CONNECTION RIVET SPACING AND SIZE. VERIFY ATTACHMENT OF ANY COMPONENTS ON THE FAR SIDE OF THE FLOORBEAM AND PROVIDE TEMPORARY BRACING / SUPPORT IF NEEDED.
2. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
3. REMOVE EXISTING RIVETS. INSTALL THE WEB COVER PLATE. FIELD DRILL HOLES IN THE EXISTING WEB USING THE COVER PLATE AS A TEMPLATE WHERE RIVETS ARE NOT PRESENT.
4. REAM EXISTING RIVET HOLES AS REQUIRED FOR INSTALLATION. INSTALL THE COVER PLATE WITH NEW HIGH STRENGTH BOLTS. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.




EXISTING CONDITION




SECTION WP1-WP1




REPAIR ELEVATION

REPAIR F01

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

TYPICAL WEB COVER PLATE REPAIR 3

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 55 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

PLOTTED: 10/26/2022 7:58:25 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Web Cover Plate 3.dgn

PLOTTED: 10/26/2022 7:58:32 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Flange Cover Plate.dgn

## REPAIR S02

ITEM 1050-0202
REPAIR S02 - FLANGE COVER PLATE, STRINGER
REPRESENTATIVE CONDITIONS

## REPAIR F02

ITEM 1050-0111
REPAIR F02 - FLANGE COVER PLATE, FLOORBEAM
REPRESENTATIVE CONDITIONS

## REPAIR G01

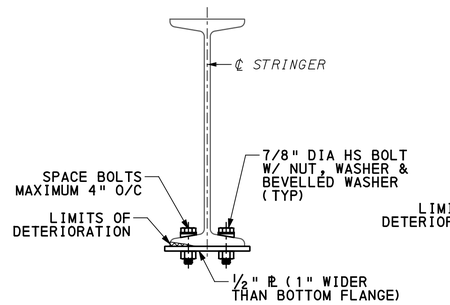
ITEM 1050-0112
REPAIR G01 - BOTTOM FLANGE COVER PLATE, GIRDER
REPRESENTATIVE CONDITIONS

## REPAIR G02

ITEM 1050-0113
REPAIR G02 - TOP FLANGE COVER PLATE, GIRDER
REPRESENTATIVE CONDITIONS

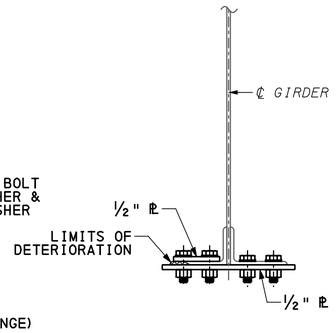
## REPAIR S02, F02, G01, G02 - PROCEDURE

1. FIELD VERIFY THE LIMITS OF DETERIORATION IN THE FLANGE. EXTEND THE LIMITS OF THE REPAIR A MINIMUM OF 6" BEYOND THE LIMIT OF DETERIORATION ALONG THE LENGTH OF THE MEMBER. FIELD VERIFY EXISTING PLATE THICKNESS AND WIDTH, IF PRESENT.
2. WHEN FABRICATING COVER PLATES, ENSURE THAT PROPER EDGE DISTANCES FOR BOLTS AT THE ENDS OF THE PLATES ARE ACHIEVED.
3. REMOVE THE EXISTING RIVETS AND COVER PLATE TO THE LIMIT OF THE REPLACEMENT IF PRESENT. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN
4. REAM EXISTING RIVET HOLES AS REQUIRED FOR INSTALLATION. INSTALL THE COVER PLATE WITH NEW HIGH STRENGTH BOLTS. FOR INSTALLATIONS WHERE NO EXISTING COVER PLATE IS PRESENT, FIELD DRILL THE EXISTING FLANGE USING THE COVER PLATE AS A TEMPLATE.
5. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.



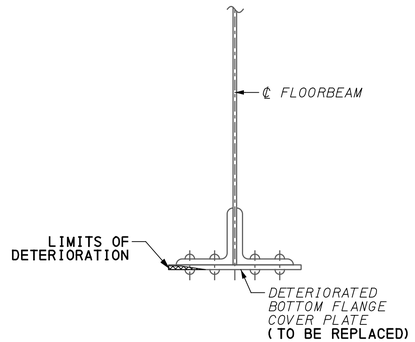

## REPAIR S02

0 6 1 FOOT



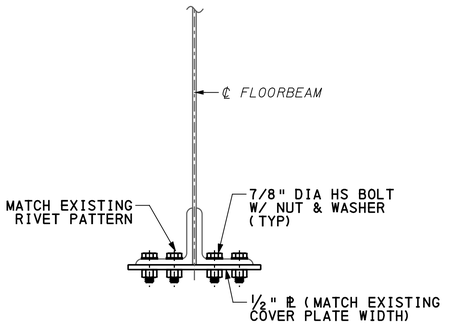

## REPAIR G01

0 6 1 FOOT



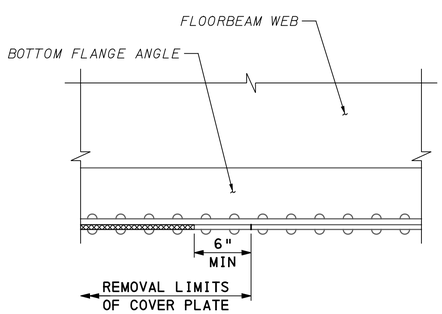

## EXISTING CONDITION

0 6 1 FOOT



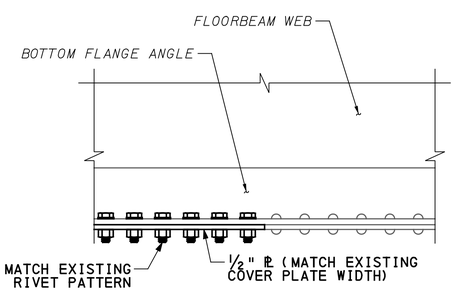

## PROPOSED REPAIR

0 6 1 FOOT




## EXISTING CONDITION

0 6 1 FOOT




## PROPOSED REPAIR

0 6 1 FOOT

## REPAIR F02

0 6 1 FOOT

## REPAIR F02 ELEVATION

0 6 1 FOOT

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# TYPICAL FLANGE COVER PLATE REPAIRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 56 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 7:58:50 AM
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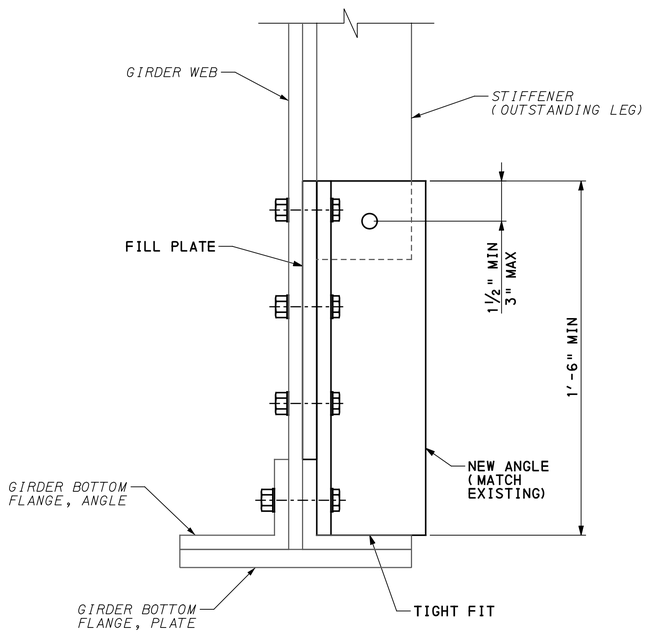
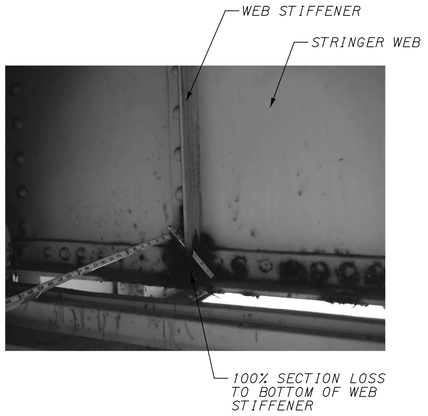


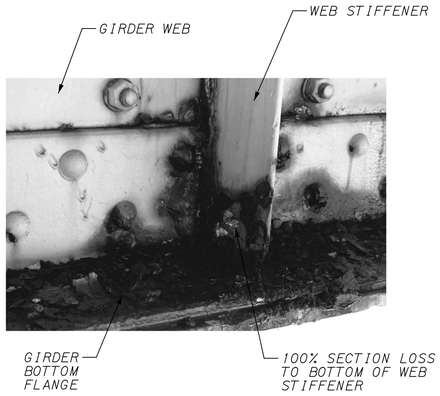

## SECTION WS1-WS1

NOT TO SCALE



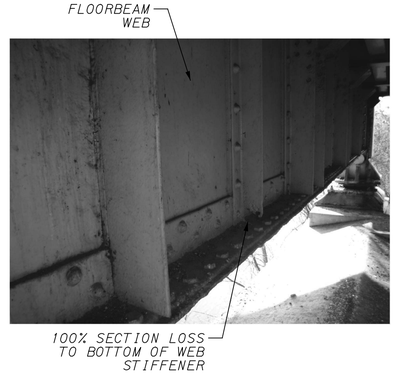

## REPAIR S03

ITEM 1050-0203
REPAIR S03 - STIFFENER REPAIR, STRINGER
REPRESENTATIVE CONDITIONS



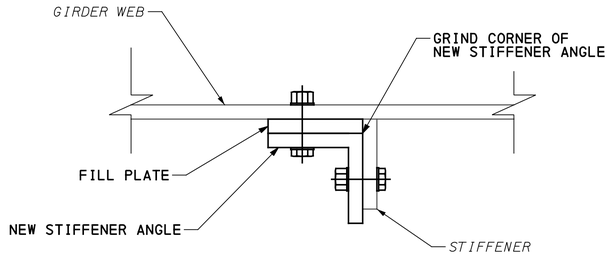

## REPAIR G04

ITEM 1050-0218
REPAIR G04 - STIFFENER REPAIR, GIRDER
REPRESENTATIVE CONDITIONS



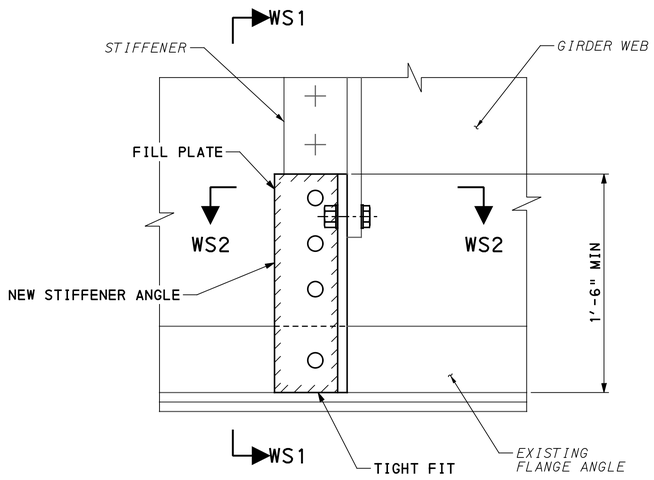

## REPAIR F05

ITEM 1050-0211
REPAIR F05 - STIFFENER REPAIR, FLOORBEAM
REPRESENTATIVE CONDITIONS



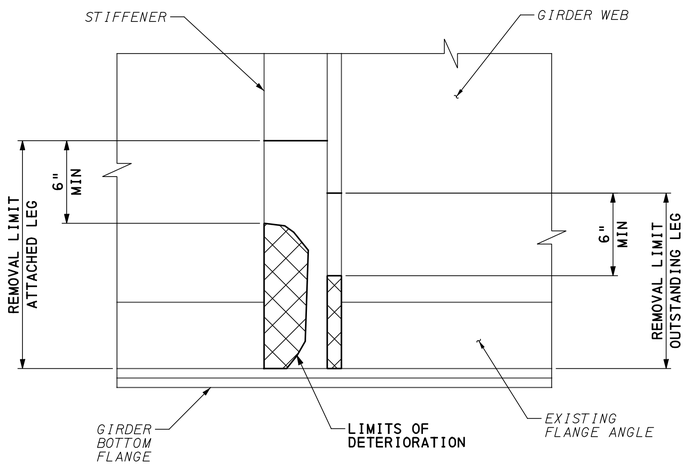

## SECTION WS2-WS2

NOT TO SCALE




## ELEVATION

NOT TO SCALE




## REMOVAL LIMITS

NOT TO SCALE

## REPAIR S03, F05 & G04

NOT TO SCALE

## REPAIR S03, F05, G04 - PROCEDURE

1. FIELD VERIFY EXISTING MEMBER SIZES, MEMBER GEOMETRY AND RIVET PATTERN. PROVIDE STIFFENER ANGLES TO MATCH EXISTING STIFFENERS AND FILL PLATES AS REQUIRED TO COMPLETE THE WORK.
2. DRILL HOLES IN NEW MEMBERS TO MATCH EXISTING RIVET PATTERNS. NEW MEMBERS MAY BE MATCH DRILLED IN THE FIELD. DRILL HOLE IN THE OUTSTANDING LEG OF THE EXISTING STIFFENER TO AVOID INTERFERENCE WITH OTHER BOLTS. GRIND THE HEEL OF THE NEW ANGLE AND THE CONTACT POINT OF THE NEW ANGLE TO THE INSIDE OF THE FLANGE ANGLE AS REQUIRE TO AVOID INTERFERENCE WITH THE EXISTING MEMBERS AND
3. REMOVE PORTION OF THE OUTSTANDING LEG OF THE STIFFENER 6" BEYOND THE LIMIT OF THE DETERIORATION. REMOVE PORTION OF THE ATTACHED LEG OF THE STIFFENER FOR TWO FULL EXISTING RIVET SPACES BEYOND THE LIMIT OF THE DETERIORATION, OR TO PERMIT A MINIMUM OF 3 BOLTS TO BE INSTALLED TO THE WEB OF THE MEMBER, WHICHEVER IS GREATER.
4. PERFORM PACK RUST OR OTHER REPAIRS AS SPECIFIED OR AS DIRECTED BY THE DEPARTMENT REPRESENTATIVE.
5. BLAST CLEAN AND PREPARE ALL FAYING SURFACES IN ACCORDANCE WITH THE SPECIFICATIONS AND SPECIAL PROVISIONS.
6. INSTALL NEW PORTION OF STIFFENER ANGLE WITH 7/8" DIAMETER HIGH STRENGTH BOLTS WITH NUTS AND WASHERS IN ACCORDANCE WITH THE SPECIFICATIONS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
TYPICAL WEB STIFFENER REPAIRS 1

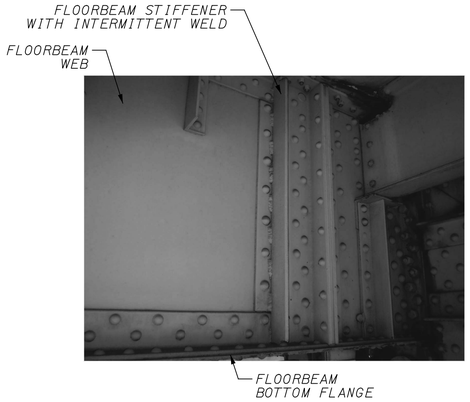
RECOMMENDED
OCTOBER 26, 2022

SHEET 57 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | EAL | CKD: | TSA |
|---|---|---|---|---|---|---|---|

PLOTTED: 10/26/2022 7:59:02 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Web Stiffener 2.dgn

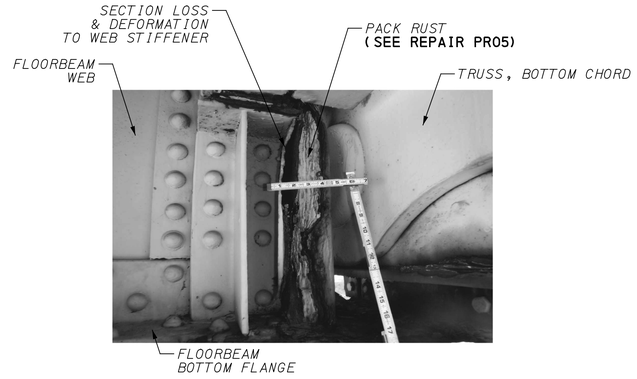



## REPAIR F06

ITEM 1050-0212
REPAIR F06 - STIFFENER RETROFIT, FLOORBEAM
REPRESENTATIVE CONDITIONS

## REPAIR F06 - PROCEDURE AND NOTES

1. PRIOR TO REPAIR, VISUALLY INSPECT ALL EXISTING WELDS FOR CRACKS. REPORT ANY CRACKS TO THE REPRESENTATIVE AND THE ENGINEER FOR FURTHER EVALUATION.
2. GRIND EXISTING TACK WELDS TO BASE METAL. RE-WELD THE STIFFENER TO BASE METAL USING A CONTINUOUS FILLET WELD. MINIMUM WELD SIZE SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPLICABLE AWS D1.5 STANDARDS.
3. GRIND AND RE-WELD ONE SIDE OF THE STIFFENER AT A TIME. COMPLETE THE REPAIR ON ONE SIDE PRIOR TO STARTING THE OTHER SIDE OF THE STIFFENER.
4. PROVIDE NON-DESTRUCTIVE, MAGNETIC PARTICLE TESTING OF THE NEW WELDS IN ACCORDANCE WITH THE SPECIFICATIONS. REPAIR ANY DEFECTIVE WELDS.




## REPAIR F07

ITEM 1050-0213
REPAIR F07 - BEARING SEAT STIFFENER REPAIR, FLOORBEAM
REPRESENTATIVE CONDITIONS

## REPAIR F07 - PROCEDURE AND NOTES

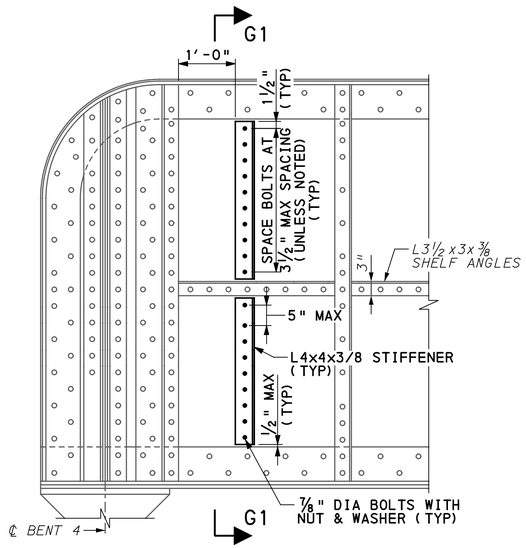
1. FIELD VERIFY EXISTING RIVET PATTERN, RIVET SIZE, AND ANGLE DIMENSIONS PRIOR TO FABRICATION.
2. CONDUCT THIS REPAIR DURING A FULL STRUCTURE SHUTDOWN DURING PHASE 1. CONSTRUCTION LIVE LOAD MAY BE PRESENT ON THE BRIDGE.
3. REMOVE EXISTING RIVETS AND STIFFENERS. PERFORM ANY REMOVAL OF PACK RUST AS PART OF REPAIR PR05 BETWEEN THE EXISTING STIFFENER AND THE REMAINING ANGLE MEMBER . PREPARE FAYING SURFACES IN ACCORDANCE WITH THE SPECIFICATIONS.
4. NOTE THAT THIS REPAIR INCLUDES THE REPLACEMENT OF THE STIFFENERS ON BOTH SIDES OF THE FLOORBEAM REGARDLESS OF CONDITION OF THE FAR STIFFENER. BOTH STIFFENERS SHALL BE REPLACED AT ALL REPAIR LOCATIONS INDICATED.
5. INSTALL NEW STIFFENERS AND FILL PLATES IF REQUIRED. DRILL AND REAM HOLES IN ACCORDANCE WITH THE SPECIFICATIONS. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

## REPAIR G05

ITEM 1050-0219
REPAIR G05 - STIFFENER ADDITION, GIRDER
REPRESENTATIVE CONDITIONS

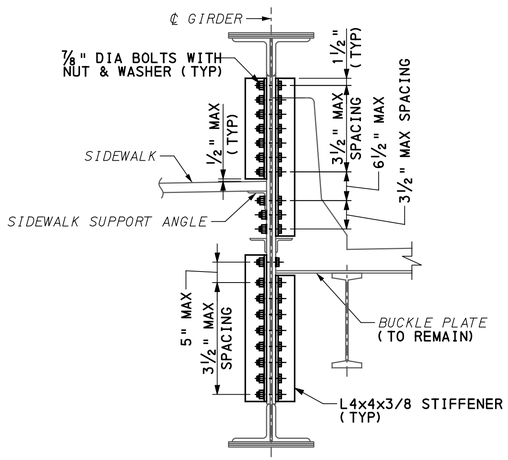
## REPAIR G05 - PROCEDURE AND NOTES

1. FIELD VERIFY THE PROPOSED LOCATION OF THE NEW STIFFENER TO ENSURE NO EXISTING COMPONENTS WILL INTERFERE WITH THE INSTALLATION. ALSO FIELD VERIFY MEASUREMENTS OF THE STIFFENER LENGTH RELATIVE TO THE UNDERSIDE OF THE DECK OF THE SIDEWALK. SEE DETAILS.
2. COORDINATE THIS REPAIR WITH REPAIR C07. ON THE NORTH GIRDER OF SPAN 4, THE STIFFENER ON THE SIDEWALK FACE OF THE GIRDER MAY BE INSTALLED DURING CONSTRUCTION PHASE 3 OR DURING PHASE 1 WHILE ENSURING PEDESTRIAN TRAFFIC REMAINS UNOBSTRUCTED.
3. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. INSTALL THE NEW STIFFENER. FIELD DRILL HOLES IN THE EXISTING WEB USING THE STIFFENER ANGLES AS A TEMPLATE. INSTALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.



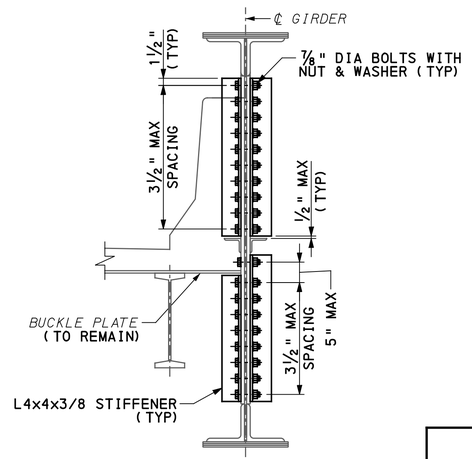

## REPAIR G05 DETAIL

SOUTH GIRDER, SPAN 4 END AT BENT 4 SHOWN;
END AT BENT 3 SIMILAR
0 1 2 FEET




## SECTION G1-G1

NORTH GIRDER
0 1 2 FEET




## SECTION G1-G1

SOUTH GIRDER
0 1 2 FEET

NOTE: BARRIER REPLACEMENT NOT SHOWN FOR CLARITY

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR BARRIER REPLACEMENT IN SPAN 4, REPAIR C07, SEE SHEET 80.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
TYPICAL WEB STIFFENER REPAIRS 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 58 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 7:59:15 AM
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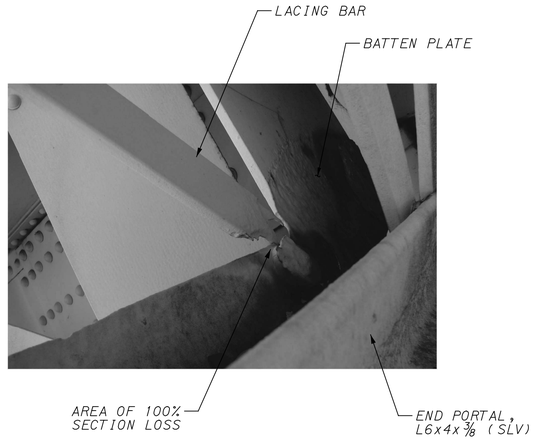
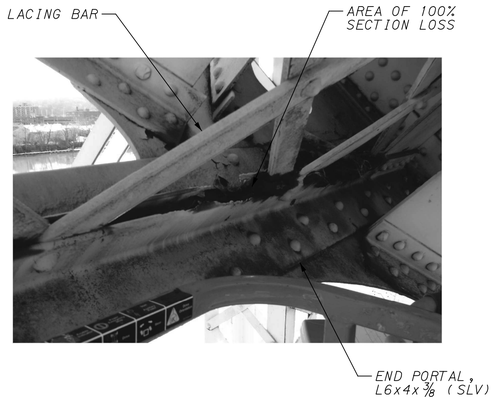


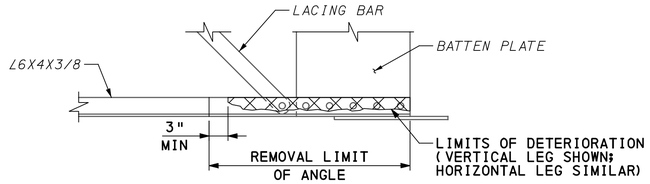

## REPAIR TB01

ITEM 1050-0239
REPAIR TB01 - LACING BAR REPAIR, END PORTAL
REPRESENTATIVE CONDITIONS



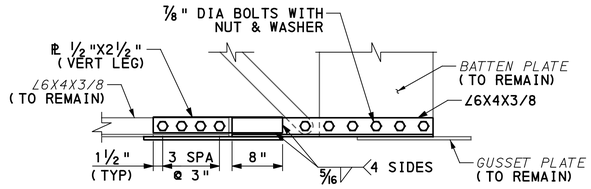

## REPAIR TB06

ITEM 1050-0244
REPAIR TB06 - END PORTAL STRUT REPAIR
REPRESENTATIVE CONDITIONS



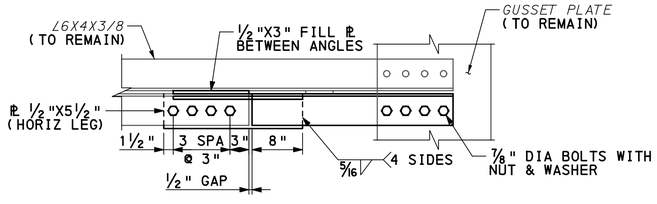

## REMOVAL LIMITS

NOT TO SCALE




## ELEVATION

NOT TO SCALE




## PLAN

NOT TO SCALE

## REPAIR TB06

NOT TO SCALE

## REPAIR TB01 - PROCEDURE AND NOTES

1. FIELD VERIFY EXISTING RIVET PATTERN, RIVET SIZE, AND LACING BAR DIMENSIONS PRIOR TO FABRICATION.
2. PROVIDE TEMPORARY SUPPORT AND BRACING OF ANY MAIN MEMBER IN ANY LOCATION OR DIRECTION WHEN MORE THAN THREE (3) CONSECUTIVE LACING BARS ARE REMOVED. DO NOT REMOVE LACING BARS IN MORE THAN ONE PLANE OR FACE OF ANY MEMBER AT ONE TIME.
3. REMOVE DETERIORATED LACING BARS AND RIVETS WITHOUT DAMAGING CONNECTED MEMBERS. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. PERFORM ANY REPAIRS TO CONNECTED MATERIAL PRIOR TO INSTALLING NEW LACING BARS. EVALUATE THE CONDITION OF THE CONNECTED MATERIAL WITH THE REPRESENTATIVE TO DETERMINE IF REPAIRS ARE REQUIRED.
5. INSTALL NEW LACING BARS. REAM HOLES FOR NEW BOLTS AS REQUIRED. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

## REPAIR TB06 - PROCEDURE AND NOTES

1. COORDINATE THIS REPAIR WITH REPAIR TB01.
2. FIELD VERIFY EXISTING RIVET PATTERN, RIVET SIZE, DETERIORATION LIMITS AND STRUT ANGLE DIMENSIONS PRIOR TO FABRICATION.
3. REMOVE EXISTING RIVETS AND CUT AND REMOVE THE DETERIORATED ANGLE LEG TO THE LIMITS SHOWN IN THE DETAILS. USE CAUTION TO PREVENT DAMAGE TO ANY MEMBERS TO REMAIN. GRIND SHARP EDGES TO REMAIN.
4. REMOVE ANY DETERIORATED LACING BARS FOR REPAIR TB01. PROTECT ANY LACING BARS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
5. DRILL AND REAM EXISTING AND NEW HOLES FOR NEW BOLTS. NEW PLATE MAY BE MATCH DRILLED IN THE FIELD.
6. INSTALL NEW PLATE. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR GENERAL DETAILS OF LACING BAR REPLACEMENT, SEE SHEET 50.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
# END PORTAL BRACING REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 59 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
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PLOTTED: 10/26/2022 7:59:25 AM
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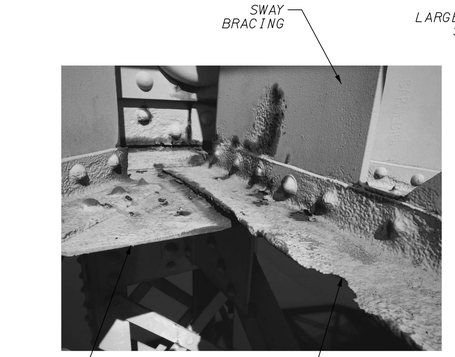



## REPAIR TB04

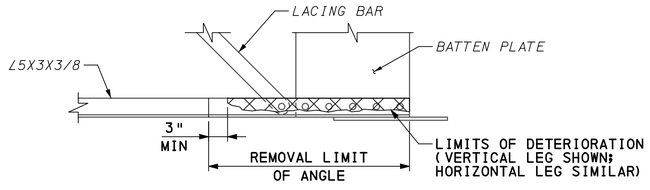
ITEM 1050-0242
REPAIR TB04 - END SWAY BRACE ANGLE REPLACEMENT
REPRESENTATIVE CONDITIONS

## REPAIR TB05

ITEM 1050-0243
REPAIR TB05 - MID SWAY BRACE ANGLE REPLACEMENT
REPRESENTATIVE CONDITIONS

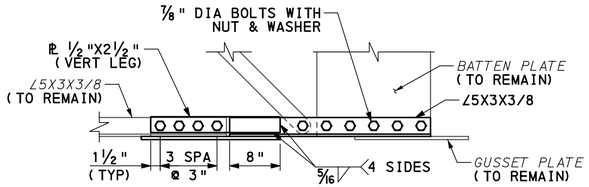
## REPAIR TB07

ITEM 1050-0245
REPAIR TB07 - SWAY BRACING STRUT REPLACEMENT
REPRESENTATIVE CONDITIONS



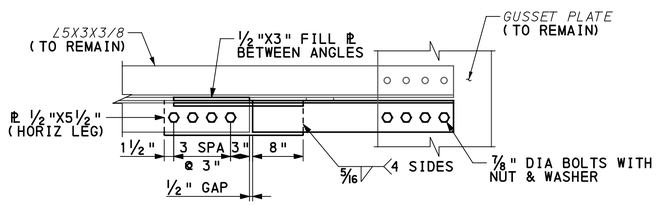

## REMOVAL LIMITS

NOT TO SCALE




## ELEVATION

NOT TO SCALE




## PLAN

NOT TO SCALE

## REPAIR TB04 ( TB05 SIMILAR)

NOT TO SCALE

## REPAIR TB04 - PROCEDURE AND NOTES

1. FIELD VERIFY EXISTING RIVET PATTERN, RIVET SIZE, DETERIORATION LIMITS AND STRUT ANGLE DIMENSIONS PRIOR TO FABRICATION.
2. REMOVE EXISTING RIVETS AND CUT AND REMOVE THE DETERIORATED ANGLE TO THE LIMITS SHOWN IN THE DETAILS. USE CAUTION TO PREVENT DAMAGE TO ANY MEMBERS TO REMAIN.
3. PROTECT ANY LACING BARS, BATTEN PLATES OR GUSSET PLATES TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. DRILL AND REAM EXISTING AND NEW HOLES FOR NEW BOLTS. NEW ANGLE MAY BE MATCH DRILLED IN THE FIELD. WELDS OF CONNECTION PLATES TO THE NEW SECTION OF ANGLE SHALL BE PERFORMED IN THE SHOP IN ACCORDANCE WITH THE SPECIFICATIONS.
5. INSTALL NEW ANGLE. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS. PROVIDE FILL PLATE BETWEEN THE EXISTING ANGLES OF THE STRUT TO ENSURE FULL CAPACITY OF THE BOLTS CAN BE DEVELOPED.

## REPAIR TB05 - PROCEDURE AND NOTES

1. FIELD VERIFY STRUT ANGLE SIZE AND DETERIORATION LIMITS PRIOR TO FABRICATION. IF REPAIR OCCURS IN PROXIMITY TO THE VERTICAL BRACE MEMBER, VERIFY RIVET SIZE AND PATTERN.
2. REMOVE EXISTING RIVETS IF PRESENT AND REMOVE THE DETERIORATED ANGLE TO THE LIMITS SHOWN IN THE DETAILS. USE CAUTION TO PREVENT DAMAGE TO ANY MEMBERS TO REMAIN.
3. CLEAN AND PREPARE THE FAYING SURFACES OF ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. DRILL AND REAM EXISTING AND NEW HOLES FOR NEW BOLTS. CONNECTION PLATES FOR NEW ANGLE MAY BE MATCH DRILLED IN THE FIELD. WELDS OF CONNECTION PLATES TO THE NEW SECTION OF ANGLE SHALL BE PERFORMED IN THE SHOP IN ACCORDANCE WITH THE SPECIFICATIONS.
5. INSTALL NEW ANGLE. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS. PROVIDE FILL PLATE BETWEEN THE EXISTING ANGLES OF THE STRUT TO ENSURE FULL CAPACITY OF THE BOLTS CAN BE DEVELOPED.

## REPAIR TB07 - PROCEDURE AND NOTES

1. THIS REPAIR IS FOR THE FULL LENGTH REPLACEMENT OF THE BOTTOM STRUT ANGLES IN THE LOCATIONS INDICATED. FOR ALL REPAIR LOCATIONS, REPLACE BOTH ANGLE MEMBERS.
2. FIELD VERIFY STRUT ANGLE SIZE. VERIFY RIVET SIZE AND PATTERN AT ALL CONNECTIONS. VERIFY THAT THE CONNECTIONS AND ADJOINING MEMBERS ARE NOT DAMAGED OR DISTORTED. REPORT ANY INDICATIONS OF DAMAGE TO THE REPRESENTATIVE.
3. REMOVE EXISTING RIVETS AND REMOVE THE EXISTING ANGLES. USE CAUTION TO PREVENT DAMAGE TO ANY MEMBERS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES OF ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. DRILL AND REAM EXISTING AND NEW HOLES FOR NEW BOLTS. HOLES FOR NEW ANGLES MAY BE MATCH DRILLED IN THE FIELD.
5. INSTALL NEW ANGLE. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SWAY BRACE ANGLE REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
PENNSYLVANIA

RECOMMENDED
OCTOBER 26, 2022

SHEET 60 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | TJH | CKD: | TSA |
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PLOTTED: 10/26/2022 7:59:36 AM
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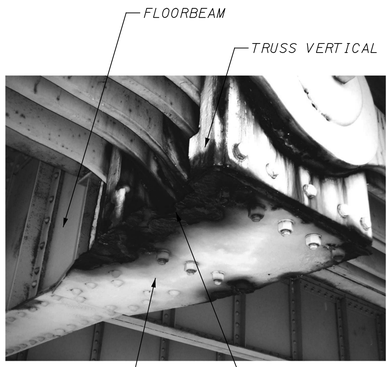
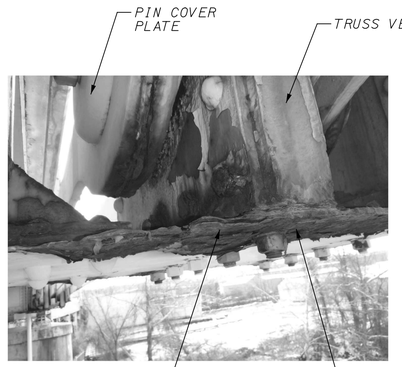



## WORK LIMIT NOTES:

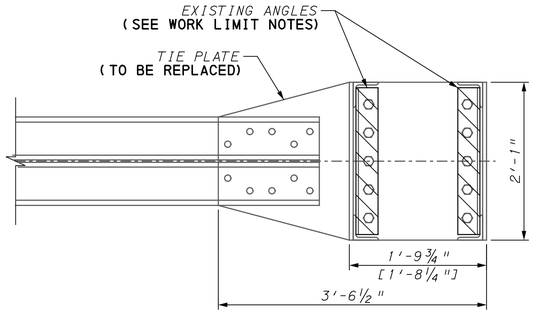
1. ALL LOCATIONS INDICATED ON THE PLANS ARE ASSUMED TO REQUIRE THE USE OF BOTH F04 AND T08. VERIFY EXISTING CONDITIONS AND REPORT DISCREPANCIES TO THE REPRESENTATIVE.
2. T08 REPAIR INCLUDES THE CONNECTION ANGLES BETWEEN THE TIE PLATE AND THE TRUSS VERTICAL AND THE FASTENERS TO THE TRUSS VERTICAL.
3. F04 REPAIR INCLUDES THE TIE PLATE AND THE FASTENERS TO THE FLOORBEAM AND THE CONNECTION ANGLES.
4. REPAIR F04 MAY BE CONDUCTED WITHOUT REPAIR T08 IF CONDITIONS WARRANT. HOWEVER, CONDUCT REPAIR F04 IN ALL LOCATIONS WHERE REPAIR T08 IS REQUIRED.

## REPAIR F04, T08 - PROCEDURE AND NOTES

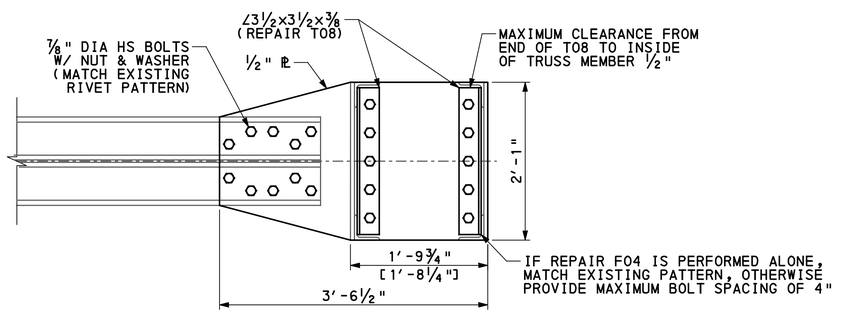
1. FIELD VERIFY EXISTING MEMBER SIZES, MEMBER GEOMETRY AND RIVET PATTERNS.
2. CONDUCT THIS REPAIR UNDER A FULL BRIDGE CLOSURE UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER. CONDUCT THIS REPAIR FOLLOWING ALL ADJACENT REPAIRS TO OTHER MEMBERS INCLUDING PACK RUST CLEANING AT THE EYE BARS.
3. REMOVE EXISTING PLATE AND CONNECTION ANGLES. REAM EXISTING HOLES FOR NEW BOLTS. NEW MEMBERS MAY BE MATCH DRILLED IN THE FIELD.
4. BLAST CLEAN AND PREPARE THE FAYING SURFACES OF THE CONNECTING ELEMENTS OF THE PROPOSED REPLACEMENT COMPONENTS IN ACCORDANCE WITH THE SPECIFICATIONS. IF EXCESSIVE DETERIORATION (GREATER THAN 33% SECTION LOSS) OF ANY CONNECTING ELEMENT TO REMAIN IN FOUND, IMMEDIATELY CONTACT THE ENGINEER.
5. INSTALL NEW CONNECTION ANGLES INCLUDING INSTALLATION OF BOLTS TO THE TRUSS VERTICAL IN ACCORDANCE WITH THE SPECIFICATIONS. INSTALL NEW BOTTOM PLATE. ENSURE THAT THE BOTTOM PLATE IS FULLY IN CONTACT WITH THE BOTTOM FLANGE OF THE FLOORBEAM AND PROVIDE FILL PLATES IF NEEDED.

## REPAIR F04 & T08

ITEM 1050-0210
REPAIR F04 - BOTTOM FLANGE CONNECTION REPAIR, FLOORBEAM
ITEM 1050-0229
REPAIR T08 - CONNECTION ANGLE REPAIR, TRUSS
REPRESENTATIVE CONDITIONS




PLAN (REMOVAL)
0 1 2 FEET

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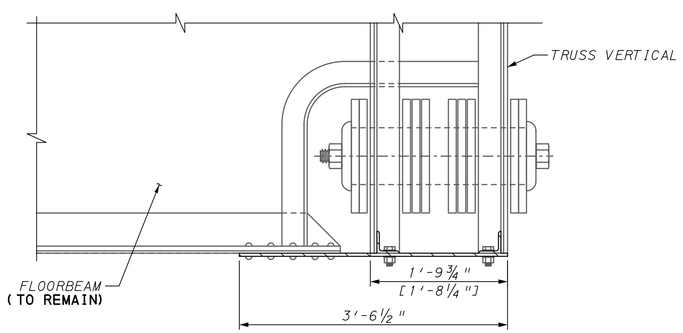
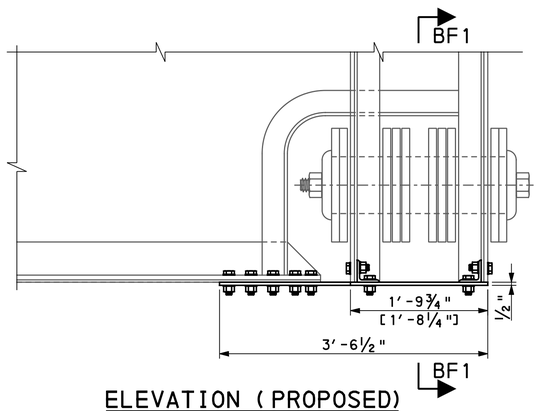
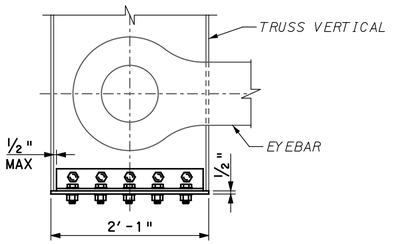



ELEVATION (REMOVAL)
0 1 2 FEET




ELEVATION (PROPOSED)
0 1 2 FEET

NOTE: DIMENSIONS IN BRACKETS SPECIFIC TO 29'-0½" PANELS




SECTION BF1-BF1
0 1 2 FEET

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## BOTTOM FLANGE CONNECTION REPAIR

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 61 OF 124
S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
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PLOTTED: 10/26/2022 7:59:44 AM
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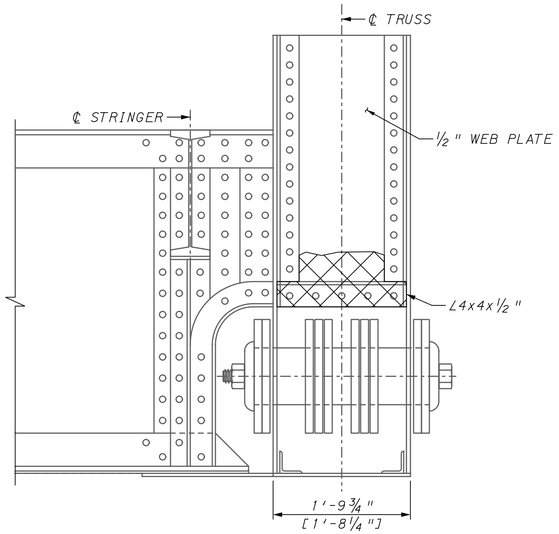


EXISTING

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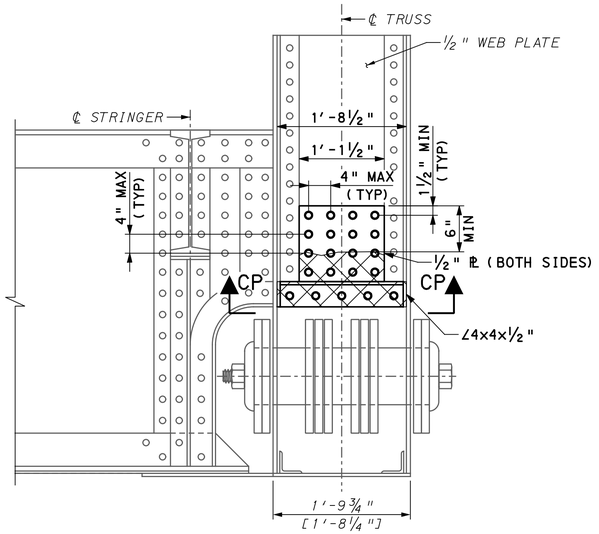
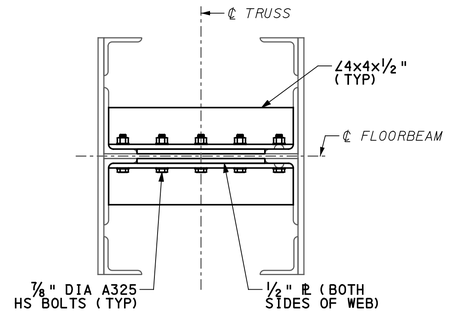


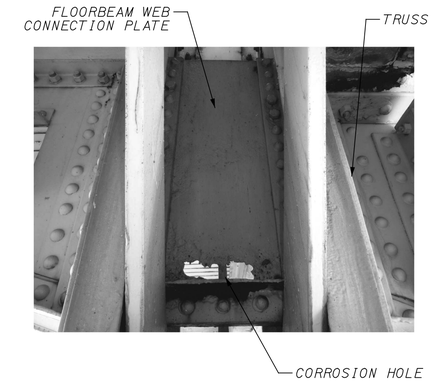

PROPOSED REPAIRS

0 1 2 FEET




SECTION CP-CP

0 1 2 FEET




## REPAIRS T09 & T10

ITEM 1050-0230
REPAIR T09 - FLOORBEAM CONNECTION ANGLE REPAIR, TRUSS
ITEM 1050-0231
REPAIR T10 - FLOORBEAM CONNECTION PLATE REPAIR, TRUSS

## REPAIRS T09 & T10

### REPAIR T09 - PROCEDURE AND NOTES

1. THIS REPAIR IS FOR THE REPLACEMENT OF THE ANGLES AT THE TRUSS VERTICAL BRACE IN THE LOCATIONS INDICATED. FOR ALL REPAIR LOCATIONS, REPLACE BOTH ANGLE MEMBERS REGARDLESS OF CONDITION.
2. THIS REPAIR MAY OR MAY NOT OCCUR IN CONJUNCTION WITH REPAIR T10. NOTE THAT IN ALL REPAIR T10 LOCATIONS, THIS REPAIR WILL ALSO OCCUR.
3. DO NOT CONDUCT THIS REPAIR UNTIL THE CLEANING FOR REPAIR PR03 HAS OCCURRED. CONDUCT THIS REPAIR PRIOR TO CONDUCTING REPAIR F04 AT ANY LOCATIONS WHERE BOTH REPAIRS OCCUR AT THE SAME TRUSS JOINT.
4. FIELD VERIFY ANGLE SIZE AND RIVET SIZE AND PATTERN.
5. REMOVE THE EXISTING ANGLES AND FILL PLATES IF PRESENT. VERIFY THE CONDITION OF THE WEB PLATE TO ASSESS IF REPAIR T10 IS REQUIRED AND REPORT FINDINGS TO THE REPRESENTATIVE. CLEAN AND PREPARE THE FAYING SURFACES OF ALL MATERIAL TO REMAIN.
6. DRILL AND REAM EXISTING AND NEW HOLES FOR NEW BOLTS. HOLES FOR NEW ANGLES MAY BE MATCH DRILLED IN THE FIELD.
7. INSTALL NEW ANGLE. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS. FOR LOCATIONS WHERE REPAIR T10 IS NOT REQUIRED, PROVIDE A 3/8" X 4" FILL PLATE AS INDICATED. WHERE REPAIR T10 IS ALSO PERFORMED, THE FILL PLATE MAY BE OMITTED.

### REPAIR T10 - PROCEDURE AND NOTES

1. THIS REPAIR IS FOR THE PLACEMENT OF WEB COVER PLATES AT THE TRUSS VERTICAL BRACE IN THE LOCATIONS INDICATED. FOR ALL REPAIR LOCATIONS, REPAIR T09 IS ALSO REQUIRED. NOTE THAT COVER PLATES ARE REQUIRED ON BOTH SIDES OF THE EXISTING WEB PLATE.
2. DO NOT CONDUCT THIS REPAIR UNTIL THE CLEANING FOR REPAIR PR03 HAS OCCURRED. CONDUCT THIS REPAIR PRIOR TO CONDUCTING REPAIR F04 AT ANY LOCATIONS WHERE BOTH REPAIRS OCCUR AT THE SAME
3. FIELD VERIFY DETERIORATION LIMITS AND DETERMINE THE EXTENT OF THE COVER PLATES REQUIRED. PERFORM FIELD VERIFICATION OF INFORMATION FOR REPAIR T09.
4. REMOVE THE EXISTING ANGLES AND FILL PLATES, IF PRESENT, FOR REPAIR T09.
5. DRILL AND REAM EXISTING AND NEW HOLES FOR NEW BOLTS FOR THE COVER PLATES. HOLES FOR COVER PLATES MAY BE MATCH DRILLED IN THE FIELD.
6. INSTALL NEW COVER PLATES. INSTALL NEW BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS. COMPLETE REPAIR T09 FOLLOWING INSTALLATION OF THE COVER PLATES.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
FLOORBEAM CONNECTION PLATE AND ANGLE REPAIR

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 62 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | TJH | CKD: | TSA |
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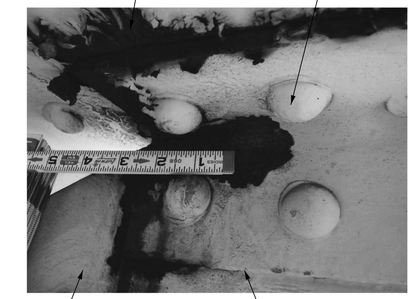
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_T11-12 Clip Angle.dgn

## REPAIR T11

ITEM 1050-0232
REPAIR T11 - REPLACE CLIP ANGLE
NORTH TRUSS, SPAN 11, JOINT U4
REPRESENTATIVE CONDITIONS

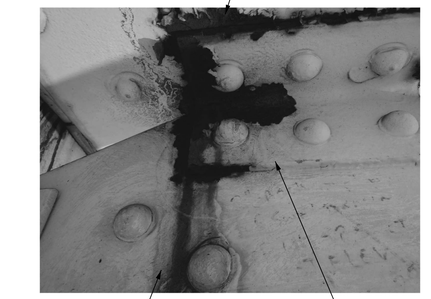
## REPAIR T11

ITEM 1050-0232
REPAIR T11 - REPLACE CLIP ANGLE
NORTH TRUSS, SPAN 11, JOINT U4
REPRESENTATIVE CONDITIONS




## REPAIR T12

ITEM 1050-0233
REPAIR T12 - REPLACE CLIP ANGLE & GUSSET PLATE
NORTH TRUSS, SPAN 10, JOINT U6
REPRESENTATIVE CONDITIONS




## REPAIR T12

ITEM 1050-0233
REPAIR T12 - REPLACE CLIP ANGLE & GUSSET PLATE
NORTH TRUSS, SPAN 10, JOINT U6
REPRESENTATIVE CONDITIONS

## REPAIR T11 - PROCEDURE AND NOTES

1. FIELD VERIFY EXISTING CONNECTION PLATE / ANGLE SIZE, CONNECTION RIVET SPACING, SIZE AND EDGE DISTANCES. THE CONNECTION ANGLES MAY BE REPLACED WITH EITHER BENT PLATES OR STRUCTURAL ANGLES.
2. PROVIDE TEMPORARY SUPPORT OF SWAY BRACING DURING THE REPAIR. VERIFY THE CONDITION OF THE CONNECTION ANGLES OF THE VERTICAL GUSSET PLATE TO THE TRUSS VERTICAL MEMBER. REPORT ANY NOTED DEFECTS OR DETERIORATION TO THE REPRESENTATIVE.
3. REMOVE EXISTING CONNECTION ANGLES. PROVIDE ULTRASONIC OR SIMILAR TESTING TO VERIFY THAT NO CRACKS EXIST IN THE GUSSET PLATE. COORDINATE TESTING RESULTS WITH THE REPRESENTATIVE AND ENGINEER. IF CRACKS IN THE GUSSET PLATE ARE DISCOVERED, REPAIR T12 MAY BE REQUIRED.
4. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
5. INSTALL THE NEW CONNECTION PLATES / ANGLES. USE 7/8" DIA HS BOLTS WITH NUTS AND WASHERS IN THE CONNECTIONS. REAM EXISTING HOLES IF REQUIRED IN ACCORDANCE WITH THE SPECIFICATIONS.
6. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS. FOLLOWING COMPLETION OF THE BOLT INSTALLATION, REMOVE ANY TEMPORARY SUPPORT.

## REPAIR T12 - PROCEDURE AND NOTES

1. FIELD VERIFY EXISTING CONNECTION PLATE / ANGLE SIZE, GUSSET PLATE SIZE, CONNECTION RIVET SPACING, SIZE AND EDGE DISTANCES. THE CONNECTION ANGLES MAY BE REPLACED WITH EITHER BENT PLATES OR STRUCTURAL ANGLES. REPLACE THE GUSSET PLATE WITH A PLATE THICKNESS MATCHING EXISTING.
2. PROVIDE TEMPORARY SUPPORT OF SWAY BRACING AND ALL HORIZONTAL BRACING MEMBERS DURING THE REPAIR. VERIFY THE CONDITION OF THE CONNECTION ANGLES OF THE VERTICAL GUSSET PLATE TO THE TRUSS VERTICAL MEMBER AS WELL AS THE UPPER GUSSET PLATE. REPORT ANY NOTED DEFECTS OR DETERIORATION TO THE
3. REMOVE EXISTING CONNECTION ANGLES AND GUSSET PLATE. INSPECTION ALL HORIZONTAL BRACING MEMBERS TO VERIFY THAT CRACKS DID NOT PROPAGATE INTO THE BRACING. PERFORM DYE PENETRANT OR SIMILAR TESTING ON BRACING MEMBERS. IF CRACKS ARE SUSPECTED IN ANY MEMBER TO REMAIN, PROVIDE ULTRASONIC OR SIMILAR TESTING. COORDINATE TESTING RESULTS WITH THE REPRESENTATIVE AND ENGINEER.
4. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
5. INSTALL THE NEW CONNECTION PLATES / ANGLES AND GUSSET PLATE. USE 7/8" DIA HS BOLTS WITH NUTS AND WASHERS IN THE CONNECTIONS. REAM EXISTING HOLES IF REQUIRED IN ACCORDANCE WITH THE SPECIFICATIONS.
6. INSTALL ALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS. FOLLOWING COMPLETION OF THE BOLT INSTALLATION, REMOVE ANY TEMPORARY SUPPORT.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
CLIP ANGLE REPAIRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 63 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

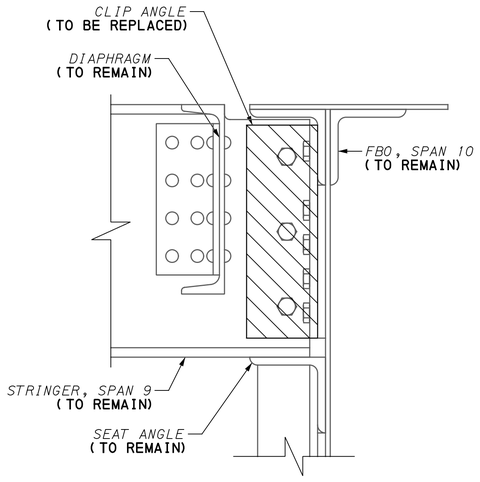
PLOTTED: 10/26/2022 8:00:05 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Stringer Clip Angle.dgn

## REPAIR S09

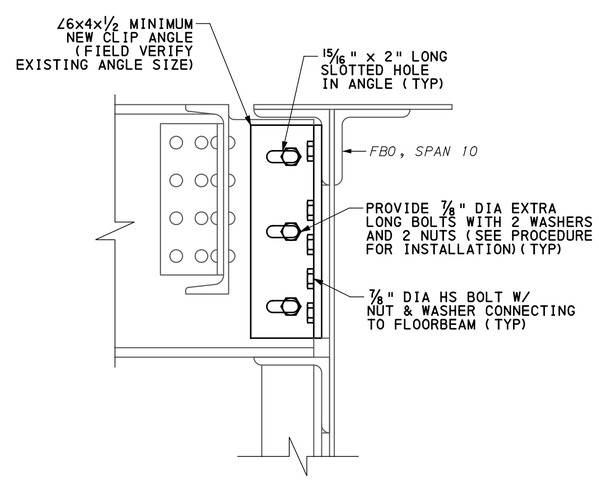
ITEM 1050-0267
REPAIR S09 - REPLACE STRINGER CLIP ANGLE
REPRESENTATIVE CONDITIONS

## REPAIR S09 - PROCEDURE

1. FIELD VERIFY EXISTING CONNECTION ANGLE SIZE, CONNECTION RIVET SPACING, SIZE AND EDGE DISTANCES. THE PROPOSED CONNECTION ANGLES SHALL BE A MINIMUM OF AN L6X4X1/2, HOWEVER VERIFY CLEARANCES AND PROPOSED CONNECTION LAYOUT PRIOR TO FABRICATION.
2. COORDINATE REPLACEMENT OF THE EXISTING CONNECTION ANGLES WITH THE REPLACEMENT OF THE EXPANSION JOINT AT PIER 1.
3. REMOVE EXISTING CONNECTION ANGLES. PROTECT ANY COMPONENTS TO REMAIN. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
4. INSTALL THE NEW CONNECTION ANGLES. USE 7/8" DIA HS BOLTS WITH NUTS AND WASHERS IN THE CONNECTIONS TO THE TRUSS FLOORBEAM. REAM EXISTING HOLES IF REQUIRED IN ACCORDANCE WITH THE SPECIFICATIONS. INSTALL THE BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.
5. FOR THE CONNECTION TO THE SPAN 9 STRINGERS, REAM THE EXISTING HOLES IN THE STRINGERS IF REQUIRED IN ACCORDANCE WITH THE SPECIFICATIONS. PROVIDE ADDITIONAL LENGTH BOLTS FOR 2 NUTS. INSTALL THE HS BOLTS WITH WASHERS UNDER BOTH THE BOLT HEAD AND NUT, AND TIGHTEN THE NUT SNUG TIGHT. BACK THE NUT OFF APPROXIMATELY 1/4 TURN AND INSTALL THE SECOND JAM NUT SNUG TIGHT TO THE FIRST NUT.




EXISTING
NOT TO SCALE




PROPOSED
NOT TO SCALE

## REPAIR S09
NOT TO SCALE

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
STRINGER CLIP ANGLE REPAIR

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 64 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
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PLOTTED: 10/26/2022 8:00:11 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Rivet - Bolt Replacement.dgn

## REPAIR F09

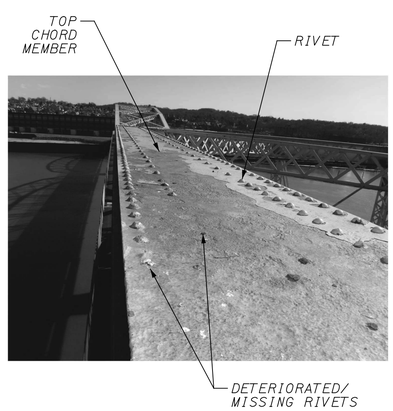
ITEM 1050-0215
REPAIR F09 - REPLACE RIVET, FLOORBEAM
REPRESENTATIVE CONDITIONS

## REPAIR G08

ITEM 1050-0222
REPAIR G08 - REPLACE RIVET, GIRDER
REPRESENTATIVE CONDITIONS

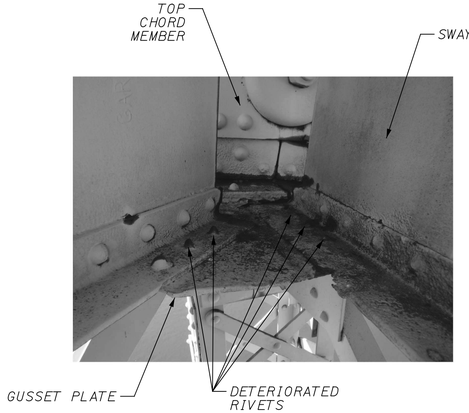
## REPAIR T05

ITEM 1050-0227
REPAIR T05 - REPLACE RIVET, TRUSS
REPRESENTATIVE CONDITIONS



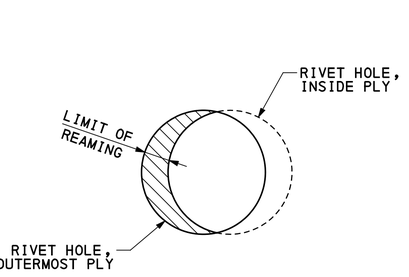

## REPAIR TC03

ITEM 1050-0236
REPAIR TC03 - REPLACE RIVET, CHORD
REPRESENTATIVE CONDITIONS
(TOP CHORD SHOWN; BOTTOM CHORD SIMILAR)

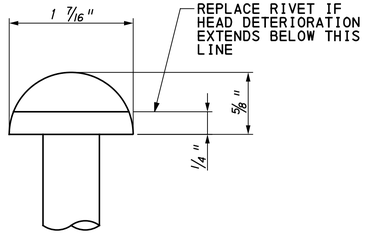



## REPAIR TB03

ITEM 1050-0241
REPAIR TB03 - REPLACE RIVET, BRACING
REPRESENTATIVE CONDITIONS




DETAIL 1




DETAIL 2

## REPAIR F09, G08, T05, TC03, TB03, B02

NOT TO SCALE

## REPAIR B02

ITEM 1050-0249
REPAIR B02 - REPLACE RIVET, BENT
REPRESENTATIVE CONDITIONS

## REPAIR F09, G08, T05, TC03, TB03, B02 - PROCEDURE AND NOTES

1. THIS REPAIR IS FOR THE REPLACEMENT OF RIVETS OR BOLTS WITH NEW HIGH STRENGTH BOLTS ONLY WHERE NEW STEEL IS NOT REQUIRED. BOLT INSTALLATION FOR ALL STEEL REPAIRS WHERE NEW BOLTS ARE REQUIRED TO COMPLETE THE REPAIR ARE INCLUDED WITH THE REPRESENTATIVE REPAIR. HOWEVER, PROCEDURES NOTED IN THIS REPAIR ARE APPLICABLE TO ALL LOCATIONS
2. USE A PNEUMATIC RIVET BREAKER AND A PNEUMATIC PUNCH FOR RIVET REMOVAL. RIGHT ANGLE PORTABLE DRILLS OPERATED BY ELECTRICITY OR COMPRESSED AIR MAY BE USED TO REMOVE RIVETS AT LOCATIONS WHERE INSUFFICIENT CLEARANCE FOR USE OF OTHER
3. DO NOT USE A TORCH OR OTHER BURNING METHODS FOR REMOVAL.
4. REAM EXISTING HOLES AS NEEDED FOR NEW HIGH STRENGTH BOLTS. INSTALL NEW BOLTS WITH NUT AND WASHER IN ACCORDANCE WITH THE SPECIFICATIONS.
5. IN AREAS WHERE MULTIPLE ADJACENT RIVETS ARE BEING REPLACED, REMOVE AND REPLACE ONE AT A TIME.
6. PERFORM ALL WORK IN ACCORDANCE WITH APPLICABLE WORKER HEALTH AND SAFETY REQUIREMENTS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
TYPICAL RIVET REPLACEMENT AND BOLT REPAIRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 65 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | EAL | CKD: | TSA |
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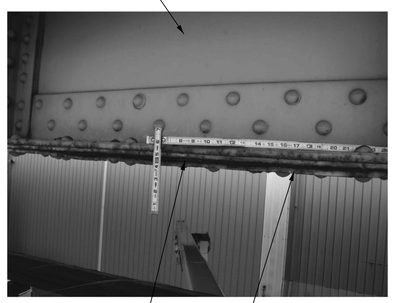
PLOTTED: 10/26/2022 8:00:34 AM

FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\SR1038 RPR_Pack Rust 1.dgn




## REPAIR PR01

ITEM 1070-0350
REPAIR PR01 - PACK RUST REPAIR,
GIRDER OR FLOORBEAM
REPRESENTATIVE CONDITIONS

## REPAIR PR02

ITEM 1070-0350
REPAIR PR02 - PACK RUST REPAIR,
TRUSS MEMBER
REPRESENTATIVE CONDITIONS

## REPAIR PR05

ITEM 1070-0350
REPAIR PR05 - PACK RUST REPAIR,
STRINGER BEARING SEAT
REPRESENTATIVE CONDITIONS

## REPAIR PR06

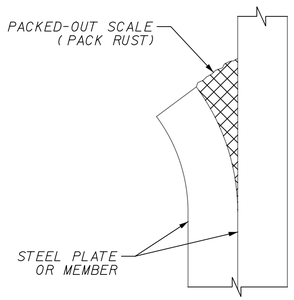
ITEM 1070-0350
REPAIR PR06 - PACK RUST REPAIR,
BENT
REPRESENTATIVE CONDITIONS

## REPAIR PR07

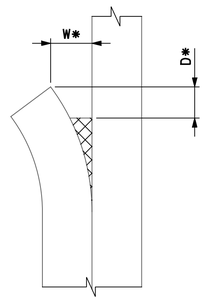
ITEM 1070-0350
REPAIR PR07 - PACK RUST REPAIR,
TRUSS END PORTAL
REPRESENTATIVE CONDITIONS

## REPAIR PR01, PR02, PR05, PR06, PR07 - PROCEDURE AND NOTES

1. THIS REPAIR IS FOR THE CLEANING AND TREATMENT OF PACK RUST AREAS AS SHOW ON THE PLANS OR AS DEFINED BY THE REPRESENTATIVE.
2. PRIOR TO BLAST CLEANING, REMOVE ALL RUST SCALE AND REMOVE PACK RUST AS DEFINED IN THE PLANS FROM ALL CREVICES USING MANUALLY OPERATED OR POWER OPERATED DESCALING TOOLS.
3. FOLLOWING BLAST CLEANING AND PRIMER APPLICATION, FLOOD THE PACK RUS AREA WITH A PENETRATING SEALER AS RECOMMENDED BY THE MANUFACTURER SO THAT THE MATERIAL FLOWS AND WICKS INTO THE CREVICE AREAS. WIPE EXCESS MATERIAL FROM THE SURFACE FOLLOWING APPLICATION. FOLLOWING DRYING AND CURING OF THE PENETRATING SEALER, APPLY THE
4. APPLY CAULKING TO THE PACK RUST AREA IN ACCORDANCE WITH THE SPECIFICATIONS.
5. CLEANING OF THE PACK RUST AREAS IS INCIDENTAL TO THE BLAST CLEANING AND PAINTING OF THE STRUCTURE. PENETRATING SEALER AND CAULKING APPLICATION IS INCLUDED IN THE APPROPRIATE ITEM NUMBERS.




EXISTING CONDITION




REPAIR

| PACK RUST REMOVAL LIMIT | |
|---|---|
| W | D (MIN) |
| > 1/4" | 1" |
| ≤ 1/4" | 1/2" |

## REPAIR PR01, PR02, PR04 & PR06

NOT TO SCALE

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

TYPICAL PACK RUST REPAIRS 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 66 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
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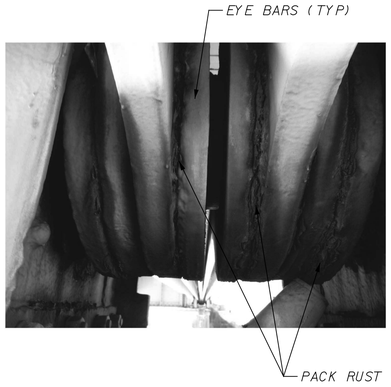
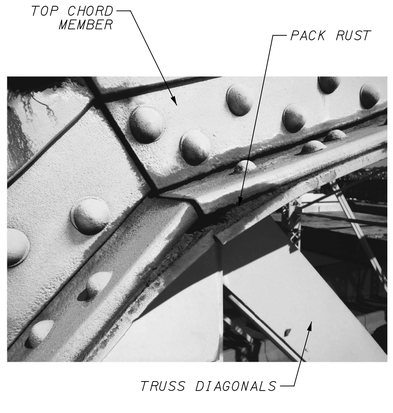
PLOTTED: 10/26/2022 8:00:53 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Pack Rust 2.dgn




## REPAIR PR03

ITEM 9000-0201
REPAIR PR03 - PACK RUST REPAIR,
EYE BARS
REPRESENTATIVE CONDITIONS




## REPAIR PR04

ITEM 9000-0202
REPAIR PR04 - PACK RUST REPAIR,
JOINT OR CHORD
REPRESENTATIVE CONDITIONS

## REPAIR PR03 - PROCEDURE AND NOTES

1. SEE THE SPECIAL PROVISION FOR ITEM 9000-0201.
2. THIS REPAIR SHALL BE USED IN ANY LOCATION WHERE EXTENSIVE PACK RUST EXISTS BETWEEN THE HEADS OF EYE BARS AT BOTTOM CHORD JOINT LOCATIONS. LOCATIONS ARE DESIGNATED ON THE PLANS. ANY ADDITIONAL LOCATIONS PROPOSED FOR THE REPAIR SHALL BE COORDINATED WITH THE REPRESENTATIVE AND THE ENGINEER.
3. COORDINATE ALL CLEANING OPERATIONS WITH OTHER REPAIRS INCLUDING F04 / T08, T09 AND T10 REPAIRS. IF ANY OF THESE REPAIRS OCCUR IN THE SAME JOINT AS PR03, IT IS RECOMMENDED TO COMPLETE THOSE REPAIRS PRIOR TO CONDUCTING PR03. ALSO COORDINATE THIS REPAIR WITH OPERATIONS TO PLACE PAINT CONTAINMENT.
4. PROVIDE PROTECTION TO ALL ELEMENTS TO REMAIN. PROVIDE PROTECTION TO TRAFFIC AND PEDESTRIANS AS REQUIRED.
5. CONDUCT ULTRA-HIGH-PRESSURE WATER JETTING AT A MINIMUM OF 30,000 PSI TO REMOVE PACK RUST FROM AREAS BETWEEN THE EYE BARS AT THE JOINTS. EXERCISE EXTREME CAUTION TO AVOID DAMAGING OR GOUGING THE EYE BARS OR PINS. IF WATER JETTING IS PERFORMED PRIOR TO BLAST CLEANING OF OTHER ELEMENTS, FLUSH AND CLEAN THE AREAS BETWEEN THE EYE BARS USING HIGH PRESSURE WATER AS REQUIRED TO ENSURE THE REMOVAL OF ALL BLASTING MATERIALS.
6. FOLLOWING PRIMER APPLICATION, FLOOD THE AREA BETWEEN THE EYE BARS WITH A PENETRATING SEALER AS RECOMMENDED BY THE MANUFACTURER. APPLY INTERMEDIATE PAINT COAT AFTER CURING OF THE PENETRATING SEALER.
7. FOLLOWING APPLICATION OF THE TOP COAT, APPLY CAULKING TO ALL SEAMS OF THE EYEBARS AT THE TOP OF THE CONNECTIONS. EXTEND THE CAULKING DOWN THE SIDES OF THE EYEBARS TO PREVENT WATER INTRUSION FROM ABOVE. DO NOT CAULK THE UNDERSIDE OF THE EYEBARS TO ENSURE DRAINAGE.

## REPAIR PR04 - PROCEDURE AND NOTES

1. SEE THE SPECIAL PROVISION FOR ITEM 9000-0202.
2. THIS REPAIR SHALL BE USED IN ANY PACK RUST LOCATION WHERE THE CONNECTED ELEMENT OF A TRUSS CHORD HAS EXHIBITED SIGNIFICANT (GREATER THAN 1/4") DEFORMATION DUE TO THE PRESCENCE OF PACK RUST EXCEPT FOR LOCATIONS WHERE A TOP CHORD COVER PLATE IS INVOLVED (SEE REPAIR TC06).
3. SATURATE THE PACK RUST AREA USING MINIMUM 3000 PSI WATER BLASTING. IMMEDIATELY FOLLOWING THE SATURATION OF THE PACK RUST, HEAT THE SURFACE OF THE BASE METAL ELEMENT TO A TEMPERATURE OF BETWEEN 250 AND 400 DEGREES FAHRENHEIT.
4. REMOVE PACK RUST USING MECHANICAL METHODS. PACK RUST MAY BE REMOVED USING HAND CHISELS, HAMMERS, PRYING, OR SMALL MECHANICAL TOOLS IN ACCORDANCE WITH THE SPECIFICATIONS. USE EXTREME CARE TO AVOID DAMAGING UNDERLYING MATERIAL.
5. THOROUGHLY DRY THE AREA AND FLOOD THE AREA WITH A PENETRATING SEALER. PROTECT THE BASE METAL ELEMENT WITH A SACRIFICIAL STEEL PLATE A MINIMUM OF 1" THICK AND DRIVE THE DEFORMED BASE METAL INTO ITS ORIGINAL POSITION USING A PNEUMATIC HAMMER.
6. CAULK THE AREA WHERE THE REPAIR OCCURRED IN ACCORDANCE WITH THE SPECIFICATIONS FOR PACK RUST REPAIRS.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

TYPICAL PACK RUST REPAIRS 2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 67 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
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PLOTTED: 10/26/2022 8:01:04 AM
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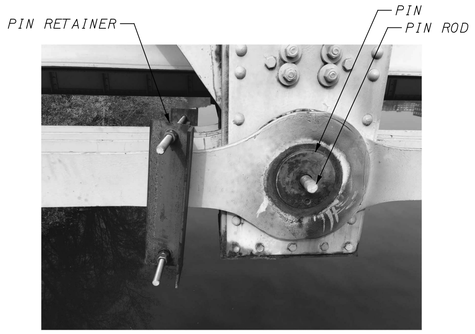
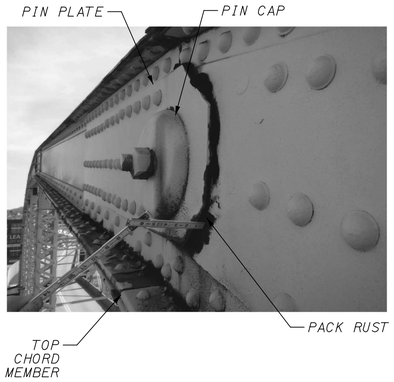


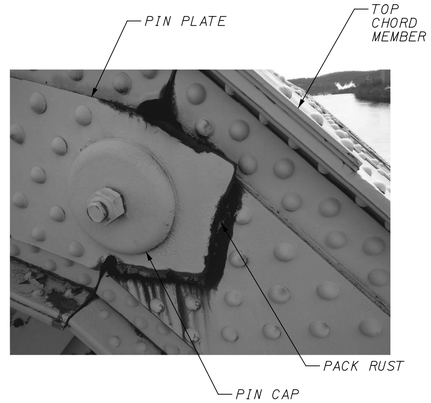

## REPAIR TC05

ITEM 1050-0237
REPAIR TC05 - REPLACE PIN ROD
REPRESENTATIVE CONDITIONS




## REPAIR TC06

ITEM 1050-0238
REPAIR TC06 - REPAIR TOP CHORD PIN PLATE
REPRESENTATIVE CONDITIONS

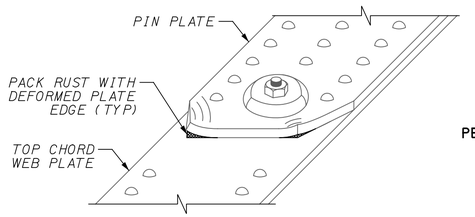



## REPAIR TC06

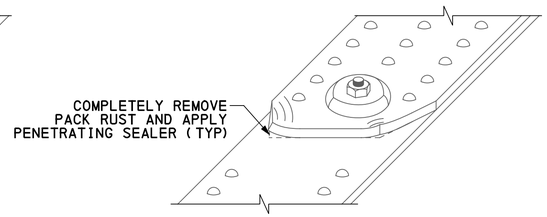
ITEM 1050-0238
REPAIR TC06 - REPAIR TOP CHORD PIN PLATE
REPRESENTATIVE CONDITIONS

## REPAIR TC05 - PROCEDURE AND NOTES

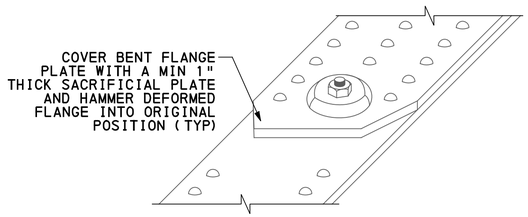
1. COORDINATE THIS WORK WITH REPAIR PR03 IF REQUIRED. PR03 MAY BE CONDUCTED PRIOR TO THIS REPAIR, HOWEVER STEPS 2 THROUGH 4 MUST BE COMPLETED PRIOR TO PR03.
2. CONDUCT THIS WORK DURING A FULL BRIDGE CLOSURE. CONSTRUCTION LIVE LOAD MAY BE PRESENT DURING THE OPERATION.
3. FIELD VERIFY THE DIMENSIONS OF THE EXISTING COVER PLATE ROD. PROVIDE A NEW COVER PLATE ROD OF EQUIVALENT DIMENSIONS.
4. VERIFY THE PLACEMENT AND CONDITION OF THE EXISTING CLAMP MECHANISM. BOLTS SHOULD BE SNUG TIGHT WITH JAM BOLTS IN PLACE. IF ANY EVIDENCE OF DAMAGE OR EXCESSIVE DETERIORATION IS DETECTED, NOTIFY THE REPRESENTATIVE PRIOR TO PROCEEDING WITH THE WORK.
5. REMOVE THE EXISTING COVER PLATE ROD AND COVER PLATES. POWER TOOL CLEAN THE ENDS OF THE PINS AND THE INTERIOR SURFACES OF THE COVER PLATES, AND APPLY A COAT OF PRIMER. DISPOSE OF THE EXISTING COVER PLATE ROD IN ACCORDANCE WITH THE SPECIFICATIONS.
6. INSTALL NEW COVER PLATE ROD AND RE-INSTALL COVER PLATES. PROVIDE STANDARD WASHERS FOR THE COVER PLATE ROD, AND INSTALL THE NUTS TO A SNUG TIGHT FIT.
7. REMOVE AND DISPOSE OF THE CLAMP MECHANISM IN ACCORDANCE WITH THE SPECIFICATIONS.




EXISTING




REMOVAL




PROPOSED

## REPAIR TC06

NOT TO SCALE

## REPAIR TC06 - PROCEDURE AND NOTES

1. THIS REPAIR SHALL BE USED IN TOP CHORD CONNECTION PLATES WHERE THE PIN PLATE HAS EXHIBITED SIGNIFICANT (GREATER THAN 1/4") DEFORMATION DUE TO THE PRESCENCE OF PACK RUST.
2. SATURATE THE PACK RUST AREA USING MINIMUM 3000 PSI WATER BLASTING. IMMEDIATELY FOLLOWING THE SATURATION OF THE PACK RUST, HEAT THE SURFACE OF THE COVER PLATE TO A TEMPERATURE OF BETWEEN 250 AND 400 DEGREES FAHRENHEIT.
3. REMOVE PACK RUST USING MECHANICAL METHODS. PACK RUST MAY BE REMOVED USING HAND CHISELS, HAMMERS, PRYING, OR SMALL MECHANICAL TOOLS IN ACCORDANCE WITH THE SPECIFICATIONS. USE EXTREME CARE TO AVOID DAMAGING UNDERLYING MATERIAL.
4. THOROUGHLY DRY THE AREA AND FLOOD THE AREA WITH A PENETRATING SEALER. PROTECT THE PIN PLATE WITH A SACRIFICIAL STEEL PLATE A MINIMUM OF 1" THICK AND DRIVE THE DEFORMED PIN PLATE INTO ITS ORIGINAL POSITION USING A PNEUMATIC HAMMER.
5. TIGHTEN THE EXISTING COVER PLATE ROD AS NEEDED TO RE-SEAT THE PIN COVER TO THE PLATE IF NECESSARY. ENSURE A TIGHT FIT BETWEEN THE PIN COVER AND THE PLATE.
6. CAULK THE AREA WHERE THE REPAIR OCCURRED IN ACCORDANCE WITH THE SPECIFICATIONS FOR PACK RUST REPAIRS.

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
TYPICAL PIN ROD AND TOP CHORD PLATE REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

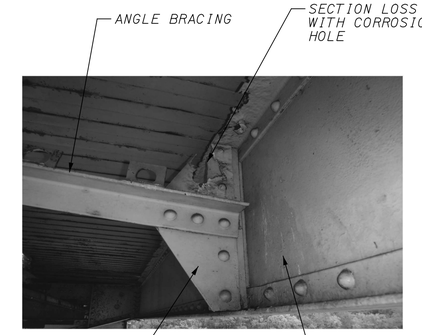
RECOMMENDED
OCTOBER 26, 2022

SHEET 68 OF 124

S - 40253

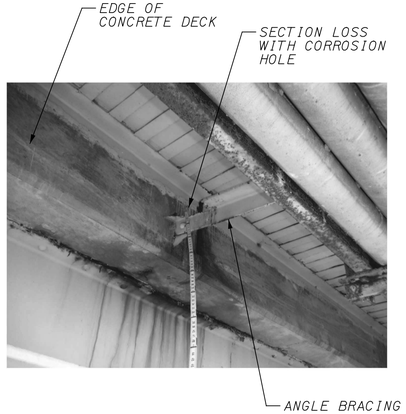
PLOTTED: 10/26/2022 8:01:15 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038 RPR_Sidewalk Support.dgn




## REPAIR TM03

ITEM 1050-0246
REPAIR TM03 - SIDEWALK GUSSET PLATE REPAIR
REPRESENTATIVE CONDITIONS




## REPAIR TM04

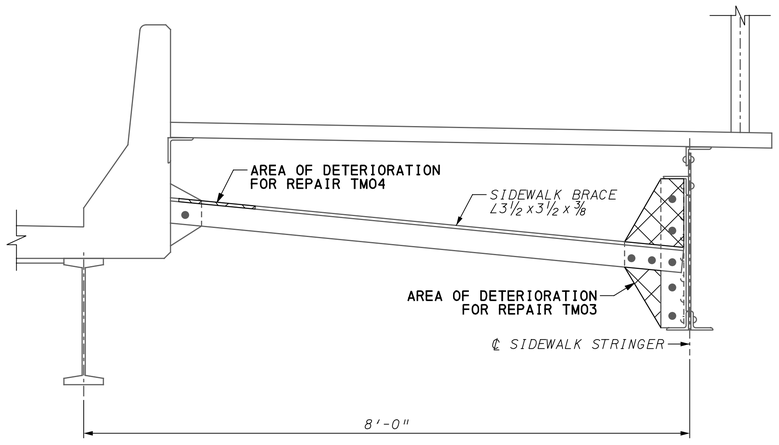
ITEM 1050-0247
REPAIR TM04 - SIDEWALK ANGLE BRACING REPAIR
REPRESENTATIVE CONDITIONS

## REPAIR TM03 - PROCEDURE

1. FIELD VERIFY EXISTING PLATE SIZE, RIVET SIZE, AND RIVET SPACING PRIOR TO FABRICATION. ALSO VERIFY THE CONDITION OF THE CONNECTION ANGLE AND THE BRACE ANGLE PRIOR TO FABRICATION. REPORT ANY DETERIORATION TO THE REPRESENTATIVE.
2. REMOVE EXISTING RIVETS AND REMOVE THE DETERIORATED PLATE. USE CAUTION TO PREVENT DAMAGE TO ANY MEMBERS TO REMAIN. DO NOT SIMULTANEOUSLY PERFORM THIS REPAIR ON ADJACENT SIDEWALK BRACES.
3. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS. REAM EXISTING HOLES FOR NEW BOLTS.
4. INSTALL NEW PLATE. INSTALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.

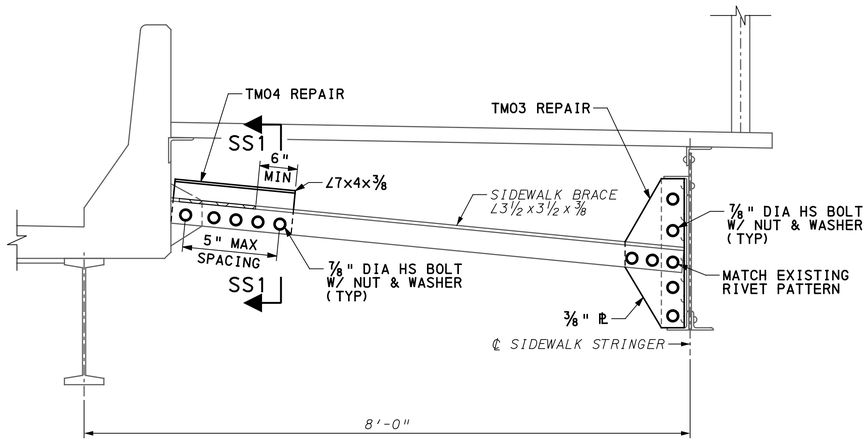
## REPAIR TM04 - PROCEDURE

1. FIELD VERIFY EXISTING ANGLE SIZE, RIVET SIZE, AND RIVET SPACING PRIOR TO FABRICATION. VERIFY THE LIMIT OF DETERIORATION OF THE ANGLE AND EXTEND THE REPAIR ANGLE A MINIMUM OF 6" BEYOND THE LIMIT OF DETERIORATION.
2. DRILL NEW HOLES IN THE EXISTING BRACE FOR THE REPAIR ANGLE AND FILL PLATE. REMOVE THE EXISTING RIVET.
3. CLEAN AND PREPARE THE FAYING SURFACES ON ALL MEMBERS TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS. REAM EXISTING HOLES FOR NEW BOLTS.
4. INSTALL NEW ANGLE AND FILL PLATE. INSTALL BOLTS IN ACCORDANCE WITH THE SPECIFICATIONS.



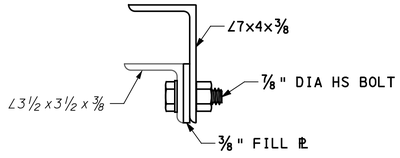

## SIDEWALK BRACE (EXISTING)

0 1 2 FEET




## SIDEWALK BRACE (PROPOSED REPAIRS)

0 1 2 FEET




## SECTION SS1-SS1

NOT TO SCALE

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
SIDEWALK STRUCTURE REPAIRS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 69 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

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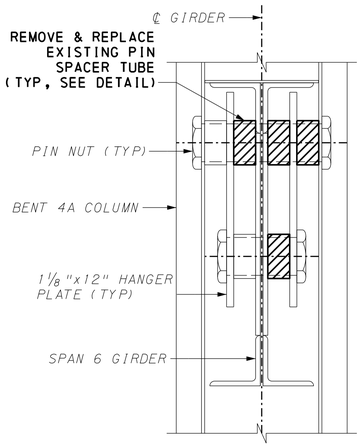
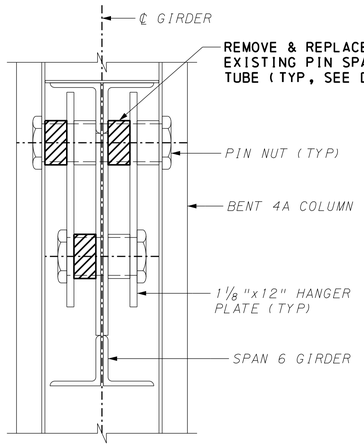
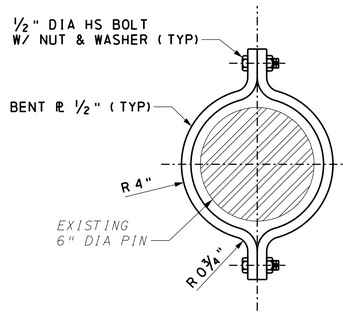


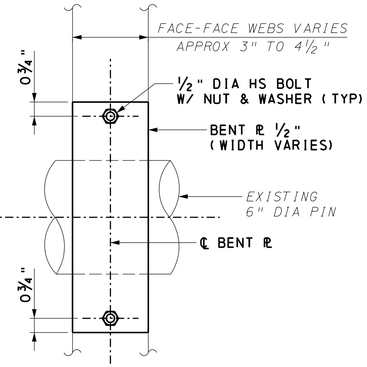

GIRDER G2
(LOOKING TOWARD SPAN 5)
NOT TO SCALE




GIRDER G1
(LOOKING TOWARD SPAN 5)
NOT TO SCALE




SECTION




ELEVATION

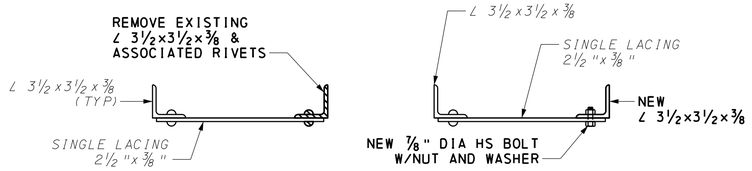
PIN SPACER TUBE DETAIL
0 3 6 9 1 FOOT

## REPAIR G06 - PROCEDURE AND NOTES

1. REMOVE EXISTING GIRDER PIN SPACER TUBES AS INDICATED. USE EXISTING PIN SPACER TUBE DIMENSIONS TO FABRICATE NEW GIRDER PIN SPACER TUBES USING DETAILS ON THIS SHEET.
2. REMOVE LOOSE DEBRIS AND PRIME STEEL AREAS THAT WILL BE IN CONTACT AFTER INSTALLATION OF NEW GIRDER PIN SPACER TUBES.
3. INSTALL NEW GIRDER PIN SPACER TUBES AS INDICATED. INSTALL NEW BOLTS SNUG-TIGHT.

## REPAIR TYPE G06

ITEM 1050-0220
REPLACE GIRDER PIN SPACER TUBE




REMOVAL REPLACEMENT

## REPAIR B08

ITEM 1050-0255
REPLACE SWAY BRACE ANGLE
0 6 1 FOOT

LEGEND:

PIN SPACER TUBE TO BE REPLACED (REPAIR G06)

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4 .

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT REPAIR DETAILS 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 70 OF 124
S - 40253

| DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS |
|---|---|---|---|

PLOTTED: 10/25/2022 10:12:13 PM
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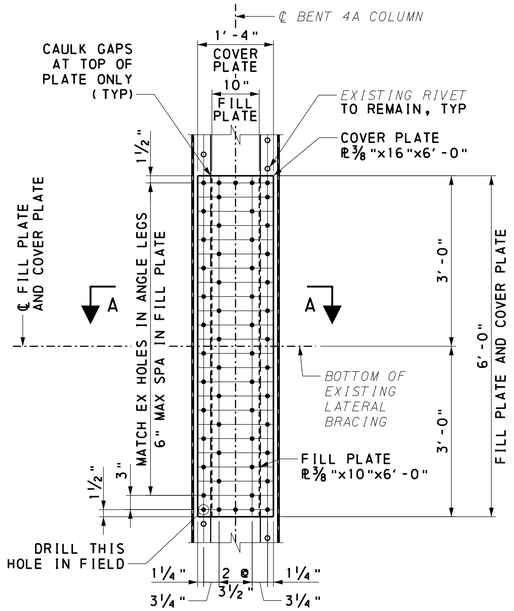
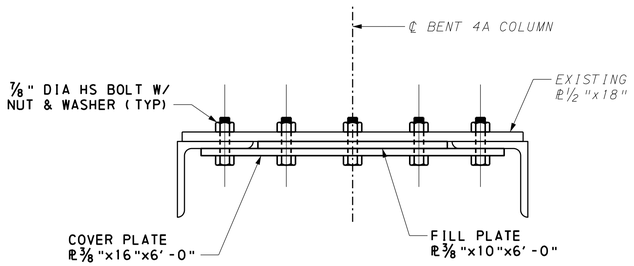
## REPAIR B09

ITEM 1050-0256
INSTALL COLUMN COVER PLATE
REPRESENTATIVE PHOTO




## REPAIR B09 - ELEVATION

0 1 2 FEET

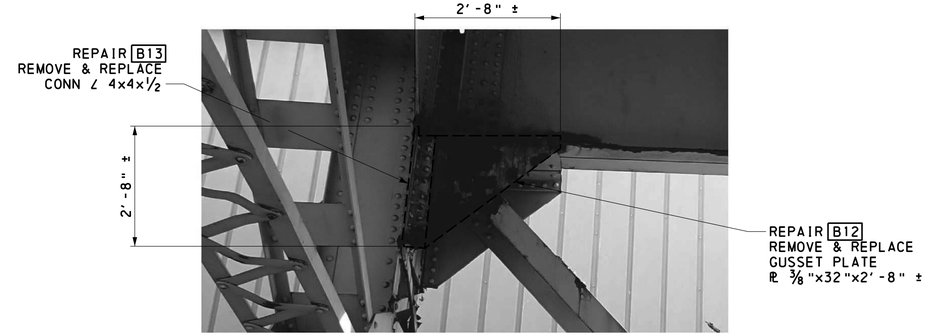



## PART SECTION A-A

LACING AND RIVETS NOT SHOWN
0 3 6 9 1 FOOT

## REPAIR B09 - PROCEDURE AND NOTES

1. AFTER ABRASIVE BLASTING, THE REPRESENTATIVE WILL DELINEATE THE FINAL DIMENSIONS OF THE FILL AND COVER PLATES.
2. DRILL HOLES FOR NEW BOLTS AS REQUIRED, USING REPAIR AND FILL PLATES AS A TEMPLATE.
3. REMOVE RIVETS AS REQUIRED. REAM HOLES FOR ⅞" DIA HS BOLTS USING THE OUTERMOST PLY AS THE TEMPLATE.
4. INSTALL FILL AND COVER PLATES.
5. INSTALL NEW ⅞" DIA HS BOLTS W/ NUTS AND WASHERS IN ALL OPEN HOLES.




## REPAIR B13

ITEM 1050-0119
REPLACE CONNECTION ANGLE
(∠ 4x4x½)
REPRESENTATIVE PHOTO

## REPAIR B12

ITEM 1050-0259
REPLACE BENT4-4A BRACING
GUSSET PLATE, TYPE 2
REPRESENTATIVE PHOTO

## REPAIR B12, B13 - PROCEDURE AND NOTES

1. REMOVE EXISTING RIVETS ATTACHING THE EXISTING GUSSET PLATE TO THE BENT 4-4A BRACING.
2. REMOVE GUSSET PLATE AND/OR CONNECTION PLATE AND DISCARD.
3. REAM HOLES AS REQUIRED. HOLES MAY BE DRILLED IN THE GUSSET PLATE USING THE EXISTING HOLES IN THE BRACING MEMBERS AS A TEMPLATE.
4. INSTALL NEW ⅞" DIA HS BOLTS W/ NUTS AND WASHERS IN ALL OPEN HOLES.

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENT REPAIR DETAILS 2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 71 OF 124

S - 40253

| DES: ABC | CKD: KTS | DWG: ABC | CKD: KTS |
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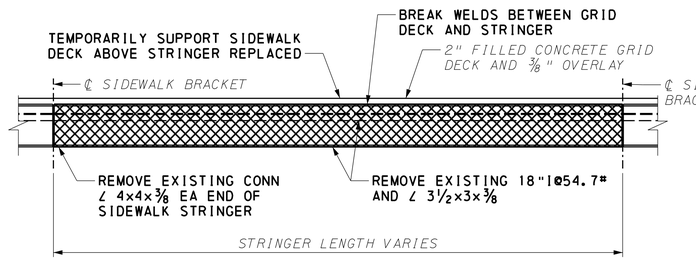
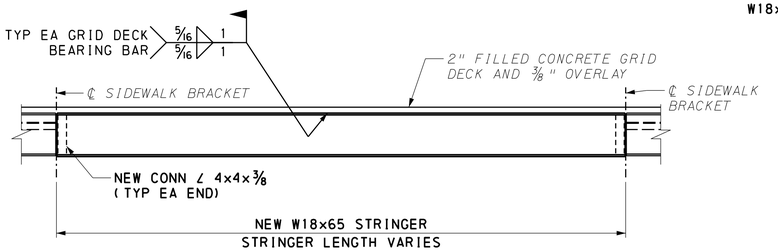



## REMOVAL ELEVATION

0 2 4 FEET




## REPLACEMENT ELEVATION

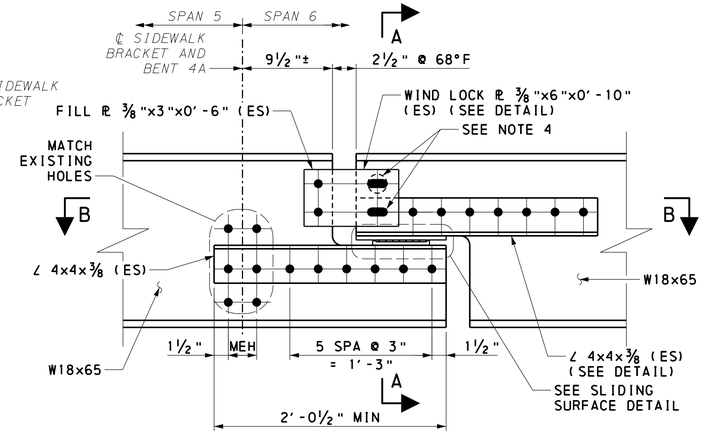
0 2 4 FEET

## REPAIR S05

ITEM 1050-0110
REPLACE SIDEWALK STRINGER
REPRESENTATIVE PHOTO

## REPAIR S05 - PROCEDURE AND NOTES

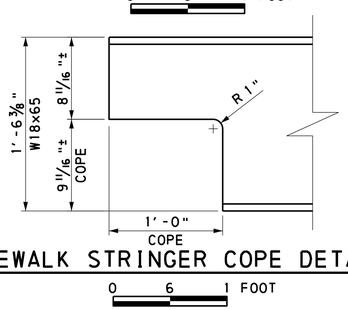
1. PAYMENT FOR SIDEWALK STRINGER EXPANSION ASSEMBLY IS NOT INCLUDED IN THIS ITEM. PAYMENT FOR SIDEWALK STRINGER EXPANSION ASSEMBLY IS INCLUDED IN ITEM 1050-0205, REPAIR S06, REPLACE SIDEWALK STRINGER EXPANSION ASSEMBLY.
2. TEMPORARILY SUPPORT THE AFFECTED SIDEWALK DECK AS REQUIRED TO REPLACE THE INDICATED STRINGER(S).
3. REMOVE EXISTING STRINGER AND DISCARD. NOTE THAT THE SIDEWALK STRINGER TOP FLANGE IS WELDED TO EACH TRANSVERSE BEARING BAR OF THE STEEL SIDEWALK GRID DECK. SUBMIT A PROCEDURE FOR SIDEWALK STRINGER REMOVAL FOR APPROVAL.
4. REMOVE EXISTING ∠ 4x4x3/8 CONNECTION ANGLES AT EACH END OF THE REMOVED STRINGER AND DISCARD. REAM EXISTING HOLES AS REQUIRED.
5. INSTALL NEW STRINGER AND CONNECTION ANGLES. INSTALL 7/8"ø HS BOLTS W/ NUTS AND WASHERS IN ALL OPEN HOLES.
6. WELD NEW STRINGER TO EACH TRANSVERSE BEARING BAR OF THE STEEL SIDEWALK GRID DECK AS INDICATED. USE GRADE E60XX ELECTRODES.




## SIDEWALK STRINGER EXPANSION ASSEMBLY ELEVATION

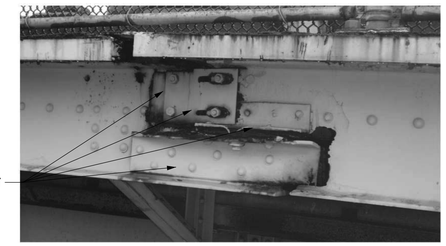
SIDEWALK AND EXPANSION DAM COVER PLATE NOT SHOWN

0 6 1 FOOT




## SIDEWALK STRINGER COPE DETAIL

0 6 1 FOOT

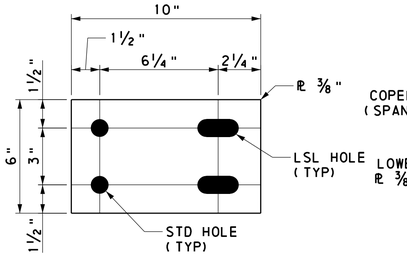



## REPAIR S06

ITEM 1050-0205
REPLACE SIDEWALK STRINGER
EXPANSION ASSEMBLY
REPRESENTATIVE PHOTO

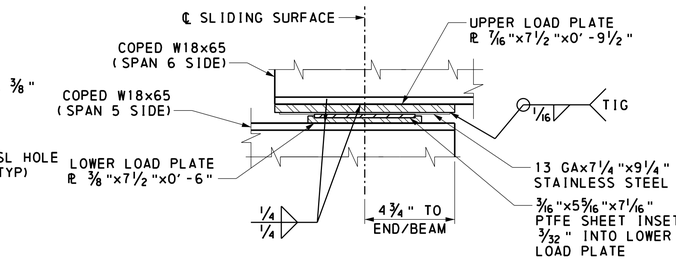
## REPAIR S06 - PROCEDURE AND NOTES

1. SIDEWALK STRINGER REMOVAL AND REPLACEMENT IS NOT INCLUDED IN THIS ITEM. SIDEWALK STRINGER REMOVAL AND REPLACEMENT IS PAID UNDER ITEM 1050-0110, REPAIR S05, REPLACE SIDEWALK STRINGER.
2. TEMPORARILY SUPPORT THE AFFECTED SIDEWALK STRINGERS AND SIDEWALK DECK AS REQUIRED TO INSTALL THE SIDEWALK STRINGER EXPANSION ASSEMBLY. REMOVE EXISTING EXPANSION ASSEMBLY MATERIAL AND DISCARD.
3. INSTALL STAINLESS STEEL AND TEFLON SLIDING SURFACES AS INDICATED. ADJUST THE DIMENSIONS OF THE SIDEWALK STRINGER COPES AS REQUIRED TO ACCOMMODATE THE SLIDING SURFACES.
4. INSTALL 7/8" DIAMETER HS BOLTS IN LONG-SLOTTED HOLES WITH A WASHER UNDER THE BOLT HEAD AND THE NUT. TIGHTEN THE NUTS HAND-TIGHT, BACK OFF ONE-QUARTER TURN, AND PEEN BOLT THREADS.



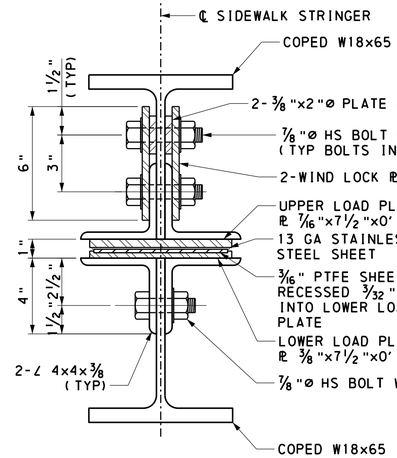

## WIND LOCK ℞ DETAIL

0 3 6 9 1 FOOT



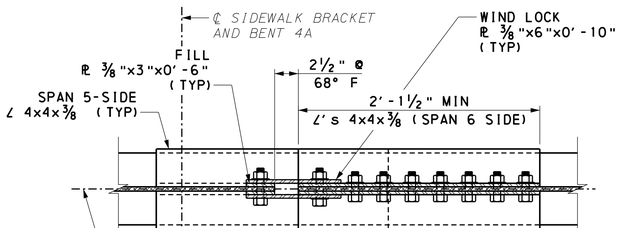

## SLIDING SURFACE DETAIL

0 3 6 9 1 FOOT



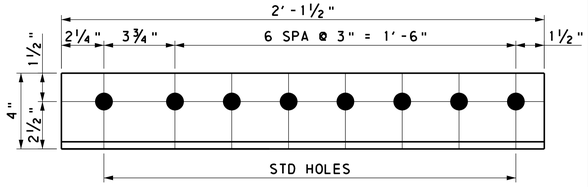

## SECTION A-A

0 3 6 9 1 FOOT




## SECTION B-B

0 6 1 FOOT




## SPAN 6-SIDE ∠ 4x4x3/8 DETAIL

0 3 6 9 1 FOOT

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. PROVIDE STAINLESS STEEL CONFORMING TO ASTM A240, GRADE 30, TYPE 304 WITH AN ANSI 0.02 MIL OR LESS SURFACE FINISH.
3. PROVIDE PTFE SHEET MADE FROM VIRGIN TFE RESIN PER ASTM D4894. PTFE SHEET SHALL BE UNFILLED, DIMPLED AND LUBRICATED. DIMPLES SHALL HAVE A MINIMUM 1/2" EDGE DISTANCE AND CONFORM TO AASHTO LRFD BDS, 1998 EDITION, SECTION 14.7.2.
4. PROVIDE STANDARD HOLES FOR 7/8"ø HS BOLTS IN COPED W18x65 BEAM AND ∠ 4x4x3/8 ANGLES. PROVIDE LONG-SLOTTED (LSL) HOLES IN THE 3/8" WIND LOCK PLATES.

## LEGEND:

| | |
|---|---|
| ES | EACH SIDE |
| LSL | LONG-SLOTTED |
| MEH | MATCH EXISTING HOLES |
| MIN | MINIMUM |
| STD | STANDARD |

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# SIDEWALK STRINGER REPAIR DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
AARON BRUCE COLORITO
ENGINEER
PE083280

RECOMMENDED
OCTOBER 26, 2022

SHEET 72 OF 124

S - 40253

| DES: ABC | CKD: MJB | DWG: ABC | CKD: MJB |
|---|---|---|---|

PLOTTED: 10/26/2022 8:01:25 AM
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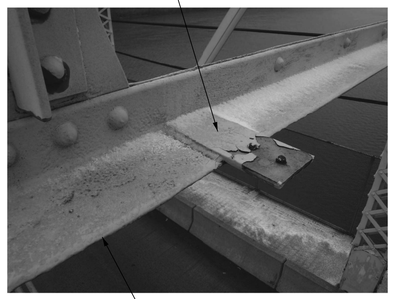
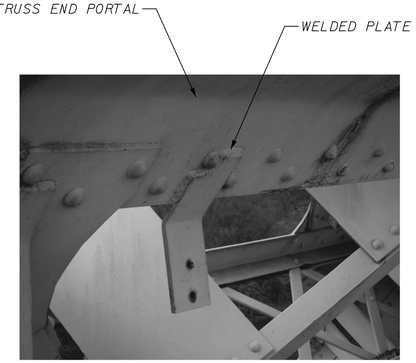



## REPAIR M08

ITEM 1050-0260
REPAIR M08 - REMOVE EXISTING TAB PLATE
REPRESENTATIVE CONDITIONS

## REPAIR M08

ITEM 1050-0260
REPAIR M08 - REMOVE EXISTING TAB PLATE
REPRESENTATIVE CONDITIONS




## REPAIR M08

ITEM 1050-0260
REPAIR M08 - REMOVE EXISTING TAB PLATE
REPRESENTATIVE CONDITIONS

## REPAIR M08 - PROCEDURE

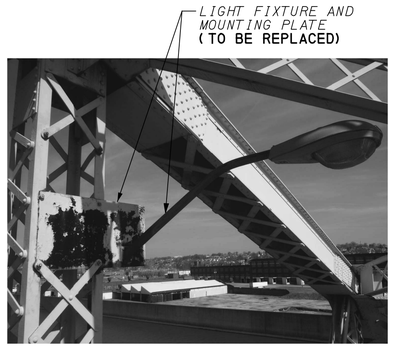
1. GRIND TAB PLATE WELDS FLUSH TO EXISTING STRUCTURAL MEMBER. EXERCISE CARE TO AVOID NICKING OR GOUGING THE STEEL DURING TAB PLATE REMOVAL OPERATIONS.
2. IF WELD CANNOT BE REMOVED WITHOUT IMPACTING EXISTING RIVETS, REMOVE RIVETS PRIOR TO GRINDING. REPLACE RIVETS WITH HIGH STRENGTH BOLTS AFTER COMPLETION OF TAB PLATE REMOVAL.
3. INSPECT STRUCTURAL MEMBER FOLLOWING TAB PLATE REMOVAL FOR DETERIORATION OR CRACKS. REPORT ANY FINDINGS TO THE REPRESENTATIVE.

## REPAIR M15

ITEM 1050-0262
REPAIR M15 - REMOVE KICKER BEAM
REPRESENTATIVE CONDITIONS

## REPAIR M15 - PROCEDURE

1. REMOVE EXISTING RIVETS CONNECTING KICKER BEAM TO GIRDER AND BUCKLE PLATE.
2. IF CUTTING IS REQUIRED TO REMOVE THE KICKER BEAM, EXERCISE CARE TO AVOID NICKING OR GOUGING ANY MEMBERS TO REMAIN.
3. REMOVE KICKER BEAM AND ANY MOUNTING HARDWARE.

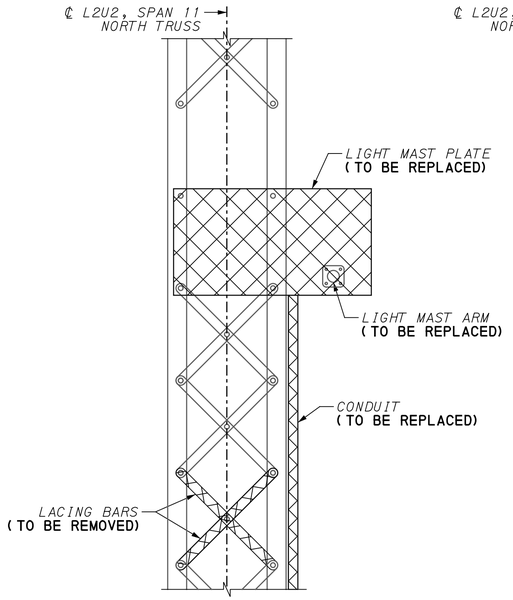



## REPAIR M09 & M27

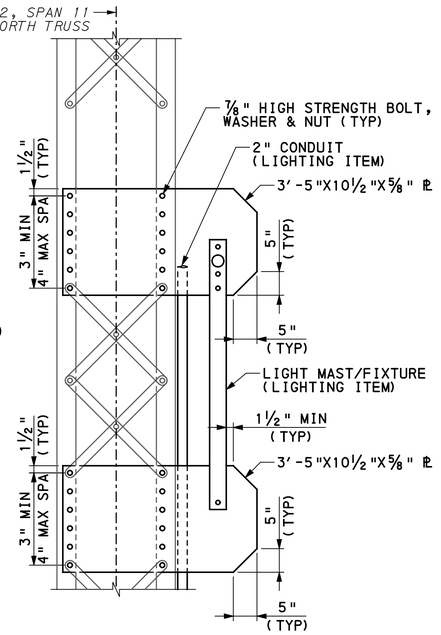
REPAIR M09 - INSTALL LIGHT MAST AND FIXTURE
REPAIR M27 - REPLACE LIGHT MAST PLATE
REPRESENTATIVE CONDITIONS

## REPAIR M09 & M27 - PROCEDURE

1. DISCONNECT ANY ELECTRICAL CONNECTIONS TO THE LIGHT FIXTURE.
2. REMOVE BOLTS CONNECTING FIXTURE MOUNTING PLATE TO THE TRUSS ANGLES. REMOVE LACING BARS AS NEEDED FOR LOWER MOUNTING PLATE. REMOVE CONDUIT ATTACHED TO TRUSS VERTICAL.
3. INSPECT TRUSS ANGLES FOLLOWING MOUNTING PLATE AND LACING BAR REMOVAL FOR DETERIORATION OR CRACKS. REPORT ANY FINDINGS TO THE REPRESENTATIVE.
4. IF NO DEFECTS ARE PRESENT, INSTALL PROPOSED MOUNTING PLATES WITH HIGH STRENGTH BOLTS. PLACE PLATES FLUSH AGAINST THE FACE OF THE TRUSS VERTICAL. REINSTALL EXISTING LACING BARS.
5. INSTALL LIGHT MAST/FIXTURE (LIGHTING ITEM) TO MOUNTING PLATES.
6. INSTALL STRUCTURE MOUNTED CONDUIT (LIGHTING ITEM) ALONG TRUSS VERTICAL FOR CONNECTION TO LIGHT FIXTURE.




EXISTING
NOT TO SCALE




PROPOSED
NOT TO SCALE

## REPAIRS M09 & M27

NOTE: REFER TO LIGHTING PLANS FOR DETAILS OF LIGHT MAST/FIXTURE

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
MISCELLANEOUS STEEL REPAIRS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 73 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
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PLOTTED: 10/26/2022 8:01:43 AM
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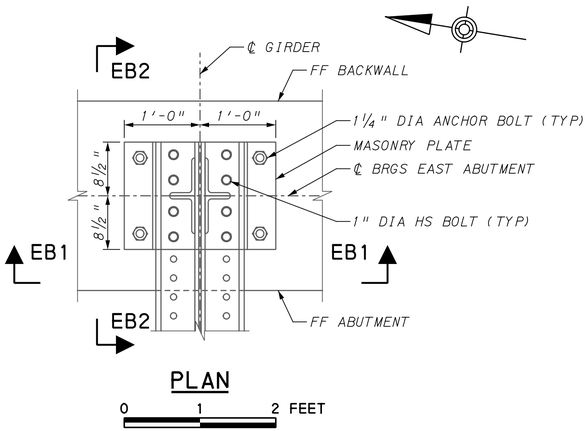
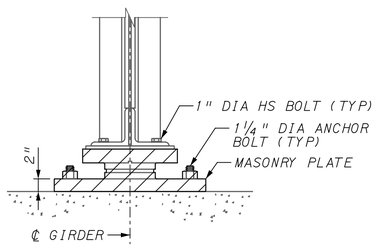


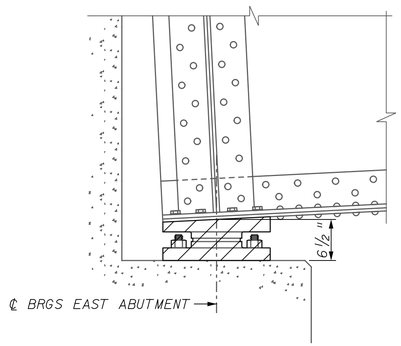

PLAN

0 1 2 FEET



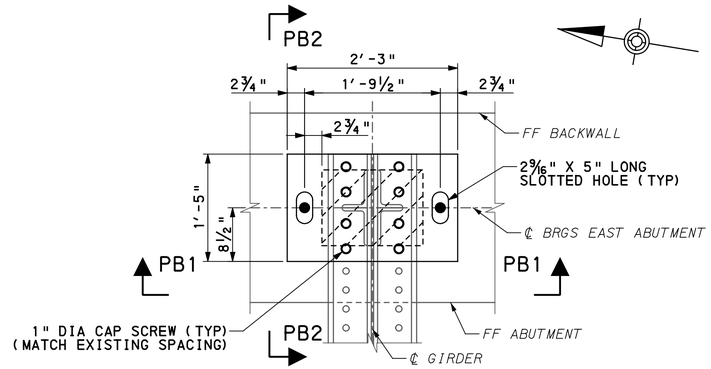

SECTION EB1-EB1

0 1 2 FEET



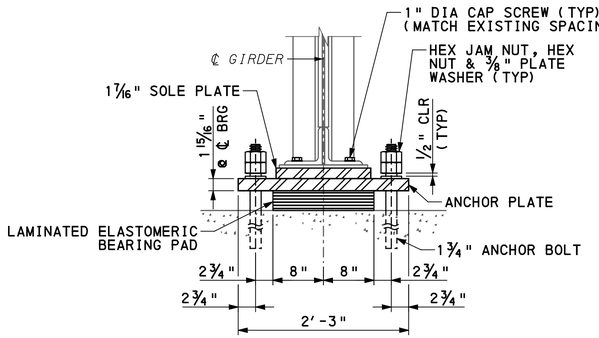

SECTION EB2-EB2

0 1 2 FEET



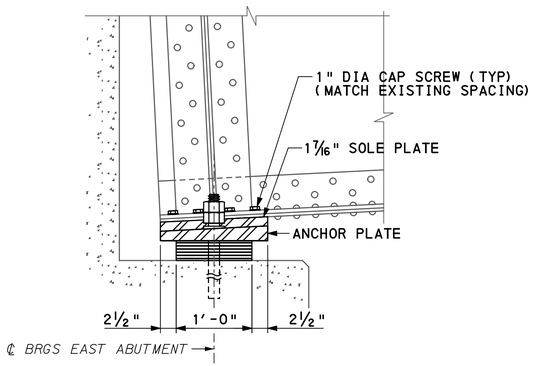

PLAN

0 1 2 FEET




SECTION PB1-PB1

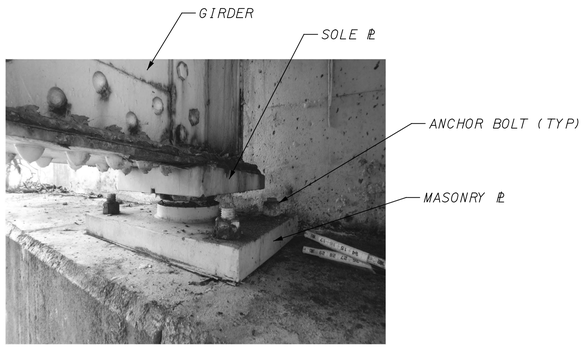
0 1 2 FEET




SECTION PB2-PB2

0 1 2 FEET

## EAST ABUTMENT POT BEARING REMOVAL LIMITS




## REPLACE EXPANSION BEARING (BR01)

ITEM 1018-0050 REMOVAL OF PORTION OF EXISTING BRIDGE
ITEM 1050-0020 FABRICATED STRUCTURAL STEEL
ITEM 1050-0085 LAMINATED NEOPRENE BEARING PAD
ITEM 9000-0203 JACKING BRIDGE SUPERSTRUCTURE

## REPAIR BR01 - PROCEDURE AND NOTES

1. JACKING/TEMPORARY SUPPORT OF SPAN 1 AT EAST ABUTMENT FOR REPLACEMENT OF EXPANSION BEARINGS IS INCLUDED WITH ITEM 9000-0203.
2. COORDINATE WORK WITH THE TRAFFIC CONTROL PLANS AND THE PLANNED CLOSURE OF THE STRUCTURE IN PHASE 1.
3. INCLUDE CONSTRUCTION LIVE LOAD IN THE DESIGN OF THE JACKING/TEMPORARY SUPPORT SYSTEM. ALL SUPPORT DETAILS TO BE DESIGNED BY THE CONTRACTOR. ALTERNATE DETAILS MAY BE PROPOSED BY THE CONTRACTOR. ALL DESIGNS SHALL BE SUBMITTED TO THE DEPARTMENT FOR REVIEW.
4. CUT OFF EXISTING ANCHOR BOLTS DURING REMOVAL OF EXISTING POT BEARINGS.
5. CLEAN AND REPAIR BEAM SEAT AS NEEDED TO PROVIDE A SMOOTH, LEVEL SURFACE FOR THE ELASTOMERIC BEARING PAD. DRILL HOLES TO INSTALL NEW ANCHOR BOLTS.
6. COMPLETE INSTALLATION OF NEW BEARING ASSEMBLY, INCLUDING ELASTOMERIC BEARING PAD, ANCHOR PLATE AND SOLE PLATE.

## PROPOSED EAST ABUTMENT ELASTOMERIC BEARING

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 75.

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# BEARING REPLACEMENT EAST ABUTMENT

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
PENNSYLVANIA

RECOMMENDED
OCTOBER 26, 2022

SHEET 74 OF 124

S - 40253

PLOTTED: 10/26/2022 8:01:48 AM
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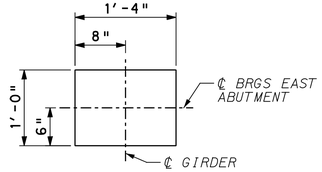
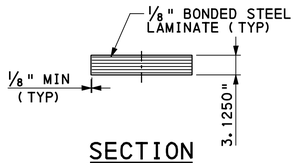


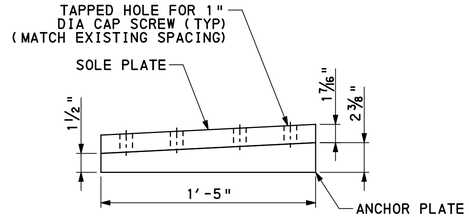

PLAN




SECTION

## LAMINATED ELASTOMERIC BEARING PAD

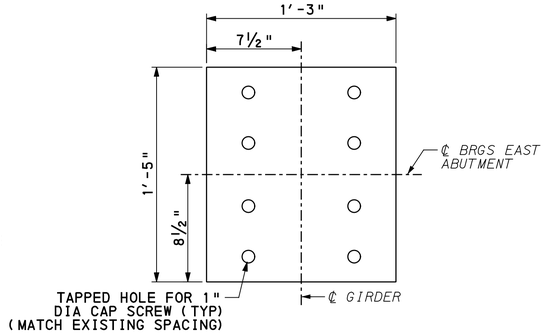
0 1 2 FEET




NOTE: PROVIDE FLATNESS TOLERANCE IN ACCORDANCE WITH PUB 408, SECTION 1105.03(g). PROVIDE SOLE PLATE IN ACCORDANCE WITH DESIGN MANUAL PART 4, SECTION D14.7.6.3.8P

## SOLE PLATE DETAIL WITH ANCHOR PLATE

0 2 4 FEET



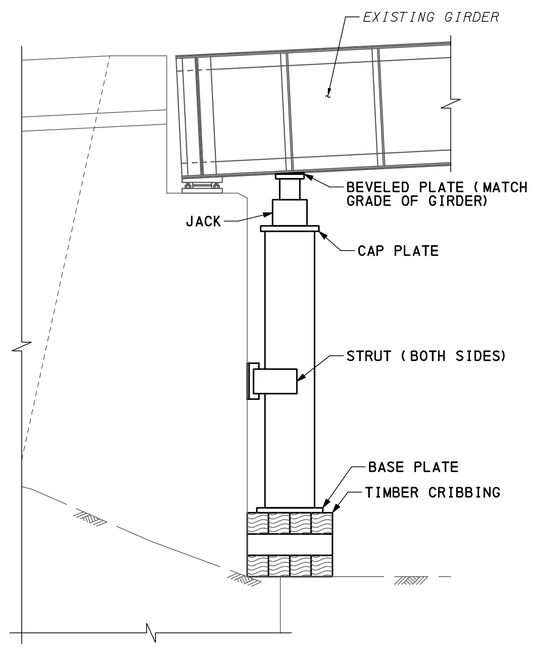

## SOLE PLATE PLAN VIEW

0 2 4 FEET

## BEARING PAD AND ANCHOR NOTES:

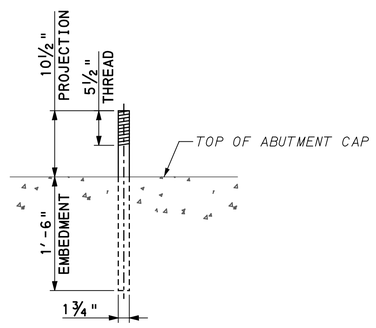
1. THE FABRICATOR MAY USE CONTRACT DRAWINGS TO FABRICATE THE ELASTOMERIC PADS.
2. FOR ADDITIONAL DETAILS AND NOTES NOT SHOWN, SEE PENNDOT STANDARD DRAWING BC-755M.
3. FIELD VERIFY EXISTING DIMENSIONS PRIOR TO FABRICATING BEARING PLATES.
4. PROVIDE PLATE WASHERS OF SUFFICIENT SIZE TO COVER THE ROUND HOLE OR SLOT FOR EXTREMES OF MOVEMENT OF THE BEARINGS. WASHERS MAY BE CLIPPED IF REQUIRED.
5. UNLESS OTHERWISE NOTED, VERTICAL DIMENSIONS ARE MEASURED AT ℄ BEARINGS.
6. MARK THICKER END OF BEVELED SOLE PLATES TO IDENTIFY THICKER END IN THE FIELD.
7. PAINT ALL STEEL SURFACES IN ACCORDANCE WITH PUB 408, SECTION 1060.
8. PROVIDE STRUCTURAL STEEL CONFORMING TO AASHTO M270, GRADE 50 (ASTM A709, GRADE 50).
9. FABRICATE ANCHOR BOLTS FROM STEEL CONFORMING TO ASTM F1554, GRADE 55.
10. HOT DIP GALVANIZE BOLTS, NUTS AND WASHERS.

| ELASTOMERIC BEARING PAD DATA | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LOCATION | BEARING TYPE | SIZE | | INT LAYER THK | COVER LAYER THICKNESS | NUMBER OF ELASTOMER LAYERS | OVERALL THICKNESS | QUANTITY |
| | | LENGTH | WIDTH | | | | | |
| EAST ABUTMENT | EXP | 12" | 16" | 3/8" | 1/4" | 7 | 3.1250" | 2 |




## CONCEPTUAL JACKING PLAN

NOT TO SCALE




## ANCHOR BOLT DETAIL

0 2 4 FEET

| JACKING LOAD TABLE | | |
|---|---|---|
| LOCATION | DL (K) | LL (K) |
| EAST ABUTMENT | 71.7 | 84.3 |

JACKING LOADS ARE SERVICE LOADS (UNFACTORED)

LL BASED ON MAXIMUM PHL-93 LL REACTION

PROVIDED LOADS ARE APPROXIMATE AND TO BE VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTING JACKING PLANS

JACKING LOADS ARE MAXIMUM REACTIONS AT THE BEARING CENTERLINE. LOADS WILL VARY BASED ON JACKING LOCATION.

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR PROPOSED BEARING PLAN AND SECTIONS, SEE SHEET 74.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## BEARING DETAILS

RECOMMENDED
OCTOBER 26, 2022

SHEET 75 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
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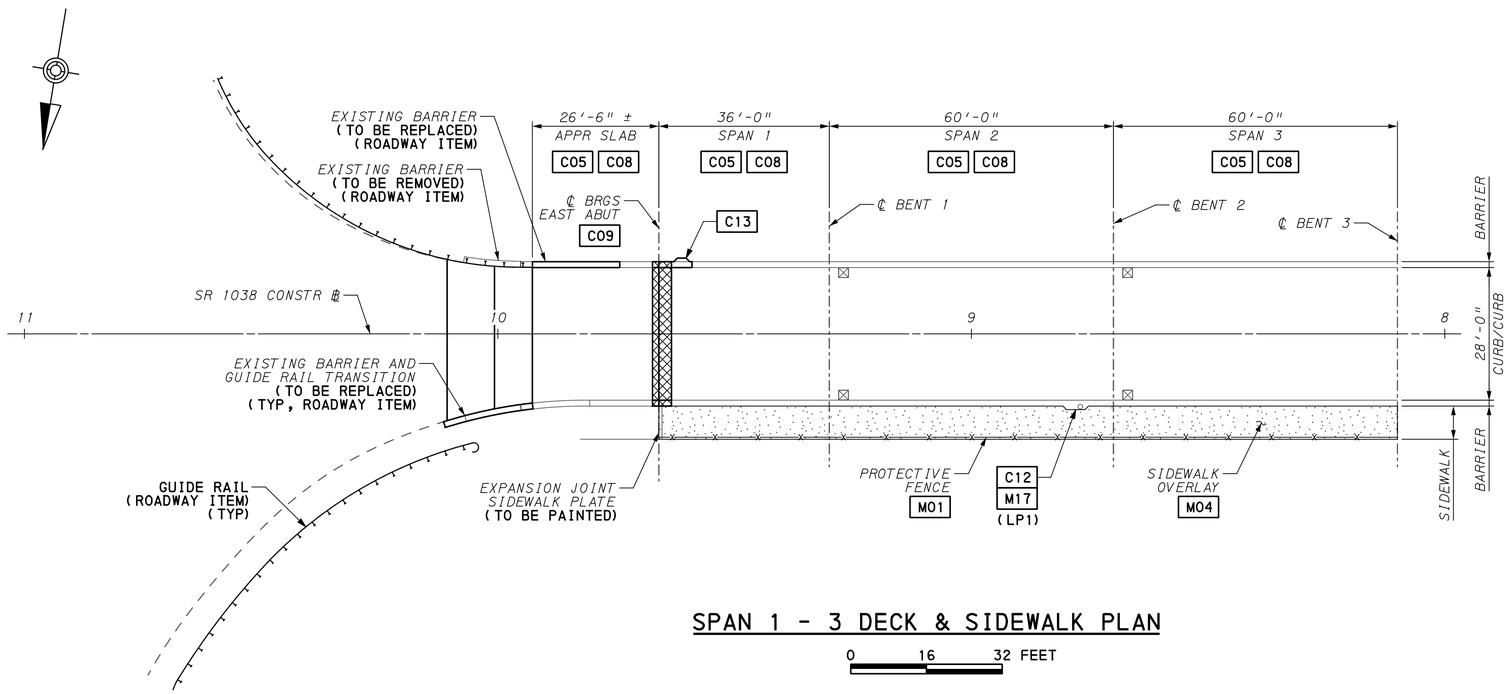


## SPAN 1 - 3 DECK & SIDEWALK PLAN

0 16 32 FEET

## LEGEND:

- ⊠ SCUPPER (TO REMAIN UNLESS NOTED)
- PROTECTIVE FENCE
- BLOCKOUT FOR EXPANSION DAM REPLACEMENT
- NEW EPOXY OVERLAY
- [C00] DENOTES REPAIR

## BARRIER PENETRATING SEALER (C05)

ITEM 1019-0050 PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALER, BRIDGE SUPERSTRUCTURE)

## REPLACE PROTECTIVE FENCE (M01)

ITEM 5016-0103 SIDEWALK PROTECTIVE FENCE, VINYL-COATED STEEL, REMOVE AND REPLACE

## REPAIR DESCRIPTION AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| C01 | BARRIER SPALL REPAIR | 20 | CF | 1 |
| C05 | PROTECTIVE COATING, PENETRATING SEALER | N/A | SF | 600 |
| C08 | PLACE LMC OVERLAY | N/A | SF | 5110 |
| C09 | REPLACE STRIP SEAL EXPANSION DAM | 83 TO 86 | LF | 31 |
| C12 | REPLACE BARRIERS AND LIGHT POLE ANCHORAGE | 111 TO 121 | EA | 1 |
| C13 | REPLACE BARRIER AND JUNCTION BOX | 122 | EA | 1 |
| M01 | REPLACE SIDEWALK FENCE | 101 | LF | 156 |
| M04 | REPLACE SIDEWALK OVERLAY | N/A | SF | 1092 |
| M17 | INSTALL NEW LIGHT POLE AND FIXTURE | N/A | EA | 1 |

## LATEX MODIFIED CONCRETE OVERLAY (C08)

ITEM 1039-0010 CONCRETE BRIDGE DECK SURFACE PREPARATION, HYDRODEMOLITION
ITEM 1041-0020 SCARIFICATION, 1/2" DEPTH
ITEM 1042-0030 3 HOUR ACCELERATED LATEX MODIFIED CONCRETE WEARING SURFACE, 1 1/4" DEPTH
ITEM 1042-0070 3 HOUR ACCELERATED LATEX MODIFIED CONCRETE, VARIABLE DEPTH
ITEM 1001-0970 MECHANICAL TEXTURING WITH TRANSVERSE SAWED GROOVES

## REPLACE SIDEWALK OVERLAY (M04)

ITEM 1018-0050 REMOVAL OF PORTION OF EXISTING BRIDGE
ITEM 1046-0010 EPOXY OVERLAY

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEETS 77, 78, AND 79.
3. FOR LIGHT POLE BARRIER DETAILS, SEE SHEETS 111 TO 120.
4. FOR REPAIR [C13] DETAILS, SEE SHEET 122.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
DECK AND SIDEWALK PLAN, SP 1 - 3

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 76 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

PLOTTED: 10/26/2022 8:02:19 AM

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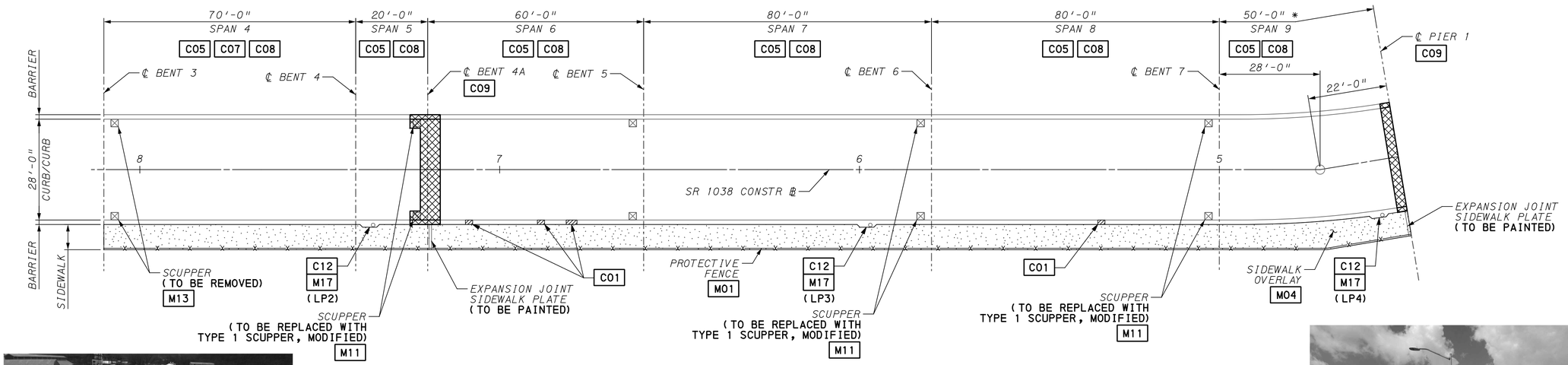
* MEASURED ALONG ℄ BRIDGE




## SPAN 4 - 9 DECK & SIDEWALK PLAN

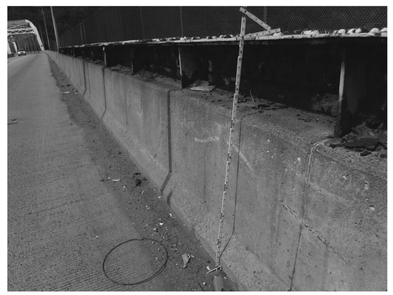
0 16 32 FEET

## REPLACE STRIP SEAL EXPANSION DAM (C09)

ITEM 1090-1014 ACCELERATED EXPANSION DAM REPLACEMENT, 3" MOVEMENT
ITEM 5090-1015 ACCELERATED EXPANSION DAM REPLACEMENT, 3½" MOVEMENT, NON-STANDARD RETAINER
ITEM 5090-1016 ACCELERATED EXPANSION DAM REPLACEMENT, 4" MOVEMENT, NON-STANDARD RETAINER
ITEM 9000-0218 ACCELERATED EXPANSION DAM REPLACEMENT, 5" MOVEMENT, NON-STANDARD RETAINER

## LEGEND:

- ⊠ SCUPPER (TO REMAIN UNLESS NOTED)
- —x— PROTECTIVE FENCE
- ⊠ BLOCKOUT FOR EXPANSION DAM REPLACEMENT
- NEW EPOXY OVERLAY
- C00 DENOTES REPAIR



## REPLACE EXISTING BARRIER (C07)

ITEM 1018-0050 REMOVAL OF PORTION OF EXISTING BRIDGE
ITEM 1001-1100 CLASS AA CEMENT CONCRETE, ACCELERATED
ITEM 1002-0052 REINFORCEMENT BARS, EPOXY COATED

## BARRIER SPALL REPAIR (C01)

ITEM 1040-0210 CONCRETE BRIDGE BARRIER REPAIR ACCELERATED, TYPE 2 USING ASC

## INSTALL NEW LIGHT POLE AND FIXTURE (M17)

ROADWAY ITEM

## REPAIR DESCRIPTION AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| C01 | BARRIER SPALL REPAIR | 20 | CF | 3 |
| C05 | PROTECTIVE COATING, PENETRATING SEALER | N/A | SF | 1200 |
| C07 | REPLACE EXISTING BARRIER | 80 | LF | 140 |
| C08 | PLACE LMC OVERLAY | N/A | SF | 10080 |
| C09 | REPLACE STRIP SEAL EXPANSION DAM | 83 TO 86 | LF | 62 |
| C12 | REPLACE BARRIERS AND LIGHT POLE ANCHORAGE | 111 TO 121 | EA | 3 |
| M01 | REPLACE SIDEWALK FENCE | 101 | LF | 364 |
| M04 | REPLACE SIDEWALK OVERLAY | N/A | SF | 2548 |
| M11 | REPLACE SCUPPER | 81 | EA | 6 |
| M13 | REMOVE EXISTING SCUPPER AND REPAIR DECK | 81 | EA | 2 |
| M17 | INSTALL NEW LIGHT POLE AND FIXTURE | N/A | EA | 3 |

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEETS 76, 78, AND 79.
3. FOR LIGHT POLE BARRIER DETAILS, SEE SHEETS 111 TO 120.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
DECK AND SIDEWALK PLAN, SP 4 - 9

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

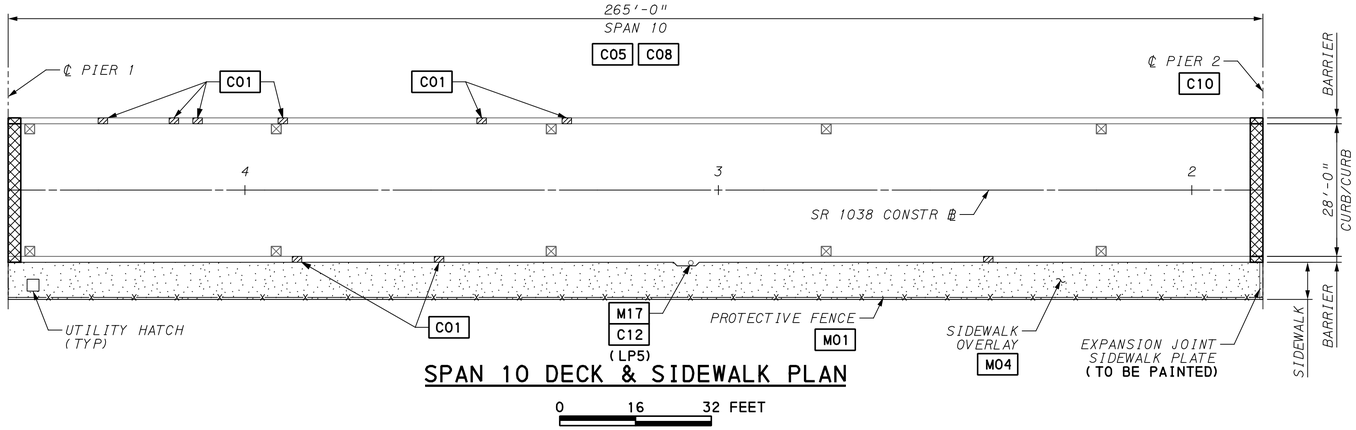
RECOMMENDED
OCTOBER 26, 2022

SHEET 77 OF 124

S - 40253

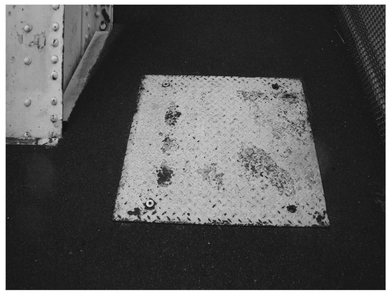
DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

PLOTTED: 10/26/2022 8:02:35 AM




## SPAN 10 DECK & SIDEWALK PLAN

0 16 32 FEET

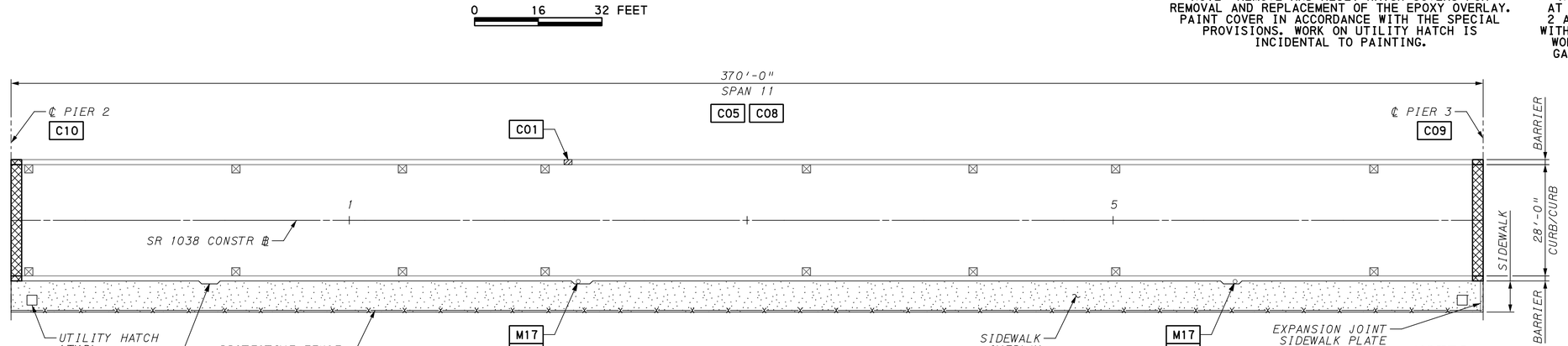


## TYPICAL UTILITY HATCH

NOTE: REMOVE AND RESET HATCH COVERS FOR REMOVAL AND REPLACEMENT OF THE EPOXY OVERLAY. PAINT COVER IN ACCORDANCE WITH THE SPECIAL PROVISIONS. WORK ON UTILITY HATCH IS INCIDENTAL TO PAINTING.

## FENCE GATE

NOTE: PROVIDE GATES WITH APPROPRIATE LOCKS AT THE NAVIGATION LIGHTING LOCATIONS AT PIERS 2 AND 3. COORDINATE SIGNING AND OTHER DETAILS WITH THE REPRESENTATIVE. GATE, LOCKS, AND OTHER WORK ASSOCIATED WITH THE CONSTRUCTION OF THE GATES IS INCIDENTAL TO THE PROTECTIVE FENCE.




## SPAN 11 DECK & SIDEWALK PLAN

0 16 32 FEET

## NOTES:

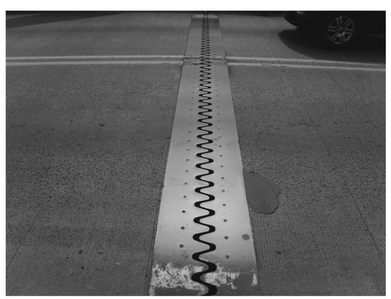
1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEETS 76, 77, AND 79.
3. FOR LIGHT POLE BARRIER DETAILS, SEE SHEETS 111 TO 120.

## LEGEND:

- ⊠ SCUPPER (TO REMAIN UNLESS NOTED)
- —x— PROTECTIVE FENCE
- ⊠ BLOCKOUT FOR EXPANSION DAM REPLACEMENT
- NEW EPOXY OVERLAY
- C00 DENOTES REPAIR

## REPAIR DESCRIPTION AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| C01 | BARRIER SPALL REPAIR | 20 | CF | 7 |
| C05 | PROTECTIVE COATING, PENETRATING SEALER | N/A | SF | 2071 |
| C08 | PLACE LMC OVERLAY | N/A | SF | 17780 |
| C09 | REPLACE STRIP SEAL EXPANSION DAM | 83 TO 86 | LF | 31 |
| C10 | REPLACE TOOTH EXPANSION DAM | 87 TO 89 | LB | 8600 |
| C12 | REPLACE BARRIERS AND LIGHT POLE ANCHORAGE | 111 TO 121 | EA | 3 |
| M01 | REPLACE SIDEWALK FENCE | 101 | LF | 635 |
| M04 | REPLACE SIDEWALK OVERLAY | N/A | SF | 4445 |
| M17 | INSTALL NEW LIGHT POLE AND FIXTURE | N/A | EA | 3 |



## REPLACE TOOTH EXPANSION DAM (C10)

ITEM 5020-0002 TOOTH EXPANSION DAM
WITH DRAIN TROUGH, REMOVE AND REPLACE

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
DECK AND SIDEWALK PLAN, SP 10 & 11

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 78 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Deck - Sp 10 & 11.dgn

PLOTTED: 10/26/2022 8:02:49 AM
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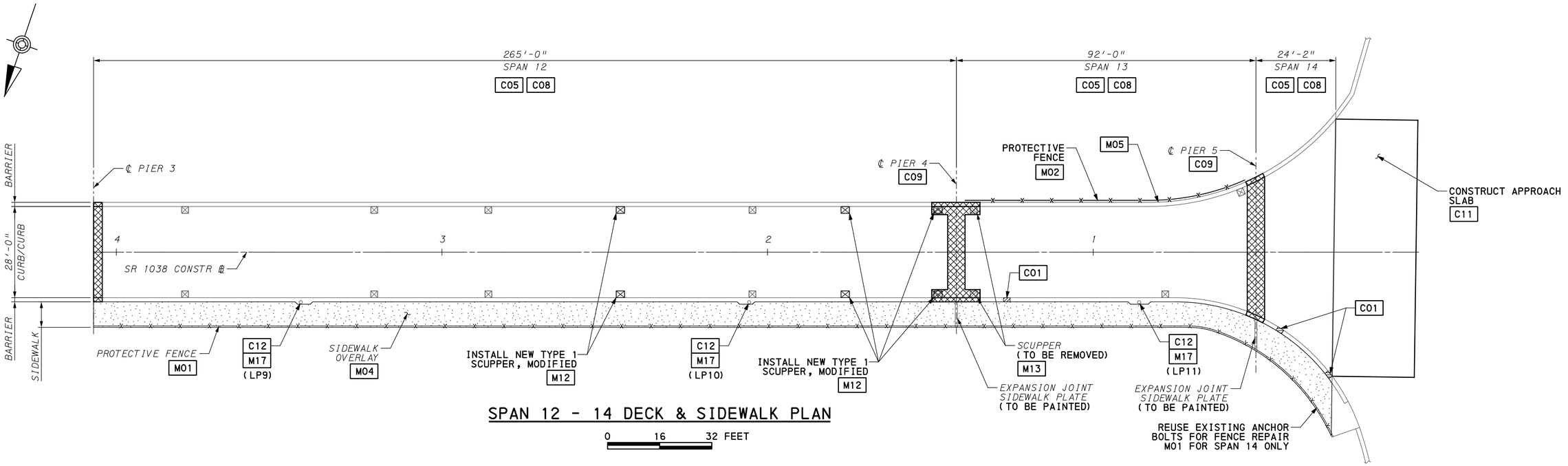


## SPAN 12 - 14 DECK & SIDEWALK PLAN

0 16 32 FEET

## LEGEND:

- ⊠ SCUPPER (TO REMAIN UNLESS NOTED)
- PROTECTIVE FENCE
- BLOCKOUT FOR EXPANSION DAM REPLACEMENT
- NEW EPOXY OVERLAY
- C00 DENOTES REPAIR

## REPLACE BARRIER FENCE (M02)

ITEM 5016-0006 BARRIER PROTECTIVE FENCE, VINYL-COATED STEEL, REMOVE AND REPLACE

## EXPANSION JOINT SIDEWALK PLATE

NOTE: EXISTING PLATE TO REMAIN. PAINT EXPANSION JOINT PLATE IN ACCORDANCE WITH THE SPECIAL PROVISIONS. WORK ON EXPANSION JOINT PLATE IS INCIDENTAL TO PAINTING.

## REPAIR DESCRIPTION AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| C01 | BARRIER SPALL REPAIR | 20 | CF | 3 |
| C05 | PROTECTIVE COATING, PENETRATING SEALER | N/A | SF | 1251 |
| C08 | PLACE LMC OVERLAY | N/A | SF | 10673 |
| C09 | REPLACE STRIP SEAL EXPANSION DAM | 83 TO 86 | LF | 75 |
| C11 | CONSTRUCT APPROACH SLAB | 97 TO 100 | LS | |
| C12 | REPLACE BARRIERS AND LIGHT POLE ANCHORAGE | 111 TO 121 | EA | 3 |
| M01 | REPLACE SIDEWALK FENCE | 101 | LF | 382 |
| M02 | REPLACE BARRIER FENCE | 102 | LF | 90 |
| M04 | REPLACE SIDEWALK OVERLAY | N/A | SF | 2669 |
| M05 | INSTALL BARRIER FLASHING | 30 | LF | 80 |
| M12 | INSTALL NEW SCUPPER | 81 | EA | 6 |
| M13 | REMOVE EXISTING SCUPPER AND REPAIR DECK | 81 | EA | 2 |
| M17 | INSTALL NEW LIGHT POLE AND FIXTURE | N/A | EA | 3 |

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEETS 76, 77, AND 78.
3. FOR LIGHT POLE BARRIER DETAILS, SEE SHEETS 111 TO 120.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
DECK AND SIDEWALK PLAN, SP 12 - 14

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 79 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

PLOTTED: 10/26/2022 8:06:51 AM
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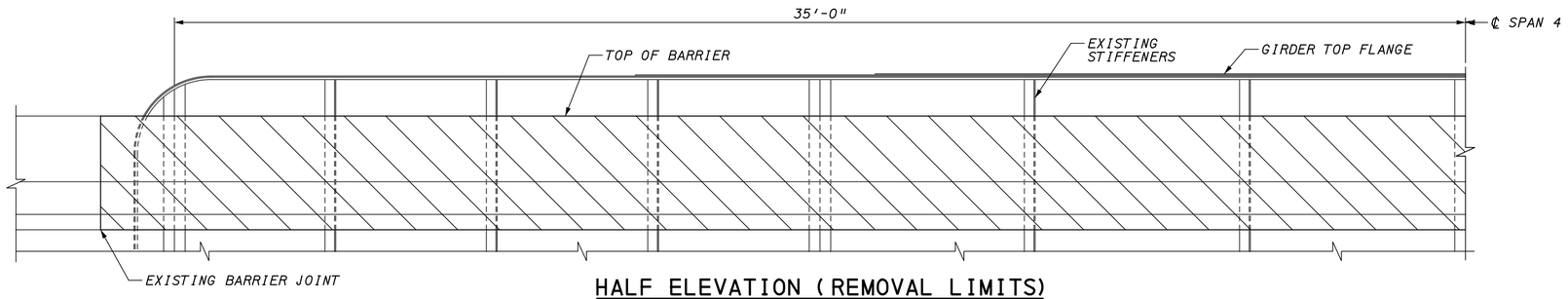
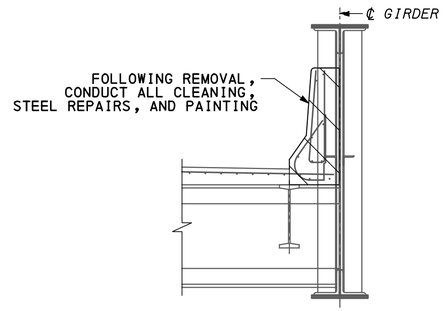


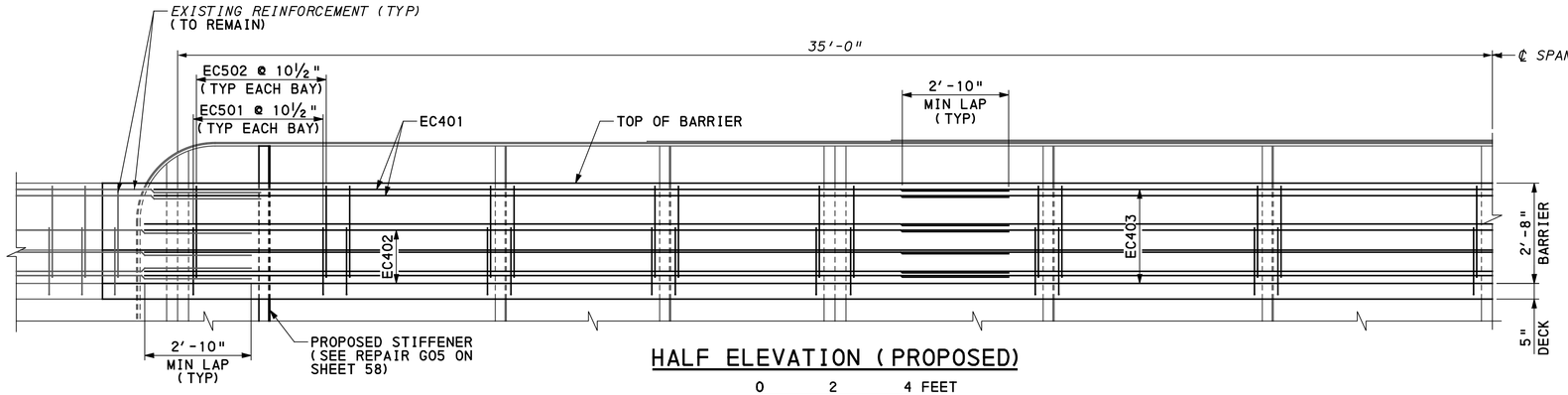

HALF ELEVATION (REMOVAL LIMITS)

0 2 4 FEET



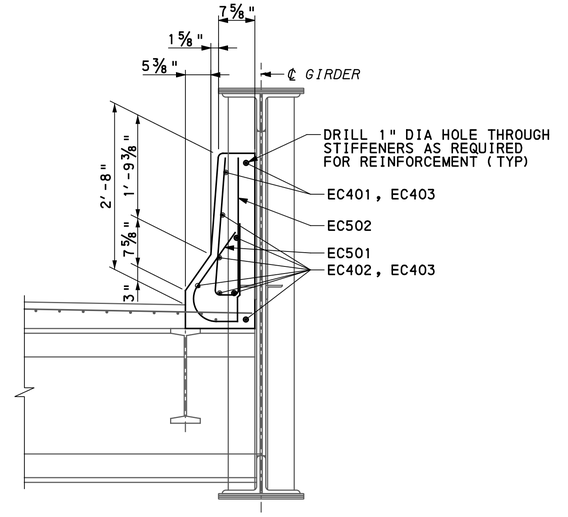

SECTION (REMOVAL LIMITS)

0 2 4 FEET




HALF ELEVATION (PROPOSED)

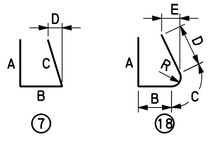
0 2 4 FEET




SECTION (PROPOSED)

0 1 2 FEET

| REINFORCEMENT BAR SCHEDULE | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MARK | SIZE | NUMBER | LENGTH | TYPE | A | B | C | D | E | R | REMARKS |
| | | | | | | | | | | | |
| EC401 | 4 | 8 | 22'-9" | STR | | | | | | | |
| EC402 | 4 | 28 | 23'-0" | STR | | | | | | | |
| EC403 | 4 | 18 | 32'-5" | STR | | | | | | | |
| | | | | | | | | | | | |
| EC501 | 5 | 164 | 4'-2 3/4" | 18 | 1'-8 5/8" | 4 1/2" | 10 1/2" | 1'-4 5/8" | 10 1/2" | 4 3/4" | |
| EC502 | 5 | 164 | 5'-2 3/4" | 7 | 2'-3 7/8" | 4 7/8" | 2'-3 7/8" | 2 1/8" | | | |




NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DECK AND SIDEWALK PLAN, SP 4-9, SEE SHEET 77.
3. FOR WEB COVER PLATE REPAIR DETAILS, SEE SHEET 53.
4. FOR WEB STIFFENER REPAIR DETAILS, SEE SHEET 58.
5. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
6. E - INDICATES EPOXY COATED REBAR.
7. FOR ALL BAR TYPES SHOWN, DIMENSIONS 1-E AND LENGTH ARE MEASURED ALONG OUTSIDE OF THE BAR. R IS MEASURED ALONG INSIDE OF BAR.

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

| Mark | Description | By | Chk'd. | Recm'd. | Date |
|---|---|---|---|---|---|
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SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# BARRIER DETAILS SPAN 4

RECOMMENDED

OCTOBER 26, 2022

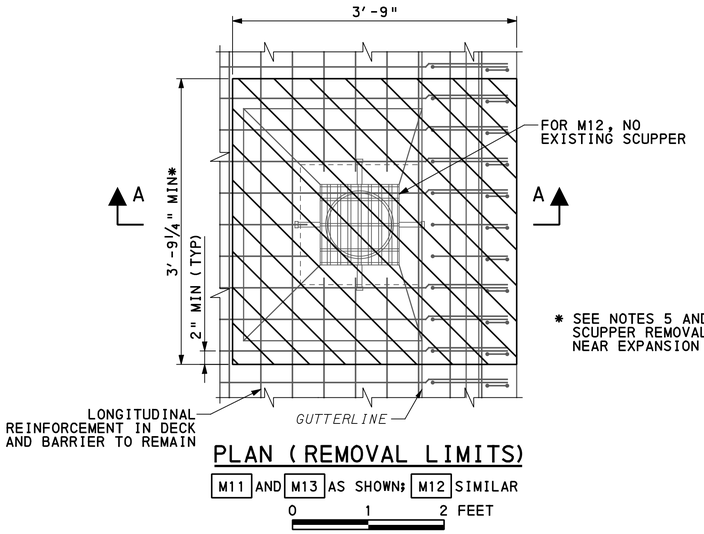
SHEET 80 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 8:06:54 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Scupper Details 1.dgn

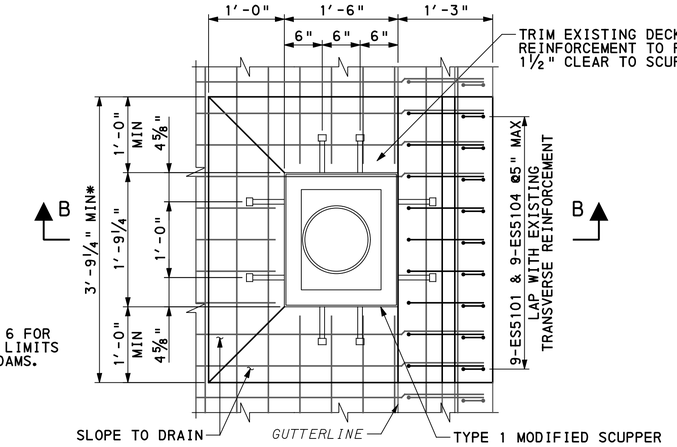



* SEE NOTES 5 AND 6 FOR SCUPPER REMOVAL LIMITS NEAR EXPANSION DAMS.

## PLAN (REMOVAL LIMITS)

M11 AND M13 AS SHOWN; M12 SIMILAR

0 1 2 FEET



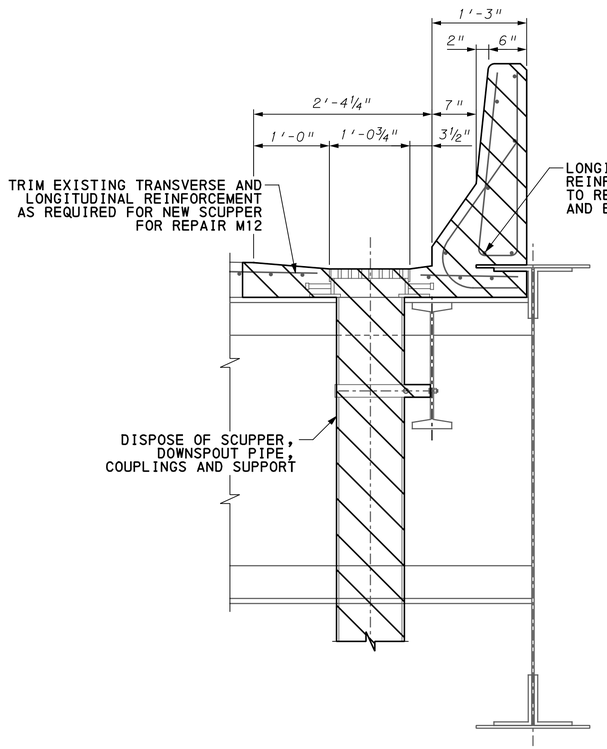

## PLAN (REPLACE SCUPPER)

M11

0 1 2 FEET

## REPAIR M11

ITEM 9000-0216 SCUPPER, TYPE 1, REPLACEMENT INSTALLATION

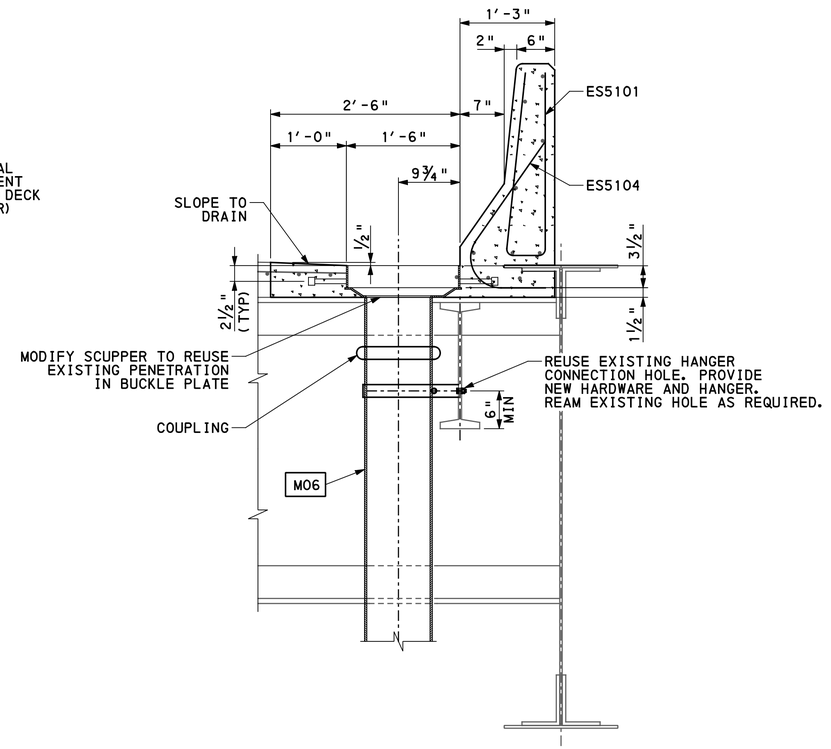



## SECTION A-A

M11 AND M13 AS SHOWN; M12 SIMILAR

GIRDER SPAN SHOWN; TRUSS SPAN SIMILAR

0 1 2 FEET




## SECTION B-B

M11

0 1 2 FEET

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DECK AND SIDEWALK PLANS, SEE SHEETS 76 TO 79.
3. FOR DOWNSPOUTING DETAILS, SEE SHEETS 103 TO 108.
4. REMOVAL OF DECK AND BARRIER CONCRETE, NEW REINFORCEMENT, CONCRETE PLACEMENT, AND OTHER WORK REQUIRED TO COMPLETE REPAIRS ARE INCIDENTAL TO ITEMS 9000-0215, 9000-0216 OR 9000-0217.
5. FOR REMOVAL LIMITS OF REPAIR M11 NEAR BENT 4A EXPANSION DAM, SEE SHEET 84.
6. FOR REMOVAL LIMITS OF REPAIRS M12 AND M13 NEAR PIER 4 EXPANSION DAM, SEE SHEET 90.
7. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
8. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188

BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01

SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

## SCUPPER DETAILS 1

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 81 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 8:06:59 AM

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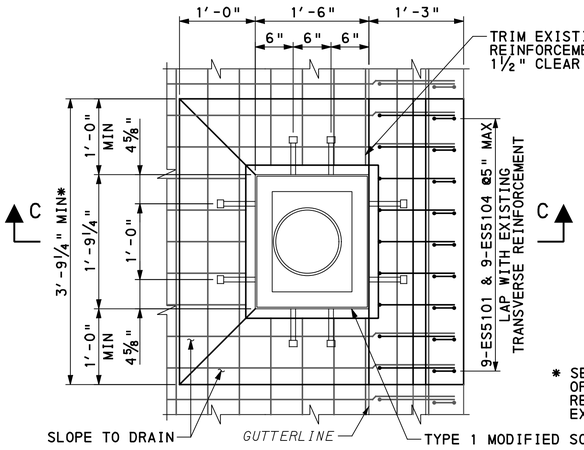
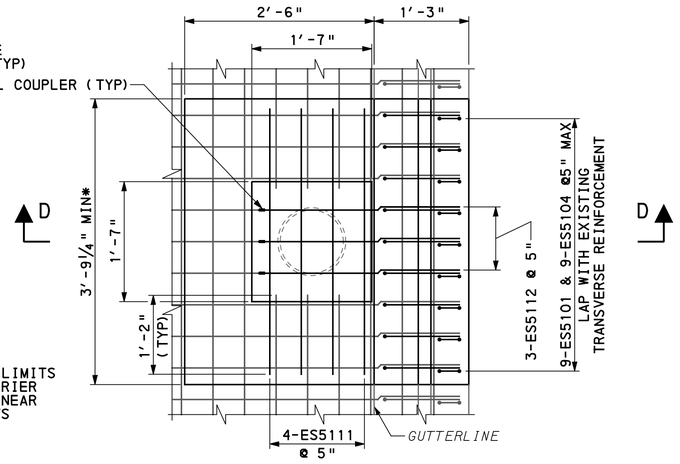



* SEE NOTE 6 FOR LIMITS OF DECK AND BARRIER RECONSTRUCTION NEAR EXPANSION JOINTS

## PLAN (INSTALL NEW SCUPPER)

M12

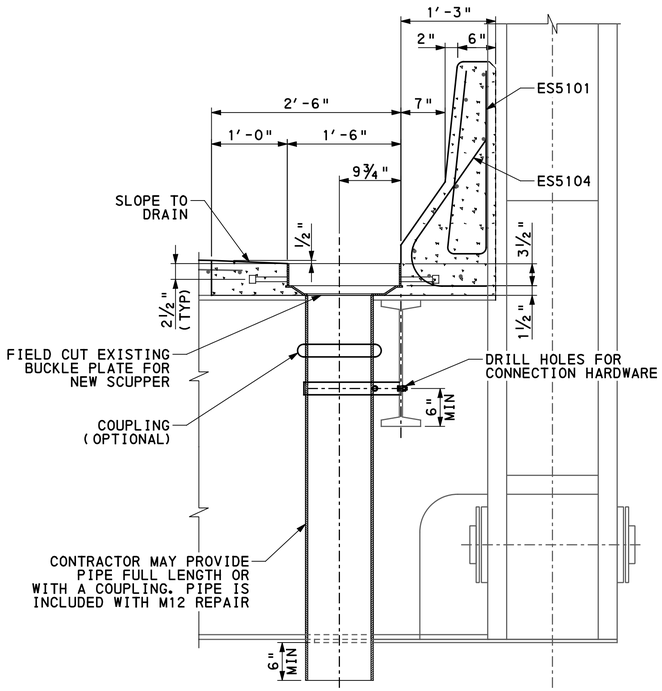
0 1 2 FEET




## PLAN (REMOVE SCUPPER)

M13

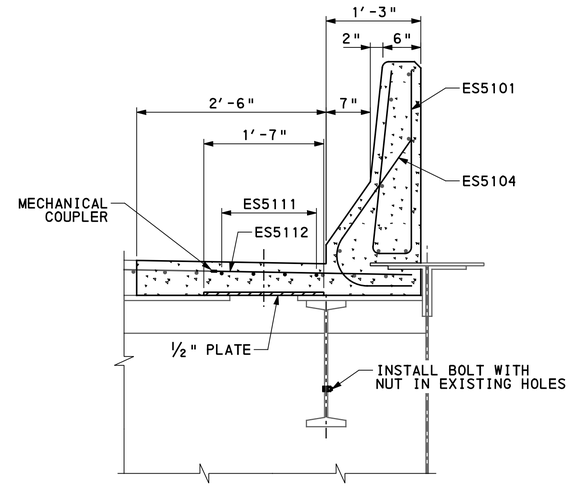
0 1 2 FEET




## SECTION C-C

M12

0 1 2 FEET




## SECTION D-D

M13

0 1 2 FEET

## REPAIRS M12 AND M13

ITEM 9000-0215 SCUPPER, TYPE 1, NEW INSTALLATION (REPAIR M12)
ITEM 9000-0217 SCUPPER REMOVAL (REPAIR M13)

### NOTES:

1. WORK THIS SHEET WITH SHEET 81.
2. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
3. FOR DECK AND SIDEWALK PLANS, SEE SHEETS 76 TO 79.
4. FOR DOWNSPOUTING DETAILS, SEE SHEETS 103 TO 108.
5. REINFORCEMENT BAR COUPLERS FOR REPAIR M13 ARE INCIDENTAL TO THAT REPAIR.
6. FOR RECONSTRUCTION LIMITS OF REPAIRS M12 AND M13 NEAR PIER 4 EXPANSION DAM, SEE SHEET 90.
7. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
8. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
# SCUPPER DETAILS 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 82 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 8:07:07 AM
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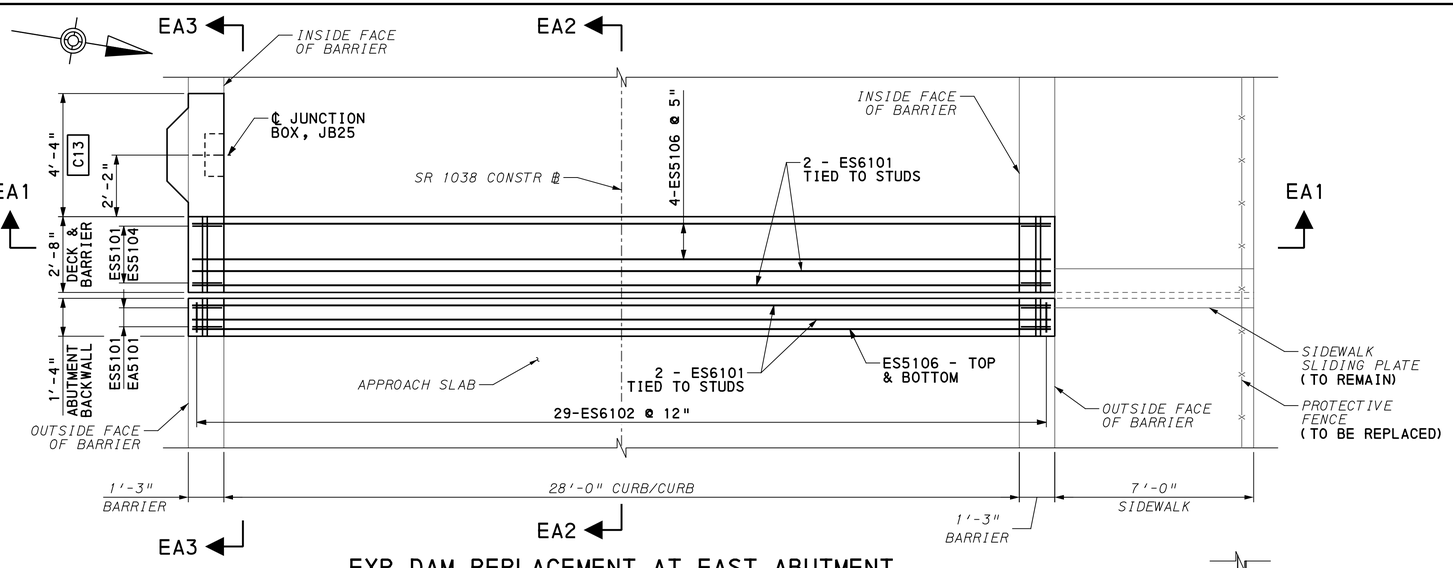
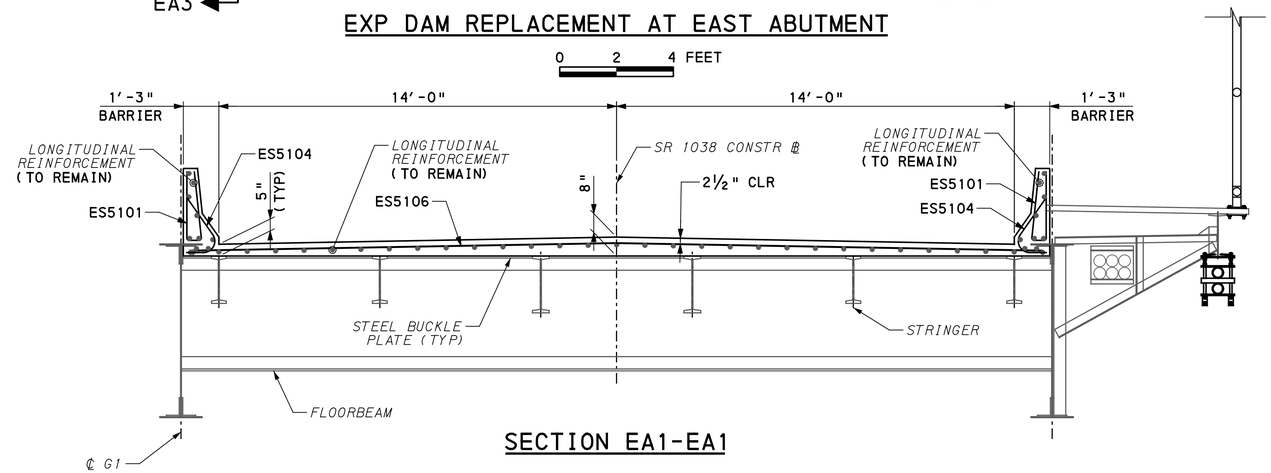
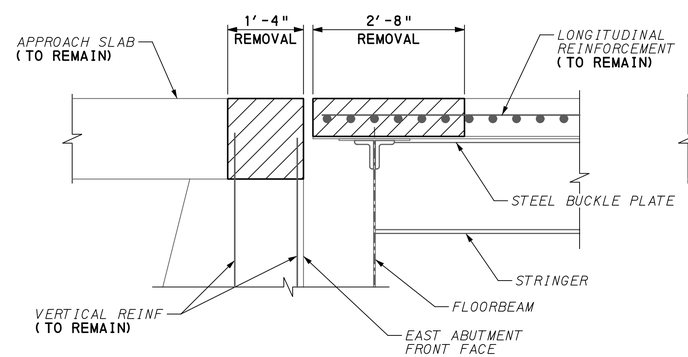


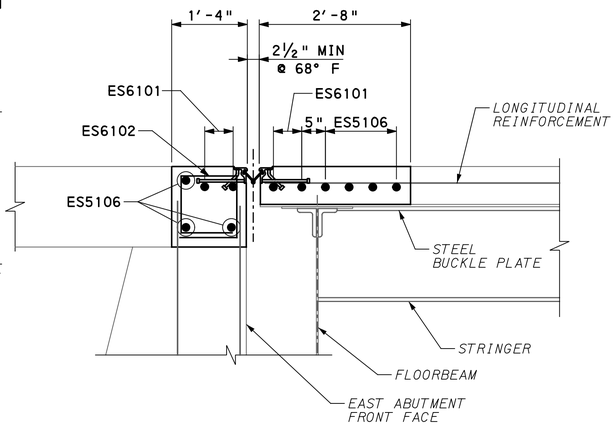

## EXP DAM REPLACEMENT AT EAST ABUTMENT



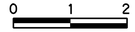

## SECTION EA1-EA1




## SECTION EA2-EA2 (REMOVAL)




## SECTION EA2-EA2 (PROPOSED)




## EXPANSION DAM NOTES:

1. PROVIDE UNDERDECK PROTECTIVE SHIELDING IN ACCORDANCE WITH THE SPECIFICATIONS (INCIDENTAL TO EXPANSION DAM REPLACEMENT).
2. SAWCUT, REMOVE AND DISCARD PORTIONS OF BARRIER AND DECK CONCRETE. REMOVE AND DISCARD EXISTING VERTICAL REINFORCEMENT IN BARRIERS AND EXISTING TRANSVERSE REINFORCEMENT IN DECK AS INDICATED ON PLANS. REMOVE AND DISCARD EXISTING EXPANSION DAM ASSEMBLY.
3. CONTRACTOR TO EXERCISE CAUTION DURING REMOVAL OF EXISTING CONCRETE, TRANSVERSE REINFORCEMENT IN DECK AND VERTICAL REINFORCEMENT IN BARRIERS. DO NOT DAMAGE EXISTING LONGITUDINAL REINFORCEMENT IN DECK AND BARRIERS. ANY DAMAGE SUSTAINED TO THE PORTION OF BARRIERS, DECK AND REINFORCEMENT DESIGNATED TO REMAIN SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE DISTRICT REPRESENTATIVE AT NO ADDITIONAL COST TO THE DEPARTMENT.
4. PRIOR TO PLACEMENT OF NEW CONCRETE, CONTRACTOR TO CLEAN EXISTING REINFORCEMENT AND PAINT WITH EPOXY PAINT. PLACE NEW TRANSVERSE REINFORCEMENT IN THE DECK AND VERTICAL REINFORCEMENT IN THE BARRIERS. INSTALL NEW NEOPRENE STRIP SEAL DAM.
5. THE EXPOSED FACES OF EXISTING DECK, BARRIERS AND ABUTMENT BACKWALL TO BE CLEANED. APPLY AN APPROVED EPOXY BONDING COMPOUND TO THE SURFACES.
6. CONTRACTOR IS REQUIRED TO FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO FABRICATION OF EXTRUSIONS AND HOOD PLATE.
7. CONTRACTOR TO VERIFY THAT THE BAR BENDING DIMENSIONS GIVEN ON THIS DRAWING WILL FIT WITH THE PROPOSED CONSTRUCTION PRIOR TO FABRICATING THESE BARS.
8. ALL NEW REINFORCEMENT SHOWN IS TO BE EPOXY COATED.
9. FOR NEOPRENE STRIP SEAL DETAILS NOT SHOWN, SEE BC-767M.
10. FOR ALTERNATE STRIP SEAL EXTRUSION, SEE DETAIL ON SHEET 92.
11. SHOP DRAWINGS FOR NEW NEOPRENE STRIP SEAL TO BE SUBMITTED TO THE DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR STRIP SEAL DAM DETAILS AND SECTIONS NOT SHOWN, SEE SHEETS 92 THRU 94.
3. VERTICAL LEG OF BAR C1 MAY BE FIELD TRIMMED AT TRUSS VERTICAL IF REQUIRED DUE TO REDUCED BARRIER WIDTH.
4. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
5. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
EXPANSION DAM EAST ABUTMENT

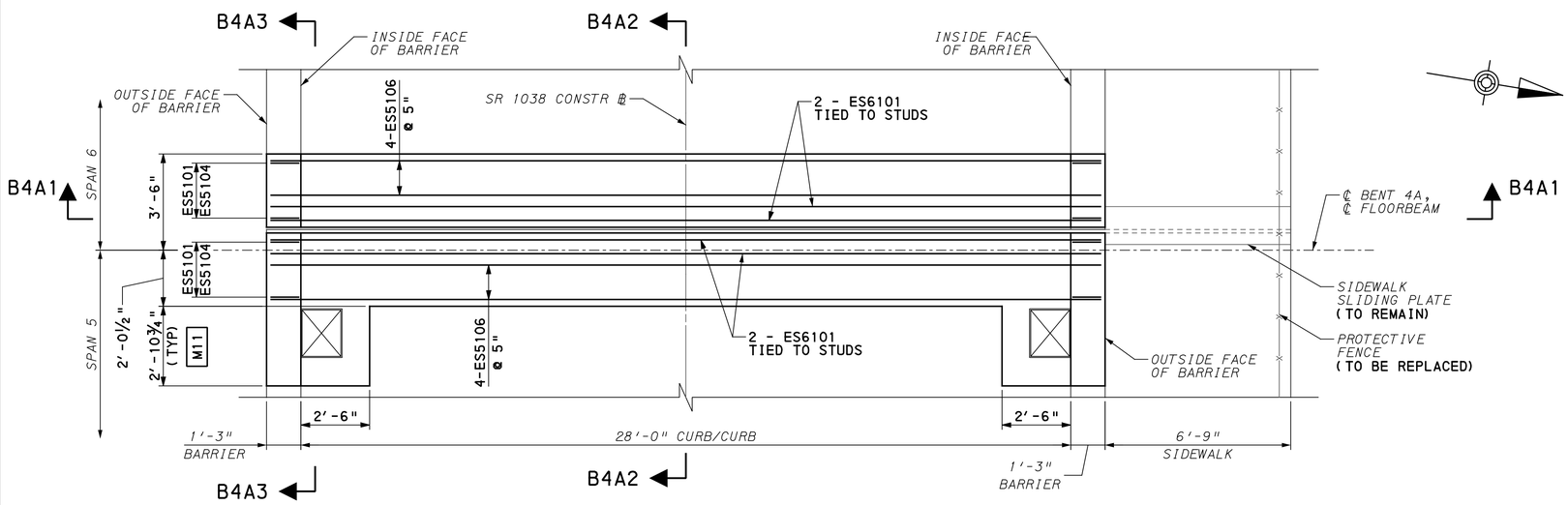
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 83 OF 124
S - 40253

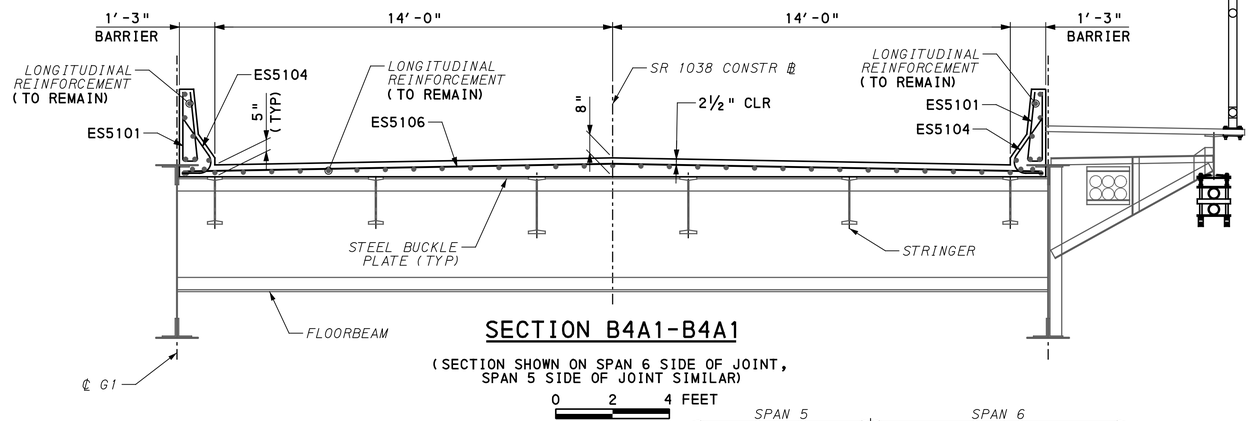
| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 8:07:11 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Exp Dam Repl - Bent 4A.dgn




## EXP DAM REPLACEMENT AT BENT 4A

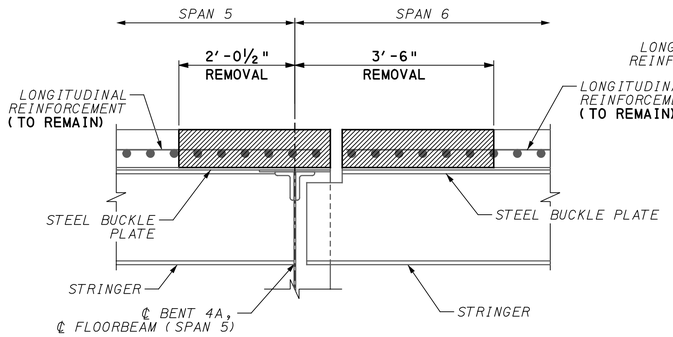
0 2 4 FEET




## SECTION B4A1-B4A1

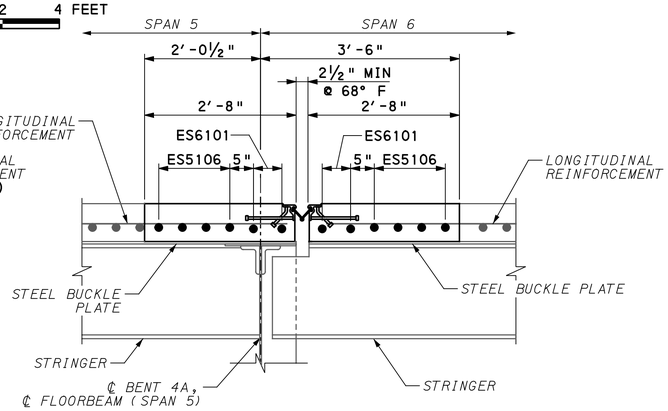
(SECTION SHOWN ON SPAN 6 SIDE OF JOINT, SPAN 5 SIDE OF JOINT SIMILAR)

0 2 4 FEET




## SECTION B4A2-B4A2 (REMOVAL)

0 1 2 FEET




## SECTION B4A2-B4A2 (PROPOSED)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR EXPANSION DAM NOTES, SEE SHEET 83.
3. FOR STRIP SEAL DAM DETAILS AND SECTIONS NOT SHOWN, SEE SHEETS 92 THRU 94.
4. EXTEND THE LIMITS OF REPAIR M11 AS SHOWN, INCIDENTAL TO REPAIR M11.
5. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
6. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# EXPANSION DAM BENT 4A

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
PENNSYLVANIA

RECOMMENDED
OCTOBER 26, 2022

SHEET 84 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | EAL | CKD: | TSA |
|---|---|---|---|---|---|---|---|

PLOTTED: 10/26/2022 8:07:14 AM
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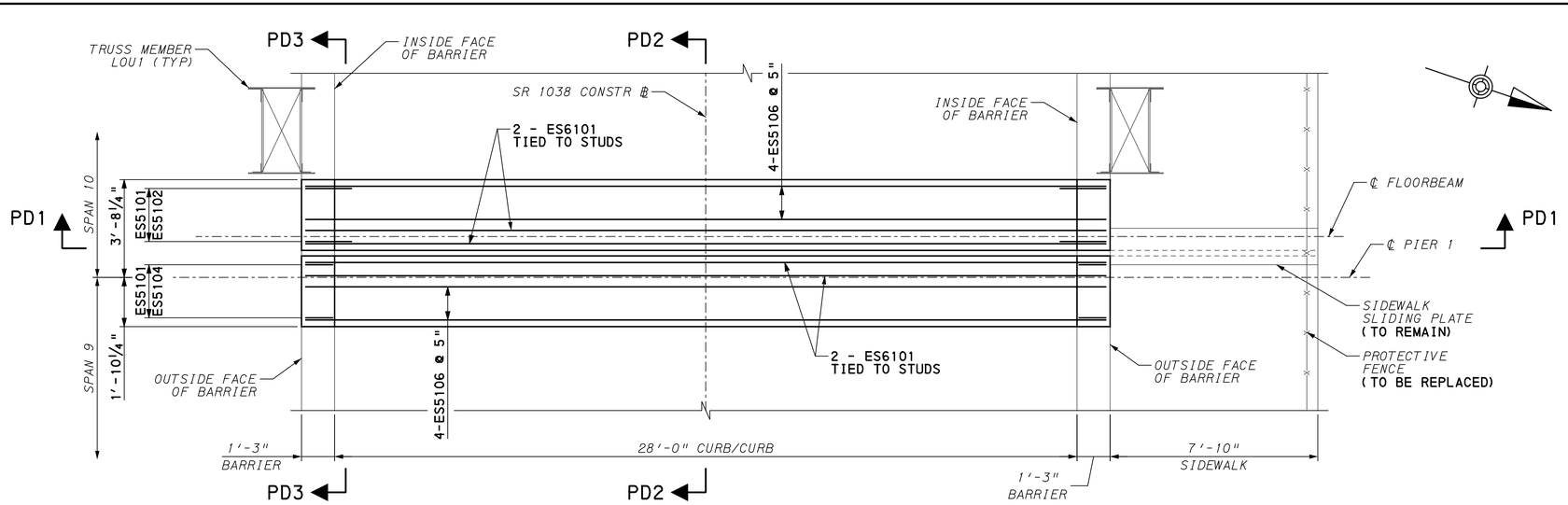
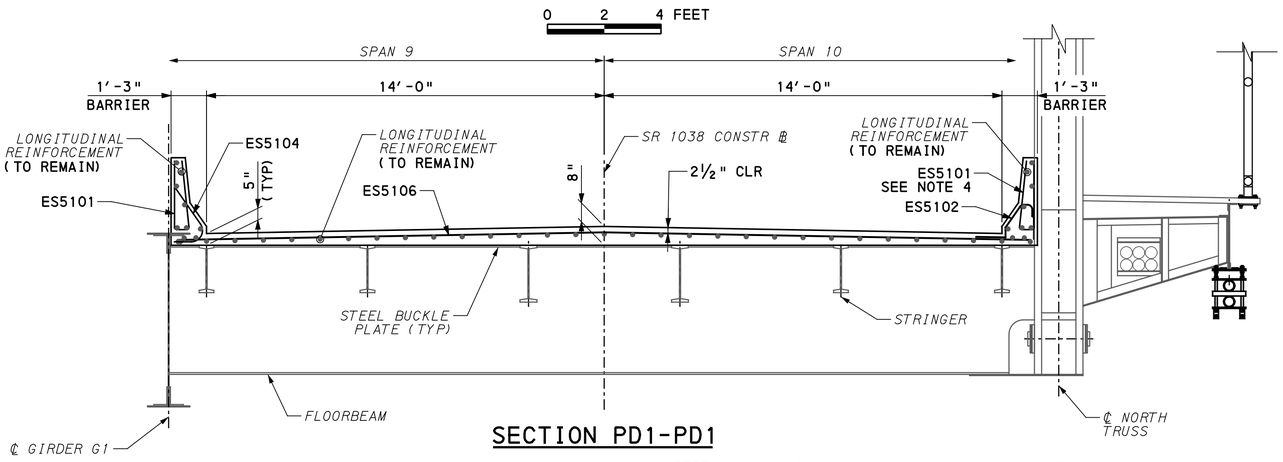
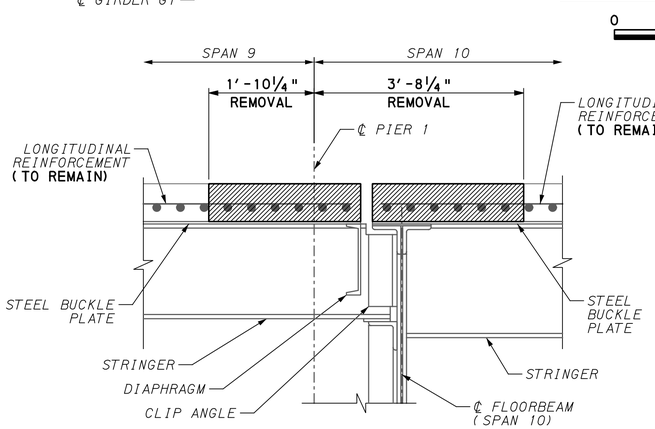



## EXP DAM REPLACEMENT AT PIER 1

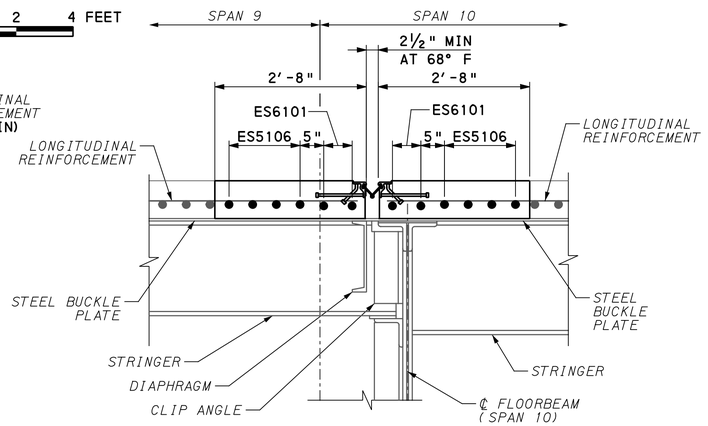



## SECTION PD1-PD1




## SECTION PD2-PD2 (REMOVAL)

0 1 2 FEET




## SECTION PD2-PD2 (PROPOSED)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR EXPANSION DAM NOTES, SEE SHEET 83.
3. FOR STRIP SEAL DAM DETAILS AND SECTIONS NOT SHOWN, SEE SHEETS 92 THRU 95.
4. VERTICAL LEG OF BAR ES5101 MAY BE FIELD TRIMMED AT TRUSS VERTICAL IF REQUIRED DUE TO REDUCED BARRIER WIDTH.
5. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
6. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## EXPANSION DAM PIER 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 85 OF 124

S - 40253

| DES: EAL | CKD: TSA | DWG: EAL | CKD: TSA |
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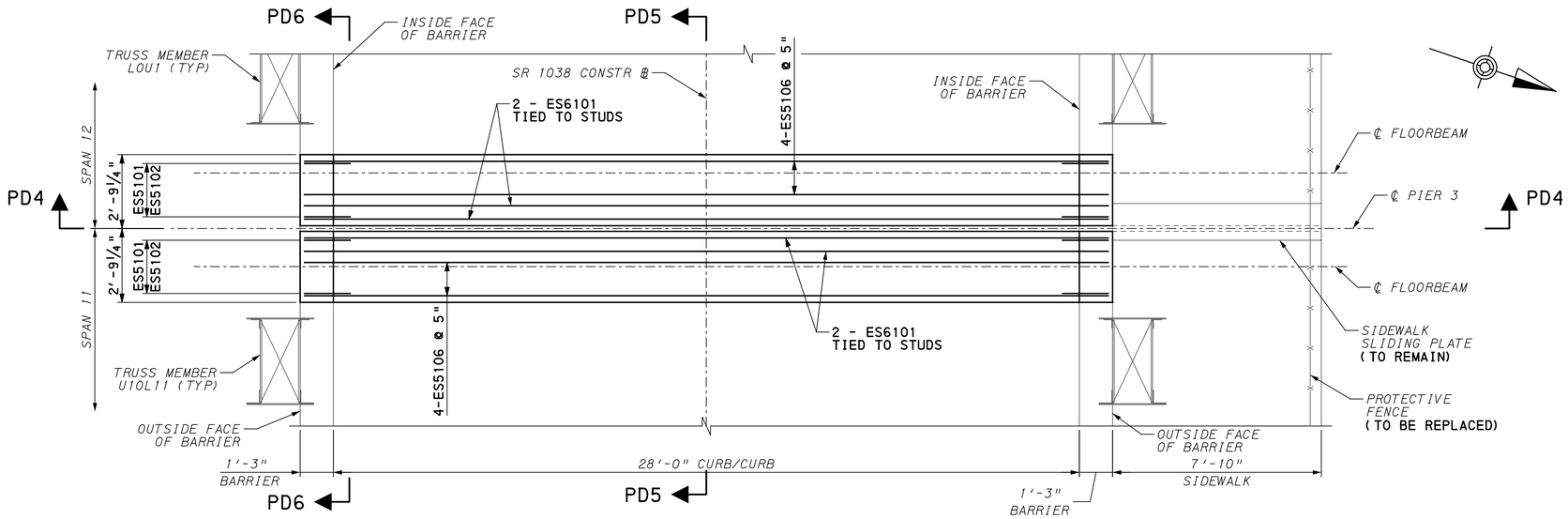
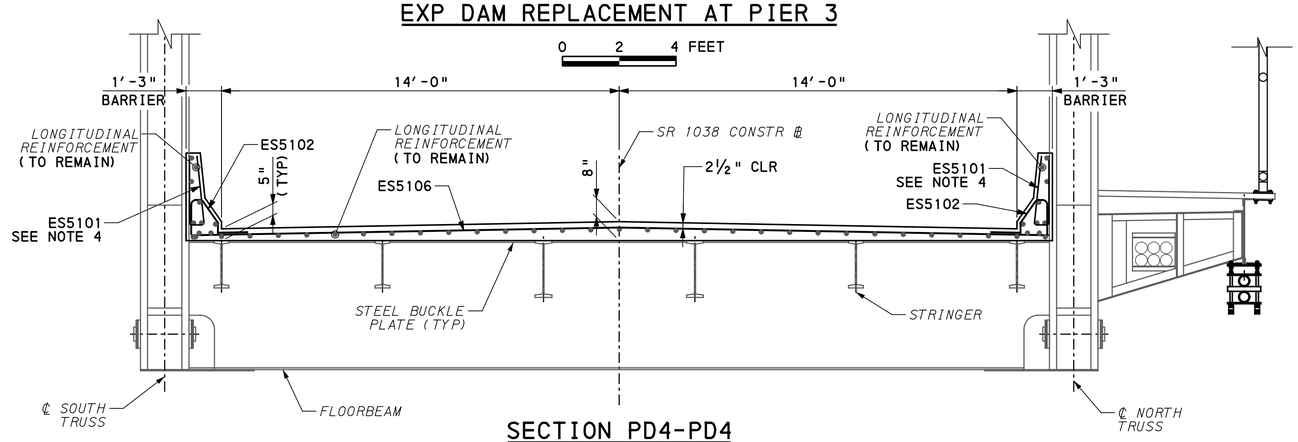
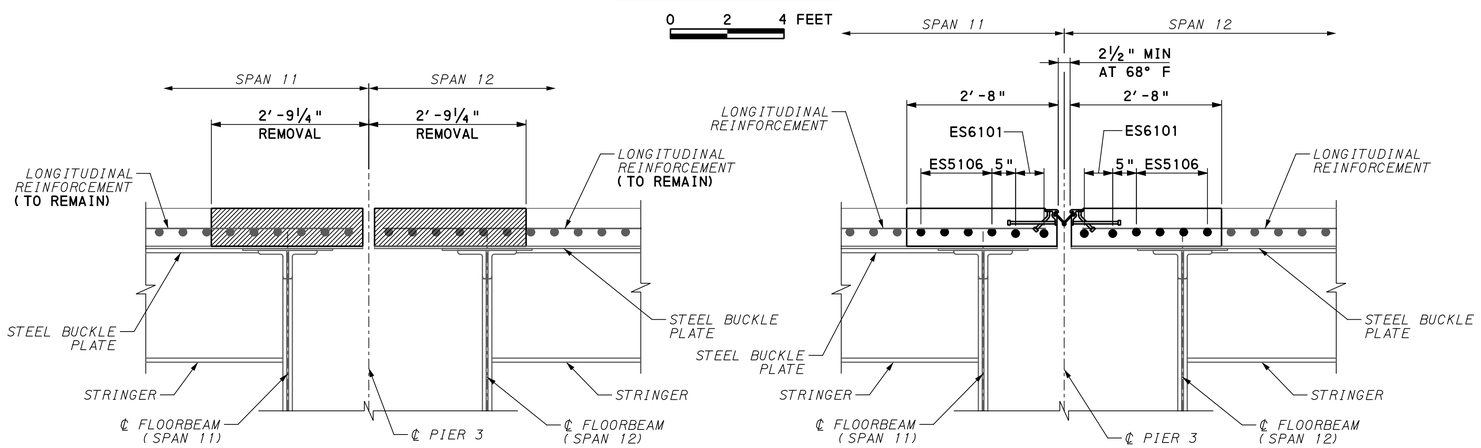



## EXP DAM REPLACEMENT AT PIER 3




## SECTION PD4-PD4




## SECTION PD5-PD5 (REMOVAL)

0 1 2 FEET




## SECTION PD5-PD5 (PROPOSED)

0 1 2 FEET

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR EXPANSION DAM NOTES, SEE SHEET 83.
3. FOR STRIP SEAL DAM DETAILS AND SECTIONS NOT SHOWN, SEE SHEETS 92 THRU 94.
4. VERTICAL LEG OF BAR ES5101 MAY BE FIELD TRIMMED AT TRUSS VERTICAL IF REQUIRED DUE TO REDUCED BARRIER WIDTH.
5. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
6. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## EXPANSION DAM PIER 3

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 86 OF 124

S - 40253

| DES: | EAL | CKD: | TSA | DWG: | EAL | CKD: | TSA |
|---|---|---|---|---|---|---|---|

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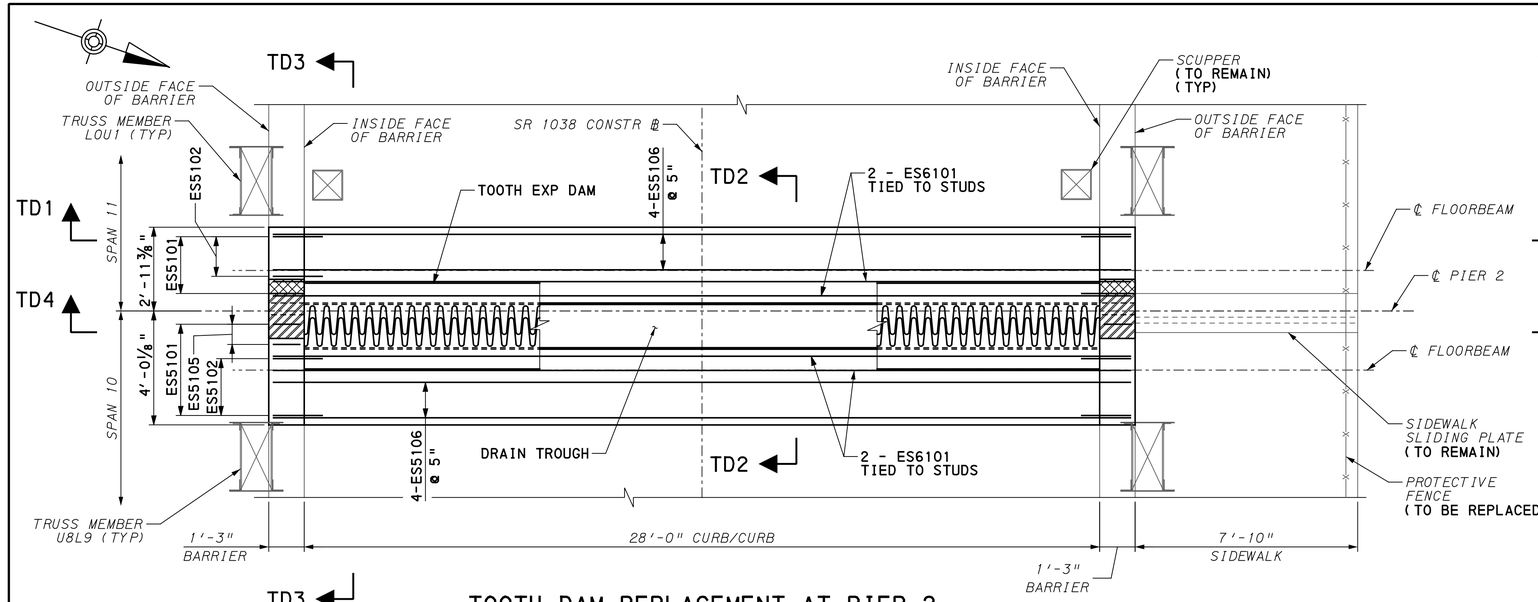
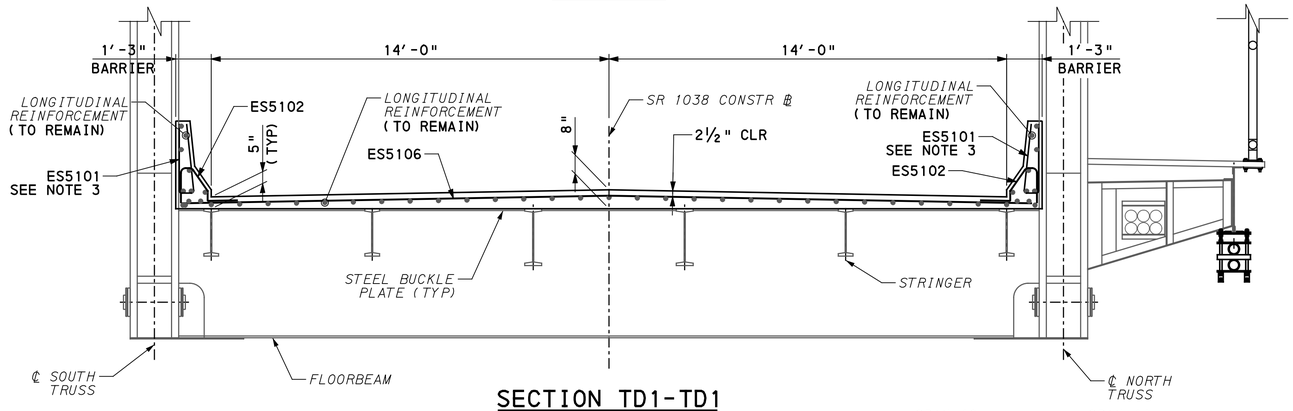


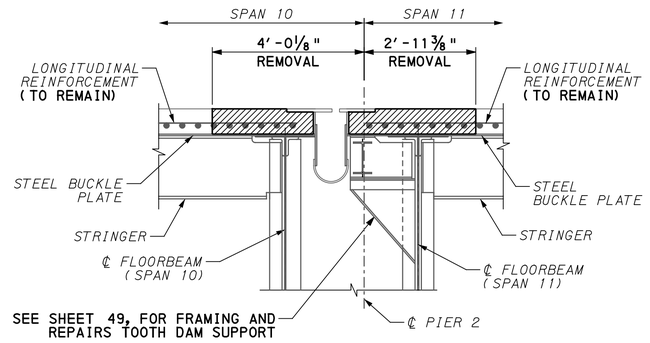

## TOOTH DAM REPLACEMENT AT PIER 2

0 2 4 FEET



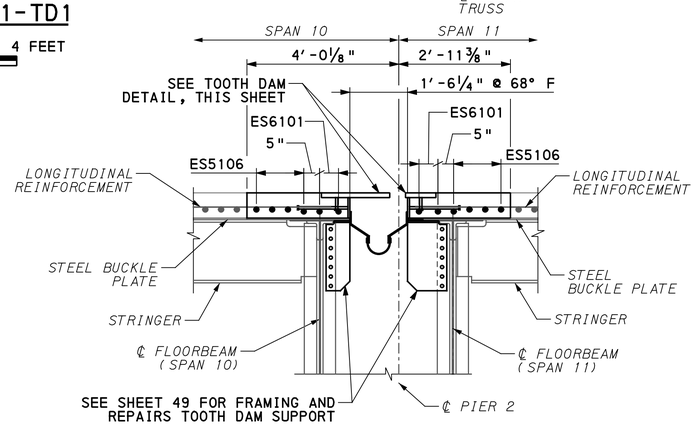

## SECTION TD1-TD1

0 2 4 FEET



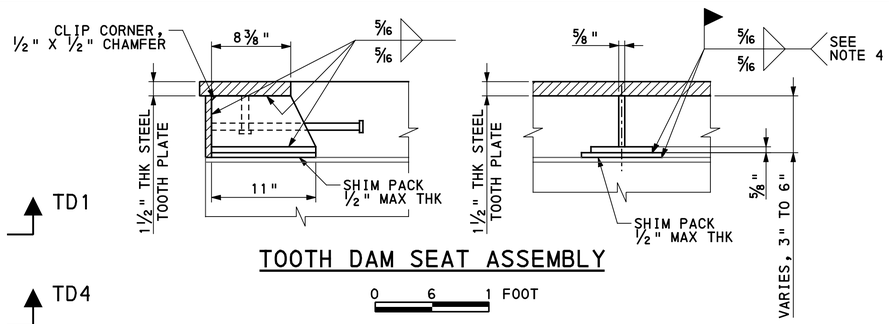

## SECTION TD2-TD2 (REMOVAL)

0 2 4 FEET



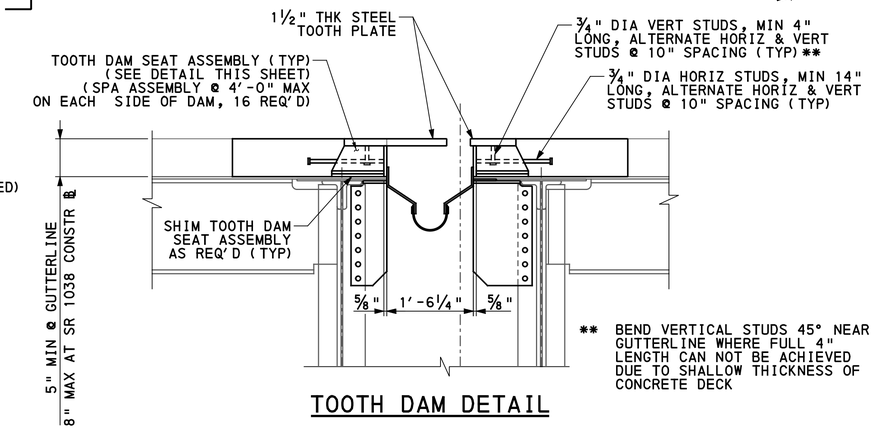

## SECTION TD2-TD2 (PROPOSED)

0 1 2 FEET




## TOOTH DAM SEAT ASSEMBLY

0 6 1 FOOT




** BEND VERTICAL STUDS 45° NEAR GUTTERLINE WHERE FULL 4" LENGTH CAN NOT BE ACHIEVED DUE TO SHALLOW THICKNESS OF CONCRETE DECK

## TOOTH DAM DETAIL

0 1 2 FEET

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SECTION TD3-TD3 AND ADDITIONAL DETAILS, SEE SHEETS 88 AND 89.
3. VERTICAL LEG OF BAR ES5101 MAY BE FIELD TRIMMED AT TRUSS VERTICAL IF REQUIRED DUE TO REDUCED BARRIER WIDTH.
4. FIELD WELD SHIM PACK TO BUCKLE PLATE AND SEAT ASSEMBLY TO SHIM PACK. SHIM PACK MAY BE OMITTED AT THE DISCRETION OF THE CONTRACTOR.
5. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
6. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

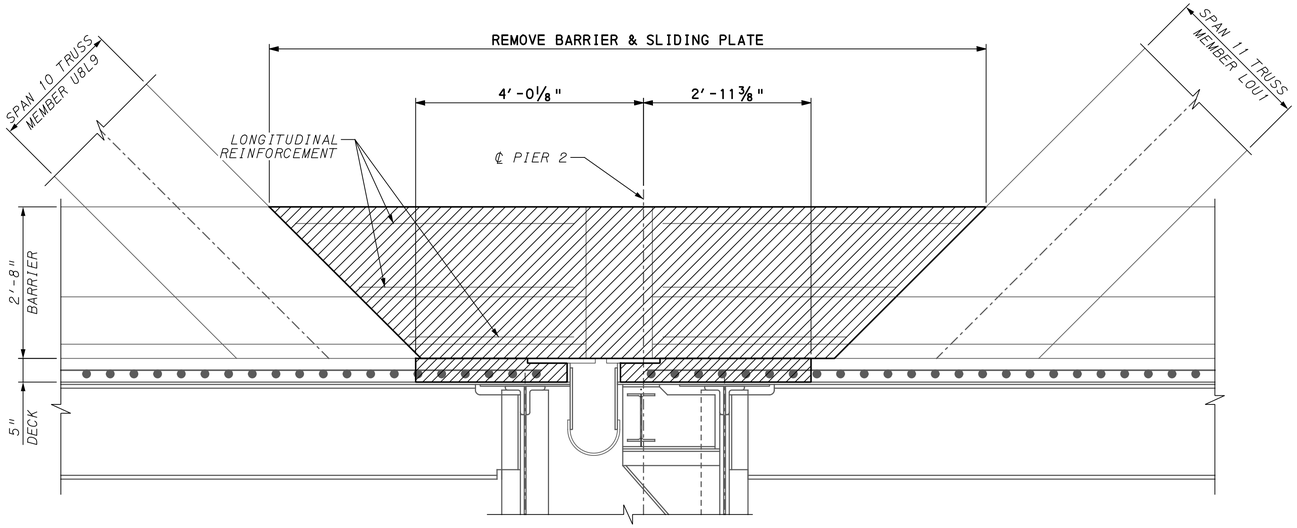
# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## TOOTH EXPANSION JOINT PIER 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

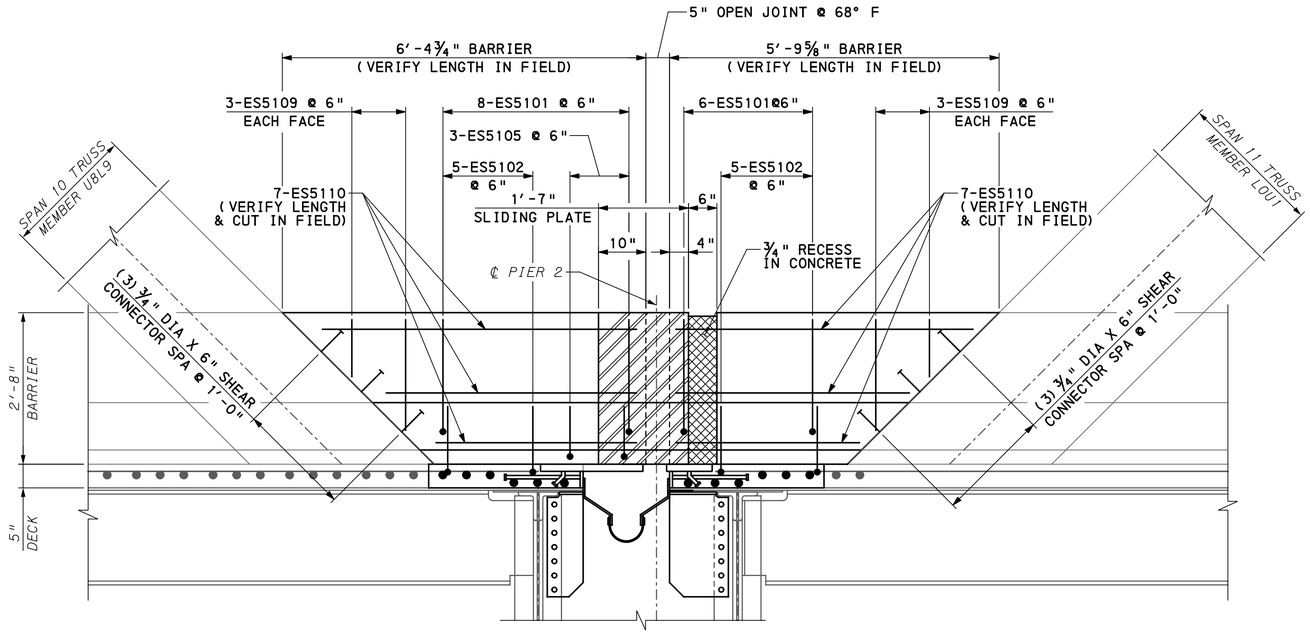
SHEET 87 OF 124
S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|




## SECTION TD3-TD3 (REMOVAL)

0 1 2 FEET




## SECTION TD3-TD3 (PROPOSED)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 87.
3. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# TOOTH JOINT DETAILS 1

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 88 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 8:07:24 AM

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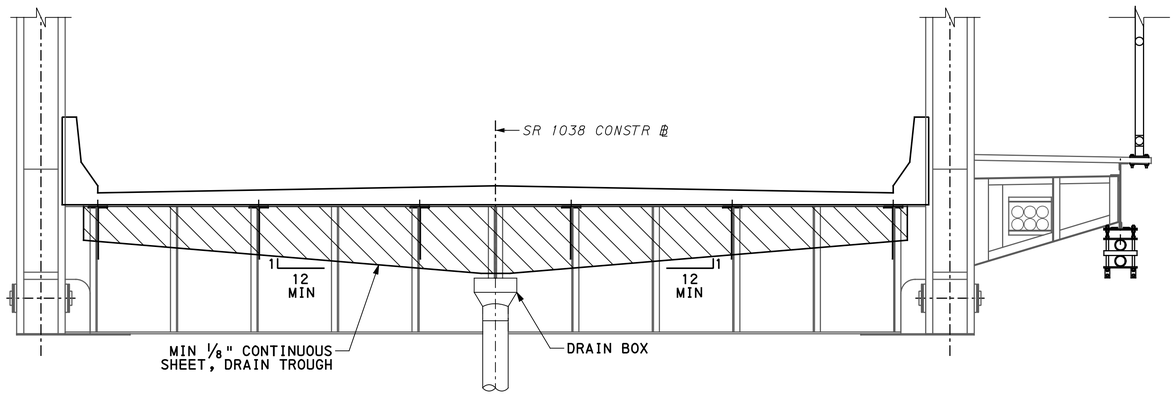
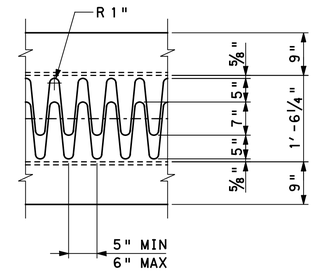


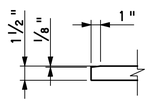

SECTION TD4-TD4

0 2 4 FEET




TOOTH PLATE DETAIL

0 1 2 FEET




TOOTH PLATE SECTION

0 2 4 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 87.
3. FOR ADDITIONAL DRAINAGE DETAILS AT PIER 2, SEE SHEET 108.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# TOOTH JOINT DETAILS 2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 89 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

PLOTTED: 10/26/2022 8:07:26 AM

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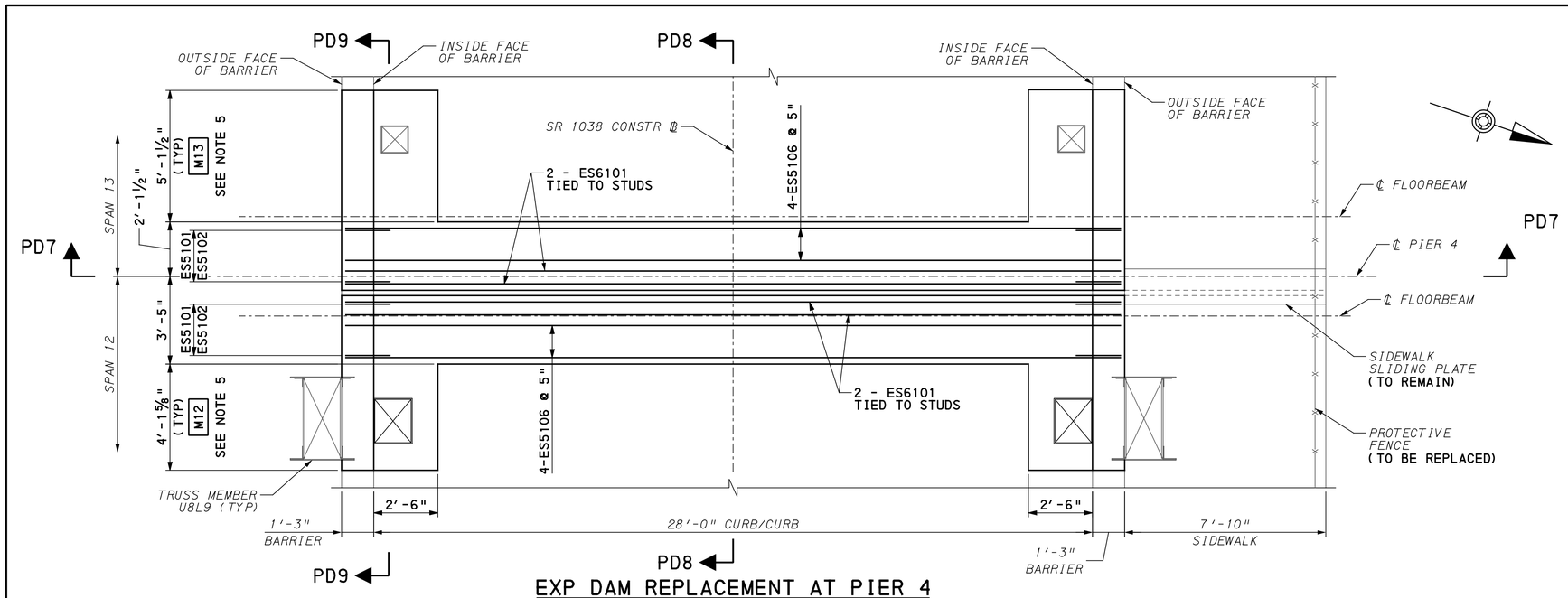
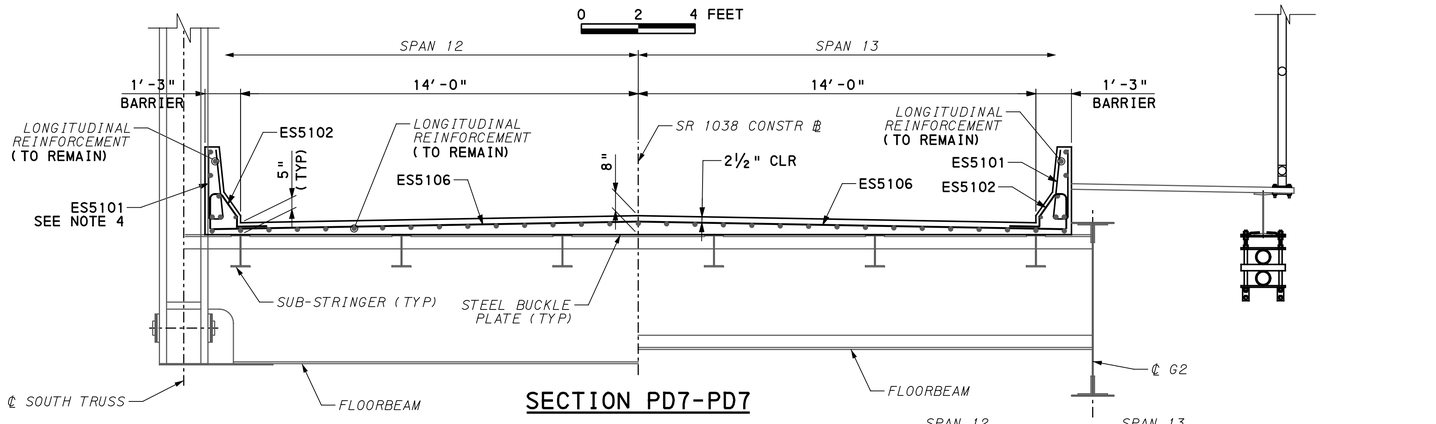
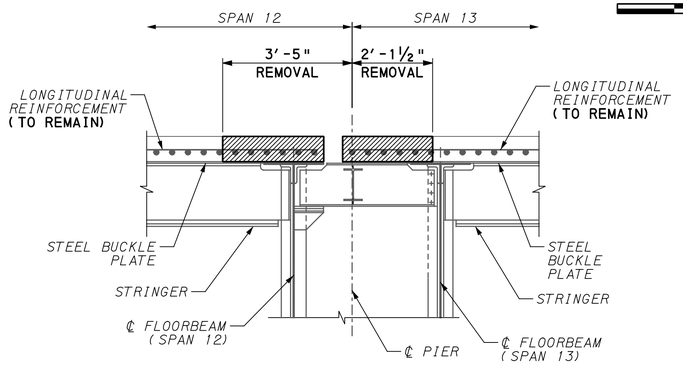



## EXP DAM REPLACEMENT AT PIER 4



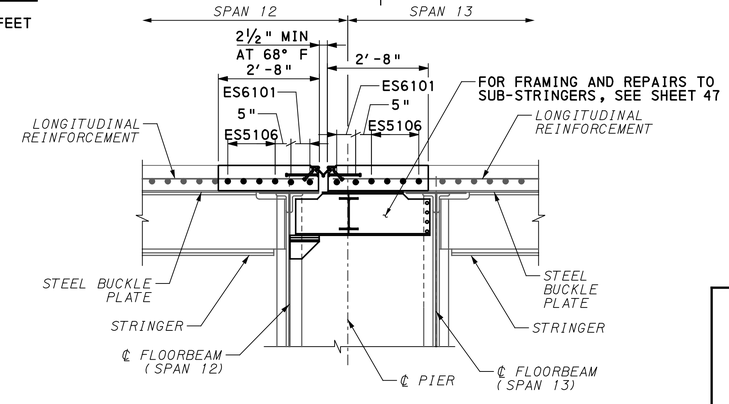

## SECTION PD7-PD7

0 2 4 FEET




## SECTION PD8-PD8 (REMOVAL)

0 2 4 FEET




## SECTION PD8-PD8 (PROPOSED)

0 2 4 FEET

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR EXPANSION DAM NOTES, SEE SHEET 83.
3. FOR STRIP SEAL DAM DETAILS AND SECTIONS NOT SHOWN, SEE SHEETS 92 THRU 96.
4. VERTICAL LEG OF BAR ES5101 MAY BE FIELD TRIMMED AT TRUSS VERTICAL IF REQUIRED DUE TO REDUCED BARRIER WIDTH.
5. EXTEND THE LIMITS OF REPAIRS M12 AND M13 AS SHOWN. INCIDENTAL TO REPAIRS M12 AND M13.
6. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
7. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

| Mark | Description | By | Chk'd. | Rec'm'd. | Date |
|---|---|---|---|---|---|
| REVISIONS | | | | | |

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## EXPANSION DAM PIER 4

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 90 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

PLOTTED: 10/26/2022 8:07:29 AM
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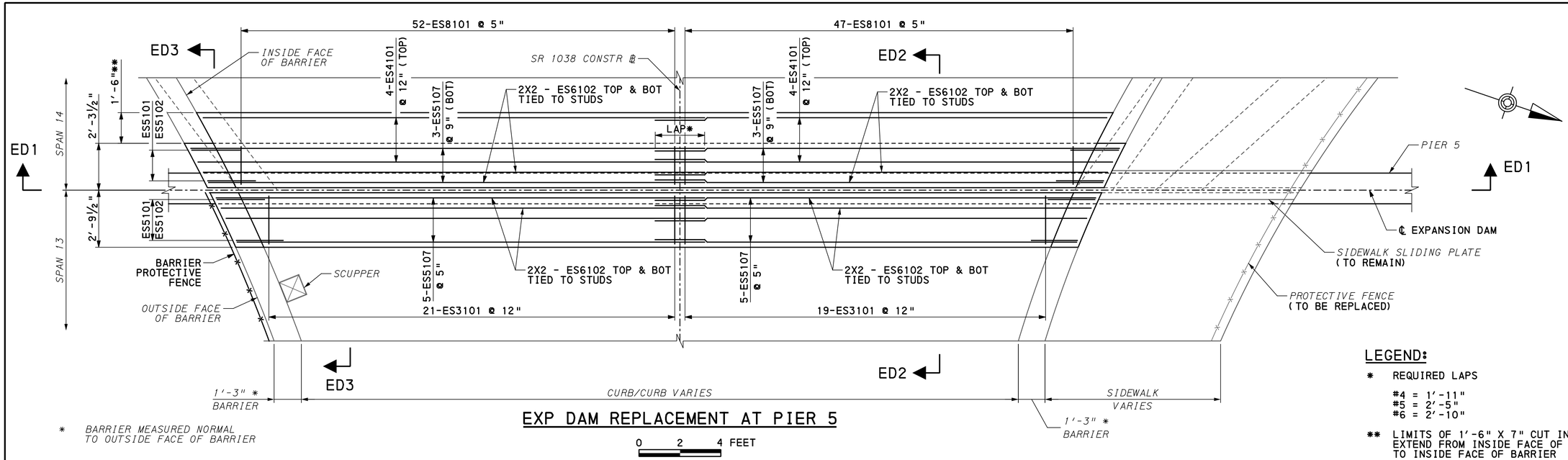



* BARRIER MEASURED NORMAL TO OUTSIDE FACE OF BARRIER

## EXP DAM REPLACEMENT AT PIER 5

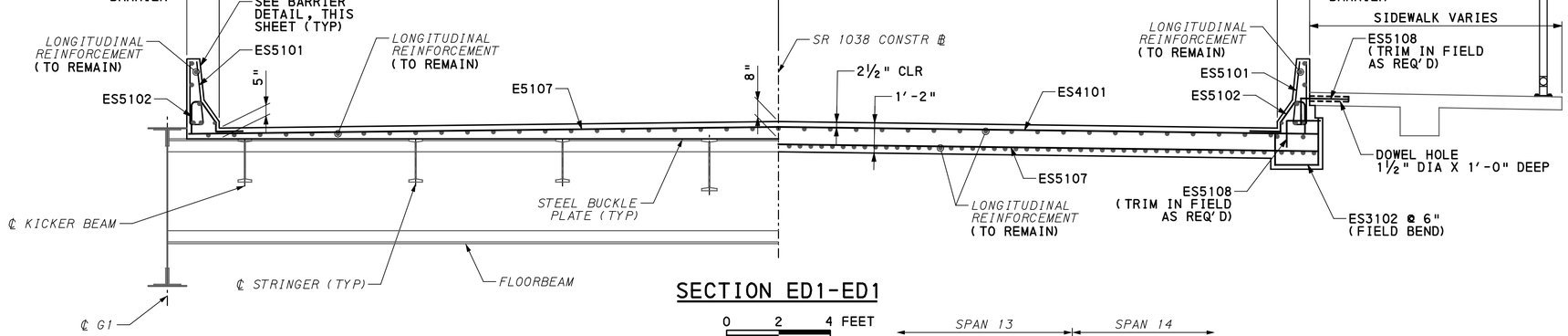
0 2 4 FEET

**LEGEND:**

* REQUIRED LAPS

#4 = 1'-11"
#5 = 2'-5"
#6 = 2'-10"

** LIMITS OF 1'-6" X 7" CUT IN SLAB EXTEND FROM INSIDE FACE OF BARRIER TO INSIDE FACE OF BARRIER

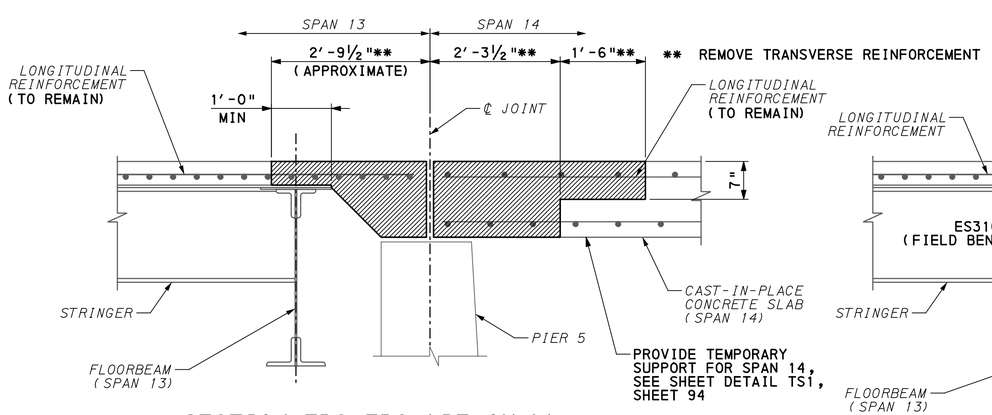



## SECTION ED1-ED1

0 2 4 FEET

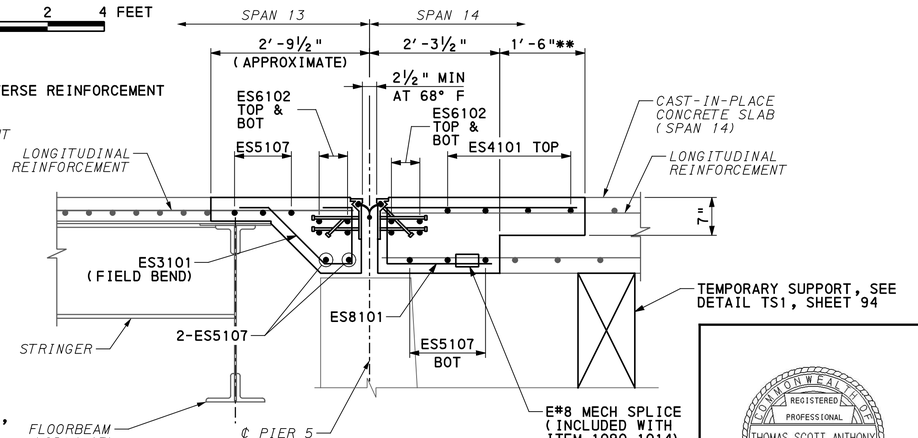
**NOTES:**

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR EXPANSION DAM NOTES, SEE SHEET 83.
3. FOR STRIP SEAL DAM DETAILS AND SECTIONS NOT SHOWN, SEE SHEETS 92 THRU 94.
4. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.




## SECTION ED2-ED2 (REMOVAL)

0 1 2 FEET




## SECTION ED2-ED2 (PROPOSED)

0 1 2 FEET

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## EXPANSION DAM PIER 5

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — THOMAS SCOTT ANTHONY — ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 91 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 8:07:31 AM
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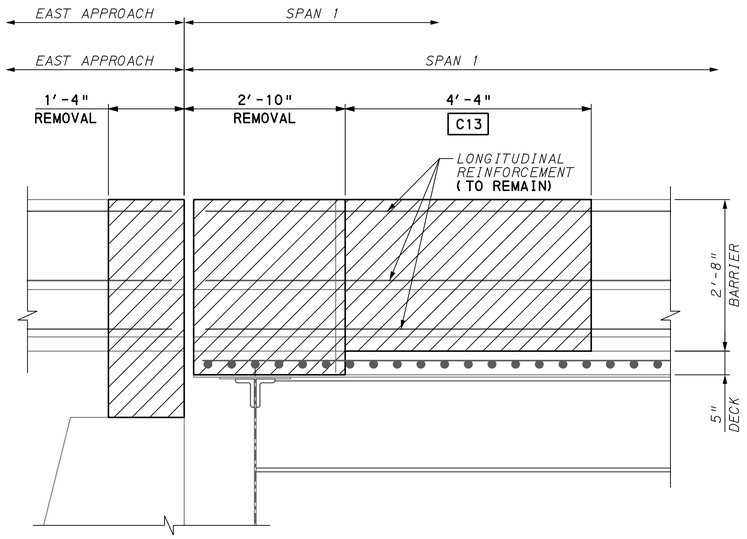
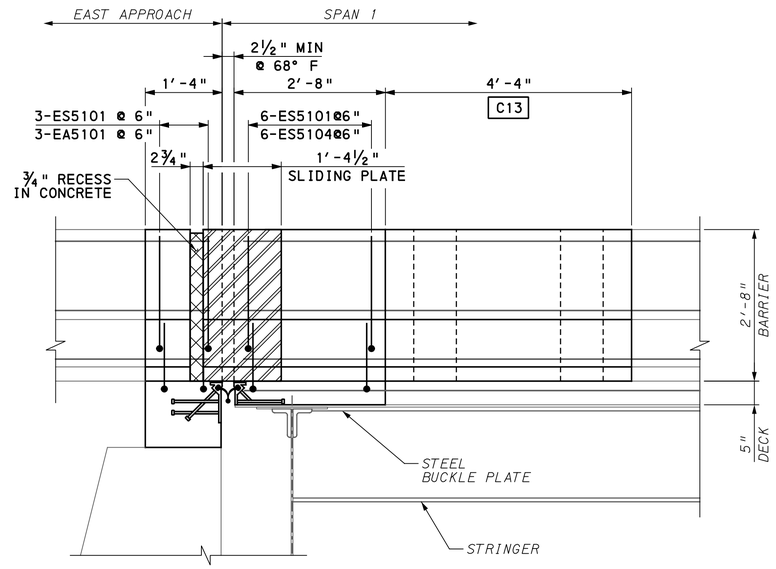


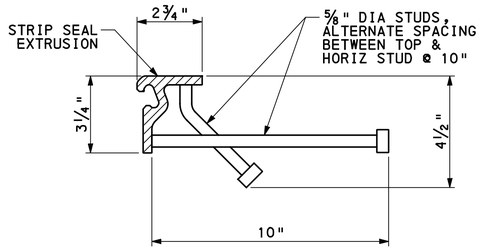

## SECTION EA3-EA3 (REMOVAL)

0 1 2 FEET




## SECTION EA3-EA3 (PROPOSED)

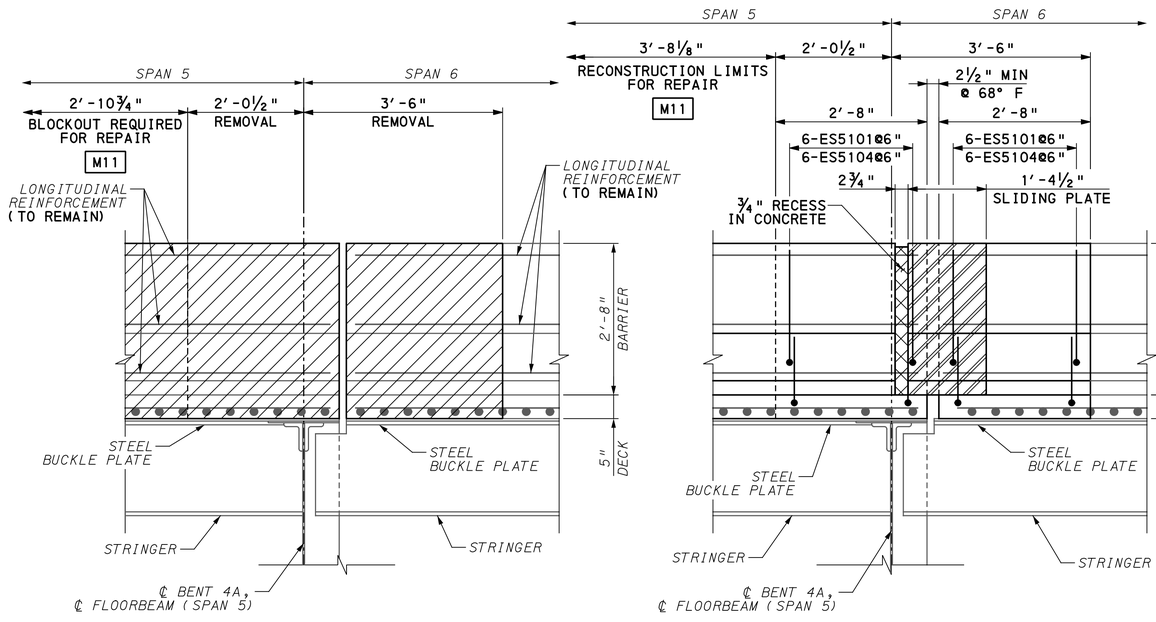
0 1 2 FEET




## ALTERNATE STRIP SEAL EXTRUSION

NOT TO SCALE

ALTERNATE STRIP SEAL EXTRUSION
REQUIRED FOR ITEMS 5090-1015,
5090-1016 AND 5090-1019
AT ALL STRIP SEAL LOCATIONS EXCEPT PIER 5




## SECTION B4A3-B4A3 (REMOVAL)

0 1 2 FEET




## SECTION B4A3-B4A3 (PROPOSED)

0 1 2 FEET

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEETS 83 - 86 AND 90.
3. FOR DETAILS OF REPAIR M11, SEE SHEET 81.
4. FOR TYPICAL BARRIER SECTION, SEE SHEET 93.
5. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
# STRIP SEAL DAM DETAILS 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 92 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 8:07:33 AM
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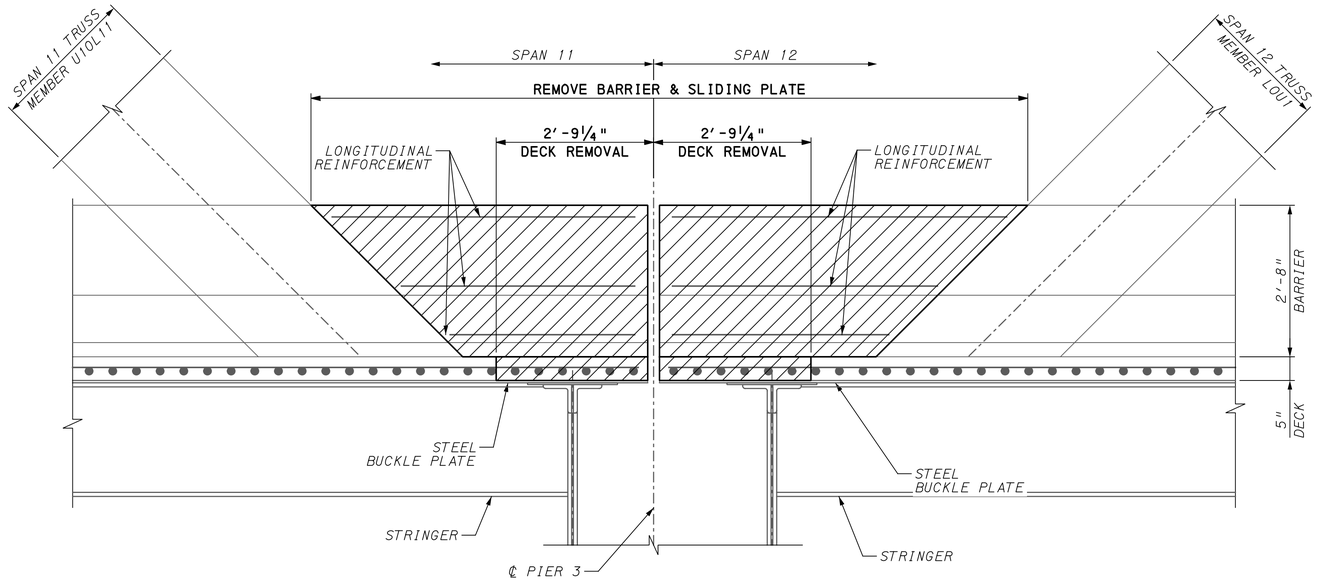
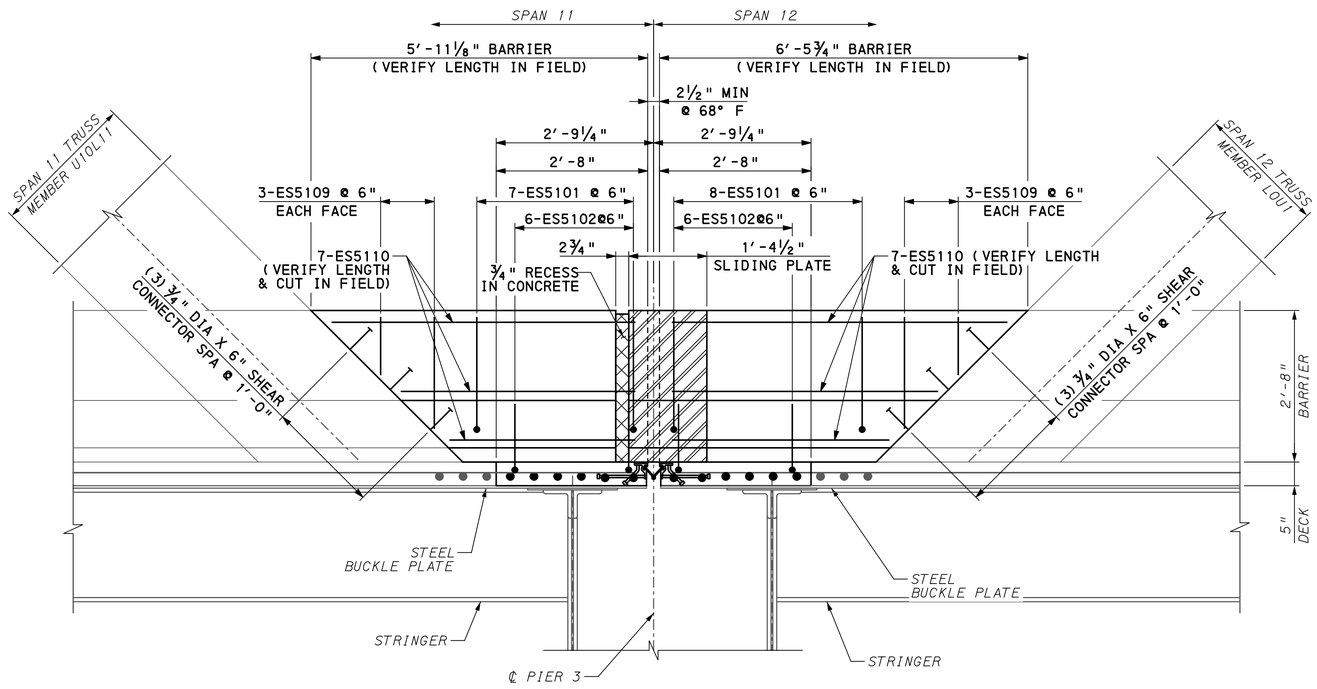


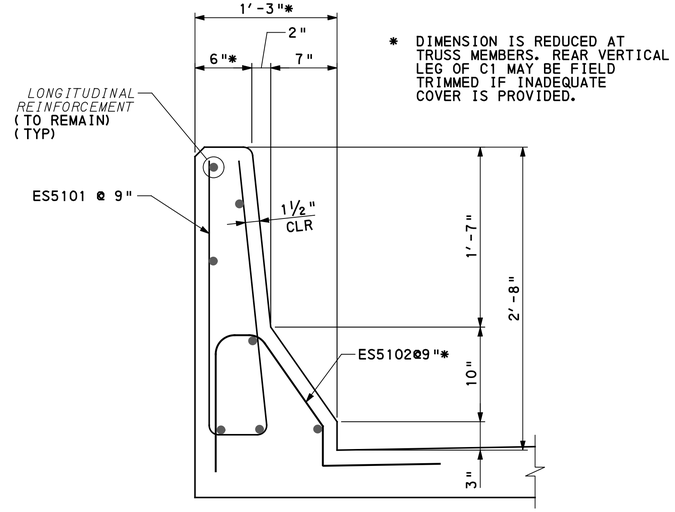

## SECTION PD6-PD6 ( REMOVAL)

0 1 2 FEET




## SECTION PD6-PD6 ( PROPOSED)

0 1 2 FEET




## TYPICAL BARRIER SECTION

SECTION AT BRIDGE DECK SHOWN;
SECTION AT ABUTMENT OR PIER WALL SIMILAR

0 6 1 FOOT

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 86.
3. FOR DETAILS OF REPAIR M12 & M13, SEE SHEETS 81 AND 82.
4. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
5. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## STRIP SEAL DAM DETAILS 2

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — THOMAS SCOTT ANTHONY — ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 93 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 8:07:36 AM
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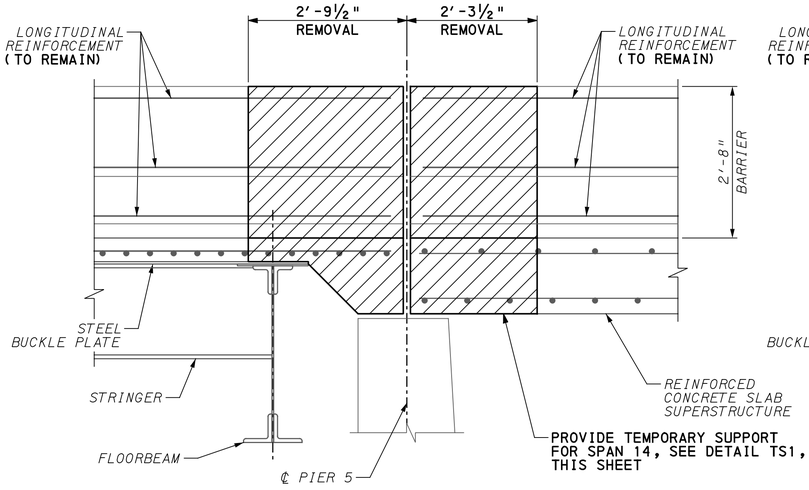
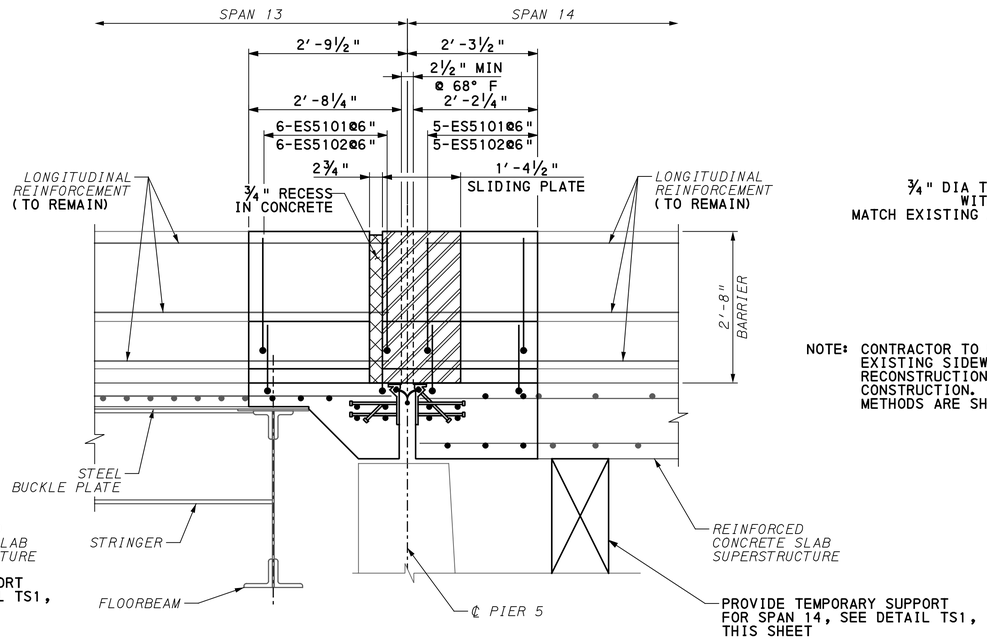



## SECTION ED3-ED3 (REMOVAL)

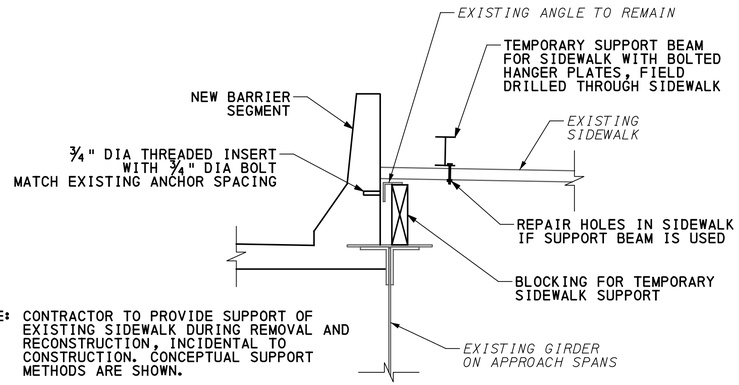
0 1 2 FEET




## SECTION ED3-ED3 (PROPOSED)

0 1 2 FEET

NOTE: LIMITS OF 1′-6" X 7" CUT IN SLAB IN SPAN 14 EXTEND FROM INSIDE FACE OF BARRIER TO INSIDE FACE OF BARRIER

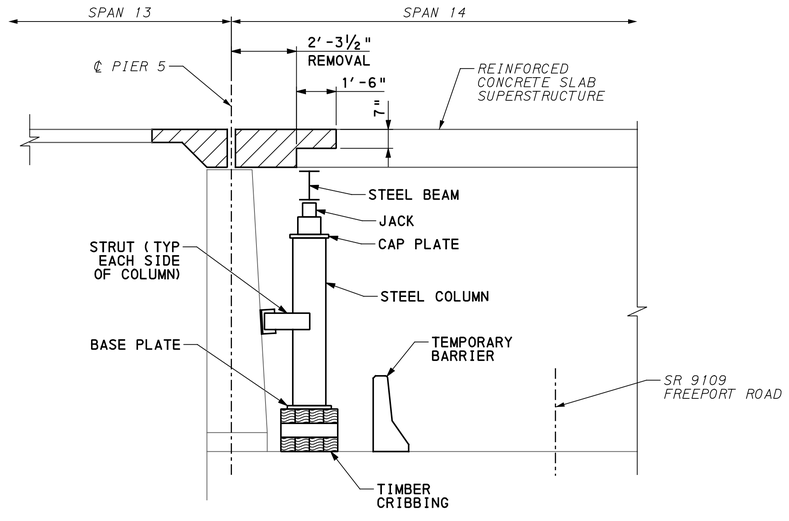



NOTE: CONTRACTOR TO PROVIDE SUPPORT OF EXISTING SIDEWALK DURING REMOVAL AND RECONSTRUCTION, INCIDENTAL TO CONSTRUCTION. CONCEPTUAL SUPPORT METHODS ARE SHOWN.

## SIDEWALK SUPPORT AT BARRIER

PROVIDE NEW THREADED INSERT AND NEW BOLT INCIDENTAL TO NEW CONSTRUCTION

NOT TO SCALE




## DETAIL TS1

CONCEPTUAL JACKING OF SPAN 14
NOT TO SCALE

### JACKING/TEMPORARY SUPPORT NOTES:

1. JACKING/TEMPORARY SUPPORT OF SPAN 14 FOR REPLACEMENT OF PIER 5 EXPANSION DAM IS INCLUDED IN ITEM 9000-0203.
2. COORDINATE WORK WITH THE TRAFFIC CONTROL PLANS AND THE PLANNED CLOSURE OF THE STRUCTURE IN PHASE 2A.
3. INCLUDE CONSTRUCTION LIVE LOAD IN THE DESIGN OF THE JACKING/TEMPORARY SUPPORT SYSTEM.
4. CONCEPTUAL SUPPORT DETAILS IS SHOWN. ALL SUPPORT DETAILS TO BE DESIGNED BY THE CONTRACTOR. ALTERNATE DESIGNS MAY BE PROPOSED BY THE CONTRACTOR. ALL DESIGNS SHALL BE SUBMITTED TO THE DEPARTMENT FOR REVIEW.
5. PROVIDE JACKING UNDER SPAN 14 BEAMS AND SPAN 14 SIDEWALK UNDER LIMITS OF REMOVAL.

| JACKING LOAD TABLE | | |
|---|---|---|
| LOCATION | DL (K/FT) | LL (K/FT) |
| PIER 5 | 2.5 | 5.4 |

JACKING LOADS ARE SERVICE LOADS (UNFACTORED)

LL BASED ON MAXIMUM HS20 LL REACTION

PROVIDED LOADS ARE APPROXIMATE AND TO BE VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTING JACKING PLANS

JACKING LOADS ARE MAXIMUM REACTIONS AT THE BEARING CENTERLINE. LOADS WILL VARY BASED ON JACKING LOCATION.

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 91.
3. FOR TYPICAL BARRIER SECTION, SEE SHEET 93.
4. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
# STRIP SEAL DAM DETAILS 3

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — THOMAS SCOTT ANTHONY — ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 94 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 8:07:39 AM
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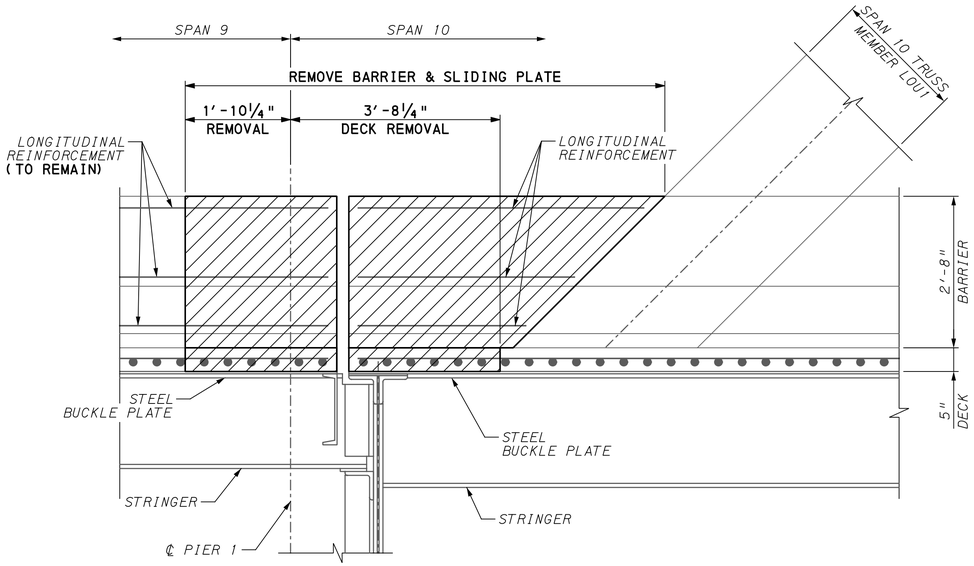
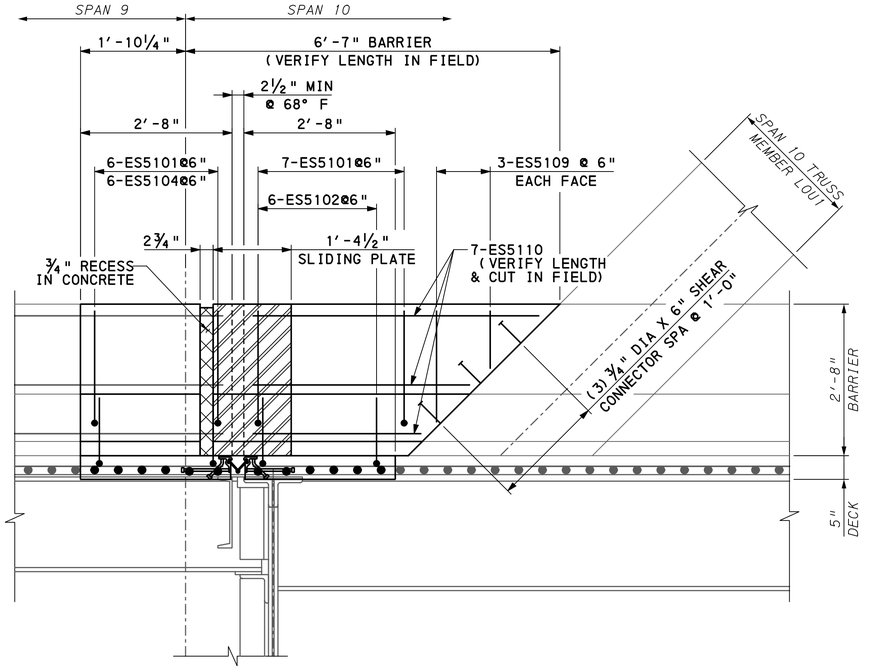



## SECTION PD3-PD3 (REMOVAL)

0 1 2 FEET




## SECTION PD3-PD3 (PROPOSED)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 85.
3. FOR TYPICAL BARRIER SECTION, SEE SHEET 93.
4. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## STRIP SEAL DAM DETAILS 4

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — THOMAS SCOTT ANTHONY — ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 95 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | EAL | CKD: | TSA |
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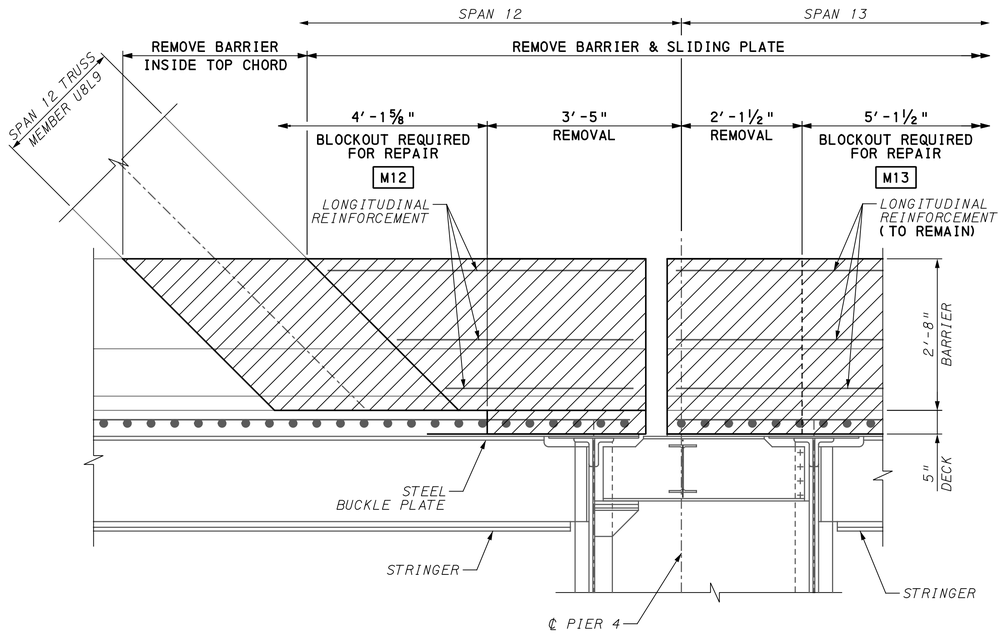
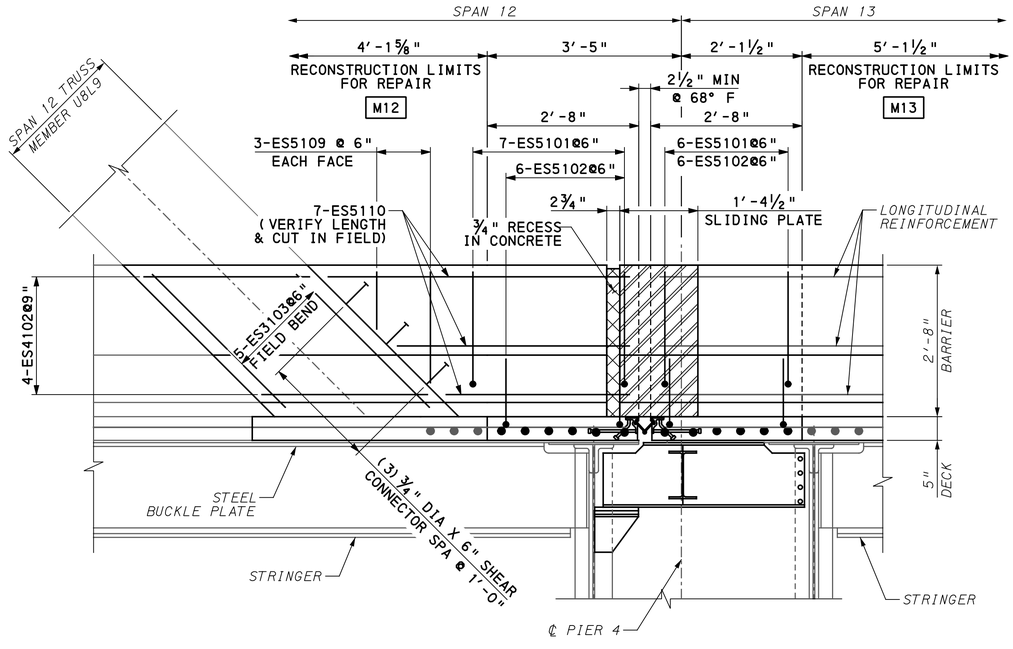



## SECTION PD9-PD9 (REMOVAL)

0 1 2 FEET




## SECTION PD9-PD9 (PROPOSED)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. WORK THIS SHEET WITH SHEET 90.
3. FOR DETAILS OF REPAIR M12 & M13, SEE SHEETS 81 AND 82.
4. FOR DETAILS OF SIDEWALK SUPPORT AT BARRIER, SEE SHEET 94.
5. FOR EXP DAM & SCUPPER REINFORCEMENT SCHEDULE, SEE SHEET 124.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## STRIP SEAL DAM DETAILS 5

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 96 OF 124
S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
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PLOTTED: 10/26/2022 8:07:43 AM
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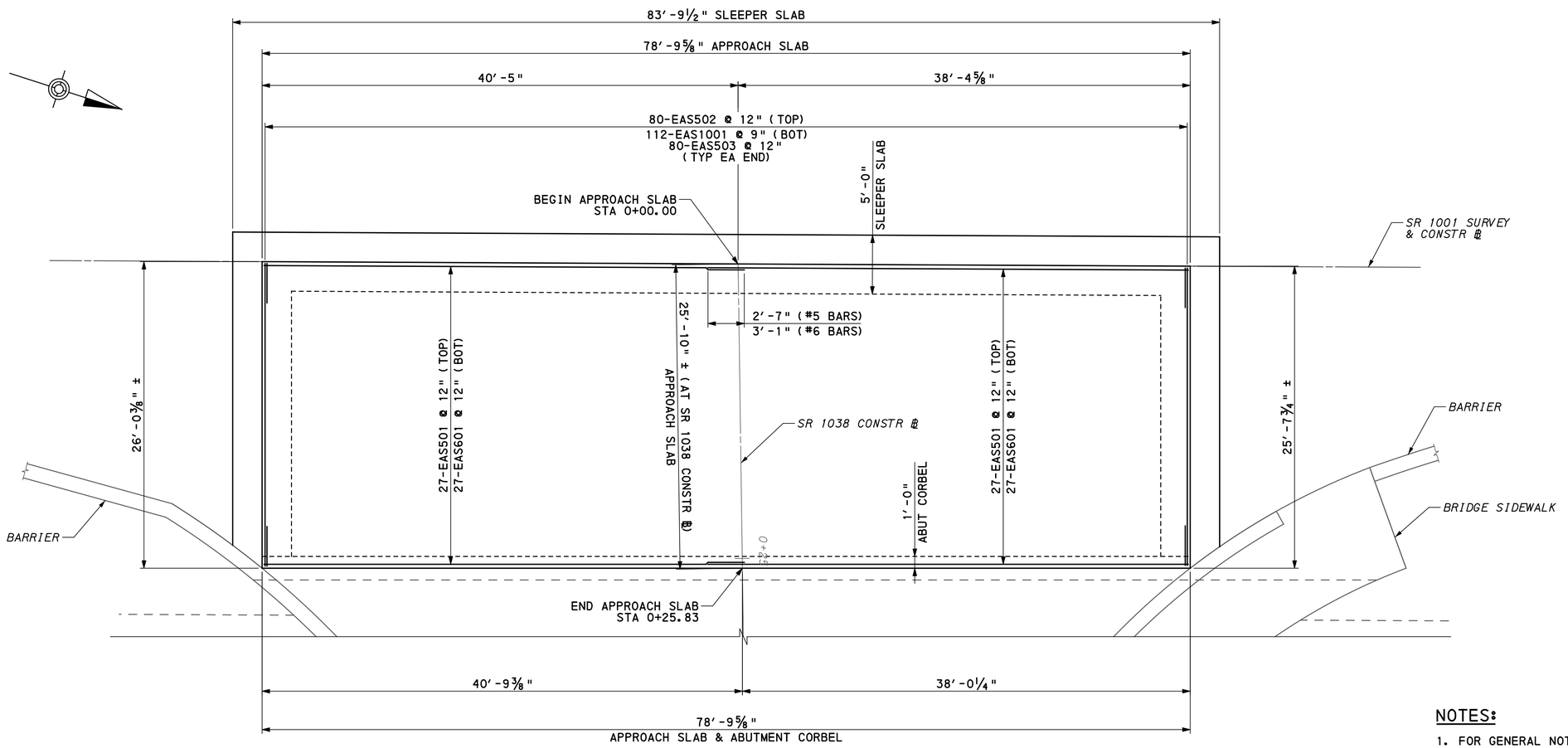


## APPROACH SLAB PLAN

0 5 10 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR APPROACH SLAB SECTIONS AND DETAILS, SEE SHEET 98.
3. FOR SLEEPER SLAB PLAN, SEE SHEET 99.
4. FOR REINFORCEMENT BAR SCHEDULE, SEE SHEET 100.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/WPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
APPROACH SLAB PLAN

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 97 OF 124
S - 40253

| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 9:44:28 AM
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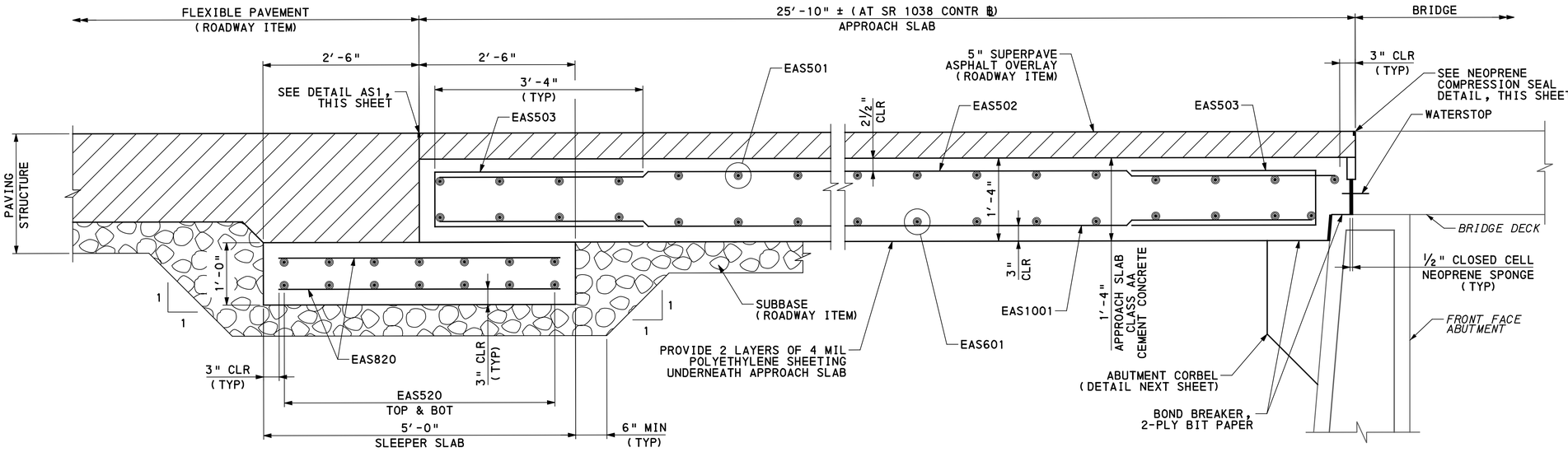
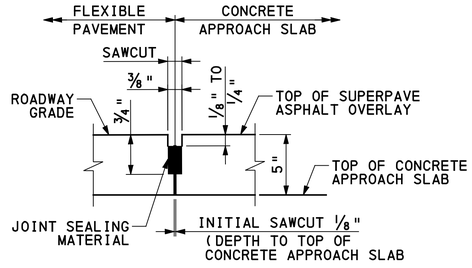


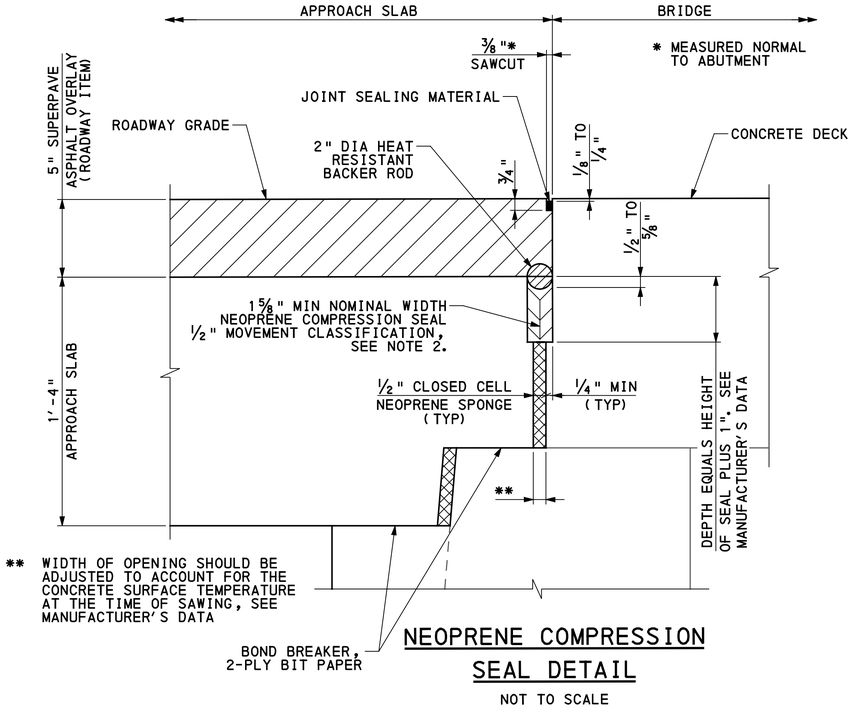

## TYPICAL LONGITUDINAL SECTION THROUGH APPROACH SLAB

0 3 6 9 1' 2'




## DETAIL AS1

NOT TO SCALE




## NEOPRENE COMPRESSION SEAL DETAIL

NOT TO SCALE

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR APPROACH SLAB PLAN, SEE SHEET 97.
3. FOR SLEEPER SLAB PLAN AND CORBEL DETAILS, SEE SHEET 99.
4. FOR REINFORCEMENT BAR SCHEDULE, SEE SHEET 100.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01

SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

## APPROACH SLAB SECTIONS AND DETAILS

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — THOMAS SCOTT ANTHONY — ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 98 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | EAL | CKD: | TSA |
|---|---|---|---|---|---|---|---|

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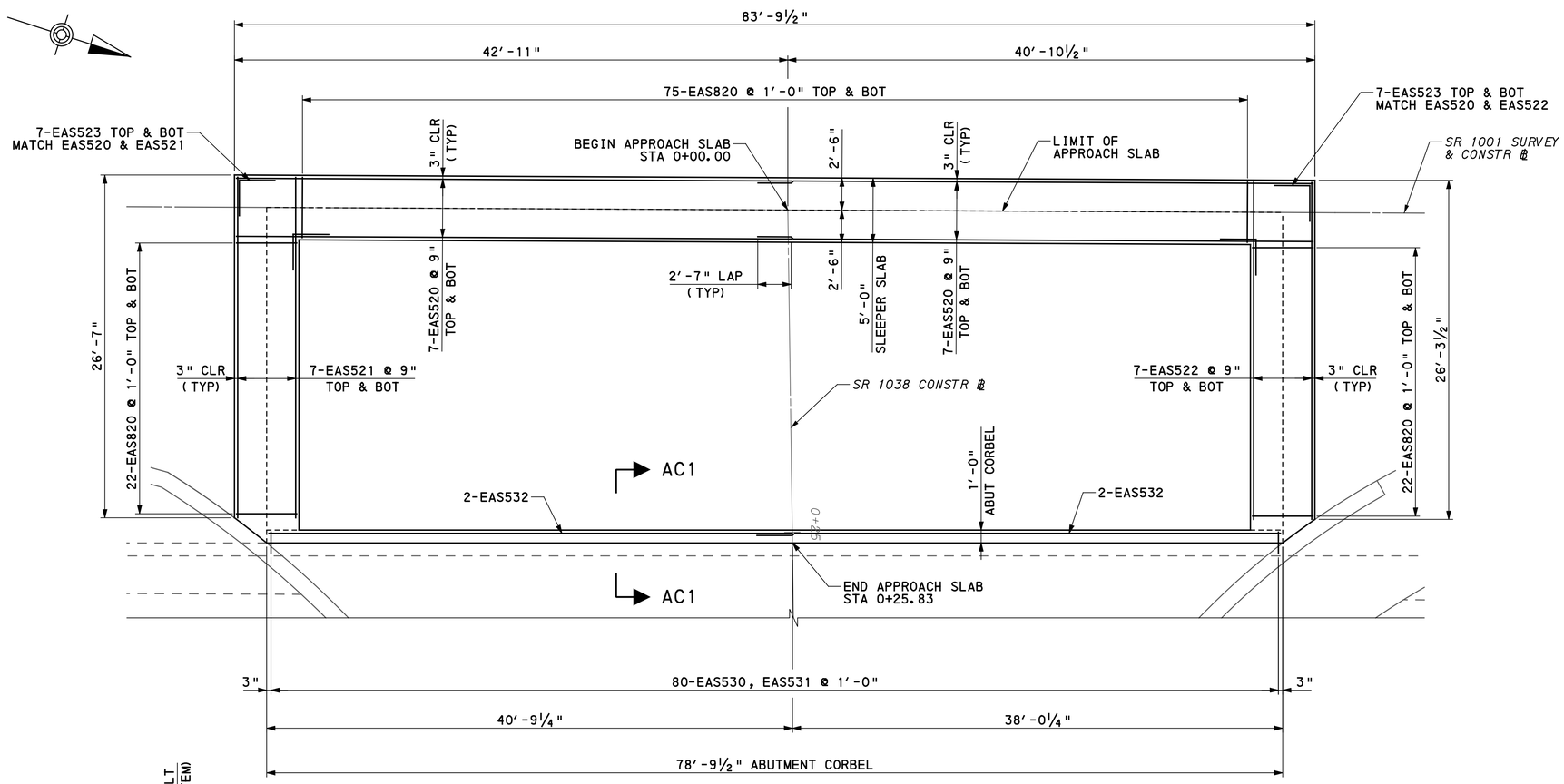
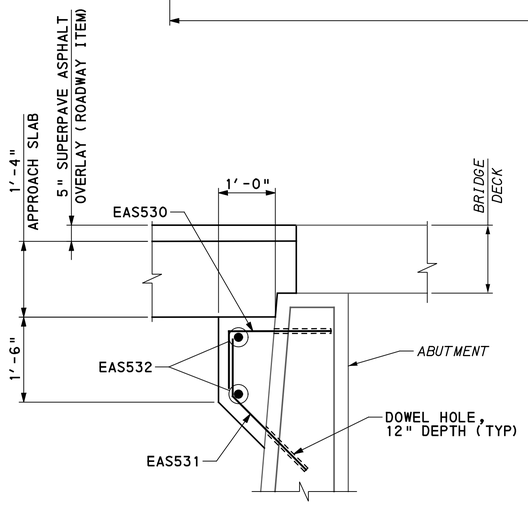



## SLEEPER SLAB PLAN

0 5 10 FEET




## SECTION AC1-AC1

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR APPROACH SLAB PLAN, SEE SHEET 97.
3. FOR APPROACH SLAB SECTIONS AND DETAILS, SEE SHEET 98.
4. FOR REINFORCEMENT BAR SCHEDULE, SEE SHEET 100.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## SLEEPER SLAB PLAN

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 99 OF 124

S - 40253

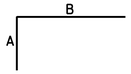
| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 8:07:49 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\Reinforcement Bar Schedule.dgn

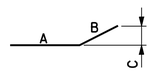
# REINFORCEMENT BAR SCHEDULE

| MARK | SIZE | NUMBER | LENGTH | TYPE | A | B | C | D | E | R | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROACH SLAB | | | | | | | | | | | |
| EAS501 | 5 | 54 | 40'-8" | STR | | | | | | | |
| EAS502 | 5 | 80 | 25'-3" TO 25'-8" | STR | | | | | | | VARY 8 EA BAR BY 1/2" |
| EAS503 | 5 | 160 | 7'-7 1/2" | 4 | 3'-4" | 11 1/2" | 3'-4" | | | | VARY EA BAR BY 2'-0" |
| EAS601 | 6 | 54 | 41'-0" | STR | | | | | | | |
| EAS1001 | 10 | 112 | 24'-9" TO 25'-2" | STR | | | | | | | VARY 8 EA BY 3/8" |
| SLEEPER SLAB | | | | | | | | | | | |
| EAS520 | 5 | 28 | 41'-2" | STR | | | | | | | |
| EAS521 | 5 | 14 | 26'-4" | STR | | | | | | | |
| EAS522 | 5 | 14 | 26'-1" | STR | | | | | | | |
| EAS523 | 5 | 28 | 5'-6" | 10 | 2'-9" | 2'-9" | | | | | |
| EAS820 | 8 | 238 | 4'-8" | STR | | | | | | | |
| ABUTMENT CORBEL | | | | | | | | | | | |
| EAS530 | 5 | 80 | 2'-9" | 10 | 1'-9" | 1'-0" | | | | | |
| EAS531 | 5 | 80 | 2'-10" | 11 | 1'-10" | 1'-0" | 8 1/2" | | | | |
| EAS532 | 5 | 4 | 40'-8" | STR | | | | | | | |

(4)



(10)



(11)

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
3. E - INDICATES EPOXY COATED REBAR.
4. FOR ALL BAR TYPES SHOWN, DIMENSIONS A - E AND LENGTH ARE MEASURED ALONG OUTSIDE OF BAR. R IS MEASURED ALONG INSIDE OF BAR.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
APPROACH SLAB REINFORCEMENT SCHEDULE

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 100 OF 124

S - 40253

DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA

PLOTTED: 10/26/2022 8:07:52 AM
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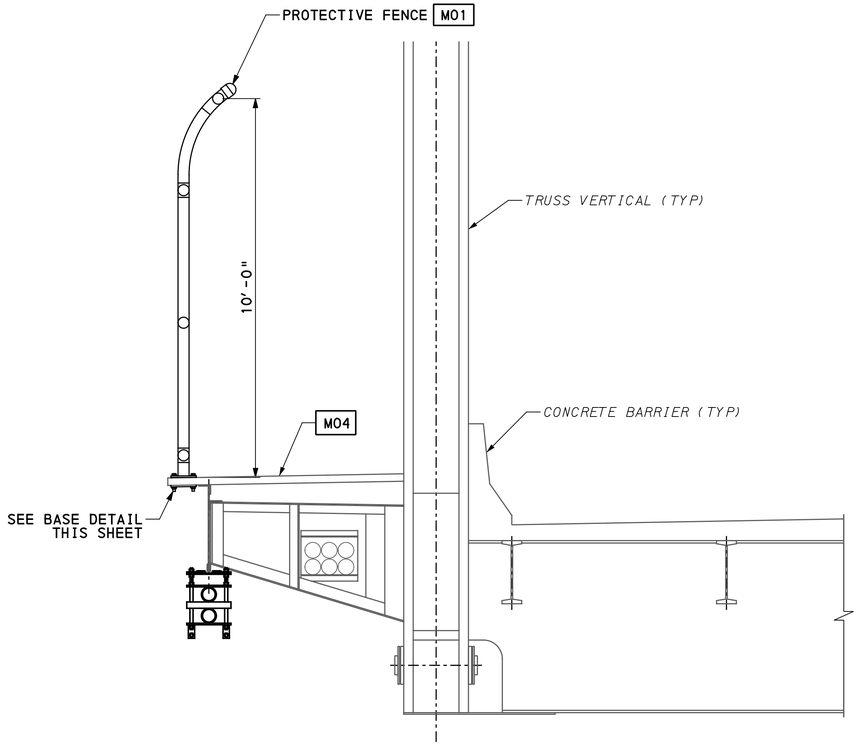



## TYPICAL FENCE SECTION

(TRUSS SPANS SHOWN; APPROACH SPANS SIMILAR, EXCEPT SPAN 14)

0 2 4 FEET

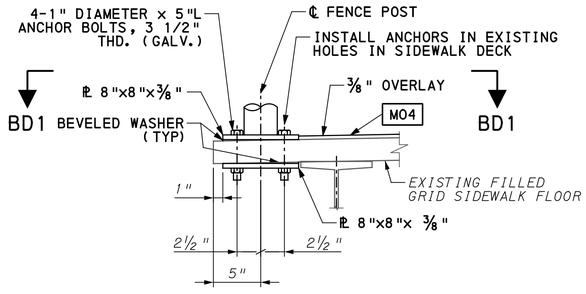
EXISTING FENCE BASE PLATE

EXISTING FENCE BASE PLATE UNDERSIDE

TYPICAL EXCEPT SPAN 14

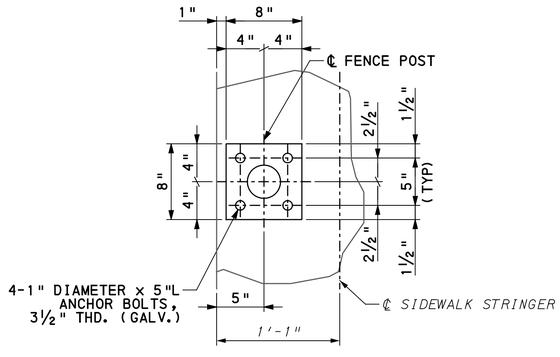
EXISTING FENCE ANCHORAGE

REUSE EXISTING ANCHOR BOLTS, SPAN 14 ONLY




## BASE DETAIL

0 6 1 FOOT




## SECTION BD1-BD1

0 6 1 FOOT

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DECK AND SIDEWALK PLANS, SEE SHEETS 76 TO 79.
3. FOR FENCE DETAILS NOT SHOWN, SEE BC-701M.
4. FOR NOTES REGARDING GATE DETAILS AND LOCATIONS IN FENCE, SEE SHEET 78.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01

SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# STRUCTURE MOUNTED FENCE DETAILS 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

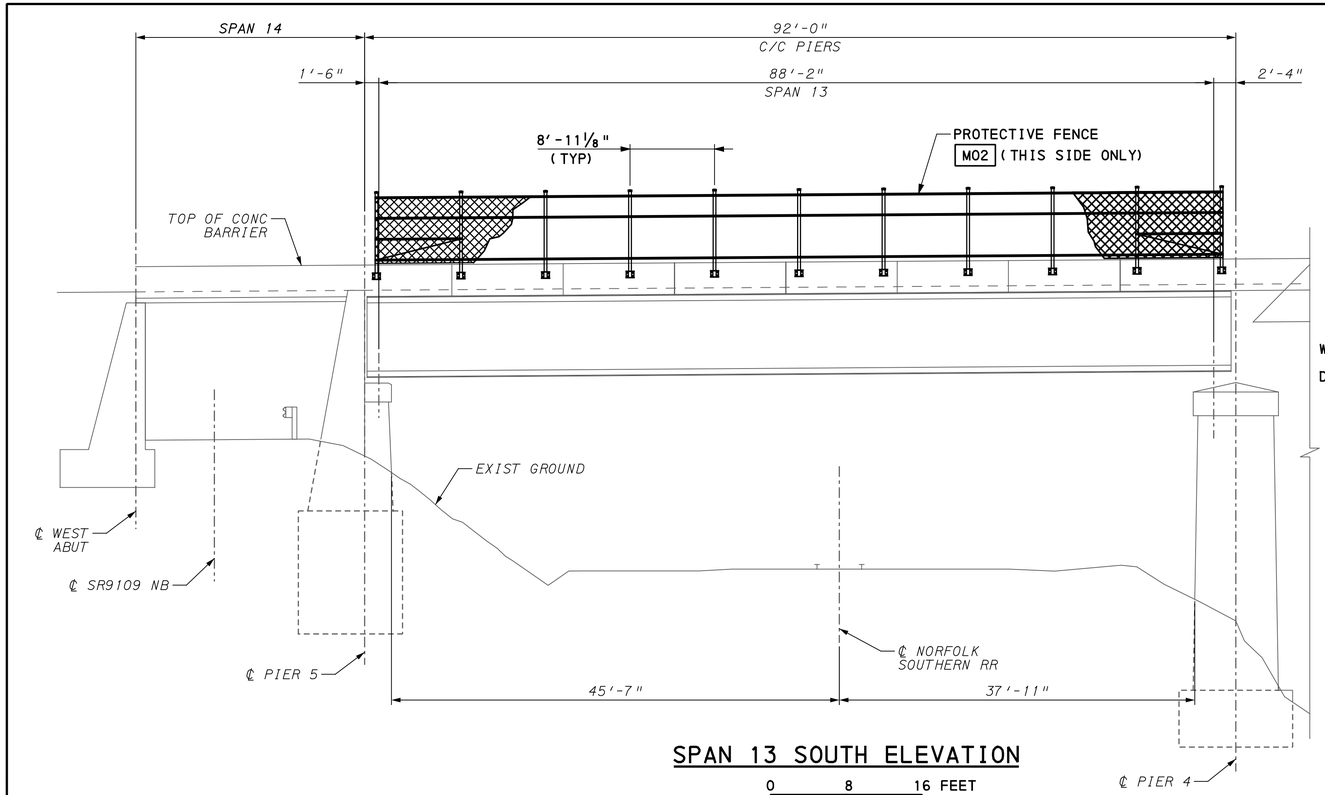
OCTOBER 26, 2022

SHEET 101 OF 124

S - 40253

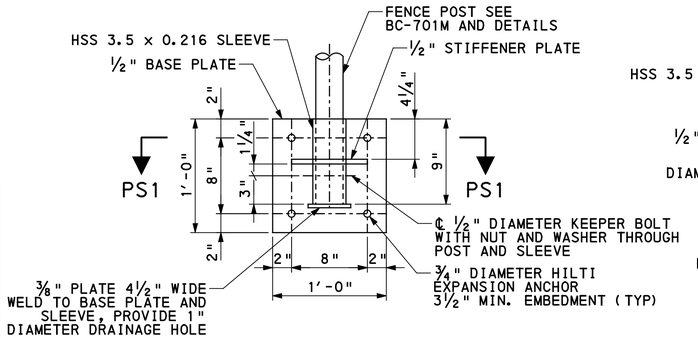
| DES: | TJH | CKD: | TSA | DWG: | EDS | CKD: | TSA |
|---|---|---|---|---|---|---|---|

PLOTTED: 10/26/2022 8:08:08 AM



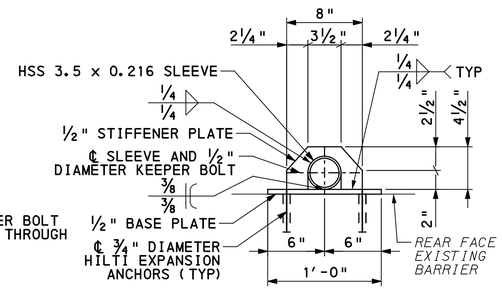

## SPAN 13 SOUTH ELEVATION

0 8 16 FEET




## PIPE SLEEVE CONNECTION DETAIL

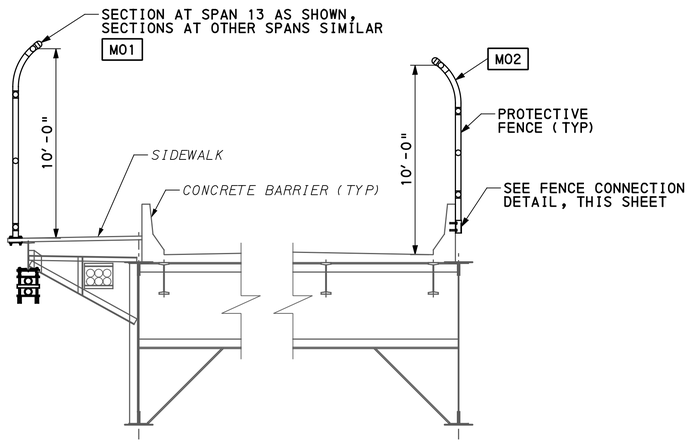
0 6 1 FOOT




## SECTION PS1-PS1

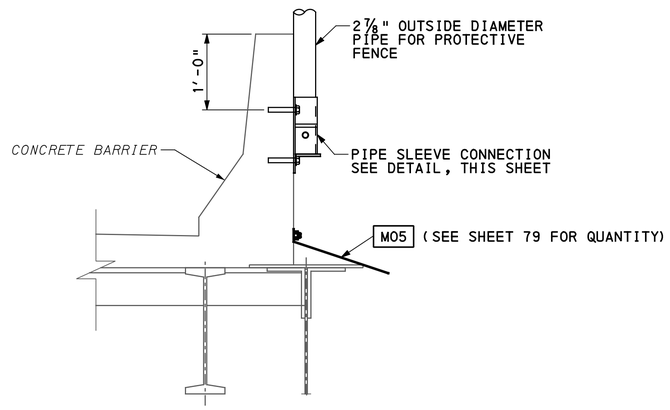
0 6 1 FOOT

## EXISTING FENCE CONNECTION




## SPAN 13 TYPICAL SECTION

0 2 4 6 FEET




## FENCE CONNECTION DETAIL

0 1 2 FEET

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR DECK AND SIDEWALK PLAN SP 12-14, SEE SHEET 79.
3. FOR DETAILS OF BARRIER FLASHING, SEE SHEET 30.
4. FOR DETAILS OF SIDEWALK FENCE, SEE SHEET 101.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# STRUCTURE MOUNTED FENCE DETAILS 2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 102 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: EDS | CKD: TSA |
|---|---|---|---|

FILE NAME: G:\17-0488 New Kensington Final\CADD\Structure\fencing details 2.dgn

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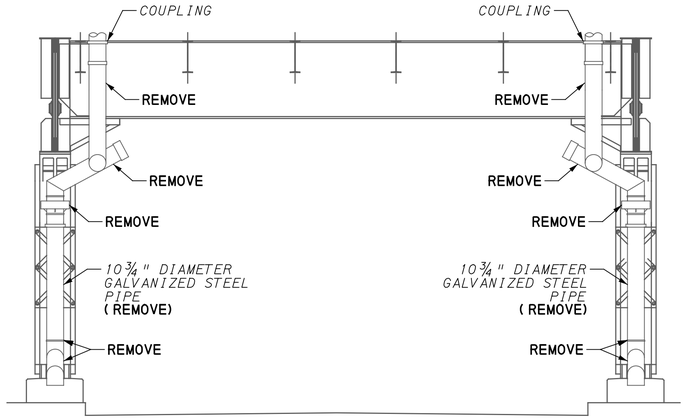
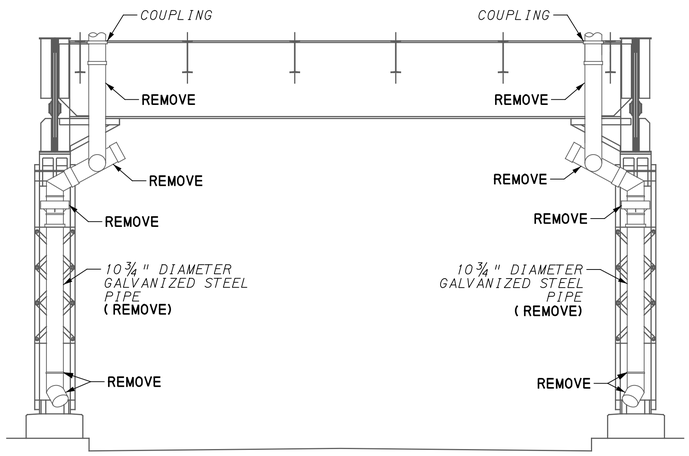


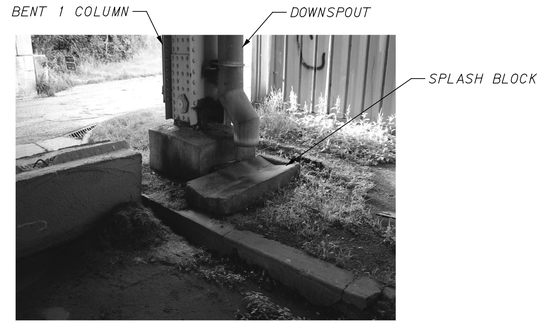

## BENT 1 ELEVATION (REMOVAL)

WEST FACE LOOKING EAST



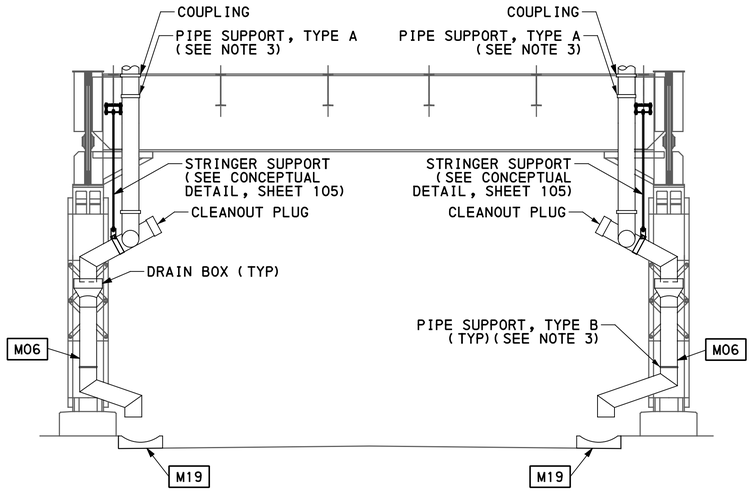

## BENT 2 - ELEVATION (REMOVAL)

WEST FACE LOOKING EAST



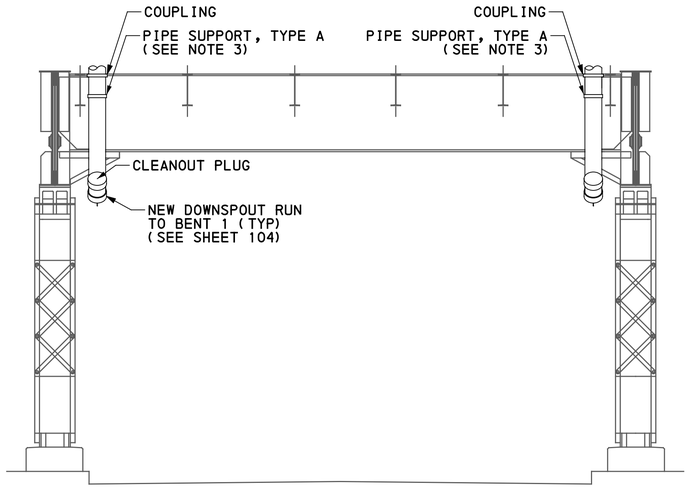

## BENT 1 DOWNSPOUT DISCHARGE

SOUTH COLUMN SHOWN; NORTH COLUMN SIMILAR
REPRESENTATIVE CONDITIONS




## BENT 1 ELEVATION (PROPOSED)

WEST FACE LOOKING EAST




## BENT 2 - ELEVATION (PROPOSED)

WEST FACE LOOKING EAST

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. CONTRACTOR MAY REUSE EXISTING DOWNSPOUT SUPPORTS UPON CONCURRENCE OF THE REPRESENTATIVE. PROVIDE NEW AND ADDITIONAL SUPPORTS TO MEET BC-751M REQUIREMENTS.
3. FOR DOWNSPOUT SUPPORT DETAILS, SEE SHEET 110.

### REPAIR DESCRIPTION AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| M06 | REPLACE DOWNSPOUTING | N/A | LF | 30 |
| M14 | INSTALL NEW DOWNSPOUT RUN | N/A | LF | 150 |
| M19 | INSTALL SPLASH BLOCK | 107 | EA | 2 |

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# BENTS 1 & 2 DRAINAGE DETAILS 1

RECOMMENDED

OCTOBER 26, 2022

SHEET 103 OF 124

S - 40253

PLOTTED: 10/26/2022 8:08:24 AM
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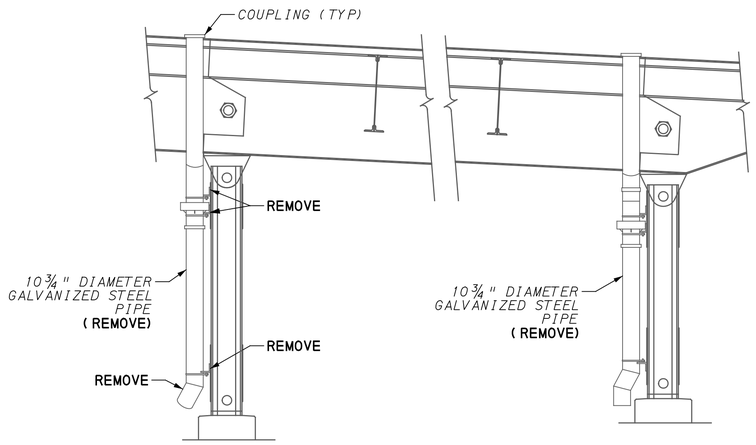
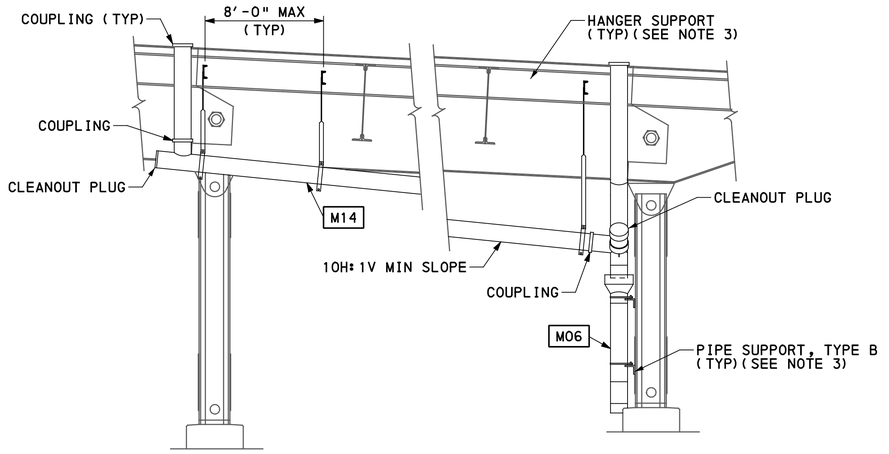



BENT 2 - END VIEW
SOUTH FACE LOOKING NORTH

BENT 1 - END VIEW
SOUTH FACE LOOKING NORTH

## REMOVAL
NORTH GIRDER SHOWN; SOUTH GIRDER OPPOSITE HAND




BENT 2 - END VIEW
SOUTH FACE LOOKING NORTH

BENT 1 - END VIEW
SOUTH FACE LOOKING NORTH

## PROPOSED
NORTH GIRDER SHOWN; SOUTH GIRDER OPPOSITE HAND

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. CONTRACTOR MAY REUSE EXISTING DOWNSPOUT SUPPORTS UPON CONCURRENCE OF THE REPRESENTATIVE. PROVIDE NEW AND ADDITIONAL SUPPORTS TO MEET BC-751M REQUIREMENTS.
3. FOR DOWNSPOUT SUPPORT DETAILS, SEE SHEET 110.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# BENTS 1 & 2 DRAINAGE DETAILS 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 104 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | TJH | CKD: | TSA |
|---|---|---|---|---|---|---|---|

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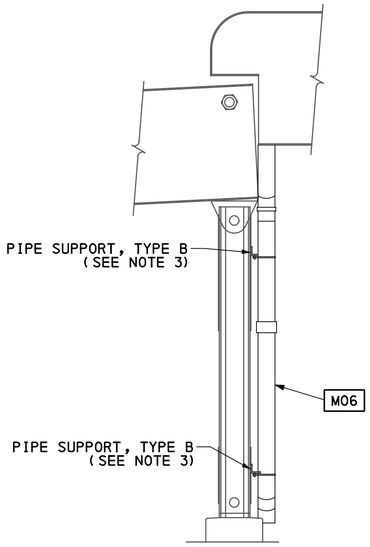
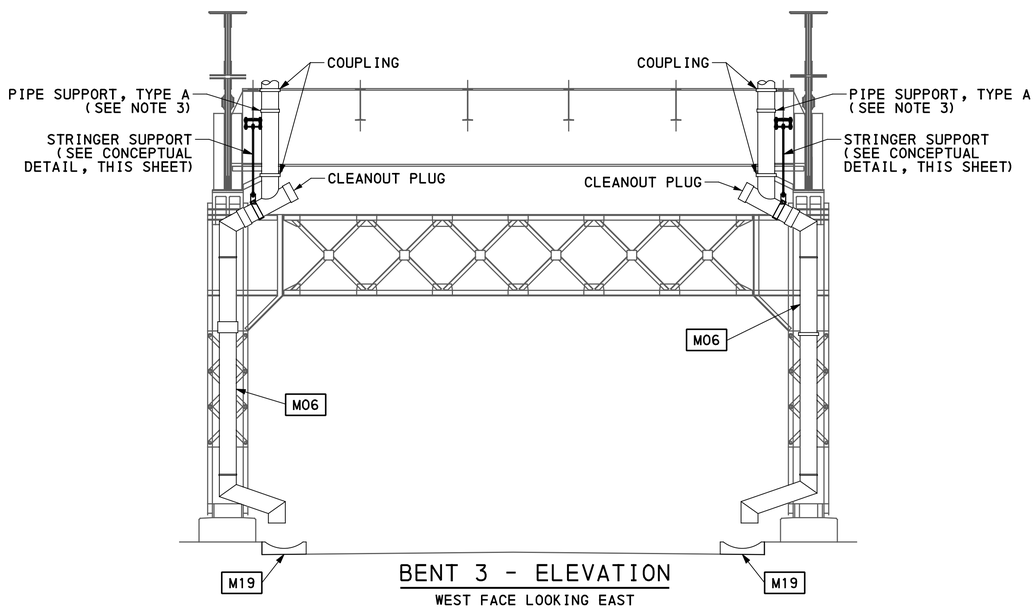
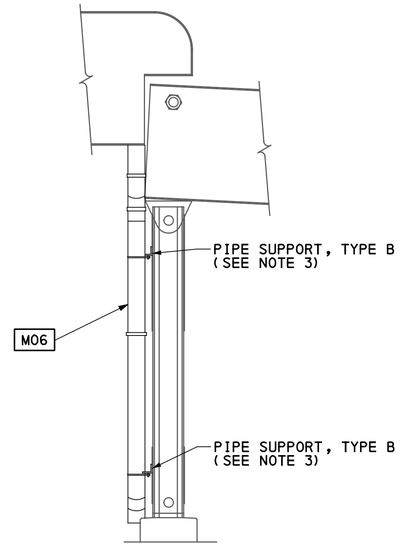


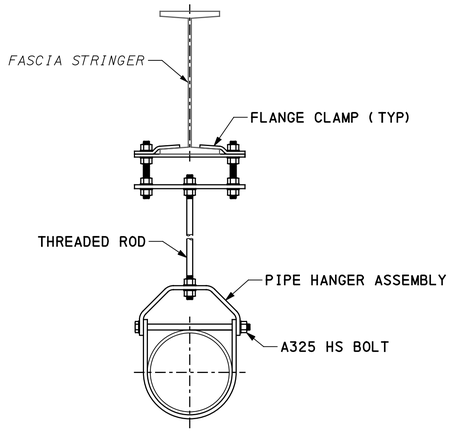

BENT 3 - END VIEW
NORTH FACE LOOKING SOUTH



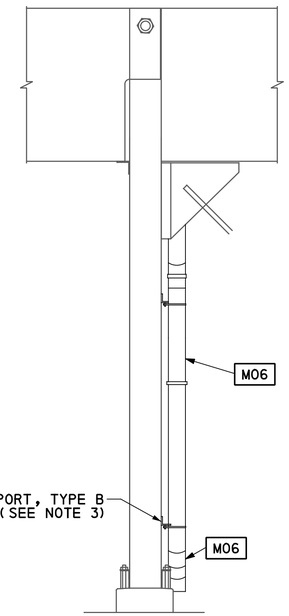

BENT 3 - ELEVATION
WEST FACE LOOKING EAST



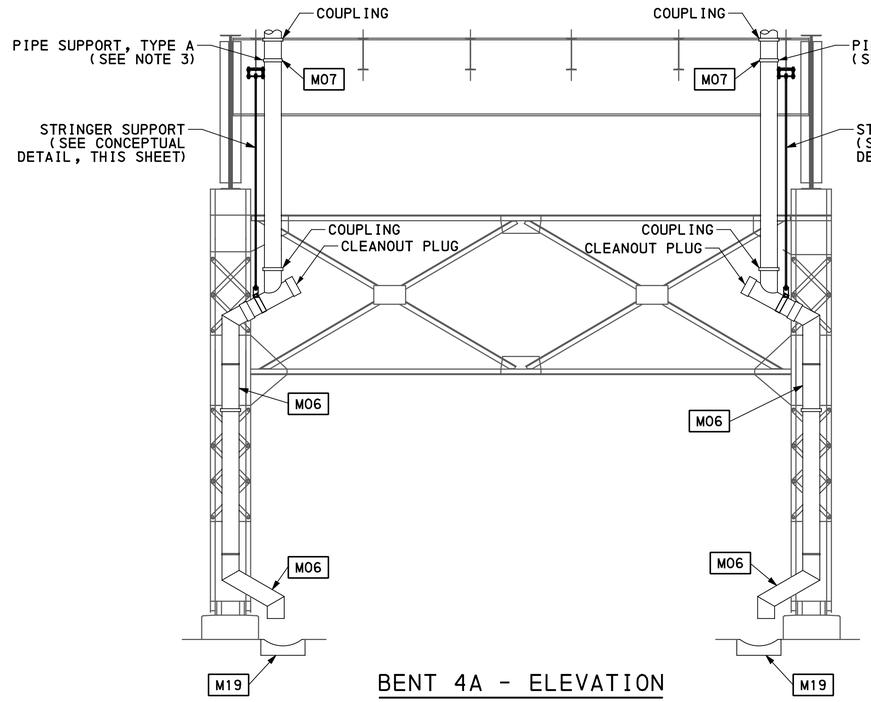

BENT 3 - END VIEW
SOUTH FACE LOOKING NORTH



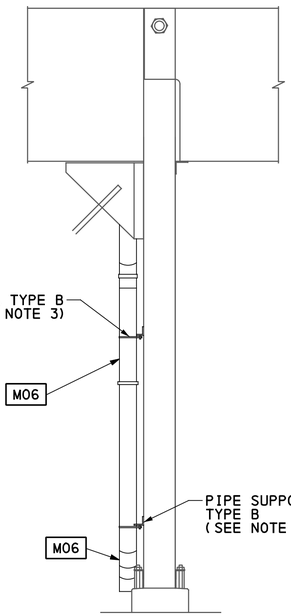

CONCEPTUAL STRINGER SUPPORT DETAIL
NOT TO SCALE




BENT 4A - END VIEW
SOUTH FACE LOOKING NORTH




BENT 4A - ELEVATION
EAST FACE LOOKING WEST




BENT 4A - END VIEW
NORTH FACE LOOKING SOUTH

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. CONTRACTOR MAY REUSE EXISTING DOWNSPOUT SUPPORTS UPON CONCURRENCE OF THE REPRESENTATIVE. PROVIDE NEW AND ADDITIONAL SUPPORTS TO MEET BC-751M REQUIREMENTS.
3. FOR DOWNSPOUT SUPPORT DETAILS, SEE SHEET 110.

REPAIR DESCRIPTION AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| M06 | REPLACE DOWNSPOUTING | N/A | LF | 120 |
| M19 | INSTALL SPLASH BLOCK | 107 | EA | 4 |

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
BENTS 3 & 4A DRAINAGE DETAILS

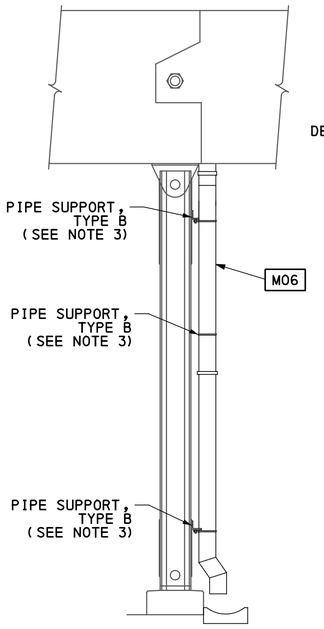
RECOMMENDED
OCTOBER 26, 2022

SHEET 105 OF 124

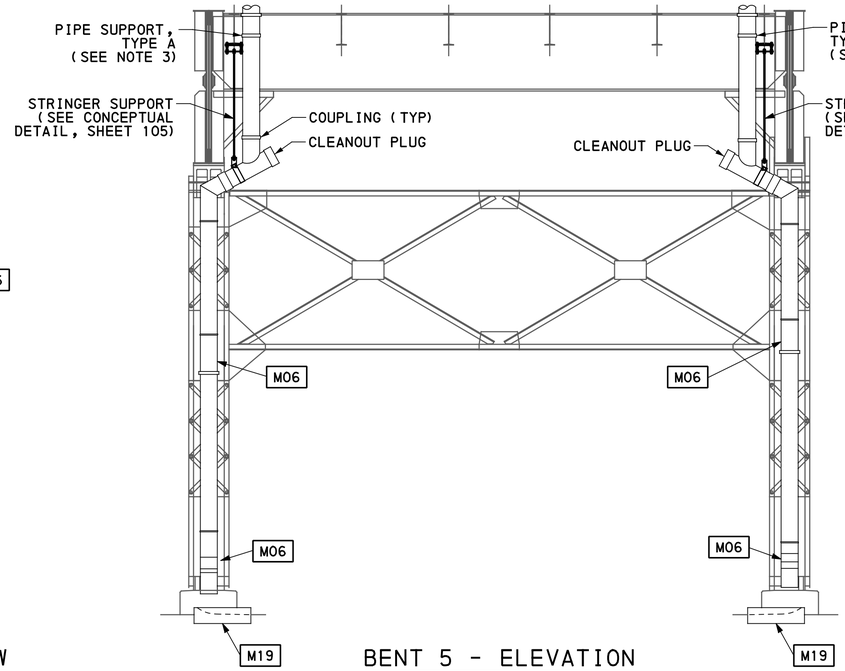
S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

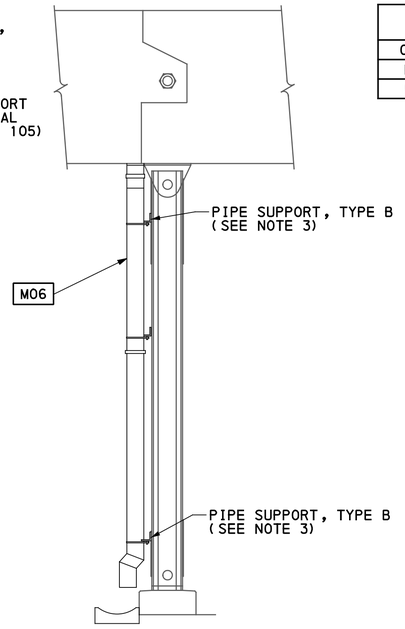
PLOTTED: 10/26/2022 8:08:29 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\drainage - bents 5 & 6.dgn




## BENT 5 - END VIEW
SOUTH FACE LOOKING NORTH



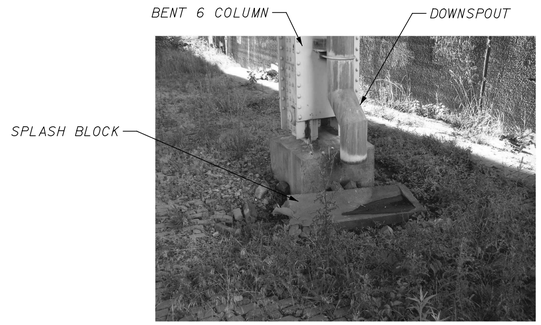

## BENT 5 - ELEVATION
EAST FACE LOOKING WEST



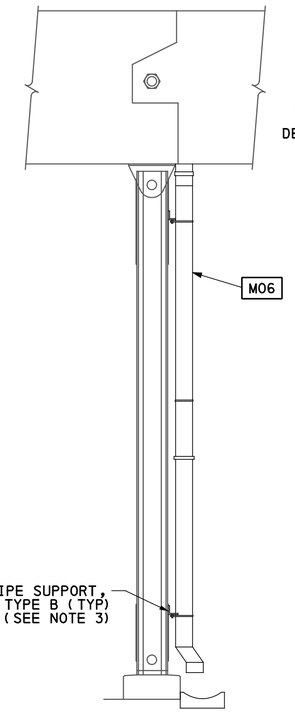

## BENT 5 - END VIEW
NORTH FACE LOOKING SOUTH

## REPAIR DESCRIPTION AND QUANTITIES

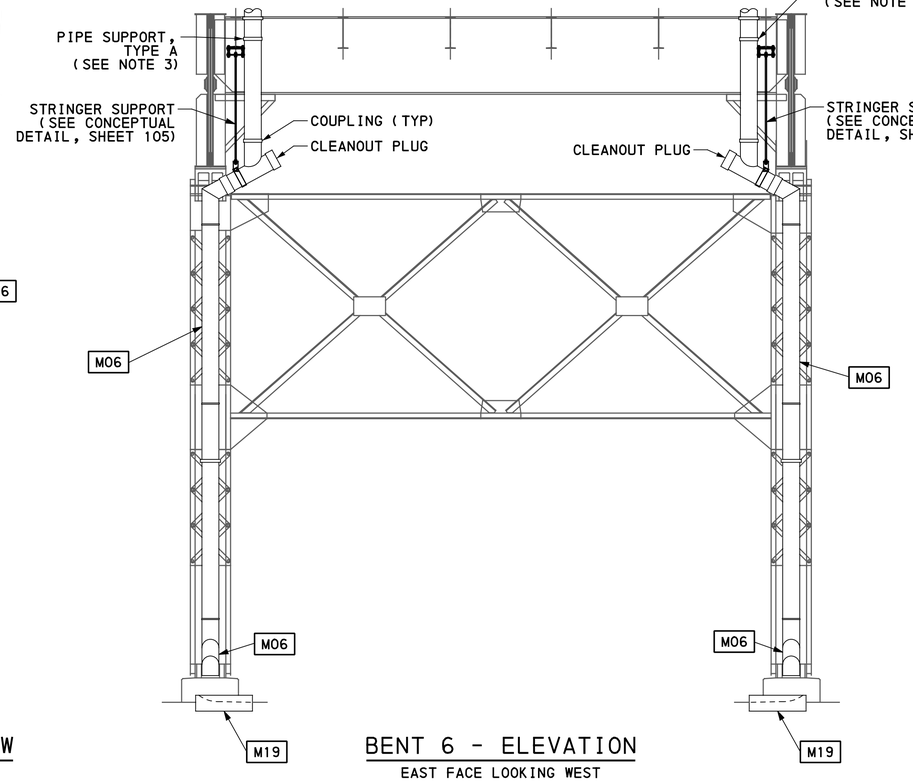
| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| M06 | REPLACE DOWNSPOUTING | N/A | LF | 120 |
| M19 | INSTALL SPLASH BLOCK | 107 | EA | 4 |



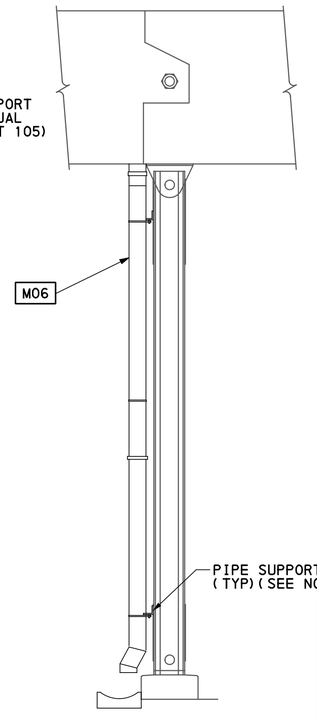

## BENT 6 DOWNSPOUT DISCHARGE
NORTH COLUMN SHOWN; SOUTH COLUMN SIMILAR REPRESENTATIVE CONDITIONS




## BENT 6 - END VIEW
SOUTH FACE LOOKING SOUTH




## BENT 6 - ELEVATION
EAST FACE LOOKING WEST




## BENT 6 - END VIEW
NORTH FACE LOOKING NORTH

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. CONTRACTOR MAY REUSE EXISTING DOWNSPOUT SUPPORTS UPON CONCURRENCE OF THE REPRESENTATIVE. PROVIDE NEW AND ADDITIONAL SUPPORTS TO MEET BC-751M REQUIREMENTS.
3. FOR DOWNSPOUT SUPPORT DETAILS, SEE SHEET 110.
4. FOR PLAN VIEW OF SPLASH BLOCK, SEE SHEET 107.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
# BENTS 5 & 6 DRAINAGE DETAILS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 106 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | TJH | CKD: | TSA |
|---|---|---|---|---|---|---|---|

PLOTTED: 10/26/2022 8:08:33 AM
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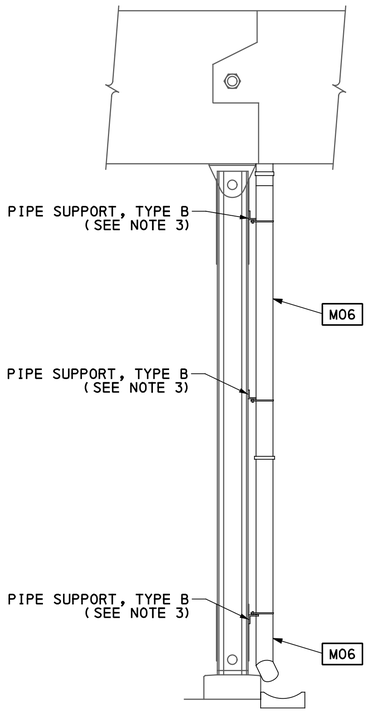
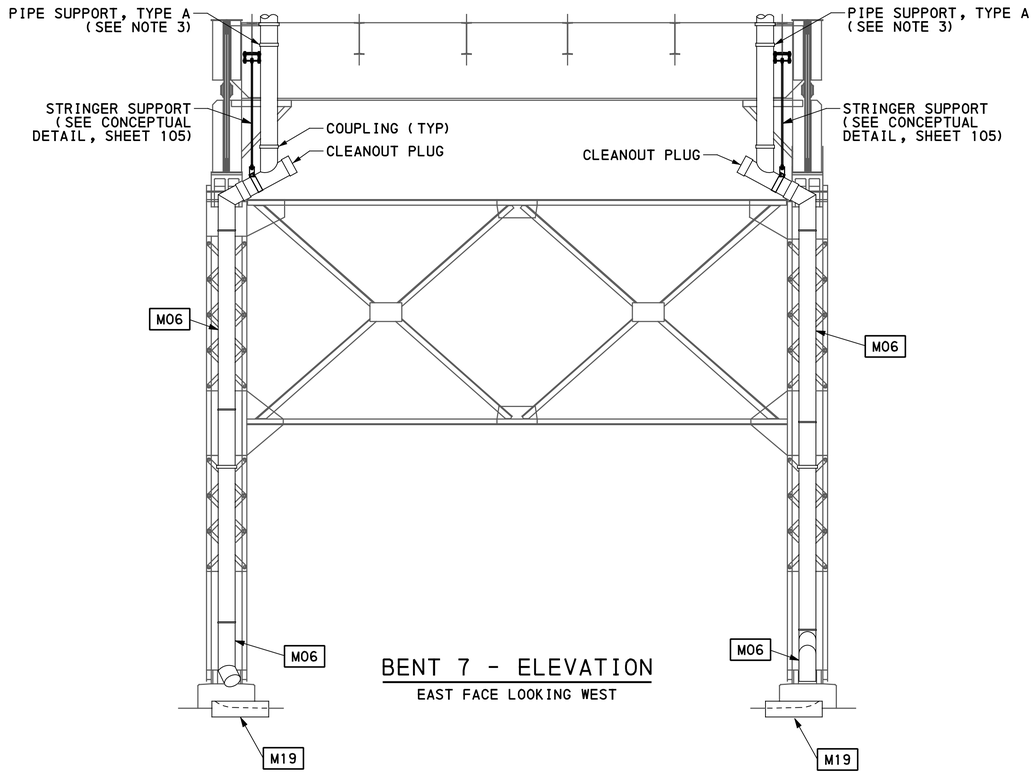
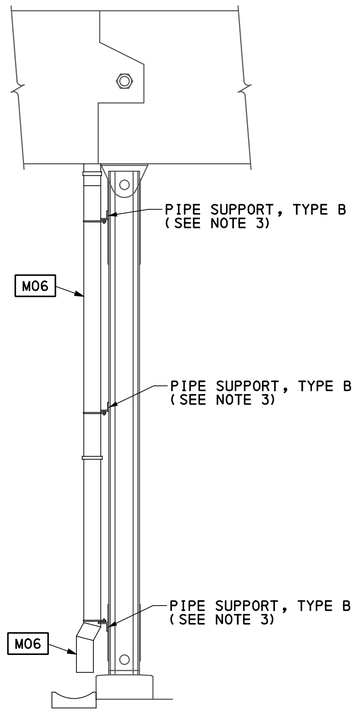


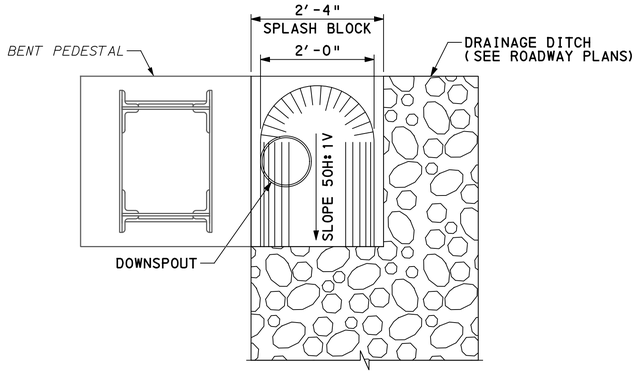

BENT 7 - END VIEW
SOUTH FACE LOOKING SOUTH




BENT 7 - ELEVATION
EAST FACE LOOKING WEST




BENT 7 - END VIEW
NORTH FACE LOOKING NORTH




SPLASH BLOCK PLAN VIEW
0 1 2 FEET

## REPAIR DESCRIPTION AND QUANTITIES

| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
|---|---|---|---|---|
| M06 | REPLACE DOWNSPOUTING | N/A | LF | 70 |
| M19 | INSTALL SPLASH BLOCK | 107 | EA | 2 |

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. CONTRACTOR MAY REUSE EXISTING DOWNSPOUT SUPPORTS UPON CONCURRENCE OF THE REPRESENTATIVE. PROVIDE NEW AND ADDITIONAL SUPPORTS TO MEET BC-751M REQUIREMENTS.
3. FOR DOWNSPOUT SUPPORT DETAILS, SEE SHEET 110.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## BENT 7 DRAINAGE DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 107 OF 124
S - 40253

DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

PLOTTED: 10/26/2022 8:08:36 AM
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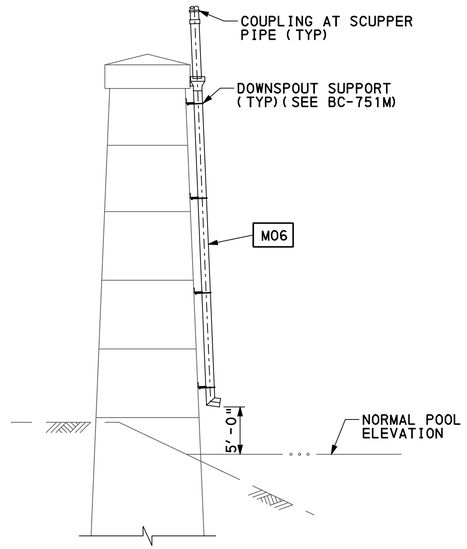
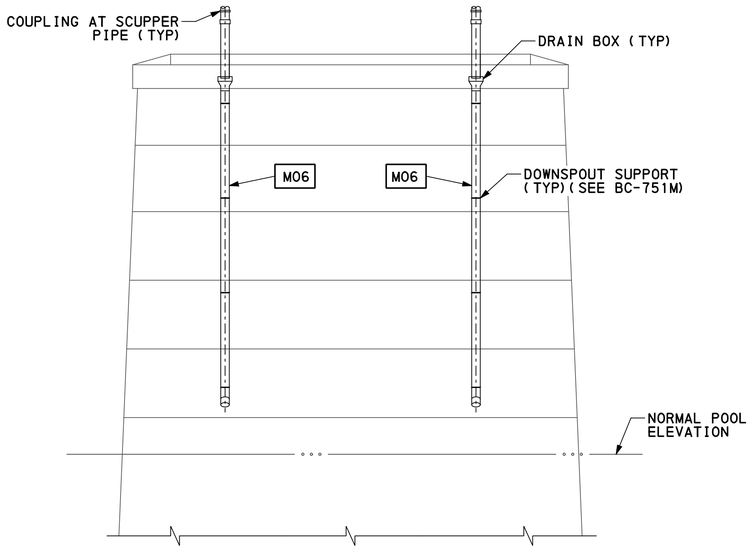


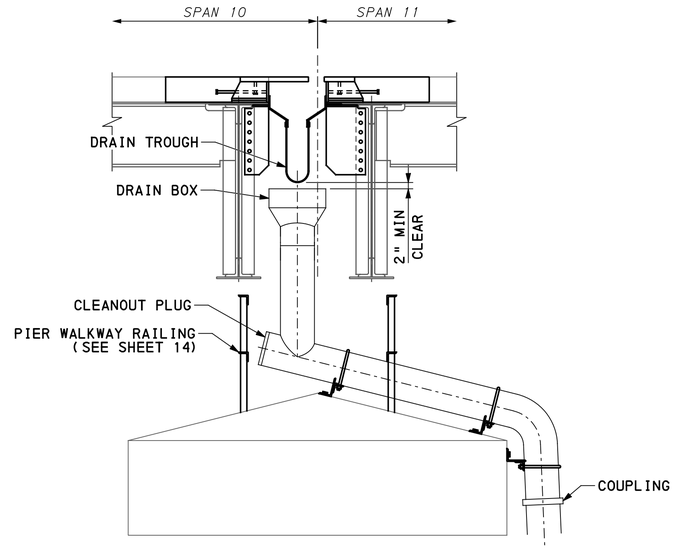

PIER 1 - NORTH FACE

NOT TO SCALE




PIER 1 - WEST FACE

NOT TO SCALE




DETAIL 1

NOT TO SCALE




PIER 2 - NORTH FACE

NOT TO SCALE




PIER 2 - WEST FACE

NOT TO SCALE

| REPAIR DESCRIPTION AND QUANTITIES | | | | |
|---|---|---|---|---|
| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
| M06 | REPLACE DOWNSPOUTING | N/A | LF | 200 |

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. CONTRACTOR MAY REUSE EXISTING PIPE SUPPORTS UPON CONCURRENCE OF THE REPRESENTATIVE. PROVIDE NEW AND ADDITIONAL SUPPORTS TO MEET BC-751M REQUIREMENTS.
3. FOR PIER REPAIR DETAILS, SEE SHEETS 13 AND 14.
4. FOR TOOTH JOINT DETAILS AT PIER 2, SEE SHEETS 87 TO 88.
5. FOR DRAINAGE TROUGH DETAILS, SEE SHEET 88.
6. FOR DOWNSPOUT SUPPORT DETAILS, SEE SHEET 110.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
# PIERS 1 & 2 DRAINAGE DETAILS

RECOMMENDED

OCTOBER 26, 2022

SHEET 108 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 8:08:41 AM
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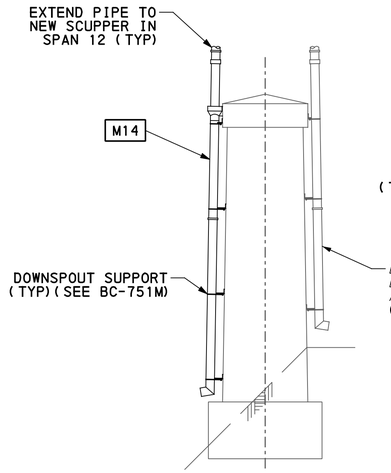
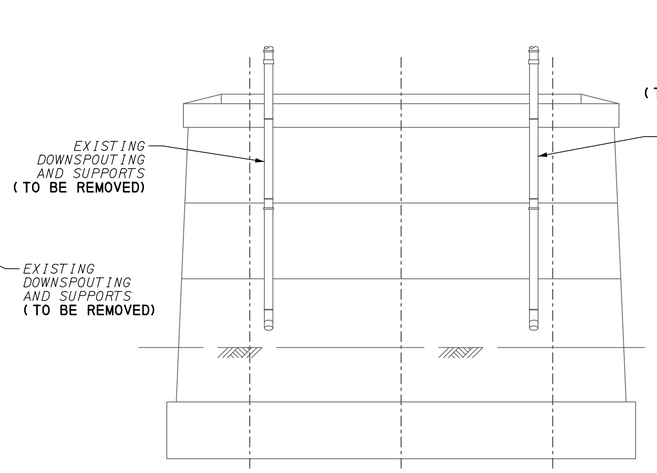
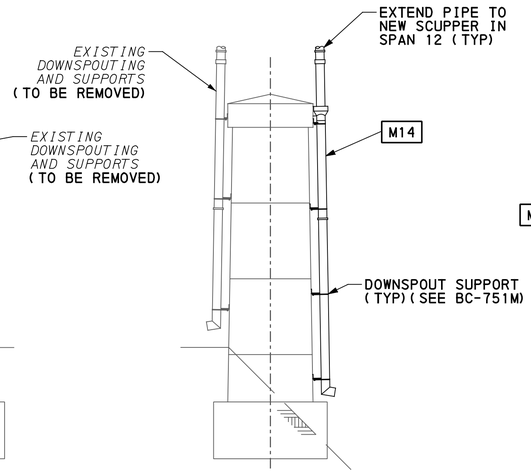


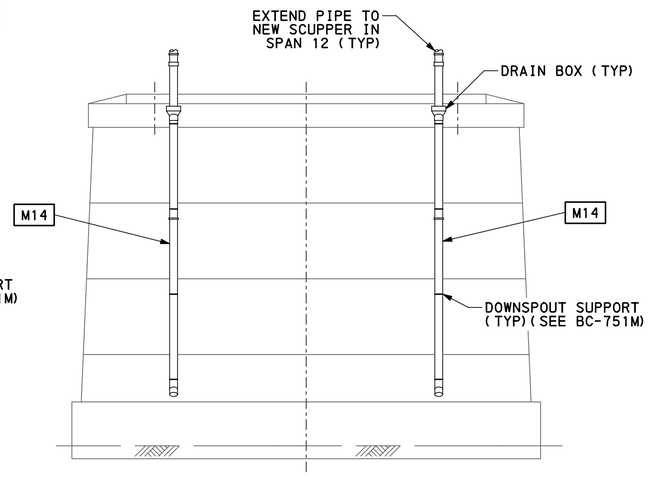

PIER 4 - NORTH FACE
NOT TO SCALE



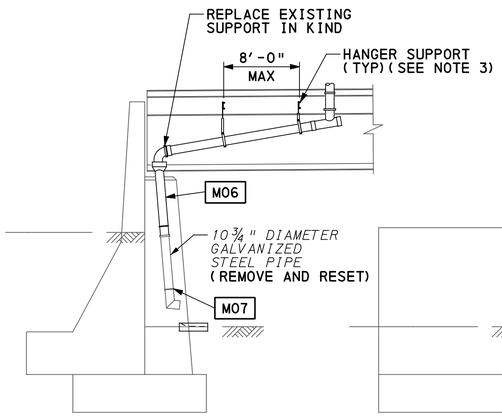

PIER 4 - WEST FACE
NOT TO SCALE



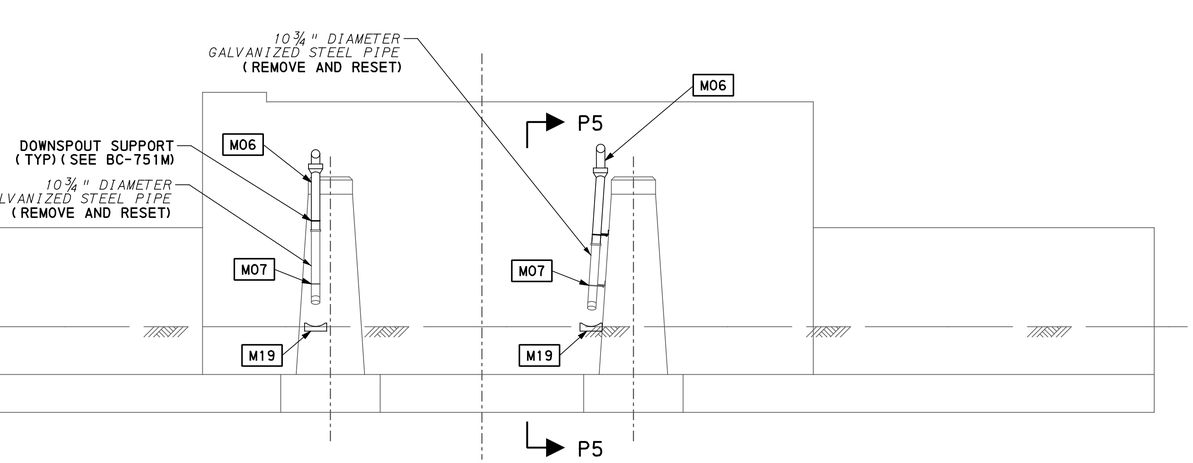

PIER 4 - SOUTH FACE
NOT TO SCALE




PIER 4 - EAST FACE
NOT TO SCALE




SECTION P5-P5
NOT TO SCALE




PIER 5 - EAST FACE
NOT TO SCALE

| REPAIR DESCRIPTION AND QUANTITIES | | | | |
|---|---|---|---|---|
| CODE | DESCRIPTION | SHEET | UNIT | QUANTITY |
| M06 | REPLACE DOWNSPOUTING | N/A | LF | 30 |
| M07 | REPLACE DOWNSPOUTING SUPPORT | N/A | EA | 2 |
| M14 | INSTALL NEW DOWNSPOUT RUN | N/A | LF | 80 |
| M19 | INSTALL Ssplash BLOCK | 107 | EA | 2 |

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR PIER REPAIR DETAILS, SEE SHEETS 16 AND 17.
3. FOR DOWNSPOUT HANGER SUPPORT DETAILS, SEE SHEET 110.
4. REMOVAL OF EXISTING DOWNSPOUTING FROM WEST FACE OF PIER 4 IS INCIDENTAL TO REPAIR M14.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
PIERS 4 & 5 DRAINAGE DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 109 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 8:08:43 AM
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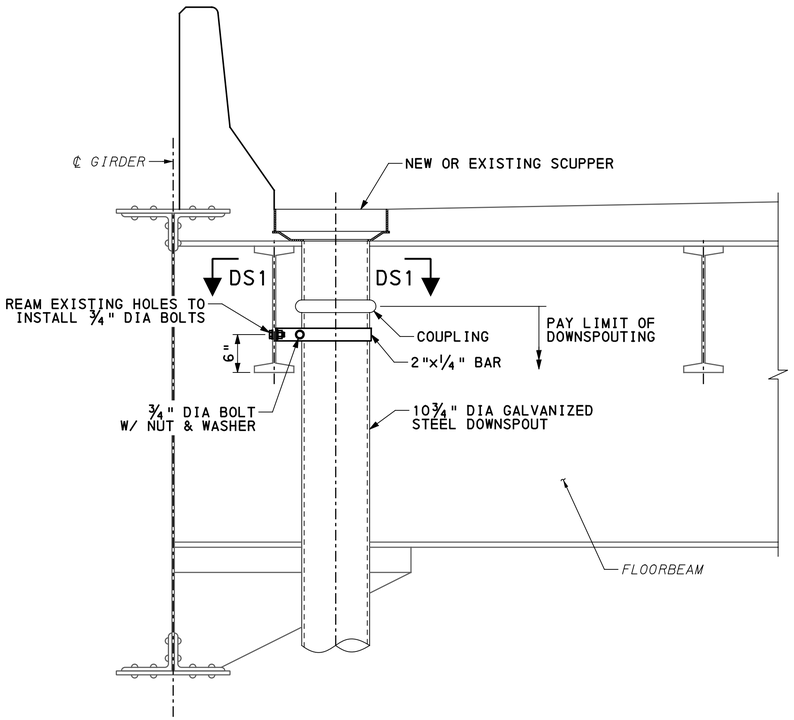
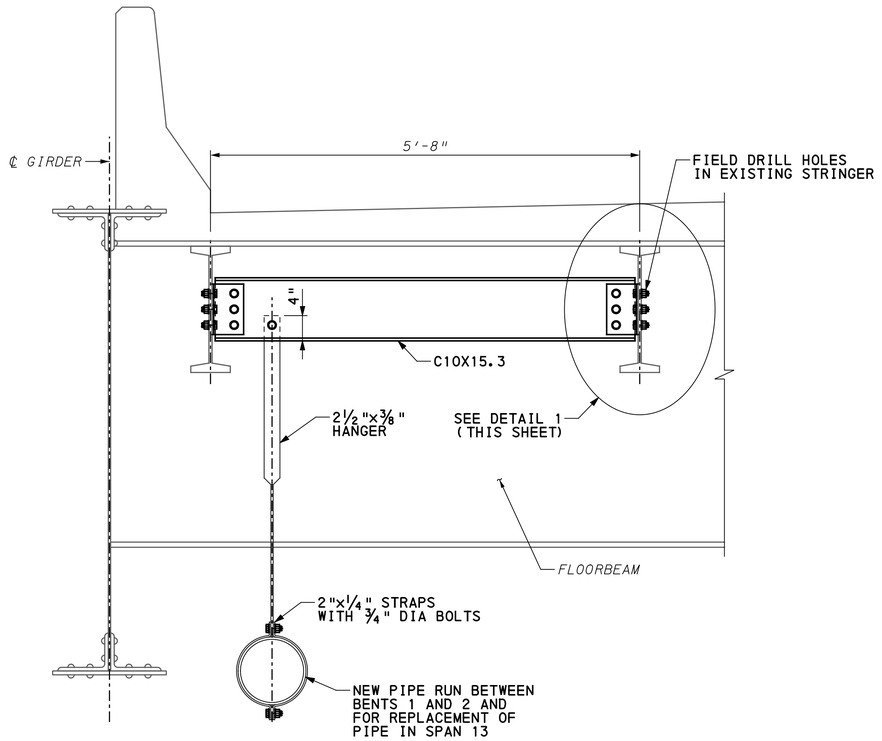



## DOWNSPOUT SUPPORT, TYPE A

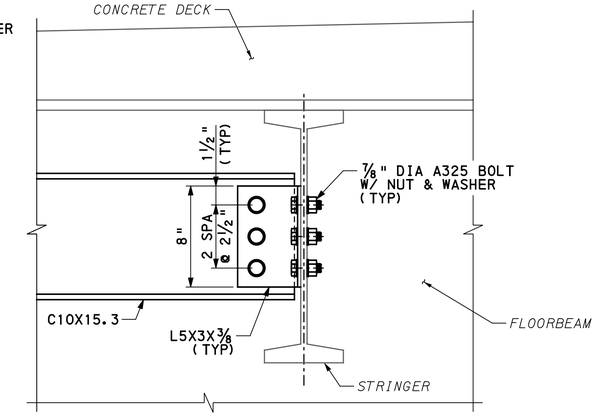
GIRDER SECTION SHOWN; TRUSS SECTION SIMILAR

0 1 2 FEET



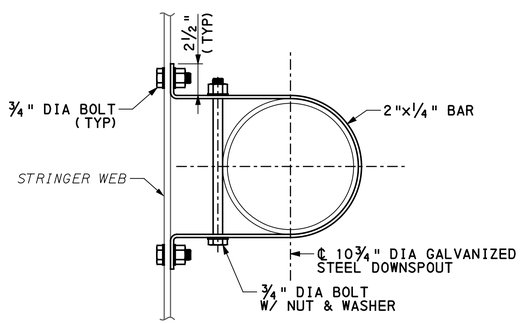

## DOWNSPOUT HANGER SUPPORT

0 1 2 FEET



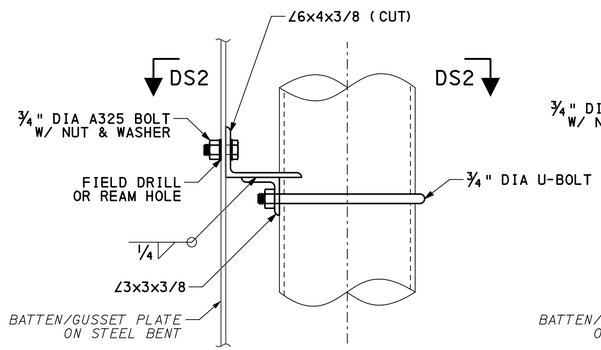

## DETAIL 1

0 6 1 FOOT



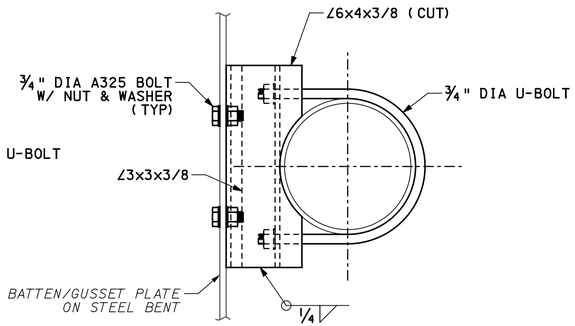

## SECTION DS1-DS1

NOT TO SCALE




## DOWNSPOUT SUPPORT, TYPE B

NOT TO SCALE




## SECTION DS2-DS2

NOT TO SCALE

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR ADDITIONAL DOWNSPOUT DETAILS NOT SHOWN, SEE BC-751M.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# DOWNSPOUT SUPPORT DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

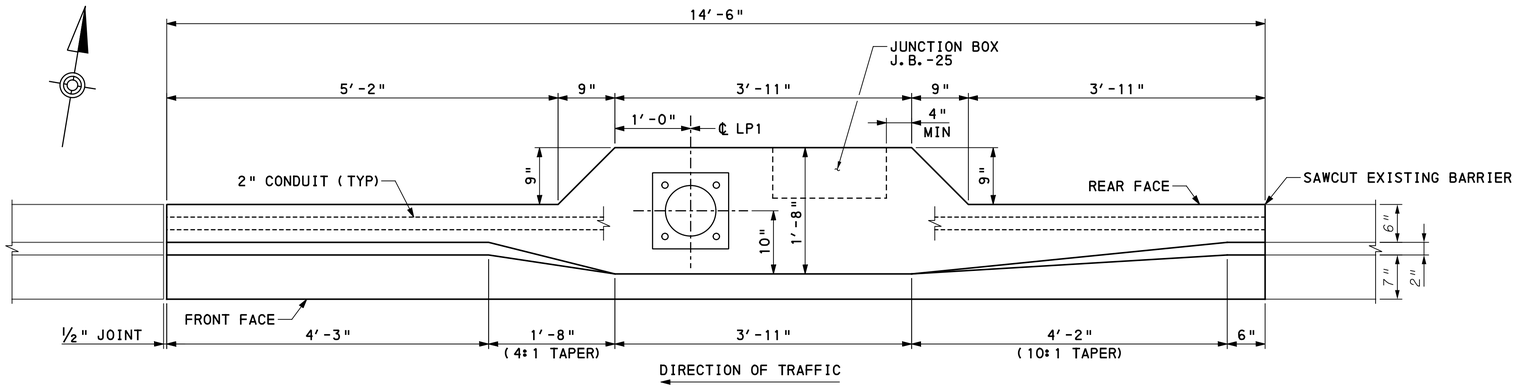
RECOMMENDED
OCTOBER 26, 2022

SHEET 110 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | TJH | CKD: | TSA |
|---|---|---|---|---|---|---|---|

PLOTTED: 10/26/2022 8:08:45 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP1.dgn



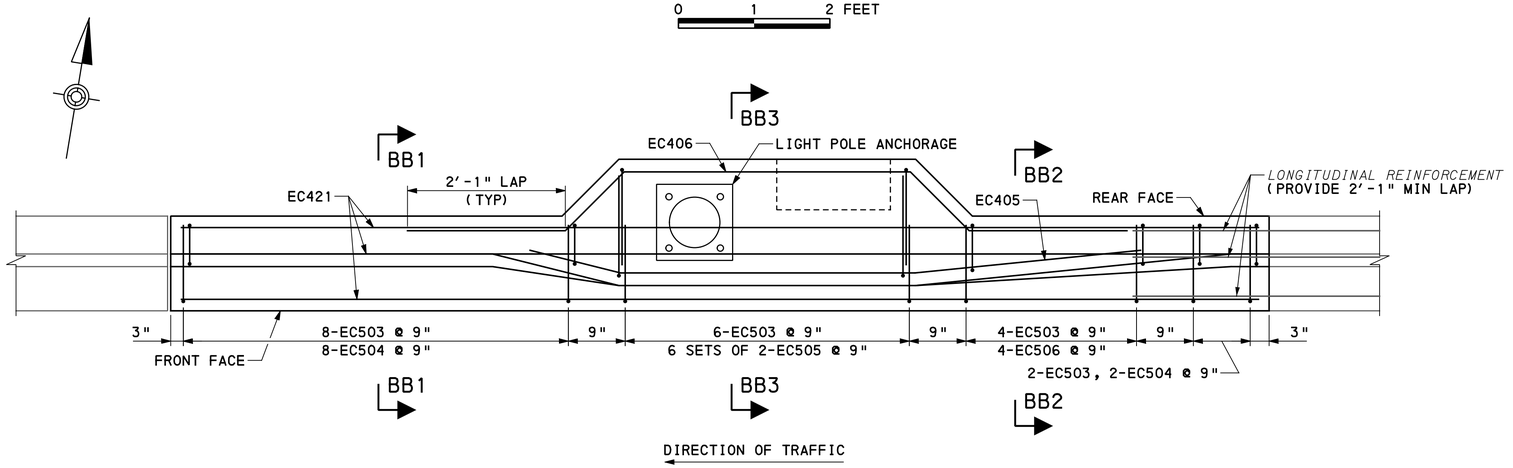

## LP1 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

0 1 2 FEET

## LIGHT POLE BLISTER - LP1

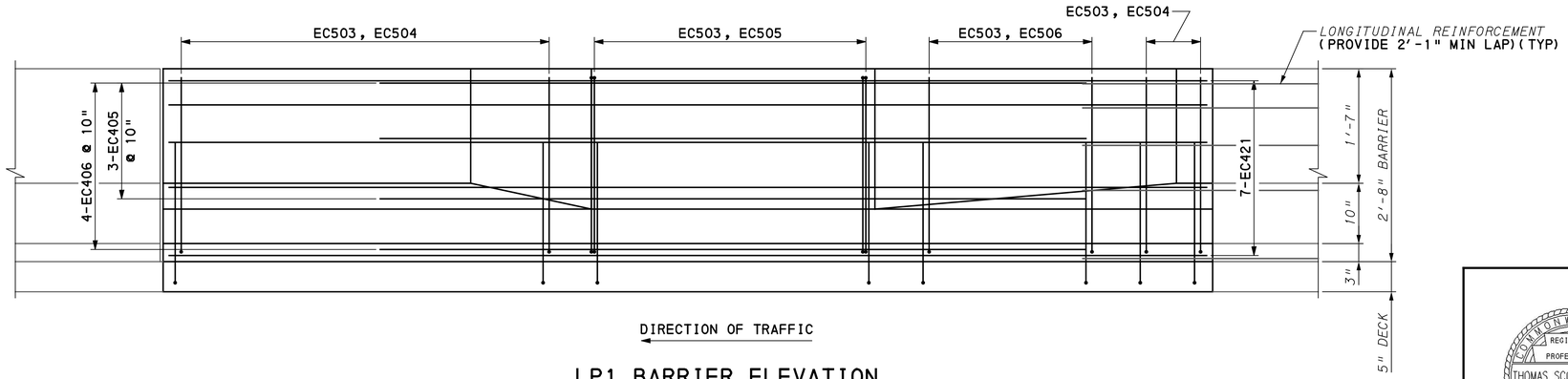
REPRESENTATIVE PHOTO




## LP1 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET




## LP1 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# LIGHT POLE BARRIER DETAILS - LP1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

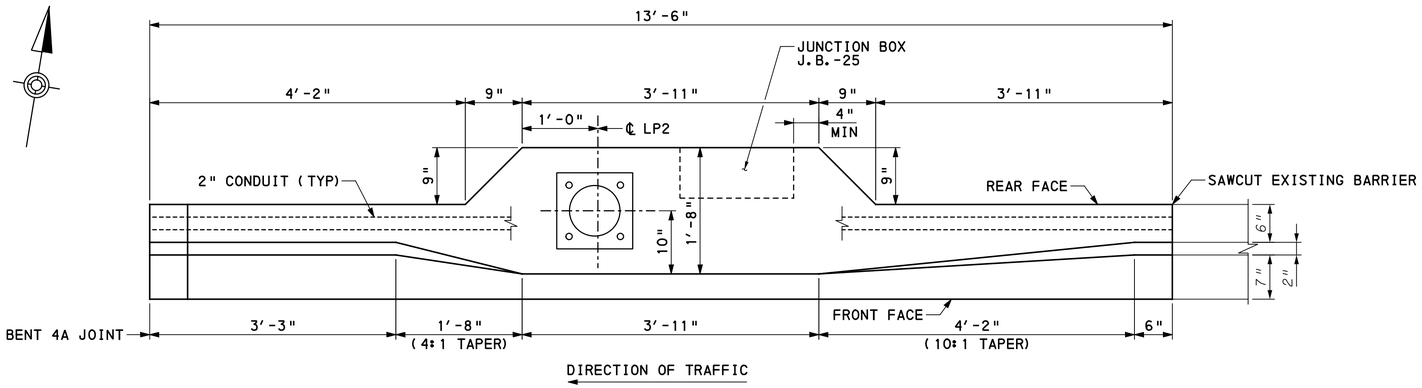
OCTOBER 26, 2022

SHEET 111 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | TJH | CKD: | TSA |
|---|---|---|---|---|---|---|---|

PLOTTED: 10/26/2022 8:08:49 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP2.dgn



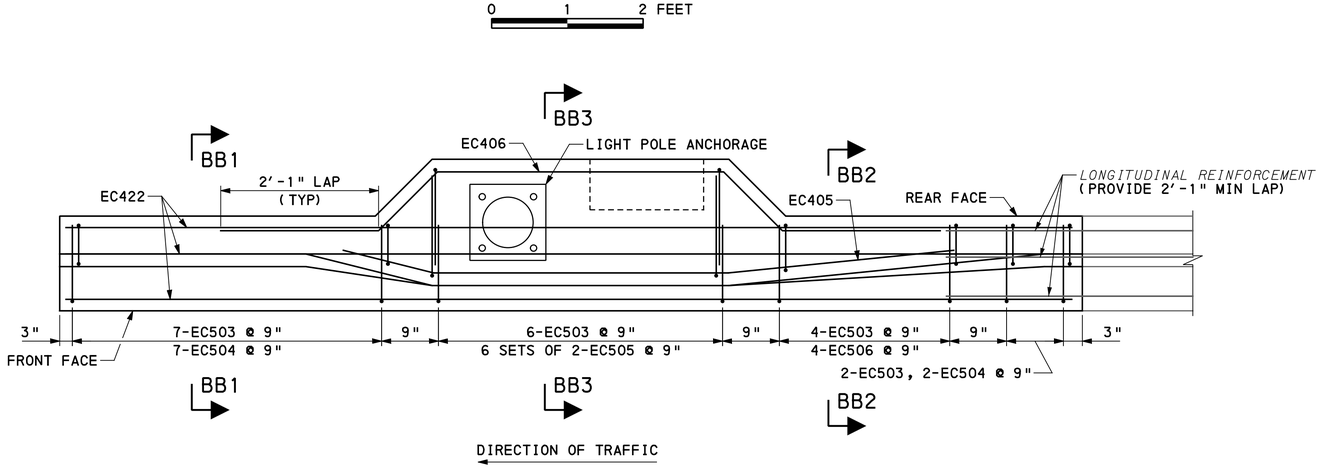

## LP2 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

0 1 2 FEET

## LIGHT POLE BLISTER - LP2

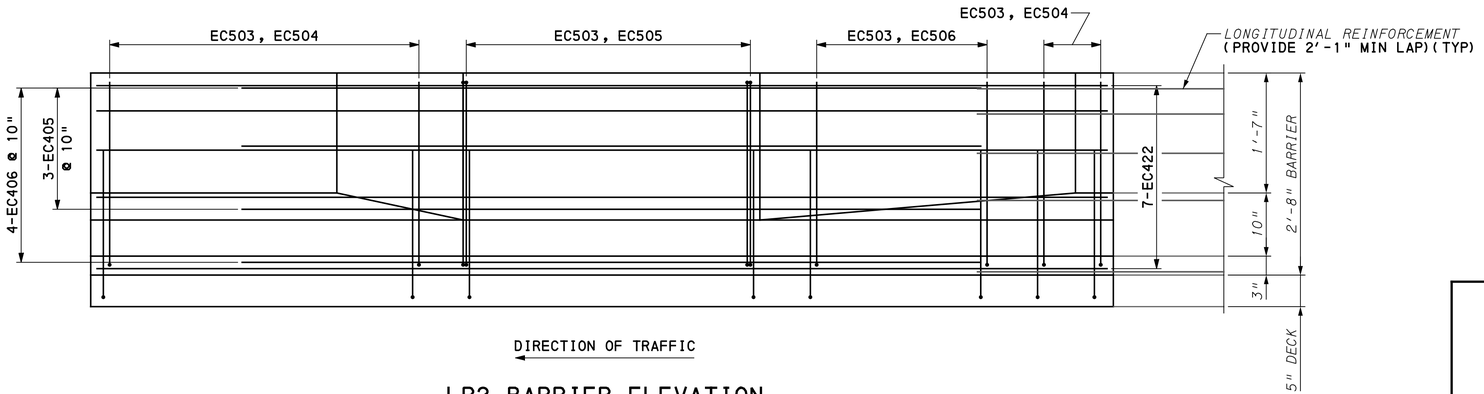
REPRESENTATIVE PHOTO




## LP2 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET




## LP2 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

| Mark | Description | By | Chk'd. | Recm'd. | Date |
|---|---|---|---|---|---|
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SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
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SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# LIGHT POLE BARRIER DETAILS - LP2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

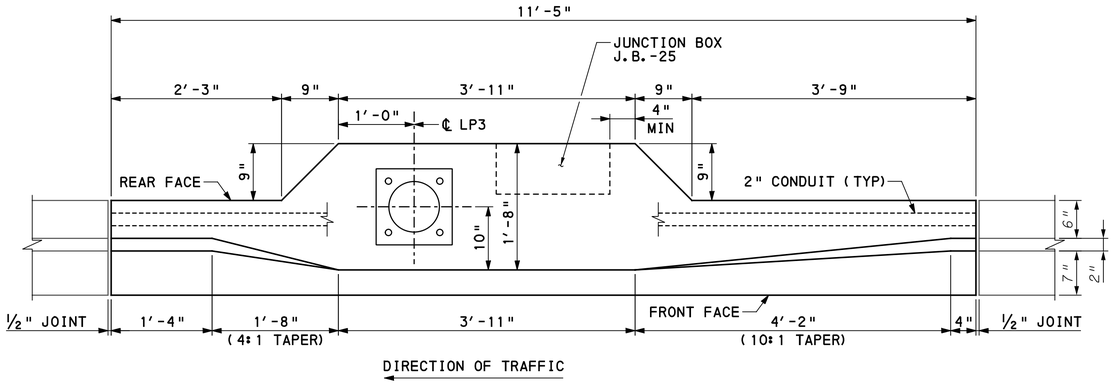
OCTOBER 26, 2022

SHEET 112 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | TJH | CKD: | TSA |
|---|---|---|---|---|---|---|---|

PLOTTED: 10/26/2022 8:08:57 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP3.dgn



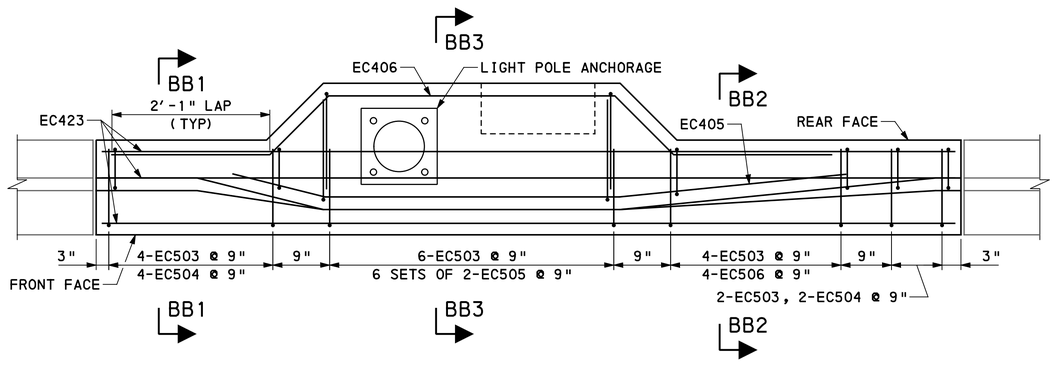

## LP3 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

0 1 2 FEET

## LIGHT POLE BLISTER - LP3

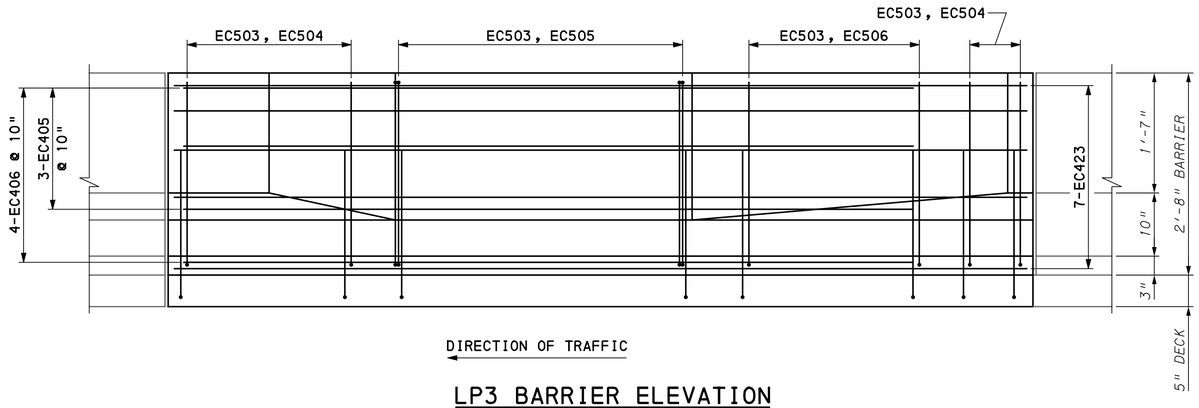
REPRESENTATIVE PHOTO




## LP3 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET




## LP3 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
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PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# LIGHT POLE BARRIER DETAILS - LP3

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

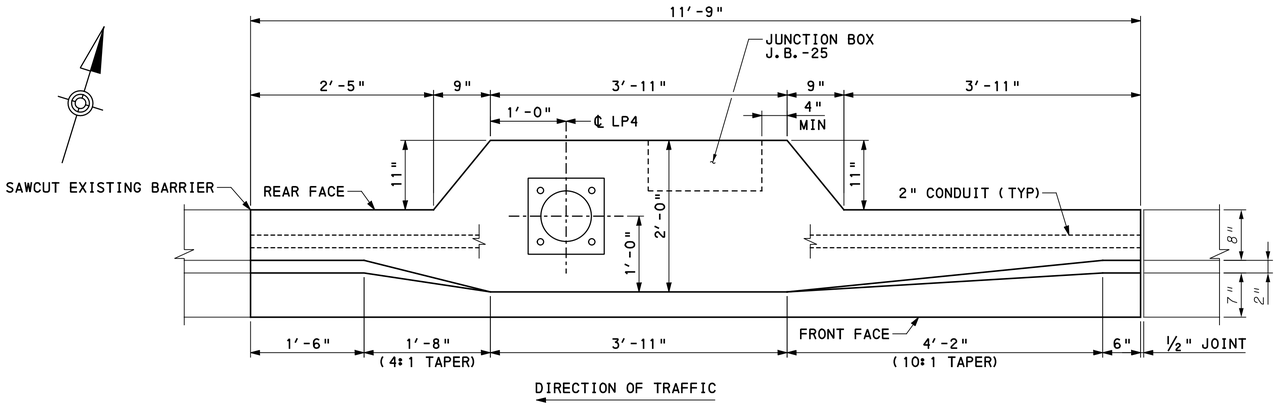
OCTOBER 26, 2022

SHEET 113 OF 124

S - 40253

| DES: | TJH | CKD: | TSA | DWG: | TJH | CKD: | TSA |
|---|---|---|---|---|---|---|---|

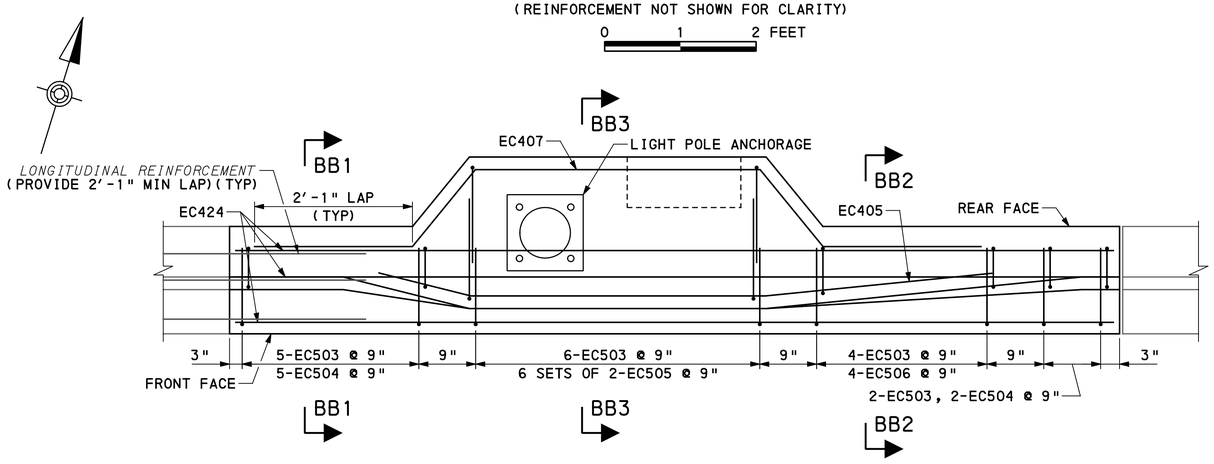
PLOTTED: 10/26/2022 8:09:05 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP4.dgn




## LP4 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

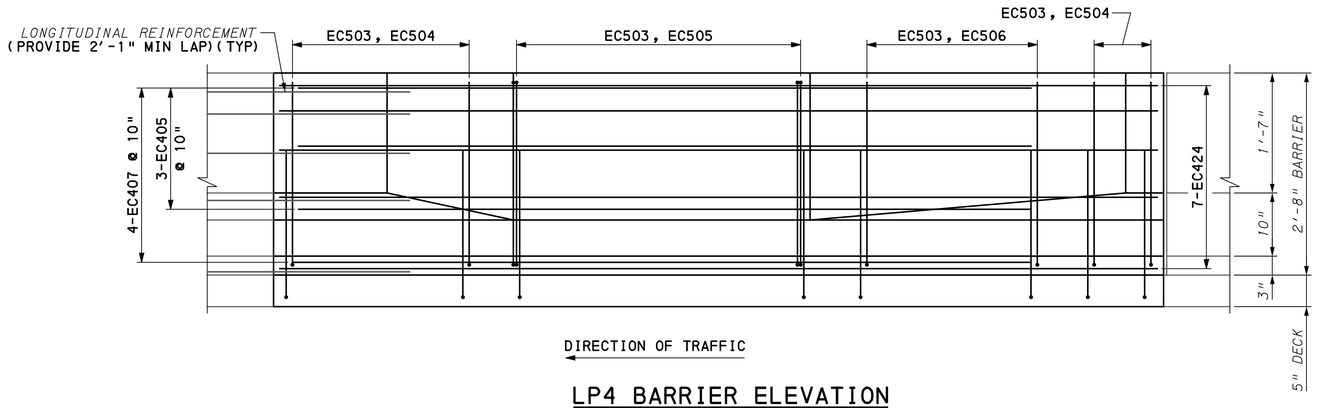
0 1 2 FEET




## LP4 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET




## LP4 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

## LIGHT POLE BLISTER - LP4

REPRESENTATIVE PHOTO

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

| Mark | Description | By | Chk'd. | Recm'd. | Date |
|---|---|---|---|---|---|
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SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
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PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# LIGHT POLE BARRIER DETAILS - LP4

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

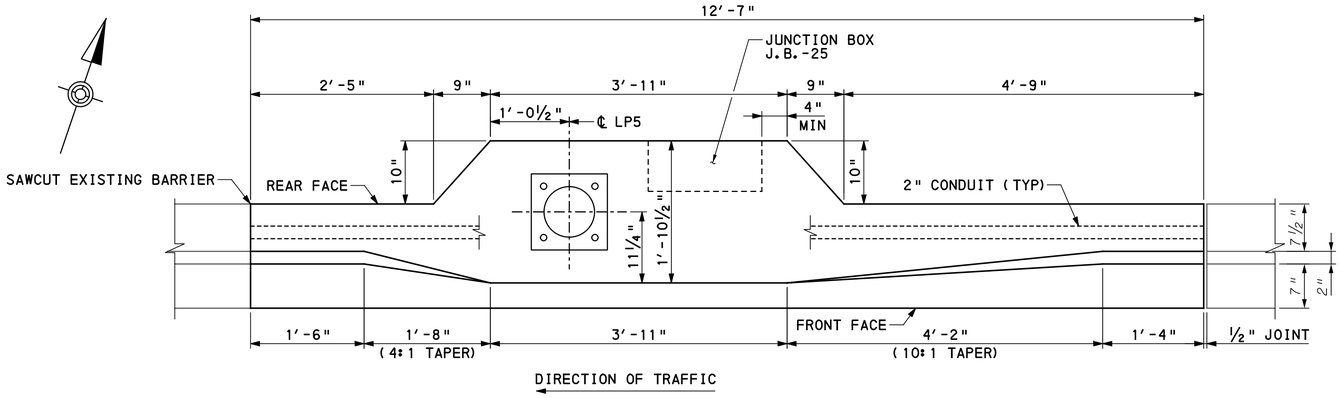
OCTOBER 26, 2022

SHEET 114 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

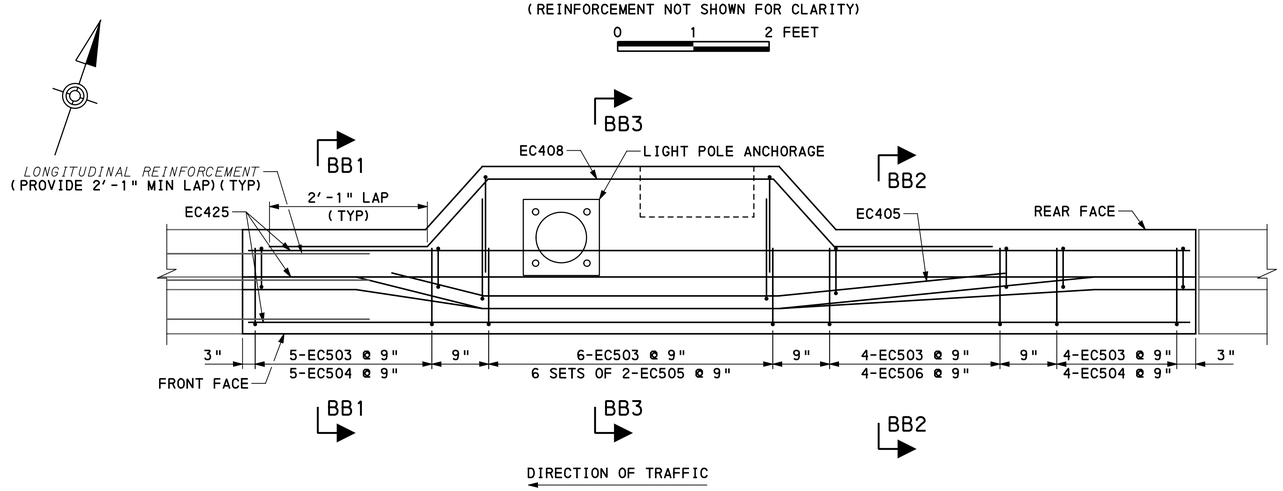
PLOTTED: 10/26/2022 8:09:12 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP5.dgn




## LP5 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

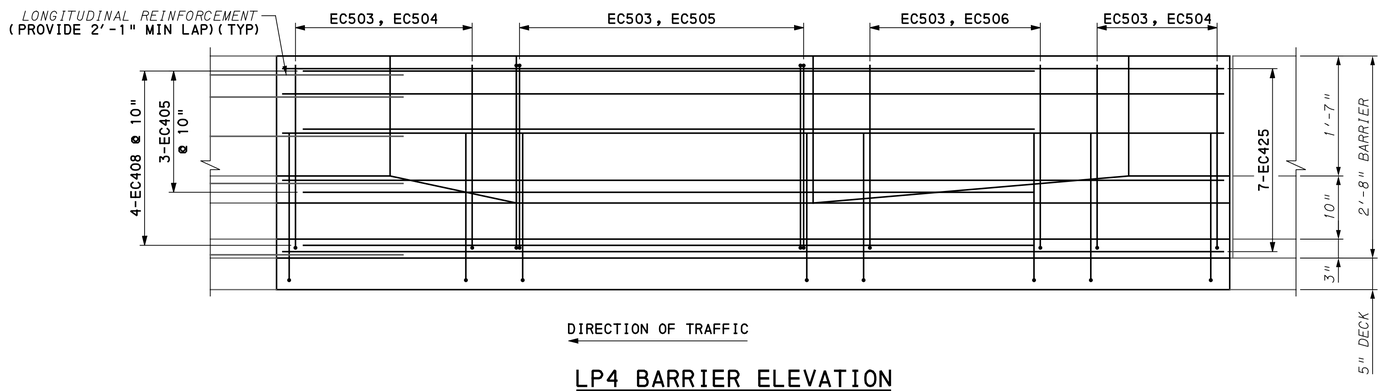
0 1 2 FEET




## LP5 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET




## LP4 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

## LIGHT POLE BLISTER - LP5

REPRESENTATIVE PHOTO

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
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PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# LIGHT POLE BARRIER DETAILS - LP5

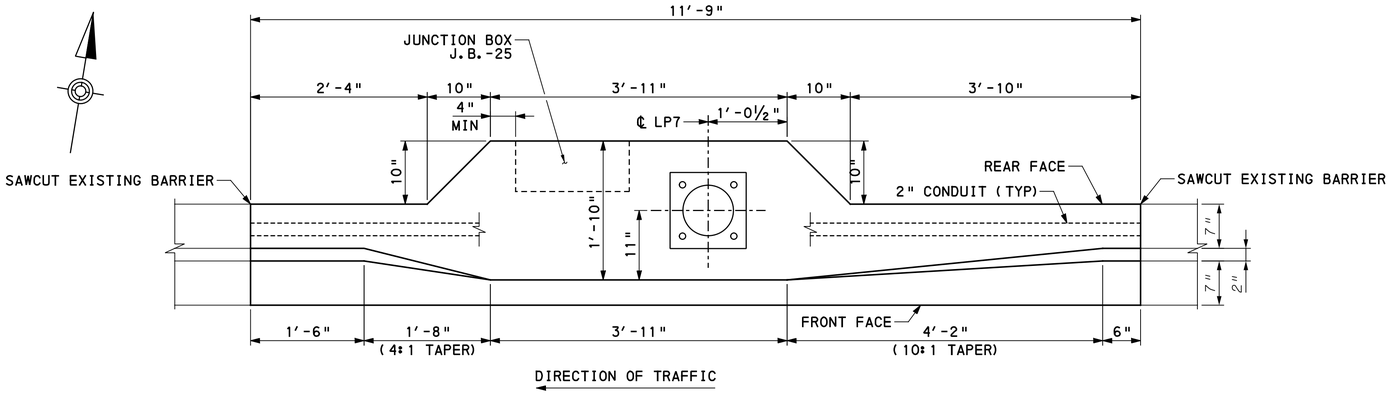
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 115 OF 124

S - 40253

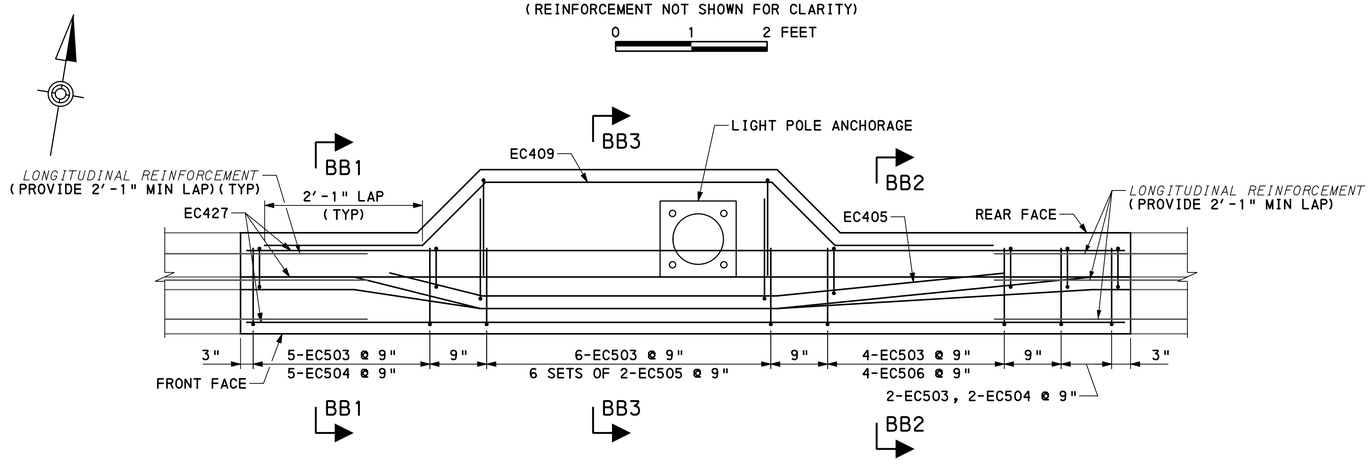
| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|




## LP7 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

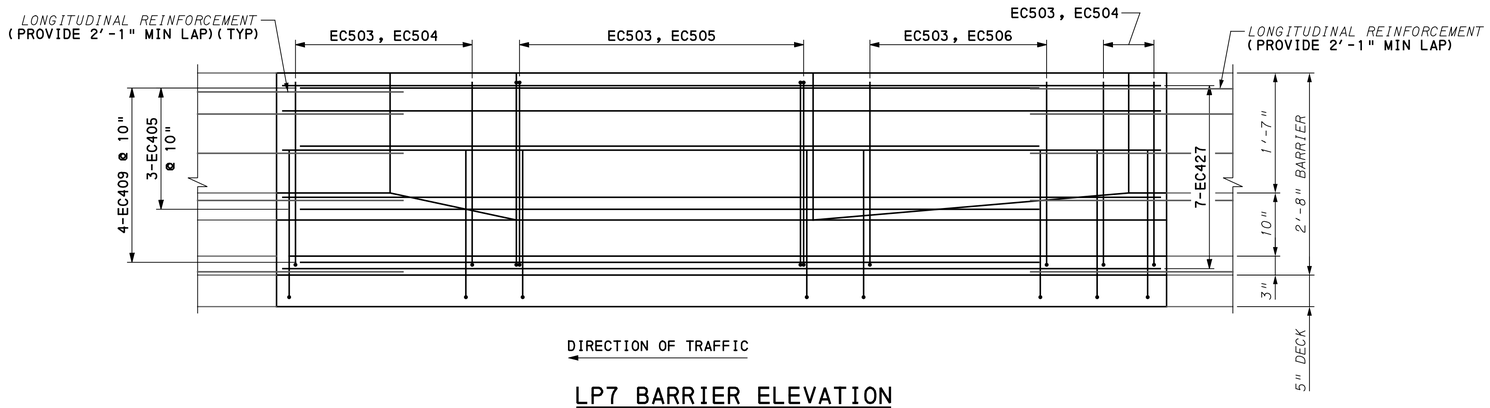
0 1 2 FEET




## LP7 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET




## LP7 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

## LIGHT POLE BLISTER - LP7

REPRESENTATIVE PHOTO

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188

BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
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OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# LIGHT POLE BARRIER DETAILS - LP7

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 116 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
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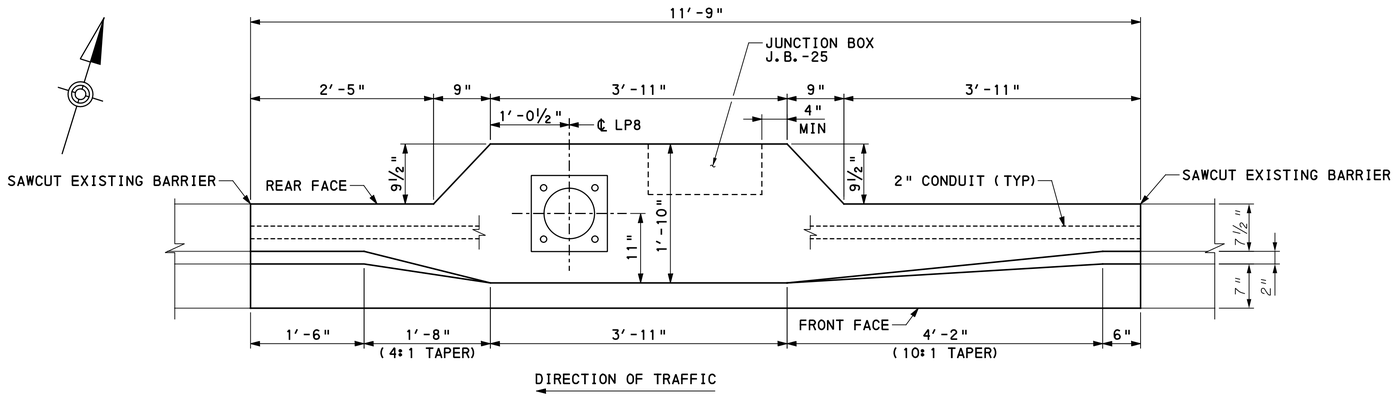
PLOTTED: 10/26/2022 8:09:17 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP7.dgn

PLOTTED: 10/26/2022 8:09:21 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP8.dgn



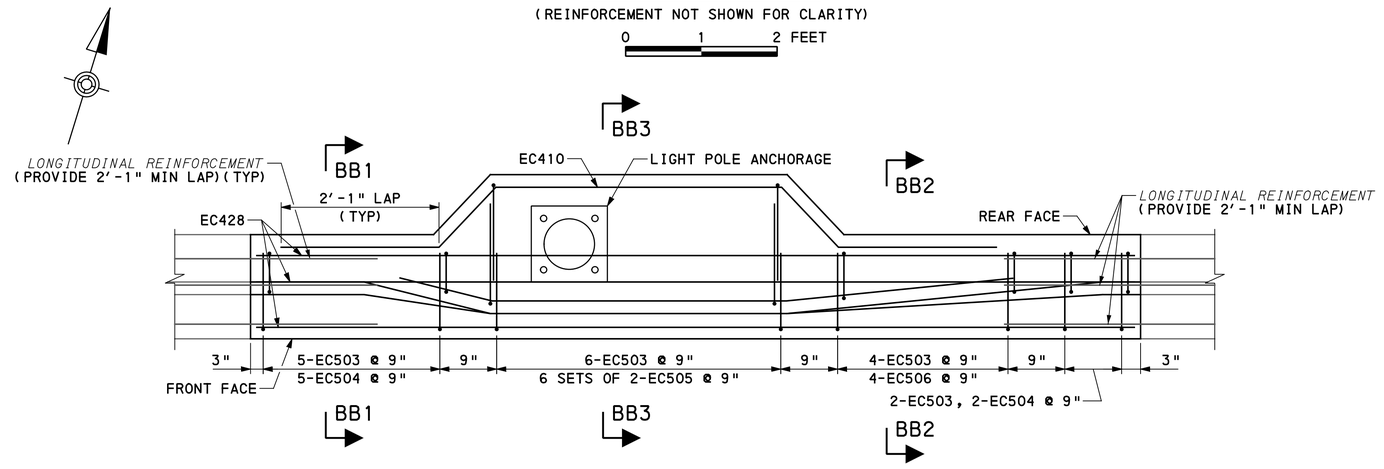

## LP8 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

0 1 2 FEET

## LIGHT POLE BLISTER - LP8

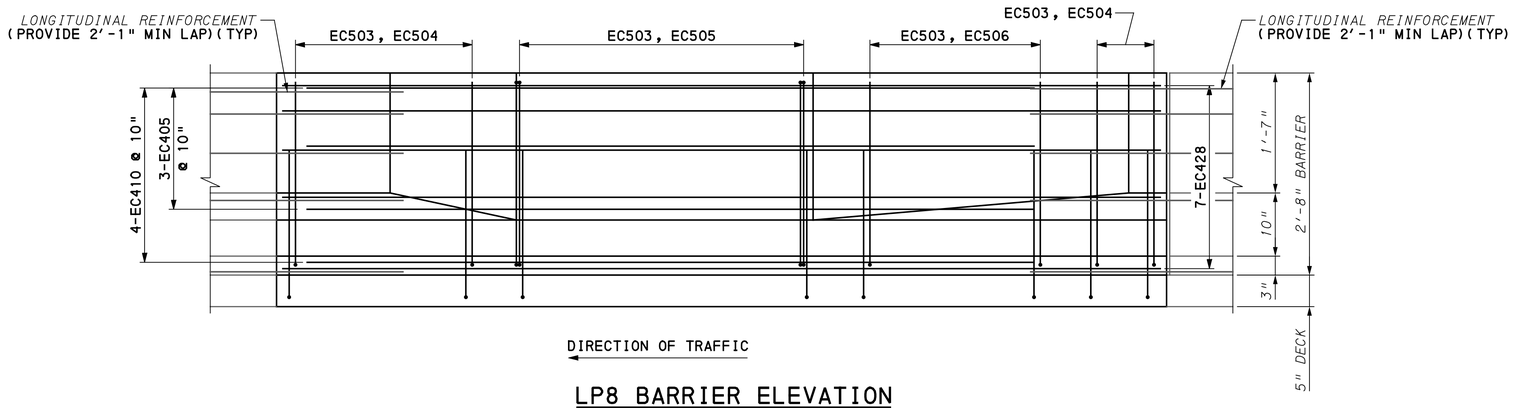
REPRESENTATIVE PHOTO




## LP8 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET




## LP8 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
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OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# LIGHT POLE BARRIER DETAILS - LP8

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

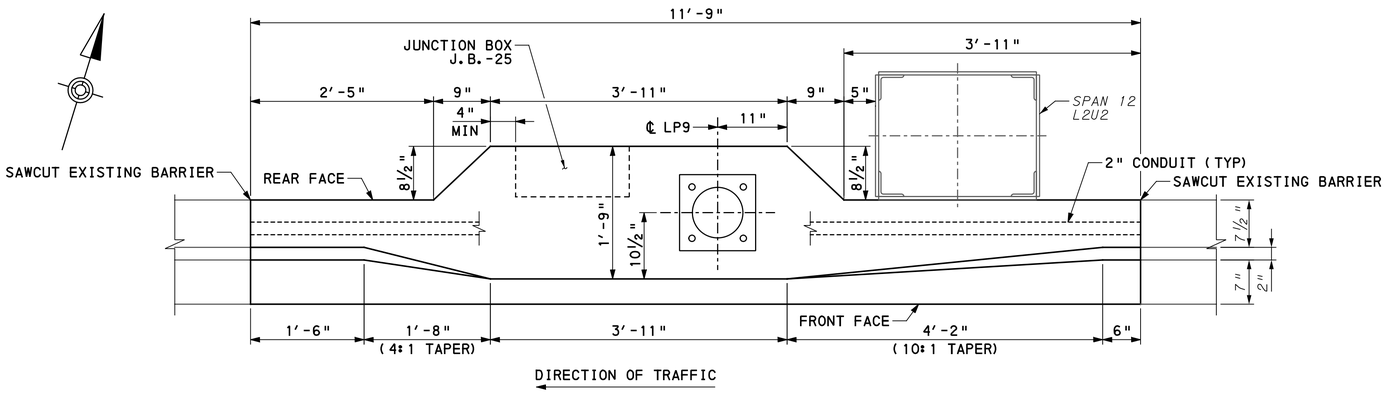
OCTOBER 26, 2022

SHEET 117 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 8:09:28 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP9.dgn



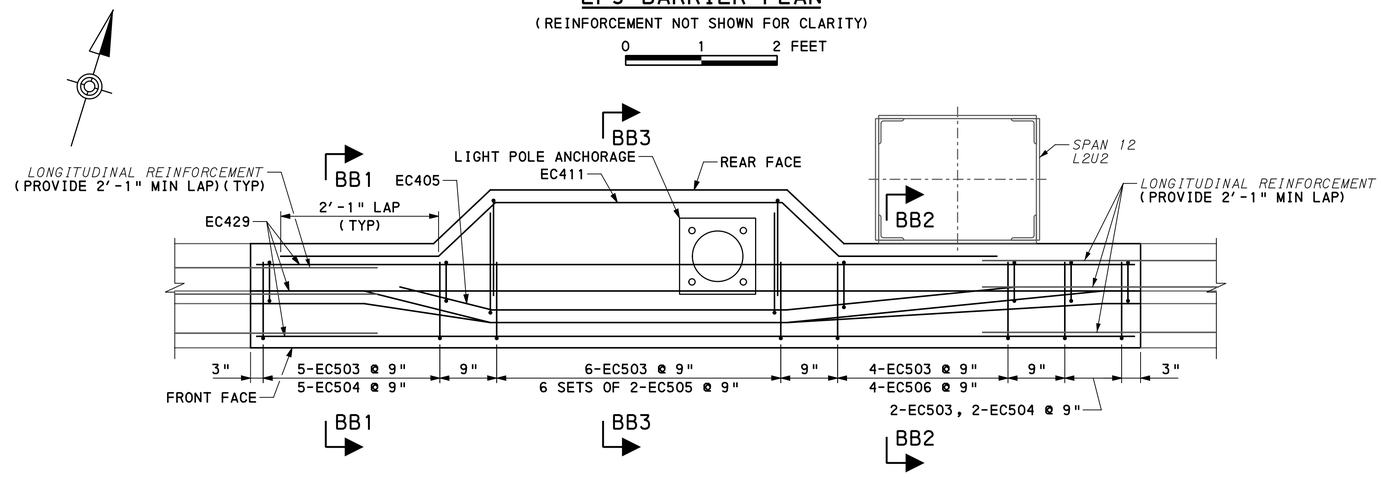

## LP9 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

0 1 2 FEET

## LIGHT POLE BLISTER - LP9

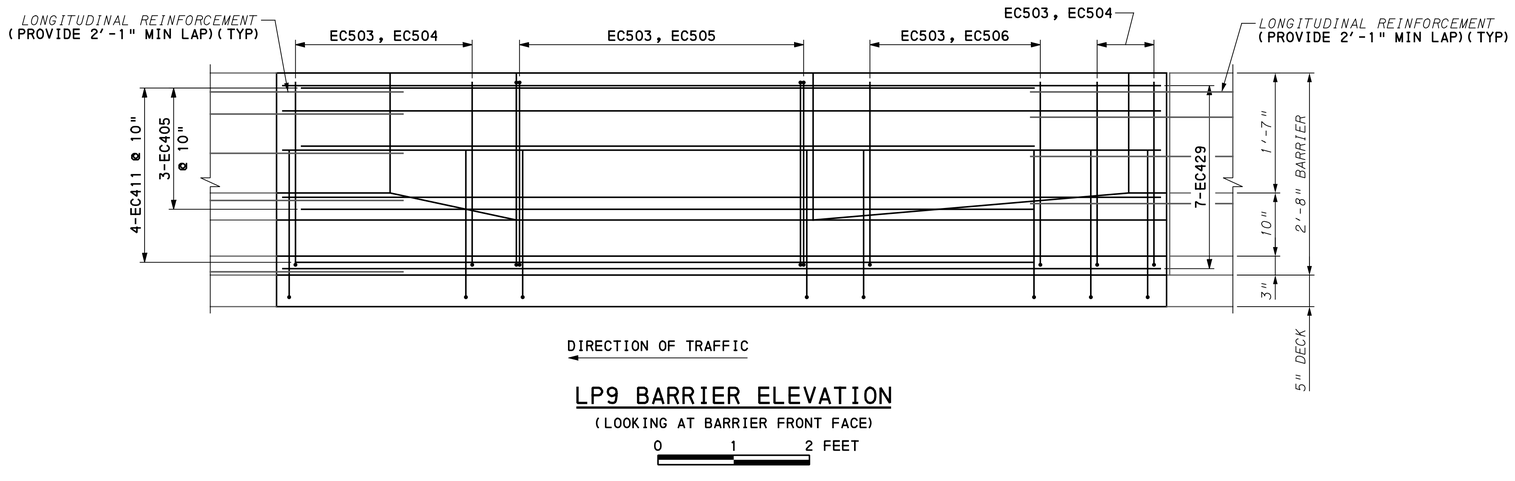
REPRESENTATIVE PHOTO




## LP9 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET




## LP9 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA

## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# LIGHT POLE BARRIER DETAILS - LP9

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 118 OF 124

S - 40253

PLOTTED: 10/26/2022 8:09:32 AM
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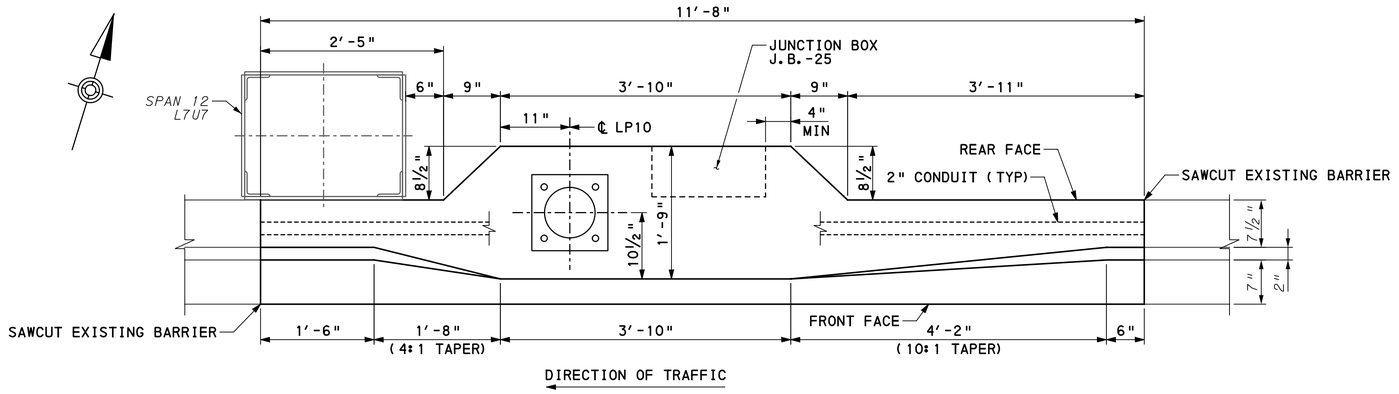
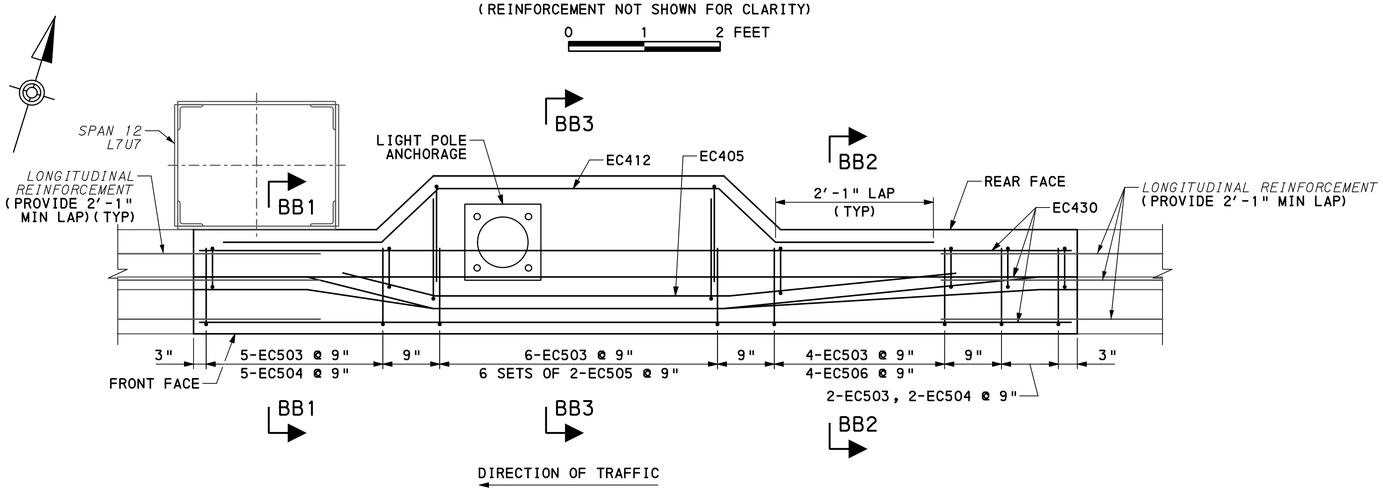



## LP10 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

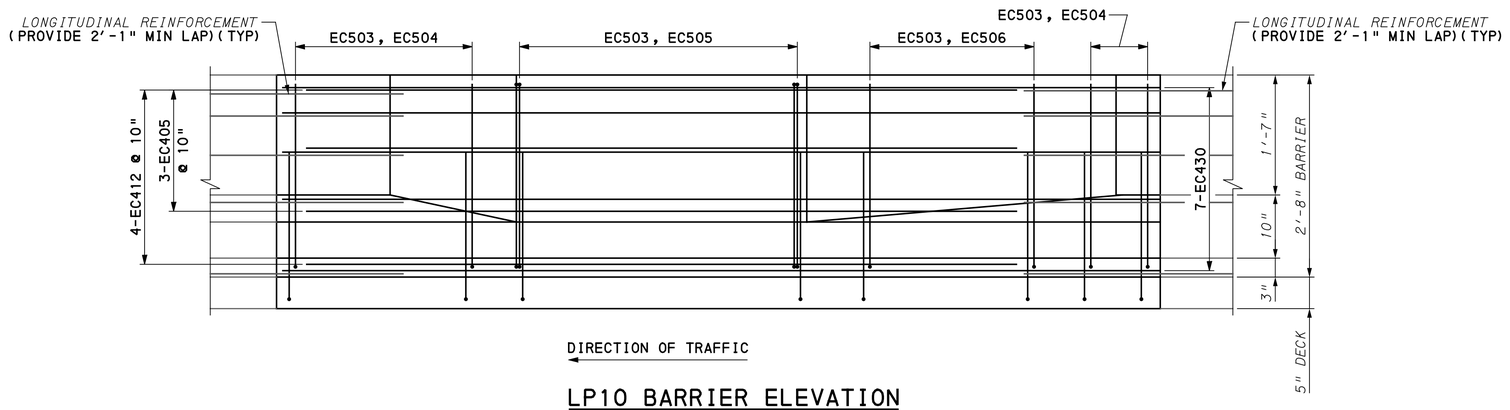
0 1 2 FEET




## LP10 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET




## LP10 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

## LIGHT POLE BLISTER - LP10

REPRESENTATIVE PHOTO

### NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# LIGHT POLE BARRIER DETAILS - LP10

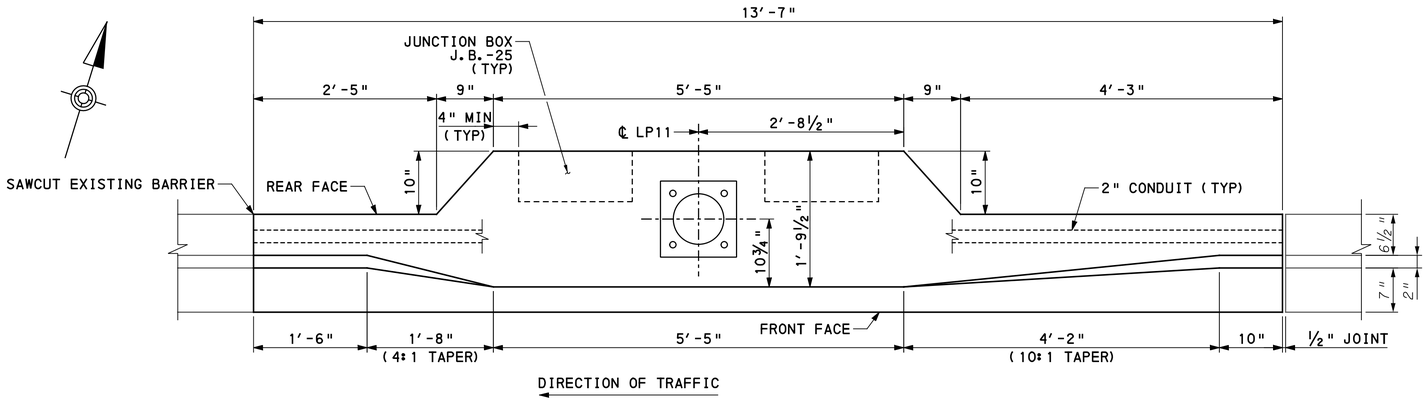
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 119 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|



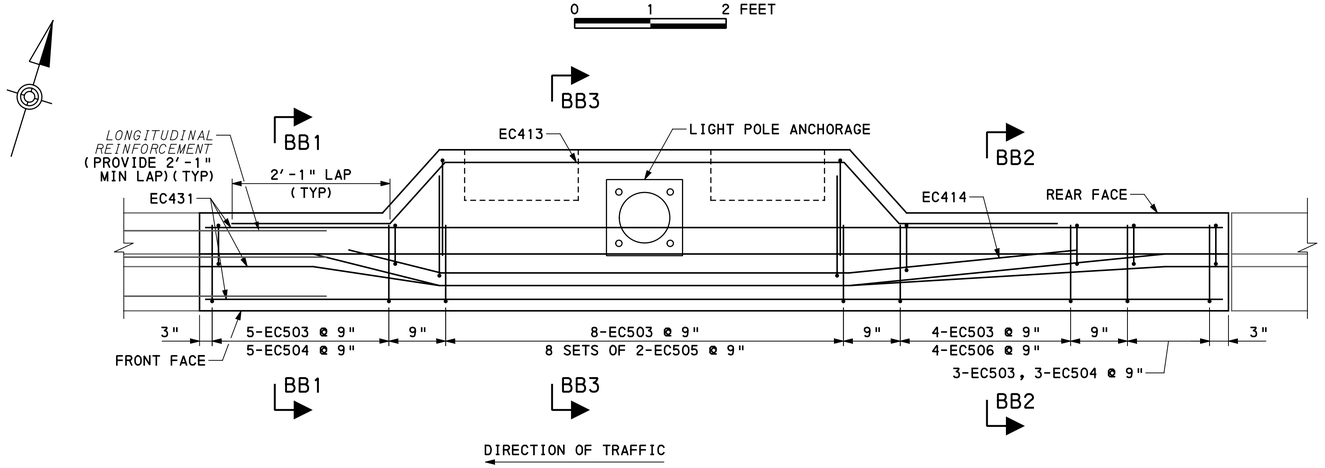

## LP11 BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

0 1 2 FEET

## LIGHT POLE BLISTER - LP11

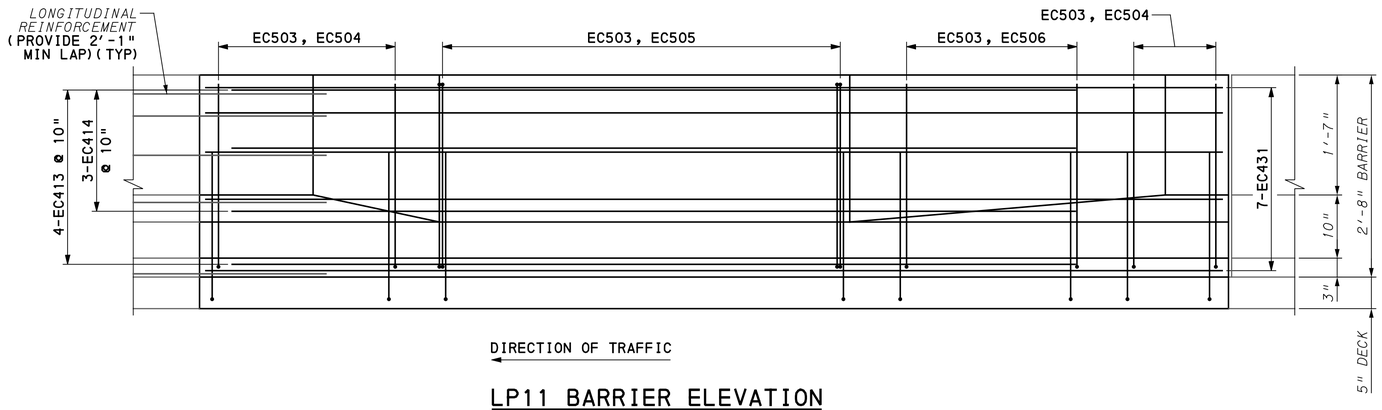
REPRESENTATIVE PHOTO




## LP11 BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

0 1 2 FEET




## LP11 BARRIER ELEVATION

(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188

BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
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OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# LIGHT POLE BARRIER DETAILS - LP11

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

RECOMMENDED

OCTOBER 26, 2022

SHEET 120 OF 124

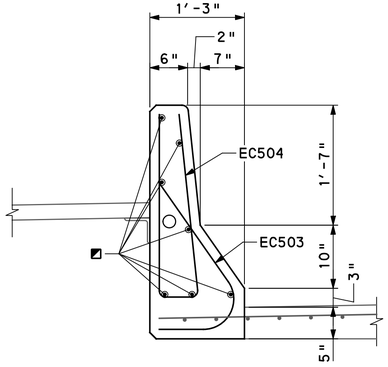
S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 8:10:06 AM

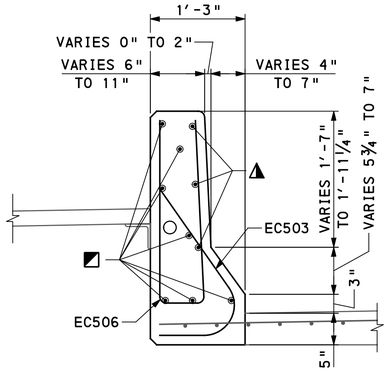
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Details LP11.dgn

PLOTTED: 10/26/2022 8:10:15 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Sections.dgn



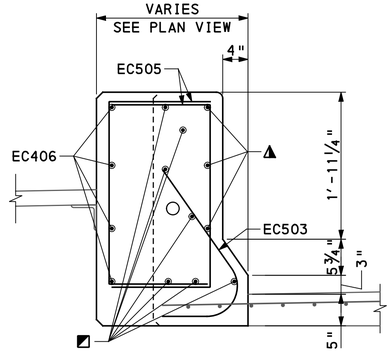

SECTION BB1-BB1

0 1 2 FEET




SECTION BB2-BB2

0 1 2 FEET



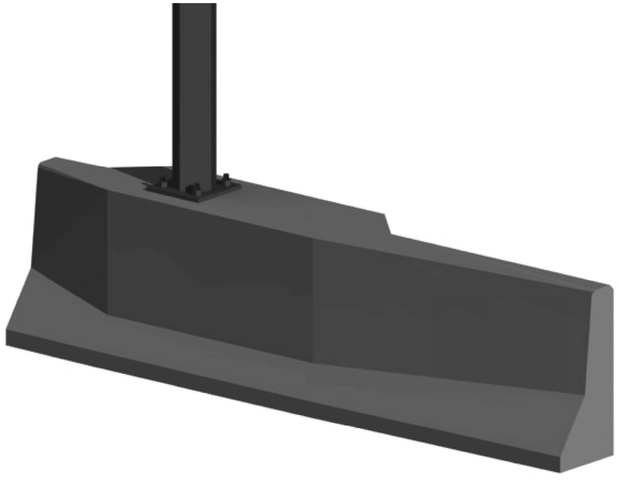

NOTE: TRIM EC505 BAR ALONG REAR FACE AS NEEDED FOR JUNCTION BOX PLACEMENT

SECTION BB3-BB3

0 1 2 FEET

| SYMBOL ◩ | |
|---|---|
| LOCATION | BAR MARK |
| LP1 | EC421 |
| LP2 | EC422 |
| LP3 | EC423 |
| LP4 | EC424 |
| LP5 | EC425 |
| LP7 | EC427 |
| LP8 | EC428 |
| LP9 | EC429 |
| LP10 | EC430 |
| LP11 | EC431 |

| SYMBOL ◭ | |
|---|---|
| LOCATION | BAR MARK |
| LP1 | EC405 |
| LP2 | EC405 |
| LP3 | EC405 |
| LP4 | EC405 |
| LP5 | EC405 |
| LP7 | EC405 |
| LP8 | EC405 |
| LP9 | EC405 |
| LP10 | EC405 |
| LP11 | EC414 |



LIGHT POLE BARRIER ISOMETRIC VIEW

NOT TO SCALE

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER DETAILS, SEE SHEETS 111 TO 120.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

LIGHT POLE BARRIER SECTIONS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED

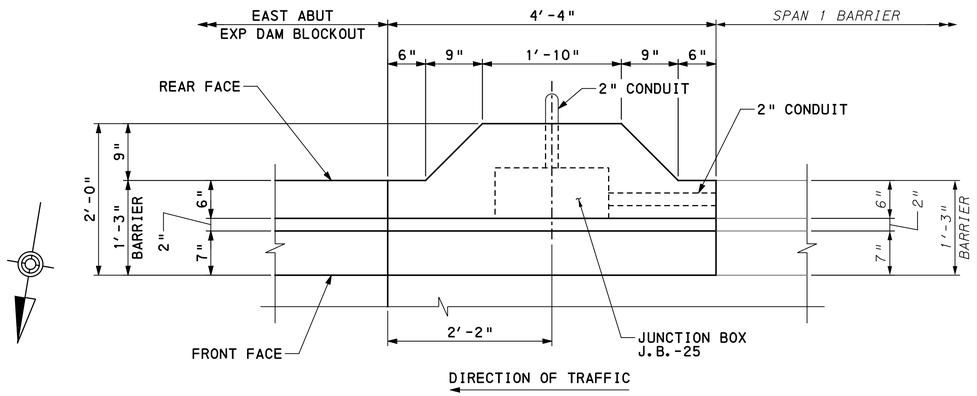
OCTOBER 26, 2022

SHEET 121 OF 124

S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

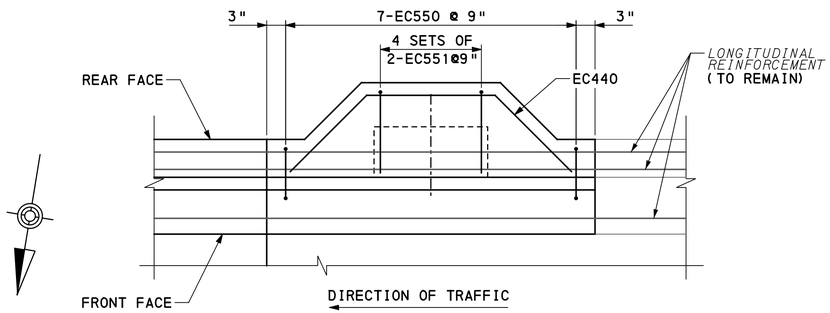
PLOTTED: 10/26/2022 8:10:20 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_JB Blister at E Abut.dgn




## REPAIR C13 - BARRIER PLAN

(REINFORCEMENT NOT SHOWN FOR CLARITY)

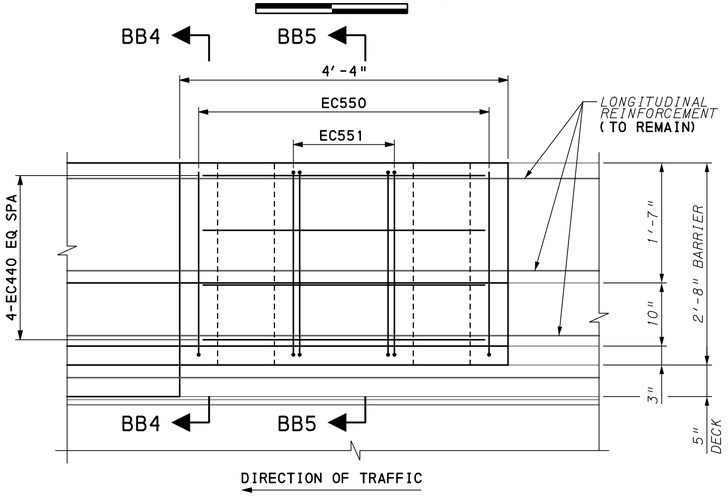
0 1 2 FEET




## REPAIR C13 - BARRIER REINFORCEMENT PLAN

(CONDUIT NOT SHOWN FOR CLARITY)

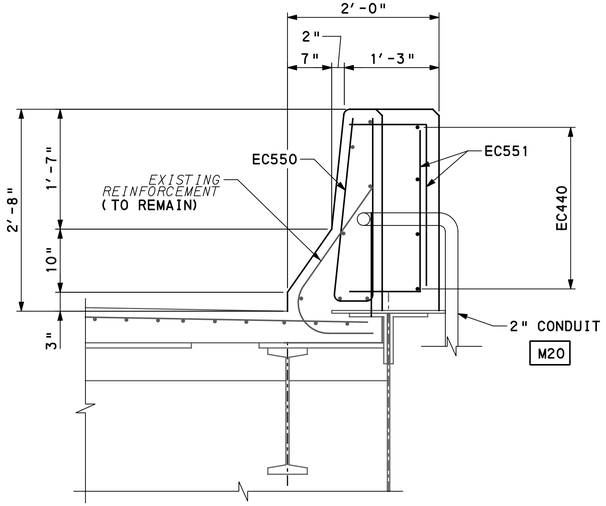
0 1 2 FEET




## REPAIR C13 - BARRIER ELEVATION

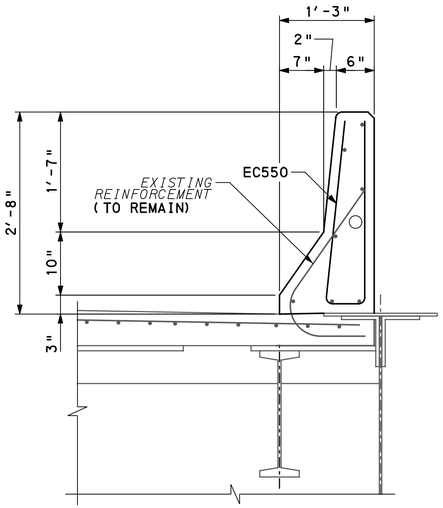
(LOOKING AT BARRIER FRONT FACE)

0 1 2 FEET




## SECTION BB5-BB5

0 1 2 FEET




## SECTION BB4-BB4

0 1 2 FEET

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR EAST ABUTMENT EXPANSION DAM, SEE SHEET 83.
3. FOR LIGHT POLE BARRIER REINFORCEMENT SCHEDULE, SEE SHEET 123.
4. FOR REPAIR [M20], SEE SHEET 12.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE

# BARRIER DETAIL - REPAIR C13

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 122 OF 124

S - 40253

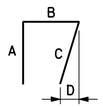
| DES: | TJH | CKD: | TSA | DWG: | EAL | CKD: | TSA |
|---|---|---|---|---|---|---|---|

PLOTTED: 10/26/2022 8:10:22 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Light Pole Barrier Reinforcement Schedule.dgn

# REINFORCEMENT BAR SCHEDULE

| MARK | SIZE | NUMBER | LENGTH | TYPE | A | B | C | D | E | R | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| LIGHT POLE BARRIER BLISTERS | | | | | | | | | | | |
| EC405 | 4 | 27 | 8'-1 1/2" | 54 | 1'-3" | 3'-10 1/2" | 3'-0" | 3 5/8" | 3 5/8" | | ALL LOCATIONS, EXCEPT LP11 |
| EC406 | 4 | 12 | 10'-1 5/8" | 23 | 3'-9 3/8" | 1'-1 1/8" | 9 3/8" | 2'-1" | | | LP1, LP2, LP3 |
| EC407 | 4 | 4 | 10'-6 5/8" | 23 | 3'-9 1/8" | 1'-3 3/4" | 10" | 2'-1" | | | LP4 |
| EC408 | 4 | 4 | 10'-4" | 23 | 3'-9 1/4" | 1'-2 3/8" | 9 5/8" | 2'-1" | | | LP5 |
| EC409 | 4 | 4 | 10'-3 5/8" | 23 | 3'-9 3/8" | 1'-2 1/8" | 10" | 2'-1" | | | LP7 |
| EC410 | 4 | 4 | 10'-1 1/2" | 23 | 3'-9 1/4" | 1'-1 1/8" | 9" | 2'-1" | | | LP8 |
| EC411 | 4 | 4 | 10'-0 1/8" | 23 | 3'-9 3/8" | 1'-0 3/8" | 9" | 2'-1" | | | LP9 |
| EC412 | 4 | 4 | 9'-11 1/8" | 23 | 3'-8 3/8" | 1'-0 3/8" | 9" | 2'-1" | | | LP10 |
| EC413 | 4 | 4 | 11'-7 1/4" | 23 | 5'-3 1/4" | 1'-1" | 8 3/4" | 2'-1" | | | LP11 |
| EC414 | 4 | 3 | 9'-7 5/8" | 54 | 1'-3" | 5'-4 5/8" | 3'-0" | 3 5/8" | 3 5/8" | | LP11 |
| EC421 | 4 | 7 | 14'-2" | STR | | | | | | | LP1 |
| EC422 | 4 | 7 | 13'-2" | STR | | | | | | | LP2 |
| EC423 | 4 | 7 | 11'-1" | STR | | | | | | | LP3 |
| EC424 | 4 | 7 | 11'-5" | STR | | | | | | | LP4 |
| EC425 | 4 | 7 | 12'-3" | STR | | | | | | | LP5 |
| EC427 | 4 | 7 | 11'-5" | STR | | | | | | | LP7 |
| EC428 | 4 | 7 | 11'-5" | STR | | | | | | | LP8 |
| EC429 | 4 | 7 | 11'-5" | STR | | | | | | | LP9 |
| EC430 | 4 | 7 | 11'-4" | STR | | | | | | | LP10 |
| EC431 | 4 | 7 | 13'-3" | STR | | | | | | | LP11 |
| EC503 | 5 | 180 | 3'-0 1/2" | 21 | 7" | 10 1/2" | 1'-7" | 1'-0" | | 4 3/4" | ALL LOCATIONS |
| EC504 | 5 | 78 | 5'-4 1/8" | 7 | 2'-4 7/8" | 6 1/4" | 2'-5" | 3" | | | ALL LOCATIONS |
| EC505 | 5 | 124 | 5'-0 7/8" | 4 | 1'-4" | 2'-4 7/8" | 1'-4" | | | | ALL LOCATIONS |
| EC506 | 5 | 40 | 5'-4 7/8" | 7 | 2'-4 7/8" | 7" | 2'-5" | 1" TO 3" | | | ALL LOCATIONS; VARY 'D' DIMENSION, 4 EA, FROM 1" TO 3" |
| JUNCTION BOX BARRIER BLISTER | | | | | | | | | | | |
| EC440 | 4 | 4 | 4'-4" | 54 | 1'-4" | 1'-8" | 1'-4" | 11 3/8" | 11 3/8" | | |
| EC550 | 5 | 7 | 5'-4 1/8" | 7 | 2'-4 7/8" | 6 1/4" | 2'-5" | 3" | | | |
| EC551 | 5 | 8 | 3'-2" | 10 | 1'-0" | 2'-2" | | | | | |

④



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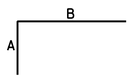

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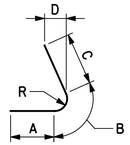

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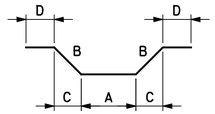

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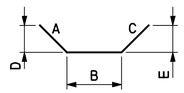

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## NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR LIGHT POLE BARRIER DETAILS, SEE SHEETS 111 TO 120.
3. FOR LIGHT POLE BARRIER SECTIONS, SEE SHEET 121.
4. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
5. E - INDICATES EPOXY COATED REBAR.
6. FOR ALL BAR TYPES SHOWN, DIMENSIONS A-E AND LENGTH ARE MEASURED ALONG OUTSIDE OF BAR. R IS MEASURED ALONG INSIDE OF BAR.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
LIGHT POLE BARRIER REINFORCEMENT SCHEDULE

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 123 OF 124
S - 40253

| DES: TJH | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

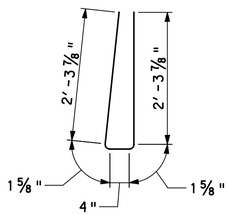
PLOTTED: 10/26/2022 8:10:23 AM
FILE NAME: G:\17-048B New Kensington Final\CADD\Structure\SR1038_Exp Dam Reinforcement Schedule.dgn

## EXP DAM REINFORCEMENT BAR SCHEDULE - FOR INFORMATION ONLY

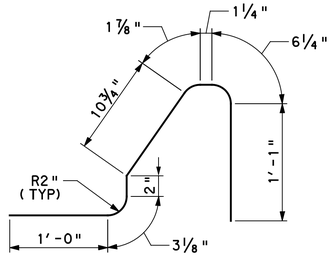
| MARK | SIZE | NUMBER | LENGTH | TYPE | A | B | C | D | E | R | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| EXPANSION DAM EAST ABUTMENT | | | | | | | | | | | |
| EA5101 | 5 | 6 | 4′-6 1/8" | S2 | | | | | | | |
| ES5101 | 5 | 18 | 5′-3" | C1 | | | | | | | |
| ES5104 | 5 | 12 | 3′-0 1/2" | S3 | | | | | | | |
| ES5106 | 5 | 7 | 27′-8" | STR | | | | | | | |
| ES6101 | 6 | 4 | 27′-8" | STR | | | | | | | |
| ES6102 | 6 | 29 | 5′-0" | S5 | | | | | | | |
| EXPANSION DAM BENT 4A | | | | | | | | | | | |
| ES5101 | 5 | 24 | 5′-3" | C1 | | | | | | | |
| ES5104 | 5 | 24 | 3′-0 1/2" | S3 | | | | | | | |
| ES5106 | 5 | 8 | 27′-8" | STR | | | | | | | |
| ES6101 | 6 | 4 | 27′-8" | STR | | | | | | | |
| EXPANSION DAM PIER 1 | | | | | | | | | | | |
| ES5101 | 5 | 26 | 5′-3" | C1 | | | | | | | |
| ES5102 | 5 | 12 | 4′-2 1/4" | S1 | | | | | | | |
| ES5104 | 5 | 12 | 3′-0 1/2" | S3 | | | | | | | |
| ES5106 | 5 | 8 | 27′-8" | STR | | | | | | | |
| ES5109 | 5 | 12 | 1′-10" | STR | | | | | | | TRIM IN FIELD AS REQUIRED |
| ES5110 | 5 | 14 | 5′-10" | STR | | | | | | | TRIM IN FIELD AS REQUIRED |
| ES6101 | 6 | 4 | 27′-8" | STR | | | | | | | |
| EXPANSION DAM PIER 3 | | | | | | | | | | | |
| ES5101 | 5 | 30 | 5′-3" | C1 | | | | | | | |
| ES5102 | 5 | 24 | 4′-2 1/4" | S1 | | | | | | | |
| ES5106 | 5 | 8 | 27′-8" | STR | | | | | | | |
| ES5109 | 5 | 24 | 1′-10" | STR | | | | | | | TRIM IN FIELD AS REQUIRED |
| ES5110 | 5 | 28 | 5′-10" | STR | | | | | | | TRIM IN FIELD AS REQUIRED |
| ES6101 | 6 | 4 | 27′-8" | STR | | | | | | | |
| TOOTH EXPANSION JOINT PIER 2 | | | | | | | | | | | |
| ES5101 | 5 | 28 | 5′-3" | C1 | | | | | | | |
| ES5102 | 5 | 20 | 4′-2 1/4" | S1 | | | | | | | |
| ES5105 | 5 | 6 | 2′-5" | S4 | | | | | | | |
| ES5106 | 5 | 8 | 27′-8" | STR | | | | | | | |
| ES5109 | 5 | 24 | 1′-10" | STR | | | | | | | TRIM IN FIELD AS REQUIRED |
| ES5110 | 5 | 28 | 5′-10" | STR | | | | | | | TRIM IN FIELD AS REQUIRED |
| ES6101 | 6 | 4 | 27′-8" | STR | | | | | | | |
| EXPANSION DAM PIER 4 | | | | | | | | | | | |
| ES3103 | 3 | 10 | 3′-4" | STR | | | | | | | BEND IN FIELD |
| ES4102 | 4 | 8 | 2′-10" | STR | | | | | | | |
| ES5101 | 5 | 26 | 5′-3" | C1 | | | | | | | |
| ES5102 | 5 | 24 | 4′-2 1/4" | S1 | | | | | | | |
| ES5106 | 5 | 8 | 27′-8" | STR | | | | | | | |
| ES5109 | 5 | 12 | 1′-10" | STR | | | | | | | TRIM IN FIELD AS REQUIRED |
| ES5110 | 5 | 14 | 5′-10" | STR | | | | | | | TRIM IN FIELD AS REQUIRED |
| ES6101 | 6 | 4 | 27′-8" | STR | | | | | | | |
| EXPANSION DAM PIER 5 | | | | | | | | | | | |
| ES3101 | 3 | 40 | 4′-0" | STR | | | | | | | BEND IN FIELD |
| ES3102 | 3 | 11 | 4′-8" | STR | | | | | | | BEND IN FIELD |
| ES4101 | 4 | 8 | 46′-5" | STR | | | | | | | |
| ES5101 | 5 | 22 | 5′-3" | C1 | | | | | | | |
| ES5102 | 5 | 22 | 4′-2 1/4" | S1 | | | | | | | |
| ES5107 | 5 | 16 | 46′-8" | STR | | | | | | | |
| ES5108 | 5 | 22 | 3′-6" | S6 | | | | | | | |
| ES6102 | 6 | 8 | 47′-0" | STR | | | | | | | |
| ES8101 | 8 | 99 | 5′-11 1/2" | S7 | | | | | | | |

## SCUPPER REINFORCEMENT BAR SCHEDULE - FOR INFORMATION ONLY

| MARK | SIZE | NUMBER | LENGTH | TYPE | A | B | C | D | E | R | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SCUPPER REPAIR - M11 ( 6 LOCATIONS - REBAR QUANTITY GIVEN FOR EACH LOCATION) | | | | | | | | | | | |
| ES5101 | 5 | 9 | 5′-3" | C1 | | | | | | | |
| ES5104 | 5 | 9 | 3′-0 1/2" | S3 | | | | | | | |
| SCUPPER REPAIR - M12 ( 6 LOCATIONS - REBAR QUANTITY GIVEN FOR EACH LOCATION) | | | | | | | | | | | |
| ES5101 | 5 | 9 | 5′-3" | C1 | | | | | | | |
| ES5104 | 5 | 9 | 3′-0 1/2" | S3 | | | | | | | |
| SCUPPER REPAIR - M13 ( 4 LOCATIONS - REBAR QUANTITY GIVEN FOR EACH LOCATION) | | | | | | | | | | | |
| ES5101 | 5 | 9 | 5′-3" | C1 | | | | | | | |
| ES5104 | 5 | 9 | 3′-0 1/2" | S3 | | | | | | | |
| ES5111 | 5 | 4 | 3′-7" | STR | | | | | | | |
| ES5112 | 5 | 3 | 2′-8" | STR | | | | | | | |



C1



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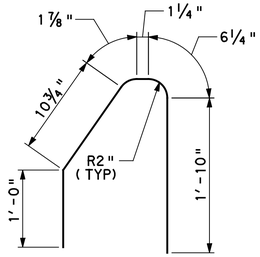

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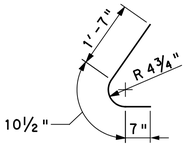

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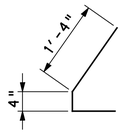

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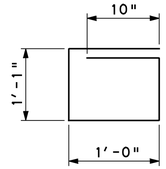
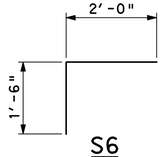
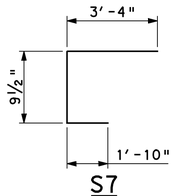


S5



S6



S7

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3 AND 4.
2. FOR SCUPPER DETAILS, SEE SHEETS 81 TO 82.
3. FOR EXPANSION DAM DETAILS, SEE SHEETS 83 TO 96 .
4. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
5. E - INDICATES EPOXY COATED REBAR.
6. FOR ALL BAR TYPES SHOWN, DIMENSIONS A-E AND LENGTH ARE MEASURED ALONG OUTSIDE OF BAR. R IS MEASURED ALONG INSIDE OF BAR.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-0059 ECMS/MPMS NO: 63515 BRKEY: 1475

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E
COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 0000
SR 1038-A01 STA 5+92.00
OVER THE ALLEGHENY RIVER & NORFOLK SOUTHERN
PRESERVATION OF 14 SPAN NEW KENSINGTON BRIDGE
## EXP DAM & SCUPPER REINFORCEMENT SCHEDULE

RECOMMENDED
OCTOBER 26, 2022

SHEET 124 OF 124

S - 40253

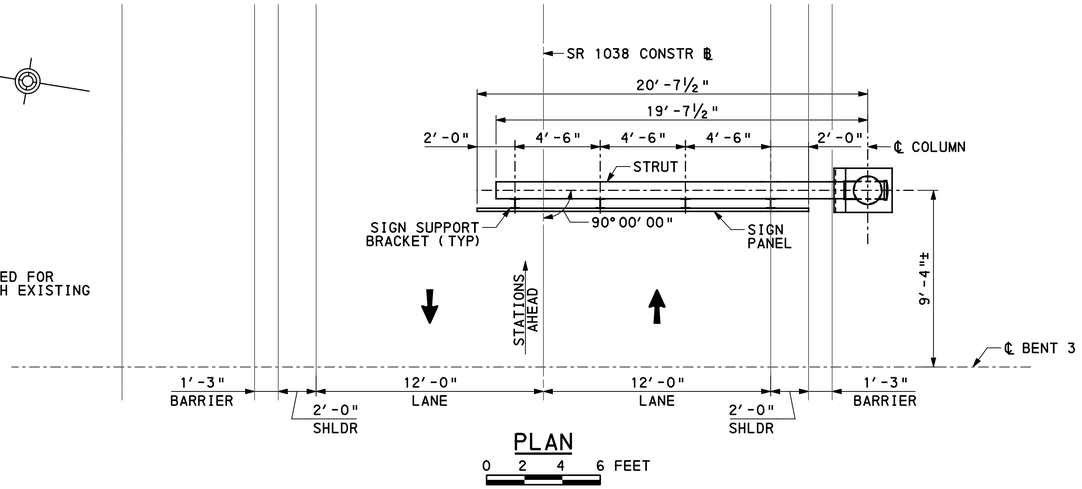
| DES: TJH | CKD: TSA | DWG: EAL | CKD: TSA |
|---|---|---|---|

PLOTTED: 10/26/2022 8:53:42 AM

FILE NAME: G:\17-048B New Kensington Final\CADD\Sign Structure\General Plan and Elevation.dgn

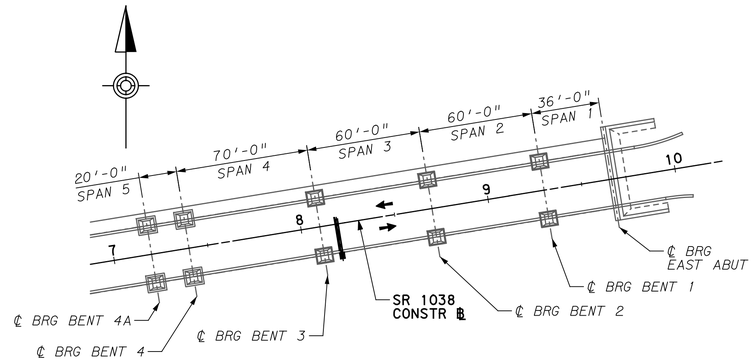
| DESIGN CRITERIA |
|---|
| DESIGN SIGN AREA = 227.5 SF |
| DESIGN LENGTH = 19.63 FT |
| DESIGN HEIGHT = 27.33 FT |
| FATIGUE CATEGORY = II |

NOTE: NON-STANDARD POST SIZE WAS USED FOR THIS STRUCTURE TO MORE CLOSELY MATCH EXISTING POST AND BRACKET DETAILS.



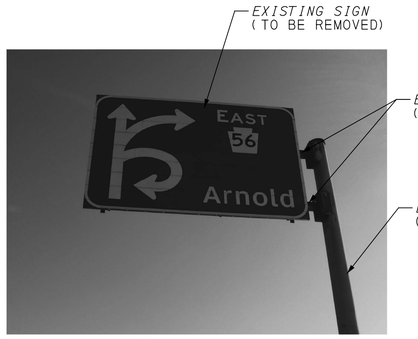

PLAN

0 2 4 6 FEET



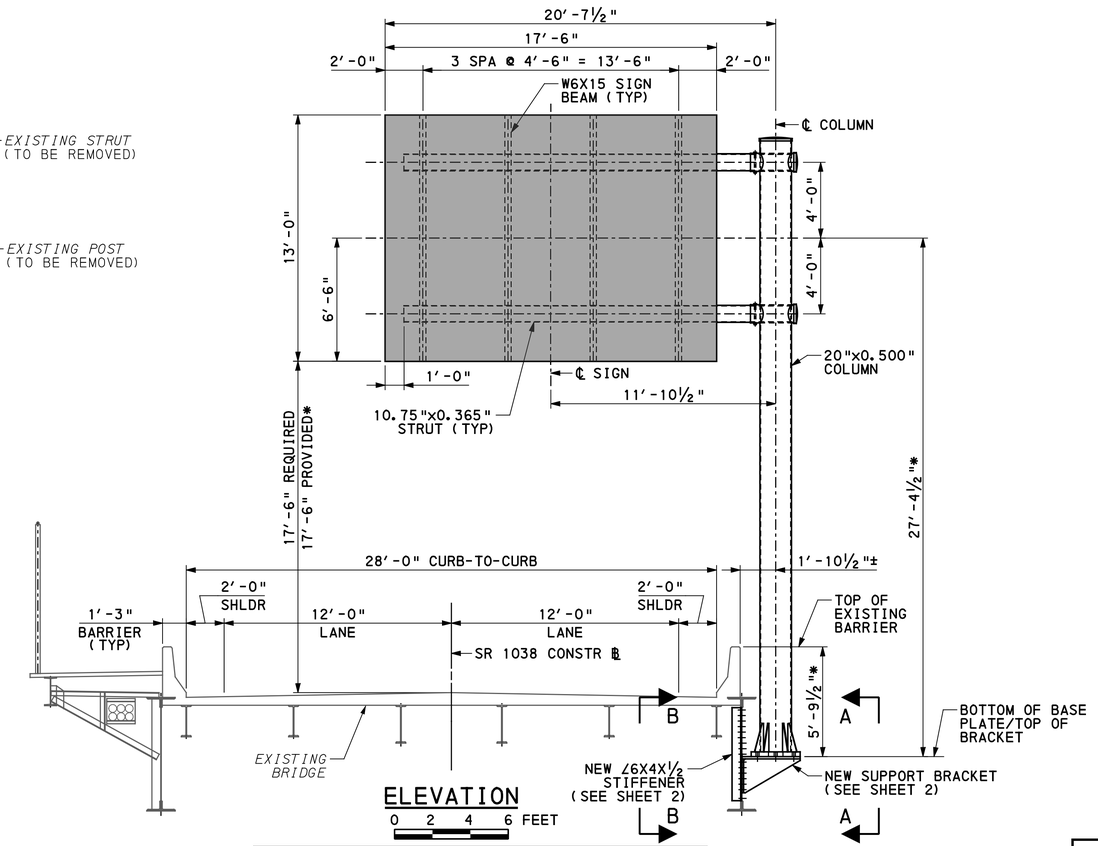

LOCATION MAP

0 40 80 FEET




EXISTING SIGN STRUCTURE

REMOVAL AND DISPOSAL OF EXISTING SIGN STRUCTURE INCLUDED UNDER ITEM 1018-0051




ELEVATION

0 2 4 6 FEET

* FIELD VERIFY BASED ON LOCATION OF EXISTING BOLTS IN GIRDER

| INDEX OF DRAWINGS | |
|---|---|
| SHEET NO. | TITLE |
| 1 | GENERAL PLAN AND ELEVATION |
| 2 | GENERAL NOTES |
| 3 | CONNECTION DETAILS |

## SCOPE OF WORK

REMOVE EXISTING SIGN STRUCTURE, SIGN PANEL AND SUPPORT BRACKET

INSTALL PROPOSED SUPPORT BRACKET TO FASCIA GIRDER

INSTALL PROPOSED CANTILEVER SIGN STRUCTURE

INSTALL PROPOSED SIGN PANEL

## NOTES:

1. FOR ADDITIONAL NOTES AND FABRICATION DETAILS, SEE BC-741M.
2. DESIGN IS FOR ACTUAL SIGN AREA.
3. FOR VIEWS A-A AND B-B, SEE SHEET 2.
4. COORDINATE ALL WORK FOR THE REMOVAL AND REPLACEMENT OF THE SIGN STRUCTURE WITH THE TRAFFIC CONTROL PLANS AND WORK FOR S-40253.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188

BMS STR ID: 02-1038-0010-1420 ECMS/MPMS NO: 63515 BRKEY: 1476

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 1420
SR 1038-A01 STA 8+18.00
OVER THE ALLEGHENY RIVER
DOUBLE STRUT CANTILEVER SIGN STRUCTURE
## GENERAL PLAN AND ELEVATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL THOMAS SCOTT ANTHONY ENGINEER NO. PE-052090-E

Prepared by:
MARKOSKY
3689 Route 711
Ligonier, PA 15658

SIGNATURE

10/26/2022
DATE

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

Docket A-2019-3010031

RECOMMENDED
Digitally signed by Shane Szalankiewicz, P.E.
Date: 2022.10.26 20:29:28-04'00'
DISTRICT BRIDGE ENGINEER

SHEET 1 OF 3
+SUPPLEMENTAL DRAWINGS

S - 40254

| DES: RKP | CKD: TSA | DWG: TJH | CKD: TSA |
|---|---|---|---|

| OVERHEAD SIGN STRUCTURES - CANTILEVER & CENTER-MOUNT STRUCTURES STRUT LENGTHS UP TO 40′ | BC-741M | 8/4/17 |
|---|---|---|
| DESCRIPTION | DWG NO. | REC. DATE |
| SUPPLEMENTAL DRAWINGS | | |

PLOTTED: 10/26/2022 8:53:49 AM

FILE NAME: G:\17-0488 New Kensington Final\CADD\Sign Structure\General Notes.dgn

## DESIGN SPECIFICATIONS

AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, FIRST EDITION, 2015.

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 8" EDITION, 2017, AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4, DECEMBER 2019, INCLUDING LATEST REVISIONS.

## DESIGN LOADS

THE DESIGN WIND VELOCITY IS 80 MPH WITH A GUST FACTOR OF 30%.

THE DESIGN ICE LOAD IS 3.0 PSF.

## GENERAL

PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH SPECIFICATIONS, PUBLICATION 408/2020, AASHTO/AWS D1.5M/D1.5 2015 BRIDGE WELDING CODE, AND CONTRACT SPECIAL PROVISIONS.

PROVIDE STRUCTURAL STEEL CONFORMING TO THE FOLLOWING:

COLUMNS AND PIPE STRUTS: SEE PUBLICATION 408, SECTION 948.2.

OVERHEAD SIGN ANGLES, SHAPES, AND PLATES:
AASHTO M270, GRADE 36
ASTM A709, GRADE 36

BRACKET ANGLES, SHAPES, AND PLATES:
ASTM A572, GRADE 50

ANCHOR BOLTS: ASTM F1554, GRADE 55 PER PUBLICATION 408, SECTION 1105.02(c)3.

BOLTS: AASHTO M164, (ASTM A325) H.S. BOLTS EXCEPT AS NOTED.

U-BOLT INSTALLATION: PER FHWA PUB GUIDELINES FOR THE INSTALLATION, INSPECTION, MAINTENANCE, AND REPAIR OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS (2005).

GALVANIZE ALL STRUCTURAL STEEL, BOLTS, NUTS AND WASHERS FOR THE OVERHEAD SIGN STRUCTURE IN ACCORDANCE WITH PUBLICATION 408, UNLESS STAINLESS STEEL OR OTHERWISE INDICATED.

VERIFY ALL DIMENSIONS AND GEOMETRY OF THE EXISTING STRUCTURE IN THE FIELD AS NECESSARY FOR PROPER FIT OF THE PROPOSED CONSTRUCTION.

ALL DIMENSIONS ARE HORIZONTAL, EXCEPT AS NOTED.

DIMENSIONS ARE BASED ON A NORMAL TEMPERATURE OF 68 DEGREES F.

## STRUCTURAL STEEL

PAINT BRACKET STRUCTURAL STEEL IN ACCORDANCE WITH PUBLICATION 408, SECTION 1070. FOR ADDITIONAL PAINTING NOTES AND REQUIREMENTS, SEE PLANS FOR S-40253.

REAM SUBDRILLED OR SUBPUNCHED HOLES FOR FIELD CONNECTIONS IN THE FABRICATION SHOP.

ALL FASTENERS ARE 7/8 INCH DIAMETER HS BOLTS, EXCEPT AS NOTED.

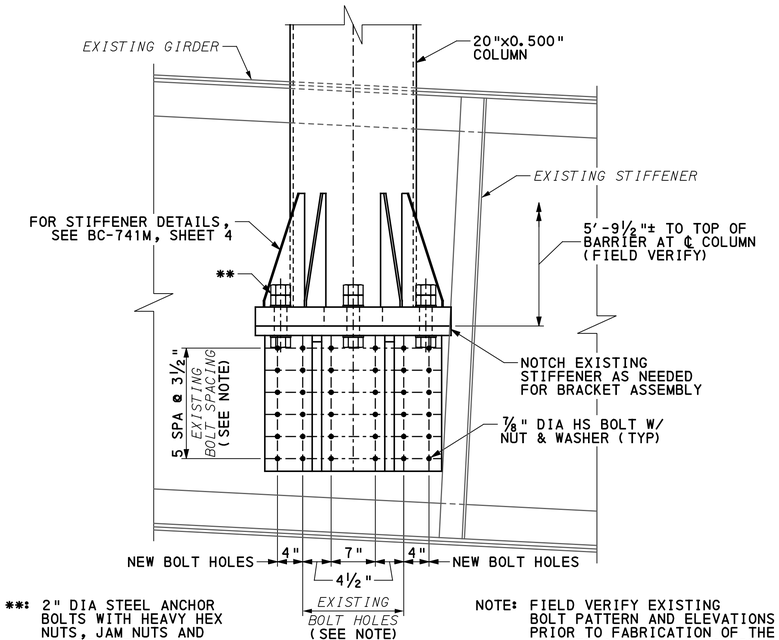
## FASTENERS

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.

## WELDING NOTES

WELDING SPECIFICATIONS: AASHTO/AWS/D1.5M/D1.5-2015 BRIDGE WELDING CODE CONSISTENT WITH PUBLICATION 408 1105.03(M) AND THE CONTRACT SPECIAL PROVISIONS. DO NOT FIELD WELD ON ANY PART OF THE EXISTING BRIDGE WITHOUT PRIOR APPROVAL OF THE REPRESENTATIVE.

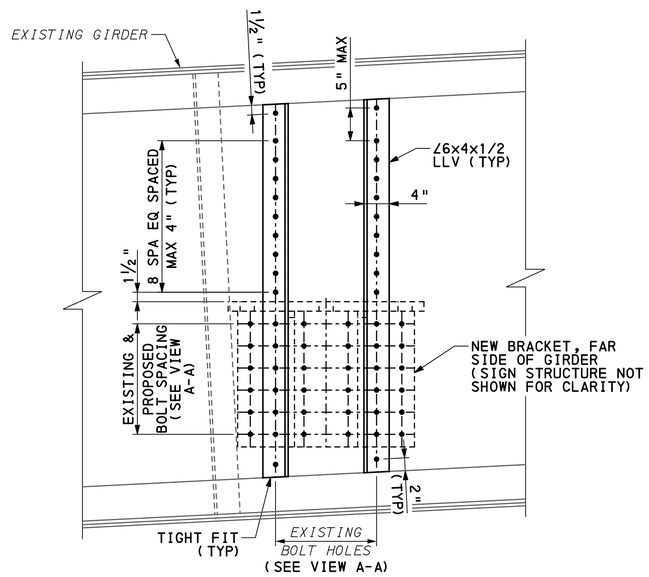



**: 2" DIA STEEL ANCHOR BOLTS WITH HEAVY HEX NUTS, JAM NUTS AND WASHERS (TYP)

NOTE: FIELD VERIFY EXISTING BOLT PATTERN AND ELEVATIONS PRIOR TO FABRICATION OF THE BRACKET OR SIGN STRUCTURE

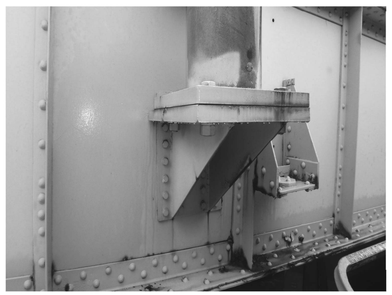
### VIEW A-A

0 1 2 FEET




### VIEW B-B

0 1 2 FEET



### EXISTING SIGN BRACKET

REMOVAL AND DISPOSAL OF EXISTING SIGN BRACKET INCLUDED UNDER ITEM 1018-0051

APPROXIMATE QUANTITIES - STEEL SIGN STRUCTURE - CANTILEVER, AS DESIGNED

| ITEM NO. | DESCRIPTION | UNIT | TOTAL |
|---|---|---|---|
| 4948-0300 | STEEL SIGN STRUCTURE - CANTILEVER, AS DESIGNED, S-40254 (1)(2) | LS | |
| 1050-0021 | FABRICATED STRUCTURAL STEEL | LB | 780 |
| 1018-0051 | REMOVAL OF PORTION OF EXISTING BRIDGE (2) | LS | |

(1) APPROXIMATELY 7,220 LBS OF STRUCTURAL STEEL, GALVANIZED, INCLUDED IN LUMP SUM ITEM 4948-0300. FOR INFORMATION ONLY.

(2) SEE SPECIAL PROVISIONS

NOTES:

1. FOR BRACKET DETAILS, SEE SHEET 3.
2. FOR BASE PLATE AND ANCHOR DETAILS, SEE SHEET 3.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-1420 ECMS/MPMS NO: 63515 BRKEY: 1476

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ALLEGHENY COUNTY
SR 1038 SECTION A01
SEGMENT 0010 OFFSET 1420
SR 1038-A01 STA 8+18.00
OVER THE ALLEGHENY RIVER
DOUBLE STRUT CANTILEVER SIGN STRUCTURE
GENERAL NOTES

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

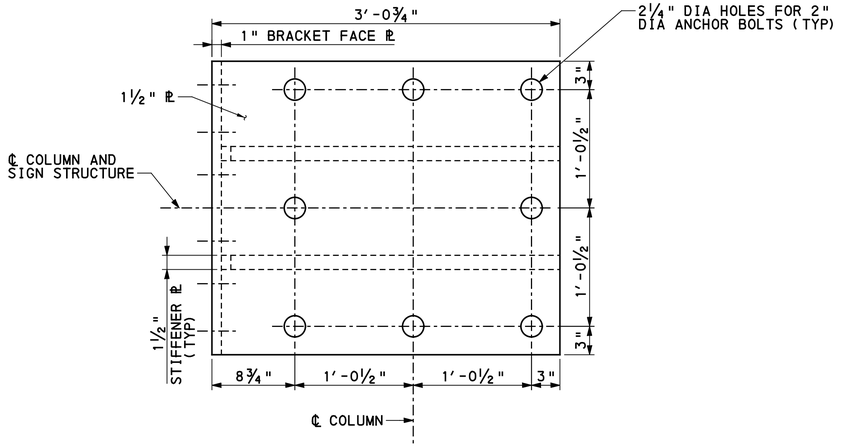
RECOMMENDED
OCTOBER 26, 2022

SHEET 2 OF 3

S - 40254

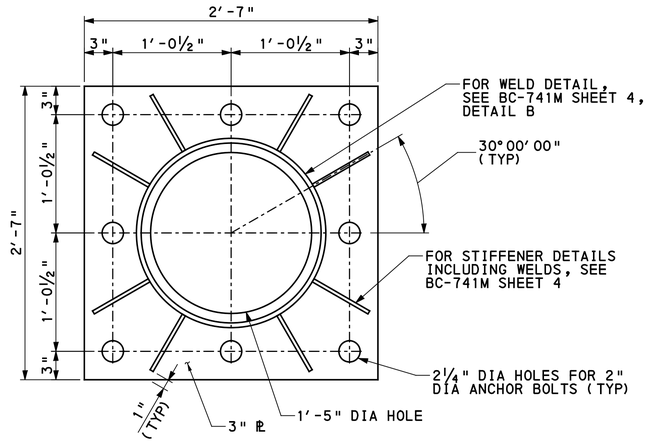
DES: RKP | CKD: TSA | DWG: TJH/RKP | CKD: TSA

PLOTTED: 10/26/2022 8:53:53 AM



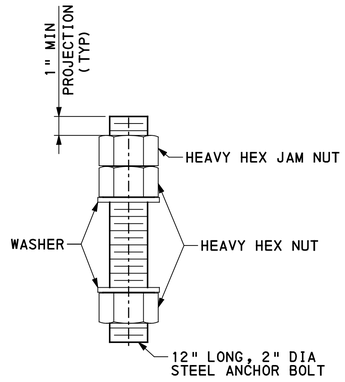

## VIEW D-D

0 6 1 FOOT



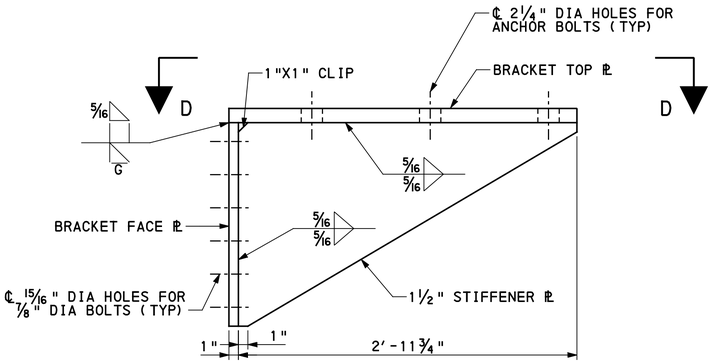

## BASE PLATE DETAIL

0 6 1 FOOT



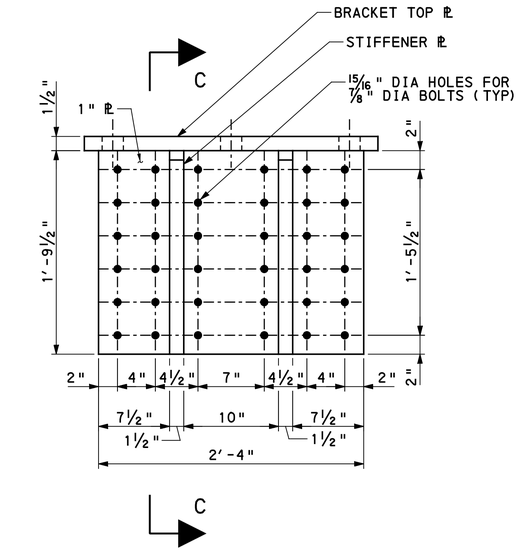

## ANCHOR BOLT ASSEMBLY

0 3 6 9 1 FOOT




## SECTION C-C

0 6 1 FOOT




## BRACKET ASSEMBLY - FRONT VIEW

0 6 1 FOOT

NOTES:

1. FOR ALL SIGN STRUCTURE DETAILS NOT SHOWN, REFER TO BC-741M.

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

SR 1038 PREVIOUSLY KNOWN AS LR 188
BMS STR ID: 02-1038-0010-1420 ECMS/MPMS NO: 63515 BRKEY: 1476

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

# ALLEGHENY COUNTY
# SR 1038 SECTION A01
SEGMENT 0010 OFFSET 1420
SR 1038-A01 STA 8+18.00
OVER THE ALLEGHENY RIVER
DOUBLE STRUT CANTILEVER SIGN STRUCTURE
## CONNECTION DETAILS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
THOMAS SCOTT ANTHONY
ENGINEER NO. PE-052090-E

RECOMMENDED
OCTOBER 26, 2022

SHEET 3 OF 3

S - 40254

| DES: RKP | CKD: TSA | DWG: TJH/RKP | CKD: TSA |
|---|---|---|---|

FILE NAME: G:\17-0488 New Kensington Final\CADD\Sign Structure\Connection Details.dgn