

February 20, 2024

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
400 North Street
Harrisburg, PA 17120

Re: Application of the Department of Transportation of the Commonwealth of Pennsylvania for approval to replace 1 span of the superstructure of the existing railroad bridge where State Route 1001 (River Road) crosses under the track of R.J. Corman Railroad Company/Pennsylvania Lines, Inc., DOT Number 148.713.V in Lawrence Township, Clearfield County, and the allocation of costs incident thereto.

Dear Secretary Chiavetta:

Enclosed for filing, please find attached for your approval the final signed plans for SR 1001-MTF in Clearfield County.

A copy of this submission has been served upon the parties in the Certificate of Service to the Application.

Sincerely,



David J. Wachob
District Grade Crossing Engineer
Engineering District 2-0
Department of Transportation

Attachments

cc: Parties of Record

Mark J. Chappell, P.E., Chief, Right-of-Way, Grade Crossing and Utilities Section, 7th Floor, CKB

Karen L. Cummings, Office of Chief Counsel, 9th Floor, CKB

William Sinick, P.E., Supervisor, Rail Safety Engineering Section PUC, 3rd Floor, CKB

February 20, 2024

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
PO Box 3265
Harrisburg, PA 17105-3265

Re: PUC No. A-2022-3036477

Dear Secretary Chiavetta:

In accordance with ordering paragraph number 5 of the PUC Secretarial Letter/Order at Docket No. A-2022-3036477 dated June 2, 2023, please find attached for your approval one half-size copy of the final signed complete detour, signage and pavement marking and structure plans for Construction of State Route 1001, Section MTF in Clearfield County, consisting of sheets, 1 through 9 of 9, one copy of half-size final signed Traffic Control Plan, consisting of sheets 1 through 2 of 2, one copy of half-size final Signing and Pavement Marking Plan, consisting of sheets 1 through 2 of 2, one copy of half-size final Structure Plans for SR 1001, Section MTF (S-1001RJC) consisting of sheets 1 through 54 of 54.

The Department of Transportation hereby avers that a set of the aforesaid final Drawings for Construction plans and a set of Structure Plans (S-1001RJC) are being sent to the parties of record in accordance with the attached Certificate of Service.

We respectfully request the approval of these plans and the subsequent issuance of a PUC Order or a Secretarial Letter. Should you have any questions or concerns, please feel free to contact David J. Wachob at (814) 496 - 6096.

Sincerely,



David J. Wachob, District Grade Crossing Engineer
Engineering District 2-0
Department of Transportation

Attachments

cc: Parties of Record

Mark J. Chappell, Chief, Right-of-Way, Grade Crossing and Utilities Section, 7th Floor, CKB

Karen L. Cummings, Office of Chief Counsel, 9th Floor, CKB

William Sinick, P.E. Supervisor, Rail Safety Engineering Section, PUC, 3rd Floor, CKB

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of the Department of Transportation of the Commonwealth of Pennsylvania for approval to replace 1 span of the superstructure of the existing railroad bridge where State Route 1001 (River Road) crosses under the track of R.J. Corman Railroad Company/Pennsylvania Lines, Inc., DOT Number 148.713.V in Lawrence Township, Clearfield County, and the allocation of costs incident thereto.

Application
Docket No. A-2022-3036477

Electronically Filed

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true copy of the foregoing document upon the participants listed below by electronic mail.

Deborah Hawley, Director of Contracts & Real Estate
R.J. Corman Railroad Group, LLC
PO Box 788, 101 RJ Corman Dr,
Nicholasville, KY 40356
Deborah.Hawley@RJCorman.com

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HNTB Corporation
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Harrisburg, PA 17110
areede@hntb.com

Deborah Hoover
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Mechanicsburg, PA 17055
Deb.Hoover@kci.com

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Clearfield County Commissioners
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Clearfield, PA 16830
[cccomm@clearfieldco.org](mailto:cocomm@clearfieldco.org)

Randy Powell, Chairperson
Lawrence Township Supervisors
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Clearfield, PA 16830
bshaffner@lawrencepa.gov

Barb Shaffner
Lawrence Township
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ryohn@atlanticbb.com

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rcarr@ugi.com

Leslie Stott
Borough of Clearfield
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Clearfield, PA 16830
lesliestott@clearfieldpa.us

Keith Hooper
Terradex Inc.
855 El Camino Real, #309
Palo Alto, CA 94301
keith@terradox.com

Dated this 20th Day of February 2024



David J. Wachob
District Grade Crossing Engineer
PennDOT District 2-0

PLAN PREPARATION
 PENNDOT PROJECT MANAGER - MICHELLE L. MAYS, P.E.

DISTRICT	COUNTY	BOROUGH	TOWNSHIP	ROUTE	SECTION	TOTAL SHEETS
2-0	CLEARFIELD		LAWRENCE	1001	MTF	9

ECMS NO. 115877

ALSO INCLUDED:

TRAFFIC CONTROL PLAN	2 SHEETS
TABULATION SHEETS	2 SHEETS
SIGNING AND PAVEMENT MARKING PLAN	1 SHEET
EROSION AND SEDIMENT POLLUTION CONTROL PLAN	8 SHEETS
STRUCTURE PLAN S-1001RJC	54 SHEETS
RAILROAD PLANS	6 SHEETS
CROSS SECTIONS	9 SHEETS
AIDS TO NAVIGATION PLAN	10 SHEETS

COMMONWEALTH OF PENNSYLVANIA



DEPARTMENT OF TRANSPORTATION

DRAWINGS FOR CONSTRUCTION OF

STATE ROUTE 1001 SECTION MTF IN CLEARFIELD COUNTY

FROM STA. 15+00.00 TO STA. 22+75.00 LENGTH 675.00 FT. 0.128 MI.
 FROM SEG. 0132 OFFSET 0330 TO SEG. 0132 OFFSET 1105

LIMITS OF SIGNING

FROM SEG. 0112 OFFSET 0886 TO SEG. 0140 OFFSET 0396

PUC APPLICATION DOCKET NUMBER A-2022-3036477

SCALE

HORIZONTAL 0 25 50 FEET

VERTICAL 0 5 10 FEET

DESIGN DESIGNATION - SR 1001

HIGHWAY CLASSIFICATION - MINOR ARTERIAL - URBAN
 TYPOLOGY - COMMUNITY ARTERIAL - RURAL PLACES
 DESIGN SPEED - 35 MPH
 PAVEMENT WIDTH - 2 LANES @ 11'-0"
 SHOULDER WIDTH - 2'-0" RT

TRAFFIC DATA

CURRENT YEAR A. D. T. - 4,815 (2023)
 DESIGN YEAR A. D. T. - 4,815 (2045)
 D. H. V. - 530 (2045)
 D - 55 %
 T - 2 %

PREPARED BY: HNTB CORPORATION, 4507 N. FRONT STREET, SUITE 300 HARRISBURG, PA 17110 DATE: 1/17/24	APPROVED DATE: <u>Jan 24, 2024</u> R. J. CORMAN RAILROAD
	RECOMMENDED DATE: <u>Feb 05, 2024</u> DISTRICT EXECUTIVE
	RECOMMENDED DATE: <u>01/07/2024</u> DEPUTY SECRETARY
	APPROVED DATE: <u>02/12/2024</u> SECRETARY OF TRANSPORTATION (ON BEHALF OF THE GOVERNOR AS WELL AS THE SECRETARY)

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
2-0	CLEARFIELD	1001	MTF	2 OF 9
LAWRENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	APPROVED

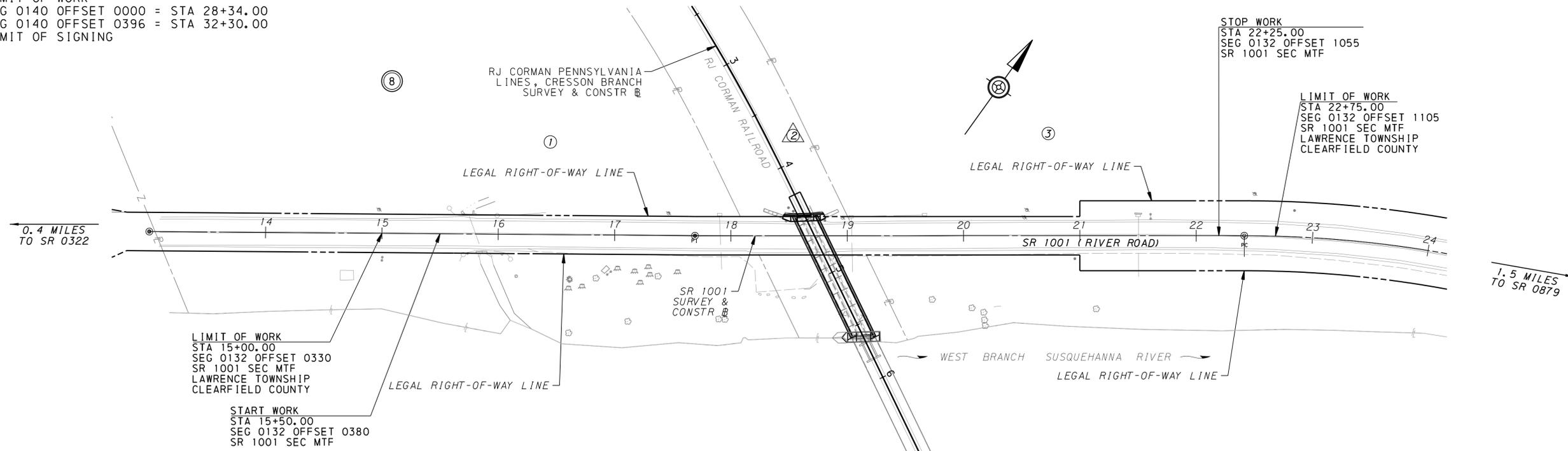
LIST OF EXISTING ROADWAY TYPES

ROUTE	TYPE
SR 1001 LIMIT OF WORK TO SEG 0132 OFFSET 0950	22' OF 2" SUPERPAVE HMA WEARING COURSE, 64-22, 9.5 MM; ON: 22' OF 1.25" BITUMINOUS WEARING COURSE; ON: 1' OF 1" BITUMINOUS WEARING COURSE ON 4" BITUMINOUS CONCRETE BASE (EACH SHOULDER); AND: 20' OF 6.75" BITUMINOUS WEARING COURSE; ON: 3' OF 8" CRUSHED AGGREGATE BASE COURSE (EACH SHOULDER); AND: 14' OF 1" BITUMINOUS WEARING COURSE; ON: 14' OF 6" NATIVE STONE GRANULAR SUBBASE
SEG 0132 OFFSET 0950 TO LIMIT OF WORK	22' OF 2" SUPERPAVE HMA WEARING COURSE, 64-22, 9.5 MM; ON: 22' OF 1.25" BITUMINOUS WEARING COURSE; ON: 1' OF 1" BITUMINOUS WEARING COURSE ON 4" BITUMINOUS CONCRETE BASE (EACH SHOULDER); AND: 20' OF 7.25" BITUMINOUS WEARING COURSE; ON: 20' OF 10" CRUSHED AGGREGATE BASE COURSE

NOTE: THE DEPTHS OF MATERIALS SHOWN ARE FOR DESIGN PURPOSES ONLY.
ANY RISK OF UNANTICIPATED COST ASSOCIATED WITH DIFFERENCES
BETWEEN THE LISTED DEPTHS AND THE ACTUAL DEPTHS SHALL BE ACCEPTED
BY THE CONTRACTOR.

LIST OF SEGMENT EQUALITIES

SR 1001
LIMIT OF SIGNING
SEG 0112 OFFSET 0886 = STA 7+60.00
SEG 0132 OFFSET 0000 = STA 11+70.00
LIMIT OF WORK
SEG 0132 OFFSET 0330 = STA 15+00.00
SEG 0132 OFFSET 0701 = STA 18+71.90
SEG 0132 OFFSET 1030 = STA 22+00.00
LIMIT OF WORK
SEG 0140 OFFSET 0000 = STA 28+34.00
SEG 0140 OFFSET 0396 = STA 32+30.00
LIMIT OF SIGNING



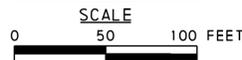
LEGEND

- ⊙ - PLAN
- - PARCEL IDENTIFICATION NUMBER
- △ - PARCEL IDENTIFICATION NUMBER (NO TAKE)

LIST OF PROPERTY OWNERS

- ① MICHAEL L. TIBBENS AND DAWN M. TIBBENS, HUSBAND AND WIFE
- ② RJ CORMAN RAILROAD COMPANY/PENNSYLVANIA LINES INC., A CORPORATION OF THE COMMONWEALTH OF PENNSYLVANIA
- ③ BRIAN LYNN HUBLER, SR., AN INDIVIDUAL, ELIZABETH L. HUBLER, AN INDIVIDUAL, AND WALTER LEE HUBLER, JR., AN INDIVIDUAL AS TENANTS IN COMMON

INDEX MAP



SHEET INDEX BLOCK

DESCRIPTION	SHEET
TITLE SHEET	1
INDEX MAP	2
GENERAL NOTES AND LOCATION MAP	3
TYPICAL SECTION	4
SUMMARY SHEET	5
TAB SHEETS	6-7
CONSTRUCTION PLAN	8
PROFILE SHEET	9

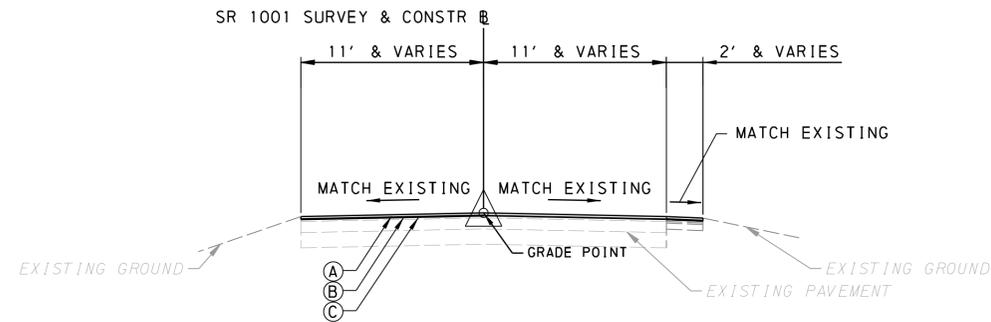


DISTRICT	COUNTY	ROUTE	SECTION	SHEET
2-0	CLEARFIELD	1001	MTF	4 OF 9
LAWRENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	APPROVED

LEGEND

- Ⓐ 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
- Ⓑ SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE (SCRATCH), PG 64S-22, 0.3 TO <3 MILLION ESALS, 9.5 MM MIX, SRL-H (1/2" DEPTH)
- Ⓒ MILLING OF ASPHALT PAVEMENT SURFACE, 2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR

NOTE: PROVIDE TACK COAT BETWEEN EACH PAVEMENT LAYER IN ACCORDANCE WITH PUB. 408, SEC. 460.



SR 1001 (RIVER ROAD)
 STA 16+50.00 TO STA 22+00.00
 NOT TO SCALE

TYPICAL SECTION
 SR 1001



TCP = TRAFFIC CONTROL PLAN
 STR = STRUCTURE PLAN
 TK = TRACK PLAN

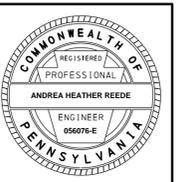
SUMMARY

ATON = AIDS TO NAVIGATION PLAN

REVISION NO	REVISIONS	DATE	BY	DISTRICT	COUNTY	ROUTE	SECTION	SHEET
				02	CLEARFIELD	1001	MTF	5 OF 9
LAWRENCE TOWNSHIP								

◆ - SEE SPECIAL PROVISIONS

QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	QUANTITY	ITEM NO	DESCRIPTION	DESIGN NO	FOR TAB SEE SHEET	
	UNIT					UNIT					UNIT					UNIT				
	4201 0001 LS	CLEARING AND GRUBBING, EXCLUDING TOPSOIL REMOVAL		NO TAB	146	0804 0025 LB	SEEDING AND SOIL SUPPLEMENTS - FORMULA B RESIDENTIAL MIX, INCLUDING MULCH		7	OR	8100 0001 LS	STEEL BRIDGE STRUCTURE		1	STR					
2743	0203 0001 CY	CLASS 1 EXCAVATION		7	10	0804 0032 LB	SEEDING - FORMULA T TEMPORARY GRASS MIX, INCLUDING MULCH		7											
35	0204 0001 CY	CLASS 2 EXCAVATION		7	10	0810 0052 EACH	SELECTIVE TREE REMOVAL		6	30	9000 0001 LF	TRACK CONSTRUCTION, BALLASTED TRACK FULL DEPTH CONSTRUCTION			TK					
6714	0212 0014 SY	GEOTEXTILE, CLASS 4, TYPE A		7	1000	0845 0001 DOLLA	UNFORESEEN WATER POLLUTION CONTROL		NO TAB	30	9000 0002 LF	TRACK CONSTRUCTION, BALLASTED TRACK PARTIAL DEPTH CONSTRUCTION			TK					
					2	0849 0010 EACH	ROCK CONSTRUCTION ENTRANCE		7	122	9000 0003 LF	TRACK CONSTRUCTION, DIRECT FIXATION TRACK CONSTRUCTION			TK					
134	0316 0434 SY	SUPERPAVE ASPHALT MIXTURE DESIGN, FLEXIBLE BASE REPLACEMENT, PG 64S-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 10" DEPTH		6	848	0850 0031 CY	ROCK, CLASS R-3		7	376	9000 0004 LF	TRACK CONSTRUCTION, RAIL REPLACEMENT			TK					
1436	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		6	1570	0850 0035 CY	ROCK, CLASS R-7		7		9000 0005 LS	TRACK CONSTRUCTION, FINAL TRACK SURFACING			TK					
43	0413 1021 TON	SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE (SCRATCH), PG 64S-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, SRL-H		6	1	0855 0003 EACH	PUMPED WATER FILTER BAG		7		9000 0006 LS	TRACK CONSTRUCTION, OPEN DECK TRACK CONSTRUCTION			TK					
3142	0460 0001 SY	ASPHALT TACK COAT		6	3	0860 0000 EACH	INLET FILTER BAG FOR TYPE M INLET		7		9000 0007 LS	IMPLEMENT AND MAINTAIN AIDS TO NAVIGATION (ATON) PLAN			ATON					
1436	0491 0013 SY	MILLING OF ASPHALT PAVEMENT SURFACE, 2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR		6	1	0860 0002 EACH	INLET FILTER BAG FOR TYPE C INLET		7	12	9000 0008 EACH	UTILITY TEST PIT			NO TAB					
					540	0867 0018 LF	COMPOST FILTER SOCK, 18" DIAMETER		7	307	9000 0010 LF	5" SCHEDULE 40 PVC CONDUIT, INCLUDING TRENCH AND BACKFILL			6					
41	0601 0352 LF	15" THERMOPLASTIC PIPE, GROUP III, 8'-2' FILL		7							9203 0101 LS	TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM, S-1001RJC			STR					
141	0601 0353 LF	18" THERMOPLASTIC PIPE, GROUP III, 8'-2' FILL		7		0901 0001 LS	MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION		NO TAB											
	0608 0001 LS	MOBILIZATION		NO TAB	28	0901 0231 DAY	ADDITIONAL WARNING LIGHTS, TYPE B		TCP											
	0609 0007 LS	INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, TYPE B		NO TAB	100	0901 0240 SF	ADDITIONAL TRAFFIC CONTROL SIGNS		TCP											
	0609 0009 LS	EQUIPMENT PACKAGE		NO TAB	6	0931 0001 SF	POST MOUNTED SIGNS, TYPE B		SPM											
1	0618 0021 EACH	CONCRETE COLLAR FOR 15" PIPE EXTENSION		7	1	0941 0001 EACH	RESET POST MOUNTED SIGNS, TYPE B		SPM											
2	0618 0022 EACH	CONCRETE COLLAR FOR 18" PIPE EXTENSION		7	2200	0962 1000 LF	4" WHITE WATERBORNE PAVEMENT MARKINGS		SPM											
	0686 0050 LS	CONSTRUCTION SURVEYING, TYPE D		NO TAB	2200	0962 1005 LF	4" YELLOW WATERBORNE PAVEMENT MARKINGS		SPM											
	0689 0003 LS	CPM SCHEDULE		NO TAB	6	0971 0001 EACH	REMOVE POST MOUNTED SIGNS, TYPE B		SPM											
1000	0690 0001 DOLLA	INTERNAL FACILITATION		NO TAB	2	0972 0001 EACH	REMOVE POST MOUNTED SIGNS, TYPE C		SPM											
340	0703 0025 CY	NO. 57 COARSE AGGREGATE		7	EITHER	8120 0001 LS	BRIDGE STRUCTURE, AS DESIGNED, S-1001RJC		1	STR										
					AND	1002 0073 LB	REINFORCEMENT BARS, GALVANIZED		1	STR										
					700															



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
2-0	CLEARFIELD	1001	MTF	8 OF 9
LAWRENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	APPROVED

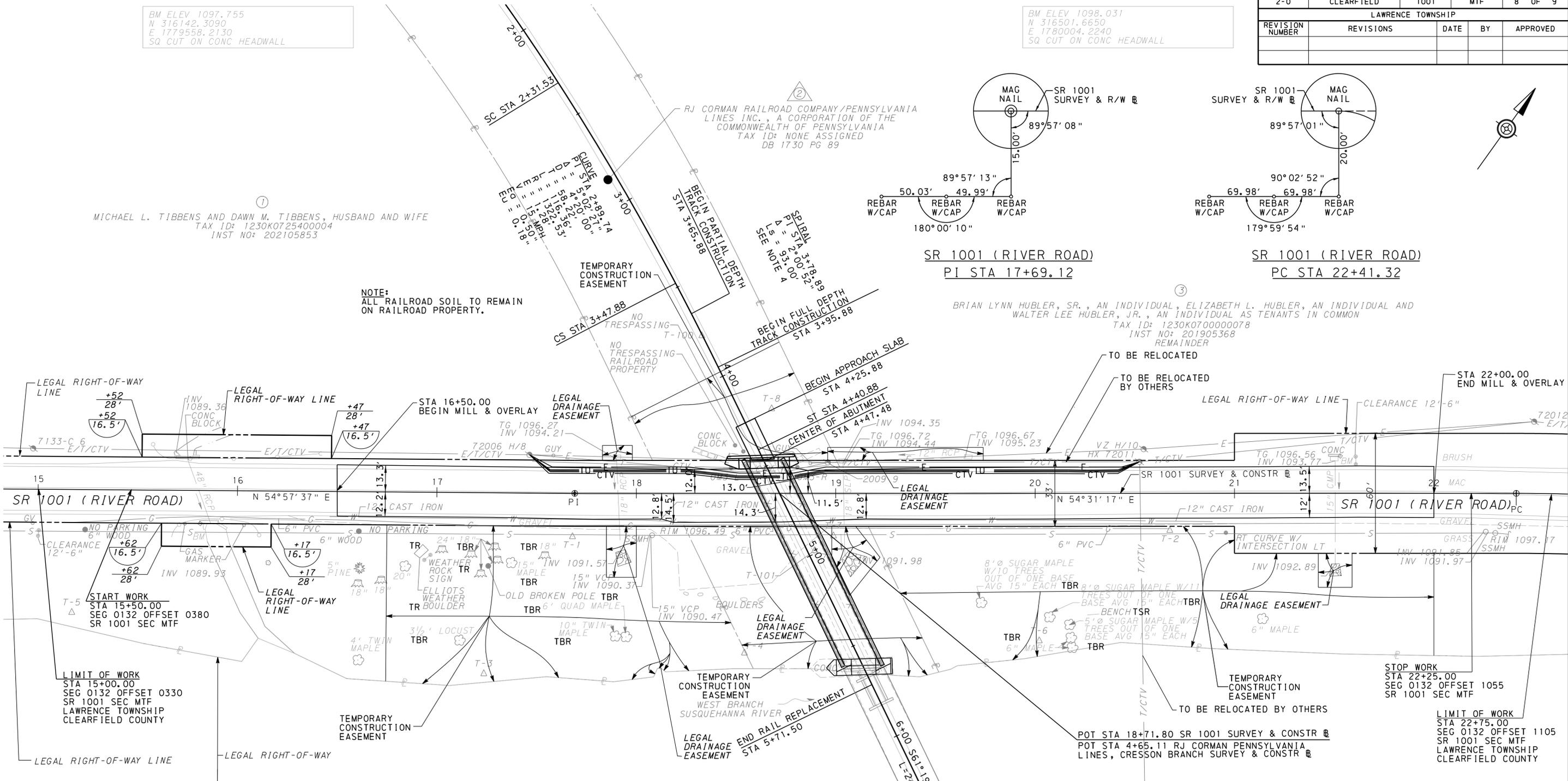
BM ELEV 1097.755
N 316142.3090
E 1779558.2130
SQ CUT ON CONC HEADWALL

BM ELEV 1098.031
N 316501.6650
E 1780004.2240
SQ CUT ON CONC HEADWALL

①
MICHAEL L. TIBBENS AND DAWN M. TIBBENS, HUSBAND AND WIFE
TAX ID: 1230K0725400004
INST NO: 202105853

③
BRIAN LYNN HUBLER, SR., AN INDIVIDUAL, ELIZABETH L. HUBLER, AN INDIVIDUAL AND WALTER LEE HUBLER, JR., AN INDIVIDUAL AS TENANTS IN COMMON
TAX ID: 1230K0700000078
INST NO: 201905368
REMAINDER

NOTE:
ALL RAILROAD SOIL TO REMAIN ON RAILROAD PROPERTY.



PROPOSED STRUCTURE DATA
RJ CORMAN RAILROAD COMPANY OEVR
SR 1001 (RIVER ROAD)
STATION: 4+65.11
TYPE OF STRUCTURE: 3-SPAN STEEL THROUGH PLATE GIRDER & STEEL THROUGH TRUSS BRIDGE
SPAN LENGTHS:
SPAN 1 = 112'-1 5/8"
SPAN 2 = 111'-11 1/2"
SPAN 3 = 111'-11 1/2"
VERTICAL CLEAR:
SR 1001 = 14'-7"
SKEW: 66°00'00"
STRUCTURE NO: S-1001RJC

EXISTING STRUCTURE DATA
RJ CORMAN RAILROAD COMPANY SR 1001 (RIVER ROAD)
STATION: 4+65.11
TYPE OF STRUCTURE: 3-SPAN STEEL THROUGH TRUSS BRIDGE
SPAN LENGTHS:
SPAN 1 = 111'-11 1/2"
SPAN 2 = 111'-11 1/2"
SPAN 3 = 111'-11 1/2"
VERTICAL CLEAR:
SR 1001 = 12'-7 1/4"
SKEW: 66°00'00"
STRUCTURE NO: N/A

LEGEND
TBR TO BE REMOVED
TR TO REMAIN AND BE PROTECTED
TSR TO BE REMOVED, STORED, AND REINSTALLED
ROCK APRON

SCALE
0 25 50 FEET



2/14/2024 11:51:10 AM E:\PROJECTS\240318-03\240318-03-CV-P101.dgn

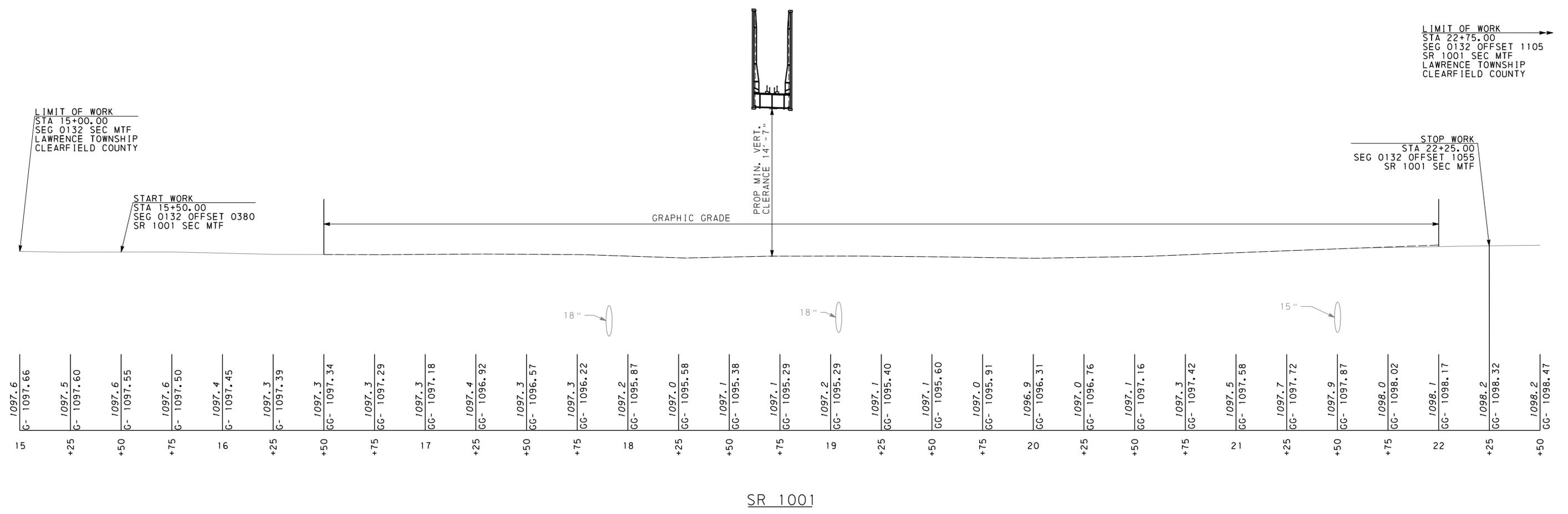
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
2-0	CLEARFIELD	1001	MTF	9 OF 9
LAWRENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	APPROVED

LIMIT OF WORK
 STA 15+00.00
 SEG 0132 SEC MTF
 LAWRENCE TOWNSHIP
 CLEARFIELD COUNTY

START WORK
 STA 15+50.00
 SEG 0132 OFFSET 0380
 SR 1001 SEC MTF

STOP WORK
 STA 22+25.00
 SEG 0132 OFFSET 1055
 SR 1001 SEC MTF

LIMIT OF WORK
 STA 22+75.00
 SEG 0132 OFFSET 1105
 SR 1001 SEC MTF
 LAWRENCE TOWNSHIP
 CLEARFIELD COUNTY



FOR PLAN, SEE SHEET 8

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
2-0	CLEARFIELD	1001	MTF	1 OF 2
LAWRENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	APPROVED

GENERAL NOTES:

THIS WORK CONSISTS OF THE MAINTENANCE OF TRAFFIC AND THE PROTECTION OF THE TRAVELING PUBLIC APPROACHING THE CONSTRUCTION AREA, WITHIN THE LIMITS OF CONSTRUCTION, AND ON APPROVED DETOURS.

FURNISH, ERECT, PLACE, AND MAINTAIN THE TRAFFIC CONTROL SIGNS AND DEVICES, AND MAINTAIN TRAFFIC DURING HOURS OF CONSTRUCTION AND AT ALL OTHER TIMES IN ACCORDANCE WITH THE METHODS INDICATED ON THESE DRAWINGS AND:

1. THE SPECIAL PROVISIONS OF THE CONTRACT
2. PA CODE, TITLE 67, CHAPTER 212, OFFICIAL TRAFFIC CONTROL DEVICES
3. PENNDOT PUBLICATION 213, TEMPORARY TRAFFIC CONTROL GUIDELINES
4. PENNDOT PUBLICATION 35, QUALIFIED PRODUCTS LIST FOR CONSTRUCTION (BULLETIN 15)
5. PENNDOT PUBLICATION 408/2020, SPECIFICATIONS AND CURRENT INTERIMS
6. FEDERAL HIGHWAY ADMINISTRATION, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
7. PENNDOT PUBLICATION 236, HANDBOOK OF APPROVED SIGNS
8. PENNDOT PUBLICATION 111, TRAFFIC CONTROL PAVEMENT MARKINGS AND SIGNING STANDARDS

IMMEDIATELY UPON COMPLETION OF THE WORK, REMOVE THE DEVICES. UNLESS OTHERWISE SPECIFIED, THEY REMAIN THE PROPERTY OF THE CONTRACTOR. THE DEPARTMENT WILL REMOVE ANY TRAFFIC CONTROL DEVICES ERECTED BY DEPARTMENT FORCES.

THE DISTRICT CONSTRUCTION ENGINEER OR REPRESENTATIVE WILL INSPECT ALL TRAFFIC CONTROL DEVICES PRIOR TO THE START OF WORK.

VEHICLE WIDTH RESTRICTION AND ROUTE MARKER SIGNS WILL BE INSTALLED AT THE BEGINNING OF THE PROJECT. THE INSTALLATION LOCATIONS ARE TO BE APPROVED BY THE DISTRICT CONSTRUCTION ENGINEER OR REPRESENTATIVE.

COVER OR REMOVE ALL SIGNS NOT IN USE OR CONFLICTING TO THE OPERATION BEING PERFORMED. WHEN COVERING EXISTING SIGNS, USE MATERIALS AND PROCEDURES CONSISTENT WITH PUBLICATION 408 SECTION 901.3(a) AND (cc).

THIS TRAFFIC CONTROL PLAN DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY AS SPECIFIED IN SECTION 901.3(a) OF PUBLICATION 408.

ALL TRAFFIC CONTROL DEVICES SHALL BE NEW OR IN LIKE NEW CONDITION AND MAINTAINED AS SUCH.

REMOVE CONFLICTING PAVEMENT MARKINGS IN ACCORDANCE WITH PUBLICATION 408 SECTION 963.

INVENTORY AND DOCUMENT ALL EXISTING SIGNS AND PAVEMENT MARKING PATTERNS PRIOR TO THE BEGINNING OF CONSTRUCTION WITH THE PROJECT ENGINEER OR REPRESENTATIVE.

PLACE TEMPORARY NON-PLOWABLE RAISED PAVEMENT MARKERS AT 5' SPACING TO SUPPLEMENT PAINT LINES IN TRANSITIONS AND LANE SHIFTS.

MAINTAIN ONE LANE TRAFFIC WHILE INSTALLING CROSS PIPES AND PAVEMENT PATCHING UNDERCUTS. ONLY EXCAVATE WHAT CAN BE BACKFILLED BEFORE THE END OF THE WORKDAY. REFER TO PENNDOT PUBLICATION 408, SECTION 901(j) FOR MAINTENANCE OF CREATED DROP-OFF CONDITIONS.

CONTACT THE DISTRICT TRAFFIC ENGINEER PRIOR TO OPENING THE ROAD TO TRAFFIC TO REVIEW SIGNS AND PAVEMENT MARKING PATTERNS.

ALL POST MOUNTED SIGNS MUST BE MOUNTED ON BREAKAWAY STEEL POSTS AS SPECIFIED IN SECTION 1103.08 OF PUBLICATION 408.

INSTALL SIGNS ON FREEWAY AND EXPRESSWAY AS PER GA 07-A, 07-B, AND 07-C.

TWO (2) WEEKS PRIOR TO IMPLEMENTING TRAFFIC PATTERN CHANGES, CONTACT: EMERGENCY SERVICES (POLICE, FIRE, MEDICAL, ETC.), LOCAL BUSINESSES, LOCAL MUNICIPALITIES, LOCAL POSTMASTER, COUNTY MAINTENANCE, SCHOOL DISTRICT, POSTED AND BONDED ROADS COORDINATOR, COORDINATE A PRESS RELEASE WITH PENNDOT COMMUNITY RELATIONS COORDINATOR PRIOR TO THE START OF WORK AND/OR START OF A NEW CONSTRUCTION PHASE.

NOTIFY THE DISTRICT CONSTRUCTION UNIT/PERMITS ENGINEER, IN WRITING (FORM M-937R) (BRIDGE/ROUTE RESTRICTION), AT LEAST 14 DAYS (EXCLUDING WEEKENDS AND HOLIDAYS) BEFORE IMPLEMENTING, CHANGING, OR EXTENDING ANY RESTRICTION OR CLOSURE. NOTIFY THE DISTRICT CONSTRUCTION UNIT, IN WRITING (FORM M-937RO) (ROUTE/BRIDGE RESTRICTION OPENING), AT LEAST SEVEN (7) DAYS (EXCLUDING WEEKENDS AND HOLIDAYS) BEFORE REMOVING ANY RESTRICTION OR CLOSURE.

WHEN WORK IMPACTS A SIGNALIZED INTERSECTION, THE SIGNAL MUST BE PUT INTO FLASH BY THE LOCAL MUNICIPALITY AND THE INTERSECTION CONTROLLED BY FLAGGER USING A RED FLAG.

MAINTAIN ACCESS TO SIDE ROADS, PRIVATE DRIVEWAYS, AND BUSINESSES AT ALL TIMES.

CONTACT THE TRAFFIC MANAGEMENT CENTER (TMC) AT LEAST 15 MINUTES PRIOR TO BEGINNING WORK WITHIN ANY STATE OWNED ROADWAY INCLUDING INTERSTATE AND LIMITED ACCESS. REPORT THE WORK LOCATION, BEGINNING TIME OF TRAFFIC RESTRICTIONS, WHAT TRAFFIC RESTRICTIONS DRIVERS WILL ENCOUNTER, THE EXPECTED TIME THAT TRAFFIC PATTERNS WILL RETURN TO NORMAL, AND WHAT PATA NUMBER IS BEING UTILIZED. UPON CONCLUSION OF THE TRAFFIC RESTRICTION, NOTIFY THE TMC IMMEDIATELY (814) 768-0725.

IF IT BECOMES NECESSARY FOR A CONSTRUCTION PROJECT TO EXTEND INTO WINTER MONTHS, THE PROJECT APPLICANT AND CONTRACTOR ARE RESPONSIBLE TO ENSURE THAT THE TEMPORARY TRAFFIC CONTROL DEVICES PROVIDE A 13'-15' LANE WIDTH (THIS CAN INCLUDE AVAILABLE SHOULDER AREA) FOR MAINTENANCE ACTIVITIES, SUCH AS SNOW PLOWING OPERATIONS. THE CONTRACTOR SHALL REVIEW THE TRAFFIC CONTROL SET UP AND TEMPORARY TRAFFIC CONTROL DEVICES THROUGHOUT THE INCLEMENT WEATHER OR STORM EVENT AND BE RESPONSIBLE FOR MAINTAINING AND RESETTING ANY TRAFFIC CONTROL DEVICES WHENEVER NEEDED. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT CLEAN AND IN THE UPRIGHT POSITION. THE PENNDOT COUNTY MAINTENANCE OFFICE SHALL BE NOTIFIED, AND PENNDOT COUNTY MAINTENANCE PERSONNEL WILL EVALUATE SNOW REMOVAL REQUIREMENTS THROUGHOUT THE WORK ZONE. IF THE MAINTAINING OF DEVICES OR WINTER OPERATIONS BECOMES AN ISSUE A DIFFERENT TRAFFIC CONTROL SET UP AND SCHEME WILL BE REQUIRED, OR THE WORK ZONE WILL NEED TO BE OPENED TO TRAFFIC WITH NO RESTRICTIONS.

GENERAL NOTES (CONTINUED) :

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

- TC-8700C JUNE 13, 2013
- TC-8716 JUNE 13, 2013
- TC-8717 JUNE 13, 2013

SHORT TERM TRAFFIC CONTROL REQUIRED FOR SITE PREPARATION WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING PATA FIGURES FROM PENNDOT PUBLICATION 213:

- A. PATA 101-A
- B. PATA 102
- C. PATA 103
- D. PATA 106

SHEET INDEX

DESCRIPTION	SHEET
GENERAL NOTES AND SIGN TABULATION	1
DETOUR PLAN	2

ADDITIONAL WARNING LIGHTS, TYPE B	ADDITIONAL TRAFFIC CONTROL SIGNS	REMARKS	SIDE	STATIONS
0901 0231 DAY	0901 0240 NIGHT	ENTIRE PROJECT	LT/RT	-
28	100			

**TABULATION OF QUANTITIES
TRAFFIC CONTROL PLAN**

**TABULATION OF TRAFFIC CONTROL DEVICES
INCLUDED IN ITEM 0901-0001
(FOR INFORMATION ONLY)**

SERIES DESIGNATION	DESCRIPTION	SIZE ▲	QUANTITY
M4-8A	END DETOUR	24"x18"	2
M4-9L	DETOUR, LEFT	30"x24"	2
M4-9R	DETOUR, RIGHT	30"x24"	2
M4-9S	DETOUR, STRAIGHT	30"x24"	4
M4-9SL	LEFT ADVANCE DETOUR	30"x24"	2
M4-9SR	RIGHT ADVANCE DETOUR	30"x24"	2
M4-10L	DETOUR ARROW, LEFT	48"x18"	1
M4-10R	DETOUR ARROW, RIGHT	48"x18"	2
R11-2	ROAD CLOSED	48"x30"	4
R11-3A	ROAD CLOSED-LOCAL TRAFFIC ONLY	60"x30"	1
W20-2	ADVANCE DETOUR	36"x36"	3
W23-101	THIS STREET TO BE CLOSED FOR CONSTRUCTION	96"x48"	2
W30-1-2	DISTANCE (1000 FT) (PANEL)	20"x6"	1
W30-1-3	DISTANCE (1500 FT) (PANEL)	20"x6"	1
W30-1-6	DISTANCE (AHEAD) (PANEL)	20"x6"	1
	TYPE III BARRICADE		7
	TYPE B YELLOW FLASHING LIGHT		13

▲ THE SIZES SHOWN ARE MINIMUM REQUIREMENTS

SEQUENCE OF CONSTRUCTION:

THE CONSTRUCTION SEQUENCE SHOWN AND DESCRIBED IN THESE DRAWINGS IS A SUGGESTED SEQUENCE. ITS INCLUSION IN THESE DRAWINGS DOES NOT IMPLY THAT THIS SEQUENCE OR METHOD IS MANDATED. HOWEVER, ANY PROPOSED CONSTRUCTION SEQUENCE MUST COMPLY WITH THE MAXIMUM TRACK OUTAGE LENGTH DEFINED BY THE OWNER, WHICH IS FOUR (4) CALENDAR DAYS OR 96 TOTAL HOURS.

PRE-CONSTRUCTION

ALL AERIAL ELECTRIC AND TELECOMMUNICATION UTILITIES ARE TO BE RELOCATED BY THE UTILITY COMPANY PRIOR TO SITE PREPARATION WORK.

STAGE 1:*

UTILIZE SHORT TERM TRAFFIC CONTROL AS REQUIRED TO PREPARE THE SITE.

1. INSTALL E&S CONTROL MEASURES.
2. PERFORM ALL NECESSARY TREE REMOVAL / CLEARING AND GRUBBING (SUBJECT TO ALL ENVIRONMENTAL DATE RESTRICTIONS NOTED IN THE CONTRACT DOCUMENTS).
3. EXTEND EXISTING DRAINAGE PIPES.
4. INSTALL ATON SIGNAGE AND CONSTRUCT TEMPORARY CAUSEWAY.
5. PERFORM MASONRY CRACK REPAIRS ON THE PIER AND ABUTMENT.
6. INSTALL TEMPORARY AGGREGATE FILL TO ESTABLISH NEAR-LEVEL GRADE IN THE WORK AREA, PROTECTING UNDERGROUND UTILITIES AS REQUIRED.
7. INSTALL TEMPORARY SHORING ADJACENT TO RIVER ROAD TO THE NORTH OF THE BRIDGE FOR ASSEMBLY OF THE NEW STRUCTURE AND TO THE SOUTH OF THE BRIDGE FOR DISASSEMBLY OF THE EXISTING STRUCTURE.
8. CONSTRUCT NEW THROUGH-GIRDER SPAN ON THE TEMPORARY SHORING AND STAGE ALL NECESSARY CONSTRUCTION MATERIALS.
9. MOBILIZE AND STAGE THE SELF-PROPELLED MODULAR TRANSPORTERS (SPMT).

STAGE 2A:

DETOUR SR 1001 (RIVER ROAD) TO PERFORM THIS WORK.

1. TAKE THE RAILROAD OUT OF SERVICE AND REMOVE THE TRACKS ACROSS SPAN 1 AND THE WESTERN BRIDGE APPROACH.
2. USE SPMT TO LIFT AND REMOVE THE EXISTING TRUSS SPAN. MOVE THE EXISTING SPAN TO THE TEMPORARY SHORING (DO NOT DEMOLISH THE STRUCTURE ON RIVER ROAD) AND BEGIN DISASSEMBLY. DEMOLITION OF THE STRUCTURE MAY CONTINUE BEYOND THIS STAGE OF CONSTRUCTION.
3. EXCAVATE BEHIND THE ABUTMENT WALL AND REMOVE PORTIONS OF THE ABUTMENT.

STAGE 2B:

DETOUR SR 1001 (RIVER ROAD) TO PERFORM THIS WORK.

4. PERFORM ALL REMAINING SUBSTRUCTURE WORK AT THE EXISTING ABUTMENT AND PIER AS INDICATED ON THE STRUCTURE PLANS.
5. INSTALL BACKFILL / GEOSYNTHETIC REINFORCED SOIL / APPROACH SLAB, AND CONSTRUCT BALLASTED TRACK BEHIND THE EXISTING ABUTMENT.
6. USE SPMT TO MOVE THE NEW BRIDGE SPAN FROM THE STAGING AREA TO FINAL ALIGNMENT.
7. INSTALL RAIL THROUGH THE WORK AREA; RESTORE TRAIN SERVICE.

STAGE 3:*

UTILIZE SHORT TERM TRAFFIC CONTROL AS REQUIRED TO RESTORE THE SITE TO PRE-CONSTRUCTION CONDITIONS.

1. RESTORE THE SITE TO PRE-CONSTRUCTION CONDITIONS.
2. REMOVE PIPE EXTENSIONS AND INSTALL PERMANENT ROCK APRONS AT THE END OF THE EXISTING STORM DRAIN PIPES.
3. RESEED THE TOPSOIL AND ESTABLISH VEGETATIVE COVER.
4. MILL AND OVERLAY PAVEMENT.
5. INSTALL PERMANENT PAVEMENT MARKINGS.
6. REMOVE EXISTING AND INSTALL NEW SIGNS.

* TO PROVIDE FLEXIBILITY IN SITE PREPARATION / RESTORATION AND TO FACILITATE THE BRIDGE CONSTRUCTION CRITICALLY IMPACTING THE TRACK OUTAGE, SR 1001 (RIVER ROAD) MAY BE DETOURED AS SHOWN IN THESE PLANS IN ADVANCE OF AND/OR FOLLOWING THE TRACK OUTAGE (STAGE 2). THE SPECIFIC TIME FRAME TO BE UTILIZED IS AT THE DISCRETION OF THE CONTRACTOR, BUT THE MAXIMUM CUMULATIVE TIME RIVER ROAD IS DETOURED SHALL NOT EXCEED FIFTEEN (15) CALENDAR DAYS, AFTER WHICH THE CONTRACTOR IS SUBJECT TO ROAD USERS LIQUIDATED DAMAGES.

**TRAFFIC CONTROL PLAN
GENERAL NOTES**

RECOMMENDED _____ 20__

DISTRICT TRAFFIC ENGINEER

PREPARED BY:
HNTB CORPORATION
4507 N. FRONT ST.
SUITE 300
HARRISBURG
PA 17110

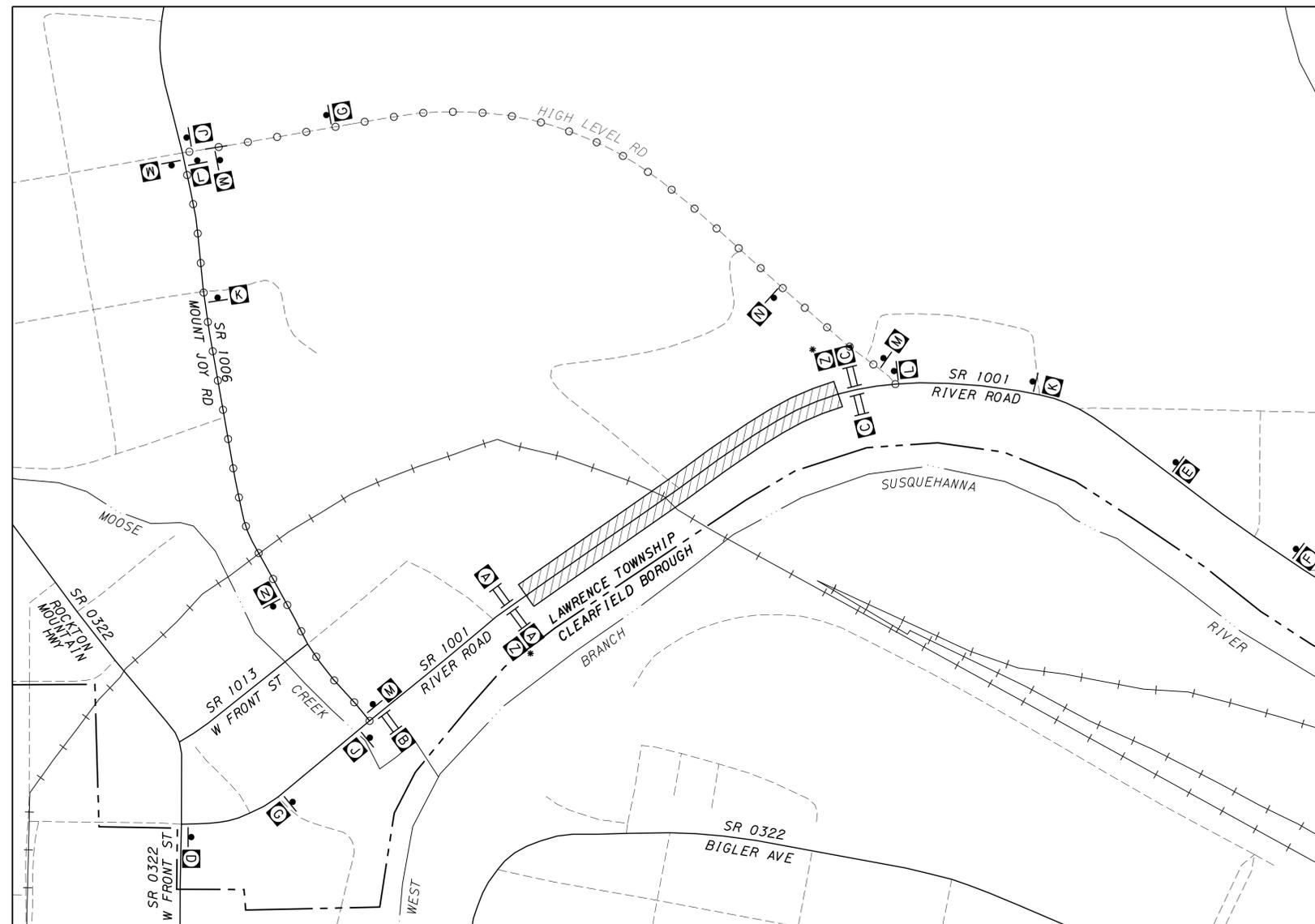


Brandon J Hess
04 / 28 / 2023

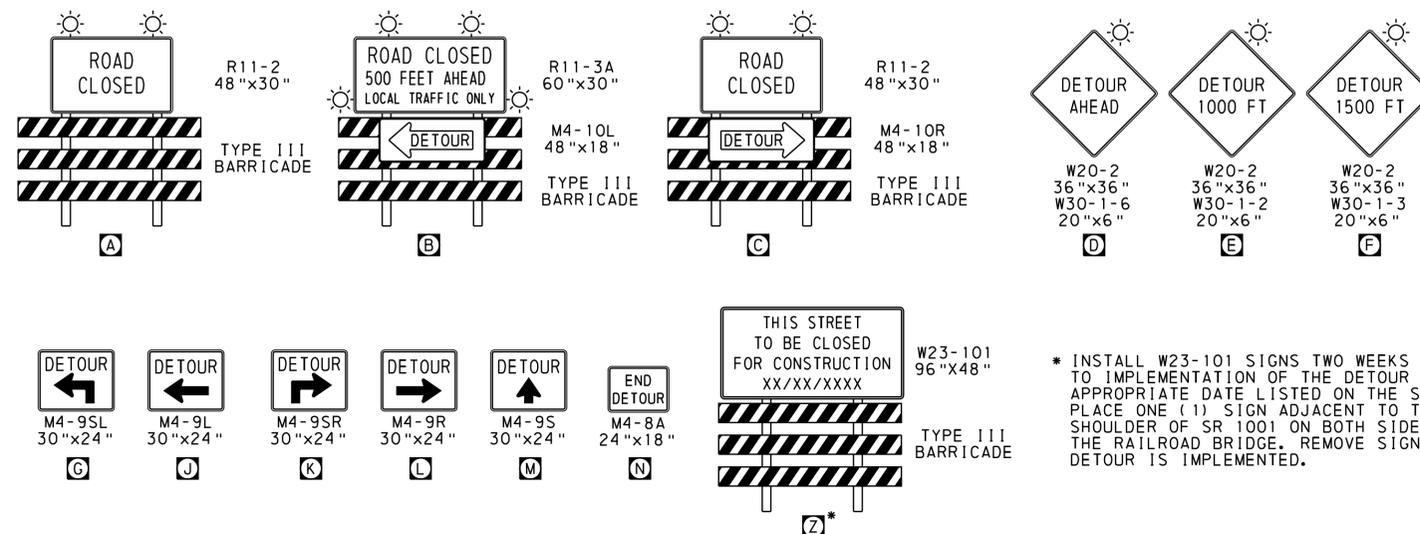
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
2-0	CLEARFIELD	1001	MTF	2 OF 2
LAWRENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	APPROVED

LEGEND

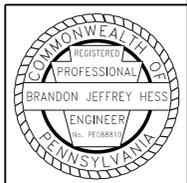
- ○ ○ ○ DETOUR ROUTE
- STATE ROUTE
- - - OTHER ROAD
- - - MUNICIPAL BOUNDARY
- STREAM
- RAILROAD
- ▨ WORK AREA
- ⊕ SIGN
- ⊥ TYPE III BARRICADE WITH SIGN
- ⊙ TYPE B FLASHING LIGHT (YELLOW)



DETOUR MAP

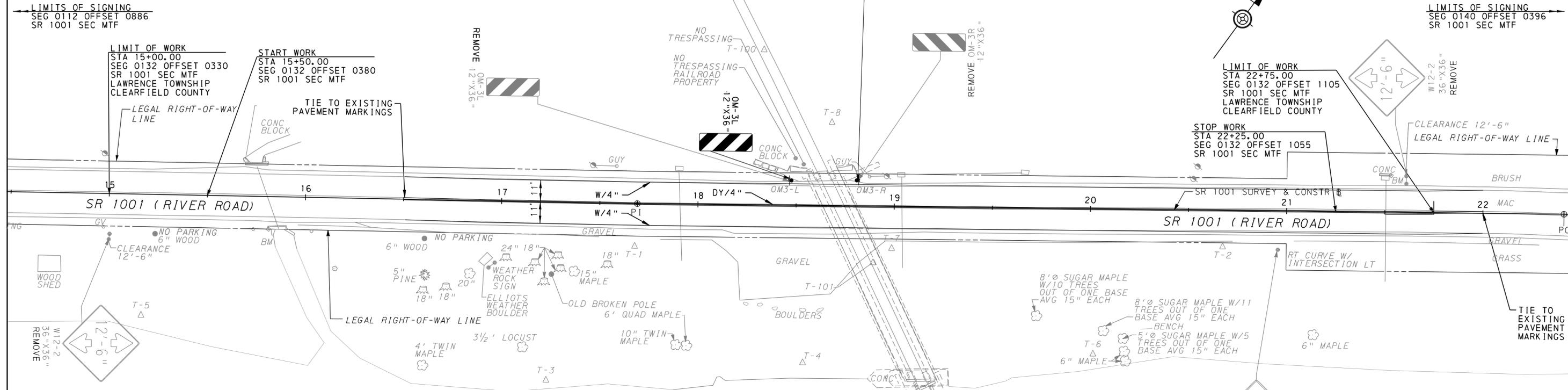


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**TRAFFIC CONTROL PLAN
SR 1001 DETOUR**

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
2-0	CLEARFIELD	1001	MTF	1 OF 2
LAWRENCE TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



GENERAL NOTES:

- PROVIDE MATERIALS AND CONSTRUCT THIS PROJECT IN ACCORDANCE WITH:
- THE SPECIAL PROVISIONS OF THIS CONTRACT;
 - FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD);
 - PENNDOT PUBLICATION 212, OFFICIAL TRAFFIC CONTROL DEVICES;
 - PENNDOT PUBLICATION 35, APPROVED CONSTRUCTION MATERIALS (BULLETIN 15);
 - PENNDOT PUBLICATION 111, TRAFFIC CONTROL - PAVEMENT MARKINGS AND SIGNING STANDARDS TC-8600 AND TC-8700 SERIES;
 - PENNDOT PUBLICATION 408, SPECIFICATIONS (LET DATE EDITION);
 - PENNDOT PUBLICATION 236, HANDBOOK OF APPROVED SIGNS

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

TC-8600 JUNE 13, 2013
 TC-8702B JUNE 13, 2013

THIS PLAN REFLECTS THE SIGNING REQUIRED UPON COMPLETION OF ALL WORK. REMOVAL OF ANY CONFLICTING SIGNS WITHIN THE PROJECT NOT INDICATED ON THIS PLAN IS INCIDENTAL TO ITEM 4201-0001, CLEARING AND GRUBBING.

SEE CONSTRUCTION PLAN FOR PROPERTY OWNERS, RIGHT-OF-WAY DETAILS, AND OTHER CONSTRUCTION DATA.

- APPLY ALL PAVEMENT MARKINGS AT THE WIDTH INDICATED.
- ALL WATERBORNE PAINT WILL BE APPLIED WITH A DOUBLE LAYER.
- USE WATERBORNE PAINT FOR ALL LONGITUDINAL LINES.
- REMOVE CONFLICTING EXISTING PAVEMENT MARKINGS, WHEN REQUIRED.
- MATCH ALL PROPOSED PAVEMENT MARKINGS AT LIMITS OF PAVING TO EXISTING PAVEMENT MARKINGS WHERE APPLICABLE.
- EXISTING SIGNS NOT SHOWN ARE TO REMAIN, UNLESS OTHERWISE NOTED.
- PROVIDE LATERAL SIGN CLEARANCE FROM EDGE OF ROADWAY TO POST MOUNTED SIGNS IN ACCORDANCE WITH TC-8702B.
- EXACT LOCATION OF SIGNS MY BE FIELD ADJUSTED TO MAINTAIN SIGHT DISTANCE AND AVOID UTILITIES.



LEGEND

- PROPOSED SIGN
- DY/4 4" DOUBLE YELLOW PAVEMENT MARKINGS
- W/4 4" WHITE PAVEMENT MARKINGS

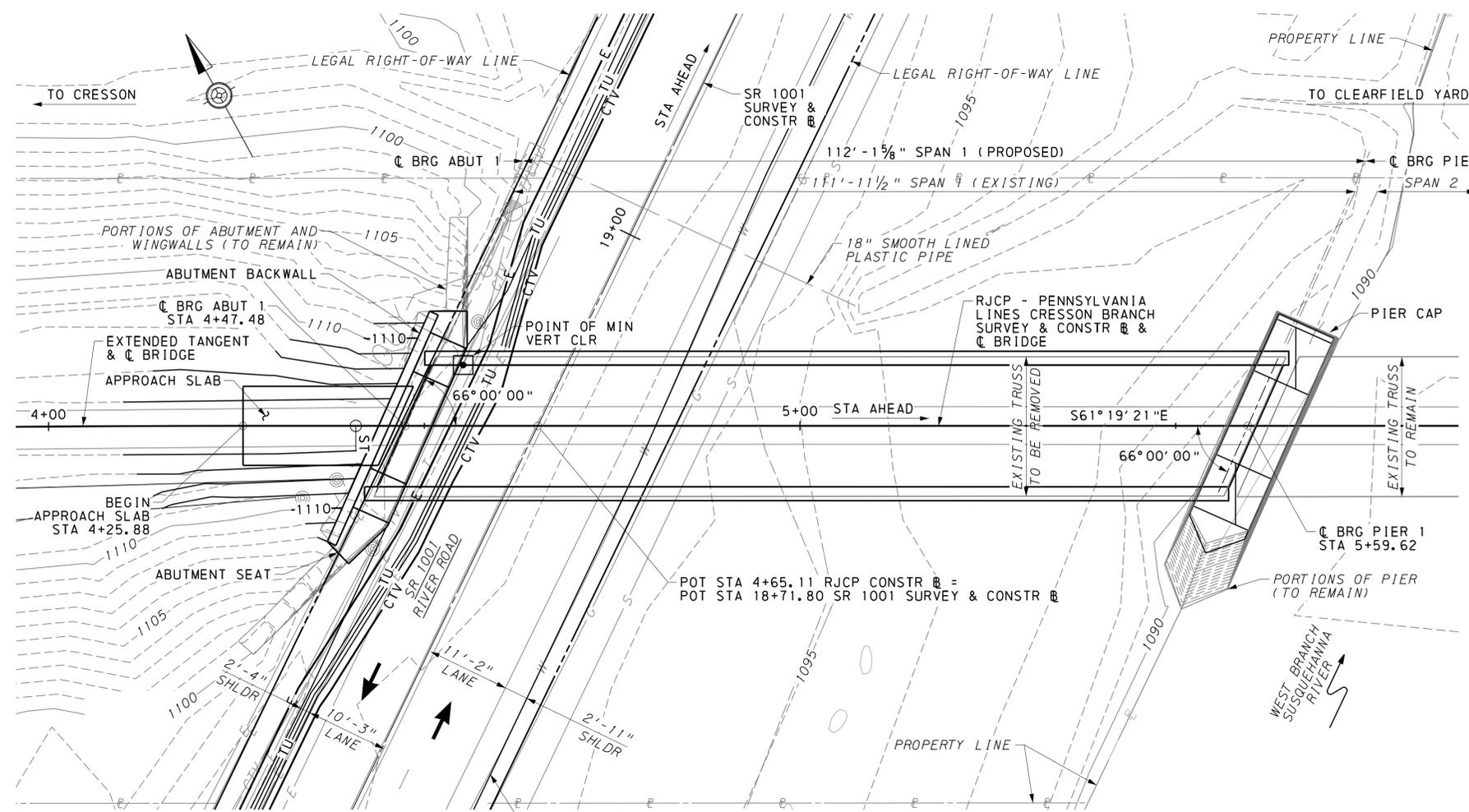
IN ADDITION TO THE PROPOSED SIGNS SHOWN ON THIS SHEET, REMOVE EXISTING SIGNS AS FOLLOWS:

SERIES	DESCRIPTION	ACTION	STA	SIDE
W12-2	LOW CLEARANCE	REMOVE, TYPE B	7+60	RT
W16-103P	DISTANCE PLAQUE			
W12-2	LOW CLEARANCE	REMOVE, TYPE B	25+30	LT
W16-103P	DISTANCE PLAQUE			
SPECIAL	CLEARANCE DETOUR	REMOVE, TYPE C	25+70	LT
SPECIAL	CLEARANCE DETOUR	REMOVE, TYPE C	32+30	LT

SIGNING AND PAVEMENT MARKING PLAN

PREPARED BY:
HNTB CORPORATION
 4507 NORTH FRONT STREET
 SUITE 300
 HARRISBURG, PA 17110

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LEGEND

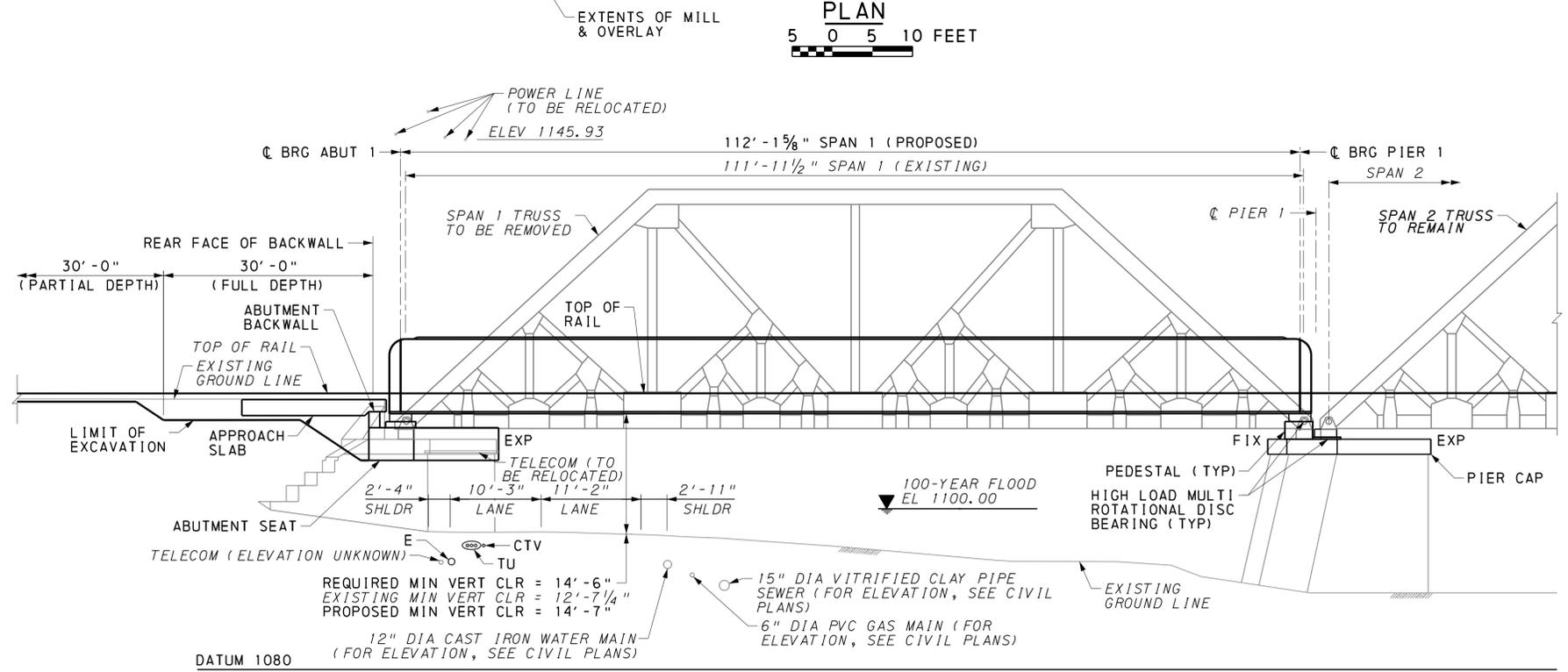
→	DIRECTION OF TRAFFIC
—200—	PROPOSED TEMPORARY CONTOUR
- - -200- - -	EXISTING CONTOUR
- - - - -	LEGAL RIGHT-OF-WAY
CTV	EXISTING CABLE TELEVISION
E	EXISTING ELECTRIC
W	EXISTING WATER
S	EXISTING SANITARY SEWER
TU	EXISTING TELEPHONE UNDERGROUND
G	EXISTING GAS
CTV	PROPOSED CABLE TELEVISION
E	PROPOSED ELECTRIC UNDERGROUND
TU	PROPOSED TELEPHONE UNDERGROUND

NOTES:

1. FOR SUPPLEMENTAL DRAWINGS, SEE SHEET 2.

INDEX OF DRAWINGS

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2	GENERAL NOTES 1
3	GENERAL NOTES 2
4	TYPICAL SECTION & DETAILS
5	SUMMARY OF QUANTITIES
6	STAKE-OUT PLAN
7	GRS & SUBSTRUCTURE DETAILS
8	ABUTMENT 1 REPAIR & DEMO DETAILS
9	ABUTMENT 1 PLAN & ELEVATION
10	ABUTMENT 1 SECTION & DETAILS
11	ABUTMENT 1 APPROACH SLAB
12	PIER 1 REPAIR & DEMO DETAILS
13	PIER 1 PLAN & ELEVATION
14	PIER 1 SECTION & DETAILS
15	FRAMING PLAN & GIRDER ELEVATION
16	GIRDER & FRAMING DETAILS 1 OF 16
17	GIRDER & FRAMING DETAILS 2 OF 16
18	GIRDER & FRAMING DETAILS 3 OF 16
19	GIRDER & FRAMING DETAILS 4 OF 16
20	GIRDER & FRAMING DETAILS 5 OF 16
21	GIRDER & FRAMING DETAILS 6 OF 16
22	GIRDER & FRAMING DETAILS 7 OF 16
23	GIRDER & FRAMING DETAILS 8 OF 16
24	GIRDER & FRAMING DETAILS 9 OF 16
25	GIRDER & FRAMING DETAILS 10 OF 16
26	GIRDER & FRAMING DETAILS 11 OF 16
27	GIRDER & FRAMING DETAILS 12 OF 16
28	GIRDER & FRAMING DETAILS 13 OF 16
29	GIRDER & FRAMING DETAILS 14 OF 16
30	GIRDER & FRAMING DETAILS 15 OF 16
31	GIRDER & FRAMING DETAILS 16 OF 16
32	BEARING DESIGN DATA AND NOTES
33	EXPANSION BEARING DETAILS 1 OF 3
34	EXPANSION BEARING DETAILS 2 OF 3
35	EXPANSION BEARING DETAILS 3 OF 3
36	FIXED BEARING DETAILS
37	END BRACKET BEARING DETAILS
38	DECK PLAN & DETAILS 1 OF 5
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43	DECK WATERPROOFING & DRAINAGE
44	EXISTING SPAN 1 DEMO DETAILS
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46	CONCEPTUAL TRUSS JACKING DETAILS
47	CAMBER DIAGRAM & MISC DETAILS
48	STAGING PLAN & ELEVATION 1 OF 3
49	STAGING PLAN & ELEVATION 2 OF 3
50	STAGING PLAN & ELEVATION 3 OF 3
51-54	STRUCTURE BORINGS



Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

HNTB



REG PROF ENGINEER
DATE 10/12/2023

PREPARED BY:
HNTB CORPORATION
4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
GENERAL PLAN & ELEVATION

RECOMMENDED _____

SHEET 1 OF 54
+ SUPPLEMENTAL DRAWINGS
S-1001RJC

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GENERAL NOTES

CONSTRUCTION SPECIFICATIONS:

1. PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH SPECIFICATIONS, PENNDOT PUBLICATION 408/2020, AASHTO/AWS D1.5M/D1.5: 2015 BRIDGE WELDING CODE, AND CONTRACT SPECIAL PROVISIONS. USE AASHTO/AWS D1.17/D1.1M: 2015 FOR WELDING NOT COVERED IN AASHTO/AWS D1.5M/D1.5: 2015.

DESIGN SPECIFICATIONS:

1. AMERICAN RAILWAY ENGINEERING AND MAINTENANCE-OF-WAY ASSOCIATION (AREMA) MANUAL FOR RAILWAY ENGINEERING, 2021.
2. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, 2017, AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4, DECEMBER 2019 (INCLUDING REVISIONS THROUGH DECEMBER 2020).
3. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) STEEL CONSTRUCTION MANUAL, 14TH EDITION, 2011 AND AISC 360-10.
4. LIVE LOAD DISTRIBUTION TO GIRDERS IS BASED UPON THREE-DIMENSIONAL FINITE ELEMENT ANALYSIS METHOD.
5. STEEL DESIGN IS IN ACCORDANCE WITH ALLOWABLE STRESS DESIGN (ASD) METHOD, AREMA CHAPTER 15, SECTION 1.4.
6. REINFORCED CONCRETE DESIGN IS IN ACCORDANCE WITH LOAD FACTOR DESIGN (LFD) METHOD, AREMA CHAPTER 8, SECTION 2.2.4c.

DESIGN LIVE LOADS:

1. VERTICAL AND LONGITUDINAL LOAD (SUPERSTRUCTURE AND PRECAST SUBSTRUCTURE): COOPER E80 OR ALTERNATE LIVE LOAD ON 4 AXLES WITH LIVE LOAD IMPACT FOR ROLLING EQUIPMENT WITHOUT HAMMER BLOW, WHICHEVER PRODUCES THE GREATEST MEMBER STRESS. FOR SERVICEABILITY DEFLECTION REQUIREMENTS, ONLY COOPER E80 LIVE LOAD USED.
2. THE PRECAST APPROACH SLAB IS DESIGNED FOR COOPER E80 WITH 100% LIVE LOAD IMPACT.
3. THIS IS A SUPERSTRUCTURE REPLACEMENT PROJECT. THE EXISTING SUBSTRUCTURE TO REMAIN WAS NOT ANALYZED AS PART OF THIS DESIGN. THE STRUCTURE SHALL CARRY THE SAME APPLIED LIVE LOADING AFTER SPAN 1 REPLACEMENT AS BEFORE.
4. DESIGN TRAIN SPEED IS 15 MPH. EXISTING RAIL GEOMETRY SUPPORTS 15 MPH.
5. FATIGUE DESIGN IS BASED UPON AREMA CHAPTER 15, SECTION 1.3.13.

DEAD LOADS:

1. STEEL DEAD LOAD: 490 PCF.
2. NORMAL WEIGHT REINFORCED CONCRETE: 150 PCF.
3. TRACK RAILS, INSIDE GUARDRAILS, AND FASTENINGS: 200 PLF PER TRACK.
4. DIRECT FIXATION FASTENER ALLOWANCE: 49 LBS PER FASTENER.
5. NO UTILITY LOAD ALLOWANCE.

GENERAL:

1. VERIFY ALL DIMENSIONS AND GEOMETRY OF THE EXISTING STRUCTURE IN THE FIELD AS NECESSARY FOR PROPER FIT OF THE PROPOSED CONSTRUCTION. FIELD VERIFY ALL DIMENSIONS ON THE PLAN SHEETS.
2. ALL DIMENSIONS SHOWN ARE HORIZONTAL, EXCEPT AS NOTED.
3. SUPERSTRUCTURE DIMENSIONS SHOWN ARE FOR A NORMAL TEMPERATURE OF 68 DEGREES F.
4. STATIONS AND ELEVATIONS ARE IN FEET. ALL OTHER DIMENSIONS ARE IN FEET AND INCHES.
5. RAIL SHALL BE 132RE.
6. DIRECT FIXATION FASTENERS SHALL BE PROGRESS RAIL LMTT8. SEE PROJECT SPECIFICATIONS FOR DIRECTION FIXATION FASTENER SPECIFICATIONS.
7. FOR RAIL ANCHORING SCHEME, REFER TO TRACK PLANS.
8. IF RAIL SIZE, DIRECT FIXATION FASTENER TYPE, OR RAIL CLIP BEHAVIOR IS ALTERED BY THE CONTRACTOR, THE ENGINEER OF RECORD SHALL BE CONTACTED FOR APPROVAL.
9. DO NOT STAGE EQUIPMENT OR STOCKPILE MATERIALS ON THE BRIDGE UNLESS WRITTEN REQUEST HAS BEEN SUBMITTED AND ACCEPTED BY THE REPRESENTATIVE.
10. DO NOT USE ADHESIVE ANCHORS IN A TENSION APPLICATION FOR PERMANENT INSTALLATIONS. THIS REQUIREMENT PERTAINS TO CONSTRUCTION OF THE BRIDGE SPAN.
11. DO NOT USE ADHESIVE ANCHORS IN A SUSTAINED TENSION APPLICATION FOR TEMPORARY INSTALLATIONS, INCLUDING DURING CONSTRUCTION. THIS REQUIREMENT PERTAINS TO CONSTRUCTION OF THE BRIDGE SPAN.
12. NOTIFY THE REGIONAL HEADQUARTERS OF THE FISH COMMISSION PRIOR TO CONSTRUCTION AND COOPERATE WITH FISH COMMISSION DURING CONSTRUCTION.

WILLIAM C. BROCK
595 EAST ROLLING RIDGE DRIVE
BELLEFONTE, PA 16823
(814) 359-5254

REINFORCED CONCRETE NOTES:

1. PROVIDE 2" CONCRETE COVER ON REINFORCEMENT BARS, EXCEPT AS NOTED.
2. PRECAST SUBSTRUCTURE CONCRETE (PIER CAP, ABUTMENT SEAT, ABUTMENT BACKWALL, PEDESTALS, APPROACH SLAB) SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (F'c) AT 28 DAYS OF 5,000 PSI. PROVIDE A MINIMUM COMPRESSIVE STRENGTH (F'c) AT TIME OF STRIPPING OF 4,000 PSI.
3. USE CLASS AAA CEMENT CONCRETE ACCELERATED, 5 KSI IN ABUTMENT AND PIER GROUT POCKETS.
4. 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.
5. 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 STEEL BARS UNLESS SPECIFIED. GRADE 40 REINFORCING STEEL BARS MAY BE SUBSTITUTED WITH A PROPORTIONAL INCREASE IN CROSS-SECTIONAL AREA, IF APPROVED BY THE CHIEF BRIDGE ENGINEER. DO NOT USE RAIL STEEL A 996/A 996M REINFORCEMENT BARS IN BRIDGE PIERS, ABUTMENTS OR WHERE BENDING OR WELDING OF THE REINFORCEMENT BARS IS INDICATED.
6. REINFORCEMENT BARS SHALL BE EPOXY-COATED UNLESS NOTED OTHERWISE. EPOXY COATED REINFORCEMENT SHALL BE STORED, HANDLED, AND PLACED IN ACCORDANCE WITH PUBLICATION 408, SECTION 1002.3G(1).
7. DETAIL AND FABRICATE REINFORCEMENT IN ACCORDANCE WITH AREMA MANUAL FOR RAILWAY ENGINEERING, CHAPTER 8.
8. WELDING OF REINFORCEMENT BARS DURING FABRICATION OR CONSTRUCTION IS NOT PERMITTED UNLESS SPECIFIED. IF SPECIFIED, WELDING SHALL CONFORM TO THE WELDING REQUIREMENTS OF AWS D1.4
9. GALVANIZED REINFORCING STEEL BARS MAY BE SUBSTITUTED FOR EPOXY-COATED REINFORCING STEEL BARS AT NO ADDITIONAL COST TO THE DEPARTMENT.
10. SET ANCHOR BOLTS IN PREFORMED HOLES. DO NOT DRILL UNLESS SPECIFICALLY INDICATED ON PLANS. FILL THE PREFORMED HOLES WITH NON-SHRINK GROUT. FILL THE CLEARANCE BETWEEN ANCHOR BOLTS AND HOLES IN MASONRY PLATES WITH APPROVED NON-HARDENING CAULKING COMPOUND CONFORMING TO PUBLICATION 408, SECTION 705.8.
11. PROVIDE DOWELS CONFORMING TO ASTM A615, GRADE 60. ALL DOWELS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A767. GROUT DOWELS IN PLACE WITH EPOXY GROUT IN ACCORDANCE WITH SPECIFICATIONS.
12. RAKE-FINISH ALL HORIZONTAL CONSTRUCTION JOINTS, TO 1/4" AMPLITUDE EXCEPT AS INDICATED.
13. CHAMFER EXPOSED CONCRETE EDGES 3/4" BY 3/4", EXCEPT AS NOTED.

SEE GENERAL NOTES (CONTINUED) NEXT SHEET

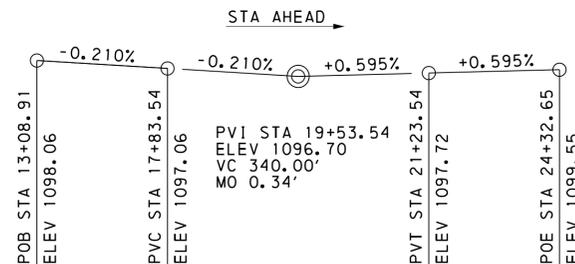
HORIZONTAL ALIGNMENT DATA

SR 1001 RIVER ROAD

TANGENT
N54° 31' 17" E

VERTICAL ALIGNMENT DATA

SR 1001 RIVER ROAD

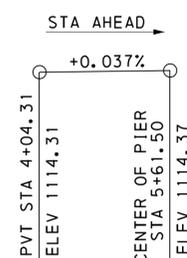


RJCP-PENNSYLVANIA LINES CRESSON BRANCH

SPIRAL
SPI STA 3+78.89
Δ = 2°00'52" RT
L = 93.00'
CS STA 3+47.48
ST STA 4+40.88

TANGENT
ST STA 4+40.88
POE STA 6+86.30
S 61°19'21" E
L = 245.42'

RJCP-PENNSYLVANIA LINES CRESSON BRANCH



REINFORCEMENT BAR FABRICATION DETAILS	DESCRIPTION	DATE
BRIDGE DRAINAGE	BC-736M	JAN 31, 2019
STEEL GIRDER DETAILS	BC-751M	JAN 31, 2019
BEARINGS	BC-753M	JAN 31, 2019
HIGH LOAD MULTI ROTATIONAL POT BEARINGS	BC-755M	JAN 31, 2019
TYPICAL WATERPROOFING AND EXPANSION DETAILS	BC-756M	SEPT 30, 2016
CLASSIFICATION OF EARTHWORK FOR STRUCTURES	BC-788M	JAN 31, 2019
BACKFILL AT STRUCTURES	RC-11M	JUN 01, 2010
GEOSYNTHETIC REINFORCED SOIL SLOPE	RC-12M	FEB 08, 2019
GEOSYNTHETIC STABILIZED BRIDGE APPROACH	RC-14M	SEPT 15, 2016
	RC-15M	NOV 1, 2022
	DWG NO.	DATE

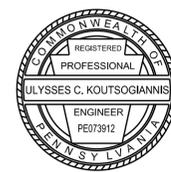
SUPPLEMENTAL DRAWINGS

LEGEND ABBREVIATIONS

ABUT	=	ABUTMENT
APPR	=	APPROACH
APPROX	=	APPROXIMATE
AHD	=	AHEAD
ARCH TREAT	=	ARCHITECTURAL TREATMENT
AST	=	ARCHITECTURAL SURFACE TREATMENT
B	=	BASELINE
BOT	=	BOTTOM
BRG	=	BEARING
C TO C	=	CENTER TO CENTER
CL	=	CENTERLINE
CONC	=	CONCRETE
CONN	=	CONNECTION
CONSTR	=	CONSTRUCTION
CLR	=	CLEAR
DF	=	DIRECT FIXATION
DIA	=	DIAMETER
EA	=	EACH
EF	=	EACH FACE
EL/ELEV	=	ELEVATION
EQ	=	EQUAL
EXIST	=	EXISTING
FCM	=	FRACTURE CRITICAL MEMBER
FF	=	FRONT FACE
GALV	=	GALVANIZED
HORIZ	=	HORIZONTAL
INTER	=	INTERMEDIATE
INV	=	INVERT
JT	=	JOINT
MAX	=	MAXIMUM
MIN	=	MINIMUM
MISC	=	MISCELLANEOUS
NB	=	NORTHBOUND
NO	=	NUMBER
NTS	=	NOT TO SCALE
OD	=	OUTSIDE DIAMETER
P	=	PLATE
PROP	=	PROPOSED
R/RAD	=	RADIUS
R/W	=	RIGHT-OF-WAY
RDWY	=	ROADWAY
REINF	=	REINFORCEMENT
REQ'D	=	REQUIRED
RF	=	REAR FACE
SB	=	SOUTHBOUND
SHLDR	=	SHOULDER
SPA	=	SPACE/SPACED
SPMT	=	SELF-PROPELLED MODULAR TRANSPORTER
STA	=	STATION
STD	=	STANDARD
ST	=	STREET
SUBSTR	=	SUBSTRUCTURE
SUPERSTR	=	SUPERSTRUCTURE
T&B	=	TOP AND BOTTOM
TPG	=	THROUGH PLATE GIRDER
TYP	=	TYPICAL
UNO	=	UNLESS NOTED OTHERWISE
VERT	=	VERTICAL
WP	=	WORK POINT

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

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PREPARED BY:
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HARRISBURG, PA 17110

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION**

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
**STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE**
GENERAL NOTES 1

RECOMMENDED _____	SHEET <u>2</u> OF <u>54</u>
	S-1001RJC

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GENERAL NOTES (CONTINUED)

STRUCTURAL STEEL NOTES:

1. FABRICATE AND ERECT STEEL IN ACCORDANCE WITH AREMA MANUAL FOR RAILWAY ENGINEERING, CHAPTER 15.
2. PROVIDE STRUCTURAL STEEL CONFORMING TO ASTM A709 GRADE 50 DESIGNATION, EXCEPT WHEN NOTED OTHERWISE.
3. GIRDER FIELD SPLICES WILL NOT BE PERMITTED. HAULING PERMIT IS REQUIRED FOR LENGTHS AS SHOWN ON THE PLANS.
4. DO NOT USE SUPPORT SYSTEMS THAT WILL CAUSE UNACCEPTABLE OVERSTRESS OR DEFORMATION TO PERMANENT BRIDGE MEMBERS.
5. ALL FASTENERS ARE 7/8" DIAMETER H.S. BOLTS IN 15/16" DIAMETER OPEN HOLES, EXCEPT AS NOTED. WHEN 1" DIAMETER H.S. BOLTS ARE SPECIFIED, USE 1 1/16" DIAMETER OPEN HOLES.
6. ALL FASTENERS SHALL BE IN ACCORDANCE WITH ASTM F3125 GRADE A325 TYPE 1 (SLIP CRITICAL CLASS B) UNLESS NOTED OTHERWISE. ALL A325 FASTENERS SHALL BE MECHANICALLY GALVANIZED IN ACCORDANCE WITH ASTM B695. ALL A490 FASTENERS SHALL BE COATED IN ACCORDANCE WITH ASTM F1136. ALL FASTENERS SHALL HAVE AN UNTHREADED SHANK OF SUFFICIENT LENGTH TO NOT ALLOW ANY THREADS TO EXIST IN THE PLANE BETWEEN THE TWO CONNECTED PARTS (SHEAR PLANE).
7. USE DIRECT TENSION INDICATORS (DTI'S) CONFORMING TO ASTM F959 TO ENSURE PROPER INSTALLATION OF HIGH STRENGTH BOLTS. OTHER METHODS TO VERIFY PROPER INSTALLATION OF HIGH STRENGTH BOLTS MAY BE USED UPON APPROVAL. THE MINIMUM TENSION OF INSTALLED BOLTS SHALL BE IN ACCORDANCE WITH AREMA TABLE 15-1-12, UNLESS NOTED OTHERWISE.
8. REAM SUBDRILLED OR SUBPUNCHED HOLES FOR FIELD SPLICES IN THE FABRICATION SHOP.
9. DO NOT MAKE WELDS BY MANUAL SHIELDED METAL ARC PROCESS FOR PRIMARY GIRDER WELDS, SUCH AS FLANGE-TO-WEB OR FOR SHOP SPLICES OF WEBS AND FLANGES.
10. DO NOT WELD ATTACHMENTS TO THROUGH GIRDER, FLOORBEAM, OR END BEAM BOTTOM FLANGES (TENSION ZONES) EXCEPT AS SHOWN.
11. PAINT STRUCTURAL STEEL IN ACCORDANCE WITH PUBLICATION 408, SECTION 1060. THE FINISH PAINT COAT OF ALL FABRICATED STRUCTURAL STEEL MEMBERS IS TO MATCH THE COLOR OF THE EXISTING ADJACENT TRUSS TO REMAIN. SUBMIT THREE (3) COLOR SAMPLES TO THE DEPARTMENT FOR ACCEPTANCE BY THE DISTRICT BRIDGE ENGINEER PRIOR TO APPLICATION.
12. PROVIDE CLASS B COATING ON THE FAYING SURFACES OF HIGH STRENGTH BOLTED CONNECTIONS. CLASS B COATINGS PROVIDE A MEAN SLIP COEFFICIENT NOT LESS THAN 0.50 FOR BOLTED CONNECTIONS PER AREMA TABLE 15-1-11A.
13. PREPARE BEARING AREAS AS SPECIFIED IN PUBLICATION 408, SECTION 1001.3(K)9.
14. PROVIDE CHARPY V-NOTCH (CVN) TESTING FOR ZONE 2 IN ACCORDANCE WITH PUBLICATION 408, SECTION 1105.02(A)5. TEST THE FOLLOWING COMPONENTS SUBJECT TO TENSILE STRESS IN ACCORDANCE WITH THESE REQUIREMENTS:
 - A. THROUGH GIRDER WEBS
 - B. THROUGH GIRDER BOTTOM FLANGE
 - C. END BEAM WEB
 - D. END BEAM BOTTOM FLANGE
 - E. FLOORBEAMS
 - F. CONNECTION PLATES AND ANGLES
15. 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, 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. THE FOLLOWING MEMBERS ARE DESIGNATED AS FCM:
 - A. THROUGH GIRDERS
 - B. END BEAMS
16. STABILITY OF PARTIAL GIRDERS AND COMPLETE GIRDERS IS TO BE MAINTAINED BY THE CONTRACTOR DURING ERECTION UNTIL ALL GIRDERS AND DIAPHRAGMS ARE IN-PLACE AND ALL BOLTS ARE PROPERLY INSTALLED. ERECTION LOADS INCLUDING SELF WEIGHT OF THE STEEL MEMBERS, WIND LOADING AND CONSTRUCTION LIVE LOAD EFFECTS ARE TO BE EVALUATED BY THE CONTRACTOR FOR STABILITY, STRESSES AND DEFLECTIONS ON THE STEEL MEMBERS DURING ANY STAGE OF ERECTION.
17. HEAT-CURVED OR HEAT CAMBERED GIRDERS ARE NOT PERMITTED.
18. THE STEEL SUPERSTRUCTURE SHALL BE DETAILED AND FABRICATED FOR TOTAL DEAD LOAD FIT (TDLF). THE CONTRACTOR SHALL ACCOUNT FOR DEFLECTIONS AND ROTATIONS OF THE GIRDERS DURING ERECTION SUCH THAT, AFTER PLACEMENT OF THE FULL DEAD LOAD AT THE END OF CONSTRUCTION, GIRDER WEBS ARE VERTICAL AND BEARING STIFFENERS ARE PLUMB.
19. BLAST CLEAN THE FAYING SURFACES OF SPLICES AND CONNECTIONS OF ALL STRUCTURAL ELEMENTS IN ACCORDANCE WITH PUBLICATION 408 SECTION 1060.3(B)3. REBLAST UNPAINTED ELEMENTS THAT REMAIN UNASSEMBLED FOR A PERIOD OF 12 MONTHS OR MORE FOLLOWING THE INITIAL CLEANING.
20. SHAPE RE-ENTRANT CORNERS OF COPEs WITH A RADIUS OF NOT LESS THAN 1" WITH A SMOOTH TRANSITION THAT MEETS THE ADJACENT EDGES WITHOUT OFFSET OR CUTTING PAST THE POINT OF TANGENCY. UNLESS NOTED OTHERWISE, PROVIDE A MINIMUM COPE RADIUS OF 1".
21. GRIND SURFACES OF ALL COPEs AND RE-ENTRANT CORNERS SMOOTH TO A BRIGHT METAL SURFACE.
22. WELDING ELECTRODES SHALL BE E70XX IN ACCORDANCE WITH AWS CODE.
23. PROVIDE MINIMUM WELD SIZE ALLOWED PER AREMA FOR FILLET WELDS IF NO WELD SIZE IS SHOWN ON THE PLANS.
24. ALL WELDS SHALL BE SHOP WELDS. FIELD WELDING IS NOT PERMITTED UNLESS NOTED OTHERWISE.
25. ANCHOR BOLTS SHALL BE ASTM F1554, GRADE 105.
26. STEEL SHALL NOT BE CUT BY SHEARING UNLESS APPROVED BY THE ENGINEER OF RECORD.

27. CORRUGATED STEEL PIPE FOR DOWEL POCKETS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123.
28. STRUCTURAL STEEL DECK PLATE SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123.
29. FUTURE GROUT INJECTION PORTS FOR THE PRECAST CONCRETE APPROACH SLAB SHALL CONFORM TO ASTM A53 AND SHALL BE HOT-DIPPED GALVANIZED PER ASTM A123. THE PORTS SHALL BE SCHEDULE 40 PIPE WITH NOMINAL DIAMETER OF 2".

EXCAVATION NOTES:

1. SITE CLASS IS NOT CLASS E OR F.
2. EXCAVATE ACCORDING TO CURRENT OSHA OR OTHER APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS. PROVIDE TEMPORARY SHORING OF EXCAVATED AREAS AS NECESSARY. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE STABILITY OF THE EXCAVATIONS.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE CONTROL OF DRAINAGE DURING CONSTRUCTION. DIRECT RUNOFF AWAY FROM THE EXISTING FOUNDATION FOOTPRINT. SEE E&S PLANS FOR MORE DETAIL.
4. NOTIFY THE DISTRICT GEOTECHNICAL SPECIALIST IF ANY DEVIATIONS FROM THE NOTED SUBSURFACE CONDITIONS ARE ENCOUNTERED DURING CONSTRUCTION.
5. EXCAVATION WILL NOT BE PAID BEYOND THE EXCAVATION PAY LIMITS SHOWN ON SHEET 5.
6. THE CONTRACTOR SHALL NOT USE VIBRATORY COMPACTION FOR THE PLACEMENT OF TEMPORARY FILL.

UTILITY NOTES:

1. COORDINATE, LOCATE, AND CONDUCT ALL WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH PUBLICATION 408, SECTIONS 105.06 AND 107.12.
2. THE CONTRACTOR SHALL VERIFY THAT CRANE AND SELF-PROPELLED MODULAR TRANSPORTER (SPMT) MOVEMENTS WILL NOT IMPACT SERVICE TO BURIED UTILITIES.

EXISTING STRUCTURE NOTES:

1. 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.
2. VERIFY ALL DIMENSIONS AND GEOMETRY OF THE EXISTING STRUCTURE, UTILITIES, AND THEIR APPURTENANCES IN THE FIELD FOR PROPER FIT OF THE PROPOSED CONSTRUCTION. SUBMIT ALL FIELD DIMENSIONS PRIOR TO FABRICATION.
3. 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 DRAWINGS: NONE.
4. REMOVE EXISTING SPAN 1 IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS AND SPECIAL PROVISIONS.
5. THE EXISTING BRIDGE STRUCTURAL MEMBERS MAY CONTAIN LEAD PAINT AND OTHER TOXIC MATERIALS SUCH AS CADMIUM, CHROMIUM, ARSENIC, ETC.

FIELD WELDING NOTES (WHERE PERMITTED):

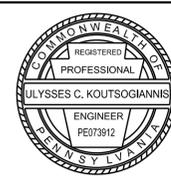
1. WELDING SPECIFICATIONS: AASHTO/AWS D1.5M/D1.5 BRIDGE WELDING CODE 2015 CONSISTENT WITH PUB 408 1105.03(M) AND THE CONTRACT SPECIAL PROVISIONS. DO NOT FIELD-WELD ON ANY PART OF THE EXISTING BRIDGE, EXCEPT WHERE SHOWN ON THE DRAWINGS, WITHOUT PRIOR APPROVAL OF THE DISTRICT BRIDGE ENGINEER.
2. WELDING OF EXISTING STRUCTURAL STEEL: USE THE SHIELDED METAL ARC PROCESS AND LOW HYDROGEN ELECTRODES THAT ARE COMPATIBLE WITH THE BASE METAL AS SPECIFIED, AND IN ACCORDANCE WITH AN APPROVED WELD PROCEDURE SPECIFICATION.
3. MAKE TACK WELDS WITH THE SAME TYPE OF ELECTRODE AND INCORPORATE IN THE FINAL WELD. NO OTHER TACK WELDING WILL BE PERMITTED.
4. 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.
5. 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.
6. PREHEAT THE STEEL TO THE SPECIFIED MINIMUM TEMPERATURE FOR A DISTANCE EQUAL TO THE THICKNESS OF THE PART BEING WELDED, BUT NOT LESS THAN 3" IN ALL DIRECTIONS FROM THE POINT OF WELDING.
7. REMOVE BY APPLICATION OF HEAT ANY MOISTURE PRESENT AT POINT OF WELD. PROVIDE WINDBREAKS FOR PROTECTION FROM DIRECT WIND.
8. 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" FROM EACH SIDE OF THE OUTSIDE LINES OF THE WELD.
9. TEST COMPLETED WELDS USING VISUAL AND NONDESTRUCTIVE METHODS IN ACCORDANCE WITH AASHTO/AWS D1.5M/D1.5 BRIDGE WELDING CODE CHAPTER 6.

CONSTRUCTION NOTES:

1. THE CONSTRUCTION SEQUENCE SHOWN AND DESCRIBED IN THESE DRAWINGS IS A SUGGESTED SEQUENCE. ITS INCLUSION IN THESE DRAWINGS DOES NOT IMPLY THAT THIS SEQUENCE OR METHOD IS MANDATED. HOWEVER, ANY PROPOSED CONSTRUCTION SEQUENCE MUST COMPLY WITH TRACK OUTAGE LIMITATIONS DEFINED BY THE OWNER. THE MAXIMUM OUTAGE LENGTH DEFINED BY THE OWNER FOR REPLACING THE STRUCTURE IS 96 HOURS.
2. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SEQUENCE DETAILING THE SEQUENCE, MEANS, AND METHODS BY WHICH THE BRIDGE WILL BE CONSTRUCTED.
3. THE CONTRACTOR SHALL VERIFY THAT LIFTING AND HANDLING METHODS WILL NOT OVERSTRESS PREFABRICATED ELEMENTS.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE FINAL DESIGN AND DETAILING OF THE TEMPORARY SUPPORT STRUCTURE FOR THE BRIDGE IN THE STAGING AREA, THE EQUIPMENT/FALSEWORK USED TO MOVE THE BRIDGE, THE JACKING SYSTEM REQUIRED TO JACK EXISTING SPAN 2, ANY STRENGTHENING OF EXISTING SPAN 1 REQUIRED FOR DEMOLITION, ANY STRENGTHENING OF EXISTING SPAN 2 REQUIRED FOR VERTICAL JACKING, CONNECTION TO EXISTING SPAN 2 FOR VERTICAL JACKING, THE FINAL LAYOUT OF THE SPMTs, AND VERIFICATION OF THE ADEQUACY OF THE PROPOSED TRAVEL PATH. DESIGN TEMPORARY SUPPORTS IN ACCORDANCE WITH THE AASHTO GUIDE DESIGN SPECIFICATIONS FOR BRIDGE TEMPORARY WORKS.
5. THE CONTRACTOR SHALL DESIGN AND DETAIL A SYSTEM TO MONITOR DEFLECTIONS AND TWIST OF THE BRIDGE SYSTEM DURING THE BRIDGE MOVE. THE MEASUREMENT SYSTEM SHALL BE CAPABLE OF BEING MONITORED CONTINUOUSLY DURING THE MOVE.
6. THE CONTRACTOR SHALL VERIFY THE ADEQUACY OF THE PROPOSED BRIDGE STRUCTURE WHEN USING SPMT LIFTING POINTS AS SHOWN IN THE PLANS. THE CONTRACTOR SHALL PROVIDE A FULL ANALYSIS OF THE BRIDGE STRUCTURE IF SPMT LIFTING POINTS ARE NOT CONSISTENT WITH THE ASSUMED LOCATIONS LISTED IN THE PLANS OR IF FALSEWORK DOES NOT PROVIDE SUPPORT THAT IS CONSISTENT WITH THE ASSUMED SUPPORT CONDITIONS.
7. THE CONTRACTOR SHALL EVALUATE THE GLOBAL STABILITY OF ABUTMENT 1 AND PIER 1 DURING THE REMOVAL OF THE EXISTING SPAN AND VERTICAL JACKING OF THE ADJACENT SPAN.
8. AT A MINIMUM, THE CONTRACTOR SHALL MONITOR THE STABILITY OF THE EXISTING STRUCTURE (ABUTMENT 1, PIER 1, SPAN 1, PIER 2, SPAN 2) DURING CONSTRUCTION OPERATIONS. CONSTRUCTION OPERATIONS SHALL BE HALTED IF CONDITIONS ARE DEEMED TO BE UNSAFE.
9. THE CONTRACTOR SHALL HAVE AN ENGINEER, REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA, OVERVIEW THE PREPARATION OF THE CALCULATIONS, DRAWINGS, AND DETAILS OF THE CONSTRUCTION SEQUENCE AND SEAL EACH ITEM SUBMITTED.
10. THE CONTRACTOR SHALL OBTAIN APPROVAL OF THE CONSTRUCTION SEQUENCE FROM THE OWNER, THE DEPARTMENT, AND THE ENGINEER OF RECORD BEFORE BEGINNING WORK ON THE BRIDGE.
11. THE CONTRACTOR BEARS FULL RESPONSIBILITY FOR THE CONSTRUCTION SEQUENCE EVEN IF THE SEQUENCE WITHIN THESE PLANS IS FOLLOWED.
12. WORK ON THIS STRUCTURE WILL BE NEAR AN ACTIVE RAILROAD TRACK. COORDINATE ALL OPERATIONS WITH THE OWNER PRIOR TO PERFORMING THIS WORK.
13. REFER TO PROJECT SPECIFICATIONS FOR GUIDANCE ON CONSTRUCTION OPERATIONS.
14. REFER TO E&S PLANS FOR TEMPORARY CAUSEWAY CONSTRUCTION.
15. THE BEARING CAPACITY OF THE BRIDGE STAGING AREA SHALL BE VERIFIED TO BE ADEQUATE BY THE CONTRACTOR FOR USE WITH THEIR CONSTRUCTION EQUIPMENT. THE CONTRACTOR SHALL VERIFY THE FINAL DIFFERENTIAL SETTLEMENTS OF THE TEMPORARY FALSEWORK TO BE ADEQUATE FOR THE SUPPORTED STRUCTURES WITHIN THE BRIDGE STAGING AREA. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE IMPACTS ON THE EXISTING UTILITIES DUE TO SPMT AND OTHER CONSTRUCTION EQUIPMENT USE.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

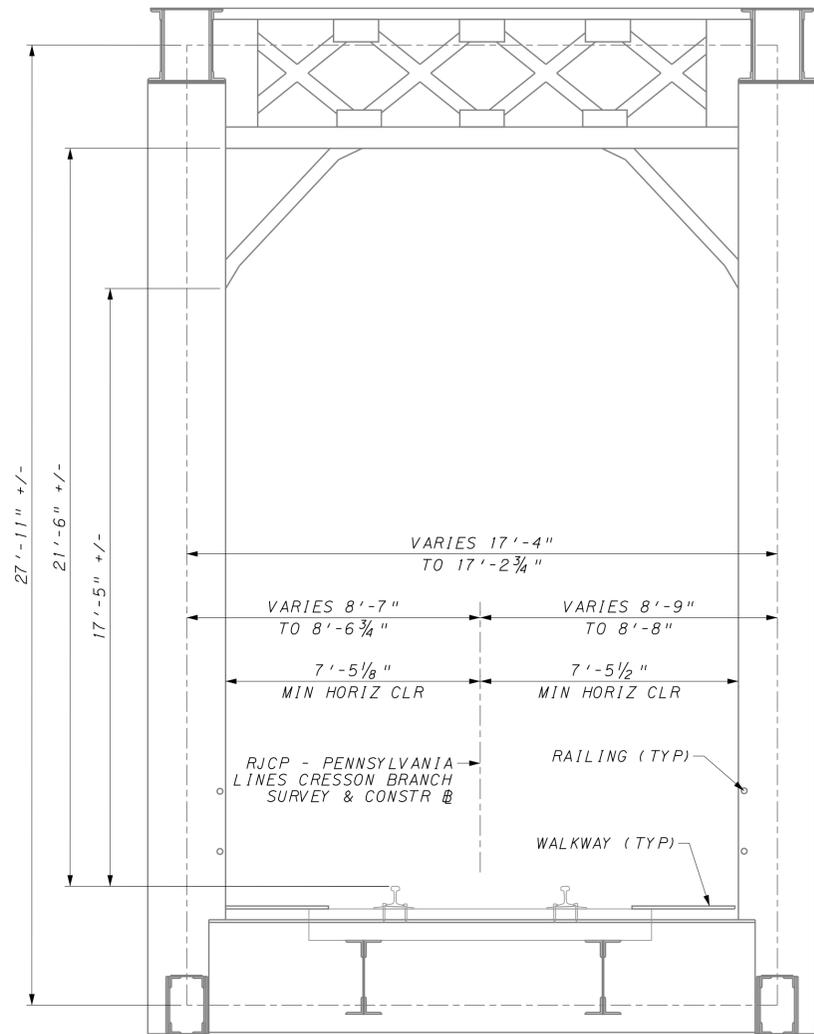
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
GENERAL NOTES 2

RECOMMENDED _____

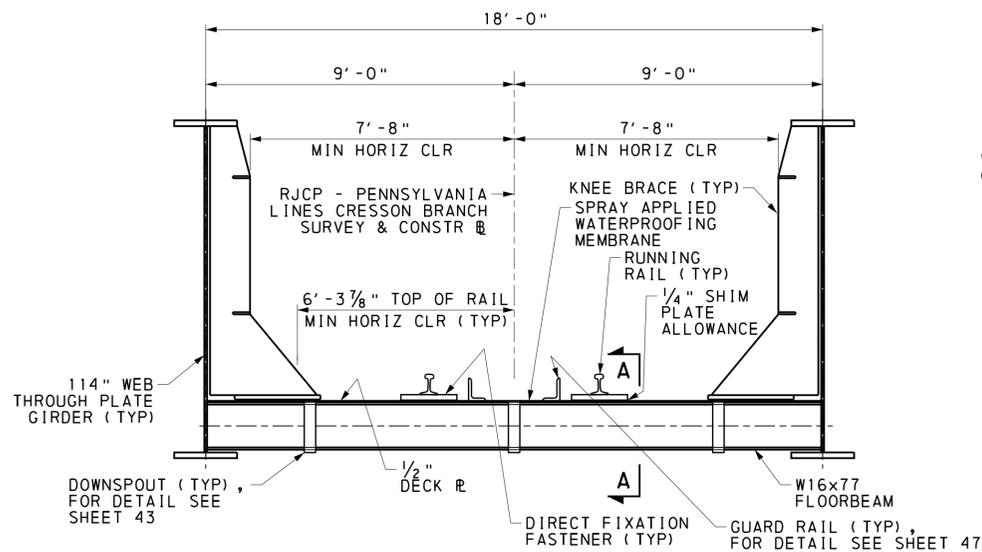
SHEET 3 OF 54

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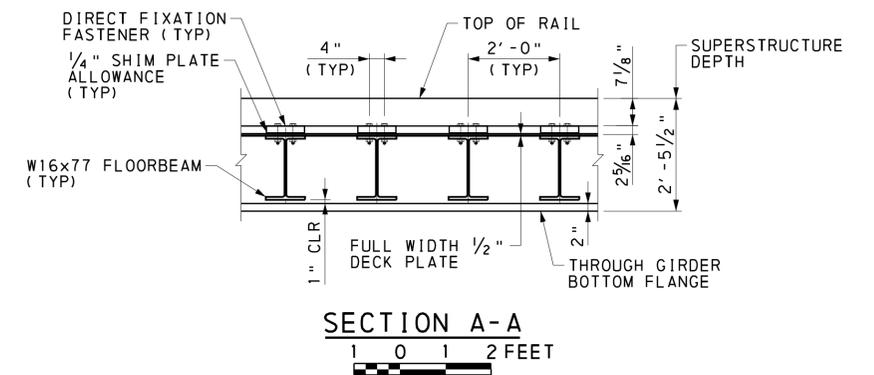
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EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION

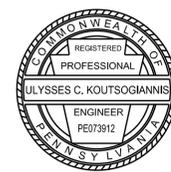


NOTE:

- 1. FOR VERTICAL CLEARANCE CALCULATIONS, A SHIM ALLOWANCE OF 1/4" WAS USED.

Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

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COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
 SR 1001 SECTION MTF
 SEG 0132 OFFSET 0701
 CR 65.60 (CRESSON BRANCH) STA 4+65.11
 OVER SR 1001 (RIVER ROAD)
 STEEL THROUGH PLATE GIRDER & STEEL
 THROUGH TRUSS BRIDGE
 TYPICAL SECTION & DETAILS

RECOMMENDED _____

SHEET 4 OF 54

S-1001RJC

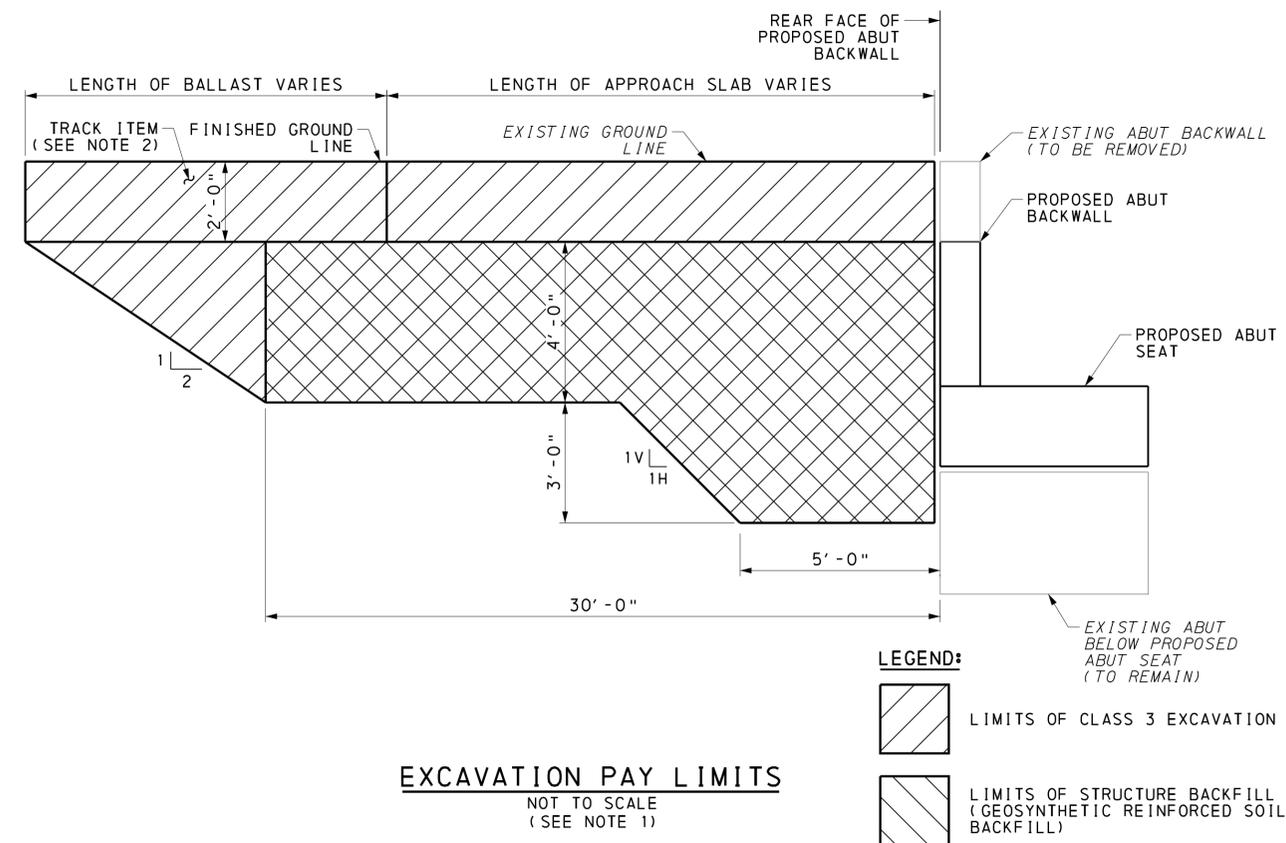
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TABULATION OF BRIDGE BID ITEMS & APPROXIMATE QUANTITIES								
QUANTITY	ITEM NUMBER	QUANTITY & UNIT	DESCRIPTION	APPR SLAB	ABUT 1	PIER 1	SUPER	
								UNIT
LS	8120 0001	BRIDGE STRUCTURE, AS-DESIGNED, S-1001RJC (SEE NOTE 1)						
	LS	220 CY	CLASS 3 EXCAVATION		220			
		35 SY	MEMBRANE WATERPROOFING SYSTEM INSTALLED ON OTHER SURFACES		35			
		2 CY	CLASS AAA CEMENT CONCRETE ACCELERATED, 5 KSI (SEE NOTE 1)		1	1		
		56 EA	DOWEL HOLES, 28" DEEP		24	32		
		1,276 LF	PRESSURE MORTAR POINTING		460	816		
		LS	REMOVAL OF PORTION OF EXISTING BRIDGE (SEE NOTES 1 & 7)					
		117 SY	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, REINFORCED CONCRETE SUBSTRUCTURE SURFACES) (SEE NOTE 10)	24	38	55		
		374,400 LB	FABRICATED STRUCTURAL STEEL (SEE NOTE 3)				374400	
		2 EA	HIGH LOAD MULTI-ROTATIONAL BEARINGS - FIXED				2	
		4 EA	HIGH LOAD MULTI-ROTATIONAL BEARINGS - NON-GUIDED EXPANSION				4	
		2 EA	LAMINATED NEOPRENE BEARING PAD				2	
		23 LF	DOWNSPOUTING (SEE NOTE 9)				23	
		9 LF	EPOXY INJECTION CRACK SEAL, STONE MASONRY (SEE NOTE 1)		5	4		
		1 EA	PRECAST CONCRETE, ABUTMENT CAP (SEE NOTES 1 & 5)		1			
		1 EA	PRECAST CONCRETE, PIER CAP (SEE NOTES 1 & 6)			1		
		1 EA	PRECAST CONCRETE, APPROACH SLAB (SEE NOTES 1 & 11)	1				
		390 SY	SPRAY APPLIED WATERPROOFING MEMBRANE - SUPERSTRUCTURE (SEE NOTE 1)				390	
		100 CF	NON-SHRINK GROUT (SEE NOTE 1)		50	50		
		LS	JACKING BRIDGE SUPERSTRUCTURE (SEE NOTE 1)					
		LS	JACKING BRIDGE SUPERSTRUCTURE, ENGINEERING (SEE NOTE 1)					
		LS	GEOSYNTHETIC REINFORCED SOIL BACKFILL (SEE NOTES 1 & 4)					
		LS	SELF PROPELLED MODULAR TRANSPORTER, ENGINEERING (SEE NOTE 1)					
		LS	SELF PROPELLED MODULAR TRANSPORTER, TEMPORARY SUBSTRUCTURES (SEE NOTE 1)					
		LS	SELF PROPELLED MODULAR TRANSPORTER, SUPERSTRUCTURE INSTALLATION (SEE NOTE 1)					
		LS	SELF PROPELLED MODULAR TRANSPORTER, EXISTING SUPERSTRUCTURE REMOVAL (SEE NOTE 1)					
AND 700	1002 0073	REINFORCEMENT BARS, GALVANIZED						
	LB				300	400		
LS	9203 0101	TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM, S-1001RJC (SEE NOTES 1 AND 8)						
	LS							

QUANTITY NOTES:

- REFER TO CONTRACT SPECIAL PROVISIONS.
- FOR AS DESIGNED STRUCTURE, FOR ALTERNATE DESIGNS, INCLUDE IN STRUCTURE LUMP SUM BID ITEM.
- PAINTING AND GALVANIZING IS INCIDENTAL TO THIS ITEM. STEEL DECK PLATE SHALL BE GALVANIZED.
- GEOSYNTHETIC REINFORCED SOIL BACKFILL: INCLUDES 220 CY AASHTO NO. 8 STONE AND 1,700 SY GEOTEXTILE, CLASS 4, TYPE C.
- PRECAST CONCRETE, ABUTMENT CAP: INCLUDES 35 CY 5 KSI CEMENT CONCRETE AND 7,400 LB OF REINFORCEMENT BARS, EPOXY COATED.
- PRECAST CONCRETE, PIER CAP: INCLUDES 33 CY 5 KSI CEMENT CONCRETE AND 4,700 LB OF REINFORCEMENT BARS, EPOXY COATED.
- REMOVAL OF PORTION OF EXISTING BRIDGE: INCLUDES 2,300 SF OF EXISTING BRIDGE TO BE REMOVED. THIS ITEM INCLUDES ENGINEERING EFFORT.
- TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM: INCLUDES 3,000 SF OF EXPOSED SURFACE AREA.
- 4" DIAMETER SCHEDULE 40 PIPE. CAULKING/SEALANT INCIDENTAL TO THIS ITEM.
- PROTECTIVE COATING SHALL BE APPLIED TO THE TOP, FRONT, BACK, AND SIDE FACES OF THE ABUTMENT SEAT/BACKWALL AND PIER CAP. PROTECTIVE COATING SHALL BE APPLIED TO TOP SURFACE OF APPROACH SLAB.
- PRECAST CONCRETE, APPROACH SLAB: INCLUDES 16 CY 5 KSI CEMENT CONCRETE AND 3,500 LB OF REINFORCEMENT BARS, EPOXY COATED.
- FOR TRACKWORK QUANTITIES AND INFORMATION, INCLUDING BUT NOT LIMITED TO DF FASTENERS, RAIL, AND GUARD RAIL, SEE TRACK QUANTITIES, PLANS, AND SPECIFICATIONS.

DES: TED | DES CKD: EMG | DWG: DAC | DWG CKD: JAC



EXCAVATION PAY LIMITS NOTES:

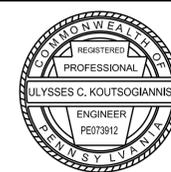
- FOR MORE DETAIL ON EXCAVATION, SEE GRS & SUBSTRUCTURE DETAILS, SHEET 7.
- EXCAVATION WITHIN THE BALLAST REGION IS INCLUDED IN CLASS 3 EXCAVATION. BALLAST TO BE USED FOR TRACK RECONSTRUCTION INCLUDED WITHIN TRACK QUANTITIES.

ALTERNATE STRUCTURE ITEMS			
ITEM NUMBER	DESCRIPTION	UNIT	TOTAL
8120-0001	BRIDGE STRUCTURE AS DESIGNED, S-1001RJC (SEE NOTE 1)	LS	LUMP SUM
8100-0001	STEEL BRIDGE STRUCTURE (SEE NOTE 1)	LS	LUMP SUM

Mark	Description	By	Chk' d	Recm' d	Date
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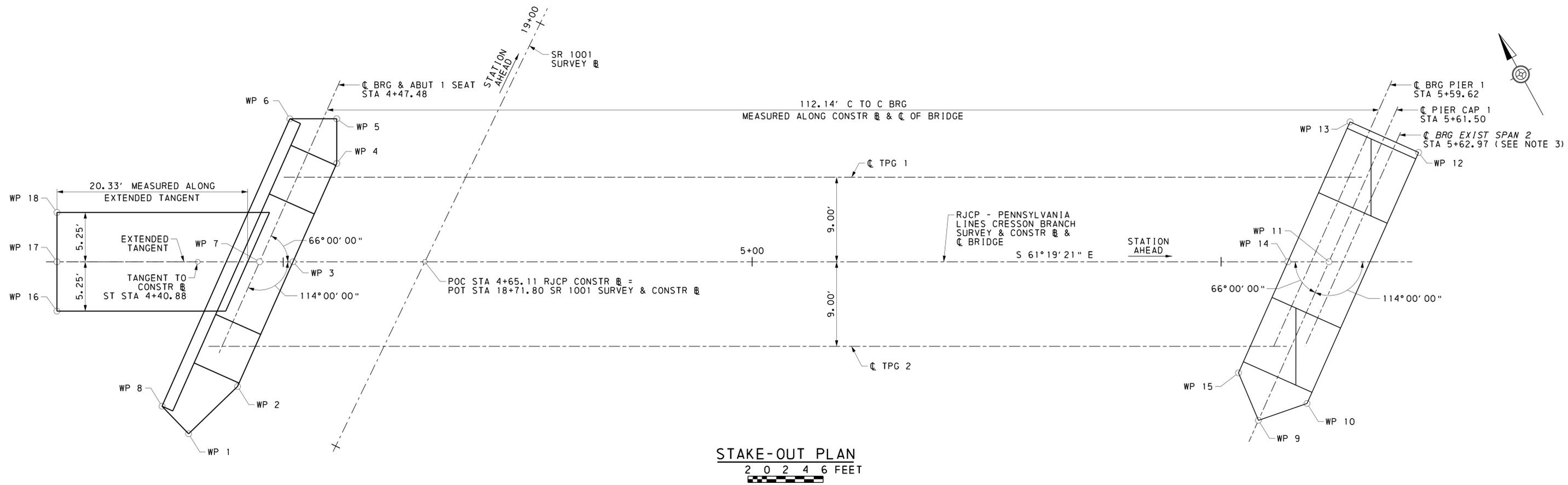


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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
SUMMARY OF QUANTITIES

RECOMMENDED _____ SHEET 5 OF 54
S-1001RJC



STAKE-OUT PLAN
2 0 2 4 6 FEET

SR 1001 SURVEY & CONSTR B COORDINATES				
POINT	STATION	NORTHING	EASTING	BEARING
PI	17+69.12	316263.6347	1779702.4418	N 54°31'17" E
PC	22+41.32	316537.6967	1780086.9667	

RJCP-PENNSYLVANIA LINES CRESSON BRANCH SURVEY & CONSTR B				
POINT	STATION	NORTHING	EASTING	BEARING
CS	3+47.88	316378.5201	1779682.7010	
PI _(S)	3+78.89	316364.6075	1779710.4077	
ST	4+40.88	316334.8530	1779764.8060	
POT	6+86.30	316217.0833	1779980.1175	S 61°19'21" E

STAKE-OUT COORDINATES					
WP	BASELINE	STATION	OFFSET	NORTHING	EASTING
1	RJCP BL	4+39.92	18.31' RT	1779755.1670	316319.2501
2	RJCP BL	4+45.13	13.28' RT	1779762.1593	316321.1659
3	RJCP BL	4+51.04	0.00'	1779773.7174	316329.9781
4	RJCP BL	4+55.71	10.47' LT	1779782.8354	316336.9298
5	RJCP BL	4+55.71	15.22' LT	1779785.1148	316341.0971
6	RJCP BL	4+50.71	15.22' LT	1779780.7278	316343.4967
7	RJCP BL	4+47.48	0.00'	1779770.5962	316331.6853
8	RJCP BL	4+37.08	15.38' RT	1779754.0885	316323.1863
9	RJCP BL	5+53.98	16.88' RT	1779855.9289	316265.7700
10	RJCP BL	5+53.98	15.08' RT	1779861.3362	316264.8627
11	RJCP BL	5+61.50	0.00'	1779870.6234	316276.9734
12	RJCP BL	5+71.06	11.64' LT	1779884.5968	316282.5970
13	RJCP BL	5+63.75	14.89' LT	1779879.7464	316288.9589
14	RJCP BL	5+57.12	0.00'	1779866.7819	316279.0745
15	RJCP BL	5+51.85	11.83' RT	1779856.4858	316271.2246
16	RJCP BL	4+25.87	5.25' RT	1779749.1157	316337.4505
17	RJCP BL	4+25.88	0.00'	1779751.6382	316342.0548
18	RJCP BL	4+25.88	5.25' LT	1779754.1607	316346.6591

FOUR PLACE COORDINATES ARE FOR COMPUTATIONAL PURPOSES ONLY AND DO NOT IMPLY A PRECISION BEYOND TWO DECIMAL POINTS.

WORK POINT CLOSURE DISTANCES	
WP TO WP	DISTANCE
1 TO 13	128.21'
5 TO 15	99.88'

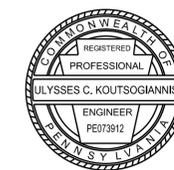
NOTES:

- ALL STATIONS ARE GIVEN ALONG RJCP-PENNSYLVANIA LINES CRESSON BRANCH SURVEY & CONSTR B.
- BRIDGE CORRESPONDS TO TANGENT AND EXTENDED TANGENT OF RJCP-PENNSYLVANIA LINES CRESSON BRANCH SURVEY & CONSTR B.
- CONTRACTOR SHALL FIELD VERIFY STATION OF EXISTING SPAN 2 CENTERLINE OF BEARING.
- WP 17 IS LOCATED AT THE INTERSECTION OF EXTENDED TANGENT AND WEST END OF APPROACH SLAB AT C OF APPROACH SLAB.

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REVISIONS					

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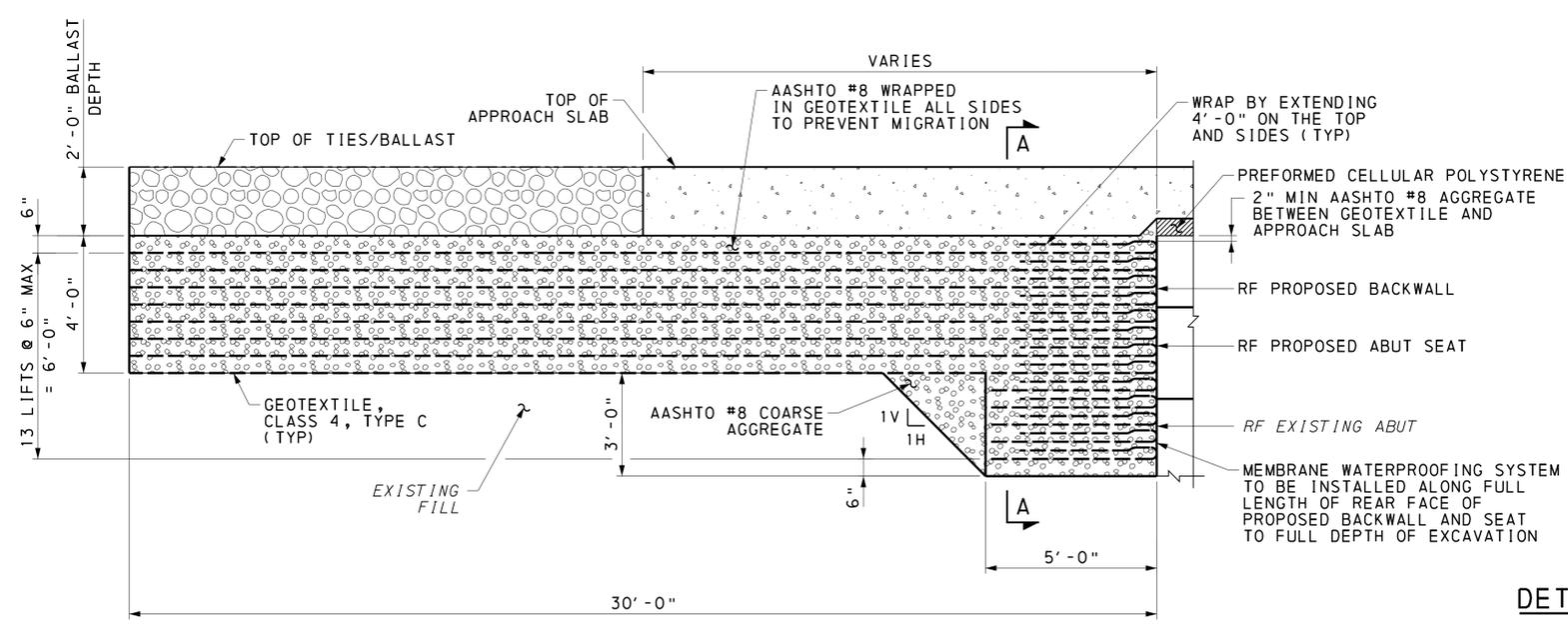
CLEARFIELD COUNTY
SR 1001 SECTION MTF
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CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
STAKE-OUT PLAN

RECOMMENDED _____

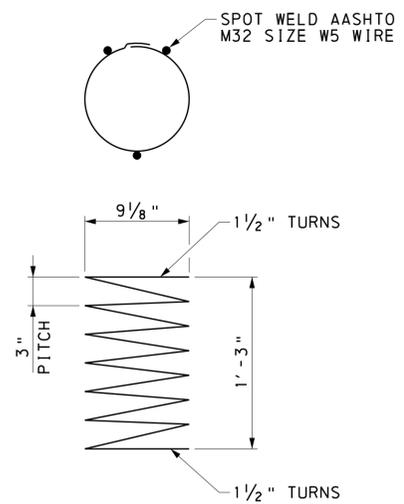
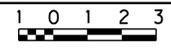
SHEET 6 OF 54

S-1001RJC

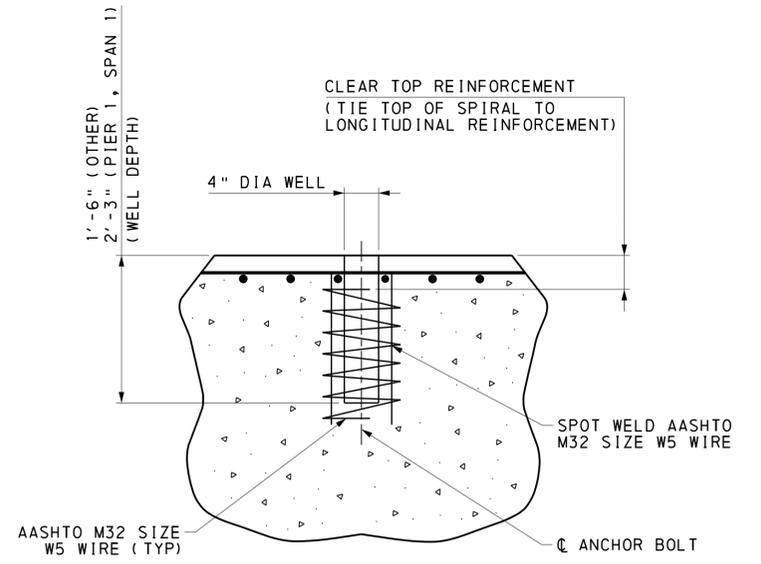
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GEOSYNTHETIC REINFORCED SOIL DETAIL



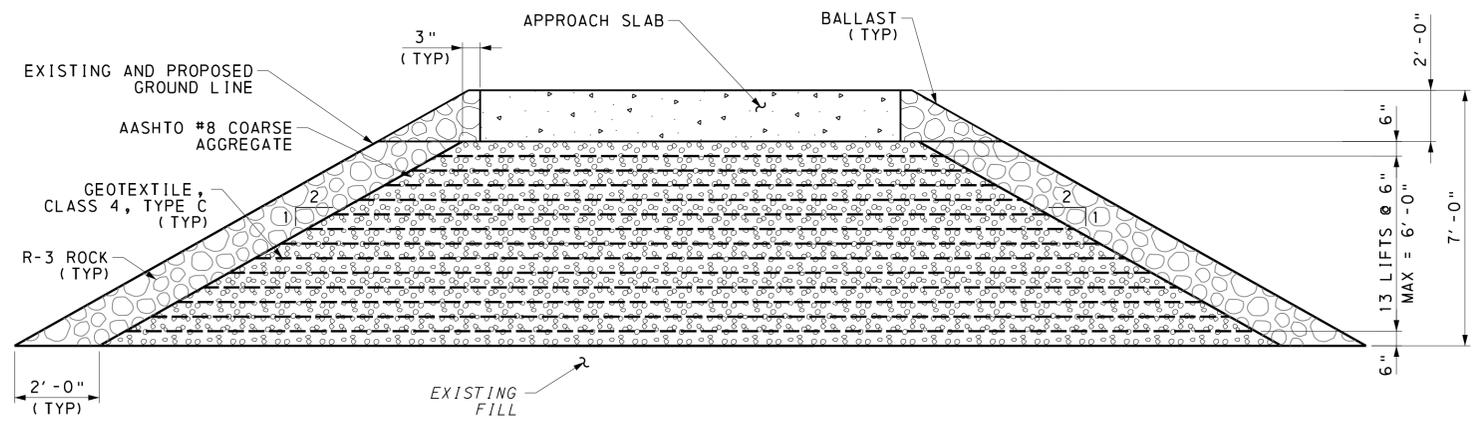
DETAIL OF SIZE W5 WIRE
NOT TO SCALE



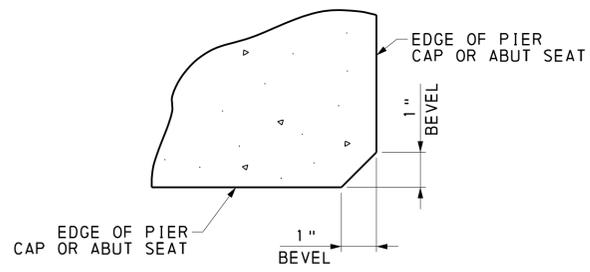
DETAIL OF ANCHOR BOLT WELL
NOT TO SCALE

ANCHOR BOLT WELL AND DOWEL POCKET NOTES:

1. ALL REINFORCING BARS IN THE TOP OF THE ABUTMENT SEAT OR PIER CAP SHALL BE SPACED TO CLEAR ANCHOR BOLT WELLS FOR BEARINGS AND DOWEL POCKETS BY AT LEAST 1/2".
2. FOR STIRRUPS, WHERE MAXIMUM SPACINGS CREATE CONFLICT WITH ANCHOR BOLT WELLS OR DOWEL POCKETS, A STIRRUP MAY BE SHIFTED UP TO ONE MAXIMUM SPACING OR BUNDLED WITH NEIGHBORING STIRRUPS. IN NO CASE SHALL THE SPACE BETWEEN NEIGHBORING SETS OF STIRRUPS EXCEED TWICE THE MAXIMUM SPACING. IF SPACING EXCEEDS THE MAXIMUM SPACING, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD FOR APPROVAL.
3. SEE GENERAL NOTES FOR ANCHOR BOLT INSTALLATION PROCEDURE.
4. ANCHOR BOLT WELLS SHALL NOT BE FORMED WITH GALVANIZED CORRUGATED STEEL PIPE.



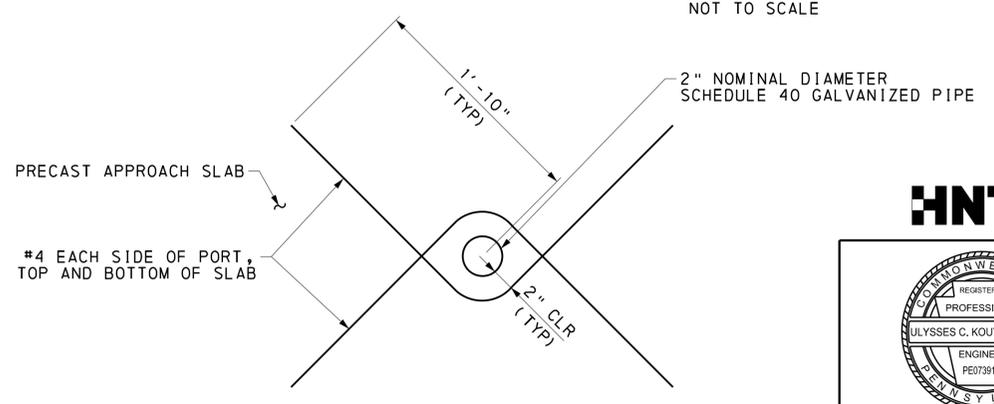
SECTION A-A
NOT TO SCALE



PIER CAP & ABUT SEAT CHAMFER DETAIL
NOT TO SCALE

GRS NOTES:

1. CONSTRUCT GRS UTILIZING CLASS 4, TYPE C GEOTEXTILE IN ACCORDANCE WITH PUBLICATION 408, SECTION 735 AND 212 WITH A MINIMUM ULTIMATE STRENGTH OF 4,800LB/FT. THE GEOTEXTILE SHALL BE SPACED AT A VERTICAL SPACING OF 6 INCHES.
2. UTILIZE AASHTO #8 FOR THE SPECIFIED BACKFILL OF THE GRS.
3. COMPACTION: COMPACT BACKFILL TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY ACCORDING TO AASHTO-T-99 AND ± 2% OPTIMUM MOISTURE CONTENT. THE COMPACTED THICKNESS SHALL BE 6" PER LIFT IN REINFORCED BACKFILL. ONLY HAND OPERATED COMPACTION EQUIPMENT IS ALLOWED WITHIN 3 FEET OF THE REAR FACE OF ABUTMENT. COMPACT OPEN-GRADED MATERIAL TO OBTAIN A STATE OF NON-MOVEMENT AND A MINIMUM OF 3 PASSES OF VIBRATION EQUIPMENT.
4. GEOSYNTHETIC REINFORCEMENT PLACEMENT: PLACE FIRST LAYER OF GEOTEXTILE 6 INCHES FROM BOTTOM OF EXCAVATION. PULL THE GEOSYNTHETIC TAUT TO REMOVE ANY WRINKLES AND LAY FLAT PRIOR TO PLACING AND COMPACTING THE BACKFILL MATERIAL. WRAPPED CORNERS NEED TO BE TIGHT WITHOUT EXPOSED SOIL. STAGGER SPLICES AT LEAST 24" APART. NO EQUIPMENT IS ALLOWED DIRECTLY ON THE GEOSYNTHETIC. PLACE A MINIMUM OF 6" LAYER OF GRANULAR FILL PRIOR TO OPERATING ONLY RUBBER-TIRED EQUIPMENT OVER THE GEOSYNTHETIC AT SPEEDS LESS THAN 5 MILES PER HOUR WITH NO SUDDEN BRAKING OR SHARP TURNING. THE TOP FINAL WRAP SHOULD BE A MIN OF 2" BELOW THE TOP OF THE FINAL LAYER TO ALLOW AT LEAST 2" OF AGGREGATE BASE COVER OVER THE GEOSYNTHETIC.
5. PLACE A MINIMUM OF 2 FEET, MEASURED HORIZONTALLY, OF R-3 ROCK ALONG THE EDGES OF THE EMBANKMENT ACCORDING TO PENNDOT PUB 408, SECTION 206.

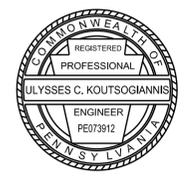


FUTURE GROUT INJECTION PORT DETAIL
NOT TO SCALE

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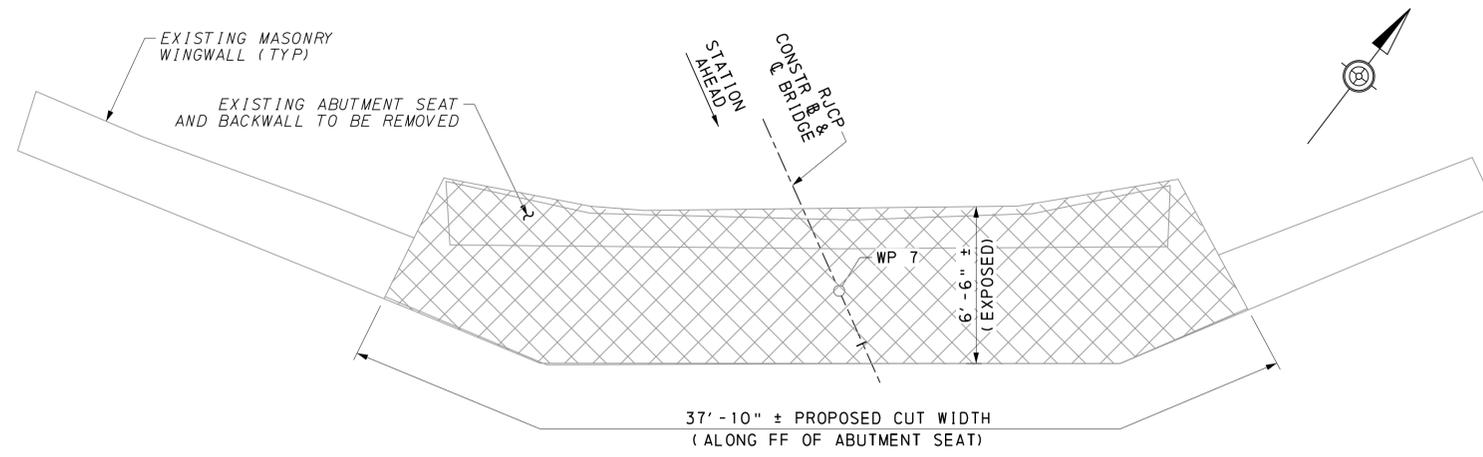
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
GRS & SUBSTRUCTURE DETAILS

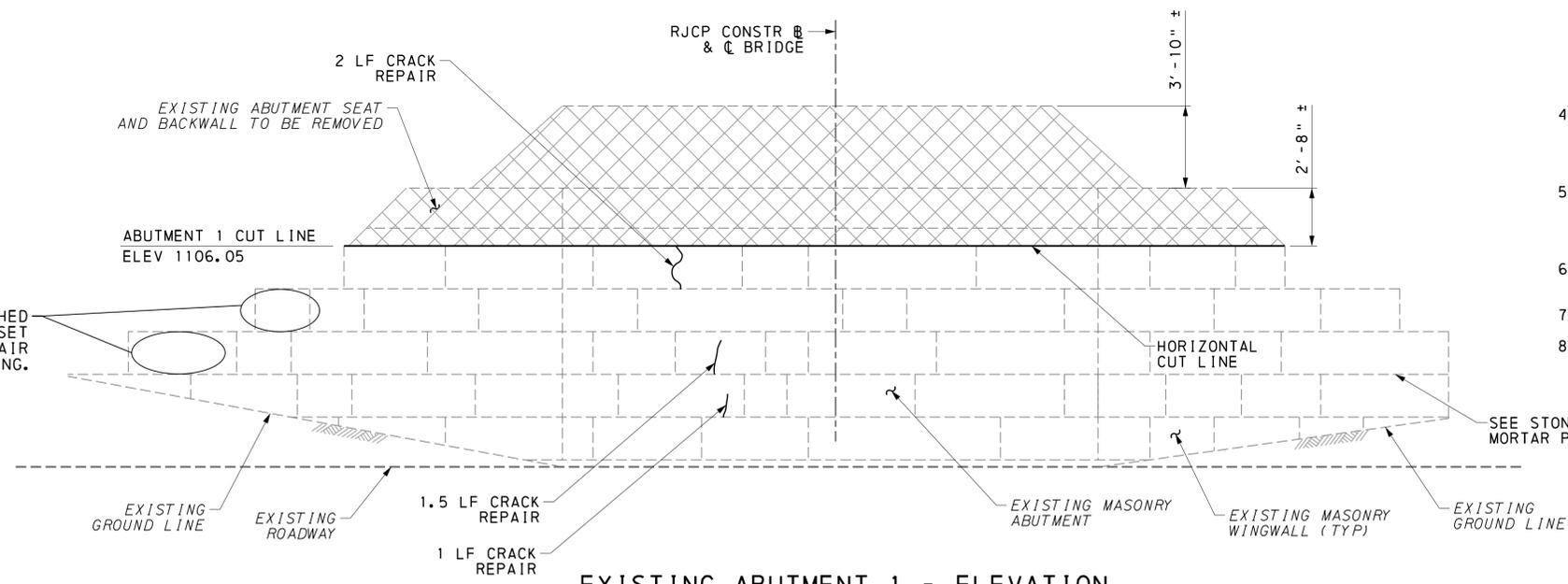
RECOMMENDED _____ SHEET 7 OF 54

S-1001RJC

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EXISTING ABUTMENT 1 - PLAN
2 0 2 4 FEET



EXISTING ABUTMENT 1 - ELEVATION
2 0 2 4 FEET
(ALONG FF WALL)

- LEGEND:**
- REMOVE EXISTING CONCRETE
 - EPOXY INJECTION CRACK SEAL

STONE MASONRY PRESSURE MORTAR POINTING NOTES:

1. MASONRY JOINTS WITHIN THE LIMITS SHOWN SHALL BE INSPECTED FOR DETERIORATION. ALL DETERIORATED MORTAR SHALL BE REPOINTED.
2. BASED ON A FIELD EVALUATION OF THE EXISTING MASONRY JOINTS, APPROX 80% OF THE MASONRY JOINTS AT ABUTMENT 1 AND 70% OF MASONRY JOINTS AT PIER 1 WILL REQUIRE REPOINTING.
3. VEGETATION GROWING IN JOINTS SHALL BE SUFFICIENTLY REMOVED TO ALLOW FOR INSTALLATION OF POINTING.
4. REMOVE ALL DETERIORATED AND LOOSE MORTAR A MINIMUM OF 2 TIMES THE WIDTH OF THE JOINT OR UNTIL SOUND MORTAR IS REACHED TO ENSURE ADEQUATE BOND.
5. CLEAN MORTAR JOINTS USING HAND TOOLS OR PNEUMATIC CHISEL, LEAVING SQUARE CUTS AT REAR OF JOINT IF POSSIBLE. DEBRIS SHALL BE REMOVED FROM JOINT USING COMPRESSED AIR.
6. BEFORE REPOINTING MORTAR, DAMPEN MASONRY SURFACES AND JOINTS. ENSURE NO STANDING WATER IS PRESENT.
7. FINISH POINT THE MASONRY USING A POINTING TOOL.
8. NEW POINTING SHALL MATCH THE WIDTH AND FINISH OF THE ADJACENT MORTAR JOINTS.

CRACK REPAIR NOTES:

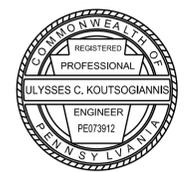
1. CRACKS SHALL BE REPAIRED USING LOW-PRESSURE INJECTED EPOXY AS DESCRIBED IN THE SPECIFICATIONS.
2. CRACKS SHALL BE CLEANED FROM ALL DEBRIS USING COMPRESSED AIR.
3. INSTALL INJECTION PORTS AS REQUIRED BY EQUIPMENT MANUFACTURER. SPACING OF PORT DEVICES SHALL BE ACCOMPLISHED AS REQUIRED TO ACHIEVE TRAVEL OF EPOXY RESIN FOR THE PRESSURE INJECTION GROUTING BETWEEN PORTS AND FILL THE CRACKS TO THE MAXIMUM.
4. AFTER EPOXY RESIN ADHESIVE HAS CURED, PORTING DEVICES (AND SEALANTS) SHALL BE REMOVED AND SUBSTRATE CLEANED AS REQUIRED BY THE ENGINEER.

SUBSTRUCTURE REMOVAL NOTES:

1. EXISTING SUBSTRUCTURES SHALL BE PARTIALLY REMOVED WITHIN THE LIMITS SHOWN ON THIS SHEET AND SHEET 12. COORDINATE REMOVAL WITH SUGGESTED CONSTRUCTION SEQUENCE ON STAGING PLAN & ELEVATION SHEETS.
2. ALL SUBSTRUCTURE REMOVAL SHALL BE DONE BY SAWCUTTING AND LIFTING OUT. CUT SURFACES SHALL BE LOCATED AS SHOWN ON THE PLANS WITHIN A TOLERANCE OF ± 1/2". SURVEY THE ELEVATION OF THE CUT LINES AT EVERY 5 FEET AND SUBMIT FOR THE ENGINEER'S REVIEW. ALL CUT SURFACES SHALL BE LEVEL.
3. EXISTING SUBSTRUCTURE SHALL BE REMOVED BY SAWCUTTING. USE OF WALLSAWS OR OTHER ALTERNATIVE SAWCUTTING METHODS MAY BE USED TO ACHIEVE A FULL DEPTH, LEVEL CUT OF THE ABUTMENT/PIER AT THE NOTED ELEVATIONS. TO MEET THE ACCELERATED SCHEDULE, PRE-CUTTING OF THE ABUTMENT/PIER IN SECTIONS AND/OR TO DEPTHS THAT DO NOT AFFECT THE SAFETY OF THE BRIDGE TO CARRY TRAFFIC COULD BE CARRIED OUT SUBJECT TO APPROVAL OF THE ENGINEER. THE REMOVAL AND DEMOLITION PLAN SHALL DETAIL THE PLANNED SHIMMING AND BRACING OF THE PRE-CUT SECTION TO MAINTAIN STABILITY AND SAFETY WHEN CARRYING TRAFFIC. THE PROPOSED PRE-CUTTING SHALL BE DETAILED IN THE REMOVAL PLAN SUBMITTAL.
4. A REMOVAL AND DEMOLITION PLAN, SIGNED BY A REGISTERED PROFESSIONAL ENGINEER IN THE COMMONWEALTH OF PENNSYLVANIA, SHALL BE SUBMITTED TO THE ENGINEER THIRTY (30) DAYS PRIOR TO BEGINNING DEMOLITION. THE REMOVAL AND DEMOLITION PLAN/METHOD SHALL MEET THE REQUIREMENTS OF THE REPLACEMENT SCHEDULE.
5. THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT ANY MATERIALS WHICH ARE TO REMAIN IN PLACE WILL NOT BE DAMAGED. IF THE CONTRACTOR DAMAGES ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, THE DAMAGED MATERIALS SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
6. CUTTING WITH BLADE SAWS MAY NEED ACCESS TO BOTH SIDES OF THE ABUTMENT, WITH THE SECOND CUT EXECUTED AFTER BACKFILL EXCAVATION.
7. EFFLORESCENCE ON MASONRY BLOCKS TO REMAIN SHALL BE REMOVED.
8. PREPARE AND SUBMIT ALL DOCUMENTS TO OBTAIN PERMITS AND APPROVALS NECESSARY TO REMOVE, TRANSPORT, AND DISPOSE OF THE DEMOLISHED STRUCTURE.

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DEPARTMENT OF TRANSPORTATION

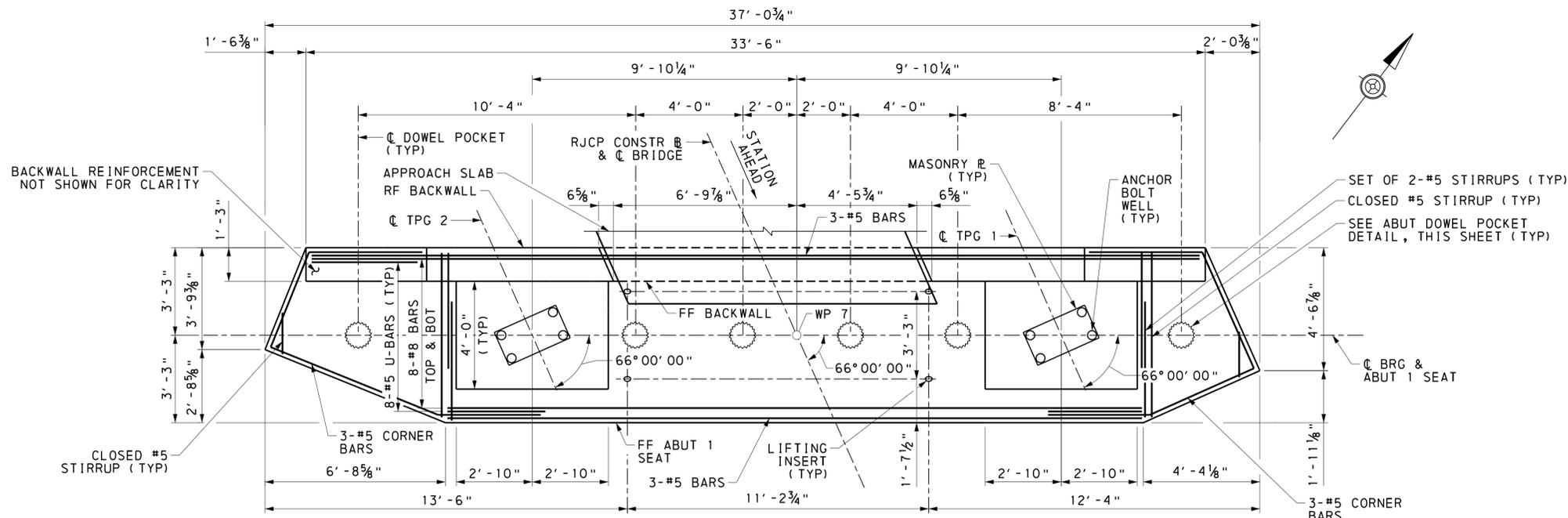
CLEARFIELD COUNTY
SR 1001 SECTION MTF
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CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
ABUTMENT 1 REPAIR & DEMO DETAILS

RECOMMENDED _____

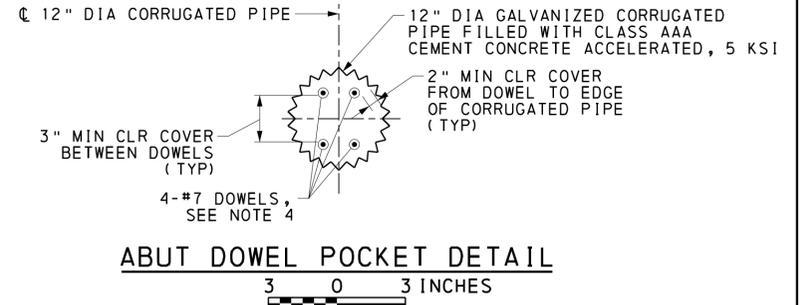
SHEET 8 OF 54

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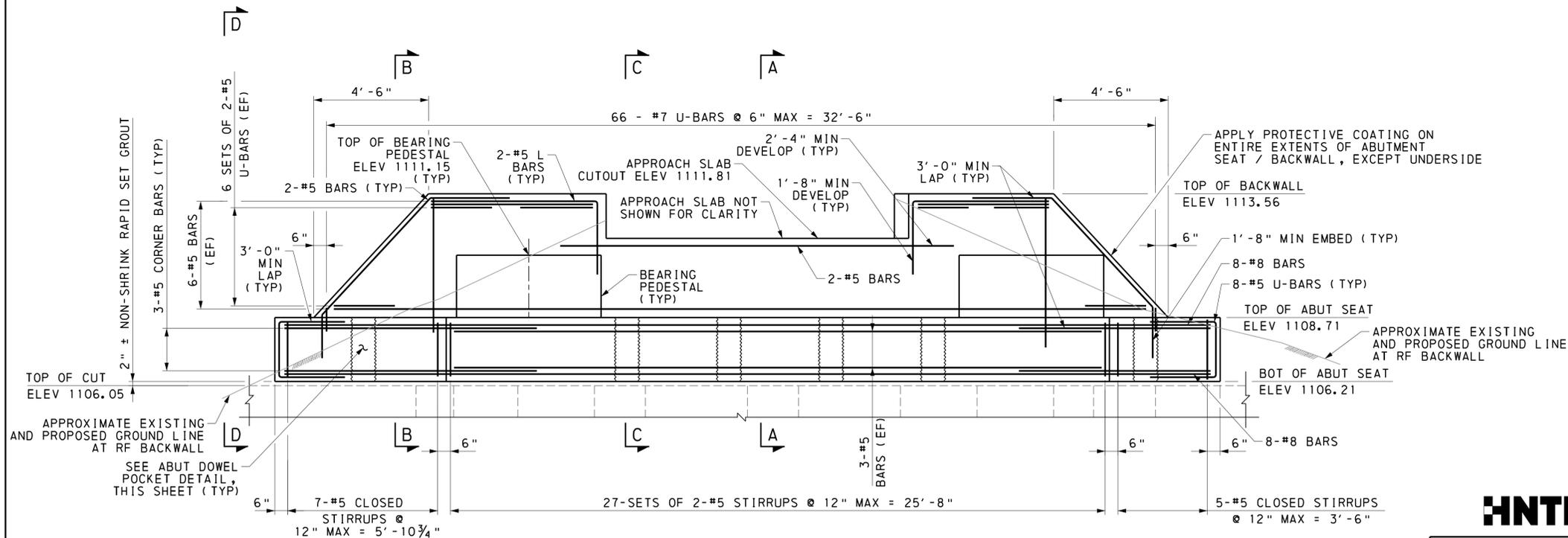
ABUTMENT 1 - PLAN OF SEAT AND BACKWALL
 1 0 1 2 3 FEET



ABUT DOWEL POCKET DETAIL
 3 0 3 INCHES

NOTES:

- FOR STAKE-OUT PLAN, SEE SHEET 6.
- FOR ABUTMENT 1 SECTIONS & DETAILS, SEE SHEET 10.
- DOWELS SHALL BE GALVANIZED. DOWELS SHALL BE DRILLED AND INSTALLED AFTER THE PRECAST ABUTMENT SEAT IS ERECTED ON TOP OF THE EXISTING ABUTMENT TO REMAIN.
- CORRUGATED STEEL PIPE USED FOR THE DOWEL POCKET DETAIL SHALL BE GALVANIZED BASED ON PROJECT SPECIFICATIONS.
- SEE SHEET 7 FOR SUBSTRUCTURE DETAILS.
- NON-SHRINK GROUT BED SHALL BE ADJUSTED AS APPROVED BY THE ENGINEER TO MEET INSTALLED TOP OF PRECAST ELEVATIONS AS INDICATED ON THE PLANS.
- LIFTING INSERTS AND 12" DIA CORRUGATED PIPE ARE INCIDENTAL TO THE ITEM "PRECAST CONCRETE, ABUTMENT CAP". LIFTING INSERTS PROVIDED BY THE CONTRACTOR SHALL BE FILLED WITH NON-SHRINK GROUT AFTER INSTALLATION.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND ANY SUPPLEMENTAL CALCULATIONS FOR THE PRECAST ABUTMENT SEAT. THE SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEERING LICENSED IN THE COMMONWEALTH OF PENNSYLVANIA. BASED ON SITE CONSTRAINTS AND CRANE CAPACITIES, THE CONTRACTOR MAY ELECT TO ERECT THE PRECAST ABUTMENT AS MULTIPLE SEGMENTS. IF MULTIPLE SEGMENTS ARE PROVIDED, TRANSVERSE CONTINUITY SHALL BE MADE WITH SHEAR KEY / COUPLER SYSTEMS.
- THE CONTRACTOR SHALL VERIFY THE ADEQUACY OF THE PRECAST SECTION FOR TRANSPORTATION FROM CASTING YARD TO SITE.
- THE CONTRACTOR SHALL VERIFY THE ADEQUACY OF LIFTING INSERTS AND PROVIDE ANY SUPPLEMENTARY REINFORCEMENT WHEN NECESSARY.
- FOR ABUTMENT 1 APPROACH SLAB, SEE SHEET 11.

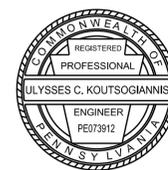


ABUTMENT 1 - ELEVATION
 1 0 1 2 3 FEET

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REVISIONS					

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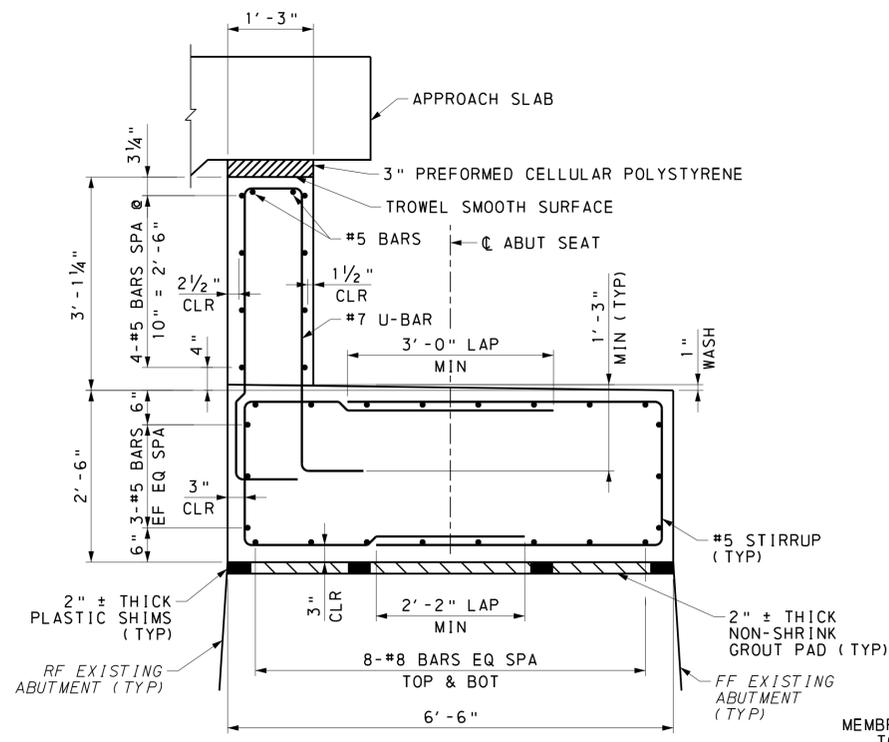
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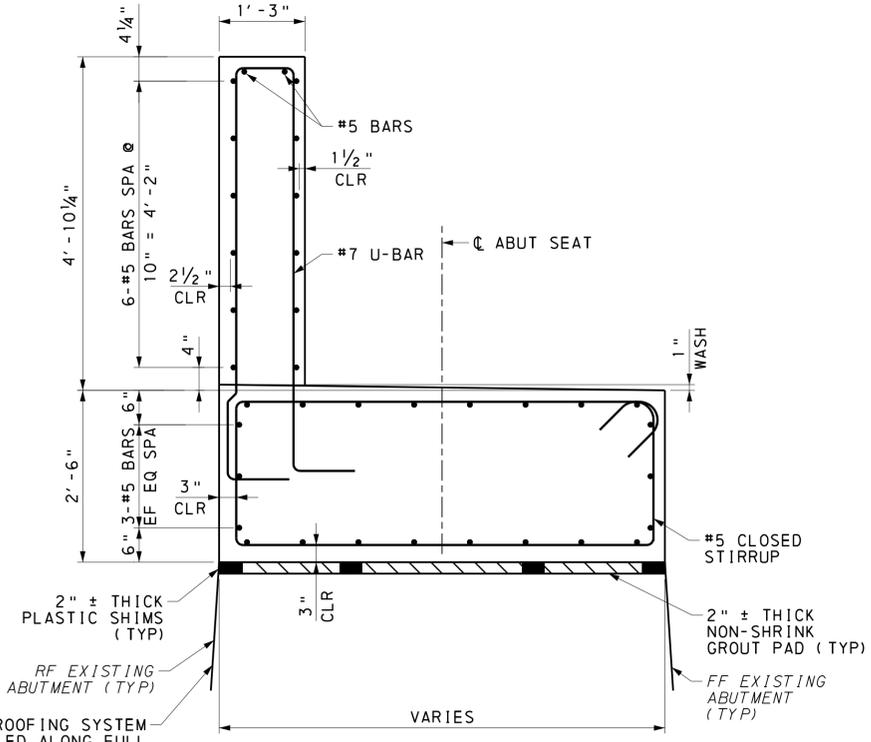
CLEARFIELD COUNTY
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 STEEL THROUGH PLATE GIRDER & STEEL
 THROUGH TRUSS BRIDGE
ABUTMENT 1 PLAN & ELEVATION

RECOMMENDED _____ SHEET 9 OF 54

S-1001RJC

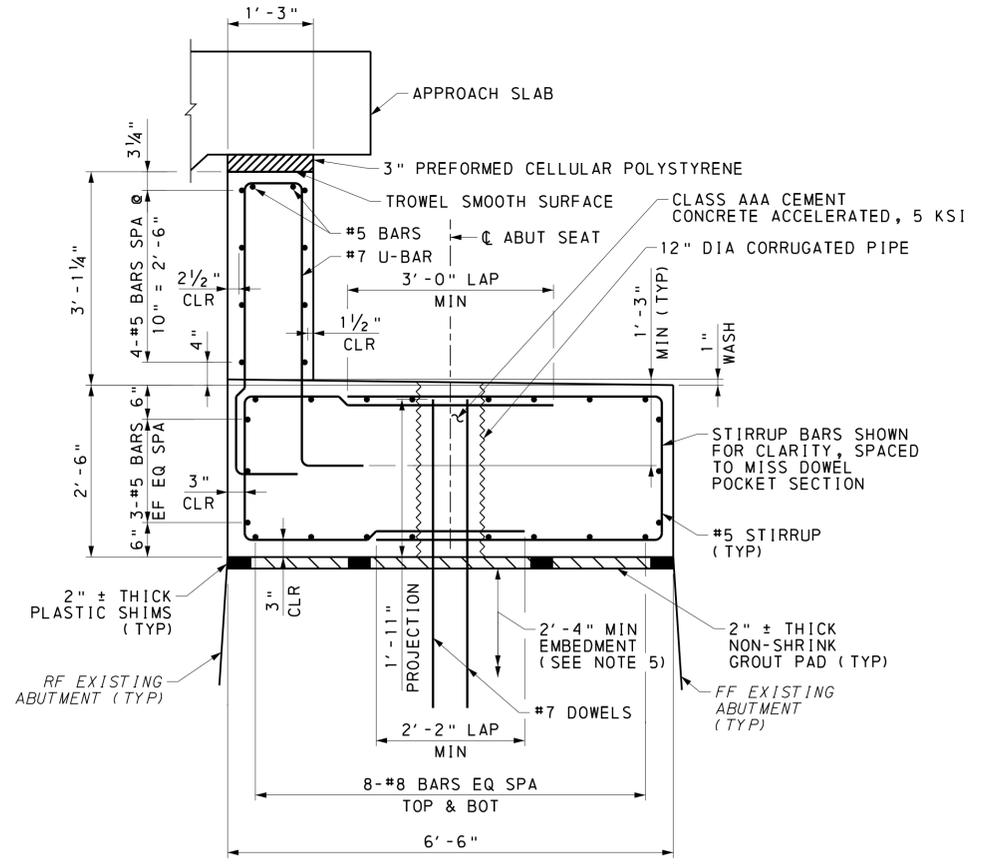


SECTION A-A
12 0 12 INCHES

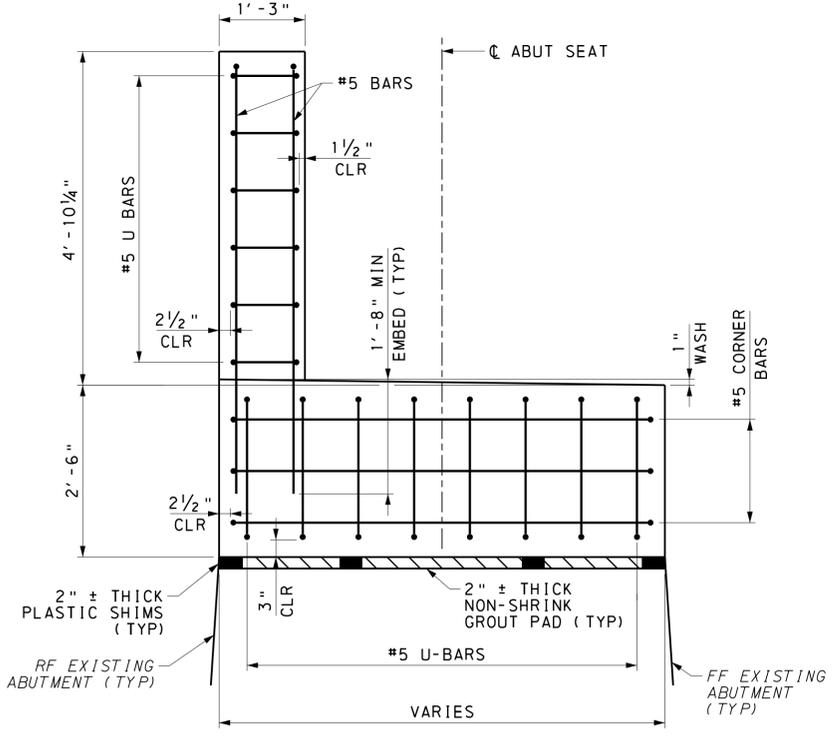


SECTION B-B
12 0 12 INCHES

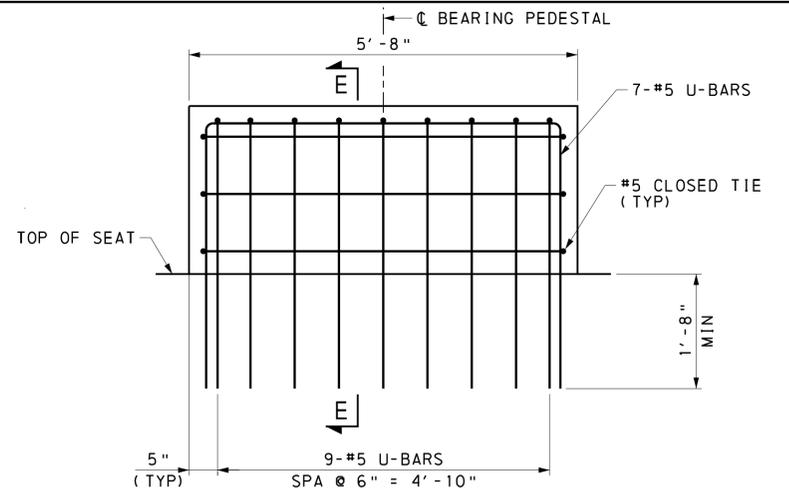
MEMBRANE WATERPROOFING SYSTEM TO BE INSTALLED ALONG FULL LENGTH OF REAR FACE OF PROPOSED BACKWALL AND SEAT TO FULL DEPTH OF EXCAVATION, TYPICAL ALL SECTIONS



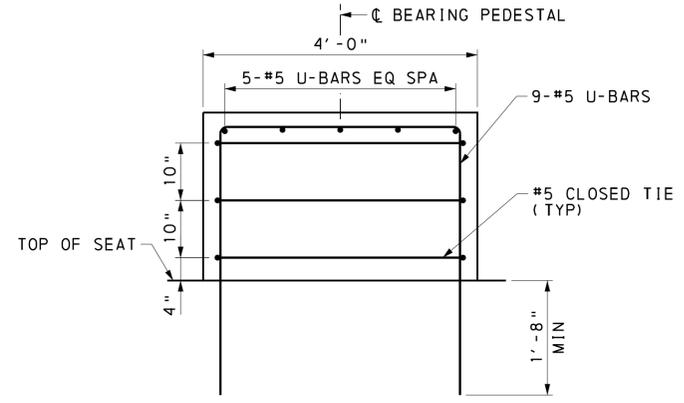
SECTION C-C
12 0 12 INCHES



SECTION D-D
12 0 12 INCHES



ABUTMENT 1 PEDESTAL ELEVATION
12 0 12 INCHES



SECTION E-E
12 0 12 INCHES

- NOTES:**
- FOR STAKE-OUT PLAN, SEE SHEET 6.
 - FOR ABUTMENT 1 PLAN & ELEVATION, SEE SHEET 9.
 - FOR ABUTMENT 1 APPROACH SLAB, SEE SHEET 11.
 - CLOSED TIE INDICATES A CONTINUOUS TIE WITH A 135 DEGREE BEND TO TERMINATE.
 - CONTRACTOR SHALL VERIFY THE INTEGRITY OF THE EXISTING MASONRY TO REMAIN BELOW THE ABUTMENT SEAT. MINIMUM EMBEDMENT IS BASED ON EMBEDMENT INTO COMPETENT MASONRY. IF LOOSE, CRACKED, MISSING, UNSOUND, OR RUBBLE MASONRY IS OBSERVED DURING THE DRILLING PROCESS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

MPMS/ECMS PROJ: 115877

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SUITE 300
HARRISBURG, PA 17110

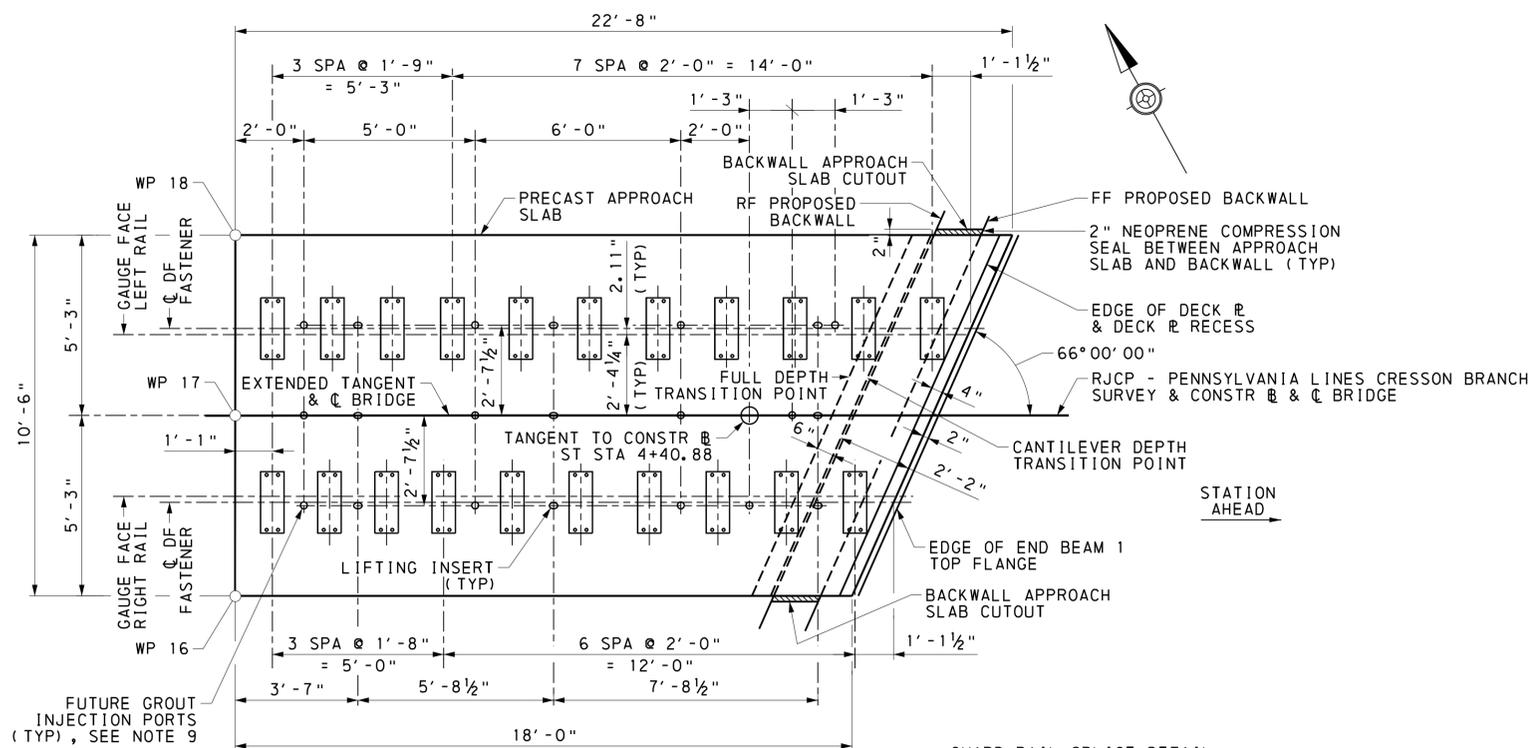
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
ABUTMENT 1 SECTION & DETAILS

RECOMMENDED _____ SHEET 10 OF 54

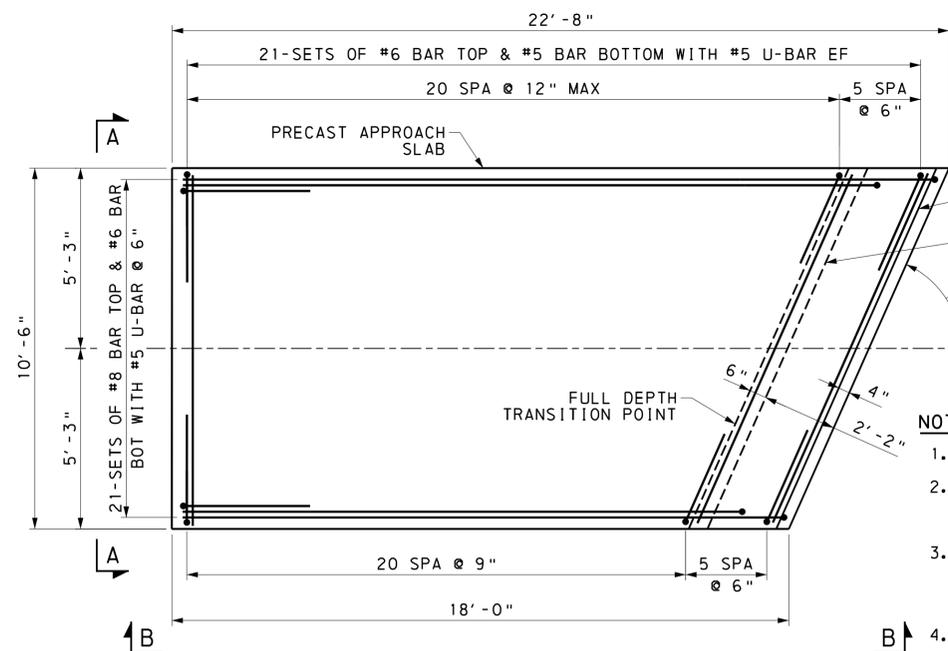
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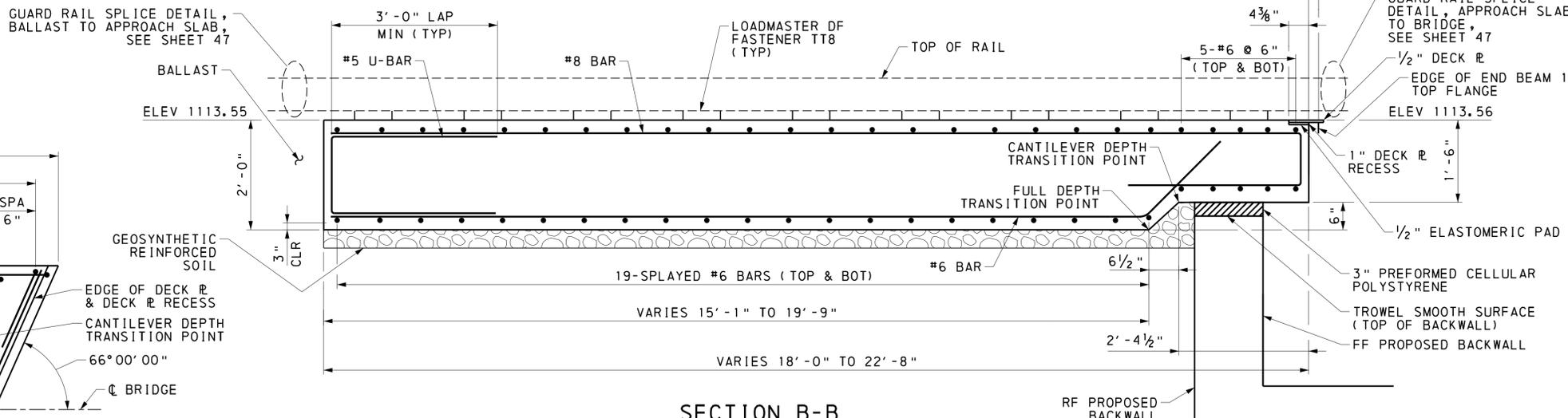
APPROACH SLAB-PLAN

1 0 1 2 3 FEET



APPROACH SLAB-REINFORCEMENT PLAN

1 0 1 2 3 FEET



SECTION A-A

12 0 12 INCHES

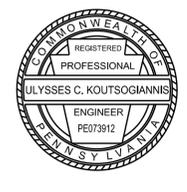
SECTION B-B

12 0 12 INCHES

- NOTES:**
1. FOR STAKE-OUT PLAN, SEE SHEET 6.
 2. LIFTING INSERTS ARE INCIDENTAL TO THE ITEM "PRECAST CONCRETE, APPROACH SLAB". LIFTING INSERTS PROVIDED BY THE CONTRACTOR SHALL BE FILLED WITH NON-SHRINK GROUT AFTER INSTALLATION.
 3. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND ANY SUPPLEMENTAL CALCULATIONS FOR THE PRECAST APPROACH SLAB. THE SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE COMMONWEALTH OF PENNSYLVANIA.
 4. THE CONTRACTOR SHALL VERIFY THE ADEQUACY OF THE PRECAST SECTION FOR TRANSPORTATION FROM CASTING YARD TO SITE.
 5. THE CONTRACTOR SHALL VERIFY THE ADEQUACY OF LIFTING INSERTS AND PROVIDE ANY SUPPLEMENTARY REINFORCEMENT WHEN NECESSARY.
 6. FOR DIRECT FIXATION FASTENER BOLT PATTERN, SEE GIRDER & FRAMING DETAILS, SHEET 24.
 7. AT WESTERN END OF APPROACH SLAB, THE CONSTR B DEVIATES FROM THE C BRIDGE & EXTENDED TANGENT BY APPROX 1/16". THEREFORE, WITH APPROVAL OF THE FASTENER MANUFACTURER, TRANSVERSELY SPACE THE DF FASTENERS ALONG THE C BRIDGE & EXTENDED TANGENT FOR THE FULL LENGTH OF THE APPROACH SLAB.
 8. FOR GUARD RAIL DETAILS, INCLUDING SPACING OF ANCHOR BOLTS, SEE SHEET 47.
 9. FUTURE GROUT INJECTION PORTS SHALL BE 2" NOMINAL DIAMETER SCHEDULE 40 GALVANIZED PIPE. PORTS SHALL BE CAST INTO THE APPROACH SLAB AND PENETRATE THE FULL SLAB DEPTH. PORTS SHALL REMAIN UNGROUTED AT END OF CONSTRUCTION FOR USE DURING THE SERVICE LIFE OF THE STRUCTURE. PORTS SHALL BE CAPPED WITH REMOVABLE CAPS TO PREVENT WATER AND MATERIAL INTRUSION BEFORE THEIR POSSIBLE USE. FUTURE GROUT INJECTION PORTS ARE INCIDENTAL TO THE ITEM "PRECAST CONCRETE, APPROACH SLAB". SEE SHEET 7 FOR FUTURE GROUT INJECTION PORT DETAIL.

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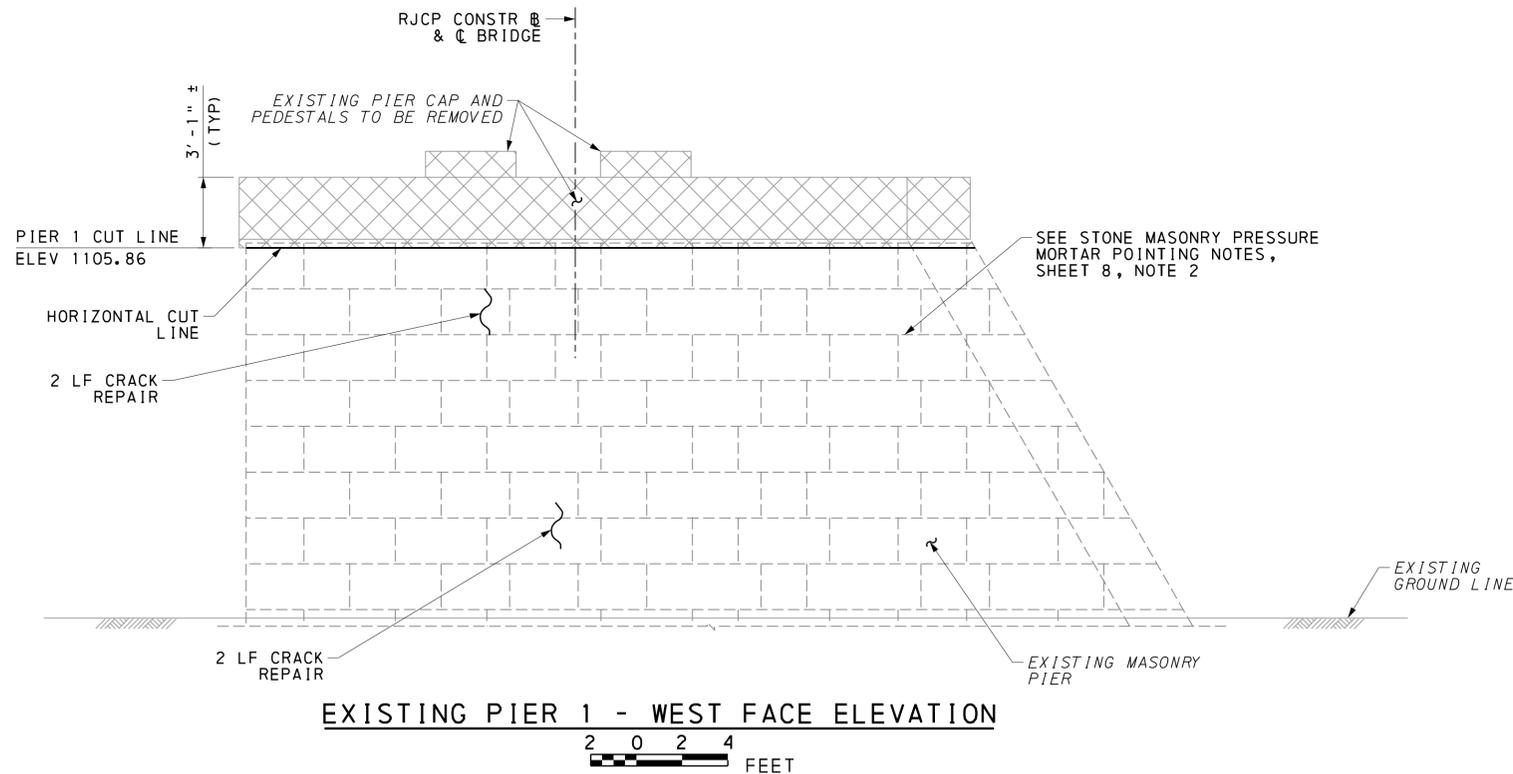
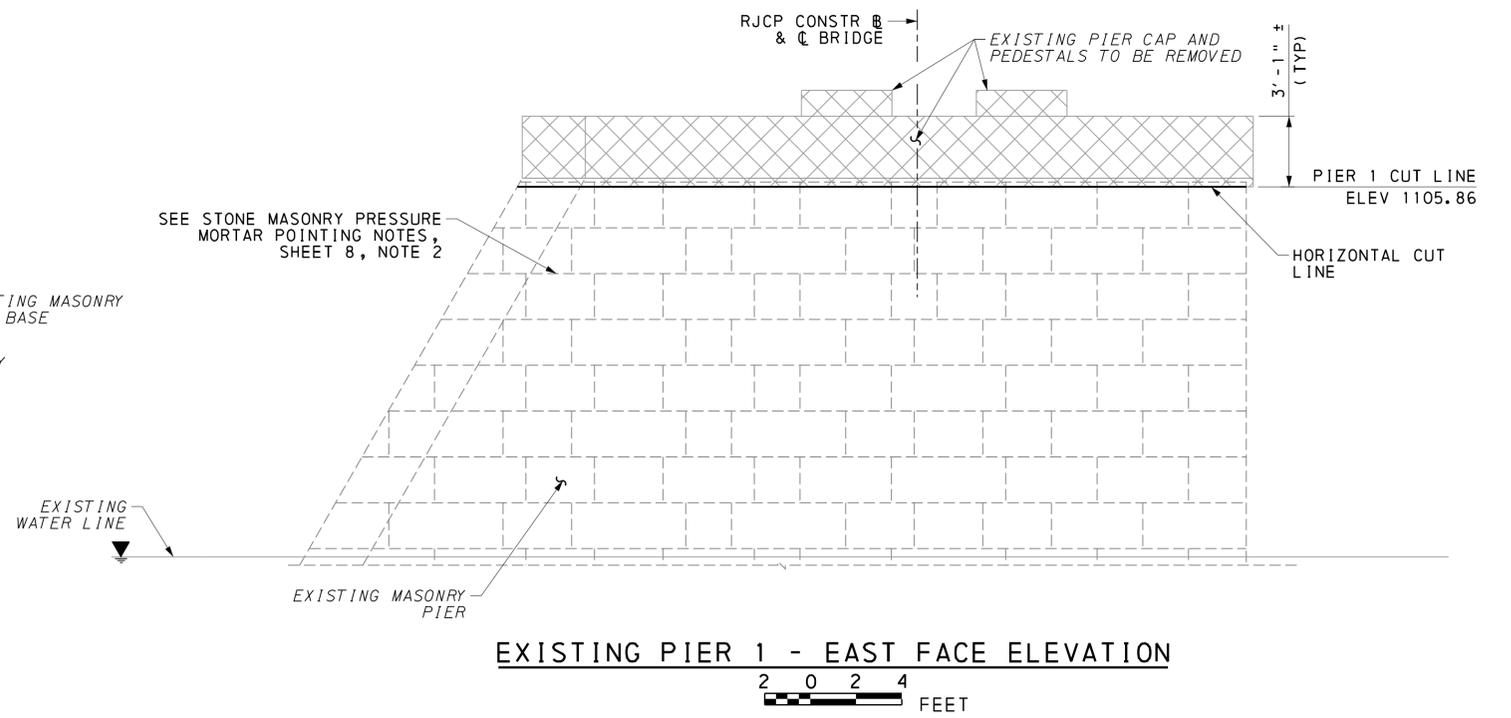
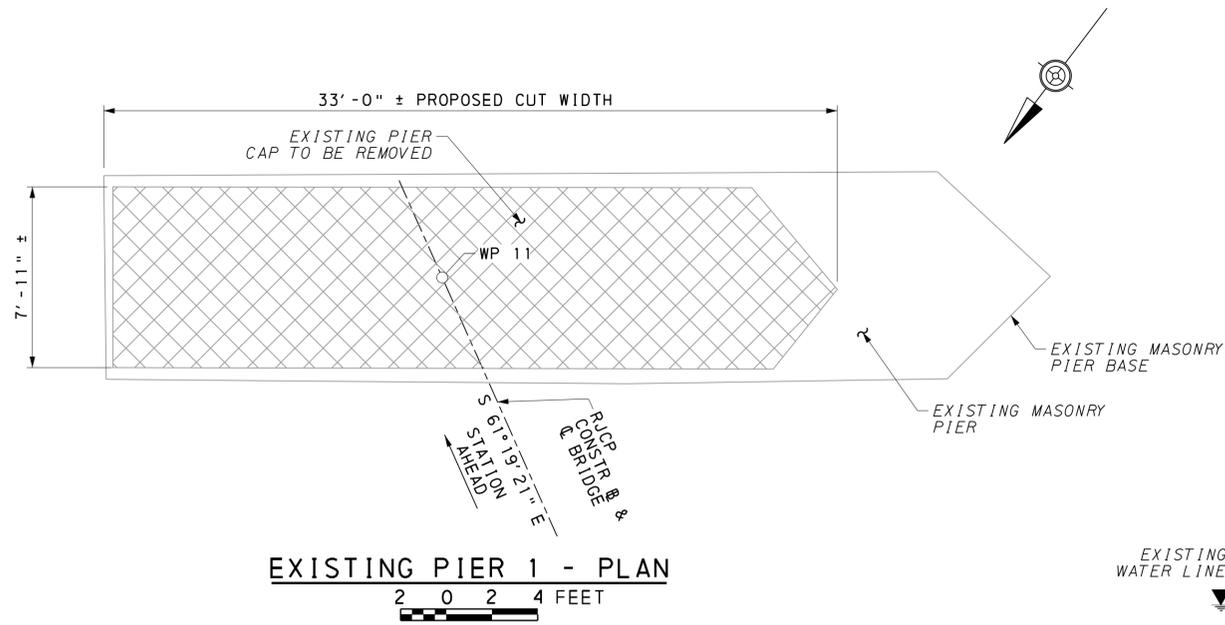


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SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
ABUTMENT 1 APPROACH SLAB

RECOMMENDED _____ SHEET 11 OF 54
S-1001RJC

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LEGEND:

-  REMOVE EXISTING CONCRETE
-  EPOXY INJECTION CRACK SEAL

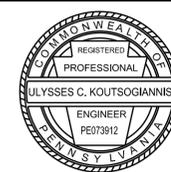
NOTES:

1. FOR STONE MASONRY PRESSURE MORTAR POINTING, CRACK REPAIR, AND REMOVAL NOTES, SEE SHEET 8.

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REVISIONS					

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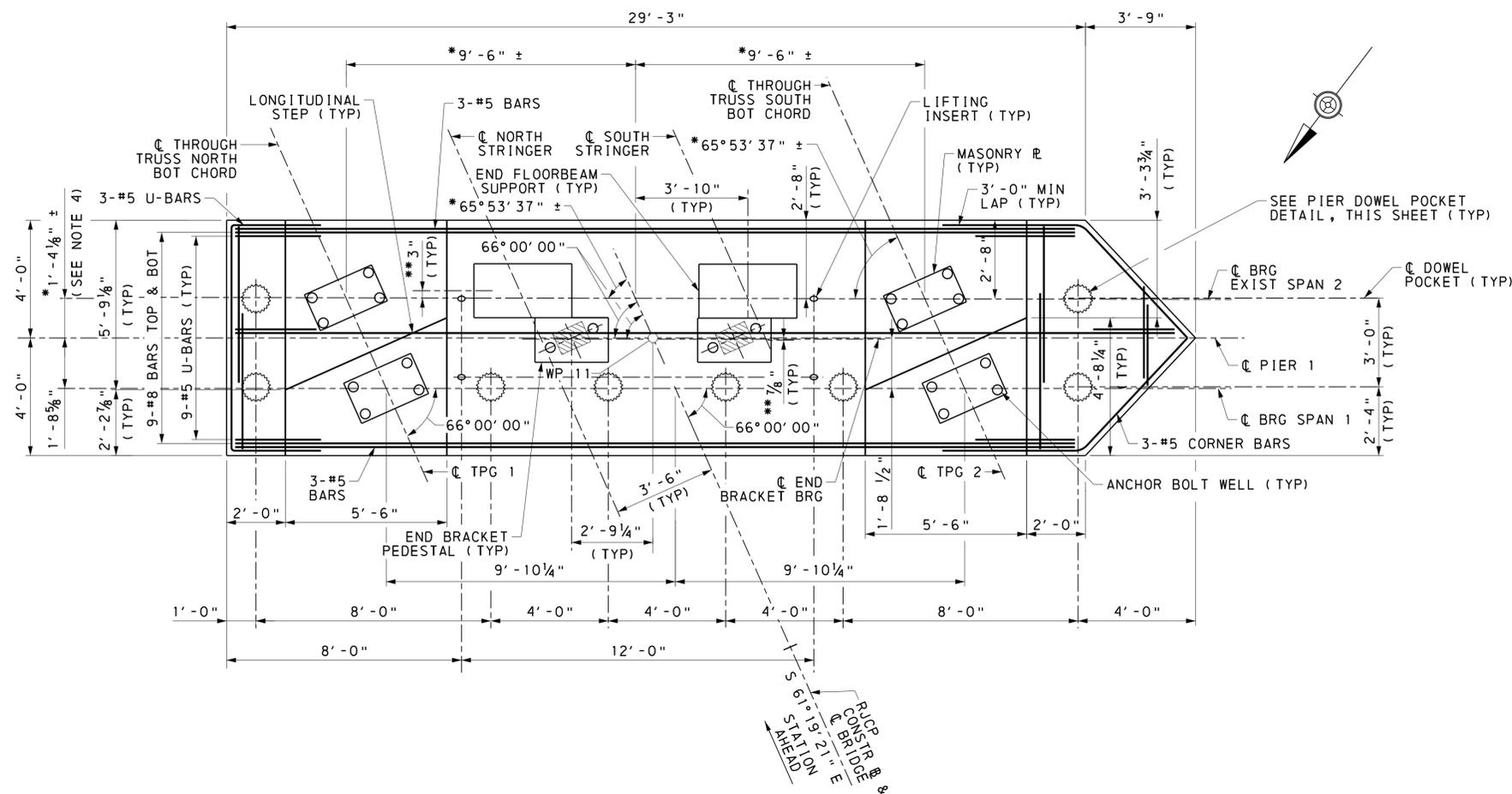
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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
PIER 1 REPAIR & DEMO DETAILS

RECOMMENDED _____	SHEET 12 OF 54
	S-1001RJC

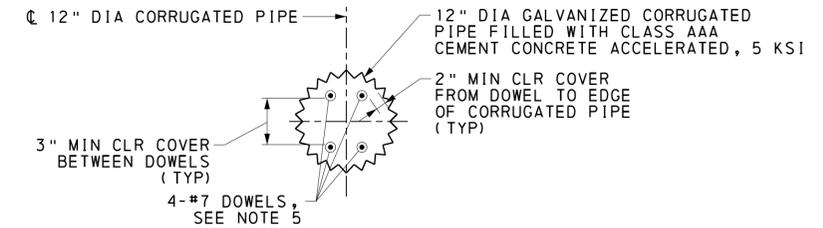
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PIER 1 - PLAN OF CAP

1 0 1 2 3 FEET

* CONTRACTOR SHALL FIELD VERIFY DIMENSIONS/ANGLES ASSOCIATED WITH THE SPAN 2 EXISTING BEARINGS TO BE REPLACED AND SUPERSTRUCTURE TO REMAIN BEFORE FABRICATION OF THE PIER CAP, BEARINGS, AND SPAN 1 SUPERSTRUCTURE.
 ** TO CENTERLINE OF PEDESTAL/SUPPORT, MEASURED PERPENDICULAR TO RESPECTIVE CL BEARING.

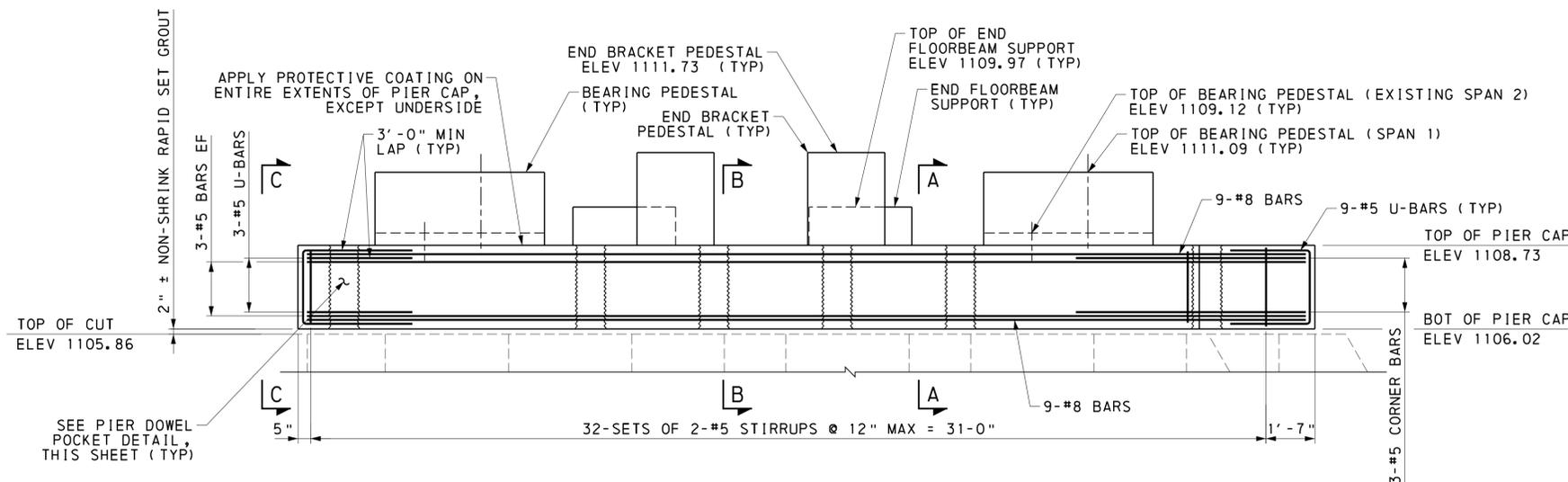


PIER DOWEL POCKET DETAIL

3 0 3 INCHES

NOTES:

- FOR STAKE-OUT PLAN, SEE SHEET 6.
- FOR PIER 1 SECTIONS & DETAILS, SEE SHEET 14.
- EXISTING SPAN 2 END FLOORBEAM SHALL BE IN CONTACT WITH END FLOORBEAM SUPPORTS TO RESTORE STRUCTURAL SYSTEM TO EXISTING CONDITION.
- OFFSET OF BEARING CENTERLINE TO PIER CENTERLINE TAKEN FROM INTERSECTION OF CONSTRUCTION BASELINE AND CL OF RESPECTIVE BEARING TO PIER CENTERLINE.
- DOWELS SHALL BE GALVANIZED. DOWELS SHALL BE DRILLED AND INSTALLED AFTER THE PRECAST PIER CAP IS ERECTED ON TOP OF THE EXISTING PIER TO REMAIN.
- CORRUGATED STEEL PIPE USED FOR THE DOWEL POCKET DETAIL SHALL BE GALVANIZED BASED ON PROJECT SPECIFICATIONS.
- SEE SHEET 7 FOR SUBSTRUCTURE DETAILS.
- NON-SHRINK GROUT BED SHALL BE ADJUSTED AS APPROVED BY THE ENGINEER TO MEET INSTALLED TOP OF PRECAST ELEVATIONS AS INDICATED ON THE PLANS.
- LIFTING INSERTS AND 12" DIA CORRUGATED PIPE ARE INCIDENTAL TO THE ITEM "PRECAST CONCRETE, PIER CAP". LIFTING INSERTS PROVIDED BY THE CONTRACTOR SHALL BE FILLED WITH NON-SHRINK GROUT AFTER INSTALLATION.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND ANY SUPPLEMENTAL CALCULATIONS FOR THE PRECAST PIER CAP. THE SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEERING LICENSED IN THE COMMONWEALTH OF PENNSYLVANIA. BASED ON SITE CONSTRAINTS AND CRANE CAPACITIES, THE CONTRACTOR MAY ELECT TO ERECT THE PRECAST PIER CAP AS MULTIPLE SEGMENTS. IF MULTIPLE SEGMENTS ARE PROVIDED, TRANSVERSE CONTINUITY SHALL BE MADE WITH SHEAR KEY / COUPLER SYSTEMS.
- THE CONTRACTOR SHALL VERIFY THE ADEQUACY OF THE PRECAST SECTION FOR TRANSPORTATION FROM CASTING YARD TO SITE.
- THE CONTRACTOR SHALL VERIFY THE ADEQUACY OF LIFTING INSERTS AND PROVIDE ANY SUPPLEMENTARY REINFORCEMENT WHEN NECESSARY.



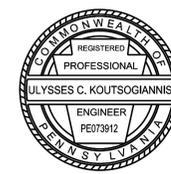
PIER 1 - ELEVATION

1 0 1 2 3 FEET

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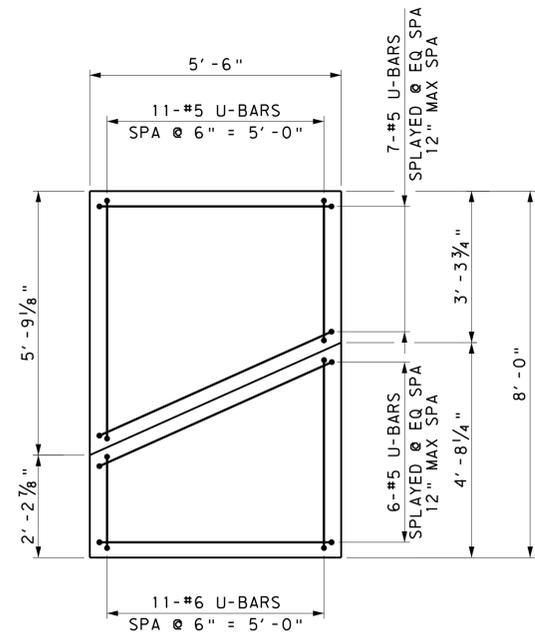
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
PIER 1 PLAN & ELEVATION

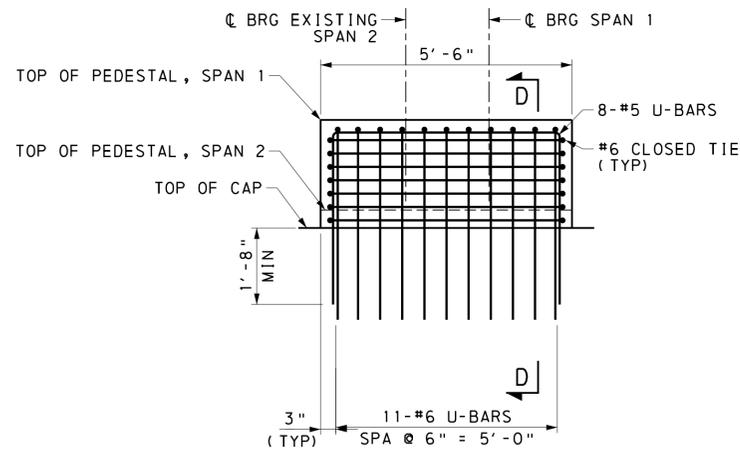
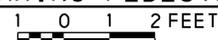
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SUITE 300
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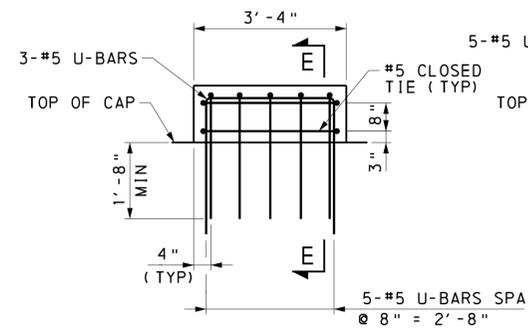
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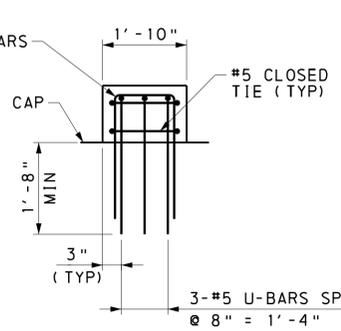
PIER 1 BEARING PEDESTAL PLAN



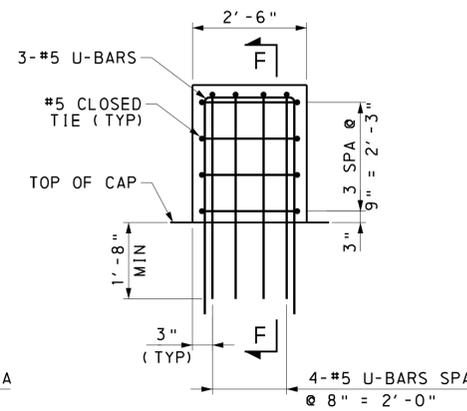
PIER 1 BEARING PEDESTAL ELEVATION



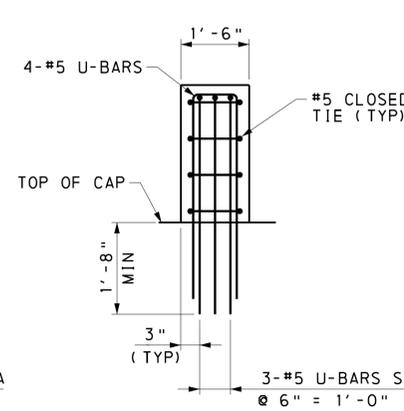
PIER 1-END FLOORBEAM SUPPORT



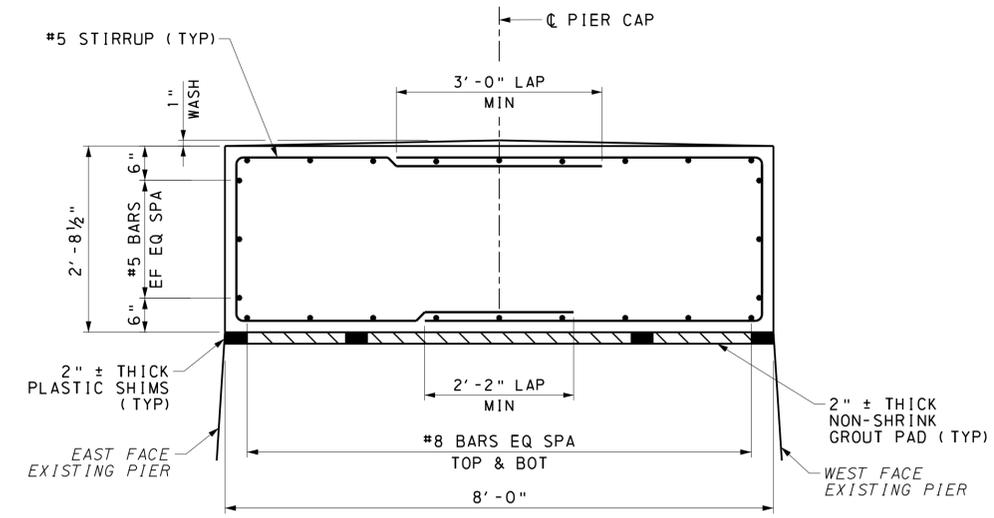
SECTION E-E



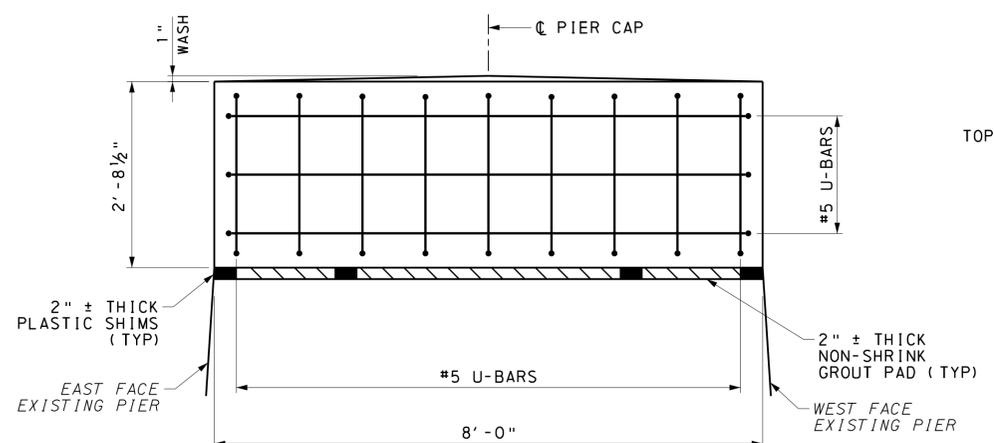
PIER 1-END BRACKET PEDESTAL



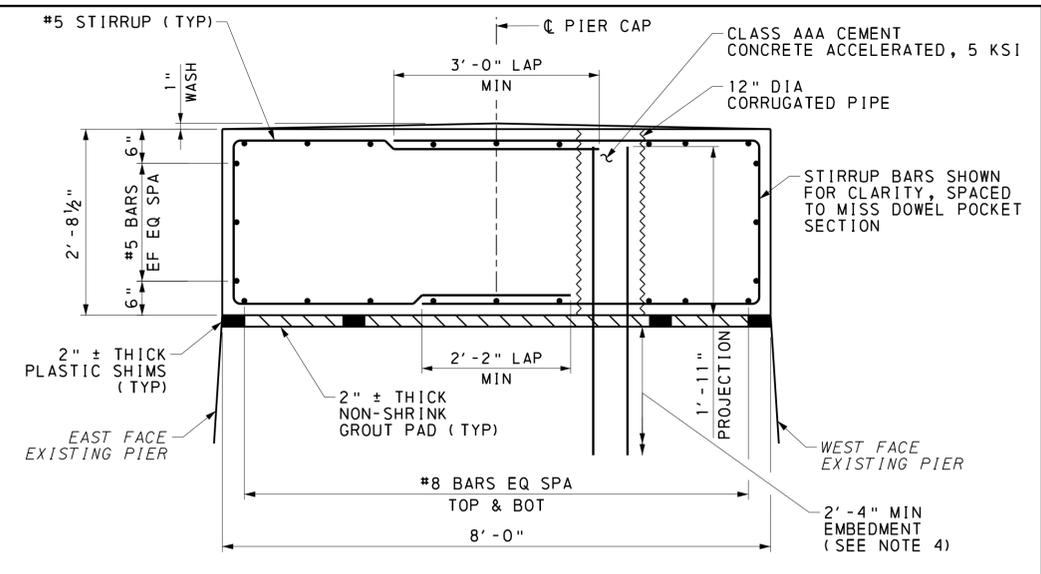
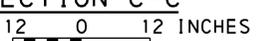
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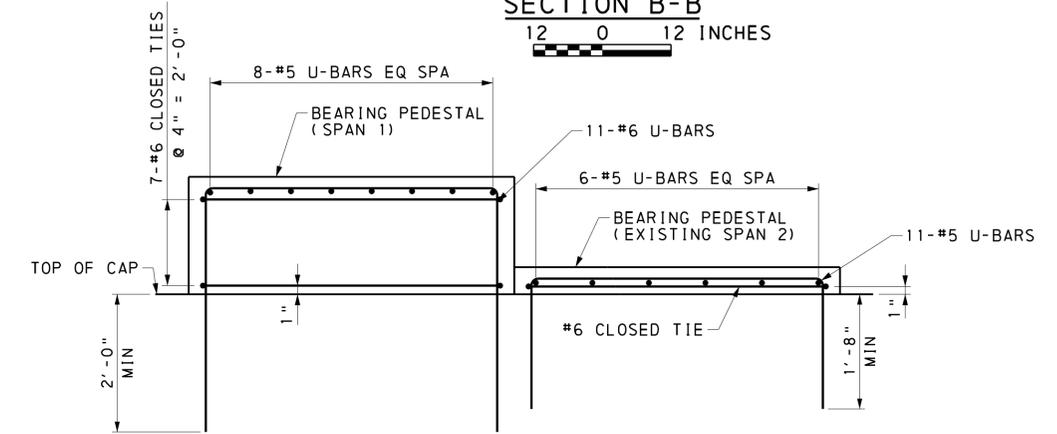
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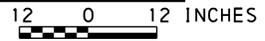
SECTION C-C



SECTION B-B



SECTION D-D

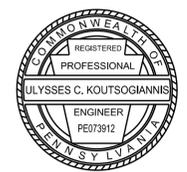


NOTES:

- FOR STAKE-OUT PLAN, SEE SHEET 6.
- FOR PIER 1 PLAN & ELEVATION, SEE SHEET 13.
- CLOSED TIE INDICATES A CONTINUOUS TIE WITH A 135 DEGREE BEND TO TERMINATE.
- CONTRACTOR SHALL VERIFY THE INTEGRITY OF THE EXISTING MASONRY TO REMAIN BELOW THE PIER CAP. MINIMUM EMBEDMENT IS BASED ON EMBEDMENT INTO COMPETENT MASONRY. IF LOOSE, CRACKED, MISSING, UNSOUND, OR RUBBLE MASONRY IS OBSERVED DURING THE DRILLING PROCESS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
PIER 1 SECTION & DETAILS

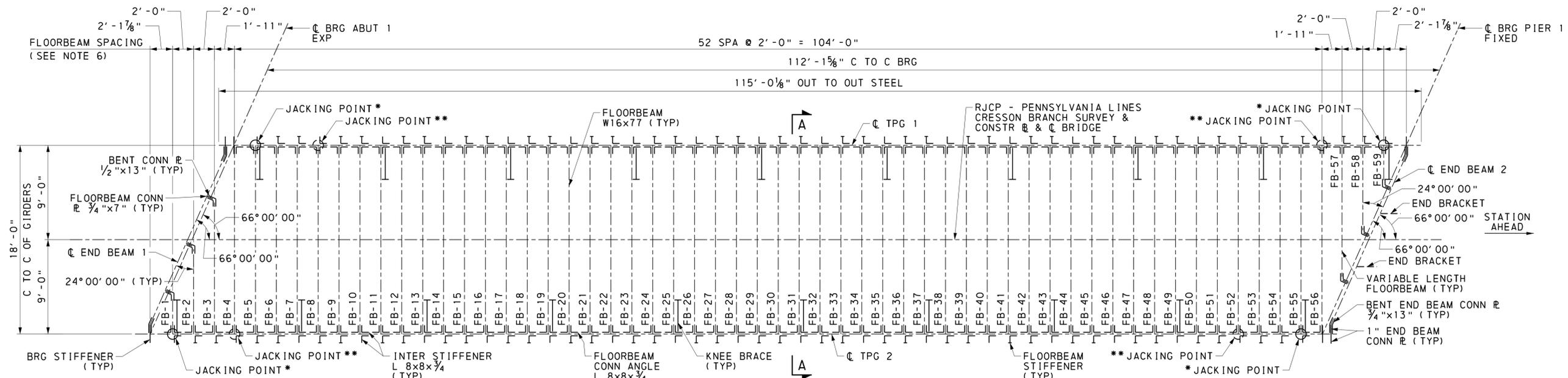
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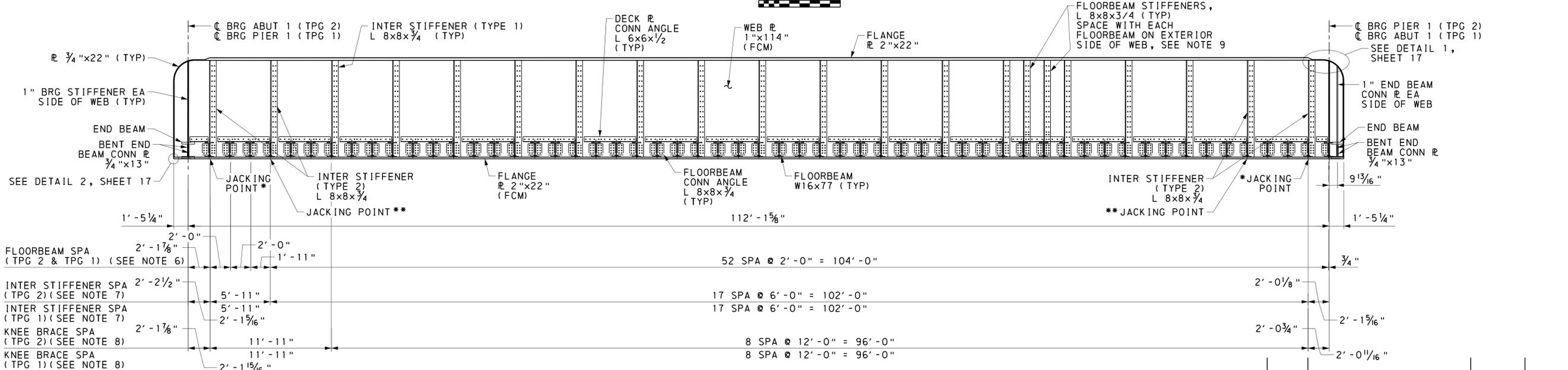
SHEET 14 OF 54

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FRAMING PLAN
2 0 2 4 6 FEET

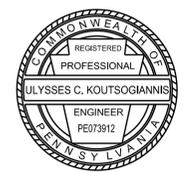


GIRDER (TPG) ELEVATION
2 0 2 4 6 FEET

- NOTES:**
- FOR STAKE-OUT PLAN, SEE SHEET 6.
 - FOR GIRDER & FRAMING DETAILS, SEE SHEETS 16-31.
 - FOR DECK PLAN & DETAILS, SEE SHEETS 38-42.
 - GIRDER ELEVATION SHOWS TPG 2, EXTERIOR FACE. HIDDEN FLOORBEAMS, END BEAMS & CONNECTION PLATES/ANGLES ARE SHOWN FOR CLARITY. HIDDEN KNEEBRACES ARE NOT SHOWN FOR CLARITY. TPG 1 IS SIMILAR.
 - THROUGH PLATE GIRDERS SHALL BE FABRICATED IN ACCORDANCE WITH THE CAMBER DIAGRAM SHOWN ON SHEET 47.
 - FLOORBEAM SPACING MEASURED TO CENTERLINE OF FLOORBEAM. DIMENSIONS TAKEN FROM C BRG STIFFENER TO C OF BRG STIFFENER.
 - INTER STIFFENER SPACING MEASURED TO MID-THICKNESS OF OUTSTANDING LEG. NOTE FOR BOTH TPG 1 AND TPG 2 THAT THE INTER STIFFENER LEG AGAINST THE TPG WEB IS ORIENTED POINTING STATION AHEAD, SEE FRAMING PLAN. DIMENSIONS TAKEN FROM C BRG STIFFENER TO C OF BRG STIFFENER.
 - KNEE BRACE SPACING MEASURED TO CENTERLINE OF KNEE BRACE WEB. DIMENSIONS TAKEN FROM C BRG STIFFENER TO C OF BRG STIFFENER.
 - FLOORBEAM STIFFENERS ARE SPACED WITH EACH FLOORBEAM ON THE EXTERIOR SIDE OF THE WEB ONLY. TPG ELEVATION SHOWS ONLY TWO FLOORBEAM STIFFENERS FOR CLARITY. NOTE FOR BOTH TPG 1 AND TPG2 THAT THE FLOORBEAM STIFFENER LEG AGAINST THE TPG WEB IS ORIENTED POINTING STATION AHEAD, SEE FRAMING PLAN.
 - VERTICAL JACKING POINT FOR BEARING REPLACEMENT.
 - VERTICAL JACKING POINT FOR SPMT MOVE. THE CONTRACTOR SHALL VERIFY THE ADEQUACY OF THE PROPOSED BRIDGE STRUCTURE WHEN USING THE SPMT LIFTING POINTS AS SHOWN IN THE PLANS. REFER TO SPECIAL PROVISIONS FOR MORE DETAIL.

Mark	Description	By	Chk'd	Recm'd	Date
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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
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STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE

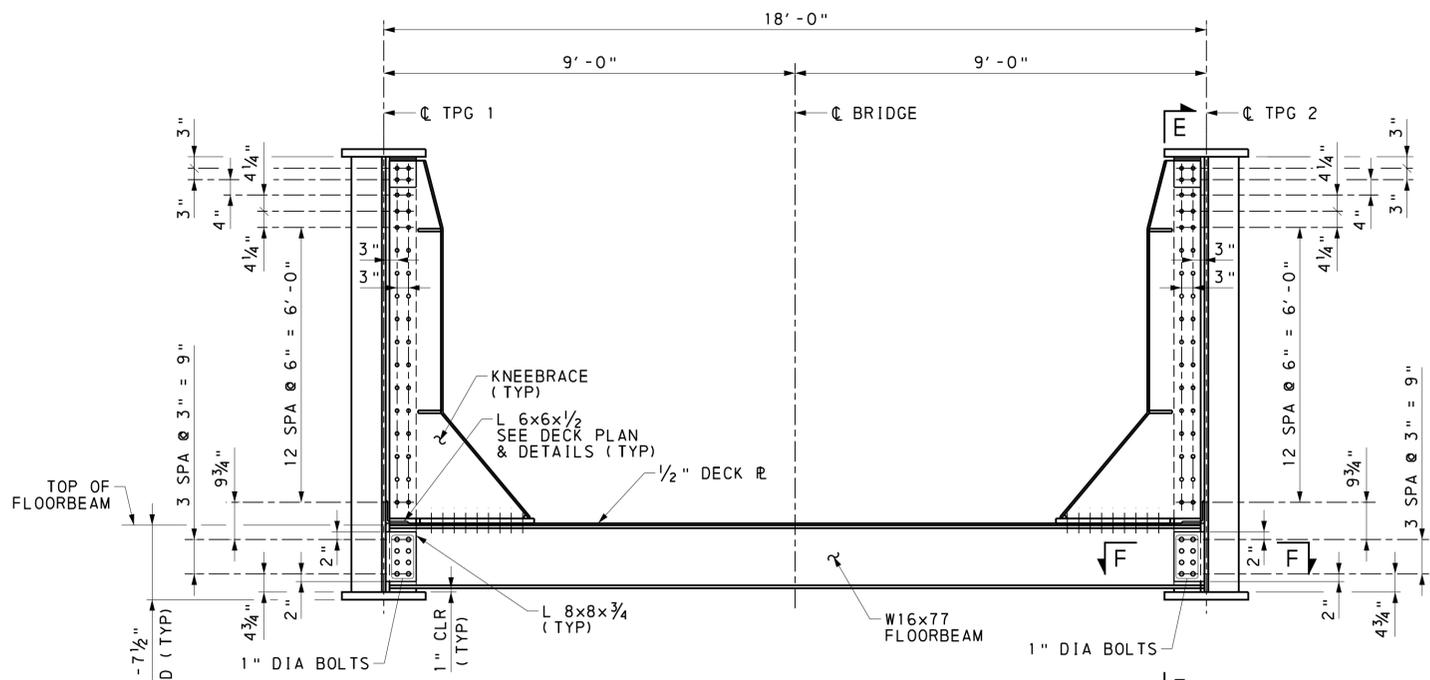
FRAMING PLAN & GIRDER ELEVATION

RECOMMENDED _____

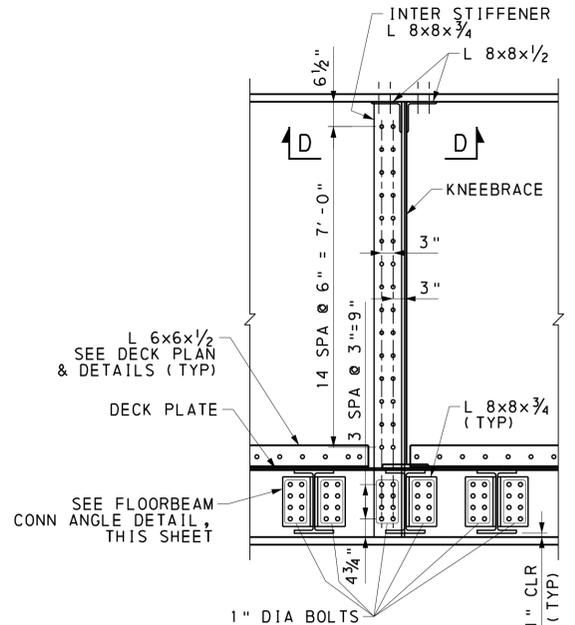
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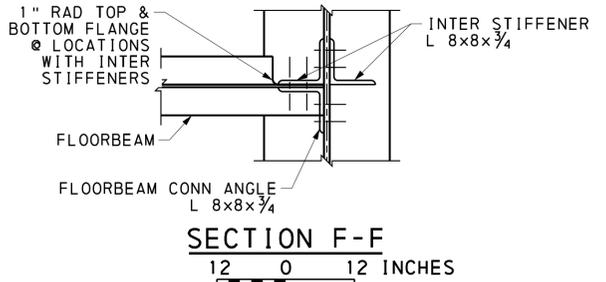
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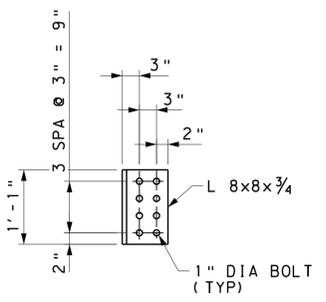
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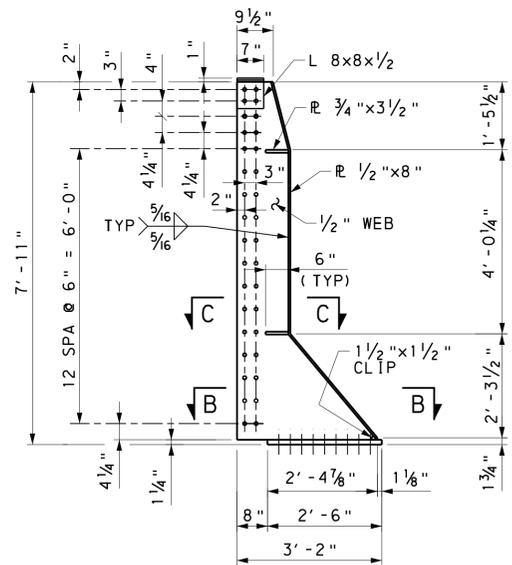
SECTION E-E
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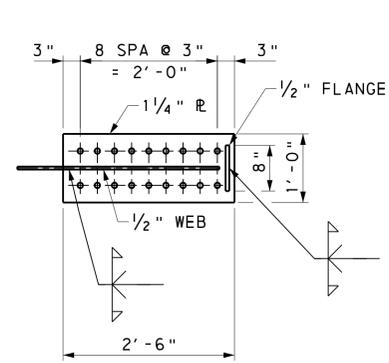
SECTION F-F
12 0 12 INCHES



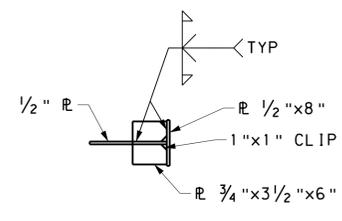
FLOORBEAM CONN ANGLE DETAIL
12 0 12 INCHES
(BOTH LEGS OF ANGLE DETAILED AS SHOWN ABOVE)



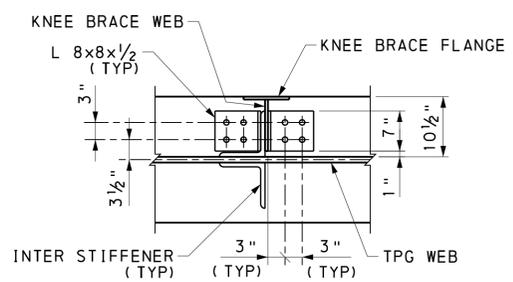
KNEEBRACE DETAIL
1 0 1 2 FEET



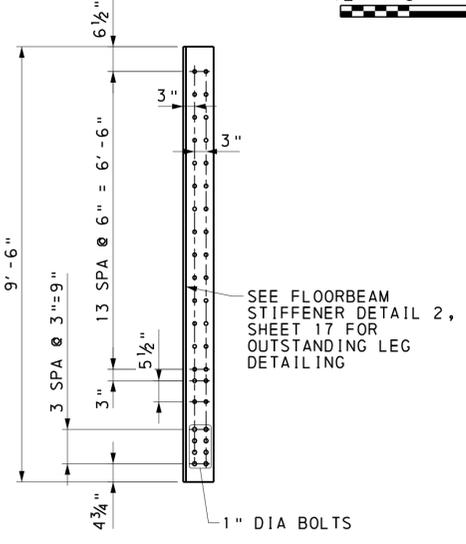
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12 0 12 INCHES



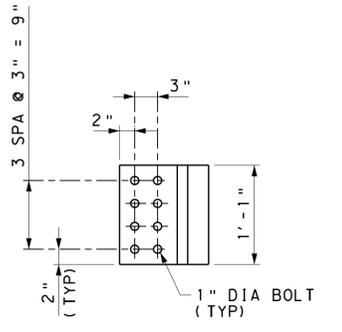
SECTION C-C
12 0 12 INCHES



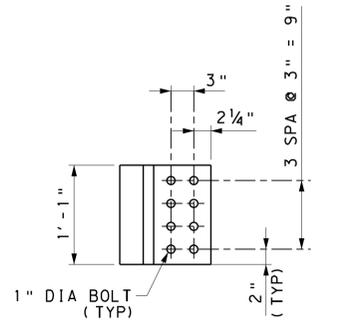
SECTION D-D
12 0 12 INCHES



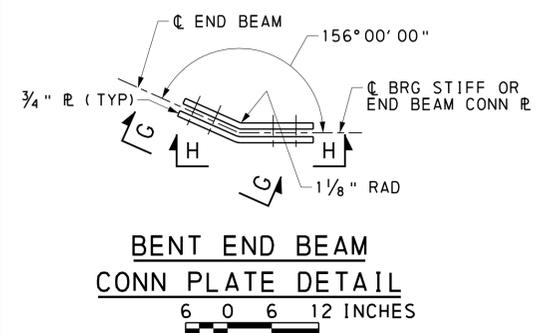
FLOORBEAM STIFFENER DETAIL 1
1 0 1 2 FEET



SECTION G-G
6 0 6 12 INCHES



SECTION H-H
6 0 6 12 INCHES



BENT END BEAM CONN PLATE DETAIL
6 0 6 12 INCHES

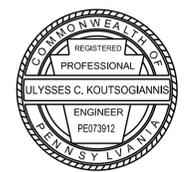
NOTES:

1. FOR STAKE-OUT PLAN, SEE SHEET 6.
2. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
3. FOR GIRDER & FRAMING DETAILS, SEE SHEETS 17-31.
4. FOR DECK PLAN & DETAILS, SEE SHEETS 38-42.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

MPMS/ECMS PROJ: 115877

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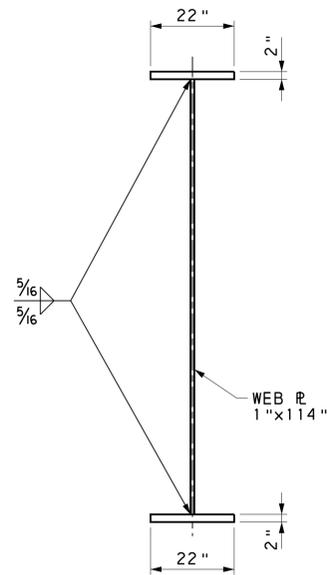


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SUITE 300
HARRISBURG, PA 17110

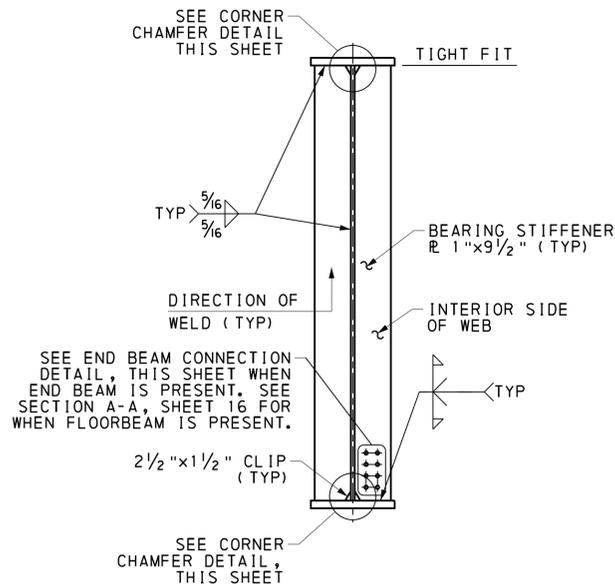
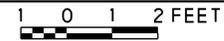
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
GIRDER & FRAMING DETAILS 1 OF 16

RECOMMENDED _____ SHEET 16 OF 54
S-1001RJC

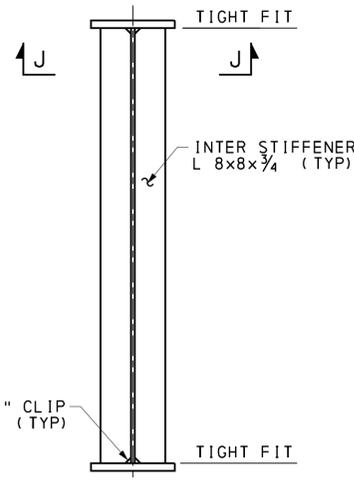
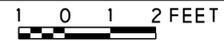
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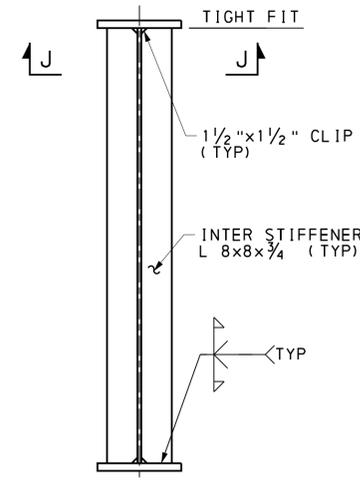
TYPICAL THROUGH GIRDER SECTION



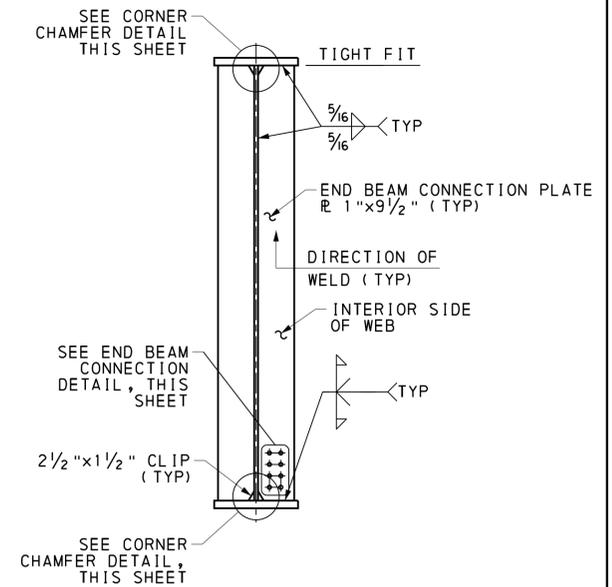
BEARING STIFFENER



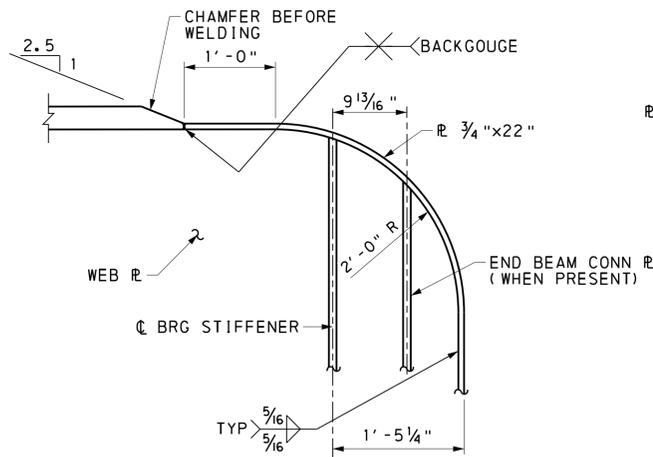
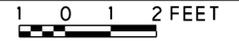
INTERMEDIATE STIFFENER TYPE 1



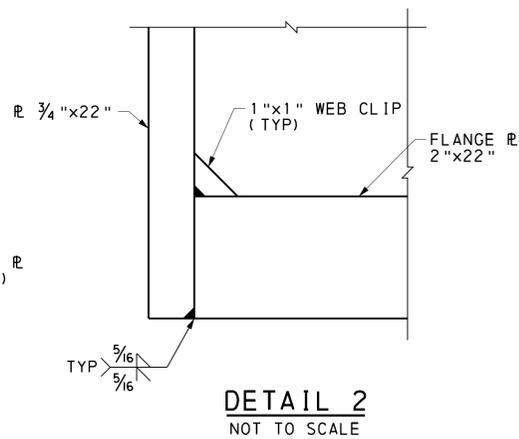
INTERMEDIATE STIFFENER TYPE 2



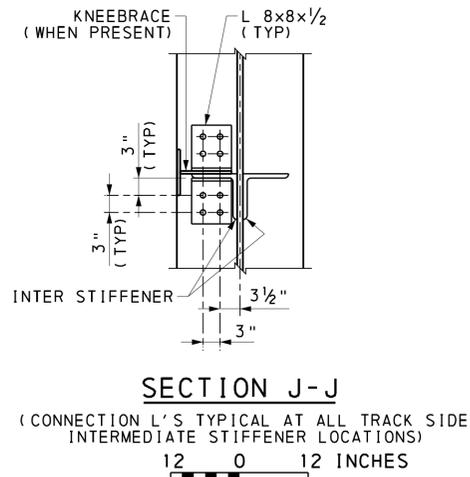
END BEAM CONNECTION PLATE



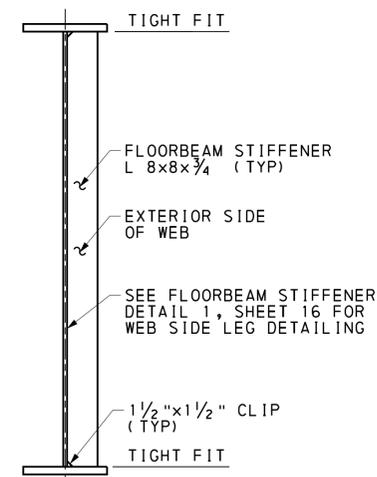
DETAIL 1
6 0 6 12 INCHES



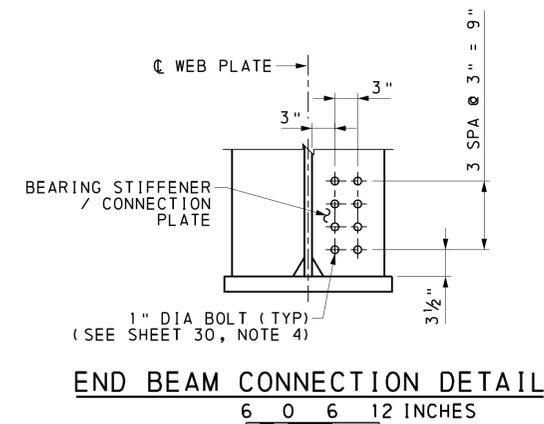
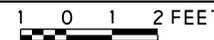
DETAIL 2
NOT TO SCALE



SECTION J-J
(CONNECTION L'S TYPICAL AT ALL TRACK SIDE INTERMEDIATE STIFFENER LOCATIONS)
12 0 12 INCHES



FLOORBEAM STIFFENER DETAIL 2

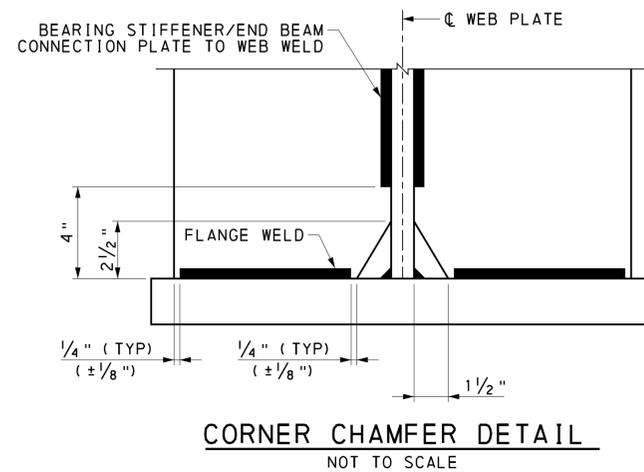


END BEAM CONNECTION DETAIL
6 0 6 12 INCHES

Mark	Description	By	Chk'd	Recm'd	Date
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NOTES:

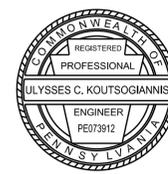
- FOR STAKE-OUT PLAN, SEE SHEET 6.
- FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
- FOR GIRDER & FRAMING DETAILS, SEE SHEETS 16 & 18-31.
- FOR DECK PLAN & DETAILS, SEE SHEETS 38-42.



CORNER CHAMFER DETAIL
NOT TO SCALE

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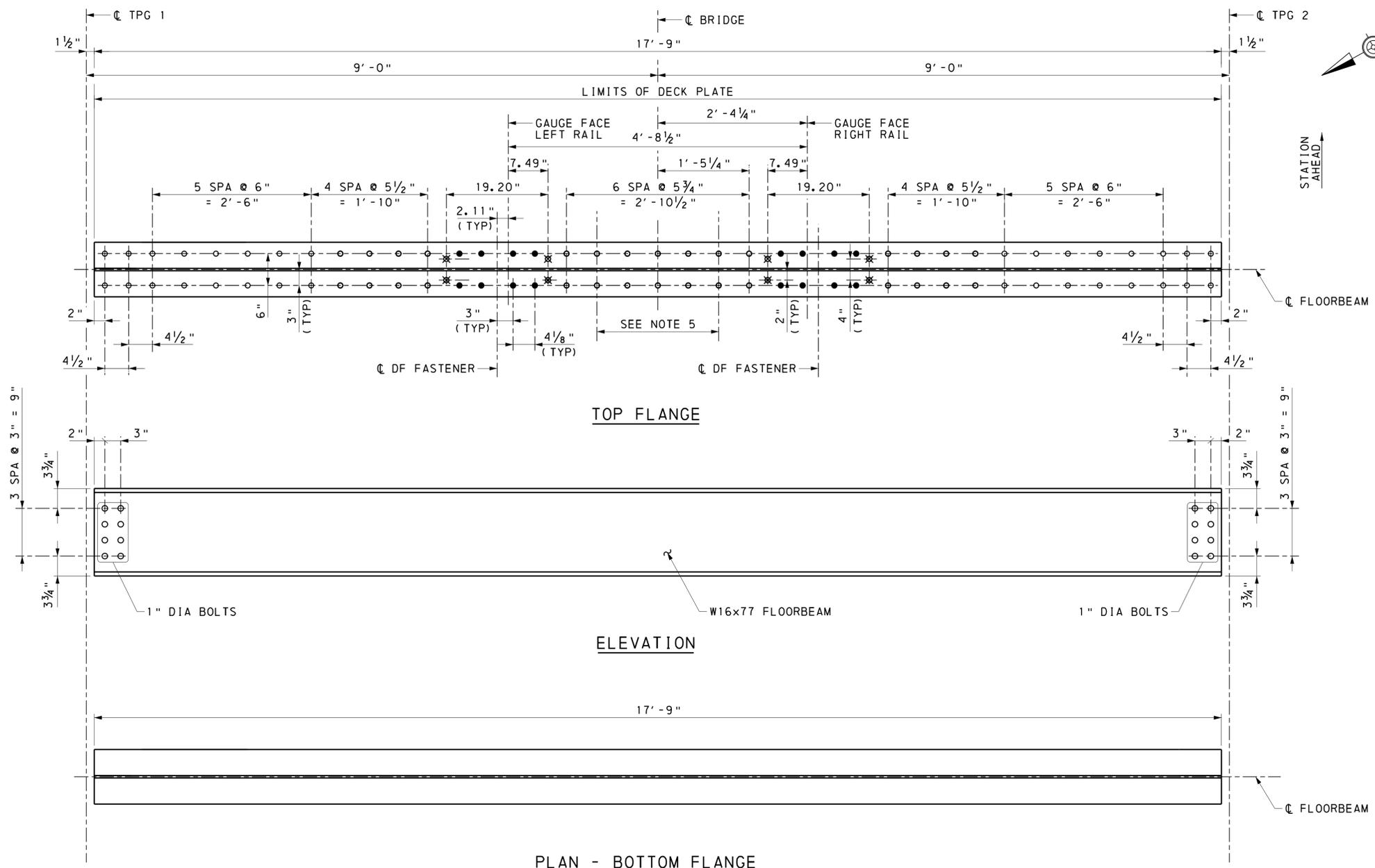


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SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
GIRDER & FRAMING DETAILS 2 OF 16

RECOMMENDED _____ SHEET 17 OF 54
S-1001RJC



TYPE 1 FLOORBEAM DETAIL
 6 0 6 12 INCHES

NOTES:

1. FOR STAKE-OUT PLAN, SEE SHEET 6.
2. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
3. FOR GIRDER & FRAMING DETAILS, SEE SHEETS 16-17 & 19-31.
4. FOR DECK PLAN & DETAILS, SEE SHEETS 38-42.
5. BOLTS SHALL BE USED TO FASTEN GUARD RAIL TO STRUCTURE. FOR GUARD RAIL DETAILS, SEE SHEET 47.

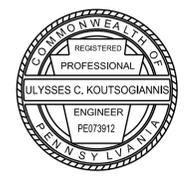
LEGEND:

- ALL BOLTS A325 UNLESS NOTED OTHERWISE
- HEX HEAD BOLT
 - COUNTERSUNK BOLT
 - ⊗ DIRECT FIXATION FASTENER BOLT

Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

FULL LENGTH FLOORBEAM TABLE		
APPLICABLE FLOORBEAM NAME	FLOORBEAM TYPE	DESCRIPTION
FB-6, FB-9, FB-12, FB-15, FB-18, FB-21, FB-24, FB-27, FB-30, FB-33, FB-36, FB-39, FB-42, FB-45, FB-48, FB-51, FB-54	TYPE 1	REGULAR FLOORBEAM
FB-8, FB-14, FB-20, FB-26, FB-32, FB-38, FB-44, FB-50	TYPE 2A	LEFT SIDE INTERMEDIATE STIFFENER & COPED
FB-5, FB-11, FB-17, FB-23, FB-29, FB-35, FB-41, FB-47, FB-53	TYPE 2B	LEFT SIDE INTERMEDIATE STIFFENER, KNEE BRACE & COPED
FB-10, FB-16, FB-22, FB-28, FB-34, FB-40, FB-46, FB-52	TYPE 3A	RIGHT SIDE INTERMEDIATE STIFFENER & COPED
FB-7, FB-13, FB-19, FB-25, FB-31, FB-37, FB-43, FB-49, FB-55	TYPE 3B	RIGHT SIDE INTERMEDIATE STIFFENER, KNEE BRACE & COPED
FB-4	FB-4	FB-4
FB-56	FB-56	FB-56

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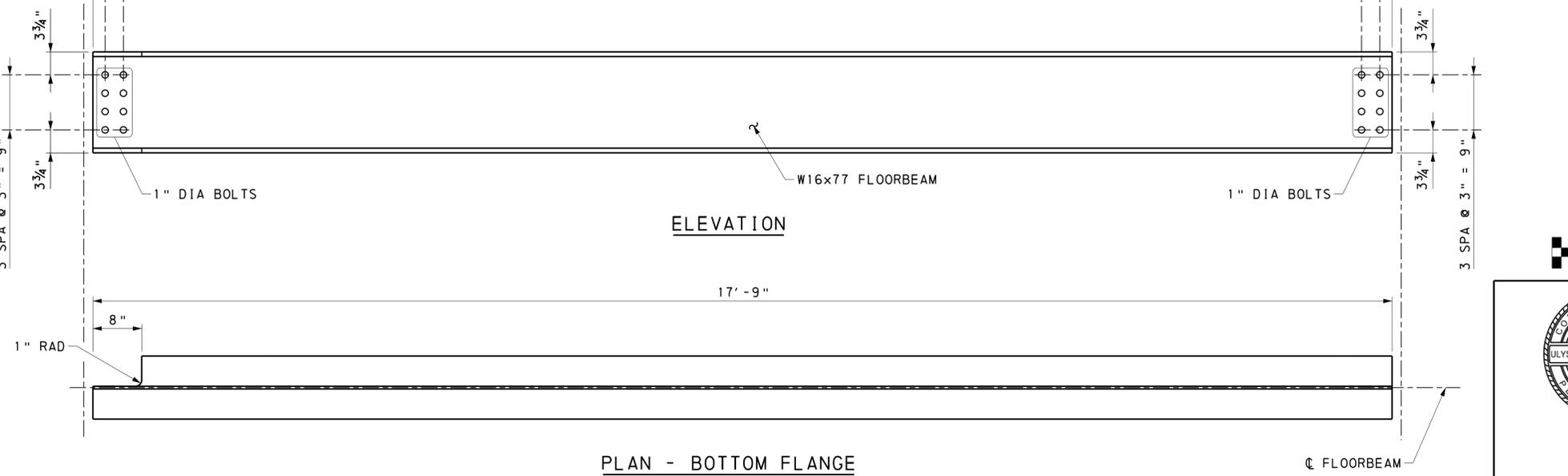
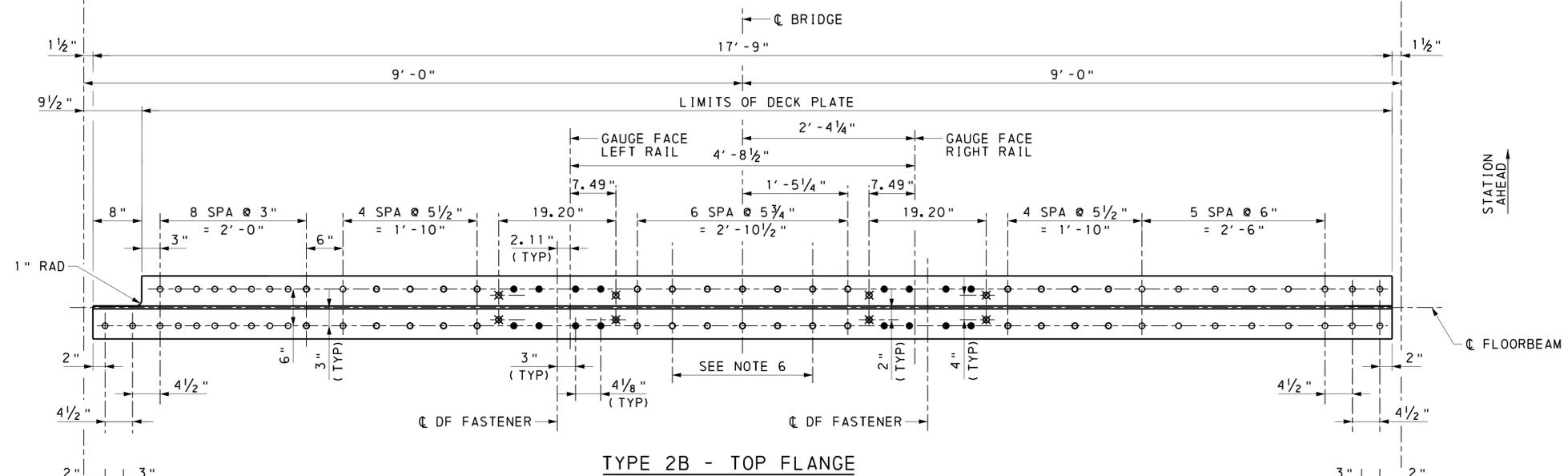
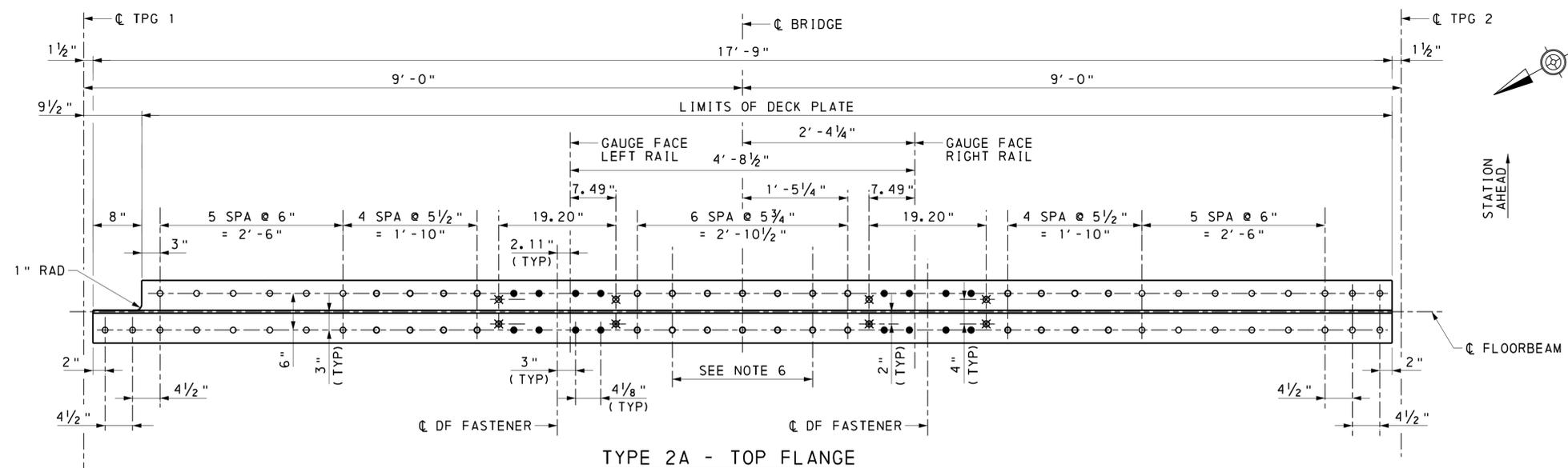
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
 SR 1001 SECTION MTF
 SEG 0132 OFFSET 0701
 CR 65.60 (CRESSON BRANCH) STA 4+65.11
 OVER SR 1001 (RIVER ROAD)
 STEEL THROUGH PLATE GIRDER & STEEL THROUGH TRUSS BRIDGE
GIRDER & FRAMING DETAILS 3 OF 16

RECOMMENDED _____ SHEET 18 OF 54

S-1001RJC

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TYPE 2 FLOORBEAM DETAIL
6 0 6 12 INCHES

NOTES:

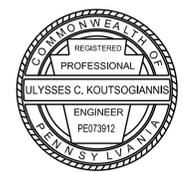
1. FOR FULL LENGTH FLOORBEAM TABLE, SEE SHEET 18.
2. FOR STAKE-OUT PLAN, SEE SHEET 6.
3. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
4. FOR GIRDER & FRAMING DETAILS, SEE SHEETS 16-18 & 20-31.
5. FOR DECK PLAN & DETAILS, SEE SHEETS 38-42.
6. BOLTS SHALL BE USED TO FASTEN GUARD RAIL TO STRUCTURE. FOR GUARD RAIL DETAILS, SEE SHEET 47.

LEGEND:

- ALL BOLTS A325 UNLESS NOTED OTHERWISE
- HEX HEAD BOLT
 - COUNTERSUNK BOLT
 - ⊗ DIRECT FIXATION FASTENER BOLT

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

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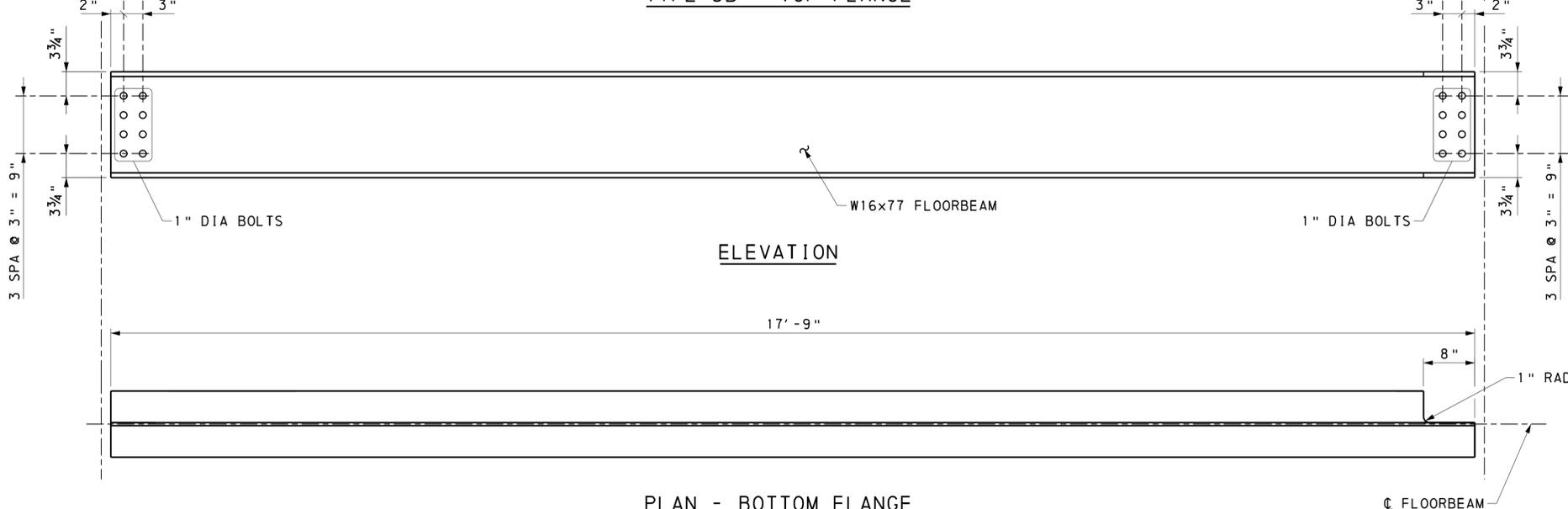
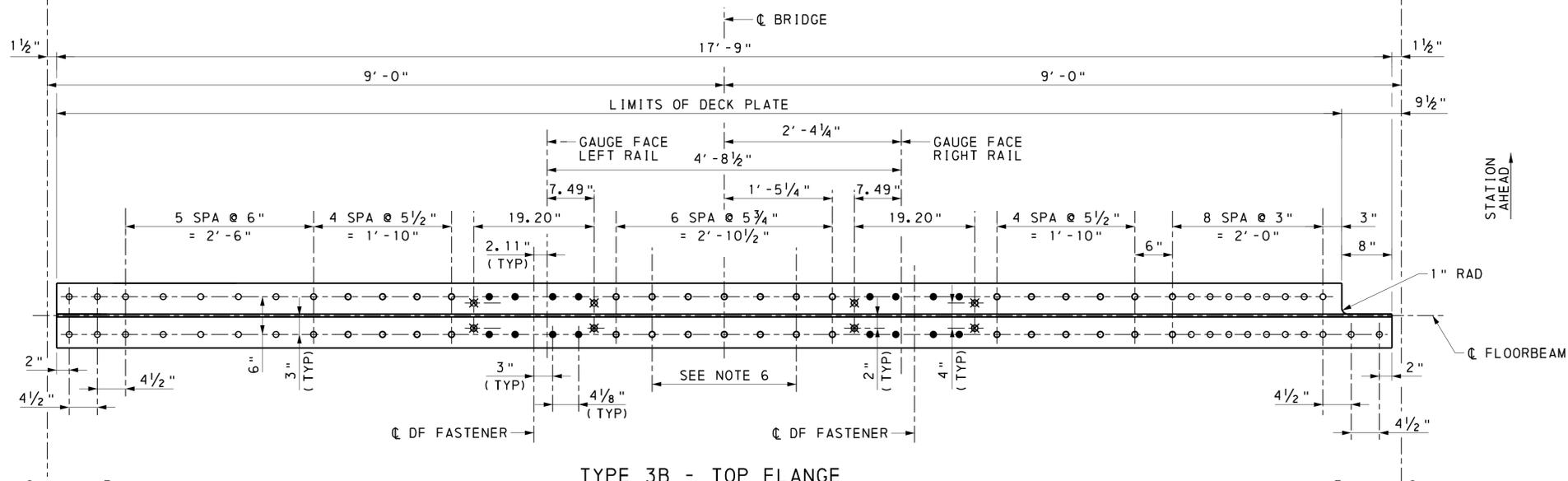
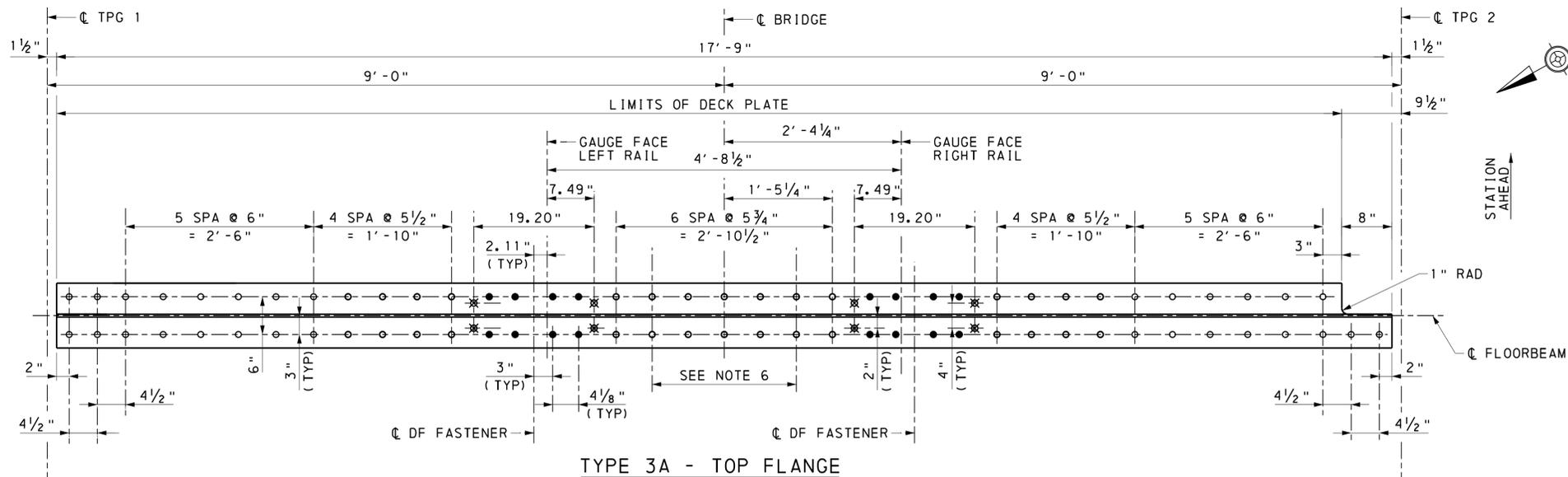
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HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
GIRDER & FRAMING DETAILS 4 OF 16

RECOMMENDED _____ SHEET 19 OF 54
S-1001RJC

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TYPE 3 FLOORBEAM DETAIL
6 0 6 12 INCHES

NOTES:

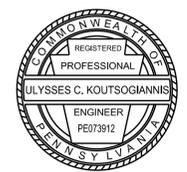
1. FOR FULL LENGTH FLOORBEAM TABLE, SEE SHEET 18.
2. FOR STAKE-OUT PLAN, SEE SHEET 6.
3. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
4. FOR GIRDER & FRAMING DETAILS, SEE SHEETS 16-19 & 21-31.
5. FOR DECK PLAN & DETAILS, SEE SHEETS 38-42.
6. BOLTS SHALL BE USED TO FASTEN GUARD RAIL TO STRUCTURE. FOR GUARD RAIL DETAILS, SEE SHEET 47.

LEGEND:

- ALL BOLTS A325 UNLESS NOTED OTHERWISE
- HEX HEAD BOLT
 - COUNTERSUNK BOLT
 - ⊗ DIRECT FIXATION FASTENER BOLT

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

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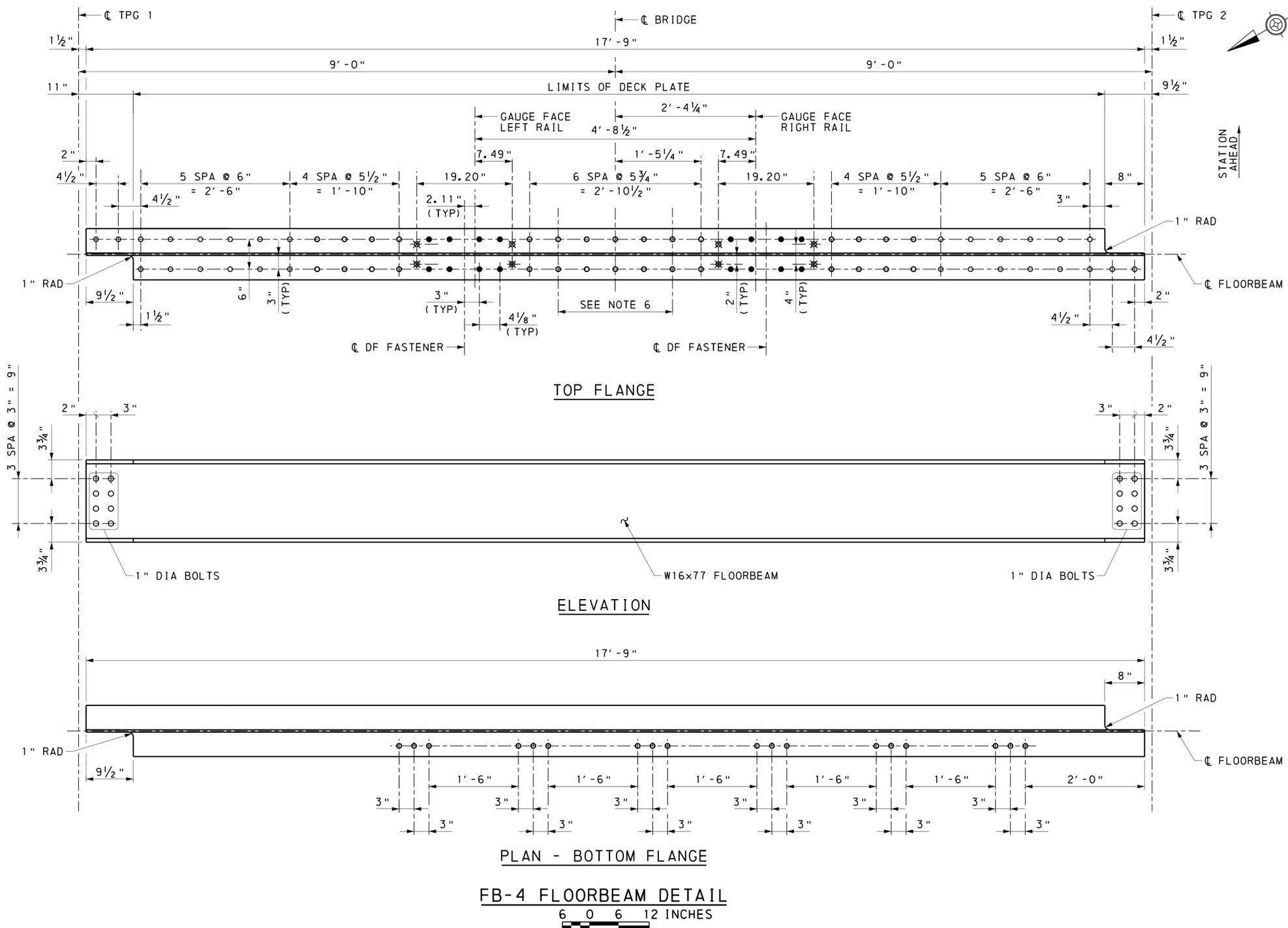
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DEPARTMENT OF TRANSPORTATION
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
GIRDER & FRAMING DETAILS 5 OF 16

RECOMMENDED _____ SHEET 20 OF 54

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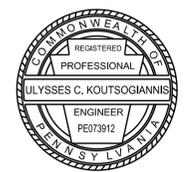
1. FOR FULL LENGTH FLOORBEAM TABLE, SEE SHEET 18.
2. FOR STAKE-OUT PLAN, SEE SHEET 6.
3. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
4. FOR GIRDER & FRAMING DETAILS, SEE SHEETS 16-20 & 22-31.
5. FOR DECK PLAN & DETAILS, SEE SHEETS 38-42.
6. BOLTS SHALL BE USED TO FASTEN GUARD RAIL TO STRUCTURE. FOR GUARD RAIL DETAILS, SEE SHEET 47.

LEGEND:

- ALL BOLTS A325 UNLESS NOTED OTHERWISE
- HEX HEAD BOLT
 - COUNTERSUNK BOLT
 - ⊗ DIRECT FIXATION FASTENER BOLT

Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

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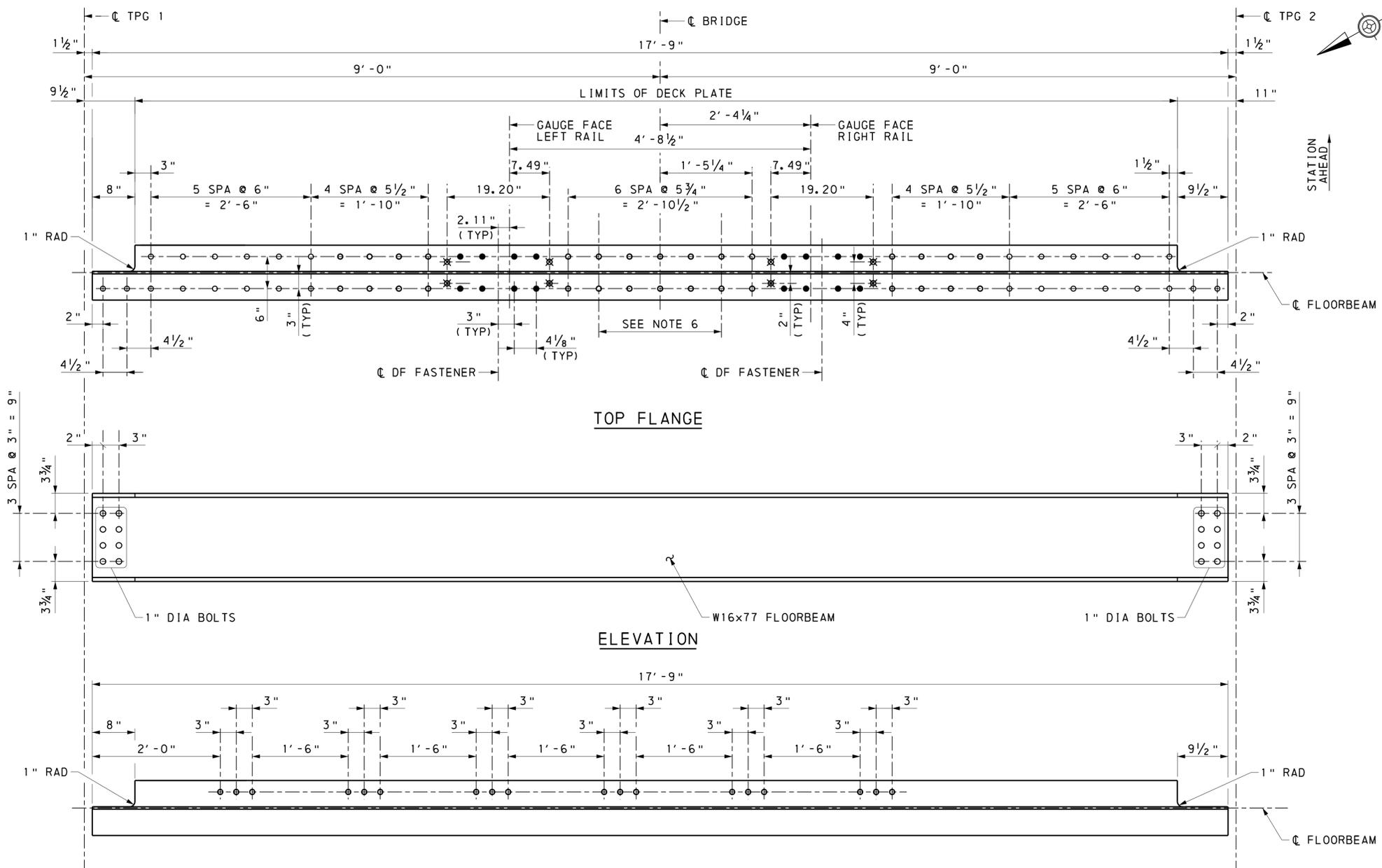


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COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
 CLEARFIELD COUNTY
 SR 1001 SECTION MTF
 SEG 0132 OFFSET 0701
 CR 65.60 (CRESSON BRANCH) STA 4+65.11
 OVER SR 1001 (RIVER ROAD)
 STEEL THROUGH PLATE GIRDER & STEEL
 THROUGH TRUSS BRIDGE
 GIRDER & FRAMING DETAILS 6 OF 16

RECOMMENDED _____ SHEET 21 OF 54
 S-1001RJC

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FB-56 FLOORBEAM DETAIL
6 0 6 12 INCHES

NOTES:

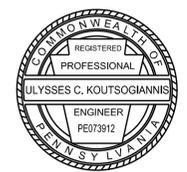
1. FOR FULL LENGTH FLOORBEAM TABLE, SEE SHEET 18.
2. FOR STAKE-OUT PLAN, SEE SHEET 6.
3. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
4. FOR GIRDER & FRAMING DETAILS, SEE SHEETS 16-21 & 23-31.
5. FOR DECK PLAN & DETAILS, SEE SHEETS 38-42.
6. BOLTS SHALL BE USED TO FASTEN GUARD RAIL TO STRUCTURE. FOR GUARD RAIL DETAILS, SEE SHEET 47.

LEGEND:

- ALL BOLTS A325 UNLESS NOTED OTHERWISE
- HEX HEAD BOLT
 - COUNTERSUNK BOLT
 - ⊗ DIRECT FIXATION FASTENER BOLT

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DEPARTMENT OF TRANSPORTATION

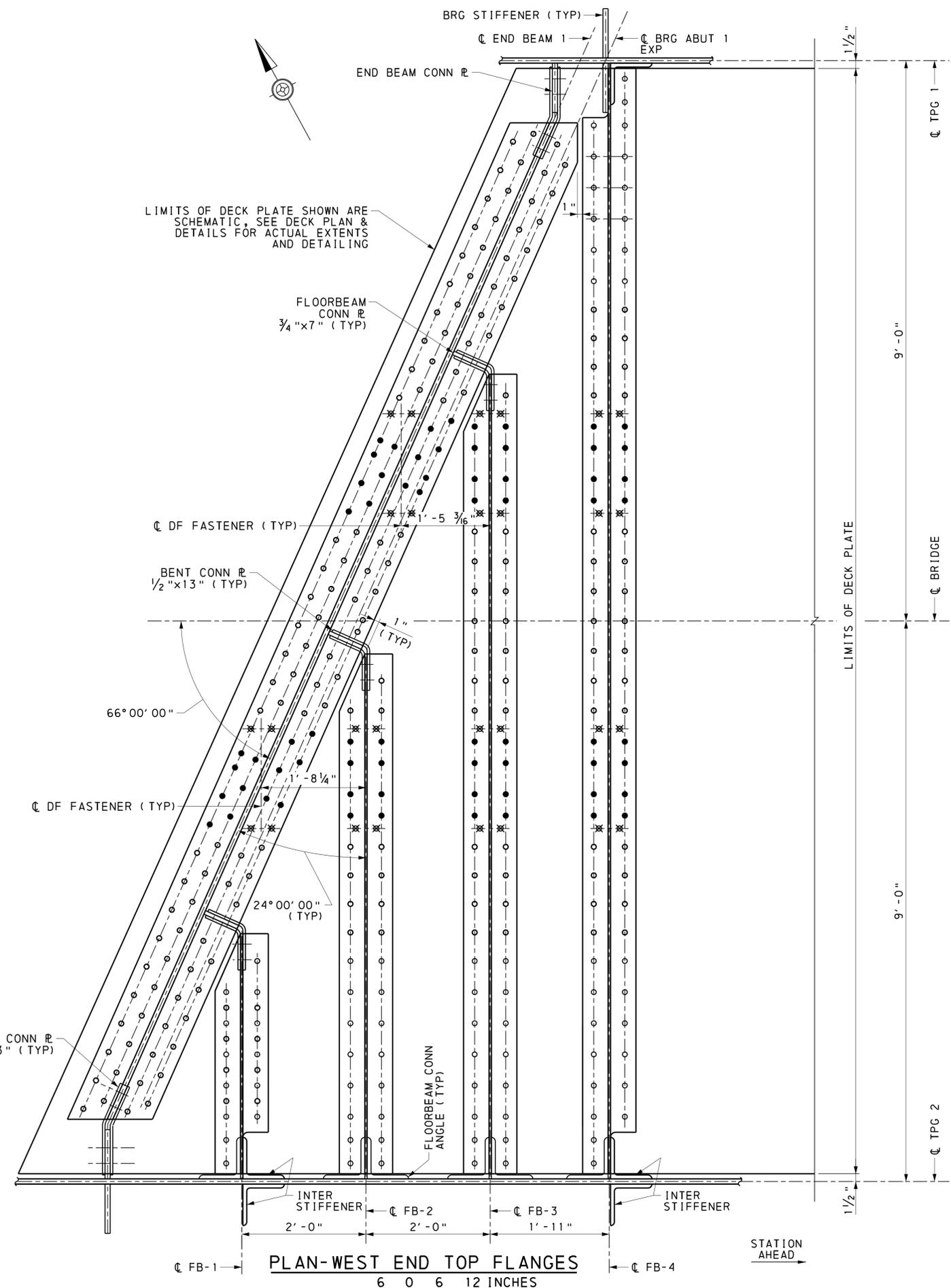
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
GIRDER & FRAMING DETAILS 7 OF 16

RECOMMENDED _____ SHEET 22 OF 54

S-1001RJC

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2/12/2024
FILENAME: 17861-1013-s-br-fcd08.dgn



LIMITS OF DECK PLATE SHOWN ARE SCHEMATIC, SEE DECK PLAN & DETAILS FOR ACTUAL EXTENTS AND DETAILING

NOTES:

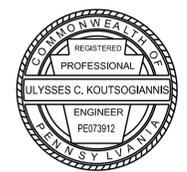
1. FOR STAKE-OUT PLAN, SEE SHEET 6.
2. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
3. FOR GIRDER & FRAMING DETAILS, SEE SHEETS 16-22 & 24-31.
4. FOR FLOORBEAM FB-1 THRU FB-3, SEE SHEETS 27-29.
5. FOR DIRECT FIXATION (DF) FASTENER BOLT PATTERN, SEE SHEET 24.
6. FOR DECK PLAN & DETAILS, SEE SHEETS 38-42.
7. FOR GUARD RAIL DETAILS, SEE SHEET 47.

LEGEND:

- ALL BOLTS A325 UNLESS NOTED OTHERWISE
- HEX HEAD BOLT
 - COUNTERSUNK BOLT
 - ⊗ DIRECT FIXATION FASTENER BOLT

Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
GIRDER & FRAMING DETAILS 8 OF 16

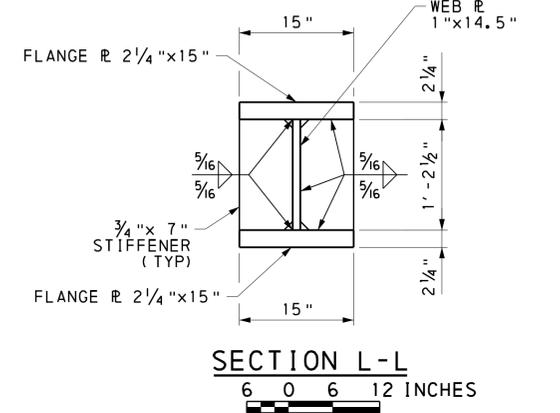
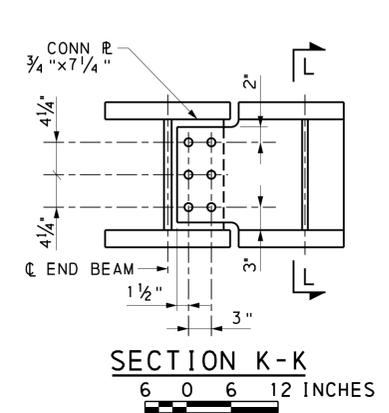
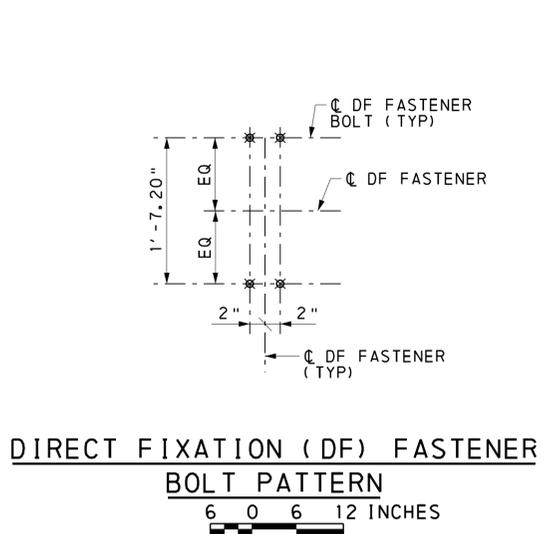
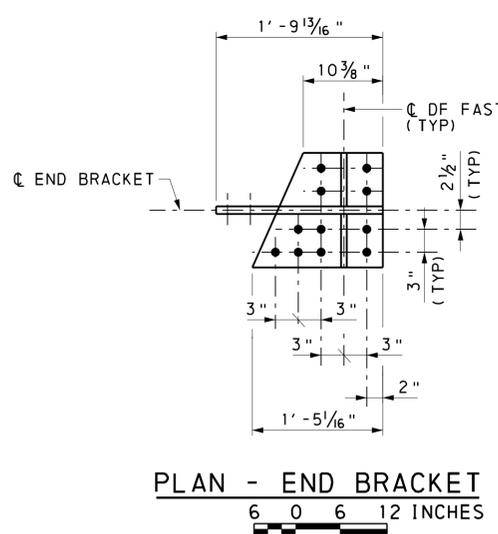
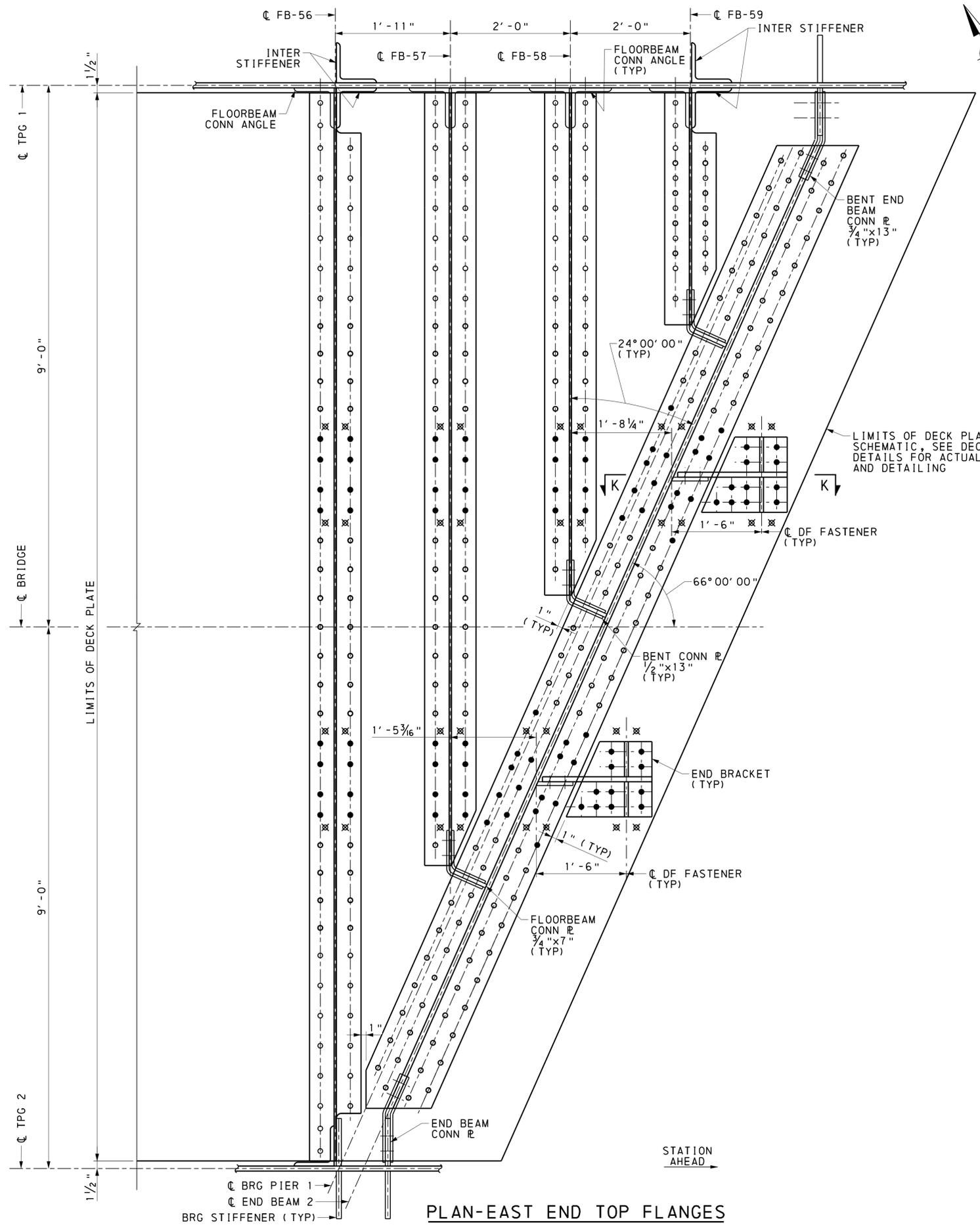
RECOMMENDED _____

SHEET 23 OF 54

S-1001RJC

PLAN-WEST END TOP FLANGES
6 0 6 12 INCHES

STATION AHEAD



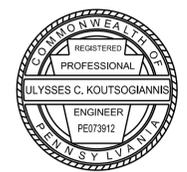
- LEGEND:**
- HEX HEAD BOLT
 - COUNTERSUNK BOLT
 - ⊗ DIRECT FIXATION FASTENER BOLT
- ALL BOLTS A325 UNLESS NOTED OTHERWISE

- NOTES:**
1. FOR STAKE-OUT PLAN, SEE SHEET 6.
 2. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
 3. FOR GIRDER & FRAMING DETAILS, SEE SHEETS 16-23 & 25-31.
 4. FOR FLOORBEAM FB-57 THRU FB-59, SEE SHEETS 27-29.
 5. FOR DECK PLAN & DETAILS, SEE SHEETS 38-42.
 6. FOR GUARD RAIL DETAILS, SEE SHEET 47.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

MPMS/ECMS PROJ: 115877

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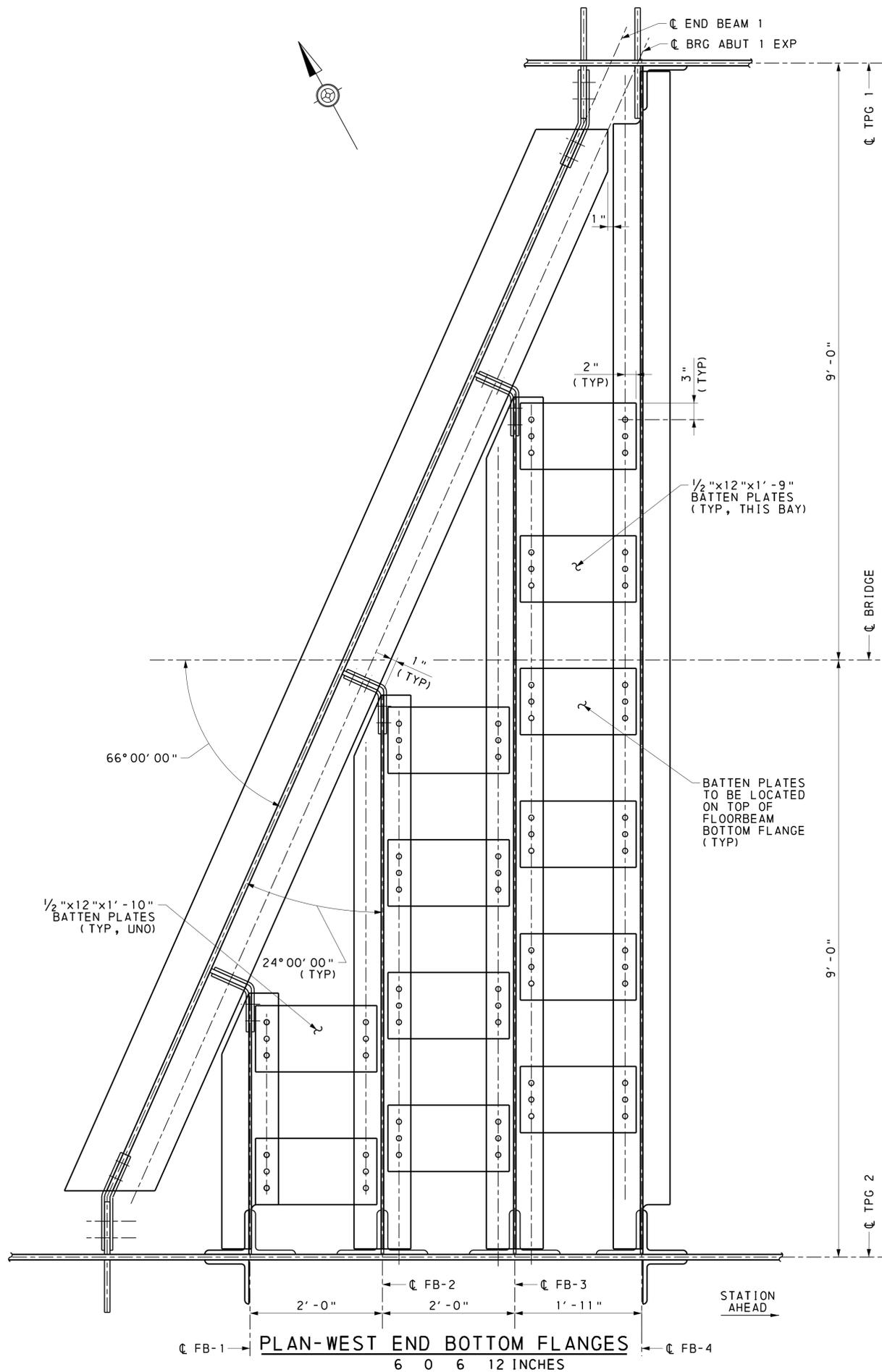
PREPARED BY:
HNTB CORPORATION
4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
GIRDER & FRAMING DETAILS 9 OF 16

RECOMMENDED _____ SHEET 24 OF 54
S-1001RJC

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NOTES:

1. FOR STAKE-OUT PLAN, SEE SHEET 6.
2. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
3. FOR GIRDER & FRAMING DETAILS, SEE SHEETS 16-24 & 26-31.
4. FOR FLOORBEAM FB-1 THRU FB-4, SEE SHEETS 27-29.

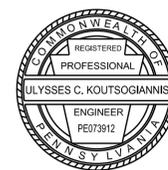
LEGEND:

- ALL BOLTS A325 UNLESS NOTED OTHERWISE
- HEX HEAD BOLT
 - COUNTERSUNK BOLT
 - ⊗ DIRECT FIXATION FASTENER BOLT

Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

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SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

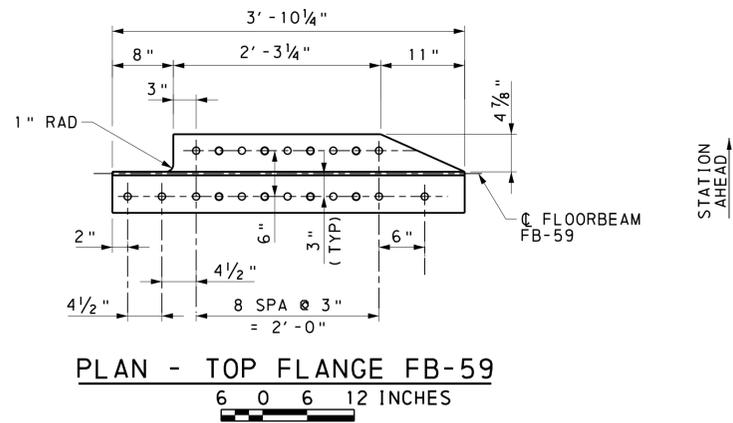
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
GIRDER & FRAMING DETAILS 10 OF 16

RECOMMENDED _____

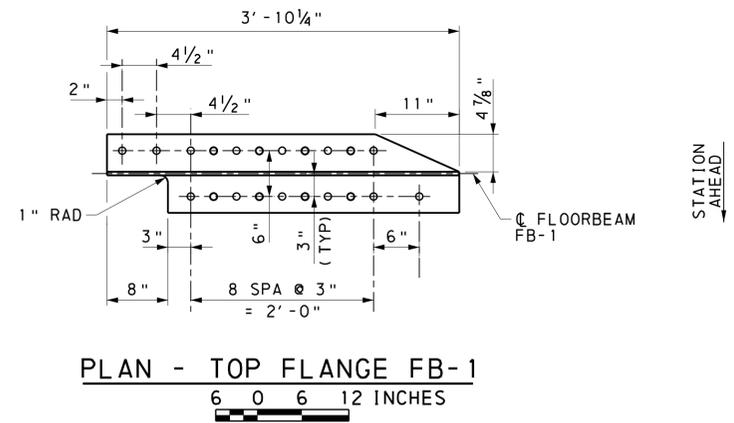
SHEET 25 OF 54

S-1001RJC

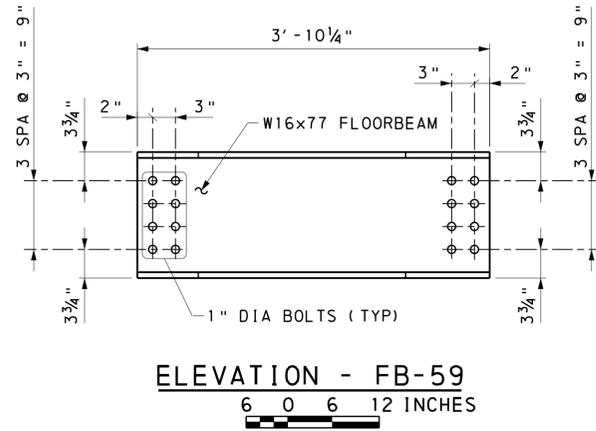
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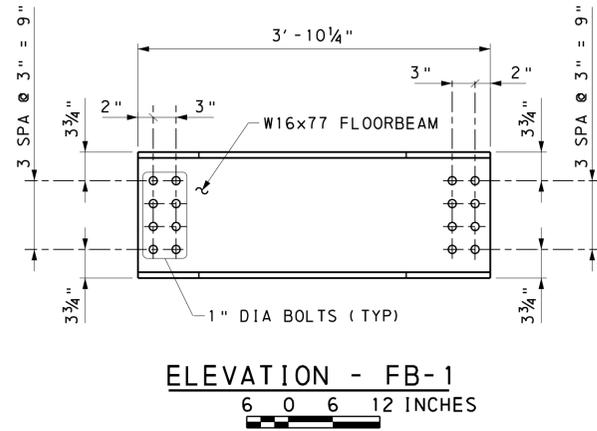
PLAN - TOP FLANGE FB-59
6 0 6 12 INCHES



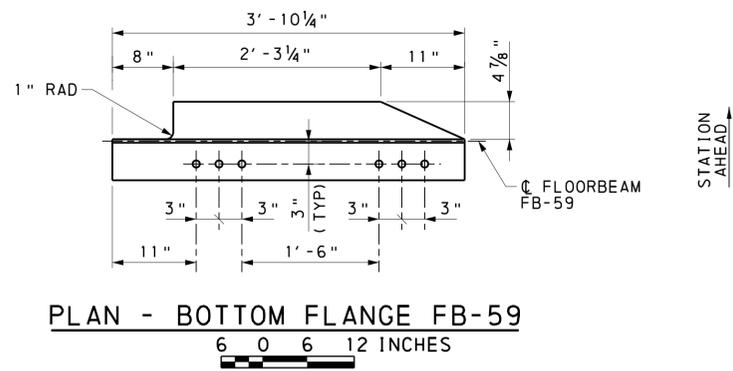
PLAN - TOP FLANGE FB-1
6 0 6 12 INCHES



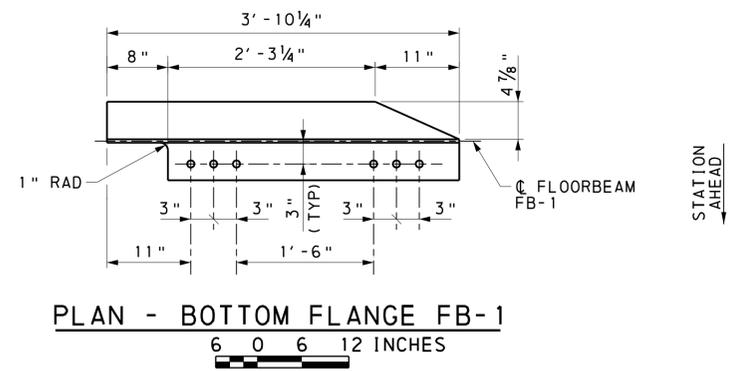
ELEVATION - FB-59
6 0 6 12 INCHES



ELEVATION - FB-1
6 0 6 12 INCHES



PLAN - BOTTOM FLANGE FB-59
6 0 6 12 INCHES

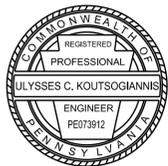


PLAN - BOTTOM FLANGE FB-1
6 0 6 12 INCHES

- NOTES:**
1. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
 2. FOR FB-1 AND FB-59 FRAMING DETAILS, SEE SHEETS 23 AND 24, RESPECTIVELY.
 3. FOR DIRECT FIXATION FASTENER BOLT PATTERN, SEE SHEET 24.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

MPMS/ECMS PROJ: 115877



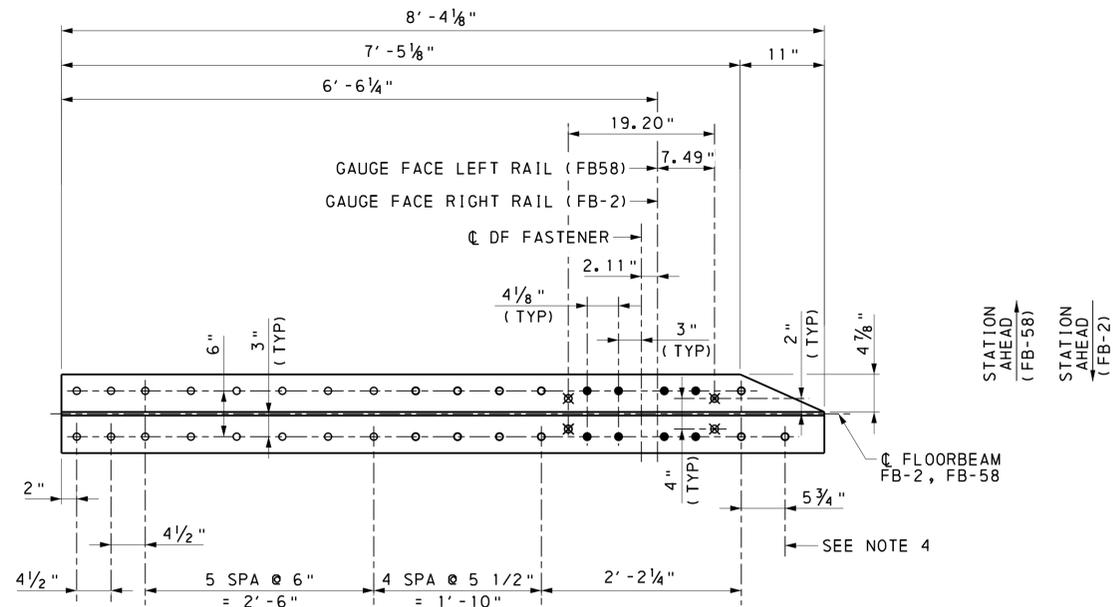
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SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
GIRDER & FRAMING DETAILS 12 OF 16

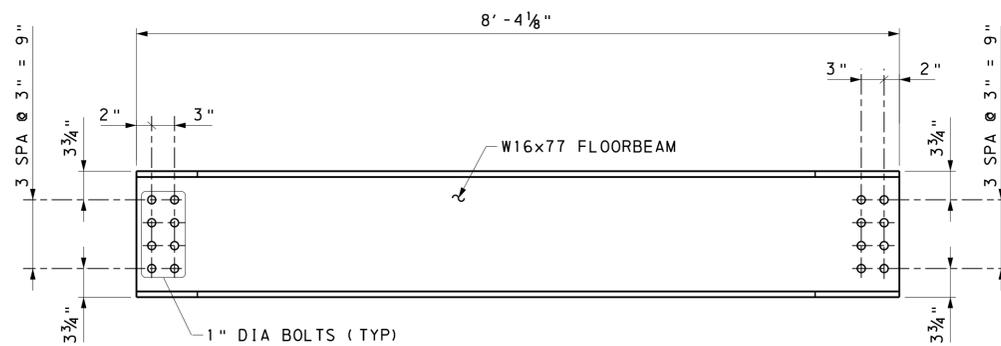
RECOMMENDED _____ SHEET 27 OF 54
S-1001RJC

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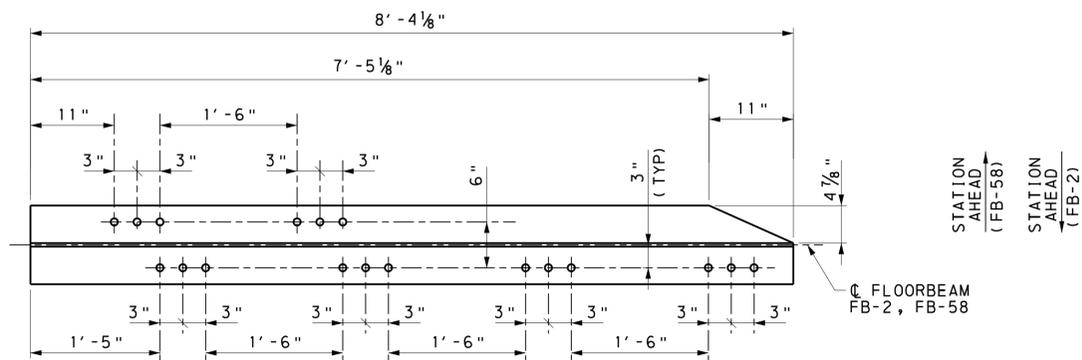
PLAN - TOP FLANGE FB-2 & FB-58

6 0 6 12 INCHES



ELEVATION

6 0 6 12 INCHES



PLAN - BOTTOM FLANGE FB-2 & FB-58

6 0 6 12 INCHES

NOTES:

1. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
2. FOR FB-2 AND FB-58 FRAMING DETAILS, SEE SHEETS 23 AND 24, RESPECTIVELY.
3. FOR DIRECT FIXATION FASTENER BOLT PATTERN, SEE SHEET 24.
4. BOLT SHALL BE USED TO FASTEN GUARD RAIL TO STRUCTURE. FOR GUARD RAIL DETAILS, SEE SHEET 47.

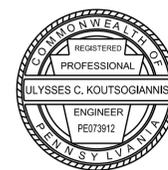
LEGEND:

- ALL BOLTS A325 UNLESS NOTED OTHERWISE
- HEX HEAD BOLT
 - COUNTERSUNK BOLT
 - ⊗ DIRECT FIXATION FASTENER BOLT

Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
GIRDER & FRAMING DETAILS 13 OF 16

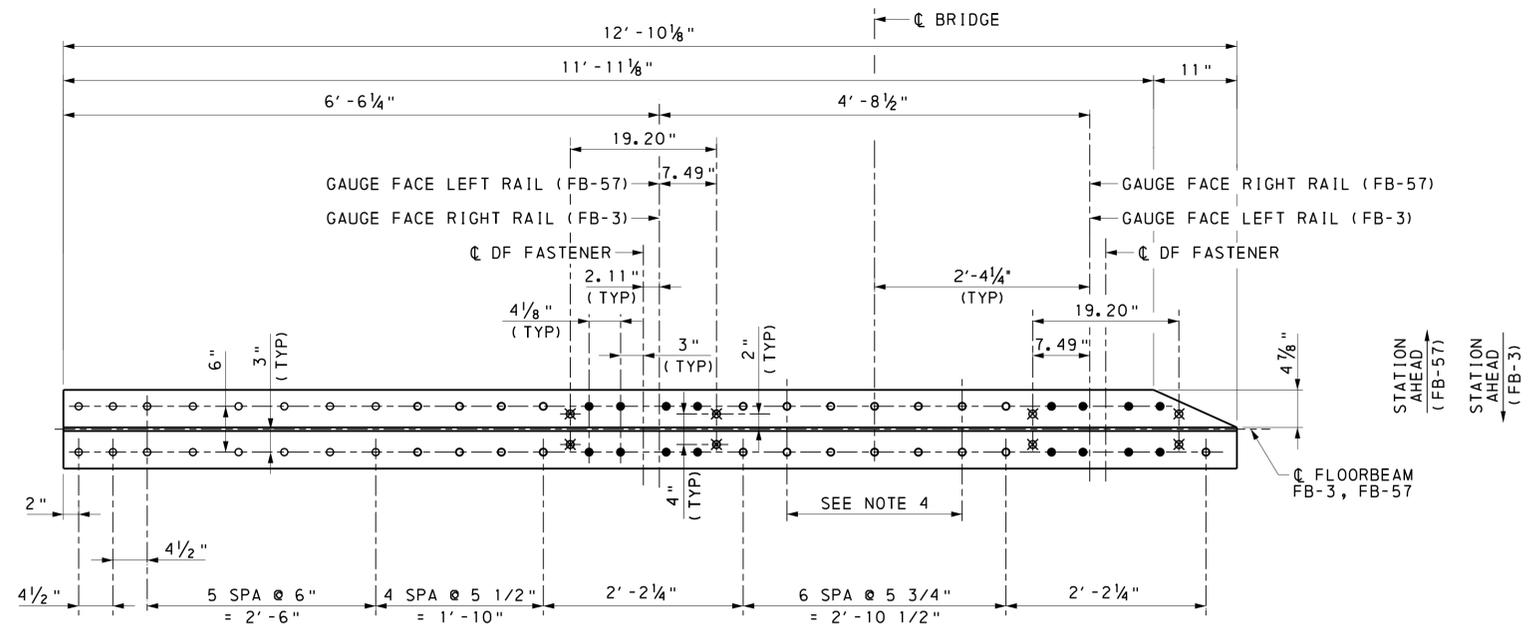
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SUITE 300
HARRISBURG, PA 17110

RECOMMENDED _____

SHEET 28 OF 54

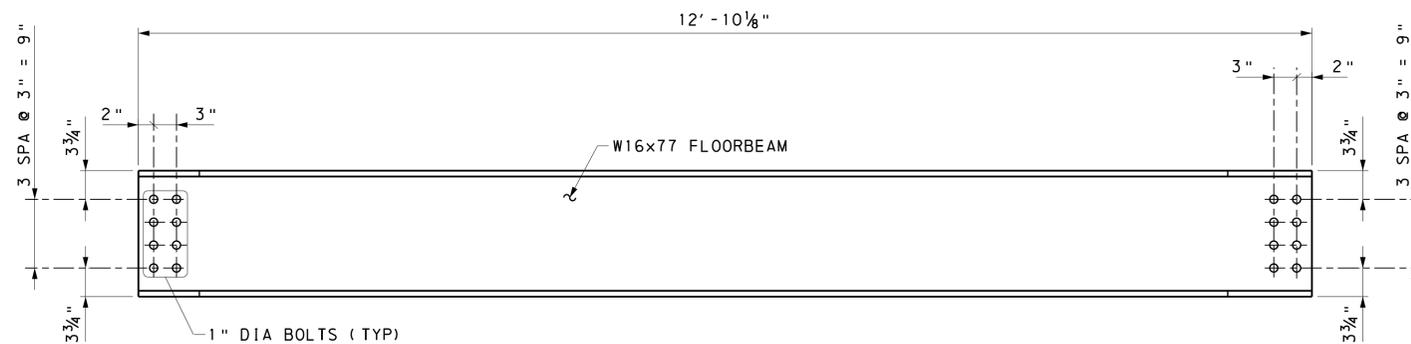
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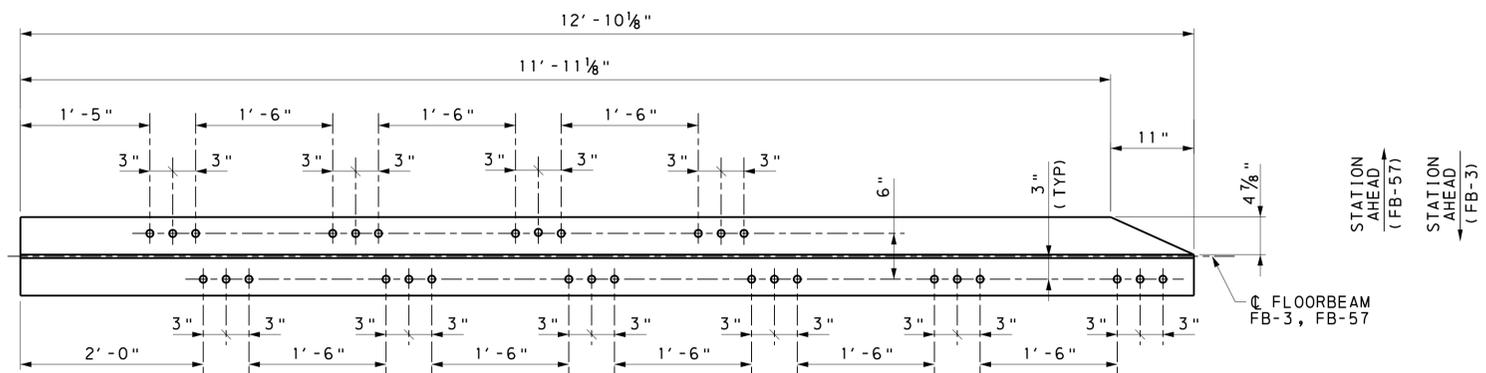
PLAN - TOP FLANGE FB-3 & FB-57

6 0 6 12 INCHES



ELEVATION

6 0 6 12 INCHES



PLAN - BOTTOM FLANGE FB-3 & FB-57

6 0 6 12 INCHES

NOTES:

1. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
2. FOR FB-3 AND FB-57 FRAMING DETAILS, SEE SHEETS 23 AND 24, RESPECTIVELY.
3. FOR DIRECT FIXATION FASTENER BOLT PATTERN, SEE SHEET 24.
4. BOLTS SHALL BE USED TO FASTEN GUARD RAIL TO STRUCTURE. FOR GUARD RAIL DETAILS, SEE SHEET 47.

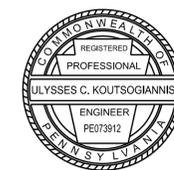
LEGEND:

- ALL BOLTS A325 UNLESS NOTED OTHERWISE
- HEX HEAD BOLT
 - COUNTERSUNK BOLT
 - ⊗ DIRECT FIXATION FASTENER BOLT

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

MPMS/ECMS PROJ: 115877

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

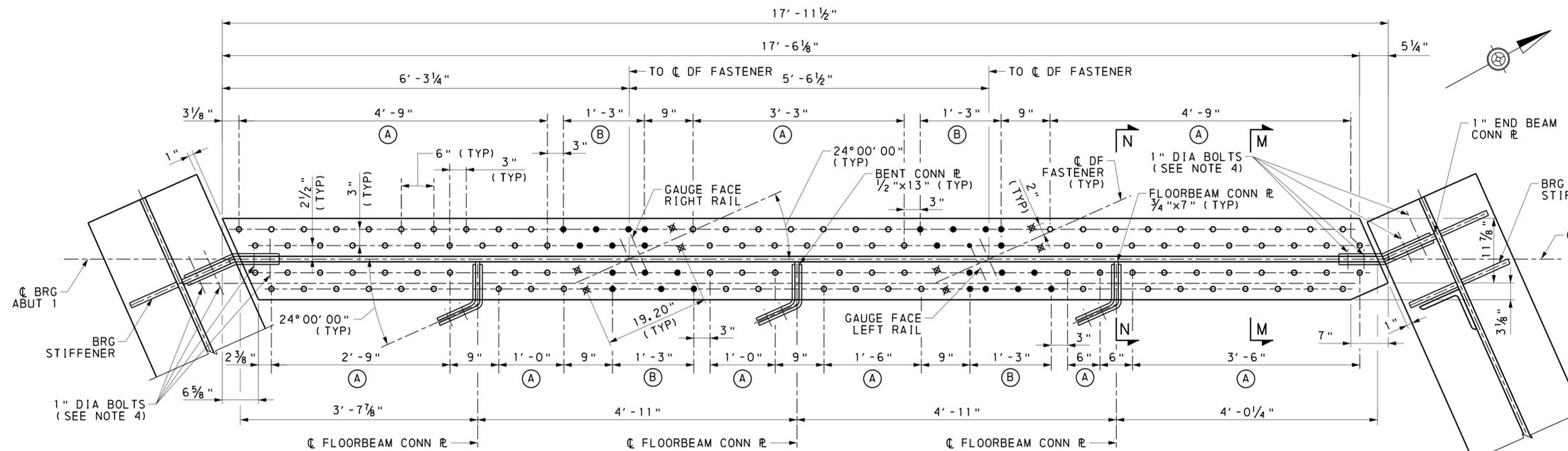
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
GIRDER & FRAMING DETAILS 14 OF 16

PREPARED BY:
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SUITE 300
HARRISBURG, PA 17110

RECOMMENDED _____

SHEET 29 OF 54

S-1001RJC



PLAN - TOP FLANGE END BEAM 1

6 0 6 12 INCHES

LEGEND:

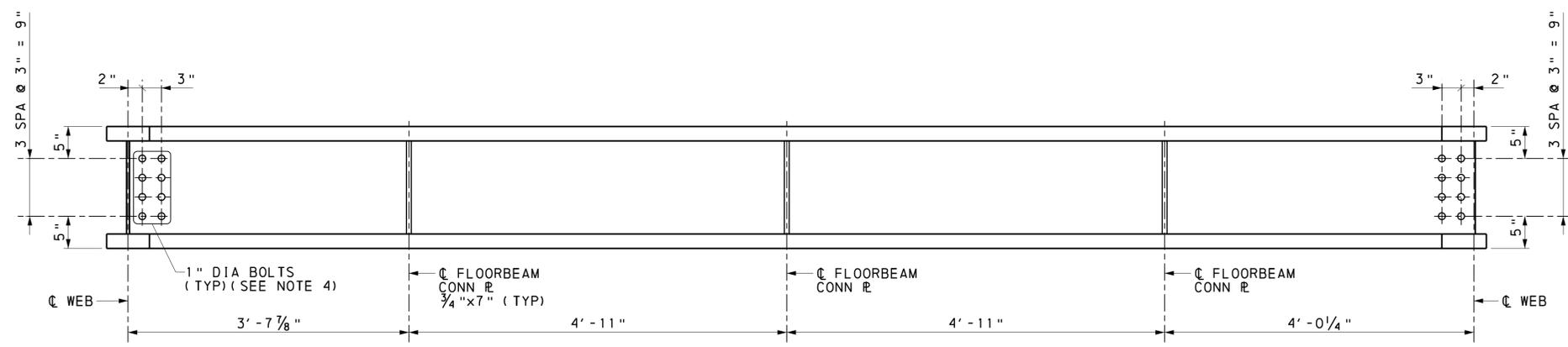
- (A) 3" BOLT SPACING, STAGGERED
- (B) 3" BOLT SPACING, STAGGERED & COUNTERSUNK

NOTES:

1. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
2. FOR DIRECT FIXATION FASTENER BOLT PATTERN, SEE SHEET 24.
3. FOR SECTION M-M AND N-N, SEE SHEET 31.
4. BOLTS SHALL BE ASTM F3125 GRADE A490 TYPE 1 (SLIP CRITICAL CLASS B) WITH A MINIMUM TENSION OF 64 KIPS IN ACCORDANCE WITH AREMA TABLE 15-1-12.

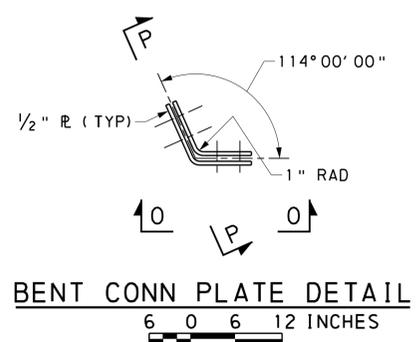
LEGEND:

- ALL BOLTS A325 UNLESS NOTED OTHERWISE
- HEX HEAD BOLT
 - COUNTERSUNK BOLT
 - ⊗ DIRECT FIXATION FASTENER BOLT



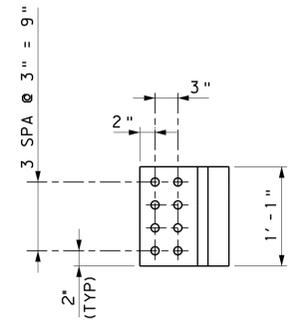
ELEVATION - END BEAM 1

6 0 6 12 INCHES



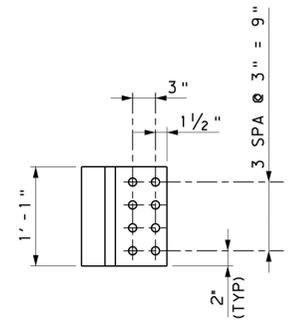
BENT CONN PLATE DETAIL

6 0 6 12 INCHES



SECTION P-P

6 0 6 12 INCHES

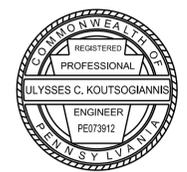


SECTION O-O

6 0 6 12 INCHES

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

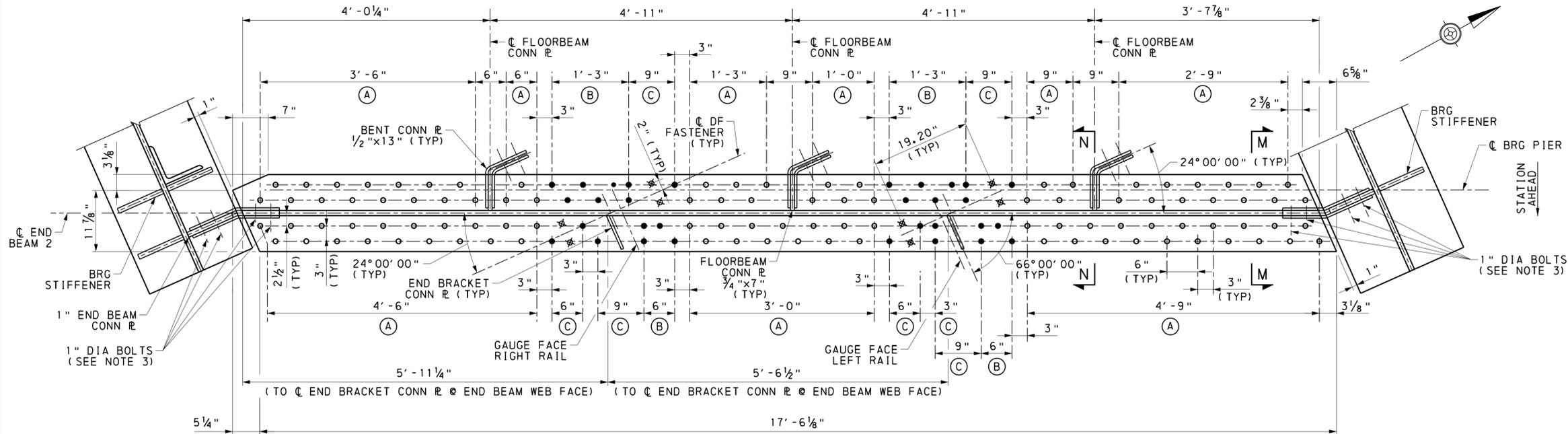
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE

GIRDER & FRAMING DETAILS 15 OF 16

RECOMMENDED _____ SHEET 30 OF 54

S-1001RJC

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PLAN - TOP FLANGE END BEAM 2

6 0 6 12 INCHES

LEGEND:

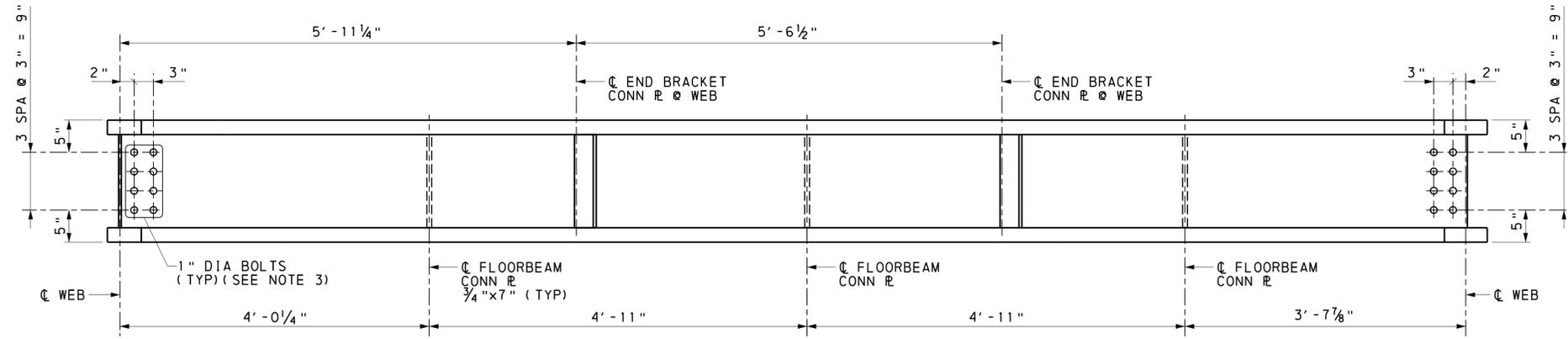
- (A) 3" BOLT SPACING, STAGGERED
- (B) 3" BOLT SPACING, STAGGERED & COUNTERSUNK
- (C) BOLT SPACING AS SHOWN, COUNTERSUNK

NOTES:

1. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
2. FOR DIRECT FIXATION FASTENER BOLT PATTERN, SEE SHEET 24.
3. BOLTS SHALL BE ASTM F3125 GRADE A490 TYPE 1 (SLIP CRITICAL CLASS B) WITH A MINIMUM TENSION OF 64 KIPS IN ACCORDANCE WITH AREMA TABLE 15-1-12.

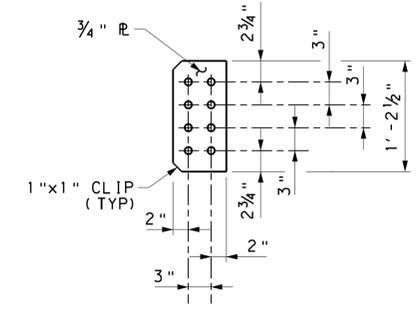
LEGEND:

- ALL BOLTS A325 UNLESS NOTED OTHERWISE
- HEX HEAD BOLT
 - COUNTERSUNK BOLT
 - ⊗ DIRECT FIXATION FASTENER BOLT



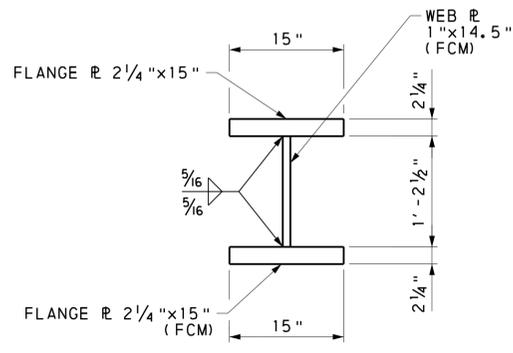
ELEVATION - END BEAM 2

6 0 6 12 INCHES



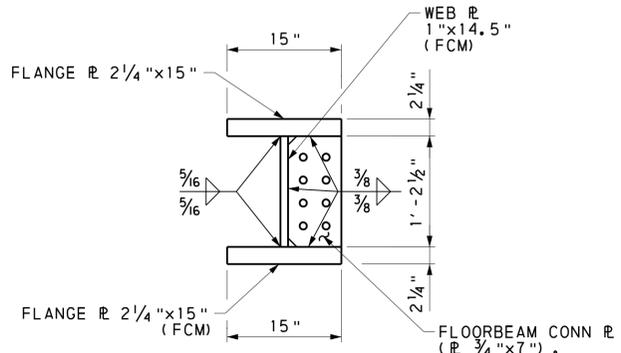
FLOORBEAM CONNECTION DETAIL

6 0 6 12 INCHES



SECTION M-M

6 0 6 12 INCHES



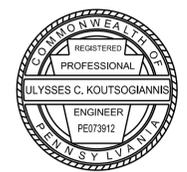
SECTION N-N

6 0 6 12 INCHES

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

MPMS/ECMS PROJ: 115877

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
GIRDER & FRAMING DETAILS 16 OF 16

PREPARED BY:
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HARRISBURG, PA 17110

RECOMMENDED _____

SHEET 31 OF 54

S-1001RJC

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NOTES:

- DESIGN DISC TYPE HIGH LOAD MULTI-ROTATIONAL BEARINGS IN CONFORMANCE WITH AREMA MANUAL CHAPTER 15 BEARING DESIGN, FABRICATION, DELIVERY, STORAGE, AND HANDLING TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.
- CROSS HATCHED COMPONENTS OF THE BEARINGS ARE SHOWN FOR REPRESENTATIVE PURPOSES ONLY. THE ACTUAL DETAILS AND CONFIGURATION OF THE COMPONENTS DEPEND UPON THE SPECIFIC BEARING AS FINISHED BY THE SELECTED BEARING MANUFACTURER.
- NON-SHRINK GROUT PAD SHALL BE USED TO ADJUST BEARING ELEVATIONS AS NECESSARY FOR INSTALLATION PROCESS.
- SEE SHEET 7 FOR ANCHOR BOLT WELL DETAIL AND NOTES.
- THE CONTRACTOR, IN COORDINATION WITH THE BEARING MANUFACTURER, SHALL BE RESPONSIBLE FOR THE DESIGN AND FURNISHING OF THE BEARINGS. THIS INCLUDES THE SOLE PLATE, MASONRY PLATE, GUIDE BARS, BEARING ASSEMBLY, AND THEIR RESPECTIVE WELDS.
- THE CONTRACTOR SHALL SUBMIT CALCULATIONS & SHOP DRAWINGS SEALED BY A PROFESSIONAL ENGINEER, LICENSED IN THE COMMONWEALTH OF PENNSYLVANIA, INDICATING CONFORMANCE WITH THE DESIGN LOADS, ROTATIONS, MOVEMENTS, AND MATERIAL CRITERIA INDICATED ON THIS SHEET AND THE GENERAL NOTES. CALCULATIONS AND SHOP DRAWINGS FOR BEARING REPLACEMENT AT EXISTING SPAN 2 SHALL INCORPORATE NECESSARY FIELD MEASUREMENTS.
- EXPANSION BEARINGS SHALL HAVE A MAXIMUM FRICTION COEFFICIENT OF 6%.
- ALLOW THE CONTINUOUS WELD CONNECTING TPG BOTTOM FLANGE TO THE SOLE PLATE TO COOL AFTER EACH PASS. THE TEMPERATURE OF THE STEEL ADJACENT TO THE PTFE SHEET IS NOT TO EXCEED 200 F.
- THE BEARING DEVICE, SOLE PLATE, AND MASONRY PLATE SHALL BE ASSEMBLED IN THE SHOP. THIS ASSEMBLY SHALL BE FIELD WELDED TO THE TPG BOTTOM FLANGE.
- ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER BEARING IS INSTALLED.
- ALL MATERIALS SHALL BE ASTM A709, GRADE 50 EXCEPT AS NOTED OTHERWISE.
- MATERIAL FOR PLATE THICKNESS 4" OR MORE AND LESS THAN 5" SHALL BE ASTM A588, GRADE 46.
- MATERIAL FOR PLATE THICKNESS 5" OR MORE SHALL BE ASTM A588, GRADE 42.
- GUIDE BARS AND SHEAR RESTRICTION MECHANISMS SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS AND AS APPROVED BY THE ENGINEER.
- BEARINGS SHALL HAVE F1554 GRADE 105 ANCHOR BOLTS EXTENDED A MINIMUM OF 1'-3" INTO CONCRETE AND SHALL BE PROVIDED WITH WASHER AND HEAVY HEX NUT, ALL GALVANIZED IN ACCORDANCE WITH ASTM A153. DESIGN AND DETERMINE FINAL LOCATION OF ANCHOR BOLTS BASED ON APPROVED BEARING ASSEMBLY AND MASONRY PLATE GEOMETRY. USE FOUR OR MORE ANCHOR BOLTS PER BEARING. ANCHOR BOLT DIAMETER SHOWN ON EACH BEARING DETAILS SHEET BASED ON DESIGN LOADS AND AREMA REQUIREMENTS.
- HARDENED WASHERS SHALL CONFORM TO ASTM F436.
- HEAVY HEX NUTS SHALL CONFORM TO ASTM A563.
- ALL SUBSTRUCTURE REINFORCING SHALL BE POSITIONED TO CLEAR THE ANCHOR BOLT WELLS.
- BEARING SOLE PLATE SHALL BE CENTERED ON C BEARING AT 68°F. BEARING SOLE PLATE LOCATION SHALL BE ADJUSTED WITH RESPECT TO C BEARING BY 0.087" FOR EACH 10°F RISE OR FALL IN THE TEMPERATURE AT INSTALLATION.
- BEVEL SOLE PLATE TO MATCH SLOPE OF GIRDER AS REQUIRED.
- PROTECT THE BEARINGS FROM DAMAGE DUE TO SHEAR DEFORMATION AND ROTATION OF BEARINGS CAUSED BY THE APPLICATION OF THE GIRDER SELF-WEIGHT AND OTHER DEAD LOADS. DEFINE THE METHOD OF PROTECTION IN THE SHOP DRAWINGS.
- THE SIZE OF THE FILLET WELD BETWEEN THE TPG AND SOLE PLATE TO BE DETERMINED BY THE BEARING MANUFACTURER. THE MINIMUM WELD SIZE SHALL BE 5/16".
- MAKE THE FILLET WELD BETWEEN THE TPG BOTTOM FLANGE AND THE SOLE PLATE AFTER ALL THE DEAD LOADS HAVE BEEN APPLIED AND THE BEARING ASSEMBLIES HAVE BEEN SET INTO FINAL POSITION.
- DO NOT POUR THE CONCRETE PEDESTAL SEATS UNTIL THE BEARINGS ARE SELECTED, THE BEARING SHOP DRAWINGS ARE APPROVED, AND THE PEDESTAL ELEVATIONS ARE APPROVED.
- PAINT THE SOLE PLATE IN ACCORDANCE WITH PUBLICATION 408, SECTION 1060. THE FINISH PAINT COAT IS TO MATCH THE COLOR OF THE EXISTING ADJACENT TRUSS TO REMAIN.

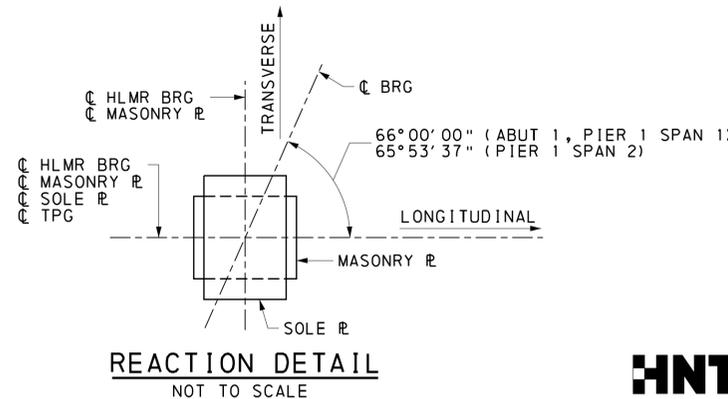
HLMR BEARING DATA TABLE					
ASD DESIGN			LOCATION:		
UNITS	ABUTMENT 1	PIER 1, PROPOSED SPAN 1	PIER 1, EXISTING SPAN 1		
LOAD: KIPS					
DISPLACEMENT: INCH					
ROTATION: RADIAN					
QUANTITY:	2	2	2		
BEARING TYPE:	UNIDIRECT	FIXED	UNIDIRECT		
LOAD (UNFACTORED)	VERTICAL LOAD	DEAD - MAXIMUM:	103.3	103.4	81.0
		DEAD - MINIMUM:	103.3	103.4	81.0
		LIVE + IM:	450.8	450.6	450.8
		TOTAL:	554.1	554.0	531.8
		WIND ON LOADED STRUCTURE:	16.5	19.4	37.4
	HORIZONTAL LOAD	WIND ON UNLOADED STRUCTURE:	10.8	13.3	46.1
		LONGITUDINAL:	6.1	5.9	6.1
		LONGITUDINAL:	7.7	277.7	6.5
		TRANSVERSE:	57.0	45.9	57.5
		CONTROLLING LOAD CASE:	WIND W/LL	WIND W/LL	WIND W/LL
ROTATION (+/-)	NET UPLIFT:	N/A	N/A	N/A	
	DUE TO ALL APPLICABLE LOADS:	0.009	0.009	0.009	
	DUE TO FAB & CONSTR TOLERANCE:	0.005	0.005	0.005	
MOVEMENT (+/-)	LONGITUDINAL	TOTAL:	0.014	0.014	0.014
		SERVICE:	1.4	-	1.4
		SEISMIC:	-	-	-
		CONSTR TOLERANCE:	1.0	-	1.0
	TRANSVERSE	TOTAL:	2.4	-	2.4
		SERVICE:	-	-	-
		SEISMIC:	-	-	-
CONSTR TOLERANCE:	-	-	-		
TOTAL:	-	-	-		

* TOTAL LOAD ONLY INCLUDES MAX DL AND LL+IM EFFECTS. VERTICAL LOAD DUE TO WIND ON LOADED STRUCTURE, WIND ON UNLOADED STRUCTURE, AND LONGITUDINAL FORCE EFFECTS ARE TABULATED HERE FOR COMPLETENESS.

** BASED ON BEARING CONFIGURATION, LONGITUDINAL LOAD INCLUDES FORCES FROM DEAD LOAD, BRAKING/TRACTION, LIVE LOAD, IMPACT, FRICTION AND WIND ON LOADED STRUCTURE.

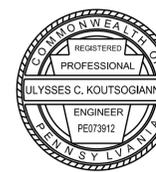
*** AREMA 15.5.7.3.2, MULTI ROTATIONAL BEARINGS SHALL BE DESIGNED FOR MINIMUM HORIZONTAL LOAD OF 10% OF THE VERTICAL LOAD. GOVERNS FOR EXPANSION DESIGN, LONGITUDINAL FORCE CONTROLS FOR FIXED DESIGN.

**** ALLOWANCE OF 0.005 RADIAN FOR UNCERTAINTY INCLUDED AND ADDED TO CALCULATED ROTATION DUE TO LOADS.



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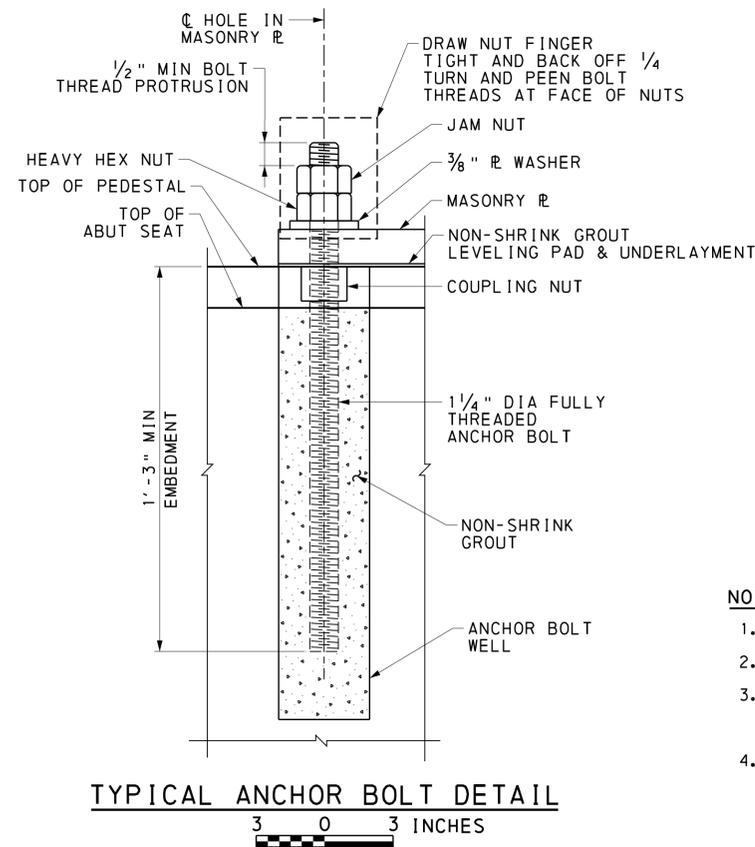
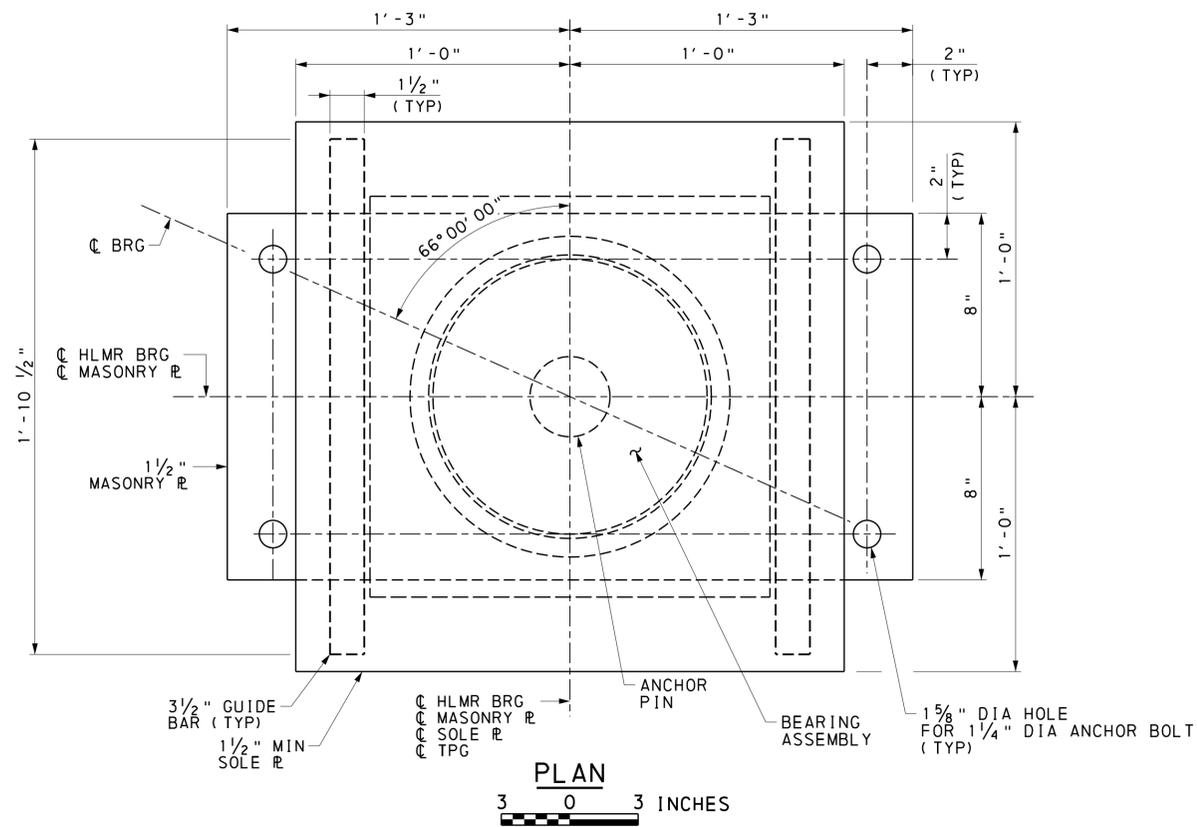


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SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
BEARING DESIGN DATA AND NOTES

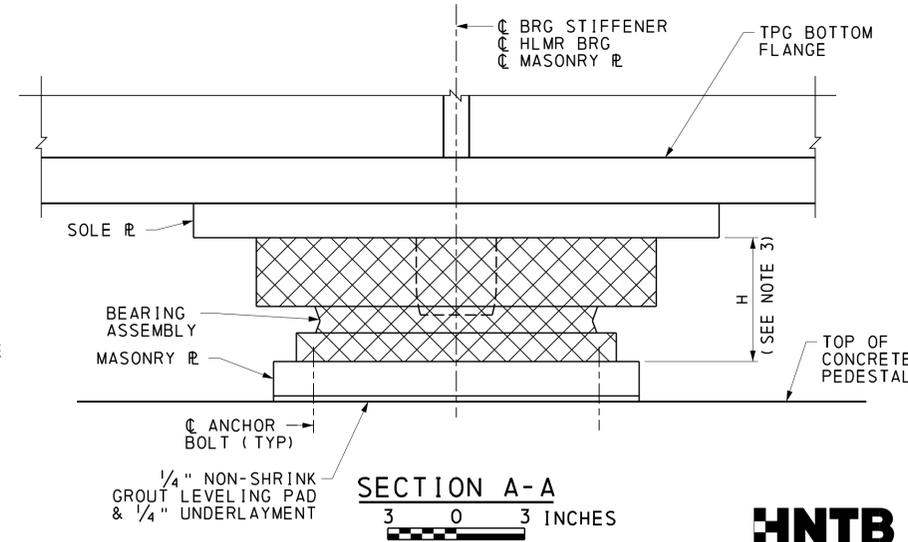
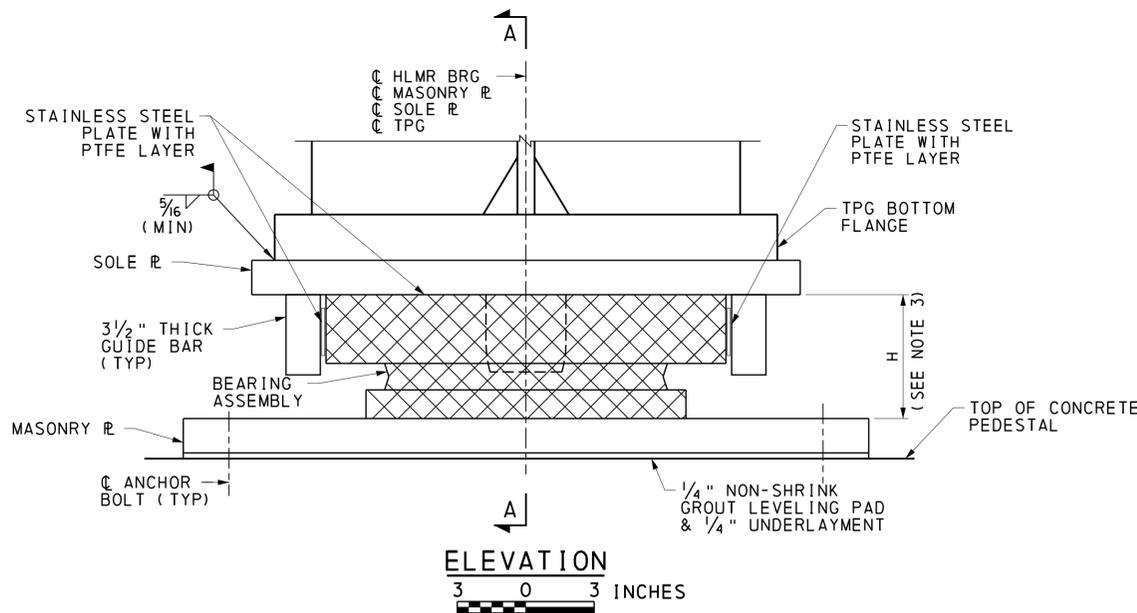
RECOMMENDED _____ SHEET 32 OF 54
S-1001RJC

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NOTES:

1. THIS SHEET APPLIES TO ABUTMENT 1 BEARINGS.
2. FOR BEARING DESIGN DATA AND NOTES, SEE SHEET 32.
3. DIMENSION "H" IS ASSUMED TO BE 5.47" FOR PLAN DETAILS. CONTRACTOR SHALL ADJUST BEARING SEAT ELEVATION AND CONCRETE PEDESTAL HEIGHT FOR THE SUPPLIED BEARING ASSEMBLY.
4. BEARING DIMENSIONS SHOWN ARE BASED UPON PRELIMINARY BEARING MANUFACTURER DESIGN.



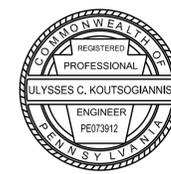
LEGEND:



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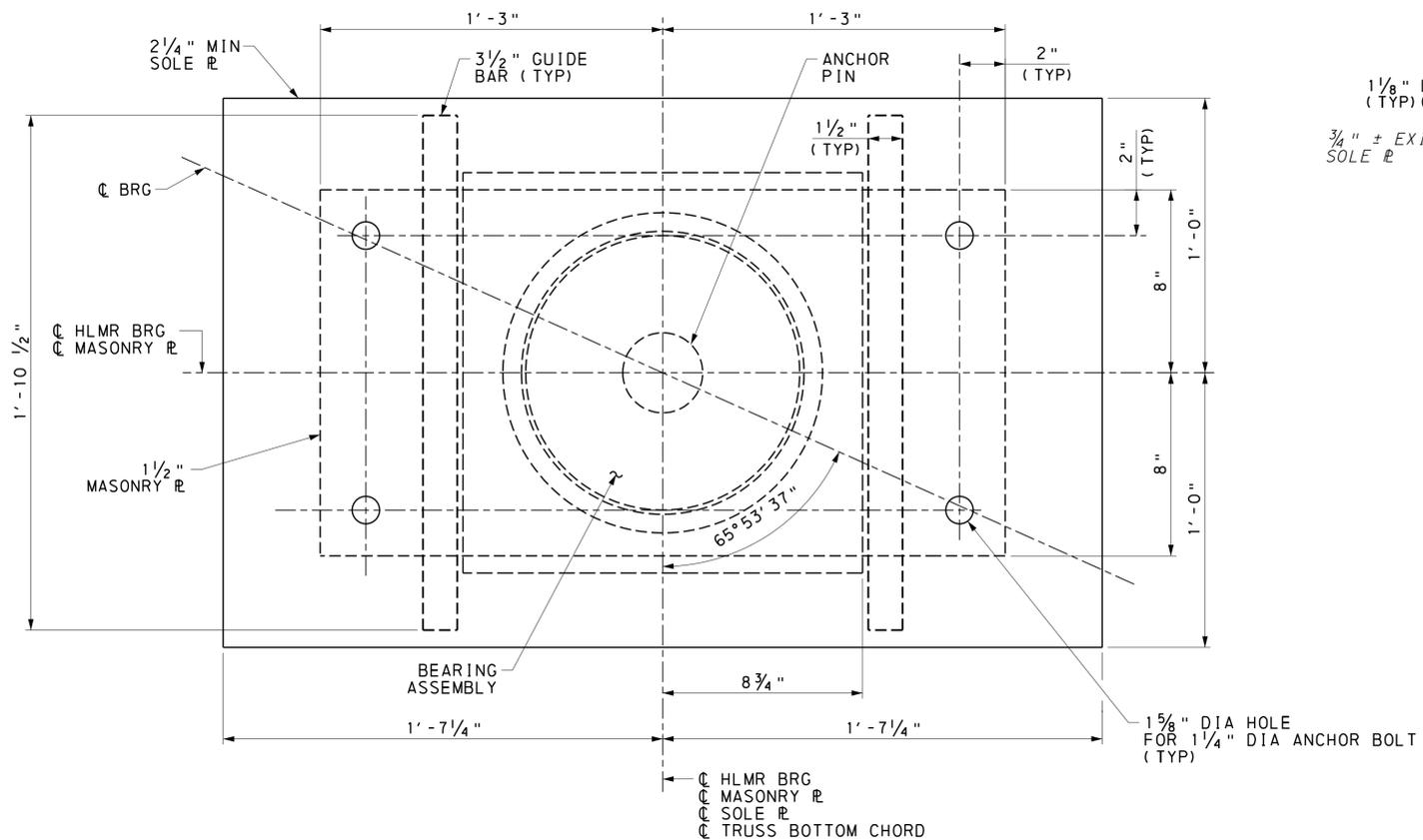
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
EXPANSION BEARING DETAILS 1 OF 3

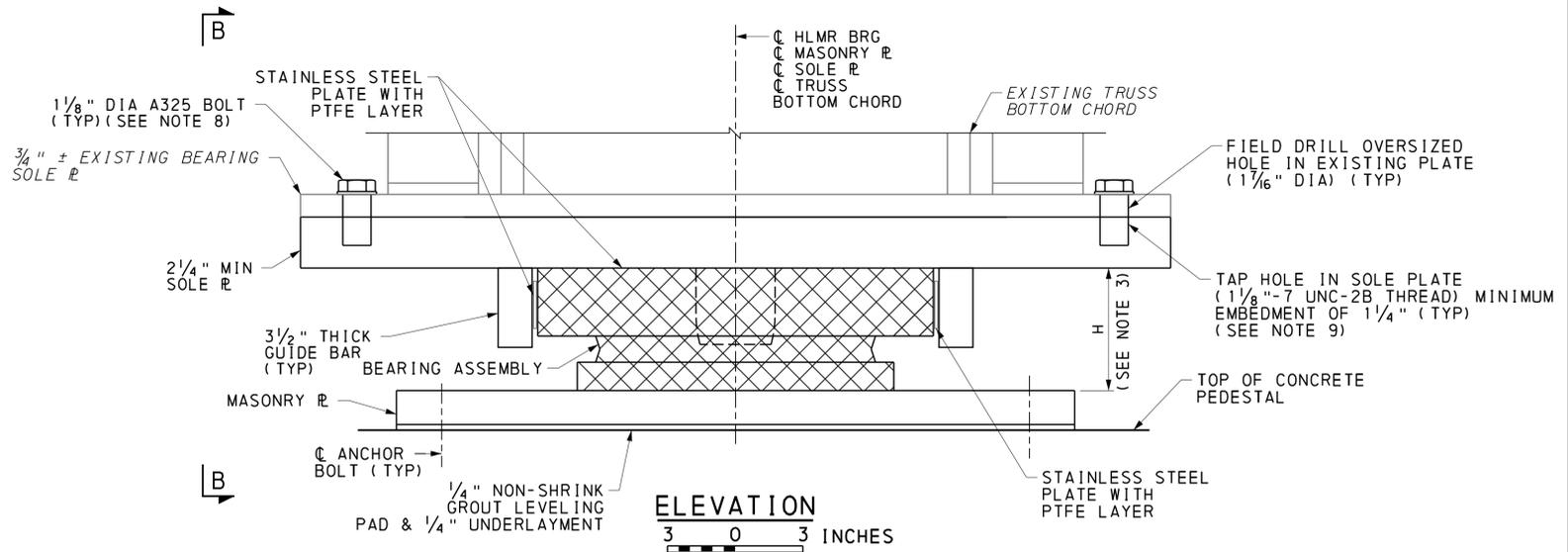
RECOMMENDED _____ SHEET 33 OF 54

S-1001RJC

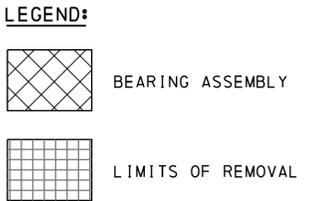
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PLAN
3 0 3 INCHES



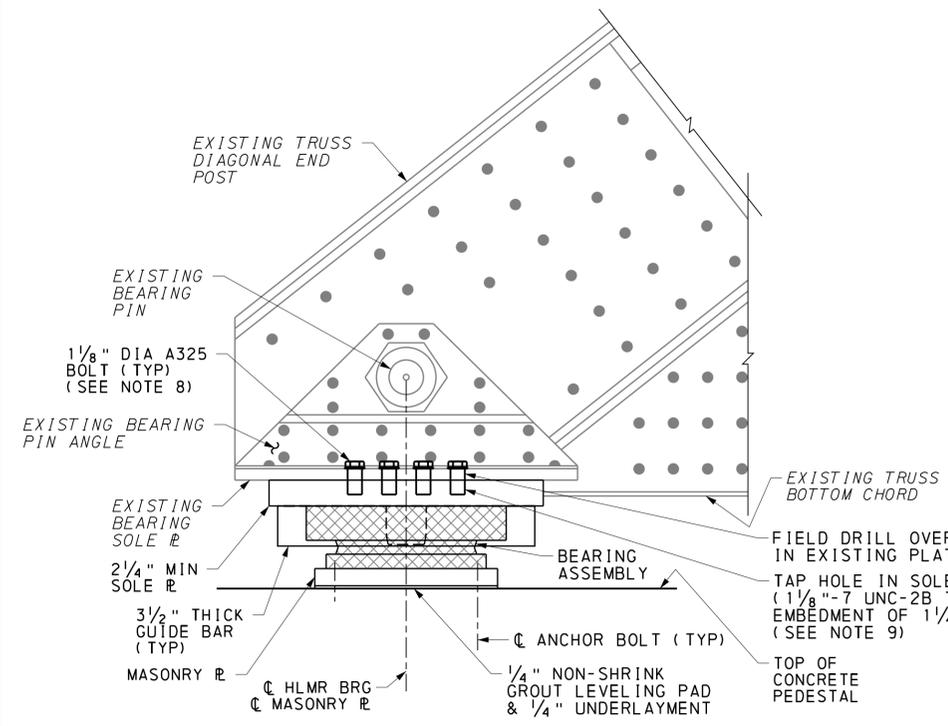
ELEVATION
3 0 3 INCHES



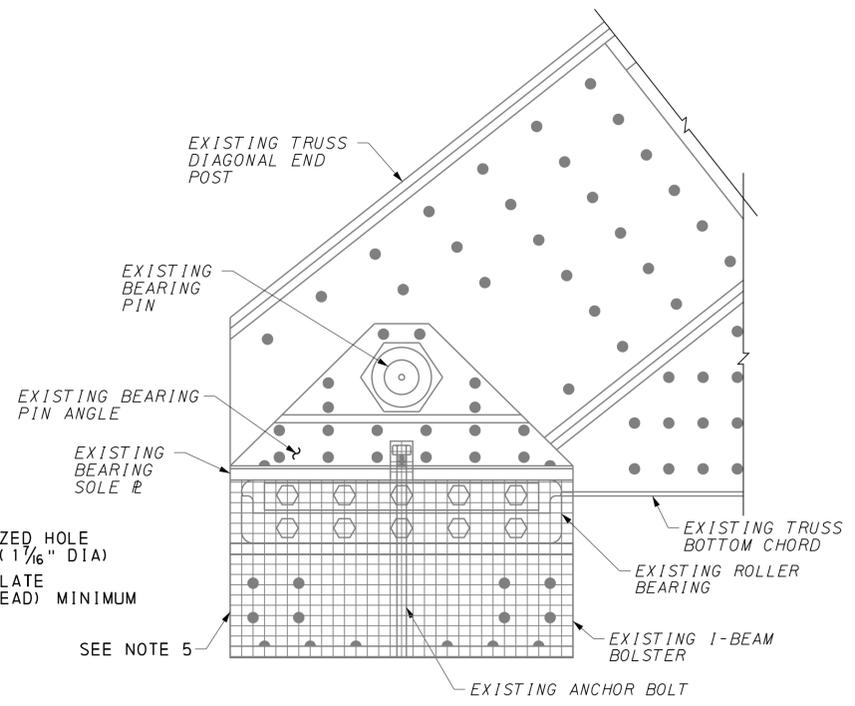
- NOTES:**
- THIS SHEET APPLIES TO PIER 1, EXISTING SPAN 2 BEARINGS. FOR ADDITIONAL PIER 1, EXISTING SPAN 2 BEARING DETAILS AND NOTES, SEE SHEET 35.
 - FOR BEARING DESIGN DATA AND NOTES, SEE SHEET 32.
 - DIMENSION "H" IS ASSUMED TO BE 5.47" FOR PLAN DETAILS. CONTRACTOR SHALL ADJUST BEARING SEAT ELEVATION AND CONCRETE PEDESTAL HEIGHT FOR THE SUPPLIED BEARING ASSEMBLY.
 - BEARING DIMENSIONS SHOWN ARE BASED UPON PRELIMINARY BEARING MANUFACTURER DESIGN.
 - REPLACE THE EXISTING BEARINGS AT PIER 1, EXISTING SPAN 2. REMOVE EXISTING I-BEAM BOLSTER, ROLLER BEARING ASSEMBLY, AND ANCHOR BOLTS. THE EXISTING BEARING SOLE PLATE SHALL REMAIN.
 - FIELD VERIFY DIMENSIONS AND CONSTRUCTABILITY BEFORE FABRICATION OF THE BEARINGS.
 - THE CONTRACTOR MAY ELECT TO COMPLETE A STEEL COUPON TEST TO DETERMINE THE WELDABILITY OF THE EXISTING STEEL. IF THE EXISTING STEEL IS DETERMINED TO BE WELDABLE, A WELDED CONNECTION FROM THE PROPOSED BEARING TO EXISTING SUPERSTRUCTURE MAY BE SUBSTITUTED FOR THE BOLTED CONNECTION SHOWN UPON APPROVAL BY THE ENGINEER.
 - PROVIDE PRE-TENSION FORCE OF 56 KIPS PER A325 BOLT.
 - TAPPED HOLES IN SOLE PLATE SHALL BE NORMAL TO THE EXISTING BEARING SOLE PLATE.
 - THE COATING ON THE TOP OF THE SOLE PLATE IN CONTACT WITH THE EXISTING BEARING SOLE PLATE SHALL BE A CLASS B COATING IN ACCORDANCE WITH THE GENERAL NOTES.

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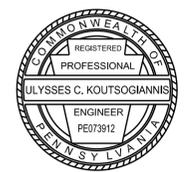


SECTION B-B
6 0 6 INCHES
(SOUTH ELEVATION SHOWN, NORTH SIMILAR)



EXISTING BEARING ELEVATION
6 0 6 INCHES
(SOUTH ELEVATION SHOWN, NORTH SIMILAR)

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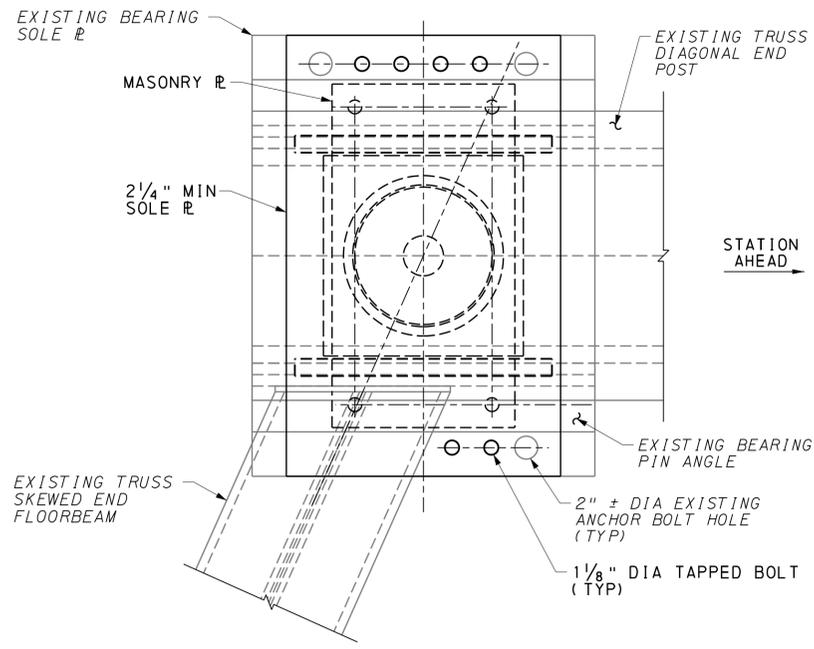
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HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
EXPANSION BEARING DETAILS 2 OF 3

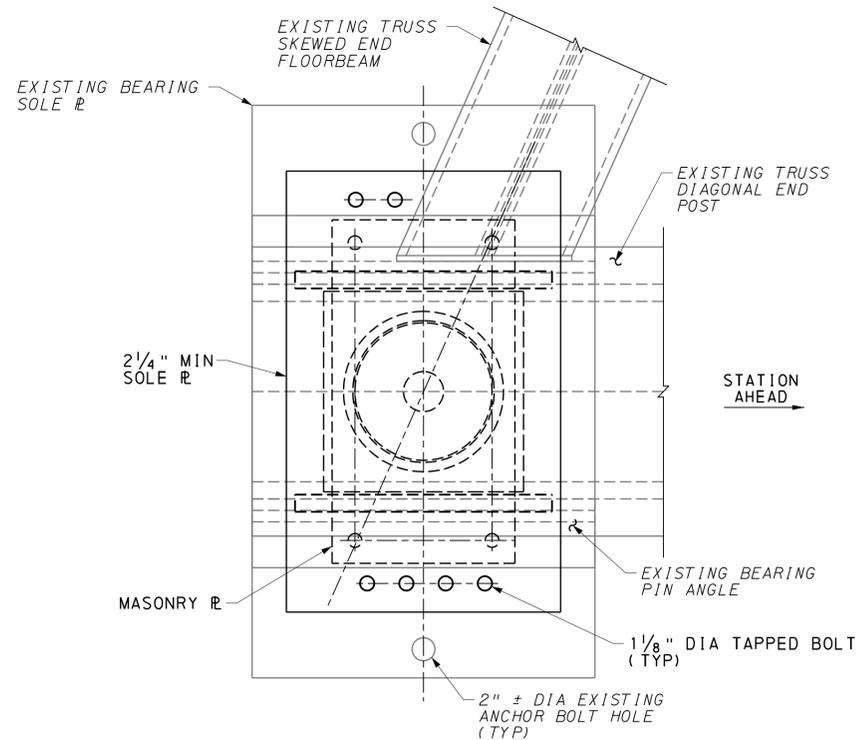
RECOMMENDED _____ SHEET 34 OF 54

S-1001RJC

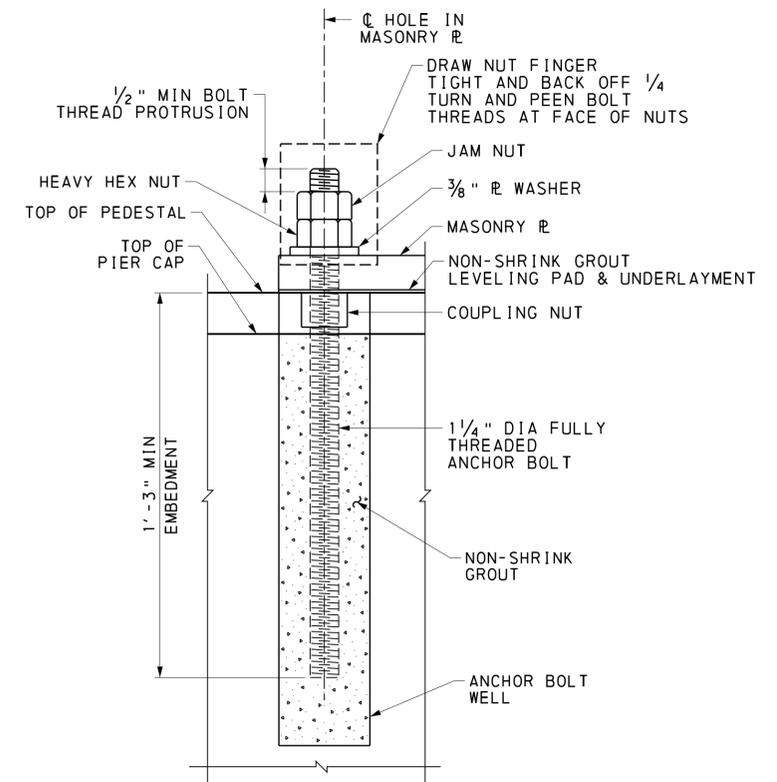
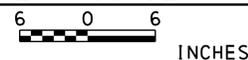
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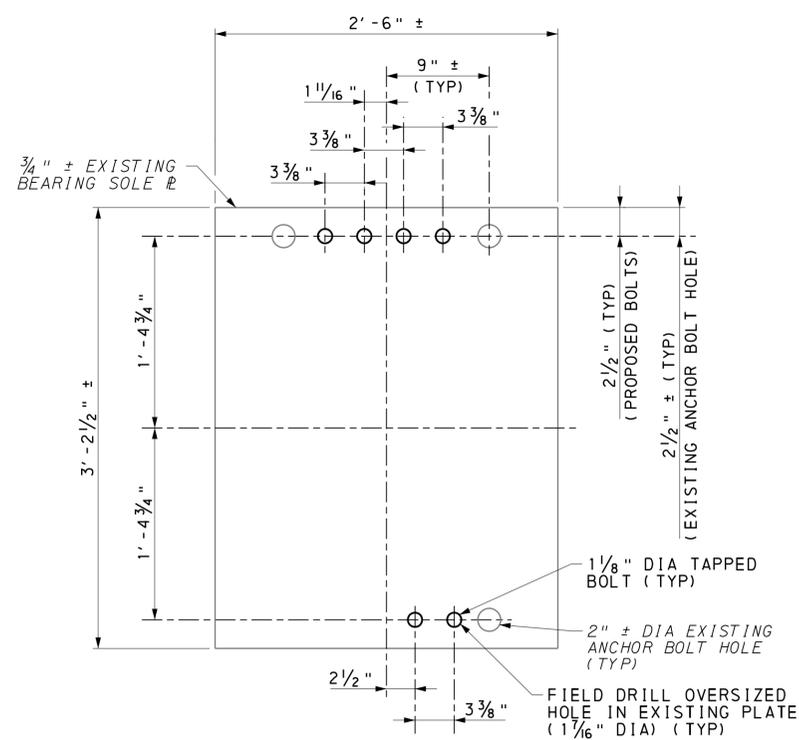
BEARING REPLACEMENT CONCEPT - NORTH PLAN



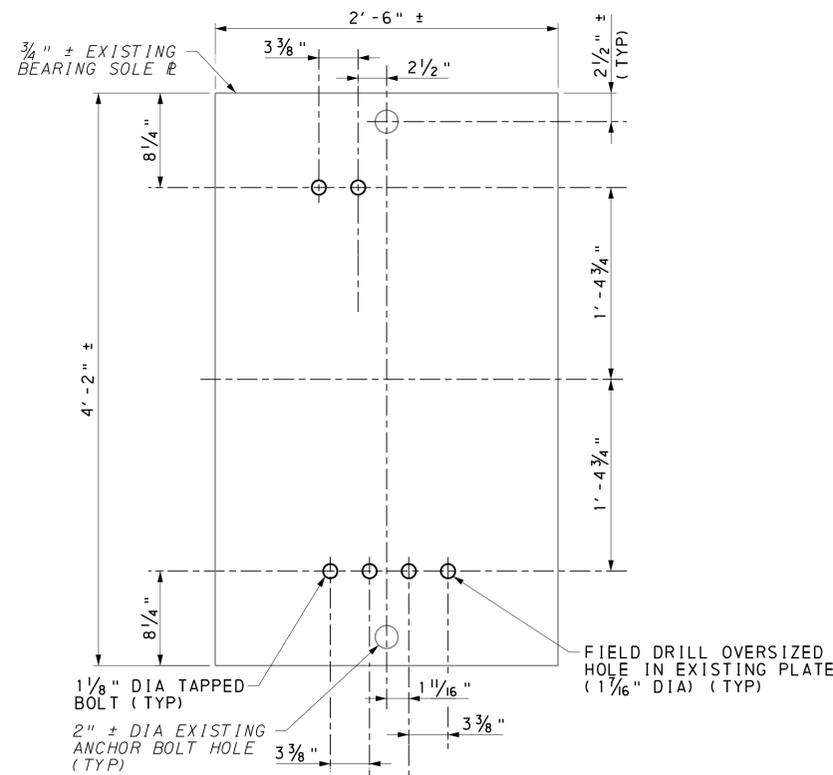
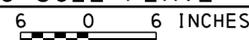
BEARING REPLACEMENT CONCEPT - SOUTH PLAN



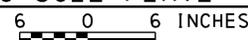
TYPICAL ANCHOR BOLT DETAIL



EXISTING BEARING SOLE PLATE - NORTH PLAN



EXISTING BEARING SOLE PLATE - SOUTH PLAN



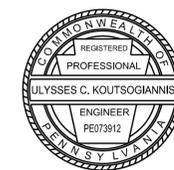
NOTES:

1. THIS SHEET APPLIES TO PIER 1, EXISTING SPAN 2 BEARINGS. FOR ADDITIONAL PIER 1, EXISTING SPAN 2 BEARING DETAILS AND NOTES, SEE SHEET 34.
2. FOR BEARING DESIGN DATA AND NOTES, SEE SHEET 32.

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REVISIONS					

MPMS/ECMS PROJ: 115877

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DEPARTMENT OF TRANSPORTATION

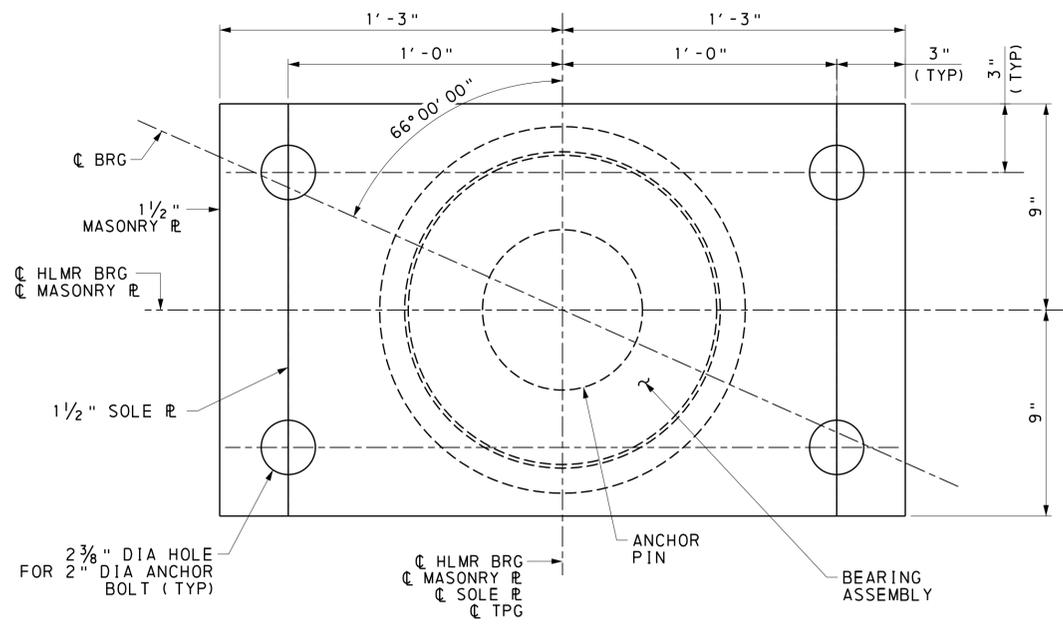
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
EXPANSION BEARING DETAILS 3 OF 3

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HARRISBURG, PA 17110

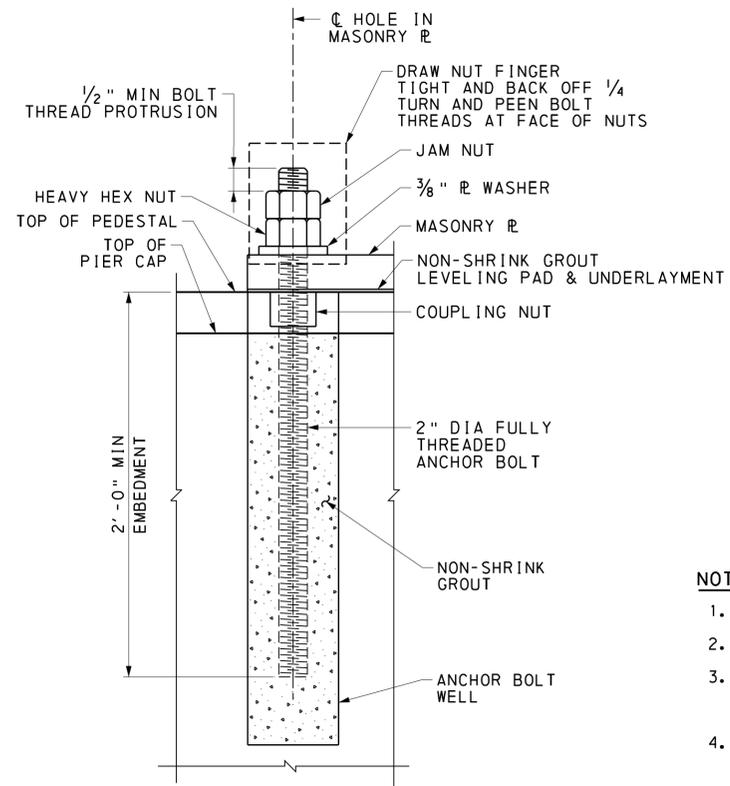
RECOMMENDED _____ SHEET 35 OF 54

S-1001RJC

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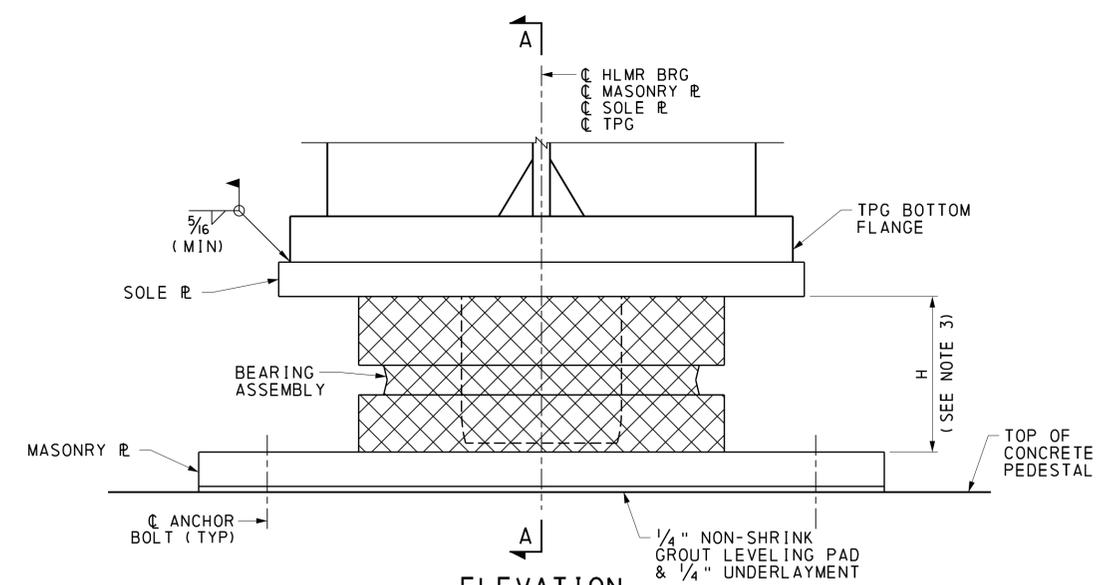
PLAN
3 0 3 INCHES



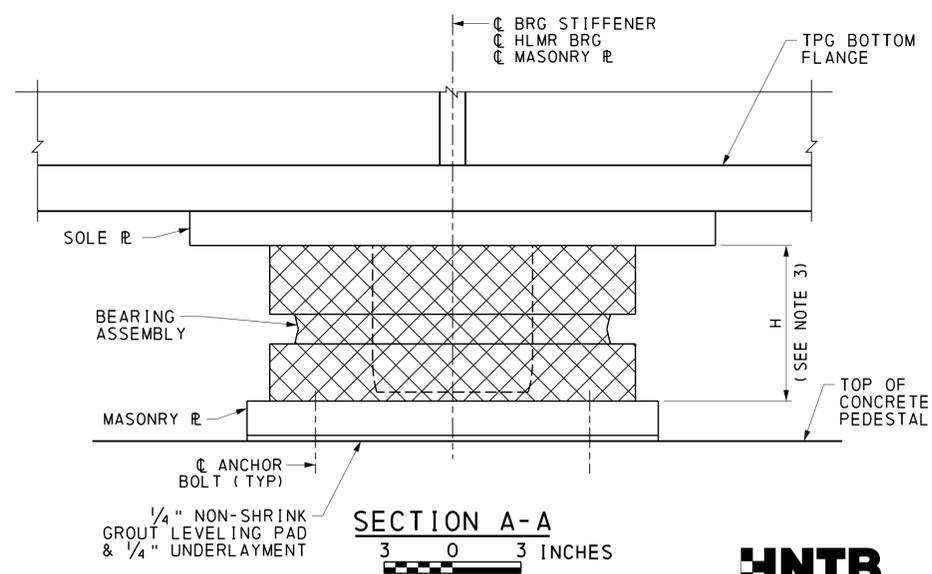
TYPICAL ANCHOR BOLT DETAIL
3 0 3 INCHES

NOTES:

1. THIS SHEET APPLIES TO PIER 1, PROPOSED SPAN 1 BEARINGS.
2. FOR BEARING DESIGN DATA AND NOTES, SEE SHEET 32.
3. DIMENSION "H" IS ASSUMED TO BE 6.72" FOR PLAN DETAILS. CONTRACTOR SHALL ADJUST BEARING SEAT ELEVATION AND CONCRETE PEDESTAL HEIGHT FOR THE SUPPLIED BEARING ASSEMBLY.
4. BEARING DIMENSIONS SHOWN ARE BASED UPON PRELIMINARY BEARING MANUFACTURER DESIGN.



ELEVATION
3 0 3 INCHES



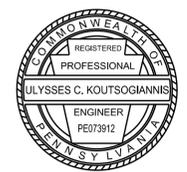
SECTION A-A
3 0 3 INCHES

LEGEND:



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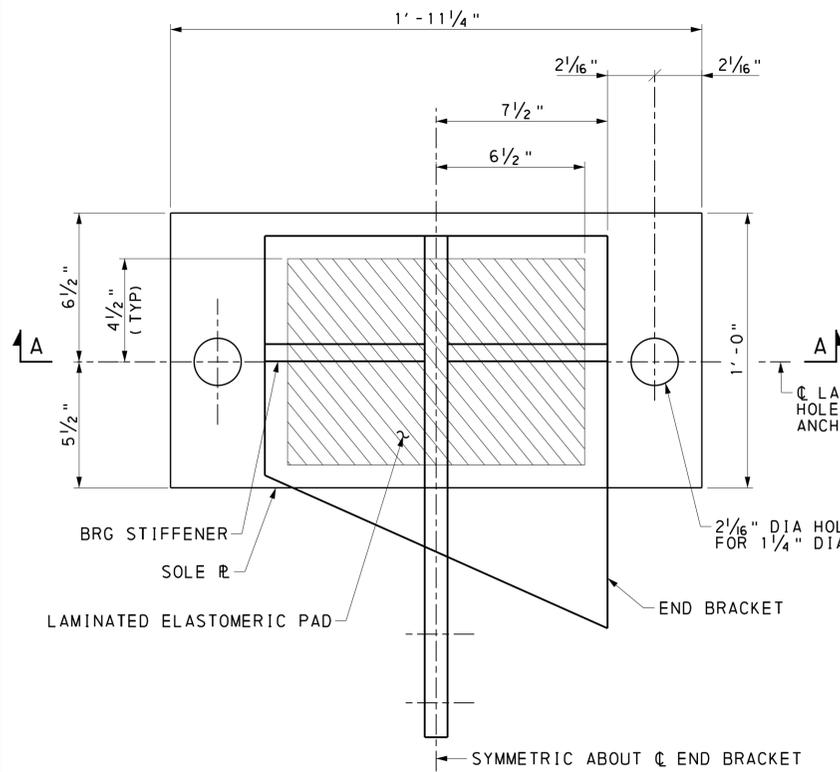
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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
FIXED BEARING DETAILS

RECOMMENDED _____ SHEET 36 OF 54

S-1001RJC

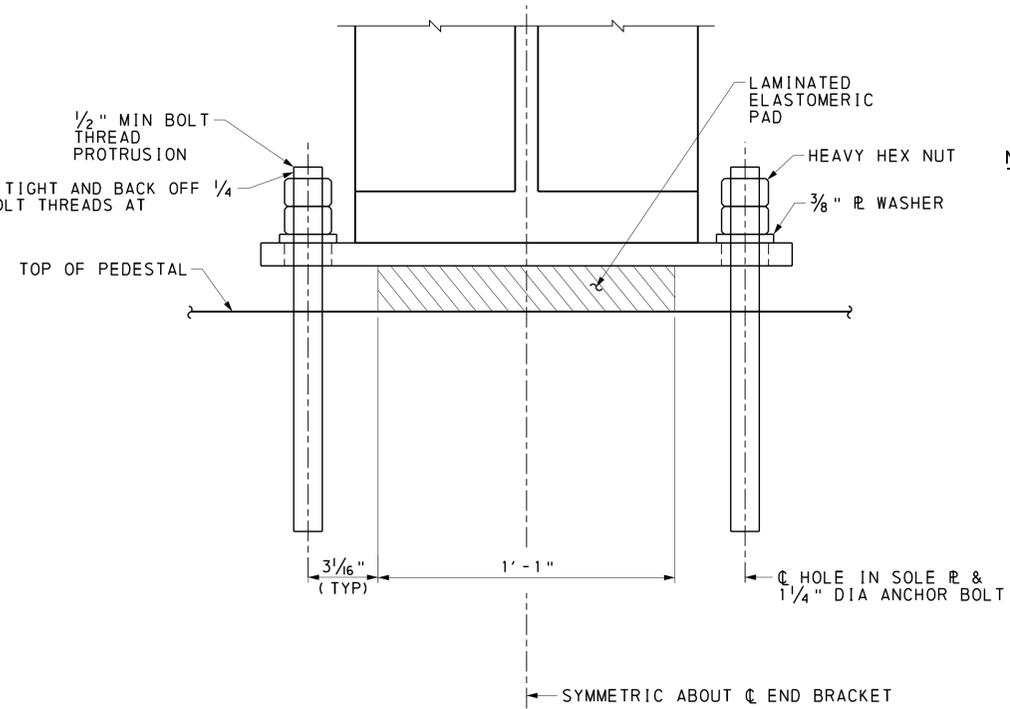
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PLAN-END BRACKET BEARING
6 0 6 INCHES

1/2" MIN BOLT
THREAD
PROTRUSION

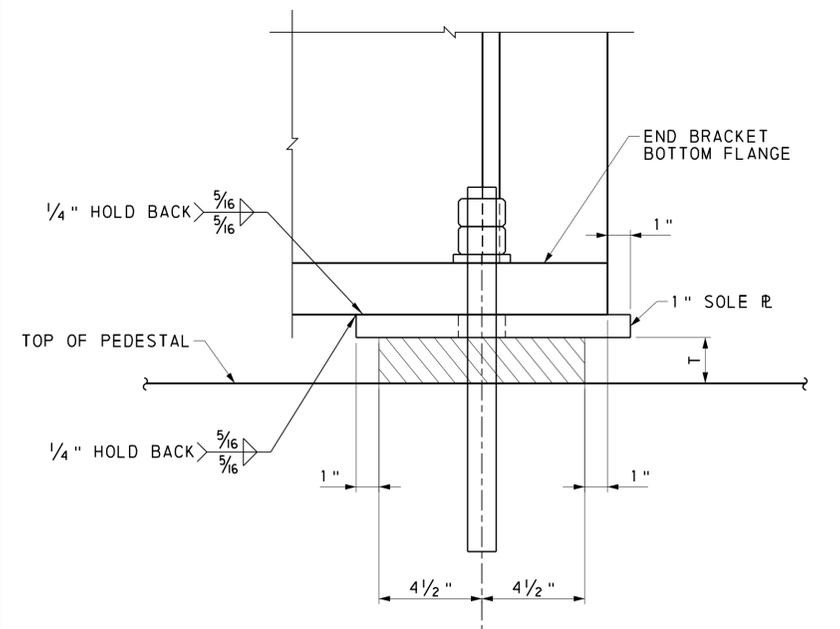
DRAW NUT FINGER TIGHT AND BACK OFF 1/4"
TURN AND PEEN BOLT THREADS AT
FACE OF NUTS



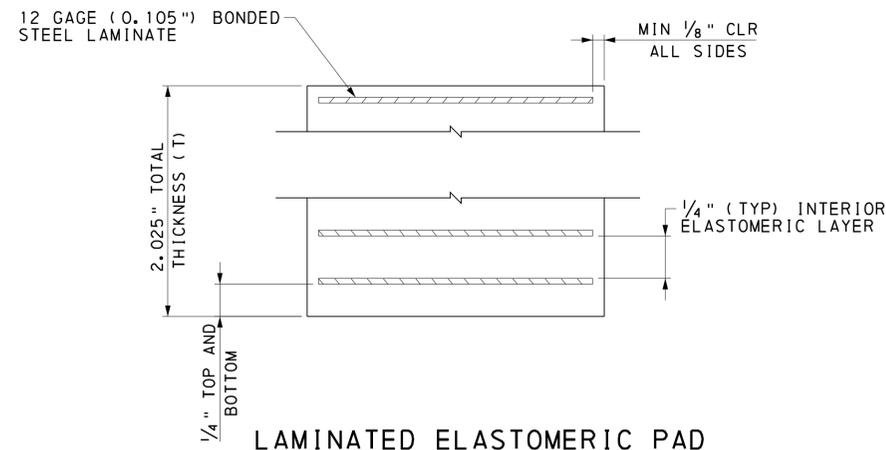
SECTION A-A
6 0 6 INCHES

NOTES:

- SEE SHEET 7 FOR ANCHOR BOLT WELL DETAIL AND NOTES. SEE SHEET 33 FOR TYPICAL ANCHOR BOLT DETAIL.
- THE END BRACKET ELASTOMERIC BEARINGS SHALL BE MANUFACTURED, DELIVERED, AND STORED IN ACCORDANCE WITH AREMA MANUAL CHAPTER 15 SECTION 5.8 AND SECTION 5.12.
- THE CONTRACTOR, IN COORDINATION WITH THE BEARING MANUFACTURER, SHALL SUBMIT DETAILED SHOP DRAWINGS BEFORE ANY FABRICATION OF ELASTOMERIC BEARINGS IS STARTED. THE MANUFACTURER SHALL NOTE ON THE SHOP DRAWINGS THE SHAPE FACTOR, EFFECTIVE ELASTOMER THICKNESS, COMPRESSIVE AREA, SHEAR AREA, WIDTH TO HEIGHT RATIO, AND LENGTH TO HEIGHT RATIO.
- ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER BEARING IS INSTALLED.
- ALL MATERIALS SHALL BE ASTM A709, GRADE 50 EXCEPT AS NOTED OTHERWISE. STEEL REINFORCEMENT FOR LAMINATED ELASTOMERIC PADS SHALL BE ROLLED FROM MILD STEEL CONFORMING TO ASTM A1011, GRADE 36.
- BEARINGS SHALL HAVE F1554 GRADE 105 ANCHOR BOLTS EXTENDED A MINIMUM OF 1'-3" INTO CONCRETE AND SHALL BE PROVIDED WITH WASHER AND HEAVY HEX NUT, ALL GALVANIZED IN ACCORDANCE WITH ASTM A153.
- HARDENED WASHERS SHALL CONFORM TO ASTM F436.
- HEAVY HEX NUTS SHALL CONFORM TO ASTM A563.
- ALL SUBSTRUCTURE REINFORCING SHALL BE POSITIONED TO CLEAR THE ANCHOR BOLT WELLS.
- THE SIZE OF FILLET WELDS FROM THE END BRACKET TO THE SOLE PLATE IS 3/16".
- DO NOT POUR THE CONCRETE PEDESTAL SEATS UNTIL THE BEARING SHOP DRAWINGS ARE APPROVED.
- SUBSTRUCTURE BEARING SURFACES SHALL BE LEVEL, SMOOTH, AND FINISHED TO THE ELEVATION NOTED ON THE PLANS.
- THE TEMPERATURE OF THE STEEL PLATE IN CONTACT WITH THE ELASTOMER SHALL NOT EXCEED 400 DEGREES F DURING THE WELDING PROCESS.
- ALL BEARING PADS ARE TO BE MOLDED TO DESIGN DIMENSIONS. CUTTING TO SIZE AFTER FABRICATION IS PROHIBITED.
- PROVIDE NEOPRENE 60 ±5 DUROMETER WITH MATERIAL PROPERTIES PER AREMA TABLE 15-5-5.
- PAINT THE SOLE PLATE IN ACCORDANCE WITH PUBLICATION 408, SECTION 1060. THE FINISH PAINT COAT IS TO MATCH THE COLOR OF THE EXISTING ADJACENT TRUSS TO REMAIN.
- PREPARE BEARING AREAS AS SPECIFIED IN PUBLICATION 408, SECTION 1001.3(K)9.
- THE END BRACKET BEARING UNFACTORED VERTICAL DESIGN REACTIONS ARE AS FOLLOWS: D=0.7 KIPS, L+I=80 KIPS, TOTAL=80.7 KIPS.



ELEVATION - END BRACKET BEARING
6 0 6 INCHES

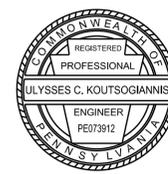


LAMINATED ELASTOMERIC PAD
6 0 6 INCHES

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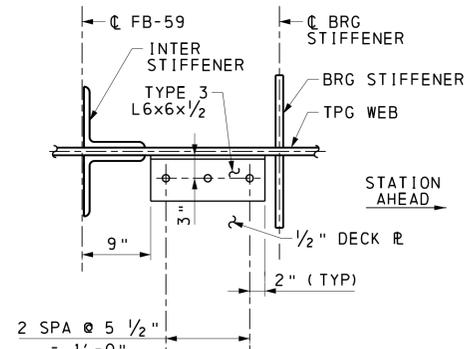
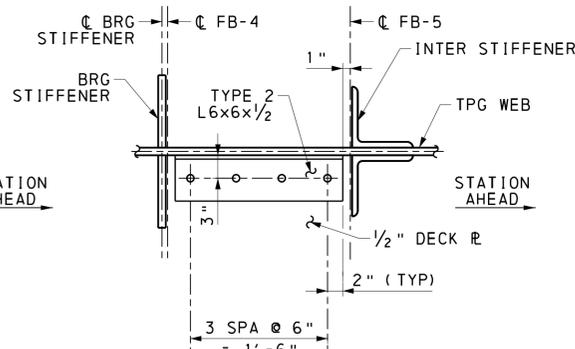
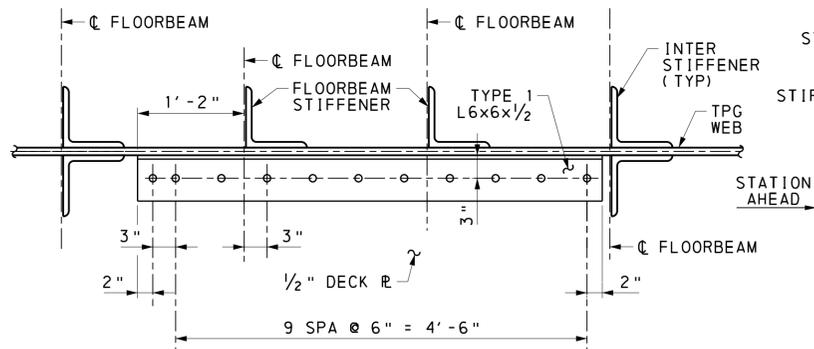
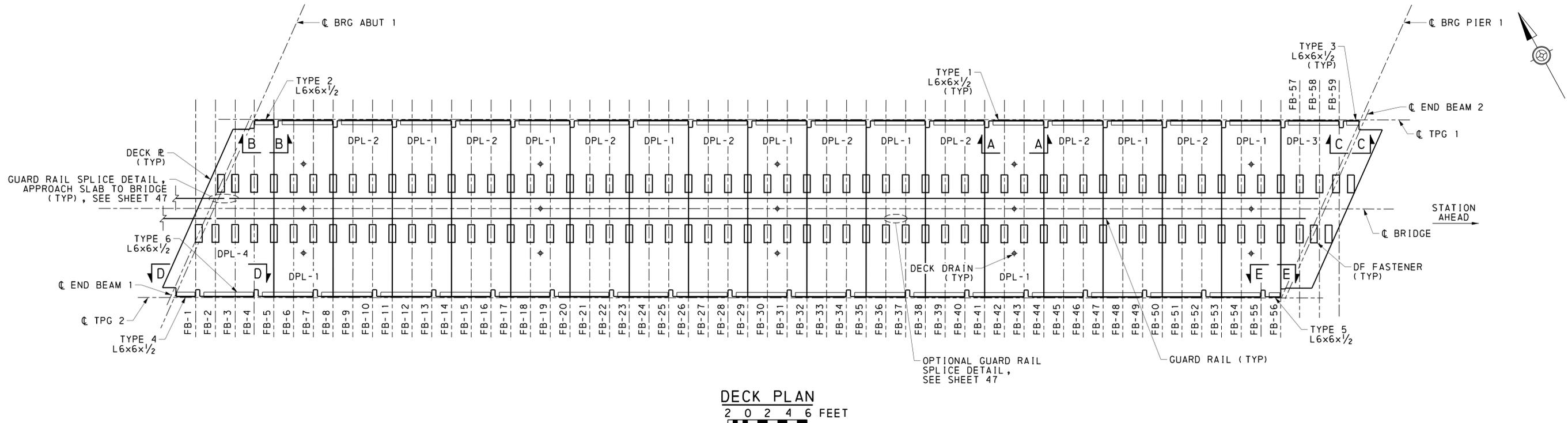
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HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
END BRACKET BEARING DETAILS

RECOMMENDED _____ SHEET 37 OF 54
S-1001RJC

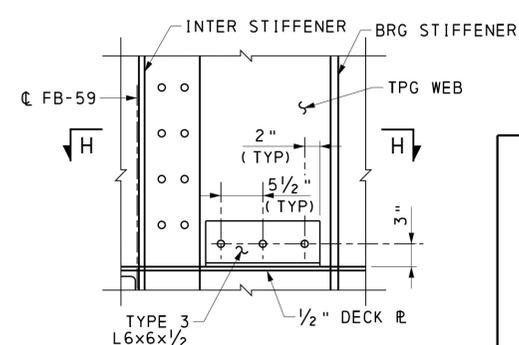
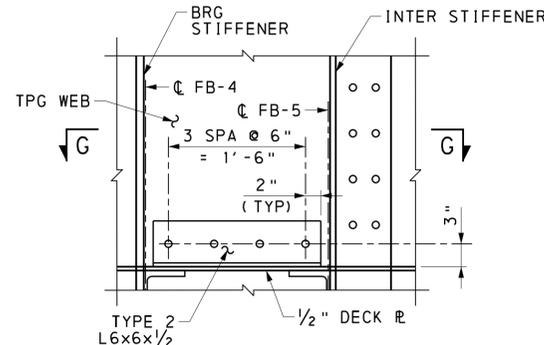
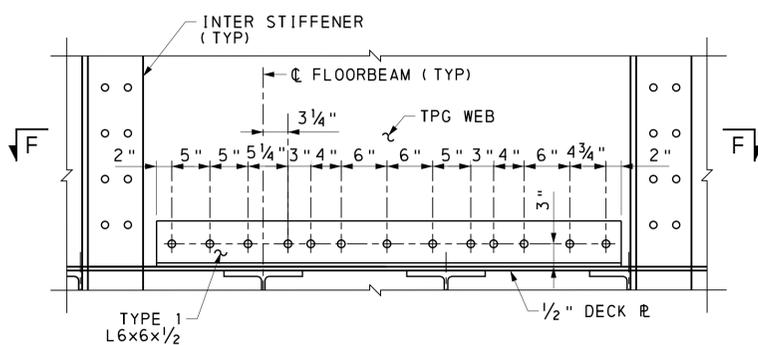
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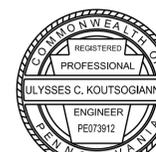
1. FOR STAKE-OUT PLAN, SEE SHEET 6.
2. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
3. FOR GIRDER & FRAMING DETAILS, SEE SHEETS 16-31.
4. DECK PLAN DOES NOT SHOW BOLT HOLES FOR CLARITY.
5. FOR GUARD RAIL DETAILS, SEE SHEET 47.

Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					



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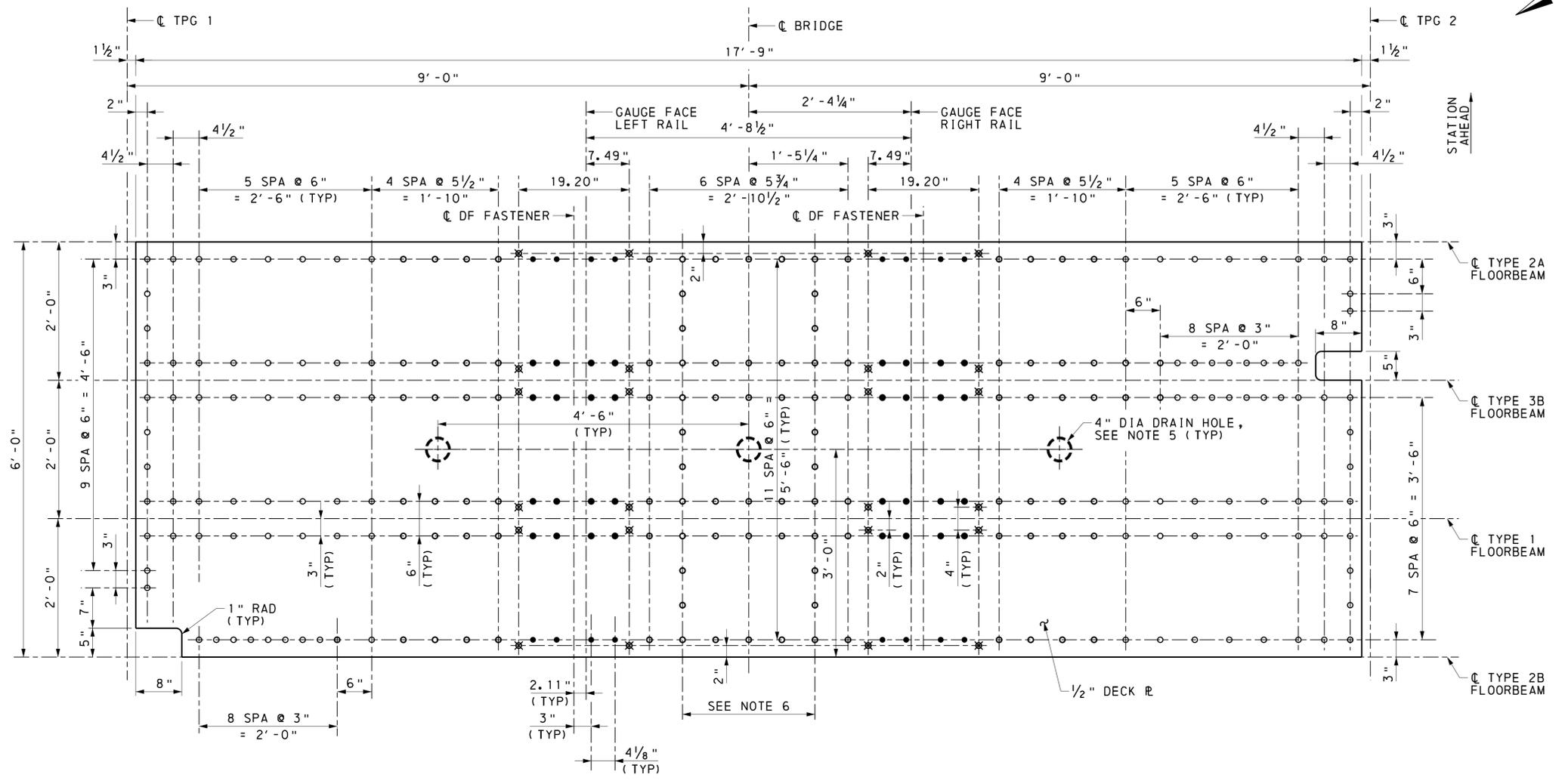
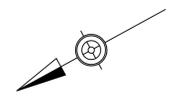


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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
DECK PLAN & DETAILS 1 OF 5

RECOMMENDED _____ SHEET 38 OF 54
S-1001RJC

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DECK PLATE DPL-1 PLAN
6 0 6 12 INCHES

NOTES:

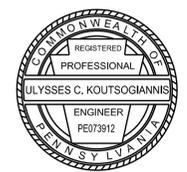
1. FOR STAKE-OUT PLAN, SEE SHEET 6.
2. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
3. FOR GIRDER & FRAMING DETAILS, SEE SHEETS 16-31.
4. FOR DECK PLAN, SEE SHEET 38.
5. DRAIN HOLES SHALL BE PLACED BETWEEN FLOORBEAMS FB 6 & FB 7, FB 18 & FB 19, FB 30 & FB 31, FB 42 & FB 43, FB 54 & FB 55.
6. BOLTS SHALL BE USED TO FASTEN GUARD RAIL TO STRUCTURE. FOR GUARD RAIL DETAILS, SEE SHEET 47.

LEGEND:

- ALL BOLTS A325 UNLESS NOTED OTHERWISE
- HEX HEAD BOLT
 - COUNTERSUNK BOLT
 - ⊗ DIRECT FIXATION FASTENER BOLT

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

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4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

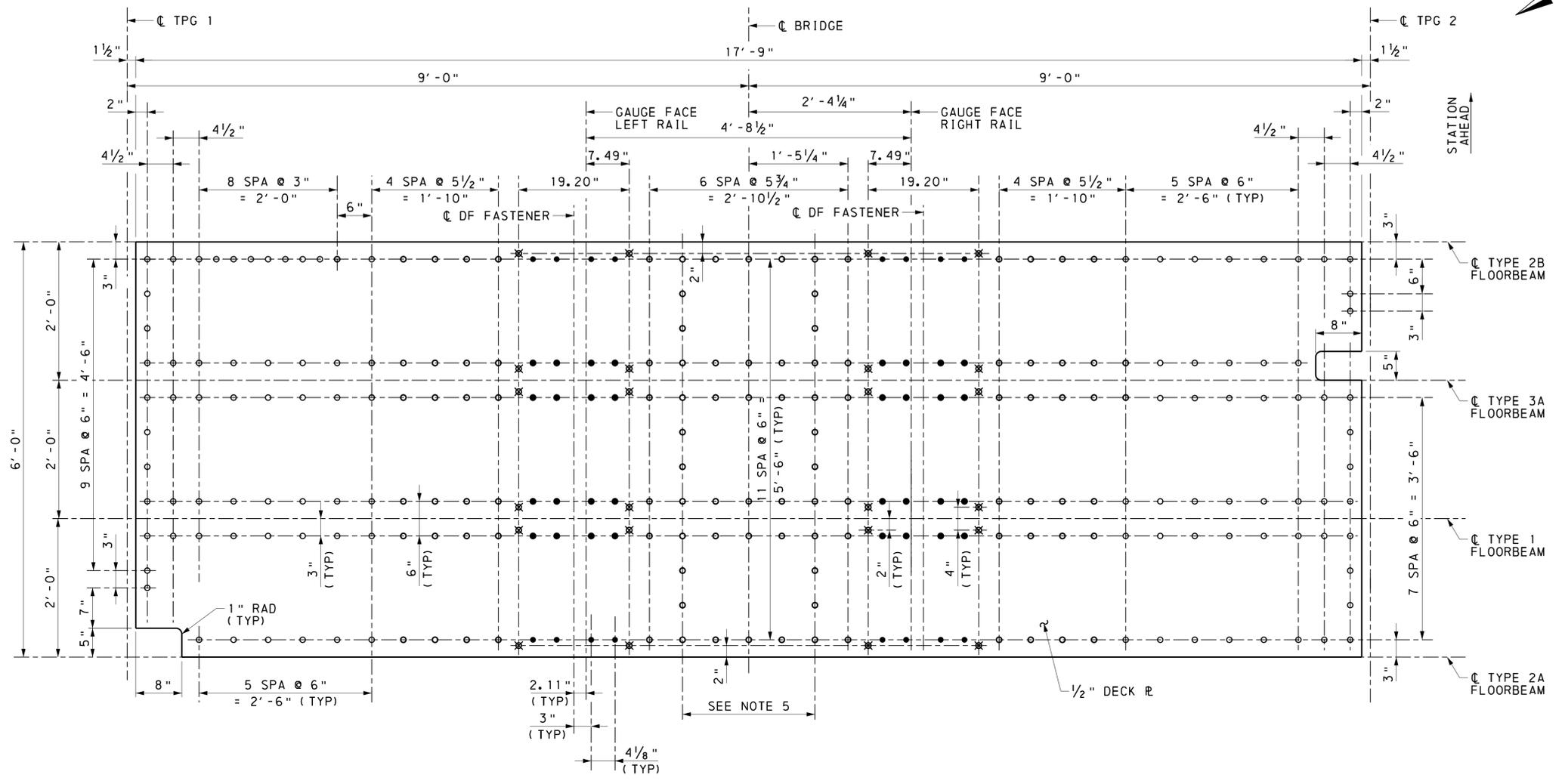
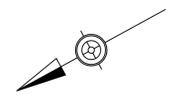
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
DECK PLAN & DETAILS 2 OF 5

RECOMMENDED _____

SHEET 39 OF 54

S-1001RJC

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DECK PLATE DPL-2 PLAN
6 0 6 12 INCHES

NOTES:

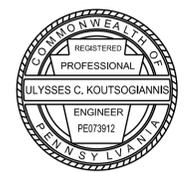
1. FOR STAKE-OUT PLAN, SEE SHEET 6.
2. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
3. FOR GIRDER & FRAMING DETAILS, SEE SHEETS 16-31.
4. FOR DECK PLAN, SEE SHEET 38.
5. BOLTS SHALL BE USED TO FASTEN GUARD RAIL TO STRUCTURE. FOR GUARD RAIL DETAILS, SEE SHEET 47.

LEGEND:

- ALL BOLTS A325 UNLESS NOTED OTHERWISE
- HEX HEAD BOLT
 - COUNTERSUNK BOLT
 - ⊗ DIRECT FIXATION FASTENER BOLT

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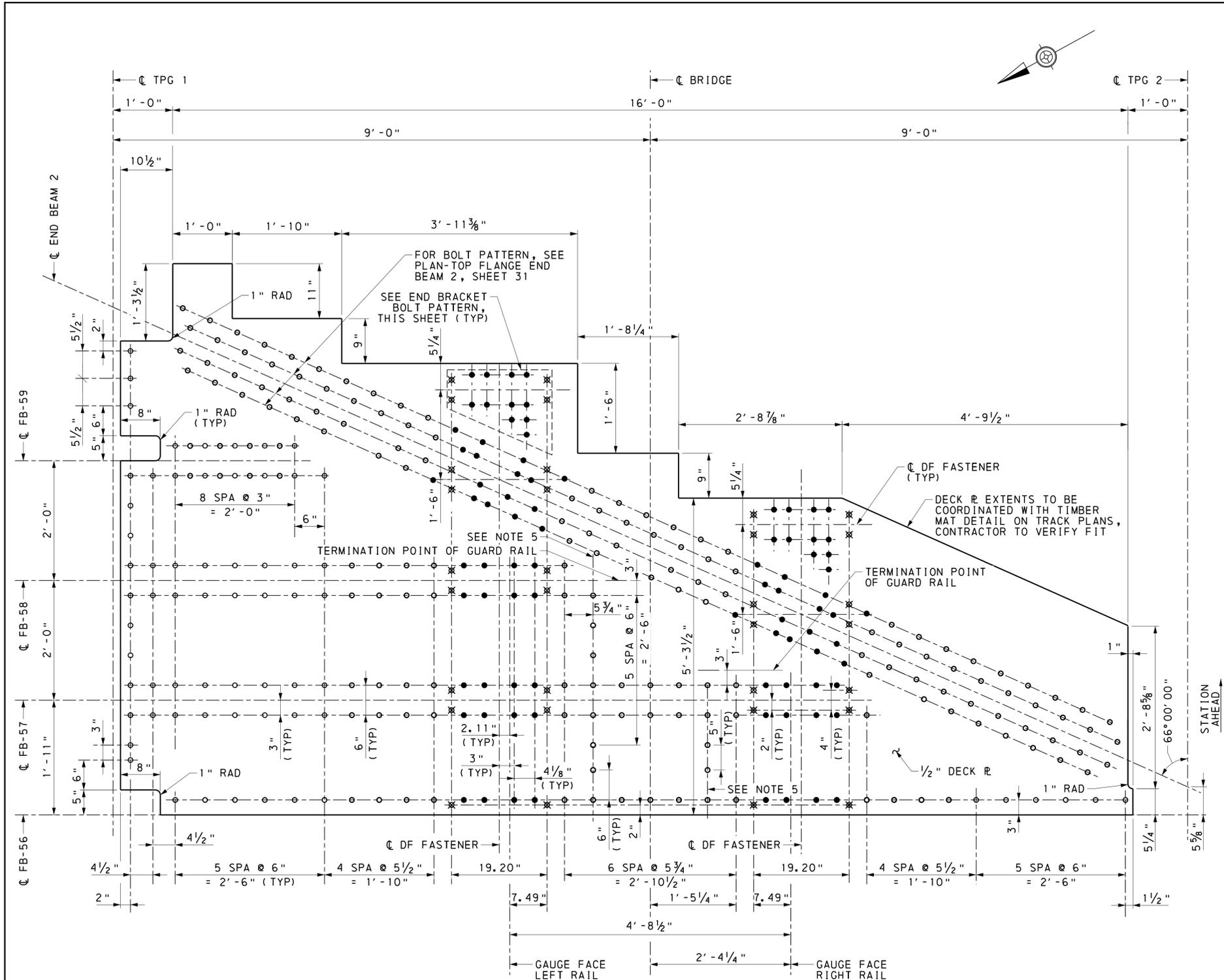
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DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
DECK PLAN & DETAILS 3 OF 5

RECOMMENDED _____ SHEET 40 OF 54

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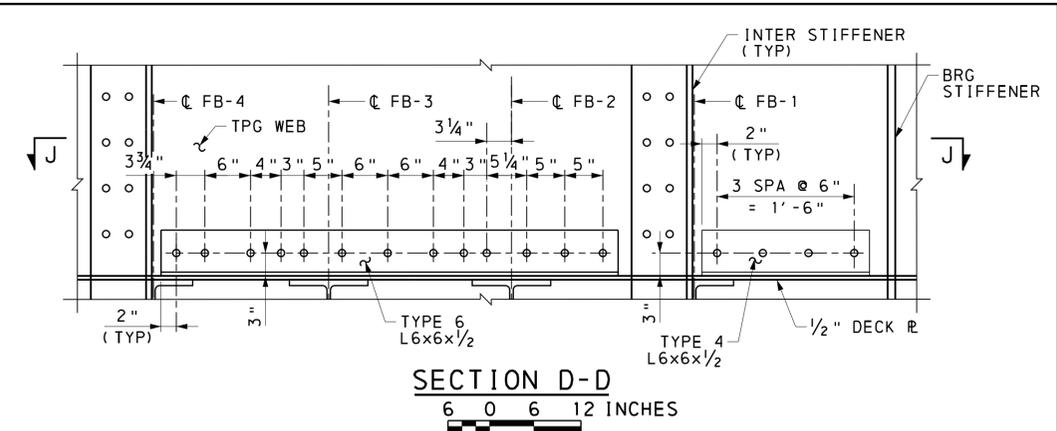
DECK PLATE DPL-3 PLAN
6 0 6 12 INCHES

LEGEND:

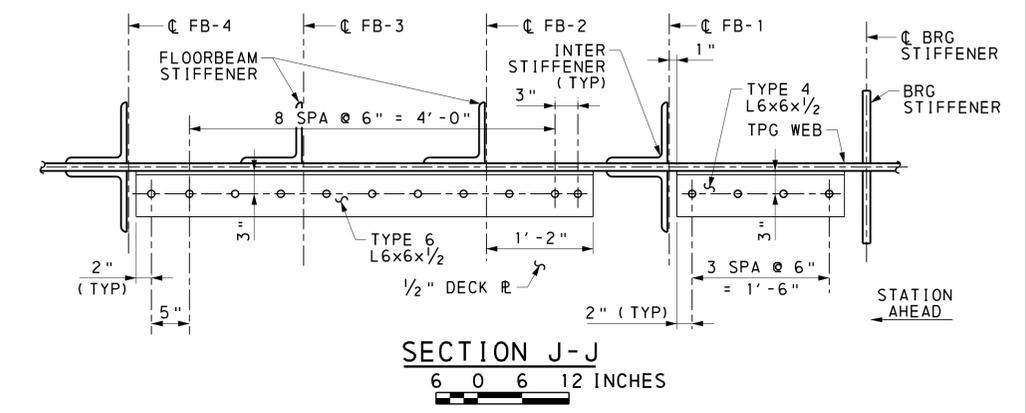
- ALL BOLTS A325 UNLESS NOTED OTHERWISE
- HEX HEAD BOLT
- COUNTERSUNK BOLT
- ⊗ DIRECT FIXATION FASTENER BOLT

NOTES:

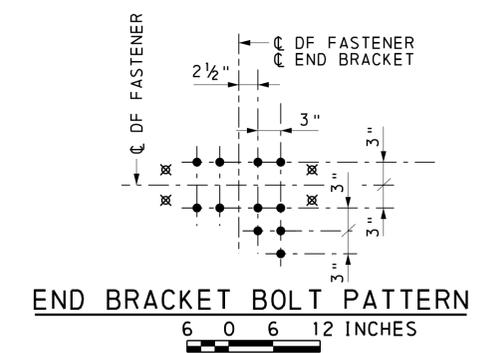
1. FOR STAKE-OUT PLAN, SEE SHEET 6.
2. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
3. FOR GIRDER & FRAMING DETAILS, SEE SHEETS 16-31.
4. FOR DECK PLAN, SEE SHEET 38.
5. BOLTS SHALL BE USED TO FASTEN GUARD RAIL TO STRUCTURE. FOR GUARD RAIL DETAILS, SEE SHEET 47.



SECTION D-D
6 0 6 12 INCHES



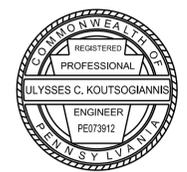
SECTION J-J
6 0 6 12 INCHES



END BRACKET BOLT PATTERN
6 0 6 12 INCHES

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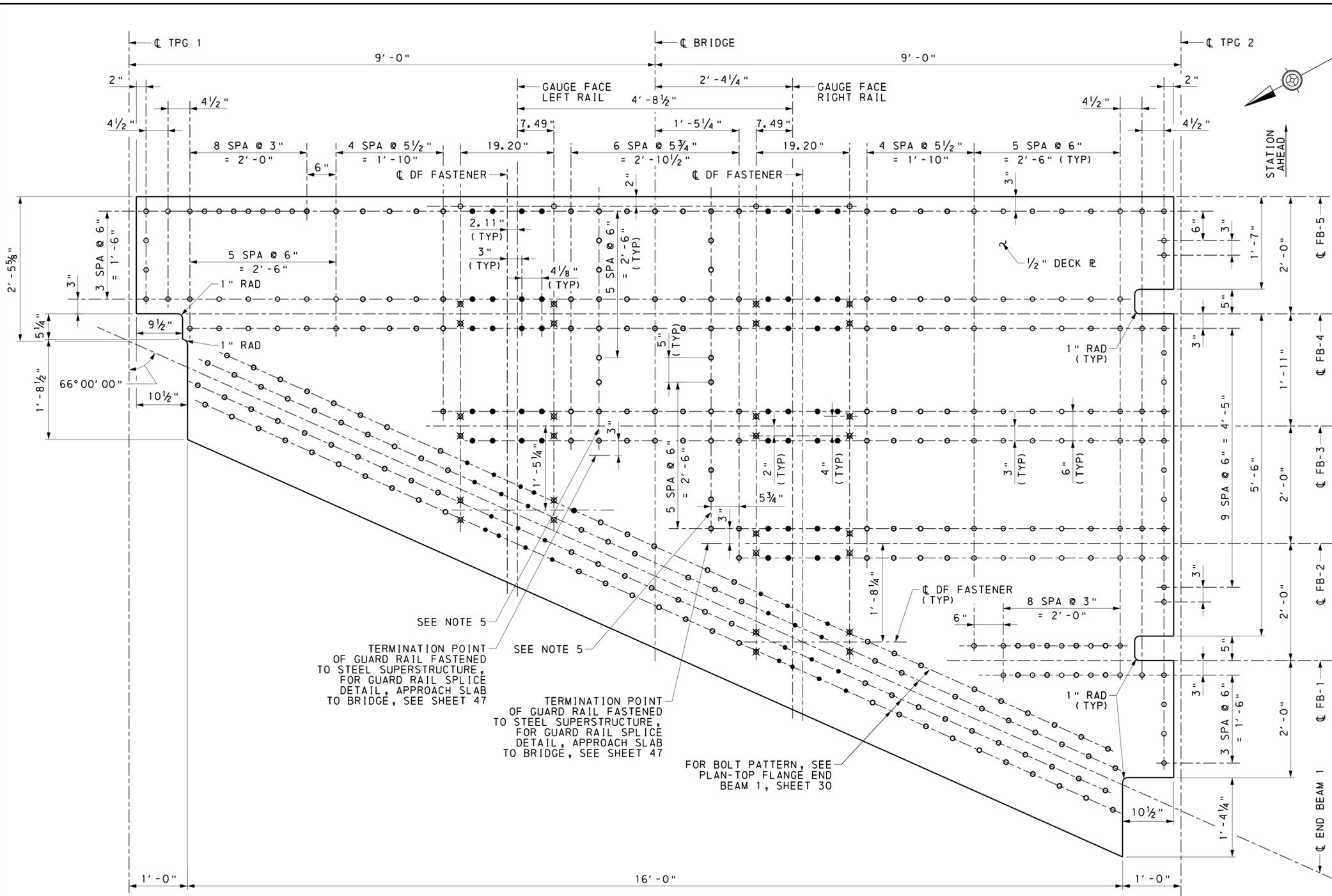


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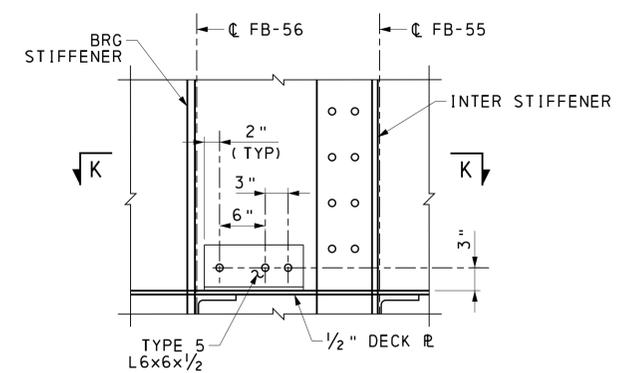
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
DECK PLAN & DETAILS 4 OF 5

RECOMMENDED _____ SHEET 41 OF 54
S-1001RJC

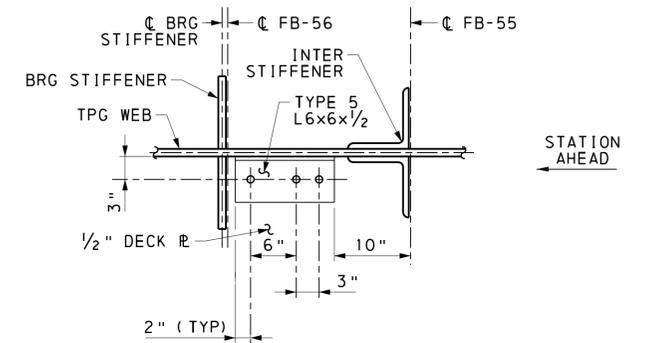
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DECK PLATE DPL-4 PLAN
6 0 6 12 INCHES



SECTION E-E
6 0 6 12 INCHES



SECTION K-K
6 0 6 12 INCHES

SEE NOTE 5
TERMINATION POINT OF GUARD RAIL FASTENED TO STEEL SUPERSTRUCTURE FOR GUARD RAIL SPLICE DETAIL, APPROACH SLAB TO BRIDGE, SEE SHEET 47

SEE NOTE 5
TERMINATION POINT OF GUARD RAIL FASTENED TO STEEL SUPERSTRUCTURE FOR GUARD RAIL SPLICE DETAIL, APPROACH SLAB TO BRIDGE, SEE SHEET 47

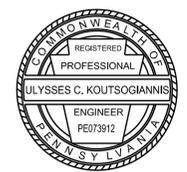
FOR BOLT PATTERN, SEE PLAN-TOP FLANGE END BEAM 1, SHEET 30

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REVISIONS					

- LEGEND:**
- ALL BOLTS A325 UNLESS NOTED OTHERWISE
 - HEX HEAD BOLT
 - COUNTERSUNK BOLT
 - ⊗ DIRECT FIXATION FASTENER BOLT

- NOTES:**
1. FOR STAKE-OUT PLAN, SEE SHEET 6.
 2. FOR FRAMING PLAN & GIRDER ELEVATION, SEE SHEET 15.
 3. FOR GIRDER & FRAMING DETAILS, SEE SHEETS 16-31.
 4. FOR DECK PLAN, SEE SHEET 38.
 5. BOLTS SHALL BE USED TO FASTEN GUARD RAIL TO STRUCTURE. FOR GUARD RAIL DETAILS, SEE SHEET 47.

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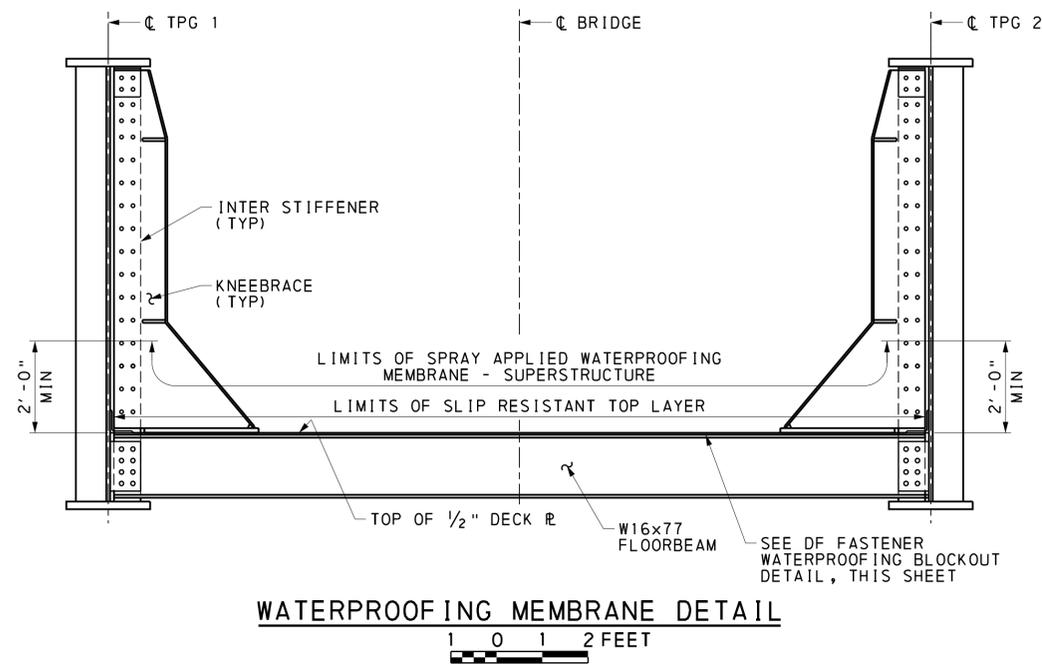
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL THROUGH TRUSS BRIDGE
DECK PLAN & DETAILS 5 OF 5

RECOMMENDED _____

SHEET 42 OF 54

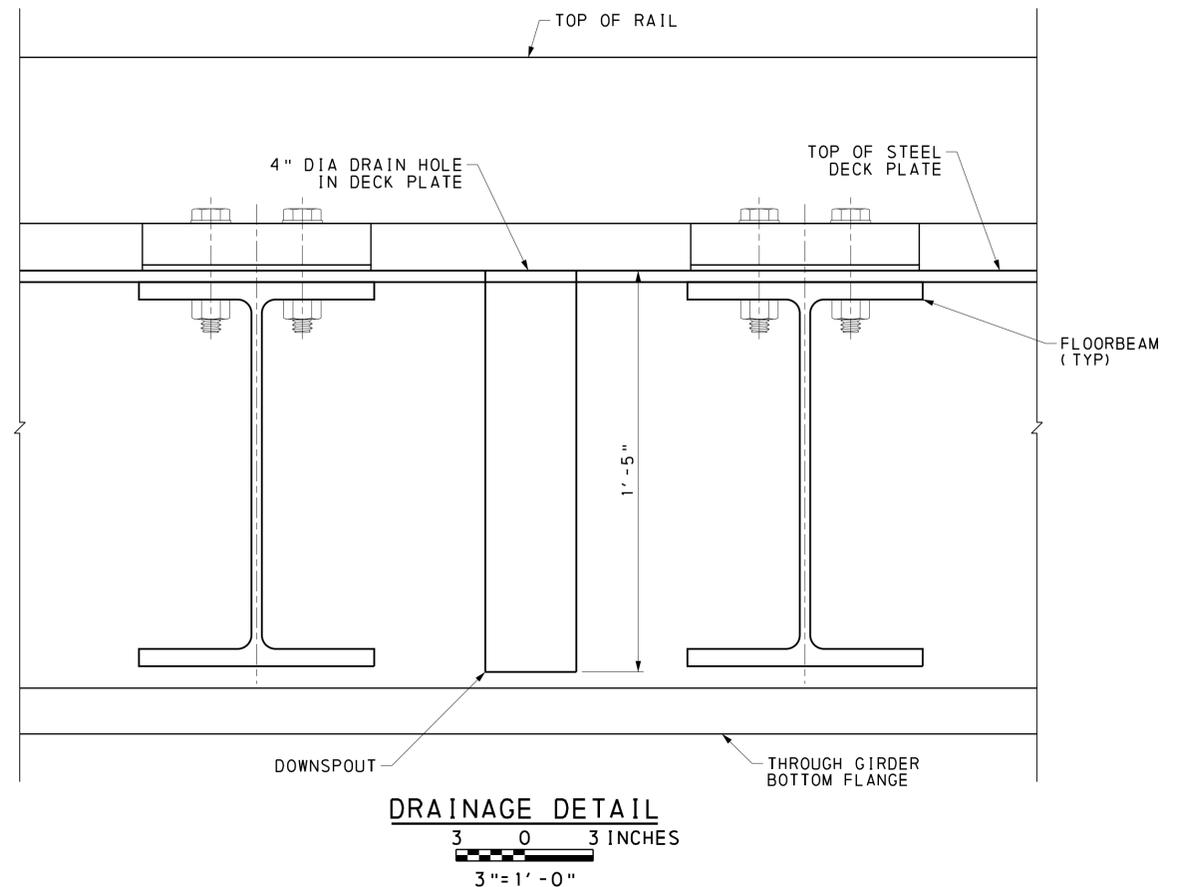
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WATERPROOFING MEMBRANE DETAIL

1 0 2 FEET



DRAINAGE DETAIL

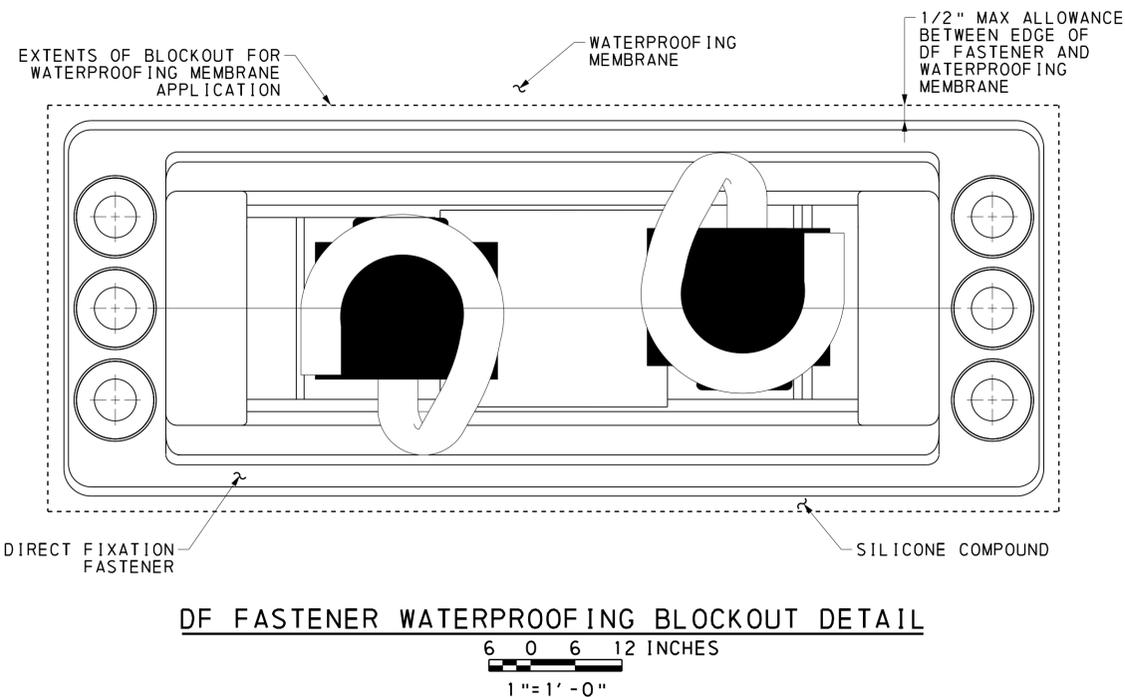
3 0 3 INCHES
3" = 1'-0"

DRAINAGE DETAIL NOTES:

1. DOWNSPOUTS SHALL NOT EXTEND LOWER THAN THE TOP OF THE THROUGH GIRDER BOTTOM FLANGE.
2. THE CONNECTION OF THE DOWNSPOUT TO THE STEEL DECK PLATE SHALL PROMOTE A POSITIVE DRAINAGE PATH THROUGH THE DOWNSPOUT. THE CONNECTION OF THE DOWNSPOUT SHALL BE APPROVED BEFORE FABRICATION OF THE STEEL DECK PLATE AND THE DOWNSPOUT.

NOTES:

1. FOR DECK PLAN & DETAILS, SEE SHEETS 38-42.
2. THE WATERPROOFING MEMBRANE SHALL HAVE A TOP LAYER THAT IS SLIP RESISTANT. THIS TOP LAYER IS INCLUDED WITHIN THE SPRAY APPLIED WATERPROOFING MEMBRANE - SUPERSTRUCTURE ITEM.



DF FASTENER WATERPROOFING BLOCKOUT DETAIL

6 0 6 12 INCHES
1" = 1'-0"

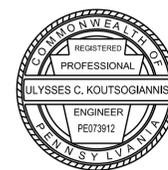
DF FASTENER WATERPROOFING BLOCKOUT NOTES:

1. FOR WATERPROOFING MEMBRANE APPLICATION, THE AREA UNDER & AROUND WHERE THE DIRECT FIXATION FASTENER WILL AFFIX TO THE STEEL DECK SHALL BE BLOCKED OUT TO PREVENT THE WATERPROOFING MEMBRANE FROM BEING APPLIED UNDER THE FASTENER. IF WATERPROOFING MEMBRANE IS APPLIED WITHIN THE BLOCKOUT REGION, IT SHALL BE REMOVED AND THE STEEL DECK PLATE SHALL BE CLEANED.
2. SEE WATERPROOFING BLOCKOUT DETAIL FOR MAX ALLOWANCE FROM EDGE OF DIRECT FIXATION FASTENER TO EDGE OF WATERPROOFING MEMBRANE.
3. AFTER INSTALLATION OF THE DIRECT FIXATION FASTENER, THE AREA BETWEEN THE FASTENER AND THE WATERPROOFING MEMBRANE SHALL BE MADE WATER TIGHT WITH A SILICONE COMPOUND.

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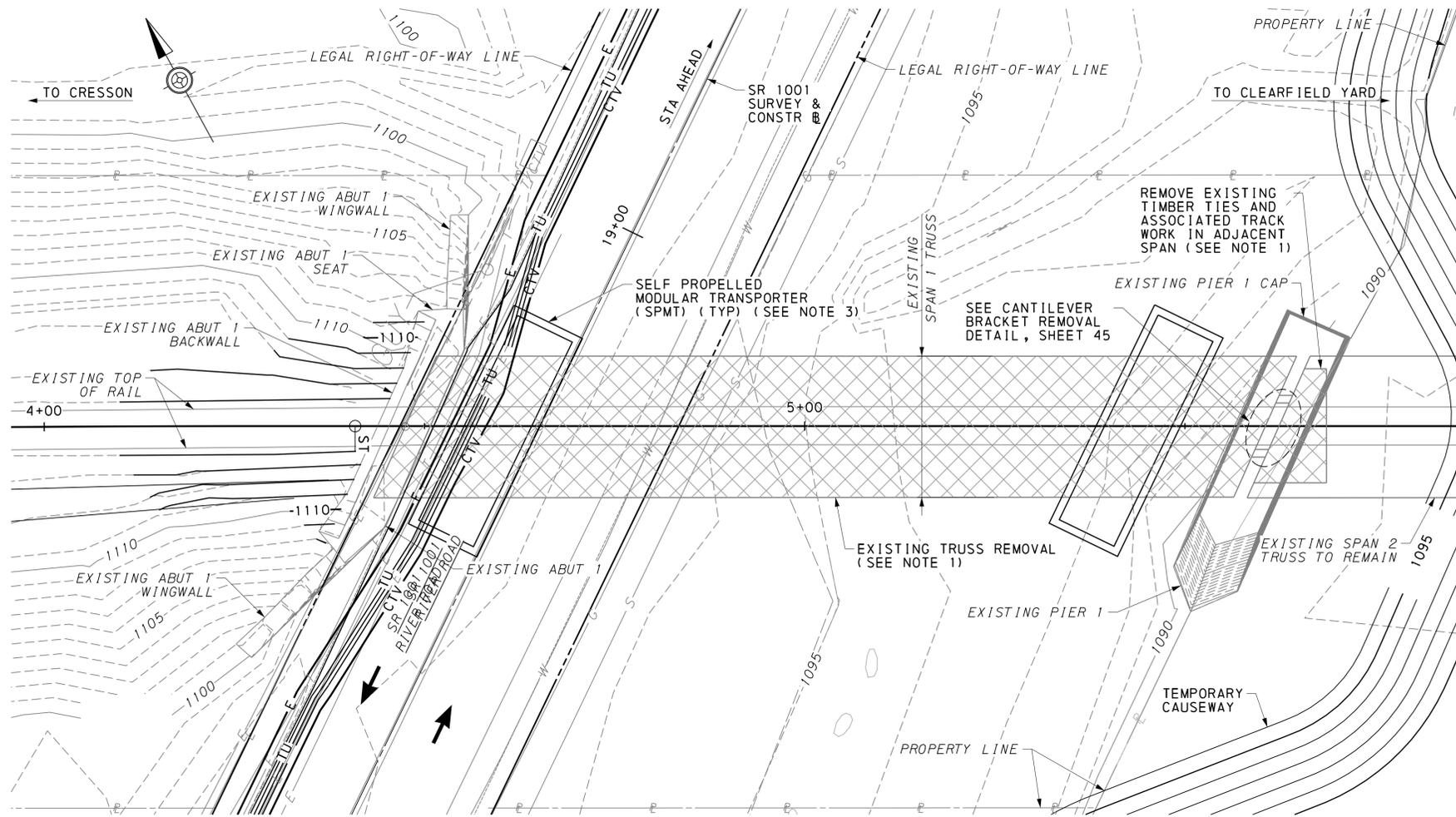
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
DECK WATERPROOFING & DRAINAGE

RECOMMENDED _____ SHEET 43 OF 54

S-1001RJC

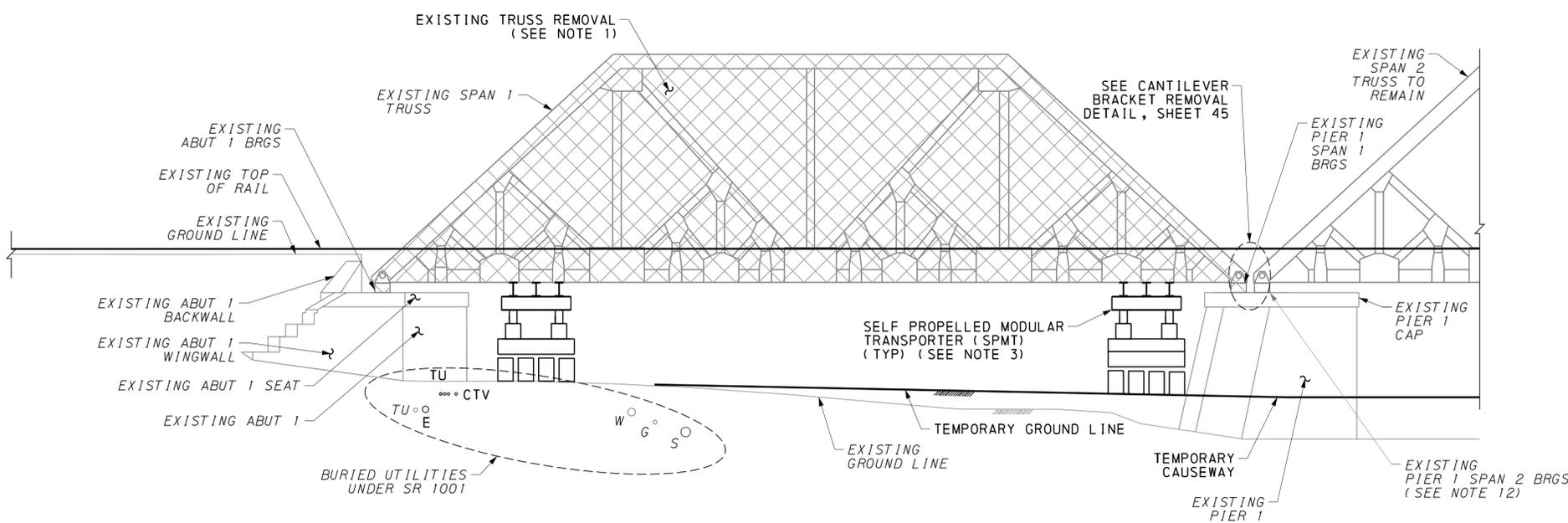
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EXISTING SPAN 1 - PLAN
 5 0 5 10 FEET

SUPERSTRUCTURE REMOVAL NOTES:

1. THE EXISTING SPAN 1 TRUSS SHALL BE REMOVED IN ITS ENTIRETY. THIS INCLUDES THE REMOVAL OF ATTACHMENTS, BEARINGS, AND TRACKWORK TO THE LIMITS SHOWN ON THIS SHEET. TRACKWORK ON EXISTING SPAN 2 SHALL BE REMOVED IN ACCORDANCE WITH TRACK PLANS TO ACCOMMODATE NECESSARY MODIFICATIONS. COORDINATE REMOVAL WITH SUGGESTED CONSTRUCTION SEQUENCE ON STAGING PLAN & ELEVATION SHEETS.
2. A REMOVAL AND DEMOLITION PLAN, SIGNED BY A REGISTERED PROFESSIONAL ENGINEER IN THE COMMONWEALTH OF PENNSYLVANIA, SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO BEGINNING DEMOLITION. THE REMOVAL AND DEMOLITION PLAN/METHOD SHALL MEET THE REQUIREMENTS OF THE REPLACEMENT SCHEDULE.
3. THE CONTRACTOR SHALL DESIGN THE SPMT SYSTEM AND ITS COMPONENTS AND SHALL SUBMIT THE DESIGN TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL. THE SPMT SYSTEM DESIGN AND SHOP DRAWINGS SHALL BE SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE COMMONWEALTH OF PENNSYLVANIA.
4. THE CONTRACTOR SHALL EVALUATE THE STRUCTURAL STABILITY OF THE TRUSS DURING REMOVAL. IF STRENGTHENING OF THE EXISTING TRUSS IS REQUIRED FOR REMOVAL, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS THAT ARE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE COMMONWEALTH OF PENNSYLVANIA.
5. THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT ANY MATERIALS WHICH ARE TO REMAIN IN PLACE WILL NOT BE DAMAGED. IF THE CONTRACTOR DAMAGES ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, THE DAMAGED MATERIALS SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
6. TRACKWORK WITHIN LIMITS OF EXISTING STRUCTURE TO BE REMOVED MAY BE KEPT ON THE STRUCTURE DURING REMOVAL OF THE SPAN IF DEEMED SAFE BY THE CONTRACTOR.
7. FOR SUBSTRUCTURE REPAIR AND REMOVAL DETAILS, SEE SHEETS 8 AND 12.
8. BURIED UTILITIES UNDER SR 1001 SHALL BE PROTECTED DURING EXISTING SUPERSTRUCTURE REMOVAL.
9. SR1001 SHALL BE PROTECTED FROM DAMAGE DURING THE REMOVAL OF THE EXISTING BRIDGE. DEMOLITION OF EXISTING SUPERSTRUCTURE IS NOT TO OCCUR ON SR 1001.
10. THE EXISTING SPAN 1 TRUSS WEIGHS APPROXIMATELY 344 KIPS INCLUDING STEEL DEAD LOAD, ATTACHMENTS, AND TRACKWORK. THE SOUTH TRUSS IS MADE FROM HEAVIER CONSTRUCTION WHEN COMPARED TO THE NORTH TRUSS AND THEREFORE HAS A HIGHER DEAD LOAD. THIS UNBALANCED LOAD SHOULD BE ACCOUNTED FOR WHEN REMOVING THE SPAN.
11. HYDRAULIC JACKS FOR VERTICALLY LIFTING THE SPAN SHALL HAVE A CAPACITY OF 2 TIMES THE VERTICAL LOAD AT EACH SUPPORT LOCATION. SUFFICIENT JACK REDUNDANCY SHALL BE PROVIDED TO BE ABLE TO CONTINUE THE WORK IN CASE OF SINGLE HYDRAULIC JACK FAILURE.
12. FOR EXISTING PIER 1 SPAN 2 BEARING REPLACEMENT DETAILS, SEE SHEETS 34 AND 35.
13. PREPARE AND SUBMIT ALL DOCUMENTS TO OBTAIN PERMITS AND APPROVALS NECESSARY TO REMOVE, TRANSPORT, AND DISPOSE OF THE DEMOLISHED STRUCTURE.
14. REFER TO CONTRACT SPECIAL PROVISIONS FOR FURTHER DETAILS.



EXISTING SPAN 1 - ELEVATION
 5 0 5 10 FEET

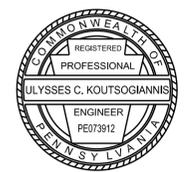
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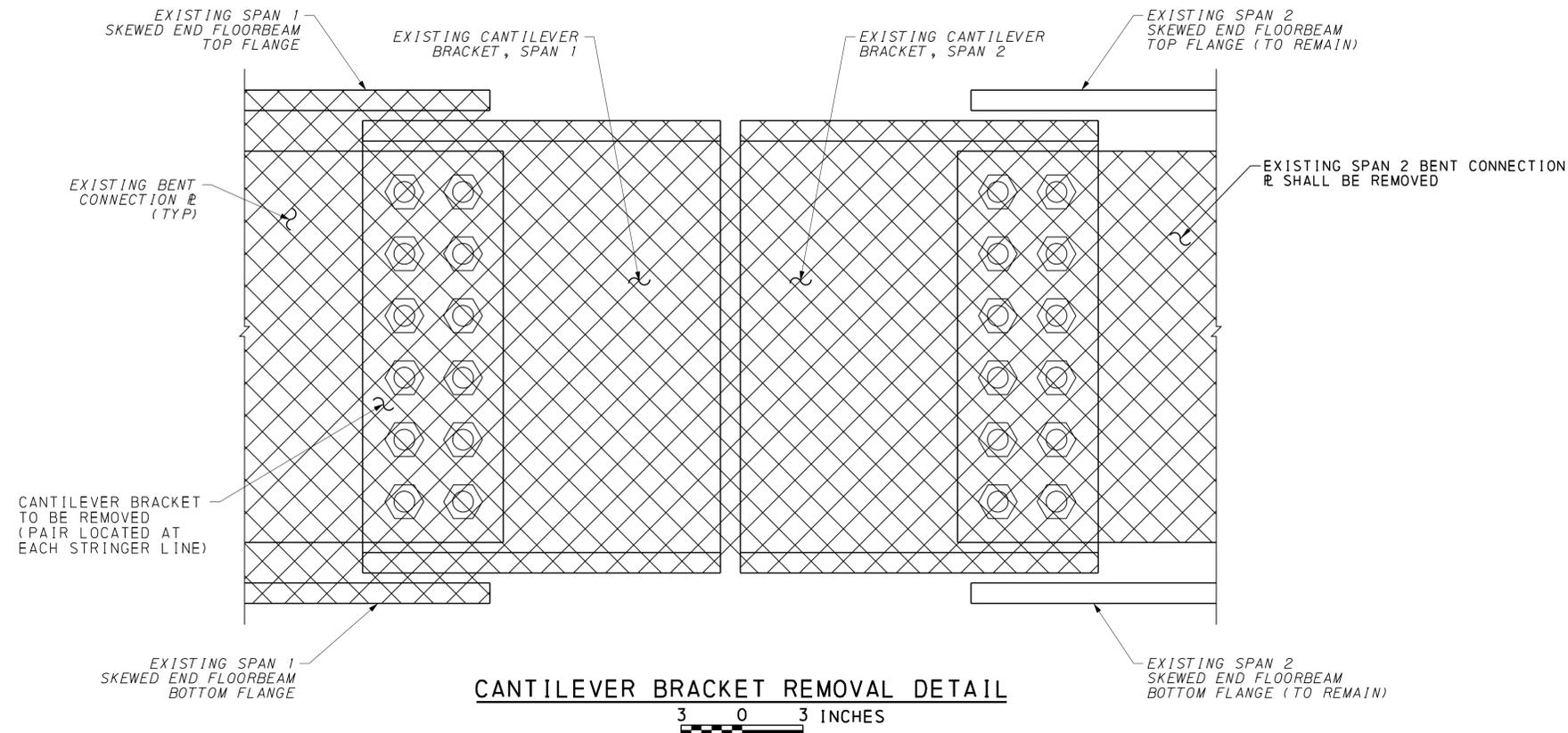
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COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
 CLEARFIELD COUNTY
 SR 1001 SECTION MTF
 SEG 0132 OFFSET 0701
 CR 65.60 (CRESSON BRANCH) STA 4+65.11
 OVER SR 1001 (RIVER ROAD)
 STEEL THROUGH PLATE GIRDER & STEEL
 THROUGH TRUSS BRIDGE
 EXISTING SPAN 1 DEMO DETAILS

RECOMMENDED _____ SHEET 44 OF 54

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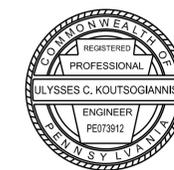
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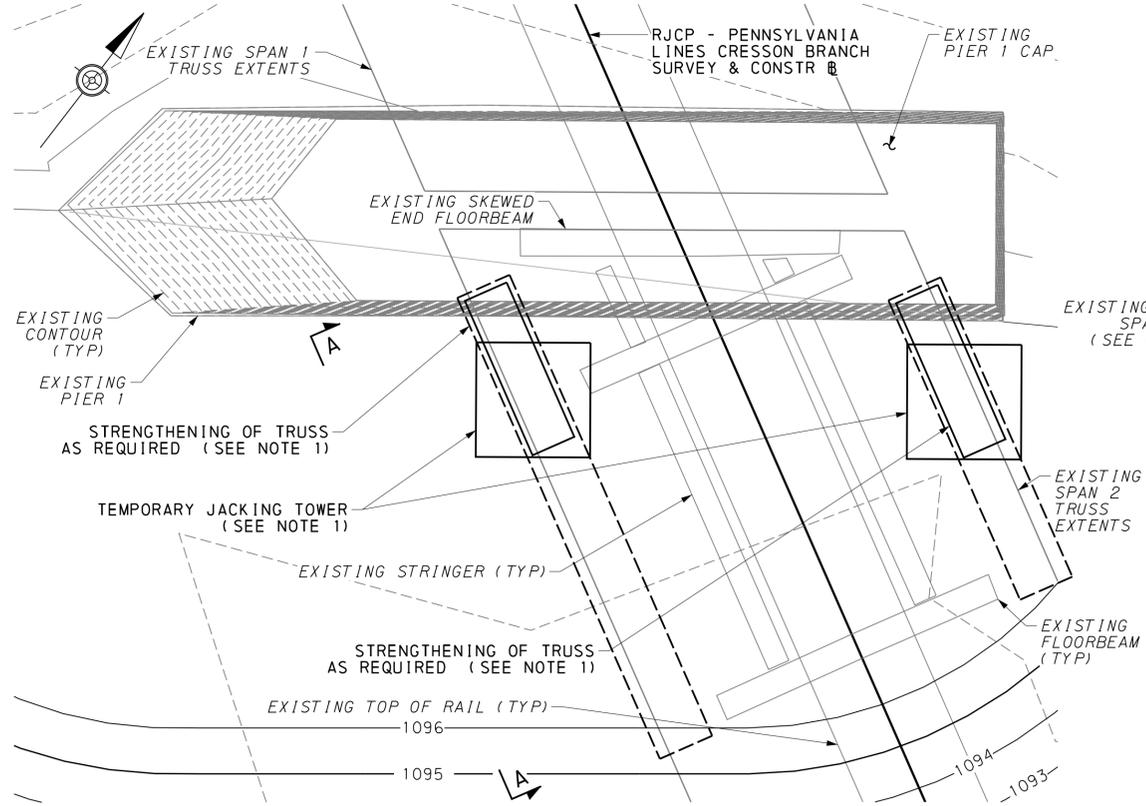
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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
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OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
EXISTING SPAN 2 RETROFIT DETAILS

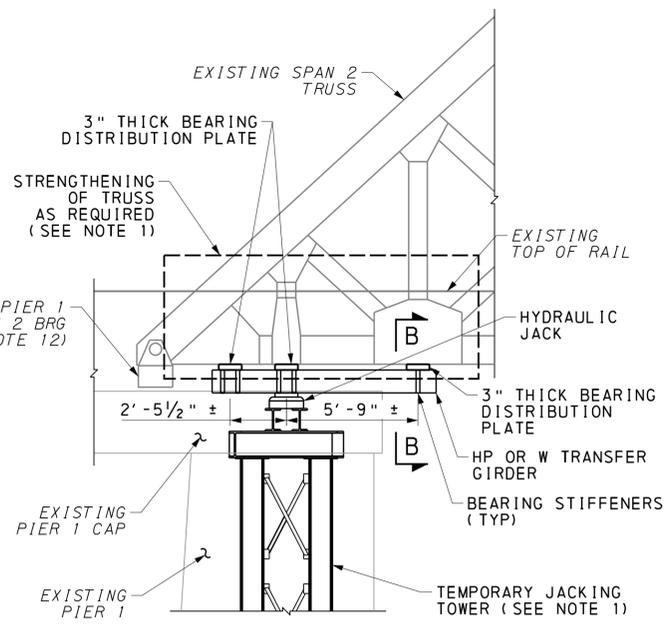
RECOMMENDED _____ SHEET 45 OF 54
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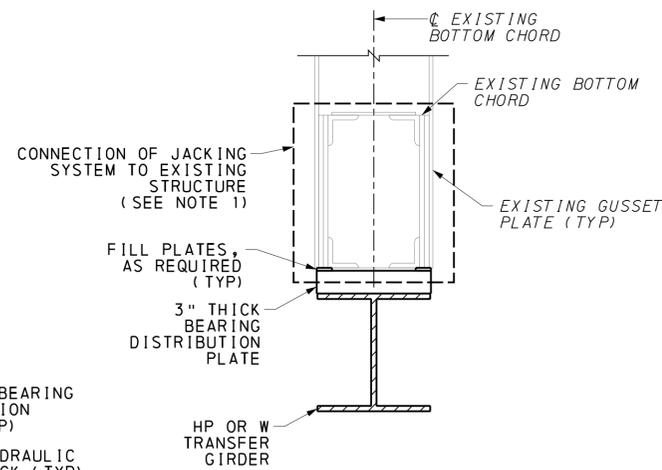
CONCEPTUAL TEMPORARY JACKING DETAIL - PLAN

2 0 2 4 FEET



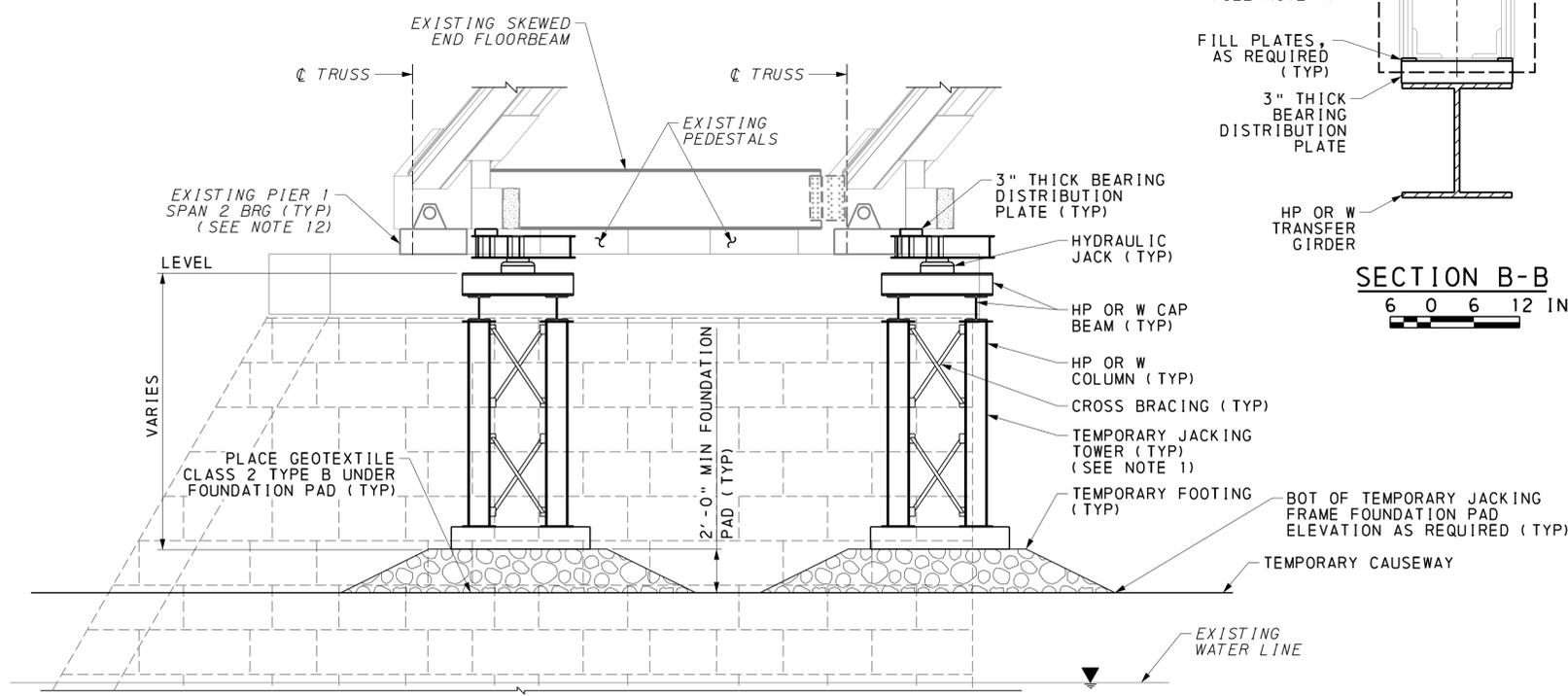
SECTION A-A

2 0 2 4 FEET
(SOUTH TRUSS SHOWN, NORTH TRUSS SIMILAR)



SECTION B-B

6 0 6 12 INCHES



CONCEPTUAL TEMPORARY JACKING DETAIL - ELEVATION

2 0 2 4 FEET

(PIER 1 EAST FACE SHOWN)

NOTES:

1. THE CONTRACTOR SHALL DESIGN THE VERTICAL JACKING SYSTEM, TEMPORARY JACKING TOWERS, ASSOCIATED COMPONENTS, CONNECTION TO THE EXISTING STRUCTURE, AND ANY NECESSARY STRENGTHENING OF EXISTING SPAN 2. THE CONTRACTOR SHALL SUBMIT THE DESIGN TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL. THE DESIGN AND SHOP DRAWINGS OF THE VERTICAL JACKING SYSTEM, TEMPORARY JACKING TOWERS, CONNECTION TO THE EXISTING STRUCTURE, AND STRENGTHENING OF EXISTING SPAN 2 SHALL BE SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE COMMONWEALTH OF PENNSYLVANIA.
2. A JACKING PLAN, SIGNED BY A REGISTERED PROFESSIONAL ENGINEER IN THE COMMONWEALTH OF PENNSYLVANIA, SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO BEGINNING JACKING. THE JACKING PLAN/METHOD SHALL MEET THE REQUIREMENTS OF THE REPLACEMENT SCHEDULE.
3. THE JACKING DETAILS SHOWN ARE SUGGESTED AND CONCEPTUAL DETAILS ONLY.
4. THE CONTRACTOR SHALL EVALUATE THE STRUCTURAL STABILITY OF THE TRUSS AND ADJACENT TRUSSES DURING VERTICAL JACKING. THE CONDITION OF ALL BEARINGS SHALL BE EVALUATED BEFORE JACKING OPERATIONS OCCUR. AIDS FOR STABILITY, SUCH AS TEMPORARY TIE DOWNS, SHALL BE USED IF NECESSARY AT BEARING LOCATIONS.
5. CLOSE THE BRIDGE AND SR1001 TO TRAFFIC IN ACCORDANCE WITH THE CONTRACT SPECIAL PROVISIONS.
6. JACK ALL TRUSS LINES AT EACH SUPPORT SIMULTANEOUSLY. CONTRACTOR TO FURNISH AND INSTALL GAUGES FOR THE MEASUREMENT OF THE SUPERSTRUCTURE MOVEMENT. JACK LOCATION SHALL BE AS CLOSE AS FEASIBLE TO EXISTING BEARING LOCATION.
7. MONITOR DIFFERENTIAL POSITIONS OF TRUSS LINES BY ACCURATE SURVEY TO ENSURE STABILITY.
8. DO NOT PERFORM JACKING DURING HIGH WIND VELOCITIES OR IN OTHER ADVERSE CONDITIONS PER OSHA REQUIREMENTS.
9. FOR TEMPORARY SUPPORTS FOUNDED ON SPREAD FOOTINGS, RAISE THE BRIDGE A MINIMUM HEIGHT OF 1/8" AND HOLD THAT ELEVATION FOR 6 HOURS. DO NOT REMOVE THE BEARINGS AND PIER CAP UNTIL IT IS VERIFIED THAT NO SETTLEMENT HAS OCCURRED DURING THIS TIME FRAME.
10. THE EXISTING SPAN 2 TRUSS WEIGHS APPROXIMATELY 344 KIPS INCLUDING STEEL DEAD LOAD, ATTACHMENTS, AND TRACKWORK. THE SOUTH TRUSS IS MADE FROM HEAVIER CONSTRUCTION WHEN COMPARED TO THE NORTH TRUSS AND THEREFORE HAS A HIGHER DEAD LOAD. THIS UNBALANCED LOAD SHOULD BE ACCOUNTED FOR WHEN JACKING THE SPAN. DEAD LOAD WAS CALCULATED BASED ON FIELD EVALUATION OF EXISTING SPAN 1, CONTRACTOR SHALL VERIFY.
11. HYDRAULIC JACKS FOR VERTICALLY LIFTING THE SPAN SHALL HAVE A CAPACITY OF 2 TIMES THE VERTICAL LOAD AT EACH SUPPORT LOCATION. SUFFICIENT JACK REDUNDANCY SHALL BE PROVIDED TO BE ABLE TO CONTINUE THE WORK IN CASE OF SINGLE HYDRAULIC JACK FAILURE.
12. FOR EXISTING PIER 1 SPAN 2 BEARING REPLACEMENT DETAILS, SEE SHEETS 34 AND 35.
13. THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT ANY MATERIALS WHICH ARE TO REMAIN IN PLACE WILL NOT BE DAMAGED. IF THE CONTRACTOR DAMAGES ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, THE DAMAGED MATERIALS SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
14. REFER TO CONTRACT SPECIAL PROVISIONS FOR FURTHER DETAILS.

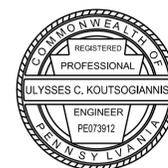
FOUNDATION PAD NOTES:

1. LEVEL THE TOP OF THE TEMPORARY CAUSEWAY AND COMPACT THE SUBGRADE OF THE FOUNDATION PAD FOOTPRINT.
2. PLACE CLASS 2, TYPE B GEOTEXTILE OVER THE PREPARED SUBGRADE PRIOR TO CONSTRUCTING TOWERS.
3. PLACE AND COMPACT PENNDOT NO 2A COARSE AGGREGATE TO A MINIMUM DEPTH OF 2' AND TO THE REQUIRED ELEVATION. EXTEND THE TOP SURFACE OF THE AGGREGATE PLACEMENT TO A MINIMUM LATERAL DISTANCE OF 2' BEYOND ALL SIDES OF THE TEMPORARY FOUNDATION OF THE JACKING FRAME AND MAINTAIN AT LEAST 1:1 SIDE SLOPES AFTER PLACING AND COMPACTING THE AGGREGATE. PLACE IN LOOSE LIFTS OF NO GREATER THAN 8" AND COMPACT TO 100% OF THE MAXIMUM DRY DENSITY. THE SURFACE OF THE FILL SHOULD BE LEVEL TO ACCOMMODATE THE TEMPORARY FOUNDATION OF THE JACKING FRAME.
4. REFER TO E&S PLANS FOR TEMPORARY CAUSEWAY TYPICAL SECTION.

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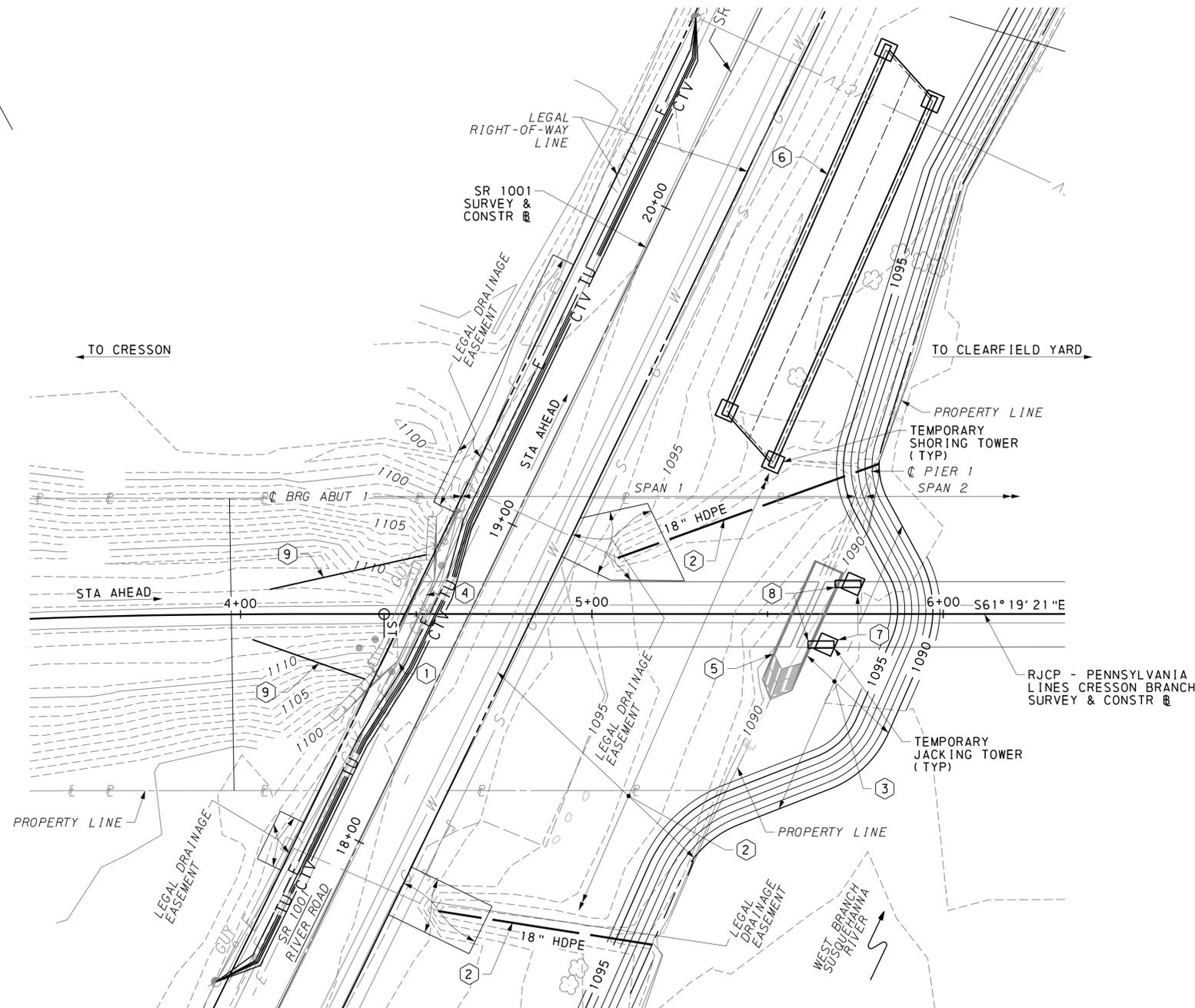
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
CONCEPTUAL TRUSS JACKING DETAILS

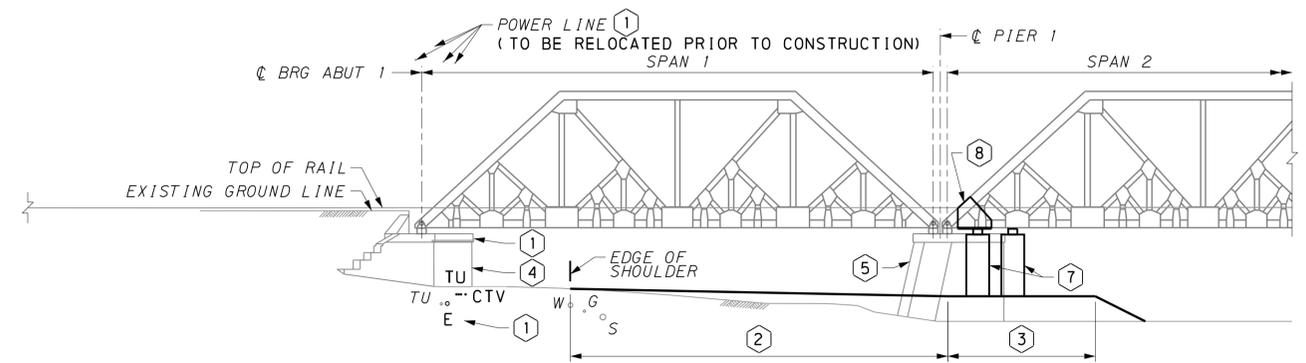
RECOMMENDED _____

SHEET 46 OF 54
S-1001RJC

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PLAN
10 0 10 20 FEET
10 NOT SHOWN FOR CLARITY



ELEVATION
10 0 10 20 FEET
6 10 NOT SHOWN FOR CLARITY

SUGGESTED CONSTRUCTION SEQUENCE

PRE-CONSTRUCTION:

1 UTILITY RELOCATION WORK INVOLVING THE ELECTRICAL AND TELECOMMUNICATION LINES AT THE ABUTMENT IS COMPLETED PRIOR TO MOBILIZATION AND SITE PREPARATION.

STAGE 1:

- 2 PREPARE SITE FOR CONSTRUCTION. EXTEND EXISTING DRAINAGE PIPES, ESTABLISH NEAR LEVEL GRADE THROUGHOUT WORK AREA, PROTECT EXISTING UNDERGROUND UTILITIES AS REQUIRED. NO VIBRATORY EQUIPMENT SHALL BE USED FOR COMPACTION.
- 3 CONSTRUCT TEMPORARY CAUSEWAY.
- 4 REPOINT MASONRY AND PERFORM CRACK REPAIRS AT ABUTMENT 1.
- 5 REPOINT MASONRY AND PERFORM CRACK REPAIRS AT PIER 1.
- 6 CONSTRUCT NEW THROUGH GIRDER SPAN ON TEMPORARY SHORING IN BRIDGE STAGING AREA.
- 7 ERECT PIER 1 JACKING TOWERS ON CAUSEWAY.
- 8 RETROFIT SPAN 2 FOR JACKING.
- 9 INSTALL TEMPORARY SHEETING AND SHORING AT ABUTMENT 1 REQUIRED FOR EXCAVATION.
- 10 MOBILIZE AND STAGE SPMT IN BRIDGE STAGING AREA SOUTH OF EXISTING BRIDGE.

IMPACTS TO ROADWAY/RAILROAD:

- TEMPORARY CLOSURE OF SOUTHBOUND LANE OF RIVER ROAD
- TEMPORARY CLOSURE OF NORTHBOUND LANE OF RIVER ROAD
- NONE
- TEMPORARY CLOSURE OF SOUTHBOUND LANE OF RIVER ROAD
- NONE
- NONE
- NONE
- NONE
- WEEKEND TRACK OUTAGES
- WEEKEND TRACK OUTAGES
- BEGIN 15-DAY DETOUR OF RIVER ROAD

LEGEND

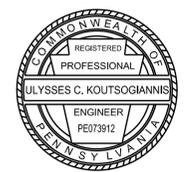
- ➔ DIRECTION OF TRAFFIC
- 200— PROPOSED TEMPORARY CONTOUR
- - -200- - EXISTING CONTOUR
- - - - - LEGAL RIGHT-OF-WAY
- CTV - EXISTING CABLE TELEVISION
- E - EXISTING ELECTRIC
- W - EXISTING WATER
- S - EXISTING SANITARY SEWER
- TU - EXISTING TELEPHONE UNDERGROUND
- G - EXISTING GAS
- CTV - PROPOSED CABLE TELEVISION
- E - PROPOSED ELECTRIC UNDERGROUND
- TU - PROPOSED TELEPHONE UNDERGROUND

NOTES:

- 1. REFER TO PROJECT SPECIFICATIONS FOR STREAM & WILDLIFE RESTRICTIONS.

Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

MPMS/ECMS PROJ: 115877



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HNTB CORPORATION
4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

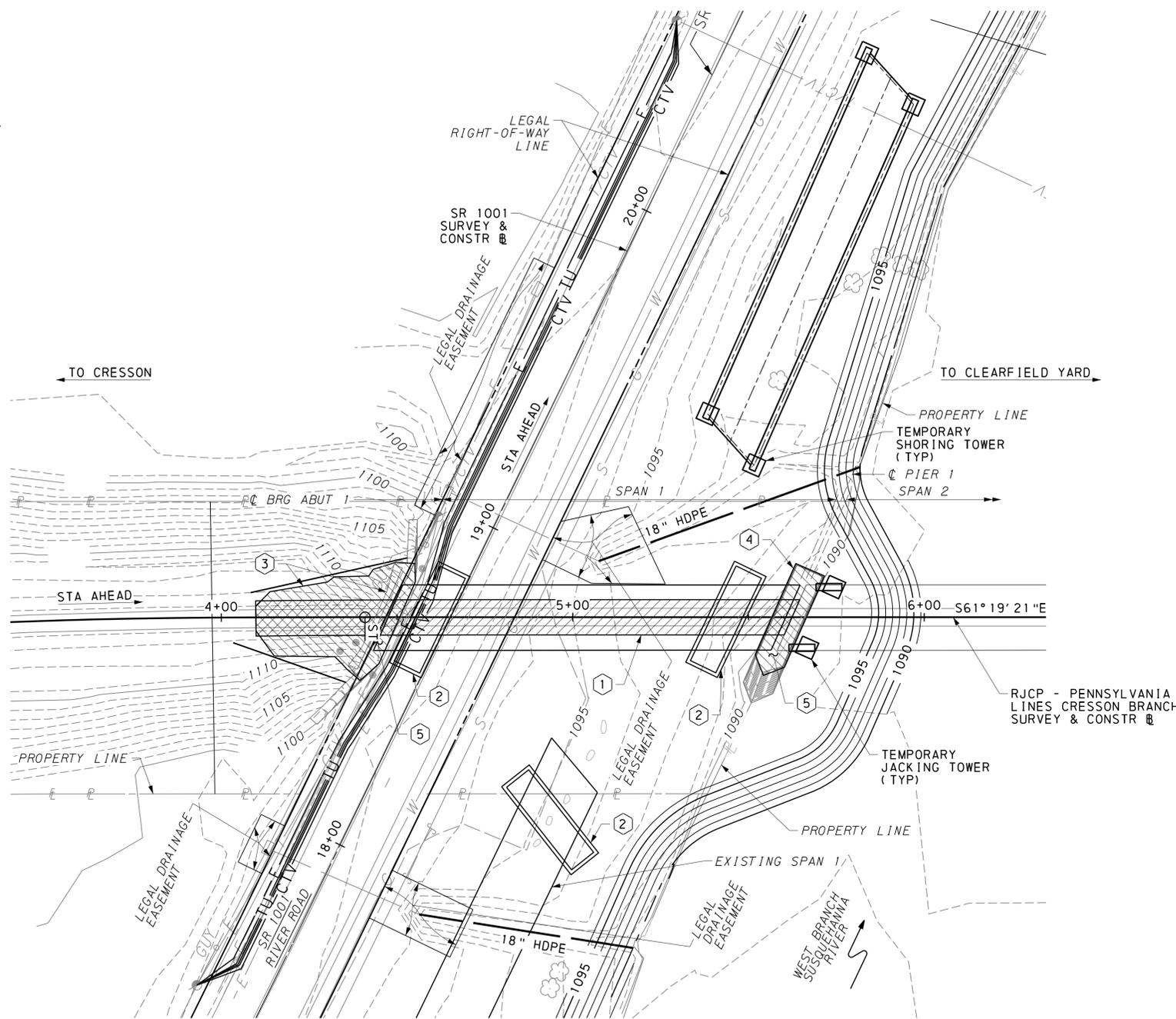
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
STAGING PLAN & ELEVATION 1 OF 3

RECOMMENDED _____

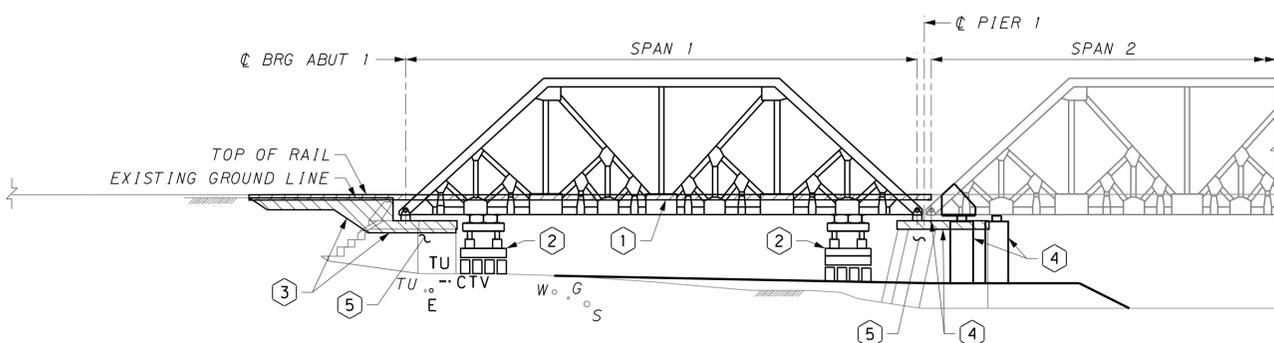
SHEET 48 OF 54

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PLAN
10 0 10 20 FEET



ELEVATION
10 0 10 20 FEET

SUGGESTED CONSTRUCTION SEQUENCE

STAGE 2A (SEE NOTE 2):

- ① IF REQUIRED, REMOVE RAILS AND TIMBER TIES FROM SPAN 1 AND WEST APPROACH.
- ② USE SPMT TO LIFT AND REMOVE EXISTING TRUSS SPAN 1. REMOVE TO SOUTH AND DEMOLISH. DEMOLITION IS NOT TO OCCUR ON SR 1001.
- ③ EXCAVATE BEHIND ABUTMENT 1. REMOVE PORTIONS OF ABUTMENT 1 SEAT AND BACKWALL.
- ④ JACK WEST END OF EXISTING TRUSS SPAN 2. REMOVE BEARINGS AND REMOVE PORTIONS OF PIER 1 CAP.
- ⑤ GROUT INTERIOR OF PIER AND ABUTMENT AS REQUIRED.

IMPACTS TO ROADWAY/RAILROAD:

4-DAY OUTAGE OF TRACK 1. CONTINUE 15-DAY DETOUR OF RIVER ROAD.

LEGEND

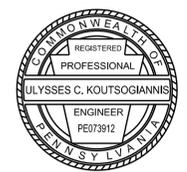
- ➔ DIRECTION OF TRAFFIC
- 200— PROPOSED TEMPORARY CONTOUR
- - -200- - - EXISTING CONTOUR
- - - - - LEGAL RIGHT-OF-WAY
- CTV - EXISTING CABLE TELEVISION
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- G - EXISTING GAS
- CTV - PROPOSED CABLE TELEVISION
- E - PROPOSED ELECTRIC UNDERGROUND
- TU - PROPOSED TELEPHONE UNDERGROUND

NOTES:

1. STAGE 2A AND STAGE 2B TO OCCUR DURING SAME 4-DAY TRACK OUTAGE.
2. THE CONTRACTOR SHALL EVALUATE THE GLOBAL STABILITY OF ABUTMENT 1 AND PIER 1 DURING THE REMOVAL OF THE EXISTING SPAN AND VERTICAL JACKING OF THE ADJACENT SPAN.
3. REFER TO PROJECT SPECIFICATIONS FOR STREAM & WILDLIFE RESTRICTIONS.

Mark	Description	By	Chk' d	Recm' d	Date
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HARRISBURG, PA 17110

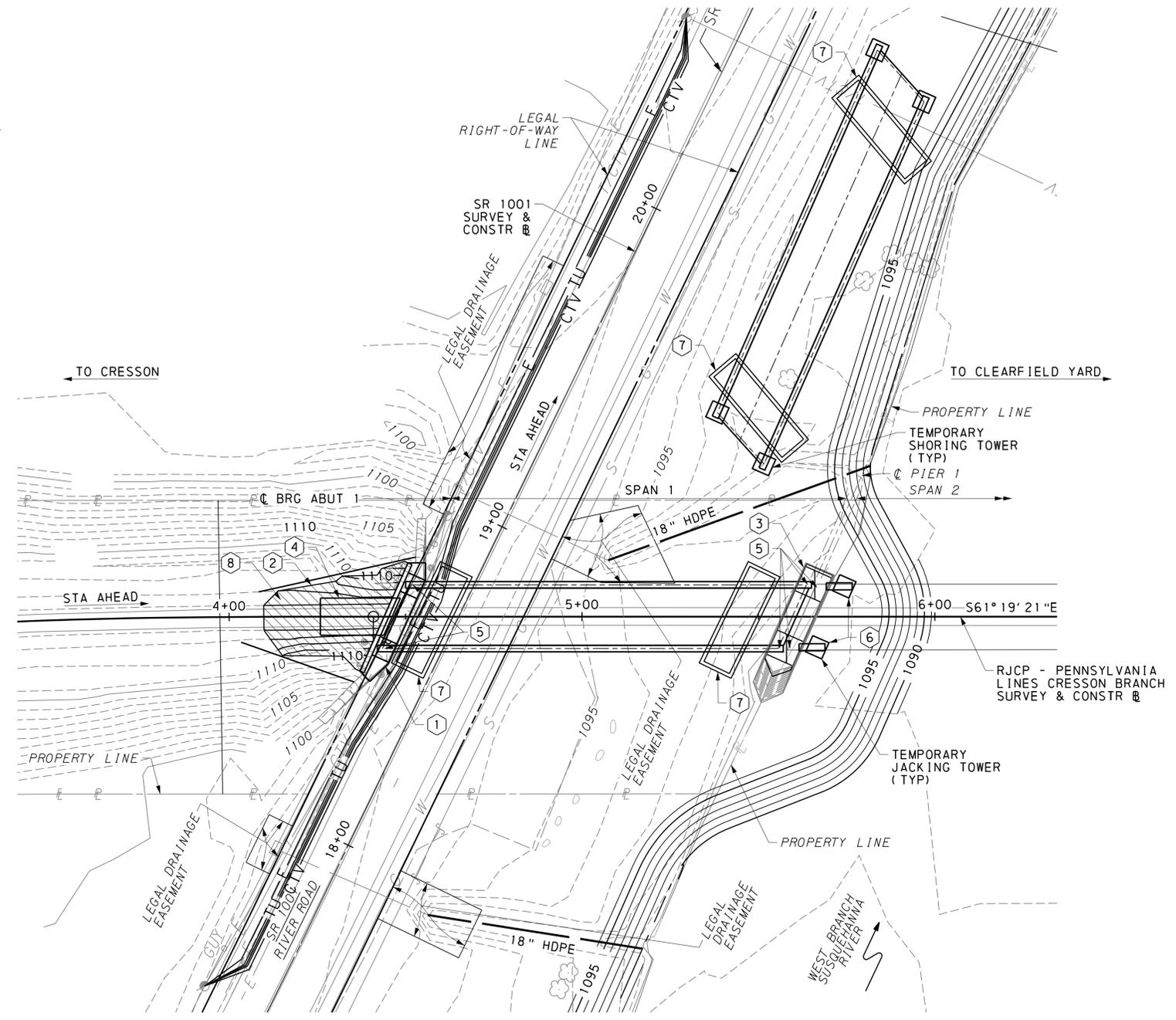
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
STAGING PLAN & ELEVATION 2 OF 3

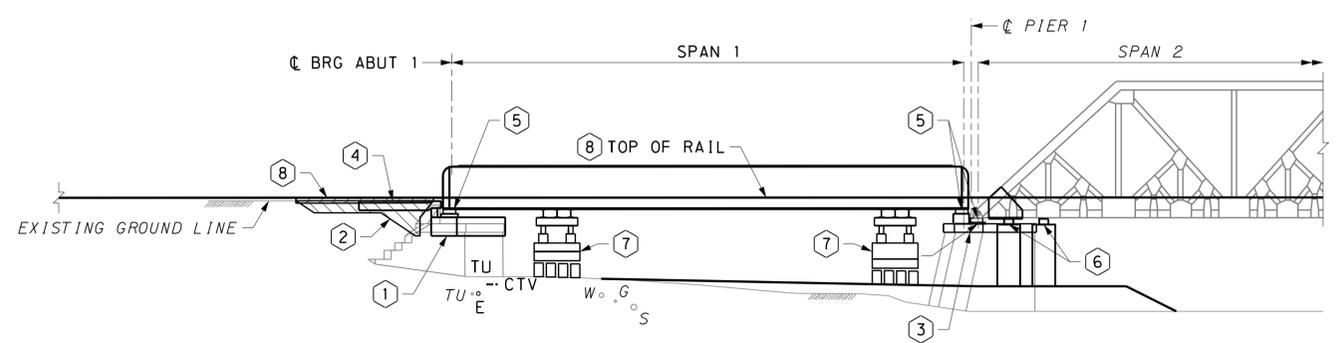
RECOMMENDED _____ SHEET 49 OF 54

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PLAN
10 0 10 20 FEET
⑨ ⑩ NOT SHOWN FOR CLARITY



ELEVATION
10 0 10 20 FEET
⑨ ⑩ NOT SHOWN FOR CLARITY

SUGGESTED CONSTRUCTION SEQUENCE

STAGE 2B (SEE NOTE 2):

- ① INSTALL NEW PRECAST BRIDGE SEAT AND BACKWALL AT ABUTMENT 1.
- ② INSTALL GEOSYNTHETIC REINFORCED SOIL IN TRACK APPROACH. CONSTRUCT BALLASTED TRACK.
- ③ INSTALL NEW PRECAST PIER CAP AT PIER 1.
- ④ INSTALL NEW APPROACH SLAB AT ABUTMENT 1.
- ⑤ SET NEW BEARINGS AT ABUTMENT 1 AND PIER 1.
- ⑥ LOWER SPAN 2 TRUSS TO FINAL ELEVATION ON NEW PIER CAP AND BEARINGS.
- ⑦ USE SPMT TO MOVE NEW BRIDGE SPAN FROM STAGING AREA TO FINAL ALIGNMENT.
- ⑧ INSTALL TIMBER TIES IN WEST APPROACH. INSTALL RAIL THROUGH WORK AREA.
- ⑨ ADJUST DIRECT FIXATION FASTENERS TO FINAL TRACK PROFILE.
- ⑩ RESUME TRAIN SERVICE.

STAGE 3: (NOT SHOWN)

- ⑪ REOPEN RIVER ROAD.
- ⑫ REMOVE PIER 1 JACKING TOWERS AND CAUSEWAY.
- ⑬ RESTORE SITE TO PRECONSTRUCTION CONDITION.
- ⑭ MILL AND OVERLAY OF SR 1001 RIVER ROAD.

IMPACTS TO ROADWAY/RAILROAD:

CONTINUE
4-DAY OUTAGE OF TRACK 1,
15-DAY DETOUR OF RIVER ROAD.

IMPACTS TO ROADWAY/RAILROAD:

END 15-DAY DETOUR OF RIVER ROAD
NONE
TEMPORARY CLOSURE OF
NORTHBOUND LANE OF RIVER ROAD
TEMPORARY CLOSURE OF NORTHBOUND AND
SOUTHBOUND LANES OF RIVER ROAD

NOTES:

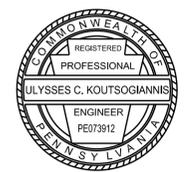
1. STAGE 2A AND STAGE 2B TO OCCUR DURING SAME 4-DAY TRACK OUTAGE.
2. THE CONTRACTOR SHALL EVALUATE THE GLOBAL STABILITY OF ABUTMENT 1 AND PIER 1 DURING THE ERECTION OF THE PROPOSED STRUCTURE AND BEARING REPLACEMENT OPERATIONS AT EXISTING SPAN 2.
3. REFER TO PROJECT SPECIFICATIONS FOR STREAM & WILDLIFE RESTRICTIONS.

LEGEND

- DIRECTION OF TRAFFIC
- PROPOSED TEMPORARY CONTOUR
- EXISTING CONTOUR
- LEGAL RIGHT-OF-WAY
- EXISTING CABLE TELEVISION
- EXISTING ELECTRIC
- EXISTING WATER
- EXISTING SANITARY SEWER
- EXISTING TELEPHONE UNDERGROUND
- EXISTING GAS
- PROPOSED CABLE TELEVISION
- PROPOSED ELECTRIC UNDERGROUND
- PROPOSED TELEPHONE UNDERGROUND

Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

MPMS/ECMS PROJ: 115877



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HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
STAGING PLAN & ELEVATION 3 OF 3

RECOMMENDED _____

SHEET 50 OF 54

S-1001RJC

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GENERAL NOTES

THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.

FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SUBSURFACE CONDITIONS MAY DIFFER FROM THE CONDITIONS REPORTED AT THE SPECIFIC LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE OF CONDITIONS AT THE BORING LOCATIONS.

LEGEND

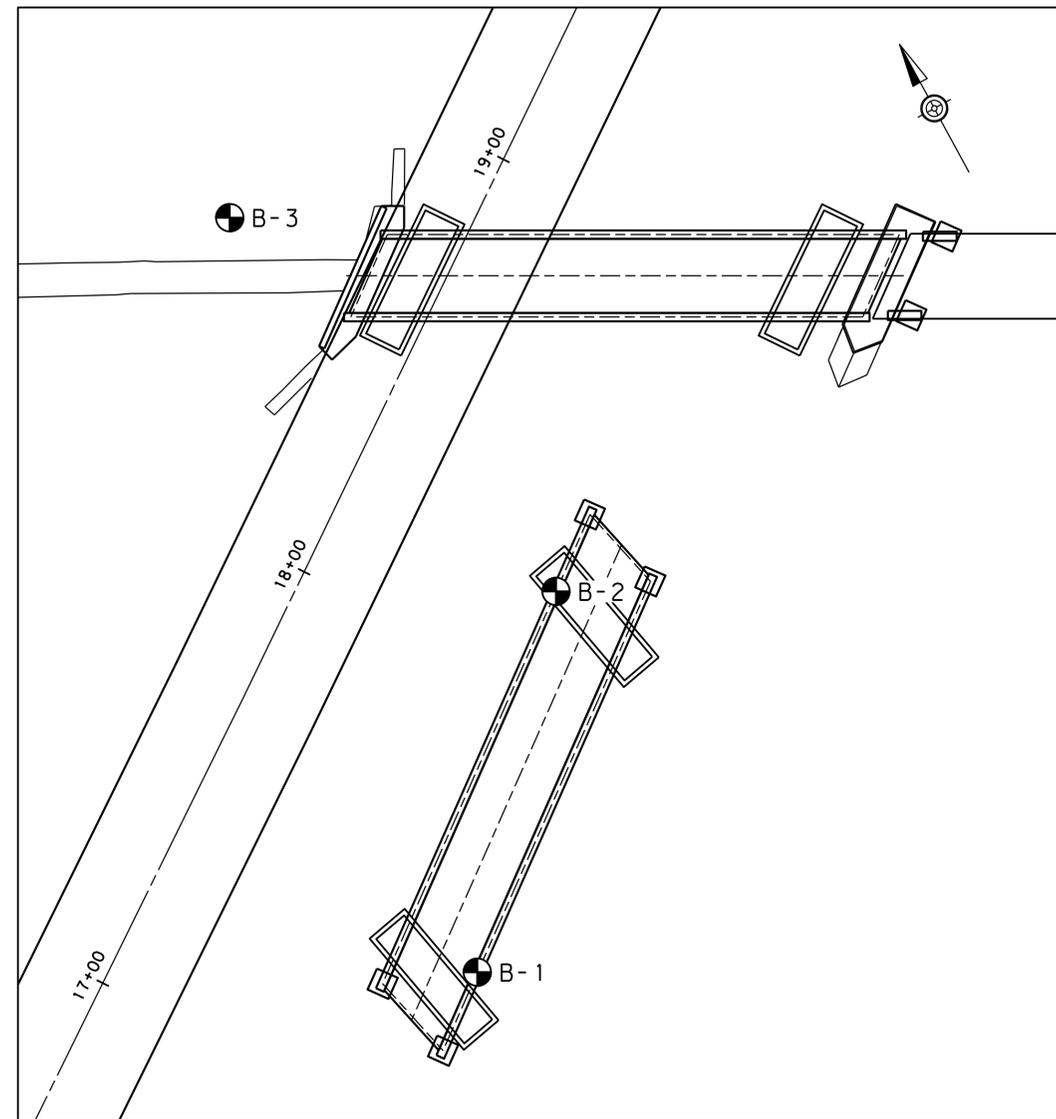
PP POCKET PENETROMETER
 TOR TOP OF ROCK ELEVATION

THE DESCRIPTION OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.

AM

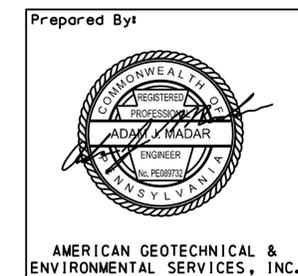
THE SUBSURFACE EXPLORATION DATA THAT ARE PRESENTED ON THESE DRAWINGS (INCLUDING BORING LOGS, EARTH SAMPLES, ROCK CORES, CLASSIFICATION OF MATERIALS AND DEPTH OF BORINGS) ACCURATELY REPRESENT THE CONDITIONS ENCOUNTERED BY THE TEST BORING PROGRAM AT EACH BORING LOCATION.

Adam J. Madar
 GEOTECHNICAL ENGINEER/ENGINEERING GEOLOGIST 8/2/2022
 DATE:



BORING LOCATION LAYOUT

SCALE
 20 FEET 0 20 FEET



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION	
CLEARFIELD COUNTY SR 1001 SECTION MTF SEG 0132 OFFSET 0701 CR 65.60 (CRESSON BRANCH) STA 4+65.11 OVER SR 1001 (RIVER ROAD) STEEL THROUGH PLATE GIRDER & STEEL THROUGH TRUSS BRIDGE STRUCTURE BORINGS (SHEET 1 OF 4)	
	SHEET 51 OF 54

M:_2023\040\exhib1\1\structure\22040_srb.dgn 8/1/2023

GENERAL NOTES

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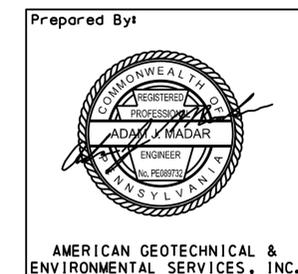
THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SUBSURFACE CONDITIONS MAY DIFFER FROM THE CONDITIONS REPORTED AT THE SPECIFIC LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE OF CONDITIONS AT THE BORING LOCATIONS.

LEGEND

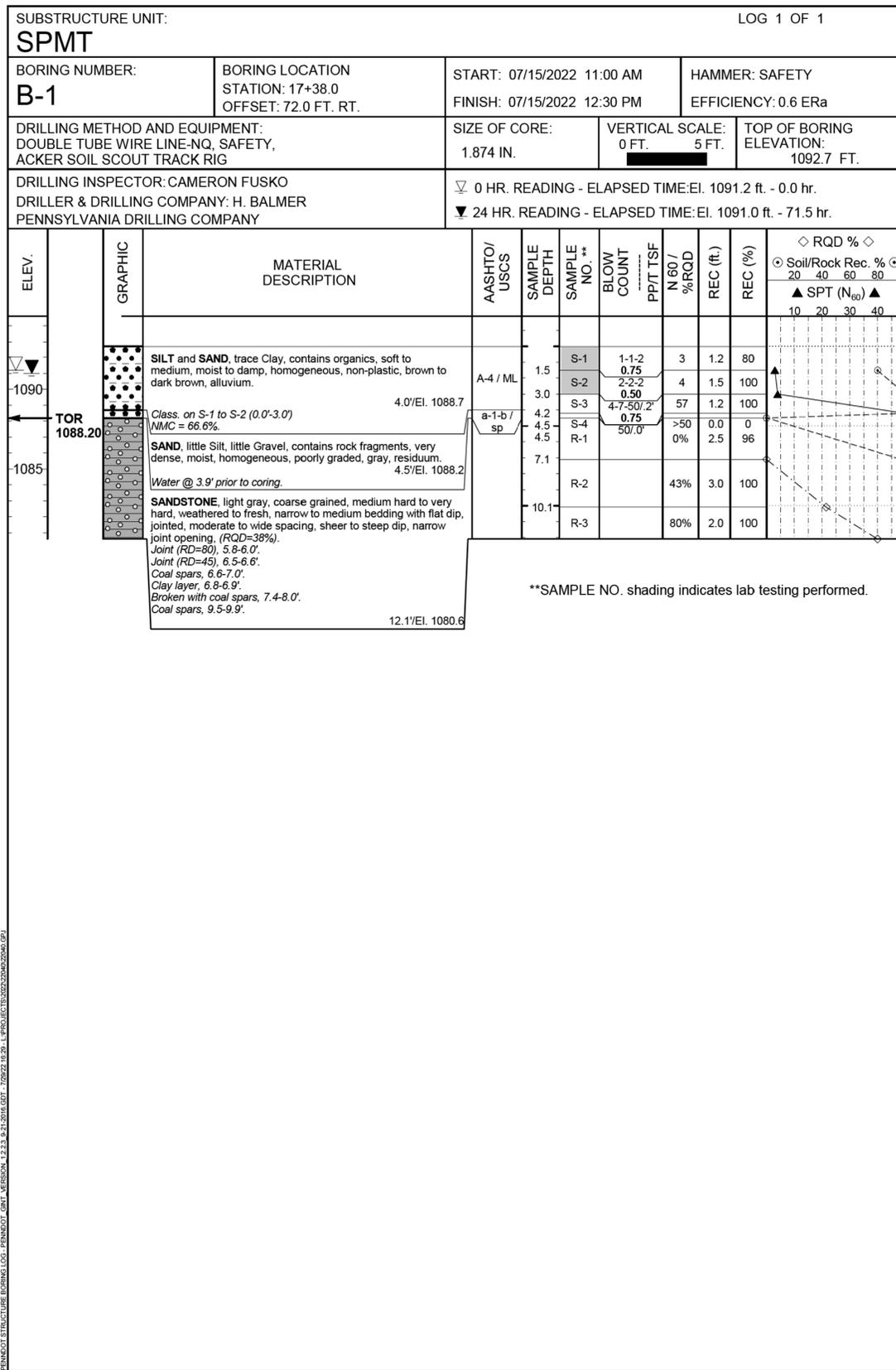
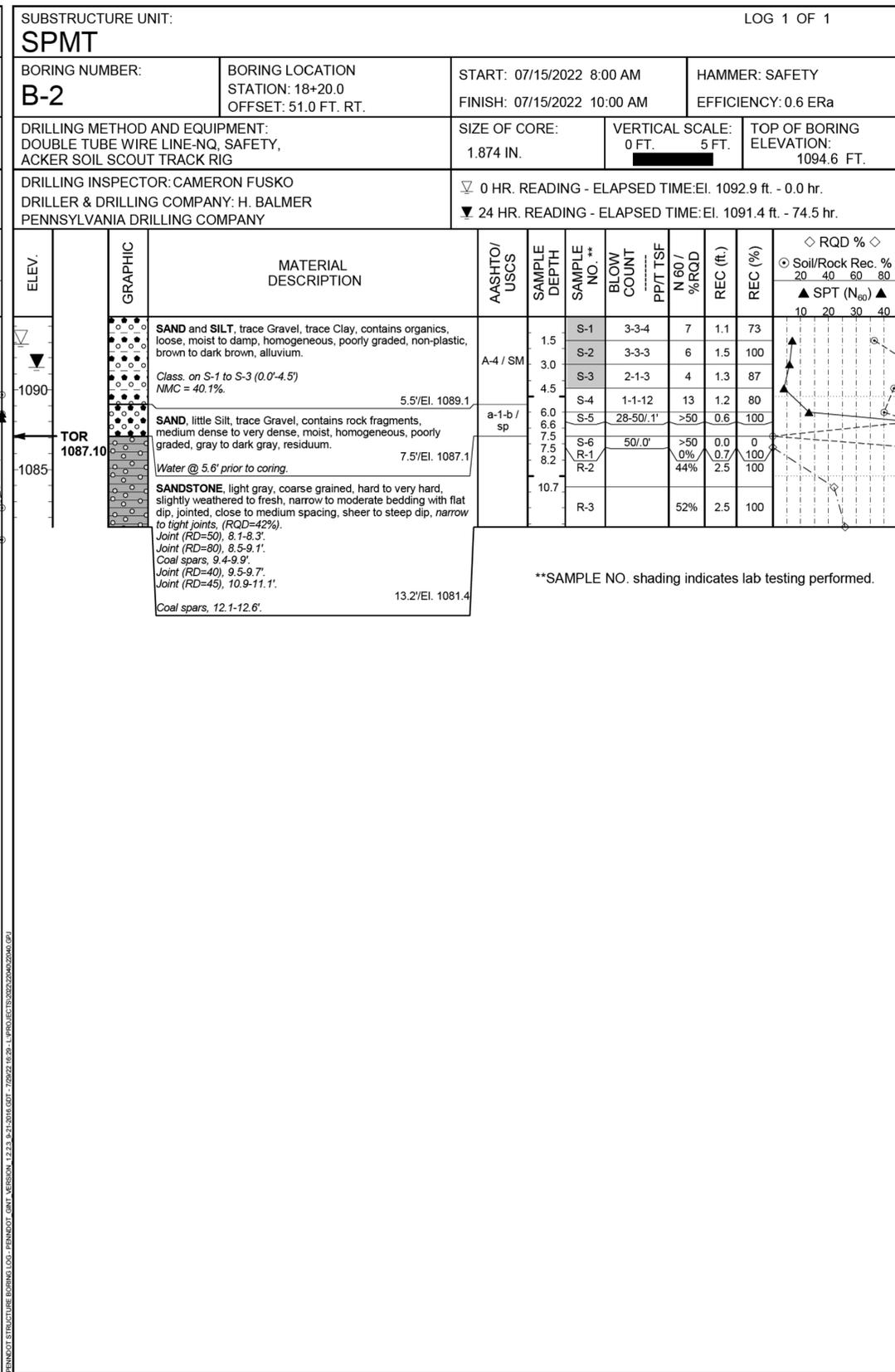
PP POCKET PENETROMETER
TOR TOP OF ROCK ELEVATION

THE DESCRIPTION OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.

Am



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
STRUCTURE BORINGS (SHEET 2 OF 4)



M:_2023\040\ext\1738\structure\22040_srb.dgn
3/23/2023

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FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

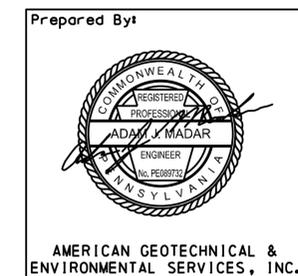
THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SUBSURFACE CONDITIONS MAY DIFFER FROM THE CONDITIONS REPORTED AT THE SPECIFIC LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE OF CONDITIONS AT THE BORING LOCATIONS.

LEGEND

PP POCKET PENETROMETER
TOR TOP OF ROCK ELEVATION

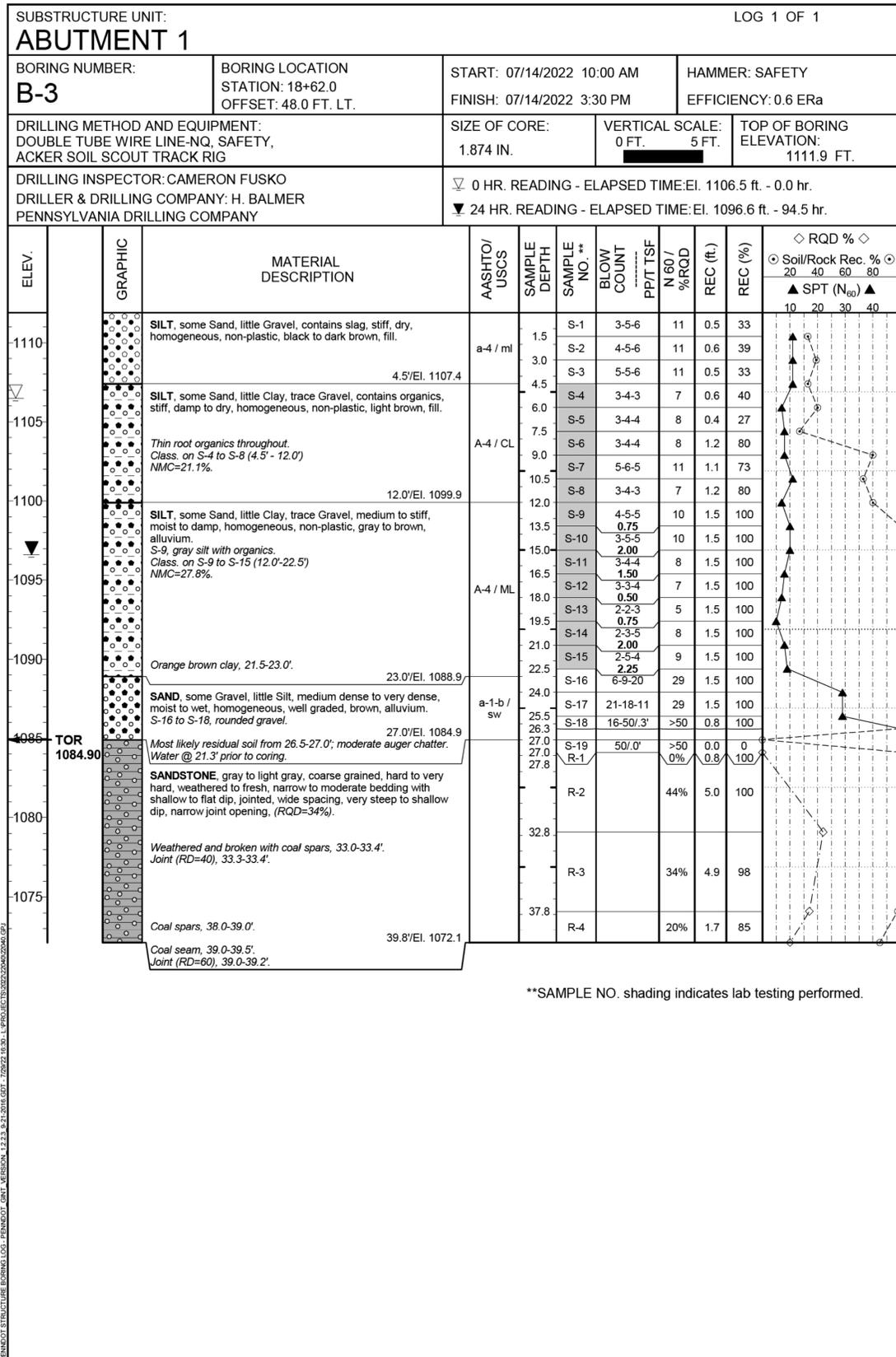
THE DESCRIPTION OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.

Am



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
CLEARFIELD COUNTY
SR 1001 SECTION MTF
SEG 0132 OFFSET 0701
CR 65.60 (CRESSON BRANCH) STA 4+65.11
OVER SR 1001 (RIVER ROAD)
STEEL THROUGH PLATE GIRDER & STEEL
THROUGH TRUSS BRIDGE
STRUCTURE BORINGS (SHEET 3 OF 4)

SHEET 53 OF 54



**SAMPLE NO. shading indicates lab testing performed.

GENERAL NOTES

THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.

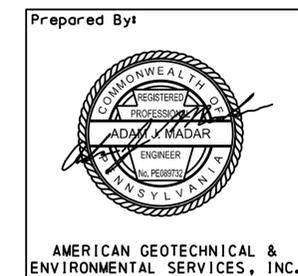
FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SUBSURFACE CONDITIONS MAY DIFFER FROM THE CONDITIONS REPORTED AT THE SPECIFIC LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE OF CONDITIONS AT THE BORING LOCATIONS.

LABORATORY TEST SUMMARY - SOILS																							
BORING NUMBER	STATION & OFFSET	SAMPLE #	TEST DEPTH (FT.)	NATURAL MOISTURE %	% GRAIN SIZE DISTRIBUTION (AASHTO)								CLASSIFICATION			PLASTICITY PARAMETERS			SHEAR STRENGTH				
					GRAVEL %	SAND %	COARSE SAND %	FINE SAND %	FINES %	SILT %	CLAY %	AASHTO	USCS	S.G.	LIQUID LIMIT	PLASTIC LIMIT	P. I.	C (TSF)	φ (DEG.)	C' (TSF)	φ' (DEG.)	TEST METHOD	
B-1	17+38.0 72 ft. RT.	S-1 to 2	0.0 to 3.0	66.6	0.0	40.8	2.1	38.7	59.2	49.4	9.8	A-4	ML		NP	NP	NP						
B-2	18+20.0 51 ft. RT.	S-1 to 3	0.0 to 4.5	40.1	5.8	49.7	6.9	42.8	44.5	40.5	4.0	A-4	SM		NP	NP	NP						
B-3	18+62.0 48 ft. LT.	S-4 to 8	4.5 to 12.0	21.1	7.1	25.2	1.6	23.6	67.7	48.3	19.4	A-4	CL		31	21	10						
B-3	18+62.0 48 ft. LT.	S-9 to 15	12.0 to 22.5	27.8	7.2	25.0	0.3	24.7	67.8	51.2	16.6	A-4	ML		NP	NP	NP						

LEGEND

PP POCKET PENETROMETER
TOR TOP OF ROCK ELEVATION



<p>COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION</p>
<p>CLEARFIELD COUNTY SR 1001 SECTION MTF SEG 0132 OFFSET 0701 CR 65.60 (CRESSON BRANCH) STA 4+65.11 OVER SR 1001 (RIVER ROAD) STEEL THROUGH PLATE GIRDER & STEEL THROUGH TRUSS BRIDGE</p>
<p>STRUCTURE BORINGS (SHEET 4 OF 4)</p>
<p>SHEET 54 OF 54</p>