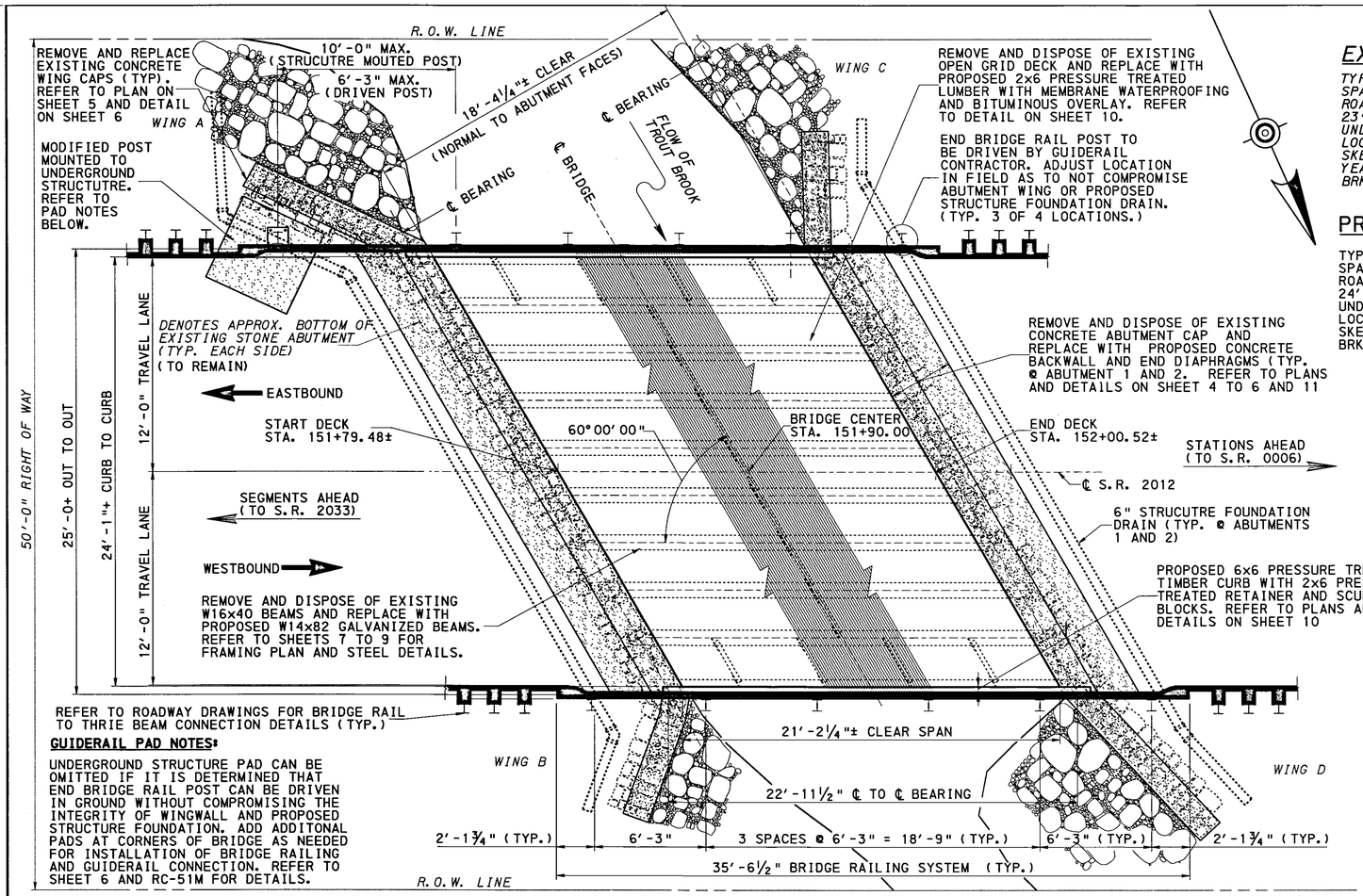
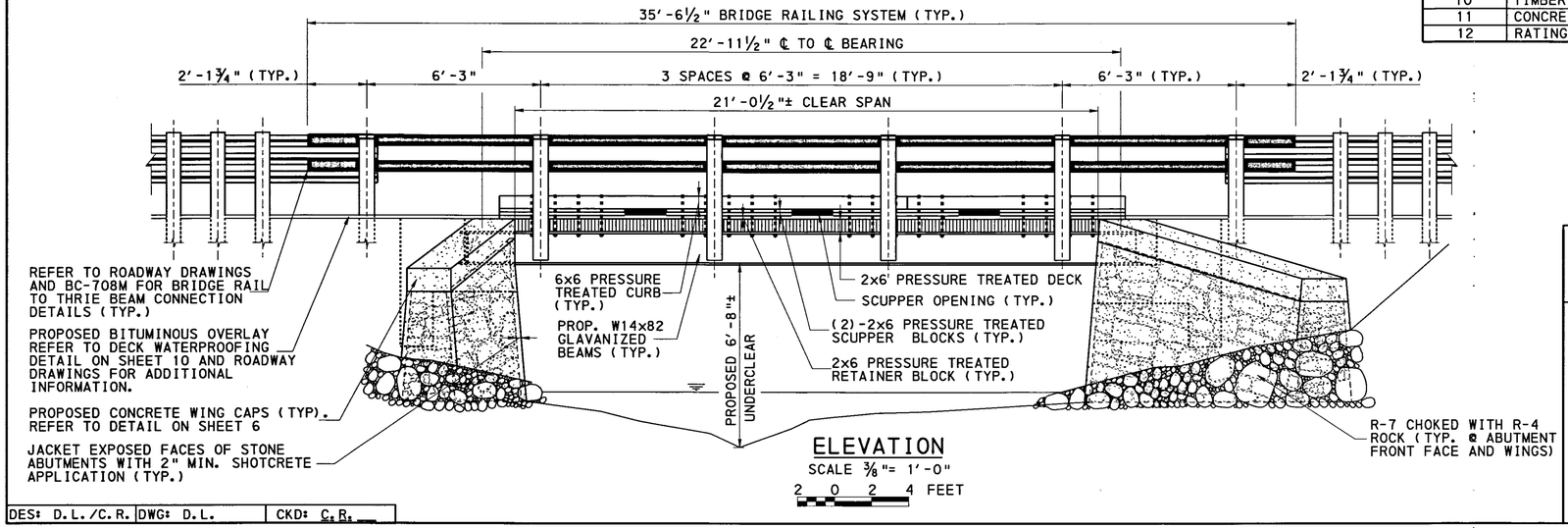


GUIDERAIL PAD NOTES:

UNDERGROUND STRUCTURE PAD CAN BE OMITTED IF IT IS DETERMINED THAT END BRIDGE RAIL POST CAN BE DRIVEN IN GROUND WITHOUT COMPROMISING THE INTEGRITY OF WINGWALL AND PROPOSED STRUCTURE FOUNDATION. ADD ADDITONAL PADS AT CORNERS OF BRIDGE AS NEEDED FOR INSTALLATION OF BRIDGE RAILING AND GUIDERAIL CONNECTION. REFER TO SHEET 6 AND RC-51M FOR DETAILS.

GENERAL PLAN

SCALE ¼"= 1'-0"
2 0 2 4 FEET



ELEVATION

SCALE ⅜"= 1'-0"
2 0 2 4 FEET

DES: D.L./C.R. | DWG: D.L. | CKD: C.R.

EXISTING STRUCTURE DATA

TYPE: 1 - SINGLE SPAN STEEL GIRDER
SPAN: 22'-0"±
ROADWAY WIDTH: 25'-0" OUT TO OUT
23'-0" CURB TO CURB
UNDERCLEARANCE: 6'-5" ±
LOCATION: STA. 151+90.00
SKEW: 60°00.00±
YEAR BUILT: 1930
BRKEY: 37253

PROPOSED STRUCTURE DATA

TYPE: 1 - SINGLE SPAN STEEL GIRDER
SPAN: 22'-11½"
ROADWAY WIDTH: 25'-½" OUT TO OUT
24'-0"± CURB TO CURB
UNDERCLEARANCE: 6'-8"±
LOCATION: STA. 151+90.00
SKEW: 60°00.00±
BRKEY: 37253

LEGEND	
ABBREVIATION	DESCRIPTION
ABUT.	ABUTMENT
APPROX.	APPROXIMATE
BOT.	BOTTOM
CLR.	CLEAR
CONC.	CONCRETE
DIA.	DIAMETER
EQ.	EQUAL
HT.	HEIGHT
INFO.	INFORMATION
MAX.	MAXIMUM
MIN.	MINIMUM
PROP.	PROPOSED
SPA.	SPACING
STA.	STATION
TYP.	TYPICAL

INDEX OF DRAWINGS

PROPOSED CONSTRUCTION SEQUENCE:

FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.

REMOVE AND DISPOSE OF EXISTING STEEL BEAMS, OPEN GRID DECK AND BRIDGE RAILING.

INSTALL PUMPED WATER FILTER BAG, TEMPORARY FENCING, CONCRETE WASHOUT AND COMPOST FILTER SOCKS AS SHOWN ON E&S PLAN.

BUILD TEMPORARY COFFER DAMS ℄ INLET AND OUTLET OF BRIDGE AND PLACE TEMPORARY DIVERSION PIPE OR TEMPORARY BARRIER AS SHOWN ON E&S PLAN.

REMOVE AND DISPOSE OF EXISTING CONCRETE ABUTMENT CAPS. NOTE, EXISTING STACKED STONE ABUTMENT IS TO REMAIN.

EXCAVATE, FORM, AND SET REINFORCEMENT FOR PROPOSED CONCRETE BACKWALLS AND ABUTMENT WING CAPS.

JACKET EXPOSED FACES OF STACKED STONE ABUTMENTS AND WINGS WITH SHOTCRETE APPLICATION.

POUR PROPOSED CONCRETE BACKWALLS AND ABUTMENT WING CAPS.

SEAL CONCRETE SURFACES WITH EPOXY RESIN MATERIAL.

PLACE R-7 CHOKED WITH R-4 ROCK ℄ FRONT FACE OF ABUTMENTS AND WINGS.

REMOVE TEMPORARY DIVERSION PIPE OR TEMPORARY BARRIER AND COFFER DAMS ℄ INLET AND OUTLET OF BRIDGE.

WATERPROOF REAR FACE OF EXPOSED BACKWALL AND WINGS.

INSTALL STRUCTURE FOUNDATION DRAIN AND BACKFILL ℄ ABUTMENTS.

INSTALL PROPOSED BEARING PADS, STEEL BEAMS, AND INTERMEDIATE DIAPHRAGMS. ATTACH OFFSET POSTS AND RAILING POSTS TO EXTERIOR BEAMS PRIOR TO PLACEMENT.

FORM, SET REINFORCEMENT, AND POUR CONCRETE END DIAPHRAGMS.

INSTALL PRESSURE TREATED DECK AND CURBING.

FORM, SET REINFORCEMENT, AND POUR CONCRETE PAD FOR BRIDGE RAILING SYSTEM. NOTE, CONSTRUCTION OF PAD CAN BE OMITTED IF IT IS DETERMINED THAT POST CAN BE DRIVEN WITHOUT COMPROMISING STRUCTURAL INTEGRITY OF WINGWALL OR NEW STRUCTURE FOUNDATION DRAIN.

INSTALL RAIL ELEMENT OF BRIDGE RAILING SYSTEM.

INSTALL MEMBRANE WATERPROOFING AND PAVE BRIDGE DECK WITH APPROACH ROADWAY AS SHOWN IN WATERPROOFING DETAIL AND ROADWAY DRAWINGS.

INSTALL GUIDERAIL AT ENDS OF BRIDGE AS SHOWN IN ROADWAY DRAWINGS.

REMOVE CONCRETE WASHOUT AND REMAINING E&S MEASURES.

SEED, MULCH, AND CLEANUP DISTURBED AREAS AND REMOVE TRAFFIC CONTROL DEVICES FROM DETOUR.

REFERENCES:

REFER TO SHEET 2 FOR SUPPLEMENTAL DRAWINGS TABLE, QUANTITY TABULATION, AND TYPICAL SECTION.

REFER TO SHEET 3 FOR GENERAL NOTES

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

S.R. 2012 PREVIOUSLY KNOWN AS L.R. 65055

Prepared by District 4-0 Bridge Unit

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

WYOMING COUNTY
S.R. 2012 SECTION BRG.
SEGMENT 0060 OFFSET 0000
STA. 151+90.00
OVER TROUT BROOK
1-SPAN STEEL STRINGER/GIRDER BRIDGE
GENERAL PLAN & ELEVATION

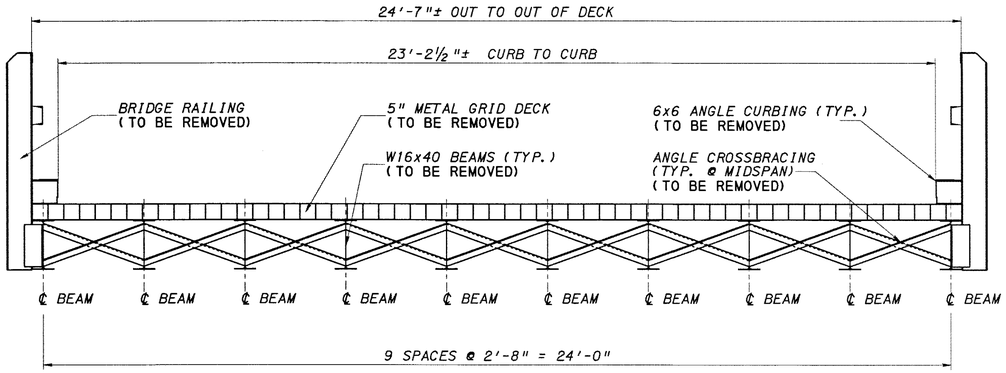
COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — GERARD BABINSKI — ENGINEER PE-055083

RECOMMENDED 11-8-2019

DISTRICT BRIDGE ENGINEER

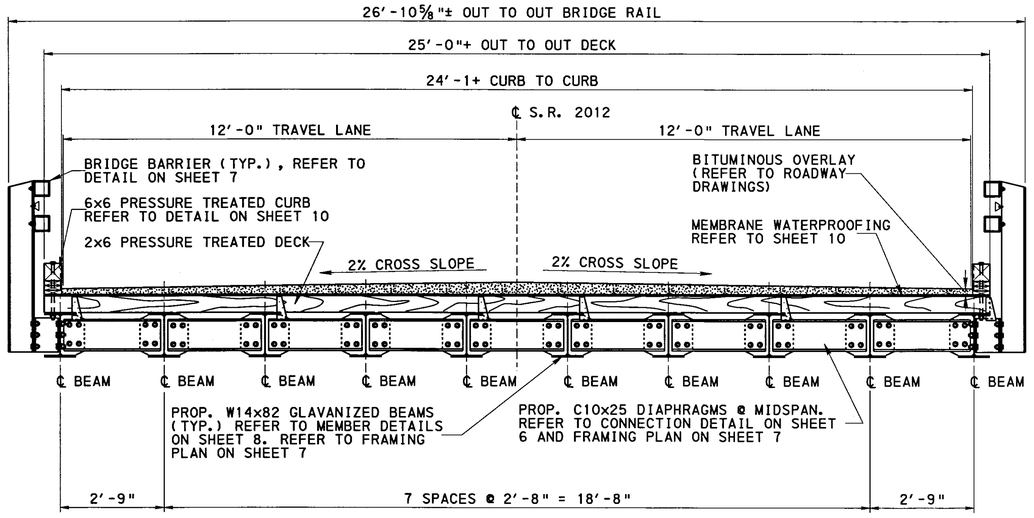
SHEET 1 OF 12 +SUPPLEMENTAL DRAWINGS

S-38969



EXISTING TYPICAL SECTION

SCALE ½"= 1'-0"
1 0 1 2 FEET



PROPOSED TYPICAL SECTION

SCALE ½"= 1'-0"
1 0 1 2 FEET

TABULATION OF BRIDGE ITEMS & APPROXIMATE QUANTITIES

ITEM DESCRIPTION	UNIT	ABUT. NO. 1	ABUT. NO. 2	SUPSTR.	TOTAL
CLASS 3 EXCAVATION	CY	58	58	-	116
GEOTEXTILE, CLASS 4, TYPE A	SY	45	45	-	90
WATERPROOFING MEMBRANE INSTALLED ON BRIDGE DECK	SY	-	-	69	69
WATERPROOFING MEMBRANE INSTALLED ON OTHER SURFACES	SY	38	38	-	76
ROCK, CLASS R-4	CY	5	5	-	10
ROCK, CLASS R-7	CY	5	5	-	10
NO. 57 COARSE AGGREGATE	CY	8	8	-	16
CLASS AAAP CEMENT CONCRETE	CY	4	4	-	8
CLASS AAA CEMENT CONCRETE (2)	CY	17	17	-	34
SHOTCRETE APPLICATION (2" MINIMUM THICKNESS)	SF	180	180	-	360
6" FOUNDATION DRAIN	LF	50	50	-	100
SELECTED BORROW EXCAVATION, STRUCTURE BACKFILL	CY	20	20	-	40
REINFORCEMENT BARS, EPOXY COATED	LB	2229	2233	-	4461
DOWEL HOLES, 12" DEPTH	EACH	25	25	-	50
PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (EPOXY RESIN) (3)	SY	42	42	-	84
1'-0" WIDE x 1" THICK PLAIN NEOPRENE STRIP	LF	30	30	-	60
FABRICATED STRUCTURAL STEEL, GALVANIZED (1)	LB	-	-	28664	28664
2x6x16'-0" (WOOD DECK BOARDS AND WOOD RETAINER BLOCKS)	EACH	-	-	173	173
2x6x14'-0" BOARD (WOOD DECK BOARD)	EACH	-	-	171	171
2x6x10'-0" (WOOD SCUPPER BLOCKS)	EACH	-	-	16	16
2x6x8'-0" (WOOD RETAINER BLOCK)	EACH	-	-	2	2
6x6x8'-0" (TIMBER CURB)	EACH	-	-	6	6
16D COMMON NAILS (GALVANIZED)	EACH	-	-	7,000	7,000
ROOFING NAILS (GALVANIZED)	EACH	-	-	200	200
NON-SHRINK GROUT (QUARTS)	EACH	2	2	-	4
CONTINUOUS CLOSED CELL STRIP NEOPRENE SPONGE	SF	10	10	-	20
CONTINUOUS CELLULAR POLYSTRENE STRIP (1" THICK)	SF	10	10	-	20
CONTINUOUS CELLULAR POLYSTRENE (2" THICK)	SF	340	340	-	680

BRIDGE TABULATION NOTES:

(1) INCLUDES BEAMS, DIAPHRAGMS, BRACING, CURB DRIP EDGE, BRIDGE RAILING SYSTEM AND ASSOCIATED CONNECTION PLATES AND HARDWARE. REFER TO FABRICATED STRUCTURAL STEEL SCHEDULE ON SHEET 9 FOR MEMBER BREAKDOWN AND QUANTITY.

(2) TO ENSURE THE ACHIEVEMENT OF REQUIRED 7 DAY BREAK STRENGTHS, A HIGHER CLASS OF CONCRETE WAS SELECTED FOR DESIGN.

(3) APPLY PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (EPOXY RESIN) TO EXPOSED SURFACES OF ABUTMENTS AND WINGWALLS. USE FEDERAL STANDARD 595B COLOR #26290 FOR ALL EPOXY RESIN.

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

S.R. 2012 PREVIOUSLY KNOWN AS L.R. 65055

DESCRIPTION	DWG. NO.	APP. DATE
BACKFILL AT STRUCTURES	RC-12M	2/8/2019
GUIDERAIL TO BRIDGE BARRIER TRANSITIONS	RC-50M	8/4/2017
TYPE 31 STRONG POST GUIDERAIL	RC-51M	8/4/2017
THRIE-BEAM TO PA TYPE 10M BRIDGE BARRIER TRANSITION CONNECTION	BC-708M	8/4/2017
TYPE 10M BRIDGE BARRIER	BC-709M	1/31/2019
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	1/31/2019
BRIDGE DRAINAGE	BC-751M	1/31/2019
STEEL GIRDER DETAILS	BC-753M	1/31/2019
STEEL DIAPHRAGMS FOR STEEL BEAM STRUCTURES	BC-754M	1/31/2019
BEARINGS	BC-755M	1/31/2019
TYPICAL WATERPROOFING AND EXPANSION DETAILS	BC-788M	1/31/2019

SUPPLEMENTAL DRAWINGS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GERARD BABINSKI
ENGINEER PE-055083

COMMONWEALTH OF PENNSYLVANIA
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TYPICAL SECTIONS & QUANTITIES

RECOMMENDED 11-8-2019

SHEET 2 OF 12

S-38969

DES: D.L./C.R. | DWG: D.L. | CKD: C.R.

GENERAL NOTES:

DESIGN SPECIFICATIONS:

AASTHO LRFD BRIDGE DESIGN SPECIFICATIONS, 2014 EDITION, AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4, APRIL 2015 EDITION.

LIVE LOAD DISTRIBUTION TO BEAMS IS BASED UPON DM-4 DISTRIBUTION FACTOR METHOD.

DESIGN IS IN ACCORDANCE WITH THE LRFD METHOD.

DESIGN LIVE LOADS:

PHL-93/P-82 (204 KIP PERMIT LOAD)

DEAD LOADS:

INCLUDES SURFACE AREA DENSITY OF 30 PSF FOR FUTURE WEARING SURFACE ON TIMBER DECK

GENERAL:

PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH SPECIFICATIONS, PUBLICATION 408 2016, AASHTO/AWS D1.5M/D1.5 2008 BRIDGE WELDING CODE

PROVIDE STRUCTURAL STEEL CONFORMING TO AASHTO M 270/M 270M (ASTM A 709/A 709M) DESIGNATION, EXCEPTED WHEN NOTED OTHERWISE.

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

USE CLASS AAAP CEMENT CONCRETE FOR CONCRETE DIAPHRAGMS

USE CLASS AAA CEMENT CONCRETE FOR BACKWALL AND WING CAPS.

A HIGHER CLASS CONCRETE MAY BE SUBSTITUTED FOR A LOWER CLASS CONCRETE IF APPROVED BY THE DISTRICT BRIDGE ENGINEER OR IF OUTLINED IN PLANS

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, SHEAR BLOCKS, BEAMS, FOOTINGS, PILES, BARRIERS OR WHERE BENDING OR WELDING OF THE REINFORCEMENT BARS IS INDICATED.

ALL REINFORCEMENT IS EPOXY COATED UNLESS OTHERWISE NOTED

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

SITE CLASS IS NOT CLASS E.

VERIFY ALL DIMENSIONS AND GEOMETRY OF THE EXISTING STRUCTURE IN THE FIELD AS NECESSARY FOR PROPER FIT OF THE PROPOSED CONSTRUCTION

NOTIFY THE REGIONAL HEADQUARTERS OF THE FISH COMMISSION PRIOR TO CONSTRUCTION AND COOPERATE WITH FISH COMMISSION DURING CONSTRUCTION.

PLACE CHEEKWALL, CONCRETE SHEAR BLOCKS, AND BACKWALL CONCRETE AFTER BEAMS ARE SET IN POSITION.

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

ALL DIMENSIONS SHOWN ARE HORIZONTAL, EXCEPT AS NOTED.

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

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

DO NOT STAGE EQUIPMENT OR STOCKPILE MATERIALS ON BRIDGE THROUGHOUT DURATION OF THE PROJECT.

ALL EXISTING CONCRETE REMOVED FROM THE STRUCTURE WILL BE DISPOSED OF, OFFSITE, TO THE SATISFACTION OF THE ENGINEER.

ALL WORK IS TO BE CONTAINED WITHIN THE RIGHT-OF-WAY

APPLY PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (EPOXY RESIN) TO EXPOSED SURFACES OF ABUTMENTS AND WINGWALLS. USE FEDERAL STANDARD 595B COLOR #26290 FOR ALL EPOXY RESIN.

CONSTRUCTION NOTES:

ALL DIMENSIONS, SURVEY, STATIONS, AND ELEVATIONS ARE TO BE FIELD VERIFIED PRIOR TO START OF CONSTRUCTION.

STAGE ALL WORK IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN (DETOUR).

STEEL BEAM NOTES:

ALL FASTENERS ARE ¾ IN., ⅞ IN., OR 1 IN. DIAMETER HS BOLTS, EXCEPT AS NOTED.

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

FABRICATE ALL MEMBERS OR MEMBER COMPONENTS DESIGNATED AS FRACTURE-CRITICAL

MEMBERS (FCM) TO CONFORM TO THE REQUIREMENTS OF DESIGN MANUAL, PART 4, SECTION 6, ARTICLE D6.6.2, AND AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 6.6.2, AND PUBLICATION 408, SECTIONS 1105.02(A)5 AND 1105.03(M)9. MEET THE BASE METAL CHARPY V-NOTCH (CVN) REQUIREMENTS FOR ZONE 2.

ALL FABRICATED STRUCTURAL STEEL TO BE GALVANIZED AFTER FABRICATION. THE FOLLOWING ARE TO BE HOT DIP GALVANIZED:
FABRICATED STRUCTURAL STEEL ITEMS - HOT DIP GALVANIZING WILL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
ASTM 123 - STANDARD SPECIFICATION FOR ZINC (HOT DIP GALVANIZED) COATINGS ON IRON & STEEL HARDWARE.
ASTM 153 - STANDARD SPECIFICATION FOR ZINC COATING (HOT DIP) COATINGS ON IRON & STEEL HARDWARE.
ASTM 385 - STANDARD PRACTICE FOR PROVIDING HIGH QUALITY ZINC COATINGS (HOT DIP) ON ASSEMBLED PRODUCTS.
ASTM A780 - STANDARD PRACTICE FOR REPAIR OF DAMAGED HOT DIP GALVANIZED COATINGS.
AASHTO M111 - STANDARD SPECIFICATION FOR ZINC (HOT DIP GALVANIZED) COATINGS ON IRON & STEEL PRODUCTS.
AASHTO M232 - HOT DIP GALVANIZING ON IRREGULARLY SHAPED ARTICLES.

THE FOLLOWING ARE TO BE MECHANICALLY GALVANIZED: ¾", ⅞", 1" DIA.
ASTM 325 BOLTS, NUTS AND WASHERS.

MECHANICALLY GALVANIZED PROCESS WILL BE IN ACCORDANCE WITH AASHTO-M298.

REPAIR ALL DAMAGED GALVANIZED SURFACES IN ACCORDANCE WITH SECTION 1105.02(s) OF PUBLICATION 408/2016.

BRIDGE REHABILITATION NOTES:

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 THE BIDDING PURPOSES. THERE IS NOT 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 PREFORMED MAY DIFFER FROM THOSE INDICATED. EXISTING STRUCTURE PLANS, S-47864 (4-30-82).

THE ENGINEER RESERVES THE RIGHT TO CHANGE THE NATURE AND SCOPE OF THE WORK TO ASSURE A SATISFACTORY REPAIR.

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 IT'S AUTHORIZED AGENTS AS POSITIVE REPRESENTATIONS OF ANY OF THE CONDITIONS THAT YOU WILL ENCOUNTER IN THE FIELD.

REPAIR ANY AREAS OF CONCRETE DAMAGED BEYOND REMOVAL LIMITS AT NO EXPENSE TO THE DEPARTMENT.

CHIP, CLEAN, STRAIGHTEN, WIRE BRUSH AND PAINT WITH EPOXY ALL EXISTING REINFORCEMENT THAT IS TO REMAIN. NEW EPOXY COATED REINFORCEMENT BARS SHALL BE PLACED TO SUPPLEMENT EXISTING REINFORCEMENT BARS WHEN: A. EXISTING REINFORCEMENT BAR HAS LOST 25% OR MORE OF THE ORIGINAL CROSS-SECTIONAL AREA. B. EXISTING REINFORCEMENT BAR IS BROKEN.

THE DEPARTMENT DOES NOT GUARANTEE THE QUANTITY OF ANY SPALLED AREAS OF CONCRETE. THE APPROXIMATE QUANTITIES SHOWN ARE FOR THE CONTRACTORS GUIDANCE ONLY. ACTUAL QUANTITIES WILL BE DETERMINED IN THE FIELD.

THE EXISTING BRIDGE HAS NOT BEEN TESTED FOR LEAD AND OTHER TOXIC MATERIALS. THERE IS A HIGH PROBABILITY THAT THE EXISTING BRIDGE CONTAINS LEAD-BASED PAINT. THE CONTRACTOR IS TO DEMOLISH AND DISPOSE OF ALL EXISTING STRUCTURAL STEEL IN COMPLIANCE WITH OSHA AND D.E.P. REGULATIONS REGARDING LEAD BASED PAINT REMOVAL.

ROLL BRIDGE DECK BITUMINOUS WEARING COARSE USING STATIC COMPACTION TO ACHIEVE REQUIRED DENSITY

WELDING NOTES:

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

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

DO NOT WELD OR BURN WHEN THE TEMPERATURE IS BELOW 0° F. PREHEAT AND MAINTAIN THE TEMPERATURE OF THE METAL TO AT LEAST 70° F WHEN THE TEMPERATURE OF THE METAL IS BETWEEN 0° F AND 32° F DURING WELDING OR BURNING.

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

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

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

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

UTILITY NOTE:

COORDINATE, LOCATE, AND CONDUCT ALL WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH PUBLICATION 408/2011, SECTIONS 105.06 AND 107.12.

TIMBER NOTES:

ALL TIMBER MEMBERS ARE TO BE SOLID SAWN, PRESSURE TREATED SELECT STRUCTURAL, SOUTHERN YELLOW PINE TIMBERS WITH THE FOLLOWING MATERIAL PROPERTIED:

F_B = 1,500 PSI, F_V = 175 PSI, F_{CP} =565 PSI, E =1,600,000 PSI.

FOLLOWING FABRICATION, TREAT ALL SOLID SAWN TIMBER COMPONENTS IN ACCORDANCE WITH AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) STANDARDS AND THE CONTRACT SPECIFICATIONS.

WHEN FIELD CUTTING ALL SOLID SAWN TIMBER, TREAT CUT SURFACES OF MEMBERS IN ACCORDANCE WITH AWPA STANDARD M4-84.

ALL TIMBER DIMENSIONS SHOWN ARE ACTUAL, UNLESS NOTED OTHERWISE.

CUT ALL TIMBERS ACCURATELY, AND FRAME TO A CLOSE FIT, TO PROVIDE FOR EVEN BEARING OF JOINTS OVER THE ENTIRE CONTACT SURFACE. MAKE JOINTS WITHOUT SHIMMING, UNLESS NOTED OTHERWISE.

GALVANIZE ALL TIMBER CONNECTION HARDWARE AS SPECIFIED IN PUB. 408/2016, SECTION 1105.02(S).

PROVIDE TIMBER HARDWARE MEETING REQUIREMENTS OF ASTM A307 AND IS PAID FOR WITH FABRICATED STRUCTURAL STEEL, GALVANIZED (ITEM NO. 1056-0110).
WHEN INSTALLING LAG SCREWS INTO NEW TREATED TIMBER, OR EXISTING TIMBERS, APPLY Cu-NAP COAT (COPPER NAPTHENATE LIQUID TO LAG SCREWS BEFORE.

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

S.R. 2012 PREVIOUSLY KNOWN AS L.R. 65055

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

WYOMING COUNTY
S.R. 2012 SECTION BRG.
SEGMENT 0060 OFFSET 0000
STA. 151+90.00
1-SPAN STEEL STRINGER/GIRDER BRIDGE
GENERAL NOTES

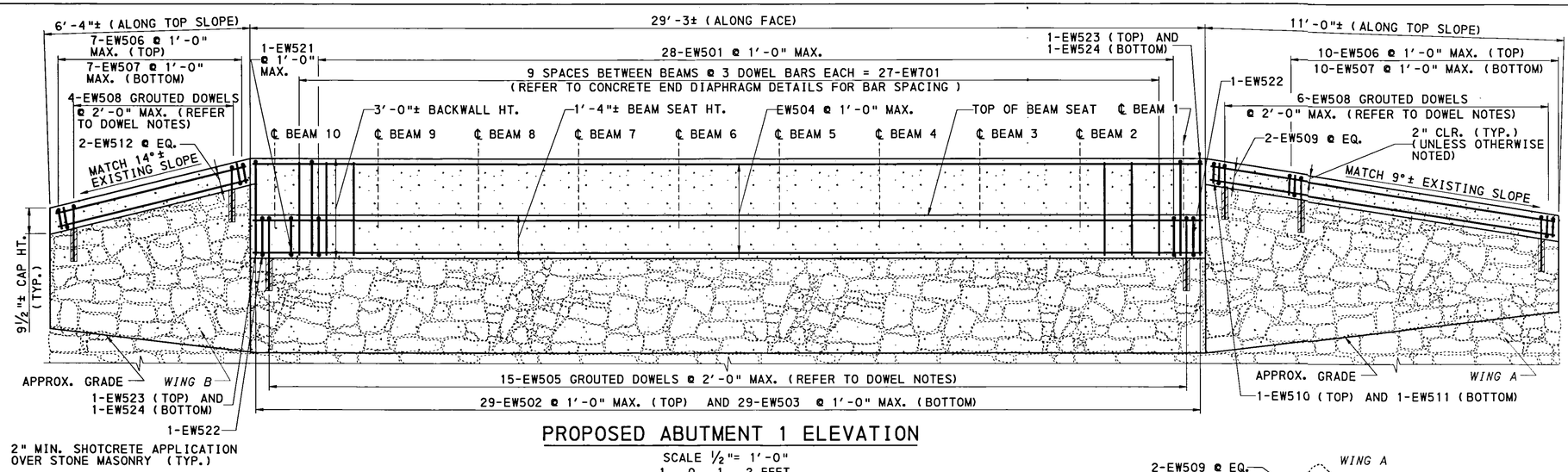
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GERARD BABINSKI
ENGINEER PE-055083

RECOMMENDED 11-8-2019

SHEET 3 OF 12

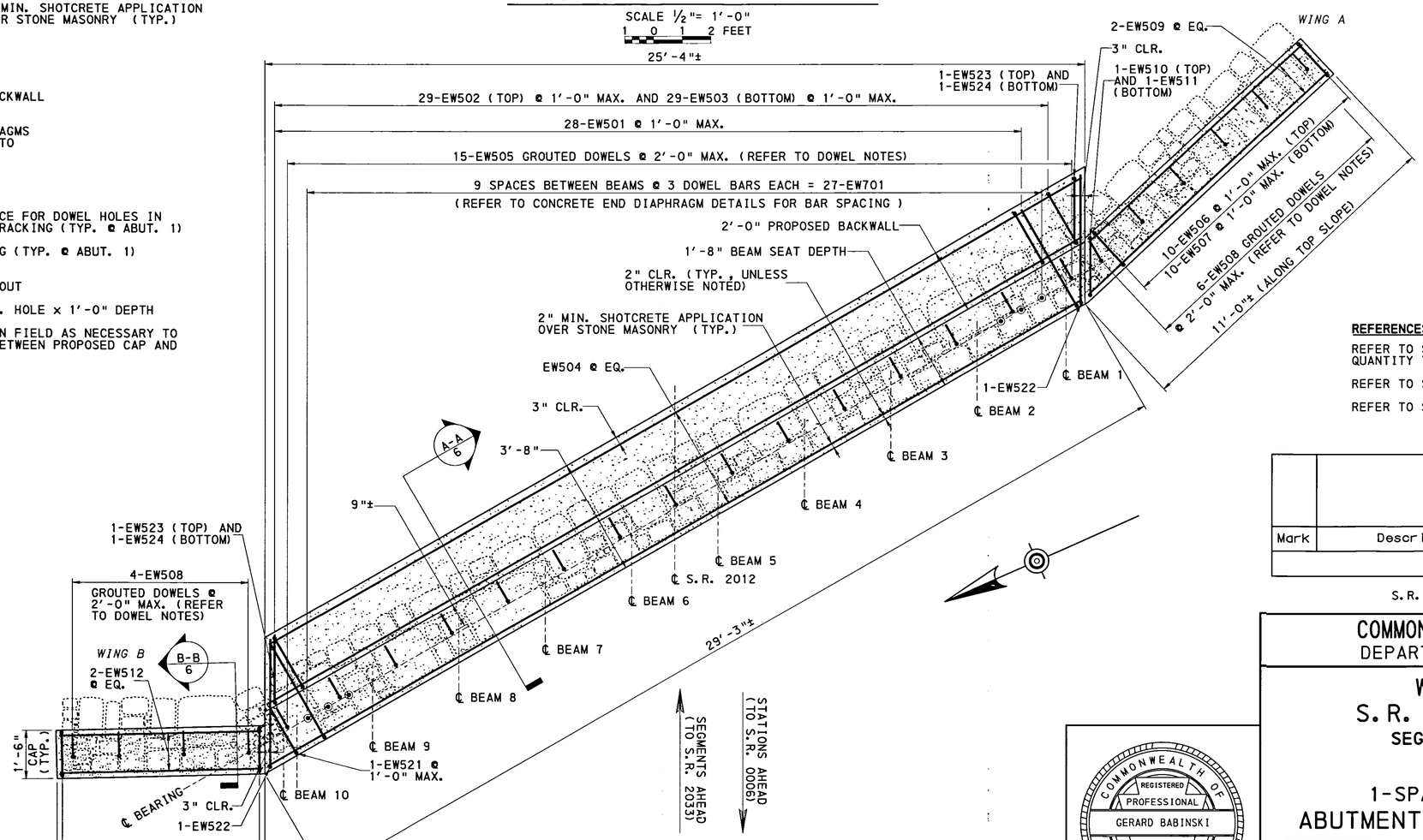
S-38969

DES: D.L./C.R. | DWG: D.L. | CKD: C.R.



PROPOSED ABUTMENT 1 ELEVATION

SCALE ½"= 1'-0"
1 0 1 2 FEET



PROPOSED ABUTMENT 1 PLAN

SCALE ½"= 1'-0"
1 0 1 2 FEET

NOTES:

USE CLASS AAA CONCRETE FOR BACKWALL AND WING CAPS

BEAMS AND CONCRETE END DIAPHRAGMS NOT SHOWN FOR CLARITY, REFER TO SHEET 11

DOWEL NOTES:

PROVIDE A 6" MIN. EDGE DISTANCE FOR DOWEL HOLES IN ROCK TO AVOID STONE MASONRY CRACKING (TYP. @ ABUT. 1)

2'-0" MAX ℄ TO ℄ DOWEL SPACING (TYP. @ ABUT. 1) UNLESS OTHERWISE NOTED.

SET DOWELS WITH NON-SHRINK GROUT

DOWEL HOLE DIMENSIONS: 1" DIA. HOLE x 1'-0" DEPTH

ADJUST DOWEL HOLE LOCATIONS IN FIELD AS NECESSARY TO ALLOW FOR PROPER CONNECTION BETWEEN PROPOSED CAP AND STONE MASONRY / ROCK.

REFERENCES:

REFER TO SHEET 2 FOR SUPPLEMENTAL DRAWINGS TABLE, QUANTITY TABULATION, AND TYPICAL SECTION.

REFER TO SHEET 3 FOR GENERAL NOTES

REFER TO SHEET 6 FOR DETAILS AND REBAR TABULATION

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

S.R. 2012 PREVIOUSLY KNOWN AS L.R. 65055

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

WYOMING COUNTY
S.R. 2012 SECTION BRG.
SEGMENT 0060 OFFSET 0000
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OVER TROUT BROOK
1-SPAN STEEL BEAM BRIDGE
ABUTMENT 1 PLAN AND ELEVATION

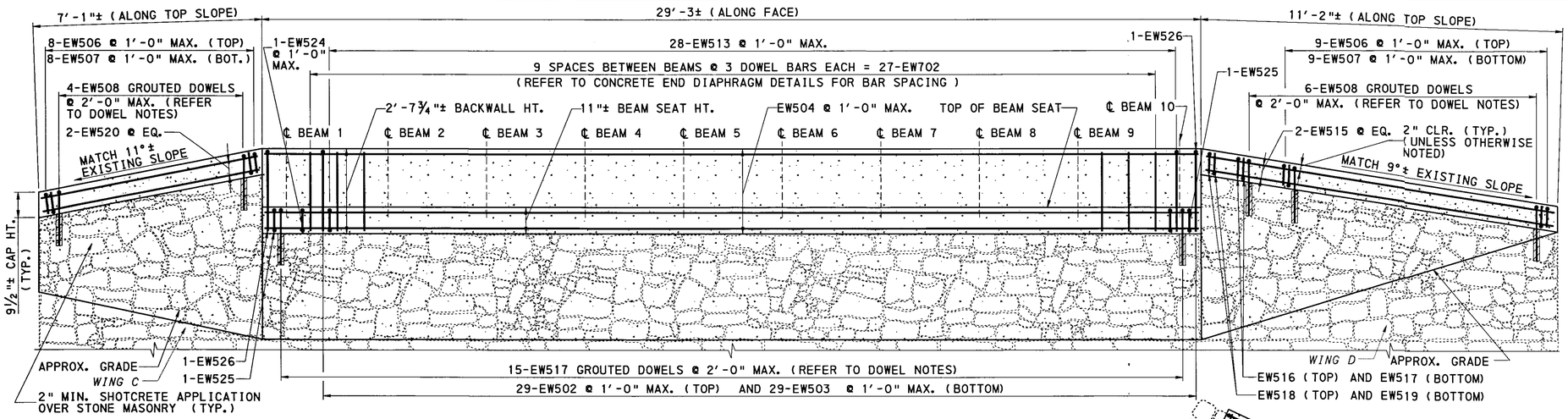
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GERARD BABINSKI
ENGINEER PE-055083

RECOMMENDED 11-8-2019

SHEET 4 OF 12

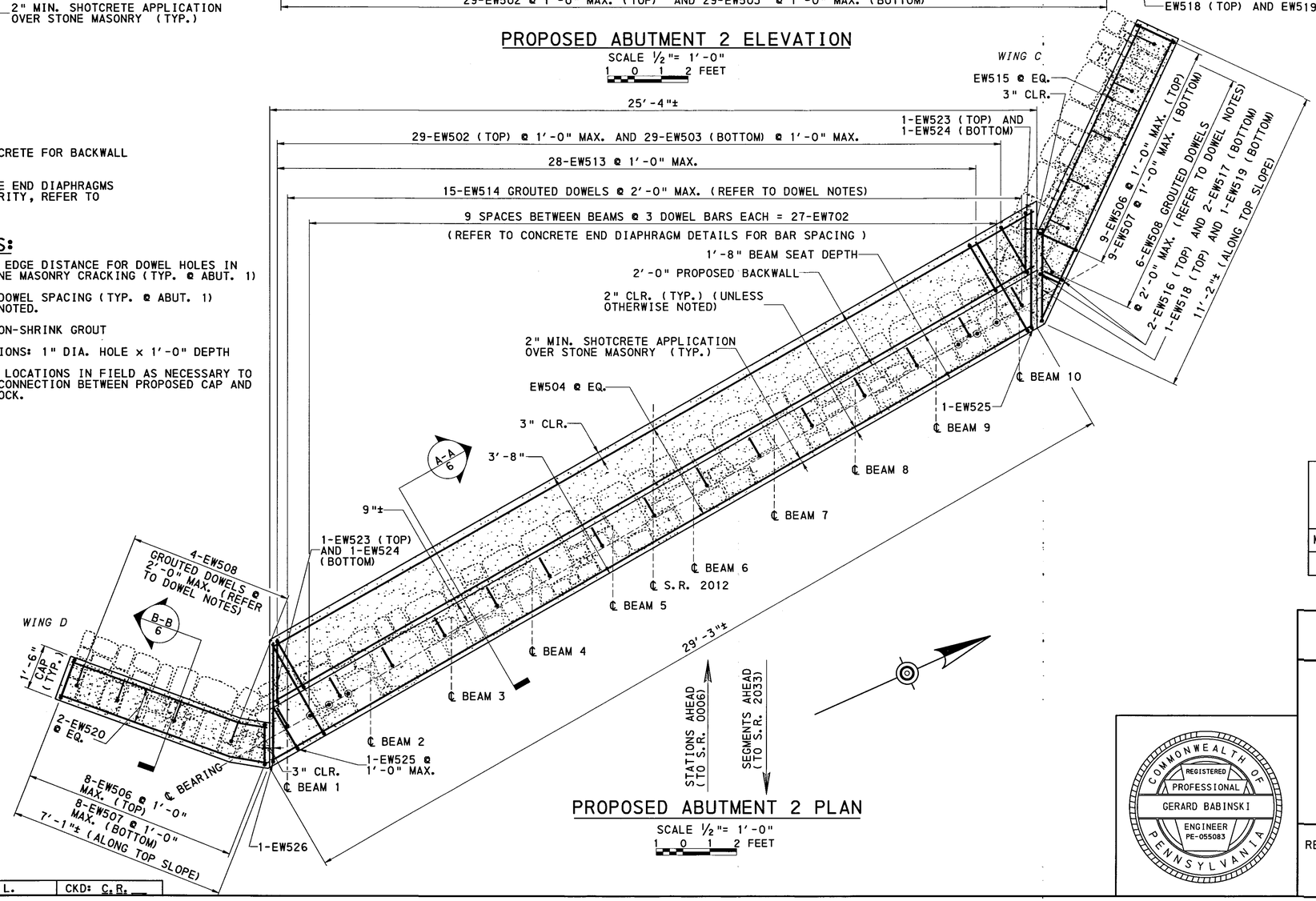
S-38969

DES: D.L./C.R. | DWG: D.L. | CKD: C.R.



PROPOSED ABUTMENT 2 ELEVATION

SCALE ½"= 1'-0"
1 0 1 2 FEET



PROPOSED ABUTMENT 2 PLAN

SCALE ½"= 1'-0"
1 0 1 2 FEET

NOTES:

USE CLASS AAA CONCRETE FOR BACKWALL AND WING CAPS

BEAMS AND CONCRETE END DIAPHRAGMS NOT SHOWN FOR CLARITY, REFER TO SHEET 11

DOWEL NOTES:

PROVIDE A 6" MIN. EDGE DISTANCE FOR DOWEL HOLES IN ROCK TO AVOID STONE MASONRY CRACKING (TYP. @ ABUT. 1)

2'-0" MAX ℄ TO ℄ DOWEL SPACING (TYP. @ ABUT. 1) UNLESS OTHERWISE NOTED.

SET DOWELS WITH NON-SHRINK GROUT

DOWEL HOLE DIMENSIONS: 1" DIA. HOLE x 1'-0" DEPTH

ADJUST DOWEL HOLE LOCATIONS IN FIELD AS NECESSARY TO ALLOW FOR PROPER CONNECTION BETWEEN PROPOSED CAP AND STONE MASONRY / ROCK.

REFERENCES:

REFER TO SHEET 2 FOR SUPPLEMENTAL DRAWINGS TABLE, QUANTITY TABULATION, AND TYPICAL SECTION.

REFER TO SHEET 3 FOR GENERAL NOTES

REFER TO SHEET 6 FOR DETAILS AND REBAR TABULATION

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

S.R. 2012 PREVIOUSLY KNOWN AS L.R. 65055

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

WYOMING COUNTY
S.R. 2012 SECTION BRG.
SEGMENT 0060 OFFSET 0000
STA. 151+90.00
OVER TROUT BROOK
1-SPAN STEEL BEAM BRIDGE
ABUTMENT 2 PLAN AND ELEVATION

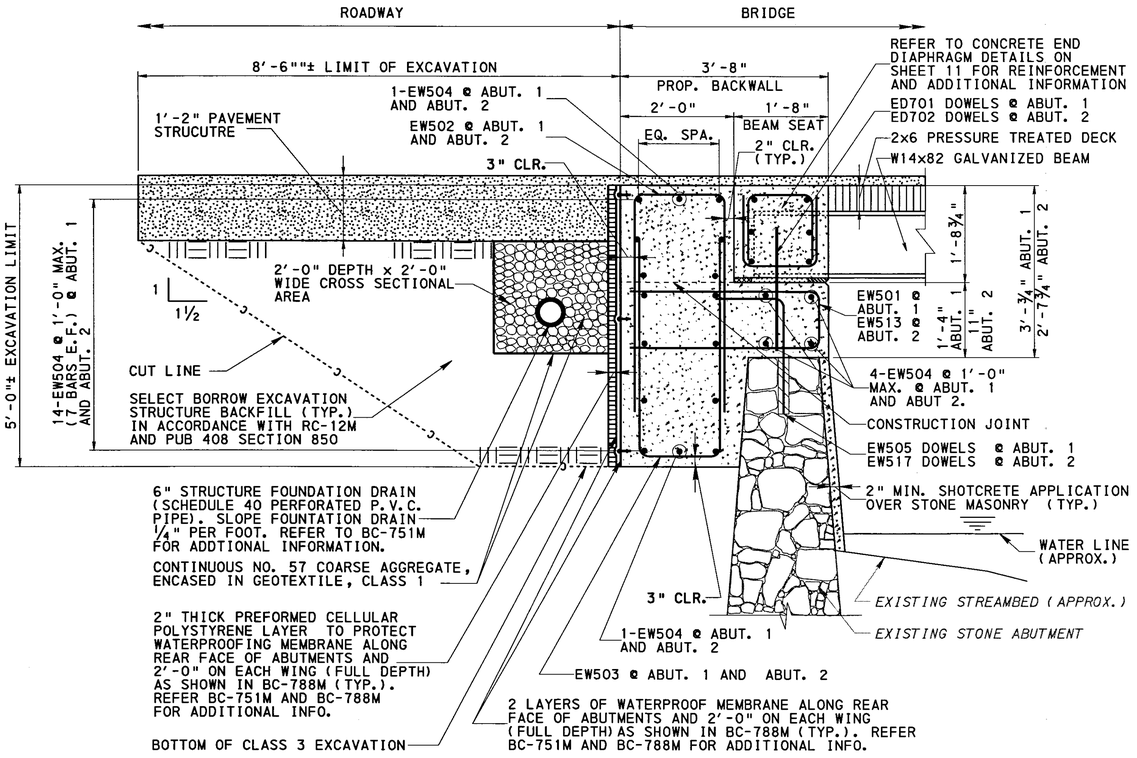
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GERARD BABINSKI
ENGINEER
PE-055083

RECOMMENDED 11-8-2019

SHEET 5 OF 12

S-38969

DES: D.L./C.R. | DWG: D.L. | CKD: C.R.



PROPOSED ABUTMENT TYPICAL SECTION A-A

SCALE ¾"= 1'-0"
12 0 12 INCHES

REINFORCEMENT SCHEDULE								
MARK	SIZE	NUMBER	LENGTH	TYPE	A	B	C	REMARKS
ABUTMENT 1 AND 2 BACKWALL AND WINGS								
EW501	5	28	7'-4"	(4)	3'-½"	4"	7"	REFER TO REINFORCEMENT NOTES
EW502	5	58	8'-8"	(4)	3'-5"	4"	1'-2"	REFER TO REINFORCEMENT NOTES
EW503	5	58	8'-8"	(4)	3'-5"	4"	1'-2"	REFER TO REINFORCEMENT NOTES
EW504	5	40	28'-9"	STR.	28'-9"			REFER TO REINFORCEMENT NOTES
EW505	5	15	3'-0"	(10)	8"	4"	2'-0"	REFER TO REINFORCEMENT NOTES
EW506	5	34	1'-11"	(4)	3"	4"	0'-9"	REFER TO REINFORCEMENT NOTES
EW507	5	34	1'-11"	(4)	3"	4"	0'-9"	REFER TO REINFORCEMENT NOTES
EW508	5	20	2'-2"	(10)	5"	4"	1'-5"	REFER TO REINFORCEMENT NOTES
EW509	5	4	10'-0"	STR.	10'-0"			REFER TO REINFORCEMENT NOTES
EW510	5	1	2'-4"	(4)	3"	4"	1'-2"	REFER TO REINFORCEMENT NOTES
EW511	5	1	2'-4"	(4)	3"	4"	1'-2"	REFER TO REINFORCEMENT NOTES
EW512	5	4	6'-2"	STR.	6'-2"			REFER TO REINFORCEMENT NOTES
EW513	5	28	6'-11"	(4)	3'-½"	4"	2"	REFER TO REINFORCEMENT NOTES
EW514	5	15	2'-6½"	(10)	8"	4"	1'-6½"	REFER TO REINFORCEMENT NOTES
EW515	5	4	10'-2"	STR.	10'-2"			REFER TO REINFORCEMENT NOTES
EW516	5	2	1'-1"	(10)	3"	4"	6"	REFER TO REINFORCEMENT NOTES
EW517	5	2	1'-1"	(10)	3"	4"	6"	REFER TO REINFORCEMENT NOTES
EW518	5	1	3'-2"	(10)	3"	4"	2'-7"	REFER TO REINFORCEMENT NOTES
EW519	5	1	3'-2"	(10)	3"	4"	2'-7"	REFER TO REINFORCEMENT NOTES
EW520	5	4	7'-2"	STR.	7'-2"			REFER TO REINFORCEMENT NOTES
EW521	5	1	3'-5"	(4)	1'-1"	4"	7"	REFER TO REINFORCEMENT NOTES
EW522	5	2	8'-4"	(4)	3'-6½"	4"	7"	REFER TO REINFORCEMENT NOTES
EW523	5	4	5'-5"	(10)	1'-8"	4"	3'-5"	REFER TO REINFORCEMENT NOTES
EW524	5	4	5'-5"	(10)	1'-8"	4"	3'-5"	REFER TO REINFORCEMENT NOTES
EW525	5	1	3'-0"	(4)	1'-1"	4"	2"	REFER TO REINFORCEMENT NOTES
EW526	5	2	3'-5"	(4)	3'-6½"	4"	2"	REFER TO REINFORCEMENT NOTES
ABUTMENT 1 CONCRETE SLAB								
ES401	4	80	4'-6"	STR.	4'-6"			REFER TO REINFORCEMENT NOTES
ABUTMENT 1 AND 2 CONCRETE END DIAPHRAGMS								
ED403	4	27	3'-10½"	(4)	1'-1¼"	3"	1'-2"	REFER TO REINFORCEMENT NOTES
ED404	4	27	3'-10½"	(4)	1'-1¼"	3"	1'-2"	REFER TO REINFORCEMENT NOTES
ED601	6	8	28'-9"	STR.	28'-9"			REFER TO REINFORCEMENT NOTES
ED602	6	8	28'-9"	STR.	28'-9"			REFER TO REINFORCEMENT NOTES
ED701	7	27	2'-8¾"	STR.	2'-8¾"			REFER TO REINFORCEMENT NOTES
ED702	7	27	2'-3¾"	STR.	2'-3¾"			REFER TO REINFORCEMENT NOTES

REINFORCEMENT NOTES:

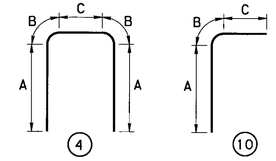
FOR REINFORCEMENT BAR FABRICATION DETAILS AND LAP SPLICE REQUIREMENTS, REFER TO STANDARD DRAWING BC-736M.

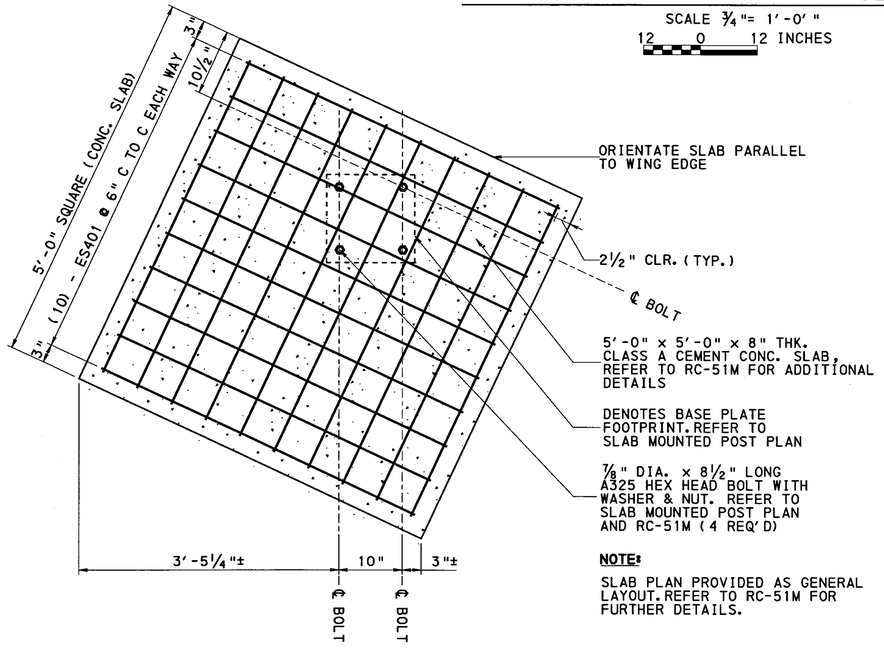
CUT/TRIM REINFORCEMENT IN FIELD AS REQUIRED. EPOXY COAT CUT/TRIMMED ENDS OF REINFORCEMENT.

FIGURES IN CIRCLES SHOW TYPES.

REINFORCEMENT SCHEDULE IS FOR INFORMATION ONLY.

VERIFY REINFORCEMENT SCHEDULE PRIOR TO FABRICATION.



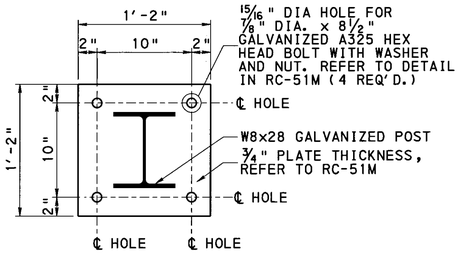


NOTE:

SLAB PLAN PROVIDED AS GENERAL LAYOUT. REFER TO RC-51M FOR FURTHER DETAILS.

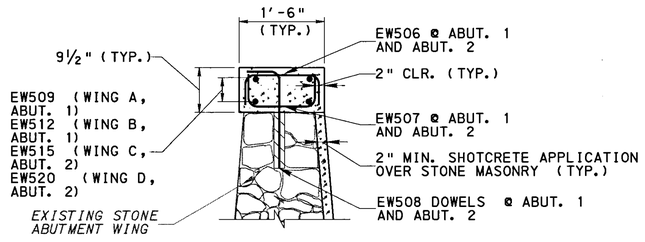
POST OVER UNDERGROUND STRUCTURE

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



SLAB MOUNTED PLATE

(MEMBER QUANTITY = 1)
SCALE 1½" = 1'-0"
6 0 6 INCHES



PROPOSED ABUTMENT WING TYPICAL SECTION B-B

SCALE ¾"= 1'-0"
12 0 12 INCHES

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

S.R. 2012 PREVIOUSLY KNOWN AS L.R. 65055

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

WYOMING COUNTY
S.R. 2012 SECTION BRG.
SEGMENT 0060 OFFSET 0000
STA. 151+90.00
OVER TROUT BROOK
1-SPAN STEEL BEAM BRIDGE
REINFORCEMENT SCHEDULE & DETAILS

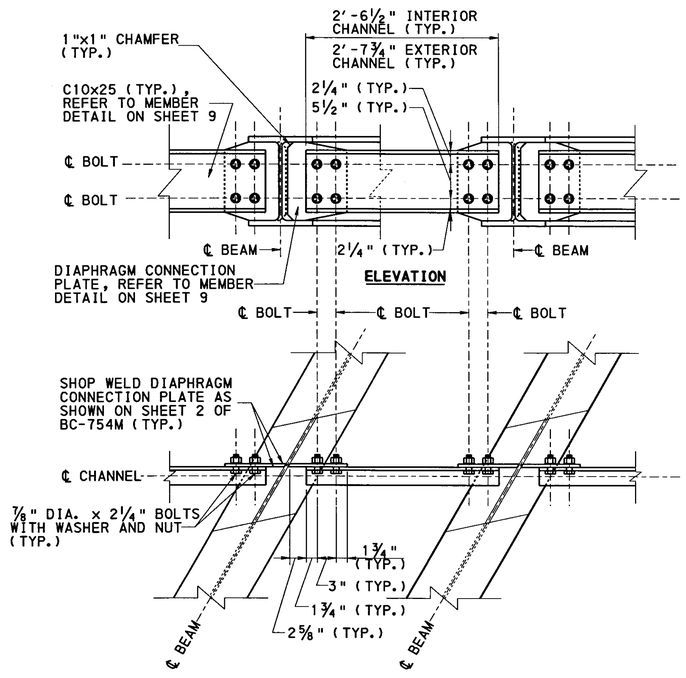
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GERARD BABINSKI
ENGINEER
PE-055083

RECOMMENDED 11-8-2019

SHEET 6 OF 12

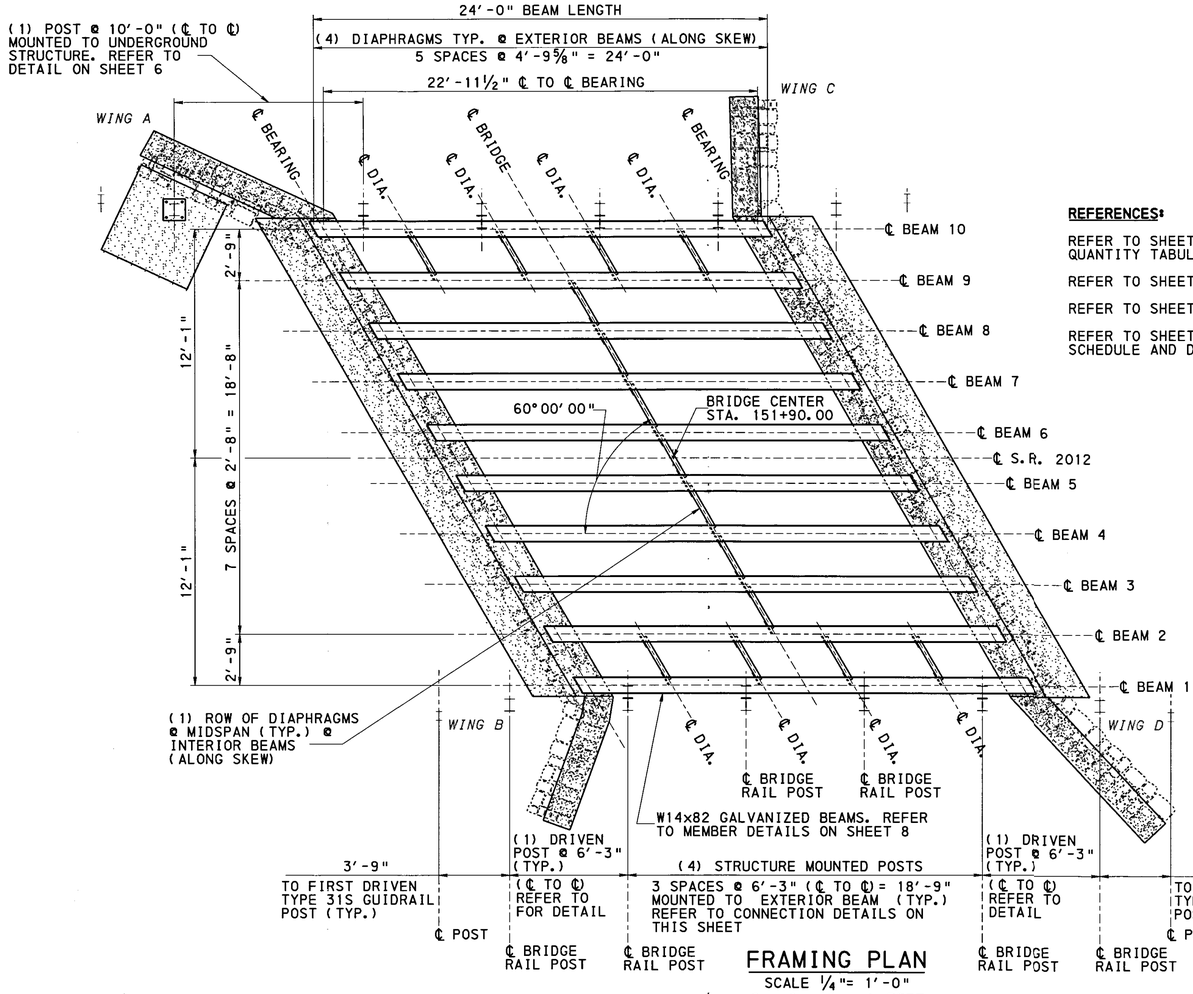
S-38969

DES: D.L./C.R. | DWG: D.L. | CKD: C.R.



TYPICAL DIAPHRAGM CONNECTION DETAIL

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



FRAMING PLAN

SCALE ¼"= 1'-0"
2 0 2 4 FEET

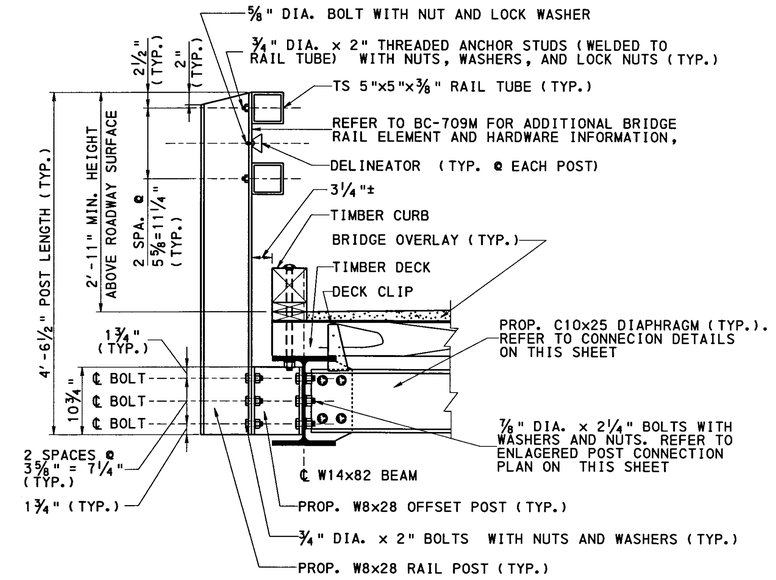
REFERENCES:

REFER TO SHEET 2 FOR SUPPLEMENTAL DRAWINGS TABLE, QUANTITY TABULATION, AND TYPICAL SECTION.

REFER TO SHEET 3 FOR GENERAL NOTES

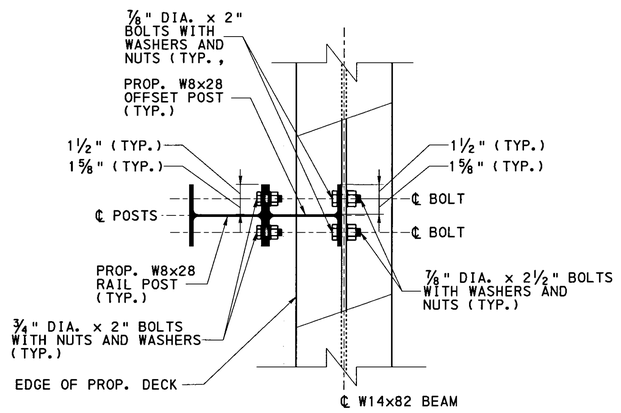
REFER TO SHEET 8 FOR BEAM DETAILS

REFER TO SHEET 9 FOR FABRICATED STRUCTURAL STEEL SCHEDULE AND DIAPHRAGM DETAILS



BRIDGE RAILING CONNECTION DETAIL

(TYPICAL @ EXTERIOR BEAMS)
SCALE 1" = 1'-0"
6 0 6 12 INCHES



ENLARGED POST CONNECTION PLAN

(TYPICAL @ EXTERIOR BEAMS)
SCALE 1½" = 1'-0"
6 0 6 INCHES

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

S.R. 2012 PREVIOUSLY KNOWN AS L.R. 65055

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

WYOMING COUNTY
S.R. 2012 SECTION BRG.
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OVER TROUT BROOK
1-SPAN STEEL STRINGER/GIRDER BRIDGE
FRAMING PLAN & CONNECTION DETAILS

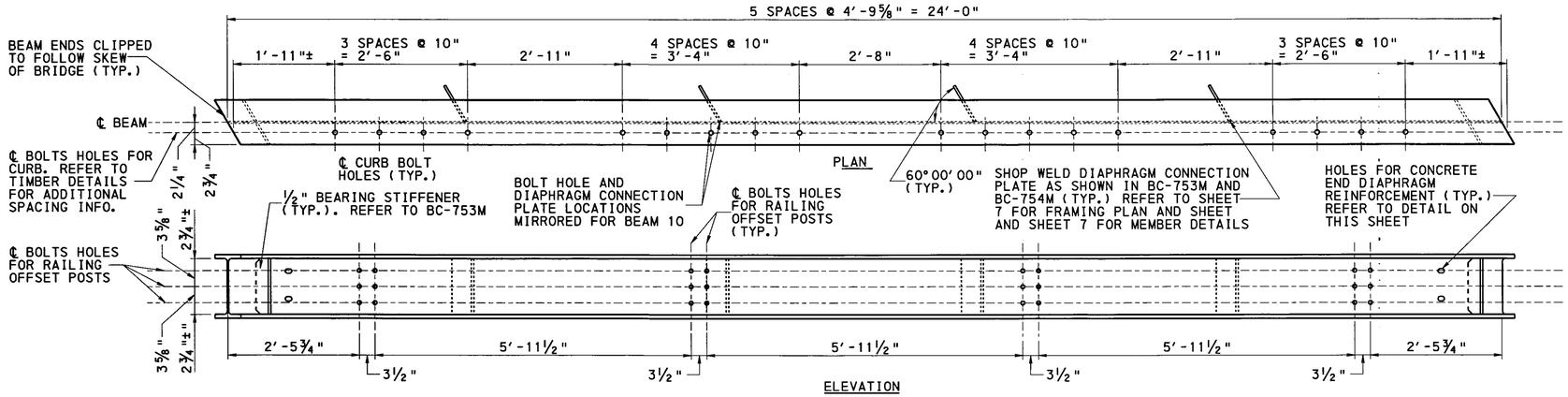
COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — GERARD BABINSKI — ENGINEER PE-055083

RECOMMENDED 11-8-2019

SHEET 7 OF 12

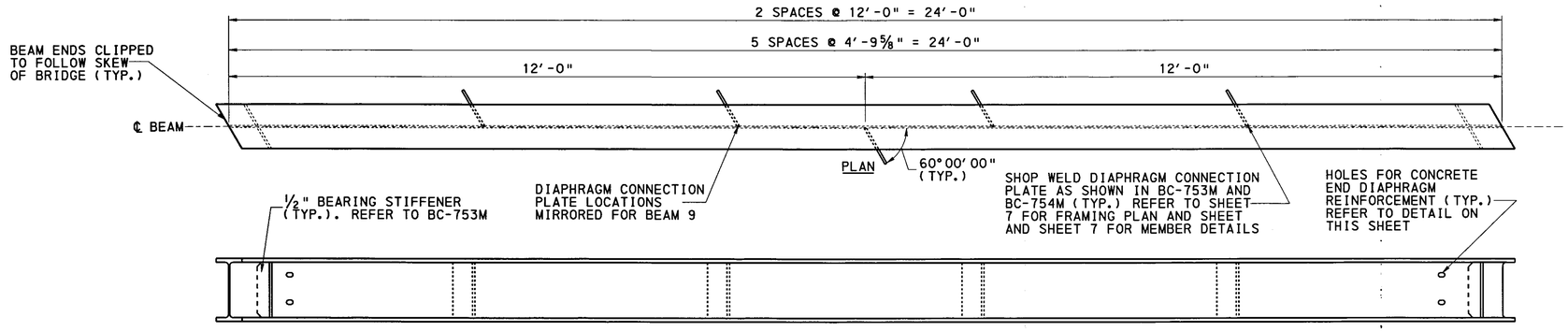
S-38969

DES: D.L./C.R. | DWG: D.L. | CKD: C.R.



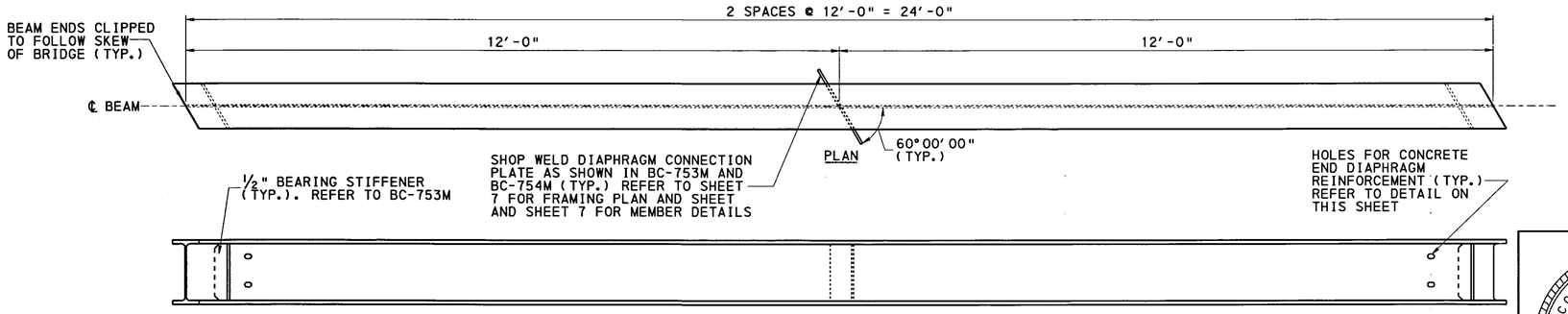
TYPICAL W14x82 EXTERIOR BEAM

(BEAM 1 SHOWN, BEAM 10 SIMILAR)
(MEMBER QUANTITY = 2)
SCALE ¾"= 1'-0"
12 0 12 INCHES



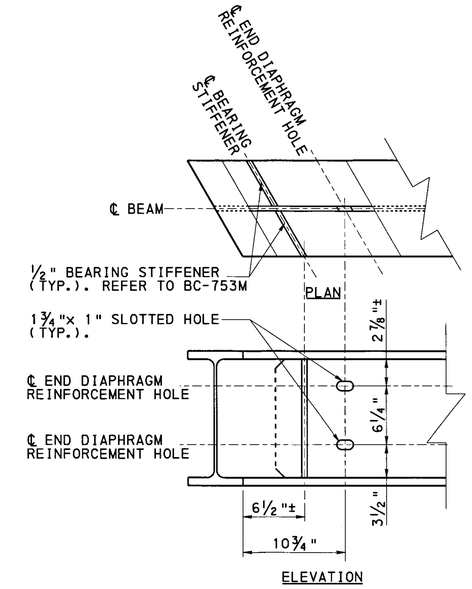
TYPICAL W14x82 FIRST INTERIOR BEAM

(BEAM 2 SHOWN, BEAM 9 SIMILAR)
(MEMBER QUANTITY = 2)
SCALE ¾"= 1'-0"
12 0 12 INCHES



TYPICAL W14x82 INTERIOR BEAM

(MEMBER QUANTITY = 6)
SCALE ¾"= 1'-0"
12 0 12 INCHES



BEAM END DETAIL

SCALE 1½" = 1'-0"
6 0 6 INCHES

REFERENCES:

REFER TO SHEET 2 FOR SUPPLEMENTAL DRAWINGS TABLE, QUANTITY TABULATION, AND TYPICAL SECTION.

REFER TO SHEET 3 FOR GENERAL NOTES

REFER TO SHEET 9 FOR FABRICATED STRUCTURAL STEEL SCHEDULE AND DIAPHRAGM DETAILS

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

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1-SPAN STEEL STRINGER/GIRDER BRIDGE
BEAM DETAILS

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — GERARD BABINSKI — ENGINEER PE-055083

RECOMMENDED 11-8-2019

SHEET 8 OF 12

S-38969

DES: D.L./C.R. | DWG: D.L. | CKD: C.R.

FABRICATED STRUCTURAL STEEL SCHEDULE

ROLLED STEEL SECTIONS

DESCRIPTION	SIZE	QUANTITY	NOMINAL WEIGHT (PLF)	LENGTH (FT.)	WEIGHT (LB.)	TOTAL WEIGHT (LB.)	REMARKS
BEAMS	W14x82	10	82	24'-0"	1968.00	19680.00	
DIAPHRAGM	C10x25	7	25	2'-6½"	63.55	444.85	
DIAPHRAGM	C10x25	8	25	2'-7¾"	66.15	529.20	
STRUCTURE MOUNTED BRIDGE RAILING OFFSET POST (FASCIA BEAMS)	W8x28	8	28	10¾"	25.08	200.70	
STRUCTURE MOUNTED BRIDGE RAILING POST (FASCIA BEAMS)	W8x28	8	28	4'-6½"	127.18	1017.41	
DRIVEN BRIDGE RAILING POST AND CONCRETE PAD MOUNTED BRIDGE RAILING POST	W8x28	4	28	8'-0"	224.00	896.00	ADJUST POST HEIGHT IN FIELD AS NESSESARY. GUIDERAIL CONTRACTOR TO DRIVE POSTS
		4	28	8'-0"	224.00	896.00	ADJUST POST HEIGHT IN FIELD AS NESSESARY.
BRIDGE RAILING	5x5x⅜	2	22.3	35'-6½"	22.30	1585.08	FABRICATE / ADJUST RAIL LENGTHS AS PER BC-708M
		2	22.3	39'-3½"	22.30	1752.33	
					SUBTOTAL =	27001.57	

PLATE MATERIAL

DESCRIPTION	SIZE	QUANTITY	NOMINAL WEIGHT (PSF)	WEIGHT (LB.)	TOTAL WEIGHT (LB.)	REMARKS
DIAPHRAGM CONNECTION PLATE	REFER TO DETAIL ON THIS SHEET	30	20.40	16.44	493.27	REFER TO BC-753M AND BC-754M FOR ADDITIONAL INFO.
BEARING STIFFENER PLATE	1'-⅝"x4¾"x½" THK.	40	20.40	9.34	373.73	REFER TO BC-753M AND BC-754M FOR ADDITIONAL INFO.
STRUCTURE MOUNTED BASE PLATE	1'-2"x1'-2"x¾" THK.	4	30.60	41.31	165.24	REFER TO RC-51M FOR ADDITIONAL INFO.
DECK CLIP (1/16" THICKNESS)	REFER TO DETAIL ON SHEET 10	510	2.50	.30	153	FABRICATE DECK CLIP WITH 16 GAGE CORROSION RESISTANT STEEL
DRIP EDGE FOR CURB	6"x8"x1/16"x7'-0"	6	2.50	20.4	122.40	FABRICATE DRIP EDGE WITH 16 GAGE CORROSION RESISTANT STEEL
				SUBTOTAL =	1307.64	

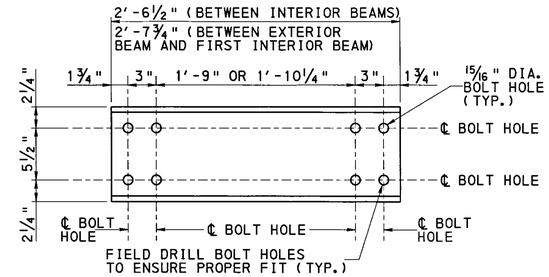
FASTENERS

DESCRIPTION	SIZE	QUANTITY	NOMINAL WEIGHT (LB.)	LENGTH (IN.)	TOTAL WEIGHT (LB.)	REMARKS
NUT AND BOLT ASSEMBLY (POST CONNECTION)	¾" DIA.	50	.584	2	29.20	
WASHERS	¾" DIA.	50	.048	———	2.40	
NUT AND BOLT ASSEMBLY (POST AND DIAPHRAGM CONNECTIONS	⅞" DIA.	175	.903	2¼"	158.03	REFER TO BC-753M AND BC-754M FOR ADDITIONAL INFO.
NUT AND BOLT ASSEMBLY (CONCRETE PAD MOUNTED POST, ANCHOR BOLTS)	⅞" DIA.	16	1.96	8½"	31.36	REFER TO RC-51M FOR ADDITIONAL INFO.
NUT AND BOLT ASSEMBLY (CURB TIMBER BOLTS)	⅞" DIA.	36	3.52	1'-5¾"	126.64	DOME HEAD BOLTS
NUT AND BOLT ASSEMBLY (SWEDGE BOLTS FOR BEAM ENDS)	⅞" DIA.	40	2.51	11¾"	100.24	
NUTS	⅞" DIA.	40	.297	———	11.88	ADDITONAL NUTS FOR BEAM ENDS AS PER BC-755M
WASHERS	⅞" DIA.	267	.07	———	18.69	
				SUBTOTAL =	478.44	
				TOTAL =	28663.73	

FABRICATED STRUCTURAL STEEL SCHEDULE NOTES:

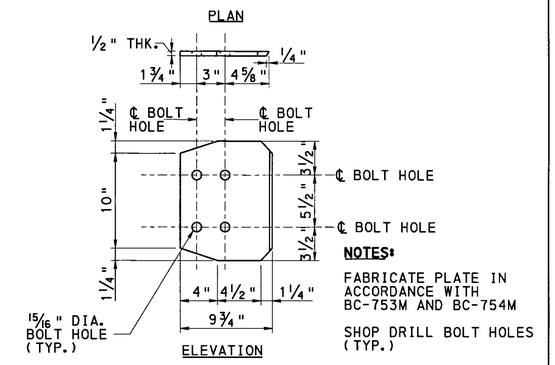
SCHEDULE IS FOR REFERENCE ONLY.

REFER TO SHEET 3 FOR MATERIAL SPECIFICATIONS.



TYPICAL C10x25 DIAPHRAGM

(MEMBER QUANTITY = 7)
(MEMBER QUANTITY = 8)
SCALE 1½" = 1'-0"
6 0 6 INCHES



NOTES:

FABRICATE PLATE IN ACCORDANCE WITH BC-753M AND BC-754M

SHOP DRILL BOLT HOLES (TYP.)

TYPICAL DIAPHRAGM CONNECTION PLATE

(MEMBER QUANTITY = 30)
SCALE 1½" = 1'-0"
6 0 6 INCHES

Mark	Description	By	Chk'd.	Recm'd.	Date
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1-SPAN STEEL STRINGER/GIRDER BRIDGE
FABRICATED STEEL SCHEDULE

COMMONWEALTH OF PENNSYLVANIA
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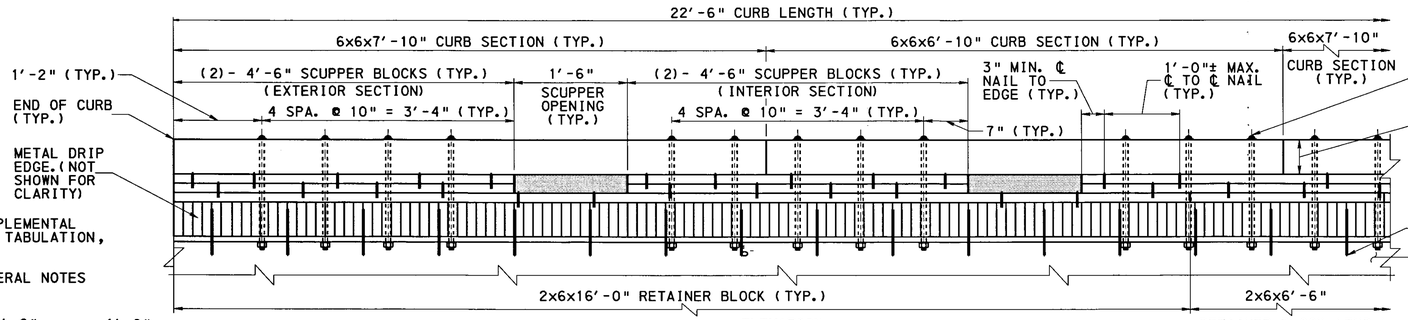
GERARD BABINSKI
ENGINEER PE-055083

RECOMMENDED 11-8-2019

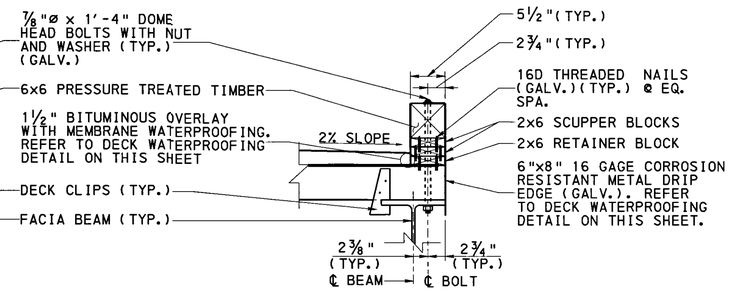
SHEET 9 OF 12

S-38969

DES: D.L./C.R. | DWG: D.L. | CKD: C.R.



ELEVATION



SECTION

REFERENCES:

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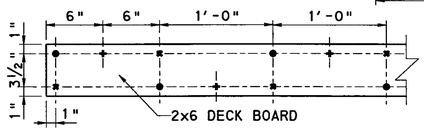
REFER TO SHEET 3 FOR GENERAL NOTES



NOTES:

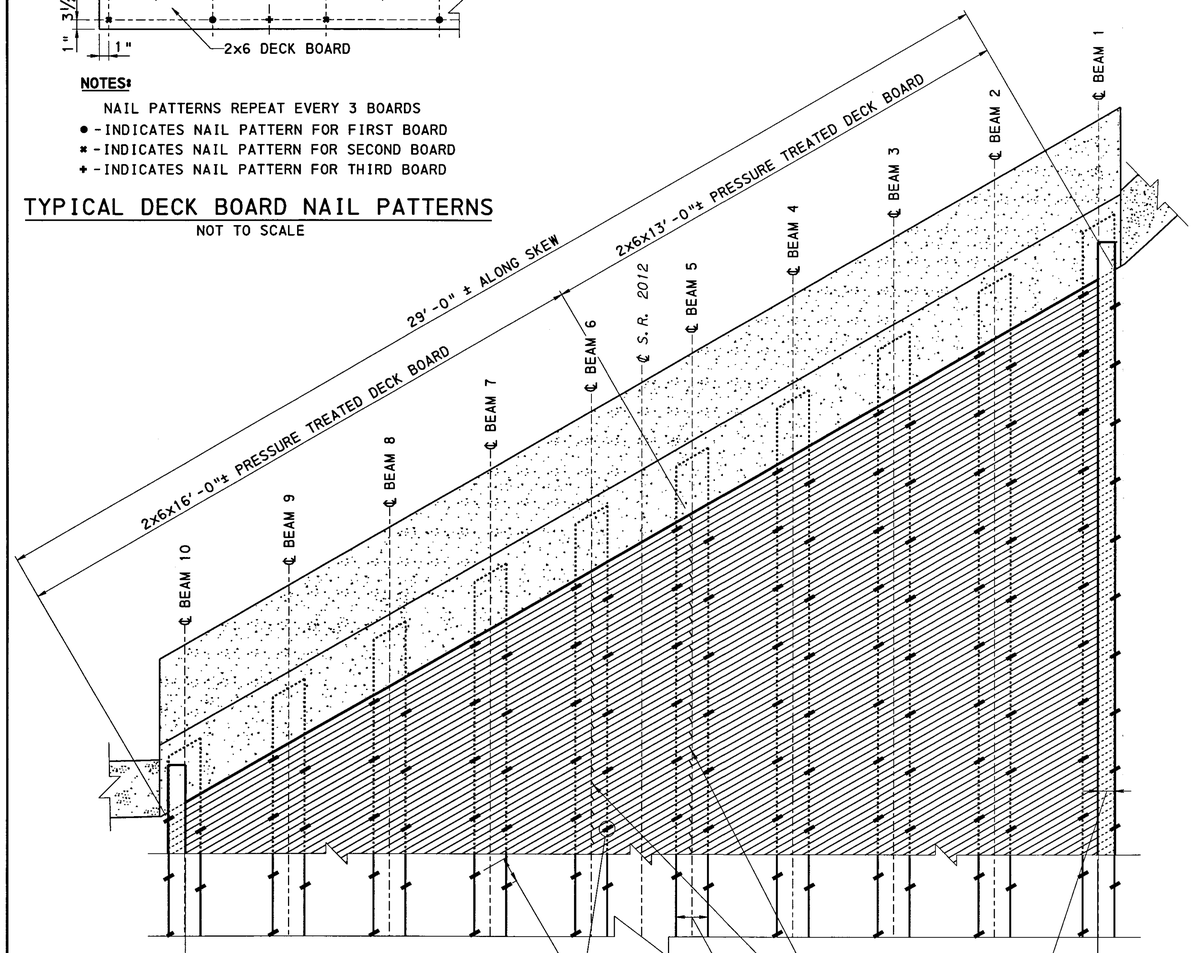
NAIL PATTERNS REPEAT EVERY 3 BOARDS
- ● - INDICATES NAIL PATTERN FOR FIRST BOARD
- * - INDICATES NAIL PATTERN FOR SECOND BOARD
- + - INDICATES NAIL PATTERN FOR THIRD BOARD

TYPICAL DECK BOARD NAIL PATTERNS

NOT TO SCALE

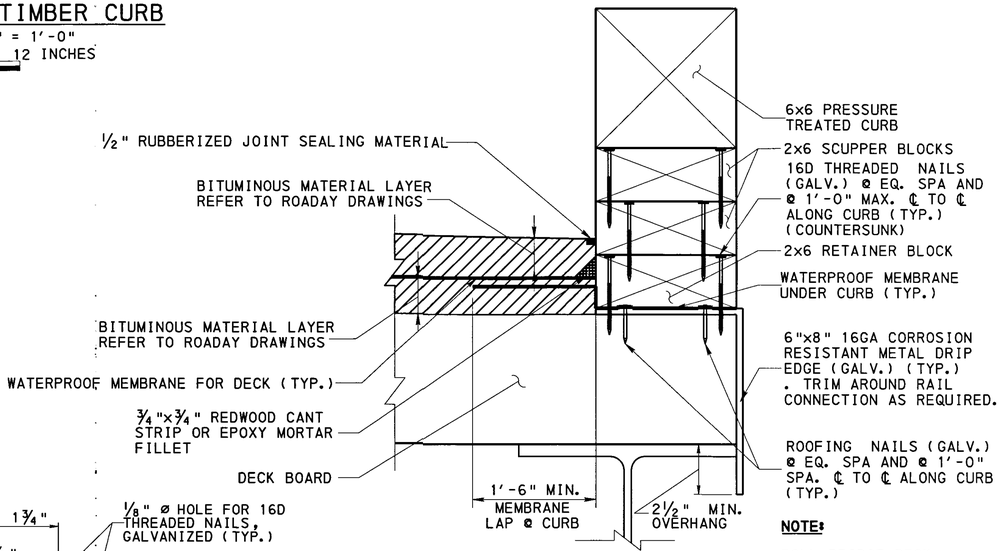
PROPOSED TIMBER CURB

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



DECK BOARD LAYOUT

SCALE ½"= 1'-0"
1 0 1 2 FEET

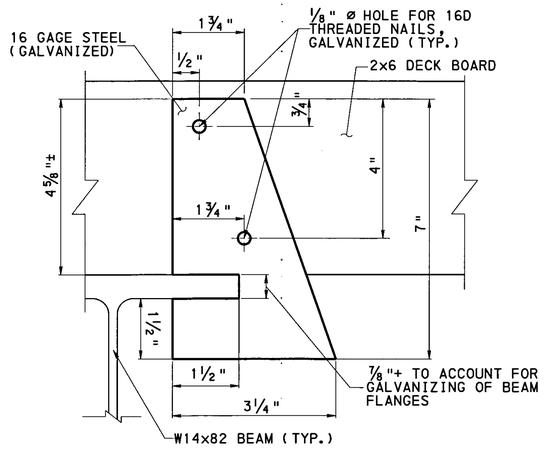


DECK WATERPROOFING

NOT TO SCALE

NOTE:

ROLL BRIDGE DECK USING STATIC COMPACTION TO ACHIEVE REQUIRED DENSITY (TYP.)



DECK CLIPS

NOT TO SCALE

DECK LAYOUT NOTES:

BOARD AND TIMBER LENGTHS INDICATED ARE NOMINAL

PLACE DECK BOARDS PARALLEL TO EXISTING SKEW

TRIM BOARD ENDS AS NECESSARY TO ENSURE PROPER CONNECTION AND FIT

APPLY WOOD PRESERVATIVE TO CUT ENDS OF 2x6 DECK AND 6x6 CURB

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

S.R. 2012 PREVIOUSLY KNOWN AS L.R. 65055

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

WYOMING COUNTY
S.R. 2012 SECTION BRG.
SEGMENT 0060 OFFSET 0000
STA. 151+90.00
OVER TROUT BROOK
1-SPAN STEEL STRINGER/GIRDER BRIDGE
TIMBER DECK DETAILS

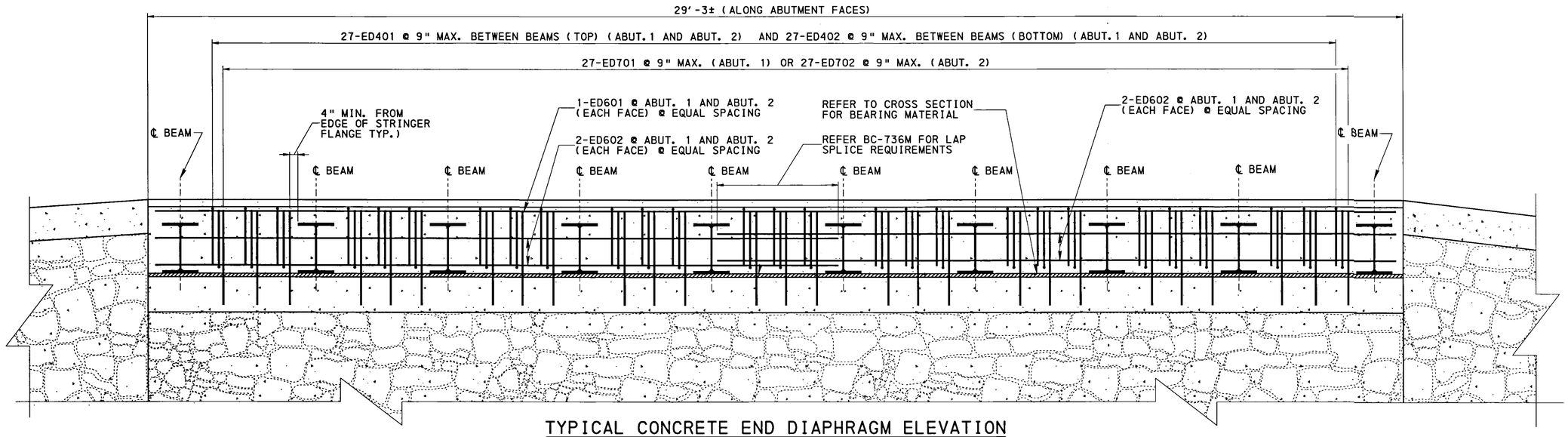
COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — GERARD BABINSKI — ENGINEER PE-055083

RECOMMENDED 11-8-2019

SHEET 10 OF 12

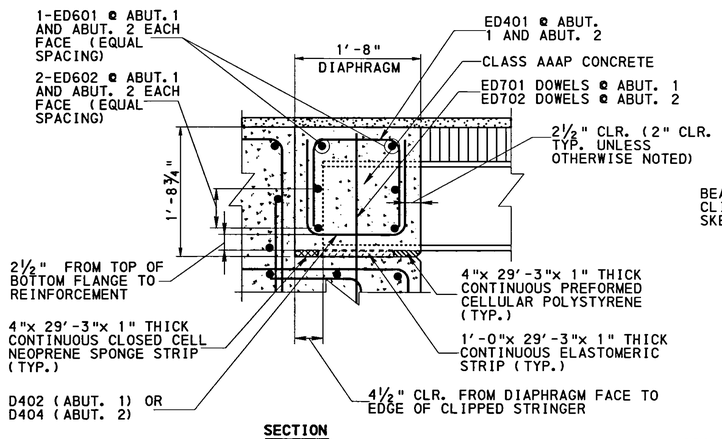
S-38969

DES: D.L./C.R. | DWG: D.L. | CKD: C.R.

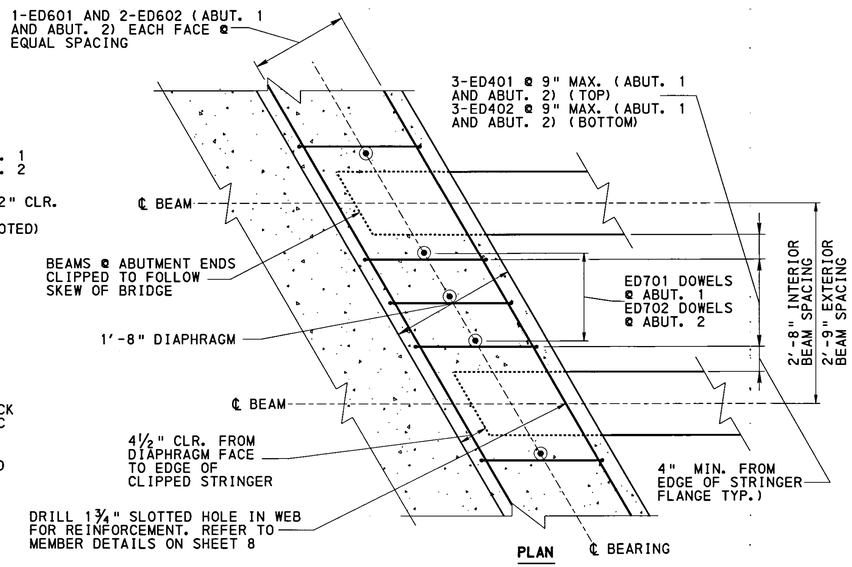


TYPICAL CONCRETE END DIAPHRAGM ELEVATION

SCALE 3/4"= 1'-0"
12 0 12 INCHES



SECTION



PLAN

TYPICAL CONCRETE END DIAPHRAGM

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

REFERENCES:

REFER TO SHEET 2 FOR SUPPLEMENTAL DRAWINGS TABLE, QUANTITY TABULATION, AND TYPICAL SECTION.

REFER TO SHEET 3 FOR GENERAL NOTES

REFER TO SHEET 6 REINFORCING SCHEDULE

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

S.R. 2012 PREVIOUSLY KNOWN AS L.R. 65055

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CONCRETE END DIAPHRAGMS

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GERARD BABINSKI
ENGINEER PE-055083

RECOMMENDED 11-8-2019

SHEET 11 OF 12

S-38969

DES: D.L./C.R. DWG: D.L. CKD: C.R.

EXTERIOR BEAM - STEEL ROLLED BEAM W14x82							
WITHOUT FUTURE WEARING SURFACE		H20	HS20	ML-80	TK527	PHL-93	P-82
INVENTORY RATING (IR)	DISTRIBUTION FACTOR	0.308	0.308	0.308	0.308	0.308	N/A
	LOCATION (ft)	9.60R	9.60R	9.60R	9.60R	9.60R	N/A
	LIMIT STATE	STR-I	STR-I	STR-I	STR-I	STR-I	N/A
	RATING FACTOR	3.54M	3.54M	2.36M	2.65M	1.95M	N/A
OPERATING RATING (OR)	DISTRIBUTION FACTOR	0.308	0.308	0.308	0.308	0.308	0.308
	LOCATION (ft)	9.60R	9.60R	9.60R	9.60R	9.60R	9.60R
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	4.59M	4.59M	3.06M	3.43M	2.53M	2.24M
WITH FUTURE WEARING SURFACE		H20	HS20	ML-80	TK527	PHL-93	P-82
INVENTORY RATING (IR)	DISTRIBUTION FACTOR	0.308	0.308	0.308	0.308	0.308	N/A
	LOCATION (ft)	9.60R	9.60R	9.60R	9.60R	9.60R	N/A
	LIMIT STATE	STR-I	STR-I	STR-I	STR-I	STR-I	N/A
	RATING FACTOR	3.51M	3.51M	2.34M	2.62M	1.93M	N/A
OPERATING RATING (OR)	DISTRIBUTION FACTOR	0.308	0.308	0.308	0.308	0.308	0.308
	LOCATION (ft)	9.60R	9.60R	9.60R	9.60R	9.60R	9.60R
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	4.55M	4.55M	3.03M	3.40M	2.51M	2.22M
MAXIMUM MOMENT CAPACITY (kip-ft) 513.40			SIMPLE SPAN				
MAXIMUM SHEAR CAPACITY (kips) 186.21			SPAN LENGTH (ft) = 24.00				

INTERIOR BEAM - STEEL ROLLED BEAM W14x82							
WITHOUT FUTURE WEARING SURFACE		H20	HS20	ML-80	TK527	PHL-93	P-82
INVENTORY RATING (IR)	DISTRIBUTION FACTOR	0.271	0.466	0.271	0.271	0.271	N/A
	LOCATION (ft)	0.00	0.00	0.00	0.00	0.00	N/A
	LIMIT STATE	STR-I	STR-I	STR-I	STR-I	STR-I	N/A
	RATING FACTOR	4.11M	3.73S	2.74M	3.07M	2.26M	N/A
OPERATING RATING (OR)	DISTRIBUTION FACTOR	0.271	0.466	0.271	0.271	0.271	0.271
	LOCATION (ft)	0.00	0.00	0.00	0.00	0.00	0.00
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	5.33M	4.84S	3.55M	3.98M	2.93M	2.60M
WITH FUTURE WEARING SURFACE		H20	HS20	ML-80	TK527	PHL-93	P-82
INVENTORY RATING (IR)	DISTRIBUTION FACTOR	0.271	0.466	0.271	0.271	0.271	N/A
	LOCATION (ft)	0.00	0.00	0.00	0.00	0.00	N/A
	LIMIT STATE	STR-I	STR-I	STR-I	STR-I	STR-I	N/A
	RATING FACTOR	4.04M	3.70S	2.69M	3.02M	2.22M	N/A
OPERATING RATING (OR)	DISTRIBUTION FACTOR	0.271	0.466	0.271	0.271	0.271	0.271
	LOCATION (ft)	0.00	0.00	0.00	0.00	0.00	0.00
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	5.23M	4.80S	3.48M	3.91M	2.88M	2.55M
MAXIMUM MOMENT CAPACITY (kip-ft) 513.40			SIMPLE SPAN				
MAXIMUM SHEAR CAPACITY (kips) 186.21			SPAN LENGTH (ft) = 24.00				

FIRST INTERIOR BEAM - STEEL ROLLED BEAM W14x82							
WITHOUT FUTURE WEARING SURFACE		H20	HS20	ML-80	TK527	PHL-93	P-82
INVENTORY RATING (IR)	DISTRIBUTION FACTOR	0.275	0.468	0.275	0.275	0.275	N/A
	LOCATION (ft)	9.60R	0.00	9.60R	9.60R	9.60R	N/A
	LIMIT STATE	STR-I	STR-I	STR-I	STR-I	STR-I	N/A
	RATING FACTOR	4.05M	3.71S	2.69M	3.02M	2.22M	N/A
OPERATING RATING (OR)	DISTRIBUTION FACTOR	0.275	0.468	0.275	0.275	0.275	0.275
	LOCATION (ft)	9.60R	0.00	9.60R	9.60R	9.60R	9.60R
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	5.24M	4.81S	3.49M	3.92M	2.88M	2.56M
WITH FUTURE WEARING SURFACE		H20	HS20	ML-80	TK527	PHL-93	P-82
INVENTORY RATING (IR)	DISTRIBUTION FACTOR	0.275	0.468	0.275	0.275	0.275	N/A
	LOCATION (ft)	9.60R	0.00	9.60R	9.60R	9.60R	N/A
	LIMIT STATE	STR-I	STR-I	STR-I	STR-I	STR-I	N/A
	RATING FACTOR	3.98M	3.68S	2.65M	2.97M	2.19M	N/A
OPERATING RATING (OR)	DISTRIBUTION FACTOR	0.275	0.468	0.275	0.275	0.275	0.275
	LOCATION (ft)	9.60R	0.00	9.60R	9.60R	9.60R	9.60R
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II
	RATING FACTOR	5.15M	4.77S	3.43M	3.85M	2.83M	2.51M
MAXIMUM MOMENT CAPACITY (kip-ft) 513.40			SIMPLE SPAN				
MAXIMUM SHEAR CAPACITY (kips) 186.21			SPAN LENGTH (ft) = 24.00				

RATING NOTES:

1. ALL RATINGS COMPUTED USING THE LOAD AND RESISTANCE FACTOR METHOD.
2. F = FLEXURE CONTROLLED RATING, V = SHEAR CONTROLLED RATING.
3. NEW RATINGS WERE CALCULATED WITH STLRFD V2.4.0.0
4. TIMBER DECK DOESN'T BRACE STRINGER FOR LATERAL TORSIONAL BUCKLING EFFECTS.

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

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STA. 151+90.00
OVER TROUT BROOK
1-SPAN STEEL STRINGER/GIRDER BRIDGE
RATING TABLES

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GERARD BABINSKI
ENGINEER PE-055083

RECOMMENDED 11-8-2019

SHEET 12 OF 12

S-38969

DES: D.L./C.R. | DWG: D.L. | CKD: C.R.