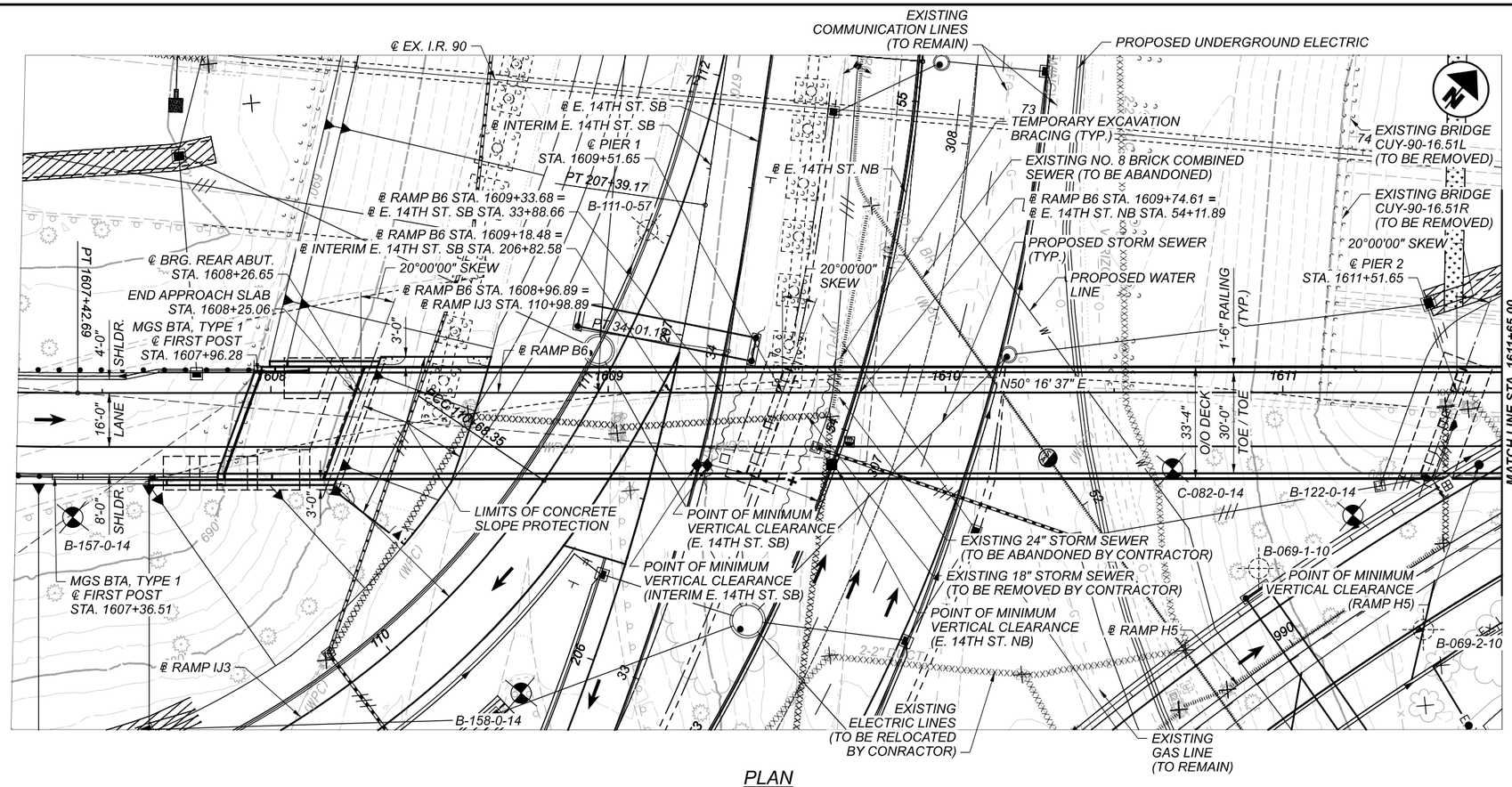
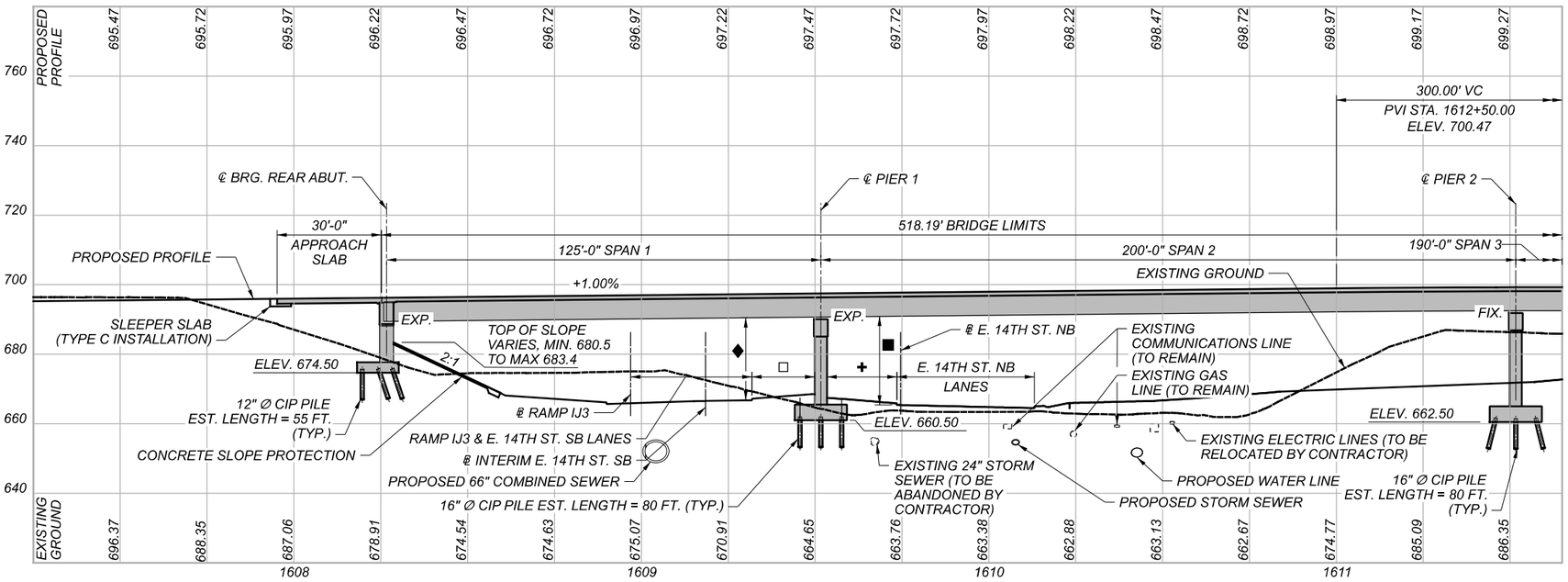


PLAN



PROFILE ALONG ℄ RAMP B6

BENCHMARK DATA

BM-59 STA. 1610+31.80, ELEV. 660.15, OFFSET 132.17 RT. MAG NAIL SET AT NOSE OF CONCRETE DRAINAGE CHANNEL, BTWN E. 14TH ST. AND COMMUNITY COLLEGE AVE.

BM-62 STA. 1612+77.43, ELEV. 672.11, OFFSET 690.58 LT. RAILROAD SPIKE IN EAST FACE OF POWER POLE NO. 121784 AT NORTHWEST CORNER OF E. 18TH ST. AND CARNEGIE AVE.

FOR ADDITIONAL BENCHMARK INFORMATION, SEE ROADWAY PLANS

NOTES

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

FOR HORIZONTAL CURVE DATA, SEE SHEET 2 / 49 .

DESIGN TRAFFIC:

2015 ADT = 6400 2015 ADTT = 512
2035 ADT = 7500 2035 ADTT = 600
DIRECTIONAL DISTRIBUTION = N/A

LEGEND

- *BORING LOCATION*
- *HISTORIC BORING LOCATION*

RAMP IJ3 AND E. 14TH ST. S.B. (INTERIM AND FINAL)

- ◆ *16'-6" REQUIRED MINIMUM VERTICAL CLEARANCE*
  23'-2½" ACTUAL MINIMUM VERTICAL CLEARANCE (INTERIM)
  23'-9" ACTUAL MINIMUM VERTICAL CLEARANCE (FINAL)
- □ *REQUIRED CLEAR ZONE: 4'-0"*
  ACTUAL CLEARANCE: 14'-3" (INTERIM)
  ACTUAL CLEARANCE: 11'-8" (FINAL)
  PROTECTION PROVIDED: NO
- ▲ *REQUIRED CLEAR ZONE: 30'-0"*
  ACTUAL CLEARANCE: 41'-5"
  PROTECTION PROVIDED: NO

E. 14TH ST. N.B. (INTERIM AND FINAL)

- ■ *16'-6" REQUIRED MINIMUM VERTICAL CLEARANCE*
  25'-0" ACTUAL MINIMUM VERTICAL CLEARANCE
- ✚ *REQUIRED CLEAR ZONE: 4'-0"*
  ACTUAL CLEARANCE: 18'-6"
  PROTECTION PROVIDED: NO

RAMP H5

- ● *16'-6" REQUIRED MINIMUM VERTICAL CLEARANCE*
  16'-11¾" ACTUAL MINIMUM VERTICAL CLEARANCE
- ⊞ *REQUIRED CLEAR ZONE: 30'-0"*
  ACTUAL CLEARANCE: 7'-2"
  PROTECTION PROVIDED: TYPE D BARRIER

PROPOSED STRUCTURE

TYPE: 3-SPAN CONTINUOUS PLATE GIRDERS, A709 GRADE 50 (PAINTED) WITH COMPOSITE CONCRETE DECK, SUPPORTED ON REINFORCED CONCRETE ABUTMENTS AND PIERS

SPANS: 125'-0", 200'-0", 190'-0" C/C BEARINGS ALONG ℄ RAMP B6

ROADWAY: 30'-0" TOE/TOE PARAPET

LOADING: HL93 AND 60 PSF FUTURE WEARING SURFACE (FWS)

SKEW: 20°00'00" LEFT FORWARD

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: 30'-0" LONG, 17" THICK (AS-1-15) TYPE C INSTALLATION (AS-2-15)

ALIGNMENT: TANGENT

SUPERELEVATION: 0.016 FT./FT.

DECK AREA: 17273 SF

COORDINATES: LATITUDE 41° 29' 44.80" N
LONGITUDE 81° 40' 40.56" W

SITE PLAN (1 OF 2)
CUY-90-1652S (BRIDGE 12)
OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	CMR
CHECKER	JML
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	1
TOTAL	49
SHEET	1696
TOTAL	2338

CUY-90-16.28 (CCG3A)

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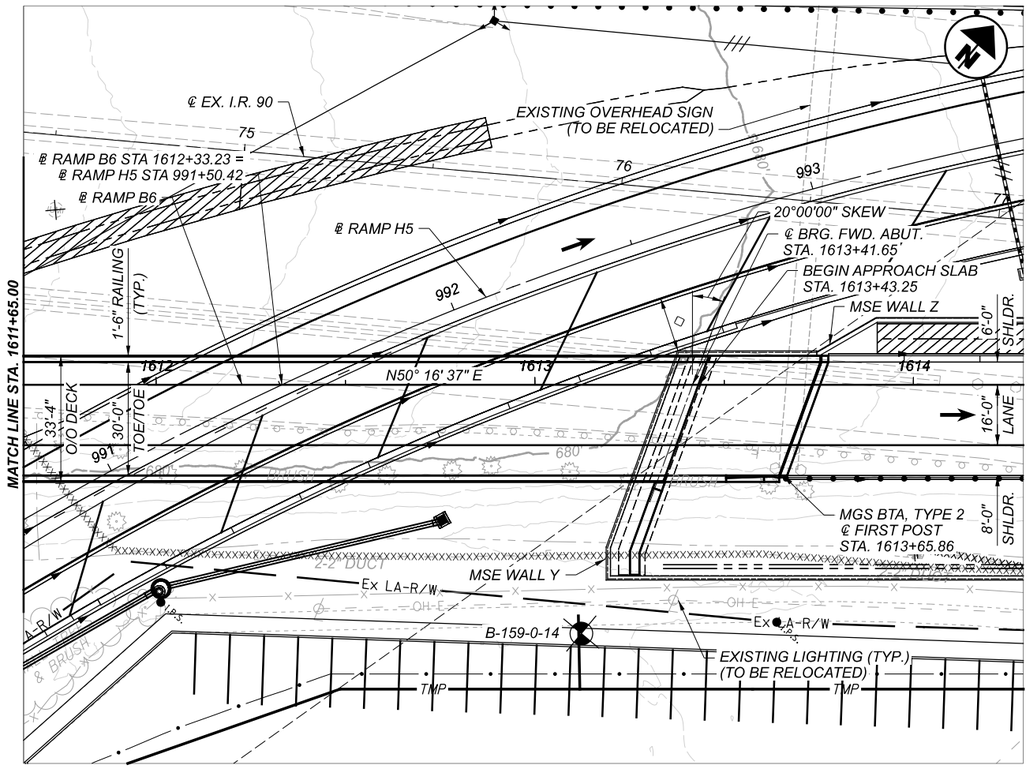
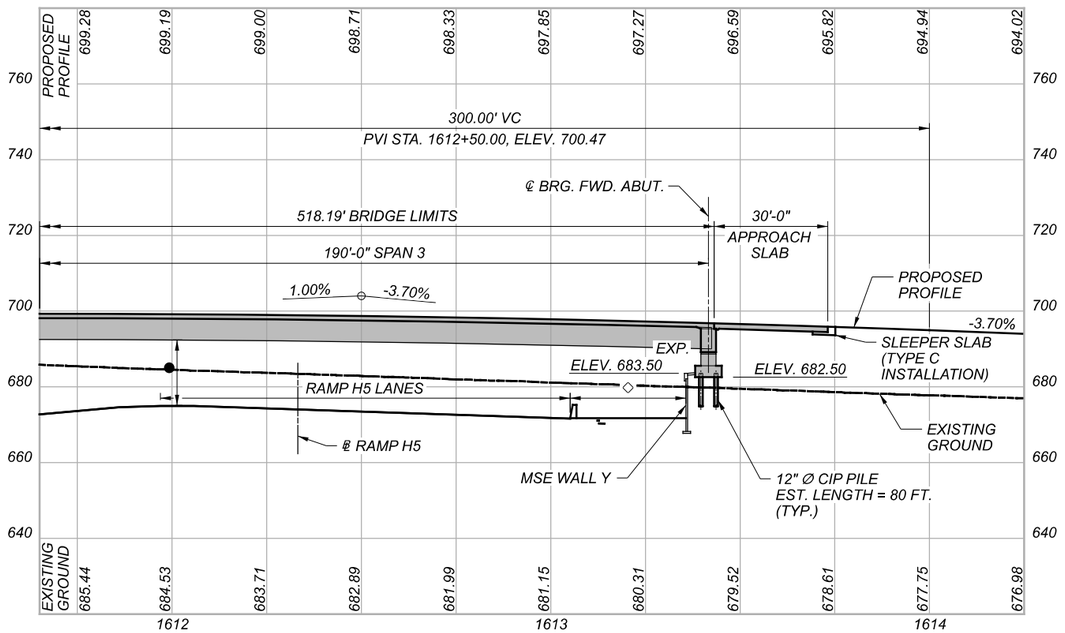


PLAN



PROFILE ALONG ℄ RAMP B6

LEGEND

- BORING LOCATION
- HISTORIC BORING LOCATION

RAMP H5

- ● 16'-6" REQUIRED MINIMUM VERTICAL CLEARANCE
  16'-11¾" ACTUAL MINIMUM VERTICAL CLEARANCE
- ◇ REQUIRED CLEAR ZONE: 30'-0"
  ACTUAL CLEARANCE: 14'-4"
  PROTECTION PROVIDED: TYPE D BARRIER

RAMP IJ3 CURVE PRIJ3-04
P.I. = Sta. 109+39.13
Δ = 69°22'21" LT
Dc = 23°00'00"
R = 249.11'
T = 172.40'
L = 301.62'
E = 53.84'

RAMP IJ3 CURVE PRIJ3-05
P.I. = Sta. 111+50.37
Δ = 25°48'24" LT
Dc = 16°00'08"
R = 358.05'
T = 82.03'
L = 161.27'
E = 9.28'

RAMP H5 CURVE PRH5-03
P.I. = Sta. 992+53.42
Δ = 48°11'11" RT
Dc = 06°30'00"
R = 881.47'
T = 394.18'
L = 741.33'
E = 84.12'

RAMP B6 CURVE PRB6-01
P.I. = Sta. 1605+84.05
Δ = 20°30'15" LT
Dc = 07°00'00"
R = 818.51'
T = 162.84'
L = 321.49'
E = 16.04

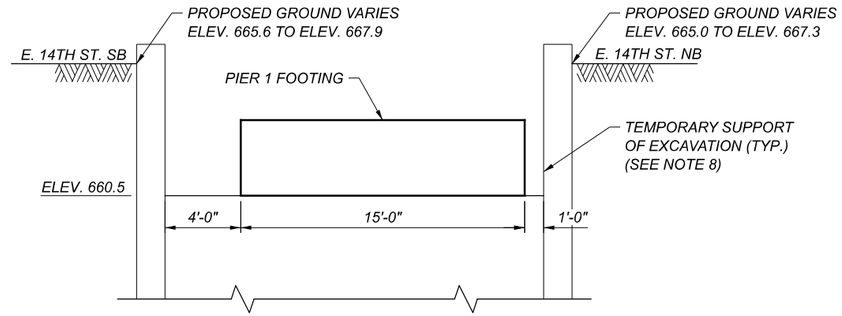
INTERIM E. 14TH ST. SB CURVE PIE14S-02
P.I. = Sta. 205+12.19
Δ = 37°45'18" LT
Dc = 8°00'08"
R = 716.00'
T = 244.83'
L = 471.81'
E = 40.70'

E. 14TH ST. SB CURVE PE14S-01
P.I. = Sta. 32+71.61
Δ = 37°41'15" LT
Dc = 14°00'00"
R = 409.26'
T = 139.67'
L = 269.20'
E = 23.18'

E. 14TH ST. NB CURVE PE14N-01
P.I. = Sta. 53+84.42
Δ = 31°26'49" LT
Dc = 12°00'00"
R = 477.46'
T = 134.42'
L = 262.06'
E = 18.56

BORING DATA

BORING	STATION	OFFSET
B-157-0-14	1607+41.27	36.89' RT
B-158-0-14	1608+74.13	89.09' RT
B-159-0-14	1613+12.32	65.72' RT
B-122-0-14	1611+20.81	36.43' RT
C-082-0-14	1610+67.32	22.64' RT
B-111-0-57	1609+11.74	48.20' LT
B-069-1-10	1610+92.88	52.20' RT
B-069-2-10	1611+41.70	70.36' RT



TEMPORARY EXCAVATION BRACING DETAIL

TEMPORARY EXCAVATION BRACING NOTES:

1. DESIGN IS IN ACCORDANCE WITH THE LOAD AND RESISTANCE FACTOR DESIGN METHODOLOGY.
2. THE STEEL SHEET PILING SHALL CONFORM TO ASTM A328 AND HAVE A MINIMUM SECTION MODULUS OF 13.2 IN^3/FT FOR FY = 38.5 KSI
3. THE TEMPORARY SHEET PILING SHALL HAVE THE FOLLOWING MINIMUM ELEVATIONS:
   TOP/WALL ELEV. 668.50
   BOTTOM/WALL ELEV. 640.80
4. THE TEMPORARY SHEET PILING SHALL BE PAID FOR UNDER ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN.
5. ALTERNATE SHEET PILING MEETING THE FOLLOWING PROPERTIES ARE PERMITTED:

Fy (ksi)	SM (IN^3/FT)
50	10.2
60	8.5

6. THE CONTRACTOR, AT HIS OWN EXPENSE, MAY PROVIDE AN ALTERNATE DESIGN FOR THE TEMPORARY SHEETING CONFORMING TO SECTION 501.05 OF THE ODOT CMS. FOR THE ALTERNATE DESIGN, THE CONTRACTOR SHALL SUBMIT SIX (6) SETS OF CALCULATIONS AND DRAWINGS. THE DETAILED DRAWINGS SHALL SHOW SIZES OF ALL STRUCTURAL MEMBERS AND DETAILS OF THE CONNECTIONS. THE DRAWINGS AND CALCULATIONS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER REGISTERED IN OHIO AND SHALL BEAR THEIR SEAL AND SIGNATURE. THE DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED A MINIMUM OF SIX (6) WEEKS PRIOR TO THE START OF CONSTRUCTION.
7. THE SHEET PILING LAYOUT AND DESIGN WAS PERFORMED ASSUMING THE CONTRACTOR WILL GRADE THE EXCAVATION TO THE NORTH AND SOUTH OF THE PIER 1 FOUNDATION AT A 1.5:1 SLOPE UNTIL MEETING THE EXISTING GROUND.
8. FOR LIMITS OF TEMPORARY EXCAVATION BRACING, SEE SHEET 1/ 49.

SITE PLAN (2 OF 2)
CUY-90-1652S (BRIDGE 12)
OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

RAMP B6 OVER

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	CMR
CHECKER	JML
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	2
TOTAL	49
SHEET	1697
TOTAL	2338

CUY-90-16.28 (CCG3A)

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:
REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED	07-17-2015
AS-2-15	REVISED	01-18-2019
SBR-1-20	REVISED	07-17-2020
SICD-1-21	REVISED	01-21-2022
SICD-2-14	REVISED	01-15-2021

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

800	DATED	05-02-2022
840	DATED	04-15-2022
869	DATED	10-17-2014

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

SPECIAL DESIGN SPECIFICATIONS:
THIS BRIDGE REQUIRED THE USE OF A TWO-DIMENSIONAL PLATE AND ECCENTRIC BEAM (PEB) MODEL TO ANALYZE THE STRUCTURE. THE COMPUTER PROGRAM USED FOR THIS STRUCTURAL ANALYSIS WAS MDX. THIS MODEL ACCOUNTED FOR THE WARPING STIFFNESS OF THE GIRDERS ACCORDING TO ARTICLE 4.6.3.3.2 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE BRIDGE COMPONENTS DESIGNED BY THIS MODEL INCLUDE THE STEEL GIRDERS AND INTERMEDIATE CROSS FRAMES.

DEAD LOAD DISTRIBUTION:
THE SELF-WEIGHT OF THE GIRDERS, BRACING MEMBERS, DECK SLAB, AND HAUNCHES ARE CALCULATED BY MDX. THE WEIGHT OF THE CROSS FRAME CONNECTIONS AND SHEAR CONNECTORS WERE CALCULATED AND APPLIED TO THE GIRDERS AS A UNIFORM DISTRIBUTED LOAD. WEIGHT OF THE BOLTED FIELD SPLICES WERE APPLIED TO THE GIRDERS AS POINT LOADS AT THE SPLICE LOCATIONS. THE ADDITIONAL WEIGHT OF THE THICKENED DECK OVERHANGS WAS APPLIED AS A DISTRIBUTED LOAD TO THE FASCIA GIRDERS. THE WEIGHT OF THE CONCRETE END DIAPHRAGMS WAS APPLIED AS A POINT LOAD AT THE ABUTMENT BEARING LOCATIONS BASED ON TRIBUTARY WIDTH. BRIDGE RAILING LOADS WERE DISTRIBUTED TO THE FASCIA GIRDER AND INTERIOR GIRDERS AT 70% AND 30% RESPECTIVELY. THE WEIGHT OF THE FUTURE WEARING SURFACE WAS DISTRIBUTED EQUALLY TO ALL GIRDERS.

LIVE LOAD DISTRIBUTION:
THE PEB MODEL USED AN INFLUENCE SURFACE FOR LIVE LOAD ANALYSIS. LIVE LOADS ARE DISTRIBUTED TO THE GIRDERS BASED ON THE RELATIVE STIFFNESS OF THE CROSS SECTION.

OPERATIONAL IMPORTANCE:
A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5, AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:
VEHICULAR LIVE LOAD: HL93
FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ. FT

MONOLITHIC WEARING SURFACE:
MONOLITHC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES TO BE 1" THICK.

DESIGN DATA:
CONCRETE CLASS QC2:
COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
CONCRETE CLASS QC1:
COMPRESSURE STRENGTH 4.0 KSI (SUBSTRUCTURE)
REINFORCING STEEL:
MINIMUM YIELD STRNEGTH 60 KSI
STRUCTURAL STEEL:
ASTM A709 GRADE 50: YIELD STRENGTH 50 KSI
GFRP:
C&MS 705.28 (MODULUS = 8700 KSI)
CAST-IN-PLACE STEEL PILES:
ASTM A252, STEEL PIPE GRADE 2
MINIMUM YIELD STRENGTH 35 KSI
ABUTMENTS: 12 IN. DIA., WALL THICKNESS 0.25 IN.
PIERS: 16 IN. DIA., WALL THICKNESS 0.5 IN.

PILE DRIVING CONSTRAINTS:
PRIOR TO DRIVING FORWARD ABUTMENT PILES TO THE ULTIMATE BEARING VALUE (UBV), CONSTRUCT THE MSE WALL AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENT UP TO THE BOTTOM OF THE FOOTING FOR A MINIMUM DISTANCE OF 200 FEET BEHIND THE FORWARD ABUTMENT. THE CONTRACTOR MAY PRE-DRIVE ABUTMENT PILES BEFORE CONSTRUCTING MSE WALLS. PRE-DRIVING CONSISTS OF INSTALLING THE ABUTMENT PILES INTO THE SOIL ONLY AS FAR AS NECESSARY SO THAT THE PILE WILL REMAIN VERTICAL DURING MSE WALL CONSTRUCTION. IF PRE-DRIVING PILES, INSTALL PILE SLEEVES AROUND PILES BEFORE CONSTRUCTING THE MSE WALL. PROVIDE AT LEAST 3-FT OF PILE ABOVE THE TOP OF THE PILE SLEEVE TO MEET THE REQUIREMENTS OF C&MS 507.09 REGARDING SPLICES. DO NOT DRIVE ABUTMENT PILES TO THE UBV UNTIL AFTER THE ABOVE REQUIRED MSE WALL AND EMBANKMENT HAVE BEEN CONSTRUCTED AND A XX CALENDAR DAY WAITING PERIOD HAS ELAPSED. THE ENGINEER MAY ADJUST THE LENGTH OF THE WAITING PERIOD BASED ON SETTLEMENT PLATFORM READINGS. AFTER THE SPECIFIED WAITING PERIOD HAS ELAPSED, DRIVE ABUTMENT PILES TO THE UBV. IN ORDER TO REMOVE ANY NEGATIVE SKIN FRICTION THAT HAS DEVELOPED DURING THE WAITING PERIOD, DRIVE EACH ABUTMENT PILE A DISTANCE OF AT LEAST 0.5-IN.

IF NOT PRE-DRIVING ABUTMENT PILES, INSTALL THE ABUTMENT PILES THROUGH PILE SLEEVES AFTER THE ABOVE REQUIRED MSE WALL AND EMBANKMENT HAVE BEEN CONSTRUCTED AND THE SPECIFIED WAITING PERIOD HAS ELAPSED.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):
REAR ABUTMENT PILES:
THE ULTIMATE BEARING VALUE IS 225 KIPS PER PILE
12-IN DIAMETER PILES 60 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PIER 1 PILES:
THE ULTIMATE BEARING VALUE IS 425 KIPS PER PILE
16-IN DIAMETER PILES 85 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PIER 2 PILES:
THE ULTIMATE BEARING VALUE IS 415 KIPS PER PILE
16-IN DIAMETER PILES 85 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

FORWARD ABUTMENT PILES:
THE ULTIMATE BEARING VALUE IS 249 KIPS PER PILE
12-IN DIAMETER PILES 85 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PILES DRIVEN TO FULL ESTIMATED LENGTH WITH PILE/SOIL SETUP:
THE ULTIMATE BEARING VALUE (UBV) IS 225 KIPS PER PILE FOR THE 12-INCH DIAMETER CAST-IN-PLACE REAR ABUTMENT PILES, 425 KIPS PER PILE FOR THE 16-INCH DIAMETER CAST-IN-PLACE PIER 1 PILES, 415 KIPS PER PILE FOR THE 16-INCH DIAMETER CAST-IN-PLACE PIER 2 PILES, AND 249 KIPS PER PILE FOR THE 12-INCH DIAMETER CAST-IN-PLACE FORWARD ABUTMENT PILES. PART OF THE UBV WILL BE ACHIEVED THROUGH PILE/SOIL SETUP, WHICH IS A TIME DEPENDENT INCREASE IN RESISTANCE THAT OCCURS IN SOME SOILS.

NOTIFY THE ENGINEER AT LEAST 5 DAYS BEFORE DRIVING PILES SO THAT THE ENGINEER CAN NOTIFY THE DISTRICT GEOTECHNICAL ENGINEER, THE OFFICE OF CONSTRUCTION ADMINISTRATION, AND THE OFFICE OF GEOTECHNICAL ENGINEERING.

DRIVE THE FIRST TWO PILES AT THE REAR ABUTMENT TO THE FULL ESTIMATED LENGTH OF 55 FEET, PIER 1 TO THE FULL ESTIMATED LENGTH OF 80 FEET, PIER 2 TO THE FULL ESTIMATED LENGTH OF 80 FEET, AND THE FORWARD ABUTMENT TO THE FULL ESTIMATED LENGTH OF 80 FEET. PERFORM DYNAMIC LOAD TESTING ON BOTH PILES WHILE DRIVING. AFTER DRIVING AND TESTING THE FIRST TWO PILES, DRIVE THE REMAINING PILES IN THE SUBSTRUCTURE TO THE SAME DEPTH AS THE FIRST TWO PILES. AFTER DRIVING ALL PILES TO THE ESTIMATED LENGTH, CEASE ALL DRIVING OPERATIONS AT THE SUBSTRUCTURE FOR A PERIOD OF __ DAYS. INCLUDE THE WAITING PERIOD AS A SEPARATE ACTIVITY IN THE PROGRESS SCHEDULE. AFTER THE WAITING PERIOD, PERFORM PILE RESTRIKES ON BOTH OF THE FIRST TWO PILES (ONE RESTRIKE ITEM).

SUBMIT ALL TEST RESULTS TO THE ENGINEER. IF THE RESTRIKE TEST RESULTS INDICATE THAT BOTH PILES ACHIEVED THE REQUIRED UBV, ALL PILES IN THE SUBSTRUCTURE MAY BE ACCEPTED BY THE ENGINEER.

IF THE RESTRIKE TEST RESULTS INDICATE THAT EITHER OF THE TWO PILES DID NOT ACHIEVE THE REQUIRED UBV, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE ENGINEER CAN NOTIFY THE DISTRICT GEOTECHNICAL ENGINEER, THE OFFICE OF CONSTRUCTION ADMINISTRATION, AND THE OFFICE OF GEOTECHNICAL ENGINEERING. THE ENGINEER WILL REVIEW THE TEST RESULTS AND ESTABLISH ADDITIONAL RESTRIKE TESTING OR DRIVING CRITERIA FOR THE PILING IN THE SUBSTRUCTURE WITH THE ASSISTANCE OF THE DISTRICT GEOTECHNICAL ENGINEER, THE OFFICE OF CONSTRUCTION ADMINISTRATION, AND THE OFFICE OF GEOTECHNICAL ENGINEERING.

IF DIRECTED BY THE ENGINEER, PERFORM ADDITIONAL RESTRIKE TESTING OR DRIVE ALL PILES IN THE SUBSTRUCTURE TO THE ESTABLISHED DRIVING CRITERIA. THE DEPARTMENT WILL PAY FOR SPLICING OF THE PILES BEYOND THE ESTIMATED LENGTH PROVIDED IN THE PLANS UNDER C&MS 109.05 WITH A NEGOTIATED PRICE PER SPLICE.

THIS PLAN NOTE INCLUDES A QUANTITY OF ONE EACH ITEM 523 DYNAMIC LOAD TESTING, AS PER PLAN AND A QUANTITY OF ONE EACH ITEM 523 RESTRIKE, AS PER PLAN PER EACH SUBSTRUCTURE UNIT.

PROPRIETARY RETAINING WALL DATA:
THE PROPRIETARY WALL SUPPLIER SHALL DESIGN THE INTERNAL STABILITY OF A MECHANICALLY STABILIZED EARTH (MSE) WALL IN ACCORDANCE WITH SS840 TO SUPPORT THE FORWARD ABUTMENT. THE DESIGN FOR INTERNAL STABILITY SHALL INCLUDE A NOMINAL (I.E. UNFACTORED) HORIZONTAL STRIP LOAD DUE TO FRICTION (FR) FROM THE SUPERSTRUCTURE OF 4.1 K/FT APPLIED PERPENDICULAR TO THE FACE OF WALL AT THE BASE OF THE CONCRETE FOOTING. THIS STRIP LOAD DOES NOT INCLUDE EARTH PRESSURE LOADS FORM THE ABUTMENT BACKFILL. HOWEVER, THE PROPRIETARY WALL SUPPLIER SHALL INCLUDE EARTH PRESSURE LOADS FROM THE ABUTMENT BACKFILL IN THE DESIGN CALCULATIONS.

PROPRIETARY RETAINING WALL DATA:
THE WALL Y REINFORCED SOIL MASS, AS DESIGNED, PRODUCES A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF ___ KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF ___ KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS ___ KIPS PER SQUARE FOOT.

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

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.263 KIPS.

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

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48".

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

ITEM 203 - EMBANKMENT, AS PER PLAN:
PLACE AND COMPACT EMBANKMENT MATERIAL IN 6 INCH LIFTS FOR THE CONSTRUCTION OF THE APPROACH EMBANKMENT BETWEEN STATIONS 1607+25.00 TO 1644+44.00.

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN:
THE DESIGN SHOWN ON THE PLANS FOR THE TEMPORARY SUPPORT OF EXCAVATION IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN ON THE PLANS OR PREPARE AN ALTERNATE DESIGN TO SUPPORT THE SIDES OF EXCAVATIONS. IF CONSTRUCTING AN ALTERNATE DESIGN FOR TEMPORARY SUPPORT OF EXCAVATION, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING. THE DEPARTMENT WILL NOT MAKE ADDITIONAL PAYMENT FOR PROVIDING AN ALTERNATE DESIGN.

ITEM 512 - SEALING OF CONCRETE SURFACES, AS PER PLAN, (PERMANENT GRAFFITI PROTECTION):
APPLY A PERMANENT GRAFFITI COATING QUALIFIED ACCORDING TO S1083 THAT IS COMPATIBLE WITH THE CONCRETE SEALER OVER WHICH IT IS APPLIED. APPLY THE GRAFFITI COATING IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.

ITEM 516 - ARMORLESS PREFORMED JOINT SEAL, AS PER PLAN:
DUE TO ANTICIPATED BRIDGE MOVEMENT, SET APPROACH SLAB JOINT OPENING (DIMENSION "A") TO 3" AT 60°F. FOR ADDITIONAL NOTES AND DETAILS, SEE STANDARD DWG. AS-2-15.

GENERAL NOTES (1 OF 2)
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER RAMP H5

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	CMR
CHECKER	BTA
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	3
TOTAL	49
SHEET	1698
TOTAL	2338

CUY-90-16.28 (CCG3A)

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ABBREVIATIONS:

THE FOLLOWING ABBREVIATIONS HAVE BEEN USED THROUGHOUT THESE PLANS TO INDICATE THE DESIGNATIONS CONTAINED IN THE LEGEND BELOW:

ABUT. - ABUTMENT
APPR. - APPROACH
℄ - BASELINE
BRG. - BEARING
BRGS. - BEARINGS
BTA - BRIDGE TERMINAL ASSEMBLY
℄ - CENTERLINE
C/C - CENTER TO CENTER
CIP - CAST-IN-PLACE
CP - COMPLETE PENETRATION BUTT WELD
CMS - CONSTRUCTION AND MATERIAL SPECIFICATIONS
CONC. - CONCRETE
CONST. - CONSTRUCTION
C.P.P. - CORRUGATED PLASTIC PIPE
CS - INDICATES BUTT WELD SUBJECT TO COMPRESSIVE STRESSES ONLY
CU YD - CUBIC YARD
CVN - CHARPY V-NOTCH TESTING
DIA. - DIAMETER
ELEV., EL. - ELEVATION
EX. - EXISTING
EXP. - EXPANSION
F.A. - FORWARD ABUTMENT
F/F - FACE TO FACE
F.S. - FIELD SPLICE
FT/FT - FOOT PER FOOT
FTG. - FOOTING
FWD. - FORWARD
GEN. - GENERAL
INT. - INTEGRAL
LF - LEFT FORWARD
LT. - LEFT
MAX. - MAXIMUM
M.E. - MATCH EXISTING
MIN. - MINIMUM
MISC. - MISCELLANEOUS
MOT - MAINTENANCE OF TRAFFIC
NO./# - NUMBER
O/O - OUT TO OUT
P.C.P.P - PERFORATED CORRUGATED PLASTIC PIPE
P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
PG - PROFILE GRADE
PGL - PROFILE GRADE LINE
PROP. - PROPOSED
PT - POINT OF TANGENCY
PVC - POINT OF VERTICAL CURVATURE
PVI - POINT OF VERTICAL INTERSECTION
PVT - POINT OF VERTICAL TANGENCY
R. - RADIUS
R.A. - REAR ABUTMENT
RCP - ROCK CHANNEL PROTECTION
RF - RIGHT FORWARD
RT. - RIGHT
R/W - RIGHT OF WAY
SAN. - SANITARY
SER. - SERIES
SHLDR. - SHOULDER
SHT. - SHEET
S.O. - SERIES OF
SPA. - SPACES OR SPACING
SR - STATE ROUTE
STA. - STATION
STD. - STANDARD
STM. - STORM
STR. - STRAIGHT
TBM - TEMPORARY BENCH MARK
TEMP. - TEMPORARY
T.O.S. - TOE OF SLOPE
T/PARAPET - TOE OF PARAPET
T/T - TOE TO TOE
TYP. - TYPICAL
U.G. - UNDERGROUND
VAR. - VARIES
VC - VERTICAL CURVE
VERT. - VERTICAL
W/O - WITHOUT

GENERAL NOTES (2 OF 2)
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN 1807806
DESIGN AGENCY
DESIGNER CMR | CHECKER BTA
REVIEWER DWW 6/21/22
PROJECT ID 82382
SUBSET 4 | TOTAL 49
SHEET 1699 | TOTAL 2338

CUY-90-16.28 (CCG3A)

ESTIMATED QUANTITIES

CALCULATED BY: DATE: XX/XX/202X
CHECKED BY: DATE: XX/XX/202X

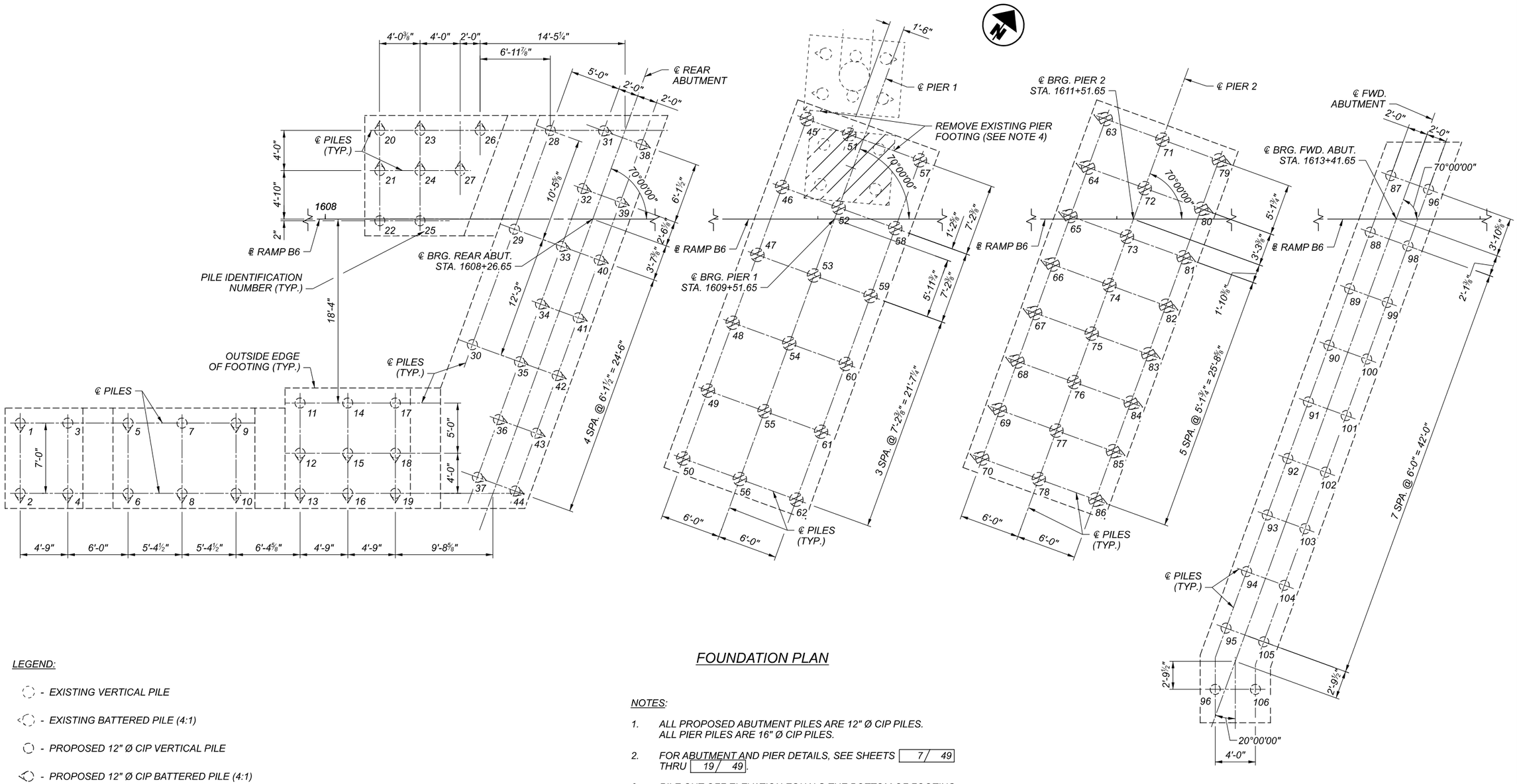
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTR.	GENERAL	SHEET REF.
203	20001		CY	EMBANKMENT, AS PER PLAN					
203	35110		CY	GRANULAR MATERIAL, TYPE B					
204	50000		SY	GEOTEXTILE FABRIC					
503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN					
503	21100		CY	UNCLASSIFIED EXCAVATION					
505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION					
507	00500		FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN					
507	00550		FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED					
507	00700		FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN					
507	00750		FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED					
509	10000		LB	EPOXY COATED REINFORCING STEEL					
509	30020		FT	NO. 4 GFRP DEFORMED BARS					
511	33500		EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE					
511	34446		CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK					
511	34450		CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)					
511	41012		CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS					
511	44112		CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING					
511	46512		CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING					
512	10001		SY	SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION)					
512	10100		SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)					
512	33000		SY	TYPE 2 WATERPROOFING					
513	10280		LB	STRUCTURAL STEEL MEMBERS, LEVEL 4					
513	20000		EACH	WELDED STUD SHEAR CONNECTORS					
514	00060		SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT					
514	00066		SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT					
516	10011		FT	ARMORLESS PREFORMED JOINT SEAL, AS PER PLAN					
516	13600		SF	1" PREFORMED EXPANSION JOINT FILLER					
516	13900		SF	2" PREFORMED EXPANSION JOINT FILLER					
516	14020		FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL					
518	21200		CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC					
518	40000		FT	6" PERFORATED CORRUGATED PLASTIC PIPE					
518	40011		FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN					
523	20000		EACH	DYNAMIC LOAD TESTING					
523	20501		EACH	RESTRIKE, AS PER PLAN					
526	30011		SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN					
526	90030		FT	TYPE C INSTALLATION					
601	21000		SY	CONCRETE SLOPE PROTECTION					
840	23000		CY	SELECT GRANULAR BACKFILL					
863	00100		SY	GEOGRID, TYPE P1					
869	00101		EACH	HIGH LOAD MULTI-ROTATIONAL (HLMR) BEARINGS, AS PER PLAN					

ESTIMATED QUANTITIES
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER

SFN 1807806
DESIGN AGENCY
DESIGNER CMR | CHECKER JTW
REVIEWER DWW 6/21/22
PROJECT ID 82382
SUBSET 5 | TOTAL 49
SHEET 1700 | TOTAL 2338

CUY-90-16.28 (CCG3A)

PILE NO.	LOCATION	PILE SIZE	EST. LENGTH
1 - 44	REAR ABUT.	12" DIA. CIP	55'-0"
45 - 62	PIER 1	16" DIA. CIP	80'-0"
63 - 86	PIER 2	16" DIA. CIP	80'-0"
87 - 106	FWD. ABUT.	12" DIA. CIP	80'-0"



FOUNDATION PLAN

LEGEND:

- ◌ - EXISTING VERTICAL PILE
- ◌ - EXISTING BATTERED PILE (4:1)
- ◌ - PROPOSED 12" Ø CIP VERTICAL PILE
- ◌ - PROPOSED 12" Ø CIP BATTERED PILE (4:1)
- ◌ - PROPOSED 16" Ø CIP VERTICAL PILE
- ◌ - PROPOSED 16" Ø CIP BATTERED PILE (4:1)

NOTES:

1. ALL PROPOSED ABUTMENT PILES ARE 12" Ø CIP PILES. ALL PIER PILES ARE 16" Ø CIP PILES.
2. FOR ABUTMENT AND PIER DETAILS, SEE SHEETS 7 / 49 THRU 19 / 49.
3. PILE CUT OFF ELEVATION EQUALS THE BOTTOM OF FOOTING PLUS 1'-0" EMBEDMENT.
4. EXISTING BRIDGE FOOTING REMOVAL IS REQUIRED TO CONTRUCT THE PROPOSED PIER 1 FOOTING. SEE PLANS FOR CUY-90-1653R (BRIDGE 11) FOR REMOVAL PAY ITEM AND ADDITIONAL NOTES.

FOUNDATION PLAN
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER RAMP H5

CUY-90-16.28 (CCG3A)

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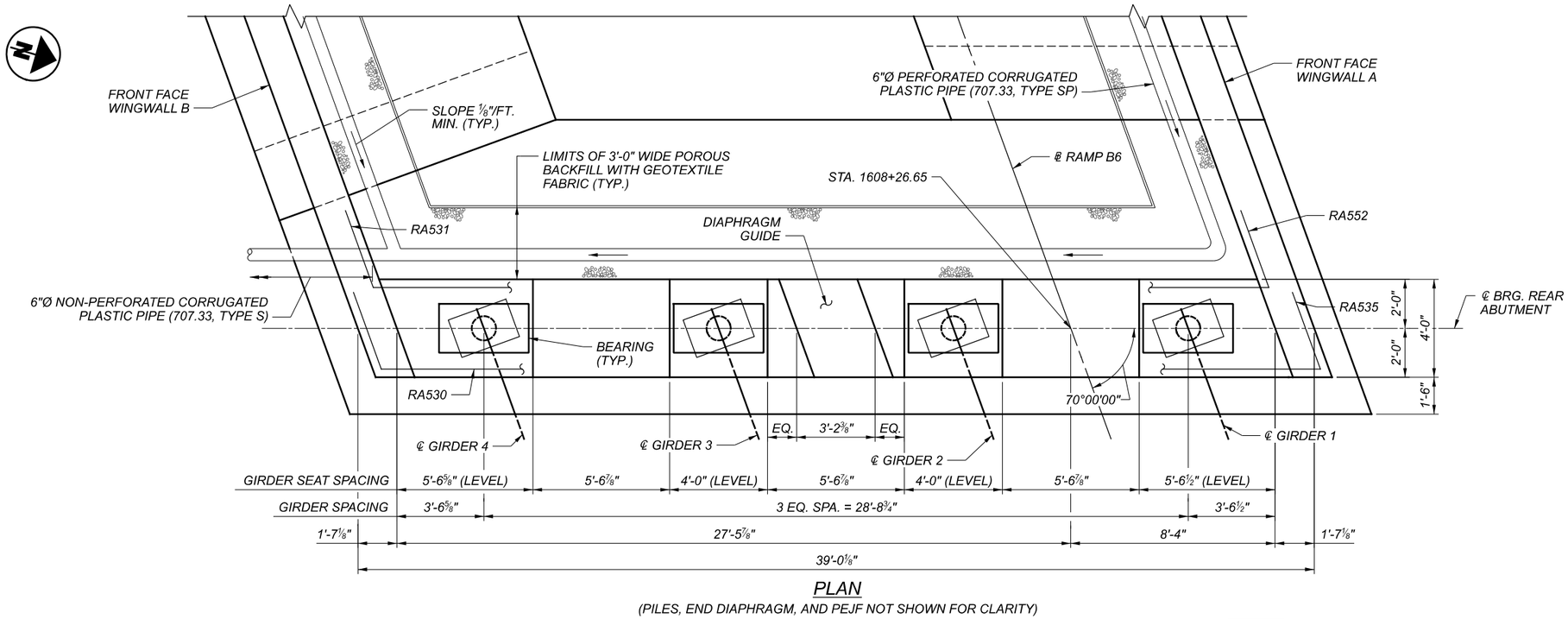
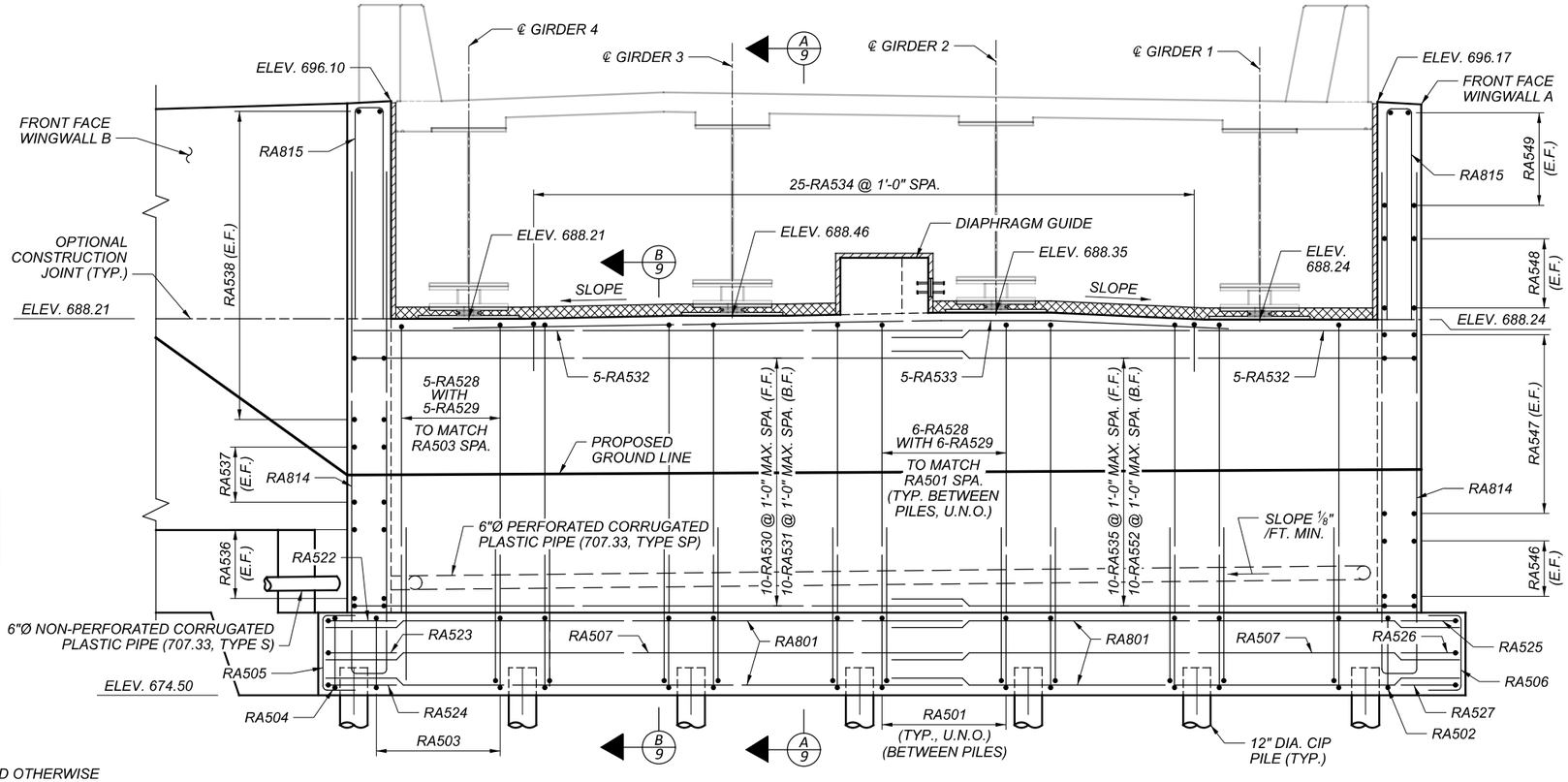
SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	ADW
CHECKER	CMR
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	6
TOTAL	49
SHEET	1701
TOTAL	2338



PLAN

(PILES, END DIAPHRAGM, AND PEJF NOT SHOWN FOR CLARITY)



ELEVATION

REQUIRED MINIMUM LAP LENGTHS	
#5	3'-4"
#8	5'-4"

LEGEND:

B.F. = BACK FACE
E.F. = EACH FACE
EQ. = EQUAL
F.F. = FRONT FACE
U.N.O. = UNLESS NOTED OTHERWISE

NOTES:

1. FOR FOUNDATION PLAN, SEE SHEET 6/49.
2. FOR REAR ABUTMENT FOOTING PLAN, SEE SHEET 8/49.
3. FOR REAR ABUTMENT DETAILS, SEE SHEET 9/49.
4. FOR WINGWALL DETAILS, SEE SHEETS 10/49 THRU 11/49.
5. FOR GEOSYNTHETIC WALL DETAILS, SEE SHEET 12/49.
6. FOR END DIAPHRAGM DETAILS, SEE SHEET 37/49.

REAR ABUTMENT PLAN AND ELEVATION
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN	1807806
DESIGN AGENCY	FHWA
DESIGNER	PJC
CHECKER	DRS
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	7
TOTAL	49
SHEET	1702
TOTAL	2338

CUY-90-16.28 (CCG3A)

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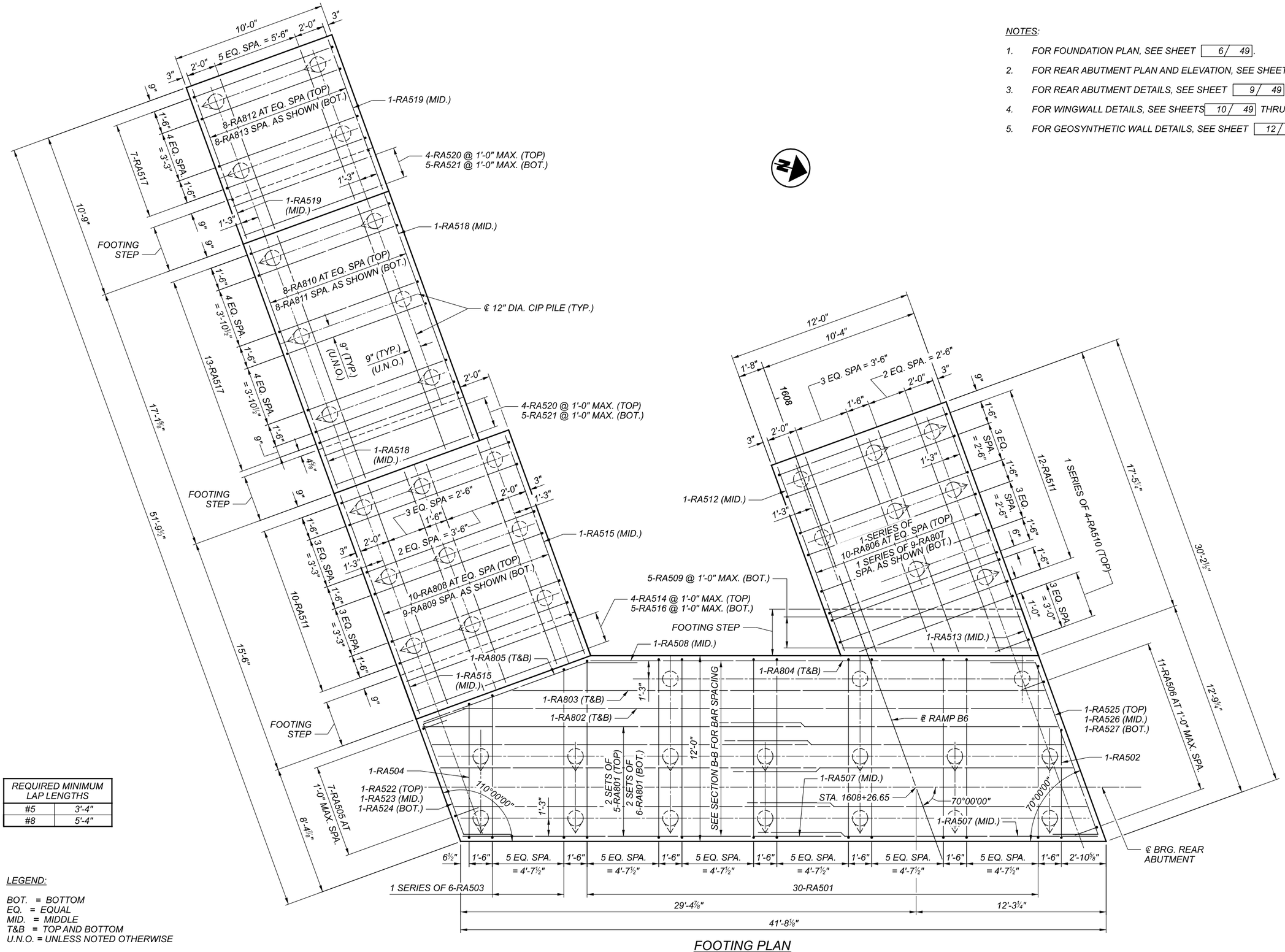

REQUIRED MINIMUM LAP LENGTHS	
#5	3'-4"
#8	5'-4"

LEGEND:

BOT. = BOTTOM
EQ. = EQUAL
MID. = MIDDLE
T&B = TOP AND BOTTOM
U.N.O. = UNLESS NOTED OTHERWISE

NOTES:

1. *FOR FOUNDATION PLAN, SEE SHEET* 6 / 49.
2. *FOR REAR ABUTMENT PLAN AND ELEVATION, SEE SHEET* 7 / 49.
3. *FOR REAR ABUTMENT DETAILS, SEE SHEET* 9 / 49.
4. *FOR WINGWALL DETAILS, SEE SHEETS* 10 / 49 *THRU* 11 / 49.
5. *FOR GEOSYNTHETIC WALL DETAILS, SEE SHEET* 12 / 49.

FOOTING PLAN

REAR ABUTMENT FOOTING PLAN
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER RAMP H5

CUY-90-16.28 (CCG3A)

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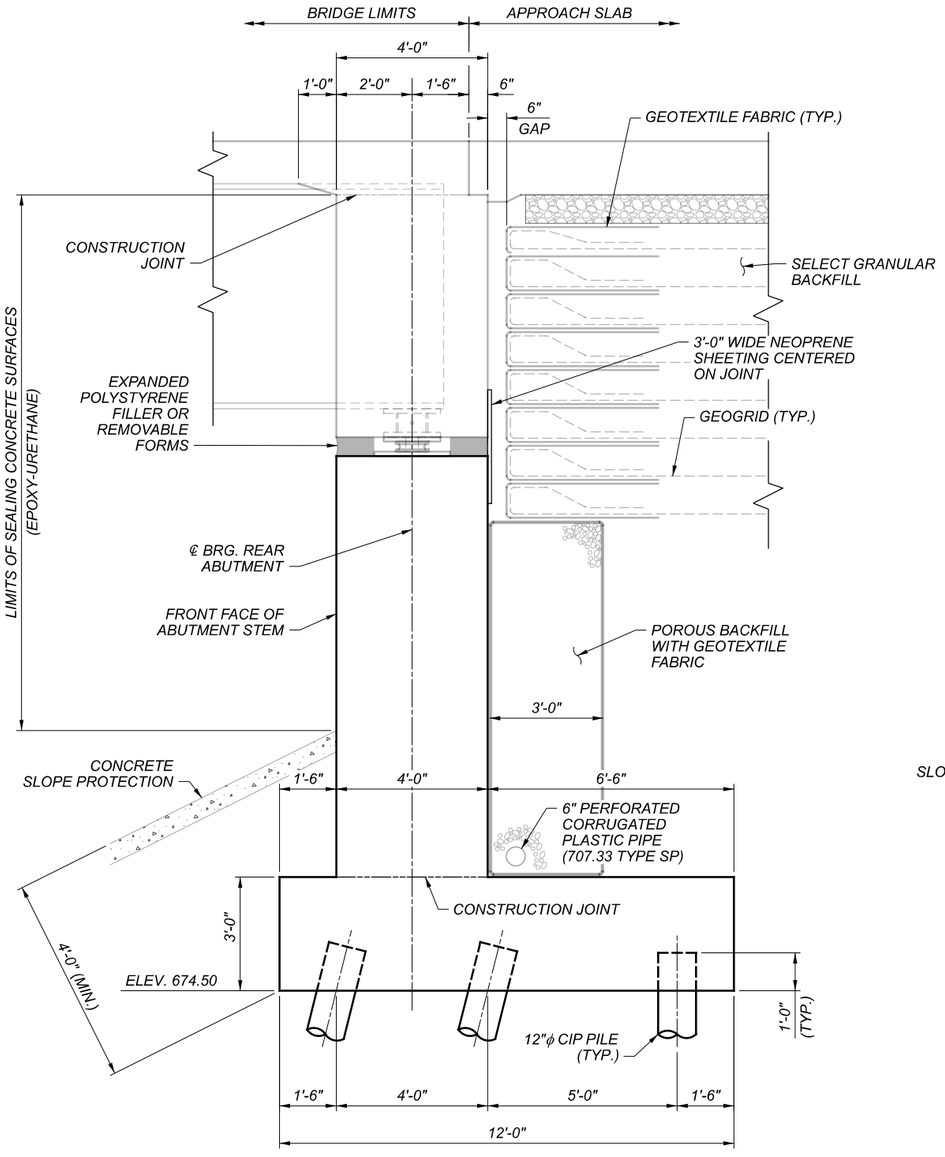
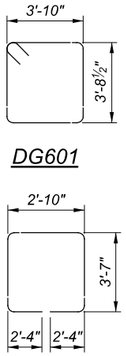
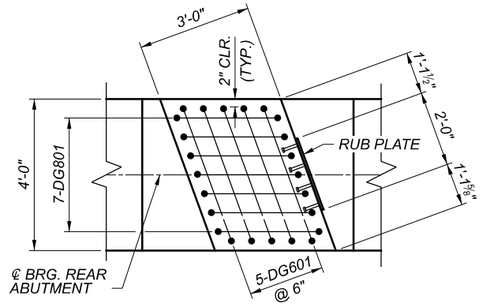
SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	DRS
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	8
TOTAL	49
SHEET	1703
TOTAL	2338



SECTION A-A

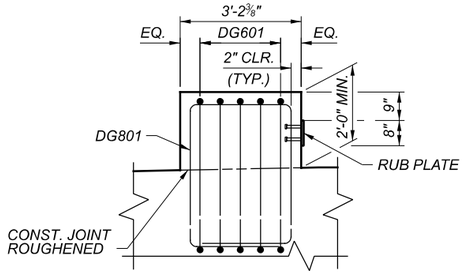
(FOR REINFORCING SEE SECTION B-B)





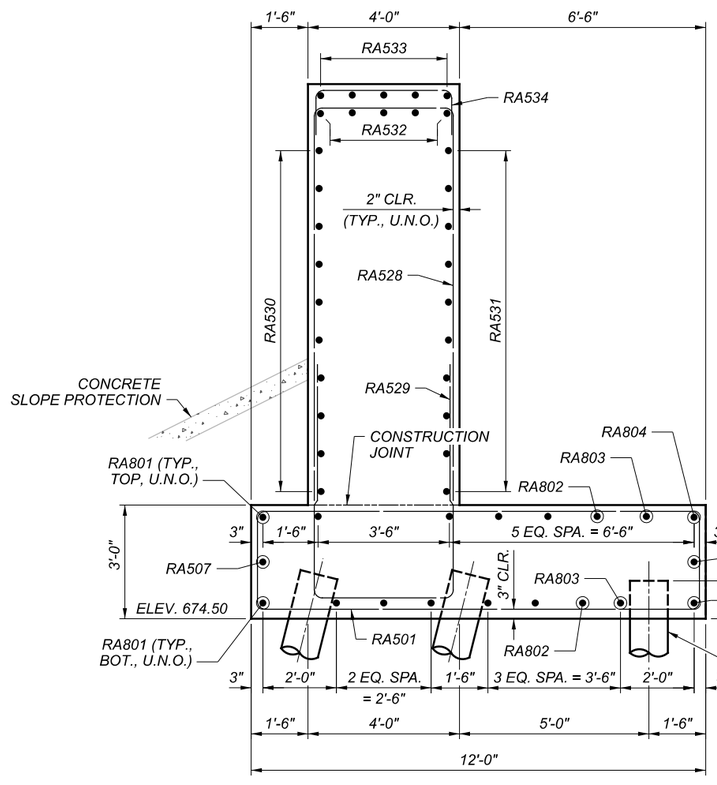
DIAPHRAGM GUIDE PLAN

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)
(ABUTMENT STEM REINFORCING NOT SHOWN FOR CLARITY)



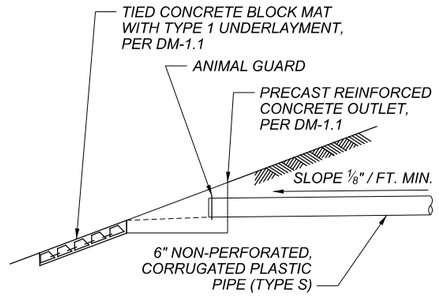
DIAPHRAGM GUIDE ELEVATION

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)
(ABUTMENT STEM REINFORCING NOT SHOWN FOR CLARITY)



SECTION B-B

(SUPERSTRUCTURE AND ABUTMENT BACKFILL NOT SHOWN FOR CLARITY)



TERMINATION OF 6" N.P.C.P.P. DETAIL

REQUIRED MINIMUM LAP LENGTHS	
#5	3'-4"
#8	5'-4"

LEGEND:

BOT. = BOTTOM
CLR. = CLEAR
E.F. = EACH FACE
EQ. = EQUAL
U.N.O. = UNLESS NOTED OTHERWISE
N.P.C.P.P. = NON-PERFORATED CORRUGATED PLASTIC PIPE

NOTES:

1. *FOR REAR ABUTMENT PLAN AND ELEVATION, SEE SHEET 7 / 49.*
2. *FOR REAR ABUTMENT FOOTING PLAN, SEE SHEET 8 / 49.*
3. *FOR WINGWALL DETAILS, SEE SHEETS 10 / 49 THRU 11 / 49.*
4. *FOR GEOSYNTHETIC WALL DETAILS, SEE SHEET 12 / 49.*
5. *PRECAST REINFORCED CONCRETE OUTLET, ANIMAL GUARD AND TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT, PER ODOT STD. DWG. DM-1.1, SHALL BE INCLUDED FOR PAYMENT WITH ITEM 518 - 6" NON-PERFORATED, CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN.*

REAR ABUTMENT DETAILS
CUY-90-1652S (BRIDGE 12)
OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	DRS
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	9
TOTAL	49
SHEET	1704
TOTAL	2338

CUY-90-16.28 (CCG3A)

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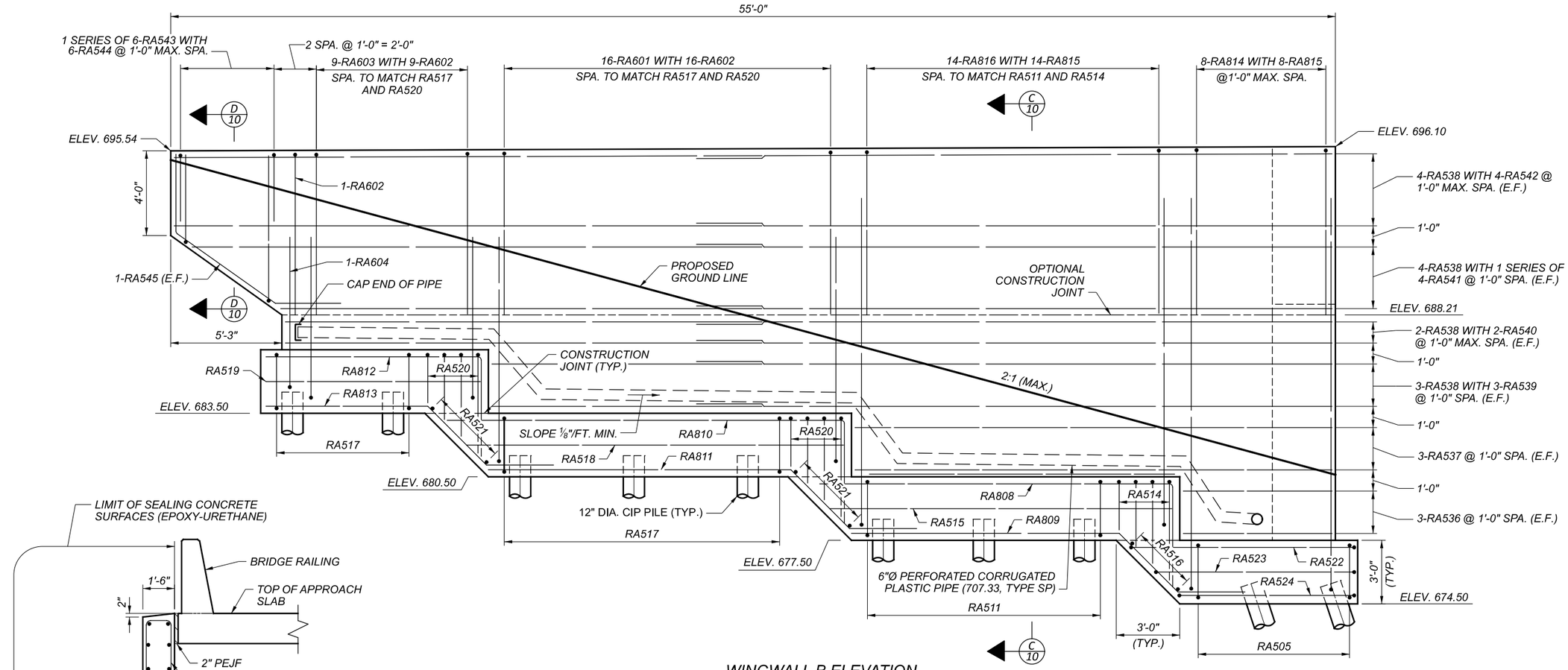
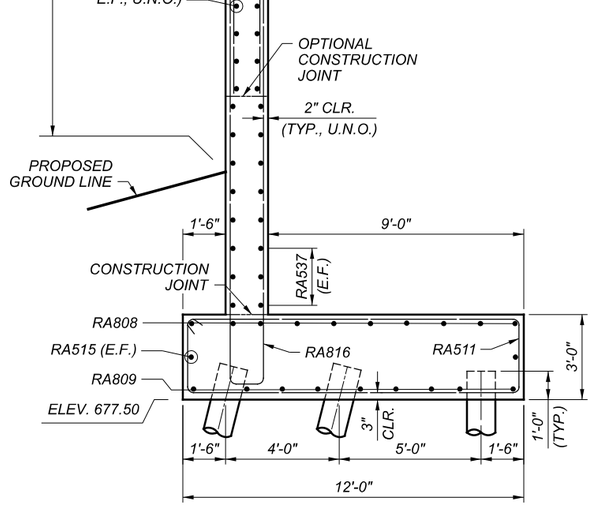
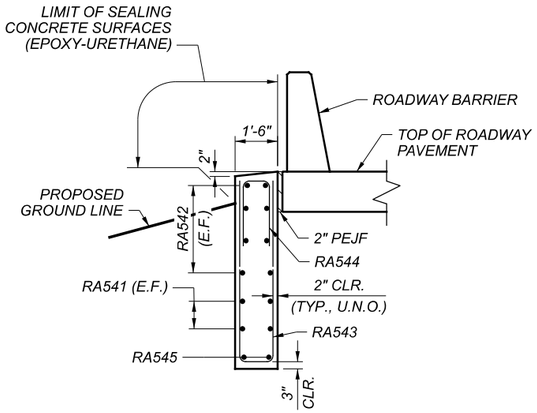


WINGWALL B ELEVATION



SECTION C-C

(BACKFILL NOT SHOWN FOR CLARITY)



SECTION D-D

(BACKFILL NOT SHOWN FOR CLARITY)

REQUIRED MINIMUM LAP LENGTHS	
#5	3'-4"
#6	3'-7"
#8	5'-4"

LEGEND:

CLR. = CLEAR
E.F. = EACH FACE
U.N.O. = UNLESS NOTED OTHERWISE

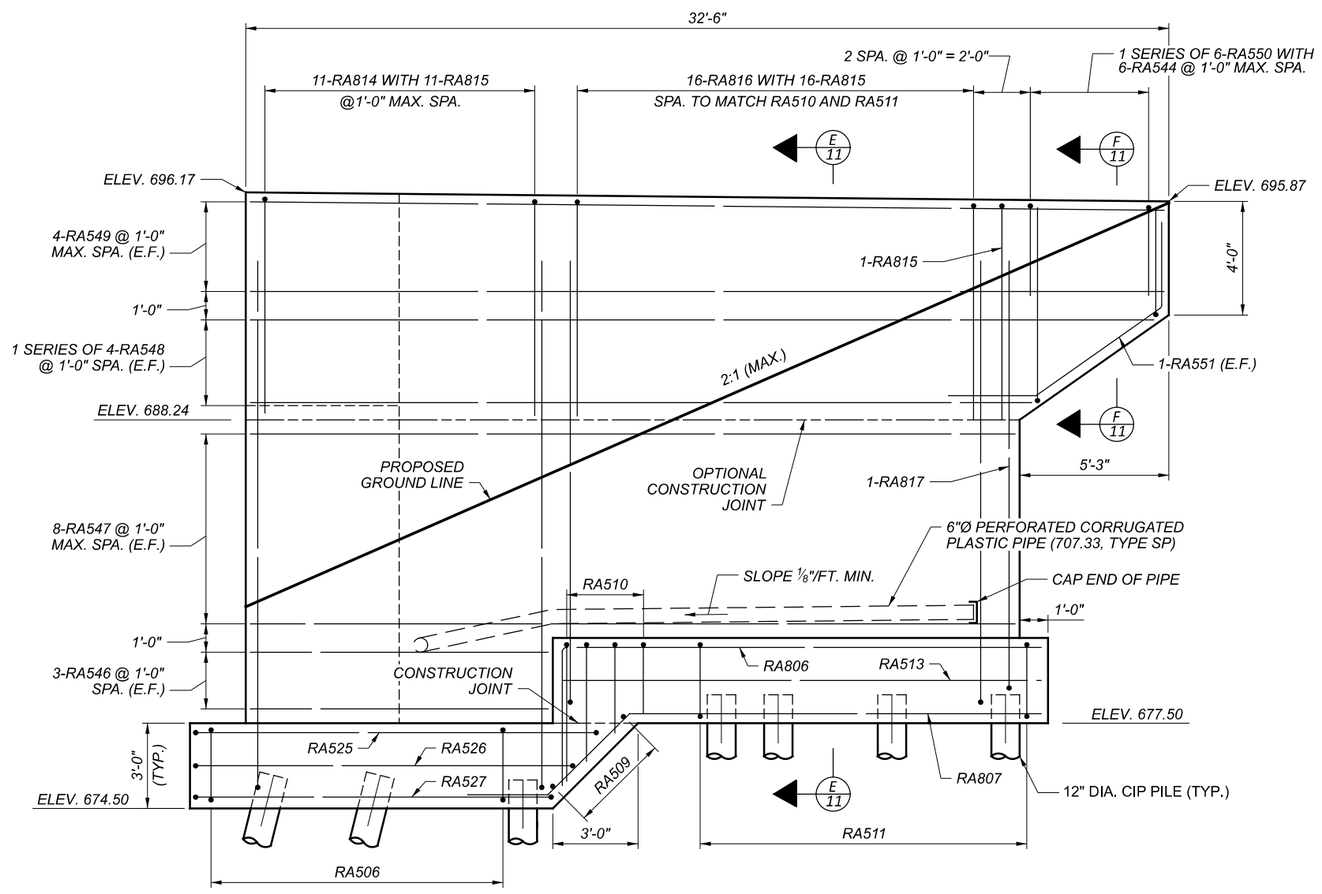
NOTES:

1. FOR REAR ABUTMENT PLAN AND ELEVATION, SEE SHEET 7/49.
2. FOR REAR ABUTMENT FOOTING PLAN, SEE SHEET 8/49.
3. FOR REAR ABUTMENT DETAILS, SEE SHEET 9/49.
4. FOR ADDITIONAL WINGWALL DETAILS, SEE SHEET 11/49.
5. FOR GEOSYNTHETIC WALL DETAILS, SEE SHEET 12/49.

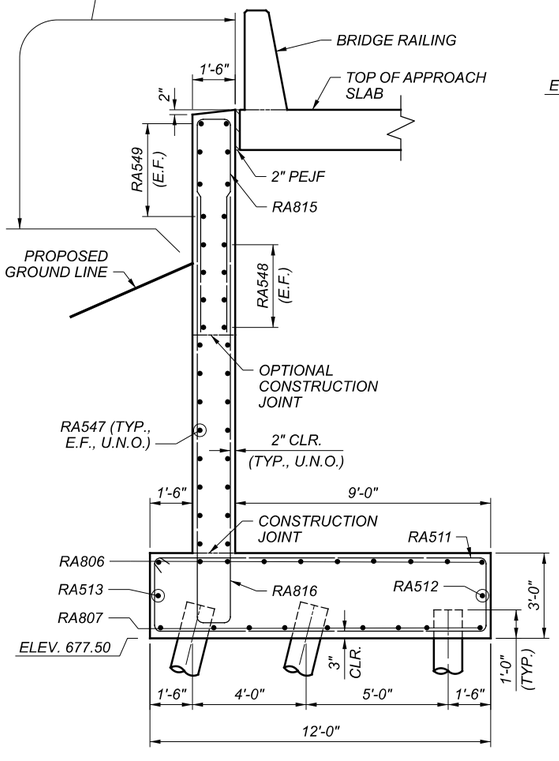
WINGWALL ELEVATION AND DETAILS (1 OF 2)
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN 1807806
DESIGN AGENCY HDR
DESIGNER PJC | CHECKER DRS
REVIEWER DWW 6/21/22
PROJECT ID 82382
SUBSET 10 | TOTAL 49
SHEET 1705 | TOTAL 2338

CUY-90-16.28 (CCG3A)

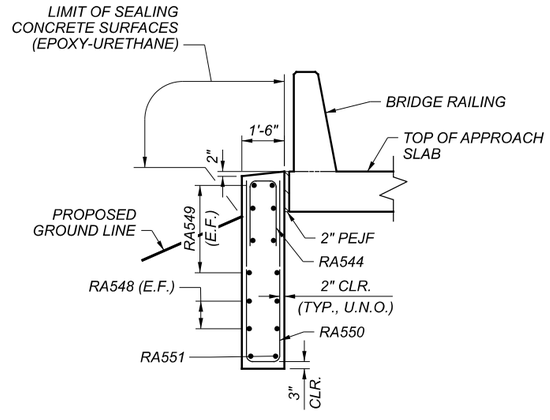


WINGWALL A ELEVATION



SECTION E-E

(BACKFILL NOT SHOWN FOR CLARITY)



SECTION F-F

(BACKFILL NOT SHOWN FOR CLARITY)

REQUIRED MINIMUM LAP LENGTHS	
#5	3'-4"
#8	5'-4"

LEGEND:

CLR. = CLEAR
E.F. = EACH FACE
U.N.O. = UNLESS NOTED OTHERWISE

NOTES:

1. FOR REAR ABUTMENT PLAN AND ELEVATION, SEE SHEET 7 / 49.
2. FOR REAR ABUTMENT FOOTING PLAN, SEE SHEET 8 / 49.
3. FOR REAR ABUTMENT DETAILS, SEE SHEET 9 / 49.
4. FOR ADDITIONAL WINGWALL DETAILS, SEE SHEET 10 / 49.
5. FOR GEOSYNTHETIC WALL DETAILS, SEE SHEET 12 / 49.

WINGWALL ELEVATION AND DETAILS (2 OF 2)
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER RAMP I

SFN 1807806
DESIGN AGENCY
DESIGNER PJC | CHECKER DRS
REVIEWER DWW 6/21/22
PROJECT ID 82382
SUBSET 11 | TOTAL 49
SHEET 1706 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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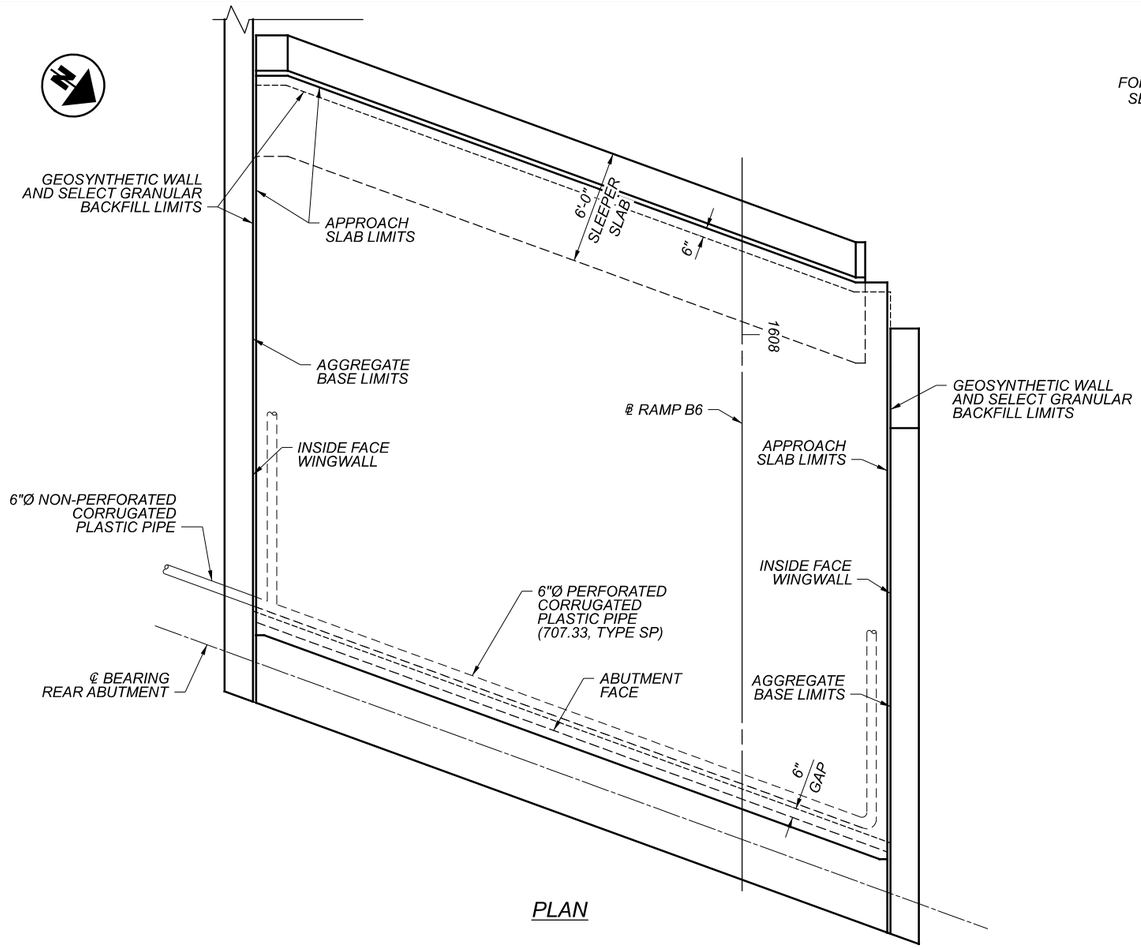
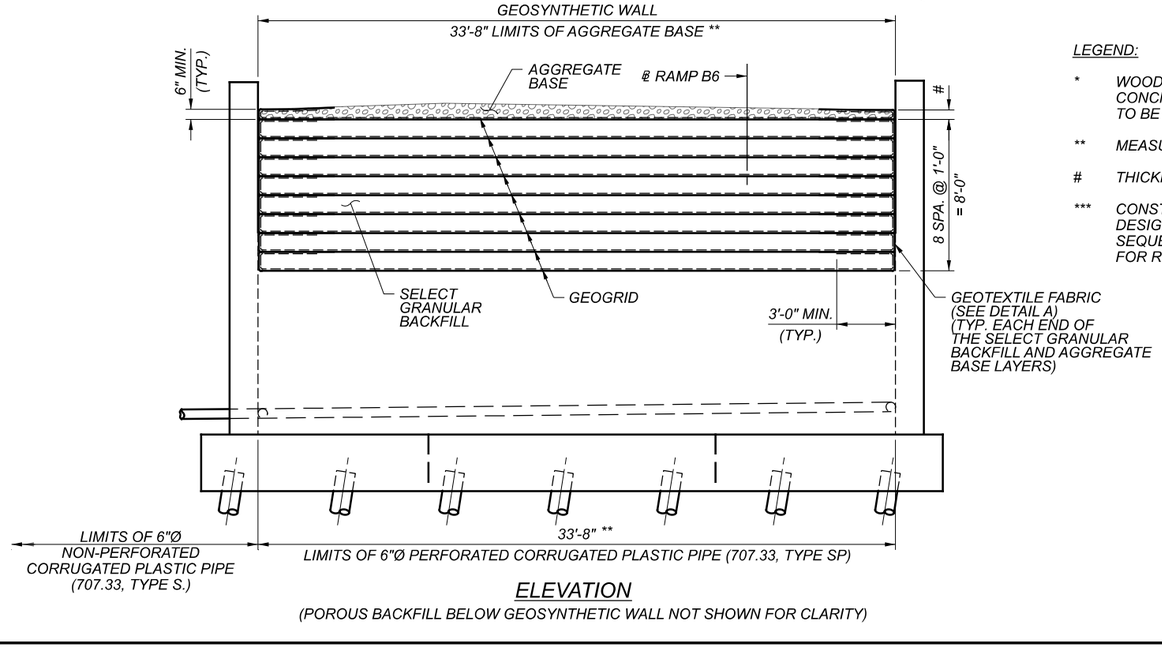
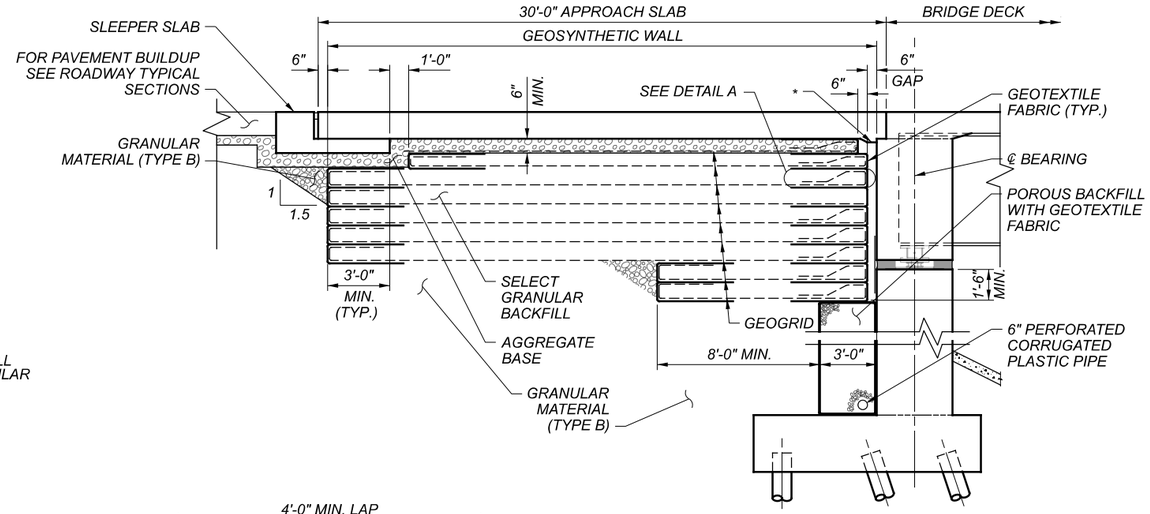


PLAN

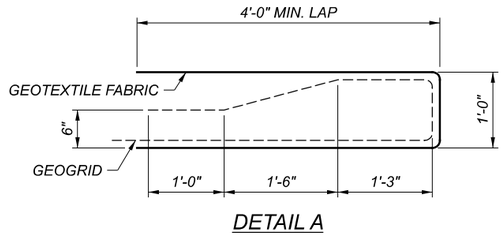


ELEVATION

(POROUS BACKFILL BELOW GEOSYNTHETIC WALL NOT SHOWN FOR CLARITY)



PROFILE



DETAIL A

LEGEND:

* WOOD FORMING TO BE LEFT IN PLACE TO PREVENT CONCRETE INTRUSION INTO GAP. NO MATERIAL IS TO BE PLACED IN GAP.

** MEASURED PERPENDICULAR TO ℄ RAMP B6.

THICKNESS VARIES BETWEEN 6" & 1'-6".

*** CONSTRUCTION SEQUENCE IS SUGGESTED BY DESIGNER. MODIFICATIONS TO THE CONSTRUCTION SEQUENCE TO BE SUBMITTED TO THE ENGINEER FOR REVIEW.

NOTES:

1. GEOTEXTILE FABRIC SHALL BE INSTALLED DIRECTLY BETWEEN THE LAYERS OF POROUS BACKFILL, SELECT GRANULAR BACKFILL, AND AGGREGATE BASE TO THE LIMITS SHOWN IN THE PLANS.
2. MINIMUM GEOTEXTILE FABRIC LAP LENGTH IS 4'-0". REFER TO DETAIL A.
3. GEOGRID REINFORCEMENT TYPE P1 SHALL CONFORM TO SUPPLEMENTAL SPECIFICATION 863.
4. SELECT GRANULAR MATERIAL SHALL CONFORM TO SUPLEMENTAL SPECIFICATION 840. PLACEMENT OF SELECT GRANULAR BACKFILL SHALL BE PER SUPPLEMENTAL SPECIFICATION 863 AND SHALL BE INCIDENTAL TO ITEM 840 - SELECT GRANULAR BACKFILL.
5. TYPE B GRANULAR MATERIAL AND GEOTEXTILE FABRIC SHALL CONFORM TO C&MS 204.
6. THE ESTIMATED QUANTITY FOR AGGREGATE BASE IS INCLUDED WITH THE ROADWAY QUANTITY FOR ITEM 304, AGGREGATE BASE.
7. FOR ABUTMENT DETAILS, SEE SHEETS 7 / 49 THRU 11 / 49.
8. FOR APPROACH SLAB AND SLEEPER SLAB DETAILS, SEE SHEET 44 / 49.
9. FOR POROUS BACKFILL LIMITS, SEE SHEETS 7 / 49 THRU 11 / 49.

CONCEPTUAL CONSTRUCTION SEQUENCE***

1. PERFORM EXCAVATION REQUIRED TO CONSTRUCT ABUTMENTS AND GEOSYNTHETIC WALL.
2. PLACE PILES AND CONSTRUCT ABUTMENTS UP TO THE LEVEL OF THE BEAM SEATS.
3. SET BEARING ASSEMBLIES AND PLACE EXPANDED POLYSTYRENE FILLER OR REMOVABLE FORMS.
4. CONSTRUCT SEMI-INTEGRAL END DIAPHRAGMS AND WINGWALLS ABOVE THE BEAM SEAT, SEE NOTE 8 ON SHEET 37 / 49.
5. ATTACH NEOPRENE SHEETING AND TYPE 2 WATERPROOFING TO THE REAR FACE OF THE ABUTMENTS TO PROTECT EXPANSION AND CONSTRUCTION JOINTS.
6. PLACE POROUS BACKFILL WITH GEOTEXTILE FABRIC BEHIND THE ABUTMENT AND WINGWALLS UP TO 1'-6" BELOW THE ABUTMENT BEAM SEATS. CONSTRUCT THE GEOSYNTHETIC IN 1 FOOT LIFT LEAVING A 6 INCH GAP BETWEEN THE BACK FACE OF THE ABUTMENT AND THE GEOSYNTHETIC WALL. PLACE THE GEOSYNTHETIC WALL UP TO THE BACK FACE OF THE WINGWALLS.
7. PLACE AGGREGATE BASE ON TOP OF THE GEOSYNTHETIC WALL.
8. WOOD FRAMING TO BE LEFT IN PLACE MUST BE PLACED OVER THE 6" GAP TO PREVENT CONCRETE OR OTHER CONSTRUCTION MATERIAL OR DEBRIS FROM FALLING INTO THE GAP.
9. CONSTRUCT APPROACH SLAB AND DECK SLAB, IF DECK SLAB WAS NOT CONSTRUCTED WITH THE END DIAPHRAGMS.

REAR ABUTMENT GEOSYNTHETIC WALL DETAILS

CUY-90-1652S (BRIDGE 12)

RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	ADW
CHECKER	CMR
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	12
TOTAL	49
SHEET	1707
TOTAL	2338

CUY-90-16.28 (CCG3A)
MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/27/2022 TIME: 10:14:44 PM USER: BAVARELL
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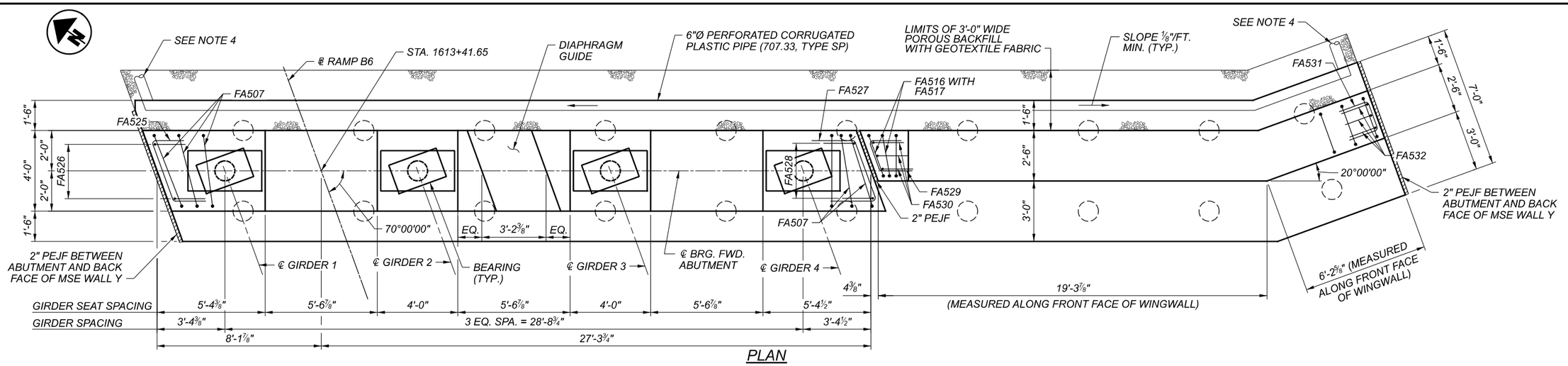
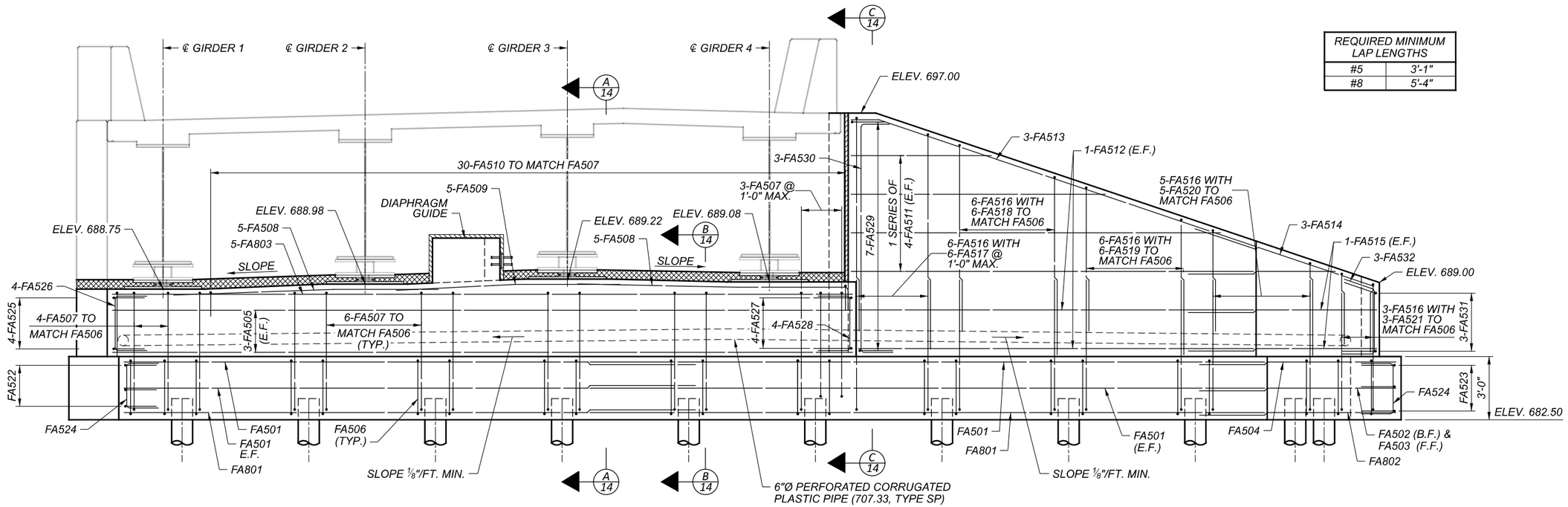


PLAN

REQUIRED MINIMUM LAP LENGTHS	
#5	3'-1"
#8	5'-4"



ELEVATION

(MSE WALL Y AND SELECT PEJF NOT SHOWN FOR CLARITY)

LEGEND:

E.F. = EACH FACE
B.F. = BACK FACE
F.F. = FRONT FACE

NOTES:

1. FOR END DIAPHRAGM DETAILS, SEE SHEET 38 / 49.
2. FOR GEOSYNTHETIC WALL DETAILS, SEE SHEET 15 / 49.
3. FOR DIAPHRAGM GUIDE DETAILS, SEE SHEET 9 / 49.
4. CONNECT ABUTMENT DRAINAGE PIPE TO MSE WALL Y DRAINAGE.
5. FOR FOUNDATION PLAN, SEE SHEET 6 / 49.
6. FOR FOOTING PLAN AND ADDITIONAL FORWARD ABUTMENT DETAILS, SEE SHEET 14 / 49.

FORWARD ABUTMENT PLAN AND ELEVATION
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN 1807806
DESIGN AGENCY
DESIGNER PJC | CHECKER JML
REVIEWER DWW 6/21/22
PROJECT ID 82382
SUBSET 13 | TOTAL 49
SHEET 1708 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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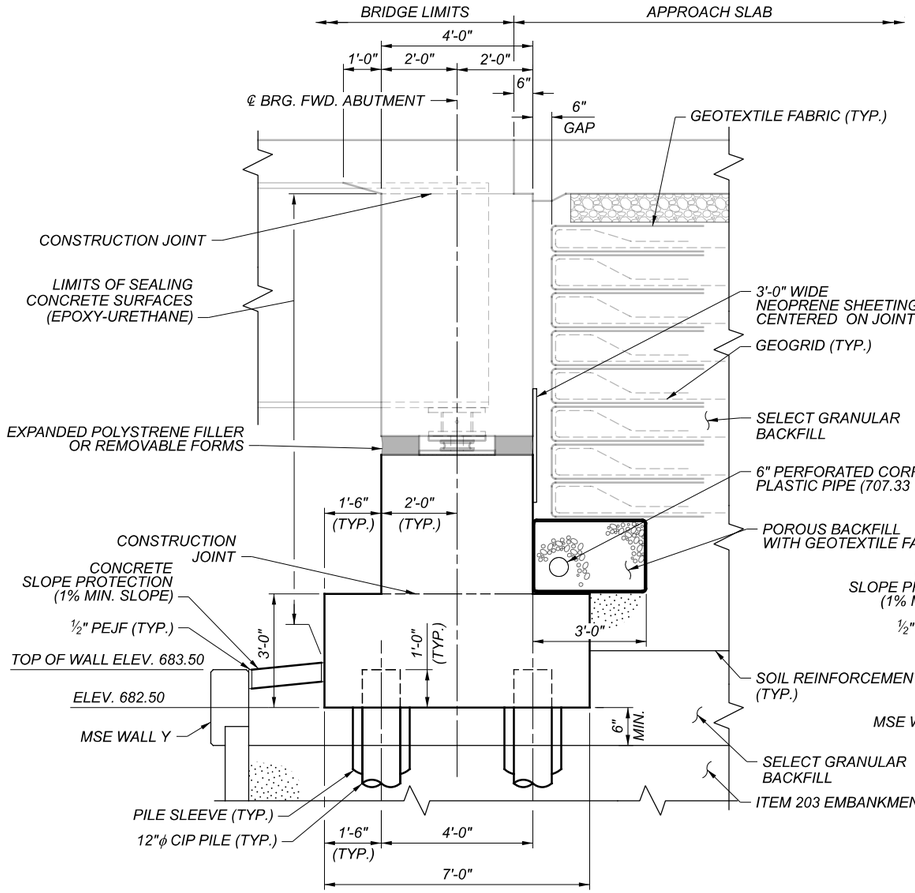
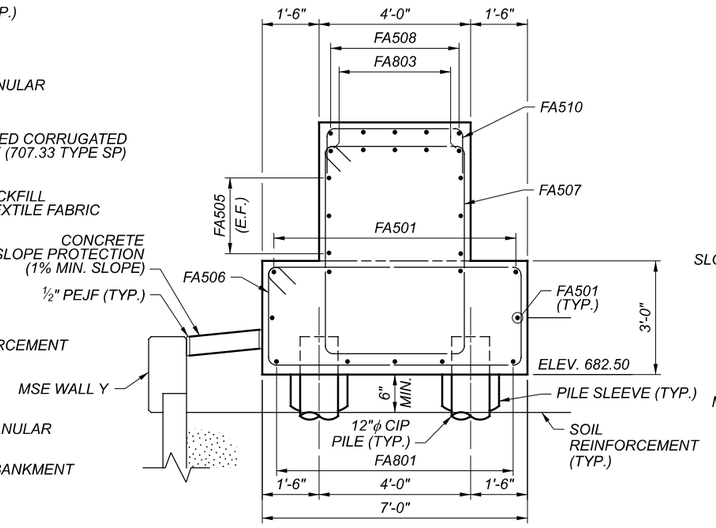


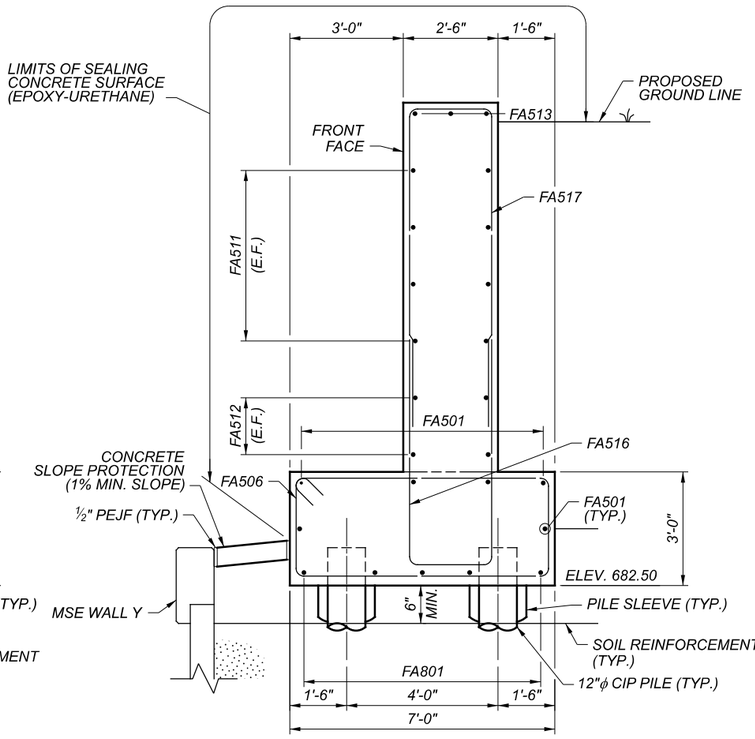
SECTION A-A

(FOR REINFORCING SEE SECTION B-B)



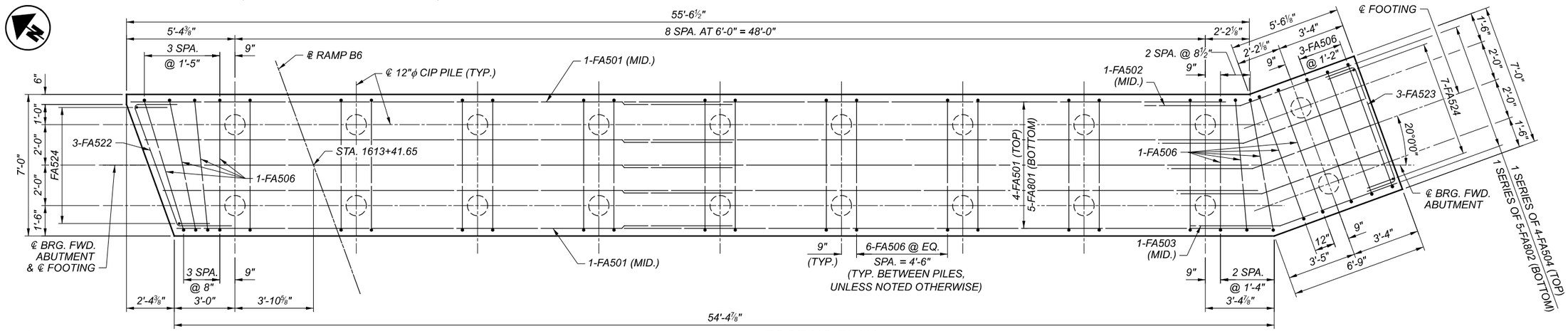
SECTION B-B

(SUPERSTRUCTURE AND ABUTMENT BACKFILL NOT SHOWN FOR CLARITY)



SECTION C-C

(ABUTMENT BACKFILL NOT SHOWN FOR CLARITY)



FOOTING PLAN

LEGEND:

E.F. = EACH FACE
MID. = MIDDLE

NOTE:

1. FOR NOTES AND ADDITIONAL DETAILS, SEE SHEET 13/49.

FORWARD ABUTMENT FOOTING PLAN AND SECTIONS
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER RAMP H5

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	JMR
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	14
TOTAL	49
SHEET	1709
TOTAL	2338

CUY-90-16.28 (CCG3A)

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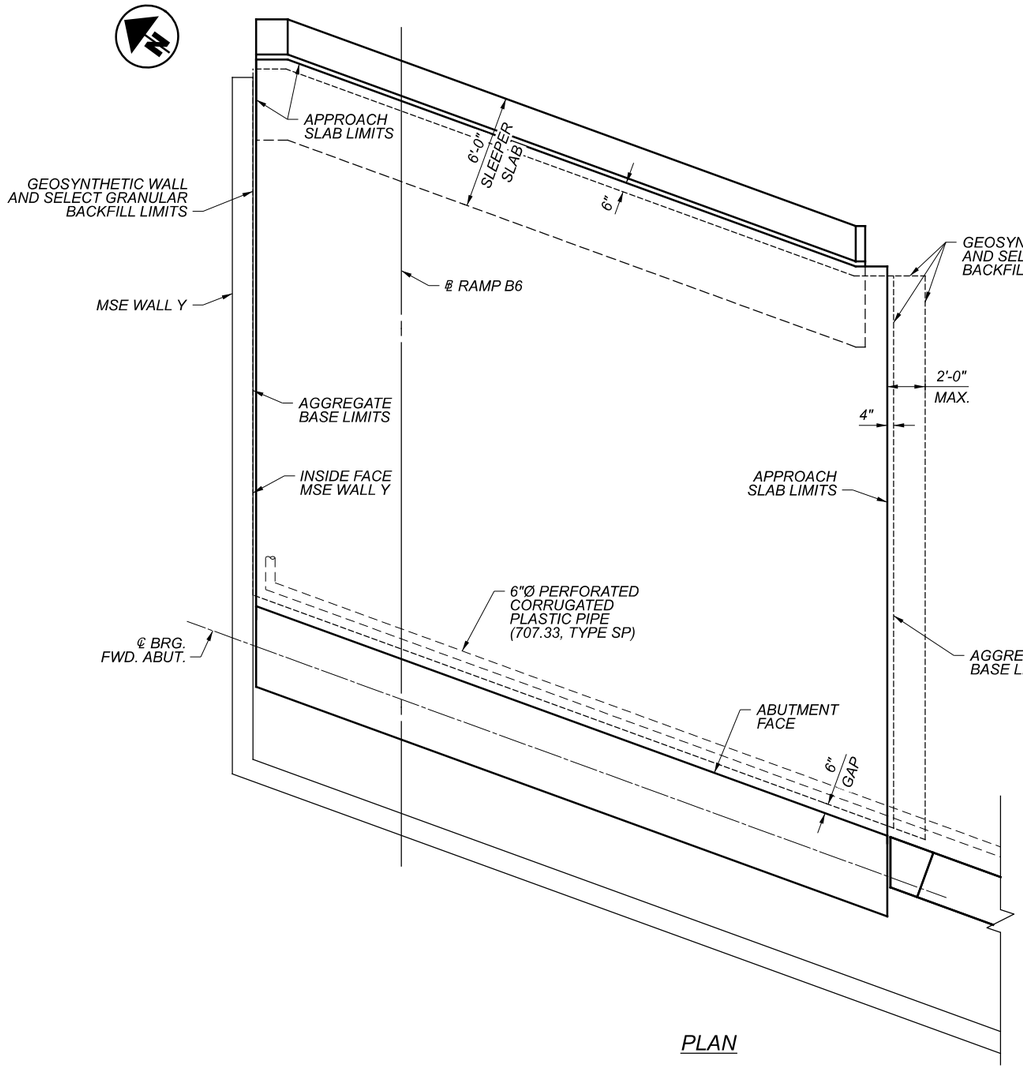
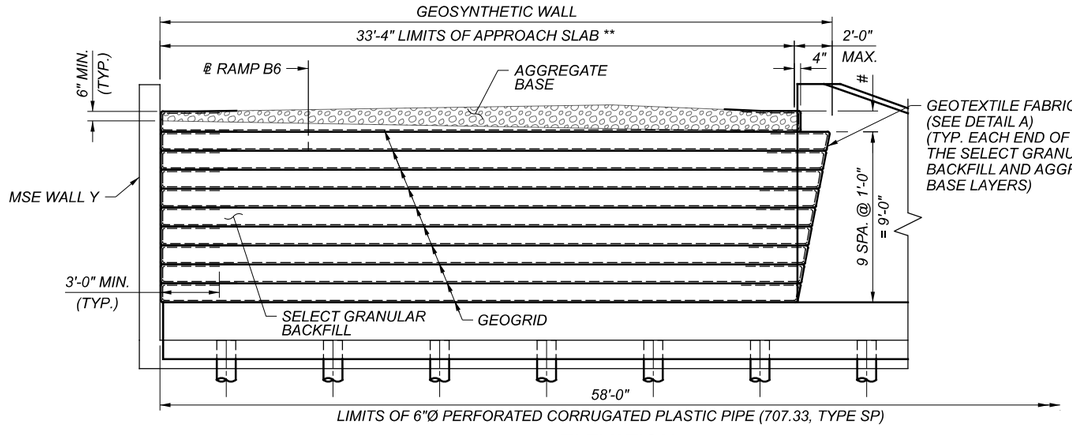
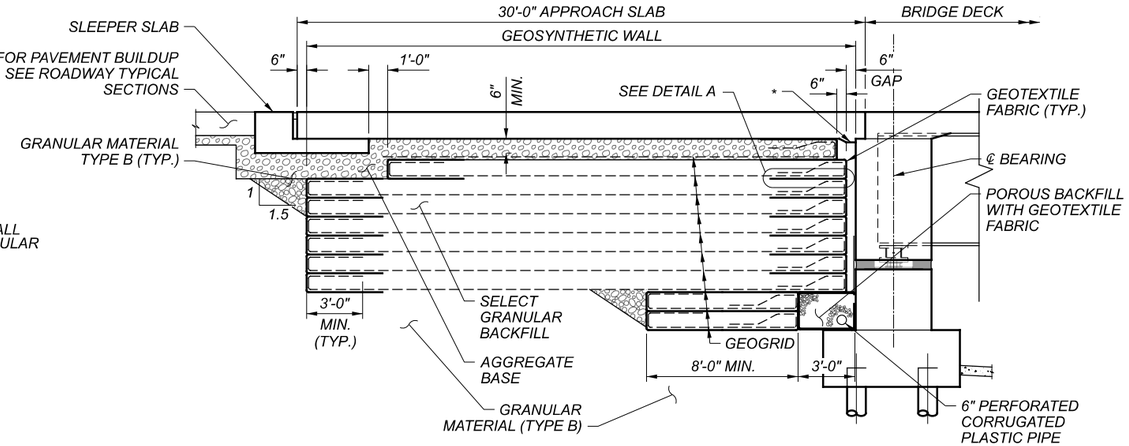


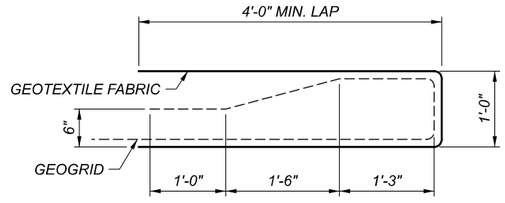
PLAN



ELEVATION



PROFILE



DETAIL A

LEGEND:

* WOOD FORMING TO BE LEFT IN PLACE TO PREVENT CONCRETE INTRUSION INTO GAP. NO MATERIAL IS TO BE PLACED IN GAP.

** MEASURED PERPENDICULAR TO ℄ RAMP B6.

\# THICKNESS VARIES BETWEEN 6" & 1'-6".

*** CONSTRUCTION SEQUENCE IS SUGGESTED BY DESIGNER. MODIFICATIONS TO THE CONSTRUCTION SEQUENCE TO BE SUBMITTED TO THE ENGINEER FOR REVIEW.

NOTES:

1. GEOTEXTILE FABRIC SHALL BE INSTALLED DIRECTLY BETWEEN THE LAYERS OF POROUS BACKFILL, SELECT GRANULAR BACKFILL, AND AGGREGATE BASE TO THE LIMITS SHOWN IN THE PLANS.
2. MINIMUM GEOTEXTILE FABRIC LAP LENGTH IS 4'-0". REFER TO DETAIL A.
3. GEOGRID REINFORCEMENT TYPE P1 SHALL CONFORM TO SUPPLEMENTAL SPECIFICATION 863.
4. SELECT GRANULAR MATERIAL SHALL CONFIRM TO SUPPLEMENT SPECIFICATION 840. PLACEMENT OF SELECT GRANULAR BACKFILL SHALL BE PER SUPPLEMENTAL SPECIFICATION 863 AND SHALL BE INCIDENTAL TO ITEM 840 - SELECT GRANULAR BACKFILL.
5. TYPE B GRANULAR MATERIAL AND GEOTEXTILE FABRIC SHALL CONFORM TO C&MS 204.
6. THE ESTIMATED QUANTITY FOR AGGREGATE BASE IS INCLUDED WITH THE ROADWAY QUANTITY FOR ITEM 304, AGGREGATE BASE.
7. FOR ABUTMENT DETAILS, SEE SHEETS 13 / 49 THRU 14 / 49.
8. FOR APPROACH SLAB AND SLEEPER SLAB DETAILS, SEE SHEET 45 / 49.
9. FOR POROUS BACKFILL LIMITS, SEE SHEETS 13 / 49 THRU 14 / 49.

CONCEPTUAL CONSTRUCTION SEQUENCE***

1. CONSTRUCT MSE WALL AS NECESSARY TO CONSTRUCT ABUTMENTS AND GEOSYNTHETIC WALL.
2. PLACE PILES AND CONSTRUCT ABUTMENTS UP TO THE LEVEL OF THE BEAM SEATS.
3. SET BEARING ASSEMBLIES AND PLACE EXPANDED POLYSTYRENE FILLER OR REMOVABLE FORMS.
4. CONSTRUCT SEMI-INTEGRAL END DIAPHRAGM AND WINGWALL ABOVE THE BEAM SEAT, SEE NOTE 8 ON SHEET 38 / 49.
5. ATTACH NEOPRENE SHEETING AND TYPE 2 WATERPROOFING TO THE REAR FACE OF THE ABUTMENTS TO PROTECT EXPANSION AND CONSTRUCTION JOINTS.
6. CONSTRUCT THE GEOSYNTHETIC WALL IN 1 FOOT LIFTS LEAVING A 6 INCH GAP BETWEEN THE BACK FACE OF THE ABUTMENT AND GEOSYNTHETIC WALL. PLACE POROUS BACKFILL WITH GEOTEXTILE FABRIC BEHIND WINGWALL.
7. PLACE AGGREGATE BASE ON TOP OF THE GEOSYNTHETIC WALL.
8. WOOD FRAMING TO BE LEFT IN PLACE MUST BE PLACED OVER THE 6" GAP TO PREVENT CONCRETE OR OTHER CONSTRUCTION MATERIAL OR DEBRIS FROM FALLING INTO THE GAP.
9. CONSTRUCT APPROACH SLAB AND DECK SLAB, IF DECK SLAB WAS NOT CONSTRUCTED WITH THE END DIAPHRAGMS.

FORWARD ABUTMENT GEOSYNTHETIC WALL DETAILS
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN	1807806
DESIGN AGENCY	FHR
DESIGNER	ADW
CHECKER	CMR
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	15
TOTAL	49
SHEET	1710
TOTAL	2338

CUY-90-16.28 (CCG3A)

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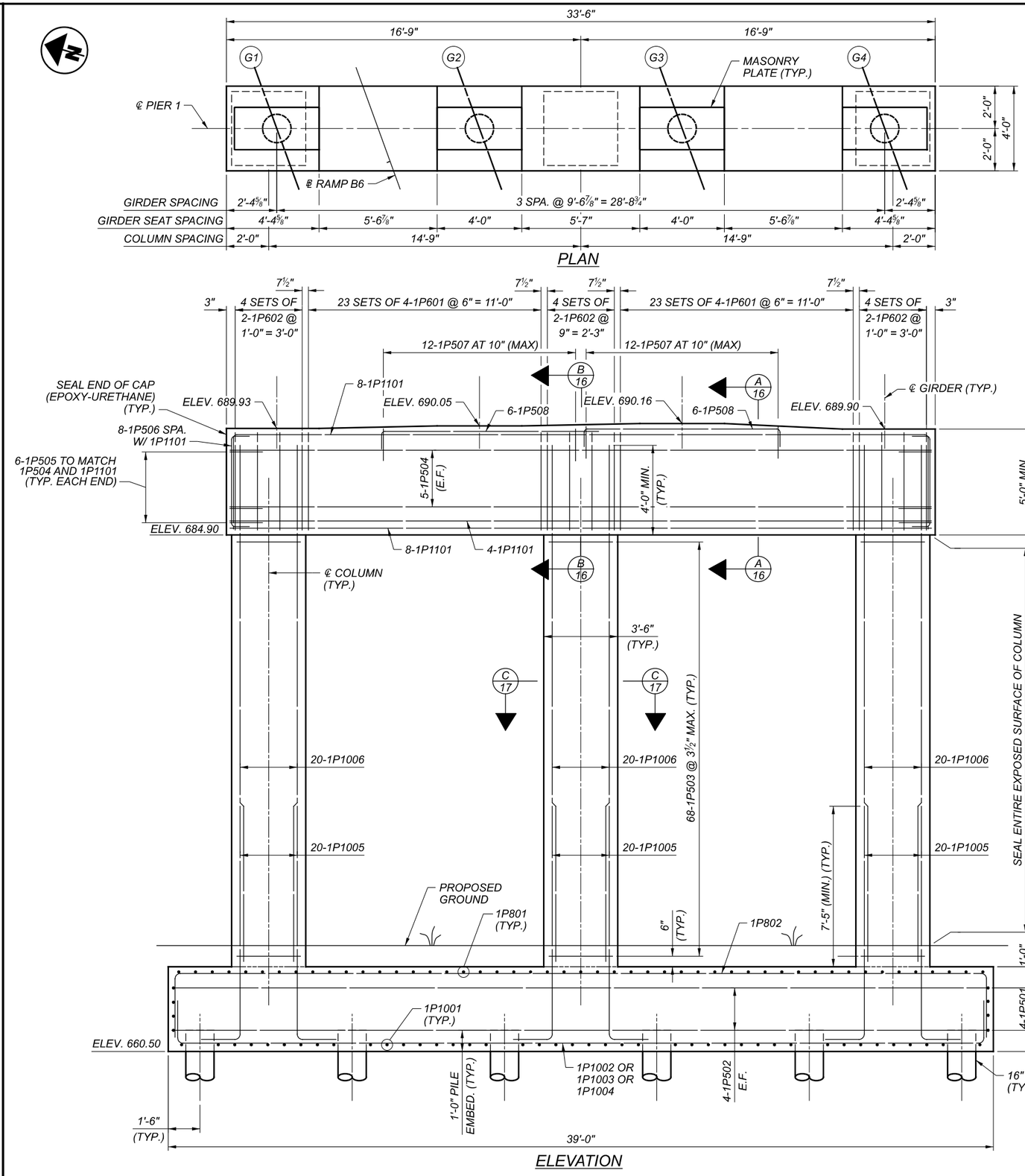
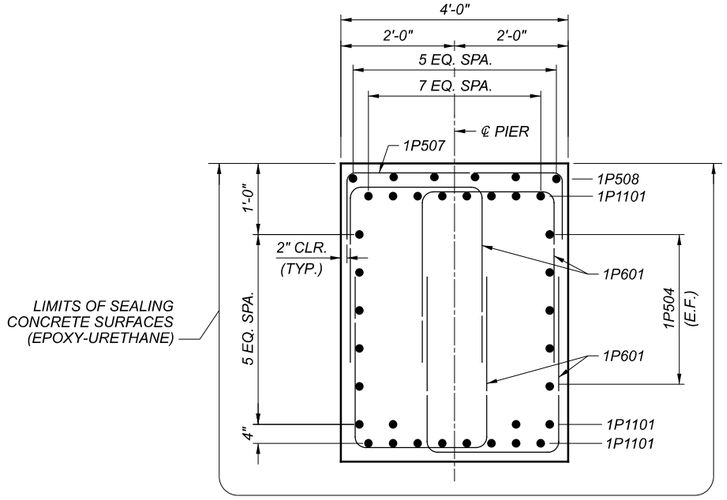
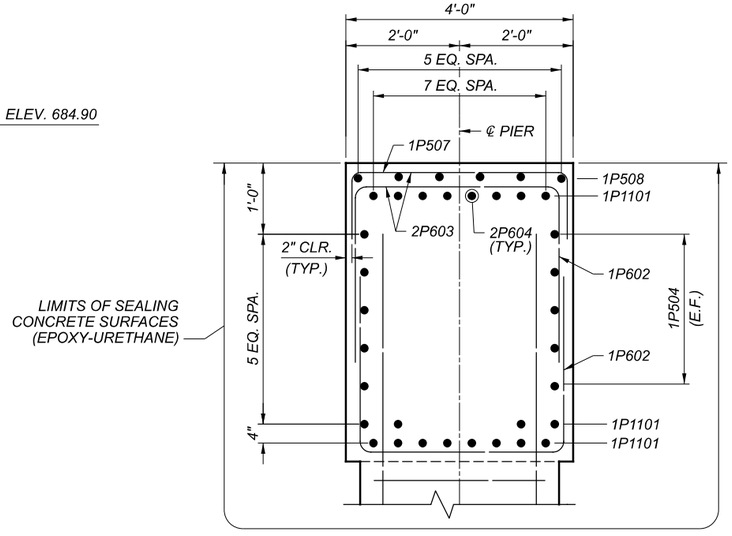


PLAN

ELEVATION



SECTION A-A



SECTION B-B

REQUIRED MINIMUM LAP LENGTHS	
#5	2'-5"
#10	7'-2"

NOTE:

1. FOR CAP, BEARING, AND COLUMN REINFORCING INTERFACE DETAIL, SEE SHEET 17 / 49.
2. FOR FOOTING PLAN AND ADDITIONAL DETAILS, SEE SHEET 17 / 49.
3. FOR PIER 2 DETAILS, SEE SHEETS 18 / 49 AND 19 / 49.
4. FOR BEARING DETAILS, 27 / 49 THRU 30 / 49.
5. FOR FOUNDATION PLAN, SEE SHEET 6 / 49.
6. FOR REINFORCING STEEL LIST, SEE SHEET 48 / 49.
7. FOR SECTION C-C, SEE SHEET 17 / 49.

PIER 1 PLAN AND ELEVATION
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER RAMP H5

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	CMR
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	16
TOTAL	49
SHEET	1711
TOTAL	2338

CUY-90-16.28 (CCG3A)

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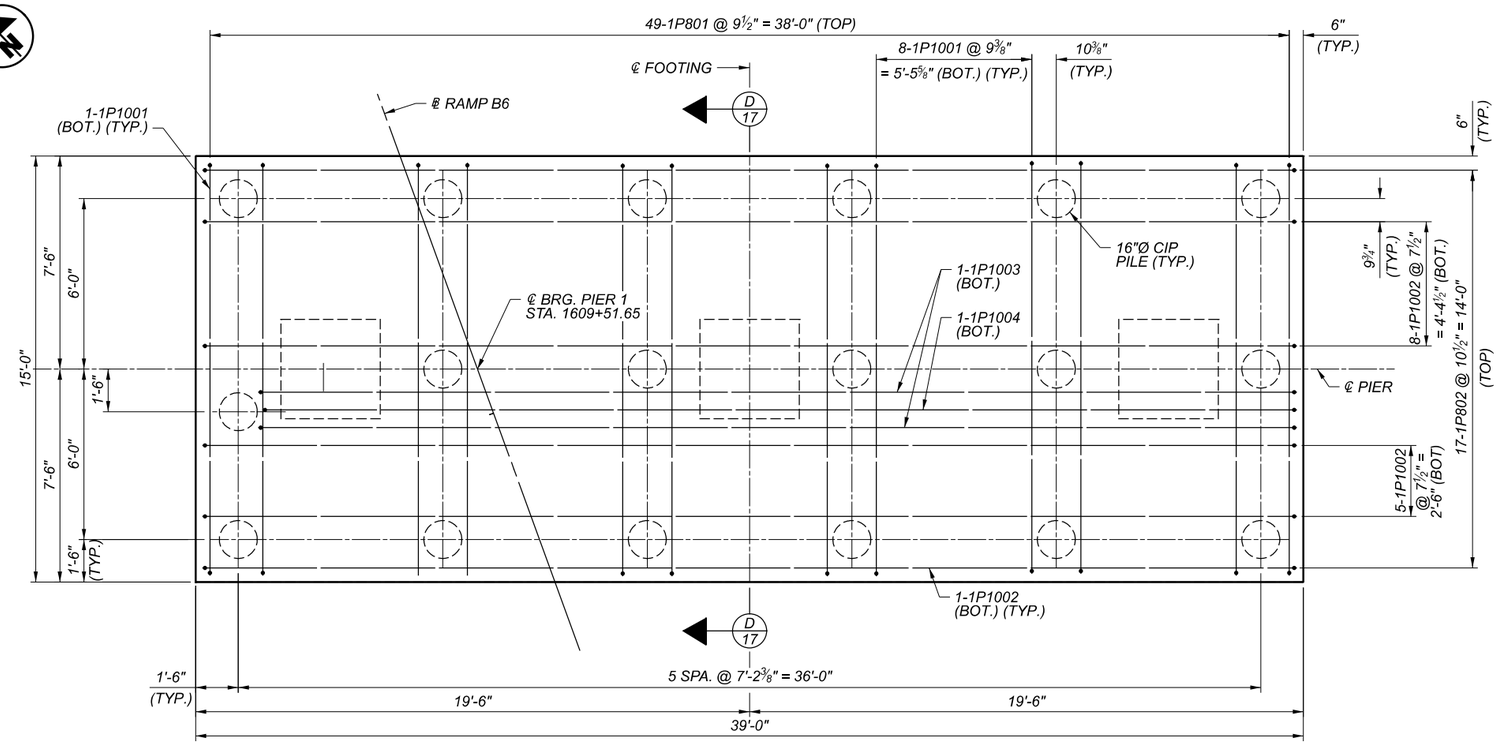
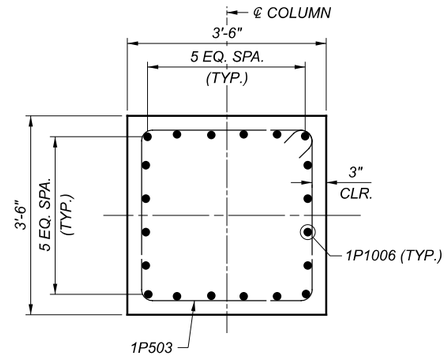
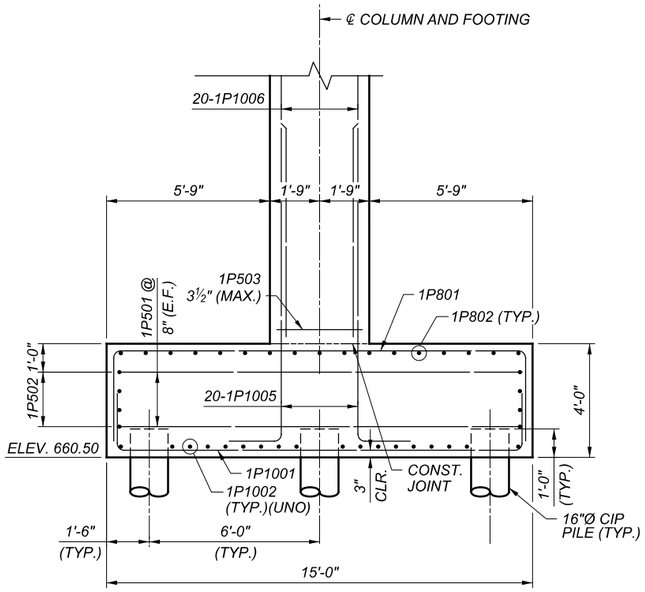


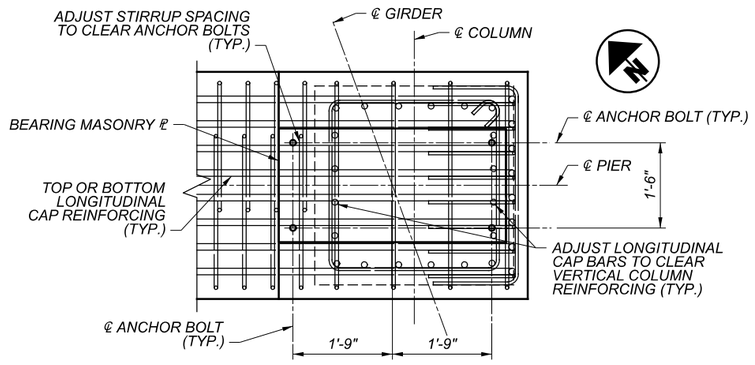
PLAN



SECTION C-C



SECTION D-D



CAP, BEARING AND COLUMN INTERFACE DETAIL

NOTE:

1. FOR LOCATION OF SECTION C-C AND ADDITIONAL PIER DETAILS AND NOTES, SEE SHEET 16/49.

PIER 1 DETAILS
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	CMR
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	17
TOTAL	49
SHEET	1712
TOTAL	2338

CUY-90-16.28 (CCG3A)
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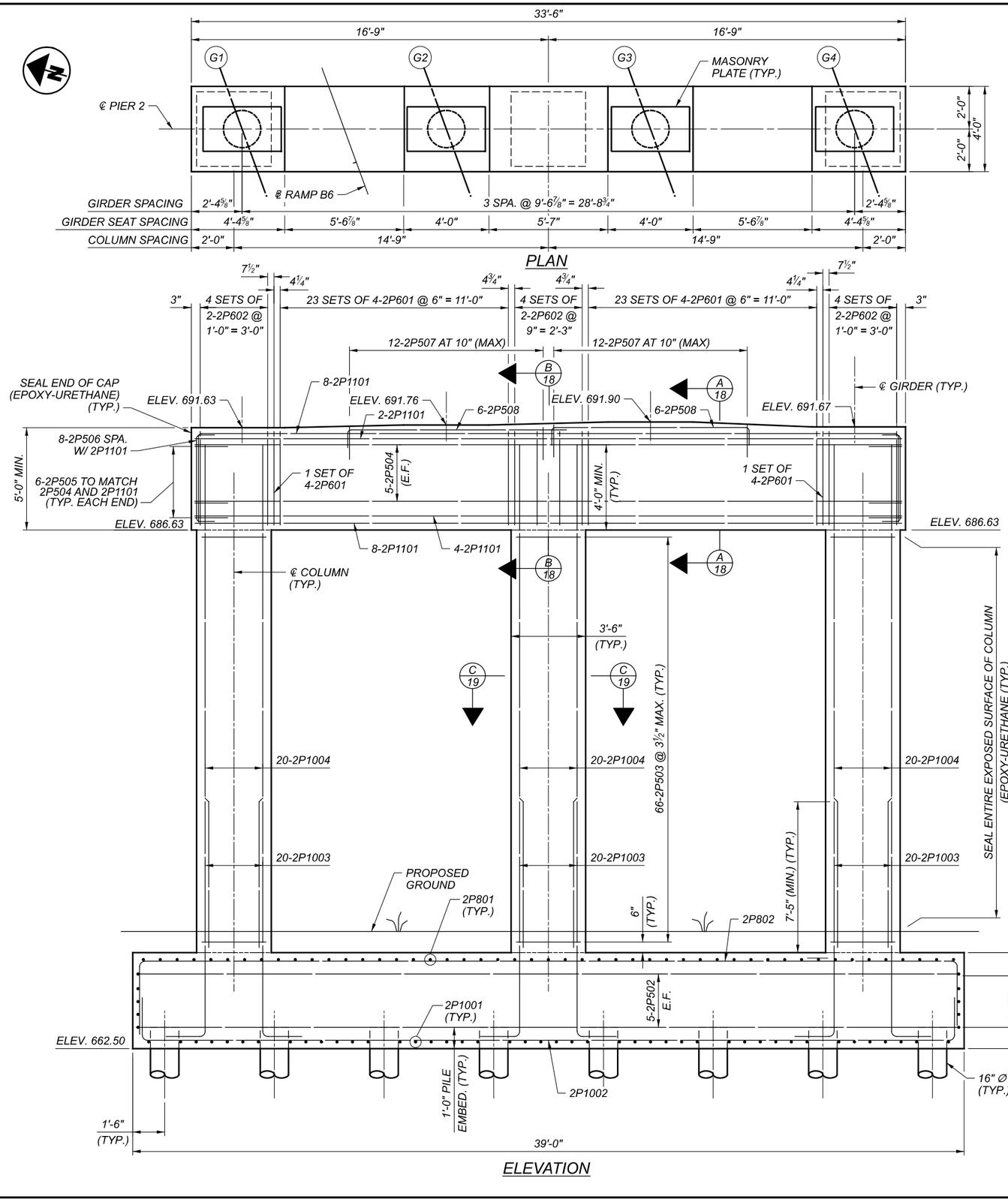
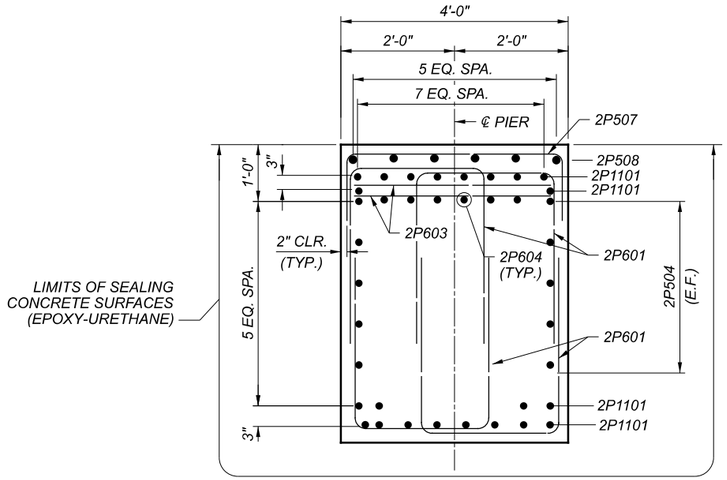
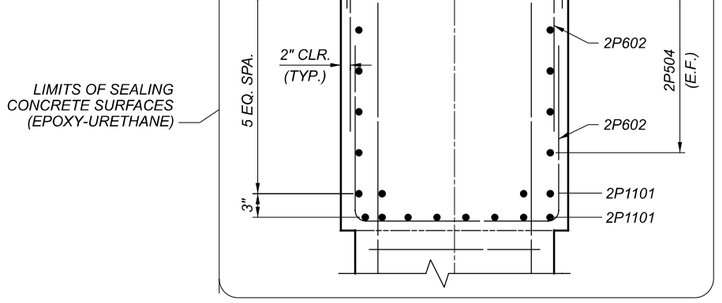


ELEVATION



SECTION A-A



SECTION B-B

REQUIRED MINIMUM LAP LENGTHS	
#5	2'-5"
#10	7'-2"

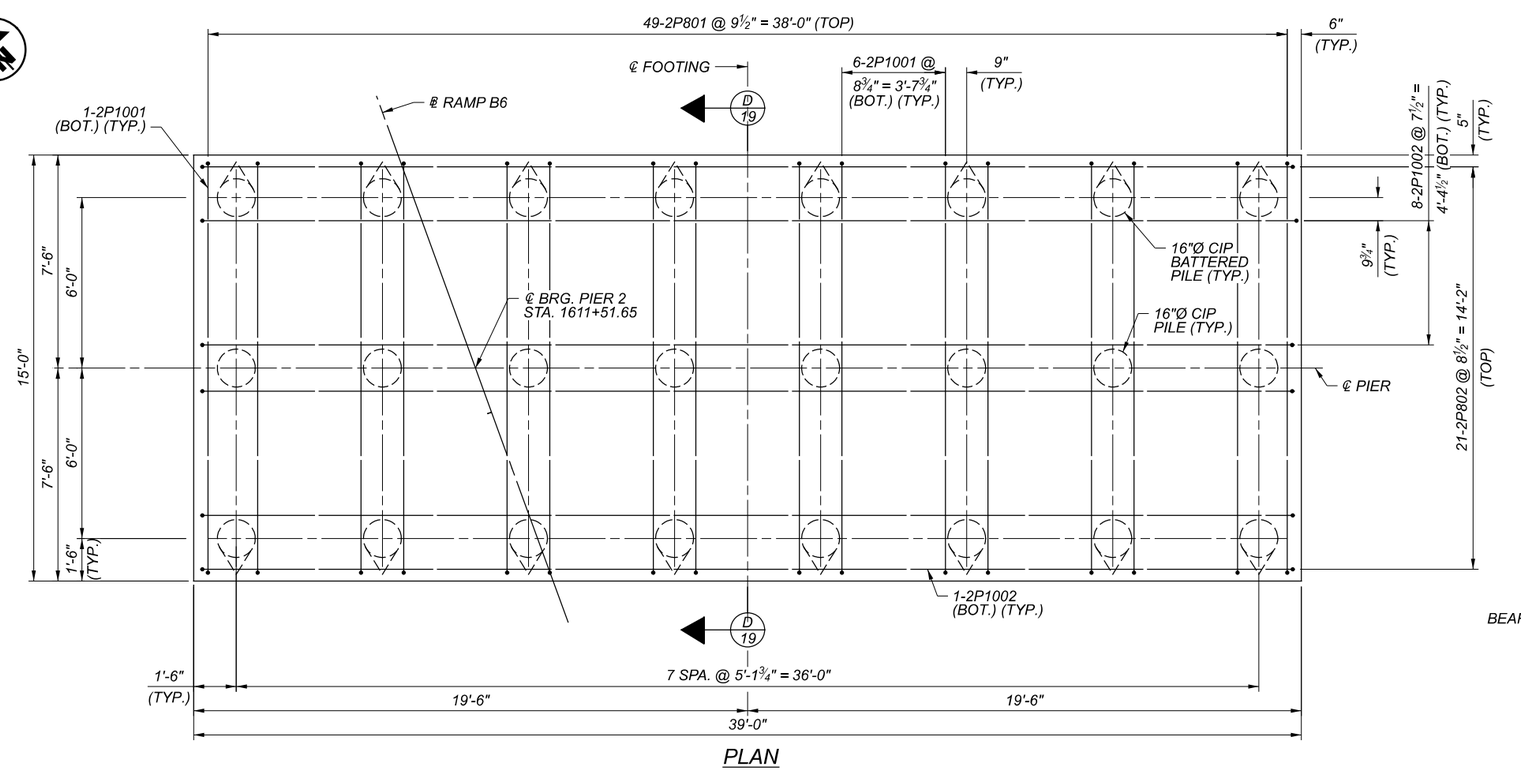
NOTE:

1. FOR CAP, BEARING, AND COLUMN REINFORCING INTERFACE DETAIL, SEE SHEET 19 / 49.
2. FOR FOOTING PLAN AND ADDITIONAL DETAILS, SEE SHEET 19 / 49.
3. FOR PIER 1 DETAILS, SEE SHEETS 16 / 49 AND 17 / 49.
4. FOR BEARING DETAILS, 27 / 49 THRU 30 / 49.
5. FOR FOUNDATION PLAN, SEE SHEET 6 / 49.
6. FOR REINFORCING STEEL LIST, SEE SHEET 48 / 49.
7. FOR SECTION C-C, SEE SHEET 19 / 49 .

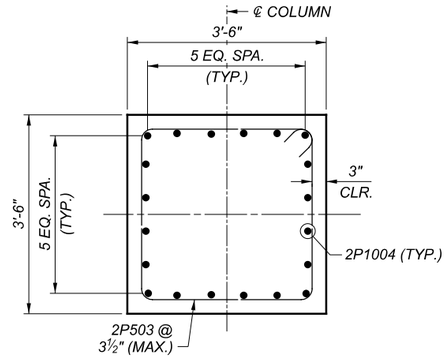
PIER 2 PLAN AND ELEVATION
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER R

SFN	1807806
DESIGN AGENCY	FHR
DESIGNER	PJC
CHECKER	CMR
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	18
TOTAL	49
SHEET	1713
TOTAL	2338

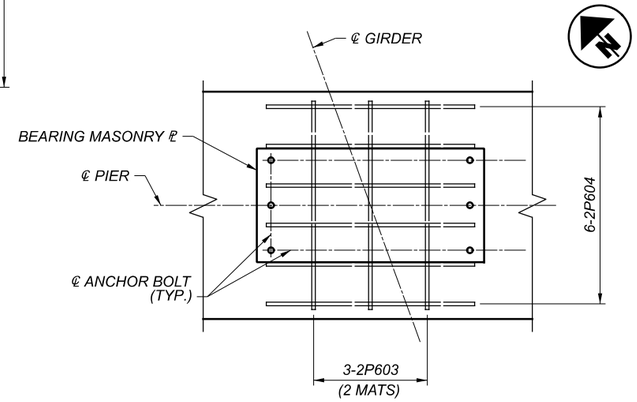
CUY-90-16.28 (CCG3A)



PLAN

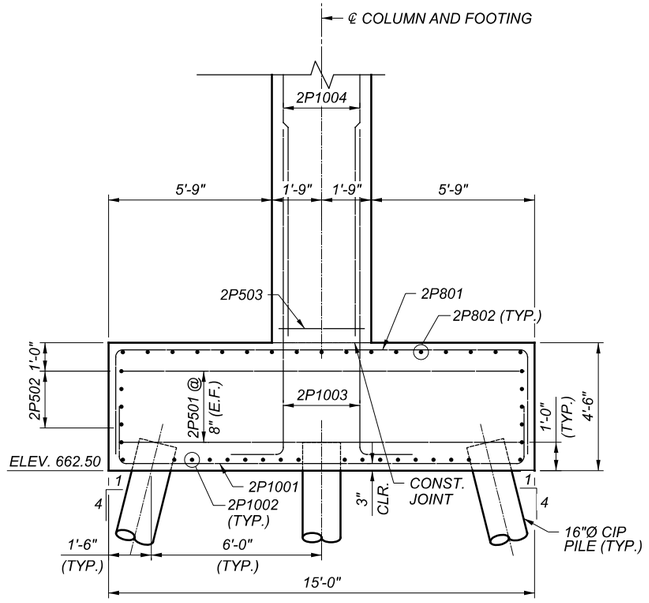


SECTION C-C

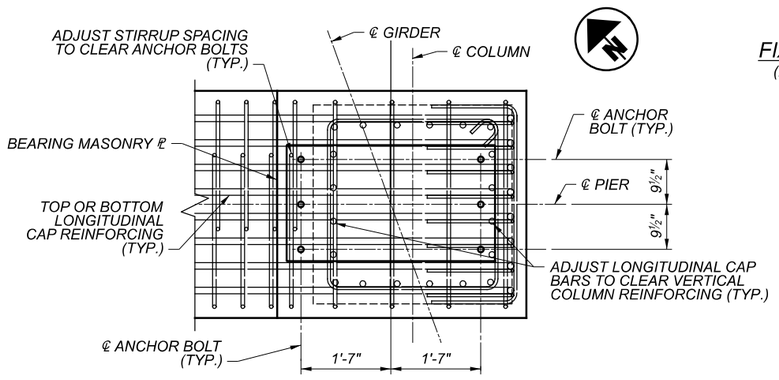


FIXED BEARING ANCHOR REINFORCING DETAIL

(MAIN CAP AND SEAT REINFORCING NOT SHOWN FOR CLARITY)
(TYP. AT EACH BEARING)



SECTION D-D



CAP, BEARING AND COLUMN INTERFACE DETAIL

NOTE:

1. FOR LOCATION OF SECTION C-C AND ADDITIONAL PIER DETAILS AND NOTES, SEE SHEET 18 / 49.

PIER 2 DETAILS
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	PJC
CHECKER	CMR
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	19
TOTAL	49
SHEET	1714
TOTAL	2338

CUY-90-16.28 (CCG3A)

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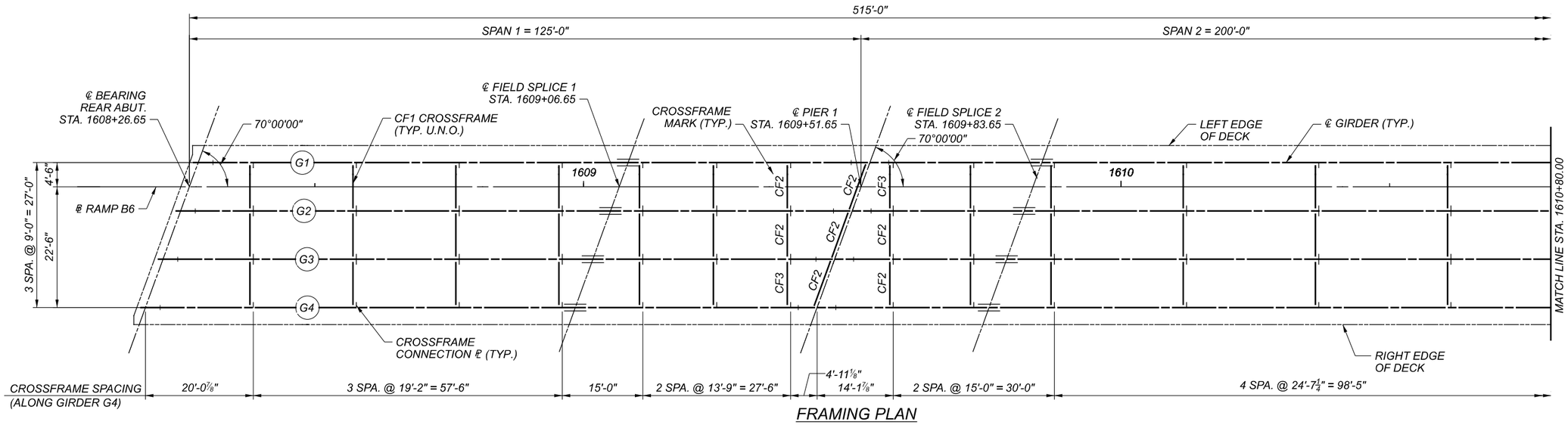
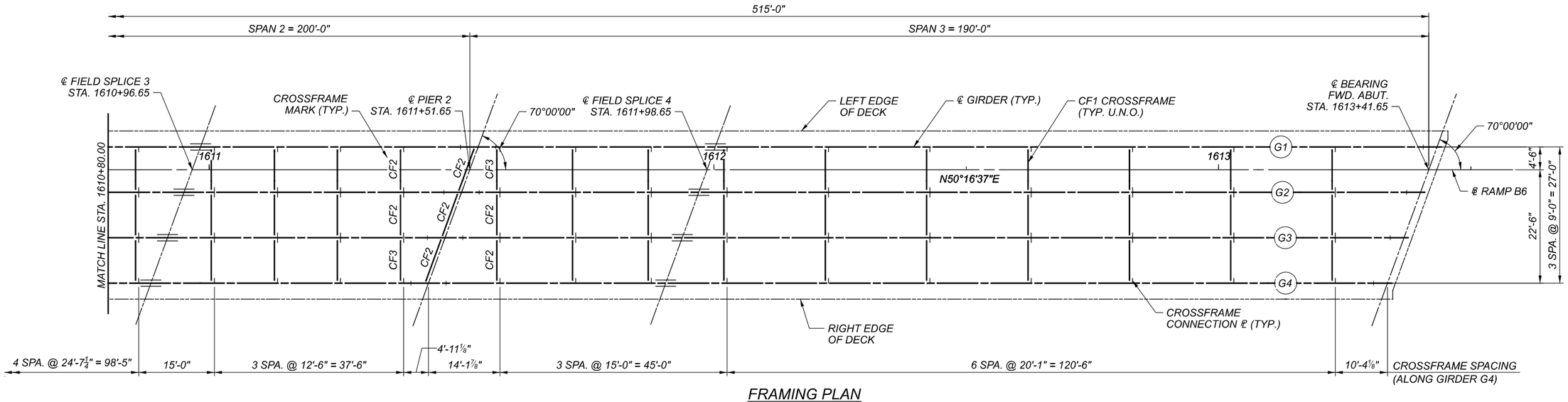


FRAMING PLAN



FRAMING PLAN

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3 / 49 THRU 4 / 49 .
2. FOR GIRDER ELEVATION AND ADDITIONAL NOTES, SEE SHEET 21 / 49 .
3. FOR GIRDER STEEL DETAILS, SEE SHEET 22 / 49 .
4. FOR CROSSFRAME DETAILS, SEE SHEET 23 / 49 .
5. FOR FIELD SPLICE DETAILS, SEE SHEET 24 / 49 .

FRAMING PLAN
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN 1807806

DESIGN AGENCY

DESIGNER CMR | CHECKER JTW

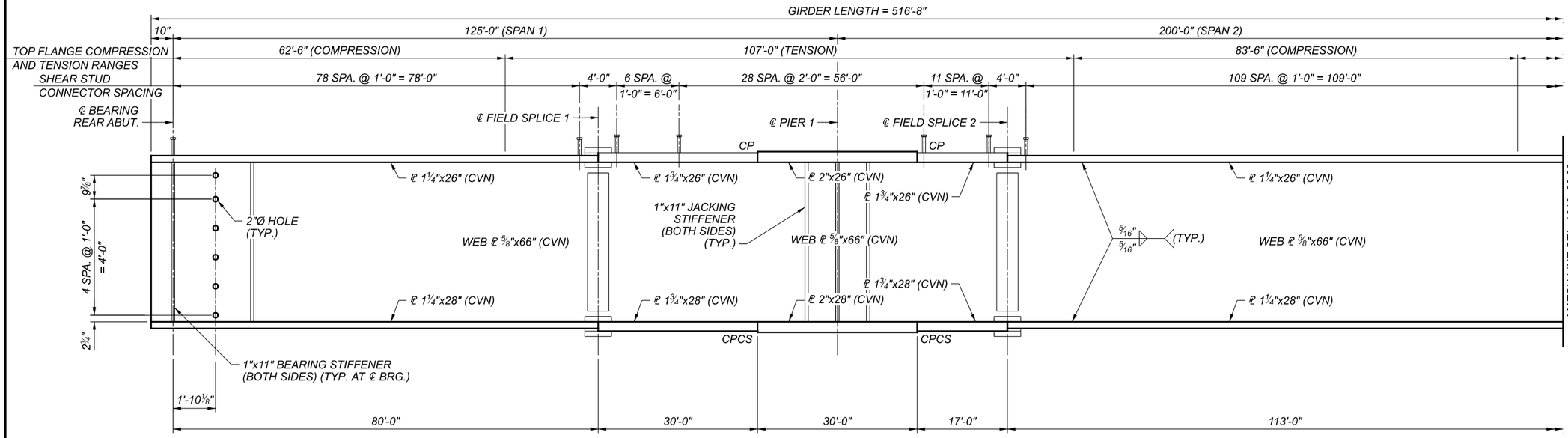
REVIEWER DWW 6/21/22

PROJECT ID 82382

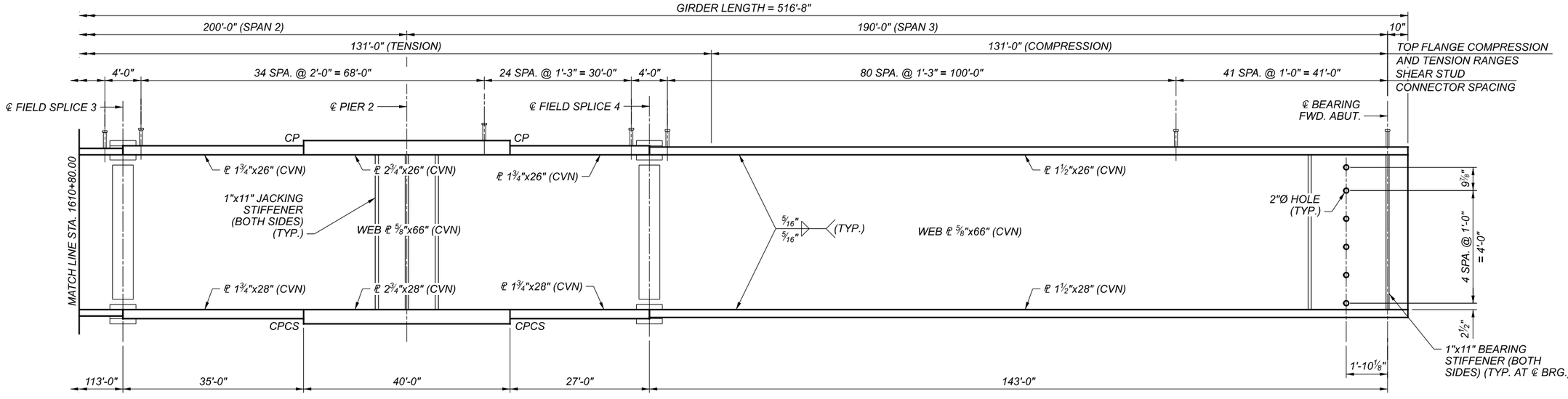
SUBSET 20 | TOTAL 49

SHEET 1715 | TOTAL 2338

CUY-90-16.28 (CCG3A)



GIRDER ELEVATION



GIRDER ELEVATION

LEGEND:

CS - INDICATES BUTT WELD SUBJECT TO COMPRESSIVE STRESS ONLY.

CP - INDICATES COMPLETE JOINT PENETRATION WELD.

NOTES:

1. *FOR GENERAL NOTES, SEE SHEET 3/49 THRU 4/49.*
2. *FOR FRAMING PLAN AND ADDITIONAL NOTES, SEE SHEET 20/49.*
3. *FOR ADDITIONAL STEEL DETAILS, SEE SHEETS 22/49 AND 23/49.*
4. *FOR FIELD SPLICE DETAILS, SEE SHEET 24/49.*
5. *FOR DEFLECTION AND CAMBER VALUES, SEE SHEETS 25/49 THRU 26/49.*
6. *FOR BEARING DETAILS, SEE SHEETS 27/49 THRU 30/49.*

NOTES CONTINUED:

7. *WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM THE EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST ¼" FOR THICKNESSES UP TO ¾" OR 5/16" FOR GREATER THAN ¾" THICK.*
8. *CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN C&MS 711.01.*
9. *PAINT PROPOSED STRUCTURAL STEEL PER ITEM 514. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.*
10. *SHEAR CONNECTORS SHALL NOT BE LOCATED OVER FLANGE TRANSITIONS. SHEAR CONNECTOR SPACING MAY BE ADJUSTED AS NEEDED AT FLANGE TRANSITIONS TO AVOID CONFLICT.*

GIRDER ELEVATION
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER

SFN 1807806
DESIGN AGENCY
DESIGNER CMR | CHECKER JTW
REVIEWER DWW 6/21/22
PROJECT ID 82382
SUBSET 21 | TOTAL 49
SHEET 1716 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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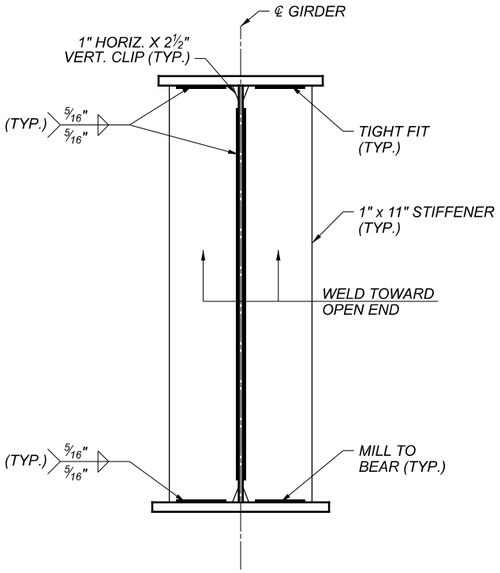
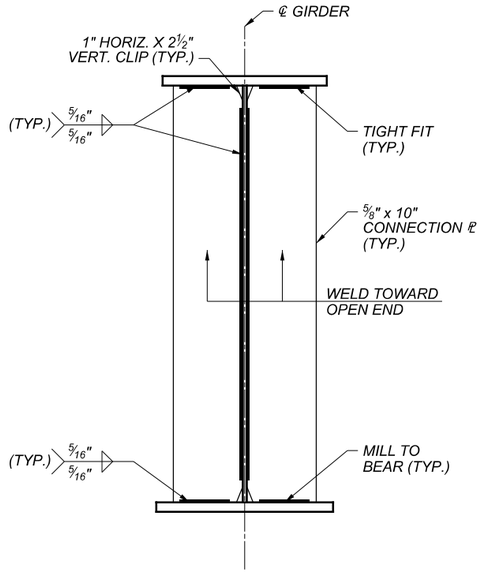
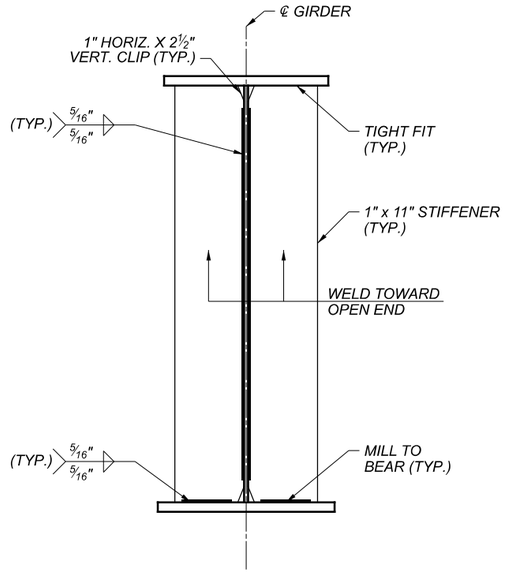


PIER BEARING STIFFENER DETAIL

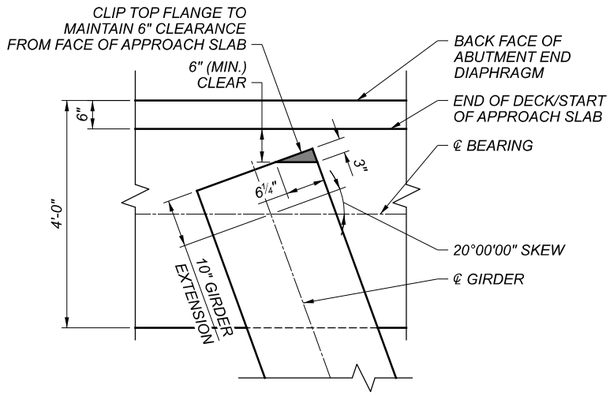


CROSSFRAME CONNECTION PLATE DETAILS

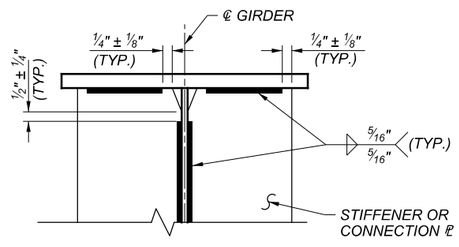
(INTERIOR GIRDER SHOWN)



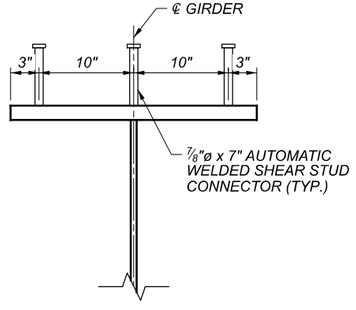
ABUTMENT BEARING & JACKING STIFFENER DETAIL



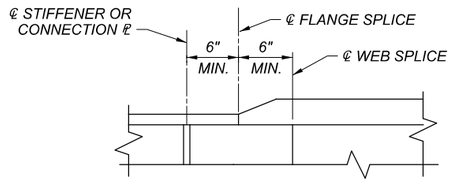
GIRDER TOP FLANGE CLIP DETAIL

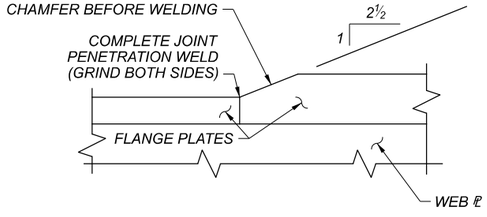


STIFFENER AND CONNECTION PLATE WELD TERMINATION DETAILS



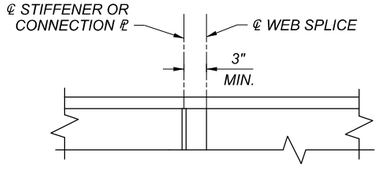
SHEAR STUD CONNECTOR DETAIL



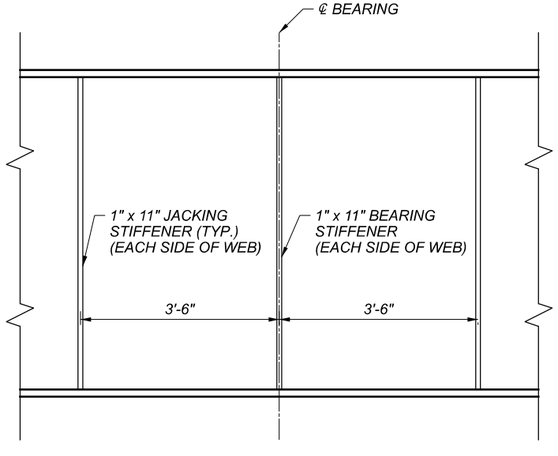


FLANGE SHOP SPLICE DETAIL

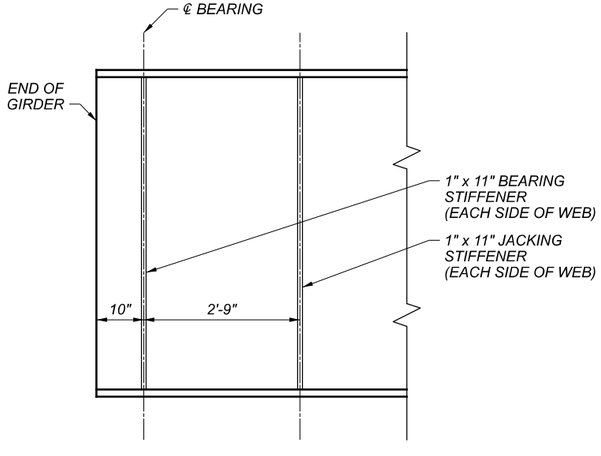
(TO BE USED AT FLANGE THICKNESS TRANSITIONS)



WELDED SHOP SPLICE CLEARANCE DETAILS



GIRDER PIER STIFFENER DETAIL



GIRDER ABUTMENT STIFFENER DETAIL

NOTES:

1. SKEW BEARING STIFFENERS ALONG SUBSTRUCTURE SKEW AT PIER 1 AND PIER 2.
2. ALL STIFFENER AND CONNECTIONS PLATES SHALL BE ASTM A709, GRADE 50 STEEL.
3. CROSSFRAME CONNECTION PLATES SHALL BE NORMAL TO THE TOP FLANGE UNLESS NOTED OTHERWISE. BEARING AND JACKING STIFFENERS SHALL BE VERTICAL AFTER ERECTION.
4. FOR GIRDER ELEVATION, SEE SHEET 21/49.
5. FOR FRAMING PLAN, SEE SHEET 20/49.

GIRDER DETAILS (1 OF 2)
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER RAMP H5

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	CMR
CHECKER	JML
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	22
TOTAL	49
SHEET	1717
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/27/2022 TIME: 10:17:37 PM USER: BAVARELL
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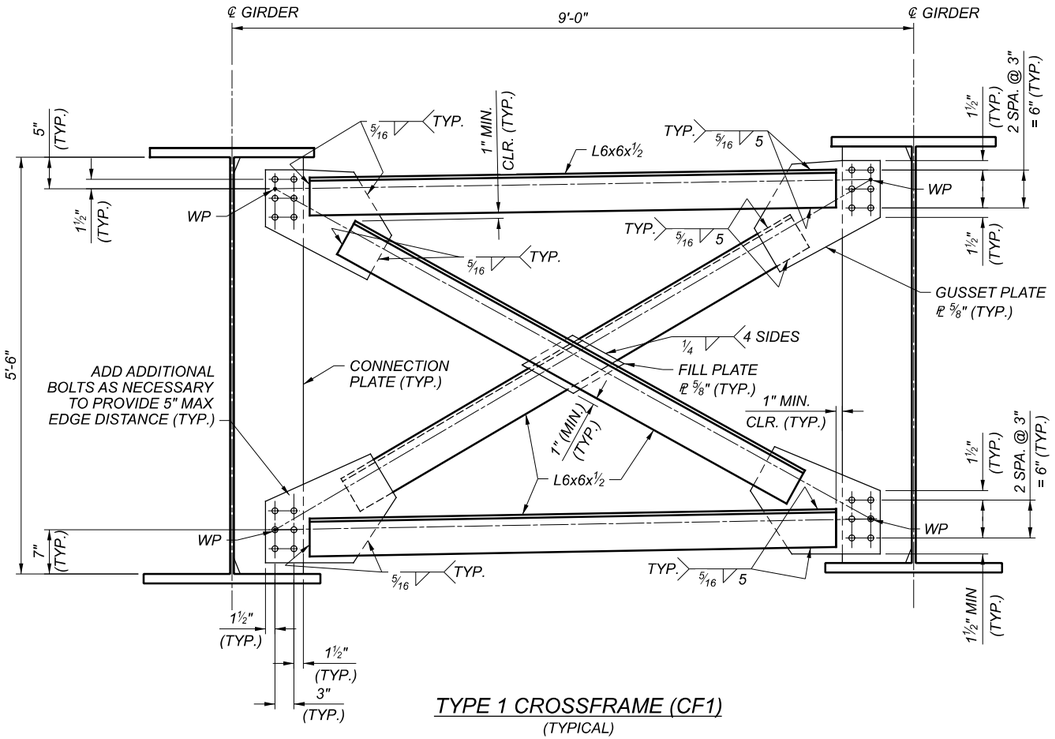
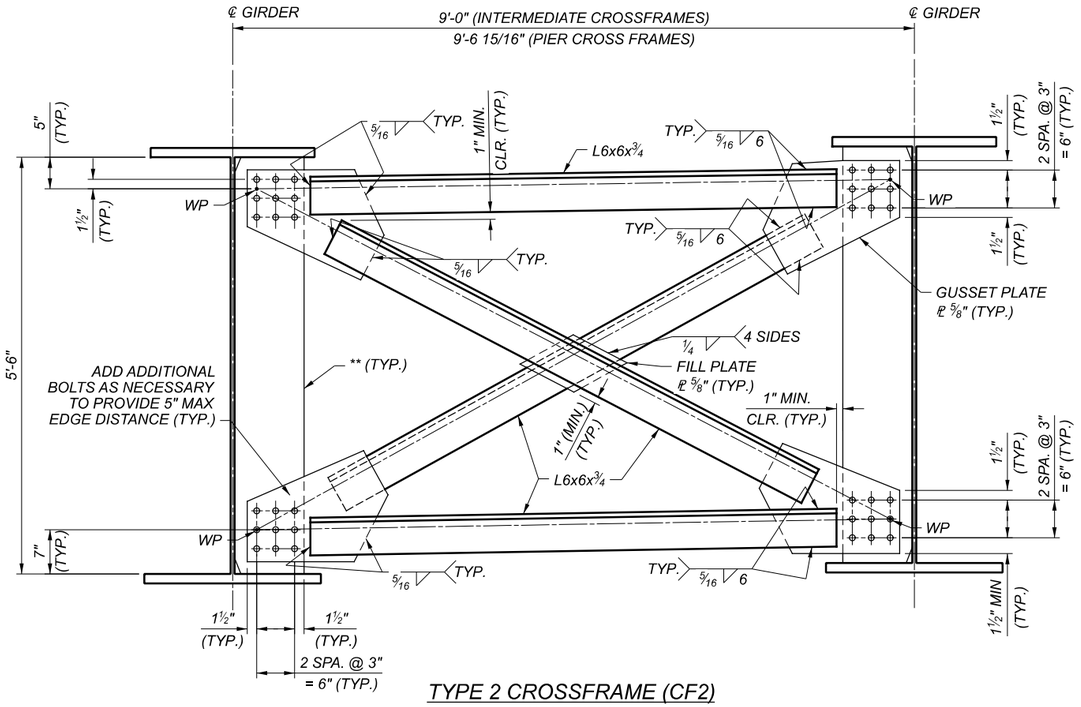
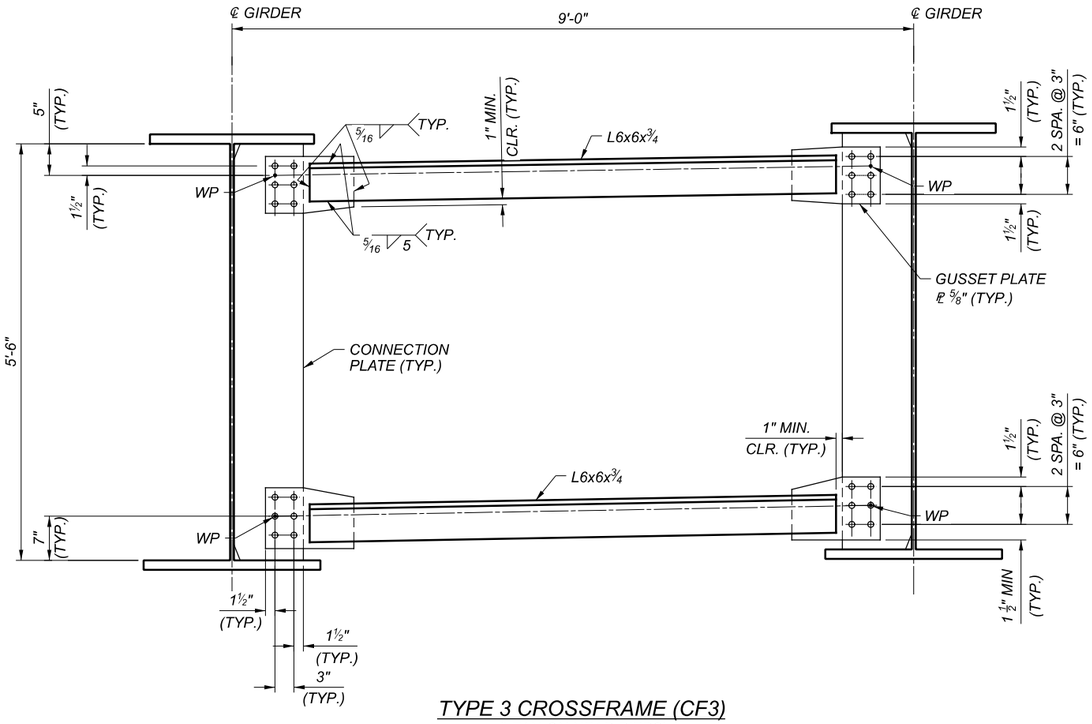


TYPE 1 CROSSFRAME (CF1)
(TYPICAL)



TYPE 2 CROSSFRAME (CF2)
(NEAR PIERS)

** CONNECTION PLATE AT INTERMEDIATE CROSSFRAMES
BEARING STIFFENER AT PIER CROSSFRAMES



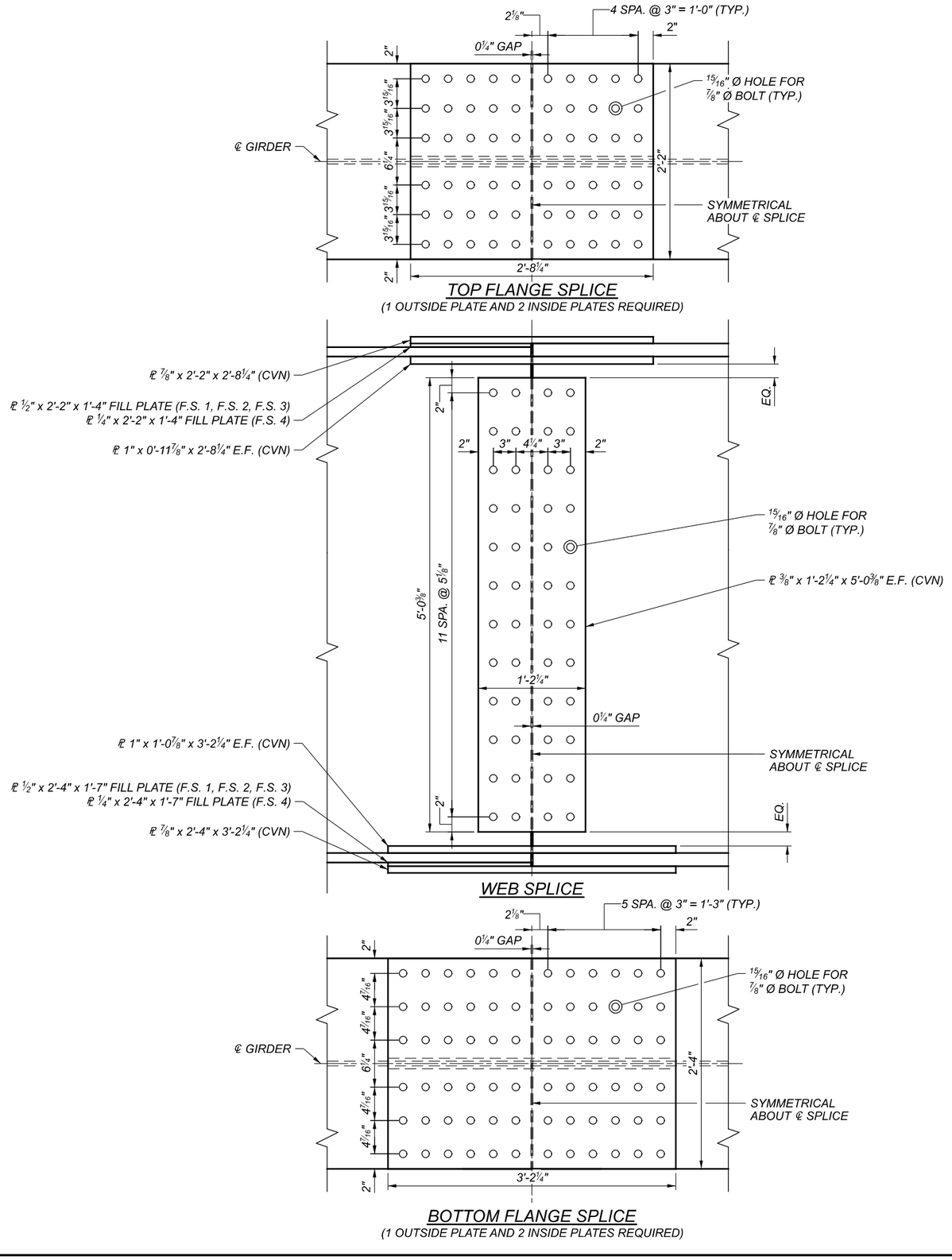
TYPE 3 CROSSFRAME (CF3)
(LEAN-ON NEAR PIERS)

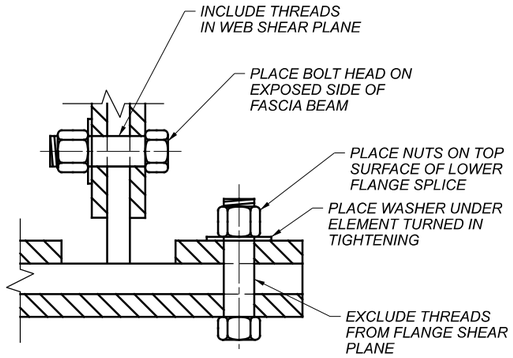
NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3/ 49 THRU 4/ 49.
2. FOR LOCATION OF CROSSFRAMES, SEE SHEET 20/ 49.
3. FOR CONNECTION PLATE AND BEARING STIFFENER DETAILS, SEE SHEET 22/ 49.
4. HIGH STRENGTH BOLTS SHALL BE ⅞" DIA. ASTM F3125 GRADE A325, TYPE I IN 15/16" DIA. STANDARD HOLES.
5. ALL CROSSFRAME MEMBERS, INCLUDING CONNECTION PLATES, GUSSET PLATES, ANGLES, W-SHAPES AND WT-SHAPES SHALL BE DESIGNATED CVN.
6. PROVIDE CLASS A SURFACE CONDITION FOR THE CONTACT AREA OF BOLTED PARTS.
7. LOCATE MEMBER NEUTRAL AXIS ALONG WORK LINE FROM WP TO WP.

GIRDER DETAILS (2 OF 2)
CUY-90-1652S (BRIDGE 12)
OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER R

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	CMR
CHECKER	JTW
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	23
TOTAL	49
SHEET	1718
TOTAL	2338





BOLT ORIENTATION DETAIL

LEGEND:

E.F. = EACH FACE

NOTES:

1. ALL BOLTS SHALL BE ⅞" DIA. ASTM F3125 GRADE A325, TYPE 1.

   THE BOLTED CONNECTION OF THE GIRDER WEB TO THE GIRDER WEB SPLICE PLATES IN THE BOLTED FIELD SPLICES WERE DESIGNED ASSUMING THREADS AND THREAD TRANSITIONS WERE INCLUDED IN THE SHEAR PLANE.

   THE BOLTED CONNECTION OF THE GIRDER FLANGE TO THE GIRDER FLANGE SPLICE PLATES IN THE BOLTED FIELD SPLICES WERE DESIGNED ASSUMING THREADS AND THREAD TRANSITIONS WERE EXCLUDED FROM IN THE SHEAR PLANE.

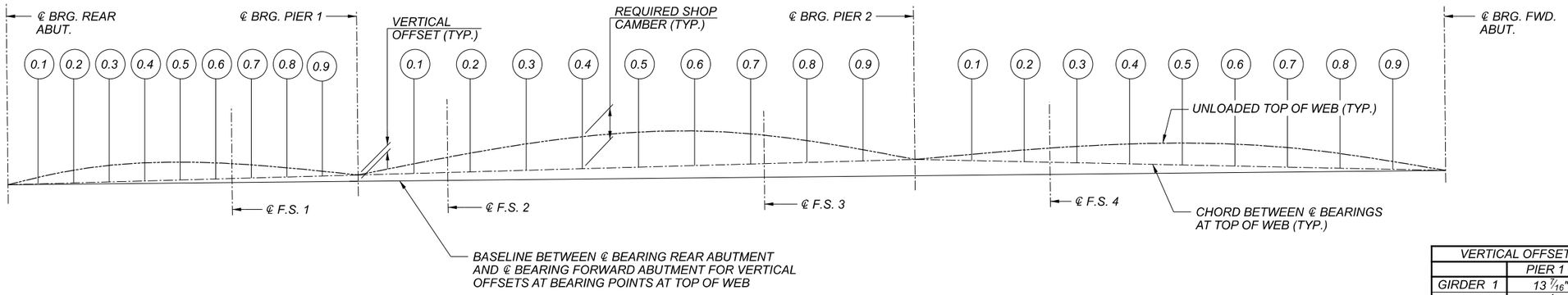
2. ALL SPLICE PLATES SHALL BE ASTM A709 GRADE 50.
3. FOR GENERAL NOTES, SEE SHEETS 3/49 THRU 4/49.
4. FOR DEFLECTION AND CAMBER TABLES, SEE SHEET 25/49 THRU 26/49.
5. FOR FIELD SPLICE LOCATIONS AND ADDITIONAL FRAMING DETAILS, SEE SHEET 20/49.
6. CVN: WHERE A PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS SPECIFIED IN CMS 711.01.

FIELD SPLICE DETAILS
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	CMR
CHECKER	RES
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	24
TOTAL	49
SHEET	1719
TOTAL	2338

DEFLECTION AND CAMBER (INCHES)

		SPAN 1											SPAN 2								
		CL BRG. REAR ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	CL F.S. 1	0.7	0.8	0.9	CL BRG. PIER 1	0.1	CL F.S. 2	0.2	0.3	0.4	0.5	0.6	0.7	CL F.S. 3
GIRDER 1	DEFLECTION DUE TO WEIGHT OF STEEL	0"	1/8"	3/16"	1/4"	1/4"	1/4"	3/16"	1/8"	1/8"	0"	0"	0"	1/8"	5/16"	3/8"	5/8"	11/16"	11/16"	1/2"	1/4"	3/16"
	DEFLECTION DUE TO REMAINING DL	0"	3/8"	11/16"	7/8"	15/16"	7/8"	11/16"	5/8"	7/16"	3/16"	0"	0"	3/8"	3/4"	1"	1 9/16"	1 7/8"	1 13/16"	1 3/8"	11/16"	1/2"
	ADJUSTMENT FOR VERTICAL CURVE	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	1/4"	7/16"	9/16"	13/16"	1 1/16"	1 5/16"	1 5/8"	1 7/8"	1 15/16"
	REQUIRED SHOP CAMBER	**0"**	**1/2"**	**7/8"**	**1 1/8"**	**1 3/16"**	**1 1/8"**	**7/8"**	**3/4"**	**9/16"**	**3/16"**	**0"**	**0"**	**3/4"**	**1 1/2"**	**1 15/16"**	**3"**	**3 5/8"**	**3 13/16"**	**3 1/2"**	**2 13/16"**	**2 5/8"**
GIRDER 2	DEFLECTION DUE TO WEIGHT OF STEEL	0"	1/8"	3/16"	1/4"	1/4"	1/4"	3/16"	1/8"	1/8"	1/16"	0"	0"	1/8"	5/16"	3/8"	5/8"	11/16"	11/16"	9/16"	5/16"	1/4"
	DEFLECTION DUE TO REMAINING DL	0"	3/8"	5/8"	13/16"	7/8"	13/16"	11/16"	9/16"	7/16"	3/16"	0"	0"	3/8"	3/4"	1"	1 9/16"	1 7/8"	1 7/8"	1 7/16"	3/4"	9/16"
	ADJUSTMENT FOR VERTICAL CURVE	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	1/4"	3/8"	1/2"	11/16"	15/16"	1 3/16"	1 7/16"	1 5/8"	1 11/16"
	REQUIRED SHOP CAMBER	**0"**	**1/2"**	**13/16"**	**1 1/16"**	**1 1/8"**	**1 1/16"**	**7/8"**	**11/16"**	**9/16"**	**1/4"**	**0"**	**0"**	**3/4"**	**1 7/16"**	**1 7/8"**	**2 7/8"**	**3 1/2"**	**3 3/4"**	**3 7/16"**	**2 11/16"**	**2 1/2"**
GIRDER 3	DEFLECTION DUE TO WEIGHT OF STEEL	0"	1/8"	3/16"	1/4"	1/4"	1/4"	3/16"	3/16"	1/8"	1/16"	0"	0"	1/8"	5/16"	3/8"	5/8"	3/4"	3/4"	9/16"	5/16"	1/4"
	DEFLECTION DUE TO REMAINING DL	0"	3/8"	5/8"	13/16"	7/8"	13/16"	5/8"	9/16"	7/16"	3/16"	0"	0"	3/8"	3/4"	1"	1 9/16"	1 15/16"	1 15/16"	1 1/2"	13/16"	5/8"
	ADJUSTMENT FOR VERTICAL CURVE	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	3/16"	5/16"	7/16"	5/8"	13/16"	1"	1 1/4"	1 7/16"	1 1/2"
	REQUIRED SHOP CAMBER	**0"**	**1/2"**	**13/16"**	**1 1/16"**	**1 1/8"**	**1 1/16"**	**13/16"**	**3/4"**	**9/16"**	**1/4"**	**0"**	**0"**	**11/16"**	**1 3/8"**	**1 13/16"**	**2 13/16"**	**3 1/2"**	**3 11/16"**	**3 5/16"**	**2 9/16"**	**2 3/8"**
GIRDER 4	DEFLECTION DUE TO WEIGHT OF STEEL	0"	1/8"	3/16"	1/4"	1/4"	1/4"	3/16"	3/16"	1/8"	1/16"	0"	0"	1/8"	1/4"	3/8"	5/8"	3/4"	3/4"	5/8"	3/8"	5/16"
	DEFLECTION DUE TO REMAINING DL	0"	3/8"	5/8"	13/16"	7/8"	13/16"	5/8"	9/16"	7/16"	3/16"	0"	0"	3/8"	3/4"	1"	1 5/8"	2 1/16"	2"	1 5/8"	15/16"	3/4"
	ADJUSTMENT FOR VERTICAL CURVE	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	3/16"	5/16"	3/8"	1/2"	11/16"	7/8"	1 1/16"	1 1/4"	1 5/16"
	REQUIRED SHOP CAMBER	**0"**	**1/2"**	**13/16"**	**1 1/16"**	**1 1/8"**	**1 1/16"**	**13/16"**	**3/4"**	**9/16"**	**1/4"**	**0"**	**0"**	**11/16"**	**1 5/16"**	**1 3/4"**	**2 3/4"**	**3 1/2"**	**3 5/8"**	**3 5/16"**	**2 9/16"**	**2 3/8"**



CAMBER DIAGRAM

VERTICAL OFFSET (INCHES)		
	PIER 1	PIER 2
GIRDER 1	13 7/16"	32 5/16"
GIRDER 2	13 1/8"	31 11/16"
GIRDER 3	12 3/4"	31 1/16"
GIRDER 4	12 3/8"	30 7/16"

NOTES:

1. NEGATIVE VALUES FOR DEFLECTIONS INDICATE DEFLECTIONS UPWARD. NEGATIVE VALUES FOR VERTICAL CURVE ADJUSTMENT AND TOTAL REQUIRED SHOP CAMBER INDICATE VALUES BELOW THE CHORD LINE.
2. DEFLECTIONS AND ADJUSTMENTS FOR VERTICAL CURVES ARE GIVEN TO THE NEAREST 1/16 INCH. THE ADJUSTMENT FOR HORIZONTAL CURVATURE IS ZERO AT ALL LOCATIONS.
3. FOR GENERAL NOTES, SEE SHEETS 3 / 49 THRU 4 / 49.
4. FOR FRAMING PLAN, SEE SHEET 20 / 49.
5. FOR ADDITIONAL DEFLECTION AND CAMBER VALUES, SEE SHEET 26 / 49.

DEFLECTION AND CAMBER (1 OF 2)
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN 1807806
DESIGN AGENCY
DESIGNER CMR | CHECKER ABO
REVIEWER DWW 6/21/22
PROJECT ID 82382
SUBSET 25 | TOTAL 49
SHEET 1720 | TOTAL 2338

CUY-90-16.28 (CCG3A)

DEFLECTION AND CAMBER (INCHES)

		SPAN 2				SPAN 3										
		CL F.S. 3	0.8	0.9	CL BRG. PIER 2	0.1	0.2	CL F.S. 4	0.3	0.4	0.5	0.6	0.7	0.8	0.9	CL BRG. FWD. ABUT.
GIRDER 1	DEFLECTION DUE TO WEIGHT OF STEEL	3/16"	0"	-1/8"	0"	5/16"	13/16"	1"	1 5/16"	1 11/16"	2"	2"	1 13/16"	1 3/8"	3/4"	0"
	DEFLECTION DUE TO REMAINING DL	1/2"	0"	-5/16"	0"	7/8"	2 3/16"	2 7/8"	3 5/8"	4 7/8"	5 5/8"	5 3/4"	5 1/8"	3 7/8"	2 1/16"	0"
	ADJUSTMENT FOR VERTICAL CURVE	1 15/16"	1 15/16"	1 3/8"	0"	3 1/16"	5 7/16"	6 5/16"	7 1/8"	8 1/8"	8 7/16"	8 1/8"	7 1/8"	5 7/16"	3 1/16"	0"
	REQUIRED SHOP CAMBER	**2 5/8"**	**1 15/16"**	**15/16"**	**0"**	**4 1/4"**	**8 7/16"**	**10 3/16"**	**12 1/16"**	**14 11/16"**	**16 1/16"**	**15 7/8"**	**14 1/16"**	**10 11/16"**	**5 7/8"**	**0"**
GIRDER 2	DEFLECTION DUE TO WEIGHT OF STEEL	1/4"	1/16"	-1/16"	0"	5/16"	3/4"	1"	1 1/4"	1 11/16"	1 15/16"	2"	1 13/16"	1 3/8"	3/4"	0"
	DEFLECTION DUE TO REMAINING DL	9/16"	1/8"	-1/4"	0"	7/8"	2 1/8"	2 13/16"	3 9/16"	4 13/16"	5 1/2"	5 5/8"	5 1/16"	3 13/16"	2 1/16"	0"
	ADJUSTMENT FOR VERTICAL CURVE	1 11/16"	1 3/4"	1 1/4"	0"	3 1/16"	5 7/16"	6 5/16"	7 1/8"	8 1/8"	8 7/16"	8 1/8"	7 1/8"	5 7/16"	3 1/16"	0"
	REQUIRED SHOP CAMBER	**2 1/2"**	**1 15/16"**	**15/16"**	**0"**	**4 1/4"**	**8 5/16"**	**10 1/8"**	**11 15/16"**	**14 5/8"**	**15 7/8"**	**15 3/4"**	**14"**	**10 5/8"**	**5 7/8"**	**0"**
GIRDER 3	DEFLECTION DUE TO WEIGHT OF STEEL	1/4"	1/16"	-1/16"	0"	5/16"	3/4"	15/16"	1 1/4"	1 5/8"	1 15/16"	1 15/16"	1 3/4"	1 3/8"	3/4"	0"
	DEFLECTION DUE TO REMAINING DL	5/8"	1/8"	-1/4"	0"	13/16"	2 1/8"	2 3/4"	3 1/2"	4 3/4"	5 7/16"	5 9/16"	5"	3 3/4"	2 1/16"	0"
	ADJUSTMENT FOR VERTICAL CURVE	1 1/2"	1 5/8"	1 3/16"	0"	3 1/16"	5 7/16"	6 5/16"	7 1/8"	8 1/8"	8 7/16"	8 1/8"	7 1/8"	5 7/16"	3 1/16"	0"
	REQUIRED SHOP CAMBER	**2 3/8"**	**1 13/16"**	**7/8"**	**0"**	**4 3/16"**	**8 5/16"**	**10"**	**11 7/8"**	**14 1/2"**	**15 13/16"**	**15 5/8"**	**13 7/8"**	**10 9/16"**	**5 7/8"**	**0"**
GIRDER 4	DEFLECTION DUE TO WEIGHT OF STEEL	5/16"	1/8"	-1/16"	0"	5/16"	11/16"	15/16"	1 3/16"	1 5/8"	1 7/8"	1 15/16"	1 3/4"	1 5/16"	3/4"	0"
	DEFLECTION DUE TO REMAINING DL	3/4"	1/4"	-3/16"	0"	13/16"	2 1/16"	2 11/16"	3 1/2"	4 11/16"	5 7/16"	5 9/16"	5"	3 3/4"	2 1/16"	0"
	ADJUSTMENT FOR VERTICAL CURVE	1 5/16"	1 3/8"	1 1/16"	0"	3 1/16"	5 7/16"	6 5/16"	7 1/8"	8 1/8"	8 7/16"	8 1/8"	7 1/8"	5 7/16"	3 1/16"	0"
	REQUIRED SHOP CAMBER	**2 3/8"**	**1 3/4"**	**13/16"**	**0"**	**4 3/16"**	**8 3/16"**	**9 15/16"**	**11 13/16"**	**14 7/16"**	**15 3/4"**	**15 5/8"**	**13 7/8"**	**10 1/2"**	**5 7/8"**	**0"**

NOTES:

1. *NEGATIVE VALUES FOR DEFLECTIONS INDICATE DEFLECTIONS UPWARD. NEGATIVE VALUES FOR VERTICAL CURVE ADJUSTMENT AND TOTAL REQUIRED SHOP CAMBER INDICATE VALUES BELOW THE CHORD LINE.*
2. *DEFLECTIONS AND ADJUSTMENTS FOR VERTICAL CURVES ARE GIVEN TO THE NEAREST $1/16$ INCH. THE ADJUSTMENT FOR HORIZONTAL CURVATURE IS ZERO AT ALL LOCATIONS.*
3. *FOR GENERAL NOTES, SEE SHEETS 3 / 49 THRU 4 / 49.*
4. *FOR FRAMING PLAN, SEE SHEET 20 / 49.*
5. *FOR ADDITIONAL DEFLECTION AND CAMBER VALUES, SEE SHEET 25 / 49.*

DEFLECTION AND CAMBER (2 OF 2)
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN 1807806
DESIGN AGENCY HDR
DESIGNER CMR | CHECKER ABO
REVIEWER DWW 6/21/22
PROJECT ID 82382
SUBSET 26 | TOTAL 49
SHEET 1721 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/27/2022 TIME: 10:18:01 PM USER: BAVARELL
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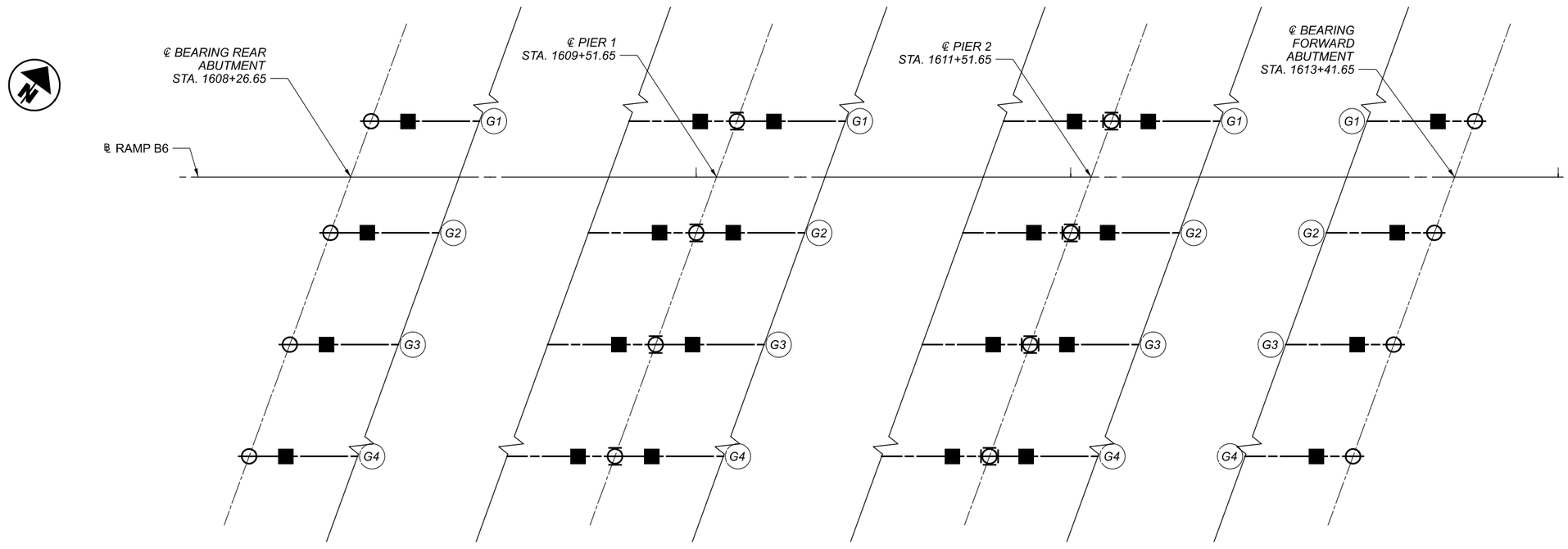
LOCATION	GIRDER		BEARING TYPE	MASONRY PLATE							SOLE PLATE			STEEL LOAD PLATE				ANCHOR BOLTS		EST. HLMR DISC BEARING HEIGHT, 'H'	TOTAL BEARING HEIGHT, 'T'
	NO.	SKEW		'ML'	'MW'	'MT'	'A'	'B'	'C'	'D'	'SL'	'SW'	SLOPE	Lp	Tp	Wtp	Wbp	NO. OF BOLTS PER GIRDER	DIAMETER		
		(DEGREES)		(INCHES)	(INCHES)	(INCHES)	(SPA)	(INCHES)	(INCHES)	(INCHES)	(INCHES)	(INCHES)	(%)	(INCHES)	(INCHES)	(INCHES)	(INCHES)		(INCHES)	(INCHES)	(INCHES)
REAR ABUT	G1 - G4	20	NON-GUIDED	24.00	44.00	1.25	1	18.00	18.00	38.00	19.50	30.00	0.00	18.00	1.50	30.00	30.00	4	1.25	3.95	5.33
PIER 1	G1 - G4	20	GUIDED	24.00	48.00	1.25	1	18.00	18.00	42.00	28.50	30.00	1.00	--	--	--	--	4	1.25	6.83	8.21
PIER 2	G1	20	FIXED	25.00	44.00	1.25	2	9.50	19.00	38.00	21.00	30.00	0.17	--	--	--	--	6	1.25	7.13	8.51
	G2	20	FIXED	25.00	44.00	1.25	2	9.50	19.00	38.00	21.00	30.00	0.22	--	--	--	--	6	1.25	7.13	8.51
	G3	20	FIXED	25.00	44.00	1.25	2	9.50	19.00	38.00	21.00	30.00	0.27	--	--	--	--	6	1.25	7.13	8.51
	G4	20	FIXED	25.00	44.00	1.25	2	9.50	19.00	38.00	21.00	30.00	0.32	--	--	--	--	6	1.25	7.13	8.51
FWD ABUT	G1 - G4	20	NON-GUIDED	24.00	44.00	1.25	1	18.00	18.00	38.00	19.50	30.00	0.00	18.00	1.50	30.00	30.00	4	1.25	3.95	5.33



REAR ABUTMENT BEARINGS

PIER 1 BEARINGS

PIER 2 BEARINGS

FORWARD ABUTMENT BEARINGS

LEGEND:

- NON-GUIDED EXPANSION DISC BEARING
- GUIDED EXPANSION DISC BEARING
- FIXED DISC BEARING
- FUTURE JACKING POINT

NOTES:

1. FOR DETAILS ASSOCIATED WITH THE BEARING ASSEMBLIES, SEE SHEETS 28 / 49 THRU 29 / 49.
2. FOR FUTURE JACKING NOTES, SEE SHEET 30 / 49.

BEARING LOCATION PLAN
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5 OVER RAMP B6

SFN 1807806

DESIGN AGENCY HDR

DESIGNER	CHECKER
CMR	ABO

REVIEWER DWW 6/21/22

PROJECT ID 82382

SUBSET	TOTAL
27	49

SHEET	TOTAL
1722	2338

CUY-90-16.28 (CCG3A)

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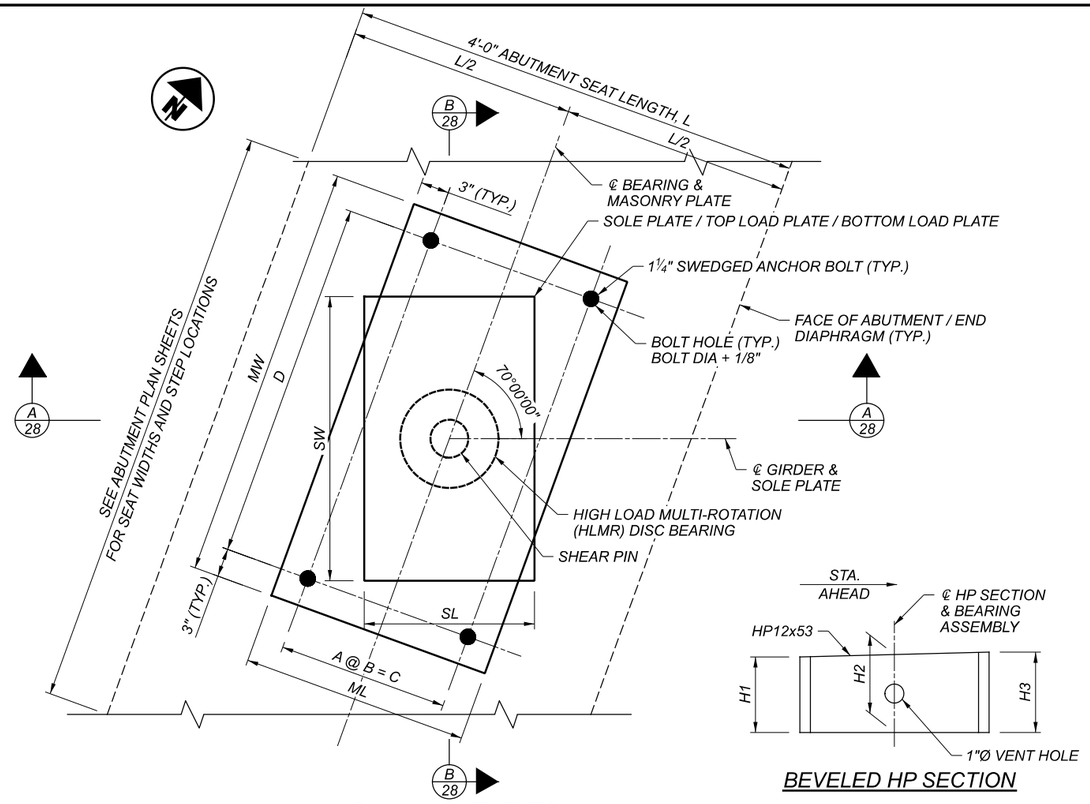
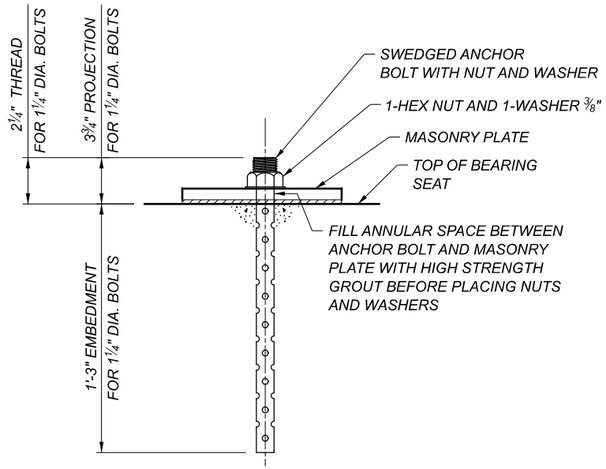


PLAN - ABUTMENTS

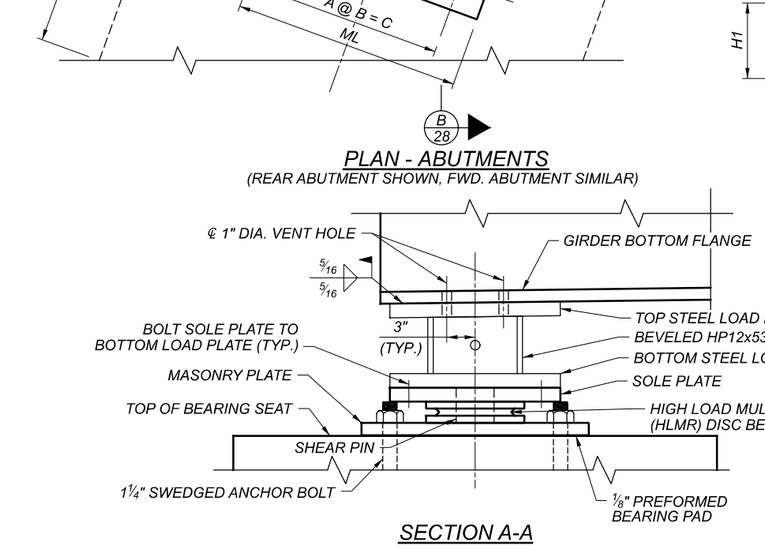
(REAR ABUTMENT SHOWN, FWD. ABUTMENT SIMILAR)

BEVELED HP SECTION

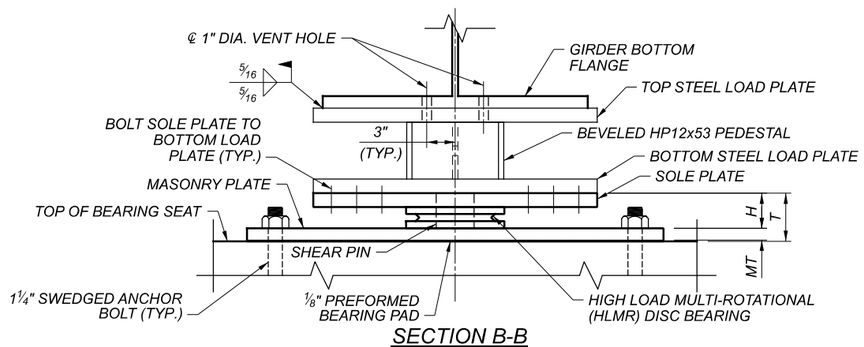


SWEDGED ANCHOR BOLT DETAIL

NOT TO SCALE

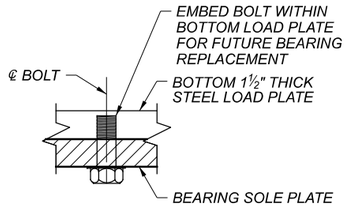


SECTION A-A

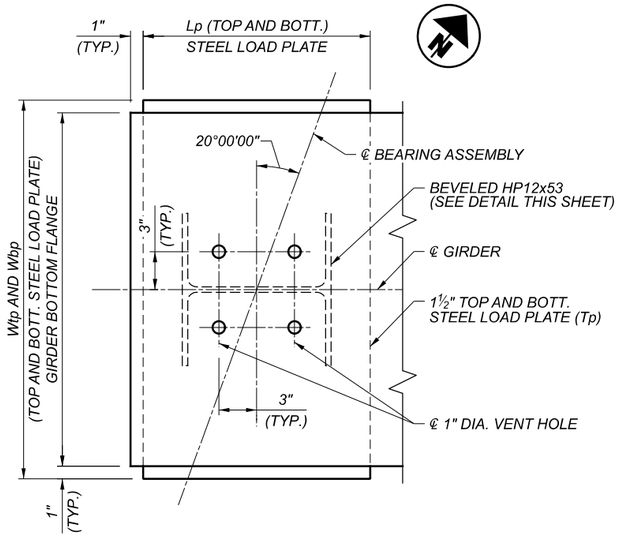


SECTION B-B

BEVELED HP SHAPE DATA					
REAR ABUTMENT			FWD. ABUTMENT		
H1	H2	H3	H1	H2	H3
5 15/16"	6"	6 1/16"	6 3/16"	6"	5 13/16"



BOLTED SOLE PLATE TO LOAD PLATE DETAIL



PLAN - REAR TOP STEEL LOAD PLATE

(REAR ABUTMENT SHOWN, FWD. ABUTMENT SIMILAR)

NOTES:

1. FOR INFORMATION ASSOCIATED WITH THE BEARING ASSEMBLIES, SEE SHEETS 27/49, 29/49 AND 30/49.
2. TOTAL BEARING HEIGHT, 'T', IS MEASURED FROM TOP OF SOLE PLATE TO TOP OF BEARING SEAT AT CENTERLINE OF BEARING.
3. EXERCISE CAUTION WHEN WELDING NEAR THE DISC BEARING PADS IN CONTACT WITH THE STEEL. WELD IN ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS TO MAINTAIN A SAFE TEMPERATURE SO AS NOT TO DAMAGE THE DISC BEARINGS. ANY DAMAGE DUE TO WELDING WILL BE CAUSE FOR REJECTION.
4. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE, GIRDER NUMBER, AND A DIRECTION ARROW THAT POINTS UPSTATION AND SHALL BE INCLUDED FOR PAYMENT WITH ITEM 869 - HIGH LOAD MULTI-ROTATIONAL (HLMR) BEARINGS, AS PER PLAN. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER THE BEARING IS INSTALLED.

BEARING DETAILS (1 OF 3)
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	CMR
CHECKER	ABO
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	28
TOTAL	49
SHEET	1723
TOTAL	2338

CUY-90-16.28 (CCG3A)

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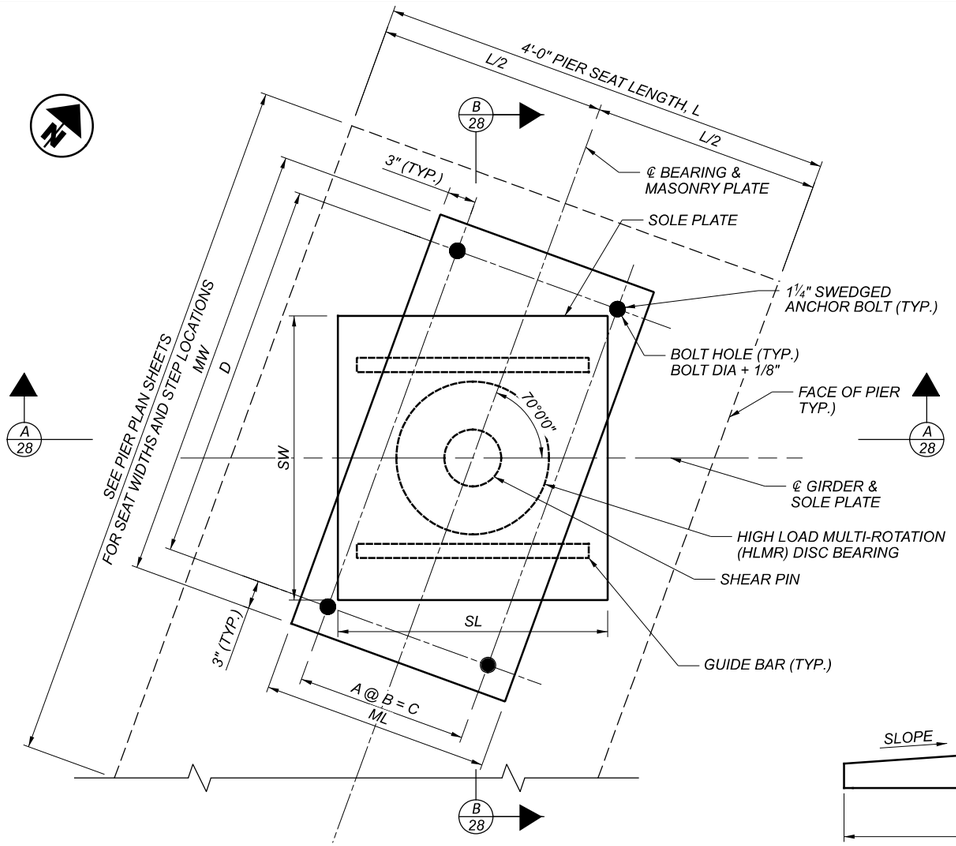
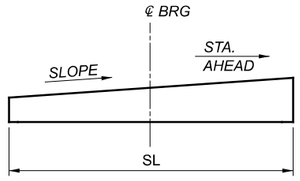
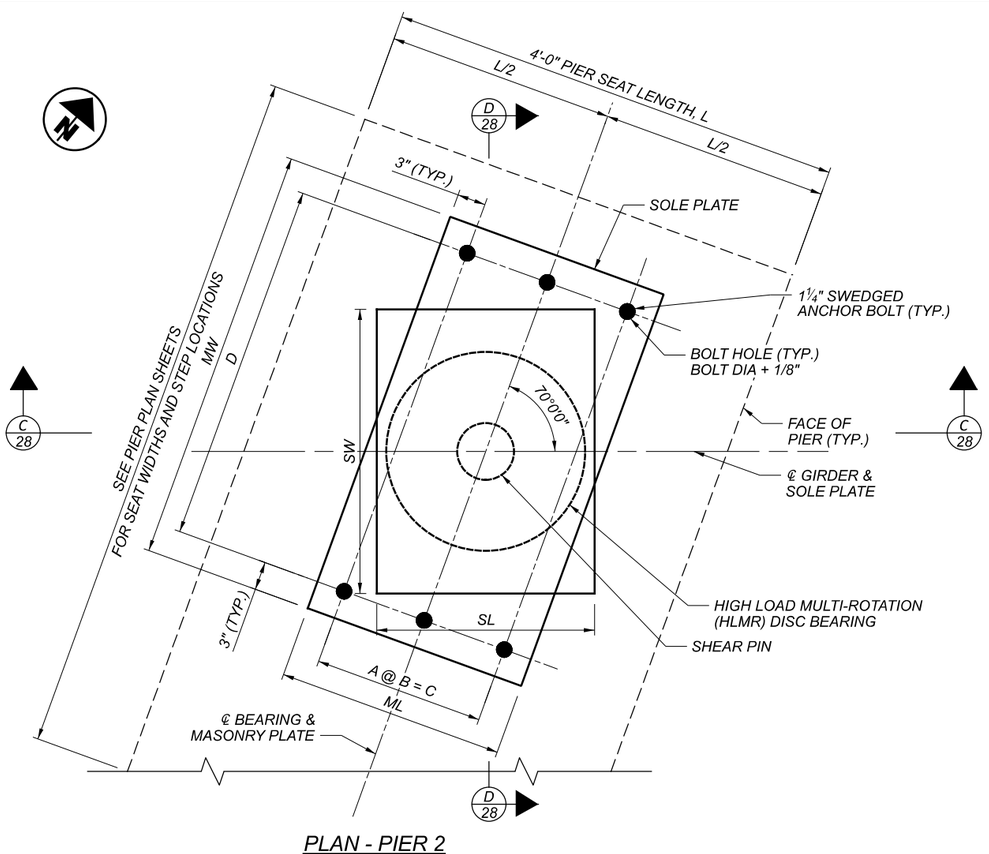


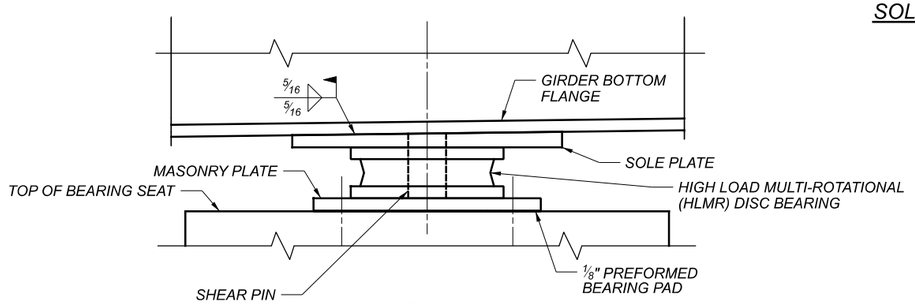
PLAN - PIER 1



SOLE PLATE DETAIL

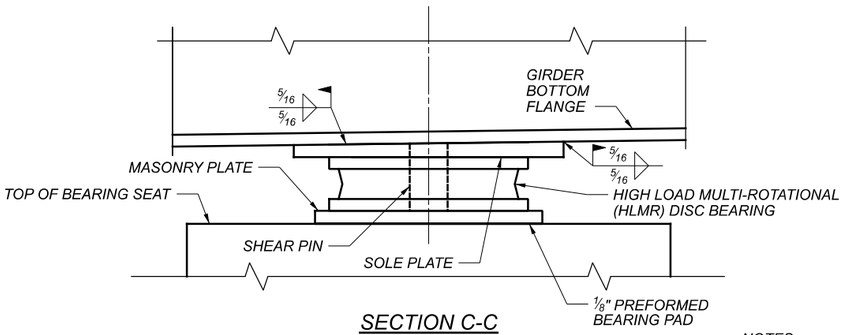


PLAN - PIER 2



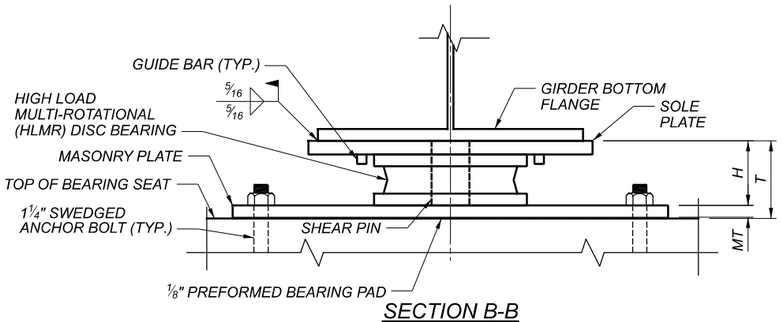
SECTION A-A

(ANCHOR BOLTS NOT SHOWN FOR CLARITY)

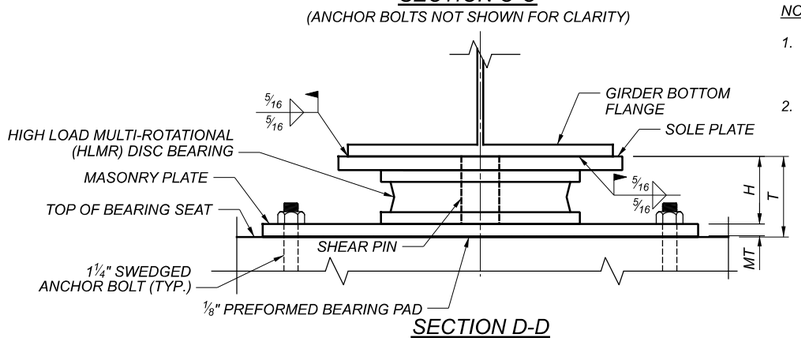


SECTION C-C

(ANCHOR BOLTS NOT SHOWN FOR CLARITY)



SECTION B-B



SECTION D-D

NOTES:

1. A POSITIVE (+) SOLE PLATE SLOPE INDICATES INCREASING THICKNESS AHEAD STATION.
2. FOR ADDITIONAL BEARING NOTES, SEE SHEETS 28 / 49 AND 30 / 49.

BEARING DETAILS (2 OF 3)
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	CMR
CHECKER	ABO
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	29
TOTAL	49
SHEET	1724
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/27/2022 TIME: 10:18:20 PM USER: BAVARELL
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DISC BEARING DATA TABLE											
LOCATION	GIRDER NO.	BEARING TYPE	MAXIMUM DESIGN LOADS (KIPS)					DESIGN MOVEMENTS (INCHES) PARALLEL TO CL GIRDER		DESIGN ROTATION (RADIANS)	DESIGN COEFFICIENT OF FRICTION
			STRENGTH LIMIT STATE		SERVICE LIMIT STATE						
			TOTAL VERTICAL LOAD	TOTAL HORIZONTAL LOAD	TOTAL VERTICAL LOAD	VERTICAL DEAD LOAD	TOTAL HORIZONTAL LOAD	CONTRACTION	EXPANSION		
REAR ABUT	G1 - G4	NON-GUIDED	346	--	270	140	--	2.89	1.93	0.0091	0.06
PIER 1	G1 - G4	GUIDED	900	105	690	420	11	1.84	1.23	0.0091	0.06
PIER 2	G1 - G4	FIXED	1130	330	860	560	193	--	--	0.0105	--
FWD ABUT	G1 - G4	NON-GUIDED	474	--	370	210	--	2.89	1.93	0.0138	0.06

BEARING HEIGHT				
	REAR ABUTMENT	PIER 1	PIER 2	FORWARD ABUTMENT
GIRDER 1	5.33	8.21	8.51	5.33
GIRDER 2	5.33	8.21	8.51	5.33
GIRDER 3	5.33	8.21	8.51	5.33
GIRDER 4	5.33	8.21	8.51	5.33

FUTURE JACKING NOTES:

1. SUBMIT THE PROPOSED JACKING AND/OR BEARING REPLACEMENT PROCEDURE TO THE DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF ANY JACKING OPERATIONS.
2. JACK THE SUPERSTRUCTURE ONLY AT LOCATIONS SHOWN ON THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING THE JACKS AND JACKING PROCEDURE, INCLUDING, BUT NOT LIMITED TO, CHECKING CONCRETE BEARING STRESSES, STABILITY, AND GIRDER AND DETAIL STRESSES. FOR LOADS, SEE MAXIMUM JACKING LOAD TABLE. NOTE THAT THE LOADS GIVEN ARE THOSE AT THE BEARINGS, NOT NECESSARILY THE JACKS. ANALYSIS MAY BE REQUIRED TO DETERMINE SOME JACKING LOADS.
3. JACK EACH GIRDER AT A GIVEN SUBSTRUCTURE LOCATION SIMULTANEOUSLY AND WITH THE SAME DISPLACEMENT AND RATE OF DISPLACEMENT. PROVIDE HYDRAULIC REGULATING DEVICES AS REQUIRED.
4. CENTER THE JACKS ON THE CENTERLINE OF THE GIRDER WEBS AND THE JACKING STIFFENER PLATES OR AS DETAILED IN THE JACKING PROCEDURE SUBMITTED TO THE DEPARTMENT.

MAXIMUM JACKING LOAD TABLE (TONS)					
	DL	JDL	LL	JLL	TOTAL
REAR ABUTMENT	69	90	49	85	175
PIER 1	208	270	104	182	452
PIER 2	276	360	118	206	566
FORWARD ABUTMENT	105	136	58	102	238

FUTURE JACKING NOTES: (CONT'D)

5. ACCOUNT FOR ANY THERMAL MOVEMENTS AND ANY HORIZONTAL FORCES THAT MAY BE ENCOUNTERED DURING THE PERIOD WHEN THE SUPERSTRUCTURE IS BEING JACKED OR IS SHORED ON TEMPORARY SUPPORTS.
6. IF TRAFFIC IS PERMITTED ON THE BRIDGE DURING JACKING, ACCOUNT FOR THE EFFECTS OF VIBRATIONS DUE TO TRAFFIC ON THE BRIDGE AND ALSO NEAR THE SUBSTRUCTURE UNIT ON WHICH JACKING IS TAKING PLACE OR WHILE THE SUPERSTRUCTURE IS BEING SHORED ON TEMPORARY SUPPORTS.
7. DO NOT DAMAGE THE SUPERSTRUCTURE OR SUBSTRUCTURE WHEN JACKING AND REPLACING THE BEARINGS.
8. THE MAXIMUM ALLOWABLE JACKING DISPLACEMENT OF THE SUPERSTRUCTURE IS ONE INCH (1") VERTICAL.
9. PROVIDE RESTRAINT AGAINST TRANSVERSE WIND LOADING DURING JACKING OPERATIONS.

JACKING LOAD NOTES:

JDL = 1.30DL
JLL = 1.75LL

WHERE:
DL DENOTES DEAD LOAD REACTIONS AT BEARING
JDL DENOTES JACKING DESIGN DEAD LOAD REACTIONS AT BEARING
LL DENOTES LIVE LOAD + IM REACTIONS AT BEARING
JLL DENOTES JACKING DESIGN LIVE LOAD + IM REACTIONS AT BEARING
TOTAL DENOTES JDL + JLL

LOADS SHOWN ARE PER BEARING AND IN UNITS OF TONS.

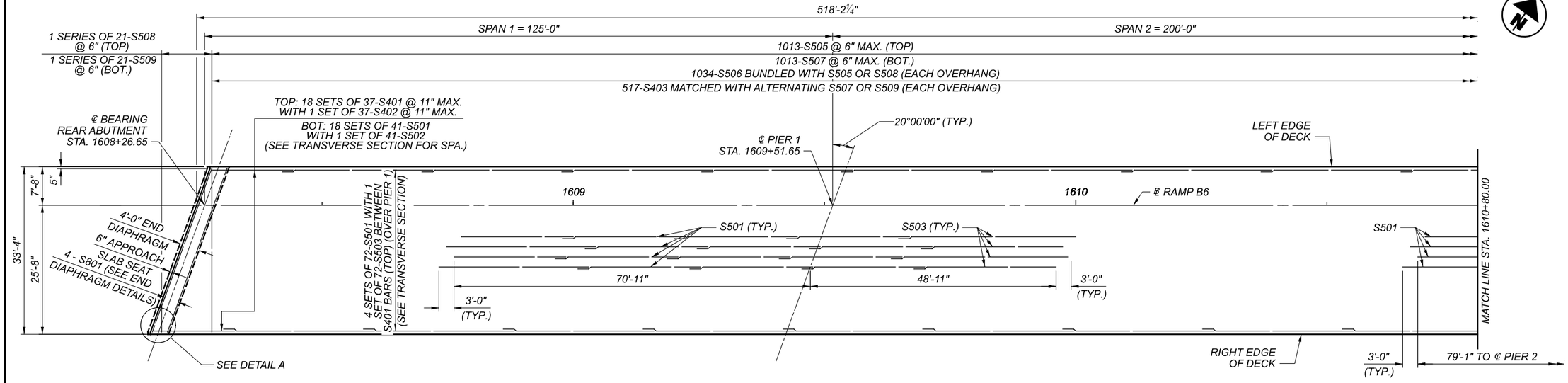
NOTES:

1. FOR INFORMATION AND DETAILS ASSOCIATED WITH THE BEARING ASSEMBLIES, SEE SHEETS 27 / 49 THRU 29 / 49.
2. DISC BEARINGS SHALL BE DESIGNED, FABRICATED, TESTED AND INSTALLED IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 869, CHAPTER 14 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATION AND CHAPTER 18 OF THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS. THE SHOP DRAWINGS SHALL BE SUBMITTED SHOWING MANUFACTURER, MATERIALS, AND DIMENSIONS OF ALL COMPONENTS OF THE BEARING ASSEMBLY TO THE ENGINEER FOR APPROVAL. THE MANUFACTURER SHALL SUBMIT CERTIFIED COPIES OF TEST REPORTS TO THE ENGINEER FOR REVIEW.
3. HIGH LOAD MULTI-ROTATIONAL BEARINGS SHALL BE DISC TYPE. POT BEARINGS ARE NOT PERMITTED. BEARING ASSEMBLIES SHOWN ARE SCHEMATIC.
4. ANCHOR BOLTS SHALL BE ASTM F1554, GRADE 105. NUTS SHALL CONFORM TO ASTM A563. WASHERS SHALL CONFORM TO ASTM F436. MASONRY PLATE SHALL CONFORM TO ASTM A709, GRADE 50.
5. BEARINGS SHALL BE DESIGNED AND DETAILED SUCH THAT THE BEARING ASSEMBLY CAN BE REMOVED FOR REPLACEMENT OR REPAIR.
6. MARK THE THICKER EDGE OF THE SOLE PLATE AS SUCH FOR THE PURPOSE OF FIELD IDENTIFICATION. PLACE MARK ON THE EDGE OF THE SOLE PLATE SO THAT IT WILL BE VISIBLE AFTER BEARING INSTALLATION.
7. MARK EACH BEARING WITH THE NAME OF THE MANUFACTURER AND TYPE OR MODEL NUMBER. PLACE THE IDENTIFICATION MARK IN A PERMANENT MANNER AND LOCATION SO THAT IT IS VISIBLE AFTER ERECTION.
8. THE MANUFACTURER SHALL WELD OR PRESS FIT THE BEARING PLATE TO THE MASONRY PLATE TO ENSURE FULL LATERAL CAPACITY CAN BE TAKEN BY THE BEARING.
9. GUIDED AND NON-GUIDED BEARINGS MAY BE REQUIRED TO BE FIXED TEMPORARILY DURING ERECTION OF SUPERSTRUCTURE. THE CONTRACTOR SHALL DESIGN TEMPORARY FIXING DEVICES AND SUBMIT DETAILS FOR REVIEW BY THE ENGINEER.
10. TACK WELD OR SECURELY CLAMP THE BEVELED LOAD PLATE TO THE GIRDER BOTTOM FLANGE DURING DECK CASTING. AFTER A MINIMUM OF SEVEN DAYS AFTER DECK CASTING IS COMPLETE, THE BEARING SHALL BE RESET. THE BEARING RE-SETTING SHALL CENTER THE DISC (ACCOUNTING FOR SETTING TEMPERATURE) ON THE SOLE PLATE PRIOR TO COMPLETING THE BOTTOM FLANGE TO BEVELED LOAD PLATE WELD.
11. THE BEARING PROVIDER IS RESPONSIBLE FOR DESIGN AND SUPPLY OF PREFORMED BEARING PAD, MASONRY PLATE, LOWER BEARING PLATE, ELASTOMERIC DISC, UPPER BEARING PLATE, SOLE PLATE AND GUIDE BARS, ANY AND ALL PTFE AND STAINLESS STEEL SLIDING SURFACES, AND ANY OTHER REQUIRED COMPONENTS OF THE BEARING ASSEMBLY.
12. THE MINIMUM THICKNESS OF EACH BEARING PLATE AND SOLE PLATE SHALL BE AS REQUIRED BY DESIGN BUT MUST BE AT LEAST $\frac{3}{4}$".
13. PREFORMED BEARING PADS CONFORMING TO CMS 711.21 SHALL BE PROVIDED FOR EACH BEARING WHERE INDICATED AND PLACED AS SHOWN IN THE BEARING DETAILS.
14. ROTATION VALUES IN THE TABLE INCLUDE AN ALLOWANCE OF 0.005 RADIANS FOR UNCERTAINTIES.
15. THE PIER AND ABUTMENT BEAM SEAT ELEVATIONS ARE BASED ON BEARING HEIGHTS PROVIDED IN THE TABLE SHOWN. IF THE CONTRACTOR'S SELECTED BEARING MANUFACTURER HAS A DESIGN THAT DOES NOT CONFORM TO THE HEIGHTS PROVIDED IN THE TABLE, ADJUST THE BEARING SEAT ELEVATIONS AT NO ADDITIONAL COST TO THE STATE. ADJUST THE LOCATION OF REINFORCING STEEL HORIZONTALLY AS NECESSARY TO AVOID INTERFERENCE WITH THE BEARING ANCHOR BOLTS. MAINTAIN THE MINIMUM CONCRETE COVER AND MINIMUM SPACING REQUIRED BY THE PROJECT PLANS. IF THE REINFORCING STEEL CANNOT BE MOVED TO PROVIDE THE REQUIRED POSITION FOR THE ANCHOR BOLTS, THE CONTRACTOR'S BEARING MANUFACTURER SHALL RE-DESIGN THE BEARINGS TO ACCOMMODATE AN ACCEPTABLE ANCHOR BOLT CONFIGURATION.
16. BEARINGS ARE TO BE SET BY USE OF A STEEL TEMPLATE WITH A MINIMUM THICKNESS OF $\frac{1}{4}$-IN.

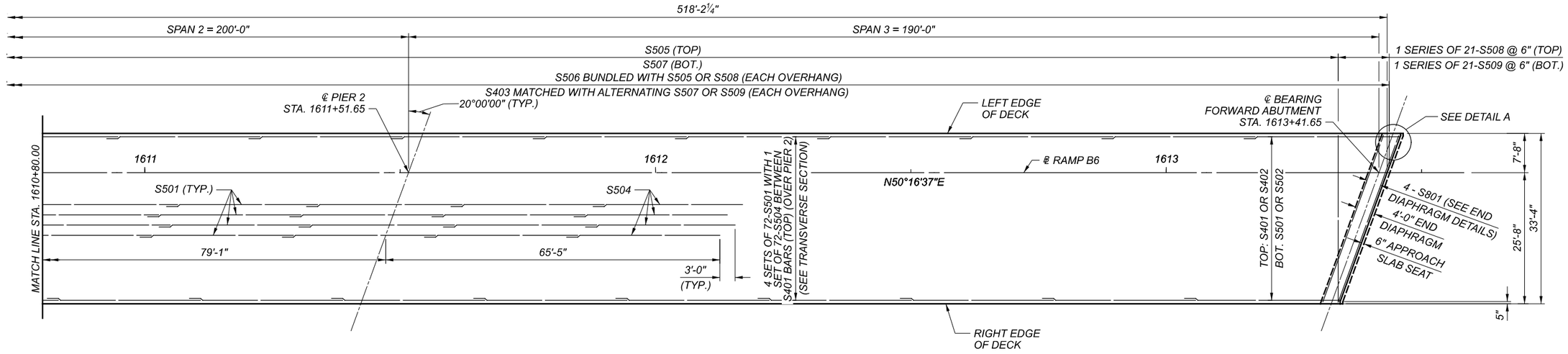
BEARING DETAILS (3 OF 3)
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAM PB6 OVER

SFN 1807806
DESIGN AGENCY
HDR
DESIGNER CMR | CHECKER ABO
REVIEWER DWW 6/21/22
PROJECT ID 82382
SUBSET 30 | TOTAL 49
SHEET 1725 | TOTAL 2338

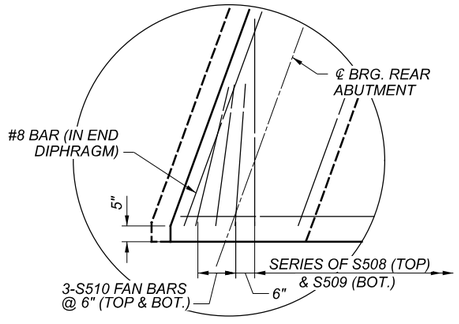
CUY-90-16.28 (CCG3A)



DECK PLAN



DECK PLAN



DETAIL A

(RIGHT REAR CORNER SHOWN, LEFT FWD. CORNER SIMILAR)

REQUIRED MINIMUM LAP LENGTHS	
#4	1'-11"
#5	2'-5"
#8	4'-11"

NOTES:

1. FOR FRAMING PLAN AND BEAM ELEVATION, SEE SHEET 20 / 49 AND 21 / 49.
2. FOR SCREED, TOP OF HAUNCH, AND FINAL DECK ELEVATIONS, SEE SHEET 40 / 49 THRU 43 / 49.
3. FOR TRANSVERE SECTION, SEE SHEET 36 / 49.
4. FOR BRIDGE RAILING PLAN AND DETAILS, SEE SHEET 33 / 49.
5. FOR REINFORCING STEEL LISTS, SEE SHEETS 46 / 49 THRU 49 / 49.
6. DRIP GROOVES SHALL TERMINATE 2'-0" FROM THE FACE OF THE ABUTMENT END DIAPHRAGMS.
7. FOR END DIAPHRAGM DETAILS, SEE SHEET 37 / 49 THRU 39 / 49.
8. FOR DECKPOUR SEQUENCE, SEE SHEET 32 / 49.

SLAB PLAN (1 OF 2)
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	CMR
CHECKER	JTW
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	31
TOTAL	49
SHEET	1726
TOTAL	2338

CUY-90-16.28 (CCG3A)

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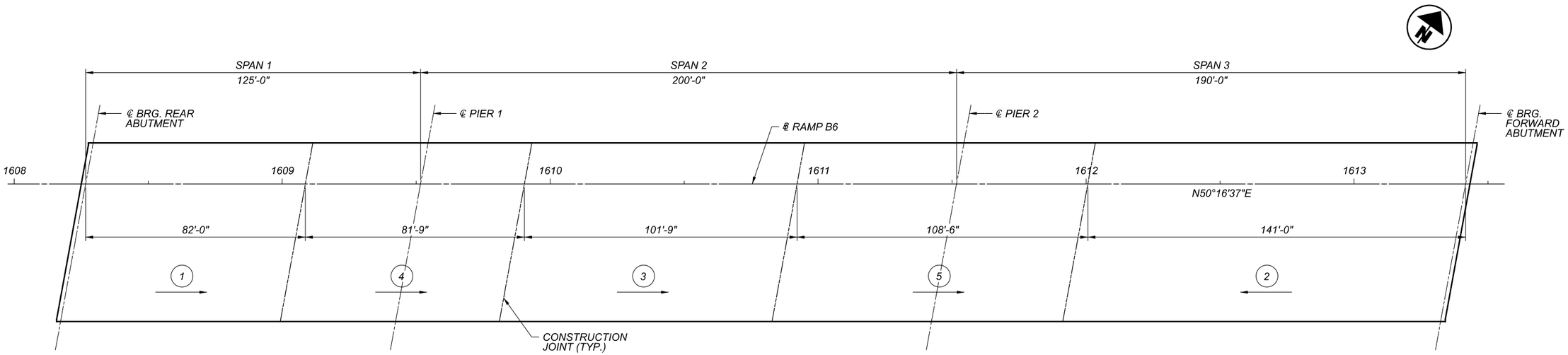

DECK POUR SEQUENCE

NOTES:

1. (#) INDICATES PLACEMENT SEQUENCE.
   → INDICATES DIRECTION OF POUR.
2. A MINIMUM OF TWO DAYS MUST ELAPSE BETWEEN POURS. TWO DAYS WILL BE MEASURED FROM THE END OF ONE POUR TO THE BEGINNING OF THE NEXT POUR.
3. DO NOT PLACE BRIDGE RAILING CONCRETE UNTIL ALL DECK POURS ARE COMPLETED.
4. NO OTHER DECK PLACEMENT SEQUENCE IS PERMITTED WITHOUT WRITTEN APPROVAL OF THE ENGINEER AND WITHOUT A DETAILED COMPUTER ANALYSIS OF THE SUPERSTRUCTURE TO DEMONSTRATE THAT NO UNACCEPTABLE OVERSTRESS WILL RESULT. SHOULD THE CONTRACTOR PROPOSE TO USE A DIFFERENT SEQUENCE. THE SUBMITTAL SHALL BE MADE IN ACCORDANCE WITH CMS ITEMS 501 AND 511.
5. THE ENTIRE DECK (PLACEMENTS 1 THROUGH 5) MAY BE PLACED IN ONE CONTINUOUS POUR AS LONG AS THE CONCRETE REMAINS WORKABLE.
6. PLACEMENT 1, 2, AND 3 MAY BE COMBINED AS LONG AS THE CONCRETE REMAINS WORKABLE.
7. PLACEMENT 4 AND 5 MAY BE COMBINED AS LONG AS THE CONCRETE REMAINS WORKABLE.
8. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE SUPERSTRUCTURE DURING THE DECK POUR.

SLAB PLAN (2 OF 2)
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	CMR
CHECKER	BTA
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	32
TOTAL	49
SHEET	1727
TOTAL	2338

CUY-90-16.28 (CCG3A)
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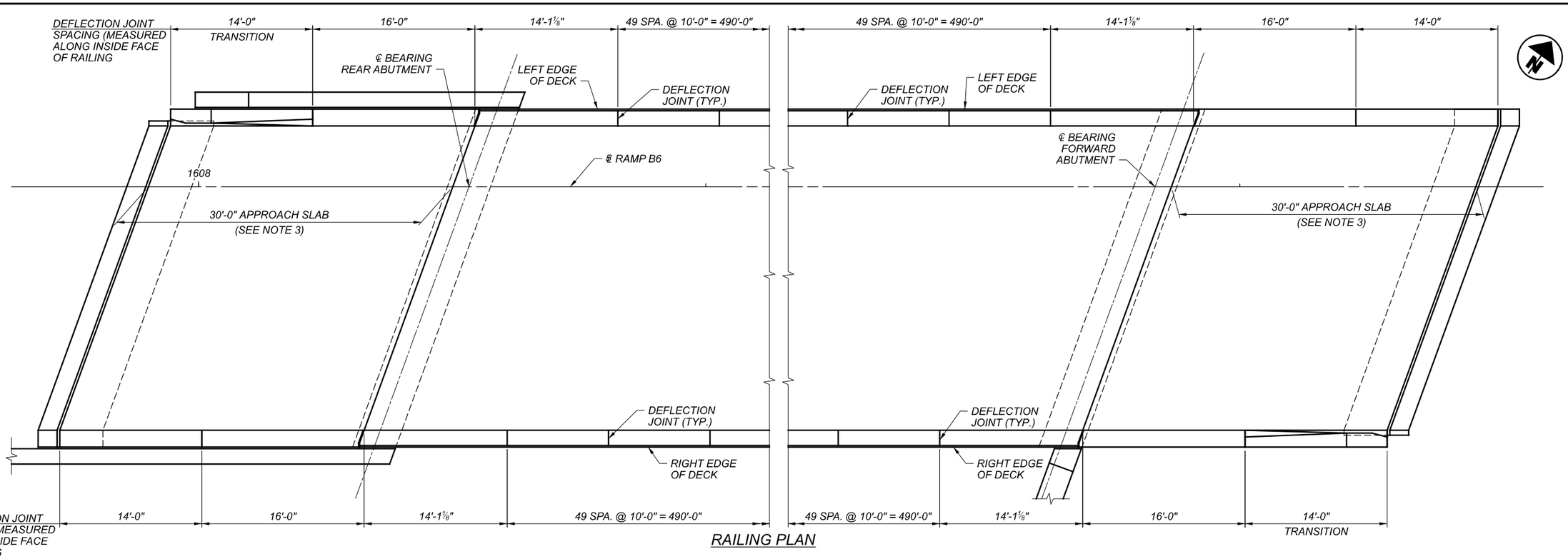
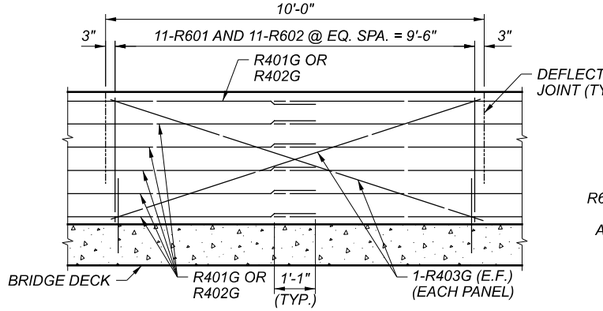
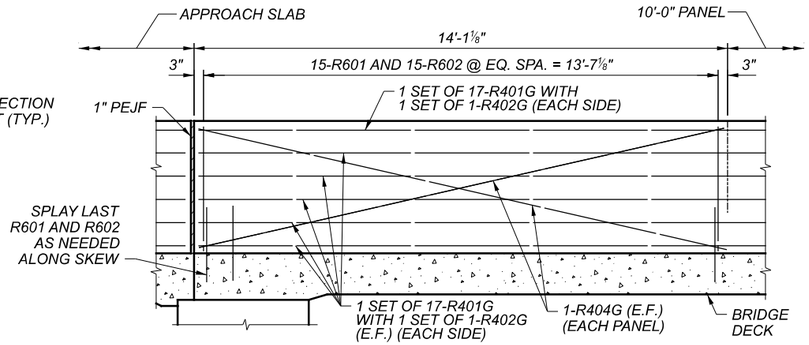


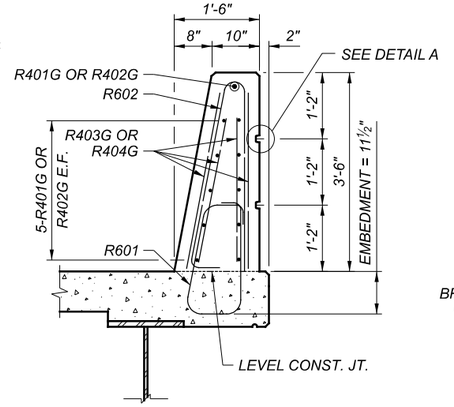
RAILING PLAN



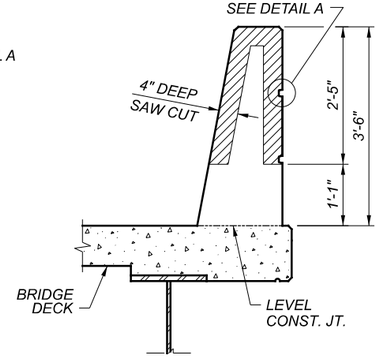
BRIDGE RAILING REINFORCING - 10'-0" PANEL
(98 PANELS)



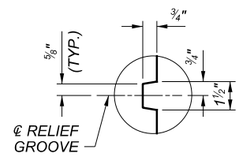
BRIDGE RAILING REINFORCING - 14'-1⅛" PANEL
(4 PANELS)



TYPICAL BRIDGE RAILING SECTION
(DECK REINFORCING NOT SHOWN)



DEFLECTION JOINT DETAIL
(DECK AND RAIL REINFORCING NOT SHOWN)



DETAIL A

LEGEND:

E.F.= EACH FACE
PEJF= PREFORMED EXPANSION JOINT FILLER

NOTES:

1. *FOR ADDITIONAL RAILING NOTES AND DETAILS, SEE ODOT STD. DWG. SBR-1-20.*
2. *THE CONCRETE FOR THE PARAPET (RAILING) MOUNTED ON THE APPROACH SLAB SHALL BE PAID FOR WITH ITEM 511, CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET).*
3. *FOR APPROACH SLAB RAILING AND TRANSITION DETAILS, SEE SHEETS* 34 / 49 *AND* 35 / 49.
4. *FOR SLAB PLAN AND TRANSVERSE SECTION, SEE SHEETS* 31 / 49 *AND* 36 / 49

RAILING PLAN
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	ADW
CHECKER	CMR
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	33
TOTAL	49
SHEET	1728
TOTAL	2338

CUY-90-16.28 (CCG3A)

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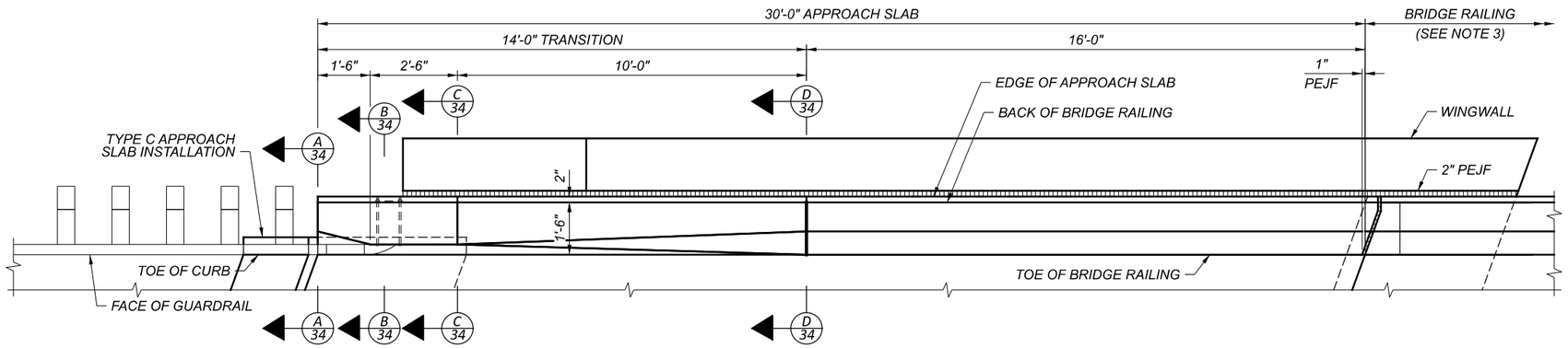
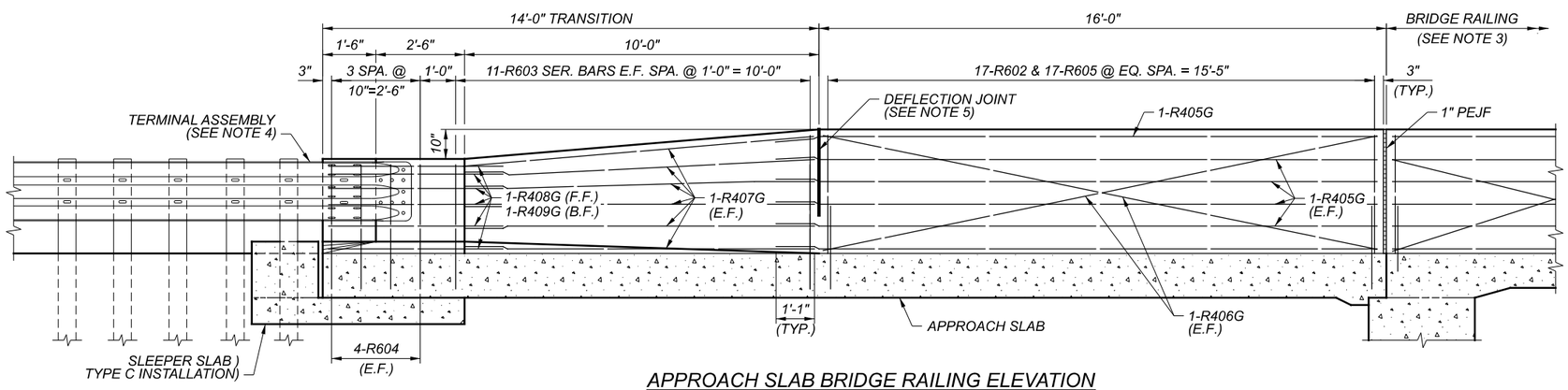


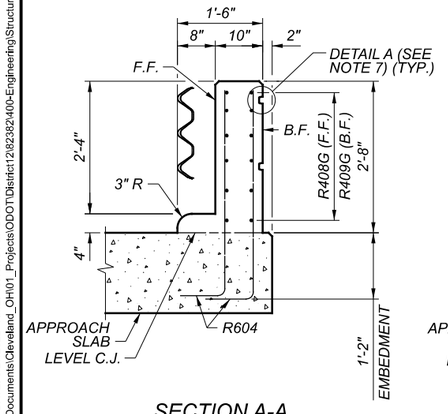
APPROACH SLAB BRIDGE RAILING PLAN

(LEFT REAR SHOWN, RIGHT FORWARD SIMILAR)

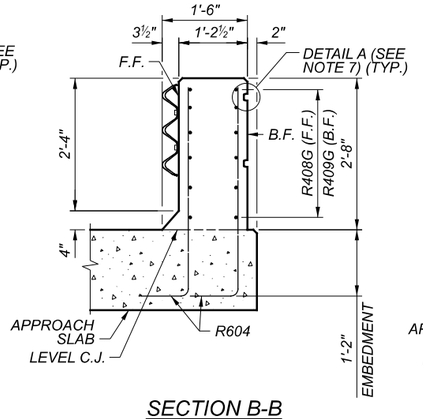


APPROACH SLAB BRIDGE RAILING ELEVATION

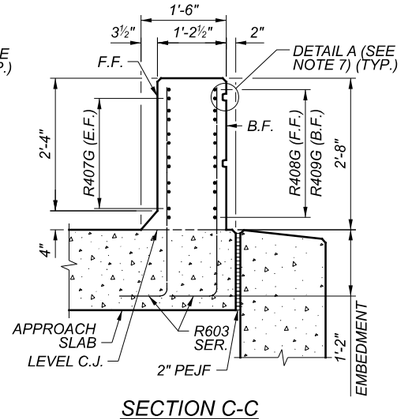
(LEFT REAR AND RIGHT FORWARD SHOWN)



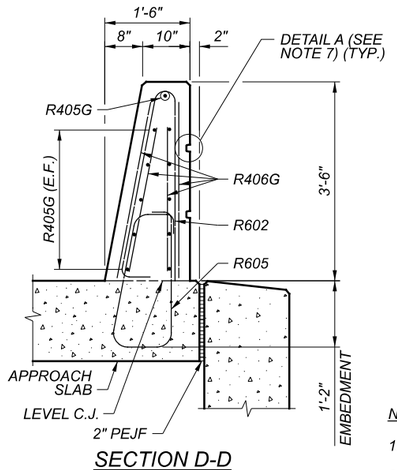
SECTION A-A



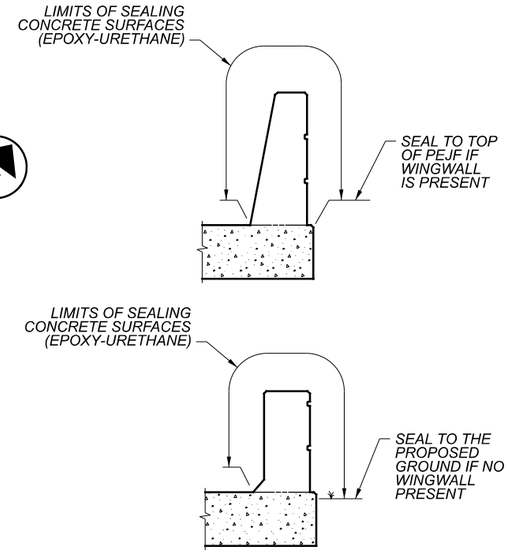
SECTION B-B



SECTION C-C



SECTION D-D



BRIDGE RAILING SEALING DETAIL

LEGEND:

E.F. = EACH FACE
B.F. = BACK FACE
F.F. = FRONT FACE
PEJF = PREFORMED EXPANSION JOINT FILLER
C.J. = CONSTRUCTION JOINT

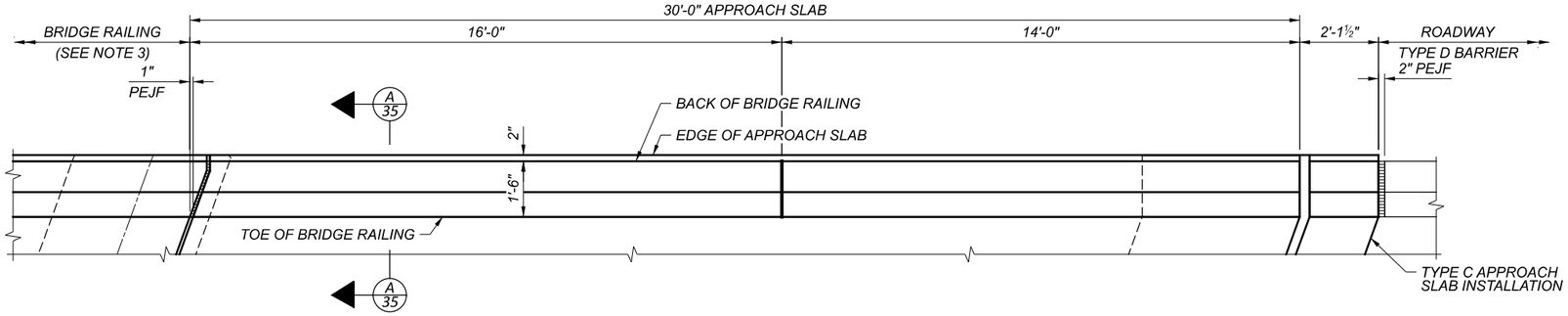
NOTES:

1. FOR ADDITIONAL BRIDGE RAILING NOTES AND DETAILS, SEE ODOT STD. DWG. SBR-1-20.
2. FOR APPROACH SLAB DETAILS, SEE SHEETS 44 / 49 AND 45 / 49.
3. FOR BRIDGE RAILING DETAILS WITHIN BRIDGE LIMITS, SEE SHEET 33 / 49.
4. FOR ADDITIONAL BRIDGE TERMINAL ASSEMBLY DETAILS, SEE ROADWAY SHEETS AND ODOT STD. DWG. MGS-3.1.
5. FOR DEFLECTION JOINT DETAIL, SEE SHEET 33 / 49.
6. FOR ADDITIONAL APPROACH SLAB RAILING DETAILS, SEE SHEET 35 / 49.
7. FOR AESTHETIC GROOVE DETAIL, SEE SHEET 33 / 49.

APPROACH SLAB RAILING DETAILS (1 OF 2)
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER

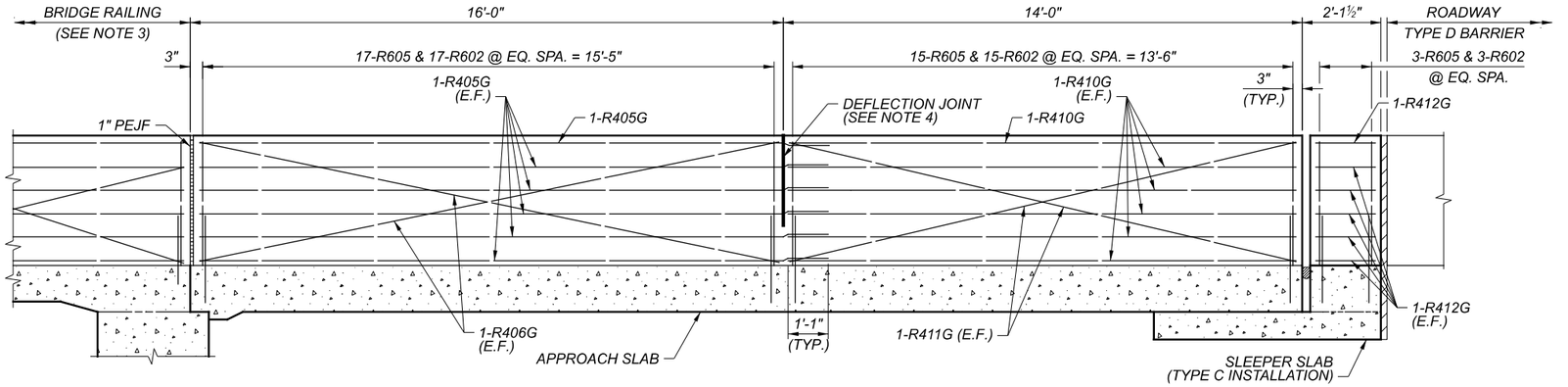
SFN 1807806
DESIGN AGENCY
DESIGNER ADW | CHECKER CMR
REVIEWER DWW 6/21/22
PROJECT ID 82382
SUBSET 34 | TOTAL 49
SHEET 1729 | TOTAL 2338

CUY-90-16.28 (CCG3A)



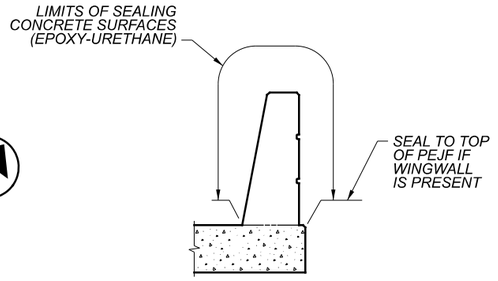
APPROACH SLAB BRIDGE RAILING PLAN

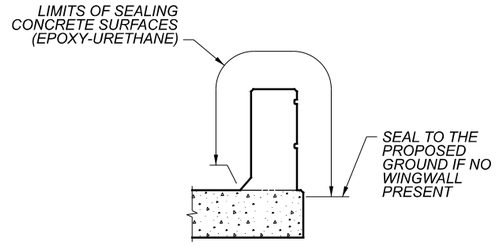
(LEFT FORWARD SHOWN, RIGHT REAR SIMILAR)



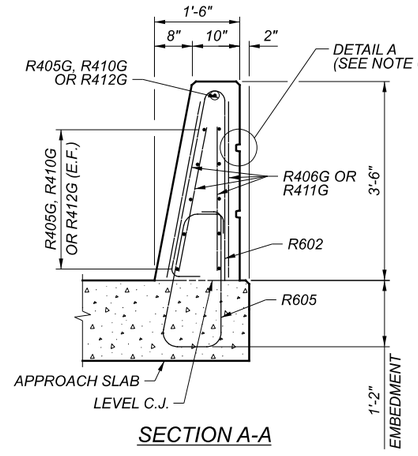
APPROACH SLAB BRIDGE RAILING ELEVATION

(LEFT FORWARD SHOWN, RIGHT REAR SIMILAR)





BRIDGE RAILING SEALING DETAIL



SECTION A-A

LEGEND:

E.F. = *EACH FACE*
B.F. = *BACK FACE*
F.F. = *FRONT FACE*
PEJF = *PREFORMED EXPANSION JOINT FILLER*
C.J. = *CONSTRUCTION JOINT*

NOTES:

1. *FOR ADDITIONAL BRIDGE RAILING NOTES AND DETAILS, SEE ODOT STD. DWG. SBR-1-20.*
2. *FOR APPROACH SLAB DETAILS, SEE SHEETS* 44 / 49 *AND* 45 / 49.
3. *FOR BRIDGE RAILING DETAILS WITHIN BRIDGE LIMITS, SEE SHEET* 33 / 49.
4. *FOR DEFLECTION JOINT DETAIL, SEE SHEET* 33 / 49.
5. *FOR ADDITIONAL APPROACH SLAB RAILING DETAILS, SEE SHEET* 34 / 49.
6. *FOR AESTHETIC GROOVE DETAIL, SEE SHEET* 33 / 49.

APPROACH SLAB RAILING DETAILS (2 OF 2)
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER

SFN 1807806
DESIGN AGENCY
DESIGNER ADW | CHECKER CMR
REVIEWER DWW 6/21/22
PROJECT ID 82382
SUBSET 35 | TOTAL 49
SHEET 1730 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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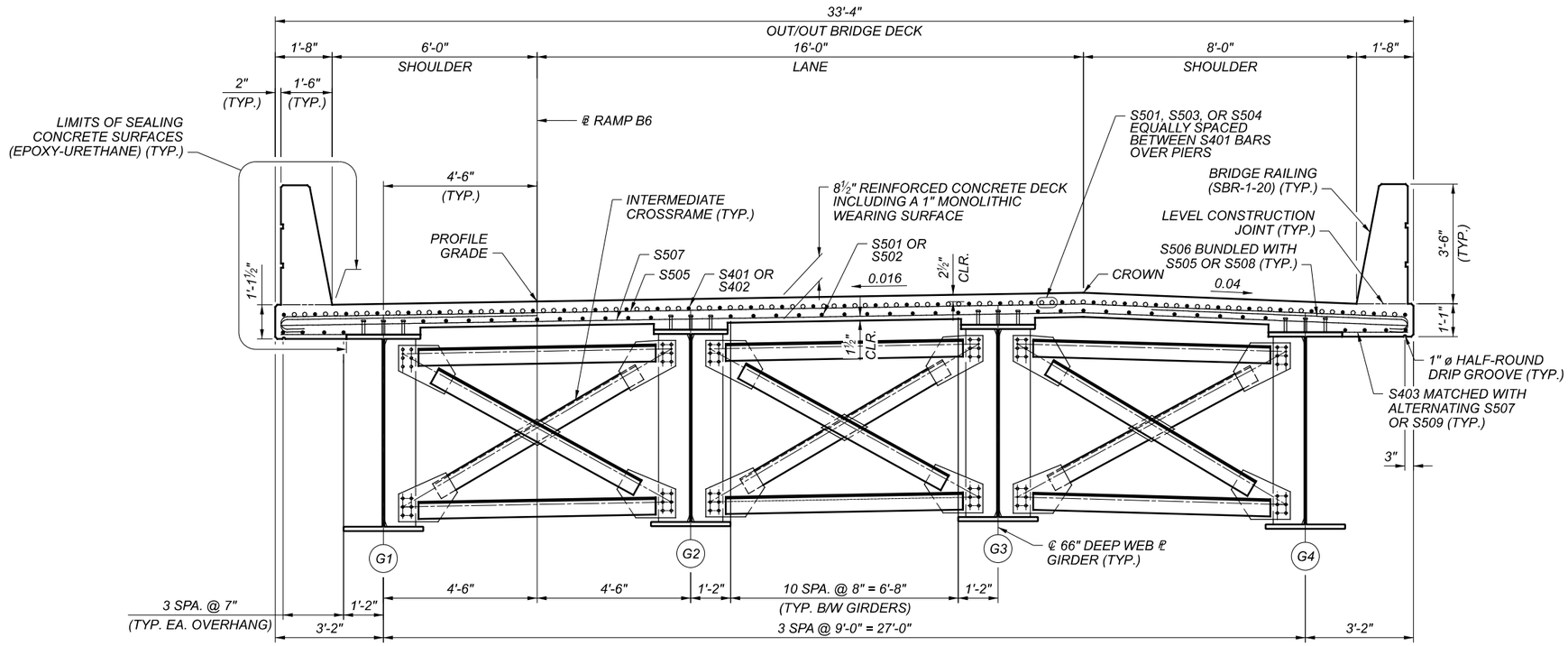

TYPICAL TRANSVERSE SECTION

(BRIDGE RAILING REINFORCING NOT SHOWN FOR CLARITY)

NOTES:

1. FOR FRAMING PLAN AND GIRDER ELEVATION, SEE SHEETS 20 / 49 AND 21 / 49.
2. FOR SCREED, TOP OF HAUNCH, AND FINAL DECK ELEVATIONS, SEE SHEET 40 / 49 THRU 43 / 49.
3. FOR DECK PLAN, SEE SHEET 31 / 49.
4. FOR BRIDGE RAILING PLAN AND DETAILS, SEE SHEET 33 / 49.
5. FOR CROSSFRAME DETAILS, SEE SHEET 23 / 49.
6. FOR REINFORCING STEEL LISTS, SEE SHEETS 46 / 49 THRU 49 / 49.
7. DRIP GROOVES SHALL TERMINATE 2'-0" FROM THE FACE OF THE ABUTMENT END DIAPRAGMS.
8. DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 5¼" INCHES AND HAUNCH WIDTH EQUAL TO TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE.

   THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF GIRDER, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.23.

TRANSVERSE SECTION
CUY-90-1652S (BRIDGE 12)
OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	CMR
CHECKER	JTW
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	36
TOTAL	49
SHEET	1731
TOTAL	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/27/2022 TIME: 10:19:08 PM USER: BAVARELL
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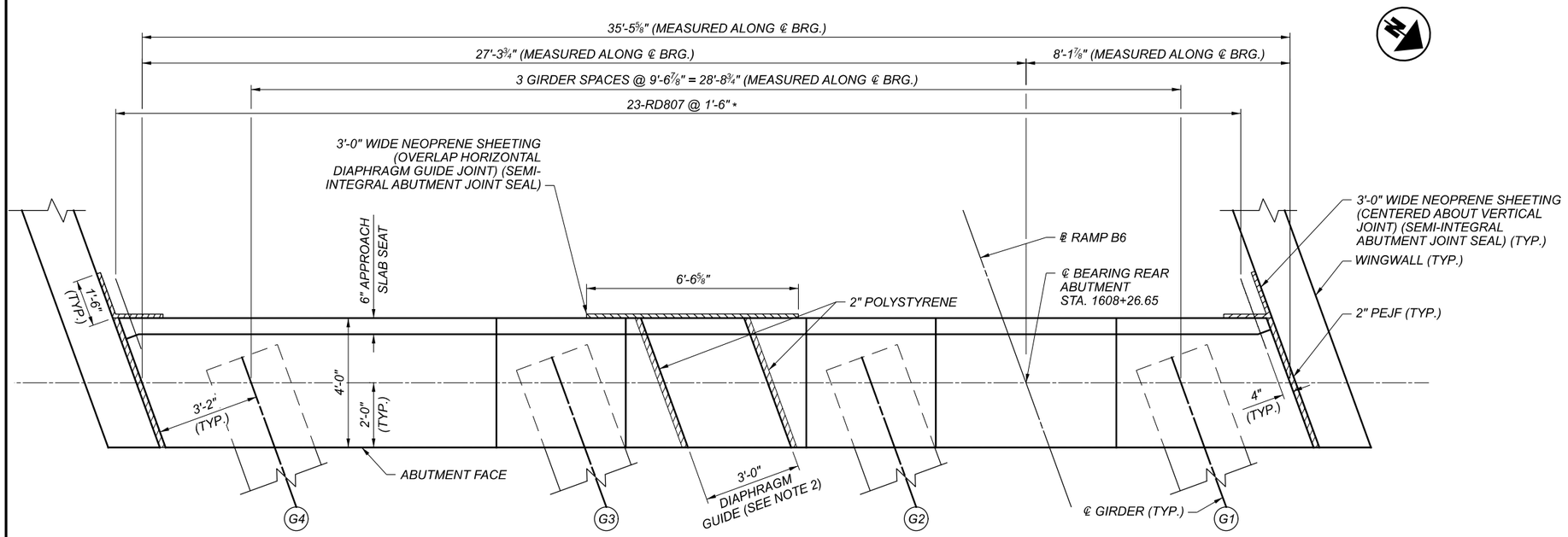
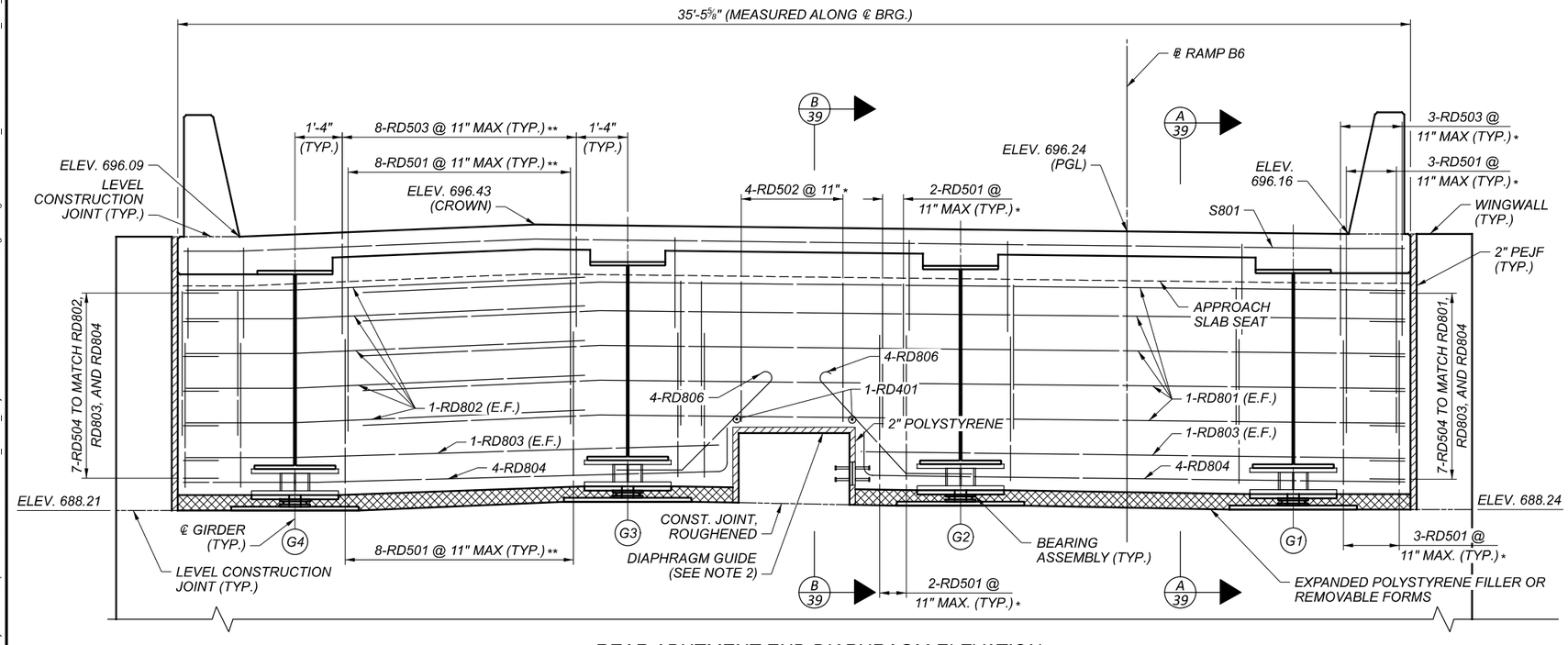


REAR ABUTMENT END DIAPHRAGM PLAN

(APPROACH SLAB NOT SHOWN FOR CLARITY)



REAR ABUTMENT END DIAPHRAGM ELEVATION

(LOOKING DOWNSTATION)

LEGEND:

(GX) = GIRDER LINE DESIGNATION

* MEASURED AND PLACED PARALLEL TO GIRDERS

** TYP. BETWEEN GIRDERS, UNLESS NOTED OTHERWISE MEASURED AND PLACED PARALLEL TO GIRDERS

MIN. LAP LENGTH	
NO. 5 BARS	2'-5"
NO. 8 BARS	5'-4"

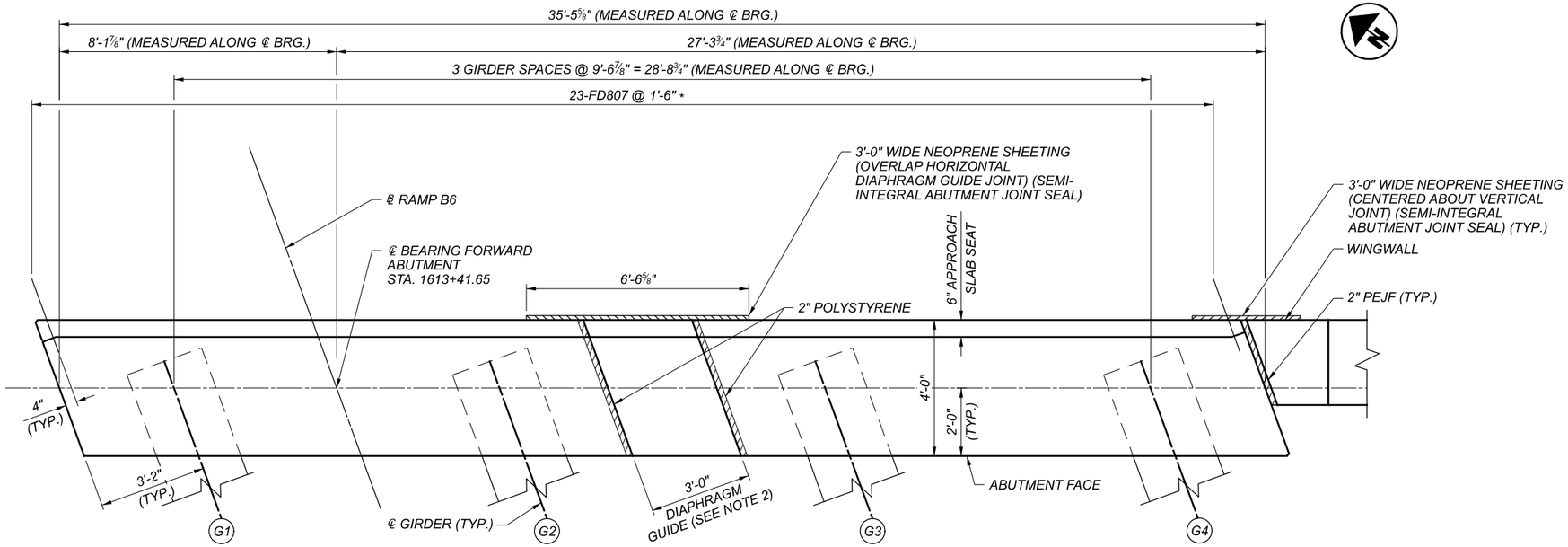
NOTES:

1. FOR ADDITIONAL END DIAPHRAGM DETAILS, SEE SHEET 39 / 49 .
2. FOR DIAPHRAGM GUIDE DETAILS, SEE SHEET 9 / 49 .
3. FOR SLAB PLAN, SEE SHEET 31 / 49 .
4. FOR BEARING DETAILS, SEE SHEETS 27 / 49 THRU 30 / 49 .
5. FOR REAR ABUTMENT DETAILS, SEE SHEETS 7 / 49 THRU 12 / 49 .
6. UNLESS OTHERWISE NOTED, ELEVATIONS ARE SHOWN AT THE ℄ BEARING.
7. FOR ADDITIONAL TOP OF DECK ELEVATIONS SEE SHEETS 42 / 49 THRU 43 / 49 .
8. ABUTMENT DIAPHRAGM CONCRETE: PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN ON SHEET 39 / 49 AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK.
9. END DIAPHRAGM CONCRETE AND EXPANDED POLYSTYRENE FILLER OR REMOVABLE FORMS SHALL BE INCLUDED FOR PAYMENT WITH ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK.

REAR ABUTMENT END DIAPHRAGM DETAILS
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

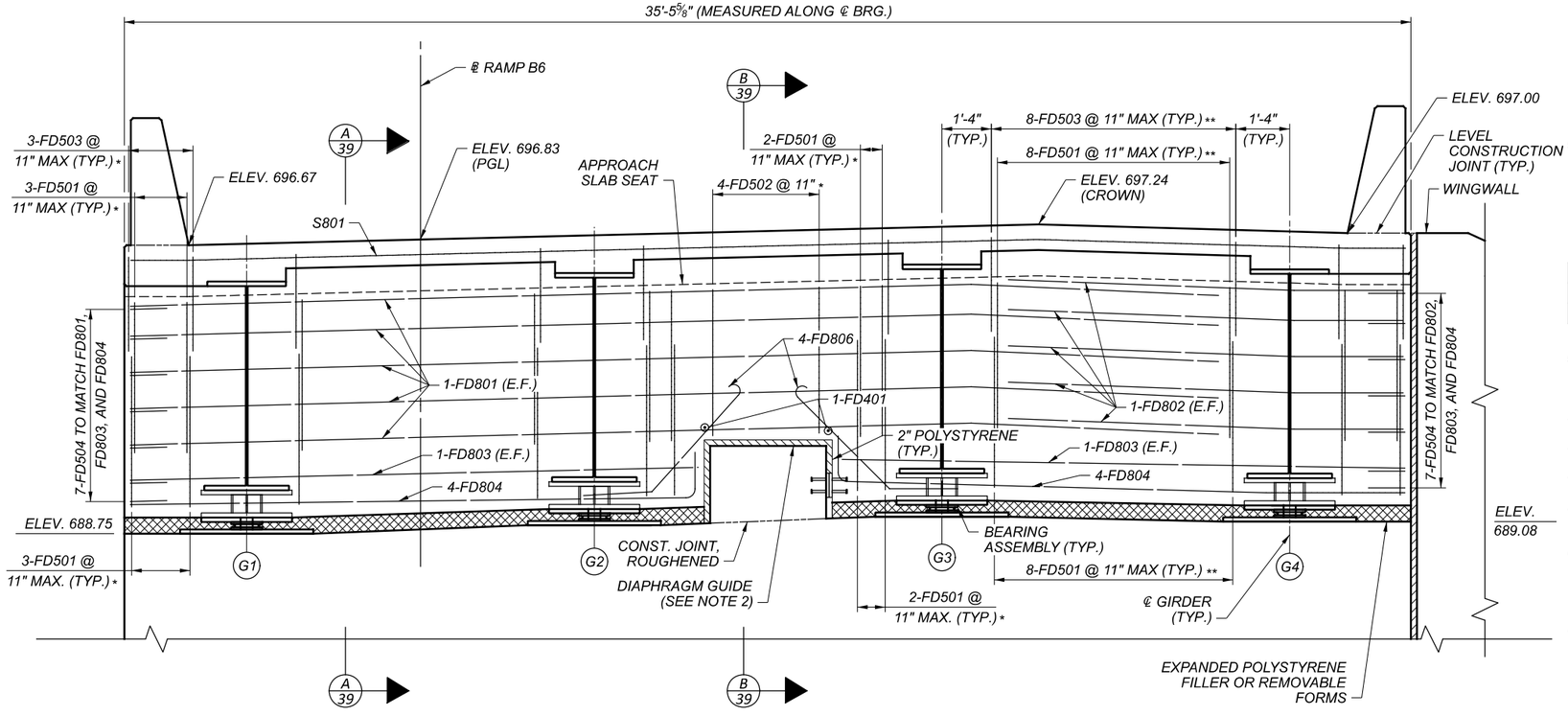
SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	CMR
CHECKER	JML
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	37
TOTAL	49
SHEET	1732
TOTAL	2338

CUY-90-16.28 (CCG3A)



FORWARD ABUTMENT END DIAPHRAGM PLAN

(APPROACH SLAB NOT SHOWN FOR CLARITY)



FORWARD ABUTMENT END DIAPHRAGM ELEVATION

(LOOKING UPSTATION)

LEGEND:

(GX) = *GIRDER LINE DESIGNATION*

* *MEASURED AND PLACED PARALLEL TO GIRDERS*

** *TYP. BETWEEN GIRDERS, UNLESS NOTED OTHERWISE MEASURED AND PLACED PARALLEL TO GIRDERS*

MIN. LAP LENGTH	
NO. 5 BARS	2'-5"
NO. 8 BARS	5'-4"

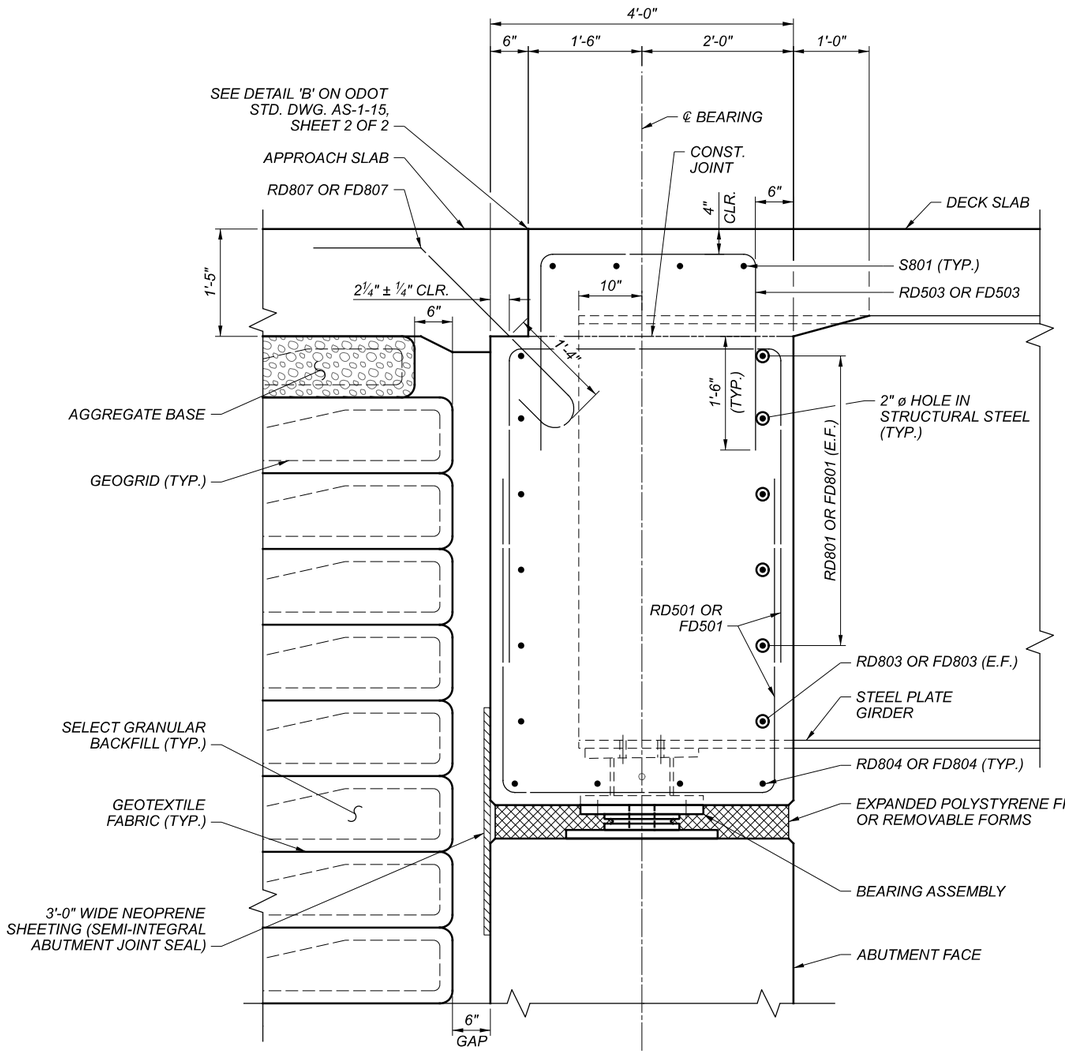
NOTES:

1. *FOR ADDITIONAL END DIAPHRAGM DETAILS, SEE SHEET* 39 / 49 .
2. *FOR DIAPHRAGM GUIDE DETAILS, SEE SHEET* 9 / 49 .
3. *FOR SLAB PLAN, SEE SHEET* 31 / 49 .
4. *FOR BEARING DETAILS, SEE SHEETS* 27 / 49 *THRU* 30 / 49 .
5. *FOR FORWARD ABUTMENT DETAILS, SEE SHEETS* 13 / 49 *THRU* 15 / 49 .
6. *UNLESS OTHERWISE NOTED, ELEVATIONS ARE SHOWN AT THE ℄ BEARING.*
7. *FOR ADDITIONAL TOP OF DECK ELEVATIONS SEE SHEETS* 42 / 49 *THRU* 43 / 49 .
8. *ABUTMENT DIAPHRAGM CONCRETE: PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN ON SHEET* 39 / 49 *AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK.*
9. *END DIAPHRAGM CONCRETE AND EXPANDED POLYSTYRENE FILLER OR REMOVABLE FORMS SHALL BE INCLUDED FOR PAYMENT WITH ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK.*

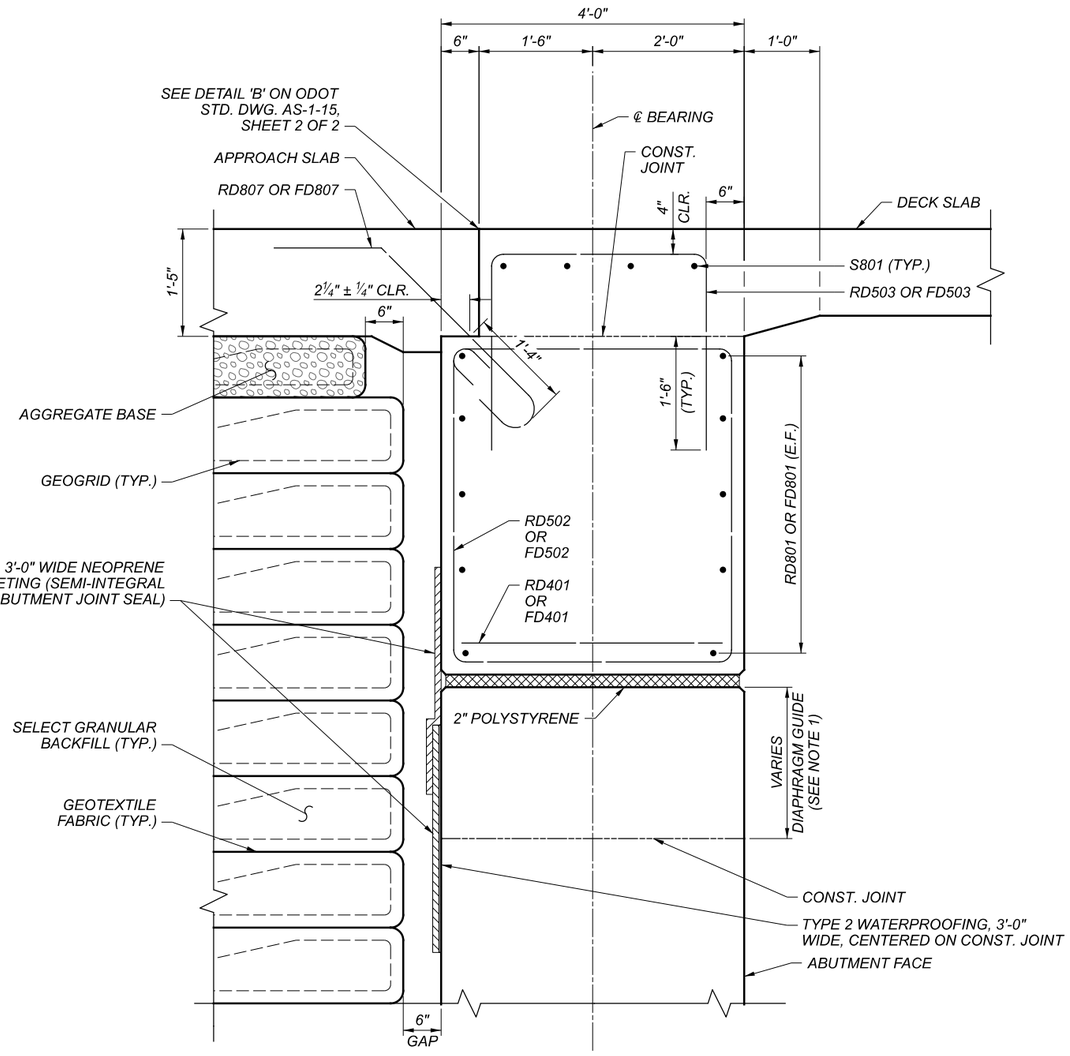
FORWARD ABUTMENT END DIAPHRAGM DETAILS
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER RAMP H5

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	CMR
CHECKER	JML
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	38
TOTAL	49
SHEET	1733
TOTAL	2338

CUY-90-16.28 (CCG3A)



SECTION A-A



SECTION B-B

NOTES:

1. FOR ADDITIONAL END DIAPHRAGM DETAILS AND NOTES, SEE SHEETS 37 / 49 AND 38 / 49 .
2. FOR LOCATION OF 2" DIA. HOLES IN STRUCTURAL STEEL, SEE SHEET 21 / 49 .
3. FOR ABUTMENT DETAILS, SEE SHEETS 7 / 49 THRU 15 / 49 .
4. FOR SOIL REINFORCING DETAILS, SEE SHEETS 12 / 49 AND 15 / 49 .
5. FOR APPROACH SLAB DETAILS, SEE SHEETS 44 / 49 AND 45 / 49 .

END DIAPHRAGM DETAILS
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER RAMP H5

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/27/2022 TIME: 10:19:27 PM USER: BAVARELL
pw:\\mb-us-pw.bentley.com:mb-us-pw-03\Documents\Cleveland_OH\01_Projects\ODOT\District12\82382\400-Engineering\Structures\SFN_1807806\Sheets\82382_SFN_1807806_SR008.dgn

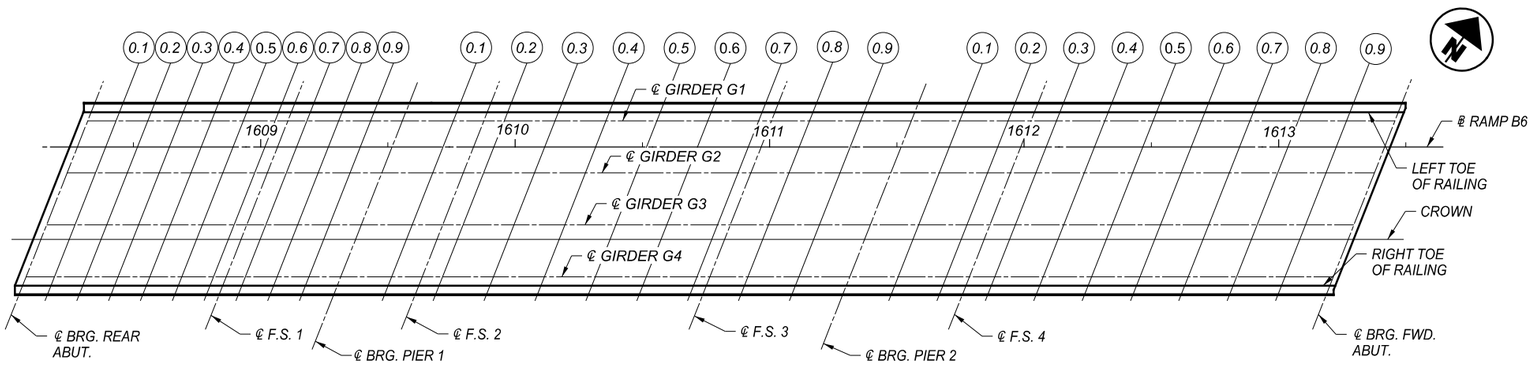
SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	CMR
CHECKER	JML
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	39
TOTAL	49
SHEET	1734
TOTAL	2338

SCREED ELEVATIONS

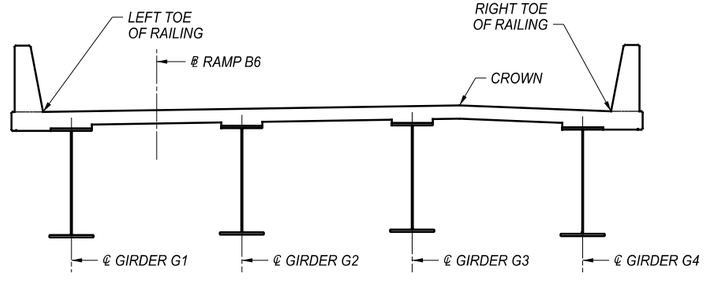
		SPAN 1											SPAN 2								
		CL BRG. REAR ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	CL F.S. 1	0.7	0.8	0.9	CL BRG. PIER 1	0.1	CL F.S. 2	0.2	0.3	0.4	0.5	0.6	0.7	CL F.S. 3
LEFT TOE OF RAILING	STATION	1608+28.84	1608+41.34	1608+53.84	1608+66.34	1608+78.84	1608+91.34	1609+03.84	1609+08.84	1609+16.34	1609+28.84	1609+41.34	1609+53.84	1609+73.84	1609+85.84	1609+93.84	1610+13.84	1610+33.84	1610+53.84	1610+73.84	1610+93.84	1610+98.84
	ELEV.	696.16	696.32	696.47	696.61	696.74	696.86	696.97	697.01	697.07	697.18	697.29	697.41	697.64	697.79	697.89	698.14	698.37	698.56	698.72	698.87	698.90
BL RAMP B6	STATION	1608+26.65	1608+39.15	1608+51.65	1608+64.15	1608+76.65	1608+89.15	1609+01.65	1609+06.65	1609+14.15	1609+26.65	1609+39.15	1609+51.65	1609+71.65	1609+83.65	1609+91.65	1610+11.65	1610+31.65	1610+51.65	1610+71.65	1610+91.65	1610+96.65
	ELEV.	696.24	696.39	696.54	696.68	696.81	696.93	697.04	697.09	697.15	697.25	697.36	697.49	697.72	697.87	697.97	698.22	698.44	698.64	698.80	698.95	698.98
CROWN	STATION	1608+20.83	1608+33.33	1608+45.83	1608+58.33	1608+70.83	1608+83.33	1608+95.83	1609+00.83	1609+08.33	1609+20.83	1609+33.33	1609+45.83	1609+65.83	1609+77.83	1609+85.83	1610+05.83	1610+25.83	1610+45.83	1610+65.83	1610+85.83	1610+90.83
	ELEV.	696.43	696.59	696.74	696.88	697.01	697.13	697.24	697.28	697.34	697.45	697.56	697.68	697.91	698.07	698.17	698.42	698.65	698.85	699.01	699.16	699.19
RIGHT TOE OF RAILING	STATION	1608+17.92	1608+30.42	1608+42.92	1608+55.42	1608+67.92	1608+80.42	1608+92.92	1608+97.92	1609+05.42	1609+17.92	1609+30.42	1609+42.92	1609+62.92	1609+74.92	1609+82.92	1610+02.92	1610+22.92	1610+42.92	1610+62.92	1610+82.92	1610+87.92
	ELEV.	696.09	696.24	696.39	696.53	696.66	696.78	696.89	696.93	696.99	697.10	697.21	697.34	697.57	697.72	697.82	698.07	698.30	698.50	698.67	698.81	698.85

TOP OF HAUNCH ELEVATIONS

		SPAN 1											SPAN 2								
		CL BRG. REAR ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	CL F.S. 1	0.7	0.8	0.9	CL BRG. PIER 1	0.1	CL F.S. 2	0.2	0.3	0.4	0.5	0.6	0.7	CL F.S. 3
GIRDER 1	STATION	1608+28.29	1608+40.79	1608+53.29	1608+65.79	1608+78.29	1608+90.79	1609+03.29	1609+08.29	1609+15.79	1609+28.29	1609+40.79	1609+53.29	1609+73.29	1609+85.29	1609+93.29	1610+13.29	1610+33.29	1610+53.29	1610+73.29	1610+93.29	1610+98.29
	ELEV.	695.47	695.63	695.78	695.92	696.05	696.17	696.28	696.32	696.39	696.49	696.60	696.72	696.95	697.10	697.20	697.45	697.68	697.87	698.03	698.18	698.22
GIRDER 2	STATION	1608+25.01	1608+37.51	1608+50.01	1608+62.51	1608+75.01	1608+87.51	1609+00.01	1609+05.01	1609+12.51	1609+25.01	1609+37.51	1609+50.01	1609+70.01	1609+82.01	1609+90.01	1610+10.01	1610+30.01	1610+50.01	1610+70.01	1610+90.01	1610+95.01
	ELEV.	695.58	695.74	695.89	696.03	696.16	696.28	696.39	696.43	696.49	696.60	696.71	696.83	697.06	697.21	697.31	697.56	697.79	697.99	698.15	698.30	698.33
GIRDER 3	STATION	1608+21.74	1608+34.24	1608+46.74	1608+59.24	1608+71.74	1608+84.24	1608+96.74	1609+01.74	1609+09.24	1609+21.74	1609+34.24	1609+46.74	1609+66.74	1609+78.74	1609+86.74	1610+06.74	1610+26.74	1610+46.74	1610+66.74	1610+86.74	1610+91.74
	ELEV.	695.70	695.85	696.00	696.14	696.27	696.39	696.50	696.54	696.60	696.71	696.82	696.95	697.17	697.33	697.43	697.68	697.91	698.10	698.27	698.41	698.45
GIRDER 4	STATION	1608+18.46	1608+30.96	1608+43.46	1608+55.96	1608+68.46	1608+80.96	1608+93.46	1608+98.46	1609+05.96	1609+18.46	1609+30.96	1609+43.46	1609+63.46	1609+75.46	1609+83.46	1610+03.46	1610+23.46	1610+43.46	1610+63.46	1610+83.46	1610+88.46
	ELEV.	695.44	695.60	695.75	695.89	696.02	696.14	696.25	696.29	696.35	696.46	696.57	696.69	696.92	697.08	697.18	697.43	697.66	697.86	698.03	698.17	698.20



PLAN



TRANSVERSE SECTION

NOTES:

1. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
3. FOR SLAB PLAN, SEE SHEET 31/ 49.
4. FOR RAILING PLAN, SEE SHEET 33/ 49.
5. FOR TRANSVERSE SECTION, SEE SHEET 36/ 49.
6. FOR FINAL DECK SURFACE ELEVATIONS, SEE SHEETS 42/ 49 AND 43/ 49.
7. FOR ADDITIONAL SCREED AND TOP OF HAUNCH ELEVATIONS, SEE SHEET 41/ 49.

SCREED AND TOP OF HAUNCH ELEVATIONS (1 OF 2)
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN	1807806
DESIGN AGENCY	HDR
DESIGNER	CMR
CHECKER	ABO
REVIEWER	DWW 6/21/22
PROJECT ID	82382
SUBSET	40
TOTAL	49
SHEET	1735
TOTAL	2338

CUY-90-16.28 (CCG3A)
MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/27/2022 TIME: 10:19:34 PM USER: BAVARELL
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SCREED ELEVATIONS

		SPAN 2				SPAN 3										
		CL F.S. 3	0.8	0.9	CL BRG. PIER 2	0.1	0.2	CL F.S. 4	0.3	0.4	0.5	0.6	0.7	0.8	0.9	CL BRG. FWD. ABUT.
LEFT TOE OF RAILING	STATION	1610+98.84	1611+13.84	1611+33.84	1611+53.84	1611+72.84	1611+91.84	1612+00.84	1612+10.84	1612+29.84	1612+48.84	1612+67.84	1612+86.84	1613+05.84	1613+24.84	1613+43.84
	ELEV.	698.90	699.00	699.10	699.19	699.26	699.32	699.33	699.33	699.26	699.10	698.83	698.44	697.95	697.35	696.67
BL RAMP B6	STATION	1610+96.65	1611+11.65	1611+31.65	1611+51.65	1611+70.65	1611+89.65	1611+98.65	1612+08.65	1612+27.65	1612+46.65	1612+65.65	1612+84.65	1613+03.65	1613+22.65	1613+41.65
	ELEV.	698.98	699.08	699.19	699.28	699.36	699.42	699.43	699.44	699.38	699.22	698.96	698.58	698.09	697.50	696.83
CROWN	STATION	1610+90.83	1611+05.83	1611+25.83	1611+45.83	1611+64.83	1611+83.83	1611+92.83	1612+02.83	1612+21.83	1612+40.83	1612+59.83	1612+78.83	1612+97.83	1613+16.83	1613+35.83
	ELEV.	699.19	699.30	699.41	699.52	699.62	699.69	699.71	699.72	699.68	699.54	699.29	698.93	698.46	697.89	697.24
RIGHT TOE OF RAILING	STATION	1610+87.92	1611+02.92	1611+22.92	1611+42.92	1611+61.92	1611+80.92	1611+89.92	1611+99.92	1612+18.92	1612+37.92	1612+56.92	1612+75.92	1612+94.92	1613+13.92	1613+32.92
	ELEV.	698.85	698.95	699.08	699.19	699.29	699.38	699.40	699.42	699.38	699.25	699.01	698.66	698.20	697.64	697.00

TOP OF HAUNCH ELEVATIONS

		SPAN 2				SPAN 3										
		CL F.S. 3	0.8	0.9	CL BRG. PIER 2	0.1	0.2	CL F.S. 4	0.3	0.4	0.5	0.6	0.7	0.8	0.9	CL BRG. FWD. ABUT.
GIRDER 1	STATION	1610+98.29	1611+13.29	1611+33.29	1611+53.29	1611+72.29	1611+91.29	1612+00.29	1612+10.29	1612+29.29	1612+48.29	1612+67.29	1612+86.29	1613+05.29	1613+24.29	1613+43.29
	ELEV.	698.22	698.31	698.41	698.50	698.58	698.64	698.65	698.65	698.58	698.42	698.15	697.77	697.27	696.68	696.00
GIRDER 2	STATION	1610+95.01	1611+10.01	1611+30.01	1611+50.01	1611+69.01	1611+88.01	1611+97.01	1612+07.01	1612+26.01	1612+45.01	1612+64.01	1612+83.01	1613+02.01	1613+21.01	1613+40.01
	ELEV.	698.33	698.43	698.54	698.64	698.72	698.79	698.80	698.81	698.75	698.60	698.34	697.97	697.48	696.90	696.24
GIRDER 3	STATION	1610+91.74	1611+06.74	1611+26.74	1611+46.74	1611+65.74	1611+84.74	1611+93.74	1612+03.74	1612+22.74	1612+41.74	1612+60.74	1612+79.74	1612+98.74	1613+17.74	1613+36.74
	ELEV.	698.45	698.55	698.67	698.77	698.87	698.94	698.96	698.97	698.92	698.78	698.53	698.17	697.70	697.12	696.47
GIRDER 4	STATION	1610+88.46	1611+03.46	1611+23.46	1611+43.46	1611+62.46	1611+81.46	1611+90.46	1612+00.46	1612+19.46	1612+38.46	1612+57.46	1612+76.46	1612+95.46	1613+14.46	1613+33.46
	ELEV.	698.20	698.31	698.43	698.54	698.65	698.73	698.75	698.76	698.73	698.60	698.36	698.01	697.54	696.98	696.34

NOTES:

1. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
3. FOR SLAB PLAN, SEE SHEET 31/ 49.
4. FOR RAILING PLAN, SEE SHEET 33/ 49.
5. FOR TRANSVERSE SECTION, SEE SHEET 36/ 49.
6. FOR FINAL DECK SURFACE ELEVATIONS, SEE SHEETS 42/ 49 AND 43/ 49.
7. FOR ADDITIONAL SCREED AND TOP OF HAUNCH ELEVATIONS, SEE SHEET 40/ 49.

SCREED AND TOP OF HAUNCH ELEVATIONS (2 OF 2)
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN 1807806

DESIGN AGENCY

DESIGNER CMR | CHECKER ABO

REVIEWER DWW 6/21/22

PROJECT ID 82382

SUBSET 41 | TOTAL 49

SHEET 1736 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/27/2022 TIME: 10:19:41 PM USER: BAVARELL
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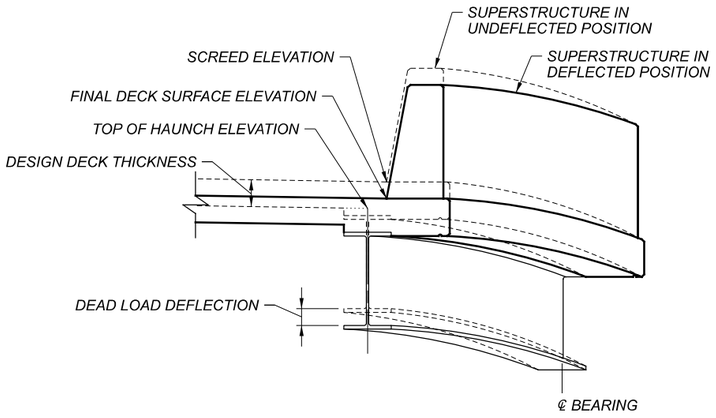
FINAL DECK SURFACE ELEVATIONS

		SPAN 1												SPAN 2								
		CL BRG. REAR ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	CL F.S. 1	0.7	0.8	0.9	CL BRG. PIER 1	0.1	CL F.S. 2	0.2	0.3	0.4	0.5	0.6	0.7	CL F.S. 3
LEFT TOE OF RAILING	STATION	1608+28.84	1608+41.34	1608+53.84	1608+66.34	1608+78.84	1608+91.34	1609+03.84	1609+08.84	1609+16.34	1609+28.84	1609+41.34	1609+53.84	1609+73.84	1609+85.84	1609+93.84	1610+13.84	1610+33.84	1610+53.84	1610+73.84	1610+93.84	1610+98.84
	ELEV.	696.16	696.29	696.41	696.54	696.66	696.79	696.91	696.96	697.04	697.16	697.29	697.41	697.61	697.73	697.81	698.01	698.21	698.41	698.61	698.81	698.86
GIRDER 1	STATION	1608+28.29	1608+40.79	1608+53.29	1608+65.79	1608+78.29	1608+90.79	1609+03.29	1609+08.29	1609+15.79	1609+28.29	1609+40.79	1609+53.29	1609+73.29	1609+85.29	1609+93.29	1610+13.29	1610+33.29	1610+53.29	1610+73.29	1610+93.29	1610+98.29
	ELEV.	696.18	696.31	696.43	696.56	696.68	696.81	696.93	696.98	697.06	697.18	697.31	697.43	697.63	697.75	697.83	698.03	698.23	698.43	698.63	698.83	698.88
BL RAMP B6	STATION	1608+26.65	1608+39.15	1608+51.65	1608+64.15	1608+76.65	1608+89.15	1609+01.65	1609+06.65	1609+14.15	1609+26.65	1609+39.15	1609+51.65	1609+71.65	1609+83.65	1609+91.65	1610+11.65	1610+31.65	1610+51.65	1610+71.65	1610+91.65	1610+96.65
	ELEV.	696.24	696.36	696.49	696.61	696.74	696.86	696.99	697.04	697.11	697.24	697.36	697.49	697.69	697.81	697.89	698.09	698.29	698.49	698.69	698.89	698.94
GIRDER 2	STATION	1608+25.01	1608+37.51	1608+50.01	1608+62.51	1608+75.01	1608+87.51	1609+00.01	1609+05.01	1609+12.51	1609+25.01	1609+37.51	1609+50.01	1609+70.01	1609+82.01	1609+90.01	1610+10.01	1610+30.01	1610+50.01	1610+70.01	1610+90.01	1610+95.01
	ELEV.	696.29	696.42	696.54	696.67	696.79	696.92	697.04	697.09	697.17	697.29	697.42	697.54	697.74	697.86	697.94	698.14	698.34	698.54	698.74	698.94	698.99
GIRDER 3	STATION	1608+21.74	1608+34.24	1608+46.74	1608+59.24	1608+71.74	1608+84.24	1608+96.74	1609+01.74	1609+09.24	1609+21.74	1609+34.24	1609+46.74	1609+66.74	1609+78.74	1609+86.74	1610+06.74	1610+26.74	1610+46.74	1610+66.74	1610+86.74	1610+91.74
	ELEV.	696.40	696.53	696.65	696.78	696.90	697.03	697.15	697.20	697.28	697.40	697.53	697.65	697.85	697.97	698.05	698.25	698.45	698.65	698.85	699.05	699.10
CROWN	STATION	1608+20.83	1608+33.33	1608+45.83	1608+58.33	1608+70.83	1608+83.33	1608+95.83	1609+00.83	1609+08.33	1609+20.83	1609+33.33	1609+45.83	1609+65.83	1609+77.83	1609+85.83	1610+05.83	1610+25.83	1610+45.83	1610+65.83	1610+85.83	1610+90.83
	ELEV.	696.43	696.56	696.68	696.81	696.93	697.06	697.18	697.23	697.31	697.43	697.56	697.68	697.88	698.00	698.08	698.28	698.48	698.68	698.88	699.08	699.13
GIRDER 4	STATION	1608+18.46	1608+30.96	1608+43.46	1608+55.96	1608+68.46	1608+80.96	1608+93.46	1608+98.46	1609+05.96	1609+18.46	1609+30.96	1609+43.46	1609+63.46	1609+75.46	1609+83.46	1610+03.46	1610+23.46	1610+43.46	1610+63.46	1610+83.46	1610+88.46
	ELEV.	696.15	696.28	696.40	696.53	696.65	696.78	696.90	696.95	697.03	697.15	697.28	697.40	697.60	697.72	697.80	698.00	698.20	698.40	698.60	698.80	698.85
RIGHT TOE OF RAILING	STATION	1608+17.92	1608+30.42	1608+42.92	1608+55.42	1608+67.92	1608+80.42	1608+92.92	1608+97.92	1609+05.42	1609+17.92	1609+30.42	1609+42.92	1609+62.92	1609+74.92	1609+82.92	1610+02.92	1610+22.92	1610+42.92	1610+62.92	1610+82.92	1610+87.92
	ELEV.	696.09	696.21	696.34	696.46	696.59	696.71	696.84	696.89	696.96	697.09	697.21	697.34	697.54	697.66	697.74	697.94	698.14	698.34	698.54	698.74	698.79



DEFLECTION DETAIL

NOTES:

1. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.
2. FOR SLAB PLAN, SEE SHEET 31 / 49.
3. FOR RAILING PLAN, SEE SHEET 33 / 49.
4. FOR TRANSVERSE SECTION, SEE SHEET 36 / 49.
5. FOR SCREED AND TOP OF HAUNCH ELEVATIONS, SEE SHEETS 40 / 49 AND 41 / 49.
6. FOR ADDITIONAL FINAL DECK SURFACE ELEVATIONS, SEE SHEET 43 / 49.

FINAL DECK SURFACE ELEVATIONS (1 OF 2)
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN 1807806
DESIGN AGENCY HDR
DESIGNER CMR | CHECKER ABO
REVIEWER DWW 6/21/22
PROJECT ID 82382
SUBSET 42 | TOTAL 49
SHEET 1737 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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FINAL DECK SURFACE ELEVATIONS

		SPAN 2				SPAN 3										
		CL F.S. 3	0.8	0.9	CL BRG. PIER 2	0.1	0.2	CL F.S. 4	0.3	0.4	0.5	0.6	0.7	0.8	0.9	CL BRG. FWD. ABUT.
LEFT TOE OF RAILING	STATION	1610+98.84	1611+13.84	1611+33.84	1611+53.84	1611+72.84	1611+91.84	1612+00.84	1612+10.84	1612+29.84	1612+48.84	1612+67.84	1612+86.84	1613+05.84	1613+24.84	1613+43.84
	ELEV.	698.86	699.00	699.12	699.19	699.19	699.13	699.09	699.02	698.86	698.63	698.35	698.02	697.62	697.18	696.67
GIRDER 1	STATION	1610+98.29	1611+13.29	1611+33.29	1611+53.29	1611+72.29	1611+91.29	1612+00.29	1612+10.29	1612+29.29	1612+48.29	1612+67.29	1612+86.29	1613+05.29	1613+24.29	1613+43.29
	ELEV.	698.88	699.02	699.14	699.21	699.21	699.16	699.12	699.05	698.89	698.66	698.39	698.05	697.66	697.21	696.71
BL RAMP B6	STATION	1610+96.65	1611+11.65	1611+31.65	1611+51.65	1611+70.65	1611+89.65	1611+98.65	1612+08.65	1612+27.65	1612+46.65	1612+65.65	1612+84.65	1613+03.65	1613+22.65	1613+41.65
	ELEV.	698.94	699.08	699.21	699.28	699.29	699.24	699.20	699.13	698.97	698.76	698.48	698.15	697.77	697.33	696.83
GIRDER 2	STATION	1610+95.01	1611+10.01	1611+30.01	1611+50.01	1611+69.01	1611+88.01	1611+97.01	1612+07.01	1612+26.01	1612+45.01	1612+64.01	1612+83.01	1613+02.01	1613+21.01	1613+40.01
	ELEV.	698.99	699.13	699.27	699.35	699.36	699.32	699.28	699.22	699.06	698.85	698.58	698.26	697.88	697.44	696.94
GIRDER 3	STATION	1610+91.74	1611+06.74	1611+26.74	1611+46.74	1611+65.74	1611+84.74	1611+93.74	1612+03.74	1612+22.74	1612+41.74	1612+60.74	1612+79.74	1612+98.74	1613+17.74	1613+36.74
	ELEV.	699.10	699.25	699.40	699.48	699.51	699.47	699.44	699.38	699.24	699.03	698.78	698.46	698.09	697.66	697.18
CROWN	STATION	1610+90.83	1611+05.83	1611+25.83	1611+45.83	1611+64.83	1611+83.83	1611+92.83	1612+02.83	1612+21.83	1612+40.83	1612+59.83	1612+78.83	1612+97.83	1613+16.83	1613+35.83
	ELEV.	699.13	699.28	699.43	699.52	699.55	699.52	699.48	699.43	699.29	699.09	698.83	698.52	698.15	697.72	697.24
GIRDER 4	STATION	1610+88.46	1611+03.46	1611+23.46	1611+43.46	1611+62.46	1611+81.46	1611+90.46	1612+00.46	1612+19.46	1612+38.46	1612+57.46	1612+76.46	1612+95.46	1613+14.46	1613+33.46
	ELEV.	698.85	699.00	699.16	699.25	699.29	699.26	699.23	699.18	699.05	698.85	698.60	698.30	697.94	697.52	697.05
RIGHT TOE OF RAILING	STATION	1610+87.92	1611+02.92	1611+22.92	1611+42.92	1611+61.92	1611+80.92	1611+89.92	1611+99.92	1612+18.92	1612+37.92	1612+56.92	1612+75.92	1612+94.92	1613+13.92	1613+32.92
	ELEV.	698.79	698.93	699.09	699.19	699.23	699.20	699.17	699.13	698.99	698.80	698.55	698.25	697.89	697.47	697.00

NOTES:

1. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.
2. FOR SLAB PLAN, SEE SHEET 31 / 49.
3. FOR RAILING PLAN, SEE SHEET 33 / 49.
4. FOR TRANSVERSE SECTION, SEE SHEET 36 / 49.
5. FOR SCREED AND TOP OF HAUNCH ELEVATIONS, SEE SHEETS 40 / 49 AND 41 / 49.
6. FOR ADDITIONAL FINAL DECK SURFACE ELEVATIONS, SEE SHEET 42 / 49.

FINAL DECK SURFACE ELEVATIONS (2 OF 2)
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN 1807806

DESIGN AGENCY

DESIGNER CMR | CHECKER ABO

REVIEWER DWW 6/21/22

PROJECT ID 82382

SUBSET 43 | TOTAL 49

SHEET 1738 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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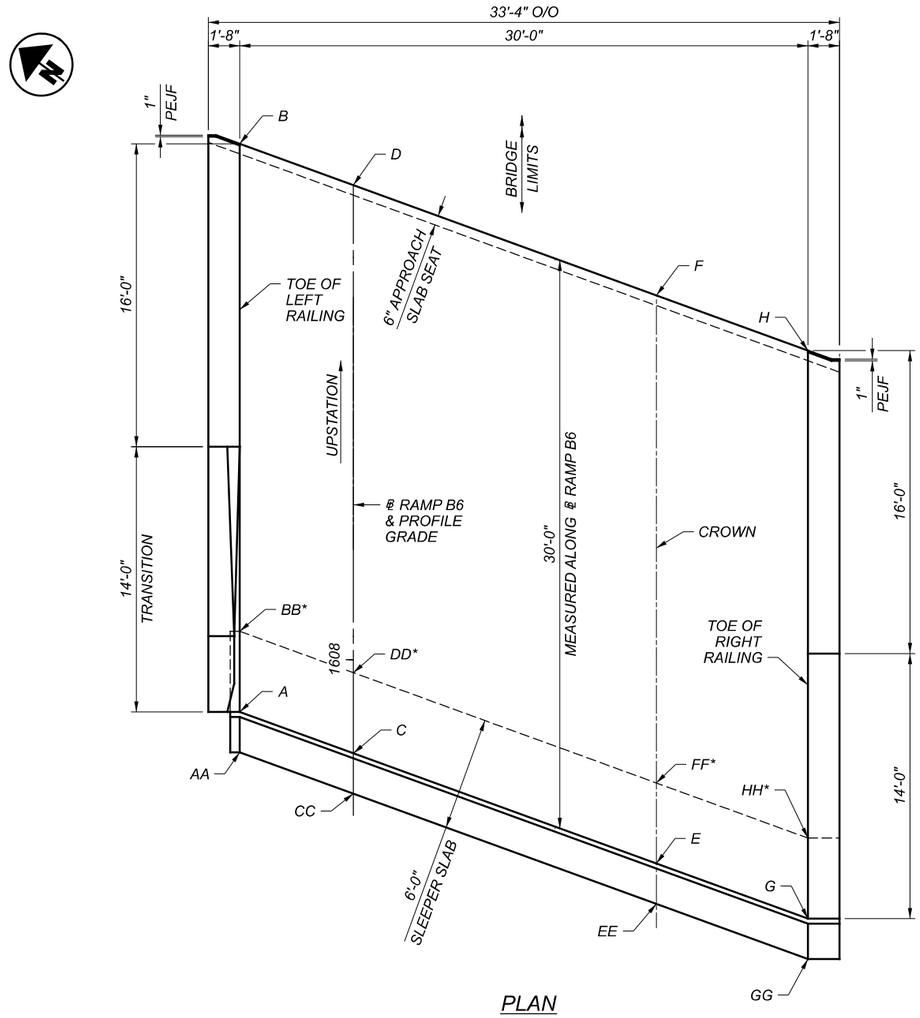
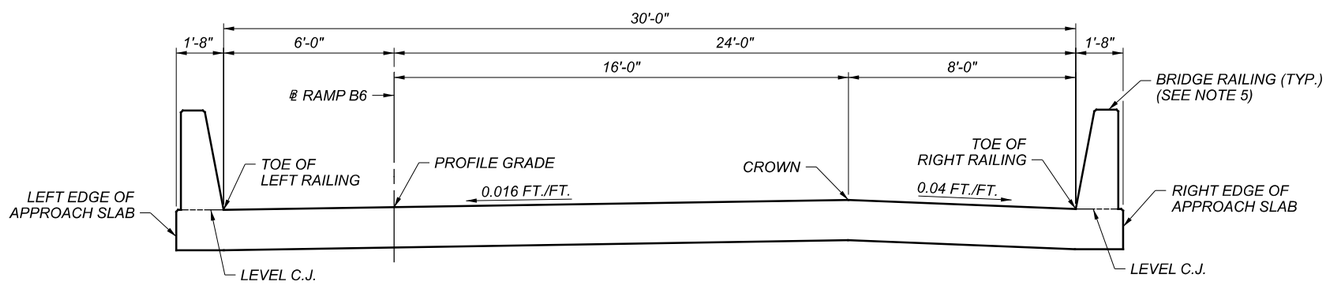
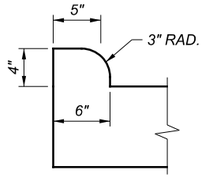


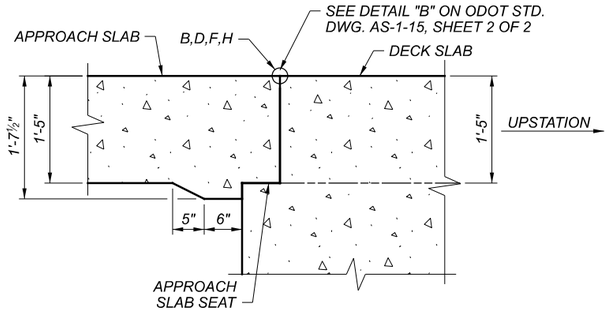
PLAN



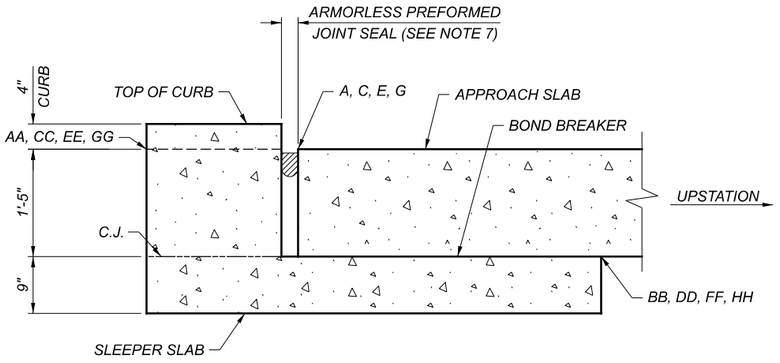
TYPICAL SECTION
(LOOKING UP STATION)



CONCRETE CURB DETAIL



APPROACH SLAB AT ABUTMENT
(SEE NOTE 1)



SLEEPER SLAB SECTION
(LEFT SIDE SHOWN) (SEE NOTE 2)

REAR APPROACH SLAB							
MARK	STATION	OFFSET	ELEVATION	MARK	STATION	OFFSET	ELEVATION
A	1607+97.24	6.00' LT	695.85	E	1607+89.23	16.00' RT	696.12
B	1608+27.24	6.00' LT	696.15	F	1608+19.23	16.00' RT	696.42
C	1607+95.06	0.00'	695.92	G	1607+86.32	24.00' RT	695.77
D	1608+25.06	0.00'	696.22	H	1608+16.32	24.00' RT	696.07

REAR SLEEPER SLAB							
MARK	STATION	OFFSET	ELEVATION	MARK	STATION	OFFSET	ELEVATION
AA	1607+95.11	6.00' LT	695.83	EE	1607+87.10	16.00' RT	696.10
BB*	1608+01.50	6.00' LT	694.47	FF*	1607+93.49	16.00' RT	694.74
CC	1607+92.93	0.00'	695.90	GG	1607+84.19	24.00' RT	695.75
DD*	1608+99.31	0.00'	694.55	HH*	1607+90.58	24.00' RT	694.40

* DENOTES TOP OF SLEEPER SLAB UNDER APPROACH SLAB.

NOTES:

1. FOR ADDITIONAL DETAILS, REINFORCING AND NOTES ON APPROACH SLAB AND SLEEPER SLABS, SEE ODOT STD. DWG. AS-1-15 AND AS-2-15.
2. APPROACH SLAB INSTALLATION SHALL BE TYPE C, PER ODOT STD. DWG. AS-2-15.
3. STATION AND OFFSETS ARE MEASURED FROM ℄ RAMP B6.
4. FOR END DIAPHRAGM DETAILS, SEE SHEETS 37 / 49 THRU 39 / 49.
5. FOR APPROACH SLAB BRIDGE RAILING DETAILS, SEE SHEETS 34 / 49 THRU 35 / 49.
6. THE CONCRETE FOR THE BRIDGE RAILING MOUNTED ON THE APPROACH SLABS SHALL BE PAID FOR UNDER ITEM 511, CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET). THE CONCRETE AND REINFORCING STEEL FOR THE APPROACH SLAB SHALL BE PAID FOR UNDER ITEM 526, REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN. THE CONCRETE AND REINFORCING STEEL FOR THE SLEEPER SLAB INCLUDING CURB AND RAILING SHALL BE PAID FOR UNDER ITEM 526, TYPE C INSTALLATION.
7. THE ARMORLESS PREFORMED JOINT SEAL SHALL BE PAID FOR UNDER ITEM 516, ARMORLESS PREFORMED JOINT SEAL, AS PER PLAN.

REAR ABUTMENT APPROACH SLAB PLAN
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER

SFN 1807806
DESIGN AGENCY HDR
DESIGNER CMR | CHECKER JML
REVIEWER DWW 6/21/22
PROJECT ID 82382
SUBSET 44 | TOTAL 49
SHEET 1739 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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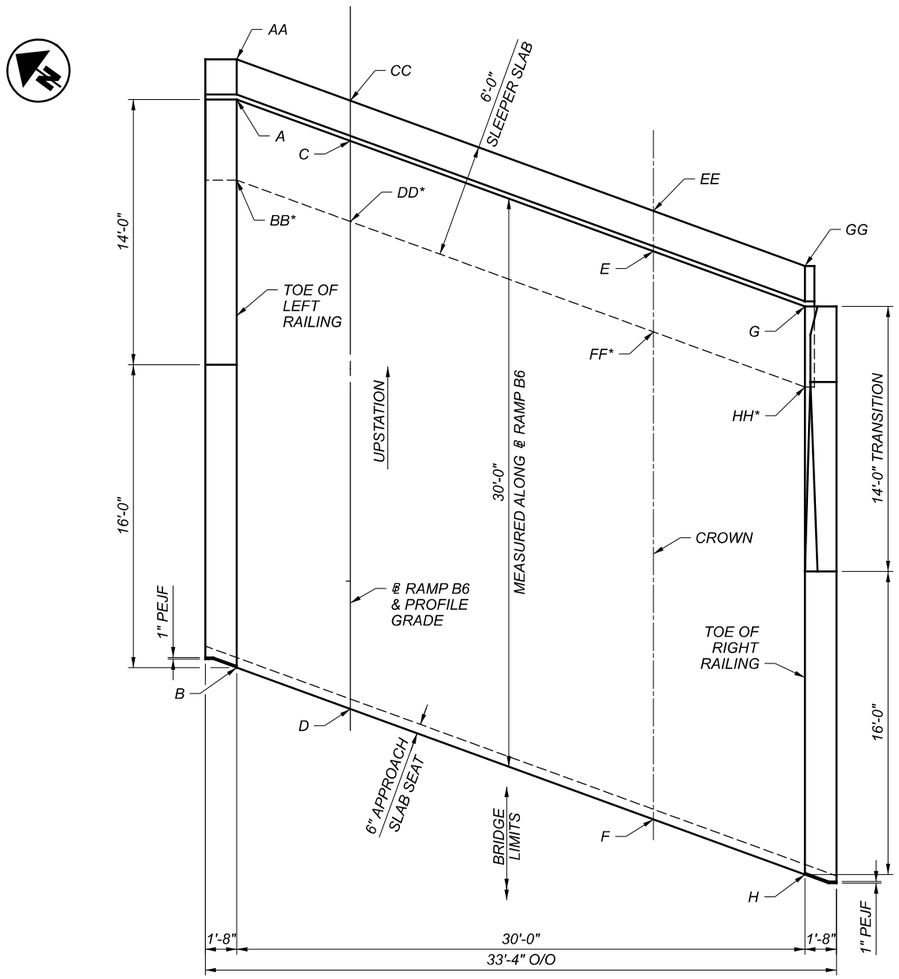
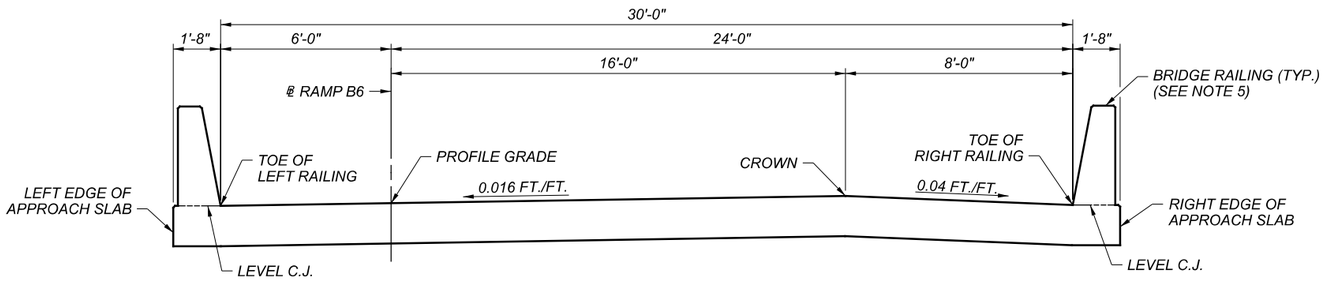
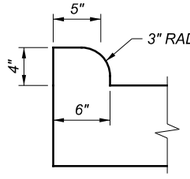


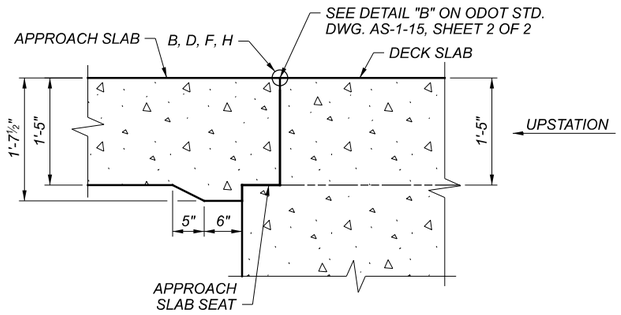
PLAN



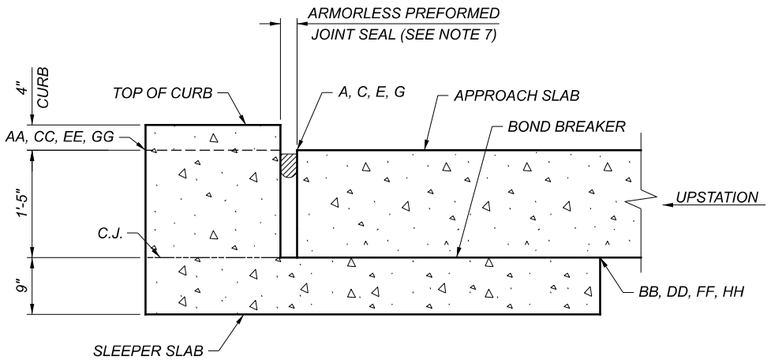
TYPICAL SECTION
(LOOKING UP STATION)



CONCRETE CURB DETAIL



APPROACH SLAB AT ABUTMENT
(SEE NOTE 1)



SLEEPER SLAB SECTION
(RIGHT SIDE SHOWN) (SEE NOTE 2)

FORWARD APPROACH SLAB							
MARK	STATION	OFFSET	ELEVATION	MARK	STATION	OFFSET	ELEVATION
A	1613+75.43	6.00' LT	695.71	E	1613+67.42	16.00' RT	696.32
B	1613+45.43	6.00' LT	696.63	F	1613+37.42	16.00' RT	697.20
C	1613+73.25	0.00'	695.87	G	1613+64.51	24.00' RT	696.09
D	1613+43.25	0.00'	696.78	H	1613+34.51	24.00' RT	696.96

FORWARD SLEEPER SLAB							
MARK	STATION	OFFSET	ELEVATION	MARK	STATION	OFFSET	ELEVATION
AA	1613+77.56	6.00' LT	696.63	EE	1613+69.55	16.00' RT	696.25
BB*	1613+71.17	6.00' LT	694.43	FF*	1613+63.17	16.00' RT	695.03
CC	1613+75.38	0.00'	695.80	GG	1613+66.64	24.00' RT	696.02
DD*	1613+68.99	0.00'	694.59	HH*	1613+60.26	24.00' RT	694.80

* DENOTES TOP OF SLEEPER SLAB UNDER APPROACH SLAB.

NOTES:

1. FOR ADDITIONAL DETAILS, REINFORCING AND NOTES ON APPROACH SLAB AND SLEEPER SLABS, SEE ODOT STD. DWG. AS-1-15 AND AS-2-15.
2. APPROACH SLAB INSTALLATION SHALL BE TYPE C, PER ODOT STD. DWG. AS-2-15.
3. STATION AND OFFSETS ARE MEASURED FROM ℄ RAMP B6.
4. FOR END DIAPHRAGM DETAILS, SEE SHEETS 37 / 49 THRU 39 / 49.
5. FOR APPROACH SLAB BRIDGE RAILING DETAILS, SEE SHEETS 34 / 49 THRU 35 / 49.
6. THE CONCRETE FOR THE BRIDGE RAILING MOUNTED ON THE APPROACH SLABS SHALL BE PAID FOR UNDER ITEM 511, CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET). THE CONCRETE AND REINFORCING STEEL FOR THE APPROACH SLAB SHALL BE PAID FOR UNDER ITEM 526, REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN. THE CONCRETE AND REINFORCING STEEL FOR THE SLEEPER SLAB INCLUDING CURB AND RAILING SHALL BE PAID FOR UNDER ITEM 526, TYPE C INSTALLATION.
7. THE ARMORLESS PREFORMED JOINT SEAL SHALL BE PAID FOR UNDER ITEM 516, ARMORLESS PREFORMED JOINT SEAL, AS PER PLAN.

FORWARD ABUTMENT APPROACH SLAB PLAN
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN 1807806
DESIGN AGENCY HDR
DESIGNER CMR | CHECKER JML
REVIEWER DWW 6/21/22
PROJECT ID 82382
SUBSET 45 | TOTAL 49
SHEET 1740 | TOTAL 2338

CUY-90-16.28 (CCG3A)

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MARK	NUMBER	LENGTH	MATERIAL	WEIGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
REAR ABUTMENT												
SUB-TOTAL					ITEM 509E10000, EPOXY COATED REINFORCING STEEL							

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
FORWARD ABUTMENT												
SUB-TOTAL					ITEM 509E10000, EPOXY COATED REINFORCING STEEL							

NOTES:

1. *FOR GENERAL NOTES, SEE SHEETS* 3/49 *THRU* 4/49.
2. *FOR BAR BENDING DIAGRAMS AND ADDITIONAL NOTES, SEE SHEET* 49/49.

REINFORCING STEEL LIST (1 OF 4)
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN 1807806

DESIGN AGENCY

HDR

DESIGNER	CHECKER
ADW	CMR

REVIEWER DWW 6/21/22

PROJECT ID 82382

SUBSET	TOTAL
46	49

SHEET	TOTAL
1741	2338

CUY-90-16.28 (CCG3A)

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MARK	NUMBER	LENGTH	MATERIAL	WEIGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
REAR ABUTMENT END DIAPHRAGM												
SUB-TOTAL						ITEM 509E10000, EPOXY COATED REINFORCING STEEL						

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
FORWARD ABUTMENT END DIAPHRAGM												
SUB-TOTAL						ITEM 509E10000, EPOXY COATED REINFORCING STEEL						

NOTES:

1. *FOR GENERAL NOTES, SEE SHEETS* 3 / 49 *THRU* 4 / 49 .
2. *FOR BAR BENDING DIAGRAMS AND ADDITIONAL NOTES, SEE SHEET* 49 / 49 .

REINFORCING STEEL LIST (2 OF 4)
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN 1807806

DESIGN AGENCY

DESIGNER ADW | CHECKER CMR

REVIEWER DWW 6/21/22

PROJECT ID 82382

SUBSET 47 | TOTAL 49

SHEET 1742 | TOTAL 2338

CUY-90-16.28 (CCG3A)

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
PIER 1												
SUB-TOTAL						ITEM 509E10000, EPOXY COATED REINFORCING STEEL						

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
PIER 2												
SUB-TOTAL						ITEM 509E10000, EPOXY COATED REINFORCING STEEL						

NOTES:

1. *FOR GENERAL NOTES, SEE SHEETS* 3 / 49 *THRU* 4 / 49 .
2. *FOR BAR BENDING DIAGRAMS AND ADDITIONAL NOTES, SEE SHEET* 49 / 49 .

REINFORCING STEEL LIST (3 OF 4)
CUY-90-1652S (BRIDGE 12)
RAMP B6 OVER RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5

SFN 1807806

DESIGN AGENCY

HDR

DESIGNER	CHECKER
ADW	CMR

REVIEWER DWW 6/21/22

PROJECT ID 82382

SUBSET	TOTAL
48	49

SHEET	TOTAL
1743	2338

CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/27/2022 TIME: 10:20:25 PM USER: BAVARELL
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MARK	NUMBER	LENGTH	MATERIAL	WEIGHT	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
SUPERSTRUCTURE												
SUB-TOTAL						ITEM 509E10000, EPOXY COATED REINFORCING STEEL						

MARK	NUMBER	LENGTH	MATERIAL	WEIGHT OR LENGTH	TYPE	DIMENSIONS						
						A	B	C	D	E	R	INC.
RAILING												
SUB-TOTAL						ITEM 509E10000, EPOXY COATED REINFORCING STEEL						
SUB-TOTAL						ITEM 509E30020, NO. 4 GFRP DEFORMED BARS						

BAR BENDING DIAGRAMS

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3/ 49 THRU 4/ 49.

2. THE LETTER PREFIX INDICATES BAR LOCATION. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE TWO DIGITS WHEN FOUR DIGITS ARE USED INDICATES BAR SIZE NUMBER. ALL REINFORCING IS ASSUMED EPOXY COATED UNLESS OTHERWISE INDICATED BY A LETTER SUFFIX. IF A LETTER SUFFIX IS PROVIDED, IT INDICATES BAR OR BAR COATING TYPE. EXAMPLE: R401G

   R: THE LOCATION OF THE BARS IN THE STRUCTURE (BRIDGE RAILING)
   4: BAR SIZE DIMENSION NO. 4
   01: SEQUENCE NUMBER
   G: GFRP

   THE FOLLOWING IS A LIST OF BAR LOCATION PREFIXES:
   - S: SUPERSTRUCTURE
   - R: RAILING
   - RD: REAR ABUTMENT END DIAPHRAGM
   - FD: FORWARD ABUTMENT END DIAPHRAGM
   - RA: REAR ABUTMENT
   - FA: FORWARD ABUTMENT
   - 1P: PIER 1
   - 2P: PIER 2
   - DG: DIAPHRAGM GUIDE

   THE FOLLOWING IS A LIST OF BAR MATERIAL SUFFIXES:
   - G: GFRP

3. BAR DIMENSIONS ARE SHOWN OUT-TO-OUT UNLESS OTHERWISE NOTED. "STD." WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BAR BEND AT THE END OF THE BAR. STRAIGHT BARS ARE INDICATED BY "STR."

4. BAR MATERIAL:

   "STL" = GRADE 60 STEEL
   "GFRP" = GLASS FIBER REINFORCED POLYMER

REINFORCING STEEL LIST (4 OF 4)
CUY-90-1652S (BRIDGE 12)
RAMP IJ3, CR-721 (E. 14TH ST.), AND RAMP H5
RAMP B6 OVER RAMP IJ3

SFN 1807806
DESIGN AGENCY HDR
DESIGNER ADW | CHECKER CMR
REVIEWER DWW 6/21/22
PROJECT ID 82382
SUBSET 49 | TOTAL 49
SHEET 1744 | TOTAL 2338

CUY-90-16.28 (CCG3A)