WEST BRIDGE PLANS
FOR
PARAGON STAR DEVELOPMENT – LEE'S SUMMIT, MO

View High Dr, View High Pkwy, River Rd
Sections 33 & 34–Township 48–Range 32
City of Lee's Summit
Jackson County, Missouri

Design Speed = 40 mph

9/2/20 City Comments

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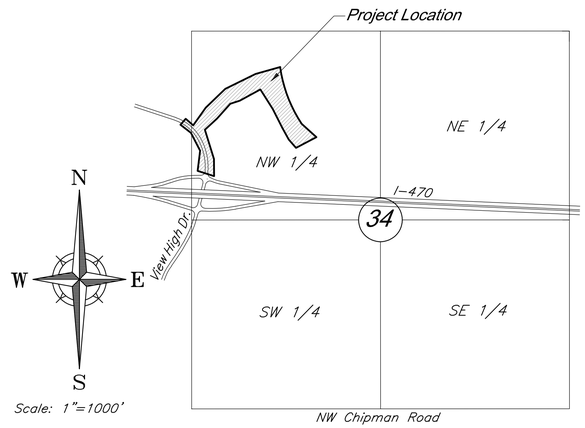
Summary of Quantities

Item No.	Description	Unit	Unit Quantity
1	West Bridge	L.S.	1

PROJECT BENCHMARK

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I-470 bridge spanning View High Drive.
EL=833.80



Scale: 1"=1000'

VICINITY MAP

Section 33 & 34-T48N-R32W

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PROJECT ENGINEER: _____ DATE: 9/17/20

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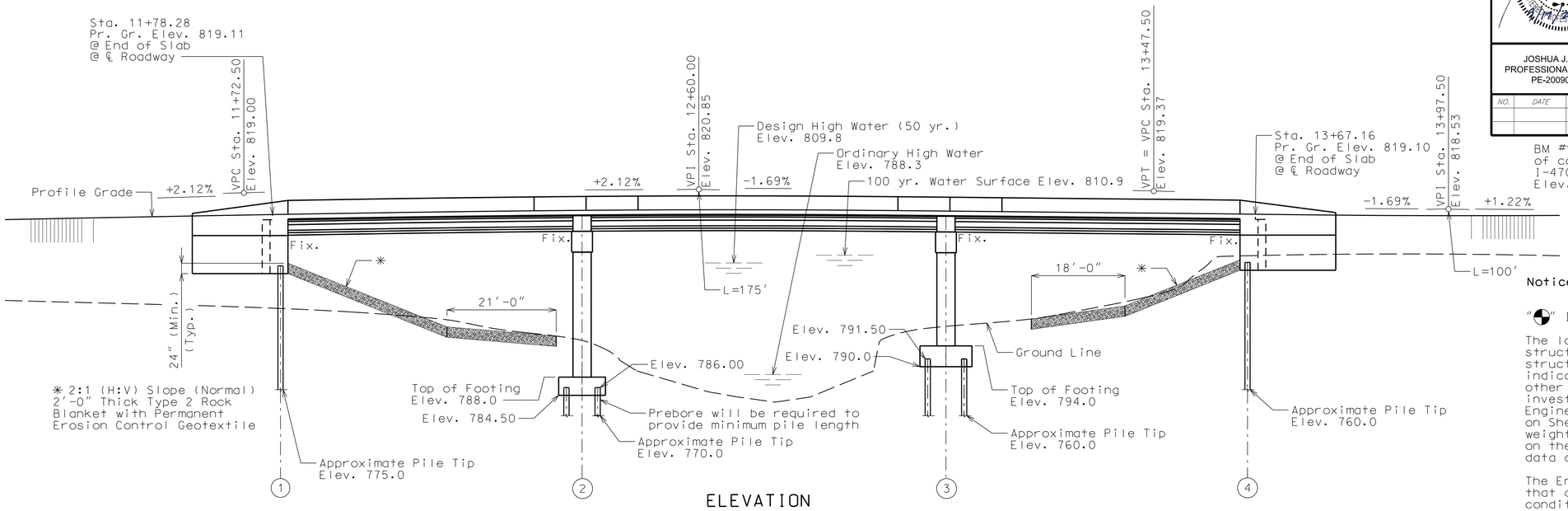
9/17/20 – FOR CONSTRUCTION

WEST BRIDGE
(58'-70'-58') PRESTRESSED CONCRETE NU-GIRDER SPANS

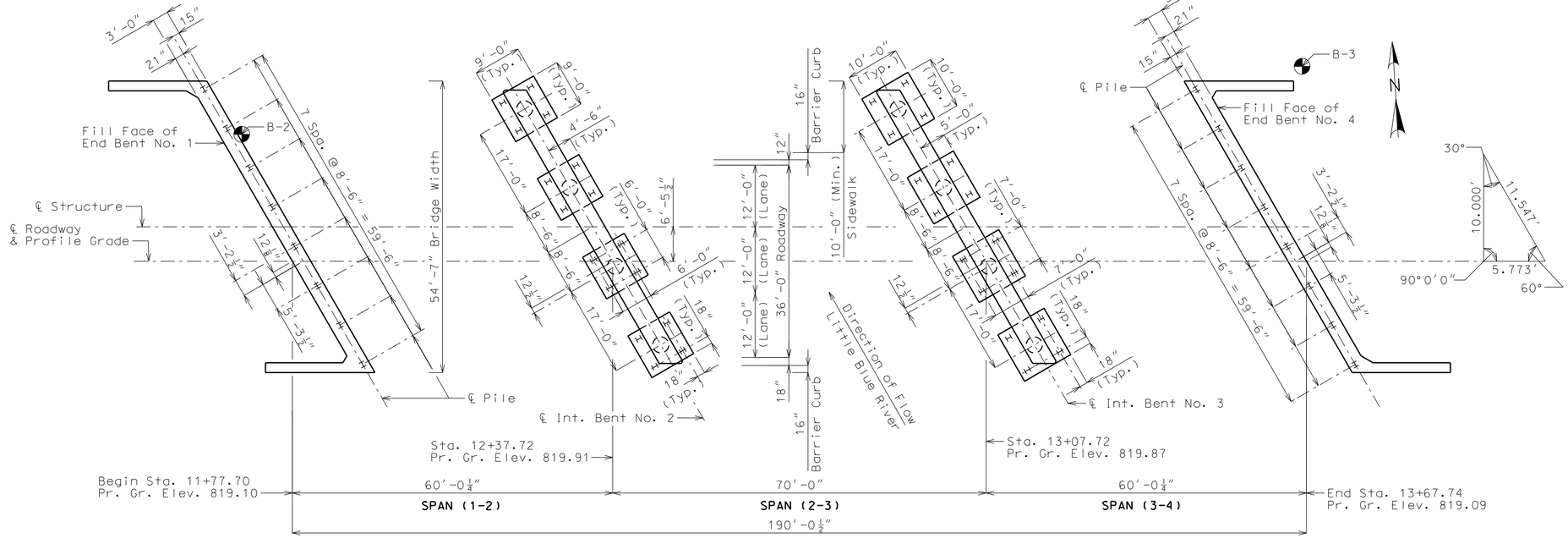
SEC/SUR 34 TWP 48N RGE 32W



ELEVATION

(Looking North)

(Aesthetics not shown for clarity)



PLAN

Note: This drawing is not to scale. Follow dimensions.

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SHEET NO.	1
TOTAL SHEETS	30

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West Bridge Plans

Paragon Star Development

Lee's Summit, Missouri

NO.	DATE	REVISIONS	BY	APPROVED

BM #11 Chiseled "L" on top Northeast corner of concrete guardrail at Northeast corner of I-470 Bridge spanning View High Drive. Elev. = 833.80

Notice and Disclaimer Regarding Boring Log Data

"⊕" Indicates location of borings.

The locations of all subsurface borings for this structure are shown on the plan sheet(s) for this structure. The boring data for all locations indicated, as well as any other boring logs or other factual records of subsurface data and investigations performed by the Geotechnical Engineer for the design of the bridge, are shown on Sheet No. 30. No greater significance or weight should be given to the boring data depicted on the plan sheets than is given to the subsurface data available from the Engineer or elsewhere.

The Engineer does not represent or warrant that any such boring data accurately depicts the conditions to be encountered in constructing this bridge. A contractor assumes all risks it may encounter in basing its bid prices, time or schedule of performance on the boring data depicted here, or on any other documentation not expressly warranted, which the contractor may obtain from the Engineer.

Hydrologic Data
Drainage Area = 56.8 (sq. mi.) Design Flood Frequency = 50 years Design Flood Discharge = 4,794 cfs Design Flood (D.F.) Elevation = 809.8
Base Flood (100-year)
Base Flood Elevation = 811.28 Base Flood Discharge = 5,636 cfs Estimated Backwater = 0.2 ft Average Velocity thru Opening = 2.6 ft/s
Freeboard (50-year)
Design High Water = 809.8
Freeboard = 2.6 ft
Roadway Overtopping
Overtopping Flood Frequency >500 years

Notes:

Roadway fill shall be completed to the final roadway section and up to the elevation of the bottom of the concrete beam within the limits of the structure and for not less than 25 feet in back of the fill face of the end bents before any piles are driven for any bents falling within the embankment section.

All bents are parallel.

All longitudinal dimensions shown are horizontal.

BRIDGE: WEST PARAGON PARKWAY OVER LITTLE BLUE RIVER

General Notes:

Design Specifications:
2012 AASHTO LRFD Bridge Design Specifications (6th Ed.) and 2013 Interim Revisions.
Seismic Design Category = A
All referenced specifications shall refer to Missouri Standard Specifications for Highway Construction unless otherwise noted. Construction of the bridge shall conform to the MoDOT standard specificiation. Payment for construction of the bridge shall be completely covered by the lump sum.

Design Loading:
Vehicular = HL-93
Future Wearing Surface = 35 lb/sf
Earth = 120 lb/cf
Equivalent Fluid Pressure = 70 lb/cf

Design Unit Stresses:

Class B Concrete (Substructure)	f'c = 4,000 psi
Class B-1 Concrete (Barrier Curb)	f'c = 4,000 psi
Class B-2 Concrete (Superstructure except Barrier Curb	f'c = 4,000 psi
Reinforcing Steel (Grade 60)	fy = 60,000 psi
Structural Steel HP Pile (ASTM A709 Grade 50S)	fy = 50,000 psi

For Precast Prestressed Panel Stresses, see Sheet No. 17.
For Prestressed Girder Stresses, See Sheets No. 14 & 15.

Neoprene Pads:
Plain and Laminated Neoprene Bearing Pads shall be 60 durometer and shall be in accordance with Sec 716.

Joint Filler:
All joint filler shall be in accordance with Section 1057 for preformed sponge rubber expansion and partition joint filler, except as noted.

Reinforcing Steel:
Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.
All reinforcement shall be epoxy coated.

Minimum clearance between galvanized piles and uncoated (plain) reinforcing steel including bar supports shall be 1 1/2". Nylon, PVC, or other polyethylene spacers shall be used to maintain clearance. Nylon cable ties shall be used to bind the spacers to the reinforcement.

Miscellaneous:
City Construction personnel will indicate the type of joint filler option used under the precast panels for this structure:

☐ Constant Joint Filler

☐ Variable Joint Filler

FOUNDATION DATA

TYPE	DESIGN DATA		BENT NUMBER 1	2	3	4
Load Bearing Pile	Pile Type and Size		HP12x53	HP12x53	HP12x53	HP12x53
	Number	ea	8	16	16	8
	Approximate Length per Each	ft	64	16	32	50
	Pile Point Reinforcement	ea	8	16	16	8
	Min. Galvanized Penetration (Elev.)	ft	745	770	760	760
	Est. Max Scour Depth 500 (Elev.)	ft	794	790	791	790
	Pile Driving Verification Method		WEAP	WEAP	WEAP	WEAP
	Resistance Factor		0.5	0.5	0.5	0.5
	Minimum Nominal Axial Compressive Resistance	kip	518	504	522	518

WEAP = Wave Equation Analysis of Piles

Minimum Nominal Axial Compressive Resistance = Maximum Factored Loads/Resistance Factor

Prebore for piles at Bent No. 2 to elevation 770.0.

HP piles are anticipated to be driven to refusal on rock. Review all borings for depth of rock and restrict driving as appropriate to comply with hard rock driving criteria in accordance with Sec 702.

All piles at End Bent 1 shall be galvanized down to the minimum galvanized penetration (elevation) of 785. All piles at Int. Bent 2 and 3 and End Bent 4 shall be completely galvanized.

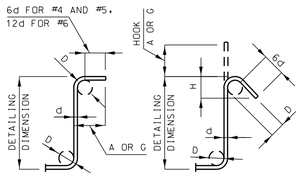
Pile point reinforcement need not be galvanized. Shop drawings will not be required for pile point reinforcement.

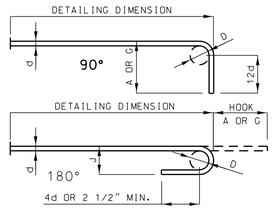
The contractor shall make every effort to achieve the minimum galvanized penetration (elevation) shown on the plans for all piles. Deviations in penetration less than 5 feet of the minimum will be considered acceptable provided the contractor makes the necessary corrections to ensure the minimum penetration is achieved on subsequent piles.

Method of forming the slab shall be as shown on the plans and in accordance with Sec 703. All hardware for forming the slab to be left in place as a permanent part of the structure shall be coated in accordance with ASTM A123 or ASTM B633 with a thickness class SC 4 and a finish type I, II, or III.

Contractor to provide shoring plan for piers signed and sealed by a professional engineer licensed in the State of Missouri.

Contractor shall provide rebar shop drawings for review prior to ordering reinforcement.





STIRRUP HOOK DIMENSIONS			
GRADES 40 - 50 - 60 KSI			
BAR SIZE	D (IN.)	90° HOOK	135° HOOK
		HOOK A OR G	HOOK A OR G	APPROX. H
#4	2"	4 1/2"	4 1/2"	3"
#5	2 1/2"	6"	5 1/2"	3 3/4"
#6	4 1/2"	12"	8"	4 1/2"

NOTE: UNLESS OTHERWISE NOTED, DIAMETER "D" IS THE SAME FOR ALL BENDS AND HOOKS ON A BAR.

END HOOK DIMENSIONS				
BAR SIZE	D (IN.)	ALL GRADES		
		180° HOOKS		90° HOOKS
		A OR G	J	A OR G
#3	2 1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	12"
#7	5 1/4"	10"	7"	14"
#8	6"	11"	8"	16"
#9	9 1/2"	15"	11 3/4"	19"
#10	10 3/4"	17"	13 1/4"	22"
#11	12"	19"	14 3/4"	2'-0"
#14	18 1/4"	2'-3"	21 3/4"	2'-7"

NOTE:

ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEGREE ARE TO BE BENT WITH SAME PROCEDURE AS FOR 90 DEGREE STANDARD HOOKS.
HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE PROCEDURES AS SHOWN ON THIS SHEET.
E = EPOXY COATED REINFORCEMENT.
S = STIRRUP.
X = BAR IS INCLUDED IN SUBSTRUCTURE QUANTITIES.
V = BAR DIMENSIONS VARY IN EQUAL INCREMENTS BETWEEN DIMENSIONS SHOWN ON THIS LINE AND THE FOLLOWING LINE.
NO. EA. = NUMBER OF BARS OF EACH LENGTH.
NOMINAL LENGTHS ARE BASED ON OUT TO OUT DIMENSIONS SHOWN IN BENDING DIAGRAMS AND ARE LISTED FOR FABRICATORS USE. (NEAREST INCH)
ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.
PAYWEIGHTS ARE BASED ON ACTUAL LENGTHS.
FOUR ANGLE OR CHANNEL SPACERS ARE REQUIRED FOR EACH COLUMN SPIRAL. SPACERS ARE TO BE PLACED ON INSIDE OF SPIRALS. LENGTH AND WEIGHT OF COLUMN SPIRALS DO NOT INCLUDE SPLICES OR SPACERS.
REINFORCING STEEL (GRADE 60) FY = 60,000 PSI.

For all drill and grout applications the contractor shall use one of the qualified resin anchor systems in accordance with Sec. 1039

GENERAL NOTES

Note: This drawing is not to scale. Follow dimensions.

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SHEET NO.	2
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West Bridge Plans
Paragon Star Development
Lee's Summit, Missouri

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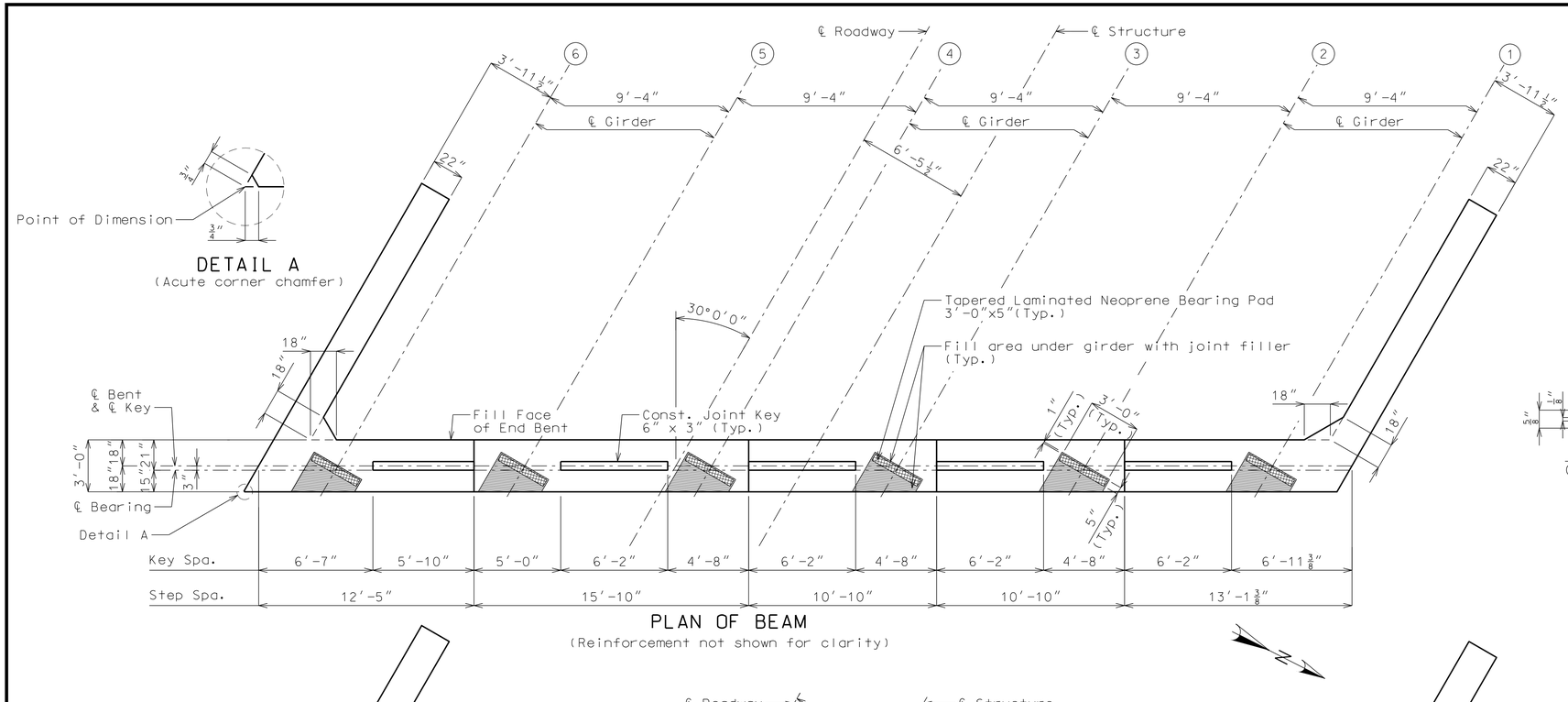
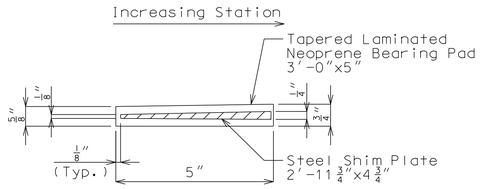
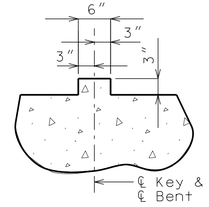
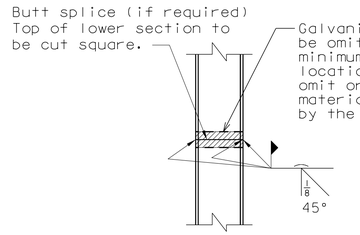




BEARING PAD DETAIL



SECTION THRU KEY



DETAIL OF STEEL PILE SPLICE

Notes:

For details of End Bent No. 1 not shown, see Sheets No. 4 & 5.

For details of Vertical Drain at End Bents, see Sheet No. 6.

Reinforcing steel shall be shifted to clear piles. U-bars shall clear piles by at least 1½″.

All concrete in the end bent above top of beam and below top of slab shall be Class B-2.

For reinforcement of Barrier Curb, see Sheets No. 21-23 and 26.

The U-bars and Pairs-V bars shall be placed parallel to ℄ Roadway.

DETAILS OF END BENT NO. 1

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SHEET NO.	3
TOTAL SHEETS	30

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West Bridge Plans

Paragon Star Development

Lee's Summit, Missouri

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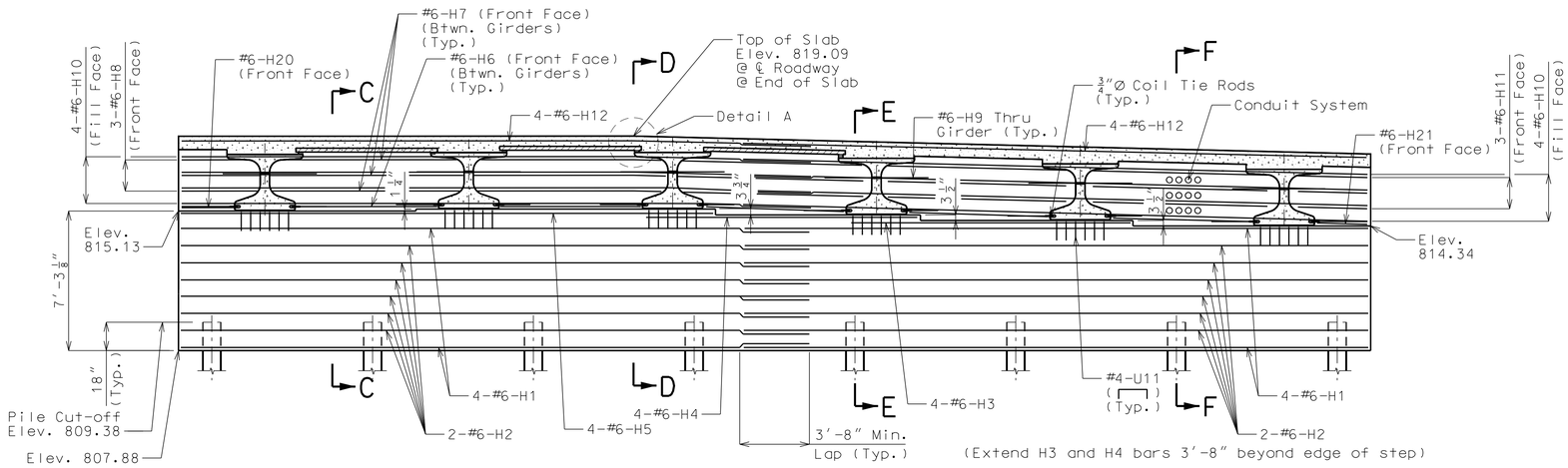
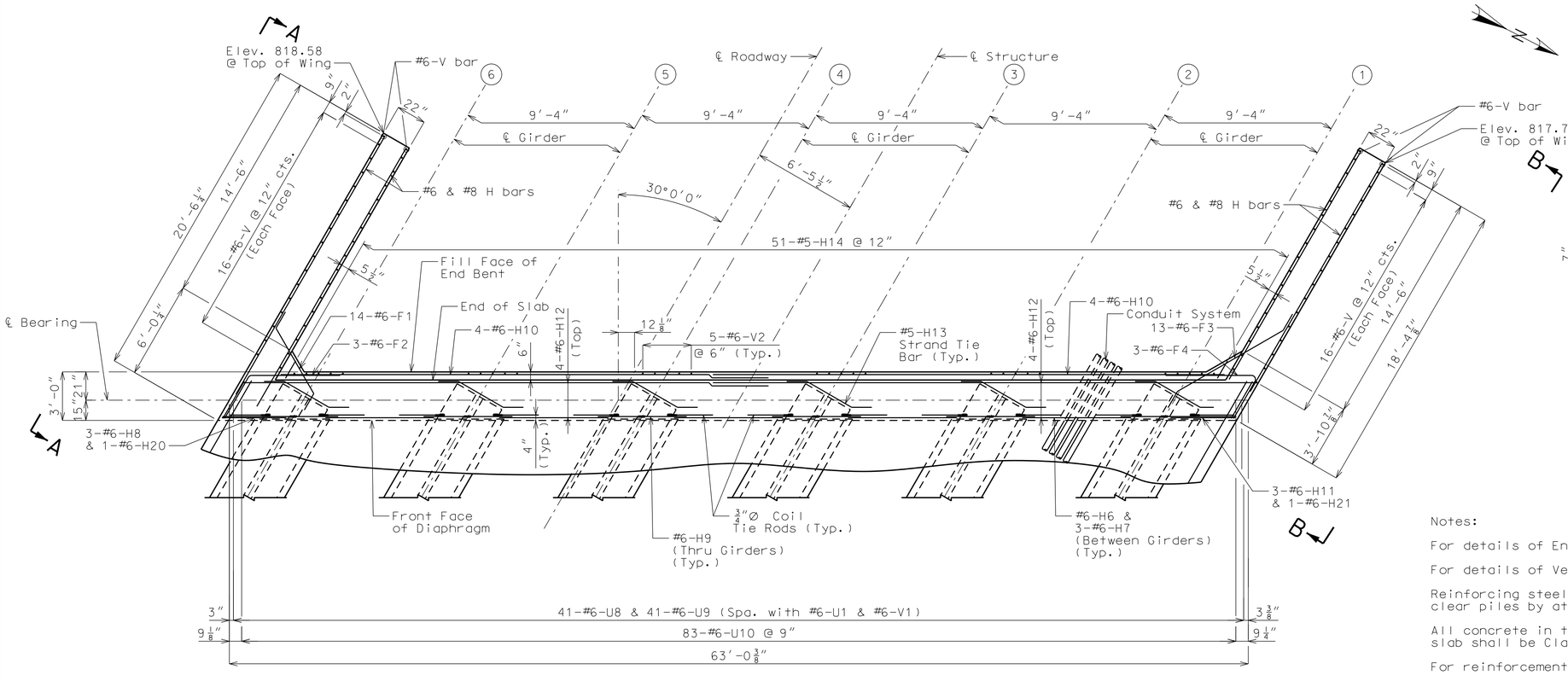


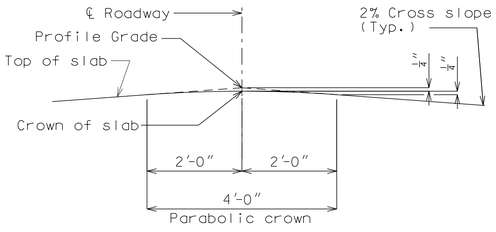
SECTION NEAR END BENT

(Stirrup reinforcement and keys not shown for clarity)

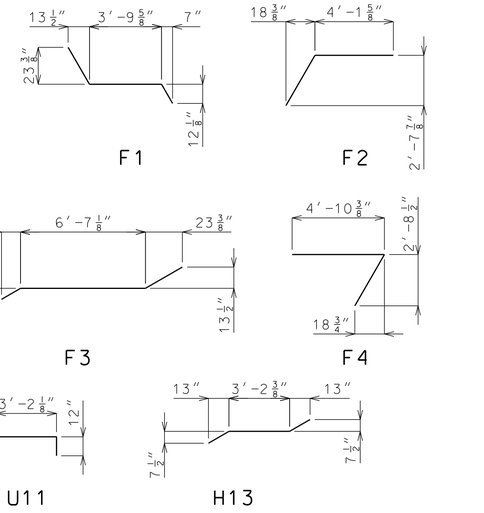


PART PLAN

(Note: Steps and keys not shown for clarity)



DETAIL A



BAR BENDING DIAGRAMS

Notes:

For details of End Bent No. 1 not shown, see Sheets No. 3 and 5.

For details of Vertical Drain at End Bents, see Sheet No. 6.

Reinforcing steel shall be shifted to clear piles. U-bars shall clear piles by at least 1½".

All concrete in the end bent above top of beam and below top of slab shall be Class B-2.

For reinforcement of Barrier Curb, see Sheets No. 21-23 and 26.

The U-bars and Pairs-V bars shall be placed parallel to ℄ Structure.

Reinforcing steel shall be shifted as necessary to miss conduit system.

For Conduit Details, see Sheet No. 26 and 27.

For Elevations A-A & B-B, See Sheet No. 5.

For Sections C-C, D-D, E-E & F-F See Sheet No. 5.

DETAILS OF END BENT NO. 1

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SHEET NO.	4
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SHEET NO.:	5
TOTAL SHEETS	30

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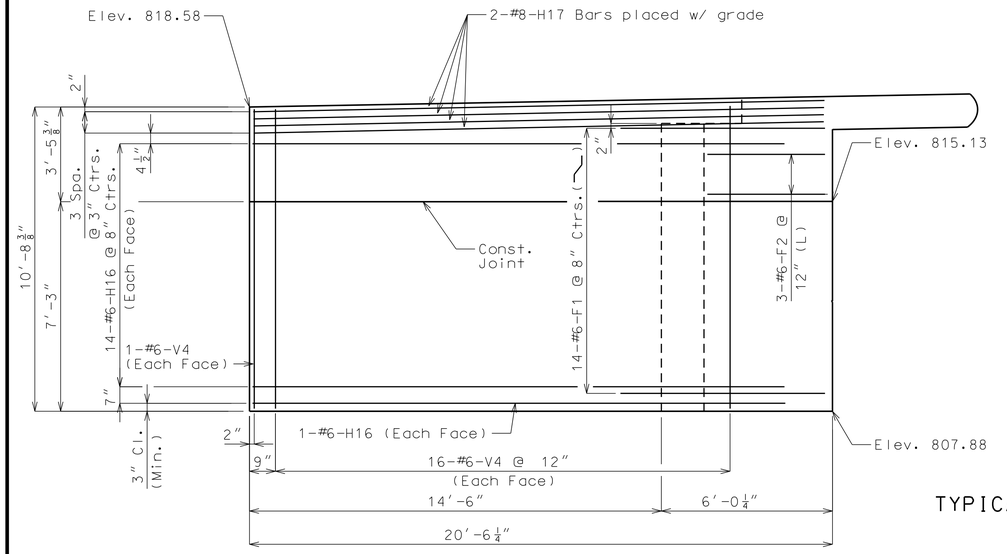
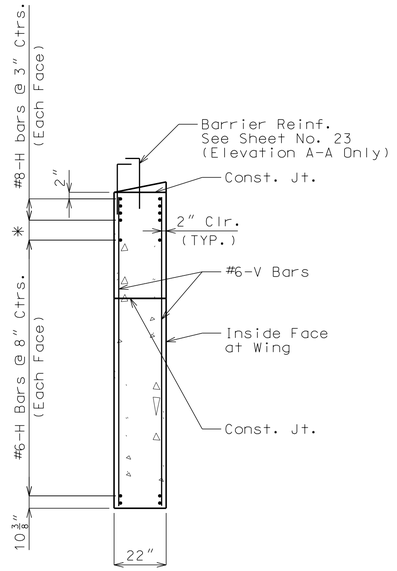
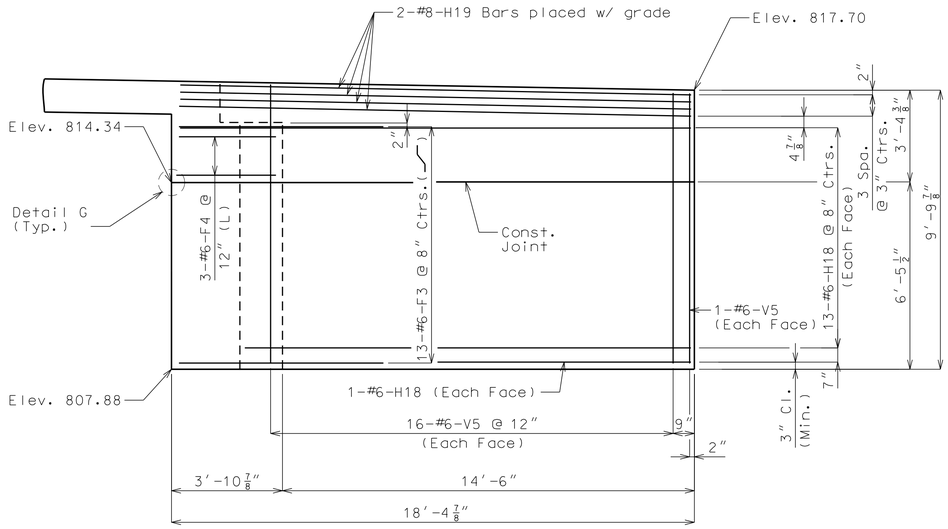


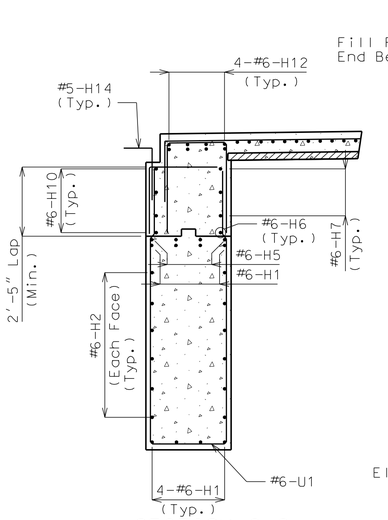
ELEVATION A-A



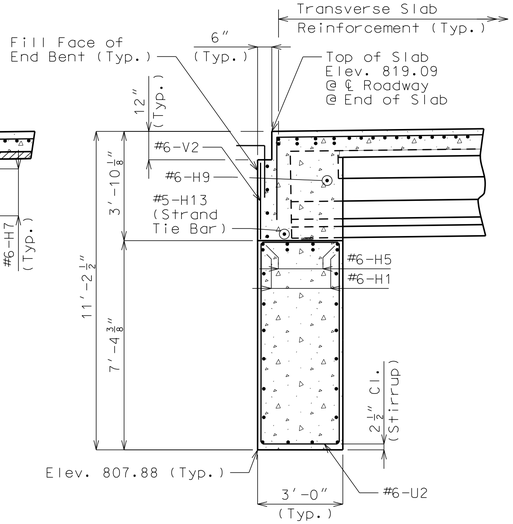
TYPICAL SECTION THRU ELEVATION A-A
Looking down station
* Varies



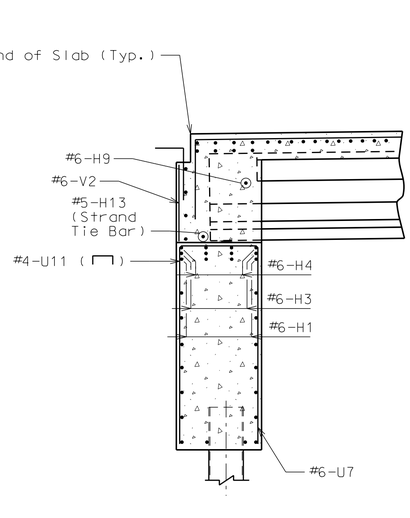
ELEVATION B-B



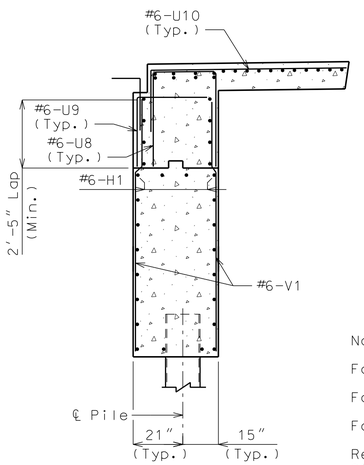
SECTION C-C



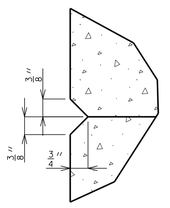
SECTION D-D



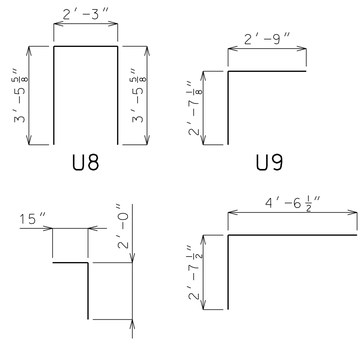
SECTION E-E



SECTION F-F



DETAIL G



BAR BENDING DIAGRAMS

DETAILS OF END BENT NO. 1

Notes:

For details of End Bent No. 1 not shown, See Sheets No. 3 and 4.

For location of Elevations A-A & B-B, See Sheet No. 4.

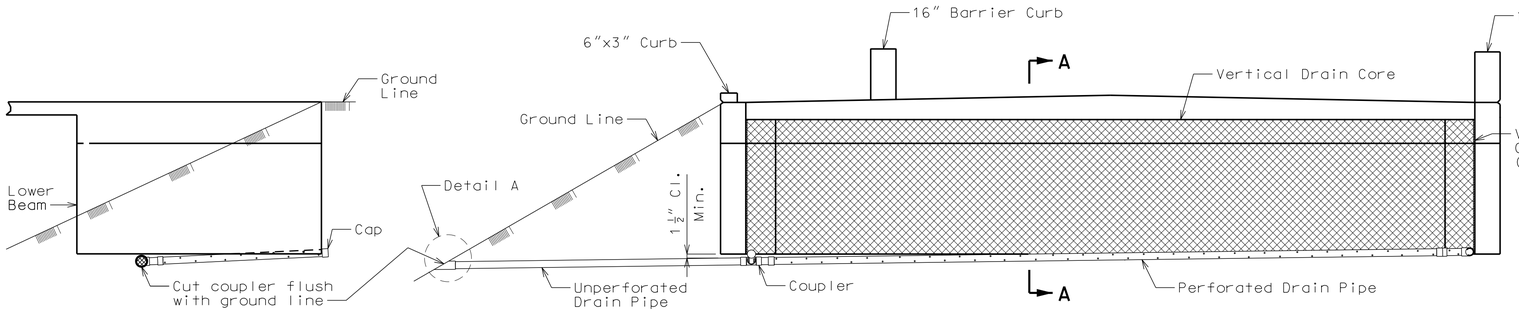
For location of Sections C-C, D-D, E-E & F-F See Sheet No. 4.

Reinforcing steel shall be shifted to clear piles. U bars shall clear piles by at least 1 1/2 inch.

For reinforcement of Barrier Curb, See Sheets No. 21-23 and 26.

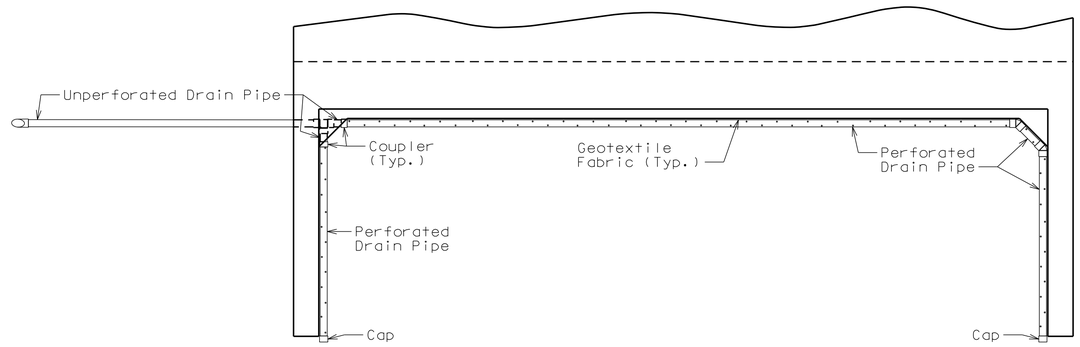
HP pile shall be galvanized to the minimum galvanized penetration (elevation) (See Foundation Data).

Note: This drawing is not to scale. Follow dimensions.

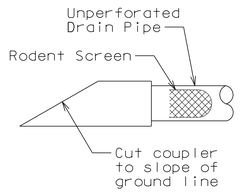


ELEVATION OF NORTH WING

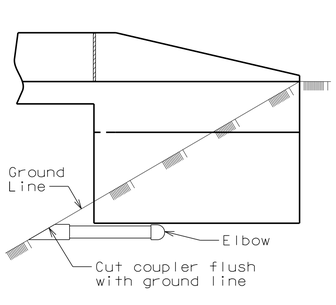
ELEVATION OF END BENT



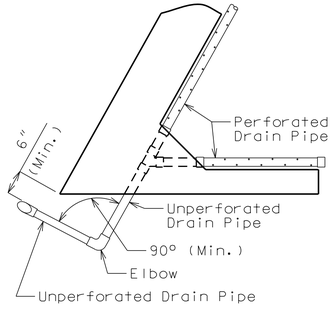
PLAN OF END BENT



DETAIL A

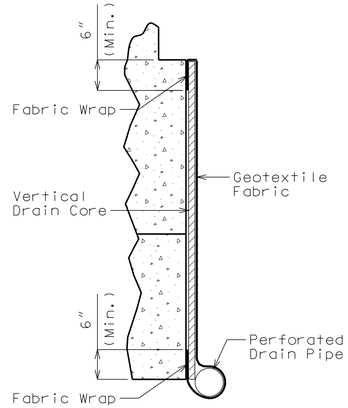


ELEVATION OF SOUTH WING



PART PLAN

OPTIONAL TURNED DRAIN
(Only if rock is encountered outside of wing)



PART SECTION A-A
(Section thru wing similar)

General Notes:

All drain pipe shall be sloped 1 to 2 percent.

Drain pipe may be either 6-inch diameter corrugated metallic-coated steel pipe underdrain, 4-inch diameter corrugated polyvinyl chloride (PVC) drain pipe, or 4-inch diameter corrugated polyethylene (PE) drain pipe.

Drain pipe shall be placed at fill face of end bent and inside face of wings. The pipe shall slope to lowest grade of ground line, also missing the lower beam of end bent by a minimum of 1 1/2 inches.

Perforated pipe shall be placed at fill face side and inside face of wings at the bottom of end bent and plain pipe shall be used where the vertical drain ends to the exit at ground line.

VERTICAL DRAIN AT END BENTS

(Squared end bent shown, skewed end bent similar)

Note: This drawing is not to scale. Follow dimensions.

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SHEET NO.:	6
TOTAL SHEETS	30

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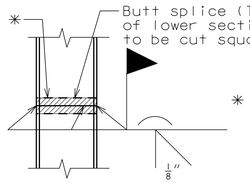
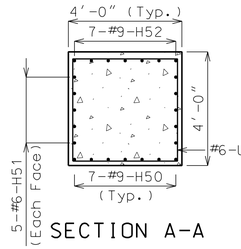
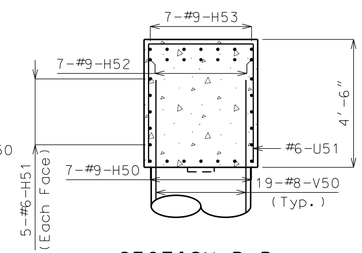


* Galvanizing material shall be omitted or removed 1 inch clear of weld locations. See special provisions.

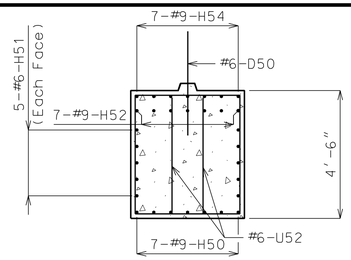
STEEL PILE SPLICE
(if required)



SECTION A-A



SECTION B-B



SECTION C-C

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TOTAL SHEETS	30

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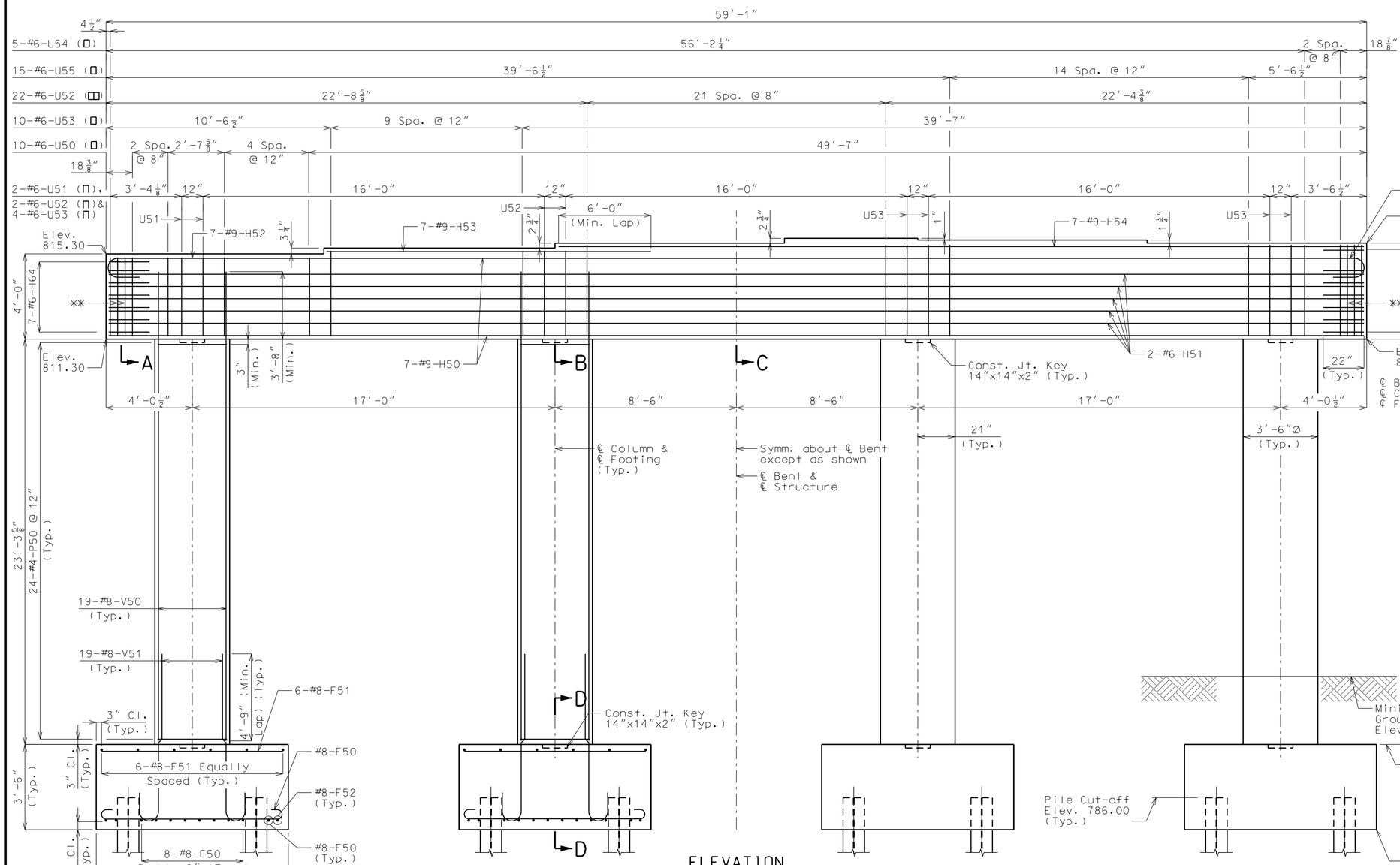
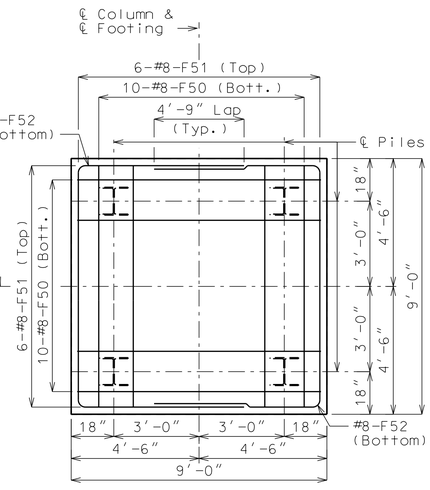


ELEVATION

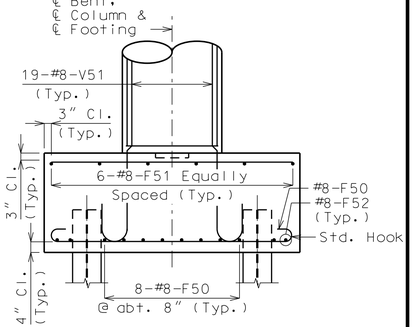
Note: Dowels & Keys on beam not shown for clarity.

** See Sheet No. 8 for spacing of #6-U56, #6-U57, and #6-U58.

Dimensions are along ℄ of Beam.



PLAN OF FOOTING



SECTION D-D

DETAILS OF INTERMEDIATE BENT NO. 2

Notes:
Hooks shown shall be standard 180 degree hooks.

For details of Int. Bent No. 2 not shown, see Sheet No. 8.

Reinforcing steel shall be shifted to clear piles by 1 1/2".

For steps 2" or more, use 2 1/4"x1/2" joint filler up vertical face.

Note: This drawing is not to scale. Follow dimensions.

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SHEET NO.	TOTAL SHEETS
8	30

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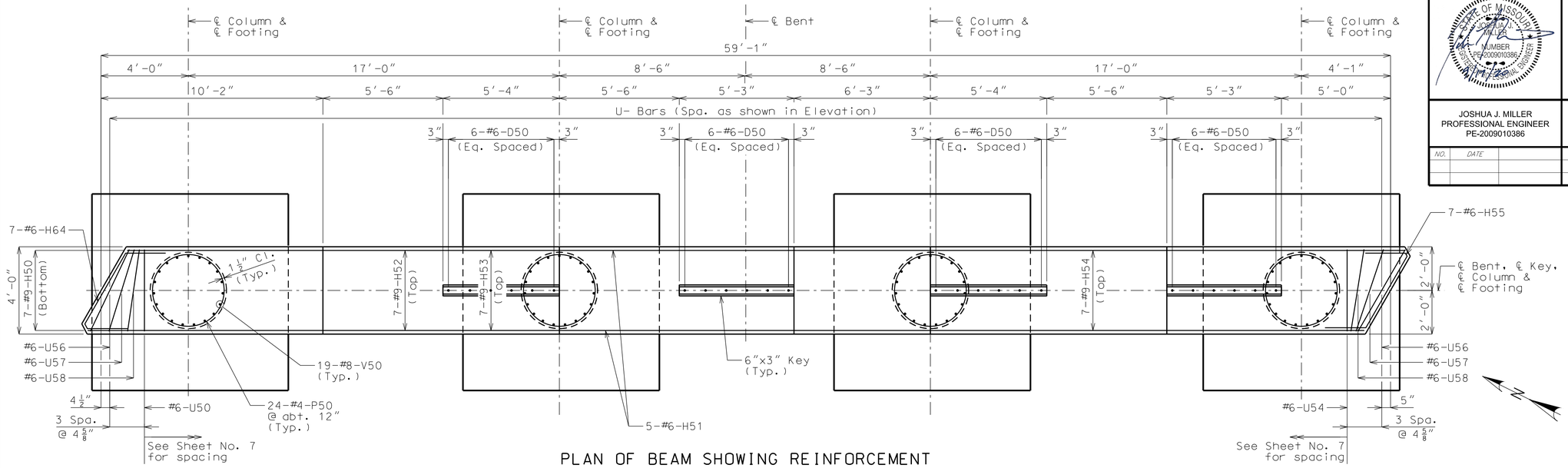
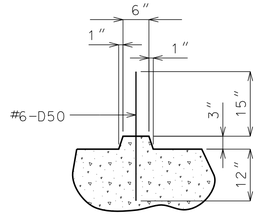
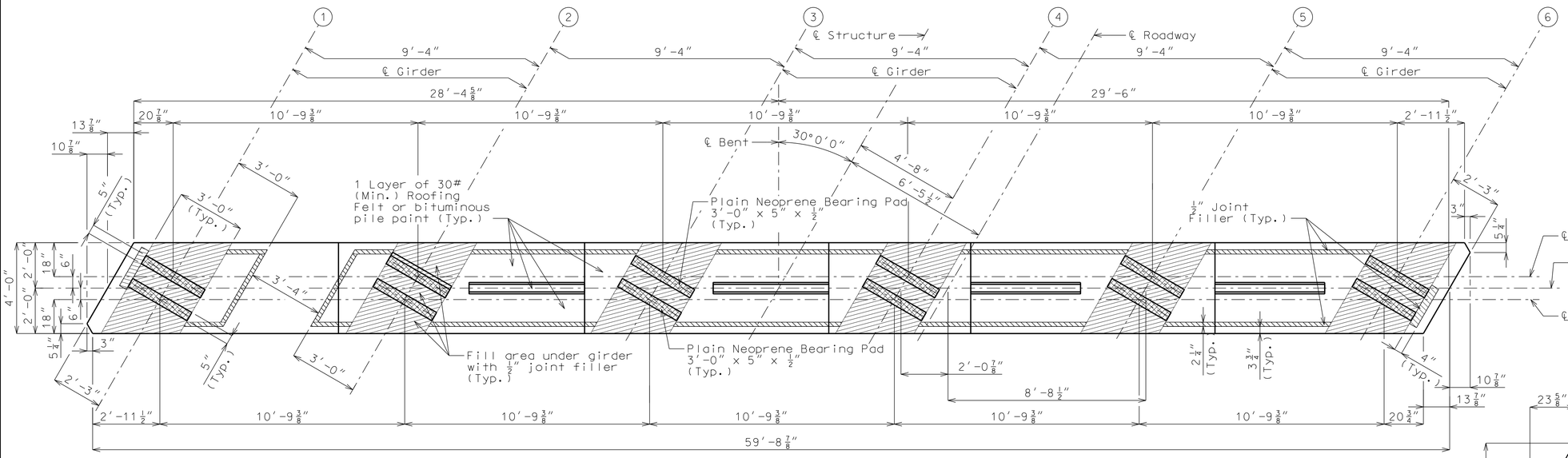


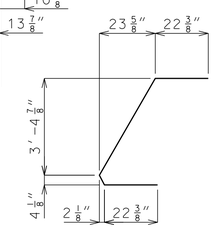
PLAN OF BEAM SHOWING REINFORCEMENT



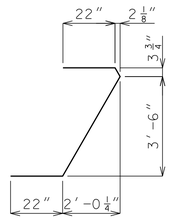
DETAIL OF KEY



PLAN OF BEAM



#6-H64



#6-H55

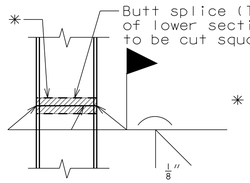
Notes:

For details of Int. Bent No. 2 not shown, see Sheet No. 7.

For steps 2″ or more, use 2¼″x½″ joint filler up vertical face.

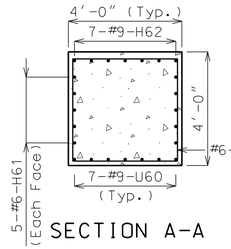
DETAILS OF INTERMEDIATE BENT NO. 2

Note: This drawing is not to scale. Follow dimensions.

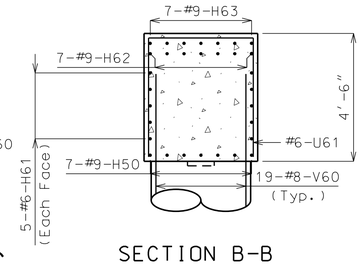


STEEL PILE SPLICE
(if required)

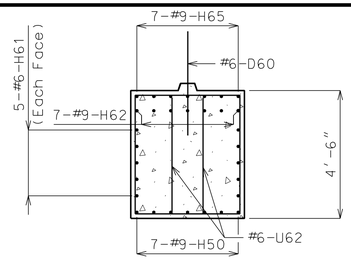
* Galvanizing material shall be omitted or removed 1 inch clear of weld locations. See special provisions.



SECTION A-A



SECTION B-B



SECTION C-C

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SHEET NO.	TOTAL SHEETS
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West Bridge Plans

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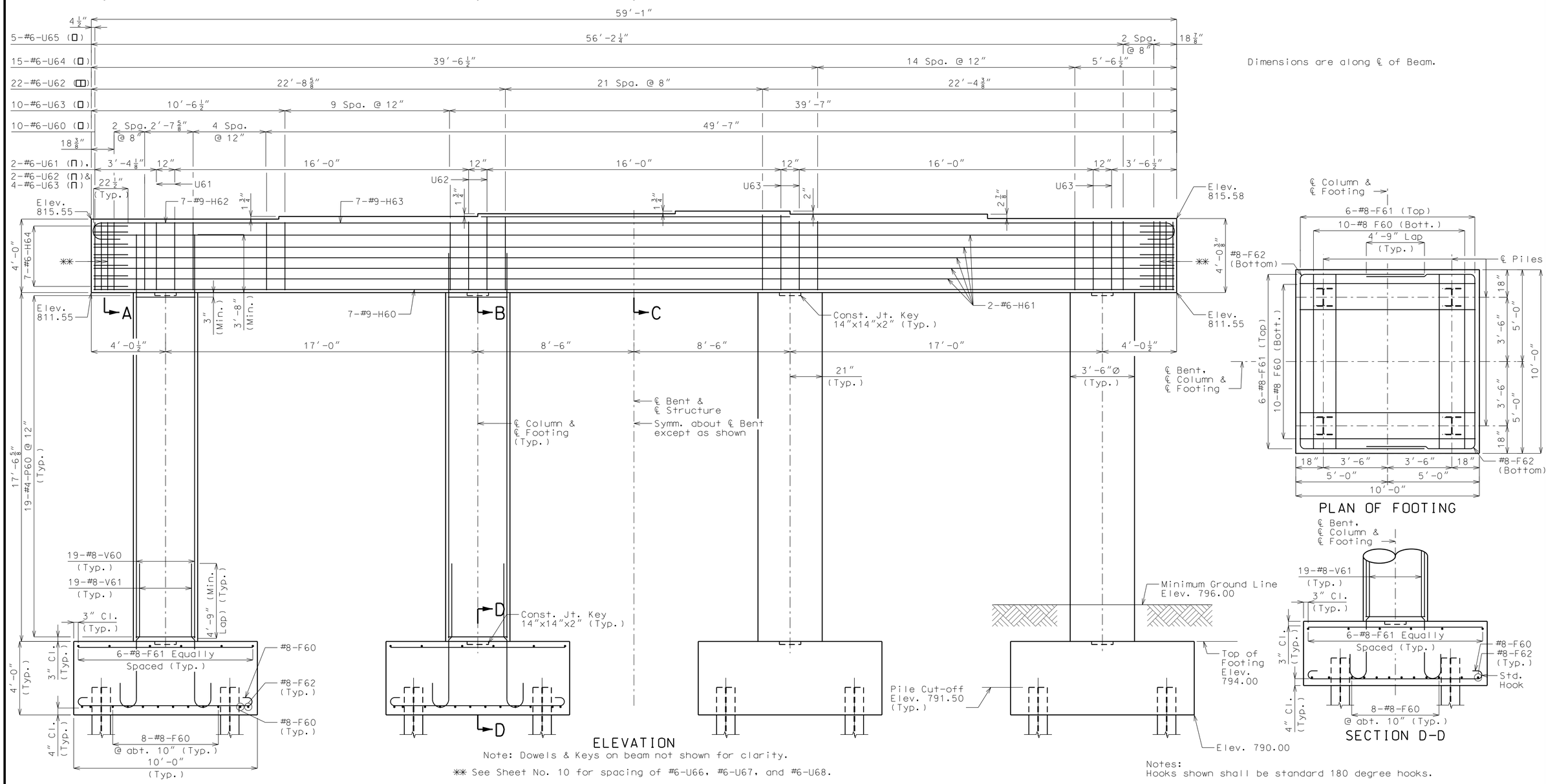


ELEVATION

Note: Dowels & Keys on beam not shown for clarity.

** See Sheet No. 10 for spacing of #6-U66, #6-U67, and #6-U68.

Dimensions are along ℄ of Beam.

PLAN OF FOOTING

SECTION D-D

Notes:
Hooks shown shall be standard 180 degree hooks.

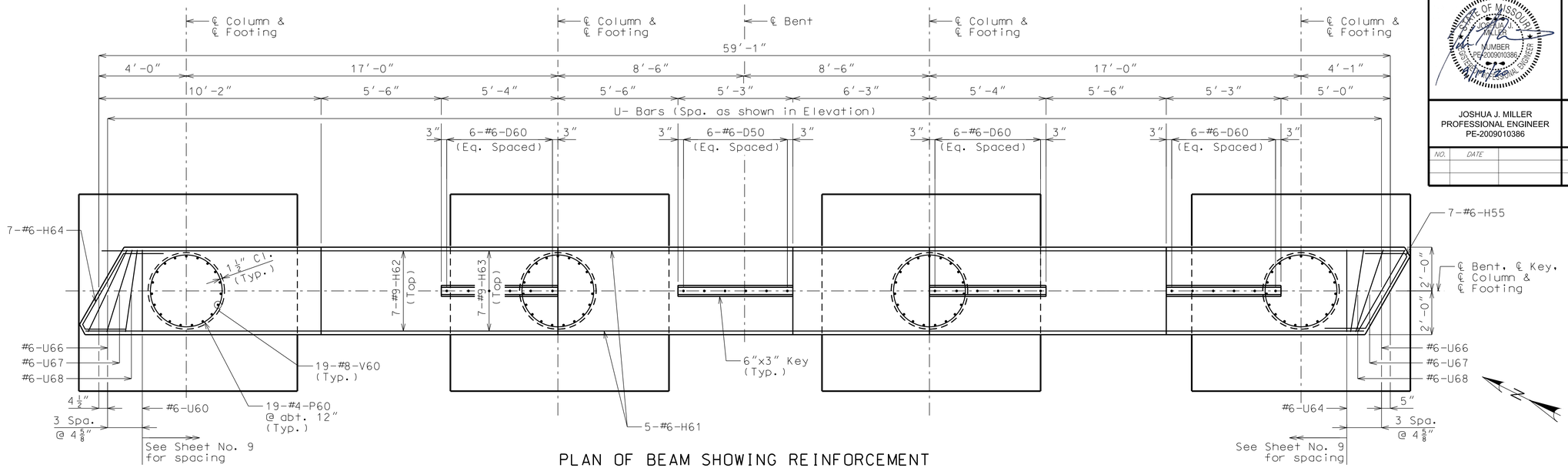
For details of Int. Bent No. 3 not shown, see Sheet No. 10.

Reinforcing steel shall be shifted to clear piles by 1½".

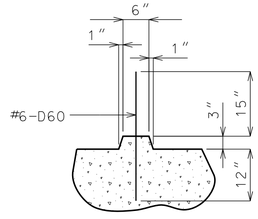
For steps 2" or more, use 2¼"x½" joint filler up vertical face.

DETAILS OF INTERMEDIATE BENT NO. 3

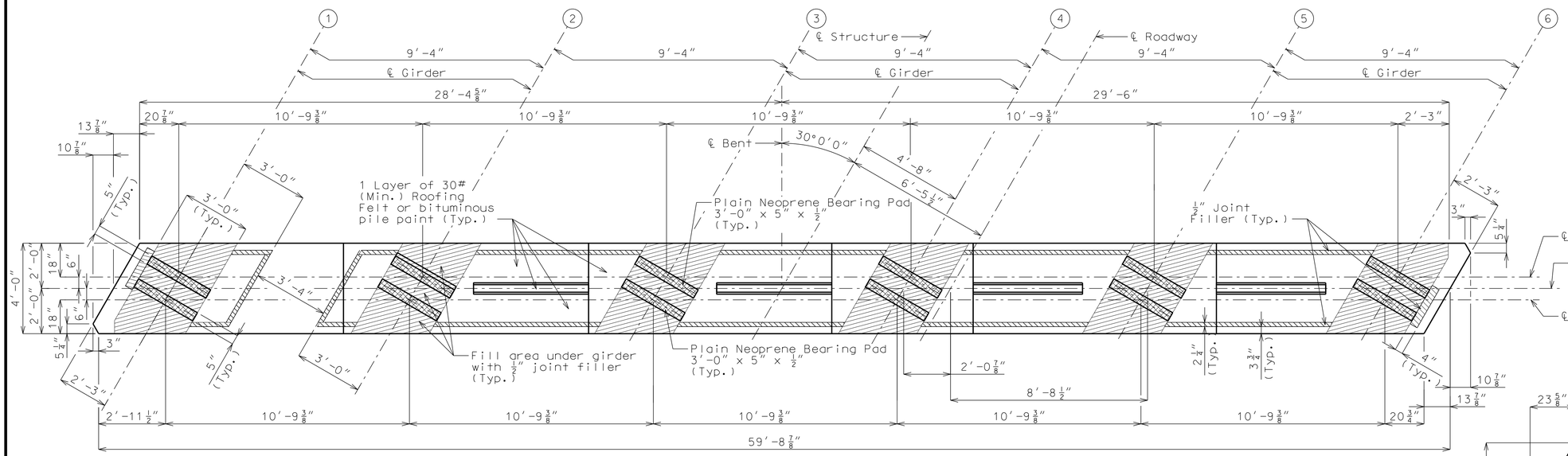
Note: This drawing is not to scale. Follow dimensions.



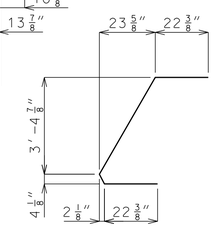
PLAN OF BEAM SHOWING REINFORCEMENT



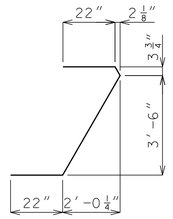
DETAIL OF KEY



PLAN OF BEAM



#6-H64



#6-H55

DETAILS OF INTERMEDIATE BENT NO. 3

Note: This drawing is not to scale. Follow dimensions.

Notes:

For details of Int. Bent No. 3 not shown, see Sheet No. 9.

For steps 2″ or more, use 2¼″x½″ joint filler up vertical face.

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TOTAL SHEETS	30

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West Bridge Plans

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Lee's Summit, Missouri

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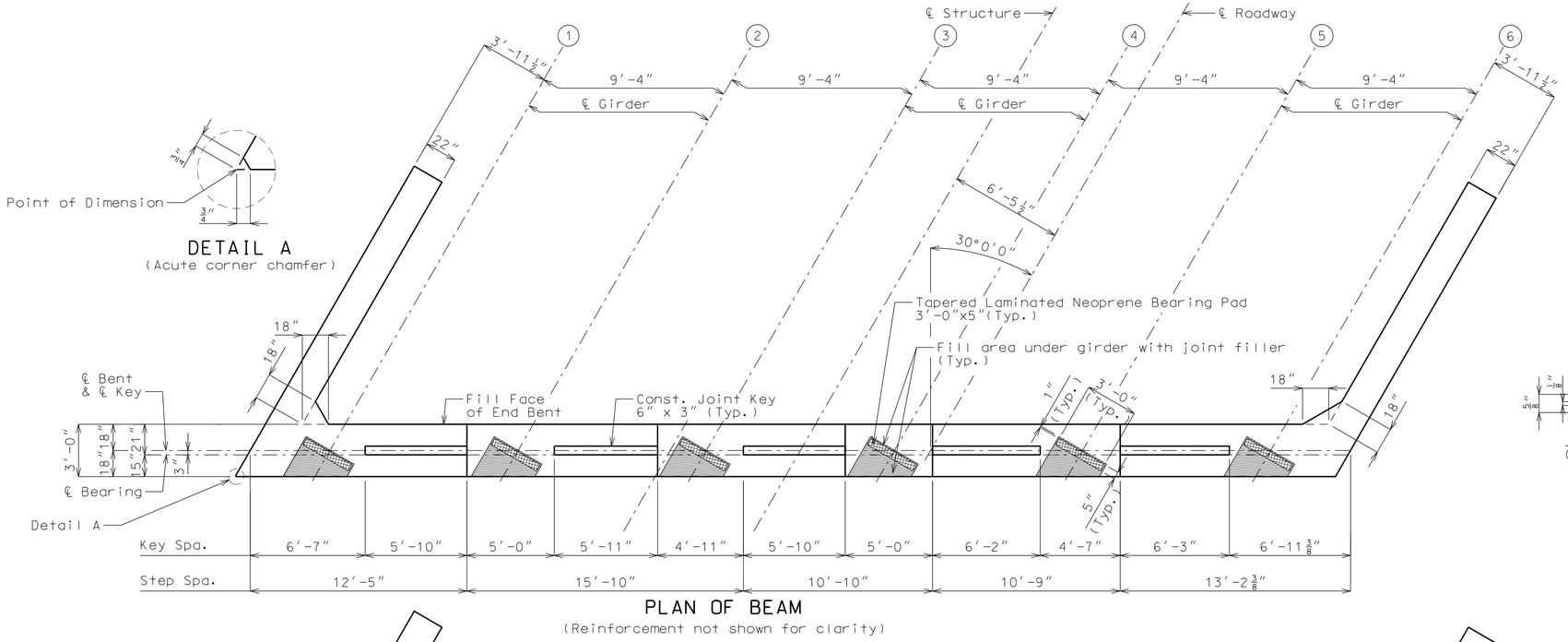
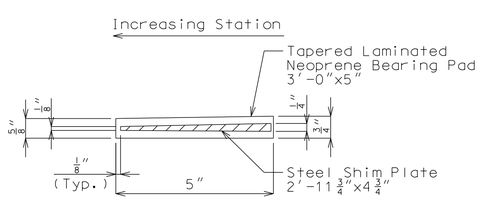
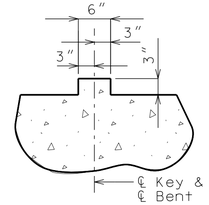


PLAN OF BEAM

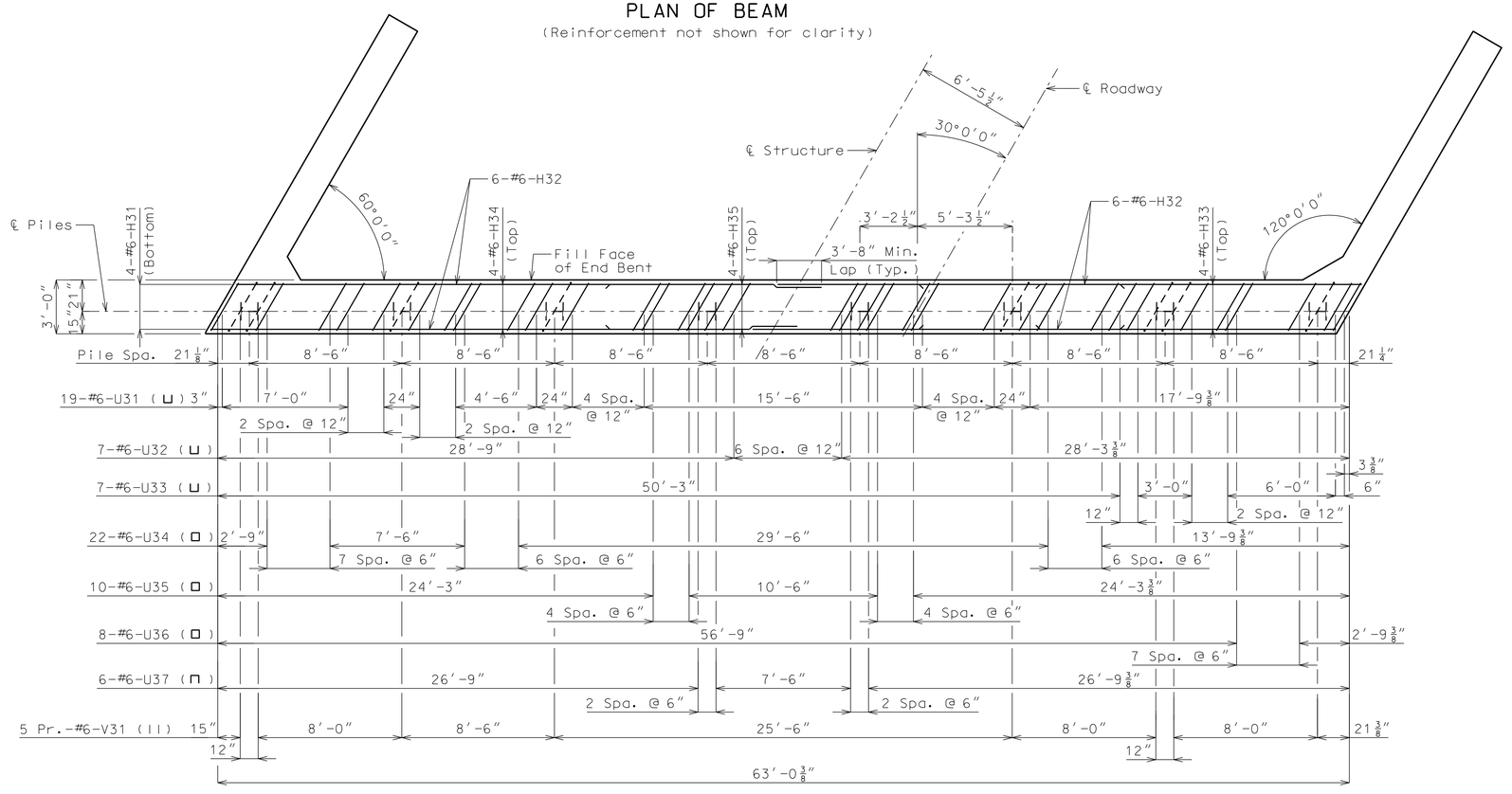
(Reinforcement not shown for clarity)



BEARING PAD DETAIL

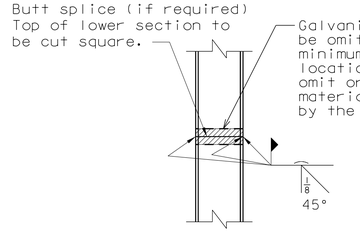


SECTION THRU KEY



PLAN OF BEAM SHOWING REINFORCEMENT

(Note: Steps and keys not shown for clarity)



DETAIL OF STEEL PILE SPLICE

Notes:

For details of End Bent No. 4 not shown, see Sheets No. 12 and 13.

For details of Vertical Drain at End Bents, see Sheet No. 6.

Reinforcing steel shall be shifted to clear piles. U-bars shall clear piles by at least 1½".

All concrete in the end bent above top of beam and below top of slab shall be Class B-2.

For reinforcement of Barrier Curb, see Sheets No. 21-23 and 26.

The U-bars and Pairs-V bars shall be placed parallel to ℄ Roadway.

DETAILS OF END BENT NO. 4

Note: This drawing is not to scale. Follow dimensions.

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SHEET NO.	11
TOTAL SHEETS	30

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West Bridge Plans

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Lee's Summit, Missouri

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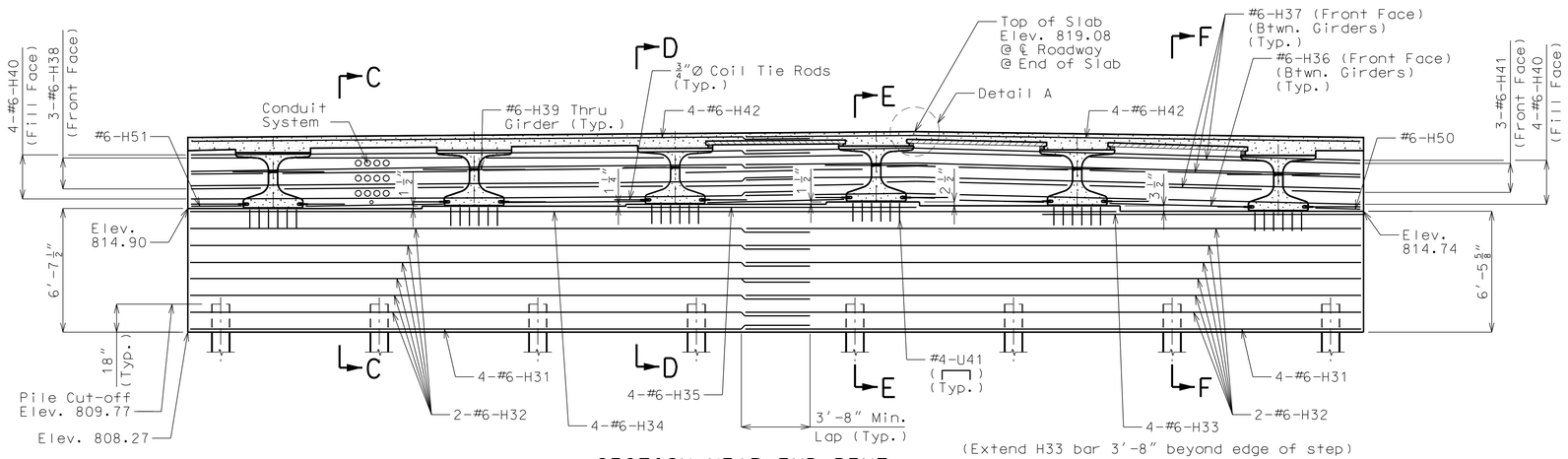
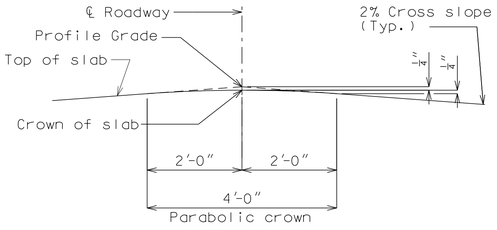


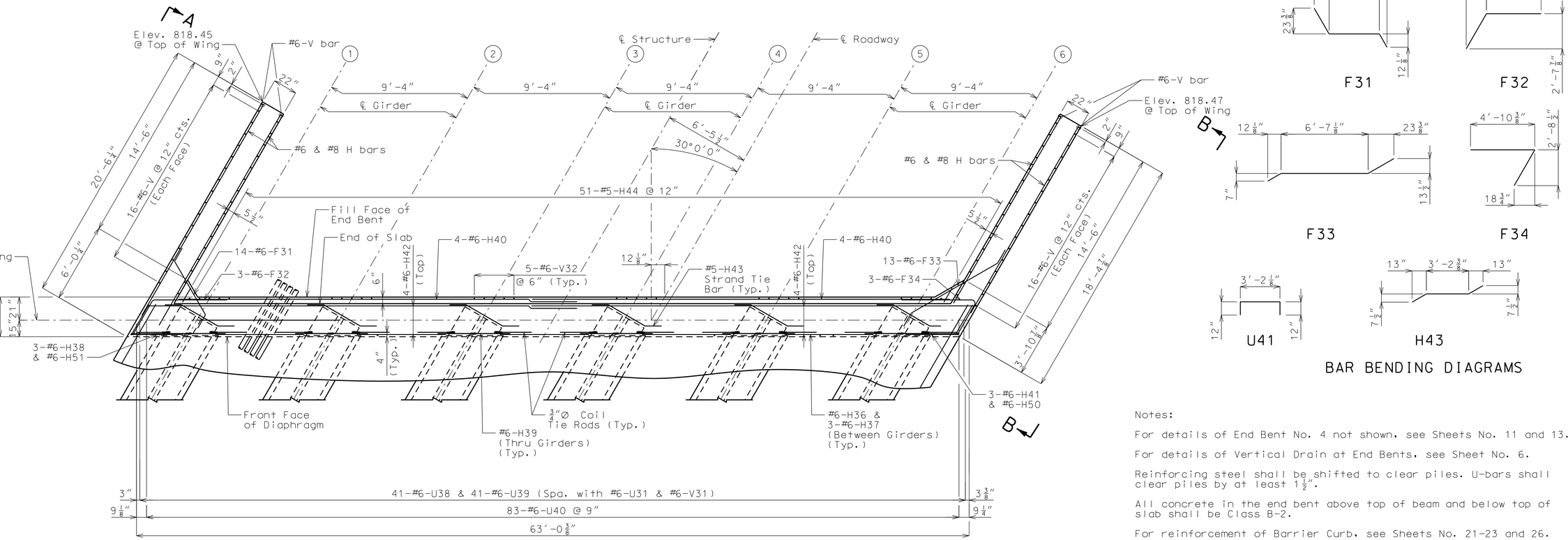
SECTION NEAR END BENT

(Stirrup reinforcement and keys not shown for clarity)

(Extend H33 bar 3'-8" beyond edge of step)

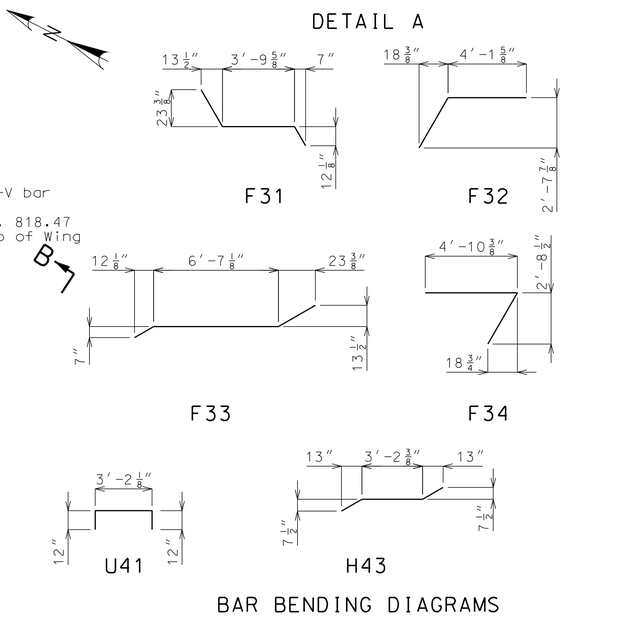


DETAIL A



PART PLAN

(Note: Steps and keys not shown for clarity)



BAR BENDING DIAGRAMS

Notes:

For details of End Bent No. 4 not shown, see Sheets No. 11 and 13.

For details of Vertical Drain at End Bents, see Sheet No. 6.

Reinforcing steel shall be shifted to clear piles. U-bars shall clear piles by at least 1½".

All concrete in the end bent above top of beam and below top of slab shall be Class B-2.

For reinforcement of Barrier Curb, see Sheets No. 21-23 and 26.

The U-bars and Pairs-V bars shall be placed parallel to ℄ Structure.

Reinforcing steel shall be shifted as necessary to miss conduit system.

For Conduit Details, see Sheet No. 26 and 27.

The U-bars and Pairs-V bars shall be placed parallel to ℄ Structure.

For Elevations A-A & B-B, See Sheet No. 13.

For Sections C-C, D-D, E-E & F-F See Sheet No. 13.

DETAILS OF END BENT NO. 4

Note: This drawing is not to scale. Follow dimensions.

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DESIGN BY:	JJM
DRAWN BY:	DWM
PROJECT NO.:	12720
SHEET NO.	12
TOTAL SHEETS	30

JOSHUA J. MILLER
PROFESSIONAL ENGINEER
PE-2009010386

West Bridge Plans

Paragon Star Development

Lee's Summit, Missouri

NO.	DATE	REVISIONS	BY	APPROVED

STATE OF MISSOURI
JOSHUA J. MILLER
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DATE:	09-17-20
DESIGN BY:	JJM
DRAWN BY:	DWM
PROJECT NO.:	12720
SHEET NO.	13
TOTAL SHEETS	30

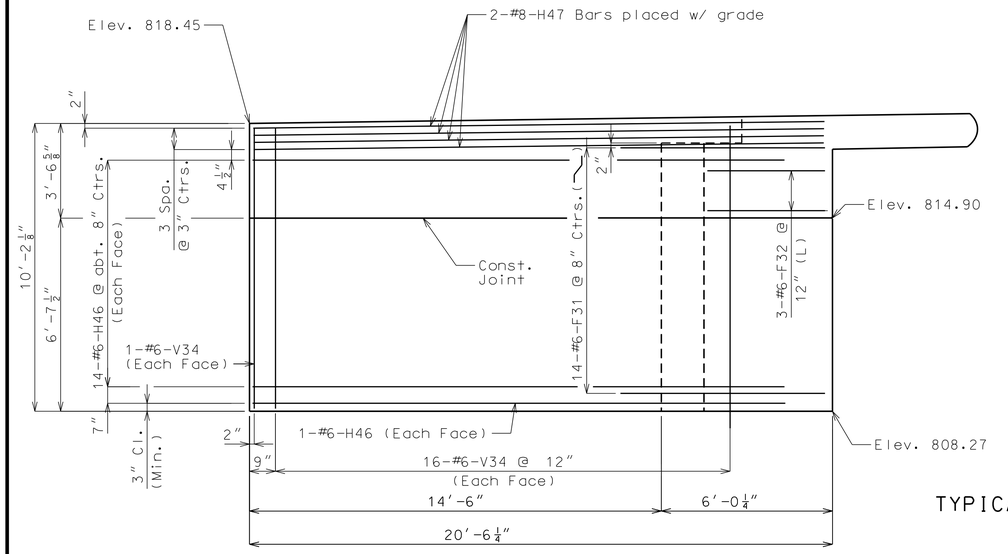
JOSHUA J. MILLER
PROFESSIONAL ENGINEER
PE-2009010386

West Bridge Plans

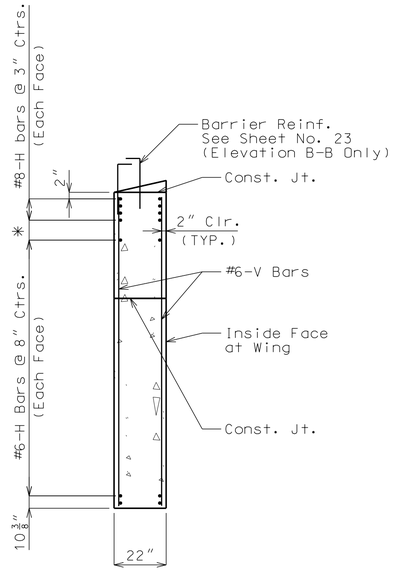
Paragon Star Development

Lee's Summit, Missouri

NO.	DATE	REVISIONS	BY	APPROVED



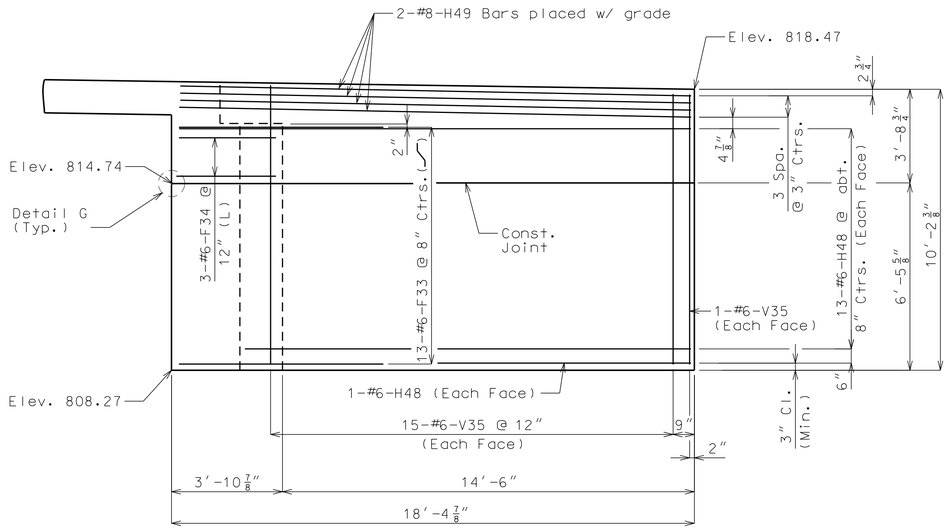
ELEVATION A-A



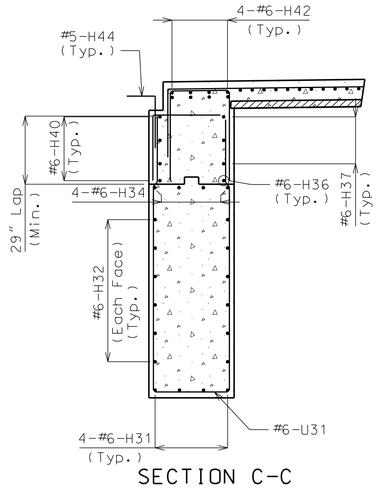
TYPICAL SECTION THRU ELEVATION B-B

Looking down station

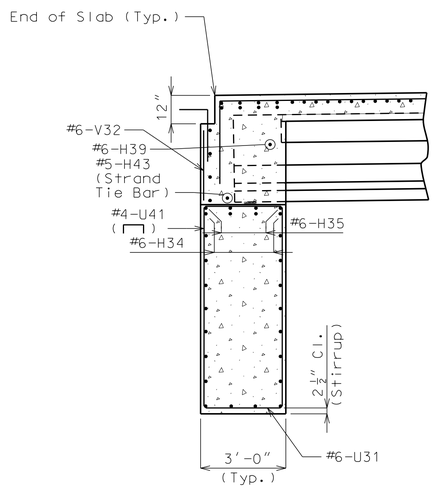
* Varies



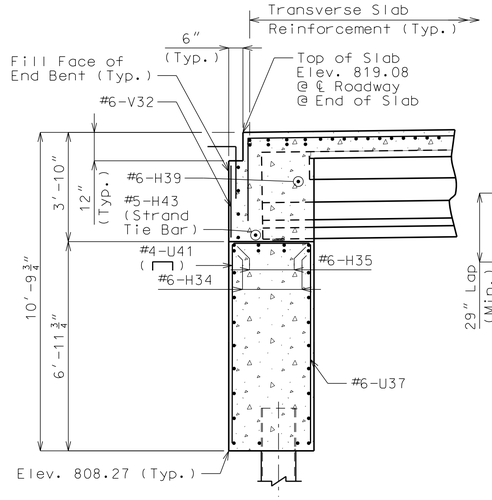
ELEVATION B-B



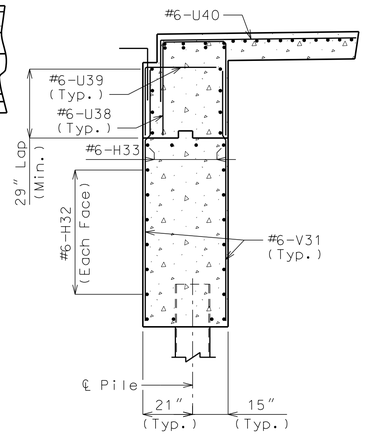
SECTION C-C



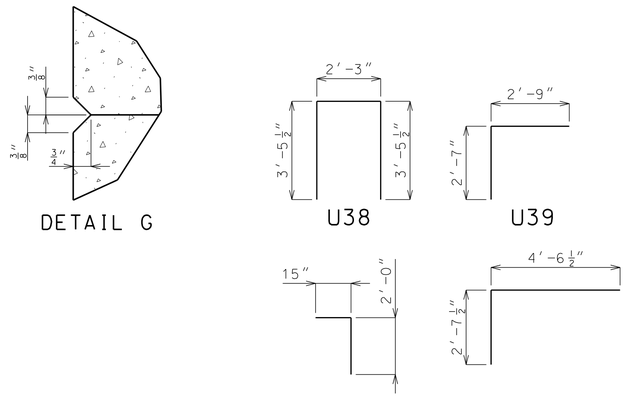
SECTION D-D



SECTION E-E



SECTION F-F



BAR BENDING DIAGRAMS

Notes:

For details of End Bent No. 4 not shown, See Sheets No. 11 and 12.

For location of Elevations A-A & B-B, See Sheet No. 12.

For location of Sections C-C, D-D, E-E & F-F See Sheet No. 12.

Reinforcing steel shall be shifted to clear piles. U bars shall clear piles by at least 1 1/2 inch.

For reinforcement of Barrier Curb, See Sheets No. 21-23 and 26.

HP pile shall be galvanized to the minimum galvanized penetration (elevation) (See Foundation Data).

DETAILS OF END BENT NO. 4

Note: This drawing is not to scale. Follow dimensions.

Concrete for prestressed girders shall be Class A-1 with f'c = 8000 psi and f'ci = 6500 psi.

(+) indicates prestressing strand.

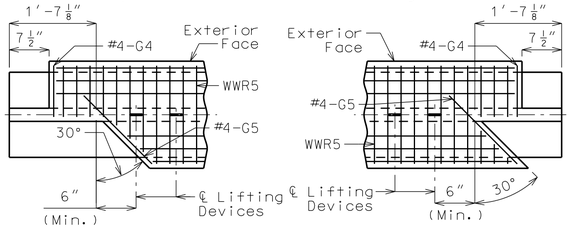
Use 20 strands with an initial prestress force of 879 kips.

Prestressing tendons shall be uncoated, seven-wire, low-relaxation strands, 0.6 inch diameter in accordance with AASHTO M 203, Grade 270. Pretensioned members shall be in accordance with Sec 1029.

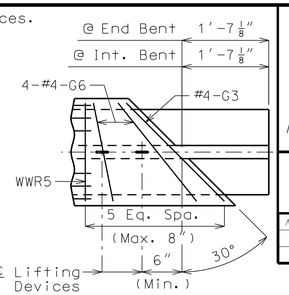
✳ Girder top flange shall be steel troweled to a smooth finish for 8" at the edges, as shown. Apply two layers of 30-lb roofing felt as a bond breaker to this region only excluding where joint filler is applied. The center portion shall be rough finished by scarifying the surface transversely with a wire brush, and no laitance shall remain on the surface.

✳✳ At the contractor's option the location for bent-up strands may be varied from that shown for fully bonded strands only. The total number of bent-up strands shall not be changed. One strand tie bar is required for each layer of bent-up strands except at end bents which require one bar on the bottom layer of strands only. No additional payment will be made if additional strand tie bars are required.

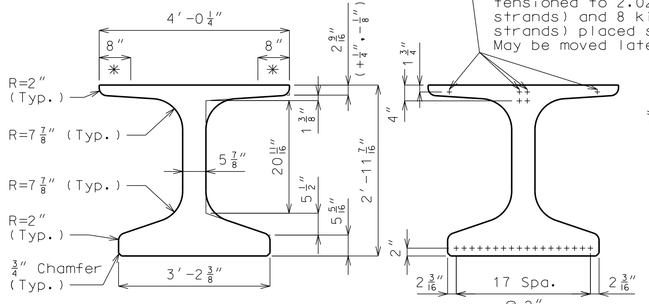
Fabricator shall be responsible for location and design of lifting devices.



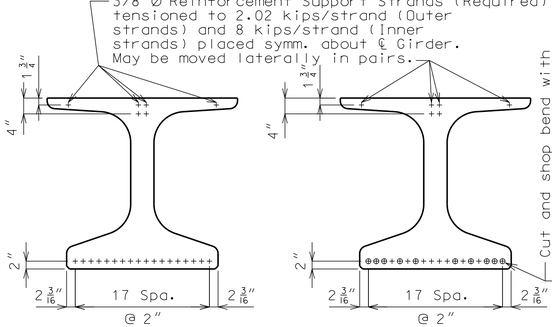
LEFT EXTERIOR GIRDER AT INTERMEDIATE BENT
(ROTATE 180° FOR RIGHT EXTERIOR)



INTERIOR GIRDER AT ALL BENTS
& EXTERIOR GIRDER AT END BENT



DIMENSIONS

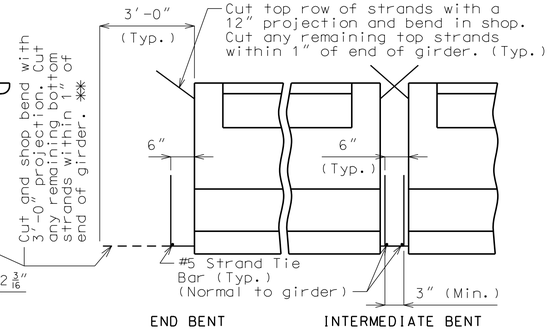


℄ GIRDER

END OF GIRDER

STRAND ARRANGEMENTS

TOP FLANGE BLOCKOUT



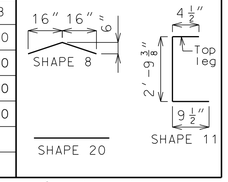
END BENT INTERMEDIATE BENT

STRAND DETAILS AT GIRDER ENDS

BILL OF REINFORCING STEEL - EACH GIRDER

NO.	SIZE & MARK	ACTUAL LENGTH	SHAPE
80	3 G1	2'-10"	8
2	4 G3	4'-3 3/8"	20
2	4 G4	2'-1"	20
2	4 G5	3'-1 1/8"	20
8	4 G6	Varies	20

BENDING DIAGRAMS

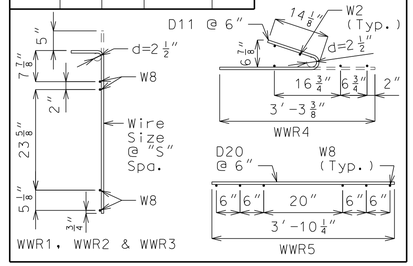


G4 and G5 not required for interior girders. Half no. of G3, G4, G5 and G6 not required for ext. girders of end spans.

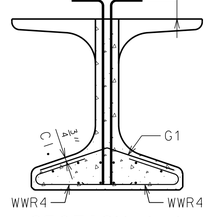
WELDED WIRE REINFORCEMENT - EACH GIRDER

MARK	WIRE SIZE	S	L	J
WWR1	D31	3"	4'-0"	4"
WWR2	D31	6"	8'-0"	4 1/2"
WWR3	D31	12"	16'-0"	2"

BENDING DIAGRAMS

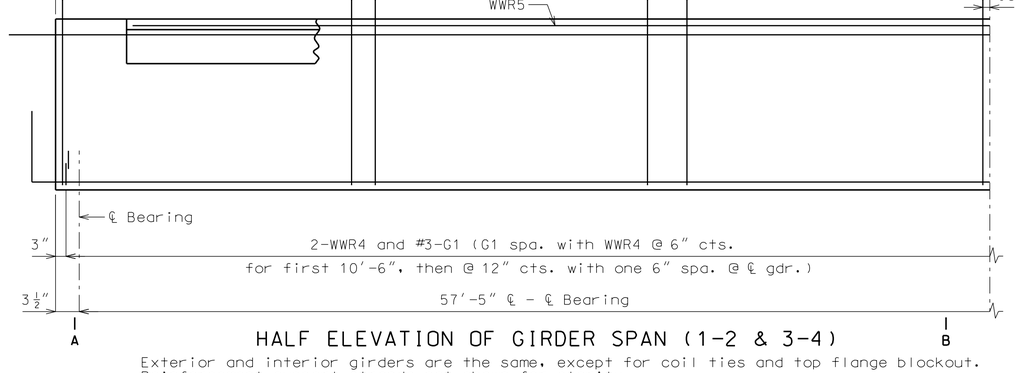


WWR1, WWR2 & WWR3



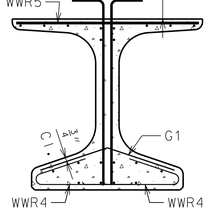
SECTION A-A

Strands not shown for clarity.



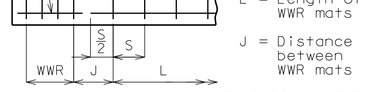
HALF ELEVATION OF GIRDER SPAN (1-2 & 3-4)

Exterior and interior girders are the same, except for coil ties and top flange blockout. Reinforcement support strands not shown for clarity.



SECTION B-B

Strands not shown for clarity.

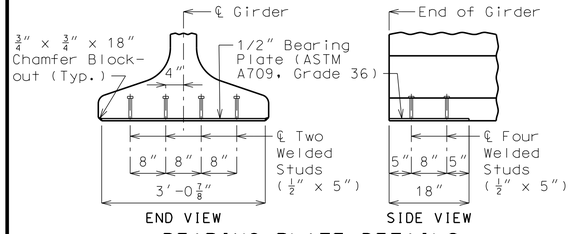


S = Vertical wire spacing

L = Length of WWR mats

J = Distance between WWR mats

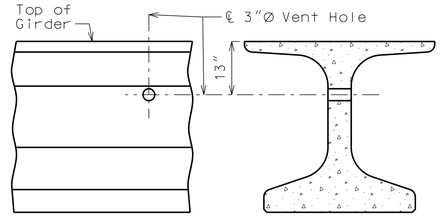
WELDED WIRE PLACEMENT



END VIEW SIDE VIEW

BEARING PLATE DETAILS

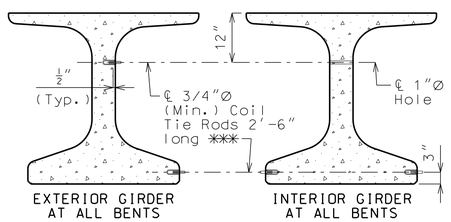
Galvanize the 1/2" bearing plate (ASTM A709 Grade 36) in accordance with ASTM A123.



PART ELEVATION OF GIRDER PART SECTION NEAR VENT HOLE

DETAILS OF VENT HOLE

Place vent holes at or near upgrade 1/3 point of girders and clear reinforcing steel or strands by 1 1/2" minimum and steel interm. diaphragm bolt connections by 6" minimum.



EXTERIOR GIRDER AT ALL BENTS INTERIOR GIRDER AT ALL BENTS

DETAILS OF COIL TIES

Cast 1"Ø hole horizontally in girder for #6 bar 5'-6" long and clear reinforcing steel or strands by 1 1/2" minimum.

✳✳✳ Length of coil tie rods at exterior face of exterior girders at end bents = 2'-10".

✳✳✳ Length of coil tie rods at faces adjacent to conduit blockout of Girders No. 1 & 2 at intermediate bents = 14".

Note: This drawing is not to scale. Follow dimensions.

General Notes:

Reinforcing Steel:

All dimensions are out to out.

Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.

Actual bar lengths are measured along centerline of bar to the nearest inch.

Minimum clearance to reinforcing shall be 1", unless otherwise shown.

All bar reinforcement shall be Grade 60.

Welded Wire Reinforcement (WWR) shall be in accordance with AASHTO M 221. WWR shall not be epoxy coated.

Miscellaneous:

Coil ties shall be held in place in the forms by slotted wire-setting-studs projecting thru forms. Studs are to be left in place or replaced with temporary plugs until girders are erected, then replaced by coil tie rods.

The contractor shall provide bracing necessary for lateral and torsional stability of the girders during construction of the concrete slab and remove the bracing after the slab has attained 75% design strength. Contractor shall not drill holes in the girders.

For location of coil ties and #6 bars at concrete bent diaphragms, see Sheets No. 4, 5, 12, 13 and 16.

For Girder Camber Diagram, see Sheet No. 18.

Precaster shall make necessary adjustment in length of girder to account for slope of road and camber of girder. Adjust beam length and top flange blockout dimensions as necessary.

STATE OF MISSOURI
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DESIGN BY:	JJM
DRAWN BY:	DWM
PROJECT NO.:	12720
SHEET NO.:	14
TOTAL SHEETS	30

JOSHUA J. MILLER
PROFESSIONAL ENGINEER
PE-2009010386

West Bridge Plans
Paragon Star Development
Lee's Summit, Missouri

NO.	DATE	REVISIONS	BY	APPROVED

Concrete for prestressed girders shall be Class A-1 with f'c = 8000 psi and f'ci = 6500 psi.

(+) indicates prestressing strand.

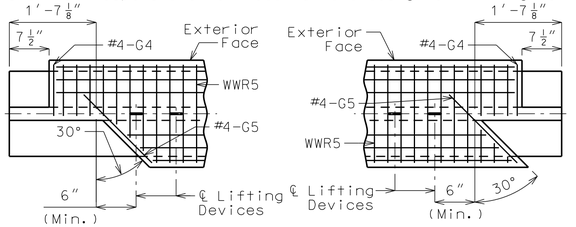
Use 26 strands with an initial prestress force of 1142.5 kips.

Prestressing tendons shall be uncoated, seven-wire, low-relaxation strands, 0.6 inch diameter in accordance with AASHTO M 203, Grade 270. Pretensioned members shall be in accordance with Sec 1029.

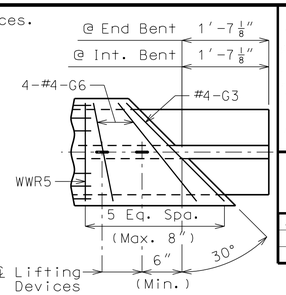
✳ Girder top flange shall be steel troweled to a smooth finish for 8" at the edges, as shown. Apply two layers of 30-lb roofing felt as a bond breaker to this region only excluding where joint filler is applied. The center portion shall be rough finished by scarifying the surface transversely with a wire brush, and no laitance shall remain on the surface.

✳✳ At the contractor's option the location for bent-up strands may be varied from that shown for fully bonded strands only. The total number of bent-up strands shall not be changed. One strand tie bar is required for each layer of bent-up strands except at end bents which require one bar on the bottom layer of strands only. No additional payment will be made if additional strand tie bars are required.

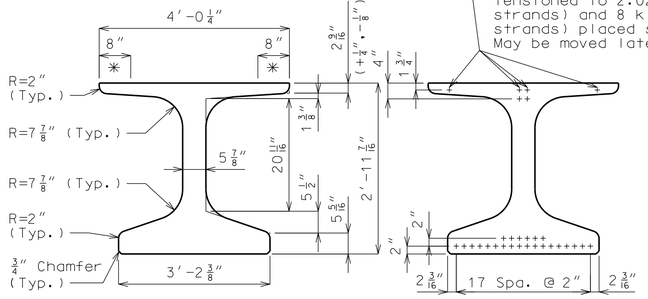
Fabricator shall be responsible for location and design of lifting devices.



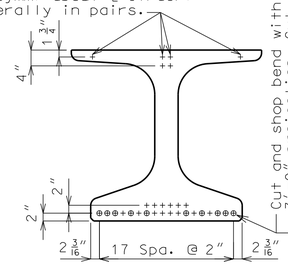
LEFT EXTERIOR GIRDER AT INTERMEDIATE BENT
(ROTATE 180° FOR RIGHT EXTERIOR)



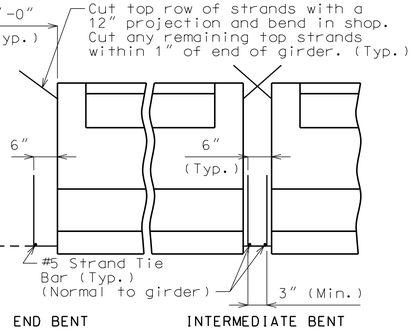
INTERIOR GIRDER AT ALL BENTS
& EXTERIOR GIRDER AT END BENT



DIMENSIONS



℄ GIRDER END OF GIRDER
STRAND ARRANGEMENTS



END BENT INTERMEDIATE BENT
STRAND DETAILS AT GIRDER ENDS

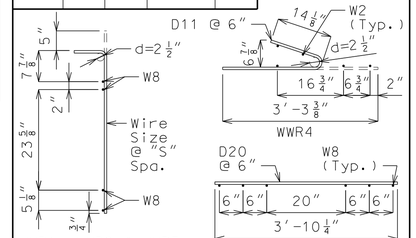
TOP FLANGE BLOCKOUT

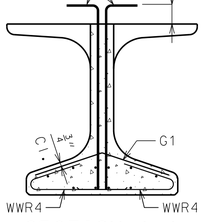
BILL OF REINFORCING STEEL - EACH GIRDER				
NO.	SIZE & MARK	ACTUAL LENGTH	SHAPE	BENDING DIAGRAMS
90	3 G1	2'-10"	8	
2	4 G3	4'-5 3/8"	20	
2	4 G4	2'-1"	20	
2	4 G5	3'-1 1/8"	20	
8	4 G6	Varies	20	

BENDING DIAGRAMS: 16" 16" 6" SHAPE 8; 4 1/2" Top leg, 2'-9 3/8", 9 1/2" SHAPE 11; SHAPE 20

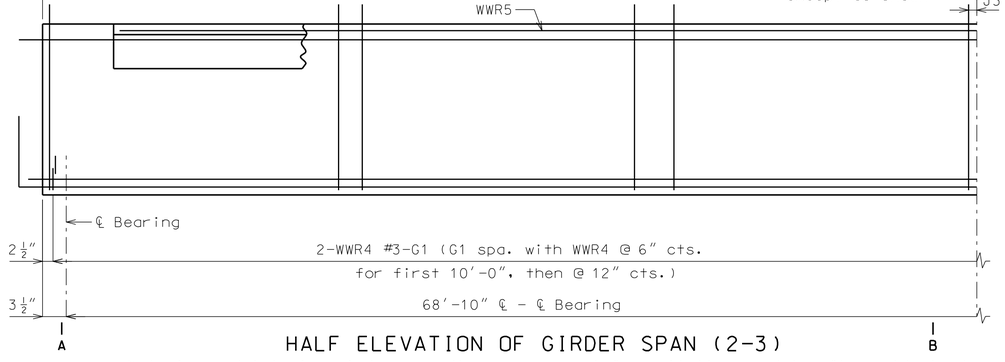
G4 and G5 not required for interior girders. G3 and G6 not required for exterior girders of intermediate spans.

WELDED WIRE REINFORCEMENT - EACH GIRDER					
MARK	WIRE SIZE	S	L	J	BENDING DIAGRAMS
WWR1	D31	6"	13'-0"	4"	
WWR2	D31	8"	6'-0"	8 3/4"	
WWR3	D31	12"	14'-0"	6"	



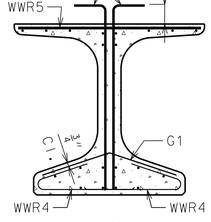


SECTION A-A
Strands not shown for clarity.

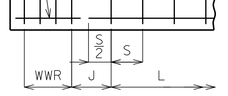


HALF ELEVATION OF GIRDER SPAN (2-3)

Exterior and interior girders are the same, except for coil ties, and top flange blockout. Reinforcement support strands not shown for clarity.



SECTION B-B
Strands not shown for clarity.

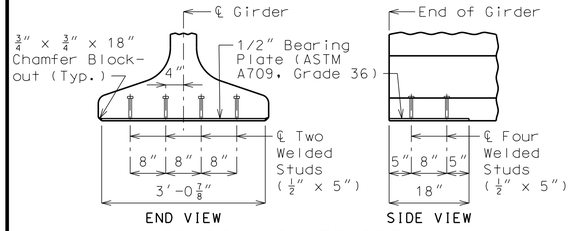


S = Vertical wire spacing

L = Length of WWR mats

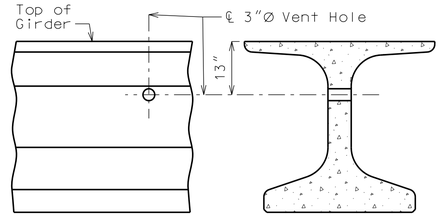
J = Distance between WWR mats

WELDED WIRE PLACEMENT



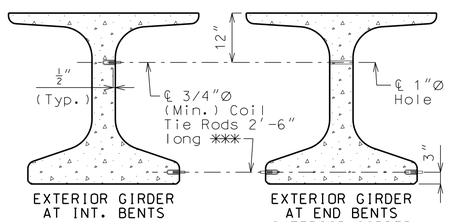
END VIEW SIDE VIEW
BEARING PLATE DETAILS

Galvanize the 1/2" bearing plate (ASTM A709 Grade 36) in accordance with ASTM A123.



PART ELEVATION OF GIRDER PART SECTION NEAR VENT HOLE
DETAILS OF VENT HOLE

Place vent holes at or near upgrade 1/3 point of girders and clear reinforcing steel or strands by 1 1/2" minimum and steel interm. diaphragm bolt connections by 6" minimum.



EXTERIOR GIRDER AT INT. BENTS EXTERIOR GIRDER AT END BENTS INTERIOR GIRDER AT ALL BENTS
DETAILS OF COIL TIES

Cast 1"Ø hole horizontally in girder for #6 bar 5'-6" long and clear reinforcing steel or strands by 1 1/2" minimum.

✳✳✳ Length of coil tie rods at exterior face of exterior girders at end bents = 2'-10".

✳✳✳ Length of coil tie rods at faces adjacent to conduit blockout of Girders No. 1 & 2 at intermediate bents = 14".

Note: This drawing is not to scale. Follow dimensions.

General Notes:

Reinforcing Steel:

All dimensions are out to out.

Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.

Actual bar lengths are measured along centerline of bar to the nearest inch.

Minimum clearance to reinforcing shall be 1", unless otherwise shown.

All bar reinforcement shall be Grade 60.

Welded Wire Reinforcement (WWR) shall be in accordance with AASHTO M 221. WWR shall not be epoxy coated.

Miscellaneous:

Coil ties shall be held in place in the forms by slotted wire-setting-studs projecting thru forms. Studs are to be left in place or replaced with temporary plugs until girders are erected, then replaced by coil tie rods.

The contractor shall provide bracing necessary for lateral and torsional stability of the girders during construction of the concrete slab and remove the bracing after the slab has attained 75% design strength. Contractor shall not drill holes in the girders.

For location of coil ties and #6 bars at concrete bent diaphragms, see Sheets No. 4, 5, 12, 13 and 16.

For Girder Camber Diagram, see Sheet No. 18.

Precaster shall make necessary adjustment in length of girder to account for slope of road and camber of girder. Adjust beam length and top flange blockout dimensions as necessary.

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PE-2009010386

DATE:	09-17-20
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DRAWN BY:	DWM
PROJECT NO.:	12720
SHEET NO.:	15
TOTAL SHEETS	30

West Bridge Plans

Paragon Star Development

Lee's Summit, Missouri

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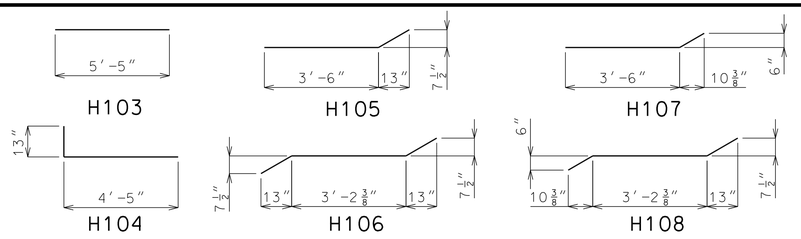
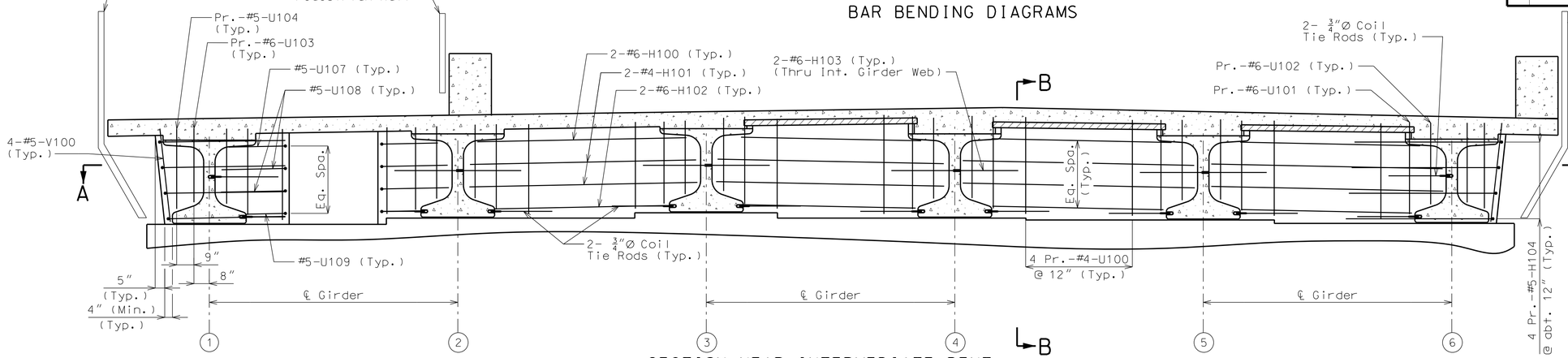
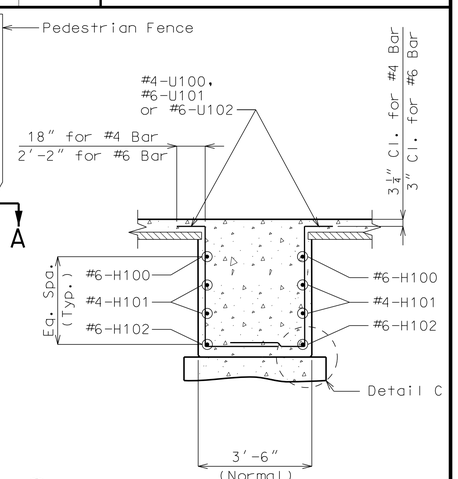


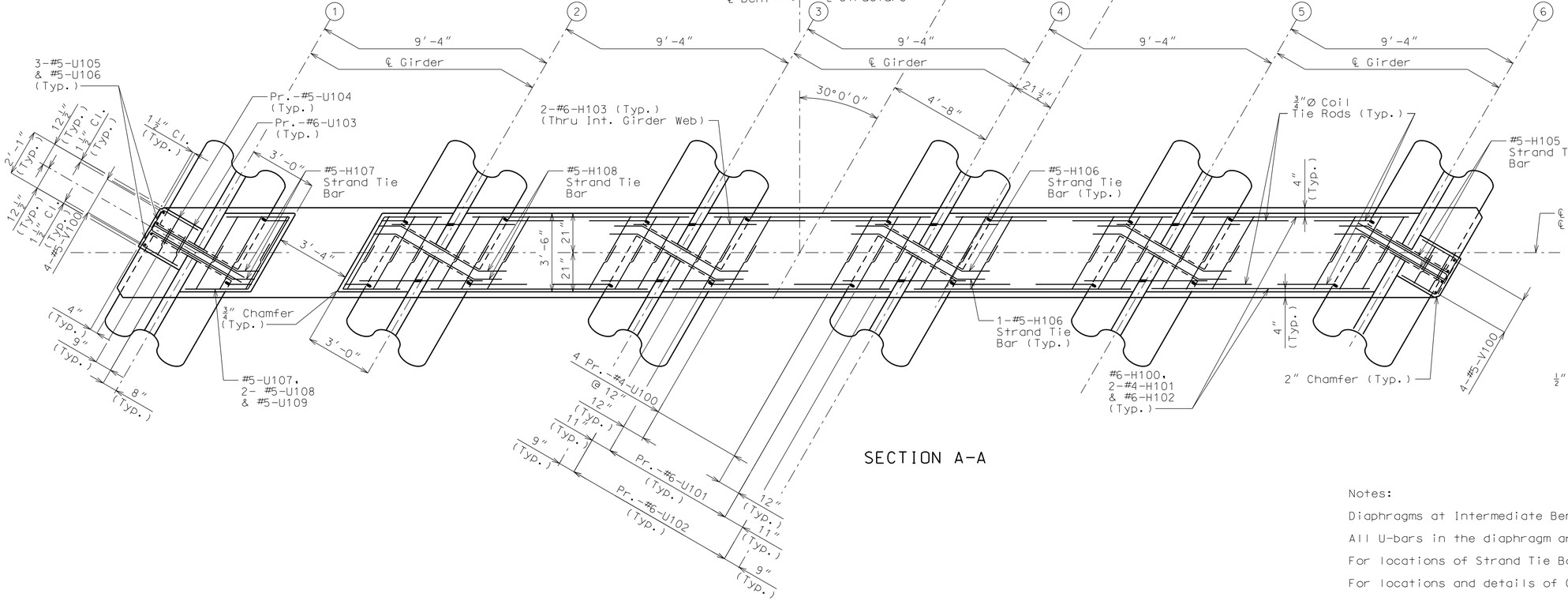
BAR BENDING DIAGRAMS



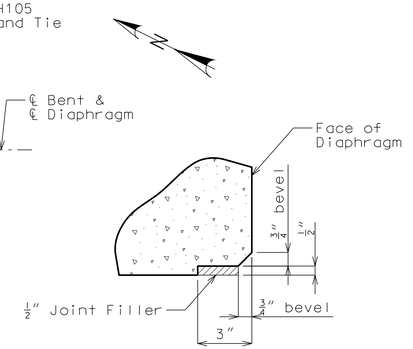
SECTION NEAR INTERMEDIATE BENT



SECTION B-B



SECTION A-A



DETAIL C

Notes:

Diaphragms at Intermediate Bents shall be built vertically.

All U-bars in the diaphragm are to be placed parallel to ℄ Roadway.

For locations of Strand Tie Bars, see Sheets No. 14 and 15.

For locations and details of Coil Tie Rods, see Sheets No. 14 and 15.

For conduit details, see Sheets No. 26 and 27.

DETAILS OF CONCRETE DIAPHRAGMS AT INTERMEDIATE BENTS NO. 2 & 3

Note: This drawing is not to scale. Follow dimensions.

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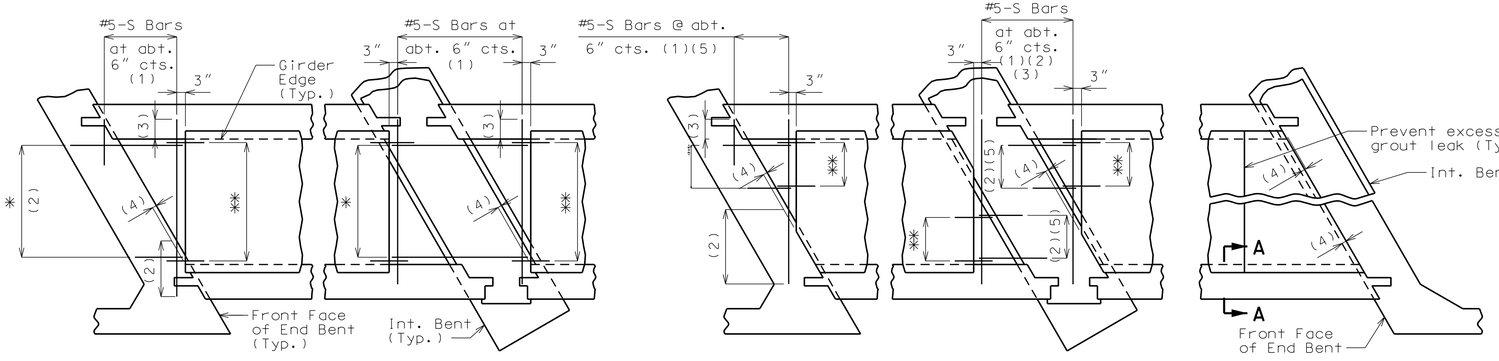
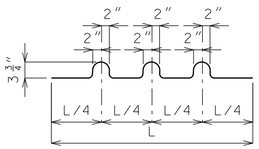


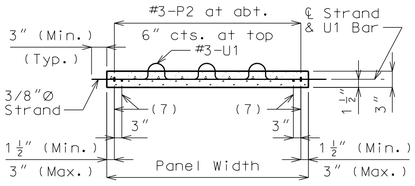
SQUARED END PANELS OR TRUNCATED END PANELS

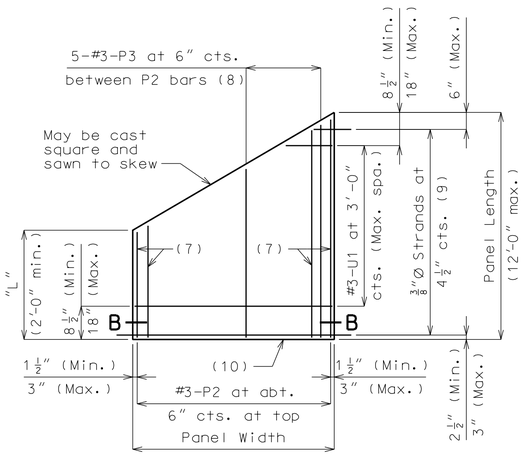
PLAN SHOWING PANELS PLACEMENT

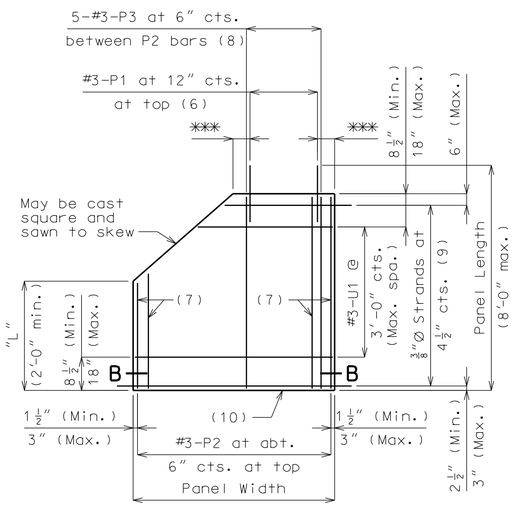
* #5-S Bars at abt. 9" cts. (1)
** #3-P1 at 12" cts. (End panels only)



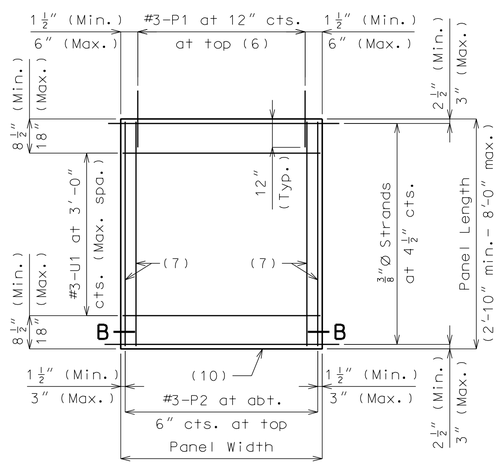
U1 Bars may be oriented at right angles to location and spacing shown. U1 Bars shall be placed between P1 bars.



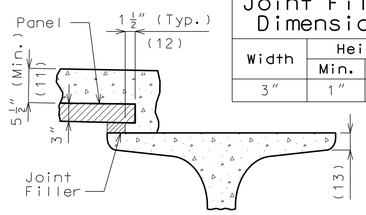




*** 3" (Min.), 6" (Max.)



SKEWED END PANELS



Joint Filler Dimensions		
Width	Height	
	Min.	Max.
3"	1"	4"

Reference Notes:

Plan of Panels Placement:

(1) S-bars shown are bottom steel in slab between panels and used with squared and truncated end panels only.

(2) Extend S-bars 18 inches beyond the front face of end bents and int. bents for squared and truncated end panels only.

(3) Extend S-bars 9 inches beyond edge of girder (Typ.).

(4) End panels shall be dimensioned 1/2" min. to 1 1/2" max. from the inside face of diaphragm.

(5) For truncated end panels, use a min. of #5-S bars at 6" crossings in openings, or min. 4x4-W7xW7.

Plans of Panels:

(6) For end panels only, P1 bars shall be 2'-0" in length and embedded 12". P1 bars will not be required for panels at squared integral end bents.

(7) #3-P2 bars near edge of panel at bottom (under strands).

(8) Use #3-P3 bars if panel is skewed 45° or greater.

(9) Any strand 2'-0" or shorter shall have a #4 reinforcing bar on each side of it, centered between strands. Strands 2'-0" or shorter may then be debonded at the fabricator's option.

(10) Optional 1/2" x 45° Chamfer one or both sides at bottom.

Section A-A:

(11) Slab thickness over prestressed panels varies due to girder camber. In order to maintain minimum slab thickness, it may be necessary to raise the grade uniformly throughout the structure. No payment will be made for additional labor or materials required for necessary grade adjustment.

(12) Contractor shall ensure proper consolidation under and between panels.

(13) At the contractor's option, the variation in slab thickness over prestressed panels may be eliminated or reduced by increasing and varying the girder top flange thickness. Dimensions shall be shown on the shop drawings.

General Notes:

Prestressed Panels:

Concrete for prestressed panels shall be Class A-1 with f'c = 6,000 psi, f'ci = 4,000 psi.

The top surface of all panels shall receive a scored finish with a depth of scoring of 1/8" perpendicular to the prestressing strands in the panels.

Prestressing tendons shall be high-tensile strength, uncoated, seven-wire, low-relaxation strands for prestressed concrete in accordance with AASHTO M 203 Grade 270, with nominal diameter of strand = 3/8" and nominal area = 0.085 sq.in. and minimum ultimate strength = 22.95 kips (270 ksi). Larger strands may be used with the same spacing and initial tension.

Initial prestressing force = 17.2 kips/strand.

The method and sequence of releasing the strands shall be shown on the shop drawings.

Suitable anchorage devices for lifting panels may be cast in panels, provided the devices are shown on the shop drawings and approved by the engineer. Panel lengths shall be determined by the contractor and shown on the shop drawings.

When squared end panels are used at skewed bents, the skewed portion shall be cast full depth. No separate payment will be made for additional concrete and reinforcing required.

Support from diaphragm forms is required under the optional skewed end until cast-in-place concrete has reached 3,000 psi compressive strength.

Prestressed panels shall be brought to saturated surface-dry (SSD) condition just prior to the deck pour. There shall be no free standing water on the panels or in the area to be cast.

The prestressed panel quantities are not included in the table of estimated quantities for the slab.

Reinforcing Steel:

All dimensions are out to out.

Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.

Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

If U1 bars interfere with placement of slab steel, U1 loops may be bent over, as necessary, to clear slab steel.

Deformed welded wire reinforcement (WWR) providing a minimum area of reinforcing perpendicular to strands of 0.22 sq in./ft, with spacing parallel to strands sufficient to ensure proper handling, may be used in lieu of the #3-P2 bars shown. Wire diameter shall not be larger than 0.375 inch. The above alternative reinforcement criteria may be used in lieu of the #3-P3 bars, when required, and placed over a width not less than 2 feet.

The following reinforcing steel shall be tied securely to the strands with the following maximum spacing in each direction:
- #3-P2 bars at 16 inches.
- WWR at 24 inches.

The #3-U1 bars shall be tied securely to #3-P2 bars, to WWR or to strands (when placed between P1 bars) at about 3-foot centers.

Minimum reinforcement steel length shall be 2'-0".

All reinforcement other than prestressing strands shall be epoxy coated.

Precast panels may be in contact with stirrup reinforcing in diaphragms.

S-bars are not listed in the bill of reinforcing.

Cost of S-bars will be considered completely covered by the contract unit price for the slab.

Joint Filler:

Joint filler shall be preformed fiber expansion joint material in accordance with Sec 1057 or expanded or extruded polystyrene bedding material in accordance with Sec 1073.

Use Slab Haunching Diagram on Sheet No. 18 for determining thickness of joint filler within the limits noted in the table of Joint Filler Dimensions.

Thicker material may be used on one or both sides of the girder to reduce cast-in-place concrete thickness to within tolerances.

The same thickness of preformed fiber expansion joint material shall be used under any one edge of any panel except at locations where top flange thickness may be stepped. The maximum change in thickness between adjacent panels shall be 1/4 inch. The polystyrene bedding material may be cut with a transition to match haunch height above top of flange.

Joint filler shall be glued to the girder. When thickness exceeds 1 1/2 inches, the joint filler shall be glued top and bottom. The glue used shall be the type recommended by the joint filler manufacturer.

Edges of panels shall be uniformly seated on the joint filler before slab reinforcement is placed.

DETAILS OF PRESTRESSED PANELS

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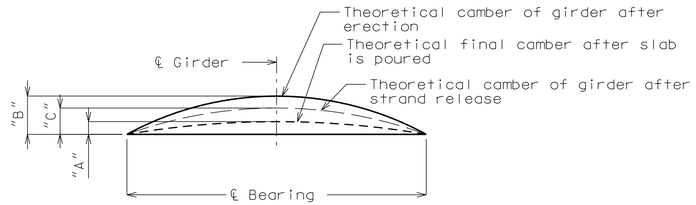
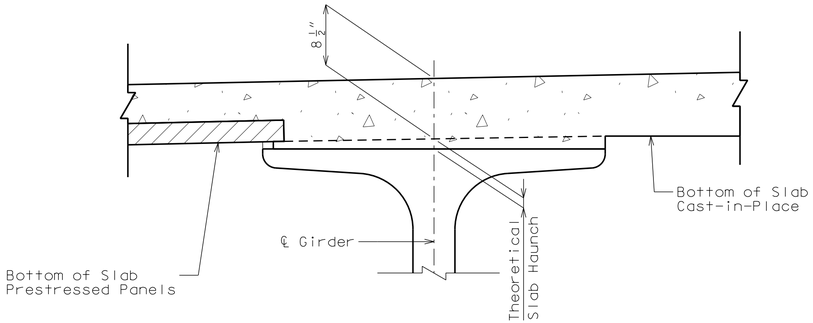


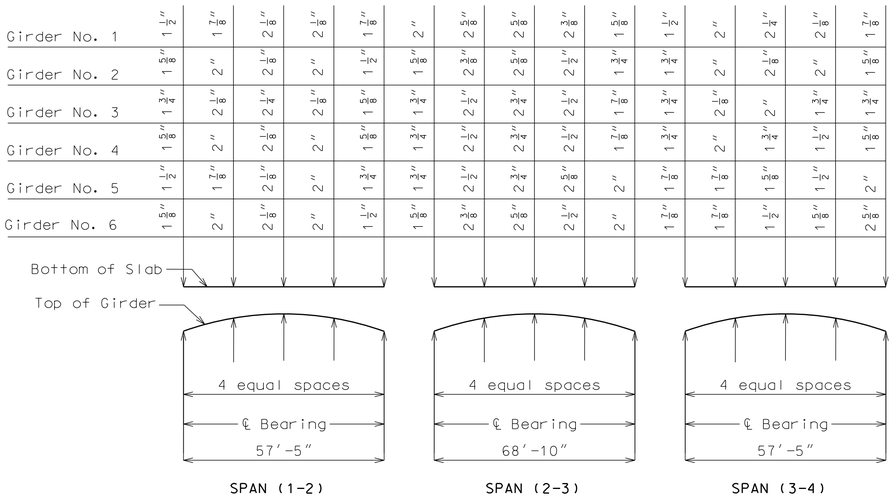
	Span (1-2)			Span (2-3)			Span (3-4)		
	"A"	"B"	"C"	"A"	"B"	"C"	"A"	"B"	"C"
Ext. Prestressed Beam	$\frac{5}{8}$"	1"	$\frac{3}{4}$"	$\frac{3}{4}$"	1 $\frac{1}{4}$"	1"	$\frac{5}{8}$"	1"	$\frac{3}{4}$"
Int. Prestressed Beam	$\frac{1}{2}$"			$\frac{5}{8}$"			$\frac{1}{2}$"		

GIRDER CAMBER DIAGRAM

Conversion factors for girder camber
0.25 pt. = 0.7125 x 0.5 pt.

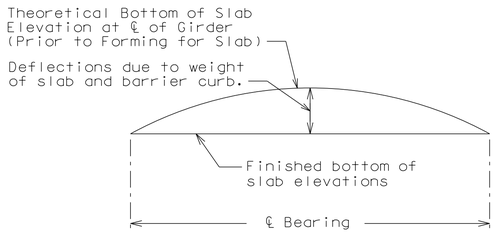


THEORETICAL SLAB HAUNCH



THEORETICAL SLAB HAUNCHING DIAGRAM

If girder camber is different from that shown in the camber diagram, in order to maintain minimum slab thickness, an adjustment of the slab haunches, an increase in slab thickness or a raise in grade uniformly throughout the structure shall be necessary. No payment will be made for additional labor or materials required for variation in haunching, slab thickness or grade adjustment.



TYPICAL SLAB ELEVATIONS DIAGRAM

Theoretical Bottom of Slab Elevations at Centerline of Girder (Prior to forming for slab)

	Span (1-2) (57'-5" ℄ brg - ℄ brg.)					Span (2-3) (68'-10" ℄ brg - ℄ brg.)					Span (3-4) (57'-5" ℄ brg - ℄ brg.)				
	℄ brg.	.25	.50	.75	℄ brg.	℄ brg.	0.25	0.50	0.75	℄ brg.	℄ brg.	.25	.50	.75	℄ brg.
Girder No. 1	817.48	817.81	818.09	818.30	818.45	818.46	818.67	818.78	818.78	818.68	818.67	818.61	818.49	818.30	818.05
Girder No. 2	817.78	818.10	818.37	818.56	818.69	818.70	818.90	818.99	818.97	818.84	818.83	818.76	818.62	818.41	818.16
Girder No. 3	818.08	818.39	818.64	818.82	818.93	818.94	819.11	819.18	819.14	818.99	818.98	818.89	818.74	818.51	818.27
Girder No. 4	818.38	818.67	818.90	819.06	819.16	819.17	819.32	819.37	819.31	819.14	819.13	819.02	818.85	818.61	818.38
Girder No. 5	818.37	818.64	818.86	819.00	819.08	819.09	819.22	819.25	819.17	818.98	818.97	818.84	818.65	818.42	818.21
Girder No. 6	818.28	818.54	818.73	818.86	818.92	818.93	819.04	819.05	818.94	818.74	818.73	818.58	818.38	818.15	817.97

Elevations are based on a constant slab thickness of 8 $\frac{1}{2}$" and include allowance for theoretical dead load deflections due to weight of slab (including precast panel where appropriate) and barrier curb.

CAMBER, HAUNCHING, & ELEVATIONS (NU-GIRDER)

Note: This drawing is not to scale. Follow dimensions.

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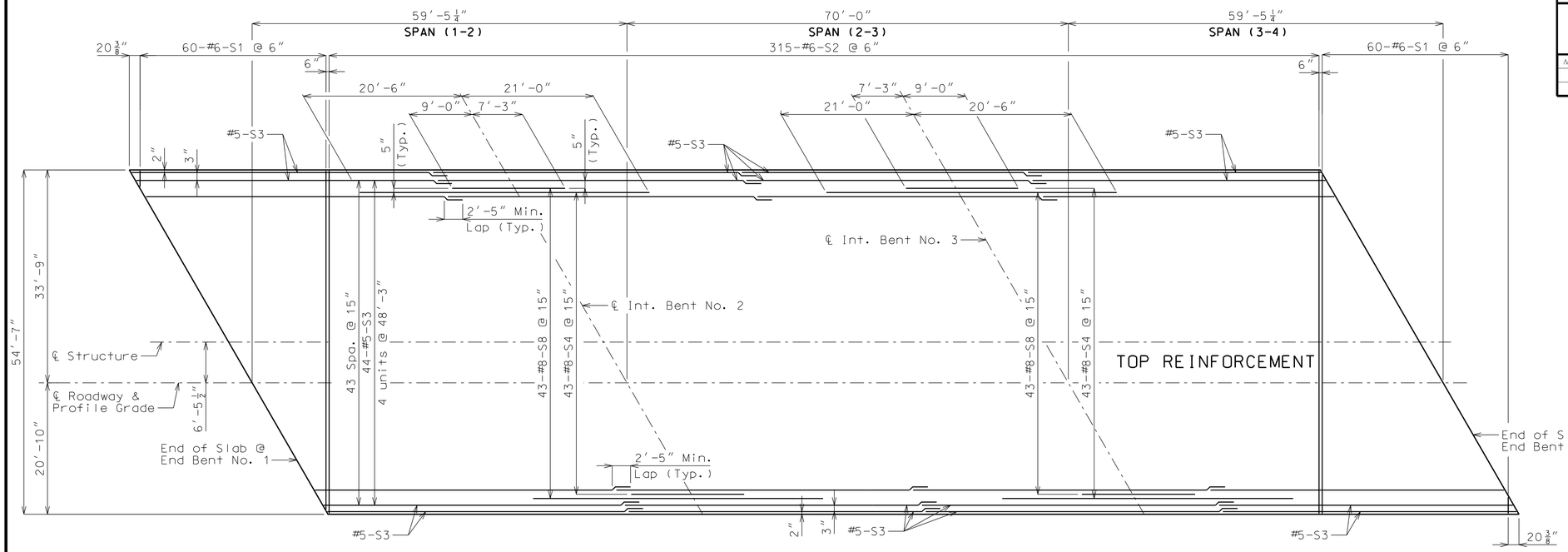
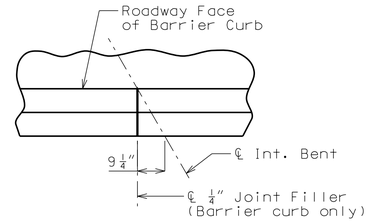
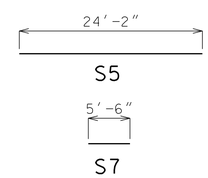
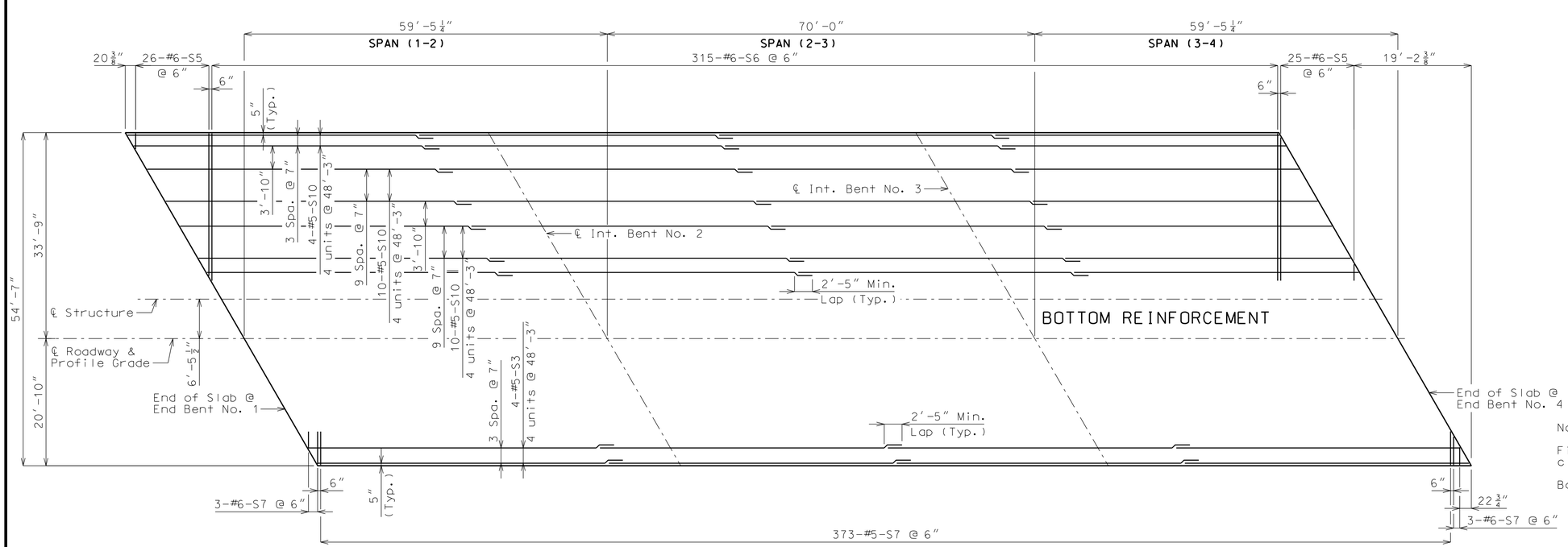




PART PLAN OF BARRIER JOINT
ON RIGHT BARRIER CURB
AT INTERMEDIATE BENT

(Left Barrier similar)





PLAN OF SLAB SHOWING REINFORCING

Notes:

Field cut #6-S7 as necessary to provide minimum clear of abutments.

Barrier reinforcement not shown for clarity.

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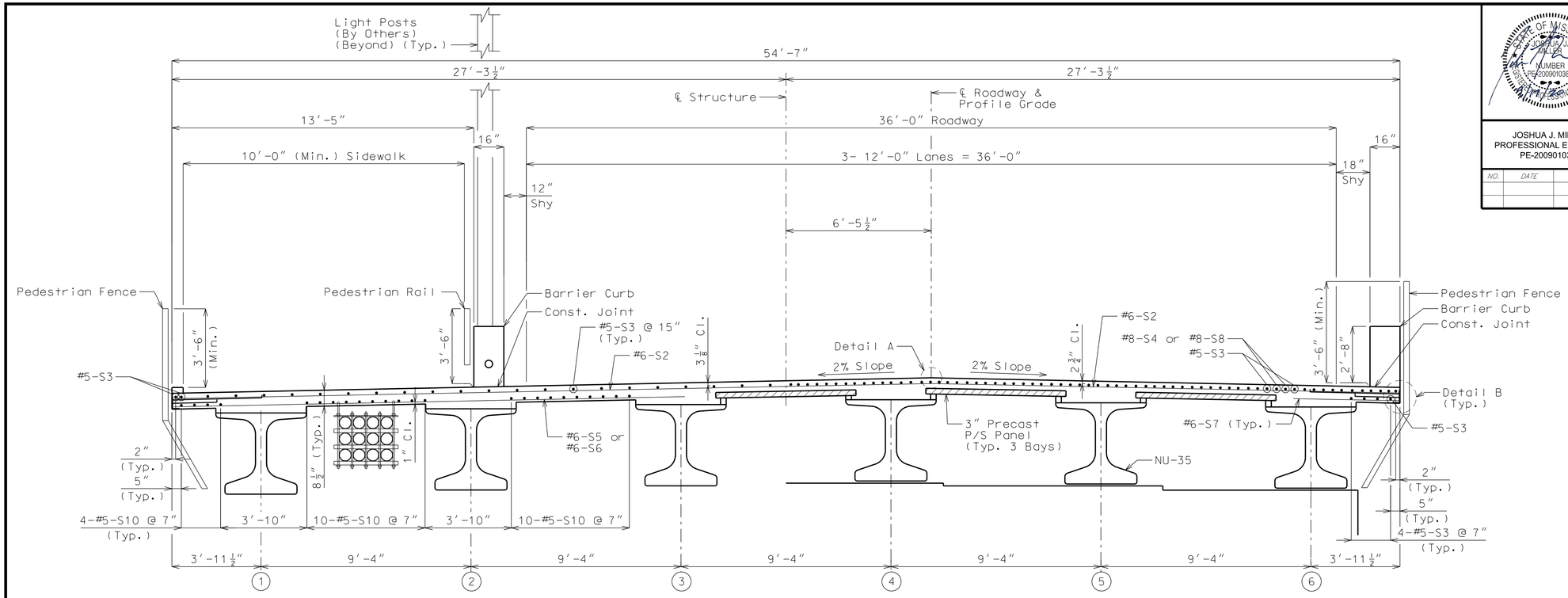
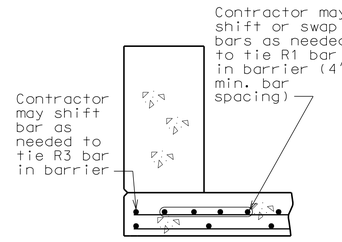


HALF SECTION NEAR MIDSPAN

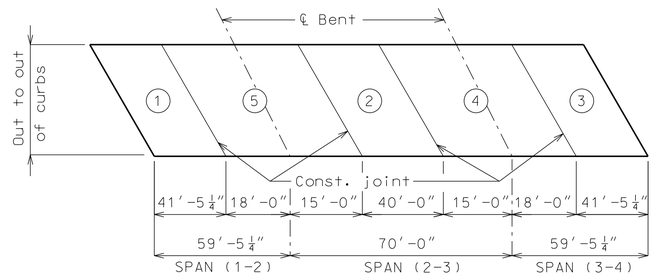
HALF SECTION NEAR INTERMEDIATE BENT

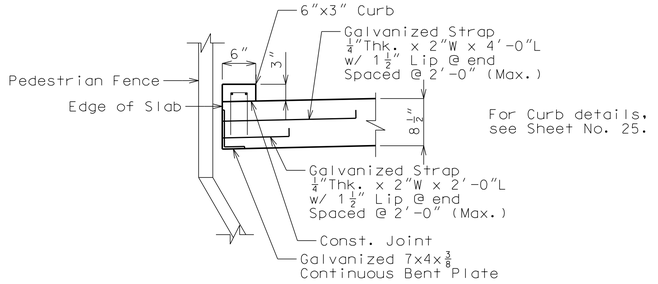
SECTION THRU SLAB

(Median not shown for clarity.)

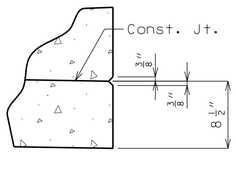


OPTIONAL SHIFTING TOP BARS AT BARRIER

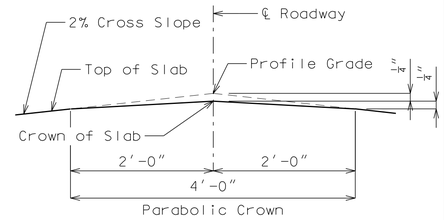




SIDEWALK CURB AND PEDESTRIAN FENCE ATTACHMENT DETAIL



DETAIL B

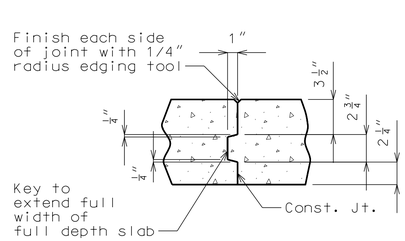


DETAIL A

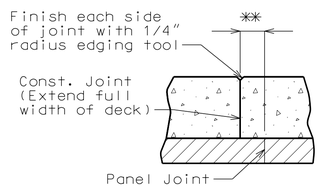
	Sequence of Pours					Min. rate of pour cu. yds./hr.
	Direction					With retarder
Basic sequence	1	2	3	4	5	25
	Either direction					
Alternate pours to the basic skip sequence are subject to the approval of the engineer in accordance with Sec 703.						
Alternate "A" pours	1	5 + 2		4 + 3		25
	End to 5	1 to 4		2 to end		
Alternate "B" pours	1 + 5 + 2		4 + 3			25
	End to 4		2 to end			
Alternate "C" pours	1 + 5 + 2 + 4 + 3					25
	End to end					

Note: The contractor shall pour and satisfactorily finish the slab pours at the rate given.

SLAB POURING SEQUENCE



FULL DEPTH SLAB



** Adjust the construction joint to a clearance of 6 inches minimum from the panel joint.

SLAB ON PANELS

SLAB CONSTRUCTION JOINT

Notes:

For details of precast prestressed panels, see Sheet No. 17.

For reinforcement of Barrier Curb not shown, see Sheets No. 21-23 and 26.

For Theoretical Bottom of Slab Elevations, Girder Camber Diagram and Theoretical Slab Haunching Diagram, see Sheet No. 18.

For Plan of Slab Showing Reinforcement, see Sheet No. 19.

For Conduit details, see Sheet No 26 and 27.

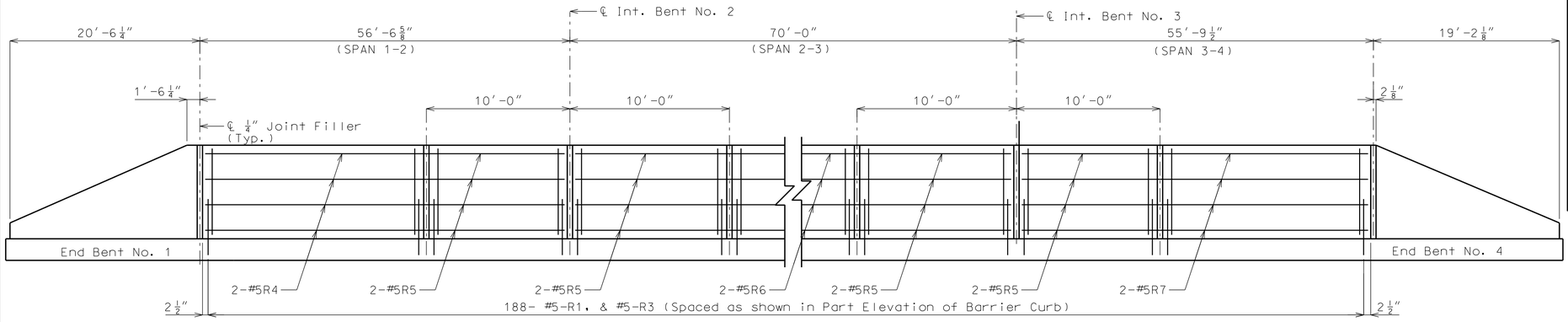
For Pedestrian Fence and Pedestrian Rail details, see Architectural Sheets.

For median details, see Street Plans.

The sidewalk segment of the bridge shall have a minimum cross-slope of 1.5%. Cross-slopes steeper than 2% are not compliant with ADA and must be made compliant by whatever means necessary, including removal and replacement.

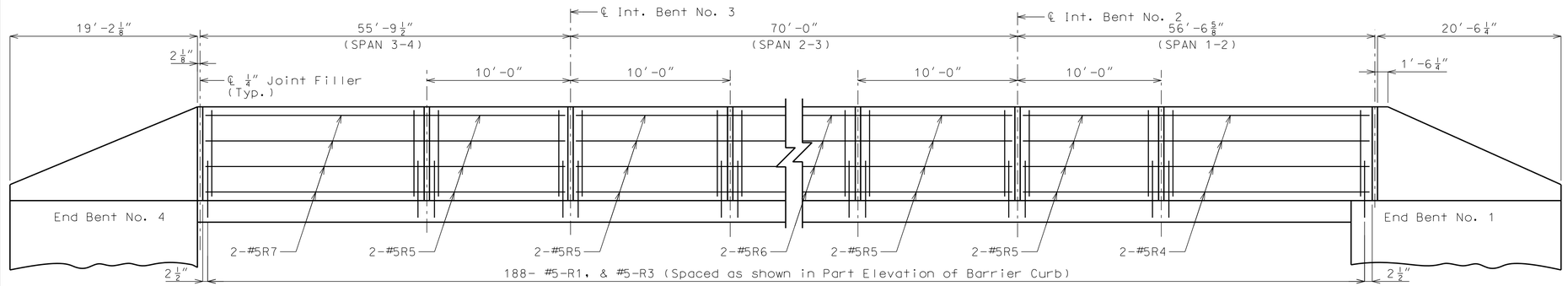
SLAB DETAILS

Note: This drawing is not to scale. Follow dimensions.



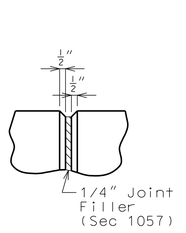
ELEVATION OF LEFT BARRIER CURB

(Longitudinal dimensions along traffic face of barriers are horizontal)

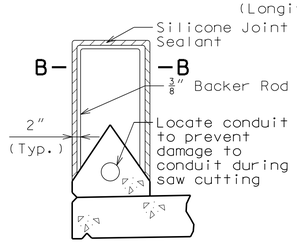


ELEVATION OF RIGHT BARRIER CURB

(Longitudinal dimensions along traffic face of barriers are horizontal)

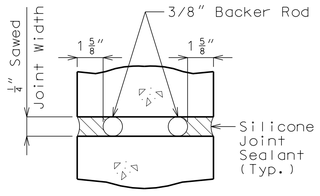


PART ELEVATION
AT FORMED JOINT

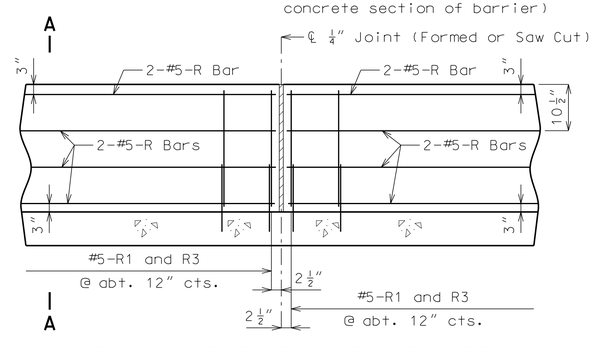


SECTION THRU
SAW CUT JOINT

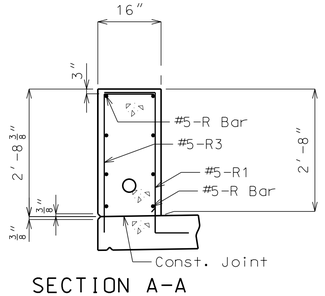
(Use when conduit is required)
(Place conduit in center of
concrete section of barrier)



SECTION B-B

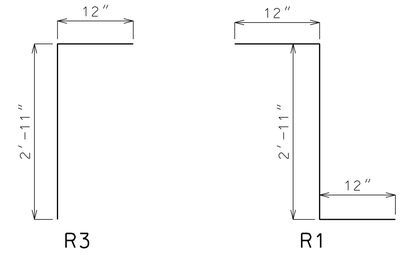


PART ELEVATION OF BARRIER CURB

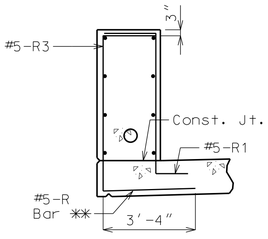


SECTION A-A

The cross-sectional area above the slab = 3.56 sq. ft.



BAR BENDING DIAGRAM



R-BAR PERMISSIBLE ALTERNATE SHAPE

** The R3 bar and #5 bottom transverse slab bar in cantilever (P/S panels only) combination may be furnished as one bar as shown, at the contractor's option.

General Notes

Top of barrier curb shall be built parallel to grade with barrier curb joints (except at end bents) normal to grade.

All exposed edges of barrier curb shall have either a 1/2-inch radius or a 3/8-inch bevel, unless otherwise noted.

Concrete in the barrier curb shall be Class B-1.

Concrete traffic barrier delineators shall be placed on top of the barrier curb as shown on Missouri Standard Plans 617.10 and in accordance with Sec 617. Delineators on bridges with two-lane, two-way traffic shall have retroreflective sheeting on both sides.

Joint sealant and backer rods shall be in accordance with Sec 717 for silicone joint sealant for saw cut and formed joints.

For Conduit Details, see Sheets No. 26 and 27.

CONVENTIONAL-FORMED BARRIER CURB

Note: This drawing is not to scale. Follow dimensions.

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West Bridge Plans

Paragon Star Development

Lee's Summit, Missouri

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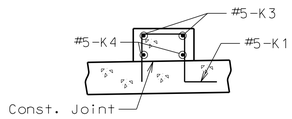
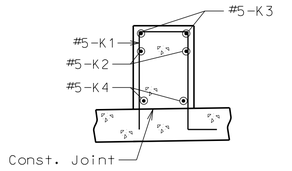
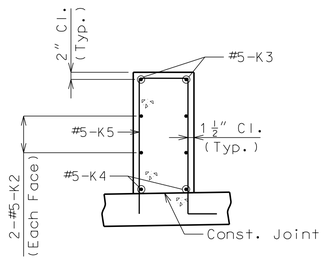


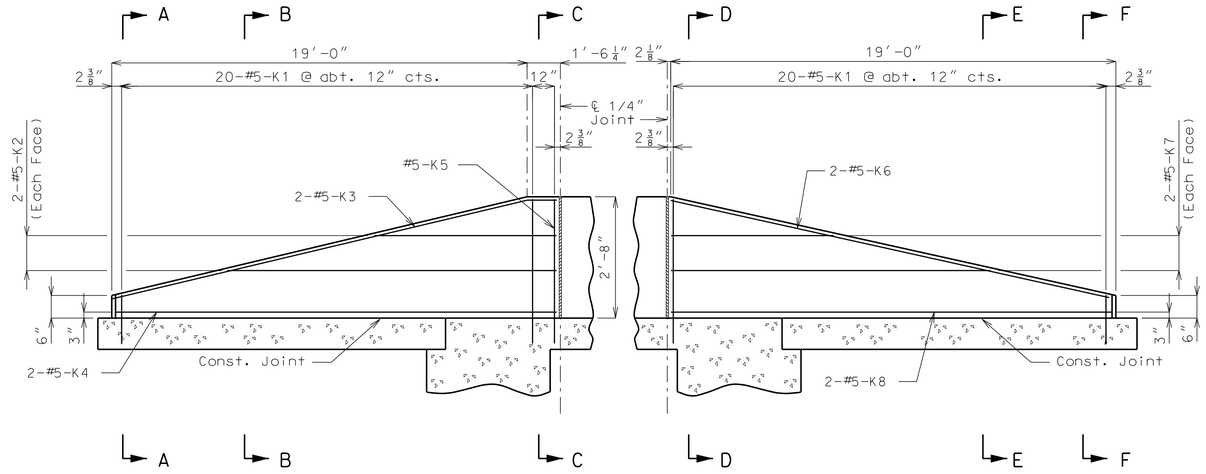
SECTION A-A



SECTION B-B

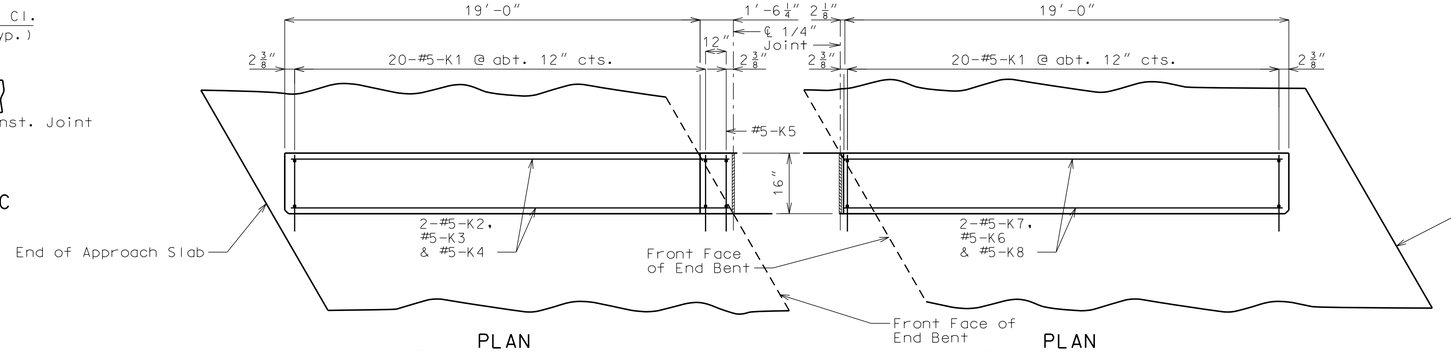


SECTION C-C



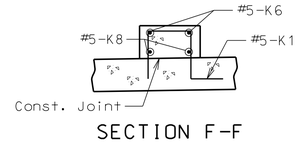
ELEVATION
End Bent No. 1

ELEVATION
End Bent No. 4

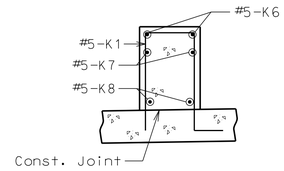


PLAN
End Bent No. 1

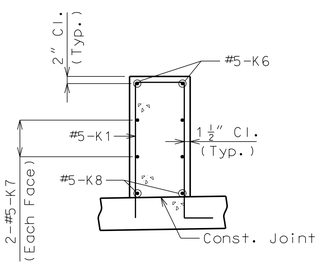
PLAN
End Bent No. 4



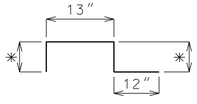
SECTION F-F



SECTION E-E



SECTION D-D



K1
✳ Varies 8" to 2'-10"

General Notes

For Conduit Details, see Sheets No. 26 and 27.

Concrete traffic barrier delineators shall be placed on top of the barrier curb as shown on Missouri Standard Plans 617.10 and in accordance with Sec 617 of the Missouri Standard Specifications for Highway Construction. Delineators on bridges with two-lane, two way traffic shall have retroreflective sheeting on both sides.

Reinforcing Steel:
Minimum clearance to reinforcing steel shall be 1½".

CONVENTIONAL-FORMED LEFT BARRIER CURB AT END BENTS ON CONCRETE APPROACH SLAB

Note: This drawing is not to scale. Follow dimensions.

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West Bridge Plans
Paragon Star Development
Lee's Summit, Missouri

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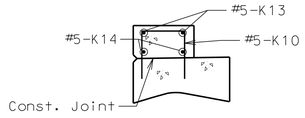
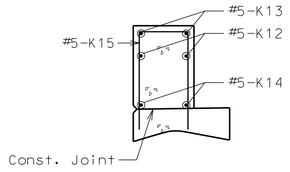
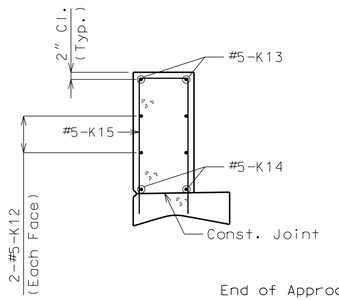


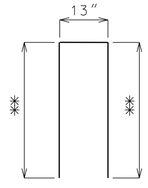
SECTION A-A



SECTION B-B

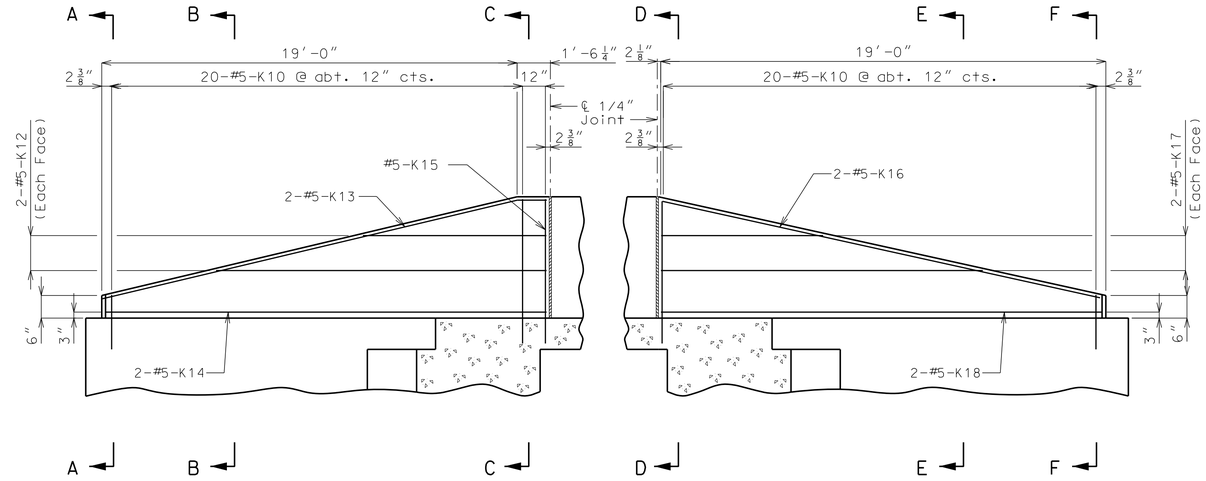


SECTION C-C



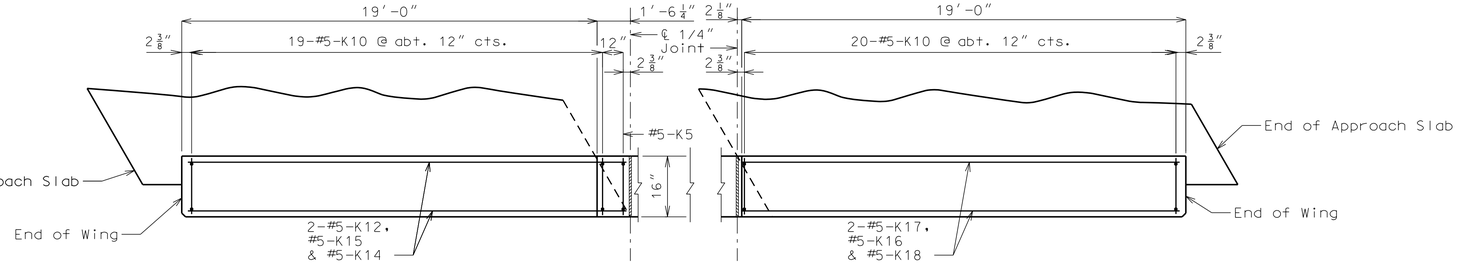
K10

** Varies 1'-10 to 4'-0"



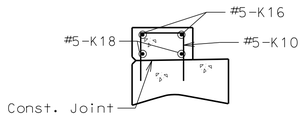
ELEVATION
END BENT NO. 1

ELEVATION
END BENT NO. 4

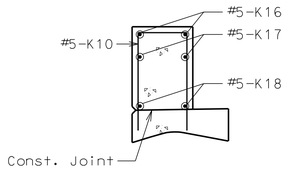


PLAN
END BENT NO. 1

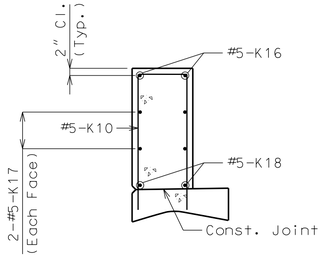
PLAN
END BENT NO. 4



SECTION F-F



SECTION E-E



SECTION D-D

General Notes

For Conduit Details, see Sheets No. 26 and 27.

Concrete traffic barrier delineators shall be placed on top of the barrier curb as shown on Missouri Standard Plans 617.10 and in accordance with Sec 617 of the Missouri Standard Specifications for Highway Construction. Delineators on bridges with two-lane, two way traffic shall have retroreflective sheeting on both sides.

Reinforcing Steel:
Minimum clearance to reinforcing steel shall be 1½".

CONVENTIONAL-FORMED SAFETY BARRIER CURB AT END BENTS ON WING

Note: This drawing is not to scale. Follow dimensions.

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TOTAL SHEETS	30

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West Bridge Plans
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Lee's Summit, Missouri

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TOTAL SHEETS	30

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Paragon Star Development

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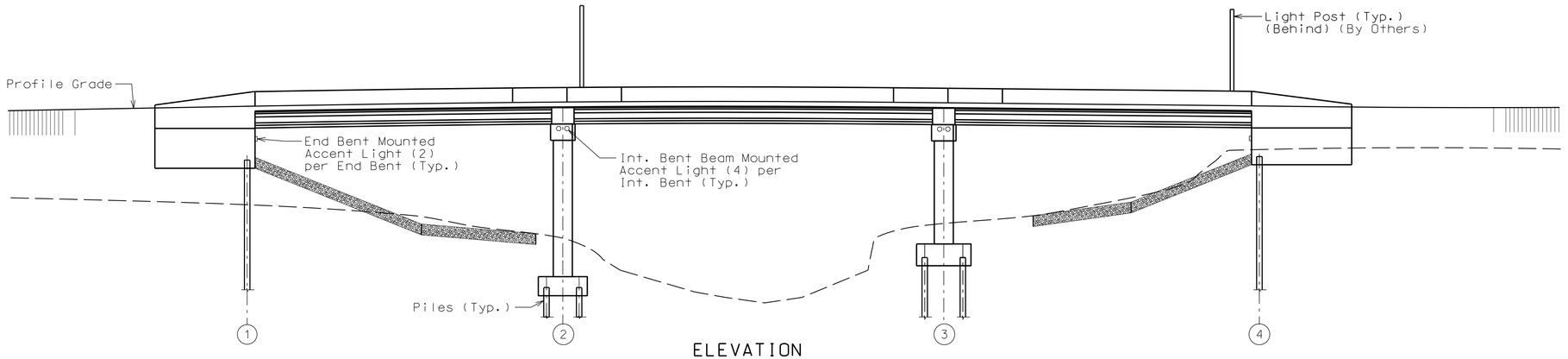
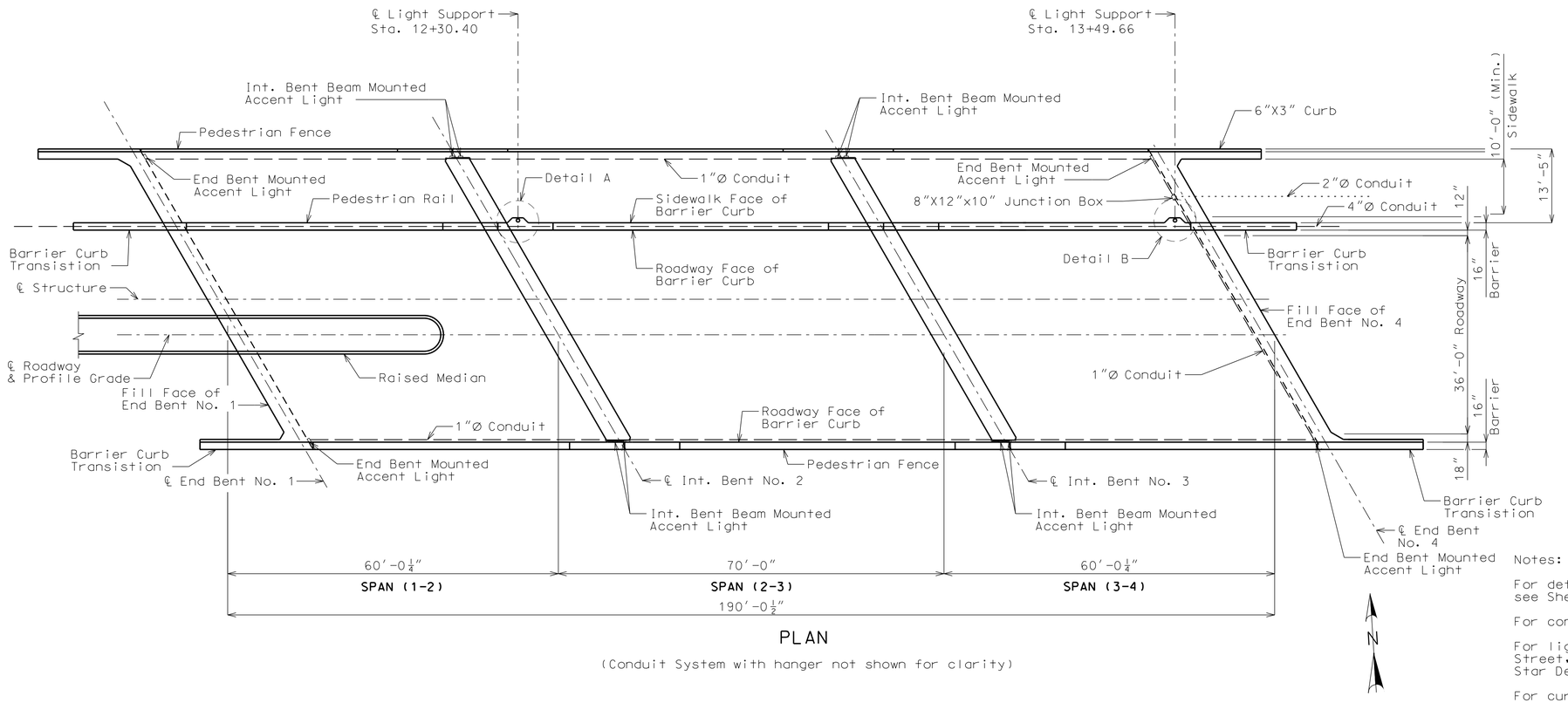


ELEVATION

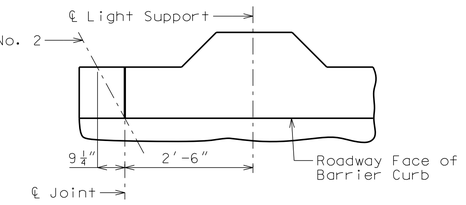
(Looking North)

(Pedestrian Fence not shown for clarity. See Architectural Sheets.)

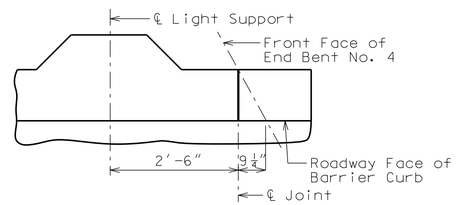


PLAN

(Conduit System with hanger not shown for clarity)



DETAIL A



DETAIL B

Notes:

For details of Light Support and Barrier reinforcement, see Sheet No. 26 .

For conduit details, see Sheets No. 26 and 27.

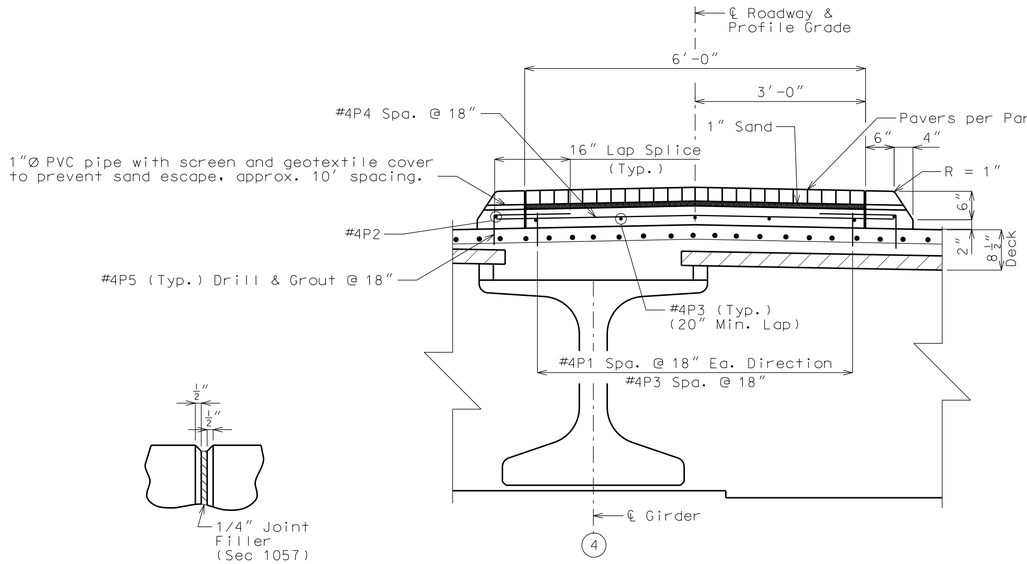
For light standards, light baseplate, and wiring, see "Public Street, Storm Sewer and Street Lighting Plans for Paragon Star Development Paragon Parkway" plans set.

For curb and raised median details, see Sheet No. 25 .

For aesthetic details and connections, see Architectural Sheets.

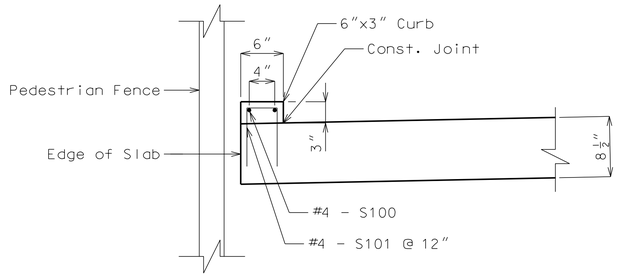
GENERAL PLAN AND ELEVATION OF AESTHETIC DETAILS, LIGHTING AND CONDUIT

Note: This drawing is not to scale. Follow dimensions.



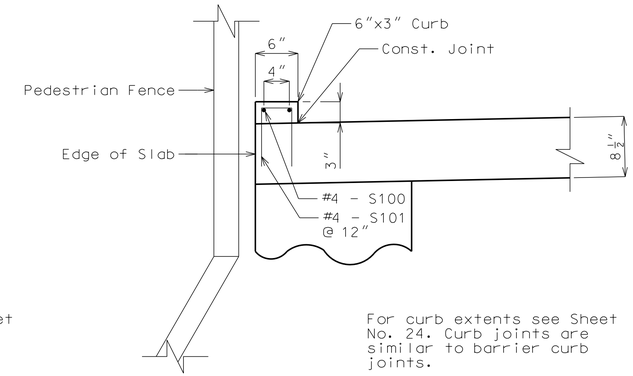
TYPICAL SECTION

PART ELEVATION
AT FORMED JOINT



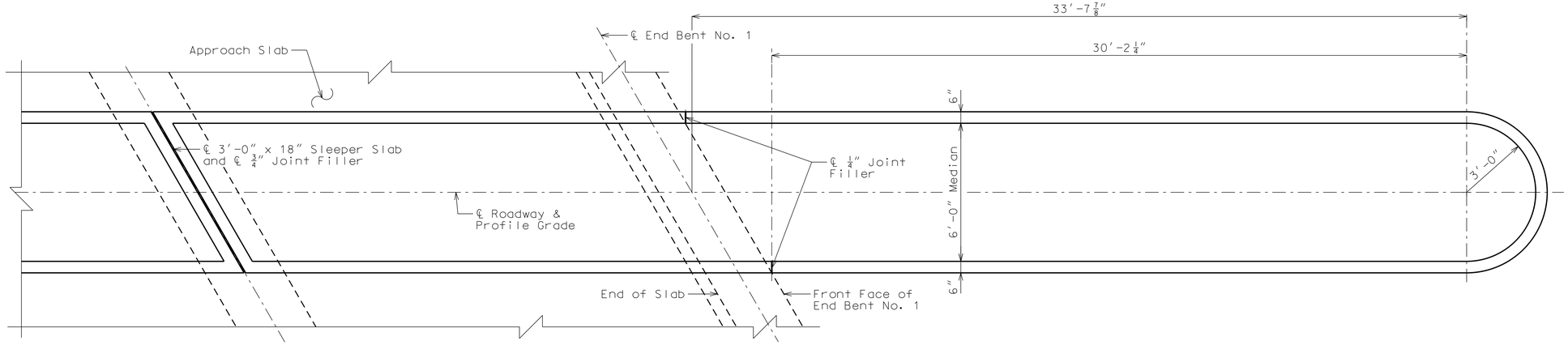
For curb extents see Sheet No. 24. Curb joints are similar to barrier curb joints.

SIDEWALK CURB DETAIL ON CONCRETE APPROACH SLAB



For curb extents see Sheet No. 24. Curb joints are similar to barrier curb joints.

SIDEWALK CURB DETAIL ON WING



PLAN OF MEDIAN ON BRIDGE & APPROACH SLAB

Note:
See Street Plans for median details and extents.

MEDIAN AND CURB DETAILS

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West Bridge Plans
Paragon Star Development
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Notes:

Cost of furnishing and placing anchor bolts for light standard will be considered completely covered by the contract lump sum price for the bridge.

All conduits shall be rigid nonmetallic schedule 40 heavy wall polyvinyl chloride (PVC) with 3" minimum cover in concrete. Each section of conduit shall bear the Underwriters Laboratories (UL) label.

All conduit clamps for conduits not encased in concrete shall be commercially-available, nonmetallic conduit clamps and approved by the engineer.

Anchor bolts and nuts shall be ASTM F1554 Grade 55. Anchor bolts, nuts and washers shall be fully galvanized.

Shift reinforcing steel in field where necessary to clear conduit and junction boxes.

Light standards, wiring and fixtures shall be furnished and installed by others.

For details of light standards, light baseplate, and wiring, see Lighting Plans sheet.

Contractor shall verify the bolt size and pattern in accordance with the light pole manufacturer's specifications prior to placing the anchor bolts.

Expansion fittings shall be placed as shown and set in accordance with the manufacturer's requirements and based on the air temperature at the time of setting given an estimated total expansion movement of 1 inch using a maximum temperature range of 120°F and a maximum temperature of 110°F. Additional expansion fittings beyond what is specified on the bridge plans shall be provided and placed in accordance with the conduit manufacturer's recommendations.

Use "surface" mounting, except adjacent to sidewalks.

All end bent, intermediate bent, and barrier junction boxes shall be PVC molded in accordance with Sec 1062. The conduit terminations shall be permanentor separable. The terminations and covers shall be of watertight construction and shall meet requirements for NEMA 4 enclosure.

Placement of junction boxes and covers, complete in place, shall be flush with the pedestrian face of barrier. Junction boxes and covers may be recessed up to $\frac{1}{4}$".

Weep holes shall be provided at low points or other critical locations to drain any moisture in the conduit system. Conduit shall be sloped to drain.

Drainage shall be provided at low points or other critical locations of all conduits and all junction boxes in accordance with Sec 707. All conduits shall be sloped to drain where possible.

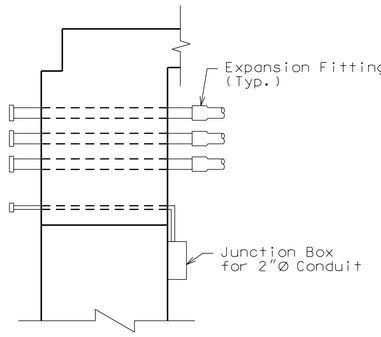
All 1" and 2" diameter conduits shall be secured to concrete with nonmetallic clamps at about 5'-0" cts. Concrete anchors for clamps shall be in accordance with Federal Specification FF-S-325, Group II, Type 4, Class I and shall be galvanized in accordance with ASTM A153, B695-91 Class 50 or stainless steel. Minimum embedment in concrete shall be 1 3/4". The supplier shall furnish a manufacturer's certification that the concrete anchors meet the required material and galvanizing specifications.

Junction box size shown on plan may require special order. No other size may be substituted.

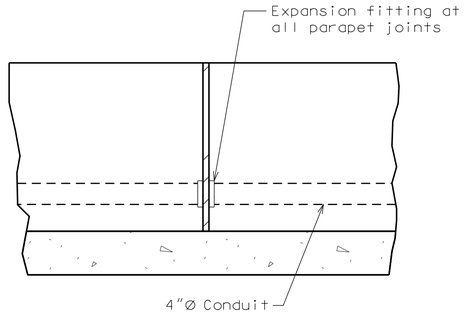
City Construction Personnel: Indicate in field and on bridge plans for future work the exact location of buried conduit at ends of bridge that are capped and not immediately used.

Payment for furnishing and installing light supports, concrete and reinforcing steel, and Conduit System, complete in place, will be considered completely covered by the contract lump sum price for the bridge.

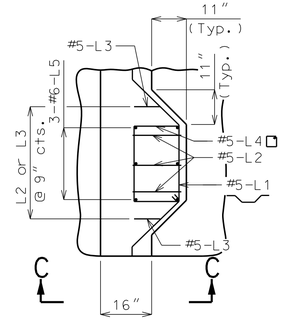
Cast-in-place anchors for the 12-duct conduit system shall be designed per the conduit hanger's engineer and the design shall be signed and sealed by a registerd Professional Engineer in the State of Missouri. The design and details shall be submitted to the owner for review a minimum for four weeks prior to the start of fabrication.



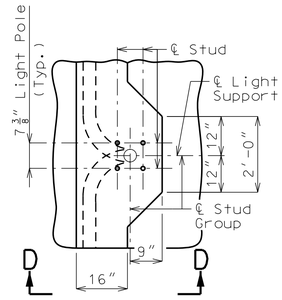
TYPICAL SECTION AT END BENT
SHOWING CONDUIT SYSTEM



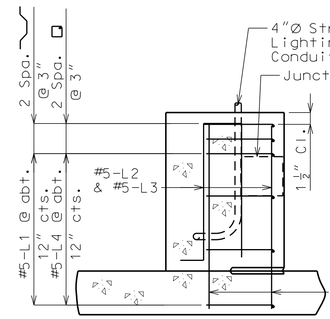
EXPANSION FITTING DETAIL



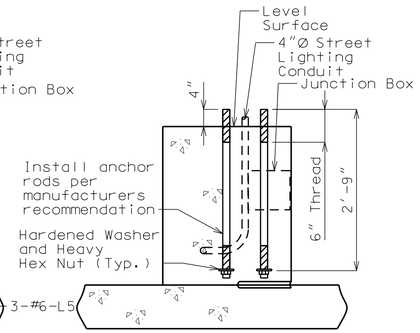
PART PLAN



PART PLAN



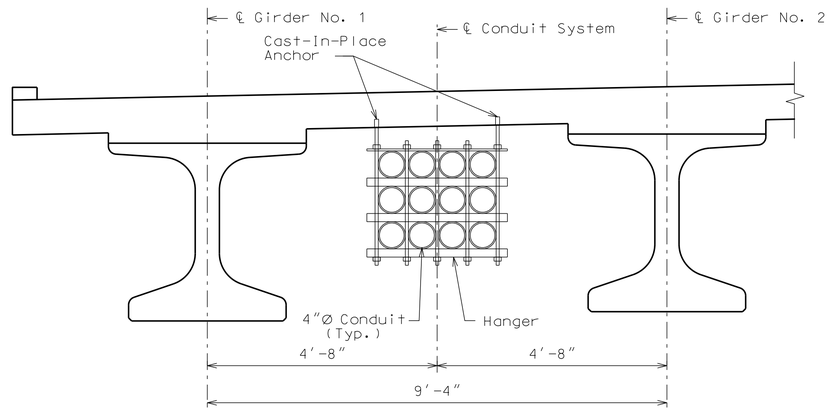
SECTION C-C



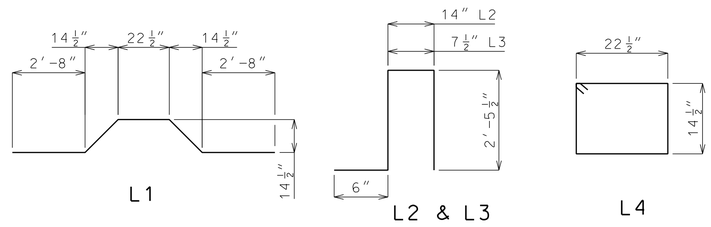
SECTION D-D

(Conduit not shown for clarity)

LIGHT SUPPORTS ON LEFT BARRIER



CONDUIT SYSTEM HANGER DETAIL



BENDING DIAGRAMS

CONDUIT DETAILS

Note: This drawing is not to scale. Follow dimensions.

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SHEET NO.	26
TOTAL SHEETS	30

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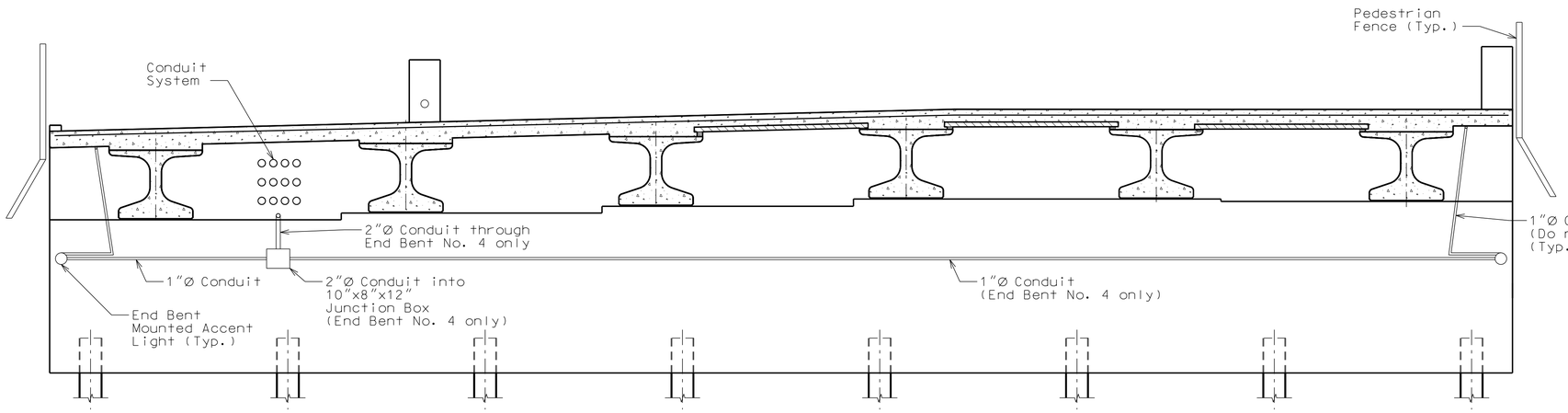
West Bridge Plans

Paragon Star Development

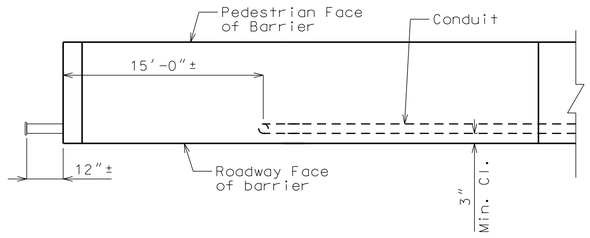
Lee's Summit, Missouri

NO.	DATE	REVISIONS	BY	APPROVED



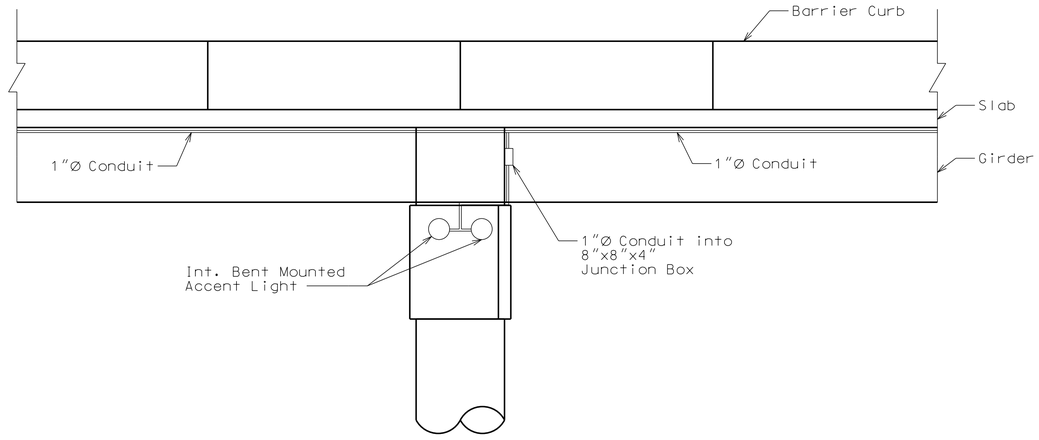
TYPICAL END BENT ELEVATION SHOWING
LIGHTING AND CONDUIT

(End Bent No. 4 shown, End Bent No. 1 similar)



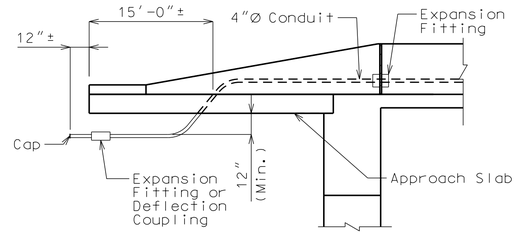
PLAN AT LEFT BARRIER CURB

(Left barrier at End Bent No. 1 shown,
left barrier at End Bent No. 4 similar)



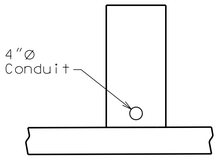
TYPICAL INT. BENT ELEVATION SHOWING
LIGHTING AND CONDUIT

(Right fascia shown, left fascia similar)



ELEVATION SHOWING CONDUITS
NEAR END BENTS AT LEFT
BARRIER CURB

(Left barrier at End Bent No. 1 shown,
Left barrier at End Bent No. 4 similar)



TYPICAL SECTION
OF LEFT
BARRIER CURB

CONDUIT DETAILS

Note: This drawing is not to scale. Follow dimensions.

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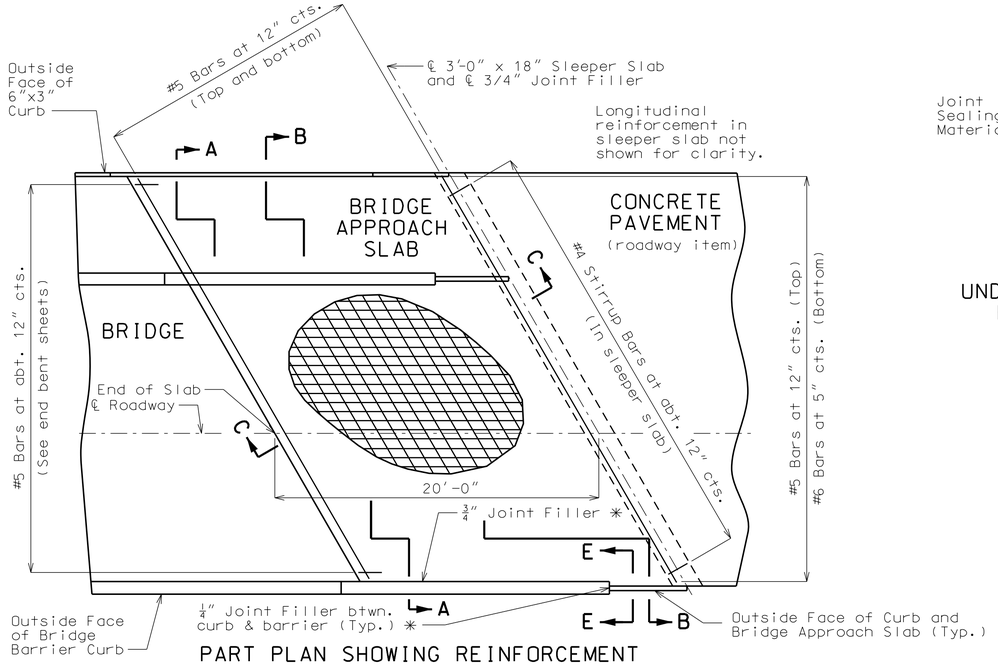
West Bridge Plans

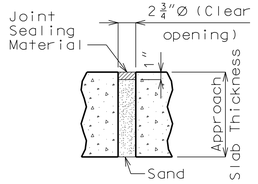
Paragon Star Development

Lee's Summit, Missouri

NO.	DATE	REVISIONS	BY	APPROVED

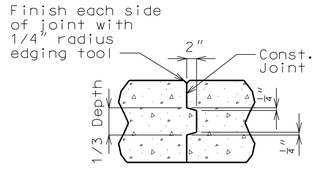


PART PLAN SHOWING REINFORCEMENT

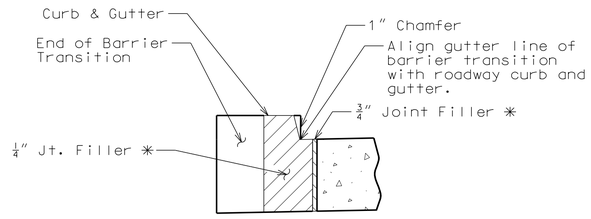


UNDERSEAL ACCESS HOLE DETAIL

(If required)



CONST. JOINT DETAIL



SECTION E-E

(Between curbs)

(See Street plans for concrete curb on Approach Slab to roadway curb details)

General Notes:

All concrete for the bridge approach slab and sleeper slab shall be in accordance with Sec 503 (f'c = 4,000 psi).

The reinforcing steel in the bridge approach slab and the sleeper slab shall be epoxy coated Grade 60 with fy = 60,000 psi.

Drain pipe may be either 6" diameter corrugated metallic-coated pipe underdrain, 4" diameter corrugated polyvinyl chloride (PVC) drain pipe, or 4" diameter corrugated polyethylene (PE) drain pipe.

Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

The reinforcing steel in the bridge approach slab and the sleeper slab shall be continuous. The transverse reinforcing steel may be made continuous by lap splicing the #5 bars 29".

All joint filler shall be in accordance with Sec 1057 for preformed fiber expansion joint filler except as noted.

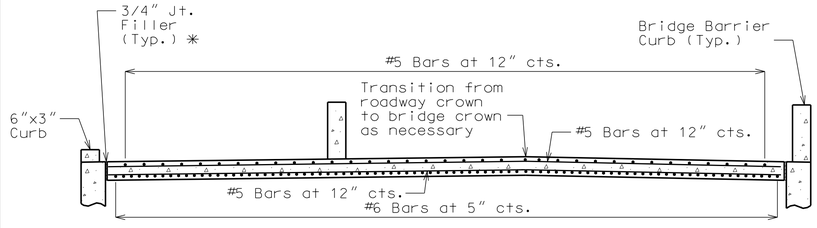
The contractor shall pour and satisfactorily finish the bridge before pouring the bridge approach slab.

For Concrete Approach Pavement details, see Street plans.

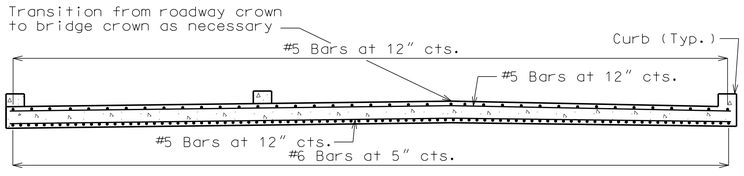
See Street Plans for details of Curb on Approach Slab.

Payment for furnishing all materials, labor and excavation necessary to construct the approach slab, including the timber header, sleeper slab, underdrain, Type 5 aggregate base, joint filler and all other appurtenances and incidental work as shown on this sheet, complete in place, will be considered completely covered by the contract lump sum price for the bridge.

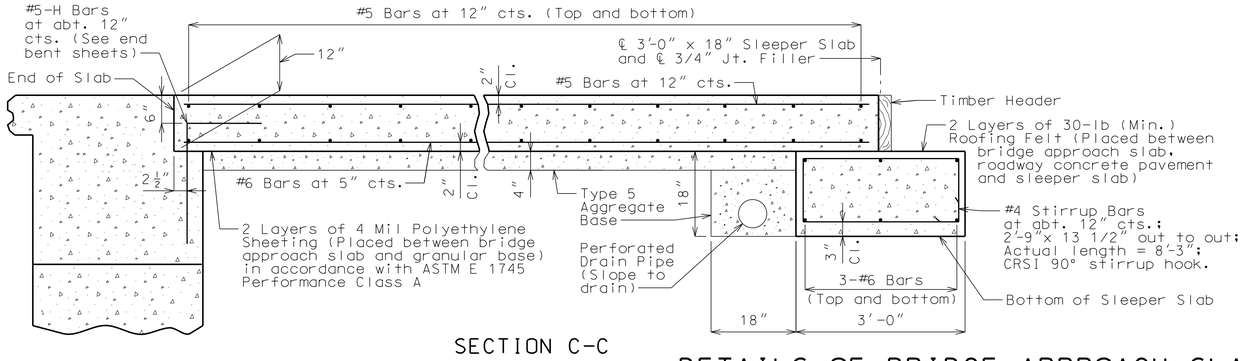
* Seal joint between vertical face of approach slab and wing with "Silicone Joint Sealant for Saw Cut and Formed Joints" in accordance with Sec 717.



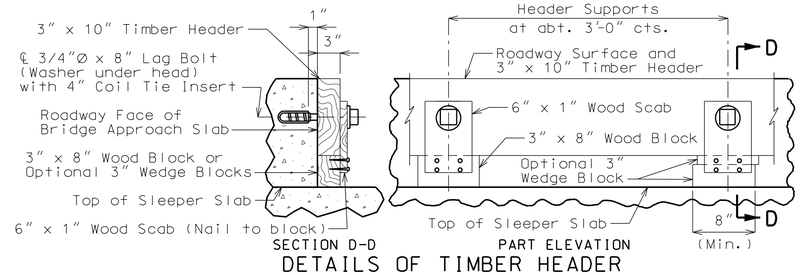
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D PART ELEVATION

DETAILS OF TIMBER HEADER

Remove timber header when concrete pavement is placed.

DETAILS OF BRIDGE APPROACH SLAB (MAJOR ROAD)

Note: This drawing is not to scale. Follow dimensions.

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TOTAL SHEETS	30

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West Bridge Plans

Paragon Star Development

Lee's Summit, Missouri

NO.	DATE	REVISIONS	BY	APPROVED

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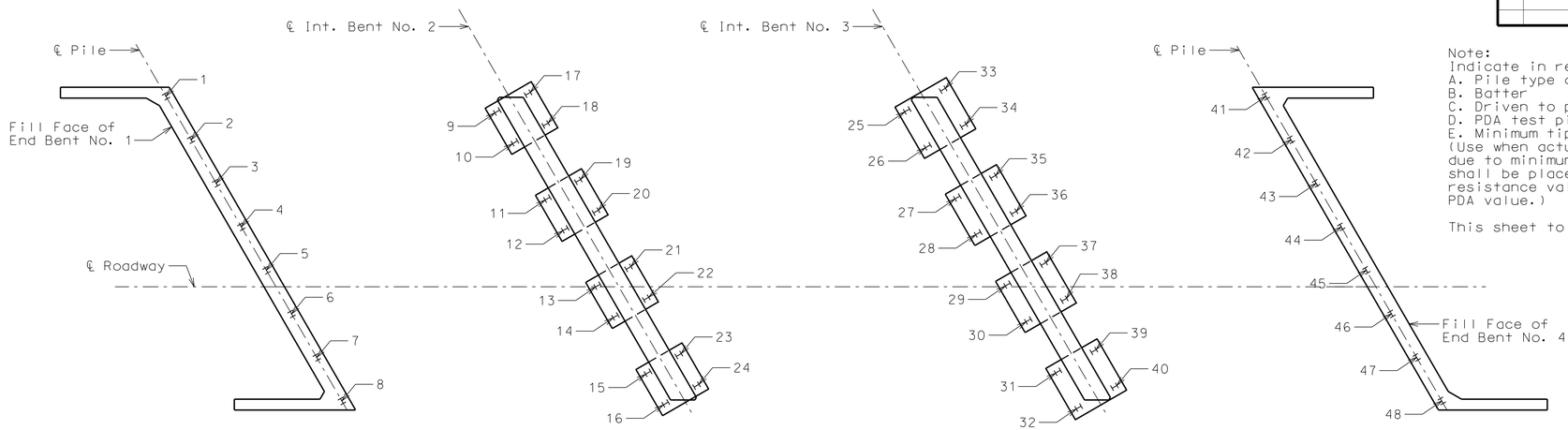

Note:
Indicate in remarks column:
A. Pile type and grade
B. Batter
C. Driven to practical refusal
D. PDA test pile
E. Minimum tip elevation controlled
(Use when actual blow count is less than PDA blow count due to minimum tip elevation requirement. A plus sign (+) shall be placed after the PDA nominal axial compressive resistance value indicating actual value is higher than PDA value.)

This sheet to be completed by City construction personnel.

PART PLAN SHOWING PILE NUMBERING FOR RECORDING AS-BUILT PILE DATA

As-Built Pile Data

Pile No.	Length in Place (ft)	PDA Nom. Axial Compressive Resistance (kips)	PDA End of Drive Blow Count (blows/in.)	Actual End of Drive Blow Count (blows/in.)	Remarks
					END BENT NO. 1
1					
2					
3					
4					
5					
6					
7					
8					
					INT. BENT NO. 2
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					

As-Built Pile Data

Pile No.	Length in Place (ft)	PDA Nom. Axial Compressive Resistance (kips)	PDA End of Drive Blow Count (blows/in.)	Actual End of Drive Blow Count (blows/in.)	Remarks
					INT. BENT NO. 2 CONT.
20					
21					
22					
23					
24					
					INT. BENT NO. 3
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					

As-Built Pile Data

Pile No.	Length in Place (ft)	PDA Nom. Axial Compressive Resistance (kips)	PDA End of Drive Blow Count (blows/in.)	Actual End of Drive Blow Count (blows/in.)	Remarks
					INT. BENT NO. 3 CONT.
39					
40					
					END BENT NO. 4
41					
42					
43					
44					
45					
46					
47					
48					

AS-BUILT PILE DATA

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SHEET NO.	TOTAL SHEETS
30	30

JOSHUA J. MILLER
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West Bridge Plans
Paragon Star Development
Lee's Summit, Missouri

NO.	DATE	REVISIONS	BY	APPROVED

BORING LOG NO. B-2

Page 1 of 1

PROJECT: Paragon Star Bridges

CLIENT: GBA, Lenexa, KS

SITE: I-470 and View High Drive, Lee's Summit, MO

LOCATION See Exploration Plan
Latitude: 38.9391° Longitude: -94.4477°
Approximate Surface Elev.: 814 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	UNCONFINED COMPRESSIVE STRENGTH (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
		0.5	813.5+/-										
			6" ROOT ZONE										
2			**LEAN CLAY (CL)**, dark brown to brown, soft to very soft - trace organics to 5 feet.	5			16	1-1-2 N=3		31			
			- with fine sand from 8.5 to 18.5 feet	10			16	2-1-2 N=3		35			
				15			18	0-0-1 N=1		38			
			- with gravel below 18.5 feet	20			18	0-1-3 N=4		37			
			- with fine sand below 23.5 feet	25			18	0-0-1 N=1		32			78
		28.5	785.5+/-										
			CLAYEY SAND (SC), trace gravel, brown, loose	30			18	3-4-5 N=9		29			
				35			10	5-3-4 N=7		21			28
		38.5	775.5+/-										
3			**SHALE**, gray, highly to moderately weathered	40			5	50/5"		22			
				45			3	50/3"		17			
		50.0	764+/-	50			4	50/4"		31			
			Boring Terminated at 50 Feet										

Stratification lines are approximate. In-situ, the transition may be gradual.
Classification estimated from disturbed samples. Core samples and petrographic analysis may reveal other rock types.

Hammer Type: Automatic

Advancement Method:
Continuous Flight Augers

Abandonment Method:
Boring backfilled with Auger Cuttings

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan

Notes:

WATER LEVEL OBSERVATIONS
Groundwater not encountered

Terracon
15620 W 113th St
Lenexa, KS

Boring Started: 07-01-2019 | Boring Completed: 07-01-2019
Drill Rig: 988 | Driller: SF
Project No.: 02195051

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 02195051 PARAGON STAR BRID.GPJ TERRACON_DATATEMPLATE.GDT 7/16/19

BORING LOG NO. B-3

Page 1 of 1

PROJECT: Paragon Star Bridges

CLIENT: GBA, Lenexa, KS

SITE: I-470 and View High Drive, Lee's Summit, MO

LOCATION See Exploration Plan
Latitude: 38.9391° Longitude: -94.447°
Approximate Surface Elev.: 812 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	UNCONFINED COMPRESSIVE STRENGTH (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
		0.5	811.5+/-										
			6" ROOT ZONE										
2			**LEAN CLAY (CL)**, with fine sand, brown to gray, medium stiff - trace organics to 3.5 feet	5			12	3-3-3 N=6		23			
			- very soft to soft below 8.5 feet	10	▽		12	1-1-1 N=2		27			
				15			12	0-0-0 N=0		30			99
				20			12	1-1-1 N=2		31			
				25			12	0-0-1 N=1		32			
				30			12	0-0-2 N=2		32			
				35			12	0-0-2 N=2		32			99
				40			12	0-0-2 N=2		34			
				45			12	0-1-1 N=2		33			
		48.0	764+/-										
3			**SHALE**, gray, highly to moderately weathered	50			3	50/3"		15			
		53.7	758.5+/-				2	50/2"		17			
			Boring Terminated at 53.7 Feet										

Stratification lines are approximate. In-situ, the transition may be gradual.
Classification estimated from disturbed samples. Core samples and petrographic analysis may reveal other rock types.

Hammer Type: Automatic

Advancement Method:
0 to 10 ft: Continuous Flight Augers
10 to 53.7 ft.: Wash Bore

Abandonment Method:
Boring backfilled with Auger Cuttings

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevations were interpolated from a topographic site plan

Notes:

WATER LEVEL OBSERVATIONS
▽ *13 ft. at completion*

Terracon
15620 W 113th St
Lenexa, KS

Boring Started: 07-01-2019 | Boring Completed: 07-01-2019
Drill Rig: 884 | Driller: DB
Project No.: 02195051

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 02195051 PARAGON STAR BRID.GPJ TERRACON_DATATEMPLATE.GDT 7/16/19

BORING DATA

Note: For locations of borings, see Sheet No. 1.

Note: This drawing is not to scale. Follow dimensions.

GENERAL NOTES

1. "A" SERIES DRAWINGS PERTAIN TO, BUT ARE NOT LIMITED TO: BRIDGE RAILS, RAIL STRUCTURE, RAIL FINISHES, AND BRIDGE LIGHTING.

2. ALL SPOT ELEVATIONS ARE TO STATE BASE PLANE COORDINATES USED BY THE BRIDGE AND CIVIL SCOPES.

3. ALL SPOT ELEVATIONS ARE FOR GENERAL COORDINATION PURPOSES ONLY. REFERENCE CIVIL AND BRIDGE SCOPES FOR OFFICIAL ELEVATIONS.

4. ALL WELDS ARE TO BE CONTINUOUS AND WATER TIGHT U.N.O.

5. ALL STEEL IS TO BE FULLY GALVANIZED. ANY GALVANIZING REMOVED DURING THE CONSTRUCTION OR INSTALLATION PROCESS SHALL BE REPAIRED WITH A ZINC-RICH PRIMER. BECAUSE ZINC-RICH PRIMER IS UNDERSTOOD TO BE A SHORTER LIVED FINISH AS WELL AS HAVING A DIFFERENT APPEARCE THAN ACTUAL GALVANIZING, EVERY EFFORT SHALL BE MADE TO MINIMIZE RELIANCE UPON ZINC-RICH PRIMER.

6. ANY DIMENSIONS BETWEEN PRIMARY STRUCTURAL ELEMENTS (SUCH AS GRIDS) ARE FOR REFERENCE ONLY. REFERENCE BRIDGE STUCTURE DRAWINGS FOR OFFICIAL DIMENSIONS OF BRIDGE STRUCTURE.

7. ALSO FOR REFERENCE ONLY ARE PORTRAYAL OF BRIDGE COMPONENTS, INCLUDING BUT NOT LIMITED TO: *BRIDGE DECK*, *CURB TRANSITION BARRIERS*, *ROADWAY BARRIERS*, *GIRDERS*, *PIER BEAMS*, PIERS, *ABUTMENTS*, *ABUTMENT WING WALLS*, AND *APPROACH SLABS*. REFERENCE BRIDGE STUCTURE DRAWINGS FOR OFFICIAL DOCUMENTATION OF BRIDGE COMPONENTS.

8. REFERENCE CIVIL DRAWINGS FOR ADJACENCT CIVIL SCOPE, INCLUDING BUT NOT LIMITED TO: ADJACENT *DRIVE* PAVING, *CURBS*, MEDIANS, AND STREET SIGNAGE.

9. REFERENCE BRIDGE ELECTRICAL/LIGHTING PACKAGE FOR ADDITIONAL LIGHTING INFORMATION AT BRIDGE DECK LIGHTING AND AT BRIDGE SIDE LIGHTING.

10. FOR INFORMATION ON CONDUIT ROUTING, REFERENCE ALL OF THE FOLLOWING: BRIDGE RAIL DRAWINGS, BRIDGE DRAWINGS, ELECTRICAL/LIGHTING DRAWINGS.

11. ALL ELECTRICAL CONDUIT SHALL BE WRAPPED TIGHT TO AND ALIGNED WITH ADJACENT SURFACES. RADIUSED CORNERS ARE TO BE KEPT TO BUILDABLE MINIMUM, AND CHANGES IN DIRECTION SHALL BE 90 DEGREES WHERE POSSIBLE.

CODE INFORMATION

IBC 2018
- GUARD RAIL
  - HEIGHT: 42" MINIMUM
  - WHERE REQUIRED: AT LOCATIONS OF ELEVATION CHANGE > 30".
  - STRUCTURAL RESISTANCE FOR HORIZONTAL FORCES
    - POINT LOAD: 200 LB
    - DESTRIBUTED LOAD: 50 LB / LF
  - MAXIMUM OPENING WIDTH: 4"

PROJECT-SPECIFIC TERMINOLOGY

OFFICIAL TERMS USED THROUGHOUT RAIL SCOPE ARE DENOTED BY *ITALICS*.

BRIDGE AND CIVIL - (FOR REFERENCE ONLY, SEE BRIDGE AND CIVIL DWGS FOR OFFICIAL TERMINOLOGY PERTAINING TO RESPECTIVE SCOPES)

DRIVE - PAVED PATH INTENDED FOR VEHICULAR TRAVEL. ALSO CALLED A ROAD.

APPROACH SLAB - ROADWAY SURFACE TRANSITION SITUATED BETWEEN THE *BRIDGE DECK* AND *DRIVE*.

BRIDGE - A STRUCTURE SPANNING A LAND AREA OF RELATIVELY LOWER GRADE ELEVATIONS, TYPICALLY CONNECTING *DRIVES* AND/OR *PEDESTRIAN PATHWAYS* ON EITHER SIDE.

ROADWAY - AT A PAVED *DRIVE* OR *BRIDGE*, THE PORTION OF CONSTRUCTION INTENDED FOR VEHICULAR TRAVEL.

SIDEWALK - TYPICALLY RUNNING PARALLEL WITH AND IN VICINITY TO A *DRIVE*, A PAVED GROUND CONSTRUCTION INTENDED FOR TRAVEL BY INHABITANTS ON FOOT (PEDESTRIANS).

PEDESTRIAN PATHWAY - ON A *BRIDGE*, THE PORTION OF THE *BRIDGE DECK* INTENTED FOR INHABITANTS ON FOOT (PEDISTRIANS).

BRIDGE DECK - THE CONTINOUS HORIZONTAL CONCRETE SLAB WORKING IN CONCERT WITH THE REST OF THE BRIDGE STRUCTURE. THE DECK'S PRIMARY FUNCTIONS ARE: 1. PROVIDE A FINISH SURFACE FOR VEHICLES AND PEDESTRIANS ON THE *BRIDGE*. 2. (IN SOME CASES) ACT AS A DIAPHRAGM, PROVIDING STABILITY TO OVERALL STRUCTURAL SYSTEM OF THE BRIDGE (RE: BRIDGE DWGS). 3. THE *BRIDGE DECK* AND *BRIDGE DECK EDGE ANGLE* TRANSFER LOADS FROM THE *RAIL ASSEMBLIES* AND *ROADWAY BARRIERS* BACK TO THE *BRIDGE GIRDERS*, *PIER BEAMS* AND *BRIDGE PIERS*.

BRIDGE DECK EDGE ANGLE - THE EMBEDDED STEEL SHAPE AT THE *BRIDGE DECK* EDGE PROVIDING FOR THE *RAIL ASSEMBLIES* IN-FIELD ATTACHMENT TO THE *BRIDGE DECK*.

ABUTMENT - AN ASSEMBLY OF VERTICAL CONCRETE WALLS LOCATED AT THE ENDS OF EACH *BRIDGE* CLEAR SPAN. INCLUDES THE *MAIN ABUTMENT* AND *ABUTMENT WING WALLS*.

ABUTMENT (MAIN) - THE PORTION OF THE *ABUTMENT* RUNNING PERPENDICULAR TO THE DIRECTION OF BRIDGE TRAVEL. MAIN ABUTMENT'S PRIMARY FUNCTIONS ARE TO: 1. SUPPORT THE END RUNS OF BRIDGE GIRDERS AND 2. RETAIN SOIL UNDER THE APPROACH SLAB.

ABUTMENT (WING WALLS) - THE RETURN LEGS OF THE *ABUTMENT* RUNNING PARALLEL WITH THE DIRECTION OF BRIDGE TRAVEL. THE WING WALLS PRIMARY FUNCTIONS ARE: 1. TO RETAIN SOIL UNDER THE APPROACH SLABS.

ROADWAY BARRIER - A CONCRETE WALL ON TOP OF THE *BRIDGE DECK* WHOSE PRIMARY FUNCTIONS INCLUDE: KEEPING VEHICLES ON THE *ROADWAY* 2. KEEPING PEDESTRIANS OFF THE *ROADWAY* (***PEDESTRIAN/ROADWAY BARRIER*** WHEN DOING BOTH).

CURB - CONCRETE PROFILE ALONG THE *ROADWAY* EDGE WHOSE PRIMARY FUNCTIONS INCLUDE: 1. CHANNELING WATER DRAINAGE ALONG DESIGNED PATHWAYS 2. KEEPING STRAY VEHICLES ON THE *ROADWAY* BY ACTING AS A MINOR PHYSICAL BARRIER AND AS A NOTIFICATION.

CURB TRANSITION BARRIER - CONCRETE WALL WITH A SLOPING TOP SURFACE, ACTING AS A GRADUAL CHANGE IN HEIGHT FROM A *ROADWAY CURB* TO A *BRIDGE ROADWAY BARRIER*. PRIMARY FUNCTIONS: 1. ELIMINATE A BLUNT FORCE IMPACT OF STRAY VEHICALS UPON CROSSING A BRIDGE

BRIDGE LONG SPAN GIRDERS - STRUCTURAL MEMBERS THAT SPAN THE OPENING BENEATH THE BRIDGE, SITUATED UNDER THE *BRIDGE DECK* AND OVER THE *BRIDGE PIER BEAMS / BENTS*.

BRIDGE PIER BEAMS OR BENTS - CONCRETE GIRDER DIRECTLY ATOP *BRIDGE PIERS*, THESE MEMBERS COLLECT ALL THE FORCES OF THE *LONG SPAN BRIDGE GIRDERS* AND "BENDS" (*BENT*) THE FORCES TO THE PIERS.

BRIDGE PIERS - SITUATED AT INTERMEDIATE *BRIDGE BENTS*, *PIERS* ARE VERTICAL CONCRETE COLUMNS WHOSE PRIMARY FUNCTIONS ARE TO: 1. TRANSFER VERTICAL LOADS FROM *BRIDGE PIER BEAMS* TO PIER FOUNDATION SYSTEMS IN THE GROUND. 2. CREATE A CLEARING UNDER A BRIDGE FOR OTHER ENTITIES (SUCH AS WATER) TO PASS. 3. MAINTAIN A PLAN PROFILE THAT REDUCES FRICTION BETWEEN MOVING WATER PASSING UNDER THE BRIDGE.

1 A01.00 **SITE PLAN - ARCHITECTURAL**

SCALE : 1" = 100'-0"

RAILS

RAIL VERT - A SINGLE VERTICAL STEEL MEMBER OR "PICKET" IN THE *RAIL ASSEMBLY*. *RAIL VERTS* MAKE UP THE BULK OF THE MEMBERS IN THE *RAIL ASSEMBLIES*.

RAIL HORIZONTAL - A CONTINUOUS STEEL MEMBER, MORE OR LESS HORIZONTAL, THAT CONNECTS MULTIPLE *RAIL VERTS* TO MAKE A RIGID *RAIL GUARD*.

RAIL GUARD - THE RIGID COLLECTION OF *RAIL VERTS* AND *RAIL HORIZONTALS*.

WING WALL FACE PLATE - AT BRIDGE *ABUTMENT WING WALLS*, A SURFACE APPLIED PLATE PROVIDING FOR THE *RAIL ASSEMBLIES*' ATTACHMENT TO THE *ABUTMENT WING WALL*.

RAIL ANCHORAGE - ANY CONNECTIVE STEEL INTERMEDIATE TO THE *RAIL GUARD* AND EITHER THE *BRIDGE DECK EDGE ANGLE (NORTH AND SOUTH RAIL RUNS AT BRIDGE DECK)*, *WING WALL FACE PLATE* (NORTH AND SOUTH RAIL RUNS AT WING WALLS), OR *ROADWAY/PEDESTRIAN BARRIER* (MIDDLE RAIL RUNS).

RAIL ASSEMBLY - A COLLECTION OF *RAIL VERTS*, *RAIL HORIZONTALS*, AND *RAIL ANCHORAGE* TO BE SHOP FABRICATED INTO A SINGLE, RIGID CONSTRUCTION FOR HOT-DIP GALVANIZING AND SHIPPING TO THE SITE. *RAIL ASSEMBLY* LENGTH SHALL BE DICTATED BY SIZE OF GALVANIZING TANK AVAILABLE TO CONTRACTOR.

RAIL RUN - REFERS TO A CONTINUOS COLLECTION OF SEQUENTIAL *RAIL ASSEMBLIES* ALONG A SINGLE PATH. BOTH THE WEST AND EAST BRIDGES EACH HAVE A *SOUTH*, *NORTH*, AND *MIDDLE RAIL RUN*.

BASELINE ELEVATION - A THEORETICAL ELEVATION ESTABLISHED FOR EACH *RAIL RUN* TO: 1. ALLOW COMMUNICATION OF VERTICAL DIMENSIONS USING SMALLER VALUES 2. ASSIST THE METAL FABRICATOR IN ALIGNING RAIL COMPONENTS DURING SHOP ASSEMBLY AND FIELD INSTALLATION. THE BASELINE ELEVATION IS SET AT 1'-0" BELOW THE LOWEST POINT OF THE ENTIRE RAIL RUN.

RAIL BREAK - MITERED JOINT IN *RAIL VERT*.

WEST BRIDGE - RAIL SHEET LIST

REV #	SHEET #	DESCRIPTION
	A01.00	GENERAL - SITE PLAN
	A01.10	PLANS
	A03.10	WEST BRIDGE - NORTH RAIL RUN
	A03.11	WEST BRIDGE - SOUTH RAIL RUN
	A03.12	WEST BRIDGE - MIDDLE RAIL RUN
	A05.20	RAIL DETAILS
	A05.21	RAIL DETAILS
	A05.30	LIGHT MOUNT DETAILS
	A06.10	RAIL VERT TYPES
	A06.11	SCHEDULE - WEST BRIDGE RAIL VERTS - NORTH RAIL RUN
	A06.12	SCHEDULE - WEST BRIDGE RAIL VERTS - SOUTH RAIL RUN
	A06.13	SCHEDULE - WEST BRIDGE RAIL VERTS - MIDDLE RAIL RUN

EAST BRIDGE - RAIL SHEET LIST

REV #	SHEET #	DESCRIPTION
	A01.00	GENERAL - SITE PLAN
	A01.10	PLANS
	A03.20	EAST BRIDGE - NORTH RAIL RUN
	A03.21	EAST BRIDGE - SOUTH RAIL RUN
	A03.22	EAST BRIDGE - MIDDLE RAIL RUN
	A05.20	RAIL DETAILS
	A05.21	RAIL DETAILS
	A05.30	LIGHT MOUNT DETAILS
	A06.10	RAIL VERT TYPES
	A06.14	SCHEDULE - EAST BRIDGE RAIL VERTS - NORTH RAIL RUN
	A06.15	SCHEDULE - EAST BRIDGE RAIL VERTS - SOUTH RAIL RUN
	A06.16	SCHEDULE - EAST BRIDGE RAIL VERTS - MIDDLE RAIL RUN

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WEST BRIDGE PLANS

View High Dr, View High Pkwy, River Rd
Lee's Summit, MO

REV	DATE	DESCRIPTION

STATE OF MISSOURI
CRAIG DEROY ROGERS
NUMBER A-005244
REGISTERED ARCHITECT
9.17.2020

PROJECT NUMBER
12720.62

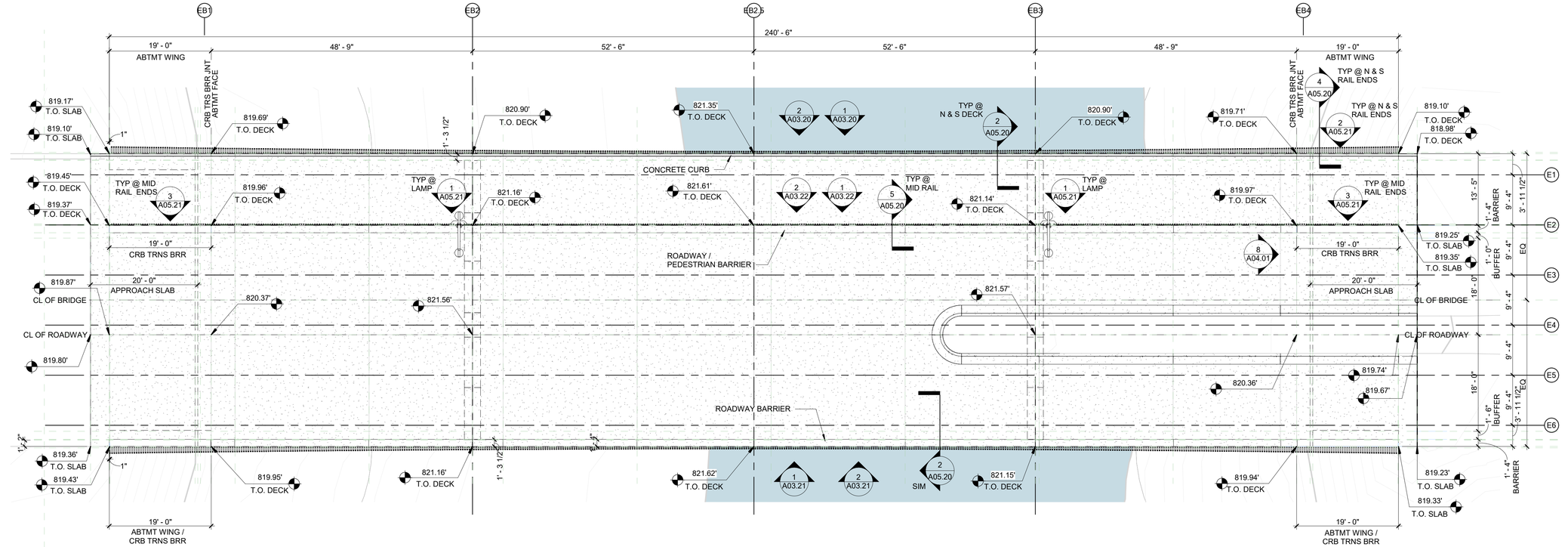
DATE
2020.09.17
ISSUE FOR CONSTRUCTION

DESIGNED:	NJC
DRAWN:	NJC
REVIEWED:	CLR

SHEET TITLE
GENERAL - SITE PLAN

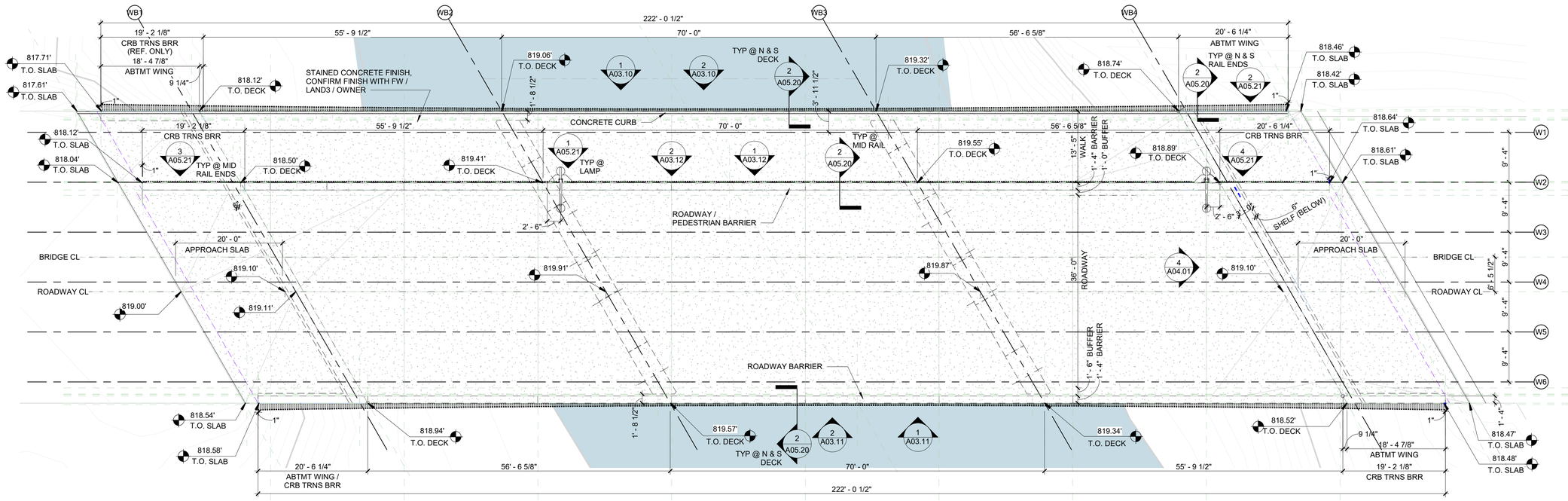
SHEET NUMBER
A01.00

Plotted: 9/21/2020 3:07:32 PM -- BIM 360://12720.62 ParagonStar_ Bridges/12720.61_ParagonStar_ Bridges_Site.rvt



1 A01.00 | A01.10 SCALE : 3/32" = 1'-0"

PLAN-BRIDGE_E



2 A01.00 | A01.10 SCALE : 3/32" = 1'-0"

PLAN-BRIDGE_W

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WEST BRIDGE PLANS

View High Dr, View High Pkwy, River Rd
Lee's Summit, MO

REV	DATE	DESCRIPTION

STATE OF MISSOURI
CRAIG DEROY ROGGE
NUMBER A-010524
REGISTERED ARCHITECT
9.17.2020

PROJECT NUMBER
12720.62

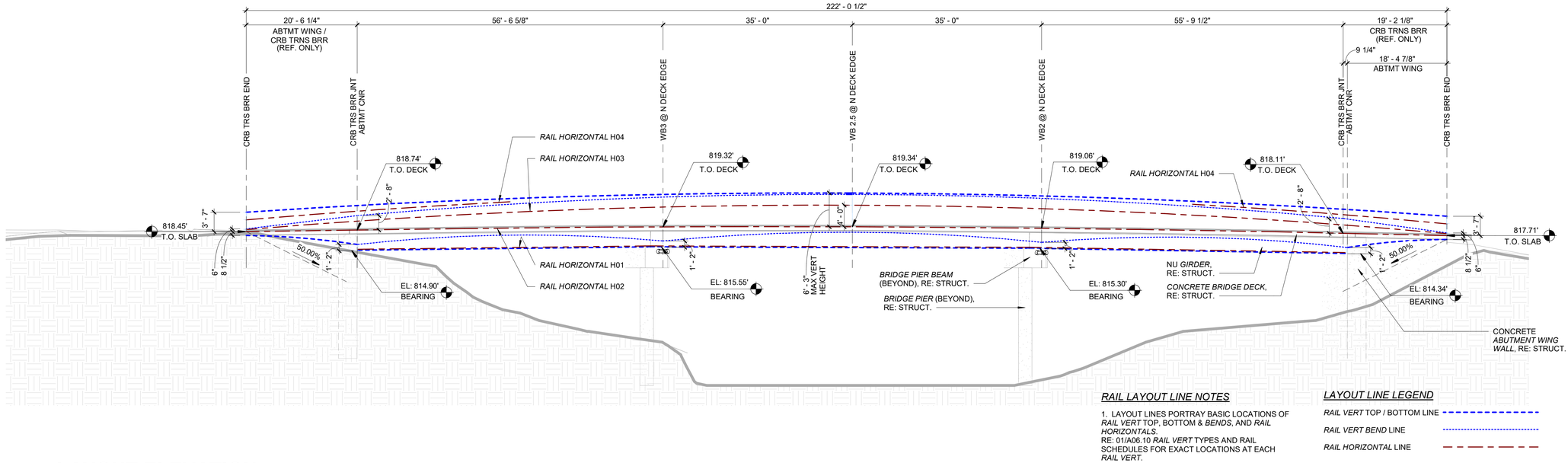
DATE
2020.09.17
ISSUE FOR CONSTRUCTION

DESIGNED:	NJC
DRAWN:	NJC
REVIEWED:	CLR

SHEET TITLE
PLANS

SHEET NUMBER
A01.10

Plotted 9/21/2020 3:07:45 PM -- BIM 360://12720.62 ParagonStar_Bridges/12720.61_ParagonStar_Bridges_Site.rvt



LAYOUT ELEVATION

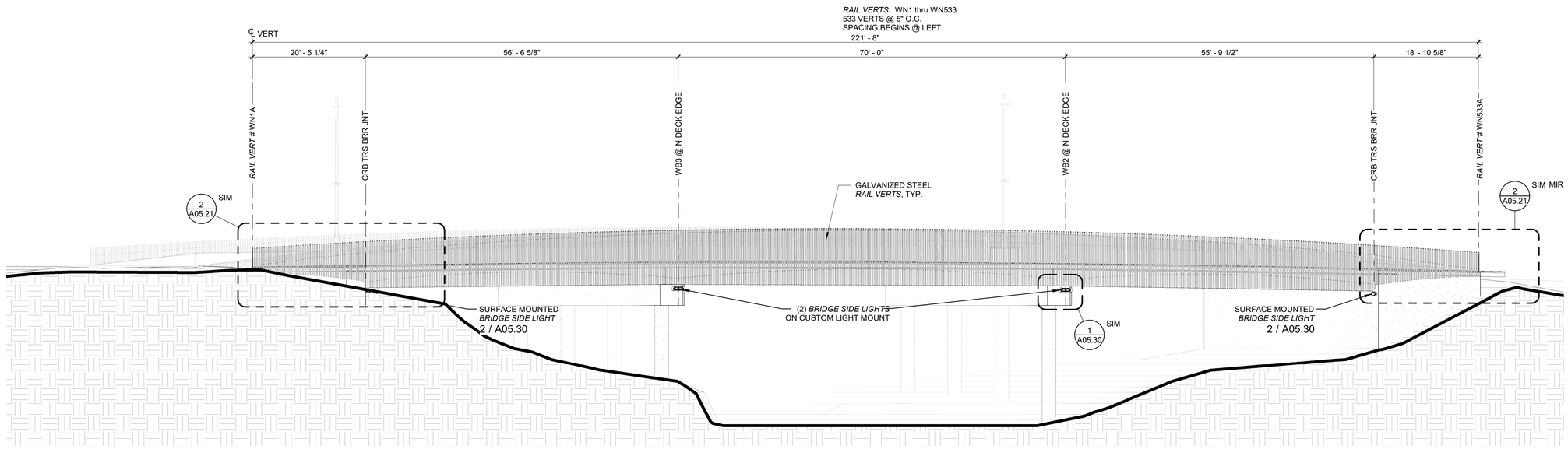
2 / A01.10 | A03.10 SCALE : 3/32" = 1'-0"

RAIL LAYOUT LINE NOTES

1. LAYOUT LINES PORTRAY BASIC LOCATIONS OF *RAIL VERT* TOP, BOTTOM & *BENDS*, AND *RAIL HORIZONTALS*.
RE: 01/A06.10 *RAIL VERT* TYPES AND RAIL SCHEDULES FOR EXACT LOCATIONS AT EACH *RAIL VERT*.

LAYOUT LINE LEGEND

- *RAIL VERT* TOP / BOTTOM LINE
- *RAIL VERT BEND* LINE
- *RAIL HORIZONTAL* LINE



ELEVATION

1 / A01.10 | A03.10 SCALE : 3/32" = 1'-0"

RAIL REFERENCE

1. RE: A01.00 FOR PROJECT TERMINOLOGY.

2. RE: RAIL ELEVATIONS FOR:
   a. *RAIL VERT LAYOUT*
   b. *RAIL HORIZONTAL* LAYOUT
   c. *RAIL VERT BENDS* LAYOUT.

3. RE: 1 / A06.10 FOR:
   a. *RAIL VERT* CONFIGURATION TYPES.

4. RE: RAIL SCHEDULES FOR:
   a. *RAIL VERT* VERTICAL LOCATION RELATIVE TO EACH RAIL RUN BASELINE ELEVATION
   b. *RAIL VERT* LEG LENGTHS
   c. *RAIL VERT BEND* ANGLES
   d. *ANCHORAGE* LOCATIONS
   e. *RAIL HORIZONTAL* LOCATIONS

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WEST BRIDGE PLANS

View High Dr, View High Pkwy, River Rd
Lee's Summit, MO

REV	DATE	DESCRIPTION

STATE OF MISSOURI
CRAIG DEROY ROGGE
NUMBER A-905244
REGISTERED ARCHITECT
9.17.2020

PROJECT NUMBER
12720.62

DATE
2020.09.17
ISSUE FOR CONSTRUCTION

DESIGNED:	NJC
DRAWN:	NJC
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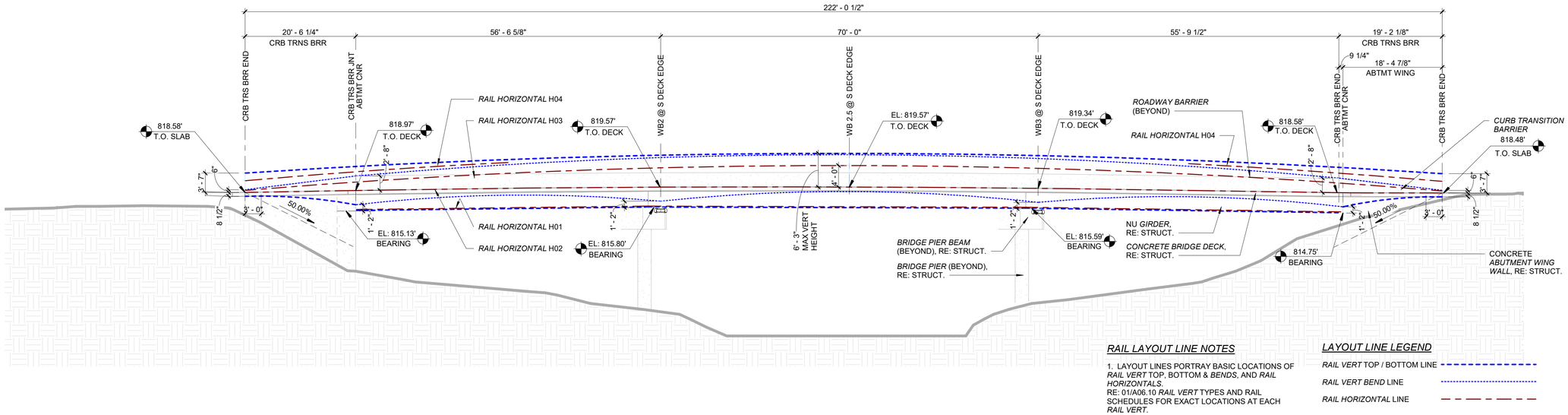
SHEET TITLE
WEST BRIDGE - NORTH RAIL RUN

SHEET NUMBER
A03.10

Plotted 9/21/2020 3:07:48 PM -- BIM 360://12720.62 ParagonStar_Bridges/12720.61_ParagonStar_Bridges_Site.rvt



LAYOUT ELEVATION

1 / A01.10 | A03.11 SCALE : 3/32" = 1'-0"

RAIL LAYOUT LINE NOTES

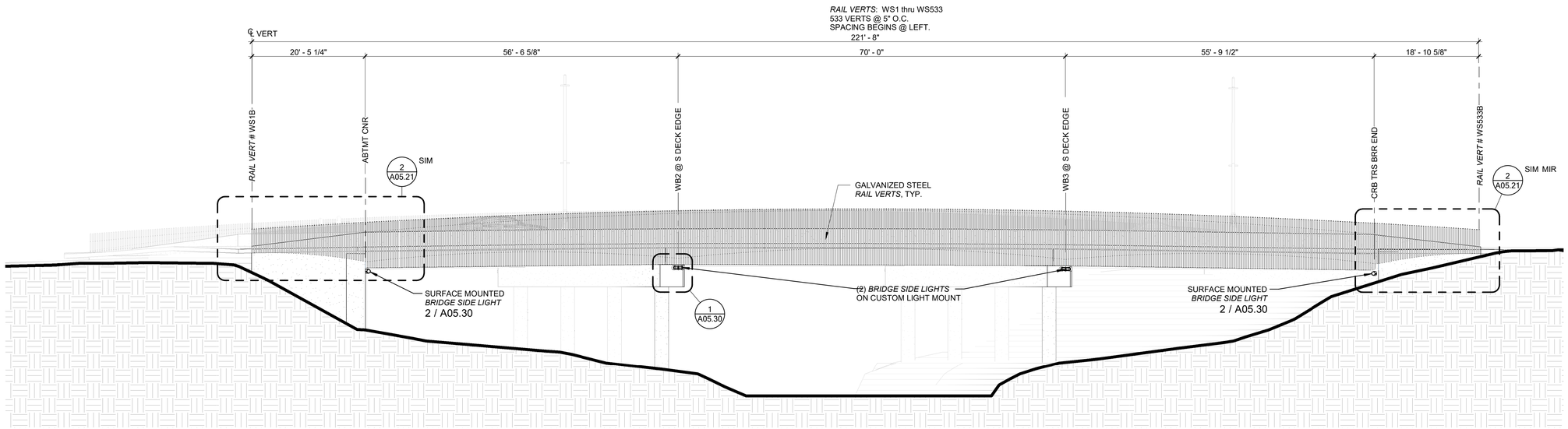
1. LAYOUT LINES PORTRAY BASIC LOCATIONS OF *RAIL VERT* TOP, BOTTOM & *BENDS*, AND *RAIL HORIZONTALS*.
RE: 01/A06.10 *RAIL VERT* TYPES AND RAIL SCHEDULES FOR EXACT LOCATIONS AT EACH *RAIL VERT*.

LAYOUT LINE LEGEND

RAIL VERT TOP / BOTTOM LINE

RAIL VERT BEND LINE

RAIL HORIZONTAL LINE



ELEVATION

2 / A01.10 | A03.11 SCALE : 3/32" = 1'-0"

RAIL REFERENCE

1. RE: A01.00 FOR PROJECT TERMINOLOGY.

2. RE: RAIL ELEVATIONS FOR:
   a. *RAIL VERT LAYOUT*
   b. *RAIL HORIZONTAL* LAYOUT
   c. *RAIL VERT BENDS* LAYOUT.

3. RE: 1 / A06.10 FOR:
   a. *RAIL VERT* CONFIGURATION TYPES.

4. RE: RAIL SCHEDULES FOR:
   a. *RAIL VERT* VERTICAL LOCATION RELATIVE TO EACH RAIL RUN BASELINE ELEVATION
   b. *RAIL VERT* LEG LENGTHS
   c. *RAIL VERT BEND* ANGLES
   d. *ANCHORAGE* LOCATIONS
   e. *RAIL HORIZONTAL* LOCATIONS

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WEST BRIDGE PLANS

View High Dr, View High Pkwy, River Rd
Lee's Summit, MO

REV	DATE	DESCRIPTION

STATE OF MISSOURI
CRAIG DEROY ROGGE
NUMBER A-69524
REGISTERED ARCHITECT
9-17-2020

PROJECT NUMBER
12720.62

DATE
2020.09.17
ISSUE FOR CONSTRUCTION

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DRAWN:	NJC
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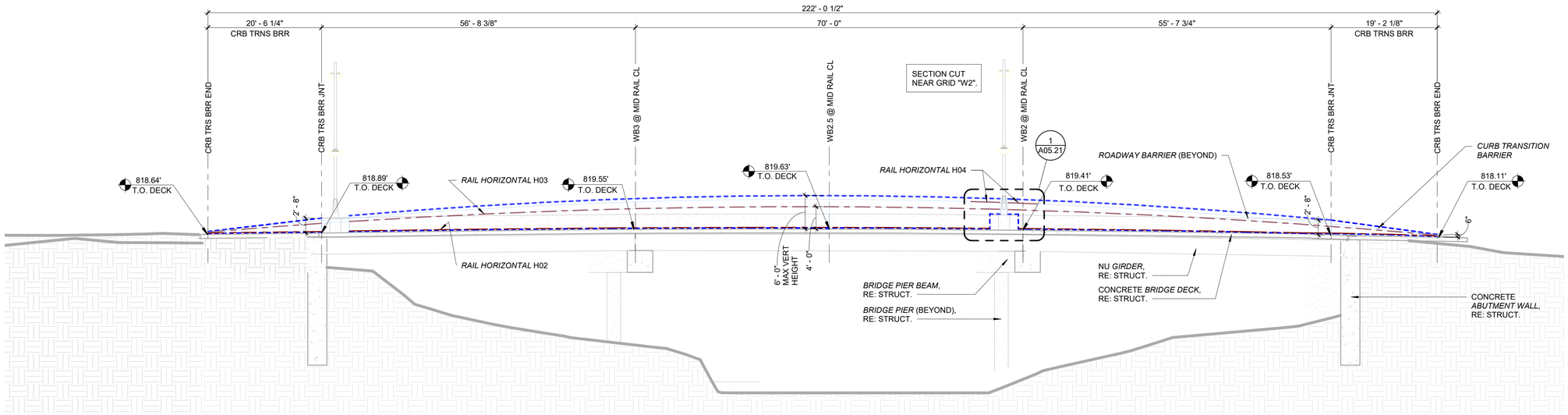
SHEET TITLE
WEST BRIDGE - SOUTH RAIL RUN

SHEET NUMBER
A03.11

Plotted 9/21/2020 3:07:52 PM -- BIM 360://12720.62 ParagonStar_Bridges/12720.61_ParagonStar_Bridges_Site.rvt



RAIL LAYOUT LINE NOTES

1. LAYOUT LINES PORTRAY BASIC LOCATIONS OF *RAIL VERT* TOP, BOTTOM & *BENDS*, AND *RAIL HORIZONTALS*.
RE: 01/A06.10 *RAIL VERT* TYPES AND RAIL SCHEDULES FOR EXACT LOCATIONS AT EACH *RAIL VERT*.

LAYOUT LINE LEGEND

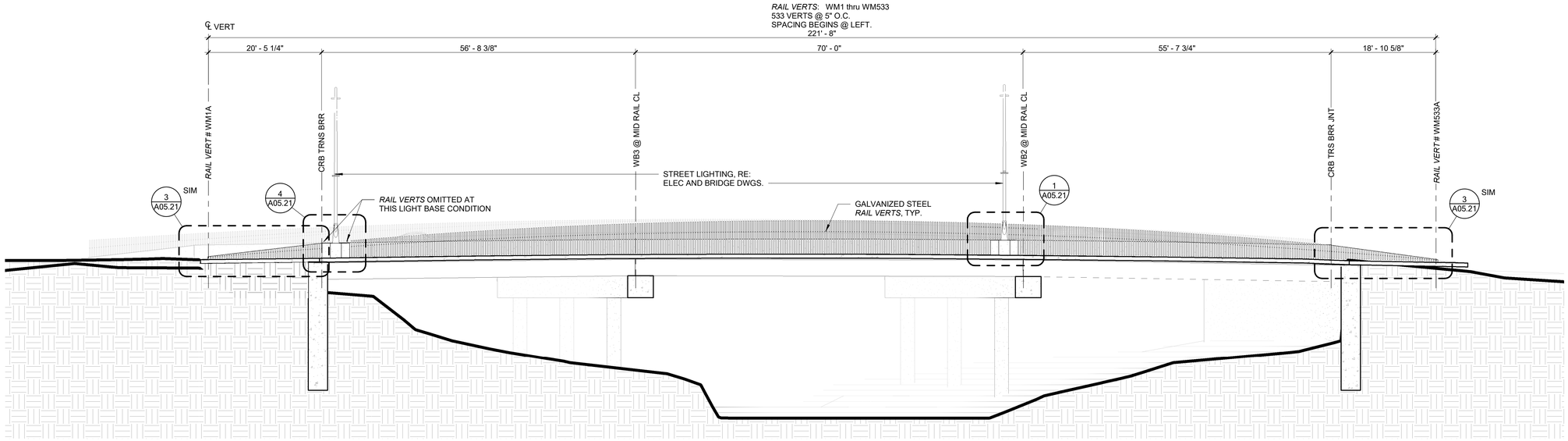
RAIL VERT TOP / BOTTOM LINE

RAIL VERT BEND LINE

RAIL HORIZONTAL LINE

LAYOUT ELEVATION

1 A01.10 | A03.12 SCALE : 3/32" = 1'-0"



ELEVATION

2 A01.10 | A03.12 SCALE : 3/32" = 1'-0"

RAIL REFERENCE

1. RE: A01.00 FOR PROJECT TERMINOLOGY.

2. RE: RAIL ELEVATIONS FOR:
   a. *RAIL VERT LAYOUT*
   b. *RAIL HORIZONTAL* LAYOUT
   c. *RAIL VERT BENDS* LAYOUT.

3. RE: 1 / A06.10 FOR:
   a. *RAIL VERT* CONFIGURATION TYPES.

4. RE: RAIL SCHEDULES FOR:
   a. *RAIL VERT* VERTICAL LOCATION RELATIVE TO EACH RAIL RUN BASELINE ELEVATION
   b. *RAIL VERT* LEG LENGTHS
   c. *RAIL VERT BEND* ANGLES
   d. *ANCHORAGE* LOCATIONS
   e. *RAIL HORIZONTAL* LOCATIONS

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WEST BRIDGE PLANS

View High Dr, View High Pkwy, River Rd
Lee's Summit, MO

REV	DATE	DESCRIPTION

STATE OF MISSOURI
CRAIG DEROY ROGGE
NUMBER A-005244
REGISTERED ARCHITECT
9-17-2020

PROJECT NUMBER
12720.62

DATE
2020.09.17
ISSUE FOR CONSTRUCTION

DESIGNED:	NJC
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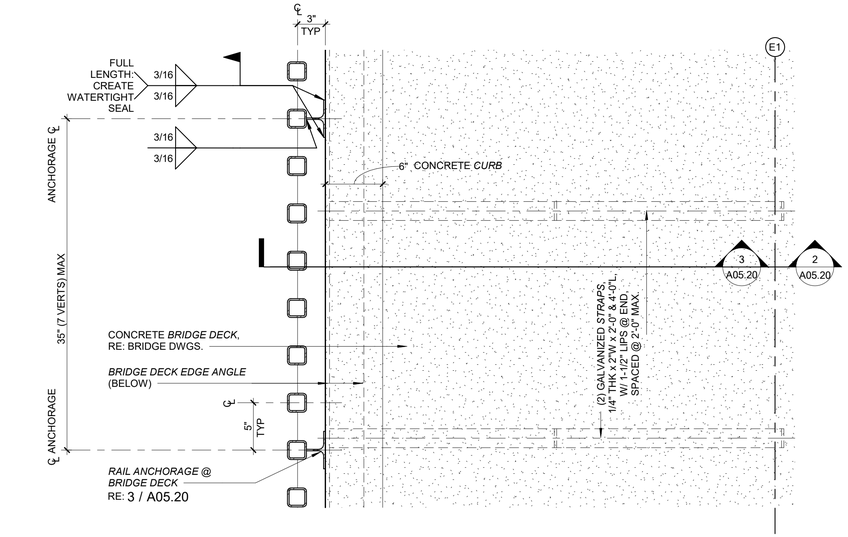
SHEET TITLE
WEST BRIDGE - MIDDLE RAIL RUN

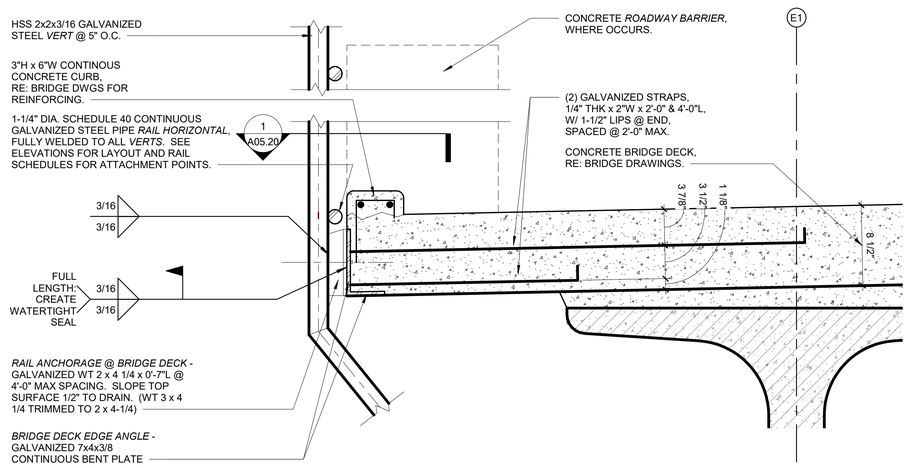
SHEET NUMBER
A03.12

Plotted 9/21/2020 3:07:57 PM — BIM 360://12720.62 ParagonStar_Bridges/12720.61_ParagonStar_Bridges_Site.rvt



1 A05.20 | A05.20 **PLAN DETAIL @ TYP. ANCHORAGE**

SCALE : 1 1/2" = 1'-0"



3 A05.20 | A05.20 **DETAIL - RAIL @ DECK EDGE - TYP**

SCALE : 1 1/2" = 1'-0"

RAIL REFERENCE

1. RE: A01.00 FOR PROJECT TERMINOLOGY.
2. RE: RAIL ELEVATIONS FOR:
   a. *RAIL VERT LAYOUT*
   b. *RAIL HORIZONTAL* LAYOUT
   c. *RAIL VERT BENDS* LAYOUT.
3. RE: 1 / A06.10 FOR:
   a. *RAIL VERT* CONFIGURATION TYPES.
4. RE: RAIL SCHEDULES FOR:
   a. *RAIL VERT* VERTICAL LOCATION RELATIVE TO EACH RAIL RUN BASELINE ELEVATION
   b. *RAIL VERT* LEG LENGTHS
   c. *RAIL VERT BEND* ANGLES
   d. *ANCHORAGE* LOCATIONS
   e. *RAIL HORIZONTAL* LOCATIONS

5 A01.10 | A05.20 **TYP RAIL SECTION @ MID RAIL**

SCALE : 3/4" = 1'-0"

4 A01.10 | A05.20 **SECTION - TYP RAIL @ N & S ENDS**

SCALE : 3/4" = 1'-0"

2 A01.10 | A05.20 **SECTION - TYP RAIL @ N & S DECK**

SCALE : 3/4" = 1'-0"

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WEST BRIDGE PLANS

View High Dr, View High Pkwy, River Rd
Lee's Summit, MO

REV	DATE	DESCRIPTION

STATE OF MISSOURI
CRAIG DEROY ROGGE
NUMBER A-905244
REGISTERED ARCHITECT
9-17-2020

PROJECT NUMBER
12720.62

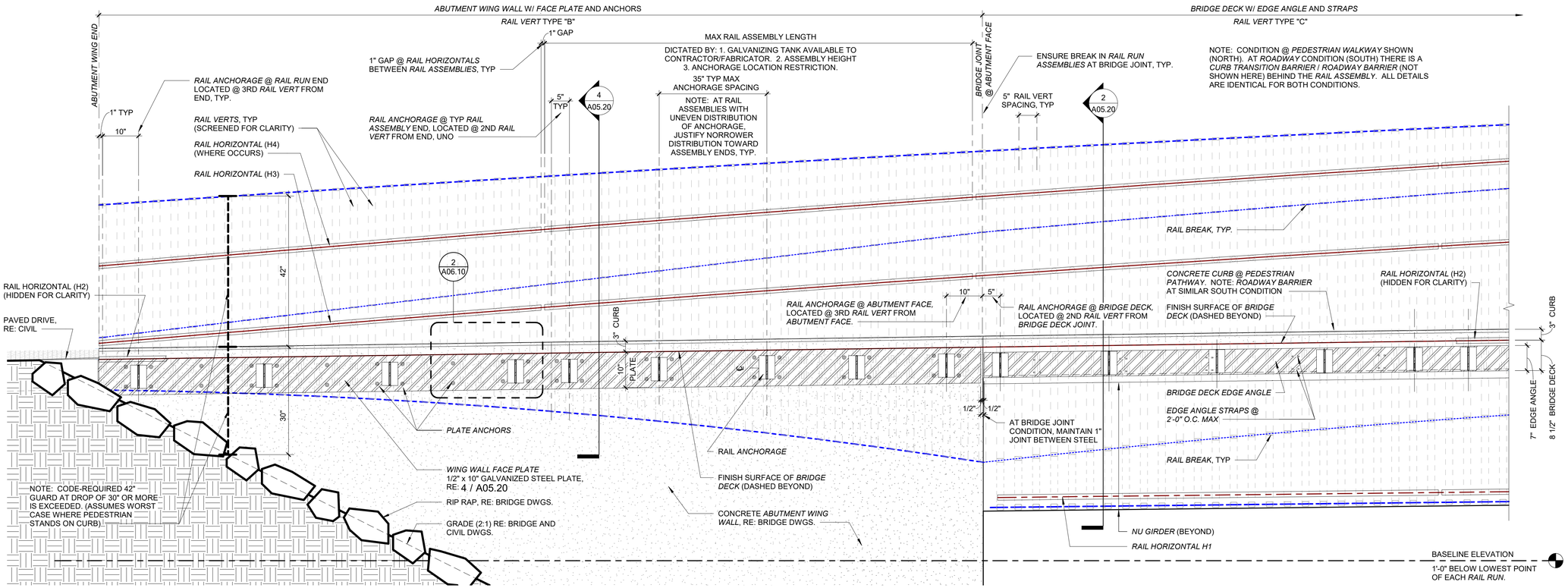
DATE
2020.09.17
ISSUE FOR CONSTRUCTION

DESIGNED:	NJC
DRAWN:	NJC
REVIEWED:	CLR

SHEET TITLE
RAIL DETAILS

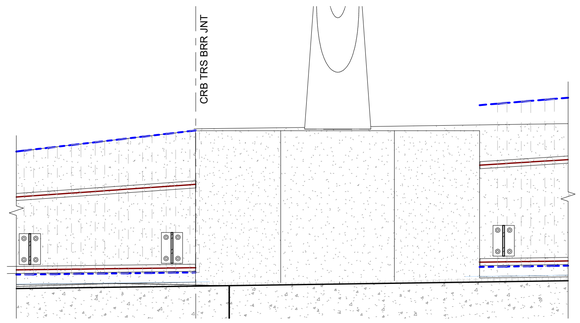
SHEET NUMBER
A05.20

Plotted: 9/21/2020 3:08:32 PM — BIM 360://12720.62 ParagonStar_Bridges/12720.61_ParagonStar_Bridges_Site.rvt



RAIL ELEVATION - N&S RAIL RUNS

2 A01.10 | A05.21 SCALE : 3/4" = 1'-0"



RAIL ELEVATION @ MID RAIL RUN END W/ LAMP

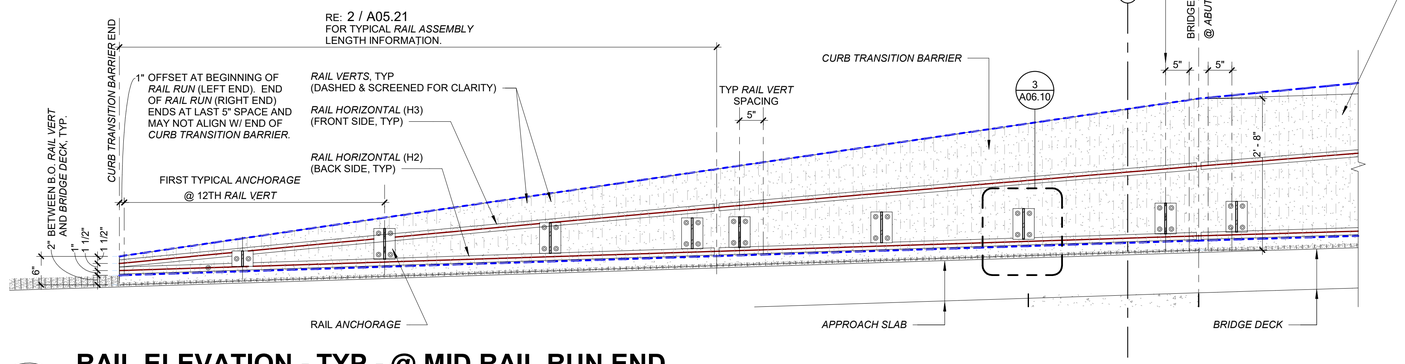
4 A01.10 | A05.21 SCALE : 3/4" = 1'-0"

LAYOUT LINE LEGEND

- RAIL VERT TOP / BOTTOM LINE
- RAIL VERT BEND LINE
- RAIL HORIZONTAL LINE

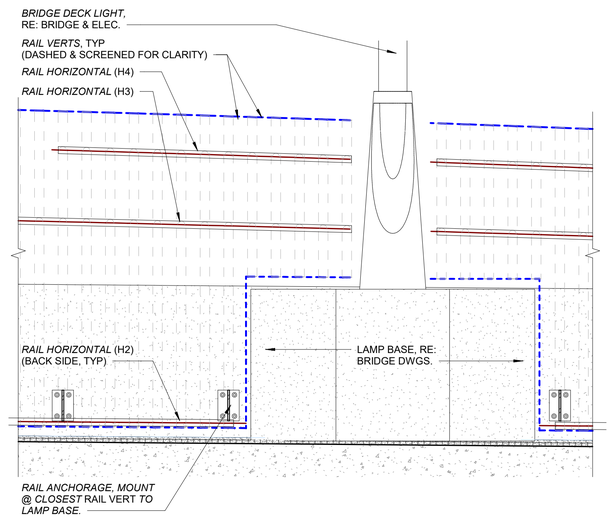
RAIL LAYOUT LINE NOTES

1. LAYOUT LINES PORTRAY BASIC LOCATIONS OF RAIL VERT TOP, BOTTOM & BENDS, AND RAIL HORIZONTALS. RE: 01/A06.10 RAIL VERT TYPES AND RAIL SCHEDULES FOR EXACT LOCATIONS AT EACH RAIL VERT.



RAIL ELEVATION - TYP - @ MID RAIL RUN END

3 A01.10 | A05.21 SCALE : 3/4" = 1'-0"



RAIL ELEVATION - AT LAMP

1 A01.10 | A05.21 SCALE : 3/4" = 1'-0"

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WEST BRIDGE PLANS

View High Dr, View High Pkwy, River Rd
Lee's Summit, MO

REV	DATE	DESCRIPTION

STATE OF MISSOURI
CRAIG DEROY ROGGE
NUMBER A-005244
REGISTERED ARCHITECT
9-17-2020

PROJECT NUMBER
12720.62

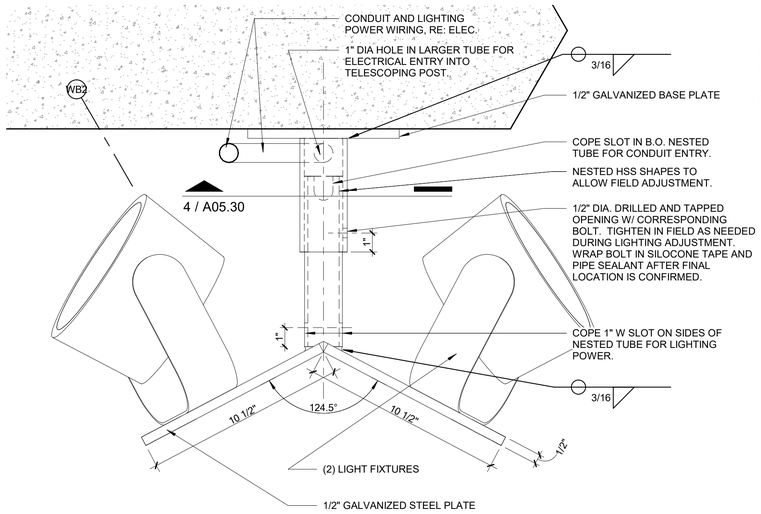
DATE
2020.09.17
ISSUE FOR CONSTRUCTION

DESIGNED:	NJC
DRAWN:	NJC
REVIEWED:	CLR

SHEET TITLE
RAIL DETAILS

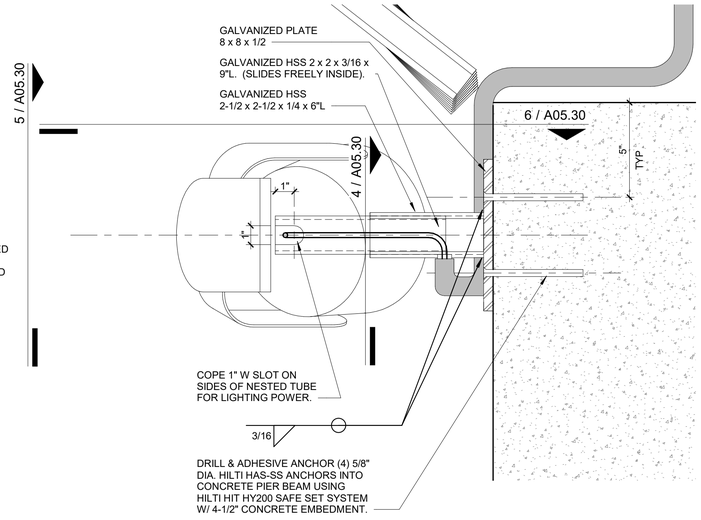
SHEET NUMBER
A05.21

Plotted: 9/21/2020 3:08:38 PM -- BIM 360://12720.62 ParagonStar_Bridges/12720.61_ParagonStar_Bridges_Site.rvt



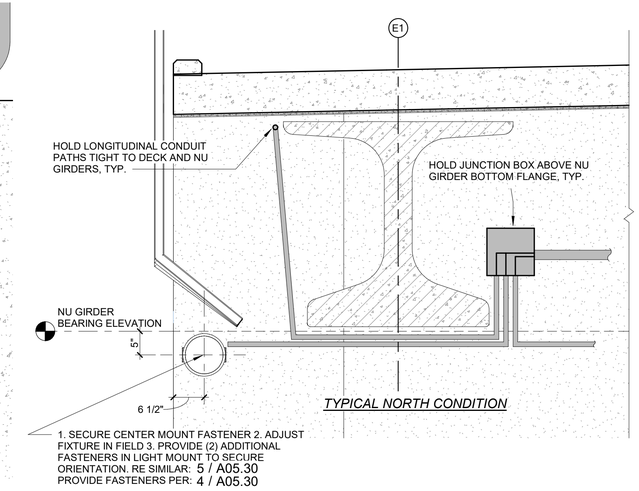
6 PLAN DETAIL - LIGHT MOUNT

SCALE : 3" = 1'-0"



3 SECTION @ SIDE LIGHT SUPPORT

SCALE : 3" = 1'-0"

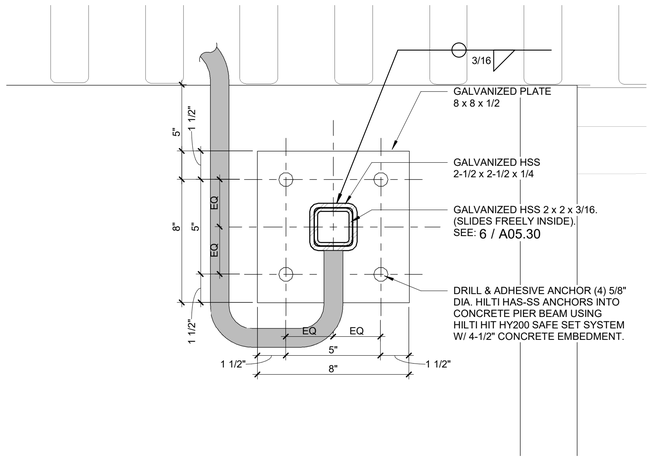


2 ELEVATION - DIRECT LIGHT MOUNT

SCALE : 3/4" = 1'-0"

5 LIGHT MOUNT PLATE

SCALE : 3" = 1'-0"



4 LIGHT MOUNT BASE PLATE

SCALE : 3" = 1'-0"

1 LIGHT MOUNT ELEVATION - W BRIDGE - PIER BEAMS

A03.10 A05.30 SCALE : 1 1/2" = 1'-0"

GBA
9801 Renner Blvd. Ste. 300
Lenexa, KS 66219
913.492.0400
gbateam.com

WEST BRIDGE PLANS

View High Dr, View High Pkwy, River Rd
Lee's Summit, MO

REV	DATE	DESCRIPTION

STATE OF MISSOURI
CRAIG DEROY ROGGE NUMBER A-005244
REGISTERED ARCHITECT
9-17-2020

PROJECT NUMBER
12720.62

DATE
2020.09.17
ISSUE FOR CONSTRUCTION

DESIGNED:	NJC
DRAWN:	NJC
REVIEWED:	CLR

SHEET TITLE
LIGHT MOUNT DETAILS

SHEET NUMBER
A05.30

Engineering COA# E-92
Architecture COA# A-45
Land Sureveying COA# LS-8

Plotted 9/21/2020 3:08:47 PM — BIM 360://12720.62 ParagonStar_Bridges/12720.61_ParagonStar_Bridges_Site.rvt

RAIL VERT TYPE NOTES

1. RAIL "P01V" ELEVATIONS SHALL BE USED FOR VERTICAL ALIGNMENT OF MEMBERS DURING SHOP ASSEMBLY.

2. VERTICAL DIMENSIONS OR ELEVATIONS STATED IN *RAIL VERT* SCHEDULES ARE TO *BASELINE ELEVATION* FOR EACH *RAIL RUN*. *THE BASELINE ELEVATION* IS ARBITRARILY SET TO 1'-0" BELOW THE LOWEST POINT OF EACH *RAIL RUN* AND IS UNIQUE TO EACH *RAIL RUN*.

3. *ANCHORAGE* SPACING LOGIC IS SPECIFIED IN DOCUMENTS, BUT *ANCHORAGE* IS NOT PRESENT AT EVERY *RAIL VERT*. BECAUSE SPECIFIC *ANCHORAGE* PLAN LOCATIONS ARE LAID OUT BY FABRICATOR, "ANV" ELEVATION HAS BEEN PROVIDED FOR ALL *RAIL VERTS*.

RAIL VERT TYPE LEGEND

"#" SYMBOL REPRESENTS A NUMBER

P0# - POINT AT CENTERPOINT OF *RAIL VERT* SEGMENT, LOCATED AT EITHER: *RAIL VERT ENDS* (TOP/BOTTOM) OR *RAIL VERT BREAKS*.

P0#V - POINT VERTICAL DISTANCE TO *BASELINE ELEVATION*

L0# - *RAIL VERT* SEGEMENT (LEG) OR LENGTH OF SEGMENT (LEG)

H0# - *RAIL HORIZONTAL*

H0#V - *RAIL HORIZONTAL* VERTICAL DISTANCE TO *BASELINE ELEVATION*

A0# - ANGLE BETWEEN ADJACENT *RAIL VERT* SEGMENTS

AN01 - CENTERLINE OF *ANCHORAGE*

ANV - *ANCHORAGE* VERTICAL DISTANCE TO *BASELINE ELEVATION*

RAIL VERT ID LOGIC

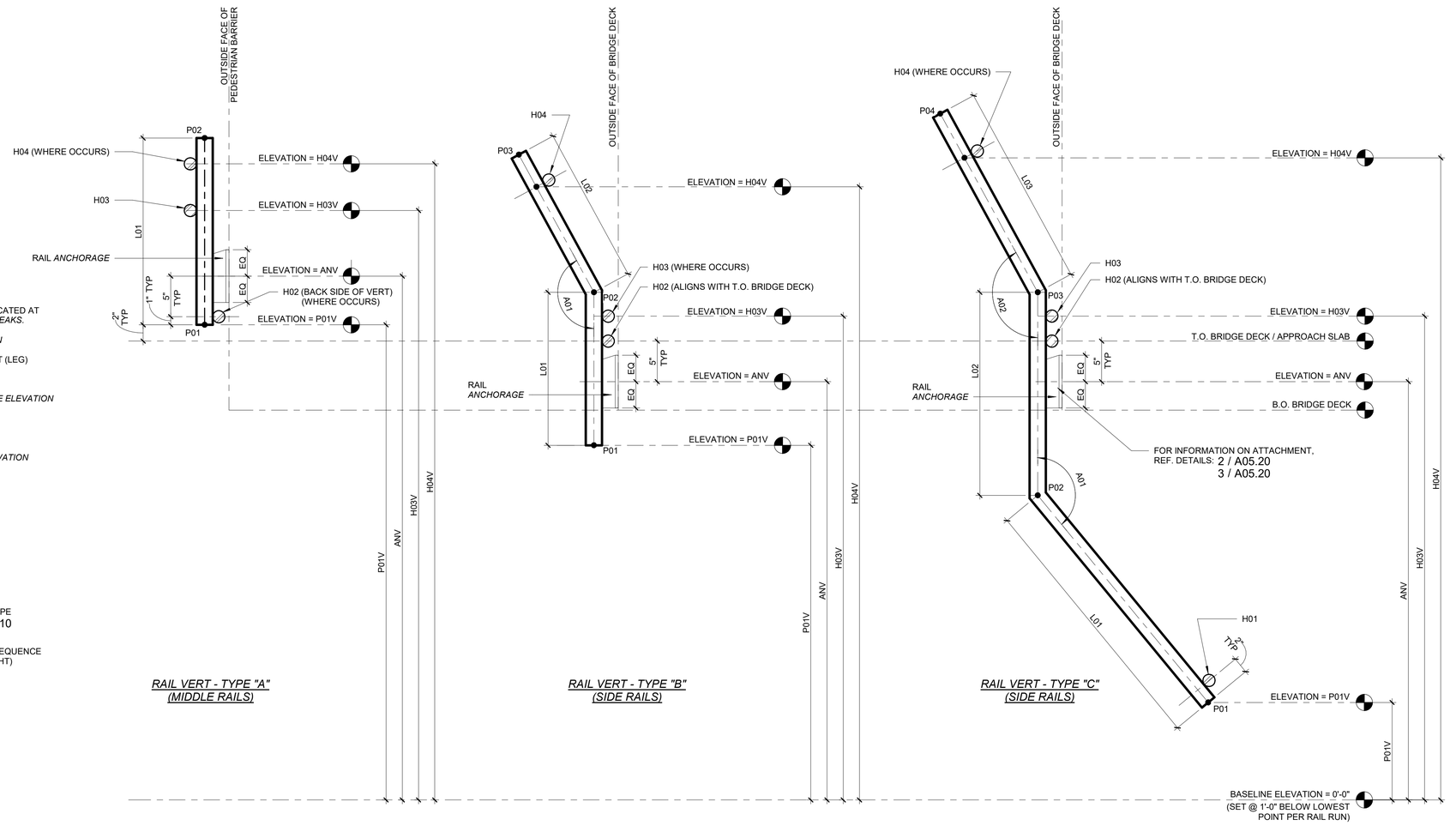
WN134B

BRIDGE CODE:
W = WEST
E = EAST

RAIL RUN CODE:
N = NORTH
S = SOUTH
M = MIDDLE

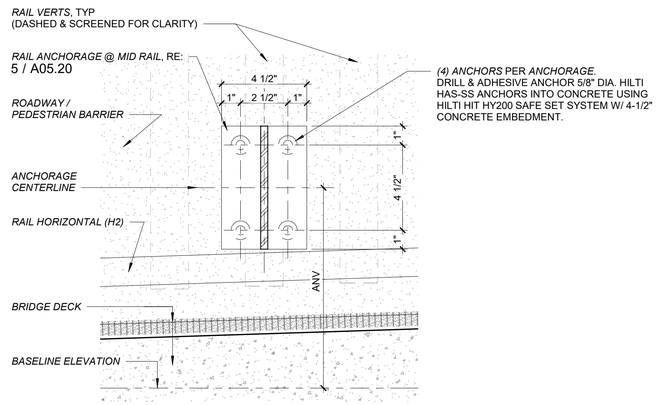
NUMBER IN SEQUENCE (LEFT TO RIGHT)

RAIL VERT TYPE
RE: 1 / A06.10



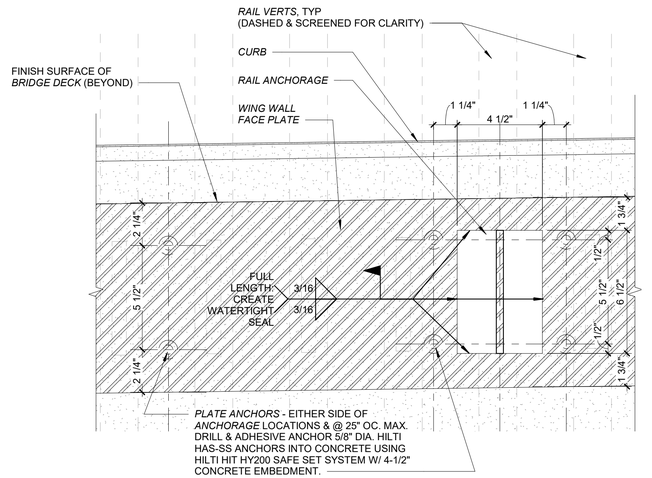
1 RAIL VERT TYPES

A06.10 SCALE : 1 1/2" = 1'-0"



3 DETAIL ELEVATION - ANCHORAGE AT MID RAIL RUN

A05.21 | A06.10 SCALE : 3" = 1'-0"



2 DETAIL ELEVATION - PLATE ANCHORS

A05.21 | A06.10 SCALE : 3" = 1'-0"

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gbateam.com

WEST BRIDGE PLANS

View High Dr, View High Pkwy, River Rd
Lee's Summit, MO

REV	DATE	DESCRIPTION

STATE OF MISSOURI
CRAIG DEROY ROGERS NUMBER A-905244
REGISTERED ARCHITECT
9-17-2020

PROJECT NUMBER
12720.62

DATE
2020.09.17
ISSUE FOR CONSTRUCTION

DESIGNED:	NJC
DRAWN:	NJC
REVIEWED:	CLR

SHEET TITLE
RAIL VERT TYPES

SHEET NUMBER
A06.10

Plotted: 9/21/2020 3:08:52 PM -- BIM 360://12720.62 ParagonStar_Bridges/12720.61_ParagonStar_Bridges_Site.rvt

WEST BRIDGE - NORTH RUN

ID	P01V	L01	A01	L02	A02	L03	LTOT	ANV	H03V	H04V
WN1B	4'-3 7/8"	1'-2 5/8"	162.028°	3'-2 7/8"			4'-5 1/2"	4'-7 1/2"	5'-5"	7'-2 1/2"
WN2B	4'-3 7/8"	1'-3 1/4"	162.015°	3'-2 5/8"			4'-5 7/8"	4'-7 1/2"	5'-5 1/2"	7'-3"
WN3B	4'-3 3/4"	1'-4"	162.000°	3'-2 1/4"			4'-6 1/4"	4'-7 5/8"	5'-5 7/8"	7'-3 3/8"
WN4B	4'-3 3/4"	1'-4 5/8"	161.983°	3'-2"			4'-6 3/4"	4'-7 5/8"	5'-6 1/4"	7'-3 3/4"
WN5B	4'-3 5/8"	1'-5 3/8"	161.966°	3'-1 3/4"			4'-7 1/8"	4'-7 3/4"	5'-6 3/4"	7'-4 1/8"
WN6B	4'-3 1/2"	1'-6 1/8"	161.947°	3'-1 1/2"			4'-7 5/8"	4'-7 3/4"	5'-7 1/8"	7'-4 5/8"
WN7B	4'-3 3/8"	1'-6 7/8"	161.928°	3'-1 1/4"			4'-8"	4'-7 7/8"	5'-7 1/2"	7'-5 1/8"
WN8B	4'-3 1/8"	1'-7 5/8"	161.906°	3'-0 7/8"			4'-8 1/2"	4'-8"	5'-8"	7'-5 1/2"
WN9B	4'-3"	1'-8 3/8"	161.883°	3'-0 5/8"			4'-9"	4'-8"	5'-8 3/8"	7'-5 7/8"
WN10B	4'-2 7/8"	1'-9 1/8"	161.858°	3'-0 3/8"			4'-9 1/2"	4'-8 1/4"	5'-8 3/4"	7'-6 3/8"
WN11B	4'-2 5/8"	1'-9 7/8"	161.832°	3'-0 1/8"			4'-10"	4'-8 1/8"	5'-9 1/8"	7'-6 3/4"
WN12B	4'-2 3/8"	1'-10 3/4"	161.805°	2'-11 3/4"			4'-10 1/2"	4'-8 1/4"	5'-9 5/8"	7'-7 1/8"
WN13B	4'-2 1/4"	1'-11 1/2"	161.776°	2'-11 1/2"			4'-11"	4'-8 1/4"	5'-10"	7'-7 5/8"
WN14B	4'-2"	2'-0 3/8"	161.745°	2'-11 1/4"			4'-11 5/8"	4'-8 3/8"	5'-10 3/8"	7'-8"
WN15B	4'-1 3/4"	2'-1 1/4"	161.713°	2'-10 7/8"			4'-12"	4'-8 1/8"	5'-10 3/4"	7'-8 3/8"
WN16B	4'-1 5/8"	2'-2 1/8"	161.680°	2'-10 5/8"			4'-12 1/4"	4'-8 1/8"	5'-11 1/4"	7'-8 3/4"
WN17B	4'-1 1/8"	2'-3"	161.645°	2'-10 3/8"			5'-1 3/8"	4'-8 5/8"	5'-11 5/8"	7'-9 1/4"
WN18B	4'-0 7/8"	2'-3 7/8"	161.607°	2'-10 1/8"			5'-1 7/8"	4'-8 5/8"	6'-0"	7'-9 5/8"
WN19B	4'-0 1/2"	2'-4 3/4"	161.568°	2'-9 3/4"			5'-2 1/2"	4'-8 3/4"	6'-0 3/8"	7'-10"
WN20B	4'-0 1/4"	2'-5 5/8"	161.527°	2'-9 1/2"			5'-3 1/8"	4'-8 3/4"	6'-0 3/4"	7'-10 3/8"
WN21B	3'-11 7/8"	2'-6 5/8"	161.484°	2'-9 1/4"			5'-3 3/4"	4'-8 7/8"	6'-1 1/8"	7'-10 7/8"
WN22B	3'-11 1/2"	2'-7 5/8"	161.440°	2'-9"			5'-4 1/2"	4'-8 7/8"	6'-1 1/2"	7'-11 1/4"
WN23B	3'-11 1/8"	2'-8 1/2"	161.393°	2'-8 5/8"			5'-5 1/8"	4'-9"	6'-2"	7'-11 5/8"
WN24B	3'-10 3/4"	2'-9 3/8"	161.344°	2'-8 3/8"			5'-5 3/4"	4'-9"	6'-2 3/8"	8'-0"
WN25B	3'-10 3/8"	2'-10 1/2"	161.293°	2'-8"			5'-6 1/2"	4'-9 1/8"	6'-2 3/4"	8'-0 3/8"
WN26B	3'-10"	2'-11 1/2"	161.240°	2'-7 3/4"			5'-7 1/4"	4'-9 1/4"	6'-3 1/8"	8'-0 3/4"
WN27B	3'-9 5/8"	3'-0 1/2"	161.184°	2'-7 3/8"			5'-7 7/8"	4'-9 1/4"	6'-3 1/2"	8'-1 1/4"
WN28B	3'-9 1/8"	3'-1 1/2"	161.126°	2'-7 1/8"			5'-8 5/8"	4'-9 3/8"	6'-3 7/8"	8'-1 5/8"
WN29B	3'-8 5/8"	3'-2 5/8"	161.066°	2'-6 3/4"			5'-9 3/8"	4'-9 3/8"	6'-4 1/4"	8'-2"
WN30B	3'-8 1/4"	3'-3 5/8"	161.003°	2'-6 1/2"			5'-10 1/8"	4'-9 1/2"	6'-4 5/8"	8'-2 3/8"
WN31B	3'-7 3/4"	3'-4 3/4"	160.938°	2'-6 1/4"			5'-11"	4'-9 5/8"	6'-5"	8'-2 3/4"
WN32B	3'-7 1/4"	3'-5 7/8"	160.869°	2'-5 7/8"			5'-11 3/4"	4'-9 5/8"	6'-5 3/8"	8'-3 1/8"
WN33B	3'-6 3/4"	3'-7"	160.799°	2'-5 5/8"			5'-12 5/8"	4'-9 5/8"	6'-5 3/4"	8'-3 1/2"
WN34B	3'-6 1/4"	3'-8 1/8"	160.725°	2'-5 1/4"			6'-1 3/8"	4'-9 3/4"	6'-6 1/8"	8'-3 7/8"
WN35B	3'-5 5/8"	3'-9 1/4"	160.648°	2'-5"			6'-2 1/8"	4'-9 7/8"	6'-6 1/2"	8'-4 1/4"
WN36B	3'-5 1/8"	3'-10 3/8"	160.568°	2'-4 5/8"			6'-3"	4'-9 7/8"	6'-6 7/8"	8'-4 5/8"
WN37B	3'-4 1/2"	3'-11 1/2"	160.485°	2'-4 3/8"			6'-3 7/8"	4'-10"	6'-7 1/4"	8'-5"
WN38B	3'-4"	4'-0 3/4"	160.399°	2'-4"			6'-4 3/4"	4'-10"	6'-7 5/8"	8'-5 3/8"
WN39B	3'-3 3/8"	4'-1 7/8"	160.310°	2'-3 3/4"			6'-5 5/8"	4'-10 1/8"	6'-7 7/8"	8'-5 7/8"
WN40B	3'-2 3/4"	4'-3 1/8"	160.216°	2'-3 3/8"			6'-6 1/2"	4'-10 1/8"	6'-8 1/4"	8'-6 1/8"
WN41B	3'-2 1/8"	4'-4 3/8"	160.119°	2'-3 1/8"			6'-7 3/8"	4'-10 1/4"	6'-8 5/8"	8'-6 1/2"
WN42B	3'-1 1/2"	4'-5 5/8"	160.018°	2'-2 3/4"			6'-8 3/8"	4'-10 1/4"	6'-9"	8'-6 7/8"
WN43B	3'-0 7/8"	4'-6 7/8"	159.914°	2'-2 1/2"			6'-9 1/4"	4'-10 3/8"	6'-9 3/8"	8'-7 1/4"
WN44B	3'-0 1/8"	4'-8 1/8"	159.804°	2'-2 1/8"			6'-10 1/4"	4'-10 1/2"	6'-9 3/4"	8'-7 5/8"
WN45B	2'-11 1/2"	4'-9 3/8"	159.691°	2'-1 3/4"			6'-11 1/8"	4'-10 1/2"	6'-10"	8'-8"
WN46B	2'-10 3/4"	4'-10 5/8"	159.574°	2'-1 1/2"			7'-0 1/8"	4'-10 5/8"	6'-10 3/8"	8'-8 3/8"
WN47B	2'-10 1/8"	5'-0"	159.451°	2'-1 1/8"			7'-1 1/8"	4'-10 5/8"	6'-10 3/4"	8'-8 3/4"
WN48B	2'-9 3/8"	5'-1 1/4"	159.323°	2'-0 7/8"			7'-2 1/8"	4'-10 3/4"	6'-11 1/8"	8'-9 1/8"
WN49B	2'-8 5/8"	5'-2 5/8"	159.190°	2'-0 1/2"			7'-3 1/8"	4'-10 3/4"	6'-11 5/8"	8'-9 1/2"
WN50B	2'-7 7/8"	5'-4"	159.054°	2'-0 1/8"			7'-4 1/8"	4'-10 7/8"	6'-11 3/4"	8'-9 7/8"
WN51C	1'-7 1/4"	2'-1 5/8"	120.745°	5'-4"	159.034°	2'-0"	9'-5 1/2"	4'-10 7/8"	7'-0 1/8"	8'-10 1/8"
WN52C	1'-7 1/4"	2'-1 7/8"	121.678°	5'-3 7/8"	159.020°	1'-11 3/4"	9'-5 1/2"	4'-11"	7'-0 1/2"	8'-10 1/2"
WN53C	1'-7 3/8"	2'-2 1/8"	122.583°	5'-3 3/4"	159.007°	1'-11 5/8"	9'-5 1/2"	4'-11"	7'-0 7/8"	8'-10 7/8"
WN54C	1'-7 3/8"	2'-2 3/8"	123.457°	5'-3 5/8"	158.993°	1'-11 1/2"	9'-5 1/2"	4'-11 1/8"	7'-1 1/8"	8'-11 1/4"
WN55C	1'-7 1/2"	2'-2 5/8"	124.298°	5'-3 5/8"	158.979°	1'-11 1/4"	9'-5 1/2"	4'-11 1/4"	7'-1 1/2"	8'-11 5/8"
WN56C	1'-7 1/2"	2'-2 7/8"	125.111°	5'-3 1/2"	158.966°	1'-11 1/8"	9'-5 1/2"	4'-11 3/8"	7'-1 7/8"	8'-11 7/8"
WN57C	1'-7 5/8"	2'-3 1/8"	125.894°	5'-3 3/8"	158.952°	1'-10 7/8"	9'-5 1/2"	4'-11 3/8"	7'-2 1/8"	9'-0 1/4"
WN58C	1'-7 5/8"	2'-3 3/8"	126.651°	5'-3 3/8"	158.937°	1'-10 3/4"	9'-5 1/2"	4'-11 3/8"	7'-2 1/2"	9'-0 5/8"
WN59C	1'-7 3/4"	2'-3 5/8"	127.382°	5'-3 1/4"	158.922°	1'-10 1/2"	9'-5 1/2"	4'-11 1/2"	7'-2 3/4"	9'-1"
WN60C	1'-7 3/4"	2'-4"	128.084°	5'-3 1/4"	158.908°	1'-10 3/8"	9'-5 1/2"	4'-11 1/2"	7'-3 1/8"	9'-1 1/4"
WN61C	1'-7 7/8"	2'-4 1/4"	128.760°	5'-3 1/8"	158.894°	1'-10 1/8"	9'-5 1/2"	4'-11 5/8"	7'-3 1/2"	9'-1 5/8"
WN62C	1'-7 7/8"	2'-4 1/2"	129.418°	5'-3 1/8"	158.878°	1'-10"	9'-5 5/8"	4'-11 5/8"	7'-3 3/4"	9'-2"
WN63C	1'-7 7/8"	2'-4 3/4"	130.050°	5'-3"	158.863°	1'-9 7/8"	9'-5 5/8"	4'-11 3/4"	7'-4 1/8"	9'-2 1/4"
WN64C	1'-8"	2'-5"	130.658°	5'-3"	158.849°	1'-9 5/8"	9'-5 5/8"	4'-11 3/4"	7'-4 1/2"	9'-2 5/8"
WN65C	1'-8"	2'-5 1/4"	131.247°	5'-3"	158.832°	1'-9 1/2"	9'-5 3/4"	4'-11 7/8"	7'-4 3/4"	9'-3"
WN66C	1'-8 1/8"	2'-5 1/2"	131.812°	5'-3"	158.817°	1'-9 3/8"	9'-5 3/4"	4'-11 7/8"	7'-5"	9'-3 3/8"
WN67C	1'-8 1/8"	2'-5 3/4"	132.356°	5'-2 7/8"	158.801°	1'-9 1/8"	9'-5 7/8"	5'-0"	7'-5 3/8"	9'-3 3/8"
WN68C	1'-8 1/4"	2'-6"	132.884°	5'-2 7/8"	158.785°	1'-9"	9'-5 7/8"	5'-0"	7'-5 5/8"	9'-4"
WN69C	1'-8 1/4"	2'-6 1/4"	133.390°	5'-2 7/8"	158.769°	1'-8 3/4"	9'-6"	5'-0 1/8"	7'-6"	9'-4 1/4"
WN70C	1'-8 3/8"	2'-6 1/2"	133.878°	5'-2 7/8"	158.752°	1'-8 5/8"	9'-6"	5'-0 1/8"	7'-6 1/4"	9'-4 5/8"
WN71C	1'-8 3/8"	2'-6 3/4"	134.350°	5'-2 7/8"	158.736°	1'-8 1/2"	9'-6 1/8"	5'-0 1/4"	7'-6 5/8"	9'-5"
WN72C	1'-8 1/2"	2'-7"	134.803°	5'-2 7/8"	158.719°	1'-8 1/4"	9'-6 1/8"	5'-0 3/8"	7'-6 7/8"	9'-5 1/4"
WN73C	1'-8 1/2"	2'-7 1/4"	135.241°	5'-2 7/8"	158.702°	1'-8 1/8"	9'-6 1/4"	5'-0 3/8"	7'-7 1/4"	9'-5 5/8"
WN74C	1'-8 1/2"	2'-7 1/2"	135.661°	5'-2 7/8"	158.684°	1'-8"	9'-6 3/8"	5'-0 1/2"	7'-7 1/2"	9'-5 7/8"
WN75C	1'-8 5/8"	2'-7 3/4"	136.067°	5'-2 7/8"	158.667°	1'-7 3/4"	9'-6 3/8"	5'-0 1/2"	7'-7 7/8"	9'-6 1/4"
WN76C	1'-8 5/8"	2'-7 7/8"	136.457°	5'-3"	158.649°	1'-7 5/8"	9'-6 1/2"	5'-0 5/8"	7'-8 1/8"	9'-6 5/8"
WN77C	1'-8 3/4"	2'-8 1/8"	136.834°	5'-3"	158.631°	1'-7 1/2"	9'-6 5/8"	5'-0 5/8"	7'-8 3/8"	9'-6 7/8"
WN78C	1'-8 3/4"	2'-8 3/8"	137.195°	5'-3"	158.613°	1'-7 1/4"	9'-6 5/8"	5'-0 3/4"	7'-8 5/8"	9'-7 1/4"
WN79C	1'-8 7/8"	2'-8 5/8"	137.544°	5'-3"	158.595°	1'-7 1/8"	9'-6 3/4"	5'-0 3/4"	7'-9"	9'-7 1/2"
WN80C	1'-8 7/8"	2'-8 3/4"	137.879°	5'-3 1/8"	158.576°	1'-7"	9'-6 7/8"	5'-0 7/8"	7'-9 3/8"	9'-7 7/8"
WN81C	1'-9"	2'-9"	138.200°	5'-3 1/8"	158.557°	1'-6 7/8"	9'-7"	5'-0 7/8"	7'-9 5/8"	9'-8 1/8"
WN82C	1'-9"	2'-9 1/4"	138.511°	5'-3 1/8"	158.538°	1'-6 5/8"	9'-7"	5'-1"	7'-9 7/8"	9'-8 1/2"
WN83C	1'-9 1/8"	2'-9 3/8"	138.807°	5'-3 1/4"	158.518°	1'-6 1/2"	9'-7 1/8"	5'-1"	7'-10 1/8"	9'-8 3/4"
WN84C	1'-9 1/8"	2'-9 5/8"	139.094°	5'-3 1/4"	158.498°	1'-6 3/8"	9'-7 1/4"	5'-1 1/8"	7'-10 1/2"	9'-9"
WN85C	1'-9 1/8"	2'-9 3/4"	139.368°	5'-3 3/8"	158.479°	1'-6 1/4"	9'-7 3/8"	5'-1 1/8"	7'-10 3/4"	9'-9 3/8"
WN86C	1'-9 1/4"	2'-10"	139.632°	5'-3 1/2"	158.458°	1'-6"	9'-7 1/2"	5'-1 1/4"	7'-11"	9'-9 5/8"
WN87C	1'-9 1/4"	2'-10 1/8"	139.885°	5'-3 1/2"	158.437°	1'-5 7/8"	9'-7 1/2"	5'-1 1/4"	7'-11 3/8"	9'-10"
WN88C	1'-9 3/8"	2'-10 3/8"	140.126°	5'-3 5/8"	158.417°	1'-5 3/4"	9'-7 5/8"	5'-1 3/8"	7'-11 5/8"	9'-10 1/4"
WN89C	1'-9 3/8"	2'-10 5/8"	140.358°	5'-3 3/4"	158.396°	1'-5 5/8"	9'-7 3/4"	5'-1 3/8"	7'-11 7/8"	9'-10 5/8"
WN90C	1'-9 1/2"	2'-10 5/8"	140.581°	5'-3 3/4"	158.374°	1'-5 3/8"	9'-7 7/8"	5'-1 1/2"	8'-0 1/8"	9'-10 7/8"
WN91C	1'-9 1/2"	2'-10 3/4"	140.791°	5'-3 7/8"	158.353°	1'-5 1/4"	9'-8"	5'-1 5/8"	8'-0 3/8"	9'-11 1/8"
WN92C	1'-9 5/8"	2'-11"	140.995°	5'-4"	158.333°	1'-5 1/8"	9'-8 1/8"	5'-1 5/8"	8'-0 3/4"	9'-11 1/2"
WN93C	1'-9 5/8"	2'-11 1/8"	141.188°	5'-4 1/8"	158.309°	1'-5"	9'-8 1/4"	5'-1 3/4"	8'-1"	9'-11 3/4"
WN94C	1'-9 3/4"	2'-11 3/8"	141.372°	5'-4 1/4"	158.286°	1'-4 7/8"	9'-8 1/4"	5'-1 5/8"	8'-1 1/4"	10'-0"
WN95C	1'-9 3/4"	2'-11 3/8"	141.546°	5'-4 3/8"	158.264°	1'-4 5/8"	9'-8 3/8"	5'-1 7/8"	8'-1 1/2"	10'-0 3/8"
WN96C	1'-9 3/4"	2'-11 1/2"	141.713°	5'-4 1/2"	158.239°	1'-4 1/2"	9'-8 1/2"	5'-1 7/8"	8'-1 3/4"	10'-0 5/8"
WN97C	1'-9 7/8"	2'-11 5/8"	141.871°	5'-4 5/8"	158.217°	1'-4 3/8"	9'-8 5/8"	5'-2"	8'-2"	10'-0 7/8"
WN98C	1'-9 7/8"	2'-11 3/4"	142.021°	5'-4 3/4"	158.194°	1'-4 1/4"	9'-8 3/4"	5'-2"	8'-2 3/8"	10'-1 1/4"
WN99C	1'-10"	2'-11 7/8"	142.162°	5'-4 7/8"	158.170°	1'-4 1/8"	9'-8 7/8"	5'-2 1/8"	8'-2 5/8"	10'-1 1/2"
WN100C	1'-10"	3'-0"	142.295°	5'-5"	158.145°	1'-4"	9'-9"	5'-2 1/8"	8'-2 7/8"	10'-1 3/4"
WN101C	1'-10 1/8"	3'-0 1/8"	142.421°	5'-5 1/4"	158.120°	1'-3 3/4"	9'-9 1/8"	5'-2 1/4"	8'-3 1/8"	10'-2"
WN102C	1'-10 1/8"	3'-0 1/8"	142.538°	5'-5 3/8"	158.096°	1'-3 5/8"	9'-9 1/4"	5'-2 1/4"	8'-3 3/8"	10'-2 3/8"
WN103C	1'-10 1/4"	3'-0 1/4"	142.647°	5'-5 1/2"	158.071°	1'-3 1/2"	9'-9 3/8"	5'-2 3/8"	8'-3 5/8"	10'-2 5/8"
WN104C	1'-10 1/4"	3'-0 3/8"	142.749°	5'-5 3/4"	158.045°	1'-3 3/8"	9'-9 3/8"	5'-2 3/8"	8'-3 7/8"	10'-2 7/8"
WN105C	1'-10 3/8"	3'-0 3/8"	142.844°	5'-5 7/8"	158.019°	1'-3 1/4"	9'-9 1/2"	5'-2 3/8"	8'-4 1/8"	10'-3 1/8"
WN106C	1'-10 3/8"	3'-0 3/8"	142.932°	5'-6"	157.992°	1'-3 1/8"	9'-9 5/8"	5'-2 1/2"	8'-4 3/8"	10'-3 3/8"
WN107C	1'-10 3/8"	3'-0 5/8"	143.011°	5'-6 1/4"	157.965°	1'-3"	9'-9 3/4"	5'-2 1/2"	8'-4 5/8"	10'-3 3/4"
WN108C	1'-10 1/2"	3'-0 5/8"	143.083°	5'-6 1/2"	157.939°	1'-2 7/8"	9'-9 7/8"	5'-2 5/8"	8'-4 7/8"	10'-4"
WN109C	1'-10 1/2"	3'-0 5/8"	143.150°	5'-6 5/8"	157.910°	1'-2 3/4"	9'-10"	5'-2 5/8"	8'-5 1/8"	10'-4 1/4"
WN110C	1'-10 5/8"	3'-0 3/4"	143.207°	5'-6 7/8"	157.884°	1'-2 1/2"	9'-10 1/8"	5'-2 3/4"	8'-5 1/4"	10'-4 1/2"
WN111C	1'-10 5/8"	3'-0 3/4"	143.257°	5'-7"	157.854°	1'-2 3/8"	9'-10 1/8"	5'-2 3/4"	8'-5 5/8"	10'-4 3/4"
WN112C	1'-10 3/4"	3'-0 7/8"	143.303°	5'-7 1/4"	157.825°	1'-2 1/4"	9'-10 3/8"	5'-2 7/8"	8'-5 7/8"	10'-5"
WN113C	1'-10 3/4"	3'-0 7/8"	143.341°	5'-7 1/2"	157.796°	1'-2 1/8"	9'-10 1/2"	5'-2 7/8"	8'-6 1/8"	10'-5 1/4"
WN114C	1'-10 7/8"	3'-0 7/8"	143.372°	5'-7 3/4"	157.769°	1'-2"	9'-10 5/8"	5'-2 7/8"	8'-6 1/4"	10'-5 1/2"
WN115C	1'-10 7/8"	3'-0 7/8"	143.395°	5'-7 7/8"	157.738°	1'-1 7/8"	9'-10 3/4"	5'-3"	8'-6 1/2"	10'-5 7/8"
WN116C	1'-11"	3'-0 7/8"	143.412°	5'-8 1/8"	157.708°	1'-1 3/4"	9'-10 7/8"	5'-3"	8'-6 3/4"	10'-6 1/8"
WN117C	1'-11"	3'-0 7/8"	143.421°	5'-8 3/8"	157.676°	1'-1 5/8"	9'-11"	5'-3 1/8"	8'-7"	10'-6 3/8"
WN118C	1'-11"	3'-0 7/8"	143.425°	5'-8 5/8"	157.646°	1'-1 1/2"	9'-11"	5'-3 1/8"	8'-7 1/4"	
WN119C	1'-11 1/8"	3'-0 7/8"	143.420°	5'-8 7/8"	157.615°	1'-1 3/8"	9'-11 1/8"	5'-3 1/4"	8'-7 1/2"	
WN120C	1'-11 1/8"	3'-0 7/8"	143.410°	5'-9 1/8"	157.582°	1'-1 1/4"	9'-11 1/4"	5'-3 1/4"	8'-7 3/4"	
WN121C	1'-11 1/4"	3'-0 7/8"	143.393°	5'-9 3/8"	157.548°	1'-1 1/8"	9'-11 3/8"	5'-3 3/8"	8'-7 7/8"	
WN122C	1'-11 1/4"	3'-0 7/8"	143.369°	5'-9 5/8"	157.518"	1'-1"	9'-11 1/2"	5'-3 3/8"	8'-8 1/8"	
WN123C	1'-11 3/8"	3'-0 7/8"	143.338°	5'-9 7/8"	157.483°	1'-0 7/8"	9'-11 5/8"	5'-3 1/2"	8'-8 3/8"	
WN124C	1'-11 3/8"	3'-0 3/4"	143.299°	5'-10 1/4"	157.449°	1'-0 3/4"	9'-11 3/4"	5'-3 1/2"	8'-8 5/8"	
WN125C	1'-11 1/2"	3'-0 3/4"	143.255°	5'-10 1/2"	157.415°	1'-0 5/8"	9'-11 7/8"	5'-3 1/2"	8'-8 3/4"	
WN126C	1'-11 1/2"	3'-0 5/8"	143.203°	5'-10 3/4"	157.381°	1'-0 1/2"	10'-0"	5'-3 5/8"	8'-9"	
WN127C	1'-11 5/8"	3'-0 5/8"	143.143°	5'-11 1/8"	157.345°	1'-0 3/8"	10'-0 1/8"	5'-3 5/8"	8'-9 1/4"	
WN128C	1'-11 5/8"	3'-0 5/8"	143.078°	5'-11 3/8"	157.310°	1'-0 1/4"	10'-0 1/4"	5'-3 3/4"	8'-9 1/2"	
WN129C	1'-11 5/8"	3'-0 1/2"	143.004°	5'-11 5/8"	157.272°	1'-0 1/8"	10'-0 3/8"	5'-3 3/4"	8'-9 5/8"	
WN130C	1'-11 3/4"	3'-0 1/2"	142.924°	6'-0"	157.237°	1'-0"	10'-0 1/2"	5'-3 7/8"	8'-9 7/8"	
WN131C	1'-11 3/4"	3'-0 3/8"	142.835°	6'-0 1/4"	157.196°	0'-11 7/8"	10'-0 5/8"	5'-3 7/8"	8'-10 1/8"	
WN132C	1'-11 7/8"	3'-0 3/8"	142.741°	6'-0 5/8"	157.159°	0'-11 3/4"	10'-0 3/4"	5'-4"	8'-10 1/4"	
WN133C	1'-11 7/8"	3'-0 1/4"	142.639°	6'-0 7/8"	157.120°	0'-11 5/8"	10'-0 7/8"	5'-4"	8'-10 1/2"	
WN134C	2'-0"	3'-0 1/4"	142.527°	6'-1 1/4"	157.082°	0'-11 1/2"	10'-1"	5'-4"	8'-10 3/4"	
WN135C	2'-0"	3'-0 1/8"	142.410°	6'-1 5/8"	157.043°	0'-11 1/2"	10'-1 1/8"	5'-4 1/8"	8'-10 7/8"	
WN136C	2'-0 1/8"	3'-0"	142.284°	6'-1 7/8"	157.003°	0'-11 3/8"	10'-1 1/4"	5'-4 1/8"	8'-11 1/8"	
WN137C	2'-0 1/8"	2'-11 7/8"	142.150°	6'-2 1/4"	156.961°	0'-11 1/4"	10'-1 3/8"	5'-4 1/4"	8'-11 1/4"	
WN138C	2'-0 1/4"	2'-11 3/4"	142.008°	6'-2 5/8"	156.921°	0'-11 1/8"	10'-1 1/2"	5'-4 1/4"	8'-11 1/2"	
WN139C	2'-0 1/4"	2'-11 5/8"	141.858°	6'-3"	156.879°	0'-11"	10'-1 5/8"	5'-4 3/8"	8'-11 3/4"	
WN140C	2'-0 1/4"	2'-11 1/2"	141.700°	6'-3 3/8"	156.837°	0'-10 7/8"	10'-1 3/4"	5'-4 3/8"	8'-11 7/8"	
WN141C	2'-0 3/8"	2'-11 3/8"	141.532°	6'-3 3/4"	156.793°	0'-10 3/4"	10'-1 7/8"	5'-4 1/2"	9'-0 1/8"	
WN142C	2'-0 3/8"	2'-11 1/4"	141.358°	6'-4 1/8"	156.750°	0'-10 5/8"	10'-2"	5'-4 1/2"	9'-0 1/4"	
WN143C	2'-0 1/2"	2'-11 1/8"	141.172°	6'-4 1/2"	156.704°	0'-10 1/2"	10'-2 1/8"	5'-4 5/8"	9'-0 1/2"	
WN144C	2'-0 1/2"	2'-11"	140.979°	6'-4 7/8"	156.661°	0'-10 1/2"	10'-2 1/4"	5'-4 5/8"	9'-0 5/8"	
WN145C	2'-0 5/8"	2'-10 3/4"	140.778°	6'-5 1/4"	156.613°	0'-10 3/8"	10'-2 3/8"	5'-4 3/4"	9'-0 7/8"	
WN146C	2'-0 5/8"	2'-10 5/8"	140.563°	6'-5 5/8"	156.567°	0'-10 1/4"	10'-2 1/2"	5'-4 3/4"	9'-1"	
WN147C	2'-0 3/4"	2'-10 1/2"	140.341°	6'-6"	156.520°	0'-10 1/8"	10'-2 5/8"	5'-4 3/4"	9'-1 1/4"	
WN148C	2'-0 3/4"	2'-10 1/4"	140.108°	6'-6 3/8"	156.472°	0'-10"	10'-2 3/4"	5'-4 7/8"	9'-1 3/8"	
WN149C	2'-0 7/8"	2'-10 1/8"	139.867°	6'-6 3/4"	156.425°	0'-9 7/8"	10'-2 7/8"	5'-4 7/8"	9'-1 1/2"	
WN150C	2'-0 7/8"	2'-10"	139.612°	6'-7 1/4"	156.376°	0'-9 7/8"	10'-3"	5'-5"	9'-1 3/4"	
WN151C	2'-1"	2'-9 3/4"	139.350°	6'-7 5/8"	156.326°	0'-9 3/4"	10'-3 1/8"	5'-5"	9'-1 7/8"	
WN152C	2'-1"	2'-9 5/8"	139.075°	6'-8"	156.275°	0'-9 5/8"	10'-3 1/4"	5'-5 1/8"	9'-2 1/8"	
WN153C	2'-1"	2'-9 3/8"	138.788°	6'-8 1/2"	156.223°	0'-9 1/2"	10'-3 3/8"	5'-5 1/8"	9'-2 1/4"	
WN154C	2'-1 1/8"	2'-9 1/4"	138.490°	6'-8 7/8"	156.172°	0'-9 3/8"	10'-3 1/2"	5'-5 1/8"	9'-2 3/8"	
WN155C	2'-1 1/8"	2'-9"	138.180°	6'-9 3/8"	156.121°	0'-9 3/8"	10'-3 5/8"	5'-5 1/4"	9'-2 5/8"	
WN156C	2'-1 1/4"	2'-8 3/4"	137.857°	6'-9 3/4"	156.064°	0'-9 1/4"	10'-3 7/8"	5'-5 1/4"	9'-2 3/4"	
WN157C	2'-1 1/4"	2'-8 5/8"	137.522°	6'-10 1/4"	156.014°	0'-9 1/8"	10'-4"	5'-5 3/8"	9'-2 7/8"	
WN158C	2'-1 3/8"	2'-8 3/8"	137.172°	6'-10 3/4"	155.954°	0'-9"	10'-4 1/8"	5'-5 3/8"	9'-3 1/8"	
WN159C	2'-1 3/8"	2'-8 1/8"	136.812°	6'-11 1/8"	155.902°	0'-8 7/8"	10'-4 1/4"	5'-5 3/8"	9'-3 1/4"	
WN160C	2'-1 1/2"	2'-7 7/8"	136.434°	6'-11 5/8"	155.846°	0'-8 7/8"	10'-4 3/8"	5'-5 3/8"	9'-3 3/8"	
WN161C	2'-1 1/2"	2'-7 3/4"	136.044°	7'-0 1/8"	155.788°	0'-8 3/4"	10'-4 1/2"	5'-5 1/2"	9'-3 5/8"	
WN162C	2'-1 5/8"	2'-7 1/2"	135.638°	7'-0 5/8"	155.730°	0'-8 5/8"	10'-4 3/4"	5'-5 1/2"	9'-3 3/4"	
WN163C	2'-1 5/8"	2'-7 1/4"	135.216°	7'-1"	155.672°	0'-8 5/8"	10'-4 7/8"	5'-5 1/2"	9'-3 7/8"	
WN164C	2'-1 5/8"	2'-7"	134.780°	7'-1 1/2"	155.608°	0'-8 1/2"	10'-5"	5'-5 1/2"	9'-4"	
WN165C	2'-1 3/4"	2'-6 3/4"	134.324°	7'-2"	155.549°	0'-8 3/8"	10'-5 1/8"	5'-5 1/2"	9'-4 1/4"	
WN166C	2'-1 3/4"	2'-6 1/2"	133.855°	7'-2 1/2"	155.488°	0'-8 1/4"	10'-5 3/8"	5'-5 1/2"	9'-4 3/8"	
WN167C

WEST BRIDGE - SOUTH RUN

ID	P01V	L01	A01	L02	A02	L03	LTOT	ANV	H03V	H04V
WS1B	4'-0 5/8"	1'-2 5/8"	162.026°	3'-2 7/8"			4'-5 3/8"	4'-4 1/8"	5'-1 3/4"	6'-11 1/4"
WS2B	4'-0 3/4"	1'-3 1/8"	161.998°	3'-2 1/2"			4'-5 5/8"	4'-4 1/4"	5'-2 1/8"	6'-11 5/8"
WS3B	4'-0 7/8"	1'-3 5/8"	161.969°	3'-2 1/4"			4'-5 7/8"	4'-4 3/8"	5'-2 1/2"	7'-0 1/8"
WS4B	4'-1"	1'-4 1/8"	161.939°	3'-1 7/8"			4'-6 1/8"	4'-4 3/8"	5'-3"	7'-0 5/8"
WS5B	4'-1"	1'-4 5/8"	161.908°	3'-1 5/8"			4'-6 3/8"	4'-4 1/2"	5'-3 3/8"	7'-1"
WS6B	4'-1 1/8"	1'-5 1/4"	161.874°	3'-1 3/8"			4'-6 5/8"	4'-4 5/8"	5'-3 3/4"	7'-1 1/2"
WS7B	4'-1 1/8"	1'-5 7/8"	161.839°	3'-1"			4'-6 7/8"	4'-4 5/8"	5'-4 1/4"	7'-1 7/8"
WS8B	4'-1 1/8"	1'-6 1/2"	161.803°	3'-0 3/4"			4'-7 1/4"	4'-4 3/4"	5'-4 5/8"	7'-2 3/8"
WS9B	4'-1 1/8"	1'-7 1/8"	161.764°	3'-0 3/8"			4'-7 1/2"	4'-4 7/8"	5'-5"	7'-2 3/4"
WS10B	4'-1 1/8"	1'-7 3/4"	161.725°	3'-0"			4'-7 7/8"	4'-4 7/8"	5'-5 1/4"	7'-3 1/4"
WS11B	4'-1"	1'-8 1/2"	161.683°	2'-11 3/4"			4'-8 1/4"	4'-5"	5'-5 7/8"	7'-3 5/8"
WS12B	4'-0 7/8"	1'-9 1/8"	161.640°	2'-11 1/2"			4'-8 5/8"	4'-5 1/8"	5'-6 1/4"	7'-4 1/8"
WS13B	4'-0 7/8"	1'-9 7/8"	161.594°	2'-11 1/8"			4'-9"	4'-5 1/8"	5'-6 5/8"	7'-4 1/2"
WS14B	4'-0 3/4"	1'-10 5/8"	161.548°	2'-10 7/8"			4'-9 1/2"	4'-5 1/4"	5'-7"	7'-5"
WS15B	4'-0 1/2"	1'-11 3/8"	161.498°	2'-10 1/2"			4'-10"	4'-5 3/8"	5'-7 3/8"	7'-5 3/8"
WS16B	4'-0 3/8"	2'-0 1/8"	161.447°	2'-10 1/8"			4'-10 3/8"	4'-5 1/2"	5'-7 3/4"	7'-5 7/8"
WS17B	4'-0 1/4"	2'-1"	161.394°	2'-9 7/8"			4'-10 7/8"	4'-5 1/2"	5'-8 1/4"	7'-6 1/4"
WS18B	4'-0"	2'-1 7/8"	161.338°	2'-9 5/8"			4'-11 3/8"	4'-5 5/8"	5'-8 5/8"	7'-6 5/8"
WS19B	3'-11 3/4"	2'-2 5/8"	161.281°	2'-9 1/4"			5'-0"	4'-5 3/4"	5'-9"	7'-7 1/8"
WS20B	3'-11 1/2"	2'-3 1/2"	161.221°	2'-9"			5'-0 1/2"	4'-5 3/4"	5'-9 3/8"	7'-7 1/2"
WS21B	3'-11 1/4"	2'-4 1/2"	161.159°	2'-8 5/8"			5'-1 1/8"	4'-5 7/8"	5'-9 3/4"	7'-7 7/8"
WS22B	3'-11"	2'-5 3/8"	161.094°	2'-8 3/8"			5'-1 5/8"	4'-6"	5'-10 1/8"	7'-8 3/8"
WS23B	3'-10 5/8"	2'-6 1/4"	161.027°	2'-8"			5'-2 1/4"	4'-6 1/8"	5'-10 1/2"	7'-8 3/4"
WS24B	3'-10 3/4"	2'-7 1/4"	160.957°	2'-7 5/8"			5'-2 7/8"	4'-6 1/8"	5'-10 7/8"	7'-9 1/8"
WS25B	3'-9 7/8"	2'-8 1/4"	160.885°	2'-7 3/8"			5'-3 5/8"	4'-6 1/4"	5'-11 1/4"	7'-9 1/2"
WS26B	3'-9 1/2"	2'-9 1/4"	160.810°	2'-7"			5'-4 1/4"	4'-6 3/8"	5'-11 5/8"	7'-10"
WS27B	3'-9 1/8"	2'-10 1/4"	160.732°	2'-6 3/4"			5'-5"	4'-6 3/8"	6'-0"	7'-10 3/8"
WS28B	3'-8 3/4"	2'-11 3/8"	160.651°	2'-6 3/8"			5'-5 5/8"	4'-6 1/2"	6'-0 3/8"	7'-10 3/4"
WS29B	3'-8 1/4"	3'-0 3/8"	160.567°	2'-6"			5'-6 3/8"	4'-6 5/8"	6'-0 3/4"	7'-11 1/8"
WS30B	3'-7 3/4"	3'-1 1/2"	160.479°	2'-5 3/4"			5'-7 1/8"	4'-6 3/4"	6'-1 1/8"	7'-11 5/8"
WS31B	3'-7 3/8"	3'-2 5/8"	160.389°	2'-5 3/8"			5'-8"	4'-6 3/4"	6'-1 1/2"	8'-0"
WS32B	3'-6 3/4"	3'-3 3/4"	160.295°	2'-5"			5'-8 3/4"	4'-6 7/8"	6'-1 7/8"	8'-0 3/8"
WS33B	3'-6 1/4"	3'-4 7/8"	160.197°	2'-4 3/4"			5'-9 5/8"	4'-7"	6'-2 1/4"	8'-0 7/8"
WS34B	3'-5 3/4"	3'-6"	160.096°	2'-4 3/8"			5'-10 3/8"	4'-7"	6'-2 5/8"	8'-1 1/8"
WS35B	3'-5 1/8"	3'-7 1/4"	159.991°	2'-4"			5'-11 1/4"	4'-7 1/8"	6'-3"	8'-1 1/2"
WS36B	3'-4 1/2"	3'-8 1/2"	159.882°	2'-3 3/4"			6'-0 1/8"	4'-7 1/4"	6'-3 3/8"	8'-2"
WS37B	3'-3 7/8"	3'-9 3/4"	159.768°	2'-3 3/8"			6'-1 1/8"	4'-7 1/4"	6'-3 3/4"	8'-2 3/8"
WS38B	3'-3 1/4"	3'-11"	159.651°	2'-3"			6'-2"	4'-7 3/8"	6'-4 1/8"	8'-2 3/4"
WS39B	3'-2 5/8"	4'-0 1/4"	159.529°	2'-2 3/4"			6'-2 7/8"	4'-7 1/2"	6'-4 1/2"	8'-3 1/8"
WS40B	3'-1 7/8"	4'-1 5/8"	159.402°	2'-2 3/8"			6'-3 7/8"	4'-7 5/8"	6'-4 7/8"	8'-3 1/2"
WS41B	3'-1 1/4"	4'-2 7/8"	159.271°	2'-2"			6'-4 7/8"	4'-7 5/8"	6'-5 1/8"	8'-3 7/8"
WS42B	3'-0 1/2"	4'-4 1/4"	159.134°	2'-1 5/8"			6'-5 7/8"	4'-7 3/4"	6'-5 1/2"	8'-4 1/4"
WS43B	2'-11 3/4"	4'-5 5/8"	158.992°	2'-1 3/8"			6'-7"	4'-7 7/8"	6'-5 7/8"	8'-4 5/8"
WS44B	2'-11"	4'-7"	158.845°	2'-1"			6'-8"	4'-7 7/8"	6'-6 1/4"	8'-5"
WS45B	2'-10 1/8"	4'-8 3/8"	158.691°	2'-0 5/8"			6'-9 1/8"	4'-8"	6'-6 5/8"	8'-5 3/8"
WS46B	2'-9 3/8"	4'-9 7/8"	158.532°	2'-0 1/4"			6'-10 1/8"	4'-8 1/8"	6'-6 7/8"	8'-5 3/4"
WS47B	2'-8 1/2"	4'-11 3/8"	158.367°	2'-0"			6'-11 1/4"	4'-8 1/8"	6'-7 1/4"	8'-6 1/8"
WS48B	2'-7 5/8"	5'-0 7/8"	158.193°	1'-11 5/8"			7'-0 3/8"	4'-8 1/4"	6'-7 5/8"	8'-6 1/2"
WS49B	2'-6 3/4"	5'-2 3/8"	158.015°	1'-11 1/4"			7'-1 5/8"	4'-8 3/8"	6'-8"	8'-6 7/8"
WS50B	2'-5 7/8"	5'-3 7/8"	157.829°	1'-10 7/8"			7'-2 3/4"	4'-8 3/8"	6'-8 3/4"	8'-7 1/4"
WS51C	1'-5 1/4"	2'-1 5/8"	120.807°	5'-3 3/4"	157.797°	1'-10 3/4"	9'-4 1/8"	4'-8 1/2"	6'-8 5/8"	8'-7 1/2"
WS52C	1'-5 1/4"	2'-1 7/8"	121.766°	5'-3 5/8"	157.776°	1'-10 1/2"	9'-4 1/8"	4'-8 1/2"	6'-9"	8'-7 7/8"
WS53C	1'-5 3/8"	2'-2 1/8"	122.689°	5'-3 5/8"	157.752°	1'-10 3/8"	9'-4"	4'-8 5/8"	6'-9 3/8"	8'-8 1/4"
WS54C	1'-5 3/8"	2'-2 3/8"	123.579°	5'-3 1/2"	157.731°	1'-10 1/8"	9'-4"	4'-8 3/4"	6'-9 5/8"	8'-8 5/8"
WS55C	1'-5 1/2"	2'-2 5/8"	124.438°	5'-3 3/8"	157.707°	1'-10"	9'-4"	4'-8 3/4"	6'-10"	8'-9"
WS56C	1'-5 1/2"	2'-3"	125.267°	5'-3 1/4"	157.685°	1'-9 7/8"	9'-4"	4'-8 7/8"	6'-10 3/8"	8'-9 3/8"
WS57C	1'-5 5/8"	2'-3 1/4"	126.066°	5'-3 1/8"	157.661°	1'-9 5/8"	9'-4"	4'-8 7/8"	6'-10 5/8"	8'-9 3/4"
WS58C	1'-5 5/8"	2'-3 1/2"	126.836°	5'-3 1/8"	157.638°	1'-9 1/2"	9'-4"	4'-9"	6'-11"	8'-10"
WS59C	1'-5 3/4"	2'-3 3/4"	127.579°	5'-3"	157.615°	1'-9 3/8"	9'-4"	4'-9 1/8"	6'-11 1/4"	8'-10 3/8"
WS60C	1'-5 3/4"	2'-4"	128.295°	5'-2 7/8"	157.591°	1'-9 1/8"	9'-4"	4'-9 1/8"	6'-11 5/8"	8'-10 3/4"
WS61C	1'-5 7/8"	2'-4 1/4"	128.987°	5'-2 7/8"	157.567°	1'-8 7/8"	9'-4 1/8"	4'-9 1/4"	7'-0"	8'-11 1/8"
WS62C	1'-5 7/8"	2'-4 5/8"	129.649°	5'-2 3/4"	157.541°	1'-8 3/4"	9'-4 1/8"	4'-9 3/8"	7'-0 1/4"	8'-11 3/8"
WS63C	1'-6"	2'-4 7/8"	130.291°	5'-2 3/4"	157.518°	1'-8 5/8"	9'-4 1/8"	4'-9 3/8"	7'-0 5/8"	8'-11 3/4"
WS64C	1'-6"	2'-5 1/8"	130.909°	5'-2 5/8"	157.493°	1'-8 5/8"	9'-4 1/8"	4'-9 1/2"	7'-1"	8'-12 1/8"
WS65C	1'-6 1/8"	2'-5 3/8"	131.504°	5'-2 5/8"	157.466°	1'-8 1/4"	9'-4 1/4"	4'-9 1/2"	7'-1 1/4"	9'-0 1/2"
WS66C	1'-6 1/8"	2'-5 5/8"	132.079°	5'-2 5/8"	157.442°	1'-8 1/8"	9'-4 1/4"	4'-9 5/8"	7'-1 1/2"	9'-0 3/4"
WS67C	1'-6 1/8"	2'-5 7/8"	132.632°	5'-2 1/2"	157.416°	1'-7 7/8"	9'-4 3/8"	4'-9 5/8"	7'-1 7/8"	9'-1 1/8"
WS68C	1'-6 1/4"	2'-6 1/8"	133.163°	5'-2 1/2"	157.389°	1'-7 3/4"	9'-4 3/8"	4'-9 3/4"	7'-2 1/8"	9'-1 1/2"
WS69C	1'-6 1/4"	2'-6 3/8"	133.678°	5'-2 1/2"	157.363°	1'-7 5/8"	9'-4 1/2"	4'-9 7/8"	7'-2 1/2"	9'-1 3/4"
WS70C	1'-6 3/8"	2'-6 5/8"	134.172°	5'-2 1/2"	157.336°	1'-7 3/8"	9'-4 1/2"	4'-9 7/8"	7'-2 3/4"	9'-2 1/8"
WS71C	1'-6 3/8"	2'-6 7/8"	134.649°	5'-2 1/2"	157.310°	1'-7 1/4"	9'-4 5/8"	4'-10"	7'-3 1/8"	9'-2 3/8"
WS72C	1'-6 1/2"	2'-7 1/8"	135.106°	5'-2 3/8"	157.282°	1'-7 1/8"	9'-4 5/8"	4'-10"	7'-3 3/8"	9'-2 3/4"
WS73C	1'-6 1/2"	2'-7 3/8"	135.549°	5'-2 3/8"	157.255°	1'-6 7/8"	9'-4 3/4"	4'-10 1/8"	7'-3 3/4"	9'-3 1/8"
WS74C	1'-6 5/8"	2'-7 7/8"	135.975°	5'-2 3/8"	157.226°	1'-6 3/4"	9'-4 7/8"	4'-10 1/8"	7'-4"	9'-3 3/8"
WS75C	1'-6 5/8"	2'-7 7/8"	136.382°	5'-2 3/8"	157.199°	1'-6 5/8"	9'-4 7/8"	4'-10 1/4"	7'-4 3/8"	9'-3 3/4"
WS76C	1'-6 3/4"	2'-8 1/8"	136.777°	5'-2 1/2"	157.170°	1'-6 3/8"	9'-5"	4'-10 3/8"	7'-4 5/8"	9'-4"
WS77C	1'-6 3/4"	2'-8 3/8"	137.156°	5'-2 1/2"	157.143°	1'-6 1/4"	9'-5 1/8"	4'-10 3/8"	7'-4 7/8"	9'-4 3/8"
WS78C	1'-6 7/8"	2'-8 5/8"	137.521°	5'-2 1/2"	157.113°	1'-6 1/8"	9'-5 1/8"	4'-10 1/2"	7'-5 1/4"	9'-4 5/8"
WS79C	1'-6 7/8"	2'-8 3/4"	137.872°	5'-2 1/2"	157.083°	1'-6"	9'-5 1/4"	4'-10 1/2"	7'-5 1/2"	9'-5"
WS80C	1'-6 7/8"	2'-9"	138.210°	5'-2 1/2"	157.053°	1'-5 3/4"	9'-5 3/8"	4'-10 5/8"	7'-5 7/8"	9'-5 1/4"
WS81C	1'-7"	2'-9 1/4"	138.536°	5'-2 5/8"	157.024°	1'-5 5/8"	9'-5 1/2"	4'-10 5/8"	7'-6 1/8"	9'-5 5/8"
WS82C	1'-7"	2'-9 3/8"	138.846°	5'-2 5/8"	156.994°	1'-5 1/2"	9'-5 1/2"	4'-10 3/4"	7'-6 3/8"	9'-5 7/8"
WS83C	1'-7 1/8"	2'-9 5/8"	139.146°	5'-2 5/8"	156.964°	1'-5 3/8"	9'-5 5/8"	4'-10 7/8"	7'-6 5/8"	9'-6 1/4"
WS84C	1'-7 1/8"	2'-9 7/8"	139.435°	5'-2 3/4"	156.933°	1'-5 1/8"	9'-5 3/4"	4'-10 7/8"	7'-7"	9'-6 1/2"
WS85C	1'-7 1/4"	2'-10"	139.709°	5'-2 3/4"	156.901°	1'-5"	9'-5 7/8"	4'-11"	7'-7 1/4"	9'-6 3/4"
WS86C	1'-7 1/4"	2'-10 1/4"	139.974°	5'-2 7/8"	156.869°	1'-4 7/8"	9'-6"	4'-11"	7'-7 1/2"	9'-7 1/8"
WS87C	1'-7 3/8"	2'-10 3/8"	140.229°	5'-3"	156.837°	1'-4 3/4"	9'-6"	4'-11 1/8"	7'-7 7/8"	9'-7 3/8"
WS88C	1'-7 3/8"	2'-10 5/8"	140.472°	5'-3"	156.804°	1'-4 1/2"	9'-6 1/8"	4'-11 1/8"	7'-8 1/8"	9'-7 5/8"
WS89C	1'-7 1/2"	2'-10 3/4"	140.704°	5'-3 1/8"	156.771°	1'-4 3/8"	9'-6 1/4"	4'-11 1/4"	7'-8 3/8"	9'-8"
WS90C	1'-7 1/2"	2'-10 7/8"	140.927°	5'-3 1/4"	156.738°	1'-4 1/4"	9'-6 3/8"	4'-11 1/4"	7'-8 5/8"	9'-8 1/4"
WS91C	1'-7 5/8"	2'-11 1/8"	141.141°	5'-3 1/4"	156.705°	1'-4 1/8"	9'-6 1/2"	4'-11 3/8"	7'-9"	9'-8 1/2"
WS92C	1'-7 5/8"	2'-11 1/4"	141.343°	5'-3 3/8"	156.671°	1'-4"	9'-6 5/8"	4'-11 1/2"	7'-9 1/4"	9'-8 7/8"
WS93C	1'-7 3/4"	2'-11 3/8"	141.536°	5'-3 1/2"	156.636°	1'-3 7/8"	9'-6 5/8"	4'-11 1/2"	7'-9 1/2"	9'-9 1/8"
WS94C	1'-7 3/4"	2'-11 1/2"	141.722°	5'-3 5/8"	156.602°	1'-3 5/8"	9'-6 3/4"	4'-11 5/8"	7'-9 3/4"	9'-9 1/2"
WS95C	1'-7 3/4"	2'-11 5/8"	141.896°	5'-3 3/4"	156.567°	1'-3 1/2"	9'-6 7/8"	4'-11 5/8"	7'-10"	9'-9 3/4"
WS96C	1'-7 7/8"	2'-11 3/4"	142.063°	5'-3 7/8"	156.533°	1'-3 3/8"	9'-7"	4'-11 3/4"	7'-10 1/4"	9'-10"
WS97C	1'-7 7/8"	2'-11 7/8"	142.221°	5'-4"	156.496°	1'-3 1/4"	9'-7 1/8"	4'-11 3/4"	7'-10 5/8"	9'-10 1/4"
WS98C	1'-8"	3'-0"	142.372°	5'-4 1/8"	156.459°	1'-3 1/8"	9'-7 1/4"	4'-11 7/8"	7'-10 7/8"	9'-10 1/2"
WS99C	1'-8"	3'-0 1/8"	142.512°	5'-4 1/4"	156.424°	1'-3"	9'-7 3/8"	4'-11 7/8"	7'-11 1/8"	9'-10 3/4"
WS100C	1'-8 1/8"	3'-0 1/4"	142.645°	5'-4 3/8"	156.387°	1'-2 7/8"	9'-7 1/2"	5'-0"	7'-11 3/8"	9'-11 1/8"
WS101C	1'-8 1/8"	3'-0 3/8"	142.771°	5'-4 1/2"	156.349°	1'-2 5/8"	9'-7 5/8"	5'-0 1/8"	7'-11 5/8"	9'-11 3/8"
WS102C	1'-8 1/4"	3'-0 1/2"	142.887°	5'-4 5/8"	156.310°	1'-2 1/2"	9'-7 3/4"	5'-0 1/8"	7'-11 7/8"	9'-11 5/8"
WS103C	1'-8 1/4"	3'-0 1/2"	142.996°	5'-4 7/8"	156.272°	1'-2 3/8"	9'-7 3/4"	5'-0 1/4"	8'-0 1/8"	9'-11 7/8"
WS104C	1'-8 3/8"	3'-0 5/8"	143.099°	5'-5"	156.234°	1'-2 1/4"	9'-7 7/8"	5'-0 1/4"	8'-0 3/8"	10'-0 1/8"
WS105C	1'-8 3/8"	3'-0 3/4"	143.194°	5'-5 1/8"	156.195°	1'-2 1/8"	9'-8"	5'-0 3/8"	8'-0 1/2"	10'-0 1/4"
WS106C	1'-8 1/2"	3'-0 3/4"	143.279°	5'-5 3/8"	156.155°	1'-2"	9'-8 1/8"	5'-0 3/8"	8'-0 7/8"	10'-0 5/8"
WS107C	1'-8 1/2"	3'-0 7/8"	143.359°	5'-5 1/2"	156.116°	1'-1 7/8"	9'-8 1/4"	5'-0 1/2"	8'-1 1/8"	10'-1"
WS108C	1'-8 1/2"	3'-0 7/8"	143.431°	5'-5 3/4"	156.075°	1'-1 3/4"	9'-8 3/8"	5'-0 1/2"	8'-1 1/4"	10'-1 1/4"
WS109C	1'-8 5/8"	3'-1"	143.495°	5'-5 7/8"	156.032°	1'-1 5/8"	9'-8 1/2"	5'-0 5/8"	8'-1 5/8"	10'-1 1/2"
WS110C	1'-8 5/8"	3'-1"	143.553°	5'-6 1/8"	155.991°	1'-1 1/2"	9'-8 5/8"	5'-0 3/4"	8'-1 7/8"	10'-1 3/4"
WS111C	1'-8 3/4"	3'-1 1/8"	143.605°	5'-6 3/8"	155.950°	1'-1 3/8"	9'-8 3/4"	5'-0 3/4"	8'-2"	10'-2"
WS112C	1'-8 3/4"	3'-1 1/8"	143.648°	5'-6 1/2"	155.907°	1'-1 1/4"	9'-8 7/8"	5'-0 7/8"	8'-2 3/8"	10'-2 1/4"
WS113C	1'-8 7/8"	3'-1 1/8"	143.684°	5'-6 3/4"	155.863°	1'-1 1/8"	9'-9"	5'-0 7/8"	8'-2 5/8"	10'-2 1/2"
WS114C	1'-8 7/8"	3'-1 1/8"	143.714°	5'-7"	155.820°	1'-1"	9'-9 1/8"	5'-1"	8'-2 3/4"	10'-2 3/4"
WS115C	1'-9"	3'-1 1/4"	143.737°	5'-7 1/4"	155.776°	1'-0 7/8"	9'-9 1/4"	5'-1"	8'-3 1/8"	10'-3"
WS116C	1'-9"	3'-1 1/4"	143.752°	5'-7 3/8"	155.730°	1'-0 3/4"	9'-9 3/8"	5'-1 1/8"	8'-3 3/8"	10'-3 1/4"
WS117C	1'-9 1/8"	3'-1 1/4"	143.761°	5'-7 5/8"	155.686°	1'-0 5/8"	9'-9 1/2"	5'-1 1/8"	8'-3 1/2"	10'-3 1/2"
WS118C	1'-9 1/8"	3'-1 1/4"	143.764°	5'-7 7/8"	155.640°	1'-0 1/2"	9'-9 5/8"	5'-1 1/4"	8'-3 3/4"	
WS119C	1'-9 1/4"	3'-1 1/4"	143.758°	5'-8 1/8"	155.596°	1'-0 3/8"	9'-9 3/4"	5'-1 3/8"	8'-4"	
WS120C	1'-9 1/4"	3'-1 1/4"	143.746°	5'-8 3/8"	155.549°	1'-0 1/4"	9'-9 7/8"	5'-1 3/8"	8'-4 1/4"	
WS121C	1'-9 1/4"	3'-1 1/8"	143.729°	5'-8 5/8"	155.501°	1'-0 1/8"	9'-10"	5'-1 1/2"	8'-4 1/2"	
WS122C	1'-9 3/8"	3'-1 1/8"	143.702°	5'-8 7/8"	155.453°	1'-0"	9'-10"	5'-1 1/2"	8'-4 3/4"	
WS123C	1'-9 3/8"	3'-1 1/8"	143.670°	5'-9 1/8"	155.406°	0'-11 7/8"	9'-10 1/8"	5'-1 5/8"	8'-5"	
WS124C	1'-9 1/2"	3'-1 1/8"	143.631°	5'-9 1/2"	155.356°	0'-11 3/4"	9'-10 1/4"	5'-1 3/4"	8'-5 1/8"	
WS125C	1'-9 1/2"	3'-1"	143.585°	5'-9 3/4"	155.304°	0'-11 5/8"	9'-10 3/8"	5'-1 3/4"	8'-5 3/8"	
WS126C	1'-9 5/8"	3'-1"	143.530°	5'-10"	155.255°	0'-11 1/2"	9'-10 1/2"	5'-1 7/8"	8'-5 5/8"	
WS127C	1'-9 5/8"	3'-1"	143.470°	5'-10 3/8"	155.204°	0'-11 3/8"	9'-10 5/8"	5'-1 7/8"	8'-5 7/8"	
WS128C	1'-9 3/4"	3'-0 7/8"	143.402°	5'-10 5/8"	155.153°	0'-11 1/4"	9'-10 3/4"	5'-2"	8'-6 1/4"	
WS129C	1'-9 3/4"	3'-0 7/8"	143.327°	5'-11"	155.101°	0'-11 1/8"	9'-10 7/8"	5'-2"	8'-6 1/4"	
WS130C	1'-9 7/8"	3'-0 3/4"	143.245°	5'-11 1/4"	155.048°	0'-11"	9'-11"	5'-2"	8'-6 1/2"	
WS131C	1'-9 7/8"	3'-0 3/4"	143.155°	5'-11 1/2"	154.997°	0'-10 7/8"	9'-11 1/8"	5'-2"	8'-6 5/8"	
WS132C	1'-10"	3'-0 5/8"	143.059°	5'-11 7/8"	154.944°	0'-10 3/4"	9'-11 1/4"	5'-2"	8'-6 7/8"	
WS133C	1'-10"	3'-0 1/2"	142.953°	6'-0 1/4"	154.886°	0'-10 5/8"	9'-11 3/8"	5'-2 1/8"	8'-7 1/8"	
WS134C	1'-10 1/8"	3'-0 3/8"	142.841°	6'-0 1/2"	154.834°	0'-10 5/8"	9'-11 1/2"	5'-2 1/8"	8'-7 1/4"	
WS135C	1'-10 1/8"	3'-0 3/8"	142.722°	6'-0 7/8"	154.779°	0'-10 1/2"	9'-11 5/8"	5'-2 1/8"	8'-7 1/2"	
WS136C	1'-10 1/8"	3'-0 1/4"	142.592°	6'-1 1/4"	154.721°	0'-10 3/8"	9'-11 3/4"	5'-2 1/4"	8'-7 3/4"	
WS137C	1'-10 1/4"	3'-0 1/8"	142.457°	6'-1 1/2"	154.664°	0'-10 3/8"	9'-11 7/8"	5'-2 1/4"	8'-8"	
WS138C	1'-10 1/4"	3'-0"	142.312°	6'-1 7/8"	154.606°	0'-10 1/8"	10'-0"	5'-2 1/4"	8'-8 1/8"	
WS139C	1'-10 3/8"	2'-11 7/8"	142.160°	6'-2 1/4"	154.547°	0'-10"	10'-0 1/8"	5'-2 1/4"	8'-8 3/8"	
WS140C	1'-10 3/8"	2'-11 3/4"	141.998°	6'-2 5/8"	154.490°	0'-9 7/8"	10'-0 1/8"	5'-2 3/8"	8'-8 1/2"	
WS141C	1'-10 1/2"	2'-11 5/8"	141.829°	6'-3"	154.431°	0'-9 7/8"	10'-0 3/8"	5'-2 3/8"	8'-8 3/4"	
WS142C	1'-10 1/2"	2'-11 1/2"	141.651°	6'-3 3/8"	154.369°	0'-9 3/4"	10'-0 1/2"	5'-2 3/8"	8'-8 7/8"	
WS143C	1'-10 5/8"	2'-11 1/4"	141.462°	6'-3 3/4"	154.310°	0'-9 5/8"	10'-0 3/4"	5'-2 1/2"	8'-9 1/8"	
WS144C	1'-10 5/8"	2'-11 1/8"	141.266°	6'-4 1/8"	154.245°	0'-9 1/2"	10'-0 7/8"	5'-2 1/2"	8'-9 3/8"	
WS145C	1'-10 3/4"	2'-11"	141.060°	6'-4 1/2"	154.184°	0'-9 3/8"	10'-1"	5'-2 5/8"	8'-9 1/2"	
WS146C	1'-10 3/4"	2'-10 7/8"	140.843°	6'-4 7/8"	154.120°	0'-9 3/8"	10'-1 1/8"	5'-2 1/2"	8'-9 3/4"	
WS147C	1'-10 7/8"	2'-10 5/8"	140.617°	6'-5 3/8"	154.056°	0'-9 1/4"	10'-1 1/4"	5'-2 5/8"	8'-9 7/8"	
WS148C	1'-10 7/8"	2'-10 1/2"	140.382°	6'-5 3/4"	153.989°	0'-9 1/8"	10'-1 3/8"	5'-2 5/8"	8'-10"	
WS149C	1'-10 7/8"	2'-10 3/8"	140.135°	6'-6 1/8"	153.926°	0'-9"	10'-1 1/2"	5'-2 5/8"	8'-10 1/4"	
WS150C	1'-11"	2'-10 1/8"	139.877°	6'-6 1/2"	153.860°	0'-8 7/8"	10'-1 5/8"	5'-2 3/4"	8'-10 1/2"	
WS151C	1'-11"	2'-10"	139.610°	6'-6 7/8"	153.794°	0'-8 7/8"	10'-1 3/4"	5'-2 3/4"	8'-10 5/8"	
WS152C	1'-11 1/8"	2'-9 3/4"	139.330°	6'-7 3/8"	153.726°	0'-8 3/4"	10'-1 7/8"	5'-2 3/4"	8'-10 7/8"	
WS153C	1'-11 1/8"	2'-9 1/2"	139.038°	6'-7 7/8"	153.657°	0'-8 5/8"	10'-2"	5'-2 3/4"	8'-11"	
WS154C	1'-11 1/4"	2'-9 3/8"	138.730°	6'-8 1/4"	153.589°	0'-8 1/2"	10'-2 1/4"	5'-2 7/8"	8'-11 1/4"	
WS155C	1'-11 1/4"	2'-9 1/8"	138.420°	6'-8 3/4"	153.521°	0'-8 1/2"	10'-2 3/8"	5'-2 7/8"	8'-11 3/8"	
WS156C	1'-11 3/8"	2'-8 7/8"	138.090°	6'-9 1/8"	153.446°	0'-8 3/8"	10'-2 1/2"	5'-2 7/8"	8'-11 1/2"	
WS157C	1'-11 3/8"	2'-8 3/4"	137.751°	6'-9 5/8"	153.376°	0'-8 1/4"	10'-2 5/8"	5'-2 7/8"	8'-11 5/8"	
WS158C	1'-11 1/2"	2'-8 1/2"	137.395°	6'-10 1/8"	153.306°	0'-8 1/4"	10'-2 3/4"	5'-3"	8'-11 7/8"	
WS159C	1'-11 1/2"	2'-8 1/4"	137.027°	6'-10 5/8"	153.232°	0'-8 1/8"	10'-3"	5'-3"	9'-0"	
WS160C	1'-11 5/8"	2'-8"	136.643°	6'-11"	153.159°	0'-8"	10'-3 1/8"	5'-3"	9'-0 1/4"	
WS161C	1'-11 5/8"	2'-7 3/4"	136.245°	6'-11 1/2"	153.083°	0'-7 7/8"	10'-3 1/4"	5'-3 1/8"	9'-0 3/8"	
WS162C	1'-11 5/8"	2'-7 5/8"	135.833°	7'-0"	153.011°	0'-7 7/8"	10'-3 3/8"	5'-3 1/8"	9'-0 1/2"	
WS163C	1'-11 3/4"	2'-7 3/8"	135.403°	7'-0 1/2"	152.931°	0'-7 3/4"	10'-3 5/8"	5'-3 1/8"	9'-0 3/4"	
WS164C	1'-11 3/4"	2'-7 1/8"	134.957°	7'-1"	152.861°	0'-7 5/8"	10'-3 3/4"	5'-3 1/8"	9'-0 7/8"	
WS165C	1'-11 7/8"	2'-6 7/8"	134.495°	7'-1 1/2"	152.782°	0'-7 5/8"	10'-3 7/8"	5'-3 1/4"	9'-1"	
WS166C	1'-11 7/8"	2'-6 5/8"	134.016°	7'-2"	152.700°	0'-7 1/2"	10'-4 1/8"	5'-3 1/4"	9'-1 1/8"	
WS167C	2'-0"	2'-6 3/8"	133.515°	7'-2

WEST BRIDGE - MIDDLE RUN

ID	P01V	L01	A01	L02	A02	L03	LTOT	ANV	H03V	H04V
WM1A	1'-6 3/8"	0'-4 1/8"					0'-4 1/8"	1'-11 3/8"	1'-9"	
WM2A	1'-6 1/2"	0'-4 5/8"					0'-4 5/8"	1'-11 1/2"	1'-9 3/8"	
WM3A	1'-6 1/2"	0'-5 1/8"					0'-5 1/8"	1'-11 1/2"	1'-9 7/8"	
WM4A	1'-6 5/8"	0'-5 3/4"					0'-5 3/4"	1'-11 5/8"	1'-10 1/4"	
WM5A	1'-6 5/8"	0'-6 1/4"					0'-6 1/4"	1'-11 5/8"	1'-10 3/4"	
WM6A	1'-6 3/4"	0'-6 3/4"					0'-6 3/4"	1'-11 3/4"	1'-11 1/8"	
WM7A	1'-6 3/4"	0'-7 1/4"					0'-7 1/4"	1'-11 3/4"	1'-11 1/2"	
WM8A	1'-6 7/8"	0'-7 3/4"					0'-7 3/4"	1'-11 7/8"	2'-0"	
WM9A	1'-6 7/8"	0'-8 3/8"					0'-8 3/8"	1'-11 7/8"	2'-0 3/8"	
WM10A	1'-7"	0'-8 7/8"					0'-8 7/8"	2'-0"	2'-0 3/4"	
WM11A	1'-7"	0'-9 3/8"					0'-9 3/8"	2'-0"	2'-1 1/4"	
WM12A	1'-7 1/8"	0'-9 7/8"					0'-9 7/8"	2'-0 1/8"	2'-1 5/8"	
WM13A	1'-7 1/8"	0'-10 1/2"					0'-10 1/2"	2'-0 1/8"	2'-2"	
WM14A	1'-7 1/4"	0'-11"					0'-11"	2'-0 1/4"	2'-2 3/8"	
WM15A	1'-7 1/4"	0'-11 1/2"					0'-11 1/2"	2'-0 1/4"	2'-2 7/8"	
WM16A	1'-7 3/8"	1'-0"					1'-0"	2'-0 3/8"	2'-3 1/4"	
WM17A	1'-7 3/8"	1'-0 1/2"					1'-0 1/2"	2'-0 3/8"	2'-3 5/8"	
WM18A	1'-7 1/2"	1'-1 1/8"					1'-1 1/8"	2'-0 1/2"	2'-4"	
WM19A	1'-7 1/2"	1'-1 5/8"					1'-1 5/8"	2'-0 1/2"	2'-4 3/8"	
WM20A	1'-7 5/8"	1'-2 1/8"					1'-2 1/8"	2'-0 5/8"	2'-4 7/8"	
WM21A	1'-7 5/8"	1'-2 5/8"					1'-2 5/8"	2'-0 5/8"	2'-5 1/4"	
WM22A	1'-7 5/8"	1'-3 1/4"					1'-3 1/4"	2'-0 5/8"	2'-5 5/8"	
WM23A	1'-7 3/4"	1'-3 3/4"					1'-3 3/4"	2'-0 3/4"	2'-6"	
WM24A	1'-7 3/4"	1'-4 1/4"					1'-4 1/4"	2'-0 3/4"	2'-6 3/8"	
WM25A	1'-7 7/8"	1'-4 3/4"					1'-4 3/4"	2'-0 7/8"	2'-6 3/4"	
WM26A	1'-7 7/8"	1'-5 1/4"					1'-5 1/4"	2'-0 7/8"	2'-7 1/8"	
WM27A	1'-8"	1'-5 7/8"					1'-5 7/8"	2'-1"	2'-7 1/2"	
WM28A	1'-8"	1'-6 3/8"					1'-6 3/8"	2'-1"	2'-8"	
WM29A	1'-8 1/8"	1'-6 7/8"					1'-6 7/8"	2'-1 1/8"	2'-8 3/8"	
WM30A	1'-8 1/8"	1'-7 3/8"					1'-7 3/8"	2'-1 1/8"	2'-8 3/4"	
WM31A	1'-8 1/4"	1'-8"					1'-8"	2'-1 1/4"	2'-9 1/8"	
WM32A	1'-8 1/4"	1'-8 1/2"					1'-8 1/2"	2'-1 1/4"	2'-9 1/2"	
WM33A	1'-8 3/8"	1'-9"					1'-9"	2'-1 3/8"	2'-9 7/8"	
WM34A	1'-8 3/8"	1'-9 1/2"					1'-9 1/2"	2'-1 3/8"	2'-10 1/4"	
WM35A	1'-8 1/2"	1'-10"					1'-10"	2'-1 1/2"	2'-10 5/8"	
WM36A	1'-8 1/2"	1'-10 5/8"					1'-10 5/8"	2'-1 1/2"	2'-11"	
WM37A	1'-8 5/8"	1'-11 1/8"					1'-11 1/8"	2'-1 5/8"	2'-11 3/8"	
WM38A	1'-8 5/8"	1'-11 5/8"					1'-11 5/8"	2'-1 5/8"	2'-11 3/4"	
WM39A	1'-8 3/4"	2'-0 1/8"					2'-0 1/8"	2'-1 3/4"	3'-0"	
WM40A	1'-8 3/4"	2'-0 3/4"					2'-0 3/4"	2'-1 3/4"	3'-0 3/8"	
WM41A	1'-8 7/8"	2'-1 1/4"					2'-1 1/4"	2'-1 7/8"	3'-0 3/4"	
WM42A	1'-8 7/8"	2'-1 3/4"					2'-1 3/4"	2'-1 7/8"	3'-1 1/8"	
WM43A	1'-9"	2'-2 1/4"					2'-2 1/4"	2'-2"	3'-1 1/2"	
WM44A	1'-9"	2'-2 3/4"					2'-2 3/4"	2'-2"	3'-1 7/8"	
WM45A	1'-9 1/8"	2'-3 3/8"					2'-3 3/8"	2'-2 1/8"	3'-2 1/4"	
WM46A	1'-9 1/8"	2'-3 7/8"					2'-3 7/8"	2'-2 1/8"	3'-2 5/8"	
WM47A	1'-9 1/8"	2'-4 3/8"					2'-4 3/8"	2'-2 1/8"	3'-2 7/8"	
WM48A	1'-9 1/4"	2'-4 7/8"					2'-4 7/8"	2'-2 1/4"	3'-3 1/8"	
WM49A	1'-9 1/4"	2'-5 1/2"					2'-5 1/2"	2'-2 1/4"	3'-3 5/8"	
WM50A	1'-9 3/8"	2'-6"					2'-6"	2'-2 3/8"	3'-4"	
WM63A	1'-10 5/8"	2'-10 1/2"					2'-10 1/2"	2'-3 5/8"	3'-8 3/8"	
WM64A	1'-10 5/8"	2'-10 7/8"					2'-10 7/8"	2'-3 5/8"	3'-8 5/8"	
WM65A	1'-10 3/4"	2'-11 1/4"					2'-11 1/4"	2'-3 3/4"	3'-9"	
WM66A	1'-10 7/8"	2'-11 5/8"					2'-11 5/8"	2'-3 7/8"	3'-9 1/4"	
WM67A	1'-10 7/8"	2'-11 7/8"					2'-11 7/8"	2'-3 7/8"	3'-9 5/8"	
WM68A	1'-11"	3'-0 1/4"					3'-0 1/4"	2'-4"	3'-9 7/8"	
WM69A	1'-11"	3'-0 5/8"					3'-0 5/8"	2'-4"	3'-10 1/4"	
WM70A	1'-11 1/8"	3'-1"					3'-1"	2'-4 1/8"	3'-10 1/2"	
WM71A	1'-11 1/8"	3'-1 1/4"					3'-1 1/4"	2'-4 1/8"	3'-10 7/8"	
WM72A	1'-11 1/4"	3'-1 5/8"					3'-1 5/8"	2'-4"	3'-11 1/8"	
WM73A	1'-11 3/8"	3'-2"					3'-2"	2'-4 3/8"	3'-11 1/2"	
WM74A	1'-11 3/8"	3'-2 1/4"					3'-2 1/4"	2'-4 3/8"	3'-11 3/4"	
WM75A	1'-11 1/2"	3'-2 5/8"					3'-2 5/8"	2'-4 1/2"	4'-0 1/8"	
WM76A	1'-11 1/2"	3'-3"					3'-3"	2'-4 1/2"	4'-0 3/8"	
WM77A	1'-11 5/8"	3'-3 1/4"					3'-3 1/4"	2'-4 5/8"	4'-0 3/4"	
WM78A	1'-11 5/8"	3'-3 5/8"					3'-3 5/8"	2'-4 5/8"	4'-1"	
WM79A	1'-11 3/4"	3'-4"					3'-4"	2'-4 3/4"	4'-1 3/8"	
WM80A	1'-11 7/8"	3'-4 1/4"					3'-4 1/4"	2'-4 7/8"	4'-1 5/8"	
WM81A	1'-11 7/8"	3'-4 5/8"					3'-4 5/8"	2'-4 7/8"	4'-1 7/8"	
WM82A	2'-0"	3'-4 7/8"					3'-4 7/8"	2'-5"	4'-2 1/4"	
WM83A	2'-0"	3'-5 1/4"					3'-5 1/4"	2'-5"	4'-2 1/2"	
WM84A	2'-0 1/8"	3'-5 1/2"					3'-5 1/2"	2'-5 1/8"	4'-2 3/4"	
WM85A	2'-0 1/8"	3'-5 7/8"					3'-5 7/8"	2'-5 1/8"	4'-3 1/8"	
WM86A	2'-0 1/4"	3'-6 1/8"					3'-6 1/8"	2'-5 1/4"	4'-3 3/8"	
WM87A	2'-0 1/4"	3'-6 1/2"					3'-6 1/2"	2'-5 1/4"	4'-3 5/8"	
WM88A	2'-0 3/8"	3'-6 3/4"					3'-6 3/4"	2'-5 3/8"	4'-3 7/8"	
WM89A	2'-0 1/2"	3'-7 1/8"					3'-7 1/8"	2'-5 1/2"	4'-4 1/4"	
WM90A	2'-0 1/2"	3'-7 3/8"					3'-7 3/8"	2'-5 1/2"	4'-4 1/2"	
WM91A	2'-0 5/8"	3'-7 3/4"					3'-7 3/4"	2'-5 5/8"	4'-4 3/4"	
WM92A	2'-0 5/8"	3'-8"					3'-8"	2'-5 5/8"	4'-5"	
WM93A	2'-0 3/4"	3'-8 1/4"					3'-8 1/4"	2'-5 3/4"	4'-5 3/8"	
WM94A	2'-0 3/4"	3'-8 5/8"					3'-8 5/8"	2'-5 3/4"	4'-5 5/8"	
WM95A	2'-0 7/8"	3'-8 7/8"					3'-8 7/8"	2'-5 7/8"	4'-5 7/8"	
WM96A	2'-1"	3'-9 1/8"					3'-9 1/8"	2'-6"	4'-6 1/8"	
WM97A	2'-1"	3'-9 1/2"					3'-9 1/2"	2'-6"	4'-6 1/2"	
WM98A	2'-1 1/8"	3'-9 3/4"					3'-9 3/4"	2'-6 1/8"	4'-6 5/8"	
WM99A	2'-1 1/8"	3'-10"					3'-10"	2'-6 1/8"	4'-7"	
WM100A	2'-1 1/4"	3'-10 1/4"					3'-10 1/4"	2'-6 1/4"	4'-7 1/4"	
WM101A	2'-1 1/4"	3'-10 5/8"					3'-10 5/8"	2'-6 1/4"	4'-7 1/2"	
WM102A	2'-1 3/8"	3'-10 7/8"					3'-10 7/8"	2'-6 3/8"	4'-7 3/4"	
WM103A	2'-1 3/8"	3'-11 1/8"					3'-11 1/8"	2'-6 3/8"	4'-8"	
WM104A	2'-1 1/2"	3'-11 3/8"					3'-11 3/8"	2'-6 1/2"	4'-8 1/4"	
WM105A	2'-1 5/8"	3'-11 5/8"					3'-11 5/8"	2'-6 5/8"	4'-8 1/2"	
WM106A	2'-1 5/8"	4'-0"					4'-0"	2'-6 5/8"	4'-8 3/4"	
WM107A	2'-1 3/4"	4'-0 1/4"					4'-0 1/4"	2'-6 3/4"	4'-9"	
WM108A	2'-1 3/4"	4'-0 1/2"					4'-0 1/2"	2'-6 3/4"	4'-9 1/4"	
WM109A	2'-1 7/8"	4'-0 3/4"					4'-0 3/4"	2'-6 7/8"	4'-9 1/2"	
WM110A	2'-1 7/8"	4'-1"					4'-1"	2'-6 7/8"	4'-9 3/4"	
WM111A	2'-2"	4'-1 1/4"					4'-1 1/4"	2'-7"	4'-10"	
WM112A	2'-2"	4'-1 1/2"					4'-1 1/2"	2'-7"	4'-10 1/4"	
WM113A	2'-2 1/8"	4'-1 3/4"					4'-1 3/4"	2'-7 1/8"	4'-10 1/2"	
WM114A	2'-2 1/4"	4'-2"					4'-2"	2'-7 1/4"	4'-10 3/4"	
WM115A	2'-2 1/4"	4'-2 1/4"					4'-2 1/4"	2'-7 1/4"	4'-11"	
WM116A	2'-2 3/8"	4'-2 1/2"					4'-2 1/2"	2'-7 3/8"	4'-11 1/4"	
WM117A	2'-2 3/8"	4'-2 3/4"					4'-2 3/4"	2'-7 3/8"	4'-11 1/2"	
WM118A	2'-2 3/8"	4'-3"					4'-3"	2'-7 3/8"	4'-11 3/4"	
WM127A	2'-2 1/2"	4'-3 1/4"					4'-3 1/4"	2'-7 1/2"	4'-11 7/8"	
WM120A	2'-2 1/2"	4'-3 5/8"					4'-3 5/8"	2'-7 1/2"	5'-0 1/8"	
WM121A	2'-2 5/8"	4'-3 7/8"					4'-3 7/8"	2'-7 5/8"	5'-0 3/8"	
WM122A	2'-2 5/8"	4'-4 1/8"					4'-4 1/8"	2'-7 5/8"	5'-0 5/8"	
WM123A	2'-2 5/8"	4'-4 3/8"					4'-4 3/8"	2'-7 5/8"	5'-0 7/8"	
WM124A	2'-2 3/4"	4'-4 5/8"					4'-4 5/8"	2'-7 3/4"	5'-1 1/8"	
WM125A	2'-2 3/4"	4'-4 7/8"					4'-4 7/8"	2'-7 3/4"	5'-1 1/4"	
WM126A	2'-2 7/8"	4'-5 1/8"					4'-5 1/8"	2'-7 7/8"	5'-1 1/2"	
WM127A	2'-2 7/8"	4'-5 3/8"					4'-5 3/8"	2'-7 7/8"	5'-1 3/4"	
WM128A	2'-2 7/8"	4'-5 5/8"					4'-5 5/8"	2'-7 7/8"	5'-2"	
WM129A	2'-3"	4'-5 3/4"					4'-5 3/4"	2'-8"	5'-2 1/8"	
WM130A	2'-3"	4'-6"					4'-6"	2'-8"	5'-2 3/8"	
WM131A	2'-3 1/8"	4'-6 1/4"					4'-6 1/4"	2'-8 1/8"	5'-2 5/8"	
WM132A	2'-3 1/8"	4'-6 1/2"					4'-6 1/2"	2'-8 1/8"	5'-2 3/4"	
WM133A	2'-3 1/8"	4'-6 3/4"					4'-6 3/4"	2'-8 1/8"	5'-3"	
WM134A	2'-3 1/4"	4'-7"					4'-7"	2'-8 1/4"	5'-3 1/4"	
WM135A	2'-3 1/4"	4'-7 1/4"					4'-7 1/4"	2'-8 1/4"	5'-3 3/8"	
WM136A	2'-3 1/4"	4'-7 3/8"					4'-7 3/8"	2'-8 1/4"	5'-3 5/8"	
WM137A	2'-3 3/8"	4'-7 5/8"					4'-7 5/8"	2'-8 3/8"	5'-3 7/8"	
WM138A	2'-3 3/8"	4'-7 7/8"					4'-7 7/8"	2'-8 3/8"	5'-4"	
WM139A	2'-3 1/2"	4'-8 1/8"					4'-8 1/8"	2'-8 1/2"	5'-4 1/4"	
WM140A	2'-3 1/2"	4'-8 3/8"					4'-8 3/8"	2'-8 1/2"	5'-4 1/2"	
WM141A	2'-3 1/2"	4'-8 1/2"					4'-8 1/2"	2'-8 1/2"	5'-4 5/8"	
WM142A	2'-3 5/8"	4'-8 3/4"					4'-8 3/4"	2'-8 5/8"	5'-4 7/8"	
WM143A	2'-3 5/8"	4'-9"					4'-9"	2'-8 5/8"	5'-5"	
WM144A	2'-3 3/4"	4'-9 1/8"					4'-9 1/8"	2'-8 3/4"	5'-5 1/4"	
WM145A	2'-3 3/4"	4'-9 3/8"					4'-9 3/8"	2'-8 3/4"	5'-5 3/8"	
WM146A	2'-3 3/4"	4'-9 5/8"					4'-9 5/8"	2'-8 3/4"	5'-5 5/8"	
WM147A	2'-3 7/8"	4'-9 3/4"					4'-9 3/4"	2'-8 7/8"	5'-5 3/4"	
WM148A	2'-3 7/8"	4'-10"					4'-10"	2'-8 7/8"	5'-6"	
WM149A	2'-4"	4'-10 1/8"					4'-10 1/8"	2'-9"	5'-6 1/8"	
WM150A	2'-4"	4'-10 3/8"					4'-10 3/8"	2'-9"	5'-6 3/8"	
WM151A	2'-4"	4'-10 5/8"					4'-10 5/8"	2'-9"	5'-6 1/2"	
WM152A	2'-4 1/8"	4'-10 3/4"					4'-10 3/4"	2'-9 1/8"	5'-6 3/4"	
WM153A	2'-4 1/8"	4'-11"					4'-11"	2'-9 1/8"	5'-6 7/8"	
WM154A	2'-4 1/8"	4'-11 1/8"					4'-11 1/8"	2'-9 1/8"	5'-7"	
WM155A	2'-4 1/4"	4'-11 3/8"					4'-11 3/8"	2'-9 1/4"	5'-7 1/4"	
WM156A	2'-4 1/4"	4'-11 1/2"					4'-11 1/2"	2'-9 1/4"	5'-7 3/8"	
WM157A	2'-4 3/8"	4'-11 5/8"					4'-11 5/8"	2'-9 3/8"	5'-7 1/2"	
WM158A	2'-4 3/8"	4'-11 7/8"					4'-11 7/8"	2'-9 3/8"	5'-7 3/4"	
WM159A	2'-4 3/8"	5'-0"					5'-0"	2'-9 3/8"	5'-7 7/8"	
WM160A	2'-4 1/2"	5'-0 1/4"					5'-0 1/4"	2'-9 1/2"	5'-8"	
WM161A	2'-4 1/2"	5'-0 3/8"					5'-0 3/8"	2'-9 1/2"	5'-8 1/4"	
WM162A	2'-4 5/8"	5'-0 1/2"					5'-0 1/2"	2'-9 5/8"	5'-8 3/8"	
WM163A	2'-4 5/8"	5'-0 3/4"					5'-0 3/4"	2'-9 5/8"	5'-8 1/2"	
WM164A	2'-4 5/8"	5'-0 7/8"					5'-0 7/8"	2'-9 5/8"	5'-8 3/4"	
WM165A	2'-4 3/4"	5'-1"					5'-1"	2'-9 3/4"	5'-8 7/8"	
WM166A	2'-4 3/4"	5'-1 1/4"					5'-1 1/4"	2'-9 3/4"	5'-9"	
WM167A	2'-4 3/4"	5'-1 3/8"					5'-1 3/8"	2'-9 3/4"	5'-9 1/8"	
WM168A	2'-4 7/8"	5'-1 1/2"					5'-1 1/2"	2'-9 7/8"	5'-9 3/8"	
WM169A	2'-4 7/8"	5'-1 5/8"					5'-1 5/8"	2'-9 7/8"	5'-9 1/2"	
WM170A	2'-5"	5'-1 7/8"					5'-1 7/8"	2'-10"	5'-9 5/8"	
WM171A	2'-5"	5'-2"					5'-2"	2'-10"	5'-9 3/4"	
WM172A	2'-5"	5'-2 1/8"					5'-2 1/8"	2'-10"	5'-9 7/8"	
WM173A	2'-5 1/8"	5'-2 1/4"					5'-2 1/4"	2'-10 1/8"	5'-10"	
WM174A	2'-5 1/8"	5'-2 3/8"					5'-2 3/8"	2'-10 1/8"	5'-10 1/4"	
WM175A	2'-5 1/4"	5'-2 5/8"					5'-2 5/8"	2'-10 1/4"	5'-10 3/8"	
WM176A	2'-5 1/4"	5'-2 3/4"					5'-2 3/4"	2'-10 1/4"	5'-10 1/2"	
WM177A	2'-5 1/4"	5'-2 7/8"					5'-2 7/8"	2'-10 1/4"	5'-10 5/8"	
WM178A	2'-5 1/4"	5'-3"					5'-3"	2'-10 1/4"	5'-10 3/4"	
WM179A	2'-5 1/4"	5'-3 1/4"					5'-3 1/4"	2'-10 1/4"	5'-10 7/8"	
WM180A	2'-5 3/8"	5'-3 3/8"					5'-3 3/8"	2'-10 3/8"	5'-11"	

WEST BRIDGE - MIDDLE RUN

ID	P01V	L01	A01	L02	A02	L03	LTOT	ANV	H03V	H04V
WM181A	2'-5 3/8"	5'-3 1/2"					5'-3 1/2"	2'-10 3/8"	5'-11 1/8"	
WM182A	2'-5 3/8"	5'-3 3/4"					5'-3 3/4"	2'-10 3/8"	5'-11 1/4"	
WM183A	2'-5 3/8"	5'-3 7/8"					5'-3 7/8"	2'-10 3/8"	5'-11 3/8"	
WM184A	2'-5 3/8"	5'-4"					5'-4"	2'-10 3/8"	5'-11 1/2"	
WM185A	2'-5 3/8"	5'-4 1/8"					5'-4 1/8"	2'-10 3/8"	5'-11 5/8"	
WM186A	2'-5 3/8"	5'-4 1/4"					5'-4 1/4"	2'-10 3/8"	5'-11 3/4"	
WM187A	2'-5 1/2"	5'-4 1/2"					5'-4 1/2"	2'-10 1/2"	5'-11 7/8"	
WM188A	2'-5 1/2"	5'-4 5/8"					5'-4 5/8"	2'-10 1/2"	6'-0"	
WM189A	2'-5 1/2"	5'-4 3/4"					5'-4 3/4"	2'-10 1/2"	6'-0 1/8"	
WM190A	2'-5 1/2"	5'-4 7/8"					5'-4 7/8"	2'-10 1/2"	6'-0 1/4"	
WM191A	2'-5 1/2"	5'-5"					5'-5"	2'-10 1/2"	6'-0 3/8"	
WM192A	2'-5 1/2"	5'-5 1/8"					5'-5 1/8"	2'-10 1/2"	6'-0 1/2"	
WM193A	2'-5 1/2"	5'-5 1/4"					5'-5 1/4"	2'-10 1/2"	6'-0 5/8"	
WM194A	2'-5 5/8"	5'-5 3/8"					5'-5 3/8"	2'-10 5/8"	6'-0 3/4"	
WM195A	2'-5 5/8"	5'-5 1/2"					5'-5 1/2"	2'-10 5/8"	6'-0 3/4"	
WM196A	2'-5 5/8"	5'-5 5/8"					5'-5 5/8"	2'-10 5/8"	6'-0 7/8"	
WM197A	2'-5 5/8"	5'-5 3/4"					5'-5 3/4"	2'-10 5/8"	6'-1"	
WM198A	2'-5 5/8"	5'-5 7/8"					5'-5 7/8"	2'-10 5/8"	6'-1 1/8"	
WM199A	2'-5 5/8"	5'-6"					5'-6"	2'-10 5/8"	6'-1 1/4"	
WM200A	2'-5 5/8"	5'-6 1/8"					5'-6 1/8"	2'-10 5/8"	6'-1 3/8"	
WM201A	2'-5 3/4"	5'-6 1/4"					5'-6 1/4"	2'-10 3/4"	6'-1 3/8"	
WM202A	2'-5 3/4"	5'-6 3/8"					5'-6 3/8"	2'-10 3/4"	6'-1 1/2"	
WM203A	2'-5 3/4"	5'-6 1/2"					5'-6 1/2"	2'-10 3/4"	6'-1 5/8"	
WM204A	2'-5 3/4"	5'-6 5/8"					5'-6 5/8"	2'-10 3/4"	6'-1 3/4"	
WM205A	2'-5 3/4"	5'-6 3/4"					5'-6 3/4"	2'-10 3/4"	6'-1 3/4"	
WM206A	2'-5 3/4"	5'-6 7/8"					5'-6 7/8"	2'-10 3/4"	6'-1 7/8"	
WM207A	2'-5 3/4"	5'-7"					5'-7"	2'-10 3/4"	6'-2"	
WM208A	2'-5 7/8"	5'-7"					5'-7"	2'-10 7/8"	6'-2 1/8"	
WM209A	2'-5 7/8"	5'-7 1/8"					5'-7 1/8"	2'-10 7/8"	6'-2 1/8"	
WM210A	2'-5 7/8"	5'-7 1/4"					5'-7 1/4"	2'-10 7/8"	6'-2 1/4"	
WM211A	2'-5 7/8"	5'-7 3/8"					5'-7 3/8"	2'-10 7/8"	6'-2 3/8"	
WM212A	2'-5 7/8"	5'-7 1/2"					5'-7 1/2"	2'-10 7/8"	6'-2 3/8"	
WM213A	2'-5 7/8"	5'-7 1/2"					5'-7 1/2"	2'-10 7/8"	6'-2 1/2"	
WM214A	2'-6"	5'-7 5/8"					5'-7 5/8"	2'-10 7/8"	6'-2 1/2"	
WM215A	2'-6"	5'-7 3/4"					5'-7 3/4"	2'-11"	6'-2 5/8"	
WM216A	2'-6"	5'-7 3/4"					5'-7 3/4"	2'-11"	6'-2 3/4"	
WM217A	2'-6"	5'-7 7/8"					5'-7 7/8"	2'-11"	6'-2 3/4"	
WM218A	2'-6"	5'-8"					5'-8"	2'-11"	6'-2 7/8"	
WM219A	2'-6"	5'-8"					5'-8"	2'-11"	6'-2 7/8"	
WM220A	2'-6"	5'-8 1/8"					5'-8 1/8"	2'-11"	6'-3"	
WM221A	2'-6"	5'-8 1/4"					5'-8 1/4"	2'-11"	6'-3"	
WM222A	2'-6 1/8"	5'-8 1/4"					5'-8 1/4"	2'-11 1/8"	6'-3 1/8"	
WM223A	2'-6 1/8"	5'-8 3/8"					5'-8 3/8"	2'-11 1/8"	6'-3 1/8"	
WM224A	2'-6 1/8"	5'-8 3/8"					5'-8 3/8"	2'-11 1/8"	6'-3 1/4"	
WM225A	2'-6 1/8"	5'-8 1/2"					5'-8 1/2"	2'-11 1/8"	6'-3 1/4"	
WM226A	2'-6 1/8"	5'-8 1/2"					5'-8 1/2"	2'-11 1/8"	6'-3 3/8"	
WM227A	2'-6 1/8"	5'-8 5/8"					5'-8 5/8"	2'-11 1/8"	6'-3 3/8"	
WM228A	2'-6 1/8"	5'-8 5/8"					5'-8 5/8"	2'-11 1/8"	6'-3 1/2"	
WM229A	2'-6 1/4"	5'-8 3/4"					5'-8 3/4"	2'-11 1/4"	6'-3 1/2"	
WM230A	2'-6 1/4"	5'-8 3/4"					5'-8 3/4"	2'-11 1/4"	6'-3 1/2"	
WM231A	2'-6 1/4"	5'-8 7/8"					5'-8 7/8"	2'-11 1/4"	6'-3 5/8"	
WM232A	2'-6 1/4"	5'-8 7/8"					5'-8 7/8"	2'-11 1/4"	6'-3 5/8"	
WM233A	2'-6 1/4"	5'-8 7/8"					5'-8 7/8"	2'-11 1/4"	6'-3 3/4"	
WM234A	2'-6 1/4"	5'-9"					5'-9"	2'-11 1/4"	6'-3 3/4"	
WM235A	2'-6 1/4"	5'-9"					5'-9"	2'-11 1/4"	6'-3 3/4"	
WM236A	2'-6 3/8"	5'-9 1/8"					5'-9 1/8"	2'-11 3/8"	6'-3 7/8"	
WM237A	2'-6 3/8"	5'-9 1/8"					5'-9 1/8"	2'-11 3/8"	6'-3 7/8"	
WM238A	2'-6 3/8"	5'-9 1/4"					5'-9 1/4"	2'-11 1/4"	6'-3 7/8"	
WM239A	2'-6 1/4"	5'-9 1/4"					5'-9 1/4"	2'-11 1/4"	6'-3 7/8"	
WM240A	2'-6 1/4"	5'-9 1/4"					5'-9 1/4"	2'-11 1/4"	6'-4"	
WM241A	2'-6 1/4"	5'-9 3/8"					5'-9 3/8"	2'-11 1/4"	6'-4"	
WM242A	2'-6 1/4"	5'-9 3/8"					5'-9 3/8"	2'-11 1/4"	6'-4"	
WM243A	2'-6 1/4"	5'-9 1/2"					5'-9 1/2"	2'-11 1/4"	6'-4"	
WM244A	2'-6 1/4"	5'-9 1/2"					5'-9 1/2"	2'-11 1/4"	6'-4 1/8"	
WM245A	2'-6 1/4"	5'-9 1/2"					5'-9 1/2"	2'-11 1/4"	6'-4 1/8"	
WM246A	2'-6 1/4"	5'-9 5/8"					5'-9 5/8"	2'-11 1/4"	6'-4 1/8"	
WM247A	2'-6 1/4"	5'-9 5/8"					5'-9 5/8"	2'-11 1/4"	6'-4 1/8"	
WM248A	2'-6 1/4"	5'-9 5/8"					5'-9 5/8"	2'-11 1/4"	6'-4 1/8"	
WM249A	2'-6 1/4"	5'-9 3/4"					5'-9 3/4"	2'-11 1/4"	6'-4 1/8"	
WM250A	2'-6 1/4"	5'-9 3/4"					5'-9 3/4"	2'-11 1/4"	6'-4 1/4"	
WM251A	2'-6 1/4"	5'-9 3/4"					5'-9 3/4"	2'-11 1/4"	6'-4 1/4"	
WM252A	2'-6 1/4"	5'-9 7/8"					5'-9 7/8"	2'-11 1/4"	6'-4 1/4"	
WM253A	2'-6 1/4"	5'-9 7/8"					5'-9 7/8"	2'-11 1/4"	6'-4 1/4"	
WM254A	2'-6 1/4"	5'-9 7/8"					5'-9 7/8"	2'-11 1/4"	6'-4 1/4"	
WM255A	2'-6 1/4"	5'-9 7/8"					5'-9 7/8"	2'-11 1/4"	6'-4 1/4"	
WM256A	2'-6 1/4"	5'-9 7/8"					5'-9 7/8"	2'-11 1/4"	6'-4 1/4"	
WM257A	2'-6 1/4"	5'-9 7/8"					5'-9 7/8"	2'-11 1/4"	6'-4 1/4"	
WM258A	2'-6 1/4"	5'-10"					5'-10"	2'-11 1/4"	6'-4 1/4"	