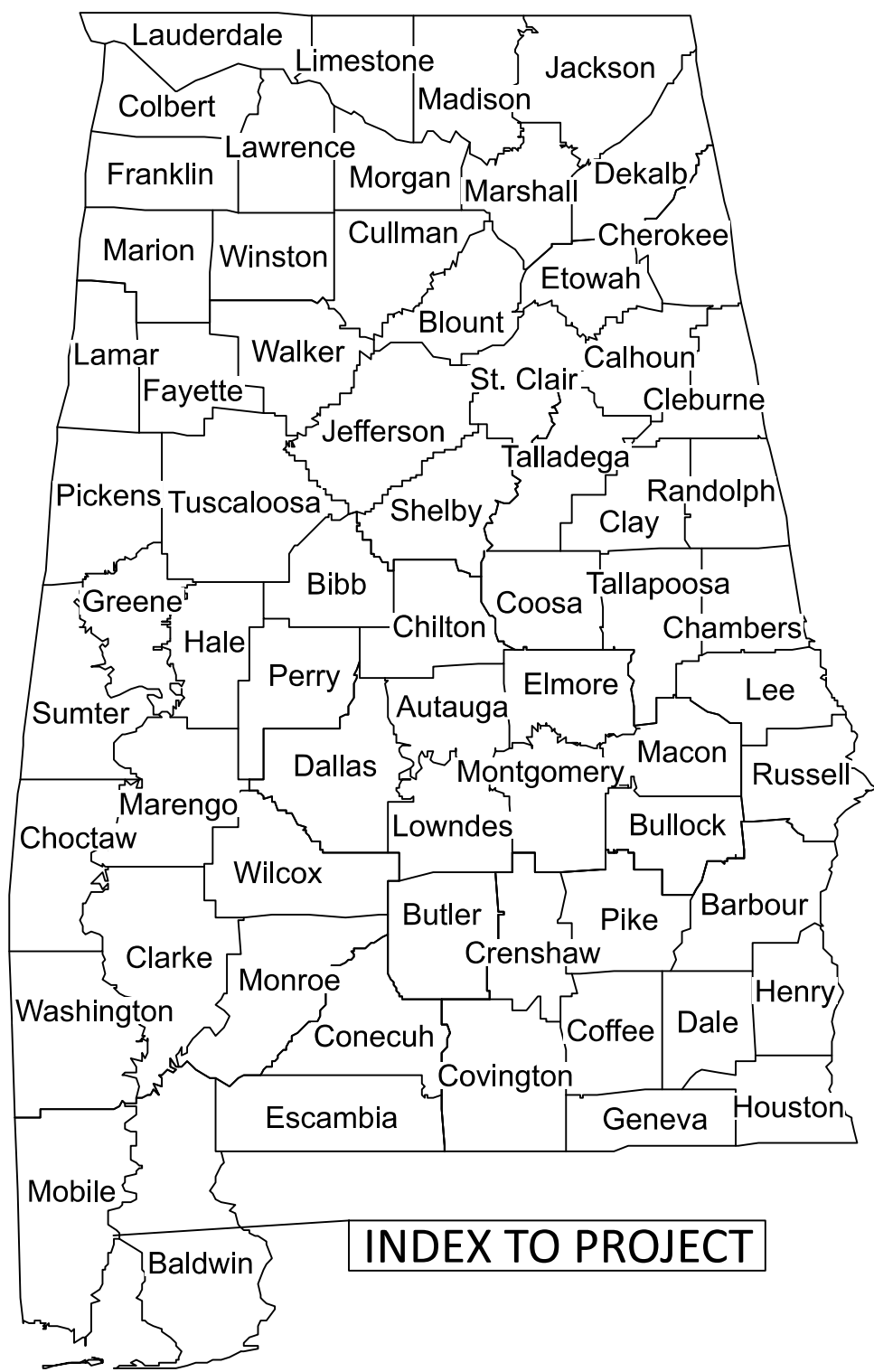
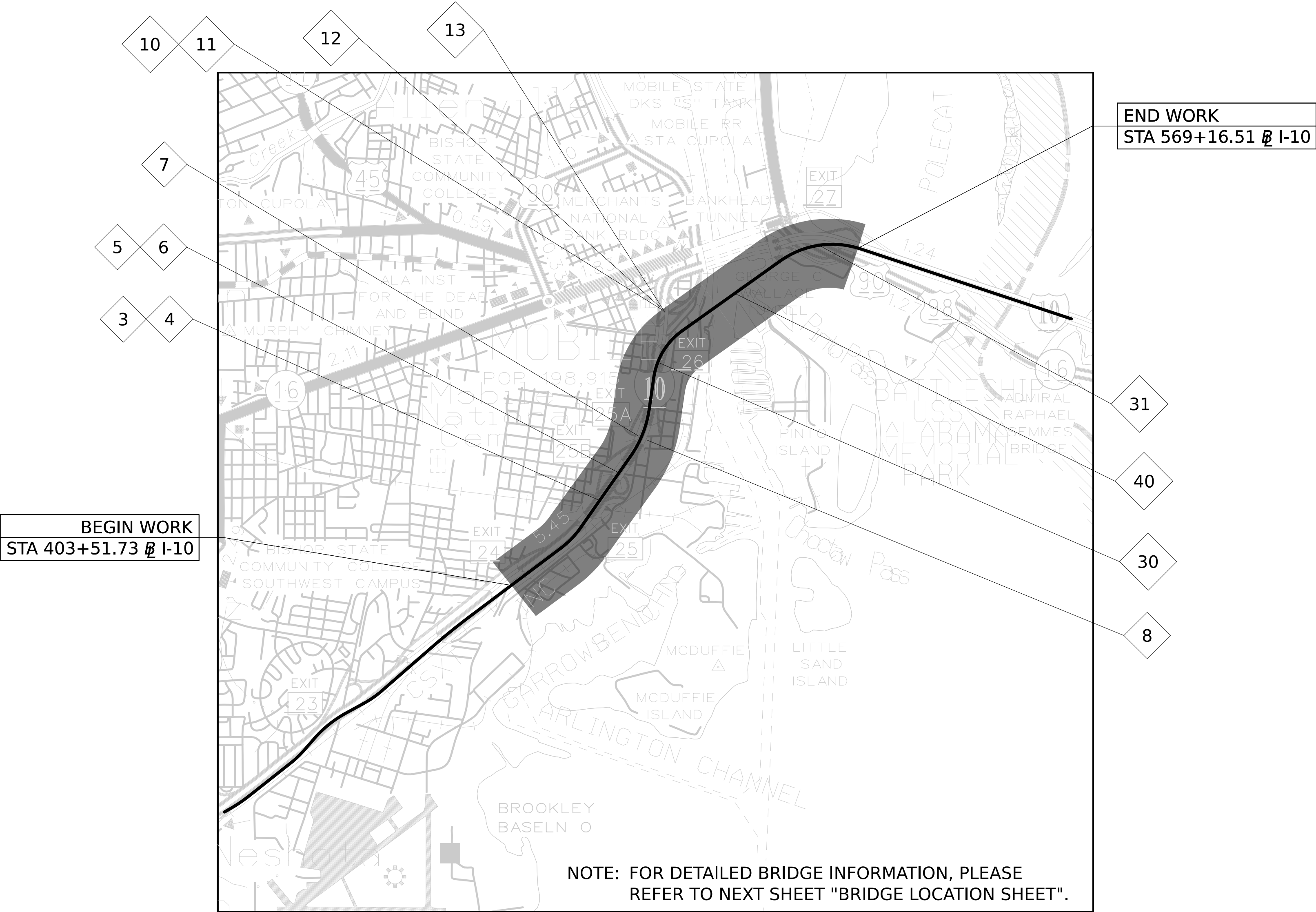
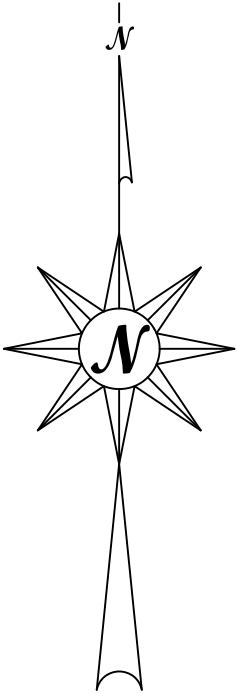




ALABAMA
DEPARTMENT OF TRANSPORTATION
PLANS OF PROPOSED PROJECT NUMBER
INFRA-I010(353)
MOBILE RIVER BRIDGE PROJECT
90% DESIGN
WATER STREET RAMP C
MOBILE COUNTY



STATE	REFERENCE PROJECT NO	FISCAL YEAR
AL	INFRA-I010(353)	2025
CONTRACT ID NO		



ALABAMA DEPARTMENT OF TRANSPORTATION
Submitted for Approval:
STATE DESIGN ENGINEER
CHIEF ENGINEER
Approved:
TRANSPORTATION DIRECTOR



BRIDGE LOCATION SHEET

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-GN-12002

REQUIRED BRIDGES							
INDEX	ROADWAY	STA	TO	STA	LENGTH	BIN*	EFFECT
3	I-10 WB OVER SOUTH CAROLINA ST	441+97.54	-	443+73.54	176.00'	021820	NO EFFECT
4	I-10 EB OVER SOUTH CAROLINA ST	441+97.54	-	443+73.54	176.00'	021821	NO EFFECT
5	I-10 WB OVER VIRGINIA ST	452+48.39	-	454+48.39	200.00'	021822	NO EFFECT
6	I-10 EB OVER VIRGINIA ST	452+48.39	-	454+48.39	200.00'	021823	NO EFFECT
7	I-10 BUS WB OVER TEXAS ST	5980+39.82	-	5982+79.82	240.00'	021824	NO EFFECT
8	I-10 BUS EB OVER TEXAS ST	5980+69.51	-	5986+09.51	540.00'	021825	NO EFFECT
10	I-10 BUS WB OVER CANAL ST & CLAIBORNE ST	6012+96.00	-	6026+71.00	1375.00'	021827	NO EFFECT
11	I-10 BUS EB OVER CANAL ST & CLAIBORNE ST	6013+07.39	-	6026+69.00	1361.61'	021828	NO EFFECT
12	WATER ST WB OFF RAMP	1304+31.00	-	1309+64.19	533.19'	021829	NO EFFECT
13	WATER ST EB OFF RAMP	1206+26.00	-	1208+29.17	203.17'	021830	NO EFFECT
30	I-10 MAINLINE WEST HIGH LEVEL APPROACH	466+57.38	-	508+90.05	4232.67'	XXXXX	NO EFFECT
31	I-10 MAINLINE EAST HIGH LEVEL APPROACH	534+65.05	-	569+16.51	3451.46'	XXXXX	NO EFFECT
40	MAIN SPAN BRIDGE	508+90.05	-	534+65.05	2575.00'	XXXXX	NO EFFECT
TOTAL LENGTH =					15264.10'	TOTAL EFFECT =	

8

I-10 BUS EB OVER TEXAS ST

10

I-10 BUS WB OVER CANAL ST & CLAIBORNE ST

Why was 9 skipped



ALABAMA
DEPARTMENT OF
TRANSPORTATION

A	EL	06/13/2025	90% FINAL SUBMITTAL
REV. NO.	BY	DATE	DESCRIPTION OF REVISION

PE STAMP

PE STAMP

QR
CODE



PLAN SUBMITTAL

90%

BIN(S)

COUNTY(S)

MOBILE

DESIGNER: _____ DATE: _____

BRIDGE SHEET NO. _____ OF _____

SHEET TITLE

MOBILE RIVER BRIDGE
WATER STREET RAMP C
BRIDGE LOCATION SHEET

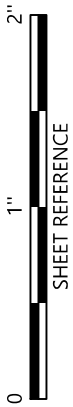
INDEX OF SHEETS

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-GN-12003

[illegible][illegible]

 ALABAMA DEPARTMENT OF TRANSPORTATION	A	LP	02/02/2024	60% INTERIM SUBMITTAL	PE STAMP DATE	PE STAMP DATE	QR CODE 000000000000	 Kiewit	 KIEWIT MASSMAN TRAYLOR A JOINT VENTURE	 VOLKERT	PLAN SUBMITTAL 90%	BIN(S)	DESIGNER: <u>E. LEON</u> DATE: _____ COUNTY(S) MOBILE	BRIDGE SHEET NO. _____ OF _____ INDEX OF SHEETS		
	B	EL	06/13/2025	90% FINAL SUBMITTAL								021829			SHEET TITLE	
	REV. NO.	BY	DATE	DESCRIPTION OF REVISION												

PLANS ABBREVIATIONS SHEET				REFERENCE	FISCAL	SHEET					
				PROJECT NO	YEAR	NO					
				INFRA-I010(353)	2025	S01-GN-12004					
ABANDON(ED).....	ABAN	DOUBLE BARREL CULVERT.....	CD	KILOMETERS PER HOUR.....	KPH	RADIUS.....	R	SYMMETRICAL.....	SYM	THICKNESS	THK
ABUTMENT.....	ABUT	DRAINAGE AREA.....	DA	LANE.....	LN	RAILROAD.....	RR	TANGENT.....	TAN	ENGINEER OF RECORD.....	EOR
ACCELERATION.....	ACCL	DRIVE.....	DR	LATITUDE.....	LAT	RANGE.....	RGE	TANGENT LENGTH (CURVE DATA).....	T		
ACQUIRED.....	ACQD	DROP INLET.....	DI	LEFT.....	LT	RECORD.....	REC	TANGENT TO SPIRAL.....	TS	CONGESTION	ITS
ACRE.....	AC	EACH.....	EA	LEFT AHEAD.....	LA	REDUCTION.....	RED	TEMPORARY.....	TEMP	CLOSED CIRCUIT TELEVISION	CCTV
AHEAD.....	AH	EASEMENT.....	ESMT	LEFT BACK.....	LB	REFERENCE.....	REF	TEMPORARY BENCH MARK.....	TBM	DYNAMIC MESSAGE SIGN	DMS
ALABAMA.....	AL	EAST.....	E	LENGTH OF CURVE.....	L	REFERENCE POINT.....	RP	THROAT.....	TH	HIGH LEVEL APPROACH	HLA
ALABAMA DEPARTMENT OF TRANSPORTATION.....	ALDOT	EAST BOUND ROADWAY.....	EBR	LINK.....	LK	REFERENCE POINT FOR POINT ON TANGENT.....	RPOT	TOWNSHIP.....	TSHP	INTELLIGENT TRANSPORTATION SYSTEM(S)	ITS
ALTERNATE.....	ALT	EDGE OF PAVEMENT.....	EP	LIMIT.....	LIM	REINFORCED.....	REINF	TRIPLE.....	TR	PULL BOX	PBB
APPROXIMATE(LY).....	APP	ELEVATION.....	EL	LINEAR.....	LIN	REINFORCED CONCRETE.....	RC	TRIPLE BARREL CULVERT.....	CT	PAN TILT ZOOM.....	PTZ
AREA.....	A	END OF RETURN.....	ER	LINEAR FEET.....	LIN FT	REINFORCED CONCRETE DECK GIRDER.....	RCDG	TURN OUT.....	TO	SECONDARY FIBER DISTRIBUTION UNIT	SFDU
ASPHALT.....	ASP	END ANCHOR.....	E/A	LOCK-UP DEVICE.....	LUD	REINFORCED CONCRETE PIPE.....	RCP	TURNING POINT.....	TP	THE INFRA-RED TRAFFIC LOGGER	TIRTL
AVERAGE ANNUAL DAILY TRAFFIC.....	AADT	END OF PROJECT.....	EOB	LONGITUDE.....	LONG	REINFORCING STEEL.....	REINF STL	TYPE.....	TY	TRANSPORTATION MANAGEMENT CENTER	TMC
BACK.....	BK	EQUATION.....	EQ	MANHOLE.....	MH	RELOCATE.....	RELC	UNIT.....	U	PRIMARY FIBER DISTRIBUTION UNIT.....	PFDU
BACK OF GUARDRAIL.....	BK-GR	EROSION CONTROL PRODUCTS.....	ECP	MARKER.....	MRK	REMOVE.....	REM	UNKNOWN.....	UNK	UTILITIES	
BACKSIGHT.....	BS	EXCAVATION.....	EXCAV	MAXIMUM.....	MAX	REQUIRED.....	REQD	UNPAVED.....	UNPVD	ANCHOR WIRE.....	AW
BARBED WIRE.....	B/W	EXISTING.....	EX	MEAN HIGH WATER.....	MHW	RETAIN(ING).....	RET	VALLEY GUTTER.....	VG	BURIED ELECTRIC.....	BE
BARREL.....	BBL	EXPANSION.....	EXP	MEAN LOW WATER.....	MLW	REVERSE CROWN.....	RC	VARIABLE.....	VAR	BURIED FIBER OPTIC.....	BFO
BARRIER.....	BAR	EXTENSION.....	EXT	MEASUREMENT.....	MEAS	REVISION.....	REV	VERTICAL.....	VERT	BURIED TELEPHONE CABLE.....	BTC
BASE LINE.....	BL	EXTERNAL.....	E	MEDIAN.....	MED	RIGHT.....	RT	VERTICAL CURVE.....	VC	BURIED CABLE TELEVISION.....	BTV
BEARING.....	BRNG	EXTRA STRENGTH.....	EXT STR	METER.....	M	RIGHT AHEAD.....	RA	VERTICAL POINT OF CURVATURE.....	PVC	CAST IRON.....	CI
BEGIN.....	BEG	FEET.....	FT	MERIDIAN.....	MER	RIGHT BACK.....	RB	VERTICAL POINT OF INTERSECTION.....	PVI	CIRCUIT.....	CKT
BEGINNING OF PROJECT.....	BOP	FILL.....	F	MILE POST.....	MP	RIGHT OF WAY.....	ROW	VERTICAL POINT OF TANGENCY.....	PVT	DUCTILE IRON.....	BUC IRON
BETWEEN.....	BTW	FILTER BLANKET.....	FLT BLNK	MILES.....	MI	RIGHT OF WAY MARKER.....	ROWM	VITRIFIED.....	VIT	EASEMENT.....	ESMT
BILLBOARD.....	BBD	FINISHED GRADE.....	FG	MILES PER HOUR.....	MPH	RIVER.....	RIV	VOLUME.....	VOL	FIBER OPTIC.....	FO
BENCH MARK.....	BM	FINISHED SURFACE.....	FS	MILLIMETER.....	MM	ROAD.....	RD	WEST.....	W	FIRE HYDRANT.....	FH
BITUMINOUS.....	BIT	FISCAL YEAR.....	FY	MINIMUM.....	MIN	ROADWAY.....	RDWY	WEST BOUND ROADWAY.....	WBR	FORCED MAIN (SANITARY SEWER).....	FM
BITUMINOUS COATED CORRUGATED METAL PIPE.....	BCCMP	FIXED.....	FIX	MONUMENT.....	MON	SECTION.....	SEC	WING WALL.....	WW	GAS MAIN.....	GM
BOUNDARY.....	BDY	FLAT BOTTOM.....	FB	MULTIPLE.....	MULT	SERVICE ROAD.....	SER RD	WITNESS CORNER.....	WC	GAS METER.....	GMET
BRIDGE.....	BRG	FLOW LINE.....	FL	NORMAL.....	NO	SHEET.....	SHT	WOOD.....	WD	GAS VALVE.....	GV
BRIDGE END SLAB.....	BES	FORESIGHT OR FRONTSIGHT.....	FST	NORMAL CROWN.....	NC	SHEET PILING.....	SHT PILE	WORKING POINT.....	WP	GUY WIRE.....	GUY
CAPACITY.....	CAPY	FRACTIONAL.....	FRAC	NORMAL CROWN SLOPE.....	NCS	SHOULDER.....	SHLD	WOVEN WIRE.....	W/W	HIGH PRESSURE.....	HP
CAST IRON.....	CI	FULL SUPERELEVATION.....	FS	NORTH.....	N	SIDE DRAIN.....	SD	YARD.....	YD	KILOVOLT AMPS.....	KVA
CAST IN PLACE.....	CIP	GALLON.....	GAL	NORTH BOUND ROADWAY.....	NBR	SIDEWALK.....	SW	STRUCTURES			
CATCH BASIN.....	CB	GASOLINE PUMPS.....	GPP	NORTHING-EASTING.....	NE	SIGHT DISTANCE.....	S DIST	NUMBER OF STORIES.....	1, 2, 3, 4	MANHOLE.....	MH
CENTERLINE.....	CL	GARAGE.....	GAR	NOT IN CONTRACT.....	NIC	SINGLE BARREL CULVERT.....	CS	FRAME.....	FR	MERCURY VAPOR LIGHT.....	MVL
CHAIN LINK.....	C/L	GAUGE.....	GA	NOT TO SCALE.....	NTS	SKEW.....	SK	BUILDING.....	BLDG	OVERHEAD FIBER OPTIC.....	OFO
CLASS.....	CLS	GIRDER.....	GDR	NUMBER.....	NO	SLOPE STAKE.....	SST	BLOCK.....	BLK	OVERHEAD TELEPHONE CABLE.....	OTC
CONCRETE.....	CONC	GOVERNMENT.....	GOV	OBSERVATION.....	OBS	SOLID SODDING.....	SOL SOD	BRICK.....	BR	OVERHEAD ELECTRIC CABLE.....	OE
CONNECTION.....	CONN	GRASS.....	GRS	ON CENTER.....	OC	SOUTH.....	S	STUCCO.....	STU	OVERHEAD CABLE TELEVISION.....	OTV
CONSTRUCTION LIMITS.....	CONST LIM	GRADE CHANGE.....	GC	ORIGINAL.....	ORIG	SOUTHBOUND ROADWAY.....	SBR	METAL.....	MET	PAIR.....	PR
CORNER.....	COR	GRADE POINT.....	GP	OVERHAUL.....	OH	SPECIAL.....	SP	RESIDENCE.....	RES	PEDESTAL.....	PED
CORRECTION.....	CORR	GRADE ROD.....	GRD	OVERHEAD.....	OHD	SPECIAL DITCH.....	SP-DT	BUSINESS.....	BUS	POLY-VINYL CHLORIDE PIPE.....	PVC
CORRUGATED IRON.....	CORI	GRAVEL.....	GRV	OUT TO OUT.....	OO	SPECIAL DITCH LEFT.....	SDL	WAREHOUSE.....	WHSE	POWER POLE.....	PP
CORRUGATED METAL.....	CM	GUARDRAIL.....	GR	PAINT.....	PNT	SPECIAL DITCH MEDIAN.....	SDM	CHICKEN HOUSE.....	CH HSE	SANITARY SEWER.....	SS
CORRUGATED METAL PIPE.....	CMP	HEADWALL.....	HDWL	PAVED.....	PVD	SPECIAL DITCH RIGHT.....	SDR	CHURCH.....	CH	SERVICE.....	SERV
CORRUGATED PLASTIC PIPE.....	CPP	HECTARE.....	HA	PAVED SHOULDER.....	PVD SH	SPECIAL DRAWING.....	SP-DWG	SCHOOL.....	SCH	STEEL.....	STL
COUNTY.....	CO	HIGH WATER MARK.....	HWM	PAVEMENT.....	PVMT	SPECIFICATIONS.....	SPEC	DOUBLE WIDE MOBILE HOME.....	DW MH	STORM DRAIN.....	STM
COUNTY ROAD.....	CO-RD	HEIGHT.....	HT	PIPE END TREATMENT.....	PET	SPRING LINE.....	SL	MOBILE HOME.....	MH	STORM SEWER.....	STMS
CREEK.....	CK	HEIGHT OF INSTRUMENT.....	HI	PIPE ENTERING CULVERT.....	PEC	SPIRAL TO CURVE.....	SC	EACH FACE.....	EF	SWITCH.....	SW
CROSS SECTION.....	X-SECT	HEIGHT OF WATER.....	HW	PLATE GIRDER.....	P GDR	SPIRAL POINT OF INTERSECTION.....	SPI	NEAR FACE.....	NF	TELEPHONE.....	TEL
CROWN REMOVED.....	CR	HIGHWAY.....	HWY	POINT OF BEGINNING.....	POB	SPIRAL TO TANGENT.....	ST	FAR FACE.....	FF	TELEPHONE MANHOLE.....	TMH
CUBIC FEET.....	FT3 or CU FT	HOGWIRE.....	H/W	POINT OF COMPOUND CURVE.....	PCC	SQUARE.....	SQ	REAR FACE.....	RF	TRANSFORMER.....	TRAN
CUBIC FEET PER SECOND.....	CFS	HORIZONTAL.....	HOR	POINT OF CURVATURE.....	PC	SQUARE FEET.....	FT2 or SQ YD	INSIDE FACE.....	IF	TRANSMISSION LINE.....	TR LN
CUBIC YARD.....	YD3 or CU YD	HUB & TACK.....	H&T	POINT OF REVERSE CURVATURE.....	PRC	SQUARE METERS.....	M2	OUTSIDE FACE.....	OF	TRIAxIAL CABLE (SERVICE).....	TRIX
CULVERT.....	CULV	HYDRANT.....	HYD	POINT OF ENDING.....	POE	SQUARE YARDS.....	YD2 or SQ FT	EQUAL.....	EQ	VITRIFIED CLAY PIPE.....	VCP
CULTIVATED.....	CULT	IMPACT ATTENUATOR.....	IA	POINT OF INTERSECTION.....	PI	STAKE.....	STK	SPACE.....	SPA	WATER MAIN.....	WM
CURB FACE.....	CF	IN ACCORDANCE WITH.....	I/A/W	POINT OF TANGENCY.....	PT	STANDARD.....	STD	EQUAL SPACE(S).....	EQ SPA	WATER METER.....	WMET
CURB AND GUTTER.....	C&G	IN PLACE.....	IN-PL	POINT ON CURVE.....	POC	STANDARD DRAWING.....	STD-DWG	PROFILE GRADE LINE.....	PGL	WATER VALVE.....	WV
CUT.....	C	INCHES.....	IN	POUND.....	LB	STANDARD STRENGTH.....	STD STR	CLEARANCE.....	CLR	PROPERTY	
CURVE TO SPIRAL.....	CS	INCLUDING.....	INCL	PRESENT.....	PRES	STATION.....	STA	TYPICAL.....	TYP	DEED BOOK.....	DB
DECELERATION.....	DECEL	INCORPORATED.....	INC	PROFILE GRADE.....	PG	STATION & ELEVATION.....	S/E	CONSTRUCTION JOINT.....	CONST JT	REAL PROPERTY BOOK.....	RP
DECLINATION.....	DECL	INSTRUMENT.....	INST	PROJECT.....	PROJ	STATION & OFFSET.....	SO	OPTIONAL.....	OPT	PLAT BOOK.....	PB
DEGREE OF CURVE.....	D	ISLAND.....	ISL	PROJECT CONTROL.....	PJC	STOPPING SIGHT DISTANCE.....	SSD	GALVANIZED.....	GALV	MAP BOOK.....	MB
DENIED ACCESS.....	D/A	JOINT.....	JT	PROPERTY LINE.....	PL	STREET.....	ST	INSIDE DIAMETER.....	ID	PAGE.....	PG
DEPARTURE.....	DEP	JUNCTION.....	JCT	PROPOSED.....	PROP	STRUCTURE.....	STR	OUTSIDE DIAMETER.....	OD	OFFICIAL RECORD.....	OR
DIAMETER.....	DIA	JUNCTION BOX.....	JB	QUADRUPLE.....	QUAD	SUB-GRADE.....	SG	PREMOULDED.....	PREM	CAPPED (TYPICAL PLASTIC SURVEYORS CAP).....	CAP
DIRECTION.....	DIR	KILOMETER.....	KM	QUADRUPLE BARREL CULVERT.....	CQ	SUPERELEVATION.....	SE, se or e	NOMINAL.....	NOM	ALUMINUM CAP.....	ALUM CAP
DISTANCE.....	DIST	KILOMETER POST.....	KMP	QUANTITY.....	QUANT	SURVEY.....	SRV	STIRRUP.....	STIRR	BRASS CAP.....	BR CAP
DOUBLE.....	DBL							BOTTOM.....	BOT	IRON PIPE.....	IP
								DIAGRAM.....	DIAG	CRIMPED.....	CR
								RADIAL.....	RAD	REINFORCING STEEL.....	REBAR
								INTERIOR.....	INT	CONCRETE MONUMENT.....	CM
								EXTERIOR.....	EXT	DAMAGED.....	DAM
								MECHANICALLY STABILIZED EARTH.....	MSE	CHISELED X.....	CH"X"
								PREFORMED CELLULAR POLYSTYRENE.....	PCP	HUB AND TACK.....	H&T
								CLOSED CELL NEOPRENE SPONGE.....	CCNS	HAIL AND BOTTLE TOP.....	H&BT
								DOWNSTATION.....	DS	PARKER-KALON (MASONARY NAILS).....	PK NAIL
								LONGITUDINAL.....	LONGIT	FENCE POST.....	F-POST
								TRANSVERSE.....	TRANS	RAILROAD IRON.....	RR IRON
								UPSTATION.....	US	COTTON SPINDLE.....	COT SP
										ANGLE IRON.....	ANGLE IRON



REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12001

NOTES:

1. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD) 88.
2. THE ENVIRONMENTAL CLASSIFICATION FOR BOTH SUPERSTRUCTURE AND SUBSTRUCTURE IS EXTREMELY AGGRESSIVE.
3. STEEL REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60.
4. ALL CONCRETE 28 DAY STRENGTH SHALL BE 4,000 PSI UNLESS OTHERWISE NOTED.
5. PROVIDE 3/4" CHAMFERS ON ALL EXPOSED EDGES, UNLESS NOTED OTHERWISE.
6. ANTI GRAFFITI COATING MUST BE PLACED ON ALL EXPOSED SURFACES OF PROPOSED WALLS AND BRIDGE STRUCTURAL ELEMENTS INCLUDING THE MAIN SPAN BRIDGE AND HIGH LEVEL APPROACHES, FROM THE FINISHED GROUND SURFACE AT THE BASE OF THE ELEMENT TO A HEIGHT OF AT LEAST 10 FEET ABOVE THE FINISHED GROUND SURFACE. IN ADDITION, BRIDGE ABUTMENTS EXTERIOR FACING COMPONENTS AND THE BOTTOM AND OUTWARD FACES OF EXTERIOR GIRDER AT ABUTMENTS ONLY ARE TO BE COATED.

REQUIRED:

- 1 - REINFORCED CONCRETE ABUTMENT 1 ON 16" CONCRETE PILES AS PER BRIDGE SHEET 3-6, 24-26, AND 30.
- 4 - REINFORCED CONCRETE BENTS 2 THRU 5 ON 24" CONCRETE PILES AS PER BRIDGE SHEET 3-6 AND 27-30.
- 1 - 105'-0" PRESTRESSED CONCRETE FLORIDA-I 54 BEAM, SIMPLE SPAN, AS PER BRIDGE SHEET 3, SHEETS 9, 10, AND 13-22.
- 3 - 110'-0" PRESTRESSED CONCRETE FLORIDA-I 54 BEAM, SIMPLE SPANS, AS PER BRIDGE SHEET 3, 9, 11, AND 13-23.
- 1 - 98'-2 $\frac{3}{4}$ " PRESTRESSED CONCRETE FLORIDA-I 54 BEAM, SIMPLE SPAN, AS PER BRIDGE SHEET 3, 9, 12-21, AND 23.
- 6 - TEST BORING RECORDS AS PER SHEETS 31-40.

BRIDGE SPECIAL PROJECT DRAWINGS:

- | | |
|---|---|
| BRIDGE STANDARD DETAILS | BRIDGE SPECIAL PROJECT DWG NO SBD-1 |
| BRIDGE BARRIER RAIL (36" SINGLE SLOPE) | BRIDGE SPECIAL PROJECT DWG NO BBR-1 |
| STANDARD DECK REINFORCEMENT DETAILS | BRIDGE SPECIAL PROJECT DWG NO SDR-1 |
| REINFORCED CONCRETE BRIDGE END SLAB
WITH BARRIER RAIL TRANSITION | BRIDGE SPECIAL PROJECT DWG NO BES-450(IJ)BP |

I CERTIFY THAT COMPLETE REVIEWS OF THE DESIGNER'S CALCULATIONS, CONTRACT STRUCTURAL DRAWINGS, APPLICABLE SPECIFICATIONS, AND SPECIAL PROVISIONS HAVE BEEN MADE BY COMPETENT ENGINEERS OF THIS ORGANIZATION, AND THAT THESE PLANS ARE ACCURATE, COMPLETE, AND SUITABLE FOR LETTING.

APPROVED: _____ DATE: _____

(Engineer of Record's Signature)

REGISTRATION NO. _____

APPROVED: _____ DATE: _____

(Reviewing Engineer of Record's Signature)

REGISTRATION NO. _____

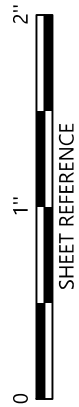
 ALABAMA DEPARTMENT OF TRANSPORTATION	A	LP	02/02/2024	60% INTERIM SUBMITTAL	PE STAMP DATE	PE STAMP DATE	QR CODE DATE	  	PLAN SUBMITTAL	BIN(S)			DESIGNER: <u>E. LEON</u> DATE: _____ BRIDGE SHEET NO. 1 OF 40	SHEET TITLE MOBILE RIVER BRIDGE WATER STREET RAMP C GENERAL NOTES (1 OF 2)
	B	EL	06/13/2025	90% FINAL SUBMITTAL						021829				
										COUNTY(S)				
										MOBILE				
	REV. NO.	BY	DATE	DESCRIPTION OF REVISION										

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

MRB-S01-BR-12001.dgn

kirk.mcdonald

6/13/2025 4:39:19 PM



STANDARD BRIDGE NOTES:

42'-5" ROADWAY WIDTH WITH STANDARD BARRIER RAILS.

THE FOLLOWING NOTE REFERENCE NUMBERS REFER TO GENERAL NOTES AS LISTED ON BRIDGE SPECIAL PROJECT DWG NO SBN-1 WITH MODIFICATIONS.

Class II

3. CONCRETE SURFACE FINISH: CLASS 3 SURFACE FINISH SHALL APPLY TO THIS BRIDGE SITE.
4. WASHING: ALL SPILLED CONCRETE AND SPLASHES SHALL BE WASHED OFF STRUCTURAL STEEL BY WATER HOSE IMMEDIATELY AFTER SLAB IS POURED.
16. POURING CURBS, RAILS, AND SIDEWALKS: ALL SLAB CONCRETE SHALL BE POURED PRIOR TO POURING ANY CURBS, RAILS, OR SIDEWALKS ON ANY SIMPLE SPAN, OR ANY CONTINUOUS UNIT.
21. PRESTRESSED CONCRETE GIRDERS WITH POURED-IN-PLACE DECK:
 - (A) SHOP DRAWINGS: SHOP DRAWINGS SHALL BE SUBMITTED AND SHALL SHOW A COMPLETE DETENSIONING SCHEDULE THAT WILL MINIMIZE TENSION IN THE CONCRETE DURING RELEASE OF THE STRANDS. DETAILED CONCRETE STRESSES DURING EACH OPERATION OF DETENSIONING SHALL BE SUBMITTED WITH THE DRAWINGS. THE SHOP DRAWINGS SHALL SHOW COMPLETE GIRDER DETAILS INCLUDING SHIELDING AND ALL REINFORCING AND STRUCTURAL STEEL.
 - (C) FINISH: THE ENTIRE TOP OF THE GIRDERS SHALL BE SCRUBBED TRANSVERSELY TO A FULL MAGNITUDE OF APPROXIMATELY ¼" AT THE TIME OF INITIAL SET TO REMOVE ALL LAITANCE AND TO PROVIDE A ROUGHENED SURFACE. THE USE OF ALL MEMBRANE CURING COMPOUND SHALL NOT BE PERMITTED ON THE TOP OF THE TOP FLANGE OF PRESTRESSED GIRDERS.
 - (E) INSERTS: INSERTS ENCASED IN TOP OF EXTERIOR GIRDERS FOR USE IN FORMING OVERHANG WILL BE CONSIDERED ON GIRDER DETAILS SUBMITTED FOR APPROVAL.
 - (F) MISC. HARDWARE: ACCESSORIES ENCASED IN GIRDERS FOR USE IN ATTACHING ANY TEMPORARY BRACING WILL BE CONSIDERED ON GIRDER DETAILS SUBMITTED FOR APPROVAL. AFTER TEMPORARY BRACING IS REMOVED, ANY HOLES THAT EXIST SHALL BE GROUTED AND SURFACE RUBBED TO A NEAT FINISH.
22. CONCRETE PEDESTALS: CONCRETE PEDESTALS MAY BE POURED CONCURRENTLY WITH THE CAP OR POURED SEPARATELY IF A TYPE II EPOXY ADHESIVE IS APPLIED TO THE CONSTRUCTION JOINT JUST PRIOR TO POURING THE PEDESTALS.
23. ANCHOR BOLT INSTALLATION: WELLS ARE REQUIRED FOR THE PLACEMENT OF ANCHOR BOLTS. SEE SECTION 508.03 (d) 2e OF THE STANDARD SPECIFICATIONS FOR FURTHER REQUIREMENTS.
24. BRIDGE DECK FINISH: THE FINAL BRIDGE DECK FINISH BEHIND THE SCREED SHALL BE OBTAINED BY BURLAP DRAG TO MATCH THE EXISTING DECK FINISH.
25. YEAR OF COMPLETION AND REFERENCE MARK: THE YEAR OF COMPLETION OF THIS STRUCTURE, AND THE PERMANENT REFERENCE MARK, AS SHOWN ON BRIDGE SPECIAL PROJECT DRAWING BBR-1 OR BBR-2 AND SBD-1 ARE REQUIRED FOR THIS STRUCTURE.
27. METAL STAY-IN-PLACE FORMS: THIS STRUCTURE HAS BEEN DESIGNED TO ALLOW THE USE OF METAL STAY-IN-PLACE FORMS AT THE CONTRACTOR'S OPTION. SEE SUB-ARTICLE 501.03 (I) OF THE SPECIFICATIONS FOR NECESSARY DETAILS AND REQUIREMENTS. NO FIELD WELDING WILL BE PERMITTED ON STRUCTURAL STEEL MEMBERS UNLESS OTHERWISE NOTED ON THE BRIDGE DRAWINGS. THE CONTRACTOR SHALL EXERCISE CARE WHEN INSTALLING STAY-IN-PLACE FORMS TO INSURE THAT NO FIELD WELDS OR ARC STRIKES OCCUR ON THE STRUCTURAL STEEL MEMBERS.
30. GIRDER ERECTION: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE STABILITY AND POSITIONAL CORRECTNESS (PLUMBNESS, ALIGNMENT, ETC.) OF THE GIRDERS DURING ALL PHASES OF CONSTRUCTION. ANY TEMPORARY BRACING AND/OR SUPPORT DEEMED NECESSARY BY THE CONTRACTOR TO ENSURE THE ABOVE UNTIL CONSTRUCTION IS COMPLETE SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE STATE. WORKING DRAWINGS FOR BRACING SHALL BE SUBMITTED IN ACCORDANCE WITH ARTICLE 501.03 (I) OF THE STANDARD SPECIFICATIONS.

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12002

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

 ALABAMA DEPARTMENT OF TRANSPORTATION	A	LP	02/02/2024	60% INTERIM SUBMITTAL	PE STAMP	PE STAMP	QR CODE	  	PLAN SUBMITTAL	BIN(S)	DESIGNER: <u>E. LEON</u> DATE: _____	BRIDGE SHEET NO. 2 OF 40	SHEET TITLE MOBILE RIVER BRIDGE WATER STREET RAMP C GENERAL NOTES (2 OF 2)
	B	EL	06/13/2025	90% FINAL SUBMITTAL						021829			
										COUNTY(S)			
										MOBILE			
	REV. NO.	BY	DATE	DESCRIPTION OF REVISION						DATE			

MRB-S01-BR-12002.dgn

kirk.mcdonald

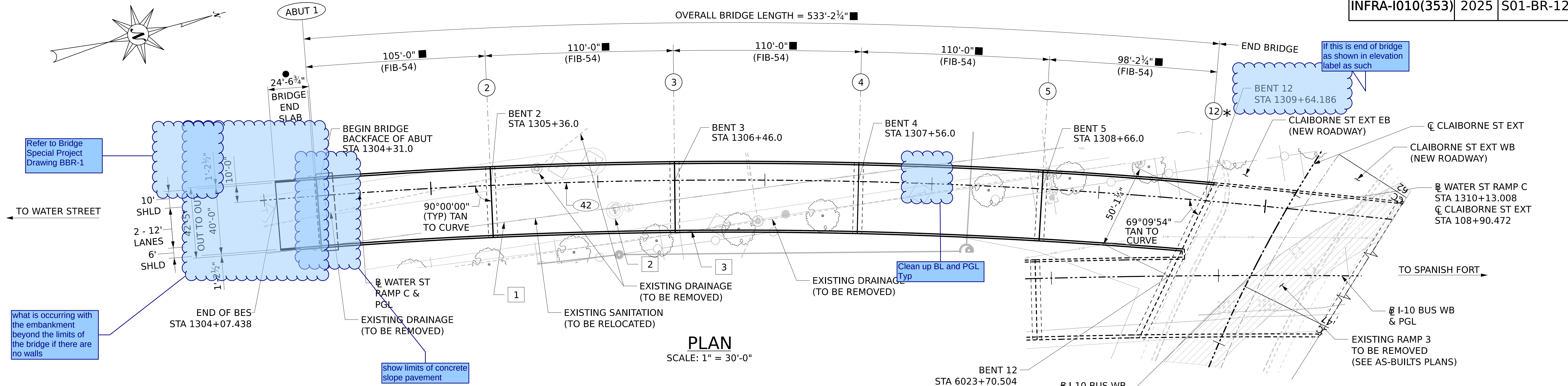
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6/13/2025

1" = 30'-0"
SHEET REFERENCE

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12003

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

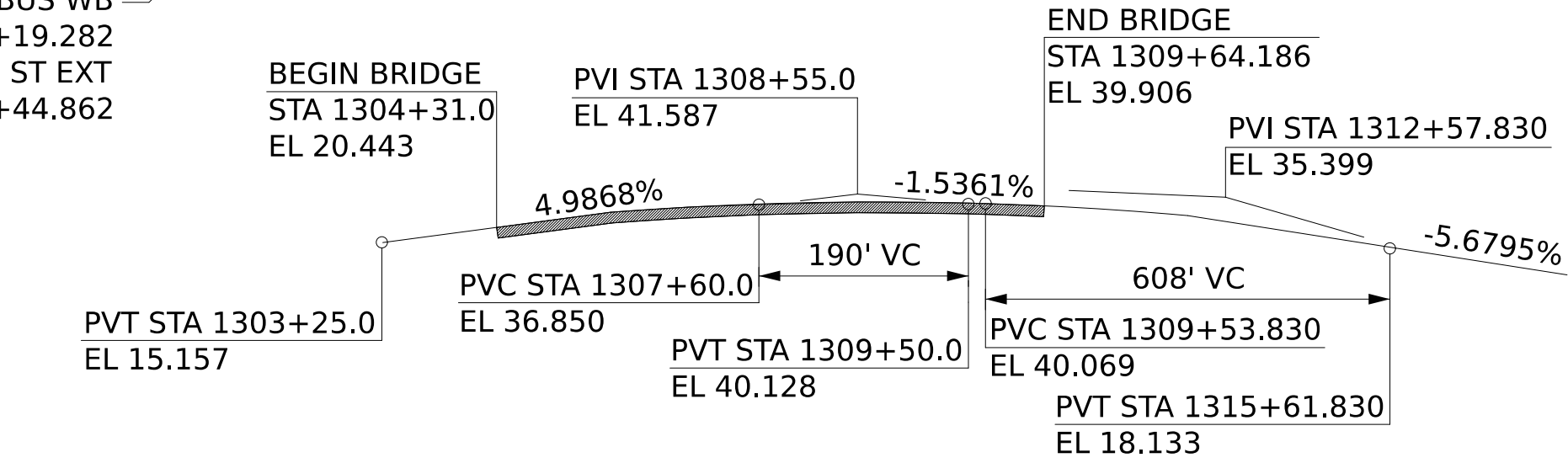


42 HORIZONTAL CURVE DATA
WATER STREET RAMP C & PGL
PI STA 1306+73.062
Δ = 12°10'13" RT
D = 1°46'06"
R = 3240.000'
L = 688.215'
T = 345.407'
e = NC
TANGENT DIRECTION AT PC = N 08°09'22" E

Please attach cleaner topo file

Show existing Typical sections underneath the bridge

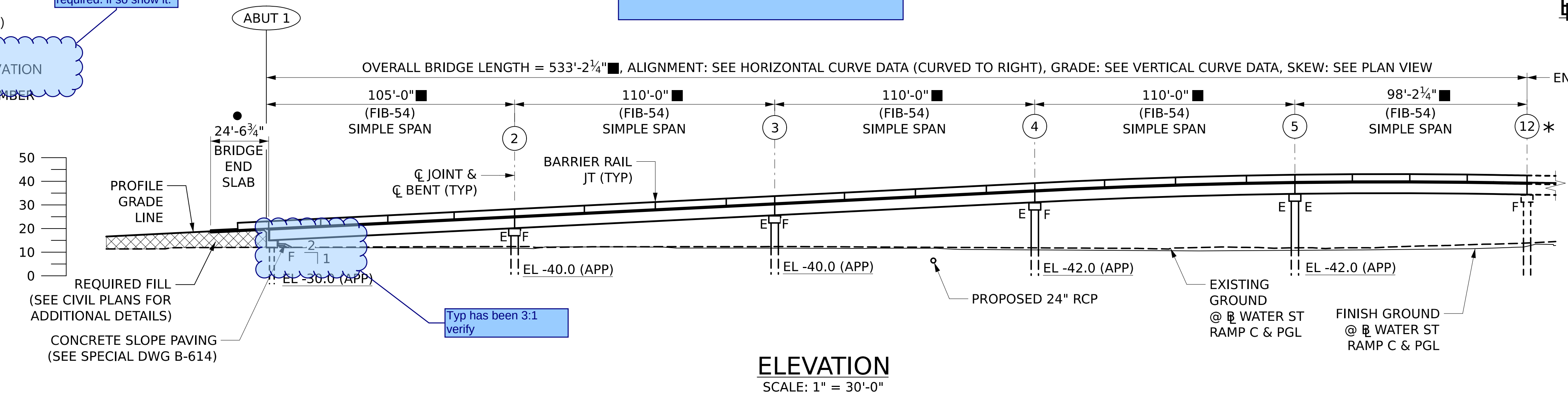
show vertical clearance and horizontal clearances typ on plan and elevation view



VERTICAL CURVE DATA WATER STREET RAMP C & PGL

- NOTES: NTS
- FOR BARRIER RAIL DETAILS, SEE BRIDGE SPECIAL PROJECT DRAWING NO BBR-1.
 - FOR BRIDGE END SLAB DETAILS, SEE BRIDGE SPECIAL PROJECT DRAWING NO BES-450(I)BP.
 - DRAIN BLOCKOUTS NOT SHOWN FOR CLARITY (SEE SPAN DETAILS SHEETS FOR DRAIN LAYOUT). OMIT DRAINS OVER TRAFFIC LANES, SIDEWALKS, UNPROTECTED SLOPE FILLS, HIGH SIDE IF SUPERELEVATED AND WITHIN 10 FEET OF BRIDGE END. NO BLOCKOUT SHALL BE PLACED WITHIN 3'-0" OF AN OPEN JOINT IN THE BARRIER RAIL.
 - SEE GENERAL PLAN & ELEVATION (2 OF 2) SHEET IN I-10 BUS WB OVER CANAL ST BRIDGE PLANS.
 - DIMENSIONS SHOWN ARE MEASURED ALONG BASELINE AND PGL.
 - REMOVE UNKNOWN PAVING MATERIAL AS NEEDED TO CONSTRUCT NEW FOUNDATIONS.
 - FOR UTILITY IDENTIFICATION AND DISPOSITION, SEE UTILITY DISPOSITION TABLE IN FOUNDATION LAYOUT SHEET.
 - ALL DECK EXPANSION JOINTS ARE OPEN JOINTS.
 - FOR PILE TIP ELEVATIONS, SEE PILE DATA TABLE SHEET.

- LEGEND
- EXISTING BRIDGE PILES
 - EXISTING BRIDGE (TO BE REMOVED)
 - REQUIRED FILL
 - REQUIRED EXCAVATION
 - UTILITY ITEM NUMBER
- Is some excavation required. If so show it.



ALABAMA DEPARTMENT OF TRANSPORTATION

A	LP	02/02/2024	60% INTERIM SUBMITTAL
B	EL	06/13/2025	90% FINAL SUBMITTAL
REV. NO.	BY	DATE	DESCRIPTION OF REVISION

PE STAMP

PE STAMP

QR CODE

PLAN SUBMITTAL

90%

BIN(S)	021829
COUNTY(S)	MOBILE

DESIGNER: E. LEON

DATE:

BRIDGE SHEET NO. 3 OF 40

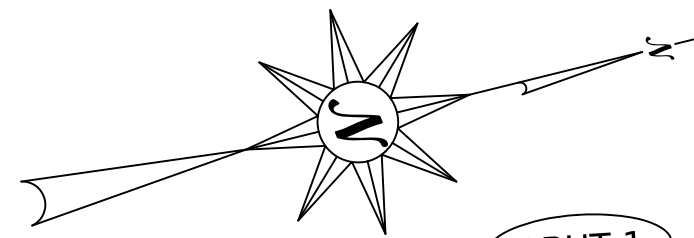
SHEET TITLE

MOBILE RIVER BRIDGE

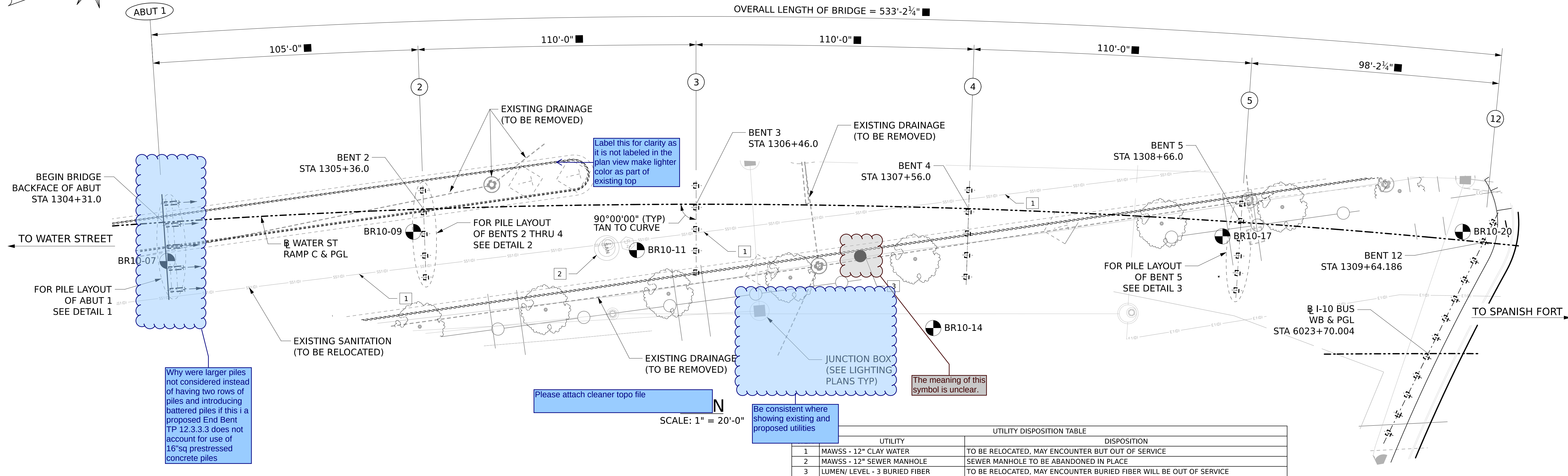
WATER STREET RAMP C

GENERAL PLAN & ELEVATION

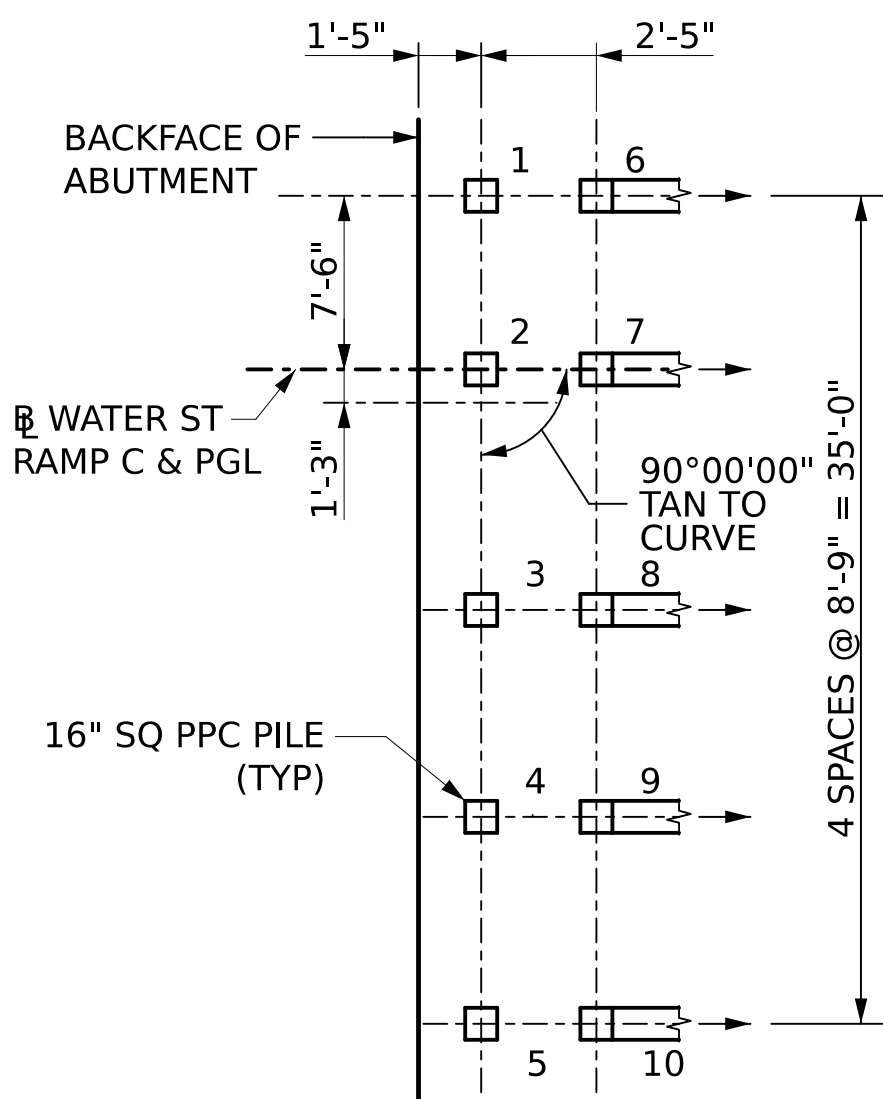
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kirk.mcdonald
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6/13/2025



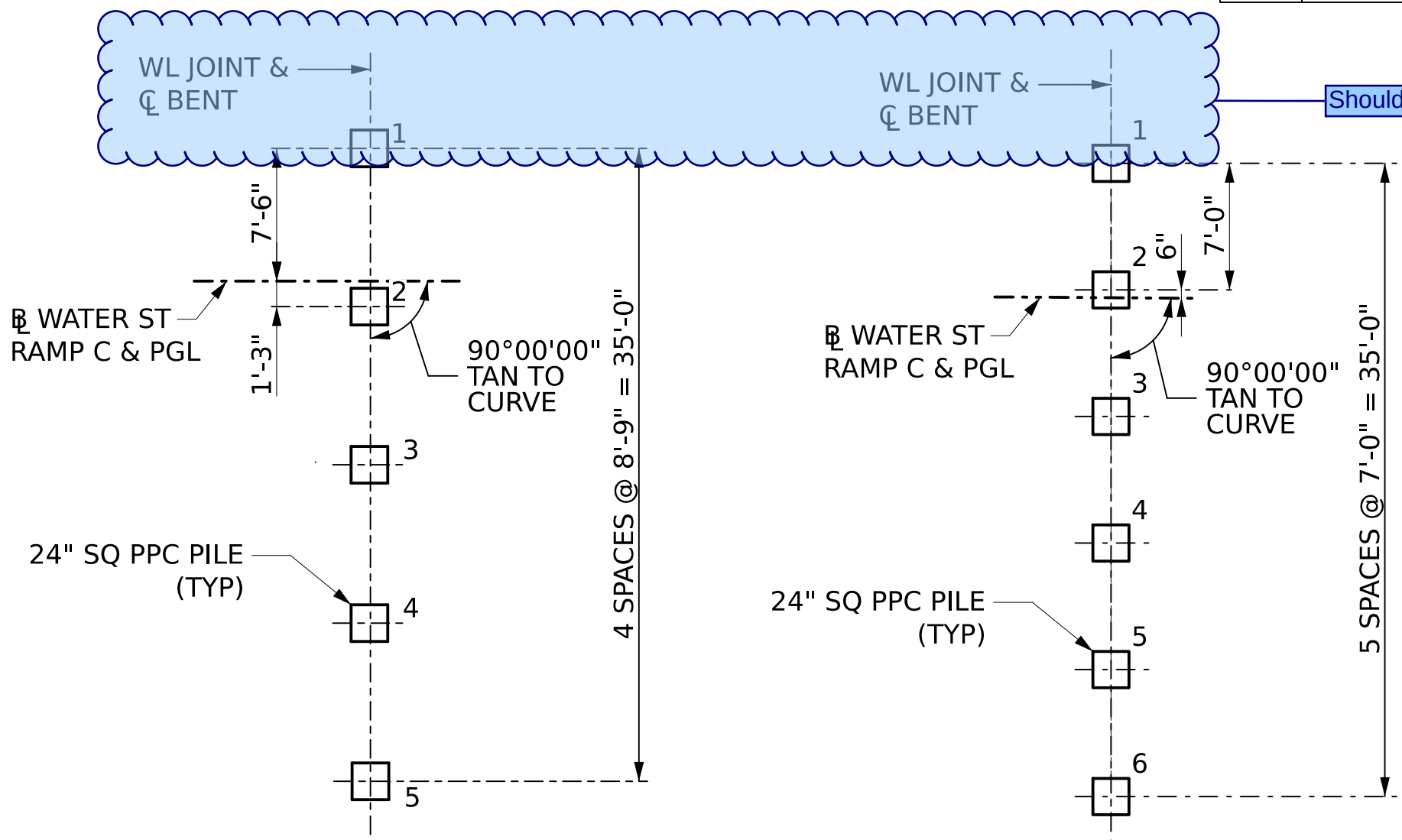
REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12004



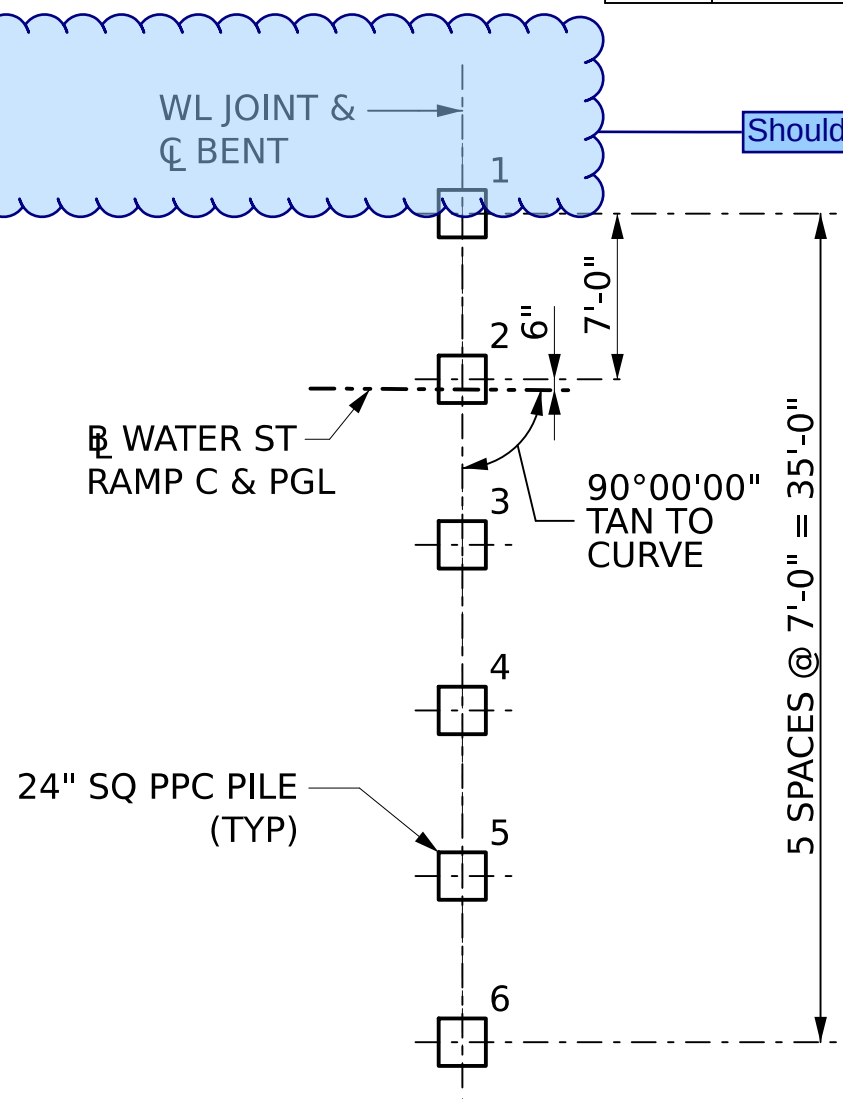
UTILITY DISPOSITION TABLE	
UTILITY	DISPOSITION
1 MAWSS - 12" CLAY WATER	TO BE RELOCATED, MAY ENCOUNTER BUT OUT OF SERVICE
2 MAWSS - 12" SEWER MANHOLE	SEWER MANHOLE TO BE ABANDONED IN PLACE
3 LUMEN/ LEVEL - 3 BURIED FIBER	TO BE RELOCATED, MAY ENCOUNTER BURIED FIBER WILL BE OUT OF SERVICE



DETAIL 1
(ABUTMENT 1)
NTS



DETAIL 2
(BENTS 2 THRU 4)
NTS



DETAIL 3
(BENT 5)
NTS

LEGEND	
	FENCE
	EXISTING SIGN
	EXISTING DRAIN INLET
	EXISTING SANITARY SEWER
	16" SQ PPC PILES AT ABUTMENTS
	16" SQ PPC PILE BATTERED AT ABUTMENTS (1 1/2:12)
	24" SQ PPC PILES AT BENTS
	24" SQ PPC TEST PILE
	SOIL BORING OR CPT
	UTILITY ITEM NUMBER

NOTES:

- ALL PILE SPACINGS ARE SHOWN AT TOP OF PILE. PILE SPACINGS ARE ALONG RADIAL LINES AT BACK OF ABUTMENT OR CL OF BENT LOCATIONS ONLY.
- DIMENSIONS SHOWN ARE MEASURED ALONG BASELINE AND PGL.
- FOR PILE LAYOUT OF BENT 12, SEE FOUNDATION LAYOUT (2 OF 2) SHEET IN I-10 BUS WB OVER CANAL ST BRIDGE PLANS.



ALABAMA
DEPARTMENT OF
TRANSPORTATION

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
A	LP	02/02/2024	60% INTERIM SUBMITTAL
B	EL	06/13/2025	90% FINAL SUBMITTAL

PE STAMP

PE STAMP

QR CODE



PLAN SUBMITTAL
90%

BIN(S)
021829
COUNTY(S)
MOBILE

DESIGNER: E. LEON
DATE: _____
BRIDGE SHEET NO. 4 OF 40

SHEET TITLE

MOBILE RIVER BRIDGE
WATER STREET RAMP C
FOUNDATION LAYOUT

PILE DATA									
ABUT OR BENT NO	PILE NO	PILE SIZE	NOMINAL BEARING RESISTANCE (TONS)	FACTORED DESIGN LOAD (TONS)	CUT-OFF ELEV (FT)	EST PILE TIP ELEV (FT)	NO OF BATTERED PILING	NO OF VERTICAL PILING	Ø COMPRESSION
1		16" SQ PPC	195	156	12.454	-64	0	1	0.8
		16" SQ PPC			12.261	-64	0	1	
		16" SQ PPC			12.069	-64	0	1	
		16" SQ PPC			11.876	-64	0	1	
		16" SQ PPC			11.684	-64	0	1	
		16" SQ PPC			12.454	-64	1	0	
		16" SQ PPC			12.261	-64	1	0	
		16" SQ PPC			12.069	-64	1	0	
		16" SQ PPC			11.876	-64	1	0	
		16" SQ PPC			11.684	-64	1	0	
2	1	24" SQ PPC	377	301	15.561	-73	0	1	0.8
	2	24" SQ PPC			15.369	-73	0	1	
	3	24" SQ PPC			15.176	-73	0	1	
	4	24" SQ PPC			14.984	-73	0	1	
	5	24" SQ PPC			14.791	-73	0	1	
3	1	24" SQ PPC	384	307	21.089	-74	0	1	0.8
	2	24" SQ PPC			20.896	-74	0	1	
	3	24" SQ PPC			20.704	-74	0	1	
	4	24" SQ PPC			20.511	-74	0	1	
4	1	24" SQ PPC	388	310	26.574	-75	0	1	0.8
	2	24" SQ PPC			26.382	-75	0	1	
	3	24" SQ PPC			26.189	-75	0	1	
	4	24" SQ PPC			25.997	-75	0	1	
	5	24" SQ PPC			25.804	-75	0	1	
5	1	24" SQ PPC	333	266	30.352	-67	0	1	0.8
	2	24" SQ PPC			30.198	-67	0	1	
	3	24" SQ PPC			30.044	-67	0	1	
	4	24" SQ PPC			29.890	-67	0	1	
	5	24" SQ PPC			29.736	-67	0	1	
	6	24" SQ PPC			29.582	-67	0	1	

Is this also the Required Driving Resistance? The plans need to clearly state what the Required Driving Resistance is for pile acceptance in the field.

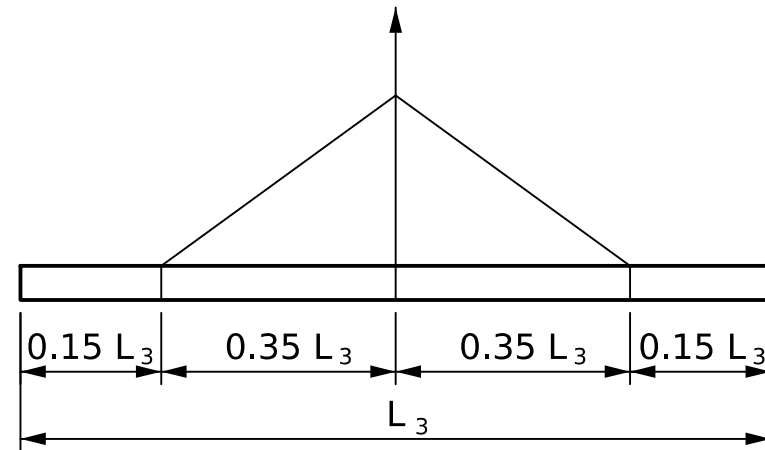
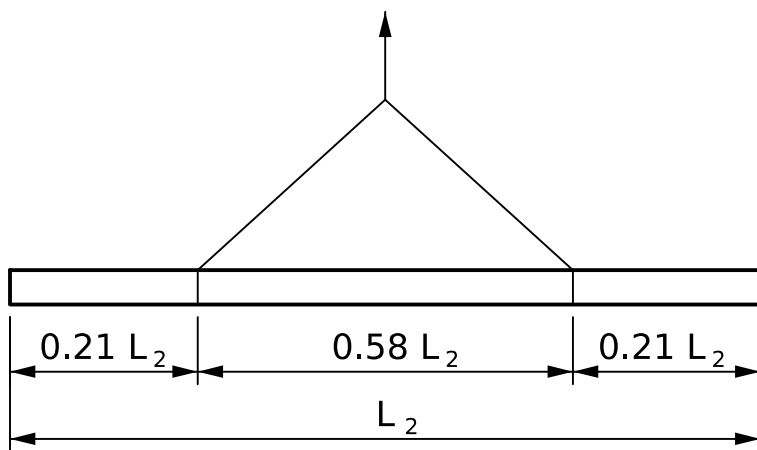
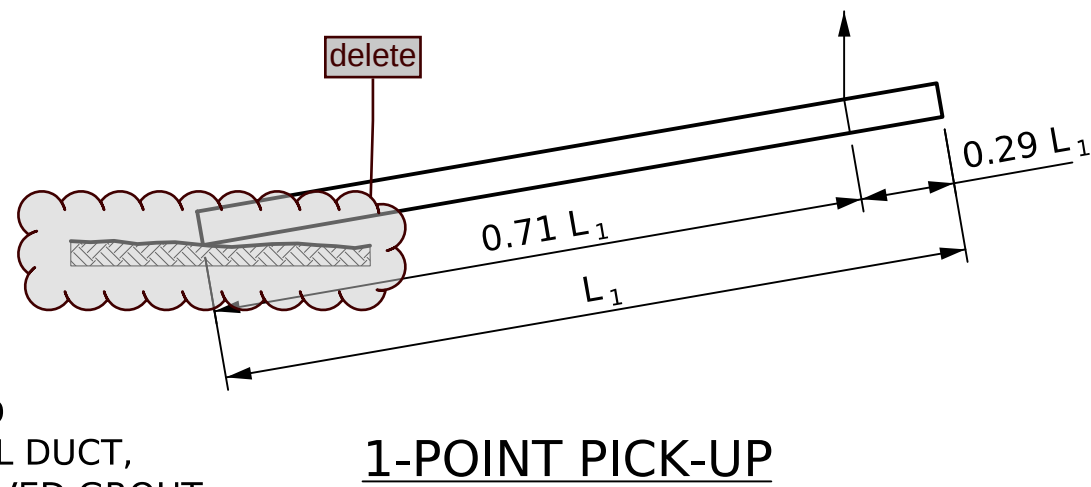
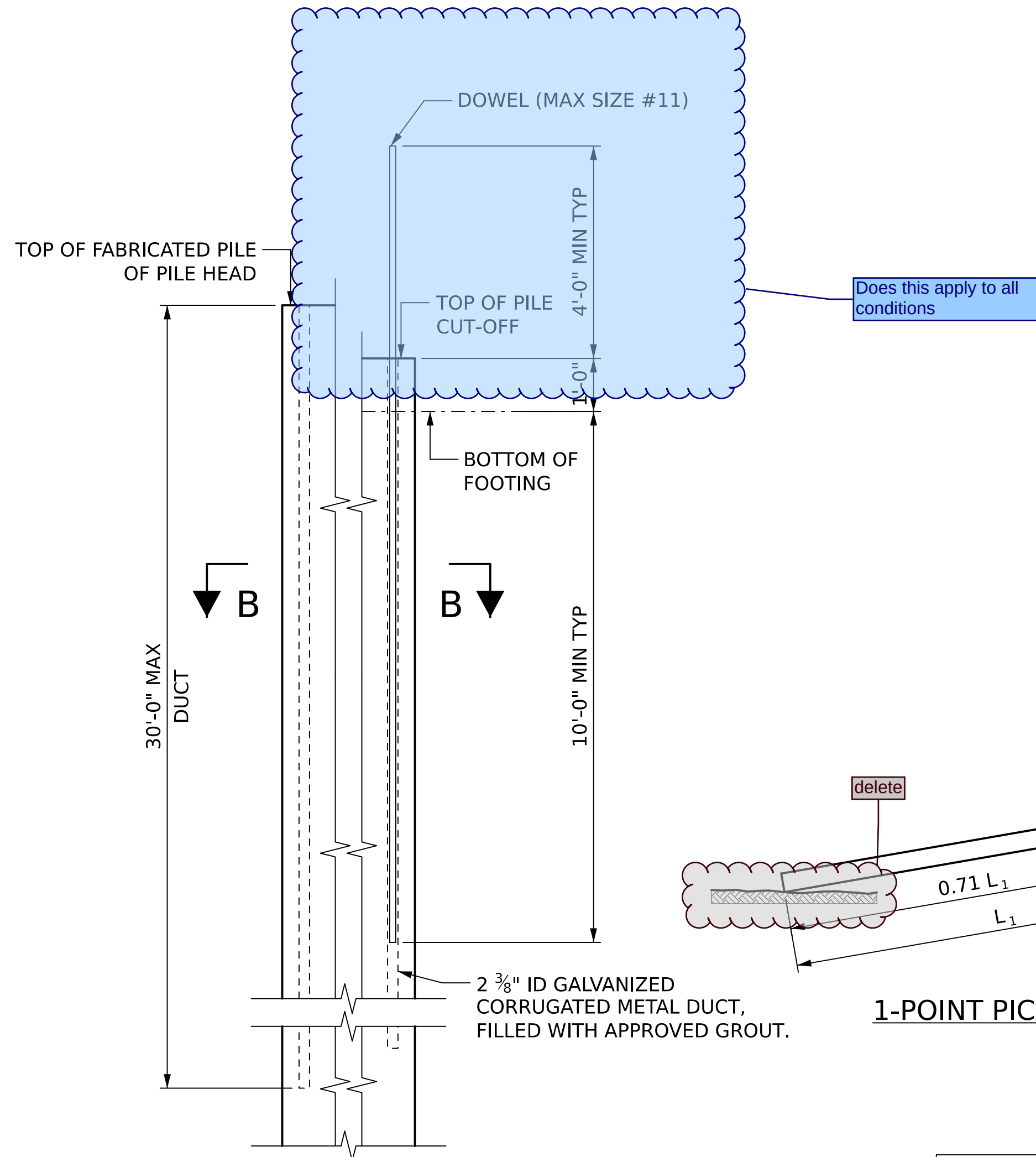
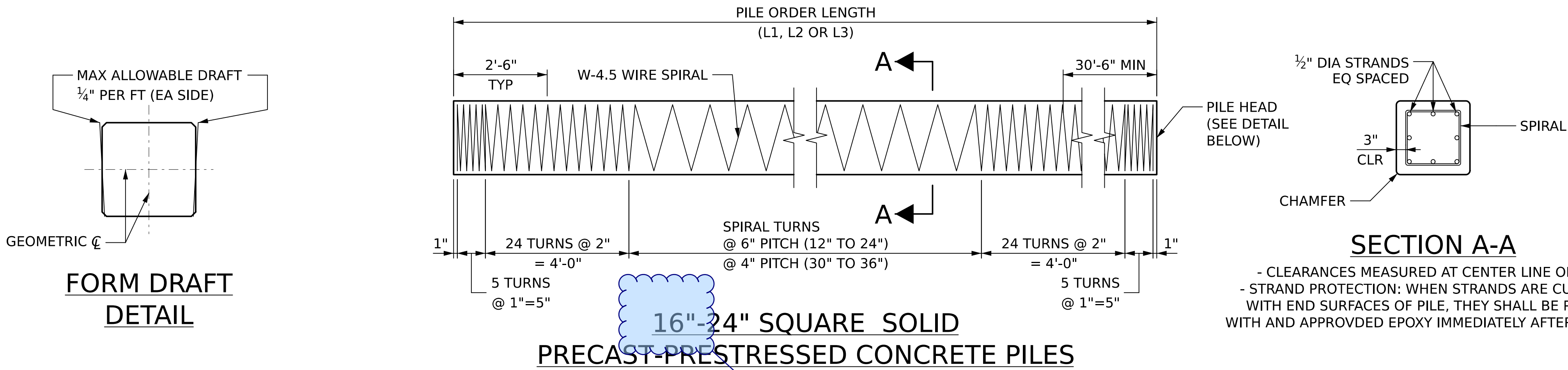
A PDA test pile for the 16in piles is needed for pile acceptance to correlate the load test data and dynamic test data on the 24in piles. The approved Load Test Plan has a static 24in test pile for this site condition only as agreed. Tip elevations would change accordingly

TP 12.3.3.3 does not account for use of 16" sq. prestressed concrete piles

TP Table 10.4 lists the Final Geotechnical Design Report to be submitted "No later than the associated Final Design Submittal" associated with the GDR. This submittal is not complete until the Final GDR has been submitted.

- NOTES:
- 1. ALL UTILITIES LOCATIONS MUST BE VERIFIED PRIOR TO ANY PILE DRIVING.
 - 2. FOR PRECAST PRESTRESSED CONCRETE (PPC) PILE DETAILS, SEE PILE DETAILS SHEET.
 - 3. DOWNDRAW FORCES HAVE NOT BEEN INCORPORATED INTO PILE LOADS AT THE ABUTMENTS.
 - 4. FOR TEST PILE LOCATIONS, SEE FOUNDATION LAYOUT SHEETS IN I-10 BUS WB OVER CANAL ST BRIDGE PLANS.
 - 5. TIP ELEVATIONS SHALL NOT BE ALTERED WITHOUT APPROVAL OF THE ENGINEER OF RECORD.
 - 6. NOMINAL BEARING RESISTANCE = FACTORED DESIGN LOAD / Ø.

Should the Geotechnical Design Report be referenced in the notes?



PICK-UP DETAILS
NOTE : PICK-UP POINTS TO BE PLAINLY MARKED ON PILES

GENERAL NOTES:

- DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, 2020.
- CONCRETE IN PILE: THE CONTRACTOR SHALL DESIGN AND SUBMIT FOR APPROVAL A CONCRETE MIX WITH A MINIMUM COMPRESSIVE CYLINDER STRENGTH OF 6000 PSI AT 28 DAYS. CONCRETE STRENGTH AT THE TIME OF TRANSFER OF PRESTRESSED FORCE SHALL BE 4500 PSI OR GREATER.
- PRESTRESSING STEEL: PRETENSIONED REINFORCEMENT SHALL BE 1/2" DIA. SEVEN-WIRE, UNCOATED LOW-RELAXATION STRANDS GRADE 270 AND SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 203. AN INITIAL TENSION OF 30,975 LBS. SHALL BE APPLIED TO EACH STRAND.
- REINFORCING STEEL: REINFORCING STEEL SHALL BE DEFORMED STEEL BARS, GRADE 60 AND SHALL MEET THE REQUIREMENTS OF AASHTO M 31.
- SPIRAL REINFORCING STEEL: SPIRAL REINFORCEMENT SHALL BE SIZE W-4.5 COLD-DRAWN STEEL WIRE AND SHALL CONFORM TO AASHTO M 336.
- FABRICATION TOLERANCES: MANUFACTURE OF THE PILING AND FABRICATION TOLERANCES SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE DETENSIONING PROCEDURE SHALL BE SUBMITTED TO THE EOR FOR APPROVAL.
- CHAMFERS AND CORNERS: ON PILES 18" OR SMALLER, ALL EXPOSED CONCRETE CORNERS SHALL HAVE 3/4" CHAMFERS. ON PILES 20" OR LARGER, ALL EXPOSED CONCRETE CORNERS SHALL HAVE 1 1/2" CHAMFERS. A 1" RADIUS CURVE WILL BE PERMITTED IN LIEU OF CHAMFERS SHOWN ABOVE. HOWEVER, ALL BENT PILES FURNISHED SHALL BE OF SAME CONFIGURATION.
- PICK-UP AND HANDLING: MAXIMUM LENGTHS FOR PICK-UP HAVE BEEN DETERMINED USING THE FOLLOWING STRESS ASSUMPTIONS:

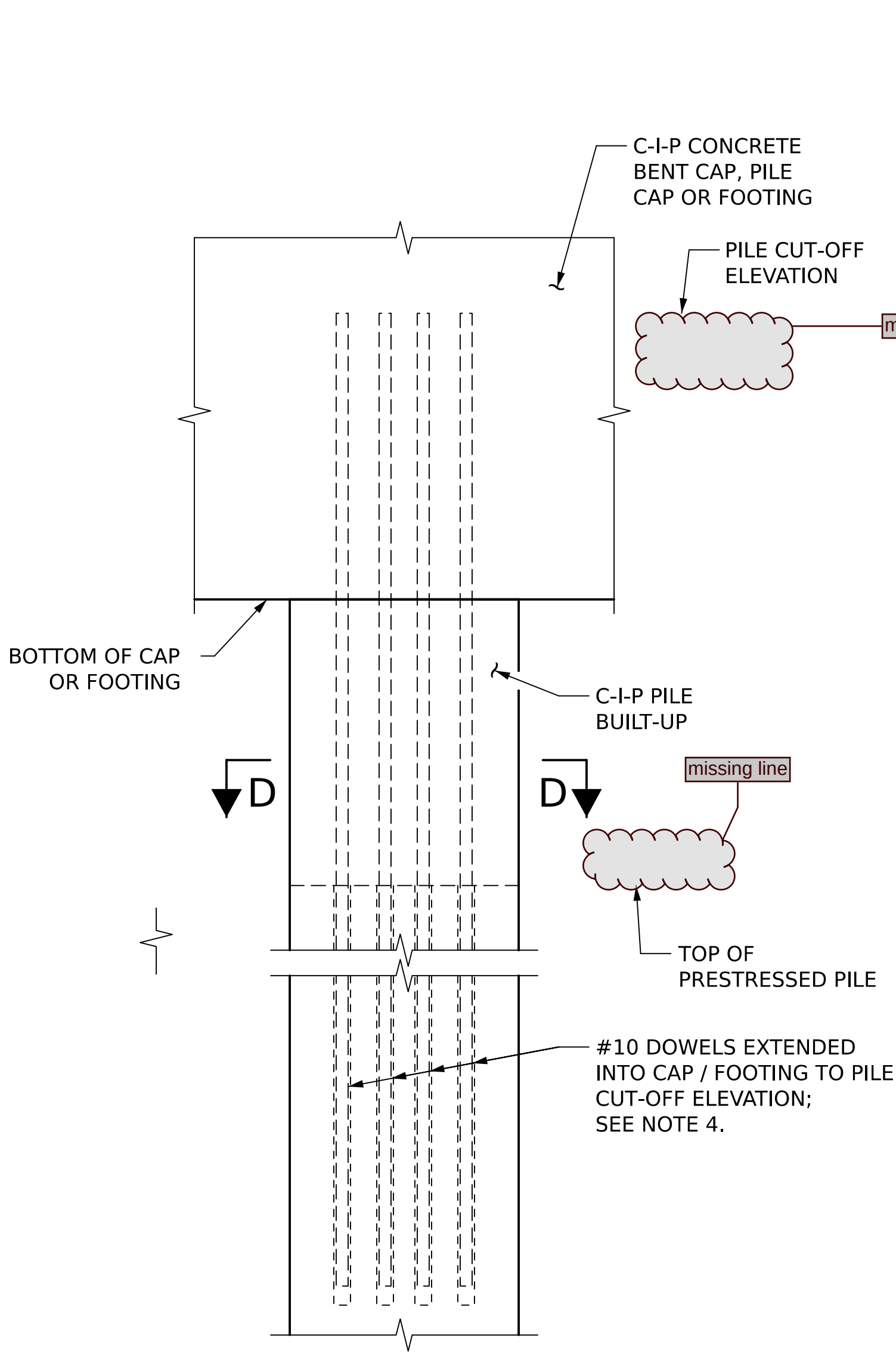
LOADING: 1 1/2 TIMES FULL DEAD LOAD. ALLOWABLE TENSILE STRESS EQUALS 0.19√ f'c KSI. THIS STRESS AND LOADING CRITERIA ARE BASED ON CAREFUL HANDLING OF THE PILE. ROTATION OF PILE IN THE SLING IS TO BE PREVENTED UNTIL PILE IS IN VERTICAL POSITION. PICK-UP POINTS FOR ALL PILES TO BE CLEARLY MARKED ON PILE. PICK-UP POINTS SHOWN MAY BE MODIFIED FOR TRANSPORTATION PURPOSES PROVIDED THE TENSILE STRESS BASED ON ABOVE LOADING CRITERIA DOES NOT EXCEED 0.19√ f'c KSI. THE MODIFIED PICK-UP POINTS SHALL BE SENT TO THE ENGINEER FOR REVIEW.

PICK-UP DEVICES: CAST-IN-PLACE LOOPS MAY BE USED AS PICK-UP DEVICES FOR PRESTRESSED PILES. FOR PILE ABUTMENTS AND FOR PILE FOOTINGS THAT ARE TO BE CONSTRUCTED BELOW GROUNDLINE, THE FOLLOWING SHALL APPLY: THE LOOPS SHALL BE CUT OFF FLUSH WITH FACE OF THE PILE AND EXPOSED SURFACES OF THE LOOPS SHALL BE COATED WITH AN APPROVED EPOXY. FOR PILE BENTS AND FOR PILE FOOTINGS THAT ARE TO BE CONSTRUCTED ABOVE POOL (WATERLINE), THE FOLLOWING SHALL APPLY: A 3"x3" BY 1 1/2" DEEP RECESS (BLOCKOUT) SHALL BE PROVIDED AT EACH LOOP PROTRUSION. THE LOOPS SHALL BE CUT OFF FLUSH WITH THE RECESSED FACE OF THE PILE AND THE RECESS SHALL BE FILLED WITH AN APPROVED EPOXY. THE EPOXY SHALL OBTAIN THE 28-DAY STRENGTH SPECIFIED FOR THE PILE PRIOR TO DRIVING THE PILE. THE TYPE OF PICK-UP DEVICE TO BE USED BY THE CONTRACTOR SHALL BE CLEARLY SHOWN ON THE PRESTRESSED CONCRETE PILE SHOP DRAWINGS.

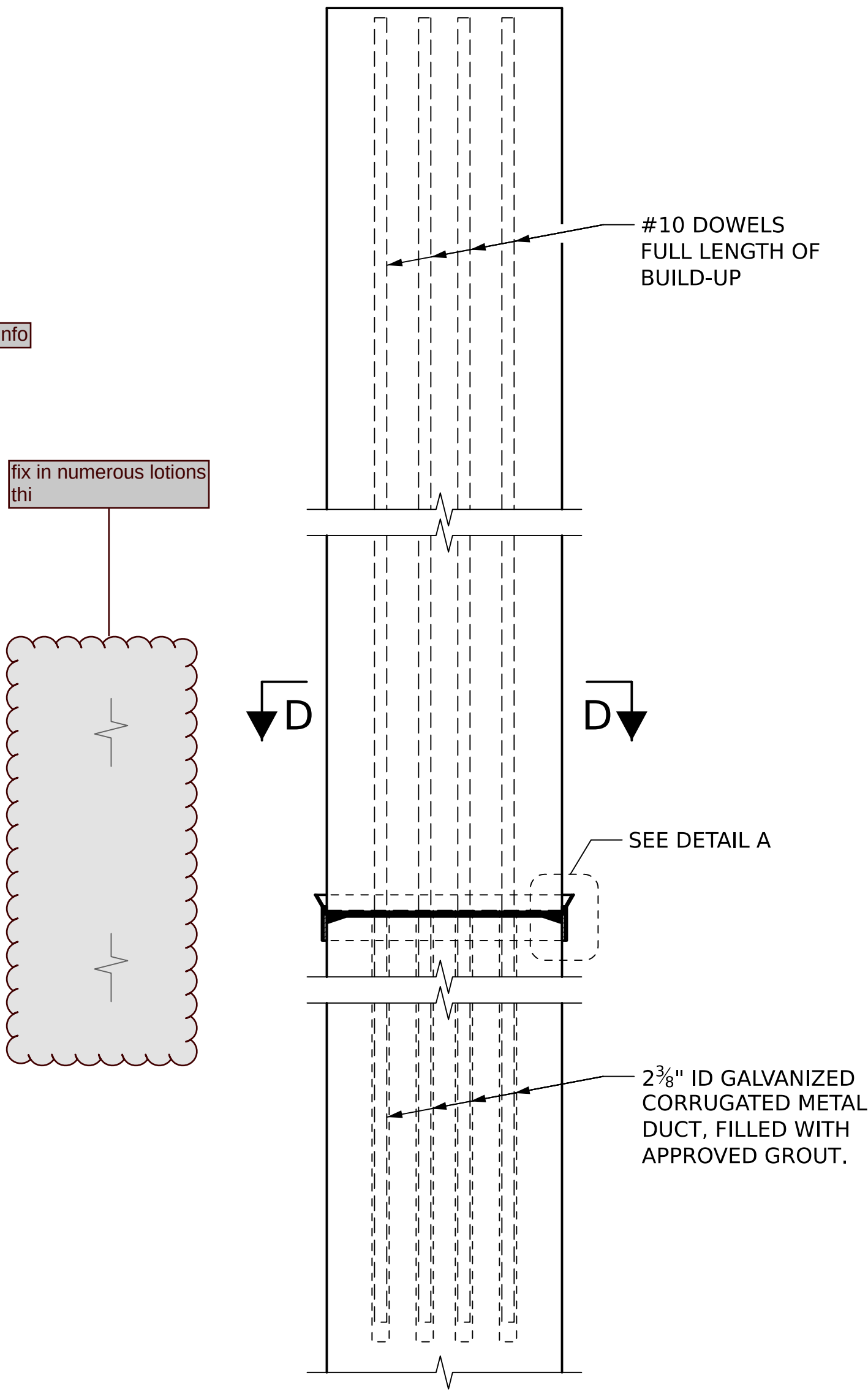
- FOR UPLIFT PILE DOWELS, HOLES SHALL BE CLEANED PRIOR TO SETTING DOWEL BARS AND SHALL BE FREE OF DUST, OIL, WATER AND OTHER CONTAMINENTS. DOWEL BARS SHALL BE SET USING AN APPROVED EPOXY.
- SHIPPING: PILING SHALL BE HELD AT THE PLANT FOR A MINIMUM OF 21 DAYS PRIOR TO SHIPPING. PILING SHALL NOT BE TRANSPORTED UNTIL THE MINIMUM 28 DAY COMPRESSIVE CONCRETE STRENGTH IS OBTAINED AND VERIFIED BY TEST CYLINDERS.
- DRIVING: PILES SHALL BE DRIVEN TO AT LEAST THE MINIMUM TIP ELEVATION AS SHOWN ON CONTRACT PLANS UNLESS OTHERWISE DIRECTED BY THE ENGINEER OF RECORD.
- BUILD-UP: THE USE OF A BUILD-UP (DRIVING OR NON-DRIVING) SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER. CONCRETE SHALL BE THE SAME JOB MIX AS THE PRESTRESS CONCRETE.

PILE INFORMATION											
PILE SIZE (in)	SECTION PROPERTIES					SQUARE SPIRAL LAYOUTS					
	VOID "D" (in)	AREA (in ²)	SECTION MODULUS (in ³)	WEIGHT PER FOOT (lb/ft)	CHAMFER (in)	NO. OF STRANDS	PRESTRESS IN CONCRETE (psi)		MAX CASTING LENGTH (ft)		
							AT RELEASE	AT 90 DAYS	L ₁	L ₂	L ₃
16 SOLID	0	256	683	267	¾"	12	1373	1273	67.6	95.7	136.7
24 SOLID	0	576	2304	600	1½"	24	1227	1154	86.7	122.7	172.0

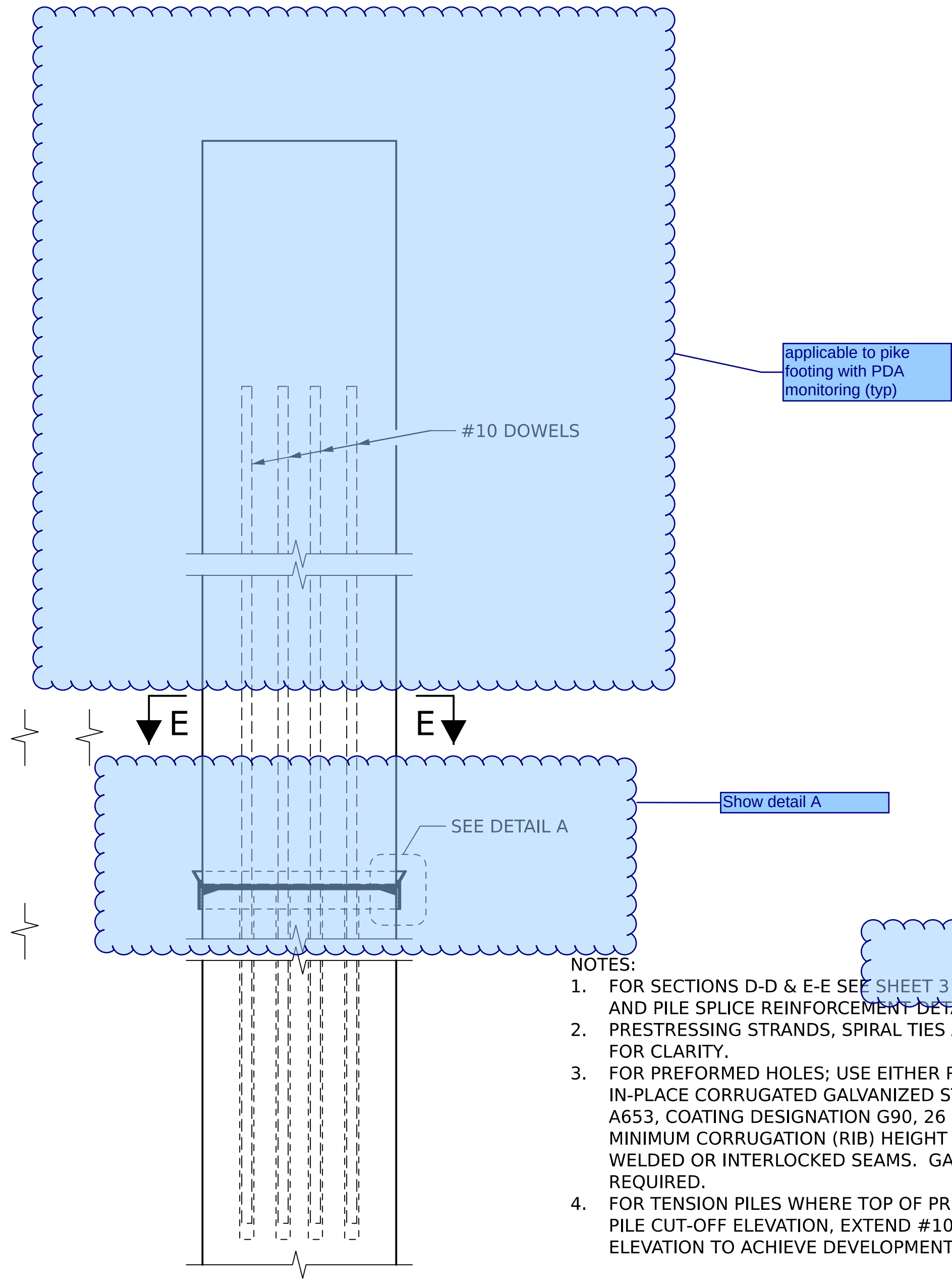
REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12007



UNPLANNED
REINFORCED CAST-IN-PLACE
PILE BUILD-UP DETAIL
NOT TO SCALE



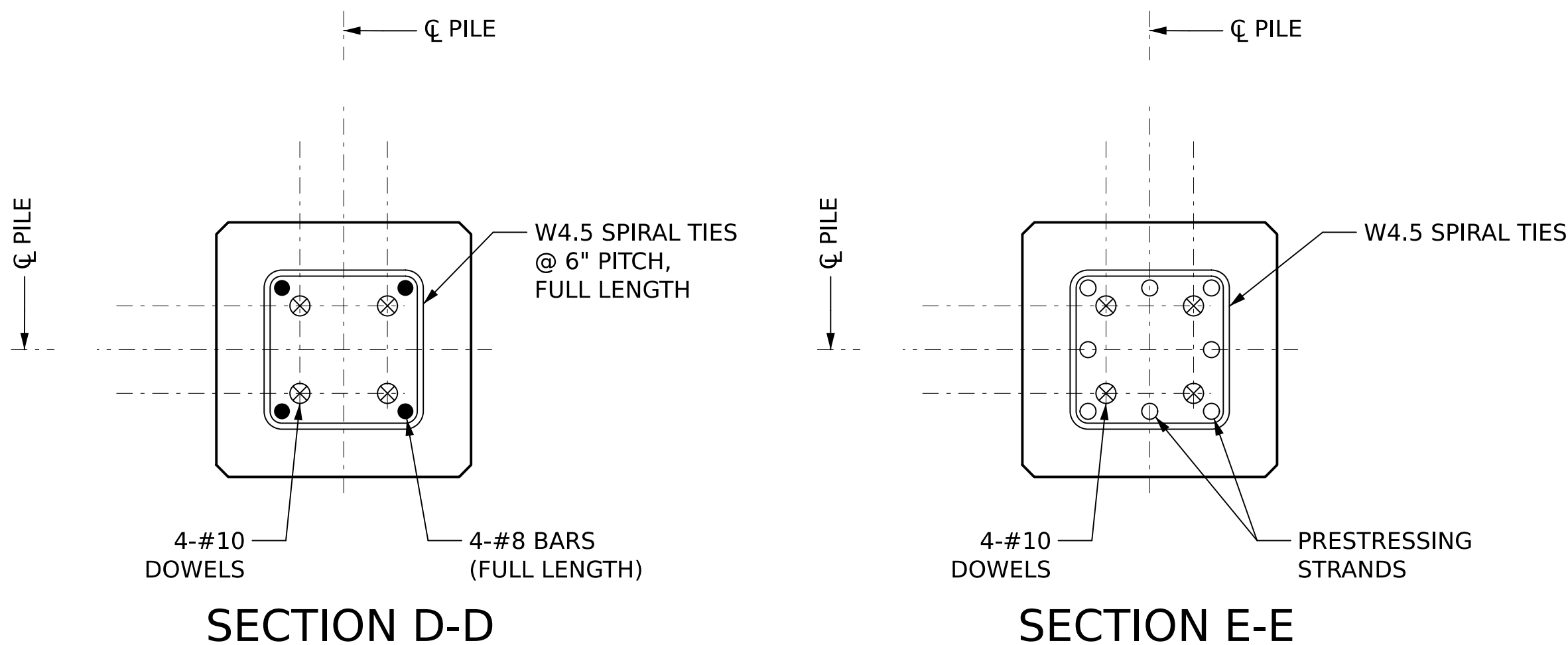
NON-DRIVABLE UNPLANNED
REINFORCED PRECAST
PILE BUILD-UP DETAIL
NOT TO SCALE



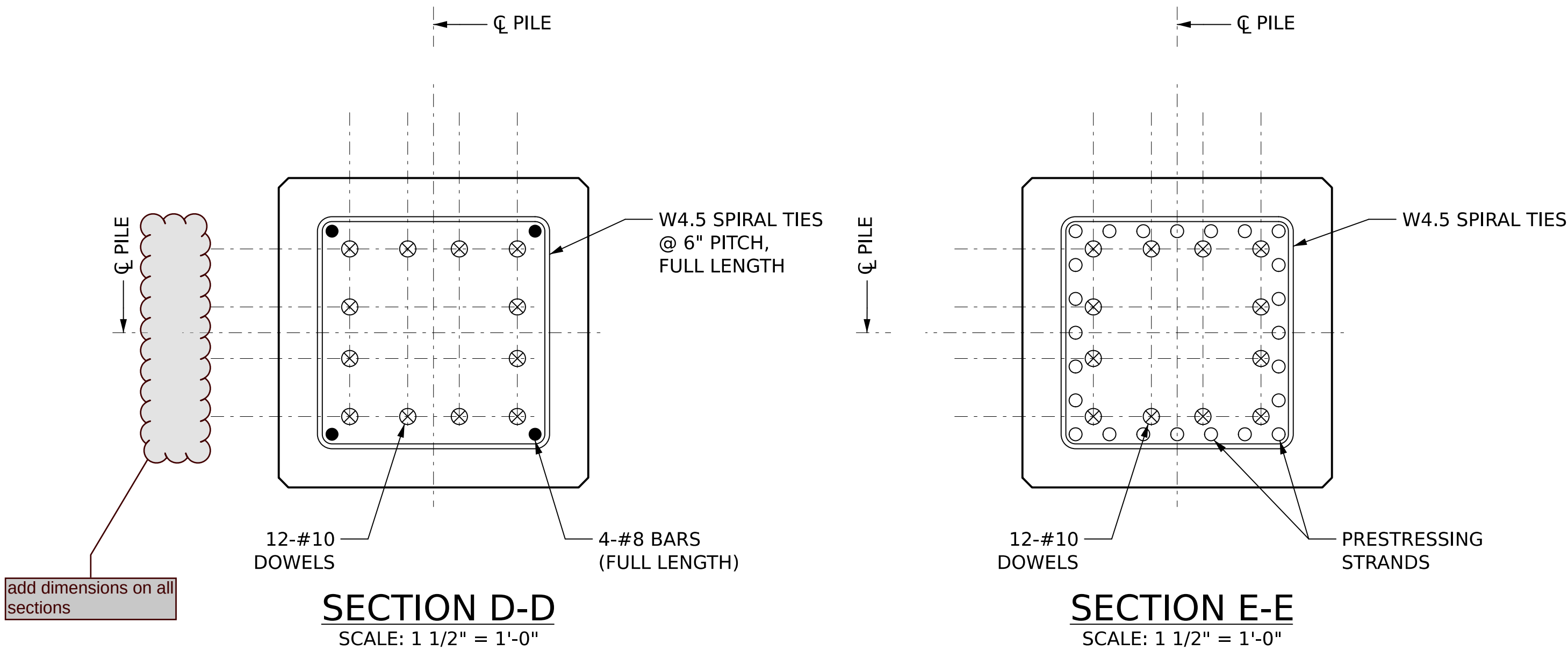
- NOTES:
- FOR SECTIONS D-D & E-E SEE SHEET 3 OF 5 FOR APPLICABLE CONCRETE PILE SIZE AND PILE SPLICE REINFORCEMENT DETAILS.
 - PRESTRESSING STRANDS, SPIRAL TIES AND/OR REINFORCEMENT ARE NOT SHOWN FOR CLARITY.
 - FOR PREFORMED HOLES; USE EITHER REMOVABLE PREFORMING MATERIAL OR STAY-IN-PLACE CORRUGATED GALVANIZED STEEL DUCTS MEETING ASTM SPECIFICATION A653, COATING DESIGNATION G90, 26 GAUGE. USE 2" DIAMETER DUCTS WITH A MINIMUM CORRUGATION (RIB) HEIGHT OF 0.12 IN. FABRICATED WITH EITHER WELDED OR INTERLOCKED SEAMS. GALVANIZING OF WELDED SEAMS IS NOT REQUIRED.
 - FOR TENSION PILES WHERE TOP OF PRESTRESSED PILE IS LESS THAN 3 FEET BELOW PILE CUT-OFF ELEVATION, EXTEND #10 DOWELS INTO CAP BEYOND PILE CUT-OFF ELEVATION TO ACHIEVE DEVELOPMENT AS APPROVED BY THE ENGINEER.

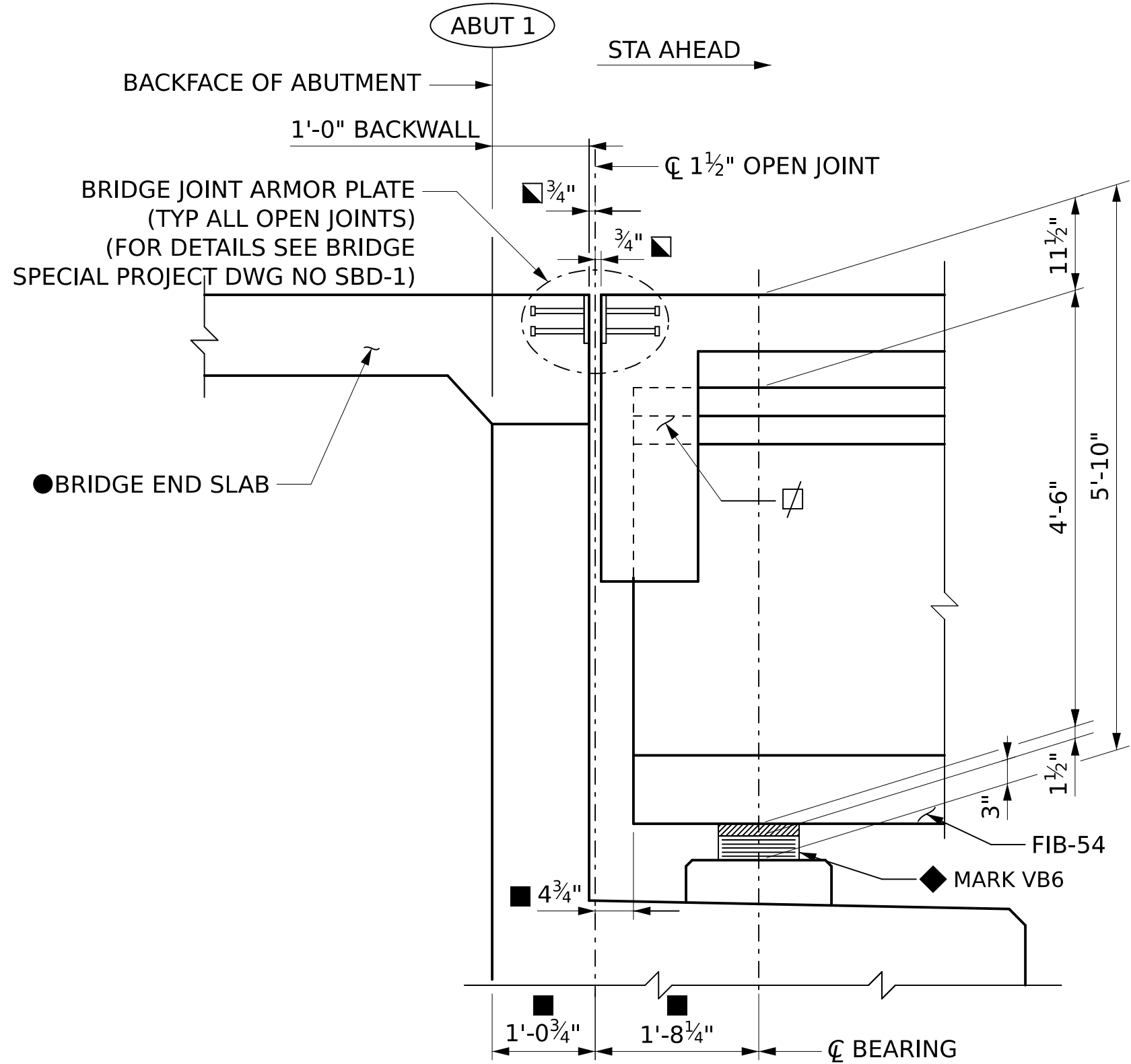
REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12008

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

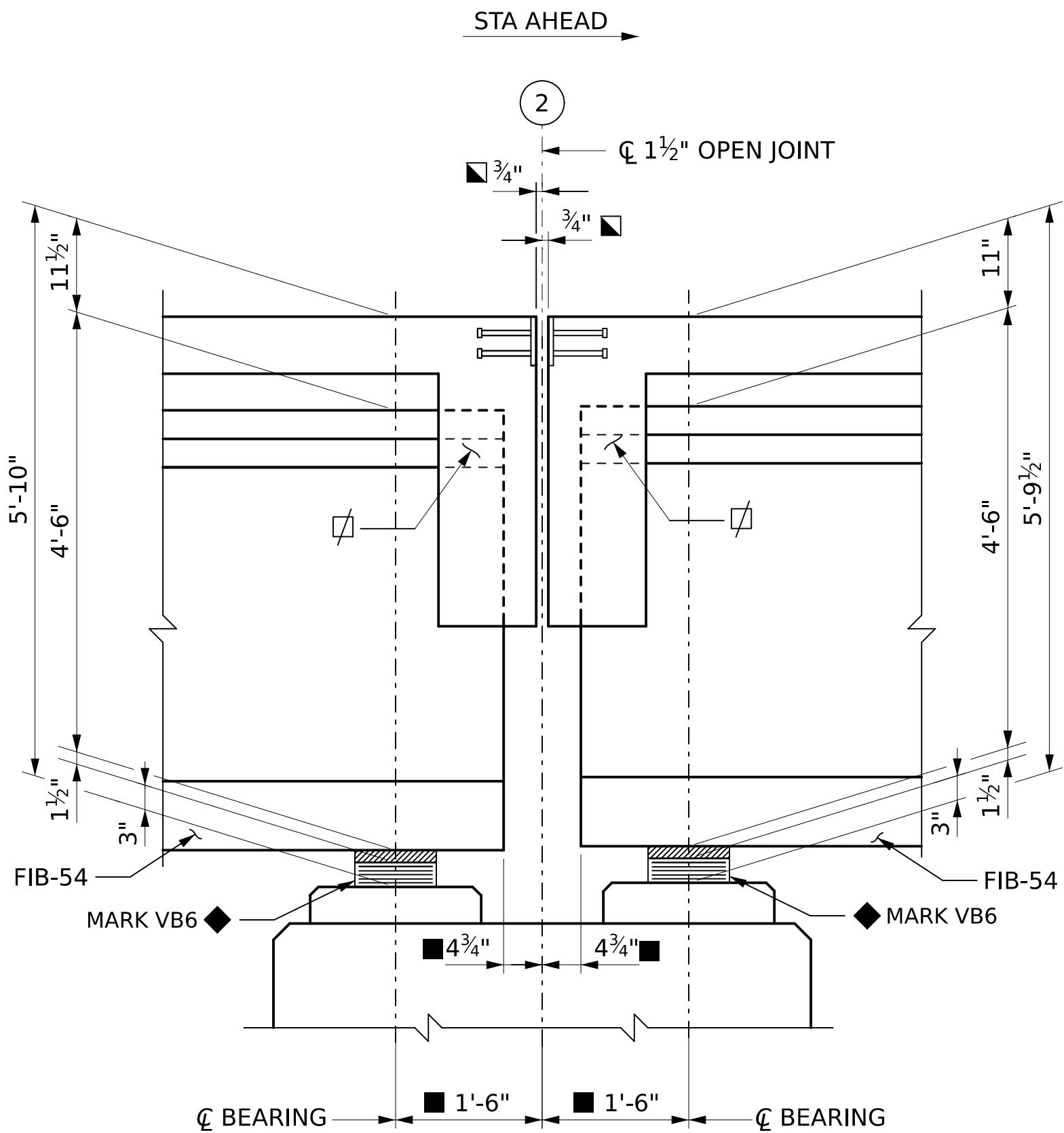


TP 12.3.3.3
Foundations does not
account for use of 16"
Sq. Prestressed
Concrete piles

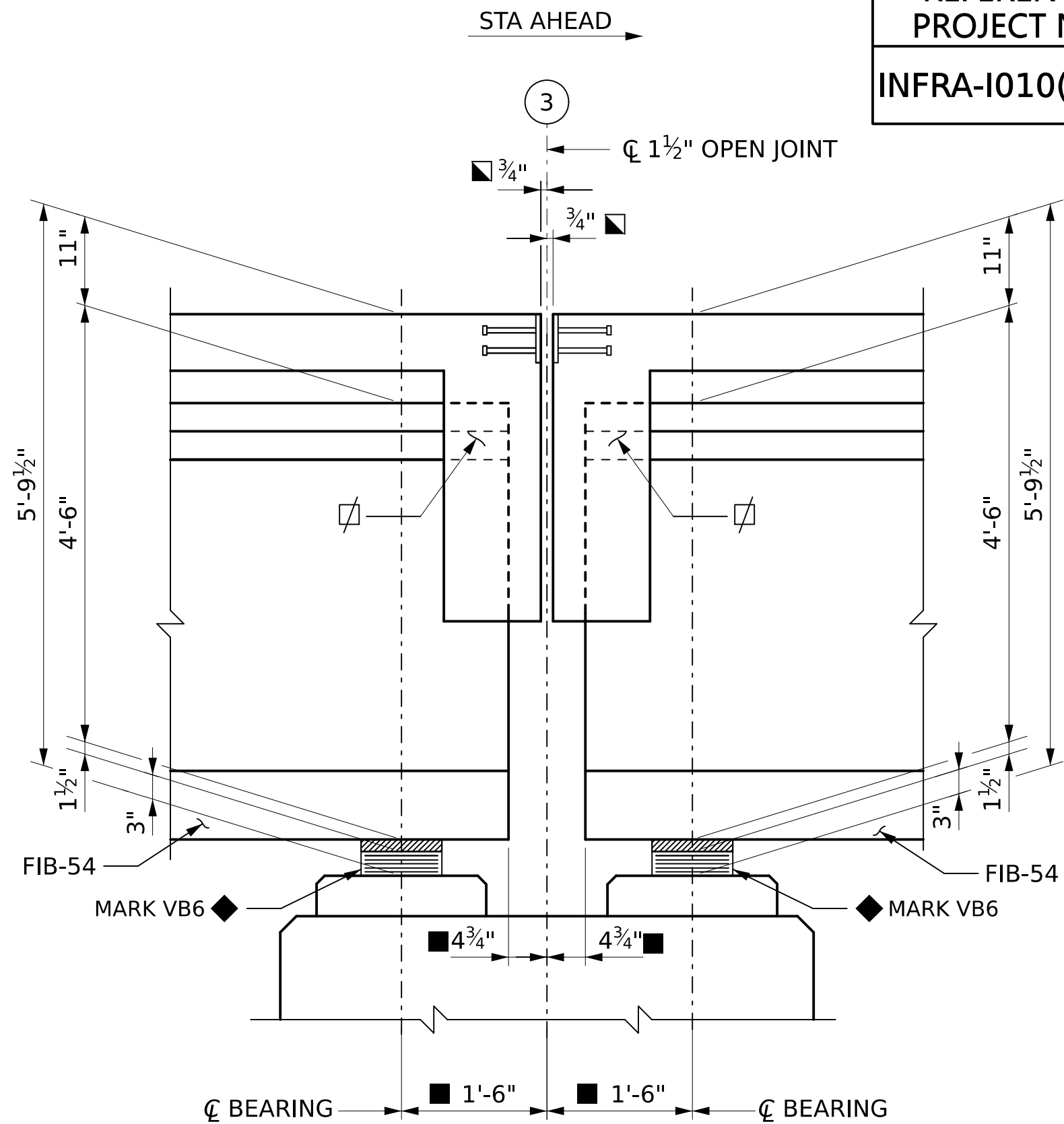




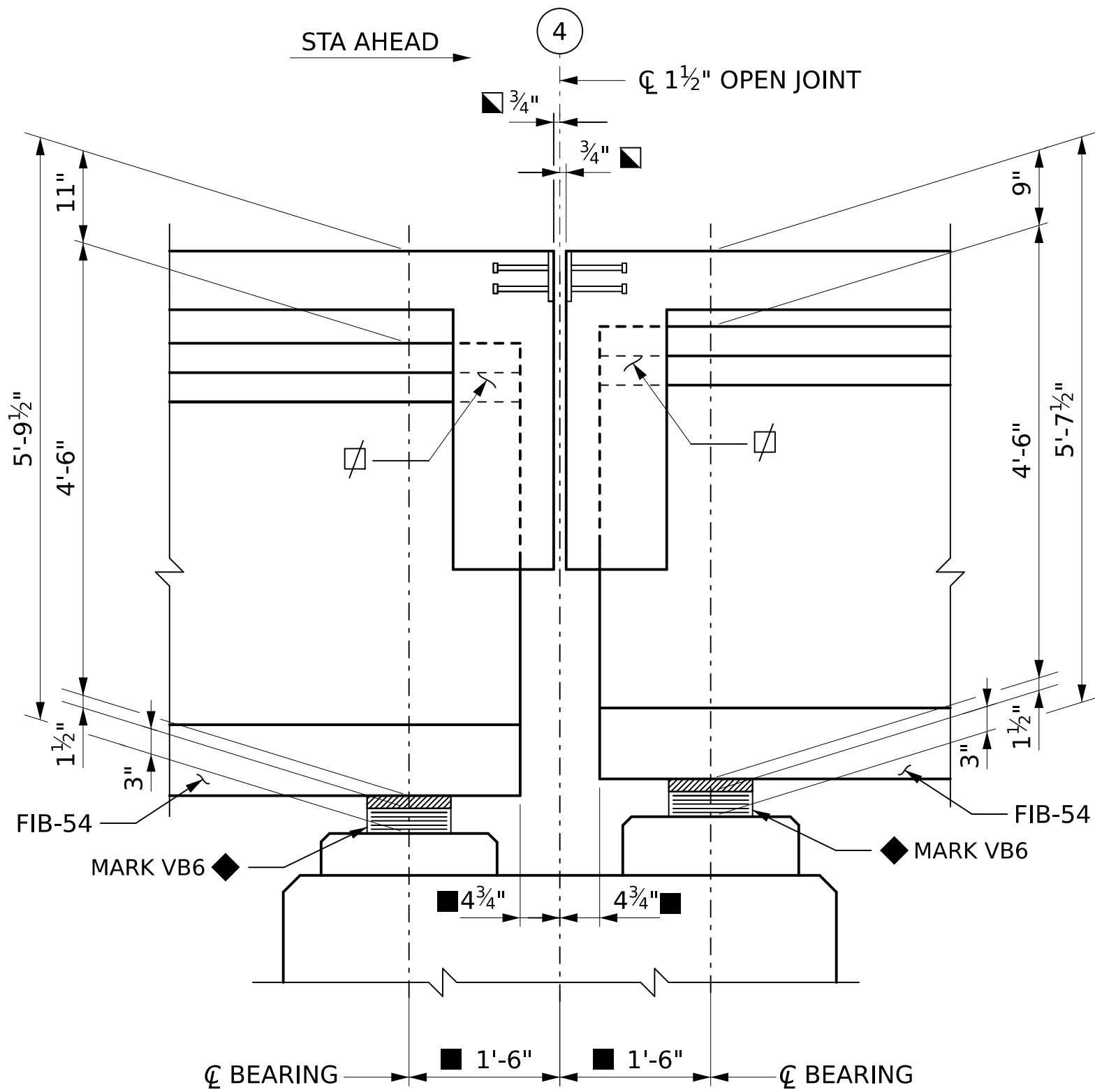
ABUTMENT 1 JOINT DETAILS
SCALE: 3/4" = 1'-0"



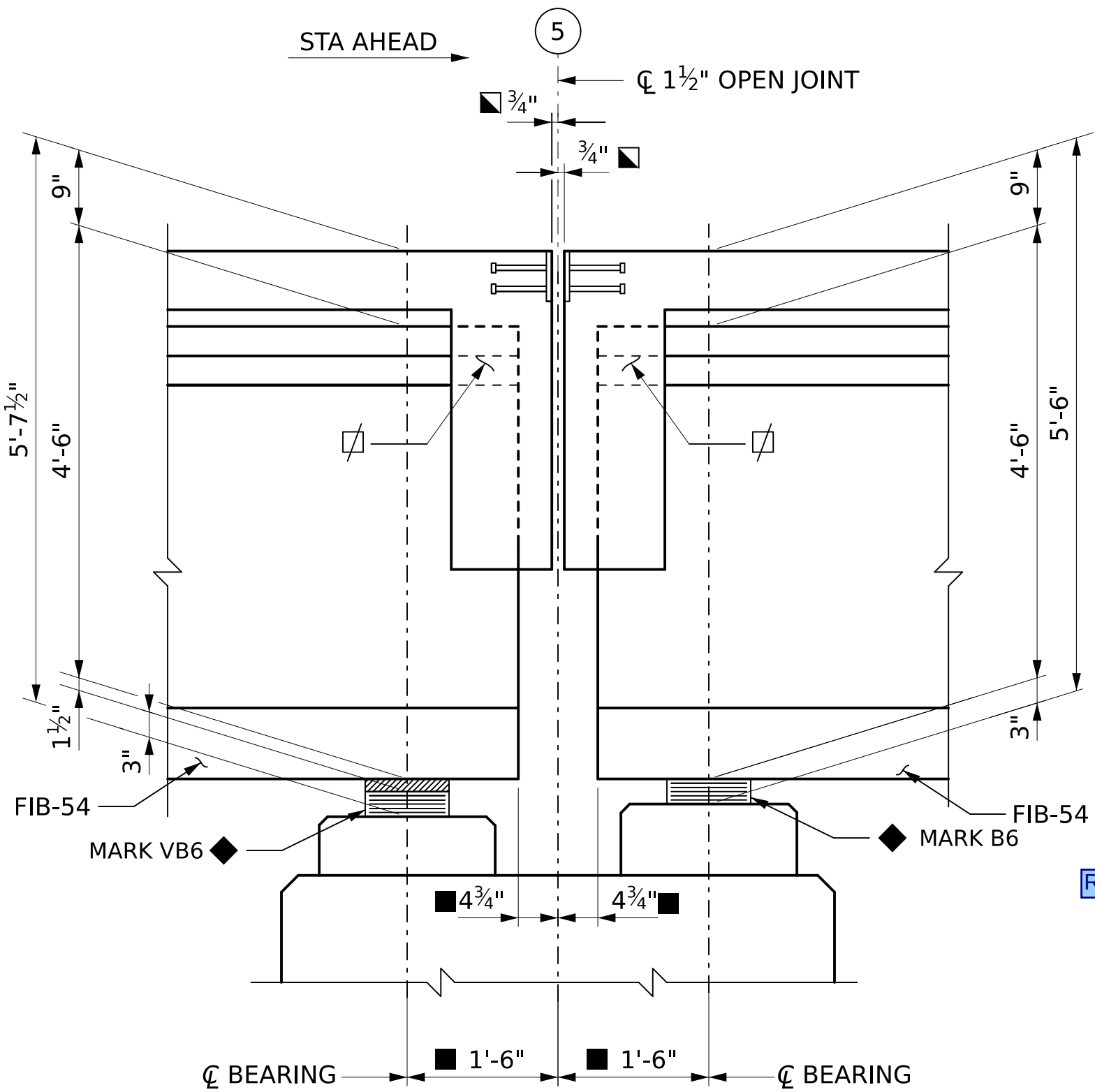
BENT 2 JOINT DETAILS
SCALE: 3/4" = 1'-0"



BENT 3 JOINT DETAILS
SCALE: 3/4" = 1'-0"



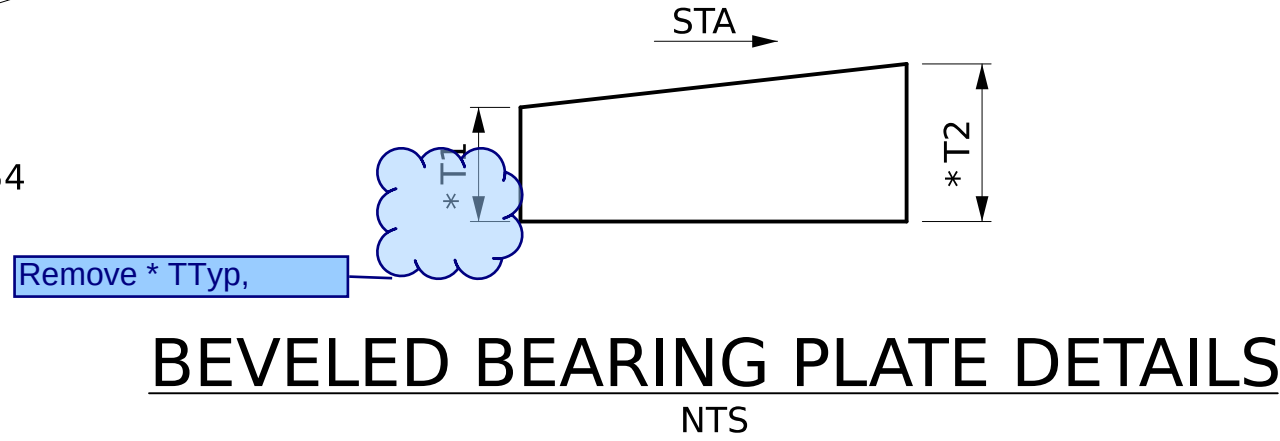
BENT 4 JOINT DETAILS
SCALE: 3/4" = 1'-0"



BENT 5 JOINT DETAILS
SCALE: 3/4" = 1'-0"

*BEARING TYPE AND BEVELED PLATE THICKNESS			
BENT	TYPE	T1 (IN)	T2 (IN)
ABUT 1	4	1.26	1.74
2 NS	4	1.26	1.74
2 FS	4	1.26	1.74
3 NS	4	1.26	1.74
3 FS	4	1.26	1.74
4 NS	4	1.26	1.74
4 FS	4	1.30	1.70
5 NS	4	1.30	1.70
5 FS	2	N/A	N/A
12 NS	2	N/A	N/A

Show sealant detail as was shown for Bridge 10 or be consistent all bridges



- NOTES:
1. JOINT OPENING IS AT 70° F.
 2. NORMAL TO $\perp$ JOINT AND $\perp$ BENT.
 3. FOR EDGE BEAM DETAILS, SEE FIB-54 EDGE BEAM DETAILS SHEETS.
 4. ELASTOMERIC BEARING TYPE MARK, SEE BEARING DETAILS SHEET.
 5. FOR BRIDGE END SLAB DETAILS, SEE BRIDGE SPECIAL PROJECT DWG NO BES-450(IJ)BP.
 6. FOR BENT 12 JOINT DETAIL, SEE JOINT LAYOUT SHEET IN I-10 BUS WB OVER CANAL ST BRIDGE PLANS.



ALABAMA
DEPARTMENT OF
TRANSPORTATION

A	LP	02/02/2024	60% INTERIM SUBMITTAL
B	EL	06/13/2025	90% FINAL SUBMITTAL
REV. NO.	BY	DATE	DESCRIPTION OF REVISION

PE STAMP
DATE

PE STAMP
DATE

QR
CODE

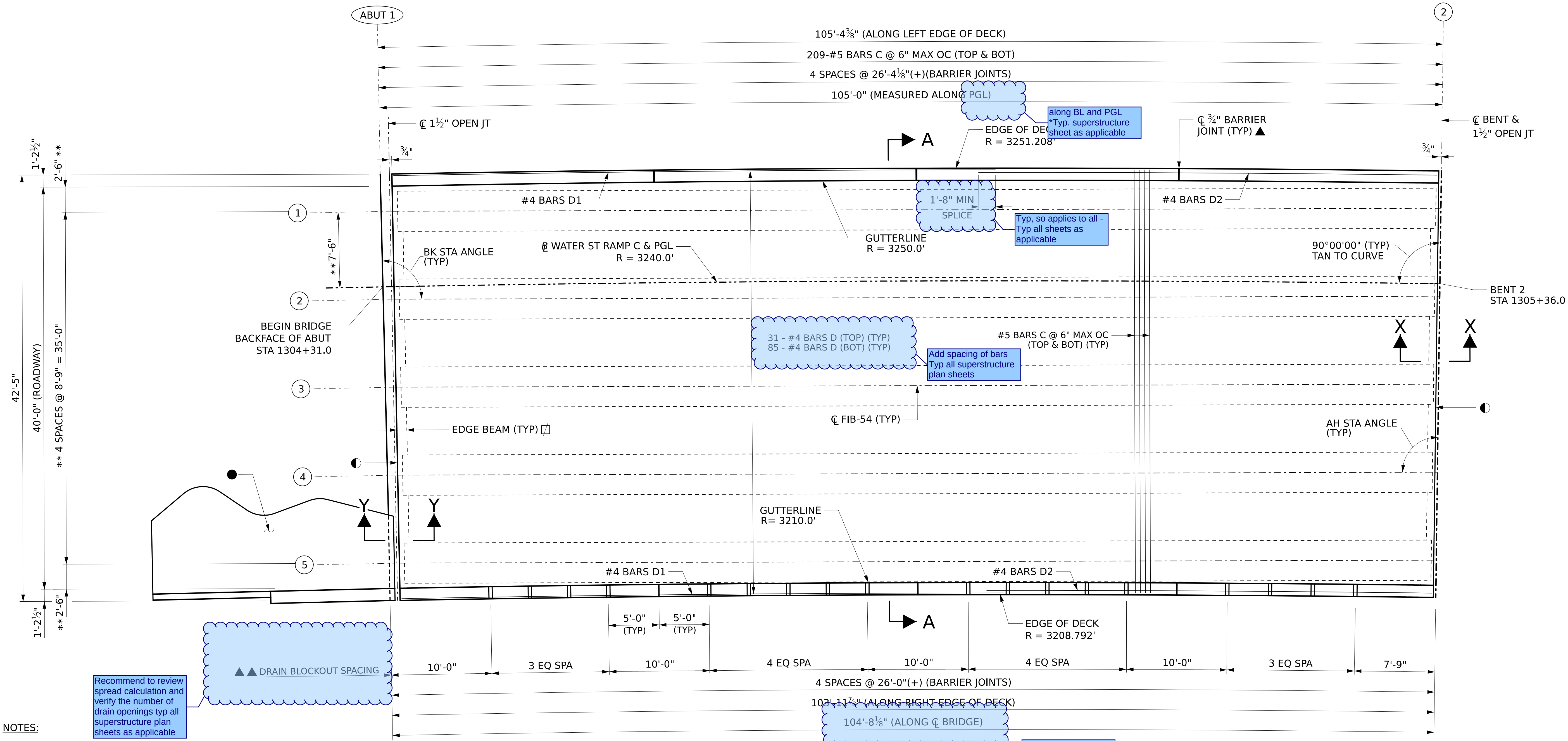


PLAN SUBMITTAL
90%

BIN(S)
021829
COUNTY(S)
MOBILE

DESIGNER: E. LEON
DATE: _____
BRIDGE SHEET NO. 9 OF 40

SHEET TITLE
MOBILE RIVER BRIDGE
WATER STREET RAMP C
JOINT LAYOUT



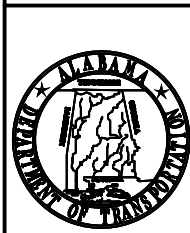
NOTES:

- FOR JOINT LAYOUT, SEE JOINT LAYOUT SHEET.
- ALL JOINT OPENING DIMENSIONS ARE SHOWN @ 70°F.
- FOR BARRIER RAIL REINFORCEMENT, DETAILS, AND JOINT OPENINGS, SEE SPECIAL PROJECT DWG NO BBR-1.
- FOR DECK ELEVATIONS, SEE DECK ELEVATIONS (1 OF 2) SHEET.
- FOR ARMOR PLATE DETAILS, SEE BRIDGE SPECIAL PROJECT DWG NO SBD-1.
- FOR SECTION A-A, SEE TYPICAL SECTION SHEET.
- FOR SECTIONS X-X & Y-Y, SEE FIB-54 EDGE BEAM DETAILS SHEETS.
- FOR DRAIN BLOCKOUT DETAILS, SEE BRIDGE SPECIAL PROJECT DWG NO BBR-1.
- FOR BRIDGE END SLAB DETAILS, SEE BRIDGE SPECIAL PROJECT DWG NO BES-450 (IJ) BP.

- FOR BILL OF REINFORCEMENT, SEE SPANS BILL OF REINFORCEMENT SHEET.
- DIMENSIONS SHOWN ARE ALONG RADIAL LINES AT BACK OF ABUTMENT OR CENTERLINE OF BENT LOCATIONS ONLY.
- FOR DECK REINFORCEMENT DETAILS, SEE BRIDGE SPECIAL PROJECT DWG SDR-1.
- SEE SPLICE NOTES ON BRIDGE SPECIAL PROJECT DWG NO SDR-1.
- SPACING OF BARS C BASED ON THE LONG SIDE OF SPAN.

CHORD GIRDER DATA			
SPAN 1			
BEAM	GIRDER LENGTH	BK STA ANGLE	AH STA ANGLE
1	105'-2 7/8"	90°55'46"	90°55'42"
2	104'-11 1/2"	90°55'45"	90°55'42"
3	104'-8"	90°55'44"	90°55'42"
4	104'-4 5/8"	90°55'42"	90°55'42"
5	104'-1 1/4"	90°55'41"	90°55'42"

GIRDER LENGTHS SHOWN ARE @ GIRDER ALONG CHORDS FROM BACK OF ABUTMENT TO WORKING LINE/REQUIRED DECK CONSTRUCTION JOINT



ALABAMA
DEPARTMENT OF
TRANSPORTATION

A	LP	02/02/2024	60% INTERIM SUBMITTAL
B	EL	06/13/2025	90% FINAL SUBMITTAL
REV. NO.	BY	DATE	DESCRIPTION OF REVISION

PE STAMP
DATE

PE STAMP
DATE

QR
CODE



PLAN SUBMITTAL
90%

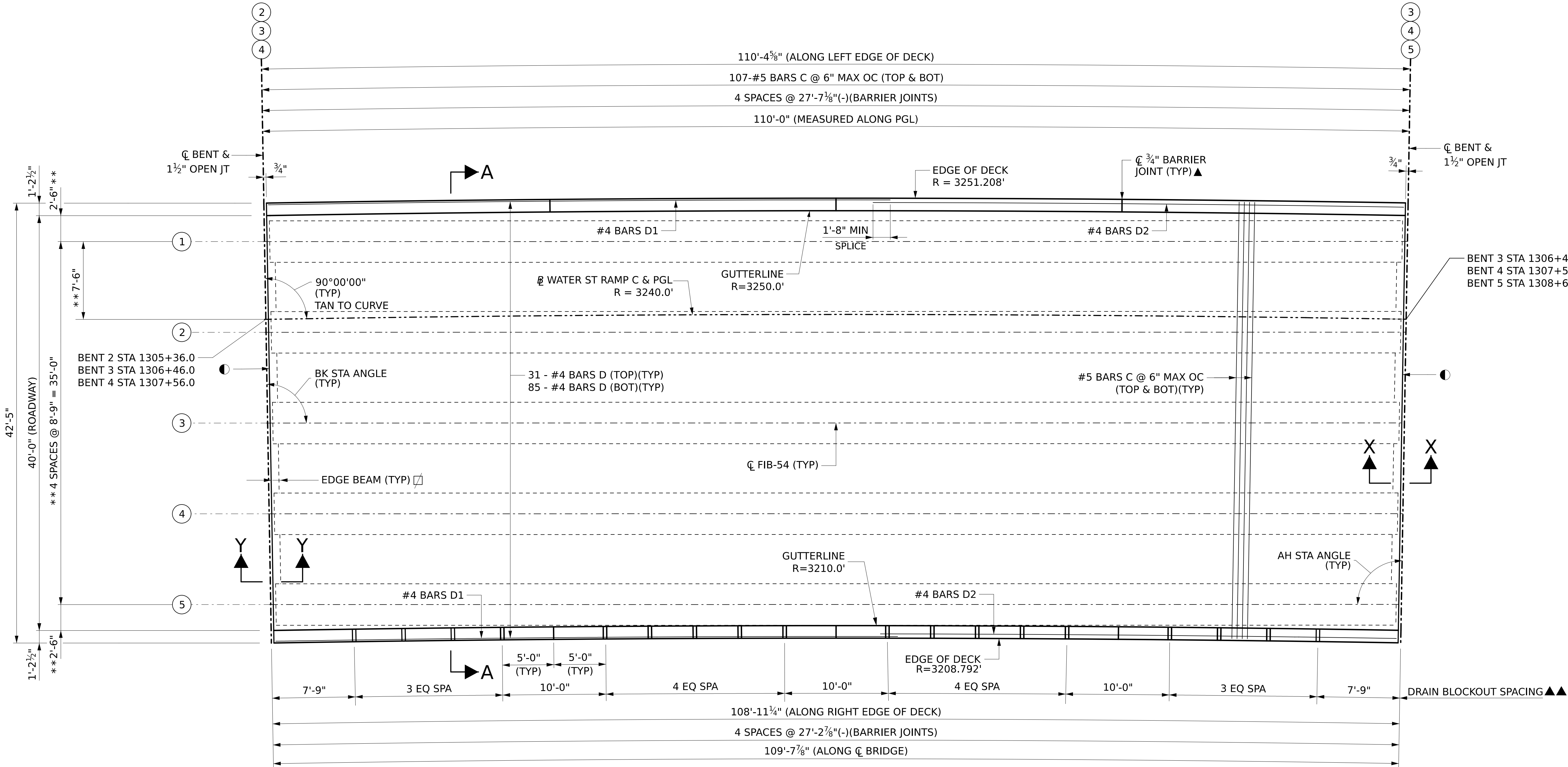
BIN(S)
021829
COUNTY(S)
MOBILE

DESIGNER: E. LEON
DATE:
BRIDGE SHEET NO. 10 OF 40

SHEET TITLE
MOBILE RIVER BRIDGE
WATER STREET RAMP C
SPAN 1 DETAILS

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12011

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION



NOTES:

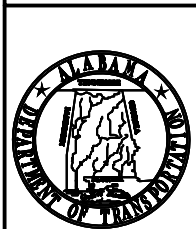
- FOR JOINT LAYOUT, SEE JOINT LAYOUT SHEET.
- ALL JOINT OPENING DIMENSIONS ARE SHOWN @ 70°F.
- FOR BARRIER RAIL REINFORCEMENT, DETAILS, AND JOINT OPENINGS, SEE SPECIAL PROJECT DWG NO BBR-1.
- FOR DECK ELEVATIONS, SEE DECK ELEVATIONS SHEETS.
- FOR ARMOR PLATE DETAILS, SEE BRIDGE SPECIAL PROJECT DWG NO SBD-1.
- FOR SECTION A-A, SEE TYPICAL SECTION SHEET.
- FOR SECTIONS X-X & Y-Y, SEE FIB-54 EDGE BEAM DETAILS SHEETS.
- FOR DRAIN BLOCKOUT DETAILS, SEE BRIDGE SPECIAL PROJECT DWG NO BBR-1.
- FOR BILL OF REINFORCEMENT, SEE SPANS BILL OF REINFORCEMENT SHEET.
- DIMENSIONS SHOWN ARE ALONG RADIAL LINES AT BACK OF ABUTMENT OR CENTERLINE OF BENT LOCATIONS ONLY.
- FOR DECK REINFORCEMENT DETAILS, SEE BRIDGE SPECIAL PROJECT DWG SDR-1.
- SEE SPLICE NOTES ON BRIDGE SPECIAL PROJECT DWG NO SDR-1.
- SPACING OF BARS C BASED ON THE LONG SIDE OF SPAN.

CHORD GIRDER DATA			
SPANS 2 THRU 4			
BEAM	GIRDER LENGTH	BK STA ANGLE	AH STA ANGLE
1	110'-3"	90°58'21"	90°58'21"
2	109'-11 3/8"	90°58'21"	90°58'21"
3	109'-7 7/8"	90°58'21"	90°58'21"
4	109'-4 1/4"	90°58'21"	90°58'21"
5	109'-0 3/4"	90°58'21"	90°58'21"

GIRDER LENGTHS SHOWN ARE @ GIRDER ALONG CHORDS FROM WORKING LINE/REQUIRED DECK CONSTRUCTION JOINT TO WORKING LINE/REQUIRED DECK CONSTRUCTION JOINT

PLAN - SPANS 2 THRU 4

SCALE: 3/16" = 1'-0"



ALABAMA
DEPARTMENT OF
TRANSPORTATION

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
A	LP	02/02/2024	60% INTERIM SUBMITTAL
B	EL	06/13/2025	90% FINAL SUBMITTAL

PE STAMP
DATE

PE STAMP
DATE

QR
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PLAN SUBMITTAL
90%

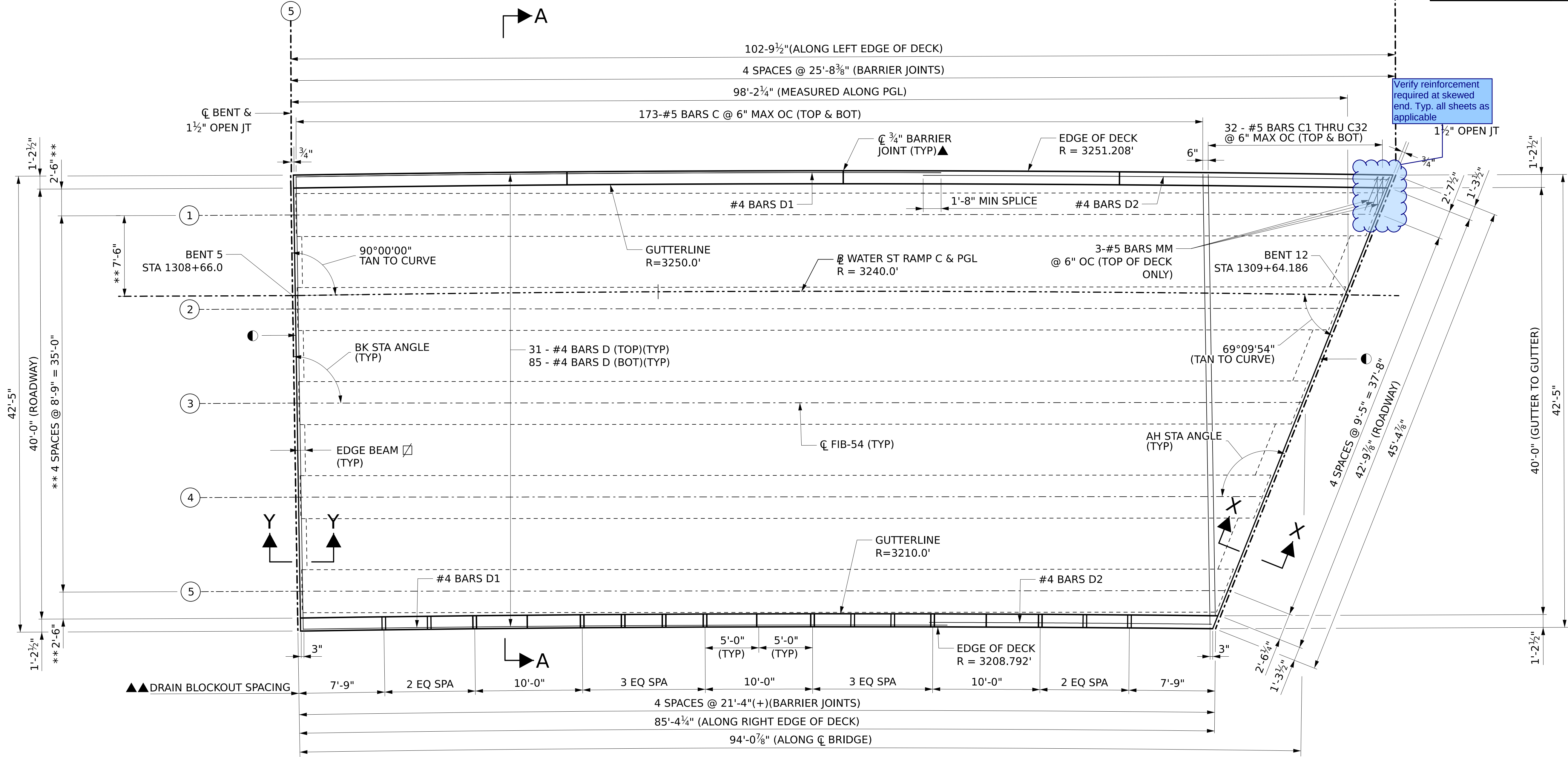
BIN(S)
021829
COUNTY(S)
MOBILE

DESIGNER: E. LEON
DATE: _____
BRIDGE SHEET NO. 11 OF 40

SHEET TITLE
MOBILE RIVER BRIDGE
WATER STREET RAMP C
SPANS 2 THRU 4 DETAILS

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12012

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION



PLAN - SPAN 5
SCALE: 3/16" = 1'-0"

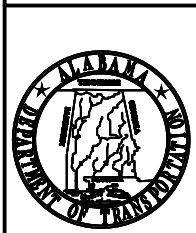
NOTES:

- FOR JOINT LAYOUT, SEE JOINT LAYOUT SHEET.
- ALL JOINT OPENING DIMENSIONS ARE SHOWN @ 70°F. for 1'-2 1/2" width (Typ.)
- ▲ FOR BARRIER RAIL REINFORCEMENT, DETAILS, AND JOINT OPENINGS, SEE SPECIAL PROJECT DWG NO BBR-1.
- FOR DECK ELEVATIONS, SEE DECK ELEVATIONS (2 OF 2) SHEET.
- FOR ARMOR PLATE DETAILS, SEE BRIDGE SPECIAL PROJECT DWG NO SBD-1.
- FOR SECTION A-A, SEE TYPICAL SECTION SHEET.
- ☐ FOR SECTION X-X & Y-Y, SEE FIB-54 EDGE BEAM DETAILS SHEETS.
- ▲▲ FOR DRAIN BLOCKOUT DETAILS, SEE BRIDGE SPECIAL PROJECT DWG NO BBR-1.

- FOR BILL OF REINFORCEMENT, SEE SPANS BILL OF REINFORCEMENT SHEET.
- ** 10. DIMENSIONS SHOWN ARE ALONG RADIAL LINES AT BACK OF ABUTMENT OR CENTERLINE OF BENT LOCATIONS ONLY.
- FOR DECK REINFORCEMENT DETAILS, SEE BRIDGE SPECIAL PROJECT DWG SDR-1.
- SEE SPLICE NOTES ON BRIDGE SPECIAL PROJECT DWG NO SDR-1.
- SPACING OF BARS C BASED ON THE LONG SIDE OF SPAN.

CHORD GIRDER DATA			
SPAN 5			
BEAM	GIRDER LENGTH	BK STA ANGLE	AH STA ANGLE
1	101'-3 3/8"	90°52'05"	111°42'11"
2	97'-8"	90°52'05"	111°42'11"
3	94'-0 5/8"	90°52'05"	111°42'11"
4	90'-5 1/4"	90°52'05"	111°42'11"
5	86'-9 7/8"	90°52'05"	111°42'11"

GIRDER LENGTHS SHOWN ARE @ GIRDER ALONG CHORDS FROM WORKING LINE/REQUIRED DECK CONSTRUCTION JOINT TO WORKING LINE/REQUIRED DECK CONSTRUCTION JOINT



ALABAMA
DEPARTMENT OF
TRANSPORTATION

A	LP	02/02/2024	60% INTERIM SUBMITTAL
B	EL	06/13/2025	90% FINAL SUBMITTAL
REV. NO.	BY	DATE	DESCRIPTION OF REVISION

PE STAMP
DATE

PE STAMP
DATE

QR
CODE



PLAN SUBMITTAL
90%

BIN(S)
021829
COUNTY(S)
MOBILE

DESIGNER: E. LEON
DATE: _____
BRIDGE SHEET NO. 12 OF 40

SHEET TITLE
MOBILE RIVER BRIDGE
WATER STREET RAMP C
SPAN 5 DETAILS

0

1"

2"

SHEET REFERENCE

ALABAMA
DEPARTMENT OF
TRANSPORTATION

A

LP

02/02/2024

60% INTERIM SUBMITTAL

B

EL

06/13/2025

90% FINAL SUBMITTAL

REV. NO.

BY

DATE

DESCRIPTION OF REVISION

PE STAMP

PE STAMP

QR CODE

 **Kiewit**

 **MASSMAN
TRAYLOR**
A JOINT VENTURE

 **VOLKERT**

PLAN SUBMITTAL

90%

BIN(S)

021829

COUNTY(S)

MOBILE

DESIGNER: E. LEON

DATE:

BRIDGE SHEET NO. 13 OF 40

SHEET TITLE

MOBILE RIVER BRIDGE
WATER STREET RAMP C
SPANS BILL OF REINFORCEMENT

BILL OF REINFORCEMENT (SPAN 1)

MARK	SIZE	NO	LENGTH	LOCATION	BENDING
BL	4	16	▲	RAIL	STRAIGHT
B1	4	415	5'-11¼"	RAIL	▲
B2	4	415	4'-6"	RAIL	▲
C	5	418	42'-1"	DECK	STRAIGHT
D1	4	116	60'-0"	DECK	STRAIGHT
D2	4	116	45'-6"	DECK	STRAIGHT
ABUTMENT 1					
L1	5	1	3'-2"	EDGE BEAM	SEE DIAG
L2	5	4	5'-6½"	EDGE BEAM	SEE DIAG
R1	8	6	4'-8"	EDGE BEAM	STRAIGHT
R2	8	4	2'-4"	EDGE BEAM	STRAIGHT
S1	5	12	7'-7"	EDGE BEAM	SEE DIAG
S1A	5	4	5'-9½"	EDGE BEAM	SEE DIAG
S2	5	12	13'-9"	EDGE BEAM	SEE DIAG
S2A	5	4	8'-4½"	EDGE BEAM	SEE DIAG
W1	5	2	35'-3"	EDGE BEAM	STRAIGHT
W1A	5	4	9'-0"	EDGE BEAM	STRAIGHT
W1B	5	4	4'-8"	EDGE BEAM	STRAIGHT
W2	5	12	7'-10"	EDGE BEAM	STRAIGHT
W3	5	2	7'-0"	EDGE BEAM	STRAIGHT
BENT 2 BK					
L1	5	5	3'-2"	EDGE BEAM	SEE DIAG
R1	8	6	4'-8"	EDGE BEAM	STRAIGHT
R2	8	4	2'-4"	EDGE BEAM	STRAIGHT
S1	5	24	7'-7"	EDGE BEAM	SEE DIAG
S1A	5	8	5'-9½"	EDGE BEAM	SEE DIAG
W1	5	2	35'-3"	EDGE BEAM	STRAIGHT
W2	5	12	7'-10"	EDGE BEAM	STRAIGHT

BAR S1

2'-8"

6"

1'-3"

BAR L1

2'-8"

6"

BAR S2

5'-9"

6"

1'-3"

BAR S1A

2'-8"

6"

1'-3"

1'-4½"

BAR L2

5'-0½"

6"

BAR S2A

4'-0"

6"

1'-3"

2'-7½"

BAR BENDING DIAGRAM

▲ SEE BRIDGE SPECIAL PROJECT DWG NO BBR-1.

*** LENGTHS SHOWN FOR BARS D ARE BASED ON THE LONG SIDE OF SPAN AND INCLUDE ADDITIONAL LENGTH REQUIRED FOR SPLICE(S). AMOUNT OF SPLICE WILL INCREMENTALLY INCREASE FROM LONG SIDE OF SPAN TO SHORT SIDE.

BILL OF REINFORCEMENT (SPANS 2 & 3) (EACH)

MARK	SIZE	NO	LENGTH	LOCATION	BENDING
BL	4	16	▲	RAIL	STRAIGHT
B1	4	435	5'-11¼"	RAIL	▲
B2	4	435	4'-6"	RAIL	▲
C	5	438	42'-1"	DECK	STRAIGHT
D1	4	116	60'-0"	DECK	STRAIGHT
D2	4	116	51'-7"	DECK	STRAIGHT
BENT 2 AH & BENT 3 AH					
L1	5	1	3'-11½"	EDGE BEAM	SEE DIAG
L2	5	4	5'-6"	EDGE BEAM	SEE DIAG
R1	8	6	4'-8"	EDGE BEAM	STRAIGHT
R2	8	4	2'-4"	EDGE BEAM	STRAIGHT
S1	5	12	7'-6"	EDGE BEAM	SEE DIAG
S1A	5	4	5'-9"	EDGE BEAM	SEE DIAG
S2	5	12	13'-8"	EDGE BEAM	SEE DIAG
S2A	5	4	8'-4"	EDGE BEAM	SEE DIAG
W1	5	2	35'-3"	EDGE BEAM	STRAIGHT
W1A	5	4	9'-0"	EDGE BEAM	STRAIGHT
W1B	5	4	4'-8"	EDGE BEAM	STRAIGHT
W2	5	12	7'-10"	EDGE BEAM	STRAIGHT
W3	5	2	7'-0"	EDGE BEAM	STRAIGHT
BENT 3 BK & BENT 4 BK					
L1	5	5	3'-1½"	EDGE BEAM	SEE DIAG
R1	8	6	4'-8"	EDGE BEAM	STRAIGHT
R2	8	4	2'-4"	EDGE BEAM	STRAIGHT
S1	5	24	7'-6"	EDGE BEAM	SEE DIAG
S1A	5	8	5'-9"	EDGE BEAM	SEE DIAG
W1	5	2	35'-3"	EDGE BEAM	STRAIGHT
W2	5	12	7'-10"	EDGE BEAM	STRAIGHT

BAR S1

2'-7½"

6"

1'-3"

BAR L1

2'-7½"

6"

BAR S2

5'-8½"

6"

1'-3"

BAR S1A

2'-7½"

6"

1'-3"

1'-4½"

BAR L2

5'-0"

6"

BAR S2A

3'-11½"

6"

1'-3"

2'-7½"

BAR BENDING DIAGRAM

▲ SEE BRIDGE SPECIAL PROJECT DWG NO BBR-1.

*** LENGTHS SHOWN FOR BARS D ARE BASED ON THE LONG SIDE OF SPAN AND INCLUDE ADDITIONAL LENGTH REQUIRED FOR SPLICE(S). AMOUNT OF SPLICE WILL INCREMENTALLY INCREASE FROM LONG SIDE OF SPAN TO SHORT SIDE.

BILL OF REINFORCEMENT (SPAN 4)

MARK	SIZE	NO	LENGTH	LOCATION	BENDING
BL	4	16	▲	RAIL	STRAIGHT
B1	4	435	5'-11¼"	RAIL	▲
B2	4	435	4'-6"	RAIL	▲
C	5	438	42'-1"	DECK	STRAIGHT
D1	4	116	60'-0"	DECK	STRAIGHT
D2	4	116	51'-7"	DECK	STRAIGHT
BENT 4 AH					
L1	5	1	2'-11½"	EDGE BEAM	SEE DIAG
L2	5	4	5'-4"	EDGE BEAM	SEE DIAG
R1	8	6	4'-8"	EDGE BEAM	STRAIGHT
R2	8	4	2'-4"	EDGE BEAM	STRAIGHT
S1	5	12	7'-2"	EDGE BEAM	SEE DIAG
S1A	5	4	5'-7"	EDGE BEAM	SEE DIAG
S2	5	12	13'-4"	EDGE BEAM	SEE DIAG
S2A	5	4	8'-2"	EDGE BEAM	SEE DIAG
W1	5	2	35'-3"	EDGE BEAM	STRAIGHT
W1A	5	4	9'-0"	EDGE BEAM	STRAIGHT
W1B	5	4	4'-8"	EDGE BEAM	STRAIGHT
W2	5	12	7'-10"	EDGE BEAM	STRAIGHT
W3	5	2	7'-0"	EDGE BEAM	STRAIGHT
BENT 5 BK					
L1	5	5	2'-11½"	EDGE BEAM	SEE DIAG
R1	8	6	4'-8"	EDGE BEAM	STRAIGHT
R2	8	4	2'-4"	EDGE BEAM	STRAIGHT
S1	5	24	7'-2"	EDGE BEAM	SEE DIAG
S1A	5	8	5'-7"	EDGE BEAM	SEE DIAG
W1	5	2	35'-3"	EDGE BEAM	STRAIGHT
W2	5	12	7'-10"	EDGE BEAM	STRAIGHT

BAR S1

2'-5½"

6"

1'-3"

BAR L1

2'-5½"

6"

BAR S2

5'-6½"

6"

1'-3"

BAR S1A

2'-5½"

6"

1'-3"

1'-4½"

BAR L2

4'-10"

6"

BAR S2A

3'-9½"

6"

1'-3"

2'-7½"

BAR BENDING DIAGRAM

▲ SEE BRIDGE SPECIAL PROJECT DWG NO BBR-1.

*** LENGTHS SHOWN FOR BARS D ARE BASED ON THE LONG SIDE OF SPAN AND INCLUDE ADDITIONAL LENGTH REQUIRED FOR SPLICE(S). AMOUNT OF SPLICE WILL INCREMENTALLY INCREASE FROM LONG SIDE OF SPAN TO SHORT SIDE.

BILL OF REINFORCEMENT (SPAN 5)

MARK	SIZE	NO	LENGTH	LOCATION	BENDING
BL	4	16	▲	RAIL	STRAIGHT
B1	4	477	5'-11¼"	RAIL	▲
B2	4	477	4'-6"	RAIL	▲
	5	342	42'-1"	DECK	STRAIGHT
C1 - C33	5	66	VARIES FROM 42'-1" - 1'-1"	DECK	STRAIGHT
D	4	116	60'-0"	DECK	STRAIGHT
D1 - D116	4	116	VARIES FROM 44'-0" - 26'-7"	DECK	STRAIGHT
MM	5	3	4'-4"	DECK	SEE DIAG
BENT 5 AH					
L1	5	5	2'-11½"	EDGE BEAM	SEE DIAG
R1	8	6	4'-8"	EDGE BEAM	STRAIGHT
R2	8	4	2'-4"	EDGE BEAM	STRAIGHT
S1	5	12	7'-2"	EDGE BEAM	SEE DIAG
S1A	5	4	5'-7"	EDGE BEAM	SEE DIAG
W1	5	2	35'-3"	EDGE BEAM	STRAIGHT
W2	5	12	7'-10"	EDGE BEAM	STRAIGHT
BENT 12 BK					
L1	5	5	2'-11½"	EDGE BEAM	SEE DIAG
R1	8	6	4'-8"	EDGE BEAM	STRAIGHT
R2	8	4	2'-4"	EDGE BEAM	STRAIGHT
S1	5	24	7'-2"	EDGE BEAM	SEE DIAG
S1A	5	8	5'-7"	EDGE BEAM	SEE DIAG
W1	5	2	37'-11"	EDGE BEAM	STRAIGHT
W2	5	12	8'-5"	EDGE BEAM	STRAIGHT

BAR S1

2'-5½"

6"

1'-3"

BAR L1

2'-5½"

6"

BAR S1A

2'-5½"

6"

1'-3"

1'-4½"

BAR MM

3'-9"

BAR BENDING DIAGRAM

▲ SEE BRIDGE SPECIAL PROJECT DWG NO BBR-1.

*** LENGTHS SHOWN FOR BARS D ARE BASED ON THE LONG SIDE OF SPAN AND INCLUDE ADDITIONAL LENGTH REQUIRED FOR SPLICE(S). AMOUNT OF SPLICE WILL INCREMENTALLY INCREASE FROM LONG SIDE OF SPAN TO SHORT SIDE.

ALABAMA
DEPARTMENT OF
TRANSPORTATION

A

LP

02/02/2024

60% INTERIM SUBMITTAL

B

EL

06/13/2025

90% FINAL SUBMITTAL

REV. NO.

BY

DATE

DESCRIPTION OF REVISION

PE STAMP

PE STAMP

QR CODE

 **Kiewit**

 **MASSMAN
TRAYLOR**
A JOINT VENTURE

 **VOLKERT**

PLAN SUBMITTAL

90%

BIN(S)

021829

COUNTY(S)

MOBILE

DESIGNER: E. LEON

DATE:

BRIDGE SHEET NO. 13 OF 40

SHEET TITLE

MOBILE RIVER BRIDGE
WATER STREET RAMP C
SPANS BILL OF REINFORCEMENT

PRELIMINARY

NOT TO BE USED FOR CONSTRUCTION

6/13/2025

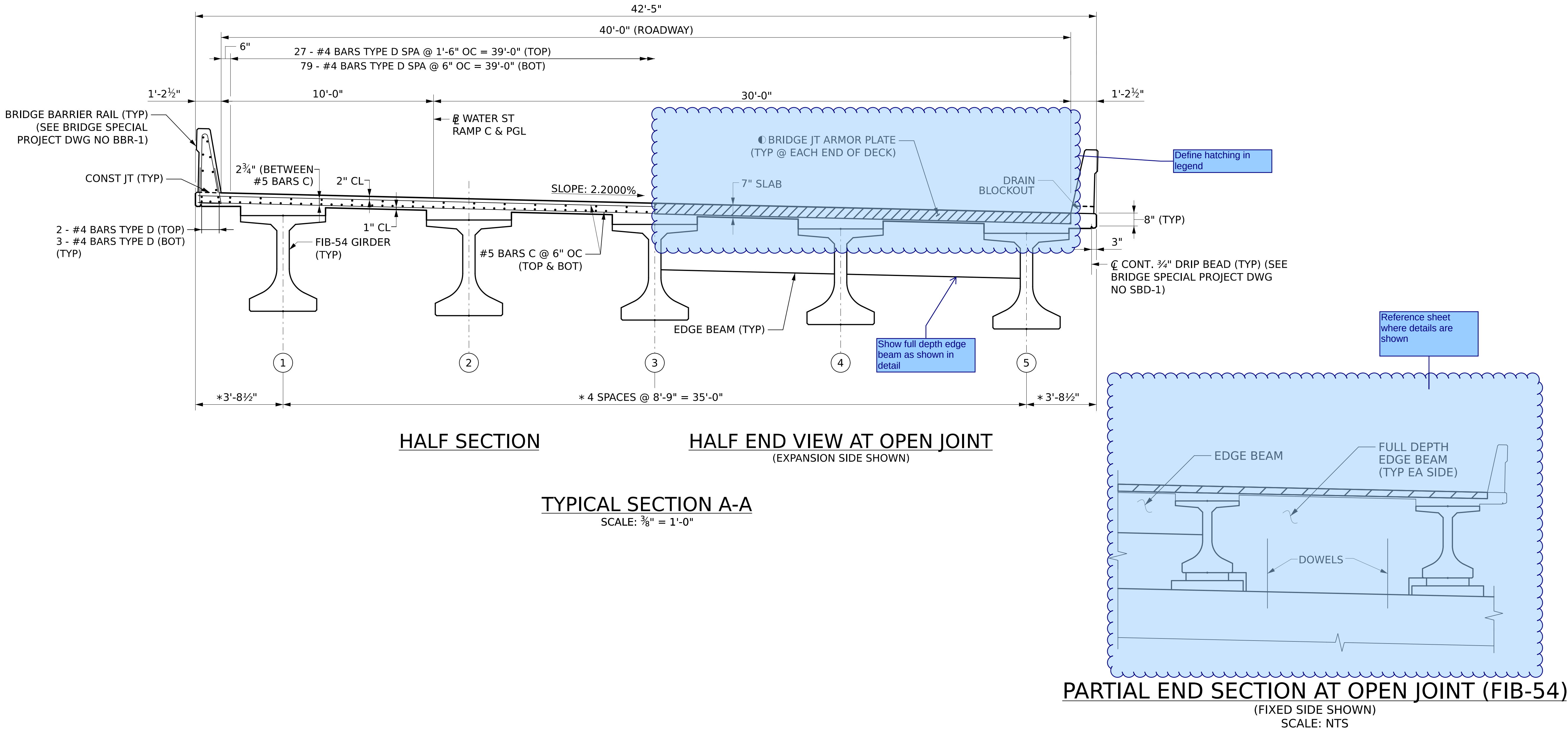
7:48:23 AM

kirk.mcdonald

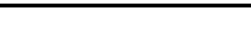
MRB-S01-BR-12013.dgn

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12014

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

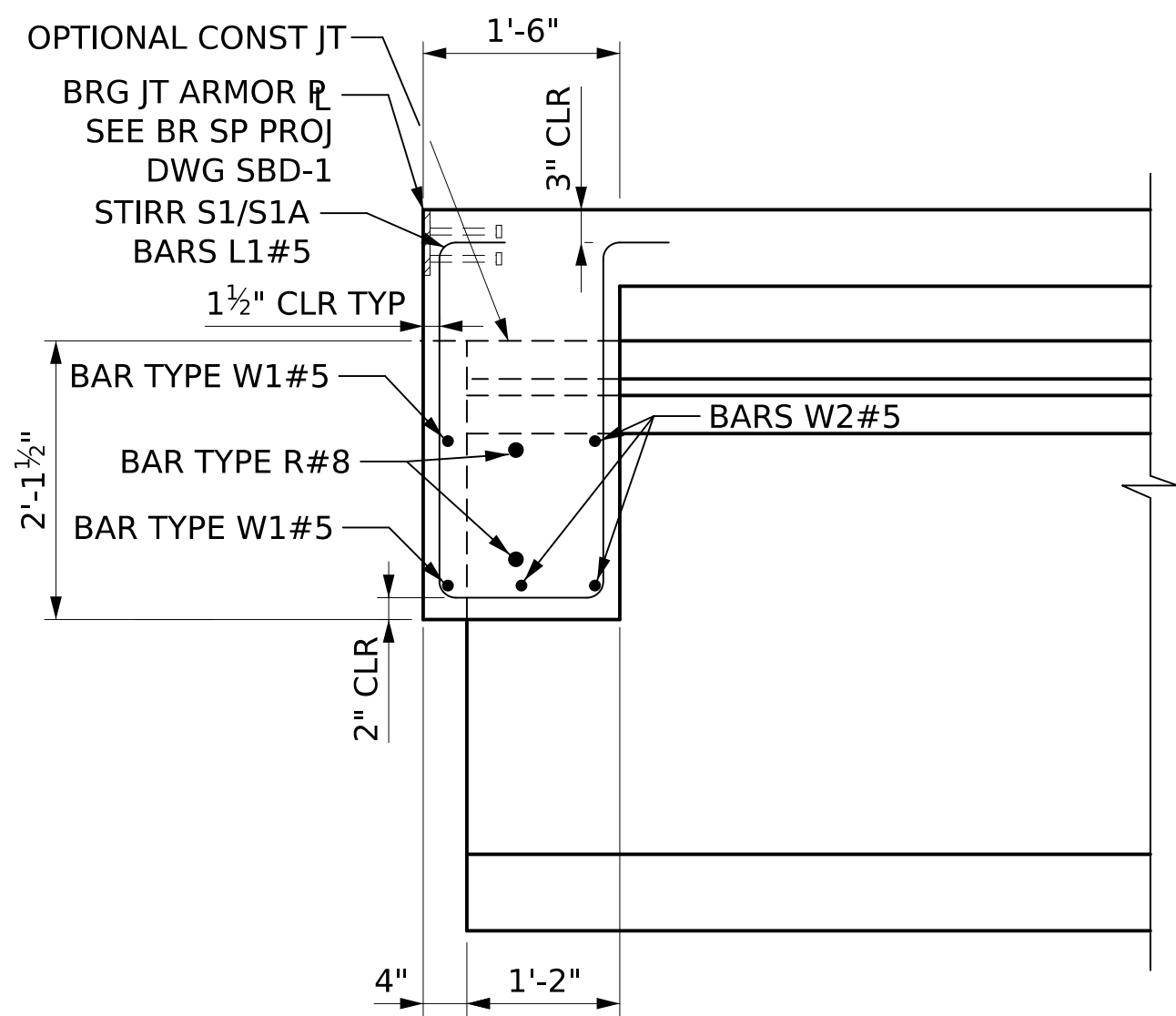


- NOTES:
- * 1. SPACING SHOWN FOR GIRDERS IS ALONG RADIAL LINES AT THE BEGINNING AND AT CENTERLINE BENT/ REQ'D DECK CONST JOINT.
 - 2. FOR BRIDGE ARMOR PLATE DETAILS, SEE BRIDGE SPECIAL PROJECT DRAWING NO SBD-1.
 - 3. FOR OPTIONAL SPLICE NOTES OF BARS C, SEE BRIDGE SPECIAL PROJECT DRAWING SDR-1.

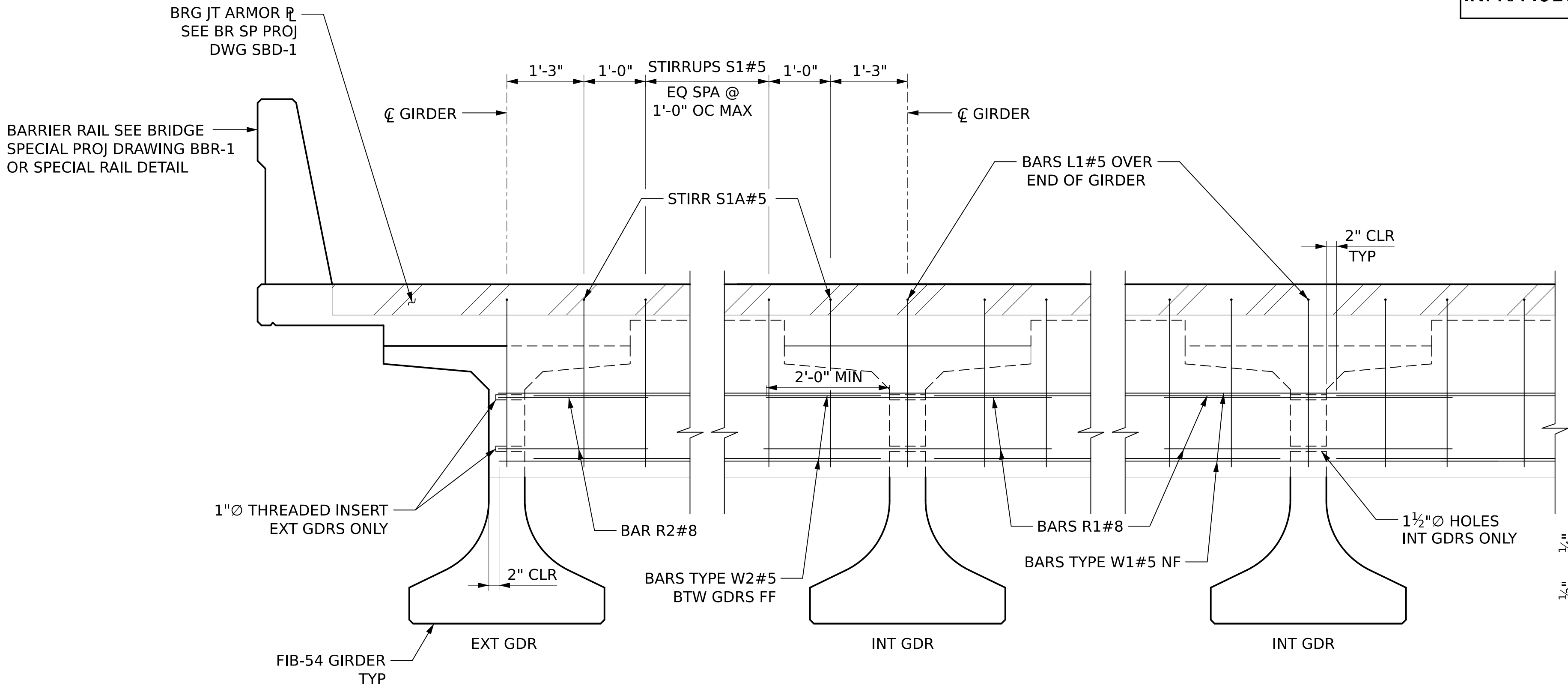
 ALABAMA DEPARTMENT OF TRANSPORTATION	A	LP	02/02/2024	60% INTERIM SUBMITTAL	PE STAMP	PE STAMP	QR CODE				PLAN SUBMITTAL	BIN(S)	DESIGNER: <u>E. LEON</u> DATE: _____	SHEET TITLE					
	B	EL	06/13/2025	90% FINAL SUBMITTAL								COUNTY(S)							
	REV. NO.	BY	DATE	DESCRIPTION OF REVISION							DATE	DATE	90%		MOBILE	BRIDGE SHEET NO. 14 OF 40			
													MOBILE RIVER BRIDGE WATER STREET RAMP C TYPICAL SECTIONS						

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12015

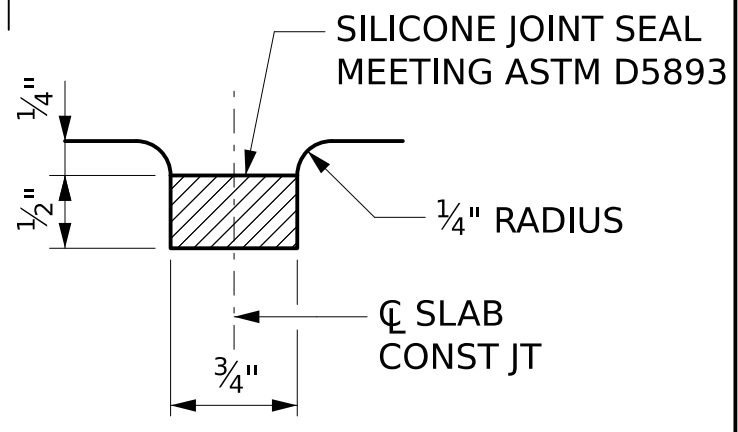
PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION



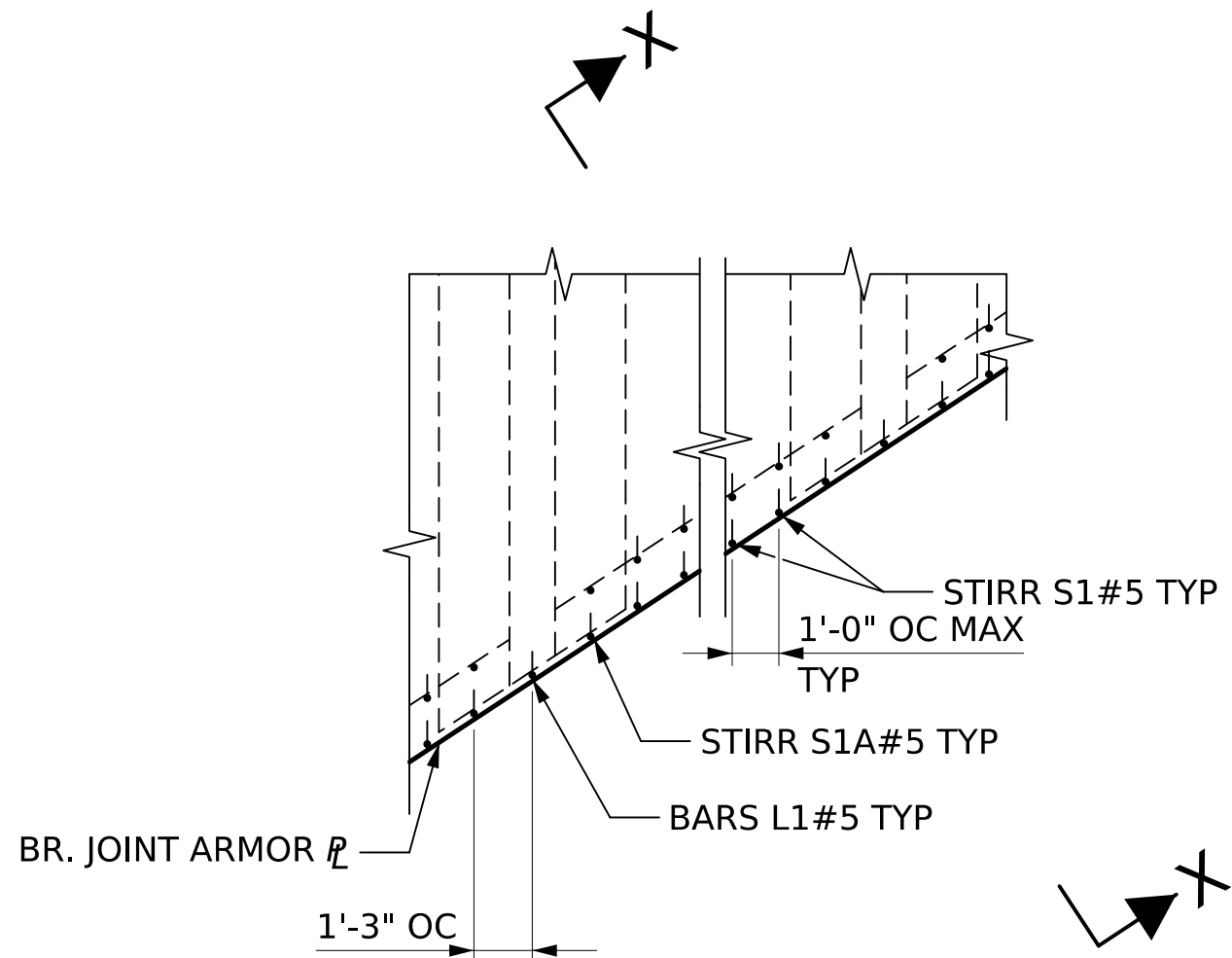
SECTION X-X
(OPEN JOINT)
SCALE: 3/4" = 1'-0"



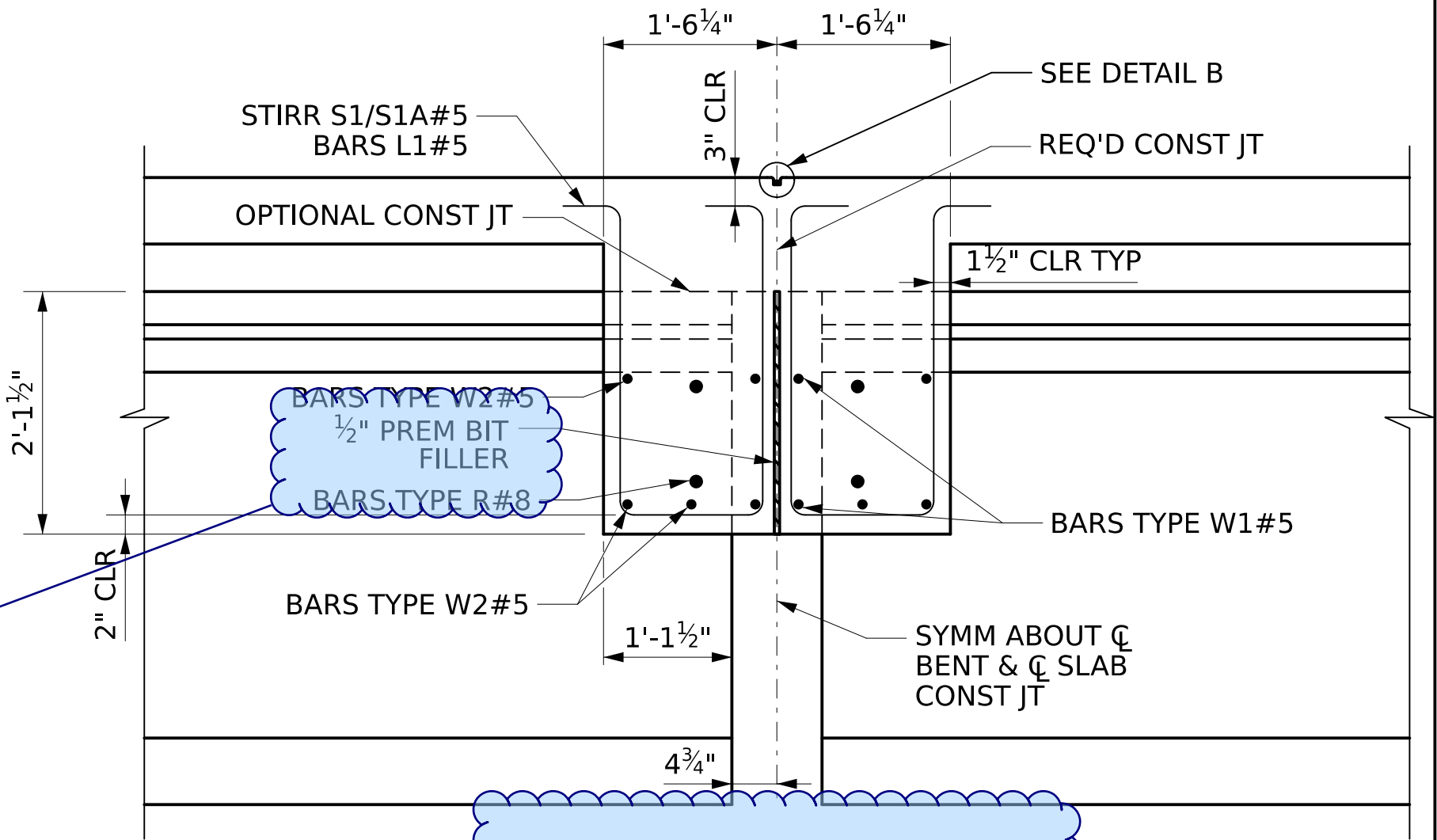
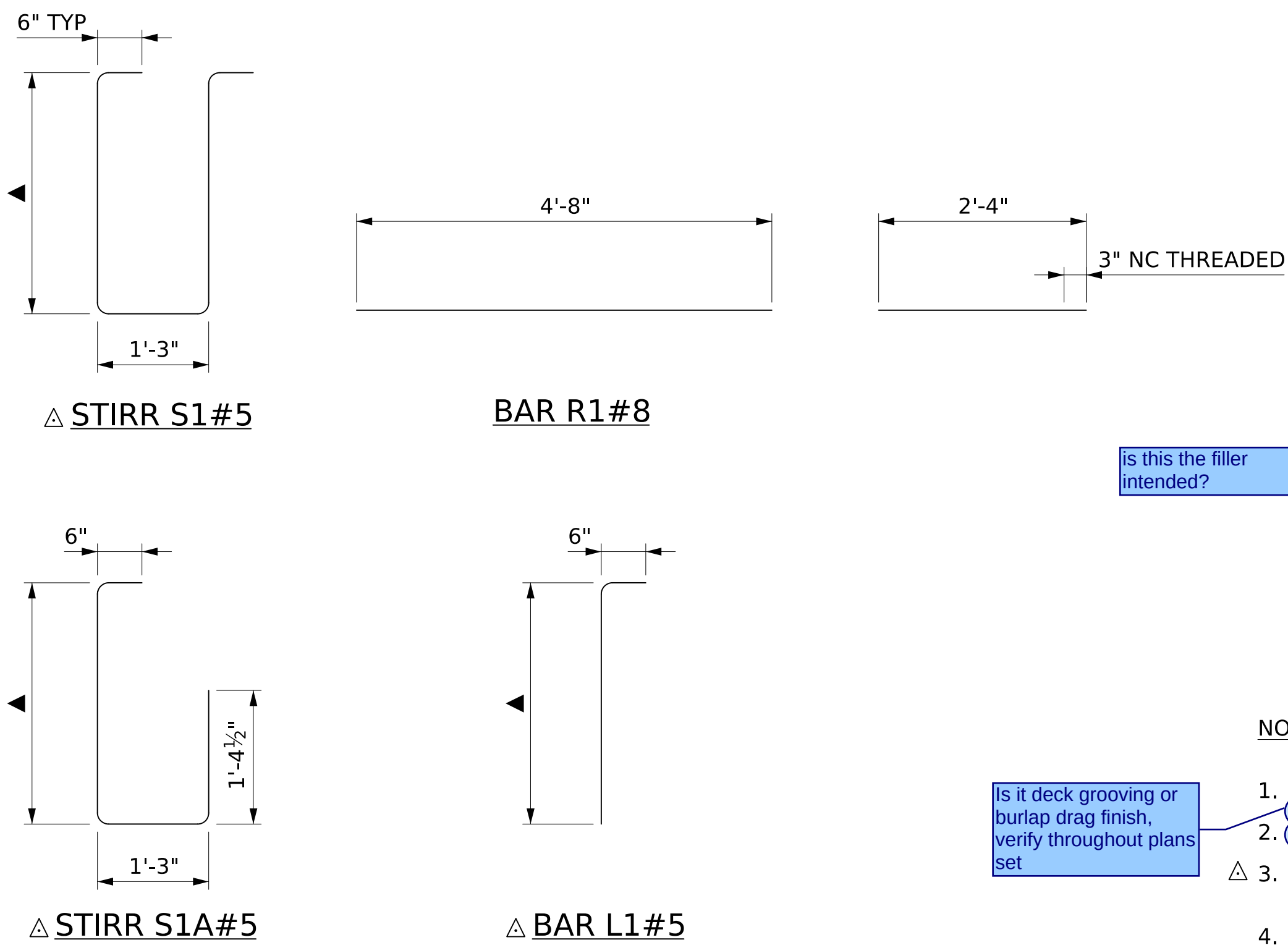
EDGE BEAM @ OPEN JOINT ANY SKEW (EXPANSION)
SCALE: 3/4" = 1'-0"



DETAIL B
NTS



PLAN - EDGE BEAM
@ OPEN JOINT (ANY SKEW)
SCALE: 1/4" = 1'-0"



NOTES:

1. THE LAP SPLICE FOR BARS TYPE W1 #5 IS EQUAL TO 19" MINIMUM.
2. EXTEND DECK GROOVING TO WITHIN 6" OF JOINT.
3. FOR DETAILS ON STIRR S1, STIRR S1A, AND BARS L1, SEE SPAN BILL OF REINFORCEMENT.
4. FOR EDGE BEAM AT CLOSED JOINTS (CONTINUOUS DECK): END VIEW AND PLAN SAME EXCEPT OMIT ARMOR PLATE. DO NOT COAT REQUIRED SLAB CONSTRUCTION JOINT WITH EPOXY ADHESIVE PRIOR TO NEXT POUR. STOP DECK GROOVING 6" MINIMUM FROM CLOSED JOINT.

Is this the filler intended?

Is it deck grooving or burlap drag finish, verify throughout plans set

Where is a closed joint specified typ.

Show spliced bars in the section

Where is the deck continuous



ALABAMA
DEPARTMENT OF
TRANSPORTATION

A	LP	02/02/2024	60% INTERIM SUBMITTAL
B	EL	06/13/2025	90% FINAL SUBMITTAL
REV. NO.	BY	DATE	DESCRIPTION OF REVISION

PE STAMP
DATE

PE STAMP
DATE

QR
CODE



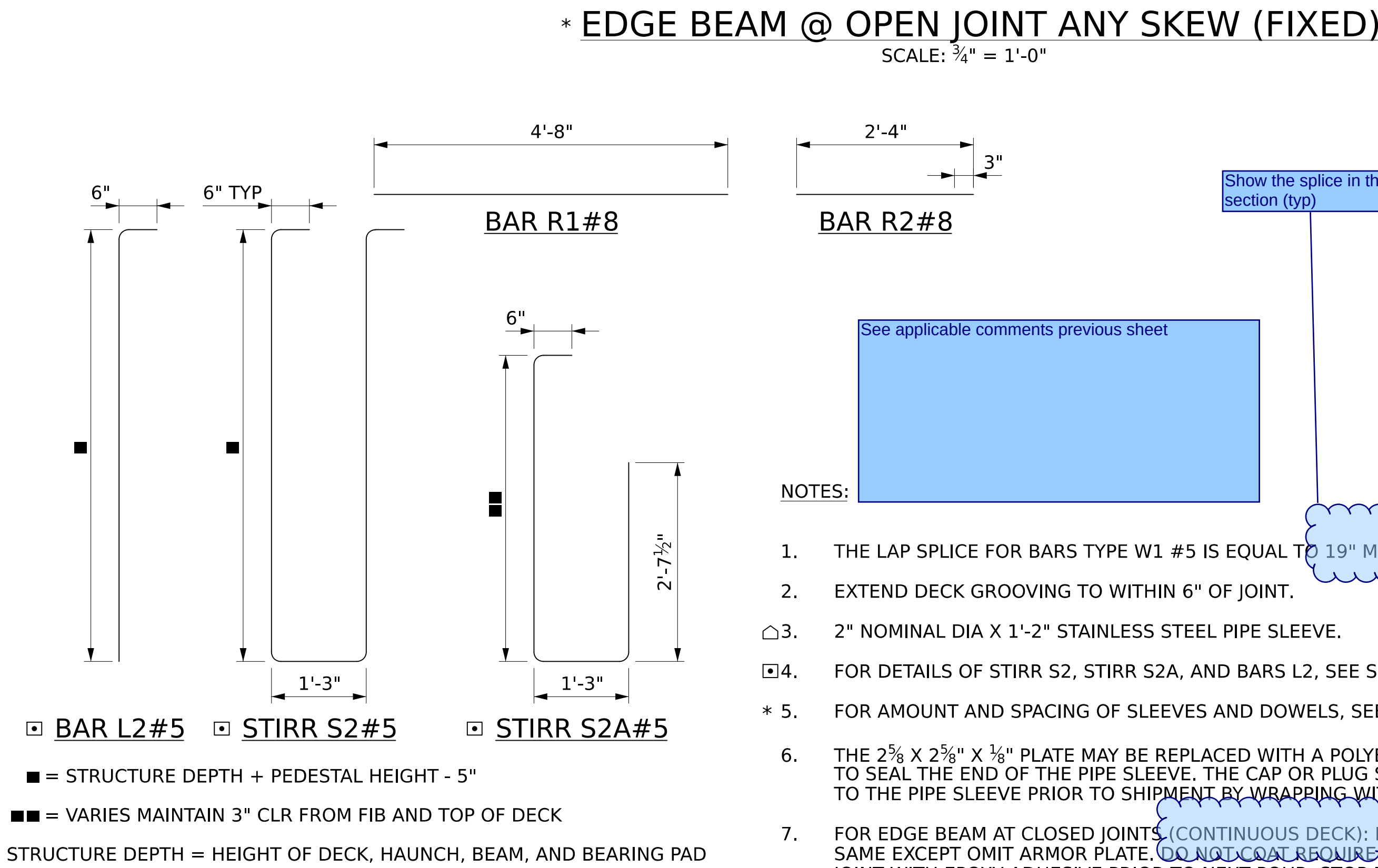
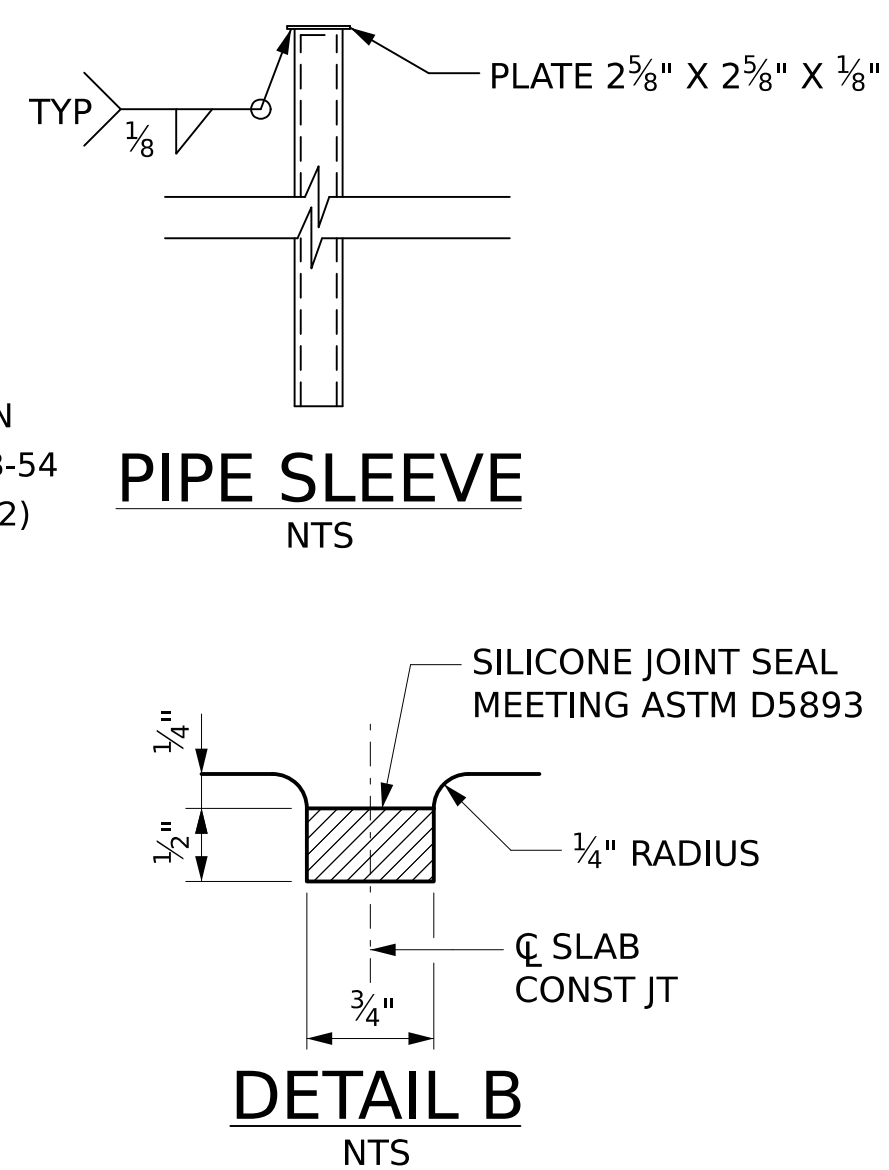
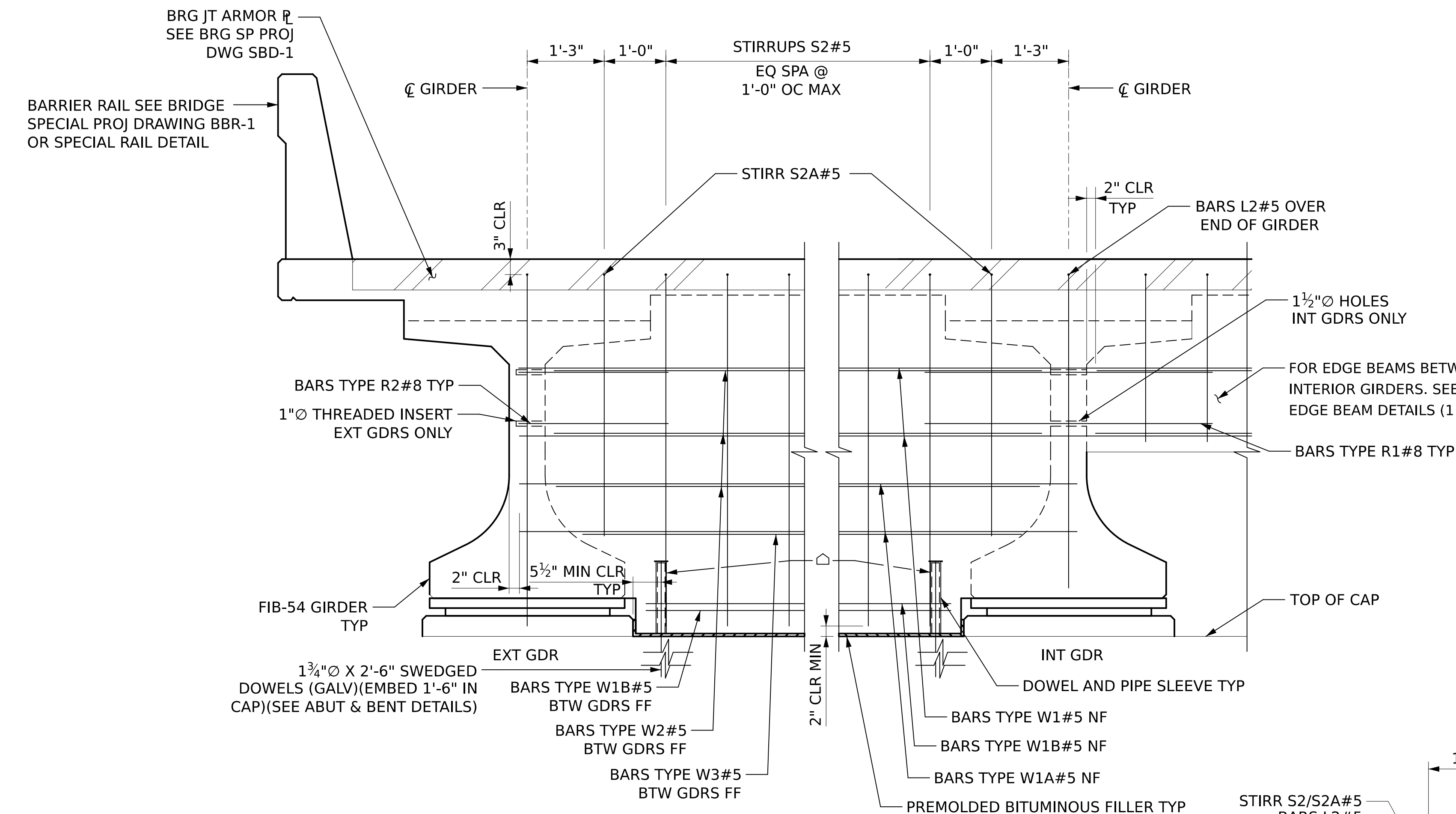
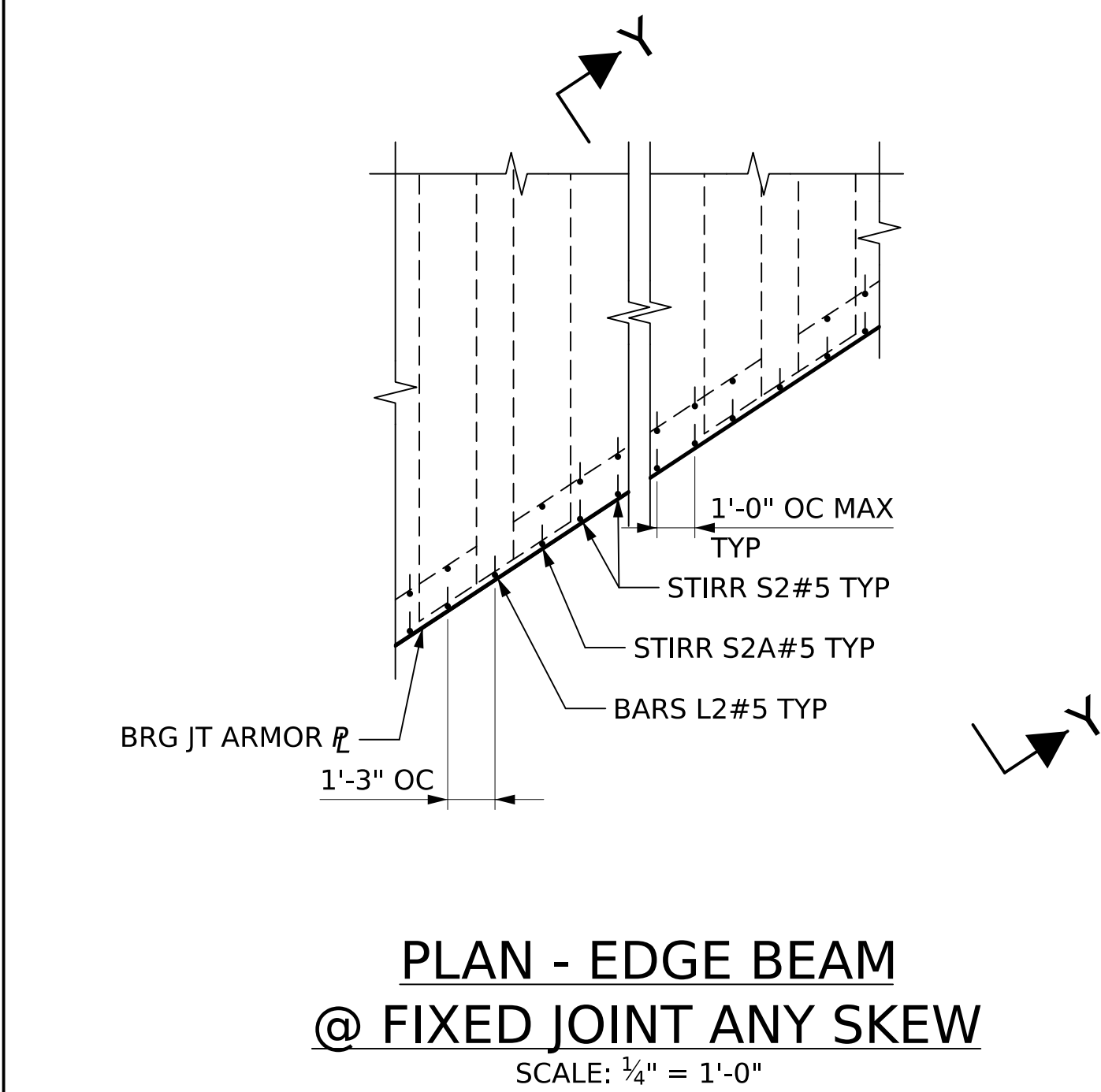
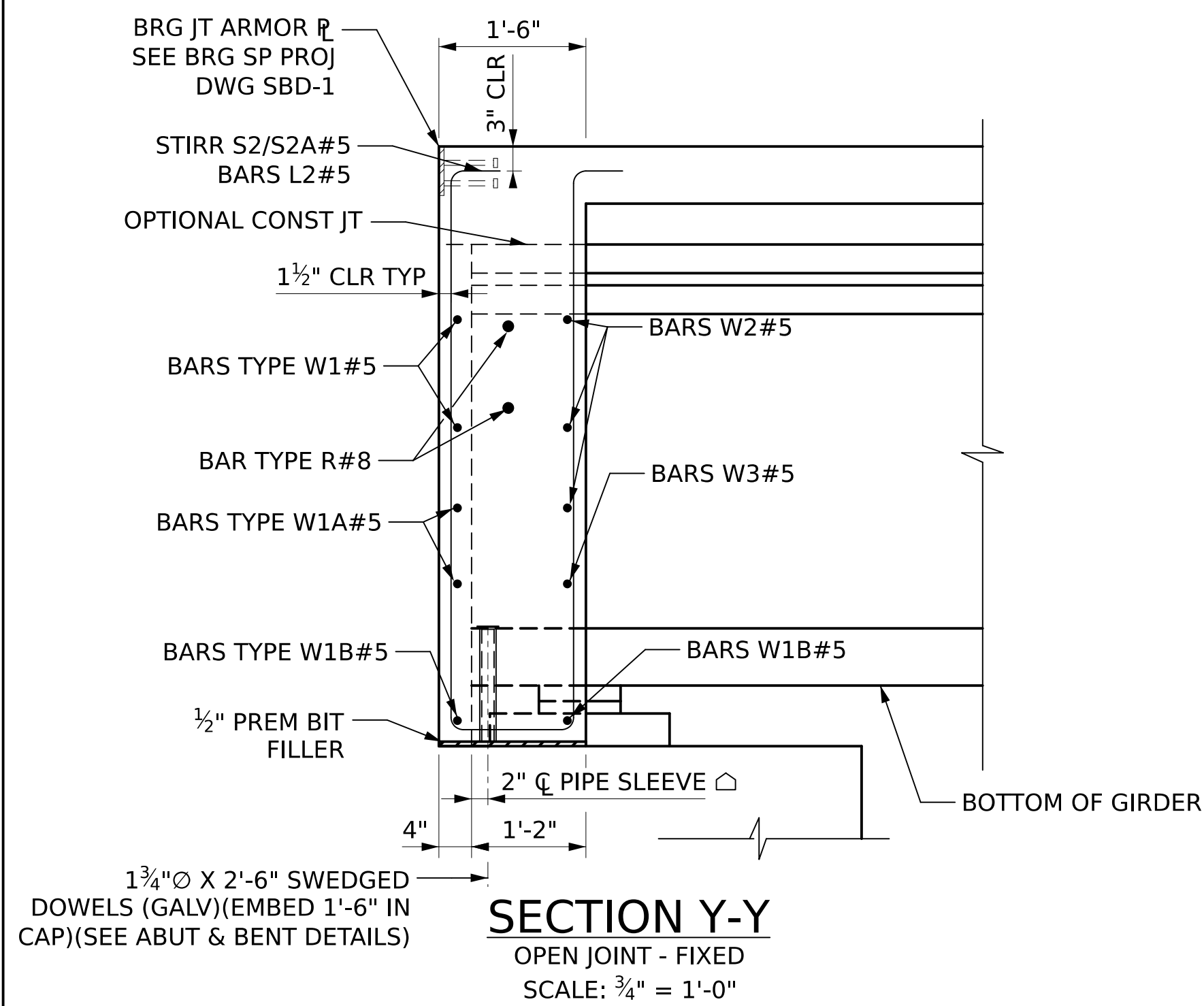
PLAN SUBMITTAL
90%

BIN(S)
021829
COUNTY(S)
MOBILE

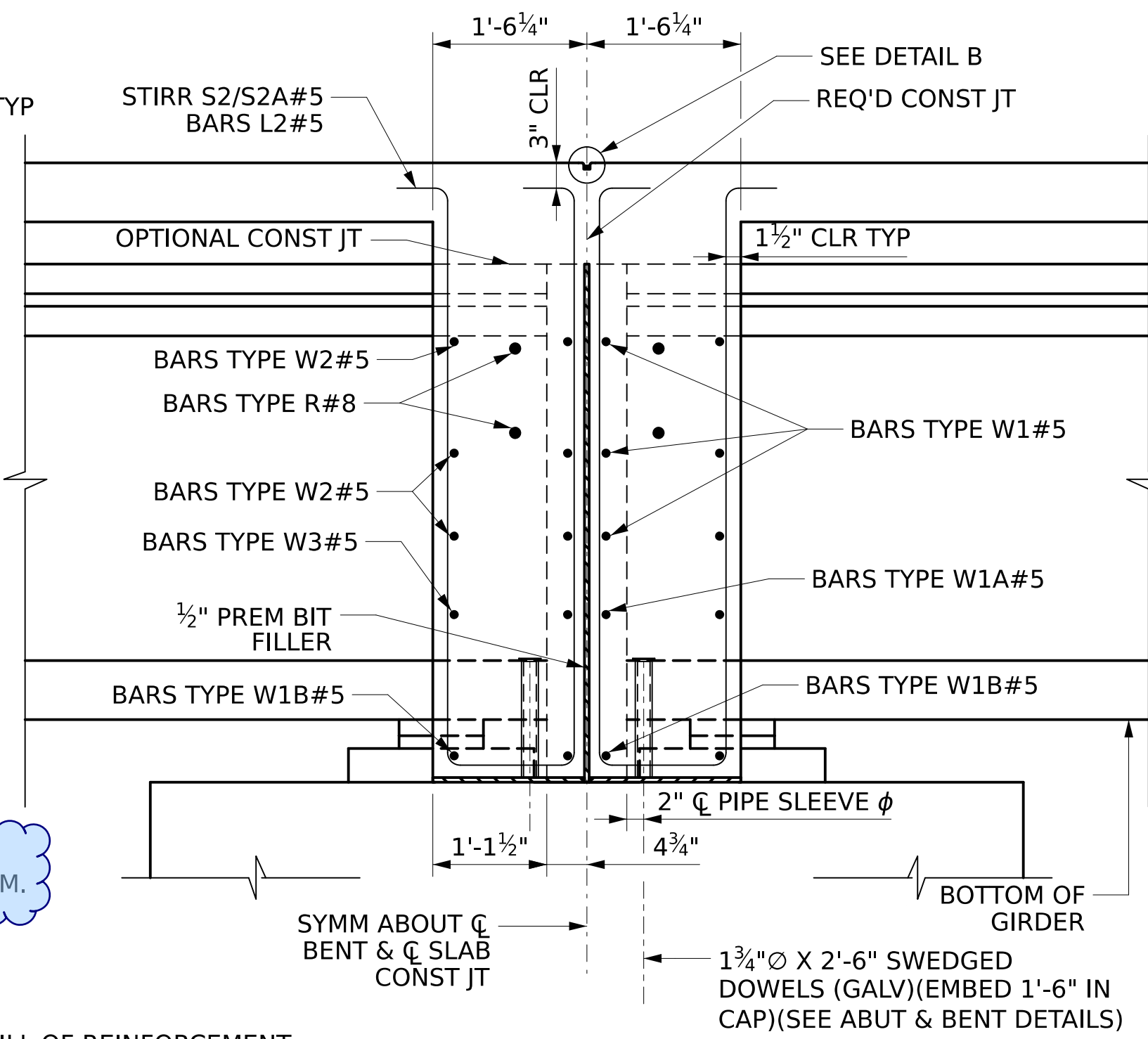
DESIGNER: S. SHEA
DATE:
BRIDGE SHEET NO. 15 OF 40

SHEET TITLE
MOBILE RIVER BRIDGE
WATER STREET RAMP C
FIB-54 EDGE BEAM DETAILS (1 OF 2)

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12016

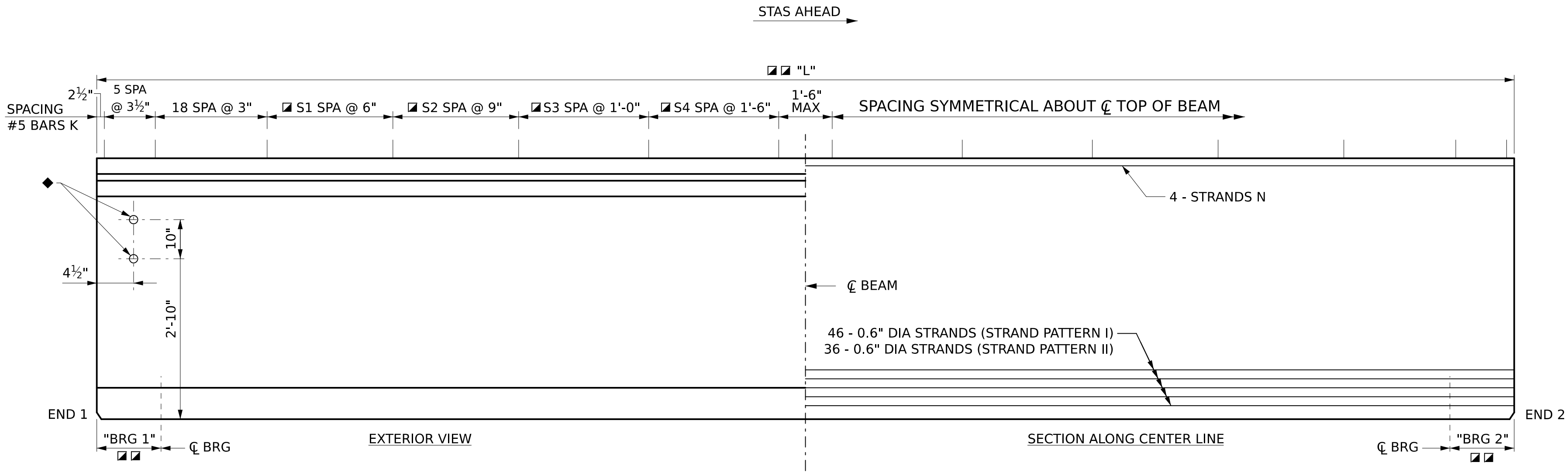


- NOTES:
- THE LAP SPLICE FOR BARS TYPE W1 #5 IS EQUAL TO 19" MINIMUM.
 - EXTEND DECK GROOVING TO WITHIN 6" OF JOINT.
 - 2" NOMINAL DIA X 1'-2" STAINLESS STEEL PIPE SLEEVE.
 - FOR DETAILS OF STIRR S2, STIRR S2A, AND BARS L2, SEE SPAN BILL OF REINFORCEMENT.
 - FOR AMOUNT AND SPACING OF SLEEVES AND DOWELS, SEE ABUT OR BENT DETAILS.
 - THE 2 3/8 X 2 3/8 X 1/8" PLATE MAY BE REPLACED WITH A POLYETHYLENE CAP OR INSERT TO SEAL THE END OF THE PIPE SLEEVE. THE CAP OR PLUG SEAL SHALL BE SECURED TO THE PIPE SLEEVE PRIOR TO SHIPMENT BY WRAPPING WITH DUCT TAPE.
 - FOR EDGE BEAM AT CLOSED JOINTS (CONTINUOUS DECK): END VIEW AND PLAN SAME EXCEPT OMIT ARMOR PLATE. DO NOT COAT REQUIRED SLAB CONSTRUCTION JOINT WITH EPOXY ADHESIVE PRIOR TO NEXT POUR. STOP DECK GROOVING 6" MINIMUM FROM CLOSED JOINT.

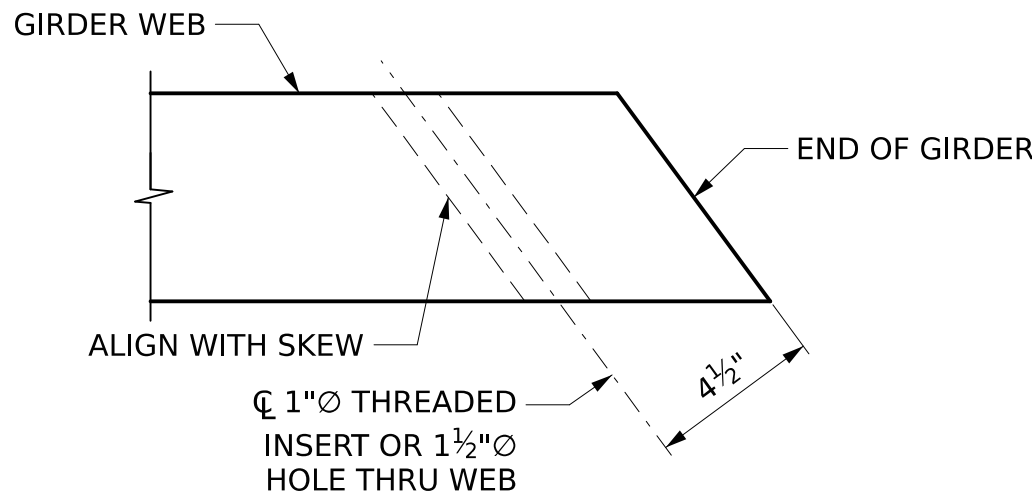


REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12017

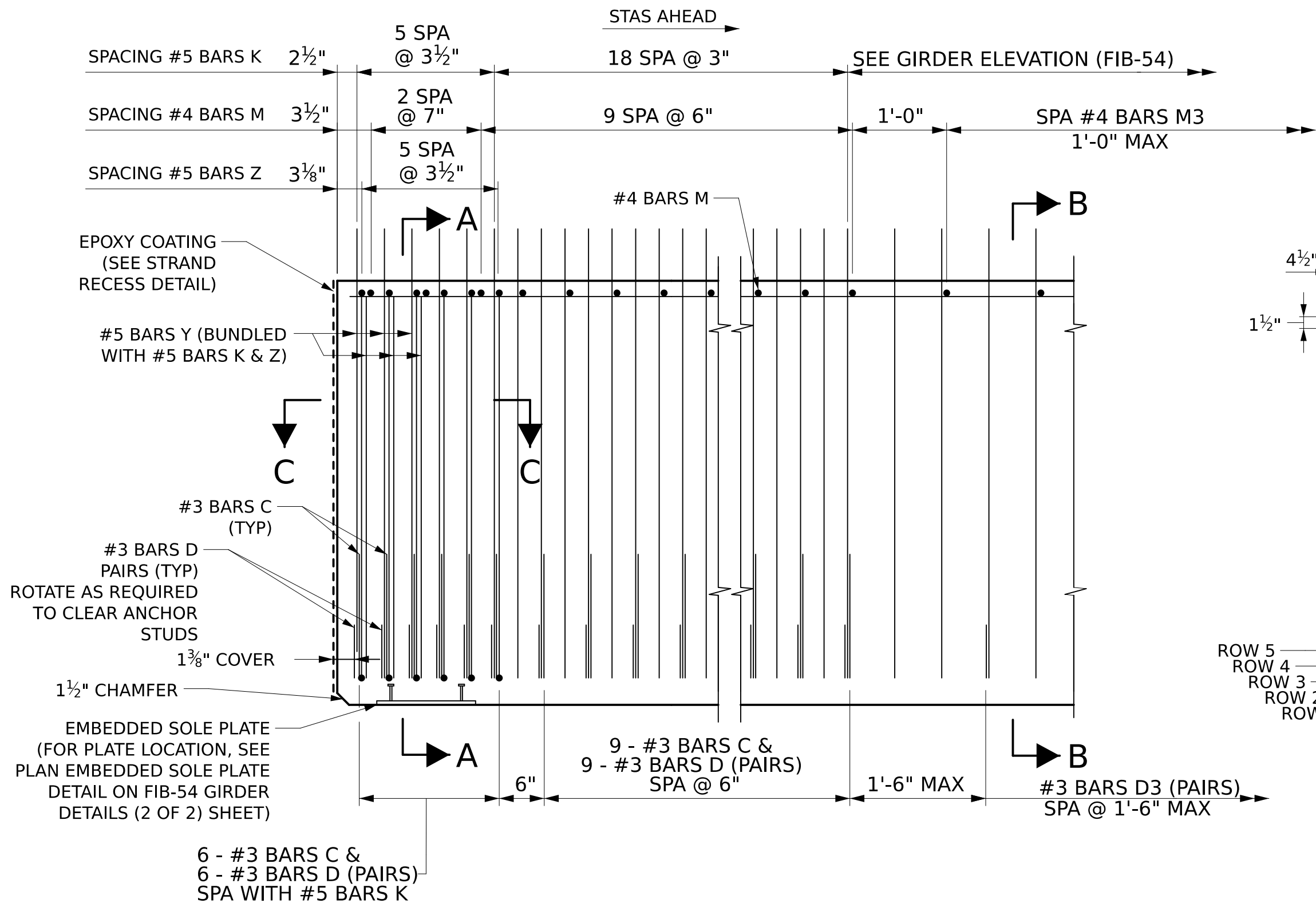
PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION



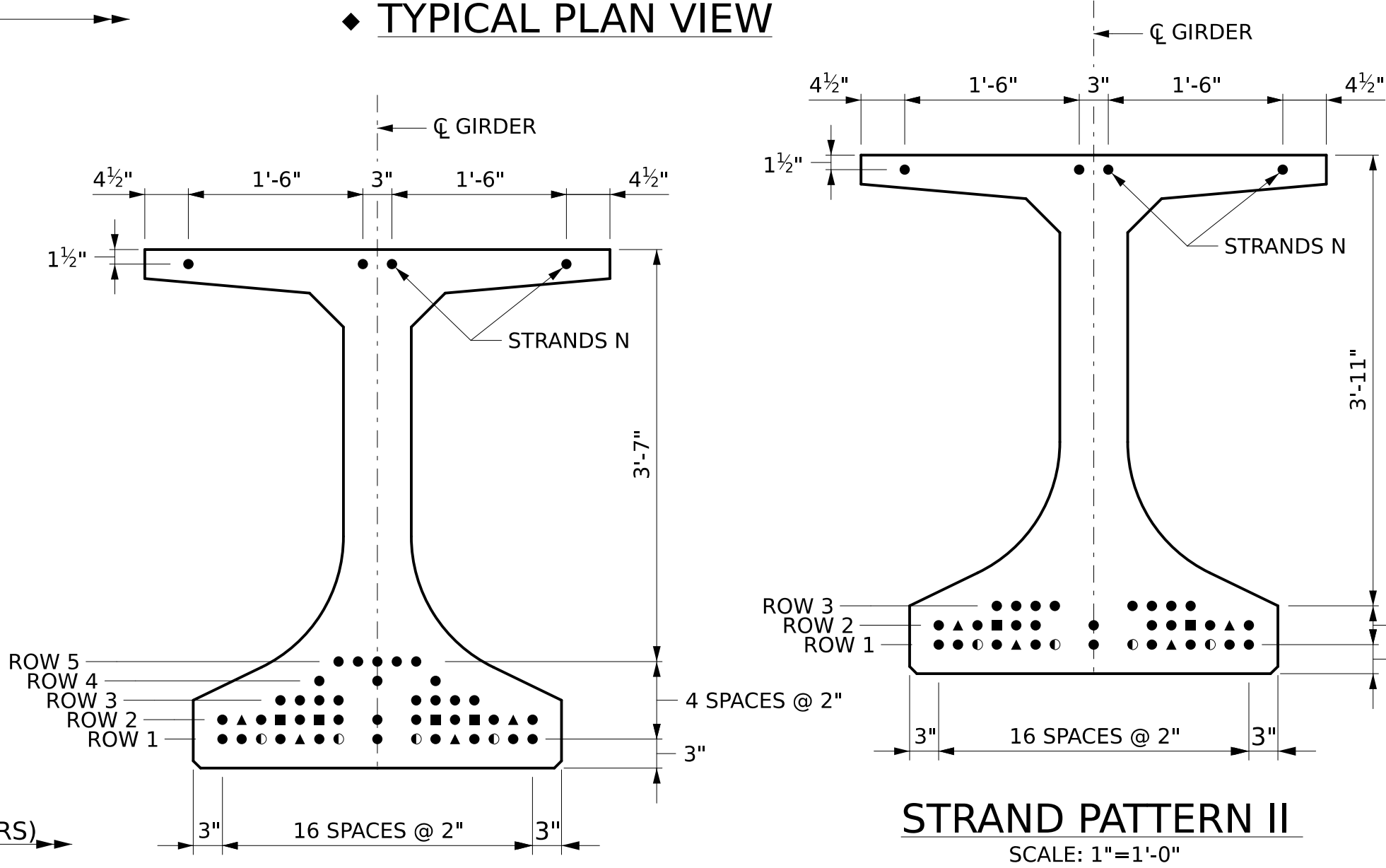
GIRDER ELEVATION (FIB-54)
NTS



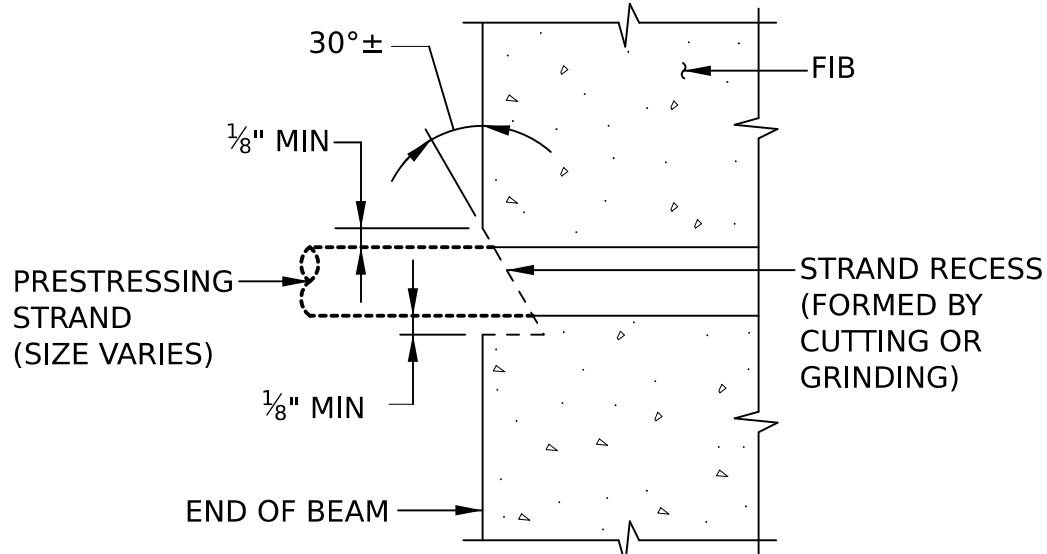
◆ TYPICAL PLAN VIEW



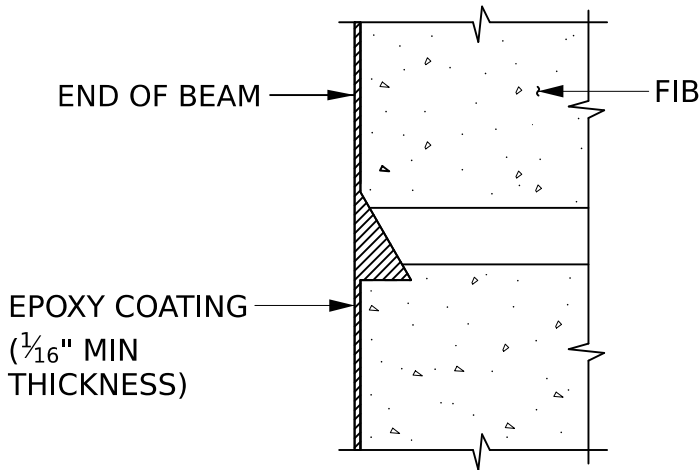
ELEVATION @ END OF BEAM
(END 1 SHOWN, END 2 SIMILAR)
(FLANGES NOT SHOWN FOR CLARITY)



- DENOTES FULLY BONDED STRANDS
- DENOTES STRANDS DEBONDED 8'-0" FROM END OF BEAM
- ▲ DENOTES STRANDS DEBONDED 12'-0" FROM END OF BEAM
- DENOTES STRANDS DEBONDED 16'-0" FROM END OF BEAM



TYPICAL SECTION
SHOWING RECESS LIMITS

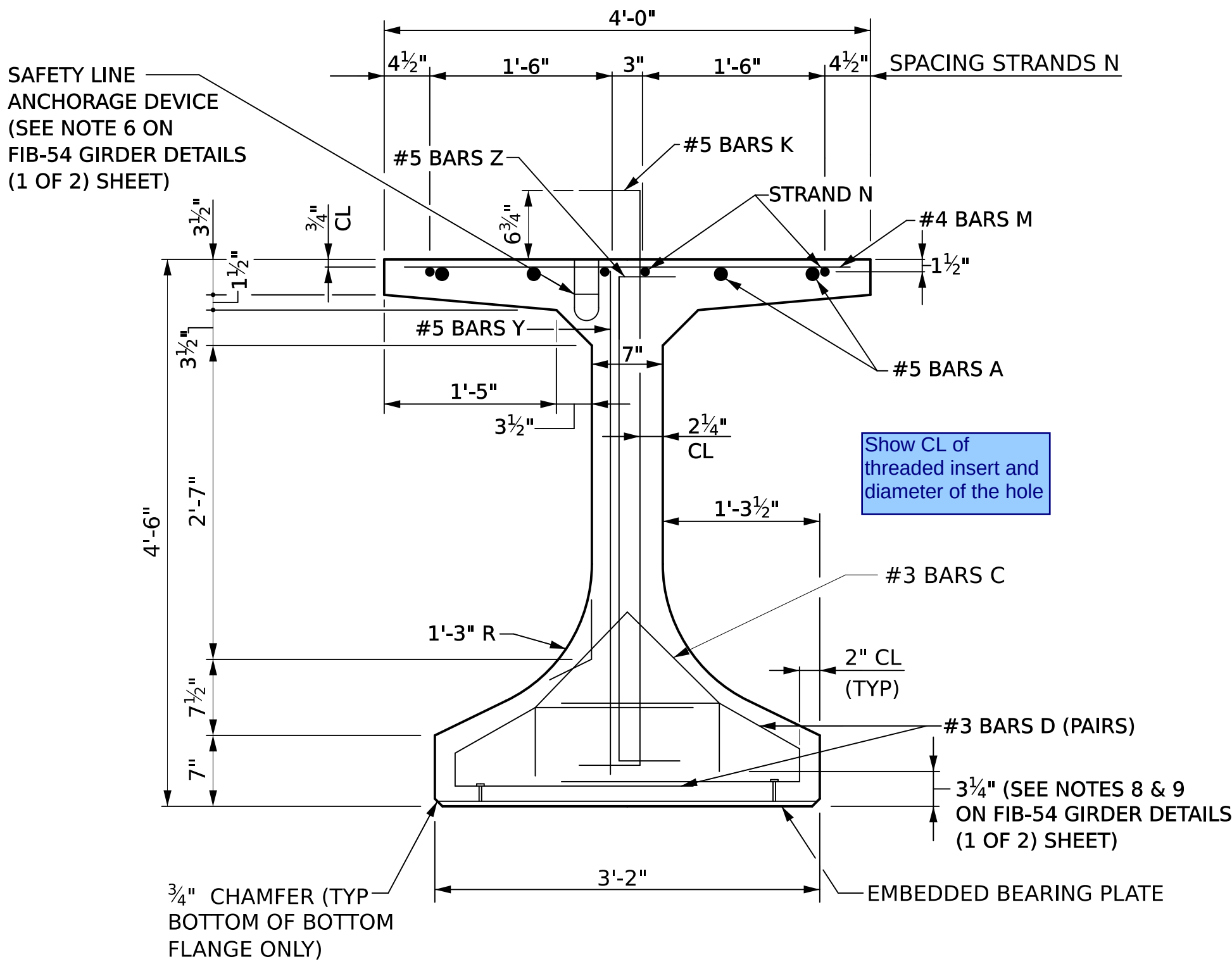


TYPICAL SECTION
AFTER EPOXY COATING

STRAND RECESS DETAILS
NTS

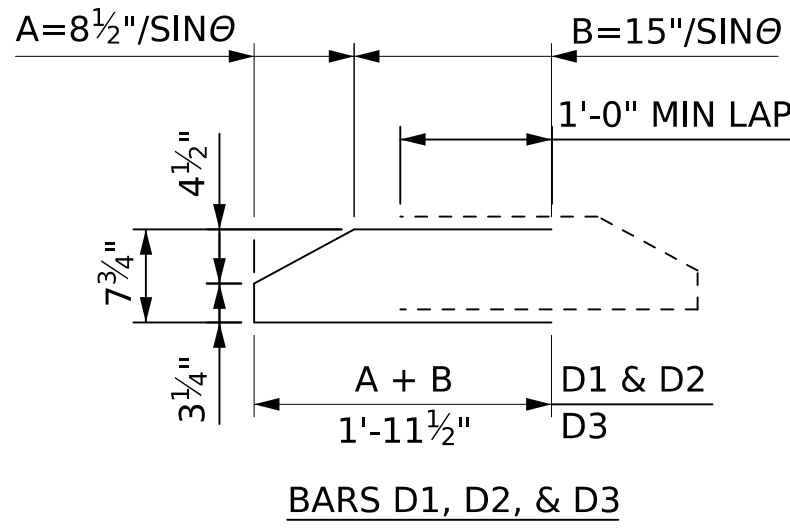
NOTES:

- FOR PRESTRESSED CONCRETE GIRDER SCHEDULE, SEE PRESTRESSED GIRDER SCHEDULE SHEET.
- ALTERNATE BEAM TYPES AND STRAND PATTERNS ARE NOT ALLOWED.
- PRESTRESSING STRANDS SHALL BE 0.6" DIAMETER, 7 WIRE, LOW RELAXATION STRANDS OF 270,000 PSI ULTIMATE TENSILE STRENGTH WITH AN INITIAL TENSION OF 43.95 K/STRAND UNLESS OTHERWISE NOTED.
- STRANDS N SHALL BE ASTM A416, GRADE 270, 7 WIRE STRANDS ½" Ø OR LARGER, STRESSED TO 30,000 LBS EACH.
- INSERTS CAST IN TOP OF EXTERIOR BEAMS, FOR USE IN FORMING OVERHANGS, WILL BE CONSIDERED ON BEAM DETAILS SUBMITTED FOR APPROVAL.
- SAFETY LINE ANCHORAGE DEVICES OR SLEEVES ARE REQUIRED AND PERMITTED IN THE TOP FLANGE ONLY TO ACCOMMODATE FALL PROTECTION SYSTEMS USED DURING CONSTRUCTION. THE BRIDGE ENGINEER WILL CONSIDER AN ALTERNATE OPTION SUBMITTED FOR APPROVAL. SEE SHOP DRAWINGS FOR DETAILS AND SPACING OF ANY REQUIRED EMBEDMENTS.
- GIRDER ENDS SHALL BE VERTICAL IN FINAL ERECTED POSITION.
- PLACE 1 BAR K OR Z AT EACH LOCATION AS DETAILED ALTERNATING THE DIRECTION OF THE ENDS FOR EACH BAR.
- BARS K AND Z SHALL BE PLACED AND TIED TO THE FULLY BONDED STRANDS IN THE BOTTOM OR CENTER ROW. AT THE CONTRACTOR'S OPTION THE LENGTH OF THE BOTTOM LEGS OF BARS K AND Z MAY BE EXTENDED TO FACILITATE TYING TO THE EXTERIOR STRANDS.
- UNLESS OTHERWISE NOTED, THE MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE 2".
- BARS D1, D2 AND D3 MAY BE FABRICATED AS A SINGLE BAR WITH A 1'-0" MINIMUM LAP SPLICE OF THE TOP LEGS, OR THE LENGTH OF THE BOTTOM LEGS MAY BE EXTENDED TO FACILITATE TYING TO THE EXTERIOR STRANDS.
- THE GIRDER CONCRETE IN THE BEAMS SHALL HAVE A MINIMUM 6,800 PSI COMPRESSIVE STRENGTH PRIOR TO RECEIVING PRESTRESSED FORCE AND A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 8,500 PSI.
- FOR BEARING PAD DETAILS, SEE BEARING DETAILS SHEET AND JOINT LAYOUT SHEET.
- FOR SECTIONS A-A, B-B & C-C, SEE FIB-54 GIRDER DETAILS (2 OF 2) SHEET.
- THE ENGINEER OF RECORD WILL ALLOW ALTERNATE GIRDER REINFORCEMENT UTILIZING WELDED WIRE FABRIC IN LIEU OF TIED REINFORCING FOR BARS C, BARS D, BARS M, BARS K AND BARS Z. THE EQUIVALENT AREA OF STEEL AND SPACING OF BARS SHALL BE MAINTAINED.
- STRANDS SHOWN UNBONDED SHALL USE PLASTIC SHEATHS AROUND CABLES FOR THE DISTANCES SHOWN FROM THE ENDS OF THE GIRDERS.
- CUT WEDGES AND RECESS PRESTRESSING STRANDS AT THE END OF THE BEAM WITHOUT DAMAGING THE SURROUND CONCRETE. PROTECT END OF WEDGED RECESSED STRANDS WITH AN APPROVED EPOXY COATING.
- ON BEAMS WITH SKEWED END, THE DEBONDED LENGTH SHALL BE MEASURED ALONG C OF BEAM FOR ALL DEBONDED STRANDS.
- FOR BARS K NUMBER OF SPACES, SEE GIRDER SCHEDULE (2 OF 2) SHEET.
- FOR PLACEMENT OF REINFORCEMENT IN BEAMS WITH SKEWED END CONDITIONS, SEE SKEW GIRDER END DETAILS SHEET.

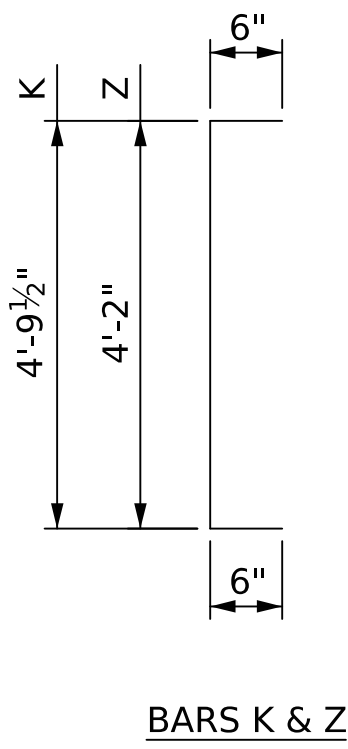


SECTION A-A
SCALE: 1" = 1'-0"

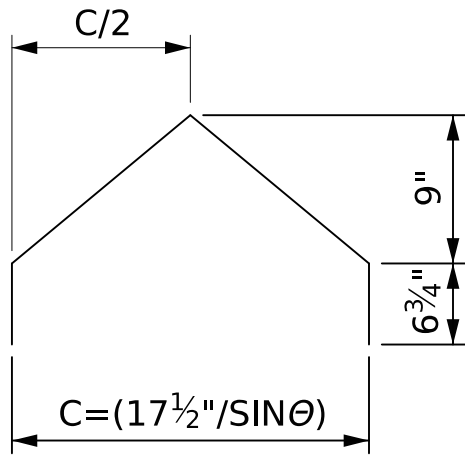
θ = BEAM END ANGLES = 90° FOR BARS D3



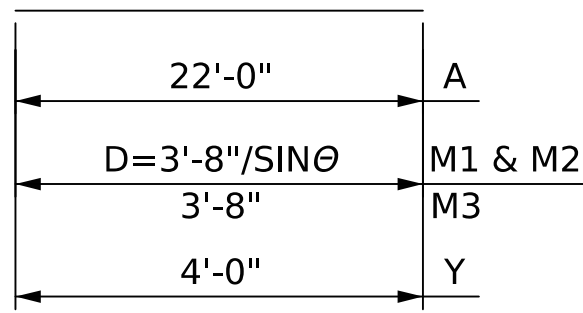
BARS D1, D2, & D3



BARS K & Z

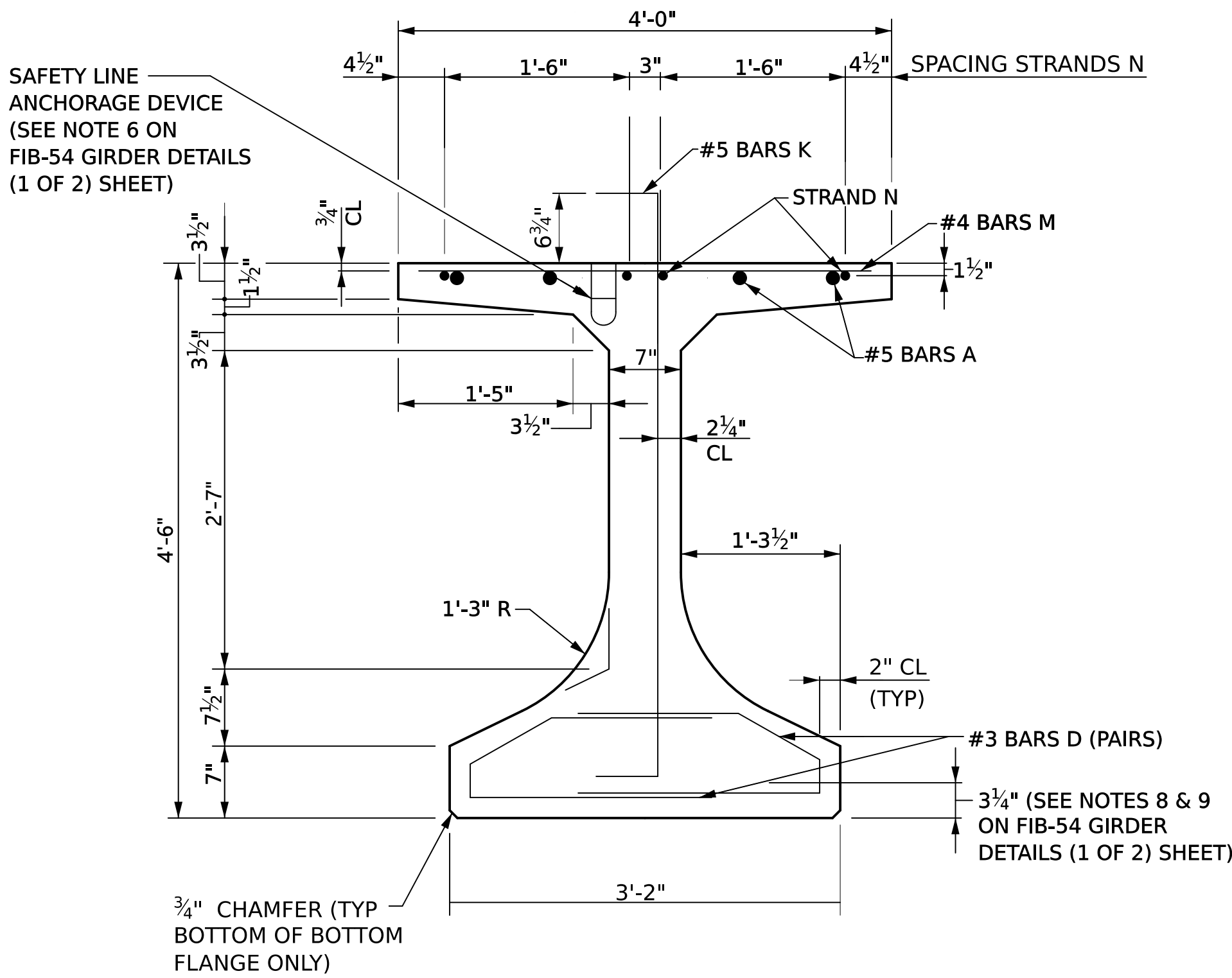


BARS C1 & C2

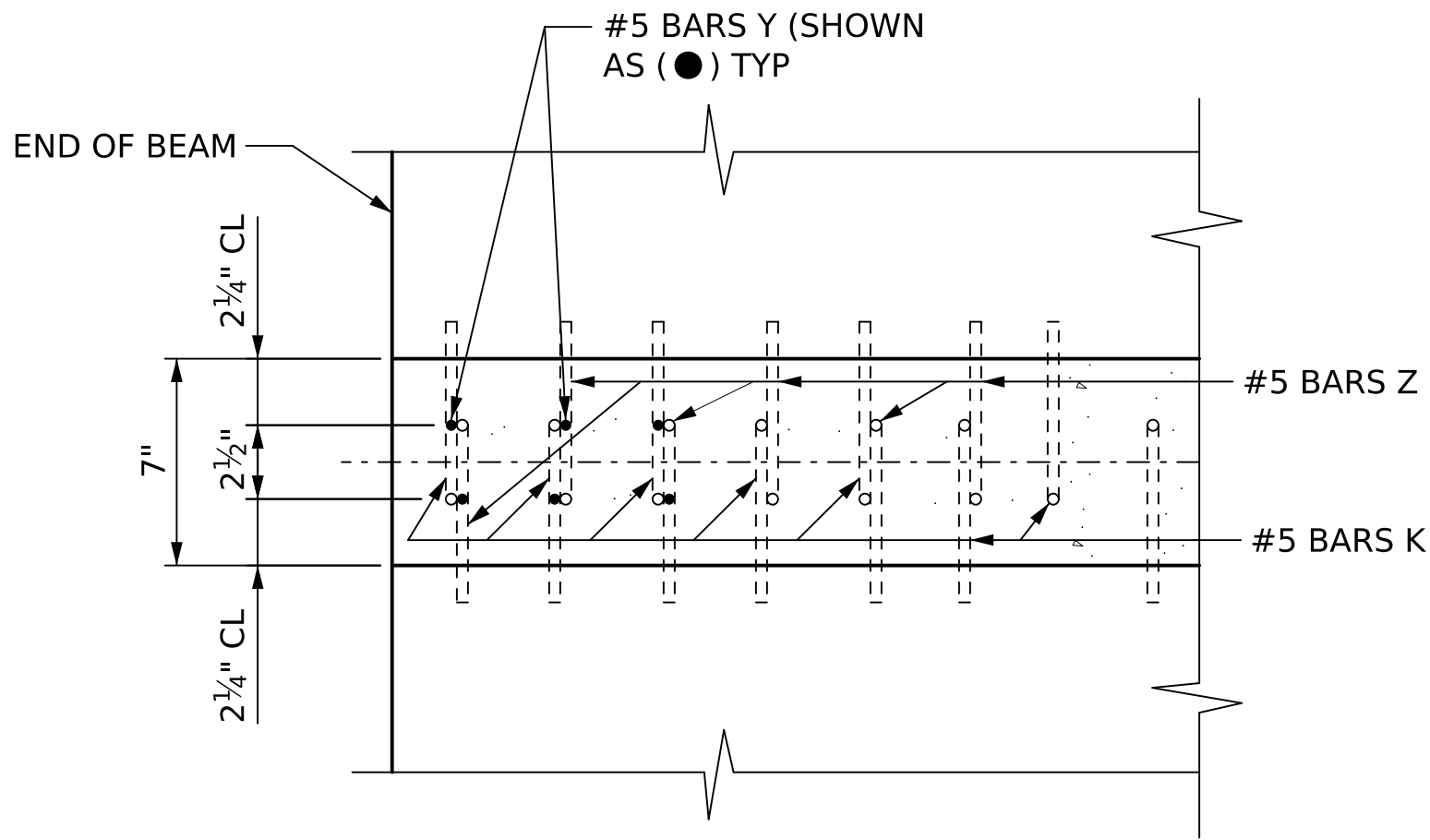


BARS A, M1, M2, M3, & Y

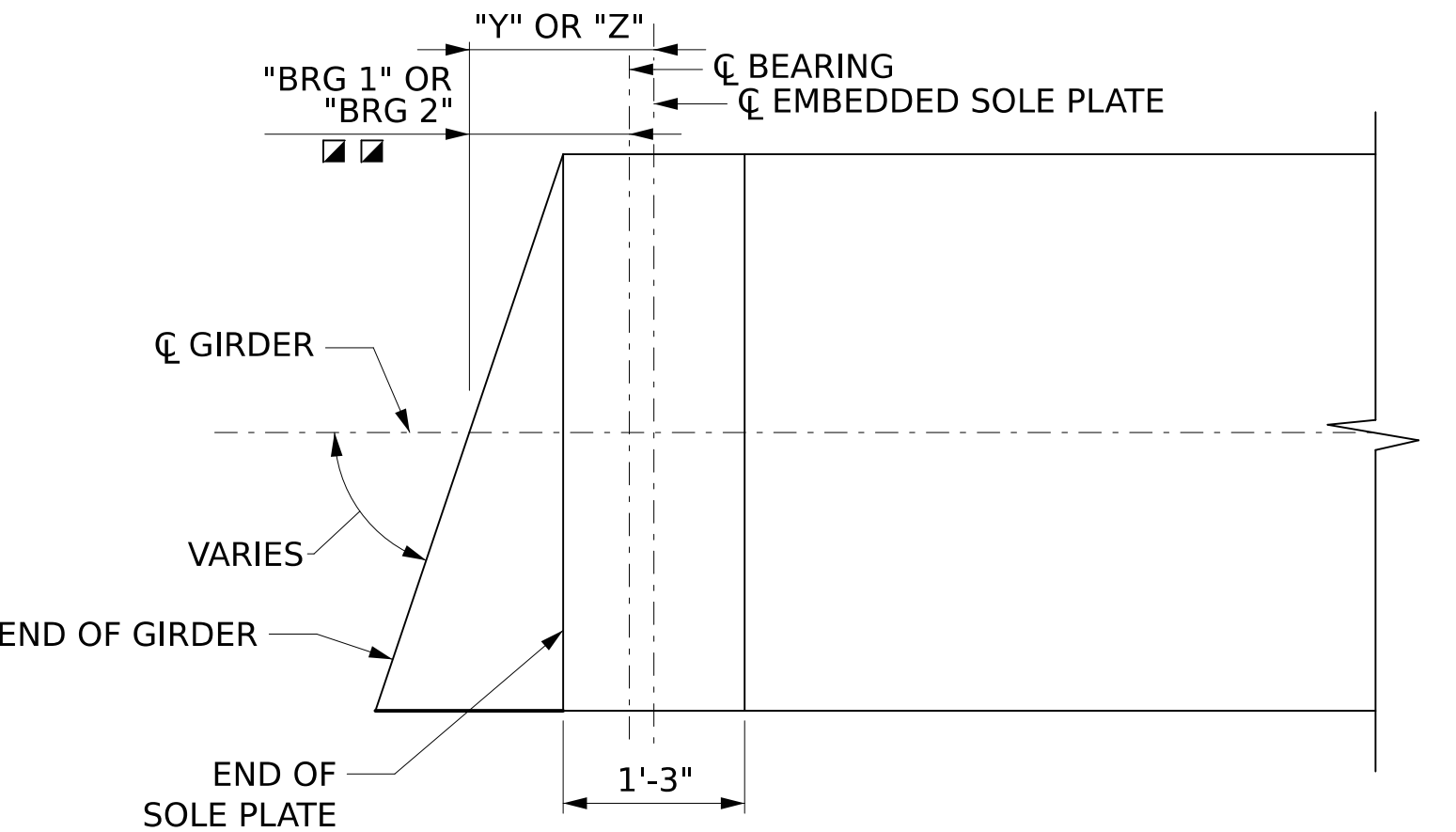
BAR BENDING DIAGRAM
SCALE: 1" = 20'-0"



SECTION B-B
SCALE: 1" = 1'-0"



SECTION C-C
(SHOWING #5 BARS K, Y & Z ONLY)



PLAN EMBEDDED SOLE PLATE DETAIL
NTS

EMBEDDED SOLE PLATE LOCATION			
SPAN	BEAM	Y (END 1)	Z (END 2)
1-4	1-5	1'-1 1/4"	1'-1 1/4"
5	1-5	1'-1 1/4"	1'-3"

- NOTES:
- FOR PRESTRESSED CONCRETE GIRDER NOTES, SEE FIB-54 DETAILS (1 OF 2) SHEET.
 - FOR LOCATION OF SECTION CUTS A-A, B-B, & C-C, SEE FIB-54 GIRDER DETAILS (1 OF 2) SHEET.
 - FOR BEAM END ANGLES, SEE GIRDER SCHEDULE (1 OF 2) SHEET.



ALABAMA
DEPARTMENT OF
TRANSPORTATION

A	LP	02/02/2024	60% INTERIM SUBMITTAL
B	EL	06/13/2025	90% FINAL SUBMITTAL
REV. NO.	BY	DATE	DESCRIPTION OF REVISION

PE STAMP
DATE

PE STAMP
DATE

QR
CODE



PLAN SUBMITTAL
90%

BIN(S)
021829
COUNTY(S)
MOBILE

DESIGNER: E. LEON
DATE:
BRIDGE SHEET NO. 18 OF 40

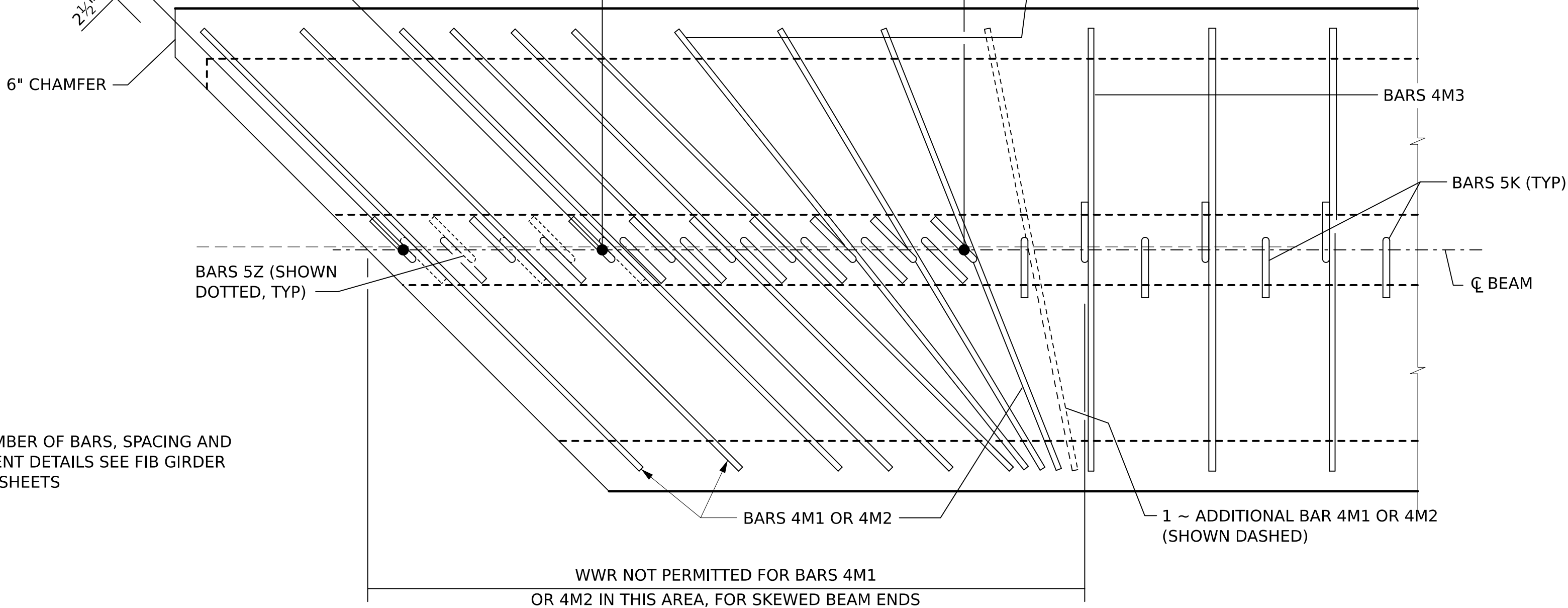
SHEET TITLE
MOBILE RIVER BRIDGE
WATER STREET RAMP C
FIB-54 GIRDER DETAILS (2 OF 2)



BARS 5K SPACED PERPENDICULAR TO END OF BEAM @ 3½". SKEWED BARS 5Z, 4M1 OR 4M2 PLACED WITH BARS 5K *

BARS 5K SPACED ALONG $\varnothing$ BEAM @ 3". BARS 4M1 OR 4M2 PLACED WITH ALTERNATE BARS 5K *

ROTATE AND FLARE BARS 4M1 OR 4M2 AND ADDITIONAL BAR 4M1 OR 4M2 EQUALLY AS REQUIRED TO MAINTAIN A 1'-0" $\pm$ MAX SPACING ALONG END OF BARS. CLIP TO MAINTAIN COVER.

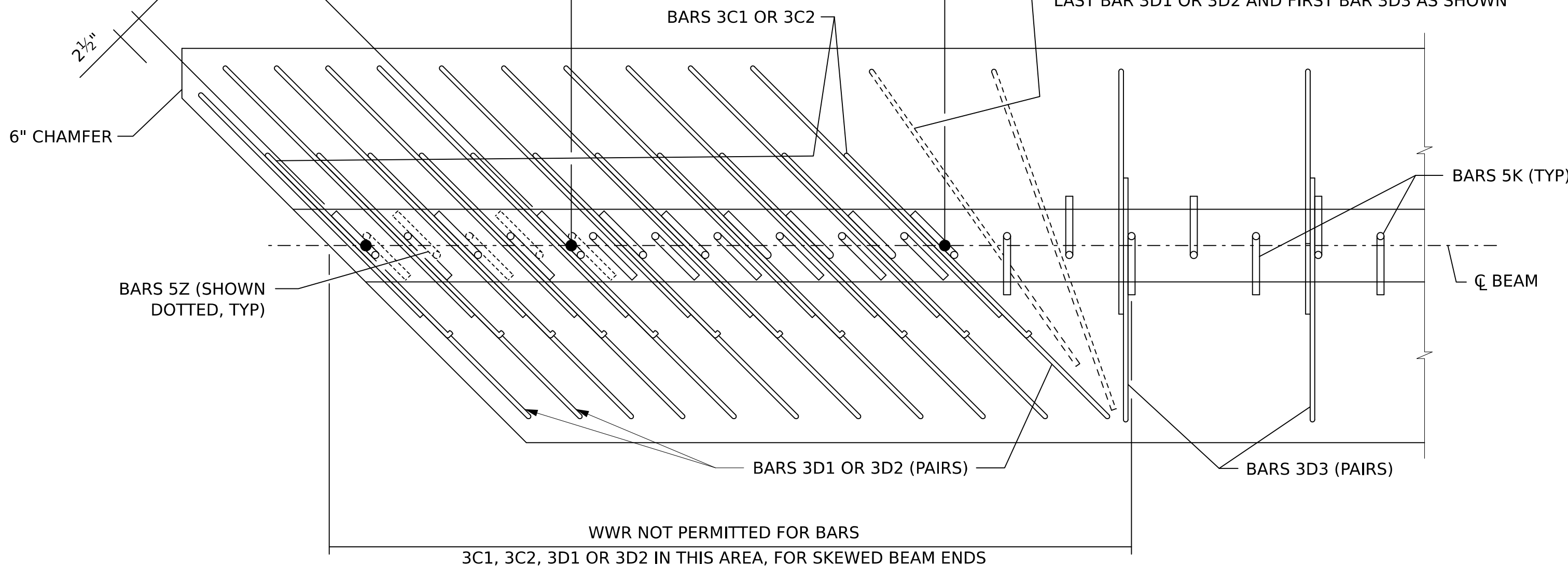


PARTIAL PLAN VIEW (SHOWING TOP FLANGE)
(END 1 SHOWN, END 2 SIMILAR)
(BARS 5A, 5Y & STRANDS N NOT SHOWN FOR CLARITY)

BARS 5K SPACED PERPENDICULAR TO END OF BEAM @ 3½". SKEWED BARS 5Z, 3D1 OR 3D2, 3C1 OR 3C2 PLACED WITH BARS 5K *

BARS 5K SPACED ALONG $\varnothing$ BEAM @ 3". BARS 3D1 OR 3D2, 3C1 OR 3C2 PLACED WITH ALTERNATE BARS 5K *

1 ~ ADDITIONAL BAR 3D1 OR 3D2 FOR SKEWS $\leq$ 10° OR 2 ~ ADDITIONAL BARS 3D1 OR 3D2 FOR SKEWS > 10° (SHOWN DASHED) ROTATE AND SPACE EQUALLY BETWEEN LAST BAR 3D1 OR 3D2 AND FIRST BAR 3D3 AS SHOWN



PARTIAL SECTION THRU WEB (SHOWING BOTTOM FLANGE)
(END 1 SHOWN, END 2 SIMILAR)
(BARS 5Y, STRANDS, AND EMBEDDED SOLE PLATE NOT SHOWN FOR CLARITY)

SKEWED BEAM END DETAILS FOR SKEWED GIRDER ENDS BRIDGES
(FIB 36 BEAM SHOWN, OTHERS SIMILAR)

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12019



ALABAMA
DEPARTMENT OF
TRANSPORTATION

A	LP	02/02/2024	60% INTERIM SUBMITTAL
B	EL	06/13/2025	90% FINAL SUBMITTAL
REV. NO.	BY	DATE	DESCRIPTION OF REVISION

PE STAMP
DATE

PE STAMP
DATE

QR CODE



PLAN SUBMITTAL
90%

BIN(S)
021829
COUNTY(S)
MOBILE

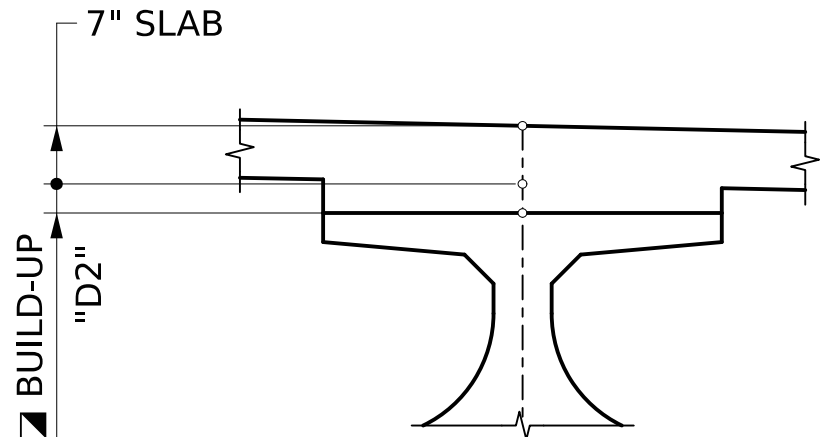
DESIGNER: E. LEON	DATE:
BRIDGE SHEET NO. 19	OF 40

SHEET TITLE
MOBILE RIVER BRIDGE WATER STREET RAMP C SKEWED GIRDER DETAIL

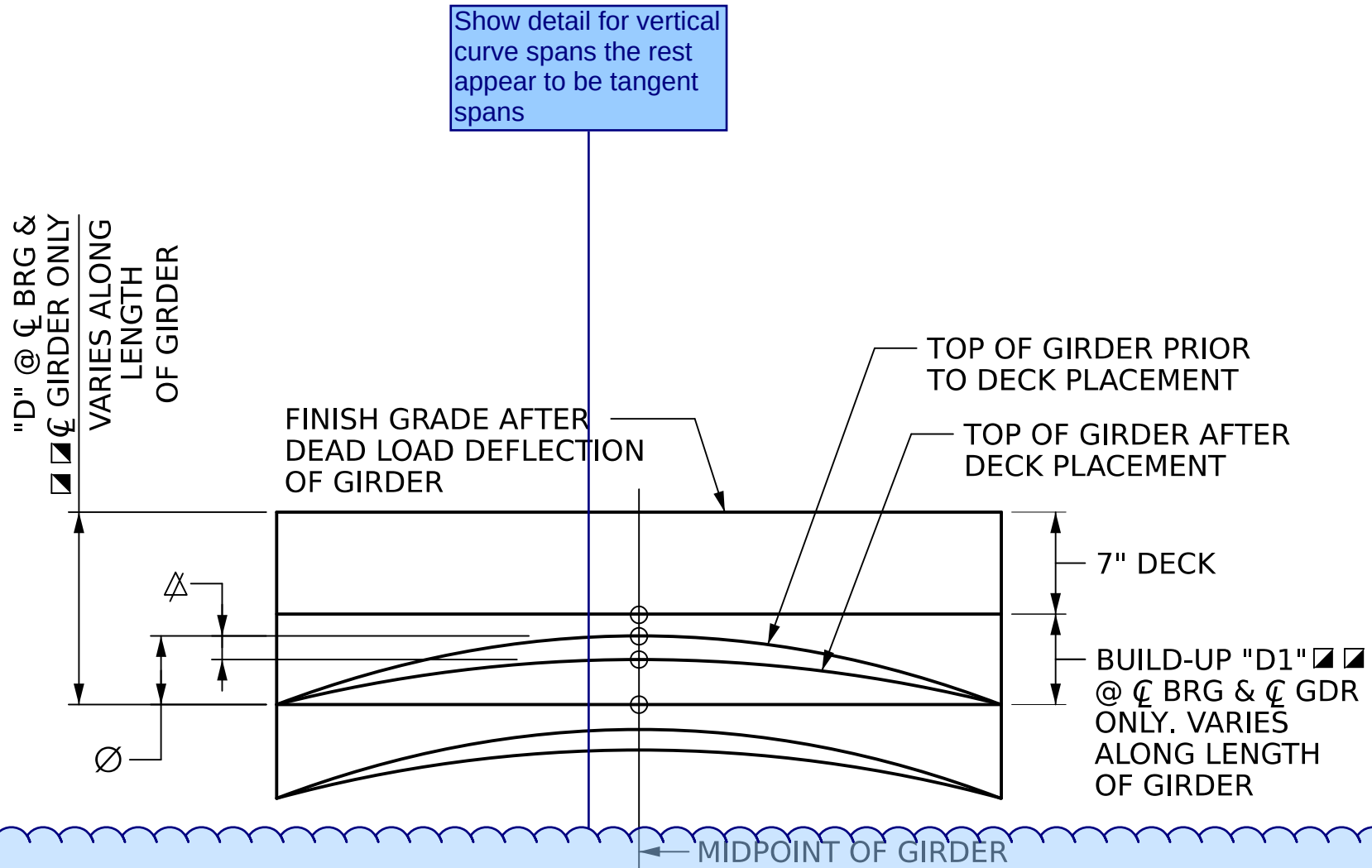
REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12020

SPAN NO	BEAM NO	BEAM LENGTH "L"	BEAM TYPE	PRESTRESSING STRANDS			STRAND PATTERN TYPE	f'ci (PSI)	BEARING DIMENSIONS		f'c (PSI)	BEAM END ANGLES		"D"	"D1"	"D2"	CAMBER	
				TOTAL	NO SHIELDED	NO DRAPED			"BRG 1"	"BRG 2"		END 1	END 2				Ø	Δ
1	1	103'-4 ⁵ / ₈ "	FIB-54	50	12	0	I	6800	1'-3 ¹ / ₂ "	1'-1 ¹ / ₄ "	8500	89°04'14"	89°04'22"	11 ¹ / ₂ "	4 ¹ / ₂ "	2 ¹ / ₄ "	2 ⁵ / ₈ "	7 ₈ "
	2	103'-1"	FIB-54	50	12	0	I	6800	1'-3 ¹ / ₂ "	1'-1 ¹ / ₄ "	8500	89°04'15"	89°04'21"	11 ¹ / ₂ "	4 ¹ / ₂ "	2 ¹ / ₄ "	2 ⁵ / ₈ "	7 ₈ "
	3	102'-9 ³ / ₄ "	FIB-54	50	12	0	I	6800	1'-3 ¹ / ₂ "	1'-1 ¹ / ₄ "	8500	89°04'16"	89°04'19"	11 ¹ / ₂ "	4 ¹ / ₂ "	2 ¹ / ₄ "	2 ⁵ / ₈ "	7 ₈ "
	4	102'-6 ³ / ₈ "	FIB-54	50	12	0	I	6800	1'-3 ¹ / ₂ "	1'-1 ¹ / ₄ "	8500	89°04'18"	89°04'18"	11 ¹ / ₂ "	4 ¹ / ₂ "	2 ¹ / ₄ "	2 ⁵ / ₈ "	7 ₈ "
	5	102'-3"	FIB-54	50	12	0	I	6800	1'-3 ¹ / ₂ "	1'-1 ¹ / ₄ "	8500	89°04'19"	89°04'16"	11 ¹ / ₂ "	4 ¹ / ₂ "	2 ¹ / ₈ "	2 ⁵ / ₈ "	3 ₄ "
2-3	1	109'-5 ¹ / ₂ "	FIB-54	50	12	0	I	6800	1'-1 ¹ / ₄ "	1'-1 ¹ / ₄ "	8500	89°01'39"	89°01'39"	11"	4"	2 ¹ / ₄ "	2 ³ / ₄ "	1 ¹ / ₈ "
	2	109'-1 ⁷ / ₈ "	FIB-54	50	12	0	I	6800	1'-1 ¹ / ₄ "	1'-1 ¹ / ₄ "	8500	89°01'39"	89°01'39"	11"	4"	2 ¹ / ₄ "	2 ³ / ₄ "	1 ¹ / ₈ "
	3	108'-10 ³ / ₈ "	FIB-54	50	12	0	I	6800	1'-1 ¹ / ₄ "	1'-1 ¹ / ₄ "	8500	89°01'39"	89°01'39"	11"	4"	2 ¹ / ₄ "	2 ³ / ₄ "	1 ¹ / ₈ "
	4	108'-6 ³ / ₄ "	FIB-54	50	12	0	I	6800	1'-1 ¹ / ₄ "	1'-1 ¹ / ₄ "	8500	89°01'39"	89°01'39"	11"	4"	2 ¹ / ₄ "	2 ³ / ₄ "	1 ¹ / ₈ "
	5	108'-3 ¹ / ₄ "	FIB-54	50	12	0	I	6800	1'-1 ¹ / ₄ "	1'-1 ¹ / ₄ "	8500	89°01'39"	89°01'39"	11"	4"	2 ¹ / ₈ "	2 ³ / ₄ "	1"
4	1	109'-5 ¹ / ₂ "	FIB-54	50	12	0	I	6800	1'-1 ¹ / ₄ "	1'-1 ¹ / ₄ "	8500	89°01'39"	89°01'39"	9"	2"	5"	2 ³ / ₄ "	1 ¹ / ₈ "
	2	109'-1 ⁷ / ₈ "	FIB-54	50	12	0	I	6800	1'-1 ¹ / ₄ "	1'-1 ¹ / ₄ "	8500	89°01'39"	89°01'39"	9"	2"	5"	2 ³ / ₄ "	1 ¹ / ₈ "
	3	108'-10 ³ / ₈ "	FIB-54	50	12	0	I	6800	1'-1 ¹ / ₄ "	1'-1 ¹ / ₄ "	8500	89°01'39"	89°01'39"	9"	2"	5"	2 ³ / ₄ "	1 ¹ / ₈ "
	4	108'-6 ³ / ₄ "	FIB-54	50	12	0	I	6800	1'-1 ¹ / ₄ "	1'-1 ¹ / ₄ "	8500	89°01'39"	89°01'39"	9"	2"	5"	2 ³ / ₄ "	1 ¹ / ₈ "
	5	108'-3 ¹ / ₄ "	FIB-54	50	12	0	I	6800	1'-1 ¹ / ₄ "	1'-1 ¹ / ₄ "	8500	89°01'39"	89°01'39"	9"	2"	4 ⁷ / ₈ "	2 ³ / ₄ "	1"
5	1	100'-5 ¹ / ₂ "	FIB-54	50	12	0	I	6800	1'-1 ¹ / ₄ "	1'-2 ¹ / ₄ "	8500	89°07'55"	68°17'49"	9"	2"	5 ⁵ / ₈ "	2 ⁵ / ₈ "	3 ₄ "
	2	96'-10 ¹ / ₈ "	FIB-54	50	12	0	I	6800	1'-1 ¹ / ₄ "	1'-2 ¹ / ₄ "	8500	89°07'55"	68°17'49"	9"	2"	5 ⁵ / ₈ "	2 ¹ / ₂ "	5 ₈ "
	3	93'-2 ³ / ₄ "	FIB-54	40	10	0	II	6800	1'-1 ¹ / ₄ "	1'-2 ¹ / ₄ "	8500	89°07'55"	68°17'49"	9"	2"	6"	1 ³ / ₄ "	5 ₈ "
	4	89'-7 ³ / ₈ "	FIB-54	40	10	0	II	6800	1'-1 ¹ / ₄ "	1'-2 ¹ / ₄ "	8500	89°07'55"	68°17'49"	9"	2"	5 ⁵ / ₈ "	1 ³ / ₄ "	1 ¹ / ₂ "
	5	86'-0"	FIB-54	40	10	0	II	6800	1'-1 ¹ / ₄ "	1'-2 ¹ / ₄ "	8500	89°07'55"	68°17'49"	9"	2"	5 ⁵ / ₈ "	1 ⁵ / ₈ "	3 ₈ "

NOTE: BEAM LENGTH "L" IS MEASURED ALONG C₁ BEAM.



TYPICAL SECTION AT MIDSPAN

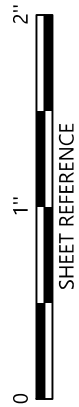


DETAIL OF BUILD UP BETWEEN BOTTOM OF DECK AND TOP OF GIRDER (ALONG CL GIRDER)

NTS

- REPRESENTS THE EXPECTED CAMBER (UPWARD DEFLECTION DUE TO PRESTRESS) USED FOR STATE DESIGN PURPOSES AND IS SHOWN HERE FOR INFORMATION ONLY. AFTER ERECTING GIRDERS AND PRIOR TO ORDERING MATERIAL AND SETTING FORMS, THE CONTRACTOR SHALL PROFILE GIRDERS TO DETERMINE THE IN-PLACE CAMBER. THE MEASURED CAMBER ORDINATES OBTAINED FROM PROFILING THE GIRDERS SHALL BE USED IN CALCULATIONS TO PROPERLY SET FORMS. SEE [] PRESTRESSED CONCRETE BEAM SCHEDULE FOR EXPECTED CAMBER.
- △ REPRESENTS ANTICIPATED DOWNWARD DEFLECTION DUE TO WEIGHT OF DECK (INCLUDES WEIGHT OF STAY-IN-PLACE FORMS). SEE [] PRESTRESSED CONCRETE BEAM SCHEDULE FOR ANTICIPATED DOWNWARD DEFLECTION

 ALABAMA DEPARTMENT OF TRANSPORTATION	A	LP	02/02/2024	60% INTERIM SUBMITTAL							PLAN SUBMITTAL	BIN(S) 021829	DESIGNER: <u>E. LEON</u> DATE: _____	SHEET TITLE MOBILE RIVER BRIDGE WATER STREET RAMP C GIRDER SCHEDULE (1 OF 2)
	B	EL	06/13/2025	90% FINAL SUBMITTAL										
REV. NO.	BY	DATE	DESCRIPTION OF REVISION		DATE	DATE	90%	COUNTY(S) MOBILE	BRIDGE SHEET NO. 20 OF 40					

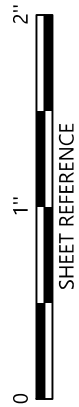


REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12021

SPAN NO	BEAM NO	REINFORCING STEEL														
		BARS C1	BARS C2	BARS D1		BARS D2		BARS D3	BARS M1	BARS M2	BARS M3	BARS K	NO OF SPACES BARS K			
		C	C	A	B	A	B	NO	D	D	NO	NO	S1	S2	S3	S4
1	1	1'-5 1/2"	1'-5 1/2"	0'-8 1/2"	1'-3"	0'-8 1/2"	1'-3"	60	3'-8"	3'-8"	91	142	12	10	12	13
	2	1'-5 1/2"	1'-5 1/2"	0'-8 1/2"	1'-3"	0'-8 1/2"	1'-3"	60	3'-8"	3'-8"	91	142	12	10	12	13
	3	1'-5 1/2"	1'-5 1/2"	0'-8 1/2"	1'-3"	0'-8 1/2"	1'-3"	60	3'-8"	3'-8"	90	142	12	11	11	13
	4	1'-5 1/2"	1'-5 1/2"	0'-8 1/2"	1'-3"	0'-8 1/2"	1'-3"	60	3'-8"	3'-8"	90	142	12	11	11	13
	5	1'-5 1/2"	1'-5 1/2"	0'-8 1/2"	1'-3"	0'-8 1/2"	1'-3"	59	3'-8"	3'-8"	90	142	12	11	11	13
2 THRU 4	1	1'-5 1/2"	1'-5 1/2"	0'-8 1/2"	1'-3"	0'-8 1/2"	1'-3"	64	3'-8"	3'-8"	97	148	12	11	13	14
	2	1'-5 1/2"	1'-5 1/2"	0'-8 1/2"	1'-3"	0'-8 1/2"	1'-3"	64	3'-8"	3'-8"	97	148	12	11	13	14
	3	1'-5 1/2"	1'-5 1/2"	0'-8 1/2"	1'-3"	0'-8 1/2"	1'-3"	64	3'-8"	3'-8"	96	148	12	11	14	13
	4	1'-5 1/2"	1'-5 1/2"	0'-8 1/2"	1'-3"	0'-8 1/2"	1'-3"	64	3'-8"	3'-8"	96	148	12	11	14	13
	5	1'-5 1/2"	1'-5 1/2"	0'-8 1/2"	1'-3"	0'-8 1/2"	1'-3"	63	3'-8"	3'-8"	96	148	12	11	14	13
5	1	1'-5 1/2"	1'-6 7/8"	0'-8 1/2"	1'-3"	0'-9 1/8"	1'-4 1/8"	58	3'-8"	3'-11 3/8"	88	142	12	12	11	12
	2	1'-5 1/2"	1'-6 7/8"	0'-8 1/2"	1'-3"	0'-9 1/8"	1'-4 1/8"	56	3'-8"	3'-11 3/8"	84	140	12	12	12	10
	3	1'-5 1/2"	1'-6 7/8"	0'-8 1/2"	1'-3"	0'-9 1/8"	1'-4 1/8"	53	3'-8"	3'-11 3/8"	81	136	12	12	10	10
	4	1'-5 1/2"	1'-6 7/8"	0'-8 1/2"	1'-3"	0'-9 1/8"	1'-4 1/8"	51	3'-8"	3'-11 3/8"	77	134	12	12	10	9
	5	1'-5 1/2"	1'-6 7/8"	0'-8 1/2"	1'-3"	0'-9 1/8"	1'-4 1/8"	49	3'-8"	3'-11 3/8"	73	134	12	13	12	6

 ALABAMA DEPARTMENT OF TRANSPORTATION	A	LP	02/02/2024	60% INTERIM SUBMITTAL							PLAN SUBMITTAL	BIN(S) 021829	DESIGNER: <u>E. LEON</u> DATE: _____	SHEET TITLE MOBILE RIVER BRIDGE WATER STREET RAMP C GIRDER SCHEDULE (2 OF 2)
	B	EL	06/13/2025	90% FINAL SUBMITTAL										
REV. NO.	BY	DATE	DESCRIPTION OF REVISION		DATE	DATE				90%	COUNTY(S) MOBILE	BRIDGE SHEET NO. 21 OF 40		

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REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12022

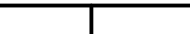
DECK ELEVATION AT TWENTIETH POINT LOCATIONS																						
BEAM	SPAN 1																					
	**ABUT 1	*ABUT 1	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	*BENT 2
LEFT GUTTER	20.663	20.800	21.051	21.303	21.554	21.805	22.056	22.307	22.559	22.810	23.061	23.312	23.563	23.815	24.066	24.317	24.568	24.820	25.071	25.322	25.573	25.824
GIRDER 1	20.608	20.745	20.994	21.244	21.494	21.744	21.994	22.245	22.495	22.746	22.997	23.248	23.499	23.751	24.002	24.254	24.506	24.758	25.011	25.263	25.516	25.769
BASELINE & PGL I-10 EB BUS	20.443	20.580	20.831	21.083	21.334	21.585	21.836	22.087	22.339	22.590	22.841	23.092	23.343	23.595	23.846	24.097	24.348	24.600	24.851	25.102	25.353	25.604
GIRDER 2	20.416	20.552	20.802	21.051	21.301	21.552	21.802	22.052	22.303	22.554	22.805	23.056	23.307	23.558	23.810	24.062	24.314	24.566	24.818	25.071	25.323	25.576
GIRDER 3	20.223	20.360	20.609	20.859	21.109	21.359	21.609	21.860	22.110	22.361	22.612	22.863	23.114	23.366	23.618	23.869	24.121	24.373	24.626	24.878	25.131	25.384
GIRDER 4	20.031	20.167	20.417	20.666	20.916	21.167	21.417	21.667	21.918	22.169	22.420	22.671	22.922	23.173	23.425	23.677	23.929	24.181	24.433	24.686	24.938	25.191
GIRDER 5	19.838	19.975	20.224	20.474	20.724	20.974	21.224	21.475	21.725	21.976	22.227	22.478	22.729	22.981	23.233	23.484	23.736	23.989	24.241	24.493	24.746	24.999
RIGHT GUTTER	19.783	19.920	20.171	20.423	20.674	20.925	21.176	21.427	21.679	21.930	22.181	22.432	22.683	22.935	23.186	23.437	23.688	23.940	24.191	24.442	24.693	24.944

Include edge of slab finish
grade elevations (Typ.)

DECK ELEVATION AT TWENTIETH POINT LOCATIONS																					
BEAM	SPAN 2																				
	*BENT 2	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	*BENT 3
LEFT GUTTER	25.974	26.241	26.508	26.774	27.041	27.308	27.575	27.842	28.108	28.375	28.642	28.909	29.175	29.442	29.709	29.976	30.243	30.509	30.776	31.043	31.310
GIRDER 1	25.918	26.183	26.448	26.714	26.979	27.245	27.511	27.777	28.043	28.310	28.577	28.843	29.111	29.378	29.645	29.913	30.181	30.449	30.717	30.986	31.254
BASELINE & PGL I-10 EB BUS	25.754	26.021	26.288	26.554	26.821	27.088	27.355	27.622	27.888	28.155	28.422	28.689	28.955	29.222	29.489	29.756	30.023	30.289	30.556	30.823	31.090
GIRDER 2	25.726	25.991	26.256	26.521	26.787	27.053	27.319	27.585	27.851	28.117	28.384	28.651	28.918	29.185	29.453	29.721	29.988	30.256	30.525	30.793	31.062
GIRDER 3	25.533	25.798	26.064	26.329	26.594	26.860	27.126	27.392	27.658	27.925	28.192	28.459	28.726	28.993	29.260	29.528	29.796	30.064	30.332	30.601	30.869
GIRDER 4	25.341	25.606	25.871	26.136	26.402	26.668	26.934	27.200	27.466	27.732	27.999	28.266	28.533	28.800	29.068	29.336	29.603	29.871	30.140	30.408	30.677
GIRDER 5	25.148	25.413	25.679	25.944	26.209	26.475	26.741	27.007	27.274	27.540	27.807	28.074	28.341	28.608	28.875	29.143	29.411	29.679	29.947	30.216	30.484
RIGHT GUTTER	25.094	25.361	25.628	25.894	26.161	26.428	26.695	26.962	27.228	27.495	27.762	28.029	28.295	28.562	28.829	29.096	29.363	29.629	29.896	30.163	30.430

DECK ELEVATION AT TWENTIETH POINT LOCATIONS																					
BEAM	SPAN 3																				
	*BENT 3	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	*BENT 4
LEFT GUTTER	31.459	31.726	31.993	32.260	32.527	32.793	33.060	33.327	33.594	33.861	34.127	34.394	34.661	34.928	35.195	35.461	35.728	35.995	36.262	36.529	36.795
GIRDER 1	31.404	31.669	31.934	32.199	32.465	32.731	33.096	33.263	33.529	33.795	34.062	34.329	34.596	34.863	35.131	35.398	35.666	35.934	36.203	36.471	36.740
BASELINE & PGL I-10 EB BUS	31.239	31.506	31.773	32.040	32.307	32.573	32.840	33.107	33.374	33.641	33.907	34.174	34.441	34.708	34.975	35.241	35.508	35.775	36.042	36.309	36.575
GIRDER 2	31.211	31.476	31.741	32.007	32.272	32.538	32.804	33.070	33.336	33.603	33.870	34.137	34.404	34.671	34.938	35.206	35.474	35.742	36.010	36.279	36.547
GIRDER 3	31.019	31.284	31.549	31.814	32.080	32.346	32.612	32.878	33.144	33.410	33.677	33.944	34.211	34.478	34.746	35.014	35.281	35.549	35.818	36.086	36.355
GIRDER 4	30.826	31.091	31.357	31.622	31.887	32.153	32.419	32.685	32.951	33.218	33.485	33.752	34.019	34.286	34.553	34.821	35.089	35.357	35.625	35.894	36.162
GIRDER 5	30.634	30.899	31.164	31.429	31.695	31.961	32.227	32.493	32.759	33.025	33.292	33.559	33.826	34.093	34.361	34.629	34.896	35.164	35.433	35.701	35.970
RIGHT GUTTER	30.579	30.846	31.113	31.380	31.647	31.913	32.180	32.447	32.714	32.981	33.247	33.514	33.781	34.048	34.315	34.581	34.848	35.115	35.382	35.649	35.915

** AT BACK OF ABUTMENT
* AT $\mathcal{C}_L$ BEARING

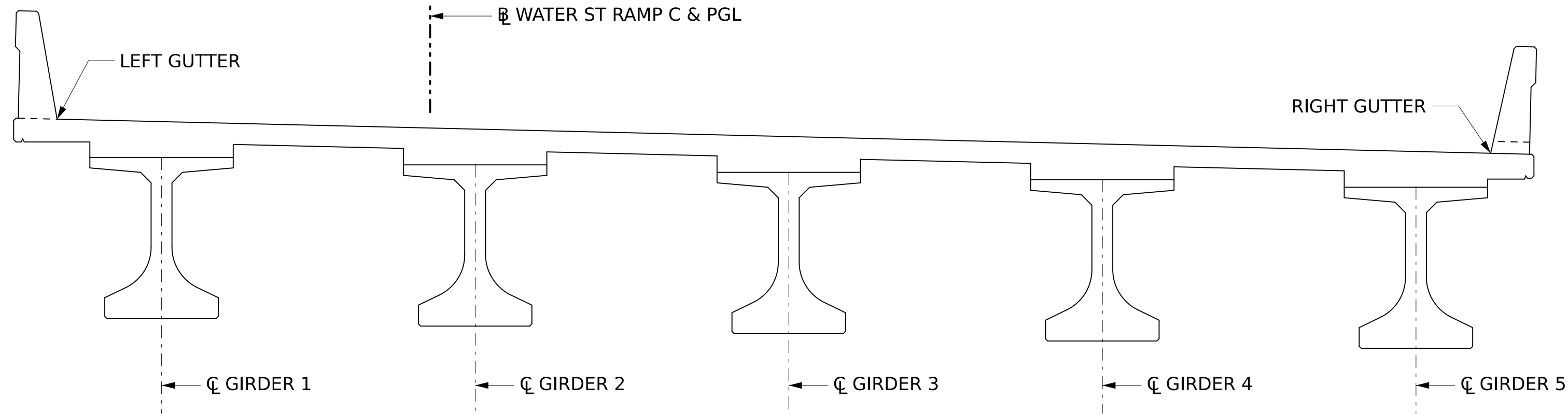
 ALABAMA DEPARTMENT OF TRANSPORTATION	A	LP	02/02/2024	60% INTERIM SUBMITTAL							PLAN SUBMITTAL	BIN(S)	DESIGNER: <u>K. VARGHA</u> DATE: _____	SHEET TITLE MOBILE RIVER BRIDGE WATER STREET RAMP C DECK ELEVATIONS (1 OF 2)
	B	EL	06/13/2025	90% FINAL SUBMITTAL								021829		
												COUNTY(S)		
												MOBILE		
	REV. NO.	BY	DATE	DESCRIPTION OF REVISION								DATE		

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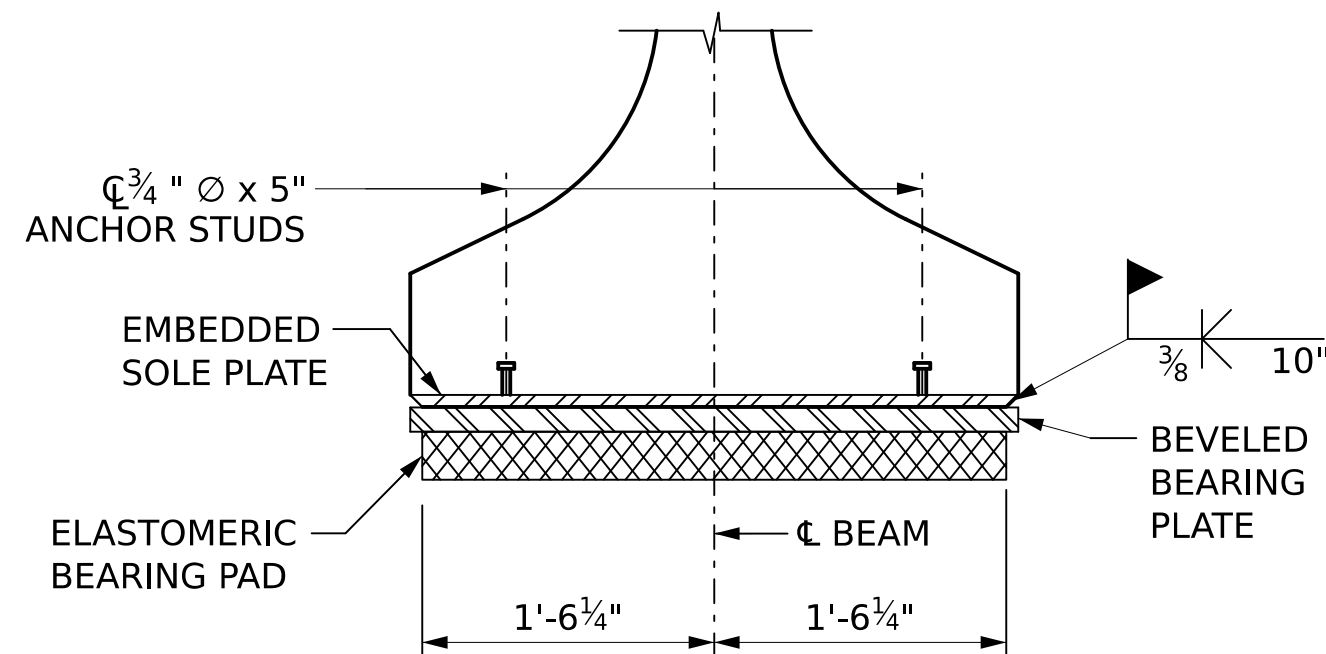
DECK ELEVATION AT TWENTIETH POINT LOCATIONS																				
BEAM	SPAN 4																			
	*BENT 4	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95 *BENT 5
LEFT GUTTER	36.945	37.210	37.467	37.714	37.951	38.178	38.395	38.603	38.800	38.988	39.166	39.335	39.493	39.642	39.780	39.909	40.028	40.137	40.237	40.327
GIRDER 1	36.889	37.153	37.408	37.653	37.889	38.115	38.332	38.538	38.736	38.923	39.101	39.269	39.428	39.577	39.717	39.846	39.966	40.077	40.178	40.269
BASELINE & PGL I-10 EB BUS	36.725	36.990	37.247	37.494	37.731	37.958	38.175	38.383	38.580	38.768	38.946	39.115	39.273	39.422	39.560	39.689	39.808	39.917	40.017	40.107
GIRDER 2	36.697	36.960	37.215	37.461	37.697	37.923	38.139	38.346	38.543	38.731	38.909	39.077	39.236	39.385	39.524	39.654	39.774	39.884	39.985	40.077
GIRDER 3	36.504	36.768	37.023	37.268	37.504	37.730	37.947	38.153	38.351	38.538	38.716	38.884	39.043	39.192	39.332	39.461	39.581	39.692	39.793	39.884
GIRDER 4	36.312	36.575	36.830	37.076	37.312	37.538	37.754	37.961	38.158	38.346	38.524	38.692	38.851	39.000	39.139	39.269	39.389	39.500	39.600	39.692
GIRDER 5	36.119	36.383	36.638	36.883	37.119	37.345	37.562	37.768	37.966	38.153	38.331	38.500	38.658	38.807	38.947	39.076	39.197	39.307	39.408	39.499
RIGHT GUTTER	36.065	36.330	36.587	36.834	37.071	37.298	37.515	37.723	37.920	38.108	38.286	38.455	38.613	38.762	38.900	39.029	39.148	39.257	39.357	39.447

DECK ELEVATION AT TENTH POINT LOCATIONS											
BEAM	SPAN 5										
	*BENT 5	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	*BENT 12
LEFT GUTTER	40.447	40.558	40.636	40.680	40.691	40.668	40.612	40.522	40.398	40.248	40.091
GIRDER 1	40.392	40.499	40.574	40.617	40.628	40.607	40.553	40.467	40.348	40.203	40.051
BASELINE & PGL I-10 EB BUS	40.227	40.334	40.411	40.457	40.471	40.455	40.408	40.329	40.220	40.081	39.932
GIRDER 2	40.199	40.303	40.378	40.422	40.436	40.420	40.374	40.298	40.192	40.056	39.911
GIRDER 3	40.007	40.108	40.181	40.226	40.243	40.233	40.194	40.127	40.032	39.910	39.771
GIRDER 4	39.814	39.912	39.984	40.030	40.050	40.044	40.012	39.955	39.871	39.761	39.632
GIRDER 5	39.621	39.716	39.787	39.833	39.856	39.855	39.830	39.780	39.707	39.610	39.489
RIGHT GUTTER	39.567	39.663	39.735	39.784	39.808	39.809	39.785	39.740	39.666	39.571	39.452

** AT BACK OF ABUTMENT
* AT CL BEARING



TYPICAL SECTION
NTS



1'-3" EMBEDDED SOLE PLATE

4 - 3/4" Ø x 5" ANCHOR STUDS

BEVELED BEARING PLATE

ELASTOMERIC BEARING PAD

5" 5"

CL BEARING

$\text{C } \frac{3}{4}'' \text{ } \phi \times 5''$
 ANCHOR STUDS
 EMBEDDED SOLE PLATE
 ELASTOMERIC BEARING PAD
 C BEAM
 1'-6 $\frac{1}{4}$ '' 1'-6 $\frac{1}{4}$ ''

Diagram illustrating a bearing stiffener connection. The connection consists of an **EMBEDDED SOLE PLATE** (1'-3" long) and **4 - 3/4" Ø X 5" ANCHOR STUDS**. The sole plate is supported by an **ELASTOMERIC BEARING PAD** (5" x 5") which is placed on a **BEARING** surface.

Figure 1: Detail of the beam-column joint. The diagram shows a cross-section of a joint. The column width is 10 inches, with 5 inches of concrete on each side of the central beam. The beam width is 1'-7 inches, with 1'-7 inches of concrete on each side of the central beam. The joint is labeled "BEAM & BRNG" and "BRNG".

45° BEVEL

3'-2"

4 - 3/4" Ø X 5" ANCHOR STUDS

3/4"

Figure 1: Typical cross-section of a 10' x 3'-0 1/2" precast concrete wall. The diagram shows a cross-section of a wall with a total height of 10 feet and a total width of 3 feet 0 1/2 inches. The wall is composed of two main sections, each 1 foot 6 3/4 inches wide, separated by a central joint. The wall is supported by a base with a 5-inch thick pad on each side of the joint. The top of the wall is finished with a 5-inch thick layer. The wall is labeled '10'' on the left, '3'-0 1/2"' on the top, and '1'-6 3/4"' for each section. The base is labeled '5"' for each pad and '5"' for the central joint area. The wall is labeled 'BRNG PAD' on both sides of the joint.

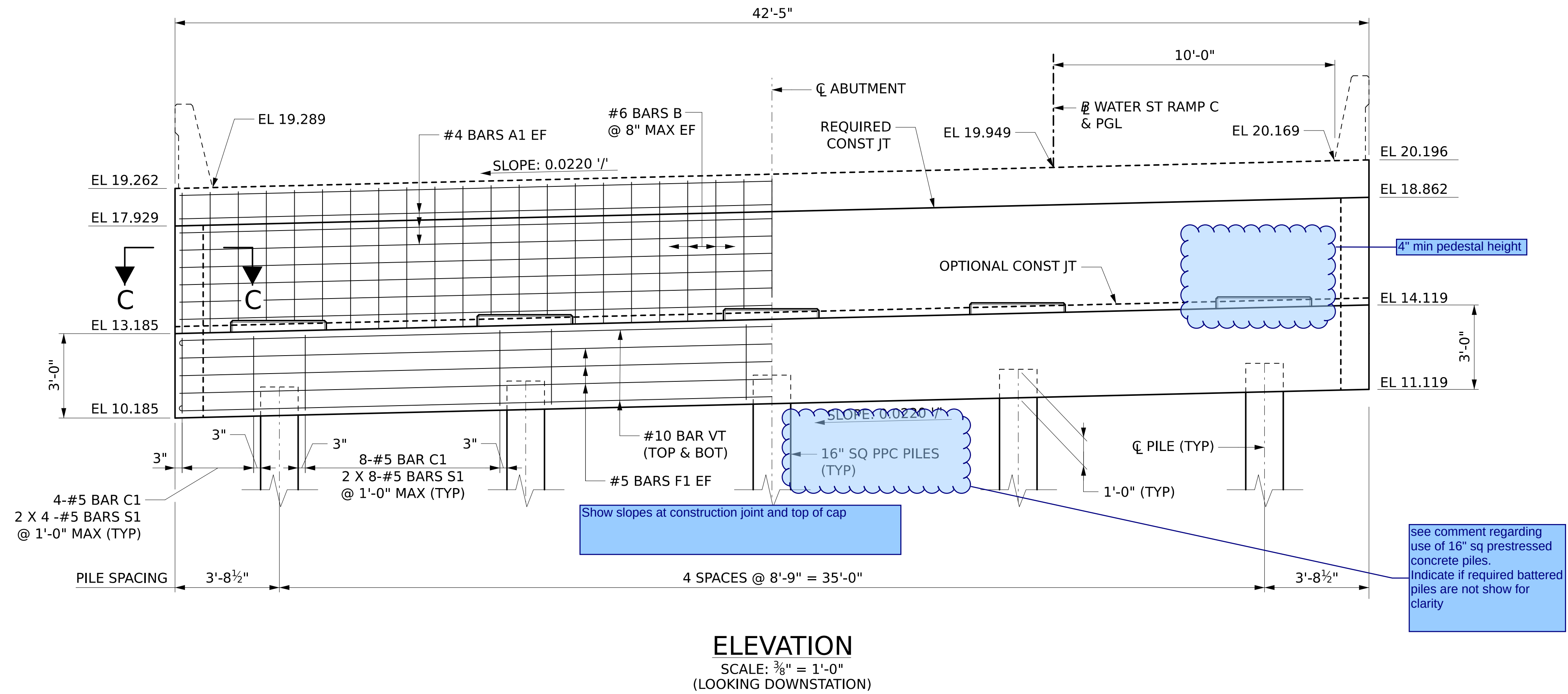
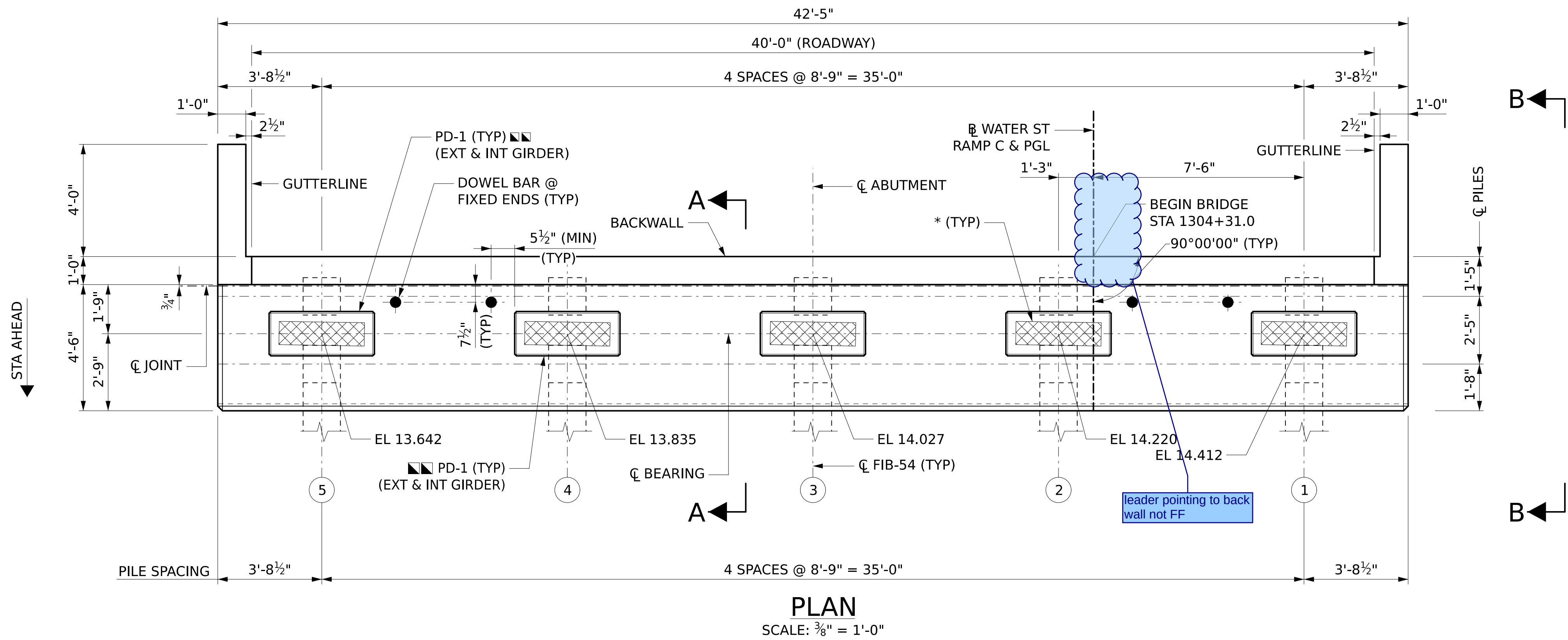
Diagram illustrating the cross-section of a bridge deck structure, showing the following components and dimensions:

- EXTERNAL ELASTOMER COVER TYP**: $\frac{1}{4}$ "
- 6-12 GAUGE STEEL PLATES**: $3'-0\frac{3}{4}" \times 9\frac{3}{4}"$
- INTERNAL ELASTOMER LAYER TYP (5 LAYERS REQ'D)**: $\frac{1}{2}"$
- CL TYP**: $\frac{1}{4}"$
- Overall Dimensions**:
 - Height: 3"
 - Width: $3'-0\frac{1}{2}"$

6/13/2025

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12025

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION



NOTES:

- * 1. TYPE 2 ELASTOMERIC BEARING PADS. SEE BEARING DETAIL SHEET.
- 2. FOR PEDESTAL DETAILS, SEE PEDESTAL DETAILS SHEET.
3. FOR SECTION A-A, B-B, AND C-C, SEE ABUTMENT 1 DETAIL SHEET.
4. FOR PILE NUMBER AND CUT-OFF ELEVATIONS, SEE PILE DATA TABLES SHEET.
5. FOR PILE TIP ELEVATIONS, SEE PILE DATA TABLES SHEET.
6. FOR BRIDGE END SLAB DETAILS, SEE BRIDGE SPECIAL PROJECT DWG BES-450(I)BP.



ALABAMA
DEPARTMENT OF
TRANSPORTATION

A	LP	02/02/2024	60% INTERIM SUBMITTAL
B	EL	06/13/2025	90% FINAL SUBMITTAL
REV. NO.	BY	DATE	DESCRIPTION OF REVISION

PE STAMP
DATE

PE STAMP
DATE

QR
CODE

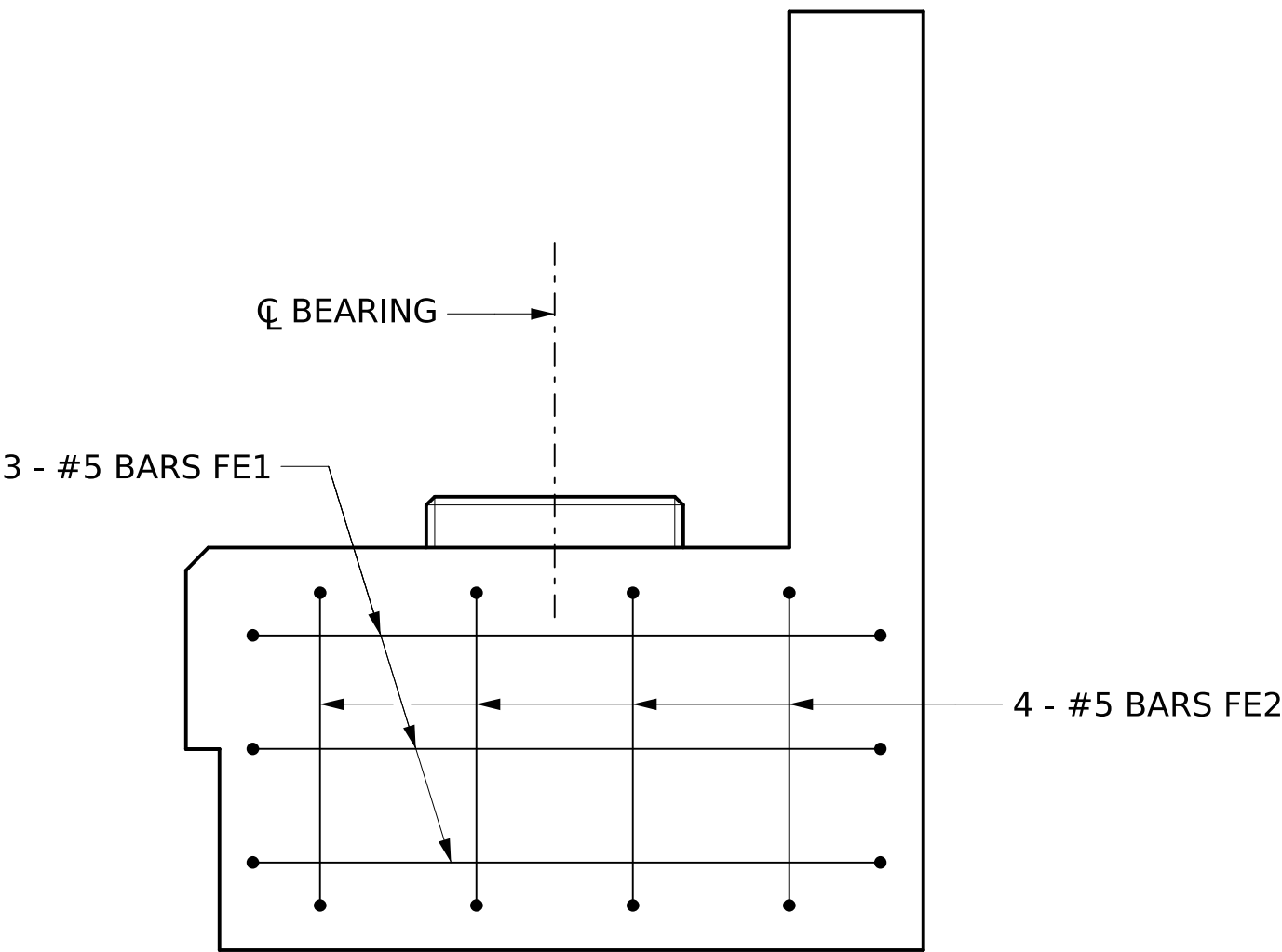
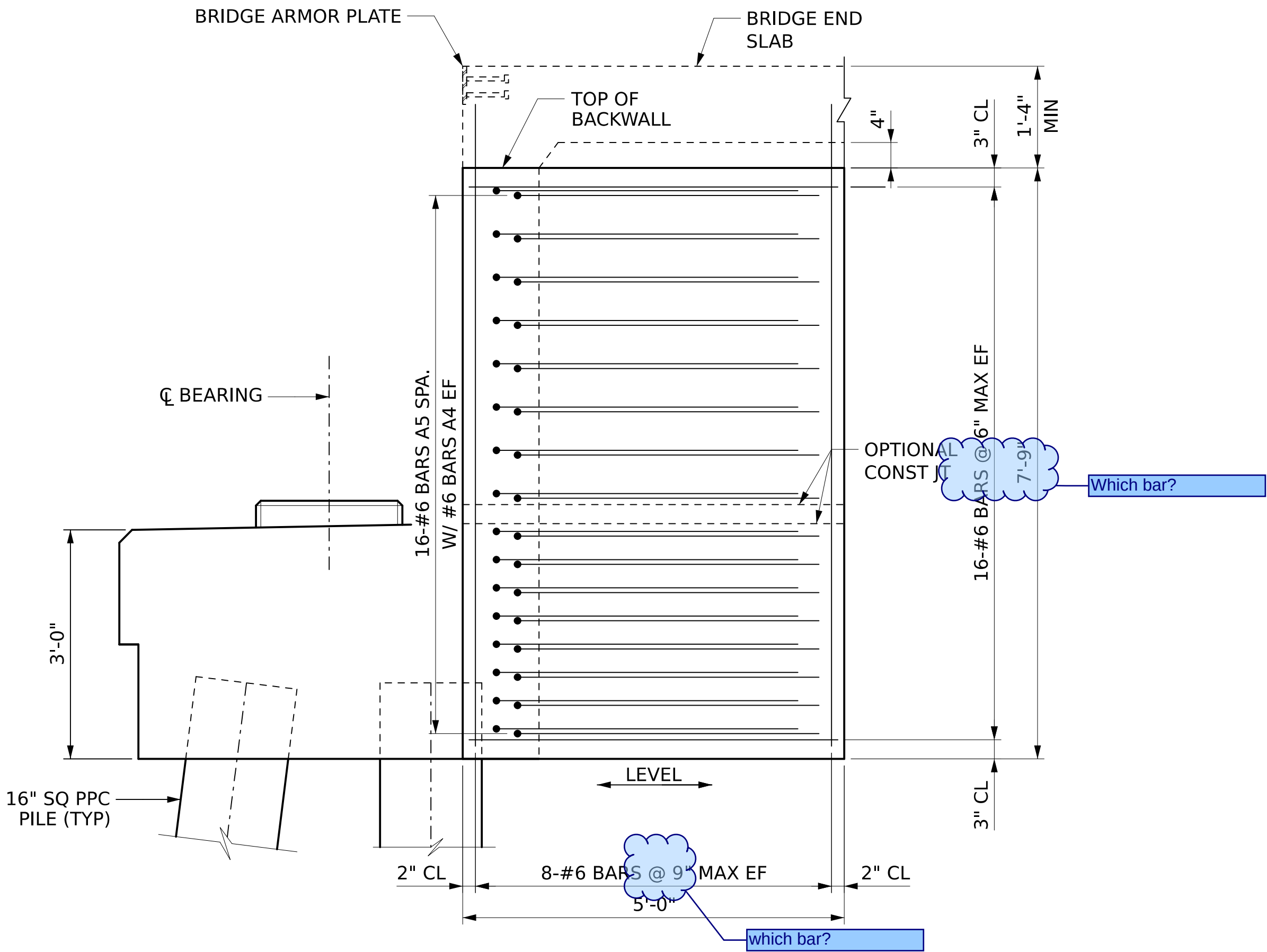
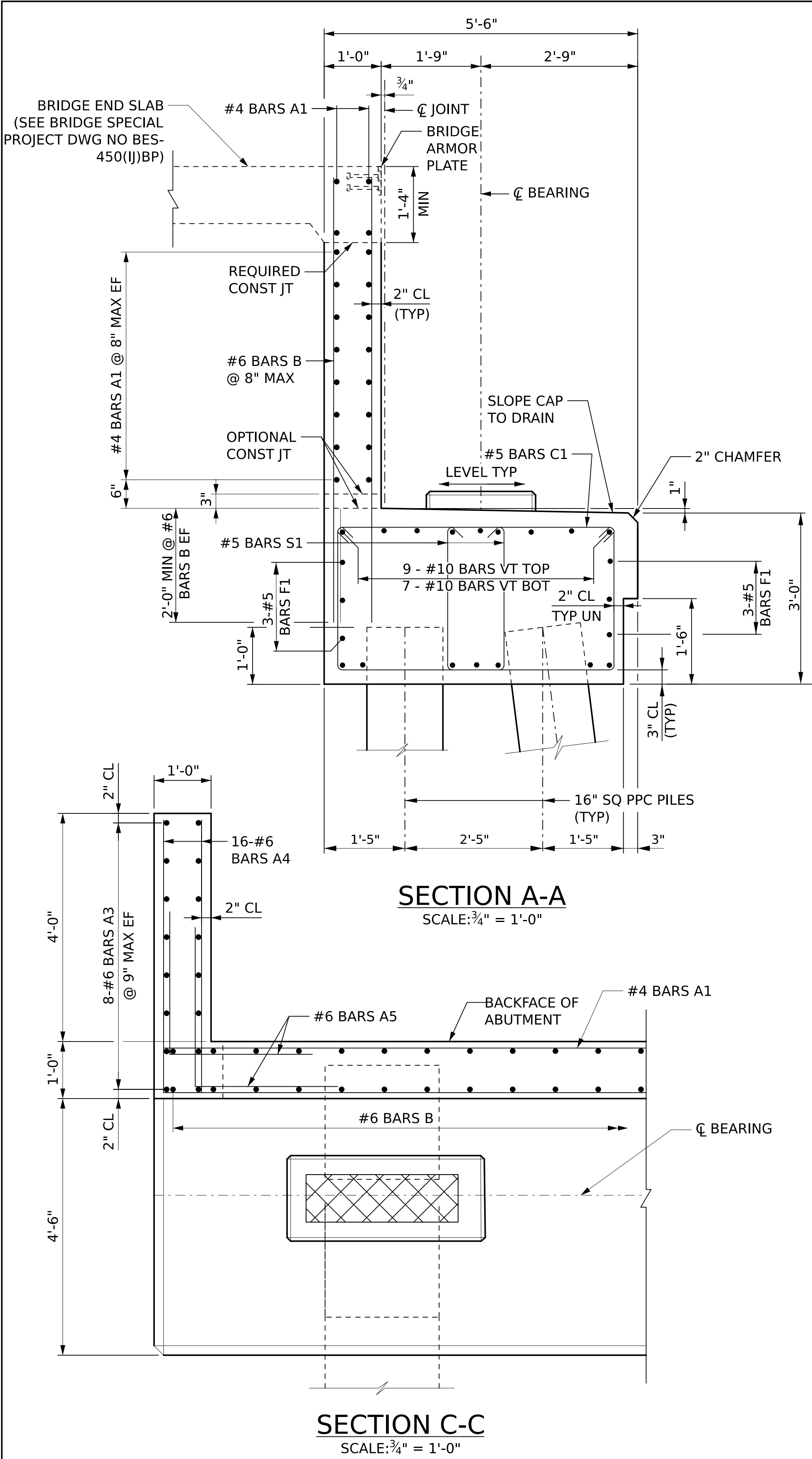


PLAN SUBMITTAL
90%

BIN(S)
021829
COUNTY(S)
MOBILE

DESIGNER: J. OSIBODU
DATE: _____
BRIDGE SHEET NO. 25 OF 40

SHEET TITLE
MOBILE RIVER BRIDGE
WATER STREET RAMP C
ABUTMENT 1



BILL OF REINFORCEMENT - ABUTMENT NO. 1					
MARK	SIZE	NO	LENGTH	LOCATION	BENDING
A1	4	20	42'-1"	BACKWALL	STRAIGHT
A3	6	32	8'-6"	WINGWALL	STRAIGHT
A4	6	64	4'-8"	WINGWALL	STRAIGHT
A5	6	64	4'-0"	WINGWALL	SEE DIAG
B	6	128	8'-2"	BACKWALL	STRAIGHT
C1	5	40	6'-11"	CAP	SEE DIAG
F1	5	6	42'-1"	CAP	STRAIGHT
FE1	5	6	6'-9½"	CAP	SEE DIAG
FE2	5	8	4'-5½"	CAP	SEE DIAG
S1	5	80	9'-1"	CAP	SEE DIAG
U1	3	20	6'-4"	PEDESTAL	SEE DIAG
U2	3	45	4'-1"	PEDESTAL	SEE DIAG
VT	10	16	48'-1"	CAP	SEE DIAG

2'-0"

2'-0"

BAR A5

4'-11"

BAR C1

42'-1"

BAR VT

1'-3"

3'-6"

2'-5½"

4'-9½"

U2

U1

FE2

FE1

1'-0"

1'-5"

FE1 & FE2

U1 & U2

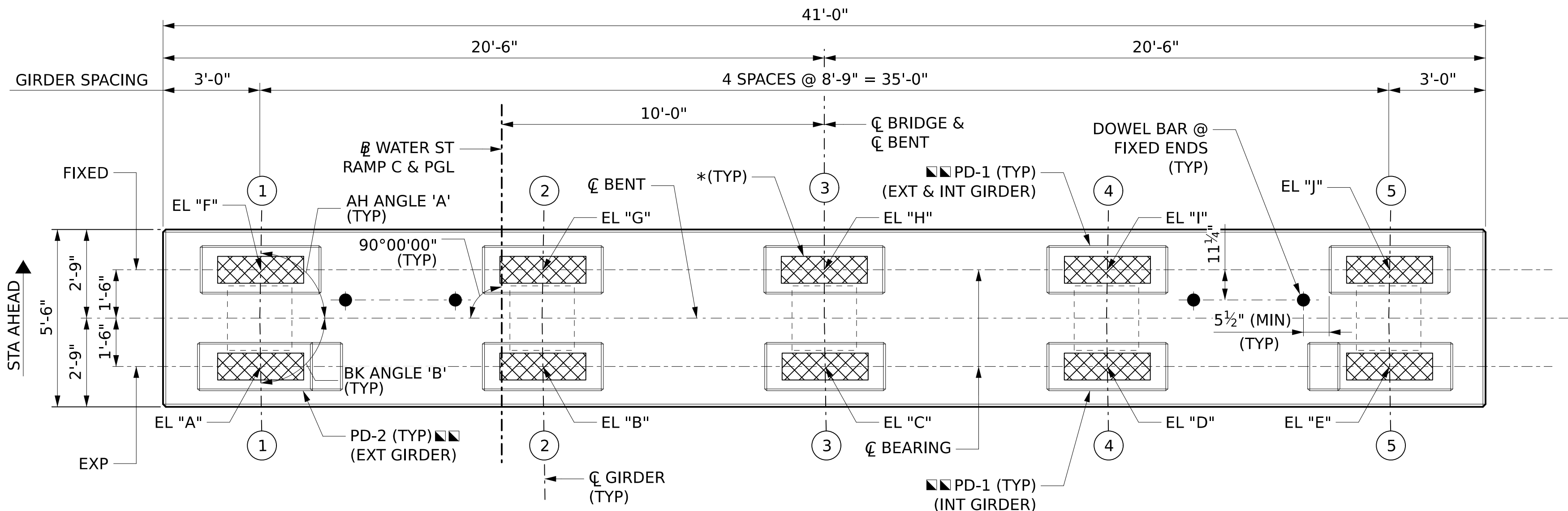
2'-7"

2'-11"

BAR S1

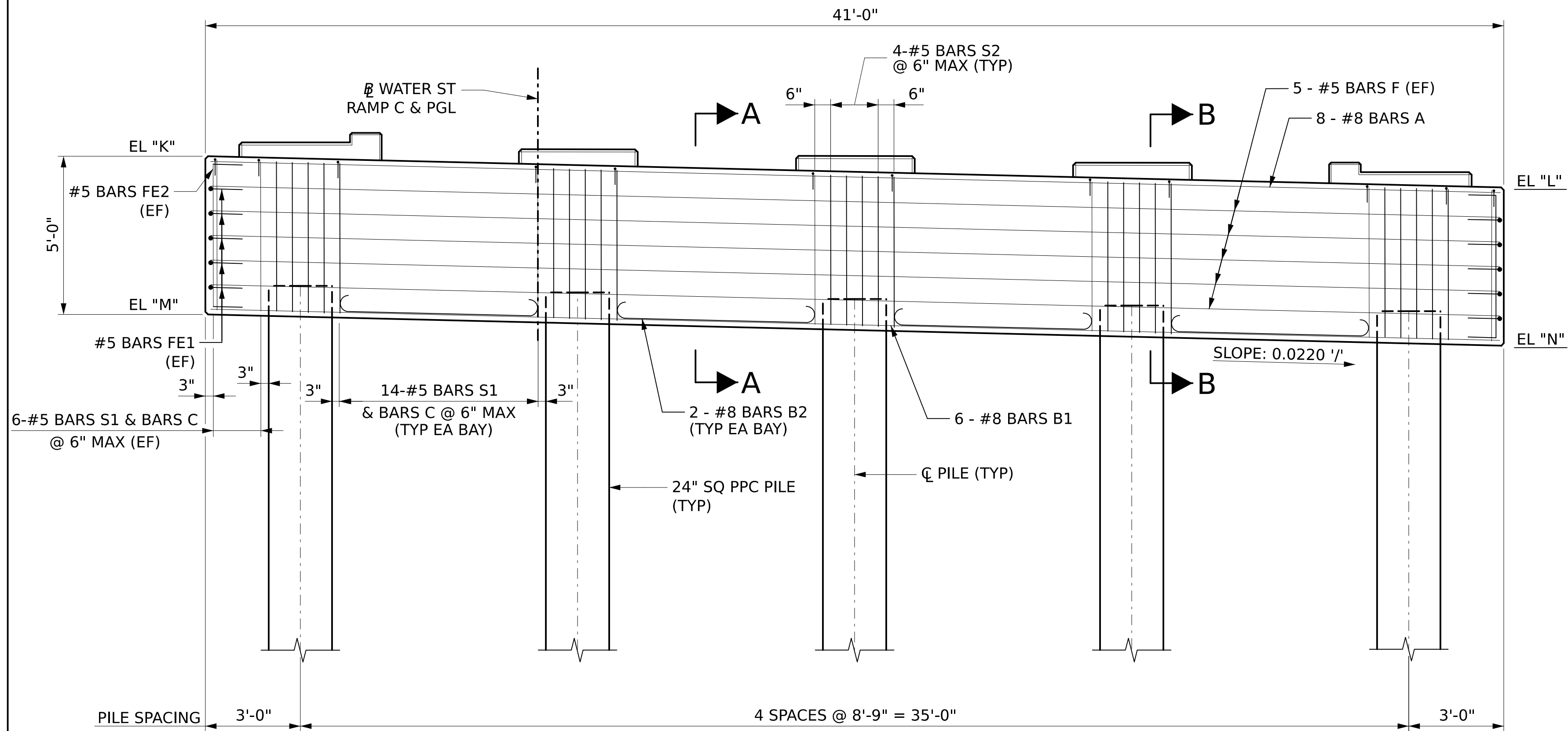
BAR BENDING DIAGRAM

- NOTES:
- FOR PEDESTAL REINFORCEMENT DETAILS, SEE PEDESTAL DETAILS SHEET.



PLAN

SCALE: 3/8" = 1'-0"



ELEVATION

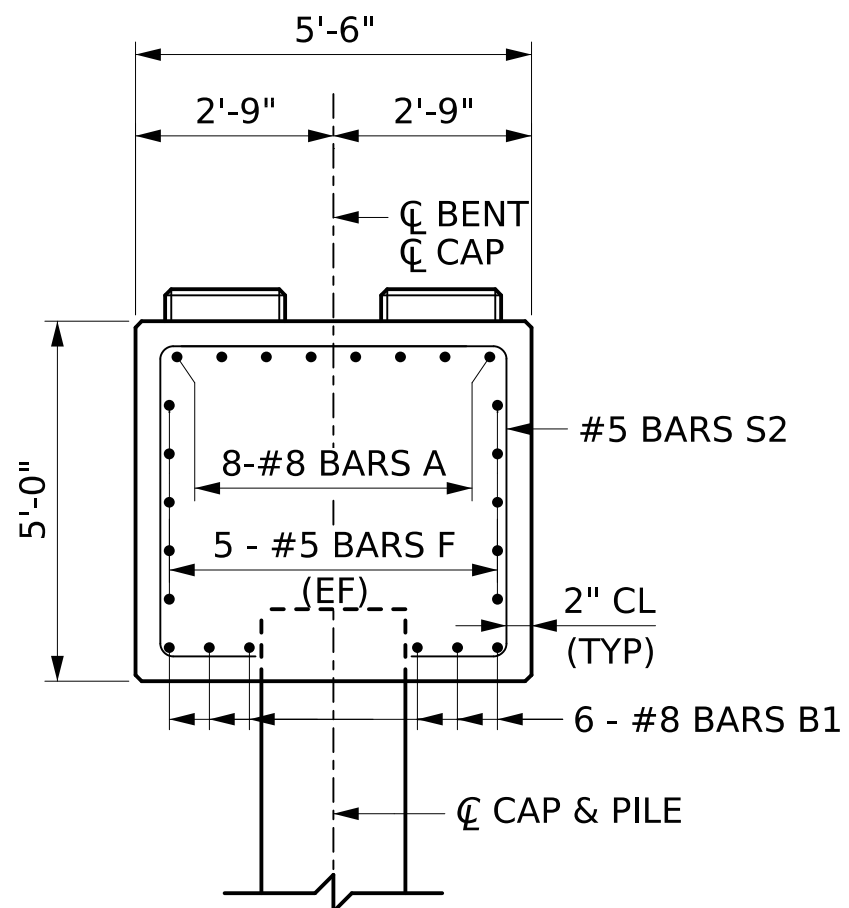
SCALE: 3/8" = 1'-0"

BENT NO	TABLE OF ELEVATIONS											
	MARK											
	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"J"	"K"	"L"
2	19.936	19.744	19.551	19.359	19.166	20.127	19.935	19.742	19.550	19.357	19.627	18.725
3	25.463	25.271	25.078	24.886	24.693	25.613	25.420	25.228	25.035	24.843	25.155	24.253
4	30.949	30.756	30.564	30.371	30.179	31.265	31.072	30.880	30.687	30.495	30.640	29.738

TABLE OF ANGLES			
BENT NO	GIRDER NO	B	A
2	1	89°04'18"	89°01'39"
	2	89°04'18"	89°01'39"
	3	89°04'18"	89°01'39"
	4	89°04'18"	89°01'39"
	5	89°04'18"	89°01'39"
3 & 4	1-5	89°01'39"	89°01'39"

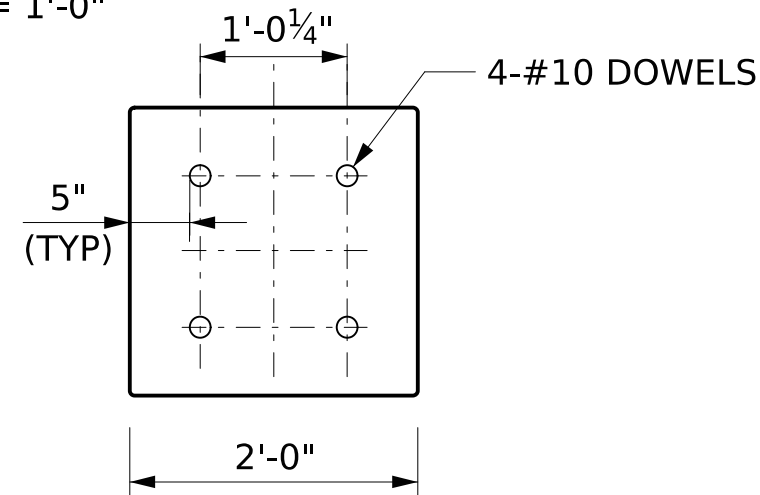
SECTION A-A

SCALE: 3/8" = 1'-0"



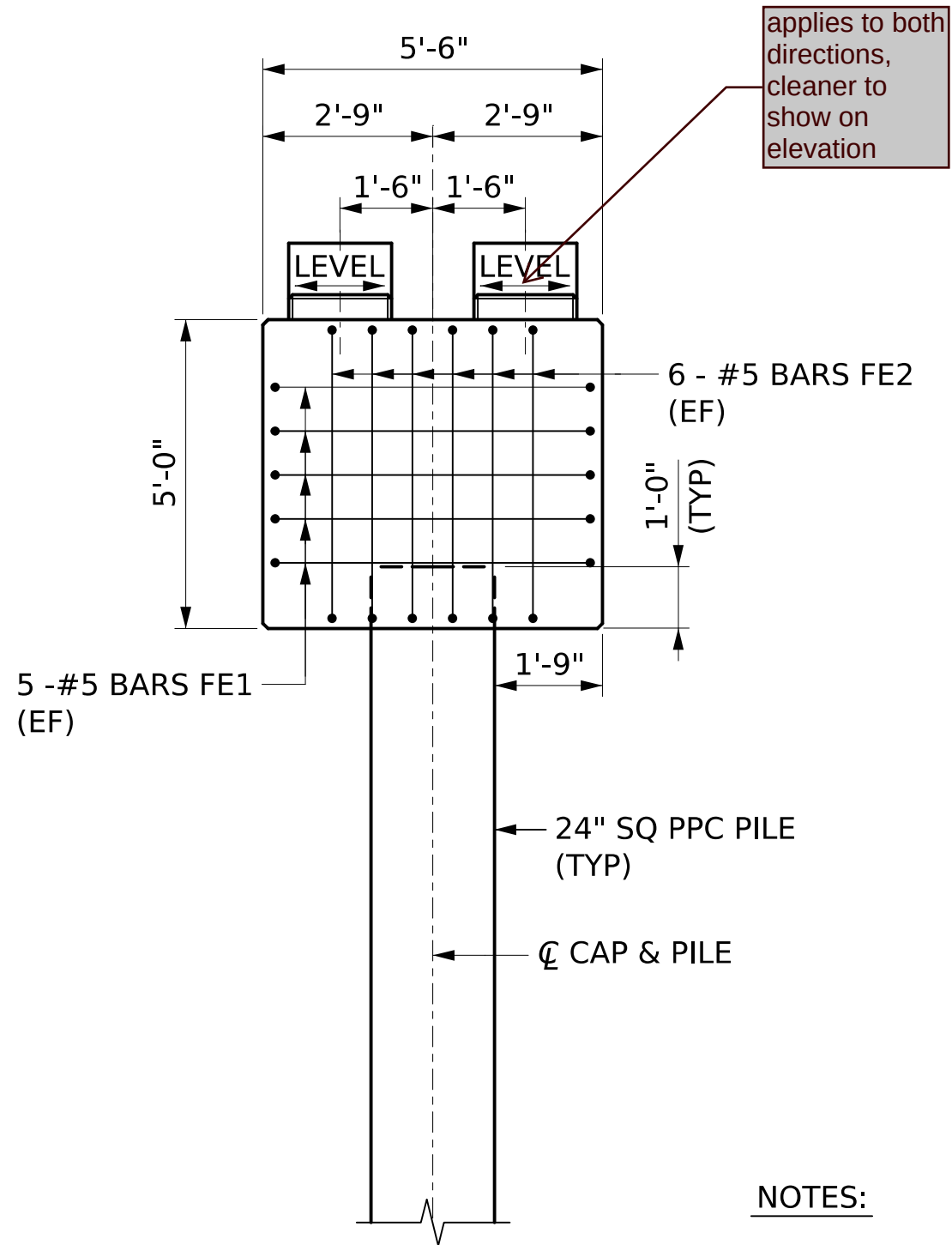
SECTION B-B

SCALE: 3/8" = 1'-0"



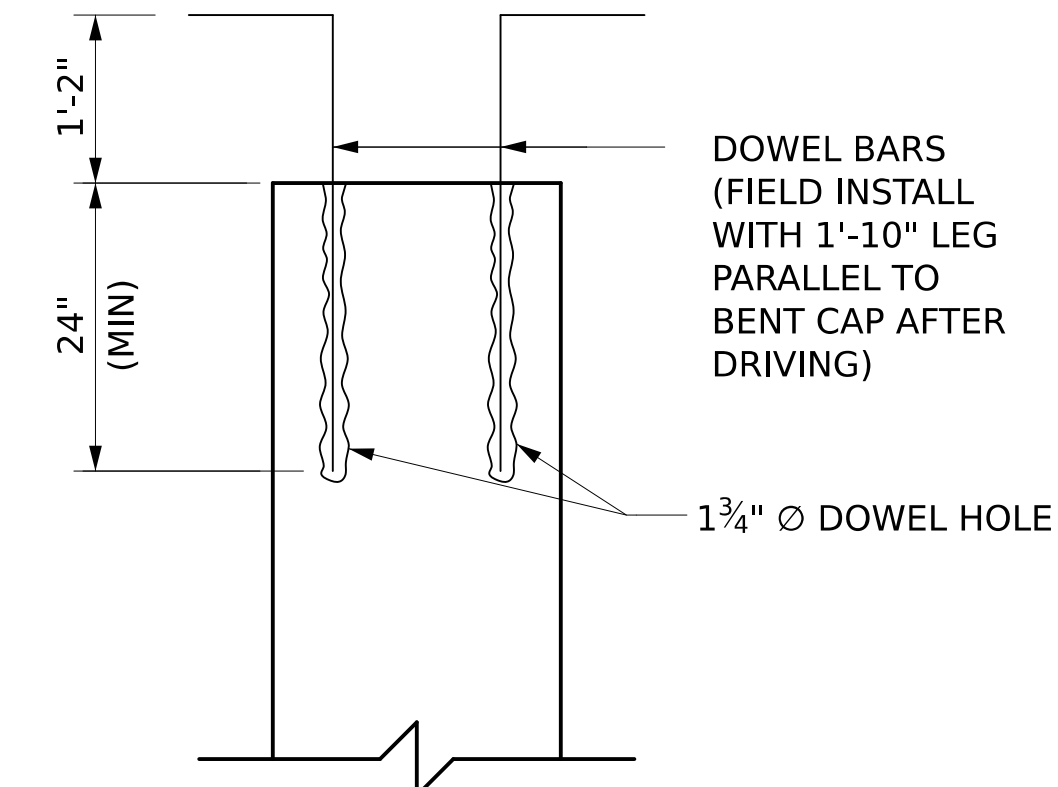
DOWEL HOLE PATTERN

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



END VIEW

SCALE: 3/8" = 1'-0"

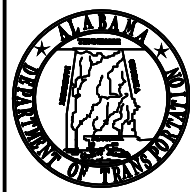


PILE HEAD ATTACHMENT

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

NOTES:

1. ELASTOMERIC BEARING PAD, MARK B6 OR VB6, SEE JOINT LAYOUT SHEET AND BEARING DETAILS SHEET.
2. FOR PEDESTAL DETAILS AND SKID BLOCK DETAILS, SEE PEDESTAL DETAILS SHEET.
3. FOR PILE NUMBER, PILE TIP, AND CUT-OFF ELEVATIONS, SEE FOUNDATION LAYOUT SHEET.
4. DOWEL HOLES SHALL BE DRILLED AFTER DRIVING IS COMPLETE. HOLES SHALL BE CLEANED PRIOR TO SETTING DOWEL BARS AND SHALL BE FREE OF DUST, OIL, WATER, AND OTHER CONTAMINANTS. DOWEL BARS SHALL BE USING AN APPROVED EPOXY.



ALABAMA
DEPARTMENT OF
TRANSPORTATION

A	LP	02/02/2024	60% INTERIM SUBMITTAL
B	EL	06/13/2025	90% FINAL SUBMITTAL
REV. NO.	BY	DATE	DESCRIPTION OF REVISION

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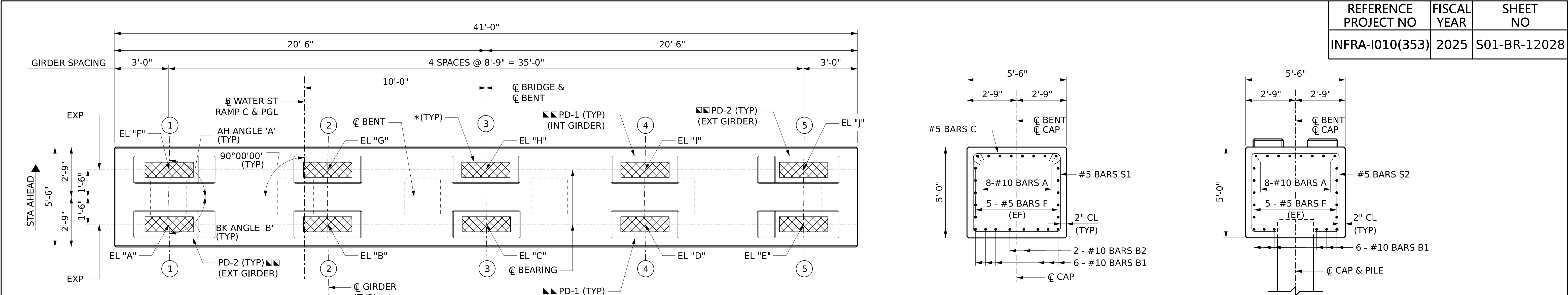
PLAN SUBMITTAL
90%

BIN(S)
021829
COUNTY(S)
MOBILE

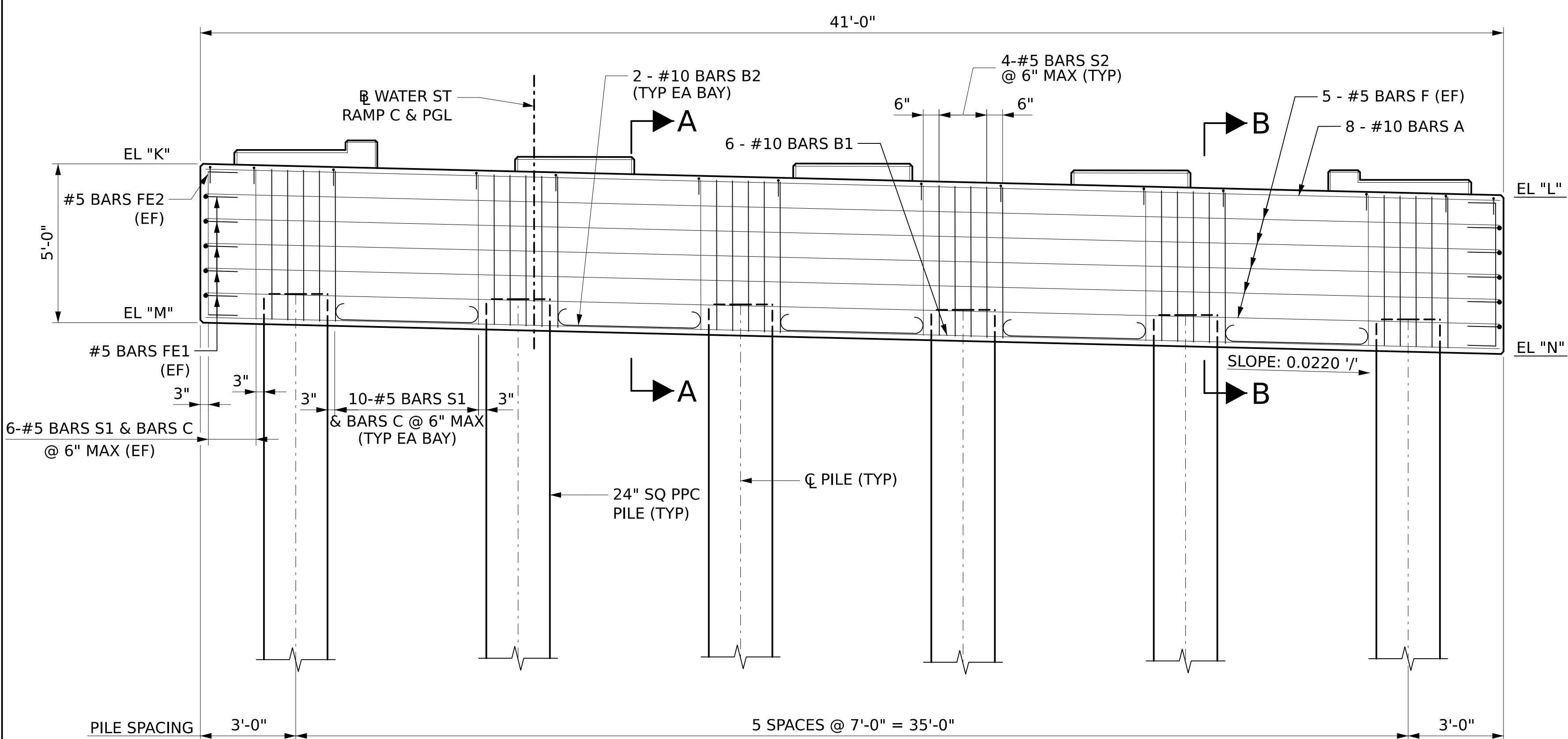
DESIGNER: E. LEON	DATE:
BRIDGE SHEET NO. 27	OF 40

SHEET TITLE
MOBILE RIVER BRIDGE WATER STREET RAMP C BENTS 2 THRU 4 DETAILS

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12028



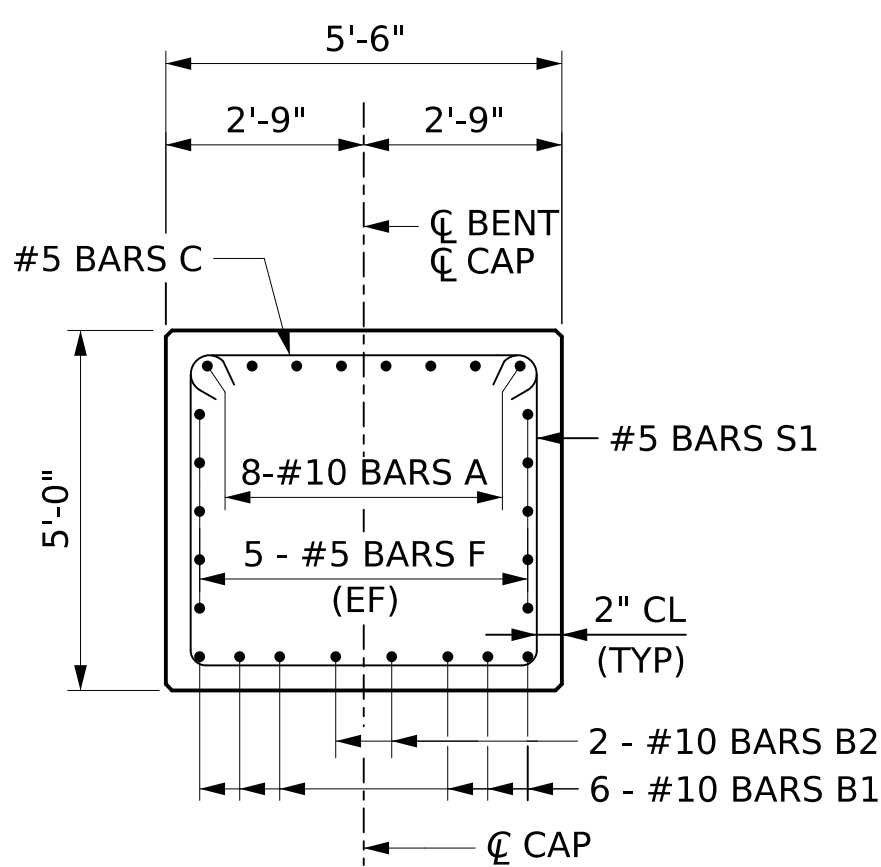
PLAN
SCALE: 3/8" = 1'-0"



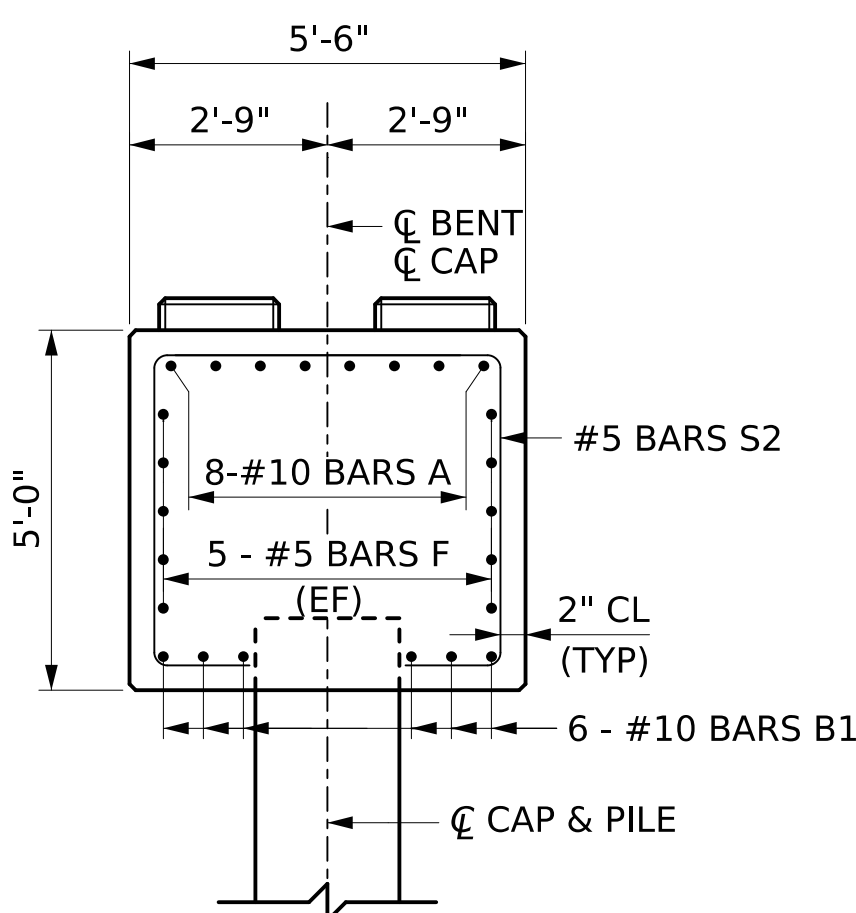
ELEVATION
SCALE: 3/8" = 1'-0"

TABLE OF ELEVATIONS												
MARK												
BENT NO	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"J"	"K"	"L"
5	34.726	34.534	34.341	34.149	33.956	34.767	34.574	34.382	34.189	33.997	34.418	33.516

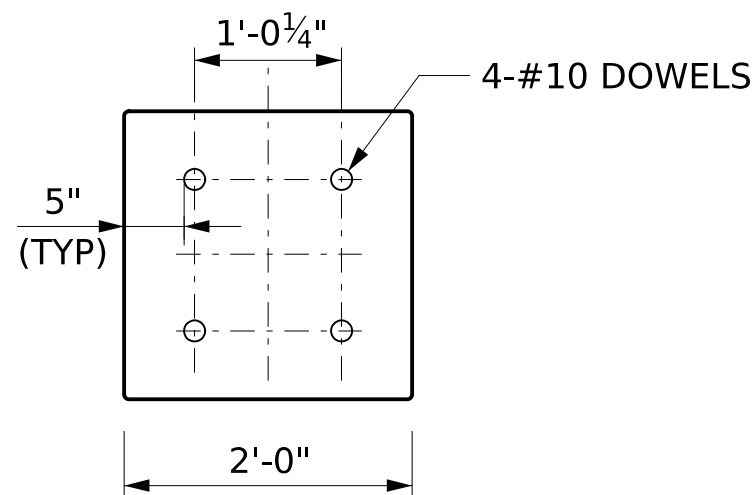
TABLE OF ANGLES			
BENT NO	GIRDER NO	B	A
5	1-5	89°01'39"	89°07'55"



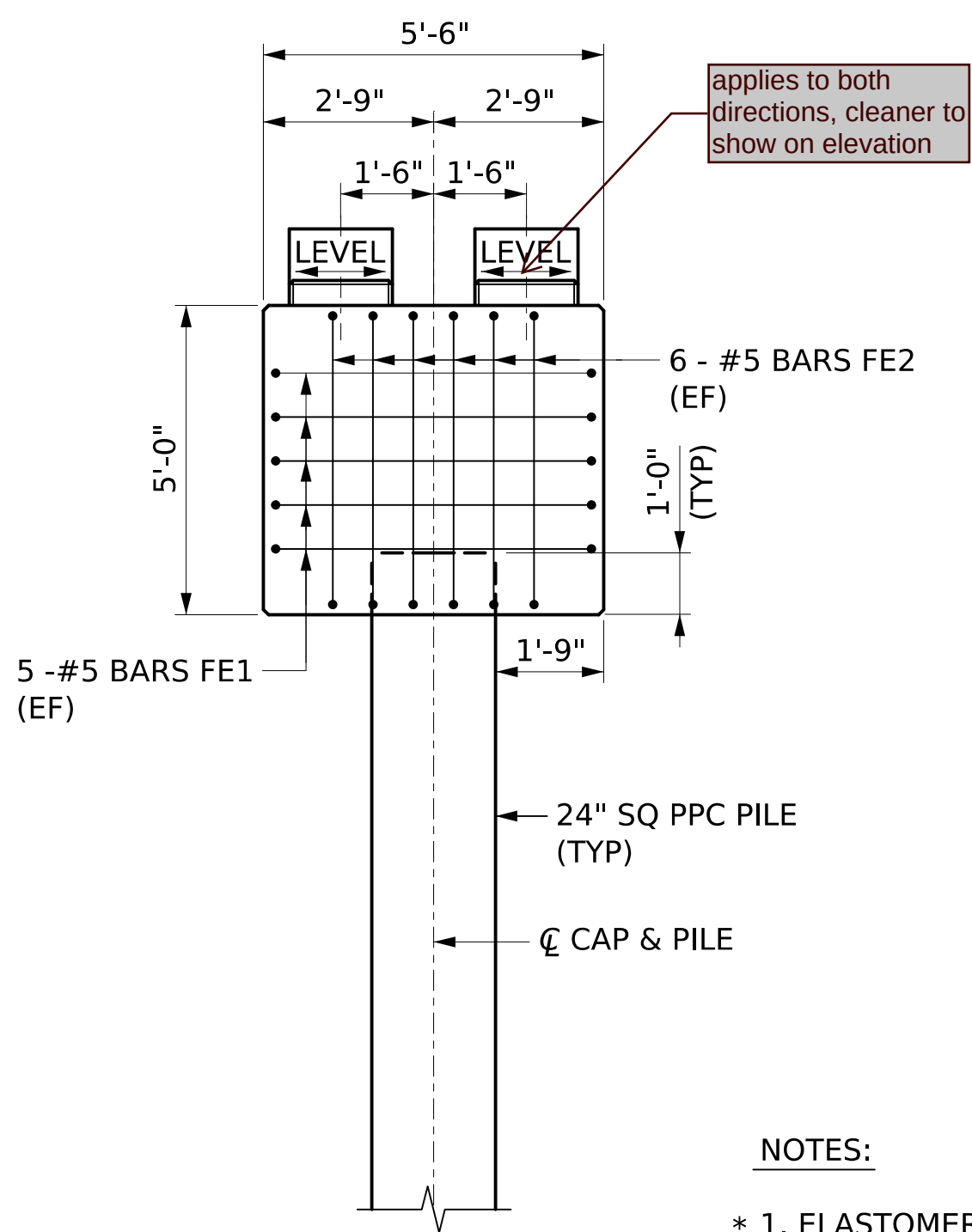
SECTION A-A
SCALE: 3/8" = 1'-0"



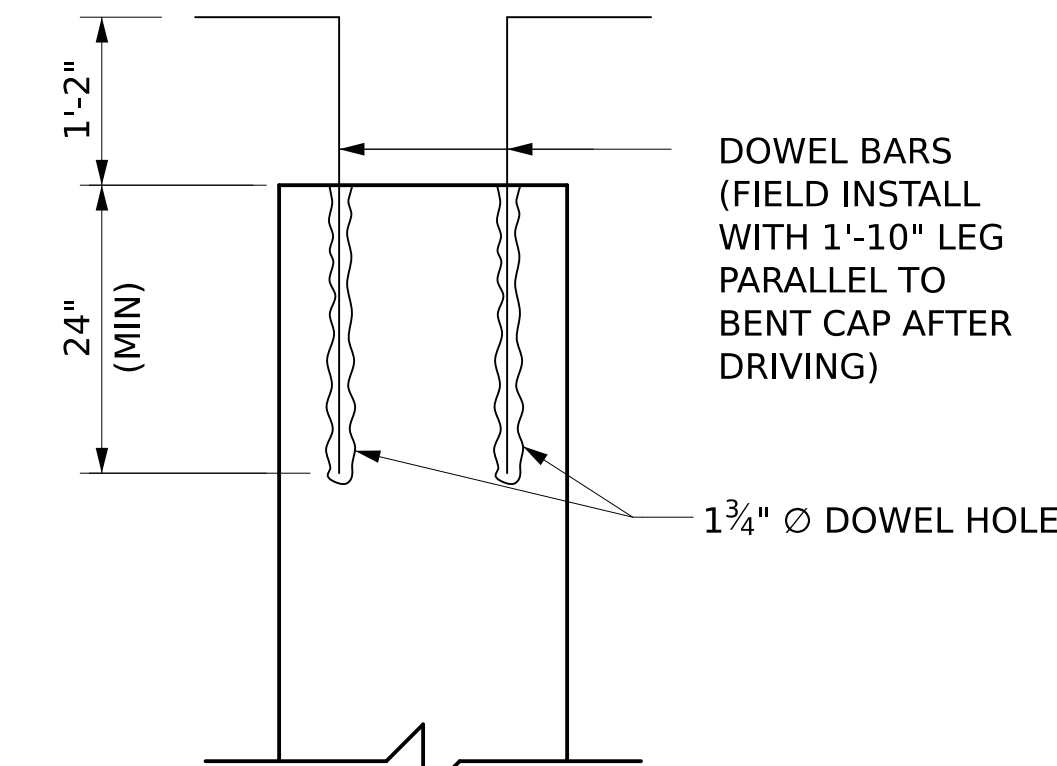
SECTION B-B
SCALE: 3/8" = 1'-0"



DOWEL HOLE PATTERN
SCALE: 3/4" = 1'-0"



END VIEW
SCALE: 3/8" = 1'-0"



PILE HEAD ATTACHMENT
SCALE: 3/4" = 1'-0"

NOTES:

- * 1. ELASTOMERIC BEARING PAD, MARK B6 OR VB6, SEE JOINT LAYOUT SHEET AND BEARING DETAILS SHEET.
- * 2. FOR PEDESTAL DETAILS AND SKID BLOCK DETAILS, SEE PEDESTAL DETAILS SHEET.
3. FOR PILE NUMBER, PILE TIP, AND CUT-OFF ELEVATIONS, SEE FOUNDATION LAYOUT SHEET.
4. DOWEL HOLES SHALL BE DRILLED AFTER DRIVING IS COMPLETE. HOLES SHALL BE CLEANED PRIOR TO SETTING DOWEL BARS AND SHALL BE FREE OF DUST, OIL, WATER, AND OTHER CONTAMINANTS. DOWEL BARS SHALL BE USING AN APPROVED EPOXY.

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12029

BILL OF REINFORCEMENT - BENTS 2 THRU 4 (EACH)

MARK	SIZE	NO	LENGTH	LOCATION	BENDING
A	8	8	40'-8"	CAP	STRAIGHT
B1	8	6	40'-8"	CAP	STRAIGHT
B2	8	8	8'-1"	CAP	SEE DIAG
C	5	68	6'-1"	CAP	SEE DIAG
F	5	10	40'-8"	CAP	STRAIGHT
FE1	5	10	7'-0½"	CAP	SEE DIAG
FE2	5	12	6'-6½"	CAP	SEE DIAG
K	4	20	1'-8"	PEDESTAL	STRAIGHT
S1	5	68	15'-5"	CAP	SEE DIAG
S2	5	20	17'-6"	CAP	SEE DIAG
U1	3	32	6'-4"	PEDESTAL	SEE DIAG
U2	3	94	4'-1"	PEDESTAL	SEE DIAG
U3	3	8	7'-1"	PEDESTAL	SEE DIAG

BAR BENDING DIAGRAM

BILL OF REINFORCEMENT - BENT 5

MARK	SIZE	NO	LENGTH	LOCATION	BENDING
A	10	8	40'-8"	CAP	STRAIGHT
B1	10	6	40'-8"	CAP	STRAIGHT
B2	10	10	7'-4"	CAP	SEE DIAG
C	5	62	6'-1"	CAP	SEE DIAG
F	5	10	40'-8"	CAP	STRAIGHT
FE1	5	10	7'-0½"	CAP	SEE DIAG
FE2	5	12	6'-6½"	CAP	SEE DIAG
K	4	40	1'-8"	PEDESTAL	STRAIGHT
S1	5	62	15'-5"	CAP	SEE DIAG
S2	5	24	17'-6"	CAP	SEE DIAG
U1	3	24	6'-4"	PEDESTAL	SEE DIAG
U2	3	98	4'-1"	PEDESTAL	SEE DIAG
U3	3	16	7'-1"	PEDESTAL	SEE DIAG

BAR BENDING DIAGRAM



ALABAMA
DEPARTMENT OF
TRANSPORTATION

A	LP	02/02/2024	60% INTERIM SUBMITTAL
B	EL	06/13/2025	90% FINAL SUBMITTAL
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PE STAMP
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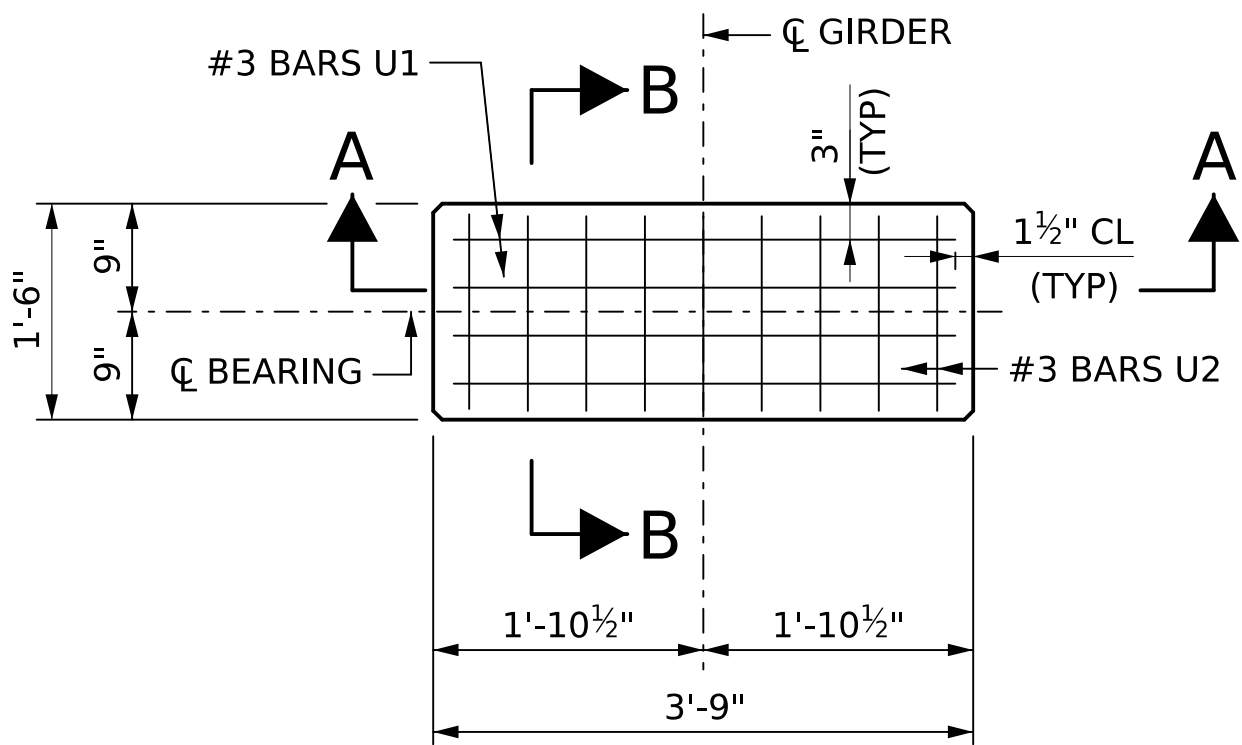


PLAN SUBMITTAL
90%

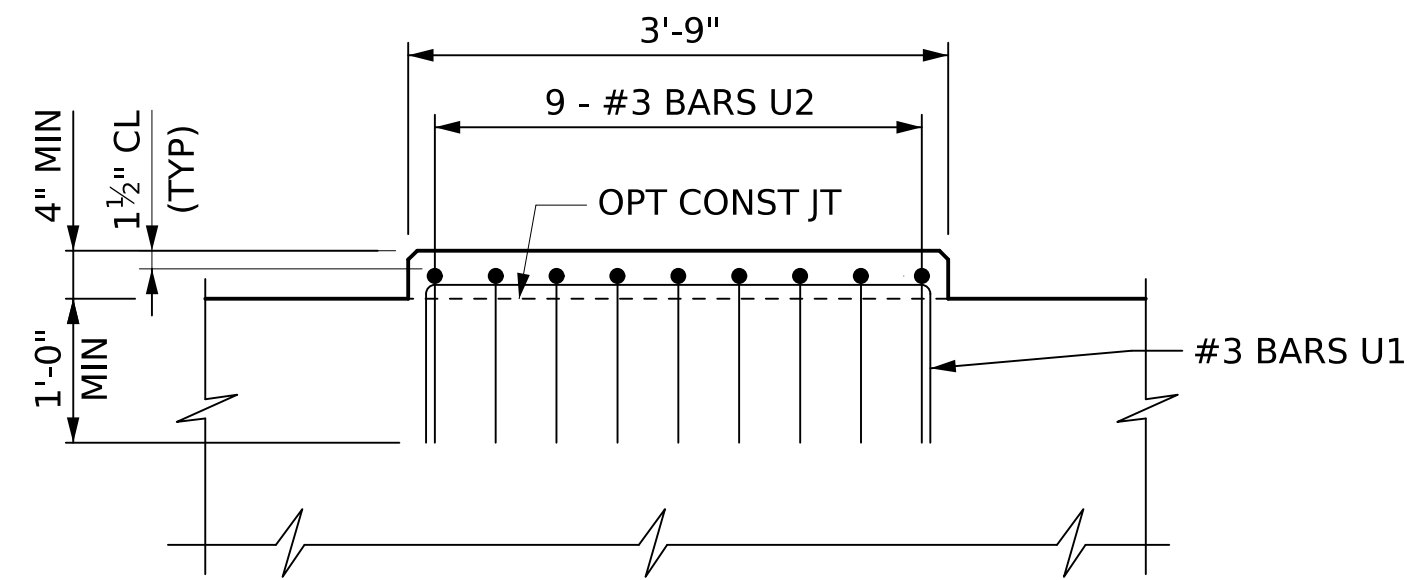
BIN(S)
021829
COUNTY(S)
MOBILE

DESIGNER: E. LEON DATE:
BRIDGE SHEET NO. 29 OF 40

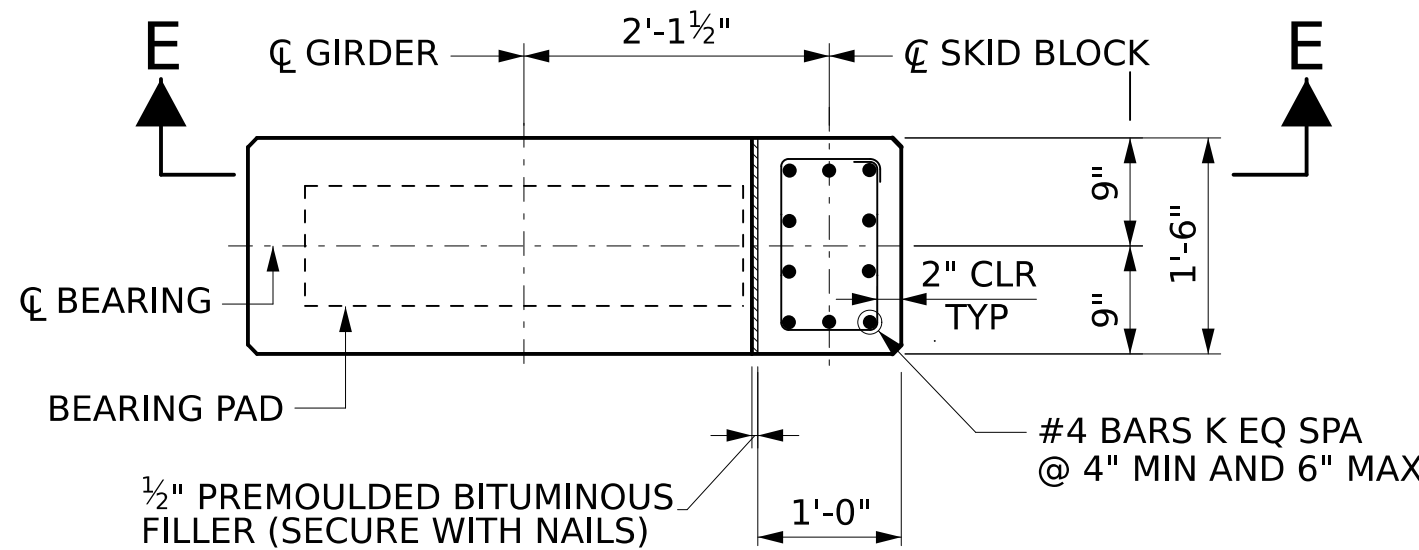
SHEET TITLE
MOBILE RIVER BRIDGE
WATER STREET RAMP C
BENTS BILL OF REINFORCEMENT



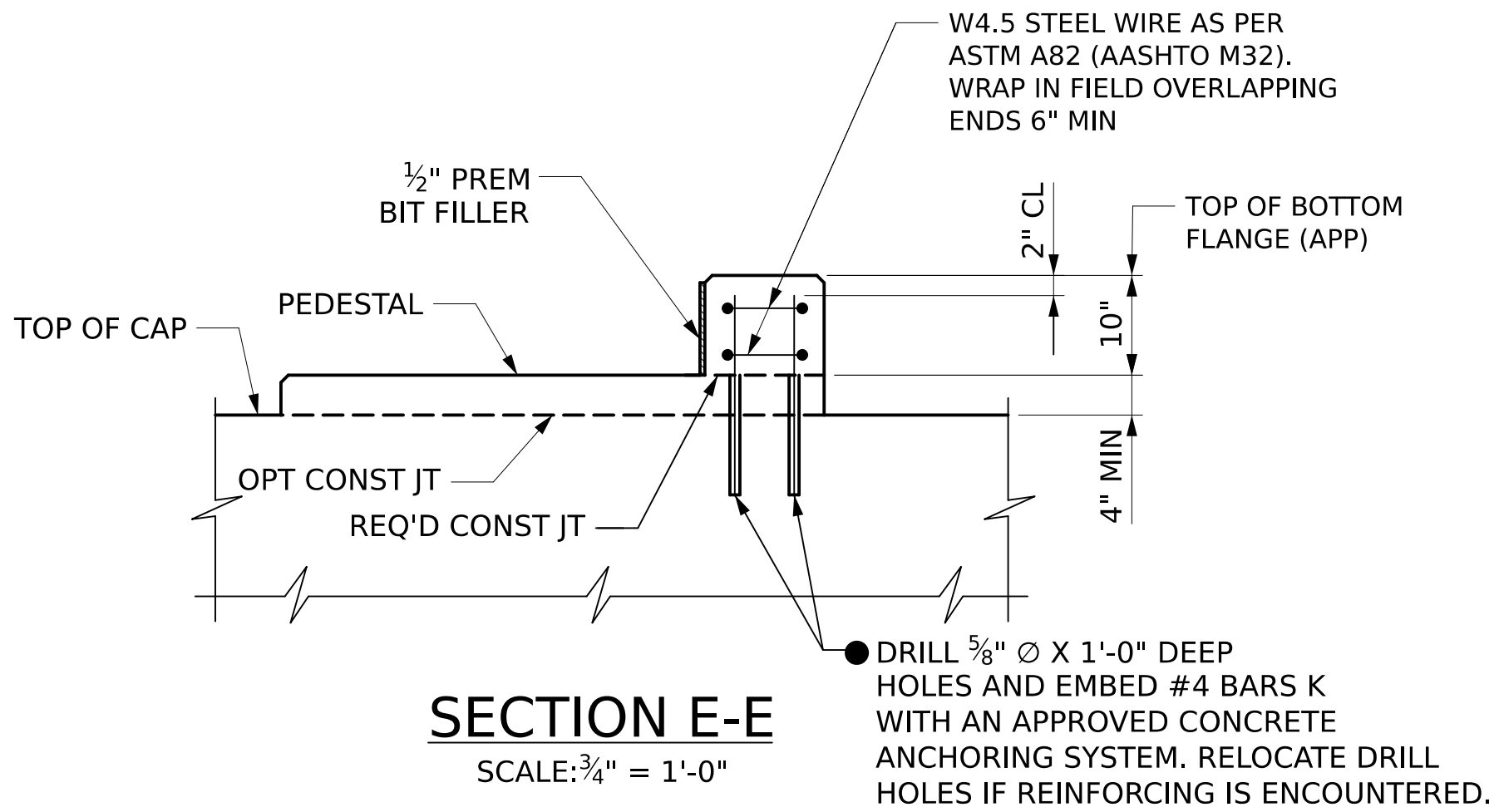
PD-1
SCALE: 3/4" = 1'-0"



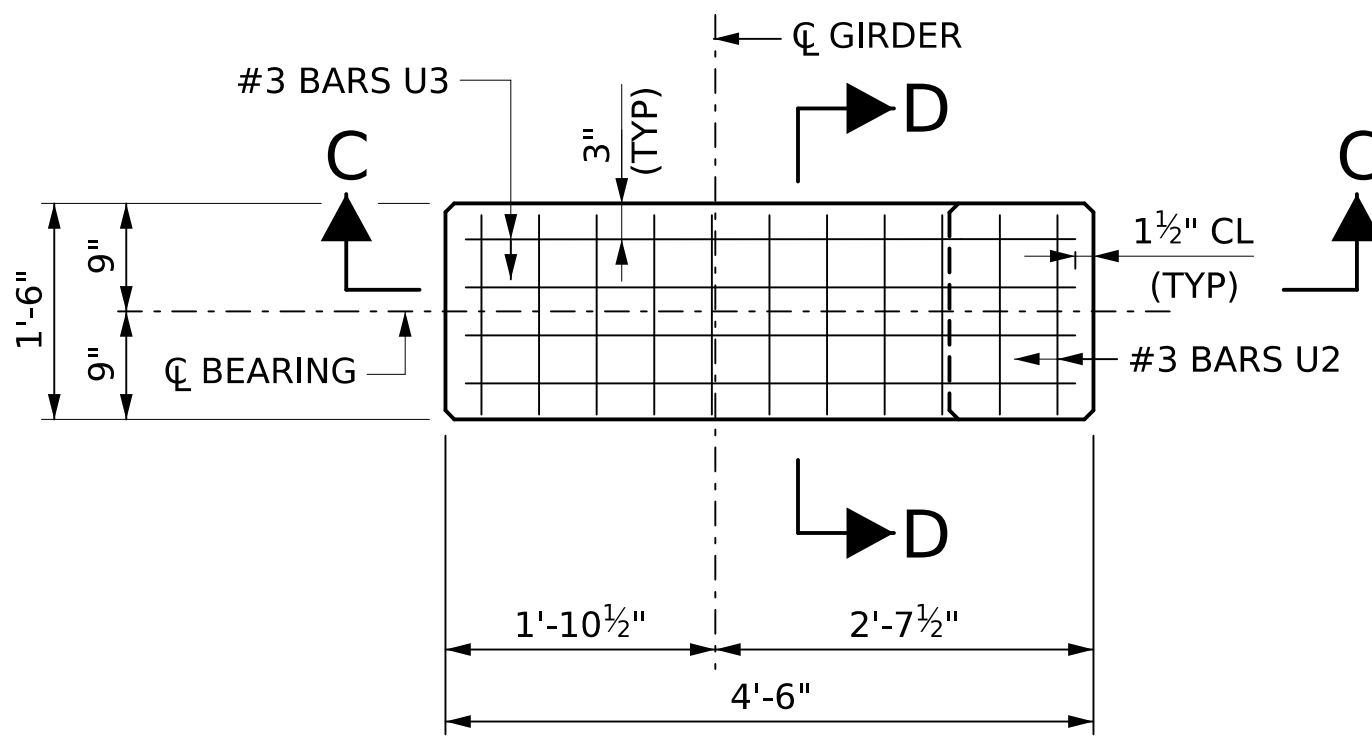
SECTION A-A
SCALE: 3/4" = 1'-0"



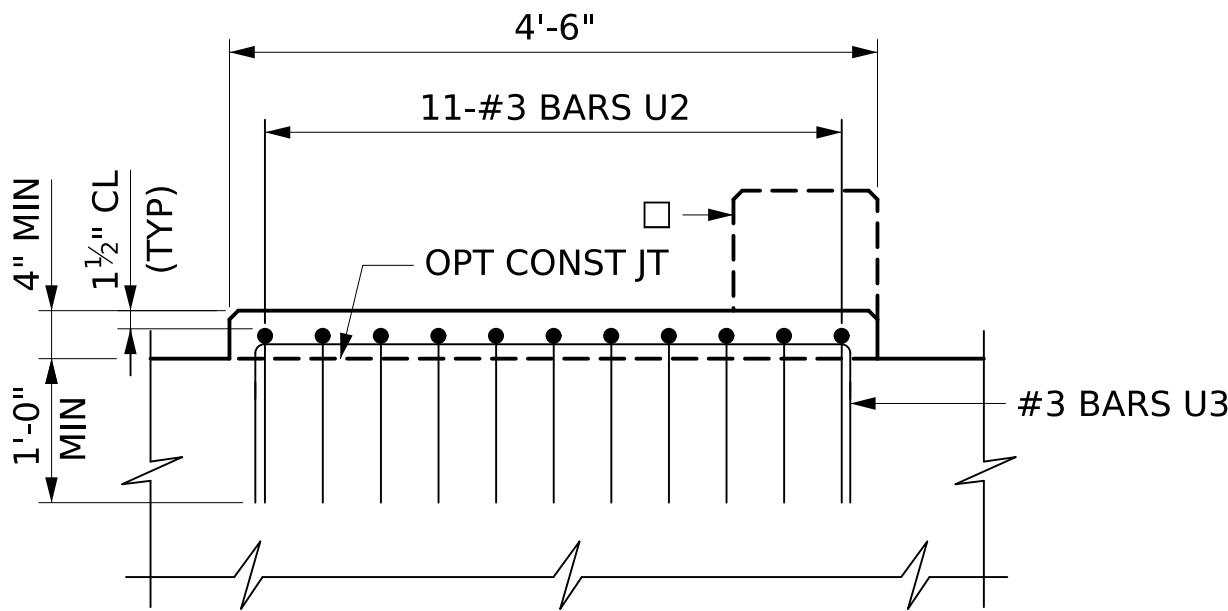
PLAN PD-2 SKID-BLOCK DETAILS
SCALE: 3/4" = 1'-0"



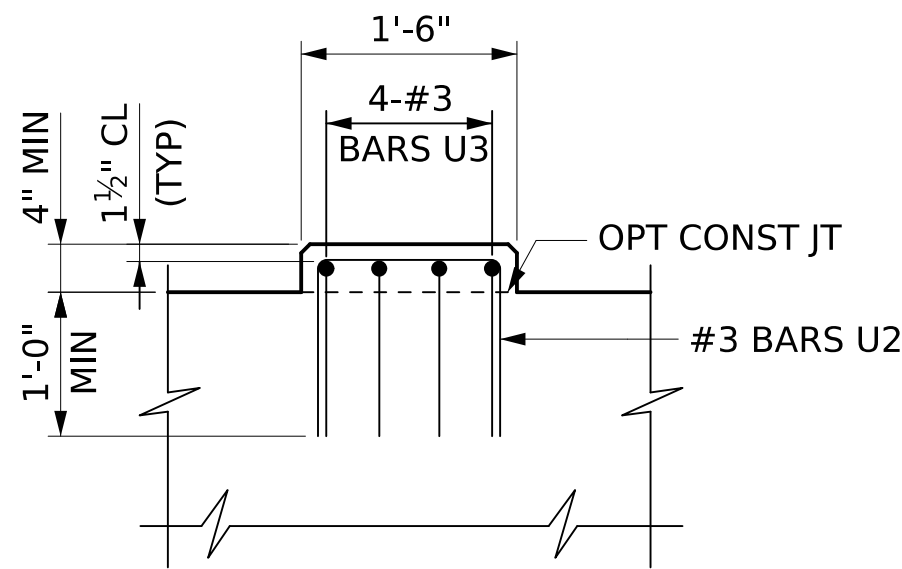
SECTION E-E
SCALE: 3/4" = 1'-0"



PD-2
SCALE: 3/4" = 1'-0"



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



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

NOTES:

- 1. SKID BLOCKS SHALL BE POURED SEPARATELY FROM THE PEDESTAL. BARS K SHOULD BE DRILLED IN AND A TYPE 2 EPOXY ADHESIVE SHALL BE APPLIED TO THE CONSTRUCTION JOINT LOCATION JUST PRIOR TO POURING THE SKID BLOCKS.
- 2. IN LIEU OF DRILLING, A CORRUGATED PIPE SLEEVE MAY BE USED TO LOCATE #4 BARS K USING AN APPROVED GROUT.
- 3. WHEN TYPE 4 BEARINGS ARE USED, #4 BARS K TO BE PLACED AND THE SKIDBLOCK POURED AFTER WELDING AND GALVANIZATION REPAIR OF THE BEARING AND GIRDER SOLE PLATE HAVE BEEN COMPLETED.



ALABAMA
DEPARTMENT OF
TRANSPORTATION

A	LP	02/02/2024	60% INTERIM SUBMITTAL
B	EL	06/13/2025	90% FINAL SUBMITTAL
REV. NO.	BY	DATE	DESCRIPTION OF REVISION

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PLAN SUBMITTAL
90%

BIN(S)
021829
COUNTY(S)
MOBILE

DESIGNER: E. LEON	DATE:
BRIDGE SHEET NO. 30	OF 40

SHEET TITLE
MOBILE RIVER BRIDGE WATER STREET RAMP C PEDESTAL DETAILS

KEY TO SYMBOLS

CLIENT Alabama Department of Transportation

PROJECT NAME I-10 Mobile River Bridge and Bayway

PROJECT NUMBER M23-359

PROJECT LOCATION Mobile County, AL

LITHOLOGIC SYMBOLS
(Unified Soil Classification System)

CH: USCS High Plasticity Clay

CL-ML: USCS Low Plasticity Silty Clay

FILL: Fill (made ground)

GP: USCS Poorly-graded Gravel

GW-GM: USCS Well-graded Gravel with Silt

ML: USCS Silt

OH: USCS High Plasticity Organic silt or clay

SC-SM: USCS Clayey Sand

SP: USCS Poorly-graded Sand

SP-SM: USCS Poorly-graded Sand with Silt

SW-SC: USCS Well-graded Sand with Clay

TOPSOIL: Topsoil

CL: USCS Low Plasticity Clay

CLS: USCS Low Plasticity Sandy Clay

GM: USCS Silty Gravel

GW: USCS Well-graded Gravel

MH: USCS Elastic Silt

NO CORE

SC: USCS Clayey Sand

SM: USCS Silty Sand

SP-SC: USCS Poorly-graded Sand with Clay

SW: USCS Well-graded Sand

SW-SM: USCS Well-graded Sand with Silt

SAMPLER SYMBOLS

Standard Penetration Test

Split Spoon

Shelby Tube

ABBREVIATIONS

LL - LIQUID LIMIT (%)
PI - PLASTIC INDEX (%)
W - MOISTURE CONTENT (%)
DD - DRY DENSITY (PCF)
NP - NON PLASTIC
-200 - PERCENT PASSING NO. 200 SIEVE
PP - POCKET PENETROMETER (TSF)

TV - TORVANE
PID - PHOTOIONIZATION DETECTOR
UC - UNCONFINED COMPRESSION
ppm - PARTS PER MILLION
▽ Water Level at Time Drilling, or as Shown
▼ Water Level at End of Drilling, or as Shown
⏏ Water Level After 24 Hours, or as Shown

KEY TO SYMBOLS MRB - GINT STD US LAB GDT - 324/25 10.08 - C:\USER\SENISE VAN\DESKTOP\MRB 2023\FIELD LOGS\GINT DATA\BASE\NEW\KIEWIT MRB 2024 1 23 2025.GPJ

BORING NO: BR10-09  PAGE 1 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 12.8
	Project No: M23-359	Depth (ft): 150.0
	Site Location: Mobile County, AL	Northing: 249478.165
	Start Date and Time: 1/30/2025 08:30 AM	Easting: 1797834.250
	End Date and Time: 2/10/2025 02:15 PM	Boring Location: West Tunnel Interch. Br.

Logged By: DJ	Drill Method: Mud Rotary	Description: Bridge 12
Checked By: JB	Hammer Type: Auto	Alignment: I-10 BUS EB
Drilling Contractor: SES	Energy Ratio (%): 64.6	Station & Offset: 6019+70.3 & 141.5 L
Driller: P. Byrd	Borehole Diameter (in): 4	Drilling Water Loss(-)/Gain(+): Not Observed
Drill Equipment: CME-45	Casing Diameter (in) & Casing Length (ft): 4 & 15	Water Elev. (ft): Not Recorded

DEPTH (ft)	ELEVATION (ft)	LITHOLOGY	MATERIAL DESCRIPTION	SAMPLE TYPE	SAMPLE DEPTH	SAMPLE NUMBER	BLOW COUNTS (N VALUE)	PPQ (tsf) (POCKET PEN.)	RECOVERY (%)	MOISTURE CONTENT (%)	PLASTICITY INDEX	FINES (%) PASSING #200
10			VAC/BACKFILL									
5												
5												
10			CLAYEY SAND (SC, A-2-6(0)), fine sand, gray, wet, very loose									
0												
13.5				X	13.5	S-1	0-0-0 (0)		100	28	12	27.6
15												
18.5			ELASTIC SILT with SAND (MH, A-7-5(82)), fine to medium sand, gray, wet, very soft to soft	X	18.5	S-2	0-0-0 (0)	0.5	100	60		
20												
23.5				X	23.5	S-3	0-0-2 (2)	0.5	100	115	81	82.1
25												

(Continued Next Page)

BORING NO: BR10-09  PAGE 2 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 12.8
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249478.165
	Start Date and Time: 1/30/2025 08:30 AM	Easting: 1797834.250
	End Date and Time: 2/10/2025 02:15 PM	Boring Location: West Tunnel Interch. Br.

DEPTH (ft)	ELEVATION (ft)	LITHOLOGY	MATERIAL DESCRIPTION	SAMPLE TYPE	SAMPLE DEPTH	SAMPLE NUMBER	BLOW COUNTS (N VALUE)	PPQ (tsf) (POCKET PEN.)	RECOVERY (%)	MOISTURE CONTENT (%)	PLASTICITY INDEX	FINES (%) PASSING #200
15			ELASTIC SILT with SAND (MH, A-7-5(82)), fine to medium sand, gray, wet, very soft to soft (continued)									
28.5			SILTY SAND (SM), fine sand, gray and tan and orange, wet, loose to medium dense	X	28.5	S-4	4-4-6 (10)		61	27		26.8
30												
33.5				X	33.5	S-5	8-8-9 (17)		67	26		
35												
38.5			POORLY GRADED SAND with SILT (SP-SM), fine to medium sand, gray and tan and orange, wet, medium dense	X	38.5	S-6	8-9-10 (19)		72	24		5.4
40												
43.5			POORLY GRADED SAND (SP, A-3(0)), fine to medium sand, trace fine gravel, tan and white, moist, medium dense to dense	X	43.5	S-7	9-13-15 (28)		67	23	NP	4.1
45												
48.5				X	48.5	S-8	10-9-11 (20)		78	27		
50												
53.5				X	53.5	S-9	13-15-10 (25)		72	23		4.1
55												

(Continued Next Page)

BORING NO: BR10-09  PAGE 3 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 12.8
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249478.165
	Start Date and Time: 1/30/2025 08:30 AM	Easting: 1797834.250
	End Date and Time: 2/10/2025 02:15 PM	Boring Location: West Tunnel Interch. Br.

DEPTH (ft)	ELEVATION (ft)	LITHOLOGY	MATERIAL DESCRIPTION	SAMPLE TYPE	SAMPLE DEPTH	SAMPLE NUMBER	BLOW COUNTS (N VALUE)	PPQ (tsf) (POCKET PEN.)	RECOVERY (%)	MOISTURE CONTENT (%)	PLASTICITY INDEX	FINES (%) PASSING #200
45			POORLY GRADED SAND (SP, A-3(0)), fine to medium sand, trace fine gravel, tan and white, moist, medium dense to dense (continued)									
58.5				X	58.5	S-10	13-17-23 (40)		67	21		4.7
60												
63.5				X	63.5	S-11	7-7-9 (16)		50	20	NP	
65												
68.5			POORLY GRADED SAND with SILT (SP-SM), fine to coarse sand, trace fine gravel, tan and white with orange and gray, wet, medium dense	X	68.5	S-12	7-8-10 (18)		50	19		5.6
70												
73.5				X	73.5	S-13	7-5-9 (14)		56	20		
75												
78.5				X	78.5	S-14	8-10-11 (21)		39	19		5.5
80												
83.5				X	83.5	S-15	11-10-12 (22)		33	22		
85												

(Continued Next Page)



ALABAMA
DEPARTMENT OF
TRANSPORTATION

A	EL	06/13/2025	90% FINAL SUBMITTAL
REV. NO.	BY	DATE	DESCRIPTION OF REVISION

PE STAMP

PE STAMP

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PLAN SUBMITTAL

90%

BIN(S)

021829

COUNTY(S)

MOBILE

DESIGNER: _____ DATE: _____

BRIDGE SHEET NO. 32 OF 40

SHEET TITLE

MOBILE RIVER BRIDGE
WATER STREET RAMP C
TEST BORING RECORD SHEET

BORING NO: BR10-09  PAGE 4 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 12.8
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249478.165
	Start Date and Time: 1/30/2025 08:30 AM	Easting: 1797834.250
	End Date and Time: 2/10/2025 02:15 PM	Boring Location: West Tunnel Interch. Br.

DEPTH (ft)	ELEVATION (ft)	LITHOLOGY	MATERIAL DESCRIPTION	SAMPLE TYPE	SAMPLE DEPTH	SAMPLE NUMBER	BLOW COUNTS (N VALUE)	PPQ (tsf) (POCKET PEN.)	RECOVERY (%)	MOISTURE CONTENT (%)	PLASTICITY INDEX	FINES (%) PASSING #200
			POORLY GRADED SAND with SILT (SP-SM), fine to coarse sand, trace fine gravel, tan and white with orange and gray, wet, medium dense <i>(continued)</i>									
	-75		POORLY GRADED SAND (SP), fine to medium sand, tan, wet, medium dense									
	90			X	88.5	S-16	10-10-10 (20)		28	23		4.7
	-80		FAT CLAY (CH, A-7-6(42)), gray, moist, very stiff									
	95			X	93.5	S-17	8-10-14 (24)	1.0	44	48	40	92.9
	-85		LEAN CLAY (CL), gray, moist, stiff to very stiff									
	100			X	98.5	S-18	10-8-8 (16)	1.0	44	39		
	-90											
	105											
	-95											
	110			X	108.5	S-19	7-9-10 (19)	1.0	44	40		89.0
	-100											
	115											

(Continued Next Page)

BORING NO: BR10-09  PAGE 5 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 12.8
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249478.165
	Start Date and Time: 1/30/2025 08:30 AM	Easting: 1797834.250
	End Date and Time: 2/10/2025 02:15 PM	Boring Location: West Tunnel Interch. Br.

DEPTH (ft)	ELEVATION (ft)	LITHOLOGY	MATERIAL DESCRIPTION	SAMPLE TYPE	SAMPLE DEPTH	SAMPLE NUMBER	BLOW COUNTS (N VALUE)	PPQ (tsf) (POCKET PEN.)	RECOVERY (%)	MOISTURE CONTENT (%)	PLASTICITY INDEX	FINES (%) PASSING #200
			LEAN CLAY (CL), gray, moist, stiff to very stiff <i>(continued)</i>									
	-105											
	120			X	118.5	S-20	5-6-6 (12)	2.0	61	22		
	-110											
	125		SANDY LEAN CLAY (CL), gray, moist, stiff to very stiff									
	-115											
	130			X	128.5	S-21	6-8-9 (17)	2.0	44	30		67.0
	-120											
	135											
	-125											
	140			X	138.5	S-22	5-8-6 (14)	2.5	39	25		
	-130											
	145											

(Continued Next Page)

BORING NO: BR10-09  PAGE 6 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 12.8
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249478.165
	Start Date and Time: 1/30/2025 08:30 AM	Easting: 1797834.250
	End Date and Time: 2/10/2025 02:15 PM	Boring Location: West Tunnel Interch. Br.

DEPTH (ft)	ELEVATION (ft)	LITHOLOGY	MATERIAL DESCRIPTION	SAMPLE TYPE	SAMPLE DEPTH	SAMPLE NUMBER	BLOW COUNTS (N VALUE)	PPQ (tsf) (POCKET PEN.)	RECOVERY (%)	MOISTURE CONTENT (%)	PLASTICITY INDEX	FINES (%) PASSING #200
			SANDY LEAN CLAY (CL, A-6(6)), fine to medium sand, gray, moist, stiff <i>(continued)</i>									
	-135											
	150			X	148.5	S-23	0-6-6 (12)	1.0	89	25	16	56.9
			Borehole Terminated at 150.0 feet.									

BORING NO: BR10-14  PAGE 1 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 18.2
	Project No: M23-359	Depth (ft): 150.0
	Site Location: Mobile County, AL	Northing: 249672.637
	Start Date and Time: 1/6/2025 08:30 AM	Easting: 1797922.109
	End Date and Time: 1/17/2025 01:00 PM	Boring Location: West Tunnel Interch. Br.
Logged By: DJ	Drill Method: Mud Rotary	Description: Bridge 12
Checked By: JB	Hammer Type: Auto	Alignment: I-10 BUS EB
Drilling Contractor: SES	Energy Ratio (%): 64.6	Station & Offset: 6021+70.3 & 100.3 L
Driller: P. Byrd	Borehole Diameter (in): 4	Drilling Water Loss(-)/Gain(+): Not Observed
Drill Equipment: CME-45	Casing Diameter (in) & Casing Length (ft): 4 & 15	Water Elev. (ft): Not Recorded

DEPTH (ft)	ELEVATION (ft)	LITHOLOGY	MATERIAL DESCRIPTION	SAMPLE TYPE	SAMPLE DEPTH	SAMPLE NUMBER	BLOW COUNTS (N VALUE)	PPQ (tsf) (POCKET PEN.)	RECOVERY (%)	MOISTURE CONTENT (%)	PLASTICITY INDEX	FINES (%) PASSING #200
0	18.2		VAC/BACKFILL									
10	8.2		LEAN CLAY (CL), trace sand pockets, gray, wet, very soft	S-1	8.5	S-1	0-1-1 (2)		67	23.8		
15	13.2			S-2	13.5	S-2	0-0-1 (1)	0.5	44	61.2		
17	16.2			T-1	15	T-1		0.5	100			
19	18.2			T-2	17	T-2		1.5	100			
20.5	17.7		SILTY SAND (SM), fine to medium sand, brown and tan, wet, loose	S-3	19	S-3	3-3-4 (7)		50	27.3		25.2
23.5	15.7		POORLY GRADED SAND with SILT (SP-SM), fine to medium sand, red and tan, wet, medium dense	S-4	20.5	S-4	10-11-13 (24)		67	28.6	NP	

(Continued Next Page)

BORING NO: BR10-14  PAGE 2 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 18.2
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249672.637
	Start Date and Time: 1/6/2025 08:30 AM	Easting: 1797922.109
	End Date and Time: 1/17/2025 01:00 PM	Boring Location: West Tunnel Interch. Br.

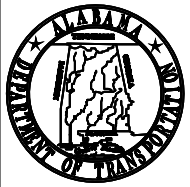
DEPTH (ft)	ELEVATION (ft)	LITHOLOGY	MATERIAL DESCRIPTION	SAMPLE TYPE	SAMPLE DEPTH	SAMPLE NUMBER	BLOW COUNTS (N VALUE)	PPQ (tsf) (POCKET PEN.)	RECOVERY (%)	MOISTURE CONTENT (%)	PLASTICITY INDEX	FINES (%) PASSING #200
28.5	10.7		POORLY GRADED SAND with SILT (SP-SM), fine to medium sand, red and tan, wet, medium dense (continued)	S-5	30	S-5	3-5-5 (10)	50	29.7			
33.5	5.7			S-6	35	S-6	9-10-13 (23)	50	24.7	NP		
38.5	0.7			S-7	40	S-7	8-8-9 (17)	61	25.4			
43.5	-4.3			S-8	45	S-8	3-6-7 (13)	56	24.9			
48.5	-9.3		POORLY GRADED SAND (SP, A-3), fine to medium sand, tan, wet, medium dense	S-9	50	S-9	9-10-12 (22)	39	23.1	NP		3.0
53.5	-14.3		POORLY GRADED SAND with SILT (SP-SM), fine to medium sand, tan, wet, medium dense	S-10	55	S-10	13-13-16 (29)	61	25.8			

(Continued Next Page)

BORING NO: BR10-14  PAGE 3 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 18.2
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249672.637
	Start Date and Time: 1/6/2025 08:30 AM	Easting: 1797922.109
	End Date and Time: 1/17/2025 01:00 PM	Boring Location: West Tunnel Interch. Br.

DEPTH (ft)	ELEVATION (ft)	LITHOLOGY	MATERIAL DESCRIPTION	SAMPLE TYPE	SAMPLE DEPTH	SAMPLE NUMBER	BLOW COUNTS (N VALUE)	PPQ (tsf) (POCKET PEN.)	RECOVERY (%)	MOISTURE CONTENT (%)	PLASTICITY INDEX	FINES (%) PASSING #200
58.5	-10.7		POORLY GRADED SAND with SILT (SP-SM), fine to medium sand, tan, wet, medium dense (continued)	S-11	60	S-11	13-13-17 (30)	39	21.9			
63.5	-15.7		POORLY GRADED SAND with GRAVEL (SP), fine subangular gravel, tan, wet, medium dense	S-12	65	S-12	5-9-10 (19)	56	15.4	NP		
68.5	-20.7		POORLY GRADED SAND with SILT (SP-SM, A-1-b), fine to coarse sand, few fine gravel, tan and gray and brown, moist, medium dense to dense	S-13	70	S-13	11-11-13 (24)	56	18.4	NP		6.2
73.5	-25.7			S-14	75	S-14	9-13-15 (28)	56	18			
78.5	-30.7			S-15	80	S-15	9-9-12 (21)	56	26.4			
83.5	-35.7			S-16	85	S-16	10-19-20 (39)	44	26.6	NP		

(Continued Next Page)



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COUNTY(S)

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DESIGNER: _____ DATE: _____

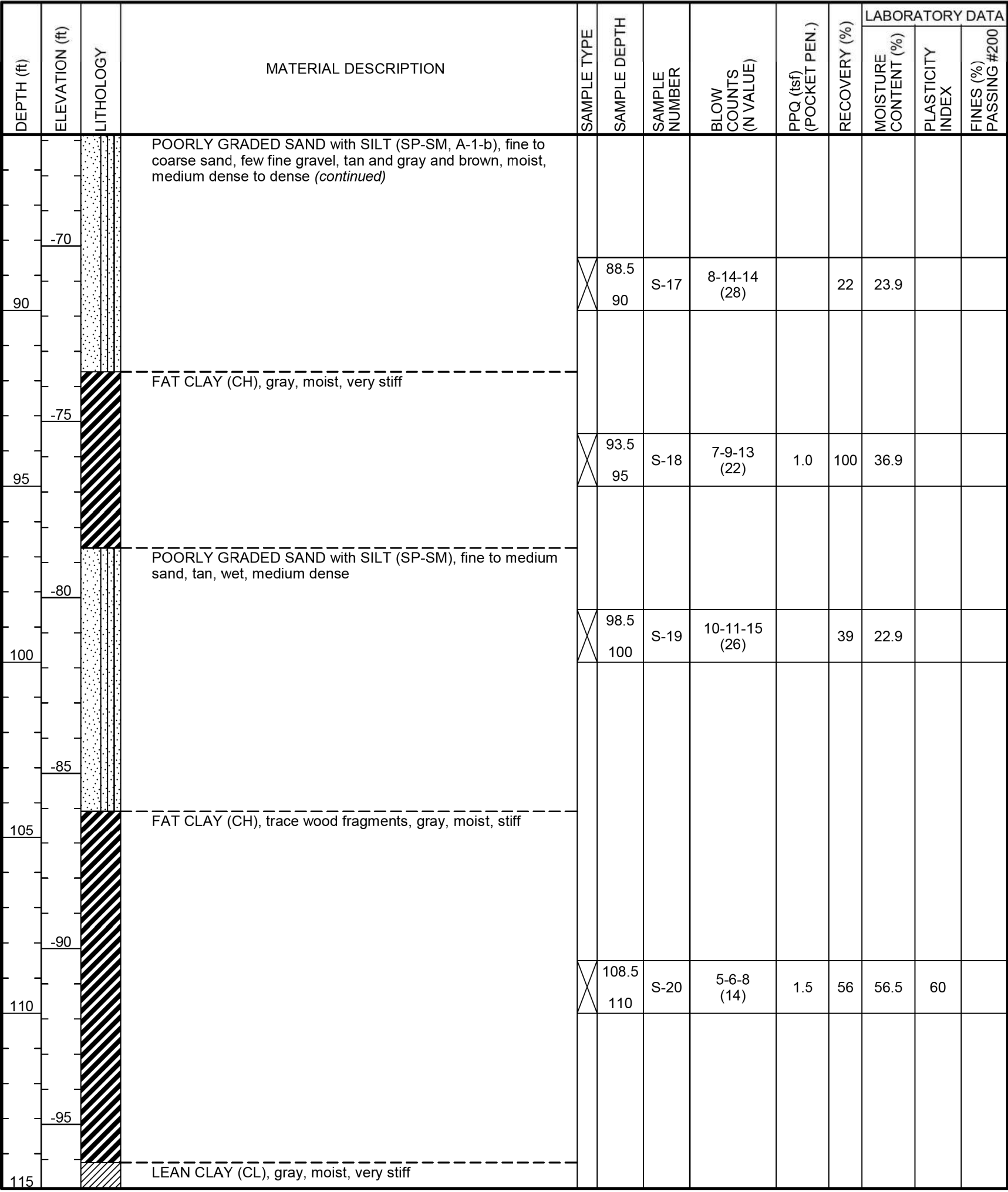
BRIDGE SHEET NO. 34 OF 40

SHEET TITLE

MOBILE RIVER BRIDGE
WATER STREET RAMP C
TEST BORING RECORD SHEET

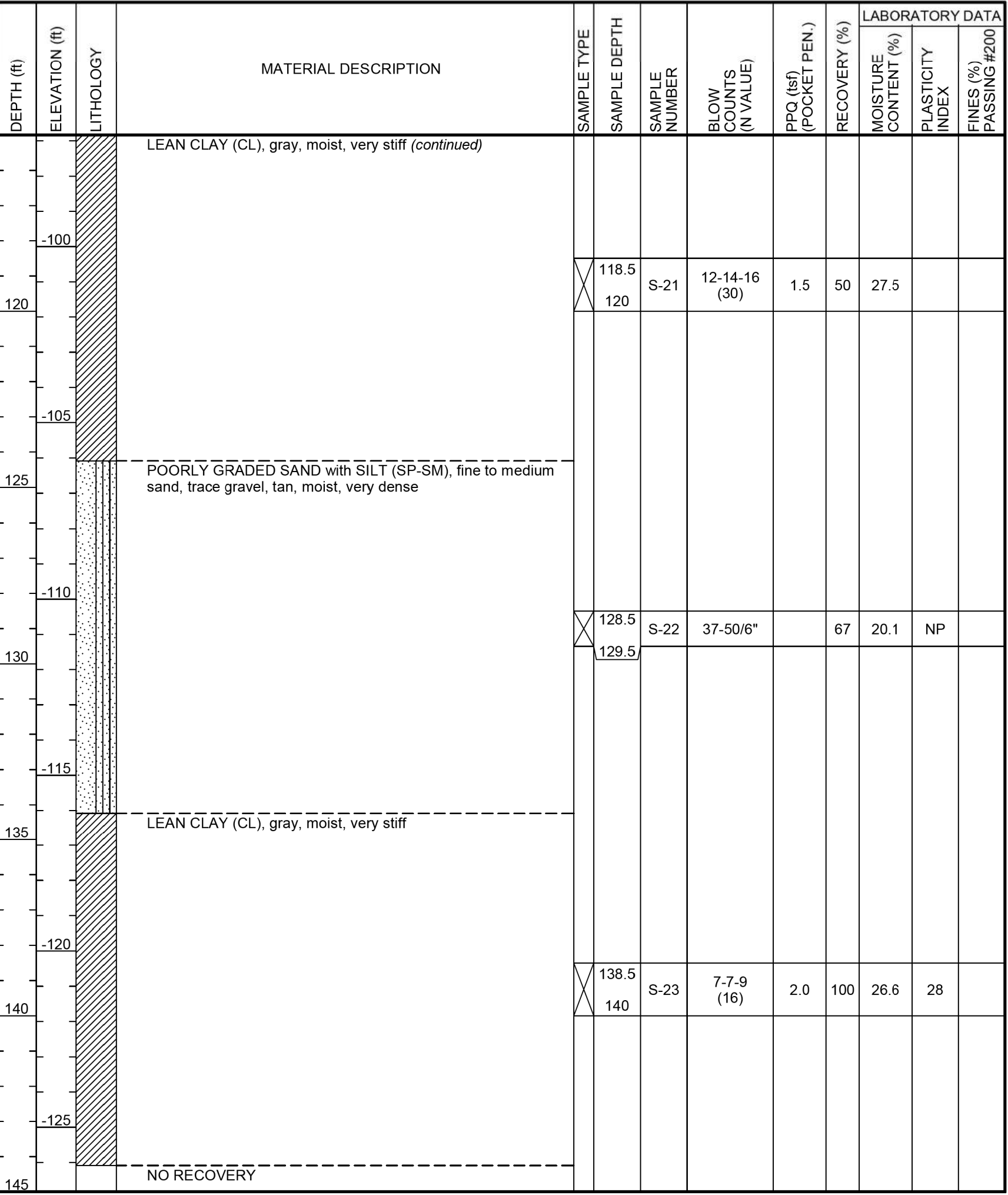
REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12035

BORING NO: BR10-14  Kiewit	Project: I-10 Mobile River Bridge and Bayway		Elevation (ft): 18.2
	Project No: M23-359		Depth (ft): 150
	Site Location: Mobile County, AL		Northing: 249672.637
	Start Date and Time: 1/6/2025 08:30 AM		Easting: 1797922.109
	End Date and Time: 1/17/2025 01:00 PM		Boring Location: West Tunnel Interch. Br.



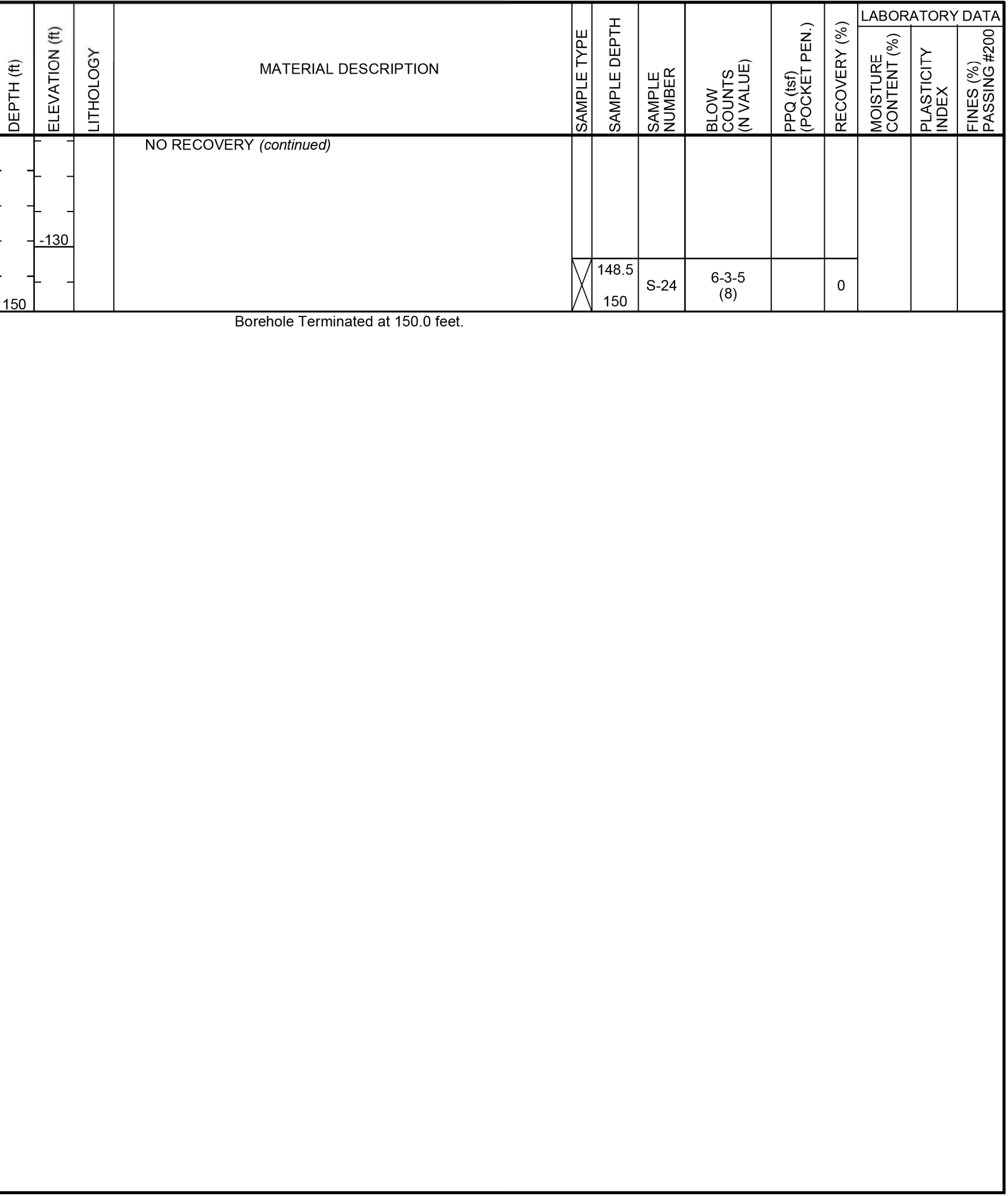
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BORING NO: BR10-14 	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 18.2
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Nothing: 249672.637
	Start Date and Time: 1/6/2025 08:30 AM	Easting: 1797922.109
	End Date and Time: 1/17/2025 01:00 PM	Boring Location: West Tunnel Interch. Br.



(Continued Next Page)

BORING NO: BR10-14 	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 18.2
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249672.637
	Start Date and Time: 1/6/2025 08:30 AM	Easting: 1797922.109
	End Date and Time: 1/17/2025 01:00 PM	Boring Location: West Tunnel Interch. Br.



A	EL	06/13/2025	90% FINAL SUBMITTAL
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COUNTY(S)
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BRIDGE SHEET NO. 35 OF 40

SHEET TITLE

MOBILE RIVER BRIDGE
WATER STREET RAMP C
TEST BORING RECORD SHEET

BORING NO: BR10-17  PAGE 1 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 11.7
	Project No: M23-359	Depth (ft): 150.0
	Site Location: Mobile County, AL	Northing: 249794.814
	Start Date and Time: 1/9/2025 01:00 PM	Easting: 1797914.082
	End Date and Time: 1/9/2025 04:00 PM	Boring Location: West Tunnel Interch. Br.

Logged By: CN	Drill Method: Mud Rotary	Description: Bridge 12
Checked By: JB	Hammer Type: Auto	Alignment: I-10 BUS EB
Drilling Contractor: SES	Energy Ratio (%): 64.6	Station & Offset: 6022+82.8 & 142.4 L
Driller: P. Byrd	Borehole Diameter (in): 4	Drilling Water Loss(-)/Gain(+): Not Observed
Drill Equipment: CME-45	Casing Diameter (in) & Casing Length (ft): 4 & 15	Water Elev. (ft): Not Recorded

DEPTH (ft)	ELEVATION (ft)	LITHOLOGY	MATERIAL DESCRIPTION	SAMPLE TYPE	SAMPLE DEPTH	SAMPLE NUMBER	BLOW COUNTS (N VALUE)	PPQ (tsf) (POCKET PEN.)	RECOVERY (%)	MOISTURE CONTENT (%)	PLASTICITY INDEX	FINES (%) PASSING #200
10			VAC/BACKFILL									
8.5				X	8.5	S-1	0-0-0 (0)		100	28.8		
13.5			SILTY SAND (SM, A-2-4(0)), fine sand, silt lense, tan and gray, moist to wet, very loose	X	13.5	S-2	2-1-2 (3)		94	25.7	NP	27.0
18.5			FAT CLAY (CH, A-7-5(103)), few fine to coarse sand, trace fine gravel, trace organics, gray and brown, moist, soft	X	18.5	S-3	0-1-2 (3)	1.0	100	96.3	92	94.2
23.5			CLAYEY SAND (SC, A-6(3)), fine sand, tan and gray and dark gray, stiff	X	23.5	S-4	1-8-7 (15)		94	37.6	13	47.3

(Continued Next Page)

BORING NO: BR10-17  PAGE 2 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 11.7
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249794.814
	Start Date and Time: 1/9/2025 01:00 PM	Easting: 1797914.082
	End Date and Time: 1/9/2025 04:00 PM	Boring Location: West Tunnel Interch. Br.

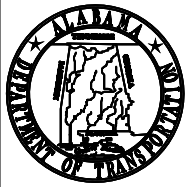
DEPTH (ft)	ELEVATION (ft)	LITHOLOGY	MATERIAL DESCRIPTION	SAMPLE TYPE	SAMPLE DEPTH	SAMPLE NUMBER	BLOW COUNTS (N VALUE)	PPQ (tsf) (POCKET PEN.)	RECOVERY (%)	MOISTURE CONTENT (%)	PLASTICITY INDEX	FINES (%) PASSING #200
15			CLAYEY SAND (SC, A-6(3)), fine sand, tan and gray and dark gray, stiff (continued)									
28.5			LEAN CLAY (CL), gray and orange, moist, very stiff									
28.5			POORLY GRADED SAND (SP), fine sand, tan, wet, medium dense	X	28.5	S-5	12-13-13 (26)	86	21.6			
33.5			POORLY GRADED SAND with SILT (SP-SM), fine sand, tan, wet, medium dense	X	33.5	S-6	9-10-12 (22)	64	25.1			
38.5			POORLY GRADED SAND with SILT (SP-SM, A-3), fine to medium sand, trace subangular gravel, tan and light gray to gray, wet, medium dense to dense	X	38.5	S-7	9-16-16 (32)	50	23.1	NP	7.0	
43.5			Redrill, 3' offset, starting at 38.5'	X	43.5	S-8	12-22-24 (46)	56	20.2			
48.5				X	48.5	S-9	12-16-16 (32)	72	22.2	NP	7.0	
53.5				X	53.5	S-10	11-8-10 (18)	61	21.7			

(Continued Next Page)

BORING NO: BR10-17  PAGE 3 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 11.7
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249794.814
	Start Date and Time: 1/9/2025 01:00 PM	Easting: 1797914.082
	End Date and Time: 1/9/2025 04:00 PM	Boring Location: West Tunnel Interch. Br.

DEPTH (ft)	ELEVATION (ft)	LITHOLOGY	MATERIAL DESCRIPTION	SAMPLE TYPE	SAMPLE DEPTH	SAMPLE NUMBER	BLOW COUNTS (N VALUE)	PPQ (tsf) (POCKET PEN.)	RECOVERY (%)	MOISTURE CONTENT (%)	PLASTICITY INDEX	FINES (%) PASSING #200
58.5			POORLY GRADED SAND with SILT (SP-SM, A-3), fine to medium sand, trace subangular gravel, tan and light gray to gray, wet, medium dense to dense (continued)	X	58.5	S-11	14-23-18 (41)	78	19.4			
63.5				X	63.5	S-12	14-16-20 (36)	86	23.8			
68.5			POORLY GRADED SAND (SP, A-1-b), fine to coarse sand, trace fine gravel, tan, wet, medium dense	X	68.5	S-13	9-12-16 (28)	61	15.4	NP	4.6	
73.5			SILTY SAND (SM), fine sand, tan and gray, moist, medium dense	X	73.5	S-14	12-14-15 (29)	78	25.3			
78.5			POORLY GRADED SAND with SILT (SP-SM, A-3), fine to medium sand, tan, wet, medium dense	X	78.5	S-15	10-12-16 (28)	83	24.9	NP	8.6	
83.5			SILTY SAND (SM), fine sand, tan and gray, moist, dense	X	83.5	S-16	13-18-20 (38)	81	23.8			

(Continued Next Page)



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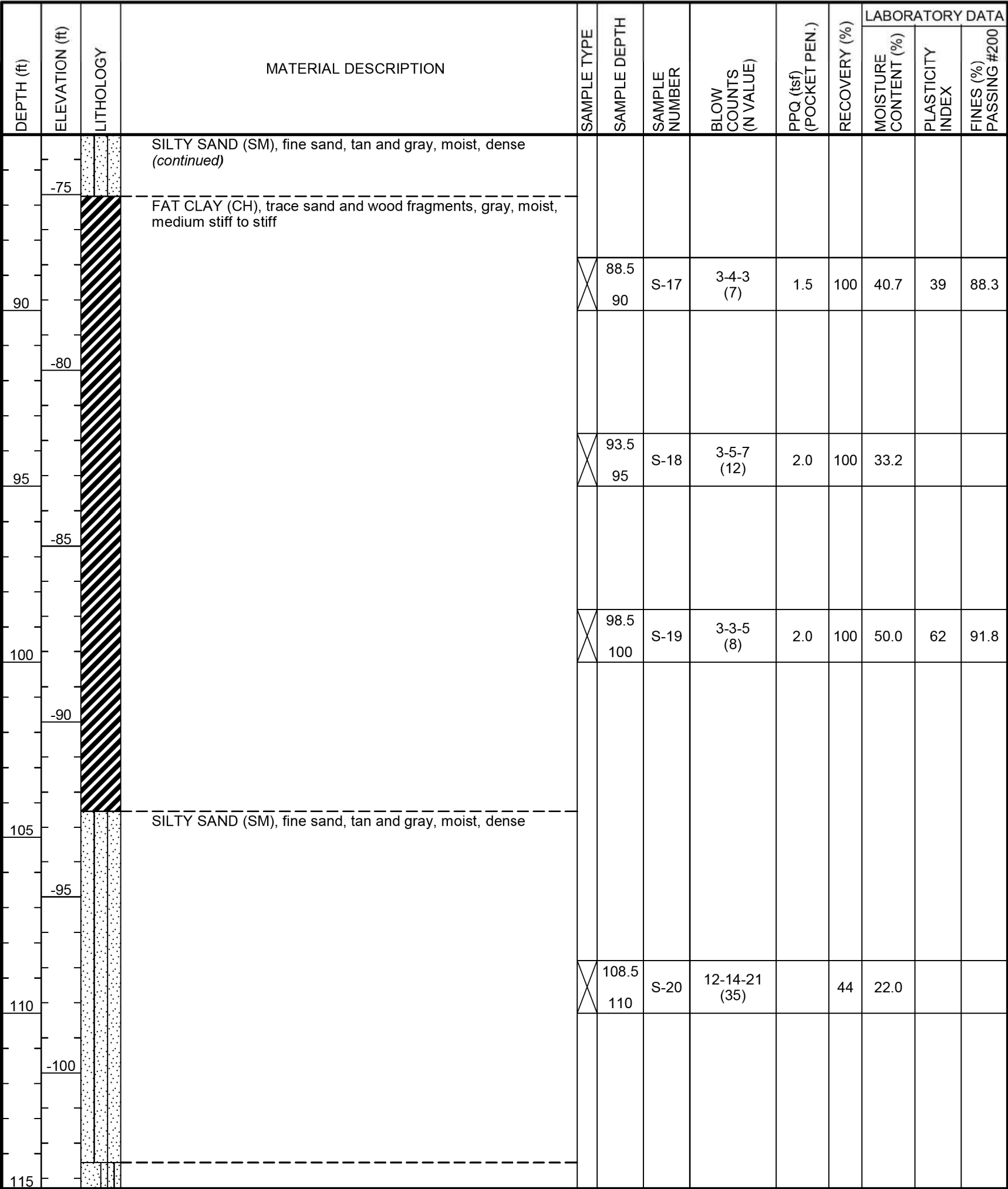
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BRIDGE SHEET NO. 36 OF 40

SHEET TITLE

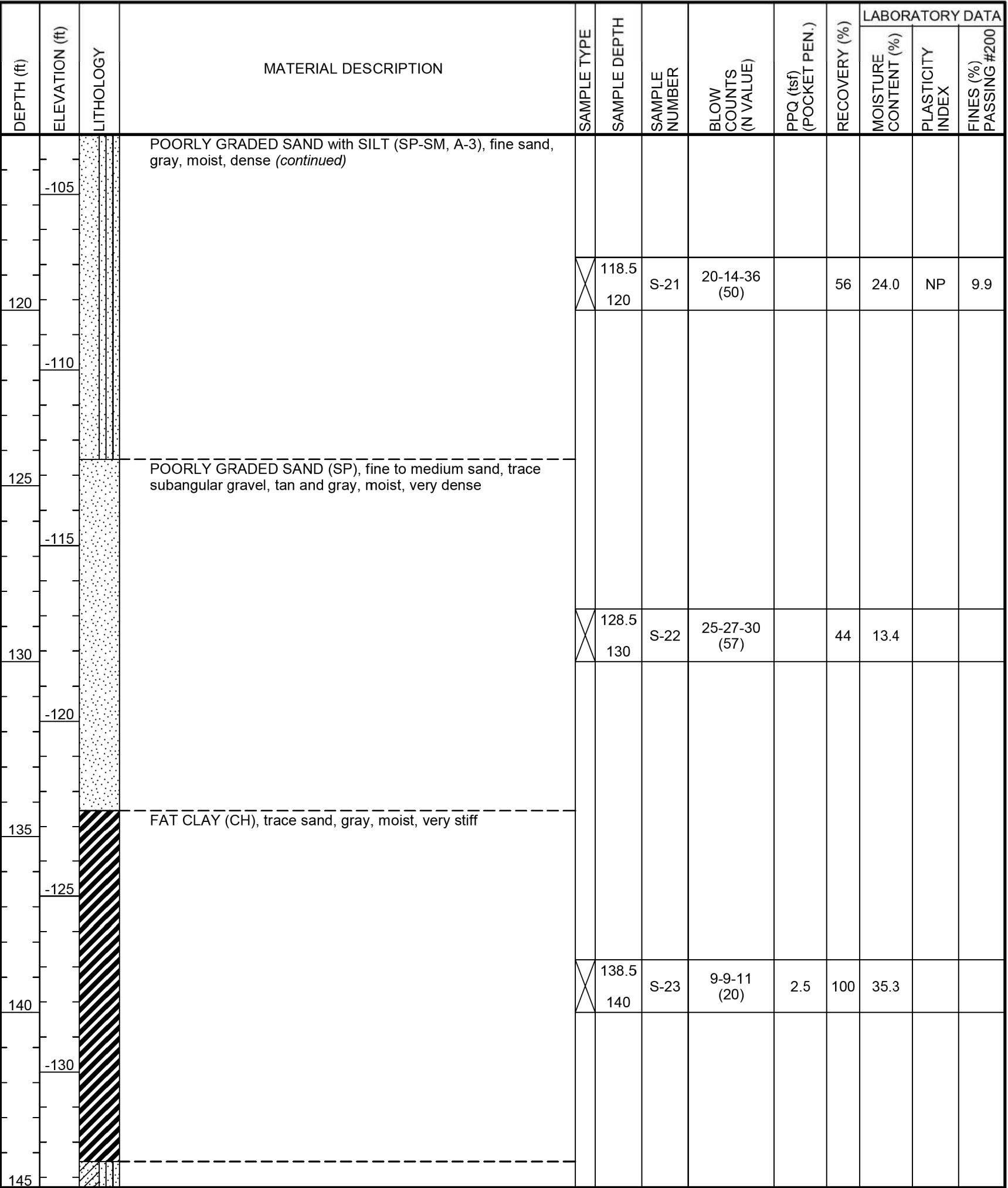
MOBILE RIVER BRIDGE
WATER STREET RAMP C
TEST BORING RECORD SHEET

BORING NO: BR10-17  PAGE 4 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 11.7
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249794.814
	Start Date and Time: 1/9/2025 01:00 PM	Easting: 1797914.082
	End Date and Time: 1/9/2025 04:00 PM	Boring Location: West Tunnel Interch. Br.



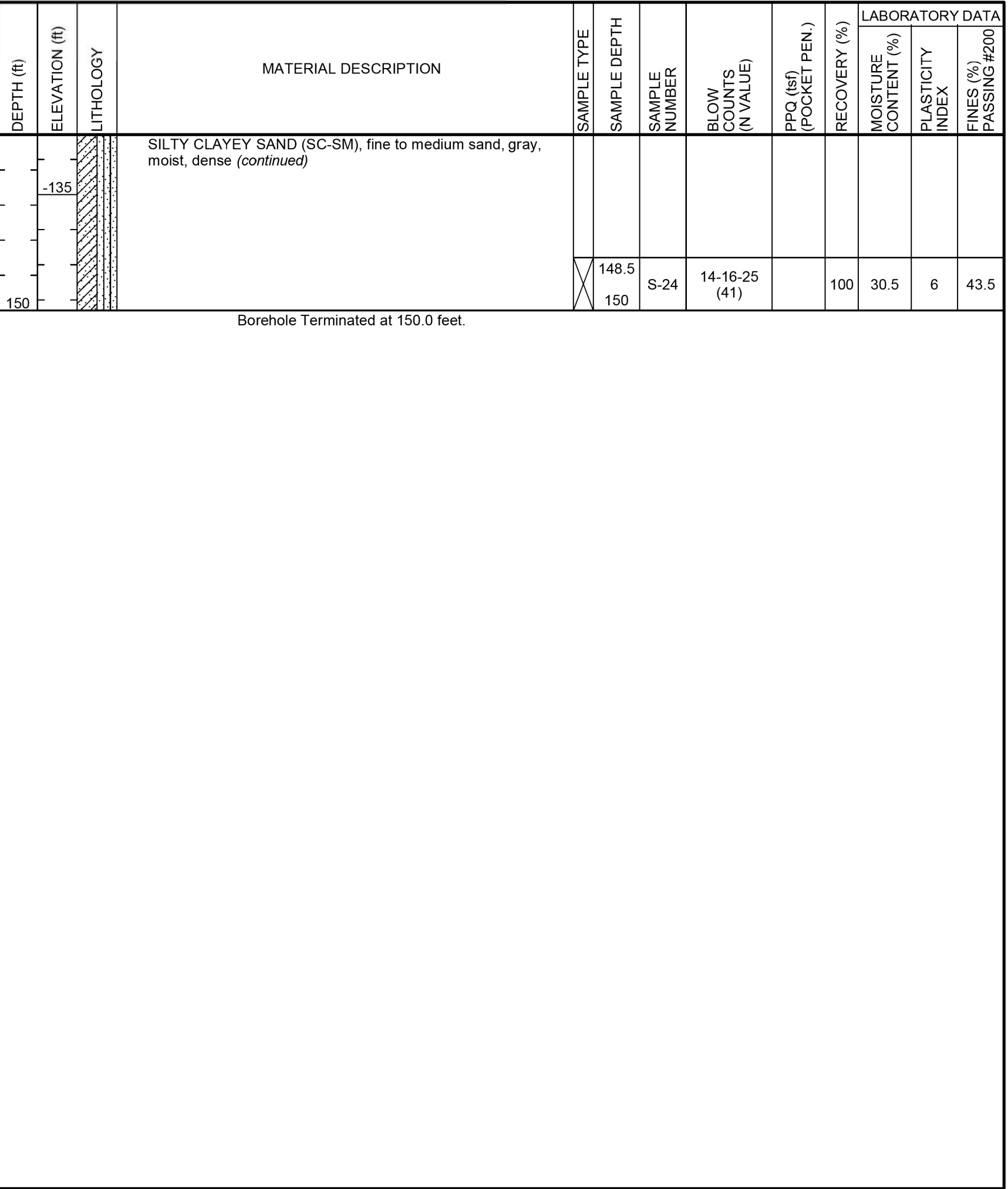
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BORING NO: BR10-17  PAGE 5 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 11.7
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249794.814
	Start Date and Time: 1/9/2025 01:00 PM	Easting: 1797914.082
	End Date and Time: 1/9/2025 04:00 PM	Boring Location: West Tunnel Interch. Br.



(Continued Next Page)

BORING NO: BR10-17  PAGE 6 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 11.7
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249794.814
	Start Date and Time: 1/9/2025 01:00 PM	Easting: 1797914.082
	End Date and Time: 1/9/2025 04:00 PM	Boring Location: West Tunnel Interch. Br.



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BRIDGE SHEET NO. 37 OF 40

SHEET TITLE

MOBILE RIVER BRIDGE
WATER STREET RAMP C
TEST BORING RECORD SHEET

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12038

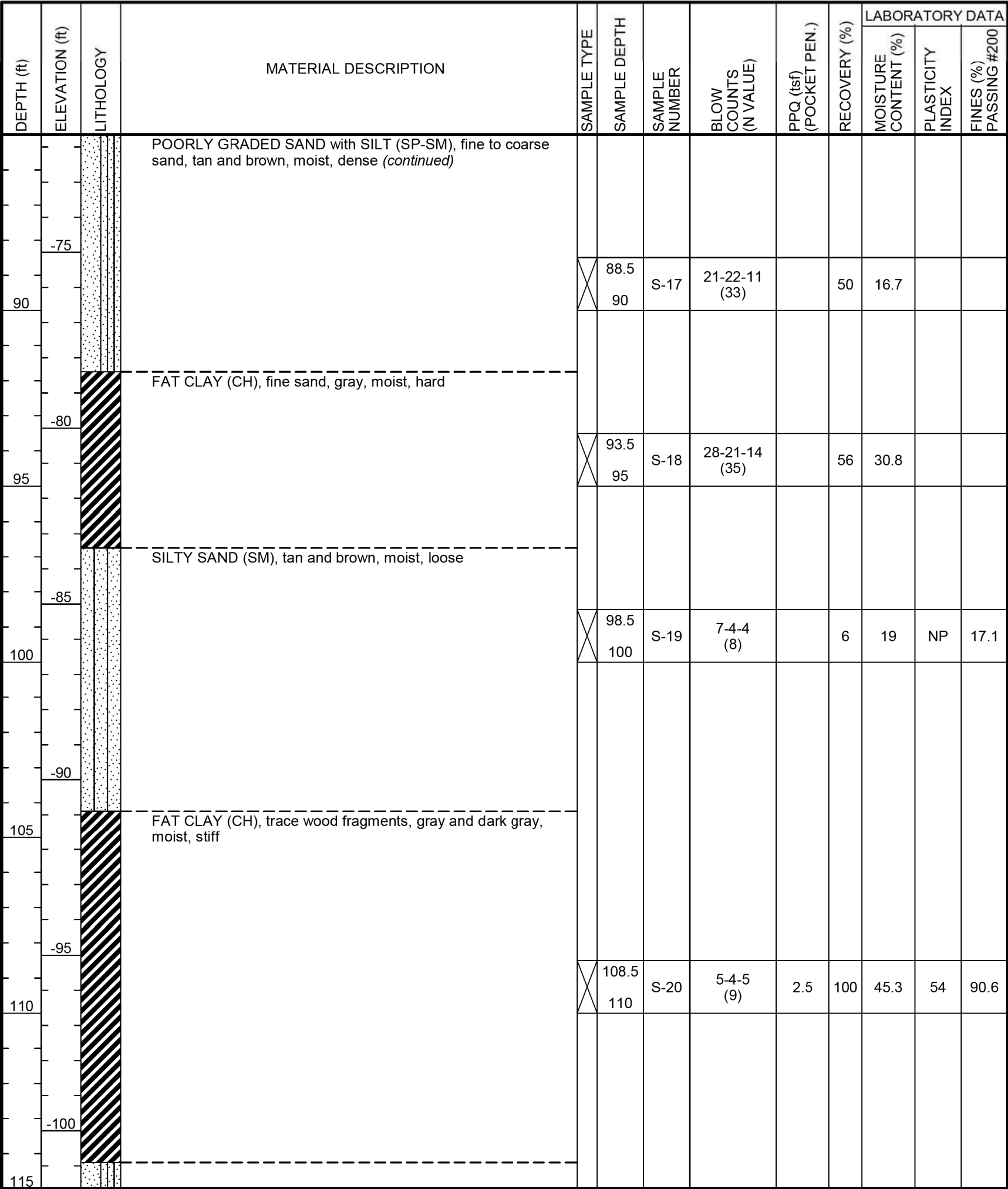
BORING NO: BR10-20		Project: I-10 Mobile River Bridge and Bayway		Elevation (ft): 13.3
		Project No: M23-359		Depth (ft): 150.0
		Site Location: Mobile County, AL		Northing: 249889.359
PAGE 1 OF 6		Start Date and Time: 12/17/2024 08:00 AM		Easting: 1797935.474
		End Date and Time: 12/17/2024 04:00 PM		Boring Location: West Tunnel Interch. Br.
Logged By: ER		Drill Method: Mud Rotary		Description: Bridge 12
Checked By: JB		Hammer Type: Auto		Alignment: I-10 BUS EB
Drilling Contractor: SES		Energy Ratio (%): 64.6		Station & Offset: 6023+79.5 & 149.1 L
Driller: P. Byrd		Borehole Diameter (in): 4		Drilling Water Loss(-)/Gain(+): Not Observed
Drill Equipment: CME-45		Casing Diameter (in) & Casing Length (ft): 4 & 15		Water Elev. (ft): Not Recorded

DEPTH (ft)	ELEVATION (ft)	LITHOLOGY	MATERIAL DESCRIPTION	SAMPLE TYPE	SAMPLE DEPTH	SAMPLE NUMBER	BLOW COUNTS (N VALUE)	PFQ (tsf) (POCKET PEN.)	RECOVERY (%)	LABORATORY DATA			
										MOISTURE CONTENT (%)	PLASTICITY INDEX	FINES (%) PASSING #200	
10	3.0		VAC/BACKFILL										
5													
5					X	8.5	S-1	2-1-1 (2)		44	27.6	NP	
10				SANDY LEAN CLAY (CL), fine sand, gray, wet, very soft to soft		10							
0													
5													
15					X	13.5	S-2	2-1-1 (2)		100	26.2		
15				NO RECOVERY (S-3)		15							
-5													
20					X	18.5	S-3	0-0-0 (0)		0			
20						20							
-10				SANDY LEAN CLAY (CL, A-6(4)), fine sand, tan and light gray, moist, stiff									
25				X	23.5	S-4	1-4-9 (13)	1.0	100	32.3	12	55.3	
25					25								

BORING NO: BR10-20			Project: I-10 Mobile River Bridge and Bayway		Elevation (ft): 13.3							
			Project No: M23-359		Depth (ft): 150							
			Site Location: Mobile County, AL		Northing: 249889.359							
			Start Date and Time: 12/16/2024 08:00 AM		Easting: 1797935.474							
			End Date and Time: 12/17/2024 04:00 PM		Boring Location: West Tunnel Interch. Br.							
DEPTH (ft)	ELEVATION (ft)	LITHOLOGY	MATERIAL DESCRIPTION	SAMPLE TYPE	SAMPLE DEPTH	SAMPLE NUMBER	BLOW COUNTS (N VALUE)	PPQ (tsf) (POCKET PEN.)	RECOVERY (%)	MOISTURE CONTENT (%)	PLASTICITY INDEX	FINES (%) PASSING #200
			SANDY LEAN CLAY (CL, A-6(4)), fine sand, tan and light gray, moist, stiff <i>(continued)</i>									
			SILTY SAND (SM), fine to medium sand, tan, wet, medium dense									
	-15			X	28.5	S-5	12-14-15 (29)		83	27.8		
30					30							
	-20											
	-35			X	33.5	S-6	8-8-9 (17)		50	24.6		
35					35							
	-25		POORLY GRADED SAND with SILT (SP-SM, A-3), fine to coarse sand, tan and brown, wet, medium dense									
	-40			X	38.5	S-7	9-11-9 (20)		56	25.3	NP	5.3
	-30				40							
	-45		SILTY SAND (SM), fine to coarse sand, tan, wet, medium dense									
	-50			X	43.5	S-8	8-10-15 (25)		50	21.5		
	-35				45							
	-50		POORLY GRADED SAND (SP), fine to coarse sand, tan and light gray, moist, medium dense									
	-55			X	48.5	S-9	10-5-11 (16)		39	23.5	NP	3.1
	-40				50							
	-55		POORLY GRADED SAND with SILT (SP-SM, A-3), fine to medium sand, tan and light gray, moist, medium dense to dense									
	-55			X	53.5	S-10	7-7-9 (16)		44	24.3		
	-55				55							

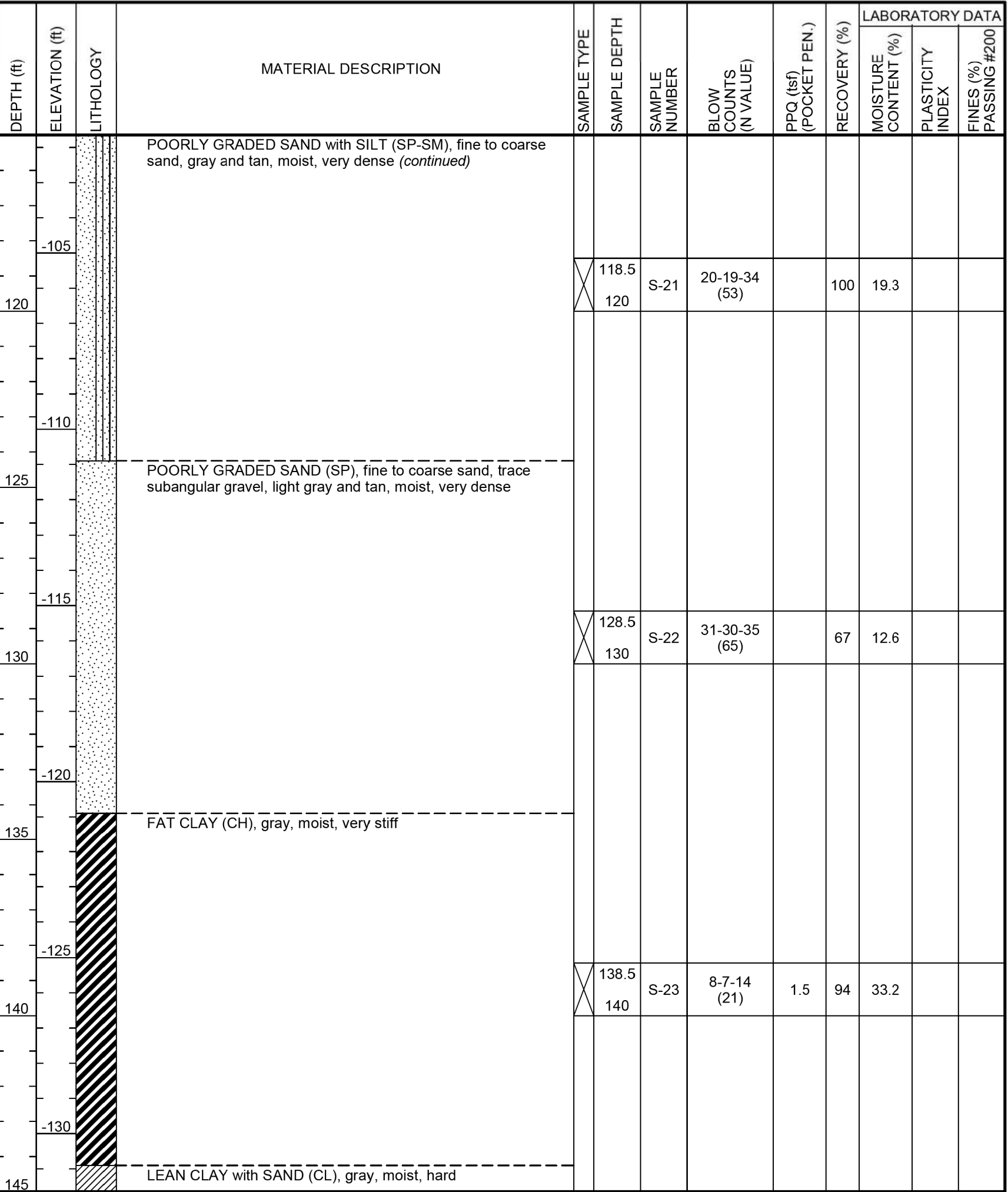
BORING NO: BR10-20			Project: I-10 Mobile River Bridge and Bayway		Elevation (ft): 13.3							
			Project No: M23-359		Depth (ft): 150							
			Site Location: Mobile County, AL		Northing: 249889.359							
			Start Date and Time: 12/16/2024 08:00 AM		Easting: 1797935.474							
			End Date and Time: 12/17/2024 04:00 PM		Boring Location: West Tunnel Interch. Br.							
DEPTH (ft)	ELEVATION (ft)	LITHOLOGY	MATERIAL DESCRIPTION	SAMPLE TYPE	SAMPLE DEPTH	SAMPLE NUMBER	BLOW COUNTS (N VALUE)	PPO (tsf) (POCKET PEN.)	RECOVERY (%)	MOISTURE CONTENT (%)	PLASTICITY INDEX	FINES (%) PASSING #200
	-45		POORLY GRADED SAND with SILT (SP-SM, A-3), fine to medium sand, tan and light gray, moist, medium dense to dense									
60			X	58.5 60	S-11	14-15-25 (40)		50	18.6	NP	6.9	
	-50											
65			X	63.5 65	S-12	17-18-21 (39)		50	21.3			
	-55											
70			POORLY GRADED SAND (SP), fine to coarse sand, trace fine subangular gravel, tan and light gray, moist, medium dense	X	68.5 70	S-13	9-13-13 (26)		67	16.5		
	-60											
75			POORLY GRADED SAND with GRAVEL (SP, A-1-a), fine to coarse sand, fine angular gravel, tan and light gray, moist, medium dense	X	73.5 75	S-14	8-9-9 (18)		61	13.7	NP	4.4
	-65											
80			SILTY SAND (SM), fine to coarse sand, tan and light gray, moist, medium dense	X	78.5 80	S-15	10-11-11 (22)		44	29.0		
	-70											
85			POORLY GRADED SAND with SILT (SP-SM), fine to coarse sand, tan and brown, moist, dense	X	83.5 85	S-16	19-21-21 (42)		72	20.5		

BORING NO: BR10-20  PAGE 4 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 13.3
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249889.359
	Start Date and Time: 12/16/2024 08:00 AM	Easting: 1797935.474
	End Date and Time: 12/17/2024 04:00 PM	Boring Location: West Tunnel Interch. Br.



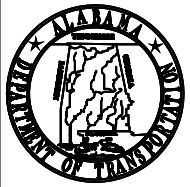
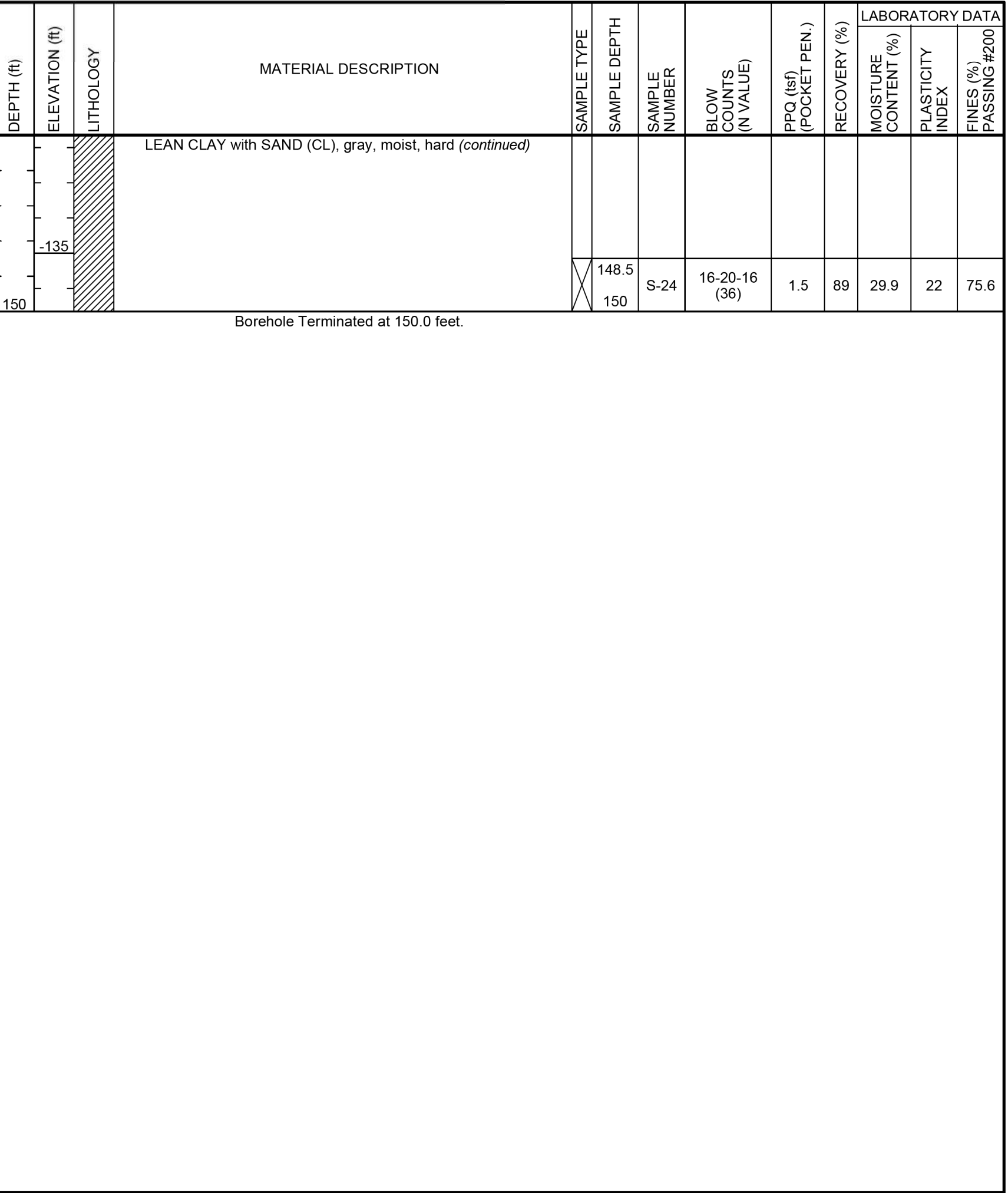
(Continued Next Page)

BORING NO: BR10-20  PAGE 5 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 13.3
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249889.359
	Start Date and Time: 12/16/2024 08:00 AM	Easting: 1797935.474
	End Date and Time: 12/17/2024 04:00 PM	Boring Location: West Tunnel Interch. Br.



(Continued Next Page)

BORING NO: BR10-20  PAGE 6 OF 6	Project: I-10 Mobile River Bridge and Bayway	Elevation (ft): 13.3
	Project No: M23-359	Depth (ft): 150
	Site Location: Mobile County, AL	Northing: 249889.359
	Start Date and Time: 12/16/2024 08:00 AM	Easting: 1797935.474
	End Date and Time: 12/17/2024 04:00 PM	Boring Location: West Tunnel Interch. Br.



ALABAMA
DEPARTMENT OF
TRANSPORTATION

A	EL	06/13/2025	90% FINAL SUBMITTAL
REV. NO.	BY	DATE	DESCRIPTION OF REVISION

PE STAMP

PE STAMP

QR CODE



PLAN SUBMITTAL
90%

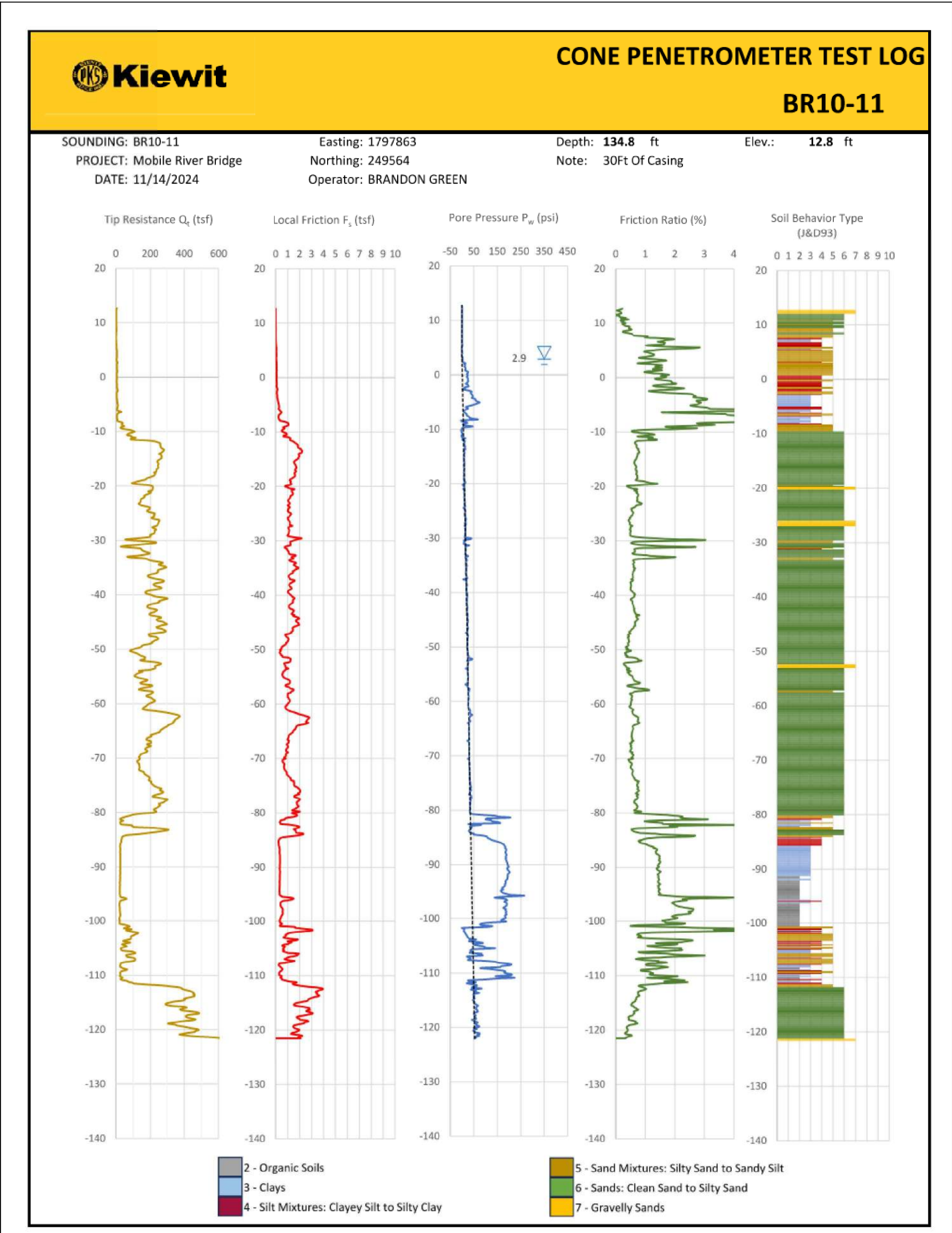
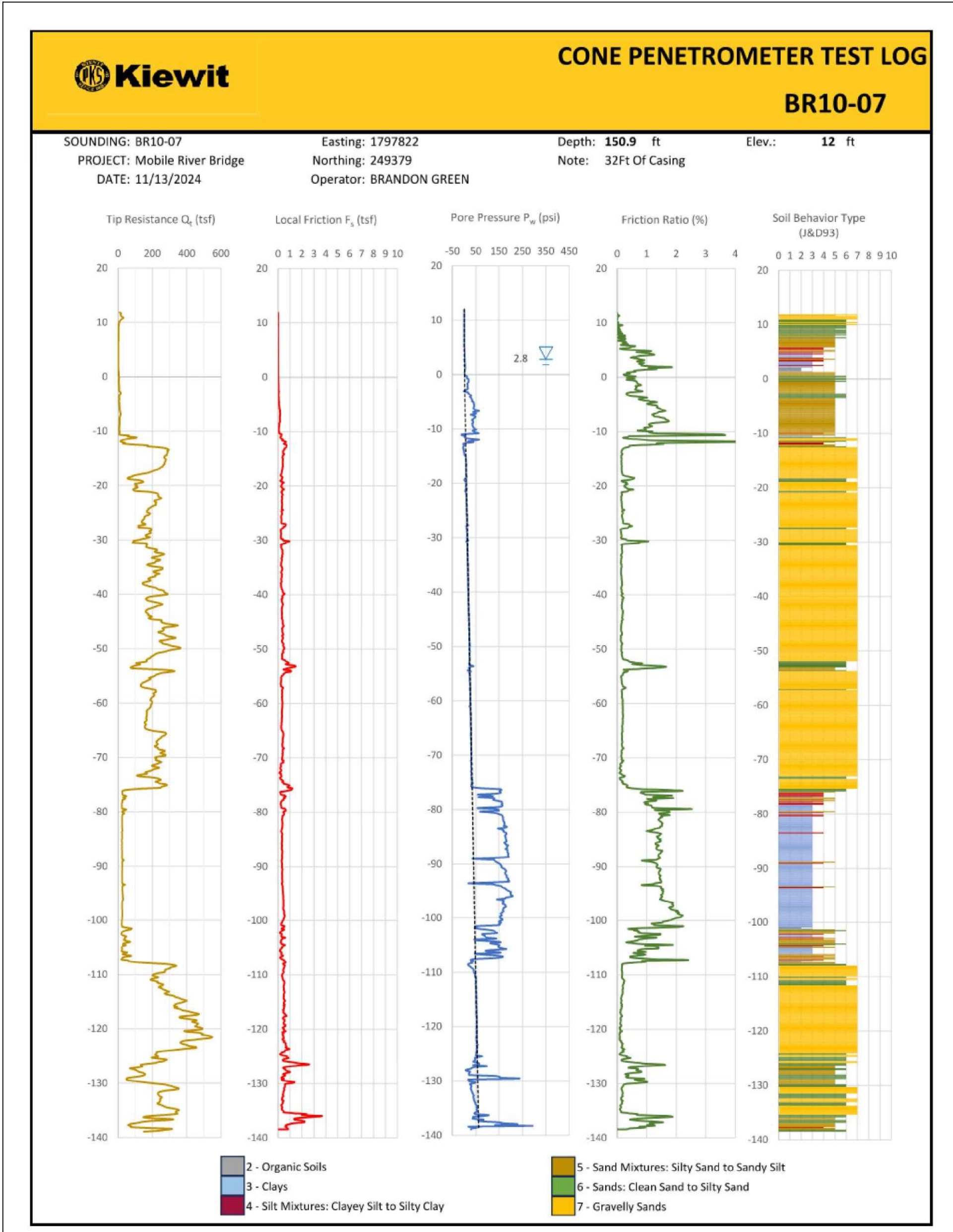
BIN(S)
021829
COUNTY(S)
MOBILE

DESIGNER:	DATE:
BRIDGE SHEET NO.	39 OF 40

SHEET TITLE
MOBILE RIVER BRIDGE WATER STREET RAMP C TEST BORING RECORD SHEET

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
INFRA-I010(353)	2025	S01-BR-12040

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION



	A	EL	06/13/2025	90% FINAL SUBMITTAL	PE STAMP DATE	PE STAMP DATE	QR CODE			PLAN SUBMITTAL	BIN(S)	DESIGNER: _____ DATE: _____	SHEET TITLE MOBILE RIVER BRIDGE WATER STREET RAMP C CPT RECORD SHEET
											021829		
											COUNTY(S)		
	REV. NO.	BY	DATE	DESCRIPTION OF REVISION							MOBILE	BRIDGE SHEET NO. 40 OF 40	