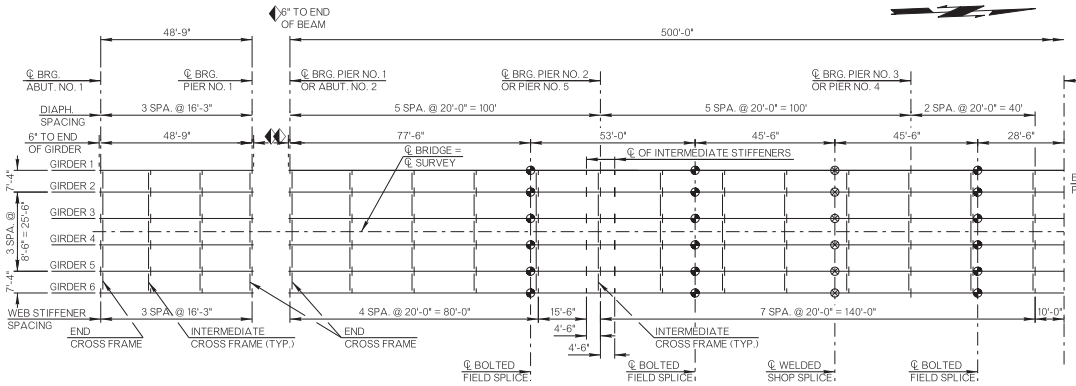
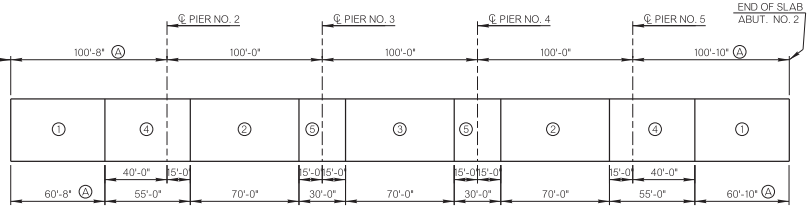


LEGEND

⊕ = B.F.S. = BOLTED FIELD SPLCE
⊗ = W.S.S. = WELDED SHOP SPLICE

FRAMING PLAN

NOTE:
℄ OF WELDED SHOP SPLICE IS REFERENCED TO SPLICE IN FLANGES. SEE "GIRDER DETAILS" SHEET.

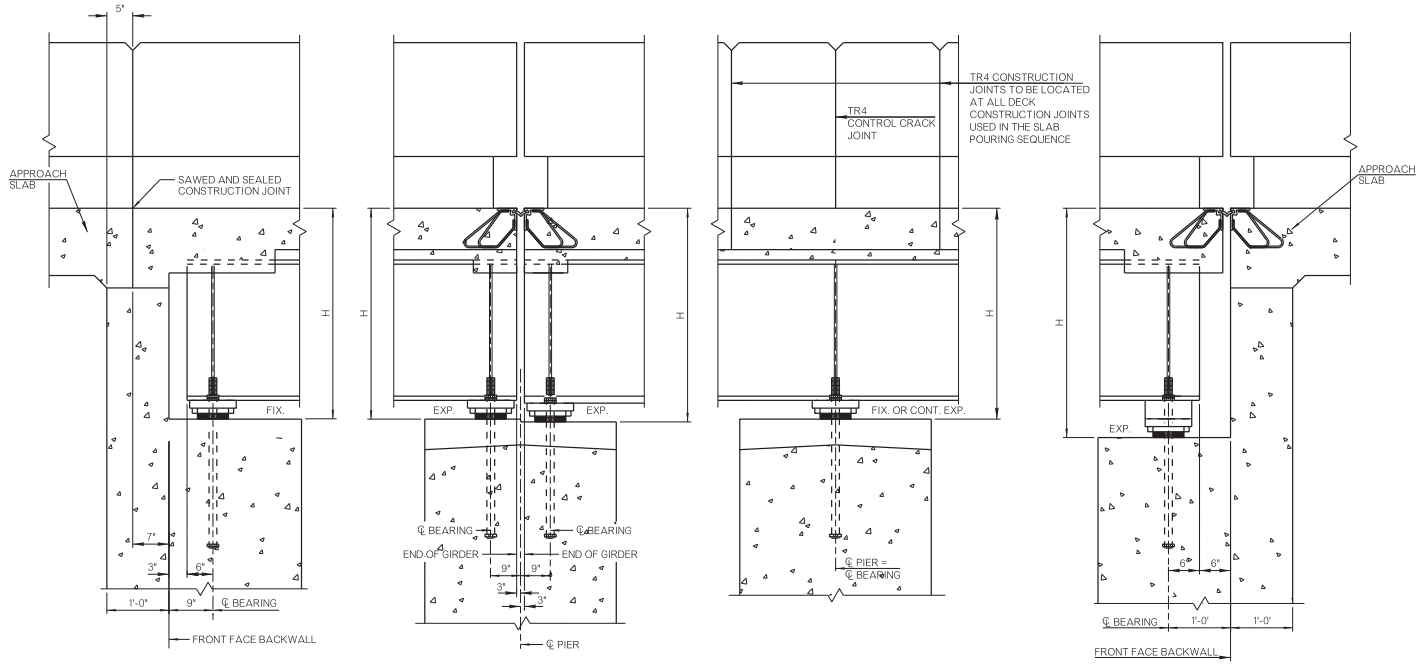


SPAN 2 THROUGH 6 SLAB POURING SEQUENCE

Ⓐ THESE DIMENSIONS ARE CALCULATED USING A 2" EXPANSION JOINT OPENING. DIMENSIONS MAY VARY DUE TO TEMPERATURE AT TIME OF POURING.

NOTE:
DO NOT TINE WITHIN 6" OF CONSTRUCTION JOINTS.

SLAB POURING SEQUENCE:
THE POURING SEQUENCE SHALL BE IN THE NUMERICAL SEQUENCE INDICATED. ALL POURS WITH THE SAME NUMBER MAY BE POURED IN ANY SEQUENCE, BUT ALL POURS WITH SAME NUMBER SHALL BE COMPLETED BEFORE BEGINNING WITH THE NEXT POUR NUMBER. THERE SHALL BE A LAPSE OF AT LEAST 48 HOURS BETWEEN POUR PHASES. EACH PHASE OF SUPERSTRUCTURE DECK CONCRETE PLACEMENT SHALL BE MADE IN ONE POUR, EACH POUR SHALL BE AT A MINIMUM RATE OF 25 C.Y. PER HOUR. IN THE EVENT OF AN EMERGENCY SITUATION, A KEYED CONSTRUCTION JOINT SHALL BE MADE PERPENDICULAR TO THE DIRECTION OF TRAFFIC, AS DIRECTED BY THE ENGINEER. AFTER AT LEAST 48 HOURS HAS ELAPSED SINCE CONCRETE PLACEMENT AND UNTIL THE SLAB IS IN PLACE ON BOTH SIDES OF THE CONSTRUCTION JOINT, THE SLAB IS UNSUPPORTED AND NO HEAVY EQUIPMENT WILL BE PERMITTED ON THE FINISHED SLAB WITHIN 5' OF THE CONSTRUCTION JOINTS.



ABUTMENT NO. 1 | PIER NO. 1 | PIER NOS. 2 & 5 (CONT. EXP.) PIER NOS. 3 & 4 (FIX.) | ABUTMENT NO. 2

LONGITUDINAL SECTION

LOCATION	DIMENSION "H"
ABUTMENT 1	5' - 10 3/8"
PIER 1 - SPAN 1	5' - 10 3/8"
PIER 1 - SPAN 2	5' - 10 7/8"
PIER 2	5' - 10 7/8"
PIER 3	5' - 10 3/4"
PIER 4	5' - 10 3/4"
PIER 5	5' - 10 7/8"
ABUTMENT 2	6' - 1 7/8"

DIMENSION "H" IS FROM TOP OF DECK SLAB TO BOTTOM OF BEARING ASSEMBLY AT ℄ BEARING.

NOTE:
2" OPENING AT 60° FOR JOINTS AND BARRIERS (SEE STD. EJ-SQ FOR MORE INFORMATION)

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

LOCHNER		
DESIGN	PRY	4/15
DRAWN	PRY	4/15
CHECKED	MLJ	1/16
FILE NAME	Long	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

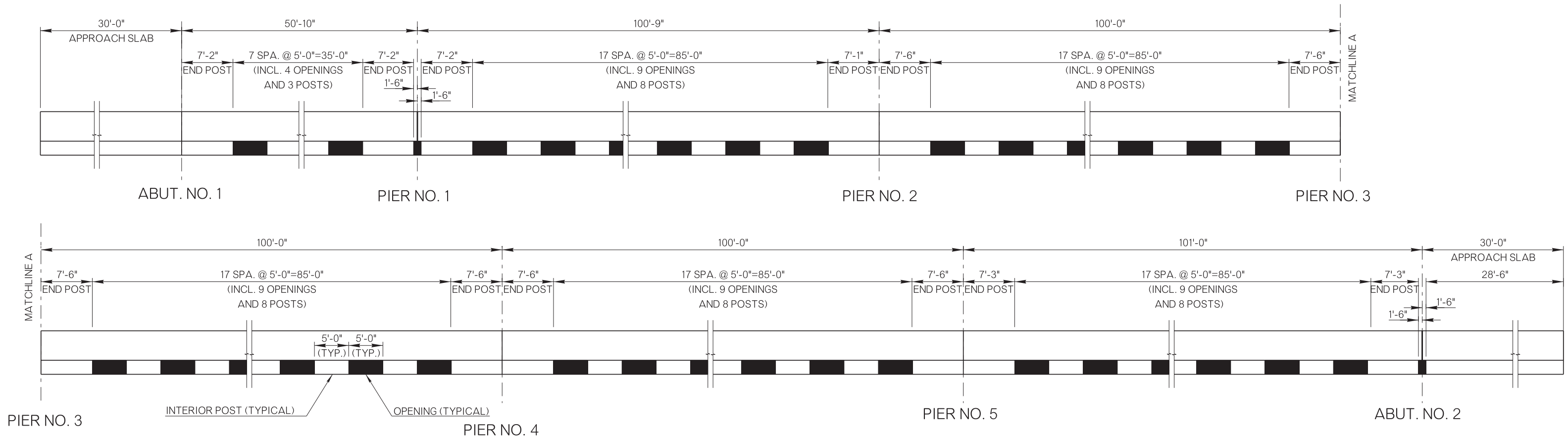
LONGITUDINAL SECTION AND FRAMING PLAN

STATE JOB NO. 29667(04) SHEET NO. B013

GARVIN COUNTY US-77

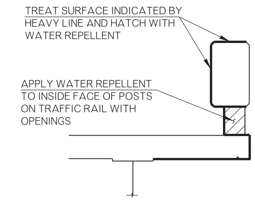
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

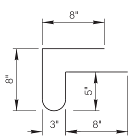


LAYOUT OF CONCRETE RAIL (TR4)

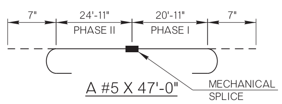
(PLACE CONTROL CRACK JOINTS AT EVERY OTHER POST ACCORDING TO TR4-2 . APPROX. 20' SPACING)



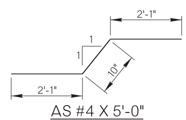
WATER REPELLENT TREATMENT DETAIL



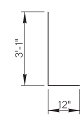
AH1 #4 X 2'-8"



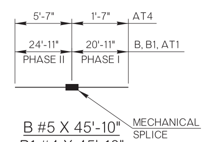
A #5 X 47'-0"



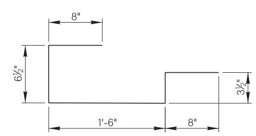
AS #4 X 5'-0"



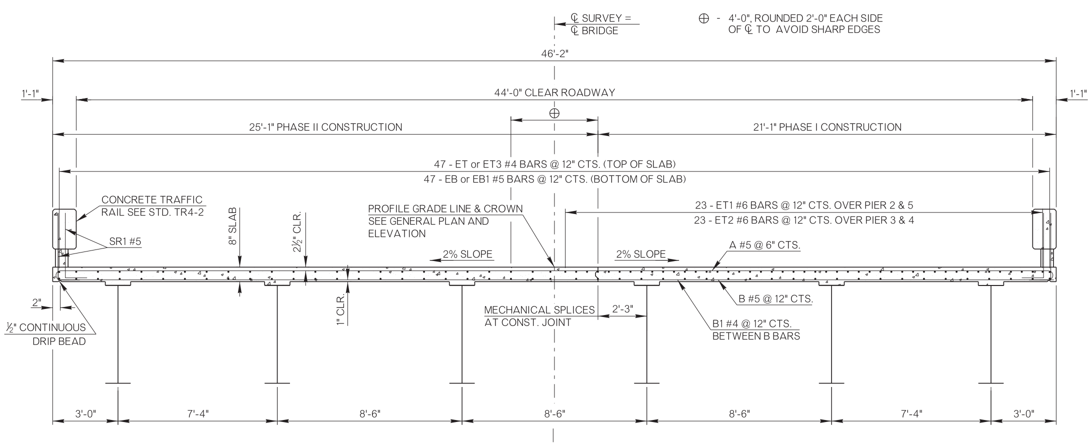
SR1 #5 X 4'-1"



B #5 X 45'-10"
B1 #4 X 45'-10"
AT1 #4 X 45'-10"
AT4 #4 X 7'-2"



AH2 #4 X 3'-8"



HALF - SECTION AT ABUTMENTS AND PIER 1

HALF - SECTION AT PIER 2, 3, 4 & 5

TYPICAL CROSS SECTION

LONGITUDINAL PIER BAR LOCATIONS				
MARK	SIZE	PIER	START	END
#6	ET1	2	25'-8" SOUTH OF CL PIER	32'-8" NORTH OF CL PIER
#6	ET2	3	27'-1" SOUTH OF CL PIER	24'-10" NORTH OF CL PIER
#6	ET2	4	24'-10" SOUTH OF CL PIER	27'-1" NORTH OF CL PIER
#6	ET1	5	32'-8" SOUTH OF CL PIER	25'-8" NORTH OF CL PIER

SUPERSTRUCTURE QUANTITIES		
ITEM	UNIT	TOTAL
SAW-CUT GROOVING	S.Y.	2,994.1
SEALED EXPANSION JOINT	L.F.	94.3
CONCRETE RAIL (TR4)	L.F.	1,224.5
CLASS AA CONCRETE	C.Y.	648.3
MECHANICAL SPLICES	EA.	2,224
EPOXY-COATED REINFORCING STEEL (GR. 60)	LB.	169,260
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	981

	BAR LIST - SUPERSTRUCTURE					
	EPOXY COATED					
	SPAN 1					
	MARK	NO.	SIZE	FORM	LENGTH	VARIANCE
△3	A	102	#5	BNT.	47'-0"	
△3	B	54	#5	STR.	45'-10"	
△3	B1	50	#4	STR.	45'-10"	
	EB1	47	#5	STR.	50'-5"	
	ET3	47	#4	STR.	50'-5"	
	SR1	106	#5	BNT.	4'-1"	

	BAR LIST - SUPERSTRUCTURE					
	EPOXY COATED					
	SPANS 2-6					
	MARK	NO.	SIZE	FORM	LENGTH	VARIANCE
△3	A	1003	#5	BNT.	47'-0"	
△3	B	506	#5	STR.	45'-10"	
△3	B1	501	#4	STR.	45'-10"	
△1	EB	423	#5	STR.	526'-6"	
△2	ET	423	#4	STR.	518'-3"	
	ET1	92	#6	STR.	58'-4"	
	ET2	92	#6	STR.	51'-11"	
	SR1	2076	#5	BNT.	4'-1"	

	BAR LIST - DIAPHRAGMS					
	EPOXY COATED					
	MARK	NO.	SIZE	FORM	LENGTH	VARIANCE
	AH1	12	#4	BNT.	2'-8"	
	AH2	170	#4	BNT.	3'-8"	
	AS	47	#4	BNT.	5'-0"	
△3	AT1	1	#4	STR.	45'-10"	
	AT2	14	#4	STR.	6'-1"	
	AT3	14	#4	STR.	7'-3"	
	AT4	7	#4	STR.	7'-2"	
	PT1	12	#4	STR.	2'-1"	

△1 INCLUDES 8 LAPS 3'-0" LONG EACH
△2 INCLUDES 8 LAPS 2'-0" LONG EACH
△3 PHASE BAR WITH MECHANICALSPLICE. SEE BAR DETAILS.

LOCHNER		
DESIGN	PRY	4/15
DRAWN	RCL	4/15
CHECKED	KLW	12/15
FILE NAME	Typ	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION & CONCRETE TRAFFIC RAIL

STATE JOB NO. 29667(04) SHEET NO. B014

GARVIN COUNTY US-77

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

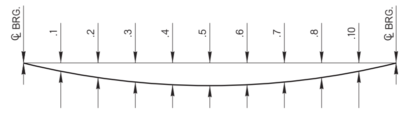
DEFLECTION SCHEDULE - GIRDERS 1 - 6												
	BEAM AND DIAPHRAGM DEFLECTION						SLAB, HAUNCH, S.I.P. STEEL DECK FORMS AND TRAFFIC RAIL DEFLECTION ②					
SPAN	CL. BRG.	1 & .9	.2 & .8	.3 & .7	.4 & .6	0.5	CL. BRG.	.1 & .9	.2 & .8	.3 & .7	.4 & .6	0.5
1	0.00"	0.02"	0.03"	0.04"	0.05"	0.06"	0.00"	0.06"	0.12"	0.16"	0.19"	0.20"

DEFLECTION SCHEDULE - GIRDERS 1 - 6										
	BEAM AND DIAPHRAGM DEFLECTION									
SPAN	CL. BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
2 & 6	0.00"	0.14"	0.25"	0.33"	0.37"	0.37"	0.32"	0.25"	0.15"	0.06"
3 & 5	0.00"	0.02"	0.00"	0.03"	0.05"	0.07"	0.07"	0.05"	0.02"	0.00"
4	0.00"	0.03"	0.08"	0.13"	0.17"	0.18"	SYM. ABOUT ℄ BRIDGE			

DEFLECTION SCHEDULE - GIRDERS 1 - 6										
	DECK SLAB, HAUNCH, S.I.P. STEEL DECK FORMS AND TRAFFIC RAIL DEFLECTION ②									
SPAN	CL. BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
2 & 6	0.00"	0.33"	0.61"	0.81"	0.90"	0.89"	0.78"	0.59"	0.36"	0.15"
3 & 5	0.00"	0.03"	0.01"	0.09"	0.16"	0.20"	0.20"	0.14"	0.07"	0.01"
4	0.00"	0.08"	0.21"	0.35"	0.45"	0.49"	SYM. ABOUT ℄ BRIDGE			

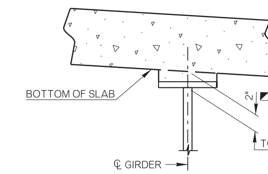
DEFLECTION SCHEDULE - GIRDERS 2 - 5										
	BEAM AND DIAPHRAGM DEFLECTION									
SPAN	CL. BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
2 & 6	0.00"	0.14"	0.25"	0.34"	0.38"	0.38"	0.33"	0.25"	0.15"	0.06"
3 & 5	0.00"	0.02"	0.00"	0.03"	0.06"	0.08"	0.07"	0.05"	0.03"	0.00"
4	0.00"	0.03"	0.08"	0.14"	0.18"	0.19"	SYM. ABOUT ℄ BRIDGE			

DEFLECTION SCHEDULE - GIRDERS 1 - 6										
	DECK SLAB, HAUNCH, S.I.P. STEEL DECK FORMS AND TRAFFIC RAIL DEFLECTION ②									
SPAN	CL. BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
2 & 6	0.00"	0.42"	0.77"	1.02"	1.14"	1.13"	0.99"	0.75"	0.46"	0.19"
3 & 5	0.00"	0.04"	0.01"	0.11"	0.20"	0.25"	0.24"	0.18"	0.09"	0.01"
4	0.00"	0.10"	0.27"	0.44"	0.56"	0.61"	SYM. ABOUT ℄ BRIDGE			



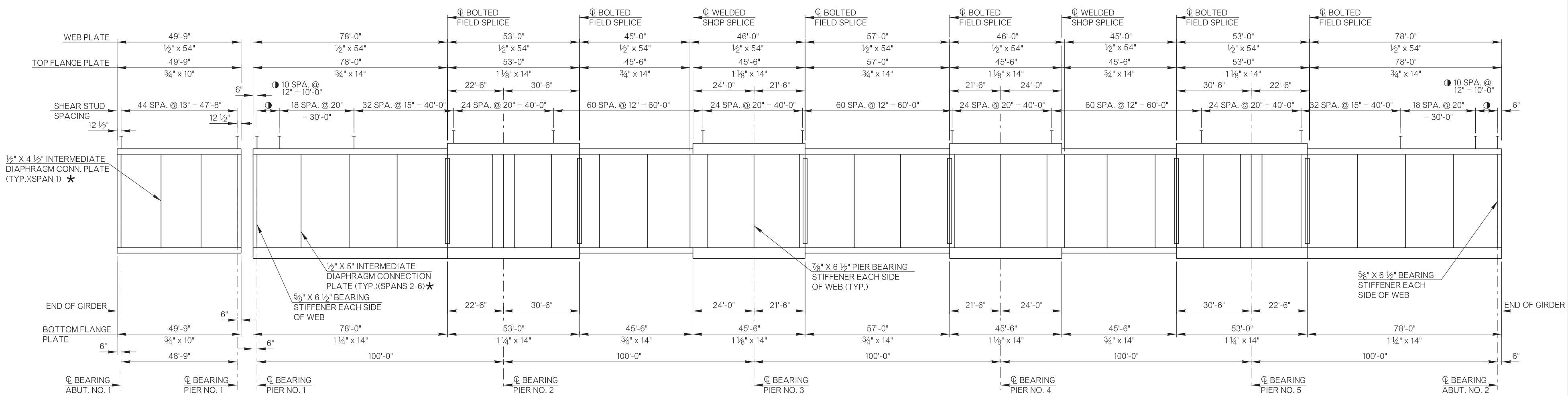
DEAD LOAD DEFLECTION DIAGRAM

② THE DEAD LOAD DEFLECTION SHOWN AT THE TENTH POINTS ARE THE DEFLECTIONS DUE TO DECK SLAB + HAUNCH + SIP STEEL DECK FORM ALLOWANCE + CONCRETE TRAFFIC RAIL. IT DOES NOT INCLUDE THE BEAM WEIGHT, DIAPHRAGMS OR FUTURE WEARING SURFACE.



THEORETICAL SLAB HAUNCH

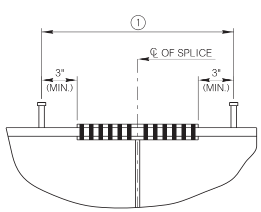
◪ DIMENSION (BOTTOM OF SLAB TO TOP OF WEB) MAY VARY IF GIRDER CAMBER AFTER ERECTION DIFFERS FROM PLAN CAMBER BY MORE THAN THE % OF DEAD LOAD DEFLECTION DUE TO WEIGHT OF STRUCTURAL STEEL. NO PAYMENT WILL BE MADE FOR ADDITIONAL FORMING OR CONCRETE REQUIRED FOR VARIABLE HAUNCHING.



GIRDER ELEVATION

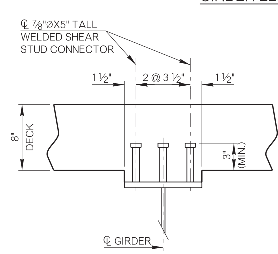
SUMMARY OF STRUCTURAL STEEL QUANTITIES

ITEM	LBS.
AASHTO M270 GRADE 50W	
GIRDERS	602,700
TYPICAL WEB STIFFENER PLATE	9,910
BEARING STIFFENERS	6,710
SPLICE PLATES	16,080
FILL PLATES	1,620
INTERMEDIATE CROSS FRAMES	31,700
END CROSS FRAMES	10,870
TOTAL AASHTO M270 GRADE 50W	679,590
WELDED SHEAR STUD CONNECTORS	7,650



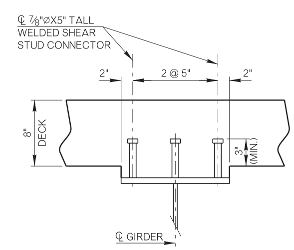
CLEARANCE AT SPLICE PLATE

① SHEAR CONNECTORS IN SPLICE PLATE REGION SHALL BE ADJUSTED BY FABRICATOR TO EACH SIDE OF CENTERLINE OF SPLICE.



10" FLANGE SHEAR STUD CONNECTOR DETAIL

(SPAN 1)



14" FLANGE SHEAR STUD CONNECTOR DETAIL

(SPANS 2-6)

★ CONNECTION PLATES ARE ATTACHED ON BOTH SIDES OF THE WEB. OMIT CONNECTION PLATES ON EXTERIOR FACES OF GIRDERS 1 & 6.

REFER TO FRAMING PLAN ON SUPERSTRUCTURE DETAILS FOR DIAPHRAGM CONNECTION PLATE SPACING.

LOCHNER		
DESIGN	JCG	1/15
DRAWN	JTC	1/15
CHECKED	PRY	1/16
FILE NAME	Girder	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

GIRDER DETAILS

STATE JOB NO. 29667(04) SHEET NO. B015

GARVIN COUNTY US-77

I:_OKC_PRJ_000009143_SUBMITTALS_2019-09-30 Updated PSE Package_DGN_025-BrA_Girder 29667.dgn