GENERAL NOTES:

1. GIRDERS SHALL BE FABRICATED AND CONSTRUCTED IN ACCORDANCE WITH 2016 LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES.
2. SEE GIRDER DATA TABLE FOR CONCRETE CLASS, REQUIRED COMPRESSIVE STRENGTH AT 28 DAYS, STRENGTH AT RELEASE, AND OTHER DESIGN INFORMATION.
3. PRESTRESSING STRANDS SHALL BE 0.6" NOMINAL DIAMETER UNCOATED, SEVEN-WIRE, LOW RELAXATION, GRADE 270 STRANDS CONFORMING TO SECTION 1009 OF THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE NOTED.
4. THE STRANDS AT TOP OF GIRDER, (4) FOR LG-36 TO LG-72 AND (2) FOR LG-25, SHALL BE MIN. ⅜" NOMINAL DIAMETER, UNCOATED, SEVEN-WIRE, LOW RELAXATION, GRADE 270 STRANDS CONFORMING TO ASTM A416, STRESSED TO 10,000 LBS. EACH FOR LG-36 TO LG-72 AND 5,000 LBS. EACH FOR LG-25.
5. MINIMUM CONCRETE CLEAR COVER SHALL BE 2", UNLESS OTHERWISE NOTED.
6. REINFORCING STEEL BARS SHALL CONFORM TO SECTION 1009 OF THE STANDARD SPECIFICATIONS.
7. DIMENSIONS RELATED TO REINFORCING STEEL ARE OUT TO OUT OF BAR UNLESS OTHERWISE NOTED. DIMENSIONS RELATED TO REINFORCING STEEL SPACING ARE CENTER TO CENTER OF BARS.
8. WELDED WIRE REINFORCEMENT SHALL CONFORM TO SECTION 1009 OF THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE SHOWN IN THE PLANS. THE DESIGN YIELD STRENGTH OF WWR IS 75 KSI.
9. THE CONTRACTOR IS RESPONSIBLE FOR STABILITY OF PRECAST PRESTRESSED CONCRETE GIRDERS DURING FABRICATION, STORAGE, TRANSPORTATION, ERECTION, AND DECK PLACEMENT. SUPPORTING ANALYSIS AND CALCULATIONS STAMPED, SIGNED, AND DATED BY A LOUISIANA LICENSED PROFESSIONAL ENGINEER AND SHOP DRAWINGS SHOWING THE METHOD OF LIFTING THE GIRDER, LIFTING LOCATIONS AND DETAILS, SUPPORT (DUNNAGE) LOCATIONS FOR STORAGE AND TRANSPORTATION DETAILS, AND ERECTION BRACING DETAILS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD (EOR) FOR REVIEW AND ACCEPTANCE PRIOR TO FABRICATION OF GIRDERS. GIRDERS ARE DESIGNED ASSUMING SUPPORTED ON DUNNAGE WITHIN 3.0 FEET FROM GIRDER ENDS.
   ANY INHERENT STABILITY PROVIDED BY CAST-IN-PLACE DIAPHRAGMS SHALL NOT BE CONSIDERED BY THE CONTRACTOR IN DESIGNING THE REQUIRED CONSTRUCTION BRACING. THE DIAPHRAGMS ARE PROVIDED TO RESTRAIN LATERAL MOVEMENT OF GIRDERS WHEN THE BRIDGE IS IN-SERVICE AND ARE NOT INTENDED OR ALLOWED FOR USE AS CONSTRUCTION STABILITY BRACING.
10. SHOW THE DATE OF CASTING ON THE WEB OF EACH GIRDER NEAR THE DOWNSTATION END (END A). FOR EXTERIOR GIRDERS, SHOW THE DATE OF CASTING ON THE INTERIOR SIDE OF THE WEB. THE DATE OF CASTING SHALL ALSO BE RECORDED IN CAMBER DATA TABLE. SEE NOTE 11 FOR MORE DETAILS.
11. THE CAMBER DESIGN DATA (C1, C2, C3, AND D5) SHOWN IN CAMBER DATA TABLE ARE ESTIMATED VALUES. IT IS CONTRACTOR'S RESPONSIBILITY TO MONITOR CAMBER GROWTH AND RECORD THE FIELD MEASURED DATA (MC1, MC1a, MC2, fb1, fb1a, fb2, Eb1, Eb1a, AND Eb2) IN CAMBER DATA TABLE. THE CAMBER DATA TABLE INCLUDING CAMBER DESIGN DATA, FIELD MEASURED DATA, AND THE DATES OF GIRDER CASTING AND RISER POUR SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND ACCEPTANCE AT LEAST FOURTEEN DAYS PRIOR TO RISER POUR. WHEN THE MEASURED "MC1" OR "MC2" DIFFER MORE THAN ½" (+ OR -) FROM "C1" OR C2", THE ENGINEER OF RECORD SHALL BE NOTIFIED IMMEDIATELY TO INVESTIGATE PROPER CORRECTIVE MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING CORRECTIVE MEASURES AT NO ADDITIONAL COST TO THE LADOTD.
12. THE CONTRACTOR IS RESPONSIBLE FOR PREPARING 4" OR 6" CONCRETE TEST CYLINDERS AS REQUIRED TO DETERMINE THE MODULES OF ELASTICITY (Eb1, Eb1a, AND Eb2) AND BREAK STRENGTH (fb1, fb1a, AND fb2) IN ACCORDANCE WITH ASTM C469 AND ASTM C39, RESPECTIVELY. THE COST OF THIS WORK SHALL BE INCLUDED IN PAYMENT FOR GIRDERS.
13. PAYMENT FOR GIRDERS SHALL BE IN ACCORDANCE WITH SECTION 805 OF STANDARD SPECIFICATIONS.
14. PAYMENT FOR BEARING PADS SHALL BE IN ACCORDANCE WITH SECTION 814 OF STANDARD SPECIFICATION.

DEFINITIONS:

C1	ESTIMATED INITIAL GIRDER CAMBER DUE TO PRESTRESS FORCE AND GIRDER SELF-WEIGHT AT TRANSFER
C2	ESTIMATED GIRDER CAMBER AT ERECTION
C3	ESTIMATED FINAL GIRDER CAMBER
D5	ESTIMATED TOTAL DEAD LOAD DEFLECTION
D	DIAMETER OF ROUND BEARING PAD
Δ_{MAX}	MAXIMUM JOINT OPENING, MEASURED IN THE DIRECTION OF TRAVEL AT MINIMUM TEMPERATURE
Eb1	CONCRETE MODULUS OF ELASTICITY MEASURED AT 18 HOURS AFTER RELEASE
Eb1a	CONCRETE MODULUS OF ELASTICITY MEASURED AT 28 DAYS
Eb2	CONCRETE MODULUS OF ELASTICITY MEASURED AT 21 DAYS BEFORE RISER POUR
END A	DOWNSTATION END OF GIRDER
END B	UPSTATION END OF GIRDER
fb1	COMPRESSIVE CONCRETE BREAK STRENGTH MEASURED AT 18 HOURS AFTER RELEASE
fb1a	COMPRESSIVE CONCRETE BREAK STRENGTH MEASURED AT 28 DAYS
fb2	COMPRESSIVE CONCRETE BREAK STRENGTH MEASURED AT 21 DAYS BEFORE RISER POUR
H	TOTAL HEIGHT OF GIRDER
HW	HEIGHT OF WEB
J	DISTANCE FROM END OF GIRDER TO CENTERLINE OF BEARING PAD MEASURED PERPENDICULAR TO THE CENTERLINE OF BEARING PAD
K	DISTANCE FROM END OF GIRDER TO CENTERLINE OF END DIAPHRAGM MEASURED ALONG THE CENTERLINE OF GIRDER WEB
L	LENGTH OF BEARING PAD
LG	GIRDER LENGTH
LP	LENGTH OF EMBEDDED & BEVELED PLATES
LPC	LENGTH OF EMBEDDED & BEVELED PLATES AT CLIPPED SIDE
LT	DISTANCE FROM END OF GIRDER TO STRAND TIE DOWN POINT
MC1	GIRDER CAMBER MEASURED AT 18 HOURS AFTER RELEASE
MC1a	GIRDER CAMBER MEASURED AT 28 DAYS
MC2	GIRDER CAMBER MEASURED AT 21 DAYS BEFORE RISER POUR
N1, N2, N3, N4	TOTAL NUMBER OF SPACINGS FOR BARS 501 IN EACH OF THE SHEAR ZONES 1 TO 4, RESPECTIVELY
P	VERTICAL BEVEL DIMENSION AT ENDS OF GIRDER
SL	SLOPE OF GIRDERS DETERMINED ALONG THE CENTERLINE OF THE GIRDER AT THE CENTERLINE OF BEARINGS
θ	SKEW ANGLE BETWEEN CENTERLINE OF SUPPORT AND A LINE NORMAL TO ROADWAY CENTERLINE
T	THICKNESS OF BEVELED PLATE AT THICKER END
TB	TOTAL THICKNESS OF ELASTOMERIC BEARING PAD
V1, V2, V3, V4	SPACING OF BARS 501 IN EACH OF SHEAR ZONES 1 TO 4, RESPECTIVELY
W	WIDTH OF BEARING PAD
X	DISTANCE FROM CENTERLINE OF JOINT TO END OF GIRDER ALONG CENTERLINE OF GIRDER. TYPICAL 3 INCHES FOR NON-SKEWED JOINTS AND SKEWED JOINTS AT LINK SLAB WITH SAME-DEPTH GIRDER. VARIES FOR OTHER SKEWED CONDITIONS.
Y	HAUNCH THICKNESS AT GIRDER CENTERLINE AND AT CENTER OF BEARING

LG GIRDER SPECIAL DETAILS INDEX

		BRIDGE STANDARDS INDEX NO.	SERIES	DESCRIPTION
COMMON DETAILS		BD.2.2.4.1.01	1 OF 11	INDEX, GENERAL NOTES AND DEFINITIONS
		BD.2.2.4.1.02	2 OF 11	DIMENSIONS AND STRAND TEMPLATES
		BD.2.2.4.1.03	3 OF 11	END OF GIRDERS
		BD.2.2.4.1.04	4 OF 11	END OF GIRDERS
		BD.2.2.4.1.05	5 OF 11	STANDARD STEEL-REINFORCED BEARING PADS
		BD.2.2.4.1.06	6 OF 11	NON-STANDARD STEEL-REINFORCED BEARING PADS
		BD.2.2.4.1.07	7 OF 11	EMBEDDED AND BEVELED PLATES - SQUARE END OF GIRDER
		BD.2.2.4.1.08	8 OF 11	EMBEDDED AND BEVELED PLATES - CLIPPED END OF GIRDER
		BD.2.2.4.1.09	9 OF 11	COIL INSERTS AND PREFORMED HOLES FOR DIAPHRAGMS
		BD.2.2.4.1.10	10 OF 11	CAMBER DETAILS
		BD.2.2.4.1.11	11 OF 11	MISC. LG DETAILS
SPECIFIC DETAILS	LG-25	BD.2.2.4.2.01	1 OF 2	LG-25 REINFORCEMENT DETAILS - CONVENTIONAL
		BD.2.2.4.2.02	2 OF 2	LG-25 REINFORCEMENT DETAILS - WWR
	LG-36	BD.2.2.4.3.01	1 OF 2	LG-36 REINFORCEMENT DETAILS - CONVENTIONAL
		BD.2.2.4.3.02	2 OF 2	LG-36 REINFORCEMENT DETAILS - WWR
	LG-45	BD.2.2.4.4.01	1 OF 2	LG-45 REINFORCEMENT DETAILS - CONVENTIONAL
		BD.2.2.4.4.02	2 OF 2	LG-45 REINFORCEMENT DETAILS - WWR
	LG-54	BD.2.2.4.5.01	1 OF 2	LG-54 REINFORCEMENT DETAILS - CONVENTIONAL
		BD.2.2.4.5.02	2 OF 2	LG-54 REINFORCEMENT DETAILS - WWR
	LG-63	BD.2.2.4.6.01	1 OF 2	LG-63 REINFORCEMENT DETAILS - CONVENTIONAL
		BD.2.2.4.6.02	2 OF 2	LG-63 REINFORCEMENT DETAILS - WWR
	LG-72	BD.2.2.4.7.01	1 OF 2	LG-72 REINFORCEMENT DETAILS - CONVENTIONAL
		BD.2.2.4.7.02	2 OF 2	LG-72 REINFORCEMENT DETAILS - WWR
	LG-78	BD.2.2.4.8.01	1 OF 2	LG-78 REINFORCEMENT DETAILS - CONVENTIONAL
		BD.2.2.4.8.02	2 OF 2	LG-78 REINFORCEMENT DETAILS - WWR

STATE OF LOUISIANA
ZHENGZHENG FU
License No. 26814
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IN
CIVIL ENGINEERING
7/19/18

BD.2.2.4.1.01

SHEET NUMBER

PARISH	CONTROL SECTION	STATE PROJECT
ALLANCASTER		

DESIGNED Z.Z. FU
CHECKED
DETAILED J. W. P.
CHECKED Z.Z. FU
REVIEWED Z. LIANG
SERIES # 1 OF 11

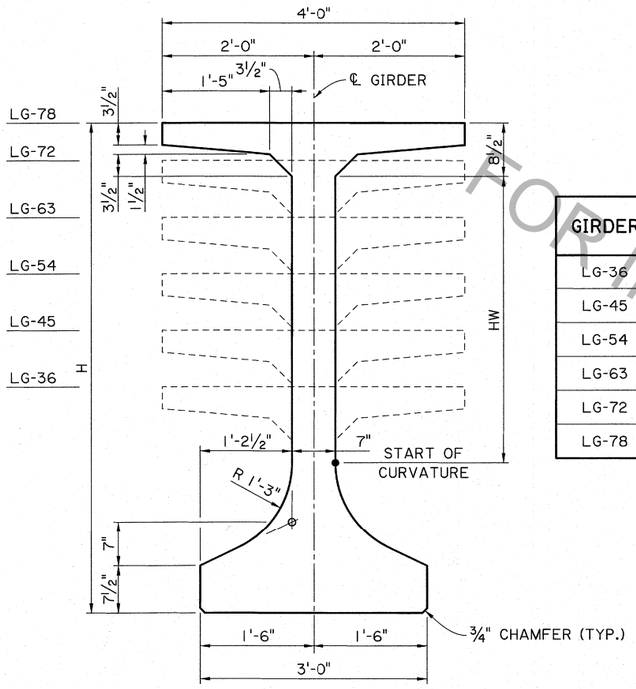
NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

INDEX, GENERAL NOTES AND DEFINITIONS

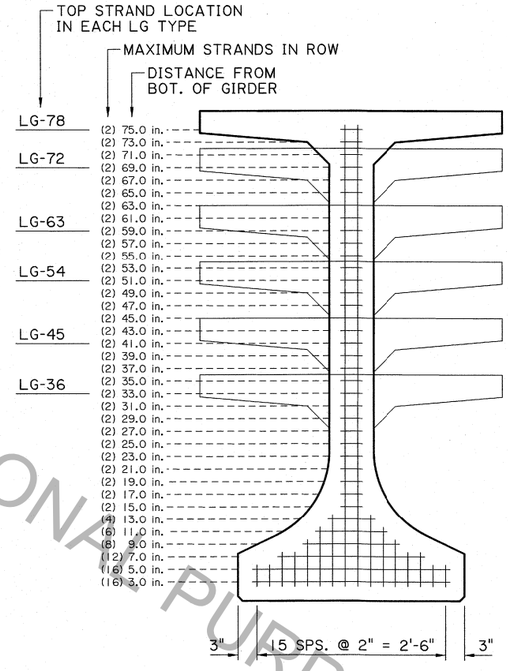
LG COMMON

DOTD BRIDGE DESIGN

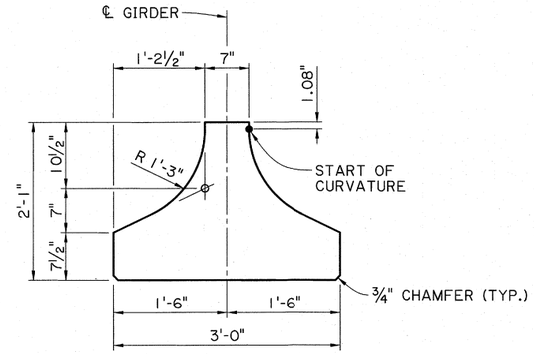


GIRDER	H (IN.)	HW (IN.)
LG-36	36	3.58
LG-45	45	12.58
LG-54	54	21.58
LG-63	63	30.58
LG-72	72	39.58
LG-78	78	45.58

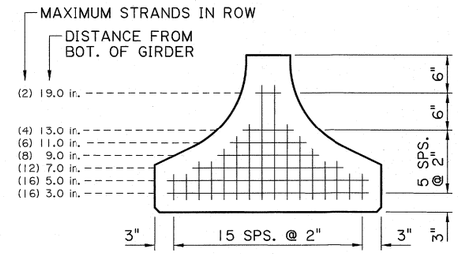
DIMENSIONS
(LG-36 TO LG-78)



STRAND TEMPLATE
(LG-36 TO LG-78)



DIMENSIONS
(LG-25)



STRAND TEMPLATE
(LG-25)

NOTES:

1. SEE LG COMMON DETAILS SHT. 1 OF 11 FOR GENERAL NOTES AND DEFINITIONS.

STATE OF LOUISIANA
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7/19/18

SHEET NUMBER

PARISH | CONTROL SECTION | STATE PROJECT

DESIGNED Z. LIANG
CHECKED B. KEVER
DETAILED J. W. P.
CHECKED Y. OUYANG
REVIEWED Z.Z. FU
SERIES # 2 OF 11

REVISION OR CHANGE ORDER DESCRIPTION | BY | NO. | DATE

DIMENSIONS AND STRAND TEMPLATES

LG COMMON

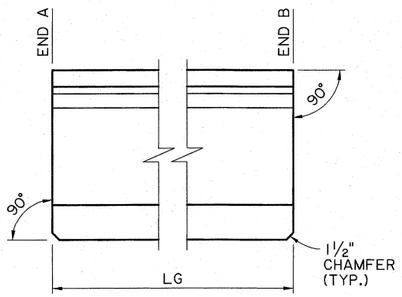
DOTD BRIDGE DESIGN

BD.2.2.4.1.02

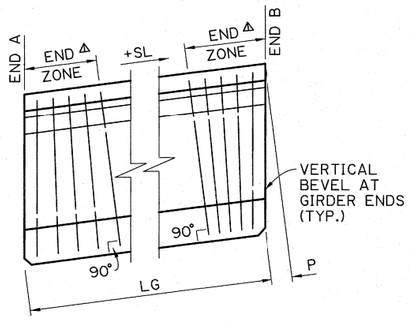
7/19/2018 14:2

NOTES:

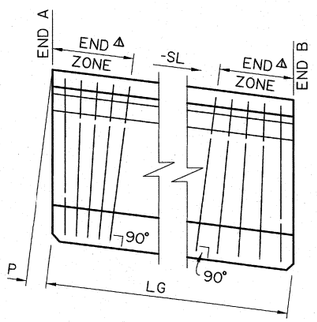
1. SEE LG COMMON DETAILS SHT. 1 OF 11 FOR GENERAL NOTES AND DEFINITIONS.
2. ☒ GIRDER CLIPPED ENDS ARE REQUIRED AT TRANSITION BENTS WITH SKEW > 25° AND END BENTS WITH SKEW > 45°.
3. △ FOR VERTICALLY BEVELLED ENDS OF BEAMS, PLACE FIRST ROW OF BARS 301, 302, 501 AND 502 PARALLEL TO THE END OF THE BEAM. PROGRESSIVELY ROTATE REMAINING BARS WITHIN THE SHEAR REINFORCEMENT END ZONE UNTIL BARS ARE PERPENDICULAR TO THE BOTTOM OF THE GIRDER BY ADJUSTING THE SPACING AT THE BOTTOM BY UP TO A MAXIMUM OF ONE INCH (1"). FOR WELDED WIRE REINFORCEMENT, SEGMENTS W1, W2 AND B1 SHALL BE FABRICATED WITH SIMILAR ADJUSTMENTS.



END CONDITION 1
(P = 0, SL = 0%)

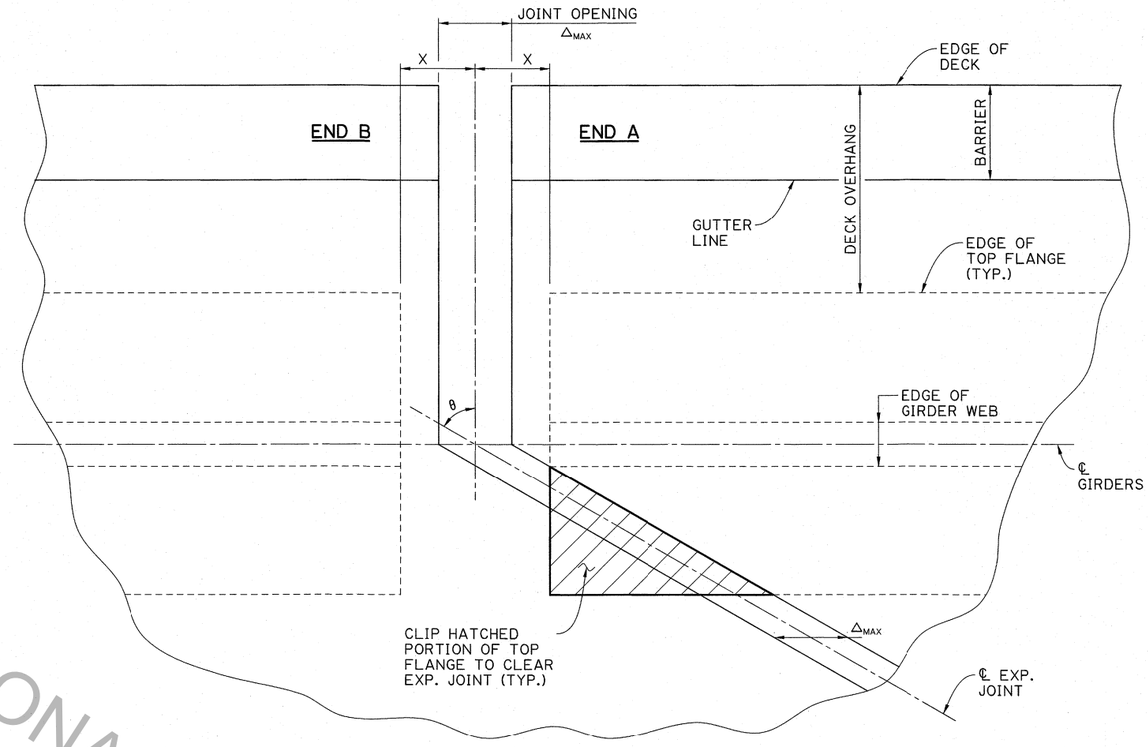


END CONDITION 2

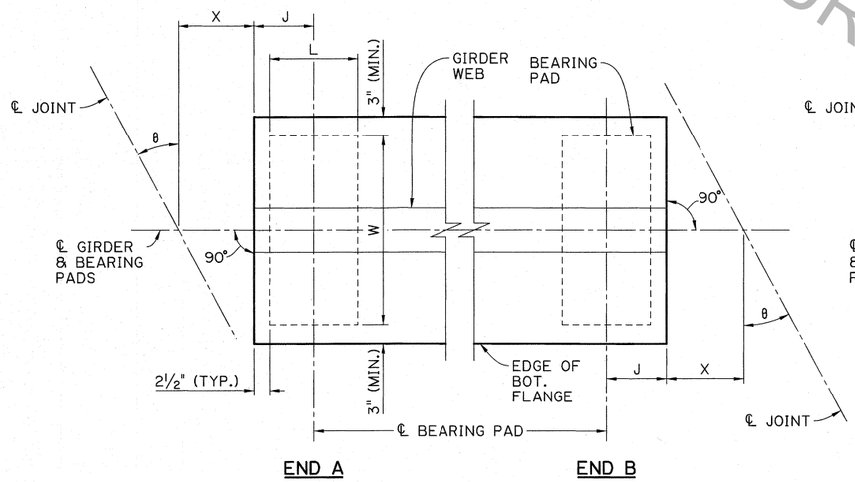


END CONDITION 3

ELEVATIONS AT GIRDER ENDS
(LG-36 TO LG-78 SHOWN, LG-25 SIMILAR)

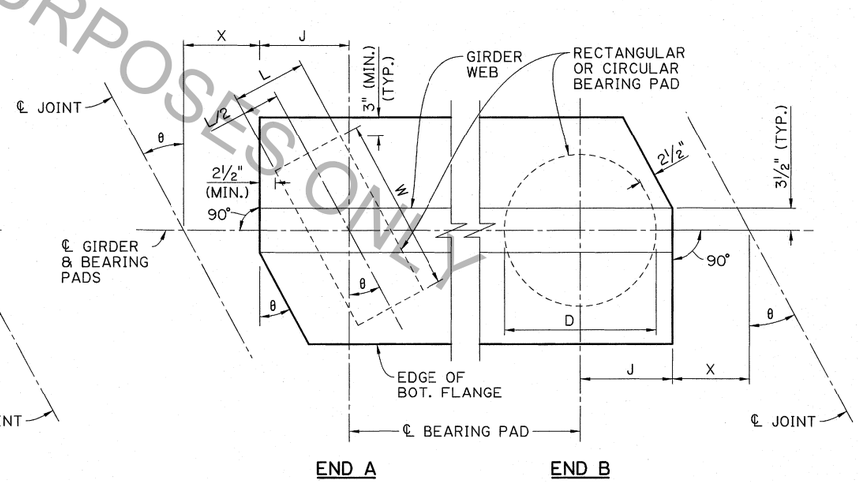


CLIPPED TOP FLANGE AT SKEWED EXPANSION JOINT - PLAN
(LG-36 TO LG-78)



END A END B

GIRDER SQUARE END



END A END B

GIRDER CLIPPED END ☒

PLAN AT GIRDER ENDS
(TOP FLANGE NOT SHOWN FOR CLARITY)

STATE OF LOUISIANA
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7/19/18

SHEET NUMBER			
PARISH	CONTROL SECTION	STATE PROJECT	
DESIGNED A.LANCASTER	DETAILED A.LANCASTER	REVIEWED Z.Z. FU	SERIES # 3 OF 11
CHECKED Z.Z. FU	CHECKED Z.Z. FU		

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

END OF GIRDERS

LG COMMON

BD.2.2.4.1.03

DOTD BRIDGE DESIGN

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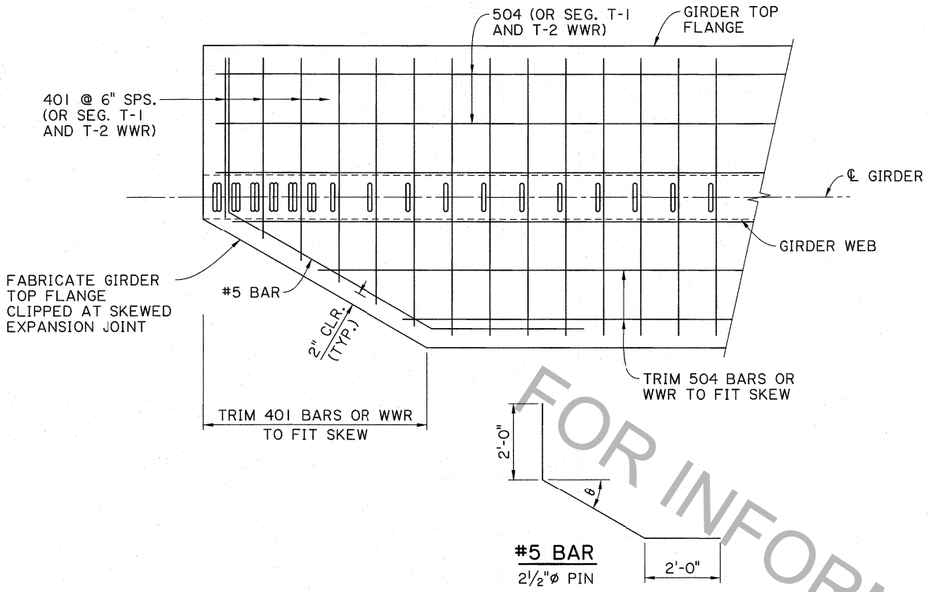
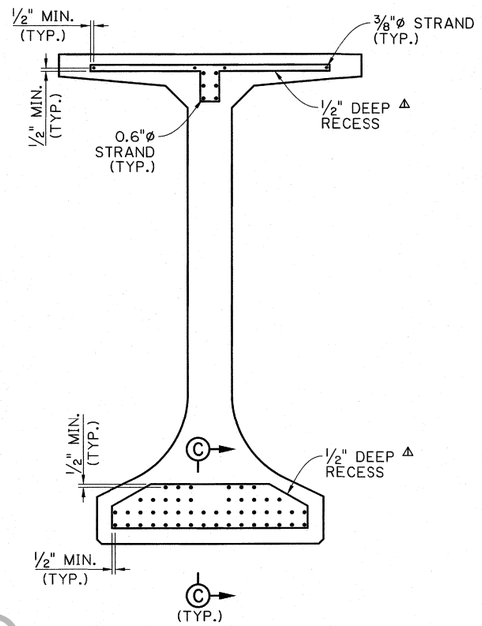
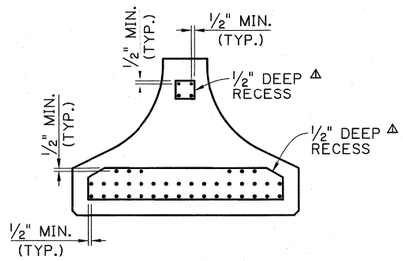


CLIPPED TOP FLANGE REINFORCEMENT DETAIL - PLAN VIEW
(LG-36 TO LG-78)



LG-36 TO LG-78

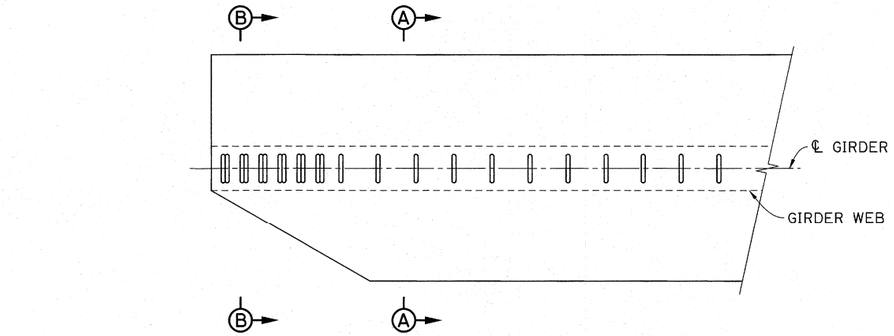


LG-25

GIRDER END STRAND RECESS DETAIL

NOTES:

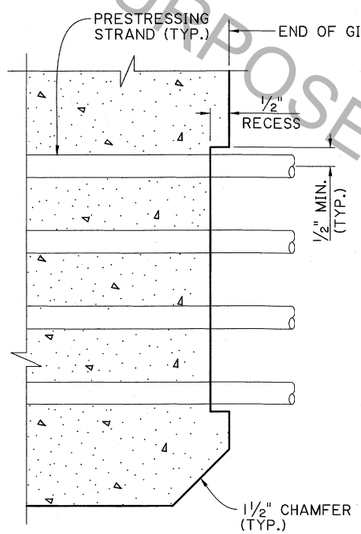
1. SEE LG COMMON DETAILS SHT. 1 OF 11 FOR GENERAL NOTES AND DEFINITIONS.
2. ⧄ CLIPPED BOTTOM FLANGES ARE REQUIRED AT TRANSITION BENTS WITH SKEW > 25° AND END BENTS WITH SKEW > 45°.
3. ⚠ PROVIDE A ½" DEEP BLOCKOUT AT ALL STRAND POSITIONS AT BEAM END. AFTER DETENSIONING, FILL RECESS WITH A TYPE 1, GRADE 3 EPOXY RESIN SYSTEM FROM THE APPROVED MATERIALS LIST AND IN ACCORDANCE WITH SECTION 1017 OF THE STANDARD SPECIFICATIONS. COAT ENTIRE BEAM END WITH 1/16" (MIN.) THICK COATING OF TYPE 1, GRADE 3 EPOXY RESIN. DETAIL SHOWN REFLECTS A GENERIC SECTION AND STRAND PATTERN. SEE PLANS FOR SPECIFIC SECTION AND STRAND PATTERN.



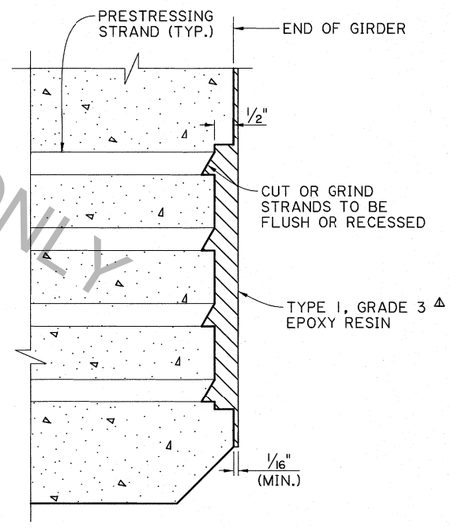
SECTION A-A

SECTION B-B

⧄ CLIPPED BOTTOM FLANGE REINFORCEMENT DETAIL
(LG-25 TO LG-78)



SECTION C-C
(PRIOR TO DETENSIONING)



SECTION C-C
(AFTER DETENSIONING AND EPOXY COATING)

STATE OF LOUISIANA
ZHENGZHENG FU
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IN
CIVIL ENGINEERING
7/19/18

SHEET NUMBER	PARISH	CONTROL SECTION	STATE PROJECT
	LANCASTER	LANCASTER	
DESIGNED A.L. Z.Z. FU			
CHECKED A.L. Z.Z. FU			
DETAILED Z. LIANG			
CHECKED			
REVIEWED Z. LIANG			
SERIES # 4 OF 11			

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

END OF GIRDERS

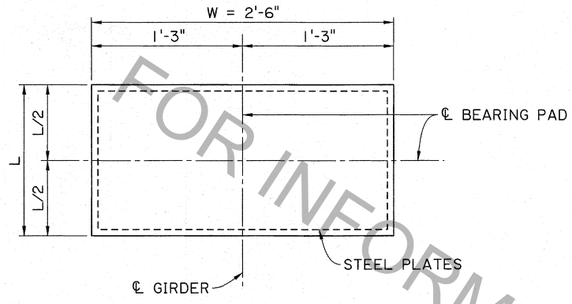
LG COMMON

BD.2.2.4.1.04

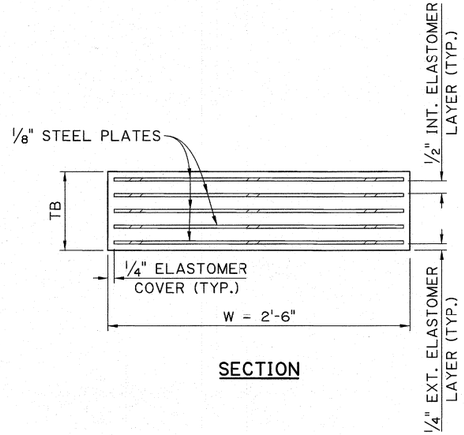
DOTD BRIDGE DESIGN

NOTES:

1. SEE LG COMMON DETAILS SHT. 1 OF 11 FOR GENERAL NOTES AND DEFINITIONS.
2. ELASTOMER FOR ALL BEARING PADS SHALL HAVE A SPECIFIED SHEAR MODULUS (G) OF 150 PSI.
3. STEEL PLATES OF ELASTOMERIC BEARING PADS SHALL BE 1/8" STEEL PLATES CONFORMING TO ASTM A36.



PLAN



SECTION

STANDARD STEEL-REINFORCED ELASTOMERIC BEARING PAD
(TYPES B-1 TO B-9)

STANDARD STEEL-REINFORCED ELASTOMERIC BEARINGS DATA TABLE

TYPE	L	W	TB	NO. OF INTERIOR ELASTOMER LAYERS	NO. OF 1/8" STEEL PLATES
B-1	8"	2'-6"	1 7/8"	2	3
B-2	10"	2'-6"	1 7/8"	2	3
B-3	10"	2'-6"	2 1/2"	3	4
B-4	10"	2'-6"	3 1/8"	4	5
B-5	1'-0"	2'-6"	3 3/4"	5	6
B-6	1'-0"	2'-6"	4 3/8"	6	7
B-7	1'-0"	2'-6"	5"	7	8
B-8	1'-2"	2'-6"	5 5/8"	8	9
B-9	1'-2"	2'-6"	6 1/4"	9	10

STATE OF LOUISIANA
ZHENGZHENG FU
License No. 26814
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
7/19/18

SHEET NUMBER

PARISH	CONTROL SECTION	STATE PROJECT

DESIGNED Z. LIANG
CHECKED Y. OUYANG
DETAILED J. W. P.
CHECKED Z.Z. FU
REVIEWED Z.Z. FU
SERIES # 5 OF 11

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

STANDARD STEEL-REINFORCED ELASTOMERIC BEARINGS

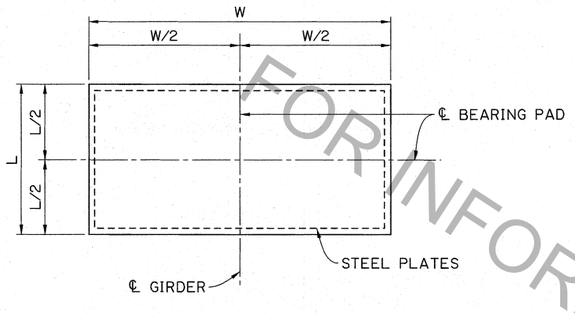
LG COMMON

BD.2.2.4.1.05

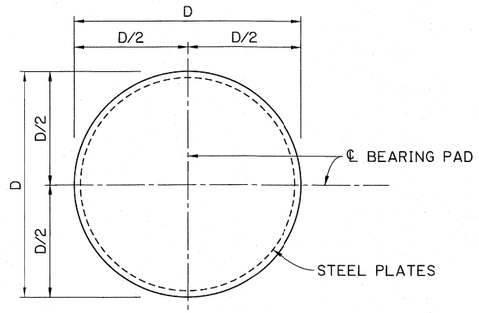
DOTD BRIDGE DESIGN

NOTES:

1. SEE LG COMMON DETAILS SHT. 1 OF 11 FOR GENERAL NOTES AND DEFINITIONS.
2. ELASTOMER FOR ALL BEARING PADS SHALL HAVE A SPECIFIED SHEAR MODULUS (G) OF 150 PSI.
3. STEEL PLATES OF ELASTOMERIC BEARING PADS SHALL BE 1/8" STEEL PLATES CONFORMING TO ASTM A36.
4. SEE PROJECT CONTRACT PLANS FOR NON-STANDARD BEARING TYPES AND DATA TABLE.



PLAN



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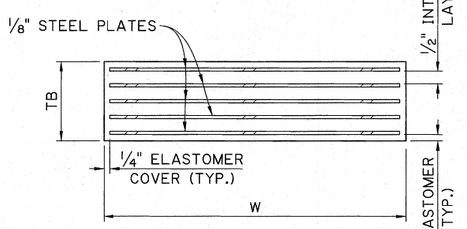
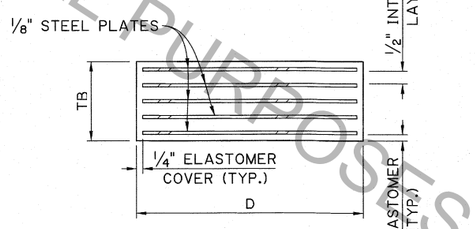


SECTION

RECTANGULAR PAD



SECTION

CIRCULAR PAD

NON-STANDARD STEEL-REINFORCED ELASTOMERIC BEARING PADS

STATE OF LOUISIANA
ZHENGZHENG FU
License No. 26814
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
7/19/18

BD.2.2.4.1.06

SHEET NUMBER

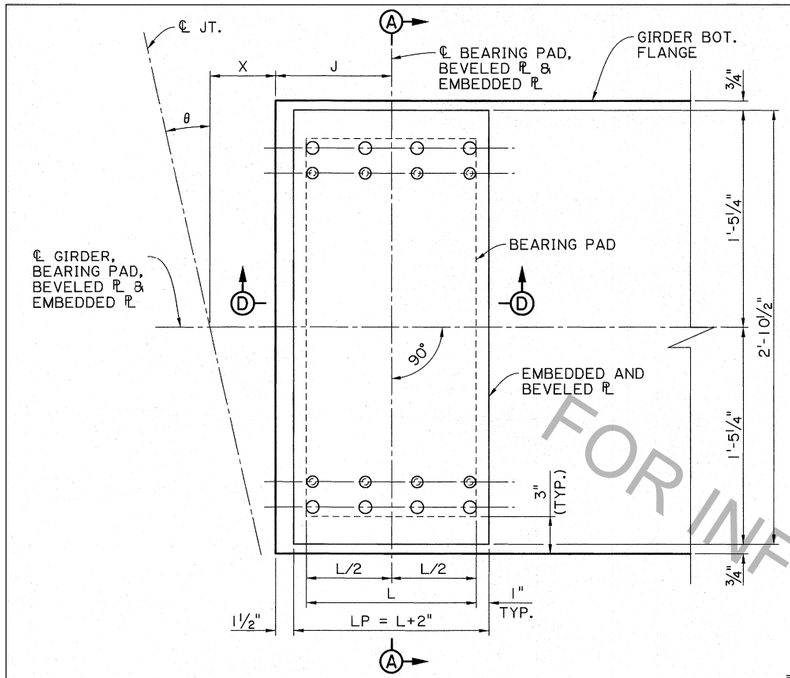
PARISH	CONTROL SECTION	STATE PROJECT
DESIGNED Z.Z. FU CHECKED A.LANCASTER	DETAILED A.LANCASTER CHECKED Z.Z. FU	REVIEWED Z.Z. FU SERIES # 6 OF 11

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

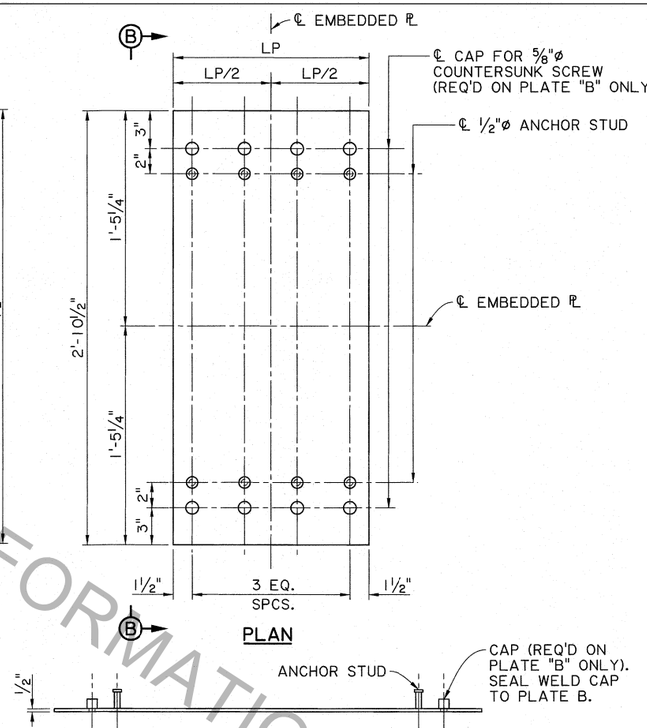
NON-STANDARD STEEL-REINFORCED ELASTOMERIC BEARINGS

LG COMMON

DOTD BRIDGE DESIGN



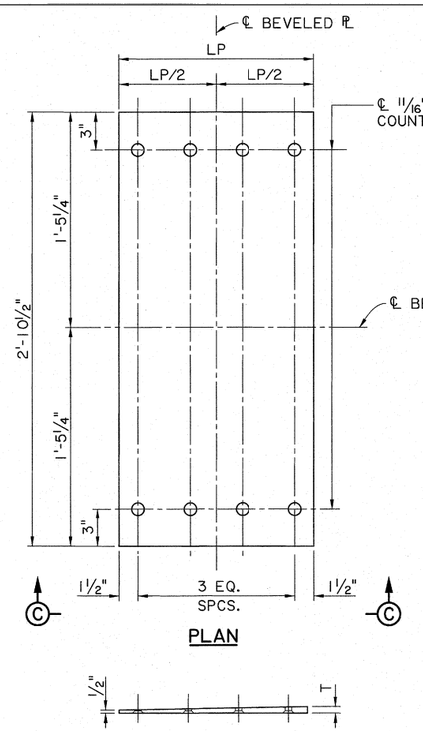
PLAN



PLAN

SECTION B-B

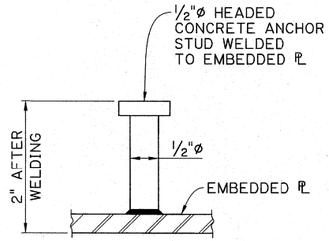
1/2" EMBEDDED PLATE "A" OR "B"



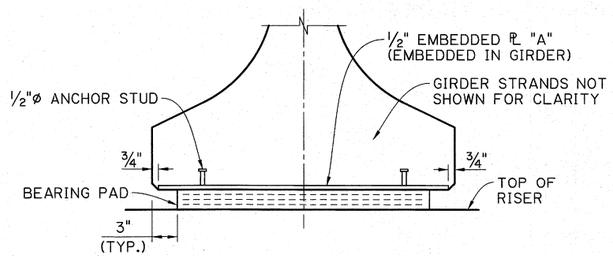
PLAN

SECTION C-C

BEVELED PLATE

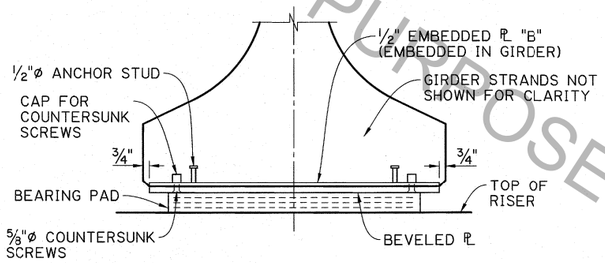


ANCHOR STUD DETAIL



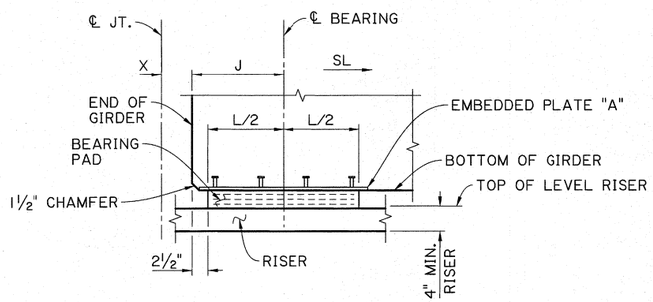
SHOWING EMBEDDED PLATE "A"

SECTION A-A

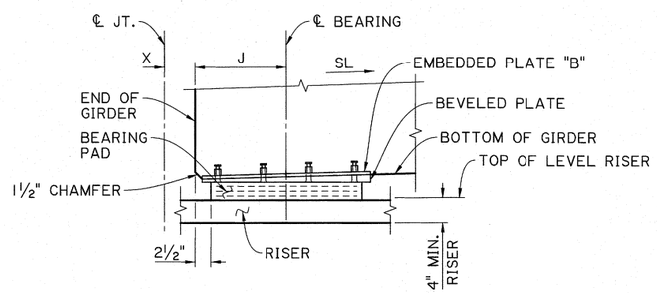


SHOWING EMBEDDED PLATE "B" AND BEVELED PLATE ASSEMBLY

SECTION A-A



SECTION D-D
(SL ≤ 1%)



SECTION D-D
(SL > 1%)

NOTES:

1. SEE LG COMMON DETAILS SHT. 1 OF 11 FOR GENERAL NOTES AND DEFINITIONS.
2. EMBEDDED PLATE "A" IS REQUIRED FOR LG45 TO LG78 GIRDERS ONLY. EMBEDDED PLATE "B" IS REQUIRED WHENEVER BEVELED PLATE IS REQUIRED.
3. THE COST OF EMBEDDED PLATE "A" AND ALL ASSOCIATED HARDWARE, AND EMBEDDED PLATE "B" AND BEVELED PLATE ASSEMBLY, WHICH CONSISTS OF EMBEDDED PLATE "B", BEVELED PLATE, AND ALL ASSOCIATED HARDWARE, SHALL BE INCLUDED IN THE PAY ITEM FOR GIRDERS.
4. EMBEDDED PLATE "A", PLATE "B", AND BEVELED PLATES SHALL CONFORM TO ASTM A240, TYPE 316L, STAINLESS STEEL.
5. 1/2"ø ANCHOR STUDS SHALL CONFORM TO ASTM A276 OR A493, STAINLESS STEEL.
6. 5/8"ø COUNTERSUNK SCREWS AND CAPS SHALL CONFORM TO ASTM F879, STAINLESS STEEL.
7. BOTTOM SURFACE OF EMBEDDED PLATE "A" AND BEVELED PLATE (SURFACE IN CONTACT WITH ELASTOMERIC BEARING PAD) SHALL HAVE SAND-BLASTED FINISH.
8. DRILL HOLES IN EMBEDDED PLATE "B" AND BEVELED PLATE AS AN ASSEMBLED UNIT. THREAD HOLES IN EMBEDDED PLATE "B" ONLY. DRILL AND THREAD HOLES PERPENDICULAR TO THE BOTTOM OF THE BEVELED PLATE. PROVIDE COUNTERSUNK SCREWS LONG ENOUGH TO MAINTAIN A 3/4" MINIMUM EMBEDMENT INTO EMBEDDED PLATE "B". PROVIDE MINIMUM 16 GAUGE STAINLESS STEEL CAPS WITH 1/2" MINIMUM TO 1 1/2" MAXIMUM HEIGHT AND A NOMINAL 7/8" INSIDE DIAMETER.

STATE OF LOUISIANA
ZHENGZHENG FU
License No. 26814
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
7/19/18

SHEET NUMBER

PARISH	CONTROL SECTION	STATE PROJECT

DESIGNED Z.Z. FU
CHECKED A.LANCASTER
DETAILED A.LANCASTER
CHECKED Z.Z. FU
REVIEWED Z. LIANG
SERIES # 7 OF 11

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

EMBEDDED AND BEVELED PLATES (SQUARE END)

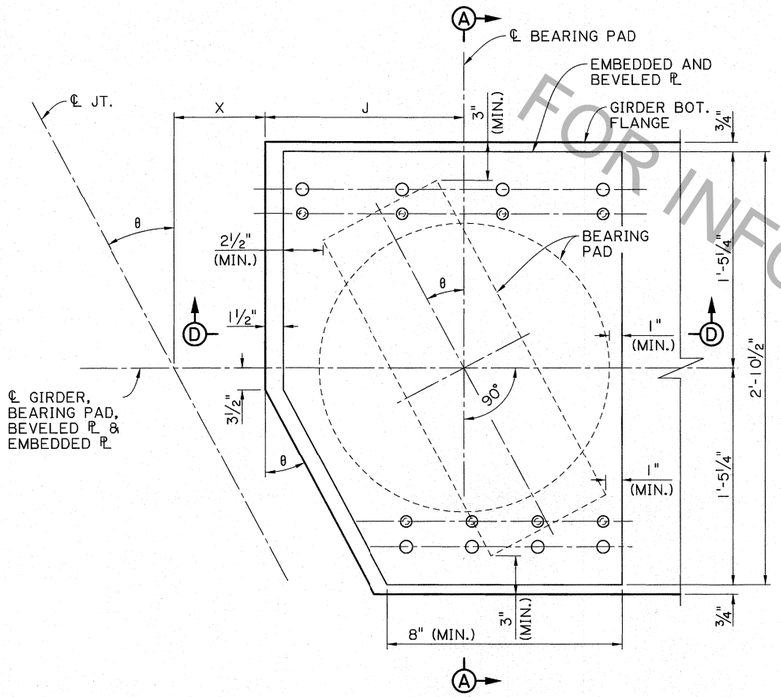
LG COMMON

BD.2.2.4.1.07

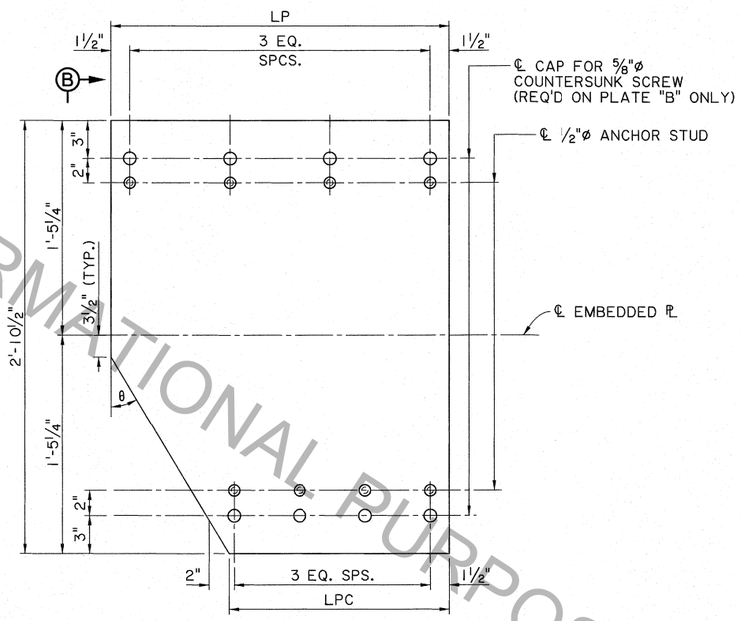
DOTD BRIDGE DESIGN

NOTES:

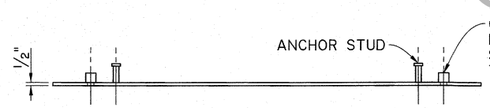
1. SEE LG COMMON DETAILS SHT. 7 OF 11 FOR NOTES, SECTION A-A, SECTION D-D, AND ANCHOR STUD DETAIL.



PLAN

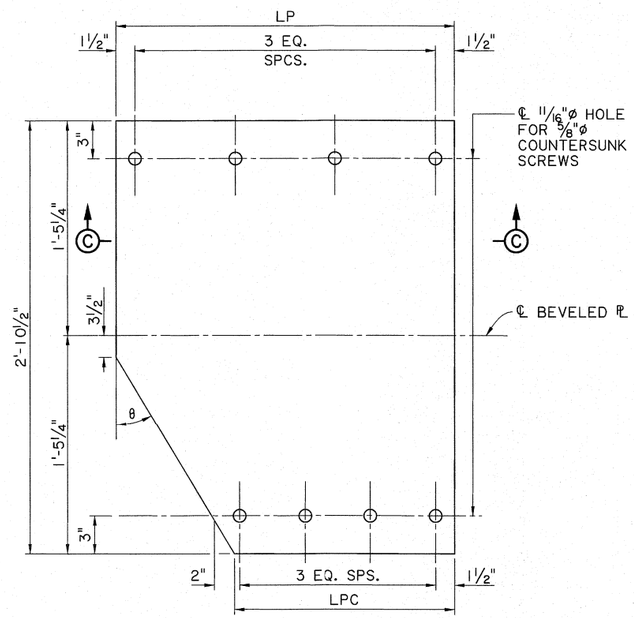


PLAN

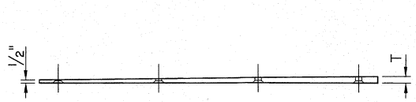


SECTION B-B

1/2" EMBEDDED PLATE "A" OR "B"



PLAN



SECTION C-C

BEVELED PLATE

SHEET NUMBER		
PARISH	CONTROL SECTION	STATE PROJECT
DESIGNED Z.Z. FU CHECKED A.LANCASTER	DETAILED A.LANCASTER CHECKED Z.Z. FU	REVIEWED Z. LIANG SERIES # 8 OF 11

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

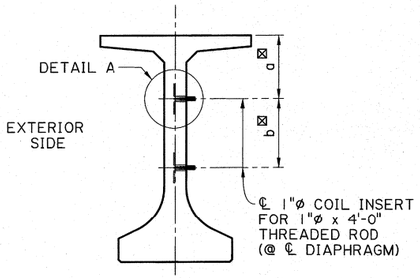
STATE OF LOUISIANA
ZHENGZHENG FU
License No. 26814
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
7/19/18

EMBEDDED AND BEVELED PLATES (CLIPPED END)

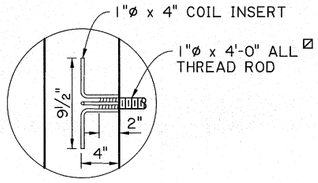
LG COMMON

BD.2.2.4.1.08

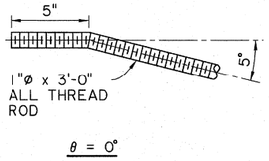
DOTD BRIDGE DESIGN



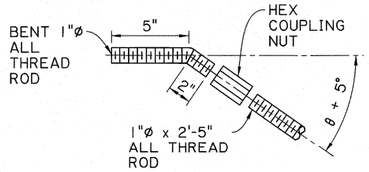
EXTERIOR GIRDER
(LG-36 TO LG-78)



DETAIL A
(LG-36 TO LG-78)

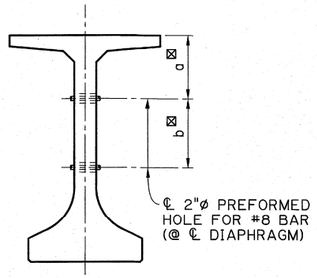


θ = 0°



0° < θ ≤ 60°

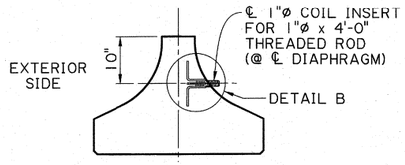
DETAIL C ⊠



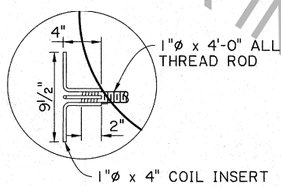
INTERIOR GIRDER
(LG-36 TO LG-78)

GIRDER TYPE	a ⊠	b ⊠
LG-36	12"	N/A
LG-45	11"	11"
LG-54	12"	14"
LG-63	12"	23"
LG-72	12"	32"
LG-78	12"	38"

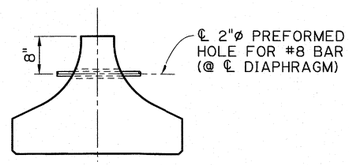
⊠ THESE DIMENSIONS MAY BE ADJUSTED TO CLEAR HARPED STRANDS WHEN NECESSARY. CONTACT ENGINEER WHEN CONFLICT OCCURS.



EXTERIOR GIRDER
(LG-25)



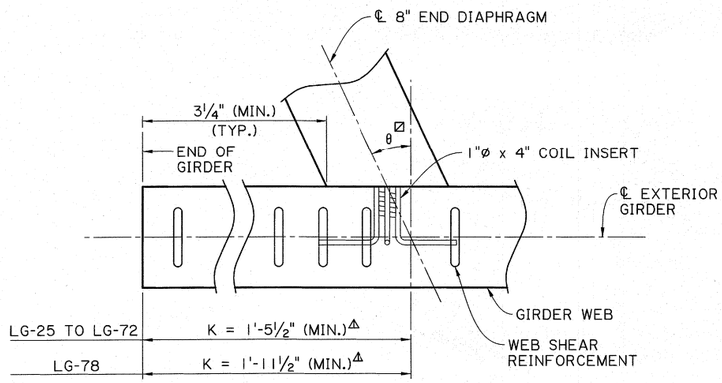
DETAIL B
(LG-25)



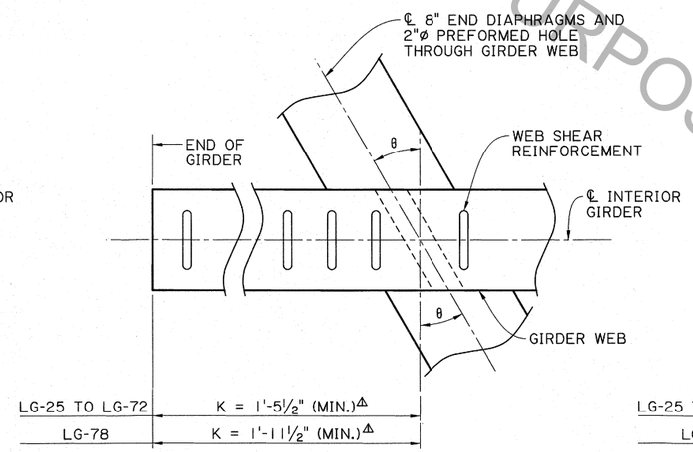
INTERIOR GIRDER
(LG-25)

NOTES:

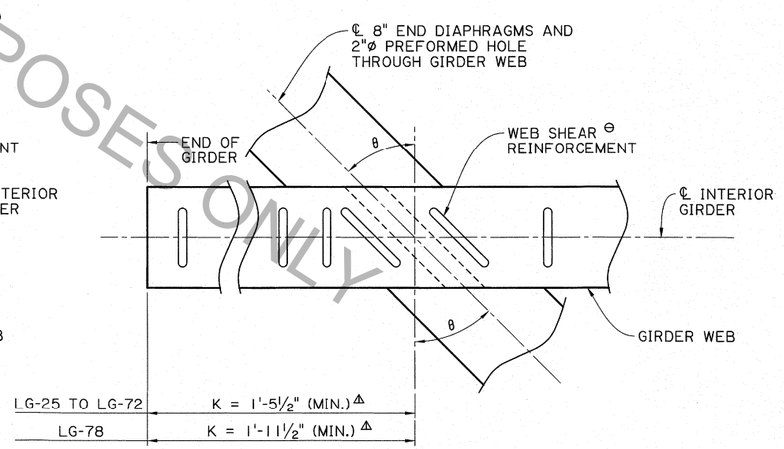
1. SEE LG COMMON DETAILS SHT. 1 OF 11 FOR GENERAL NOTES AND DEFINITIONS.
2. COIL INSERTS SHALL BE WILLIAMS TYPE C17-1X4 THIN SLAB LIFTING INSERT OR AN APPROVED EQUAL.
3. THE COST OF ALL HARDWARE SHALL BE INCLUDED IN THE COST OF GIRDERS.
△ 4. FABRICATOR SHALL CONTACT ENGINEER WHEN CONFLICT BETWEEN COIL INSERTS OR PREFORMED HOLES AND SHEAR REINFORCEMENT OCCURS.
⊖ 5. WHEN THE SKEW ANGLE EXCEEDS 30°, THE 2" PREFORMED HOLE IN THE WEB WILL CONFLICT WITH THE SHEAR REINFORCMENT ADJACENT TO THE HOLE. THE REBAR OR WWR MUST BE FABRICATED WIDER, AND ROTATED PARALLEL TO THE SKEW, IN ORDER TO ACCOMODATE THE 2" PREFORMED HOLE.
⊠ 6. FOR SKEWED DIAPHRAGMS, PROVIDE THREADED ROD IN TWO PIECES WITH A HEX COUPLING NUT (MINIMUM 2½" IN LENGTH) TO AVOID CONFLICT BETWEEN THREADED ROD AND GIRDER FLANGE DURING INSTALLATION. SEE DETAIL "C".



END DIAPHRAGM LOCATION - PLAN VIEW
(EXTERIOR GIRDER)
(N.T.S.)



END DIAPHRAGM LOCATION - PLAN VIEW
(INTERIOR GIRDER: 0° ≤ θ ≤ 30°)
(N.T.S.)



END DIAPHRAGM LOCATION - PLAN VIEW
(INTERIOR GIRDER: θ > 30°) ⊖
(N.T.S.)

STATE OF LOUISIANA
ZHENGZHENG FU
License No. 26814
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
7/19/18

ALL DETAILS THIS SHEET : N.T.S.

BD.2.2.4.1.09

SHEET NUMBER

PARISH	CONTROL SECTION	STATE PROJECT

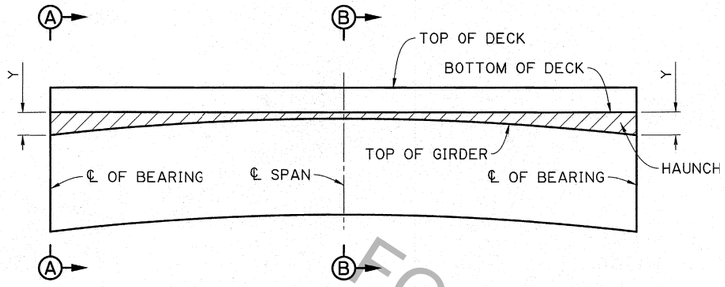
DESIGNED Z. LIANG
CHECKED A.LANCASTER
DETAILED A.LANCASTER
CHECKED Z.Z. FU
REVIEWED Z.Z. FU
SERIES # 9 OF 11

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

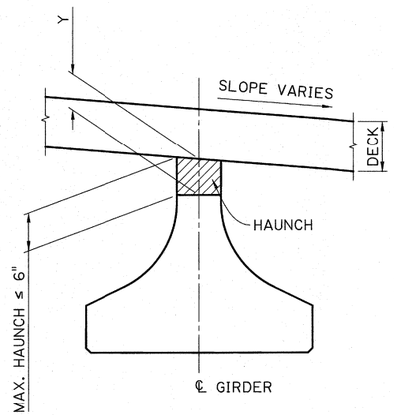
COIL INSERTS & PREFORMED HOLES FOR DIAPHRAGMS

LG COMMON

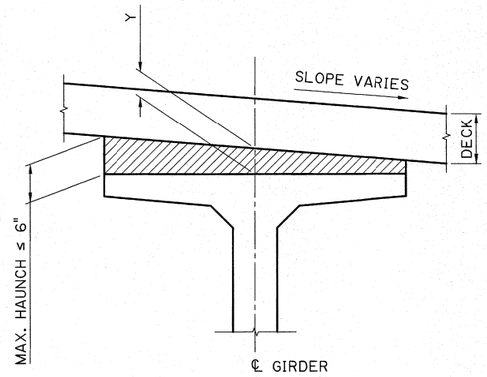
DOTD BRIDGE DESIGN



GIRDER HAUNCH DIAGRAM
(SHOWN @ GIRDER CENTERLINE)

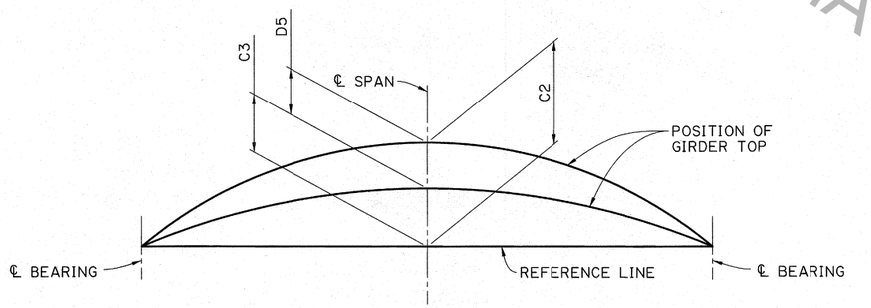


LG-25

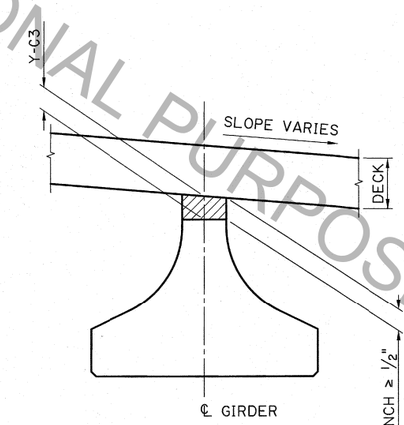


LG-36 TO LG-78

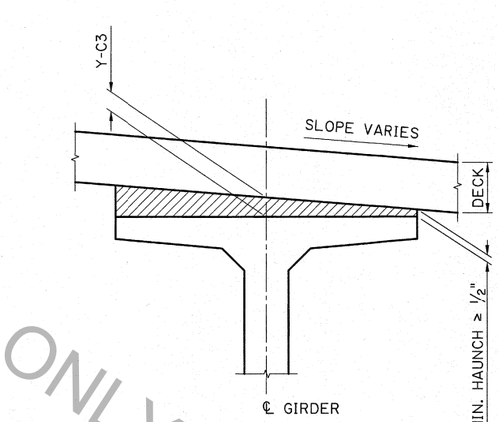
SECTION A-A
(@ ℄ BEARING)



CAMBER DIAGRAM
(SHOWN @ GIRDER CENTERLINE)



LG-25



LG-36 TO LG-78

SECTION B-B
(@ ℄ SPAN)

NOTES:

1. SEE LG COMMON DETAILS SHT. 1 OF 11 FOR GENERAL NOTES AND DEFINITIONS.

SHEET NUMBER

PARISH | CONTROL SECTION | STATE PROJECT

DESIGNED Z.Z. FU
CHECKED A.LANCASTER
DETAILED J. W. P.
CHECKED Z.Z. FU
REVIEWED Z. LIANG
SERIES # 10 OF 11

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

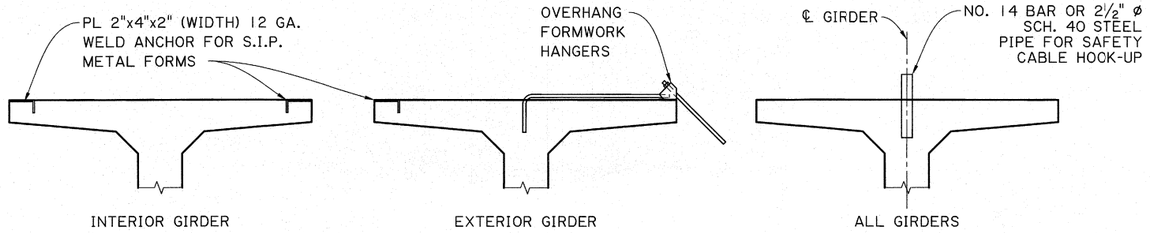
STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

CAMBER DETAILS

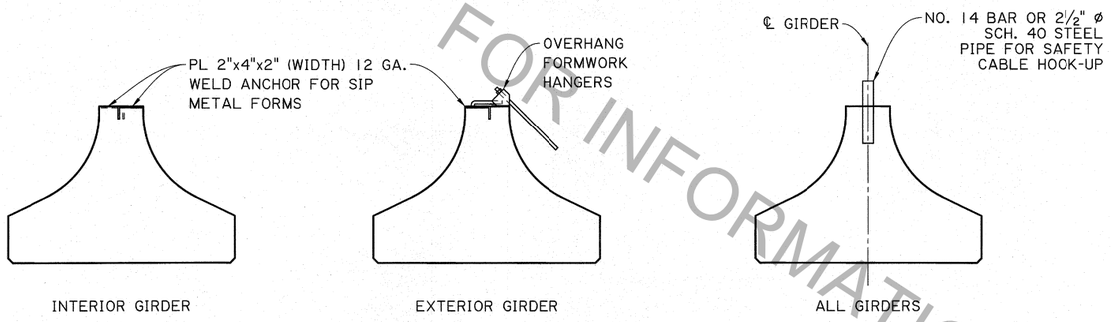
LG COMMON

BD.2.2.4.1.10

DOTD BRIDGE DESIGN

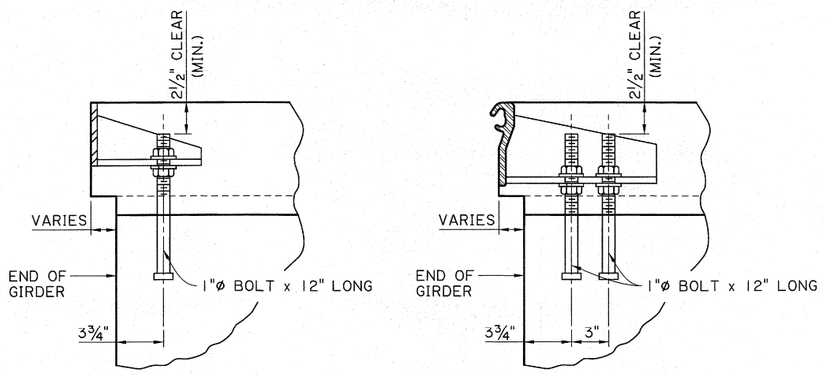


LG-36~LG-78



LG-25

FORMWORK & SAFETY CABLE ATTACHMENTS

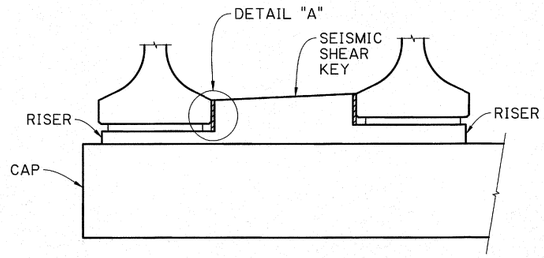


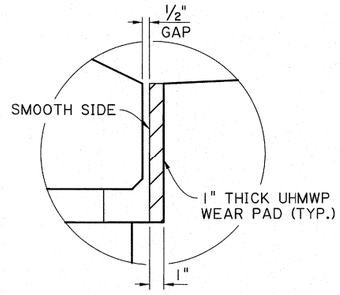
PREFORMED SILICONE

PREFORMED NEOPRENE

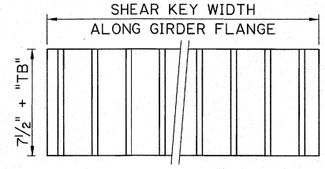
EXPANSION JOINT ANCHOR BOLT DETAIL ⊠

(PARTIAL SECTION ALONG ℄ OF GIRDER)

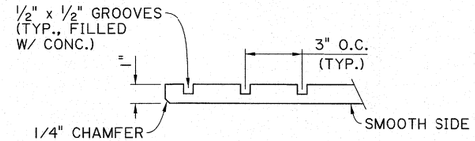




DETAIL A

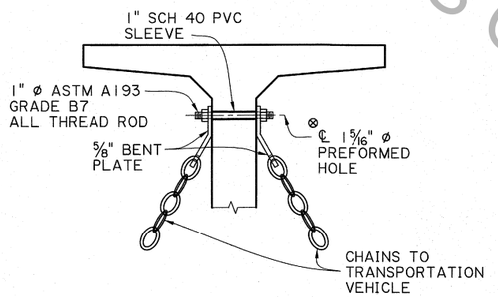


ELEVATION
(LOOKING AT GROOVED SIDE)



PARTIAL SECTION

△ ULTRA-HIGH MOLECULAR WEIGHT POLYETHYLENE (UHMWP) WEAR PAD AT SEISMIC SHEAR KEY



⊗ SUGGESTED TRANSPORTATION TIE-DOWN
(LG-36~LG-78)

NOTES:

1. SEE LG COMMON DETAILS SHT. 1 OF 11 FOR GENERAL NOTES AND DEFINITIONS.

⊗ 2. SUGGESTED TRANSPORTATION TIE-DOWN METHOD SHOWN. SEE LG COMMON DETAILS SHEET 1 OF 11 (NOTE 9) FOR CONTRACTOR RESPONSIBILITIES.

   FIELD DRILLING OF HOLES IN WEB IS NOT PERMITTED. AFTER TRANSPORTATION, HOLES IN GIRDER WEB SHALL BE CLEANED OF FORM MATERIAL AND FORM RELEASE MATERIAL, THEN FILLED COMPLETELY WITH A NON-SHRINK GROUT THAT MATCHES OR EXCEEDS THE GIRDER CONCRETE STRENGTH.

⊠ 3. SEE MISC. SPAN DETAILS FOR JOINT INFORMATION NOT SHOWN HERE.

△ 4. PROVIDE WEAR PADS IN CONFORMANCE TO ASTM D6712-17 (CALLOUT S-UHMW-PE0111). CHAMFER THE OUTER EDGES ¼".

   PLACE GIRDERS PRIOR TO CASTING SHEAR KEY. CAST WEAR PAD WITH SHEAR KEY, SMOOTH SIDE FACING GIRDER.

   PAYMENT FOR WEAR PADS SHALL BE INCLUDED IN ITEM "CLASS A1 CONCRETE (BENT CAP)".

STATE OF LOUISIANA
ZHENGZHENG FU
License No. 26814
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
7/19/18

BD.2.2.4.1.11

SHEET NUMBER

PARISH | CONTROL SECTION | STATE PROJECT

DESIGNED Z. LIANG
CHECKED A.LANCASTER
DETAILED A.LANCASTER
CHECKED Z.Z. FU
REVIEWED Z.Z. FU
SERIES # 11 OF 11

REVISION OR CHANGE ORDER DESCRIPTION | BY | NO. | DATE

DOTD

MISCELLANEOUS LG DETAILS

DOTD BRIDGE DESIGN

LG COMMON