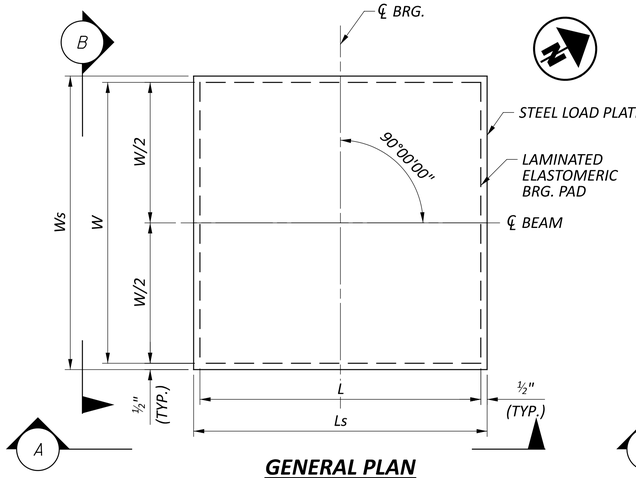
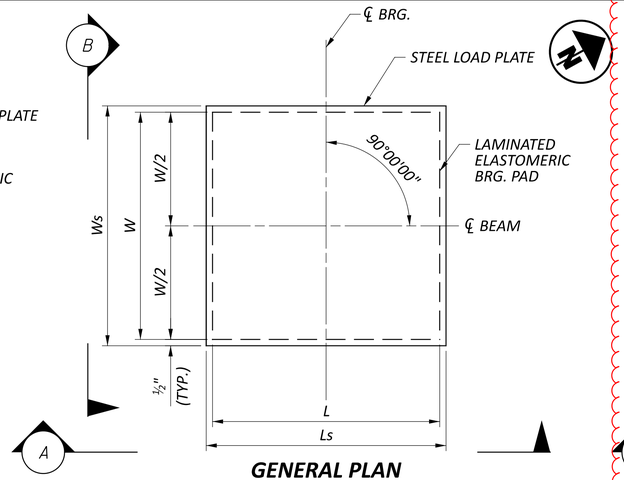
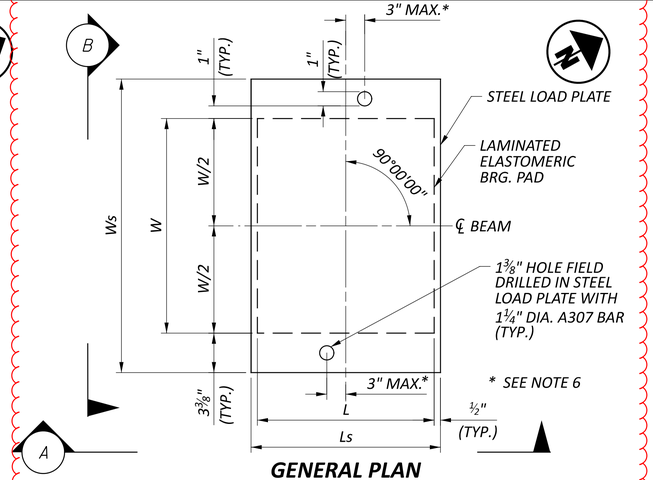


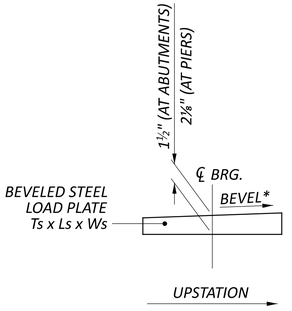
GENERAL PLAN
(ABUTMENTS)



GENERAL PLAN
(PIERS 1 & 3)



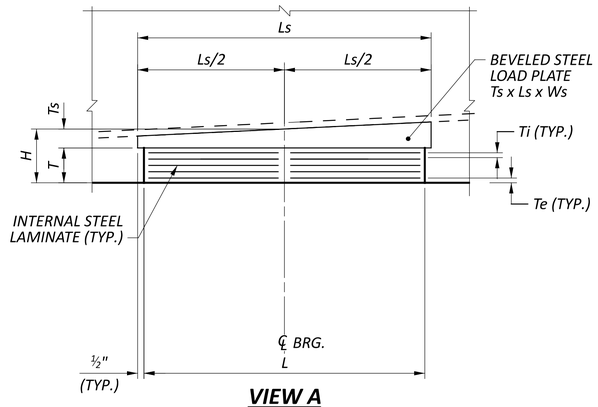
GENERAL PLAN
(PIER 2)



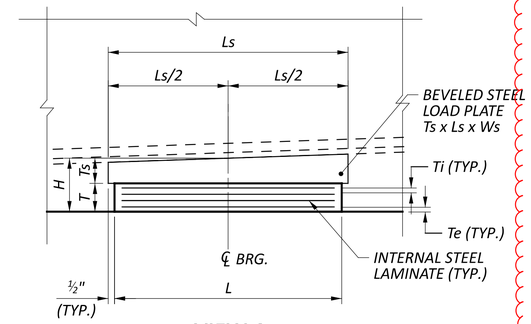
BEVELED STEEL LOAD PLATE DETAIL

LEGEND

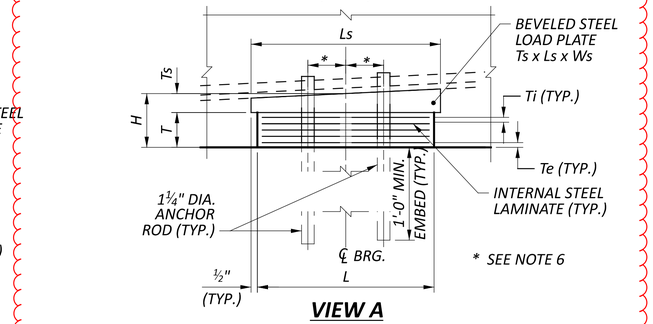
BEVEL* = 3.13% AT RA
1.20% AT FA
1.88% AT PIER 1
1.20% AT PIER 2
1.20% AT PIER 3



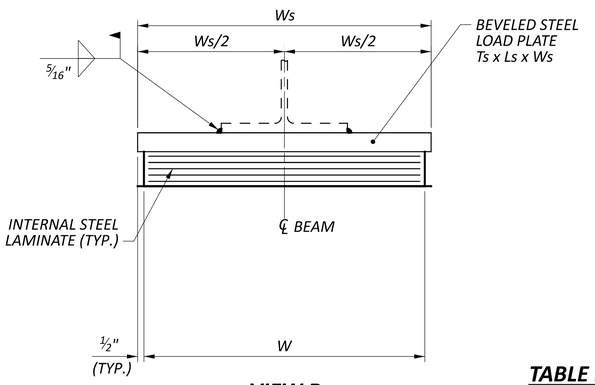
VIEW A
(ABUTMENTS)



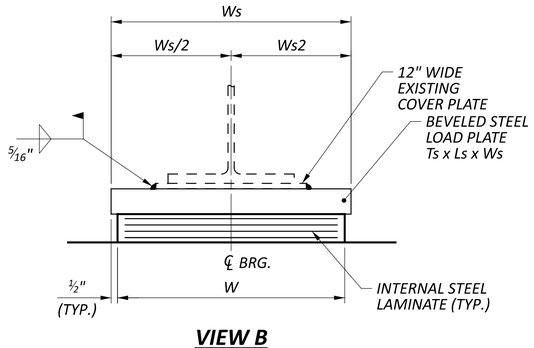
VIEW A
(PIERS 1 & 3)



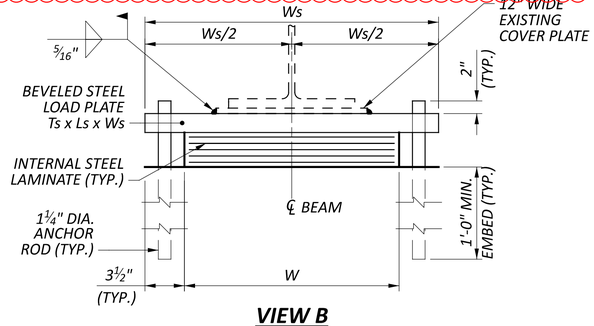
VIEW A
(PIER 2)



VIEW B
(ABUTMENTS)



VIEW B
(PIERS 1 & 3)



VIEW B
(PIER 2)

TABLE DEFINITIONS

ti = THICKNESS OF INTERNAL LAYER
te = THICKNESS OF EXTERNAL LAYER
T = TOTAL THICKNESS OF ELASTOMERIC BEARING
N = NUMBER OF STEEL LAMINATES
Ts = NOMINAL STEEL LOAD PLATE THICKNESS

LAMINATED ELASTOMERIC BEARING DETAILS

SUBSTRUCTURE UNIT	TYPE	BEARING DIMENSIONS							STEEL LOAD PLATE			SERVICE REACTIONS (KIP)		
		L	W	Te	Ti	N	T	H	Ts	Ls	Ws	DL	LL (MAX.)	DESIGN
RA & FA	EXP.	1'-3"	1'-3"	0.35"	0.5"	5	3.25"	4.75"	1 ½"	1'-4"	1'-4"	30.92	51.18	82.10
PIERS 1 & 3	EXP.	1'-3"	1'-3"	0.35"	0.5"	5	3.25"	5.375"	2 ⅛"	1'-4"	1'-4"	104.10	94.31	198.41
PIER 2	FIX.	1'-3"	1'-3"	0.35"	0.5"	5	3.25"	5.375"	2 ⅛"	1'-4"	1'-10"	100.10	94.80	194.90

NOTES

1. *INTERNAL STEEL LAMINATE THICKNESS = 0.1046 INCH (12 GAGE). ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG-TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.*
2. *THE STEEL LOAD PLATE SHALL BE ASTM A709 GRADE 50 STRUCTURAL STEEL. THE STEEL LOAD PLATES SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.*
3. *ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE AND A DIRECTION ARROW THAT POINTS UPSTATION. ALL MARKS SHALL BE PERMANENT AND SHALL BE VISIBLE AFTER THE BEARING IS INSTALLED.*
4. *CONTRACTOR TO VERIFY DIMENSIONS AS PER 501.*
5. *BASIS OF PAYMENT: THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS, INCLUDING LOAD PLATES AND MISCELLANEOUS HARDWARE. PAYMENT WILL BE AT THE UNIT PRICE BID FOR ITEM 516, EACH, ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND STEEL LOAD PLATE.*
6. *PIER 2 ONLY: ITEM 516 SHALL ALSO INCLUDE DRILLING OF DOWEL HOLES AND INSTALLATION OF ANCHOR RODS. CONTRACTOR TO LOCATE ANY EXISTING REINFORCING STEEL BARS IN THE AREA OF THE DOWEL HOLES WITH THE AID OF A REINFORCING STEEL BAR LOCATOR (PACHOMETER) PRIOR TO DRILLING HOLES. IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION OF THE PROPOSED DOWEL HOLE, THE CONTRACTOR SHALL EXERCISE CAUTION AND ADJUST THE BEARING ASSEMBLY SLIGHTLY TO AVOID THE EXISTING BAR.*

ANCHOR ROD LOCATION CAN BE MOVED 3" MAX. FROM THE CENTERLINE TO AVOID INTERFERENCE WITH THE INTERMEDIATE CROSS FRAME.

BEARING DETAILS
BRIDGE NO. MAH-422-3.132
WICK AVENUE OVER US422

SFN 05002109
DESIGN AGENCY
JMT
4215 Worth Avenue, Suite K-200
Columbus, OH 43219
DESIGNER PPA | CHECKER CBY
REVIEWER SDV 06/11/25
PROJECT ID 113757
SUBSET P.17 | TOTAL P.25
SHEET P.49 | TOTAL P.57

MAH-422-03.13

MODEL: Bearing Sheet PAPERSIZE: 34x22 (in.) DATE: 10/2/2025 TIME: 5:50:54 PM USER: COza
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