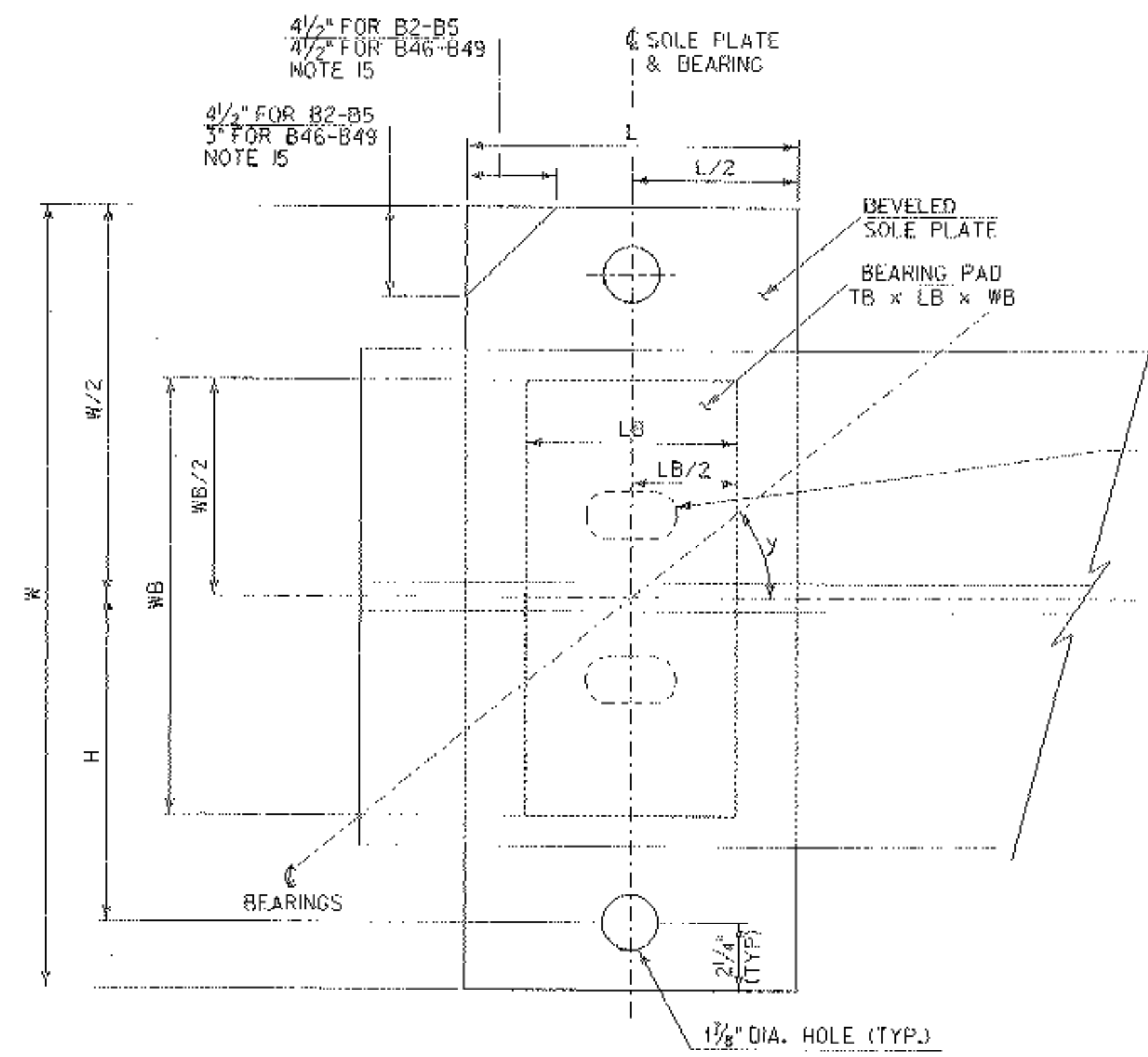


BEARING LOCATION PLAN
MTS

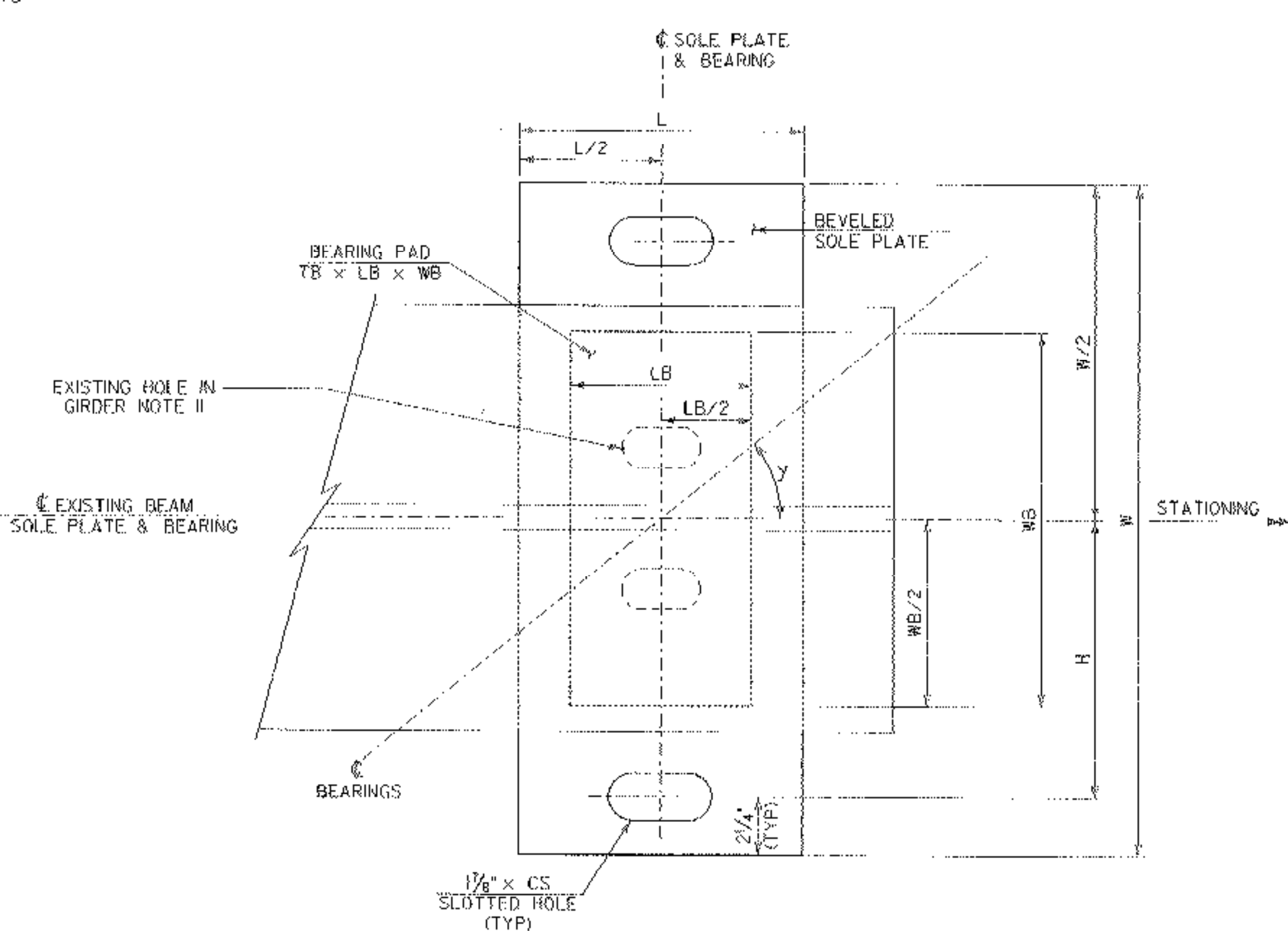
BEARING NOTES:

- BEARINGS SHALL CONFORM TO APPLICABLE SUBSECTIONS OF SECTION 531 AND 731.
- BEARINGS SHALL BE PAID FOR UNDER THE ITEM 531.0 "BEARING DEVICE ASSEMBLY."
- SHOP DRAWINGS CONFORMING TO SUBSECTION 531.03 SHALL BE SUBMITTED TO INCLUDE WELDING AND BONDING PROCEDURES.
- THE CONCRETE SURFACE UNDER THE BEARING DEVICE SHALL BE LEVEL.
- AT EXPANSION BEARINGS THE "A" DISTANCE IS THE FINAL SETTING FOR THE BEARING PAD AFTER THE CONCRETE SLAB, CURB, PAVEMENT AND BRIDGE RAIL ARE PLACED. "B" DISTANCE IS LISTED FOR SETTING THE BEARING BEFORE THE CONCRETE DECK AND CURBS HAVE BEEN PLACED. THE DIFFERENCE IS THE THEORETICAL ELONGATION OF THE BOTTOM FLANGE DUE TO DEAD LOAD DEFLECTION. THE FINAL "A" DISTANCE, AS SHOWN IN THE TABLE MUST BE ATTAINED WITHIN 1/16 OF AN INCH.
- ALL STEEL IN BEARING DEVICES (EXCEPT STAINLESS) SHALL BE AASHTO M-270, GRADE 36.
- ANCHOR BOLTS SHALL HAVE A MINIMUM OF 15" EMBEDMENT INTO THE EXISTING CONCRETE AND SHALL CONFORM TO SUBSECTION 714.08 IN THE "VERMONT SPECIFICATION." THE ANCHOR BOLTS SHALL BE DRILLED AND GROUTED INTO THE ABUTMENT AND PIER BRIDGE SEATS. THE DRILLING AND GROUTING OF THE ANCHOR BOLTS WILL BE INCLUDED AS PART OF THE ITEM "BEARING DEVICE ASSEMBLY."
- ALL BEARING DEVICES SHALL BE GALVANIZED OR METALIZED AS PER SUBSECTION 531.04 (B) AND 506.15 OF THE GENERAL SPECIAL PROVISIONS. AREAS OF GALVANIZING OR METALIZING DAMAGED BY FIELD WELDING OR HANDLING SHALL BE REPAIRED IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 513 WHICH REFERENCES ASTM A760.
- CONNECTION PLATES FOR END DIAPHRAGMS AT THE PIERS HAVE BEEN EXCLUDED FROM THE DRAWINGS FOR CLARITY PURPOSES.
- JACKING AND SHORING FROM THE BEAM SEAT OR FROM THE GROUND WILL BE REQUIRED IN ORDER TO REPLACE THE EXISTING BEARINGS AT THE ABUTMENTS AND CONSTRUCT NEW SEATS AND REPLACE THE BEARINGS AT THE PIERS. DETAILS OF JACKING AND SHORING PROPOSALS SHALL BE SUBMITTED TO THE ENGINEER FOR INFORMATIONAL PURPOSES ONLY (TWO WEEKS PRIOR TO COMMENCEMENT OF THIS WORK). IN ADDITION, SUBSTANTIATING DESIGN CALCULATIONS PERFORMED BY A PROFESSIONAL ENGINEER SHALL BE SUBMITTED FOR INFORMATIONAL PURPOSES ONLY TO THE ENGINEER. THIS WORK SHALL BE PAID FOR UNDER THE ITEM 502.11 "SHORING SUPERSTRUCTURE BEARINGS", WHETHER FROM THE BEAM SEAT OR FROM THE GROUND.
- EXISTING HOLES IN THE EXISTING BEAM FLANGE ENDS SHALL BE CLEANED AND FILLED WITH JOINT SEALER, POLYURETHANE. THIS WORK WILL BE INCLUDED WITH THE ITEM 531.0 "BEARING DEVICE ASSEMBLY."
- EXISTING ANCHOR BOLTS SHALL BE CUT OFF FLUSH WITH BRIDGE SEATS AND REMOVE THEIR UPPER PORTION. THE EXISTING BOLTS MAY BE PULLED OUT IF THIS CAN BE DONE WITHOUT DAMAGE TO EXISTING CONCRETE. THIS WORK WILL BE SUBSIDIARY TO THE ITEM 531.0 "BEARING DEVICE ASSEMBLY."
- 1/4" PLATE SHALL BE AASHTO M270 GRADE 36 TO BE PAID FOR AS ITEM 506.10 "STRUCTURAL STEEL."
- FOR 1/4" PLATE AT ABUTMENT CURTAIN WALL SEE STRINGER BOXOUT DETAILS ON SHEET 18A.
- CLIP SOLE PLATE AS SHOWN TO CLEAR CURTAIN WALL, SEE SHEET 18A.
- EACH BEARING SHALL BE MARKED WITH BEARING NUMBER AS GIVEN IN THE BEARING LOCATION PLAN AND SHALL ALSO BE MARKED WITH AN 'X' ON THE UPSTATION SIDE OF THE BEARING.

SEE SHEET 20



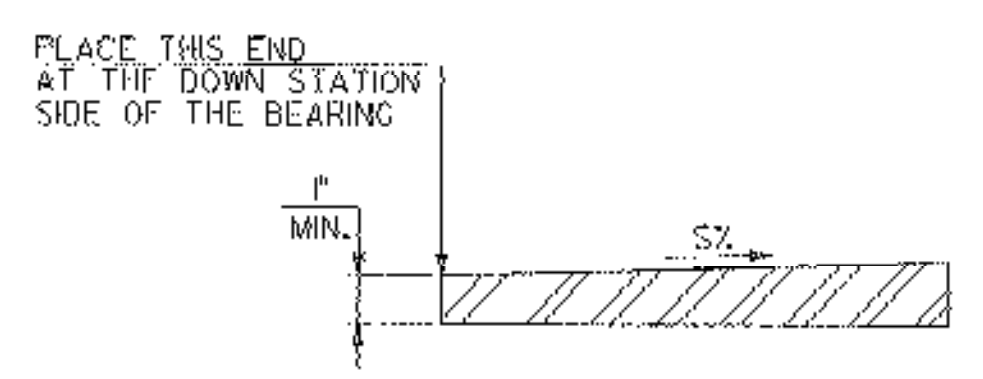
SOLE PLATE PLAN - FIXED
SCALE 3" = 1'-0"
B16-B20, B26-B30, B46-B50 - OPPOSITE HAND



SOLE PLATE PLAN - EXPANSION
SCALE 3" = 1'-0"
B4-B5, B41-B45 - OPPOSITE HAND

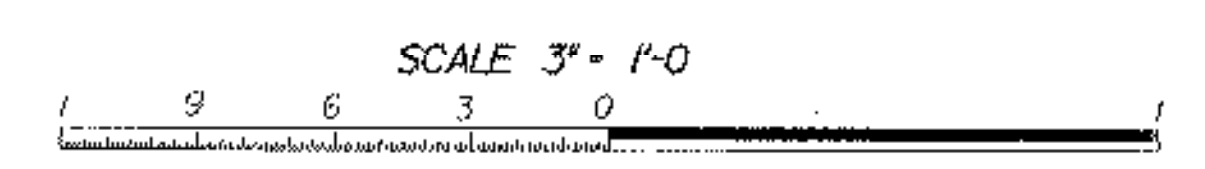
BEARING & SOLE PLATE SCHEDULE (UNITS=INCHES)								
PAD	WB	LB	TB	W	L	H	CS	TYPE
B1-B5, B21-B30	12	9	1 3/4	21 3/4	12	8 3/8	-	FIXED
B6-B10	12	9	1 3/4	21 3/4	12 1/2	8 3/8	2 3/4	EXPANSION
B11-B15	13	9	1 3/4	22 3/4	13	9 1/8	3 3/8	EXPANSION
B16-B20	13	9	1 3/4	22 3/4	12	9 1/8	-	FIXED
B31-B35, B46-B50	17	8	1 1/2	26 3/4	11	11 1/8	-	FIXED
B36-B40	17	8	1 1/2	26 3/4	12	11 1/8	3 3/8	EXPANSION
B41-B45	17	8	1 1/2	26 3/4	11 3/4	11 1/8	3 3/8	EXPANSION

BEAM/BEARING LINE ANGLE	
BEARING PAD	γ
B1, B6	44° - 04' - 42.42"
B2-B4, B7-B9	44° - 37' - 04.45"
B5, B10	45° - 08' - 37.22"
B11, B16	41° - 42' - 12.73"
B12-B14, B17-B19	42° - 17' - 24.45"
B15, B20	42° - 51' - 41.13"
B21, B26	39° - 19' - 35.50"
B22-B24, B27-B29	39° - 57' - 48.28"
B25, B30	40° - 34' - 50.06"
B31, B36	36° - 40' - 23.81"
B32-B34, B37-B39	37° - 22' - 26.99"
B35, B40	38° - 03' - 01.12"
B41, B46	33° - 17' - 23.52"
B42-B44, B47-B49	34° - 05' - 00.02"
B45, B50	34° - 50' - 48.26"



BEARING	SHIM THK "C"	BEARING	SHIM THK "C"	BEARING	SHIM THK "C"
B1	0.26 in	B17	2.28 in	B37	0.48 in
B2	0.36 in	B18	2.40 in	B38	0.72 in
B3	0.36 in	B19	2.16 in	B39	0.36 in
B4 to B6	-	B20	2.52 in	B40 to B45	-
B7	0.48 in	B21	0.24 in	B46	2.04 in
B8	0.48 in	B22	0.36 in	B47	0.60 in
B9	0.48 in	B23	0.36 in	B48	0.72 in
B10	0.60 in	B24	0.48 in	B49	0.36 in
B11 to B15	-	B25	0.48 in	B50	-
B16	2.28 in	B26 to B36	-		

SOLE PLATE SLOPE	
PAD	S
B1-B5	6.79%
B6-B10	6.30%
B11-B15	6.35%
B16-B20	5.80%
B21-B25	5.27%
B26-B30	4.76%
B31-B35	4.44%
B36-B40	3.94%
B41-B45	3.36%
B46-B50	2.85%



**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

Town of HARTLAND	Bridge No. 38
Highway No. 1-91	Log Sta.
BEARING LAYOUT & DETAILS	
SHEET 1 OF 2	
Designed By E. JOHNSTON	Drawn By N. HERRERA
Checked By E. JOHNSTON	Date DEC 2000
Bridge Design Supervisor E. JOHNSTON Date FEB. 2001	
PROJECT HARTLAND	PROJECT NO. 1M 091-1(36)
Drawing Name za272bl.dgn	Sheet 20 of 85

STONE & WEBSTER, INC.

20-DEC-2002
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