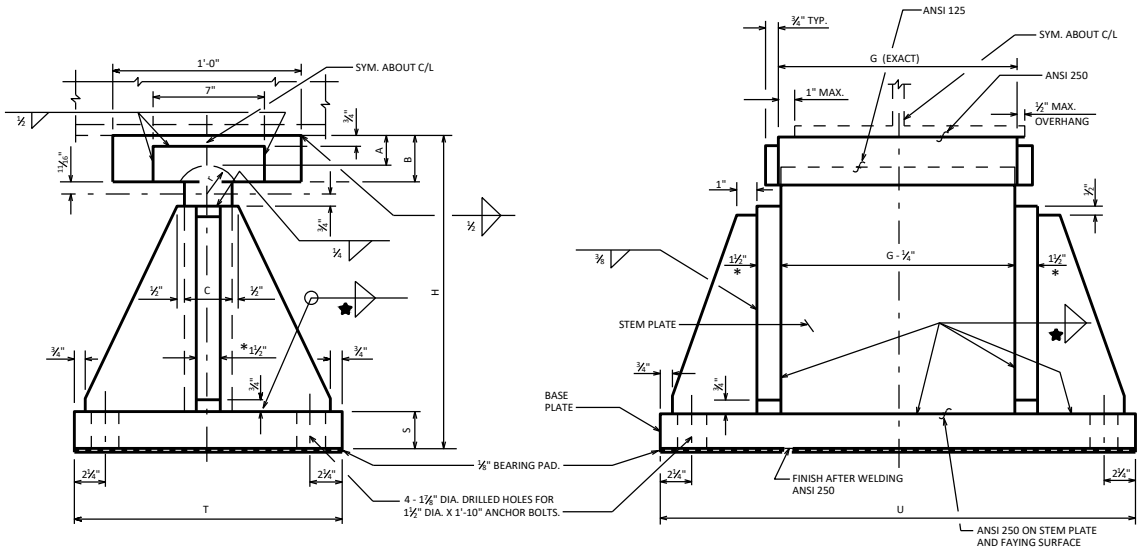

FIXED SHOE

★ 400 K ≤ REACTION < 1000 K, USE ⅝" WELD.
1000 K ≤ REACTION ≤ 1500 K, USE ¾" WELD.

* FOR REACTIONS ≥ 1000 KIPS
USE 2" STIFFENERS.

NOTES

FABRICATOR MAY INCREASE 'BASE PLATE' THICKNESS AS AN ALTERNATE TO SHIMS.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS, ON WELDED BEARINGS. FINAL MACHINING CAN BE PERFORMED BEFORE WELDING IS COMPLETED.

ALL MATERIAL FOR BEARINGS INCLUDING SHIMS BUT EXCLUDING ANCHOR BOLTS, NUTS, AND WASHERS SHALL CONFORM TO ASTM SPECIFICATION TYPE A709 GRADE 50W STEEL.

ALL ANCHOR BOLTS, NUTS, AND WASHERS SHALL CONFORM TO ASTM SPECIFICATION TYPE A709 GRADE 36 ⬢ STEEL. ANCHOR BOLTS SHALL BE THREADED 3". PROVIDE ONE STANDARD WROUGHT WASHER AND ONE HEX NUT PER BOLT. PROJECT ANCHOR BOLTS "S" PLATE THICKNESS + 2¼" ABOVE TOP OF CONCRETE MASONRY. CHAMFER ANCHOR BOLTS PRIOR TO THREADING.

AFTER WELDING SHOE ASSEMBLY, FINISH BOTTOM OF BASE PLATE TO A FLAT SURFACE.

ALL SURFACES MARKED " ⌒ " SHALL BE MACHINE FINISHED BY AN AUTOMATIC PROCESS. THE CONTACT AREA OF BOTTOM SURFACE OF THE GIRDER FLANGE SHALL BE MACHINE FINISHED.

ANCHOR BOLT DISTANCES ALONG "T" OR "U" MAY BE INCREASED FROM MINIMUM SHOWN WHEN A COMMON GRID DETAIL IS DESIRED FOR SEVERAL BEARINGS.

FOR UNPAINTED STRUCTURES THE UPPER 6" OF THE ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AS REQUIRED BY ASTM DESIGNATION A153, CLASS C OR B633.

ALL MATERIALS IN TYPE "B" FIXED SHOE BEARINGS, INCLUDING SHIMS, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING ASSEMBLIES FIXED B-__-__".

⬢ OR MATERIAL OF EQUIVALENT YIELD STRENGTH AND ELONGATION.

USE AASHTO LRFD SERVICE I LOADS FOR BEARING SELECTION. CONSIDER ONLY DEAD LOAD AND HL-93 LIVE LOADS INCLUDING 33% DYNAMIC LOAD ALLOWANCE. THE BEARINGS ON THIS STANDARD WERE DESIGNED USING THE STANDARD SPECIFICATION.

TABLE OF DIMENSIONS

REACTION (KIPS)	A	B	C	G VALUES						H	r		S	T
				G=1'-7"	G=1'-9"	G=1'-11"	G=2'-1"	G=2'-3"	G=2'-5"		STEM	PLATE		
				U	U	U	U	U	U					
400-499	1 15/16"	2 15/16"	3"	2'-8"	2'-8"	2'-10"	3'-0"	—	—	1'-6"	1 15/16"	1 45/64"	2⅜"	1'-4"
500-599	1 15/16"	2 15/16"	3"	3'-0"	3'-0"	3'-0"	3'-0"	—	—	1'-7"	1 15/16"	1 45/64"	2⅜"	1'-5"
600-699	1 15/16"	2 15/16"	3"	—	3'-3"	3'-3"	3'-3"	3'-3"	—	1'-9"	1 15/16"	1 45/64"	2⅜"	1'-6"
700-799	2 1/16"	3 1/16"	3½"	—	—	3'-6"	3'-6"	3'-6"	3'-6"	1'-10"	1 15/16"	1 61/64"	2⅛"	1'-7"
800-899	2 1/16"	3 1/16"	3½"	—	—	3'-9"	3'-9"	3'-9"	3'-9"	2'-0"	1 15/16"	1 61/64"	2⅞"	1'-8"
900-999	2 1/16"	3 1/16"	3½"	—	—	3'-10"	3'-10"	3'-10"	3'-10"	2'-1"	1 15/16"	1 61/64"	2⅛"	1'-10"
1000-1099	2 1/16"	3 15/16"	4"	—	—	—	4'-0"	4'-0"	4'-0"	2'-3"	2 1/16"	2 13/64"	3⅜"	1'-11"
1100-1199	2 1/16"	3 15/16"	4"	—	—	—	4'-2"	4'-2"	4'-2"	2'-4"	2 1/16"	2 13/64"	3⅜"	2'-0"
1200-1299	2 1/16"	3 15/16"	4"	—	—	—	—	4'-4"	4'-4"	2'-5"	2 1/16"	2 13/64"	3⅜"	2'-1"
1300-1399	2 1/16"	3 15/16"	4"	—	—	—	—	4'-6"	4'-6"	2'-6"	2 1/16"	2 13/64"	3⅜"	2'-2"
1400-1500	2 1/16"	3 15/16"	4"	—	—	—	—	4'-8"	4'-8"	2'-7"	2 1/16"	2 13/64"	3⅜"	2'-3"

TYPE 'B' - STEEL GIRDERS FIXED SHOE

BUREAU OF STRUCTURES

APPROVED: *Laura Shadewald* DATE: 7-16