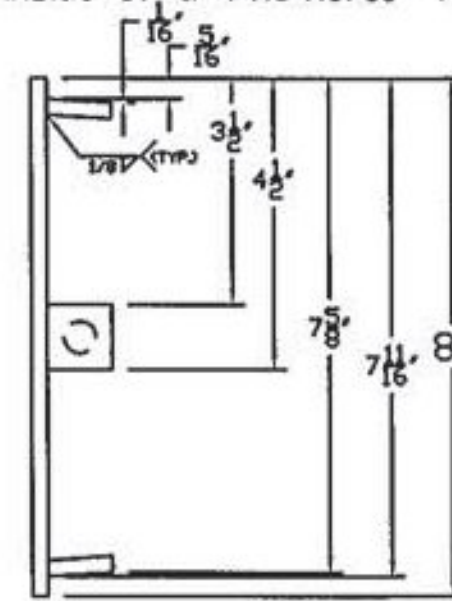
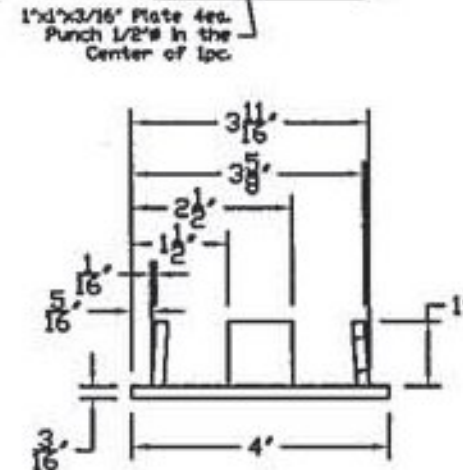
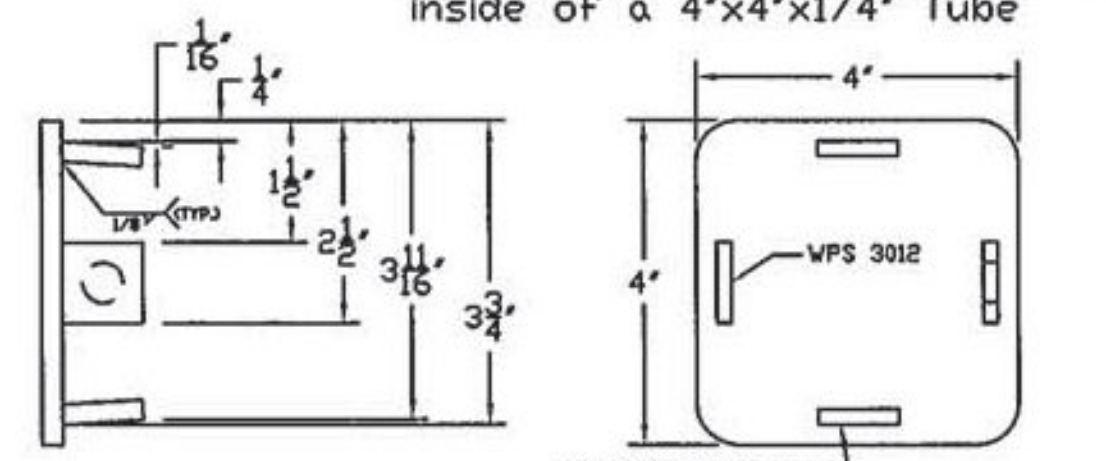


POST #	"L"
1	1'-3 1/4"
2	1'-3"
3	1'-2 11/16"
4	1'-2 3/8"

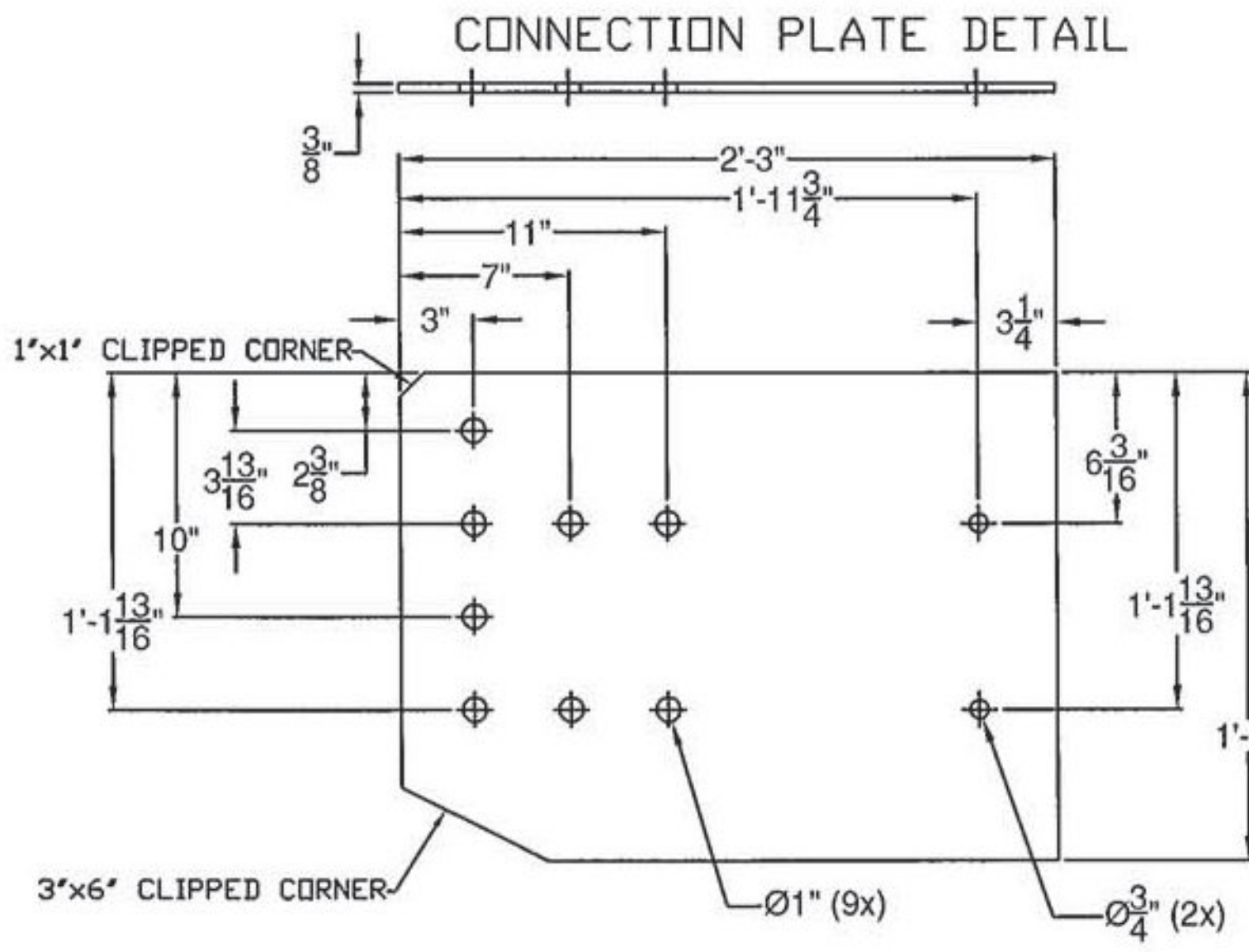
This Cap Needs to press fit inside of a 4"x8"x5/16" Tube



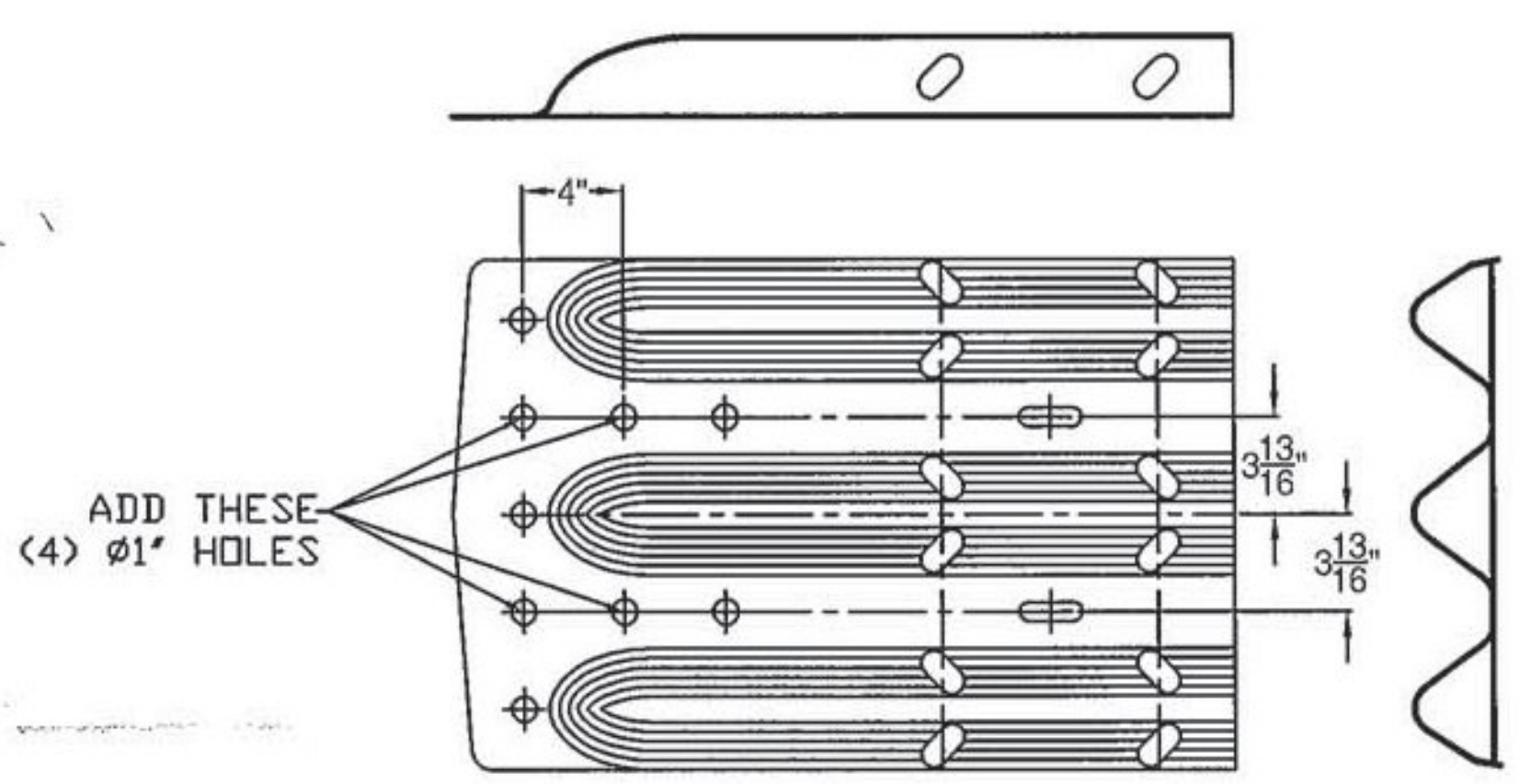
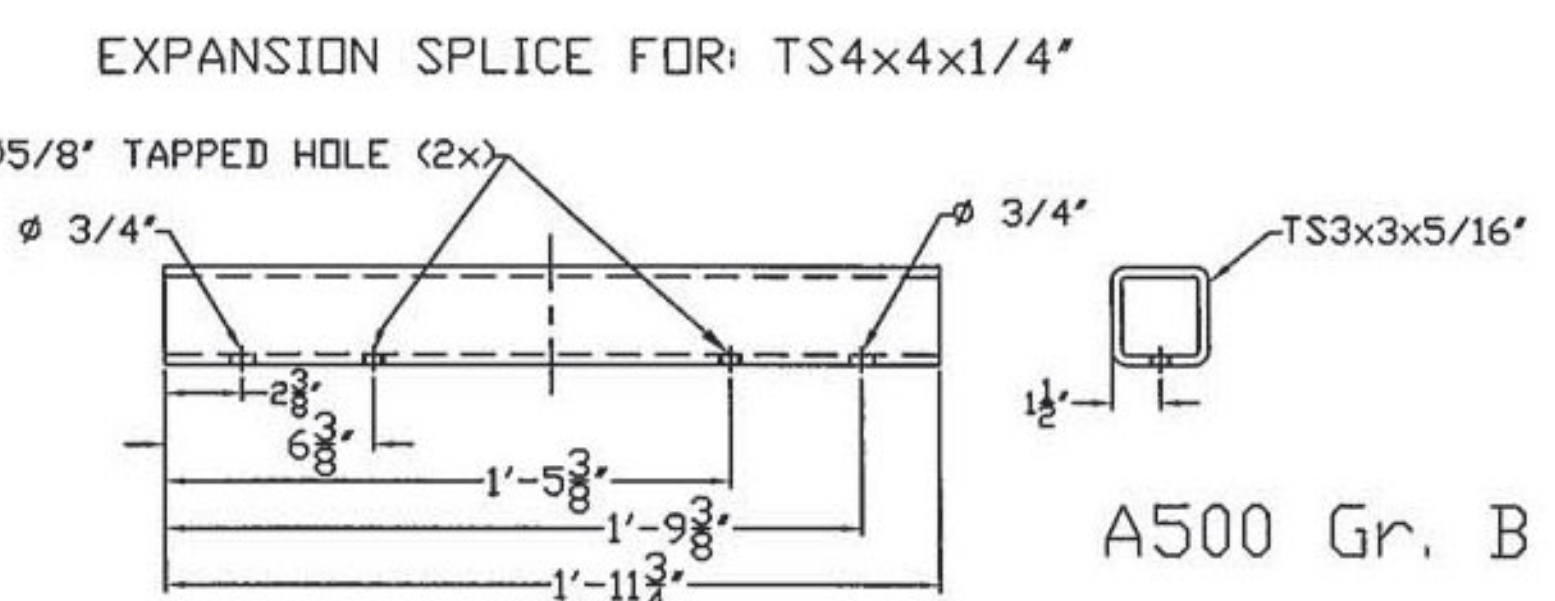
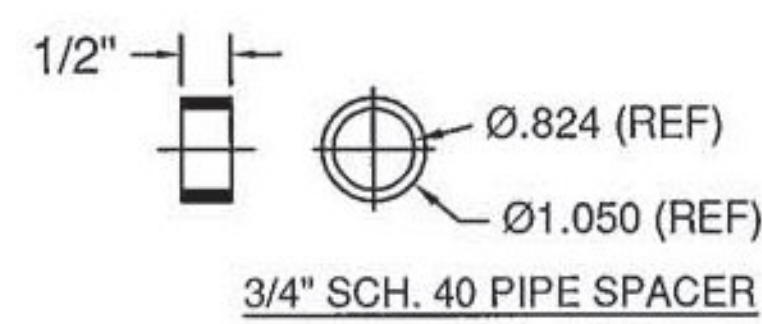
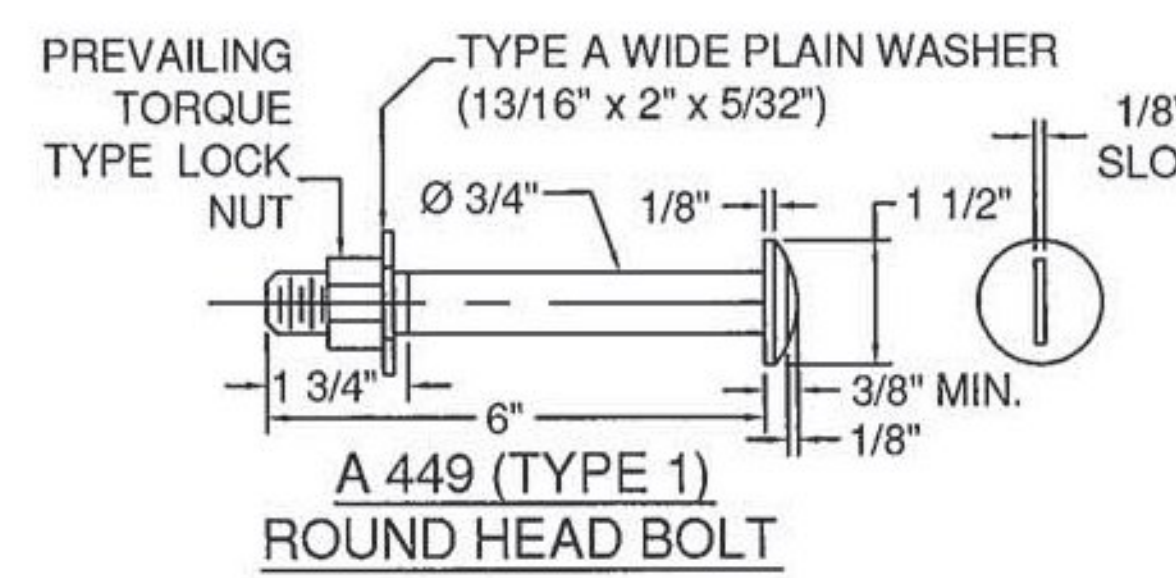
This Cap Needs to press fit inside of a 4"x4"x1/4" Tube



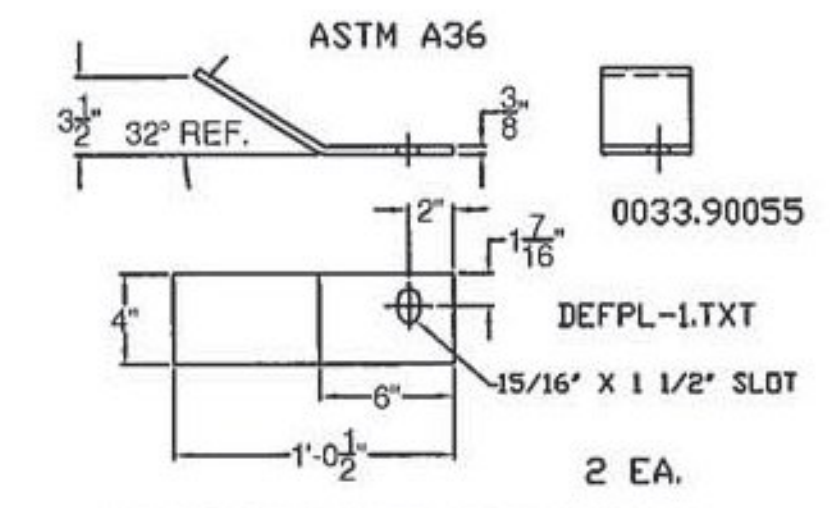
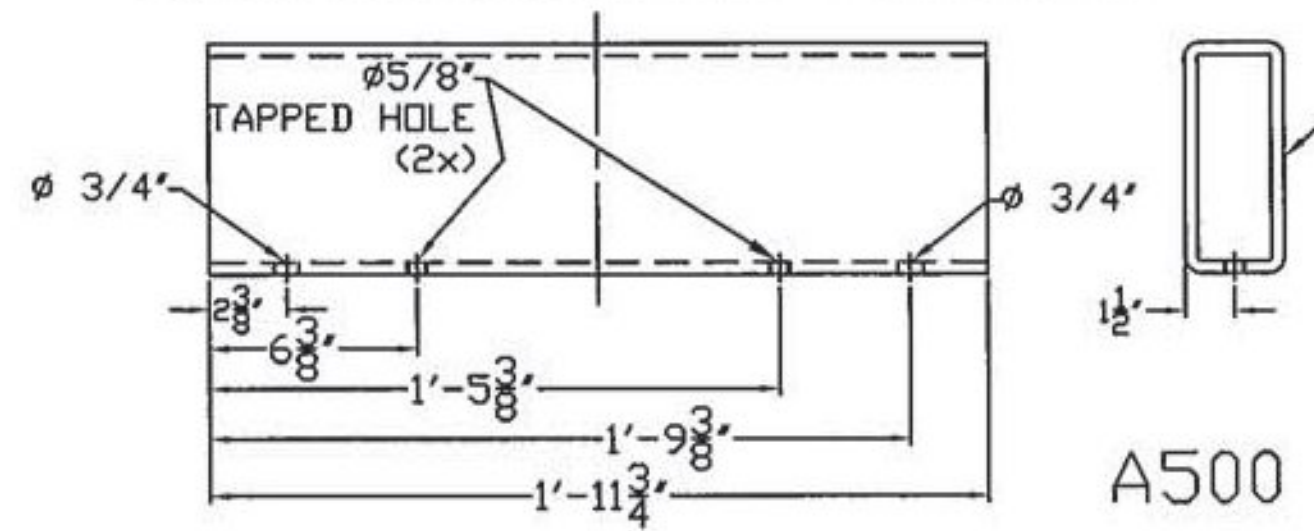
BILL OF MATERIAL (621.72) WW-1 & WW-2 (EACH)		
QTY	DESCRIPTION	ASTM DESIGNATION
1	THRIE BEAM TERMINAL CONNECTION (10 Ga)	AASHTO M180
1	THRIE BEAM TRANSITION @ 7'-3 1/2' (10 Ga)	AASHTO M180
1	CONNECTION PLATE	M270 Gr. 36
2	12' 6" THRIE BEAM (12Ga)	AASHTO M180
4	W6X25 POST @ 8'-0" (PUNCHING VARIES - POST 1-4)	A572 Gr. 50
1	DEFLECTOR PLATE (APPROACH OR TRAILING)	A36
1	8" X 4" X 5/16" RAIL @ 9'-4"	A500 Gr. B
1	4" X 4" X 1/4" RAIL @ 9'-4"	A500 Gr. B
1	8" X 4" X 1/4" END CAP	A36
1	4" X 4" X 1/4" END CAP	A36
1	7' x 3' x 3/8" SPLICE TUBE @ 1' 11 3/4"	A500 Gr. B
1	3' x 3' x 5/16" SPLICE TUBE @ 1' 11 3/4"	A500 Gr. B
8	Ø 3/4" SCH. 40 PIPE @ 1/2"	A53
8	Ø 5/8" X 1 3/4" HEX BOLTS	A307
8	Ø 5/8" FLAT WASHER, HARDENED, TYPE A, PLAIN WIDE	A307
7	Ø 3/4" X 6" CARRIAGE BOLT, & NUT	A307
1	Ø 3/4" X 2" CARRIAGE BOLT, & NUT	A307
19	Ø 5/8" X 1'-6" BUTTON HEAD POST BOLT, PLATE WASHER, F.W. & NUT	A307, A36, F844 or 307, & A563
32	Ø 5/8" X 1 1/4" BUTTON HEAD SPLICE BOLT, RECESSED NUT & F.W.	A307
19	3/16" SPEC. PLATE WASHER @ 1 3/4" X 3"	A36
16	Ø 3/4" X 6" ROUND HEAD BOLT, F.W., LOCK W. & NUT	A449, F436, ASME B18.21.1, & A563
10	6 X 8' WOOD POST @ 7'-0"	TIMBER
9	6 X 8' WOOD BLOCKOUTS @ 1'-6"	TIMBER
1	6 X 8' WOOD BLOCKOUTS @ 1'-2"	TIMBER
10	Ø 7/8" POST BOLT @ 18", F.W. & NUT	F568, F436, A563



HARDWARE APPLICATION			
QTY	DESCRIPTION	ASTM DESIGNATION	APPLICATION
A	8 Ø 5/8" X 1 3/4" HEX BOLTS	A307	USED IN SPLICE TUBES
B	8 Ø 5/8" FLAT WASHER, HARDENED, TYPE A, PLAIN WIDE	A307	FOR SPLICE TUBES,
C	7 Ø 3/4" X 6" CARRIAGE BOLT, & NUT	A307	TERM. CONN. & CONN. PLATE TO RAIL
D	1 Ø 3/4" X 2" CARRIAGE BOLT, & NUT	A307	DEFLECTOR PLATE TO CONN. PLATE
E	19 Ø 5/8" X 1'-6" BUTTON HEAD POST BOLT, PLATE WASHER, F.W. & NUT	A307, A36, F844 or A307, & A563	THRIE BEAM, TO OFFSET BLOCK, TO 6x8" POST
F	32 Ø 5/8" X 1 1/4" BUTTON HEAD SPLICE BOLT, RECESSED NUT & F.W.	A307	FASTEN PANEL COMPONENTS TOGETHER, (THRIE, TERMINAL CONNECTOR, TRANSITION SECTION)
G	19 3/16" (SPECIAL) PLATE WASHER @ 1 3/4" X 3"	A36	USED IN PANEL VALLEY, W/ 18" BOLT
H	16 Ø 3/4" X 6" ROUND HEAD BOLT, FL. WASHER, LOCK W. & NUT	A449, F436, ASME B18.21.1, & A563	FASTEN 4X4 & 4X8 RAIL TO RAIL POST 1-4



EXPANSION SPLICE FOR: TS8x4x5/16"



DRAWINGS ARE FOR COMPONENTS, ASSEMBLE PER STANDARD S-360B

SHOP DRAWING REVIEW

REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

REJECTED REVISE AND RESUBMIT FURNISH AS CORRECTED

APPROVED BY: _____

REVISIONS OR COMMENTS MADE ON THE SHOP DRAWINGS DURING THIS REVIEW DO NOT RELIEVE CONTRACTOR FROM COMPLIANCE WITH REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. THIS CHECK IS ONLY FOR REVIEW OF GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR: CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; SELECTING FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATING HIS WORK WITH THAT OF ALL OTHER TRADES; AND PERFORMING HIS WORK IN A SAFE AND SATISFACTORY MANNER.

VHB Job Number: 57517
 Reviewed By: B. Masse
 Date: 6-11-14

MODIFICATION TO P/N 5143.40056 TO CREATE P/N 5143.90056

SHEET 1 OF 4

2 RAIL BRIDGE RAIL TO GUARDRAIL TRANSITION
 ROCHESTER, BR# 0162 (18) VT RTE 73 (MAJOR COLLECTOR), BRIDGE NO: 19, OVER WHITE RIVER
 TOWN OF ROCHESTER, COUNTY OF WINDSOR, VT

R. NO.	DATE	DESCRIPTION	BY	R. NO.	DATE	DESCRIPTION	BY
E	1	6/6/14 REVISED PER 5/30/14 MARK-UP	E.P.	E			
V	2	6/10/14 REVISED PER 6/9/14 MARK-UP	E.P.	V			

ELDERLEE, INC.
 OAKS CORNERS, NEW YORK 14518
 E-Mail: dlong@elderlee.com
 Tel: 315-789-6670 Fax: 315-789-6615

DRAWN: E.P. 5/16/14
 CHECKED: D.L. 5/16/14
 APPROVED: _____
 SCALE: _____
 DRAWING NO. F.R.L. ROCHESTER, TR19