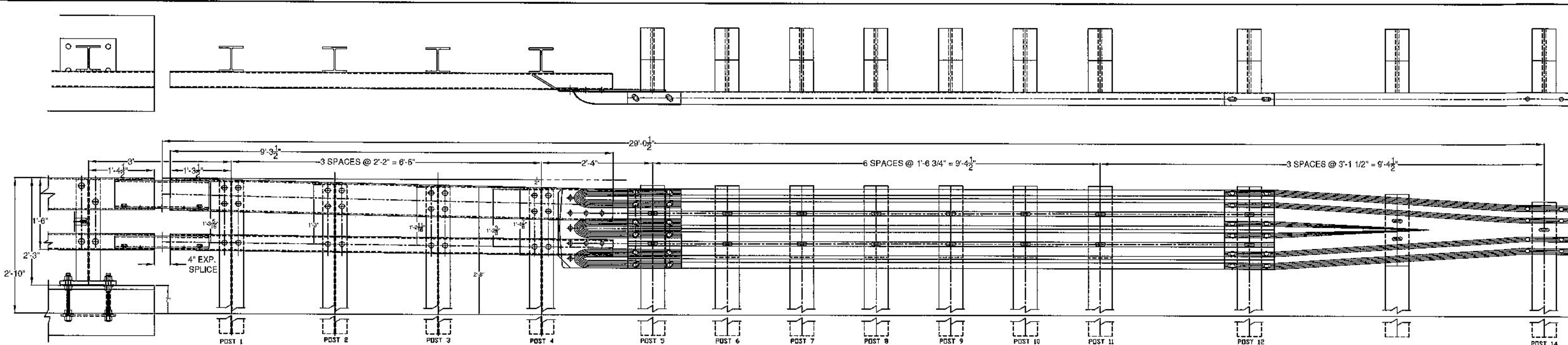
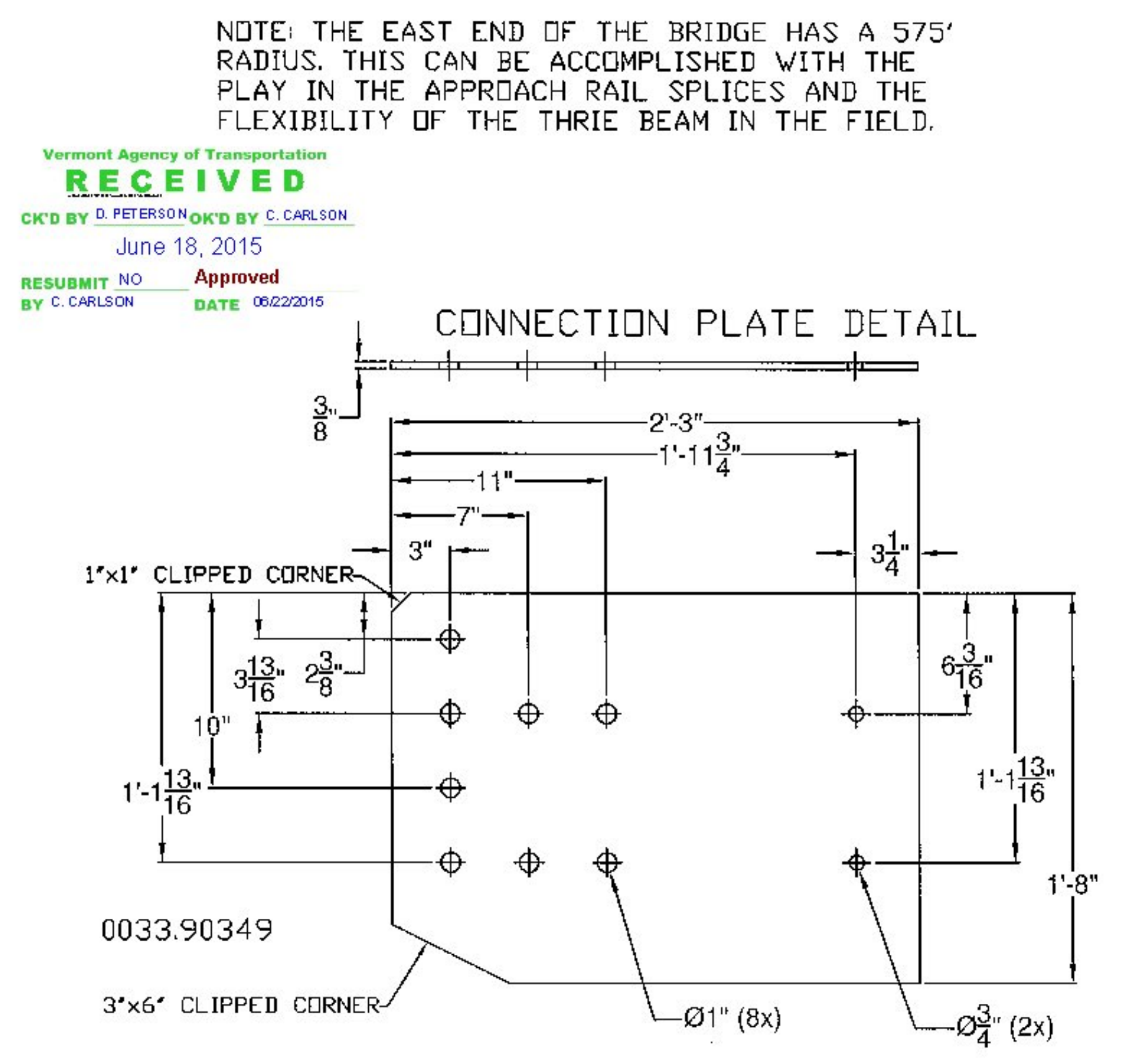
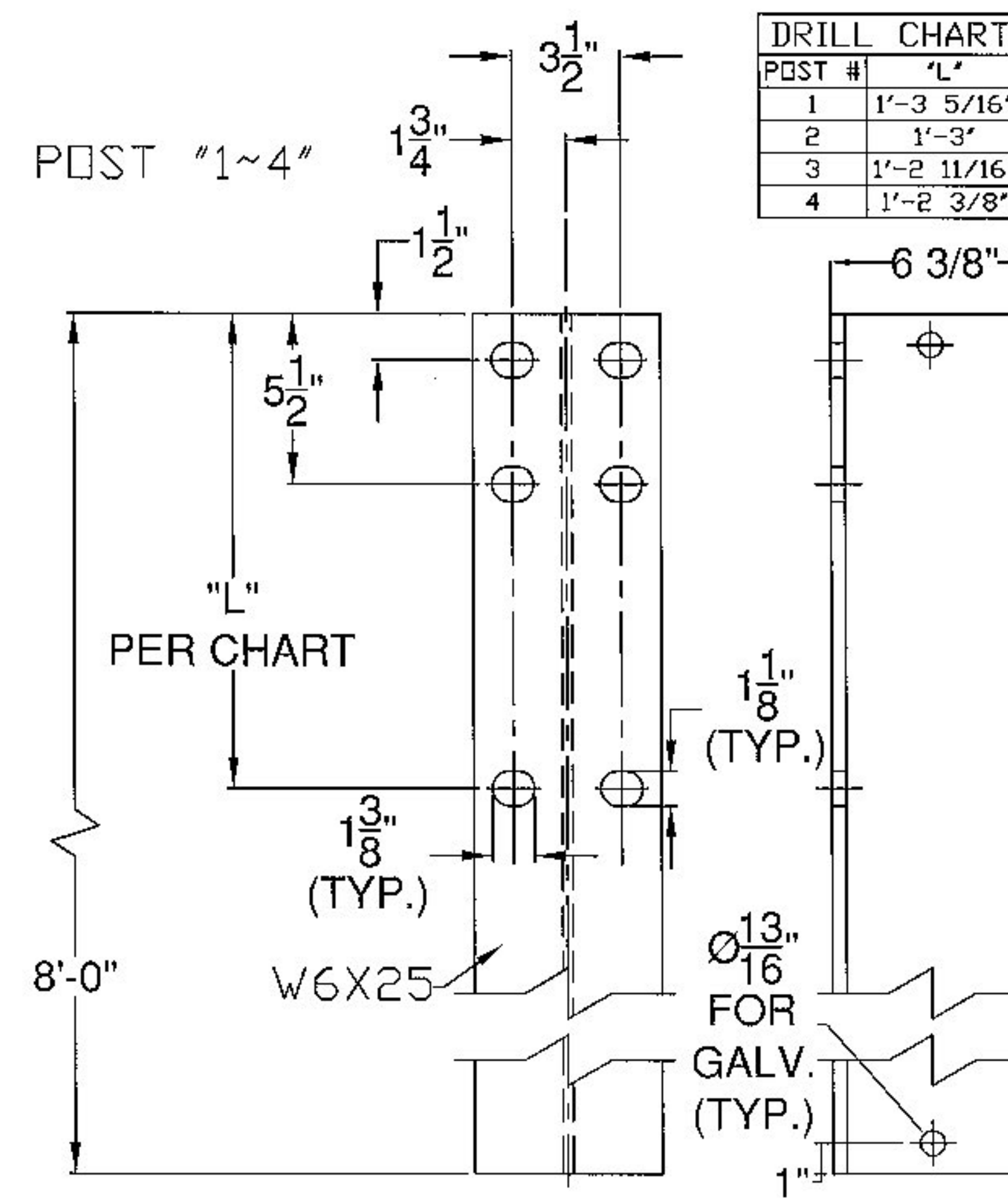




HARDWARE APPLICATION			
QTY	DESCRIPTION	APPLICATION	
A 8	Ø 5/8" X 2" HEX BOLTS	USED IN SPLICE TUBES	
B 8	Ø 5/8" FLAT WASHER, HARDENED, TYPE A, PLAIN WIDE	FOR SPLICE TUBES,	
C 7	Ø 3/4" X 6" CARRIAGE BOLT, & NUT	TERM. CONN. & CONN. PLATE TO RAIL	
D 1	Ø 3/4" X 2" CARRIAGE BOLT, & NUT	DEFLECTOR PLATE TO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

BILL OF MATERIAL (621.72) PER EACH CORNER			
QTY	PART #	DESCRIPTION	ASTM DESIGNATION
1	5143.90056	THRIE BEAM TERMINAL CONNECTION (10 Gd)	AASHTO M180
1	6029.01133	THRIE BEAM TRANSITION @ 7'-3 1/2" (10 Gd)	AASHTO M180
1	0033.90349	3/8" CONNECTION PLATE	A709 Gr.36
2	5029.00016	12" 6" THRIE BEAM (12Gd)	AASHTO M180
1	0033.90058	W6X25 POST @ 8'-0" (POST 1)	A572 Gr. 50
1	0033.90059	W6X25 POST @ 8'-0" (POST 2)	A572 Gr. 50
1	0033.90060	W6X25 POST @ 8'-0" (POST 3)	A572 Gr. 50
1	0033.90061	W6X25 POST @ 8'-0" (POST 4)	A572 Gr. 50
1	0033.90350	DEFLECTOR PLATE (APPROACH / RIGHT)	A36
1	0033.90351	DEFLECTOR PLATE (TRAILING / LEFT)	A36
1	0033.91146	8" X 4" X 5/16" RAIL @ 9'-3 1/2"	A500 Gr. B
1	0033.91145	4" X 4" X 1/4" RAIL @ 9'-3 1/2"	A500 Gr. B
1	0033.90056	8" X 4" X 3/16" END CAP	A36
1	0033.90057	4" X 4" X 3/16" END CAP	A36
1	0033.90352	3' x 3' x 5/16" EXP. SPLICE TUBE @ 1' 11 3/4"	A500 Gr. B
1	0033.90353	7' x 3' x 3/8" EXP. SPLICE TUBE @ 1' 11 3/4"	A500 Gr. B
8	0033.90053	Ø 3/4" SCH. 40 PIPE @ 1/2"	A53
8	0080.05045	Ø 5/8" X 2" HEX BOLTS	A307
8	0080.15910	Ø 5/8" FLAT WASHER, HARDENED, TYPE A, PLAIN WIDE	A307
7	0080.06300	Ø 3/4" X 6" CARRIAGE BOLT, & NUT	A307
1	0080.06081	Ø 3/4" X 2" CARRIAGE BOLT, & NUT	A307
19	T.B.D.	Ø 5/8" X 1'-6" GUARDRAIL POST BOLT, F.W. & NUT	A307
32	T.B.D.	Ø 5/8" X 1 1/4" BUTTON HEAD SPLICE BOLT, RECESSED NUT & F.W.	A307
19	0080.15913	3/16" PLATE WASHER @ 1 3/4" X 3"	A709
16	0080.06290	Ø 3/4" X 6" SLOTTED, ROUND HEAD BOLT, F.W., & LOCKNUT	A449, F436, & A563
8	0009.00070	6 X 8" WOOD POST @ 7'-0" (POST 5-12)	WOOD
1	0009.00071	6 X 8" WOOD POST @ 7'-0" (POST 13)	WOOD
1	0009.00072	6 X 8" WOOD POST @ 7'-0" (POST 14)	WOOD
8	0009.00180	6 X 8" WOOD BLOCKOUTS @ 1'-6" (FOR POST 5-12)	WOOD
8	0009.00123	6 X 8" WOOD BLOCKOUTS @ 1'-6" (FOR POST 13)	WOOD
1	0009.00122	6 X 8" WOOD BLOCKOUTS @ 1'-2" (FOR POST 14)	WOOD



ITEM #: 621.72

STRUCTURAL STEEL TO COMPLY W/ ASTM A6

GALVANIZING TO BE PER ASTM A123, UNLESS OTHERWISE SPECIFIED.

TOLERANCE UNLESS OTHERWISE NOTED:
HOLES - ± 1/32"
FRACTIONS - ± 1/16"
ANGLES - ± 1/2"

2 RAIL BRIDGE RAIL TO GUARDRAIL TRANSITION

PROJECT: ANDOVER BHF 016-1 (29) VT RTE11, RURAL MINOR ARTERIAL, BRIDGE NO. 41

TOWN OF ANDOVER, WINDSOR COUNTY, VERMONT

R NO.	DATE	DESCRIPTION	BY	R NO.	DATE	DESCRIPTION	BY
E 1	5/28/15	REVISED PER 5/18/15 MARK-UP	E.P.	E 3	6/1/15	REVISED PER 6/1/15 MARK-UP	E.P.
V 2	5/29/15	REVISED PER 5/29/15 EMAIL	E.P.	V			

ELDERLEE, INC.

OAKS CORNERS, NEW YORK 14518

email: dlong@elderlee.com / epeeb@elderlee.com

Tel: 315-789-6670 Fax: 315-789-6615

DRAWN: E.P. 5/14/15

CHECKED: D.L. 5/14/15

APPROVED: SCALE SCHEMATIC

DRAWING NO. F.R.L. ANDOVER