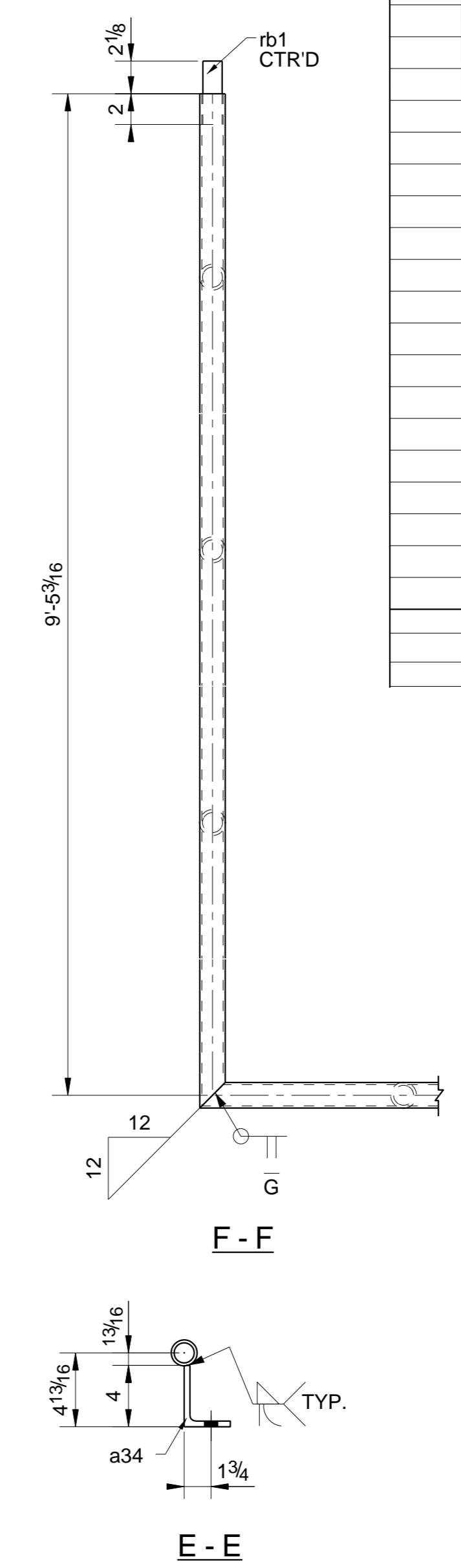
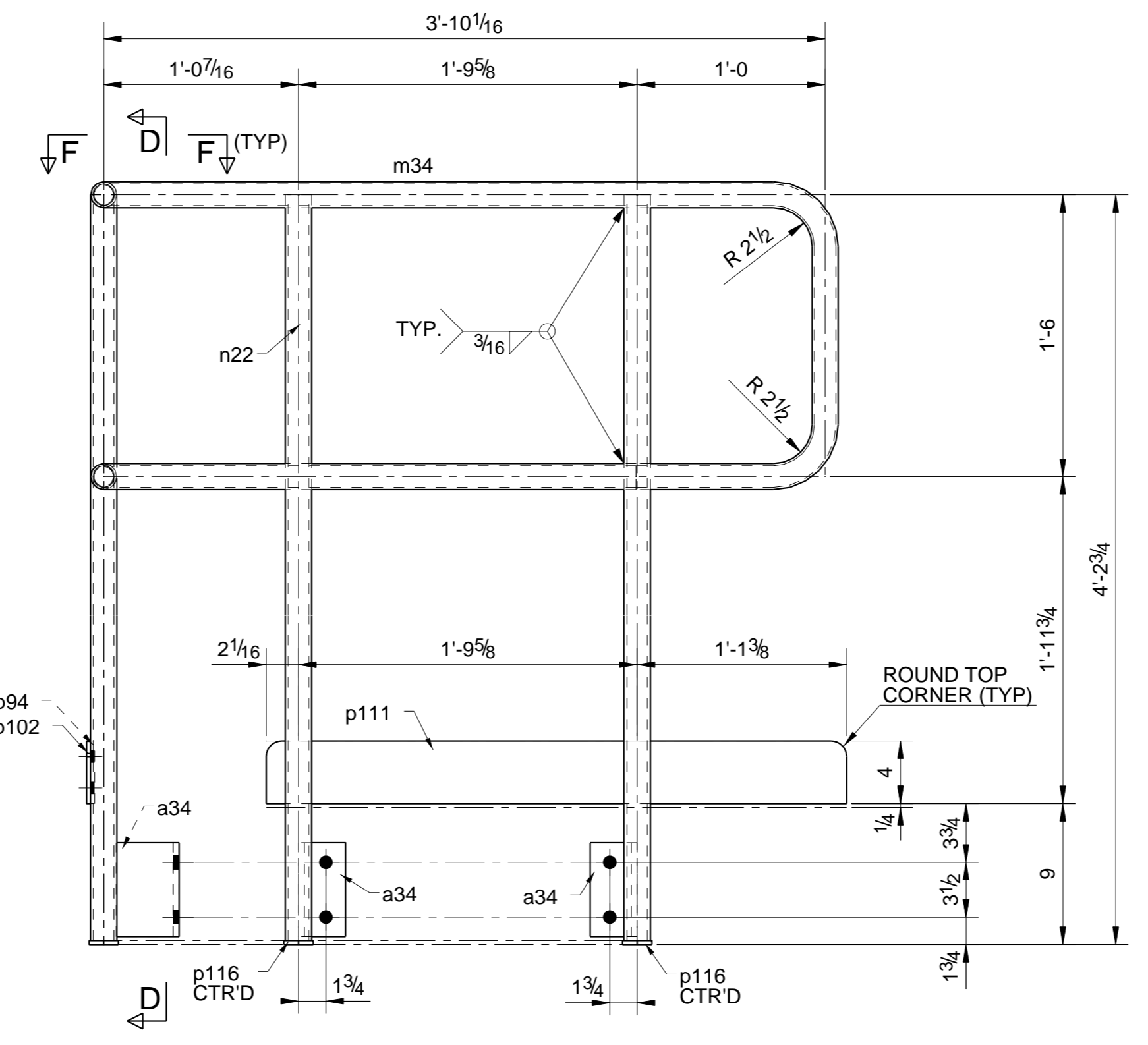
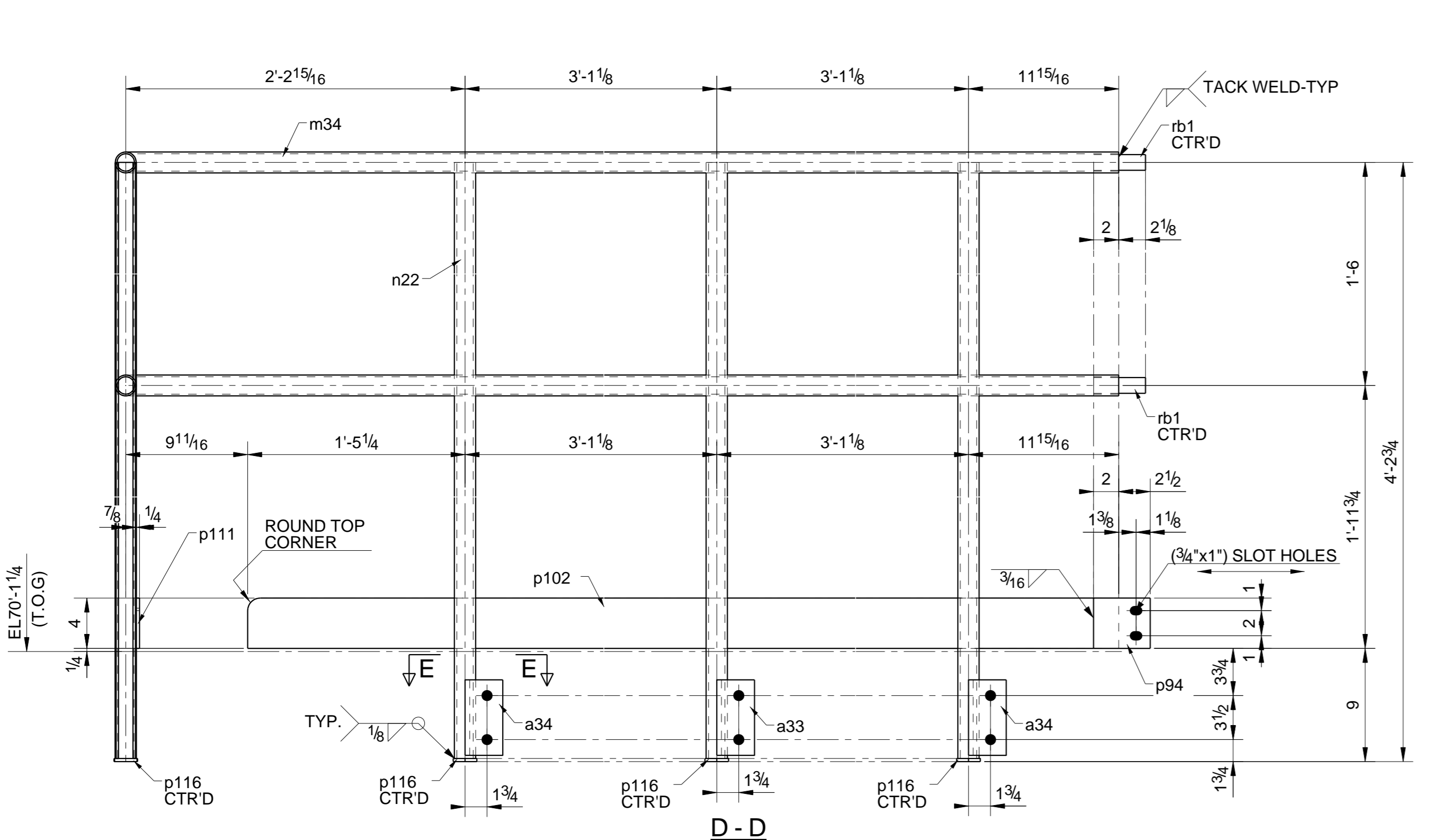
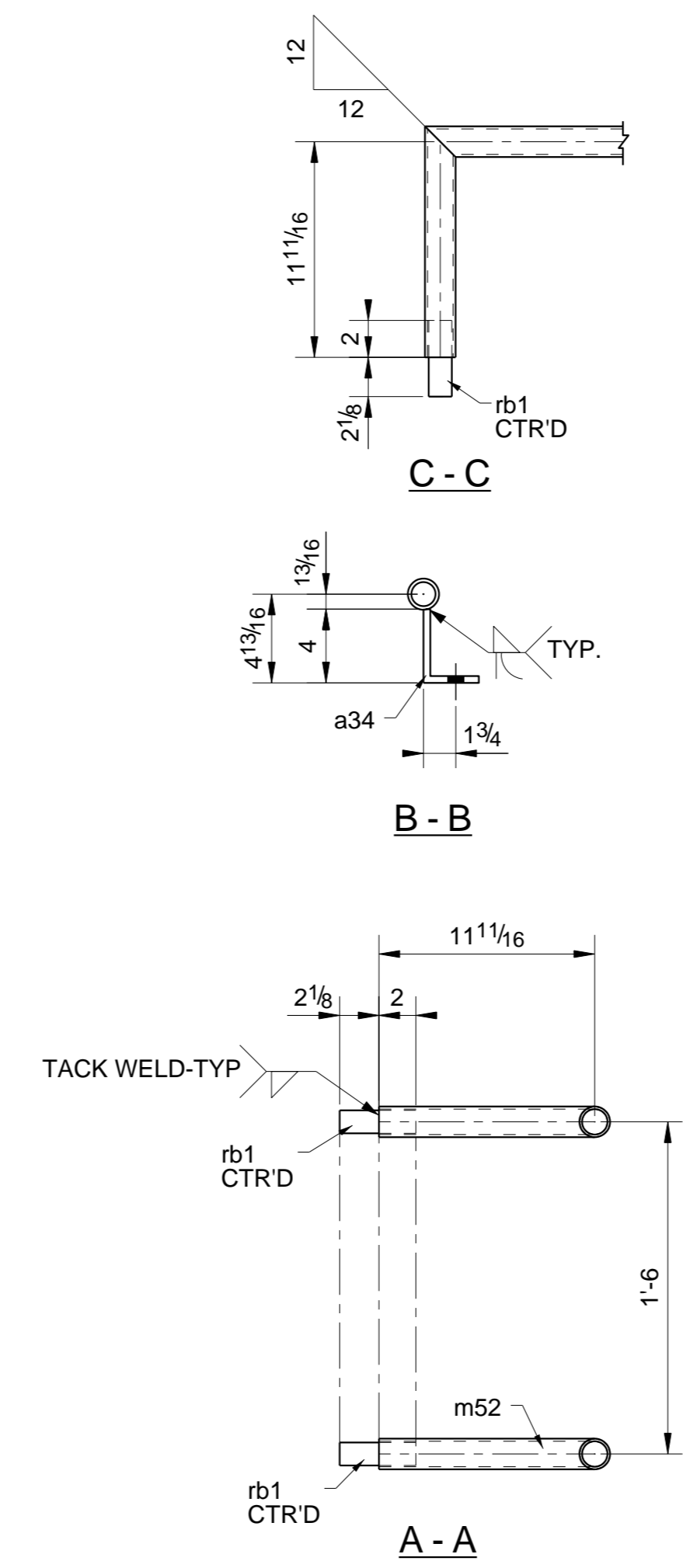
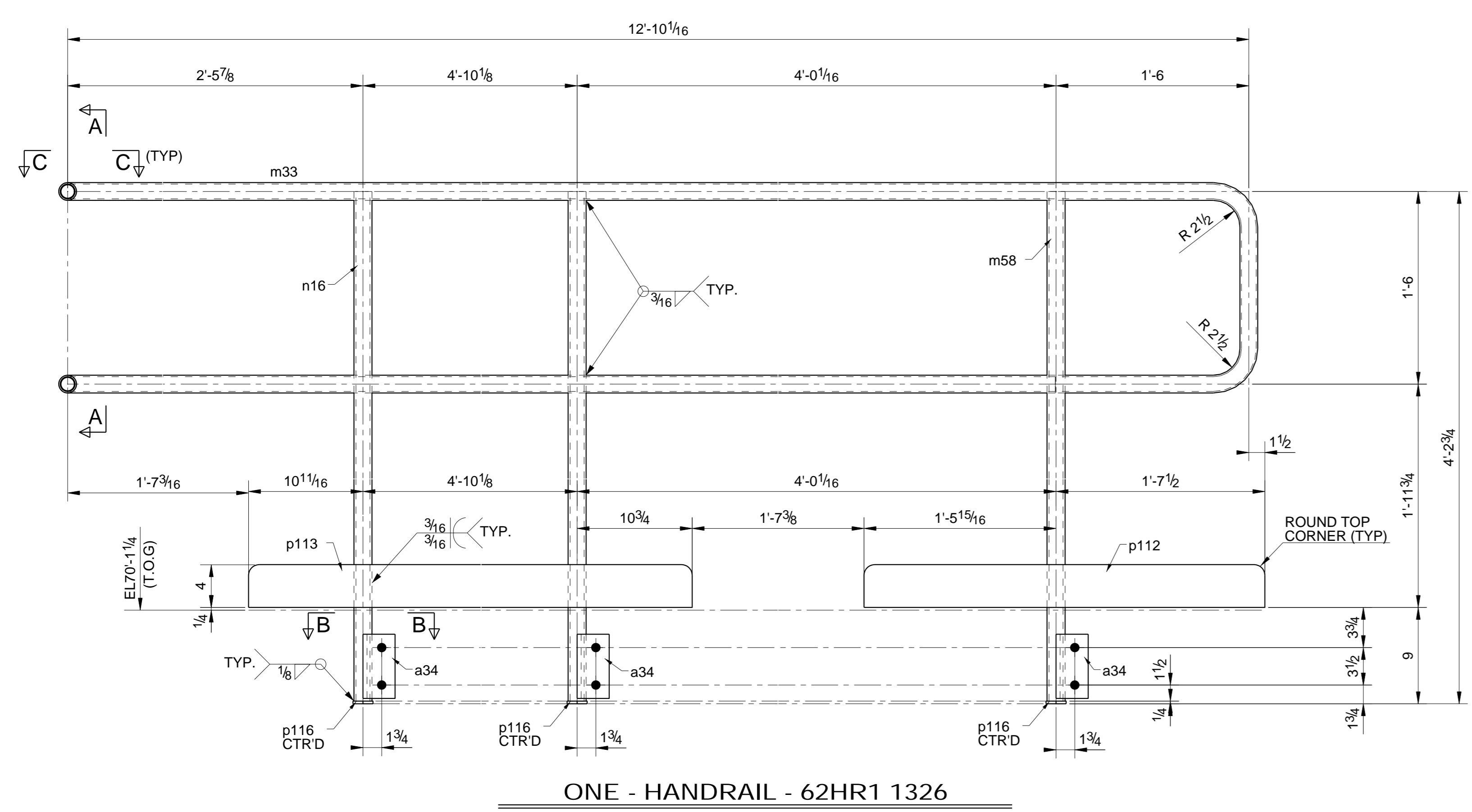


**BILL OF MATERIAL**

Quantity Per E-Dwg	E-Dwg Ref.	Line #	Quantity Total	Piece Mark	Description	Length	Weight Total	Remarks
		1.						
1	E3	2.	1	62HR1 1326	HANDRAIL		15	
		3.	3	a34	L4X3X3/8	0 6"	13	LO A36
		4.	1	p112	FB1/4"X4"	3 1 7/16"	11	A36
		5.	1	p113	FB1/4"X4"	6 7 9/16"	23	A36
		6.	3	p116	PL1/4"X1 7/8"	0 1 7/8"	1	ROUND A572
		7.	2	rb1	RB1 1/4"	0 4 1/8"	3	A36
		8.	1	m33	PIPE 1-1/4 DIA SCH. 40	33 0		LF A53
		9.	1	n16	PIPE 1-1/4 DIA SCH. 80	16 0		LF A53
		10.						
		11.			FIELD BOLT			
		12.	6		A307-G 3/4" DIA	0 2"		1 FW
		13.						
1	E3	14.	1	62HR2 1326	HANDRAIL		184	
		15.	1	a33	L4X3X3/8	0 6"	4	LO A36
		16.	4	a34	L4X3X3/8	0 6"	17	LO A36
		17.	1	p94	FB1/4"X4"	0 4 1/2"	1	SLO A36
		18.	1	p102	FB1/4"X4"	8 7 1/2"	29	A36
		19.	1	p111	FB1/4"X4"	3 1 1/16"	10	A36
		20.	5	p116	PL1/4"X1 7/8"	0 1 7/8"	1	ROUND A572
		21.	2	rb1	RB1 1/4"	0 4 1/8"	3	A36
		22.	1	m34	PIPE 1-1/4 DIA SCH. 40	34 0		LF A53
		23.	1	n22	PIPE 1-1/4 DIA SCH. 80	22 0		LF A53
		24.						
		25.			FIELD BOLT			
		26.	10		A307-G 3/4" DIA	0 2"		1 FW
		27.	2		A307-G 5/8" DIA	0 1 1/2"		1 FW
		28.						
		29.						
		30.						
		31.						
		32.						
		33.						
		34.						
		35.						
		36.						
		37.						
		38.						
		39.						
		40.						
		41.						
		42.						
		43.						
		44.						
		45.						
		46.						
		47.						
		48.						
							Total weight:	328



**SHOP NOTE:**  
 1. ALL HANDRAILS TO BE SHOP WELDED CONSTRUCTION.  
 2. ALL DIMENSION ARE FROM CENTER OF PIPE.  
 3. REMOVE ALL BURRS AND SHARP CORNER BEFORE PAINT.  
 4. ALL JOINT TO BE WELDED AND GROUND SMOOTH.

REV.	REVISION DESCRIPTION	DATE	CHK
0	For Fabrication	08/04/2014	D.P
A	For Approval	07/14/2014	D.P

**GENERAL NOTES:**  
 1) All Holes 13/16" Unless Noted Otherwise.  
 2) Finish PAINTED  
 3) All Welds 1/4" Cont. Fillet U.N.O. (Seal)  
 4) All Welds Shall be per AWS D1.1 Structural Welding Code

**NOTICE TO CONTRACTOR & ERECTOR:**  
 BACK CHARGES FOR CORRECTIVE WORK OR REPLACEMENT MATERIALS WILL NOT BE ACCEPTED UNLESS AUTHORIZED BY ORIZON INDUSTRIES BEFORE SUCH COSTS ARE INCURRED.

ERECT. DWG. REF. - E1 TO E7

CUSTOMER:  
 PROJECT:  
 MODULE - 1

DETAIL FOR:- HANDRAIL DETAIL

P.O. No. M13085-11 DRAWN BY: CHECKED BY: JOB No. SHEET No. 62