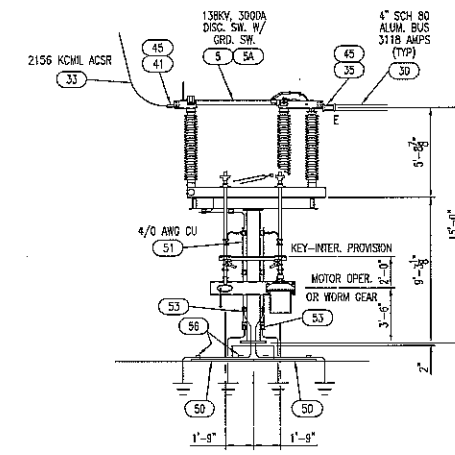


NORTH-SOUTH ELEVATION B-B (LOOKING EAST)



OPERATOR SIDE OF STRUCTURE 103

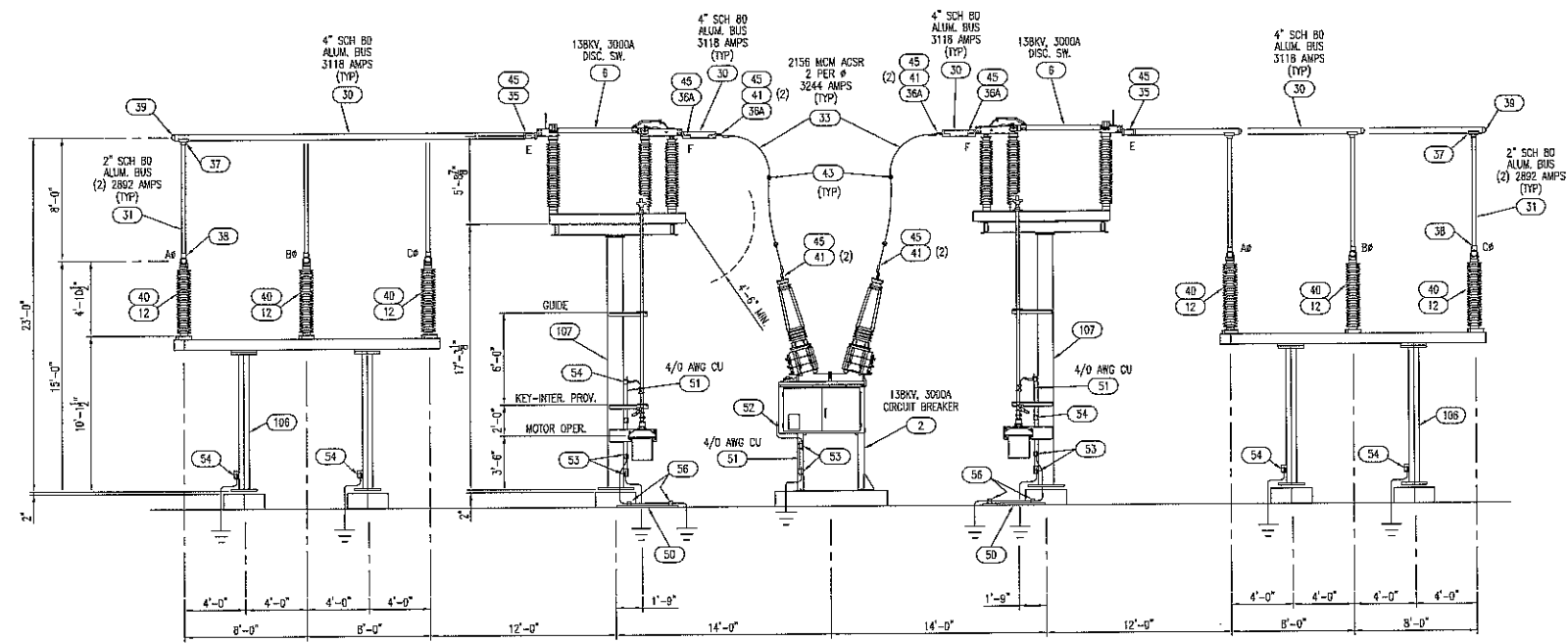
115KV LINE TO TIE IN POLE #541EM-100' AGH
1590 KCMIL ACSR LINES & 336.4 KCMIL STATIC (BY UTILITY)

HAMBY YOUNG DWG E12-227-03-R3

GENERAL NOTES

1. SEE DRAWING E12-227-01 FOR GENERAL NOTES AND LEGENDS.

A	REVISION A 3/20/2013 Eaton Block	THE INFORMATION ON THIS DOCUMENT WAS CREATED BY EATON ELECTRICAL. IT WAS DISCLOSED IN CONFIDENCE AND IS ONLY TO BE USED FOR THE PURPOSE IN WHICH IT WAS SUPPLIED.		DFTR CBE	DATE 3/20/2013	Eaton Electrical Services & Systems	
		CAD FILENAME	PRODUCT CODE X	REVISION A	ENGR CBE	DATE 3/20/2013	TITLE THIRD TAXING DISTRICT FITCH STREET STATION
				SCALE 3/16" = 1'		TYPE 115 KV SUBSTATION - GENERAL ELECTRICAL ELEVATION B-B	Mechanical
					G.D. EMPO0441	DWG M-22-003	SHEET 1 OF 1



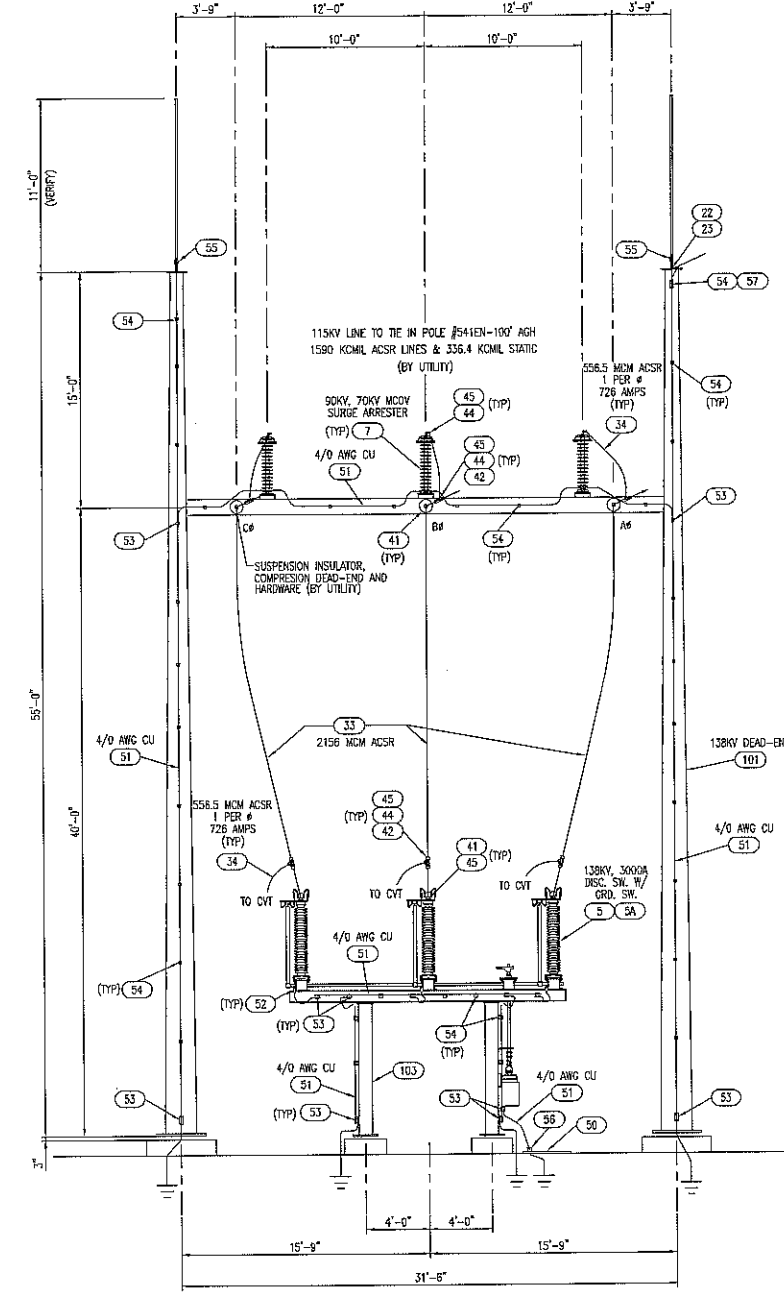
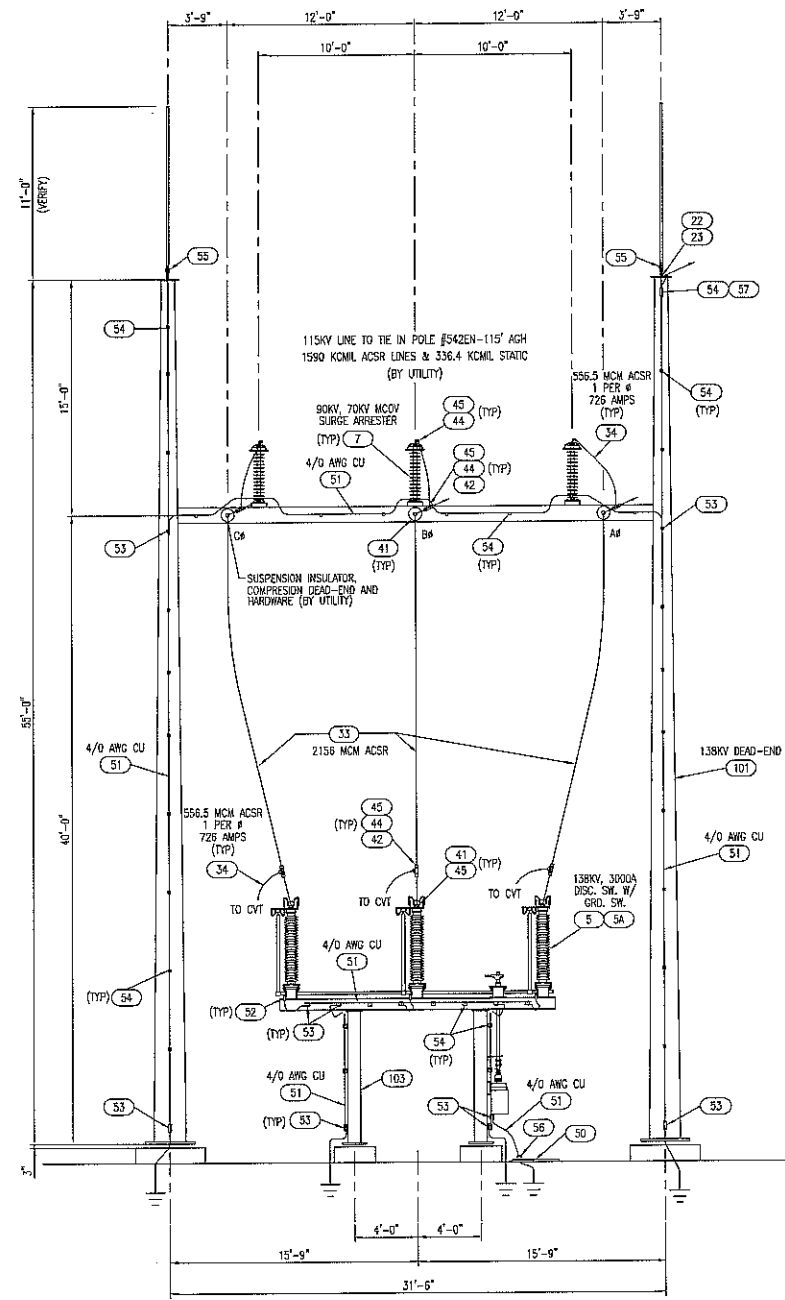
EAST-WEST ELEVATION C-C (LOOKING SOUTH)

HAMBY YOUNG DWG E12-227-04-R3

GENERAL NOTES

1. SEE DRAWING E12-227-01 FOR GENERAL NOTES AND LEGENDS.

A	REVISION	DATE	DFT/ENGR	DATE	Eaton Block	EATON Electrical Services & Systems	TITLE	TYPE	DWG	SHEET
	A									
<p>THE INFORMATION ON THIS DOCUMENT WAS CREATED BY EATON ELECTRICAL. IT WAS DISCLOSED IN CONFIDENCE AND IS ONLY TO BE USED FOR THE PURPOSE IN WHICH IT WAS SUPPLIED.</p>						SCALE	3/16" = 1'		Mechanical	
CAD FILENAME		PRODUCT CODE	REVISION	G.O.	EMPO0441		M-22-004		SHEET 1 OF 1	
		X	A							



GENERAL NOTES
1. SEE DRAWING E12-227-01 FOR GENERAL NOTES AND LEGENDS.

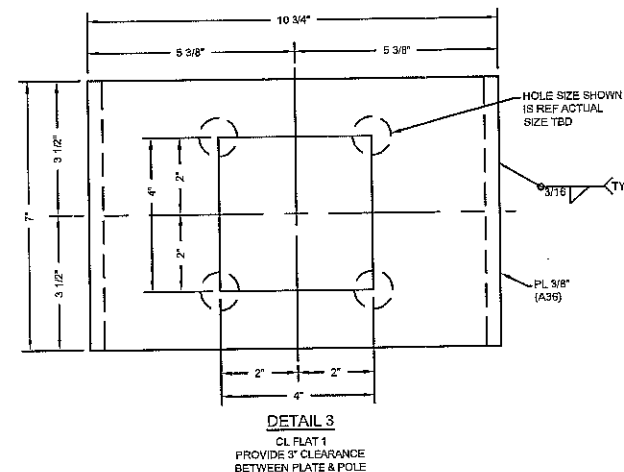
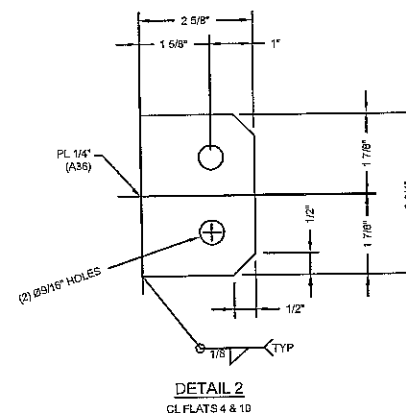
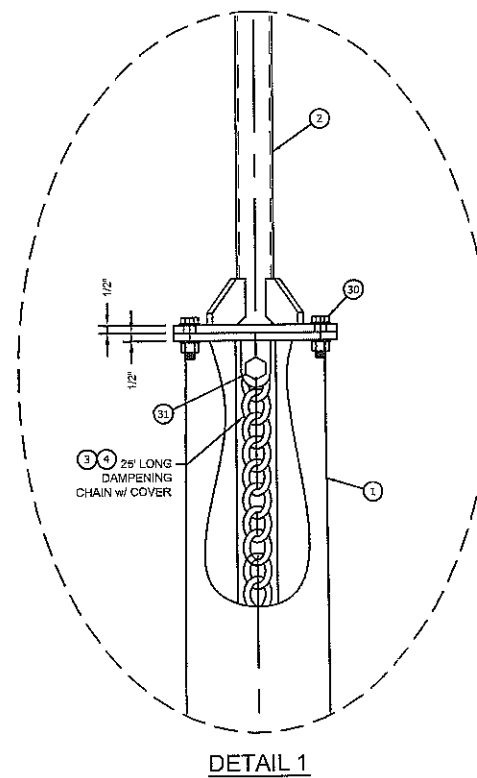
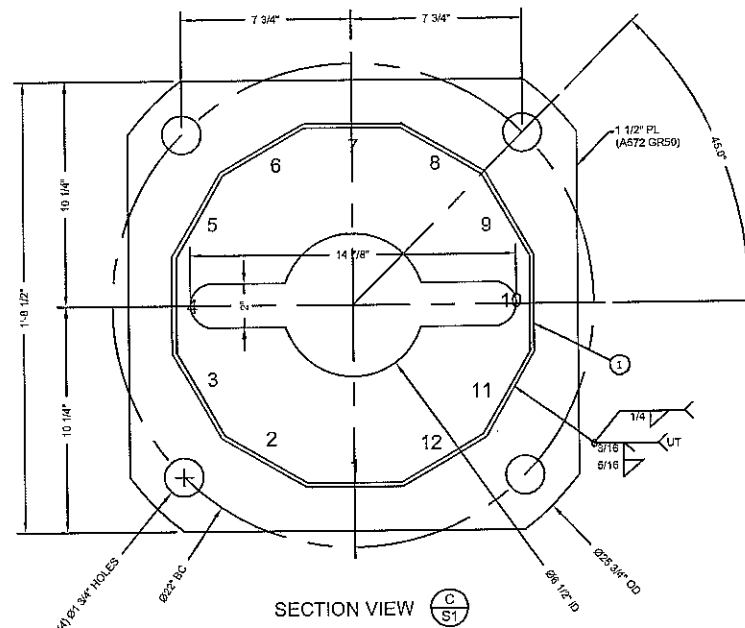
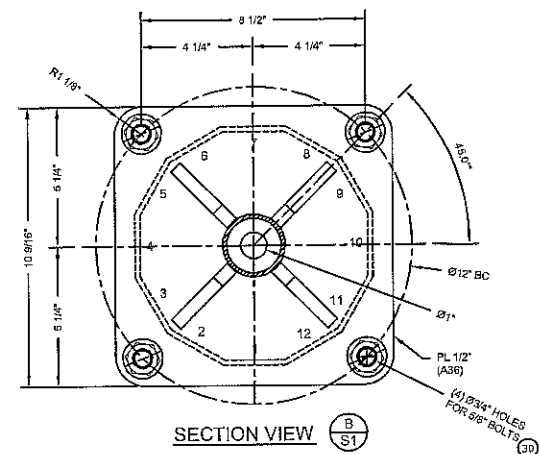
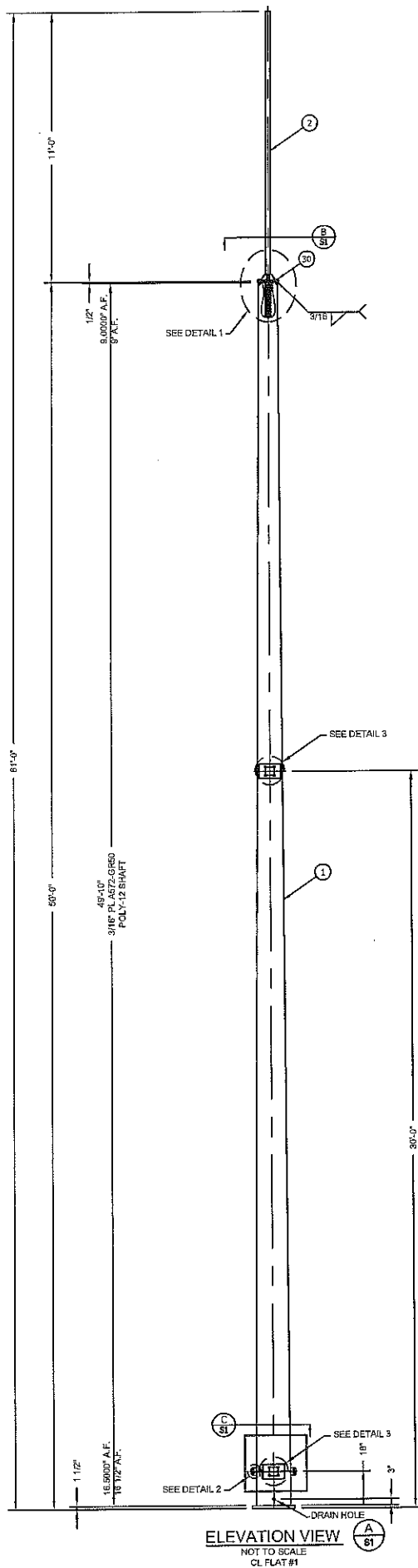
HAMBY YOUNG DWG E12-227-05-R3

A	REVISION	
	A	3/20/2013 Eden Block

THE INFORMATION ON THIS DOCUMENT WAS CREATED BY EATON ELECTRICAL. IT WAS DISCLOSED IN CONFIDENCE AND IS ONLY TO BE USED FOR THE PURPOSE IN WHICH IT WAS SUPPLIED.

DFTR	DATE
CBE	3/20/2013
ENGR	DATE
CBE	3/20/2013
SCALE	3/16" = 1'

Eaton Electrical Services & Systems	
TITLE THIRD TAXING DISTRICT FITCH STREET STATION	
TYPE 115 kV SUBSTATION-GENERAL ELECTRICAL ELEVATION D-E	Mechanical
G.O. EMP00441	DWG M-22-005
	SHEET 1 OF 1



ENGINEERED ENDEAVORS

The Experienced Point of View

10975 Kinsman Road * Newbury, OH 44065-9787
 Ph: (440) 564-5484 * Ph: (888) 270-3855
 Fx: (440) 564-5489 * www.engend.com

FOR APPROVAL

THIS DRAWING IS CONFIDENTIAL AND MAY NOT BE LOANED, REPRODUCED, COPIED EITHER WHOLLY OR IN PART, OR MADE PUBLIC IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF ENGINEERED ENDEAVORS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

REVISION HISTORY

REV. #	DATE	BY	DESCRIPTION
0	3/12/13	MLF	ISSUED FOR REVIEW

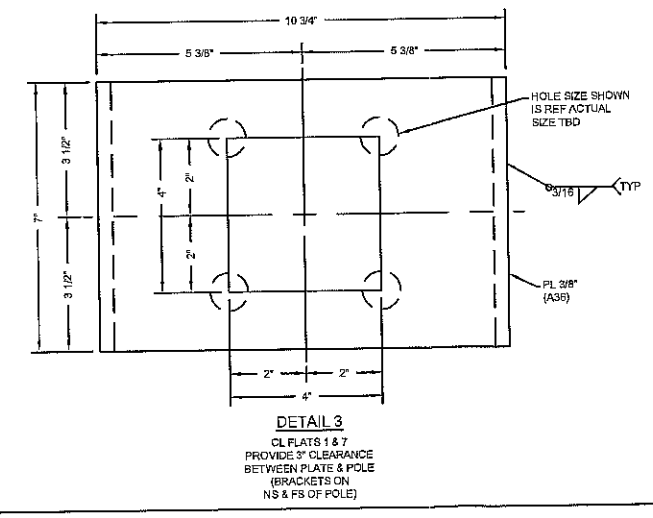
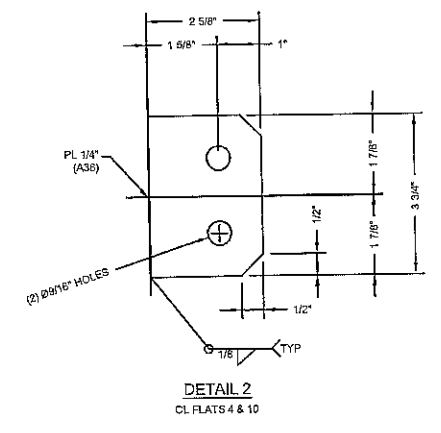
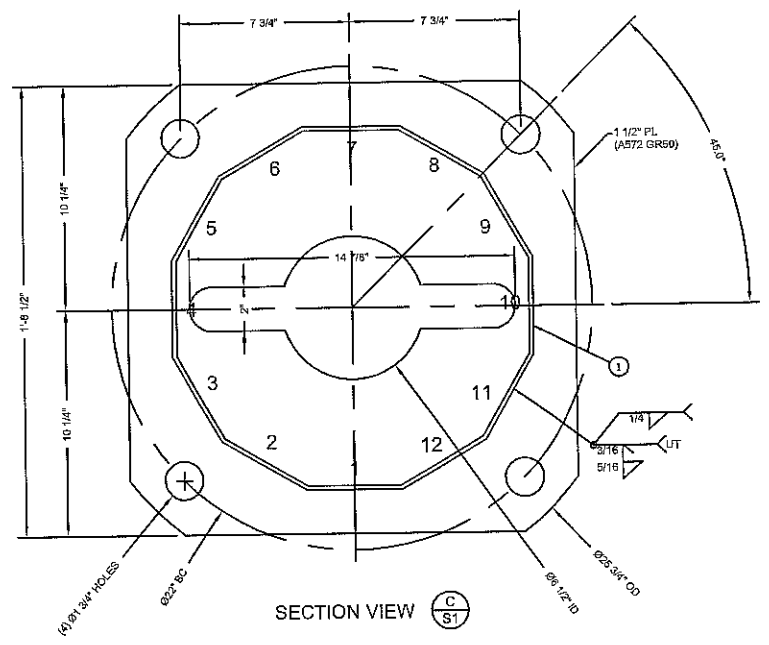
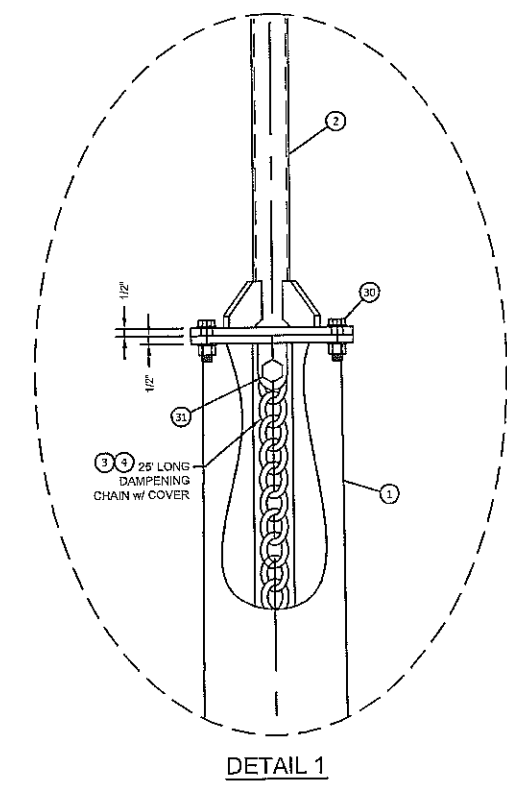
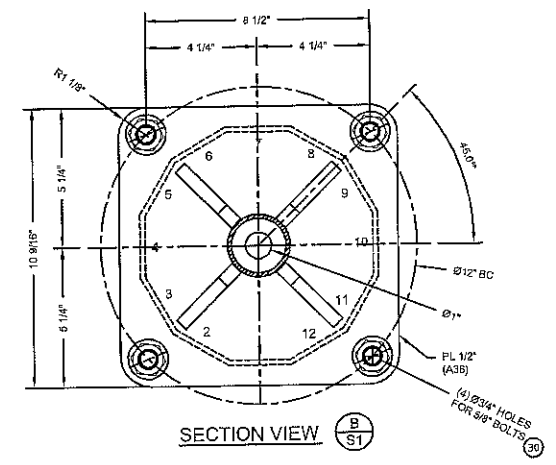
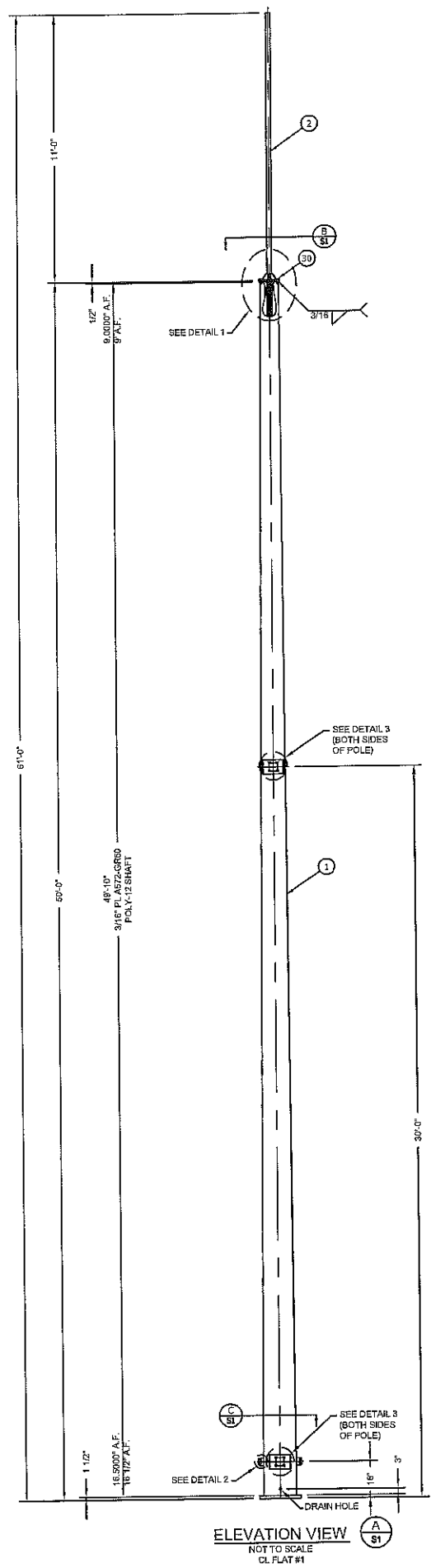
**50' LIGHTNING MAST
 HAMBY YOUNG
 FITCH STREET SUBSTATION
 NORWALK, CT**

ELEVATION VIEW & DETAILS

DRAWN BY	CREATED	PROJECT NUMBER
MLF	3/11/13	17008

DRAWING NUMBER

17008-P02-S1



STAMP

ENGINEERED ENDEAVORS
The Experienced Point of View
 10975 Kinsman Road * Newbury, OH 44065-9787
 Ph: (440) 564-5484 * Ph: (888) 270-3855
 Fx: (440) 564-5489 * www.engend.com

FOR APPROVAL
 THIS DRAWING IS CONFIDENTIAL AND MAY NOT BE LOANED, REPRODUCED, COPIED EITHER WHOLLY OR IN PART, OR MADE PUBLIC IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF ENGINEERED ENDEAVORS. - ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

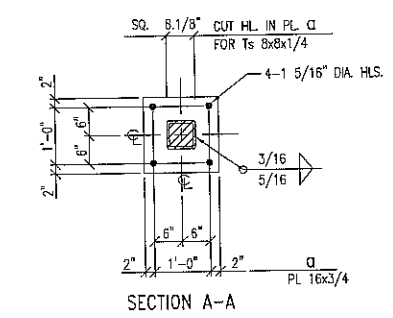
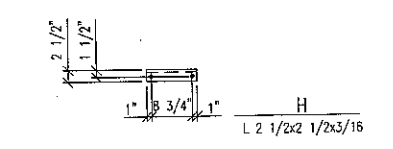
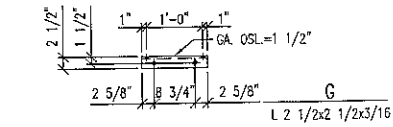
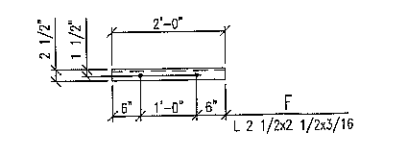
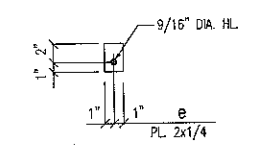
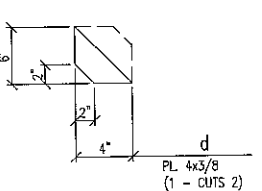
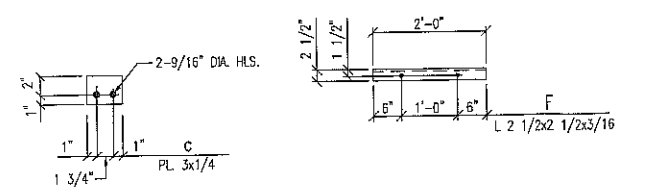
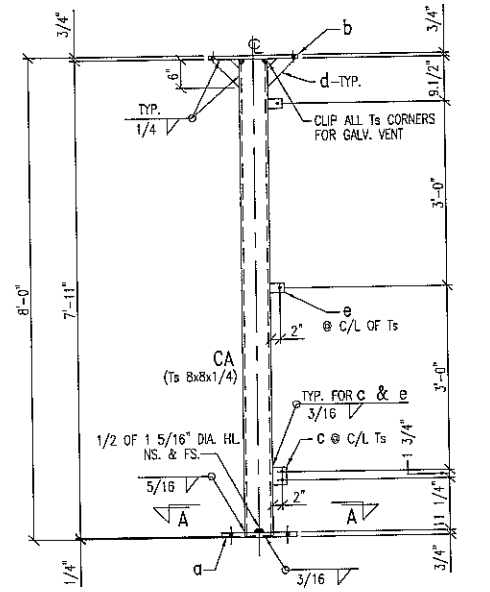
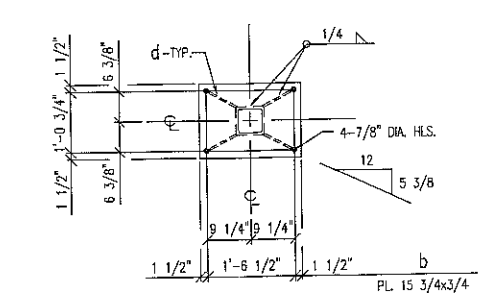
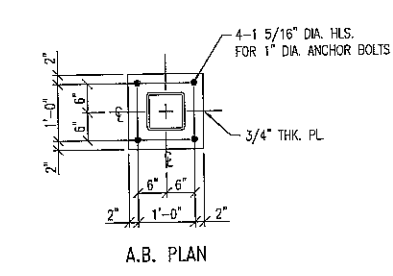
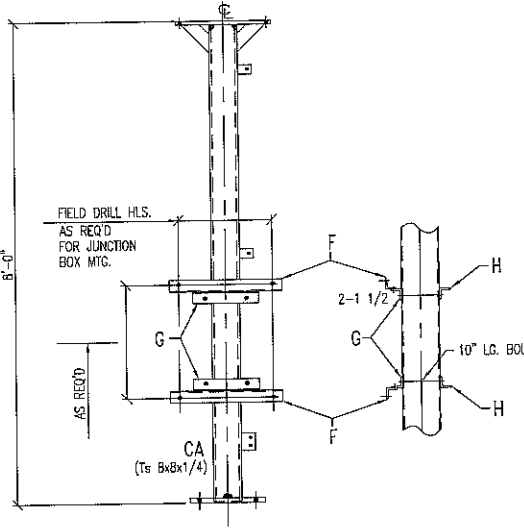
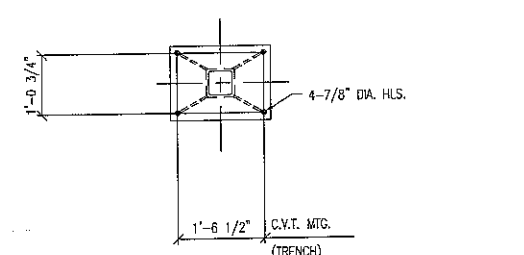
REVISION HISTORY			
REV. #	DATE	BY	DESCRIPTION
0	3/12/13	MLF	ISSUED FOR REVIEW
1	3/20/13	MLF	ADDED NOTES PER CLIENT COMMENTS 3/17/13

**50' LIGHTNING MAST
 HAMBY YOUNG
 FITCH STREET SUBSTATION
 NORWALK, CT**

ELEVATION VIEW & DETAILS

DRAWN BY MLF	CREATED 3/11/13	PROJECT NUMBER 17008
-----------------	--------------------	-------------------------

DRAWING NUMBER
17008-P02-S1



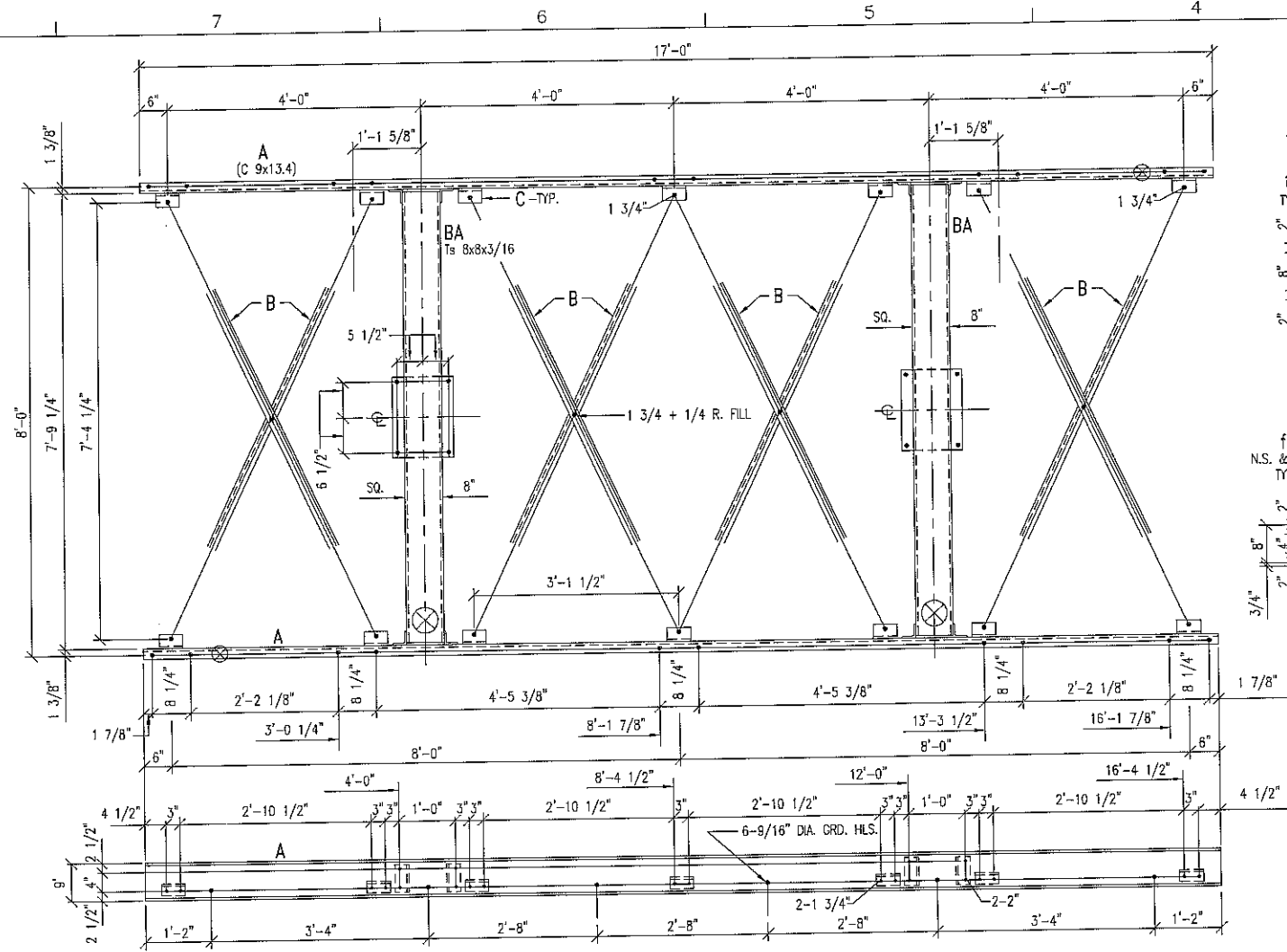
SHIPPING LIST					
SHIP KNOCKED DOWN			SHOP ASSEMBLE		
NO. PCS.	MATERIAL	LENGTH FT. IN.	MARK	REMARKS	WGT.
MAT'L FOR ONE STRUCTURE					
ONE	COLUMN		CA		
1	Ts 8 X 8 X 1/4	7 11	CA		204.4
1	PL 16 X 3/4	1 4	a		54.4
1	PL 15 3/4 X 3/4	1 9 1/2	b		71.8
1	PL 3 X 1/4	0 3 3/4	c		0.8
4	PL 4 X 3/8	0 6	d	1-CUTS 2	5.1
2	PL 2 X 1/4	0 3	e	SHOP WELD	0.9
					337.4 #
MISC. PCS					
2	L 2 1/2 X 2 1/2 X 3/16	2 0	F		12.3
2	L 2 1/2 X 2 1/2 X 3/16	1 2	G		7.2
2	L 2 1/2 X 2 1/2 X 3/16	0 10 3/4	H		5.5
					25.0 #
BOLTS					
5	5/8\"/>				

MAKE THIS SHEET - 6 TIMES
 SUFFIX ALL PIECE MARKS WITH NUMBER 1
 THUS PIECE MARK CA BECOMES CA1

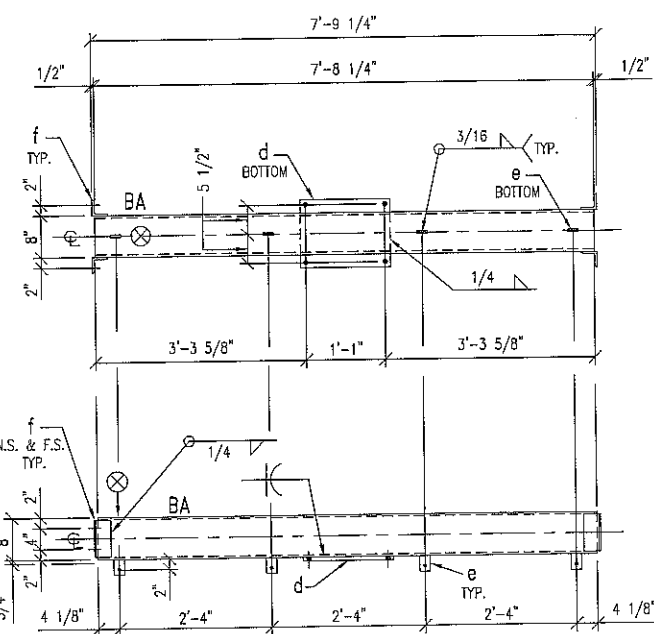
- NOTES:
- ⊗ MARK INDICATES PROPER ORIENTATION OF STRUCTURAL PIECES.
 - ALL ASTM A36 OR A992/A572 GR. 50 STEEL UNLESS NOTED.
 - ALL TUBING - ASTM A500 GRADE B.
 - ASTM A325 ERECTION BOLTS. USE THE SHORTEST BOLT THAT WILL ALLOW A HARDENED F. WA., A FULL NUT AND A FIELD INSTALLED PALNUT
 - ALL HOLES 1 1/16\"/>

HAMBY YOUNG DWG S12-227-01

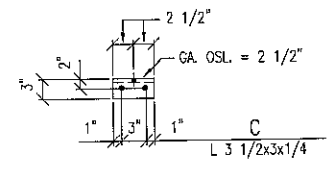
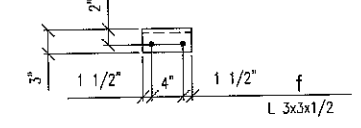
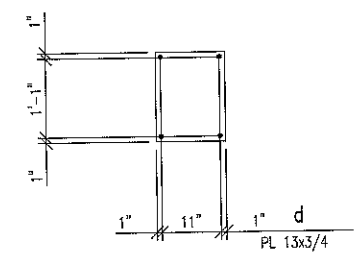
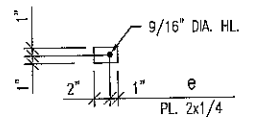
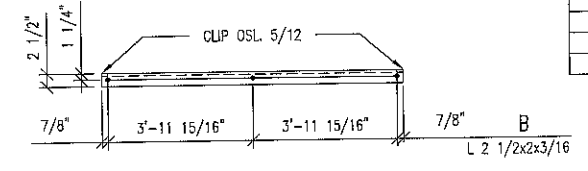
A	REVISION	DATE	BY	THE INFORMATION ON THIS DOCUMENT WAS CREATED BY EATON ELECTRICAL. IT WAS DISCLOSED IN CONFIDENCE AND IS ONLY TO BE USED FOR THE PURPOSE IN WHICH IT WAS SUPPLIED.	DFT/	DATE	EATON Electrical Services & Systems
	A	3/20/2013	Eaton		CBE	3/20/2013	
		SCALE	NONE		TYPE	138 kv 1-Ph CVT Stand-Item 102-Erection&Details Structural	
		CAD FILENAME	M-0001	PRODUCT CODE	X	REVISION	A
		G.O.	EMPO0441	DWG	S-50-001	SHEET 1 OF 1	



TRUSS TA
(C 9x13.4)



BEAM BA
(Ts 8x8x3/16)



SHIPPING LIST

SHIP KNOCKED DOWN		SHOP ASSEMBLY				
NO. PCS.	MATERIAL	LENGTH		MARK	REMARKS	WGT.
		FT.	IN.			
MAT'L FOR ONE STRUCTURE						
ONE	TRUSS			TA		
2	C 9 X 13.4	17	0	A	9x2.3/8	455.6
8	L 2 1/2 X 2 X 3/16	8	1.5/8	B		178.0
14	L 3 1/2 X 3 X 1/4	0	5	C		31.5
2	Ts 8 X 8 X 3/16	7	8 1/4	BA		301.8
2	PL 13 X 3/4	1	5	d		83.0
8	PL 2 X 1/4	0	3	e		3.4
8	L 3 X 5 X 1/2	0	7	f	SHIP WELD INTO 2-BA	43.9
						1,098.2 #
					6-13/4, 15-2", 4-1/4" R.F.	

MAKE THIS SHEET - 2 TIMES

SUFFIX ALL PIECE MARKS WITH NUMBER 2
THUS PIECE MARK BA BECOMES BAZ

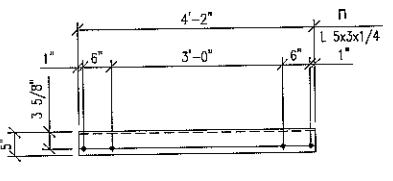
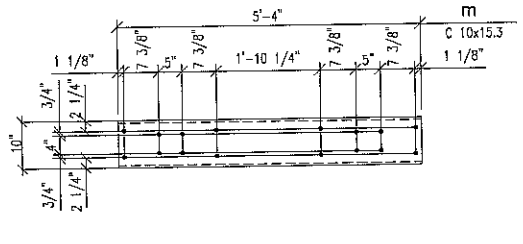
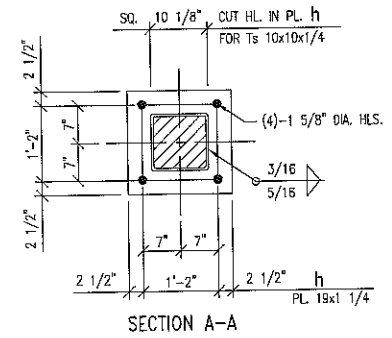
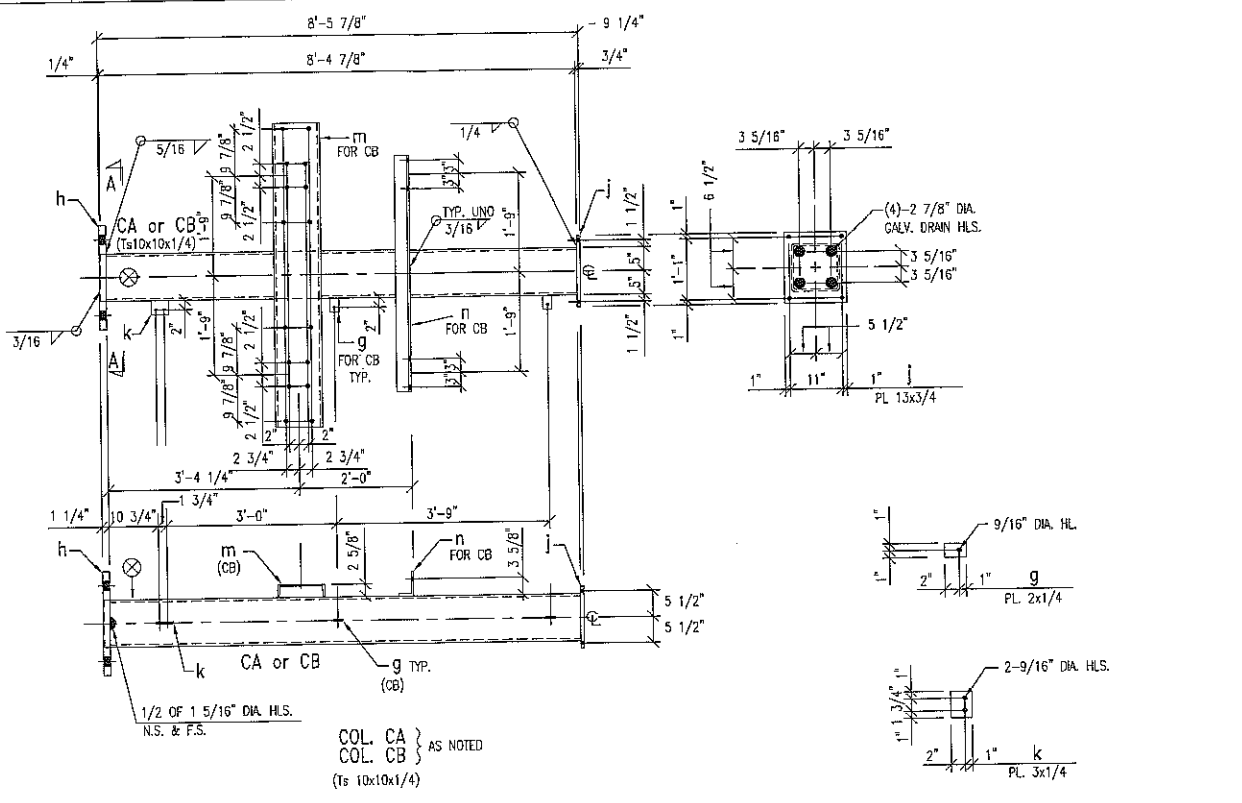
- NOTES:
- ⊗ MARK INDICATES PROPER ORIENTATION OF STRUCTURAL PIECES.
 - ALL ASTM A36 OR A992/A572 GR. 50 STEEL UNLESS NOTED.
ALL TUBING - ASTM A500 GRADE B.
 - ASTM A325 ERECTION BOLTS. USE THE SHORTEST BOLT THAT WILL ALLOW A HARDENED F. WA., A FULL NUT AND A FIELD INSTALLED PALNUT
 - ALL HOT DIP GALVANIZED AFTER FABRICATION (ASTM A123).
 - ALL HOLES 11/16" DIA. FOR 5/8" DIA. BOLTS UNLESS NOTED.
 - MINIMUM EDGE DISTANCE AS NOTED.
 - PIECE MARK STAMPED INTO METAL WITH NOT LESS THAN 3/8" HIGH CHARACTERS BEFORE GALVANIZING.
 - ALL WELDING ELECTRODES SHALL BE E70.

HAMBY YOUNG DWG S12-227-02

REVISION A 3/20/2013 Extra Mark	THE INFORMATION ON THIS DOCUMENT WAS CREATED BY EATON ELECTRICAL. IT WAS DISCLOSED IN CONFIDENCE AND IS ONLY TO BE USED FOR THE PURPOSE IN WHICH IT WAS SUPPLIED.		DFTB CBE	DATE 3/20/2013	EATON Electrical Services & Systems	
			ENGR CBE	DATE 3/20/2013	TITLE THIRD TAXING DISTRICT FITCH STREET STATION	
			SCALE NONE	TYPE 138 kV 3-Ph Low Switch Stand Item 103 - Steel Details		Structural
CAD FILENAME M-0001		PRODUCT CODE X	REVISION A	G.D. EMPO0441		DWG S-50-002
						SHEET 1 OF 1

SHIPPING LIST

NO. POS.	MATERIAL	LENGTH		MARK	REMARKS	WGT.
		FT.	IN.			
SHIP KNOCKED DOWN						
MATERIAL FOR ONE STRUCTURE						
ONE	COL.					
1	Ts 10 X 10 X 1/4	8	4 7/8	CA		274.3
1	PL 19 X 1 1/4	1	7	h		127.9
1	PL 13 X 3/4	1	3	j		41.5
1	PL 3 X 1/4	0	3 3/4	k		0.8
					SHOP WELD	444.5 #
ONE	COL.					
1	Ts 10 X 10 X 1/4	8	4 7/8	CB		274.3
2	PL 2 X 1/4	0	3	g		0.8
1	PL 19 X 1 1/4	1	7	h		127.9
1	PL 13 X 3/4	1	3	j		41.5
1	PL 3 X 1/4	0	3 3/4	k		0.8
1	C 10 X 15.3	5	4	m	10@2 5/8	81.8
1	L 5 X 3 X 1/4	4	2	n		27.5
					SHOP WELD	554.5 #
FIELD	SHOP	BOLTS				
-	46	5/8" DIA. X 1 3/4" GALV.	BOLT HEX HD.		A325	16.2
-	16	5/8" DIA. X 2" GALV.	BOLT HEX HD.		A325	6.0
9	-	5/8" DIA. X 2 3/4" GALV.	BOLT HEX HD.		A325	4.0
9	62	5/8" DIA. GALV.	HEX NUT		A325	0.3
-	4	5/8" DIA. GALV.	R. FULL		1/4" THK.	2.6
9	62	5/8" DIA. GALV.	HARDENED F. WA.		1/8" THK.	2.7
75	-	5/8" DIA. GALV.	HEX PALNUT			31.8 #
						1,030.8 #
						TOTAL BLK. WGT.=2,129.0 #
						GALV. WGT.= 2,203.5 #

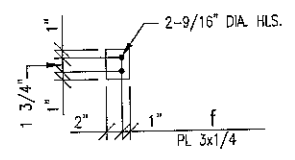
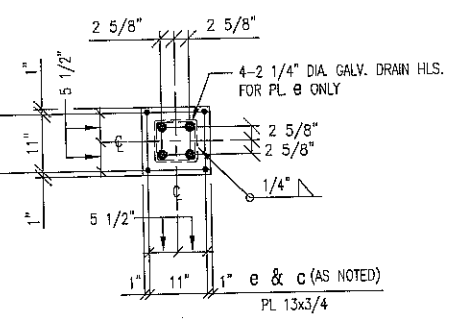
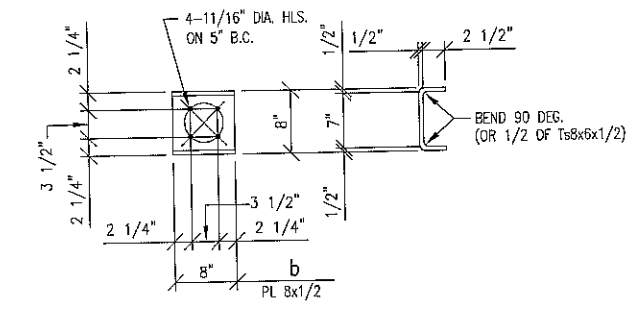
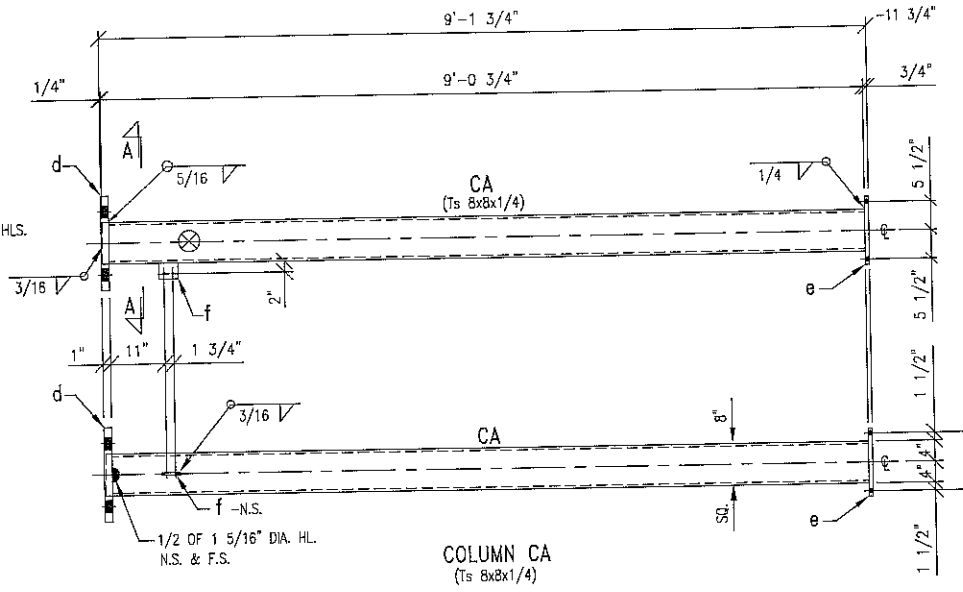
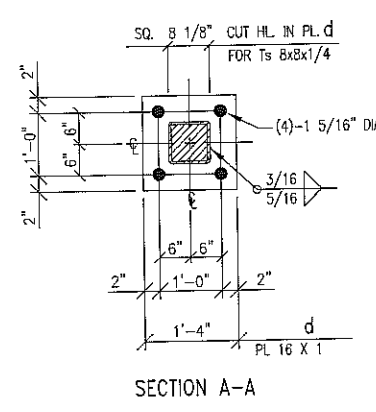
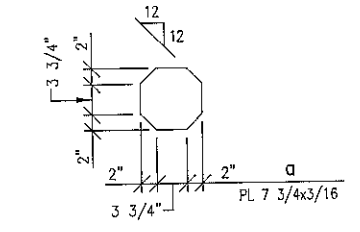
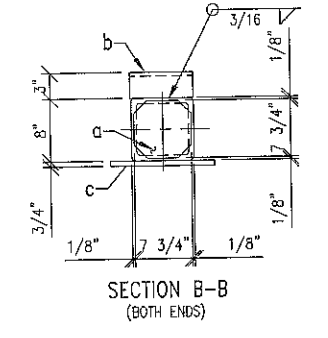
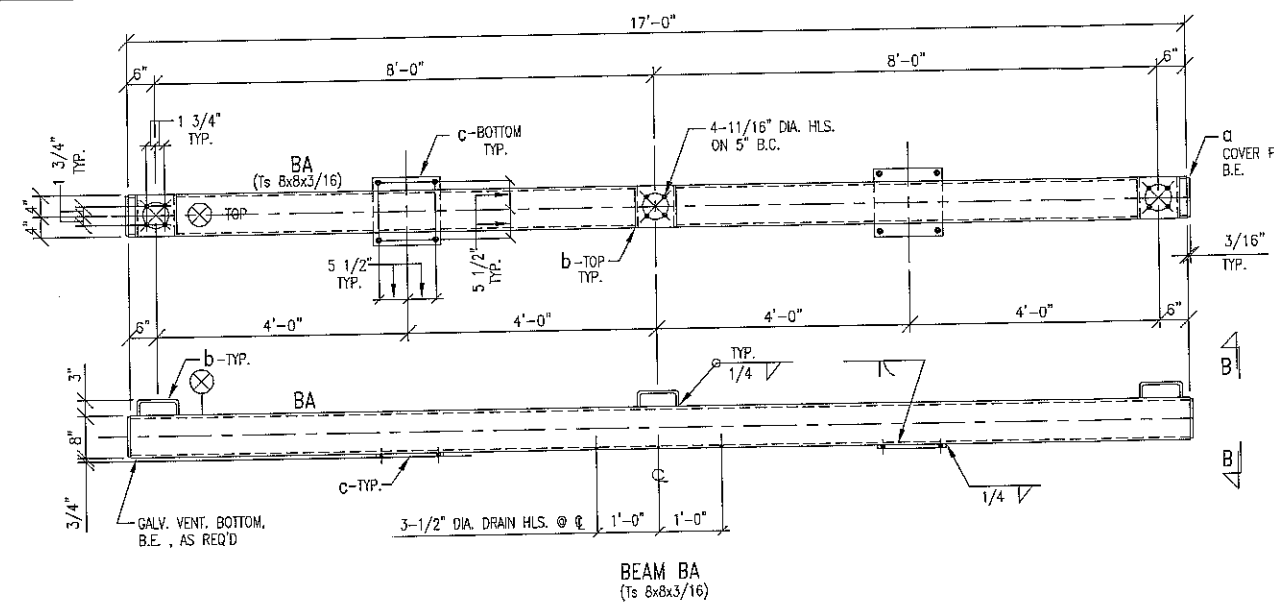


MAKE THIS SHEET - 2 TIMES
 SUFFIX ALL PIECE MARKS WITH NUMBER 3
 THUS PIECE MARK CA BECOMES CA3

- NOTES:**
- ⊗ MARK INDICATES PROPER ORIENTATION OF STRUCTURAL PIECES.
 - ALL ASTM A36 OR A992/A572 GR. 50 STEEL UNLESS NOTED.
ALL TUBING - ASTM A500 GRADE B.
 - ASTM A325 ERECTION BOLTS. USE THE SHORTEST BOLT THAT WILL ALLOW A HARDENED F. WA., A FULL NUT AND A FIELD INSTALLED PALNUT
 - ALL HOT DIP GALVANIZED AFTER FABRICATION (ASTM A123).
 - ALL HOLES 1 1/16" DIA. FOR 5/8" DIA. BOLTS UNLESS NOTED.
 - MINIMUM EDGE DISTANCE AS NOTED.
 - PIECE MARK STAMPED INTO METAL WITH NOT LESS THAN 3/8" HIGH CHARACTERS BEFORE GALVANIZING.
 - ALL WELDING ELECTRODES SHALL BE E70.

THE INFORMATION ON THIS DOCUMENT WAS CREATED BY EATON ELECTRICAL. IT WAS DISCLOSED IN CONFIDENCE AND IS ONLY TO BE USED FOR THE PURPOSE IN WHICH IT WAS SUPPLIED.	DFTG	CBE	DATE	3/20/2013	EATON Electrical Services & Systems	
	ENGR	CBE	DATE	3/20/2013		
	SCALE	NONE		TITLE		
CAD FILENAME	PRODUCT CODE	REVISION			TYPE	138 kv 3-Ph Low Switch Stand Item 103-Steel Details Structural
	X	A			G.O.	EMPO0441
					DWG	S-50-003
					SHEET	1 OF 1

REVISION
 A 3/20/2013
 Eatin Dwg



SHIPPING LIST						
NO. Pcs.	MATERIAL	LENGTH		MARK	REMARKS	WGT.
		FT.	IN.			
MAT'L. FOR ONE STRUCTURE						
1	BEAM			BA		
1	Ts 8 X 8 X 3/16	17	0	BA		333.7
2	PL 7 3/4 X 3/16	0	7 3/4	e		6.4
3	PL 8 X 1/2	1	0	b	BEND	40.8
2	1/2 OF Ts 8x8x1/2					
2	PL 13 X 3/4	1	1	c	SHOP WELD	71.9
						452.8
2	COLUMN			CA		
2	Ts 8 X 8 X 1/4	9	0 3/4	CA		488.0
2	PL 16 X 1	1	4	d		145.1
2	PL 13 X 3/4	1	1	e		71.9
2	PL 3 X 1/4	0	3 3/4	f		1.6
					SHOP WELD	
					MAKE 2- CA	686.6
BOLTS						
9	5/8" DIA. X 2 3/4" GALV. BOLT HEX. HD.			A325		4.0
9	5/8" DIA. GALV. HEX. NUT			A563-DH		0.3
9	5/8" DIA. GALV. HARDENED FL. WA.			1/8" THK.		0.3
9	5/8" DIA. GALV. PALNUT					0.3
						4.9
						BLK. WGT. = 1144.3
						GALV. WGT. = 1184.4

MAKE THIS SHEET - 4 TIMES
SUFFIX ALL PIECE MARKS WITH NUMBER 4
THUS PIECE MARK CA BECOMES CA4

- NOTES:
- ⊗ MARK INDICATES PROPER ORIENTATION OF STRUCTURAL PIECES.
 - ALL ASTM A36 OR A992/A572 GR. 50 STEEL UNLESS NOTED.
 - ALL TUBING - ASTM A500 GRADE B.
 - ASTM A325 ERECTION BOLTS. USE THE SHORTEST BOLT THAT WILL ALLOW A HARDENED F. WA., A FULL NUT AND A FIELD INSTALLED PALNUT.
 - ALL HOT DIP GALVANIZED AFTER FABRICATION (ASTM A123).
 - ALL HOLES 11/16" DIA. FOR 5/8" DIA. BOLTS UNLESS NOTED.
 - MINIMUM EDGE DISTANCE AS NOTED.
 - PIECE MARK STAMPED INTO METAL WITH NOT LESS THAN 3/8" HIGH CHARACTERS BEFORE GALVANIZING.
 - ALL WELDING ELECTRODES SHALL BE E70.

HAMBY YOUNG DWG S12-227-04

REVISION A. 3/20/2013 Eaton Black	THE INFORMATION ON THIS DOCUMENT WAS CREATED BY EATON ELECTRICAL. IT WAS DISCLOSED IN CONFIDENCE AND IS ONLY TO BE USED FOR THE PURPOSE IN WHICH IT WAS SUPPLIED.		DTR CBE	DATE 3/20/2013	Eaton Electrical Services & Systems
			ENGR CBE	DATE 3/20/2013	
		SCALE NONE	TYPE 138 kV 3-Ph Low Bus Support Item 104-Steel Details		Structural
		CAD FILENAME	PRODUCT CODE X	REVISION A	G.O. EMP00441
		DWG S-50-004		SHEET 1 OF 1	