



A CMS Energy Company

1945 West Parnall Road  
Jackson, MI 49201-8643

May 5, 2006

**EXPRESS MAIL**

Phil Mann  
Michigan Electric Transmission Company, LLC  
c/o NSI Consulting and Development, Inc.  
26657 Woodward Ave, Suite 100  
Huntington Woods, MI 48070

**SUBJECT:** Proposed Use of Alma-Summerton Future Double Circuit Structures  
Reference No: Chippewa Township/Isabella County/Lott

**REFERENCE:** Amended and Restated Easement Agreement (the "Agreement") dated April 29, 2002, between Consumers Energy Company ("Consumers") and Michigan Electric Transmission Company, now Michigan Electric Transmission Company, LLC ("METC")

Pursuant to Section 7.1 of the Agreement, Consumers hereby notifies METC that Consumers intends to add a new 46 kV circuit to existing future double circuit structures #191 through #218 of the Summerton-Alma line. This portion of the Summerton-Alma line begins at structure #191 in Section 36, T14N-R04W, Union Township, Isabella County, passes through Section 31, T14N-R03W, Chippewa Township, Isabella County, and runs north to structure #218 in Section 30, T14N-R03W, Chippewa Township, Isabella County.

METC Planning has reviewed this proposed use and responded that it is acceptable.

The location of the lands on which the subject future double circuit structures are located, and a further description of the intended use, are set forth on "Annex A", attached to this letter. Also included with this notification are additional documents showing the proposed pole top designs to be used, the record wire arrangement drawings, a construction list sheet for each structure Consumers proposes to use, and a Form 391 summarizing the proposed use.

Under said Section 7.1 of the Agreement, METC must within 30 days of this notice notify Consumers, as "Initiating User," of whether or not METC approves the proposed use as a Compatible Use. If you do not notify us either way within 30 days of this notice, then, as provided in said Section 7.1, METC will be deemed to have approved the proposed use as being a Compatible Use. We would appreciate, however, receiving METC's express approval of the proposed use as being a Compatible Use as soon as possible so that we can start work without delay.

This letter is being sent to you in duplicate. If METC agrees that the proposed use is a Compatible Use, please indicate that by signing and returning a copy of this letter to us as soon as possible, so that we can immediately proceed with construction. The other copy is for your records.

May 5, 2006

Page Two

Reference No: Chippewa Township/Isabella County/Lott

If METC believes the proposed use is not a Compatible Use, please provide an explanation with your response to help aid in the resolution that would follow.

Sincerely,



K.C. Lott  
System Planning & Protection  
Consumers Energy  
1945 West Parnall Road  
Jackson, MI 49201-8643

Cc:            \*GABultsma, Grand Rapids 203            \*BDBugbee, P12-1017A  
                 \*BGott, PE-A402                            \*TJSparks, P24-332B  
                 \*RACollins, Grand Rapids 201-C            \*JRanderson, P11-510A  
                 \*KARudolph, P24-414B                        \*MAMarr, EP7-428

\* Letter only (no attachments)

APPROVED:

MICHIGAN ELECTRIC TRANSMISSION  
COMPANY, LLC

By:  \_\_\_\_\_

Date: 6/6/06

ANNEX A

May 5, 2006

Reference No: Chippewa Township/Isabella County/Lott

**LAND TO BE IMPACTED:**

That certain strip of land in Chippewa Township, County of Isabella, State of Michigan, described as follows:

See attached highlighted patrol map: Future double circuit structures located in Section 36, T14N-R04W, in Union Township, Isabella County; and Section 31, T14N-R03W and Section 30, T14N-R03W, in Chippewa Township, Isabella County.

**PROPOSED USE:**

Pursuant to Section 7.1 of the Agreement, Consumers hereby notifies METC that Consumers intends to add a new 46 kV circuit to the existing future double circuit structures #191 through #218 of the Summerton-Alma line. This portion of the Summerton-Alma line begins at structure #191 in Section 36, T14N-R04W, Union Township, Isabella County, passes through Section 31, T14N-R03W, Chippewa Township, Isabella County, and runs north to structure #218 in Section 30, T14N-R03W, Chippewa Township, Isabella County.

CONSUMERS ENERGY  
NOTIFICATION OF PROPOSED LINE CONSTRUCTION  
REQUIRING COORDINATION WITH TRANSMISSION LINES

Send two (2) copies to:

Transmission Lines Design and Standards

Att: \_\_\_\_\_

Jackson, Michigan

TO BE FILLED IN BY SYSTEM OWNER / ENGINEER / CES

Headquarters \_\_\_\_\_

Work Order No. \_\_\_\_\_

Date \_\_\_\_\_

**PROPOSED DISTRIBUTION CONSTRUCTION**

Sketch Attached  Yes  No

Primary:

Voltage 46kV Phase 3

No. of Wires 3 Crossarms Per Pole 3-HP

Wire Size 336.4 ACSR Length of Crossarms \_\_\_\_\_

Distance Below Transmission Attaching 2<sup>nd</sup> Circuit

Skip-Span  Yes  No

Secondary:

No. of Wires \_\_\_\_\_ Wire Size \_\_\_\_\_

Other Details: Attach 2<sup>nd</sup> circuit to existing FDC line. Pole top drawings included, detailing 2<sup>nd</sup> circuit attachment.

TO BE FILLED IN BY TRANSMISSION LINES DESIGN  
AND STANDARDS OR METC

Engineering Required  Yes  No

Checked By \_\_\_\_\_ Date \_\_\_\_\_

GWO No. \_\_\_\_\_

**EXISTING DISTRIBUTION FACILITIES**

Description:

**LOCATION**

Township Chippawa & Union County Isabella

Section 30, 31, & 36 Range R03 & R04

Transmission Line Involved 6AF Alma-Summerton

Transmission Pole No. 191 thru 218

METC Line

**REMARKS:**

Prepared By Michael J. Newsome (517) 788-8906  
System Planning and Performance / Electric Service

Date May 4, 2006

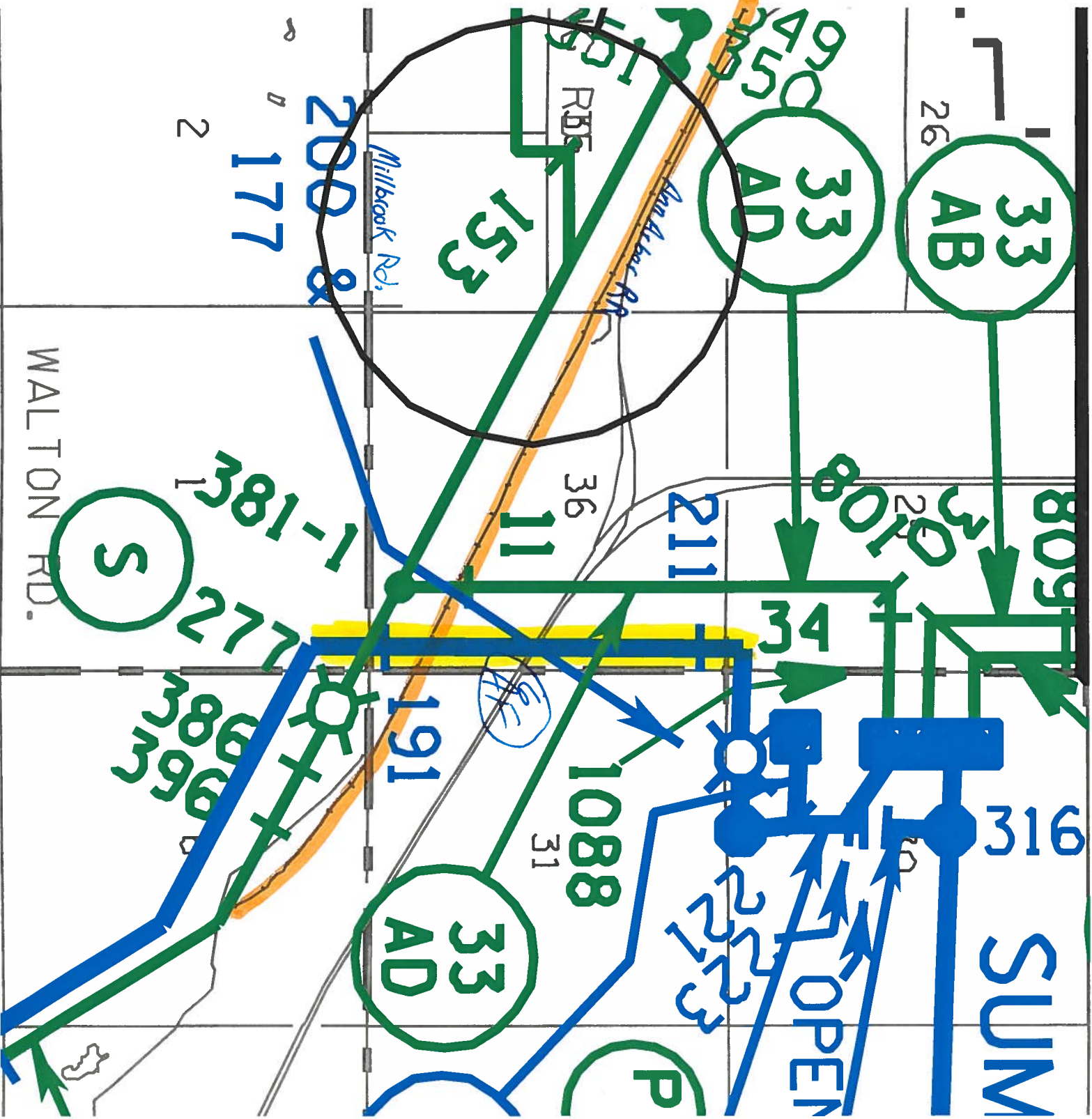
Approved By \_\_\_\_\_  
Transmission Lines Design and Standards

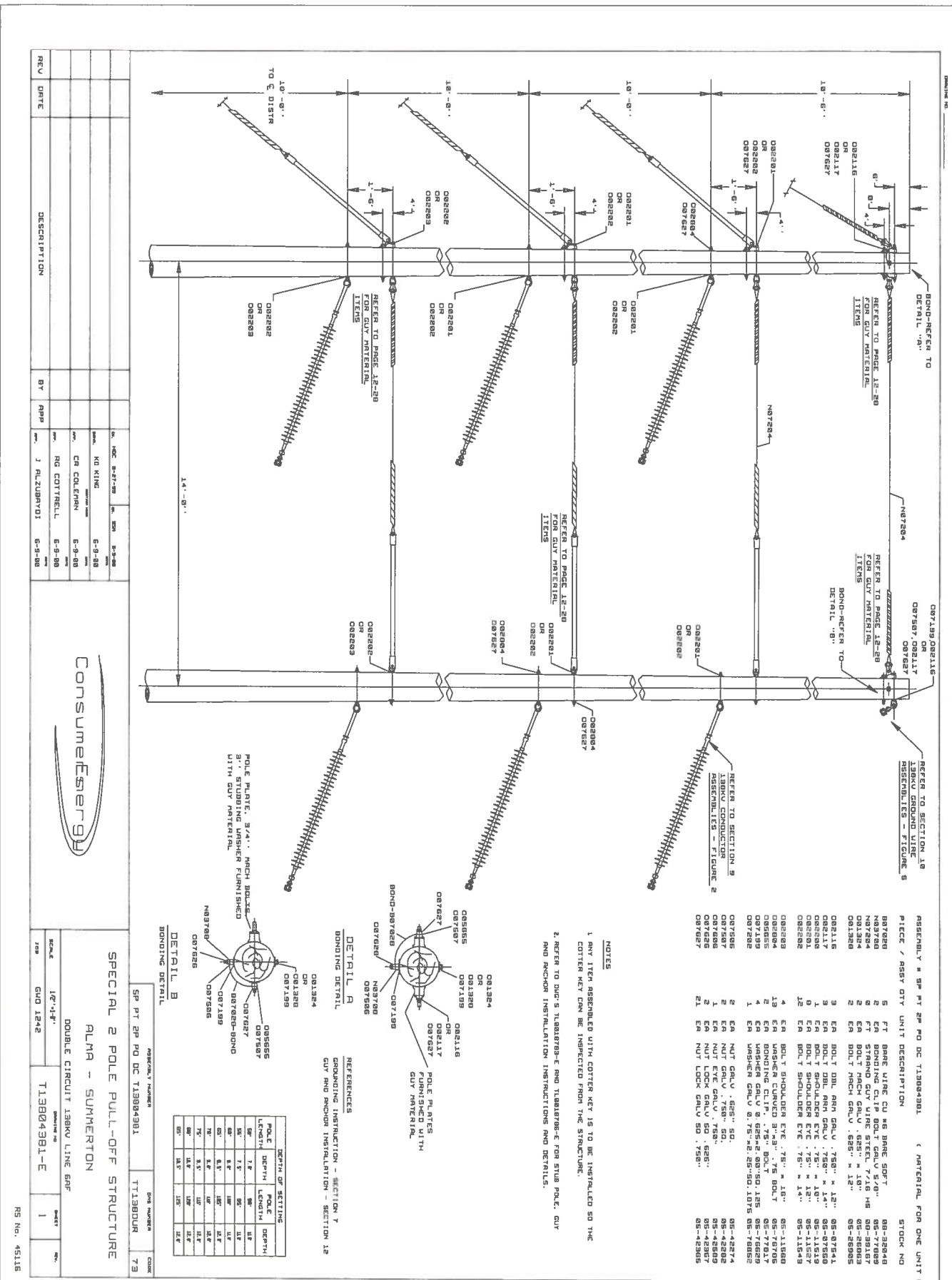
Date \_\_\_\_\_

Approved By \_\_\_\_\_  
METC

Date \_\_\_\_\_

METC lines are subject to the easement rights of METC. Your request has been forwarded to Real Estate for processing and will require a 30-day period prior to approval. Initiation of any construction activities without appropriate METC approval may require relocation or removal of the lines at your expense.



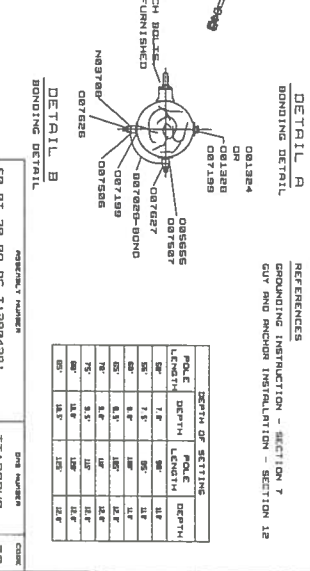


REV	DATE	DESCRIPTION	BY	APP	DATE

NO KING	6-9-00
CR COLEMAN	6-9-00
RG COTTRILL	6-9-00
J RIZZURNI	6-9-00

ASSEMBLY #	SP PT	DC	T13804391
PIECE / ASBY	QTY	UNIT	DESCRIPTION
1	1	EA	DOUBLE CIRCUIT 138KV LINE GPF

DEPTH OF SETTING	DEPTH
POLE LENGTH	DEPTH
10'-0"	10'-0"
14'-0"	14'-0"



NOTES

1. ANY ITEM ASSEMBLED WITH COTTER KEY IS TO BE INSTALLED SO THE COTTER KEY CAN BE INSPECTED FROM THE STRUCTURE.
2. REFER TO DDC'S T13804391-E AND T13804391-F FOR STUD POLE, GUY AND ANCHOR INSTALLATION INSTRUCTIONS AND DETAILS.

ITEM NO	DESCRIPTION	QTY	UNIT
082290	1/2" DIA. RIVET	10	EA
082291	3/4" DIA. RIVET	10	EA
082292	1/2" DIA. RIVET	10	EA
082293	3/4" DIA. RIVET	10	EA
082294	1/2" DIA. RIVET	10	EA
082295	3/4" DIA. RIVET	10	EA
082296	1/2" DIA. RIVET	10	EA
082297	3/4" DIA. RIVET	10	EA
082298	1/2" DIA. RIVET	10	EA
082299	3/4" DIA. RIVET	10	EA
082300	1/2" DIA. RIVET	10	EA
082301	3/4" DIA. RIVET	10	EA
082302	1/2" DIA. RIVET	10	EA
082303	3/4" DIA. RIVET	10	EA
082304	1/2" DIA. RIVET	10	EA
082305	3/4" DIA. RIVET	10	EA
082306	1/2" DIA. RIVET	10	EA
082307	3/4" DIA. RIVET	10	EA
082308	1/2" DIA. RIVET	10	EA
082309	3/4" DIA. RIVET	10	EA
082310	1/2" DIA. RIVET	10	EA
082311	3/4" DIA. RIVET	10	EA
082312	1/2" DIA. RIVET	10	EA
082313	3/4" DIA. RIVET	10	EA
082314	1/2" DIA. RIVET	10	EA
082315	3/4" DIA. RIVET	10	EA
082316	1/2" DIA. RIVET	10	EA
082317	3/4" DIA. RIVET	10	EA
082318	1/2" DIA. RIVET	10	EA
082319	3/4" DIA. RIVET	10	EA
082320	1/2" DIA. RIVET	10	EA
082321	3/4" DIA. RIVET	10	EA
082322	1/2" DIA. RIVET	10	EA
082323	3/4" DIA. RIVET	10	EA
082324	1/2" DIA. RIVET	10	EA
082325	3/4" DIA. RIVET	10	EA
082326	1/2" DIA. RIVET	10	EA
082327	3/4" DIA. RIVET	10	EA
082328	1/2" DIA. RIVET	10	EA
082329	3/4" DIA. RIVET	10	EA
082330	1/2" DIA. RIVET	10	EA
082331	3/4" DIA. RIVET	10	EA
082332	1/2" DIA. RIVET	10	EA
082333	3/4" DIA. RIVET	10	EA
082334	1/2" DIA. RIVET	10	EA
082335	3/4" DIA. RIVET	10	EA
082336	1/2" DIA. RIVET	10	EA
082337	3/4" DIA. RIVET	10	EA
082338	1/2" DIA. RIVET	10	EA
082339	3/4" DIA. RIVET	10	EA
082340	1/2" DIA. RIVET	10	EA
082341	3/4" DIA. RIVET	10	EA
082342	1/2" DIA. RIVET	10	EA
082343	3/4" DIA. RIVET	10	EA
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082363	3/4" DIA. RIVET	10	EA
082364	1/2" DIA. RIVET	10	EA
082365	3/4" DIA. RIVET	10	EA
082366	1/2" DIA. RIVET	10	EA
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082369	3/4" DIA. RIVET	10	EA
082370	1/2" DIA. RIVET	10	EA
082371	3/4" DIA. RIVET	10	EA
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082375	3/4" DIA. RIVET	10	EA
082376	1/2" DIA. RIVET	10	EA
082377	3/4" DIA. RIVET	10	EA
082378	1/2" DIA. RIVET	10	EA
082379	3/4" DIA. RIVET	10	EA
082380	1/2" DIA. RIVET	10	EA
082381	3/4" DIA. RIVET	10	EA
082382	1/2" DIA. RIVET	10	EA
082383	3/4" DIA. RIVET	10	EA
082384	1/2" DIA. RIVET	10	EA
082385	3/4" DIA. RIVET	10	EA
082386	1/2" DIA. RIVET	10	EA
082387	3/4" DIA. RIVET	10	EA
082388	1/2" DIA. RIVET	10	EA
082389	3/4" DIA. RIVET	10	EA
082390	1/2" DIA. RIVET	10	EA
082391	3/4" DIA. RIVET	10	EA
082392	1/2" DIA. RIVET	10	EA
082393	3/4" DIA. RIVET	10	EA
082394	1/2" DIA. RIVET	10	EA
082395	3/4" DIA. RIVET	10	EA
082396	1/2" DIA. RIVET	10	EA
082397	3/4" DIA. RIVET	10	EA
082398	1/2" DIA. RIVET	10	EA
082399	3/4" DIA. RIVET	10	EA
082400	1/2" DIA. RIVET	10	EA

Consumer Energy

DOUBLE CIRCUIT 138KV LINE GPF

ALMA - SUMMERTON

SP PT PP PO DC T13804391

T13804391-E

1

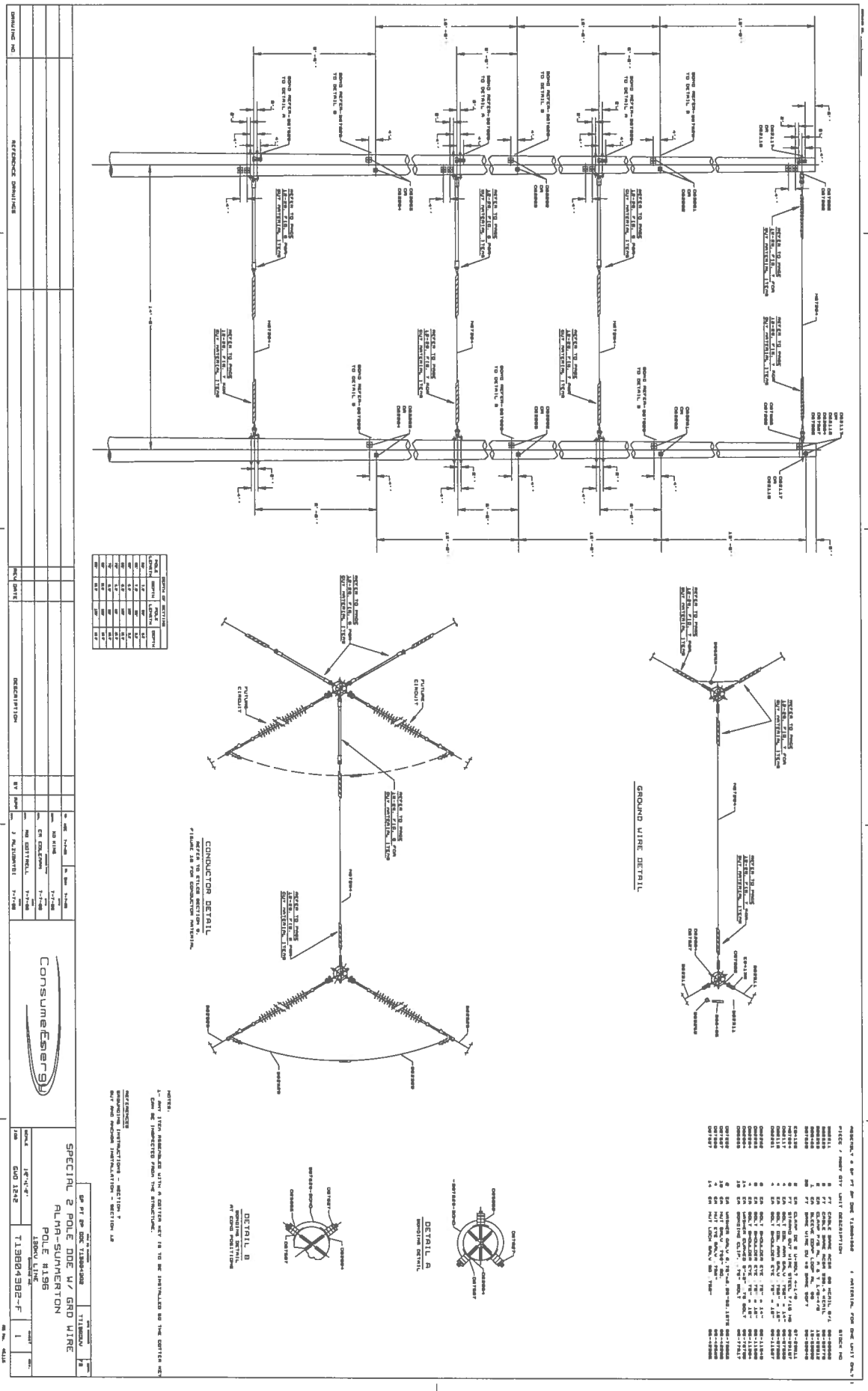
RS No. 45116

FORM SCALE = 24

PLOTTING SCALE = 2

DRAWING SCALE : 1/2" = 1'-0"

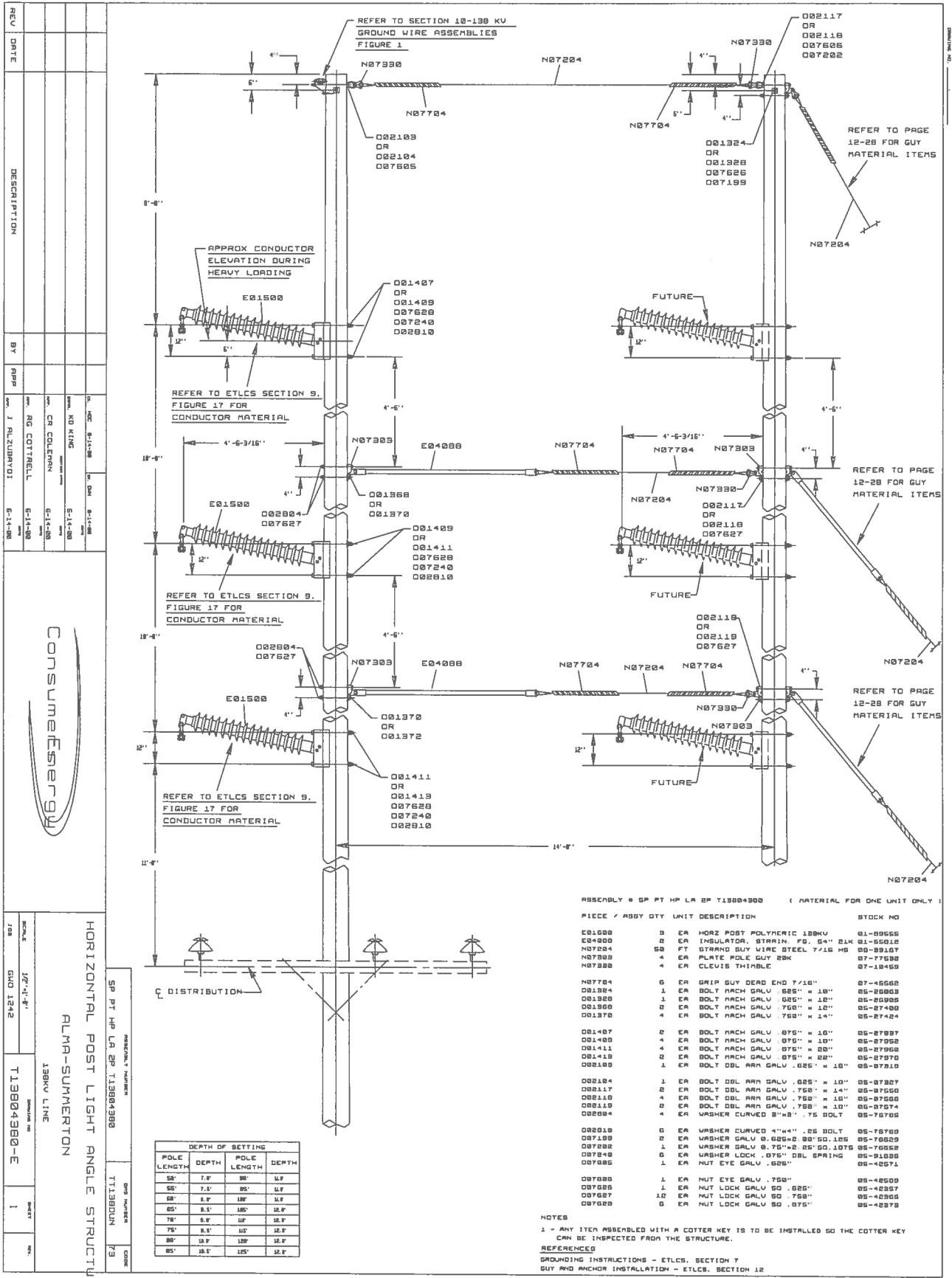
Revised 1/1, 2002, 5/2003



FORM SCALE = 24  
 PLOTTING SCALE = 2  
 DRAWING SCALE : 1/2" = 1'-0"  
 Pole # 196

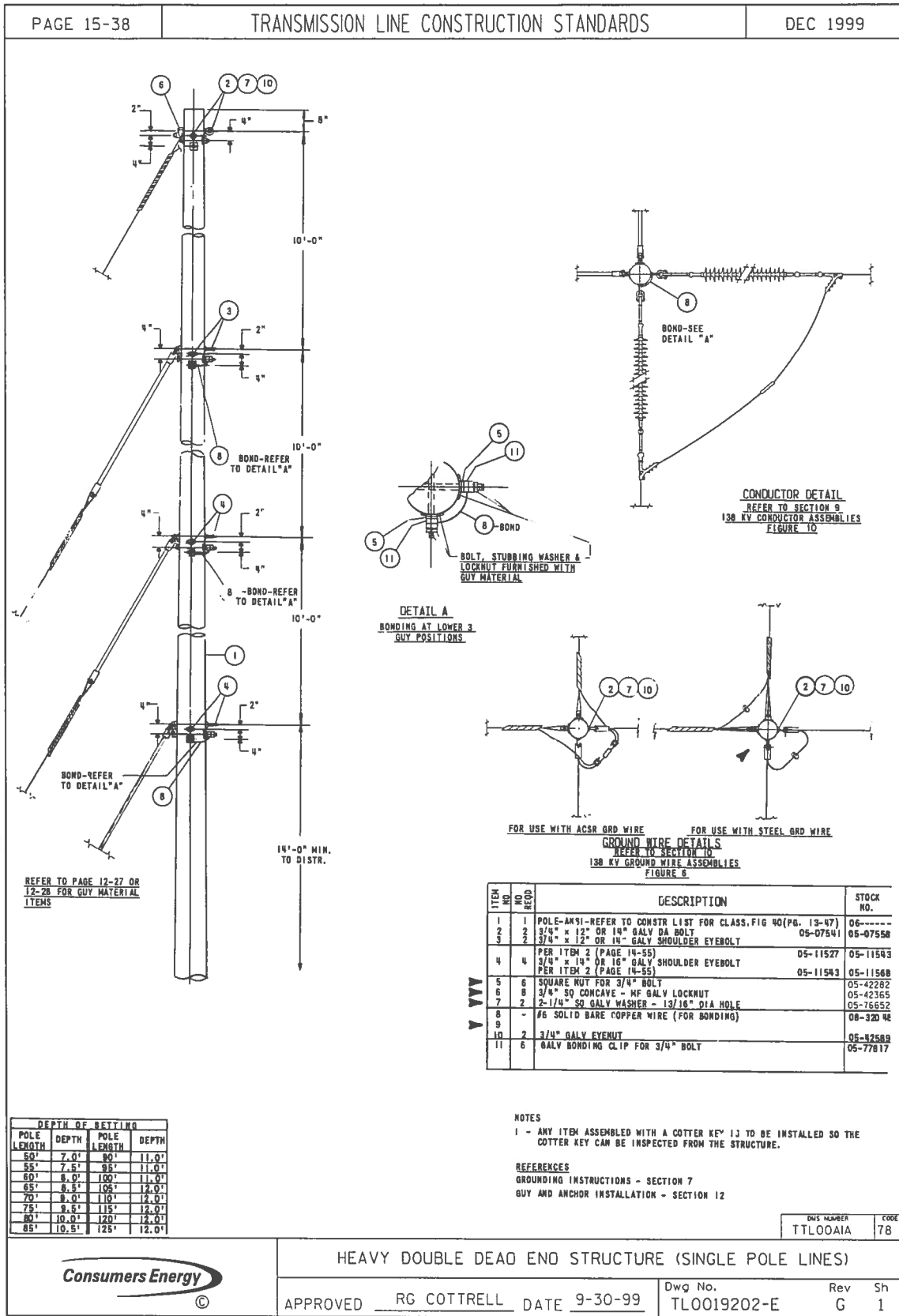


SPECIAL 2 POLE DOE W/ GRD WIRE  
 PLEA-SUMMERTON  
 POLE #196  
 13804-982-F



FORM SCALE = 24  
 PLOTTING SCALE = 2  
 DRAWING SCALE : 1/2" = 1'-0"





DEPTH OF SETTING			
POLE LENGTH	DEPTH	POLE LENGTH	DEPTH
50'	7.0'	90'	11.0'
55'	7.5'	95'	11.0'
60'	8.0'	100'	11.0'
65'	8.5'	105'	12.0'
70'	9.0'	110'	12.0'
75'	9.5'	115'	12.0'
80'	10.0'	120'	12.0'
85'	10.5'	125'	12.0'

ITEM NO.	NO. REQ'D	DESCRIPTION	STOCK NO.
1	1	POLE-ANCH-REFER TO CONSTR LIST FOR CLASS, FIG 40(PG. 13-47)	06-----
2	2	3/4" x 12" OR 14" GALV DA BOLT	05-07541
3	2	3/4" x 12" OR 14" GALV SHOULDER EYEBOLT	05-11527
4	4	PER ITEM 2 (PAGE 14-55)	05-11543
5	4	3/4" x 14" OR 16" GALV SHOULDER EYEBOLT	05-11568
6	1	SQUARE NUT FOR 3/4" BOLT	05-42282
7	1	3/4" SQ CONCAVE - WF GALV LOCKNUT	05-42365
8	2	2-1/4" SQ GALV WASHER - 13/16" DIA HOLE	05-76652
9	1	#6 SOLID BARE COPPER WIRE (FOR BONDING)	08-32048
10	2	3/4" GALV EYEBOLT	05-42589
11	6	GALV BONDING CLIP FOR 3/4" BOLT	05-77817

NOTES  
1 - ANY ITEM ASSEMBLED WITH A COTTER KEY IS TO BE INSTALLED SO THE COTTER KEY CAN BE INSPECTED FROM THE STRUCTURE.

REFERENCES  
GROUNDING INSTRUCTIONS - SECTION 7  
GUY AND ANCHOR INSTALLATION - SECTION 12

DWG NUMBER	CODE
TL00AIA	78



HEAVY DOUBLE DEAD END STRUCTURE (SINGLE POLE LINES)

APPROVED RG COTTRELL DATE 9-30-99 Dwg No. TL0019202-E Rev G Sh 1

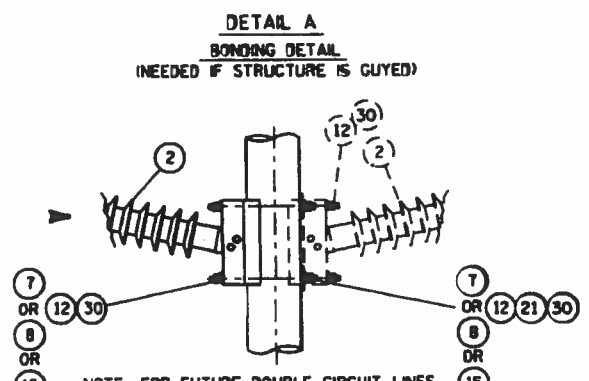
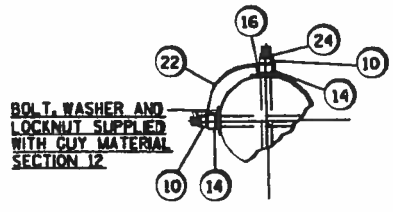
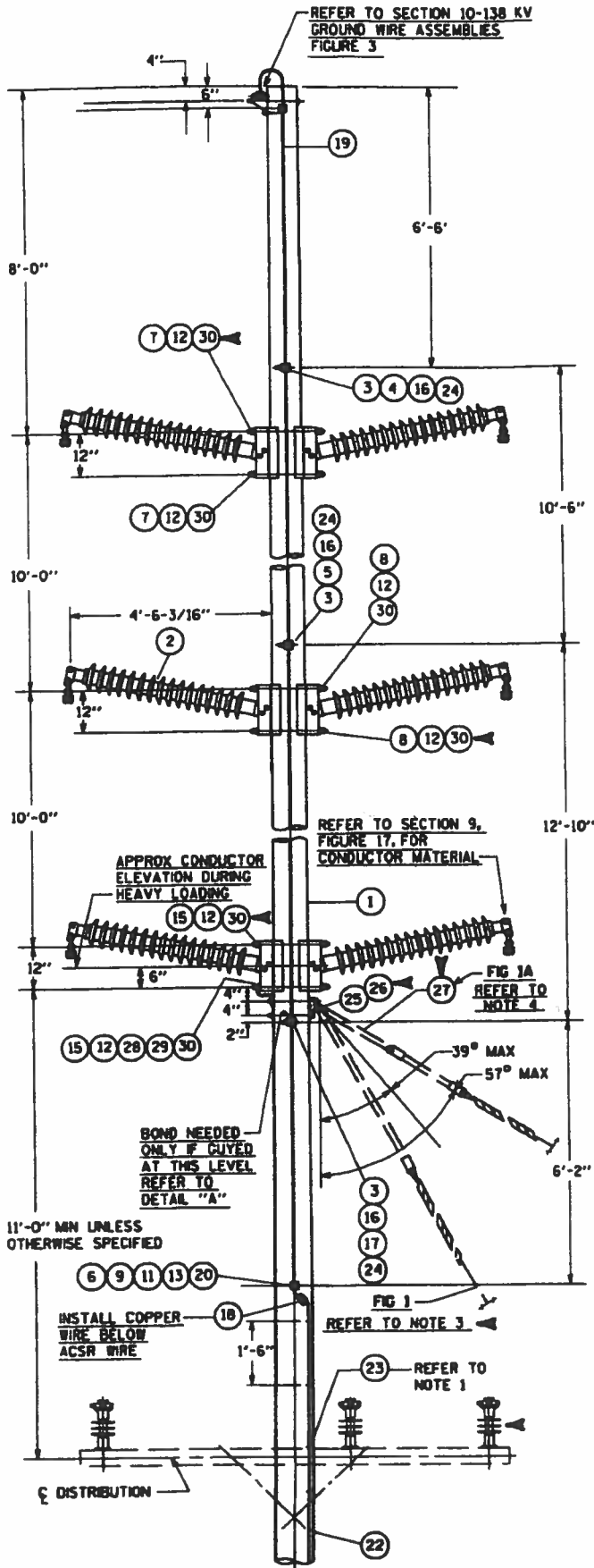
REV	DATE	DESCRIPTION	BY	APP
F	5/25/99	CHANGED INSULATORS TO NEW POLYMERIC INSULATORS	SSN	
G	9-30-99	CHK'D STOCK NUMBERS, REMOVED ITEM 9, & CHCD FIGURE 6	DWH	

DWH  
9-30-99

FORM SCALE = 24  
PLOTING SCALE = 2  
DRAWING SCALE : 1/2" = 1'-0"

Pole# 218





NOTE: FOR FUTURE DOUBLE CIRCUIT LINES, INSTALL DA BOLTS WITH SUFFICIENT LENGTH FOR INSTALLATION OF FUTURE HP INSULATORS

DEPTH OF SETTING			
POLE LENGTH	DEPTH	POLE LENGTH	DEPTH
50'	7.0'	80'	11.0'
55'	7.5'	85'	11.5'
60'	8.0'	90'	11.5'
65'	8.5'	95'	12.0'
70'	9.0'	100'	12.0'
75'	9.5'	105'	12.0'
80'	10.0'	110'	12.0'
85'	10.5'	115'	12.0'

MATERIAL SHOWN FOR DOUBLE CIRCUIT LINES - WHERE ONLY ONE CIRCUIT IS INSTALLED OMIT THREE CONDUCTOR ASSEMBLIES, REFER TO WIRE ARRANGEMENT FOR CONDUCTOR POSITIONS AND CONSTRUCTION LIST FOR GUYING

ITEM No.	QTY REQ'D	DESCRIPTION	STOCK No.
1	1	POLE-ANSI 05.1 - REFER TO CONSTR LIST FOR CLASS	06-01-89555
2	6	138 KV POLY LINE POST INSULATOR, LSK MDC	07-07661
3	3	FIBERGLASS DOWN LEAD BRACKET, (PG 14-52)	
4	1	3/4" X 14" OR 16" GALV MACH BOLT	05-27424
5	1	3/4" X 16" OR 18" GALV MACH BOLT	05-27440
6	1	5/8" X 18" OR 20" GALV MACH BOLT	05-27465
7	2	1/8" X 24" OR 26" GALV DA BOLT	05-26988
8	2	1/8" X 28" OR 28" GALV DA BOLT	05-07458
9	1	SQUARE NUT FOR 5/8" BOLT	05-07475
10	2	SQUARE NUT FOR 3/4" BOLT	05-42274
11	1	5/8" SQUARE CONCAVE - MF GALV LOCKNUT	05-42282
12	12	1/8" SQUARE CONCAVE - MF GALV LOCKNUT	05-42357
13	2	2" 50 GALV WASHER - 11/16" DIA HOLE	05-42373
14	2	GALV BONDING CLIP FOR 3/4" BOLT	05-76639
15	2	1/2" X 28" OR 30" GALV DA BOLT	05-77817
16	6	2 1/4" 50 GALV WASHER - 13/16" DIA HOLE	05-07475
17	1	3/4" X 18" OR 20" GALV MACH BOLT	05-76652
18	1	PG CLAMP - *4 ACSR TO *6 COPPER	05-27465
19	-	*4 ACSR WIRE IDOWN LEAD	05-27481
20	1	GALV BONDING CLIP FOR 5/8" BOLT	10-20114
21	6	4" 50 GALV CURVED STUBBING WASHER 15/16" DIA HOLE	06-30539
22	-	*6 BARE SOLID COPPER WIRE IDOWN LEAD AND/OR BONDING	05-77809
23	32 ±	GALV STAPLES (1-1/2")	05-76789
24	4	3/4" SQUARE CONCAVE - MF GALV LOCKNUT	07-80521
25	1	3/4" X 2" GALV MACH BOLT WITH HEX NUT	05-42355
26	1	3/4" GALV LOCK PALMUT	05-22292
27	2	GALV EXTENSION STRAP PER ITEM 3 - L = 2'-0", (PG 12-61)	05-41536
28	1	GALV BONDING CLIP FOR 1/8" BOLT	07-89982
29	1	SQUARE NUT FOR 1/8" BOLT	06-77825
30	12	ELEC MATERIAL TYPE 16-8 DBL COIL SPRING LOCKWASHER - 15/16" DIA HOLE	05-42290
			05-91636

- NOTES
- 1 - INSTALL ADDITIONAL STAPLES AS REQUIRED TO MAKE GROUNDING WIRE CONFORM TO IRREGULAR SURFACES OF POLE.
  - 2 - ANY ITEM ASSEMBLED WITH A COTTER KEY IS TO BE INSTALLED SO THE COTTER KEY CAN BE INSPECTED FROM THE STRUCTURE.
  - 3 - FIG. 1 - NO STRAPS ARE NEEDED ON GUYS UP TO 39', THE CONSTRUCTION LIST WILL SPECIFY FIG. 1A WHEN THIS TYPE OF GUY IS REQUIRED.
  - 4 - FIG. 1A - INSTALL (2) 2'-0" EXTENSION STRAPS (ITEM 27) BETWEEN FIBERGLASS GUY INSULATOR AND PLATE IF GUY IS FROM 39' TO 57'. THE CONSTRUCTION LIST WILL SPECIFY FIG. 1A WHEN THIS TYPE OF GUY IS REQUIRED.

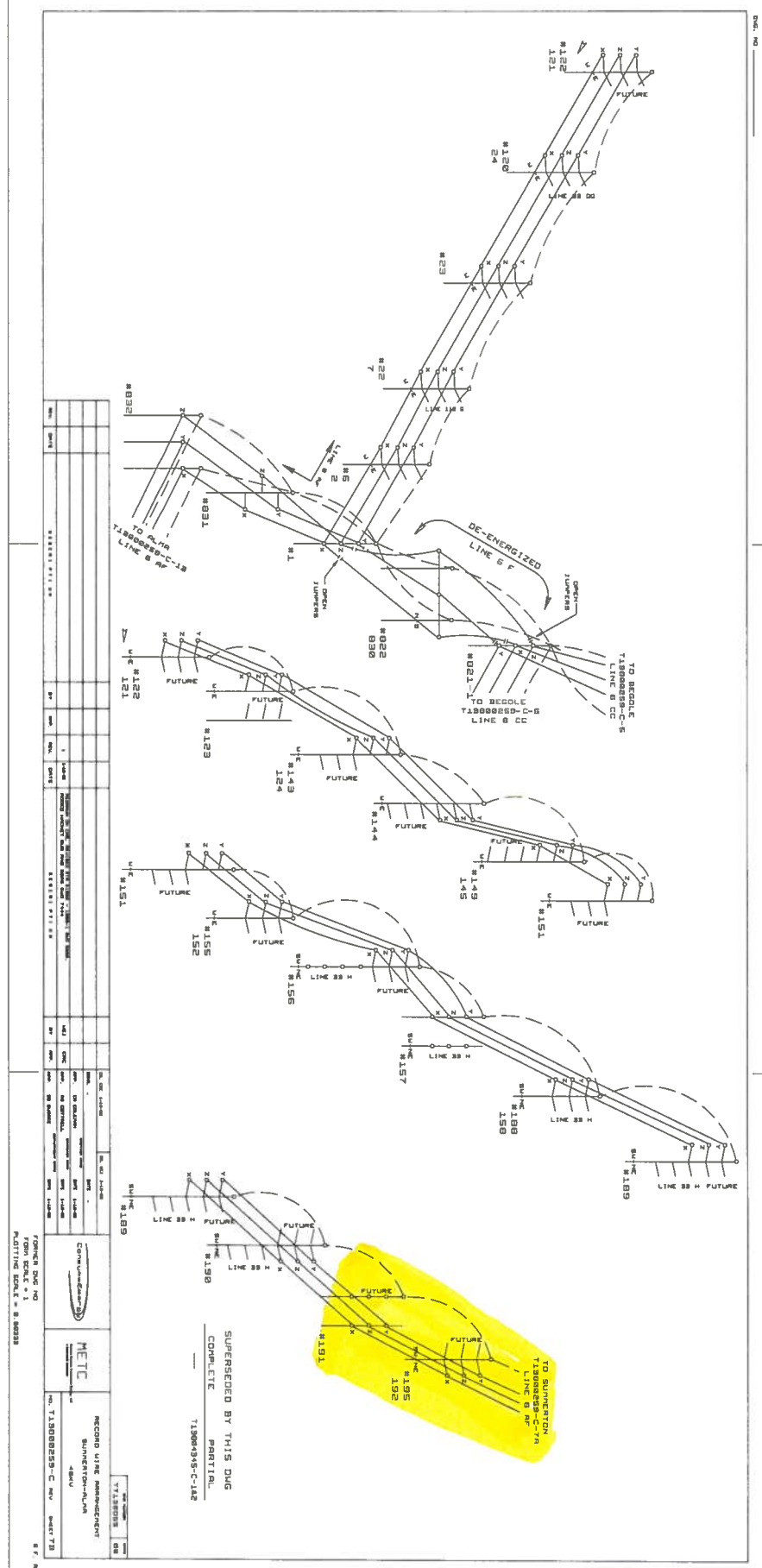
REFERENCES  
 GROUNDING INSTRUCTIONS - SECTION 7  
 GUY AND ANCHOR INSTALLATION - SECTION 12

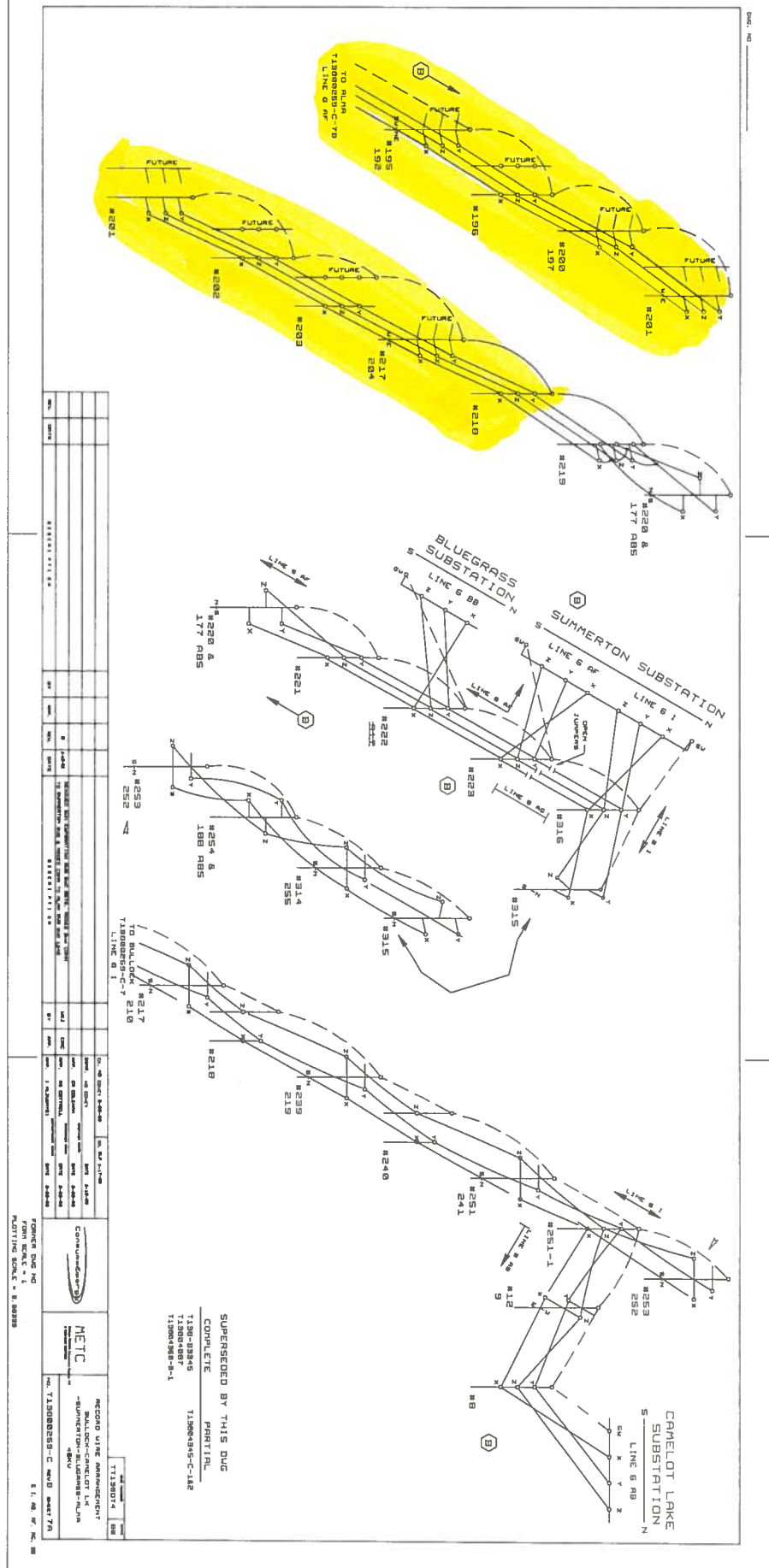
DESIGNED	CHKD
TTLOOAGX	78



138 KV HORIZONTAL POST TANGENT STRUCTURE  
 PRESENT SINGLE CIRCUIT - FUTURE DOUBLE CIRCUIT OR DOUBLE CIRCUIT - 300' RULING SPAN DESIGN

APPROVED RG COTTRELL DATE 6-11-04 Dwg No. TLO019251-E Rev H Sh 1





NO.	DATE	BY	DESCRIPTION	CHKD.	DATE	BY	DESCRIPTION
1	5/4/06	...	...	...	...	...	...
2	...	...	...	...	...	...	...
3	...	...	...	...	...	...	...
4	...	...	...	...	...	...	...
5	...	...	...	...	...	...	...
6	...	...	...	...	...	...	...
7	...	...	...	...	...	...	...
8	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...
10	...	...	...	...	...	...	...

SUPERSEDED BY THIS DWG  
 COMPLETE PARTIAL  
 T1300435-C-148  
 T1300435-C-149  
 T1300435-C-150

PROJECT NO. 1  
 DRAWING NO. 1  
 DATE 5/4/06  
 BY [Signature]  
 CHECKED [Signature]  
 APPROVED [Signature]

MCTC  
 RECORD LINE ASSIGNMENT  
 BLUEGRASS-CAMELOT LK  
 SUMMERTON-BALLOON-OLIVE  
 T1300435-C-440-D-4276

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: M0106602 ORDER : 213

LINE NO/LTR:	006AF
STRUCT #:	191
OP VOLTAGE:	138
STN/EQ :	607.83
BACK SPAN:	309.00
TYPE:	MULTI POLE
CONST TYPE:	PO

**STRUCTURE**

DWG: T13804381 SH: REV: LOC: 1 2 3 4 5 FIG:

REMARKS: USE CRUSHED ROCK BACKFILL.

LOC	HEIGHT	CLASS	DEFLECT.	G/L ELEV	SETTING ELEV	GUYING:
1	95	H1	21-35'-00" LT			NO RAKE, BUTT 2' WEST OF CL

2	95	H1				NO RAKE, BUTT 12' EAST OF CL 2-7/16" EHS DN 35 & 30' E TO SS-PISA, 8 SP & 2 GUY GUARDS PER ANC
---	----	----	--	--	--	---

**CONDUCTORS**

LINE	CKT	SH	FIG	REV	SH	FIG	REV
LINE 006AF CKT 1							
SIZE 1 & 2: 336.4 KCMIL ACSR							
DES VOLTAGE:		SH	FIG	REV	SH	FIG	REV
DWG: TL0019035		1	2				
SAG DWG: T13804372							
JMPR STR DWG:							
DAMPERS DWG:							
SPACER DWG #:							
SPACER RMKS:							
REMARKS:							
CKT 1:							
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT							

**CENTERLINE ELEV:**

**FRAMING** SH FIG REV

1:  
2:  
3:  
4:  
5:

**POLE STAY** SH FIG REV

1:  
2:  
3:  
4:  
5:

**SWAMP FIXT** SH FIG REV

1:  
2:  
3:  
4:  
5:

**GROUND WIRE**

LINE	CKT	SH	FIG	REV	SH	FIG	REV
LINE 006AF CKT 1							
SIZE: 80 KCMIL ACSR							
DWG NO: TL0019081		SH	FIG	REV	SH	FIG	REV
SAG DWG: T13804371		1	5				
DAMPERS DWG:							
REMARKS:							
CKT 1:							
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.							

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**  
DWG:  
SH: FIG: REV:

**CWA**  
DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GENERAL REMARKS**

607.35 - MILLBROOK RD

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 31

**REVISION**

LETTER:	MWO NO:
GWO: 1242	DATE: 6/9/2000
RS NO: 45116	DESIGNER: KDK
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE	

PREPARED BY: KDKING
DATE: 6/9/2000
APPROVED BY: CRCOLEMAN
DATE: 6/9/2000
DEPT. HEAD: BD BUGBEE
DIVISION HEAD: RG COTTRELL

LINE NO/LTR:	006AF
STR ORDER :	213
STRUCT #:	191

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106603 ORDER : 214

LINE NO/LTR:	006AF
STRUCT #:	192
OP VOLTAGE:	138
STNEQ :	610.98
BACK SPAN:	315.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON NORTH SIDE OF POLES 192-195  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE 006AF CKT 1  
 SIZE 1 & 2: 336.4 KCMIL ACSR  
 DES VOLTAGE: SH FIG REV SH FIG REV  
 DWG: TL0019035 3 17  
 SAG DWG: T13804372  
 JMPR STR DWG:  
 DAMPERS DWG:  
 SPACER DWG #:  
 SPACER RMKS:

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE 006AF CKT 1  
 SIZE: 80 KCMIL ACSR SH FIG REV SH FIG REV  
 DWG NO: TL0019081 1 3  
 SAG DWG: T13804371  
 DAMPERS DWG:

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 31

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 214  
STRUCT #: 192

LINE NAME: ALMA-SUMMERTON

UNIQUE STRUCT #: W0106604 ORDER: 215

LINE NO/LTR:	006AF
STRUCT #:	193
OP VOLTAGE:	138
STN/EQ:	614.14
BACK SPAN:	316.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON NORTH SIDE OF POLES 192-195  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE 006AF CKT 1  
 SIZE 1 & 2: 336.4 KCMIL ACSR  
 DES VOLTAGE: SH FIG REV SH FIG REV  
 DWG: TL0019035 3 17  
 SAG DWG: T13804372  
 JMPR STR DWG:  
 DAMPERS DWG:  
 SPACER DWG #:  
 SPACER RMKS:

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE 006AF CKT 1  
 SIZE: 80 KCMIL ACSR SH FIG REV SH FIG REV  
 DWG NO: TL0019081 1 3  
 SAG DWG: T13804371  
 DAMPERS DWG:

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 31

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 215  
STRUCT #: 193



LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106605 ORDER : 216

LINE NO/LTR:	006AF
STRUCT #:	194
OP VOLTAGE:	138
STN/EQ :	617.30
BACK SPAN:	316.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON NORTH SIDE OF POLES 192-195  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE 1 & 2:	336.4 KCMIL ACSR										
DES VOLTAGE:											
DWG:	TL0019035					3	17				
SAG DWG:	T13804372										
JMPR STR DWG:											
DAMPERS DWG:											
SPACER DWG #:											
SPACER RMKS:											

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE:	80 KCMIL ACSR										
DWG NO:	TL0019081					1	3				
SAG DWG:	T13804371										
DAMPERS DWG:											

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 31

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 216  
STRUCT #: 194

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106606 ORDER : 217

LINE NO/LTR:	006AF
STRUCT #:	195
OP VOLTAGE:	138
STN/EQ :	620.46
BACK SPAN:	316.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON NORTH SIDE OF POLES 192-195  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE 1 & 2:	336.4 KCMIL ACSR										
DES VOLTAGE:						SH	FIG	REV			
DWG:	TL0019035					3	17				
SAG DWG:	T13804372										
JMPR STR DWG:											
DAMPERS DWG:											
SPACER DWG #:											
SPACER RMKS:											

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE:	80 KCMIL ACSR										
DWG NO:	TL0019081					SH	FIG	REV			
SAG DWG:	T13804371					1	3				
DAMPERS DWG:											

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 31

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 217  
STRUCT #: 195

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: M0106607 ORDER : 218

LINE NO/LTR:	006AF
STRUCT #:	196
OP VOLTAGE:	138
STN/EQ :	623.64
BACK SPAN:	318.00
TYPE:	MULTI POLE
CONST TYPE:	DDE

**STRUCTURE**

DWG: T13804382 SH: REV: LOC: 1 2 3 4 5 FIG:

REMARKS: USE CRUSHED ROCK BACKFILL.

LOC	HEIGHT	CLASS	DEFLECT.	G/L ELEV	SETTING ELEV	GUYING:
1	90	H1	61-55'-00" RT			NO RAKE, BUTT 7' NE OF CL.

2	95	H1				NO RAKE, BUTT 7' SW OF CL. 2-7/16" EHS DOWN 50 & 45' NW TO SS-PISA, 8 SP & 2 GUY GUARDS PER ANC, 4-7/16" EHS SPAN 58' S TO 35-1 STUB POLE, 2-7/16" EHS DOWN 28' & 23' S TO SS-PISA, 8 SP & 2 GUY GUARDS PER ANC.
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**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT			
SIZE 1 & 2:	336.4 KCMIL ACSR							
DES VOLTAGE:			SH	FIG	REV	SH	FIG	REV
DWG:	TL0019035		2	10				
SAG DWG:	T13804372							

JMPR STR DWG:  
DAMPERS DWG:  
SPACER DWG #:  
SPACER RMKS:

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ASCR PER T13804372, 324'RS, 4280#MT

CKT 2:

**CENTERLINE ELEV:**

<b>FRAMING</b>	SH	FIG	REV
1:			
2:			
3:			
4:			
5:			

<b>POLE STAY</b>	SH	FIG	REV
1:			
2:			
3:			
4:			
5:			

<b>SWAMP FIXT</b>	SH	FIG	REV
1:			
2:			
3:			
4:			
5:			

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT			
SIZE:	80 KCMIL ACSR							
DWG NO:	TL0019081		SH	FIG	REV	SH	FIG	REV
SAG DWG:	T13804371							

DAMPERS DWG:

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

<b>PLAN &amp; PROFILE</b>	DWG:	FIG:	REV:
SH:			

<b>RWA</b>	DWG:	FIG:	REV:
SH:			

<b>CWA</b>	DWG: T13804345	FIG:	REV:
SH:			

<b>LIGHTNING ARRESTOR</b>			
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**GENERAL REMARKS**

623.02 - SUMMERTON RD

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: UNION  
TOWN/RANGE: T14N,R04W  
SECTION: 36

**REVISION**

LETTER:	MWO NO:
GWO: 1242	DATE: 6/9/2000
RS NO: 45116	DESIGNER: KDK
NOTES:	NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY:	KDKING
DATE:	6/9/2000
APPROVED BY:	CRCOLEMAN
DATE:	6/9/2000
DEPT. HEAD:	BD BUGBEE
DIVISION HEAD:	RG COTTRELL

LINE NO/LTR:	006AF
STR ORDER :	218
STRUCT #:	196

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106608 ORDER : 219

LINE NO/LTR:	006AF
STRUCT #:	197
OP VOLTAGE:	138
STN/EQ :	626.23
BACK SPAN:	259.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 197-200  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE 1 & 2:	336.4 KCMIL ACSR										
DES VOLTAGE:						SH	FIG	REV			
DWG:	TL0019035					3	17				
SAG DWG:	T13804372										
JMPR STR DWG:											
DAMPERS DWG:											
SPACER DWG #:											
SPACER RMKS:											

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE:	80 KCMIL ACSR										
DWG NO:	TL0019081					SH	FIG	REV			
SAG DWG:	T13804371					1	3				
DAMPERS DWG:											

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: UNION  
TOWN/RANGE: T14N,R04W  
SECTION: 36

**REVISION**

LETTER:  
GWO: 1242  
RS NO: 45116  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

MWO NO:  
DATE: 6/9/2000  
DESIGNER: KDK

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 219  
STRUCT #: 197

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106609 ORDER : 220

LINE NO/LTR:	006AF
STRUCT #:	198
OP VOLTAGE:	138
STN/EQ :	628.92
BACK SPAN:	269.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 197-200  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE 1 & 2:	336.4 KCMIL ACSR										
DES VOLTAGE:											
DWG:	TL0019035					3	17				
SAG DWG:	T13804372										
JMPR STR DWG:											
DAMPERS DWG:											
SPACER DWG #:											
SPACER RMKS:											

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE:	80 KCMIL ACSR										
DWG NO:	TL0019081					1	3				
SAG DWG:	T13804371										
DAMPERS DWG:											

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: UNION  
TOWN/RANGE: T14N,R04W  
SECTION: 36

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR:	006AF
STR ORDER:	220
STRUCT #:	198

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106610 ORDER : 221

LINE NO/LTR:	006AF
STRUCT #:	199
OP VOLTAGE:	138
STN/EQ :	631.68
BACK SPAN:	276.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 197-200  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE 1 & 2:	336.4 KCMIL ACSR										
DES VOLTAGE:											
DWG:	TL0019035					3	17				
SAG DWG:	T13804372										
JMPR STR DWG:											
DAMPERS DWG:											
SPACER DWG #:											
SPACER RMKS:											

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE:	80 KCMIL ACSR										
DWG NO:	TL0019081					1	3				
SAG DWG:	T13804371										
DAMPERS DWG:											

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: UNION  
TOWN/RANGE: T14N,R04W  
SECTION: 36

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 221  
STRUCT #: 199

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106653 ORDER : 222

LINE NO/LTR:	006AF
STRUCT #:	200
OP VOLTAGE:	138
STN/EQ :	634.99
BACK SPAN:	331.00
DEFLECTION:	4-55'-00" LT
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 197-200  
USE CRUSHED ROCK BACKFILL. NO RAKE, BUTT ON CL.

GUYING: 2-7/16" EHS (ATTACH AT GW & 4' BELOW MIDDLE CONDUCTOR) SPAN 14' E TO  
80-2 STUB ( ATTACH AT 1 FT & 18 FT BELOW POLE TOP),  
2-7/16" EHS DOWN 15' E TO SS-PISA, 7 SP & 2 GUY GUARDS

**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV
SIZE 1 & 2:	336.4 KCMIL ACSR							
DES VOLTAGE:				SH	FIG	REV		
DWG:	TL0019035			3	18			
SAG DWG:	T13804372							
JMPR STR DWG:								
DAMPERS DWG:								
SPACER DWG #:								
SPACER RMKS:								

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV
SIZE:	80 KCMIL ACSR							
DWG NO:	TL0019081			SH	FIG	REV		
SAG DWG:	T13804371			1	3			
DAMPERS DWG:								

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: UNION  
TOWN/RANGE: T14N,R04W  
SECTION: 36

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 222  
STRUCT #: 200

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: M0106612 ORDER : 223

LINE NO/LTR:	006AF
STRUCT #:	201
OP VOLTAGE:	138
STN/EQ :	637.95
BACK SPAN:	296.00
TYPE:	MULTI POLE
CONST TYPE:	HP

STRUCTURE LOC: 1 2 3 4 5

DWG: T13804380 SH: REV: FIG:

REMARKS: USE CRUSHED ROCK BACKFILL.

LOC HEIGHT CLASS DEFLECT. G/L ELEV SETTING ELEV GUYING: 1 90 H1 8-20'-00" RT NO RAKE, BUTT 2' EAST OF CL.

2 90 H1 NO RAKE, BUTT 12' WEST OF CL. 4-7/16" EHS DOWN 25' W TO SS-PISA, 7 SP, 2 GUY GUARDS

CONDUCTORS

LINE 006AF CKT 1 LINE CKT SIZE 1 & 2: 336.4 KCMIL ACSR DES VOLTAGE: SH FIG REV SH FIG REV DWG: TL0019035 3 17 SAG DWG: T13804372

JMPR STR DWG: DAMPERS DWG: SPACER DWG #: SPACER RMKS:

REMARKS: CKT 1: SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

CENTERLINE ELEV:

FRAMING SH FIG REV

- 1: 2: 3: 4: 5:

POLE STAY SH FIG REV

- 1: 2: 3: 4: 5:

SWAMP FIXT SH FIG REV

- 1: 2: 3: 4: 5:

GROUND WIRE

LINE 006AF CKT 1 LINE CKT SIZE: 80 KCMIL ACSR SH FIG REV SH FIG REV DWG NO: TL0019081 1 3 SAG DWG: T13804371

DAMPERS DWG:

REMARKS: CKT 1: SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

PLAN & PROFILE

DWG: SH: FIG: REV:

RWA

DWG: SH: FIG: REV:

CWA

DWG: T13804345 SH: FIG: REV:

LIGHTNING ARRESTOR

GENERAL REMARKS

STRUCTURE LOCATION

PROP OWNER: PARCEL NO: REMARKS:

TYPE OF RIGHT-OF-WAY: COUNTY: ISABELLA TOWNSHIP: UNION TOWN/RANGE: T14N,R04W SECTION: 36

REVISION

LETTER: MWO NO: GWO: 1242 DATE: 6/9/2000 RS NO: 45116 DESIGNER: KDK NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING DATE: 6/9/2000 APPROVED BY: CRCOLEMAN DATE: 6/9/2000 DEPT. HEAD: BD BUGBEE DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF STR ORDER : 223 STRUCT #: 201



LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: M0106613 ORDER : 224

LINE NO/LTR:	006AF
STRUCT #:	202
OP VOLTAGE:	138
STN/EQ :	641.53
BACK SPAN:	358.00
TYPE:	MULTI POLE
CONST TYPE:	PO

STRUCTURE LOC: 1 2 3 4 5

DWG: T13804381 SH: REV: FIG:

REMARKS: USE CRUSHED ROCK BACKFILL.

LOC HEIGHT CLASS DEFLECT. G/L ELEV SETTING ELEV GUYING: 1 95 H1 22-15'-00" RT NO RAKE, BUTT 2' EAST OF CL

2 95 H1 NO RAKE, BUTT 12' WEST OF CL 2-7/16" EHS DOWN 35 & 30' WEST TO SS-PISA, 8 SP & 2 GUY GUARDS PER ANC

CONDUCTORS

LINE 006AF CKT 1 SIZE 1 & 2: 336.4 KCMIL ACSR DES VOLTAGE: SH FIG REV DWG: TL0019035 SAG DWG: T13804372 JMPR STR DWG: DAMPERS DWG: SPACER DWG #: SPACER RMKS: REMARKS: CKT 1: SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CENTERLINE ELEV:			
FRAMING SH FIG REV			
1:			
2:			
3:			
4:			
5:			
POLE STAY SH FIG REV			
1:			
2:			
3:			
4:			
5:			
SWAMP FIXT SH FIG REV			
1:			
2:			
3:			
4:			
5:			

GROUND WIRE

LINE 006AF CKT 1 SIZE: 80 KCMIL ACSR DWG NO: TL0019081 SAG DWG: T13804371 DAMPERS DWG: REMARKS: CKT 1: SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

PLAN & PROFILE		
DWG:	FIG:	REV:
SH:		
RWA		
DWG:	FIG:	REV:
SH:		
CWA		
DWG:	FIG:	REV:
SH:		
LIGHTNING ARRESTOR		

GENERAL REMARKS

639.02 - US-127 SB LANE 640.35 - US-127 NB LANE

STRUCTURE LOCATION

PROP OWNER: PARCEL NO: REMARKS: TYPE OF RIGHT-OF-WAY: COUNTY: ISABELLA TOWNSHIP: UNION TOWN/RANGE: T14N,R04W SECTION: 36

REVISION

LETTER: GWO: 1242 RS NO: 45116 NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE MWO NO: DATE: 6/9/2000 DESIGNER: KDK

PREPARED BY: KDKING DATE: 6/9/2000 APPROVED BY: CRCOLEMAN DATE: 6/9/2000 DEPT. HEAD: BD BUGBEE DIVISION HEAD: RG COTTRELL

LINE NO/LTR:	006AF
STR ORDER :	224
STRUCT #:	202

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: M0106614 ORDER : 225

LINE NO/LTR:	006AF
STRUCT #:	203
OP VOLTAGE:	138
STN/EQ :	645.19
BACK SPAN:	366.00
TYPE:	MULTI POLE
CONST TYPE:	PO

**STRUCTURE**

DWG: T13804381 SH: REV: LOC: 1 2 3 4 5 FIG:

REMARKS: USE CRUSHED ROCK BACKFILL.

LOC HEIGHT CLASS DEFLECT. G/L ELEV SETTING ELEV GUYING:  
1 95 H1 24-15'-00" LT NO RAKE, BUTT 2' WEST OF CL

2 100 H1 NO RAKE, BUTT 12' EAST OF CL  
2-7/16" EHS DOWN 35 & 30' EAST TO SS-PISA, 8 SP & 2 GUY GUARDS PER ANC

**CONDUCTORS**

LINE 006AF CKT 1  
 SIZE 1 & 2: 336.4 KCMIL ACSR  
 DES VOLTAGE: SH FIG REV SH FIG REV  
 DWG: TL0019035 1 2  
 SAG DWG: T13804372  
 JMPR STR DWG:  
 DAMPERS DWG:  
 SPACER DWG #:  
 SPACER RMKS:

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**CENTERLINE ELEV:**

**FRAMING** SH FIG REV  
 1:  
 2:  
 3:  
 4:  
 5:

**POLE STAY** SH FIG REV  
 1:  
 2:  
 3:  
 4:  
 5:

**SWAMP FIXT** SH FIG REV  
 1:  
 2:  
 3:  
 4:  
 5:

**GROUND WIRE**

LINE 006AF CKT 1  
 SIZE: 80 KCMIL ACSR SH FIG REV SH FIG REV  
 DWG NO: TL0019081 1 5  
 SAG DWG: T13804371  
 DAMPERS DWG:

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**PLAN & PROFILE**

DWG: SH: FIG: REV:

**RWA**

DWG: SH: FIG: REV:

**CWA**

DWG: T13804345 SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GENERAL REMARKS**

644.34 - SUMMERTON RD

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 31

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR:	006AF
STR ORDER :	225
STRUCT #:	203

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106615 ORDER : 226

LINE NO/LTR:	006AF
STRUCT #:	204
OP VOLTAGE:	138
STN/EQ :	647.91
BACK SPAN:	272.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 204-217  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE 1 & 2:	336.4 KCMIL ACSR										
DES VOLTAGE:						SH	FIG	REV	SH	FIG	REV
DWG:	TL0019035					3	17				
SAG DWG:	T13804372										
JMPR STR DWG:											
DAMPERS DWG:											
SPACER DWG #:											
SPACER RMKS:											

**REMARKS:**

CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE:	80 KCMIL ACSR										
DWG NO:	TL0019081					SH	FIG	REV	SH	FIG	REV
SAG DWG:	T13804371					1	3				
DAMPERS DWG:											

**REMARKS:**

CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 31

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 226  
STRUCT #: 204

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106616 ORDER : 227

LINE NO/LTR:	006AF
STRUCT #:	205
OP VOLTAGE:	138
STN/EQ :	650.81
BACK SPAN:	290.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 204-217  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV
SIZE 1 & 2:	336.4	KCMIL	ACSR					
DES VOLTAGE:						SH	FIG	REV
DWG:	TL0019035					3	17	
SAG DWG:	T13804372							
JMPR STR DWG:								
DAMPERS DWG:								
SPACER DWG #:								
SPACER RMKS:								

**REMARKS:**

CKT 1:  
SAG CHART 336.4 KCMIL ASCR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV
SIZE:	80	KCMIL	ACSR					
DWG NO:	TL0019081					SH	FIG	REV
SAG DWG:	T13804371					1	3	
DAMPERS DWG:								

**REMARKS:**

CKT 1:  
SAG CHART 80 KCMIL ASCR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GENERAL REMARKS**

**STRUCTURE LOCATION**

**TYPE OF RIGHT-OF-WAY:**

PROP OWNER:  
PARCEL NO:  
REMARKS:

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 31

**REVISION**

LETTER:  
GWO: 1242  
RS NO: 45116  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

MWO NO:  
DATE: 6/9/2000  
DESIGNER: KDK

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 227  
STRUCT #: 205

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106617 ORDER: 228

LINE NO/LTR:	006AF
STRUCT #:	206
OP VOLTAGE:	138
STN/EQ :	653.64
BACK SPAN:	283.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 204-217  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE 006AF CKT 1  
 SIZE 1 & 2: 336.4 KCMIL ACSR  
 DES VOLTAGE: SH FIG REV SH FIG REV  
 DWG: TL0019035 3 17  
 SAG DWG: T13804372  
 JMPR STR DWG:  
 DAMPERS DWG:  
 SPACER DWG #:  
 SPACER RMKS:

**REMARKS:**

CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE 006AF CKT 1  
 SIZE: 80 KCMIL ACSR SH FIG REV SH FIG REV  
 DWG NO: TL0019081 1 3  
 SAG DWG: T13804371  
 DAMPERS DWG:

**REMARKS:**

CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 31

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 228  
STRUCT #: 206

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106618 ORDER: 229

LINE NO/LTR:	006AF
STRUCT #:	207
OP VOLTAGE:	138
STN/EQ :	656.45
BACK SPAN:	281.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 204-217  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE 1 & 2:	336.4 KCMIL ACSR										
DES VOLTAGE:											
DWG:	TL0019035					3	17				
SAG DWG:	T13804372										
JMPR STR DWG:											
DAMPERS DWG:											
SPACER DWG #:											
SPACER RMKS:											

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE:	80 KCMIL ACSR										
DWG NO:	TL0019081					1	3				
SAG DWG:	T13804371										
DAMPERS DWG:											

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 31

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR:	006AF
STR ORDER:	229
STRUCT #:	207

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106619 ORDER : 230

LINE NO/LTR:	006AF
STRUCT #:	208
OP VOLTAGE:	138
STN/EQ :	659.87
BACK SPAN:	342.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	1
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 204-217  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE 1 & 2:	336.4 KCMIL ACSR										
DES VOLTAGE:						SH	FIG	REV			
DWG:	TL0019035					3	17				
SAG DWG:	T13804372										
JMPR STR DWG:											
DAMPERS DWG:											
SPACER DWG #:											
SPACER RMKS:											

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE:	80 KCMIL ACSR										
DWG NO:	TL0019081					SH	FIG	REV			
SAG DWG:	T13804371					1	3				
DAMPERS DWG:											

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 31

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 230  
STRUCT #: 208

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106620 ORDER : 231

LINE NO/LTR:	006AF
STRUCT #:	209
OP VOLTAGE:	138
STN/EQ :	663.30
BACK SPAN:	343.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	1
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 204-217  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV
SIZE 1 & 2:	336.4	KCMIL	ACSR					
DES VOLTAGE:				SH	FIG	REV		
DWG:	TL0019035			3	17			
SAG DWG:	T13804372							
JMPR STR DWG:								
DAMPERS DWG:								
SPACER DWG #:								
SPACER RMKS:								

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV
SIZE:	80	KCMIL	ACSR					
DWG NO:	TL0019081			SH	FIG	REV		
SAG DWG:	T13804371			1	3			
DAMPERS DWG:								

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GENERAL REMARKS**

**STRUCTURE LOCATION**

**TYPE OF RIGHT-OF-WAY:**

PROP OWNER:  
PARCEL NO:  
REMARKS:

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 31

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 231  
STRUCT #: 209



LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106621 ORDER : 232

LINE NO/LTR:	006AF
STRUCT #:	210
OP VOLTAGE:	138
STN/EQ :	666.71
BACK SPAN:	341.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	1
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 204-217  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV
SIZE 1 & 2:	336.4	KCMIL	ACSR					
DES VOLTAGE:						SH	FIG	REV
DWG:	TL0019035					3	17	
SAG DWG:	T13804372							
JMPR STR DWG:								
DAMPERS DWG:								
SPACER DWG #:								
SPACER RMKS:								

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV
SIZE:	80	KCMIL	ACSR					
DWG NO:	TL0019081					SH	FIG	REV
SAG DWG:	T13804371					1	3	
DAMPERS DWG:								

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 31

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 232  
STRUCT #: 210

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106622 ORDER : 233

LINE NO/LTR:	006AF
STRUCT #:	211
OP VOLTAGE:	138
STN/EQ :	670.17
BACK SPAN:	346.00
DEFLECTION:	0-21'-00" RT
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	1
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 204-217  
USE CRUSHED ROCK BACKFILL. NO RAKE, BUTT ON CL.

GUYING:

**CONDUCTORS**

LINE 006AF CKT 1  
 SIZE 1 & 2: 336.4 KCMIL ACSR  
 DES VOLTAGE: SH FIG REV SH FIG REV  
 DWG: TL0019035 3 17  
 SAG DWG: T13804372  
 JMPR STR DWG:  
 DAMPERS DWG:  
 SPACER DWG #:  
 SPACER RMKS:

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**GROUND WIRE**

LINE 006AF CKT 1  
 SIZE: 80 KCMIL ACSR SH FIG REV SH FIG REV  
 DWG NO: TL0019081 1 3  
 SAG DWG: T13804371  
 DAMPERS DWG:

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GENERAL REMARKS**

669.58 - DEERFIELD RD

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 30

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 233  
STRUCT #: 211

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106623 ORDER : 234

LINE NO/LTR:	006AF
STRUCT #:	212
OP VOLTAGE:	138
STN/EQ :	673.33
BACK SPAN:	316.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 204-217  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE 006AF CKT 1  
 SIZE 1 & 2: 336.4 KCMIL ACSR  
 DES VOLTAGE: SH FIG REV SH FIG REV  
 DWG: TL0019035 3 17  
 SAG DWG: T13804372  
 JMPR STR DWG:  
 DAMPERS DWG:  
 SPACER DWG #:  
 SPACER RMKS:

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE 006AF CKT 1  
 SIZE: 80 KCMIL ACSR SH FIG REV SH FIG REV  
 DWG NO: TL0019081 1 3  
 SAG DWG: T13804371  
 DAMPERS DWG:

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 30

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 234  
STRUCT #: 212

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106624 ORDER: 235

LINE NO/LTR:	006AF
STRUCT #:	213
OP VOLTAGE:	138
STN/EQ :	676.50
BACK SPAN:	317.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 204-217  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV
SIZE 1 & 2:	336.4	KCMIL	ACSR					
DES VOLTAGE:				SH	FIG	REV		
DWG:	TL0019035			3	17			
SAG DWG:	T13804372							
JMPR STR DWG:								
DAMPERS DWG:								
SPACER DWG #:								
SPACER RMKS:								

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ASCR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV
SIZE:	80	KCMIL	ACSR					
DWG NO:	TL0019081			SH	FIG	REV		
SAG DWG:	T13804371			1	3			
DAMPERS DWG:								

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ASCR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 30

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 235  
STRUCT #: 213

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106625 ORDER : 236

LINE NO/LTR:	006AF
STRUCT #:	214
OP VOLTAGE:	138
STN/EQ :	679.67
BACK SPAN:	317.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 204-217  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE 006AF CKT 1  
 SIZE 1 & 2: 336.4 KCMIL ACSR  
 DES VOLTAGE: SH FIG REV SH FIG REV  
 DWG: TL0019035 3 17  
 SAG DWG: T13804372  
 JMPR STR DWG:  
 DAMPERS DWG:  
 SPACER DWG #:  
 SPACER RMKS:

**REMARKS:**

CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE 006AF CKT 1  
 SIZE: 80 KCMIL ACSR SH FIG REV SH FIG REV  
 DWG NO: TL0019081 1 3  
 SAG DWG: T13804371  
 DAMPERS DWG:

**REMARKS:**

CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 30

**REVISION**

LETTER: MWO NO: PREPARED BY: KDKING  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 236  
STRUCT #: 214

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106626 ORDER : 237

LINE NO/LTR:	006AF
STRUCT #:	215
OP VOLTAGE:	138
STN/EQ :	682.84
BACK SPAN:	317.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 204-217  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE 006AF CKT 1  
 SIZE 1 & 2: 336.4 KCMIL ACSR  
 DES VOLTAGE: SH FIG REV SH FIG REV  
 DWG: TL0019035 3 17  
 SAG DWG: T13804372  
 JMPR STR DWG:  
 DAMPERS DWG:  
 SPACER DWG #:  
 SPACER RMKS:

REMARKS:  
CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE 006AF CKT 1  
 SIZE: 80 KCMIL ACSR SH FIG REV SH FIG REV  
 DWG NO: TL0019081 1 3  
 SAG DWG: T13804371  
 DAMPERS DWG:

REMARKS:  
CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 30

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 237  
STRUCT #: 215

LINE NAME: ALMA-SUMMERTON

UNIQUE STRUCT #: W0106627 ORDER: 238

LINE NO/LTR:	006AF
STRUCT #:	216
OP VOLTAGE:	138
STN/EQ :	686.00
BACK SPAN:	316.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 204-217  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE 1 & 2:	336.4 KCMIL ACSR										
DES VOLTAGE:											
DWG:	TL0019035					3	17				
SAG DWG:	T13804372										
JMPR STR DWG:											
DAMPERS DWG:											
SPACER DWG #:											
SPACER RMKS:											

**REMARKS:**

CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV	SH	FIG	REV
SIZE:	80 KCMIL ACSR										
DWG NO:	TL0019081					1	3				
SAG DWG:	T13804371										
DAMPERS DWG:											

**REMARKS:**

CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 30

**REVISION**

LETTER:	MWO NO:	PREPARED BY: KDKING
GWO: 1242	DATE: 6/9/2000	DATE: 6/9/2000
RS NO: 45116	DESIGNER: KDK	APPROVED BY: CRCOLEMAN
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE		DATE: 6/9/2000
		DEPT. HEAD: BD BUGBEE
		DIVISION HEAD: RG COTTRELL

LINE NO/LTR:	006AF
STR ORDER:	238
STRUCT #:	216

LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106628 ORDER : 239

LINE NO/LTR:	006AF
STRUCT #:	217
OP VOLTAGE:	138
STN/EQ :	689.20
BACK SPAN:	320.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	85
POLE CLASS:	2
CONST TYPE:	HP

**STRUCTURE**

DWG: TL0019251 SH: FIG: REV:

REMARKS: EXCEPT INSTALL INSULATORS ON EAST SIDE OF POLES 204-217  
USE CRUSHED ROCK BACKFILL.

GUYING:

**CONDUCTORS**

LINE 006AF CKT 1  
 SIZE 1 & 2: 336.4 KCMIL ACSR  
 DES VOLTAGE: SH FIG REV SH FIG REV  
 DWG: TL0019035 3 17  
 SAG DWG: T13804372  
 JMPR STR DWG:  
 DAMPERS DWG:  
 SPACER DWG #:  
 SPACER RMKS:

**REMARKS:**

CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE 006AF CKT 1  
 SIZE: 80 KCMIL ACSR SH FIG REV SH FIG REV  
 DWG NO: TL0019081 1 3  
 SAG DWG: T13804371  
 DAMPERS DWG:

**REMARKS:**

CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 30

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 239  
STRUCT #: 217



LINE NAME : ALMA-SUMMERTON

UNIQUE STRUCT #: W0106629 ORDER : 240

LINE NO/LTR:	006AF
STRUCT#:	218
OP VOLTAGE:	138
STN/EQ :	692.38
BACK SPAN:	318.00
DEFLECTION:	90-00'-00" RT
TYPE:	WOOD POLE
POLE HT:	90
POLE CLASS:	H1
CONST TYPE:	DE

**STRUCTURE**

DWG: TL0019202 SH: FIG: REV:

REMARKS: USE CRUSHED ROCK BACKFILL. NO RAKE, BUTT 5' EAST OF CL. SEE DWG T13804379 FOR CONDUCTOR PLAN.

GUYING: 2-7/16" EHS DOWN 50' & 45' N TO SS-PISA, 8 SP & 2 GUY GUARDS PER ANC.

**CONDUCTORS**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV
SIZE 1 & 2: 336.4 KCMIL ACSR								
DES VOLTAGE:								
DWG: TL0019035 SH 2 FIG 10								
SAG DWG: T13804372								
JMPR STR DWG:								
DAMPERS DWG:								
SPACER DWG #:								
SPACER RMKS:								

**REMARKS:**

CKT 1:  
SAG CHART 336.4 KCMIL ACSR PER T13804372, 324'RS, 4280#MT  
SEE DWG T13804379 FOR CONDUCTOR PLAN. CHANGE TENSION : SLACK SPAN POLE 218 - 219.

CKT 2:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

**POLE STAY**

**SWAMP FIXT**

**PLAN & PROFILE**

DWG:  
SH: FIG: REV:

**RWA**

DWG:  
SH: FIG: REV:

**CWA**

DWG: T13804345  
SH: FIG: REV:

**LIGHTNING ARRESTOR**

**GROUND WIRE**

LINE	006AF	CKT	1	LINE	CKT	SH	FIG	REV
SIZE: 80 KCMIL ACSR								
DWG NO: TL0019081 SH 1 FIG 6								
SAG DWG: T13804371								
DAMPERS DWG:								

**REMARKS:**

CKT 1:  
SAG CHART 80 KCMIL ACSR PER T13804371, 324'RS, 2050#MT.  
CHANGE TENSION : SLACK SPAN POLE 218 - 219.

CKT 2:

**GENERAL REMARKS**

**STRUCTURE LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

**TYPE OF RIGHT-OF-WAY:**

COUNTY: ISABELLA  
TOWNSHIP: CHIPPEWA  
TOWN/RANGE: T14N,R03W  
SECTION: 30

**REVISION**

LETTER: MWO NO:  
GWO: 1242 DATE: 6/9/2000  
RS NO: 45116 DESIGNER: KDK  
NOTES: NEW CONSTR LIST LINE 6AF - ADDED POLES FOR LINE

PREPARED BY: KDKING  
DATE: 6/9/2000  
APPROVED BY: CRCOLEMAN  
DATE: 6/9/2000  
DEPT. HEAD: BD BUGBEE  
DIVISION HEAD: RG COTTRELL

LINE NO/LTR: 006AF  
STR ORDER: 240  
STRUCT #: 218

**Subject:** RE: Notification: CE Proposed Project - Summerton-Alma  
**From:** "Richard N. Collins" <rnccollins@cai-engr.com>  
**Date:** Tue, 16 May 2006 15:39:21 -0400  
**To:** "Jim Smith" <jsmith@metcllc.com>  
**CC:** "Richard D. Pulley" <rdpulley@cai-engr.com>, "fernando Guevara" <Fguevara@nsidatatechs.com>

CU-208

Jim,

This is CU-208. I thought this was rejected and/or cancelled before. Has something changed that we should review this again? Does METC planning want this to happen? I did some estimating stuff on this for Ruth a little while ago.

Sincerely,

Rich Collins

---

**From:** Jim Smith [mailto:jsmith@metcllc.com]  
**Sent:** Tuesday, May 09, 2006 1:40 PM  
**To:** racollins@cmsenergy.com; Richard N. Collins  
**Subject:** RE: Notification: CE Proposed Project - Summerton-Alma

Sorry Rich A Collins, this should have gone to Rich N. Collins. Damn, can one of you change there names. Haha, Sorry about that

James W. Smith  
Manager, Program Maintenance  
Michigan Electric Transmission Company, LLC  
3001 Orchard Vista Drive, S.E.  
Suite 300  
Grand Rapids, Michigan 49456

E-mail: [jsmith@metcllc.com](mailto:jsmith@metcllc.com)  
Phone (616) 482.1366  
Fax: (616) 482.1485

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---

**From:** Jim Smith  
**Sent:** Tuesday, May 09, 2006 1:37 PM  
**To:** Richard A. collins (racollins@cmsenergy.com); Rich D Pulley (rdpulley@cai-engr.com); Fernando Guevara; Claro Guico  
**Cc:** Phil Mann (pmann@nsi-consulting.com); Ruth M. Kloecker; Steve Quade  
**Subject:** FW: Notification: CE Proposed Project - Summerton-Alma

All,

Heads up on new CU, if you have any q questions give me a call. This is the same CU that we went around and around with CE on the previous request that was cancelled.

James W. Smith  
Manager, Program Maintenance  
Michigan Electric Transmission Company, LLC  
3001 Orchard Vista Drive, S.E.  
Suite 300  
Grand Rapids, Michigan 49456

E-mail: [jsmith@metcllc.com](mailto:jsmith@metcllc.com)  
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**From:** Kevin C Lott [<mailto:kclott@cmsenergy.com>]

**Sent:** Friday, May 05, 2006 9:02 AM

**To:** [pmann@nsi-consulting.com](mailto:pmann@nsi-consulting.com)

**Cc:** Jim Smith; Paul F Johnson; Bruce D Bugbee; Gary A Bultsma; Richard A Collins; James R Anderson; Mary Anne Marr; Brian G Ott; Kurt A Rudolph; Timothy J Sparks; Steven L Ray; Dwayne C Parker; Lisa M DeLacy; Marilyn J Leighty

**Subject:** Notification: CE Proposed Project - Summerton-Alma

This is notification by Consumers Energy to METC, LLC of CE's proposed usage of existing future double circuit poles, on which METC, LLC currently has one 138 kV circuit. Per CE-METC Planning Practice 8, CE is notifying METC, LLC of its proposed usage of the subject pole structures for the installation of a 46 kV circuit from pole #191 to pole #218 of the Summerton-Alma 138 kV line (approximately 1.6 miles).

This message is being sent in conjunction with the formal notification via registered mail. Please review CE's proposed usage and, if METC, LLC finds it to be a Compatible Use, sign one of the paper copies of the letter being sent to you and return it to me. If METC, LLC finds CE's proposed usage to not be a Compatible Use, then please provide me with your written explanation as to why METC, LLC arrived at that determination along with any suggested alternatives that METC, LLC may have in mind that would lead to resolution.

Per Section 7.1 of EA, METC, LLC has 30 days from receipt of the registered mail notification to provide CE with its written response concerning this proposed usage. Depending on the day the notification is received, the due date for your response is approximately June 5, 2006.

If you have any questions concerning this proposed usage by CE, please contact me at 517-788-1471.

K.C. Lott  
[kclott@cmsenergy.com](mailto:kclott@cmsenergy.com)

**Subject:** CU-208

**From:** "Richard D. Pulley" <rdpulley@cai-engr.com>

**Date:** Thu, 1 Jun 2006 11:42:25 -0400

**To:** "Jim Smith" <jsmith@metcllc.com>, "Ruth M. Kloecker" <rkloecker@metcllc.com>

**CC:** "Fernando Guevara" <fguevara@nsi-consulting.com>, "Richard N. Collins" <rencollins@cai-engr.com>

Jim/Ruth,

This line was designed for a double circuit of witch METC only has one currently installed. Therefore, we have nothing to check at this time and it becomes a planning issue. If you should have any questions do not hesitate to call.

Sincerely,

Rich Pulley

***Civil/Structural Engineer***

Commonwealth Associates, Inc

Phone Number: (517) 788-3008

E-Mail: [rdpulley@cai-engr.com](mailto:rdpulley@cai-engr.com)

# METC

Michigan Electric Transmission Company, LLC  
A TRANS-ELECT ENTERPRISE

## COMPATIBLE USE REQUEST

MONTH/YEAR MAY 2006 DATE OF REQUEST 5/8/2006  
METC FILE # CU-208 DUE DATE 6/6/2006  
CE REFERENCE # \_\_\_\_\_ DUE DATE NSI 6/5/2006  
CAI TASK # C208 DATE APPROVED 6/1/06

COMPATIBLE USER Consumers Energy TYPE OF USE Proposed Use of Alma-Summerton Future Double Circuit

LOCATION Isabella/Chippewa TOWNSHIP Chippewa COUNTY Isabella  
SECTION 31 QUARTER SECTION \_\_\_\_\_ TOWN 14N RANGE 3W

TRANSMISSION LINE NAME Alma-Summerton LINE NUMBER 6AF VOLTAGE 138kV  
STRUCTURE NUMBER 191 through 218 STRUCTURE TYPE Wood Pole STRUCTURE HEIGHT \_\_\_\_\_

OPERATING MVA \_\_\_\_\_ SHORT TERM EMERGENCY RATING \_\_\_\_\_  
LIMITING FACTOR \_\_\_\_\_ LONG TERM EMERGENCY RATING \_\_\_\_\_

HEIGHT OF METC CONDUCTOR AT CROSSING \_\_\_\_\_  
HEIGHT OF UTILITY AT CROSSING \_\_\_\_\_  
CONDUCTOR TEMPERATURE FOR CLEARANCE CHECK \_\_\_\_\_  
CLEARANCE MEETS NESC +2' BUFFER AT NORMAL OPERATING TEMPERATURE  YES  NO  
CLEARANCE MEETS NESC AT \_\_\_\_\_ NORMAL OPERATING MVA  YES  NO  
SHORT TERM EMERGENCY RATING  YES  NO  
LONG TERM EMERGENCY RATING  YES  NO  
6 PSF BLOW OUT CLEARANCE \_\_\_\_\_ NESC REQUIRED BLOW OUT CLEARANCE \_\_\_\_\_

IS STRUCTURE ADEQUATE FOR UTILITY ATTACHMENT  YES  NO

MEETS METC STANDARS  YES  NO ATTACHED DOCUMENTATION  YES  NO  
MEETS NECS STANDARS  YES  NO PLAN & PROFILE REVISED  YES  NO  
APPROVED PROJECT FOR THIS LINE OR CORRIDOR  YES  NO

COMMENTS:

ASSET MANAGER \_\_\_\_\_ PROPERTY MANAGEMENT FG ENGINEERING DET RDP PLANNING DEPT \_\_\_\_\_