

February 12, 2007

Michigan Electric Transmission Company, LLC  
C/O NSI Consulting & Development, Inc.  
26657 Woodward Ave., Suite 100  
Huntington Woods, MI 48070

Attention: Executive Vice President and Chief Operating Officer

Subject: Three Phase, 11,000 Delta Aerial Cable.

Reference No: 06606555/Arenac Twp/Arenac/Walker

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 relocate a distribution line crossing certain land in which METC has an interest under the Agreement. The location of the land on which said line will be constructed, and a further description of the intended use, are set forth on "Annex A", attached to this letter.

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.

February 12, 2007

Page Two

Reference No: 06606555/Arenac Twp/Arenac/Walker

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.

Very truly yours,



Stacie Lahr  
Consumers Energy  
One Energy Plaza  
Jackson, MI 49201

APPROVED:

MICHIGAN ELECTRIC TRANSMISSION  
COMPANY, LLC

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



**APPROVED FEB 26 2007**

Date: \_\_\_\_\_

ANNEX A

Reference No. 06606555/Arenac Twp/Arenac/Walker

LAND TO BE IMPACTED:

Land located in the Township of Arenac, County of Arenac, State of Michigan, described as follows:

**The Southeast 1/4 of Section 15, Township 19 North, Range 5 East.**

PROPOSED USE:

**Relocate a three phase distribution line that crosses an existing 138Kv transmission line. The distance to a METC facility is 20 feet. The crossing height is 33-35 feet. See attached 391 form, sketch, and plan and profile drawings.**

Prepared by:  
Stacie M Lahr 02/12/07  
Consumers Energy Company  
EP7-436  
One Energy Plaza  
Jackson, MI 49201



Date: February 22, 2007

To: Barbara Mention/Fernando Guevara  
Real Estate and Rights of Way  
ITC

From: David Doubley  
Engineering  
ITC

Subject: **MAR071107/CU-245**  
CE Three Phase 11kv Delta Cable next to METC 138kv  
Section 15, Arenac Twp, Arenac County

This request is approved.

Approved

by: David Doubly  
David Doubley  
Engineer

**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

<b>TO BE FILLED IN BY SYSTEM OWNER / ENGINEER / CES</b>
Headquarters <u>BAY CITY</u>
Work Order No. <u>6606555</u>
Date <u>10-18-2006</u>

**PROPOSED DISTRIBUTION CONSTRUCTION**

Sketch Attached  Yes  No

Primary:

Voltage 11,000 DELTA Phase 3

No. of Wires 3 Crossarms Per Pole \_\_\_\_\_

Wire Size 1/0 aerial cable Length of Crossarms \_\_\_\_\_

Distance Below Transmission 11.5'

Skip-Span  Yes  No

Secondary:

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

Other Details: Distribution to replace existing 158' span of #4 acsr with 1/0 aerial cable. Nearest Transmission support is 20 feet to north of distribution line. Crossing point is at 30% of distribution span.

5N

<b>TO BE FILLED IN BY TRANSMISSION LINES DESIGN AND STANDARDS OR METC</b>
Engineering Required <input type="checkbox"/> Yes <input type="checkbox"/> No
Checked By _____ Date _____
GWO No. _____

**EXISTING DISTRIBUTION FACILITIES**

Description: AT CROSS UNDER POINT - Distribution will be at 33- 35 ' above final grade at all temperature and ice loading contions. This crossing is 20' horizontal distance south from the transmission tower # 226. Estimated height from grade to lowest transmission line at this point is 50 ft above grade.

**LOCATION**

Township ARENAC County ARENAC

Section 15 Range 05E (55)

Transmission Line Involved \_\_\_\_\_  METC Line

Transmission Pole No. 20 ft south of tower #226

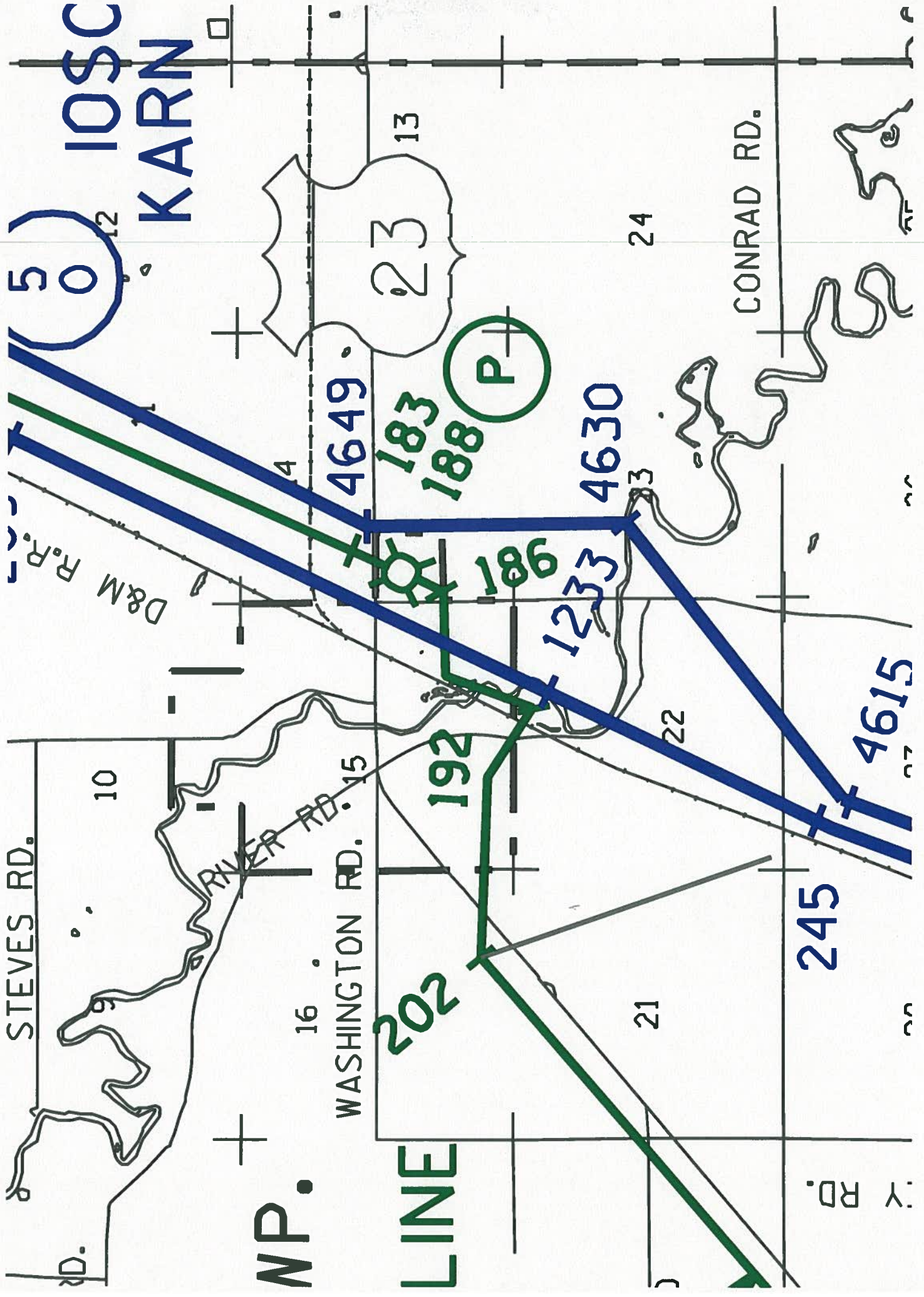
**REMARKS:**

Prepared By SUE WALKER 667-5232 Date 1-31-2007  
System Planning and Performance / Electric Service

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

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

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.



5 IO SC  
KARN

NP.

LINE

P

STEVES RD.

RIVER RD.

WASHINGTON RD.

CONRAD RD.

D&M R.R.

10

16

192

202

186

1233

21

22

245

4649

183

188

4630

24

4615

23

12

13

9

10

11

12

13

14

15

16

17

18

19

20

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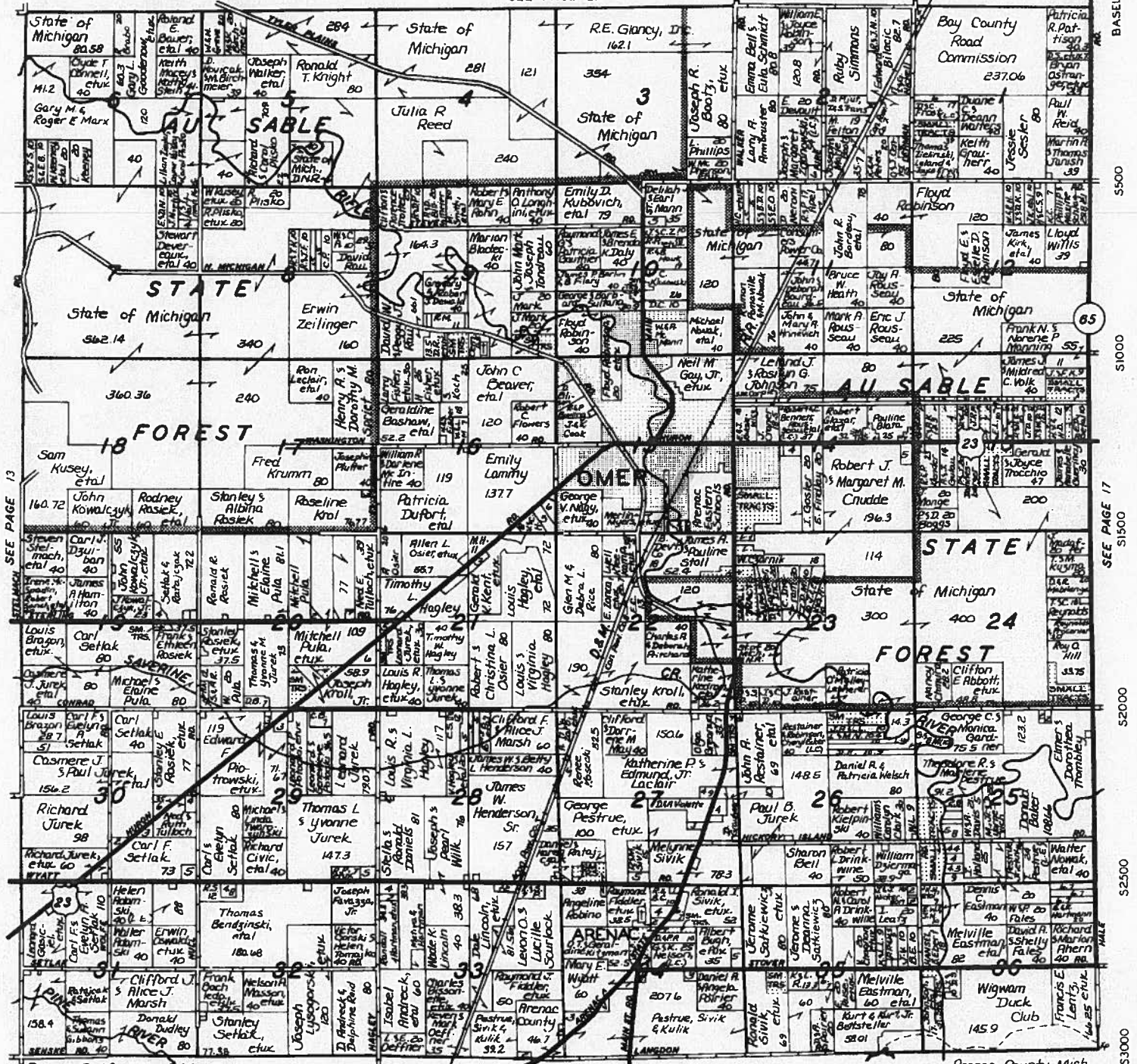
Y RD.

Map 7-60

16" DS-1 Metc

SEE PAGE 21

BASELINE



EXISTING 45-4 POLE OK

1 REPLACE

SIDE ARM/SBFC  
CLASS 'B' CONSTRUCTION  
3 PHASE DEADEND TRANSITION  
AERIAL TO BARE WIRE #4 ACSR  
PG 29-340-5  
20K-FG-P-34'-STE  
INSTALL LINE ARM + 3 ARRESTERS  
INSTALL ANTENNA ON PRIMARY GROUND  
TEST EXISTING PRIMARY GROUND-  
25 OHMS OR LESS

EXISTING 45-4 POLE OK

2 INSTALL

ANTENNA + DOWN GROUND  
TANGENT 3 PHASE  
1/0 AERIAL CABLE  
14' SWAY BRACKET  
PG29-305-1  
TEST GROUND 25 OHMS OR LESS  
REMOVE SIDE ARM

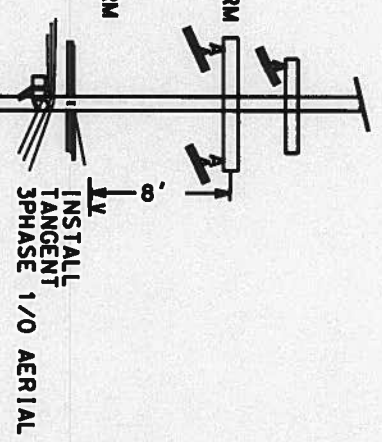
EXISTING 46KV 70'-1(SET 3' EX)  
POLE # 1183

3 SPACE 8' BELOW LOWEST 46KV ARM  
INSTALL ON NORTH SIDE OF POLE  
AERIAL CABLE TANGENT PG 29-305-1  
WITH 14" ANTI SWAY BRACKET  
NO NEUTRAL CONNECTION + NO ANTENNA  
GROUND BRACKET ON 46 KV DOWN GROUND

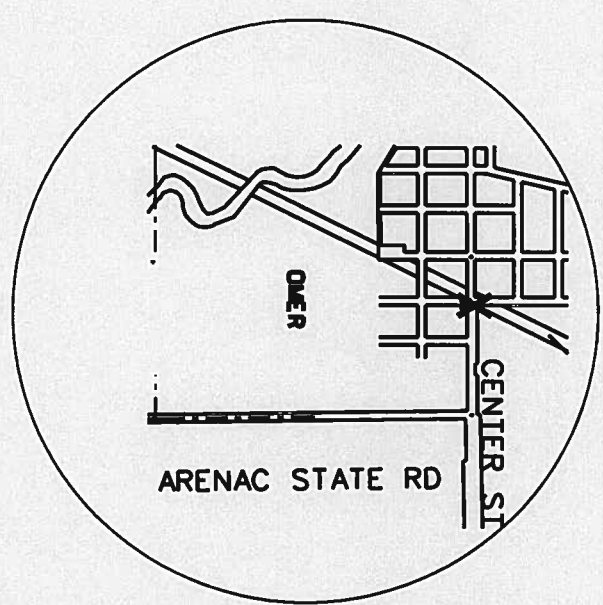
46KV SUSPENSION ARM  
REMOVE SIDE ARM

4 INSTALL

50'-4 SET 1' EX  
TOP GAIN DBS PDE PG 23-227  
20K-P-18'-RT (NORTHWEST)  
TRANSITION TO AERIAL CABLE  
2ND GAIN 1/0 PDE FIBERGLASS ARE  
AERIAL SPACER PG 29-340-5  
GUY  
GRADE 'B' ENGL=14282 FT/LB  
ATTACH PER 29-340-5  
20K-FG-57' STE (EAST)



ARENAC CO  
ARENAC TWP  
T19 R55 SEC. 15



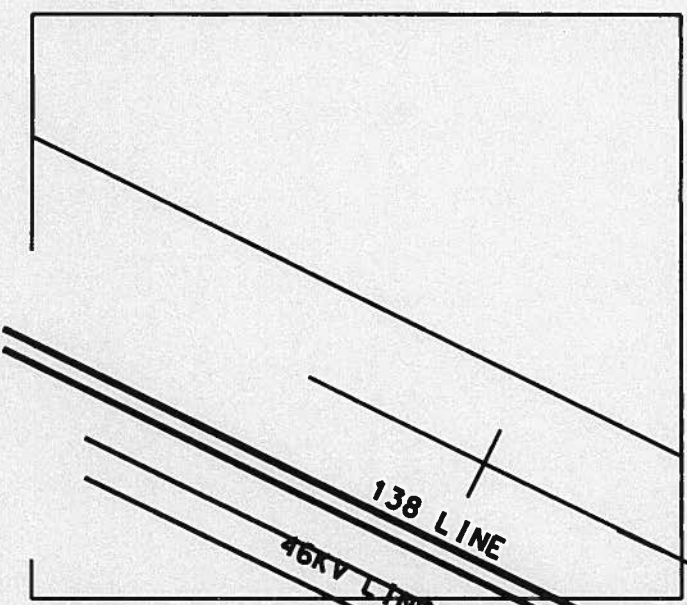
- CONSTRUCTION CERTIFICATION -

Work was constructed as Engineered or Changed as Indicated.  
All Salvageable Material Was Returned to Stores.

Signed \_\_\_\_\_ in Direct Charge of Work  
Dates: Started \_\_\_\_\_ Completed \_\_\_\_\_

MISS DIG NUMBER: \_\_\_\_\_ DATE: \_\_\_\_\_

46 kv line @ 47' ABOVE GRADE ON POLE



HIGH ST

138KV LN @50'+ ON TOWER

BELKNAP ST

CENTER ST

DBS ARM OK  
PDE OK  
REDIRECT PRIMARY  
TO NEW POLE  
LOCATION 4  
SET NEW ANCHOR  
20K-FG-P-12'-RT

REPLACE 3 PHASE DELTA PRIMARY  
#4 ACSR WITH 1/0 AERIAL CABLE =305'  
GRADE 'B' CONSTRUCTION LOCATIONS 1,2,3,+4  
NARROW RIGHT OF WAY  
MINIMUM CLEARANCES-  
10 FT FROM 138 KV TOWER  
11.5 FT BELOW 138 LINES  
8 FT BELOW 46 KV LINES  
13.5 FT FROM R/R CATWALK  
27 FT OVER R/R TRACK  
18 FT OVER STATE HIGH WAY  
TOWER

RR CROSSING HURON RD

STAKED	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		
TREES	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO		
TLM NUMBER	# DF	RODS	OHMS	
1955151408				
<i>Boussum's Energy</i>				
DESIGNED BY SGWALKER DATE 01/18/07				
APPROVED BY DATE SCALE				
SHEET 1 OF 1				
RR CROSSING HURON RD		TYPE CODE	REQUEST NO.	WORK ORDER
F0: HURON RD OMER RELOCATE RR CROSSING RELOCATE PRIMARY ARENAC		064402	03045561	
SUBSTATION BESSINGER		UTIL. TYPE	CATEGORY	TYPE
CIRCUIT QUARRY		EO	RLOC	OHLN
WD NO. 0919 GKT NO. 01 LCP NO. 0763		CAD FILE: 06606555.001		



LINE NAME: 5N - #175 TO #1253 (DUQUITE-TWINING)  
STRUCTURE #: 221 ORDER: 49

LINE NO/LTR:	5N
STRUCT #:	221
OP VOLTAGE:	138
STNEQ:	2216.36
BACK SPAN:	603.00
DEFLECTION:	
TYPE:	TOWER
TOWER TYPE:	KK71
TOWER EXT:	

**STRUCTURE**

DWG SHT LTR FIG REV COMMENTS

ANCHOR SPECIAL CONST:

ANCHOR BRACKET 1:

ANCHOR BRACKET 2:

REMARKS:

GUYING:

**CONDUCTORS**

LINE 5N

TYPE:

DES VOLTAGE: 138

DRAWINGS: NUM SHT LTR FIG REV

SPACER RMKS:

**REMARKS**

5N: SUSP.

**ELEVATIONS**

GROUNDLINE:

SETTING:

CENTERLINE:

**CON LIST**

DWG	SHT	LTR	FIG	REV
T13801105	7			

**GROUND WIRE**

LINE 5N

TYPE: 5/16 GALV STEEL

DRAWINGS: NUM SHT LTR FIG REV

ASSY: MZ0002722 1

SAG: MZ0001114

**REMARKS**

5N: SAG NOTE: FROM 175 (2459.17) TO 284 (1900.42) SAG 5/16" STEEL GRD WIRE PER MZ0001114, 500'RS, 2516#MT. INSTALL KV-93 GW PEAK PER ZM-550 (0-00' - 2 1/2'). SUSP.

**GENERAL REMARKS**

**LOCATION**

PROP OWNER: CP CO

PARCEL NO:

REMARKS: 82'E OF CL D&MRR, 40' W OF CL ALMEDA TWINING 46KV LINE

RIGHT-OF-WAY:

COUNTY: ARENAC

TOWNSHIP: ARENAC

TOWN/RANGE: T19N,R05E

SECTION: 14

**REVISION**

LETTER: B

GWO:

RS NO:

NOTES: CORRECTED LINE NAMES IN LINE LOCATION& REMARKS FOR RECORD (RLM) LHW

REV DESIGNER:

REV ENGINEER:

REVISION DATE: 6/8/1977

DESIGNER: BJC

ENGINEER: WAC

ENGINEER DATE: 9/22/1964

DIVISION HEAD: PAMULHEARN

DEPT HEAD:

LINE NO/LTR:	5N
STR ORDER:	49
STRUCT #:	221

LINE NAME: 5N - #175 TO #1253 (DUQUITE-TWINING)  
STRUCTURE #: 222 ORDER: 50

LINE NO/LTR:	5N
STRUCT #:	222
OP VOLTAGE:	138
STNEQ:	2210.87
BACK SPAN:	549.00
DEFLECTION:	
TYPE:	TOWER
TOWER TYPE:	KK71
TOWER EXT:	

**STRUCTURE**

DWG SHT LTR FIG REV COMMENTS

ANCHOR SPECIAL CONST:

ANCHOR BRACKET 1:

ANCHOR BRACKET 2:

REMARKS:

GUYING:

**CONDUCTORS**

LINE 5N

TYPE:

DES VOLTAGE: 138

DRAWINGS: NUM SHT LTR FIG REV

SPACER RMKS:

REMARKS

5N: SUSP.

**ELEVATIONS**

GROUNDLINE:

SETTING:

CENTERLINE:

**CON LIST**

DWG	SHT	LTR	FIG	REV
T13801105	7			

**GROUND WIRE**

LINE 5N

TYPE: 5/16 GALV STEEL

DRAWINGS: NUM SHT LTR FIG REV

ASSY: MZ0002722 1

SAG: MZ0001114

REMARKS

5N: SAG NOTE: FROM 175 (2459.17) TO 284 (1900.42) SAG 5/16" STEEL GRD WIRE PER MZ0001114, 500'RS, 2516#MT. INSTALL KV-93 GW PEAK PER ZM-550 (0-00' - 2 1/2'). SUSP.

**GENERAL REMARKS**

**LOCATION**

PROP OWNER: CP CO

PARCEL NO:

REMARKS: 82'E OF CL D&MRR, 40' W OF CL ALMEDA TWINING 46KV LINE

RIGHT-OF-WAY:

COUNTY: ARENAC

TOWNSHIP: ARENAC

TOWN/RANGE: T19N,R05E

SECTION: 14

**REVISION**

LETTER: B

GWO:

RS NO:

NOTES: CORRECTED LINE NAMES IN LINE LOCATION & REMARKS FOR RECORD (RLM) LHW

REV DESIGNER:

REV ENGINEER:

REVISION DATE: 6/8/1977

DESIGNER: BJC

ENGINEER: WAC

ENGINEER DATE: 9/22/1984

DIVISION HEAD: PAMULHEARN

DEPT HEAD:

LINE NO/LTR:	5N
STR ORDER:	50
STRUCT #:	222

LINE NAME: 5N -- #175 TO #1253 (DUQUITE-TWINING)  
STRUCTURE #: 223 ORDER: 51

LINE NO/LTR:	5N
STRUCT #:	223
OP VOLTAGE:	138
STW/EQ:	2208.13
BACK SPAN:	274.00
DEFLECTION:	
TYPE:	TOWER
TOWER TYPE:	KK71
TOWER EXT:	

**STRUCTURE**

DWG SHT LTR FIG REV COMMENTS

ANCHOR SPECIAL CONST:

ANCHOR BRACKET 1:

ANCHOR BRACKET 2:

REMARKS:

GUYING:

**CONDUCTORS**

LINE 5N

TYPE:

DES VOLTAGE: 138

DRAWINGS: NUM SHT LTR FIG REV

SPACER RMKS:

REMARKS

5N: SUSP.

**ELEVATIONS**

GROUNDLINE:

SETTING:

CENTERLINE:

**CON LIST**

DWG SHT LTR FIG REV  
T13801105 7

**GROUND WIRE**

LINE 5N

TYPE: 5/16 GALV STEEL

DRAWINGS: NUM SHT LTR FIG REV

ASSY: MZ0002722 1

SAG: MZ0001114

REMARKS

5N: SAG NOTE: FROM 175 (2459.17) TO 284 (1900.42) SAG 5/16" STEEL GRD WIRE PER MZ0001114, 500'RS, 2516#MT. INSTALL KV-93 GW PEAK PER ZM-550 (0-00' - 2 1/2'). SUSP.

**GENERAL REMARKS**

**LOCATION**

PROP OWNER: CP CO

PARCEL NO:

REMARKS: 62'E OF CL D&MRR, 40' W OF CL ALMEDA TWINING 46KV LINE

RIGHT-OF-WAY:

COUNTY: ARENAC

TOWNSHIP: ARENAC

TOWN/RANGE: T19N,R05E

SECTION: 14

**REVISION**

LETTER: B

GWO:

RS NO:

NOTES: CORRECTED LINE NAMES IN LINE LOCATION& REMARKS FOR RECORD (RLM) LHW

REV DESIGNER:

REV ENGINEER:

REVISION DATE: 6/6/1977

DESIGNER: BJC

ENGINEER: WAC

ENGINEER DATE: 9/22/1964

DIVISION HEAD: PAMULHEARN

DEPT HEAD:

LINE NO/LTR:	5N
STR ORDER:	51
STRUCT #:	223

LINE NAME: 5N - #175 TO #1253 (DUQUITE-TWINING)  
STRUCTURE #: 224 ORDER: 52

LINE NO/LTR:	5N
STRUCT #:	224
OP VOLTAGE:	138
STN/EQ:	2203.13
BACK SPAN:	500.00
DEFLECTION:	
TYPE:	WOOD POLE
POLE HT:	80
POLE CLASS:	2
CONST TYPE:	

**STRUCTURE**

DWG SHT LTR FIG REV COMMENTS  
MZ0002044

REMARKS: TANG. INSTALL 80'3 TANG. AS INDICATED . MIN GLC TO BE 55-3/4"  
GUYING:

**CONDUCTORS**

LINE 5N

TYPE:  
DES VOLTAGE: 138  
DRAWINGS: NUM SHT LTR FIG REV

SPACER RMKS:

**REMARKS**

5N:

**ELEVATIONS**

GROUNDLINE:  
SETTING:  
CENTERLINE:

**FRAMING**

DWG	SHT	LTR	FIG	REV
MZ0000909			22	

**CON LIST**

DWG	SHT	LTR	FIG	REV
T13801105	7			

**GROUND WIRE**

LINE 5N

TYPE: 5/16 GALV STEEL  
DRAWINGS: NUM SHT LTR FIG REV  
ASSY: MZ0002722 1  
SAG: MZ0001114

**REMARKS**

5N: SAG NOTE: FROM 175 (2459.17) TO 284 (1900.42) SAG 5/16" STEEL GRD WIRE PER MZ0001114, 500'RS, 2516#MT.

**GENERAL REMARKS**

2207.84 - P/L FENCE  
2206.38 - CL D&MRR SIDING (1 TRACK)  
2205.60 - P/L FENCE

**LOCATION**

PROP OWNER: CP CO  
PARCEL NO:  
REMARKS: 62'E OF CL D&MRR, 40' W OF CL ALMEDA TWINING 46KV LINE

RIGHT-OF-WAY:  
COUNTY: ARENAC  
TOWNSHIP: ARENAC  
TOWN/RANGE: T19N,R05E  
SECTION: 14

**REVISION**

LETTER: B  
GWO:  
RS NO:  
NOTES: CORRECTED LINE NAMES IN LINE LOCATION& REMARKS FOR RECORD {RLM}

REV DESIGNER:  
REV ENGINEER:  
REVISION DATE: 6/6/1977  
DESIGNER: BJC  
ENGINEER: WAC  
ENGINEER DATE: 9/22/1964

DIVISION HEAD: PAMULHEARN  
DEPT HEAD:

LINE NO/LTR:	5N
STR ORDER:	52
STRUCT #:	224

LINE NAME: 5N -- #175 TO #1253 (DUQUITE-TWINING)  
STRUCTURE #: 226 ORDER: 53

LINE NO/LTR:	5N
STRUCT #:	226
OP VOLTAGE:	138
STN/EQ:	2198.12
BACK SPAN:	501.00
DEFLECTION:	
TYPE:	TOWER
TOWER TYPE:	LD34
TOWER EXT:	

**STRUCTURE**

DWG SHT LTR FIG REV COMMENTS

ANCHOR SPECIAL CONST:

ANCHOR BRACKET 1:

ANCHOR BRACKET 2:

REMARKS:

GUYING:

**CONDUCTORS**

LINE 5N

TYPE:

DES VOLTAGE: 138

DRAWINGS: NUM SHT LTR FIG REV

SPACER RMKS:

REMARKS

5N: SUSP.

**ELEVATIONS**

GROUNDLINE:

SETTING:

CENTERLINE:

**CON LIST**

DWG	SHT	LTR	FIG	REV
T13801105	8			

**GROUND WIRE**

LINE 5N

TYPE: 5/16 GALV STEEL

DRAWINGS: NUM SHT LTR FIG REV

ASSY: MZ0002722 1

SAG: MZ0001114

REMARKS

5N: SAG NOTE: FROM 175 (2459.17) TO 284 (1900.42) SAG 5/16" STEEL GRD WIRE PER MZ0001114, 500'RS, 2516#MT. INSTALL KV-93 GW PEAK PER ZM-550 (0-00' - 2 1/2'). SUSP.

**GENERAL REMARKS**

REMOVE TRANSPOSITION & OLD TOWER #1224 ( KK-71)  
STA 2044.87

**LOCATION**

PROP OWNER: CP CO

PARCEL NO:

REMARKS: VILLAGE OF OMER

RIGHT-OF-WAY:

COUNTY:

TOWNSHIP:

TOWN/RANGE:

SECTION: 0

**REVISION**

LETTER: B

GWO:

RS NO:

NOTES: CORRECTED LINE NAME IN REMARKS FOR RECORD  
{RLM}  
LHW

REV DESIGNER:

REV ENGINEER:

REVISION DATE: 6/6/1977

DESIGNER: BJC

ENGINEER: WAC

ENGINEER DATE: 9/14/1964

DIVISION HEAD: PAMULHEARN

DEPT HEAD:

LINE NO/LTR:	5N
STR ORDER:	53
STRUCT #:	226

LINE NAME: 5N -- #175 TO #1253 (DUQUITE-TWINING)  
STRUCTURE #: 227 ORDER: 54

LINE NO/LTR:	5N
STRUCT #:	227
OP VOLTAGE:	138
STN/EQ:	2194.06
BACK SPAN:	406.00
DEFLECTION:	
TYPE:	TOWER
TOWER TYPE:	KR54
TOWER EXT:	

**STRUCTURE**

DWG SHT LTR FIG REV COMMENTS

ANCHOR SPECIAL CONST:

ANCHOR BRACKET 1:

ANCHOR BRACKET 2:

REMARKS: MA-23

GUYING:

**CONDUCTORS**

LINE 5N

TYPE:

DES VOLTAGE: 138

DRAWINGS: NUM SHT LTR FIG REV

SPACER RMKS:

**REMARKS**

5N: ALL DE & JS

**ELEVATIONS**

GROUNDLINE:

SETTING:

CENTERLINE:

**CON LIST**

DWG	SHT	LTR	FIG	REV
T13801105	8			

**GROUND WIRE**

LINE 5N

TYPE: 5/16 GALV STEEL

DRAWINGS: NUM SHT LTR FIG REV

ASSY: MZ0002722 1

SAG: MZ0001114

**REMARKS**

5N: SAG NOTE: FROM 175 (2459.17) TO 284 (1900.42) SAG 5/16" STEEL GRD WIRE PER MZ0001114, 500'RS, 2516#MT. INSTALL GW ON EXISTING PEAK. SUSP.

**GENERAL REMARKS**

2197.83 - DISTRIBUTION SECONDARY  
2197.57 - CL M-23 (BLACKTOP)  
2197.29 - TEL CABLE & OPEN WIRE

**LOCATION**

PROP OWNER: CP CO

PARCEL NO:

REMARKS: VILLAGE OF OMER

RIGHT-OF-WAY:

COUNTY:

TOWNSHIP:

TOWN/RANGE:

SECTION: 0

**REVISION**

LETTER: B

GWO:

RS NO:

NOTES: CORRECTED LINE NAME IN REMARKS FOR RECORD  
{RLM}  
LHW

REV DESIGNER:

REV ENGINEER:

REVISION DATE: 6/6/1977

DESIGNER: BJC

ENGINEER: WAC

ENGINEER DATE: 9/14/1964

DIVISION HEAD: PAMULHEARN

DEPT HEAD:

LINE NO/LTR:	5N
STR ORDER:	54
STRUCT #:	227

LINE NAME: 5N - #175 TO #1253 (DUQUITE-TWINING)  
STRUCTURE #: 228 ORDER: 55

LINE NO/LTR:	5N
STRUCT #:	228
OP VOLTAGE:	138
STN/EQ:	2190.64
BACK SPAN:	342.00
DEFLECTION:	
TYPE:	TOWER
TOWER TYPE:	KK71
TOWER EXT:	

**STRUCTURE**

DWG SHT LTR FIG REV COMMENTS

ANCHOR SPECIAL CONST:

ANCHOR BRACKET 1:

ANCHOR BRACKET 2:

REMARKS:

GUYING:

**CONDUCTORS**

LINE 5N

TYPE:

DES VOLTAGE: 138

DRAWINGS: NUM SHT LTR FIG REV

SPACER RMKS:

REMARKS

5N: SUSP.

**ELEVATIONS**

GROUNDLINE:

SETTING:

CENTERLINE:

**CON LIST**

DWG	SHT	LTR	FIG	REV
T13801105	8			

**GROUND WIRE**

LINE 5N

TYPE: 5/16 GALV STEEL

DRAWINGS: NUM SHT LTR FIG REV

ASSY: MZ0002722 1

SAG: MZ0001114

REMARKS

5N: SAG NOTE: FROM 175 (2459.17) TO 284 (1900.42) SAG 5/16" STEEL GRD WIRE PER MZ0001114, 500'RS, 2516#MT. INSTALL KV-93 GW PEAK PER ZM-550 (0-00' - 2 1/2'). SUSP.

**GENERAL REMARKS**

**LOCATION**

PROP OWNER: CP CO

PARCEL NO:

REMARKS: VILLAGE OF OMER

RIGHT-OF-WAY:

COUNTY:

TOWNSHIP:

TOWN/RANGE:

SECTION: 0

**REVISION**

LETTER: B

GWO:

RS NO:

NOTES: CORRECTED LINE NAME IN REMARKS FOR RECORD (RLM) LHW

REV DESIGNER:

REV ENGINEER:

REVISION DATE: 6/6/1977

DESIGNER: BJC

ENGINEER: WAC

ENGINEER DATE: 9/14/1984

DIVISION HEAD: PAMULHEARN

DEPT HEAD:

LINE NO/LTR:	5N
STR ORDER:	55
STRUCT #:	228

LINE NAME: 5N - #175 TO #1253 (DUQUITE-TWINING)

STRUCTURE #: 229

ORDER: 56

LINE NO/LTR:	5N
STRUCT #:	229
OP VOLTAGE:	138
STNEQ:	2186.53
BACK SPAN:	411.00
TYPE:	MULTI POLE
CONST TYPE:	HF

**STRUCTURE**

DWG MZ0002722 SHT LTR FIG REV COMMENTS

REMARKS:

TYPE	HEIGHT	CLASS	DEFLECT.	G/L ELEV	SET ELEV	C/L ELEV	GUYING
WOOD	80	2					
WOOD	80	2					

**CONDUCTORS**

LINE 5N

TYPE:  
DES VOLTAGE: 138  
DRAWINGS: NUM SHT LTR FIG REV

SPACER RMKS:

**REMARKS**

5N:

**CON LIST**

DWG	SHT	LTR	FIG	REV
T13801105	8			

**GROUND WIRE**

LINE 5N

TYPE: 5/16 GALV STEEL  
DRAWINGS: NUM SHT LTR FIG REV  
ASSY: MZ0002722 1  
SAG: MZ0001114

**REMARKS**

5N: SAG NOTE: FROM 175 (2459.17) TO 284 (1900.42) SAG 5/16" STEEL GRD WIRE PER MZ0001114, 500'RS, 2516#MT. INSTALL GW EXTENSION TO E'LY POLE TO CONFORM TO MZ-F647A

**GENERAL REMARKS**

2189.27 - E&W FENCE

**LOCATION**

PROP OWNER:  
PARCEL NO:  
REMARKS:

RIGHT-OF-WAY:  
COUNTY:  
TOWNSHIP:  
TOWN/RANGE:  
SECTION: 0

**REVISION**

LETTER: B  
GWO:  
RS NO:  
NOTES: CORRECTED LINE NAME IN REMARKS FOR RECORD (RLM) LHW

REV DESIGNER:  
REV ENGINEER:  
REVISION DATE: 6/6/1977  
DESIGNER: BJC  
ENGINEER: WAC  
ENGINEER DATE: 9/14/1964

DIVISION HEAD: PAMULHEARN  
DEPT HEAD:

LINE NO/LTR:	5N
STR ORDER:	56
STRUCT #:	229



LINE NAME: 5N - #175 TO #1253 (DUQUITE-TWINING)  
STRUCTURE #: 230 ORDER: 57

LINE NO/LTR:	5N
STRUCT #:	230
OP VOLTAGE:	138
STN/EQ:	2182.93
BACK SPAN:	360.00
DEFLECTION:	
TYPE:	TOWER
TOWER TYPE:	KK71
TOWER EXT:	

**STRUCTURE**

DWG SHT LTR FIG REV COMMENTS

ANCHOR SPECIAL CONST:

ANCHOR BRACKET 1:

ANCHOR BRACKET 2:

REMARKS:

GUYING:

**CONDUCTORS**

LINE 5N

TYPE:

DES VOLTAGE: 138

DRAWINGS: NUM SHT LTR FIG REV

SPACER RMKS:

**REMARKS**

5N: SUSP.

**ELEVATIONS**

GROUNDLINE:

SETTING:

CENTERLINE:

**CON LIST**

DWG	SHT	LTR	FIG	REV
T13801105	8			

**GROUND WIRE**

LINE 5N

TYPE: 5/16 GALV STEEL

DRAWINGS: NUM SHT LTR FIG REV

ASSY: MZ0002722 1

SAG: MZ0001114

**REMARKS**

5N: SAG NOTE: FROM 175 (2459.17) TO 284 (1900.42) SAG 5/16" STEEL GRD WIRE PER MZ0001114, 500'RS, 2516#MT. INSTALL KV-93 GW PEAK PER ZM-550 (0-00' - 2 1/2'). SUSP.

**GENERAL REMARKS**

2186.88 - CL ALMEDA TWINING 46 KV LINE

**LOCATION**

PROP OWNER: CP CO

PARCEL NO:

REMARKS: VILLAGE OF OMER  
62' W OF CL D&MRR

RIGHT-OF-WAY:

COUNTY:

TOWNSHIP:

TOWN/RANGE:

SECTION: 0

**REVISION**

LETTER: B

GWO:

RS NO:

NOTES: CORRECTED LINE NAME IN REMARKS FOR RECORD  
{RLM}  
LHW

REV DESIGNER:

REV ENGINEER:

REVISION DATE: 6/6/1977

DESIGNER: BJC

ENGINEER: WAC

ENGINEER DATE: 9/14/1984

DIVISION HEAD: PAMULHEARN

DEPT HEAD:

LINE NO/LTR:	5N
STR ORDER:	57
STRUCT #:	230