

Detroit  
Edison

REAL ESTATE AND RIGHTS OF WAY

Project No. BO 3660

Crossing No. Revision I  
RX 4346A

Date: May 20, 1988

To: Vicki C. Sullivan  
Supervisor  
Records Center

From: Brenda L. Golson

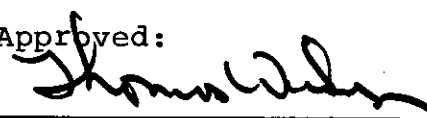
Subject: Additional Papers for Records Center File

Attached are papers related to a license agreement from Grand Trunk Western Railroad Company to Detroit Edison Company, dated May 21, 1987, Permit No. 532, File: L-3-50. Crossing of the Bloomfield-Spokane 120 kV transmission line over Grand Trunk Western Railroad, Crossings 1 and 2 located approximately 1,650 feet north of Auburn Road and 1,700 feet east of Adams Road, southwest 1/4 of Section 30, Avon Township, Oakland County, Michigan.

No additional charge was paid.

Revision I has been made part of the original agreement. Please incorporate these papers into Records Center File No. 34636-Part 4-Permit 283.

Approved:

  
Thomas Wilson  
Real Estate Associate

/BLG

attachments

cc: B. J. Davis  
C. F. VanParis

Serving Customers

*We're all a part of it!*

RECORDED RIGHT OF WAY NO.

34636-283

**Detroit Edison**

2000 Second Avenue  
Detroit, Michigan 48226  
(313) 237-8000

July 27, 1987

W. LaMasters  
Engineer of Surveys and Construction  
Grand Trunk Western Railroad Company  
131 West Lafayette Boulevard  
Detroit, MI 48226

Proposed Overhead Wire Crossing:

Crossing of the Bloomfield-Spokane 120 kV transmission line  
over the Grand Trunk and Western Railroad.

Specific Location

Located for Crossings 1 and 2 approximately, 1,650 feet north of  
Auburn Road and 1,700 feet east of Adams Road, southwest 1/4,  
Section 30, Avon Township, Oakland County, Michigan.

R.R. Valuation Station \_\_\_\_\_ R.R. Mile Post \_\_\_\_\_

City/Village \_\_\_\_\_ Township Avon

County Oakland Detroit Edison Plan Attached B0 3660 - RX 4346

This is a New Crossing Yes This is a Reconstruction of Existing Crossing No

Previous Agreement Information (if any) Date 5-21-87 (R.R. Plan) L350

~~Blanket Waiver of Hearing Covers xxxxxxxxxxxx Waiver of Hearing Requested xxxxxxxxxxxx  
xxxxxx of hearing to be waived to applicant listed below.~~

All construction will be done in accordance with the rules and regulations of the Michigan Public Service Commission.

Thomas Wilson  
Real Estate Associate

RECORDED RIGHT OF WAY NO. 37636 P 283

DATA SHEET TO ACCOMPANY DRAWING RX-4346, REVISION NO. 1  
REVISION OF CROSSING RX-4346  
COVERED UNDER R.R. INVOICE NO. L350, DATED 5-21-87

Name of Company

The Detroit Edison Company.

Name and Location of Crossing

Crossing of the Bloomfield-Spokane 120 kV transmission line over the Grand Trunk and Western Railroad. Located for crossing 1 and 2 approximately, 1,650 feet north of Auburn Road and 1,700 feet east of Adams Road, southwest 1/4 of Section 30, Avon Township, Oakland County, Michigan.

Circuits

Two 120,000 volt, 60 cycle, 3 wire, 3 phase transmission circuits.

Towers and Crossarms

See attached drawings ED1-7218 (TH) and ED1-9653 (H-Frame).

Conductors

3-1431 MCM ACSR 54/7 and one 7/16 steel groundwire per circuit. Two circuits.

Insulators

Deadend - Nine 5-3/4" x 10" insulators.

Guy and Guy Attachments

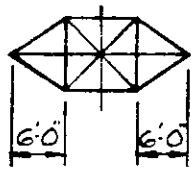
None.

Suspension and Deadend Details

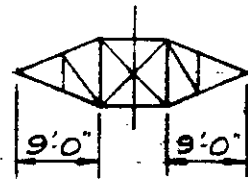
See attached drawing ED1-7008A.

Power System Organization  
CVP/lm 07-23-87

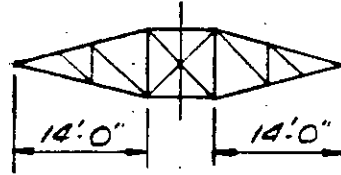
RECORDED RIGHT OF WAY NO. 34036 p283



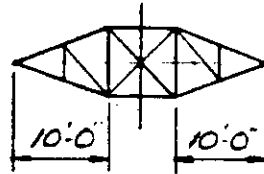
SECTION AA



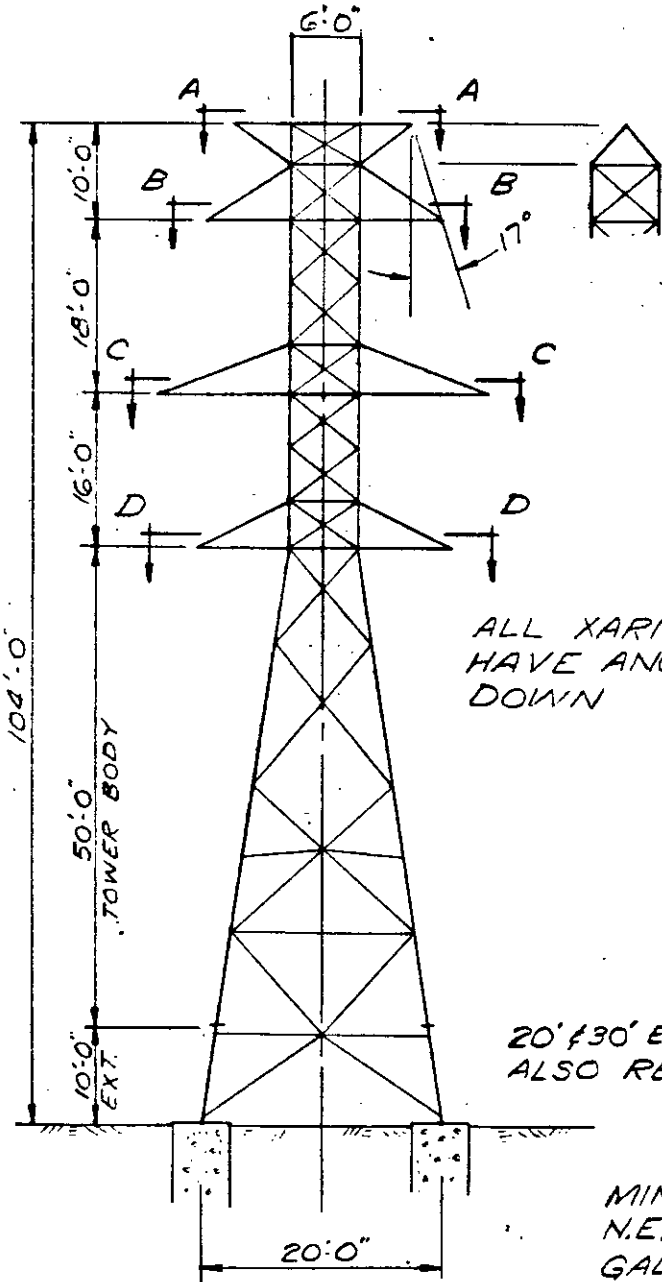
SECTION B-B



SECTION C-C



SECTION D-D



ALL XARMS MUST HAVE ANGLES TOED DOWN

20'±30' EXTENSIONS ALSO REQUIRED

MIN. STEEL THICKNESS ~ 3/16"  
 N.E.S.C. GRADE B (6TH. ED.)  
 GALV. PER ASTM SPEC. A123  
 ALL BOLTS SAME DIA. (ASTM - A 394)  
 BRACING SHOWN FOR ILLUSTRATION ONLY

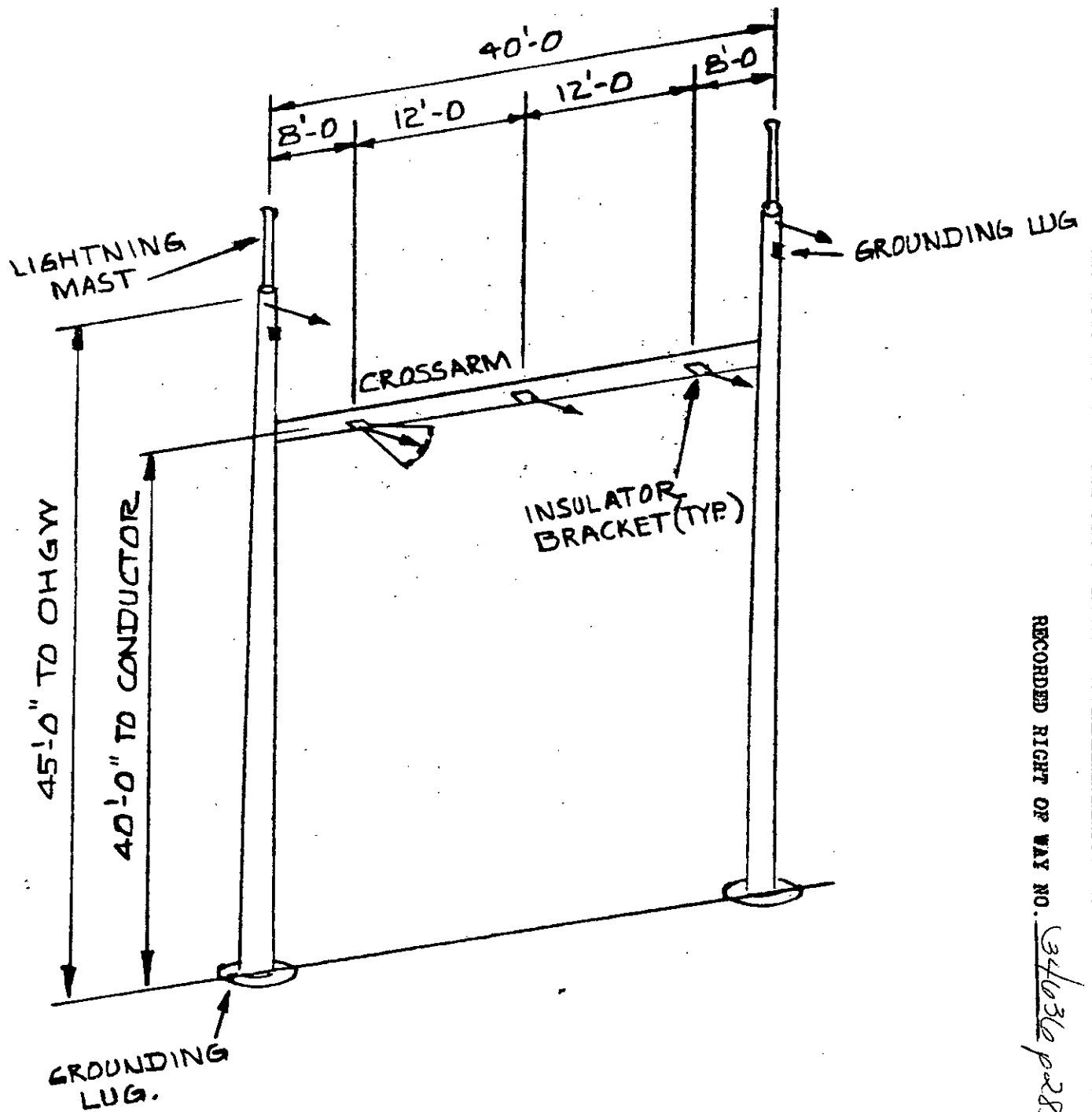
CROSSARMS FOR 15°30' DE. TOWER

CROSSARMS FOR 30°45' DE. TOWER

RECORDED RIGHT OF WAY NO. 34636 p283

230 KV DEADEND TOWERS  
 TYPE TM ~ 15°30' ANGLE  
 TYPE TH ~ 30°45' ANGLE

APPROVED	THE DETROIT EDISON COMPANY GENERAL ENGINEERING DEPARTMENT	
	LAYOUT BY R.O.S.	DRAWN BY R.O.S.
	DATE 6/19/70	DRAWING NUMBER
	SCALE ~	ED-1-7218



RECORDED RIGHT OF WAY NO. 34036 p283

5K 40 E 230 KV  
"H" FRAME

APPROVED

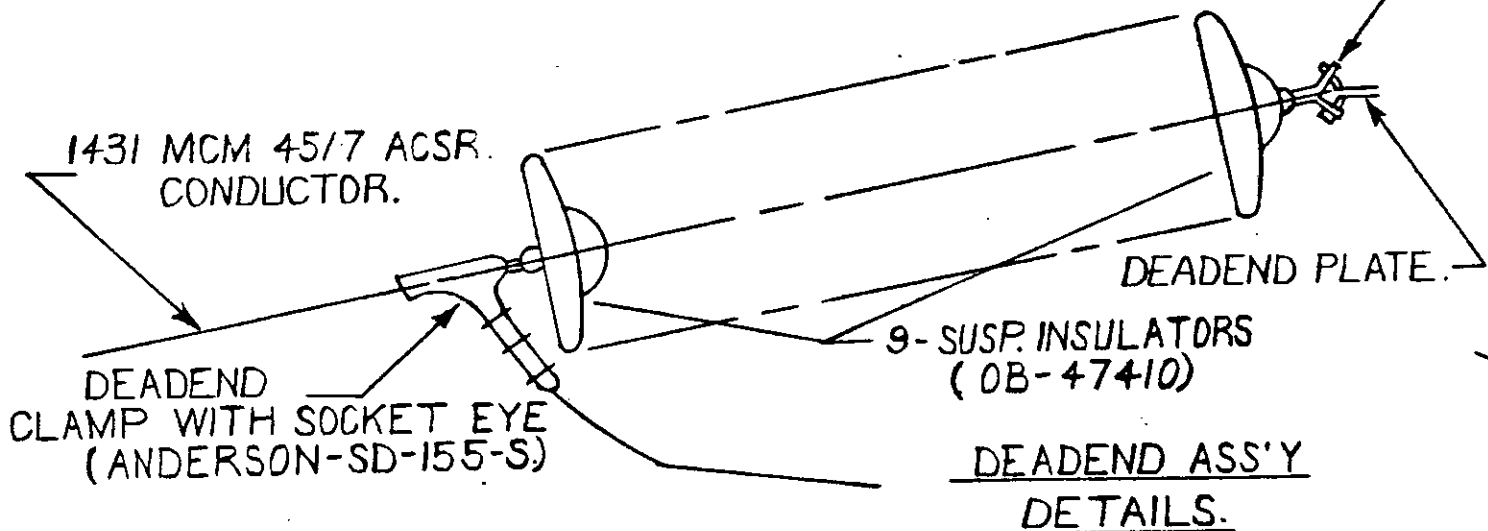
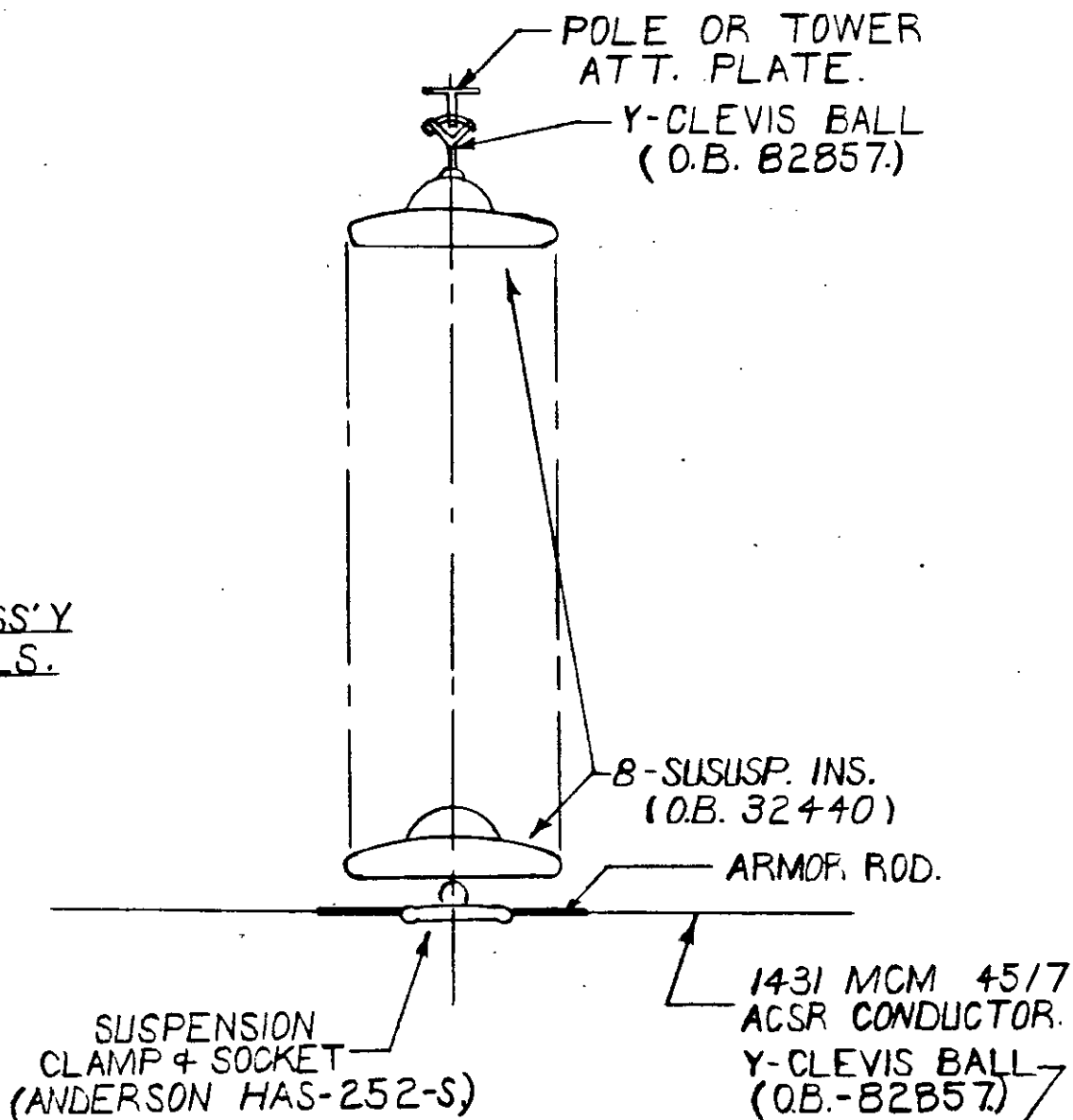
THE DETROIT EDISON COMPANY  
SYSTEM ENGINEERING DEPARTMENT

LAYOUT BY C. VAN PARIS DRAWN BY ~

DATE 4-30-87 DRAWING NUMBER

SCALE ~ ED 1-9653

SUSP. ASS'Y  
DETAILS.



RECORDED RIGHT OF WAY NO. 34636 p 283

120 KV SUSPENSION & DEADEND  
ASSEMBLY DETAILS FOR 1431 MCM  
45/7 ACSR.

APPROVED	THE DETROIT EDISON COMPANY GENERAL ENGINEERING DEPARTMENT	
	LAYOUT BY <i>RCS.</i>	DRAWN BY <i>N.H.H.</i>
	DATE <i>4-8-70.</i>	DRAWING NUMBER
	SCALE	<i>ED-1-7008-A</i>

# Detroit Edison

To: Vicki C. Sullivan  
Records Center

July 7, 1987

From: Brenda L. Golson  
Real Estate and Rights of Way ~~Department~~

Subject: BO 3660, RX 4346, Grand Trunk Western Railroad Company  
Crossings 1 and 2, Located Approximately 1,650 Feet North of  
Auburn Road and 1,700 Feet East of Adams Road  
SW ¼, Section 30, Avon Township, Oakland County, Michigan

The attached papers are for records center storage. Information about the completed transaction is shown in the following summary.


R.R. 1	R.R. INVOICE NO. M.P.S.C. NO. OR R.E. & R/W NO. 4	Update 10 Type	D.E.C.O. RECORDS CENTER FILE NO. 15	R.X. NO. OR MAP NO. 20	Facility 21	Agreement 22 Date 27
0 7	L-300 5 0	1		4 3 4 6	4	0 5 2 1 8 7

Payment Frequency 28	Rental 29 33	OH-UG 34 Code	Division 35	County 36	City or Township 38 44	Section 45
A	6 0 0	1	4	0 8	AVON	3 0

Location 41 80																												
N	O	F	A	U	B	U	R	N	R	O	A	D	-	E	A	S	T	O	F	A	D	A	M	S	R	O	A	D

Update Type Codes  
1 = New Agreement  
2 = Revised Agreement  
3 = Terminated Agreement

~~The Accounts Payable Department is requested to start on change  
the actual pay to effective~~

Approved:   
Thomas Wilson, Real Estate Associate

- cc:  Accounts Payable
- Service Planning
- ~~System Engineering~~ P S O-Clark VanParis
- Transmission & Distribution

RECORDED RIGHT OF WAY NO. 34636 p 283



2000 Second Avenue  
Detroit, Michigan 48226  
(313) 237-8000

May 7, 1987

W. LaMasters  
Engineer of Surveys and Construction  
Grand Trunk Western Railroad Company  
131 West Lafayette Boulevard  
Detroit, MI 48226

Proposed Overhead Wire Crossing:

Crossing of the Bloomfield-Spokane 120 kV transmission line over the Grand Trunk Western Railroad.

Specific Location

Crossings 1 and 2 located approximately 1,650 feet north of Auburn Road and 1,700 feet east of Adams Road, southwest 1/4, Section 30, Avon Township, Oakland County, Michigan.

R.R. Valuation Station \_\_\_\_\_ R.R. Mile Post \_\_\_\_\_

City/Village \_\_\_\_\_ Township Avon

County Oakland Detroit Edison Plan Attached BO 3660 - RX 4346

This is a New Crossing Yes This is a Reconstruction of Existing Crossing No

Previous Agreement Information (if any) Date \_\_\_\_\_ (R.R. Plan) \_\_\_\_\_

~~Blank~~ ~~Waiver of Hearing~~ ~~Requested~~ ~~Waiver of Hearing~~ ~~Requested~~  
(Waiver of hearing to be made to applicant listed below)

All construction will be done in accordance with the rules and regulations of the Michigan Public Service Commission.

Thomas Wilson  
Thomas Wilson  
Real Estate Associate

RECORDED RIGHT OF WAY NO. 34636 p283



DATA SHEET TO ACCOMPANY DRAWING RX-4346

Name of Company

The Detroit Edison Company

Name and Location of Crossing

Crossing of the Bloomfield-Spokane 120 kV transmission line over the Grand Trunk and Western Railroad. Located for crossing 1 and 2 approximately 1,650 feet north of Auburn Road and 1,700 feet east of Adams Road, southwest 1/4 of Section 30, Avon Township, Oakland County, Michigan.

Circuits

Two 120,000 volt, 60 cycle, 3 wire, 3 phase transmission circuits.

Towers and Crossarms

See attached drawings ED1-7218, (TH) and ED1-9653 (H-Frame).

Conductors

3-1431 MCM ACSR 54/7 and one 7/16 steel groundwire per circuit. Two circuits.

Insulators

Deadend - nine 5-3/4" x 10" insulators.

Guy and Guy Attachments

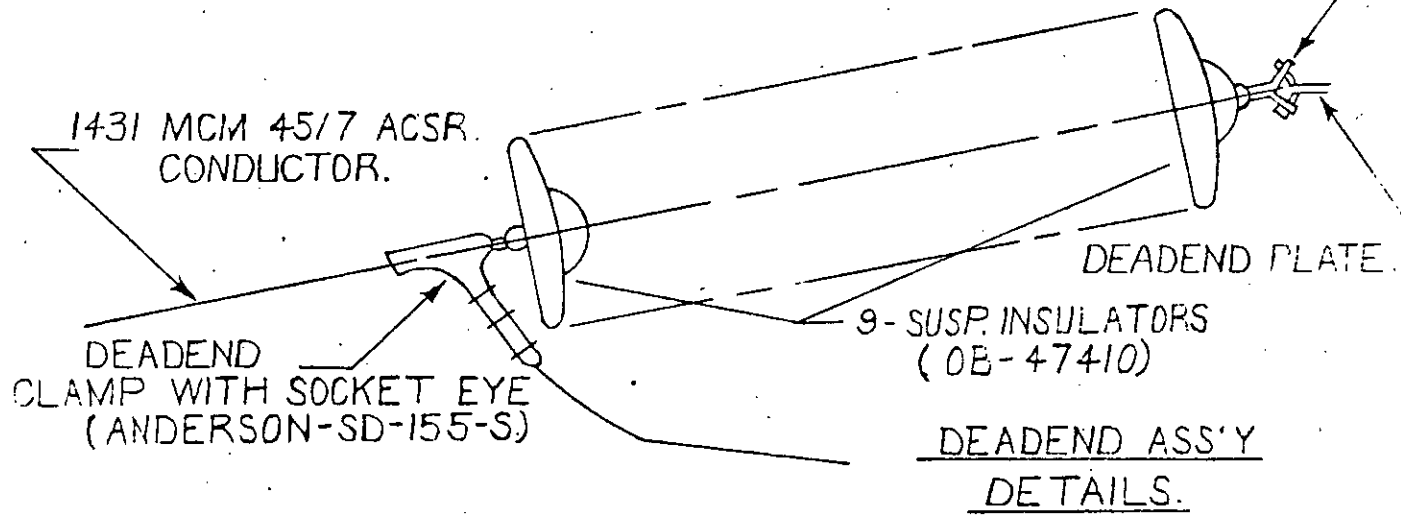
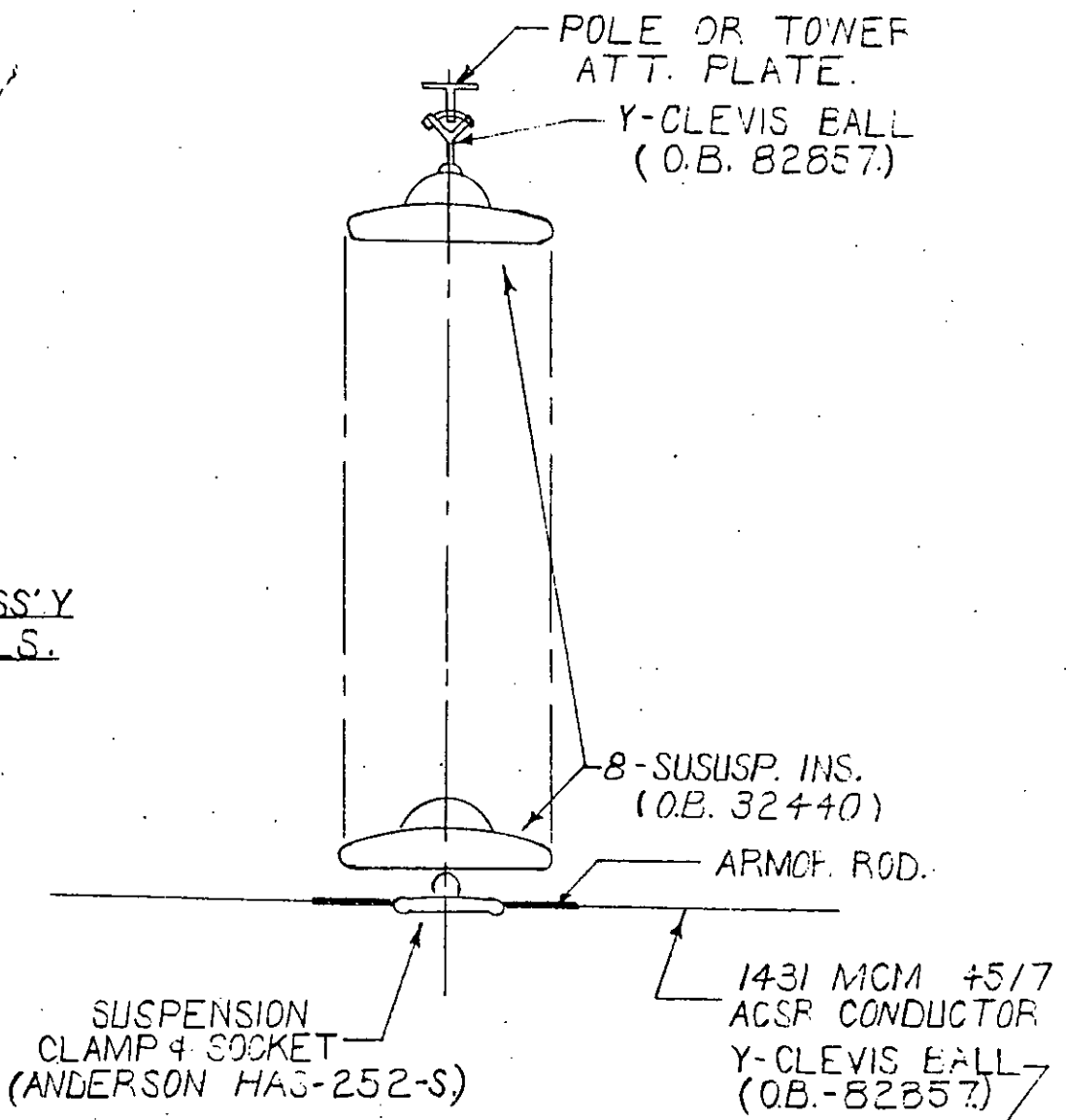
None.

Suspension and Deadend Details

See attached drawing ED1-7008A.

RECORDED RIGHT OF WAY NO. 34634 p283

SUSP. ASS'Y  
DETAILS.

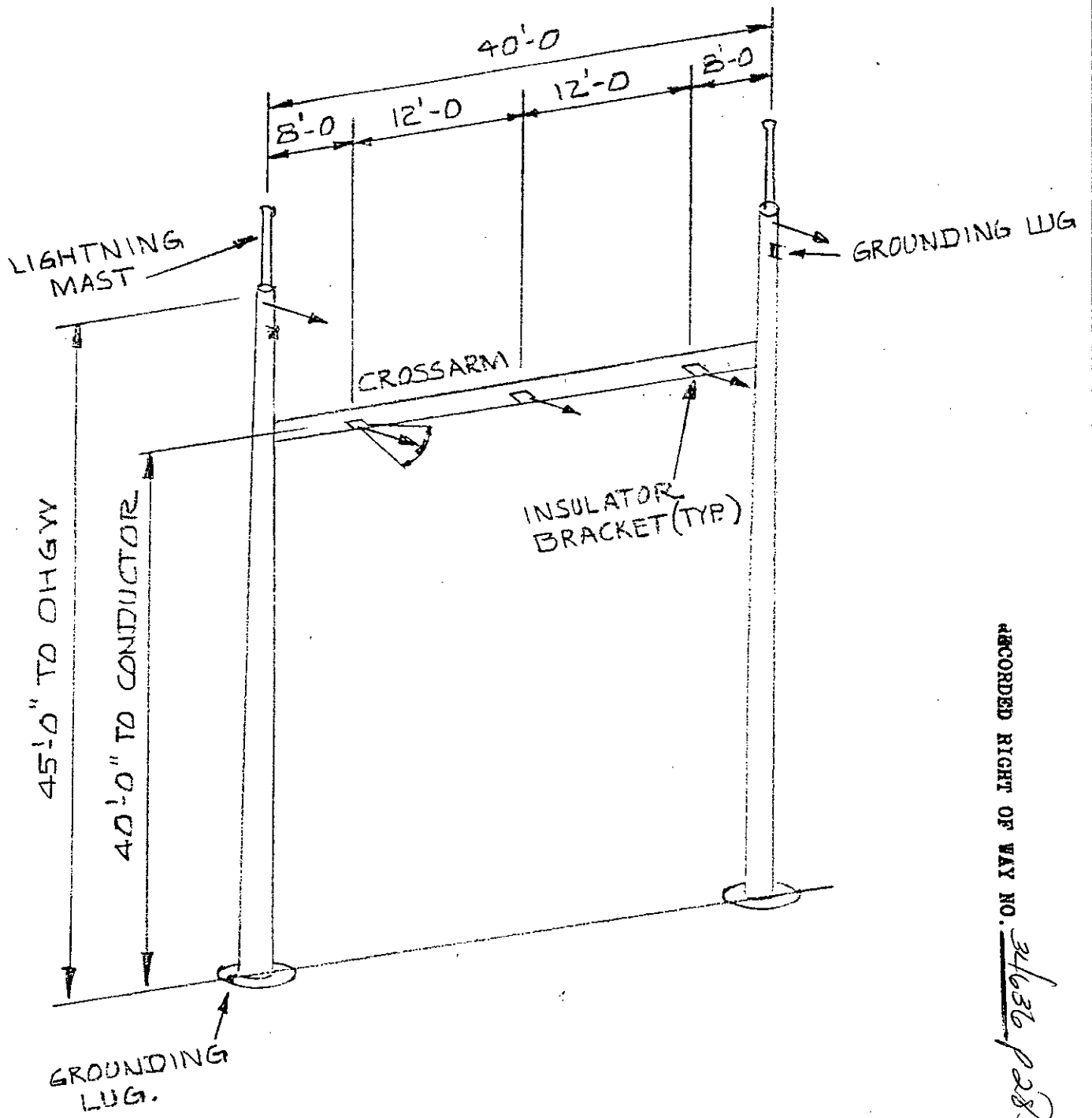


DEADEND ASS'Y  
DETAILS.

RECORDED RIGHT OF WAY NO. 34636 p 283

120 KV SUSPENSION & DEADEND ASSEMBLY DETAILS FOR 1431 MCM 45/7 ACSR.

APPROVED	THE DETROIT EDISON COMPANY GENERAL ENGINEERING DEPARTMENT	
	LAYOUT BY <i>RCS.</i>	DRAWN BY <i>N.H.H.</i>
	DATE <i>4-8-70.</i>	DRAWING NUMBER
	SCALE	<i>ED-1-7008 A</i>



RECORDED RIGHT OF WAY NO. 34636 P283

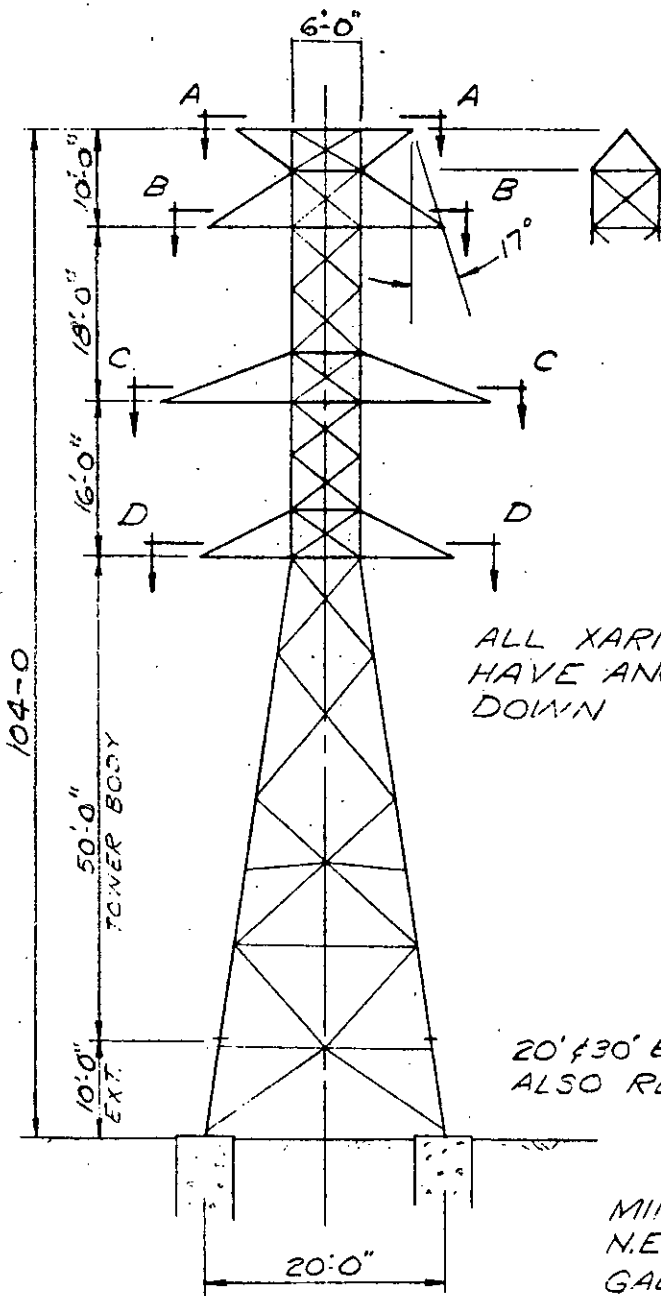
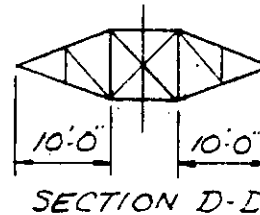
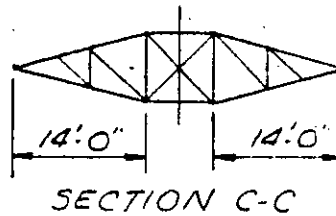
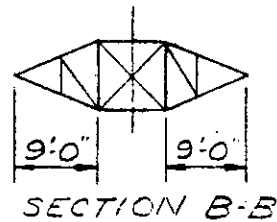
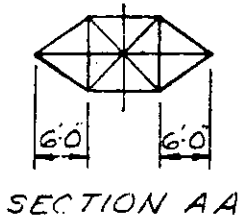
5K 40 E 230 KV  
 "H" FRAME

APPROVED

THE DETROIT EDISON COMPANY  
 SYSTEM ENGINEERING DEPARTMENT

LAYOUT BY C. VAN PARIS DRAWN BY ~

DATE 4-30-87 DRAWING NUMBER  
 SCALE ~ **ED 1-9653**



ALL XARMS MUST  
HAVE ANGLES TOED  
DOWN

20' ± 30' EXTENSIONS  
ALSO REQUIRED

MIN. STEEL THICKNESS ~ 3/16"  
N.E.S.C. GRADE B (GTH. ED)  
GALV. PER ASTM SPEC. A123  
ALL BOLTS SAME DIA. (ASTM - A 394)  
BRACING SHOWN FOR  
ILLUSTRATION ONLY

CROSSARMS FOR 15° 30' DE. TOWER

CROSSARMS FOR 30° 45' DE TOWER

RECORDED RIGHT OF WAY NO. 34636 p 283

230 KV DEADEND TOWERS  
TYPE TM ~ 15° 30' ANGLE  
TYPE TH ~ 30° 45' ANGLE

APPROVED	THE DETROIT EDISON COMPANY GENERAL ENGINEERING DEPARTMENT	
	LAYOUT BY R.O.S.	DRAWN BY R.O.S.
	DATE 6/19/70	DRAWING NUMBER
	SCALE ~	ED-1-7218



**Grand Trunk Western Railroad Co**

131 West Lafayette Boulevard  
Detroit, Michigan 48226

(313) 237-4377

June 15, 1987

Our File: L-3-50

Mr. Thomas Wilson  
Real Estate Associate  
Detroit Edison Company  
2000 Second Avenue  
Detroit, Michigan 48226

Dear Mr. Wilson:

In accordance with your request, attached in duplicate is Permit No. 532 under Master Agreement of January 2, 1932 covering the installation, maintenance and use of power line facilities at Auburn Heights, Michigan.

Please have both copies signed in the space marked "X", have the signature witnessed in the space marked "XX", thereafter returning both copies to this office for signature on behalf of the Railroad, after which a fully executed copy will be returned to you for your records.

Yours very truly,

  
R. E. Milz

bb  
Attach.

RECORDED RIGHT OF WAY NO. 34636 p283

THE CALCULATIONS FOR THIS TRIAL ARE FOR HAMLIN SUBSTATION  
 STRESS-STRAIN CURVES USED REPRESENT 1,192,500 CM ACSR 45/7

STARTING INDEX	RULING SPAN	STARTING SAG OR TENSION	AREA OF CONDUCTOR	INITIAL MAX TENS
1	161.2	2500.00	1.20200	22980

INDEX	TEMP.	INITIAL SAG	INITIAL TENSION	FINAL SAG	FINAL TENSION
1	0.	4.23	-2500.	4.23	2500.
2	0.	4.06	1299.	4.10	1285.
3	32.	4.58	2009.	4.59	2002.
4	10.	4.20	1255.	4.23	1245.
5	20.	4.33	1218.	4.36	1209.
6	30.	4.15	1184.	4.49	1175.
7	40.	4.57	1153.	4.61	1144.
8	50.	4.69	1124.	4.73	1116.
9	60.	4.81	1097.	4.84	1089.
10	70.	4.92	1072.	4.96	1064.
11	80.	5.03	1049.	5.07	1041.
12	90.	5.14	1027.	5.18	1019.
13	100.	5.25	1006.	5.28	999.
14	110.	5.35	987.	5.35	987.
15	120.	5.44	970.	5.41	977.
16	257.	6.14	862.	6.11	866.

\*\*\*\*\*

RECORDED RIGHT OF WAY NO. 34036 p283

THE CALCULATIONS FOR THIS TRIAL ARE FOR HAMLIN SUBSTATION  
 STRESS-STRAIN CURVES USED REPRESENT 1,122,500 CM ACSR 45/7

STARTING INDEX	RULING SPAN	STARTING SAG OR TENSION	AREA OF CONDUCTOR	INITIAL MAX TENS
1	161.2	2500.00	1.20200	22900

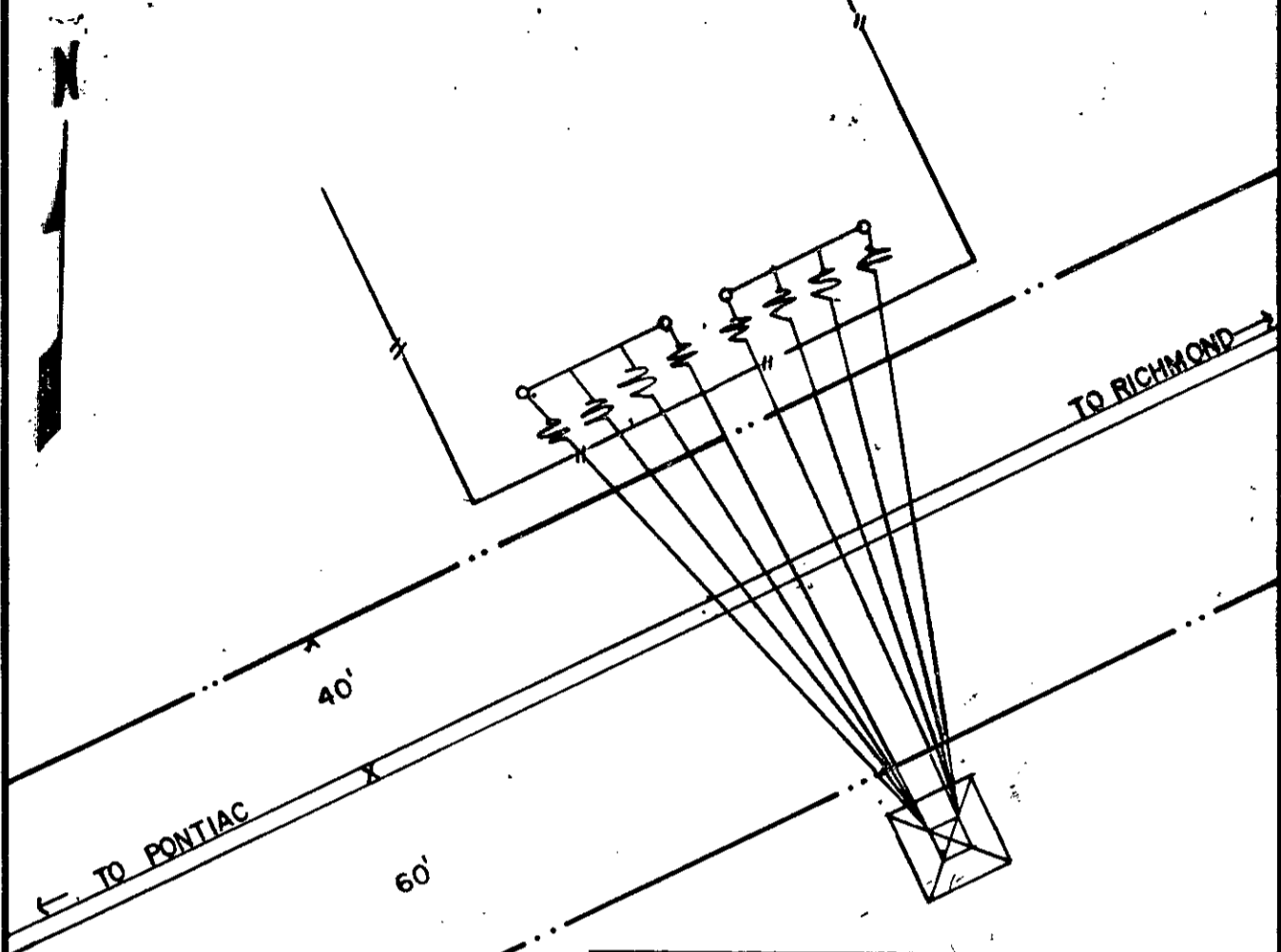
  

INDEX	TEMP.	INITIAL		FINAL	
		SAG	TENSION	SAG	TENSION
1	0.	4.23	-2500.	4.23	2500.
2	0.	4.06	1299.	4.10	1285.
3	32.	4.58	2009.	4.59	2002.
4	10.	4.20	1255.	4.23	1245.
5	20.	4.33	1218.	4.36	1209.
6	30.	4.45	1184.	4.49	1175.
7	40.	4.57	1153.	4.61	1144.
8	50.	4.69	1124.	4.73	1116.
9	60.	4.81	1097.	4.84	1089.
10	70.	4.92	1072.	4.96	1064.
11	80.	5.03	1049.	5.07	1041.
12	90.	5.14	1027.	5.18	1019.
13	100.	5.25	1006.	5.28	999.
14	110.	5.35	987.	5.35	987.
15	120.	5.44	970.	5.41	977.
16	257.	6.14	862.	6.11	866.

\*\*\*\*\*

RECORDED RIGHT OF WAY NO. 34636 p 283

Proposed installation to consist of six-1431 mcm 45/7 ACSR wires and two-7/16 steel guy with a minimum clearance of 45' above top of rail at MP 30.73



Prev. Approved by Law Dept.

T. W. APPROVALS	
<i>[Signature]</i>	LEGAL DEPT. AS TO FORM
<i>[Signature]</i>	CHIEF ENGR.
<i>[Signature]</i>	REAL ESTATE TAX DEPT.
<i>[Signature]</i>	SUPT. OF COMB.

ANY CLEARANCES SHOWN ARE FROM CENTERLINE OF TRACK, UNLESS OTHERWISE NOTED.

**GRAND TRUNK WESTERN RAILROAD COMPANY**

ROMEO SUBDIVISION

AUBURN HEIGHTS, OAKLAND COUNTY, MICHIGAN  
LICENSE

DETROIT EDISON COMPANY  
OFFICE OF ENGINEER SURVEYS & CONSTRUCTION  
DETROIT, MICHIGAN

PLAN NO. L-40-87 MAY 21, 1987  
SCALE 1"=50' FILE NO. M32-1'-5

BOUNDARIES OF G. T. W. R. R. CO.

FACILITIES TO BE COVERED BY LICENSE  
PERMIT NO. 532 Under Master Agreement dated 1/2/32  
File: L-3-50

*[Signature]*  
Engineer, Surveys & Construction, System

RENTAL FOR THIS PERMIT:  
\$800.00 for the period of June 8, 1987 through December 31, 1987  
\$600.00 per annum thereafter.

*[Signature]*

XX *[Signature]*  
THOMAS WILSON

GRAND TRUNK WESTERN RAILROAD COMPANY, a Michigan Corporation

By *[Signature]*  
Its - Manager, Property Management  
DETROIT EDISON COMPANY, a Michigan Corporation -

By X *[Signature]*  
Its - ROBERT R. TEWKSBURY, DIRECTOR REAL ESTATE AND RIGHTS OF WAY

RECORDED RIGHT OF WAY NO. 37636

283

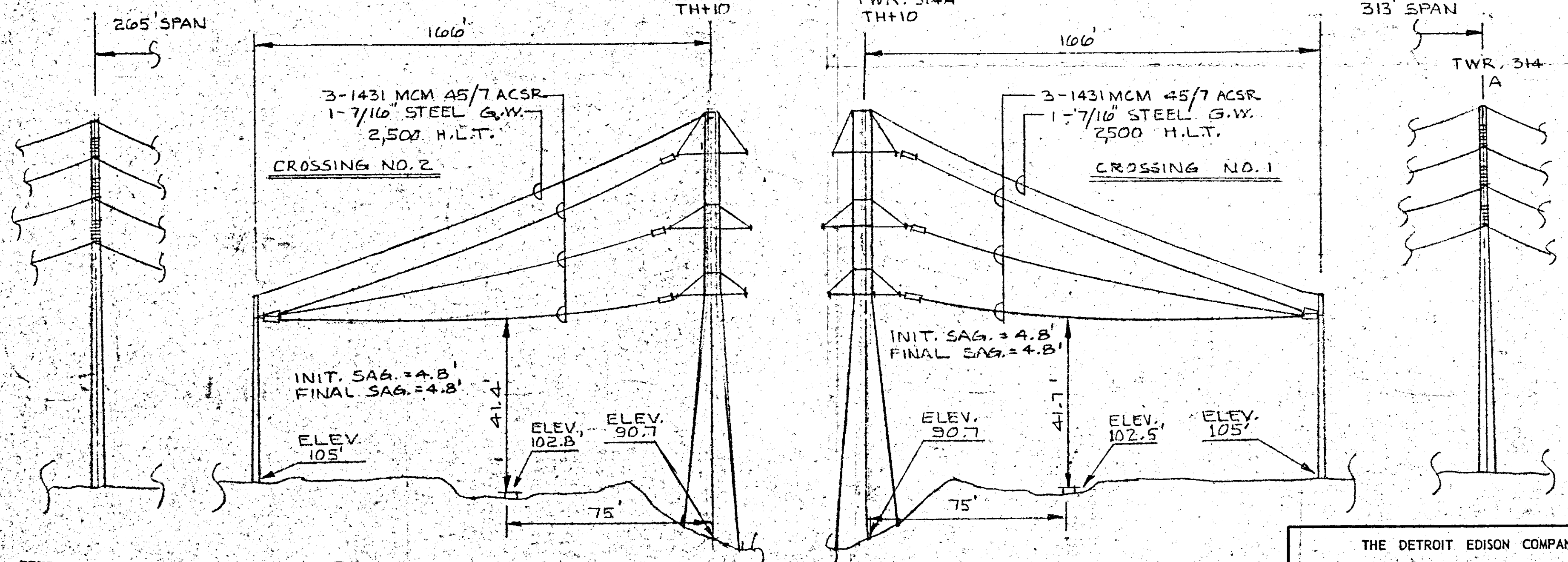
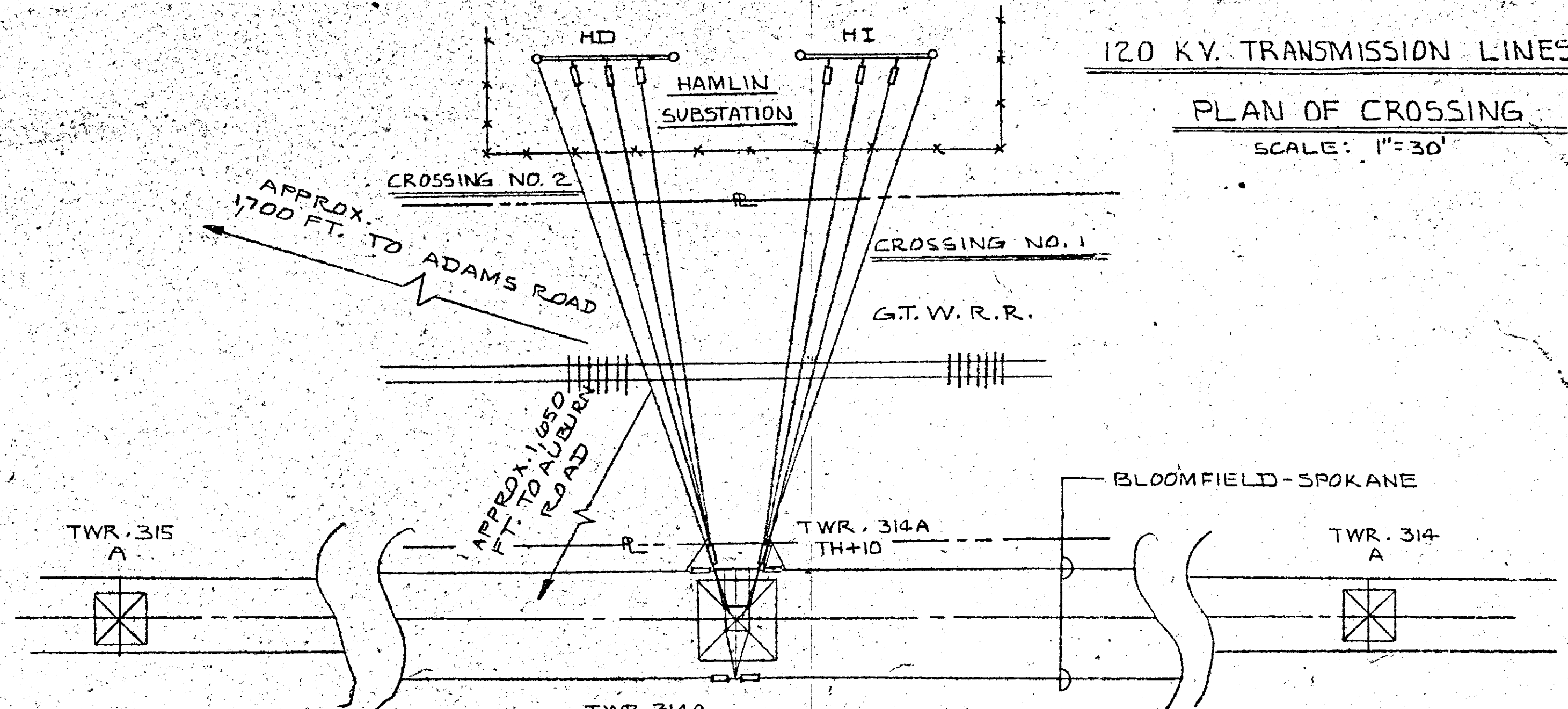




# 120 K.V. TRANSMISSION LINES

## PLAN OF CROSSING

SCALE: 1"=30'



### ELEVATION OF CROSSING

SCALE: VERT. 1"=20'  
HORIZ. 1"=30'

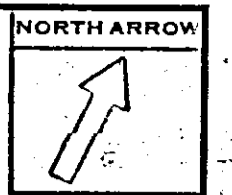
ALL DIMENSIONS AT 60° FINAL

RECORDED R/W FILE NO. 34636 p 283

CITY \_\_\_\_\_  
 COUNTY OAKLAND  
 TOWNSHIP AVON  
 SECTION NO. S.W. 1/4 - 30

THE DETROIT EDISON COMPANY	
PLAN SUBMITTED TO	
<del>MICHIGAN PUBLIC SERVICE COMMISSION</del>	
FOR 120,000 VOLT CROSSING	
OVER G.T.W. R.R.	
DRAWN BY <u>C. VAN PARIS</u>	DATE <u>7-23-87</u>
APPROVED BY <u>[Signature]</u>	DATE <u>7-23-87</u>
PERMIT NO. <u>ED</u>	DRAWING NO. REV. #1
	<u>RX-4346</u>

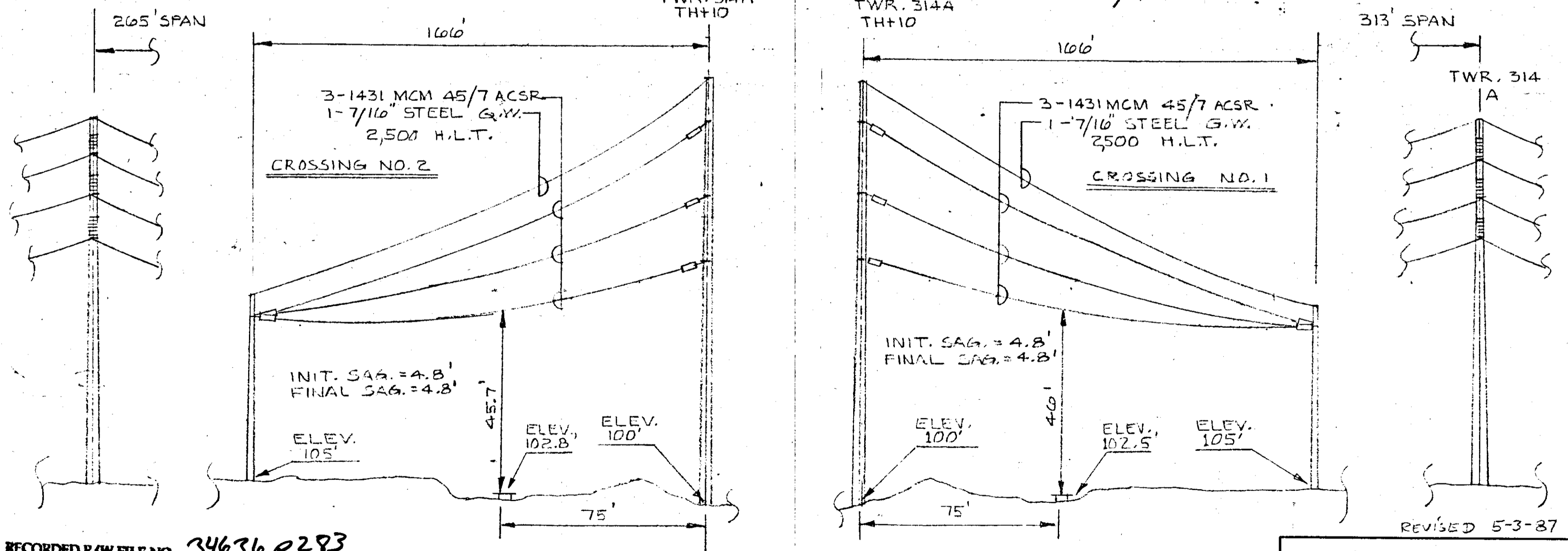
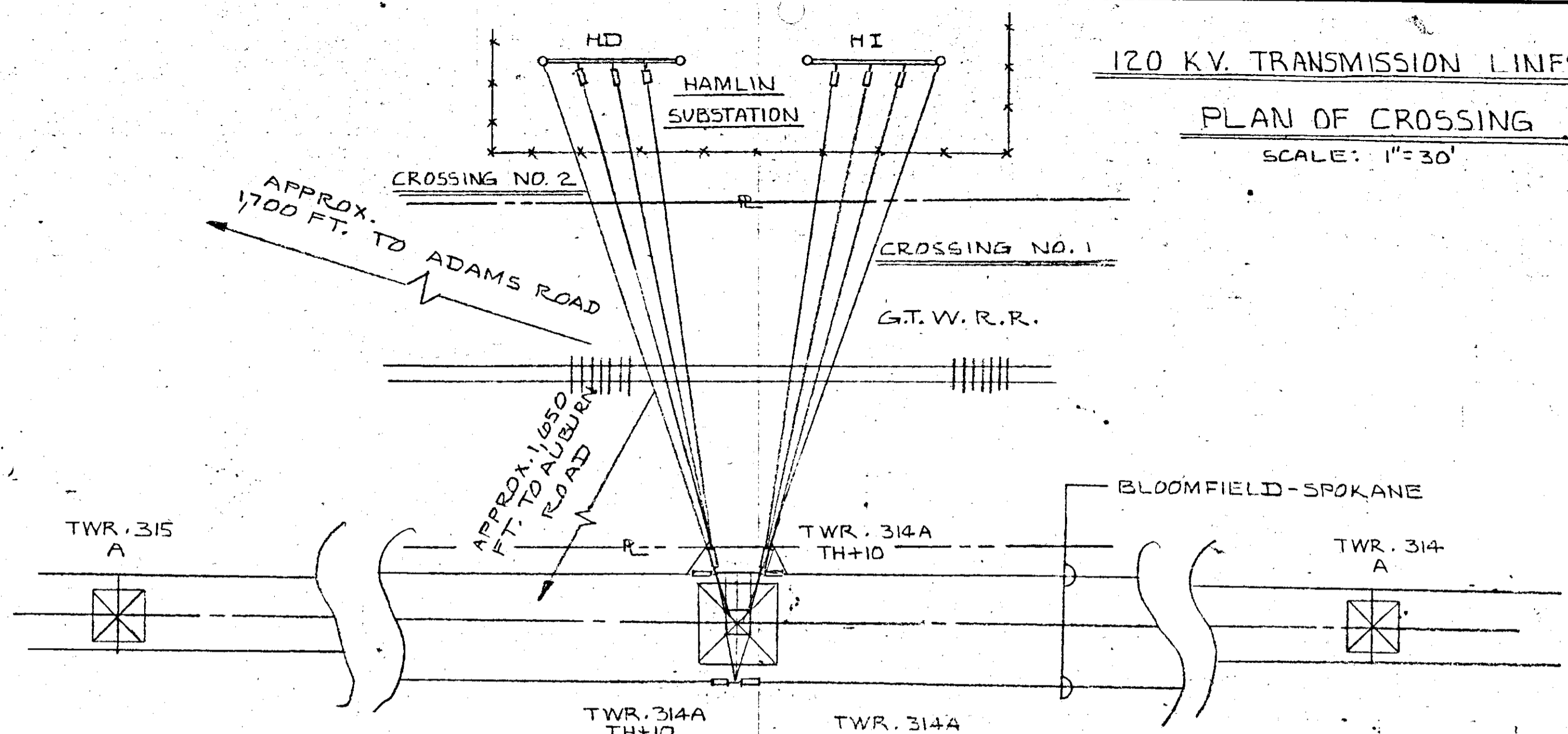
RECORDED RIGHT OF WAY NO. 94636 p 283



# 120 K.V. TRANSMISSION LINES

## PLAN OF CROSSING

SCALE: 1"=30'



RECORDED R/W FILE NO. 34636 P283

### ELEVATION OF CROSSING

SCALE: VERT. 1"=20'  
HORIZ. 1"=30'

ALL DIMENSIONS AT 60° FINAL

REVISED 5-3-87

CITY \_\_\_\_\_  
 COUNTY WAKLAND  
 TOWNSHIP AVON  
 SECTION NO. S.W. 1/4 - 30

THE DETROIT EDISON COMPANY  
 PLAN SUBMITTED TO  
~~MICHIGAN PUBLIC SERVICE COMMISSION~~  
 FOR 120,000 VOLT CROSSING  
 OVER G.T.W.R.R.  
 DRAWN BY C. VAN PARIS DATE 4-30-87  
 APPROVED BY [Signature] DATE 4-30-87

PERMIT NO. [Signature] DRAWING NO. ED. RX-4346

RECORDED RIGHT OF WAY NO. 34636 p 283