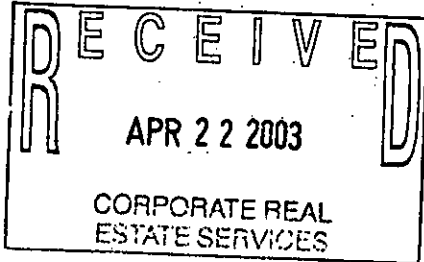


Detroit Edison

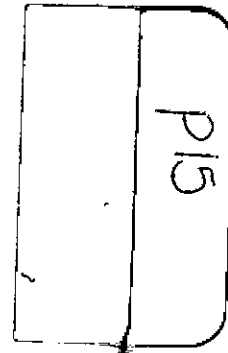


DISTRIBUTION OPERATIONS



Permanent Project No.:BOA0302209
Job Project No.:BOA0302209
RFW No.: 417394
RX/Occept No.: RX384B

Date: March 13, 2003
To: LaTonya Causey
Records Center, 2086 WCB
From: Tom Wilson, SR/WA *TW*
Redford Service Center
Subject: Wire Crossing of Railroad Tracks



Attached are papers related to the notification, dated March 5, 2003, to CSX Transportation, about the above mentioned crossing in within the SE ¼ of Section 15, Novi Township, Oakland County, Michigan.

The Service Center is notified to build the crossing as requested. **Note: All construction work associated with aerial crossings of railroad tracks requires that you notify the operating railroad as to the actual date of construction, in advance of any work.**

Please incorporate these papers into Railroad Recorded ROW Record Center File R29710P15.

Attachments

cc: Thomas Rowe (New Hudson SC)

R29710 P. 15

RECORDED R/W FILE NO.

CSX
TRANSPORTATION
Charles F. Myers
Manager
Contract Administration

500 Water Street, SC J180
Jacksonville, FL 32202-4423
(904) 359-1003
FAX: (904) 359-3665
E-Mail: Charlie_Myers@csx.com

March 12, 2003

Agreement No. CSX-029357-313 ø

Mr. Thomas Wilson, SR/WA
Real Estate Facilitator
Detroit Edison Company
12000 Dixie Road
Redford, MI 48239-2453

Dear Mr. Wilson:

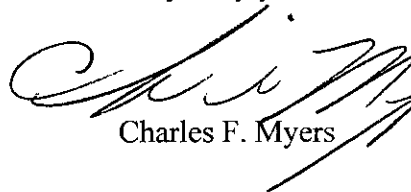
I have received your letter dated March 5, 2003, concerning the installation of a wireline crossing, located within the confines of a public street right-of-way, located at Valuation Station 11205+00, Milepost CC-74.57, at Novi, Michigan, without the benefit of an agreement with CSX Transportation, Inc.

Although you have asserted that your company possesses the right to use public roadways or highways, it does not have the right, under State or Federal Statute nor under operating practices of the interstate rail carriers, to cross over/under operated tracks without consent of the rail carrier, and without adequate protection for the safety and operations interest of the rail carrier.

Entry upon CSXT's property signifies your acknowledgement that your company, not CSXT, will be responsible for any harm or damage caused by your employees or those of your contractor while they are on site, nor which occurs during or as a result of the construction of (or any activity concerning) the wireline. In addition, CSXT will look to your company to provide continuing maintenance of the wireline installations and, after they have served your purposes, to remove same and restore the railroad's property to its former condition.

Whenever employees of your company or its contractor intend to enter CSXT property, it will be necessary to contact CSXT's Roadmaster at telephone number (517) 771-1927 (ideally between the hours of 6:30 and 8:30 a.m.), FAX: (517) 771-1928, at least five (5) days prior to the installation, to arrange for the placement of a flagman to protect the interest of CSXT. This protection is necessary in order to keep mobile equipment, booms, cranes, trenching equipment and personnel of your company and of its contractors off of the tracks and operated right-of-way, during CSXT train movements. All such costs will be billed to your company.

Very truly yours,


Charles F. Myers

Attachment

RECORDED R/W FILE NO. R29710 #15

Detroit Edison



DISTRIBUTION OPERATIONS

March 5, 2003

Mr. Charles F. Myers- SC J180
Manager Contract Administration
CSX Transportation
500 Water Street
Jacksonville, Florida 32202-4423

Re: Wire Crossing Notification

Dear Mr. Myers:

This letter is your notice of the planned temporary relocation and reconstruction of overhead line facilities, crossing over your railroad tracks, within the Grand River Road right of way area, by the Detroit Edison Company, in the SE ¼ of Section 15, Novi Township, Oakland County, Michigan, as described on the enclosed drawings and information forms. The project causing this work is related to a reconstruction of a bridge serving CSX.

1. Location: In Grand River, approximately 50 feet north of your Novi Depot.
2. Detroit Edison Project and Crossing Nos.: BOA0302209, RX384A.
3. This is a reconstruction of an existing crossing (Previous MPSC No. U2950/Date: May 13, 1926. Information on this crossing is retained in an Edison ROW File R29710P15.
4. Please indicate your:
 - R.R. Valuation Station No. _____
 - R.R. Mile Post No. _____
 - Will a Flagman or Inspection be required? _____

All construction will be done in accordance with specification of the Michigan Public Service Commission and all applicable codes and laws.

Michigan law (section 265{3} of the railroad code of 1993 {MCLA 462.265}) requires you to respond within 30 calendar days of the receipt of this notification. In the event you do not respond within 45 days of the receipt of this letter, our crews will be instructed to begin work.

Please contact me on (313) 235-2168 if you have any questions.

Sincerely,

Thomas Wilson, SR/WA
Real Estate Facilitator
Wilson@dteenergy.com

cc: Thomas Rowe (New Hudson SC)
Attachments

R29710 P15
RECORDED R/W FILE NO.

Railroad Name: **CSX RR** ⁵⁻¹³⁻²⁶ Department Order: **417394**

Row No. (Information on existing rights of way available from Record Center): **U-2950** New or existing RX No.: **384 A** Encroachment (Length in Feet): **180'**

Location City/Township(s): **NOVI** Town(s) Range(s): **T-1N R-8E** County(s): **OAKLAND** 1/4 Section(s): **5E** Section(s): **15**

Location Description of Encroachment: **IN GRAND RIVER AVE 50 FT N OF NOVI DEPOT**

Check appropriate box:
 Crosses tracks within the public road right-of-way
 Crosses railroad land
 Is longitudinally on or over railroad land,
 Provides service to the railroad

Facility Data (also detailed on attached drawing)

Nature of required tree rights

Existing State Permit No.: **U-2950** Date: **5-14-1926** Railroad Mile Post (Number): Distance to Crossing from Mile Post (in feet): **NOVI DEPOT 50 Ft.**

Type of Structure:
 Existing: Wood Steel
 Proposed: Wood Steel

Existing Conductors				Existing Poles			Existing Cross-Arms	Proposed Conductors				Proposed Poles			Proposed Cross-Arms
Span.	No./Size	Kind	Voltage	Loc.	Height	Class	Size	Span.	No./Size	Kind	Voltage	Loc.	Height	Class	Size
B-D	3-350	A	4.8KV	B	65	1	ARMLESS	B-C	3-636	A	13.2KV	B	70'	1	96"
				D	65'	1	"	B-C	1-110	ACSR	NEU	C	70'	1	96"
C-D	8A4D	MX	120V	C	55'	1									

Explanation of Line Changes (continue on separate sheet if necessary)
THE EXISTING OVERHEAD CROSSINGS B-D AND C-D ARE TO BE REMOVED FOR BRIDGE RECONSTRUCTION THE PROPOSED CROSSING B-C IS TO BE INSTALLED AFTER BRIDGE RECONSTRUCTION IS COMPLETED.

Clearances

Tolerance	Clearances	Height
Nearest 0.1 foot with lowest conductor or wire at 60° final sag. (If different indicate on drawing)	From Top of Rail to Final Sag	54 Ft.
	From Detroit Edison wire to Railroad Communication or Signal Lines	Ft.

* Materials and clearances shall be as noted in the current revision of Detroit Edison's Overhead Lines Construction Standards Manual at Railroad Crossings. Due to field conditions actual dimension may vary from those indicated.

Designed By: **THOMAS ROWE** ⁴⁸⁶⁻⁶⁴¹⁰ Date: **1-7-03** Checked By: **DENNIS BREWER** Date: _____
 Company Location: **NEW HUDSON SC** Phone No.: **248 486 6329**

RECORDED BY MILENTA R29710 P15

DETROIT
EDISON

O.H. RAILROAD CROSSING PERMIT DE 963-3866 6-85 X (SE 32)

DO _____ RX 384B

STATE PERMIT NUMBER _____

JPL RFW 417394

R/W _____

PROPOSED LINE CROSSING OVER CSX RR

IN GRAND RIVER AVE 50' N OF NOVI DEPOT

CITY OF NOVI

SECTION 15 QUARTER SE TOWNSHIP NOVI T. IN R. 8E COUNTY OAKLAND

REFER TO SECTION 12 OF OVERHEAD LINES CONSTRUCTION STANDARDS FOR MINIMUM CLEARANCE CHART. THE RAILROAD PERMIT APPLICATION (DE 963-6064) SHALL BE SUBMITTED ALONG WITH THIS VELIUM.

SPAN	SPAN LENGTH	LOWEST CONDUCTOR OVER R.R. TRACKS	STRINGING SAG AT 60° F	SAG TABLE	RULE SPAN	FINAL SAG RATION
B-C	200'	54'	2.1'	II	157'	1.33
A-B	135'	'	1'	II	157'	
C-D	130'	'	1'	II	157'	

DESIGNED BY THOMAS ROWE DIVISION NEW HUDSON

CHECKED BY DENNIS BREWER DATE 1-6-03

NOTES

EXISTING OVERHEAD CROSSING IS TO BE REMOVED FOR BRIDGE RECONSTRUCTION.

PROFILE DIMENSIONS ARE BASED ON BRIDGE CONSTRUCTION

PLANS. ACTUAL ELEVATIONS WILL BE DETERMINED AFTER CONSTRUCTION

OF BRIDGE IS COMPLETE

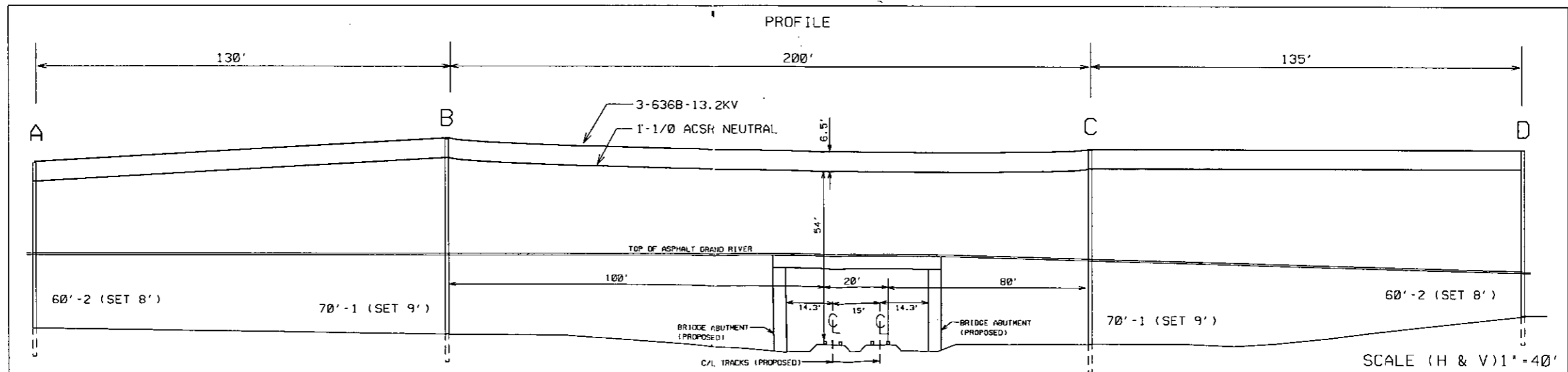
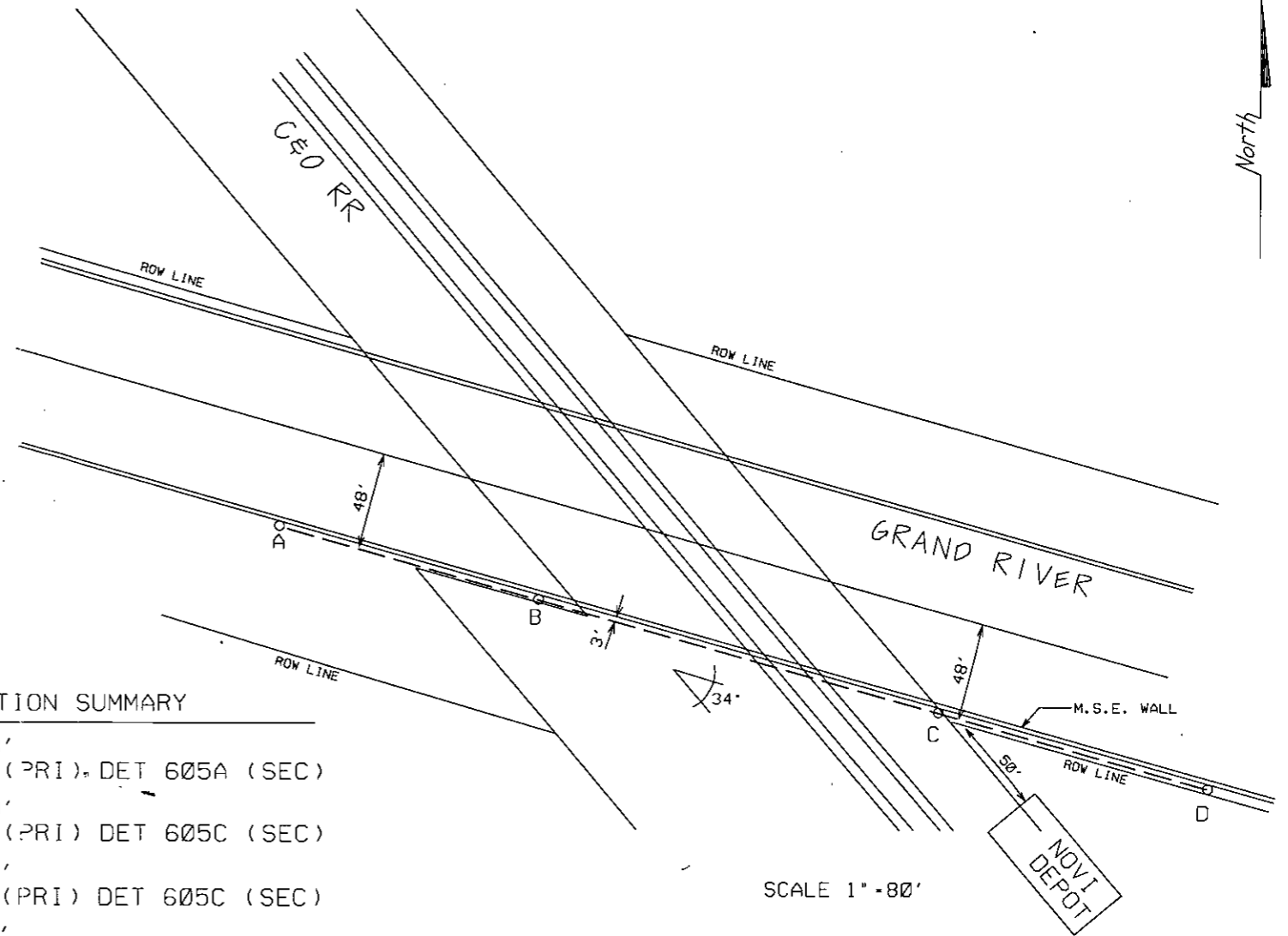
CONSTRUCTION SUMMARY

POLE A-60-1 SET 8'
DET 13X30 (PRI), DET 605A (SEC)

POLE B-70-1 SET 9'
DET 13X38 (PRI) DET 605C (SEC)

POLE C-70-1 SET 9'
DET 13X38 (PRI) DET 605C (SEC)

POLE D-60-1 SET 8'
DET 13X30 (PRI) DET 605A (SEC)



RECORDED & INDEXED R29710 P15

Detroit Edison

To: Records Center September 27, 1977

From: Doreen McLain
Real Estate and Rights of Way Department

Subject: Distribution R/W crossing the Chesapeake & Ohio R.R.,
IN THE ROAD, SE ¼ of Section 15, Novi Township,
Oakland County, T1N, R8E, RX-384A

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. 3	Update 10 Type	D.E.C.O. RECORDS CENTER FILE NO. 15	R.X. NO. OR MAP NO. 20	Facility 21	Agreement Date 27
02	0002950	1	29710	0384A	1	051426

Payment Frequency 28	Rental 29	OH-UG Code 33	Division 35	County 36	City or Township 38	Section 46
1	XXXXXX	1	4	08	NOVI	15

Location									
47	INGRANDRIVERSOFTNOFNNOVIDCPT								50

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

The Accounts Payable Department is requested to start or change the rental payment effective

Approved: *[Signature]*

- cc: Accounts Payable
 Service Planning H. Beller
 System Engineering
 Transmission & Distribution

RECORDED RIGHT OF WAY NO. 29710

permut
15

Detroit

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

September 19, 1977

Mr. Bruce Bordner, Office Engineer
Michigan Department of State
Highways & Transportation
P. O. Box 1226
18101 Nine Mile Road
Southfield, MI 48075

RECEIVED
SEP 20 1977

METRO DISTRICT
Utilities - Permits Division
Mich. Dept. of State Highways

Gentlemen:

The Detroit Edison Company plans to construct and operate, and maintain an overhead line in the City of Novi, Novi Township, Oakland County.

The line will cross the tracks of the Chesapeake & Ohio Railroad. The wires to be installed are:

Span B-D
Three #350 kcmil B 4,800 volts

APPROVED

Span C-D
One #8A4D 120 volts

SEP 20 1977
Bruce A. Bordner
DIST. UTILITY ENGINEER
MICHIGAN STATE HIGHWAY DEPT.

The railroad has given the following waiver of hearing:

Waiver dated _____ enclosed
 Blanket Waiver No. _____ on file with MPSC

The proposed crossing is shown on drawing No. RX-384A

This is a new crossing.
 This is a re-construction.

Please grant a State Highway Permit to the Detroit Edison Company for the proposed crossing.

DO NOT WRITE IN THIS BOX		
Application No.	63000-3-77	
Permit No.	ME-460-77	
Date of Issuance	9-20-77	
Fee Amount	EXEMPT	Date 9-20-77
Cash	Bill	By <i>JH</i>

Very truly yours,

John A. Haddow
John A. Haddow
Public Agency Coordinator
Real Estate & Rights of Way

RECORDED EIGHT OF WAY NO.

29710

permit 15

PROPOSED LINE CROSSING OVER CHESAPE. & OHIO R.R.
IN GRAND RIVER 50' N OF NOVI DEPOT

EXH. NO. PERMIT NUMBER
CITY OF NOVI

SECTION SE 1/4 SEC 15 TOWNSHIP NOVI T 1 N. R. 8 E COUNTY DARLAMD

NOTES
MATERIALS SHALL BE AS NOTED IN THE CURRENT REVISION OF DETROIT EDISON COMPANY'S GENERAL SPECIFICATIONS FOR OVERHEAD LINE CONSTRUCTION AT RAILROAD CROSSINGS.
ACTUAL FIELD DIMENSIONS MAY VARY SOMEWHAT FROM THOSE SHOWN, BUT THE REQUIREMENTS OF THE CURRENT REVISIONS OF ORDER NO'S. 1879 AND 1868 OF MICHIGAN PUBLIC SERVICE COMMISSION WILL BE COMPLIED WITH.

MINIMUM CLEARANCES

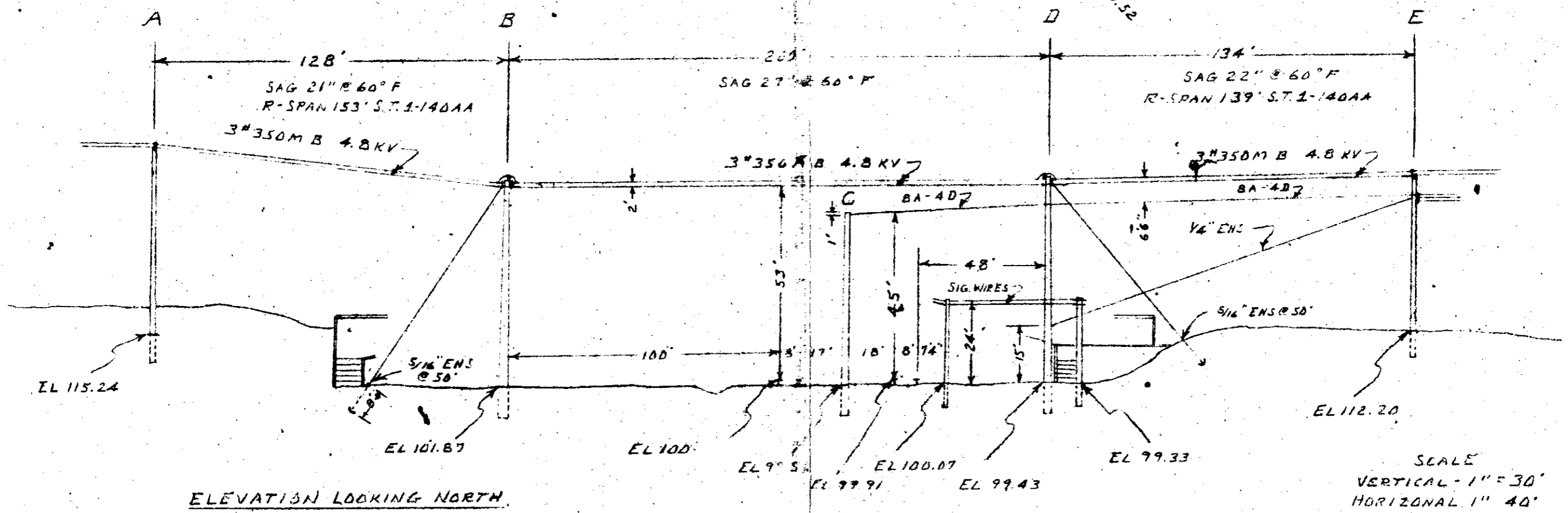
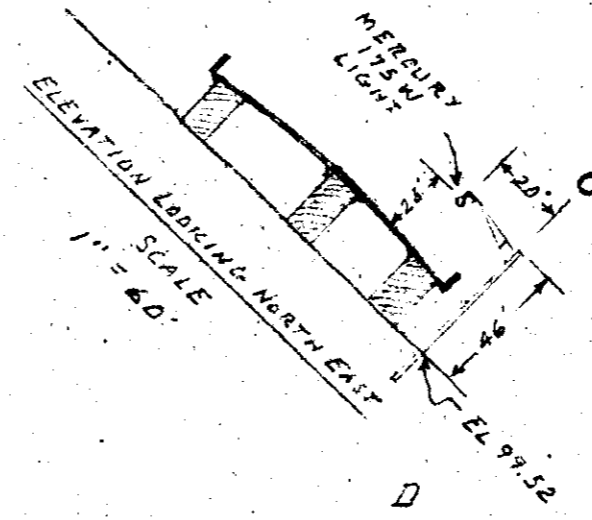
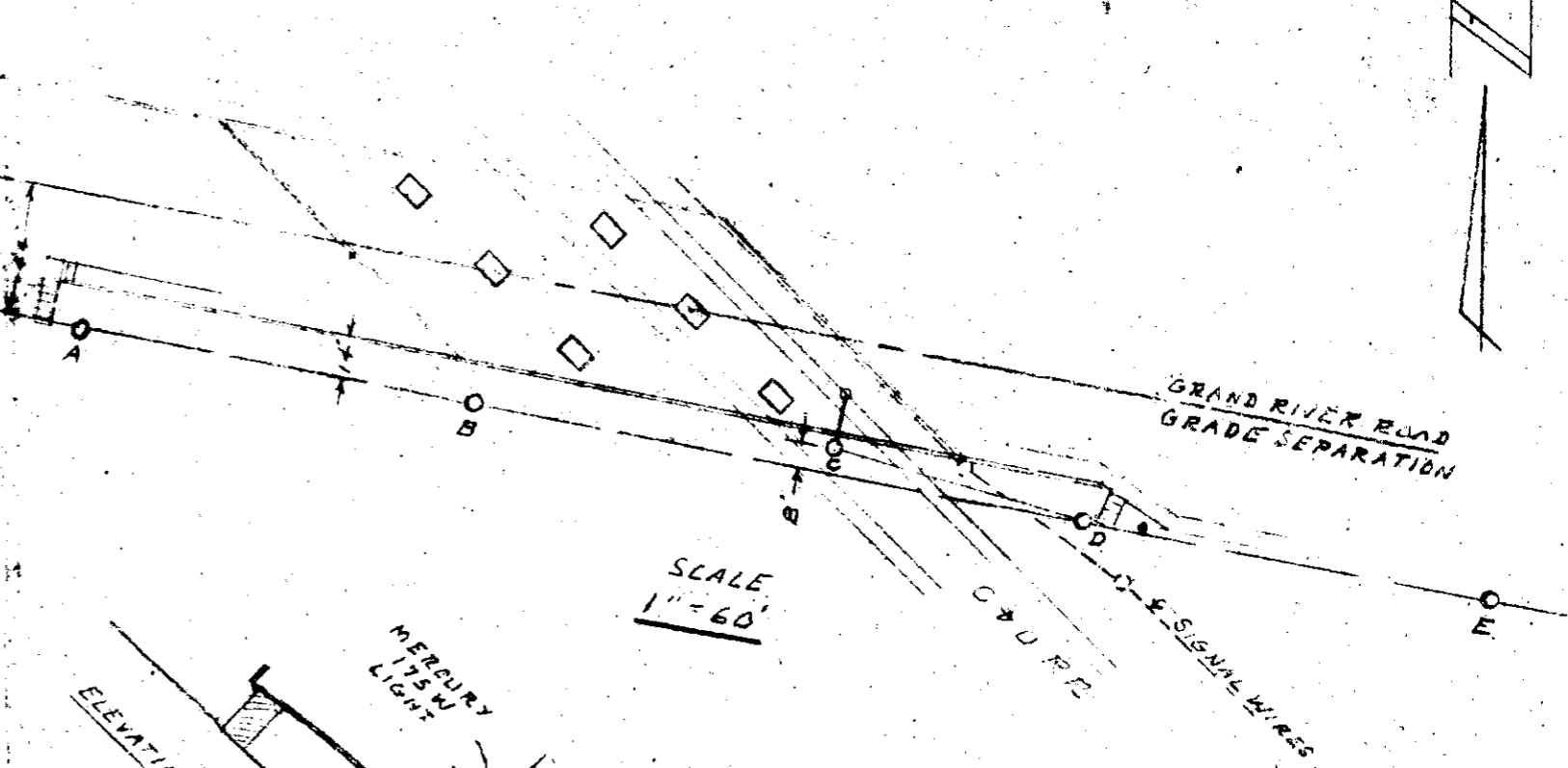
NEAREST POLE TO RAIL	SIDING	7 FT
	MAIN LINE	12 FT
WIRES OVER TRACKS	0 - 750 VOLTS	27 FT
	750 - 15,000 VOLTS	28 FT
	15,000 - 50,000 VOLTS	30 FT
	50,000 - 120,000 VOLTS	33 FT
WIRES OVER R R SIGNAL	0 - 750 VOLTS	2 FT
	750 - 8,700 VOLTS	4 FT
	8,700 - 50,000 VOLTS	6 FT
	50,000 - 120,000 VOLTS	9 FT

CONDUCTORS				POLES			
NUMBER	SIZE	KIND	VOLTAGE	LOCATION	LENGTH	CLASS	SET
				A	60	2	8
				B	65	1	8'6"
	SPAN B-D			C	55	1	9'
3	350M B	4800V	70' TOP CUT 15'				
	SPAN C-D			D	65	1	8'6"
1	BA-4D	120V		E	50	2	7'

DESIGNED BY H. BELLER DIVISION DDHQ
CHECKED BY J.M. Hoffman SYSTEM ENGINEERING DEPT. DATE 7-14-77

SPAN	SPAN LENGTH	LOWEST CONDUCTOR OVER R. R. TRACKS	STRINGING SAG AT 60° F	HEIGHT OF LOWEST CONDUCTOR OVER	
				R. R. TRACKS	R. R. SIGNAL WIRE
B-D	200'	350M B	27" FINAL SAG 31"	SPAN C-D @ 46'	22'

SAG TABLE 2-200AA
RULING SPAN 200'
FINAL SAG RATIO 1.32



**Detroit
Edison**

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

August 17, 1977

Mr. J. W. Brent, Chief Engineer
The Chesapeake & Ohio Railway Company
P. O. Box 1800
Huntington, W. Virginia 25718

Proposed Overhead Wire Crossing:

Span B-D

Three #350 kcmil B 4800 volts

RECORDED RIGHT OF WAY NO. 29710
permitt 15

Specific Location

In Grand River 50' North of Novi Depot; City of Novi,
SE 1/4 of Section 15, Township of Novi, T1N, R8E, County
of Oakland

R. R. Valuation Station _____ R. R. Mile Post _____

City/Village Novi Township Novi

County Oakland Detroit Edison Plan Attached RX-384A

This is a New Crossing _____ This is a Reconstruction of Existing Crossing XX

Previous Agreement Information (if any) Date May 13, 1926 (R. R. Plan) U-2950

Blanket Waiver of Hearing Covers XX Waiver of Hearing Requested _____
(Waiver of Hearing to be mailed to applicant listed below)

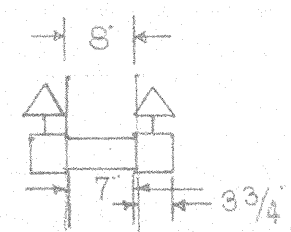
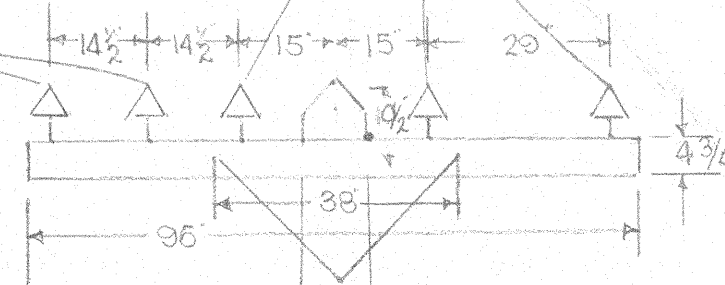
All construction will be done in accordance with the rules and regulations of the Michigan Public Service Commission.

Doreen McLain for
JOHN A. HADDOW
Public Agency Coordinator



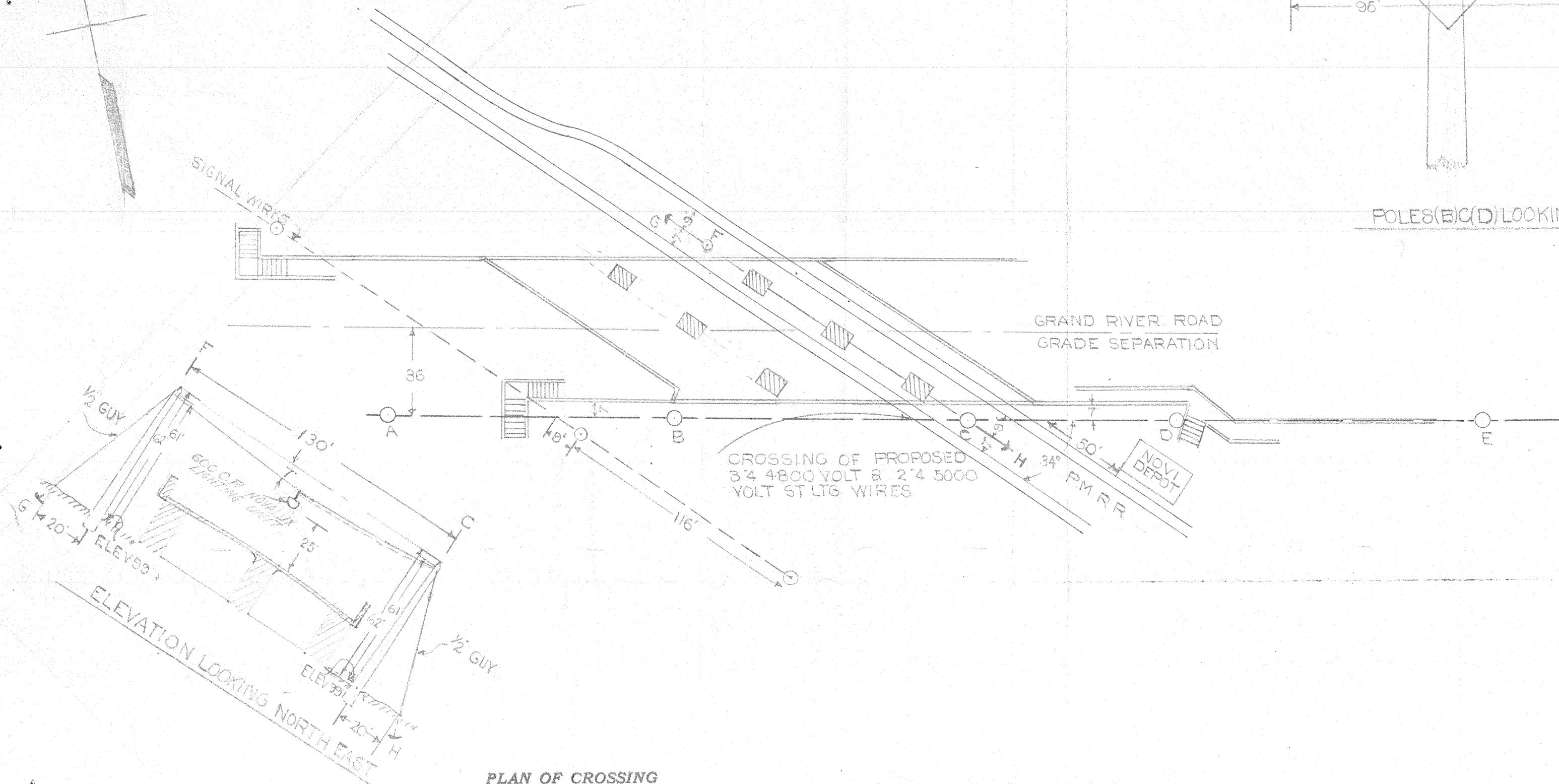
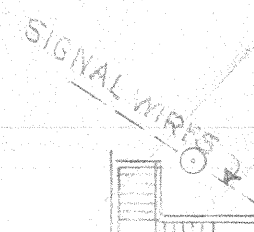
PROPOSED 2'4 SERIES ST LGT WIRES (IMMEDIATE)

PROPOSED 3'4 4800 VOLT WIRES (IMMEDIATE)

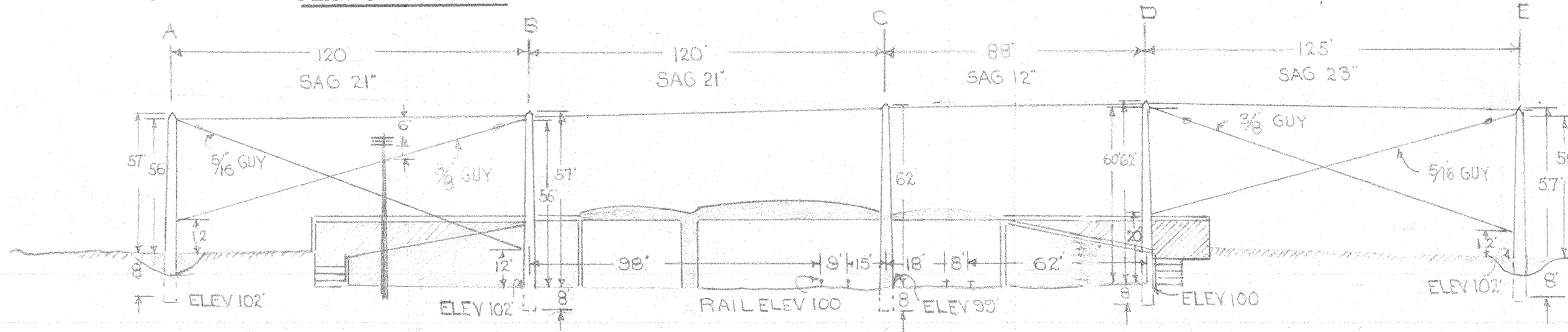


POLES (B/C/D) LOOKING EAST

POLES (B/C/D) LOOKING NORTH



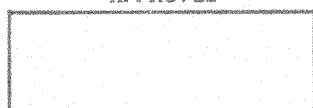
PLAN OF CROSSING



ELEVATION OF CROSSING LOOKING NORTH

PURPOSE OF LINE
REPLACING LEAD ON GRAND RIVER AVE AFTER COMPLETION OF GRADE SEPARATION BY STATE HIGHWAY DEPT

APPROVED



VILLAGE NOVI
CITY NOVI
COUNTY OAKLAND
TOWNSHIP NOVI
SURVEY NO. OF TWP. 1 NORTH
RANGE NO. 8 EAST
SECTION NO. S E 4 SEC 15

THE DETROIT EDISON CO.
PLAN SUBMITTED TO MICH. PUBLIC UTILITIES COMMISSION
FOR 5000 VOLT CROSSING
OVER PMRR
DRAWN BY EFH DATE 5-6-26
CHECKED BY D.B. DATE 5-7-26

Detroit

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

August 15, 1977

Mr. J. W. Brent, Chief Engineer
The Chesapeake & Ohio Railroad
P. O. Box 1800
Huntington, W. Virginia 25718

Proposed Overhead Wire Crossing:

Span C-D

One #8A4D 120 Volt

Specific Location

In Grand River, 50' N. of Novi Depot; City of Novi,
SE ¼ Section 15, Township of Novi, T1N, R8E, County of
Oakland.

RECORDED HIGHWAY MAP NO. 29110
page 15

R. R. Valuation Station _____ R. R. Mile Post _____

City/Village Novi Township Novi

County Oakland Detroit Edison Plan Attached RX-384A

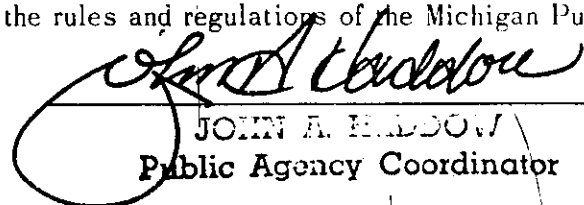
This is a New Crossing _____ This is a Reconstruction of Existing Crossing XX

Previous Agreement Information (if any) Date May 13, 1926 (R. R. Plan) U-2950

Blanket Waiver of Hearing Covers XX Waiver of Hearing Requested _____

(Waiver of Hearing to be mailed to applicant listed below)

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


JOHN A. HADDOCK
Public Agency Coordinator

STATE OF MICHIGAN

Office of the Michigan Public Utilities Commission,)

ss.

I, Jane Thompson, Acting, Secretary of the Michigan Public Utilities Commission,

Do Hereby Certify, That I have compared the annexed copy of **Permit No. U-2950**

with the original **permit**

~~ye/for/Agd/jh/~~

and that it is a true and correct transcript therefrom, and of the whole of such original.

In Testimony Whereof, I have hereunto set my hand and affixed

the seal of the Commission, at Lansing, this **14th**

day of **May** in the year of our Lord

one thousand nine hundred **twenty-six**

Jane Thompson

Acting Secretary, Michigan Public Utilities Commission.

MEW

2091

2091

RECORDED RIGHT OF WAY NO. 29410 permit-15

STATE OF MICHIGAN
BEFORE MICHIGAN PUBLIC UTILITIES COMMISSION

Standard Railroad Wire-Crossing Permit No. U-2950

In Re Application of **Detroit Edison Company (Detroit)**

Pursuant to Act No. 171 of the Session Laws of 1893, as amended, application having been made to Michigan Public Utilities Commission by said **Detroit Edison Company**

for permission to string wires across the tracks of the **Pere Marquette Railway Company**

and said **Detroit Edison Company**

having conformed to the Commission's rules governing the filing of notices and issuing of permits for the construction of electrical lines and said rail way company having waived the right of notice and hearing provided for in said act

THEREFORE, It is ordered that said **Detroit Edison Company**

be permitted to string the following described wires across the tracks of said railroad at the following described place:

In Novi Township, Oakland County, Michigan:-)))	In Grand River Avenue, 50 ft. North of Novi depot, with:
))	3 - #4 copper wires, 4800 volts, 3-phase; 2 - #4 " " , 5000 " , street-lighting.

as indicated on the attached plans, when, as and if approved.

At the point of crossing said wires shall be constructed in accordance with this Commission's rules and regulations.

Given under our hands and the Official Seal of this Commission at the City of Lansing, State of Michigan, this **14th** day of **May** A. D. 19 **26**.

MICHIGAN PUBLIC UTILITIES COMMISSION
By

.....**SHERMAN T. HANDY**.....
Chairman,

.....**SAMUEL ODELL**.....
Commissioner,

.....**SAMUEL D. PEPPER**.....
Commissioner,

.....**ROLPH DUFF**.....
Commissioner,

.....**WILLIAM W. POTTER**.....
Commissioner.

MEW

RECORDED RIGHT OF WAY NO. 29110
pp 15

DATA SHEET TO ACCOMPANY
DRAWING RX#-384

Name of Company

The Detroit Edison Company.

Name and Location of Crossing

Over the Pere Marquette R.R. Tracks in Grand River Ave., approximately 50' north of the Novi Depot, S.E. 1/4 of Section 15, Town 1 North, Range 8 East, Novi Township, Oakland County, Michigan.

Circuits

Proposed one 4,800 volt, 60 cycle, 3 wire, three phase, distribution circuit.
Proposed one 5,000 volt, 60 cycle, 2 wire, series street lighting circuit.
No existing circuits.

Poles

Poles (A),(B),(E) 65' Idaho cedar, 28" top circumference, 54" butt circumference at ground line set 8' in clay soil.
Poles (C),(D),(F) 70' Idaho cedar, 28" top circumference, 56" butt circumference at ground line set 8' in clay soil.

Guys and Guy Attachments

One 3/8" Guy from pole (B) 56' above ground to pole (A) 12' above ground.
One 3/8" Guy from pole (D) 60' above ground to pole (E) 12' above ground.
One 5/16" Guy from pole (A) 56' above ground to pole (B) 12' above ground.
One 5/16" Guy from pole (E) 56' above ground to pole (D) 20' above ground.
One 1/2" Guy from pole (F) 61' above ground to anchor (G) 20' from butt of pole (F).
One 1/2" Guy from pole (C) 61' above ground to anchor (H) 20' from butt of pole (C).
All guy wire double galvanized stranded steel with a minimum ultimate strength of 55,000 pounds per square inch.

Cross Arms

Proposed one 3 3/4" x 4 3/4" x 96" Douglas fir double cross arm per crossing pole.

Conductors

Proposed 5 #4 Medium hard drawn, stranded, triple braid, weatherproof copper wires.

DETAIL SHEET TO ACCOMPANY
RAILROAD CROSSING DRAWING

Guy Clamps

One 1 5/8" x 6" three bolt galvanized steel clamp at each end for 3/8" and 5/16" guys.
Two 1/2" Crosby guy clamps at each end, for 1/2" guys.

Guy Insulators

Two O.B. #26500 - 3 1/2" porcelain interlocking strain type insulators on 3/8" and 5/16" guys for 24,000 volt circuits and one per guy for lower voltages.
Two O.B. #25009 - 4" porcelain interlocking strain type insulators on 1/2" guys for 24,000 volt circuits and one per guy for lower voltages.

Guy Anchors

Four Blade "Everstick" on 1/2" guys buried 7' deep.
3" Cone on 3/8" and 5/16" guys buried 6' deep.

Anchor Rods

3/4" x 3' round galvanized steel rods on "Everstick" anchors.
5/8" x 6' round galvanized steel rods on 3" Cone anchors.

Cross Arm Attachments

5/8" galvanized steel center bolts
3/8" galvanized steel spacer bolts
4" x 4" treated pine spacer blocks
5/16" x 1 1/2" x 28" flat galvanized steel braces
3/8" galvanized steel bolts at arm end of braces
1/2" galvanized steel lag screws at pole end of braces

Line

12" x 14" x 1 3/8" locust pins for 24,000 volt circuits.
1 1/2" x 10 1/8" x 1" locust steel bolted (not galvanized) nuts for all other circuits.

Insulators

One O.B. #11623 pin type and four Locke #1009 disc type insulators per wire, per crossing pole on 24,000 volt circuits. (One O.B. #11623 and two Locke #3047 for dead ends.)
Two O.B. #12847 porcelain pin type insulators per wire, per crossing pole for 4800 volt, 2400 volt, series lighting, and private telephone circuits.
Two #20 Hemingray glass insulators per wire, per crossing pole for 120/240 volt secondary circuits.
One O.B. #1287 pin type and two Colonial #11940 disc type insulators per wire for #0000 primary circuits and one #20 Hemingray glass pin type and two #25009 strain type insulators per wire for #0000 secondary circuits, per crossing pole

Ties

Standard top groove tie on 24,000 volt, 4800 volt, 2400 volt, series lighting and private telephone circuits.
Standard side groove tie on 120/240 volt secondary circuits.
#8 soft, solid, bare, copper tie wire for 24,000 volt circuits.
#6 soft, solid, weatherproof, copper tie wire on all other circuits.

Checked by *D. Burns*