

STATE OF MICHIGAN

Office of the Michigan Public Utilities Commission,

} ss.

I, Roy H. Furkhiser, Secretary of the Michigan Public Utilities Commission

Do Hereby Certify, That I have compared the annexed copy of permit U-7964

wih the original permit

recorded in file U-7964

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 29th

day of July in the year of our Lord

one thousand nine hundred thirty-one

Roy H. Furkhiser

Secretary, Michigan Public Utilities Commission

RECORDED RIGHT OF WAY NO. 34636

1220

3451

3451

STATE OF MICHIGAN
BEFORE MICHIGAN PUBLIC UTILITIES COMMISSION

Standard Railroad Wire-Crossing Permit No. U-7964

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 Grand Trunk Western Railroad Co.,

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 road 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 Springfield Township,) In Big Lake off Section Line Road, 38.8 miles
Oakland County, Michigan) from City of Detroit, in SE 1/4 of Section 22,
with,

3-#2 aluminum steel-cored wires, 4800 volts
three-phase.

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 Mich-
igan, this 29th day of July
A. D. 19 31

MICHIGAN PUBLIC UTILITIES COMMISSION
By

ROBERT H. DUNN
Chairman,

KIT F. CLARDY
Commissioner,

EDWARD T. FITZGERALD
Commissioner

HARRY G. McCLURE
Commissioner,

HAROLD J. WAPLES
Commissioner.

Countersigned

Roy H. Purkiser
Secretary

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P230

4/1267

1947 APR 12 10 10 AM '47

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Name of Company

The Detroit Edison Company.

Name and Location of Crossing

Over the Grand Trunk R.R. in Big Lake Rd. (or Sec. line Rd.) 38.8 miles from Detroit, S.E. $\frac{1}{4}$, Sec. 22, Town 4 North, Range 8 East, Springfield Twp., Oakland Co., Michigan.

Circuits

Proposed one 4800 volt, 60 cycle, 3 wire, 3 phase distribution circuit.

Poles

Poles (A) (D) 40' Idaho cedar 17" top circumference 32" butt circumference at ground line set 6' in clay soil.
Poles (B) (C) 45' Idaho cedar 19" top circumference 31" butt circumference at ground line set 6'-6" in clay soil.

SEE DWG. 25" MIN. ALLARD 22"

Guys and Guy Attachments

One 3/8" Guy from Pole (B) 37' above ground to anchor (G) 40' from butt of Pole (B).
One 3/8" Guy from Pole (C) 37' above ground to anchor (H) 40' from butt of Pole (C).
One 1/2" Guy from Pole (C) 36' above ground to anchor (E) 10' from butt of Pole (C).
All guy wire double galvanized stranded steel with a minimum ultimate strength of 55000 lbs. per square inch.

Cross Arms

Proposed one 3 1/4" x 4 1/4" x 96" douglas fir double cross arm per crossing pole.

Conductors

Proposed 3 #2 A.C.S.R. wires.

Blanket
main

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Guys

On 5/16" & 3/8" guys-One 1-5/8"x6" three bolt galvanized steel clamp at each end.

On 1/2" Guy-One 1/2" galvanized Crosby clip at each end.

Guy Insulators

For distribution circuits-One O.B.#26500 (or equivalent) in 5/16" and 3/8" guys. One O.B.#25009 (or equivalent) in 1/2" steel and 5/16" copperweld Guys.

For 24,000 volt transmission circuits-Use two insulators per guy instead of one as above.

Guy Anchors

On 5/16" & 3/8" steel guys-One 8" Cone anchor set 5-1/2" deep.

On 1/2" steel and 5/16" copperweld Guys-one four blade 8" expanding anchor set 7 1/2" deep.

On two 1/2" steel or 5/16" Copperweld at one location-concrete anchor (8 cu. ft. concrete) set 6' deep.

Anchor Rods

On 5/16" and 3/8" steel guys-1-5/8"x6' round galvanized steel rod.

On 1/2" steel & 5/16" Copperweld guys 1 3/4"x8' round galvanized steel rod.

Crossarm Attachments

Center bolts-5/8" galvanized steel.

Spacer bolts-5/8" galvanized steel.

Spacers -4"x4" treated pine blocks.

Braces -(for 24,000 volt circuits) 1"x2-1/2"x30" treated-yellow pine.

Braces -1/4"x1-1/4"x28" galvanized steel for all other circuits.

Brace bolts -3/8" galvanized steel bolts at arm end.

Brace bolts -1/2"x5" galvanized steel lag screws at pole end.

Pins

On 3-1/4"x4-1/4" arms-1-1/2"x9"x1" Locust pins.

On 3-3/4"x4-3/4" arms-1-3/4"x10"x1" Locust pins except for 24,000 volt circuits.

On 24,000 volt crossarm-1 3/4"x1 3/4"x1 3/8" Locust Pins.

On 24,000 volt pole top-3 3/4"x3 3/4"x1 7" Locust pins.

Insulators

24,000 volt circuits-One O.B.#11623 (or equivalent) porcelain, pin type, insulator and six Thomas #1162 (or equivalent) disk type insulators.

Ground wire on pole side bracket-One O.B.#12847 (or equivalent) porcelain, pin type insulator and two Thomas #1162 (or equivalent) porcelain, disk type insulators.

Ground wire on pole top pin-One O.B.#10636 (or equivalent) porcelain, pin type insulator and two Thomas #1162 (or equivalent) porcelain, disk type insulators.

Primary distribution, Series St. Lighting & Private telephone circuits two O.B.#12847, (or equivalent) porcelain, pin type insulators.

Secondary distribution circuits-Two Hemingray #20 (or equivalent) glass pin type insulators.

Note:

For strain type construction (where shown)-On primary and series circuits two O.B.#11940 (or equivalent) porcelain, strain type insulators and one O.B.#12847 (or equivalent) porcelain pin type insulator.

On secondary circuits two O.B.#25009 (or equivalent) porcelain strain type insulators and one Hemingray #20 (or equivalent) glass pin type insulator.

Ties

Standard top groove tie-On 24,000 volt, 4800 volt, series street lighting and private telephone circuits.

Stand, side groove tie-On all circuits below 240 volts.

Tie wire-#8 soft, bare copper, for 24,000 volt conductors.

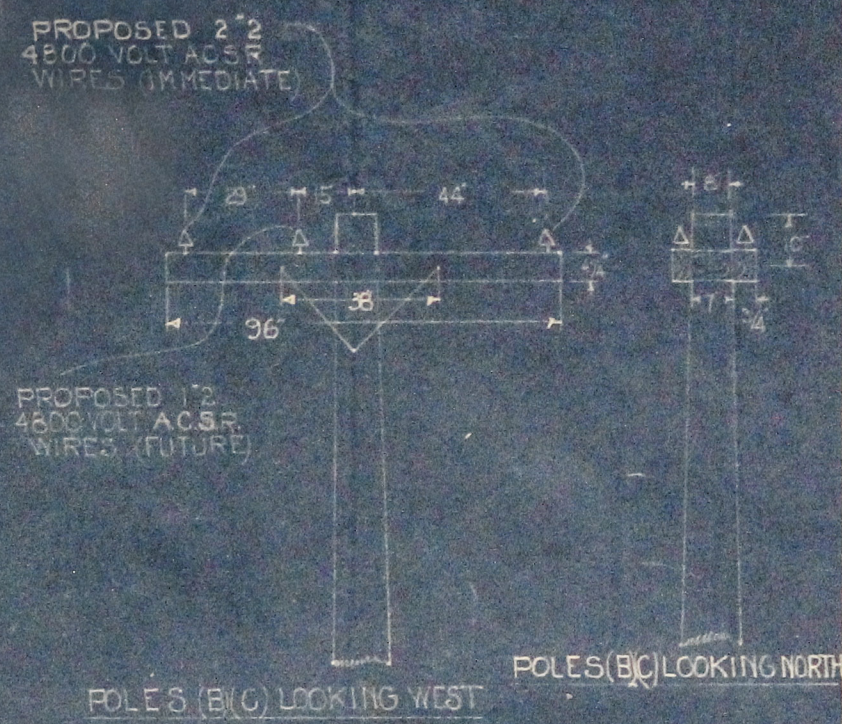
#4 or #6 soft, solid, weatherproof copper, for all circs. using weatherproof conductors.

#6 bare aluminum tie wire for #2 A.C.S.R. conductors.

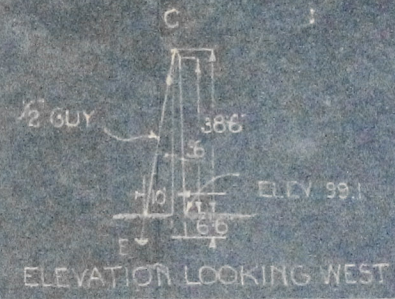
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RECORDED RIGHT OF WAY NO. 34636
P220

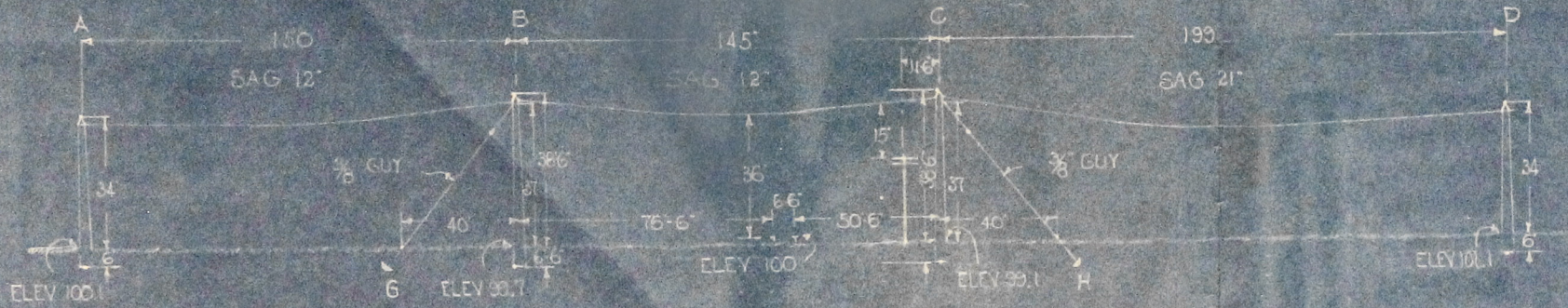
JUL 27 1931



PLAN OF CROSSING



RECORDED R/W FILE NO. **34636 P220**



PURPOSE OF LINE
EXTENSION OF RURAL
DISTRIBUTION

APPROVED
With Change For Indicated
MICHIGAN PUBLIC UTILITIES
COMMISSION
J. H. ...
CHIEF ENGINEER
FILE U-7964 DATE JUL 29 1931

CITY _____
COUNTY OAKLAND
TOWNSHIP SPRINGFIELD
SURVEY NO. OF TWP. 4 NORTH
RANGE NO. 8 EAST
SECTION NO. 5E 1/4 SEC 22

THE DETROIT EDISON CO.
PLAN SUBMITTED TO MICH.
PUBLIC UTILITIES COMMISSION
FOR 4800 VOLT CROSSING
OVER GRAND TRUNK RR
DRAWN BY FFH DATE 7-23-31
CHECKED BY HP DATE 7-23-31

SCHAIERER