

AGENDA REPORT

TO: Mayor & City Commission
FROM: Ken Hibl, City Manager
DATE: February 10, 2010
RE: MDOT Resolution – Traffic Signal Modernization



For the Agenda of February 15, 2010

Background. MDOT has a planned traffic signal upgrade project (digital signals; numeric pedestrian countdown signals – *see copy of att'd project documents*) scheduled to be completed in 2010. MDOT bears the full cost of the modernization project, but municipalities are required to share the cost (50%) of annual maintenance for the signals once they are installed. Three signals will be modernized in Clare (McEwan & Fourth; McEwan & Fifth; McEwan & Schoolcrest). MDOT bears 100% of the maintenance costs of the McEwan & Fifth signal as it is located at the convergence of two federal highways, but the cost of maintenance the other two signals are equally shared between MDOT and the City. MDOT requires a resolution (*copy att'd*) to be adopted by the governing body of each respective community indicating its agreement to share in the annual maintenance costs.

Issues & Questions Specified. Should the City Commission approve the required MDOT resolution?

Alternatives.

1. Approve the resolution.
2. Do not approve the resolution.
3. Set aside decision regarding this matter to a later date.

Financial Impact. The annual estimated maintenance costs for the two lights is \$528 per year. This is the same amount we currently pay (and have for many years).

Recommendation. I recommend that the City Commission adopt MDOT Resolution 2010-010, thereby agreeing to share in the annual maintenance costs of the two aforementioned traffic signals.

Attachments.

1. Project Documents.
2. Resolution 2010-010.



STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
BAY REGION

JENNIFER M. GRANHOLM
GOVERNOR

KIRK T. STEUDLE
DIRECTOR

January 28, 2010

Mr. Ken Hibl
City of Clare
202 W. Fifth St.
Clare, MI 48617

Dear Mr. Hibl:

Enclosed are cost agreement forms and plan sheets for traffic signal modernization at the following intersections in the City of Clare. The intersections are listed below:

- US-127BR (McEwan) @ 4th St. (18031-01-003)
- US-127BR (McEwan) @ Schoolcrest Ave. (18031-01-011)

We are requesting that the City of Clare pass a resolution agreeing to participate in actual costs of future maintenance as indicated on the attached agreement forms. Please sign the cost agreement forms, and along with two copies of the resolution return to this office. After all parties have signed the forms, an executed cost agreement will be returned to your office for your files.

The plan sheets included may be retained for your files. If you have any questions, please contact me at (989) 754-0878 ext. 256.

Sincerely,

David M. Hoeh
Bay Region Signals Engineer

dmh
Enclosure
cc: W. Cloutier
T. Palmer
J. Myers



MICHIGAN DEPARTMENT OF TRANSPORTATION
 COST AGREEMENT FOR TRAFFIC SIGNAL
 CONTROL

Lansing Region
 District TSC
 County

This Agreement Cancels and Supercedes All Previous Cost Agreements AND is terminable on thirty days notice by any party.

Typed Date 11/18/2009

LOCATION Modernization Traffic Signal

Work Auth No. 16183

US127BR (MCEWAN) @ SCHOOLCREST AVE

MDOT Plan No. 18031-01-011

CLARE

Clare County

Installation Date

* Under authority of state law and by virtue of resolutions formally adopted by their respective governing bodies (and herein submitted), the undersigned hereby agree to participate in the cost of installation, maintenance and operation of the above traffic signal control on the basis of the division of costs as determined by the provision of applicable statutes. Details of installation are as shown on attached Michigan Department of Transportation plan dated 09/09/2009. Title to equipment shall remain with the purchasing agency, and the proper credit of salvaged value shall be issued to all parties upon removal of the equipment, in proportion to their share of original cost.

PARTICIPATION

AGENCY	(BY CONTRACT)	INSTALLATION		MAINTENANCE	
		Per Cent	Estimated Cost	Per Cent	Estimated Annual Cost
Dept of Transportation 18031		0 %		50 %	\$264
CLARE	City	0 %		50 %	\$264
Total		0 %		100 %	\$528

It is further agreed that the agency responsible for handling bills and/or leased line interconnection billings shall be MDOT

It is further agreed that the agency responsible for performing signal maintenance type D shall be MDOT

For Michigan Department of Transportation use ONLY.		
APPROVED: City of CLARE Date _____ _____ (Title of Authorized Official)	APPROVED: Date _____ By _____ _____ (Title of Authorized Official)	APPROVED: By _____ Engineer of Operations Date _____
APPROVED: Date _____ _____ (Title of Authorized Official)	APPROVED: Date _____ By _____ _____ (Title of Authorized Official)	SIGNED: MICHIGAN DEPARTMENT OF TRANSPORTATION By _____ Title: _____ Date _____

* Two copies of resolution must be submitted with this form.

Q1549 (3/89)

(See Reverse Side for an Outline of Policy)

**OUTLINE OF POLICY RELATING TO DIVISION OF MAINTENANCE COSTS
FOR TRAFFIC SIGNALS**

The "Maintenance Cost Agreement for Traffic Signal Controls" between the Michigan Department of Transportation and the county, township, city or village is based on the following policy:

1. The percentage of expense shall be divided on the basis of number of signalized directions. For instance, in the case of a four-legged intersection of which two state trunk line legs are both signalized and only one of the two county legs is signalized, 66-2/3% shall apply to the state trunk line and 33-1/3% to the county road.
2. A divided highway shall be considered the same as a two-way undivided highway.
3. The signalized direction for pedestrians shall be treated in the same manner as signalized vehicular direction.
4. In case of a contract municipality, the municipal share of expense shall include percentages for signalized directions on municipal streets, plus the municipal maintenance contract percentage of the share allocated to the signalized directions on state trunk lines.
5. In case of a signal being located at the intersection of two or more state trunk line maintenance sections, the "Trunk Line Share" shall be allocated to that maintenance section which extends in the north direction. If none extends in the north direction, then to the first leg encountered starting from the north and progressing in a clockwise direction.

**OUTLINE OF POLICY RELATING TO DIVISION OF MAINTENANCE COSTS
FOR ELECTRICAL SCHOOL SIGNS**

The "Maintenance Cost Agreement for Traffic Signal Controls" between the Michigan Department of Transportation and the county, township, city or village is based on the following policy:

1. The Michigan Department of Transportation shall pay the entire cost of mechanical and routine maintenance, and the cost of energy billings.

EXPLANATION OF CODE FOR "TYPE OF INSTALLATION"

<u>SAMPLE</u>	1	-	4W	-	3C	-	S	-	A
	1		2		3		4		5

Explanation

1. The number of heads of each particular type of unit.
2. The number of signalized ways in the unit - (4 ways).
3. The number of colors facing in each direction - (3 colors).
4. How signal is supported: S-Span Suspension, M-Mast Arm, B-Bracket, P-Post or pedestal.
5. Solid or adjustable heads: S-Solid, A-Adjustable.

A pedestrian signal on a pedestal is designated by: 1-1W-2C-P-A.

A pedestrian signal on a pole is designated by: 1-1W-2C-B-A.

EXPLANATION OF MDOT PLAN NUMBER

<u>SAMPLE</u>	65032	-	01	-	001
	1		2		3

Explanation

1. Control section number.
2. Type of operation. (01-Stop and Go; 02-Flasher; 03-Keep Right Sign; 04-School Speed Limit; 05-School Flasher ; 06-Street Lighting; 07-Illuminated Sign; 08-Emergency Traffic Signal; 09-Misc.).
3. Assigned number within a control section.



MICHIGAN DEPARTMENT OF TRANSPORTATION Lansing Region
 COST AGREEMENT FOR TRAFFIC SIGNAL CONTROL District TSC
 County

This Agreement Cancels and Supercedes All Previous Cost Agreements AND is terminable on thirty days notice by any party.

Typed Date 11/18/2009

LOCATION Modernization Traffic Signal

Work Auth No. 16183

US127BR (MCEWAN) @ SCHOOLCREST AVE

MDOT Plan No. 18031-01-011

CLARE Clare County

Installation Date

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CLARE	City	0 %		50 %	\$264
Total		0 %		100 %	\$528

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It is further agreed that the agency responsible for performing signal maintenance type D shall be MDOT

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<u>SAMPLE</u>	1	-	4W	-	3C	-	S	-	A
	1		2		3		4		5

Explanation

1. The number of heads of each particular type of unit.
2. The number of signalized ways in the unit - (4 ways).
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4. How signal is supported: S-Span Suspension, M-Mast Arm, B-Bracket, P-Post or pedestal.
5. Solid or adjustable heads: S-Solid, A-Adjustable.

A pedestrian signal on a pedestal is designated by: 1-1W-2C-P-A.

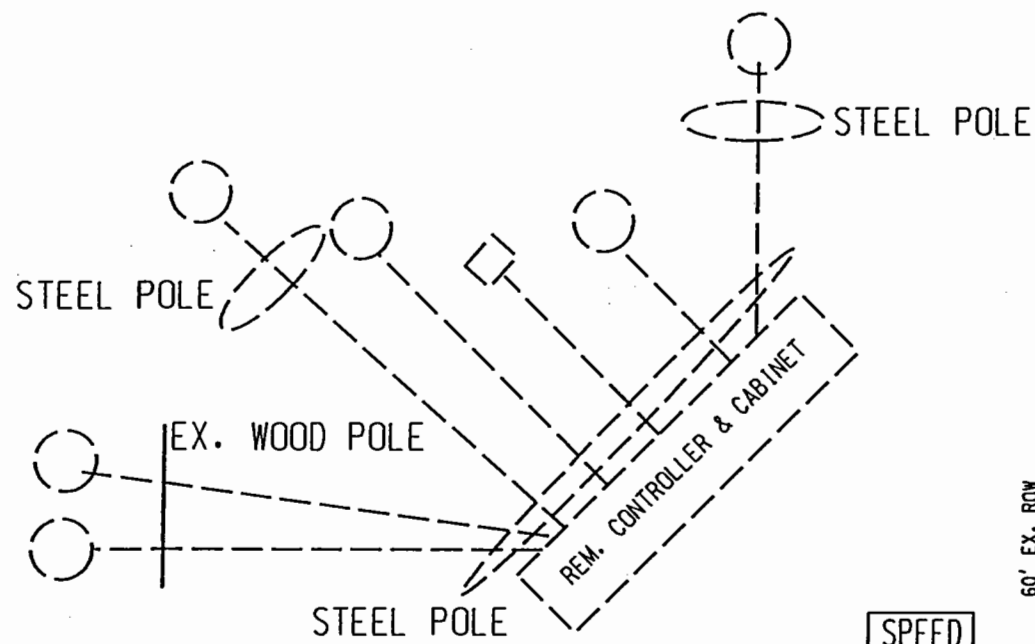
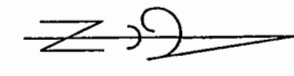
A pedestrian signal on a pole is designated by: 1-1W-2C-B-A.

EXPLANATION OF MDOT PLAN NUMBER

<u>SAMPLE</u>	65032	-	01	-	001
	1		2		3

Explanation

1. Control section number.
2. Type of operation. (01-Stop and Go; 02-Flasher; 03-Keep Right Sign; 04-School Speed Limit; 05-School Flasher ; 06-Street Lighting; 07-Illuminated Sign; 08-Emergency Traffic Signal; 09-Misc.).
3. Assigned number within a control section.



REMOVAL WIRING DIAGRAM

NOT TO SCALE

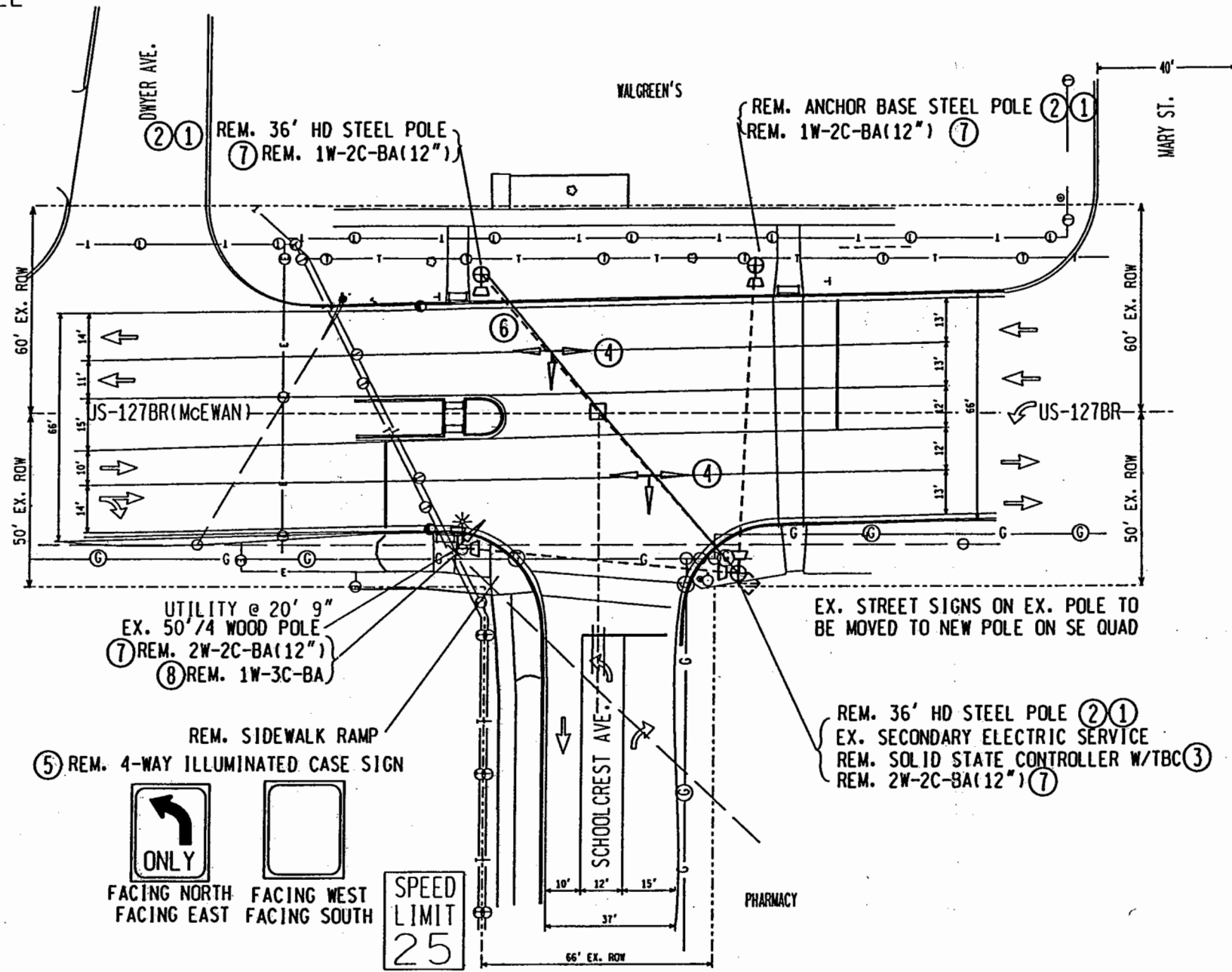
UTILIZE EXISTING CONDUIT & HANDHOLES WHERE POSSIBLE, OTHERWISE INSTALL NEW AS DIRECTED BY ENGINEER.

CONTACT: MR. RICH KLENDER OF CONSUMERS ENERGY AT 989-466-4279 AT LEAST 1 WEEK PRIOR FOR SERVICE DISCONNECT & RECONNECT. #1000738710 COST TO CONTRACTOR: \$0

FOR ELECTRICAL SERVICE INSPECTION CONTACT THE MICHIGAN DEPARTMENT OF LABOR AND ECONOMIC GROWTH AT 989-686-0032 COST TO BE PAID BY THE CONTRACTOR.

LIST OF MATERIAL

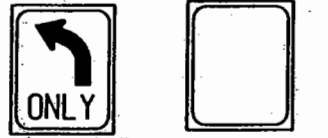
NO.	ITEM	QUANTITIES
①	Steel Pole, Rem	3 Ea
②	Fdn, Rem	3 Ea
③	Controller and Cabinet, Rem	1 Ea
④	TS, Span Wire Mtd, Rem	2 Ea
⑤	Case Sign, Rem	1 Ea
⑥	Span Wire, Rem	1 Ea
⑦	TS, Pedestrian, Bracket Arm Mtd, Rem	4 Ea
⑧	TS, Bracket Arm Mtd, Rem	1 Ea



SPEED LIMIT 35

SPEED LIMIT 45

SPEED LIMIT 25



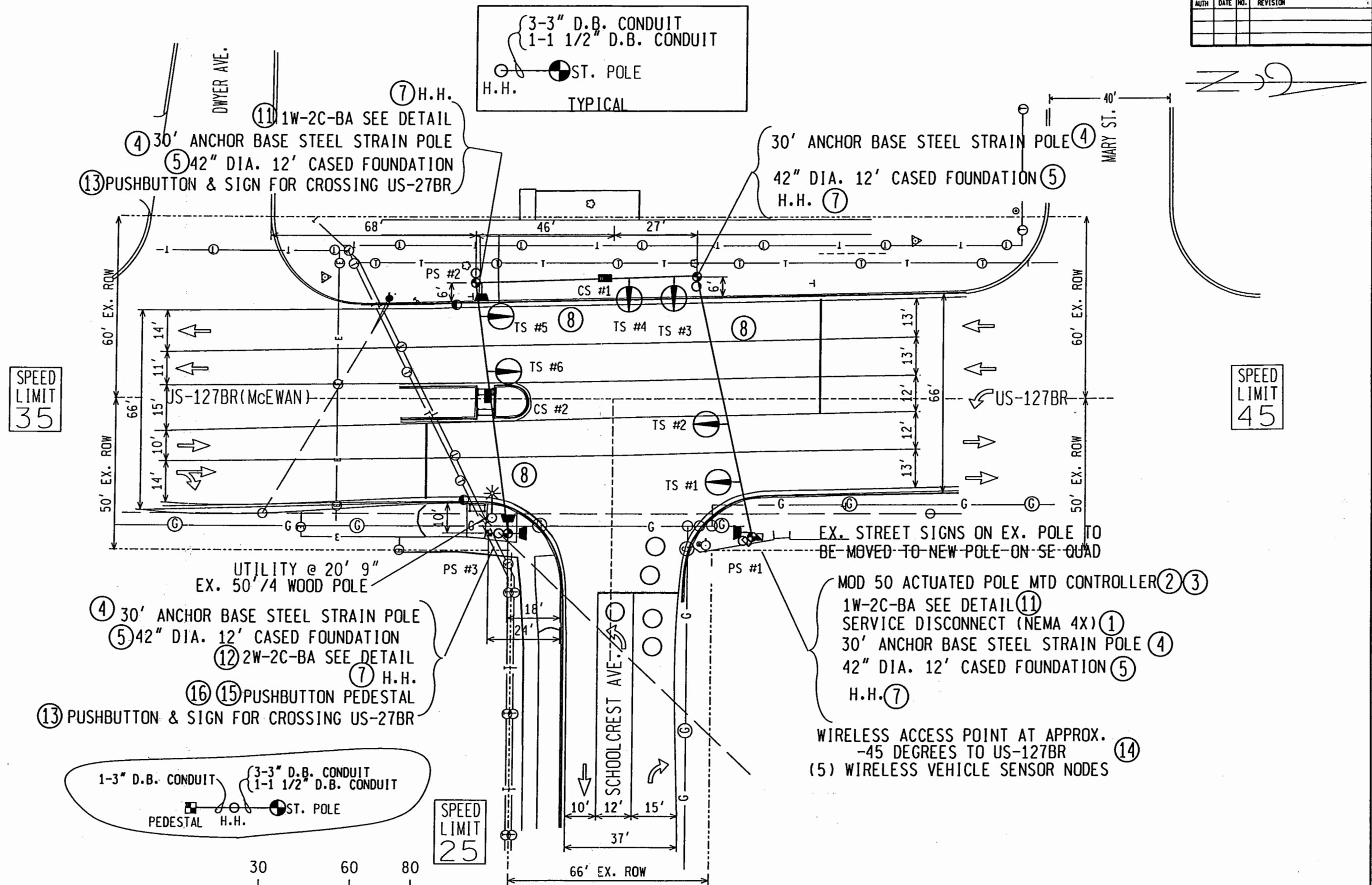
REMOVAL DIAGRAM

NOT TO SCALE

TRAFFIC SIGNAL

	OPENINGS	REMOVAL	US-127BR (MCEWAN) @ SCHOOLCREST AVE. CITY OF CLARE CLARE COUNTY	US-127BR (MCEWAN) @ SCHOOLCREST AVE.				
	CYCLIC WATTS	REMOVAL		DATE	CONT. SEC.	JOB NO.	TRAFFIC UNIT	SHEET NO.
	STEADY WATTS	REMOVAL		09/09/09	18031	102172A	SIGNALS	25
	PLAN 18031-01-011							

FINAL R.O.W.			
AUTH	DATE	NO.	REVISION



3-3" D.B. CONDUIT
1-1 1/2" D.B. CONDUIT
ST. POLE
H.H.
TYPICAL

SPEED LIMIT 35

SPEED LIMIT 45

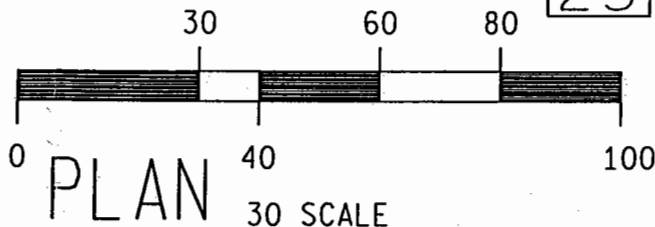
SPEED LIMIT 25

- ④ 30' ANCHOR BASE STEEL STRAIN POLE
- ⑤ 42" DIA. 12' CASIED FOUNDATION
- ⑫ 2W-2C-BA SEE DETAIL
- ⑦ H.H.
- ⑮ PUSHBUTTON PEDESTAL
- ⑬ PUSHBUTTON & SIGN FOR CROSSING US-27BR

- MOD 50 ACTUATED POLE MTD CONTROLLER ②③
- 1W-2C-BA SEE DETAIL ⑪
- SERVICE DISCONNECT (NEMA 4X) ①
- 30' ANCHOR BASE STEEL STRAIN POLE ④
- 42" DIA. 12' CASIED FOUNDATION ⑤
- H.H. ⑦
- WIRELESS ACCESS POINT AT APPROX. -45 DEGREES TO US-127BR ⑭
- (5) WIRELESS VEHICLE SENSOR NODES

1-3" D.B. CONDUIT
3-3" D.B. CONDUIT
1-1 1/2" D.B. CONDUIT
PEDESTAL H.H. ST. POLE

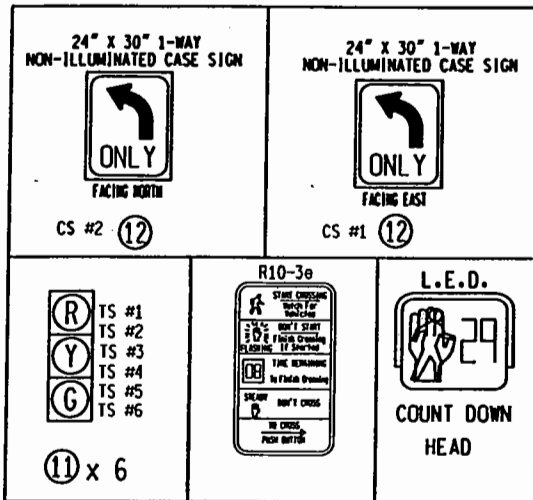
ALL DIMENSIONS ARE REFERENCED FROM BACK OF CURB



OPENINGS	22
CYCLIC WATTS	302
STEADY WATTS	105
PLAN 18031-01-011	

US-127BR (MCEWAN) @ SCHOOLCREST AVE.
CITY OF CLARE
CLARE COUNTY

TRAFFIC SIGNAL				
US-127BR (MCEWAN) @ SCHOOLCREST AVE.				
DATE	CONT. SEC.	JOB NO.	TRAFFIC UNIT	SHEET NO.
09/09/09	18031	102172A	SIGNALS	26



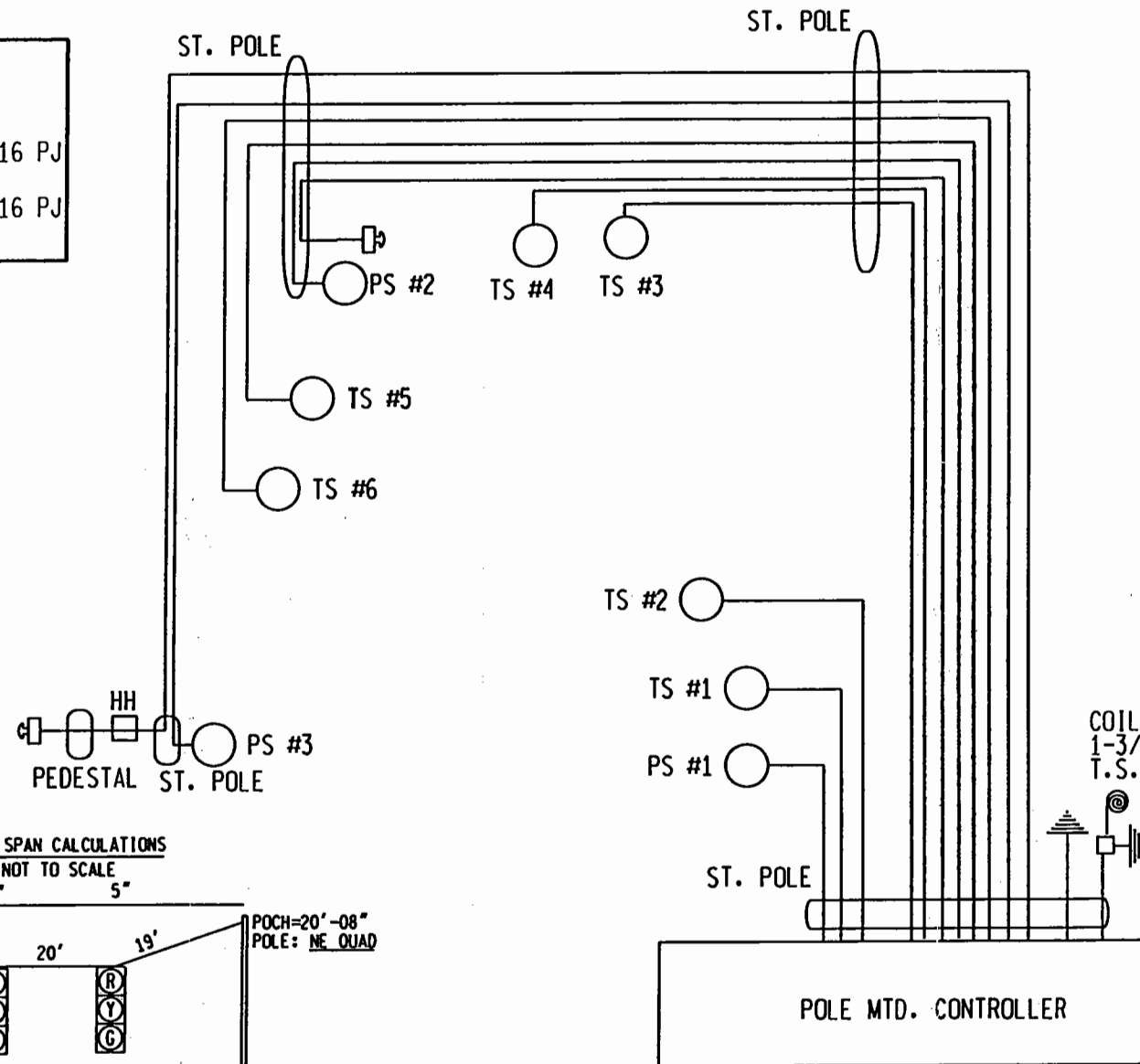
NOTE:
 1. ALL CABLES ARE 5/C #16 PJ UNLESS SPECIFIED OTHERWISE
 2. ALL PED SIGNAL CABLES ARE 7/C #16 PJ UNLESS SPECIFIED OTHERWISE
 3. ALL PUSHBUTTON CABLES ARE 2/C #16 PJ UNLESS SPECIFIED OTHERWISE

FOR ELECTRICAL SERVICE INSPECTION CONTACT THE MICHIGAN DEPARTMENT OF LABOR AND ECONOMIC GROWTH AT 989-686-0032 COST TO BE PAID BY THE CONTRACTOR.

CONTACT: MR. RICH KLENDER OF CONSUMERS ENERGY AT 989-466-4279 AT LEAST 1 WEEK PRIOR FOR SERVICE DISCONNECT & RECONNECT. #1000738710 COST TO CONTRACTOR: \$0

UTILIZE EXISTING CONDUIT & HANDHOLES WHERE POSSIBLE, OTHERWISE INSTALL NEW AS DIRECTED BY ENGINEER.

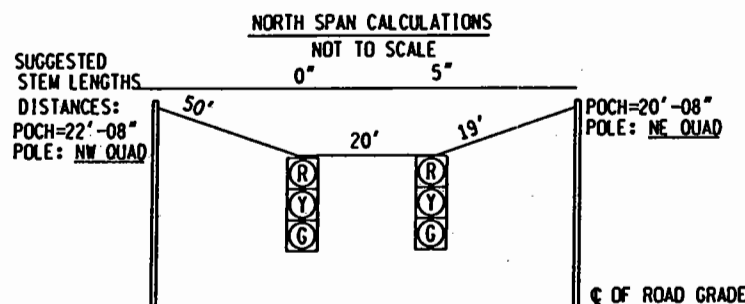
LIST OF MATERIAL		
NO.	ITEM	QUANTITIES
①	Serv Disconnect	1 Ea
②	Controller and Cabinet, Digital Type	1 Ea
③	Controller and Cabinet, Digital Type, Delivered	1 Ea
④	Strain Pole, Steel, Anchor Base, 30 foot	4 Ea
⑤	Strain Pole Fdn, Cased	48 Ft
⑥	Hh, Round, 3 foot Dia.	1 Ea
⑦	Hh, Round	4 Ea
⑧	Span Wire	3 Ea
⑨	TS, One Way Span Wire Mtd, (LED)	6 Ea
⑩	Case Sign, One Way, 24 inch by 30 inch, Non-Illuminated	2 Ea
⑪	TS, Pedestrian, One Way Bracket Arm Mtd (LED) Countdown	2 Ea
⑫	TS, Pedestrian, Two Way Bracket Arm Mtd (LED) Countdown	1 Ea
⑬	Pushbutton and Sign	2 Ea
⑭	Wireless Vehicle Detection System	1 Ea
⑮	Pushbutton Pedestal, Alum	1 Ea
⑯	Pedestal, Fdn	1 Ea
○	Conduit, DB, 1. 1 1/2 inch	40 Ft
○	Conduit, DB, 1. 3 inch	10 Ft
○	Conduit, DB, 3. 3 inch	40 Ft
○	Cable, Sec, 600V, 1. 3/C#6	10 Ft



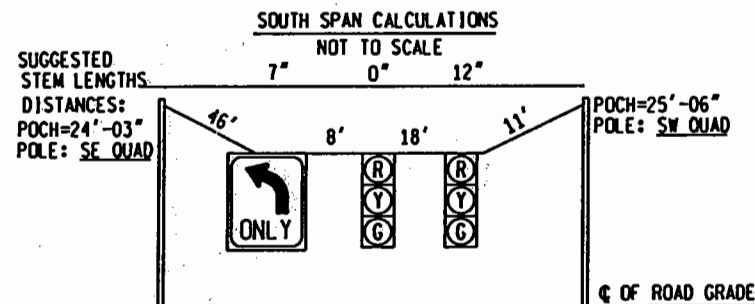
WIRING DIAGRAM
NOT TO SCALE

COIL-UP SUFFICIENT LENGTH OF 600V., 1-3/C #6 SECONDARY CABLES FOR 120V. T.S. FEED FOR CONNECTION BY CE.

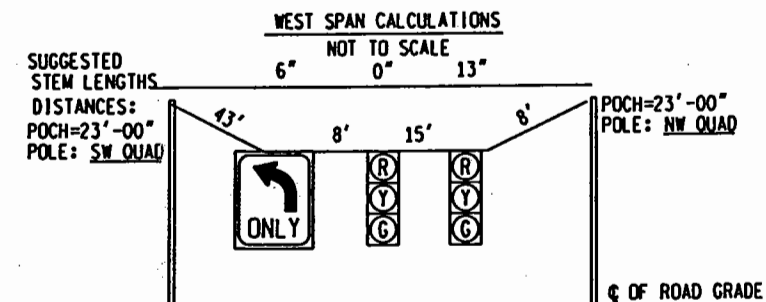
FUSE AT 60A. (NEMA 4X-STAINLESS STEEL) 60A. SERVICE DISCONNECT



NOTE:
 POCH (POLE CONTACT HEIGHT) IS SHOWN ABOVE ϕ GRADE. FIELD ADJUSTMENTS ARE TO BE MADE FOR ANY DIFFERENCE IN GRADE AT POLE VS. ROAD GRADE. POCH IS CALCULATED AT 1000 POUNDS TENSION.



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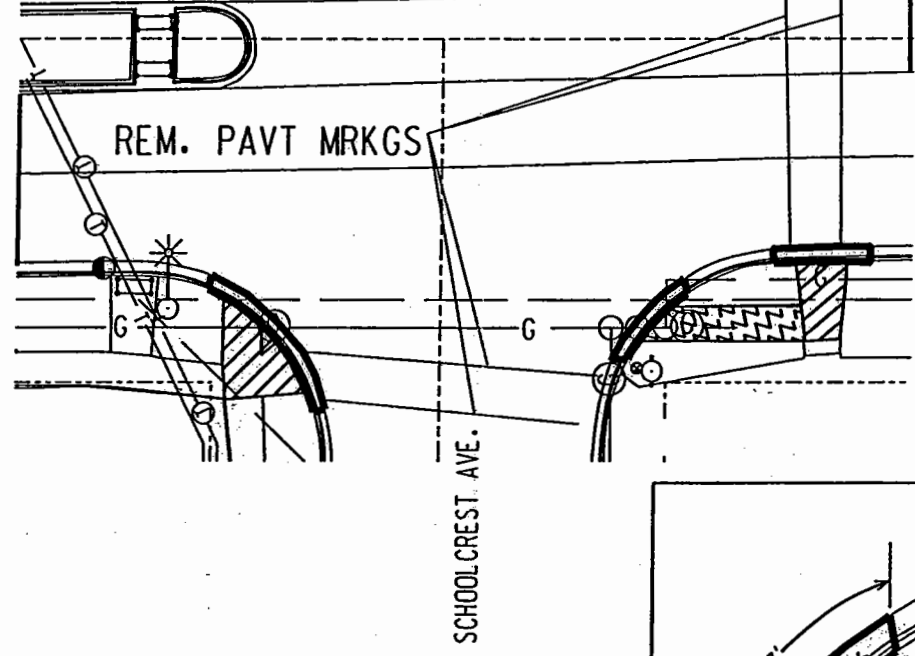
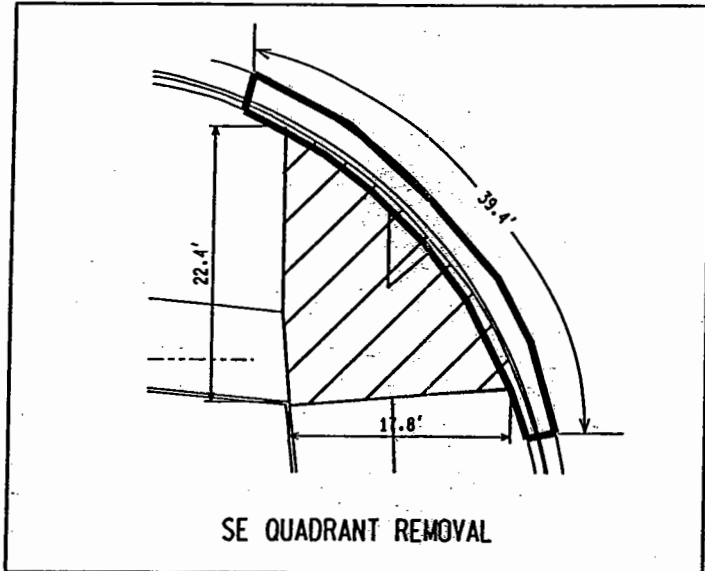
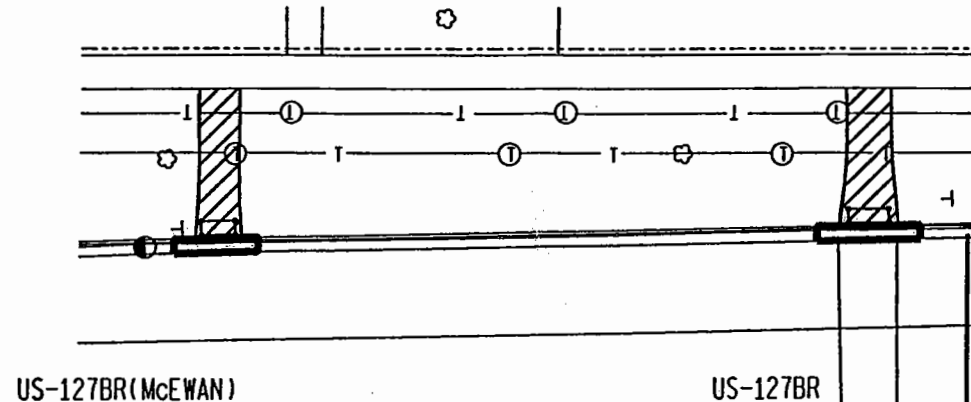
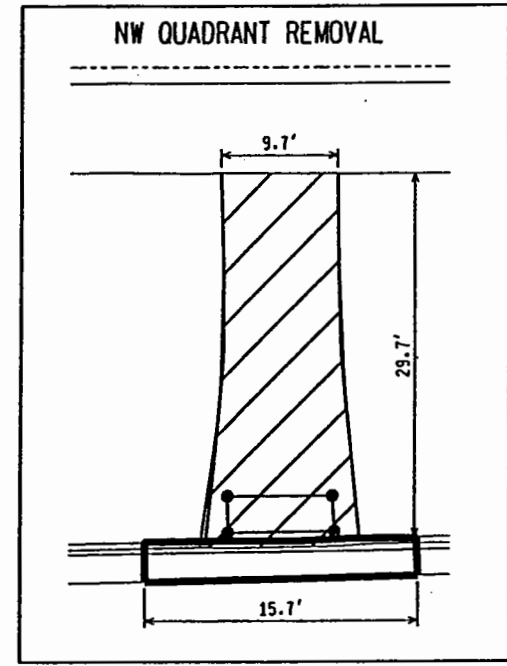
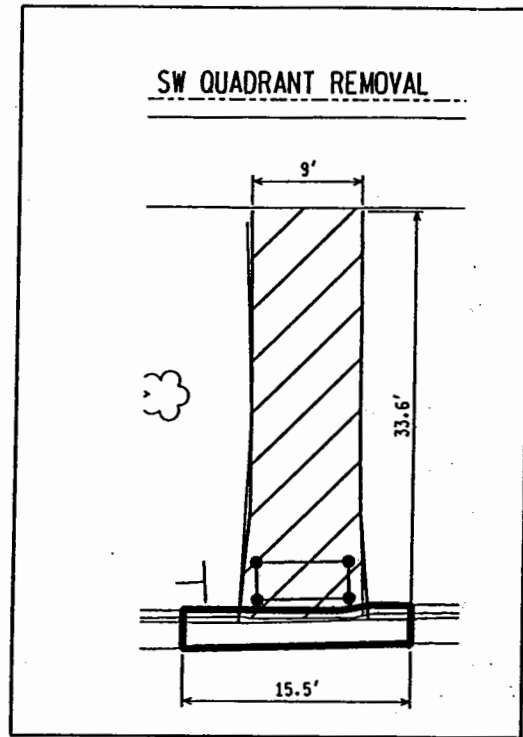


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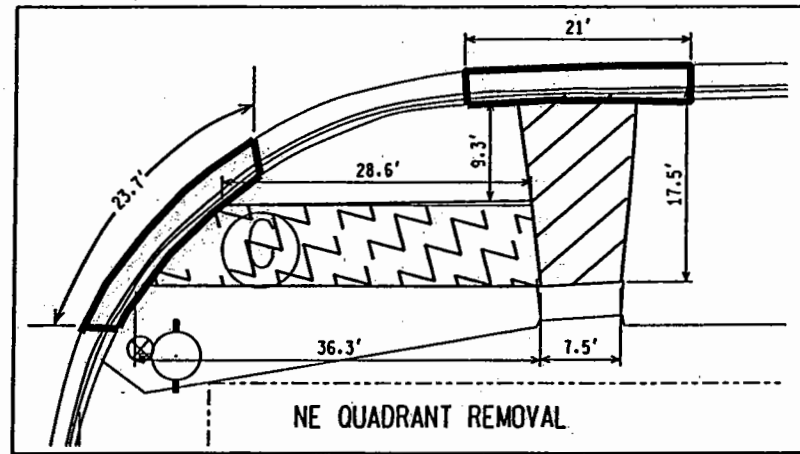
TRAFFIC SIGNAL

	OPENINGS	US-127BR (MCEWAN) @ SCHOOLCREST AVE. CITY OF CLARE CLARE COUNTY	US-127BR (MCEWAN) @ SCHOOLCREST AVE.				
	CYCLIC WATTS		DATE	CONT. SEC.	JOB NO.	TRAFFIC UNIT	SHEET NO.
	STEADY WATTS	PLAN 18031-01-011	09/09/09	18031	102172A	SIGNALS	27

ZZ



REMOVAL DIAGRAM
NOT TO SCALE



LEGEND	
	SIDEWALK REMOVE
	BRICKWORK REMOVE
	EXCAVATION OF EARTH
	CURB & GUTTER REMOVE

LIST OF MATERIAL		
NO.	ITEM	QUANTITIES
○	Excavation, Earth	7 Cyd
○	Curb and Gutter, Rem	115 Ft
○	Rem Spec Mrkg	154 Sft
○	Sidewalk, Rem	120 Syd

TRAFFIC SIGNAL

	OPENINGS CYCLIC WATTS STEADY WATTS PLAN 18031-01-011	US-127BR (MCEWAN) @ SCHOOLCREST AVE. CITY OF CLARE CLARE COUNTY	US-127BR (MCEWAN) @ SCHOOLCREST AVE.			
			DATE 09/09/09	CONT. SEC. 18031	JOB NO. 102172A	TRAFFIC UNIT SIGNALS

CITY OF CLARE RESOLUTION 2010-010

TO APPROVE MICHIGAN DEPARTMENT OF TRANSPORTATION TRAFFIC SIGNAL MAINTENANCE COST AGREEMENTS.

WHEREAS, Cost Agreements (“Agreements”) have been submitted by the Michigan Department of Transportation (“MDOT”), which requires the City of Clare to adopt a resolution demonstrating its willingness to participate in the cost of traffic signal maintenance at the following locations:

US BR-127 (McEwan) @ Fourth Street
US BR-127 (McEwan) @ Schoolcrest

and, **WHEREAS**, future maintenance of traffic signal equipment at these intersections will be shared between MDOT and the City as shown on the Council Communication; and

WHEREAS, said Agreements have been approved by the City Manager as to substance and by the City Attorney as to form.

NOW, THEREFORE, BE IT RESOLVED, that City Officials be authorized to execute said Agreements on behalf of the City of Clare.

ALL RESOLUTIONS AND PARTS OF RESOLUTIONS INsofar AS THEY CONFLICT WITH THE PROVISIONS OF THIS RESOLUTION BE AND THE SAME ARE HEREBY RESCINDED.

The Resolution was introduced by Commissioner _____ and supported by Commissioner _____. The Resolution declared adopted by the following roll call vote:

YEAS:

NAYS: None

ABSENT: None

Resolution approved for adoption on this 15th day of February 2010.

Diane Schmidt, City Clerk