

CITY COUNCIL ACTION REPORT

July 23, 2009

TO: John Szerlag, City Manager

FROM: Brian P. Murphy, Asst. City Manager/Economic Dev. Services
Steve Vandette, City Engineer *SV*

SUBJECT: Traffic Signal Agreements
Rochester, Torpey to Barclay and Wattles, East and West of Rochester
Project No. 99.203.5 and 01.106.5

Recommendation:

Staff recommends that City Council approve the attached traffic signal agreements with the Road Commission for Oakland County (RCOC) for the removal, modernization and installation of traffic signals as part of the Rochester, Torpey to Barclay and Wattles, East and West of Rochester Road projects. Furthermore, staff recommends that the Mayor and City Clerk be authorized to execute the agreements.

Background:

The RCOC requires a City Council resolution approving the attached agreements and a copy of the signed agreement for their files. Rochester and Wattles Road will be reconstructed to a boulevard and the traffic signal locations listed below and as shown on the attached plan sheets will need to be removed, modernized or installed as part of the project.

Removal:

Rochester Road and Charrington Drive (Co. #583)

Modernize:

Rochester Road (NB) and Bishop Drive (Co. #641)

Installation:

Rochester Road (SB) and South of Torpey Drive, Pedestrian Crossing (Co. # 1291)

Rochester Road (NB) and Torpey Drive (Co. # 1292)

Rochester Road (SB) and Troywood Drive (Co. # 1293)

Rochester Road (NB) and X-Over South of Wattles Road (Co. # 1294)

Rochester Road (SB) and X-Over North of Wattles Road (Co. # 1295)

Wattles Road (EB) and X-Over West of Rochester Road (Co. # 1296)

Wattles Road (WB) and X-Over East of Rochester Road (Co. # 1297)

Financial Considerations:

The traffic signal work is estimated at \$840,000 and approximately 80%, or \$672,000, of the cost is eligible for reimbursement with federal funds. The city's estimated share of \$168,000 is budgeted in the Capital Fund – Major Roads, account numbers 401.447.479.7989.992035 and 401.447.479.7989.011065.

Rochester Road and Wattles Road are both city roads, so future maintenance costs are paid by the city. The average traffic signal operation and maintenance costs for a year are approximately \$1,800 and are budgeted annually in the General Fund – Public Utilities, Traffic Signals, account number 101.447.22.479.7920.030.

Legal Considerations:

The format and content of the agreements is consistent with traffic signal agreements approved by City Council for all other traffic signals in the city.

Policy Considerations:

Goal I – Troy has enhanced the health and safety of the community.

Goal II – Troy adds value to properties through maintenance or upgrades of infrastructure and quality of life venues.



HRC
HUNDELL, ROTH & CO.
Consulting Engineers

508 HALEY DRIVE
BIRMINGHAM, MISSISSIPPI 38202
PHONE: (661) 834-8800
FAX: (661) 834-8804
FAC: (661) 834-8800
WEB: (661) 834-8800

01-05-09	RE-ISSUED FOR C1
02-05-09	ISSUED FOR C1
10-11-08	ISSUED FOR VALUE IN
10-05-08	ISSUED FOR OWNER'S
DATE	ADDITIONS MADE
DRAWN	CVL/STW
APPROVED	M.W.F.
DATE	10/11/08

1:1000 (VERTICAL)
1:1000 (HORIZONTAL)

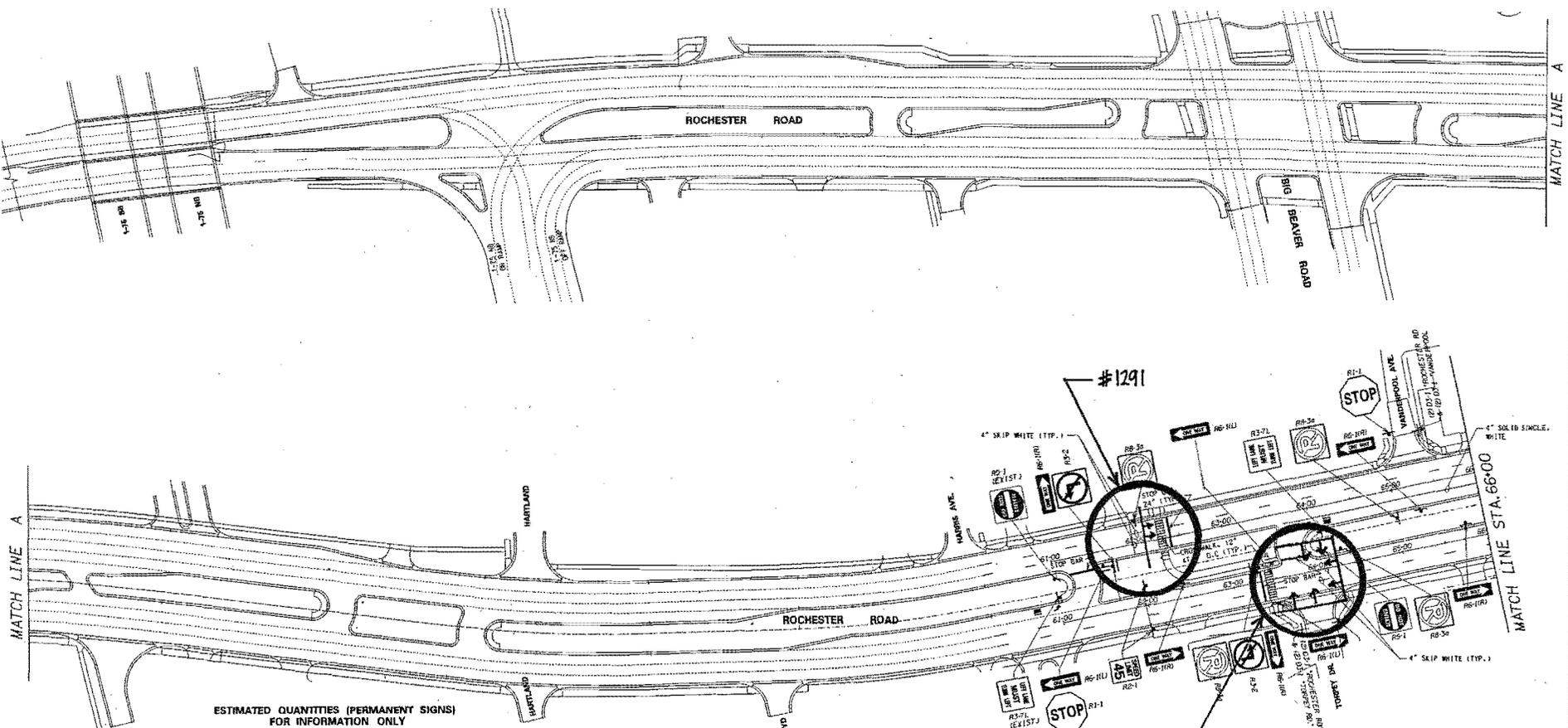


CITY OF TROY
ROCHESTER R
RECONSTRUCT
TORPEY TO BAL

DATE AND COUNTY

PERMANENT S
& LANE MARK

HRC JOB NO. SCALE



**ESTIMATED QUANTITIES (PERMANENT SIGNS)
FOR INFORMATION ONLY**

SIGN	DESCRIPTION	QTY	SIZE (INCHES)	AREA PER SIGN	TOTAL AREA	TYPE	POST PER LOCATION
R1-1	STOP SIGN	23	30 x 30	6.25	143.8	111 A	1
R2-1	SPEED LIMIT (45 MPH)	24	24 x 30	5.00	120.0	111 B	1
R3-1L	LEFT LANE MUST TURN LEFT	12	30 x 30	6.25	75.0	111 B	1
R3-1R	RIGHT LANE MUST TURN RIGHT	2	30 x 30	6.25	12.5	111 B	1
R4-1	KEEP RIGHT SIGN	1	24 x 30	5.00	5.0	111 B	1
R4-90	KEEP RIGHT (OVERHEAD) LUMINATED	1	12 x 36	18.00	18.0	111 B	-
R2-5	LEFT TURN SIGN - ONLY	11	30 x 36	4.50	85.5	111 B	1
R1-2	NO LEFT TURN SIGN	15	24 x 24	4.00	60.0	111 B	1
R1-3	NO TURN	4	24 x 24	4.00	16.0	111 B	1
R5-20 MOD	TWO WAY LEFT TURN SIGN	1	24 x 42	1.00	7.0	111 B	1
R5-1	DO NOT ENTER	12	30 x 30	6.25	75.0	111 A	1
R5-1L	ONE WAY SIGN (LEFT)	23	36 x 12	3.00	69.0	111 B	1
R5-1R	ONE WAY SIGN (RIGHT)	67	36 x 12	3.00	201.0	111 B	1
R6-30	NO PARKING SIGN	40	24 x 24	4.00	160.0	111 A	1
R6-1	DIVIDED ROAD SIGN	1	36 x 36	9.00	9.0	111 B	2
R6-2	DIVIDED ROAD SIGN	1	36 x 36	9.00	9.0	111 B	2
D3-20	ADVANCED ROAD NAME "WATLES RD"	2	36 x 18	4.50	9.0	111 A	2
D3-1	ROAD NAME "ROCHESTER RD."	24	48 x 12	4.00	96.0	111 A	1
D3-1	ROAD NAME "TORPEY DR."	2	30 x 12	2.50	5.0	111 A	1
D3-1	ROAD NAME "WATERPOOL AVE."	2	54 x 12	4.50	9.0	111 A	1
D3-1	ROAD NAME "CHARLINGTON DR."	2	54 x 12	4.50	9.0	111 A	1
D3-1	ROAD NAME "FRONZLEY RD."	2	48 x 12	4.00	8.0	111 A	1
D3-1	ROAD NAME "CELEBRON AVE."	2	54 x 12	4.50	9.0	111 A	1
D3-1	ROAD NAME "BISHOP DR."	2	30 x 12	2.50	5.0	111 A	1
D3-1	ROAD NAME "TROYWOOD AVE."	2	48 x 12	4.00	8.0	111 A	1
D3-1	ROAD NAME "WATLES RD."	4	36 x 12	3.00	12.0	111 A	1
D3-1	ROAD NAME "WATLES CT."	2	30 x 12	2.50	5.0	111 A	1
D3-1	ROAD NAME "BARCLAY DR."	2	36 x 12	3.00	6.0	111 A	1
D3-1	ROAD NAME "LAMB RD."	2	30 x 12	2.50	5.0	111 A	1
D3-10	GUIDE SIGN WITH ARROWS "WATLES RD."	2	32 x 42	21.00	42.0	11 A	2 WOOD
D3-10	GUIDE SIGN WITH ARROWS "ROCHESTER RD."	1	30 x 42	28.25	28.25	11 A	2 WOOD
D3-10	GUIDE SIGN WITH ARROWS "WATLES RD."	2	32 x 42	21.00	42.0	11 A	2 WOOD
D3-10	GUIDE SIGN WITH ARROWS "ROCHESTER RD."	1	30 x 42	28.25	28.25	11 A	2 WOOD
R3-10	REFLECTIVE MARKING	1	90 x 42	26.25	26.25	11 A	2 WOOD

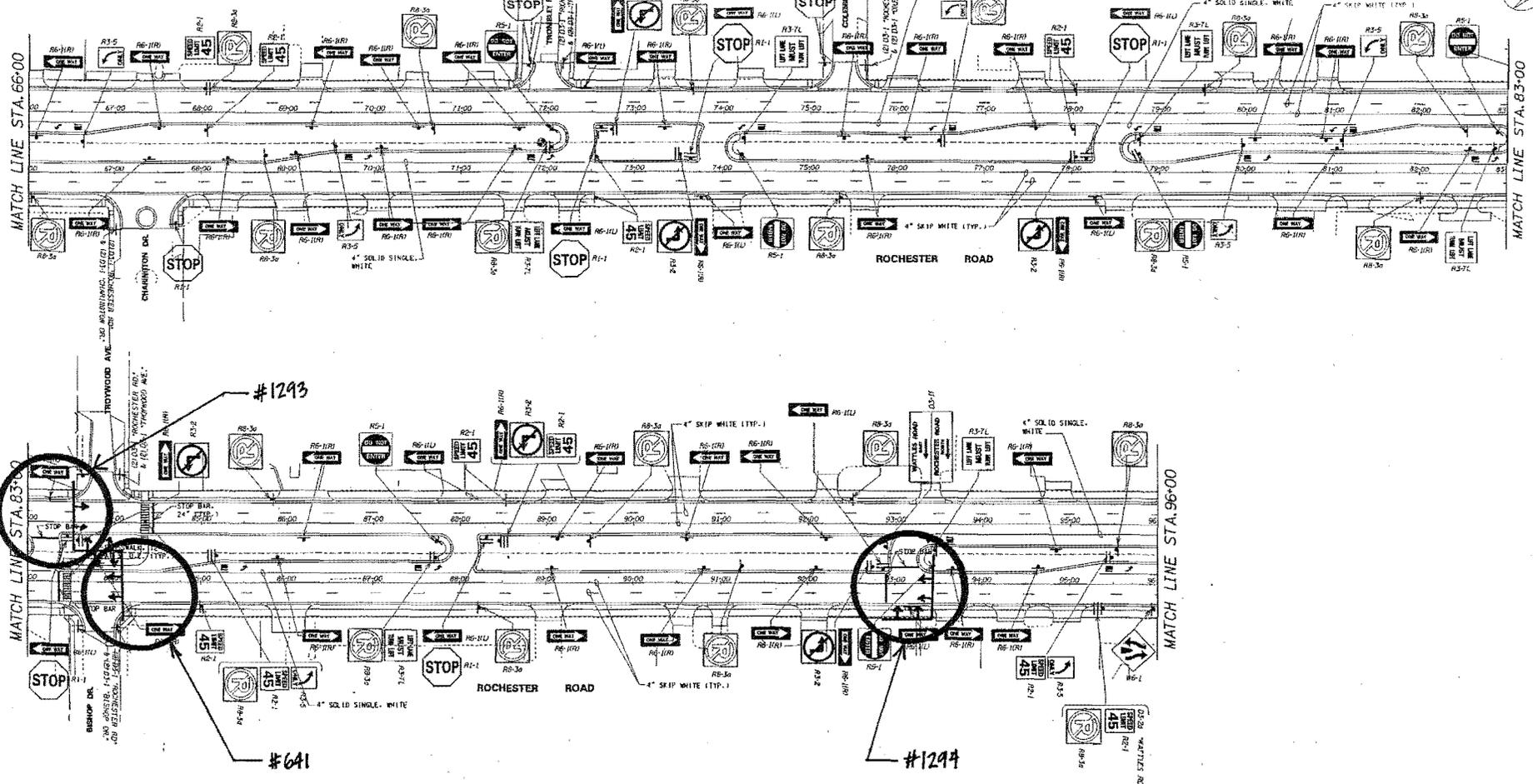
ESTIMATED QUANTITIES

Sign, Type 11A	200.0 SF
Sign, Type 111A	570.0 SF
Sign, Type 111B	709.0 SF
Post, Steel, 5 ft	1,050.0 FT
Post, Wood, 6 inch by 4 inch	144.0 FT
Paint Mkg, Dry Cold Plastic, 4 inch, White	12,500.0 FT
Paint Mkg, Dry Cold Plastic, 4 inch, Yellow	1,000.0 FT
Paint Mkg, Dry Cold Plastic, 12 inch, Grasswalk	1,100.0 FT
Paint Mkg, Dry Cold Plastic, 12 inch, Hotchink, Yellow	300.0 FT
Paint Mkg, Dry Cold Plastic, 24 inch, Stop Bar	740.0 FT
Paint Mkg, Dry Cold Plastic, 18 inch, Turn Arrow Sym	18.0 Ed
Paint Mkg, Dry Cold Plastic, Only	25.0 Ed
Paint Mkg, Dry Cold Plastic, Rt Turn Arrow Sym	6.0 Ed
Paint Mkg, Waterborne, 4 inch, White	12,500.0 FT
Paint Mkg, Waterborne, 4 inch, Yellow	3,000.0 FT
Res Coating Compound for Longit Mkg	16,400.0 FT
Res Special Mkg	1,000.0 SF

NOTE:
ALL STEEL POST SHALL BE 3 POUND U CHANNEL GALVANIZED.
ALL SIGNS TO BE FABRICATED WITH TYPE III ENCAPSULATED REFLECTIVE SHEETING, MEETING THE ROAD COMMISSION FOR DALLAS COUNTY, CURRENT STANDARD SPECIFICATIONS FOR PERMANENT SIGN.
ALL STREET NAME SIGNS SHALL BE IN ACCORDANCE WITH THE CITY OF TROY SPECIFICATIONS.
THE CONTRACTOR SHALL VERIFY WITH THE CITY OF TROY FOR THE SIZE OF THE SIGNS, TYPE OF LETTERING AND MATERIALS, PRIOR TO MANUFACTURING OF THE SIGNS. THE SIZES AS SHOWN ARE FOR ESTIMATING PURPOSES ONLY.

PERMANENT PAVEMENT MARKINGS:
(APPLY TO SHEETS PM-1 THRU PM-3)
BROKEN LINES ARE FORMED BY SEGMENTS AND GAPS AS SHOWN:
12'-5" 37'-5" 12'-5" 31'-5" 12'-5"
CONTRACTOR MUST BROOM AND CLEAN PAVEMENT TO BE STRIPPED THE SAME DAY HE WILL DO STRIPING.
ALL PERMANENT STRIPING SHALL BE OVERLAY COLD PLASTIC MATERIALS, CONFORMING TO THE 1994 MICHIGAN MANUAL OF STANDARD TRAFFIC CONTROL DEVICES.
ALL STOP BARS, LETTERS, ARROWS AND CROSS WALK MARKINGS SHALL BE OVERLAY COLD PLASTIC MATERIALS MEETING THE SPEC. FOR OVERLAY COLD PLASTIC MARKINGS.

ROCHESTER 1 of 3



PERMANENT PAVEMENT MARKINGS:
 (APPLY TO SHEETS PM-1 THRU PM-3)
 BROKEN LINES ARE FORMED BY SEGMENTS AND GAPS AS SHOWN:
 PERMANENT MARKING (TYP.)
 12'-5" 37'-5" 12'-5" 37'-5" 12'-5"

CONTRACTOR MUST GIVE AND CLEAN PAVEMENT TO BE STRIPED THE SAME DAY HE WILL DO STRIPING.

ALL PERMANENT STRIPING SHALL BE OVERLAY COLD PLASTIC MATERIALS, CONFORMING TO THE 1994 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

ALL STOP BARS, LEGENDS, ARROWS AND CROSS WALK MARKINGS SHALL BE OVERLAY COLD PLASTIC MATERIALS MEETING THE SPECS. FOR OVERLAY COLD PLASTIC MARKINGS.

ROCHESTER 2 of 3



HRC
 HERRMANN, BETH & CO.
 Consulting Engineers

854 MULLEN DRIVE
 BLOOMHILLS, MICHIGAN 48304
 PHONE: (313) 646-1000
 FAX: (313) 646-1001
 WWW SITE: http://www.hrc.com

03-09-00	RE-ISSUED FOR CI
09-20-00	ISSUED FOR CI
10-31-00	ISSUED FOR VALUE EN
10-05-05	ISSUED FOR OWNER'S
DATE	ADDITIONS AND/PR
DESIGNED	A.P.P.
DRAWN	collins
CHECKED	M.W.J.
APPROVED	M.H.A.
APPROVED FOR THE CITY OF TROY	



CITY OF TROY
 ROCHESTER R
 RECONSTRUCT
 TORPEY TO BA

PERMANENT S
 & LANE MARK



HRC
 HARRIS, ROTH & CL...
 Consulting Engineers

888 HALEY DRIVE
 BLOOMFIELD HILLS, MICH 48304
 PHONE: (248) 864-0000
 FAX: (248) 864-0001
 WEB SITE: http://www.hrc-engineers.com

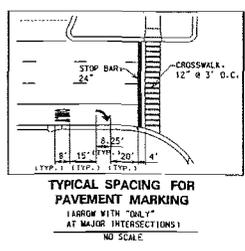
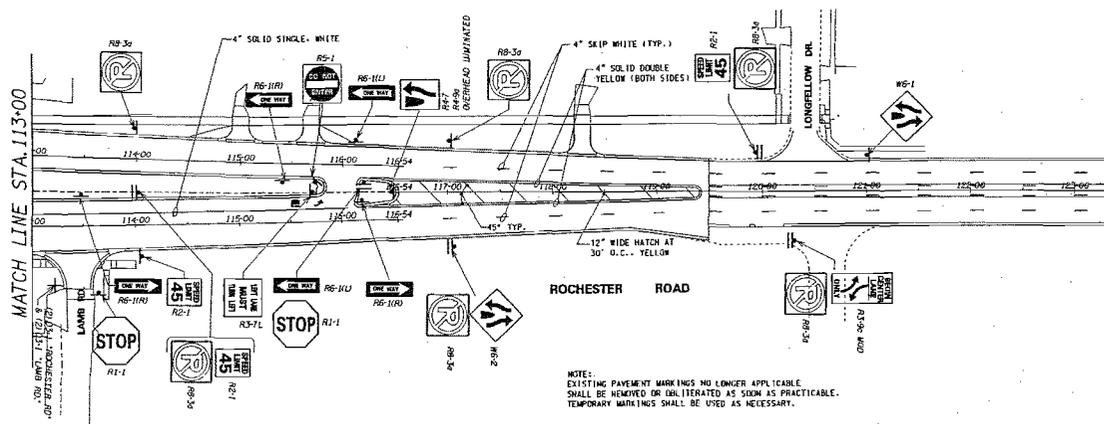
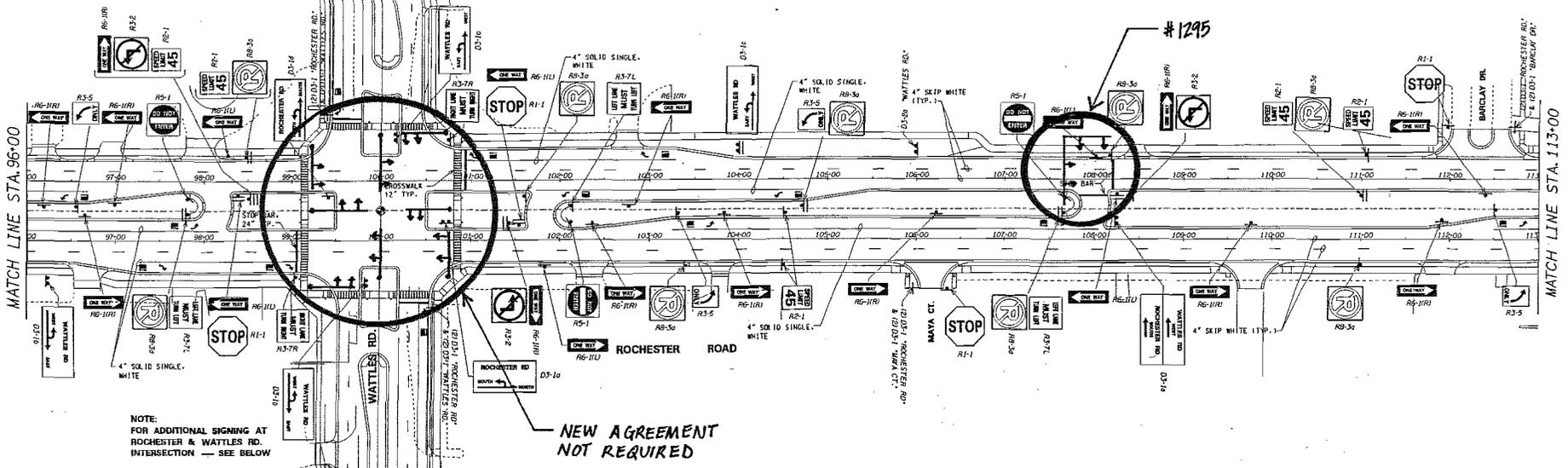
DESIGNED	A.P.P.
DRAWN	on/llanor
CHECKED	M.W.F.
APPROVED	M.H.A.



CITY OF TROY
ROCHESTER RECONSTRUCT TORPEY TO BAI

PERMANENT S & LANE MARK

HRC JOB NO. 1990474



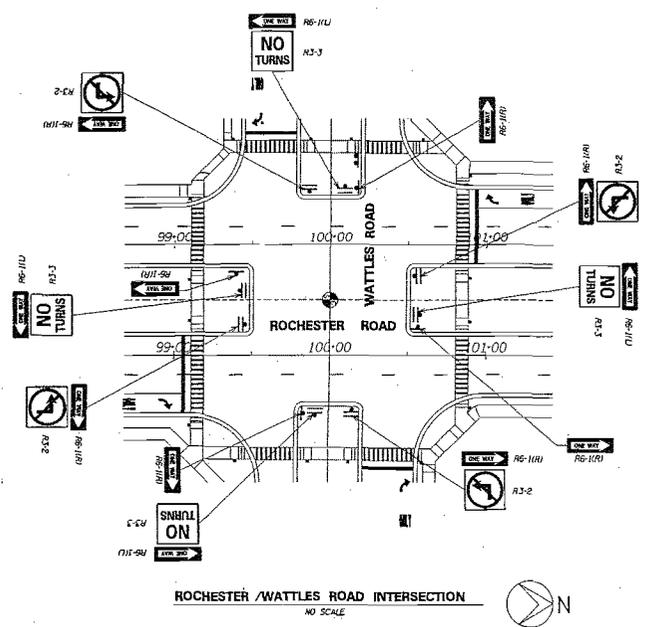
PERMANENT PAVEMENT MARKINGS:
 BROKEN LINES ARE FORMED BY SEGMENTS AND GAPS AS SHOWN:
 PERMANENT MARKING (TYP.)
 31'-5" 12'-5" 31'-5" 12'-5"

CONTRACTOR MUST BROOM AND CLEAN PAVEMENT TO BE STRIPED THE SAME DAY HE WILL DO STRIPING.

ALL PERMANENT STRIPING SHALL BE OVERLAY COLD PLASTIC MATERIALS, CONFORMING TO THE 1994 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

ALL STOP BARS, LEGENDS, ARROWS AND CROSS WALK MARKINGS SHALL BE OVERLAY COLD PLASTIC MATERIALS MEETING THE SPECS. FOR OVERLAY COLD PLASTIC MARKINGS.

ALL PERMANENT SIGNS AND PAVEMENT MARKINGS AS SHOWN HEREIN (STAGE IV) ARE INCLUDED IN THE ESTIMATED QUANTITIES SHOWN ON SHEET PW-1.



ROCHESTER 3 of 3

03-05-06	RE-ISSUED FOR C1
02-23-06	ISSUED FOR C1
04-10-03	ISSUED FOR OWNER
DATE	CONDITIONS
DESIGNED	A.P.P.
DRAWN	M.T.H./G.S.
CHECKED	B.M.P.
APPROVED	
PROJECT NO. 03-0001 (03-0001) 03-0001	

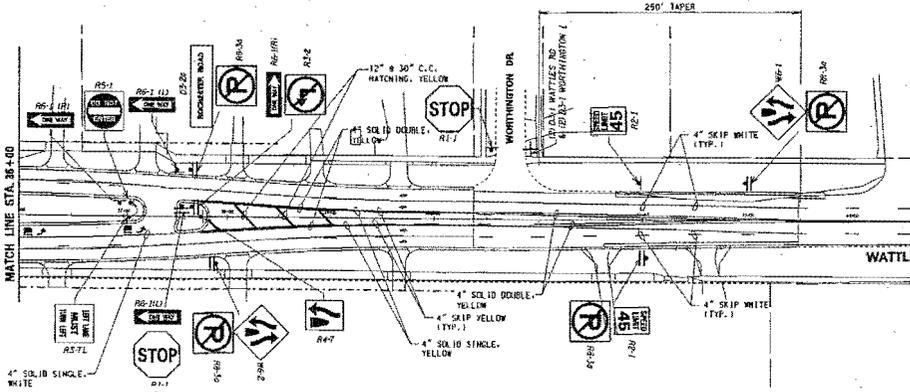
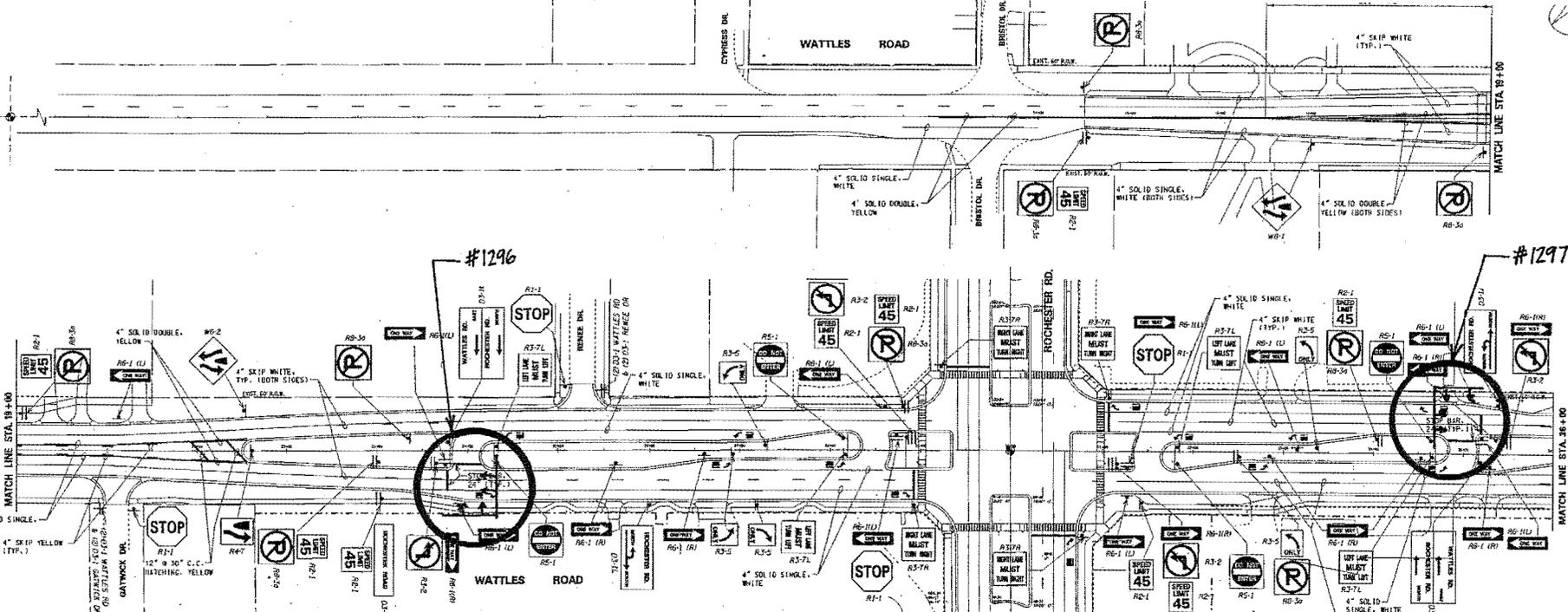


CITY OF ROCHESTER

WATTLES ROAD RECONSTRUCTION

PERMANENT SIGNAGE

SCALE



NOTE:
PERMANENT SIGNS & MARKINGS AT ROCHESTER/WATTLES ROAD INTERSECTION, SEE SHEET NO. PA-3 (ROCHESTER ROAD PROJECT)

NOTE:
EXISTING PAVEMENT MARKINGS NO LONGER APPLICABLE SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE. TEMPORARY PAVEMENT MARKINGS SHALL BE USED AS NECESSARY.

ESTIMATED QUANTITIES (PERMANENT SIGNS) FOR INFORMATION ONLY

SIGN	DESCRIPTION	QTY	SIZE (INCHES)	AREA PER SIGN (SQ FT)	TOTAL AREA (SQ FT)	TYPE	POST PER LOCATION
PS-1	STOP SIGN	11	30 x 30	6.25	68.75	111 A	1
RS-1	SPEED LIMIT (45 MPH)	11	24 x 30	5.00	55.0	111 B	1
RS-7L	LEFT LANE MUST TURN LEFT	4	30 x 30	6.25	25.0	111 B	1
RS-7R	RIGHT LANE MUST TURN RIGHT	4	30 x 30	6.25	25.0	111 B	1
RS-7	KEEP RIGHT SIGN	2	24 x 30	5.00	10.0	111 B	1
RS-50	KEEP RIGHT (DIVERGENT) LUMINATED	2	72 x 36	18.00	36.0	111 B	1
RS-5	LEFT TURN ONLY	2	30 x 36	7.50	15.0	111 B	1
RS-3	NO LEFT TURN SYMBOL	2	24 x 24	4.00	8.0	111 A	1
RS-1	DO NOT ENTER	5	30 x 30	6.25	31.25	111 A	1
RS-7L	ONE WAY SIGN (LEFT)	2	36 x 12	3.00	6.0	111 A	1
RS-7R	ONE WAY SIGN (RIGHT)	16	36 x 12	3.00	48.0	111 A	1
RS-10	NO PARKING SYMBOL	15	24 x 24	4.00	60.0	111 A	1
RS-1	DIVIDED ROAD SIGN	2	36 x 36	9.00	18.0	111 B	2
RS-2	DIVIDED ROAD SIGN	2	36 x 36	9.00	18.0	111 B	2
RS-26	ADVANCED ROAD NAME "ROCHESTER RD"	2	36 x 18	4.50	9.0	111 A	2
RS-1	ROAD NAME "WATTLES RD"	2	30 x 12	2.50	5.0	111 A	1
RS-1	ROAD NAME "WORTHINGTON DR."	2	36 x 12	4.50	9.0	111 A	1
RS-1	ROAD NAME "GATWICK DR."	2	36 x 12	4.50	9.0	111 A	1
RS-1J	GUIDE SIGN WITH ARROWS "ROCHESTER RD"	1	30 x 42	26.25	26.25	11 A	2 WOOD
RS-1L	GUIDE SIGN WITH ARROWS "ROCHESTER RD"	1	30 x 42	26.25	26.25	11 A	2 WOOD
RS-1N	GUIDE SIGN WITH ARROWS "ROCHESTER RD" / "WATTLES RD"	1	30 x 48	30.00	30.0	11 A	2 WOOD
RS-1K	GUIDE SIGN WITH ARROWS "WATTLES RD" / "ROCHESTER RD"	1	30 x 48	30.00	30.0	11 A	2 WOOD

NOTE:
ALL STEEL POST SHALL BE 3 POUND U CHANNEL GALVANIZED.

ALL SIGNS TO BE FABRICATED WITH TYPE III ENCAPSULATED REFLECTIVE SHEETING, MEETING THE ROAD COMMISSION FOR QUALITY CRITERIA, CURRENT STANDARD SPECIFICATIONS FOR PERMANENT SIGN.

ALL STREET NAME SIGNS SHALL BE IN ACCORDANCE WITH THE CITY OF ROCHESTER SPECIFICATIONS.

THE CONTRACTOR SHALL VERIFY WITH THE CITY DEP FOR THE SIZE OF THE SIGNS, TYPE OF LETTERING AND MATERIALS, PRIOR TO MANUFACTURING OF THE SIGNS. THE SIZES AS SHOWN ARE FOR ESTIMATING PURPOSES ONLY.

QUANTITIES FOR PAVEMENT MARKINGS, WATERBORNE PAINT ARE INCLUDED IN THE CONTRACT PROPOSAL IF AND WHERE NEEDED ITEMS OF WORK. THE WATERBORNE PAINT SHALL BE APPLIED IF THE COLD PLASTIC MATERIAL COULD NOT BE USED DUE TO TEMPERATURE RESTRICTIONS. THE WIDTH OF THE STRIP PAPE AND

PERMANENT PAVEMENT MARKINGS:

BROWN LINES ARE FORMED BY SEGMENTS AND GAP'S AS SHOWN:
4" PERMANENT PAVEMENT MARKING (TYP.)

CONTRACTOR MUST BRUSH AND CLEAN PAVEMENT TO BE STRIPPED THE SAME DAY HE WILL DO STRIPPING.

ALL PERMANENT STRIPING SHALL BE PERFORMED COLD PLASTIC MATERIALS, CONFORMING TO THE 2005 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

ESTIMATED QUANTITIES (THIS SHEET)

Sign, Type 11A	115.0 SF
Sign, Type 111A	200.00 SF
Sign, Type 111B	330.0 SF
Post, Small, 3 in	1150.0 P
Post, Road, 6 inch by 8 inch	150.0 P
Post Mkp, Only Cold Plastic, 4 inch, White	2500.0 FT
Post Mkp, Only Cold Plastic, 4 inch, Yellow	5000.0 FT
Post Mkp, Only Cold Plastic, 12 inch, Matching Yellow	200.0 FT
Post Mkp, Only Cold Plastic, 24 inch, Strip 9w	120.0 FT
Post Mkp, Only Cold Plastic, L4 Turn Arrow Sym	9.0 Ea
Post Mkp, Only Cold Plastic, Only	14.0 Ea
Post Mkp, Only Cold Plastic, R4 Turn Arrow Sym	5.0 Ea
Post Mkp, Waterborne, 4 inch, White	2500.0 FT
Post Mkp, Waterborne, 4 inch, Yellow	5000.0 FT
Res Curing Compound for Long11 Marks	7500.0 FT
Res Curing Compound for Special Marks	480.0 SF
	464.0 EA

WATTLES 1 of 1

July 14, 2009

William J. Huotari, P.E.
Deputy City Engineer
City of Troy
500 West Big Beaver Road
Troy, MI 48084

**Re: Traffic Signal Cost Agreements
City of Troy, Rochester Road Project
North of Big Beaver Road to North of Wattles Road**

Dear Huotari:

Included within the City of Troy project to reconstruct Rochester Road to a boulevard cross section from north of Big Beaver Road to north of Wattles Road, are plans to remove, modernize and install several traffic signals. This will require the modification or execution of new cost agreements. The following is a list of the signals:

Removal:

Rochester Road & Charrington Drive (Co. # 583)

Modernize:

Rochester Road (NB) & Bishop Drive (Co. # 641)

Installation:

Rochester Road (SB) & South of Torpey Drive, Pedestrian Crossing (Co. # 1291)

Rochester Road (NB) & Torpey Drive (Co. # 1292)

Rochester Road (SB) & Troywood Drive (Co. # 1293)

Rochester Road (NB) & X-Over South of Wattles Road (Co. # 1294)

Rochester Road (SB) & X-Over North of Wattles Road (Co. # 1295)

Wattles Road (EB) & X-Over West of Rochester Road (Co. # 1296)

Wattles Road (WB) & X-Over East of Rochester Road (Co. # 1297)

Enclosed are three copies of the traffic signal modernization agreement for each of the traffic signals listed above. Please have all the agreements signed by the appropriate official and return them to us for further processing. In addition, please provide a copy of a resolution approved by your Board in support of these agreements. A fully executed copy of each of the agreements will be returned to you for your records.

If you have any question, please feel free to contact me at (248) 858-4830.

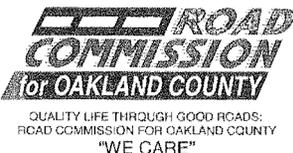
Sincerely,



Charles Keller, P.E.
Traffic Engineer
Traffic-Safety Department

Enclosures (27)

RECEIVED
JUL 16 2009
ENGINEERING



Board of Road Commissioners

Gregory C. Jamian
Commissioner

Richard G. Skarritt
Commissioner

Eric S. Wilson
Commissioner

Brent O. Bair
Managing Director

Dennis G. Kolar, P.E.
Deputy Managing Director
County Highway Engineer

Traffic Safety Department

2420 Pontiac Lk.Rd.
Waterford, MI
48328

248-858-4802

FAX
248-858-4814

TDD
248-858-8005

www.roccweb.org

**STATE OF MICHIGAN
BOARD OF COUNTY ROAD COMMISSIONERS
OAKLAND COUNTY
AGREEMENT FOR TRAFFIC CONTROL DEVICE**

Type of Work: **Traffic Signal Removal**

Location: **Rochester Road and Charrington Drive**

Signal No: **583**

Date Effective:

Under authority of state law and by virtue of resolution formally adopted by their respective governing bodies, the under-signed hereby agree to participate in the cost of installation, maintenance and operation of the above traffic control device on the basis of the following division of costs. (Title to equipment shall remain with the purchasing agency, unless purchased for roads not under the jurisdiction of the Board of County Road Commissioner.) The proportionate share of all costs are to be billed monthly. This agreement is terminable on thirty days written notice by any party.

DIVISION OF COSTS

AGENCY	REMOVAL		MAINTENANCE
	Percent	Estimated Cost	Percent
City of Troy	100 %	In Project Cost	N/A %
Total	100 %	In Project Cost	N/A %

It is further agreed that the agency responsible for payment of energy billings and/or leased line interconnection billings included in maintenance costs, shall be the ROAD COMMISSION FOR OAKLAND COUNTY.

It is further agreed that the agency responsible for making original and replacement installations and performing maintenance shall be the ROAD COMMISSION FOR OAKLAND COUNTY.

"In the event the traffic control device referred to in this agreement is located on a road or street that is not under the jurisdiction of the Road Commission for Oakland County, the authority having the jurisdiction over the road or street hereby agrees to save harmless, indemnify, represent, and defend the Road Commission for Oakland County from any and all claims, demands, or suits arising out of or relating to the installation, maintenance and operation of the traffic control device which is the subject matter of this agreement."

"In the event the traffic control device referred to in this agreement is located on a road or street that is under the jurisdiction of the Road Commission for Oakland County and by virtue of this agreement will be maintained by an agency other than the Road Commission for Oakland County, then and in that event the said agency hereby acknowledges that it is undertaking the Road Commission for Oakland County's duty to maintain the said traffic control device and further agrees to provide insurance coverage protecting the Road Commission for Oakland County."

<p>APPROVED:</p> <p>ROAD COMMISSION FOR OAKLAND COUNTY</p> <p>Date _____</p> <p>By _____</p> <p style="margin-left: 20px;">Gary Piotrowicz</p> <p>DIRECTOR OF TRAFFIC-SAFETY</p> <p>Title of Authorized Official</p>	<p>APPROVED:</p> <p>CITY OF TROY</p> <p>Date _____</p> <p>By _____</p> <p>_____</p> <p>Title of Authorized Official</p>
---	--

*Certified copy of resolution must be submitted with this form for new installations.

**STATE OF MICHIGAN
BOARD OF COUNTY ROAD COMMISSIONERS
OAKLAND COUNTY
AGREEMENT FOR TRAFFIC CONTROL DEVICE**

Type of Work: **Traffic Signal Modernization**

Location: **Rochester Road (NB) and Bishop Drive**

Signal No: **641**

Date Effective:

Under authority of state law and by virtue of resolution formally adopted by their respective governing bodies, the under-signed hereby agree to participate in the cost of installation, maintenance and operation of the above traffic control device on the basis of the following division of costs. (Title to equipment shall remain with the purchasing agency, unless purchased for roads not under the jurisdiction of the Board of County Road Commissioner.) The proportionate share of all costs are to be billed monthly. This agreement is terminable on thirty days written notice by any party.

DIVISION OF COSTS

AGENCY	MODERNIZATION Percent	Estimated Cost	MAINTENANCE Percent
City of Troy	100 %	In Project Cost	100 %
	Total	100 % In Project Cost	100 %

It is further agreed that the agency responsible for payment of energy billings and/or leased line interconnection billings included in maintenance costs, shall be the ROAD COMMISSION FOR OAKLAND COUNTY.

It is further agreed that the agency responsible for making original and replacement installations and performing maintenance shall be the ROAD COMMISSION FOR OAKLAND COUNTY.

"In the event the traffic control device referred to in this agreement is located on a road or street that is not under the jurisdiction of the Road Commission for Oakland County, the authority having the jurisdiction over the road or street hereby agrees to save harmless, indemnify, represent, and defend the Road Commission for Oakland County from any and all claims, demands, or suits arising out of or relating to the installation, maintenance and operation of the traffic control device which is the subject matter of this agreement."

"In the event the traffic control device referred to in this agreement is located on a road or street that is under the jurisdiction of the Road Commission for Oakland County and by virtue of this agreement will be maintained by an agency other than the Road Commission for Oakland County, then and in that event the said agency hereby acknowledges that it is undertaking the Road Commission for Oakland County's duty to maintain the said traffic control device and further agrees to provide insurance coverage protecting the Road Commission for Oakland County."

APPROVED:
ROAD COMMISSION FOR OAKLAND COUNTY

APPROVED:
CITY OF TROY

Date _____

Date _____

By _____
Gary Piotrowicz

By _____

DIRECTOR OF TRAFFIC-SAFETY
Title of Authorized Official

Title of Authorized Official

*Certified copy of resolution must be submitted with this form for new installations.

**STATE OF MICHIGAN
BOARD OF COUNTY ROAD COMMISSIONERS
OAKLAND COUNTY
AGREEMENT FOR TRAFFIC CONTROL DEVICE**

Type of Work: **Traffic Signal Installation**

Location: **Rochester Road (SB) and South of Torpey Drive
(Pedestrian Crossing)**

Signal No: **1291**
Date Effective:

Under authority of state law and by virtue of resolution formally adopted by their respective governing bodies, the under-signed hereby agree to participate in the cost of installation, maintenance and operation of the above traffic control device on the basis of the following division of costs. (Title to equipment shall remain with the purchasing agency, unless purchased for roads not under the jurisdiction of the Board of County Road Commissioner.) The proportionate share of all costs are to be billed monthly. This agreement is terminable on thirty days written notice by any party.

DIVISION OF COSTS

AGENCY	INSTALLATION		MAINTENANCE
	Percent	Estimated Cost	Percent
City of Troy	100 %	In Project Cost	100 %
	Total	100 % In Project Cost	100 %

It is further agreed that the agency responsible for payment of energy billings and/or leased line interconnection billings included in maintenance costs, shall be the ROAD COMMISSION FOR OAKLAND COUNTY.

It is further agreed that the agency responsible for making original and replacement installations and performing maintenance shall be the ROAD COMMISSION FOR OAKLAND COUNTY.

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APPROVED:
ROAD COMMISSION FOR OAKLAND COUNTY

Date _____

By _____
Gary Plotrowicz

DIRECTOR OF TRAFFIC-SAFETY
Title of Authorized Official

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**STATE OF MICHIGAN
BOARD OF COUNTY ROAD COMMISSIONERS
OAKLAND COUNTY
AGREEMENT FOR TRAFFIC CONTROL DEVICE**

Type of Work: **Traffic Signal Installation**

Location: **Rochester Road (NB) and Torpey Drive**

Signal No: **1292**

Date Effective:

Under authority of state law and by virtue of resolution formally adopted by their respective governing bodies, the under-signed hereby agree to participate in the cost of installation, maintenance and operation of the above traffic control device on the basis of the following division of costs. (Title to equipment shall remain with the purchasing agency, unless purchased for roads not under the jurisdiction of the Board of County Road Commissioner.) The proportionate share of all costs are to be billed monthly. This agreement is terminable on thirty days written notice by any party.

DIVISION OF COSTS

AGENCY	INSTALLATION Percent	Estimated Cost	MAINTENANCE Percent
City of Troy	100 %	In Project Cost	100 %
Total	100 %	In Project Cost	100 %

It is further agreed that the agency responsible for payment of energy billings and/or leased line interconnection billings included in maintenance costs, shall be the ROAD COMMISSION FOR OAKLAND COUNTY.

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APPROVED:
ROAD COMMISSION FOR OAKLAND COUNTY

APPROVED:
CITY OF TROY

Date _____

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Gary Piotrowicz

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DIRECTOR OF TRAFFIC-SAFETY
Title of Authorized Official

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**STATE OF MICHIGAN
BOARD OF COUNTY ROAD COMMISSIONERS
OAKLAND COUNTY
AGREEMENT FOR TRAFFIC CONTROL DEVICE**

Type of Work: **Traffic Signal Installation**

Location: **Rochester Road (SB) and Troywood Drive**

Signal No: **1293**

Date Effective:

Under authority of state law and by virtue of resolution formally adopted by their respective governing bodies, the under-signed hereby agree to participate in the cost of installation, maintenance and operation of the above traffic control device on the basis of the following division of costs. (Title to equipment shall remain with the purchasing agency, unless purchased for roads not under the jurisdiction of the Board of County Road Commissioner.) The proportionate share of all costs are to be billed monthly. This agreement is terminable on thirty days written notice by any party.

DIVISION OF COSTS

AGENCY	INSTALLATION Percent	Estimated Cost	MAINTENANCE Percent
City of Troy	100 %	In Project Cost	100 %
	Total	100 % In Project Cost	100 %

It is further agreed that the agency responsible for payment of energy billings and/or leased line interconnection billings included in maintenance costs, shall be the ROAD COMMISSION FOR OAKLAND COUNTY.

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ROAD COMMISSION FOR OAKLAND COUNTY

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CITY OF TROY

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Gary Piotrowicz

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DIRECTOR OF TRAFFIC-SAFETY
Title of Authorized Official

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**STATE OF MICHIGAN
BOARD OF COUNTY ROAD COMMISSIONERS
OAKLAND COUNTY
AGREEMENT FOR TRAFFIC CONTROL DEVICE**

Type of Work: **Traffic Signal Installation**

Location: **Rochester Road (NB) and X-Over South of Wattles Road**

Signal No: **1294**

Date Effective:

Under authority of state law and by virtue of resolution formally adopted by their respective governing bodies, the under-signed hereby agree to participate in the cost of installation, maintenance and operation of the above traffic control device on the basis of the following division of costs. (Title to equipment shall remain with the purchasing agency, unless purchased for roads not under the jurisdiction of the Board of County Road Commissioner.) The proportionate share of all costs are to be billed monthly. This agreement is terminable on thirty days written notice by any party.

DIVISION OF COSTS

AGENCY	INSTALLATION		MAINTENANCE
	Percent	Estimated Cost	Percent
City of Troy	100 %	In Project Cost	100 %
	Total	100 % In Project Cost	100 %

It is further agreed that the agency responsible for payment of energy billings and/or leased line interconnection billings included in maintenance costs, shall be the ROAD COMMISSION FOR OAKLAND COUNTY.

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APPROVED:

ROAD COMMISSION FOR OAKLAND COUNTY

Date _____

By _____

Gary Piotrowicz

DIRECTOR OF TRAFFIC-SAFETY

Title of Authorized Official

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**STATE OF MICHIGAN
BOARD OF COUNTY ROAD COMMISSIONERS
OAKLAND COUNTY
AGREEMENT FOR TRAFFIC CONTROL DEVICE**

Type of Work: **Traffic Signal Installation**

Location: **Rochester Road (SB) and X-Over North of Wattles Road**

Signal No: **1295**

Date Effective:

Under authority of state law and by virtue of resolution formally adopted by their respective governing bodies, the under-signed hereby agree to participate in the cost of installation, maintenance and operation of the above traffic control device on the basis of the following division of costs. (Title to equipment shall remain with the purchasing agency, unless purchased for roads not under the jurisdiction of the Board of County Road Commissioner.) The proportionate share of all costs are to be billed monthly. This agreement is terminable on thirty days written notice by any party.

DIVISION OF COSTS

AGENCY	INSTALLATION		MAINTENANCE
	Percent	Estimated Cost	Percent
City of Troy	100 %	In Project Cost	100 %
	Total	100 % In Project Cost	100 %

It is further agreed that the agency responsible for payment of energy billings and/or leased line interconnection billings included in maintenance costs, shall be the ROAD COMMISSION FOR OAKLAND COUNTY.

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ROAD COMMISSION FOR OAKLAND COUNTY

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Gary Piotrowicz

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DIRECTOR OF TRAFFIC-SAFETY
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**STATE OF MICHIGAN
BOARD OF COUNTY ROAD COMMISSIONERS
OAKLAND COUNTY
AGREEMENT FOR TRAFFIC CONTROL DEVICE**

Type of Work: **Traffic Signal Installation**

Location: **Wattles Road (EB) and X-Over West of Rochester Road**

Signal No: **1296**

Date Effective:

Under authority of state law and by virtue of resolution formally adopted by their respective governing bodies, the under-signed hereby agree to participate in the cost of installation, maintenance and operation of the above traffic control device on the basis of the following division of costs. (Title to equipment shall remain with the purchasing agency, unless purchased for roads not under the jurisdiction of the Board of County Road Commissioner.) The proportionate share of all costs are to be billed monthly. This agreement is terminable on thirty days written notice by any party.

DIVISION OF COSTS

AGENCY	INSTALLATION		MAINTENANCE
	Percent	Estimated Cost	Percent
City of Troy	100 %	In Project Cost	100 %
	Total	100 % In Project Cost	100 %

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APPROVED:
ROAD COMMISSION FOR OAKLAND COUNTY

APPROVED:
CITY OF TROY

Date _____

Date _____

By _____
Gary Piotrowicz

By _____

DIRECTOR OF TRAFFIC-SAFETY
Title of Authorized Official

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**STATE OF MICHIGAN
BOARD OF COUNTY ROAD COMMISSIONERS
OAKLAND COUNTY
AGREEMENT FOR TRAFFIC CONTROL DEVICE**

Type of Work: **Traffic Signal Installation**

Location: **Wattles Road (WB) and X-Over East of Rochester Road**

Signal No: **1297**

Date Effective:

Under authority of state law and by virtue of resolution formally adopted by their respective governing bodies, the under-signed hereby agree to participate in the cost of installation, maintenance and operation of the above traffic control device on the basis of the following division of costs. (Title to equipment shall remain with the purchasing agency, unless purchased for roads not under the jurisdiction of the Board of County Road Commissioner.) The proportionate share of all costs are to be billed monthly. This agreement is terminable on thirty days written notice by any party.

DIVISION OF COSTS

AGENCY	INSTALLATION		MAINTENANCE
	Percent	Estimated Cost	Percent
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	Total	100 % In Project Cost	100 %

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APPROVED:
ROAD COMMISSION FOR OAKLAND COUNTY

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