



Southwest Michigan Planning Commission

376 West Main Street, Suite 130 • Benton Harbor, MI 49022-3651

TWIN CITIES AREA TRANSPORTATION STUDY TECHNICAL ADVISORY and POLICY COMMITTEES **SPECIAL MEETING**

FOR FURTHER INFORMATION CONTACT:

Kim Gallagher, *Transportation Planner*
(269) 925-1137 x 1518

Brandon Kovnat, *Transportation Planner*
(269) 925-1137 x1524

DATE: Friday, March 30, 2018

TIME: 10:00AM

PLACE: Southwest Michigan Planning Commission Office:
376 W. Main St., Benton Harbor, MI 49022 Suite 130

AGENDA

1. Call to Order / Introductions
2. Changes to the Agenda
3. Public Comment
4. Overview and Purpose of the Meeting
5. New Business
 - TIP amendment for Berrien County Road Department
6. Adjournment
 - Next Regularly scheduled TwinCATS Meeting: Monday April 16, 2018 @ 9:30 AM

Brandon Kovnat

From: Brian Berndt <bberndt@bcroad.org>
Sent: Wednesday, March 21, 2018 10:40 AM
To: Brandon Kovnat; 'Sturdevant, James (MDOT)'; 'Andrea Dewey'; 'John (MDOT'
Cc: 'Dick Stauffer'; 'Jason Latham'; 'Kevin Stack'
Subject: Territorial Road Safety Project
Attachments: Territorial Road.pdf

Brandon,

The Berrien County Road Department respectfully requests that the Territorial Road Safety Project from Fourth Street West 1.25 miles be added to the TWINCATS TIP for 2018. I am attaching a copy of the approval letter for the project. The project will improve pavement surface and install paved shoulders.

Time is of the essence and I respectfully request a Special TWINCATS meeting to amend this project into the TIP.

Please call if you have any questions or need additional information.

Brian Berndt, PE, PS

County Highway Engineer

Berrien County Road Department

269 925 1196 ext 4407

From: Sturdevant, James (MDOT) [mailto:SturdevantJ@michigan.gov]
Sent: Wednesday, March 21, 2018 10:06 AM
To: Brian Berndt; 'Brandon Kovnat'
Cc: 'Kevin Stack'; 'Jason Latham'; Dewey, Andrea (FHWA); Lanum, John (MDOT)
Subject: RE: Territorial Road Safety Project

Brian:

The job's relationship to the "urban limits" is not the controlling factor, its relationship to the MPO boundary is.

The Red Arrow Highway job was approved by the RTF because it used RTF funds, and it was still necessary to amend it into the TwinCATS TIP.

The Territorial Road project uses Safety Funds and therefore is not an RTF project.

It will clearly need to be amended into the TwinCATS TIP.

Even if I did approve this in JobNet, FHWA would not approve obligation until it's in the TIP.

As a worst case scenario, please provide a letter to the MPO staff to request amendment into the TIP at the April meeting.

If conditions require an earlier approval, please contact Brandon about a special meeting.

If you have any more questions, please feel free to call or email.

Jim

From: Brian Berndt [mailto:bberndt@bcroad.org]
Sent: Tuesday, March 20, 2018 11:02 AM
To: 'Brandon Kovnat' <kovnatb@swmpc.org>; Sturdevant, James (MDOT) <SturdevantJ@michigan.gov>
Cc: 'Kevin Stack' <kstack@bcroad.org>; 'Jason Latham' <jlatham@bcroad.org>
Subject: Territorial Road Safety Project

Brandon, the safety project is located outside the Urban Limits. It is my opinion it does not need to be listed in the TWINCATS TIP. We have completed many projects in the past outside the Urban Limits and within the Urban Boundary without the project being listed in the Urban TIP.



STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
LANSING

RICK SNYDER
GOVERNOR

KIRK T. STEUDLE
DIRECTOR

March 23, 2017

BERRIEN COUNTY
ROAD COMMISSION

MAR 29 2017

2860 E. NAPIER AVENUE
BENTON HARBOR, MI

Mr. Brian Berndt
Berrien County
2860 East Napier Avenue
Benton Harbor, Michigan 49022

Dear Mr. Berndt:

Project Name: Territorial Road
Control Section: HRRR 11609
Job Number: TBD

The Michigan Department of Transportation (MDOT) is pleased to inform you that the subject project has been approved for federal funding in the 2018 fiscal year (FY). All agencies were previously notified by telephone and approved projects are posted on MDOT's website at www.michigan.gov/mdot.

Control Section: HRRR 11609 - Job Number: TBD
Safety Improvement Project Approved Amount: \$428,128.50
Federal Participation: \$385,315.65
Project Name: Territorial Road
Project Limits: Territorial Road from Fourth Street to the west 1.25 miles
Work Description: Improve pavement surface and install paved shoulders by trench widening and an asphalt overlay, tree removal and sign upgrades

This project will be funded with 90 percent federal funds. Unless otherwise approved in writing by MDOT at the time of obligation, the federally participating project costs for the 2018 High Risk Rural Road (HRRR) Program are limited to the project costs submitted with the application and listed above, plus the lesser of an increase of 20 percent or \$20,000 above the total project cost. The maximum amount of federal funds allowed for any project is \$600,000 for the construction phase let to contract, as long as the above listed limits are not exceeded.

Preliminary engineering, construction engineering, and right-of-way costs are not eligible for reimbursement. Nonparticipating construction items of work may be included in the overall project estimate, but are not reimbursable for federal funding. Items such as decorative lighting, brick sidewalks, street pavers, or any items that are not safety related in nature are not eligible for federal aid. These items will be reviewed once the preliminary plans are developed.

Funds for this project must be obligated in FY 2018. In order to accomplish this, the programming application form must be completed and returned to our office when the engineer's estimate is completed. The programming application form is available on MDOT's website at www.michigan.gov/mdot. In the 'Doing Business' menu, select 'Forms', under 'Local Government' select Program Application/Reimbursement Forms - Form Number 0258 is to be used for bridge projects and Form Number 0260 is to be used for road projects. As plans near completion, a grade inspection (GI) meeting can then be scheduled with our office.

Federal funds cannot be obligated until the following steps have been completed:

- The Program Application has been completed
- GI meeting has been held
- Environmental/historical clearance is received
- Permits are obtained and included in the project approval
- Right-of-way issues are cleared
- Final plans are submitted

Local Agencies within Metropolitan Planning Organization (MPO) areas must coordinate with their MPO to ensure inclusion of their project in the area's Transportation Improvement Program (TIP) for the fiscal year for which the project was selected. MDOT's Local Agency Programs Section will supply a list of selected projects to the MDOT Planning group, but it is the local agency's responsibility to ensure these projects are included in the State Transportation Improvement Program (STIP).

Provided MDOT has obligation authority remaining, HRRR funds will be obligated up through August 31, 2018. Therefore, to ensure funds are obligated prior to this date, it is imperative that the project's final package is completed and submitted to MDOT by August 17, 2018. Once posted, the Local Agency Programs FY 2018 Project Planning Guide can be accessed at www.michigan.gov/mdotlap and contains the milestone dates required for a GI submittal in order to obligate your project for the fiscal year. If your local agency wishes to obligate and construct your project prior to the fiscal year for which it was selected, they may do so by utilizing the advance construct process. The Local Agency is responsible for ensuring the project is listed in the (S)TIP for both fiscal years (the year obligated and the year federal funds are converted).

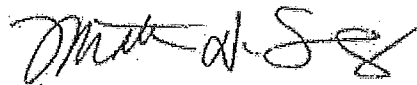
Every effort has been given to maintain a fiscally constrained program and maximize the use of limited available funds. Projects will be handled on a first come, first served basis, so please make every effort to stay on schedule.

If your project is not obligated in FY 2018, MDOT may elect to retract approved funding and you will be required to resubmit your project under a future call. If a project has received prior written approval to be carried over to FY 2019, the agency will be scored significantly lower on subsequent project submittals for two years. Funding for any 2018 project not obligated by FY 2019 will be rescinded. Any changes in the scope of work or significant changes in project cost which cannot be justified will be denied.

Please send the programming application form, GI package and final plans to:

Pamela R. Blazo, P.E.
Michigan Department of Transportation
Local Agency Programs, B215
425 W. Ottawa Street
P.O. Box 30050
Lansing, Michigan 48909

If you have any questions, please contact Pamela Blazo, Safety Programs Engineer, at 517-335-2224 or blazop@michigan.gov.

Sincerely,

Matthew W. DeLong, Administrator
Development Services Division

cc: P. Blazo

TERRITORIAL RD.
 STA 0+00 TO 50+15
 POSTED SPEED 45 mph
 DESIGN SPEED 45 mph
 ST 50+15 TO 66+00
 POSTED SPEED 35 mph
 DESIGN SPEED 35 mph

BERRIEN COUNTY ROAD DEPARTMENT
 IN CO-OPERATION WITH
 MICHIGAN DEPARTMENT OF TRANSPORTATION
 AND FEDERAL HIGHWAY ADMINISTRATION

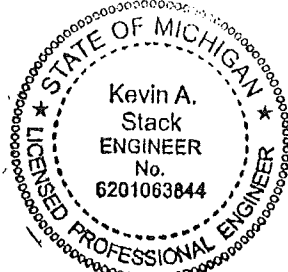
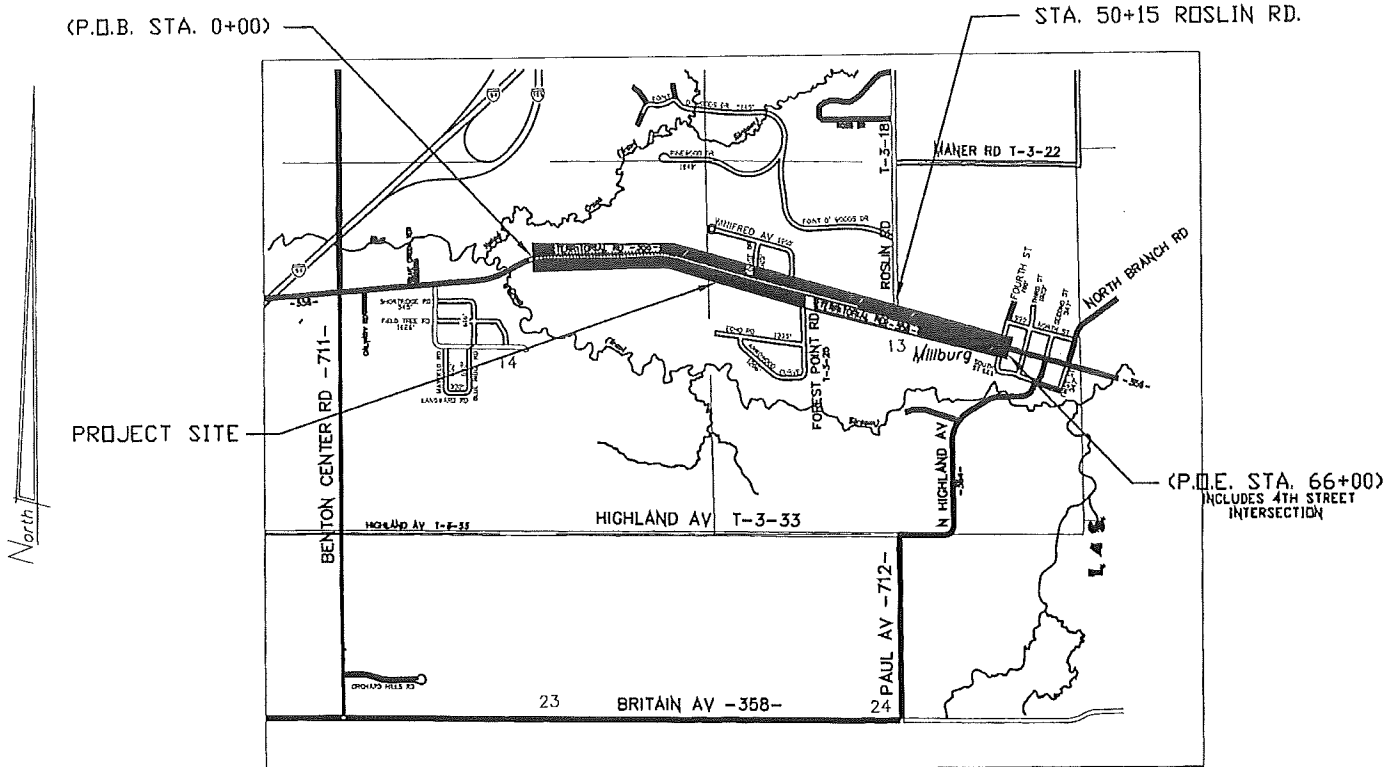
TRAFFIC DATA - TERRITORIAL RD.

(2018) ADT 1983
 (2018) DHV 179
 (2038) ADT 2181
 (2038) DHV 197
 2% COMMERCIAL

TERRITORIAL ROAD

CONTROL SECTION NUMBER: HSIP 11000
 JOB NUMBER: 200256

P.O.B. STA. 0+00 BUTT JOINT TO
 TO P.O.E. STA. 66+00 BUTT JOINT



PREPARED UNDER THE SUPERVISION OF

Kevin A. Stack 2/2/18

KEVIN A. STACK

REGISTERED PROFESSIONAL ENGINEER No. 6201063844
 BERRIEN COUNTY ROAD DEPARTMENT
 2860 E NAPIER AVENUE BENTON HARBOR, MI 49022

THE PROPOSED IMPROVEMENTS COVERED BY THESE PLANS SHALL BE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION LOCAL AGENCY PROGRAM GUIDELINES FOR GEOMETRICS, 3R, DATED 7-24-2017 AND IN ACCORDANCE WITH THE 2011 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS OR IN THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED HEREIN, ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2012 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

CONTROL SECTION HSIP 11000	JOB NUMBER 200256
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CONTRACT FOR: 1.25 MILES: HMA RESURFACING, TRENCH WIDENING, AND ADDING GRAVEL SHOULDERS

BERRIEN COUNTY ROAD DEPARTMENT APPROVAL

Louis R. Csokasy 2/2/18

LOUIS CSOKASY INTERIM MANAGING DIRECTOR DATE

BERRIEN COUNTY ROAD DEPARTMENT

LOG OF PROJECT

LOCATION

TERRITORIAL RD.

THIS PROJECT BEGINS 5015 FT WEST OF ROSLIN RD. (STA. 0+00)
THENCE EASTERLY TO FOURTH ST. (STA. 65+80)

DESCRIPTION

THE WORK SHALL CONSIST OF 1.25 MILES OF HMA TOP COURSE
PER TYPICAL SECTIONS. THE PROJECT WILL INCLUDE :
HMA TOP COURSE; TRENCH WIDENING; SHOULDERS, CL II;
TRAFFIC CONTROL; AND OTHER MISC. WORK ITEMS.

STATIONING

THE STATIONING USED ON THIS PROJECT IS BASED ON "AS-BUILT" PLANS.
THE LOCATIONS OF ITEMS OF WORK ARE LOCATED BY 2017 SURVEY.

MISC WORK ITEMS - TERRITORIAL RD.

MOBILIZATION, MAX_	1 LSUM
STUMP, REM, 37 INCH OR LARGER	2 EA
STUMP, REM, 6 INCH TO 18 INCH	8 EA
STUMP, REM, 19 INCH TO 36 INCH	1 EA
PAVT, REM STA. 9+79 RT.	50 SYD
EMBANKMENT, CIP AS DIRECTED BY THE ENGINEER	200 CYD
EXCAVATION, EARTH AS DIRECTED BY THE ENGINEER	600 CYD
APPROACH, CL II (GRAV. DRIVES) AS DIRECTED BY THE ENGINEER	100 TON
SHOULDER, CL II P.O.B. STA. 0+00 TO STA. P.O.E. 66+00	500 TON
TRENCHING, MODIFIED (WIDENING AREAS)	132 STA
AGGREGATE BASE, MODIFIED	1,000 SYD
HMA BASE CURSHING AND SHAPING	2,000 SYD

BERRIEN COUNTY ROAD DEPARTMENT
LOG OF PROJECT

MISC WORK ITEMS CONT. -TERRITORIAL RD.

PAVT FOR BUTT JOINTS, REM HMA DRIVES, POB, POE, & INTERSECTIONS	500 SYD
HAND PATCHING AS DIRECTED BY THE ENGINEER	25 TON
HMA, 4E1 (WIDENING AREAS) & AS DIRECTED BY THE ENGINEER	2123 TON
HMA, 5E1 P.O.B. STA. 0+00 TO P.O.E. STA. 66+00	2800 TON
HMA APPROACH HMA DRIVES / INTERSECTIONS	175 TON
HMA WEDGE CURB POST, MAILBOX	1,480 FT 5 EA
PAVT MRKG, WATERBORNE, 4 INCH, WHITE	13,200 FT
PAVT MRKG, WATERBORNE, 4 INCH, YELLOW	6,000 FT
MINOR TRAF DEVICES	1 LSUM
CHANNELIZING DEVICES, 42 INCH, FURN	100 EA
CHANNELIZING DEVICES, 42 INCH, OPER	100 EA
LIGHTED ARROW, TYPE C, FURN	2 EA
LIGHTED ARROW, TYPE C, OPER	2 EA
SIGN, TYPE B, TEMP, PRISMATIC, FURN	224 SFT
SIGN, TYPE B, TEMP, PRISMATIC, OPER	224 SFT
TRAF REGULATOR CONTROL	1 LSUM
RIPRAP, PLAIN	5 SYD
SLOPE RESTORATION, TYPE A AS DIRECTED BY THE ENGINEER	5000 SYD

BERRIEN COUNTY ROAD DEPARTMENT

LOG OF PROJECT

LIST OF INTERSECTIONS

STA. 29+50 LOUISE DR. LT.	STA. 50+15 ROSLIN RD. LT.
STA. 34+81 WINIFRED AVE. LT.	STA. 65+80 FOURTH ST. LT.
STA. 36+39 FOREST POINT RD. RT.	STA. 65+90 FOURTH ST. RT.

LIST OF GRAVEL DRIVES

STA. 3+32 LT.	STA. 16+91 RT.	STA. 34+28 LT.	STA. 62+31 LT.
STA. 6+30 LT.	STA. 17+68 LT.	STA. 36+97 LT.	STA. 63+75 LT.
STA. 8+56 LT.	STA. 20+67 LT.	STA. 45+23 RT.	STA. 64+04 LT.
STA. 9+97 LT.	STA. 22+44 LT.	STA. 52+58 RT.	STA. 64+14 RT.
STA. 12+71 LT.	STA. 23+00 LT.	STA. 54+00 LT.	STA. 64+80 RT.
STA. 13+72 LT.	STA. 25+49 RT.	STA. 59+16 LT.	
STA. 14+76 RT.	STA. 28+42 RT.	STA. 59+97 LT.	
STA. 15+28 LT.	STA. 28+93 LT.	STA. 60+72 LT.	
STA. 15+55 LT.	STA. 31+44 LT.	STA. 62+19 RT.	

LIST OF HMA DRIVES

STA. 12+50 LT.	STA. 27+24 LT.	STA. 51+73 RT.	STA. 60+47 RT.
STA. 15+70 RT.	STA. 27+50 RT.	STA. 55+98 LT.	STA. 61+05 RT.
STA. 21+24 RT.	STA. 34+81 RT.	STA. 56+96 RT.	STA. 63+49 RT.
STA. 22+65 RT.	STA. 36+24 LT.	STA. 57+45 LT.	STA. 65+03 RT.
STA. 24+38 LT.	STA. 41+20 LT.	STA. 58+13 RT.	
STA. 25+34 LT.	STA. 50+44 RT.	STA. 59+49 RT.	

LIST OF CONCRETE DRIVES

STA. 9+79 RT.

LIST OF HMA SPILLWAYS

STA. 5+80 LT.
STA. 50+00 LT.
STA. 54+00 LT.
STA. 57+50 LT.
STA. 58+50 RT.

LIST OF STUMP REMOVALS

STA. 5+80 LT.
STA. 50+00 LT.
STA. 54+00 LT.
STA. 57+50 LT.
STA. 58+50 RT.

GENERAL NOTES:

1. ALL REQUIRED SAWCUTTING OF EXISTING PAVEMENT PRIOR TO REMOVAL SHALL BE INCLUDED IN THE PAY ITEM OF PAVT, REM.
2. A MILLED OR SAWCUT VERTICAL FACE IS REQUIRED ALONG EDGE OF PAVEMENT IN TRENCHING, MODIFIED AND SHALL BE INCLUDED WITH THE PAY ITEM OF TRENCHING, MODIFIED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING TRAFFIC CONTROL SIGNS DURING CONSTRUCTION. THIS SHALL INCLUDE DAMAGE FROM REMOVING/REPLACING ANY SIGN. ALL TRAFFIC CONTROL SIGNS REMOVED/DAMAGED SHALL BE REPLACED IMMEDIATELY AS SOON AS CONSTRUCTION PERMITS. EXISTING TRAFFIC CONTROL SIGNS THAT NEED TO BE RELOCATED WILL BE RELOCATED BY THE BERRIEN COUNTY ROAD DEPARTMENT.
4. HMA, 5E1 SHALL BE THE MATERIAL USED FOR THE HMA APPROACHES AND SHALL BE PAID FOR AS HMA APPROACH, THIS INCLUDES ALL INTERSECTIONS AND DRIVEWAYS.
5. HMA MIXTURE FOR PAVED SHOULDERS (HMA, 4E1 AND HMA, 5E1) WILL NOT BE PAID FOR SEPERATELY BUT WILL BE PAID FOR UNDER THE PAY ITEMS OF HMA, 4E1 AND HMA, 5E1 RESPECTFULLY.
6. CROSS SECTION DATA AND AS-BUILT PLANS ARE AVAILABLE AT THE OFFICE OF THE BERRIEN COUNTY ROAD DEPARTMENT.
7. THE ITEMS; PAVT, REM; CHANNELIZING DEVICE, 42 INCH, FURN.; CHANNELIZING DEVICE, 42 INCH, OPER. AND POST, MAILBOX SHALL BE USED WHERE PAY ITEM IS DIRECTED BY THE ENGINEER.
8. CONTRACTOR IS REQUIRED TO SUBMIT DAILY TRAFFIC CONTROL INSPECTION REPORTS (PER STANDARD SPEC. 812.03) TO FIELD INSPECTOR. PAY ESTIMATES WILL BE DELAYED IF NOT RECEIVED ON A WEEKLY BASIS.
9. FIELD INSPECTOR MUST BE ON THE PROJECT SITE AND SIGN LOAD TICKETS FOR ANY MATERIAL SUPPLIED TO THE PROJECT.
10. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL CONSTRUCTION STAKES PRIOR TO ACCEPTANCE OF PROJECT, INCLUDED IN MOBILIZATION, MAX.
11. ALL UNPROTECTED EARTH SHALL BE RESTORED USING ITEM SLOPE RESTORATION, TYPE A WITHIN FIVE (5) WORKING DAYS FOR EROSION/SEDIMENTATION CONTROL.
12. HMA SPILLWAYS SHALL BE PAID FOR AS HMA WEDGE CURB. RIPRAP SHALL BE PLACED AT THE END OF EACH SPILL WAY PER MDT STANDARDS AND SPECIFICATIONS, AND SHALL BE PAID FOR AS RIPRAP, PLAIN. LOCATIONS ARE LISTED ON SHEET 4.

GENERAL NOTES

PAGE

5

PROVISIONS WILL BE MADE FOR CONTROL OF EROSION ON SHOULDERS AND SLOPES BY MEANS OF SEEDING, FERTILIZING AND MULCH OR OTHER ACCEPTABLE METHODS AS PART OF THIS CONTRACT.

NOTES APPLYING TO ROAD STANDARD PLANS

WHERE THE FOLLOWING ITEMS ARE CALLED OUT ON THE PLANS, THEY ARE TO BE CONSTRUCTED ACCORDING TO THE STANDARD PLAN LISTED BELOW OPPOSITE EACH ITEM, UNLESS OTHERWISE INDICATED.

DRIVEWAY OPENINGS AND APPROACHES	R-29-I
SOIL EROSION & SEDIMENTATION CONTROL	R-96-E
SEEDING AND TREE PLANTING	R-100-H
BUMPER & PARKING RAILS AND MISC. WOOD POST	R-74-D
SUPERELEVATIONS AND PAVEMENT CROWNS	R-107-H

NOTES APPLYING TO TRAFFIC AND SAFETY STANDARD PLANS

TEMPORARY TRAFFIC CONTROL DEVICES	WZD-125-E*
GROUND DRIVEN SIGN SUPPORTS FOR TEMP SIGNS	WZD-100-A*

* DENOTES SPECIAL DETAIL.

GENERAL NOTES

FOR PROTECTION OF UNDERGROUND UTILITIES IN CONFORMANCE WITH PA 174, 2013 DIAL 1-800-482-717 OR 811 A MINIMUM OF 3 WORKING DAYS (EXCLUDING WEEKENDS AND HOLIDAYS) PRIOR TO EACH EXCAVATION IN THE VICINITY OF UTILITY LINES. ALL "MISS DIG" PARTICIPATING MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE PART OF THE "MISS DIG" ALERT SYSTEM.

THE EXISTING UTILITIES LISTED BELOW AND SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE AS OBTAINED BY OUR SURVEYS OF 2017. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO SATISFY HIMSELF AS TO THEIR ACCURACY OR OF HIS RESPONSIBILITY IN CASE UTILITIES HAVE BEEN CONSTRUCTED OR REMOVED SINCE THE ABOVE DATE.

ELECTRIC:

AMERICAN ELECTRIC POWER
2925 MEADOWBROOK ROAD
BENTON HARBOR, MI 49022
269-926-0683
CONTACT PERSON: KURT SCHNEIDER

CABLE:

COMCAST
3830 M-139
ST. JOESPH, MI 49085
616-429-3209 EXT 1324
CONTACT PERSON: JAY CASTELLO

GAS:

MICHIGAN GAS UTILITIES
711 STARLITE DRIVE
BENTON HARBOR, MI 49022
269-605-2188
CONTACT PERSON: KELLY BAUER

TOWNSHIP OF BENTON

1725 TERRITORIAL RD.
BENTON HARBOR, MI 49022
269-925-0616
CONTACT PERSON: KELLY NELSON

TELEPHONE:

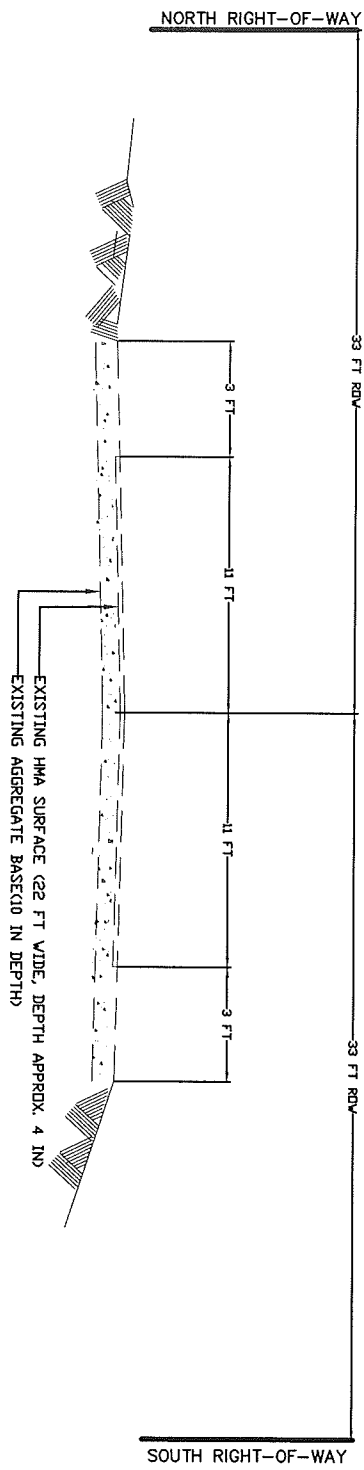
AT&T
1435 MILTON STREET
BENTON HARBOR, MI 49022
269-926-0232
CONTACT PERSON: CHRIS O'BRIEN

ANR PIPELINE

269-426-6806
CONTACT PERSON: WILL RITTMON

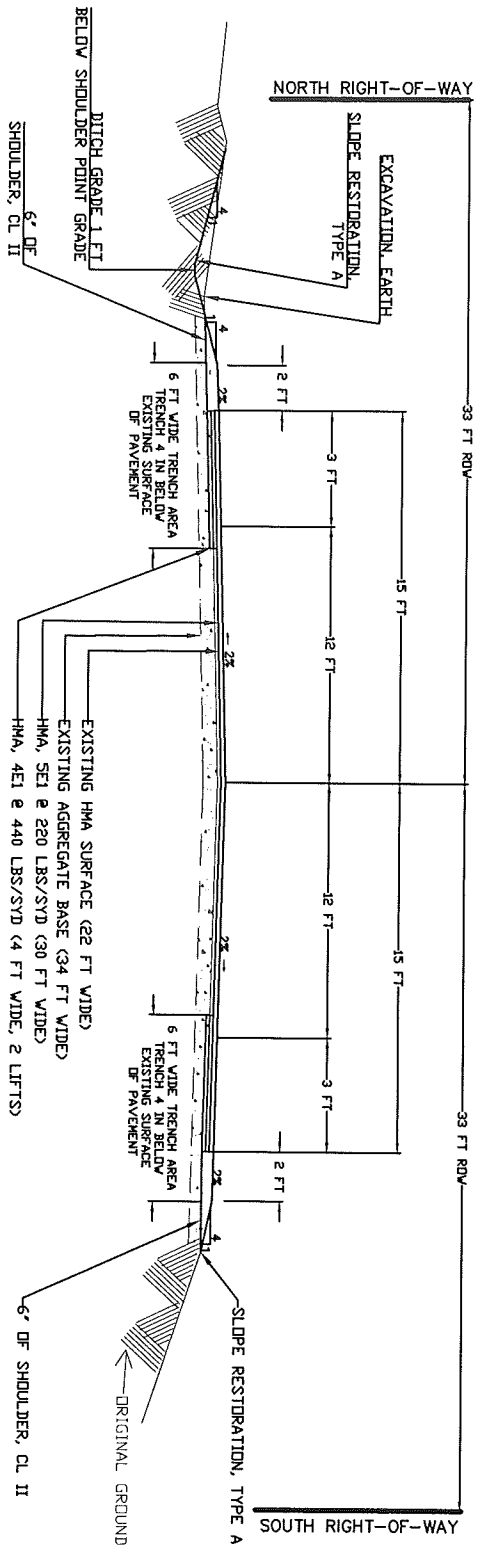
PUBLIC UTILITIES

TYPICAL SECTION



EXISTING SECTIONS
STA. 0+00 (POB) TO 66+00 (POE)

TYPICAL SECTION



TYPICAL SECTION - TERRITORIAL RD.

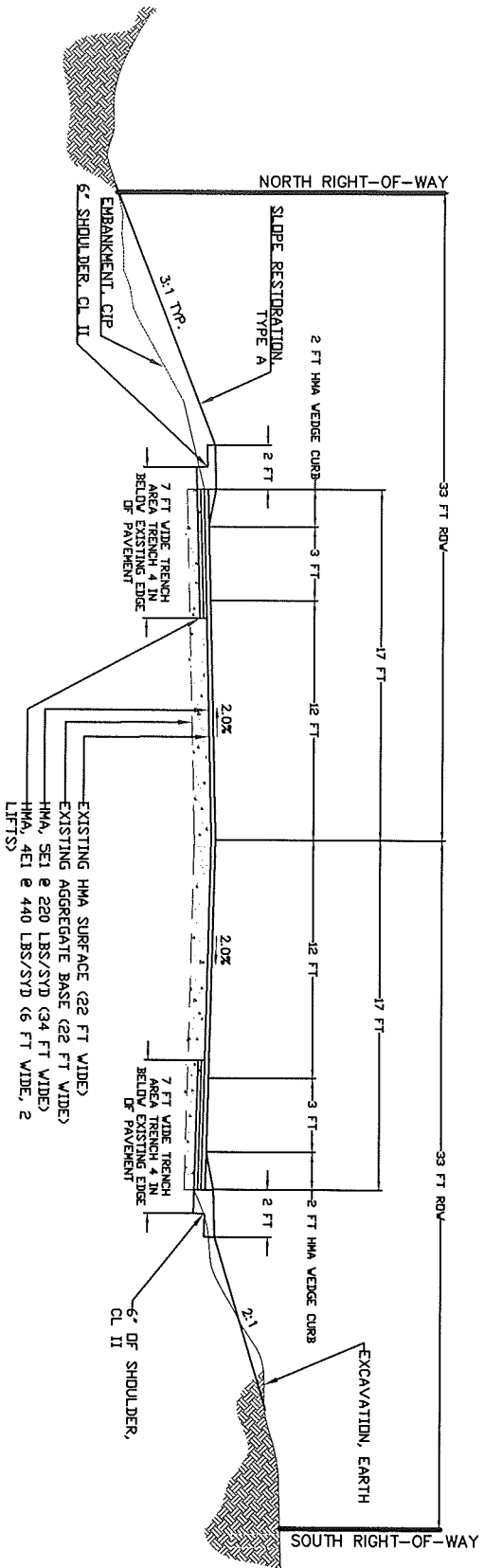
(POB) STA. 0+00 - STA. 5+80
 STA. 10+80 - STA. 54+00
 STA. 56+80 - STA. 57+50

HMA APPLICATION ESTIMATE

WORK ITEM	APPLICATION RATE	BINDER	DESCRIPTION
HMA, SE1	220 LBS/SYD	PG 64-28	TOP COURSE-30' WIDE
HMA, 4E1	440 LBS/SYD 2 LIFTS	PG 64-28	HMA WIDENING - 4' WIDE, BOTH SIDES WITHIN TRENCH ONLY - SEE TYPICAL
HMA, APPRDACH	220 LBS/SYD	PG 64-28	HMA, SE1
HAND PATCHING	220 LBS/SYD	PG 64-28	HMA, SE1

HMA BOND COAT AT 0.05 TO 0.15 GAL/SYD - NOT A PAY ITEM; AGGREGATE WEAR INDEX FOR HMA SE1 SHALL BE A MINIMUM OF 260

TYPICAL SECTION



HMA WEDGE CURB TYPICAL



MATERIAL FOR HMA WEDGE CURB SHALL BE PAID FOR AS HMA, SE1

TYPICAL SECTION - HMA WEDGE

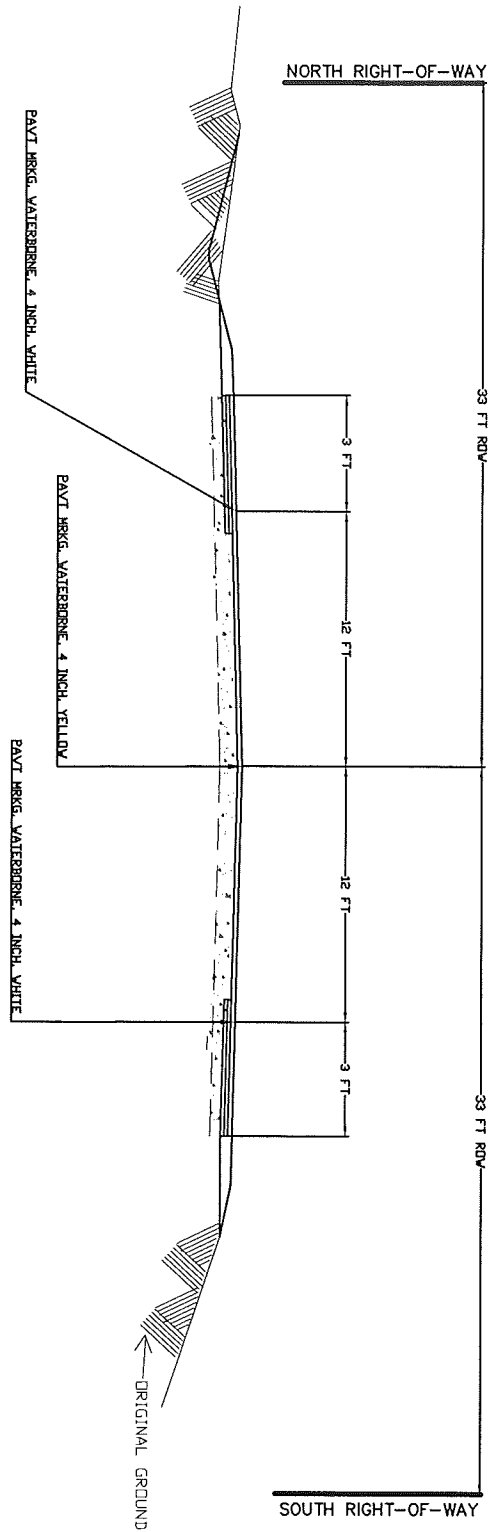
STA. 5+80 - STA. 10+80 (HMA WEDGE CURB LEFT SIDE ONLY)
 STA. 54+00 - STA. 56+80 (HMA WEDGE CURB LEFT SIDE ONLY)
 STA. 57+50 - STA. 58+50 (HMA WEDGE CURB LEFT SIDE ONLY)
 STA. 58+50 - STA. 64+50 (HMA WEDGE CURB BOTH SIDES)
 HMA SPILLWAYS LOCATED AT STA. 5+80, 50+00, 54+00, 57+50, & 58+50

HMA APPLICATION ESTIMATE

WORK ITEM	APPLICATION RATE	BINDER	DESCRIPTION
HMA, SE1	220 LBS/SYD	PG 64-28	TOP COURSE-34' WIDE
HMA, 4E1	440 LBS/SYD 2 LIFTS	PG 64-28	HMA WIDENING - 6' WIDE, BOTH SIDES WITHIN TRENCH ONLY - SEE TYPICAL
HMA, APPRDACH	220 LBS/SYD	PG 64-28	HMA, SE1
HAND PATCHING	220 LBS/SYD	PG 64-28	HMA, SE1

HMA BOND COAT AT 0.05 TO 0.15 GAL/SYD - NOT A PAY ITEM; AGGREGATE WEAR INDEX FOR HMA SE1 SHALL BE A MINIMUM OF 260

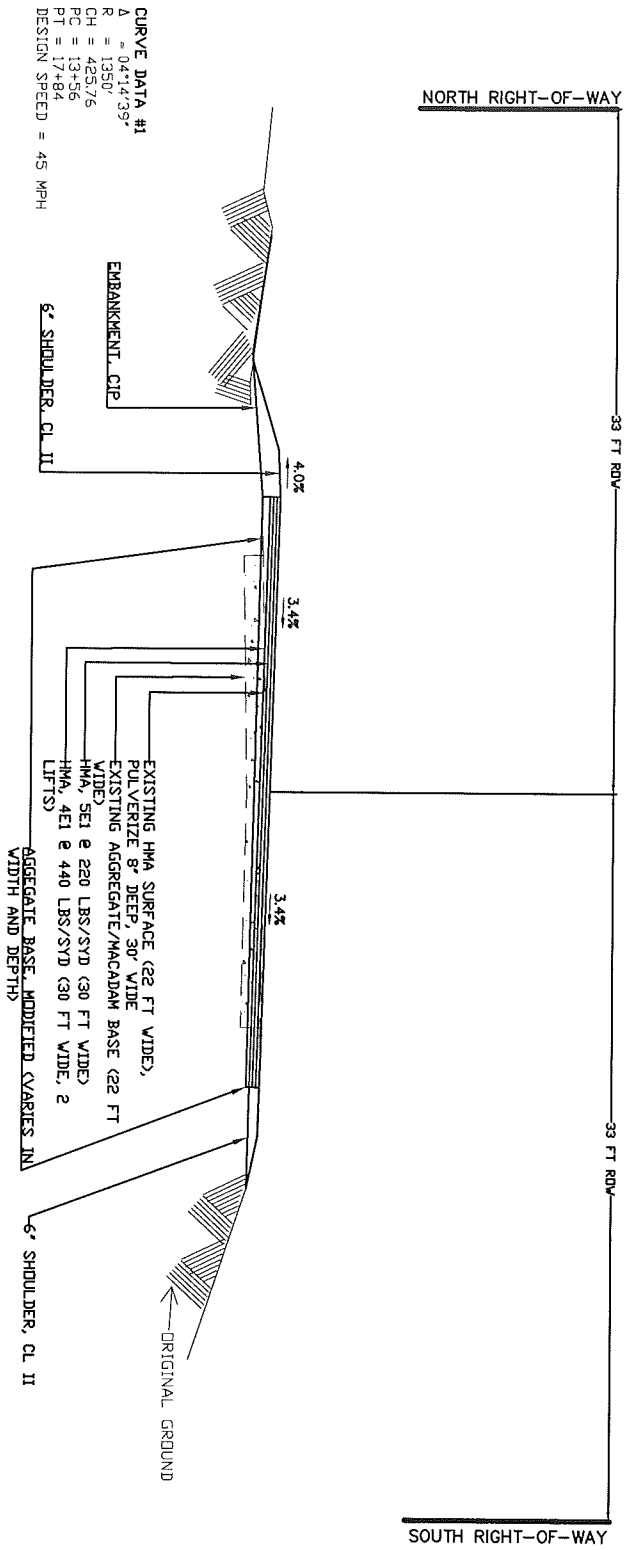
TYPICAL



PAVEMENT MARKINGS - TERRITORIAL RD.

- DOUBLE YELLOW LINE - STA 0+00 TO 16+00
- SOLID YELLOW LINE WEST BOUND LANE, SKIP YELLOW LINE EAST BOUND LANE - STA 16+00 TO 22+00
- SKIP YELLOW LINE - STA 22+00 TO 57+00
- SOLID YELLOW LINE EAST BOUND LANE, SKIP YELLOW LINE WEST BOUND LANE - STA 57+00 TO 62+50
- SOLID YELLOW LINE WEST BOUND LANE, SKIP YELLOW LINE EAST BOUND LANE - STA 62+50 TO 66+00

TYPICAL



SUPERELEVATION TYPICAL STA 12+61 TO STA 18+79

NOTE:
 CONTRACTOR TO PULVERIZE ROADWAY BETWEEN STATION 12+61 TO 18+79
 TO CONSTRUCT SUPERELEVATED CURVE. ONCE PULVERIZED, CONTRACTOR
 SHALL USE PULVERIZE MATERIAL TO CONSTRUCT GRADE SHOULDER IN ABOVE
 TABLE AND WILL BE STAKED BY BORD. ANY ADDITIONAL MATERIAL NEEDED
 TO CONSTRUCT GRADE SHALL BE AGGREGATE BASE, MODIFIED.