

Federal Aid HMA Overlay Design
Chambers Road: M-46 to Washburn Road
Letting Date – February 12, 2026, 9:30 am

Consultant: _____

Address: _____

Sign & Print: _____

Date: _____

Phone & Fax: _____

Email: _____

Federal Aid HMA Overlay Design:

Chambers Road – From M-46 to Washburn Road
Indianfields Township, Sections 19, 20, 29, 30,31,32

Cost for Design Package: \$ _____

Bids are to be submitted on the Road Commission forms in a plainly marked, sealed envelope. No faxed or emailed bids accepted. Plans and specifications are available online at www.tuscolaroad.org. Please contact Brent Dankert, Tuscola County Highway Engineer at 989-751-3873 or highwayengineer@tuscolaroad.org with any questions. Any addenda must be noted and initialed.

If you are interested in bidding and have downloaded plans from the website, please email highwayengineer@tuscolaroad.org to be added to the plan holders list to make sure you receive addendums.

Proposal Intent

The Tuscola County Road Commission seeks to hire a qualified, professional engineering team to provide survey & design services, any necessary environmental permitting, and preparation of plans, specifications, and preliminary estimates of cost for the HMA Overlay and Signage Updates for Chambers Road from M-46 to Washburn Road (2.26 miles of 1.5" HMA overlay). The TCRC expects consultants proposing on this project to have the qualifications, experience, personnel, and overall understanding of the work. The consultant shall have the following MDOT Prequalification - Design Roadway.

Background

The Tuscola County Road Commission has Chambers Road - M-46 to Washburn Road, HMA Resurfacing project on the 2027 Rural Task Force 7A Federal and State Program. The Federal STP is listed as \$ 290,600 with a local contribution of \$82,000 and a State D portion of \$37,400 for a total project estimate of \$410,000. See the attached 1799 for more information.

Basic Information:

- Project is approximately 2.26 miles 1.5" HMA overlay, shoulder aggregate, signage and pavement marking upgrades.
- The Average Daily Traffic is 1839 per day.
- Chambers Road is a primary all-season roadway
- Chambers Road from Washburn to M-81 was selected for 2024 HRRR Signing, Intersection, & Superelevation Improvements which was completed in 2025.
- Chambers Road from M-46 to Washburn Rd had a fixed object removal and driveway culvert replacement project completed in 2019

Unique design criteria for the Tuscola County Road Commission are as follows:

- Special Provision for Sign, Type IIIA, Modified – Unique to how the signs are attached and material utilized for the intersection signs.
- Special Provision Approach, Class II, Modified – Unique to the material utilized for limestone driveways shall be limestone.
- The standard cross section shall include 1-ft of topsoil along the edge of the shoulder.

- A 2-mile single lane closure is the maximum distance allowed and an advance warning (Road Work Ahead) shall be placed at all intersections and (Flagger Ahead) at all state trunkline and primary to primary intersections. TCRC will apply for MDOT permit once designer provides MOT Special Provision.
- Pavement markings will be upgraded to all 6" markings to match the project from Washburn to M-81.
- Project will be designed as a log project.
- Culvert work will not be included in the project.
- The designer is responsible for ensuring that all guardrail meets the current standards.

The intent is to have a complete bid able project at or around August 2026 incase funds are available to advance construct the project. Otherwise, the project will be included in MDOT's March 2027 bid letting. The design and permitting of project need to be completed in accordance with the Local Agency Programs FY 2025 Project Planning Guide and in accordance with all MDOT Local Agency Design Standards and policies. The proposed design must follow all Federal, State and local design standards and guidelines.

Proposal Submittal

The Tuscola County Road Commission (TCRC) is soliciting qualification statements and quote proposals to perform design services for the project discussed above. The proposal shall be a maximum of 3 pages and contain, at a minimum, the following items: (Scoring breakdown is in bold below)

- Signed Cover sheet for Request for Proposal (not included in page limit)
- **30%** Qualifications of key team members.
 - Resumes not included in page limit
- **30%** An understanding of the requested design services.
- **20%** Design fee and breakdown
 - Include an hourly fee schedule with the proposal (not included in page limit)
- **15%** Past Performance
- **5%** Location
- Signed Agreement form (not included in page limit)

Award and Payment

Award will be made in the best interest of the Road Commission. Payment will be made by monthly invoicing. All invoices must include the Tuscola County Road Commission Job Number to be processed in a timely fashion.

Attachments

- Title IV and VI Compliance
- Agreement
- Rural Task Force Data Sheet (MDOT 1799 submitted January 2027)
- Crash Report Data (UD-10s to be provided to successful bidder)
- TCRC Standard Cross Section
- Example Special Provision - Sign, Type IIIA, Modified
- Example Special Provision - Approach, Class II, Modified
- Road Certification Map
- JN# 217988 2024 JN#HRRR Chambers Rd: Washburn to M-81
- JN# 203488 2019 Fixed Object Removal Chambers Rd: M-46 to Washburn

LIABILITY

The consultant shall always exercise extreme care and shall assume all liability for any damages resulting from their operation. Furthermore, they shall hold the Tuscola County Road Commission harmless from any such claims or damages.

NON-COMPLIANCE WITH PROJECT SPECIFICATION PROVISIONS

Any variation from the specifications of the project herein without written approval from the Tuscola County Road Commission and/or its authorized representative may result in, at the discretion of the Tuscola County Road Commission, the voiding and/or canceling of the acceptance of any contract, resulting from this project.

The Tuscola County Board of Road Commissioners reserves the right to accept or reject any or all proposals and to re-advertise or to accept the proposal, that in their opinion, is in the best interest of Tuscola County.

TUSCOLA COUNTY ROAD COMMISSION

TITLE IV COMPLIANCE

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. Compliance with Regulations: The contractor shall comply with the Regulations relative to non-discrimination in Federally-assisted programs of the Department of Transportation, Title 49, code of Federal Regulations, Part 21 as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment.
3. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulation, including employment practices when the contractor covers a program set forth in Appendix B of the Regulations.
4. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to non-discrimination on the grounds of race, color, or national origin.
5. Information and Reports: The contractor shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Tuscola County Road Commission to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of a contractor is in the exclusive possession of another who fails or refuses this information, the contractor shall so certify to the State highway department, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.
6. Sanctions for Non-compliance: In the event of the contractor's non-compliance with the non-discrimination provisions of this contract, the Tuscola County Road Commission Shall Impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - a) Withholding of payments to the contractor under the contract until the contractor complies, and/or
 - b) Cancellation, termination, or suspension of the contract, in whole or in part.
7. Incorporation of Provisions: The contractor shall Include the provisions of paragraphs (1) through (6) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, or directives Issues pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the Tuscola County Road Commission may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that, in the event u contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Tuscola County Road Commission to enter into such litigation to protect the interests of the County, and, in addition, the contractor may request the State highway department to enter into such litigation to protect the interests of the State and/or the United States to enter into such litigation to protect the interests of the United States.

"The TUSCOLA COUNTY ROAD COMMISSION, in accordance with Title VI of the Civil Rights Act of 1964, 78-252, 42 U.S.C. 2000d-222d-4, the Civil Rights Act of 1987, P.L. 100-259, and Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, Part 21, Non- discrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, Disadvantaged Business Enterprise firms will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of Race, Color, Sex, Age, National Origin, or Handicap in consideration for an award. For additional compliance information, please see Appendix A."

AGREEMENT

TUSCOLA COUNTY ROAD COMMISSION – 1733 S. MERTZ ROAD, CARO, MI 48723
PAGE 1 OF 1

This agreement made this _____ day of _____, 20_____
by and between the Board of Tuscola County Road Commissioners and _____
_____.

1. _____ hereby agrees to undertake the following work in the status of an independent contractor performing the following job:
Perform all work necessary to for the design of Chambers Road from M-46 to Washburn in accordance with the RFP bid February 12, 2026
_____.
2. Said contractor, _____, shall at all times exercise extreme care and shall assume any and all liability for property damage or bodily injury resulting from the above operation by this employees, agents, assigns, sub-contractors and anyone else acting under his control or direction; and will indemnify, hold harmless and defend the Tuscola County Road Commission, its Commissioners or employees from any and all claims for property damage or bodily injury arising out of this Agreement.
3. Said contractor, _____, while engaged in said job shall maintain and furnish certificates of insurance, naming the Tuscola County Road Commission and Commissioners as an additional insured under the policy, with policy limits of \$500,000/\$1,000,000 for property damage and bodily injury, and shall furnish the Tuscola County Road Commission copies of said certificates of insurance prior to commencing any work on said project.
Additionally, said contractor, _____, shall furnish prior to start of said job with the Board of Tuscola County Road Commissioners, a policy of insurance certifying he carries and has in effect worker's compensation insurance on all those required to be covered under Michigan law.
4. The address of the Board of Tuscola County Road Commissioners is 1733 S, Mertz Rd., Caro, MI 48723.

Witnessed:

Board of Tuscola County Road Commissioners

Contractor

Contractor bid will not be accepted unless the enclosed Agreement is Signed and Returned with you bid.

RURAL TASK FORCE DATA SHEET ROAD JOB

(To be completed by each county or city for every job submitted to the Task Force)

ALL ITEMS MUST BE COMPLETED

JOB REQUEST

NEW JOB OR JOB CHANGE		JOB NUMBER	CHANGE TYPE	
			FY	COST
			DELETE	SCOPE
			MOVE TO ILLUSTRATIVE	
FISCAL YEAR	COUNTY	CITY / VILLAGE (If applicable)		

ROAD JOB DESCRIPTION

ROAD NAME FROM NFC MAP (http://mcgi.state.mi.us/fc)	NFC FUNCTIONAL CLASSIFICATION	LENGTH (Miles)
FROM	TO	
PHYSICAL REFERENCE (PR) NUMBER:	BEGINNING MILE:	ENDING MILE: OR MAP ATTACHED:
CONTRACT PROCESS:		CONTRACT TYPE:
ALL SEASON ROAD STATUS		
PROPOSED ALL SEASON	ALL SEASON NETWORK	N/A (NO STATE "D" FUNDING ON JOB)
https://mdot.maps.arcgis.com/apps/webappviewer/index.html?id=ac067829f74e49eba28b33605ccd87c0		
ANTICIPATED LETTING DATE (Month/Year)	ELEMENTS NEEDING COMMITTEE APPROVAL	
	GRAVEL ROAD	SIDEWALK
		N/A

MAJOR WORK TYPE:

JOB BUDGET CONSTRUCTION PHASE ONLY: (Not to include ROW, feasibility studies, design, or testing.)

ADDITIONAL JOB INFORMATION

1) STP	\$	
2) STP CE (RTF 1 ONLY)	\$	
3) LOCAL MATCH	\$	
4) ACC FY	\$	
5) TOTAL PARTICIPATING STP BUDGET (Line 1-4)	\$	
6) TEDF "D" AMOUNT:	\$	
7) OTHER PARTICIPATING AMOUNT: (CMAQ, BRIDGE, EARMARKS)	\$	
8) NON-LAP PARTICIPATING		
a) CE	\$	
b) PE	\$	
c) Other	\$	
9) NON-PARTICIPATING AMOUNT: GRANTS, LOCAL UTILITIES, ETC.	\$	
TOTAL JOB COST:	\$	
JOB COST INCLUDING NON-LAP:	\$	

By checking this box, the person completing this form certifies that the job identified in this document is eligible to be funded with federal Surface Transportation Program (STP) or state Transportation Economic Development Fund Category D funds.

SUBMITTED BY (Please print)	TITLE	DATE
SIGNATURE		PHONE NUMBER

Engineer's Opinion of Costs

Project Number: Chambers Rd 2024-01 RTF
Estimate Number: 2: 2.26 miles HMA overlay
Project Type: Miscellaneous
Location: Chambers Rd: M-46 to Washburn Rd
Description:

Project Engineer: Brent Dankert
Date Created: 10/17/2024
Date Edited: 10/22/2024
Fed/State #:
Fed Item:
Control Section:

Line	Pay Item	Description	Quantity	Units	Unit Price	Total
0001	1100001	Mobilization, Max	1.000	LSUM	\$34,600.00	\$34,600.00
0002	2080036	Erosion Control, Silt Fence	500.000	Ft	\$5.00	\$2,500.00
0003	3070021	Approach, CI II	130.000	Ton	\$25.00	\$3,250.00
0004	3070121	Shld, CI II	1,200.000	Ton	\$25.00	\$30,000.00
0005	3077031	_ Approach, CI II, Modified	65.000	Ton	\$50.00	\$3,250.00
0006	5010008	Pavt for Butt Joints, Rem (2)	250.000	Syd	\$25.00	\$6,250.00
0007	5010061	HMA Approach (13 driveways)	160.000	Ton	\$150.00	\$24,000.00
0008	5012024	HMA, 4EL	2,650.000	Ton	\$84.00	\$222,600.00
0009	8100371	Post, Steel, 3 pound	425.000	Ft	\$8.00	\$3,400.00
0010	8100397	Sign, Type II, Rem	1.000	Ea	\$15.00	\$15.00
0011	8100398	Sign, Type IIA	12.000	Sft	\$20.00	\$240.00
0012	8100403	Sign, Type III, Rem	19.000	Ea	\$15.00	\$285.00
0013	8100404	Sign, Type IIIA	36.000	Sft	\$20.00	\$720.00
0014	8100405	Sign, Type IIIB	100.000	Sft	\$18.00	\$1,800.00

Line	Pay Item	Description	Quantity	Units	Unit Price	Total
0015	8100616	Reflective Panel for Permanent Sign Support, 6 foot	6.000	Ea	\$35.00	\$210.00
0016	8102010	Ground Mtd Sign Support, Rem	25.000	Ea	\$5.00	\$125.00
0017	8107010	_ Sign, Type IA, Modified	24.000	Sft	\$25.00	\$600.00
0018	8112145	Pavt Mrkg, Wet Reflective Waterborne, 6 inch, White	23,864.000	Ft	\$0.50	\$11,932.00
0019	8112148	Pavt Mrkg, Wet Reflective Waterborne, 6 inch, Yellow	2,712.000	Ft	\$0.50	\$1,356.00
0020	8120035	Channelizing Device, 42 inch, Fluorescent, Furn	105.000	Ea	\$12.00	\$1,260.00
0021	8120036	Channelizing Device, 42 inch, Fluorescent, Oper	105.000	Ea	\$1.00	\$105.00
0022	8120140	Lighted Arrow, Type C, Furn	2.000	Ea	\$250.00	\$500.00
0023	8120141	Lighted Arrow, Type C, Oper	2.000	Ea	\$1.00	\$2.00
0024	8120170	Minor Traf Devices	1.000	LSUM	\$17,300.00	\$17,300.00
0025	8120264	Pavt Mrkg, Wet Reflective, Type NR, Tape, 4 inch, Yellow, Temp	1,500.000	Ft	\$0.55	\$825.00
0026	8120350	Sign, Type B, Temp, Prismatic, Furn	720.000	Sft	\$2.00	\$1,440.00
0027	8120351	Sign, Type B, Temp, Prismatic, Oper	720.000	Sft	\$2.00	\$1,440.00
0028	8120352	Sign, Type B, Temp, Prismatic, Spec, Furn	18.000	Sft	\$5.00	\$90.00
0029	8120353	Sign, Type B, Temp, Prismatic, Spec, Oper	18.000	Sft	\$2.00	\$36.00
0030	8120370	Traf Regulator Control	1.000	LSUM	\$6,900.00	\$6,900.00
0031	8167011	_ Slope Restoration Modified	2,660.000	Syd	\$8.00	\$21,280.00
0032	8210001	Monument Box	4.000	Ea	\$500.00	\$2,000.00
0033	8210010	Monument Preservation	4.000	Ea	\$1,000.00	\$4,000.00
Estimate Total: \$404,311.00						

Chambers Rd: M-46 to Washburn

-4

Tuscola (County)

Report Module: Safety Management Analysis

Today's Date: Wednesday, January 21, 2026

Dates: 01/01/2014 to 12/31/2024

Sort Order: PRNo, Milepoint, Date of Crash

Animal Crashes: Excluded

PR/Roadname: 1884401 : Chambers Rd

Milepoints: From 0.000 to 2.300

Report Filter

Field Name	Operator	Value(s)
Past X Years	<=	5

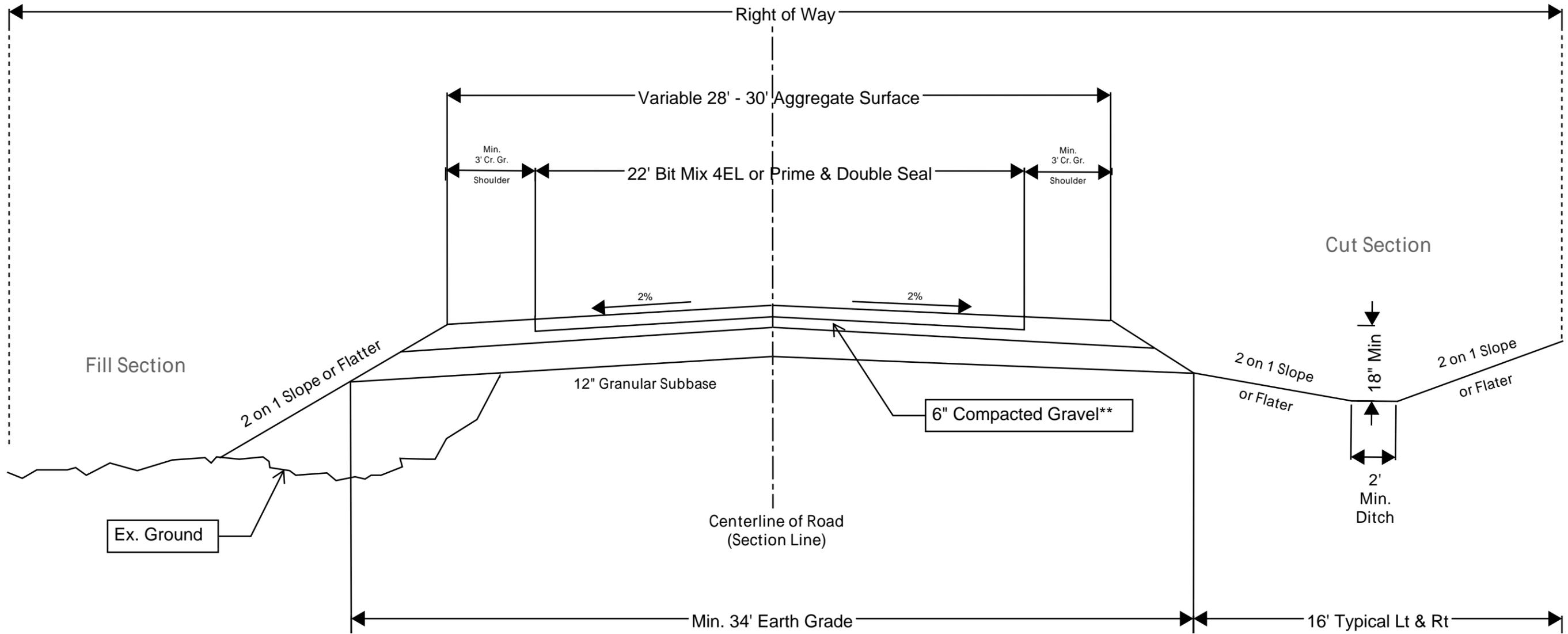
Chambers Rd: M-46 to Washburn

2020-2024

From 1/1/2014 to 12/31/2024

PR: 1884401 BMP: 0.000 EMP: 2.300

Region	----- CS -----		----- PR -----		Area	Location	Crash Type	----- Vehicle 1 -----			----- Vehicle 2 -----			Weather	Surface Condition	Date	Day	Hour	UD-10	----- Totals -----				Involves			
	Number	MP	Number	MP				Dir	Impact	Intent	Dir	Impact	Intent							Fatal	A	B	C	Injury	PDO	Alcohol	Drugs
Bay	0	0.000	1884401	0.227	Midblock	Straight Rd	MISC-MV	N	Driver-side	Go straight	S	Front-Cen	Go straight	Clear	Dry	10/18/2024	FRI	03PM-04PM	3318577	0	0	0	0	0	Y	No	Uncoded
Bay	0	0.000	1884401	0.503	Midblock	Straight Rd	FXOBJ	N	Front-Right	Go straight	U	Uncoded	Uncoded	Snow	Snowy	01/30/2023	MON	08AM-09AM	2816721	0	0	0	0	0	Y	No	Uncoded
Bay	0	0.000	1884401	0.753	Midblock	Straight Rd	FXOBJ	N	Pass-side	Go straight	U	Uncoded	Uncoded	Rain	Wet	04/23/2024	TUE	06AM-07AM	3183646	0	0	0	0	0	Y	No	Uncoded
Bay	0	0.000	1884401	0.814	Midblock	Straight Rd	FXOBJ	S	Multi Areas	Go straight	U	Uncoded	Uncoded	Clear	Wet	08/12/2023	SAT	MDNT-01AM	2970341	0	0	0	0	0	Y	Yes	Uncoded
Bay	0	0.000	1884401	2.295	Midblock	Curved Rd	MISC-SV	S	Driver-side	Negotiate Curve	U	Uncoded	Uncoded	Clear	Dry	08/24/2024	SAT	06PM-07PM	3282545	0	0	1	0	1	N	No	Uncoded



*Or approved equal by Highway Engineer
 **MDOT Spec 21A, 22A, 23A, or Crushed Limestone or approved equal by Highway Engineer

FINAL PLAN REVISIONS			
NO.	DATE	AUTH	DESCRIPTION



Tuscola County Road Commission
 1733 Mertz
 Caro, MI 48723
 Phone: 989 673-2128
 Fax: 989 673-3294

TITLE SHEET:
TCRC PROJECT NO:
Date:
FILE:

STANDARD CROSS SECTION
SHEET
2

TUSCOLA COUNTY ROAD COMMISSION

SPECIAL PROVISION
FOR
SIGN, TYPE IIIA, MODIFIED

GFA:SJG

1 of 1

06/16/2023

a. Description. This work consists of furnishing and installing Type IIIA signs using specified brackets. Perform work in accordance with section 810 of the Standard Specifications for Construction and as specified herein.

b. Materials. Provide materials in accordance with section 810 of the Standard Specifications for Construction.

1. Sign Brackets. For the sign bracket use on of the following models or approved equal:

Dornbos Sign Bracket Catalog Number 914UF-NU180 or 91UF-OL90
Rathco Safety Supply Inc. Catalog Number 91UF-OL90F or 91UF-OL90

c. Construction Methods. Complete work in accordance with section 810 of the Standard Specifications for Construction. Install sign brackets and Type IIIA signs in accordance with the bracket manufacturer's installation instructions.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Sign, Type IIIA, Modified	Ton

TUSCOLA COUNTY ROAD COMMISSION

SPECIAL PROVISION
FOR
APPROACH, CLASS __, __ INCH, MODIFIED

CON:SGI 307

1 of 1

03-09-21

a. Description. This work shall consist of placing and compacting an aggregate approach where called for on the plans.

b. Materials. The material shall meet the gradation requirements of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction, Section 902, for 23A aggregate, except all material shall be 100% crushed limestone.

c. Construction. The aggregate approach material shall be placed in accordance with Section 307 of the MDOT 2012 Standard Specifications for Construction.

d. Measurement and Payment. The completed work, **Approach, CI __, __ inch, Modified** including all materials, labor, and equipment, as measured will be paid for at the contract unit price for the following pay item.

Pay Item	Pay Unit
Approach, CI __, __ inch, Modified	Square Yard

Approach, CI __, __ inch, Modified will be measured in place by the square yard.

PLANS	SHEET NUMBERS
TITLE	1
LEGEND	2
NOTE SHEET	3
TYPICAL CROSS SECTIONS	4-5
MISCELLANEOUS DETAILS	6
REMOVAL, CONSTRUCTION AND PROFILE SHEETS	7-27
PAVEMENT MARKING AND SIGNING SHEETS	28-32

TUSCOLA COUNTY ROAD COMMISSION

IN COOPERATION WITH

MICHIGAN DEPARTMENT OF TRANSPORTATION AND FEDERAL HIGHWAY ADMINISTRATION

PLANS OF PROPOSED

CONTROL SECTION: 79000

JOB NUMBER: 217988

CHAMBERS ROAD FROM WASHBURN ROAD TO M-81
INDIANFIELDS TOWNSHIP
TUSCOLA COUNTY



AREA MAP
NOT TO SCALE

TRAFFIC DATA

1872	—	PRESENT ADT (2024)
1872	—	FUTURE ADT (2034)
55	—	POSTED SPEED
60	—	DESIGN SPEED
3.0%	—	COMMERCIAL

THE DESIGN OF THIS ROAD IS BASED ON THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2020 EDITION, AND SECTION C (3R) OF THE MICHIGAN DEPARTMENT OF TRANSPORTATION LOCAL AGENCY PROGRAMS GUIDELINES FOR GEOMETRICS ON LOCAL AGENCY PROJECTS - DATED 8/03/17, AND THE MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2011 EDITION.

CONTRACT FOR: 1.22 MILES OF HMA COLD MILLING AND RESURFACING, INTERSECTION IMPROVEMENTS, SUPERELEVATION CORRECTIONS, PERMANENT SIGNING AND PAVEMENT MARKINGS.

TUSCOLA COUNTY ROAD COMMISSION APPROVAL

<i>John G. Laurie</i>	JOHN G. LAURIE	3-28-24
CHAIRMAN		DATE
<i>Gary L. Parsell</i>	GARY L. PARSELL	3/28/24
VICE-CHAIRMAN		DATE
<i>Julia Matuszak</i>	JULIA MATUSZAK	3-28-24
MEMBER		DATE
<i>Duane Weber</i>	DUANE WEBER	3-28-24
MEMBER		DATE
<i>David J. Kennard</i>	DAVID KENNARD	3/28/24
MEMBER		DATE
<i>Brent J. Dankert</i>	BRENT J. DANKERT, P.E.	3/28/24
HIGHWAY ENGINEER		DATE

THESE PLANS WERE PREPARED FOR THE TUSCOLA COUNTY ROAD COMMISSION BY



Michael G. Niederquell
MICHAEL G. NIEDERQUELL, P.E.
REGISTRATION NO. 6201049825
DATE 4-26-24



SAGINAW OFFICE
230 S. Washington Ave.
Saginaw, MI 48607
Tel. 989-754-4717
Fax. 989-754-4440
www.SpicerGroup.com

MDOT ROAD STANDARD PLANS

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

DRIVEWAY OPENINGS & APPROACHES AND CONCRETE SIDEWALKS	R-29-J'
CONCRETE CURB AND CONCRETE CURB & GUTTER	R-30-G
BUMPER & PARKING RAILS AND MISC. WOOD POSTS	R-74-D
GRANULAR BLANKET, UNDERDRAINS, OUTLET ENDINGS	R-80-F'
FOR UNDERDRAINS, AND SEWER BULKHEADS	
BEDDING AND FILLING AROUND PIPE CULVERTS	R-82-D
UTILITY TRENCHES	R-83-C
CULVERT SLOPED END SECTION	R-95-G
SOIL EROSION & SEDIMENTATION CONTROL MEASURES	R-96-E
SEEDING AND TREE PLANTING	R-100-I'
SUPERELEVATION AND PAVEMENT CROWNS	R-107-H
PAVEMENT SAFETY EDGE	R-110-B'

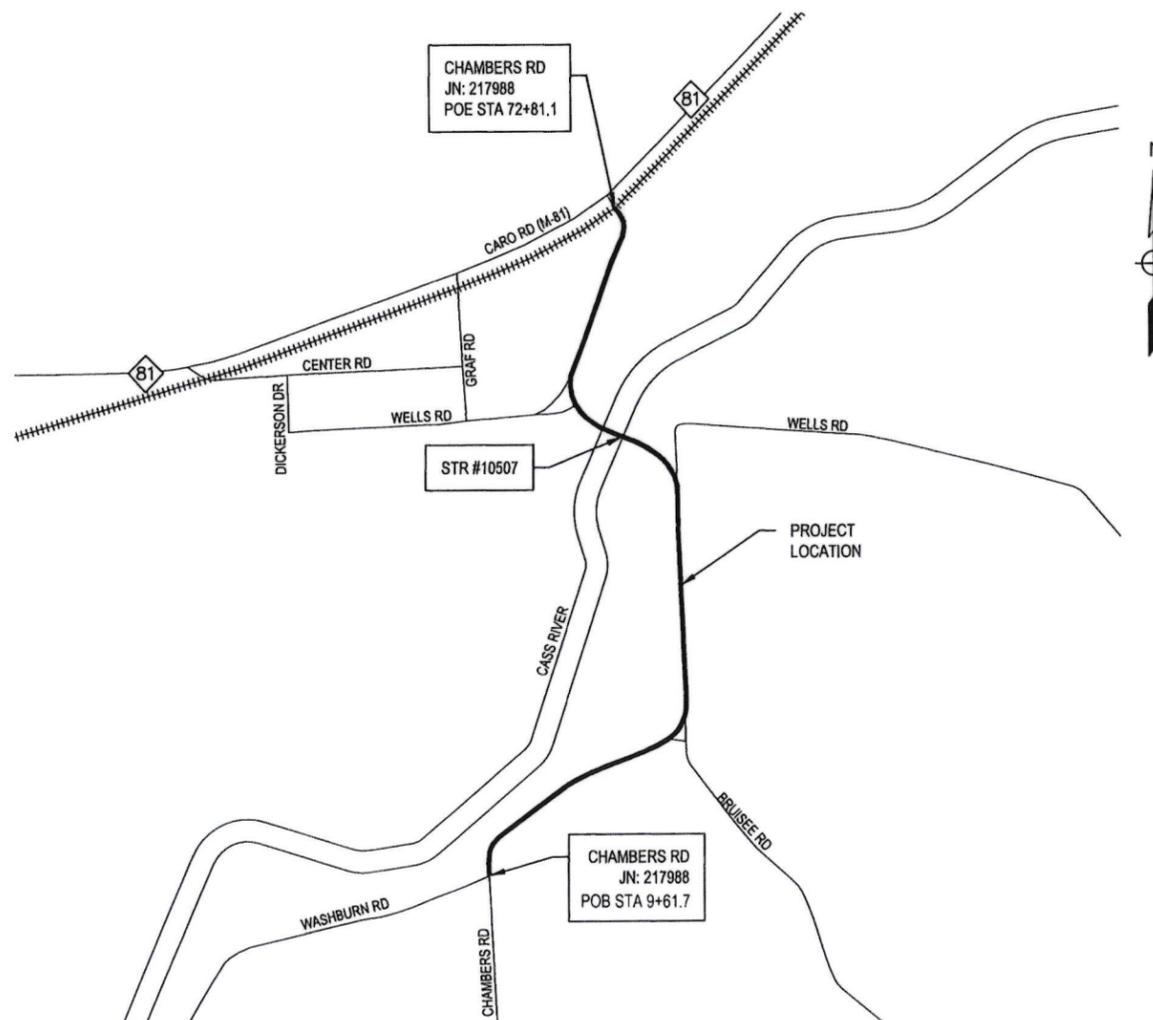
*SPECIAL DETAILS INCLUDED IN PROPOSAL

MDOT TRAFFIC AND SAFETY STANDARD PLANS

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

TEMPORARY LONGITUDINAL LINE TYPES AND PLACEMENT	PAVE-904-A*
LONGITUDINAL LINE TYPES AND PLACEMENT	PAVE-905-E
PAVEMENT MARKINGS FOR NON-SIGNALIZED INTERSECTIONS	PAVE-930-D
INTERSECTION, STOP BAR AND CROSSWALK MARKINGS	PAVE-945-D
RAILROAD GRADE CROSSING PAVEMENT MARKINGS	PAVE-965-D
ROADSIDE SIGN LOCATIONS AND SUPPORT SPACING	SIGN-120-E
PLACEMENT OF D3-1 SIGNS ABOVE R1-1	SIGN-140-A
STEEL POSTS	SIGN-200-E
GROUND DRIVEN SIGN SUPPORTS FOR TEMP SIGNS	WZD-100-A*
TEMPORARY TRAFFIC CONTROL DEVICES	WZD-125-E*

*SPECIAL DETAILS INCLUDED IN PROPOSAL



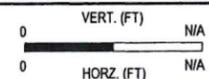
SECTIONS 17, 19 & 20, T12N-R9E

3/25/2024 1:16 PM ryan.sullivan

FINAL PLAN REVISIONS			
NO.	DATE	AUTH	DESCRIPTION



SAGINAW OFFICE
230 S. Washington Ave.
Saginaw, MI 48607
Tel. 989-754-4717
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SGI PROJECT NO: 133724SG2023
DATE: MARCH, 2024
FILE: LP_TITLE.DWG

CS: 79000
JN: 217988

TITLE SHEET
CHAMBERS ROAD

DRAWING SHEET

TTL 1

UTILITIES

THE EXISTING UTILITIES LISTED BELOW AND SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARING THESE PLANS. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO BE SATISFIED AS TO ITS ACCURACY AND THE LOCATION OF EXISTING UTILITIES.

CONTACTS

BRIGHTSPEED (TELEPHONE)
ATT: BILL SPURLOCK
144 S. SAGINAW STREET
CHESANING, MI 48616
PHONE: 989-376-1529
EMAIL: Bill.Spurlock@brightspeed.com

CITY OF CARO (WATER MAIN AND SANITARY SEWER)
ATT: THOMAS REESE
741 S HOOPER STREET
CARO, MI 48723
PHONE: 989-673-2571
EMAIL: treese@carocity.net

CHARTER COMMUNICATIONS (CABLE TV)
ATT: MARK KELLY
1480 S VALLEY CENTER DRIVE
BAY CITY, MI 48706
CELL: 989-223-9404
EMAIL: mark.kelly@charter.com

CONSUMERS ENERGY (GAS)
ATT: BENJAMIN LEWIS
2400 WEISS STREET
SAGINAW, MI 48602
PHONE: 517-581-1424
EMAIL: Benjamin.Lewis@cmsenergy.com

DTE ENERGY (ELECTRIC)
ATT: ROBERT OHMER
4100 DOERR ROAD
CASS CITY, MI 48726
PHONE: 989-325-1215
EMAIL: robert.ohmer@dteenergy.com

HURON & EASTERN RAILROAD (RAILROAD)
ATT: LUKE ZIESEMER
3670 N EUCLID ROAD
BAY CITY, MICHIGAN 48706
PHONE: 989-797-5129
EMAIL: Luke.Ziesemer@gwrr.com

THUMB ELECTRIC COOPERATIVE (ELECTRIC)
ATTN: CLINT SEIDL
2231 MAIN STREET
UBLY, MI 48475
PHONE: 989-658-851
EMAIL: cseidl@tecmi.coop

TUSCOLA COUNTY ROAD COMMISSION (ROADS)
ATT: WILLIAM GREEN
1733 MERTZ ROAD
CARO, MI 48723
PHONE: 989-673-2128
EMAIL: wgreen@tuscolaroad.org

PLAN SHEET REMOVAL LEGEND

- COLD MILLING HMA SURFACE  ABANDON 
- HMA SURFACE REMOVE  BULKHEAD 
- REMOVING PAVEMENT  CLEARING 
- REMOVING SIDEWALK  REMOVING 
- HMA BASE CRUSHING AND SHAPING  SAVE 
- REMOVING CURB, GUTTER AND CURB & GUTTER 

SYMBOLS LEGEND

-  - STORM MANHOLE
-  - SANITARY MANHOLE
-  - WATER MANHOLE
-  - TELEPHONE MANHOLE
-  - ELECTRIC MANHOLE
-  - PROPOSED MANHOLE
-  - CATCHBASIN
-  - CURB CATCHBASIN
-  - PROPOSED CATCHBASIN
-  - CULVERT END SECTION
-  - PROPOSED CULVERT END SECTION
-  - FIRE HYDRANT
-  - PROPOSED FIRE HYDRANT
-  - GAS VALVE
-  - WATER VALVE
-  - PROPOSED WATER VALVE
-  - WATER CURB STOP
-  - WATER METER
-  - TELEPHONE PEDESTAL
-  - POWER POLE
-  - TELEPHONE POLE
-  - POWER AND TELEPHONE POLE
-  - LIGHT POLE
-  - GUY ANCHOR AND POLE
-  - PERMANENT UTILITY MARKER
-  - CABLE TV PEDESTAL
-  - TRANSFORMER
-  - ELECTRICAL PEDESTAL
-  - EROSION CONTROL ITEM NUMBER (SEE STANDARD PLAN R-96 SERIES)
-  - MAIL BOX
-  - BARRIER FREE PARKING
-  - SPRINKLER
-  - RAILROAD SIGNAL
-  - ANTENNA
-  - SATELLITE DISH
-  - AIR CONDITIONING UNIT
-  - BENCH MARK
-  - CONTROL POINT
-  - FOUND SURVEY CORNER
-  - SET 3/4" IRON PIPE
-  - 1/4 SECTION CORNER
-  - BREAK IN LINE
-  - STUMP
-  - WETLANDS
-  - PINE
-  - BUSH
-  - TREE
-  - M.W. - MONITORING WELL
-  - HAND HOLE
-  - EXISTING SIGN-1 POST
-  - PROPOSED SIGN-1 POST
-  - EXISTING SIGN-2 POSTS
-  - PROPOSED SIGN-2 POSTS

HAZARDOUS OR FLAMMABLE MATERIAL - GAS OR ELECTRICAL LINES LABEL

CAUTION - CRITICAL UTILITY - FIBER OPTIC, TELEPHONE LINES, AND WATER MAIN LABEL

-  - DR STRUCTURE COVER, ADJ, CASE _
-  - ADJUST BY OTHERS
-  - RELOCATE BY OTHERS
-  - CURB RAMP TYPE _
-  - GATE BOX, ADJ, CASE _
-  - CONTRACTOR TO SUPPORT UTILITY POLE
-  - PRESERVE MONUMENT BOX
-  - WATER SHUTOFF, ADJ, CASE _
-  - MONITORING WELL, ADJ, CASE _
-  - RELOCATE WITH CASE _

LINE TYPE LEGEND

-  - EXISTING WATER MAIN
-  - EXISTING SANITARY SEWER OR FORCE MAIN
-  - EXISTING STORM SEWER
-  - EXISTING UNDERGROUND TELEPHONE
-  - EXISTING UNDERGROUND FIBER OPTIC
-  - EXISTING UNDERGROUND CABLE TV
-  - EXISTING GAS MAIN
-  - EXISTING UNDERGROUND ELECTRIC
-  - EXISTING OVERHEAD UTILITY
-  - EXISTING FENCE
-  - EXISTING CURB & GUTTER
-  - EXISTING BUILDING
-  - PROPOSED STORM SEWER
-  - PROPOSED AGGREGATE
-  - PROPOSED CURB & GUTTER
-  - PROPOSED REVERSE PAN CURB & GUTTER
-  - SLOPE STAKE LINE
-  - RIGHT-OF-WAY
-  - EASEMENT
-  - GUARDRAIL
-  - TREE LINE
-  - LANDSCAPING
-  - WETLAND
-  - WATER EDGE

PLAN SHEET CONSTRUCTION LEGEND

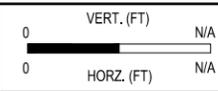
-  - HMA APPROACH

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LEGEND
CHAMBERS ROAD

DRAWING SHEET
LGND 2

3/27/2024 4:31 PM Jake.roberts

GENERAL NOTES

UNDERGROUND UTILITIES/MISS DIG

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174, 2013, THE CONTRACTOR SHALL DIAL 1-800-482-7171 OR 811 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE EXISTING UTILITIES ON THESE DRAWINGS HAVE BEEN SHOWN ACCORDING TO THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND SHALL NOTIFY THE ENGINEER AS TO WHERE POSSIBLE CONFLICT EXISTS.

EXISTING WATER MAINS AND SEWERS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PROPERLY IDENTIFIED EXISTING WATER MAINS AND/OR EXISTING SEWERS DURING THE CONSTRUCTION OF THIS PROJECT.

ADJUSTING MONUMENT BOXES

ALL GOVERNMENT CORNERS ON THIS PROJECT SHALL BE PRESERVED, WHETHER SHOWN OR NOT. IT MAY BE NECESSARY TO PLACE OR ADJUST MONUMENT BOXES, AS REQUIRED.

PAVEMENT MARKINGS AND SIGNS

ALL PERMANENT PAVEMENT MARKINGS, SHAPES, AND DIMENSIONS SHALL CONFORM WITH MDOT PAVEMENT MARKING TYPICALS PAVE-900 SERIES.

SOIL EROSION MEASURES

APPROPRIATE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTH-DISTURBING ACTIVITIES. PLACE TURF ESTABLISHMENT ITEMS AS SOON AS POSSIBLE ON POTENTIAL ERODABLE SLOPES AS DIRECTED BY THE ENGINEER. CRITICAL DITCH GRADES SHALL BE PROTECTED WITH EITHER SOD OR SEED/MULCH OR MULCH BLANKET AS DIRECTED BY THE ENGINEER.

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE AND MAINTAINED UNTIL THE CONTRACT HAS BEEN COMPLETED AND ACCEPTED. MEASURES SHALL ONLY BE PAID FOR ONCE.

SEED MIXTURE

THE DESIGNATION FOR THE PERMANENT TURF SEED MIXTURE ON THIS PROJECT SHALL BE THM.

DRAINAGE STRUCTURE OFFSETS AND ELEVATIONS

DRAINAGE STRUCTURE IN PROPOSED CURB - OFFSETS AND ELEVATIONS SHOWN ARE TO THE BACK AND TOP OF CURB. ALIGN THE STRUCTURE WITH THE BACK OF THE CASTING AND THE TOP OF THE CASTING FLUSH WITH THE PROPOSED BACK AND TOP OF CURB. DRAINAGE STRUCTURES IN OUTLAWN AREA AND PAVED AREA - OFFSET SHOWN IS TO CENTER OF STRUCTURE. RIM ELEVATIONS FOR DOME COVERS AND FLAT COVERS ARE TO THE TOP OF THE CASTING FRAME

GENERAL NOTES (CONT.)

LAWN SPRINKLERS/LANDSCAPING

OWNERS OF EXISTING LAWN SPRINKLER SYSTEMS AND/OR LANDSCAPING SHALL BE NOTIFIED (IN WRITING WITH A COPY SENT TO THE ENGINEER) BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF ANY WORK TO BE DONE THAT WILL AFFECT THOSE SYSTEMS AND/OR LANDSCAPING. IF THE PROPERTY OWNER FAILS TO RELOCATE THE LAWN SPRINKLER SYSTEM PRIOR TO THE CONTRACTOR BEGINNING WORK, AND IF THE CONTRACTOR CUTS THE SYSTEM DURING THE CONSTRUCTION, THE CONTRACTOR SHALL CAP THE SYSTEM PIPE AND WITNESS THE LOCATION OF THE CAP WITH A WOODEN STAKE FOR THE PROPERTY OWNERS USE. THE CONTRACTOR SHALL PLACE THE SALVAGED SPRINKLER HEADS ON THE BACK OF THE RIGHT OF WAY. IF THE PROPERTY OWNER FAILS TO RELOCATE THE LANDSCAPING PRIOR TO THE CONTRACTOR BEGINNING WORK, THE CONTRACTOR SHALL CAREFULLY SALVAGE THE LANDSCAPING ITEMS AND STOCKPILE THEM ON THE BACK OF THE RIGHT OF WAY OR AT A LOCATION DESIGNATED BY THE ENGINEER FOR THE PROPERTY OWNER. ANY OTHER MODIFICATION TO THE LAWN SPRINKLER SYSTEMS AND/OR LANDSCAPING, IS THE RESPONSIBILITY OF THE OWNER AND IS NOT PART OF THIS CONTRACT. THIS WORK WILL NOT BE PAID FOR SEPARATELY.

CONNECTIONS TO EXISTING CULVERTS/SEWERS

THE EXTENSIONS/CONNECTIONS TO EXISTING CULVERTS/SEWERS ON THIS PROJECT MAY REQUIRE EXTRA WORK TO OBTAIN A TIGHT SEAL AT THE JOINT CONNECTING NEW PIPE TO EXISTING PIPE. THE JOINT BETWEEN THE EXISTING AND NEW PIPES SHALL BE CONSTRUCTED ACCORDING TO THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND AS DIRECTED BY THE ENGINEER. ANY EXTRA WORK REQUIRED TO OBTAIN TIGHT JOINTS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN COMPENSATION FOR NEW PIPE.

PROPERTY OWNERS

PROPERTY OWNERS' NAMES, WHERE SHOWN, ARE FOR INFORMATION ONLY, AND THEIR ACCURACY IS NOT GUARANTEED.

SAWCUTS

PAYMENT FOR SAWCUTS REQUIRED TO REMOVE MISCELLANEOUS ITEMS, PAVEMENT AND/OR CURB AND GUTTER SHALL BE INCLUDED IN THOSE REMOVAL ITEMS.

TOPSOIL

CONTRACTOR SHALL REMOVE AND DISPOSE, OR SALVAGE AND STORE TOPSOIL A MINIMUM OF 4" DEEP. SALVAGED TOPSOIL SHALL BE STORED ON-SITE UNLESS WRITTEN PERMISSION IS OBTAINED AT AN OFF-SITE LOCATION. COST TO REMOVE AND DISPOSE, OR SALVAGE AND STORE TOPSOIL SHALL BE INCLUDED IN THE PAYMENT FOR OTHER ITEMS.

SALVAGED MATERIALS

IF CONTRACTORS CHOOSES TO USE SALVAGED MATERIALS FROM PROJECT TO MAINTAIN ACCESS, IT SHALL BE PLACED, MAINTAINED, AND REMOVED WHEN NO LONGER NEEDED AT CONTRACTOR'S EXPENSE.

MAINTAINING TRAFFIC QUANTITIES

- 6 Ea Barricade, Type III, High Intensity, Double Sided, Lighted, Furn
- 6 Ea Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
- 2 Ea Pedestrian Type II Barricade, Temp
- 2 Ea Lighted Arrow, Type C, Furn
- 2 Ea Lighted Arrow, Type C, Oper
- 1 LSUM Minor Traf Devices
- 968 Ft Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, Yellow, Temp
- 170 Ea Plastic Drum, Flourescent, Furn
- 170 Ea Plastic Drum, Flourescent, Oper
- 424 Sft Sign, Type B, Temp, Prismatic, Furn
- 424 Sft Sign, Type B, Temp, Prismatic, Oper
- 8 Sft Sign, Type B, Temp, Prismatic, Spec, Furn
- 8 Sft Sign, Type B, Temp, Prismatic, Spec, Oper
- 1 LSUM Traf Regulator Control

MISCELLANEOUS ESTIMATES

THE FOLLOWING ITEMS OF WORK SHALL BE DONE AS THEY APPLY THROUGHOUT THE PROJECT. THESE ITEMS ARE NOT DETAILED OR INCLUDED ON THE PLAN AND PROFILE SHEETS:

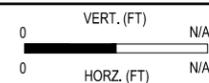
- 1 LSUM Mobilization, Max ____
- 1 Cyd Masonry and Conc Structure, Rem
- 100 Cyd Non Haz Contaminated Material Handling and Disposal, LM
- 150 Cyd Subgrade Undercutting, Type II
- 200 Ton Maintenance Gravel
- 1 Ea Dr Structure Cover, Adj, Case 1
- 1 Ea Dr Structure Cover, Adj, Case 2
- 5 Ea Post, Mailbox
- 13500 Syd Slope Restoration, Modified

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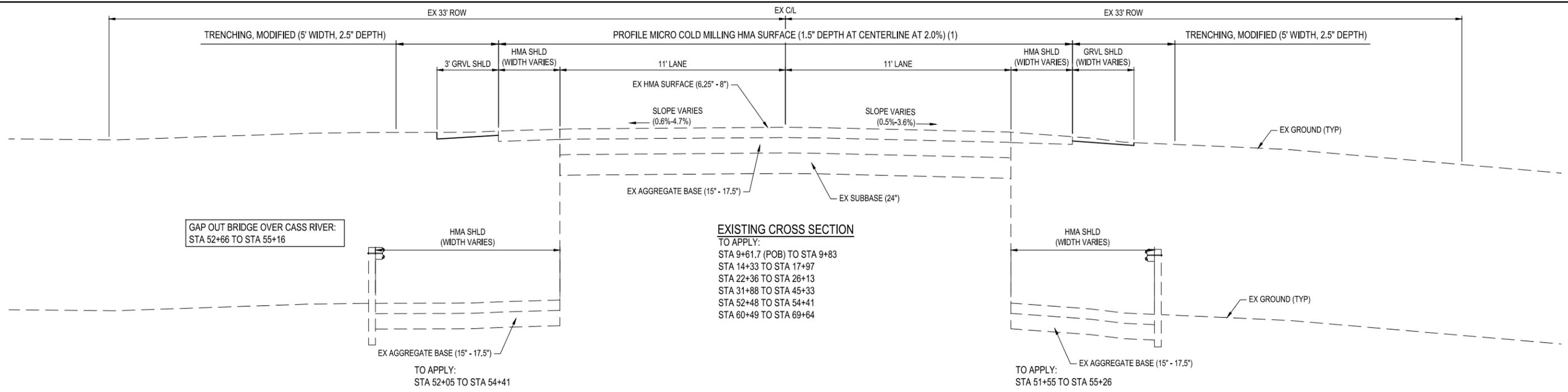


SGI PROJECT NO: 133724SG2023
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**NOTE SHEET
CHAMBERS ROAD**

DRAWING	SHEET
NOTE	3

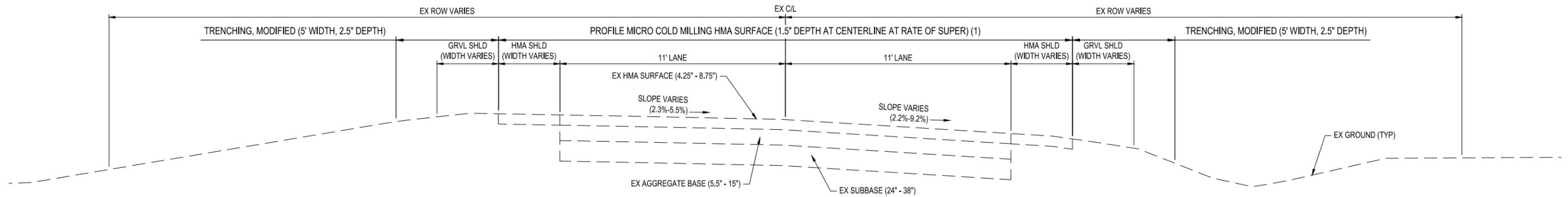


EXISTING CROSS SECTION

TO APPLY:
 STA 9+61.7 (POB) TO STA 9+83
 STA 14+33 TO STA 17+97
 STA 22+36 TO STA 26+13
 STA 31+88 TO STA 45+33
 STA 52+48 TO STA 54+41
 STA 60+49 TO STA 69+64

TO APPLY:
 STA 52+05 TO STA 54+41

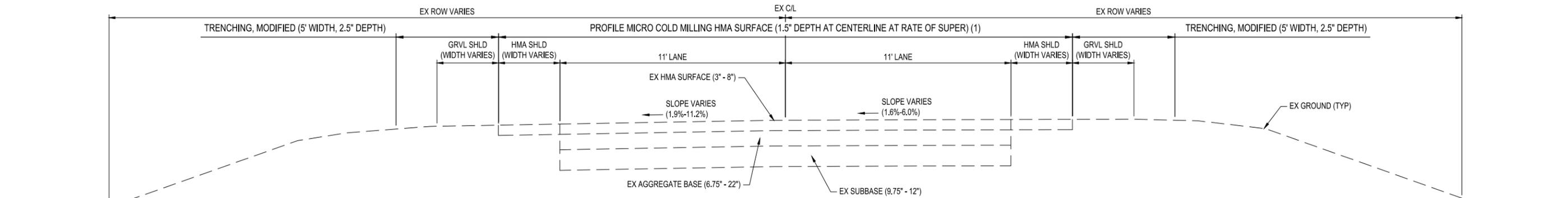
TO APPLY:
 STA 51+55 TO STA 55+26



EXISTING CROSS SECTION

TO APPLY:
 STA 9+83 TO STA 14+33
 STA 17+97 TO STA 22+36
 STA 54+41 TO STA 60+49

(1) COLD MILLING DEPTH VARIES FROM STA 9+98 TO STA 11+99
 SEE PROFILE SHEETS FOR PROPOSED CENTERLINE ELEVATIONS
 COLD MILLING DEPTH VARIES FROM STA 44+87 TO STA 52+24
 SEE PROFILE SHEETS FOR PROPOSED CENTERLINE ELEVATIONS
 COLD MILLING DEPTH VARIES FROM STA 55+26 TO STA 60+39
 SEE PROFILE SHEETS FOR PROPOSED CENTERLINE ELEVATIONS



EXISTING CROSS SECTION

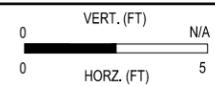
TO APPLY:
 STA 26+13 TO STA 31+88
 STA 45+33 TO STA 52+48
 STA 69+64 TO STA 72+81.1 (POE)

4/26/2024 8:22 AM Ryan.Sullivan

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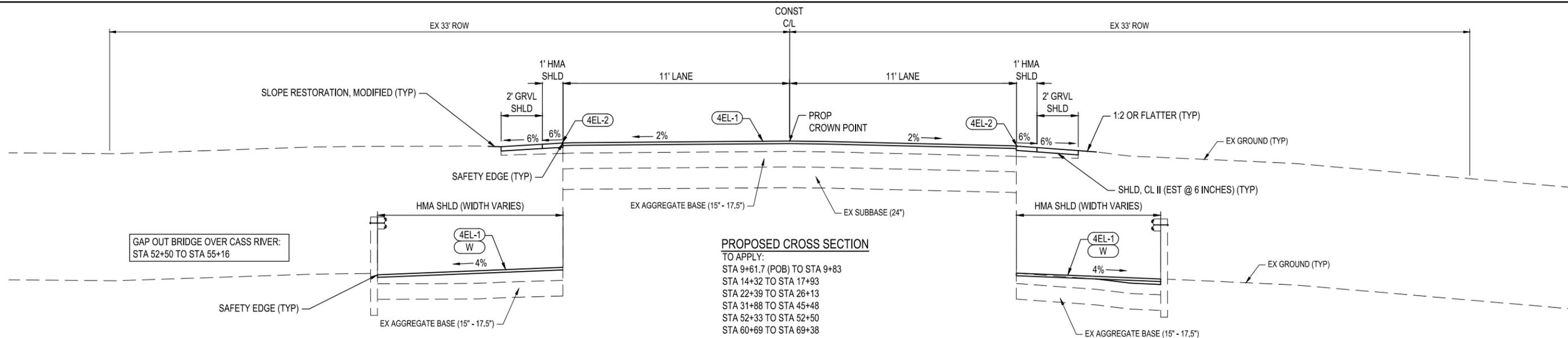
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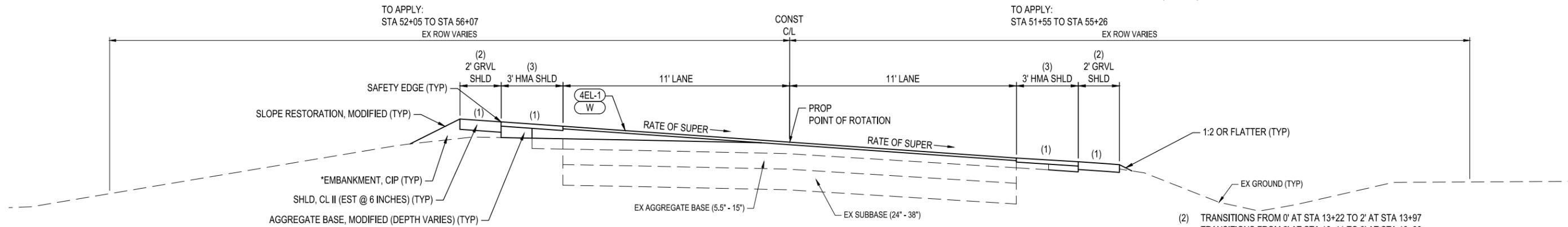
TYPICAL CROSS SECTIONS		DRAWING	SHEET
CHAMBERS ROAD		TYP1	4



PROPOSED CROSS SECTION

TO APPLY:
 STA 9+61.7 (POB) TO STA 9+83
 STA 14+32 TO STA 17+93
 STA 22+39 TO STA 26+13
 STA 31+88 TO STA 45+48
 STA 52+33 TO STA 52+50
 STA 60+69 TO STA 69+38

GAP OUT BRIDGE OVER CASS RIVER:
 STA 52+50 TO STA 55+16



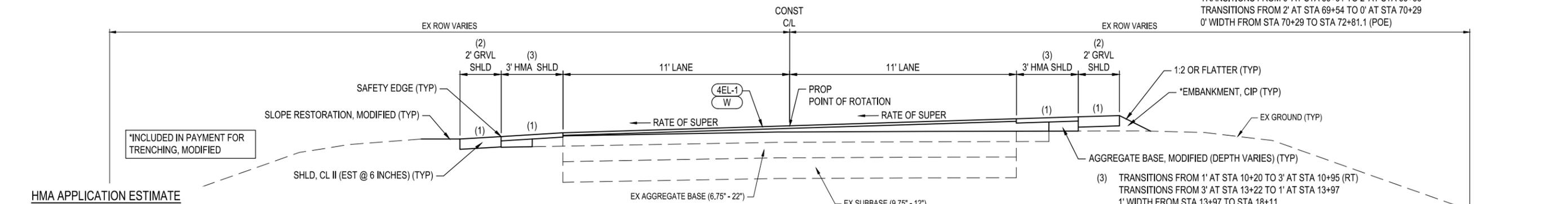
PROPOSED CROSS SECTION

TO APPLY:
 STA 9+83 TO STA 14+32
 STA 17+93 TO STA 22+39
 STA 55+16 TO STA 60+69

(2) TRANSITIONS FROM 0' AT STA 13+22 TO 2' AT STA 13+97
 TRANSITIONS FROM 2' AT STA 18+11 TO 0' AT STA 18+86
 0' WIDTH FROM STA 18+86 TO STA 21+45
 TRANSITIONS FROM 0' AT STA 21+45 TO 2' AT STA 22+20
 TRANSITIONS FROM 2' AT STA 26+45 TO 0' AT STA 27+22
 0' WIDTH FROM STA 27+22 TO STA 30+80
 TRANSITIONS FROM 0' AT STA 30+80 TO 2' AT STA 31+55
 TRANSITIONS FROM 2' AT STA 45+56 TO 0' AT STA 46+31
 0' WIDTH FROM STA 46+31 TO STA 59+91
 TRANSITIONS FROM 0' AT STA 59+91 TO 2' AT STA 60+66
 TRANSITIONS FROM 2' AT STA 69+54 TO 0' AT STA 70+29
 0' WIDTH FROM STA 70+29 TO STA 72+81.1 (POE)

(1) FOR SHOULDER SLOPES IN SUPER TRANSITION AND FULL SUPER, SEE STANDARD PLAN R-107 SERIES

*INCLUDED IN PAYMENT FOR TRENCHING, MODIFIED



PROPOSED CROSS SECTION

TO APPLY:
 STA 26+13 TO STA 31+88
 STA 45+48 TO STA 52+33
 STA 69+38 TO STA 72+81.1 (POE)

(3) TRANSITIONS FROM 1' AT STA 10+20 TO 3' AT STA 10+95 (RT)
 TRANSITIONS FROM 3' AT STA 13+22 TO 1' AT STA 13+97
 1' WIDTH FROM STA 13+97 TO STA 18+11
 TRANSITIONS FROM 1' AT STA 18+11 TO 3' AT STA 18+86
 TRANSITIONS FROM 3' AT STA 21+45 TO 1' AT STA 22+20
 1' WIDTH FROM STA 22+20 TO STA 26+45
 TRANSITIONS FROM 1' AT STA 26+45 TO 3' AT STA 27+22
 TRANSITIONS FROM 3' AT STA 30+80 TO 1' AT STA 31+55
 1' WIDTH FROM STA 31+55 TO STA 45+56
 TRANSITIONS FROM 1' AT STA 45+56 TO 3' AT STA 46+31
 TRANSITIONS FROM 3' AT STA 59+91 TO 1' AT STA 60+66
 1' WIDTH FROM STA 60+66 TO STA 69+54
 TRANSITIONS FROM 1' AT STA 69+54 TO 3' AT STA 70+29

HMA APPLICATION ESTIMATE

IDENT NO.	ITEM	RATE LBS PER SYD	PERFORMANCE GRADE	REMARKS
4EL-1	HMA, 4EL	165	58-28	HMA TOP COURSE
4EL-2	HMA, 4EL	275	58-28	HMA TOP COURSE; SHOULDERS
W	HMA, 4EL	0-330	58-28	HMA WEDGING COURSE
HA	HMA APPROACH	165	58-28	DRIVEWAYS AND INTERSECTIONS; HMA, 4EL

PLACE HMA BOND COAT AT 0.05-0.15 GAL/SYD BETWEEN LAYERS AS DIRECTED BY THE ENGINEER (INCLUDED IN PAYMENT FOR HMA PAVING)
 THE AGGREGATE WEAR INDEX (AWI) FOR THE TOP COURSE SHALL BE 220 MINIMUM

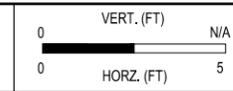
FOR INFORMATION ONLY

TRENCHING, MODIFIED	
VOLUME	ITEM
265 CYD	EMBANKMENT, CIP
315 CYD	EXCAVATION, EARTH

4/26/2024 8:22 AM Ryan.Sullivan

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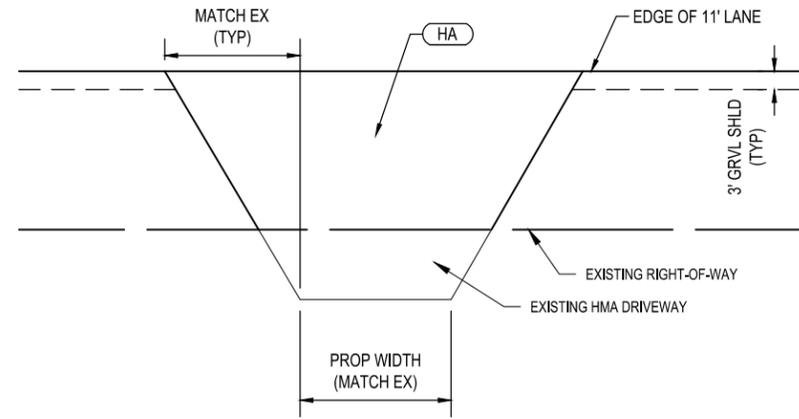
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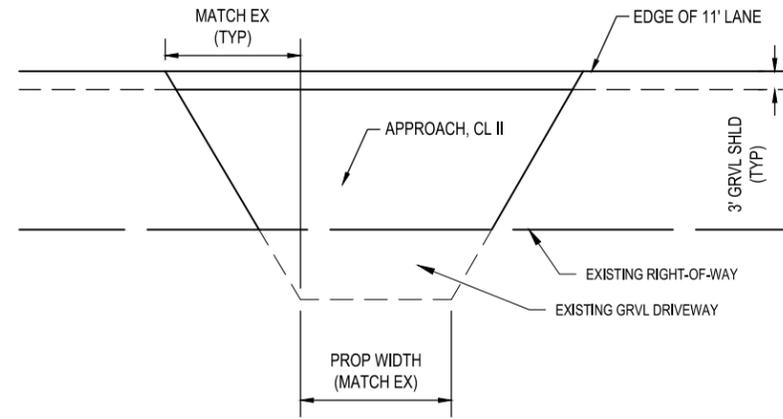
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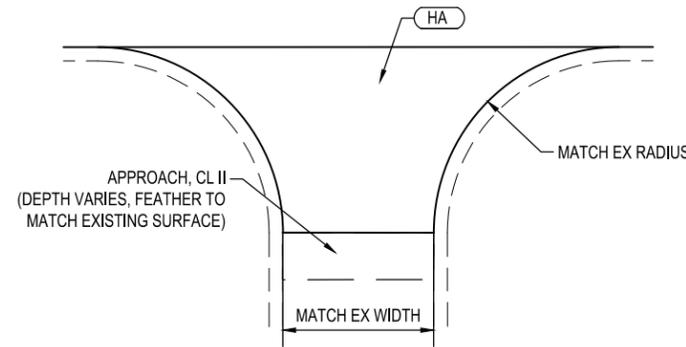
TYPICAL CROSS SECTIONS		DRAWING	SHEET
CHAMBERS ROAD			
		TYP2	5



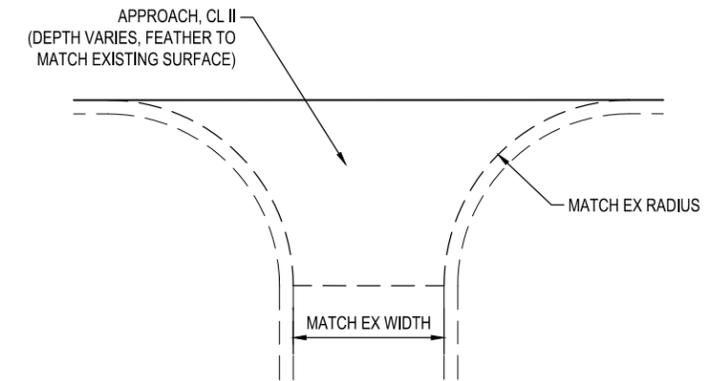
HMA DRIVEWAY REPAIR DETAIL



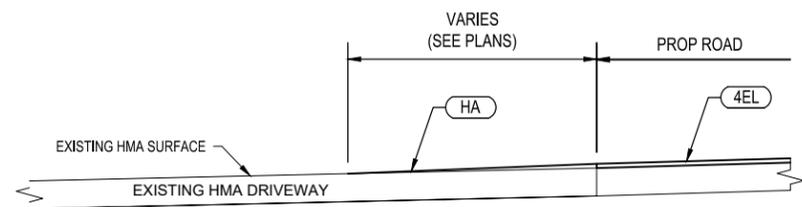
GRAVEL DRIVEWAY REPAIR DETAIL



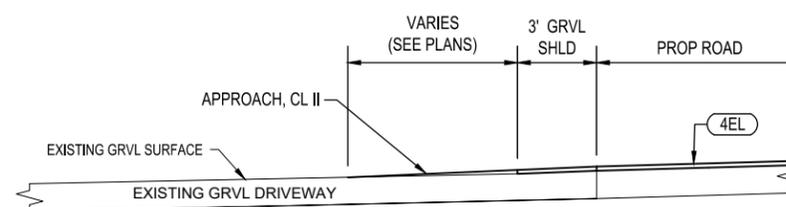
HMA SIDE STREET APPROACH DETAIL
(BRUISEE RD/WELLS RD)



GRAVEL SIDE STREET APPROACH DETAIL
(WASHBURN RD)



HMA DRIVEWAY REPAIR
CROSS SECTION
(10% MAX SLOPE)



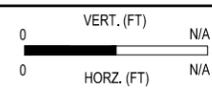
GRAVEL DRIVEWAY REPAIR
CROSS SECTION
(10% MAX SLOPE)

4/4/2024 3:51 PM ryan.sullivan

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JN: 217988

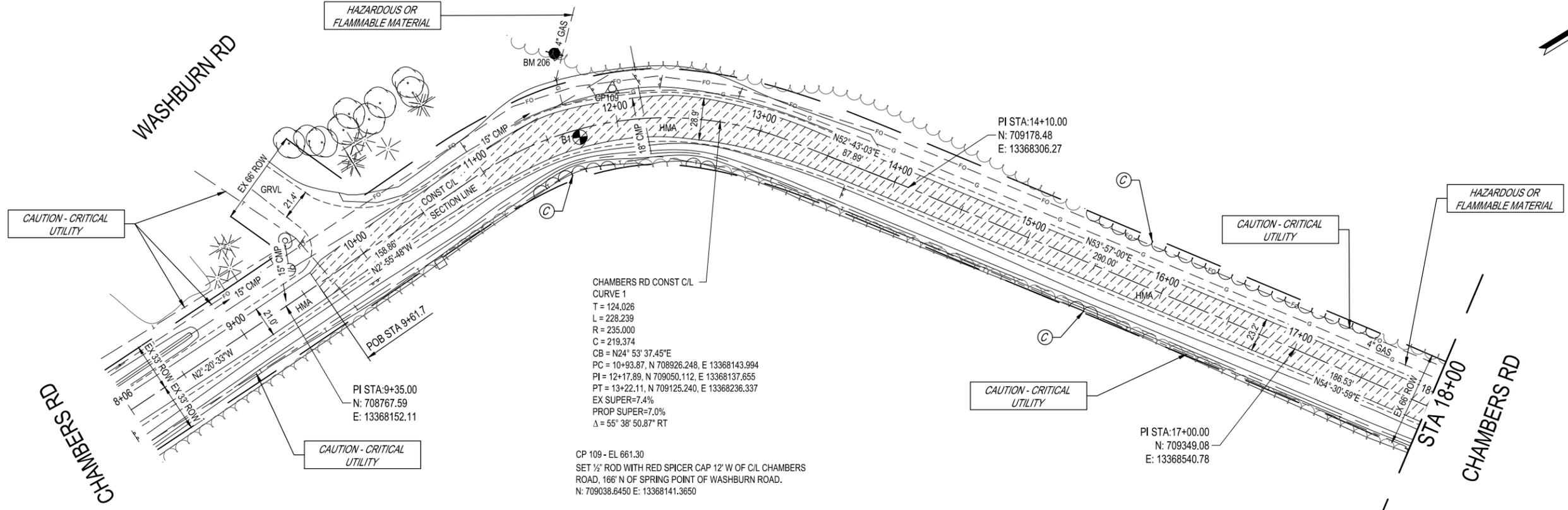
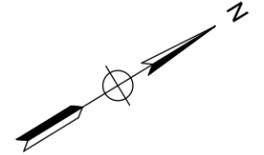
MISCELLANEOUS DETAILS
CHAMBERS ROAD

DRAWING	SHEET
DETS	6

SECTION 19
T12N, R9E
INDIANFIELDS TWP

BM 206 - EL 659.203
SET GEAR SPIKE IN SOUTH FACE OF POWER
POLE 45' W OF CHAMBERS ROAD, NORTHWEST
OF SPRING POINT OF CHAMBERS ROAD.
N: 709017.1190 E: 13368099.4500

SECTION 20
T12N, R9E
INDIANFIELDS TWP



CHAMBERS RD CONST C/L
CURVE 1
T = 124.026
L = 228.239
R = 235.000
C = 219.374
CB = N24° 53' 37.45"E
PC = 10+93.87, N 708926.248, E 13368143.994
PI = 12+17.89, N 709050.112, E 13368137.655
PT = 13+22.11, N 709125.240, E 13368236.337
EX SUPER=7.4%
PROP SUPER=7.0%
Δ = 55° 38' 50.87" RT

CP 109 - EL 661.30
SET 1/2" ROD WITH RED SPICER CAP 12' W OF C/L CHAMBERS
ROAD, 166' N OF SPRING POINT OF WASHBURN ROAD.
N: 709038.6450 E: 13368141.3650

SECTION 20
T12N, R9E
INDIANFIELDS TWP

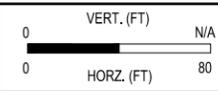
REMOVAL QUANTITIES - THIS SHEET
0.01 Acre Clearing
17 Sta Trenching, Modified
2281 Syd Micro Texture Pavt Milling

5/14/2024 10:47 AM caleb.hughes

FINAL PLAN REVISIONS			
NO.	DATE	AUTH	DESCRIPTION



SAGINAW OFFICE
230 S. Washington Ave.
Saginaw, MI 48607
Tel. 989-754-4717
Fax. 989-754-4440
www.SpicerGroup.com



SGI PROJECT NO: 133724SG2023
DATE: MAY, 2024
FILE: LP_REM.DWG

CS: 79000
JN: 217988

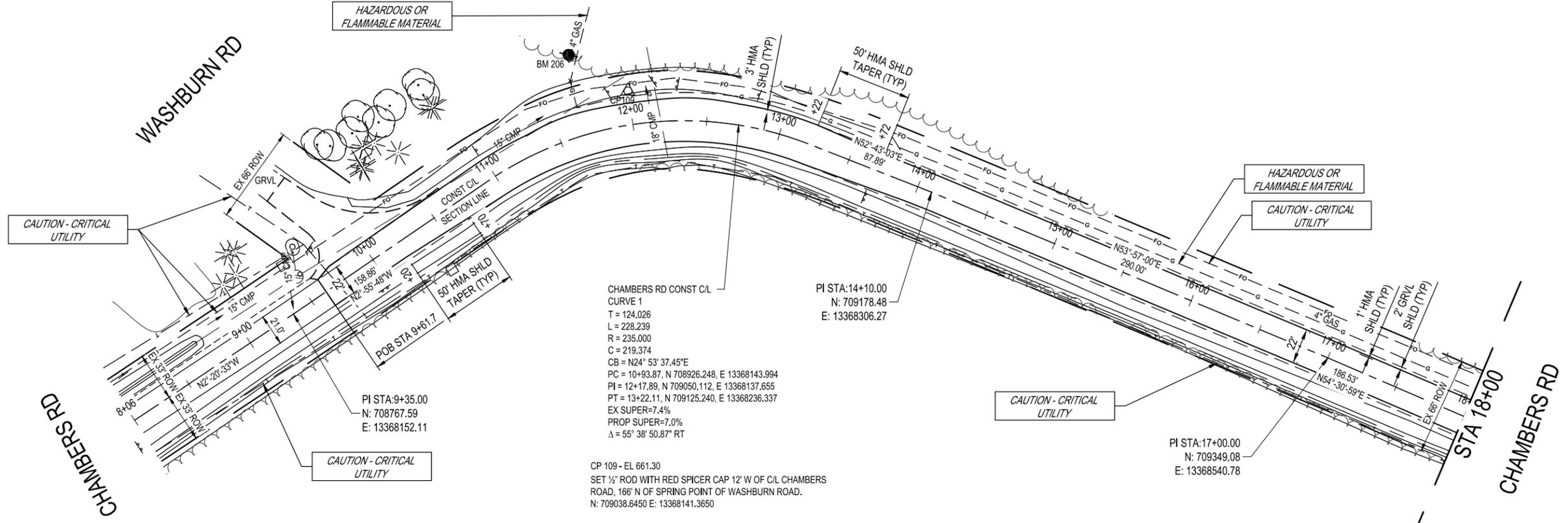
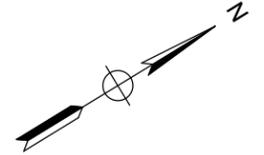
REMOVAL
CHAMBERS ROAD
STA 9+61.7 (POB) TO STA 18+00

DRAWING SHEET
REM1 7

SECTION 19
T12N, R9E
INDIANFIELDS TWP

BM 206 - EL 659.203
SET GEAR SPIKE IN SOUTH FACE OF POWER
POLE 45' W OF CHAMBERS ROAD, NORTHWEST
OF SPRING POINT OF CHAMBERS ROAD.
N: 709017.1190 E: 13368099.4500

SECTION 20
T12N, R9E
INDIANFIELDS TWP



CHAMBERS RD CONST C/L
CURVE 1
T = 124.026
L = 228.239
R = 235.000
C = 219.374
CB = N24° 53' 37.45"E
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PI = 12+17.89, N 709050.112, E 13368137.655
PT = 13+22.11, N 709125.240, E 13368236.337
EX SUPER=7.4%
PROP SUPER=7.0%
Δ = 55° 38' 50.87" RT

CP 109 - EL 661.30
SET 1/2" ROD WITH RED SPICER CAP 12' W OF C/L CHAMBERS
ROAD, 166' N OF SPRING POINT OF WASHBURN ROAD.
N: 709038.6450 E: 13368141.3650

INTERSECTION QUANTITIES - WASHBURN RD
41 Ton Approach, CI II

SECTION 20
T12N, R9E
INDIANFIELDS TWP

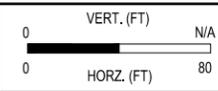
CONSTRUCTION QUANTITIES - THIS SHEET
21 Ton Aggregate Base
123 Ton Shld, CI II
353 Ton HMA, 4EL

4/26/2024 2:43 PM jake.roberts

FINAL PLAN REVISIONS			
NO.	DATE	AUTH	DESCRIPTION



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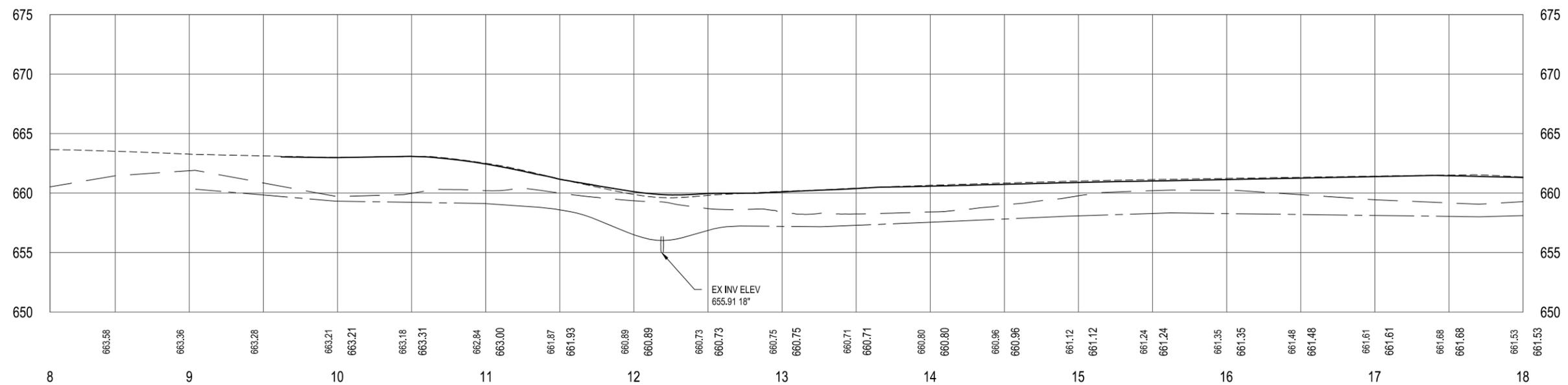
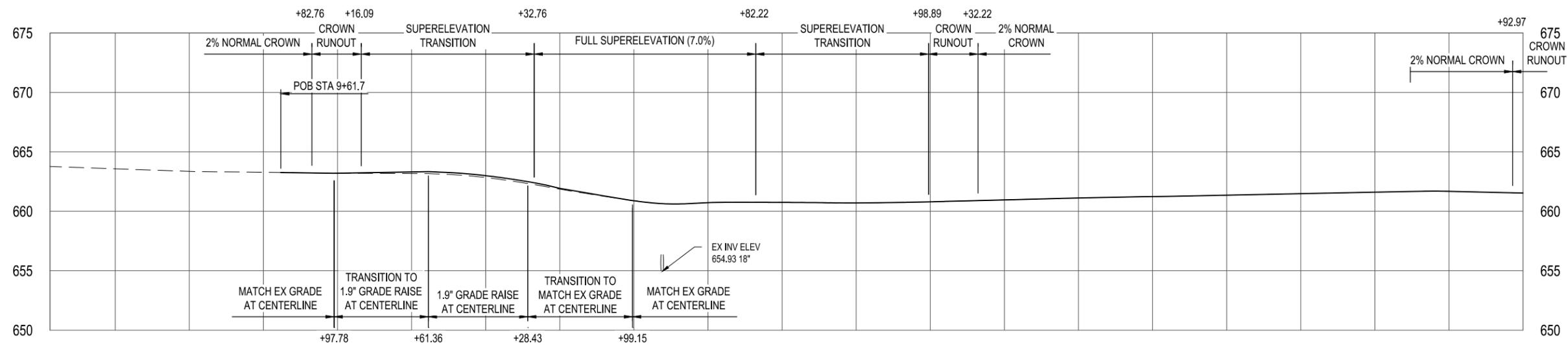
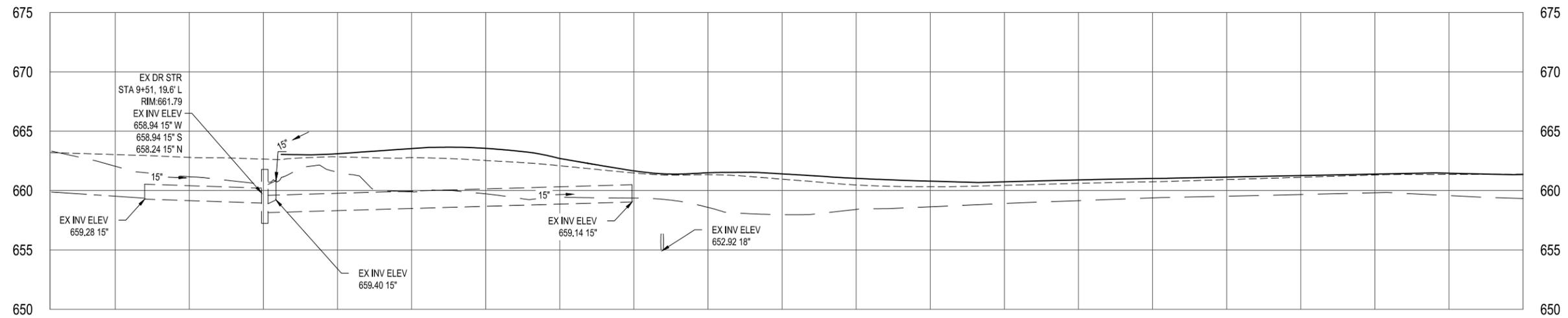


SGI PROJECT NO: 133724SG2023
DATE: APRIL, 2024
FILE: LP_PLAN.DWG

CS: 79000
JN: 217988

CONSTRUCTION
CHAMBERS ROAD
STA 9+61.7 (POB) TO STA 18+00

DRAWING	SHEET
CON1	8

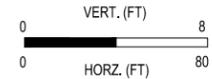


4/26/2024 9:47 AM jake.roberts

FINAL PLAN REVISIONS			
NO.	DATE	AUTH	DESCRIPTION



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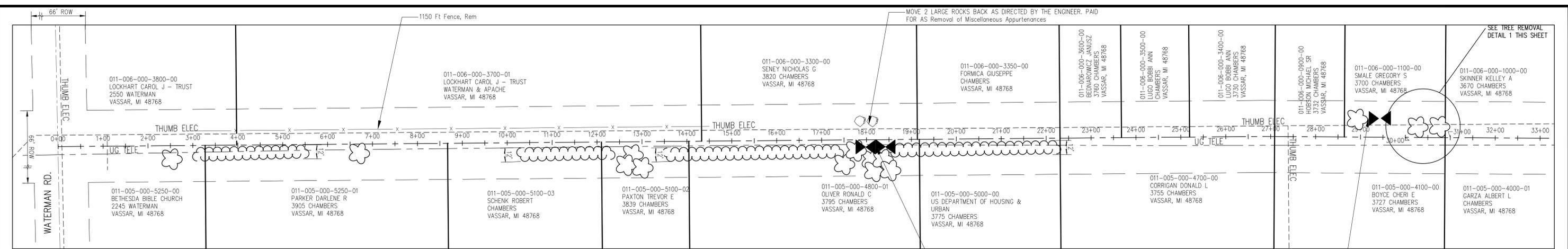


SGI PROJECT NO: 133724SG2023
DATE: APRIL, 2024
FILE: LP_PROF.DWG

CS: 79000
JN: 217988

PROFILE
CHAMBERS ROAD
STA 9+61.7 (POB) TO STA 18+00

DRAWING SHEET
PROF1 9

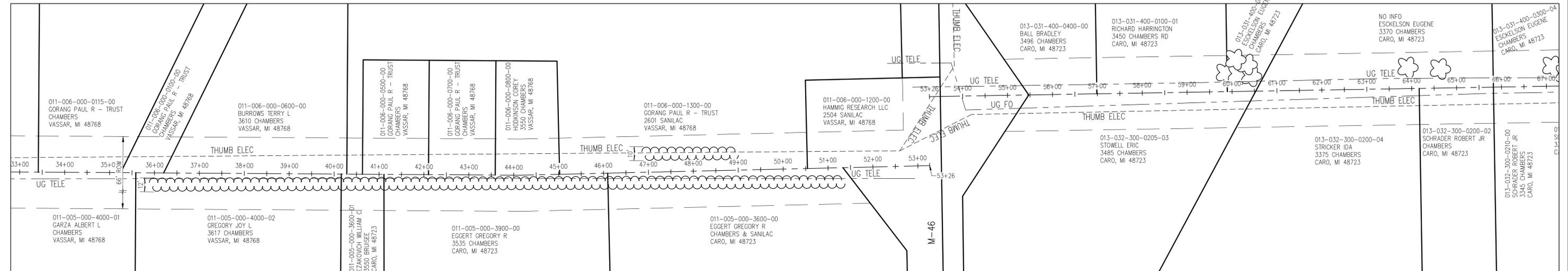
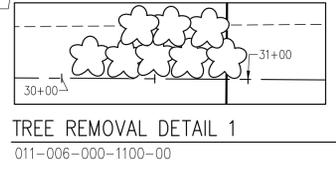


FROM POB STA 0+00 (WATERMAN RD) TO STA 33+00

	RIGHT	LEFT	TOTAL (Ea)		LENGTH	WIDTH	TOTAL (Acre)
Tree, Rem, 6 inch to 18 inch	7	9	16	Clearing - Left	0	0	0
Tree, Rem, 19 inch to 36 inch	1	0	1	Clearing - Right	1220'	12'	0.3
Tree, Rem, 37 inch or Larger	1	0	1	Slope Restoration	807	Syd	
Tree Removal	2	0	2				

CHAMBERS ROAD
POB STA. 0+00 TO STA. 33+00

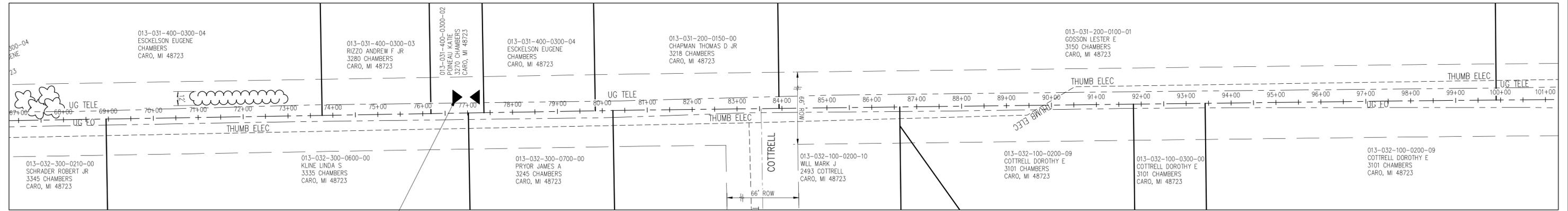
- REMOVE 2 EX CULVERTS AND REPLACE WITH 1 CULVERT AT 3795 CHAMBERS RD. PAYMENT FOR HEADWALL REMOVAL INCLUDED IN Removal of Miscellaneous Appurtenances:
 - Culv, Rem, 24 inch to 48 inch: 2 Each
 - Culv, Cl F, 36 inch: 177 Ft
 - Culv, Slp End Sect, 1 on 6, 36 inch, Longit: 2 Each
 - Approach, Cl II: 10 Ton
 - Erosion Control, Silt Fence: 50 Ft
 - Slope Restoration: 80 Syd
- REMOVE AND REPLACE EX CULVERT AT 3700 CHAMBER RD. PAYMENT FOR HEADWALL REMOVAL INCLUDED IN Removal of Miscellaneous Appurtenances:
 - Culv, Rem, Less than 24 inch: 1 Each
 - Culv, Cl F, 12 inch: 42 Ft
 - Culv, End Sect, 12 inch, Approach, Cl II: 2 Each
 - Erosion Control, Silt Fence: 5 Ton
 - Slope Restoration: 25 Ft
 - Slope Restoration: 40 Syd



FROM STA 33+00 TO STA 67+00

	RIGHT	LEFT	TOTAL (Ea)		LENGTH	WIDTH	TOTAL (Acre)
Tree, Rem, 6 inch to 18 inch	0	7	7	Clearing - Left	200'	10'	0.1
Tree, Rem, 19 inch to 36 inch	0	0	0	Clearing - Right	1525'	12'	0.4
Tree, Rem, 37 inch or Larger	0	0	0	Slope Restoration	565	Syd	
Tree Removal	0	0	0				

CHAMBERS ROAD
STA. 33+00 TO STA. 67+00

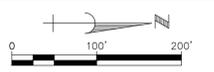


- REMOVE AND REPLACE EX CULVERT AT 3270 CHAMBERS RD. PAYMENT FOR HEADWALL REMOVAL INCLUDED IN Removal of Miscellaneous Appurtenances:
 - Culv, Rem, Less than 24 inch: 1 Each
 - Culv, Cl F, 12 inch: 51 Ft
 - Culv End Sect, 12 inch: 2 Each
 - Approach, Cl II: 5 Ton
 - Erosion Control, Silt Fence: 25 Ft
 - Slope Restoration: 40 Syd

CHAMBERS ROAD
STA. 67+00 TO STA. 101+00

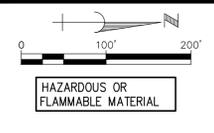
FROM STA 67+00 TO STA 101+00

	RIGHT	LEFT	TOTAL (Ea)		LENGTH	WIDTH	TOTAL (Acre)
Tree, Rem, 6 inch to 18 inch	0	4	4	Clearing - Left	200'	12'	0.1
Tree, Rem, 19 inch to 36 inch	0	0	0	Clearing - Right	0	0	0
Tree, Rem, 37 inch or Larger	0	0	0	Slope Restoration	147	Syd	
Tree Removal	0	0	0				



HAZARDOUS OR FLAMMABLE MATERIAL

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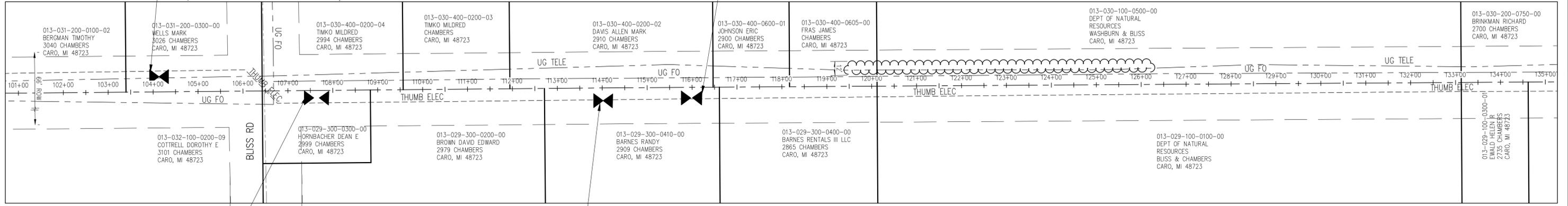
REMOVE AND REPLACE EX CULVERT AT 3026 CHAMBERS RD.
PAYMENT FOR HEADWALL REMOVAL INCLUDED IN Removal of Miscellaneous Appurtenances:

- Culv, Rem, Less than 24 inch 1 Each
- Culv, Cl F, 18 inch 44 Ft
- Culv, Slip End Sect, 1 on 6, 18 inch, Longit 2 Each
- Approach, CL II 5 Ton
- Erosion Control, Silt Fence 25 Ft
- Slope Restoration 40 Syd

REMOVE AND REPLACE EX CULVERT AT 2909 CHAMBERS RD. PAYMENT FOR HEADWALL REMOVAL INCLUDED IN Removal of Miscellaneous Appurtenances:

- Culv, Rem, 24 inch to 48 inch 1 Each
- Culv, Cl F, 24 inch 30 Ft
- Culv, Slip End Sect, 1 on 6, 24 inch, Longit 2 Each
- Approach, CL II 5 Ton
- Erosion Control, Silt Fence 25 Ft
- Slope Restoration 40 Syd

NOTE:
WORK ON MICHIGAN DNR LAND: SEE APPLICATION/PERMIT TO USE STATE LAND THAT IS LOCATED IN THE PROPOSAL



REMOVE AND REPLACE EX CULVERT AT 2999 CHAMBERS RD. PAYMENT FOR HEADWALL REMOVAL INCLUDED IN Removal of Miscellaneous Appurtenances:

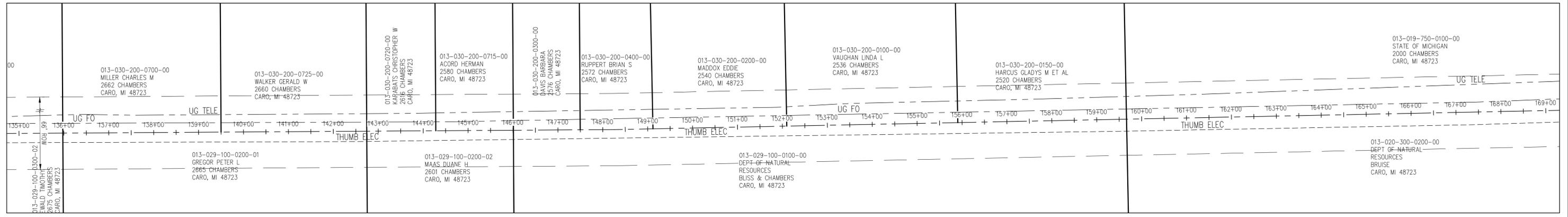
- Culv, Rem, Less than 24 inch 1 Each
- Culv, Cl F, 12 inch 55 Ft
- Culv End Sect, 12 inch 2 Each
- Approach, CL II 5 Ton
- Erosion Control, Silt Fence 25 Ft
- Slope Restoration 40 Syd

REMOVE AND REPLACE EX CULVERT AT 2909 CHAMBER RD. PAYMENT FOR HEADWALL REMOVAL INCLUDED IN Removal of Miscellaneous Appurtenances:

- Culv, Rem, 24 inch to 48 inch 1 Each
- Culv, Cl F, 24 inch 31 Ft
- Culv, Slip End Sect, 1 on 6, 24 inch, Longit 2 Each
- Approach, CL II 5 Ton
- Erosion Control, Silt Fence 25 Ft
- Slope Restoration 40 Syd

CHAMBERS ROAD
STA. 101+00 TO STA. 135+00

FROM STA 101+00 TO STA 135+00							
	RIGHT	LEFT	TOTAL (Eq)		LENGTH	WIDTH	TOTAL (Acre)
Tree, Rem, 6 inch to 18 inch	0	0	0	Clearing - Left	675'	12'	0.2
Tree, Rem, 19 inch to 36 inch	0	0	0	Clearing - Right	0	0	0
Tree, Rem, 37 inch or Larger	0	0	0	Slope Restoration	225	Syd	
Tree Removal	0	0	0				

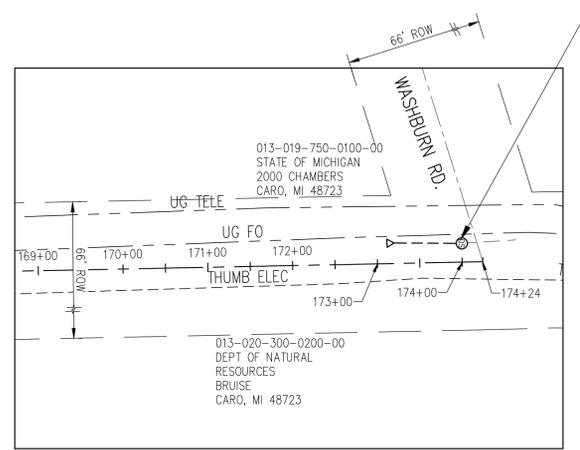


CHAMBERS ROAD
STA. 135+00 TO STA. 169+00

FROM STA 135+00 TO STA 169+00							
	RIGHT	LEFT	TOTAL (Eq)		LENGTH	WIDTH	TOTAL (Acre)
Tree, Rem, 6 inch to 18 inch	0	0	0	Clearing - Left	0	0	0
Tree, Rem, 19 inch to 36 inch	0	0	0	Clearing - Right	0	0	0
Tree, Rem, 37 inch or Larger	0	0	0	Slope Restoration	0	Syd	
Tree Removal	0	0	0				

PLACE DRAINAGE STRUCTURE OVER EXISTING CULVERT AND EXTEND STORM ALONG ROAD:

- Dr Structure, 48 inch dia 1 Each
- Sewer, Cl A, 15 inch, Tr Det A 80 Ft
- Dr Structure Cover, Type E 1 Each
- Culv, End Sect, 15 inch 1 Each
- Erosion Control, Silt Fence 200 Ft
- Slope Restoration 150 Syd



FROM STA 169+00 TO POE STA 174+24							
	RIGHT	LEFT	TOTAL (Eq)		LENGTH	WIDTH	TOTAL (Acre)
Tree, Rem, 6 inch to 18 inch	0	0	0	Clearing - Left	0	0	0
Tree, Rem, 19 inch to 36 inch	0	0	0	Clearing - Right	0	0	0
Tree, Rem, 37 inch or Larger	0	0	0	Slope Restoration	0	Syd	
Tree Removal	0	0	0				

CHAMBERS ROAD
STA. 169+00 TO POE STA. 174+24

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ENGINEERING • ARCHITECTURE • SURVEYING

405 RIVER STREET
ALPENA, MICHIGAN 49707
(989) 354-3178

TUSCOLA COUNTY ROAD COMMISSION
CHAMBERS ROAD
SEC. 5, 6, 7, 8, FREMONT TWP., T11N-R9E
SEC. 19, 20, 29, 30, 31, 32, INDIAN FIELDS., T12N-R9E

SITE PLAN

BY:	DATE:	SHEET NO.
AAR	5/19	
CHK:	DATE:	13
SJB	5/19	

W.O. 79-435 OF 13