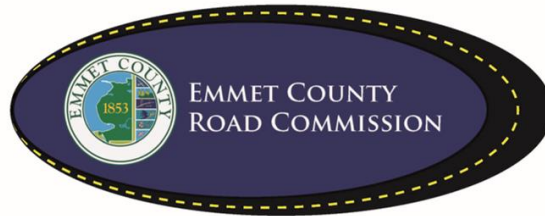


Wade Williams
Mark W. Hoffman
Frank Zulski, Jr.
Brent Shank, PE
Engineer-Manager
Lisa Kleeman
Finance Director



2265 E. Hathaway Road
Harbor Springs, MI 49740
Office: (231) 347-8142
Fax: (231) 347-5787
www.emmetcrc.org

REQUEST FOR PROPOSAL

Project: The Emmet County Road Commission will receive sealed proposals for Construction Inspection Services for the Douglas Lake Road over the E. Branch of the Maple River culvert removal / bridge installation project in McKinley Township. The project design is being funded through the U.S. Fish and Wildlife Great Lakes Fish and Wildlife Restoration Act and USDA Natural Resources Conservation Service through the Conservation Resource Alliance.

The Emmet County Road Commission will accept Bids until **9:00 a.m.** local time on **January 3, 2023** at: 2265 E. Hathaway Road, Harbor Springs, MI 49740. Bid packages are available at the Emmet County Road Commission Office or on Emmet County Road Commission website at www.emmetcrc.org.

ALL PROPOSALS WILL BE SEALED AND PLAINLY MARKED AS "RFP FOR INSPECTION SERVICES".

THE BIDDER UNDERSTANDS AND AGREES THAT THE EMMET COUNTY ROAD COMMISSION RESERVES THE RIGHT TO REJECT ANY AND ALL BIDS; TO WAIVE IRREGULARITIES OR INFORMALITIES; AND NO CONTRACTUAL RELATIONSHIP SHALL EXIST BETWEEN THE BIDDER AND THE EMMET COUNTY ROAD COMMISSION FOR THE WORK DESCRIBED HEREIN UNTIL SUCH TIME AS THE CONTRACT HAS BEEN FORMALLY EXECUTED BY BOTH THE BIDDER AND THE EMMET COUNTY ROAD COMMISSION.

December 5, 2022

Project Facts

The Conservation Resource Alliance was awarded National Fish and Wildlife Foundation, USFW Fish Passage, and USDA Natural Resources Conservation Services (NRCS) funding for replacement of the undersized culverts and timber bridge installation on Douglas Lake Road over E. Branch of the Maple River.

The current Douglas Lake Road crossing consists of a 6' diameter corrugated metal culvert and a 4' diameter corrugated metal culvert. The culverts are undersized for the crossing causing erosion on the downstream side of the river.

Douglas Lake Road currently has a 22' wide hard surface. The right-of-way is 66' wide and the road is centered in its own right-of-way. The 2019 traffic count for this section of road was 353. Douglas Lake Road is a county local road.

Since NRCS funds are involved with the project, the following will also be required by the consultant:

“Fulfill Natural Resources Conservation Service (NRCS) inspection requirements. Comply with NRCS Source 4 Non-NRCS Engineer requirements for the NRCS Roles and Responsibilities for Engineering Technical Assistance to USDA Program Participants document. The NRCS engineering contact for this project is Andrea Paladino, NRCS Civil Engineer in Traverse City. She can be reached at 231-486-2523 and cell 989-698-6036.”

The Road Commission intends to contract: 1) Timber Bridge Supply, 2) Culvert Removal and bridge installation, 3) Approach Preparation and HMA Paving, and 4) Guardrail Installation.

The Road Commission intends to provide Traffic Control (Detour), Existing Guardrail Removal and Slope Restoration. A designated Engineering staff member of the Road Commission will be the Project Manager for the project.

Scope of work to be completed:

- Provide Inspection and complete IDR daily for all aspects of work taking place during the duration of the project.
- Construction material testing (HMA, Aggregate, etc.) and Density Testing (via. Nuclear Gauge)
- Be responsible for Soil Erosion and Sedimentation Control (SESC) and Construction Storm Water. Consultant shall complete NPDES Stormwater Reports as required.
- All Documentation materials, as-builds, and proper forms be completed for project close out and be submitted to Natural Resources Conservation Service (NRCS).
- All inspection documentation shall follow current MDOT, FHWA and NRCS guidelines.

Project Submittals

The Consultant must submit 1 copy of the proposal.

Past experiences with MEGLE permitting and NRCS requirements, references, and estimated cost to complete the necessary work.

Proposals will be evaluated on the Evaluation Scale listed below of this request. Point values will be awarded on a sliding scale based upon proposal information provided and total point values in each category are not guaranteed.

Evaluation Scale

(Total Possible Points = 100)

Qualifications and experience of staff dedicated to this project	15
Experience with MEGLE permitting	15
Experience working on NRCS projects	25
Responsiveness – Time schedule to complete work	25
Total cost and hourly rate	20
Total Score	100

Additional Information

The Road Commission is expected to select the consultant at its next regularly scheduled board meeting following RFP due date.



NOTICE OF AUTHORIZATION

Permit Number: WRP033421 v. 1

Date Issued: May 9, 2022

Site Name: 24 - Douglas Lake Road over East Branch Maple River

Expiration Date: May 9, 2027

The Michigan Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division, P.O. Box 30458, Lansing, Michigan 48909-7958, under provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; specifically:

- Part 31, Floodplain Regulatory Authority of the Water Resources Protection.
- Part 301, Inland Lakes and Streams.
- Part 303, Wetlands Protection.
- Part 315, Dam Safety.
- Part 323, Shorelands Protection and Management.
- Part 325, Great Lakes Submerged Lands.
- Part 353, Sand Dunes Protection and Management.

Authorized activity:

Remove the existing twin, 58 foot long by 5-foot diameter corrugated metal culverts and install a 28 foot long by 28-foot span by 6.85-foot rise timber bridge at the Douglas Lake Road crossing of the East Branch of the Maple River. Place a total of 37 cubic yards of rock riprap for scour protection at the bridge abutments. Place a maximum of 295 cubic yard of fill in 0.05 acres of wetland for roadway improvements and installation of the bridge.

All work shall be performed according to the attached plans and permit conditions.

To be conducted at property located in: Emmet County, Waterbody: East Branch Maple River
Emmet County, McKinley Township, Town/Range/Section 37N04W25

Permittee:

Emmet County Road Commission
2265 E Hathaway Road
Harbor Springs, Michigan 49740

Issued By:

John Gustafson
Marquette District Office
Water Resources Division
906-203-9887

*This notice must be displayed at the site of work.
Laminating this notice or utilizing sheet protectors is recommended.*
Please refer to the above permit number with any questions or concerns.

EGLE-WRD
WRP033421 v1.0
Approved
Issued On:05/09/2022
Expires On:05/09/2027



**MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
WATER RESOURCES DIVISION PERMIT**

Issued To:

**Emmet County Road Commission
2265 E Hathaway Road
Harbor Springs, Michigan 49740**

Permit No: WRP033421 v.1
Submission No.: HPE-N05W-QN3C4
Site Name: 24 - Douglas Lake Road over East Branch Maple River
Issued: May 9, 2022
Revised:
Expires: May 9, 2027

This permit is being issued by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division (WRD), under the provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA); specifically:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Part 301, Inland Lakes and Streams | <input type="checkbox"/> Part 323, Shorelands Protection and Management |
| <input checked="" type="checkbox"/> Part 303, Wetlands Protection | <input type="checkbox"/> Part 325, Great Lakes Submerged Lands |
| <input type="checkbox"/> Part 315, Dam Safety | <input type="checkbox"/> Part 353, Sand Dunes Protection and Management |
| <input checked="" type="checkbox"/> Part 31, Water Resources Protection (Floodplain Regulatory Authority) | |

EGLE certifies that the activities authorized under this permit are in compliance with the State Coastal Zone Management Program and certifies without conditions under the Federal Clean Water Act, Section 401 that the discharge from the activities authorized under this permit will comply with Michigan's water quality requirements in Part 31, Water Resources Protection, of the NREPA and associated administrative rules, where applicable.

Permission is hereby granted, based on permittee assurance of adherence to State of Michigan requirements and permit conditions, to:

Authorized Activity:

Remove the existing twin, 58 foot long by 5-foot diameter corrugated metal culverts and install a 28 foot long by 28-foot span by 6.85-foot rise timber bridge at the Douglas Lake Road crossing of the East Branch of the Maple River. Place a total of 37 cubic yards of rock riprap for scour protection at the bridge abutments. Place a maximum of 295 cubic yard of fill in 0.05 acres of wetland for roadway improvements and installation of the bridge.

All work shall be performed according to the attached plans and permit conditions.

Waterbody Affected: East Branch Maple River
Property Location: Emmet County, McKinley Township, Town/Range/Section 37N04W25

**EGLE-WRD
WRP033421 v1.0
Approved
Issued On:05/09/2022
Expires On:05/09/2027**

Authority granted by this permit is subject to the following limitations:

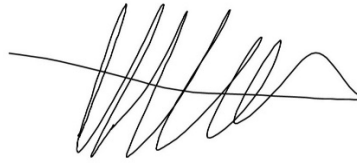
- A. Initiation of any work on the permitted project confirms the permittee's acceptance and agreement to comply with all terms and conditions of this permit.
- B. The permittee, in exercising the authority granted by this permit, shall not cause unlawful pollution as defined by Part 31 of the NREPA.
- C. This permit shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.
- D. All work shall be completed in accordance with the approved plans and specifications submitted with the application and/or plans and specifications attached to this permit.
- E. No attempt shall be made by the permittee to forbid the full and free use by the public of public waters at or adjacent to the structure or work approved.
- F. It is made a requirement of this permit that the permittee give notice to public utilities in accordance with 2013 PA 174 (Act 174) and comply with each of the requirements of Act 174.
- G. This permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits, or complying with other state statutes.
- H. This permit does not prejudice or limit the right of a riparian owner or other person to institute proceedings in any circuit court of this state when necessary to protect his rights.
- I. Permittee shall notify EGLE within one week after the completion of the activity authorized by this permit by completing and forwarding the attached preaddressed postcard to the office addressed thereon.
- J. This permit shall not be assigned or transferred without the written approval of EGLE.
- K. Failure to comply with conditions of this permit may subject the permittee to revocation of permit and criminal and/or civil action as cited by the specific state act, federal act, and/or rule under which this permit is granted.
- L. All dredged or excavated materials shall be disposed of in an upland site (outside of floodplains, unless exempt under Part 31 of the NREPA, and wetlands).
- M. In issuing this permit, EGLE has relied on the information and data that the permittee has provided in connection with the submitted application for permit. If, subsequent to the issuance of a permit, such information and data prove to be false, incomplete, or inaccurate, EGLE may modify, revoke, or suspend the permit, in whole or in part, in accordance with the new information.
- N. The permittee shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents, and representatives for any and all claims or causes of action arising from acts or omissions of the permittee, or employees, agents, or representative of the permittee, undertaken in connection with this permit. The permittee's obligation to indemnify the State of Michigan applies only if the state: (1) provides the permittee or its designated representative written notice of the claim or cause of action within 30 days after it is received by the state, and (2) consents to the permittee's participation in the proceeding on the claim or cause of action. It does not apply to contested case proceedings under the Administrative Procedures Act, 1969 PA 306, as amended, challenging the permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the permittee or any other person.
- O. Noncompliance with these terms and conditions and/or the initiation of other regulated activities not specifically authorized shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, EGLE may initiate criminal and/or civil proceedings as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.
- P. If any change or deviation from the permitted activity becomes necessary, the permittee shall request, in writing, a revision of the permitted activity from EGLE. Such revision request shall include complete documentation supporting the modification and revised plans detailing the proposed modification. Proposed modifications must be approved, in writing, by EGLE prior to being implemented.
- Q. This permit may be transferred to another person upon written approval of EGLE. The permittee must submit a written request to EGLE to transfer the permit to the new owner. The new owner must also submit a written request to EGLE to accept transfer. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties that includes all the above information may be provided to EGLE. EGLE will review the request and, if approved, will provide written notification to the new owner.

- R. Prior to initiating permitted construction, the permittee is required to provide a copy of the permit to the contractor(s) for review. The property owner, contractor(s), and any agent involved in exercising the permit are held responsible to ensure that the project is constructed in accordance with all drawings and specifications. The contractor is required to provide a copy of the permit to all subcontractors doing work authorized by the permit.
- S. Construction must be undertaken and completed during the dry period of the wetland. If the area does not dry out, construction shall be done on equipment mats to prevent compaction of the soil.
- T. Authority granted by this permit does not waive permit requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from the County Enforcing Agent (CEA).
- U. Authority granted by this permit does not waive permit requirements under the authority of Part 305, Natural Rivers, of the NREPA. A Natural Rivers Zoning Permit may be required for construction, land alteration, streambank stabilization, or vegetation removal along or near a natural river.
- V. The permittee is cautioned that grade changes resulting in increased runoff onto adjacent property is subject to civil damage litigation.
- W. Unless specifically stated in this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a wetland or on bottomland of the water body are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.
- X. For projects with potential impacts to fish spawning or migration, no work shall occur within fish spawning or migration timelines (i.e., windows) unless otherwise approved in writing by the Michigan Department of Natural Resources, Fisheries Division.
- Y. Work to be done under authority of this permit is further subject to the following special instructions and specifications:
- 1) Authority granted by this permit does not waive compliance requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA. Any discharge of sediment into waters of the state and/or off the road right-of-way is a violation of this permit, Part 91, and Part 31, Water Resources Protection, of the NREPA. A violation of these parts subjects the permittee to potential fines and penalties.
 - 2) This permit does not authorize or sanction work that has been completed in violation of applicable federal, state, or local statutes.
 - 3) The permittee is responsible for acquiring all necessary easements or rights-of-way before commencing any work authorized by this permit. All construction operations relating to, or part of this project shall be confined to the existing right-of-way limits or other acquired easements.
 - 4) Temporary soil erosion and sedimentation control measures shall be installed before or upon commencement of the earth change and shall be maintained daily. Temporary soil erosion and sedimentation control measures shall be maintained until permanent soil erosion and sedimentation control measures are in place and the area is stabilized. Permanent soil erosion and sedimentation control measures for all slopes, channels, ditches, or any disturbed area shall be installed within five (5) calendar days after final grading, or the final earth change has been completed.
 - 5) All raw areas in uplands resulting from the permitted construction activity shall be effectively stabilized with sod and/or seed and mulch (or other technology specified by this permit or project plans) in a sufficient quantity and manner to prevent erosion and any potential siltation to surface waters or wetlands. Temporary stabilization measures shall be installed before or upon commencement of the permitted activity and shall be maintained until permanent measures are in place. Permanent measures shall be in place within five (5) days of achieving final grade.

- 6) All raw earth within 100 feet of a lake, stream, or wetland that is not brought to final stabilization by the end of the active growing season shall be temporarily stabilized with mulch blankets in accordance with the following dates: September 20th for the Upper Peninsula, October 1st for the Lower Peninsula north of US-10, and October 10th for the Lower Peninsula south of US-10.
- 7) This permit placard shall be kept posted at the work site, in a prominent location at all times for the duration of the project, or until permit expiration.
- 8) This permit is being issued for the maximum time allowed and no extensions of this permit will be granted. Initiation of the construction work authorized by this permit indicates the permittee's acceptance of this condition. The permit, when signed by EGLE, will be for a five-year period beginning at the date of issuance. If the project is not completed by the expiration date, a new permit must be sought.
- 9) All fill/backfill shall consist of clean inert material that will not cause siltation nor contain soluble chemicals, organic matter, pollutants, or contaminants. All fills shall be contained in such a manner so as not to erode into any surface water, floodplain, or wetland. All raw areas associated with the permitted activity shall be stabilized with sod and/or seed and mulch, riprap, or other technically effective methods as necessary to prevent erosion.
- 10) All dredge/excavated spoils including organic and inorganic soils, vegetation, and other material removed shall be placed on upland (non-wetland, non-floodplain or non-bottomland), prepared for stabilization, and revegetated and reseeded with native Michigan species appropriate to the site and mulched in such a manner so as to prevent and ensure against erosion of any material into any waterbody, wetland, or floodplain.
- 11) During removal of the existing structures, every precaution shall be taken to prevent debris from entering any watercourse. Any debris reaching the watercourse during the removal of the structures shall be immediately retrieved from the water. All material shall be disposed of in an acceptable manner consistent with local, state, and federal regulations.
- 12) Prior to the removal of the existing structures, cofferdams of steel sheet piling, gravel bags, clean stone, coarse aggregate, concrete or other acceptable barriers shall be installed to isolate all construction activity from the water. The barriers shall be maintained in good working order throughout the duration of the project. Upon project completion, the accumulated materials shall be removed and disposed of at an upland site.
- 13) All cofferdam and temporary steel sheet pile shall then be removed in its entirety, unless specifically shown to be left in place on the accepted plans. Cofferdam and sheet pile that is left in place shall be cut off at the elevation shown on the plans and shall be a minimum of one foot below the stream bottom.
- 14) The road fill side slopes shall not be steeper than 1-on-2 (1 vertical to 2 horizontal) except where headwalls of reinforced concrete, mortar masonry, dry masonry, or other acceptable methods are used.

- 15) Road fill side slopes terminating in the stream and any raw streambanks resulting from the construction, shall be stabilized with temporary measures in accordance with appropriate Best Management Practices based on site conditions, and if necessary, may be riprapped extending above the ordinary high water mark, before or upon commencement of the permitted activity. Temporary stabilization measures shall be maintained until permanent measures are in place.
- 16) All other road fill slopes, ditches, and other raw areas draining directly to the stream may be protected with riprap, sod and/or seed and mulch as may be necessary to provide effective erosion protection. The placement of riprap shall be limited to the minimum necessary to ensure proper stabilization of the side slopes and fill in the immediate vicinity of the structure.
- 17) If the project, or any portion of the project, is stopped and lies incomplete for any length of time (other than that encountered in a normal work week) every precaution shall be taken to protect the incomplete work from erosion, including the placement of temporary gravel bag riprap, temporary seeding and mulching, or other acceptable temporary protection.
- 18) No work shall be done in the stream during periods of above-normal flows except as necessary to prevent erosion.
- 19) Rock riprap shall be placed so that it does not narrow up the stream or interfere with stream flows in and out of the bridge.
- 20) Areas to be protected by riprap shall be cleared of brush and debris. All grades shall be shaped and compacted to the required cross section. Geotextile liner shall be placed on the prepared grades. The riprap installation shall not damage the geotextile liner.
- 21) Any alterations to the existing road grade elevations other than that shown on the plans will require prior approval from the WRD.
- 22) Prior to the start of construction, all adjacent non-work wetland areas shall be protected by properly trenched sedimentation barrier to prevent sediment from entering the wetland. Orange construction fencing may be installed as needed to prohibit construction personnel from entering or performing work in these areas. Sedimentation barrier shall be maintained daily throughout the construction process. Upon project completion, the accumulated materials shall be removed and disposed of at an upland site. The sedimentation barrier shall then be removed in its entirety and the area restored to its original configuration and cover.

23) Threatened or endangered species (Hungerford’s crawling water beetle) are known to occur on or near this project site and may be impacted by your activities. The U.S. Fish and Wildlife Service’s Alpena Fish and Wildlife Conservation Office (AFWCO) is funding this project and is required to comply with the federal Endangered Species Act (ESA) prior to project implementation. Under the ESA, all Conservation Measures, Reasonable and Prudent Measures, and Terms and Conditions specified for this project in the Biological Opinion completed by FWS Michigan Ecological Services Field Office (MIESFO) are non-discretionary and must be followed, as applicable, unless modifications are approved by MIESFO. Any modifications approved by the MIESFO shall be provided to EGLE. If the project changes and federal funding is not issued (and no federal nexus otherwise exists), please contact the MIESFO at 517-351-2555 prior to commencement of construction activity to ensure ESA compliance.



Issued By:

John Gustafson
 Marquette District Office
 Water Resources Division
 906-203-9887

THIS PERMIT MUST BE SIGNED BY THE PERMITTEE TO BE VALID.

I hereby assure that I have read, am familiar with, and agree to adhere to the terms and conditions of this permit.

 Permittee Signature

 Date

cc: McKinley Township Clerk
 Emmet County Drain Commissioner
 Emmet County CEA
 U.S. Fish and Wildlife Service
 U.S. EPA
 Jeff Bridgland, EGLE
 Huron Engineering and Surveying

EMMET COUNTY ROAD COMMISSION
 IN COOPERATION WITH
THE CONSERVATION RESOURCE ALLIANCE
 PLANS OF PROPOSED IMPROVEMENTS
DOUGLAS LAKE RD OVER E BR MAPLE RIVER
 SECTION 25, T37N, R4W, MCKINLEY TOWNSHIP
 EMMET COUNTY, MICHIGAN



INDEX TO SHEETS

SHEET 1	TITLE SHEET
SHEET 2	LEGEND SHEET
SHEET 3	TYPICAL & DETAIL SHEET
SHEET 4	PLAN SHEET

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

R-82-D	BEDDING AND FILLING AROUND PIPE CULVERTS
R-83-C	UTILITY TRENCHES
R-96-E	SOIL EROSION & SEDIMENTATION CONTROL MEASURES
R-100-H	SEEDING AND TREE PLANTING
R-105-D	GRADING CROSS-SECTIONS

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174, 2013, THE CONTRACTOR SHALL DIAL 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION. 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.



GENERAL NOTES

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 MICHIGAN DEPARTMENT OF TRANSPORTATION 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174, 2013, THE CONTRACTOR SHALL DIAL 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.

PLACE TOPSOIL, SEED, FERTILIZER, AND MULCH AS SOON AS POSSIBLE. CRITICAL GRADES SHOULD BE PROTECTED WITH MULCH BLANKETS AS DIRECTED BY THE ENGINEER. CIRCLED NUMBERS ON PLANS REFER TO ITEMS ON THE MDOT STANDARD PLAN R-96-SERIES

CONTRACTOR SHALL PRESERVE AND/OR REPLACE ANY EXISTING PARCEL CORNERS ENCOUNTERED DURING THE WORK.

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

NAME OF OWNER	UTILITY
AT&T CONTACT: JEFF COLLARD PHONE: 231-348-8010	TELEPHONE
CONSUMERS ENERGY CONTACT: KYLE ROBINSON PHONE: 231-582-8314	ELECTRIC

CONTRACT FOR:
 CULVERT REMOVAL, PRE-FABRICATED TIMBER BRIDGE, GUARDRAIL INSTALLATION, AGGREGATE BASE, HMA SURFACING, AND SLOPE RESTORATION

PREPARED UNDER SUPERVISION OF

REBECCA E. RIVARD	50497
REGISTERED PROFESSIONAL ENGINEER	REGISTRATION NO.

HURON ENGINEERING AND SURVEYING, INC.

ORGANIZATION

3205 US-23 SOUTH, ALPENA, MI 49707

ADDRESS

TITLE SHEET

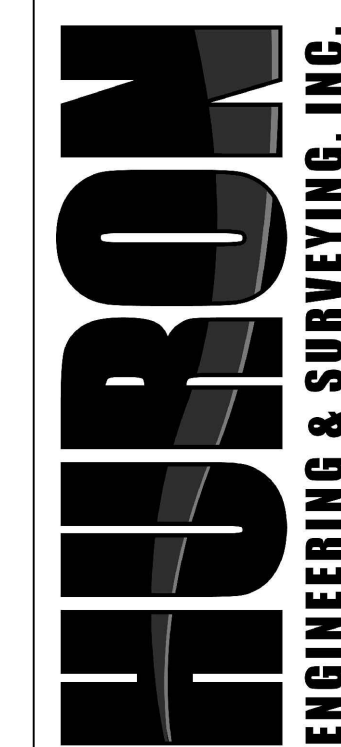
SCALE
N/A

ENGINEER
RIVARD

DATE
OCTOBER 8, 2021

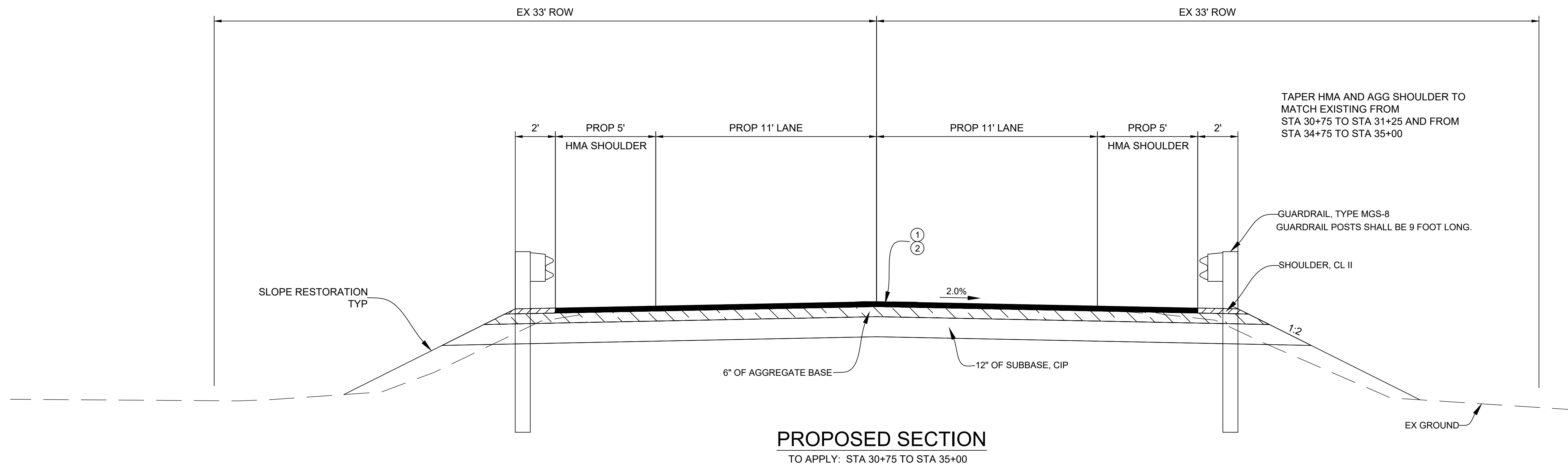
SITE
DOUGLAS RD OVER
E BR MAPLE RIVER

JOB NUMBER
21.082



SHEET NO.

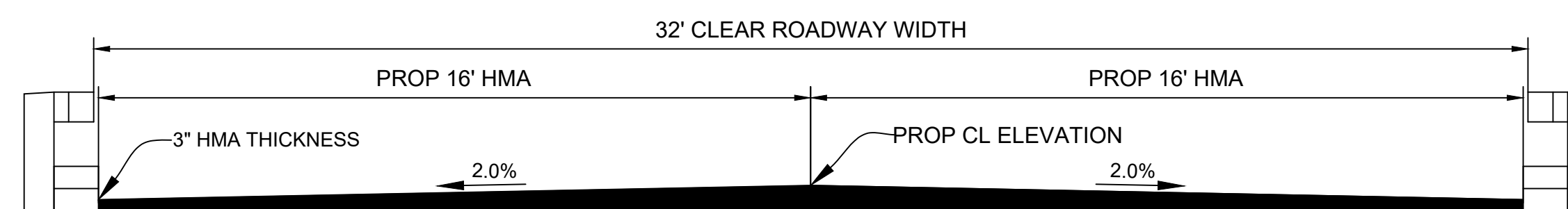
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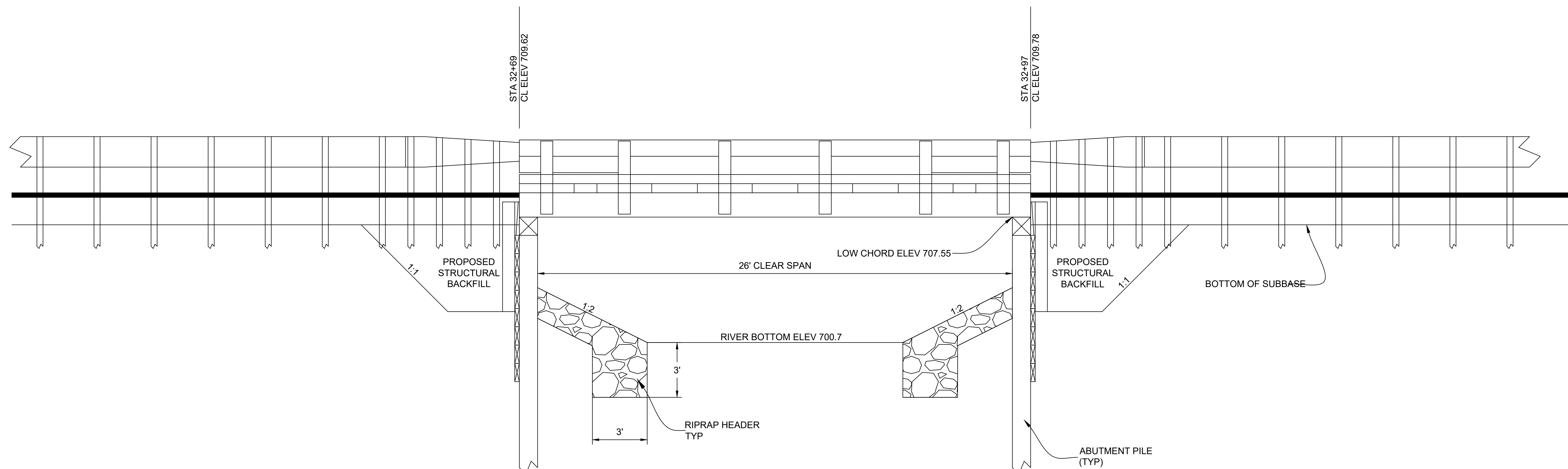
PROPOSED SECTION
TO APPLY: STA 30+75 TO STA 35+00

HMA APPLICATION TABLE				
IDENTITY	PAY ITEM	RATE LB/SYD	PERFORMANCE GRADE	REMARKS
1	HMA, 4EML	165	58-28	TOP COURSE AWI 220
2	HMA, 4EML	165	58-28	LEVELING COURSE
	HMA BOND COAT	0.05-0.15 GAL/SYD (FOR INFORMATION ONLY)		

TARGET AIR VOIDS SHALL BE REGRESSED TO 3.0%
USE OF RECYCLED ASPHALT SHINGLES (RAS) IS PROHIBITED.
THE ROLLER METHOD OF DENSITY SHALL APPLY.



BRIDGE DECK DETAIL



TYPICAL AND DETAIL SHEET

SCALE
N/A

ENGINEER
RIVARD

DATE
OCTOBER 8, 2021

SITE
DOUGLAS RD OVER
E BR MAPLE RIVER

JOB NUMBER
21.082

HURON
ENGINEERING & SURVEYING, INC.

SHEET NO.

3

WATER & DRAINAGE SYMBOLS

- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING MANHOLE
- PROPOSED MANHOLE
- EXISTING CULVERT END SECTION
- PROPOSED CULVERT END SECTION
- EXISTING HEADWALL
- PROPOSED HEADWALL
- WATER SHUTOFF(Service Valve)
- GATE VALVE
- GATEWELL
- WATER METER
- WATER MANHOLE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- ADJ-HYD ADJUST FIRE HYDRANT
- ADJ ADJUST DRAINAGE STRUCTURE
- ADJ-K ADJUST DRAINAGE STRUCTURE W/COVER
- ADJ-B/O ADJUST DRAINAGE STRUCTURE BY OTHERS
- REL-B/O RELOCATE - BY OTHERS
- SR-1 SIDEWALK RAMP TYPE
- CHECK DAM (PROFILES)
- DIKE (PROFILES)
- W.T. m WATER TABLE (PROFILES)
- POST
- WATER WELL

REAL ESTATE SYMBOLS

- PROPERTY OWNERSHIP ARROW
- CONTIGUOUS PROPERTY SYMBOL
- 123456 PARCEL NUMBER BOX
- PARCEL LINES

UTILITIES SYMBOLS

- POWER POLE
- TELEPHONE POLE
- GUY POLE
- LIGHT POLE
- POWER LIGHT POLE
- TELEPHONE MANHOLE
- POWER TOWER
- GAS VALVE
- WALK/NO-WALK
- GUY ANCHOR
- RAILROAD SIGNAL
- ELECTRICAL MANHOLE
- ELECTRICAL HANDHOLE
- TELEPHONE PEDESTAL/RISER
- FIBER OPTIC MARKER

MISCELLANEOUS SYMBOLS

- RIPRAP
- SIGN
- STUMP
- SWAMP
- DECIDUOUS TREE
- CONIFEROUS TREE
- BUSH
- MAIL BOX
- FLAG
- BAR & CAP
- SECTION CORNER
- QUARTER SECTION
- BENCHMARK
- USGS MARKER
- CONTROL POINT
- BEAM G. R. RUN NUMBER (EXISTING)
- BEAM G. R. RUN NUMBER (PROPOSED)

HAZARDOUS OR FLAMMABLE MATERIAL USED WITH UNDERGROUND GAS & ELECTRICAL LINES

CAUTION - CRITICAL UNDERGROUND UTILITY USED WITH FIBER OPTICS LINES

PROP 36" PROPOSED CULVERT/SEWER

EX 12" CMP EXISTING CULVERT/SEWER

UTILITY PATTERNS

- ELEC ELECTRICAL LINE
- 24" GAS GAS LINE
- 12" OIL OIL LINE
- TELE TELEPHONE LINE
- 36" WM WATER LINE
- CTV CABLE TV
- FO FIBER OPTICS
- POWER TRANSMISSION LINE

R.O.W. PATTERNS

- EX. LIMITED ACCESS R.O.W.
- EXISTING R.O.W.
- PROP LIMITED ACCESS R.O.W.
- PROP FREE ACCESS R.O.W.
- SECTION LINE
- GRADING EASEMENT

TOPO PATTERNS

- HEDGE LINE
- TREE LINE
- EXISTING FENCE
- PROPOSED FENCE
- EXISTING GUARD RAIL
- PROPOSED GUARD RAIL
- DRAINAGE CRS/EDGE OF WATER
- WETLANDS AREA
- ABANDON ANY UTILITY
- CITY LIMITS
- RAILROAD
- SOUND ABATEMENT WALL
- CONCRETE MEDIAN BARRIER
- SLOPE STAKE LINE

DRIVE/APPROACH LEGEND

- CONCRETE
- HMA
- AGGREGATE

REMOVAL LEGEND

- REMOVING (R)
- ABANDONING (A)
- SAVE (S)
- BULKHEAD (B)
- REMOVING CURB & GUTTER

SPECIAL LEGEND THIS PROJECT

- STANDARD PLAN R-96-E SOIL EROSION & SEDIMENTATION SILT FENCE (26)
- STANDARD PLAN R-96-E SOIL EROSION & SEDIMENTATION CHECK DAM (37)
- ROAD BORING LOCATION (SBOR 1)

LEGEND SHEET

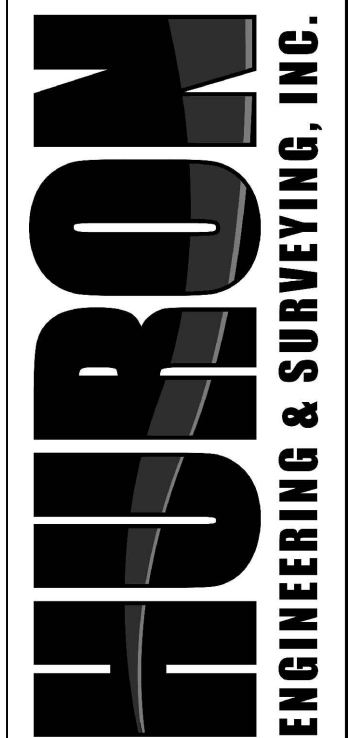
SCALE
N/A

ENGINEER
RIVARD

DATE
OCTOBER 8, 2021

SITE
DOUGLAS RD OVER
E BR MAPLE RIVER

JOB NUMBER
21.082

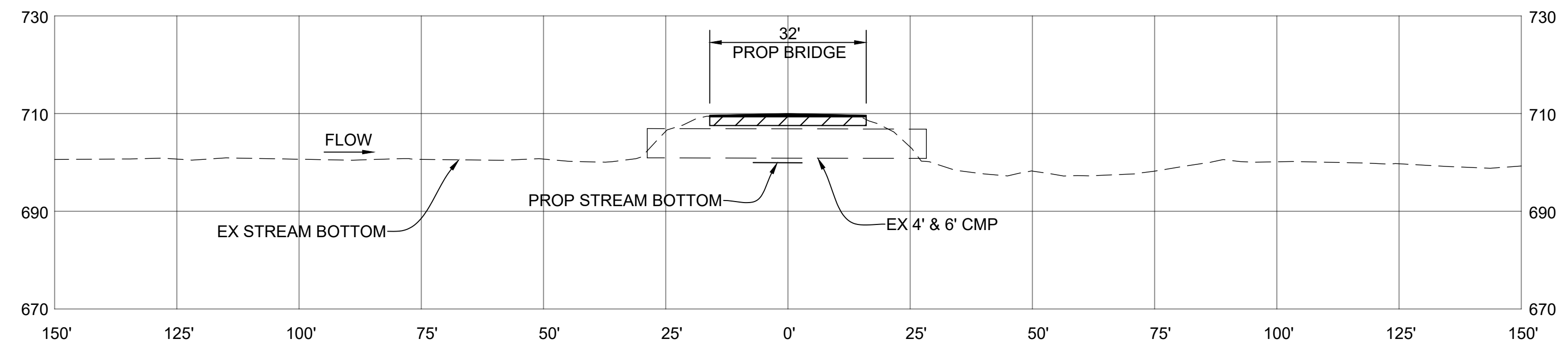
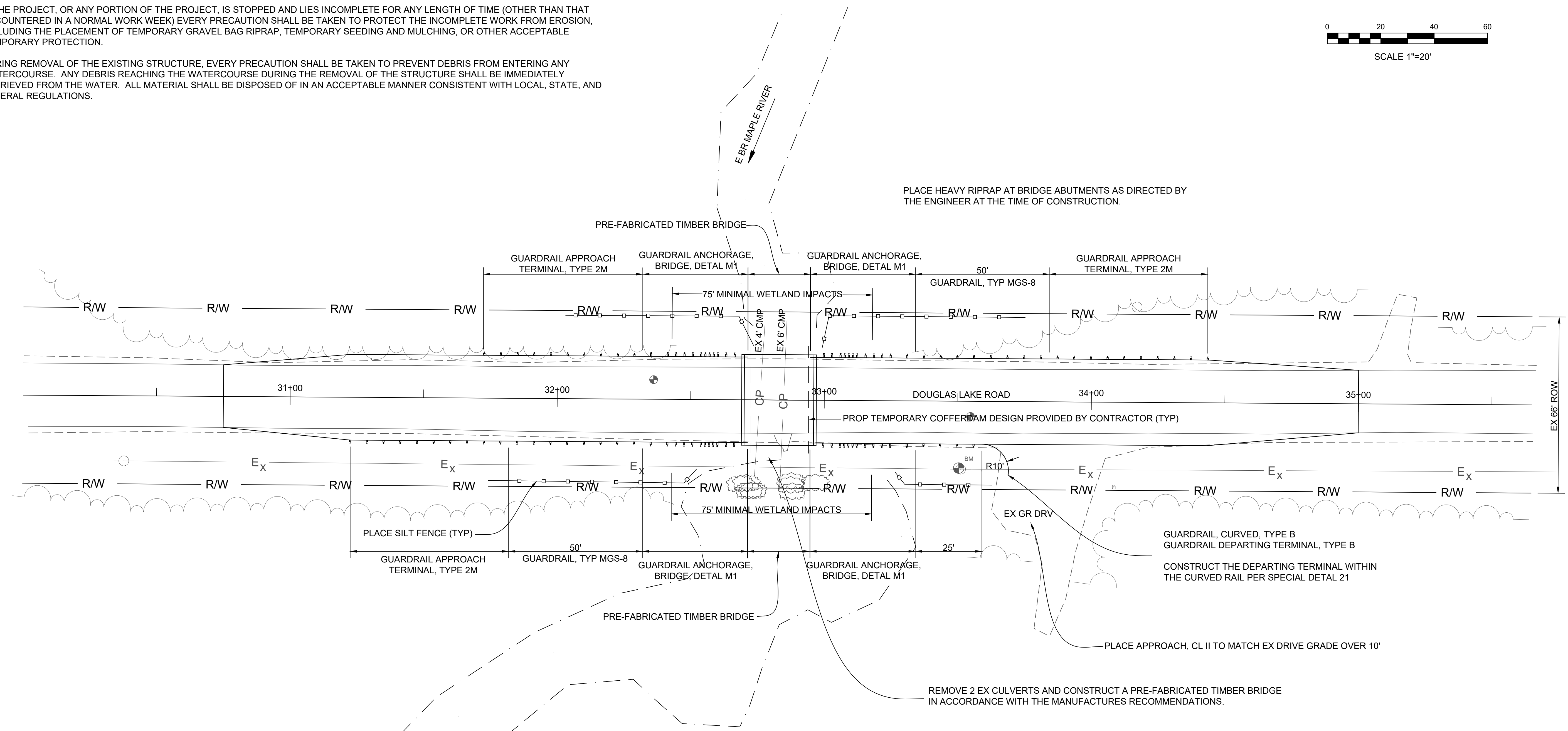
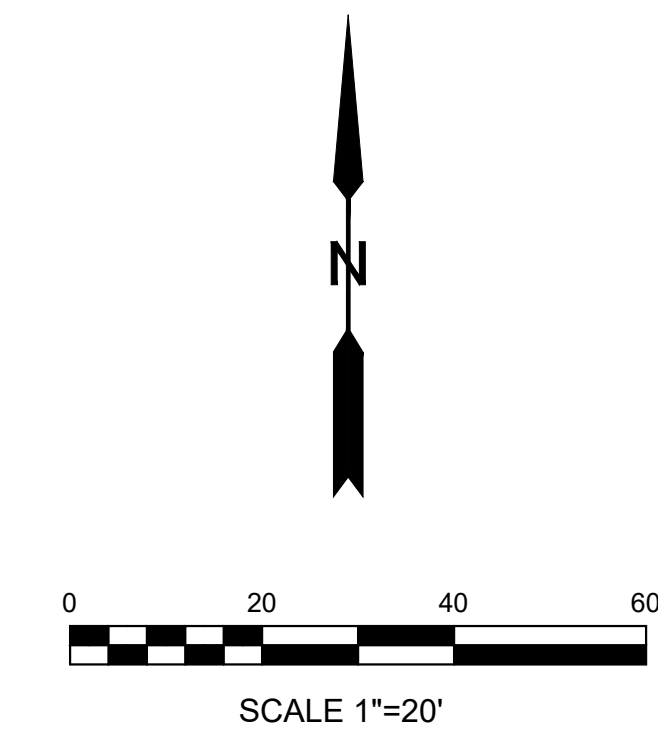


SHEET NO.

2

SOIL EROSION AND SEDIMENTATION CONTROL NOTES

1. ALL SOIL EROSION AND SILT MUST BE CONTROLLED AND CONTAINED WITHIN THE CONSTRUCTION LIMITS. WHERE POSSIBLE, REQUIRED EROSION CONTROL PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO SITE DISRUPTION.
2. DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR FOR EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES, AND NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY.
3. PERMANENT MEASURES FOR SESC FOR ALL DISTURBED AREAS SHALL BE IN PLACE WITHIN 5 DAYS OF COMPLETION OF FINAL GRADING.
4. RESTORE DISTURBED AREAS WITH 3" TOPSOIL SURFACE, MDT CLASS A SEED MIXTURE, 300#/ACRE CHEMICAL FERTILIZER NUTRIENTS AND 2 TONS/ACRES MULCH. PLACE TOPSOIL/SEED/FERTILIZER PRIOR TO PLACING MULCH BLANKETS.
5. CONTRACTOR SHALL OBTAIN AND PAY ALL FEES FOR THE SOIL EROSION CONTROL PERMIT.
6. IF THE PROJECT, OR ANY PORTION OF THE PROJECT, IS STOPPED AND LIES INCOMPLETE FOR ANY LENGTH OF TIME (OTHER THAN THAT ENCOUNTERED IN A NORMAL WORK WEEK) EVERY PRECAUTION SHALL BE TAKEN TO PROTECT THE INCOMPLETE WORK FROM EROSION, INCLUDING THE PLACEMENT OF TEMPORARY GRAVEL BAG RIPRAP, TEMPORARY SEEDING AND MULCHING, OR OTHER ACCEPTABLE TEMPORARY PROTECTION.
7. DURING REMOVAL OF THE EXISTING STRUCTURE, EVERY PRECAUTION SHALL BE TAKEN TO PREVENT DEBRIS FROM ENTERING ANY WATERCOURSE. ANY DEBRIS REACHING THE WATERCOURSE DURING THE REMOVAL OF THE STRUCTURE SHALL BE IMMEDIATELY RETRIEVED FROM THE WATER. ALL MATERIAL SHALL BE DISPOSED OF IN AN ACCEPTABLE MANNER CONSISTENT WITH LOCAL, STATE, AND FEDERAL REGULATIONS.



PROPOSED STREAM PROFILE

PLAN SHEET

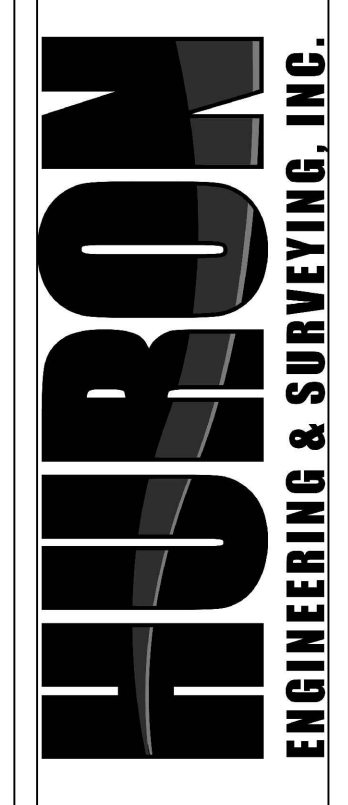
SCALE

ENGINEER
1"-24' RIVARD

DATE
OCTOBER 8, 2021

SITE
DOUGLAS RD OVER
E BR MAPLE RIVER

JOB NUMBER
21.082



SHEET NO.

4