

HURON PINES IN COOPERATION WITH OTSEGO COUNTY ROAD COMMISSION

PLANS OF PROPOSED IMPROVEMENTS SPARR ROAD OVER SOUTH BRANCH PIGEON RIVER SECTION 26 AND 35, T31N, R2W, DOVER TOWNSHIP OTSEGO COUNTY, MICHIGAN

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 2012 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.



CONTRACT FOR:
CULVERT REPLACEMENT, AGGREGATE BASE, 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

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TITLE SHEET

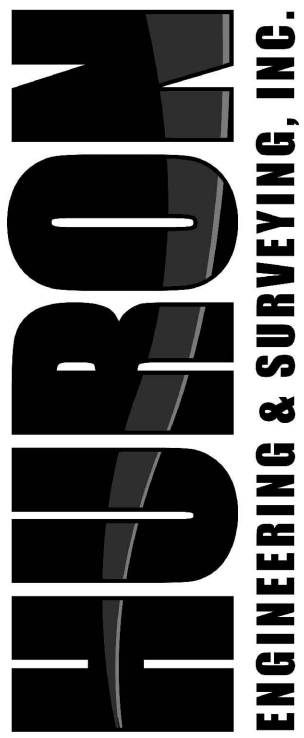
SCALE
N/A

ENGINEER
RIVARD

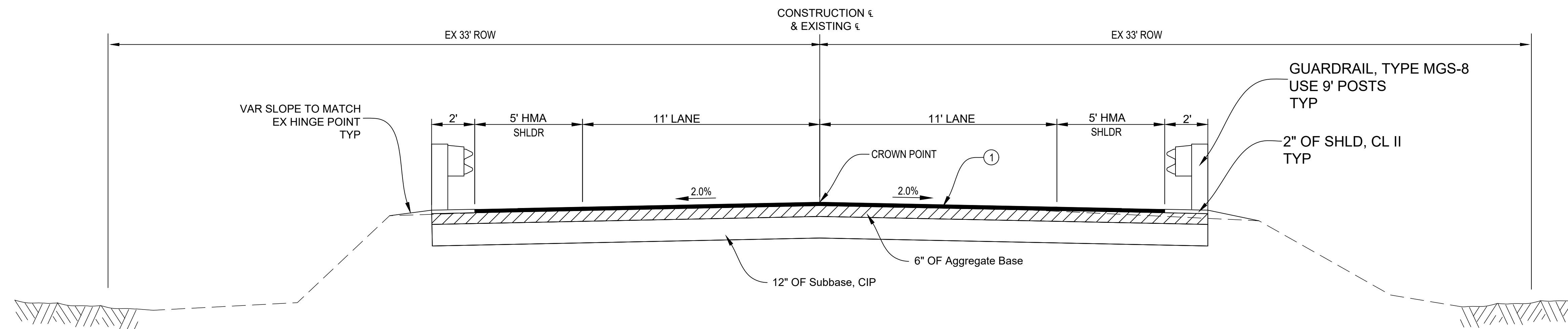
DATE
APRIL 26, 2023

SITE NUMBER
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JOB NUMBER
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SHEET NO.
1



PROPOSED TYPICAL SECTION

TO APPLY: STA 10+43 TO STA 14+04

HMA APPLICATION TABLE

IDENT.	PAY ITEM	RATE #/SYD	PERFORMANCE GRADE	REMARKS
①	HMA, 4EL	220	58-28	TOP COURSE, AWI=220
	HMA BOND COAT	0.05-0.15 GAL/SYD	(FOR INFORMATION ONLY)	

TYPICAL AND NOTE SHEET

SCALE
1/8"

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ENGINEERING & SURVEYING, INC.

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

LEGEND SHEET

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DURING STREAM ENCLOSURE ACTIVITIES AND ALL CONSTRUCTION ACTIVITIES CONTRACTOR WILL PLACE EROSION CONTROL MEASURES TO PREVENT SEDIMENT FROM ENTERING THE WATERWAY.

ALL EROSION CONTROL ITEMS MUST BE WILDLIFE FRIENDLY AND CONTAIN NO PLASTIC NETTING

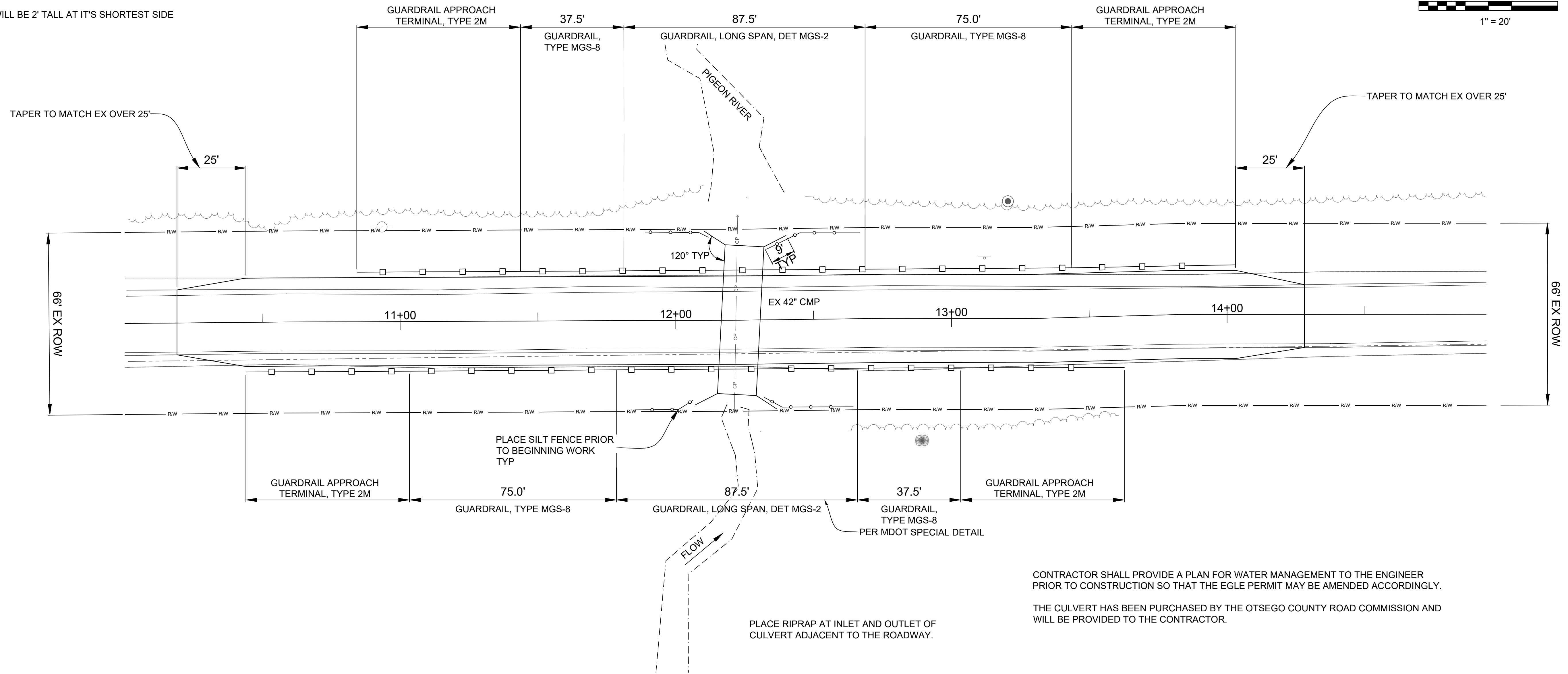
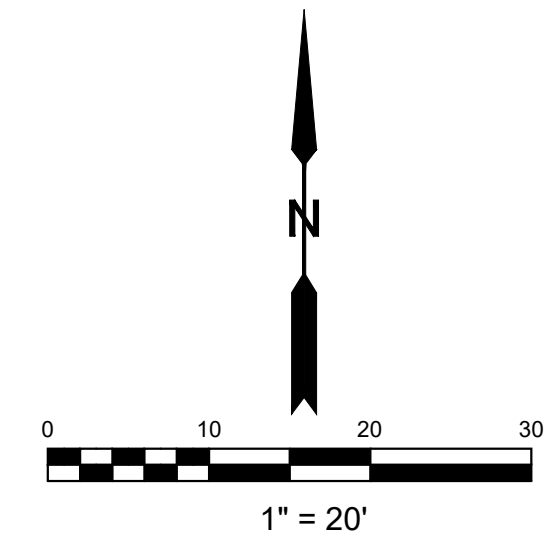
THE USE OF COAL TAR SEALANTS ARE NOT ALLOWED.

ALL RIPRAP WILL BE ROUNDED FIELD STONE PER THE MDNR NATURAL RIVERS PERMIT.

ALL SEED WILL BE NATIVE SEED FREE OF INVASIVE SPECIES.

CONTACT HURON ENGINEERING PRIOR TO PLACEMENT OF THE CULVERT, HURON SHALL BE ON-SITE DURING INSTALLATION.

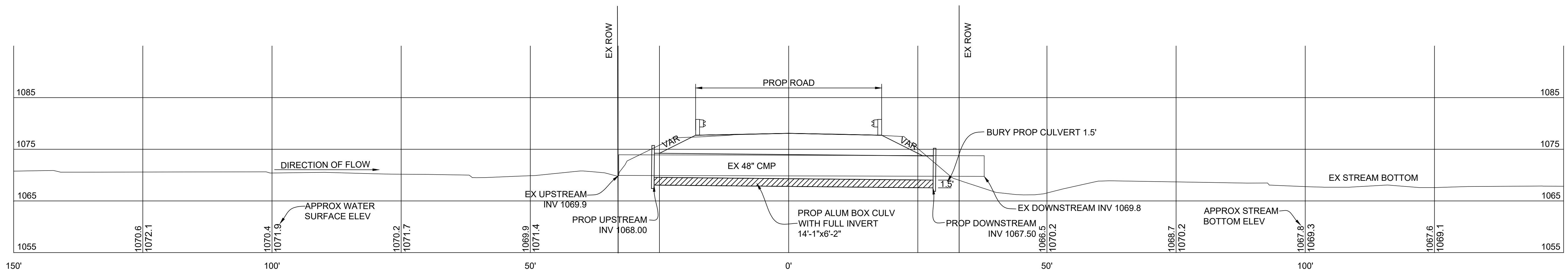
WINGWALLS WILL BE 2' TALL AT IT'S SHORTEST SIDE



CONTRACTOR SHALL PROVIDE A PLAN FOR WATER MANAGEMENT TO THE ENGINEER PRIOR TO CONSTRUCTION SO THAT THE EGLE PERMIT MAY BE AMENDED ACCORDINGLY.

THE CULVERT HAS BEEN PURCHASED BY THE OTSEGO COUNTY ROAD COMMISSION AND WILL BE PROVIDED TO THE CONTRACTOR.

PLACE RIPRAP AT INLET AND OUTLET OF CULVERT ADJACENT TO THE ROADWAY.



STREAM PROFILE DETAIL

PLAN SHEET

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N/A

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