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UTILITIES

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

- | | |
|---|---|
| ELECTRIC
CONSUMERS ENERGY CO.
2400 WEISS STREET
SAGINAW, MI 48602
CONTACT: VIRGIE DOWNS
TELEPHONE: 989-791-5938 | ROADS
MIDLAND COUNTY ROAD COMMISSION
2334 NORTH MERIDIAN ROAD
SANFORD, MICHIGAN 48657
CONTACT: JONATHAN MYERS, P.E.
TELEPHONE: 989-687-9060 |
| GAS DISTRIBUTION
CONSUMERS ENERGY CO.
3201 E. COURT STREET
FLINT, MI 48506
CONTACT: EVAN HUIZENGA
TELEPHONE: 810-847-8227 | WATER
CITY OF MIDLAND
333 W. ELLSWORTH STREET
MIDLAND, MI 48640
CONTACT: TOM HOBLET
TELEPHONE: 989-837-3515 |
| COUNTY DRAIN
MIDLAND COUNTY DRAIN COMMISSION
220 W. ELLSWORTH STREET
MIDLAND, MI 48640
CONTACT: JOSEPH SOVA
TELEPHONE: 989-832-6770 | CABLE
CHARTER COMMUNICATIONS
14252 FARMINGTON ROAD
LIVONIA, MI 48154
CONTACT: PATRICK DELISI
TELEPHONE: 586-746-6684 |
| TELEPHONE AND FIBER
AT&T
502 BEACH STREET
FLINT, MI 48502
CONTACT: MICHAEL BAIZ
TELEPHONE: 810-938-3143 | TELEPHONE AND FIBER
LUMEN TECHNOLOGIES
110 WEST MAIN STREET
KINGSLEY, MI 49646-0569
CONTACT: WADE MILLER
TELEPHONE: 989-277-7943 |

M.D.O.T. STANDARD PLANS

(* SPECIAL DETAILS WILL BE INCLUDED IN PROPOSAL)

PLAN NO.	TITLE
R-1-G	DRAINAGE STRUCTURES
R-7-F	COVER B
R-11-E	MONUMENT BOXES
R-12-E	COVER G
R-29-I	DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALK
R-35-E	CONCRETE SHOULDER GUTTER AND SPILLWAY
R-60-J *	GUARDRAIL TYPES A, B, T, TD, MGS-8, & MGS-8D
R-62-H *	GUARDRAIL APPROACH TERMINAL, TYPE 2M
R-66-E *	GUARDRAIL DEPARTING TERMINAL TYPES B, T & MGS
R-72-D *	GUARDRAIL LONG SPAN INSTALLATIONS
R-80-F *	GRANULAR BLANKET, UNDERDRAINS, OUTLET ENDINGS FOR UNDERDRAINS, AND SEWER BULKHEADS
R-82-D	BEDDING AND FILLING AROUND PIPE CULVERTS
R-83-C	UTILITY TRENCHES
R-86-F	PRECAST CONCRETE END SECTION FOR PIPE CULVERT
R-88-E *	STEEL END SECTION
R-95-G	CULVERT SLOPED END SECTION
R-96-E	SOIL EROSION & SEDIMENTATION CONTROL MEASURES
R-100-I *	SEEDING AND TREE PLANTING
R-105-D	GRADING CROSS-SECTIONS
R-110-B *	PAVEMENT SAFETY EDGE
R-112-J *	SHOULDER AND CENTER LINE CORRUGATIONS
21 *	GUARDRAIL AT INTERSECTIONS

MDOT TRAFFIC AND SAFETY STANDARD PLANS

PLAN NO.	TITLE
SIGN-100-G	STANDARD SIGN INSTALLATIONS
SIGN-120-E	ROADSIDE SIGN LOCATIONS & SUPPORT SPACING
SIGN-140-A	PLACEMENT OF D3-1 SIGNS ABOVE R1-1
SIGN-150-D	SIGN SUPPORT SELECTION CHARTS
SIGN-200-E	STEEL POSTS
PAVE-900-G	PAVEMENT ARROW AND MESSAGE DETAILS
PAVE-904-B *	TEMPORARY LONGITUDINAL LINE TYPES & PLACEMENT
PAVE-905-E	LONGITUDINAL LINE TYPES AND PLACEMENT
PAVE-930-D	PAVEMENT MARKINGS FOR NON-SIGNALIZED INTERSECTIONS
PAVE-935-E	LEFT TURN LANE MARKINGS
PAVE-940-D	RIGHT TURN LANE AND ISLAND PAVEMENT MARKINGS
PAVE-945-D	INTERSECTION, STOP BAR & CROSSWALK MARKINGS

MIDLAND COUNTY ROAD COMMISSION

IN CO-OPERATION WITH
MICHIGAN DEPARTMENT OF TRANSPORTATION

&
FEDERAL HIGHWAY ADMINISTRATION
PLAN AND PROFILE OF PROPOSED

EASTMAN ROAD WIDENING AND REHABILITATION

T15N - R2E, SECTIONS 16, 17, 20, 21, 28, 29

LARKIN TOWNSHIP, MIDLAND COUNTY

CONTROL SECTION
56000

JOB NO.
212909

COUNTY	ROAD	PROJ.	YEAR	SHEET	TOTAL
MIDLAND	EASTMAN	212909	2023	1	65

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE COMPLETED IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND SUPPLEMENTAL SPECIFICATIONS, THE LATEST MDOT STANDARD ROAD PLANS, AND SECTION C (3R) OF THE MDOT LOCAL AGENCY PROGRAMS GUIDELINES FOR GEOMETRICS, 2017 EDITION, AND SUPPLEMENTAL SPECIFICATIONS.

THE PLACEMENT OF PAVEMENT MARKINGS AND SIGNAGE SHALL BE COMPLETED IN ACCORDANCE WITH THE MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2011 EDITION.

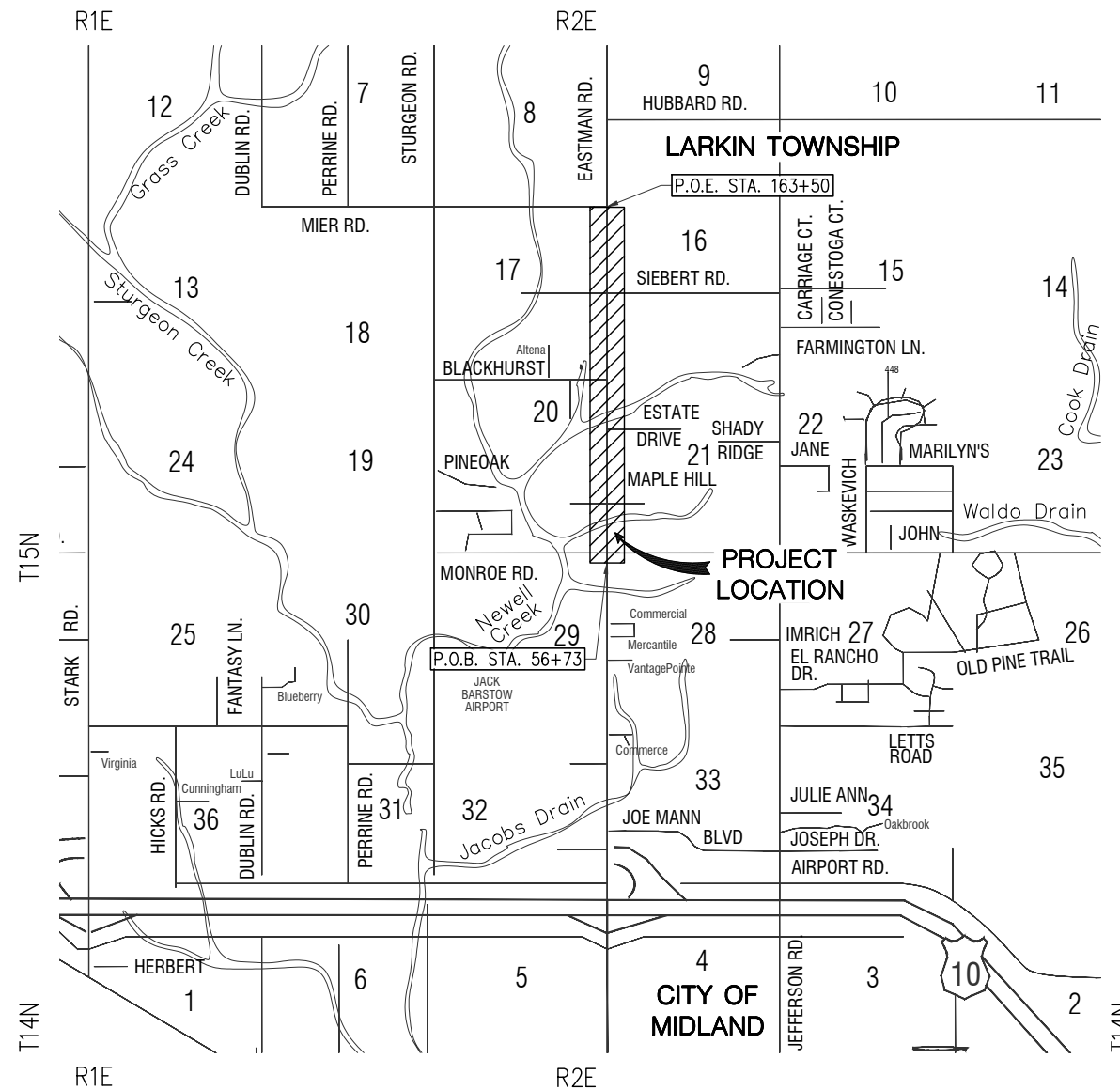
PROJECT LENGTH

JN 212909
STA 56+73 (P.O.B.) TO STA 163+50 (P.O.E.)

JN 212909 = 2.02 MILES

TRAFFIC DATA

EASTMAN ROAD
PRESENT ADT (2024) = 6,880 VEHICLES/DAY
FUTURE ADT (2044) = 12,426 VEHICLES/DAY
% COMMERCIAL = 6%
STA 56+73 (P.O.B.) TO STA 163+50 (P.O.E.)
DESIGN SPEED = 55 MPH
POSTED SPEED = PRIMA FACIE



NOT TO SCALE



Know what's below.
Call before you dig.

CONTRACT FOR:
1.74 MILES OF SHOULDER WIDENING, COLD MILLING HMA SURFACE, HMA PAVING, AGGREGATE SHOULDER, DRAINAGE IMPROVEMENTS, PERMANENT PAVEMENT MARKINGS, CENTERLINE CORRUGATIONS, AND PERMANENT SIGNING. INCLUDING AN ADDITIONAL 0.28 MILES OF ONLY PERMANENT PAVEMENT MARKINGS AND CENTERLINE CORRUGATIONS.



ROWE PROFESSIONAL SERVICES COMPANY
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GENERAL CONSTRUCTION NOTES

EMERGENCY CONTACTS

BEFORE BEGINNING WORK ON THE PROJECT, THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH THE NAMES AND TELEPHONE NUMBERS OF EMERGENCY CONTACTS. AT LEAST ONE PERSON REPRESENTING THE CONTRACTOR SHALL BE AVAILABLE TO RESPOND TO EMERGENCIES THROUGHOUT THE LIFE OF THE PROJECT, 24 HOURS A DAY, 7 DAYS A WEEK.

UNDERGROUND UTILITY IDENTIFICATION AND LOCATION

THE CONTRACTOR SHALL CONTACT MISS DIG (1-800-482-7171, 811, OR WWW.MISSDIG.ORG) A MINIMUM OF THREE WORK DAYS IN ADVANCE OF BEGINNING EXCAVATION. THE CONTRACTOR IS RESPONSIBLE TO IDENTIFY AND NOTIFY UTILITY AGENCIES WITHIN THE PROJECT AREA WHICH DO NOT PARTICIPATE IN THE MISS DIG NOTIFICATION PROGRAM.

PUBLIC UTILITIES

EXISTING UTILITIES ARE SHOWN BASED UPON RECORDS AND LOCATIONS PROVIDED BY UTILITY AGENCIES. THE INFORMATION SHOWN IS CONSIDERED APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR. UNLESS THE PLANS SPECIFICALLY SHOW THAT EXISTING UTILITIES ARE TO BE MOVED, THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN EXISTING UTILITIES.

VERIFICATION OF UNDERGROUND UTILITIES

THE CONTRACTOR SHALL EXCAVATE AND LOCATE ALL EXISTING UTILITIES IN THE PROJECT AREA IN ADVANCE OF CONSTRUCTION TO VERIFY THEIR ACTUAL LOCATION. POTENTIAL CONFLICTS SHALL BE REPORTED TO THE ENGINEER. THE CONTRACTOR SHALL MAKE SUCH CHANGES TO GRADE AND ALIGNMENT OF PROPOSED WORK AS DIRECTED BY THE ENGINEER TO AVOID CONFLICTS, AT NO INCREASE IN COST TO THE OWNER.

UTILITY SERVICE

UNLESS SPECIFICALLY PROVIDED OTHERWISE IN THE CONTRACT DOCUMENTS, ALL EXISTING UTILITIES ARE TO REMAIN IN SERVICE DURING THE PROJECT.

MAILBOXES

MAILBOXES LOCATED WITHIN THE LIMITS OF EXCAVATION, GRADING, OR CONSTRUCTION SHALL BE REMOVED AND PROTECTED FROM DAMAGE BY THE CONTRACTOR. TEMPORARY MAILBOXES SHALL BE PROVIDED AND MAINTAINED DURING THE PROJECT. UPON COMPLETION OF GRADING OR CONSTRUCTION ACTIVITIES, THE ORIGINAL MAILBOX SHALL BE REINSTALLED.

MAILBOXES (AND/OR SUPPORTS) WHICH ARE DAMAGED AS A RESULT OF THE PROJECT SHALL BE REPLACED BY THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE. MAILBOXES SHALL BE REPLACED IN ACCORDANCE WITH THE STANDARDS OF THE U.S. POSTAL SERVICE AND THE REGULATIONS OF THE AGENCY HAVING JURISDICTION OVER THE ROADS AND STREETS IN THE PROJECT AREA.

PRIVATE IRRIGATION SYSTEMS

WHERE IRRIGATION SYSTEMS WITHIN THE PUBLIC RIGHT-OF-WAY WILL INTERFERE WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE PROPERTY OWNERS THAT IT IS THEIR RESPONSIBILITY TO REMOVE AND PROTECT THEIR IRRIGATION SYSTEM. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A COPY OF THE NOTIFICATION.

WHERE THE OWNER HAS NOT REMOVED THEIR PRIVATE IRRIGATION SYSTEM, THE CONTRACTOR SHALL CUT AND PLUG THOSE SECTIONS OF PIPING WHICH INTERFERE WITH CONSTRUCTION. SPRINKLER HEADS, VALVES, AND PIPING WHICH INTERFERES WITH THE CONTRACTOR'S WORK, SHALL BE REMOVED AND STOCKPILED ON THE OWNER'S PROPERTY.

SOIL BORINGS / PAVEMENT CORES

LOGS OF SOIL BORINGS OR PAVEMENT CORES REPRESENT THE SUBSURFACE CONDITIONS ENCOUNTERED AT SPECIFIC POINTS. THE INFORMATION IS PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY.

MAINTAINING TRAFFIC

LOCAL AND EMERGENCY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES WITHIN THE PROJECT AREA.

WHEN EXCAVATION, FRESH CONCRETE, OR OTHER CONSTRUCTION WORK WILL RESULT IN THE CLOSURE OF A STREET OR DRIVEWAY FOR A PERIOD OF TIME, THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL AFFECTED RESIDENTS AND BUSINESSES IN ADVANCE.

THE ENGINEER SHALL NOTIFY EMERGENCY RESPONSE AGENCIES IN ADVANCE OF ROAD CLOSURES OR THE ESTABLISHMENT OF DETOURS.

MIDLAND COUNTY CENTRAL DISPATCH
TELEPHONE: 989-839-6464

MIDLAND COUNTY SHERIFF
TELEPHONE: 989-839-4600

MIDLAND PUBLIC SCHOOLS
TELEPHONE: 989-923-5041

SCHEDULE

THE CONTRACTOR SHALL COMPLETE ALL WORK IN AN EXPEDITIOUS MANNER AND SHALL NOT STOP WORK ON THE PROJECT ONCE BEGUN.

ALIGNMENT

ALIGNMENT AND GRADES FOR CURB AND GUTTER (INCLUDING THROUGH RAMPS AND DRIVEWAY OPENINGS) SHOWN ON THE PLANS ARE FOR THE TOP, BACK OF CURB, UNLESS SPECIFICALLY SHOWN OTHERWISE ON THE PLANS.

THE HORIZONTAL ALIGNMENT SHOWN ON THE DRAWINGS FOR DRAINAGE STRUCTURES LOCATED IN THE CURB LINE IS TO THE CENTER OF THE CASTING.

WHERE RIM ELEVATIONS ARE PROVIDED ON THE PLANS FOR MANHOLE CASTINGS, THE ELEVATION PROVIDED IS FOR THE TOP OF THE CASTING.

WHERE RIM ELEVATIONS ARE PROVIDED FOR INLET TYPE CASTINGS, THE ELEVATIONS ARE PROVIDED AS FOLLOWS:

- CURB INLETS - THE ELEVATION OF THE TOP OF CURB
- ALL OTHER INLETS - THE ELEVATION OF THE FLOW LINE

WHERE RIM ELEVATIONS ARE PROVIDED ON THE PLANS FOR INLETS OR MANHOLE CASTINGS, THE ELEVATIONS PROVIDED ARE CONSIDERED PRELIMINARY. THE CONTRACTOR SHALL MAKE THE FINAL ADJUSTMENT FOLLOWING THE ESTABLISHMENT OF ACTUAL GRADING AND PAVEMENT ELEVATIONS.

CONSTRUCTION STAKING

CONSTRUCTION STAKING IS TO BE PROVIDED BY THE ENGINEER OR OWNER, THE CONTRACTOR SHALL REQUEST STAKING AT LEAST THREE WORKING DAYS IN ADVANCE.

CONSTRUCTION STAKING IS TO BE PROVIDED BY THE ENGINEER OR OWNER, STAKING WILL BE PROVIDED ONE TIME. THE CONTRACTOR SHALL PROTECT AND PRESERVE SURVEY CONTROL AND STAKING. RE-STAKING WILL BE AT THE CONTRACTOR'S EXPENSE.

SURVEY CORNERS, BENCHMARKS, AND CONTROL POINTS

THE CONTRACTOR SHALL PRESERVE ALL GOVERNMENT CORNERS, PROPERTY CORNERS, BENCHMARKS, SURVEY CONTROL POINTS AND OTHER SURVEY POINTS WITHIN THE PROJECT AREA. WHERE CORNERS, BENCHMARKS, OR SURVEY POINTS ARE ENCOUNTERED WHICH WILL BE DISTURBED BY THE CONTRACTOR'S ACTIVITIES; A LICENSED SURVEYOR SHALL WITNESS THE POINT BEFORE DISTURBANCE AND SHALL RE-SET THE POINT FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL PAY THE SURVEYOR TO WITNESS AND TO RE-SET THE POINTS.

PROTECTION OF TREES, SHRUBS, AND LANDSCAPING

ALL TREES, SHRUBS, AND LANDSCAPING WITHIN THE CONSTRUCTION AREA WHICH ARE NOT SPECIFICALLY DESIGNATED FOR REMOVAL SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED TREES, SHRUBS, AND LANDSCAPING SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

CONSTRUCTION SIGNING AND BARRICADING

THE CONTRACTOR SHALL PROTECT HAZARDOUS AREAS WITH BARRICADES. BARRICADES LEFT IN PLACE AFTER SUNSET SHALL BE LIGHTED.

THE CONTRACTOR SHALL PROVIDE SUITABLE SANDBAGS OR OTHER SUITABLE MEASURES FOR ANCHORING OF TEMPORARY SIGNS AND BARRICADES, TO PREVENT THEIR TIPPING OR DISPLACEMENT BY WIND OR AIR FLOW FROM VEHICLES.

THE CONTRACTOR SHALL PROVIDE SIGNING, BARRICADES, TRAFFIC REGULATORS, CONES, AND OTHER TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCY HAVING JURISDICTION OVER STREETS OR ROADS IN THE PROJECT AREA, THE CURRENT MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND THE PLANS AND SPECIFICATIONS.

THE CONTRACTOR SHALL COVER OR REMOVE TEMPORARY SIGNS DURING PERIODS WHEN THEY ARE NOT APPROPRIATE.

TURF ESTABLISHMENT

ALL DISTURBED AREAS WHICH ARE NOT TO BE SURFACED WITH PAVEMENT, AGGREGATE OR OTHER APPROVED SURFACES SHALL BE ESTABLISHED WITH TURF.

TURF AREAS SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE.

DISTURBED AREAS SHALL BE SURFACED WITH FOUR INCHES OF SCREENED TOPSOIL.

THE CONTRACTOR IS RESPONSIBLE TO ESTABLISH TURF WHICH IS SUBSTANTIALLY FREE OF BARE SPOTS AND FREE OF WEEDS. THE GROUND SURFACE IN TURF AREAS SHALL BE SMOOTH AND PROVIDE A NATURAL TRANSITION TO ADJACENT, UNDISTURBED AREAS.

THE CONTRACTOR IS RESPONSIBLE TO PROVIDE WATERING, WEEDING, RESEEDING, AND REWORKING AS NECESSARY TO ESTABLISH TURF AREAS TO THE REQUIRED STANDARD.

ADA COMPLIANCE

ALL PROPOSED CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA), AND APPLICABLE GUIDELINES OR STANDARDS. WHERE EXISTING CONDITIONS AND/OR THE REQUIREMENTS OF THE PLANS WILL RESULT IN FINISHED CONDITIONS THAT DO NOT MEET THE ADA REQUIREMENTS, GUIDELINES, OR STANDARDS; THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REMOVE AND REPLACE WORK DETERMINED TO BE NOT IN ACCORDANCE WITH APPLICABLE REQUIREMENTS, GUIDELINES, OR STANDARDS.

BACKFILL AND EMBANKMENT

BACKFILL OF AN EXCAVATION UNDER OR WITHIN THE ONE ON ONE INFLUENCE OF AN EXISTING OR PROPOSED ROAD, SIDEWALK, DRIVEWAY, PAVEMENT, OR AGGREGATE SURFACE, SHALL BE SAND, MEETING THE REQUIREMENTS OF GRANULAR MATERIAL CLASS III AS DESCRIBED IN THE CURRENT MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE SAND BACKFILL SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

BACKFILL OF AN EXCAVATION WHICH IS NOT UNDER OR WITHIN THE ONE ON ONE INFLUENCE OF AN EXISTING OR PROPOSED ROAD, SIDEWALK, DRIVEWAY, PAVEMENT, OR AGGREGATE SURFACE MAY BE SUITABLE EXCAVATED MATERIAL OR OTHER SOIL, WHICH IS FREE OF ORGANIC MATTER, STONES AND ROCKS, ROOTS, BROKEN CONCRETE, FROZEN MATERIAL, OR DEBRIS. THE BACKFILL SHALL BE COMPACTED TO AT LEAST 90% OF ITS MAXIMUM UNIT WEIGHT.

THE CONTRACTOR SHALL INDICATE THE SOURCE OF SAND USED FOR BACKFILL TO THE ENGINEER, AND PROVIDE THE ENGINEER WITH THE RESULTS OF A GRADATION TEST PERFORMED ON A SAMPLE OF THE SAND. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN ADVANCE OF USING SAND FROM OTHER SOURCES.

EMBANKMENT USED TO BUILD THE SUBGRADE TO REQUIRED ELEVATION SHALL BE SUITABLE SOIL EXCAVATED FROM THE PROJECT SITE, OR FURNISHED BY THE CONTRACTOR FROM OTHER SOURCES. SUITABLE SOIL IS FREE FROM ORGANIC MATTER, ROCKS AND STONES, FROZEN MATERIAL, BROKEN CONCRETE, AND DEBRIS.

EMBANKMENT CONSTRUCTED OF GRANULAR SOILS SHALL BE COMPACTED IN LIFTS NOT EXCEEDING 10 INCHES TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

EMBANKMENT CONSTRUCTED OF COHESIVE SOILS SHALL BE COMPACTED IN LIFTS NOT EXCEEDING 10 INCHES TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT.

DENSITY TESTING

THE MAXIMUM UNIT WEIGHT OF SAND AND OTHER GRANULAR SOILS WILL BE DETERMINED BY THE ONE POINT CONE TEST, AS DESCRIBED IN THE MICHIGAN DEPARTMENT OF TRANSPORTATION'S DENSITY TESTING AND INSPECTION MANUAL, EXCEPT WHEN ANOTHER TEST METHOD IS SPECIFIED.

THE MAXIMUM UNIT WEIGHT OF COHESIVE SOILS WILL BE DETERMINED BY THE ONE POINT PROCTOR TEST, AS DESCRIBED IN THE MICHIGAN DEPARTMENT OF TRANSPORTATION'S DENSITY TESTING AND INSPECTION MANUAL, EXCEPT WHEN ANOTHER TEST METHOD IS SPECIFIED.

WORK HOURS

UNLESS PROVIDED OTHERWISE IN THE CONTRACT DOCUMENTS OR LIMITED BY LOCAL ORDINANCE, THE CONTRACTOR SHALL WORK WITHIN OF THE FOLLOWING TIMES, UNLESS OTHERWISE APPROVED BY THE OWNER: MONDAY THROUGH FRIDAY DAYLIGHT HOURS ONLY SATURDAY MUST BE APPROVED BY ENGINEER SUNDAY NO WORK WILL BE ALLOWED

THE CONTRACTOR SHALL NOT WORK ON HOLIDAYS UNLESS APPROVED BY THE OWNER.

LANDSCAPING

WHERE LANDSCAPING WITHIN THE PUBLIC RIGHT-OF-WAY WILL INTERFERE WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE PROPERTY OWNERS THAT IT IS THEIR RESPONSIBILITY TO REMOVE OR RELOCATE THEIR LANDSCAPING. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A COPY OF THE NOTIFICATION.

WHERE THE OWNER HAS NOT REMOVED THEIR LANDSCAPING, THE CONTRACTOR SHALL CONTINUE WORK PER PLAN AS SCHEDULED. THE LANDSCAPING WILL BE REMOVED BY THE CONTRACTOR AND THE AREA WILL BE RESTORED PER PLANS AND SPECIFICATIONS.

DRAINAGE

THE CONTRACTOR SHALL MAINTAIN DRAINAGE OF THE PROJECT AREA AND ADJACENT AREAS. WHERE EXISTING DRAINAGE FACILITIES ARE DISTURBED OR BLOCKED BY CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY PROVISIONS FOR DRAINAGE.

WHERE CONSTRUCTION HAS DISTURBED EXISTING DITCHES, SWALES, OR OTHER DRAINAGE FACILITIES; THE CONTRACTOR SHALL RESTORE THEM TO THEIR GRADES AND DIMENSIONS WHICH EXISTED PRIOR TO THE BEGINNING OF CONSTRUCTION, UNLESS DIRECTED OTHERWISE.

DRAINAGE SHALL NOT BE REROUTED ONTO ADJACENT PROPERTIES NOR ALLOWED TO DRAIN ONTO ADJACENT PROPERTIES AT AN INCREASED RATE, AS A RESULT OF THE CONTRACTOR'S WORK.

ROAD PROJECTS

ADJUSTING STRUCTURES

WHERE CASTINGS FOR MANHOLES, CATCH BASINS, INLETS, VALVE BOXES, AND MONUMENT BOXES ARE TO BE ADJUSTED TO MEET A NEW PAVEMENT SURFACE ELEVATION, THE FINAL ADJUSTMENT SHALL NOT BE COMPLETED UNTIL ALL PAVEMENT COURSES HAVE BEEN PLACED EXCEPT THE FINAL COURSE. THE FINAL ADJUSTMENT SHALL BE COMPLETED JUST PRIOR TO PLACEMENT OF THE FINAL COURSE OF PAVEMENT.

THE MATERIALS AND PROCEDURES FOR ADJUSTING STRUCTURES SHALL MEET THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION OVER THE ROAD AND UTILITIES.

SUBGRADE PREPARATION

TOPSOIL, PEAT, AND ORGANIC MATERIAL SHALL BE EXCAVATED AND REMOVED.

SOFT AND YIELDING SOILS SHALL BE REMOVED OR DRIED IF THE RESULT OF EXCESSIVE MOISTURE CONTENT.

PRIOR TO CONSTRUCTING FILLS, SUBBASE, OR PAVEMENT ON A SUBGRADE; THE SUBGRADE SHALL BE PROOF-ROLLED TO DETERMINE THE SUITABILITY OF THE SUBGRADE. THE CONTRACTOR SHALL DRIVE A HEAVY PIECE OF WHEELED CONSTRUCTION EQUIPMENT OVER THE SUBGRADE WHILE THE ENGINEER IS OBSERVING. THE CONSTRUCTION OF FILLS, SUBBASE, OR PAVEMENTS SHALL NOT PROCEED UNTIL THE SUBGRADE HAS BEEN DEMONSTRATED TO BE FREE OF SOFT AREAS.

THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN THE MOISTURE CONTENT OF SUBGRADE SOILS WITHIN A SUITABLE RANGE TO ALLOW FOR COMPACTION TO THE REQUIRED DENSITY. WHEN THE SOIL IS TOO DRY, THE CONTRACTOR SHALL ADD WATER. WHEN THE SOIL IS TOO WET, THE CONTRACTOR SHALL PROVIDE DRAINAGE OR AERATE THE SOIL.

THE SURFACE OF THE SUBGRADE SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM UNIT WEIGHT, PRIOR TO CONSTRUCTING FILLS, SUBBASE, OR PAVEMENTS.

CURB AND CUTTERS

THE CONTRACTOR SHALL DETERMINE THE LOCATION AND DIMENSIONS OF CURB OPENINGS FOR DRIVEWAYS, RAMPS, AND DRAINAGE STRUCTURES.

HOT MIX ASPHALT (HMA) PAVING

PAVEMENTS WHICH ARE TO BE OVERLAID WITH A NEW PAVEMENT COURSE SHALL BE SWEEPED TO REMOVE ALL DIRT AND DEBRIS.

A BITUMINOUS BOND COAT SHALL BE APPLIED TO PAVEMENTS WHICH ARE TO BE OVERLAID WITH A NEW PAVEMENT COURSE AND ALLOWED TO CURE PRIOR TO CONSTRUCTING THE NEW PAVEMENT COURSE.

HMA PAVEMENT SHALL NOT BE PLACED WHEN THE SURFACE BEING OVERLAID IS WET, OR WHEN RAIN IS FORECAST OR THREATENING.

DRIVEWAY CONSTRUCTION

DRIVEWAY SLOPES SHALL NOT EXCEED 10%, EXCEPT WHERE SPECIFICALLY INDICATED OTHERWISE ON THE PLANS OR DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL PROVIDE PROPERTY OWNERS WITH SUITABLE NOTICE BEFORE REMOVING AND REPLACING AN EXISTING DRIVEWAY.

GRAVEL AND FIELD DRIVEWAYS SHALL BE PAVED 1 FOOT WIDER THAN THE EDGE OF ROADWAY DURING MAINLINE PAVING. ALL COSTS SHALL BE INCLUDED IN HMA PAY ITEMS

STORM SEWER CONSTRUCTION NOTES

DRAINAGE STRUCTURES SHALL BE CONSTRUCTED FROM PRECAST CONCRETE MANHOLE SECTIONS, MEETING ASTM C478.

SUMPS IN DRAINAGE STRUCTURES AND PIPELINES SHALL BE FREE OF SEDIMENT AND DEBRIS AT THE TIME OF ACCEPTANCE BY THE OWNER.

Sewer, Cl A, ___ inch, Tr Det ___ SHALL BE PLASTIC PIPE MEETING ASTM 2881 OR AASHTO M330. SEWER SHALL BE MANDREL TESTED AND MDOT FORM 1975 SHALL BE COMPLETED.

CULVERT NOTES

Culv, Cl F, ___ inch SHALL BE PLASTIC PIPE MEETING ASTM F2881 OR AASHTO M330. CULVERTS SHALL BE MANDREL TESTED AND MDOT FORM 1975 SHALL BE COMPLETED.

MISCELLANEOUS QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Mobilization, Max \$144,700	1	LSUM
Clearing	1	Acre
Ditch Cleanout	40	Sta
Embankment, CIP	1100	Cyd
Excavation, Earth	6900	Cyd
Subgrade Undercutting, Type II	200	Cyd
Trench Undercut and Backfill	10	Cyd
Maintenance Gravel	402	Ton
Underdrain, Subbase, 6 inch	500	Ft
Underdrain Outlet, 6 inch	75	Ft
Underdrain, Outlet Ending, 6 inch	5	Ea
Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	4	Ea
Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	4	Ea
Channelizing Device, 42 inch, Fluorescent, Furn	400	Ea
Channelizing Device, 42 inch, Fluorescent, Oper	400	Ea
Lighted Arrow, Type C, Furn	2	Ea
Lighted Arrow, Type C, Oper	2	Ea
Minor Traf Devices	1	LSUM
Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, Yellow, Temp	737	Ft
Plastic Drum, Fluorescent, Furn	30	Ea
Plastic Drum, Fluorescent, Oper	30	Ea
Sign, Type B, Temp, Prismatic, Furn	671	Sft
Sign, Type B, Temp, Prismatic, Oper	671	Sft
Sign, Type B, Temp, Prismatic, Spec, Furn	75	Sft
Sign, Type B, Temp, Prismatic, Spec, Oper	75	Sft
Traf Regulator Control	1	LSUM
Slope Restoration, Non-Freeway, Type A	3200	Syd
Slope Restoration, Non-Freeway, Type F	9510	Syd
Slope Restoration, Non-Freeway, Type G	5740	Syd
Sinusoidal Corrugations, Milled, HMA Centerline	8704	Ft



Know what's **below.**
Call before you dig.

PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

PLAN DATE: AUGUST 2023
PROJECT MGR: MJS
REVIEWER: TCL
SCALE: NO SCALE

O: (989) 772-2138
F: (989) 773-7757
www.rowepsc.com

ROWE PROFESSIONAL SERVICES COMPANY



127 S. Main Street
Mt. Pleasant, MI 48858

PREPARED FOR
MIDLAND COUNTY ROAD COMMISSION
EASTMAN ROAD WIDENING AND REHAB.

NOTE & MISCELLANEOUS QUANTITIES SHEET

SHT# 3 OF 65
JOB No: 19M0006

CONTROL TABLE - EASTMAN ROAD PROJECT CONTROL LINE

BENCHMARK DATA TABLE

NUMBER	NORTHING	EASTING	ELEVATION	STATION	OFFSET	DESCRIPTION
BM 11	797507	13154990	643.92	74+74.24	31.36' RT	NE'LY FLANGE BOLT ON HYDRANT, 18' ± E OF E. EDGE OF BIT EASTMAN RD, 22' ± N7W TO TOP CENTER OF BEE HIVE, 32' ± S15E TO FLAG POLE
BM 12	799004	13154896	653.32	89+71.24	67.24' LT	NE FLANGE BOLT ON HYDRANT, W SIDE EASTMAN RD, 30.5' ± S TO C/L IRON WOODS PASS, 67' ± E TO C/L EASTMAN RD, 17.5' ± N65E TO P. POLE
BM 13	800533	13155015	650.94	105+00.17	47.16' RT	NE FLANGE BOLT ON HYDRANT, E SIDE EASTMAN RD, 32' ± S TO C/L ESTATES DR, 21' ± S50W TO STOP SIGN POST, 47.5' ± W TO C/L EASTMAN RD.
BM 14	801669	13154939	648.72	116+36.42	28.85' LT	NW FLANGE BOLT ON HYDRANT, W SIDE EASTMAN RD, 28' ± E TO C/L EASTMAN RD, 11' ± S23E TO TOP CENTER OF 15" CORR. METAL PIPE AT S END
BM 15	802913	13154932	648.97	128+79.80	41.21' LT	SET SPIKE IN E FACE OF P. POLE, W SIDE EASTMAN RD, 17.5' ± S40E TO FIBER OPTIC CABLE MARKER, 41' ± E TO C/L EASTMAN RD, 55' ± N TO C/L OF CONCRETE DRIVE TO HOUSE #3189
BM 16	803751	13155007	655.13	137+18.29	30.60' RT	SET SPIKE IN W FACE OF P. POLE, SE QUAD OF EASTMAN RD & SIEBERT RD, 32' ± N TO C/L SIEBERT RD, 30' ± W TO C/L EASTMAN RD, 5' ± S70E TO TELEPHONE RISER
BM 17	805087	13154939	652.27	150+53.91	43.20' LT	FND RR SPIKE IN E FACE OF POWER POLE, 14' ± N TO C/L OF CREEK, 42' ± E TO C/L EASTMAN RD, 26' ± N56E TO TOP CENTER OF 48" CORR. METAL PIPE AT W END
BM 21	795902	13154889	640.97	58+69.25	64.69' LT	NE FLANGE BOLT OF HYDRANT, 37.5' ± S TO C/L MONROE RD, 12.5' ± S36W TO WEIGHT LIMIT SIGN POST, 21' ± N75E TO STREET SIGN POST

TRAVERSE POINT DATA TABLE

NUMBER	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
TP 1	797396.9780	13154991.0400	73+64.48	33.12' RT	FND "ROSENBLACK" IRON & CAP. 2' ± W OF EDGE OF ASPHALT P. LOT TO "WHOLESALE AUTO", 55' ± S OF C/L DRIVE TO "WHOLESALE AUTO" P. LOT, 72' ± S15E TO "WHOLESALE AUTO" SIGN
TP 2	798937.4780	13154933.7900	89+04.79	29.11' LT	SET IRON & "ROWE TRAV" CAP. 36' ± N TO C/L IRON WOODS PASS, 11.5' ± S22W TO AT&T UNDERGROUND CABLE MARKER, 29' ± E TO C/L EASTMAN RD.
TP 3	800534.8100	13155000.9100	105+02.33	32.85' RT	SET IRON & "ROWE TRAV" CAP. 32' ± S TO C/L ESTATES DR, 33' ± W TO C/L EASTMAN RD, 14.5' ± E TO HYDRANT
TP 4	801708.9640	13154932.2370	116+76.16	36.14' LT	SET IRON & "ROWE TRAV" CAP. 5' ± W TO P. POLE, 36' ± E TO C/L EASTMAN RD, 41' ± S10E TO HYDRANT
TP 5	802919.5300	13154951.4200	128+86.85	21.43' LT	SET IRON & "ROWE TRAV" CAP. 21.5' ± S70W TO P. POLE, 28' ± N TO C/L CONCRETE DRIVE TO HOUSE #3189, 21' ± E TO C/L EASTMAN RD.
TP 6	803805.9580	13155008.5540	137+73.55	31.45' RT	SET IRON & "ROWE TRAV" CAP. 23.5' ± S TO C/L SIEBERT RD, 31' ± W TO C/L EASTMAN RD, 6' ± S40E TO STOP SIGN/STREET SIGN POST
TP 7	805086.7310	13154954.6230	150+54.08	27.51' LT	SET IRON & "ROWE TRAV" CAP. 16.5' ± W TO E FACE OF P. POLE, 16' ± N20E TO TOP CENTER OF 48" CORR. METAL PIPE AT W END, 27' ± E TO C/L EASTMAN RD.
TP 20	795909.6630	13154913.3680	58+77.13	40.00' LT	SET IRON & "ROWE TRAV" CAP, NW QUAD OF EASTMAN RD. & MONROE RD, 15' ± N20W TO FIBER OPTIC MARKER, 10' ± N30E TO SW FACE OF P. POLE, 45' ± S TO C/L MONROE RD.

ALIGNMENT POINT DATA TABLE

NUMBER	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
AP 31	790132.6331	13154967.8800	1+00.00	0.00' RT	POINT OF BEGINNING, EASTMAN ROAD EXISTING CENTERLINE ALIGNMENT
AP 34	795932.0233	13154953.3217	58+99.41	0.00' RT	POINT OF CURVATURE, EASTMAN ROAD EXISTING CENTERLINE ALIGNMENT
AP 35	795984.1593	13154953.3543	59+51.55	0.00' RT	POINT OF TANGENT, EASTMAN ROAD EXISTING CENTERLINE ALIGNMENT
AP 36	800824.8586	13154969.0022	107+92.27	0.00' RT	POINT OF CURVATURE, EASTMAN ROAD EXISTING CENTERLINE ALIGNMENT
AP 37	800896.1804	13154968.9784	108+63.59	0.00' RT	POINT OF TANGENT, EASTMAN ROAD EXISTING CENTERLINE ALIGNMENT
AP 38	801317.5471	13154967.3352	112+84.96	0.00' RT	POINT OF CURVATURE, EASTMAN ROAD EXISTING CENTERLINE ALIGNMENT
AP 39	801390.0001	13154967.3152	113+57.42	0.00' RT	POINT OF TANGENT, EASTMAN ROAD EXISTING CENTERLINE ALIGNMENT
AP 40	802620.9741	13154971.4336	125+88.40	0.00' RT	POINT OF CURVATURE, EASTMAN ROAD EXISTING CENTERLINE ALIGNMENT
AP 41	802635.4635	13154971.4926	126+02.89	0.00' RT	POINT OF TANGENT, EASTMAN ROAD EXISTING CENTERLINE ALIGNMENT
AP 42	804264.0627	13154979.3012	142+31.51	0.00' RT	POINT OF CURVATURE, EASTMAN ROAD EXISTING CENTERLINE ALIGNMENT
AP 43	804277.7272	13154979.3574	142+45.17	0.00' RT	POINT OF TANGENT, EASTMAN ROAD EXISTING CENTERLINE ALIGNMENT
AP 44	806262.4822	13154986.1615	162+29.94	0.00' RT	POINT OF CURVATURE, EASTMAN ROAD EXISTING CENTERLINE ALIGNMENT
AP 45	806309.5166	13154986.2121	162+76.97	0.00' RT	POINT OF TANGENT, EASTMAN ROAD EXISTING CENTERLINE ALIGNMENT
AP 46	806515.4486	13154985.9495	164+83.00	0.00' RT	POINT OF ENDING, EASTMAN ROAD EXISTING CENTERLINE ALIGNMENT

SECTION CORNER DATA TABLE

NUMBER	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
SCOR 204	803782.7750	13154980.0860	137+50.23	3.09' RT	1/4 CORNER E6, T15N-R2E, MIDLAND COUNTY, MICHIGAN, FND. REMON MON. IN BOX NO TOP
SCOR 205	803783.5650	13157634.7880	137+63.75	2657.76' RT	CENTER SECTION F6, T15N-R2E, MIDLAND COUNTY, MICHIGAN, FND. REMON MON. IN BOX
SCOR 206	803780.8900	13152367.7150	137+35.82	2609.24' LT	CENTER SECTION D6, T15N-R2E, MIDLAND COUNTY, MICHIGAN, FND. REMON MON. IN BOX
SCOR 207	801161.4310	13154968.6510	111+28.84	0.71' RT	SECTION CORNER E7, T15N-R2E, MIDLAND COUNTY, MICHIGAN, FND. REMON MON. IN BOX NO TOP
SCOR 208	801149.2960	13152342.0220	111+26.95	2625.95' LT	1/4 CORNER D7, T15N-R2E, MIDLAND COUNTY, MICHIGAN, FND. REMON MON. IN BOX
SCOR 209	798516.2270	13154961.0380	84+83.63	0.50' LT	1/4 CORNER E8, T15N-R2E, MIDLAND COUNTY, MICHIGAN, FND. REMON MON. IN BOX NO TOP
SCOR 210	795867.6780	13154953.7290	58+35.07	0.28' RT	SECTION CORNER E9, T15N-R2E, MIDLAND COUNTY, MICHIGAN, FND. REMON MON. IN BOX
SCOR 211	795838.6250	13152321.4300	58+11.23	2632.07' LT	1/4 CORNER D9, T15N-R2E, MIDLAND COUNTY, MICHIGAN, FND. REMON MON. IN BOX
SCOR 212	795864.1190	13157599.7860	58+26.26	2646.32' RT	1/4 CORNER F9, T15N-R2E, MIDLAND COUNTY, MICHIGAN, FND. REMON MON. IN BOX

NOTES:

VERTICAL DATUM IS - NAVD88, PER OPUS OBSERVATION AT TP 1
 HORIZONTAL DATUM IS MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE NAD83 (2011)
 UNITS ARE INTERNATIONAL FEET.



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PLAN SUBMITTALS AND CHANGES

BIDDING DOCUMENTS		REV:
DATE	DESCRIPTION	
8/21/23	ISSUED FOR BIDS	

SHT# **4** OF **65**
 JOB No: 19M0006

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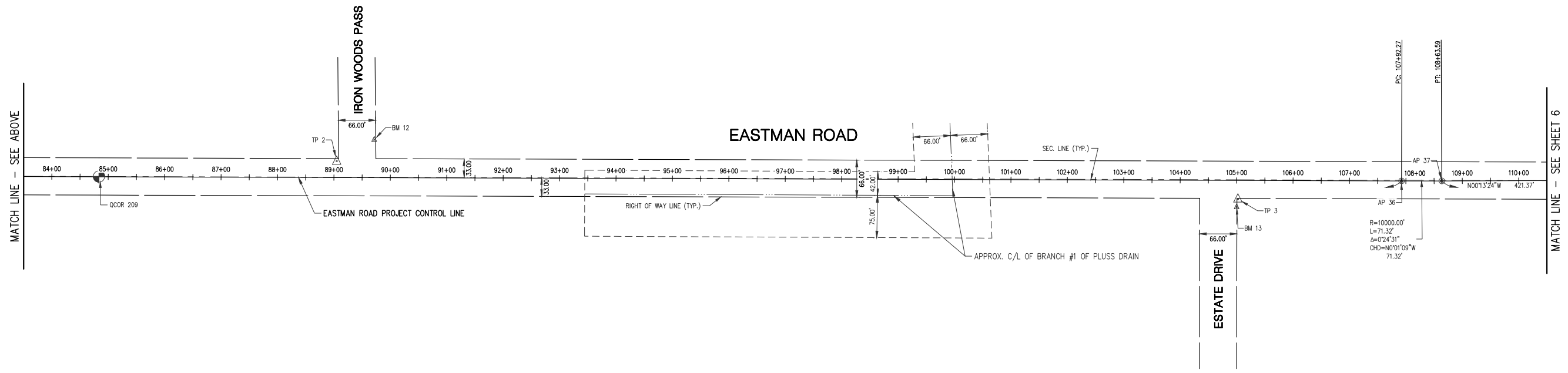
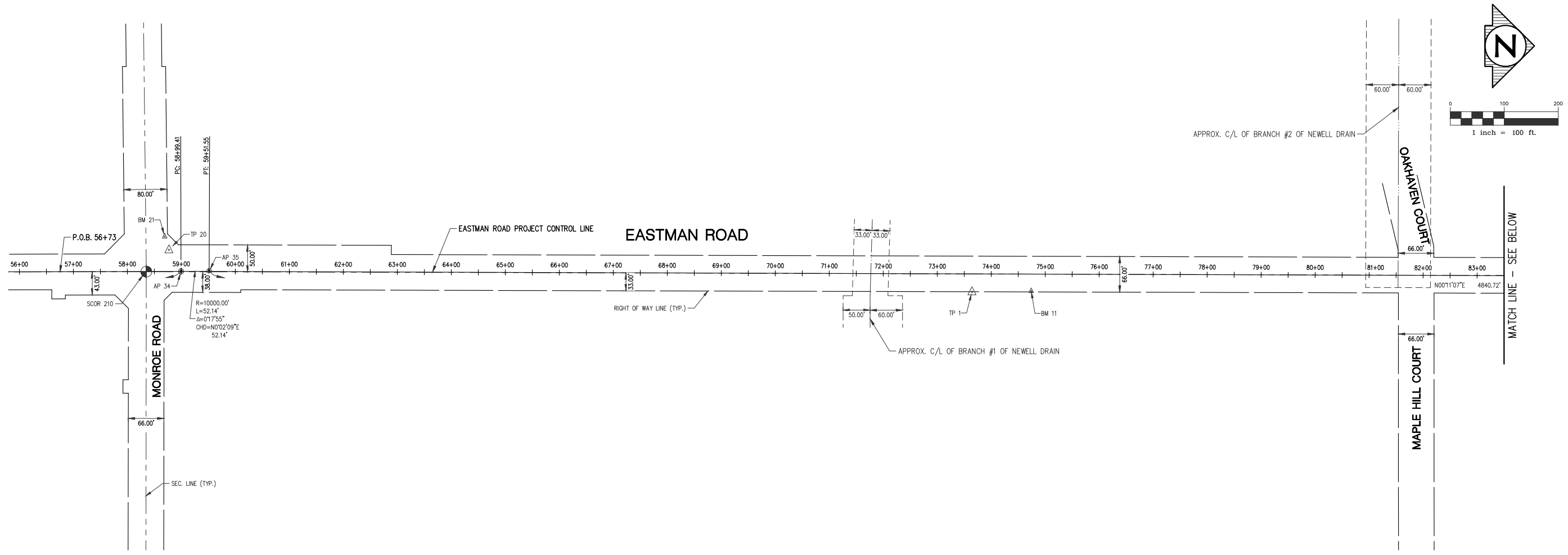


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 Mt. Pleasant, MI 48858

ALIGNMENT AND CONTROL SHEET



- LEGEND**
- ▲ BENCHMARK
 - ALIGNMENT POINT
 - △ TRAVERSE POINT
 - ⊕ SECTION CORNER

NOTES:
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PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

REV: _____
 SHT# **5** OF **65**
 JOB No: 19M0006

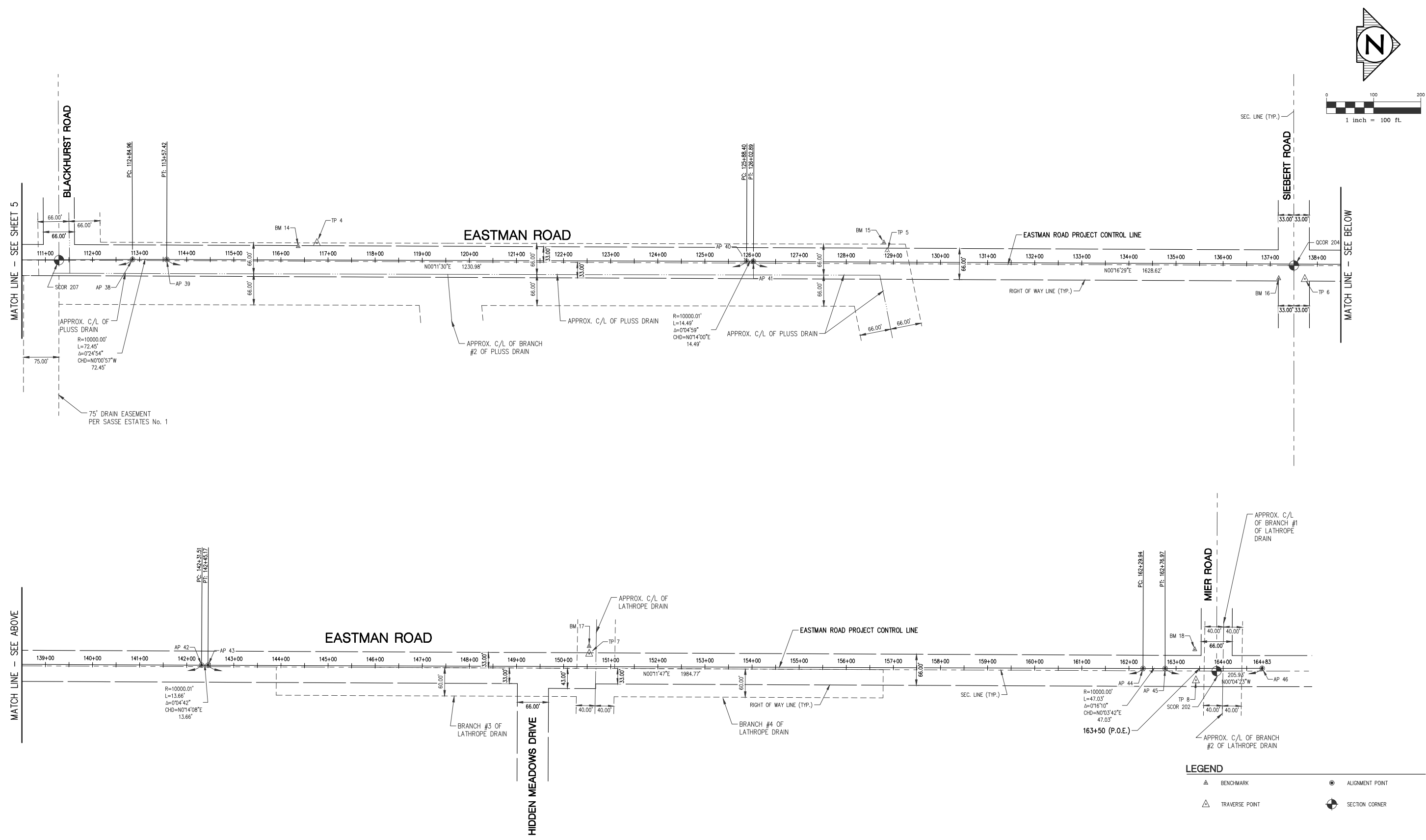
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PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
 REVIEWER: TCL
 SCALE: 1" = 100'

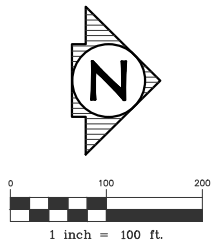
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ALIGNMENT AND CONTROL SHEET



MATCH LINE - SEE ABOVE

MATCH LINE - SEE SHEET 5



LEGEND

▲ BENCHMARK	● ALIGNMENT POINT
△ TRAVERSE POINT	⊕ SECTION CORNER

NOTES:
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PLAN SUBMITTALS AND CHANGES		REV:
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DATE	DESCRIPTION	
8/21/23	ISSUED FOR BIDS	

PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
 REVIEWER: TCL
 SCALE: 1" = 100'

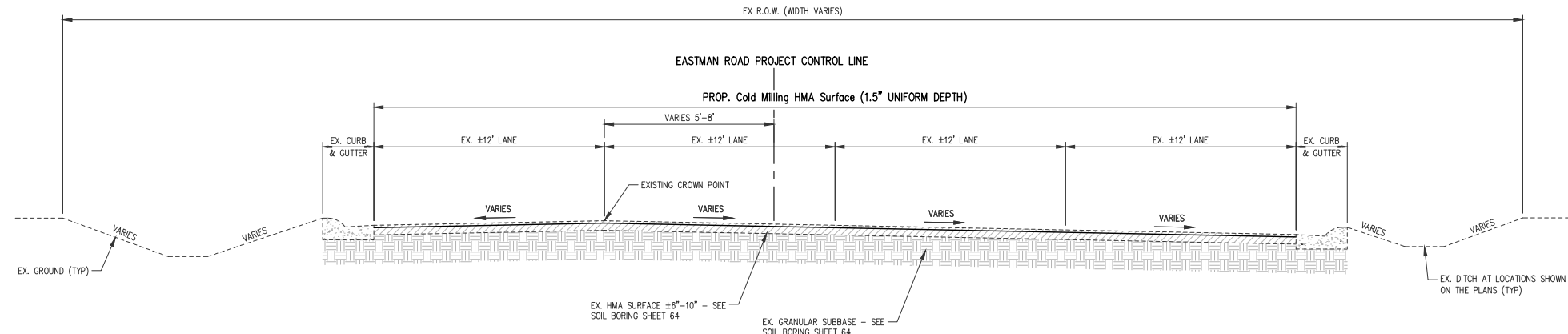
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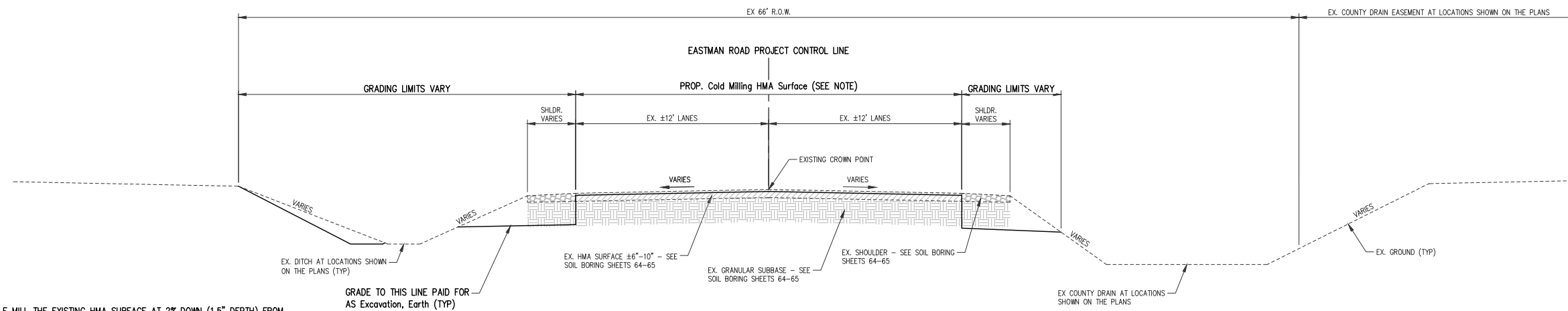
ALIGNMENT AND CONTROL SHEET

SHT# **6** OF **65**
 JOB No: 19M0006



EXISTING TYPICAL CROSS SECTION

APPLIES:
STA 56+73 (P.O.B) TO STA 60+28

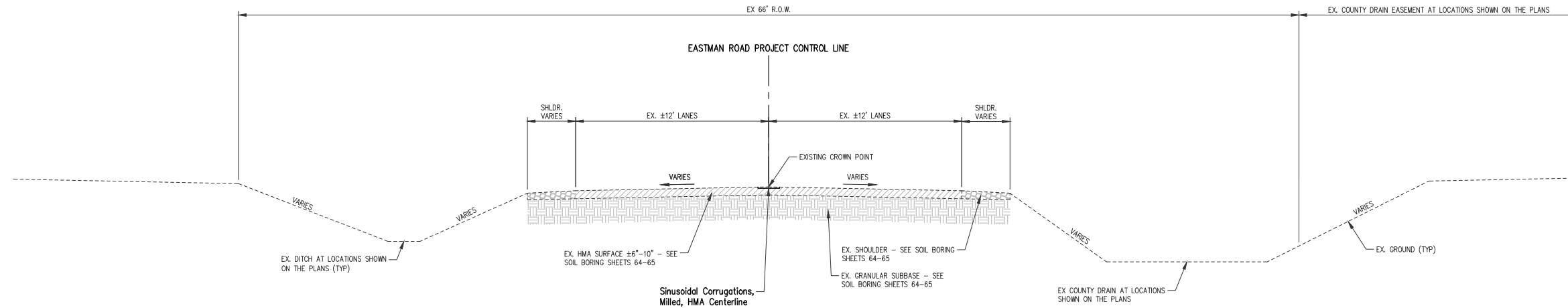


EXISTING TYPICAL CROSS SECTION

APPLIES:
STA 60+28 TO STA 148+81

NOTE:
PROFILE MILL THE EXISTING HMA SURFACE AT 2% DOWN (1.5\"/>

GRADE TO THIS LINE PAID FOR
AS Excavation, Earth (TYP)



EXISTING TYPICAL CROSS SECTION

APPLIES:
STA 148+81 TO STA 163+50 (P.O.E.)



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SHT# 7 OF 65
JOB No: 19M0006

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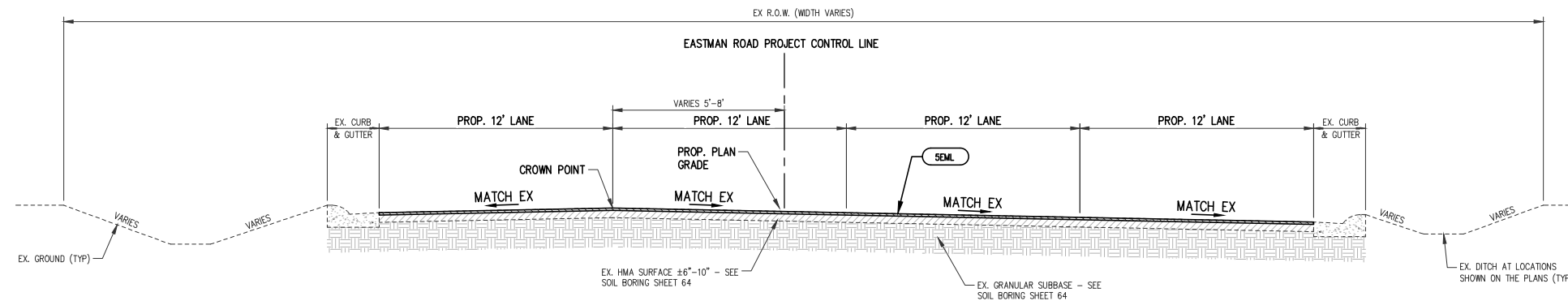


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TYPICAL SHEET

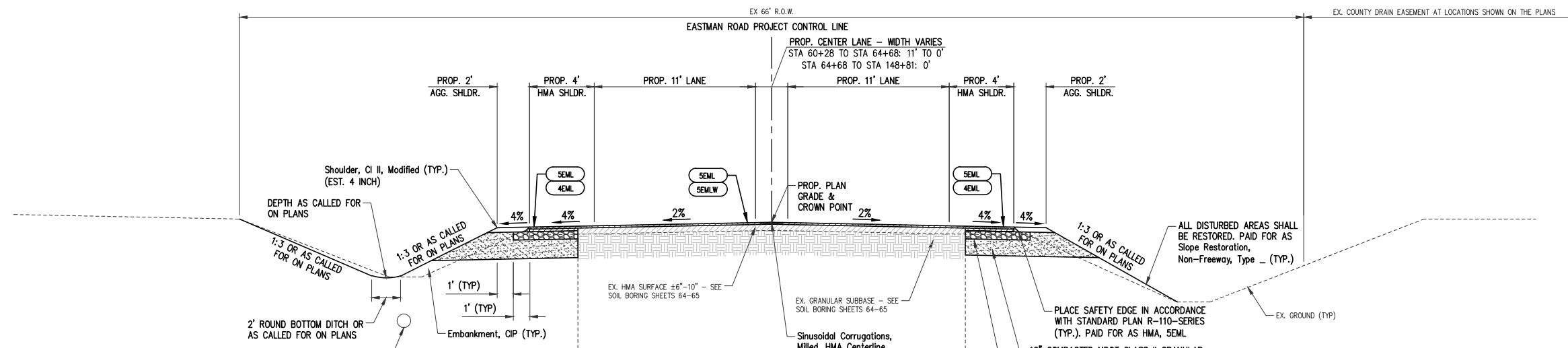
PLAN DATE: AUGUST 2023
PROJECT MGR: MJS
REVIEWER: TCL
SCALE: NO SCALE

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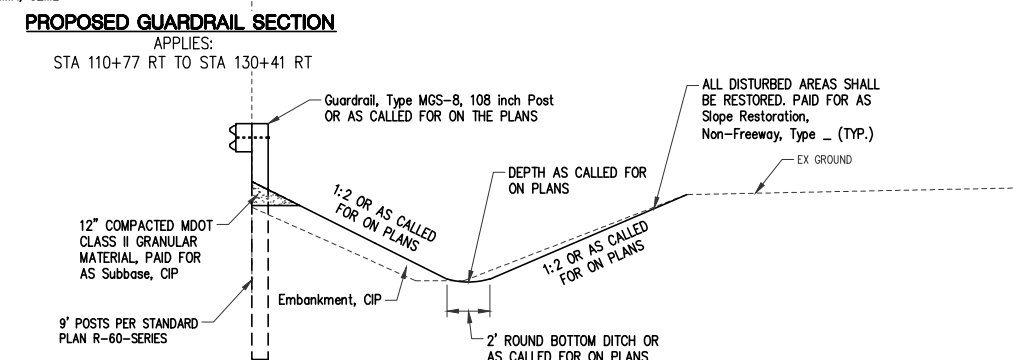
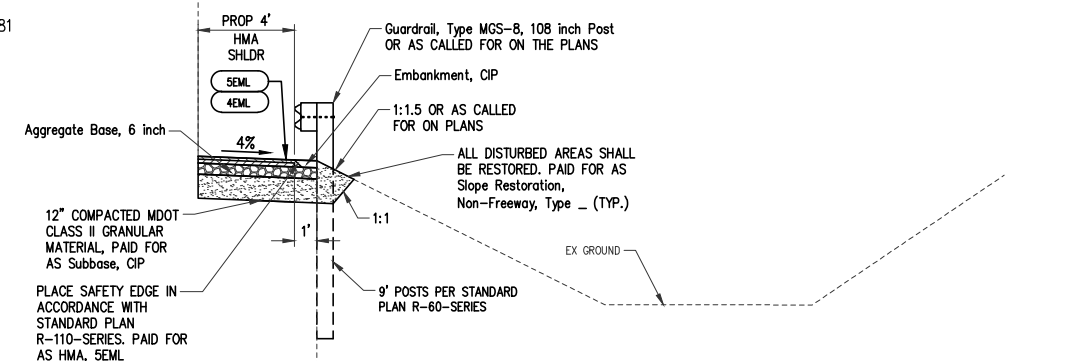
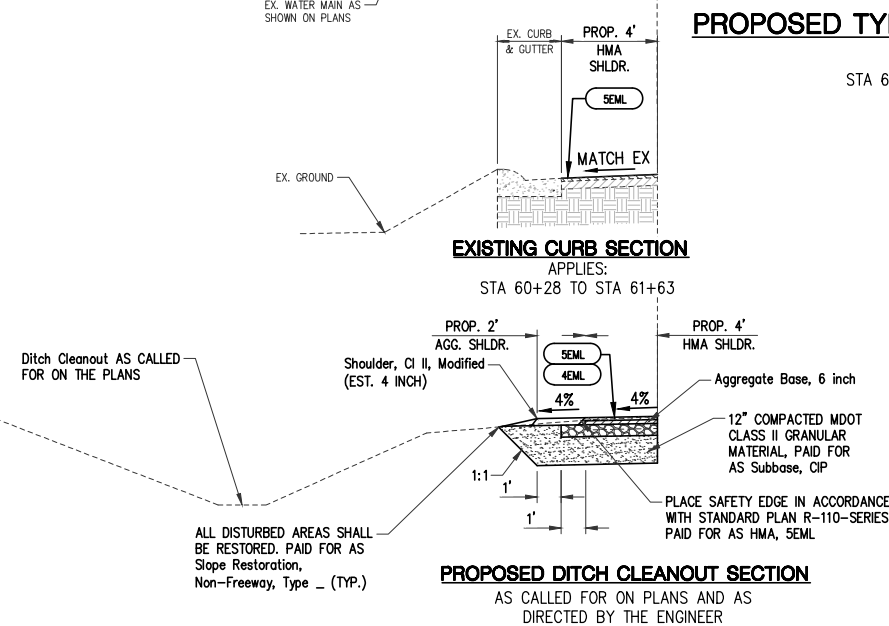
PROPOSED TYPICAL CROSS SECTION

APPLIES:
STA 56+73 (P.O.B.) TO STA 60+28



PROPOSED TYPICAL CROSS SECTION

APPLIES:
STA 60+28 TO STA 148+81



HMA APPLICATION CHART						
IDENT NO	ITEM	HMA PAVEMENT	RATE OF APPLICATION	ESTIMATED THICKNESS	PERFORMANCE GRADE	COMMENTS
5EML	HMA, 5EML	HMA, 5EML	165#/SYD	1.5"	64-28	TOP COURSE (AWI=260 MINIMUM)
4EML	HMA, 4EML	HMA, 4EML	220#/SYD	2.0"	64-28	LEVELING COURSE
5EMLW	HMA, 5EML	HMA, 5EML	VARIES	VARIES	64-28	WEDGING FOR PROFILE AND CROWN CORRECTION
HMA-A	HMA APPROACH	-	-	-	64-28	MATCH MAINLINE APPLICATION RATES AND MIXES FOR APPROACH RESURFACING AND WIDENING
HMA-D	HMA APPROACH	VARIES	385#/SYD	-	64-28	HMA, 5EML @ 165#/SYD AND HMA, 4EML @ 220#/SYD FOR DRIVEWAYS
HP	Hand Patching	HMA, 4EML	VARIES	VARIES	64-28	Hand Patching FOR STORM SEWER TRENCH REPAIRS (2" MAX LIFT, 1.5" MIN LIFT)
-	HMA BOND COAT	-	0.05-0.15 GAL	-	-	NOT A PAY ITEM; FOR INFORMATION ONLY

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PLAN SUBMITTALS AND CHANGES		REV:
DATE	DESCRIPTION	
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SHT# 8 OF 65
JOB No: 19M0006

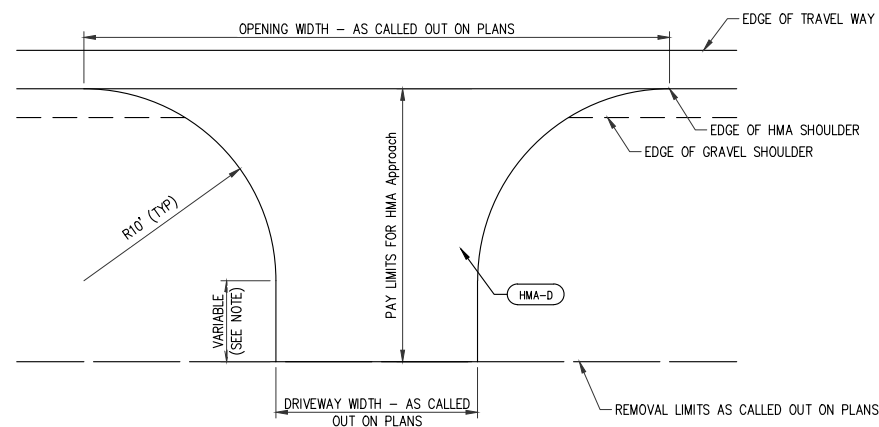
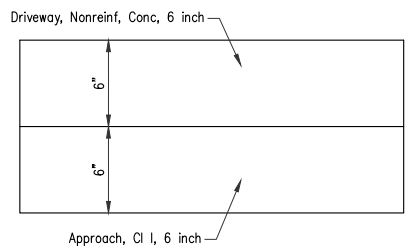
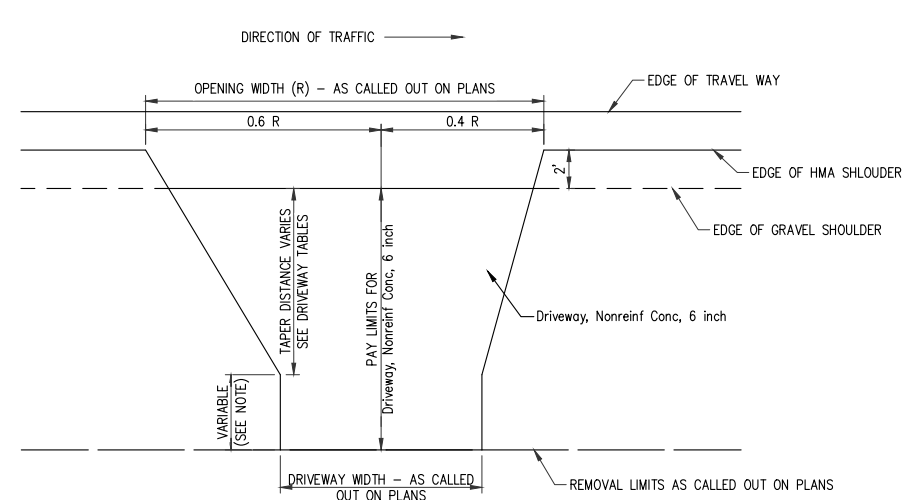
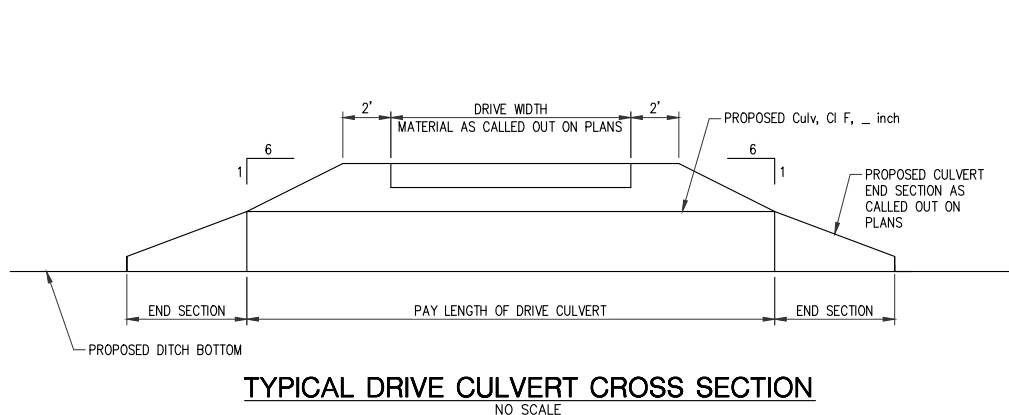
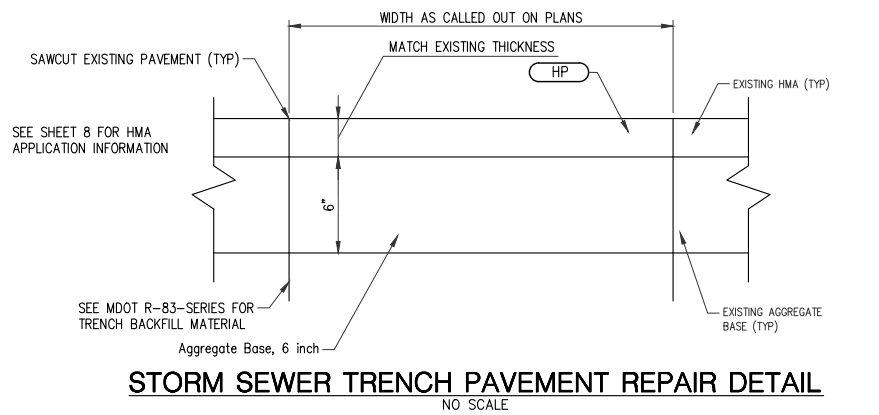
PLAN DATE: AUGUST 2023
PROJECT MGR: MJS
REVIEWER: TCL
SCALE: NO SCALE

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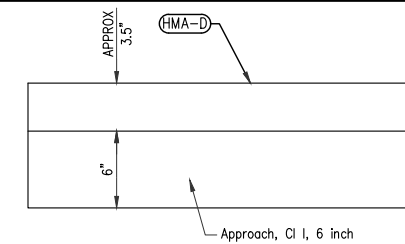
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TYPICAL SHEET

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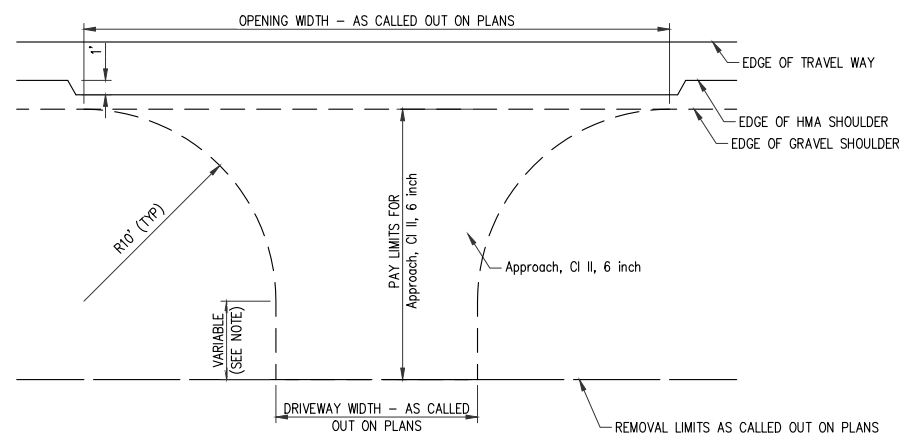
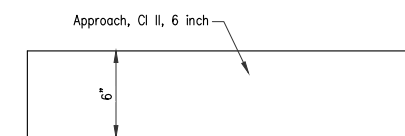
NOTE: LENGTH TO BE AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.



SEE SHEET 8 FOR HMA APPLICATION INFORMATION

HMA DRIVEWAY DETAIL
NO SCALE

NOTE: LENGTH TO BE AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

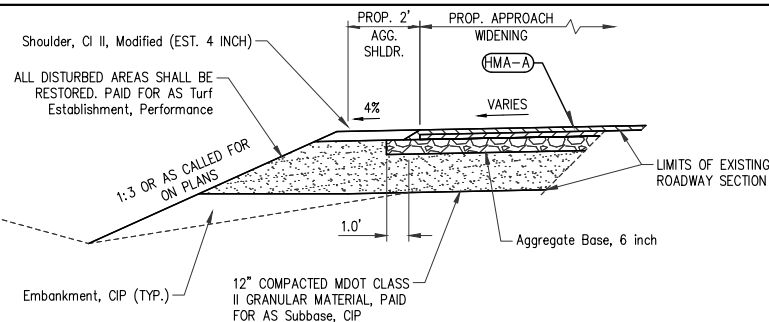


NOTE: LENGTH TO BE AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

SEE SHEET 8 FOR HMA APPLICATION INFORMATION

HMA DRIVEWAY SECTION
NO SCALE

AGGREGATE DRIVEWAY SECTION
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APPROACH WIDENING
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PLAN SUBMITTALS AND CHANGES

BIDDING DOCUMENTS	
DATE	DESCRIPTION
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SHT# 9 OF 65
JOB No: 19M0006

PLAN DATE: AUGUST 2023
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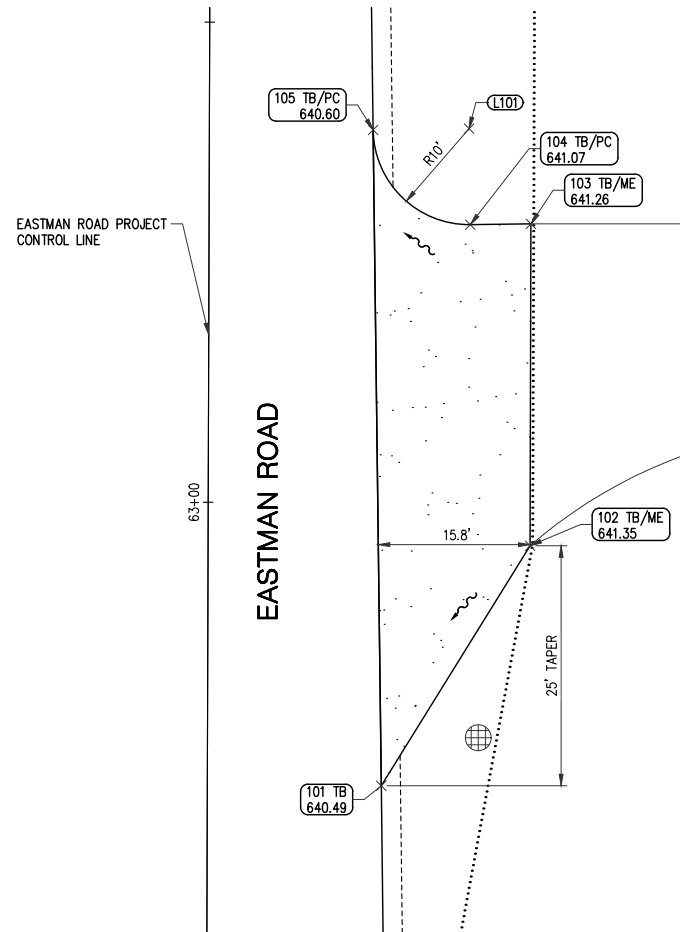
DETAIL SHEET

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LEGEND

- TC - TOP OF CONCRETE CURB
- TB - TOP OF BITUMINOUS PAVEMENT
- DD - DUB DOWN
- ME - MATCH EXISTING ELEVATION
- PC - POINT OF CURVATURE
- ~ - FLOW DIRECTION



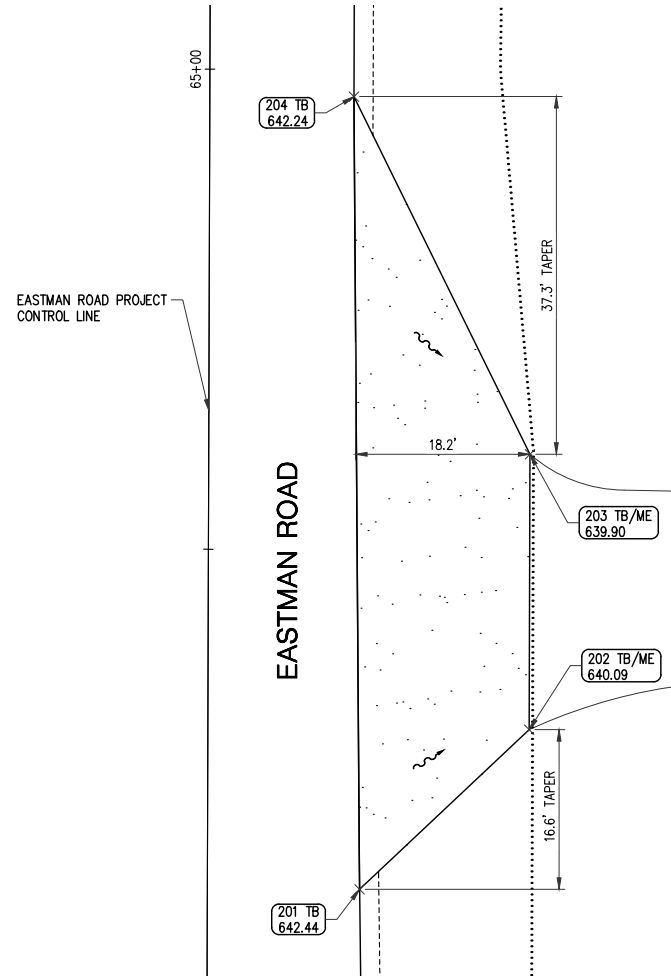
STANFORD PROPANE GAS SOUTH DRIVE

1" = 10'



GRADING POINTS				
POINT	DESCRIPTION	STATION	OFFSET	ELEVATION
101	TB	62+70.53	18.12' R	640.49
102	TB/ME	62+95.58	33.53' R	641.35
103	TB/ME	63+29.09	33.52' R	641.26
104	TB/PC	63+29.00	27.20' R	641.07
105	TB/PC	63+38.84	17.05' R	640.60

LAYOUT POINTS			
POINT	DESCRIPTION	STATION	OFFSET
L101	10' RADIUS	63+38.99	27.05, R

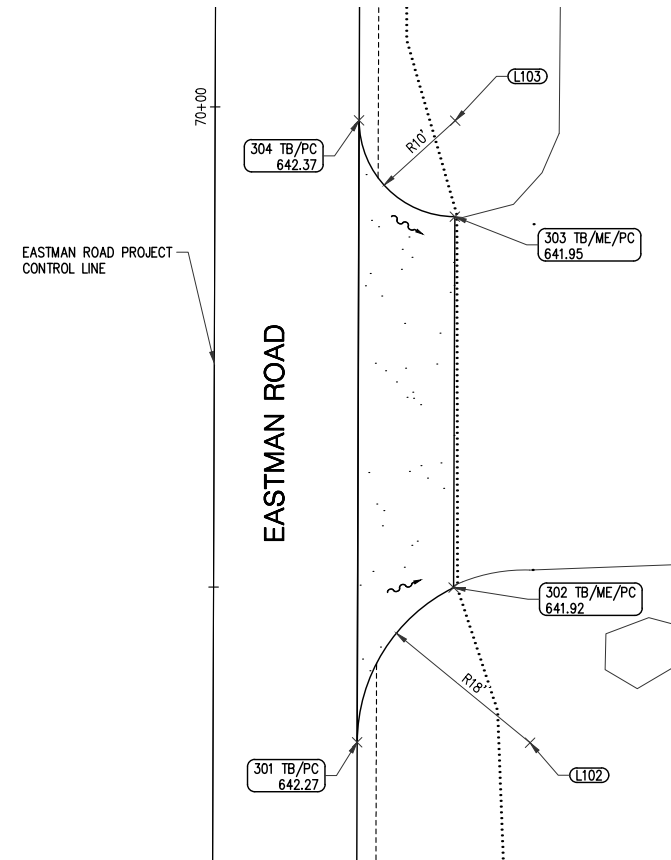


STANFORD PROPANE GAS NORTH DRIVE

1" = 10'



GRADING POINTS				
POINT	DESCRIPTION	STATION	OFFSET	ELEVATION
201	TB	64+14.62	15.86' R	642.44
202	TB/ME	64+31.32	33.47' R	640.09
203	TB/ME	64+60.00	33.46' R	639.90
204	TB	64+97.18	15.00' R	642.24



HIGH STANDARDS AUTOMOTIVE DRIVE

1" = 10'



GRADING POINTS				
POINT	DESCRIPTION	STATION	OFFSET	ELEVATION
301	TB/PC	69+33.89	15.01' R	642.27
302	TB/ME/PC	69+50.03	25.01' R	641.92
303	TB/ME/PC	69+88.66	25.00' R	641.95
304	TB/PC	69+98.66	15.00' R	642.37

LAYOUT POINTS			
POINT	DESCRIPTION	STATION	OFFSET
L102	10' RADIUS	69+33.89	33.01, R
L103	10' RADIUS	69+98.66	25.00, R



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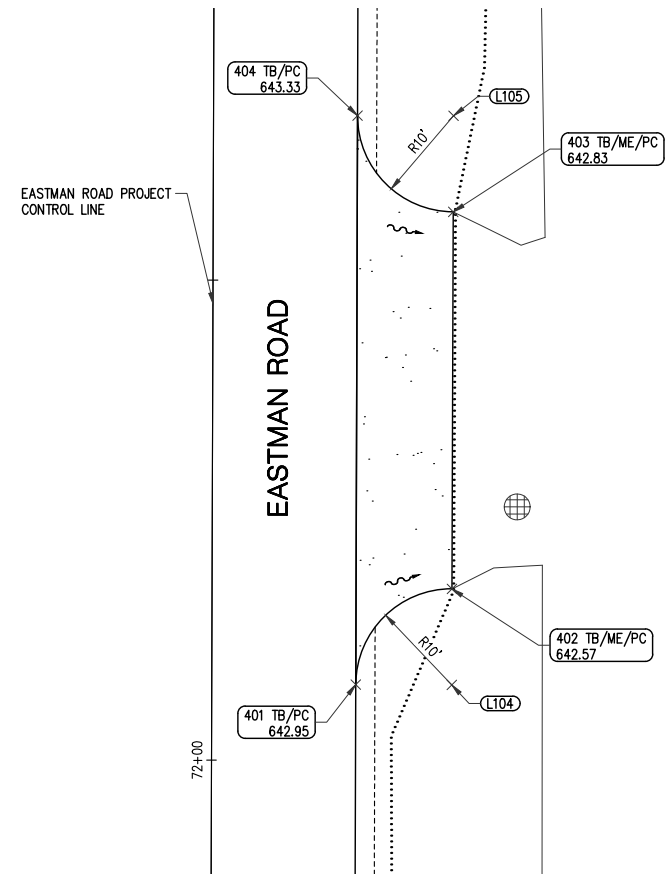
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DETAIL GRADING SHEET
SHT# 10 of 65
JOB No: 19M0006

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LEGEND

- TC - TOP OF CONCRETE CURB
- TB - TOP OF BITUMINOUS PAVEMENT
- DD - DUB DOWN
- ME - MATCH EXISTING ELEVATION
- PC - POINT OF CURVATURE
- DT - DITCH BOTTOM
- TS - TOP OF SPILLWAY
- ~ - FLOW DIRECTION

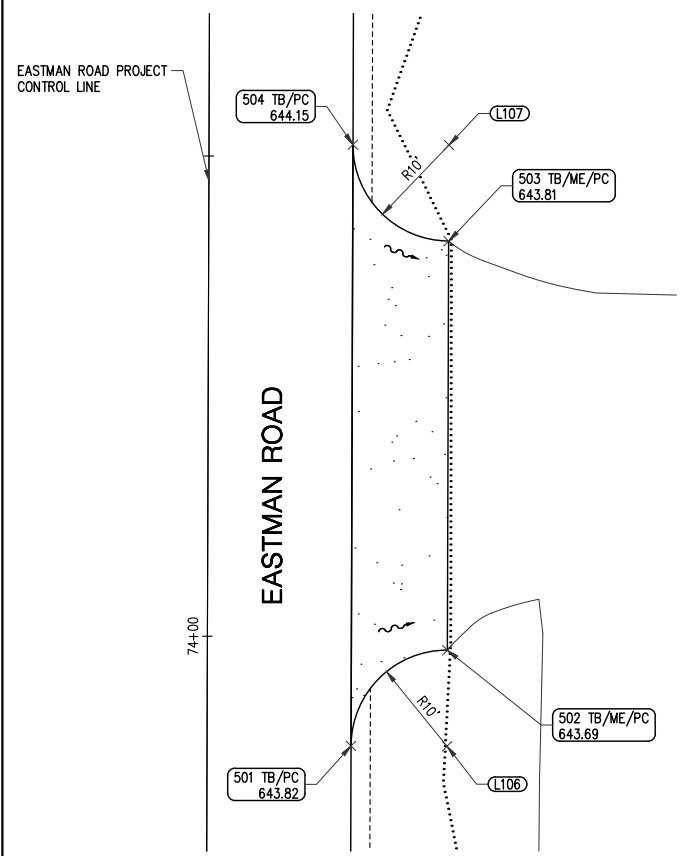


DW AUTO DRIVE
1" = 10'



GRADING POINTS				
POINT	DESCRIPTION	STATION	OFFSET	ELEVATION
401	TB/PC	72+07.91	15.00' R	642.95
402	TB/ME/PC	72+17.91	25.00' R	642.57
403	TB/ME/PC	72+57.19	25.00' R	642.83
404	TB/PC	72+67.19	15.00' R	643.33

LAYOUT POINTS			
POINT	DESCRIPTION	STATION	OFFSET
L104	10' RADIUS	72+07.91	25.00, R
L105	10' RADIUS	72+67.19	25.00, R



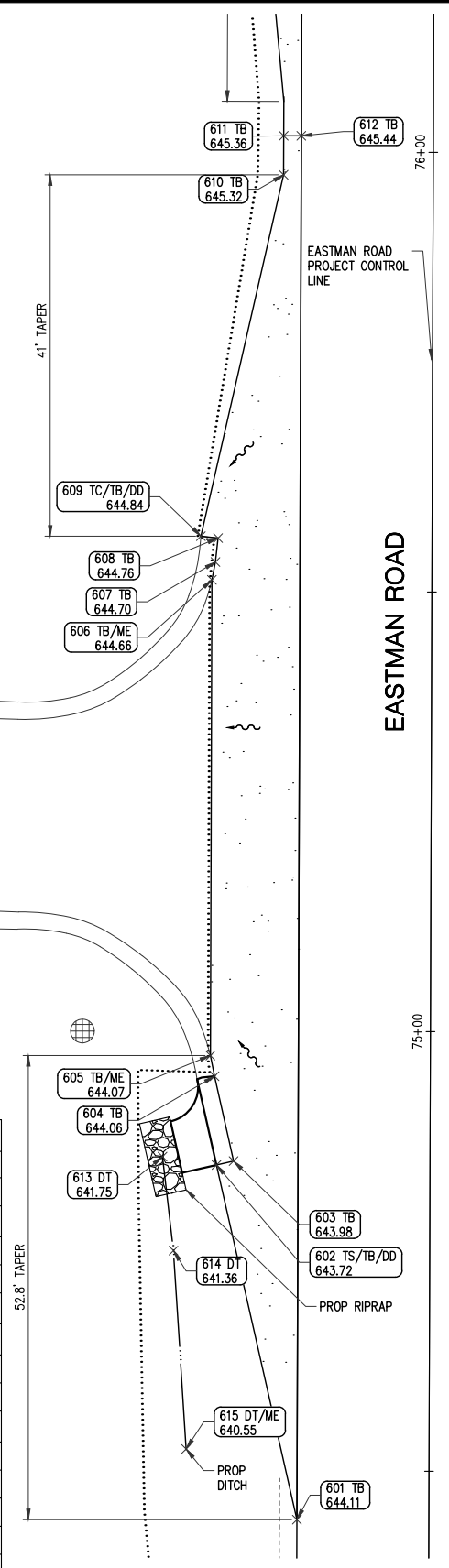
MAPLE HILL NURSERY SOUTH DRIVE
1" = 10'



GRADING POINTS				
POINT	DESCRIPTION	STATION	OFFSET	ELEVATION
501	TB/PC	73+88.63	15.00' R	643.82
502	TB/ME/PC	73+98.63	25.00' R	643.69
503	TB/ME/PC	74+41.23	25.00' R	643.81
504	TB/PC	74+51.23	15.00' R	644.15

LAYOUT POINTS			
POINT	DESCRIPTION	STATION	OFFSET
L106	10' RADIUS	73+88.63	25.00, R
L107	10' RADIUS	74+51.23	25.00, R

GRADING POINTS				
POINT	DESCRIPTION	STATION	OFFSET	ELEVATION
601	TB	74+44.45	15.00' L	644.11
602	TS/TB/DD	74+84.76	24.27' L	643.72
603	TB	74+85.20	22.32' L	643.98
604	TB	74+94.86	24.53' L	644.06
605	TB/ME	74+97.20	25.00' L	644.07
606	TB/ME	75+51.30	25.00' L	644.66
607	TB	75+53.33	24.62' L	644.70
608	TB	75+56.05	24.32' L	644.76
609	TC/TB/DD	75+56.27	26.27' L	644.84
610	TB	75+97.39	17.00' L	645.32
611	TB	76+01.83	17.00' L	645.36
612	TB	76+01.83	15.00' L	645.44
613	DT	74+85.68	30.40' L	641.75
614	DT	74+75.00	29.13' L	641.36
615	DT/ME	74+52.44	27.62' L	640.55



ICON SAF-LOC SOUTH DRIVE
1" = 10'



811
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PLAN SUBMITTALS AND CHANGES		REV:
BIDDING DOCUMENTS		
DATE	DESCRIPTION	
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**MIDLAND COUNTY ROAD COMMISSION
EASTMAN ROAD WIDENING AND REHAB.**

DETAIL GRADING SHEET

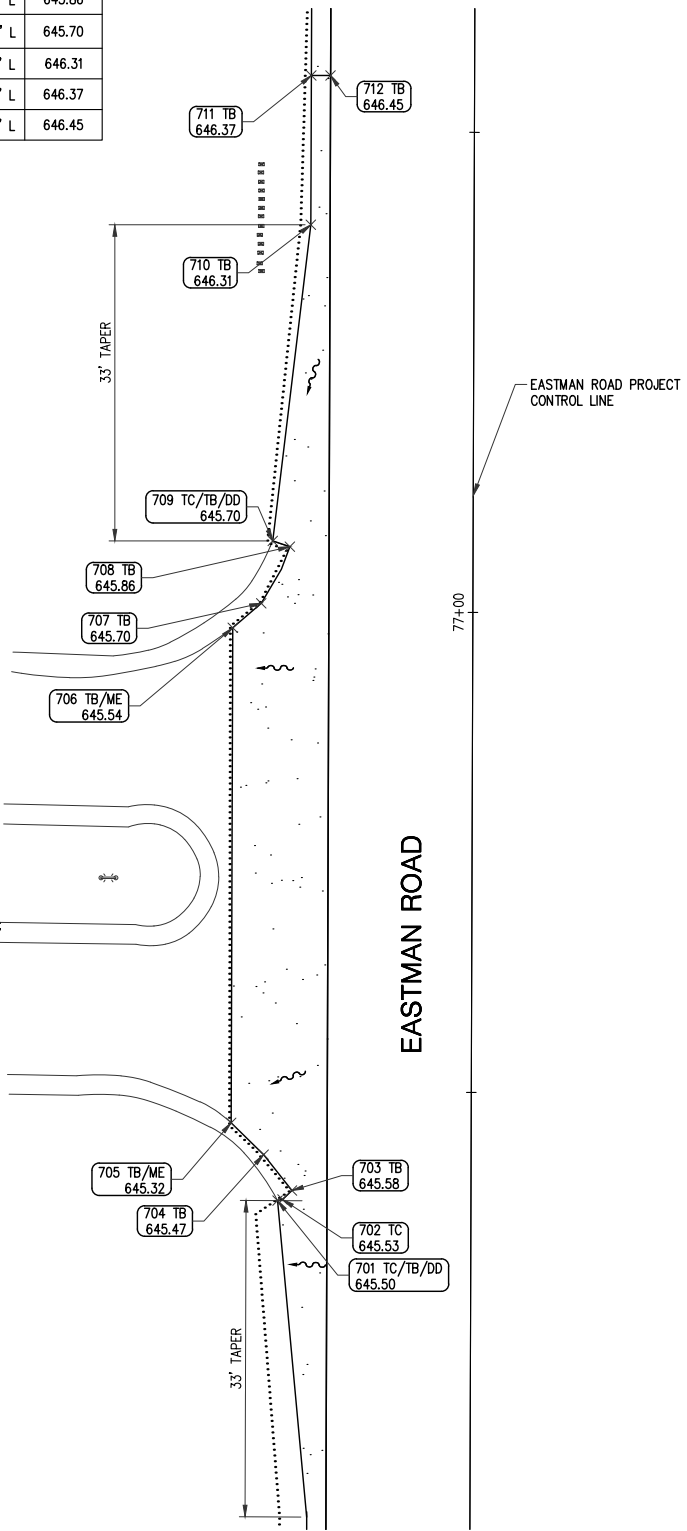
PLAN DATE: AUGUST 2023
PROJECT MGR: MJS
REVIEWER: TCL
SCALE: 1" = 10'

PREPARED FOR
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SHT# 11 OF 65
JOB No: 19M0006

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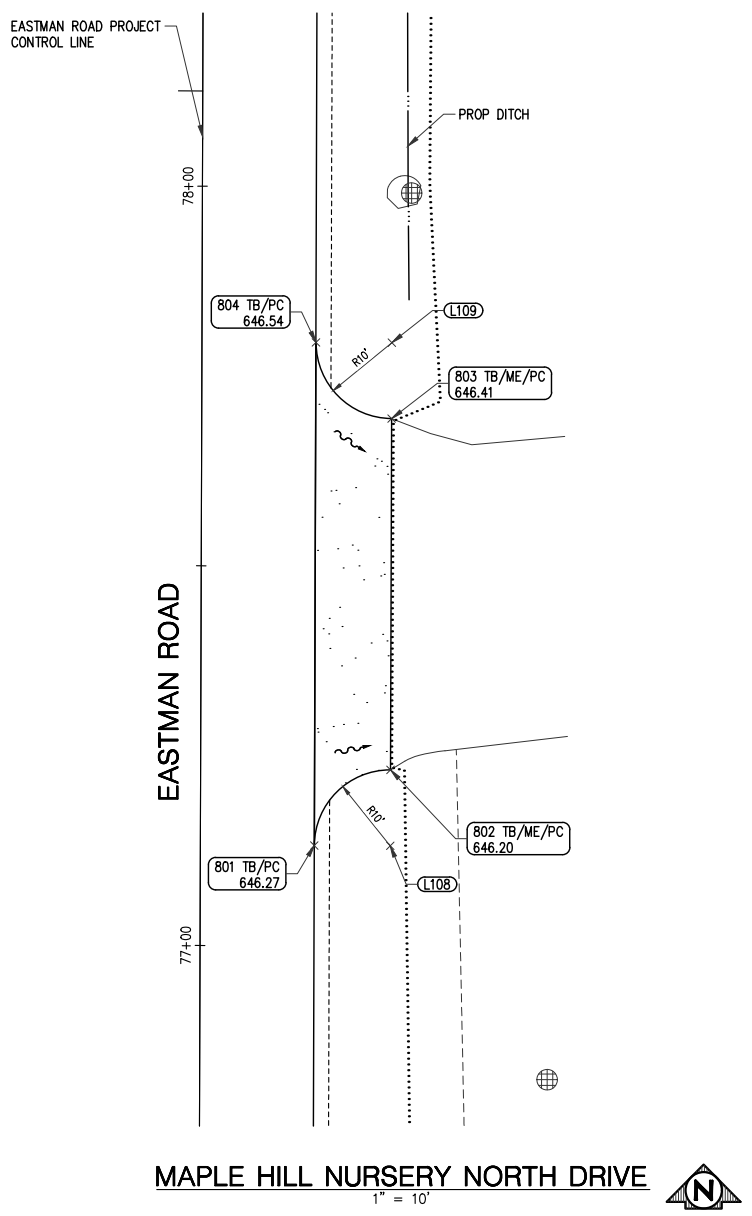
GRADING POINTS				
POINT	DESCRIPTION	STATION	OFFSET	ELEVATION
701	TC/TB/DD	76+38.67	20.15' L	645.50
702	TC	76+38.80	19.63' L	645.53
703	TB	76+39.74	18.66' L	645.58
704	TB	76+43.45	21.61' L	645.47
705	TB/ME	76+46.77	25.00' L	645.32
706	TB/ME	76+98.31	25.00' L	645.54
707	TB	77+00.88	22.05' L	645.70
708	TB	77+06.79	19.08' L	645.86
709	TC/TB/DD	77+07.38	20.86' L	645.70
710	TB	77+40.32	17.00' L	646.31
711	TB	77+55.87	17.00' L	646.37
712	TB	77+55.87	15.00' L	646.45



ICON SAF-LOC DRIVE
1" = 10'

LEGEND

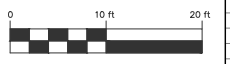
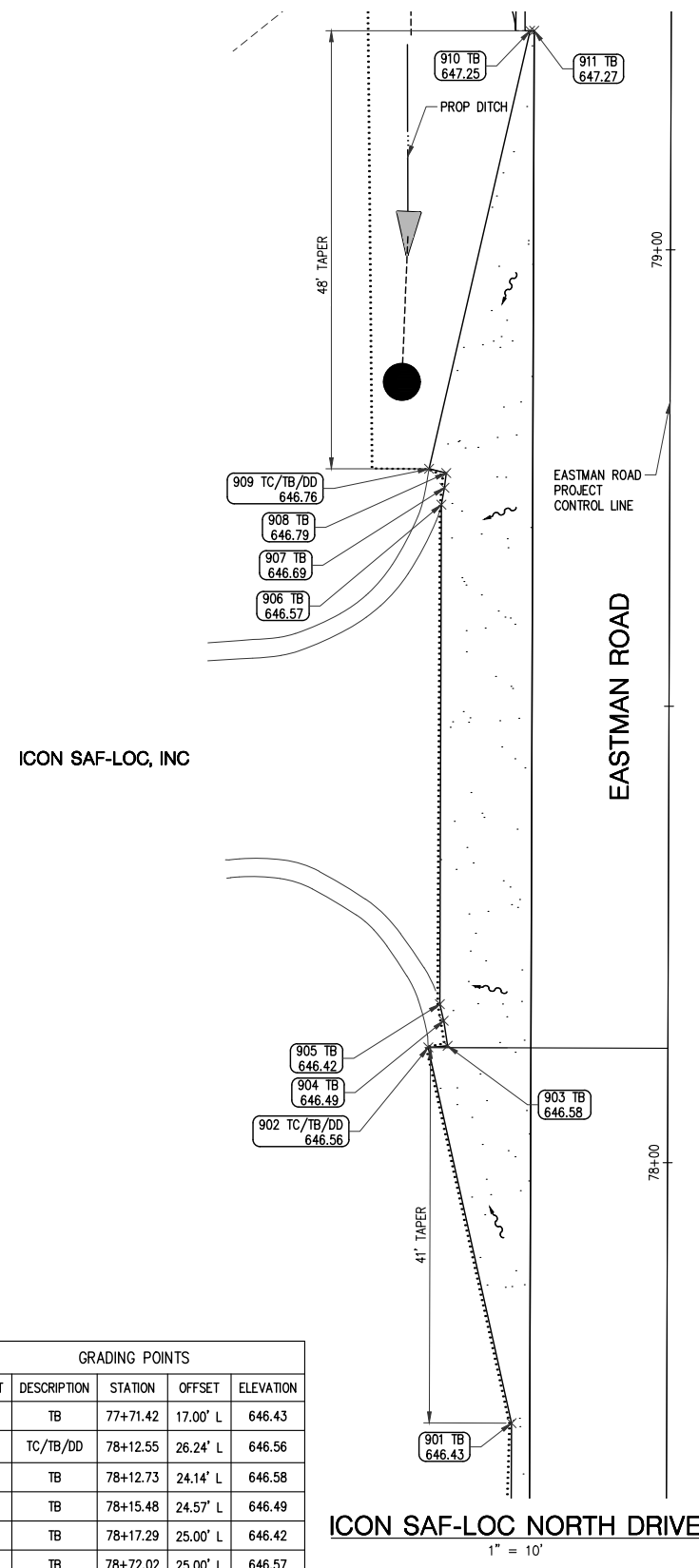
- TC - TOP OF CONCRETE CURB
- TB - TOP OF BITUMINOUS PAVEMENT
- DD - DUB DOWN
- ME - MATCH EXISTING ELEVATION
- PC - POINT OF CURVATURE
- ~ - FLOW DIRECTION



GRADING POINTS				
POINT	DESCRIPTION	STATION	OFFSET	ELEVATION
801	TB/PC	77+13.20	15.00' R	646.27
802	TB/ME/PC	77+23.20	25.00' R	646.20
803	TB/ME/PC	77+69.46	25.00' R	646.41
804	TB/PC	77+79.46	15.00' R	646.54

LAYOUT POINTS			
POINT	DESCRIPTION	STATION	OFFSET
L108	10' RADIUS	77+13.20	25.00, R
L109	10' RADIUS	77+79.46	25.00, R

GRADING POINTS				
POINT	DESCRIPTION	STATION	OFFSET	ELEVATION
901	TB	77+71.42	17.00' L	646.43
902	TC/TB/DD	78+12.55	26.24' L	646.56
903	TB	78+12.73	24.14' L	646.58
904	TB	78+15.48	24.57' L	646.49
905	TB	78+17.29	25.00' L	646.42
906	TB	78+72.02	25.00' L	646.57
907	TB	78+73.86	24.67' L	646.69
908	TB	78+75.48	24.48' L	646.79
909	TC/TB/DD	78+75.93	26.36' L	646.76
910	TB	79+23.95	15.45' L	647.25
911	TB	79+23.95	15.00' L	647.27



PLAN SUBMITTALS AND CHANGES	
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DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

PLAN DATE: AUGUST 2023
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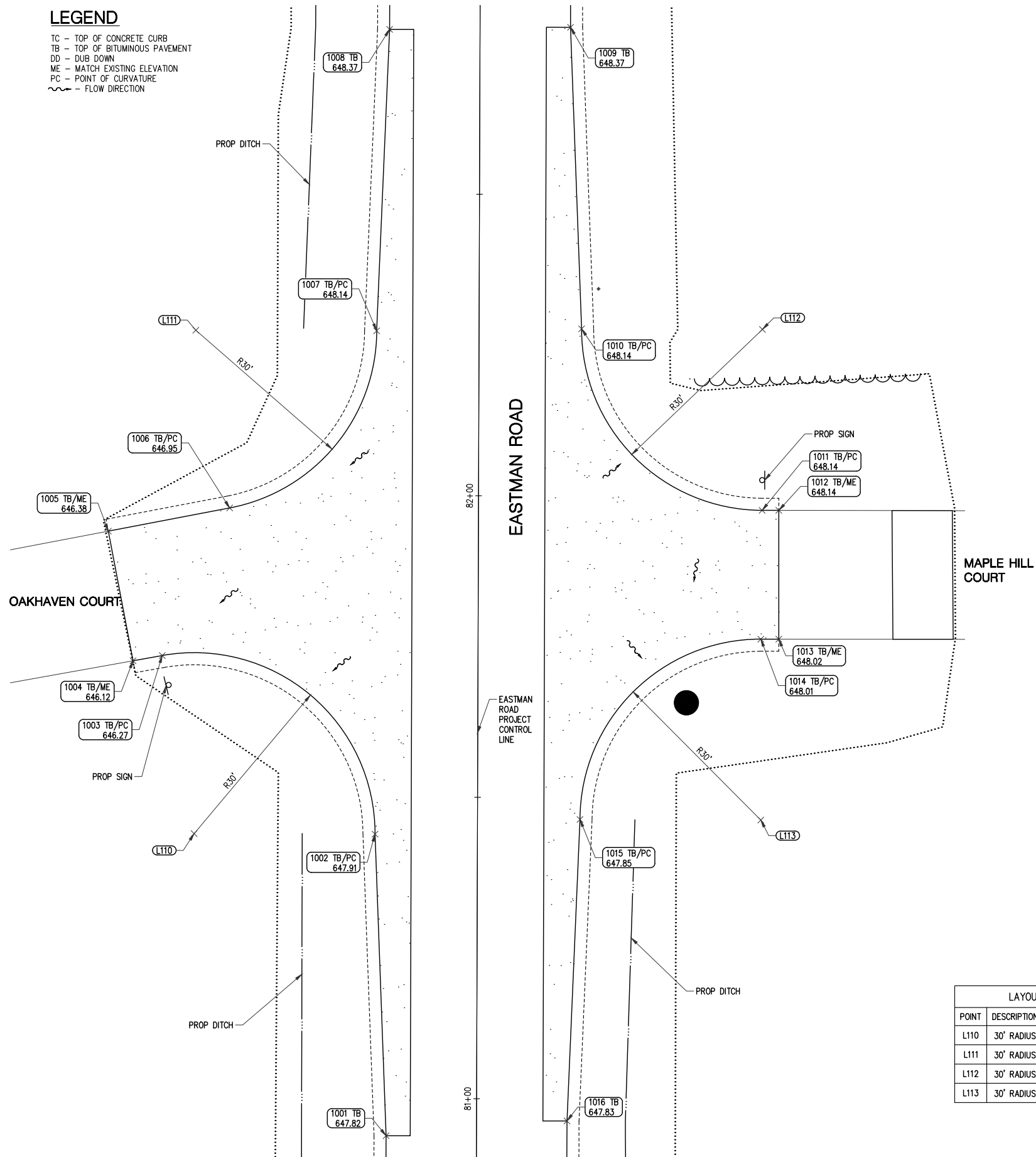
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DETAIL GRADING SHEET
SHT# 12 OF 65
JOB No: 19M0006

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LEGEND

- TC - TOP OF CONCRETE CURB
- TB - TOP OF BITUMINOUS PAVEMENT
- DD - DUB DOWN
- ME - MATCH EXISTING ELEVATION
- PC - POINT OF CURVATURE
- ~ - FLOW DIRECTION

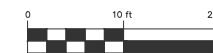


GRADING POINTS				
POINT	DESCRIPTION	STATION	OFFSET	ELEVATION
1001	TB	80+93.82	15.00' L	647.82
1002	TB/PC	81+43.82	17.00' L	647.91
1003	TB/PC	81+73.34	52.38' L	646.27
1004	TB/ME	81+72.45	57.23' L	646.12
1005	TB/ME	81+93.94	61.40' L	646.38
1006	TB/PC	81+97.85	41.28' L	646.95
1007	TB/PC	82+27.30	17.00' L	648.14
1008	TB	82+77.30	15.00' L	648.37
1009	TB	82+77.74	15.00' R	648.37
1010	TB/PC	82+27.74	17.00' R	648.14
1011	TB/PC	81+97.74	47.04' R	648.14
1012	TB/ME	81+97.74	49.82' R	648.14
1013	TB/ME	81+76.38	49.87' R	648.02
1014	TB/PC	81+76.37	46.90' R	648.01
1015	TB/PC	81+46.37	17.00' R	647.85
1016	TB	80+96.37	15.00' R	647.83

LAYOUT POINTS			
POINT	DESCRIPTION	STATION	OFFSET
L110	30' RADIUS	81+43.82	47.00, L
L111	30' RADIUS	82+27.30	47.00, L
L112	30' RADIUS	82+27.74	47.00, R
L113	30' RADIUS	81+46.37	47.00, R

MAPLE HILL COURT/ OAKHAVEN COURT INTERSECTION

1" = 10'



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SHT# 13 of 65
JOB No: 19M0006

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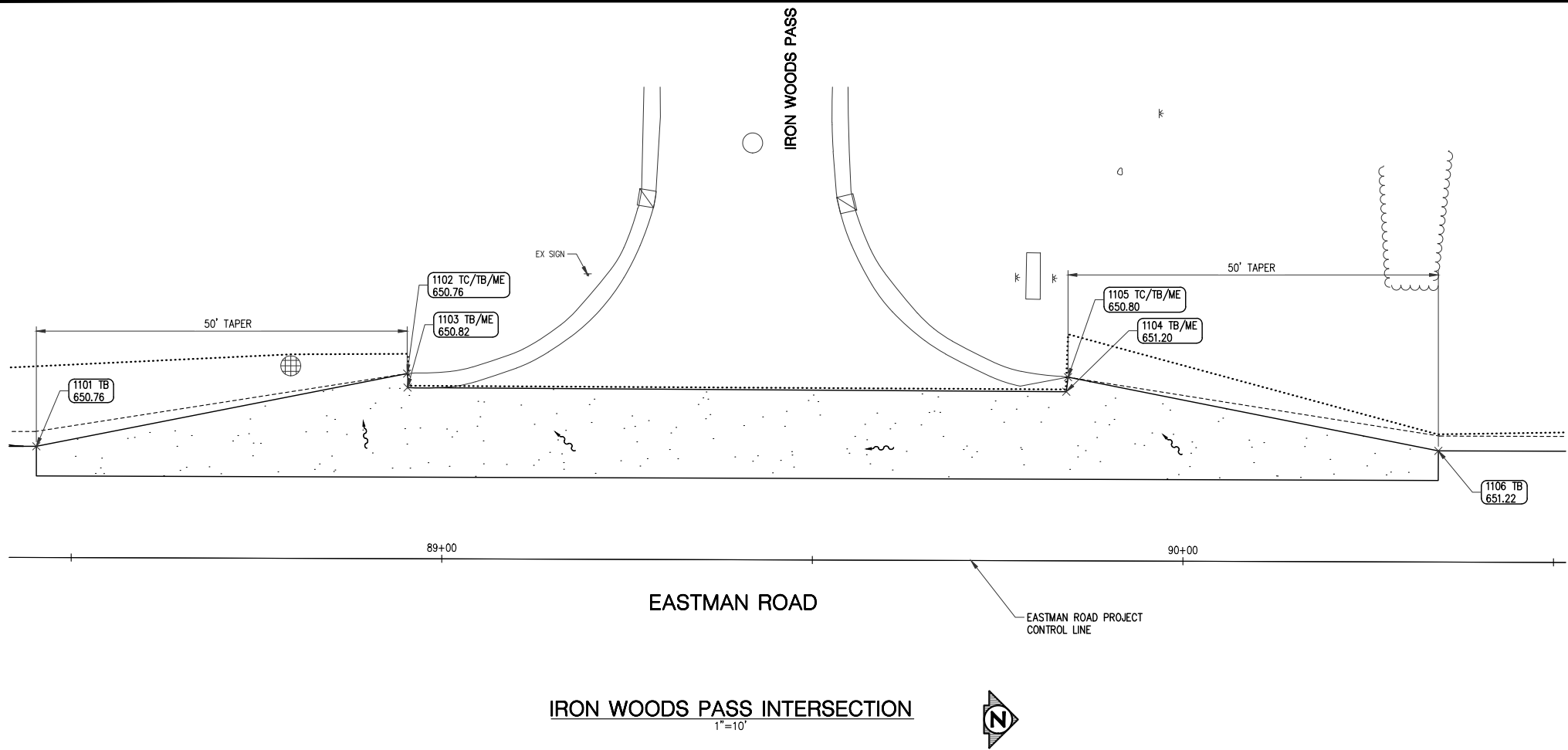
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PLAN DATE: AUGUST 2023
PROJECT MGR: MJS
REVIEWER: TCL
SCALE: 1" = 10'

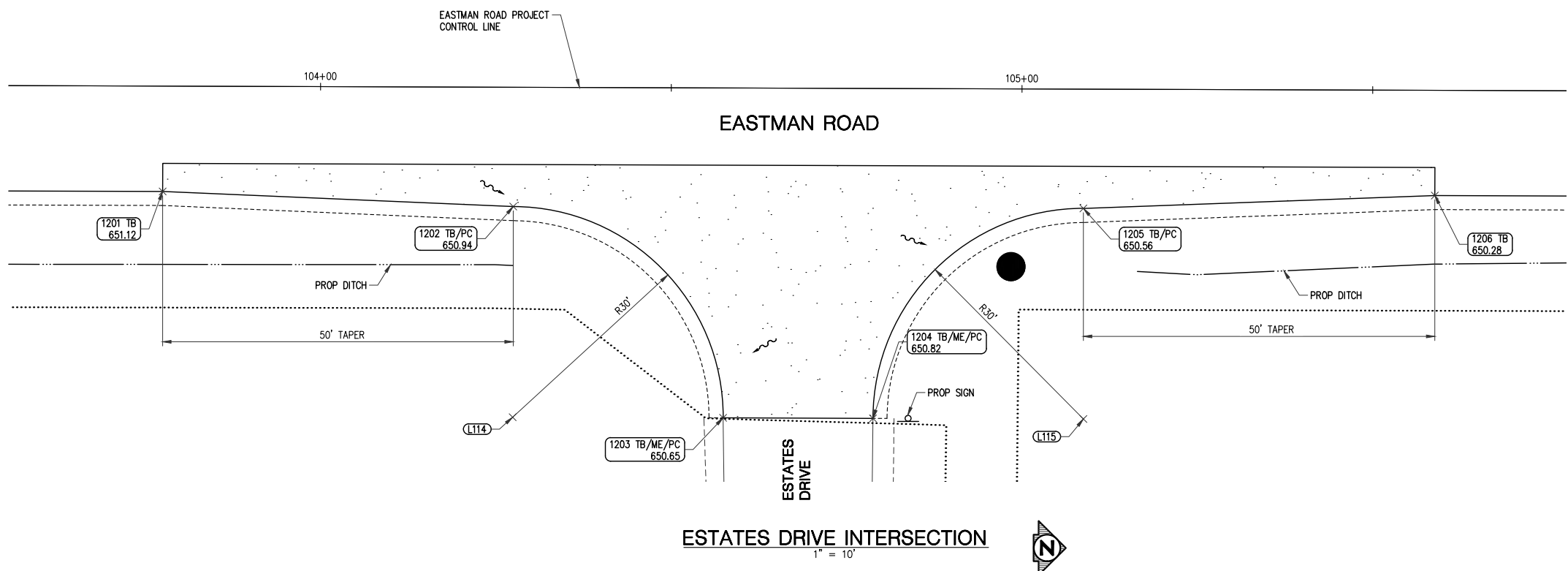
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LEGEND
 TC - TOP OF CONCRETE CURB
 TB - TOP OF BITUMINOUS PAVEMENT
 DD - DUB DOWN
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 PC - POINT OF CURVATURE
 ~ - FLOW DIRECTION

GRADING POINTS				
POINT	DESCRIPTION	STATION	OFFSET	ELEVATION
1101	TB	88+45.26	15.00' L	650.76
1102	TC/TB/ME	88+95.26	24.98' L	650.76
1103	TB/ME	88+95.31	23.09' L	650.82
1104	TB/ME	89+84.20	22.82' L	651.20
1105	TC/TB/ME	89+84.42	24.78' L	650.80
1106	TB	90+34.42	15.00' L	651.22

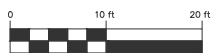
IRON WOODS PASS INTERSECTION
 1" = 10'



GRADING POINTS				
POINT	DESCRIPTION	STATION	OFFSET	ELEVATION
1201	TB	103+77.54	15.00' R	651.12
1202	TB/PC	104+27.54	17.00' R	650.94
1203	TB/ME/PC	104+57.54	47.00' R	650.65
1204	TB/ME/PC	104+78.91	47.00' R	650.82
1205	TB/PC	105+08.82	17.00' R	650.56
1206	TB	105+58.91	15.00' R	650.28

LAYOUT POINTS			
POINT	DESCRIPTION	STATION	OFFSET
L114	30' RADIUS	104+27.54	47.00, R
L115	30' RADIUS	105+08.91	47.00, R

ESTATES DRIVE INTERSECTION
 1" = 10'



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SHT# 14 OF 65
 JOB No: 19M0006

PLAN DATE: AUGUST 2023
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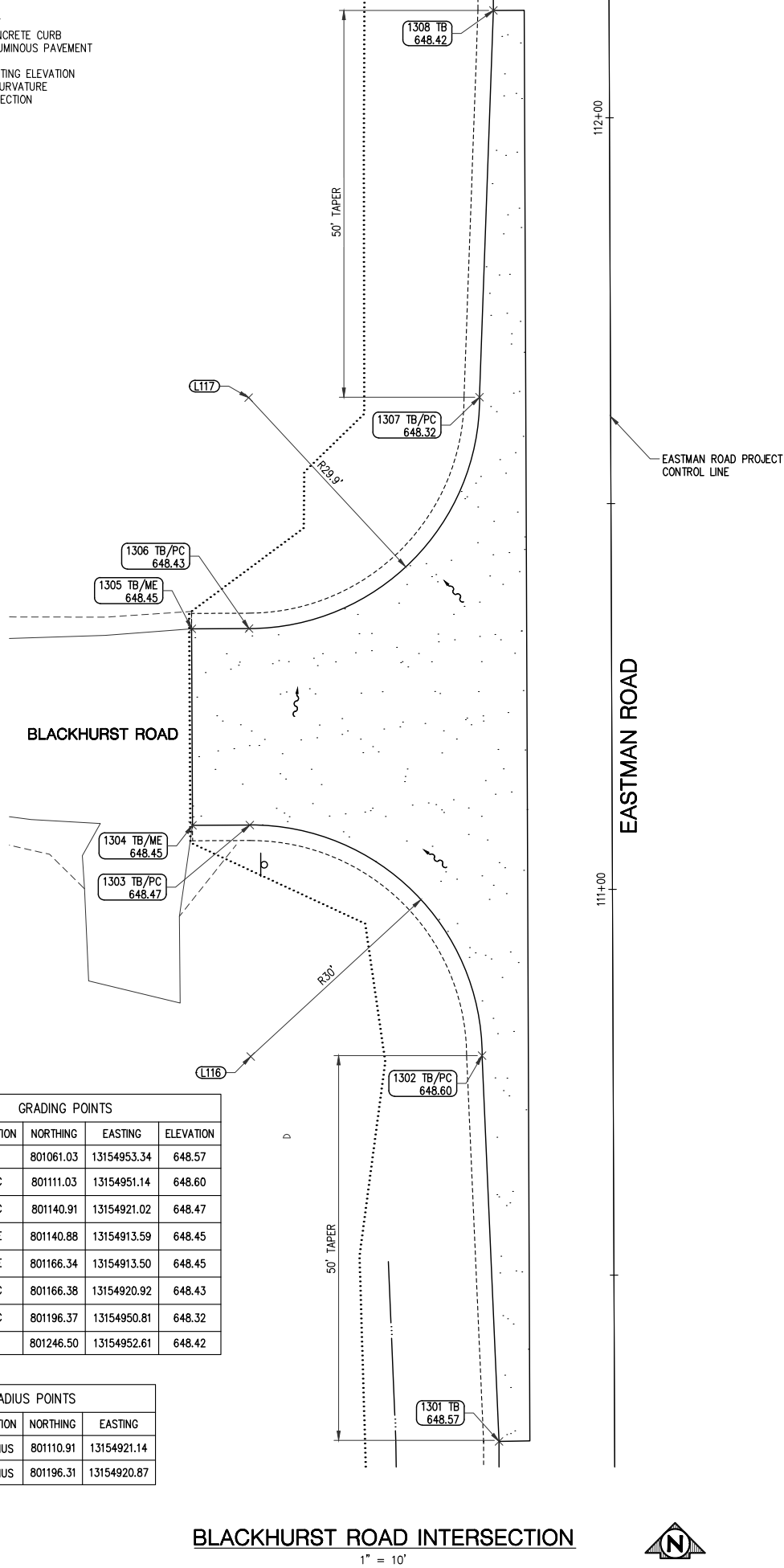
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LEGEND

- TC - TOP OF CONCRETE CURB
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- ~ - FLOW DIRECTION

GRADING POINTS				
POINT	DESCRIPTION	NORTHING	EASTING	ELEVATION
1301	TB	801061.03	13154953.34	648.57
1302	TB/PC	801111.03	13154951.14	648.60
1303	TB/PC	801140.91	13154921.02	648.47
1304	TB/ME	801140.88	13154913.59	648.45
1305	TB/ME	801166.34	13154913.50	648.45
1306	TB/PC	801166.38	13154920.92	648.43
1307	TB/PC	801196.37	13154950.81	648.32
1308	TB	801246.50	13154952.61	648.42

RADIUS POINTS				
POINT	DESCRIPTION	NORTHING	EASTING	
L116	30' RADIUS	801110.91	13154921.14	
L117	30' RADIUS	801196.31	13154920.87	

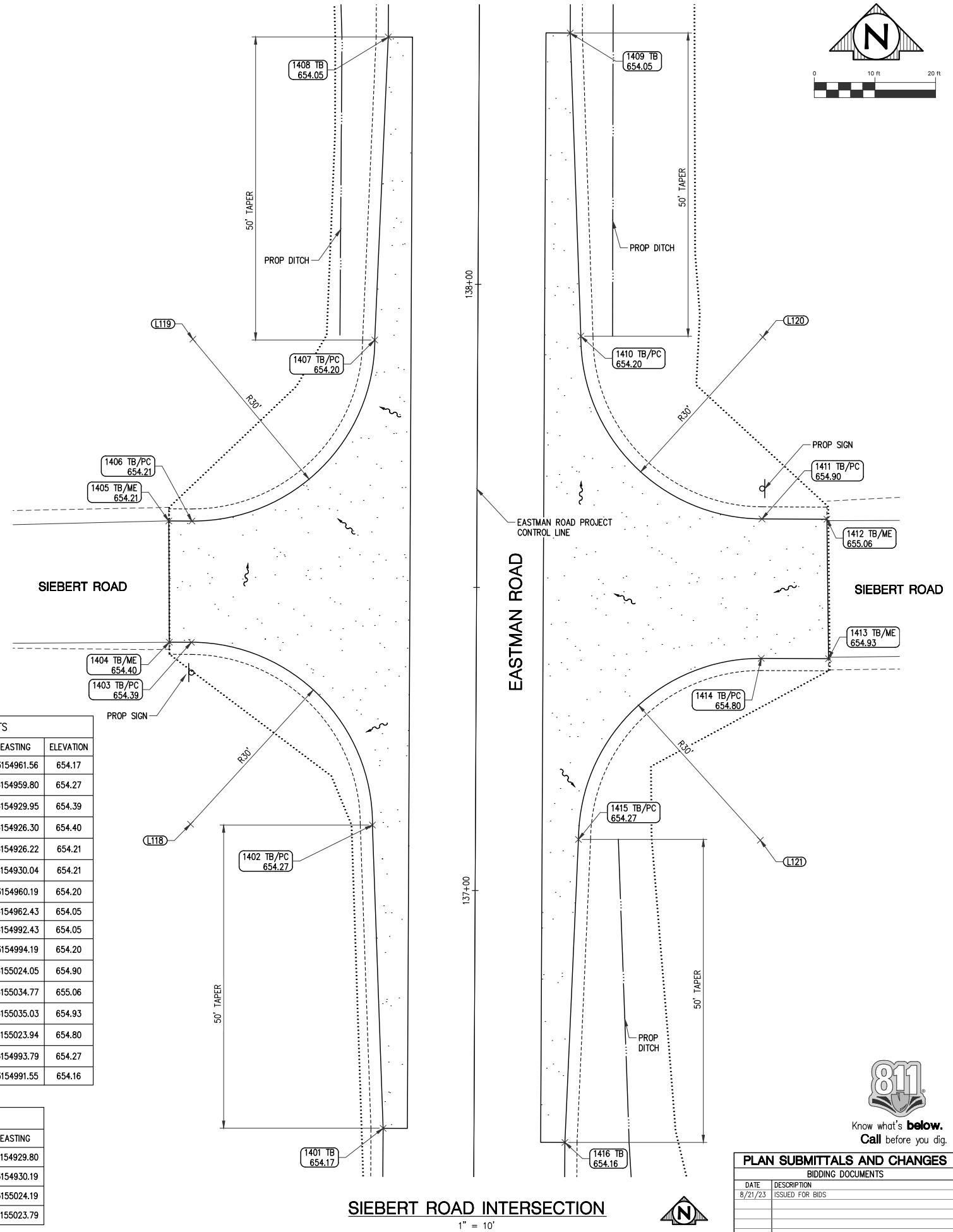


BLACKHURST ROAD INTERSECTION

1" = 10'

GRADING POINTS				
POINT	DESCRIPTION	NORTHING	EASTING	ELEVATION
1401	TB	803693.36	13154961.56	654.17
1402	TB/PC	803743.37	13154959.80	654.27
1403	TB/PC	803773.51	13154929.95	654.39
1404	TB/ME	803773.53	13154926.30	654.40
1405	TB/ME	803793.53	13154926.22	654.21
1406	TB/PC	803793.51	13154930.04	654.21
1407	TB/PC	803823.37	13154960.19	654.20
1408	TB	803873.36	13154962.43	654.05
1409	TB	803874.01	13154992.43	654.05
1410	TB/PC	803824.00	13154994.19	654.20
1411	TB/PC	803793.86	13155024.05	654.90
1412	TB/ME	803793.81	13155034.77	655.06
1413	TB/ME	803770.81	13155035.03	654.93
1414	TB/PC	803770.86	13155023.94	654.80
1415	TB/PC	803741.01	13154993.79	654.27
1416	TB	803691.01	13154991.55	654.16

RADIUS POINTS				
POINT	DESCRIPTION	NORTHING	EASTING	
L118	30' RADIUS	803743.51	13154929.80	
L119	30' RADIUS	803823.51	13154930.19	
L120	30' RADIUS	803823.86	13155024.19	
L121	30' RADIUS	803740.86	13155023.79	



SIEBERT ROAD INTERSECTION

1" = 10'

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SHT# 15 of 65
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REVIEWER: TCL
SCALE: 1" = 10'



55+79.31.51' FIBER OPTIC MARKER POST

55+00 26.01' TP 6986
55+09 34.81' 12" RND PLASTIC PIPE
55+10 27.51' STORM MH
55+18 44.71' ELEC POLE

56+40 28.91' TELE RISER
56+51 44.51' TELE RISER
56+52 29.41' TELE RISER

56+28 53.51' ADVERTISING SIGN
56+28 49.11' METAL POST
56+28 57.01' METAL POST

57+71 45.21' GUY WIRE
57+82 42.41' TELE RISER
57+84 34.41' GUY WIRE
57+84 42.21' METAL POST
57+92 34.01' RND CB
57+97 32.31' TRAFFIC CONTROL BOX
57+98 32.21' STRAIN POLE

58+20 13.01' TRAFFIC SIGNAL

58+59 72.51' MISC SIGN
58+69 64.71' RND 21
58+69 64.61' FIRE HYDRANT
58+74 44.01' STREET SIGN
58+77 40.01' TP 20
58+81 47.01' ELEC POLE
58+81 47.01' ELEC POLE
58+91 45.31' FIBER OPTIC MARKER POST
58+91 46.01' ELEC POLE

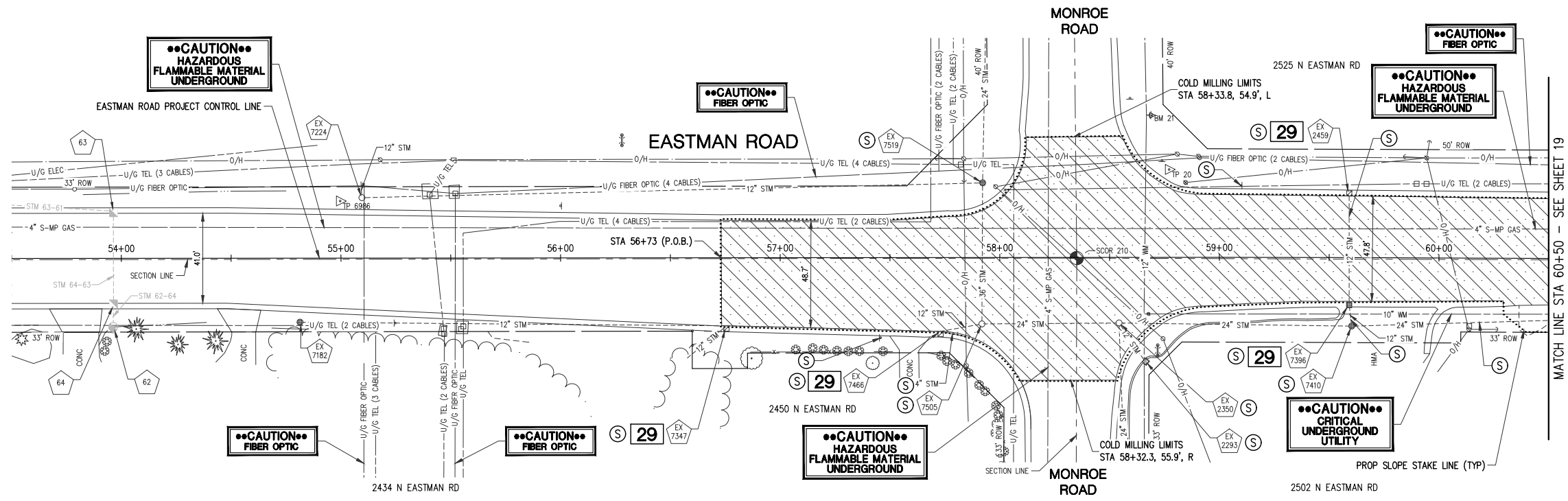
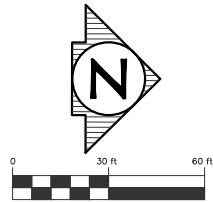
59+10 32.71' MISC SIGN

59+49 30.21' CURB INLET B/C

59+84 46.01' GUY WIRE
59+80 33.71' TELE RISER
59+84 45.51' ELEC POLE
59+96 53.41' GUY WIRE

EXISTING STRUCTURES

- MH# 2293 TYPE: STORM COVER: CURB INLET RIM= 641.51 12" RCP SW INV.=638.91
MH# 2350 TYPE: STORM COVER: SOLID RIM= 642.00 24" RCP E INV.=637.40 12" RCP NE INV.=637.60 24" RCP N INV.=637.40 24" RCP S INV.=637.40
MH# 2459 TYPE: STORM COVER: CURB INLET RIM= 640.85 12" RCP E INV.=638.45
MH# 6943 TYPE: STORM COVER: SOLID RIM= 640.59 8" VCP E INV.=637.09 8" VCP N INV.=637.09 15" SLC S INV.=637.09
MH# 7182 TYPE: STORM COVER: BEEHIVE RIM= 640.05 12" RCP S INV.=637.55 12" RCP N INV.=637.50
MH# 7224 TYPE: STORM COVER: SOLID RIM= 640.66 12" SLC N INV.=637.91 12" SLC W INV.=637.96
MH# 7347 TYPE: STORM COVER: CURB INLET RIM= 641.39 12" RCP S INV.=637.49 12" RCP N INV.=637.39 12" RCP SE INV.=637.69
MH# 7396 TYPE: STORM COVER: FLAT GRATE RIM= 641.05 12" RCP W INV.=638.05 12" RCP E INV.=638.05
MH# 7410 TYPE: STORM COVER: FLAT GRATE RIM= 641.02 24" RCP S INV.=637.82 12" RCP W INV.=637.87 24" RCP N INV.=637.92
MH# 7466 TYPE: STORM COVER: CURB INLET RIM= 641.13 12" RCP S INV.=637.43 12" RCP N INV.=637.38 4" CPP N INV.=639.13
MH# 7505 TYPE: STORM COVER: SOLID RIM= 641.71 12" RCP S INV.=636.11 36" RCP W INV.=633.71
MH# 7519 TYPE: STORM COVER: BEEHIVE RIM= 640.89 36" RCP S INV.=632.89 36" RCP E INV.=632.79 24" RCP W INV.=632.79



53+52 34.8R LANDSCAPING
53+55 36.7R 6' JUNIPER
53+60 39.2R ROCK
53+66 39.2R LANDSCAPING

53+92 42.2R 4' DECID. SHRUB
53+93 37.9R 4' DECID. SHRUB

54+07 32.2R 12" PINE
54+26 39.2R 10" PINE
54+27 44.9R ROCK

54+43 37.7R 12" PINE
54+50 33.7R RDM ROD
54+73 34.6R HEAVY WOODS
54+81 29.2R RND CB

55+47 32.2R TELE RISER
55+47 34.5R TELE RISER
55+55 32.2R TELE RISER
55+56 31.1R TELE RISER

56+14 72.2R HEAVY WOODS

56+42 68.5R HEAVY WOODS

56+58 45.6R 12" RND CONC PIPE (RCP)
56+60 33.3R RDM ROD
56+60 39.9R RDM PIPE
56+74 49.7R HEAVY WOODS
56+76 33.0R CURB INLET B/C
56+87 45.8R 10" MAPLE

57+07 41.8R 4' DECID. SHRUB
57+15 42.9R POST & RAIL

57+35 42.9R POST & RAIL
57+42 48.0R 6' MAPLE
57+43 42.8R POST & RAIL
57+46 36.5R MISC SIGN
57+47 42.9R DECID. SHRUB
57+47 46.9R POST & RAIL
57+47 43.3R POST & RAIL
57+68 36.2R WALL BOX
57+73 44.7R 4' DECID. SHRUB
57+74 35.7R CURB INLET B/C
57+75 46.0R POST & RAIL

57+82 48.9R POST & RAIL
57+86 49.2R ELEC POLE
57+88 53.9R POST & RAIL
57+92 30.2R STORM MH
57+93 59.4R POST & RAIL
57+93 61.0R 4' DECID. SHRUB

58+05 0.4R MONUMENT BOX

58+54 30.0R STORM MH
58+70 47.3R CURB INLET B/C
58+88 25.7R GATE VALVE
58+72 42.3R ADVERTISING SIGN
58+74 37.0R STRAIN POLE

59+59 21.6R SQUARE CB
59+60 31.2R RND CB

60+14 39.9R TELE RISER
60+14 32.4R ELEC POLE
60+15 23.7R WOOD POST
60+16 23.4R WALL BOX
60+27 32.4R GUY WIRE

SHEET QUANTITIES table with columns: DESCRIPTION, QUANTITY, UNITS. Rows include Erosion Control, Inlet Protection, Fabric Drop (4 units) and Cold Milling HMA Surface (2479 units).

PLAN SUBMITTALS AND CHANGES table with columns: DATE, DESCRIPTION. Shows a submission on 8/21/23 for ISSUED FOR BIDS.

PLAN DATE: AUGUST 2023
PROJECT MGR: MJS
REVIEWER: TCL
SCALE: 1" = 30'

ROWE PROFESSIONAL SERVICES COMPANY logo and contact information: 127 S. Main Street, Mt. Pleasant, MI 48858. Phone: (989) 772-2138, Fax: (989) 773-7757. Website: www.roweps.com

MIDLAND COUNTY ROAD COMMISSION
EASTMAN ROAD WIDENING AND REHAB.
STA 56+73 (P.O.B.) TO STA 60+50
REMOVAL SHEET

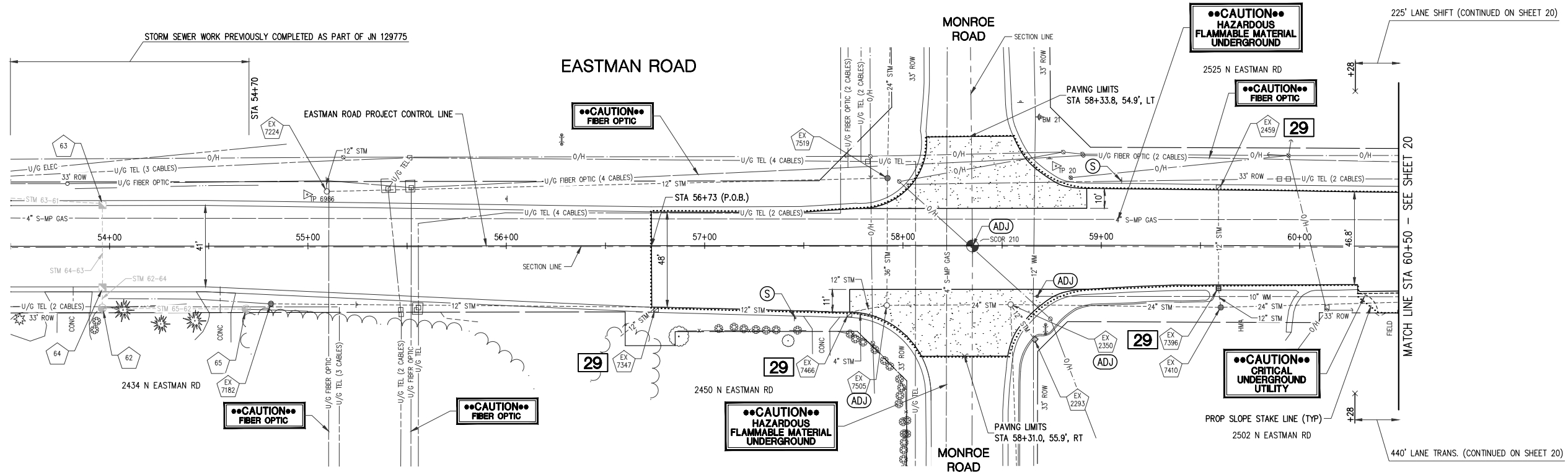
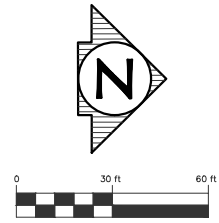


PROPOSED STORM SEWER STRUCTURE TABLE						
STRUCT NO.	DIA.	COVER TYPE	RIM ELEVATION	INVERT	STATION	OFFSET
* 62	48"	G	RIM=640.97	12" 635.90 W (PR) 12" 635.90 N (PR)	53+96.3	31.2 R
* 63	48"	J	T/C=642.50	12" 635.64 S (PR) 12" 635.64 E (PR)	53+96.4	21.5 L
* 64	48"	J	T/C=642.50	12" 635.85 W (PR) 12" 635.85 E (PR)	53+96.4	21.5 R
* 65	48"	G	RIM=640.30	12" 636.25 S (PR)	54+68.8	31.8 R

* FOR INFORMATION ONLY. STORM SEWER WORK PREVIOUSLY COMPLETED AS PART OF JN 129775.

PROPOSED STORM SEWER PIPE TABLE							
PIPE NUMBER	DIAMETER	PAY ITEM	TOTAL LENGTH	SLOPE	TRENCH DETAIL A (T.D. A)	TRENCH DETAIL B (T.D. B)	
* STM 62-64	12"	Sewer, Cl A, _ inch, Tr Det _	10'	0.51%	10'	0'	
* STM 63-61	12"	Sewer, Cl A, _ inch, Tr Det _	114'	0.48%	16'	98'	
* STM 64-63	12"	Sewer, Cl A, _ inch, Tr Det _	43'	0.49%	0'	43'	
* STM 65-62	12"	Sewer, Cl A, _ inch, Tr Det _	73'	0.48%	60'	13'	

* FOR INFORMATION ONLY. STORM SEWER WORK PREVIOUSLY COMPLETED AS PART OF JN 129775.



DRIVEWAY SCHEDULE								
C/L DRIVEWAY STATION	EXIST. PWMT TYPE	DRIVEWAY OFFSET REMOVAL LIMITS (FT)	WIDTH AT REMOVAL LIMITS (FT)	WIDTH AT OPENING (FT)	LENGTH OF DRIVE RESTORATION (FT)	Approach, Cl I, 6 inch (Syd)	Approach, Cl II, 6 inch (Syd)	HMA Approach (Ton)
60+45, RT	G	33.7	10.0	30.0	10.0	0	16	0

↳ G = GRAVEL DRIVE

SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Subbase, CIP	5	Cyd
Aggregate Base, 6 inch	4	Syd
Approach, Cl II, 6 inch	16	Syd
Shld, Cl II, Modified	2	Ton
Dr Structure Cover, Adj, Case 1	2	Ea
HMA Approach	52	Ton
HMA, 4EML	1	Ton
HMA, 5EML	172	Ton
Monument Box Adj	1	Ea
Gate Box, Adj, Case 1	1	Ea



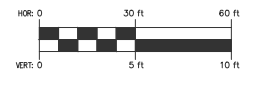
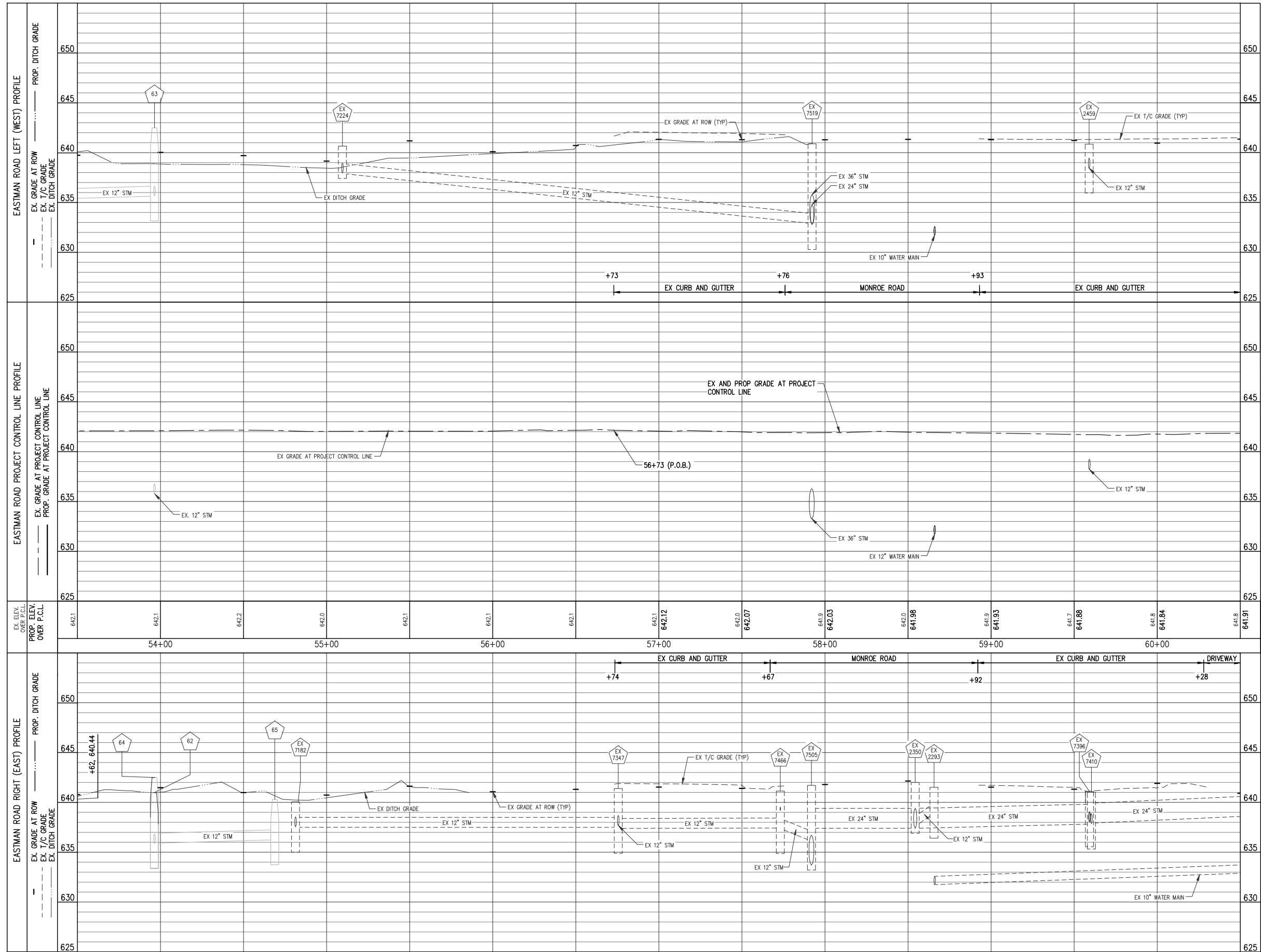
PLAN SUBMITTALS AND CHANGES		REV:
BIDDING DOCUMENTS		
DATE	DESCRIPTION	
8/21/23	ISSUED FOR BIDS	

PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
 REVIEWER: TCL
 SCALE: 1" = 30'

ROWE PROFESSIONAL SERVICES COMPANY

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PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

REV: _____
 SHT# 18 of 65
 JOB No: 19M0006

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 PROFILE SHEET

PLAN DATE: AUGUST 2023
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 SCALE: HORZ: 1"=30', VERT: 1"=5'

60+79 46.6L WOOD POST
 60+79 52.4L WOOD POST
 60+79 52.4L WOOD POST
 60+90 52.8L GAS MARKER POST

61+65 34.6L U'OND FIBER OPTIC MARKING

SAVE 61+86 37.3L 15" CONC PIPE (RCP)

REL 62+27 18.9L MAIL BOX

62+90 46.3L METAL POST
 SAVE 62+99 27.7L 12" METAL PIPE (CMP)

SAVE 63+25 27.5L 12" METAL PIPE (CMP)
 63+29 34.9L TELE RISER
 63+29 47.1L ELEC POLE
 63+32 34.7L TELE RISER
 63+38 44.7L U'G FIBER OPTIC

REM 63+42 27.9L 12" METAL PIPE (CMP)

REM 63+70 28.3L 12" METAL PIPE (CMP)

REL 63+73 21.1L MAIL BOX

REM 64+74 19.6L MSC SIGN

REL-B/O 64+84 24.3L GAS TEST STATION
 REL-B/O 64+84 24.6L GAS MARKER POST
 64+94 35.5L FIBER OPTIC MARKER POST
 64+95 39.1L BRUSH AREA
 65+08 39.6L BRUSH AREA

REL 65+47 19.8L MAIL BOX

REM 65+57 29.3L 15" CONC PIPE (RCP)
 65+57 47.4L ELEC POLE

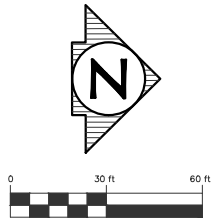
REM 65+85 29.1L 15" CONC PIPE (RCP)

66+06 42.8L 8" DECID. SHRUB

67+32 32.6L IRON PIPE

67+58 37.6L BRUSH AREA

SAVE 67+60 33.3L 18" CONC PIPE (RCP)
 REM 67+97 28.3L 18" RND METAL PIPE (CMP)
 67+92 41.3L BRUSH AREA



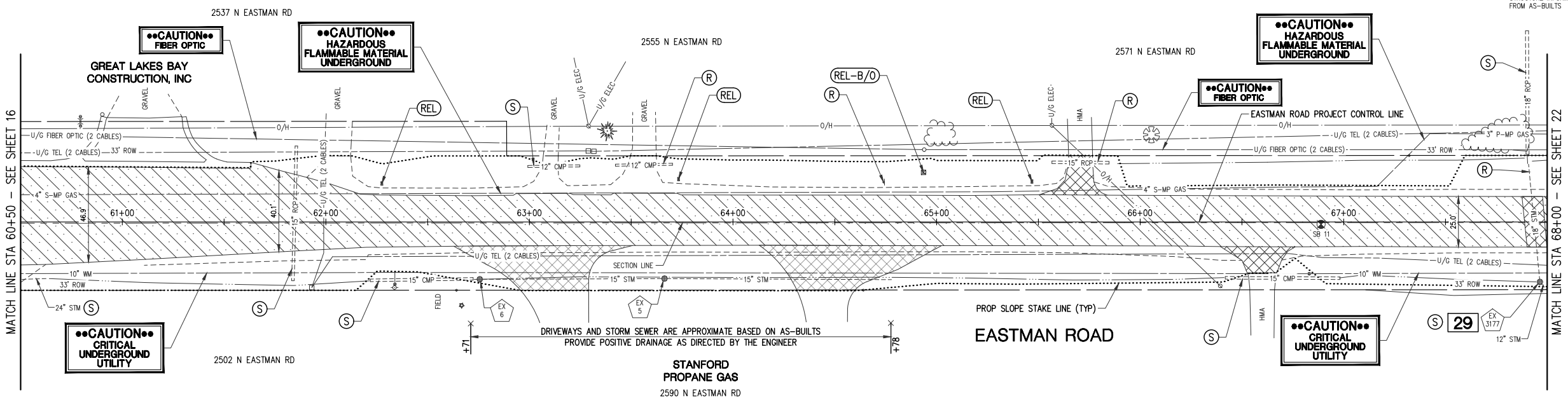
EXISTING STRUCTURES

MH# 3177
 TYPE: STORM
 COVER: BEEHIVE
 RIM= 637.65
 12" CFP NE INV.=635.05
 18" RCP W INV.=634.30

MH# 5
 TYPE: STORM
 COVER: BEEHIVE
 RIM= 641.50
 15" RCP N INV.=638.80
 15" RCP S INV.=638.80
 STRUCTURE INFORMATION FROM AS-BUILTS

MH# 6
 TYPE: STORM
 COVER: BEEHIVE
 RIM= 642.40
 15" RCP N INV.=639.20
 15" CFP S INV.=639.20
 STRUCTURE INFORMATION FROM AS-BUILTS

DESCRIPTION	QUANTITY	UNITS
Culv, Rem, Less than 24 inch	2	Ea
Sewer, Rem, Less than 24 inch	59	Ft
Erosion Control, Inlet Protection, Fabric Drop	1	Ea
Cold Milling HMA Surface	2403	Syd
HMA Surface, Rem	359	Syd
Ground Mtd Sign Support, Rem	1	Ea
Sign, Type III, Rem	1	Ea



60+63 27.6R 24" RND CONC PIPE (RCP) SAVE

61+84 28.9R 15" CONC PIPE (RCP) SAVE

61+83 32.3R TELE RISER

62+22 28.7R 15" METAL PIPE (CMP) SAVE

62+34 30.6R GATE VALVE
 62+34 32.3R FIBER HYDRANT

62+64 33.6R RND PIPE
 62+67 41.0R "S" STUMP
 62+72 28.0R 15" METAL PIPE (CMP) SAVE

64+64 33.5R RND ROD

66+39 31.4R ELEC POLE
 66+42 27.5R 15" METAL PIPE (CMP) SAVE

66+83 25.4R GATE VALVE
 66+89 1.2R 11 SOIL BORING

66+98 27.7R 15" METAL PIPE (CMP) SAVE

67+86 29.5R RND CB SAVE



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

REV:

SHT# 19 of 65
 JOB No: 19M0006

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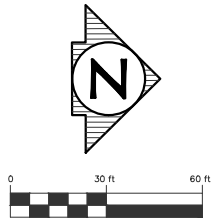
UTILITY ROAD REPAIR SCHEDULE				
CROSSING STATION	WIDTH OF TRENCH REPAIR (Ft)	LENGTH OF TRENCH REPAIR (Ft)	Hand Patching (Ton)	Aggregate Base, 6 inch (Syd)
67+94	10	25	15	28

PROPOSED STORM SEWER STRUCTURE TABLE						
STRUCT NO.	DIA.	COVER TYPE	RIM ELEVATION	INVERT	STATION	OFFSET
EX(1) 3177	N/A	N/A	RIM=637.65	18" 635.05 W (PR) 12" 635.05 NE (EX)	67+96.4	29.5 R

PROPOSED STORM SEWER PIPE TABLE							
PIPE NUMBER	DIAMETER	PAY ITEM	TOTAL LENGTH	SLOPE	TRENCH DETAIL A (T.D. A)	TRENCH DETAIL B (T.D. B)	
STM EX 3177-68	18"	Sewer, Cl A, _ inch, Tr Det _	58'	0.28%	0'	58'	

PROPOSED STORM SEWER END SECTION TABLE					
STRUCT NO.	DIA.	PAY ITEM	END OF PIPE INVERT	END OF PIPE STATION	END OF PIPE OFFSET
68	18"	Culv End Sect, _ inch	18" 634.89	67+90.8	28.3 L

(1) Dr Structure Top, 18 inch

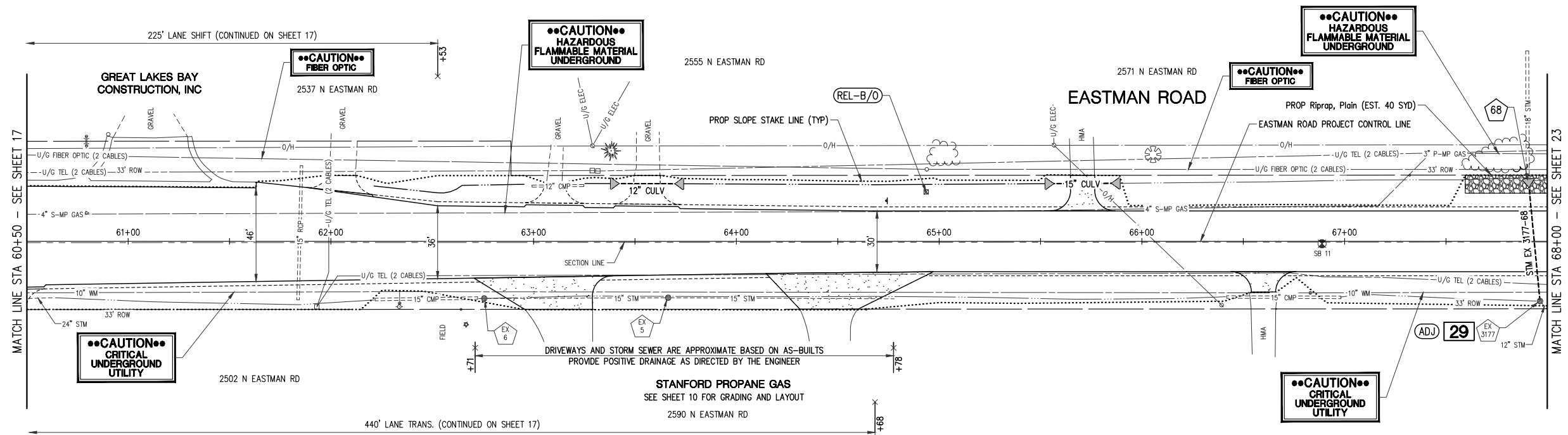


PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
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 SCALE: 1" = 30'

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 JOB No: 19M0006



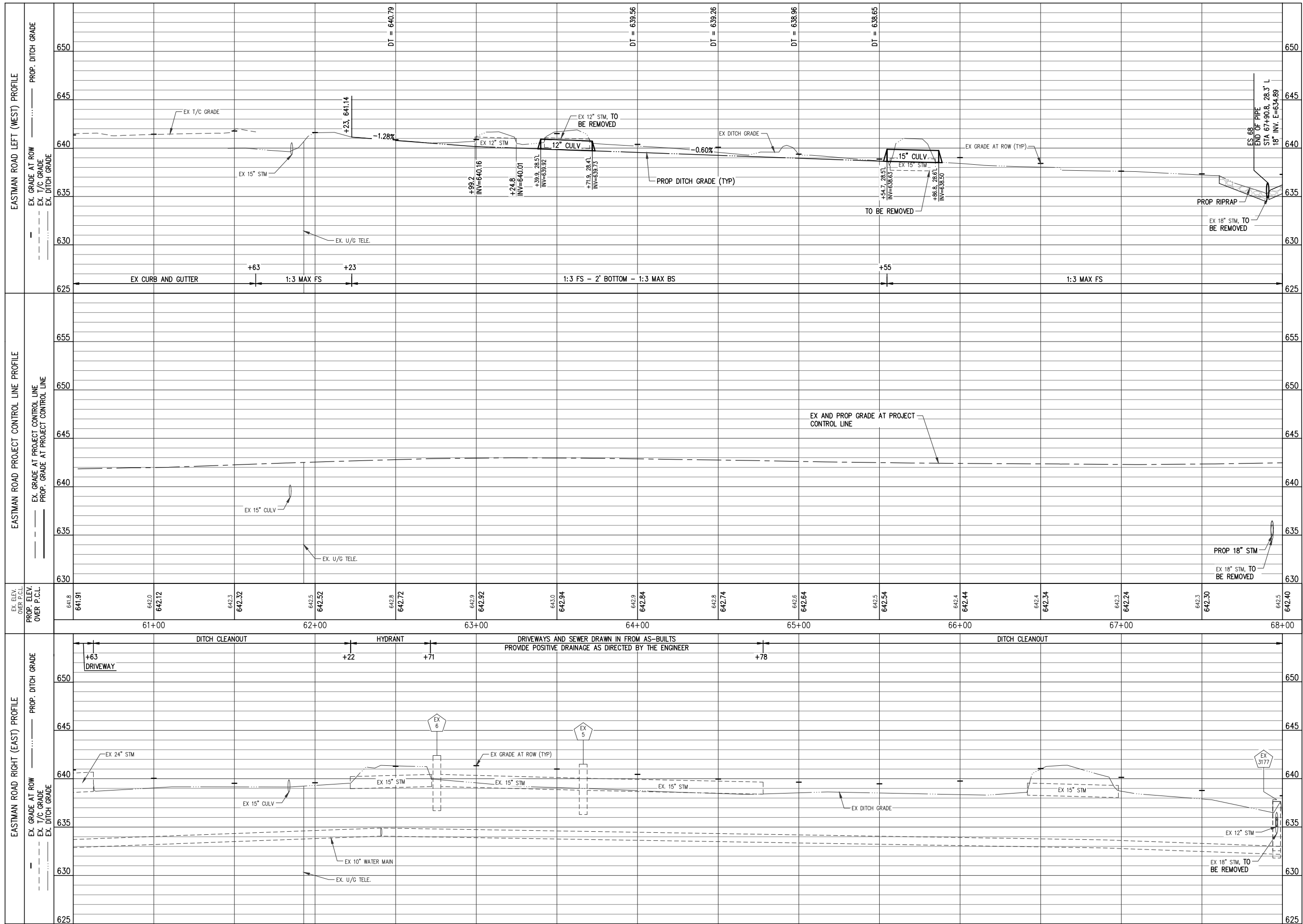
DRIVEWAY SCHEDULE												
C/L DRIVEWAY STATION	EXIST. P/MT TYPE	DRIVEWAY OFFSET REMOVAL LIMITS (FT)	WIDTH AT REMOVAL LIMITS (FT)	WIDTH AT OPENING (FT)	LENGTH OF DRIVE RESTORATION (FT)	Approach, Cl I, 6 inch (Syd)	Approach, Cl II, 6 inch (Syd)	HMA Approach (Ton)	Culv, Cl F, 12 inch (Ft)	Culv End Sect, 12 inch (Ea)	Culv, Cl F, 15 inch (Ft)	Culv End Sect, 15 inch (Ea)
63+08, RT	HMA	33.5	33.5	68.3	16.0	84	0	19	0	0	0	0
63+10, LT	G	32.5	10.0	30.0	10.0	0	16	0	0	0	0	0
63+56, LT	G	32.5	13.0	33.0	14.2	0	25	0	32	2	0	0
64+57, RT	HMA	33.5	28.7	82.5	18.0	111	0	25	0	0	0	0
65+71, LT	HMA	32.6	12.0	32.0	17.6	28	0	6	0	0	32	2
66+60, RT	HMA	33.4	12.0	32.0	10.0	18	0	4	0	0	0	0

G = GRAVEL DRIVE, HMA = HMA DRIVE
 NOTE: Culv, Cl F, _ inch VALUE INDICATES PAY LENGTH, PROFILE INDICATES ACTUAL LENGTH.

SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Subbase, CIP	500	Cyd
Aggregate Base, 6 inch	724	Syd
Approach, Cl I, 6 inch	241	Syd
Approach, Cl II, 6 inch	41	Syd
Shield, Cl II, Modified	63	Ton
Culv End Sect, 12 inch	2	Ea
Culv End Sect, 15 inch	2	Ea
Culv End Sect, 18 inch	1	Ea
Culv, Cl F, 12 inch	32	Ft
Culv, Cl F, 15 inch	32	Ft
Sewer, Cl A, 18 inch, Tr Det B	58	Ft
Dr Structure Cover, Adj, Case 2	1	Ea
Dr Structure, Top, 18 inch	1	Ea
Hand Patching	15	Ton
HMA Approach	56	Ton
HMA, 4EML	62	Ton
HMA, 5EML	260	Ton
Post, Mailbox	3	Ea
Riprap, Plain	40	Syd



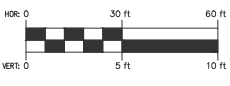
PLAN SUBMITTALS AND CHANGES		REV:
DATE	DESCRIPTION	
8/21/23	ISSUED FOR BIDS	



PLAN SUBMITTALS AND CHANGES

BIDDING DOCUMENTS	
DATE	DESCRIPTION
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REV: _____
 SHT# 21 of 65
 JOB No: 19M0006



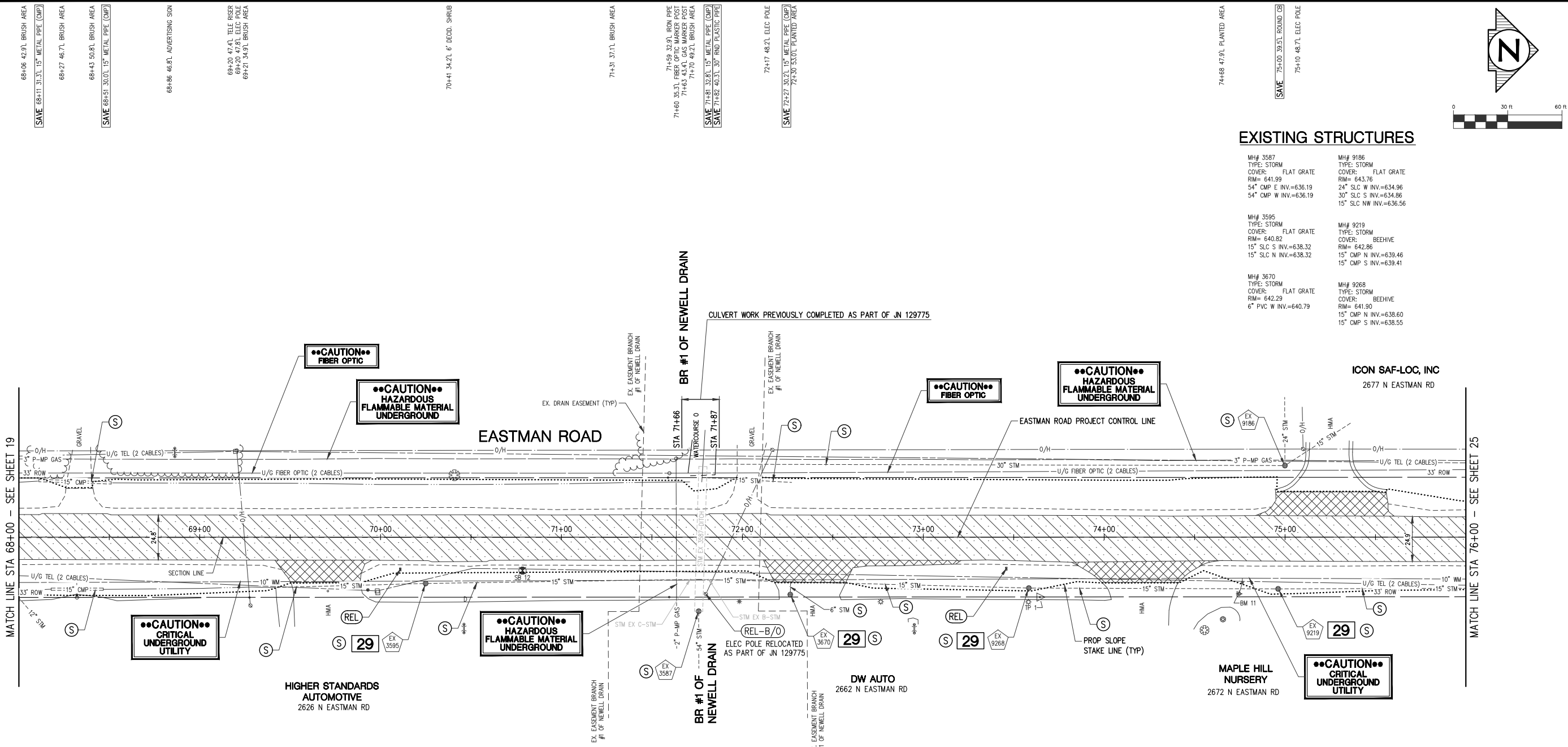
Know what's below.
 Call before you dig.

PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
 REVIEWER: TCL
 SCALE: HORZ: 1"=30', VERT: 1"=5'

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EXISTING STRUCTURES

MH# 3587 TYPE: STORM COVER: FLAT GRATE RIM= 641.99 54" CMP E INV.=636.19 54" CMP W INV.=636.19	MH# 9186 TYPE: STORM COVER: FLAT GRATE RIM= 643.76 24" SLC W INV.=634.96 30" SLC S INV.=634.86 15" SLC NW INV.=636.56
MH# 3595 TYPE: STORM COVER: FLAT GRATE RIM= 640.82 15" SLC S INV.=638.32 15" SLC N INV.=638.32	MH# 9219 TYPE: STORM COVER: BEEHIVE RIM= 642.86 15" CMP N INV.=639.46 15" CMP S INV.=639.41
MH# 3670 TYPE: STORM COVER: FLAT GRATE RIM= 642.29 6" PVC W INV.=640.79	MH# 9268 TYPE: STORM COVER: BEEHIVE RIM= 641.90 15" CMP N INV.=638.60 15" CMP S INV.=638.55

SHEET QUANTITIES

DESCRIPTION	QUANTITY	UNITS
Erosion Control, Inlet Protection, Fabric Drop	4	Ea
Cold Milling HMA Surface	2230	Syd
HMA Surface, Rem	310	Syd

PLAN SUBMITTALS AND CHANGES

BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

68+06 42.9L BRUSH AREA
SAVE 68+11 31.3L 15" METAL PIPE (CMP)
68+27 46.7L BRUSH AREA

68+43 50.8L BRUSH AREA
SAVE 68+51 30.0L 15" METAL PIPE (CMP)

68+86 46.8L ADVERTISING SIGN

69+20 47.4L TELE RISER
69+20 47.8L ELEC POLE
69+21 34.9L BRUSH AREA

70+41 34.2L 6" DECID. SHRUB

71+31 37.1L BRUSH AREA

71+59 32.9L IRON PIPE
71+60 35.3L FIBER OPTIC MARKER POST
71+63 43.4L GAS MARKER POST
71+70 49.2L BRUSH AREA
SAVE 71+81 15.9L 15" METAL PIPE (CMP)
SAVE 71+82 40.3L 30" RND PLASTIC PIPE

72+17 48.2L ELEC POLE
SAVE 72+27 30.7L 15" METAL PIPE (CMP)
72+30 53.0L PLANTED AREA

74+68 47.9L PLANTED AREA

SAVE 75+00 39.5L ROUND CB
75+10 48.7L ELEC POLE

68+18 28.8R 15" METAL PIPE (CMP) SAVE

68+32 32.1R GATE VALVE
68+32 33.4R FIRE HYDRANT

68+47 28.8R 15" METAL PIPE (CMP) SAVE

69+27 33.7R ROW ROD
69+28 37.8R ELEC POLE
69+40 44.2R RFP RAP
69+43 27.5R 15" RND PLASTIC PIPE SAVE
69+47 45.3R RFP RAP

69+71 28.8R MAG NAIL

69+83 28.1R WATER STOP BOX
69+86 30.7R TELE RISER
70+11 17.9R MAIL BOX REL

70+25 25.6R ROUND CB SAVE

70+46 34.3R HAND HOLE
70+46 50.5R ADVERTISING SIGN

70+78 18.5R 12 SOIL BORING

71+60 33.2R IRON ROD

71+76 41.0R ROUND CB SAVE

71+88 35.5R METAL LIGHT POLE

72+26 31.8R ROUND CB SAVE

72+76 35.7R LIGHT POLE

72+95 50.6R ADVERTISING SIGN

73+46 17.4R MAIL BOX REL

73+58 28.1R ROUND CB SAVE
73+58 35.8R LIGHT POLE
73+64 33.1R TP 1

74+59 59.9R LANDSCAPING
74+59 51.4R 5' DECID. SHRUB
74+66 45.4R 3' DECID. SHRUB
74+75 31.4R BLM HYDRANT
74+75 45.6R LANDSCAPING
74+76 25.0R WATER VALVE

74+96 28.6R ROUND CB SAVE



PLAN DATE: AUGUST 2023
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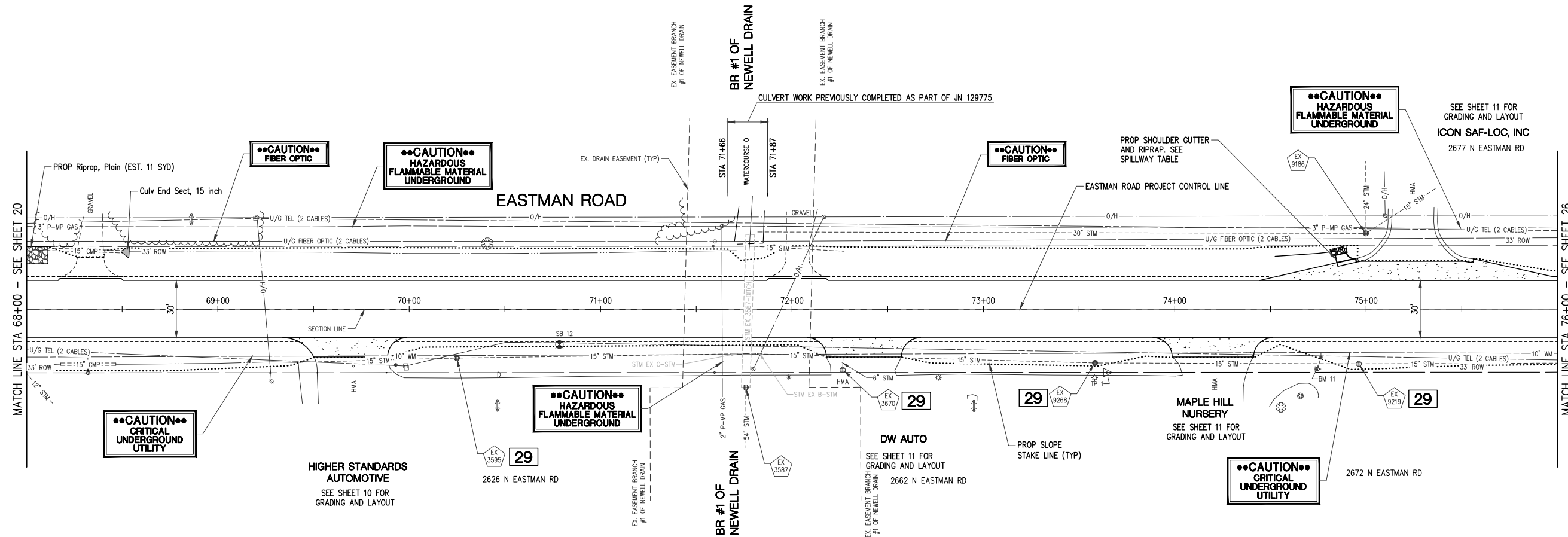
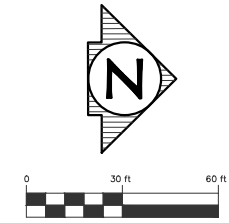
PROPOSED STORM SEWER STRUCTURE TABLE						
STRUCT NO.	DIA.	COVER TYPE	RIM ELEVATION	INVERT	STATION	OFFSET
* EX 3587	N/A	N/A	RIM=644.87	54" 636.19 E (EX) 54" 636.16 W (PR)	71+75.8	41.0 R

* FOR INFORMATION ONLY. STORM SEWER WORK PREVIOUSLY COMPLETED AS PART OF JN 129775

PROPOSED STORM SEWER PIPE TABLE							
PIPE NUMBER	DIAMETER	PAY ITEM	TOTAL LENGTH	SLOPE	TRENCH DETAIL A (T.D. A)	TRENCH DETAIL B (T.D. B)	
* STM EX 3587-DITCH	54"	Sewer, CI A, _ inch, Tr Det _	80'	1.42%	22'	58'	
* STM EX B-STIM	15"	Sewer, CI A, _ inch, Tr Det _	6'	0.72%	6'	0'	
* STM EX C-STIM	15"	Sewer, CI A, _ inch, Tr Det _	6'	0.71%	6'	0'	

* FOR INFORMATION ONLY. STORM SEWER WORK PREVIOUSLY COMPLETED AS PART OF JN 129775.

SPILLWAY TABLE			
C/L SPILLWAY STATION	SHOULDER GUTTER TYPE	PAY ITEM	
		Shld Gutter, Conc, Det (Ea)	Riprap, Plain (Syd)
74+87	DET 2	1	4



DRIVEWAY SCHEDULE									
C/L DRIVEWAY STATION	EXIST. PVMT TYPE	DRIVEWAY OFFSET REMOVAL LIMITS (FT)	WIDTH AT REMOVAL LIMITS (FT)	WIDTH AT OPENING (FT)	LENGTH OF DRIVE RESTORATION (FT)	Approach, CI I, 6 inch, (Syd)	Approach, CI II, 6 inch, (Syd)	HMA Approach (Ton)	Culv End Sect, 15 inch (Ea)
68+33, RT	N/A	0	0	0	0	0	0	0	0
68+33, LT	G	32.7	14.0	34.0	10.0	0	20	0	1
69+70, RT	HMA	33.2	38.6	64.8	10.0	51	0	11	0
72+03, LT	G	32.9	12.0	32.0	16.0	0	26	0	0
72+37, RT	HMA	33.1	39.3	59.3	10.0	49	0	11	0
74+21, RT	HMA	33.0	42.6	62.6	10.0	52	0	12	0
75+24, LT	HMA	33.1	54.1	157.4	10.0	130	0	29	0

G = GRAVEL DRIVE, HMA = HMA DRIVE, N/A = NOT APPLICABLE

SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Subbase, CIP	531	Cyd
Aggregate Base, 6 inch	732	Syd
Approach, CI I, 6 inch	282	Syd
Approach, CI II, 6 inch	46	Syd
Shld, CI II, Modified	70	Ton
Culv End Sect, 15 inch	1	Ea
HMA Approach	64	Ton
HMA, 4EML	52	Ton
HMA, 5EML	238	Ton
Shld Gutter, Conc, Det 2	1	Ea
Post, Mailbox	2	Ea
Riprap, Plain	15	Syd

PLAN DATE: AUGUST 2023
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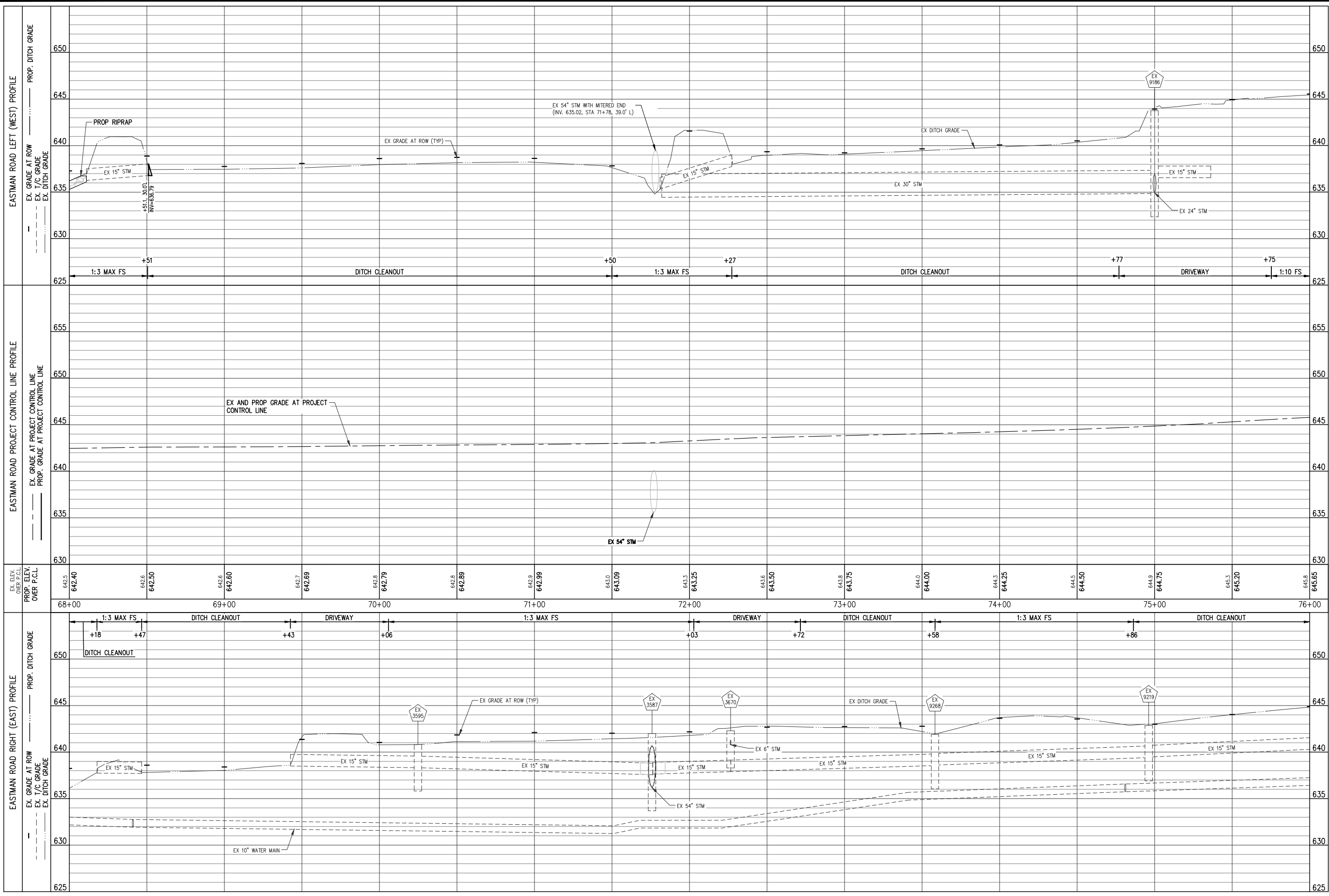
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DATE	DESCRIPTION	
8/21/23	ISSUED FOR BIDS	

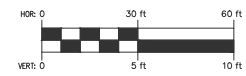
SHT# 23 OF 65
JOB No: 19M0006



PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
 REVIEWER: TCL
 SCALE: HORZ: 1"=30', VERT: 1"=5'

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EASTMAN ROAD WIDENING AND REHAB.
 STA 68+00 TO STA 76+00
 PROFILE SHEET



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

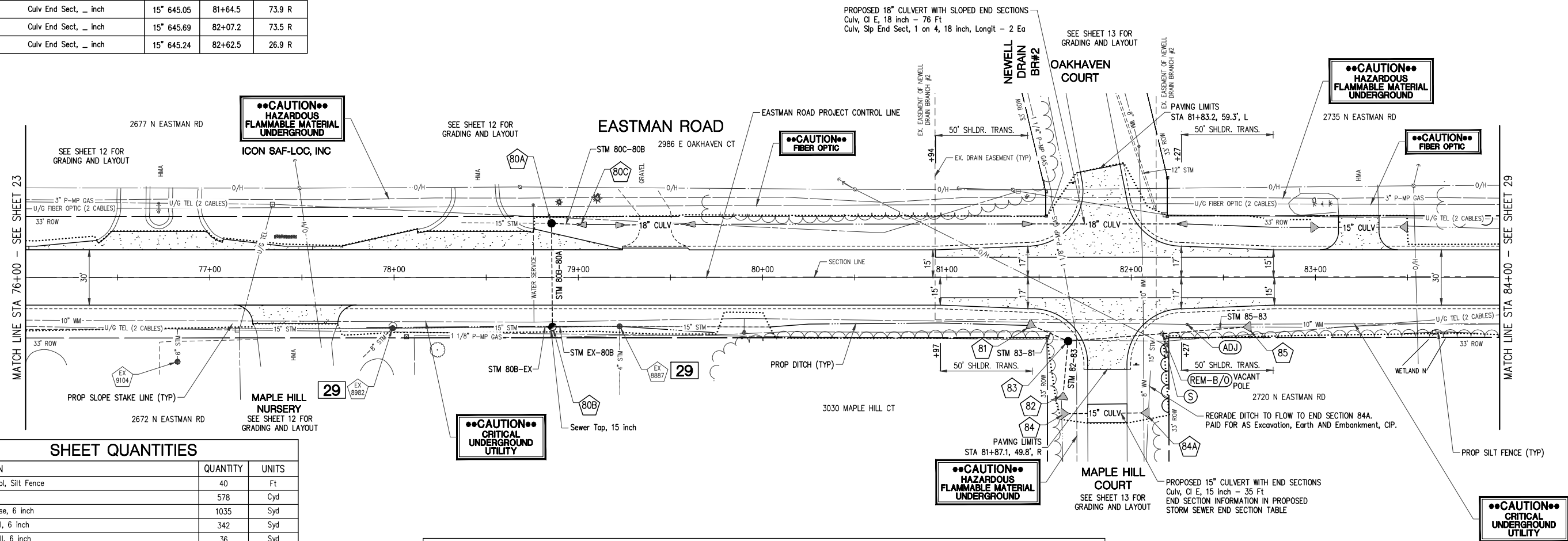
REV: _____
 SHT# 24 OF 65
 JOB No: 19M0006

UTILITY ROAD REPAIR SCHEDULE				
CROSSING STATION	WIDTH OF TRENCH REPAIR (Ft)	LENGTH OF TRENCH REPAIR (Ft)	Hand Patching (Ton)	Aggregate Base, 6 inch (Syd)
78+86	10	25	15	28
81+86 (1) RT	18	33	34	66
81+86 (2) RT	10	22	15	25
81+86 LT	10	40	23	45

PROPOSED STORM SEWER STRUCTURE TABLE						
STRUCT NO.	DIA.	COVER TYPE	RIM ELEVATION	INVERT	STATION	OFFSET
80A	48"	B	RIM=646.57	15" 643.49 S (EX) 18" 643.44 N (PR) 18" 643.44 E (PR)	78+85.4	29.4 L
80B	48"	G	RIM=646.09	18" 642.74 W (PR) 15" 642.64 N (PR) 15" 642.64 S (PR)	78+85.9	26.9 R
83	48"	B	RIM=647.29	15" 644.55 N (PR) 15" 644.55 E (PR) 15" 644.55 SW (PR)	81+65.8	34.6 R

PROPOSED STORM SEWER PIPE TABLE							
PIPE NUMBER	DIAMETER	PAY ITEM	TOTAL LENGTH	SLOPE	TRENCH DETAIL A (T.D. A)	TRENCH DETAIL B (T.D. B)	
STM 80B-80A	18"	Sewer, Cl A, _ inch, Tr Det _	56'	1.24%	8'	48'	
STM 80B-EX	15"	Sewer, Cl A, _ inch, Tr Det _	8'	0.80%	8'	0'	
STM 80C-80B	18"	Sewer, Cl A, _ inch, Tr Det _	16'	0.50%	16'	0'	
STM 82-83	15"	Sewer, Cl A, _ inch, Tr Det _	29'	1.33%	29'	0'	
STM 83-81	15"	Sewer, Cl A, _ inch, Tr Det _	21'	0.36%	21'	0'	
STM 85-83	15"	Sewer, Cl E, _ inch, Tr Det _	97'	0.71%	0'	97'	
STM EX-80B	15"	Sewer, Cl A, _ inch, Tr Det _	8'	0.80%	8'	0'	

PROPOSED STORM SEWER END SECTION TABLE					
STRUCT NO.	DIA.	PAY ITEM	END OF PIPE INVERT	END OF PIPE STATION	END OF PIPE OFFSET
80C	18"	Culv Slip End Sect, 1 on 4, _ inch, Longit	18" 643.52	79+01.4	28.8 L
81	15"	Culv End Sect, _ inch	15" 644.47	81+46.4	26.1 R
82	15"	Culv End Sect, _ inch	15" 644.94	81+63.1	63.8 R
84	15"	Culv End Sect, _ inch	15" 645.05	81+64.5	73.9 R
84A	15"	Culv End Sect, _ inch	15" 645.69	82+07.2	73.5 R
85	15"	Culv End Sect, _ inch	15" 645.24	82+62.5	26.9 R



SHEET QUANTITIES

DESCRIPTION	QUANTITY	UNITS
Erosion Control, Silt Fence	40	Ft
Subbase, CIP	578	Cyd
Aggregate Base, 6 inch	1035	Syd
Approach, Cl I, 6 inch	342	Syd
Approach, Cl II, 6 inch	36	Syd
Shld, Cl II, Modified	61	Ton
Culv End Sect, 15 inch	7	Ea
Culv, Cl E, 15 inch	35	Ft
Culv, Cl E, 18 inch	76	Ft
Culv, Cl F, 15 inch	48	Ft
Culv, Cl F, 18 inch	38	Ft
Culv, Slip End Sect, 1 on 4, 18 inch, Longit	5	Ea
Sewer, Cl A, 15 inch, Tr Det A	66	Ft
Sewer, Cl A, 18 inch, Tr Det A	24	Ft
Sewer, Cl A, 18 inch, Tr Det B	48	Ft
Sewer, Cl E, 15 inch, Tr Det B	97	Ft
Sewer Tap, 15 inch	1	Ea
Dr Structure Cover, Type B	2	Ea
Dr Structure Cover, Type G	1	Ea
Dr Structure, 48 inch dia	3	Ea
Hand Patching	87	Ton
HMA Approach	143	Ton
HMA, 4EML	59	Ton
HMA, 5EML	223	Ton
Post, Mailbox	2	Ea
Gate Box, Adj, Case 2	1	Ea

DRIVEWAY SCHEDULE												
C/L DRIVEWAY STATION	EXIST. PVMT TYPE	DRIVEWAY OFFSET REMOVAL LIMITS (FT)	WIDTH AT REMOVAL LIMITS (FT)	WIDTH AT OPENING (FT)	LENGTH OF DRIVE RESTORATION (FT)	Approach, Cl I, 6 inch (Syd)	Approach, Cl II, 6 inch (Syd)	HMA Approach (Ton)	Culv, Cl F, 15 inch (Ft)	Culv End Sect, 15 inch (Ea)	Culv, Cl F, 18 inch (Ft)	Culv, Slip End Sect, 1 on 4, 18 inch, Longit
76+69, LT	HMA	33.1	51.6	154.1	10.0	101	0	23	0	0	0	0
77+46, RT	HMA	32.9	41.0	77.0	10.0	56	0	13	0	0	0	0
78+44, LT	HMA	33.2	54.7	168.1	10.0	135	0	30	0	0	0	0
79+42, LT	G	33.2	17.0	36.4	16.2	0	36	0	0	0	38	2
83+24, LT	HMA	33.4	22.0	42.0	18.4	50	0	11	48	2	0	0

G = GRAVEL DRIVE, HMA = HMA DRIVE
NOTE: Culv, Cl F, _ inch VALUE INDICATES PAY LENGTH, PROFILE INDICATES ACTUAL LENGTH.

PLAN DATE: AUGUST 2023
PROJECT MGR: MJS
REVIEWER: TCL
SCALE: 1" = 30'

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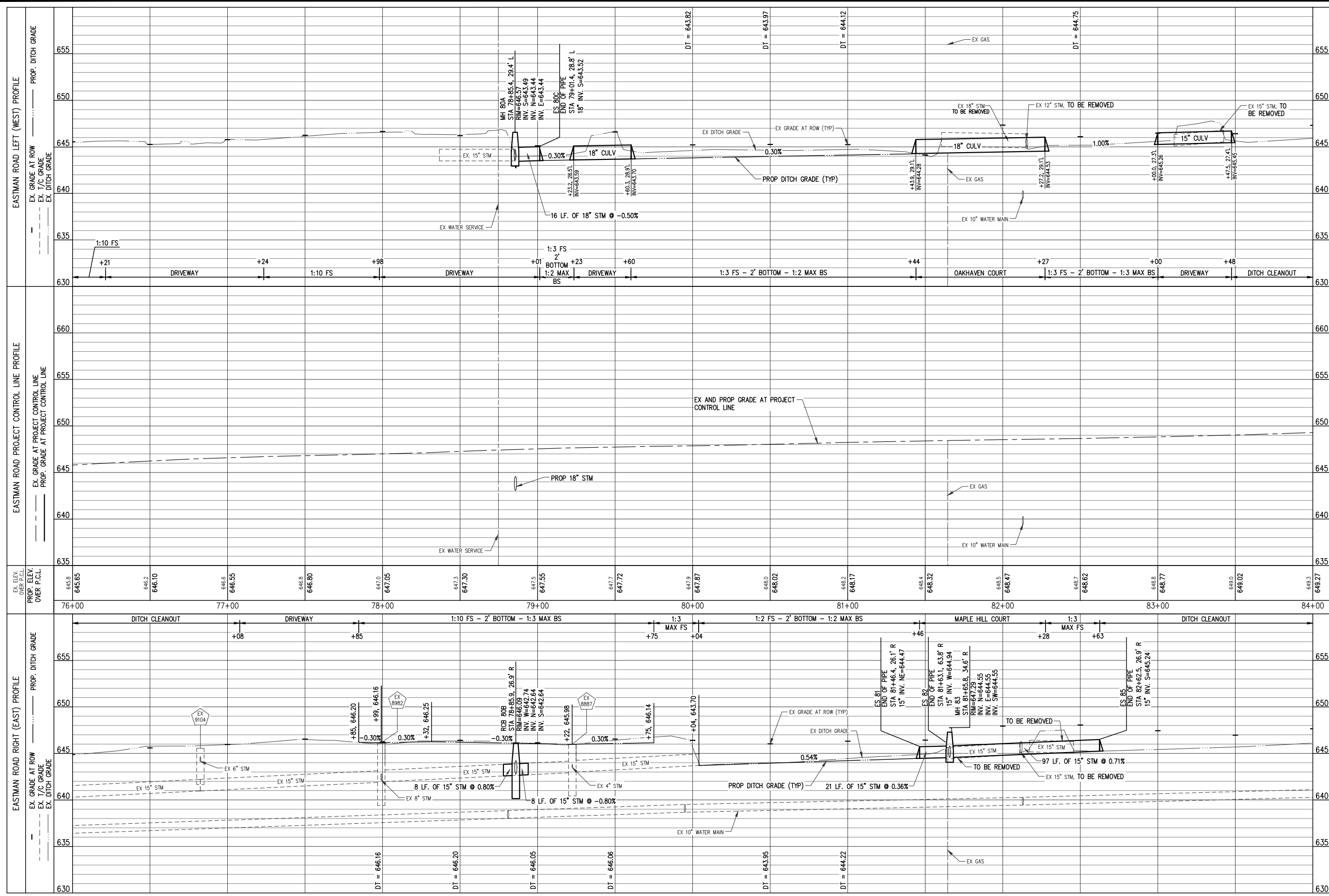
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EASTMAN ROAD WIDENING AND REHAB.
STA 76+00 TO STA 84+00
CONSTRUCTION SHEET

PLAN SUBMITTALS AND CHANGES			REV:
BIDDING DOCUMENTS			
DATE	DESCRIPTION		
8/21/23	ISSUED FOR BIDS		

SHT# 26 OF 65
JOB No: 19M0006

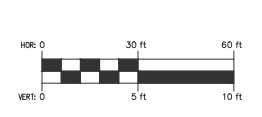




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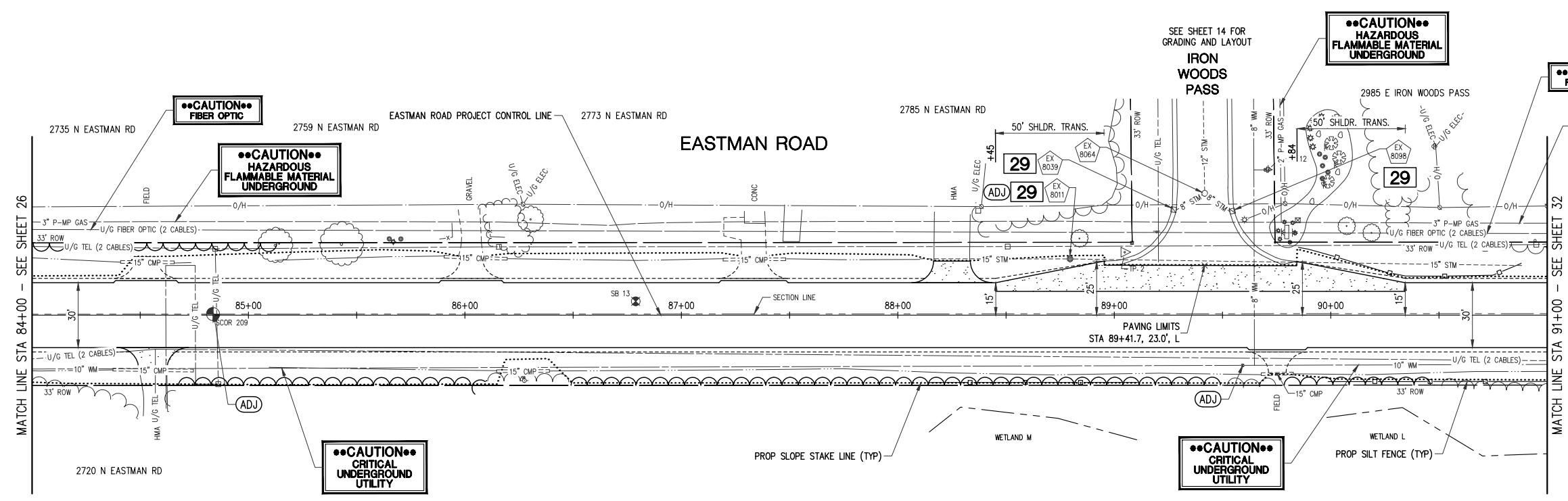
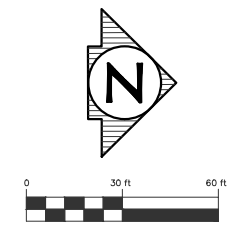
PLAN DATE: AUGUST 2023
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PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

REV: _____

SHT# 27 of 65
JOB No: 19M0006



MATCH LINE STA 84+00 - SEE SHEET 26

MATCH LINE STA 91+00 - SEE SHEET 32

DRIVEWAY SCHEDULE								
C/L DRIVEWAY STATION	EXIST. PVMT TYPE	DRIVEWAY OFFSET REMOVAL LIMITS (FT)	WIDTH AT REMOVAL LIMITS (FT)	WIDTH AT OPENING (FT)	LENGTH OF DRIVE RESTORATION (FT)	Approach, Cl I, 6 inch (Syd)	Approach, Cl II, 6 inch (Syd)	HMA Approach (Ton)
84+52, LT	G	33.5	10.0	30.0	10.0	0	16	0
84+57, RT	HMA	32.5	12.0	32.0	10.0	20	0	5
86+03, LT	G	33.5	10.0	30.0	10.0	0	16	0
87+33, LT	G	33.6	12.0	32.0	10.0	0	18	0
88+25, LT	HMA	33.6	16.4	37.0	10.0	24	0	6
89+75, RT	G	32.3	8.0	28.0	10.0	0	14	0

G = GRAVEL DRIVE, HMA = HMA DRIVE, N/A = NOT APPLICABLE
 NOTE: Culv, Cl F, _ inch VALUE INDICATES PAY LENGTH, PROFILE INDICATES ACTUAL LENGTH.

SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Erosion Control, Silt Fence	304	FT
Subbase, CIP	422	Cyd
Aggregate Base, 6 inch	513	Syd
Approach, Cl I, 6 inch	44	Syd
Approach, Cl II, 6 inch	64	Syd
Shld, Cl II, Modified	69	Ton
Dr Structure Cover, Adj, Case 2	1	Ea
HMA Approach	36	Ton
HMA, 4EML	45	Ton
HMA, 5EML	201	Ton
Post, Mailbox	4	Ea
Monument Box Adj	1	Ea
Gate Box, Adj, Case 2	1	Ea



PLAN SUBMITTALS AND CHANGES		
BIDDING DOCUMENTS		
DATE	DESCRIPTION	REV:
8/21/23	ISSUED FOR BIDS	

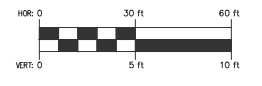
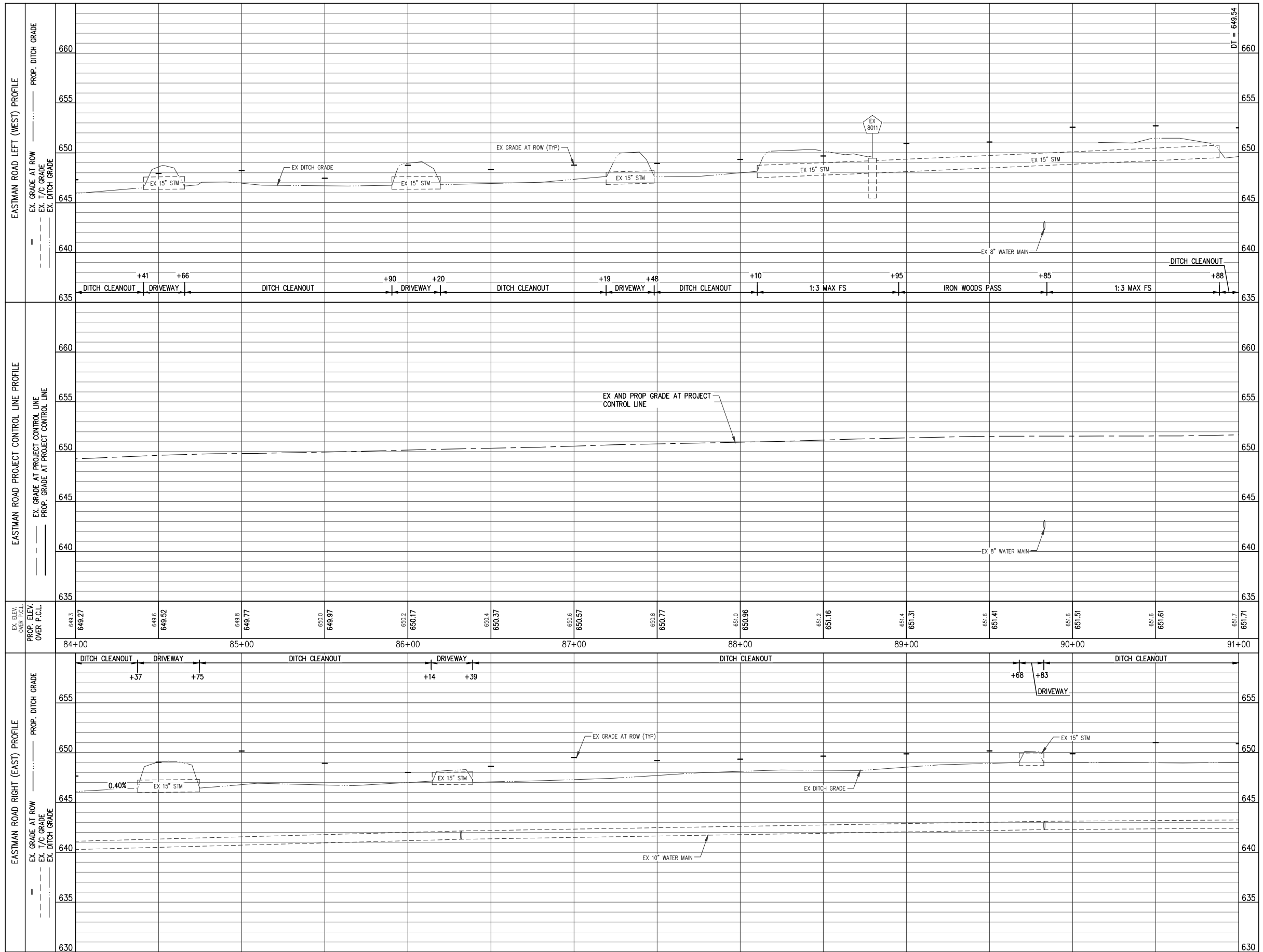
SHT# 29 OF 65
 JOB No: 19M0006

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 CONSTRUCTION SHEET



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PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
 REVIEWER: TCL
 SCALE: 1" = 30'



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
 REVIEWER: TCL
 SCALE: HORZ: 1"=30', VERT: 1"=5'
 DT = 649.54

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 STA 84+00 TO STA 91+00
 PROFILE SHEET

REV: _____
 SHT# 30 of 65
 JOB No: 19M0006

91+00 50.5' ELEC POLE
 CLR 91+10 33.5' HEAVY WOODS
 91+18 41.2' 8" GRAB APPLE
 CLR 91+38 33.6' HEAVY WOODS

CLR 91+79 33.7' HEAVY WOODS
 REL 92+12 19.4' MAIL BOX

92+41 49.5' LANDSCAPING
 92+52 51.0' ROCK
 92+57 41.1' ROCK
 92+58 41.1' ROCK
 92+65 51.7' 8" GRAB APPLE
 92+67 38.7' 5" CONIF. SHRUB
 92+78 50.8' LANDSCAPING

92+99 36.0' STUMP
 93+10 48.9' HEAVY WOODS

93+31 77.7' WATER VALVE
 93+31 28.8' FIRE HYDRANT
 93+48 48.4' TELE RISER
 93+49 30.3' CITY WIRE
 93+50 48.4' TELE POLE
 93+53 50.1' ELEC POLE

CLR 93+85 30.4' HEAVY WOODS

95+19 49.4' ELEC POLE

CLR 95+39 33.9' HEAVY WOODS
 REM 95+42 27.4' 15" METAL PIPE (CMP)
 REL 95+47 18.2' MAIL BOX
 REL 95+50 17.4' MAIL BOX
 REL 95+52 28.5' WATER VALVE
 REL 95+54 17.2' MAIL BOX
 95+64 47.8' HEAVY WOODS

REM 95+83 27.4' 15" METAL PIPE (CMP)
 95+87 34.9' BRUSH AREA
 95+87 44.1' URNOY GAS MARKING
 96+03 29.3' 15" METAL PIPE (CMP)
 96+08 33.7' IRON PIPE
 96+08 33.7' IRON PIPE
 96+10 36.0' BRUSH AREA
 96+17 33.5' 3" DECID. SHRUB

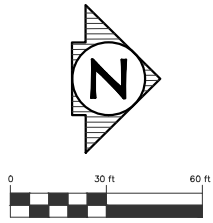
96+46 34.7' 8" APPLE
 SAVE 96+56 27.2' 15" METAL PIPE (CMP)

96+77 34.6' TELE RISER
 96+81 48.9' 12" L.I.A.C.
 96+81 49.6' ELEC POLE

97+03 35.2' BOARD FENCE
 97+04 35.9' 2" CONIF. SHRUB
 97+15 33.6' 2" CONIF. SHRUB
 97+15 33.3' BOARD FENCE

97+42 40.5' MSC. SIGN
 REL 97+47 17.5' MAIL BOX

97+94 45.8' BRUSH AREA
 98+05 24.7' WATER VALVE
 98+07 25.0' WATER VALVE
 98+07 25.0' WATER VALVE
 98+23 35.0' PLANTED AREA
 CLR 98+23 31.9' BRUSH AREA
 CLR 98+32 34.0' BRUSH AREA
 98+49 40.5' PLANTED AREA



EXISTING STRUCTURES

M/H# 9735
 TYPE: STORM
 COVER: FLAT GRATE
 RIM= 650.00
 6" PVC E INV.=644.00
 4" PVC E INV.=644.00
 18" RCP S INV.=642.30
 18" RCP N INV.=642.20

PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
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 SCALE: 1" = 30'

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 STA 91+00 TO STA 98+50
 REMOVAL SHEET

REV:
 SHT# 31 OF 65
 JOB No: 19M0006



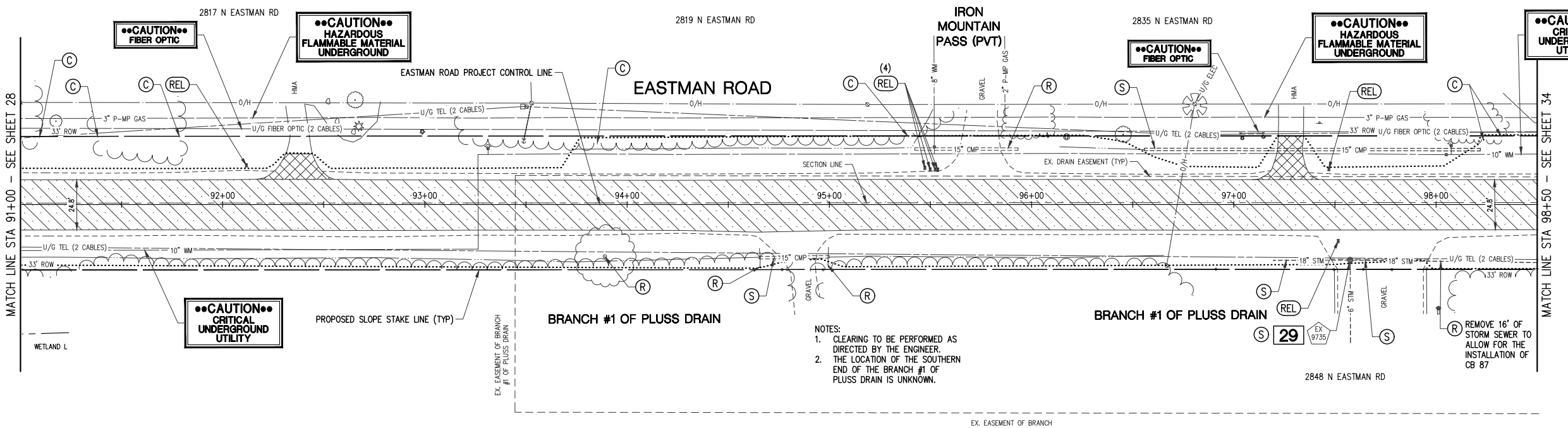
PLAN SUBMITTALS AND CHANGES

BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

SHEET QUANTITIES

DESCRIPTION	QUANTITY	UNITS
Tree, Rem, 19 inch to 36 inch	1	Ea
Culv, Rem, Less than 24 inch	1	Ea
Culv, End, Rem, Less than 24 inch	2	Ea
Sewer, Rem, Less than 24 inch	16	Ft
Erosion Control, Inlet Protection, Fabric Drop	1	Ea
Cold Milling HMA Surface	2078	Syd
HMA Surface, Rem	67	Syd

- NOTES:
 1. CLEARING TO BE PERFORMED AS DIRECTED BY THE ENGINEER.
 2. THE LOCATION OF THE SOUTHERN END OF THE BRANCH #1 OF PLUS DRAIN IS UNKNOWN.



91+28 32.3R HEAVY WOODS

91+28 32.3R HEAVY WOODS

93+89 25.7R 30" COTTONWOOD REM

94+65 21.7R MASONRY WALL REM
 94+65 26.3R 15" METAL PIPE (CMP) SAVE
 94+66 30.8R MASONRY WALL REM

94+77 32.1R METAL POST
 94+80 47.9R HEAVY WOODS
 94+87 32.3R HEAVY WOODS
 94+87 32.3R METAL POST
 95+00 31.1R MASONRY WALL REM
 95+00 25.6R 15" METAL PIPE (CMP) REM

96+46 30.7R HEAVY WOODS

96+67 30.2R ELEC POLE

96+80 45.0R HEAVY WOODS

96+91 31.9R METAL POST

97+50 32.1R METAL POST
 97+52 18.0R METAL BOX REL
 97+58 27.4R ROUND CR SAVE
 97+64 32.0R METAL POST

97+78 32.1R METAL POST

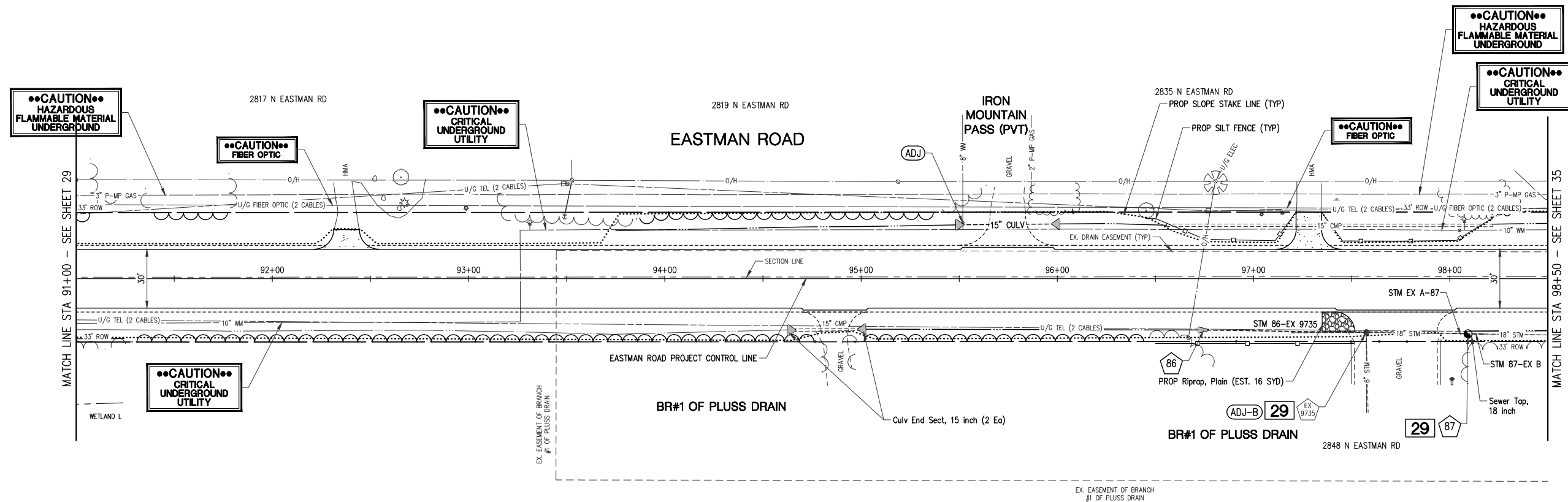
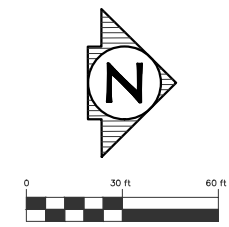
97+95 31.8R METAL POST
 98+01 51.1R ELEC OUTLET
 98+01 51.2R WOOD POST
 98+01 51.4R WATER FAUCET
 98+09 53.5R HEAVY WOODS

PROPOSED STORM SEWER STRUCTURE TABLE						
STRUCT NO.	DIA.	COVER TYPE	RIM ELEVATION	INVERT	STATION	OFFSET
EX 9735	N/A	B	RIM=650.00	6" 644.00 E (EX) 18" 645.54 S (PR) 4" 644.00 E (EX) 18" 642.20 N (EX)	97+57.5	27.4 R
(1)	48"	G	RIM=648.34	18" 642.07 N (PR) 18" 642.07 S (PR)	98+09.3	28.1 R

(1) Dr Structure, Top, 18 inch

PROPOSED STORM SEWER PIPE TABLE						
PIPE NUMBER	DIAMETER	PAY ITEM	TOTAL LENGTH	SLOPE	TRENCH DETAIL A (T.D. A)	TRENCH DETAIL B (T.D. B)
STM 86-EX 9735	18"	Sewer, Cl A, 18 inch, Tr Det A	83'	0.50%	77'	6'
STM 87-EX B	18"	Sewer, Cl A, 18 inch, Tr Det B	8'	0.25%	8'	0'
STM EX A-87	18"	Sewer, Cl A, 18 inch, Tr Det B	8'	0.25%	8'	0'

PROPOSED STORM SEWER END SECTION TABLE					
STRUCT NO.	DIA.	PAY ITEM	END OF PIPE INVERT	END OF PIPE STATION	END OF PIPE OFFSET
86	18"	Culv, Slip End Sect, 1 on 4, 18 inch, Longit	18" 645.95	96+74.8	26.2 R



DRIVEWAY SCHEDULE										
C/L DRIVEWAY STATION	EXIST. PWMT TYPE	DRIVEWAY OFFSET REMOVAL LIMITS (FT)	WIDTH AT REMOVAL LIMITS (FT)	WIDTH AT OPENING (FT)	LENGTH OF DRIVE RESTORATION (FT)	Approach, Cl I, 6 inch (Syd)	Approach, Cl II, 6 inch (Syd)	HMA Approach (Ton)	Culv, Cl F, 15 inch (Ft)	Culv End Sect, 15 inch (Ea)
92+38, LT	HMA	33.8	13.2	33.2	10.0	20	0	5	0	0
94+87, RT	G	32.1	14.0	34.0	10.0	0	20	0	0	2
95+75, LT	G	33.9	18.0	48.0	16.9	0	45	0	48	2
97+28, LT	HMA	33.9	13.0	33.0	18.9	32	0	8	0	0
97+73, RT	G	32.0	42.0	62.0	10.0	0	52	0	0	0

G = GRAVEL DRIVE, HMA = HMA DRIVE

NOTE: Culv, Cl F, 18 inch VALUE INDICATES PAY LENGTH, PROFILE INDICATES ACTUAL LENGTH.

SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Erosion Control, Inlet Protection, Fabric Drop	1	Ea
Erosion Control, Silt Fence	310	Ft
Subbase, CIP	474	Cyd
Aggregate Base, 6 inch	614	Syd
Approach, Cl I, 6 inch	52	Syd
Approach, Cl II, 6 inch	117	Syd
Shld, Cl II, Modified	75	Ton
Culv End Sect, 15 inch	4	Ea
Culv, Cl F, 15 inch	48	Ft
Culv, Slip End Sect, 1 on 4, 18 inch, Longit	1	Ea
Sewer, Cl A, 18 inch, Tr Det A	93	Ft
Sewer, Cl A, 18 inch, Tr Det B	6	Ft
Sewer Tap, 18 inch	1	Ea
Dr Structure Cover, Adj, Case 2	1	Ea
Dr Structure Cover, Type B	1	Ea
Dr Structure Cover, Type G	1	Ea
Dr Structure, 48 inch dia	1	Ea
Dr Structure, Add Depth of 48 inch dia, 8 foot to 15 foot	1	Ft
Dr Structure, Tap, 18 inch	1	Ea
HMA Approach	13	Ton
HMA, 4EML	52	Ton
HMA, 5EML	224	Ton
Post, Mailbox	7	Ea
Riprap, Plain	16	Syd
Gate Box, Adj, Case 2	1	Ea



PLAN SUBMITTALS AND CHANGES		REV:
BIDDING DOCUMENTS		
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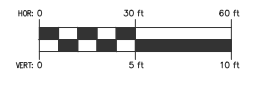
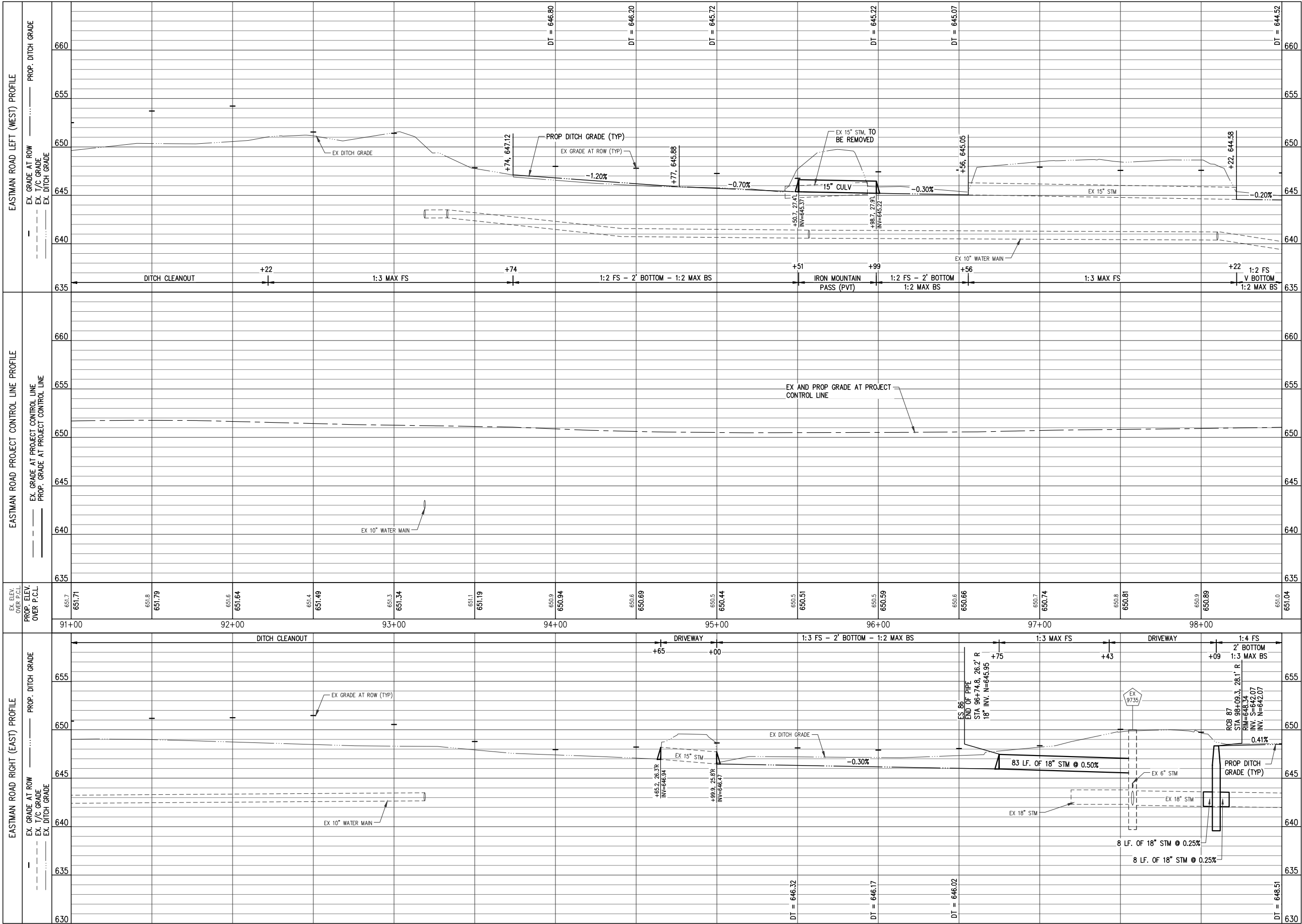
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SHT# 32 OF 65
 JOB No: 19M0006



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
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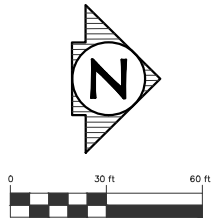
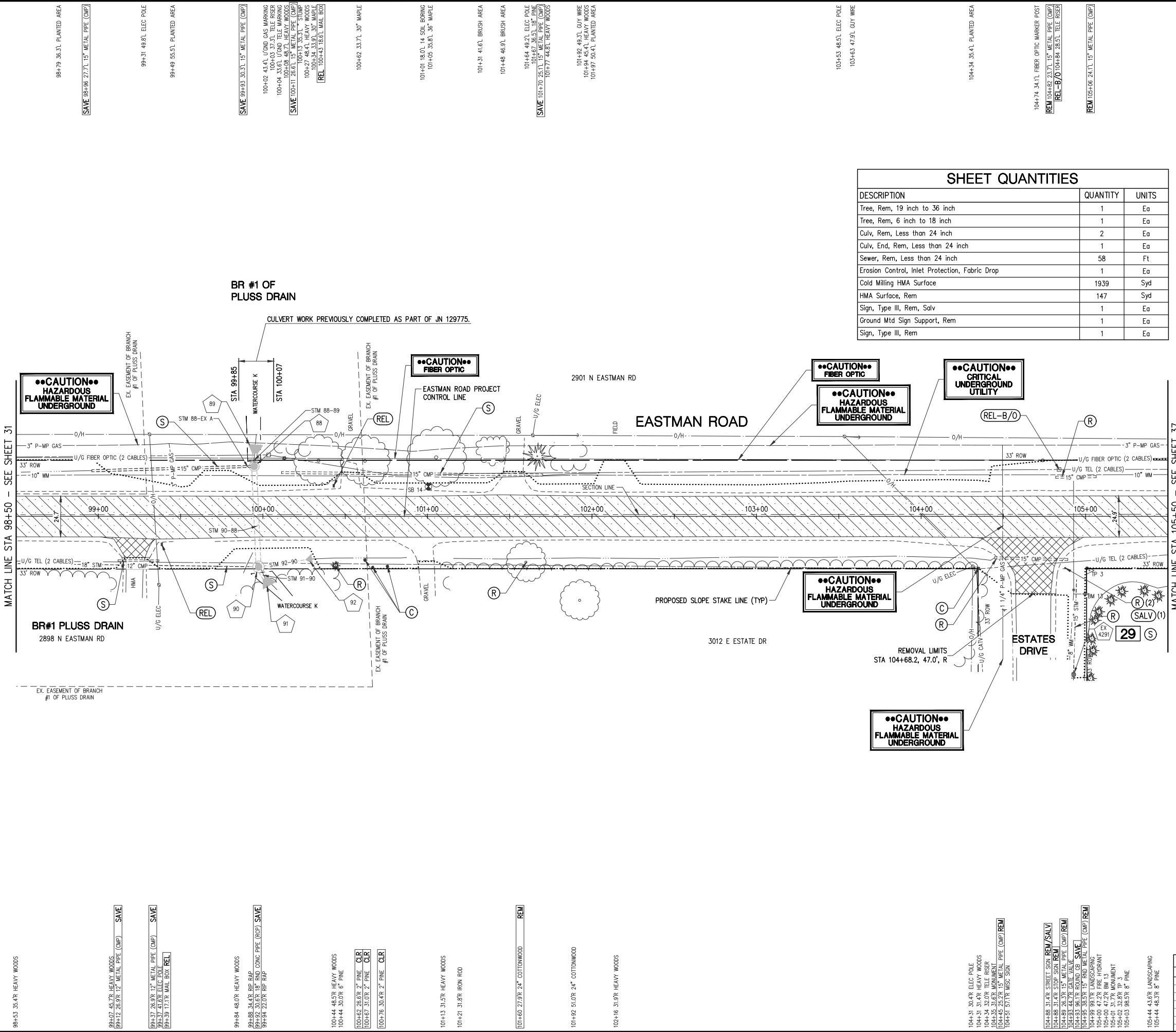
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 STA 91+00 TO STA 98+50
 PROFILE SHEET

REV:
 SHT# 33 OF 65
 JOB No: 19M0006



EXISTING STRUCTURES

M/H: 4291
 TYPE: STORM
 COVER: FLAT GRATE
 RM= 648.96
 15" SLC W INV.=647.26
 15" SLC E INV.=647.26

SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Tree, Rem, 19 inch to 36 inch	1	Ea
Tree, Rem, 6 inch to 18 inch	1	Ea
Culv, Rem, Less than 24 inch	2	Ea
Culv, End, Rem, Less than 24 inch	1	Ea
Sewer, Rem, Less than 24 inch	58	Ft
Erosion Control, Inlet Protection, Fabric Drop	1	Ea
Cold Milling HMA Surface	1939	Syd
HMA Surface, Rem	147	Syd
Sign, Type III, Rem, Salv	1	Ea
Ground Mtd Sign Support, Rem	1	Ea
Sign, Type III, Rem	1	Ea

98+79 36.31 PLANTED AREA
 SAVE 98+96 27.71 15" METAL PIPE (CMP)

99+31 49.81 ELEC POLE
 99+49 55.51 PLANTED AREA

SAVE 99+83 30.11 15" METAL PIPE (CMP)
 100+02 43.41 U/GND GAS MARKING
 100+03 37.31 TELE RISER
 100+04 33.61 U/GND TELE MARKING
 100+08 48.71 HEAVY WOODS
 100+11 28.61 15" METAL PIPE (CMP)
 100+27 48.41 HEAVY WOODS
 100+34 33.91 30" MAPLE
 100+43 18.61 MAIL BOX
 REL 100+43 18.61 MAIL BOX

100+62 33.71 30" MAPLE
 101+01 18.01 14 SOU DOBING
 101+05 35.81 30" MAPLE

101+31 41.61 BRUSH AREA
 101+48 46.91 BRUSH AREA
 101+64 49.01 ELEC POLE
 101+67 35.41 15" METAL PIPE (CMP)
 101+77 44.81 HEAVY WOODS
 SAVE 101+70 25.11 15" METAL PIPE (CMP)

101+82 49.31 GUY WIRE
 101+89 49.31 GUY WIRE
 101+97 50.41 PLANTED AREA

103+53 48.51 ELEC POLE
 103+63 47.91 GUY WIRE

104+34 35.41 PLANTED AREA

104+74 34.11 FIBER OPTIC MARKER POST
 REM 104+82 23.71 15" METAL PIPE (CMP)
 REL-B/O 104+84 28.51 TELE RISER
 REM 105+06 24.11 15" METAL PIPE (CMP)

MATCH LINE STA 98+50 - SEE SHEET 31

MATCH LINE STA 105+50 - SEE SHEET 37

BR#1 PLUS DRAIN
 2898 N EASTMAN RD

2901 N EASTMAN RD
 EASTMAN ROAD
 FIELD

3012 E ESTATE DR

ESTATES DRIVE

EX. EASEMENT OF BRANCH #1 OF PLUS DRAIN

CAUTION HAZARDOUS FLAMMABLE MATERIAL UNDERGROUND

CAUTION HAZARDOUS FLAMMABLE MATERIAL UNDERGROUND

CAUTION CRITICAL UNDERGROUND UTILITY

CAUTION HAZARDOUS FLAMMABLE MATERIAL UNDERGROUND

CAUTION HAZARDOUS FLAMMABLE MATERIAL UNDERGROUND

98+43 35.4R HEAVY WOODS

99+07 45.7R HEAVY WOODS
 99+12 26.6R 12" METAL PIPE (CMP) SAVE
 99+37 26.9R 12" METAL PIPE (CMP) SAVE
 99+37 41.0R ELEC POLE
 99+39 17.1R MAIL BOX REL

99+84 48.0R HEAVY WOODS
 99+88 34.4R BR RAP
 99+91 48.7R BR RAP
 99+94 22.0R BR RAP

100+44 48.5R HEAVY WOODS
 100+44 30.0R 6" PINE
 100+62 26.6R 2" PINE CLR
 100+67 31.0R 2" PINE CLR
 100+76 30.4R 2" PINE CLR

101+13 31.5R HEAVY WOODS
 101+21 31.6R IRON ROD

101+60 27.8R 24" COTTONWOOD REM

101+92 51.0R 24" COTTONWOOD

102+16 31.9R HEAVY WOODS

104+31 30.4R ELEC POLE
 104+31 31.4R HEAVY WOODS
 104+34 32.0R TELE RISER
 104+45 25.2R 15" METAL PIPE (CMP) REM
 104+51 57.1R MSG SIGN

104+88 31.4R STREET SIGN REM/SALV
 104+88 31.4R STOP SIGN REM
 104+89 29.3R 15" METAL PIPE (CMP) REM
 104+93 36.1R ROUND GR SAVE
 104+95 35.8R 15" RND METAL PIPE (CMP) REM
 104+99 39.7R LANDSCAPING
 105+00 47.2R FIRE HYDRANT
 105+01 31.7R MONUMENT
 105+02 32.6R TP 3
 105+03 38.5R 8" PINE

105+44 43.6R LANDSCAPING
 105+44 46.9R 6" PINE

PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS



PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
 REVIEWER: TCL
 SCALE: 1" = 30'

PREPARED FOR
MIDLAND COUNTY ROAD COMMISSION
EASTMAN ROAD WIDENING AND REHAB.

ROWE PROFESSIONAL SERVICES COMPANY

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STA 98+50 TO STA 105+50
 REMOVAL SHEET

SHT# 34 OF 65
 JOB No: 19M0006

STRUCT NO.	DIA.	PAY ITEM	END OF PIPE INVERT	END OF PIPE STATION	END OF PIPE OFFSET
89	36"	Culv End Sect, 15 inch	36" 641.16	99+95.2	38.4 L
91	36"	Culv End Sect, 15 inch	36" 641.57	100+01.4	37.6 R
92	15"	Culv End Sect, 15 inch	15" 646.75	100+27.5	26.2 R
95	15"	Culv End Sect, 15 inch	15" 648.16	104+27.5	25.4 R
97	15"	Culv End Sect, 15 inch	15" 646.94	105+14.5	25.7 R

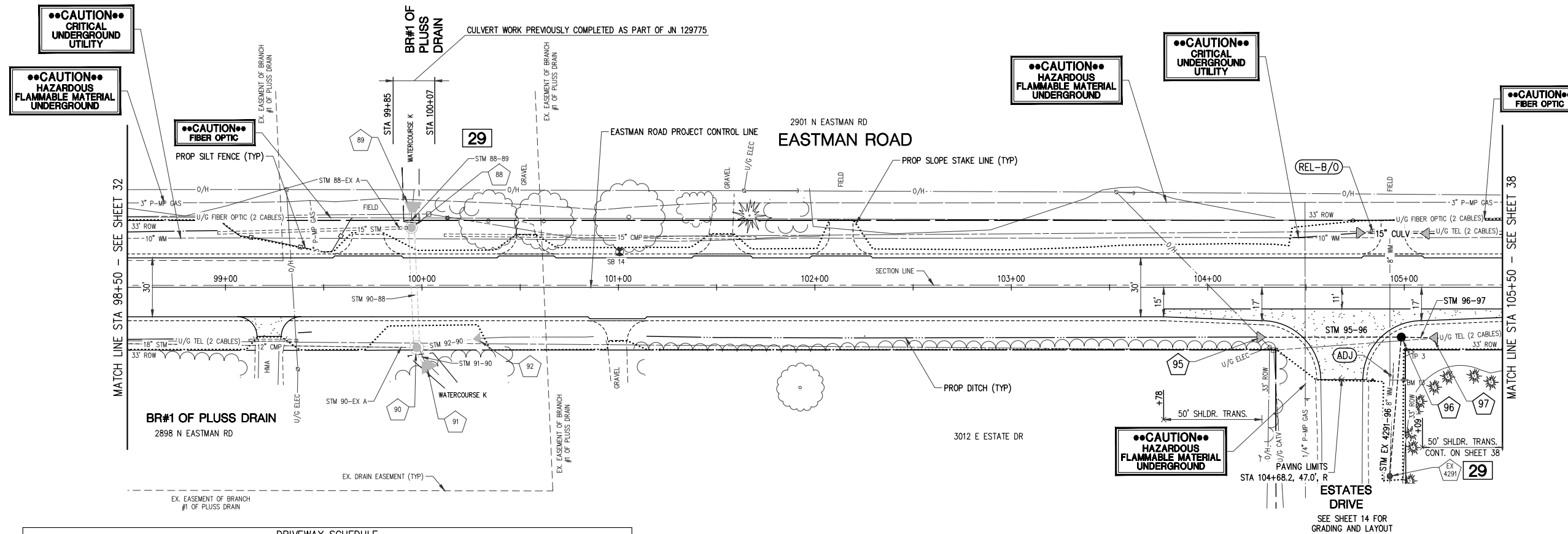
* FOR INFORMATION ONLY. STORM SEWER WORK PREVIOUSLY COMPLETED AS PART OF JN 129775.

STRUCT NO.	DIA.	COVER TYPE	RIM ELEVATION	INVERT	STATION	OFFSET
EX 4291	N/A	N/A	RIM=648.96	15" 647.26 W (PR) 15" 647.26 E (EX)	104+92.6	96.1 R
88	72"	B	RIM=649.00	36" 641.17 E (PR) 36" 641.17 W (PR) 15" 643.95 S (PR)	99+94.7	30.4 L
90	84"	B	RIM=649.28	18" 641.60 S (PR) 36" 641.53 NE (PR) 36" 641.26 W (PR) 15" 645.50 N (PR)	99+97.3	30.7 R
96 (1)	48"	B	RIM=650.78	15" 647.00 E (PR) 15" 647.00 S (PR) 15" 647.00 N (PR)	104+98.5	25.3 R

(1) Dr Structure, Top, 15 inch
* FOR INFORMATION ONLY. STORM SEWER WORK PREVIOUSLY COMPLETED AS PART OF JN 129775.

PIPE NUMBER	DIAMETER	PAY ITEM	TOTAL LENGTH	SLOPE	TRENCH DETAIL A (T.D. A)	TRENCH DETAIL B (T.D. B)
STM 88-89	36"	Sewer, CI A, 15 inch, Tr Det	8'	0.12%	8'	0'
STM 88-EX A	15"	Sewer, CI A, 15 inch, Tr Det	8'	0.48%	8'	0'
STM 90-88	36"	Sewer, CI A, 15 inch, Tr Det	61'	0.15%	0'	61'
STM 90-EX A	18"	Sewer, CI A, 15 inch, Tr Det	8'	0.25%	8'	0'
STM 91-90	36"	Sewer, CI A, 15 inch, Tr Det	8'	0.50%	8'	0'
STM 92-90	15"	Sewer, CI A, 15 inch, Tr Det	30'	4.10%	30'	0'
STM 95-96	15"	Sewer, CI A, 15 inch, Tr Det	71'	1.63%	31'	40'
STM 96-97	15"	Sewer, CI A, 15 inch, Tr Det	16'	0.37%	16'	0'
STM EX 4291-96	15"	Sewer, CI A, 15 inch, Tr Det	71'	0.37%	71'	0'

* FOR INFORMATION ONLY. STORM SEWER WORK PREVIOUSLY COMPLETED AS PART OF JN 129775.



C/L DRIVEWAY STATION	EXIST. PAVT TYPE	DRIVEWAY OFFSET REMOVAL LIMITS (FT)	WIDTH AT REMOVAL LIMITS (FT)	WIDTH AT OPENING (FT)	LENGTH OF DRIVE RESTORATION (FT)	Approach, CI I, 6 inch (Syd)	Approach, CI II, 6 inch (Syd)	HMA Approach (Ton)	Culv, CI F, 15 inch (Ft)	Culv End Sect, 15 inch (Ea)
99+22, RT	HMA	32.0	12.4	32.4	10.0	19	0	4	0	0
99+72, LT	G	34.0	16.0	36.0	10.0	0	23	0	0	0
100+53, LT	G	34.1	10.0	30.0	10.0	0	16	0	0	0
101+00, RT	G	31.9	10.0	30.0	10.0	0	16	0	0	0
101+53, LT	G	34.1	11.0	31.0	10.0	0	17	0	0	0
102+13, LT	G	34.1	12.0	32.0	17.1	0	28	0	0	0
104+94, LT	G	34.2	12.0	32.0	17.2	0	28	0	32	2

G = GRAVEL DRIVE, HMA = HMA DRIVE
NOTE: Culv, CI F, 15 inch VALUE INDICATES PAY LENGTH, PROFILE INDICATES ACTUAL LENGTH.

DESCRIPTION	QUANTITY	UNITS
Erosion Control, Silt Fence	81	Ft
Subbase, CIP	462	Cyd
Aggregate Base, 6 inch	766	Syd
Approach, CI I, 6 inch	19	Syd
Approach, CI II, 6 inch	128	Syd
Shld, CI II, Modified	75	Ton
Culv End Sect, 15 inch	4	Ea
Culv, CI F, 15 inch	32	Ft
Sewer, CI A, 15 inch, Tr Det A	118	Ft
Sewer, CI A, 15 inch, Tr Det B	40	Ft
Dr Structure Cover, Type B	1	Ea
Dr Structure, 48 inch dia	1	Ea
Dr Structure, Top, 15 inch	1	Ea
HMA Approach	54	Ton
HMA, 4EML	51	Ton
HMA, 5EML	203	Ton
Post, Mailbox	2	Ea
Gate Box, Adj, Case 2	1	Ea

BIDDING DOCUMENTS		REV:
DATE	DESCRIPTION	
8/21/23	ISSUED FOR BIDS	

PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
 REVIEWER: TCL
 SCALE: 1" = 30'

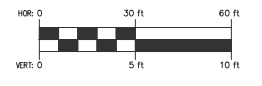
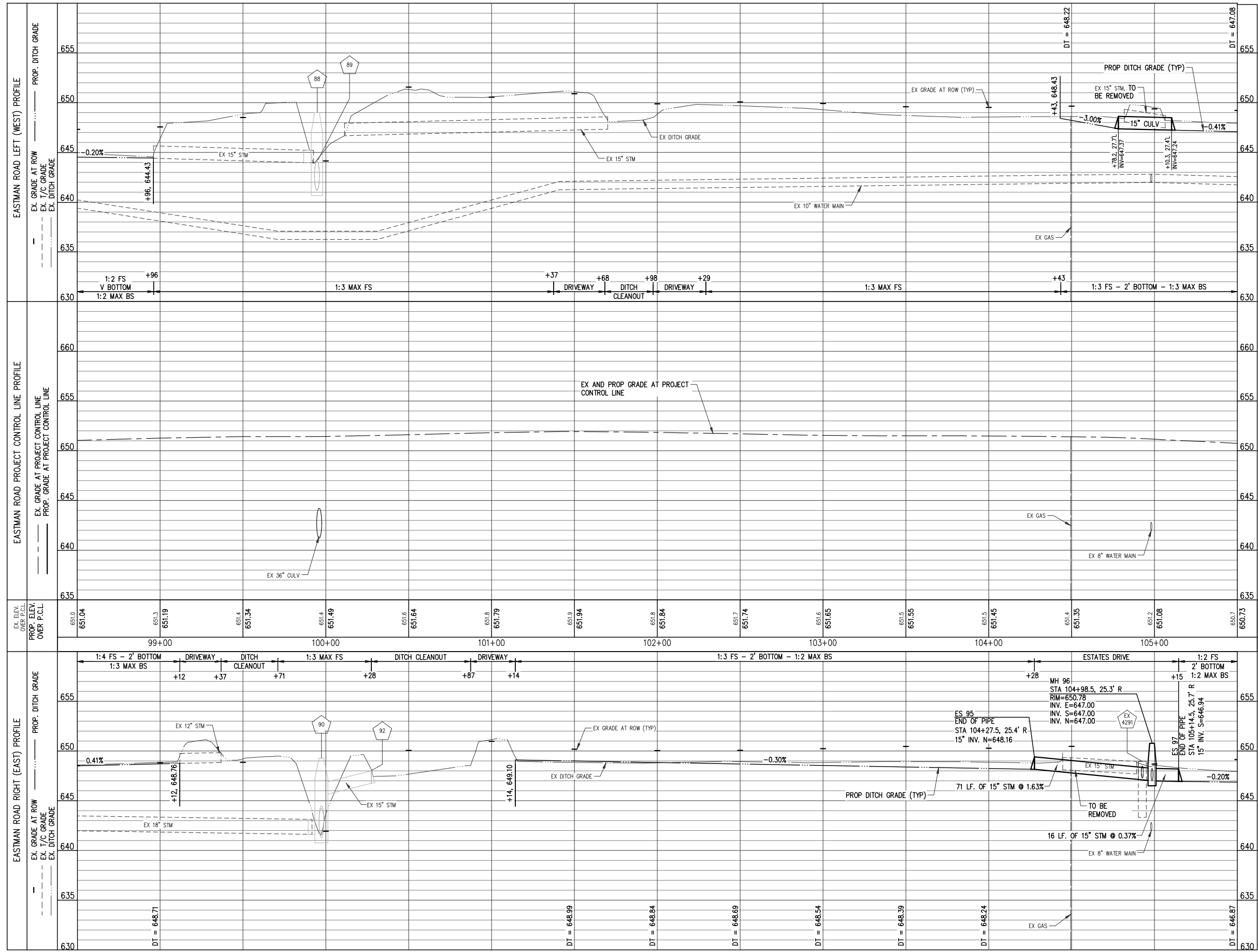
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MIDLAND COUNTY ROAD COMMISSION
EASTMAN ROAD WIDENING AND REHAB.
 STA 98+50 TO STA 105+50
 CONSTRUCTION SHEET

SHT# 35 OF 65
 JOB No: 19M0006





PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

PLAN DATE: AUGUST 2023
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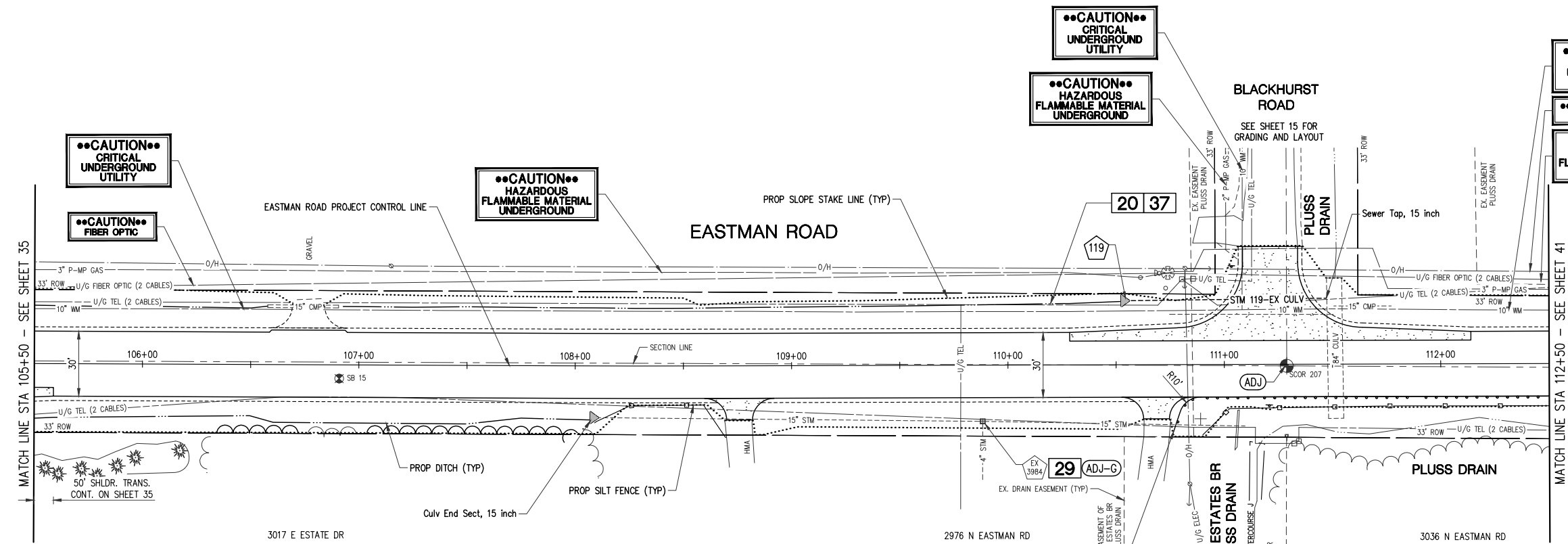
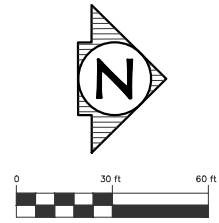
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 STA 98+50 TO STA 105+50
 PROFILE SHEET

SHT# 36 OF 65
 JOB No: 19M0006

UTILITY ROAD REPAIR SCHEDULE				
CROSSING STATION	WIDTH OF TRENCH REPAIR (Ft)	LENGTH OF TRENCH REPAIR (Ft)	Hand Patching (Ton)	Aggregate Base, 6 inch (Syd)
111+23 LT	20	44	51	98

PROPOSED STORM SEWER PIPE TABLE						
PIPE NUMBER	DIAMETER	PAY ITEM	TOTAL LENGTH	SLOPE	TRENCH DETAIL A (T.D. A)	TRENCH DETAIL B (T.D. B)
STM 119-EX CULV	15"	Sewer, Cl A, _ inch, Tr Det _	93'	3.533%	40'	53'

PROPOSED STORM SEWER END SECTION TABLE					
STRUCT NO.	DIA.	PAY ITEM	END OF PIPE INVERT	END OF PIPE STATION	END OF PIPE OFFSET
119	15"	Culv, End Sect, _ inch	15" 645.10	110+54.7	29.6 L



DRIVEWAY SCHEDULE								
C/L DRIVEWAY STATION	EXIST. PMT TYPE	DRIVEWAY OFFSET REMOVAL LIMITS (FT)	WIDTH AT REMOVAL LIMITS (FT)	WIDTH AT OPENING (FT)	LENGTH OF DRIVE RESTORATION (FT)	Approach, Cl I, 6 inch (Syd)	Approach, Cl II, 6 inch (Syd)	HMA Approach (Ton)
106+77, LT	G	34.3	15.0	35.0	10.0	0	22	0
108+76, RT	HMA	32.0	12.0	32.0	10.0	18	0	4
110+70, RT	HMA	33.3	12.0	32.0	10.0	18	0	4

NOTE: Culv, Cl F, _ inch VALUE INDICATES PAY LENGTH, PROFILE INDICATES ACTUAL LENGTH.

SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Erosion Control, Check Dam, Stone	20	Ft
Erosion Control, Sediment Trap	1	Ea
Erosion Control, Silt Fence	237	Ft
Subbase, CIP	426	Cyd
Aggregate Base, 6 inch	654	Syd
Approach, Cl I, 6 inch	36	Syd
Approach, Cl II, 6 inch	22	Syd
Shld, Cl II, Modified	65	Ton
Culv End Sect, 15 inch	2	Ea
Sewer, Cl A, 15 inch, Tr Det A	40	Ft
Sewer, Cl A, 15 inch, Tr Det B	53	Ft
Sewer Tap, 15 inch	1	Ea
Dr Structure Cover, Adj, Case 2	1	Ea
Dr Structure Cover, Type G	1	Ea
Hand Patching	51	Ton
HMA Approach	40	Ton
HMA, 4EML	44	Ton
HMA, 5EML	200	Ton
Post, Mailbox	1	Ea
Guardrail Departing Terminal, Type MGS	1	Ea
Guardrail Reflector	12	Ea
Guardrail, Long Span, Det MGS-1	1	Ea
Guardrail, Curved, Type MGS-8, 108 inch Post	13	Ft
Guardrail, Type MGS-8, 108 inch Post	86	Ft
Monument Box Adj	1	Ea



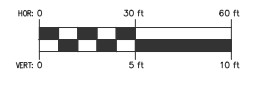
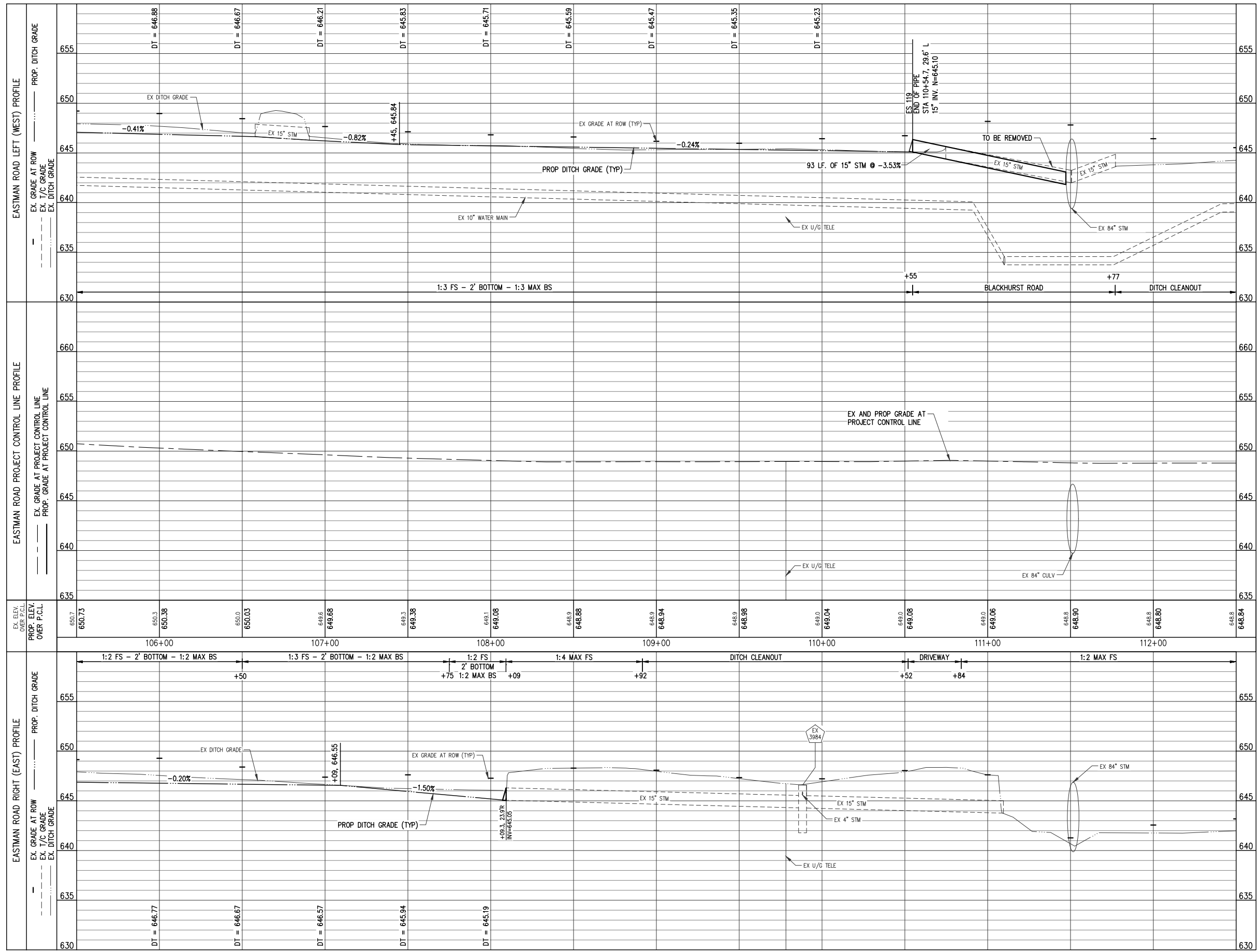
PLAN SUBMITTALS AND CHANGES		REV:
BIDDING DOCUMENTS		
DATE	DESCRIPTION	
8/21/23	ISSUED FOR BIDS	

PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
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PREPARED FOR
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 STA 105+50 TO STA 112+50
 CONSTRUCTION SHEET

SHT# 38 OF 65
 JOB No: 19M0006



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

REV: _____
 SHT# 39 OF 65
 JOB No: 19M0006

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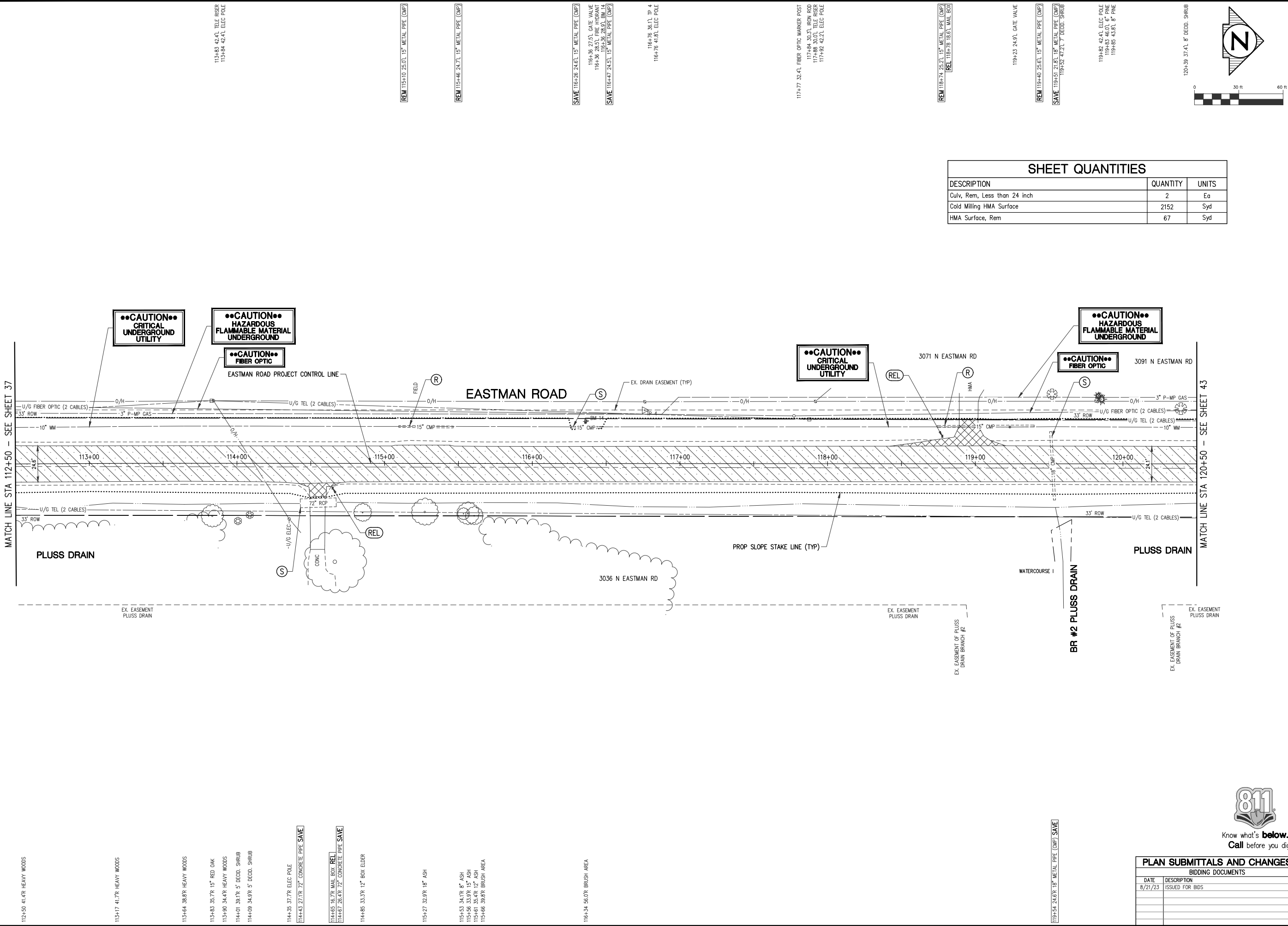


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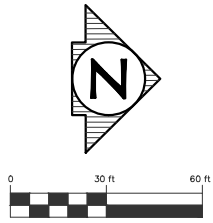
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 STA 105+50 TO STA 112+50
 PROFILE SHEET

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- 113+83 42.41' TELE RISER
- 113+84 42.41' ELEC POLE
- 119+82 42.41' ELEC POLE
- 119+83 46.01' 6" PINE
- 119+85 43.91' 6" PINE
- 116+76 36.11' TP. 4
- 116+76 41.81' ELEC POLE
- 117+77 32.41' FIBER OPTIC MARKER POST
- 117+84 30.31' IRON ROD
- 117+88 30.01' TELE RISER
- 117+92 42.21' ELEC POLE
- 119+23 24.91' GATE VALVE
- 119+82 42.41' ELEC POLE
- 119+83 46.01' 6" PINE
- 119+85 43.91' 6" PINE
- 120+39 37.41' 8" DECID. SHRUB



SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Culv, Rem, Less than 24 inch	2	Ea
Cold Milling HMA Surface	2152	Syd
HMA Surface, Rem	67	Syd

MATCH LINE STA 112+50 - SEE SHEET 37

MATCH LINE STA 120+50 - SEE SHEET 43

- 112+50 41.4R HEAVY WOODS
- 113+17 41.7R HEAVY WOODS
- 113+64 38.6R HEAVY WOODS
- 113+83 35.7R 15" RED OAK
- 113+90 34.4R HEAVY WOODS
- 114+01 39.1R 5' DECID. SHRUB
- 114+09 34.9R 5' DECID. SHRUB
- 114+35 37.7R ELEC POLE
- 114+43 27.1R 72" CONCRETE PIPE **SAVE**
- 114+65 16.7R MAIL BOX **REL**
- 114+67 26.4R 72" CONCRETE PIPE **SAVE**
- 114+85 33.3R 12" BOX ELDER
- 115+27 32.8R 18" ASH
- 115+63 34.7R 8" ASH
- 115+66 33.9R 6" ASH
- 115+81 35.4R 12" ASH
- 115+86 39.6R BRUSH AREA
- 116+34 56.0R BRUSH AREA

811
Know what's below.
Call before you dig.

PLAN SUBMITTALS AND CHANGES	
ISSUED DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

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STA 112+50 TO STA 120+50
REMOVAL SHEET

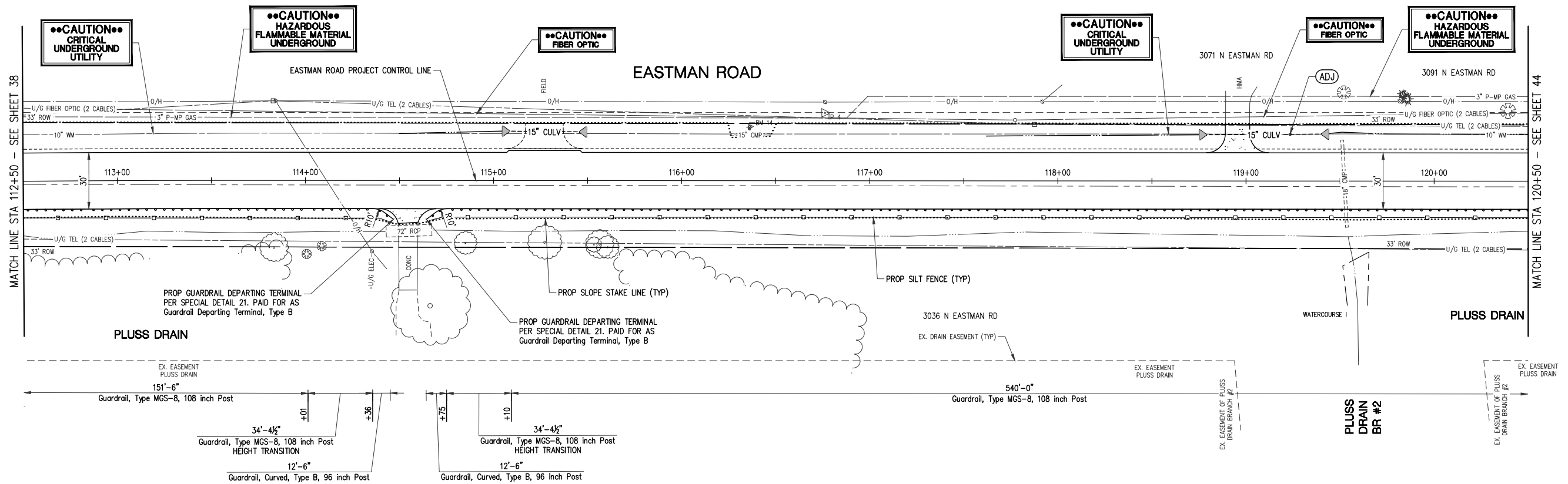
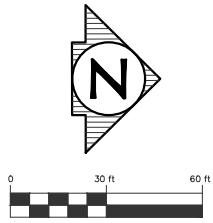
REV:
SHT# 40 of 65
JOB No: 19M0006

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DRIVEWAY SCHEDULE											
C/L DRIVEWAY STATION	EXIST. PVMT TYPE	DRIVEWAY OFFSET REMOVAL LIMITS (FT)	WIDTH AT REMOVAL LIMITS (FT)	WIDTH AT OPENING (FT)	LENGTH OF DRIVE RESTORATION (FT)	Approach, CI I, 6 inch (Syd)	Approach, CI II, 6 inch (Syd)	HMA Approach (Ton)	Driveway, Nonreinf Conc, 6 inch (Syd)	Culv, CI F, 15 inch (Ft)	Culv End Sect, 15 inch (Ea)
114+55, RT	C	35.4	10.0	30.0	8.0	13	0	4	0	0	0
115+27, LT	G	30.5	20.0	40.0	13.5	0	35	0	0	40	2
118+95, LT	HMA	30.1	13.0	33.0	15.1	27	0	6	0	64	2

G = GRAVEL DRIVE, C = CONCRETE DRIVE, HMA = HMA DRIVE
 NOTE: Culv, CI F, _ inch VALUE INDICATES PAY LENGTH, PROFILE INDICATES ACTUAL LENGTH.

SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Erosion Control, Silt Fence	782	Ft
Subbase, CIP	478	Cyd
Aggregate Base, 6 inch	573	Syd
Approach, CI I, 6 inch	40	Syd
Approach, CI II, 6 inch	35	Syd
Shld, CI II, Modified	42	Ton
Culv End Sect, 15 inch	4	Ea
Culv, CI F, 15 inch	104	Ft
HMA Approach	10	Ton
HMA, 4EML	61	Ton
HMA, 5EML	237	Ton
Post, Mailbox	2	Ea
Guardrail Departing Terminal, Type B	2	Ea
Guardrail Reflector	38	Ea
Guardrail, Curved, Type B, 96 inch Post	25	Ft
Guardrail, Type MGS-8, 108 inch Post	760	Ft
Gate Box, Adj, Case 2	1	Ea



PLAN DATE: AUGUST 2023
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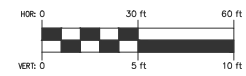
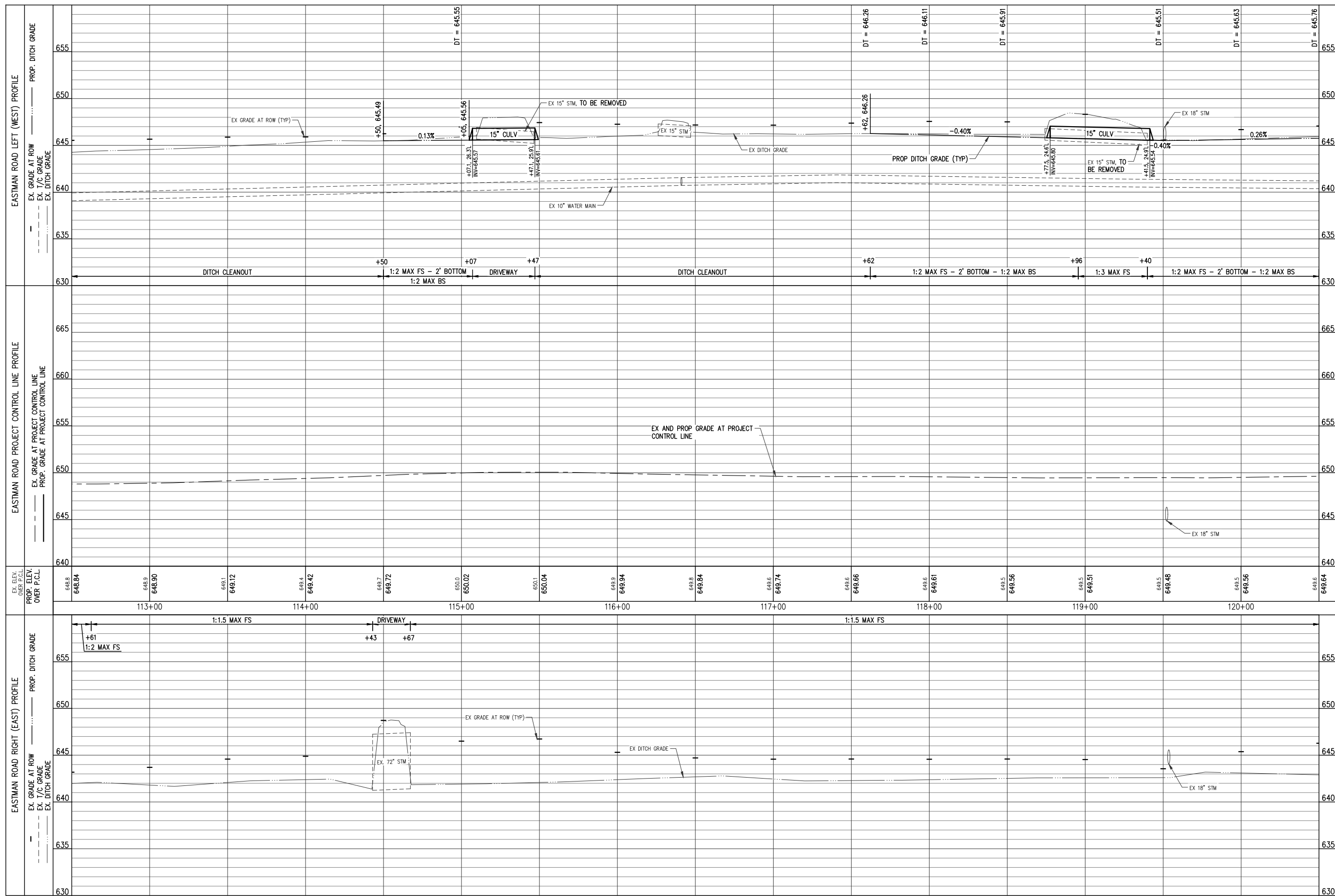


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 STA 112+50 TO STA 120+50
 CONSTRUCTION SHEET



PLAN SUBMITTALS AND CHANGES		REV:
BIDDING DOCUMENTS		
DATE	DESCRIPTION	
8/21/23	ISSUED FOR BIDS	

SHT# 41 OF 65
 JOB No: 19M0006



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

REV: _____
 SHT# 42 OF 65
 JOB No: 19M0006

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 STA 112+50 TO STA 120+50
 PROFILE SHEET

127 S. Main Street
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SAVE 120+71 24.6L 15" METAL PIPE (CMP)

SAVE 121+20 24.6L 15" METAL PIPE (CMP)

REM 122+21 24.5L 15" METAL PIPE (CMP)

122+33 27.5L GATE VALVE

122+34 28.4L FIRE HYDRANT

REM 122+46 24.2L 15" METAL PIPE (CMP)

122+56 37.2L TELE RISER

122+57 39.2L FIBER OPTIC MARKER POST

122+59 39.0L TELE RISER

122+75 42.1L ELEC POLE

REL 123+50 17.8L MAIL BOX

SAVE 123+57 24.5L 15" METAL PIPE (CMP)

SAVE 123+89 24.9L 15" METAL PIPE (CMP)

124+13 31.2L GAS MARKER POST

124+63 48.7L BRUSH AREA

124+73 30.0L IRON PIPE

REM 124+99 25.4L 18" METAL PIPE (CMP)

124+97 39.9L BRUSH AREA

REM 125+00 25.1L HEADWALL

REM 125+01 31.0L HEADWALL

125+04 50.5L BRUSH AREA

REM 125+29 20.6L HEADWALL

REM 125+27 20.3L HEADWALL

REM 125+31 23.0L 18" METAL PIPE (CMP)

125+76 29.8L GUY WIRE

REL 125+77 19.4L MAIL BOX

125+77 42.4L ELEC POLE

REM 125+80 24.8L 15" METAL PIPE (CMP)

125+91 47.5L BRUSH AREA

REM 126+12 24.2L 15" METAL PIPE (CMP)

126+14 48.5L BRUSH AREA

126+64 29.8L WATER STOP BOX

SAVE 127+84 24.3L 15" METAL PIPE (CMP)

127+89 37.3L GATE VALVE

127+88 28.4L FIRE HYDRANT

128+05 38.9L BRUSH AREA

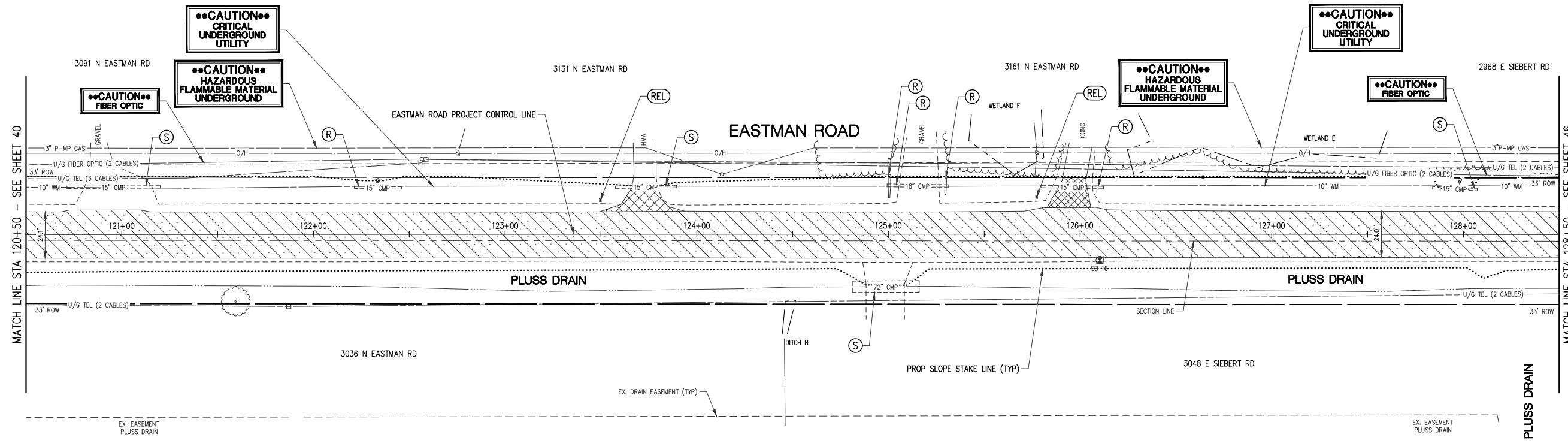
SAVE 128+07 23.4L 15" METAL PIPE (CMP)

128+44 23.5L U/GND FIBER OPTIC MARKING



SHEET QUANTITIES

DESCRIPTION	QUANTITY	UNITS
Culv, Rem, Less than 24 inch	3	Ea
Culv, End, Rem, Less than 24 inch	2	Ea
Pavt, Rem	30	Syd
Cold Milling HMA Surface	2154	Syd
HMA Surface, Rem	33	Syd



CAUTION
CRITICAL UNDERGROUND UTILITY

CAUTION
HAZARDOUS FLAMMABLE MATERIAL UNDERGROUND

CAUTION
FIBER OPTIC

CAUTION
HAZARDOUS FLAMMABLE MATERIAL UNDERGROUND

CAUTION
CRITICAL UNDERGROUND UTILITY

CAUTION
FIBER OPTIC



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

PLAN DATE: AUGUST 2023
PROJECT MGR: MJS
REVIEWER: TCL
SCALE: 1" = 30'

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EASTMAN ROAD WIDENING AND REHAB.

STA 120+50 TO STA 128+50
REMOVAL SHEET

REV:
SHT# 43 OF 65
JOB No: 19M0006

121+59 35.0R 15" ASH
121+87 37.8R TELE RISER

124+81 27.4R 72" METAL PIPE (CMP) SAVE

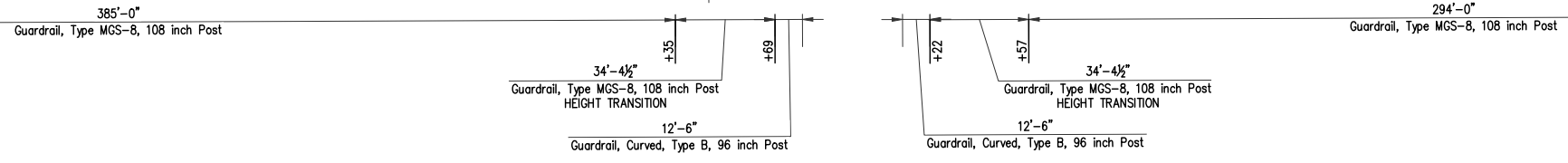
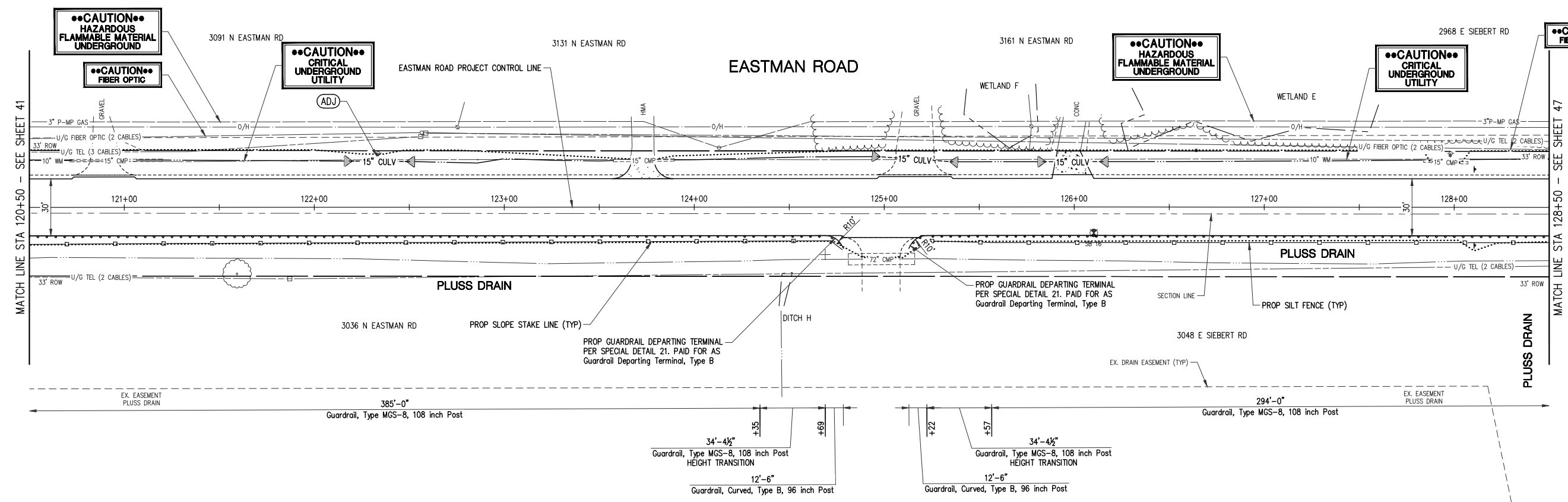
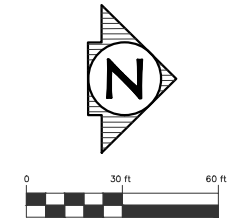
125+16 27.3R 72" METAL PIPE (CMP) SAVE

126+10 13.7R 16 SOIL BORING

DRIVEWAY SCHEDULE												
C/L DRIVEWAY STATION	EXIST. P.V.M.T. TYPE	DRIVEWAY OFFSET REMOVAL LIMITS (FT)	WIDTH AT REMOVAL LIMITS (FT)	WIDTH AT OPENING (FT)	TAPER DISTANCE (FT)	LENGTH OF DRIVE RESTORATION (FT)	Approach, CI I, 6 inch (Syd)	Approach, CI II, 6 inch (Syd)	HMA Approach (Ton)	Driveway, Nonreinf Conc. 6 inch (Syd)	Culv, CI F, 15 inch (Ft)	Culv End Sect, 15 inch (Ea)
120+89, LT	G	29.9	14.0	34.0	-	12.9	0	25	0	0	0	0
122+36, LT	N/A	0	0	0	-	0	0	0	0	0	32	2
123+73, LT	HMA	29.6	12.0	32.0	-	10.0	18	0	5	0	0	0
125+00, RT	G	36.5	20.0	40.0	-	10.0	0	27	0	0	0	0
125+16, LT	G	29.5	20.0	40.0	-	12.5	0	33	0	0	40	2
125+97, LT	C	29.4	12.0	21.0	12.4	12.4	23	0	0	23	32	2
127+96, LT	N/A	0	0	0	-	0	0	0	0	0	0	0

G = GRAVEL DRIVE, C = CONCRETE DRIVE, HMA = HMA DRIVE, N/A = NOT APPLICABLE
 NOTE: Culv, CI F, _ inch VALUE INDICATES PAY LENGTH, PROFILE INDICATES ACTUAL LENGTH.

SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Erosion Control, Silt Fence	766	Ft
Subbase, CIP	474	Cyd
Aggregate Base, 6 inch	560	Syd
Approach, CI I, 6 inch	41	Syd
Approach, CI II, 6 inch	85	Syd
Shld, CI II, Modified	41	Ton
Culv End Sect, 15 inch	6	Ea
Culv, CI F, 15 inch	104	Ft
HMA Approach	5	Ton
HMA, 4EML	61	Ton
HMA, 5EML	238	Ton
Driveway, Nonreinf Conc, 6 inch	23	Syd
Post, Mailbox	2	Ea
Guardrail Departing Terminal, Type B	2	Ea
Guardrail Reflector	36	Ea
Guardrail, Curved, Type B, 96 inch Post	25	Ft
Guardrail, Type MGS-8, 108 inch Post	748	Ft
Gate Box, Adj, Case 2	1	Ea



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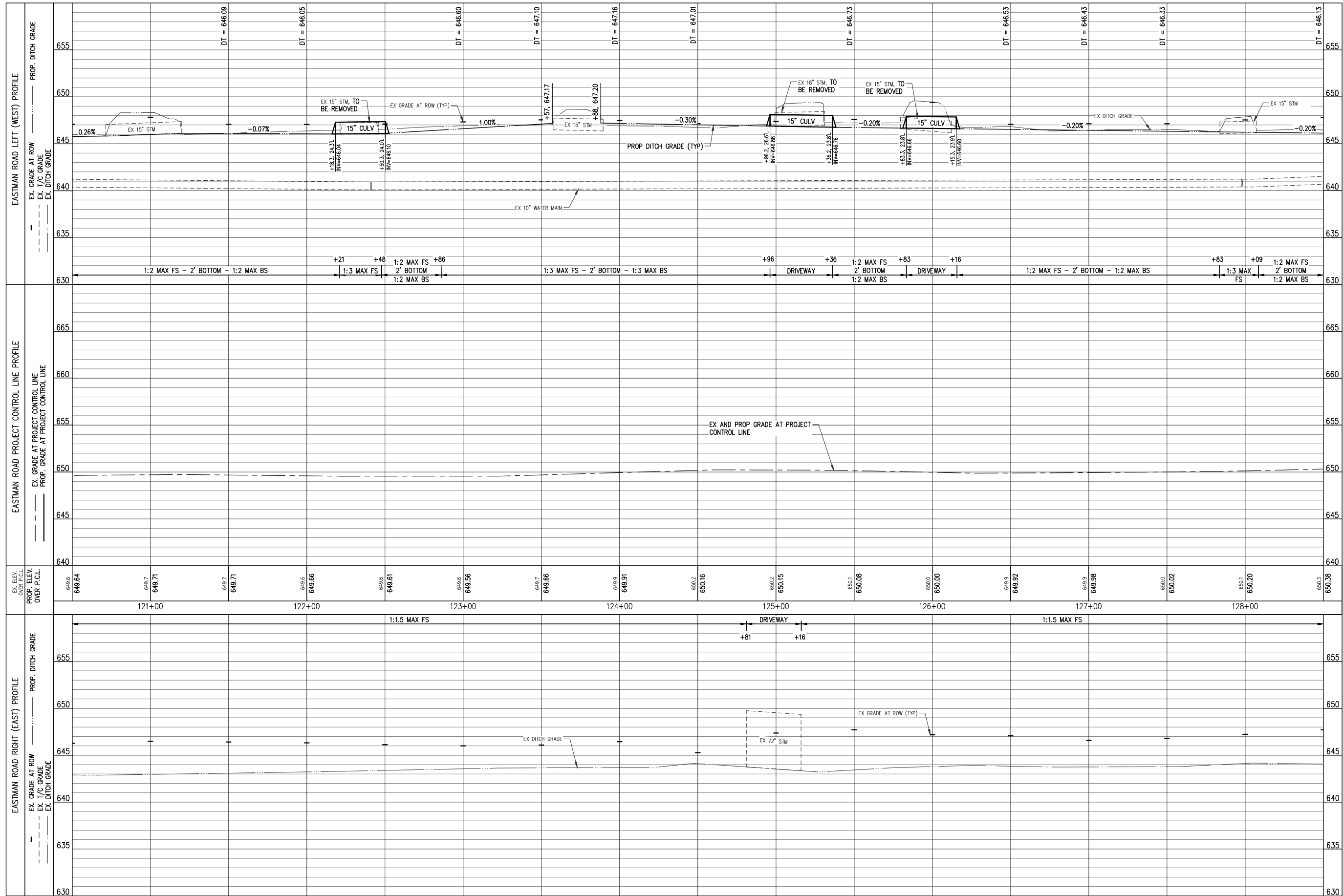
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 EASTMAN ROAD WIDENING AND REHAB.
 STA 120+50 TO STA 128+50
 CONSTRUCTION SHEET



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

REV: _____
 SHT# 44 OF 65
 JOB No: 19M0006

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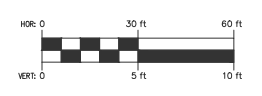


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 STA 120+50 TO STA 128+50
 PROFILE SHEET

SHT# 45 OF 65
 JOB No: 19M0006



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

REV: _____

128+56 TO 71 BRUSH AREA
 REM 128+56 16.2'L MISC. SIGN
 128+66 30.2'L FIBER OPTIC MARKER POST
 REM 128+69 21.1'L 24" METAL PIPE (CMP)
 128+77 12.8'L BRUSH AREA
 128+81 42.0'L ELEC POLE
 128+87 21.4'L TP 5
 REM 128+77 24.0'L 15" RND PLASTIC PIPE

REL 129+30 17.8'L MAIL BOX

130+06 31.5'L 8" PINE
 130+17 39.2'L GUY WIRE
 130+17 42.1'L ELEC POLE
 CLR 130+18 43.1'L BRUSH AREA
 130+20 22.4'L 15" PLASTIC PIPE
 REM 130+20 22.0'L 15" RND PLASTIC PIPE
 CLR 130+35 34.1'L BRUSH AREA

REM 130+78 22.6'L 15" METAL PIPE (CMP)

REM 131+12 23.5'L 15" METAL PIPE (CMP)
 131+14 47.9'L BRUSH AREA
 131+20 33.0'L TELE RISER

131+55 29.1'L METAL POST
 131+55 29.6'L IRON PIPE
 131+62 47.9'L BRUSH AREA

132+71 33.4'L BOARD FENCE
 132+83 33.3'L BOARD FENCE
 REM 132+85 23.4'L 15" METAL PIPE (CMP)
 REL 132+87 19.9'L MAIL BOX

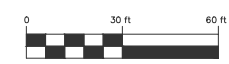
REM 133+13 23.4'L 15" METAL PIPE (CMP)

133+22 58.0'L BRUSH AREA
 133+23 42.2'L TELE RISER
 133+26 43.0'L TELE POLE
 133+28 43.2'L ELEC POLE

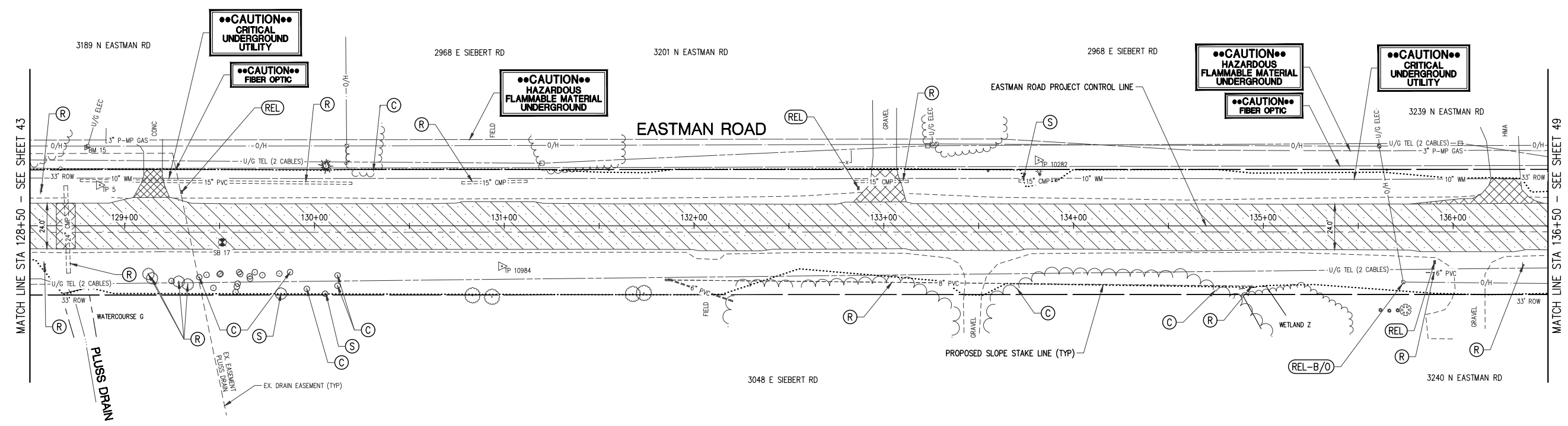
133+55 29.0'L METAL POST
 133+55 29.3'L IRON PIPE

133+63 57.6'L BRUSH AREA
 133+71 23.6'L 15" METAL PIPE (CMP)
 133+82 27.2'L GATE VALVE
 133+91 23.9'L 15" METAL PIPE (CMP)

135+61 41.9'L ELEC POLE
 135+61 42.1'L ELEC POLE
 135+62 29.6'L IRON PIPE
 136+04 43.6'L TELE RISER



SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Tree, Rem, 6 inch to 18 inch	4	Ea
Culv, Rem, Less than 24 inch	5	Ea
Culv, Rem, 24 inch to 48 inch	1	Ea
Pavt, Rem	22	Syd
Cold Milling HMA Surface	2148	Syd
HMA Surface, Rem	102	Syd
Ground Mtd Sign Support, Rem	3	Ea
Sign, Type III, Rem	3	Ea



128+58 20.4'R MISC SIGN REM
 128+70 25.0'R 24" METAL PIPE (CMP) REM

128+86 74.8'R PLANTED AREA

129+33 31.0'R 6" ELM (4) REM

129+51 8.7'R 17" SOIL BORING

129+60 24.5'R 3" ELM (18) CLR

129+82 36.5'R 3" ELM (2) SAVE

130+10 34.5'R 3" ELM (5) CLR

130+83 36.7'R 8" ELM

130+93 37.5'R 8" ELM

130+99 21.3'R TP 10984

131+66 36.0'R 8" ELM

131+74 35.5'R 8" ELM

131+87 28.2'R 6" PLASTIC PIPE REM

132+10 45.9'R PLANTED AREA

132+18 53.3'R HEAVY WOODS

132+20 39.7'R 6" PLASTIC PIPE

133+37 44.4'R HEAVY WOODS

133+55 56.5'R HEAVY WOODS

134+03 25.9'R HEAVY WOODS CLR

134+67 30.7'R HEAVY WOODS CLR

134+94 31.7'R 6" RND PLASTIC PIPE REM

135+04 58.3'R HEAVY WOODS

135+21 32.1'R BRUSH AREA

135+45 46.0'R BRUSH AREA

135+62 44.4'R 2' JUNIPER

135+66 44.7'R 2' JUNIPER

135+71 44.5'R 2' JUNIPER

135+74 29.6'R ELEC POLE

135+75 44.3'R 6" DECID. SHRUB

135+86 24.6'R 6" RND PLASTIC PIPE REM

135+90 19.2'R MAIL BOX REL

136+37 20.7'R MISC SIGN REM



PLAN SUBMITTALS AND CHANGES	
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 STA 128+50 TO STA 136+50
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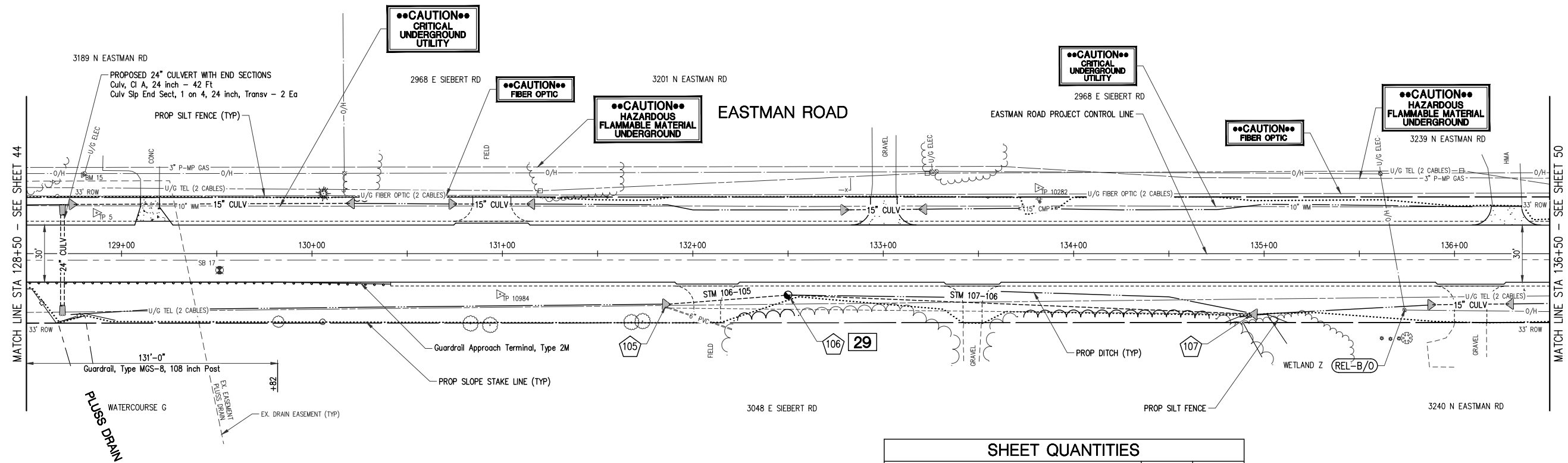
SHT# 46 OF 65
 JOB No: 19M0006

UTILITY ROAD REPAIR SCHEDULE				
CROSSING STATION	WIDTH OF TRENCH REPAIR (Ft)	LENGTH OF TRENCH REPAIR (Ft)	Hand Patching (Ton)	Aggregate Base, 6 inch (Syd)
128+69	10	25	15	28

PROPOSED STORM SEWER STRUCTURE TABLE						
STRUCT NO.	DIA.	COVER TYPE	RIM ELEVATION	INVERT	STATION	OFFSET
106	48"	G	RIM=650.01	15" 646.76 S (PR) 15" 646.76 N (PR)	132+50.0	21.7 R

PROPOSED STORM SEWER PIPE TABLE						
PIPE NUMBER	DIAMETER	PAY ITEM	TOTAL LENGTH	SLOPE	TRENCH DETAIL A (T.D. A)	TRENCH DETAIL B (T.D. B)
STM 106-105	15"	Sewer, Cl A, _ inch, Tr Det _	64'	0.36%	49'	15'
STM 107-106	15"	Sewer, Cl A, _ inch, Tr Det _	244'	1.28%	233'	11'

PROPOSED STORM SEWER END SECTION TABLE					
STRUCT NO.	DIA.	PAY ITEM	END OF PIPE INVERT	END OF PIPE STATION	END OF PIPE OFFSET
105	15"	Culv End Sect, _ inch	15" 646.53	131+86.5	26.6 R
107	15"	Culv End Sect, _ inch	15" 649.88	134+93.9	31.7 R



DRIVEWAY SCHEDULE												
C/L DRIVEWAY STATION	EXIST. PWMT TYPE	DRIVEWAY OFFSET REMOVAL LIMITS (FT)	WIDTH AT REMOVAL LIMITS (FT)	WIDTH AT OPENING (FT)	TAPER DISTANCE (FT)	LENGTH OF DRIVE RESTORATION (FT)	Approach, Cl I, 6 inch, (Syd)	Approach, Cl II, 6 inch, (Syd)	HMA Approach (Ton)	Driveway, Nonreinf Conc, 6 inch (Syd)	Culv, Cl F, 15 inch (Ft)	Culv End Sect, 15 inch (Ea)
129+15, LT	C	29.6	10.0	18.0	7.5	12.6	17	0	0	18	145	2
130+94, LT	G	29.6	20.0	40.0	-	12.6	0	33	0	0	40	2
132+08, RT	G	36.3	14.0	34.0	-	19.3	0	35	0	0	0	0
133+00, LT	G	29.7	14.0	34.0	-	14.7	0	28	0	0	40	2
133+47, RT	G	36.3	10.0	30.0	-	19.3	0	26	0	0	0	0
136+08, RT	G	36.2	17.0	37.0	-	19.2	0	41	0	0	40	2
136+27, LT	HMA	29.9	16.0	36.0	-	10.0	23	0	5	0	0	0

G = GRAVEL DRIVE, C = CONCRETE DRIVE, HMA = HMA DRIVE, N/A = NOT APPLICABLE
 NOTE: Culv, Cl F, _ inch VALUE INDICATES PAY LENGTH, PROFILE INDICATES ACTUAL LENGTH.

SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Erosion Control, Silt Fence	92	Ft
Erosion Control, Inlet Protection, Fabric Drop	1	Ea
Subbase, CIP	516	Cyd
Aggregate Base, 6 inch	716	Syd
Approach, Cl I, 6 inch	40	Syd
Approach, Cl II, 6 inch	163	Syd
Shld, Cl II, Modified	73	Ton
Culv End Sect, 15 inch	10	Ea
Culv, Cl A, 24 inch	42	Ft
Culv, Cl F, 15 inch	265	Ft
Culv, Slip End Sect, 1 on 4, 24 inch, Transv	2	Ea
Sewer, Cl A, 15 inch, Tr Det A	282	Ft
Sewer, Cl A, 15 inch, Tr Det B	26	Ft
Dr Structure Cover, Type G	1	Ea
Dr Structure, 48 inch dia	1	Ea
Hand Patching	15	Ton
HMA Approach	12	Ton
HMA, 4EML	60	Ton
HMA, 5EML	239	Ton
Driveway, Nonreinf Conc, 6 inch	18	Syd
Post, Mailbox	3	Ea
Guardrail Approach Terminal, Type 2M	1	Ea
Guardrail Reflector	8	Ea
Guardrail, Type MGS-8, 108 inch Post	131	Ft

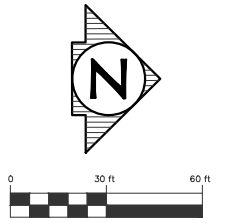
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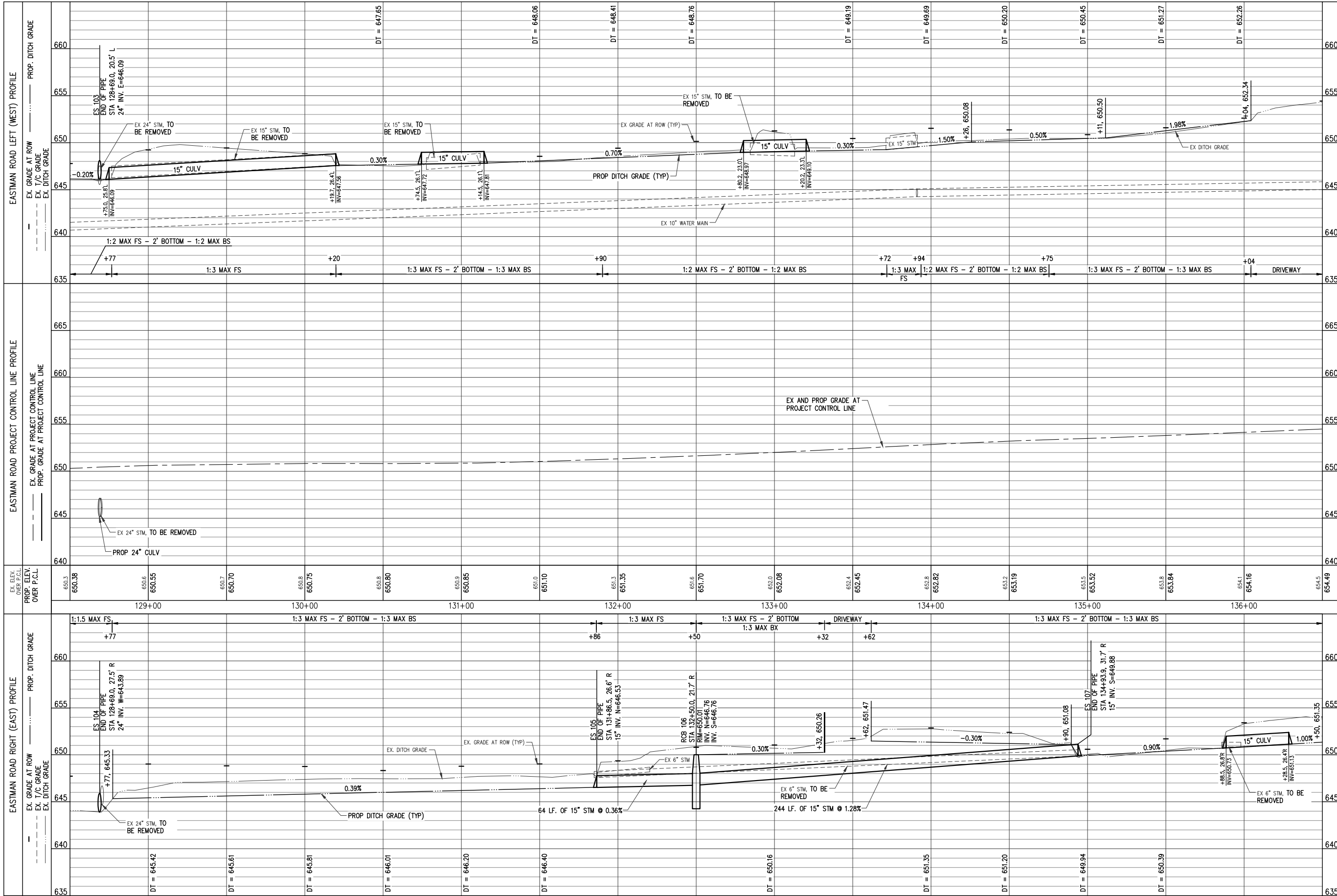
SHT# 47 OF 65
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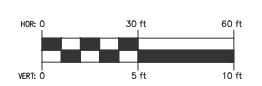


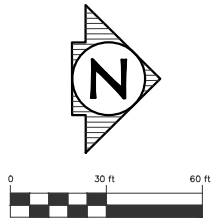
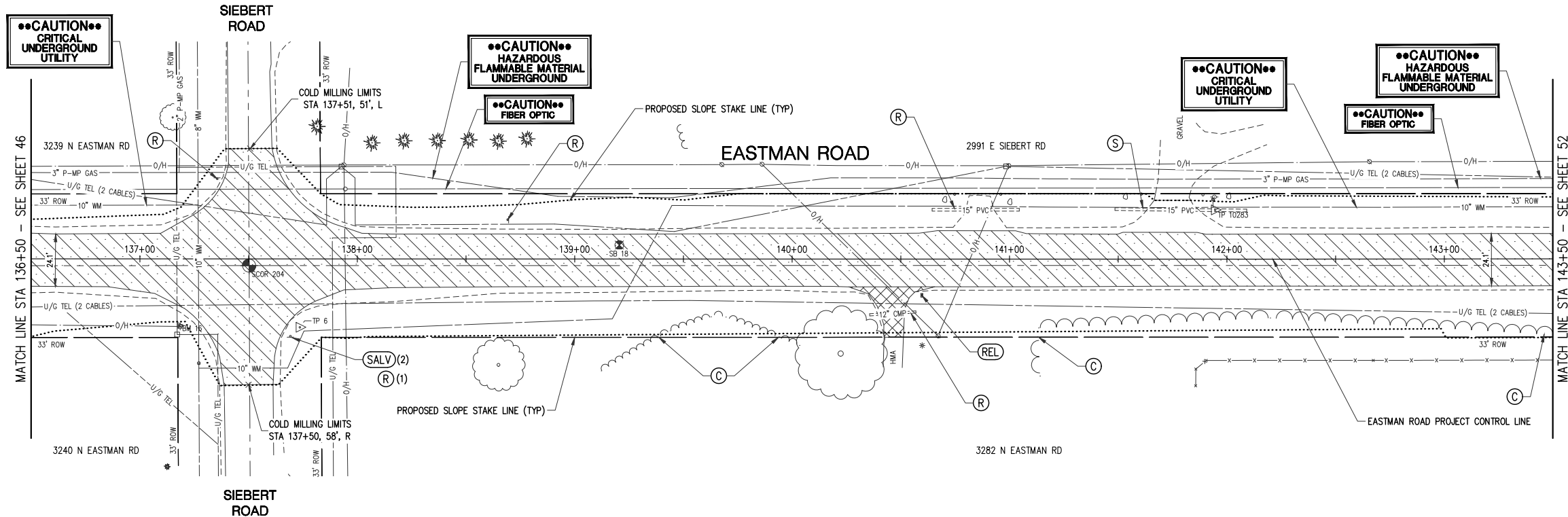
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SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Culv, Rem, Less than 24 inch	2	Ea
Cold Milling HMA Surface	2283	Syd
Sign, Type III, Rem, Salv	2	Ea
Ground Mtd Sign Support, Rem	3	Ea
Sign, Type III, Rem	3	Ea

- 137+15 66.11, 12" GRAB APPLE
- REM 137+36 36.81, STOP SIGN
- 137+62 61.01, 8" PINE
- 137+93 42.51, TELE RISER
- 137+94 43.21, ELEC POLE
- 137+98 32.21, FIBER OPTIC MARKER POST
- 138+07 53.41, 8" PINE
- 138+22 54.41, 8" PINE
- 138+37 54.41, 8" PINE
- 138+51 54.71, 8" PINE
- 138+65 54.21, 8" PINE
- 138+69 55.01, WSC SIGN
- 138+78 55.31, 8" PINE
- 139+21 6.41, 18 SOIL BORING
- 139+48 01.81, BRUSH AREA
- 139+52 20.81, BRUSH AREA
- 139+68 43.41, ELEC POLE
- 139+86 43.61, ELEC POLE
- 140+64 22.61, 15" PLASTIC PIPE
- 140+70 27.31, ROCK
- 140+75 28.61, METAL POST
- 140+86 28.61, METAL POST
- 140+87 28.31, ROCK
- 141+00 28.31, ROCK
- 141+00 42.91, ELEC POLE
- 141+04 22.71, 15" PLASTIC PIPE
- 141+25 53.81, WOOD BUILDING
- 141+41 54.21, WOOD BUILDING
- 141+48 23.01, 15" PLASTIC PIPE
- 141+53 28.61, ROCK
- 141+61 28.91, METAL POST
- 141+89 28.61, METAL POST
- 141+94 27.51, GATE VALVE
- 141+94 28.61, FRR HYDRANT
- 141+95 22.61, TP 10282
- 142+01 29.01, ROCK
- 142+09 22.31, 15" PLASTIC PIPE
- 142+66 44.81, ELEC POLE

- 137+13 95.6R 3" PINE
- 137+17 34.8R TELE RISER
- 137+19 30.5R LIGHT POLE
- 137+19 30.6R BM 16
- 137+27 48.0R GATE VALVE
- 137+50 31.1R 1/4 CORNER EG
- 137+69 35.6R STREET SIGN REM/SALV
- 137+69 35.6R STREET SIGN REM/SALV
- 137+69 35.6R STOP SIGN REM
- 137+74 31.4R TP 6
- 138+65 48.6R 24" MAPLE
- 139+39 36.0R BRUSH AREA CLR
- 140+22 43.5R 42" ASH
- 140+36 25.7R 12" METAL PIPE (CMP) REM
- 140+57 24.3R 12" METAL PIPE (CMP) REM
- 140+60 16.7R MAN BOX REL
- 140+60 39.7R METAL LIGHT POLE
- 140+67 35.4R TELE POLE
- 141+13 31.7R HEAVY WOODS CLR
- 141+14 53.8R HEAVY WOODS CLR
- 141+86 58.3R CHAINLINK
- 142+20 27.1R HEAVY WOODS CLR
- 142+67 46.6R CHAINLINK
- 143+50 34.7R HEAVY WOODS CLR

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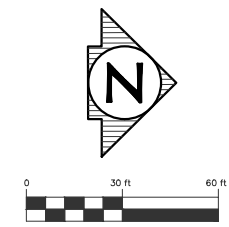
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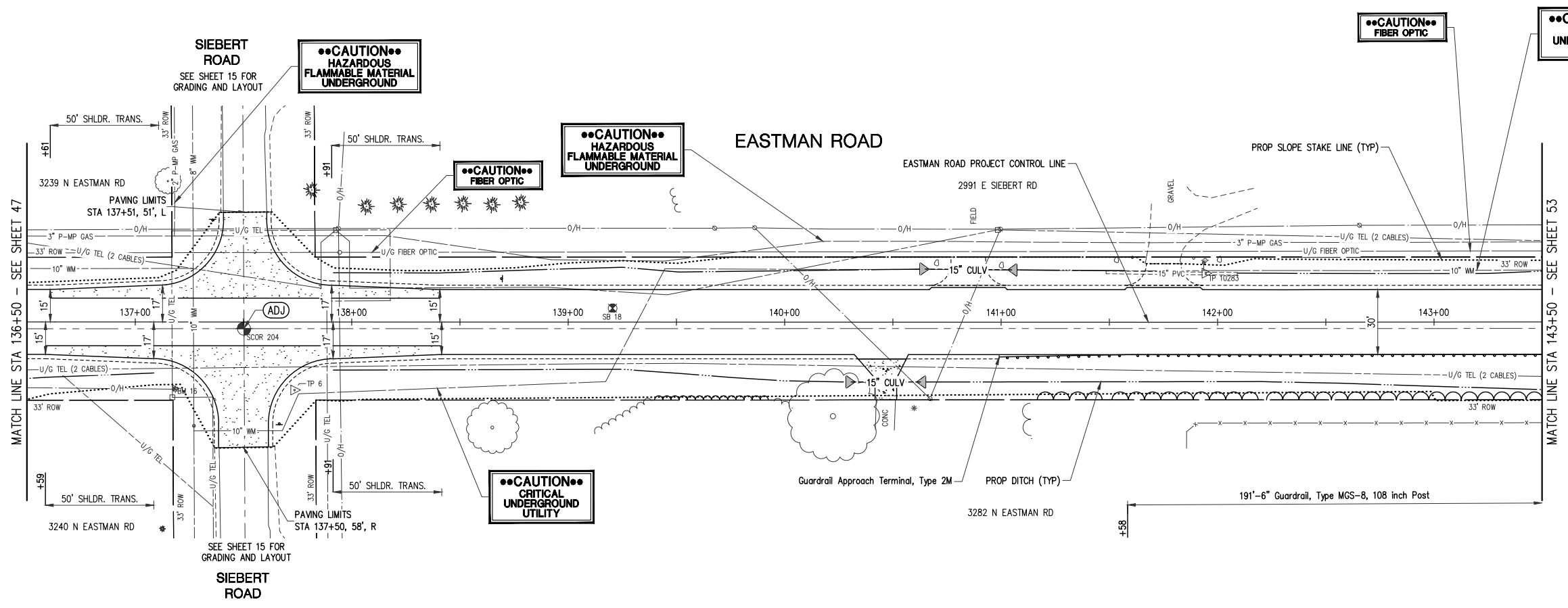
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 STA 136+50 TO STA 143+50
 CONSTRUCTION SHEET

REV: _____
 SHT# 50 OF 65
 JOB No: 19M0006



DRIVEWAY SCHEDULE											
C/L DRIVEWAY STATION	EXIST. PVMT TYPE	DRIVEWAY OFFSET REMOVAL LIMITS (FT)	WIDTH AT REMOVAL LIMITS (FT)	WIDTH AT OPENING (FT)	TAPER DISTANCE (FT)	LENGTH OF DRIVE RESTORATION (FT)	Approach, Cl I, 6 inch (Syd)	Approach, Cl II, 6 inch (Syd)	Driveway, Nonreinf Conc, 6 inch (Syd)	Culv, Cl F, 15 inch (Ft)	Culv End Sect, 15 inch (Ea)
140+47, RT	C	36.0	10.0	22.3	9.0	19.0	27	0	28	32	2
140+85, LT	G	30.0	16.0	36.0	-	13.0	0	28	0	40	2
141+75, LT	G	30.1	16.0	36.0	-	10.0	0	23	0	0	0

C = CONCRETE DRIVE, G = GRAVEL DRIVE, HMA = HMA DRIVE
 NOTE: Culv, Cl F, _ inch VALUE INDICATES PAY LENGTH, PROFILE INDICATES ACTUAL LENGTH.

SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Subbase, CIP	431	Cyd
Aggregate Base, 6 inch	540	Syd
Approach, Cl I, 6 inch	27	Syd
Approach, Cl II, 6 inch	51	Syd
Shld, Cl II, Modified	51	Ton
Culv End Sect, 15 inch	4	Ea
Culv, Cl F, 15 inch	72	Ft
HMA Approach	57	Ton
HMA, 4EML	48	Ton
HMA, 5EML	194	Ton
Driveway, Nonreinf, Conc, 6 inch	28	Syd
Post, Mailbox	1	Ea
Guardrail Approach Terminal, Type 2M	1	Ea
Guardrail Reflector	10	Ea
Guardrail, Type MGS-8, 108 inch Post	192	Ft
Monument Box	1	Ea
Monument Box Adj	1	Ea

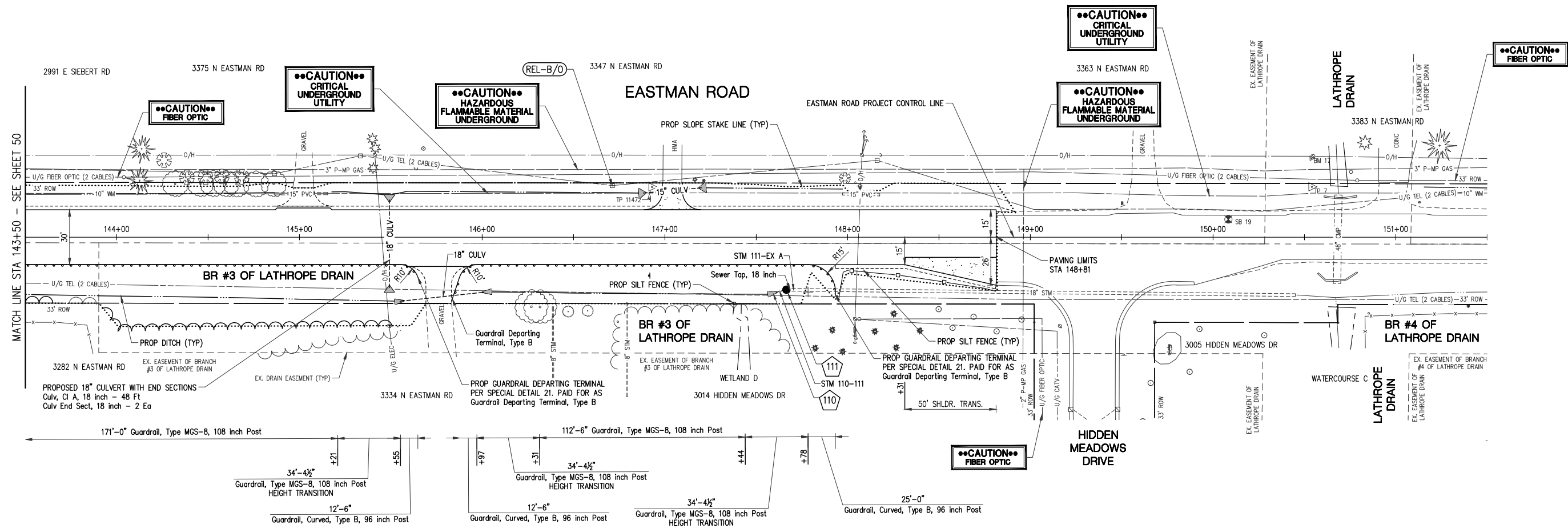
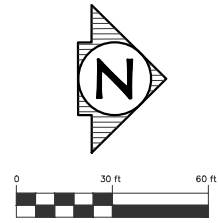
PLAN SUBMITTALS AND CHANGES		REV:
DATE	DESCRIPTION	
8/21/23	ISSUED FOR BIDS	

UTILITY ROAD REPAIR SCHEDULE				
CROSSING STATION	WIDTH OF TRENCH REPAIR (Ft)	LENGTH OF TRENCH REPAIR (Ft)	Hand Patching (Ton)	Aggregate Base, 6 inch (Syd)
145+50	10	24	14	27

PROPOSED STORM SEWER STRUCTURE TABLE						
STRUCT NO.	DIA.	COVER TYPE	RIM ELEVATION	INVERT	STATION	OFFSET
111	48"	B	RIM=650.48	18" 645.65 S (PR) 18" 645.40 N (PR)	147+66.5	28.7 R

PROPOSED STORM SEWER PIPE TABLE							
PIPE NUMBER	DIAMETER	PAY ITEM	TOTAL LENGTH	SLOPE	TRENCH DETAIL A (T.D. A)	TRENCH DETAIL B (T.D. B)	
STM 110-111	18"	Sewer, CI A, 18 inch, Tr Det A	8'	0.40%	8'	0'	
STM 111-EX A	18"	Sewer, CI A, 18 inch, Tr Det B	8'	0.18%	8'	0'	

PROPOSED STORM SEWER END SECTION TABLE					
STRUCT NO.	DIA.	PAY ITEM	END OF PIPE INVERT	END OF PIPE STATION	END OF PIPE OFFSET
110	18"	Culv, Slip End Sect, 1 on 4, 18 inch, Longit	18" 645.68	147+59.2	30.5 R



DRIVEWAY SCHEDULE														
C/L DRIVEWAY STATION	EXIST. P.V.M.T. TYPE	DRIVEWAY OFFSET REMOVAL LIMITS (FT)	WIDTH AT REMOVAL LIMITS (FT)	WIDTH AT OPENING (FT)	TAPER DISTANCE (FT)	LENGTH OF DRIVE RESTORATION (FT)	Approach, CI I, 6 inch (Syd)	Approach, CI II, 6 inch (Syd)	HMA Approach (Ton)	Driveway, Nonreinf Conc, 6 inch (Syd)	Culv, CI F, 15 inch (Ea)	Culv End Sect, 15 inch (Ea)	Culv, CI F, 18 inch (Ft)	Culv, Slip End Sect, 18 inch, Longit (Ea)
145+02, LT	G	29.8	11.0	31.0	-	10.0	0	17	0	0	0	0	0	0
145+76, RT	G	36.2	14.0	34.0	-	19.2	0	35	0	0	0	0	48	2
147+04, LT	HMA	29.6	11.0	31.0	-	14.6	23	0	5	0	32	2	0	0

G = GRAVEL DRIVE, C = CONCRETE DRIVE, HMA = HMA DRIVE
 NOTE: Culv, CI F, 18 inch VALUE INDICATES PAY LENGTH, PROFILE INDICATES ACTUAL LENGTH.

SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Erosion Control, Silt Fence	121	Ft
Subbase, CIP	331	Cyd
Aggregate Base, 6 inch	504	Syd
Approach, CI I, 6 inch	23	Syd
Approach, CI II, 6 inch	52	Syd
Shld, CI II, Modified	33	Ton
Culv End Sect, 15 inch	2	Ea
Culv End Sect, 18 inch	2	Ea
Culv, CI A, 18 inch	48	Ft
Culv, CI F, 15 inch	32	Ft
Culv, CI F, 18 inch	48	Ft
Culv, Slip End Sect, 1 on 4, 18 inch, Longit	3	Ea
Sewer, CI A, 18 inch, Tr Det A	16	Ft
Sewer Tap, 18 inch	1	Ea

SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Dr Structure Cover, Type B	1	Ea
Dr Structure, 48 inch dia	1	Ea
Hand Patching	14	Ton
HMA Approach	18	Ton
HMA, 4EML	40	Ton
HMA, 5EML	162	Ton
Post, Mailbox	3	Ea
Guardrail Departing Terminal, Type B	3	Ea
Guardrail Reflector	26	Ea
Guardrail, Curved, Type B, 96 inch Post	50	Ft
Guardrail, Type MGS-8, 108 inch Post	387	Ft

WEDGING NOTE
 HMA, 5EML INCLUDES 6 TONS OF WEDGING.

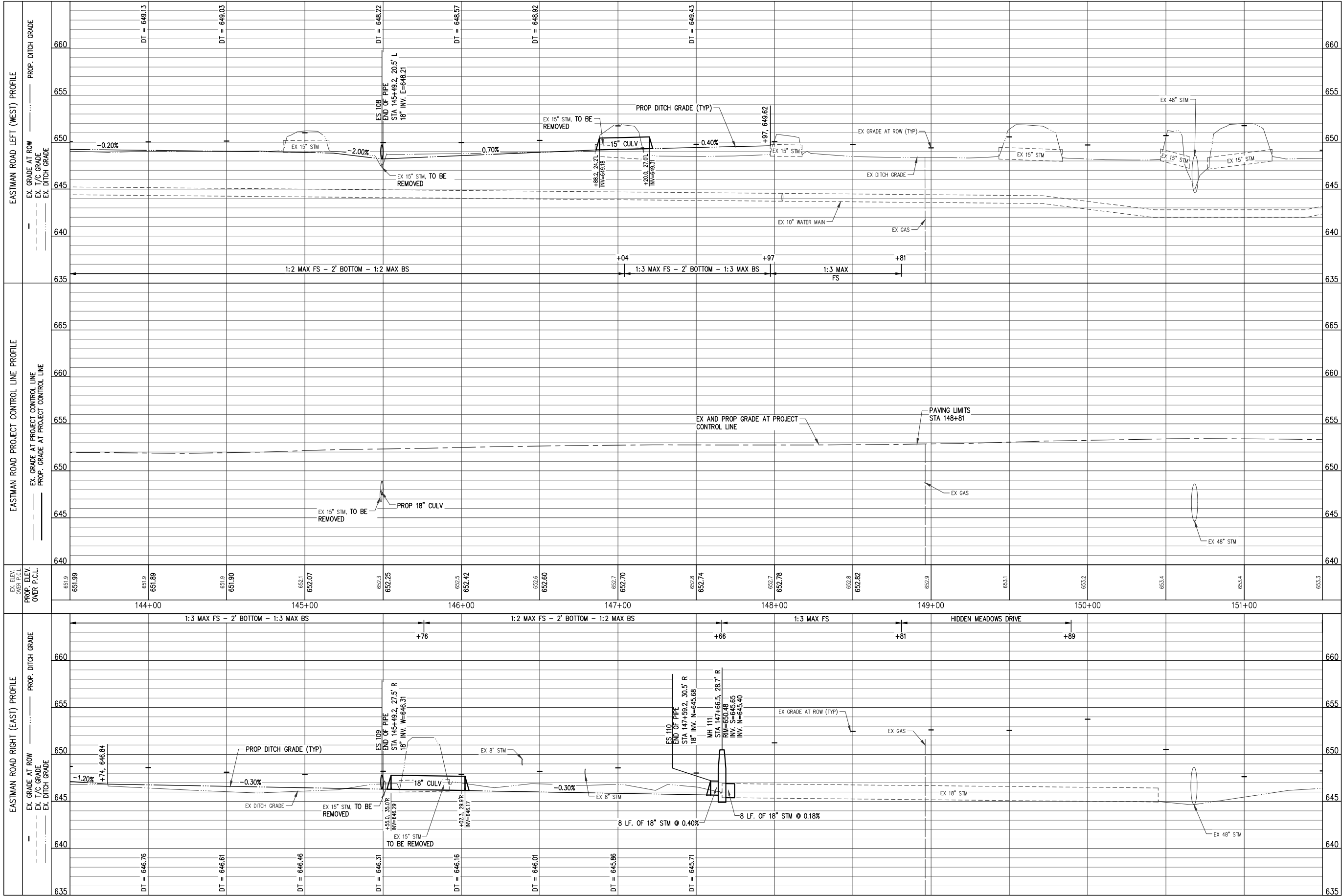


PLAN SUBMITTALS AND CHANGES		REV:
DATE	DESCRIPTION	
8/21/23	ISSUED FOR BIDS	

PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
 REVIEWER: TCL
 SCALE: 1" = 30'

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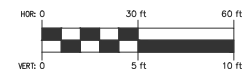
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 STA 143+50 TO STA 151+50
 CONSTRUCTION SHEET



PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
 REVIEWER: TCL
 SCALE: HORZ: 1"=30', VERT: 1"=5'

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 STA 143+50 TO STA 151+50
 PROFILE SHEET

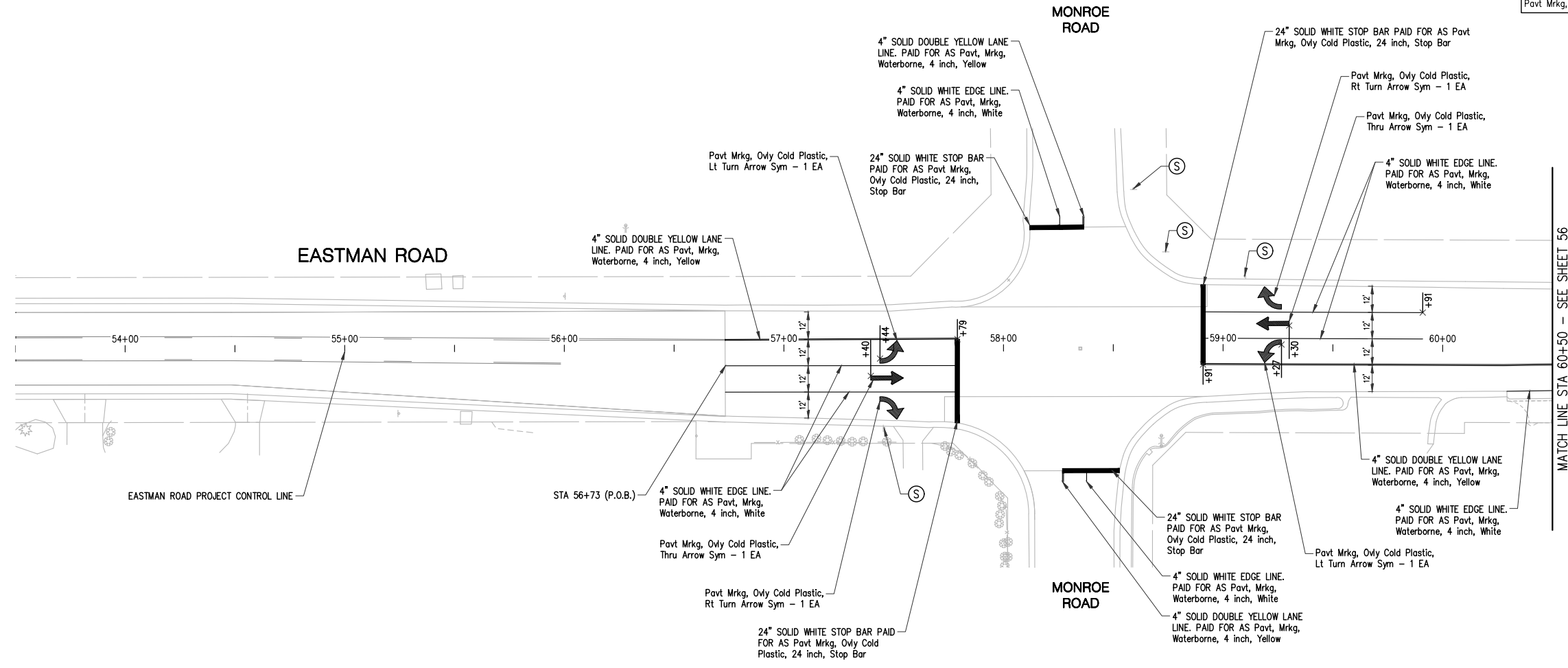


PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

REV: _____
 SHT# 54 OF 65
 JOB No: 19M0006



SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Pavt Mrkg, Ovy Cold Plastic, 24 inch, Stop Bar	126	Ft
Pavt Mrkg, Ovy Cold Plastic, Lt Turn Arrow Sym	2	Ea
Pavt Mrkg, Ovy Cold Plastic, Rt Turn Arrow Sym	2	Ea
Pavt Mrkg, Ovy Cold Plastic, Thru Arrow Sym	2	Ea
Pavt Mrkg, Waterborne, 4 inch, White	445	Ft
Pavt Mrkg, Waterborne, 4 inch, Yellow	595	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, White	445	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, Yellow	595	Ft

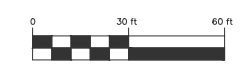


PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
 REVIEWER: TCL
 SCALE: 1" = 30'

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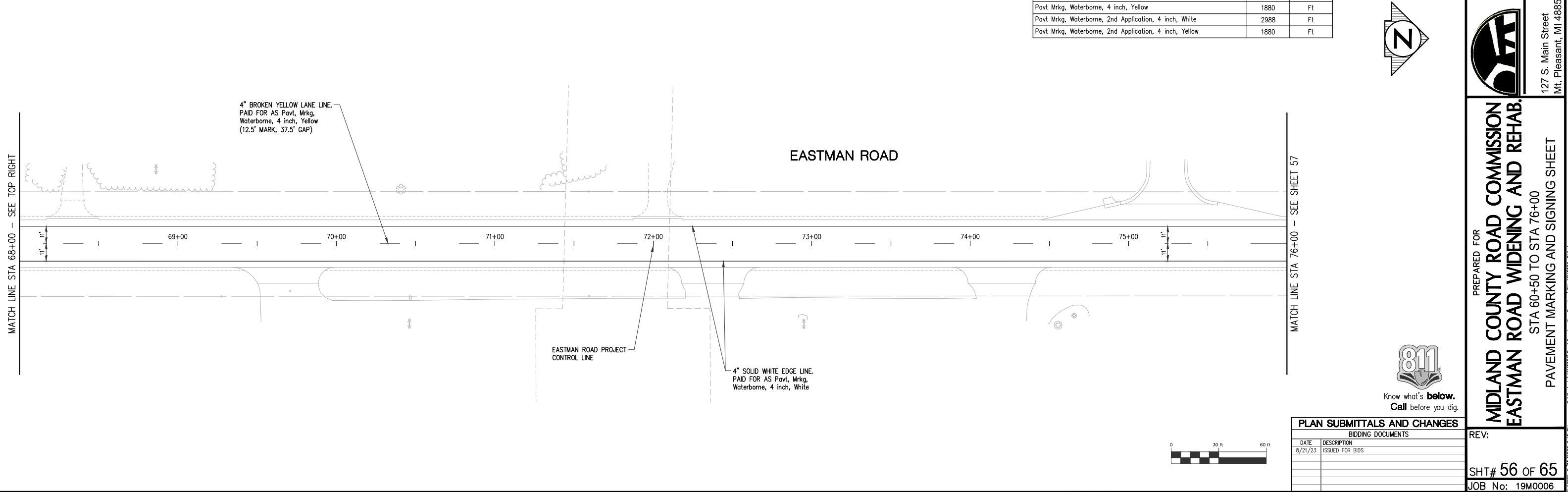
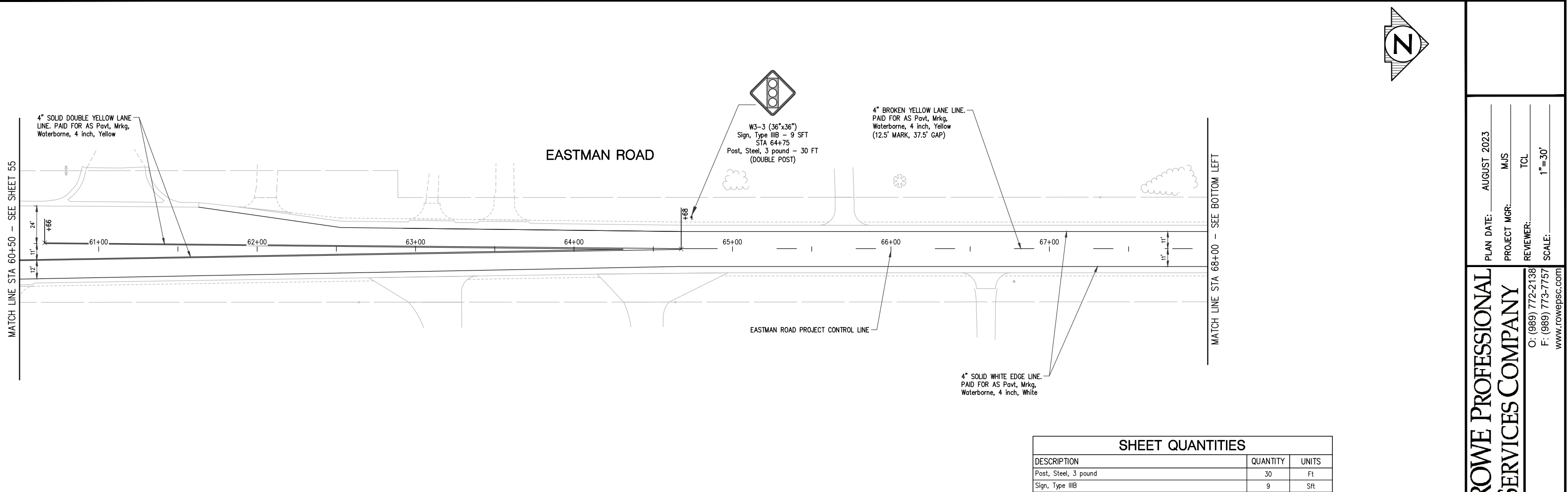
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 PAVEMENT MARKING AND SIGNING SHEET



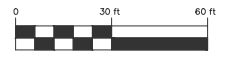
PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

REV: _____
 SHT# 55 OF 65
 JOB No: 19M0006

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SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Post, Steel, 3 pound	30	Ft
Sign, Type III B	9	Sft
Pavt Mrkg, Waterborne, 4 inch, White	2988	Ft
Pavt Mrkg, Waterborne, 4 inch, Yellow	1880	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, White	2988	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, Yellow	1880	Ft



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

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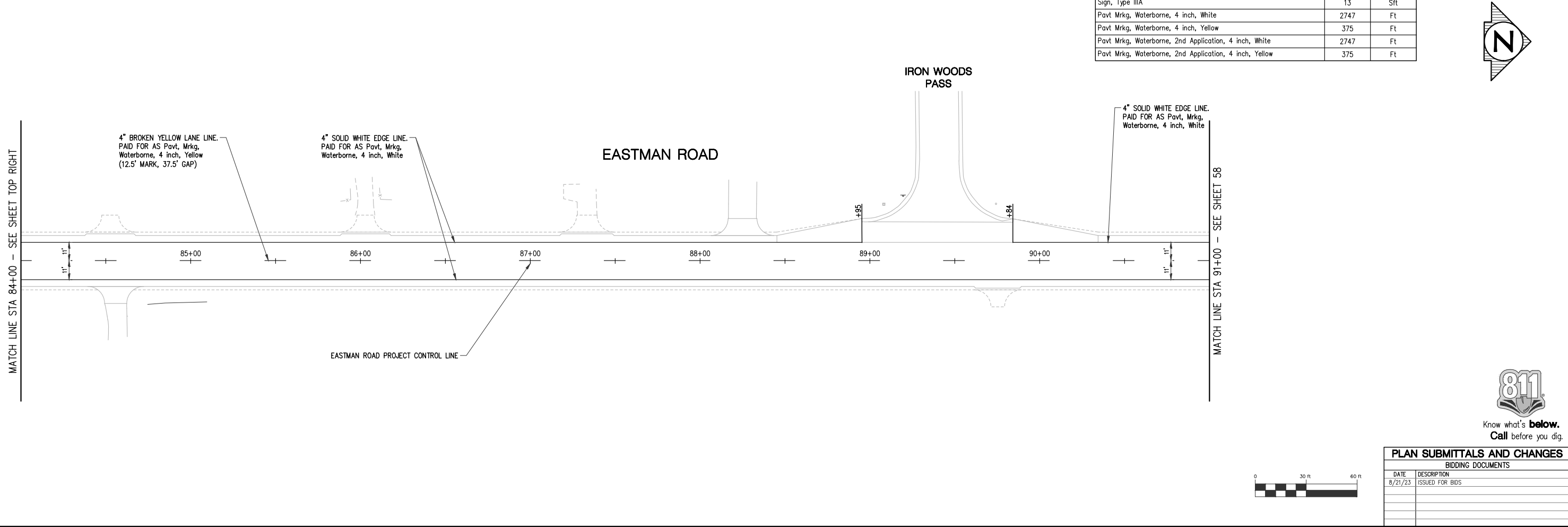
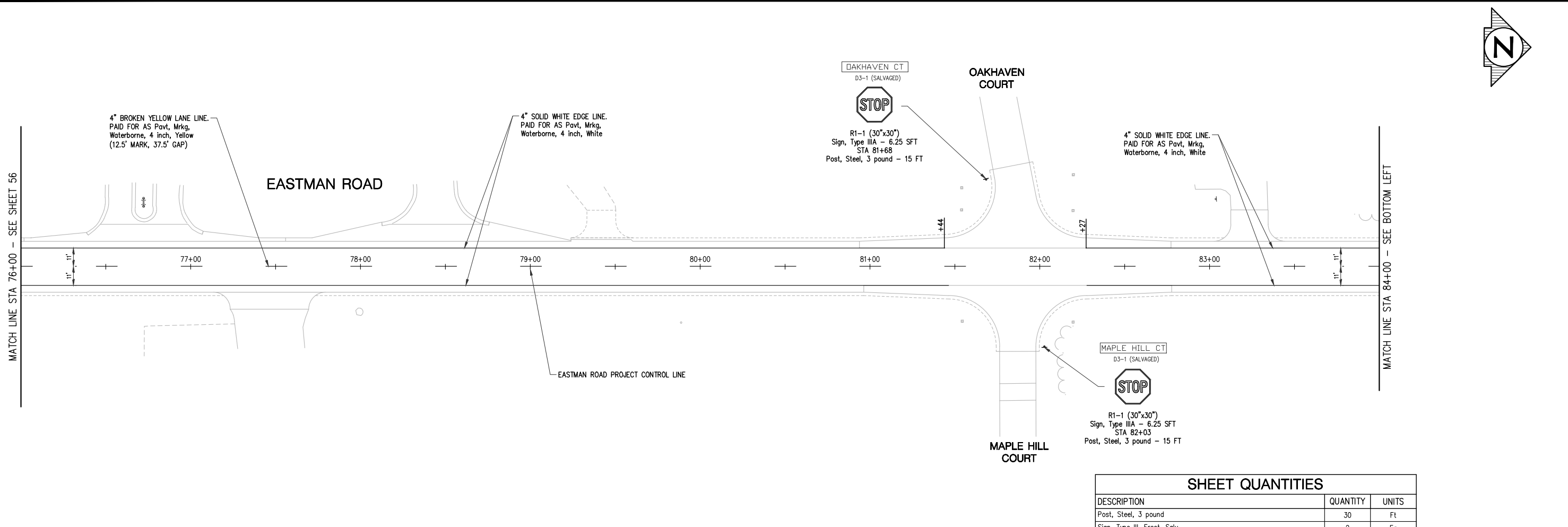
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STA 60+50 TO STA 76+00
PAVEMENT MARKING AND SIGNING SHEET

PLAN DATE: AUGUST 2023
PROJECT MGR: MJS
REVIEWER: TCL
SCALE: 1" = 30'

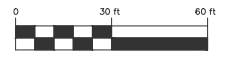
REV: _____

SHT# 56 OF 65
JOB No: 19M0006

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SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Post, Steel, 3 pound	30	Ft
Sign, Type III, Erect, Salv	2	Ea
Sign, Type IIIA	13	Sft
Pavt Mrkg, Waterborne, 4 inch, White	2747	Ft
Pavt Mrkg, Waterborne, 4 inch, Yellow	375	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, White	2747	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, Yellow	375	Ft



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

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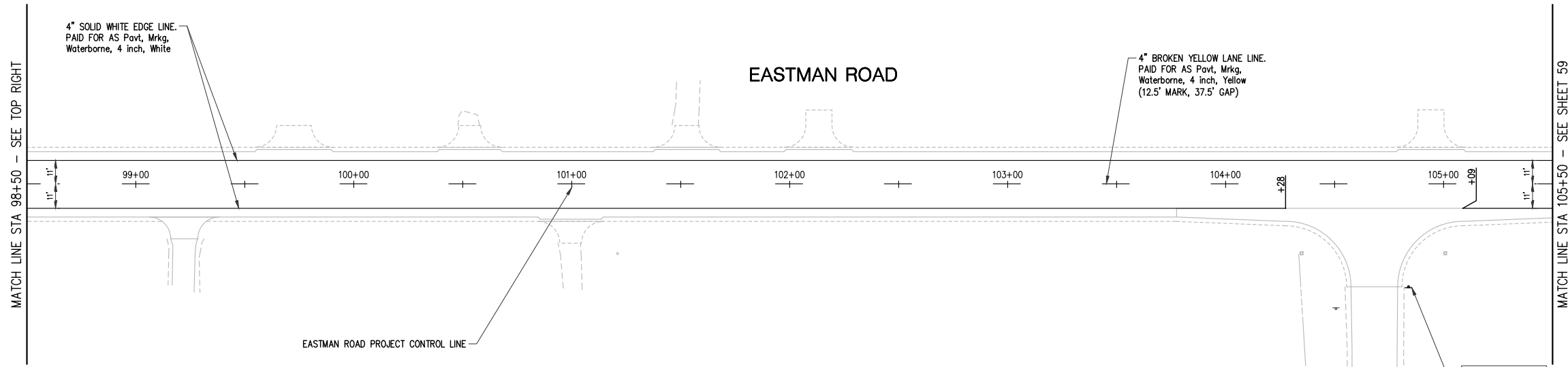
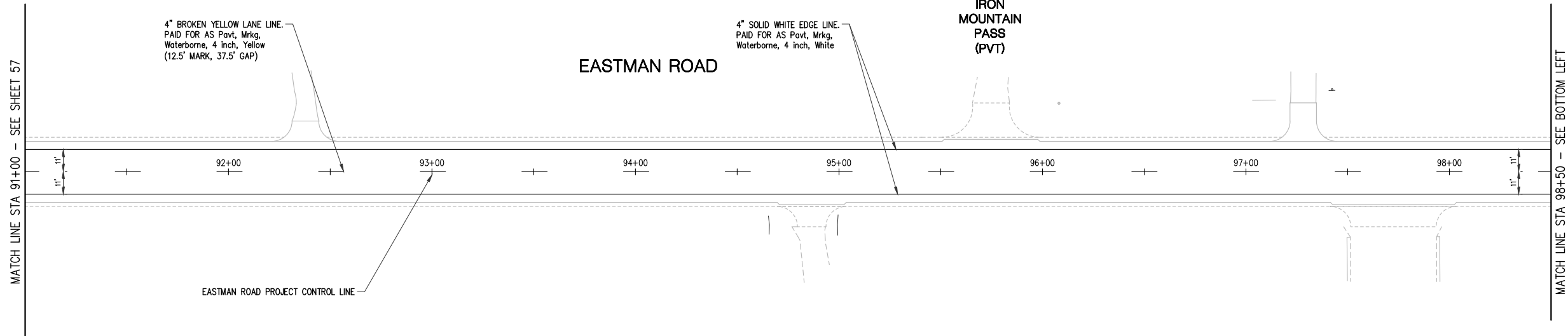
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PAVEMENT MARKING AND SIGNING SHEET

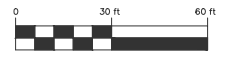
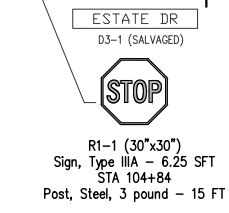
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PROJECT MGR: MJS
REVIEWER: TCL
SCALE: 1" = 30'

SHT# 57 OF 65
JOB No: 19M0006

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SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Post, Steel, 3 pound	15	Ft
Sign, Type III, Erect, Salv	1	Ea
Sign, Type IIIA	7	Sft
Pavt Mrkg, Waterborne, 4 inch, White	2819	Ft
Pavt Mrkg, Waterborne, 4 inch, Yellow	363	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, White	2819	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, Yellow	363	Ft



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

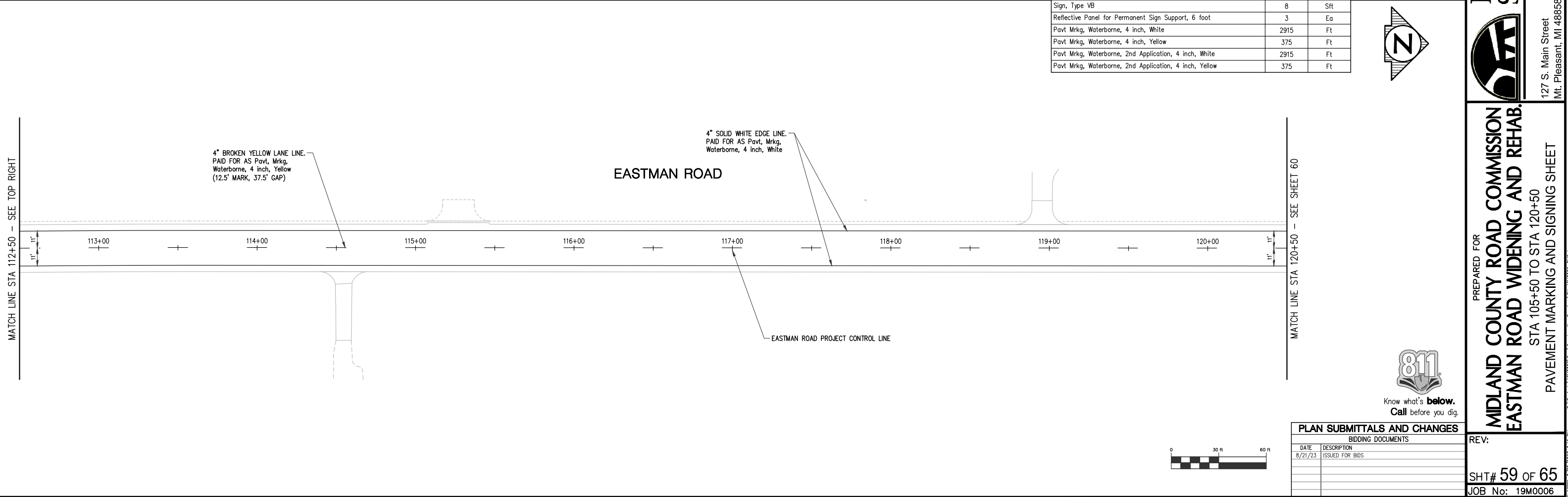
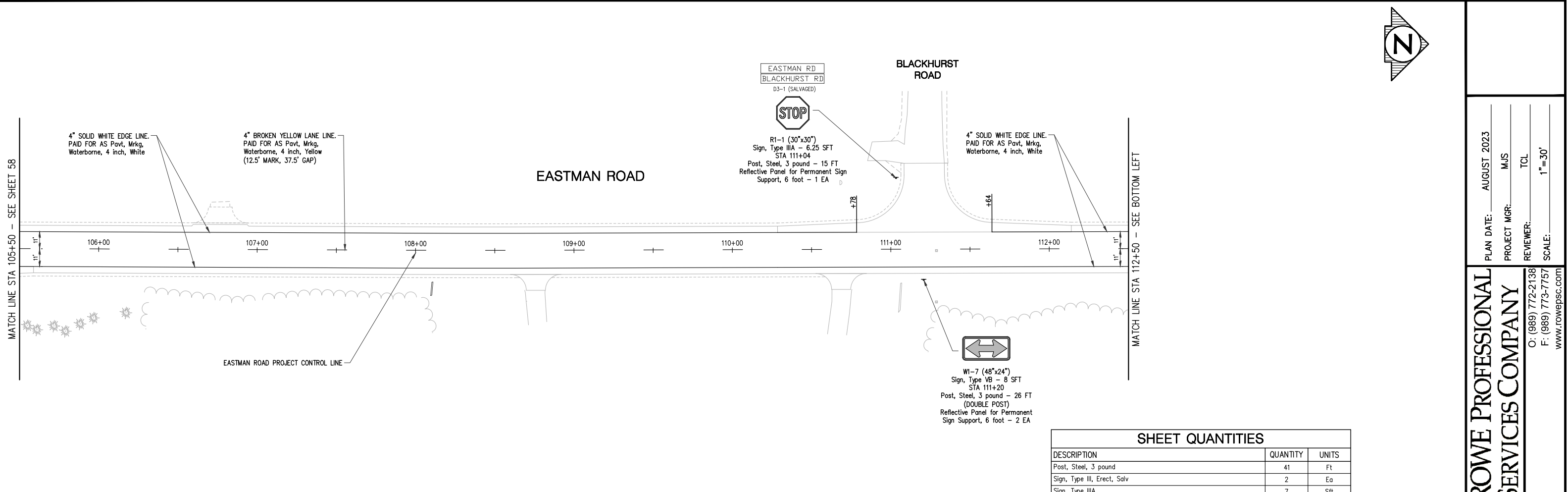
REV: _____
 SHT# 58 OF 65
 JOB No: 19M0006

PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
 REVIEWER: TCL
 SCALE: 1" = 30'

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SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Post, Steel, 3 pound	41	Ft
Sign, Type III, Erect, Salv	2	Ea
Sign, Type IIIA	7	Sft
Sign, Type VB	8	Sft
Reflective Panel for Permanent Sign Support, 6 foot	3	Ea
Pavt Mrkg, Waterborne, 4 inch, White	2915	Ft
Pavt Mrkg, Waterborne, 4 inch, Yellow	375	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, White	2915	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, Yellow	375	Ft

PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS


 PLAN DATE: AUGUST 2023
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 SCALE: 1" = 30'


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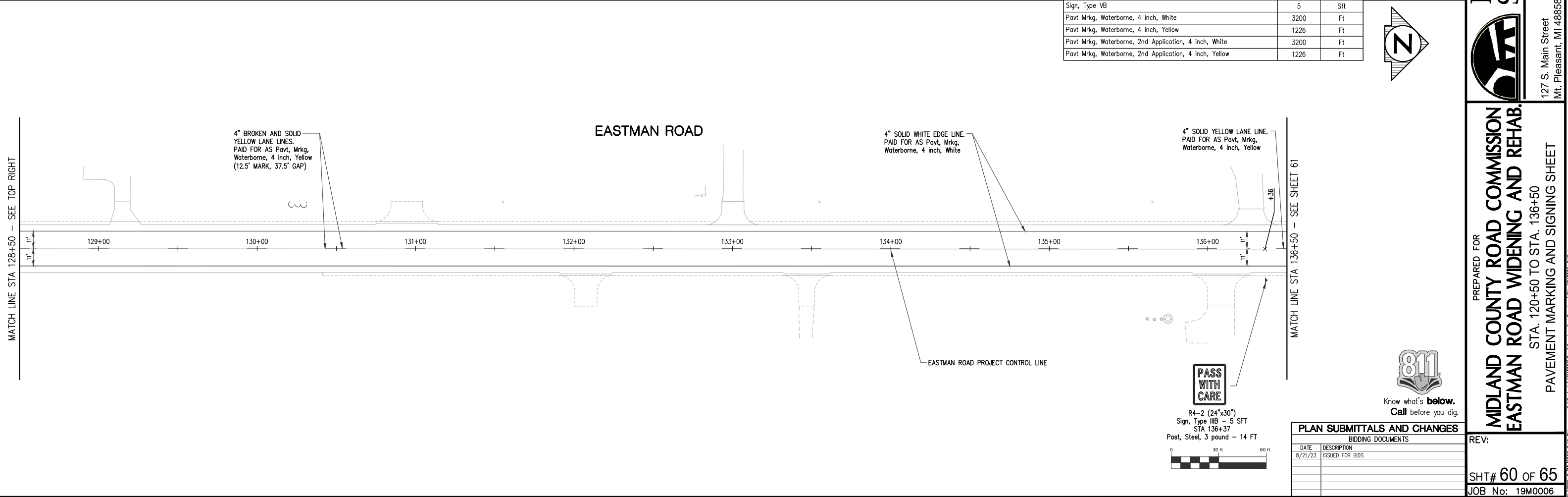
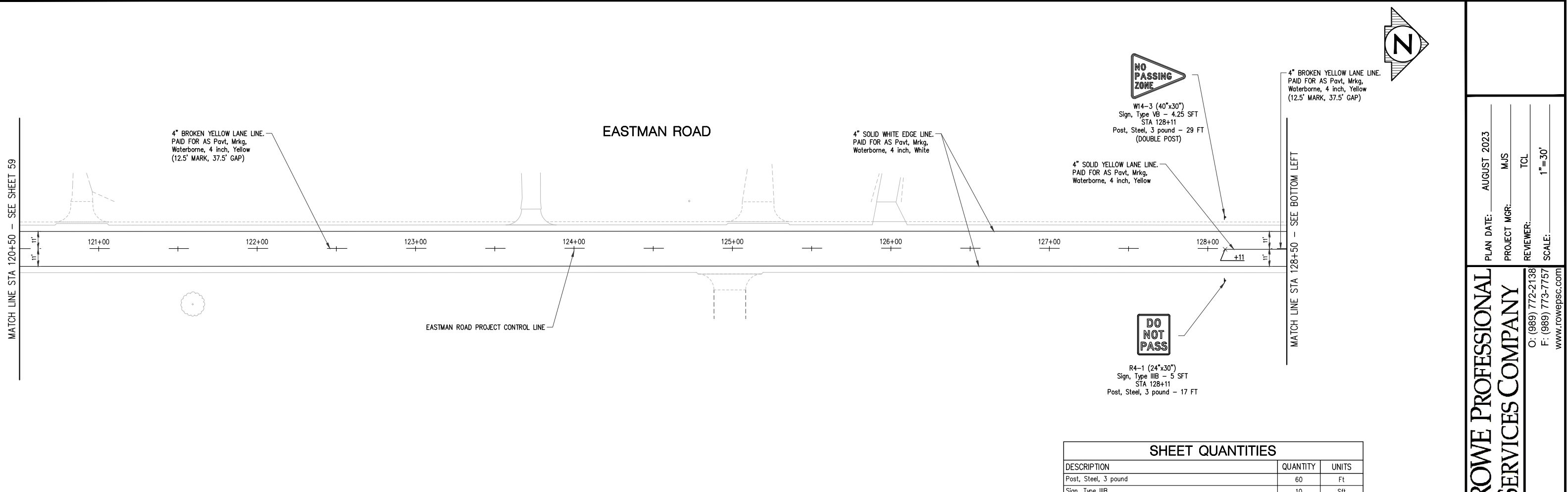
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 JOB No: 19M0006

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SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Post, Steel, 3 pound	60	Ft
Sign, Type III B	10	Sft
Sign, Type VB	5	Sft
Pavt Mrkg, Waterborne, 4 inch, White	3200	Ft
Pavt Mrkg, Waterborne, 4 inch, Yellow	1226	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, White	3200	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, Yellow	1226	Ft

PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

PLAN DATE: AUGUST 2023

PROJECT MGR: MJS

REVIEWER: TCL

SCALE: 1" = 30'

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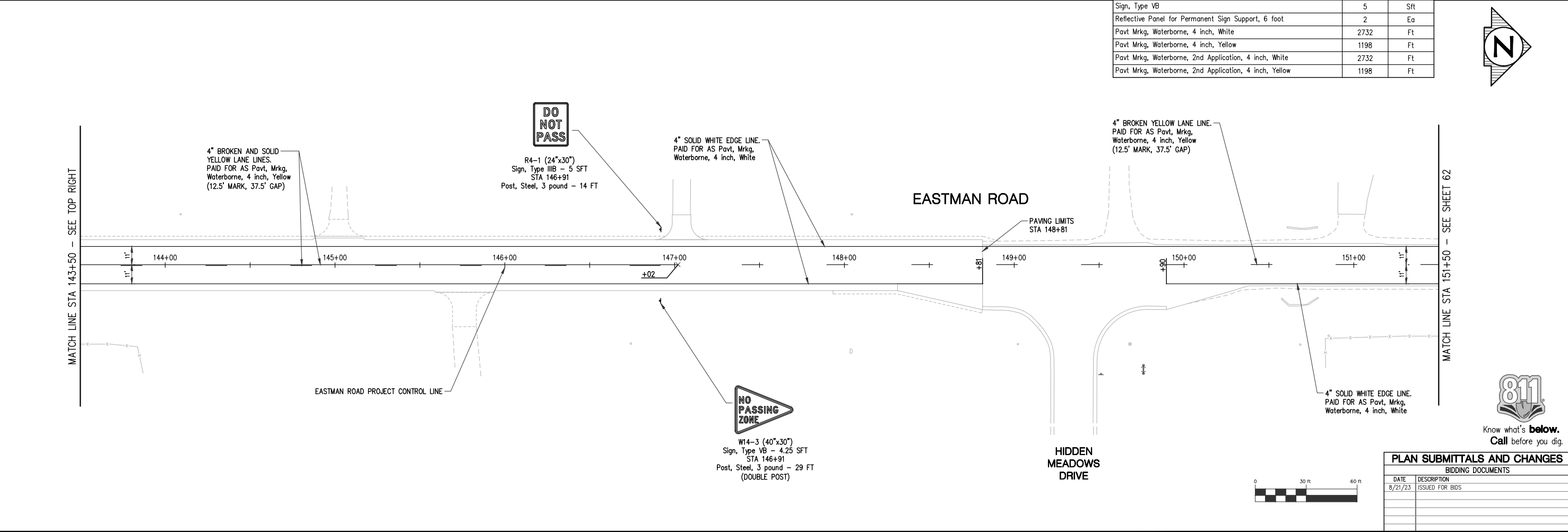
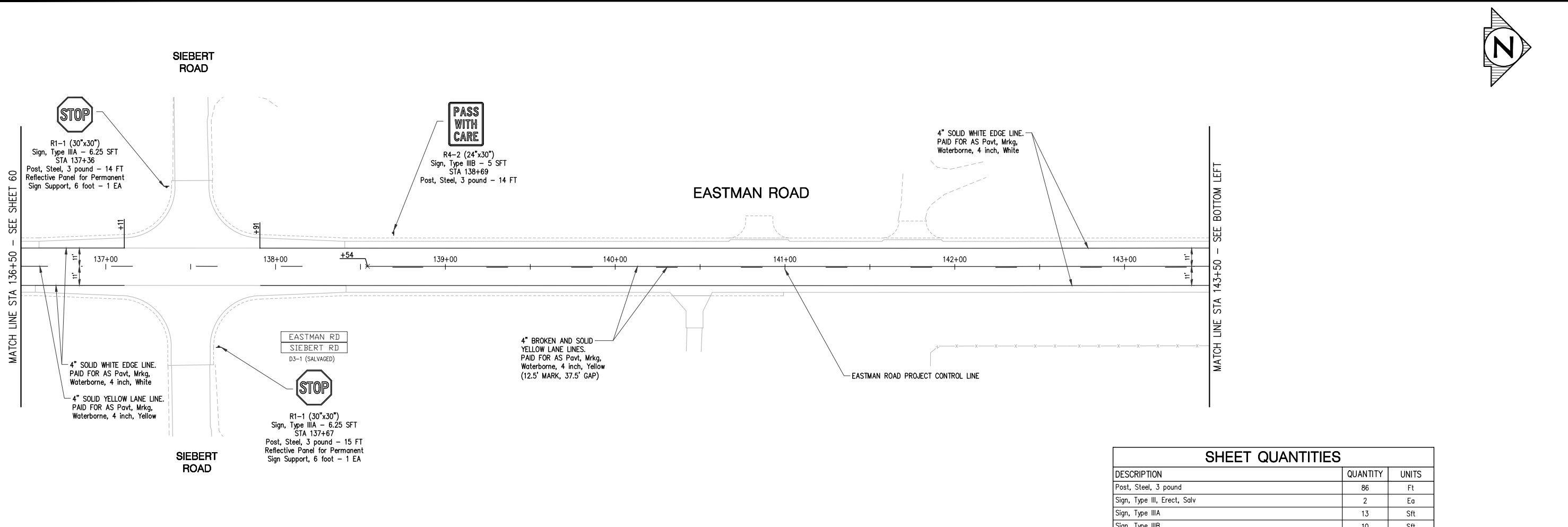
SHT# 60 OF 65

JOB No: 19M0006

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SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Post, Steel, 3 pound	86	Ft
Sign, Type III, Erect, Salv	2	Ea
Sign, Type IIIA	13	Sft
Sign, Type IIIB	10	Sft
Sign, Type VB	5	Sft
Reflective Panel for Permanent Sign Support, 6 foot	2	Ea
Pavt Mrkg, Waterborne, 4 inch, White	2732	Ft
Pavt Mrkg, Waterborne, 4 inch, Yellow	1198	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, White	2732	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, Yellow	1198	Ft

PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
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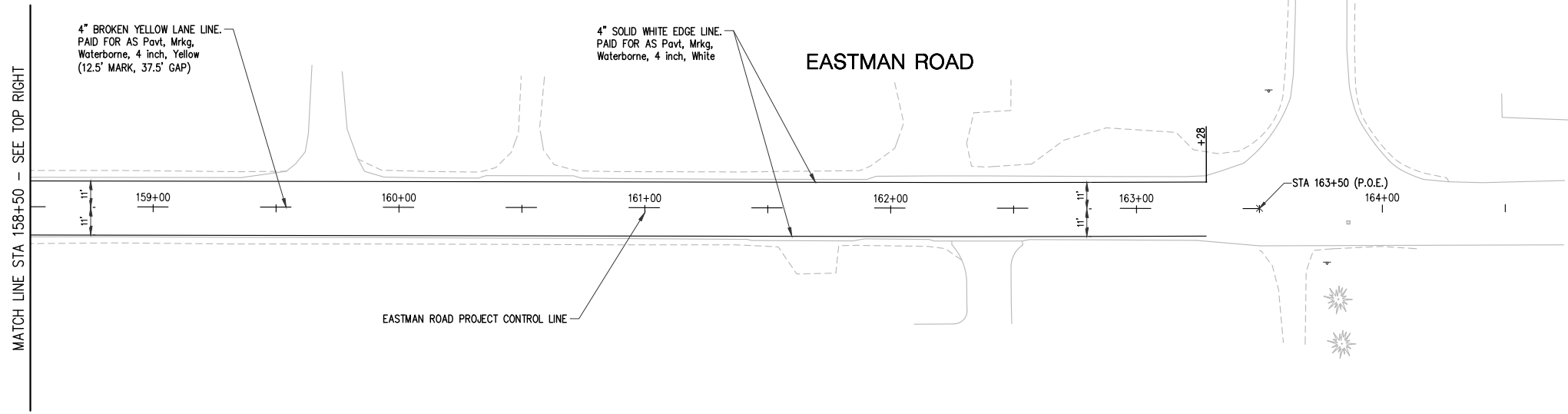
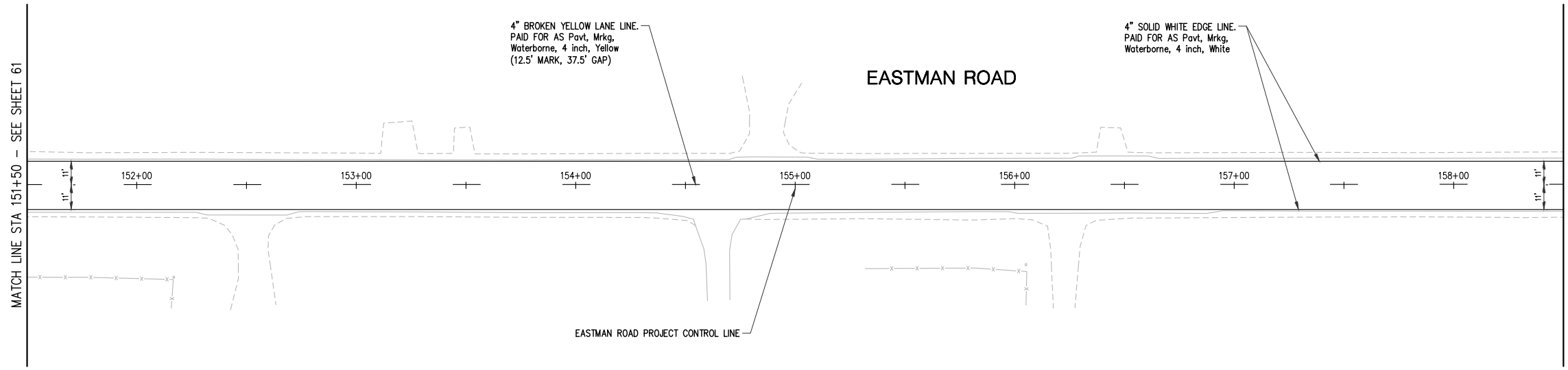
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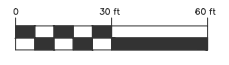
PLAN DATE: AUGUST 2023
PROJECT MGR: MJS
REVIEWER: TCL
SCALE: 1" = 30'

REV: _____

SHT# 61 OF 65
JOB No: 19M0006



SHEET QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
Pavt Mrkg, Waterborne, 4 inch, White	2349	Ft
Pavt Mrkg, Waterborne, 4 inch, Yellow	294	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, White	2349	Ft
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, Yellow	294	Ft



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
8/21/23	ISSUED FOR BIDS

PLAN DATE: AUGUST 2023
 PROJECT MGR: MJS
 REVIEWER: TCL
 SCALE: 1" = 30'

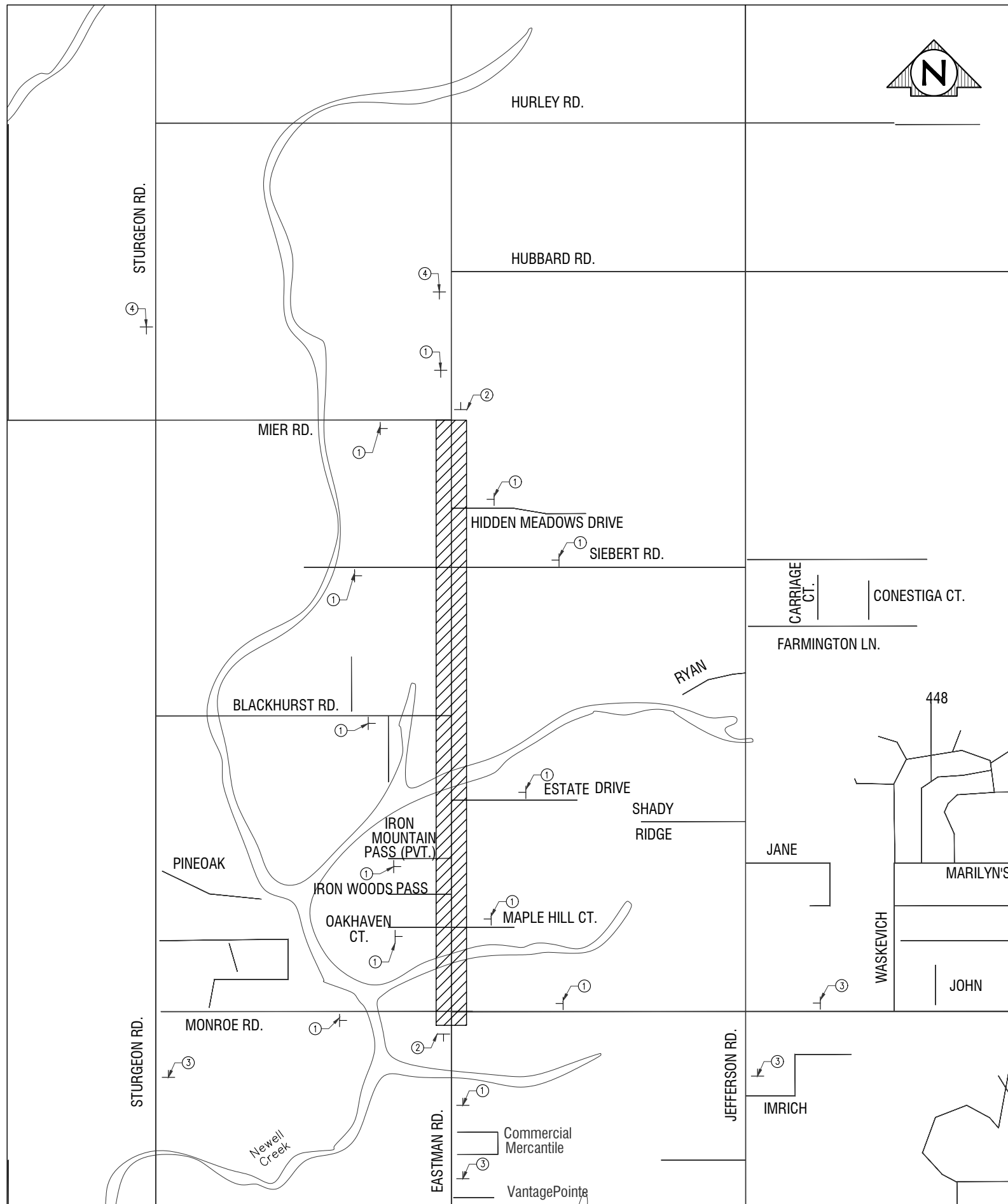
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 STA. 151+50 TO STA. 163+50 (P.O.E.)
 PAVEMENT MARKING AND SIGNING SHEET



REV: _____
 SHT# 62 OF 65
 JOB No: 19M0006



SIGN LEGEND

SYMBOL	SIGN	DESIGNATION	SIZE	NUMBER OF SIGNS
①		W20-1	48" x 48"	13
②		G20-2	24" x 48"	2
③		*SPECIAL	60" x 30"	4
④		*SPECIAL	60" x 30"	2

SYMBOL LEGEND

- SIGN
- CONSTRUCTION ZONE



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PLAN SUBMITTALS AND CHANGES

BIDDING DOCUMENTS	
DATE	DESCRIPTION
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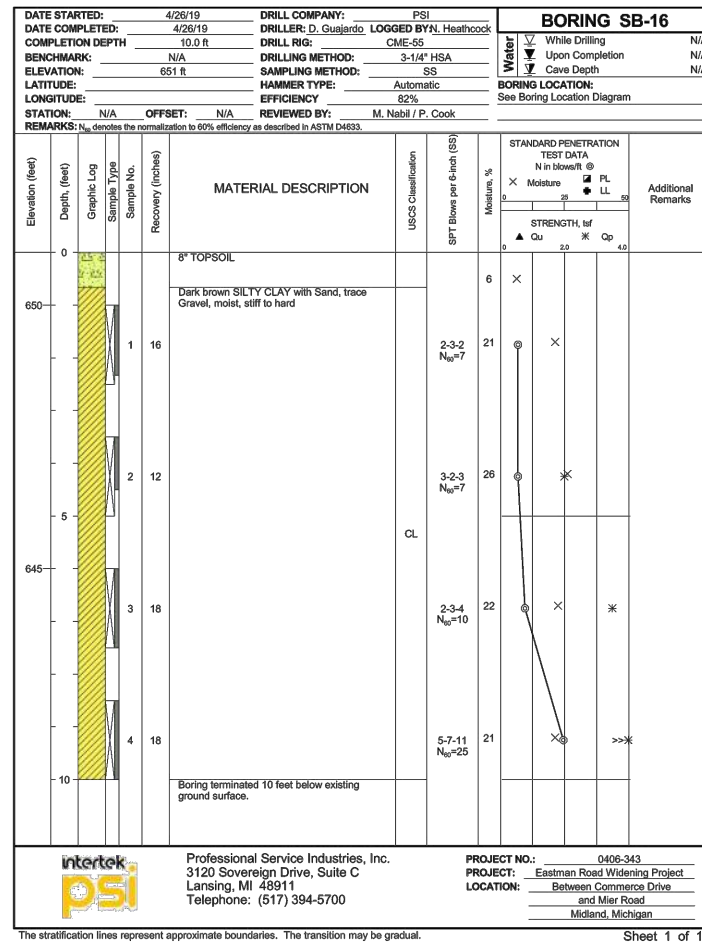
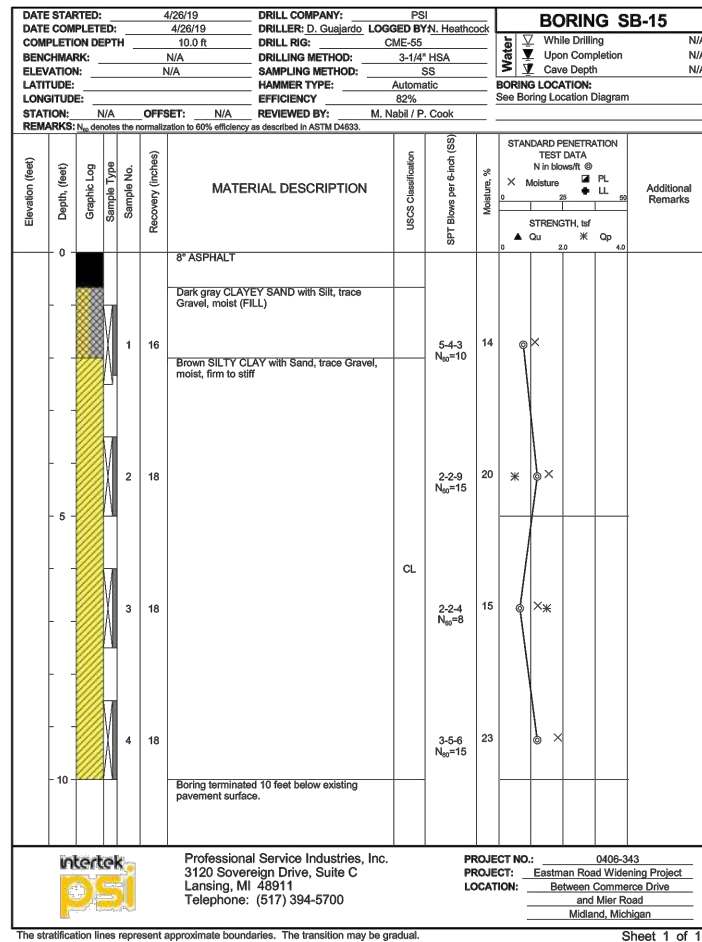
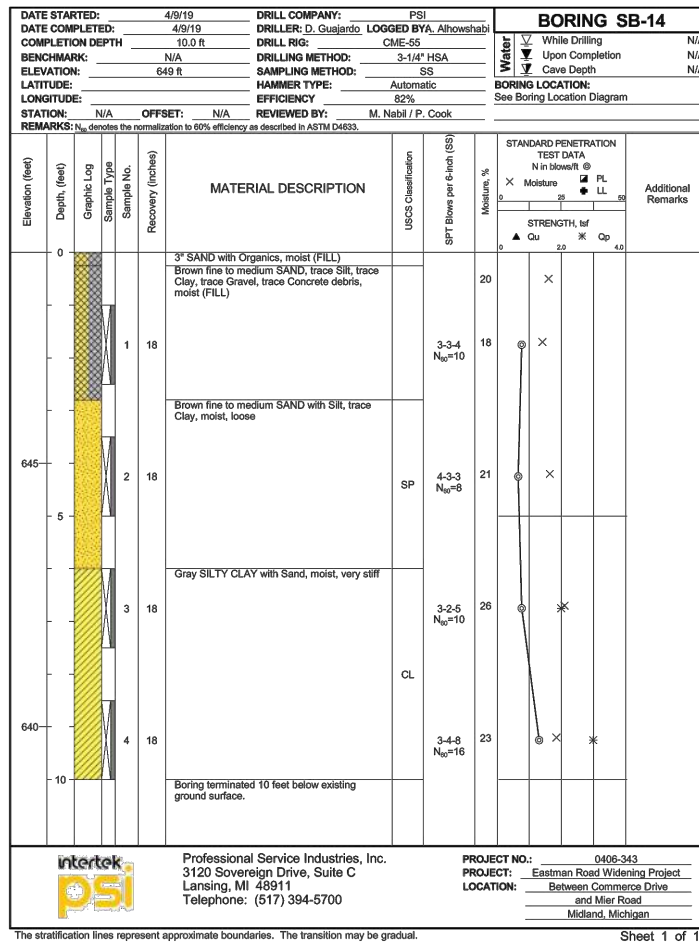
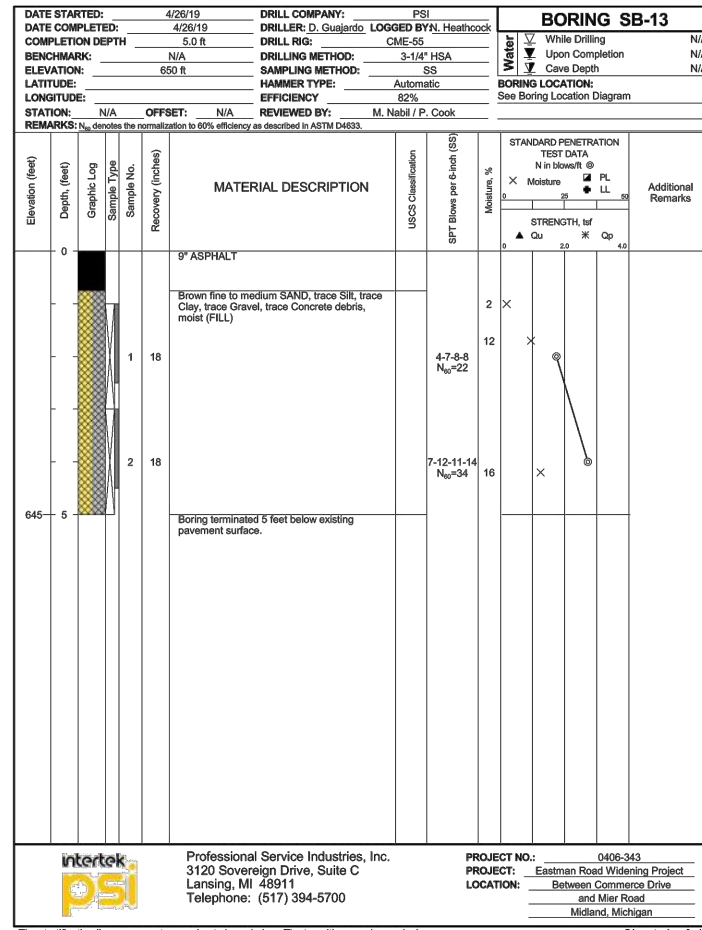
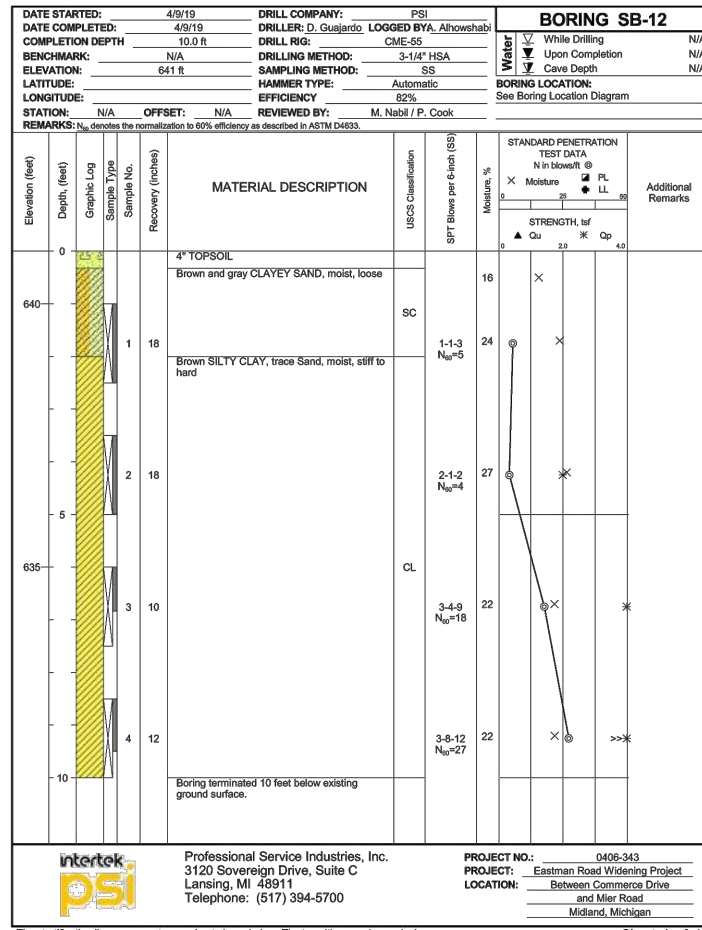
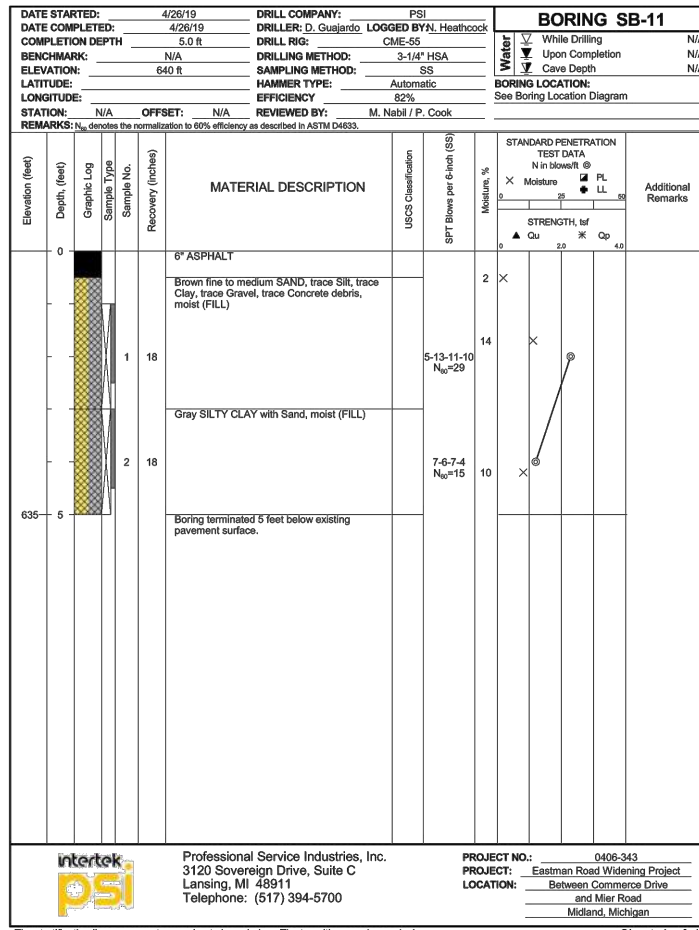
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PREPARED FOR
**MIDLAND COUNTY ROAD COMMISSION
EASTMAN ROAD WIDENING AND REHAB.**

MAINTAINING TRAFFIC

PLAN DATE: AUGUST 2023
PROJECT MGR: MJS
REVIEWER: TCL
SCALE: NO SCALE

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PLAN SUBMITTALS AND CHANGES		REV:
DATE	DESCRIPTION	
8/21/23	ISSUED FOR BIDS	

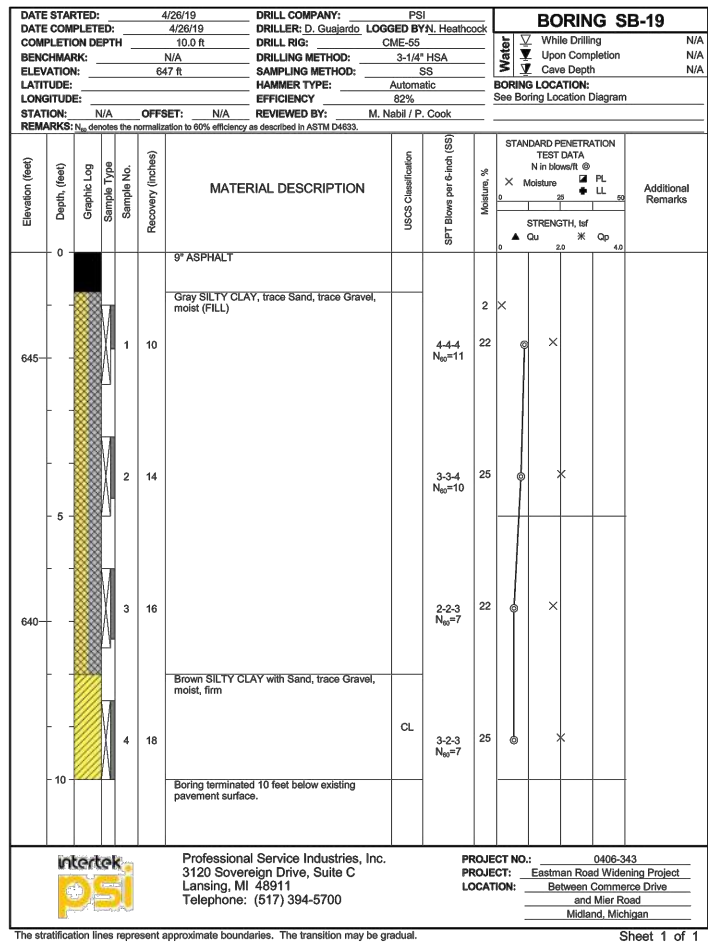
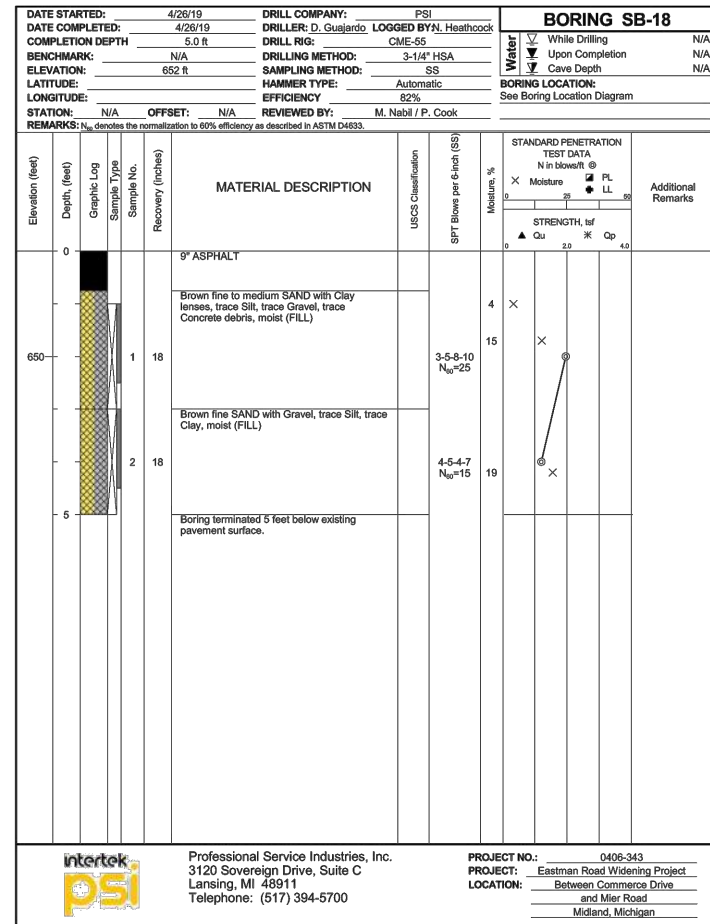
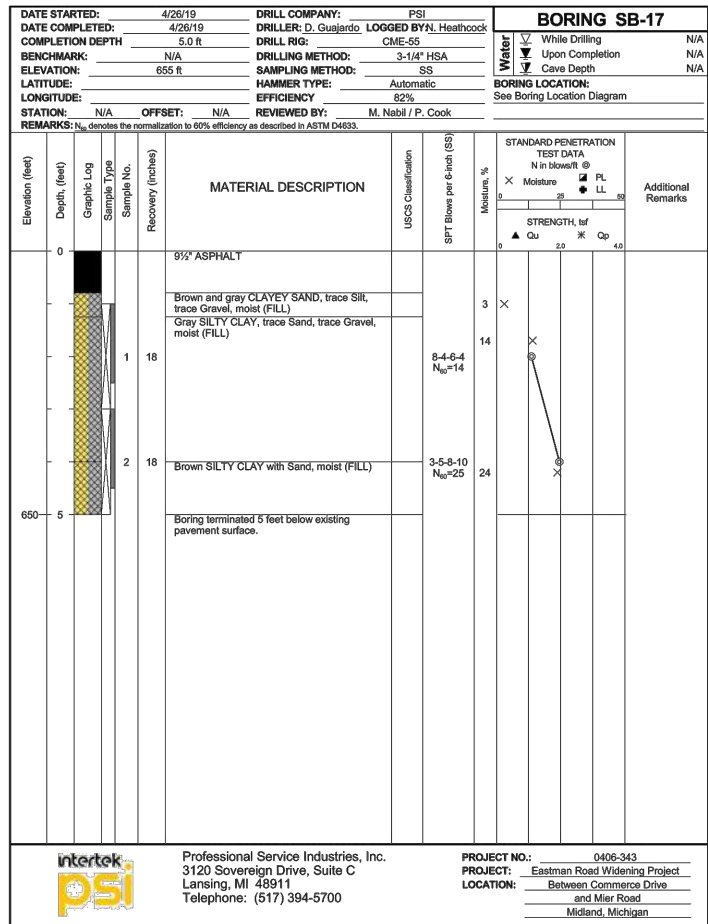
PLAN DATE: AUGUST 2023
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SOIL BORING SHEET
 SHT# 64 OF 65
 JOB No: 19M0006



PLAN SUBMITTALS AND CHANGES	
BIDDING DOCUMENTS	
DATE	DESCRIPTION
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PLAN DATE: AUGUST 2023
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