

LOCATION MAP

SEE SHEET P.2



STATE OF OHIO DEPARTMENT OF TRANSPORTATION

ATB/TRU-CULVERTS-FY2026

AUSTINBURG AND DORSET TOWNSHIPS
ASHTABULA COUNTY

GUSTAVUS TOWNSHIP
TRUMBULL COUNTY

FEDERAL PROJECT NUMBER

NON-FEDERAL

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

FISCAL YEAR 2026 CULVERT REPAIR/REPLACEMENTS
IN ASHTABULA AND TRUMBULL COUNTIES.

EARTH DISTURBED AREAS

SEE SHEET P.2

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEETS P.6-P.8.

Arthur G. Noiro Jr.
 Arthur G. Noiro Jr., P.E.
 District 04 Deputy Director

Pamela Boratyn
 Pamela Boratyn
 Director, Department of Transportation

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DESIGN DESIGNATIONS

SEE SHEET P.2

DESIGN EXCEPTIONS

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ADA DESIGN WAIVERS

SEE SHEET P.2

UNDERGROUND UTILITIES
 Contact Two Working Days
 Before You Dig

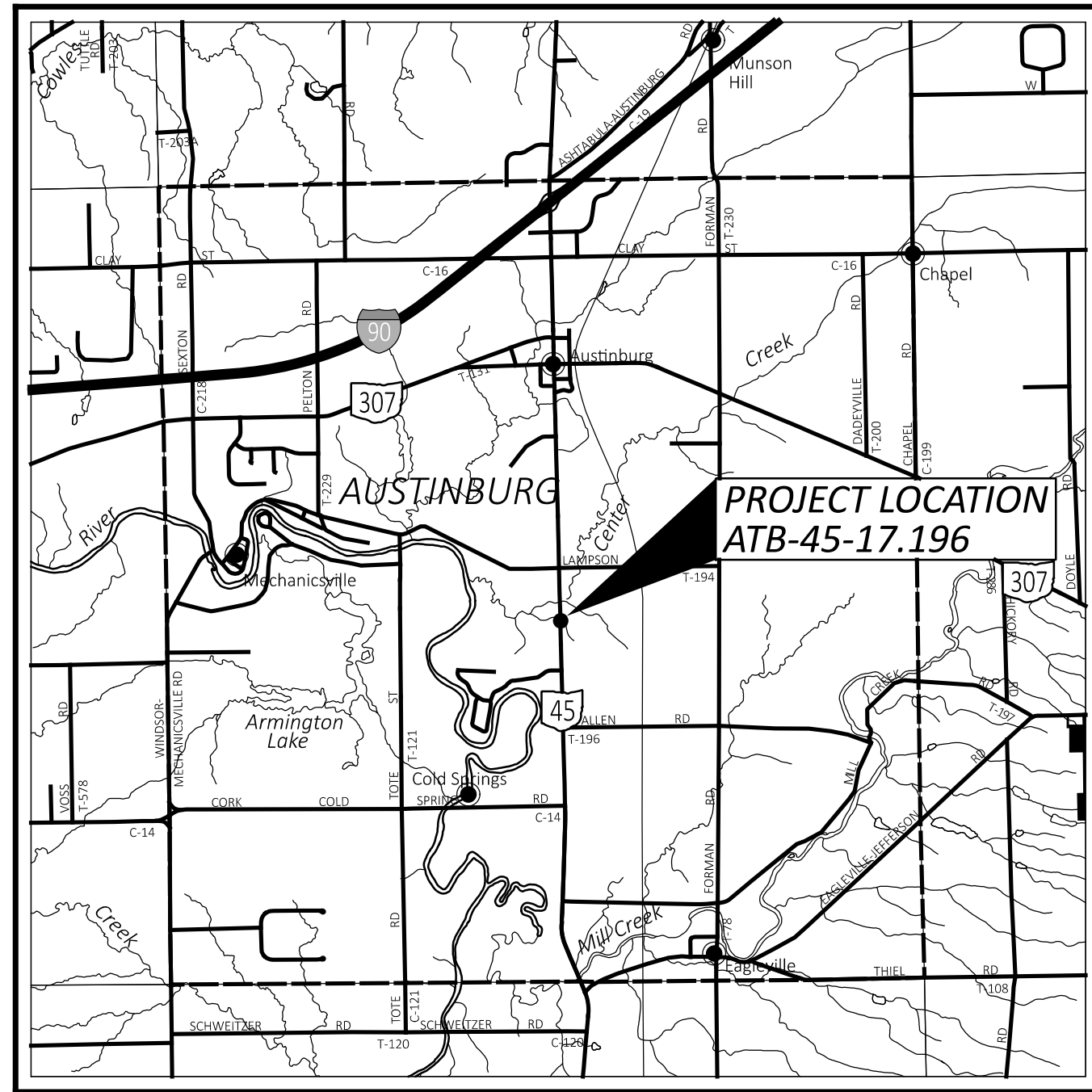
OHIO811, 8-1-1, or 1-800-362-2764
 (Non members must be called directly)

PLAN PREPARED BY:
 ODOT DISTRICT 4 - CAPITAL PLANNING
 2088 S. ARLINGTON RD.
 AKRON, OH 44306

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-2.2	1/15/21	MT-97.10	7/18/25	800-2023 1/16/26	WPC 12/19/25
BP-3.1	1/19/24	MT-101.60	1/17/25	832 7/18/25	
		MT-101.90	7/17/20	836 1/19/24	
DM-1.1	1/17/25	MT-105.10	1/17/20		
DM-4.2	7/20/12				
DM-4.3	1/15/16	TC-41.20	10/18/13		
DM-4.4	1/15/16	TC-42.20	10/18/13		
		TC-52.10	10/18/13		
MGS-1.1	1/17/25	TC-52.20	1/15/21		
MGS-2.1	1/17/25	TC-61.30	7/19/24		
MGS-4.2	1/17/25	TC-65.10	1/17/14		
MGS-4.3	1/18/13	TC-65.11	1/17/25		
HW-1.1	7/19/24				
HW-2.1	7/15/22				
HW-2.2	7/20/18				

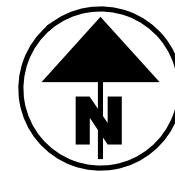
ENGINEER'S SEAL:

DESIGN AGENCY	
DESIGNER	NKF
REVIEWER	MJP 3/27/25
PROJECT ID	122339
SHEET	P.1
TOTAL	34



LOCATION MAP

LATITUDE: N 41°44'55" LONGITUDE: W 80°51'15"



PORTION TO BE IMPROVED	●
INTERSTATE HIGHWAY	=====
FEDERAL ROUTES	=====
STATE ROUTES	=====
COUNTY & TOWNSHIP ROADS	=====
OTHER ROADS	-----

DESIGN DESIGNATION*

CURRENT ADT (2026)	3,769
DESIGN YEAR ADT (2046)	3,769
DESIGN HOURLY VOLUME (2046)	403
DIRECTIONAL DISTRIBUTION	53%
TRUCKS (24 HOUR B&C)	3%
DESIGN SPEED	60 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
04 MINOR ARTERIAL (RURAL)	
NHS PROJECT	NO

DESIGN EXCEPTIONS

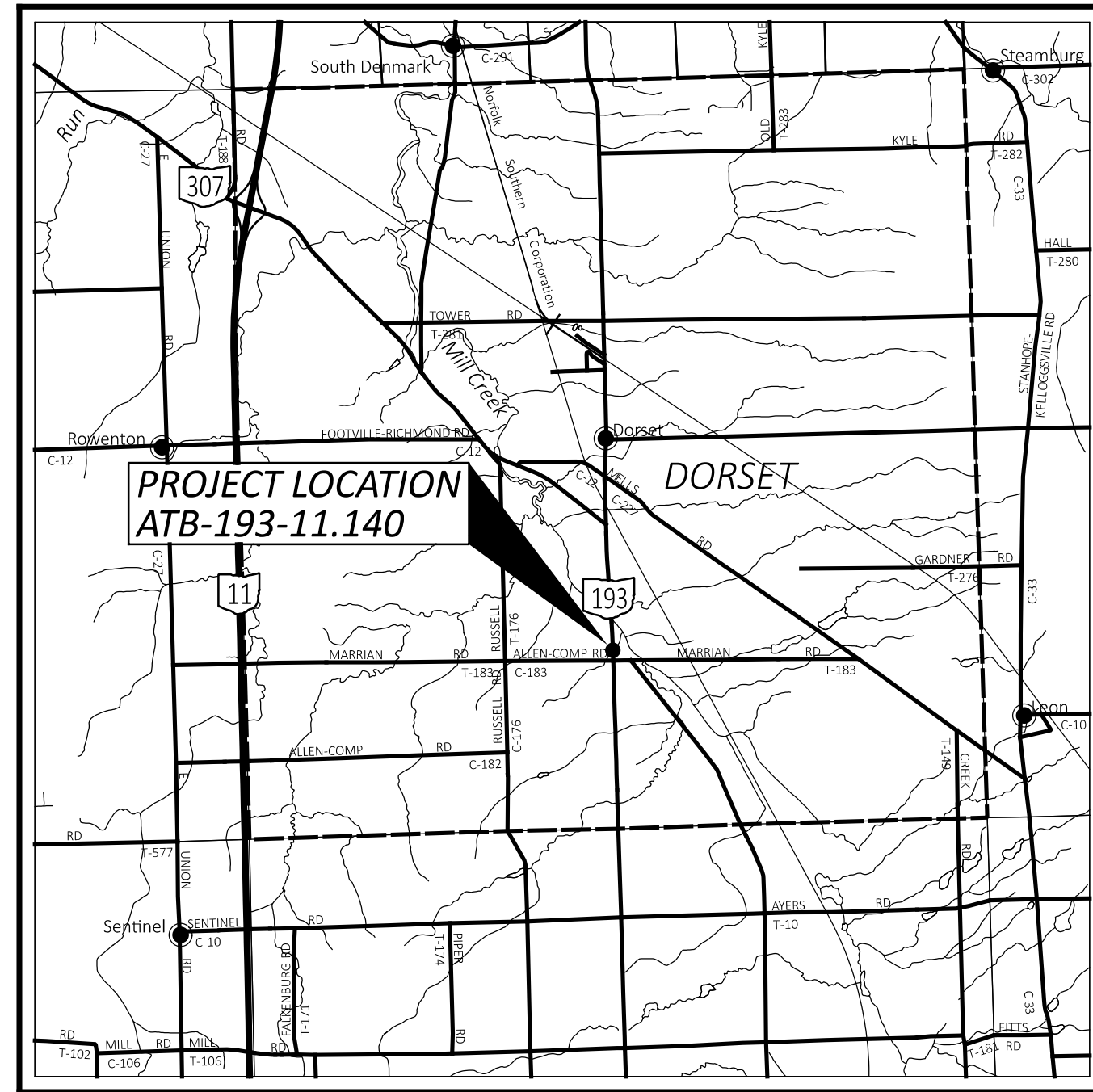
NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED

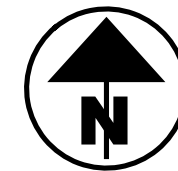
EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.29 ACRES
CONTRACTOR EARTH DISTURBED AREA:	0.25 ACRES



LOCATION MAP

LATITUDE: N 41°39'40" LONGITUDE: W 80°40'00"



PORTION TO BE IMPROVED	●
INTERSTATE HIGHWAY	=====
FEDERAL ROUTES	=====
STATE ROUTES	=====
COUNTY & TOWNSHIP ROADS	=====
OTHER ROADS	-----

DESIGN DESIGNATION*

CURRENT ADT (2026)	850
DESIGN YEAR ADT (2046)	850
DESIGN HOURLY VOLUME (2046)	89
DIRECTIONAL DISTRIBUTION	55%
TRUCKS (24 HOUR B&C)	6%
DESIGN SPEED	60 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
05 MAJOR COLLECTOR (RURAL)	
NHS PROJECT	NO

DESIGN EXCEPTIONS

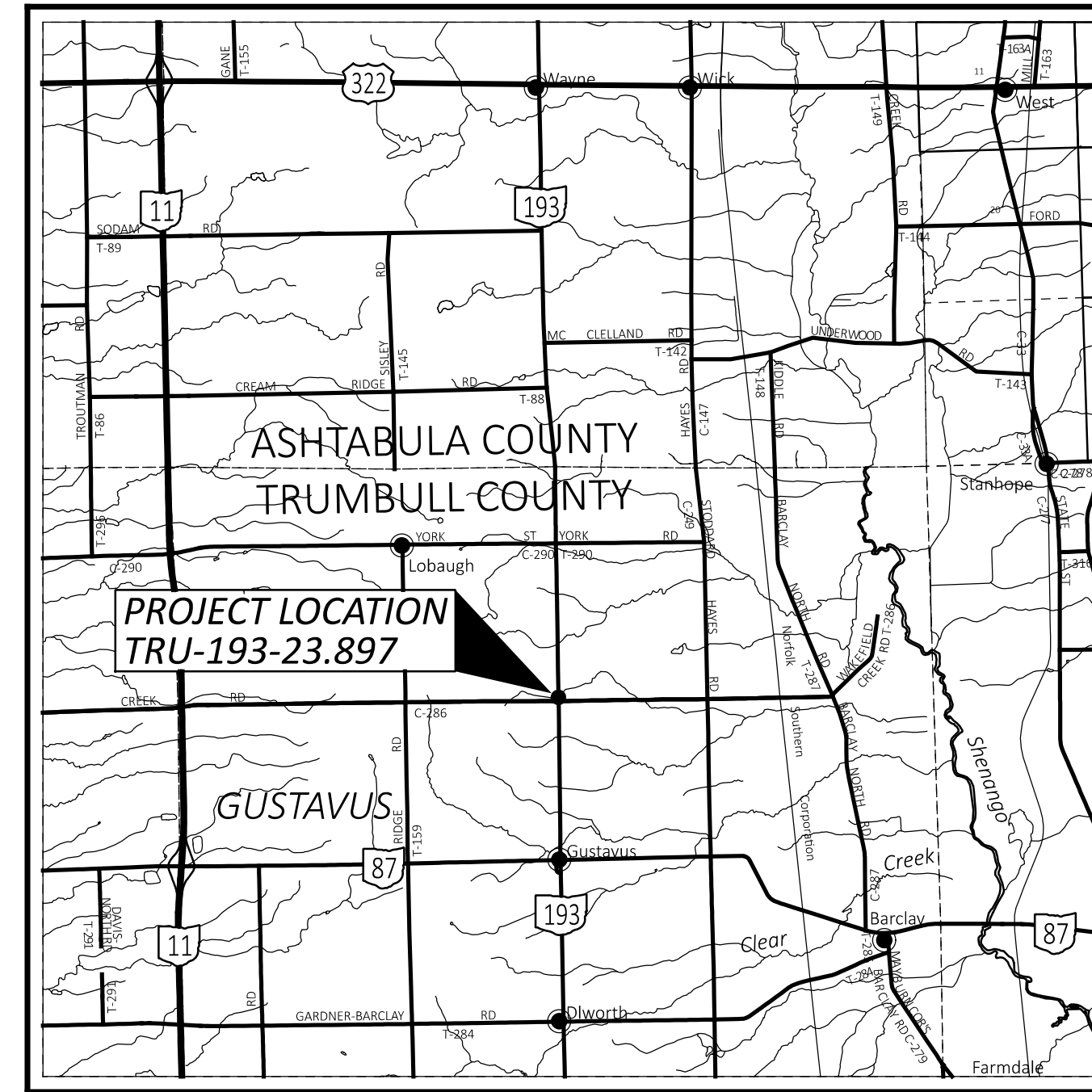
SHOULDER WIDTH APPROVED 5/15/25

ADA DESIGN WAIVERS

NONE REQUIRED

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.16 ACRES
CONTRACTOR EARTH DISTURBED AREA:	0.00 ACRES



LOCATION MAP

LATITUDE: N 41°28'40" LONGITUDE: W 80°39'55"



PORTION TO BE IMPROVED	●
INTERSTATE HIGHWAY	=====
FEDERAL ROUTES	=====
STATE ROUTES	=====
COUNTY & TOWNSHIP ROADS	=====
OTHER ROADS	-----

DESIGN DESIGNATION*

CURRENT ADT (2026)	465
DESIGN YEAR ADT (2046)	465
DESIGN HOURLY VOLUME (2046)	49
DIRECTIONAL DISTRIBUTION	51%
TRUCKS (24 HOUR B&C)	10%
DESIGN SPEED	60 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
05 MAJOR COLLECTOR (RURAL)	
NHS PROJECT	NO

DESIGN EXCEPTIONS

LANE WIDTH APPROVED 5/15/25
 SHOULDER WIDTH APPROVED 5/15/25

ADA DESIGN WAIVERS

NONE REQUIRED

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.19 ACRES
CONTRACTOR EARTH DISTURBED AREA:	0.00 ACRES

NOTE: PROJECT LOCATIONS ARE GREATER THAN 0.25 MILE APART

* DISCLAIMER: DESIGN DESIGNATION VALUES ARE REFERENCED FROM THE TRAFFIC MONITORING MANAGEMENT SYSTEM (TMMS)



WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

ITEM SPECIAL - AS-BUILT CONSTRUCTION PLANS

PRIOR TO FINAL ACCEPTANCE OF THE WORK, THE CONTRACTOR SHALL FURNISH THE DEPARTMENT FORMAL AS-BUILT CONSTRUCTION PLANS. THE FORMAL AS-BUILT CONSTRUCTION PLANS SHALL INCLUDE ALL RED-LINED CHANGES. RED-LINE CHANGE SHALL BE DENOTED UTILIZING CLOUDING IN MICROSTATION (OR OTHER CAD SOFTWARE) OR CLOUDING IN PDF EDITING SOFTWARE. THE AS-BUILT CONSTRUCTION PLANS SHALL HAVE A SIGNED VERIFICATION ON THE TITLE SHEET FROM THE CONTRACTOR INDICATING THAT ALL RED-LINED AND FIELD CHANGES HAVE BEEN INCORPORATED INTO AS-BUILT CONSTRUCTION PLANS.

THE CONTRACTORS VERIFICATION STATEMENT INDICATES ALL KNOWN FIELD MODIFICATIONS MADE HAVE BEEN INCLUDED IN THE FORMAL AS-BUILT CONSTRUCTION PLANS. THE CONTRACTORS VERIFICATION STATEMENT SHALL BE SIGNED BY THE CONTRACTORS PROJECT MANAGER (OR ACCEPTABLE REPRESENTATIVE).

IN ADDITION TO THE INFORMATION SHOWN ON THE CONSTRUCTION PLANS, THE AS-BUILT CONSTRUCTION PLANS SHALL SHOW THE FOLLOWING:

1. ALL DEVIATIONS FROM THE ORIGINAL APPROVED CONSTRUCTION PLANS WHICH RESULT IN A CHANGE OF LOCATION, MATERIAL, TYPE OR SIZE OF WORK.
2. ANY UTILITIES, PIPES, WELLHEADS, ABANDONED PAVEMENTS, FOUNDATIONS OR OTHER MAJOR OBSTRUCTIONS DISCOVERED AND REMAINING IN PLACE WHICH ARE NOT SHOWN, OR DO NOT CONFORM TO LOCATIONS OR DEPTHS SHOWN IN THE PLANS. UNDERGROUND FEATURES SHALL BE SHOWN AND LABELED ON THE AS-BUILT CONSTRUCTION PLANS IN TERMS OF STATION, OFFSET AND ELEVATION.
3. THE FINAL OPTION AND SPECIFICATION NUMBER SELECTED FOR THOSE ITEMS WHICH ALLOW SEVERAL MATERIAL OPTIONS UNDER THE SPECIFICATION (E.G., CONDUIT).
4. CHANGES TO THE PAY ITEMS AND FINAL QUANTITIES AS PAID SHALL BE SHOWN ON THE GENERAL SUMMARY AND SUBSUMMARIES.
5. ADDITIONAL PLAN SHEETS MAY BE NEEDED IF NECESSARY TO SHOW WORK NOT INCLUDED IN THE CONSTRUCTION PLANS. IF ADDITIONAL PLAN SHEETS ARE NEEDED, THEY ARE REQUIRED TO BE PREPARED IN CONFORMANCE WITH THE LOCATION AND DESIGN MANUAL, VOLUME 3, SECTION 1200 - PLAN PREPARATION.

NOTATION SHALL ALSO BE MADE OF LOCATIONS AND THE EXTENT OF USE OF MATERIALS, OTHER THAN SOIL, FOR EMBANKMENT CONSTRUCTION (ROCK, BROKEN CONCRETE WITHOUT REINFORCING STEEL, ETC.).

THE PLAN INDEX SHALL SHOW THE PLAN SHEETS WHICH HAVE CHANGES APPEARING ON THEM.

TWO COPIES OF THE AS-BUILT CONSTRUCTION PLANS SHALL BE DELIVERED TO THE PROJECT ENGINEER FOR APPROVAL UPON COMPLETION OF THE PHYSICAL WORK BUT PRIOR TO THE REQUEST FOR FINAL PAYMENT. AFTER THE DEPARTMENT HAS APPROVED THE AS-BUILT CONSTRUCTION PLANS, THE ASSOCIATED ELECTRONIC FILES SHALL BE DELIVERED TO THE DISTRICT CAPITAL PROGRAMS ADMINISTRATOR. ACCEPTANCE OF THESE PLANS AND DELIVERY OF THE ASSOCIATED ELECTRONIC FILES IS REQUIRED PRIOR TO THE WORK BEING ACCEPTED AND THE FINAL ESTIMATE APPROVED.

PAYMENT FOR ALL THE ABOVE SHALL BE LUMP SUM UPON PROPER EXECUTION OF ALL WORK OF THIS ITEM AS DETERMINED BY THE PROJECT ENGINEER.

REVIEW OF DRAINAGE FACILITIES

PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

ITEM 408 - PRIME COAT, AS PER PLAN

APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE SAFETY EDGE, OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:

SIEVE	TOTAL PERCENT PASSING
1- 1/2"	100
3/4"	50-100
NO. 4	35-70
NO. 30	9-33
NO. 200	0-13

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, NOTIFY THE ENGINEER BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, NOTIFY THE ENGINEER BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

FARM DRAINS

PROVIDE UNOBSTRUCTED OUTLETS TO ALL FARM DRAINS ENCOUNTERED DURING CONSTRUCTION. REPLACE EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY WITHIN THE (RIGHT OF WAY)(CONSTRUCTION) LIMITS WITH ITEM 611, CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

OUTLET EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES INTO THE ROADWAY DITCH USING ITEM 611, TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION IS ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. INTERCEPT LATERAL FIELD TILES WHICH CROSS THE ROADWAY WITH ITEM 611, TYPE E CONDUIT, AND CARRY IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

THE LOCATION, TYPE, SIZE AND GRADE OF REPLACEMENTS IS DETERMINED BY THE ENGINEER AND PAYMENT MADE ON FINAL MEASUREMENTS.

PROVIDE EROSION CONTROL PADS AT THE OUTLET END OF ALL FARM DRAINS PER STANDARD CONSTRUCTION DRAWING DM-1.1, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE.

PAYMENT FOR THE EROSION CONTROL PADS AND ANY NECESSARY BENDS OR BRANCHES IS INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK AT EACH LOCATION NOTED ABOVE:

- 611 6" CONDUIT, TYPE B 20 FT
- 611 6" CONDUIT, TYPE E 20 FT
- 611 6" CONDUIT, TYPE F 20 FT
- 601 ROCK CHANNEL PROTECTION TYPE C WITH FILTER 2 CU. YD

ENDANGERED SPECIES HABITAT - INDIANA BAT/NORTHERN LONG-EARED BAT/TRI-COLORED BAT (ATB-45-17.19):

THE AFOREMENTIONED PROJECT SITE IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT, NORTHERN LONG-EARED BAT AND TRI-COLORED BAT. NO TREES SHALL BE REMOVED AT THIS LOCATION FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

DESIGN AGENCY



DESIGNER
NKF

REVIEWER
MJP 3/27/25

PROJECT ID
122339

SHEET TOTAL
P.3 | 34

MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
2. ALL FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT OPERATIONS SHALL BE COMPLETED THE SAME DAY THE EXCAVATION IS MADE. IF THE CONTRACTOR CANNOT COMPLETE THE WORK, THE EXCAVATION SHALL BE BACKFILLED OR PROTECTED AS PER STANDARD CONSTRUCTION DRAWING MT-101.90.
3. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.
4. A QUANTITY OF 10 CU. YDS. OF ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.
5. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

DETOUR NOTIFICATION [ODOT]

THE CONTRACTOR SHALL ADVISE THE PROJECT ENGINEER EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING.

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REPRESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE		
ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURE	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<= 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURE & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW SHALL NOT BE PERMITTED AT PROJECT COST NOR TIME COMPENSATION. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

DURING PERIODS WHERE TRAFFIC NEEDS TO BE DIRECTED CONTRARY TO A TRAFFIC CONTROL DEVICE (FLAGGER, SIGN [E.G. STOP SIGN, STREET OR HIGHWAY SIGNS, ETC], SIGNAL OR OTHER DEVICE USED TO REGULATE, WARN OR GUIDE TRAFFIC). TRAFFIC IN THIS INSTANCE INCLUDES VEHICULAR, PEDESTRIAN AND/OR SHARED USE PATH USERS.

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES THAT MEET ALL OF THE CRITERIA LISTED BELOW: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

- CRITERIA
- . ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND
 - . AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND,
 - . AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS AND/OR IN CONTRARY TO OTHER TRAFFIC CONTROL DEVICE IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE SHIFT DURATION SHALL NOT BE LESS THAN THE LEO'S MINIMUM SHOW-UP TIME REQUIRED BY THEIR LAW ENFORCEMENT AGENCY. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 32 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.



ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. [AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.]

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE		
ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
ROAD & RAMP CLOSURES	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	<12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

MAINTENANCE OF TRAFFIC RESTRICTIONS (TRU-193-23.897)

THE CONTRACTOR IS ADVISED OF PROJECT TRU-193-17.77 PID 116751 THAT INCLUDES THE RESURFACING OF TRU-193. THE CULVERT REPLACEMENT SHALL BE COMPLETED PRIOR TO 6/26/2026. THE CULVERT REPLACEMENT CONTRACTOR SHALL COORDINATE THEIR WORK TO ENSURE THAT THE RESURFACING OF TRU-193 SHALL OCCUR AFTER THE REPLACEMENT OF THE SLM 23.897 CULVERT IS COMPLETE.

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR) ATB-45-17.196

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIME, EXCEPT FOR A PERIOD NOT TO EXCEED 14 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET P.6. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$5,000 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

ALL WORK AT THE ATB-45 LOCATION SHALL BE COMPLETED DURING THE PERMITTED DETOUR DURATION.

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR) ATB-193-11.140

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIME, EXCEPT FOR A PERIOD NOT TO EXCEED 14 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET P.7. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$2,500 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

THE CLOSURE OF ATB-193-11.140 AND TRU-193-23.897 SHALL NOT BE PERFORMED CONCURRENTLY.

ALL WORK AT THE ATB-193 LOCATION SHALL BE COMPLETED DURING THE PERMITTED DETOUR DURATION.

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR) TRU-193-23.897

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIME, EXCEPT FOR A PERIOD NOT TO EXCEED 14 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET P.8. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$1,250 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

THE CLOSURE OF ATB-193-11.140 AND TRU-193-23.897 SHALL NOT BE PERFORMED CONCURRENTLY.

ALL WORK AT THE TRU-193 LOCATION SHALL BE COMPLETED DURING THE PERMITTED DETOUR DURATION.

DRIVEWAY ACCESS (ATB-45-17.196)

CONTRACTOR SHALL PROVIDE ACCESS TO THE DRIVES LOCATED ON SR 45 (STA. 903+32 LT) THROUGHOUT THE ENTIRE DURATION OF THE ATB-45-17.196 CULVERT REPLACEMENT.

ALL COSTS ASSOCIATED WITH MAINTAINING THIS DRIVE ACCESS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

ASPHALT PAVING LIMITATION

THE CONTRACTOR SHALL NOT ANTICIPATE OR SCHEDULE PLACING ASPHALT (ASPHALT SURFACE COURSE, ASPHALT INTERMEDIATE COURSE, ASPHALT CONCRETE BASE, ETC.) BETWEEN NOVEMBER 1 AND APRIL 1 WHEN SUBMITTING THEIR INITIAL BAR CHART PROGRESS SCHEDULE TO THE DISTRICT CONSTRUCTION ENGINEER (DCE) AS SPECIFIED IN CMS SECTION 108.02A. THIS LIMITATION SHALL ALSO INCLUDE INITIAL BASE LINE SCHEDULES AND ALL UPDATES IF A CPM SCHEDULE IS REQUIRED.

INTERIM COMPLETION DATE (TRU-193-23.897)

ALL WORK SHALL BE COMPLETED ON TRU-193-23.897 NO LATER THAN JUNE 26, 2026.

DESIGN AGENCY

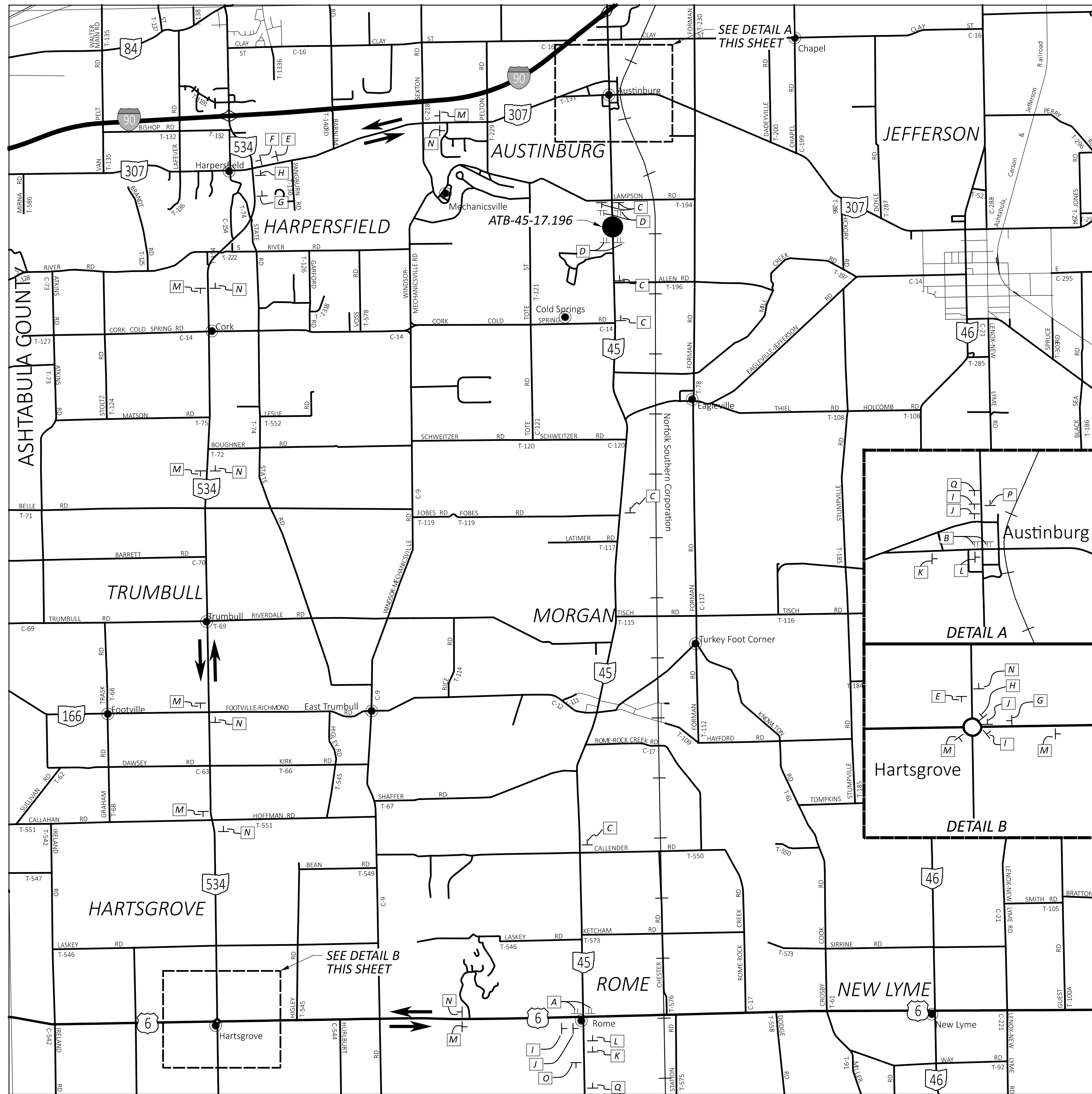


DESIGNER
NKF

REVIEWER
MJP 3/27/25

PROJECT ID
122339

SHEET TOTAL
P.5 | 34



DETOUR ROUTE FOR: ATB-45-17.196

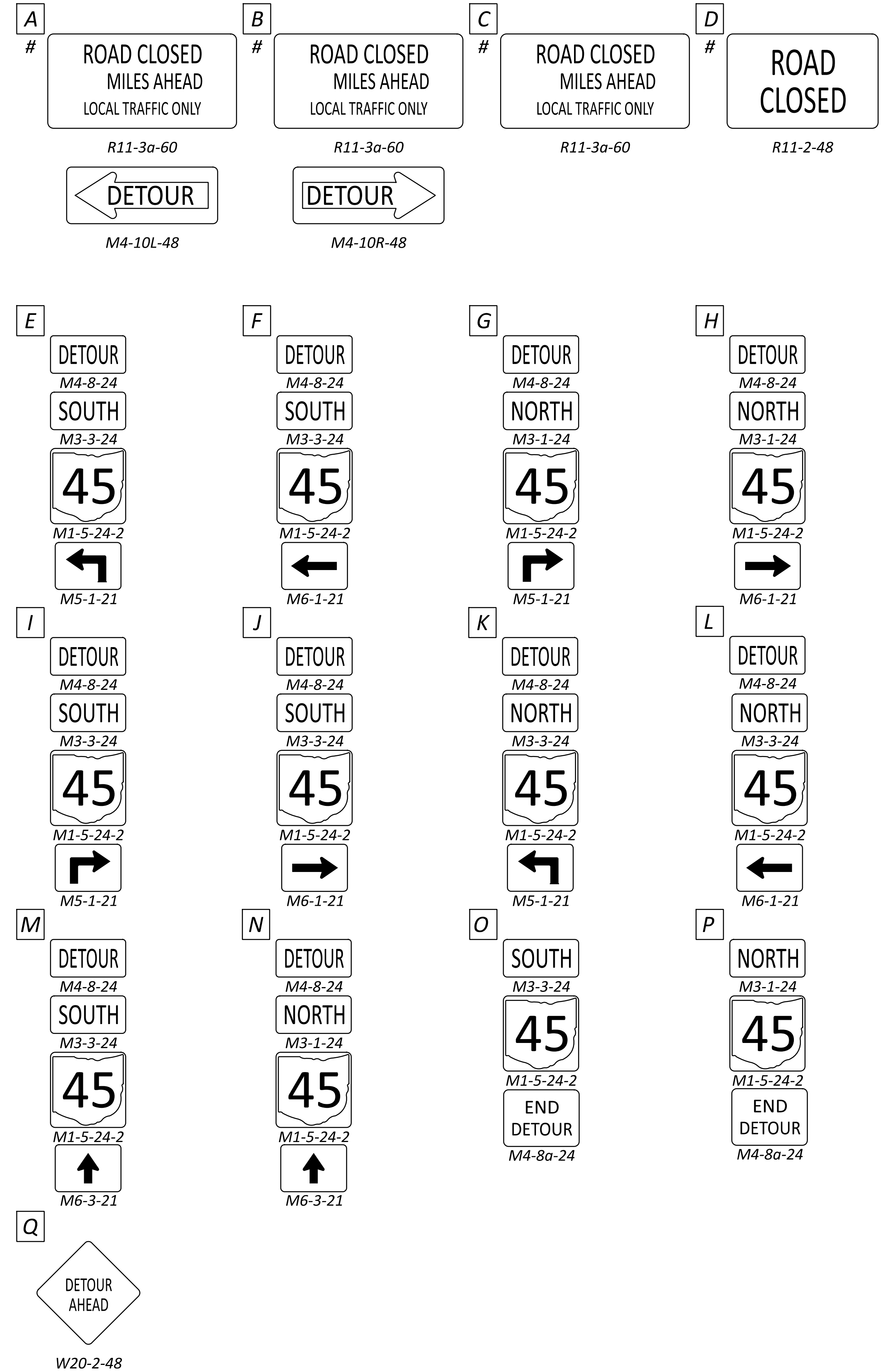
DETOUR ROUTE: SR 307 / SR 534 / US 6

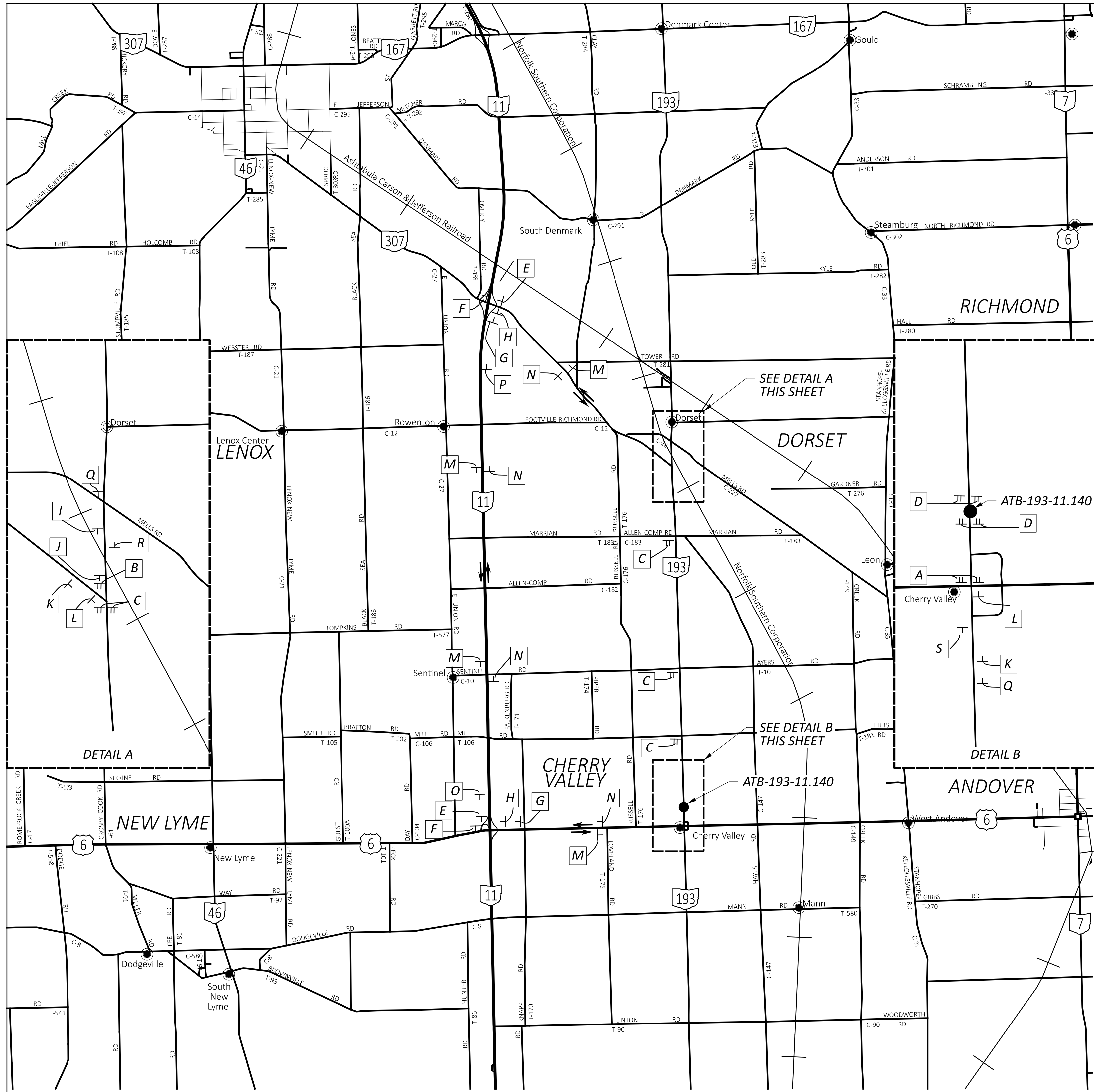
CLOSE CULVERT ATB-45-17.196 PER STANDARD CONSTRUCTION DRAWING MT-101.60

ON TYPE III BARRICADE WITH TYPE B FLASHERS MOUNTED PER SCD MT-101.60

TYPE A WARNING LIGHT

REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.

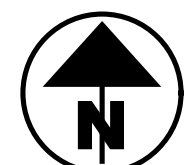




DETOUR ROUTE FOR: ATB-193-11.140

- DETOUR ROUTE: SR 307 / SR 11 / SR 6**
- CLOSE CULVERT ATB-193-11.140 PER STANDARD CONSTRUCTION DRAWING MT-101.60**
- ON TYPE III BARRICADE WITH TYPE B FLASHERS MOUNTED PER SCD MT-101.60**
- TYPE A WARNING LIGHT**

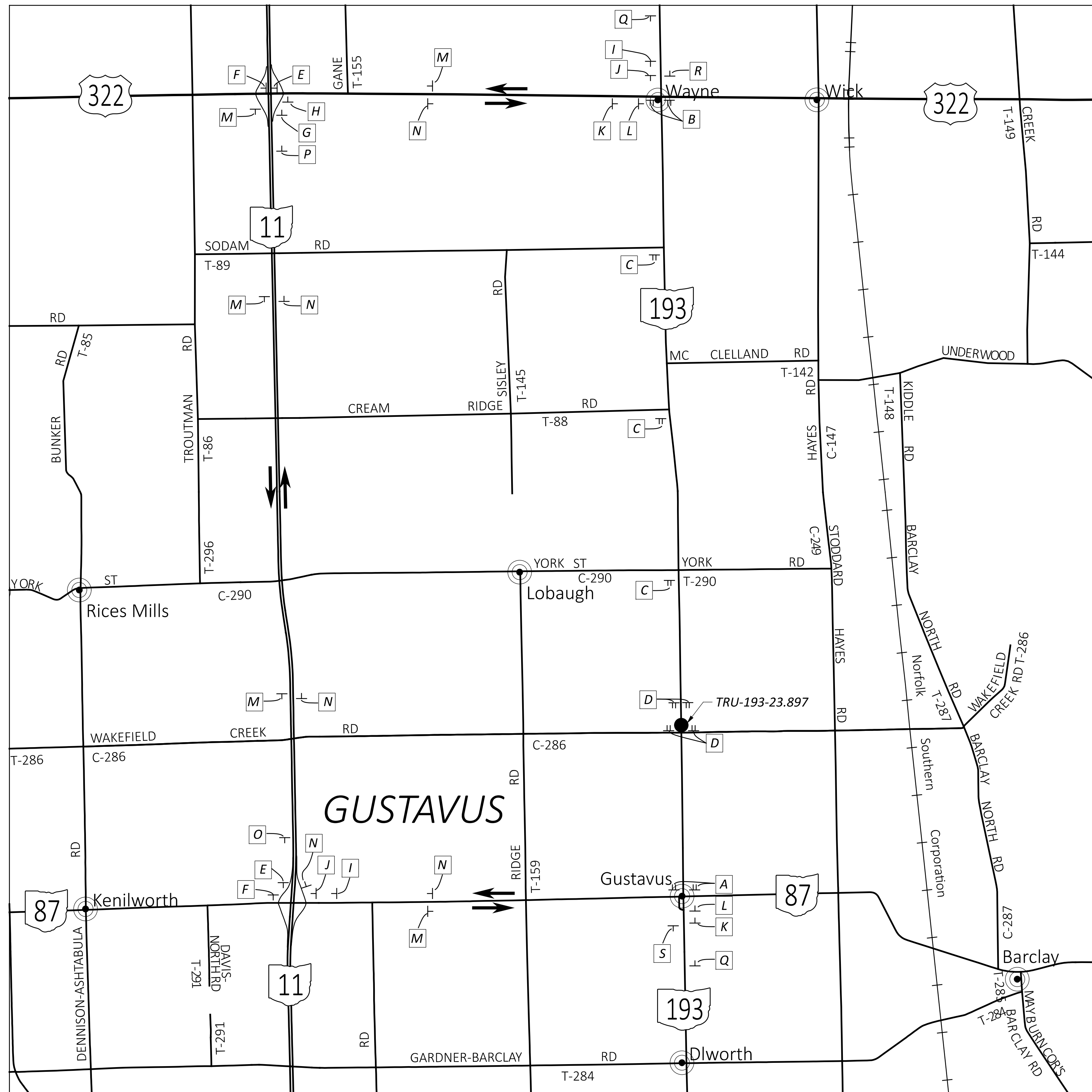
REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.



NOT TO SCALE

<p>A #</p> <p>ROAD CLOSED MILES AHEAD LOCAL TRAFFIC ONLY</p> <p>R11-3a-60</p> <p>DETOUR</p> <p>M4-10L-48</p>	<p>B #</p> <p>ROAD CLOSED MILES AHEAD LOCAL TRAFFIC ONLY</p> <p>R11-3a-60</p> <p>DETOUR</p> <p>M4-10R-48</p>	<p>C #</p> <p>ROAD CLOSED MILES AHEAD LOCAL TRAFFIC ONLY</p> <p>R11-3a-60</p>	<p>D #</p> <p>ROAD CLOSED</p> <p>R11-2-48</p>
<p>E</p> <p>DETOUR M4-8-24 SOUTH M3-3-24</p> <p>193 M1-5-24-3</p> <p> M5-1-21</p>	<p>F</p> <p>DETOUR M4-8-24 SOUTH M3-3-24</p> <p>193 M1-5-24-3</p> <p> M6-1-21</p>	<p>G</p> <p>DETOUR M4-8-24 NORTH M3-1-24</p> <p>193 M1-5-24-3</p> <p> M5-1-21</p>	<p>H</p> <p>DETOUR M4-8-24 NORTH M3-1-24</p> <p>193 M1-5-24-3</p> <p> M6-1-21</p>
<p>I</p> <p>DETOUR M4-8-24 SOUTH M3-3-24</p> <p>193 M1-5-24-3</p> <p> M5-1-21</p>	<p>J</p> <p>DETOUR M4-8-24 SOUTH M3-3-24</p> <p>193 M1-5-24-3</p> <p> M6-1-21</p>	<p>K</p> <p>DETOUR M4-8-24 NORTH M3-1-24</p> <p>193 M1-5-24-3</p> <p> M5-1-21</p>	<p>L</p> <p>DETOUR M4-8-24 NORTH M3-1-24</p> <p>193 M1-5-24-3</p> <p> M6-1-21</p>
<p>M</p> <p>DETOUR M4-8-24 SOUTH M3-3-24</p> <p>193 M1-5-24-3</p> <p> M6-3-21</p>	<p>N</p> <p>DETOUR M4-8-24 NORTH M3-1-24</p> <p>193 M1-5-24-3</p> <p> M6-3-21</p>	<p>O</p> <p>DETOUR M4-8-24 SOUTH M3-3-24</p> <p>193 M1-5-24-3</p> <p> M6-2R-21</p>	<p>P</p> <p>DETOUR M4-8-24 NORTH M3-1-24</p> <p>193 M1-5-24-3</p> <p> M6-2R-21</p>
<p>Q</p> <p>DETOUR AHEAD</p> <p>W20-2-48</p>	<p>R</p> <p>NORTH M3-1-24</p> <p>193 M1-5-24-3</p> <p>END DETOUR</p> <p>M4-8a-24</p>	<p>S</p> <p>SOUTH M3-3-24</p> <p>193 M1-5-24-3</p> <p>END DETOUR</p> <p>M4-8a-24</p>	





DETOUR ROUTE FOR: TRU-193-23.897

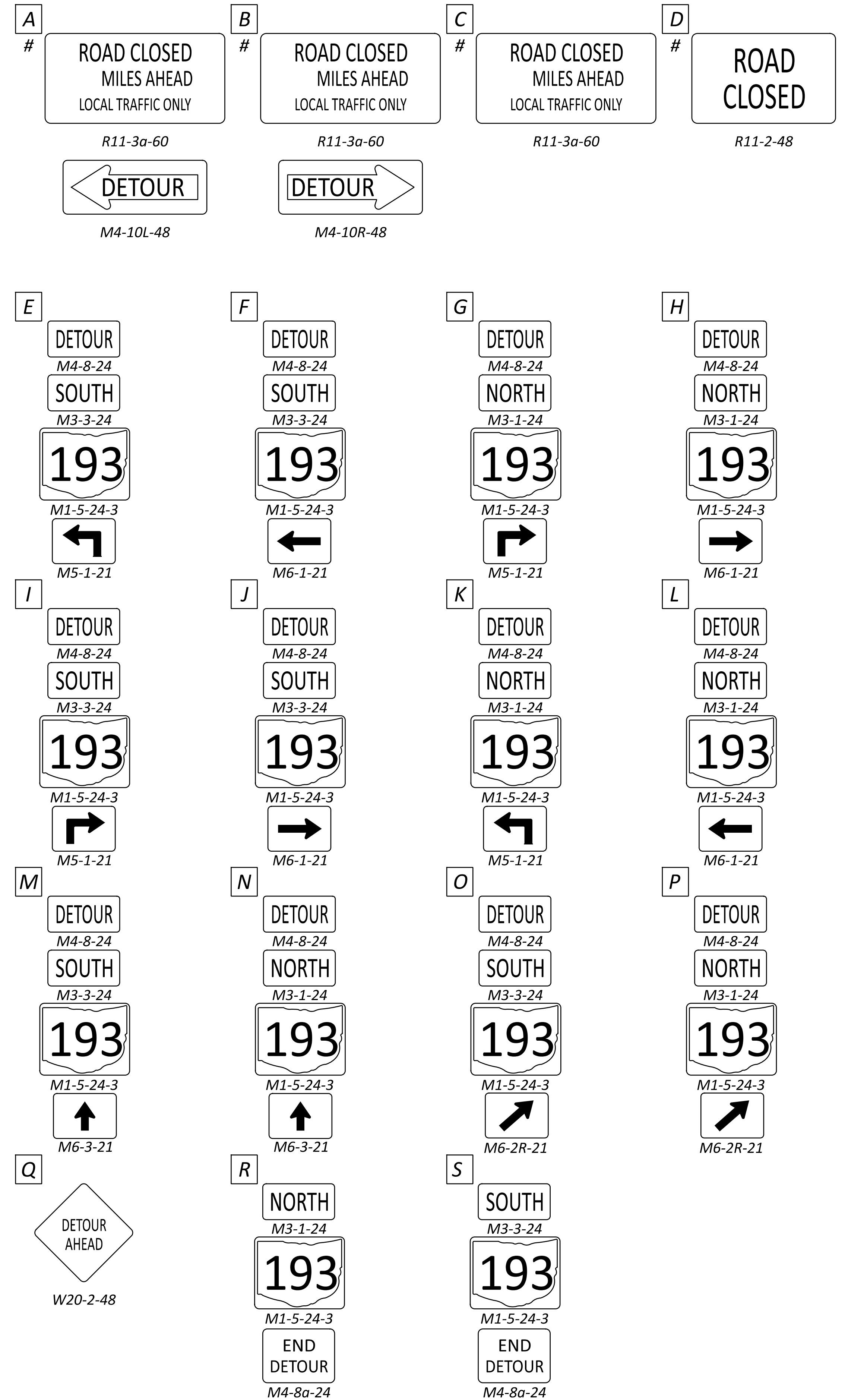
DETOUR ROUTE: US 322 / SR 11 / SR 87

CLOSE CULVERT TRU-193-23.897 PER STANDARD CONSTRUCTION DRAWING MT-101.60

ON TYPE III BARRICADE WITH TYPE B FLASHERS MOUNTED PER SCD MT-101.60

TYPE A WARNING LIGHT

REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.



DESIGN AGENCY



DESIGNER
NKF


REVIEWER
MJP 3/27/25

PROJECT ID
122339

SHEET TOTAL
P.8 | 34

SHEET NUMBER								PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
P.3	P.4	P.11	P.12	P.19	P.20	P.26	P.27	01/NFP	EXT	TOTAL				
													MAINTENANCE OF TRAFFIC	
	32							32	614	11110	32	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
	LS							LS	614	12420	LS		DETOUR SIGNING	
	10							10	614	13000	10	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
													INCIDENTALS	
								LS	614	11000	LS		MAINTAINING TRAFFIC	
								6	619	16010	6	MNTH	FIELD OFFICE, TYPE B	
								LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
								LS	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY	
DESIGNER	NKF
REVIEWER	MJP 3/27/25
PROJECT ID	122339
SHEET	P.10
TOTAL	34

SURVEYING PARAMETERS - OHIO COUNTY COORDINATE SYSTEM (OCCS)

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE THIS SHEET OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL
 POSITIONING METHOD: STATIC
 MONUMENT TYPE: B

VERTICAL POSITIONING
 ORTHOMETRIC HEIGHT DATUM: NAVD 88
 GEOID: 2018

HORIZONTAL POSITIONING
 REFERENCE FRAME: NAD 83 (2011) (EPOCH: 2010.0000)
 ELLIPSOID: GRS80
 COORDINATE SYSTEM: ASHTABULA COUNTY LDP
 MAP PROJECTION: SINGAL PARALLEL LAMBERT CONIC CONFORMAL
 CENTRAL LATITUDE: N 41-51-00
 CENTRAL LONGITUDE: E 279-15-00
 FALSE NORTHING: 328083.3333333
 FALSE EASTING: 164041.6666667
 PROJECTION SCALE FACTOR: 1.000032

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH C&MS 623.

UNITS ARE IN U.S. SURVEY FEET.
 USE THE FOLLOWING CONVERSION FACTOR:
 1 METER = 3.28083333333 U.S. SURVEY FEET

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

Ashtabula County Department of Environmental Services (Water)
 ATTN: Ed Spoor
 36 West Walnut Street
 Jefferson, OH 44047
 440-576-3098
 440-969-4772 (cell)
 elspoor@ashtabulacounty.us

Windstream Kinetic
 OSP Engineer II
 ATTN: Eric LaCourse
 330-805-5993 (cell)
 eric.lacourse@windstream.com

CEI The Illuminating Company
 ATTN: John Zassick
 6896 Miller Road
 Brecksville, OH 44141
 440-546-8706
 216-538-1580 (cell)
 jmzassick@firstenergycorp.com

ITEM SPECIAL - SURVEY CONTROL VERIFICATION

THE CONTRACTOR SHALL PERFORM THIS WORK TO VERIFY THE PROVIDED SURVEY CONTROL. THE CONTRACTOR WILL PERFORM THE VERIFICATION USING ONE OF THE TWO METHODS BELOW DEPENDENT UPON THE CONTRACTOR'S CHOSEN MEANS OF SURVEY CONTROL TO BE USED ON THE PROJECT. THE WORK SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN OHIO LICENSED SURVEYOR.

1. IF USING GPS DEVICES TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
 - a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLAN AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
 - b. PERFORM A SITE CALIBRATION UTILIZING THE AVAILABLE HORIZONTAL AND VERTICAL CONTROL POINTS PROVIDED IN THE PLAN.
 - c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.
2. IF USING CONVENTIONAL SURVEY INSTRUMENTATION TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
 - a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
 - b. LOCATE AND OBSERVE ANGLE AND DISTANCE TO ALL AVAILABLE HORIZONTAL CONTROL POINTS PROVIDED IN THE PLAN.
 - c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID ITEM.

CONTROL POINT (U.S. SURVEY FEET GROUND)					
POINT	NORTHING	EASTING	STATION	OFFSET	ELEV.
CP10	290236.779	135533.323	896+01.63	16.62' RT.	809.87
CP20	291157.963	135500.108	905+23.06	17.01' LT.	791.94
CP30	291975.093	135525.737	913+39.89	19.80' RT.	985.98
CENTERLINE ALIGNMENT					
MN898	290569.839	135514.263	899+34.82	0.82' LT.	
MN904	291066.104	135519.273	904+31.09	1.76' RT.	
MN907	291349.404	135515.109	907+14.40		
MN10	292728.657	135503.141	920+93.74		
BENCHMARK					
BM1	291633.600	135487.900	909+98.98	23.02' LT.	783.34

PAVEMENT MARKINGS

ALL PAVEMENT MARKINGS THAT ARE REMOVED DURING THE CULVERT REPLACEMENT WILL BE REPLACED WITH ITEM 642 - TRAFFIC PAINT. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY (LANE WIDTH 12 FT):

- ITEM 642 - EDGE LINE, 6", TYPE 1 0.07 MI
- ITEM 642 - CENTER LINE, 6", TYPE 1 0.03 MI

ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND CULVERTS (ATB-45-17.196)

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE PLANS, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING, AS PER PLAN, AROUND CULVERTS. SCALPING IS NOT REQUIRED FOR THIS ITEM OF WORK. ALL VEGETATION SHALL BE REMOVED WITHIN 15 FEET (OR TO THE R/W LIMITS, WHICHEVER IS CLOSER) OF THE HEADWALLS, ABUTMENTS, AND/OR PIERS.

ALL OTHER PROVISIONS AS SET FORTH IN THE C&MS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM BID PRICE FOR IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING, AS PER PLAN, AROUND CULVERTS.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

- 659, TOPSOIL 92 CY
- 659, SEEDING AND MULCHING 832 SY
- 659, COMMERCIAL FERTILIZER 0.11 TON
- 659, LIME 0.17 ACRES
- 659, WATER 4 M. GAL.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

CONDUIT IDENTIFICATION SIGNS

CONDUIT IDENTIFICATION SIGNS (I-H25b) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR ATB-45-17.196

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:

- ITEM 630 - SIGN, FLAT SHEET, 730.20, 1 SQ FT
- ITEM 630 - GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT

EXCAVATION AND EMBANKMENT

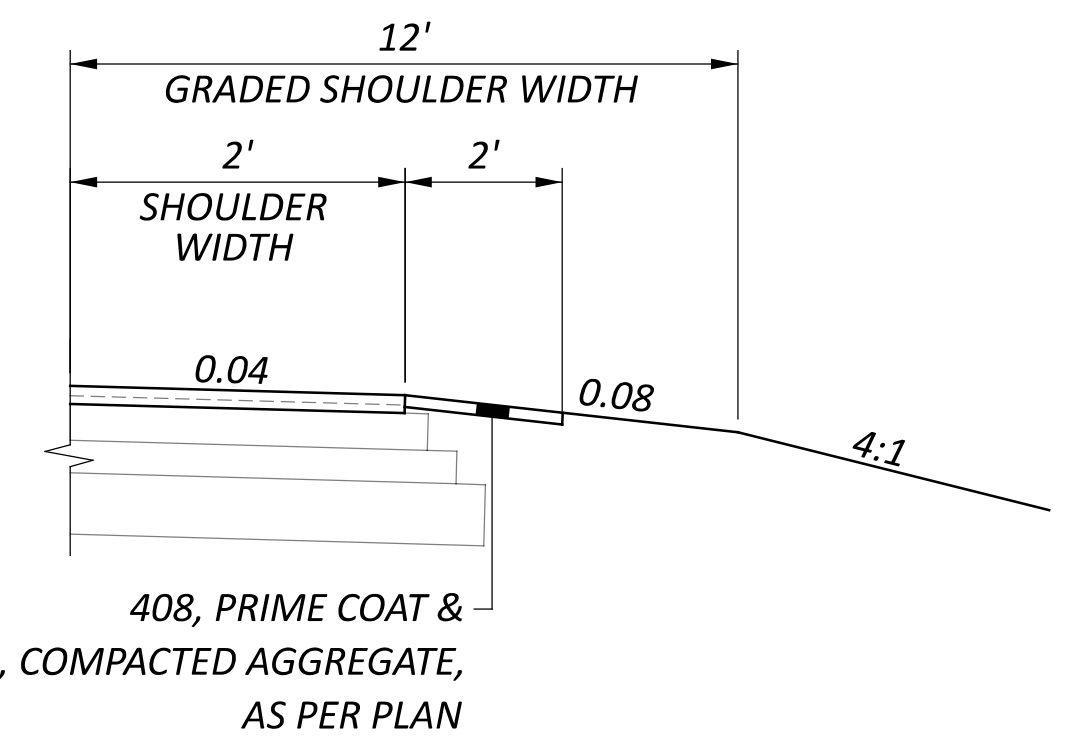
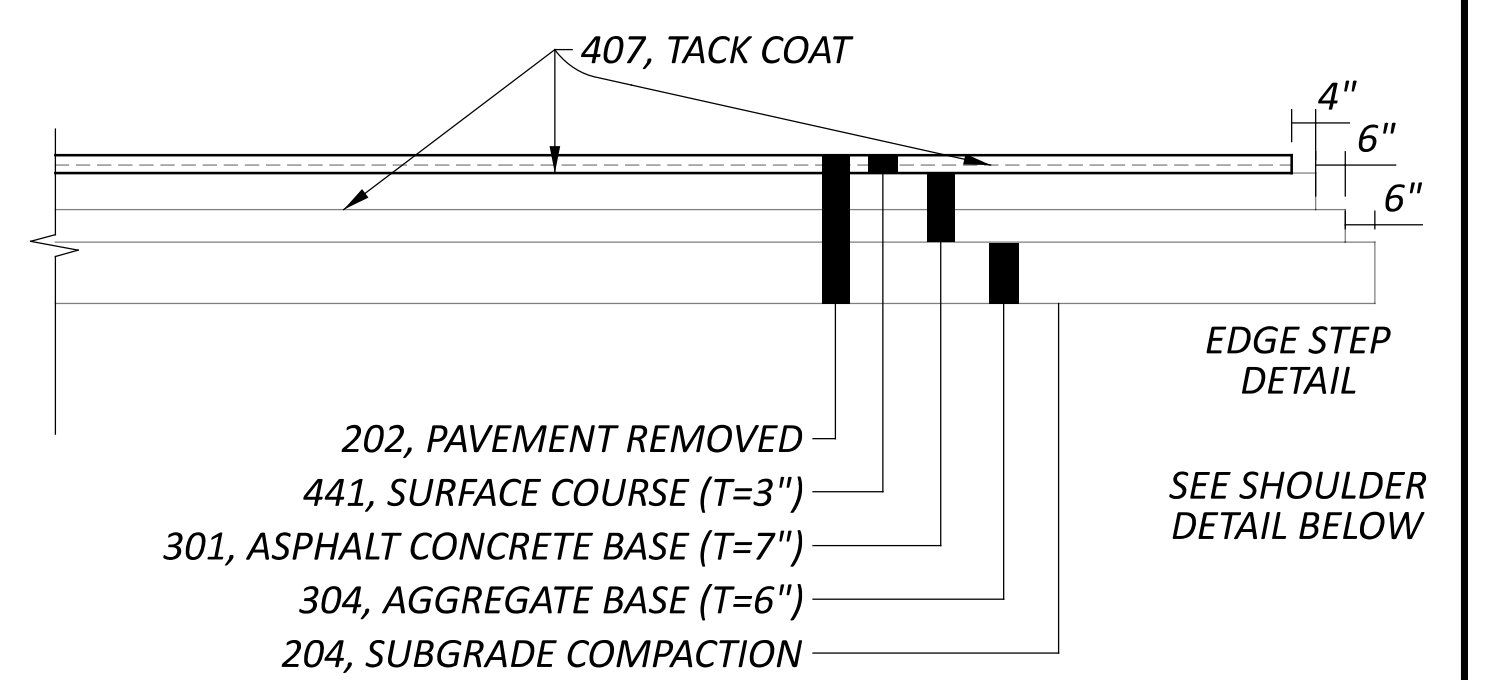
THE FOLLOWING QUANTITIES HAVE BEEN TAKEN FROM THE CROSS SECTION SHEETS AND CARRIED TO THE GENERAL SUMMARY:

- ITEM 203 - EXCAVATION 245 CY
- ITEM 204 - EMBANKMENT 215 CY

PAVEMENT RESTORATION AND RESURFACING FOR CONDUITS

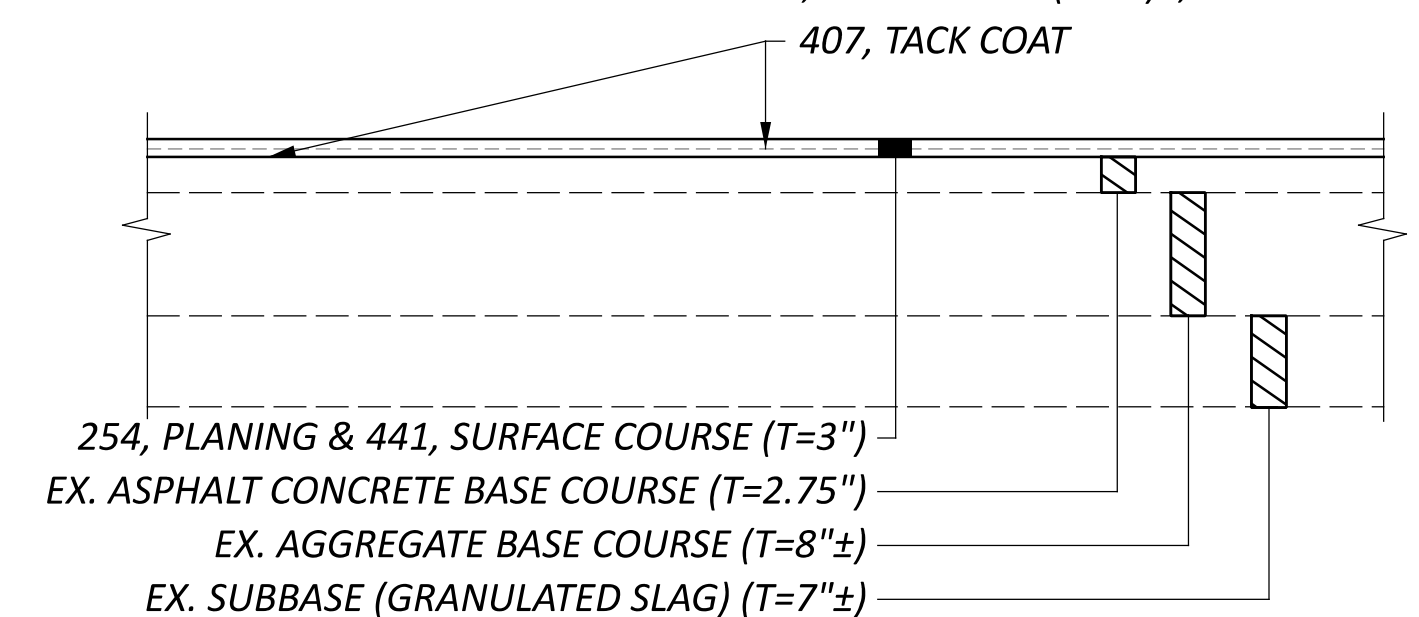
THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR PAVEMENT RESTORATION AFTER THE INSTALLATION AND/OR REMOVAL OF CONDUITS

- STA. 903+70.00 TO STA. 904+50.00
- ITEM 202 PAVEMENT REMOVED, 285 SY
- ITEM 204 SUBGRADE COMPACTION, 310 SY
- ITEM 301 ASPHALT CONCRETE BASE, PG64-22, (449), (T=7"), 58 CY (PLACED IN 2 LIFTS OF 3.5")
- ITEM 304 AGGREGATE BASE, (T=6"), 52 CY
- ITEM 407 NON-TRACKING TACK COAT, (@ 0.06 GAL/SY), 26 GAL.
- ITEM 408 PRIME COAT, AS PER PLAN, (@ 0.40 GAL/SY), 15 GAL.
- ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449), AS PER PLAN, PG64-22, (T=3"), 24 CY (PLACED IN 2 LIFTS OF 1.5")
- ITEM 617 COMPACTED AGGREGATE, AS PER PLAN (T=1")*, 1 CY



THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO RESURFACE THE ROADWAY AFTER THE INSTALLATION AND/OR REMOVAL OF CONDUITS

- STA. 903+20.00 TO STA. 903+70.00
- STA. 904+50.00 TO STA. 905+00.00
- ITEM 254 PAVEMENT PLANING (T=3"), 312 SY
- ITEM 407 NON-TRACKING TACK COAT, (@ 0.09 GAL/SY), 29 GAL.
- ITEM 408 PRIME COAT, AS PER PLAN, (@ 0.40 GAL/SY), 19 GAL.
- ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449), AS PER PLAN, PG64-22 (T=3"), 26 CY
- ITEM 617 COMPACTED AGGREGATE, AS PER PLAN (T=1")*, 2 CY



*SHORT PROJECT, SAFETY EDGE NOT INCLUDED

DESIGN AGENCY

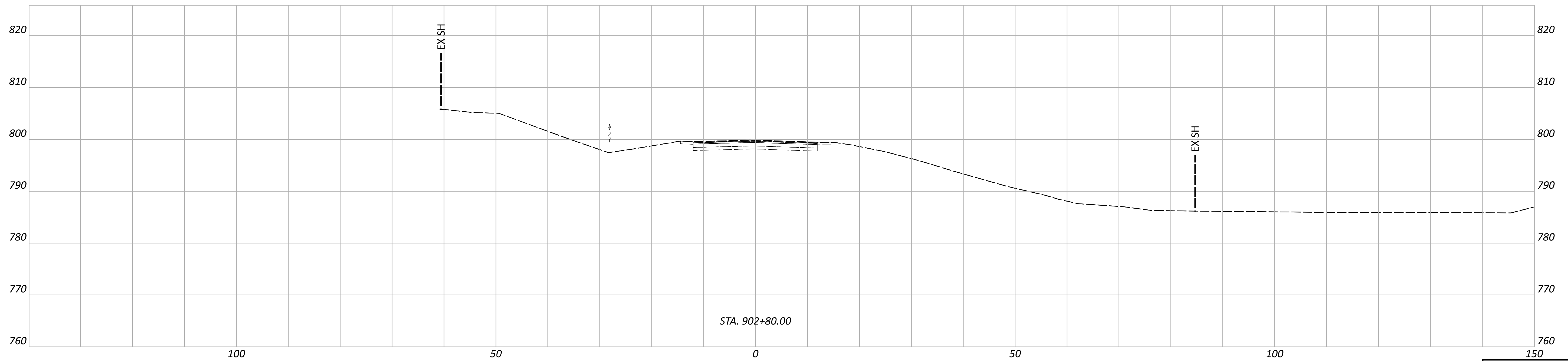
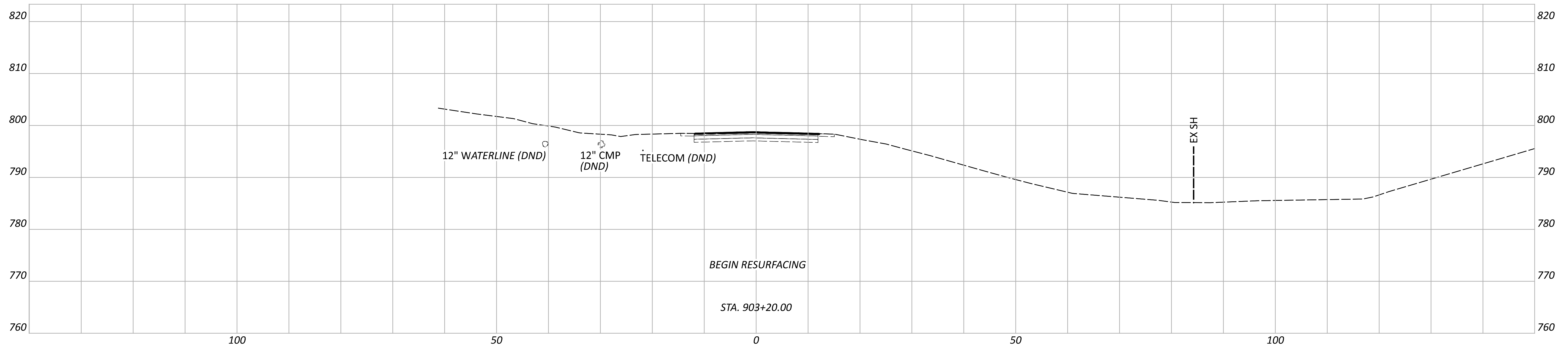


DESIGNER
NKF

REVIEWER
MJP 3/27/25

PROJECT ID
122339

SHEET TOTAL
P.11 34



Sheet Totals		
Seeding	Cut	Fill

DESIGN AGENCY



DESIGNER

NKF

REVIEWER

MJP 3/27/25

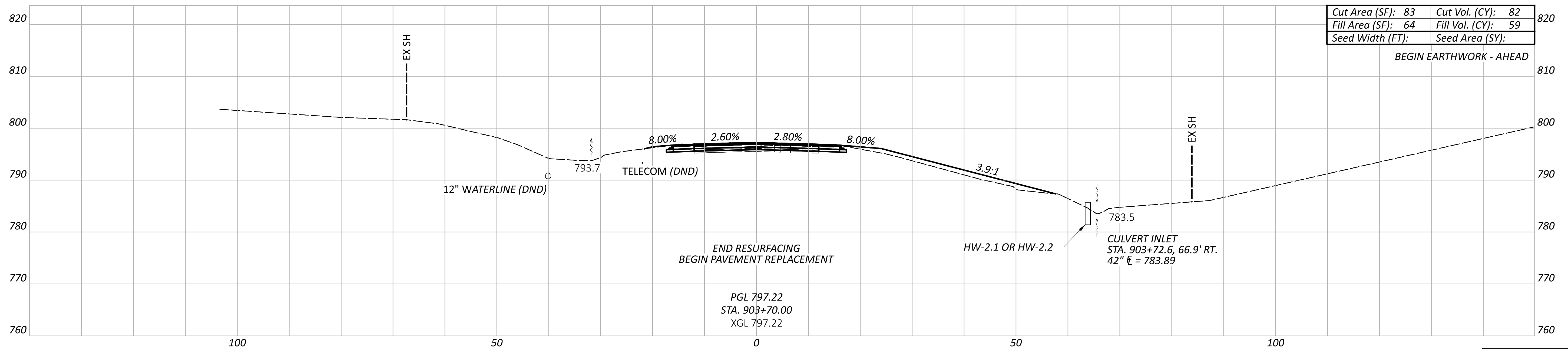
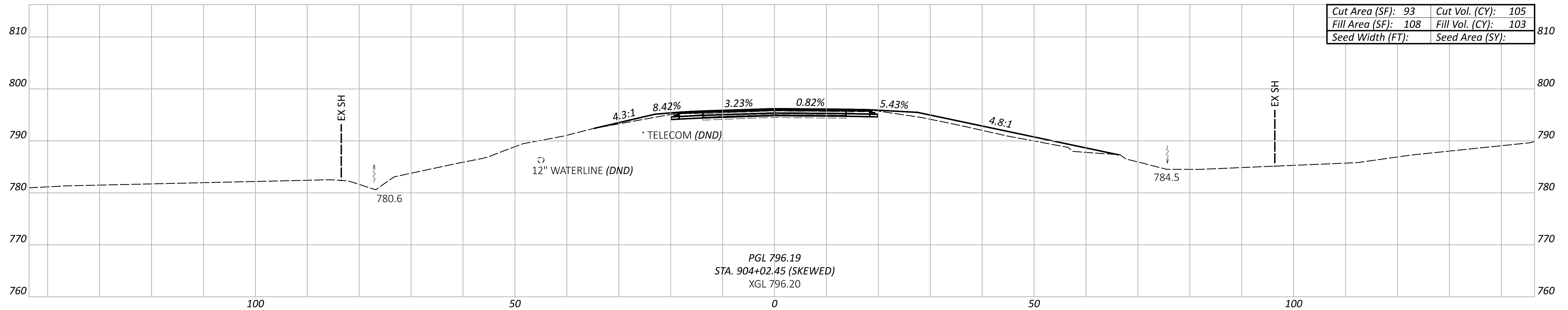
PROJECT ID

122339

SHEET TOTAL

P.14 34

CROSS SECTIONS - ATB-45-17.196
 STA. 903+20.00 TO STA. 902+80.00



Sheet Totals			SHEET TOTAL	
Seeding	Cut	Fill	P.15	34
187	162			

CROSS SECTIONS - ATB-45-17.196
 STA. 903+99.59 TO STA. 903+70.00

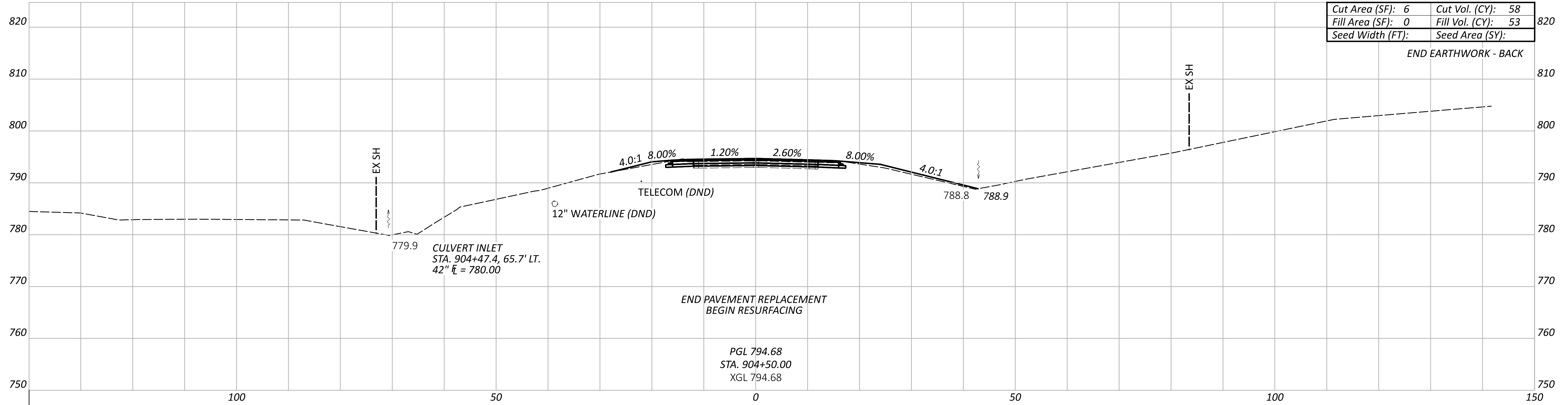
DESIGN AGENCY



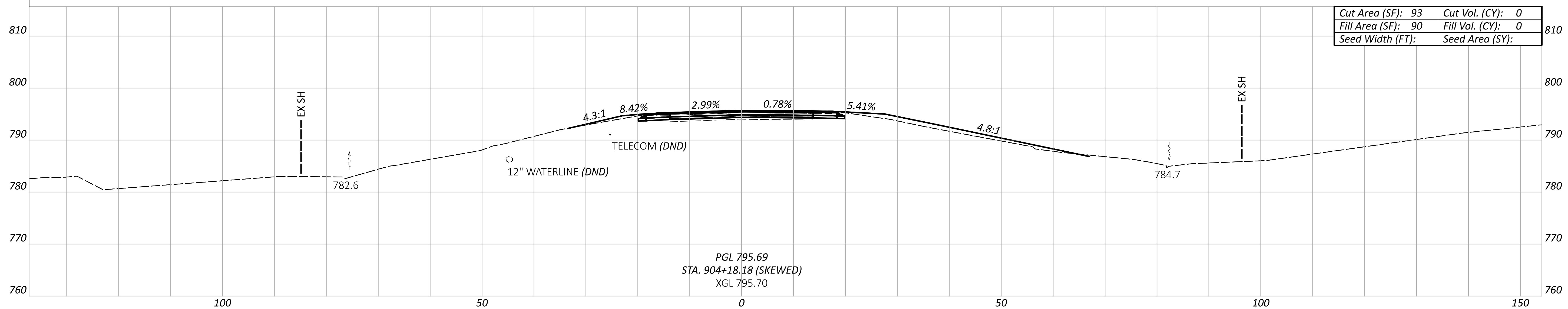
DESIGNER
 NKF

REVIEWER
 MJP 3/27/25

PROJECT ID
 122339




Cut Area (SF):	6	Cut Vol. (CY):	58
Fill Area (SF):	0	Fill Vol. (CY):	53
Seed Width (FT):		Seed Area (SY):	

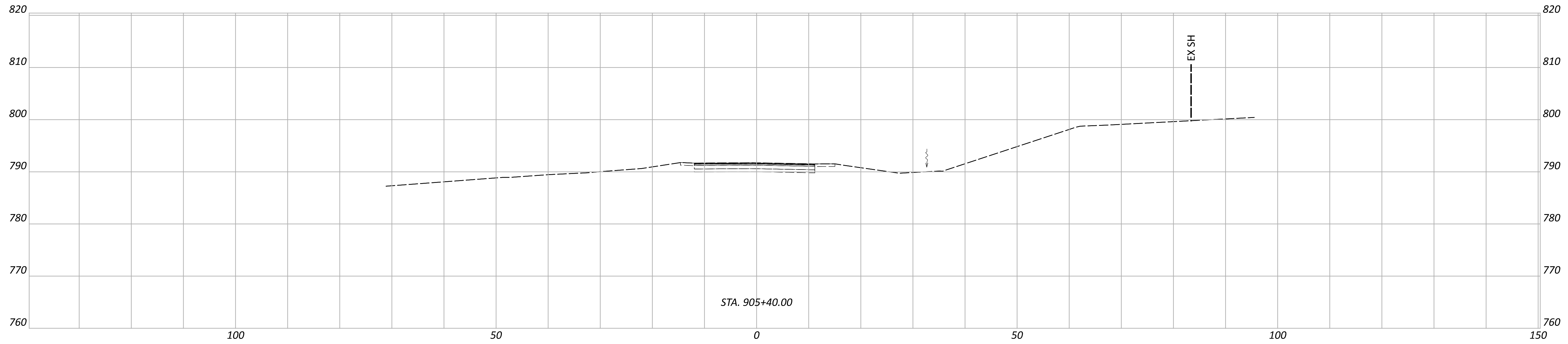


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Seed Width (FT):		Seed Area (SY):	

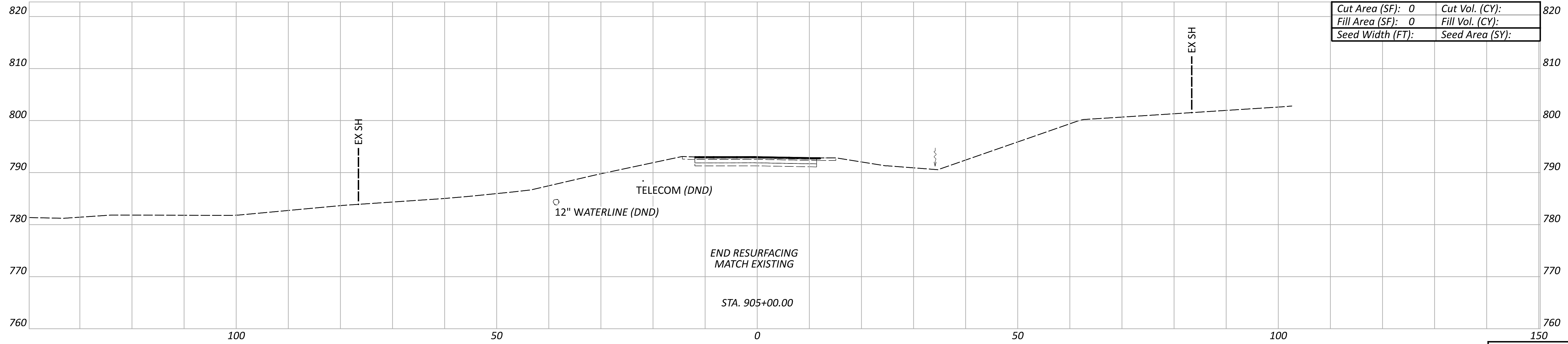
CROSS SECTIONS - ATB-45-17.196
 STA. 904+24.44 TO STA. 904+50.00

DESIGN AGENCY

 DESIGNER
 NKF
 REVIEWER
 MJP 3/27/25
 PROJECT ID
 122339

Sheet Totals			SHEET TOTAL	
Seeding	Cut	Fill	P.16	34
	58	53		



STA. 905+40.00



STA. 905+00.00

END RESURFACING
MATCH EXISTING

Cut Area (SF):	0	Cut Vol. (CY):	
Fill Area (SF):	0	Fill Vol. (CY):	
Seed Width (FT):		Seed Area (SY):	

Sheet Totals			122339	
Seeding	Cut	Fill	SHEET	TOTAL
			P.17	34

CROSS SECTIONS - ATB-45-17.196
STA. 905+00.00 TO STA. 905+40.00

DESIGN AGENCY



DESIGNER

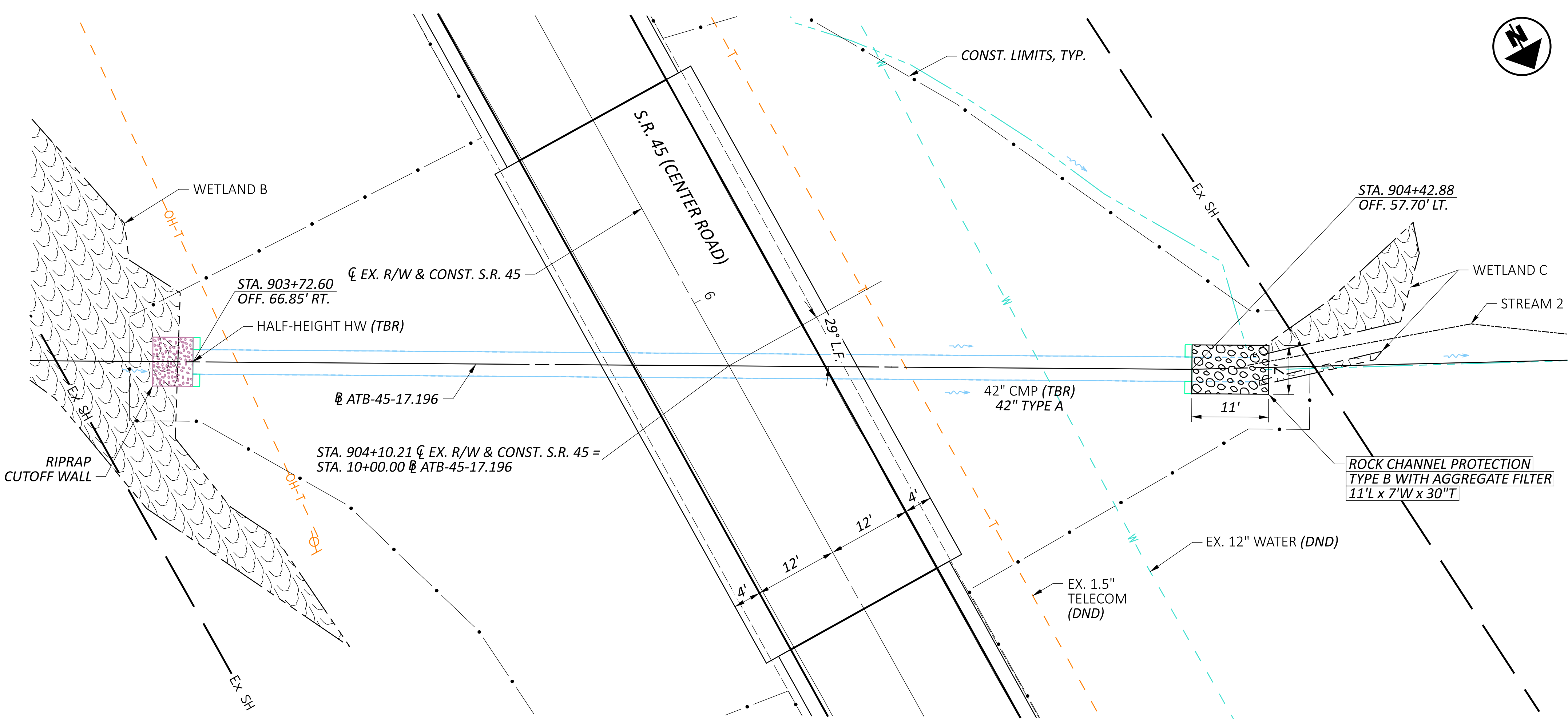
NKF

REVIEWER

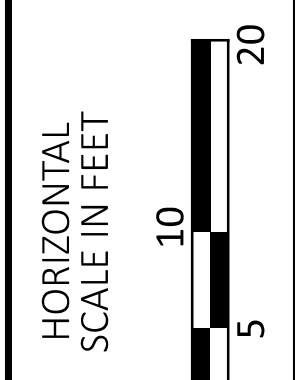
MJP 3/27/25

PROJECT ID

122339



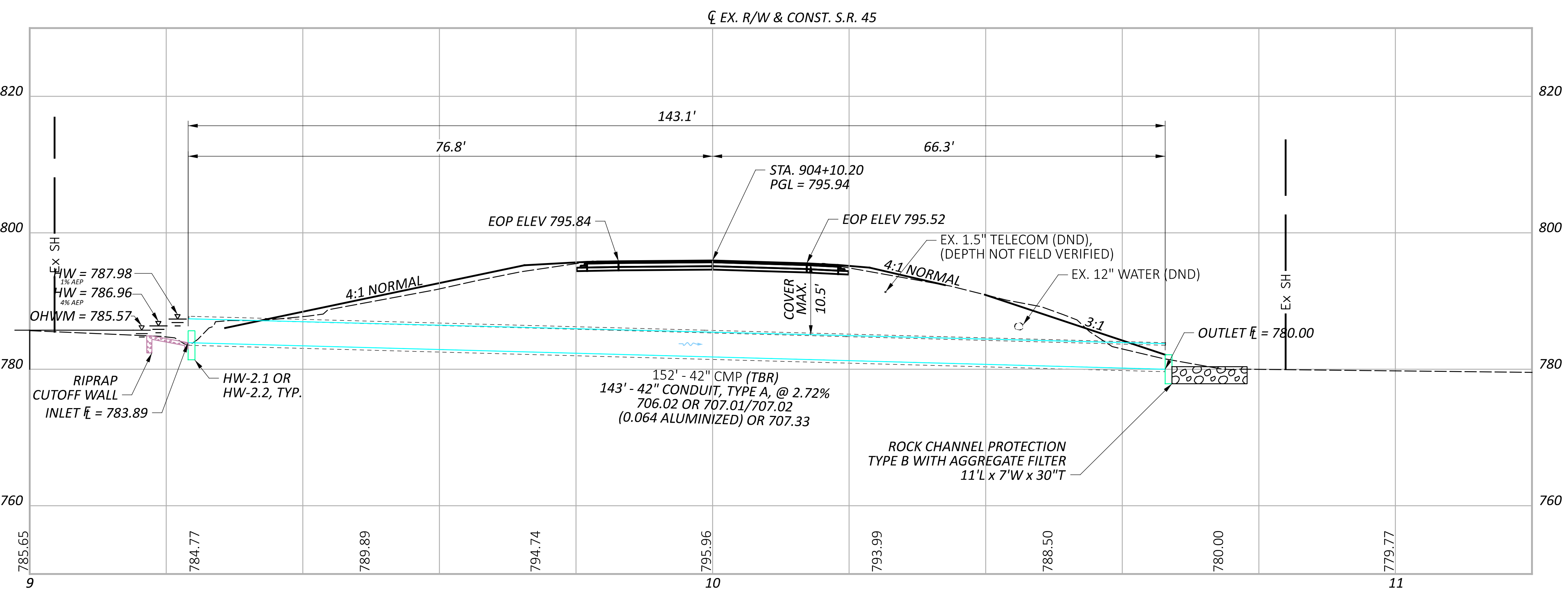
FOR BENCHMARK INFORMATION, SEE SHEET P.11
 FOR ESTIMATED QUANTITIES, SEE SHEET P.12



HYDRAULIC DATA		
DRAINAGE AREA =	70 ACRES	
Q (4%) =	42 CFS	V (4%) = 15.2 FT/S
Q (1%) =	60 CFS	V (1%) = 16.8 FT/S
ORDINARY HIGH WATER MARK:	785.57 FT	
DESIGN SERVICE LIFE:	75 YEARS	
ABRASION LEVEL:	1	
pH:	8.0	
HW (4%) =	786.96 FT	
HW (1%) =	787.98 FT	

EXISTING CULVERT	
TYPE:	CMP
SIZE:	42"
SKEW:	29° L.F.
ALIGNMENT:	TANGENT
DATE BUILT:	1959
CONDITION:	POOR
CFN:	1865001

PROPOSED CULVERT	
TYPE:	42" CONDUIT, TYPE A, 706.02 OR 707.01 / 707.02 (0.064 ALUMINIZED) OR 707.33
SKEW:	29° L.F.
ALIGNMENT:	TANGENT
CFN:	1999398



CULVERT DETAIL
 ATB-45-17.196

DESIGN AGENCY	
DESIGNER	NKF
REVIEWER	MJP 3/27/25
PROJECT ID	122339
SUBSET	TOTAL
1	1
SHEET	TOTAL
P.18	34

SURVEYING PARAMETERS - OHIO COUNTY COORDINATE SYSTEM (OCCS)

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE THIS SHEET OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL
 POSITIONING METHOD: STATIC
 MONUMENT TYPE: B

VERTICAL POSITIONING
 ORTHOMETRIC HEIGHT DATUM: NAVD 88
 GEOID: 2018

HORIZONTAL POSITIONING
 REFERENCE FRAME: NAD 83 (2011) (EPOCH: 2010.0000)
 ELLIPSOID: GRS80
 COORDINATE SYSTEM: ASHTABULA COUNTY LDP
 MAP PROJECTION: SINGAL PARALLEL LAMBERT CONIC CONFORMAL

CENTRAL LATITUDE: N 41-51-00
 CENTRAL LONGITUDE: E 279-15-00
 FALSE NORTHING: 328083.3333333
 FALSE EASTING: 164041.6666667
 PROJECTION SCALE FACTOR: 1.000032

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH C&MS 623.

UNITS ARE IN U.S. SURVEY FEET.
 USE THE FOLLOWING CONVERSION FACTOR:
 1 METER = 3.28083333333 U.S. SURVEY FEET

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

CEI The Illuminating Company Windstream Kinetic
 ATTN: John Zassick OSP Engineer II
 6896 Miller Road ATTN: Eric LaCourse
 Brecksville, OH 44141 330-805-5593 (cell)
 440-546-8706 Eric.LaCourse@windstream.com
 216-538-1580 (cell)
 jmzassick@firstenergycorp.com

Diversified Gas & Oil Plc Allied Universal
 ATTN: Matt Postlethwait ATTN: Mark Bradford
 Pipeline Technician - Ohio 4 Walker Way, Suite 1
 1026A Cookson Ave SE Albany, NY 12205
 New Philadelphia, OH 44663 518-527-5064 ext. 107
 330-417-1397 (cell) 518-362-6060 (cell)
 MPostlethwait@dgc.com mark.bradford@aus.com

ITEM SPECIAL - SURVEY CONTROL VERIFICATION

THE CONTRACTOR SHALL PERFORM THIS WORK TO VERIFY THE PROVIDED SURVEY CONTROL. THE CONTRACTOR WILL PERFORM THE VERIFICATION USING ONE OF THE TWO METHODS BELOW DEPENDENT UPON THE CONTRACTOR'S CHOSEN MEANS OF SURVEY CONTROL TO BE USED ON THE PROJECT. THE WORK SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN OHIO LICENSED SURVEYOR.

1. IF USING GPS DEVICES TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
 - a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLAN AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
 - b. PERFORM A SITE CALIBRATION UTILIZING THE AVAILABLE HORIZONTAL AND VERTICAL CONTROL POINTS PROVIDED IN THE PLAN.
 - c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.
2. IF USING CONVENTIONAL SURVEY INSTRUMENTATION TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
 - a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
 - b. LOCATE AND OBSERVE ANGLE AND DISTANCE TO ALL AVAILABLE HORIZONTAL CONTROL POINTS PROVIDED IN THE PLAN.
 - c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID ITEM.

CONTROL POINT (U.S. SURVEY FEET GROUND)					
POINT	NORTHING	EASTING	STATION	OFFSET	ELEV.
CP10	257673.777	186716.352			981.73
CP20	258756.595	186667.638	192+47.62	19.52' LT.	974.16
CP30	259687.846	186646.205	201+80.04	24.01' LT.	968.50
CENTERLINE ALIGNMENT					
MN1	258681.944	186688.280	191+72.67	0.00' RT.	
MN200	259607.948	186674.433	200+98.71	5.08' RT.	
MR200	259609.148	186707.718	200+98.78	33.30' RT.	
BENCHMARK					
BM1	258643.489	186707.092	974.85	18.04' LT.	974.85

PAVEMENT MARKINGS

ALL PAVEMENT MARKINGS THAT ARE REMOVED DURING THE CULVERT REPLACEMENT WILL BE REPLACED WITH ITEM 642 - TRAFFIC PAINT. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY (LANE WIDTH 12 FT):

ITEM 642 - EDGE LINE, 6", TYPE 1 0.04 MI
 ITEM 642 - CENTER LINE, 6", TYPE 1 0.02 MI

RIPRAP TYPE D, AS PER PLAN

FOLLOW THE RIPRAP CUTOFF WALL DETAIL IN STANDARD CONSTRUCTION DRAWING DM-1.1, EXCEPT THE 5 FT HORIZONTAL LENGTH WILL BE EXTENDED TO 11 FT.

ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND CULVERTS (ATB-193-11.140)

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE PLANS, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING, AS PER PLAN, AROUND CULVERTS. SCALPING IS NOT REQUIRED FOR THIS ITEM OF WORK. ALL VEGETATION SHALL BE REMOVED WITHIN 15 FEET (OR TO THE R/W LIMITS, WHICHEVER IS CLOSER) OF THE HEADWALLS, ABUTMENTS, AND/OR PIERS.

ALL OTHER PROVISIONS AS SET FORTH IN THE C&MS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM BID PRICE FOR IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING, AS PER PLAN, AROUND CULVERTS.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, TOPSOIL 42 CY
 659, SEEDING AND MULCHING 377 SY
 659, COMMERCIAL FERTILIZER 0.05 TON
 659, LIME 0.08 ACRES
 659, WATER 2 M. GAL.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

CONDUIT IDENTIFICATION SIGNS

CONDUIT IDENTIFICATION SIGNS (I-H25b) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR ATB-193-11.140

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:
 ITEM 630 - SIGN, FLAT SHEET, 730.20, 1 SQ FT
 ITEM 630 - GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT

EXCAVATION AND EMBANKMENT

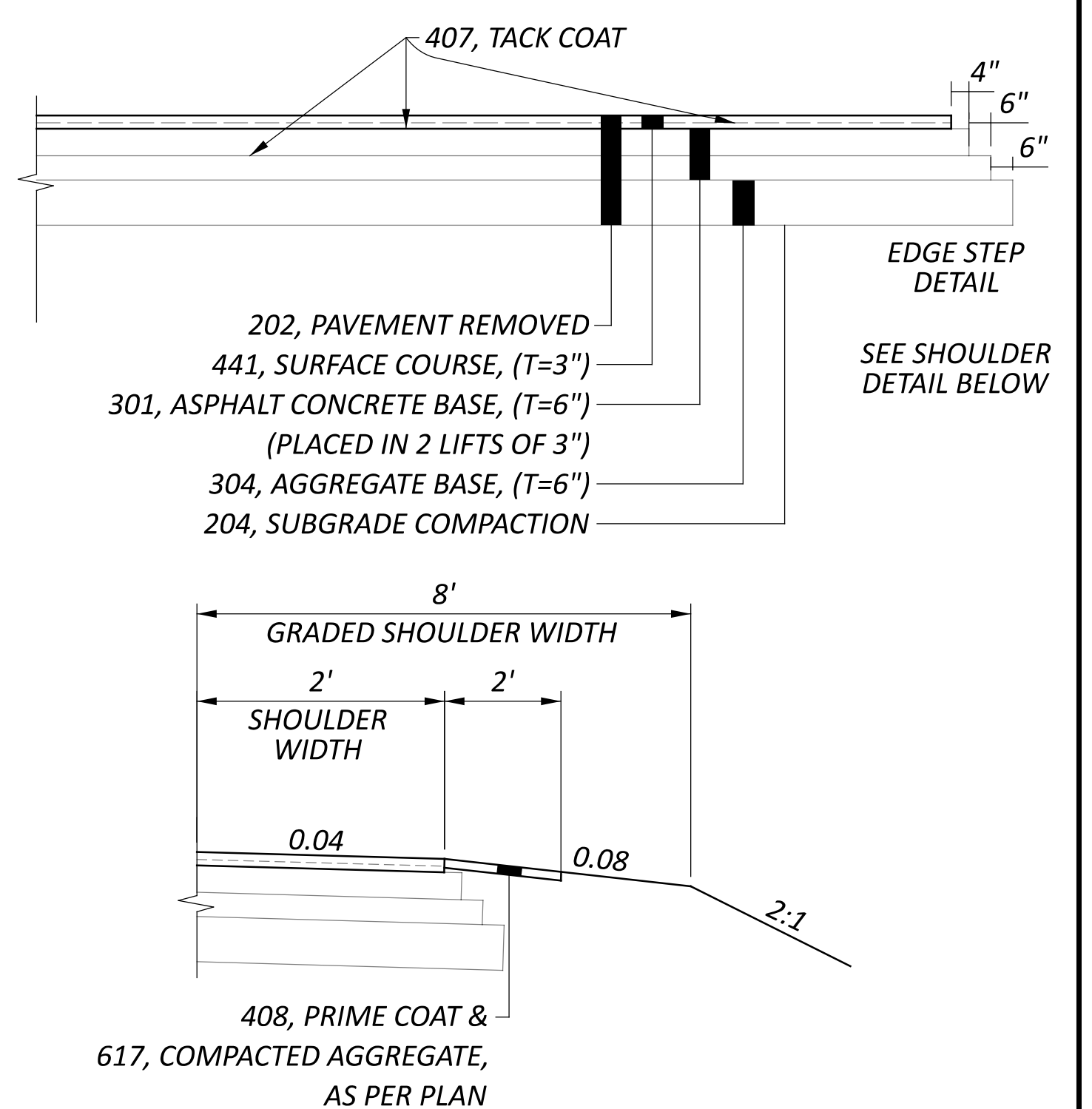
THE FOLLOWING QUANTITIES HAVE BEEN TAKEN FROM THE CROSS SECTION SHEETS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 203 - EXCAVATION 116 CY
 ITEM 204 - EMBANKMENT 16 CY

PAVEMENT RESTORATION AND RESURFACING FOR CONDUITS

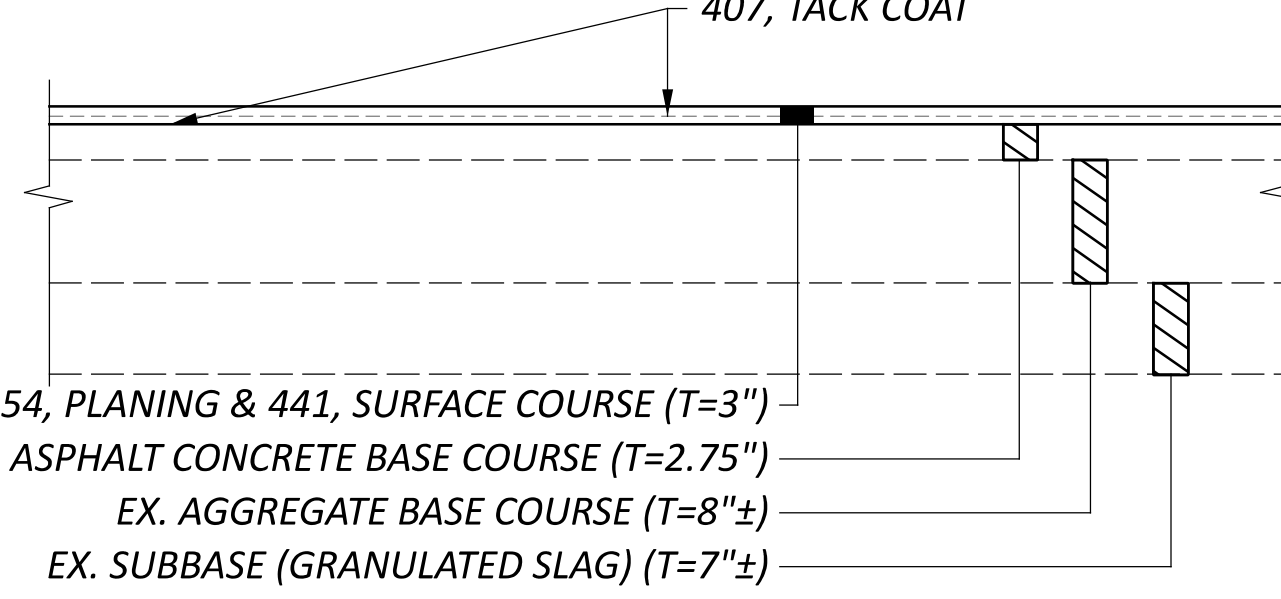
THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR PAVEMENT RESTORATION AFTER THE INSTALLATION AND/OR REMOVAL OF CONDUITS

STA. 194+70.00 TO STA. 195+25.00
 ITEM 202 PAVEMENT REMOVED, 162 SY
 ITEM 204 SUBGRADE COMPACTION, 252 SY
 ITEM 301 ASPHALT CONCRETE BASE, PG64-22, (449), (T=6"), 28 CY
 ITEM 304 AGGREGATE BASE, (T=6"), 42 CY
 ITEM 407 NON-TRACKING TACK COAT, (0.06 GAL/SY), 20 GAL.
 ITEM 408 PRIME COAT, AS PER PLAN, (0.40 GAL/SY), 10 GAL.
 ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449), AS PER PLAN, PG64-22, (T=3"), 14 CY (PLACED IN 2 LIFTS OF 1.5")
 ITEM 617 COMPACTED AGGREGATE, AS PER PLAN, (T=1")*, 1 CY



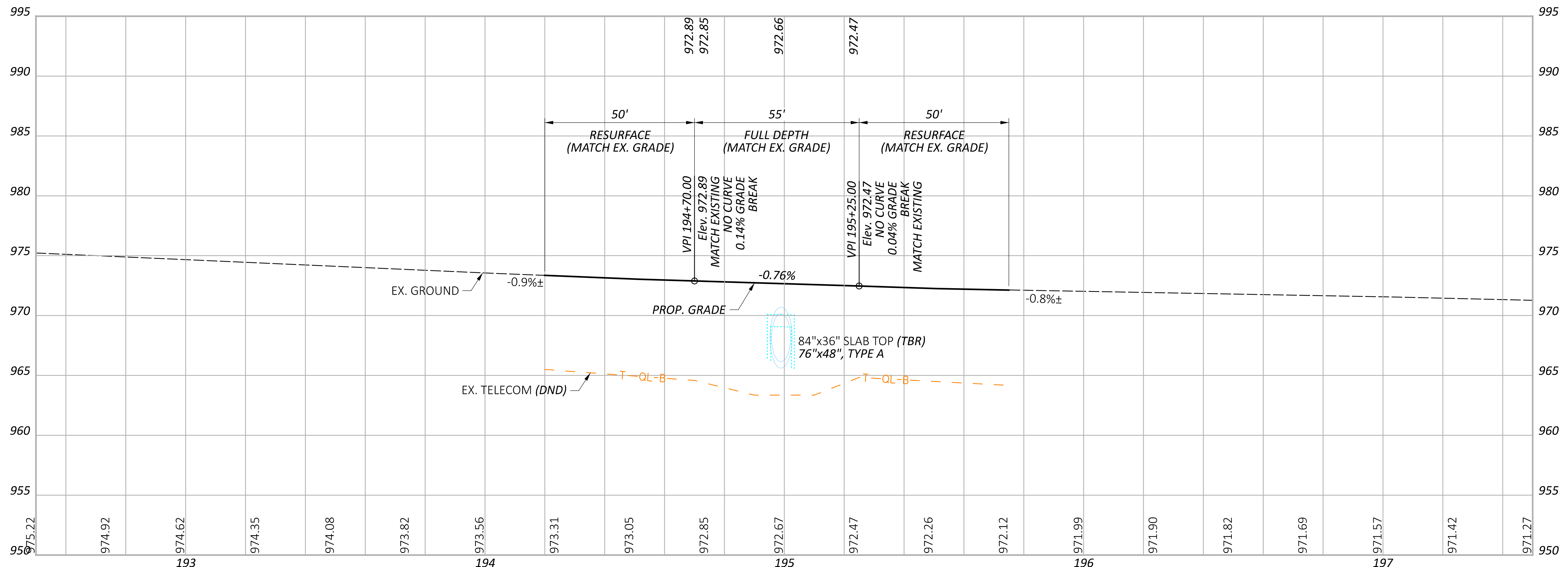
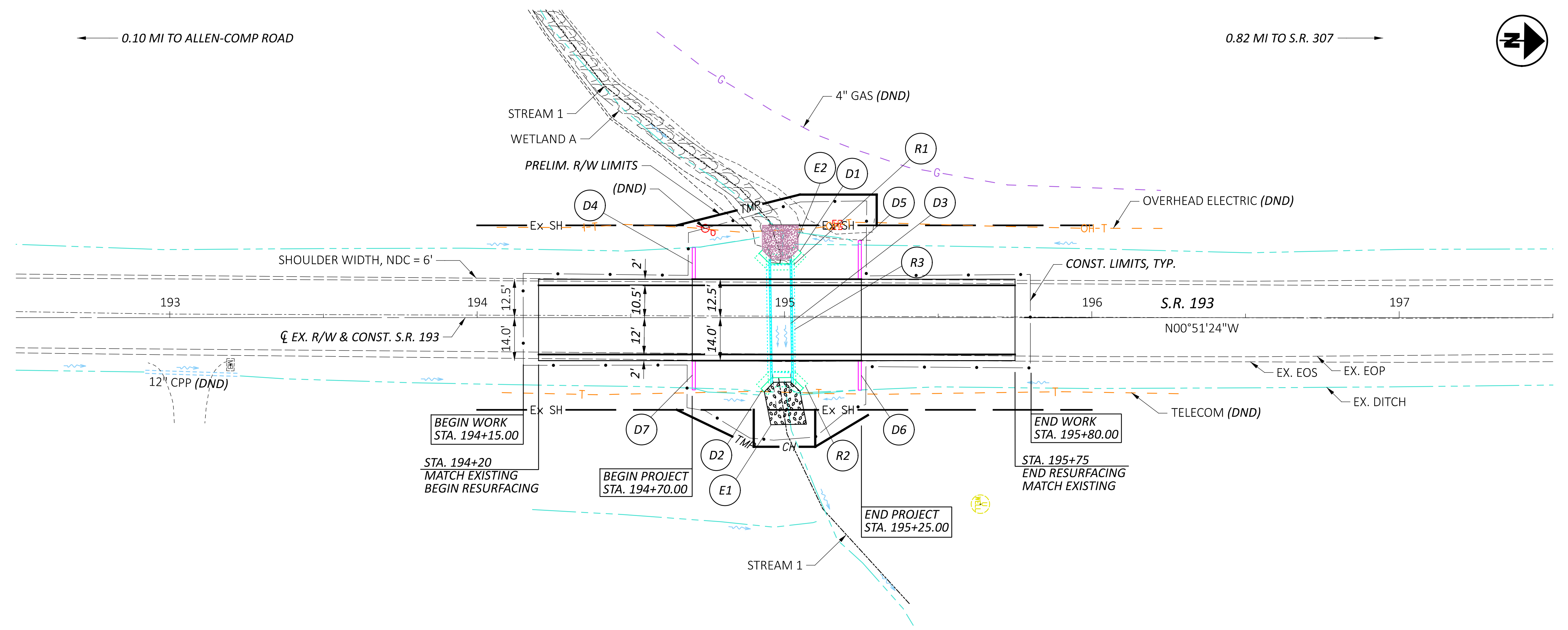
THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO RESURFACE THE ROADWAY AFTER THE INSTALLATION AND/OR REMOVAL OF CONDUITS

STA. 194+20 TO STA. 194+70
 STA. 195+25 TO STA. 195+75
 ITEM 254 PAVEMENT PLANING (T=3"), 296 SY
 ITEM 407 NON-TRACKING TACK COAT, (0.09 GAL/SY), 27 GAL.
 ITEM 408 PRIME COAT, AS PER PLAN, (0.40 GAL/SY), 19 GAL.
 ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449), AS PER PLAN, PG64-22, (T=3"), 25 CY
 ITEM 617 COMPACTED AGGREGATE, AS PER PLAN (T=1")*, 2 CY



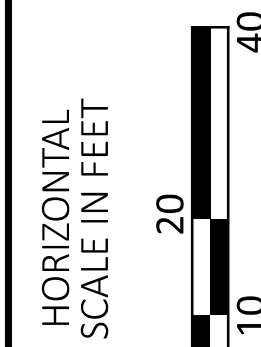
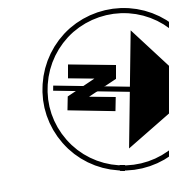
*SHORT PROJECT, SAFETY EDGE NOT INCLUDED





← 0.10 MI TO ALLEN-COMP ROAD

0.82 MI TO S.R. 307 →



PLAN AND PROFILE
 ATB-193-11.140

DESIGN AGENCY



DESIGNER

NKF

REVIEWER

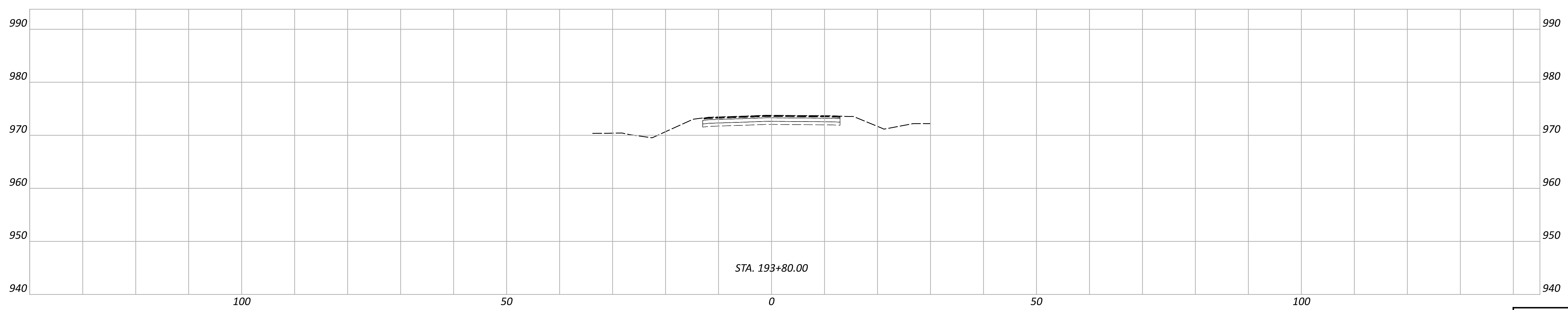
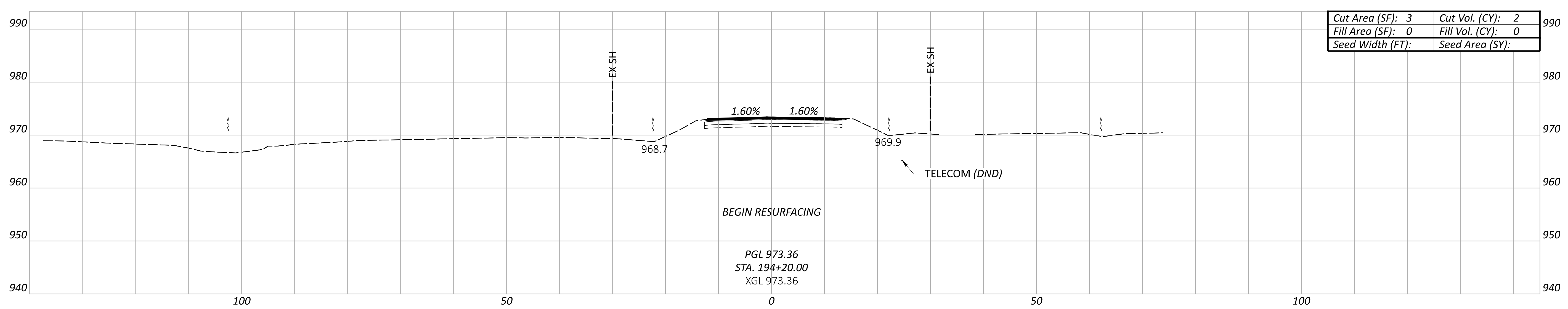
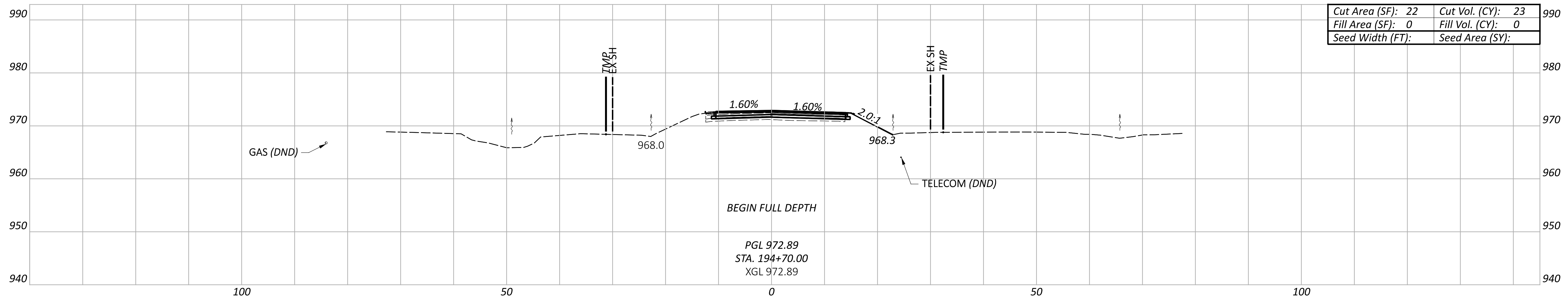
MJP 3/27/25

PROJECT ID

122339

SHEET TOTAL

P.21 34

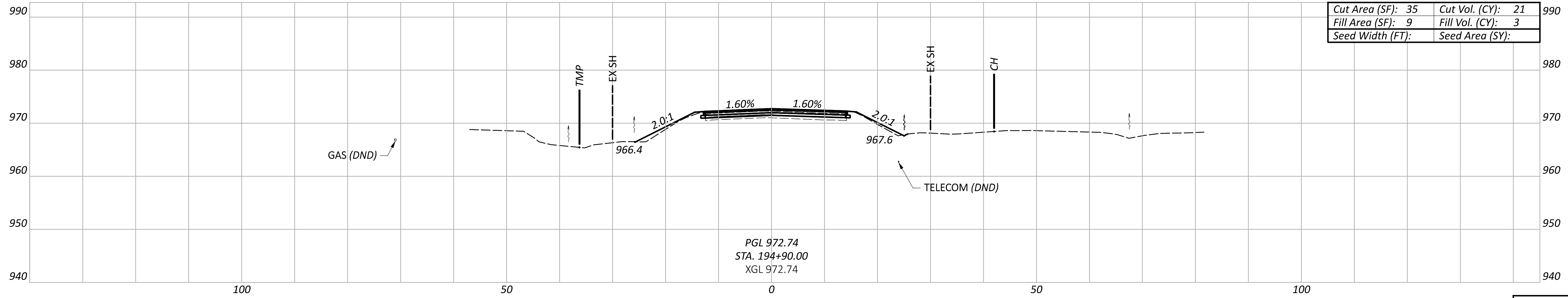
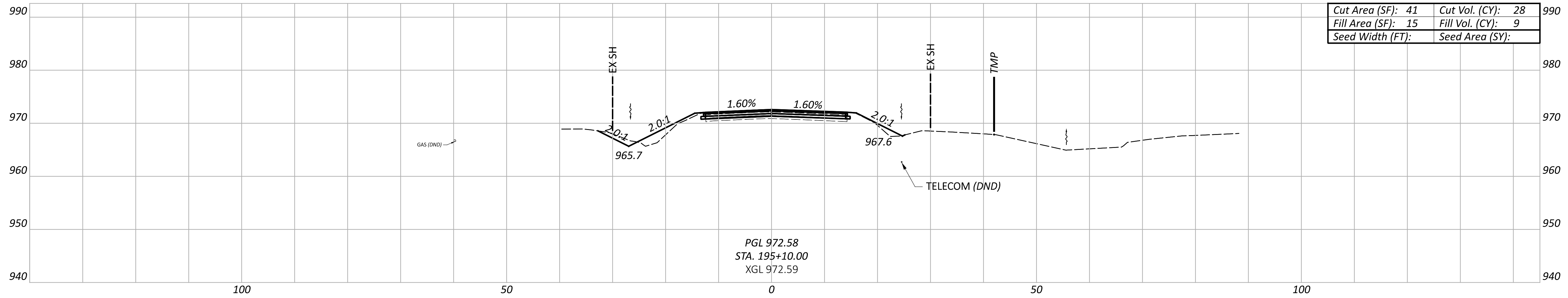
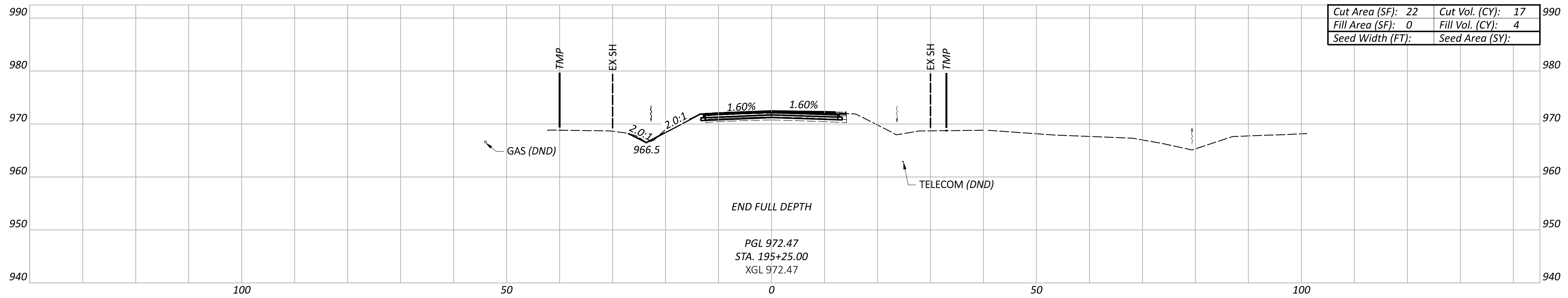


CROSS SECTIONS - ATB-193-11.140
 STA. 193+80.00 TO STA. 194+70.00


DESIGN AGENCY

DESIGNER: NKF
 REVIEWER: MJP 3/27/25
 PROJECT ID: 122339

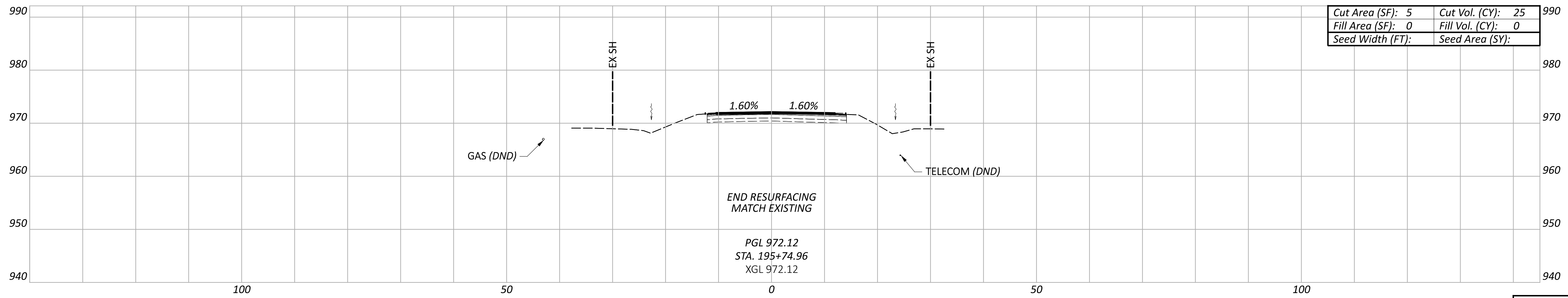
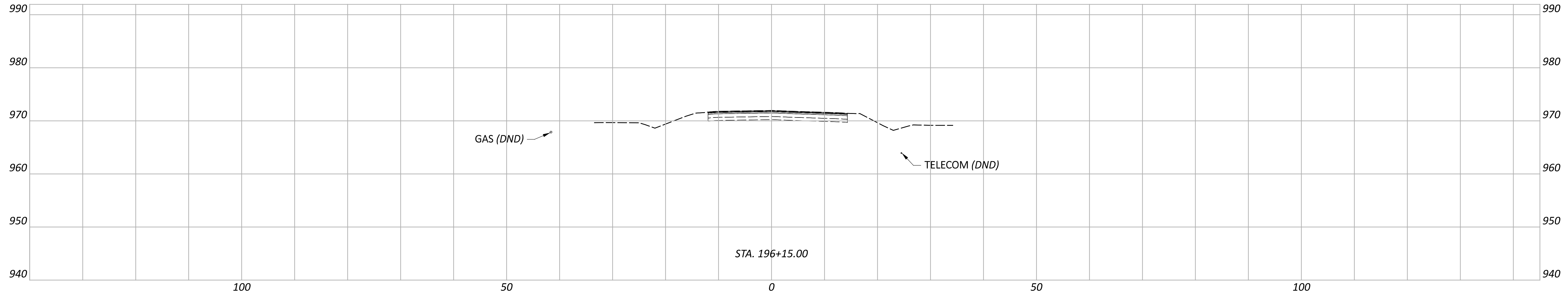
Sheet Totals			SHEET TOTAL	
Seeding	Cut	Fill	P.22	34
	25	0		



CROSS SECTIONS - ATB-193-11.140
 STA. 194+90.00 TO STA. 195+25.00

DESIGN AGENCY

 DESIGNER
 NKF
 REVIEWER
 MJP 3/27/25
 PROJECT ID
 122339

Sheet Totals			122339	
Seeding	Cut	Fill	SHEET	TOTAL
66	16		P.23	34



Cut Area (SF):	5	Cut Vol. (CY):	25
Fill Area (SF):	0	Fill Vol. (CY):	0
Seed Width (FT):		Seed Area (SY):	

Sheet Totals			SHEET TOTAL	
Seeding	Cut	Fill	P.24	34
	25	0		

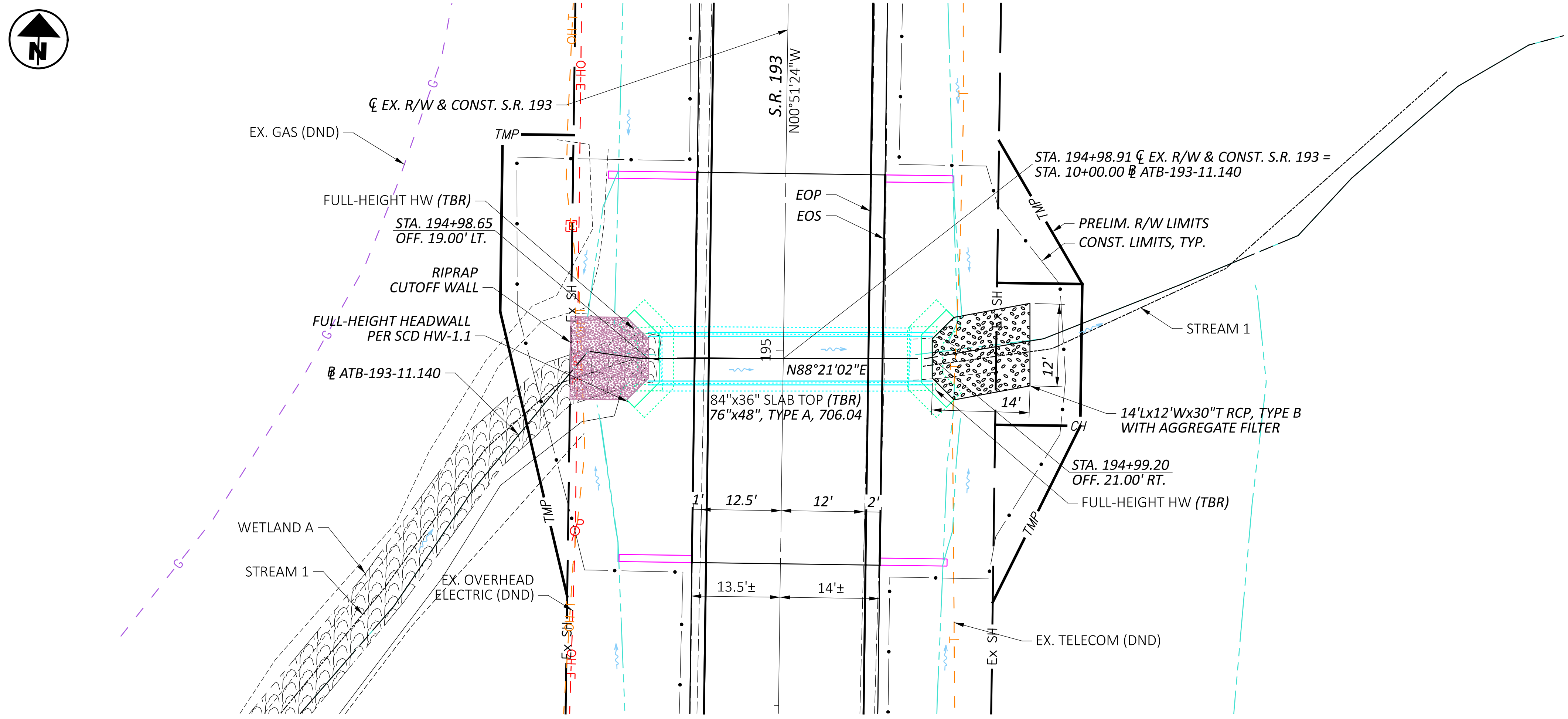
CROSS SECTIONS - ATB-193-11.140
 STA. 195+74.96 TO STA. 196+15.00

DESIGN AGENCY

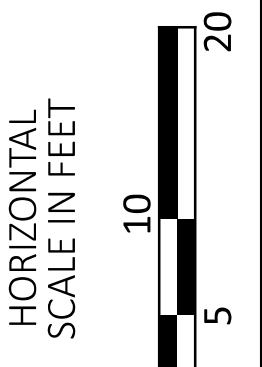
DESIGNER
 NKF

REVIEWER
 MJP 3/27/25

PROJECT ID
 122339



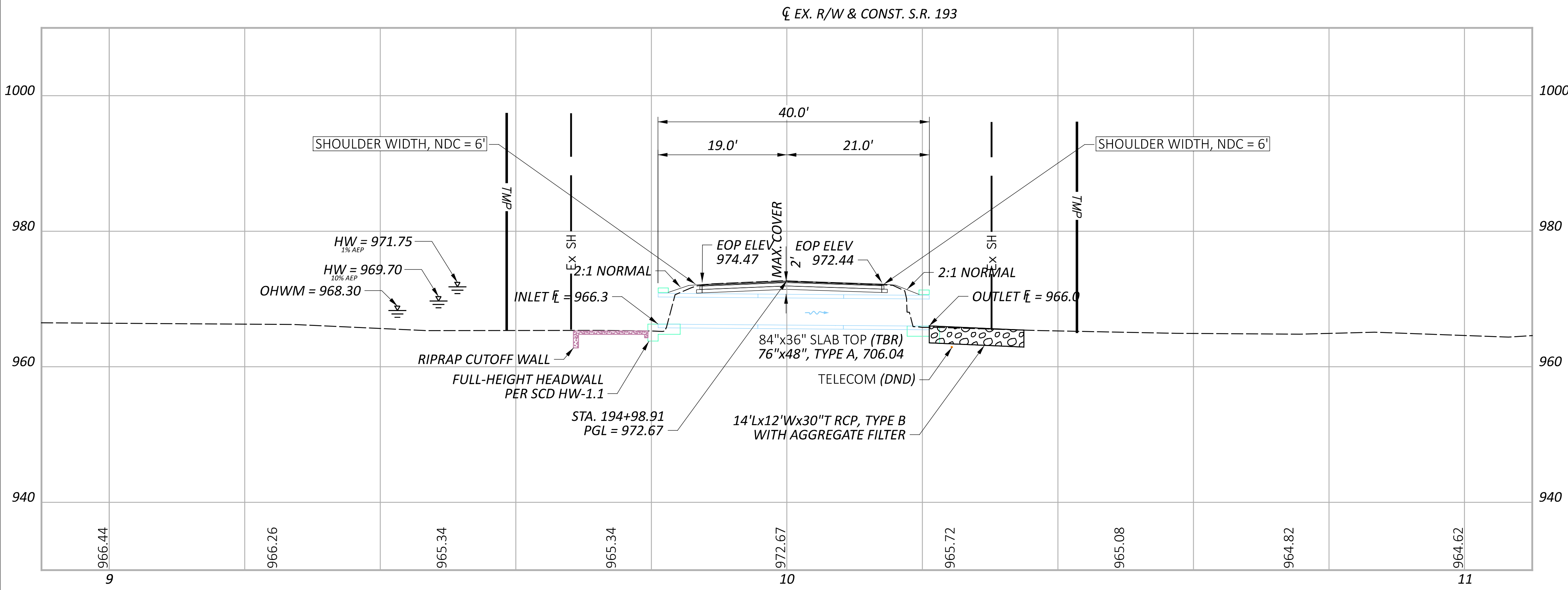
FOR BENCHMARK INFORMATION, SEE SHEET P.19
 FOR ESTIMATED QUANTITIES, SEE SHEET P.20



HYDRAULIC DATA		
DRAINAGE AREA =	186 ACRES	
Q (10%) =	101 CFS	V (10%) = 11.5 FT/S
Q (1%) =	191 CFS	V (1%) = 13.8 FT/S
ORDINARY HIGH WATER MARK:	968.3	
DESIGN SERVICE LIFE:	75 YEARS	
ABRASION LEVEL:	1	
pH:	8.1	

EXISTING CULVERT	
TYPE:	SLAB TOP
SIZE:	84"x36"
SKEW:	1° R.F.
ALIGNMENT:	TANGENT
DATE BUILT:	UNKNOWN
CONDITION:	FAIR
CFN:	1881793

PROPOSED CULVERT	
TYPE:	76"x48" CONDUIT, TYPE A, 706.04
SKEW:	NONE
ALIGNMENT:	TANGENT
CFN:	1999405



CULVERT DETAIL
 ATB-193-11.140

DESIGN AGENCY	
DESIGNER	NKF
REVIEWER	MJP 3/27/25
PROJECT ID	122339
SUBSET	TOTAL
1	1
SHEET	TOTAL
P.25	34

SURVEYING PARAMETERS - OHIO COUNTY COORDINATE SYSTEM (OCCS)

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE THIS SHEET OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL
 POSITIONING METHOD: STATIC
 MONUMENT TYPE: B

VERTICAL POSITIONING
 ORTHOMETRIC HEIGHT DATUM: NAVD 88
 GEOID: 2018

HORIZONTAL POSITIONING
 REFERENCE FRAME: NAD 83 (2011) (EPOCH: 2010.0000)
 ELLIPSOID: GRS80
 COORDINATE SYSTEM: TRUMBULL COUNTY LDP
 MAP PROJECTION: TRANSVERSE MERCATOR

CENTRAL LATITUDE: N 39-54-00
 CENTRAL LONGITUDE: E 279-09-00
 FALSE NORTHING: 328083.3333333
 FALSE EASTING: 164041.6666667
 PROJECTION SCALE FACTOR: 1.000032

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH C&MS 623.

UNITS ARE IN U.S. SURVEY FEET.
 USE THE FOLLOWING CONVERSION FACTOR:
 1 METER = 3.28083333333 U.S. SURVEY FEET

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

Brightspeed/Lumen/CenturyLink
 ATTN: Alan Peters
 3801 Elm Road
 Warren, OH 44502
 330-841-1408
 330-219-3306 (cell)
 Alan.L.Peters@brightspeed.com
 relocations@lumen.com
 relocations@brightspeed.com

Ohio Edison
 ATTN: Phillip Rawson
 730 South Avenue
 Youngstown, OH 44502
 724-255-1332 (cell)
 prawson@firstenergycorp.com

ITEM SPECIAL - SURVEY CONTROL VERIFICATION

THE CONTRACTOR SHALL PERFORM THIS WORK TO VERIFY THE PROVIDED SURVEY CONTROL. THE CONTRACTOR WILL PERFORM THE VERIFICATION USING ONE OF THE TWO METHODS BELOW DEPENDENT UPON THE CONTRACTOR'S CHOSEN MEANS OF SURVEY CONTROL TO BE USED ON THE PROJECT. THE WORK SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN OHIO LICENSED SURVEYOR.

1. IF USING GPS DEVICES TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
 - a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLAN AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
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 - c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.
2. IF USING CONVENTIONAL SURVEY INSTRUMENTATION TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL
 - a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
 - b. LOCATE AND OBSERVE ANGLE AND DISTANCE TO ALL AVAILABLE HORIZONTAL CONTROL POINTS PROVIDED IN THE PLAN.
 - c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID ITEM.

CONTROL POINT (U.S. SURVEY FEET GROUND)					
POINT	NORTHING	EASTING	STATION	OFFSET	ELEV.
CP10	574016.771	214650.545	47+60.24	15.43' RT.	1080.13
CP20	574831.296	214620.332	55+74.68	17.09' LT.	1068.82
CP30	575790.529	214664.342	65+34.02	24.24' RT.	1075.50
CENTERLINE ALIGNMENT					
ML36	572864.644	214598.93	36+07.97	32.92' LT.	
MR36	572864.165	214664.825			
ML39	573156.691	214599.658	39+00.02	33.02' LT.	
MR39	573156.516	214665.607	39+00.03	32.93' RT.	
MR50	574256.505	214668.684	50+00.03	32.89' RT.	
ML63	575644.997	214606.439	63+88.34	33.29' LT.	
MR63	575645.168	214672.687			
BENCHMARK					
BM1	574556.781	214617.663	53+00.16	18.98' LT.	1071.17

PAVEMENT MARKINGS

ALL PAVEMENT MARKINGS THAT ARE REMOVED DURING THE CULVERT REPLACEMENT WILL BE REPLACED WITH ITEM 642 - TRAFFIC PAINT. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY (LANE WIDTH 12 FT):

ITEM 642 - EDGE LINE, 6", TYPE 1	0.06 MI
ITEM 642 - CENTER LINE, 6", TYPE 1	0.03 MI

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, TOPSOIL	59 CY
659, SEEDING AND MULCHING	532 SY
659, COMMERCIAL FERTILIZER	0.07 TON
659, LIME	0.11 ACRES
659, WATER	3 M. GAL.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND CULVERTS (TRU-193-23.897)

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE PLANS, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING, AS PER PLAN, AROUND CULVERTS. SCALPING IS NOT REQUIRED FOR THIS ITEM OF WORK. ALL VEGETATION SHALL BE REMOVED WITHIN 15 FEET (OR TO THE R/W LIMITS, WHICHEVER IS CLOSER) OF THE HEADWALLS, ABUTMENTS, AND/OR PIERS.

ALL OTHER PROVISIONS AS SET FORTH IN THE C&MS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM BID PRICE FOR IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING, AS PER PLAN, AROUND CULVERTS.

CONDUIT IDENTIFICATION SIGNS

CONDUIT IDENTIFICATION SIGNS (I-H25b) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR TRU-193-23.897

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:

- ITEM 630 - SIGN, FLAT SHEET, 730.20, 1 SQ FT
- ITEM 630 - GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT
- ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, 1 EACH
- ITEM 630 - REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 1 EACH

EXCAVATION AND EMBANKMENT

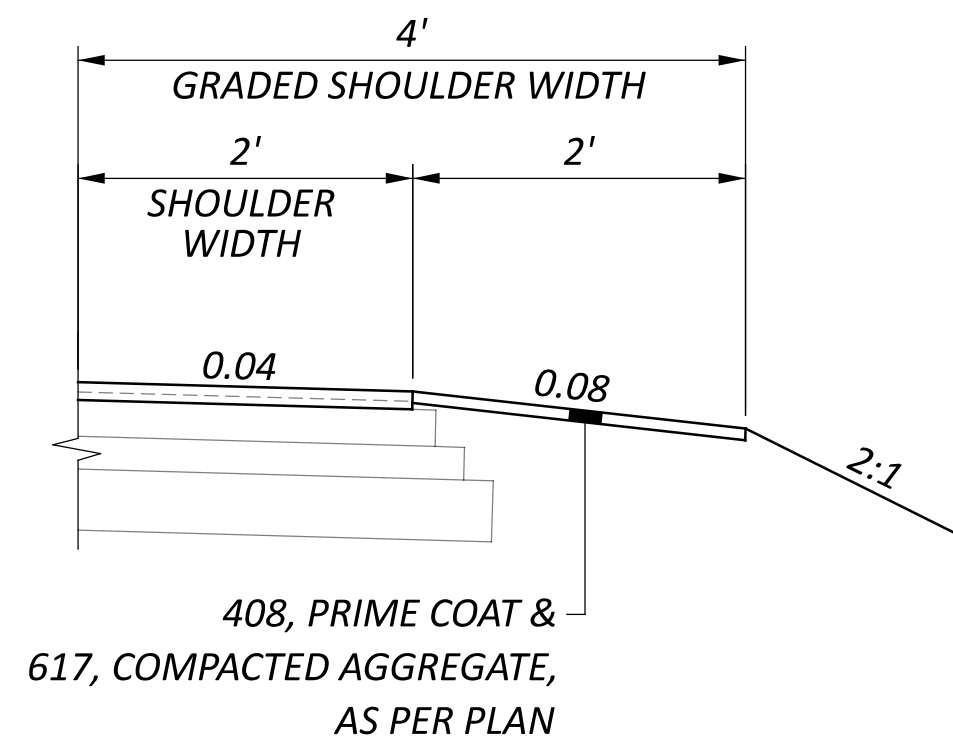
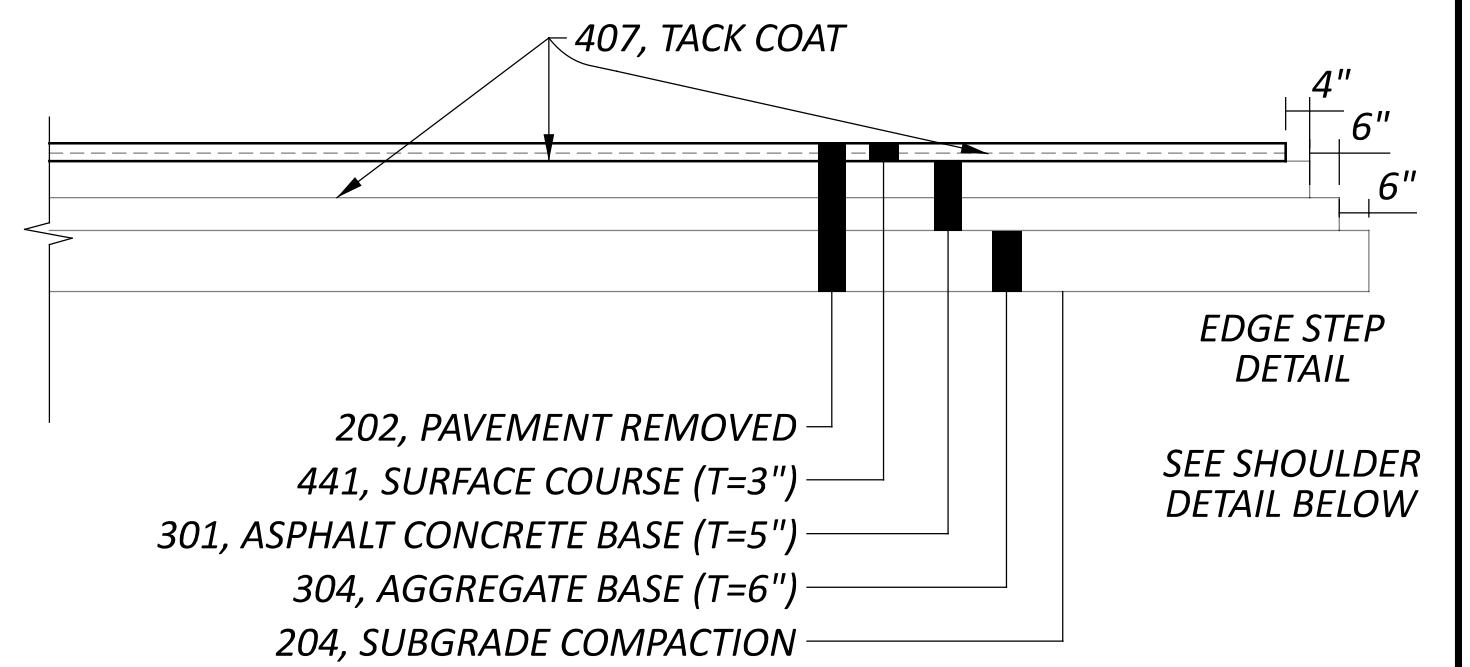
THE FOLLOWING QUANTITIES HAVE BEEN TAKEN FROM THE CROSS SECTION SHEETS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 203 - EXCAVATION	267 CY
ITEM 204 - EMBANKMENT	24 CY

PAVEMENT RESTORATION AND RESURFACING FOR CONDUITS

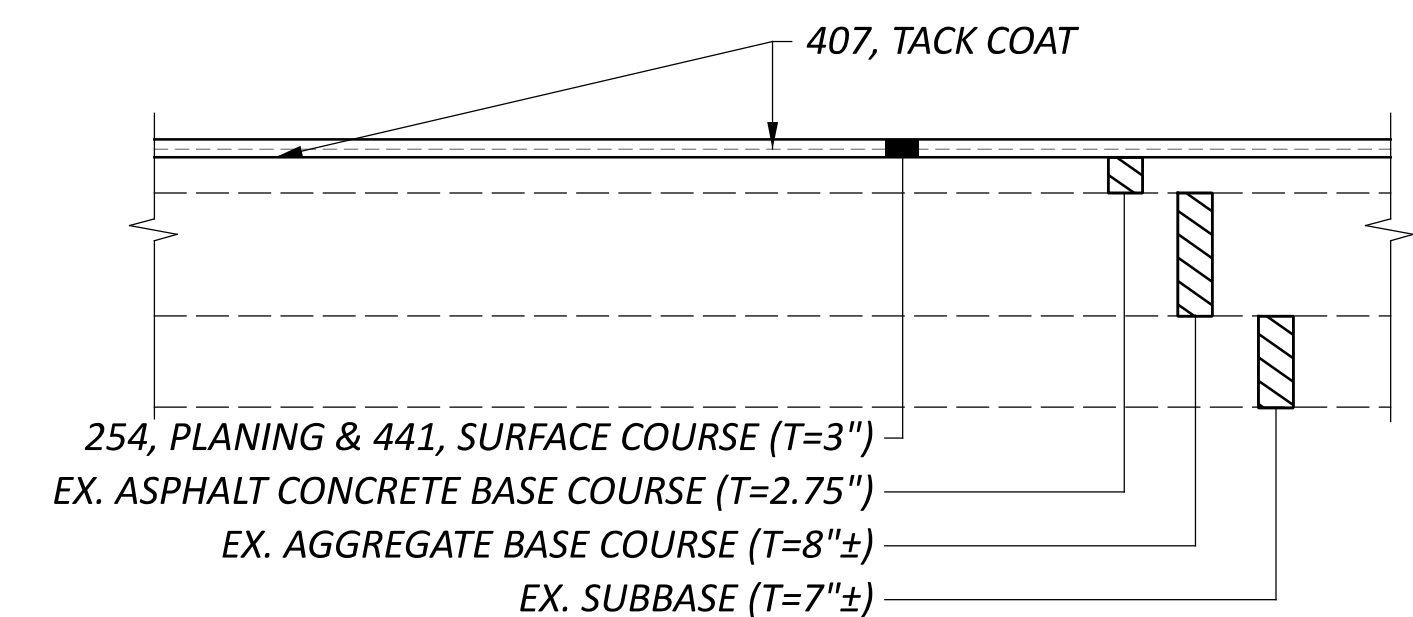
THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR PAVEMENT RESTORATION AFTER THE INSTALLATION AND/OR REMOVAL OF CONDUITS

- STA. 55+00.00 TO STA. 55+50.00
- ITEM 202 PAVEMENT REMOVED, 156 SY
 - ITEM 204 SUBGRADE COMPACTION, 166 SY
 - ITEM 301 ASPHALT CONCRETE BASE, PG64-22, (449), 23 CY
 - ITEM 304 AGGREGATE BASE, (T=6"), 28 CY
 - ITEM 407 NON-TRACKING TACK COAT, (@ 0.06 GAL/SY), 20 GAL.
 - ITEM 408 PRIME COAT, AS PER PLAN, (@ 0.04 GAL/SY), 10 GAL.
 - ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449), AS PER PLAN, PG64-22 (T=3"), 14 CY (PLACED IN 2 LIFTS OF 1.5")
 - ITEM 617 COMPACTED AGGREGATE, AS PER PLAN (T=1")*, 1 CY



THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO RESURFACE THE ROADWAY AFTER THE INSTALLATION AND/OR REMOVAL OF CONDUITS


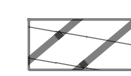
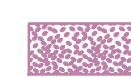
- STA. 54+50.00 TO STA. 55+00.00
- STA. 55+50.00 TO STA. 56+00.00
- ITEM 254 PAVEMENT PLANING (T=3"), 312 SY
 - ITEM 407 NON-TRACKING TACK COAT, (@ 0.09 GAL/SY), 29 GAL.
 - ITEM 408 PRIME COAT, AS PER PLAN, (@ 0.04 GAL/SY), 19 GAL.
 - ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449), AS PER PLAN, PG64-22 (T=3"), 26 CY
 - ITEM 617 COMPACTED AGGREGATE, AS PER PLAN (T=1")*, 2 CY

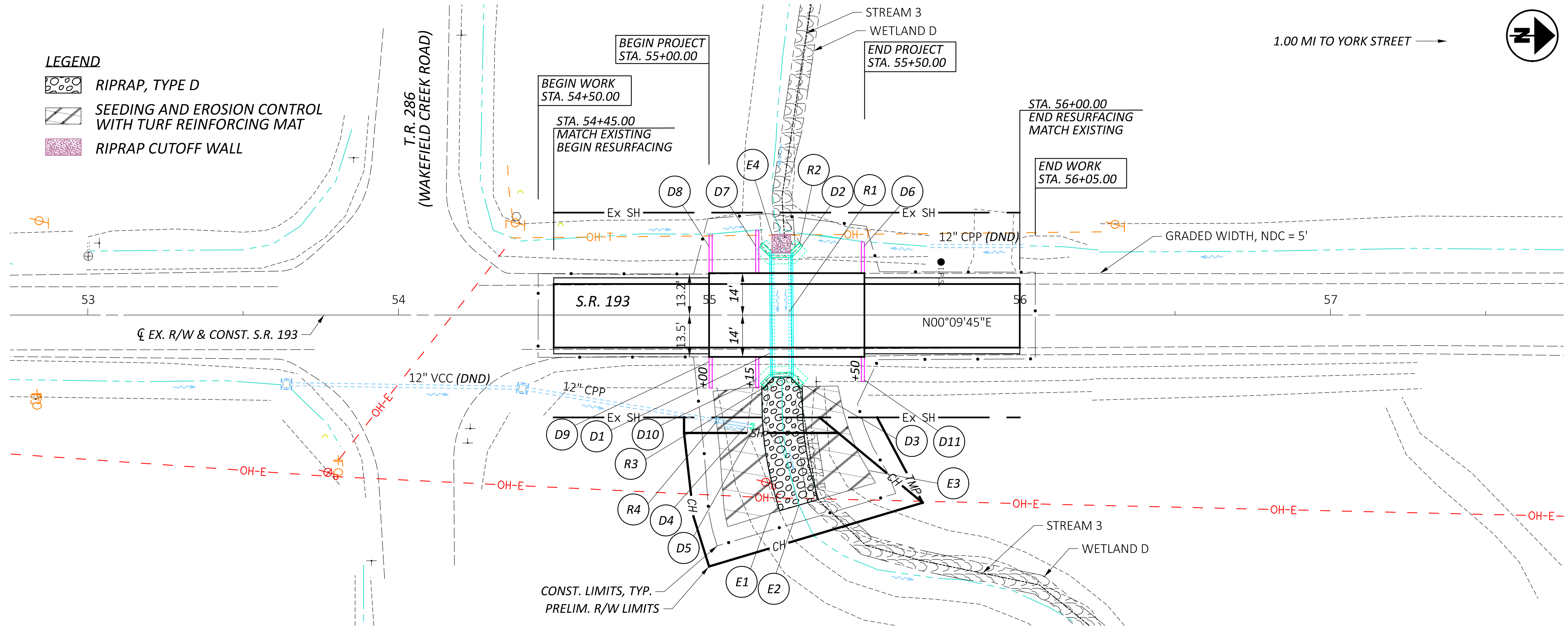


*SHORT PROJECT, SAFETY EDGE NOT INCLUDED

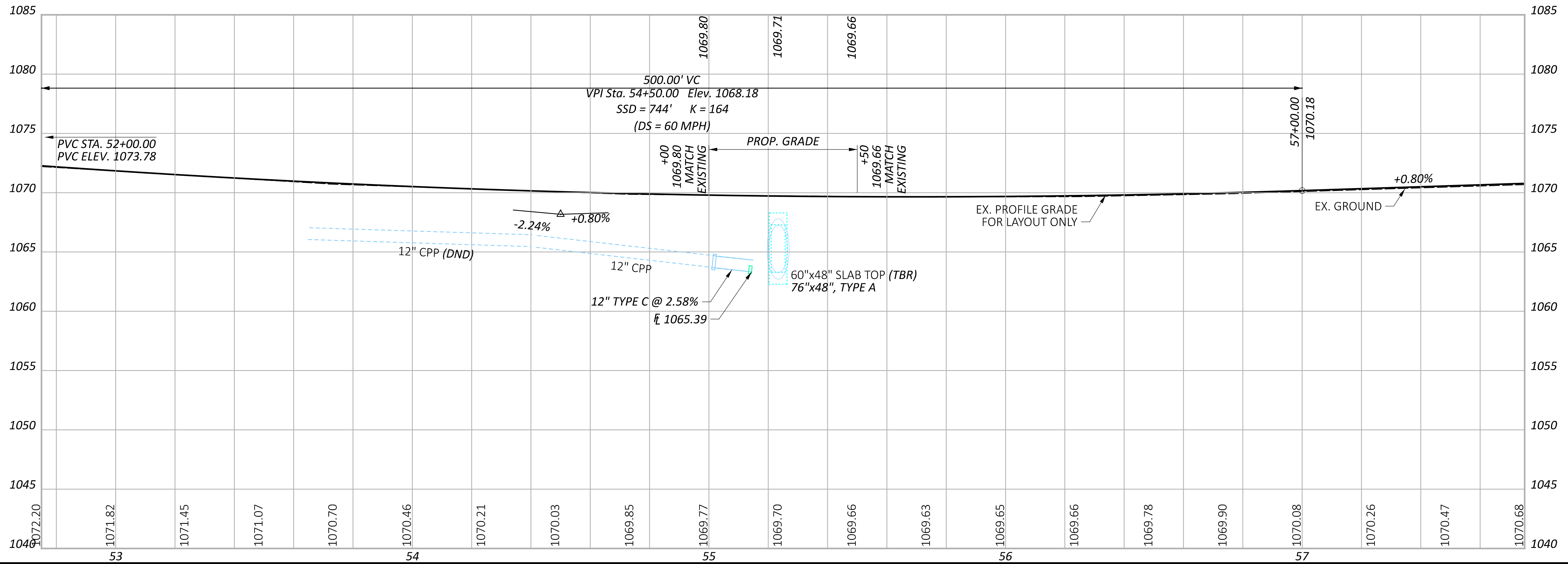
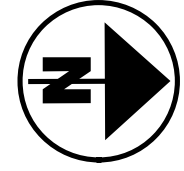


LEGEND

-  RIPRAP, TYPE D
-  SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT
-  RIPRAP CUTOFF WALL



1.00 MI TO YORK STREET →

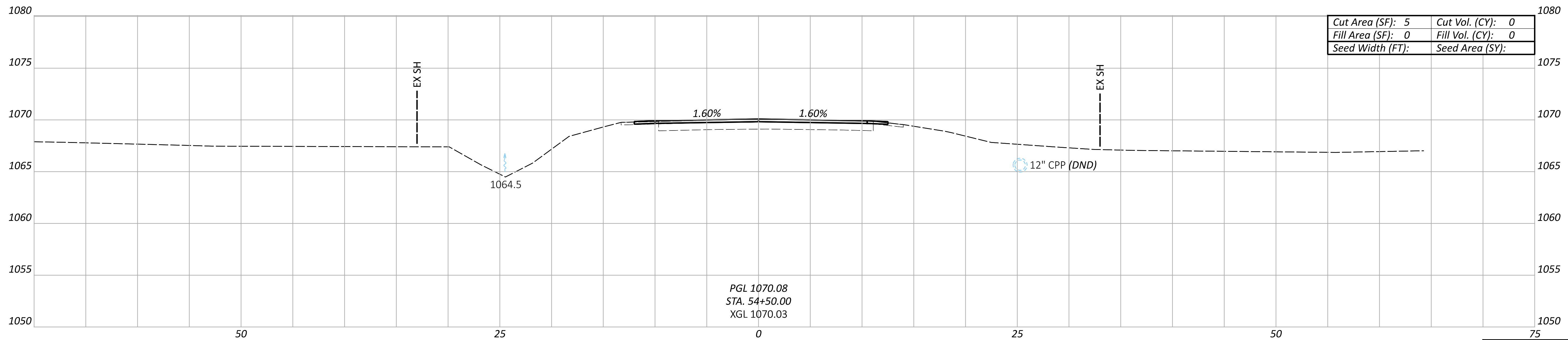
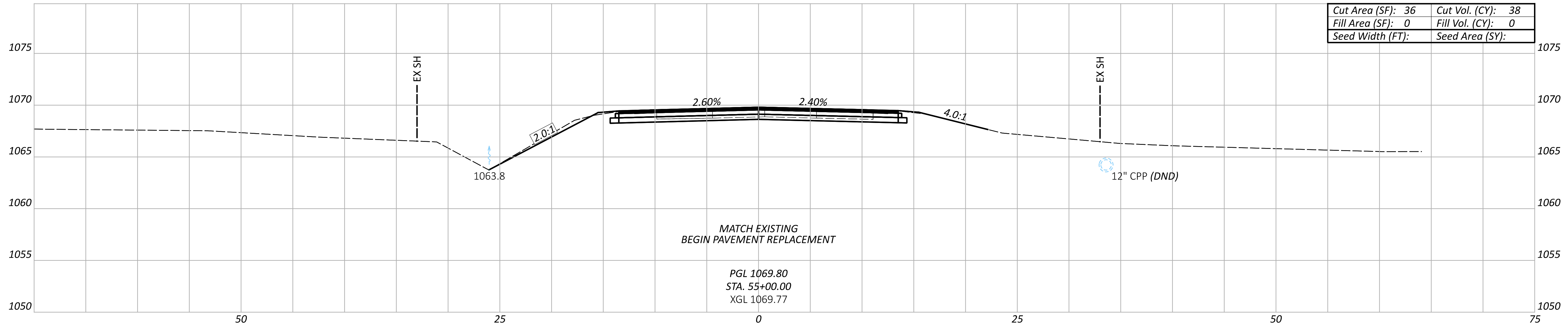


PLAN AND PROFILE
 TRU-193-23.897

DESIGN AGENCY



DESIGNER	NKF
REVIEWER	MJP 3/27/25
PROJECT ID	122339
SHEET	P.28
TOTAL	34



CROSS SECTIONS - TRU-193-23.897
 STA. 54+50 TO STA. 55+00

DESIGN AGENCY



DESIGNER

NKF

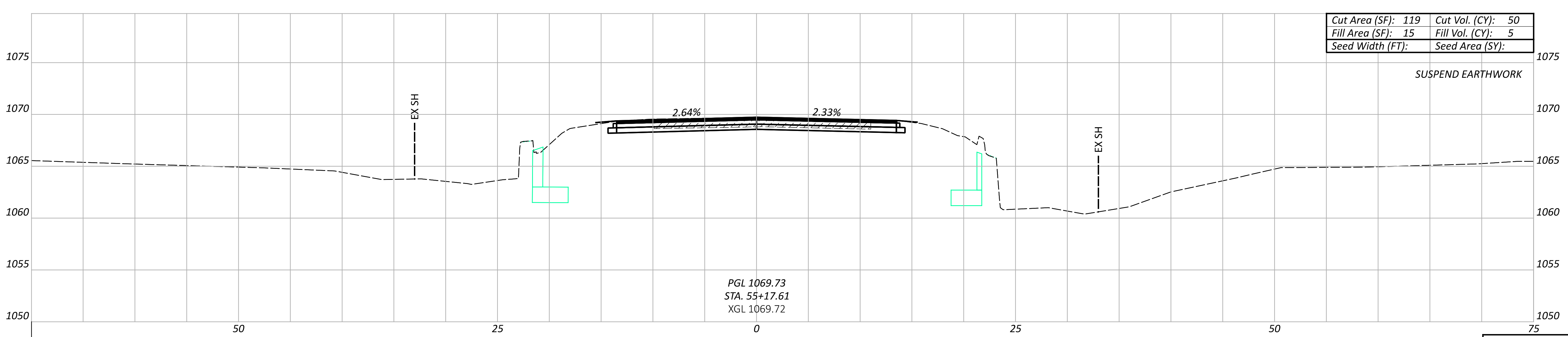
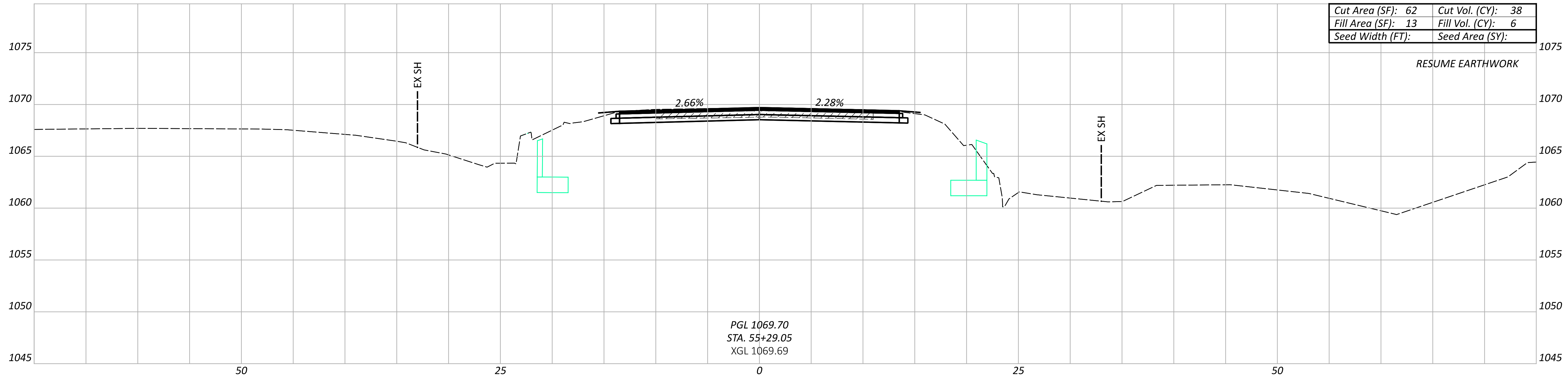
REVIEWER

MJP 3/27/25

PROJECT ID

122339

Sheet Totals			SHEET TOTAL	
Seeding	Cut	Fill	P.29	34
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Sheet Totals			122339	
Seeding	Cut	Fill	SHEET	TOTAL
	88	11	P.30	34

CROSS SECTIONS - TRU-193-23.897
 STA. 55+23.34 TO STA. 55+50

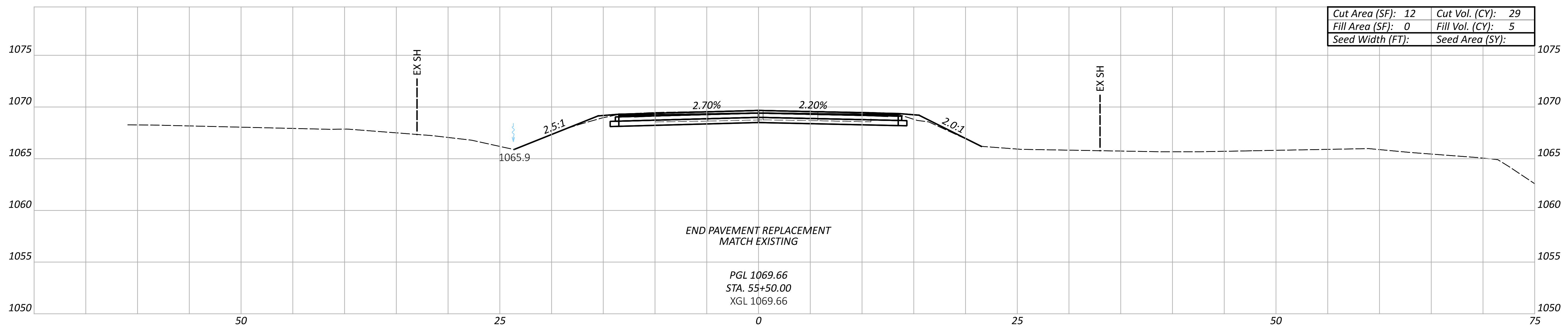
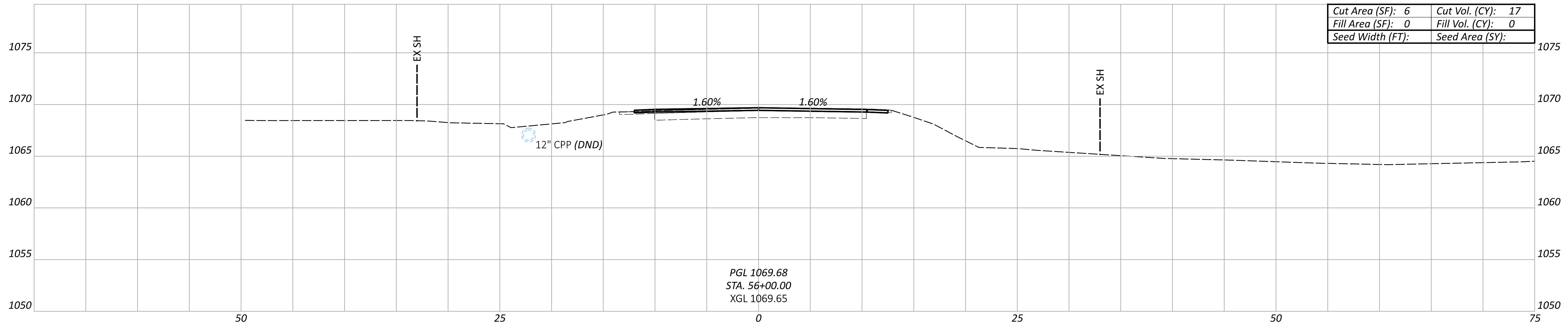
DESIGN AGENCY



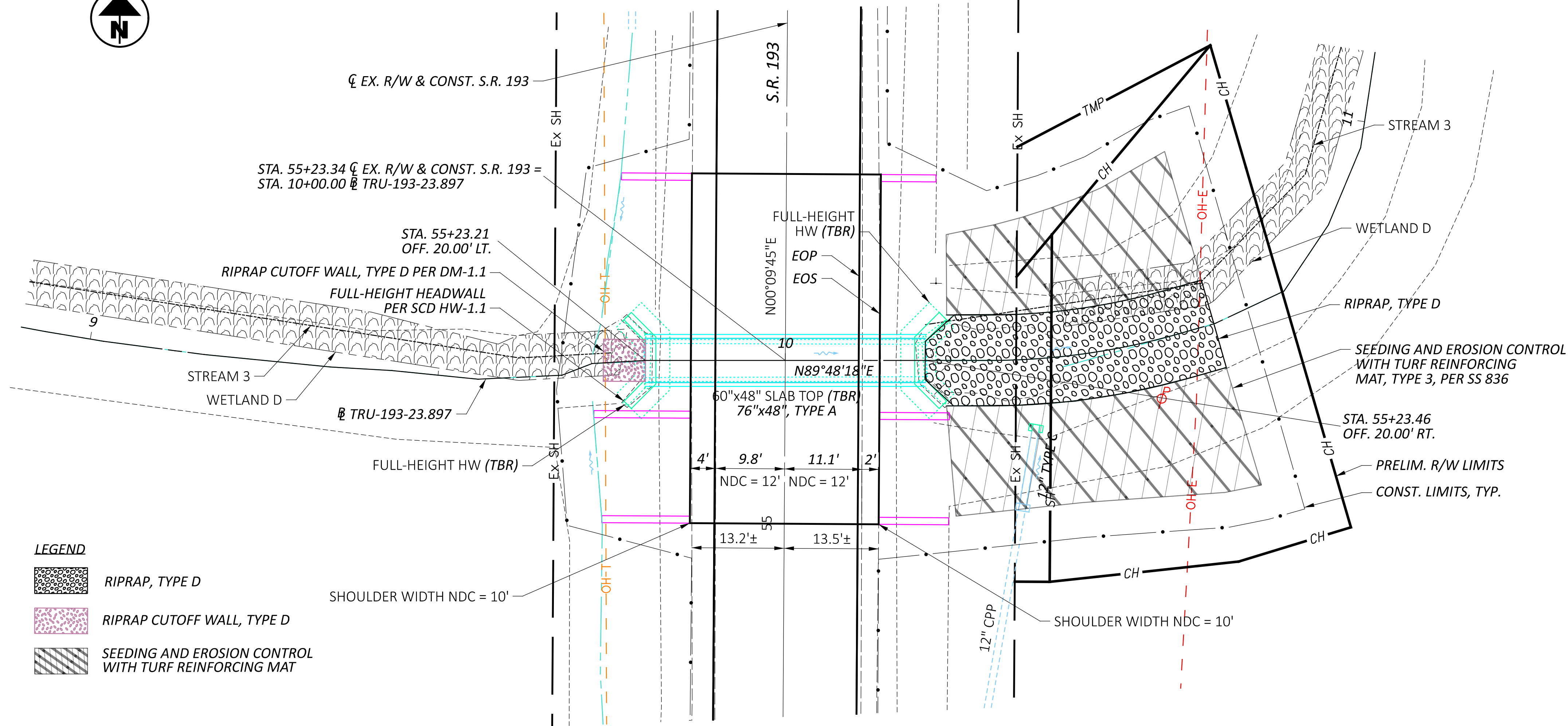
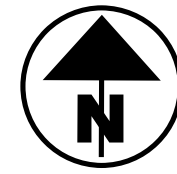
DESIGNER
 NKF

REVIEWER
 MJP 3/27/25

PROJECT ID
 122339



Sheet Totals			SHEET TOTAL	
Seeding	Cut	Fill	P.31	TOTAL
46	5		P.31	34



- LEGEND**
- RIPRAP, TYPE D
 - RIPRAP CUTOFF WALL, TYPE D
 - SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT

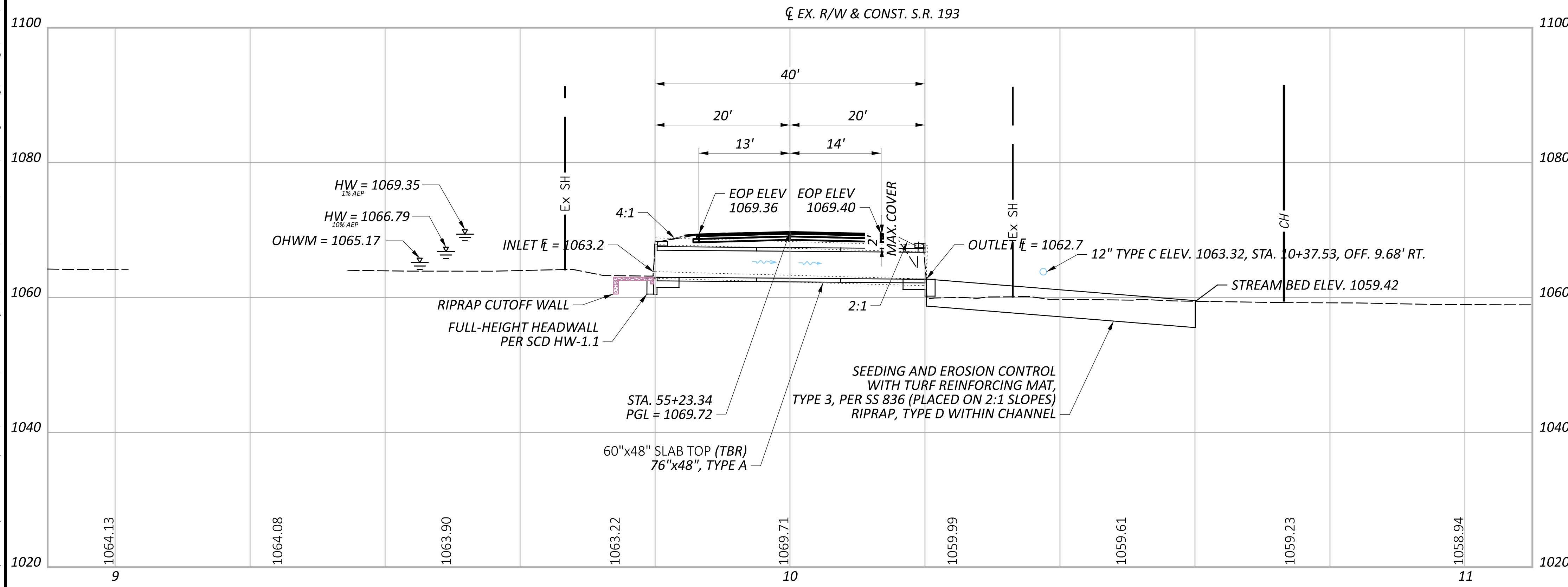
FOR BENCHMARK INFORMATION, SEE SHEET P.26
 FOR ESTIMATED QUANTITIES, SEE SHEET P.27



HYDRAULIC DATA		
DRAINAGE AREA =	154 ACRES	
Q (10%) =	110 CFS	V (10%) = 14.1 FT/S
Q (1%) =	216 CFS	V (1%) = 17.2 FT/S
ORDINARY HIGH WATER MARK:	1065.8 FT	HW (10%) = 1066.79 FT
DESIGN SERVICE LIFE:	75 YEARS	HW (1%) = 1069.35 FT
ABRASION LEVEL:	1	
pH:	8.2	

EXISTING CULVERT	
TYPE:	SLAB TOP
SIZE:	60"x48"
SKEW:	NONE
ALIGNMENT:	TANGENT
DATE BUILT:	UNKNOWN
CONDITION:	FAIR
CFN:	1800945

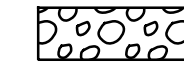
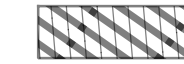
PROPOSED CULVERT	
TYPE:	76"x48" CONDUIT, TYPE A, 706.04
SKEW:	NONE
ALIGNMENT:	TANGENT
CFN:	1999395

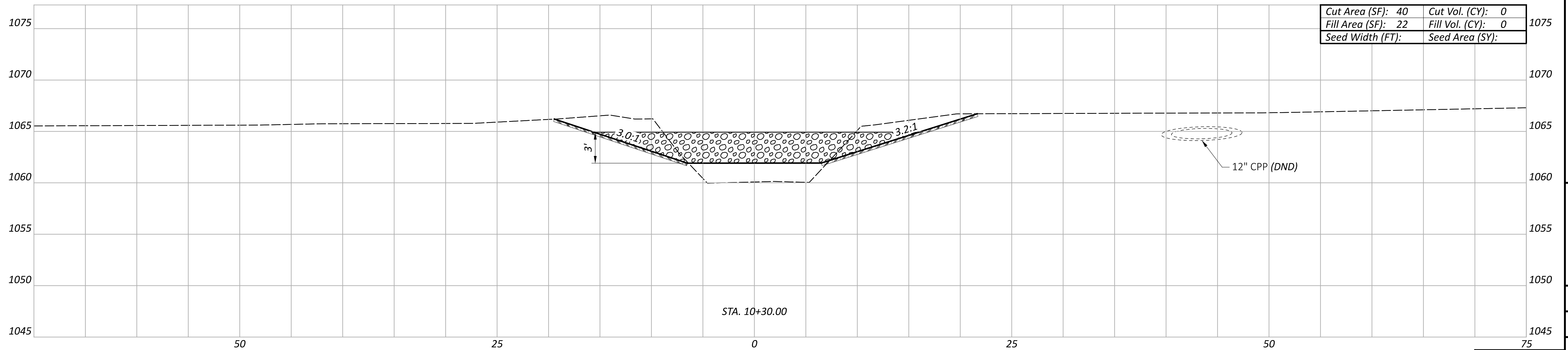
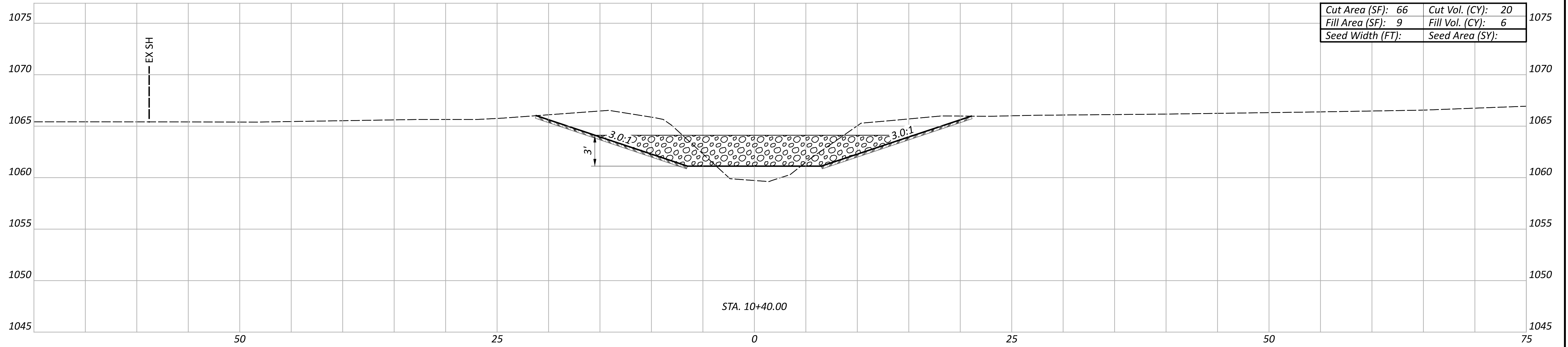


CULVERT DETAIL
 TRU-193-23.897

DESIGN AGENCY	
DESIGNER	NKF
REVIEWER	MJP 3/27/25
PROJECT ID	122339
SUBSET	TOTAL
1	1
SHEET	TOTAL
P.32	34

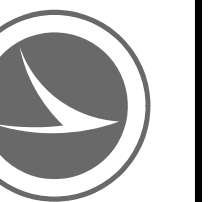
LEGEND

	RIPRAP, TYPE D
	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT



CHANNEL CROSS SECTIONS
 TRU-193-23.897

DESIGN AGENCY



DESIGNER

NKF

REVIEWER

MJP MM-DD-YY

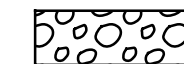
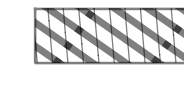
PROJECT ID

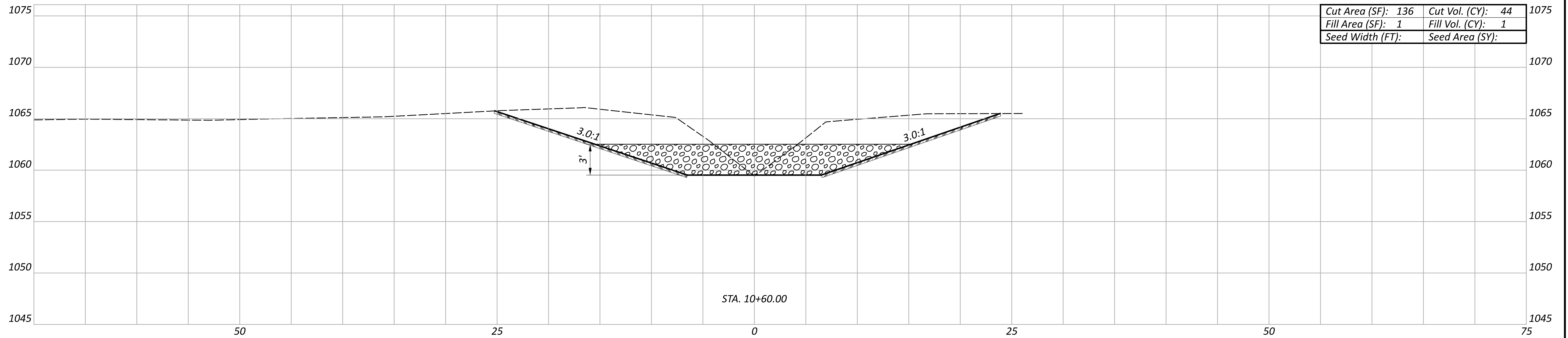
122339

Sheet Totals		
Seeding	Cut	Fill
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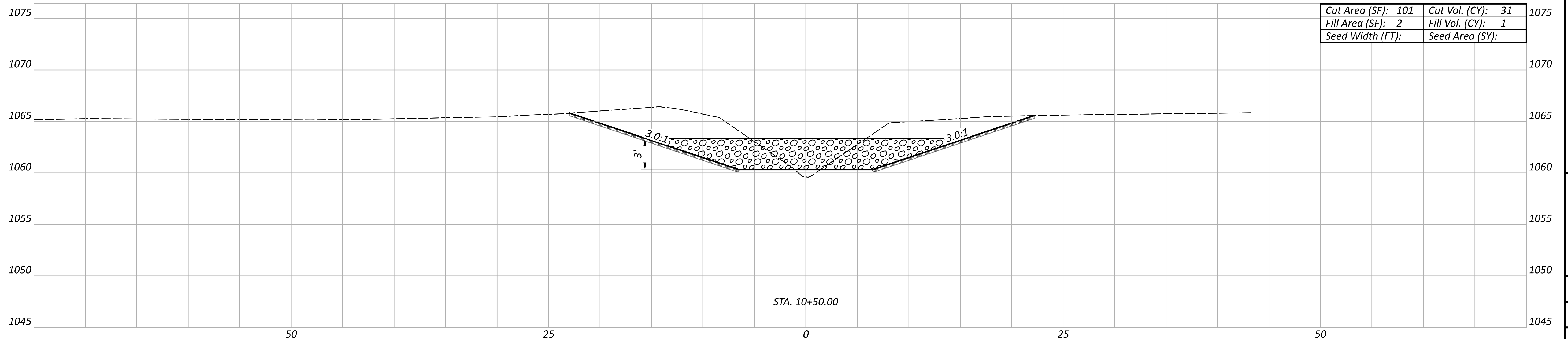
SHEET	TOTAL
P.33	34

LEGEND

-  RIPRAP, TYPE D
-  SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT



Cut Area (SF):	136	Cut Vol. (CY):	44
Fill Area (SF):	1	Fill Vol. (CY):	1
Seed Width (FT):		Seed Area (SY):	



Cut Area (SF):	101	Cut Vol. (CY):	31
Fill Area (SF):	2	Fill Vol. (CY):	1
Seed Width (FT):		Seed Area (SY):	

CHANNEL CROSS SECTIONS
 TRU-193-23.897

DESIGN AGENCY



DESIGNER

NKF

REVIEWER

MJP MM-DD-YY

PROJECT ID

122339

Sheet Totals			SHEET TOTAL	
Seeding	Cut	Fill	P.34	TOTAL
75	2			34