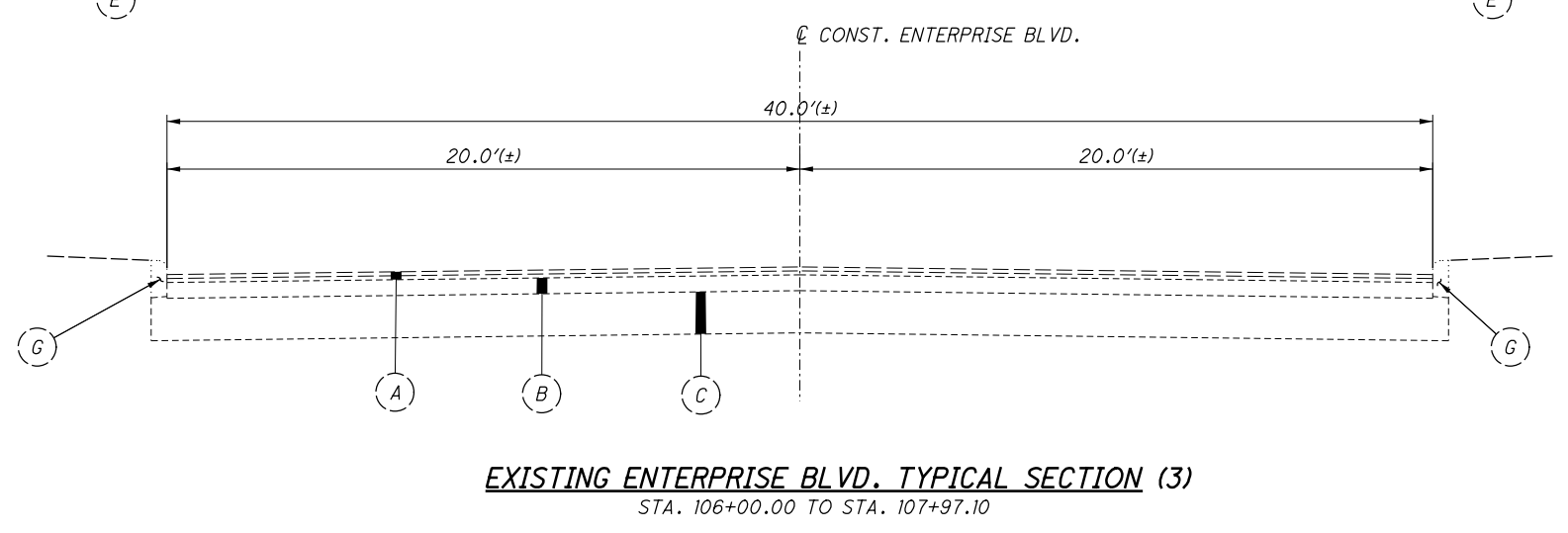
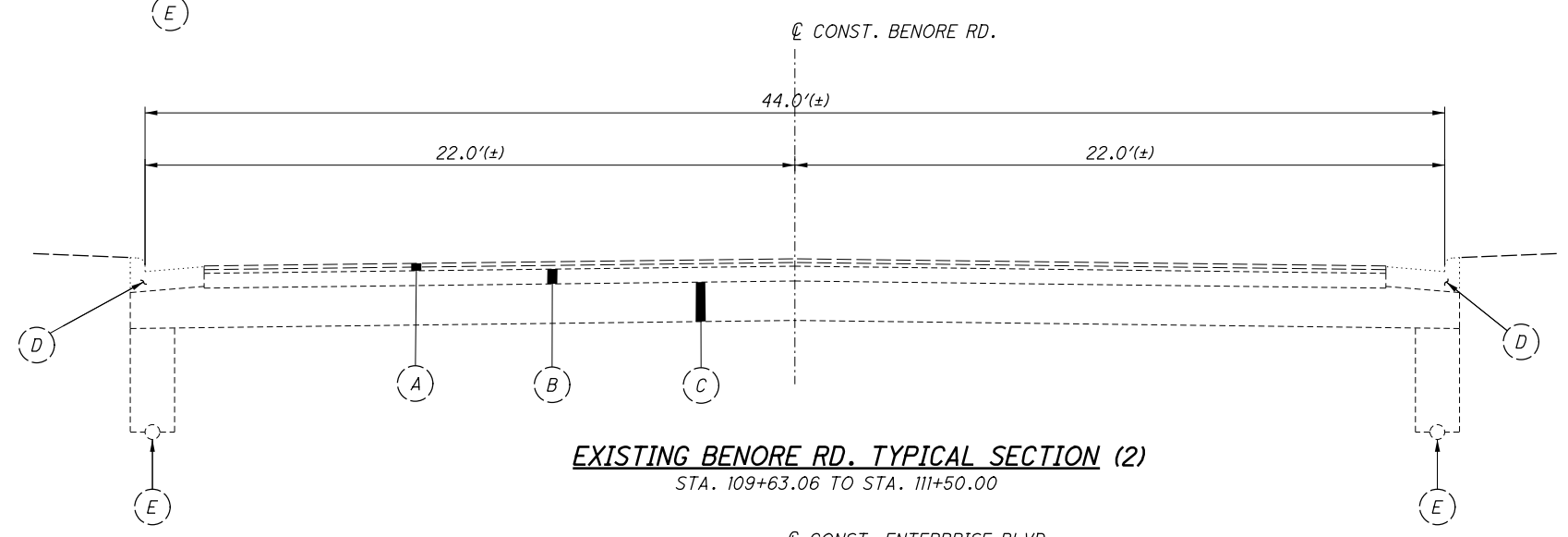
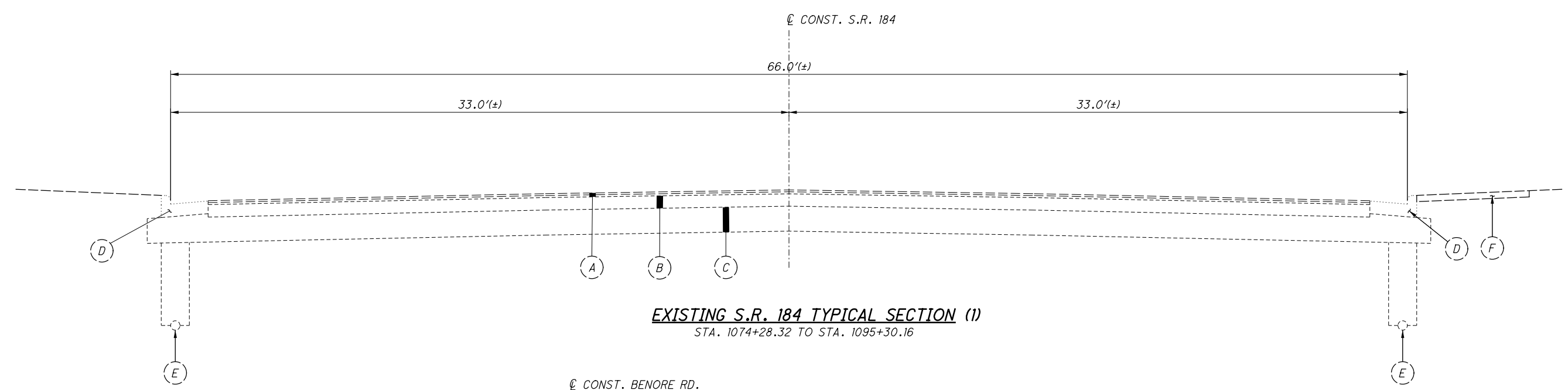


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- LEGEND**
- (A) 3"± ASPHALT CONCRETE
 - (B) 8"± ASPHALT CONCRETE BASE
 - (C) 16"± SUBBASE
 - (D) COMBINATION CURB AND GUTTER
 - (E) 6"± PIPE UNDERDRAINS
 - (F) SIDEWALK
 - (G) CURB

CJK	10/18/21	RESPONSE TO RFI 8,9
REV. BY	DATE	DESCRIPTION

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS, EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

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

AT&T OHIO
130 N. ERIE ST, RM 714
TOLEDO, OH 44883
419-245-7304

INDEPENDENTS FIBER NETWORK
13888 COUNTY RD 25A
WAPAKONETA, OH 45895
419-739-3114

BUCKEYE BROADBAND
2700 OREGON RD.
NORTHWOOD, OH 43619
ATTN: MICHAEL SHEAHAN
419-724-3713

LEVEL 3 COMMUNICATIONS
1025 ELDORADO BLVD.
BROOMFIELD, CO 80021
512-742-1428

BUCKEYE PIPE LINE COMPANY
P.O. BOX 368
EMMAUS, PA 18049-0368
484-232-4000

SUNOCO LOGISTICS
7155 INKSTER ROAD
TAYLOR, MI 48180
313-670-1251

CITY OF TOLEDO -
DIVISION OF WATER
401 SOUTH ERIE STREET
TOLEDO, OH 43602
419-936-2839

TOLEDO EDISON (USIC)
6099 ANGOLA RD.
HOLLAND, OH 43528
419-249-5218

COLUMBIA GAS OF OHIO -
TOLEDO
2901 E. MANHATTAN BLVD.
TOLEDO, OH 43611
419-539-6066

MARATHON ASHLAND PIPE LINE
COMPANY
539 S. MAIN STREET
FINDLAY, OH 45840
419-422-2121

ENBRIDGE ENERGY
1409 HAMMOND AVE.
SUPERIOR, WI 54880
715-398-4500

LUCAS COUNTY ENGINEER'S OFFICE
1 GOVERNMENT CENTER, SUITE 870
TOLEDO, OH 43604-2259
419-213-4541 X4359

GAS RECOVERY SYSTEMS
10611 5 MILE RD.
NORTHVILLE, MI 48168
248-305-7774

LUCAS COUNTY SANITARY
ENGINEERS
1111 SOUTH McCORD RD.
HOLLAND, OH 43528
419-213-2926

CITY OF TOLEDO
DIVISION OF ENGINEERING SERVICES
600 JEFFERSON AVE. SUITE 300
TOLEDO, OHIO 43604
419-245-1315

CITY OF TOLEDO
DIVISION OF TRANSPORTATION
110 N. WESTWOOD
TOLEDO, OHIO 43607
419-245-1300

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 9:00 PM AM AND 7:00 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT. CONTRACTOR WILL NEED TO APPLY FOR A NOISE WAIVER FROM CITY OF TOLEDO.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 2 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: ODOT VRS

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD 83 (2011)
ELLIPSOID: GRS 80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE NORTH ZONE
COMBINED SCALE FACTOR: 1.0000000
ORIGIN OF COORDINATE SYSTEM: OHIO NORTH ZONE
NORTHING = 0.000
EASTING = 0.000

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 CMS 623.

UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

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.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

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

MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED

ALL CASTINGS SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT OF WAY FOR SALVAGE BY STATE FORCES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 ITEM.

ITEM SPECIAL - MISCELLANEOUS METAL

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIAL SHALL MEET ITEM 611 OF THE SPECIFICATIONS AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

SPECIAL, MISCELLANEOUS METAL 500 POUNDS

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE EXPENSE OF THE CONTRACTOR.

TEMPORARY DRAINAGE ITEMS

TEMPORARY DRAINAGE ITEMS LABELED ON THE MAINTENANCE OF TRAFFIC PLAN ARE ITEMIZED IN THE MOT GENERAL SUMMARY FOR INFORMATION ONLY AND INCLUDED IN ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, LUMP SUM.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

SEEDING AND MULCHING

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

659, SOIL ANALYSIS TEST	2 EACH
659, TOPSOIL	189 CU. YD.
659, SEEDING AND MULCHING - SEE SHEETS 52, 56 AND 29	85 SQ. YD.
659, REPAIR SEEDING AND MULCHING	85 SQ. YD.
659, INTER-SEEDING	85 SQ. YD.
659, COMMERCIAL FERTILIZER	0.23 TON
659, LIME	0.04 ACRES
659, WATER	9 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 690-98400 - SPECIAL - MISC.: WATER PERMIT FEES, FIXED LUMP SUM (\$7,650.00)

THIS ITEM OF WORK IS TO COMPENSATE THE CITY OF TOLEDO DIVISION OF WATER DISTRIBUTION FOR WATER PERMIT FEES FOR WORK ASSOCIATED WITH THIS PROJECT. THE WATER PERMIT FEES SHALL BE PAID BY THE CONTRACTOR PRIOR TO THE CITY COMMENCING WITH THE WORK. THE CONTRACTOR WILL NOT BE REQUIRED TO PERFORM ANY FIELD WORK ON THE PROJECT FOR THESE ITEMS.

QTY	UNIT	DESCRIPTION	UNIT FEE	TOTAL FEE
1	EACH	FIRE HYDRANT REMOVED	\$2,200.00	\$2,200.00
1	EACH	FIRE HYDRANT ADJUSTED TO GRADE	\$850.00	\$850.00
1	EACH	FIRE HYDRANT	\$4,600.00	\$4,600.00

CJK	10/07/21	△ CORRECT HOURS R2
CEL	10/12/21	△ RESPONSE TO RFI 5
REV. BY	DATE	DESCRIPTION
DATE COMPLETED		

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GENERAL NOTES

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ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF 1 LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON S.R. 184 AND BENOIRE RD. BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, AND ITEM 615 ROADS FOR MAINTAINING TRAFFIC. ENTERPRISE BLVD. WILL BE CLOSED FOR THE DURATION OF THE PROJECT.

ALL WORK ASSOCIATED WITH MAINTENANCE OF TRAFFIC INCLUDING SET-UP, PAVING, SIDEWALK AND CURB RAMP WORK, PHASE CHANGES, TEMPORARY TRAFFIC SIGNALS AND TEAR DOWNS SHALL BE COMPLETED BETWEEN THE HOURS OF 8:00PM AND 6:00AM.

PEDESTRIAN TRAFFIC SHALL BE MAINTAINED AT ALL TIMES THROUGH CONSTRUCTION ZONE AS DETAILED IN THE PLANS.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD 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.

NOTICE OF CLOSURE SIGN TIME TABLE
ITEM DURATION SIGN DISPLAYED
OF CLOSURE TO PUBLIC

RAMP & >=2 WEEKS 14 CALENDAR DAYS PRIOR TO CLOSURE

ROAD > 12 HOURS 7 CALENDAR DAYS PRIOR & < 2 WEEKS TO CLOSURE

CLOSURES < 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 PHONE NUMBER SHALL BE (419) 373-4428.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 100 CU. YD.
ITEM 616, WATER 20 M. GAL.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

PHASE 1:

- 1) S.R. 184 EB, JUST EAST OF RAINTREE PARKWAY.
- 2) S.R. 184 EB, JUST WEST OF INTERSECTION OF S.R. 184 & BENOIRE/ENTERPRISE.
- 3) S.R. 184 EB, JUST EAST OF INTERSECTION OF S.R. 184 & BENOIRE/ENTERPRISE.

PHASE 2:

- 1) S.R. 184 WB, JUST WEST OF INTERSECTION OF S.R. 184 & BENOIRE/ENTERPRISE.
- 2) ENTERPRISE BLVD. AT INTERSECTION OF S.R. 184 & BENOIRE/ENTERPRISE.
- 3) S.R. 184 WB, JUST EAST OF INTERSECTION OF S.R. 184 & BENOIRE/ENTERPRISE.
- 4) S.R. 184 WB, JUST WEST OF INTERSECTION OF S.R. 184 & FUTURA/BENOIRE.

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.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 10 M. GAL.

ITEM 614, REPLACEMENT SIGN

FLATSHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL

AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ITEM 615, ROADS FOR MAINTAINING TRAFFIC, AS PER PLAN

IN ADDITION TO ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, ITEM 615, ROADS FOR MAINTAINING TRAFFIC SHALL INCLUDE ALL ITEMS NECESSARY TO PROVIDE A COMPLETE, FUNCTIONAL, AND SAFE INSTALLATION OF TEMPORARY ROAD FOR PUBLIC USE.

ITEM 615, ROADS FOR MAINTAINING TRAFFIC SHALL CONFORM TO C&MS ITEM 615 AND SHALL INCLUDE, BUT NOT LIMITED TO, INSTALLATION, MAINTENANCE, AND REMOVAL OF ALL EARTHWORK, GUARDRAIL, SIDEWALK, AND DRAINAGE NECESSARY TO PROVIDE THE TEMPORARY ROAD INSTALLATION.

ITEMS HAVE BEEN INCLUDED ON SHEETS 40-41 OF THE PLANS AS INFORMATION ONLY AND SHOULD BE INCLUDED IN ITEM 615, ROADS FOR MAINTAINING TRAFFIC, AS PER PLAN.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 615, ROADS FOR MAINTAINING TRAFFIC, LUMP SUM AS PER PLAN

CJK	10/13/21	RESPONSE TO RFI 10
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DATE COMPLETED		

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DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (ONE-WAY) SEE SHEET 14

ITEM 614, OBJECT MARKER, (TWO-WAY) SEE SHEET 19,26

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

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 WILL NOT BE PERMITTED AT PROJECT COST. 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).

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: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN A 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).

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 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 THE SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. 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 WHICH 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 120 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.

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 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 CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	4 CALENDAR DAYS PRIOR TO CLOSURE
LANE CLOSURES & 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.

THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY PHONE AT: (419) 373-4428 OR EMAIL AT: D02.pio@dot.ohio.gov

DISTRICT PERMIT SECTION BY PHONE AT: (419) 373-4301 OR EMAIL AT: D02.permits@dot.ohio.gov

PRIOR TO CLOSING ANY STREET OR TRAFFIC LANE, THE CONTRACTOR SHALL NOTIFY THE CITY OF TOLEDO, DIVISION OF TRANSPORTATION, AT 419-245-1300 OR BY EMAIL AT SHAWN.COMES@TOLEDO.OH.GOV AT LEAST SEVEN (7) DAYS PRIOR TO STARTING WORK.

ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

- SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
- EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO SECTION 204.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS). IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.
- COMPACT THE SUBGRADE ACCORDING TO C&MS 204.03.
- APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS. PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO C&MS 204.06.
- EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO C&MS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
- PROOF ROLL THE STABILIZED AREAS ACCORDING TO C&MS 204.06 TO VERIFY STABILITY.
- FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

EXISTING UTILITIES WITHIN ANY UNSUITABLE SUBGRADE AREA SHALL NOT BE DISTURBED DURING EXCAVATION AND REPLACEMENT ACTIVITIES.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE AS PER THE GEOTECHNICAL REPORT (STRUCTURE FOUNDATION EXPLORATION - FINAL DATED MAY 14, 2021) ARE BOTH PAID UNDER ITEM 204 EXCAVATION OF SUBGRADE.

ESTIMATED QUANTITIES HAVE BEEN PROVIDED BELOW AND CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

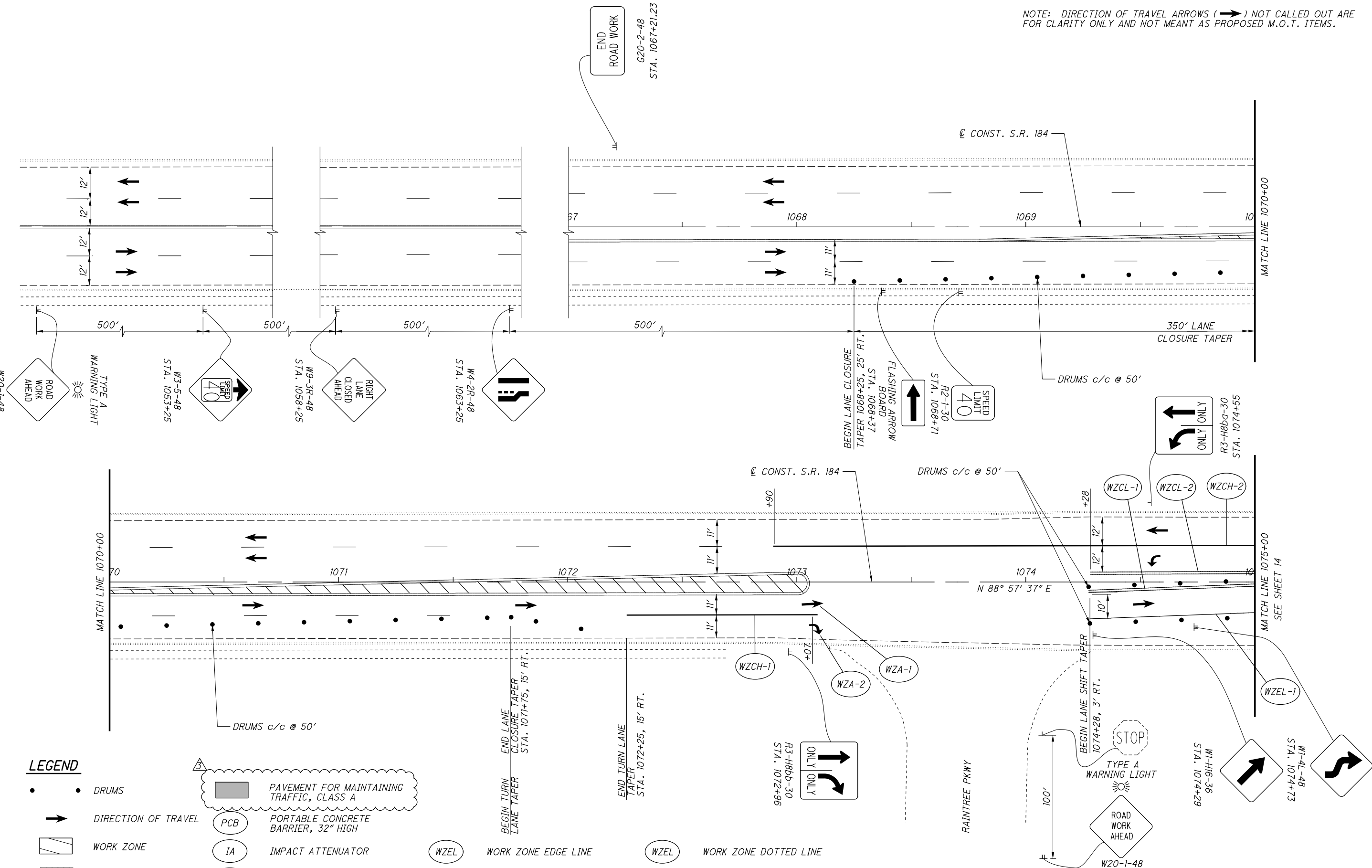
ITEM 204, EXCAVATION OF SUBGRADE 1,160 CY
 ITEM 204, GRANULAR EMBANKMENT, TYPE C 1,160 CY

CEL	10/12/21	RESPONSE TO RFI 5
REV. BY	DATE	DESCRIPTION
		DATE COMPLETED

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SEE SHEET 83, 86 & 87 OF 147 FOR PEDESTRIAN TEMPORARY SIGNALS

NOTE: DIRECTION OF TRAVEL ARROWS (→) NOT CALLED OUT ARE FOR CLARITY ONLY AND NOT MEANT AS PROPOSED M.O.T. ITEMS.



LEGEND

- DRUMS
- DIRECTION OF TRAVEL
- ▨ WORK ZONE
- ▤ TEMPORARY WALK
- ✕ EXISTING PAVEMENT MARKING TO BE REMOVED
- ▭ PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
- PCB PORTABLE CONCRETE BARRIER, 32" HIGH
- IA IMPACT ATTENUATOR
- WZEL WORK ZONE EDGE LINE
- WZSL WORK ZONE STOP LINE
- WZCH WORK ZONE CHANNELIZING LINE
- WZC WORK ZONE CROSS WALK
- WZEL WORK ZONE DOTTED LINE

NOTE: REMOVAL OF CONFLICTING PAVEMENT MARKINGS IS REQUIRED AND PAID FOR UNDER THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC

CEL	10/12/21	RESPONSE TO RFI 5
REV. BY	DATE	DESCRIPTION
DATE COMPLETED		

MAINTENANCE OF TRAFFIC PHASE 1
S.R. 184 - STA. 1048+25 TO STA. 1075+00

LUC-184-8.92

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NOTE: REMOVAL OF CONFLICTING PAVEMENT MARKINGS IS REQUIRED AND PAID FOR UNDER THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC

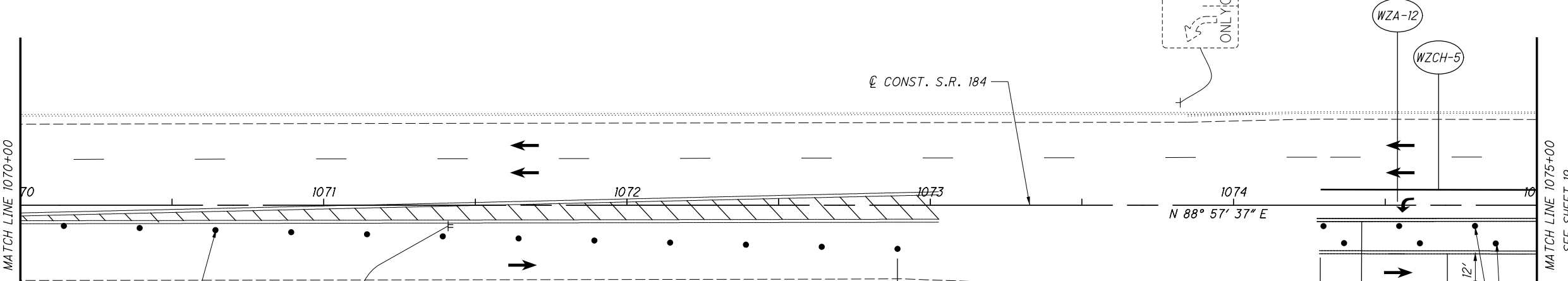
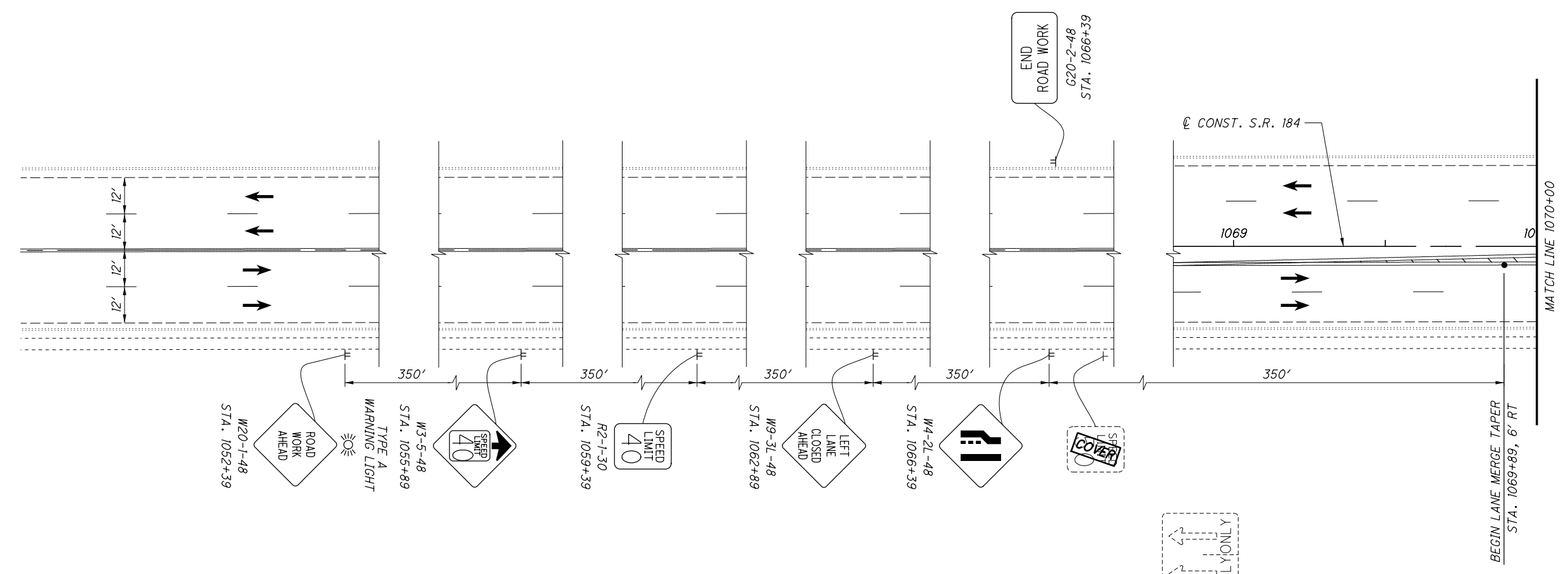
NOTE: DIRECTION OF TRAVEL ARROWS (→) NOT CALLED OUT ARE FOR CLARITY ONLY AND NOT MEANT AS PROPOSED M.O.T. ITEMS.

CALCULATED
AJK
CHECKED
JMZ

0 50 100
HORIZONTAL
SCALE IN FEET

MAINTENANCE OF TRAFFIC PHASE 2
S.R. 184 - STA. 1052+39 TO STA. 1075+00

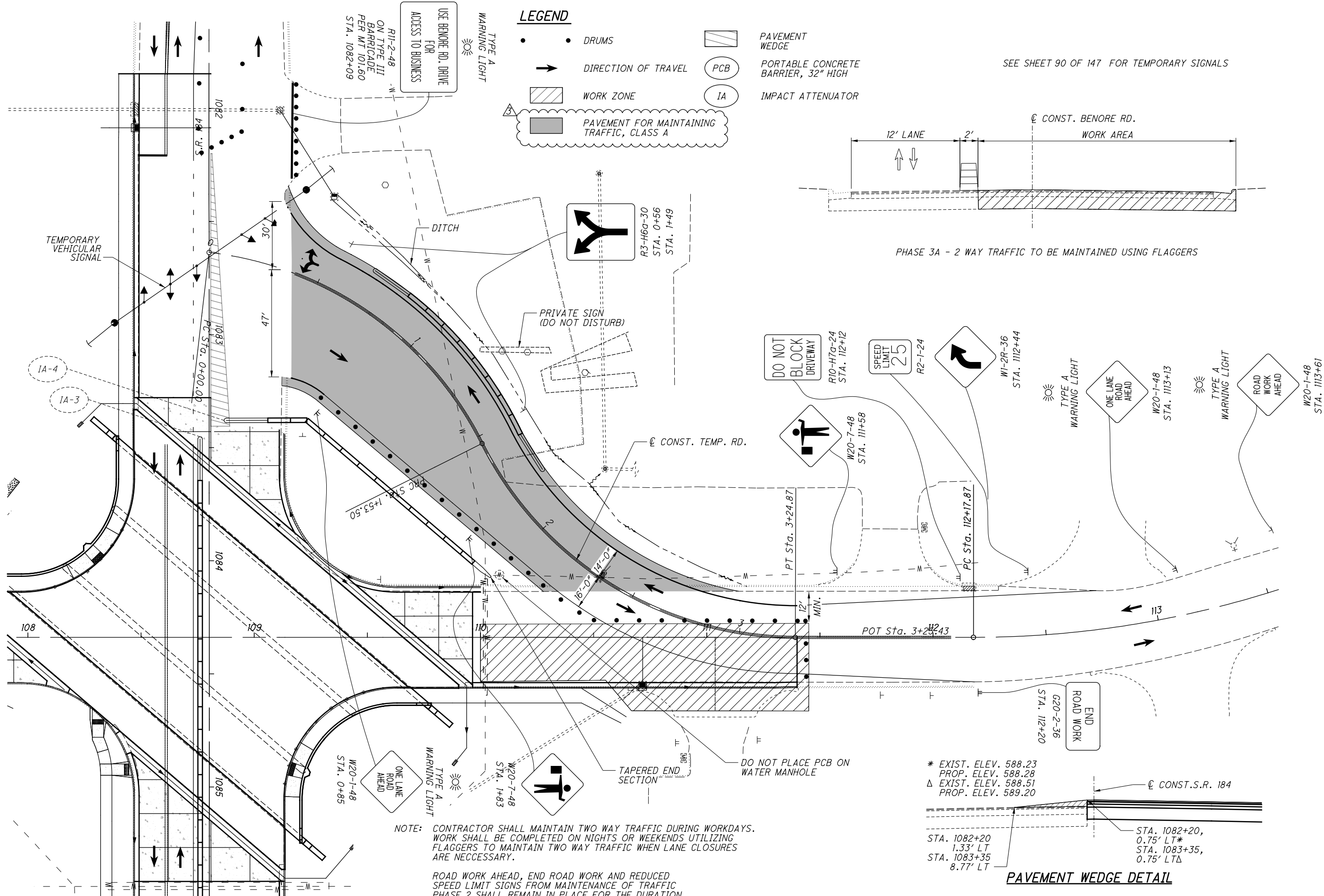
LUC-184-8.92



LEGEND

- DRUMS
- DIRECTION OF TRAVEL
- ▨ WORK ZONE
- ▨ TEMPORARY WALK
- ▨ PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
- ✕ EXISTING PAVEMENT MARKING TO BE REMOVED
- DRUMS c/c @ 50'
- ↓ FLASHING ARROW BOARD STA. 1071+41
- ▨ PAVEMENT WEDGE
- PCB PORTABLE CONCRETE BARRIER, 32" HIGH
- IA IMPACT ATTENUATOR
- WZCL WORK ZONE CENTER LINE
- WZDL WORK ZONE DOTTED LINE
- WZCH WORK ZONE CHANNELIZING LINE
- WZEL WORK ZONE EDGE LINE
- WZSL WORK ZONE STOP LINE
- WZCW WORK ZONE CROSS WALK

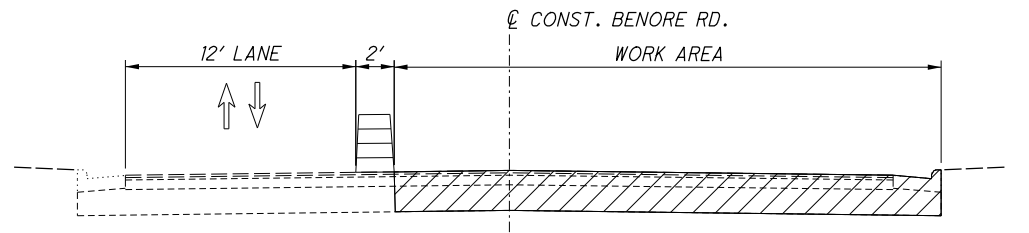
CEL	10/12/21	RESPONSE TO RFI 5
REV. BY	DATE	DESCRIPTION



LEGEND

- DRUMS
- DIRECTION OF TRAVEL
- ▨ WORK ZONE
- ▨ PAVEMENT WEDGE
- PCB
- IA
- ▨ PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A

SEE SHEET 90 OF 147 FOR TEMPORARY SIGNALS



PHASE 3A - 2 WAY TRAFFIC TO BE MAINTAINED USING FLAGGERS

NOTE: CONTRACTOR SHALL MAINTAIN TWO WAY TRAFFIC DURING WORKDAYS. WORK SHALL BE COMPLETED ON NIGHTS OR WEEKENDS UTILIZING FLAGGERS TO MAINTAIN TWO WAY TRAFFIC WHEN LANE CLOSURES ARE NECESSARY.

ROAD WORK AHEAD, END ROAD WORK AND REDUCED SPEED LIMIT SIGNS FROM MAINTENANCE OF TRAFFIC PHASE 2 SHALL REMAIN IN PLACE FOR THE DURATION OF MAINTENANCE OF TRAFFIC PHASE 3.

* EXIST. ELEV. 588.23
 PROP. ELEV. 588.28
 Δ EXIST. ELEV. 588.51
 PROP. ELEV. 589.20

STA. 1082+20
 1.33' LT
 STA. 1083+35
 8.77' LT

STA. 1082+20,
 0.75' LT*
 STA. 1083+35,
 0.75' LTA

PAVEMENT WEDGE DETAIL

CEL	10/12/21	RESPONSE TO RFI 5
REV. BY	DATE	DESCRIPTION

CALCULATED AREA
 CHECKED JMJ

MAINTENANCE OF TRAFFIC PHASE 3

BENE RD - STA. 108+00 TO STA. 114+00

LUC-184-8.92

23
147

LEGEND

- DRUMS
- DIRECTION OF TRAVEL
- ▨ WORK ZONE
- ▭ PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
- PCB PORTABLE CONCRETE BARRIER, 32" HIGH
- WZCL WORK ZONE CENTER LINE
- WZSL WORK ZONE STOP LINE
- WZCH WORK ZONE CHANNELIZING LINE
- WZEL WORK ZONE EDGE LINE

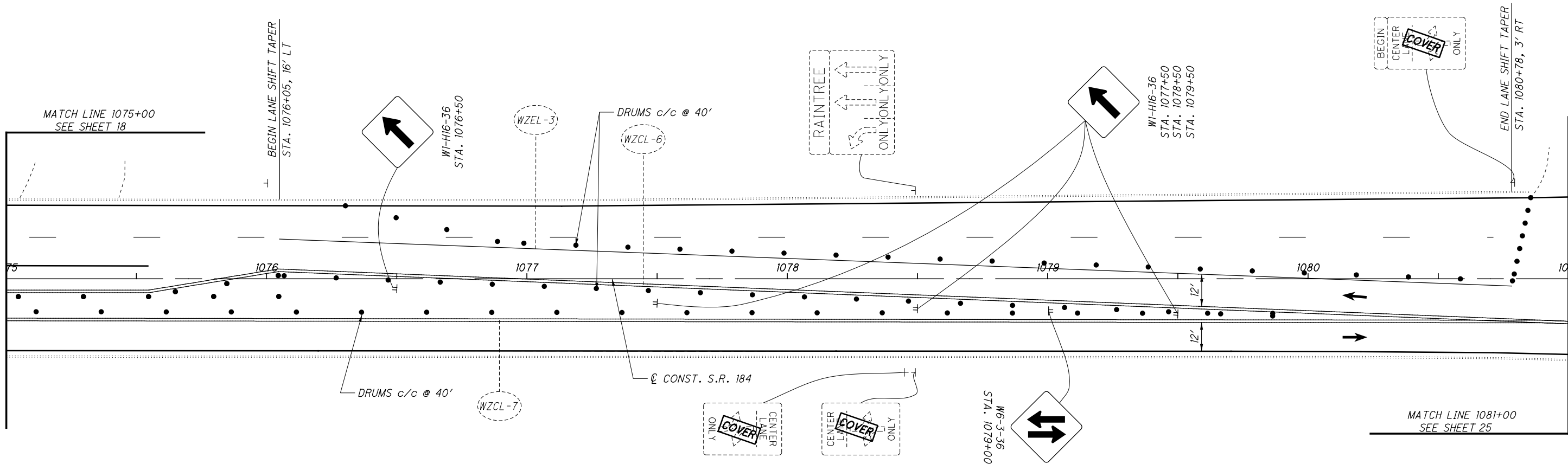
SEE SHEET 94 OF 147 FOR SIGNING AND PAVEMENT AND TRAFFIC SIGNAL DETAILS

NOTE: REMOVAL OF CONFLICTING PAVEMENT MARKINGS IS REQUIRED AND PAID FOR UNDER THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC

CALCULATED JTS CHECKED CEL

0 50 100
25
HORIZONTAL SCALE IN FEET

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FOR MAINTENANCE OF TRAFFIC FROM STA. 1065+00 TO 1075+00 SEE PHASE 2 MAINTENANCE OF TRAFFIC ON SHEETS 18/147.

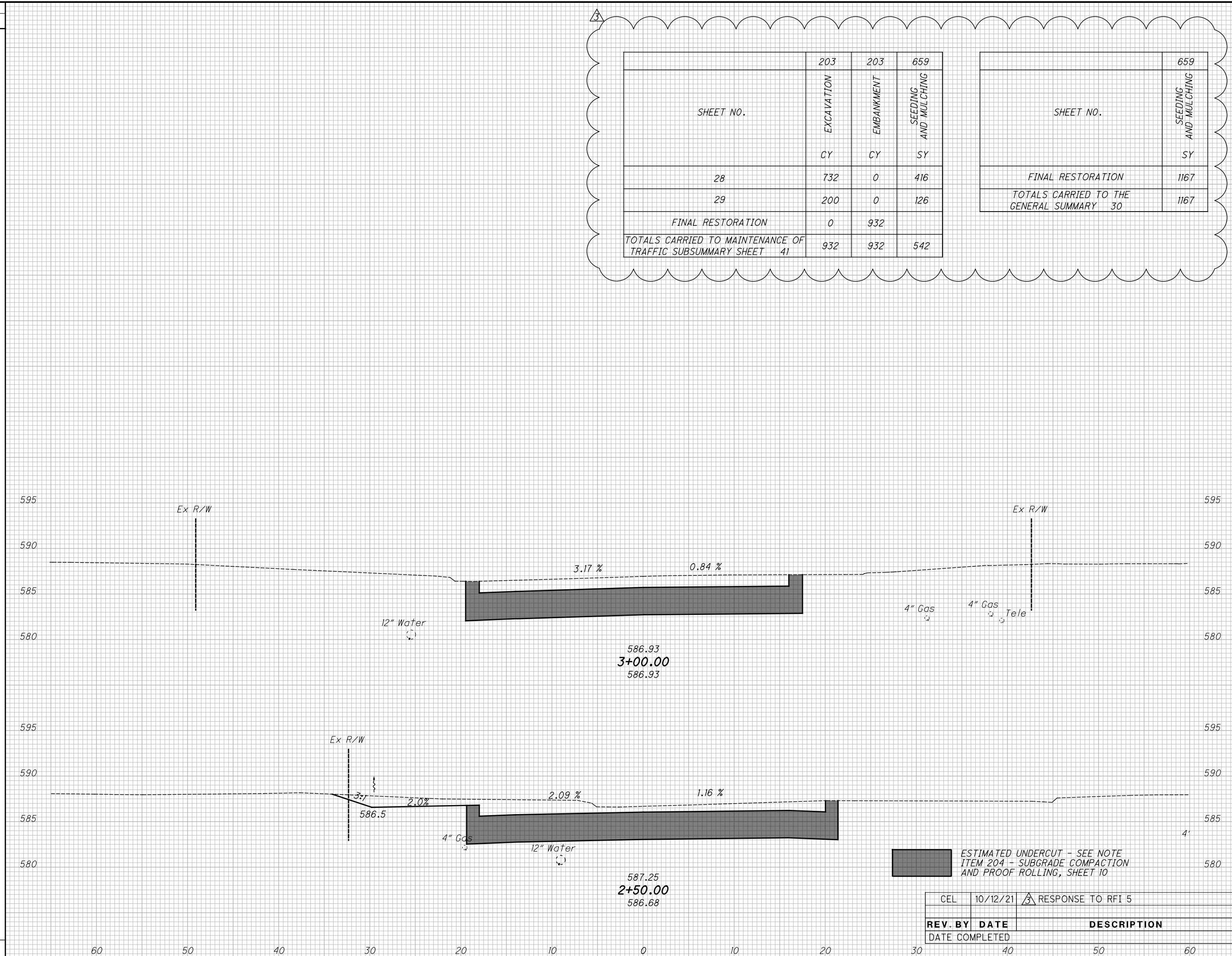
MAINTENANCE OF TRAFFIC PHASE 4
S.R. 184 - STA. 1076+00 TO STA. 1081+00

LUC-184-8.92

CEL	10/12/21	RESPONSE TO RFI 5
REV. BY	DATE	DESCRIPTION
DATE COMPLETED		

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SEEDING	
END WIDTH	SO. YDS.
60	126
50	79
40	17
30	47
20	0



3			
SHEET NO.	EXCAVATION	EMBANKMENT	SEEDING AND MULCHING
	CY	CY	SY
28	732	0	416
29	200	0	126
FINAL RESTORATION	0	932	
TOTALS CARRIED TO MAINTENANCE OF TRAFFIC SUBSUMMARY SHEET 41	932	932	542

SHEET NO.	SEEDING AND MULCHING
	SY
FINAL RESTORATION	1167
TOTALS CARRIED TO THE GENERAL SUMMARY 30	1167

END AREA		VOLUME	
CUT	FILL	CUT	FILL
42	0	99	0
65	0	101	0
		200	0

CROSS SECTIONS TEMPORARY ROAD
STA. 2+50.00 TO STA. 3+00.00
LUC-184-8.92
 CALCULATED: JMZ
 CHECKED: BPS
 29
 147

ESTIMATED UNDERCUT - SEE NOTE ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING, SHEET 10

CEL	10/12/21	RESPONSE TO RFI 5
REV. BY	DATE	DESCRIPTION
DATE COMPLETED		

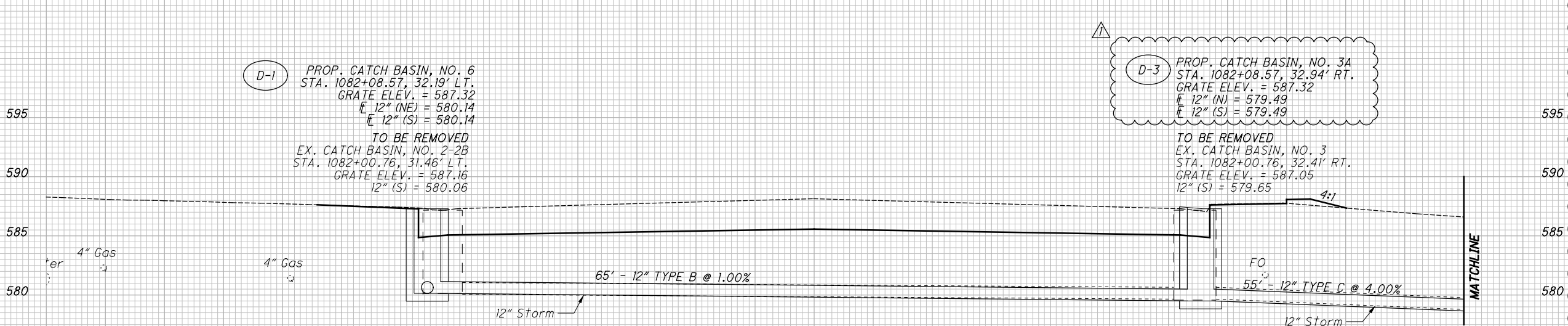
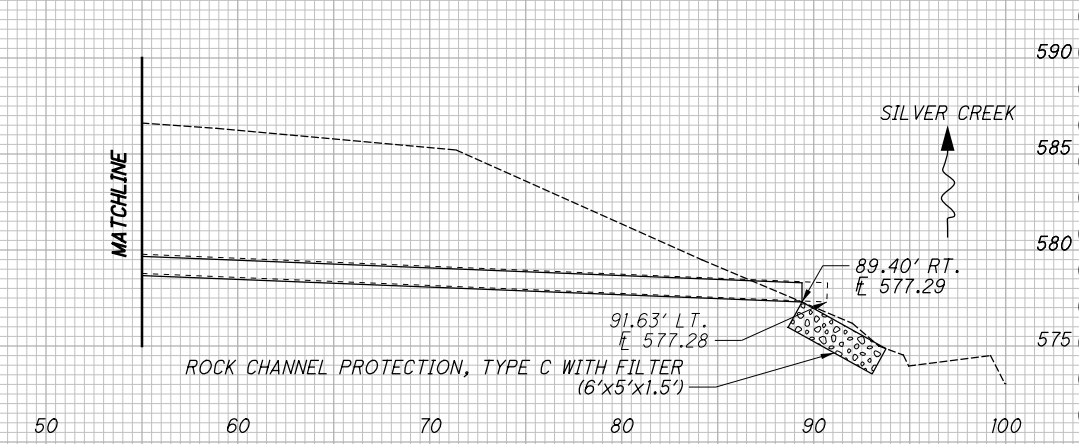
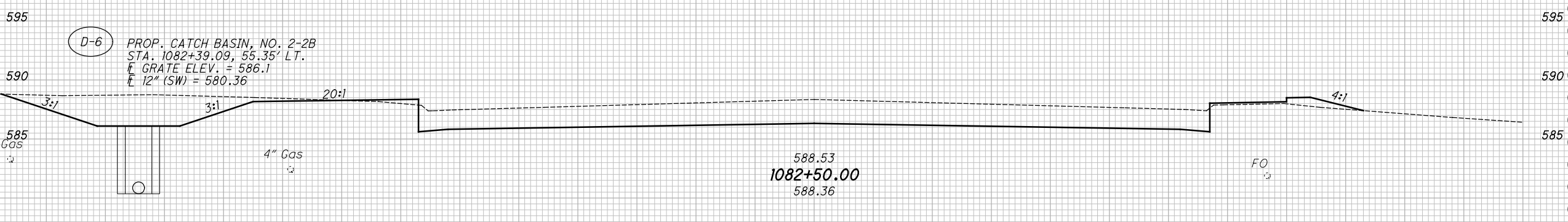
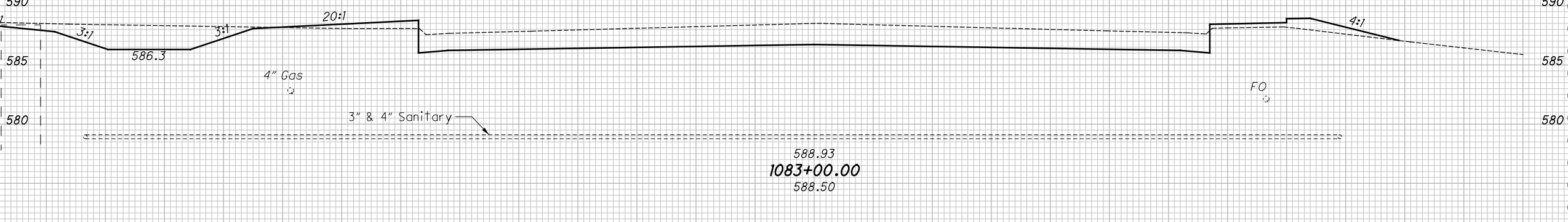
REF NO.	SHEET NO.	STATION TO STATION			SIDE	202	202	202	202	202	202	202	202	204	606	606	606	606	606	608	608	608	609	609	
						PAVEMENT REMOVED SY	WALK REMOVED SF	CURB REMOVED FT	CURB AND GUTTER REMOVED FT	PIPE REMOVED, 24" AND UNDER FT	PIPE REMOVED, OVER 24" FT	GUARDRAIL REMOVED FT	MANHOLE REMOVED EACH	CATCH BASIN REMOVED EACH	SUBGRADE COMPACTION SY	GUARDRAIL, TYPE MGS FT	ANCHOR ASSEMBLY, MGS TYPE B EACH	ANCHOR ASSEMBLY, MGS TYPE T EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2 EACH	4" CONCRETE WALK SF	CURB RAMP SF	DETECTABLE WARNING SF	COMBINATION CURB AND GUTTER, TYPE 2 FT	CURB, TYPE 6 FT
C-1	44	1081+84.68	TO	1083+87.76	LT				205													205			
C-2	44	1081+84.68	TO	1083+27.93	RT				143													143			
C-3	45	1085+41.79	TO	1086+86.86	LT				145													145			
C-4	45	1085+41.79	TO	1086+86.86	RT				203													203			
C-5	48	106+10.70	TO	108+49.05	LT			153															153		
C-6	48	106+10.70	TO	108+43.62	RT			207															207		
C-7	49	109+44.56	TO	111+39.92	LT				195													195			
C-8	49	109+96.50	TO	111+39.92	RT				143													143			
R-1	44	1080+78.38	TO	1083+44.83	RT						270														
R-2	44	1082+00.76			LT/RT							1													
R-3	44	1082+00.76			LT/RT			65																	
R-4	44	1082+00.76			RT							1													
R-5	44	1082+00.76			RT			55																	
R-6			NOT USED																						
R-7	44	1081+84.68	TO	1083+54.00	RT		1023																		
R-8	45	1085+24.92	TO	1087+91.76	LT					269															
R-9	45	1084+83.94	TO	1086+86.86	RT		1246																		
R-10	48	107+20.76	TO	107+81.94	LT					61															
R-11	48	107+64.24			LT						1														
R-12	48	107+64.24	TO	107+90.82	LT				48																
R-13	49	109+78.26	TO	110+44.07	RT					66															
R-14	49	110+76.33			RT						1														
G-1	44	1081+70.51	TO	1083+97.30	RT									112.5	1		1								
G-2	45	1085+28.76	TO	1086+99.19	LT									112.5	1		1								
G-3	48	107+33.00	TO	107+85.84	LT									25		1		1							
G-4	49	109+74.34	TO	110+13.76	RT											1		1							
P-1	44	1081+84.68	TO	1083+87.68	LT/RT	1193							1333												
P-2	45	1084+84.79	TO	1086+86.86	LT/RT	1500							1339												
P-3	48	106+10.70	TO	107+92.07	LT/RT	1076							866												
P-4	49	109+71.94	TO	111+39.92	LT/RT	760							903												
APPROACH SLABS		1083+60.57	TO	1083+80.57	LT/RT								302												
APPROACH SLABS		1084+89.15	TO	1085+09.15	LT/RT								302												
SW-1	44	1081+84.86	TO	1083+27.93	LT															1023					
SW-2	45	1084+83.94	TO	1086+86.86	RT															1246					
SW-3	48	109+96.50	TO	110+64.64	RT															416					
DW-1	44	1083+97			RT																12				
DW-2	45	1084+91			LT																12				
CR-1	45	1084+68			RT																78				
CR-2	45	1084+92			RT																97				
TOTALS CARRIED TO GENERAL SUMMARY						4529	2269	360	1035	120	48	666	1	3	5045	250	2	2	2	2	2685	175	24	1035	360

CALCULATED	CEL	10/12/21	RESPONSE TO RFI 6
CHECKED	JMZ		
ROADWAY SUBSUMMARY			
LUC-184-8.92			
34			
147			

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SEEDING
END SO.
WIDTH YDS.
45
247
44
168
17
14
0
429

S-1 RECONSTRUCTED TO GRADE
EX. SANITARY MANHOLE,
STA. 1083+09.08, 67.21' LT.
GRATE ELEV. = 588.51
30" (S) / 24" (E) = 561.75
PROP. MOT GRATE ELEV. = 587.37
PROP. FINAL GRATE ELEV. = 588.43



D-1 PROP. CATCH BASIN, NO. 6
STA. 1082+08.57, 32.19' LT.
GRATE ELEV. = 587.32
12" (NE) = 580.14
12" (S) = 580.14

TO BE REMOVED
EX. CATCH BASIN, NO. 2-2B
STA. 1082+00.76, 31.46' LT.
GRATE ELEV. = 587.16
12" (S) = 580.06

D-3 PROP. CATCH BASIN, NO. 3A
STA. 1082+08.57, 32.94' RT.
GRATE ELEV. = 587.32
12" (N) = 579.49
12" (S) = 579.49

TO BE REMOVED
EX. CATCH BASIN, NO. 3
STA. 1082+00.76, 32.41' RT.
GRATE ELEV. = 587.05
12" (S) = 579.65

588.15
1082+00.00
588.15
STA. 1081+84.68 BEGIN PROJECT

REV. BY	DATE	DESCRIPTION
CJK	10/06/21	ADDENDUM R1
CJK	10/15/21	RESPONSE TO RFI 8,9

END STA.	AREA		VOLUME		CALCULATED CEL	CHECKED JMZ
	CUT	FILL	CUT	FILL		
1082+00.00	120	57	231	86		
1082+50.00	129	36				
1082+84.68			213	35		
1082+84.68	100	2				
1083+00.00			57	1		
1083+00.00	100	2				
TOTAL			501	122		

CROSS SECTIONS S.R. 184
STA. 1082+00.00 TO STA. 1083+00.00

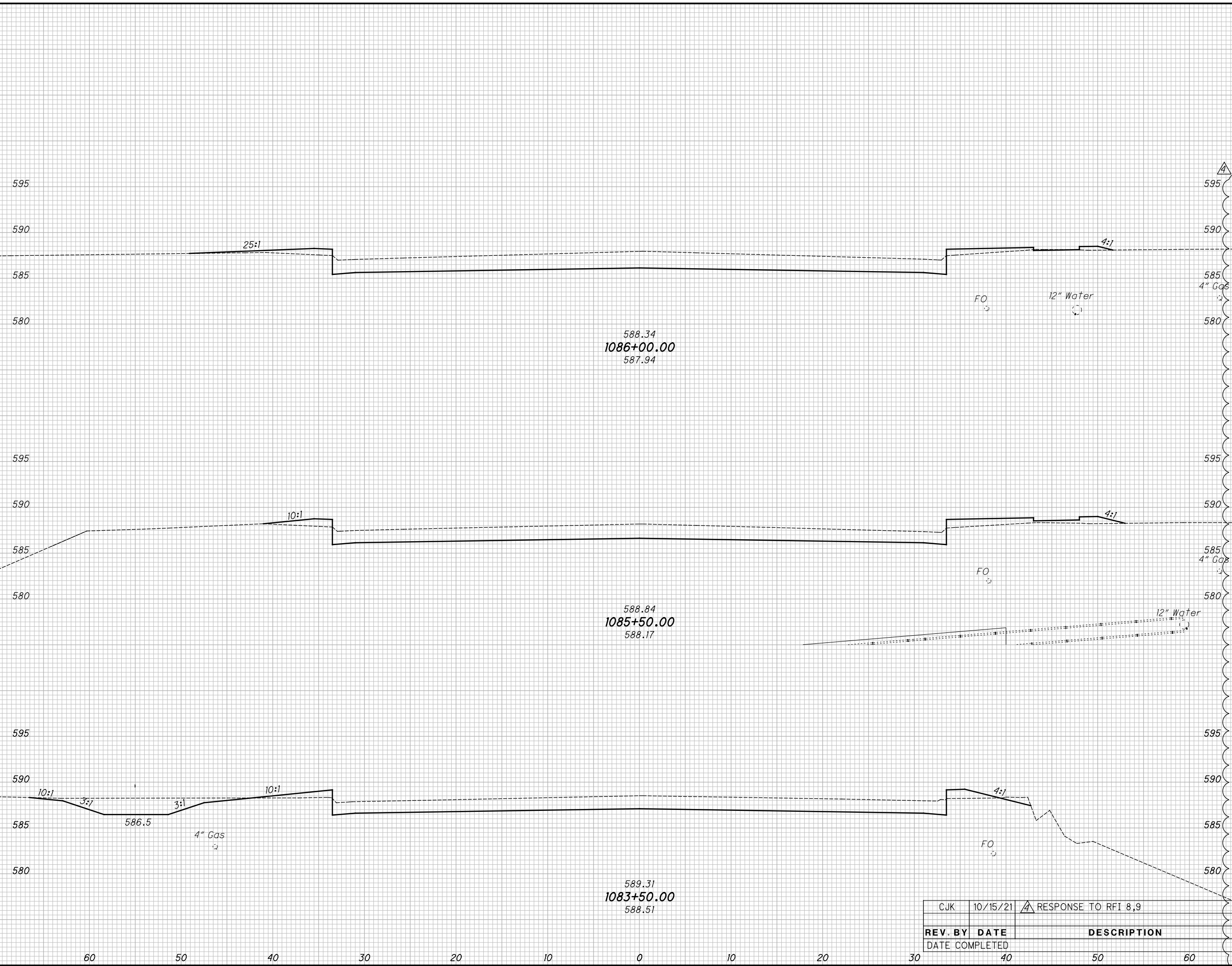
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147

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SEEDING	
END WIDTH	SO. YDS.
396	255
60	46
50	22
40	29



END CUT	AREA FILL	VOLUME	
		CUT	FILL
91	56	170	82
93	33		
116	69	218	117
		388	199

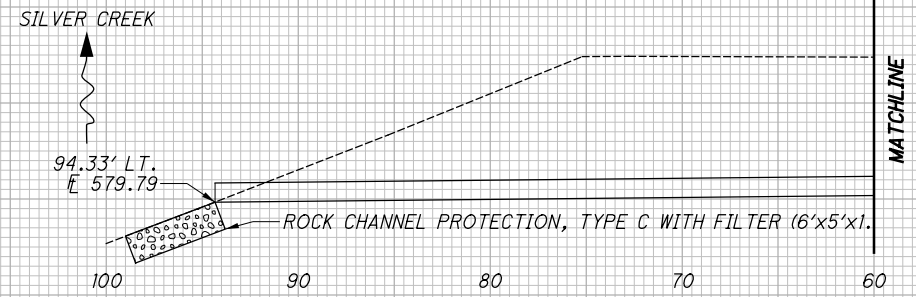
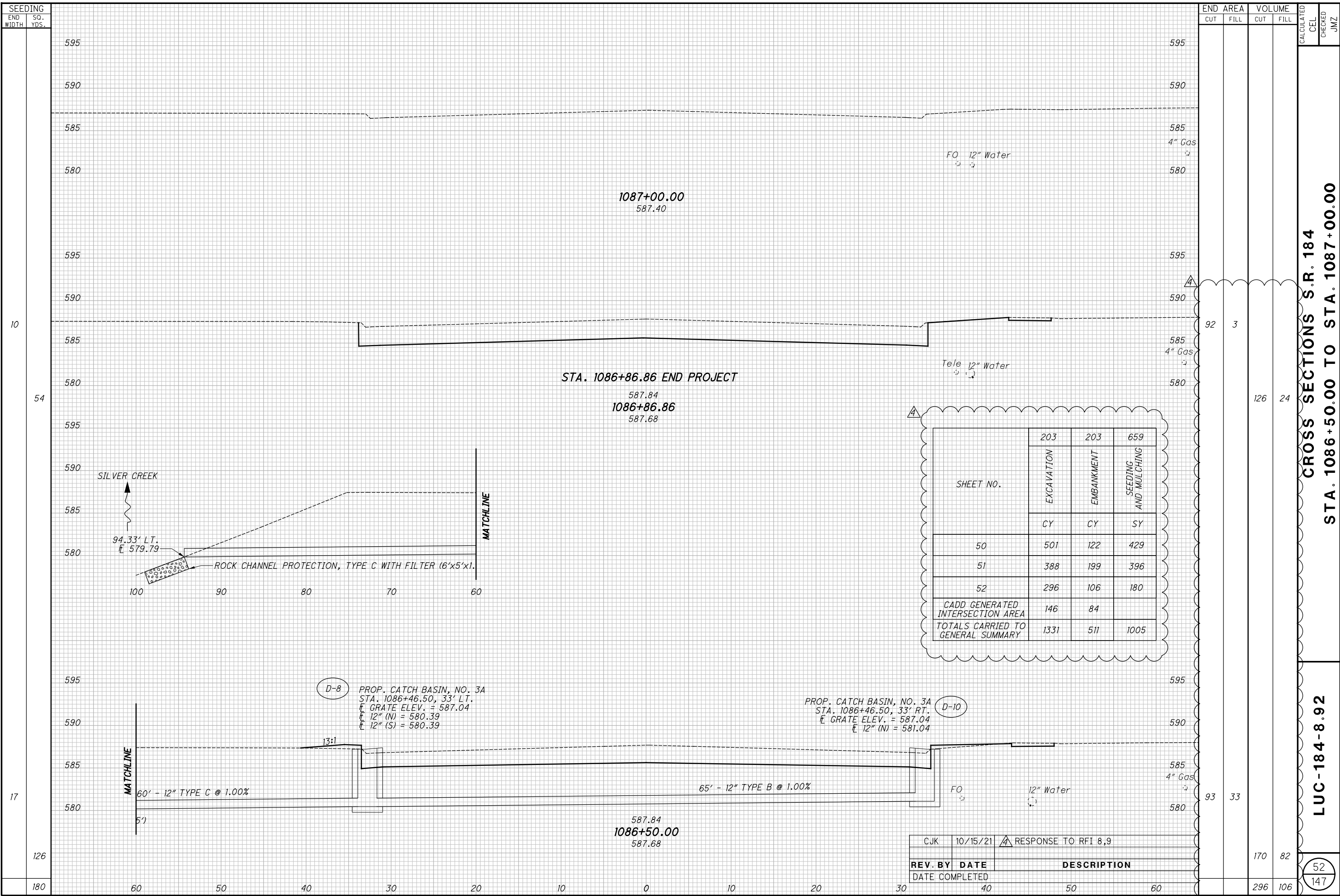
CROSS SECTIONS S.R. 184
STA. 1083+50.00 TO STA. 1086+00.00

LUC-184-8.92

51
147

CJK	10/15/21	RESPONSE TO RFI 8,9
REV. BY	DATE	DESCRIPTION
DATE COMPLETED		

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SHEET NO.	203	203	659
	EXCAVATION	EMBANKMENT	SEEDING AND MULCHING
	CY	CY	SY
50	501	122	429
51	388	199	396
52	296	106	180
CADD GENERATED INTERSECTION AREA	146	84	
TOTALS CARRIED TO GENERAL SUMMARY	1331	511	1005

D-8 PROP. CATCH BASIN, NO. 3A
 STA. 1086+46.50, 33' LT.
 E GRATE ELEV. = 587.04
 E 12" (N) = 580.39
 E 12" (S) = 580.39

D-10 PROP. CATCH BASIN, NO. 3A
 STA. 1086+46.50, 33' RT.
 E GRATE ELEV. = 587.04
 E 12" (N) = 581.04

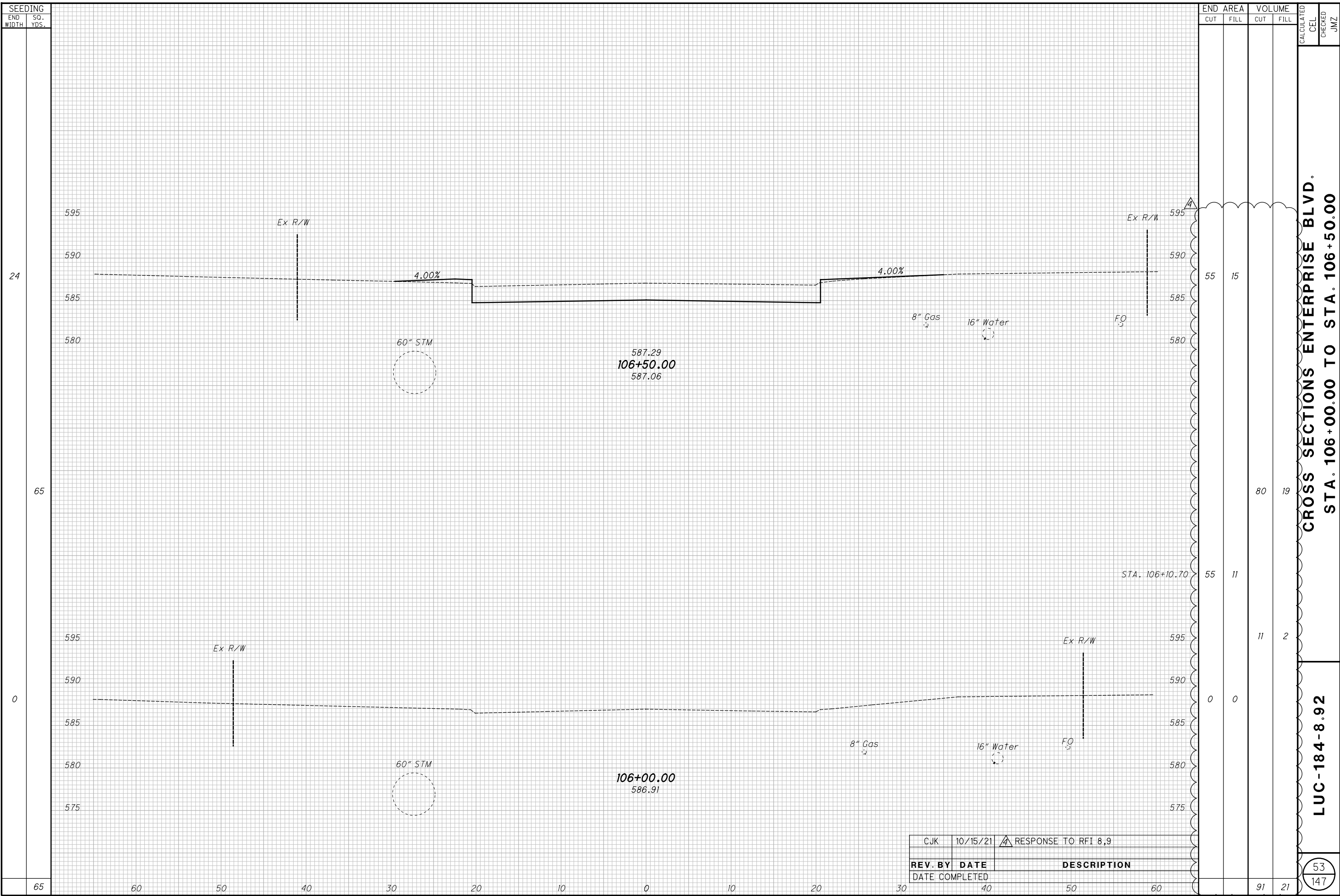
CJK	10/15/21	RESPONSE TO RFI 8,9
REV. BY	DATE	DESCRIPTION
DATE COMPLETED		

CROSS SECTIONS S.R. 184
 STA. 1086+50.00 TO STA. 1087+00.00

LUC-184-8.92

52
147

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CJK	10/15/21	RESPONSE TO RFI 8,9
REV. BY	DATE	DESCRIPTION
DATE COMPLETED		

CROSS SECTIONS ENTERPRISE BLVD.
STA. 106+00.00 TO STA. 106+50.00

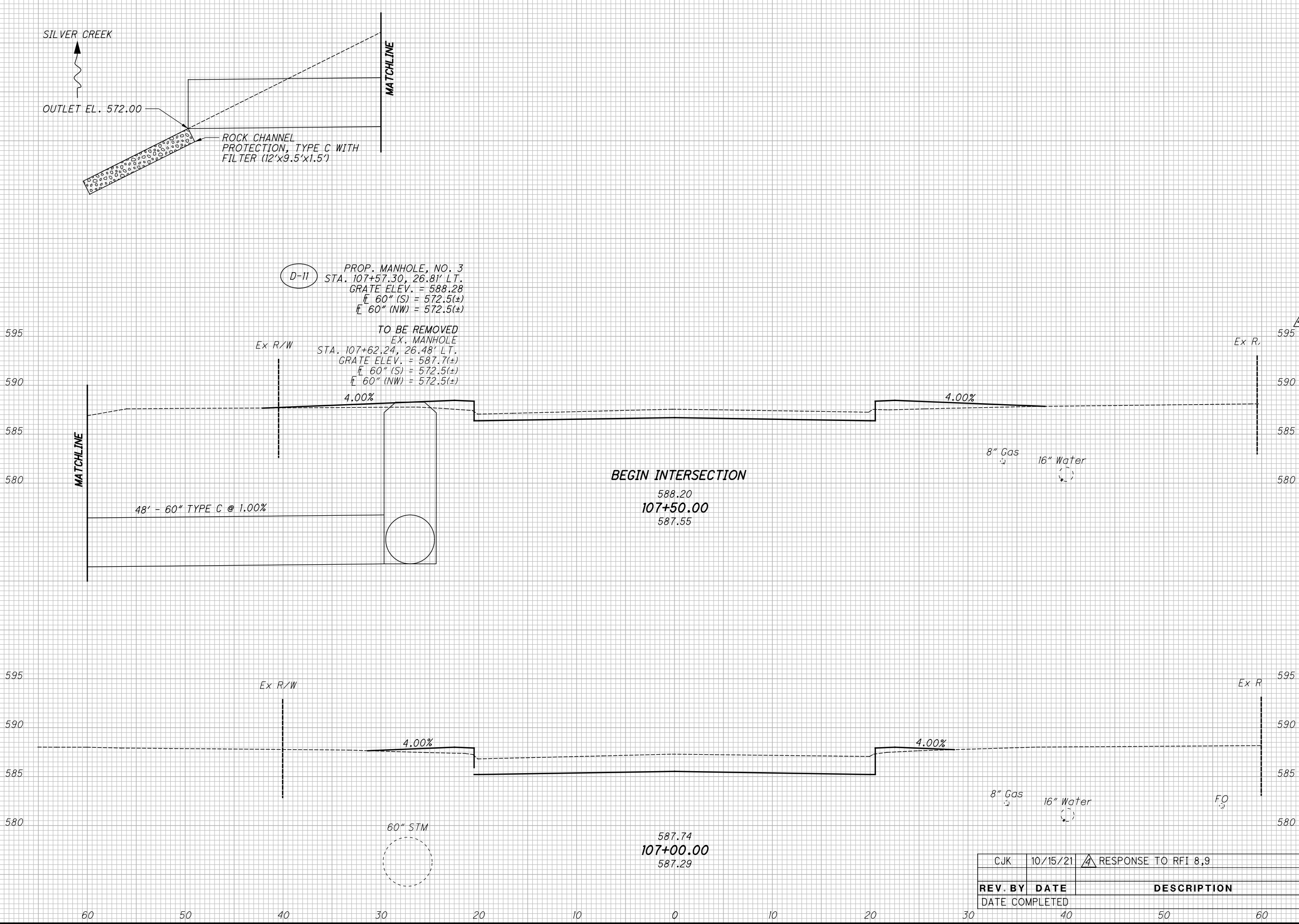
LUC-184-8.92

53
147

END STA.	AREA		VOLUME		CALCULATED CEL	CHECKED JMZ
	CUT	FILL	CUT	FILL		
106+50.00	55	15	80	19		
106+10.70	55	11	11	2		
106+00.00	0	0				
TOTAL			91	21		

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SEEDING	
END WIDTH	SO. YDS.
279	118
19	161
39	39



(D-11) PROP. MANHOLE, NO. 3
 STA. 107+57.30, 26.81' LT.
 GRATE ELEV. = 588.28
 E 60" (S) = 572.5(±)
 E 60" (NW) = 572.5(±)

TO BE REMOVED
 EX. MANHOLE
 STA. 107+62.24, 26.48' LT.
 GRATE ELEV. = 587.7(±)
 E 60" (S) = 572.5(±)
 E 60" (NW) = 572.5(±)

BEGIN INTERSECTION
 588.20
 107+50.00
 587.55

587.74
 107+00.00
 587.29

CJK 10/15/21 RESPONSE TO RFI 8,9

REV. BY	DATE	DESCRIPTION

END AREA		VOLUME		CALCULATED CEL	CHECKED JMZ
CUT	FILL	CUT	FILL		
55	47	101	69		
55	27	101	39		
		208	108		

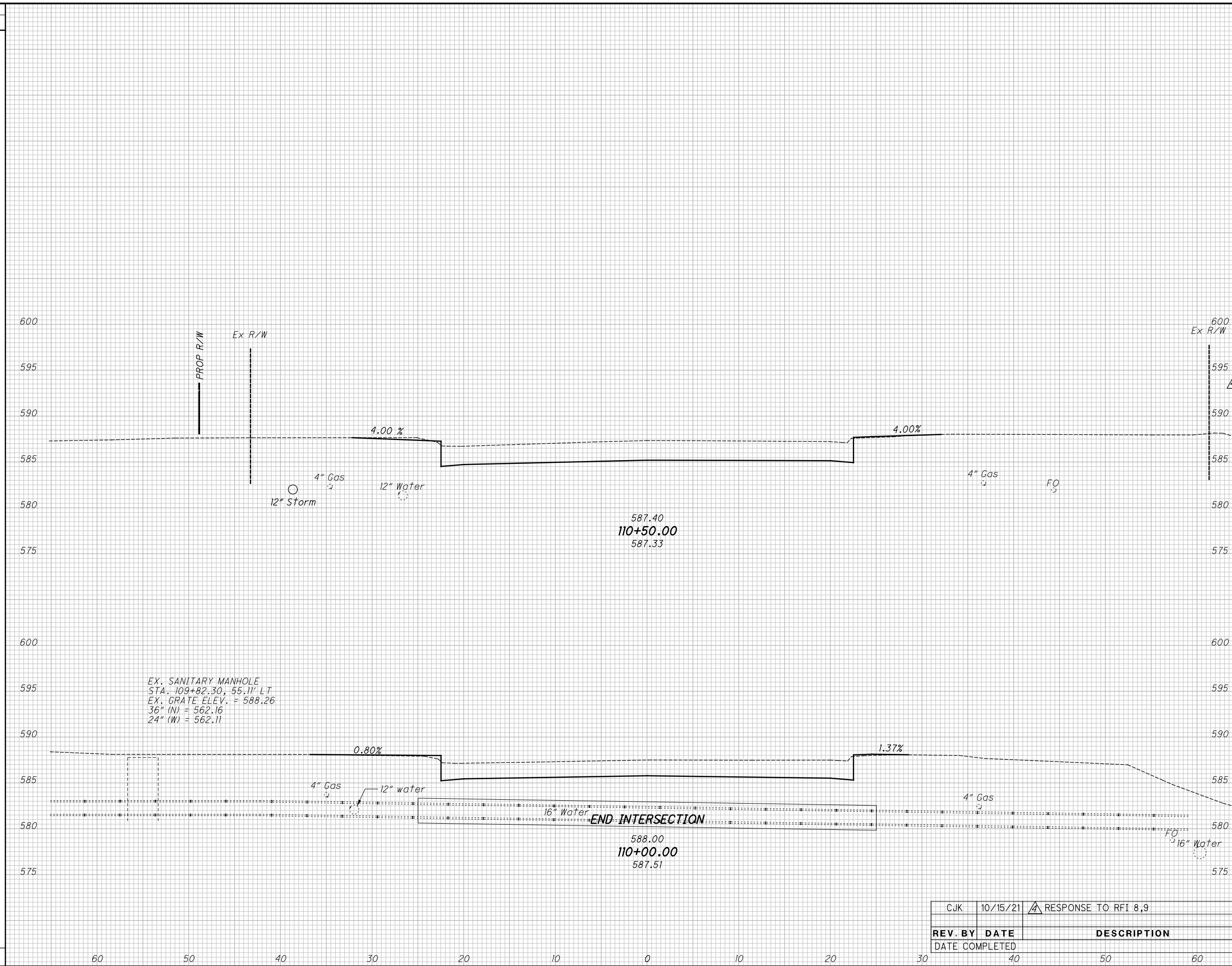
CROSS SECTIONS ENTERPRISE BLVD.
 STA. 107+00.00 TO STA. 107+50.00

LUC-184-8.92

54
 147

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SEEDING	
END WIDTH	SO. YDS.
19	
169	
42	
169	



EX. SANITARY MANHOLE
 STA. 109+82.30, 55.11' LT
 EX. GRATE ELEV. = 588.26
 36" (N) = 562.16
 24" (W) = 562.11

END INTERSECTION

END AREA		VOLUME		CALCULATED CEL	CHECKED JMZ
CUT	FILL	CUT	FILL		
56	6				
102	27				
55	23				
102	27				

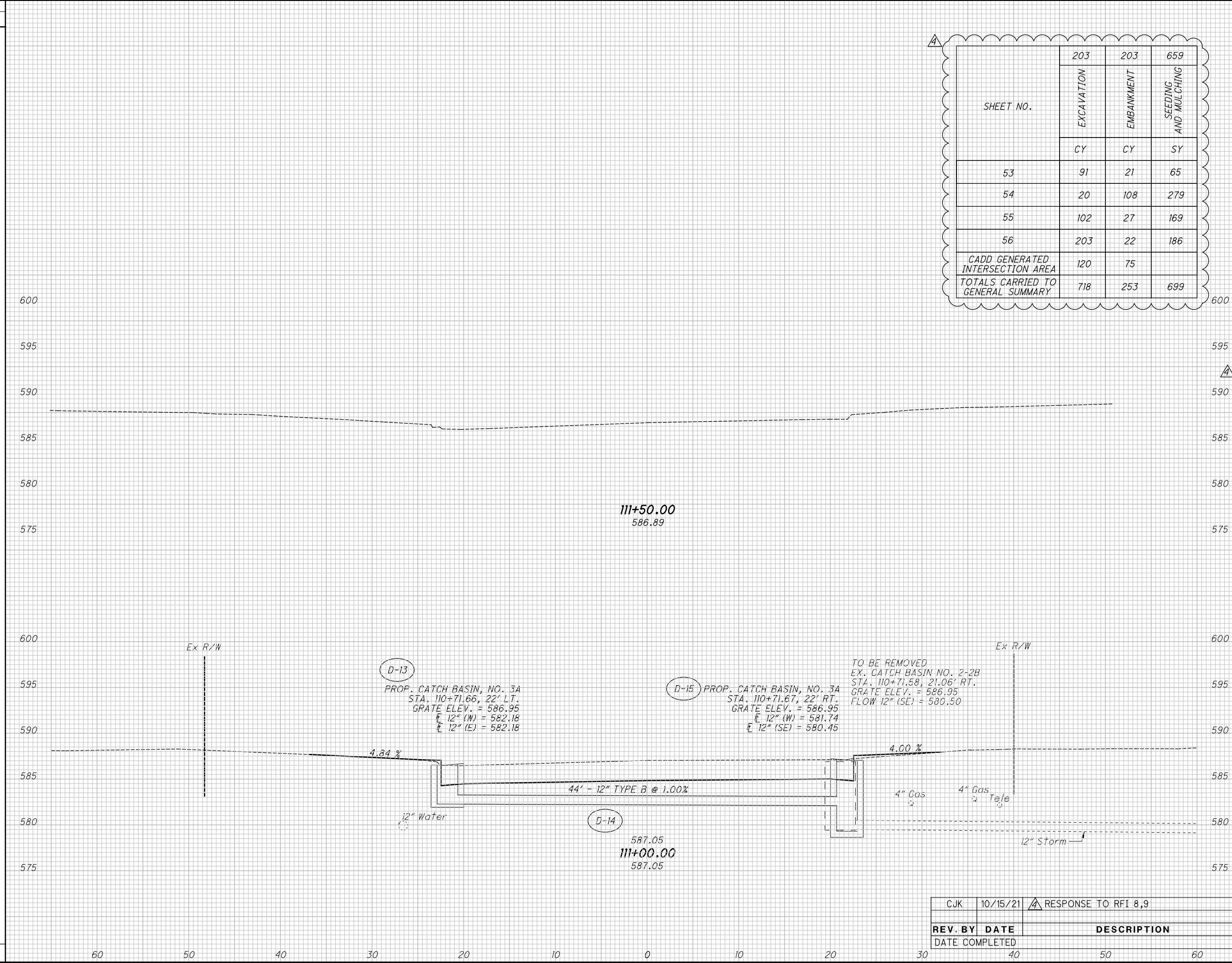
CROSS SECTIONS BENORE ROAD
 STA. 110+00.00 TO STA. 110+50.00

LUC-184-8.92

CJK	10/15/21	RESPONSE TO RFI 8,9
REV. BY	DATE	DESCRIPTION
DATE COMPLETED		

55
147

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SHEET NO.	203	203	659
	EXCAVATION	EMBANKMENT	SEEDING AND MULCHING
	CY	CY	SY
53	91	21	65
54	20	108	279
55	102	27	169
56	203	22	186
CADD GENERATED INTERSECTION AREA	120	75	
TOTALS CARRIED TO GENERAL SUMMARY	718	253	699

END AREA	VOLUME	CALCULATED	CHECKED		
				CUT	FILL
55	0				
101	8				
55	9				
102	14				
203	22				

CROSS SECTIONS BENORE ROAD
STA. 111+00.00

LUC-184-8.92

CJK	10/15/21	RESPONSE TO RFI 8,9
REV. BY	DATE	DESCRIPTION
DATE COMPLETED		

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ESTIMATED QUANTITIES (01/NHS/BR)

CALC. BY: ARA
CHKD. BY: AJK
DATE: 2/22/2021
DATE: 2/23/2021

ITEM	ITEM EXTENSION	TOTAL	UNIT	DESCRIPTION	REAR ABUTMENT	FORWARD ABUTMENT	PIERS	SUPER-STRUCTURE	GENERAL	REF. SHEET NUMBER
202	11003	LS		STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					LS	3
202	22900	737	SY	APPROACH SLAB REMOVED	362	375				
202	23500	1777	SY	WEARING COURSE REMOVED	362	375		1040		
503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN					LS	3
503	21100	673	CY	UNCLASSIFIED EXCAVATION	337	336				
505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION					LS	
507	00500	2430	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	1215	1215				
507	00550	2700	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	1350	1350				
507	00700	2600	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN			2600			
507	00750	2800	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED			2800			
509	10000	435485	LB	EPOXY COATED REINFORCING STEEL	13769	13717	12915	395084		
511	33312	1165	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE				1165		
511	43512	233	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING	117	116				
512	10050	167	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)				167		
512	10100	761	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	59	62	187	453		
512	33000	6	SY	TYPE 2 WATERPROOFING	2	2		2		
516	13200	276	SF	1/2" PREFORMED EXPANSION JOINT FILLER				276		
516	13600	305	SF	1" PREFORMED EXPANSION JOINT FILLER				305		
516	14014	391	FT	INTEGRAL ABUTMENT EXPANSION JOINT SEAL				391		
517	75120	202	FT	RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING)				202		
518	21200	276	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	140	136				
518	40000	417	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	209	208				
518	40010	60	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	30	30				
523	20000	8	EACH	DYNAMIC LOAD TESTING	2	2	4			
523	20500	8	EACH	RESTRIKE	2	2	4			
526	15010	595	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=13")	298	297				
526	90010	380	FT	TYPE A INSTALLATION	190	190				
SPECIAL	45IE30000	388	FT	PRESSURE RELIEF JOINT, TYPE A	194	194				
601	32204	907	CY	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC	458	449				
625	33000	1	EACH	STRUCTURE GROUNDING SYSTEM					1	3

DESIGN AGENCY
PENNONI ASSOCIATES INC.
2 SUMMIT PARK DRIVE, SUITE 335
INDEPENDENCE, OHIO 44131

DATE
2/20/21
REVIEWED
MDP
STRUCTURE FILE NUMBER
4805144

DRAWN
JTS
REVISED

DESIGNED
JTS
CHECKED
BFS

ESTIMATED QUANTITIES
BRIDGE NO. LUC-184-0892
S.R. 184 (ALEXIS RD.) OVER SILVER CREEK

LUC-184-8.92
PID No. 101327

5 / 48

CJK	10/12/21	RESPONSE TO TO RFI 7
REV. BY	DATE	DESCRIPTION
DATE COMPLETED		

101
147

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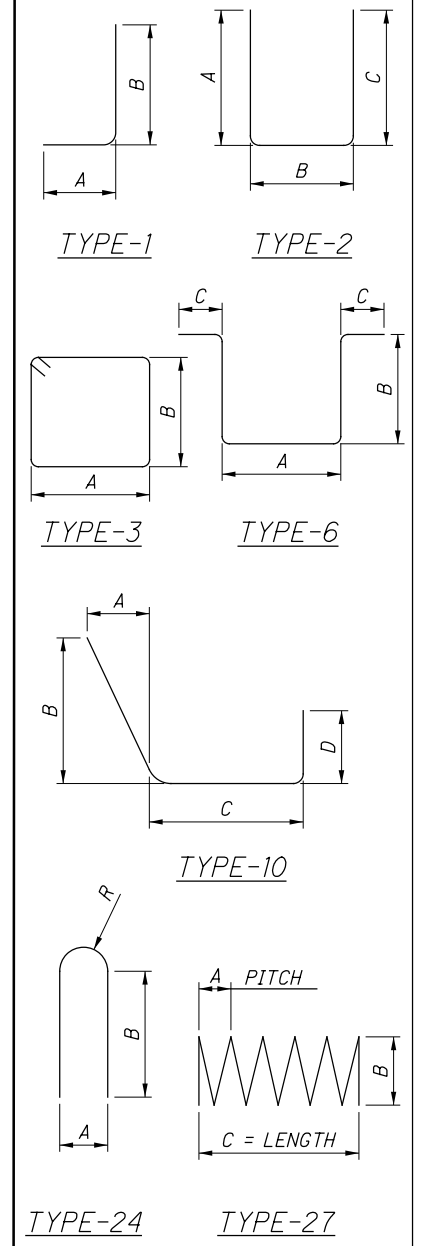
REINFORCING STEEL LIST

Table with columns: MARK, NUMBER (TOTAL), LENGTH, WEIGHT, TYPE, DIMENSIONS (A, B, C, D, E, R), SERIES INC. Rows include PIERS (P401, P501, P502, P503*, P504, P505, P506, P507, P508, P509, P510, P511, P512, P513, P514, P515, P516, P517, P518, P601*, P602, P603, P604, P605, P606, P1101*, P1102, P1103, P1104, P1105) and a TOTAL row.

REINFORCING STEEL LIST

Table with columns: MARK, NUMBER (TOTAL), LENGTH, WEIGHT, TYPE, DIMENSIONS (A, B, C, D, E, R), SERIES INC. Rows include SUPERSTRUCTURE (S401, S402, S403, S404, S405, S406, S407, S408, S409, S501, S502, S503, S504, S505, S506, S507, S508, S509, S510, S511, S512, S513, S514, S515, S516, S517, S518, S519, S520, S521, S522, S523, S524, S525, S526, S527, S528, S529, S530, S531, S532, S533, S534, S535, S536, S537, S538, S539, S540).

BENDING DIAGRAMS



REINFORCING STEEL NOTES

- 1. SERIES BARS - EACH BAR VARIES BY TABULATED AMOUNT.
2. ALL DIMENSIONS ARE OUT TO OUT.
3. TYPE 'STR' INDICATES A STRAIGHT BAR.
4. THE BAR SIZE NUMBER IS INDICATED IN THE 'MARK' COLUMNS. THE FIRST ONE OR TWO DIGITS OF EACH MARK INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, A501 IS A #5 BAR SIZE AND P1001 IS A #10 BAR SIZE.
5. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
6. 16" C.I.P. REINF. CONC. PILE REINFORCING IS PROVIDED FOR INFORMATION ONLY. ALL REINFORCING STEEL REQUIRED FOR 16" C.I.P PILE IS TO BE INCLUDED FOR PAYMENT UNDER ITEM 507 - 16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED.

* BAR UTILIZING MECHANICAL CONNECTORS
SEE NOTE 6

Table with columns: REV BY, DATE, DESCRIPTION, DATE COMPLETED. Row 1: CJK, 10/12/21, RESPONSE TO TO RFI 7.

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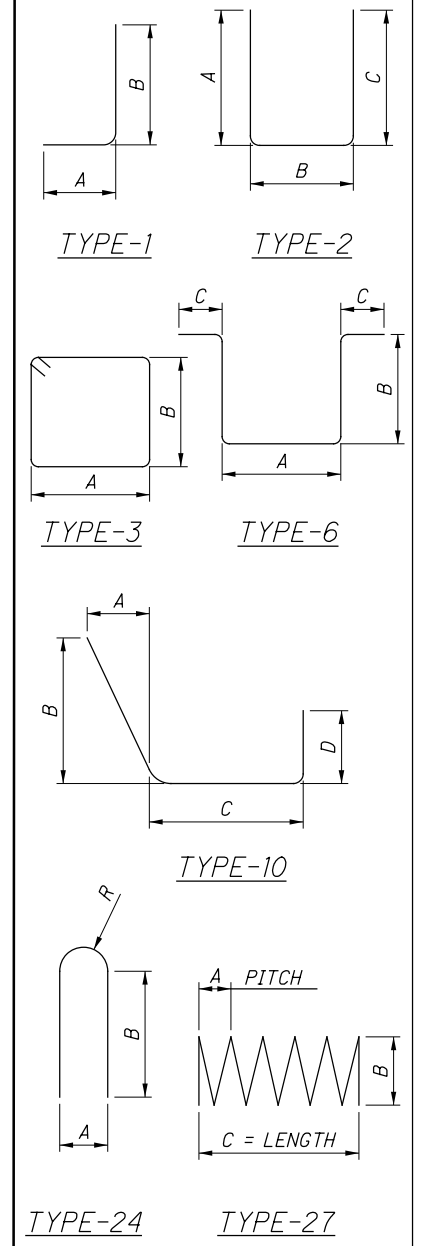
REINFORCING STEEL LIST

Table with columns: MARK, NUMBER, LENGTH, WEIGHT, TYPE, DIMENSIONS (A, B, C, D, E, R), SERIES INC. Includes sections for PIERS and SUPERSTRUCTURE with various bar specifications.

REINFORCING STEEL LIST

Table with columns: MARK, NUMBER, LENGTH, WEIGHT, TYPE, DIMENSIONS (A, B, C, D, E, R), SERIES INC. Includes sections for SUPERSTRUCTURE and various bar specifications.

BENDING DIAGRAMS



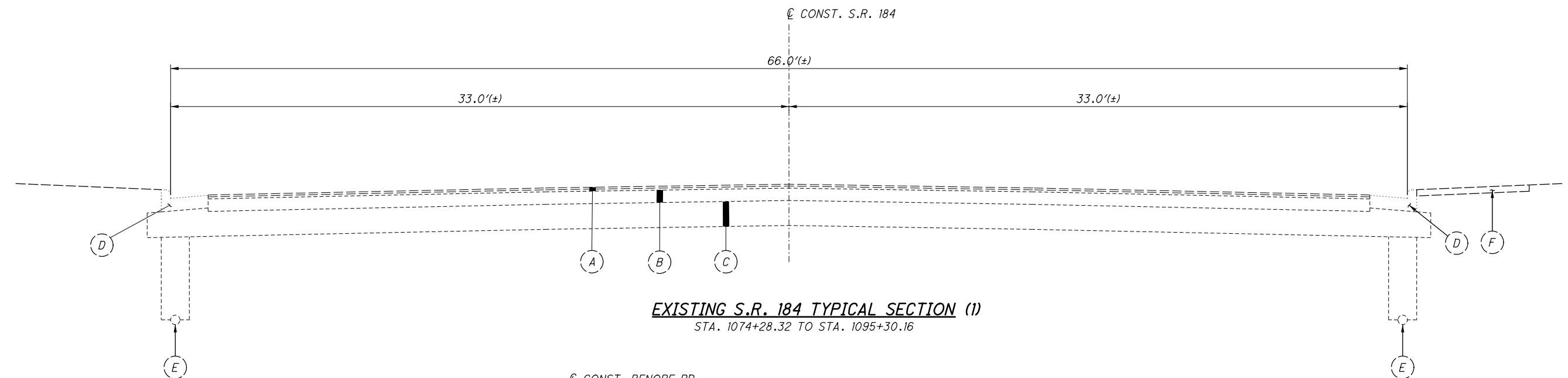
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2. ALL DIMENSIONS ARE OUT TO OUT.
3. TYPE 'STR' INDICATES A STRAIGHT BAR.
4. THE BAR SIZE NUMBER IS INDICATED IN THE MARK COLUMNS...
5. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
6. 16" C.I.P. REINF. CONC. PILE REINFORCING IS PROVIDED FOR INFORMATION ONLY...

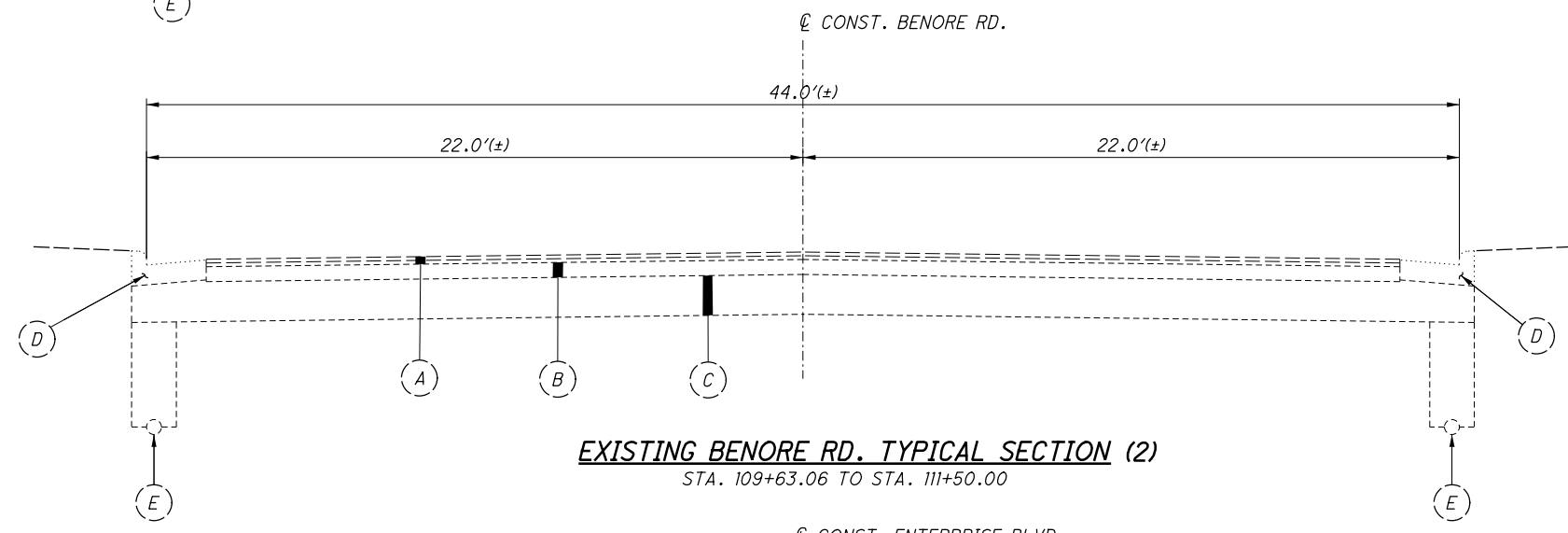
* BAR UTILIZING MECHANICAL CONNECTORS
◇ SEE NOTE 6

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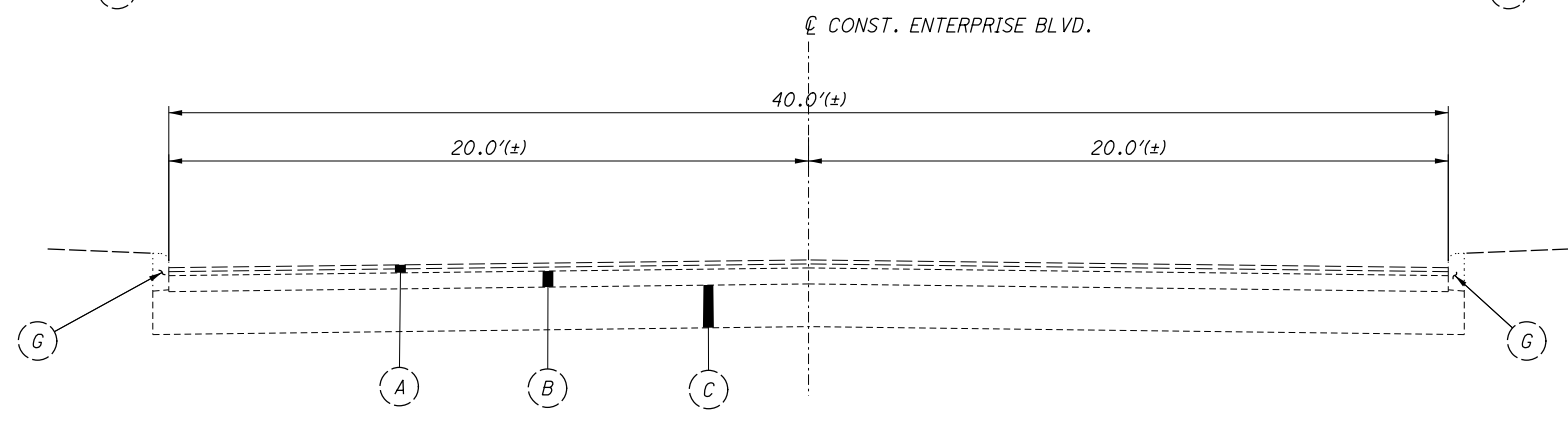
CALCULATED
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EXISTING S.R. 184 TYPICAL SECTION (1)
STA. 1074+28.32 TO STA. 1095+30.16



EXISTING BENOIRE RD. TYPICAL SECTION (2)
STA. 109+63.06 TO STA. 111+50.00



EXISTING ENTERPRISE BLVD. TYPICAL SECTION (3)
STA. 106+00.00 TO STA. 107+97.10

LEGEND

- (A) 3"± ASPHALT CONCRETE
- (B) 8"± ASPHALT CONCRETE BASE
- (C) 16"± SUBBASE
- (D) COMBINATION CURB AND GUTTER
- (E) 6"± PIPE UNDERDRAINS
- (F) SIDEWALK
- (G) CURB

EXISTING TYPICAL SECTIONS

LUC-184-8.92

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS, EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

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

AT&T OHIO INDEPENDENTS FIBER NETWORK
130 N. ERIE ST, RM 714 13888 COUNTY RD 25A
TOLEDO, OH 44883 WAPAKONETA, OH 45895
419-245-7304 419-739-3114

BUCKEYE BROADBAND LEVEL 3 COMMUNICATIONS
2700 OREGON RD. 1025 ELDORADO BLVD.
NORTHWOOD, OH 43619 BROOMFIELD, CO 80021
ATTN: MICHAEL SHEAHAN 512-742-1428
419-724-3713

BUCKEYE PIPE LINE COMPANY SUNOCO LOGISTICS
P.O. BOX 368 7155 INKSTER ROAD
EMMAUS, PA 18049-0368 TAYLOR, MI 48180
484-232-4000 313-670-1251

CITY OF TOLEDO - TOLEDO EDISON (USIC)
DIVISION OF WATER 6099 ANGOLA RD.
401 SOUTH ERIE STREET HOLLAND, OH 43528
TOLEDO, OH 43602 419-249-5218
419-936-2839

COLUMBIA GAS OF OHIO - MARATHON ASHLAND PIPE LINE
TOLEDO COMPANY
2901 E. MANHATTAN BLVD. 539 S. MAIN STREET
TOLEDO, OH 43611 FINDLAY, OH 45840
419-539-6066 419-422-2121

ENBRIDGE ENERGY LUCAS COUNTY ENGINEER'S OFFICE
1409 HAMMOND AVE. 1 GOVERNMENT CENTER, SUITE 870
SUPERIOR, WI 54880 TOLEDO, OH 43604-2259
715-398-4500 419-213-4541 X4359

GAS RECOVERY SYSTEMS LUCAS COUNTY SANITARY
10611 5 MILE RD. ENGINEERS
NORTHVILLE, MI 48168 1111 SOUTH McCORD RD.
248-305-7774 HOLLAND, OH 43528
419-213-2926

CITY OF TOLEDO
DIVISION OF ENGINEERING SERVICES
600 JEFFERSON AVE. SUITE 300
TOLEDO, OHIO 43604
419-245-1315

CITY OF TOLEDO
DIVISION OF TRANSPORTATION
110 N. WESTWOOD
TOLEDO, OHIO 43607
419-245-1300

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 9:00 PM AM AND 7:00 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT. CONTRACTOR WILL NEED TO APPLY FOR A NOISE WAIVER FROM CITY OF TOLEDO.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 2 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: ODOT VRS

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD 83 (2011)
ELLIPSOID: GRS 80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE NORTH ZONE
COMBINED SCALE FACTOR: 1.0000000
ORIGIN OF COORDINATE SYSTEM: OHIO NORTH ZONE
NORTHING = 0.000
EASTING = 0.000

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 CMS 623.

UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

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.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

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

MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED

ALL CASTINGS SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT OF WAY FOR SALVAGE BY STATE FORCES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 ITEM.

ITEM SPECIAL - MISCELLANEOUS METAL

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIAL SHALL MEET ITEM 611 OF THE SPECIFICATIONS AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

SPECIAL, MISCELLANEOUS METAL 500 POUNDS

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE EXPENSE OF THE CONTRACTOR.

TEMPORARY DRAINAGE ITEMS

TEMPORARY DRAINAGE ITEMS LABELED ON THE MAINTENANCE OF TRAFFIC PLAN ARE ITEMIZED IN THE MOT GENERAL SUMMARY FOR INFORMATION ONLY AND INCLUDED IN ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, LUMP SUM.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

SEEDING AND MULCHING

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

659, SOIL ANALYSIS TEST	2 EACH
659, TOPSOIL	189 CU. YD.
659, SEEDING AND MULCHING - SEE SHEETS 52, 56 AND 29	85 SQ. YD.
659, REPAIR SEEDING AND MULCHING	85 SQ. YD.
659, INTER-SEEDING	85 SQ. YD.
659, COMMERCIAL FERTILIZER	0.23 TON
659, LIME	0.04 ACRES
659, WATER	9 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 690-98400 - SPECIAL - MISC.: WATER PERMIT FEES, FIXED LUMP SUM (\$7,650.00)

THIS ITEM OF WORK IS TO COMPENSATE THE CITY OF TOLEDO DIVISION OF WATER DISTRIBUTION FOR WATER PERMIT FEES FOR WORK ASSOCIATED WITH THIS PROJECT. THE WATER PERMIT FEES SHALL BE PAID BY THE CONTRACTOR PRIOR TO THE CITY COMMENCING WITH THE WORK. THE CONTRACTOR WILL NOT BE REQUIRED TO PERFORM ANY FIELD WORK ON THE PROJECT FOR THESE ITEMS.

QTY	UNIT	DESCRIPTION	UNIT FEE	TOTAL FEE
1	EACH	FIRE HYDRANT REMOVED	\$2,200.00	\$2,200.00
1	EACH	FIRE HYDRANT ADJUSTED TO GRADE	\$850.00	\$850.00
1	EACH	FIRE HYDRANT	\$4,600.00	\$4,600.00

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GENERAL NOTES

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ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF 1 LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON S.R. 184 AND BENOIRE RD. BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, AND ITEM 615 ROADS FOR MAINTAINING TRAFFIC. ENTERPRISE BLVD. WILL BE CLOSED FOR THE DURATION OF THE PROJECT.

ALL WORK ASSOCIATED WITH MAINTENANCE OF TRAFFIC INCLUDING SET-UP, PAVING, SIDEWALK AND CURB RAMP WORK, PHASE CHANGES, TEMPORARY TRAFFIC SIGNALS AND TEAR DOWNS SHALL BE COMPLETED BETWEEN THE HOURS OF 8:00PM AND 6:00AM.

PEDESTRIAN TRAFFIC SHALL BE MAINTAINED AT ALL TIMES THROUGH CONSTRUCTION ZONE AS DETAILED IN THE PLANS.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD 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.

NOTICE OF CLOSURE SIGN TIME TABLE
ITEM DURATION SIGN DISPLAYED
OF CLOSURE TO PUBLIC

RAMP & >=2 WEEKS 14 CALENDAR DAYS PRIOR TO CLOSURE

ROAD > 12 HOURS 7 CALENDAR DAYS PRIOR & < 2 WEEKS TO CLOSURE

CLOSURES < 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 PHONE NUMBER SHALL BE (419) 373-4428.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 100 CU. YD.

ITEM 616, WATER 20 M. GAL.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

PHASE 1:

- 1) S.R. 184 EB, JUST EAST OF RAINTREE PARKWAY.
- 2) S.R. 184 EB, JUST WEST OF INTERSECTION OF S.R. 184 & BENOIRE/ENTERPRISE.
- 3) S.R. 184 EB, JUST EAST OF INTERSECTION OF S.R. 184 & BENOIRE/ENTERPRISE.

PHASE 2:

- 1) S.R. 184 WB, JUST WEST OF INTERSECTION OF S.R. 184 & BENOIRE/ENTERPRISE.
- 2) ENTERPRISE BLVD. AT INTERSECTION OF S.R. 184 & BENOIRE/ENTERPRISE.
- 3) S.R. 184 WB, JUST EAST OF INTERSECTION OF S.R. 184 & BENOIRE/ENTERPRISE.
- 4) S.R. 184 WB, JUST WEST OF INTERSECTION OF S.R. 184 & FUTURA/BENOIRE.

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.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 10 M. GAL.

ITEM 614, REPLACEMENT SIGN

FLATSHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL

AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ITEM 615, ROADS FOR MAINTAINING TRAFFIC, AS PER PLAN

IN ADDITION TO ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, ITEM 615, ROADS FOR MAINTAINING TRAFFIC SHALL INCLUDE ALL ITEMS NECESSARY TO PROVIDE A COMPLETE, FUNCTIONAL, AND SAFE INSTALLATION OF TEMPORARY ROAD FOR PUBLIC USE.

ITEM 615, ROADS FOR MAINTAINING TRAFFIC SHALL CONFORM TO C&MS ITEM 615 AND SHALL INCLUDE, BUT NOT LIMITED TO, INSTALLATION, MAINTENANCE, AND REMOVAL OF ALL EARTHWORK, GUARDRAIL, SIDEWALK, AND DRAINAGE NECESSARY TO PROVIDE THE TEMPORARY ROAD INSTALLATION.

ITEMS HAVE BEEN INCLUDED ON SHEETS 40-41 OF THE PLANS AS INFORMATION ONLY AND SHOULD BE INCLUDED IN ITEM 615, ROADS FOR MAINTAINING TRAFFIC, AS PER PLAN.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 615, ROADS FOR MAINTAINING TRAFFIC, LUMP SUM AS PER PLAN

CALCULATED
A JK
CHECKED
JMZ

MAINTENANCE OF TRAFFIC GENERAL NOTES

LUC-184-8.92

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DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (ONE-WAY) SEE SHEET 14

ITEM 614, OBJECT MARKER, (TWO-WAY) SEE SHEET 19,26

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

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 WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMTCD, 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).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMTCD, 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: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN A 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).

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 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 THE SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. 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 WHICH 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 120 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.

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 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 CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	4 CALENDAR DAYS PRIOR TO CLOSURE
LANE CLOSURES & 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.

THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY PHONE AT: (419) 373-4428 OR EMAIL AT: D02.pio@dot.ohio.gov

DISTRICT PERMIT SECTION BY PHONE AT: (419) 373-4301 OR EMAIL AT: D02.permits@dot.ohio.gov

PRIOR TO CLOSING ANY STREET OR TRAFFIC LANE, THE CONTRACTOR SHALL NOTIFY THE CITY OF TOLEDO, DIVISION OF TRANSPORTATION, AT 419-245-1300 OR BY EMAIL AT SHAWN.COMES@TOLEDO.OH.GOV AT LEAST SEVEN (7) DAYS PRIOR TO STARTING WORK.

ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

- SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
- EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO SECTION 204.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS). IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.
- COMPACT THE SUBGRADE ACCORDING TO C&MS 204.03.
- APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS. PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO C&MS 204.06.
- EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO C&MS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
- PROOF ROLL THE STABILIZED AREAS ACCORDING TO C&MS 204.06 TO VERIFY STABILITY.
- FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

EXISTING UTILITIES WITHIN ANY UNSUITABLE SUBGRADE AREA SHALL NOT BE DISTURBED DURING EXCAVATION AND REPLACEMENT ACTIVITIES.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE AS PER THE GEOTECHNICAL REPORT (STRUCTURE FOUNDATION EXPLORATION - FINAL DATED MAY 14, 2021) ARE BOTH PAID UNDER ITEM 204 EXCAVATION OF SUBGRADE.

ESTIMATED QUANTITIES HAVE BEEN PROVIDED BELOW AND CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 204, EXCAVATION OF SUBGRADE 1,160 CY
ITEM 204, GRANULAR EMBANKMENT, TYPE C 1,160 CY

CALCULATED
A JK
CHECKED
JMZ

MAINTENANCE OF TRAFFIC GENERAL NOTES

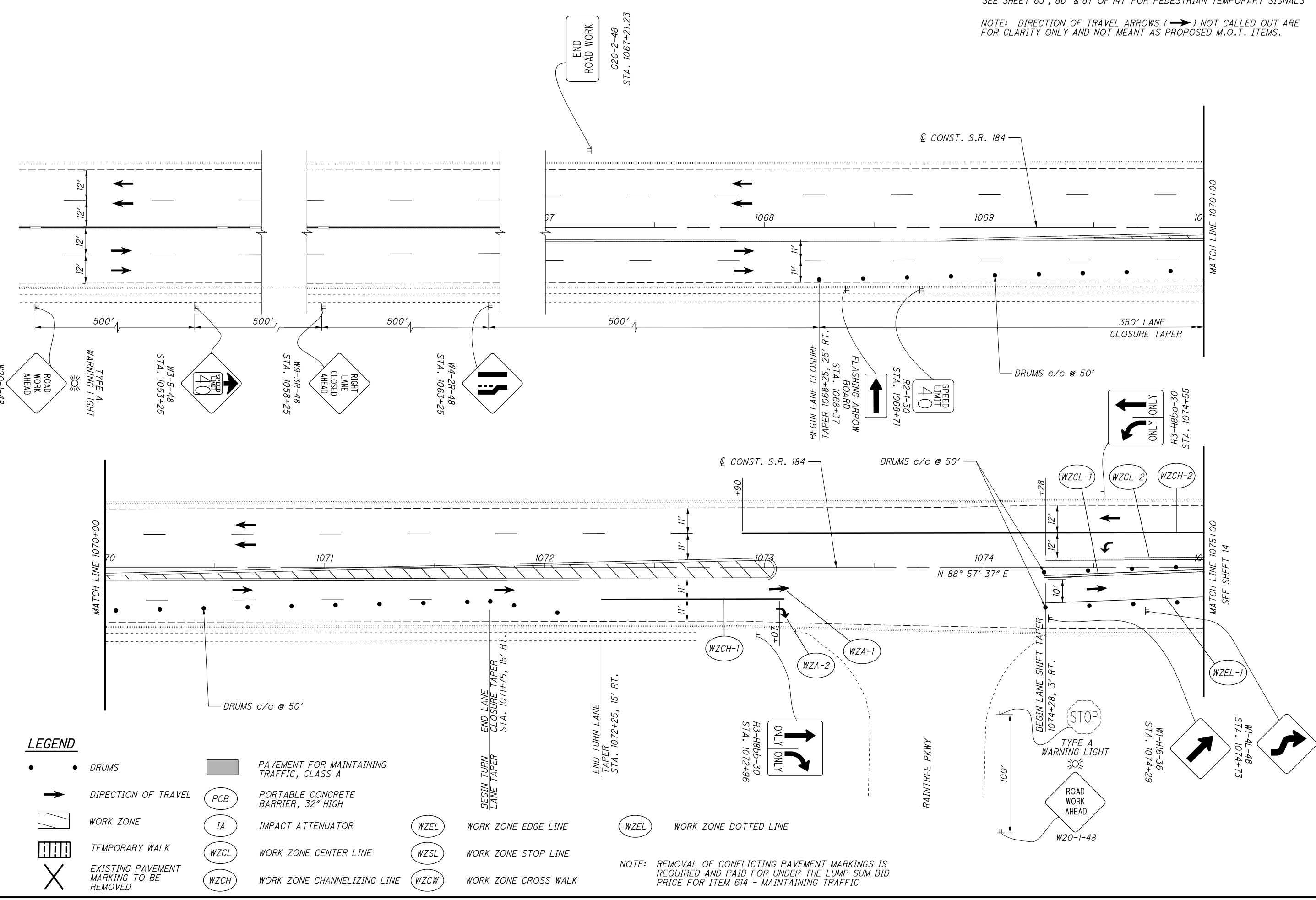
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SEE SHEET 83, 86 & 87 OF 147 FOR PEDESTRIAN TEMPORARY SIGNALS
 NOTE: DIRECTION OF TRAVEL ARROWS (→) NOT CALLED OUT ARE FOR CLARITY ONLY AND NOT MEANT AS PROPOSED M.O.T. ITEMS.

CALCULATED
 ARA
 CHECKED
 JMZ

0 50 100
 HORIZONTAL
 SCALE IN FEET



LEGEND

- DRUMS
- DIRECTION OF TRAVEL
- ▨ WORK ZONE
- ▩ TEMPORARY WALK
- ✕ EXISTING PAVEMENT MARKING TO BE REMOVED
- ▒ PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
- PCB PORTABLE CONCRETE BARRIER, 32" HIGH
- IA IMPACT ATTENUATOR
- WZCL WORK ZONE CENTER LINE
- WZCH WORK ZONE CHANNELIZING LINE
- WZEL WORK ZONE EDGE LINE
- WZSL WORK ZONE STOP LINE
- WZCW WORK ZONE CROSS WALK
- WZEL WORK ZONE DOTTED LINE

NOTE: REMOVAL OF CONFLICTING PAVEMENT MARKINGS IS REQUIRED AND PAID FOR UNDER THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC

MAINTENANCE OF TRAFFIC PHASE 1
S.R. 184 - STA. 1048+25 TO STA. 1075+00

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NOTE: REMOVAL OF CONFLICTING PAVEMENT MARKINGS IS REQUIRED AND PAID FOR UNDER THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC

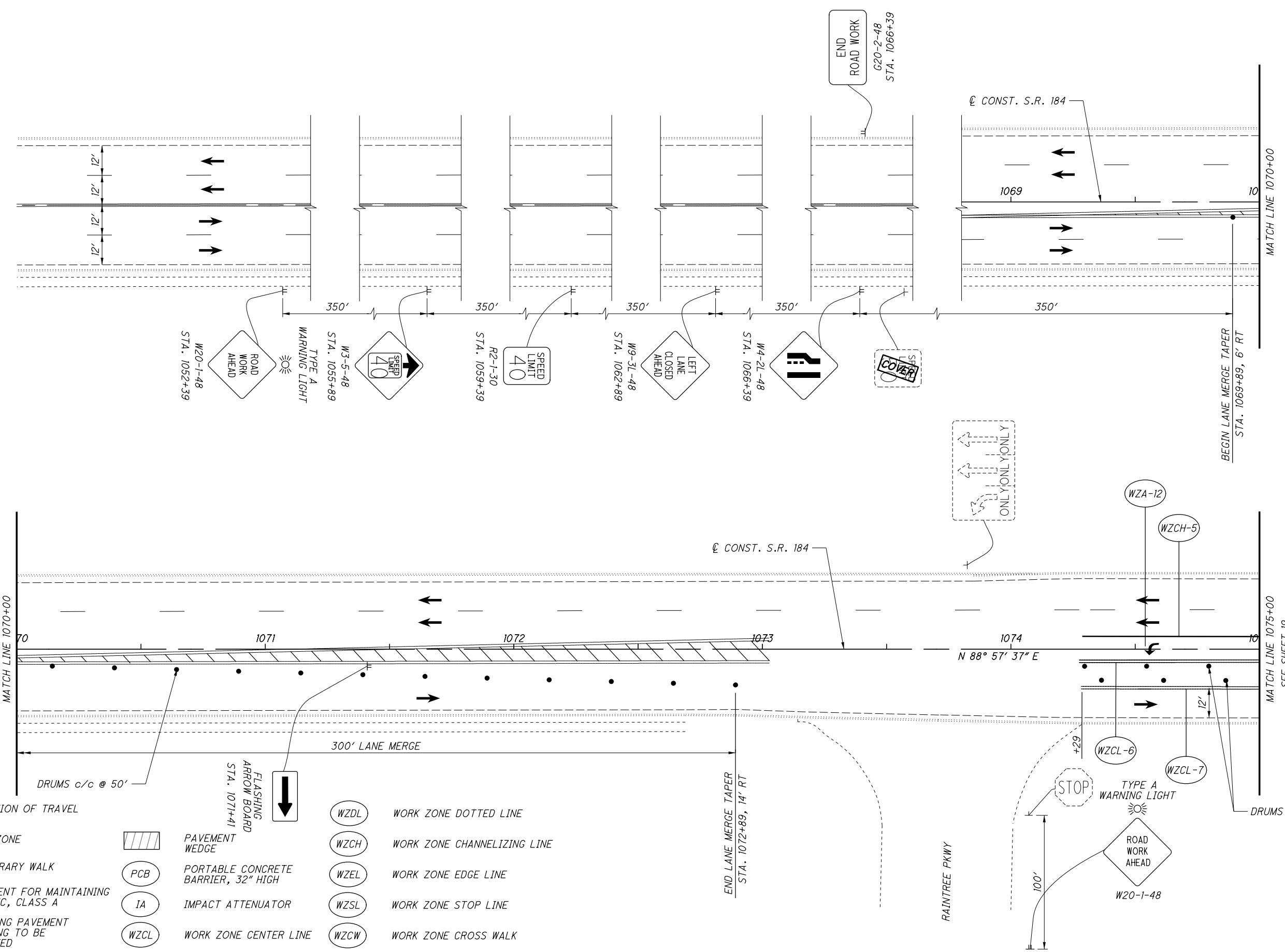
NOTE: DIRECTION OF TRAVEL ARROWS (→) NOT CALLED OUT ARE FOR CLARITY ONLY AND NOT MEANT AS PROPOSED M.O.T. ITEMS.

CALCULATED
AJK
CHECKED
JMZ

0 50 100
HORIZONTAL
SCALE IN FEET

MAINTENANCE OF TRAFFIC PHASE 2
S.R. 184 - STA. 1052+39 TO STA. 1075+00

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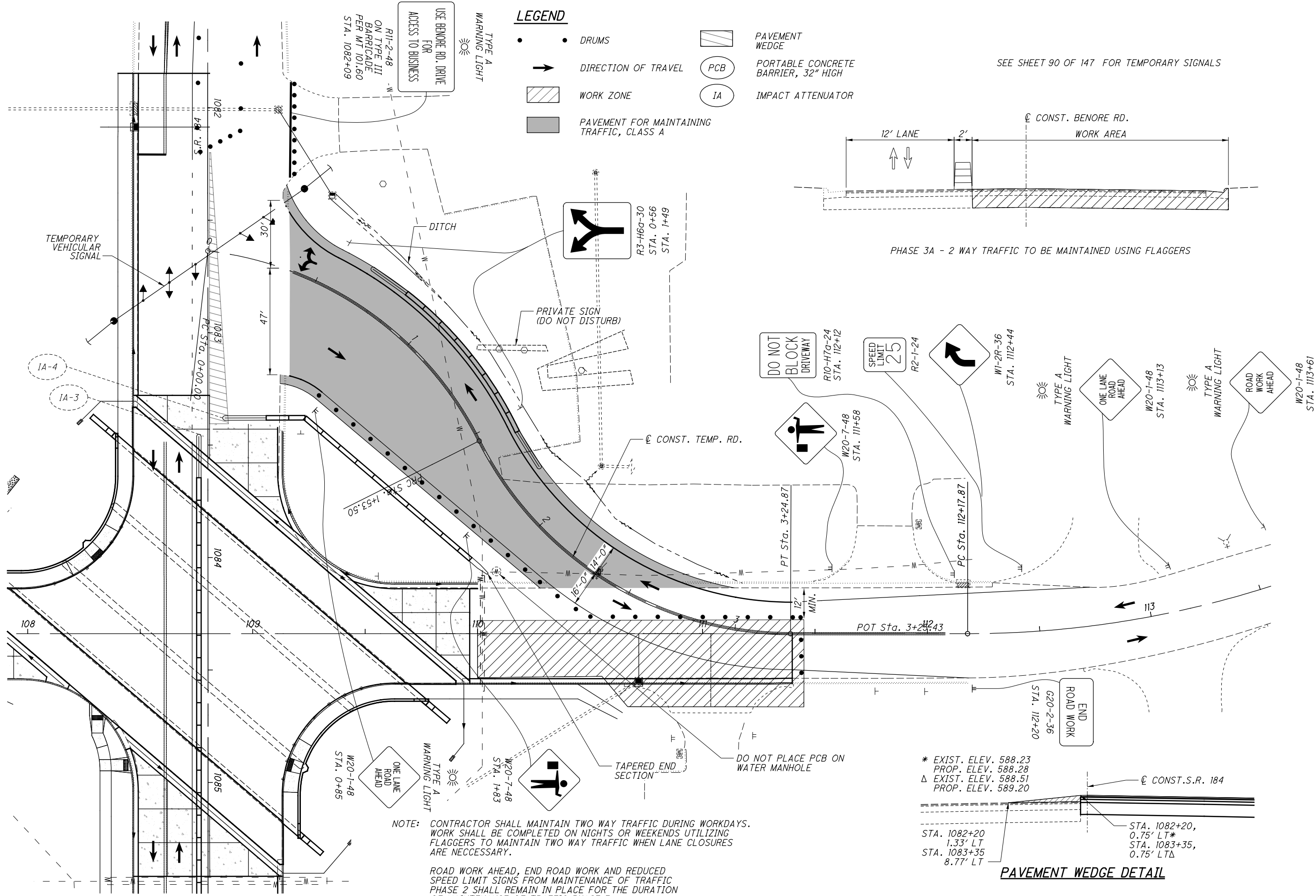


LEGEND

- DRUMS
- DIRECTION OF TRAVEL
- ▨ WORK ZONE
- ▨ TEMPORARY WALK
- ▨ PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
- ✕ EXISTING PAVEMENT MARKING TO BE REMOVED
- DRUMS c/c @ 50'
- FLASHING ARROW BOARD STA. 1071+41
- ▨ PAVEMENT WEDGE
- PCB PORTABLE CONCRETE BARRIER, 32" HIGH
- IA IMPACT ATTENUATOR
- WZCL WORK ZONE CENTER LINE
- WZDL WORK ZONE DOTTED LINE
- WZCH WORK ZONE CHANNELIZING LINE
- WZEL WORK ZONE EDGE LINE
- WZSL WORK ZONE STOP LINE
- WZCW WORK ZONE CROSS WALK

RAINTREE PKWY

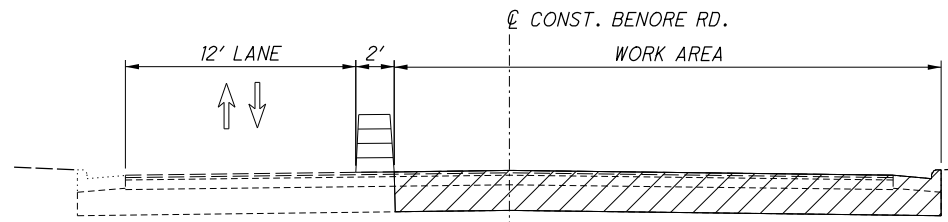
SEE SHEET 19



LEGEND

- • DRUMS
- DIRECTION OF TRAVEL
- ▨ WORK ZONE
- ▨ PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
- ▨ PAVEMENT WEDGE
- PCB PORTABLE CONCRETE BARRIER, 32" HIGH
- IA IMPACT ATTENUATOR

SEE SHEET 90 OF 147 FOR TEMPORARY SIGNALS



PHASE 3A - 2 WAY TRAFFIC TO BE MAINTAINED USING FLAGGERS

CALCULATED AREA CHECKED JMJ

0 50 100 HORIZONTAL SCALE IN FEET

**MAINTENANCE OF TRAFFIC PHASE 3
BENOIRE RD - STA. 108+00 TO STA. 114+00**

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SEE SHEET 94 OF 147 FOR SIGNING AND PAVEMENT AND TRAFFIC SIGNAL DETAILS

NOTE: REMOVAL OF CONFLICTING PAVEMENT MARKINGS IS REQUIRED AND PAID FOR UNDER THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC

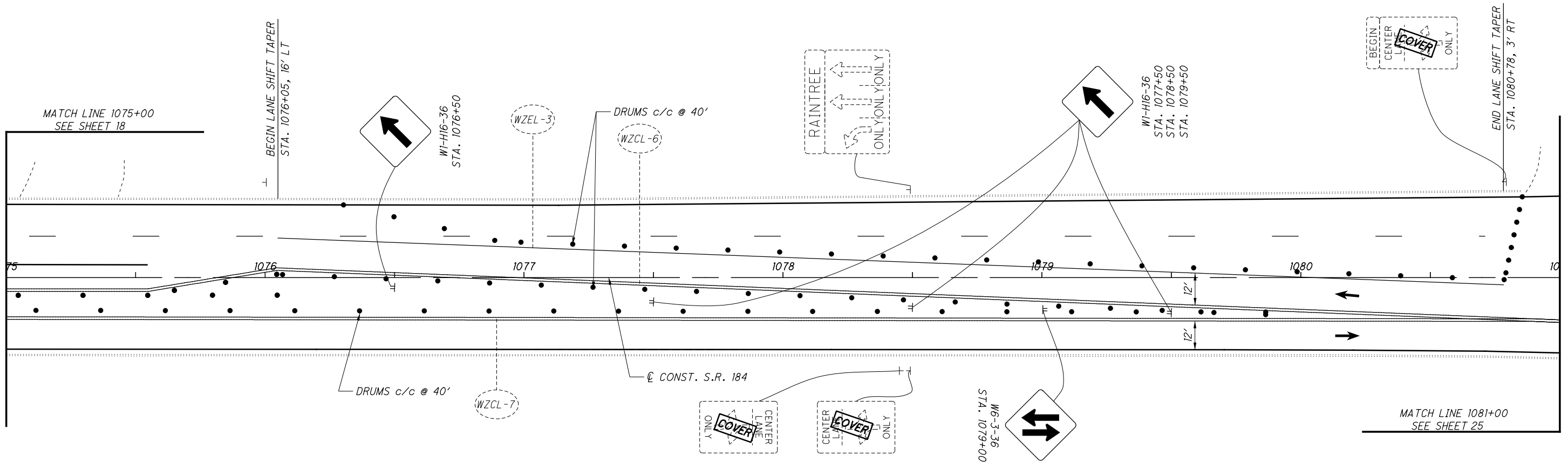
CALCULATED
JTS
CHECKED
CEL

0 50 100
25
HORIZONTAL
SCALE IN FEET

LEGEND

- DRUMS
- DIRECTION OF TRAVEL
- ▨ WORK ZONE
- PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A
- PCB PORTABLE CONCRETE BARRIER, 32" HIGH
- WZCL WORK ZONE CENTER LINE
- WZSL WORK ZONE STOP LINE
- WZCH WORK ZONE CHANNELIZING LINE
- WZEL WORK ZONE EDGE LINE

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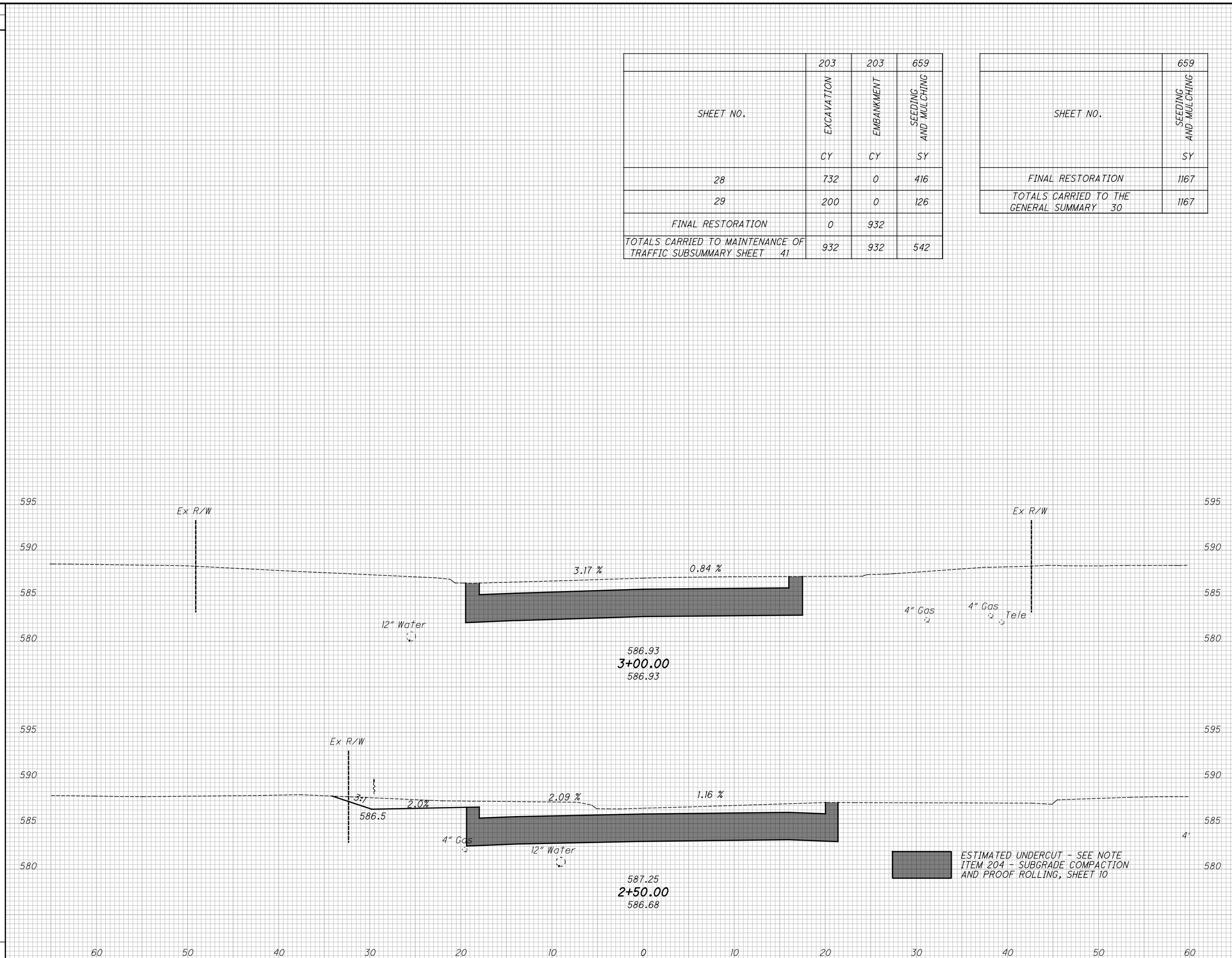
FOR MAINTENANCE OF TRAFFIC FROM STA. 1065+00 TO 1075+00 SEE PHASE 2 MAINTENANCE OF TRAFFIC ON SHEETS 18/147.

MAINTENANCE OF TRAFFIC PHASE 4
S.R. 184 - STA. 1076+00 TO STA. 1081+00

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SEEDING	
END WIDTH	SO. YDS.
126	79
60	47
50	0



SHEET NO.	EXCAVATION CY	EMBANKMENT CY	SEEDING AND MULCHING SY
28	732	0	416
29	200	0	126
FINAL RESTORATION	0	932	
TOTALS CARRIED TO MAINTENANCE OF TRAFFIC SUBSUMMARY SHEET 41	932	932	542

SHEET NO.	SEEDING AND MULCHING SY
FINAL RESTORATION	1167
TOTALS CARRIED TO THE GENERAL SUMMARY 30	1167

END AREA	VOLUME		CALCULATED	CHECKED	BPS
	CUT	FILL			
42	0	0			
99	0	0			
65	0	0			
101	0	0			
200	0	0			

ESTIMATED UNDERCUT - SEE NOTE
ITEM 204 - SUBGRADE COMPACTION
AND PROOF ROLLING, SHEET 10

CROSS SECTIONS TEMPORARY ROAD
STA. 2+50.00 TO STA. 3+00.00

LUC-184-8.92

29
147

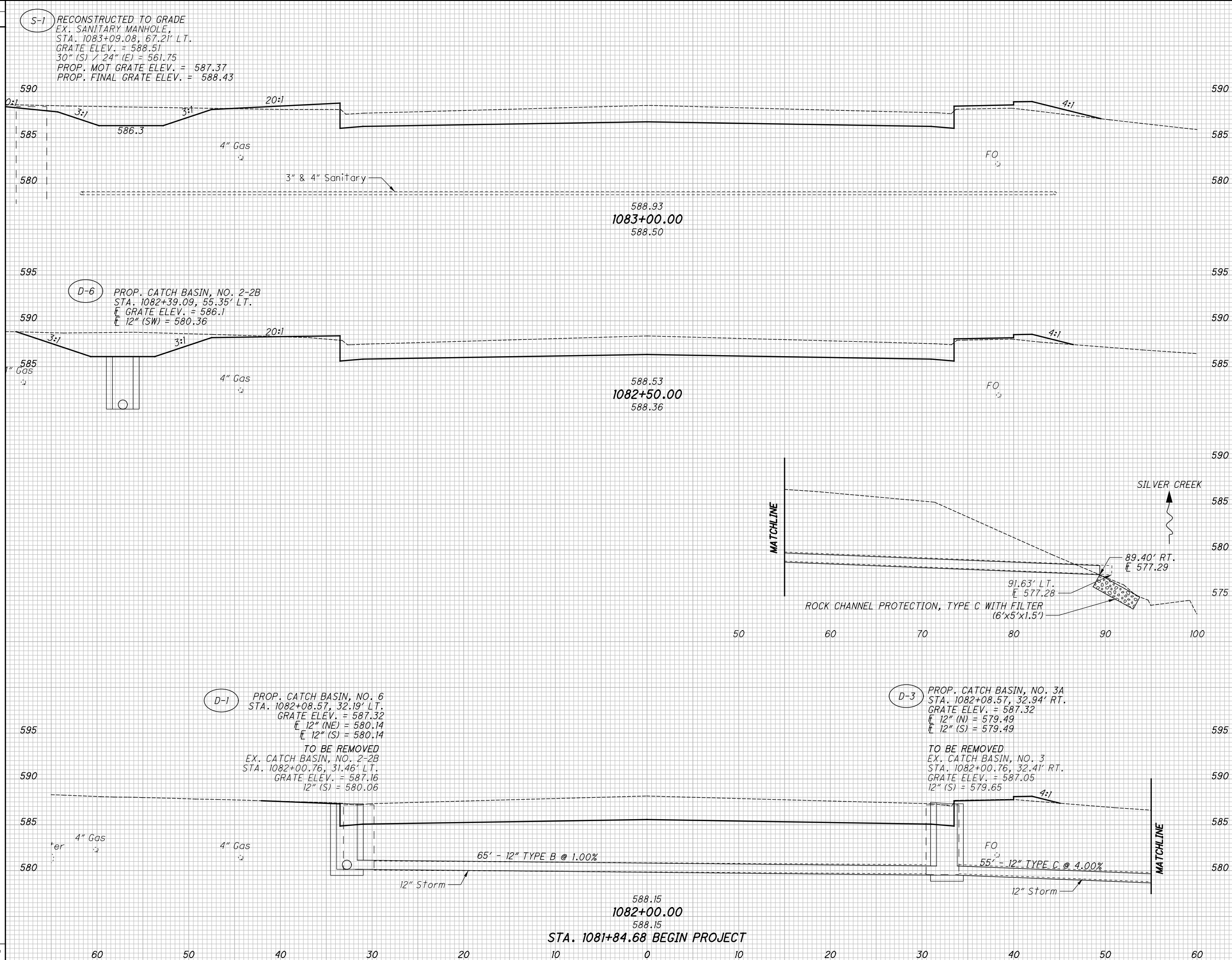
REF NO.	SHEET NO.	STATION TO STATION			SIDE	202	202	202	202	202	202	202	202	204		606	606	606	606	606	608	608	608	609	609
						PAVEMENT REMOVED SY	WALK REMOVED SF	CURB REMOVED FT	CURB AND GUTTER REMOVED FT	PIPE REMOVED, 24" AND UNDER FT	PIPE REMOVED, OVER 24" FT	GUARDRAIL REMOVED FT	MANHOLE REMOVED EACH	CATCH BASIN REMOVED EACH	SUBGRADE COMPACTION SY	GUARDRAIL, TYPE MGS FT	ANCHOR ASSEMBLY, MGS TYPE B EACH	ANCHOR ASSEMBLY, MGS TYPE T EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2 EACH	4" CONCRETE WALK SF	CURB RAMP SF	DETECTABLE WARNING SF	COMBINATION CURB AND GUTTER, TYPE 2 FT	CURB, TYPE 6 FT
C-1	44	1081+84.68	TO	1083+87.76	LT				205														205		
C-2	44	1081+84.68	TO	1083+27.93	RT				143														143		
C-3	45	1085+41.79	TO	1086+86.86	LT				145														145		
C-4	45	1085+41.79	TO	1086+86.86	RT				203														203		
C-5	48	106+10.70	TO	108+49.05	LT			153																153	
C-6	48	106+10.70	TO	108+43.62	RT			207																207	
C-7	49	109+44.56	TO	111+39.92	LT				195														195		
C-8	49	109+96.50	TO	111+39.92	RT				143														143		
R-1	44	1080+78.38	TO	1083+44.83	RT						270														
R-2	44	1082+00.76			LT/RT							1													
R-3	44	1082+00.76			LT/RT			65																	
R-4	44	1082+00.76			RT							1													
R-5	44	1082+00.76			RT			55																	
R-6			NOT USED																						
R-7	44	1081+84.68	TO	1083+54.00	RT		1023																		
R-8	45	1085+24.92	TO	1087+91.76	LT					269															
R-9	45	1084+83.94	TO	1086+86.86	RT		1246																		
R-10	48	107+20.76	TO	107+81.94	LT					61															
R-11	48	107+64.24			LT						1														
R-12	48	107+64.24	TO	107+90.82	LT				48																
R-13	49	109+78.26	TO	110+44.07	RT					66															
R-14	49	110+76.33			RT						1														
G-1	44	1081+70.51	TO	1083+97.30	RT										112.5	1		1							
G-2	45	1085+28.76	TO	1086+99.19	LT										112.5	1		1							
G-3	48	107+33.00	TO	107+85.84	LT										25		1		1						
G-4	49	109+74.34	TO	110+13.76	RT												1		1						
P-1	44	1081+84.68	TO	1083+87.68	LT/RT	1193							1333												
P-2	45	1084+84.79	TO	1086+86.86	LT/RT	1500							1339												
P-3	48	106+10.70	TO	107+92.07	LT/RT	1076							866												
P-4	49	109+71.94	TO	111+39.92	LT/RT	760							903												
APPROACH SLABS		1083+60.57	TO	1083+80.57	LT/RT								302												
APPROACH SLABS		1084+89.15	TO	1085+09.15	LT/RT								302												
SW-1	44	1081+84.86	TO	1083+27.93	LT																1023				
SW-2	45	1084+83.94	TO	1086+86.86	RT																1246				
SW-3	48	109+96.50	TO	110+64.64	RT																416				
DW-1	44	1083+97			RT																	12			
DW-2	45	1084+91			LT																	12			
CR-1	45	1084+68			RT																	78			
CR-2	45	1084+92			RT																	97			
TOTALS CARRIED TO GENERAL SUMMARY						4529	2269	360	1035	120	48	666	1	3	5045	250	2	2	2	2	2685	175	24	1035	360

CALCULATED	CEL
CHECKED	JMZ
ROADWAY SUBSUMMARY	
LUC-184-8.92	
34	147

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SEEDING
END SO.
WIDTH YDS.

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END AREA	VOLUME		CALCULATED CEL	CHECKED JMZ
	CUT	FILL		
120	57			
129	36			
213	35			
100	2			
100	2			
501	122			

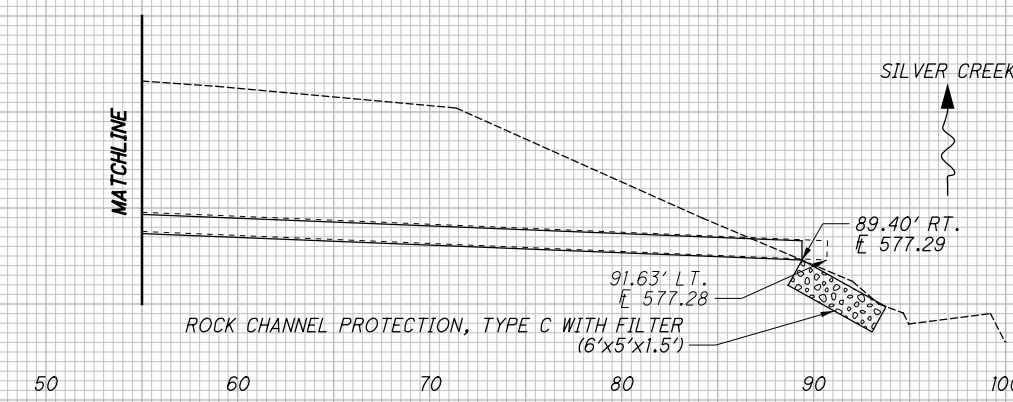
CROSS SECTIONS S.R. 184
STA. 1082+00.00 TO STA. 1083+00.00
LUC-184-8.92
50
147

S-1 RECONSTRUCTED TO GRADE
 EX. SANITARY MANHOLE,
 STA. 1083+09.08, 67.21' LT.
 GRATE ELEV. = 588.51
 30" (S) / 24" (E) = 561.75
 PROP. MOT GRATE ELEV. = 587.37
 PROP. FINAL GRATE ELEV. = 588.43

D-6 PROP. CATCH BASIN, NO. 2-2B
 STA. 1082+39.09, 55.35' LT.
 GRATE ELEV. = 586.1
 12" (SW) = 580.36

D-1 PROP. CATCH BASIN, NO. 6
 STA. 1082+08.57, 32.19' LT.
 GRATE ELEV. = 587.32
 12" (NE) = 580.14
 12" (S) = 580.14
 TO BE REMOVED
 EX. CATCH BASIN, NO. 2-2B
 STA. 1082+00.76, 31.46' LT.
 GRATE ELEV. = 587.16
 12" (S) = 580.06

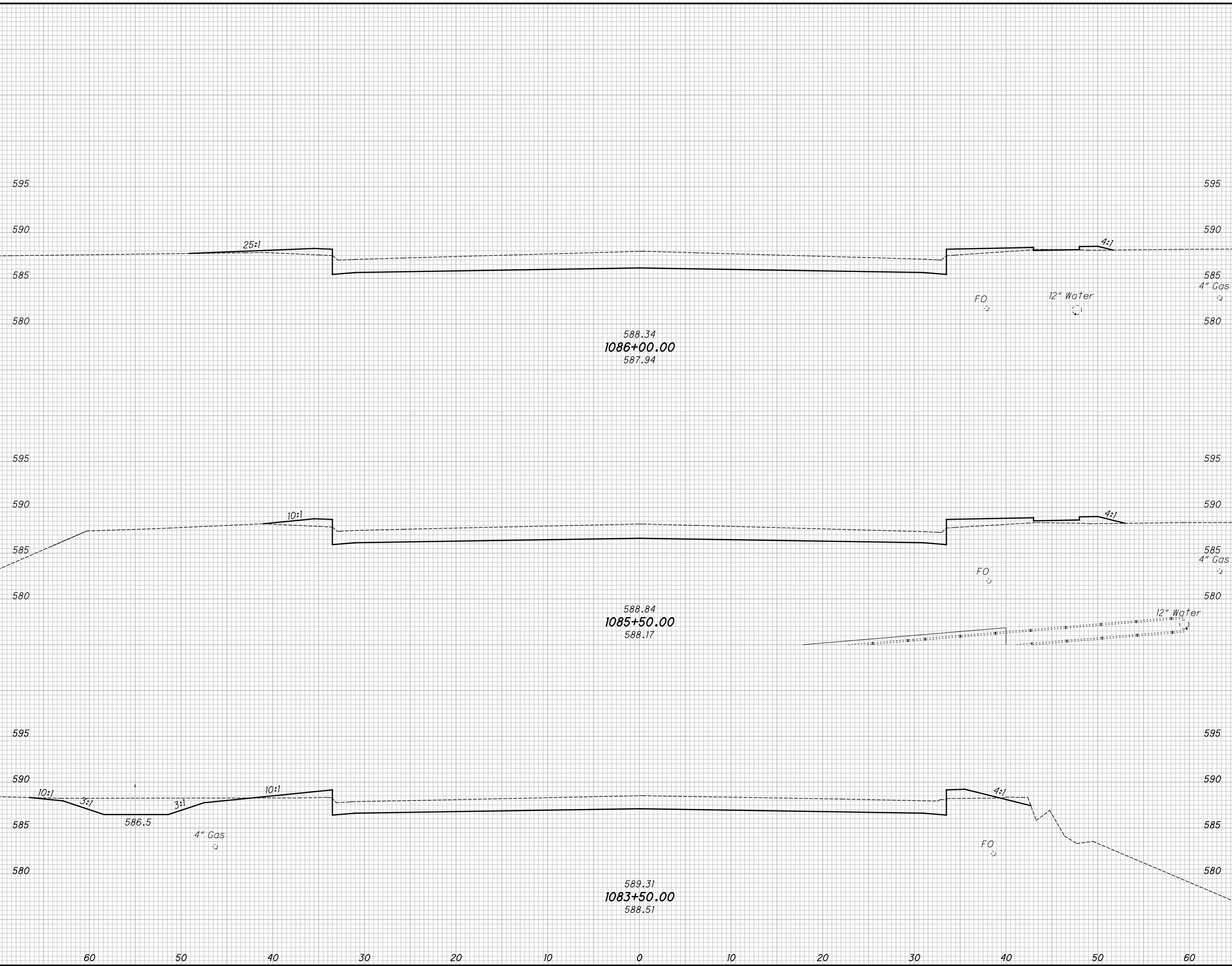
D-3 PROP. CATCH BASIN, NO. 3A
 STA. 1082+08.57, 32.94' RT.
 GRATE ELEV. = 587.32
 12" (N) = 579.49
 12" (S) = 579.49
 TO BE REMOVED
 EX. CATCH BASIN, NO. 3
 STA. 1082+00.76, 32.41' RT.
 GRATE ELEV. = 587.05
 12" (S) = 579.65



588.15
 1082+00.00
 588.15
 STA. 1081+84.68 BEGIN PROJECT

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SEEDING	
END WIDTH	SO. YDS.
396	255
60	46
50	22
40	29



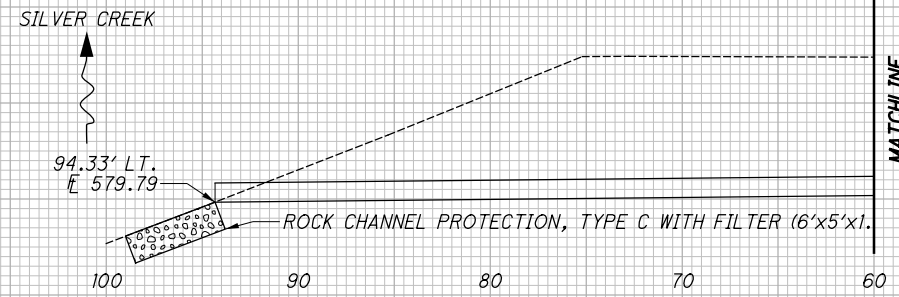
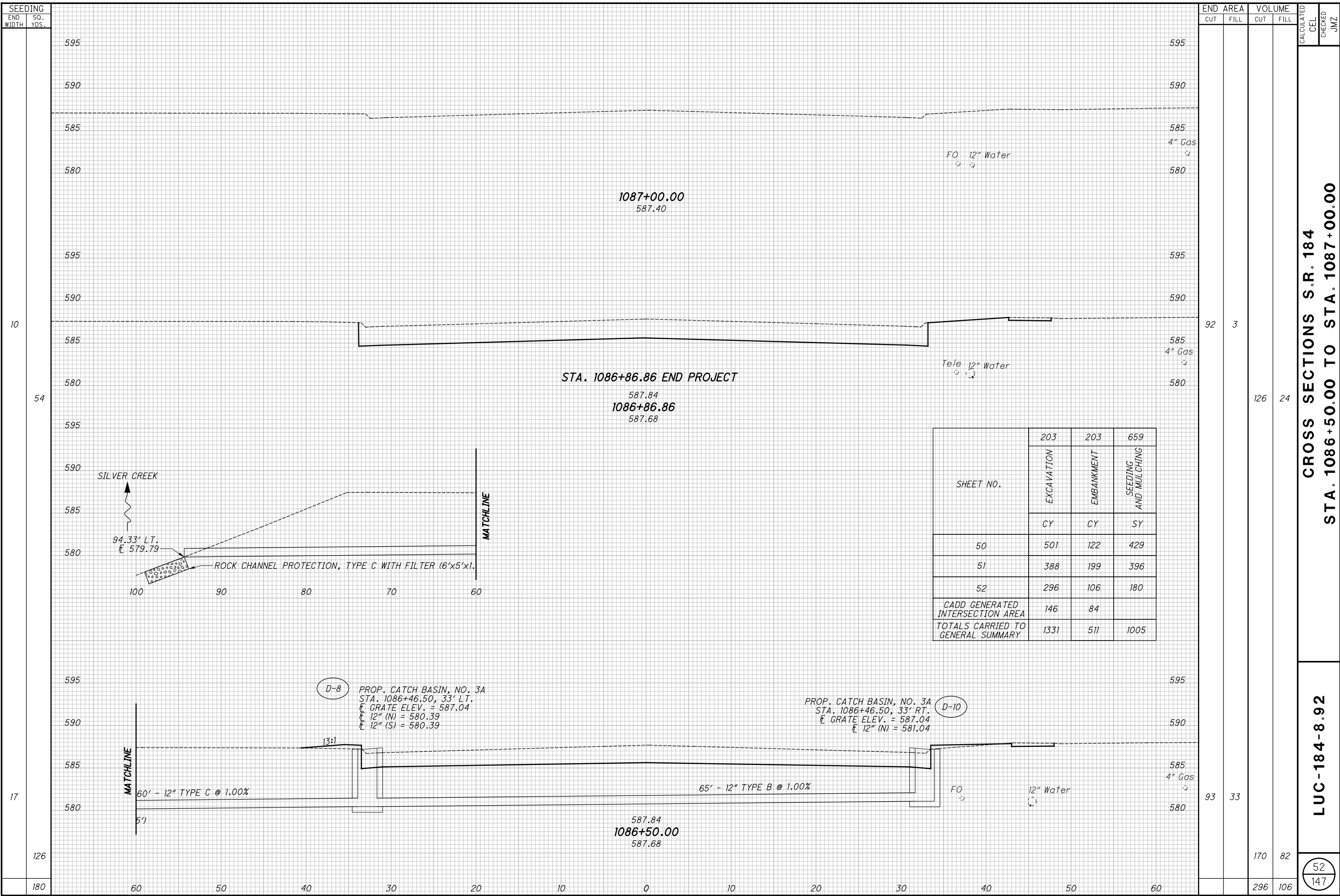
END AREA		VOLUME	
CUT	FILL	CUT	FILL
91	56	170	82
93	33		
116	69	218	117
		388	199

**CROSS SECTIONS S.R. 184
STA. 1083+50.00 TO STA. 1086+00.00**

LUC-184-8.92

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STA. 1086+86.86 END PROJECT
 587.84
 1086+86.86
 587.68

1087+00.00
 587.40

1086+50.00
 587.84
 587.68

SHEET NO.	203	203	659
	EXCAVATION	EMBANKMENT	SEEDING AND MULCHING
	CY	CY	SY
50	501	122	429
51	388	199	396
52	296	106	180
CADD GENERATED INTERSECTION AREA	146	84	
TOTALS CARRIED TO GENERAL SUMMARY	1331	511	1005

D-8 PROP. CATCH BASIN, NO. 3A
 STA. 1086+46.50, 33' LT.
 E GRATE ELEV. = 587.04
 E 12" (N) = 580.39
 E 12" (S) = 580.39

D-10 PROP. CATCH BASIN, NO. 3A
 STA. 1086+46.50, 33' RT.
 E GRATE ELEV. = 587.04
 E 12" (N) = 581.04

END STA.	AREA		VOLUME		CALCULATED CEL	CHECKED JMZ
	CUT	FILL	CUT	FILL		
1086+50.00	92	3	126	24		
1087+00.00	93	33	170	82		
TOTAL			296	106		

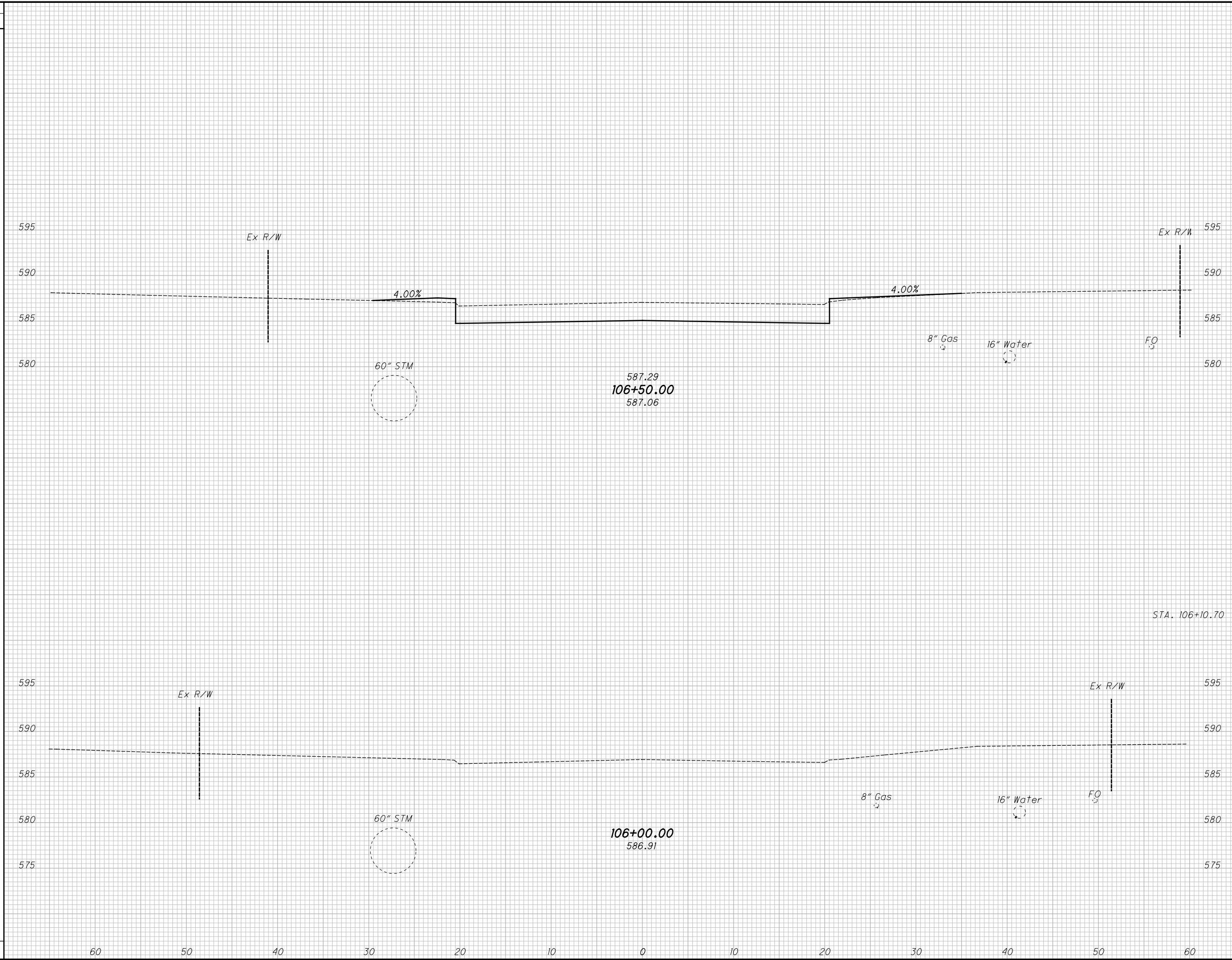
CROSS SECTIONS S.R. 184
 STA. 1086+50.00 TO STA. 1087+00.00

LUC-184-8.92

52
 147

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SEEDING	
END WIDTH	SO. YDS.
24	65
0	65



END AREA		VOLUME	
CUT	FILL	CUT	FILL
55	15	80	19
55	11	11	2
0	0	0	0
91	21		

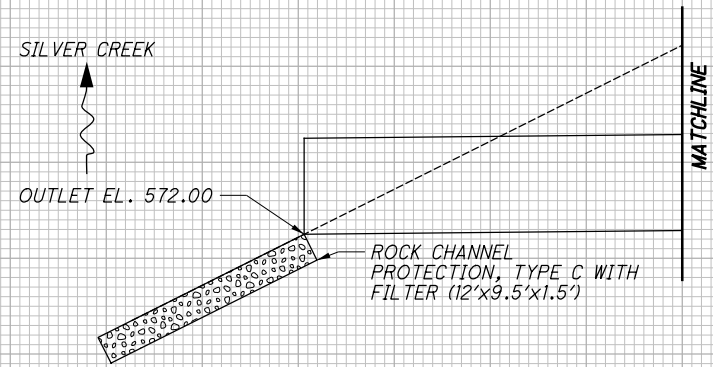
CROSS SECTIONS ENTERPRISE BLVD.
STA. 106+00.00 TO STA. 106+50.00

LUC-184-8.92

53
147

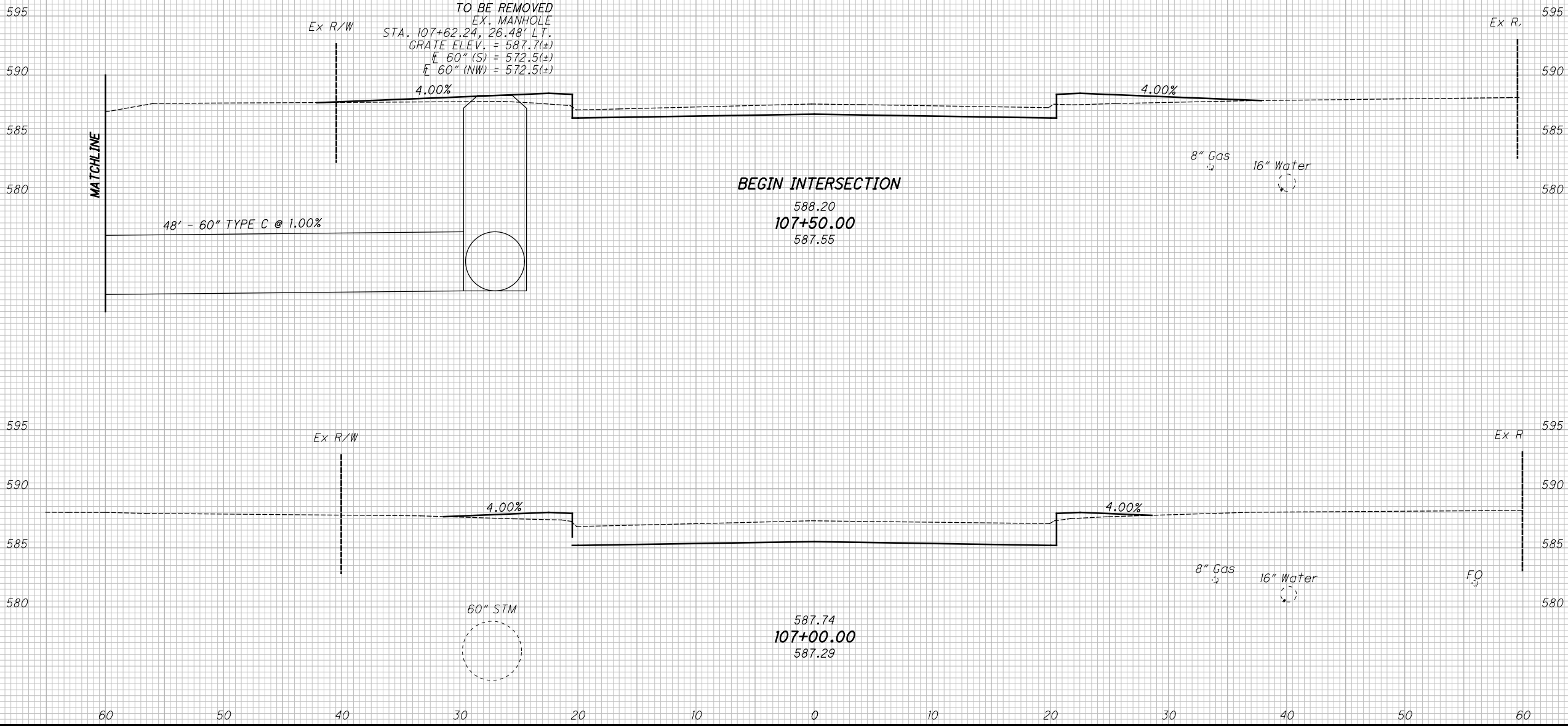
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SEEDING	
END WIDTH	SO. YDS.
279	118
19	161
39	161



(D-11) PROP. MANHOLE, NO. 3
 STA. 107+57.30, 26.81' LT.
 GRATE ELEV. = 588.28
 E 60" (S) = 572.5(±)
 E 60" (NW) = 572.5(±)

TO BE REMOVED
 EX. MANHOLE
 STA. 107+62.24, 26.48' LT.
 GRATE ELEV. = 587.7(±)
 E 60" (S) = 572.5(±)
 E 60" (NW) = 572.5(±)



END AREA		VOLUME		CALCULATED CEL	CHECKED JMZ
CUT	FILL	CUT	FILL		
55	47	101	69		
55	27	101	39		
		208	108		

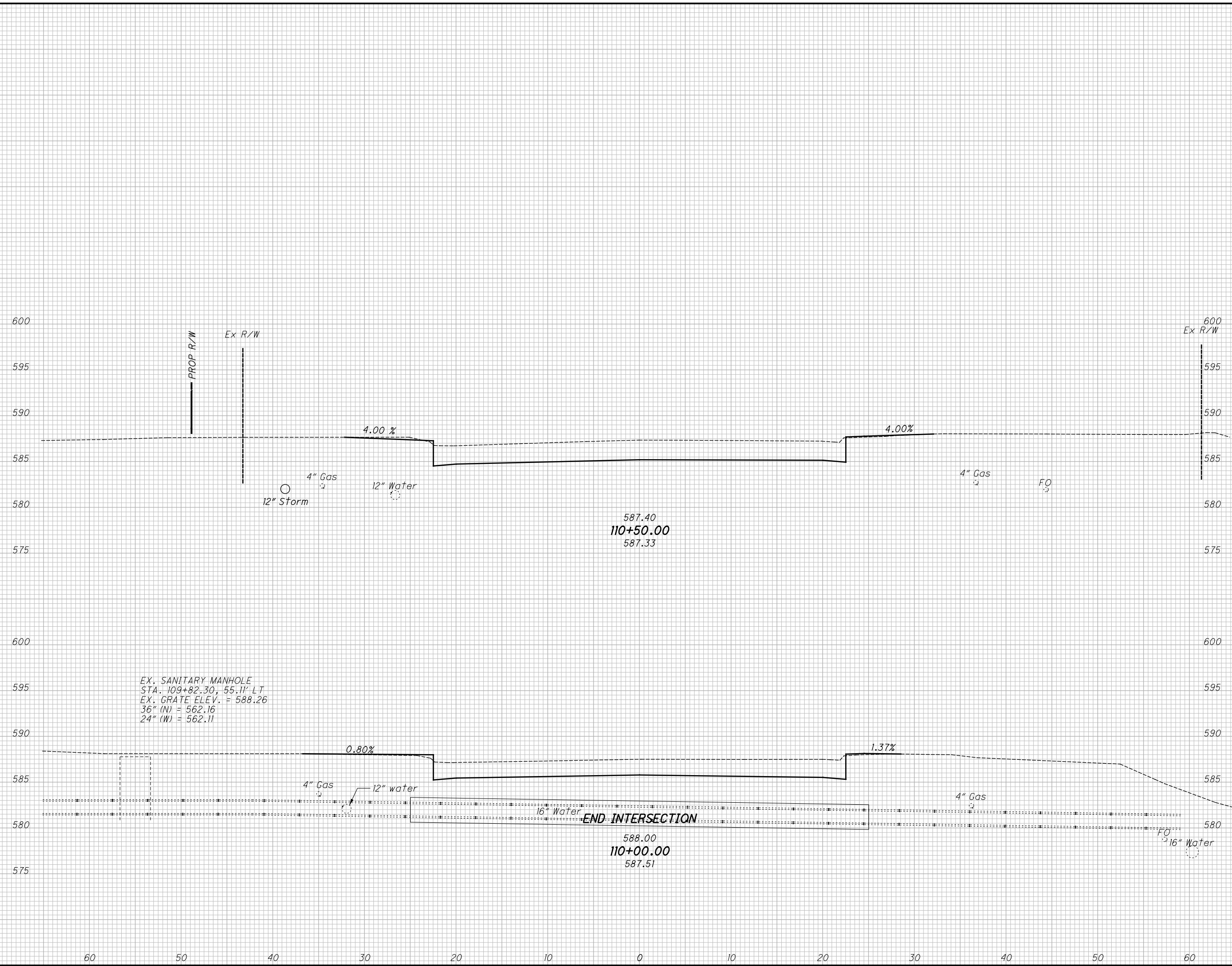
CROSS SECTIONS ENTERPRISE BLVD.
 STA. 107+00.00 TO STA. 107+50.00

LUC-184-8.92

54
 147

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SEEDING	END AREA		VOLUME		CALCULATED CEL	CHECKED JMZ
	CUT	FILL	CUT	FILL		
19	56	6				
169	55	23	102	27		
169			102	27		



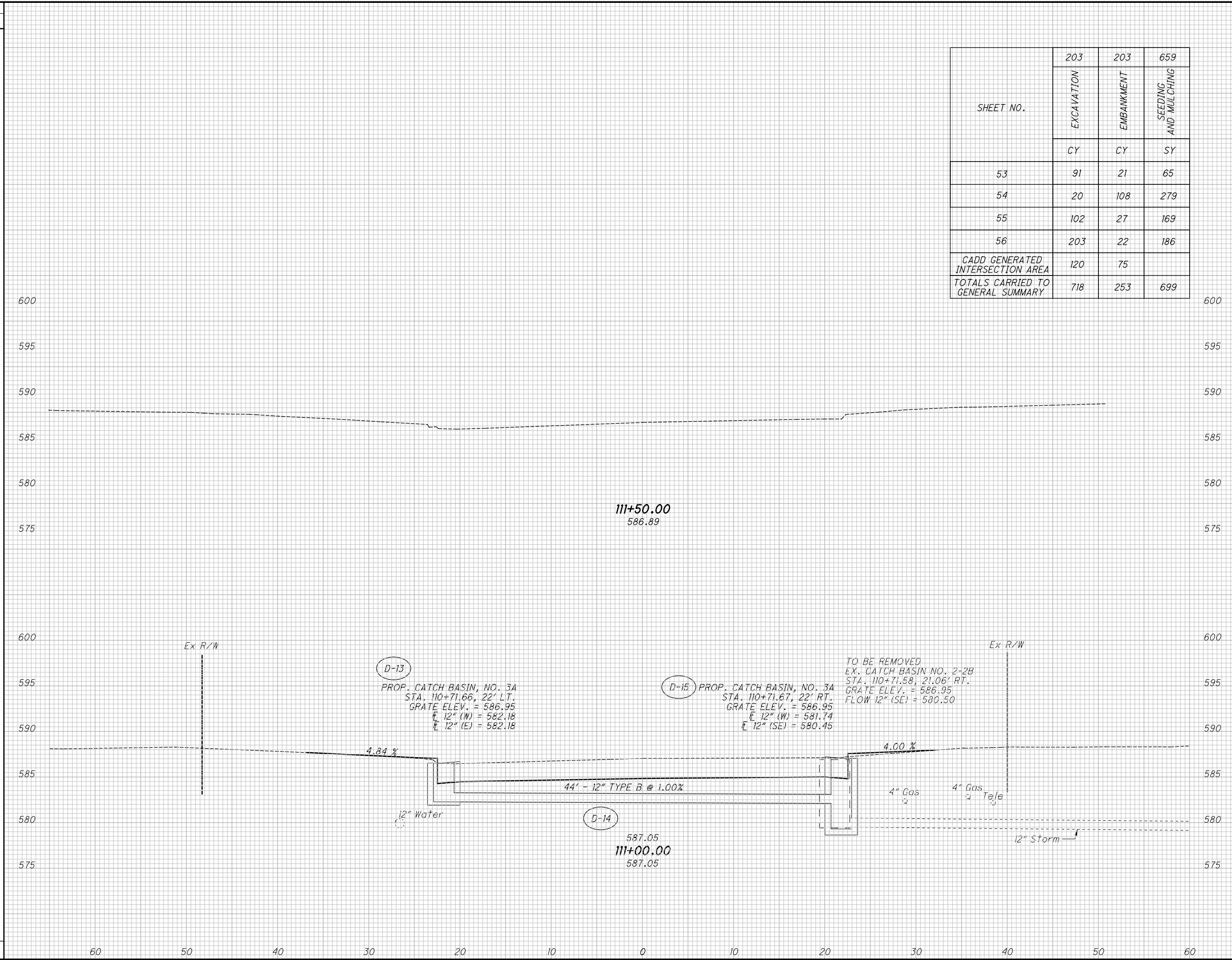
**CROSS SECTIONS BENORE ROAD
 STA. 110+00.00 TO STA. 110+50.00**

LUC-184-8.92

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147

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SEEDING	
END WIDTH	SO. YDS.
186	120
60	24



SHEET NO.	203	203	659
	EXCAVATION	EMBANKMENT	SEEDING AND MULCHING
	CY	CY	SY
53	91	21	65
54	20	108	279
55	102	27	169
56	203	22	186
CADD GENERATED INTERSECTION AREA	120	75	
TOTALS CARRIED TO GENERAL SUMMARY	718	253	699

END AREA		VOLUME	
CUT	FILL	CUT	FILL
55	0	101	8
55	9	102	14
		203	22

CROSS SECTIONS BENORE ROAD
STA. 111+00.00
LUC-184-8.92
 CALCULATED CEL
 CHECKED JMZ

56
147

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ESTIMATED QUANTITIES (01/NHS/BR)

CALC. BY: ARA
CHKD. BY: AJK
DATE: 2/22/2021
DATE: 2/23/2021

ITEM	ITEM EXTENSION	TOTAL	UNIT	DESCRIPTION	REAR ABUTMENT	FORWARD ABUTMENT	PIERS	SUPER-STRUCTURE	GENERAL	REF. SHEET NUMBER
202	11003	LS		STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					LS	3
202	22900	737	SY	APPROACH SLAB REMOVED	362	375				
202	23500	1777	SY	WEARING COURSE REMOVED	362	375		1040		
503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN					LS	3
503	21100	673	CY	UNCLASSIFIED EXCAVATION	337	336				
505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION					LS	
507	00500	2430	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	1215	1215				
507	00550	2700	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	1350	1350				
507	00700	2600	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN			2600			
507	00750	2800	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED			2800			
509	10000	435485	LB	EPOXY COATED REINFORCING STEEL	13769	13717	12915	395084		
511	33312	1165	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE				1165		
511	43512	233	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING	117	116				
512	10050	167	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)				167		
512	10100	761	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	59	62	187	453		
512	33000	6	SY	TYPE 2 WATERPROOFING	2	2		2		
516	13200	276	SF	1/2" PREFORMED EXPANSION JOINT FILLER				276		
516	13600	305	SF	1" PREFORMED EXPANSION JOINT FILLER				305		
516	14014	391	FT	INTEGRAL ABUTMENT EXPANSION JOINT SEAL				391		
517	75120	202	FT	RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING)				202		
518	21200	276	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	140	136				
518	40000	417	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	209	208				
518	40010	60	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	30	30				
523	20000	8	EACH	DYNAMIC LOAD TESTING	2	2	4			
523	20500	8	EACH	RESTRIKE	2	2	4			
526	15010	595	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=13")	298	297				
526	90010	380	FT	TYPE A INSTALLATION	190	190				
SPECIAL	45IE30000	388	FT	PRESSURE RELIEF JOINT, TYPE A	194	194				
601	32204	907	CY	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC	458	449				
625	33000	1	EACH	STRUCTURE GROUNDING SYSTEM					1	3

DESIGN AGENCY
PENNONI ASSOCIATES INC.
2 SUMMIT PARK DRIVE, SUITE 335
INDEPENDENCE, OHIO 44131

DATE: 2/20/21
REVIEWED: MDP
STRUCTURE FILE NUMBER: 4805144

DRAWN: JTS
REVISED:

DESIGNED: JTS
CHECKED: BPS

ESTIMATED QUANTITIES
BRIDGE NO. LUC-184-0892
S.R. 184 (ALEXIS RD.) OVER SILVER CREEK

LUC-184-8.92
PID No. 101327

5 / 48

101
147