

**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.

**EXISTING SUBSURFACE DRAINAGE**

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE. UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

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

ITEM 601, TIED CONCRETE BLOCK MAT, TYPE 1	17.8 SQ. YD.
ITEM 605, AGGREGATE DRAINS	80 FT.
ITEM 611, 6" CONDUIT, TYPE F	140 FT.
ITEM 611, PRECAST REINFORCED CONCRETE OUTLET	10 EACH
ITEM 605, 6" UNCLASSIFIED PIPE UNDERDRAINS	180 FT.

**ENDANGERED BAT HABITAT REMOVAL**

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT, AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT 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 (ESA). FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK 3 INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

**CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL**

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

**PART-WIDTH CONSTRUCTION**

BECAUSE OF THE NECESSITY TO BUILD PARTS OF 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.

**ENVIRONMENTAL COMMITMENT**

**WETLAND IMPACT MINIMIZATION**

A WETLAND HABITAT HAS BEEN IDENTIFIED AT THE CULVERT OUTLET AT STA. 56+59 AS DEPICTED ON THE PLAN SHEETS. CONTRACTOR TO AVOID UNAUTHORIZED IMPACT TO WETLAND HABITATS BEYOND EXISTING CONSTRUCTION LIMITS, NO CONSTRUCTION ACTIVITIES OR ANCILLARY CONSTRUCTION (STAGING AREAS, WASTE LOCATION AND/OR BORROW LOCATIONS) ARE PERMITTED BEYOND THE PROPOSED CONSTRUCTION LIMITS IN THE AREA DEFINED ABOVE.

**TEMPORARY FILLS**

UNNAMED TRIBUTARIES (UNT) 1, 2 AND 3 HAVE BEEN IDENTIFIED ON THE PLAN SHEETS. TEMPORARY FILLS ARE NOT AUTHORIZED IN THESE STREAMS. UNDER NO CIRCUMSTANCES ARE TEMPORARY ACCESS FILLS, CAUSEWAYS, COFFERDAMS, STREAM FORDING AND/OR DEMOLITIONS DEBRIS PERMITTED IN THESE STREAMS, OR OTHER STREAMS OR WETLANDS OUTSIDE OF DELINEATED CONSTRUCTION LIMITS FOR THIS PROJECT.

**ITEM 611 - CONDUIT BORED OR JACKED**

WHERE IT IS SPECIFIED THAT A CONDUIT BE INSTALLED BY THE METHOD OF BORING OR JACKING, NO TRENCH EXCAVATION SHALL BE CLOSER THAN 10 FEET TO THE EDGE OF PAVEMENT. PROVIDE A STEEL CASING PIPE CONFORMING TO 748.06. JOINTS WITH A CIRCUMFERENTIAL FULLY PENETRATING B-U4B WELD THAT IS PERFORMED BY A CERTIFIED WELDER FOR WELDING CODE AMERICAN WELDING SOCIETY (AWS) D1.1 OR MACHINED INTERLOCKING JOINTS ARE PERMITTED. THE INSTALLED CASING PIPE IS THE STORM WATER CONVEYANCE CARRIER UNLESS OTHERWISE SPECIFIED IN THE PLANS. HYDROSTATIC TESTING IS NOT REQUIRED FOR THE CASING PIPE.

**ITEM 611 - MANHOLE NO. 3, AS PER PLAN**

THE EXISTING CATCH BASIN IN THE EXISTING DITCH ADJACENT US-33 NORTHBOUND IS BELIEVED TO BE TIED INTO AN EXISTING 72-INCH CORRUGATED METAL PIPE VIA A BLIND CONNECTION. A NEW CATCH BASIN WILL SERVICE THE RELOCATED DITCH AND A MANHOLE WILL REPLACE THE EXISTING CATCH BASIN. THE MANHOLE SHALL FOLLOW THE REQUIREMENTS OF THE C&MS ITEM 611 FOR INSTALLATION EXCEPT THAT THE EXISTING INVERTS SHALL BE FIELD VERIFIED TO ESTABLISH THE INVERTS TO BE USED TO PERPETUATE THE BLIND CONDITION.

**PAVEMENT RESTORATION FOR PIPE INSTALLATIONS AND/OR REMOVALS**

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF PIPES.

ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A PG64-22 (449) 3 CU. YDS.

ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 (449) 8 CU. YDS.

THE ABOVE QUANTITY IS BASED ON A 301 THICKNESS OF 9.0 INCHES, A 442 THICKNESS OF 3.0 INCHES AND A PAVEMENT RESTORATION WIDTH THAT INCLUDES THE TRENCH WIDTH PLUS TWO FEET ON EACH SIDE OF THE TRENCH.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

**ITEM SPECIAL - MAILBOX SUPPORT**

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATIONS SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER.

WOOD POSTS SHALL BE NOMINAL 4 INCHES BY 4 INCHES SQUARE OR 4.5 INCHES DIAMETER ROUND, AND CONFORM TO 710.14.

STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2 INCHES I.D., AND CONFORM TO AASHTO M 181.

ALL HARDWARE INCLUDING BUT NOT LIMITED TO PLATES, SCREWS, BOLTS, AND ETC. SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS, TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.10. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL MAILBOX SUPPORT SYSTEM, (SINGLE) (DOUBLE).

**ITEM 621 - RAISED PAVEMENT MARKER REMOVED**

THIS ITEM SHALL CONSIST OF REMOVAL OF RPM'S ON SR 682 AND ALL RAMPS. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 621, RAISED PAVEMENT MARKER REMOVED 79 EACH

**POST CONSTRUCTION STORM WATER TREATMENT**

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

**VEGETATED FILTER STRIP**

THIS PLAN UTILIZES VEGETATED FILTER STRIP(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670, SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS.

**ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

**ITEM 632 - REMOVAL OF TRAFFIC SIGNAL INSTALLATION**

TRAFFIC SIGNAL INSTALLATIONS, INCLUDING SIGNAL HEADS, CABLE, MESSENGER WIRE, STRAIN POLES, CABINET, CONTROLLER, PULL BOXES ETC., SHALL BE REMOVED IN ACCORDANCE WITH C&MS 632.26 AND AS INDICATED ON THE PLANS.

REMOVED ITEMS SHALL BE DELIVERED TO THE NEAREST ODOT FACILITY WHOSE ADDRESS IS LISTED BELOW:

ODOT ATHENS GARAGE  
700 W. UNION ST.  
ATHENS, OHIO 45701

SALVAGE THESE ITEMS:  
SIGNAL CABINET (COMPLETE)  
BATTERY BACKUP CABINET (COMPLETE)

SWITCH  
STRAIN POLES

**ITEM 203 - EMBANKMENT, AS PER PLAN**

EMBANKMENT SHALL BE EMPLACED UNDER THE AUSPICES OF THE ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS CURRENT EDITION WITH REGARD TO THE FOLLOWING EXCEPTIONS. SUBSECTION 203.03 (A) SHALL BE MODIFIED TO CLAY IDENTIFIED AS ODOT GROUP CLASSIFICATION A-7-6. THE INTENT OF CLAY EMBANKMENT PLACEMENT BELOW DRAINAGE DITCH IS TO REDUCE STORMWATER INFILTRATION INTO THE ROCK KEY BELOW. THIS AS PER PLAN ITEM SHALL BE USED IN CONJUNCTION WITH ITEMS INCLUDED IN THE ENHANCED EMBANKMENT DETAIL SHOWN ON SHEET 90.

**FULLY-ACTUATED OPERATION OF WORK ZONE TRAFFIC SIGNAL**

THE WORK ZONE SIGNAL CONTROL REQUIRED FOR THIS PROJECT AND SHOWN ON SHEETS - & - AND TRAFFIC SCDS MT-96.11, 96.20 AND 96.26 SHALL BE FULLY TRAFFIC-ACTUATED AND OPERATE IN A MANNER SIMILAR TO THAT DESCRIBED IN SECTION 733.02 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

CONTRACTOR TO MAINTAIN EXISTING SPAN WIRE, SIGNAL HEADS AND WIRING IN MOT PHASE 1 AND 2. A TEMPORARY SIGNAL CONTROLLER AND DETECTORS WILL BE REQUIRED TO PROVIDE PHASING/TIMING SHOWN. TEMPORARY POLES AND SPAN WIRE WILL BE REQUIRED AT STA. 330+40. SIGNAL CABLE WILL NEED TO BE RUN TO THIS LOCATION ON EXISTING UTILITY POLES. CONTRACTOR TO ADJUST SIGNAL HEAD LOCATION FOR EACH PHASE AS REQUIRED BY THE ENGINEER.

THE INITIAL CONTROLLER TIMING SHALL BE AS FOLLOWS:

PHASE	1	2	3	4	5	6	7
APPROACH	SR 682 NB	US 33 EXIT (RAMP D)	TR-662 (SKIPPABLE)	ALL RED (DUMMY PHASE)	SR 682 SB	DRIVE (SKIPPABLE)	ALL RED (DUMMY PHASE)
MIN. GREEN	20	12	6	17	20	6	17
EXTENSION	4	4	4		4	4	
MAX GREEN	40	20	15		40	15	
YELLOW	5	5	5	5	5	5	5
ALL RED				X	3		X
RECALL				ON			ON

SIGNAL SHALL REST ON RED WHEN NO VEHICLES ARE DETECTED.

THE CONTRACTOR SHALL ALSO DESIGN, FURNISH, INSTALL AND MAINTAIN A TRAFFIC DETECTOR ON EACH TRAFFIC APPROACH WHICH WILL RELIABLY DETECT ALL LEGAL TRAFFIC APPROACHING (BUT NOT LEAVING) THE SIGNAL AS IT PASSES OR WAITS IN THE DESIGNATED DETECTOR ZONE SHOWN IN THE PLANS. DETECTOR DESIGNS WHICH DO NOT PROVIDE RELIABLE DETECTION, FREE FROM FALSE CALLS, SHALL BE IMMEDIATELY REPLACED BY THE CONTRACTOR.

PAYMENT IS INCIDENTAL TO THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

**ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN**

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL-PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) - & - OF THE PLAN. PLACEMENT OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

**CONT'D...ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN**

THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN FOUR HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.) THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NON-COMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER- DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN, 32 SIGN MONTH ASSUMING 4 PCMS SIGN(S) FOR 8 MONTH(S)

**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.

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND PERMANENT CONCRETE BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE UNDER EITHER OF THE FOLLOWING CONDITIONS: ALONG TAPERS AND TRANSITION AREAS; OR ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT-101.70.

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

ITEM 614, BARRIER REFLECTOR, TYPE 1 (BI-DIRECTIONAL)	20 EACH
ITEM 614, OBJECT MARKER, TWO-WAY	20 EACH
ITEM 614, INCREASED BARRIER DELINEATION	1000 FEET

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

ALONG RUNS OF INCREASED BARRIER DELINEATION WHERE THIS ITEM IS PROVIDED, THE QUANTITY SHALL BE MEASURED AS THE ENTIRE LENGTH OF THE RUN OF INCREASED BARRIER DELINEATION, INCLUDING THE SPACES BETWEEN THE INDIVIDUAL DELINEATION PANELS OR STACKS OF BARRIER REFLECTORS.

**DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL**

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL; AND, ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET.

OBJECT MARKERS SHALL BE INSTALLED ON ALL TEMPORARY AND PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKERS SHALL CONFORM TO C&MS 614.03 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET WITH A 25 FOOT OFFSET FROM THE BARRIER REFLECTORS.

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

ITEM 614, BARRIER REFLECTOR, TYPE 3, ONE-WAY	53 EACH
ITEM 614, OBJECT MARKER, ONE-WAY	36 EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE ABOVE ITEM(S).

DESIGN AGENCY



DESIGNER MS

REVIEWER JGW 07/10/24

PROJECT ID 118465

SHEET TOTAL 15 | 240

SEQUENCE OF CONSTRUCTION

PHASE 1:

PRE-PHASE: CONSTRUCT TRANSVERSE STORM SEWER CROSSINGS ON SR-682 AND THE STORM TRUNK UNDER THE RESIDENTIAL DRIVE AT STA. 12+37, SUNSET LANE, AND RAMP B USING TRENCHLESS METHODS. CONDUITS MAY HAVE TEMPORARY BULKHEADS INSTALLED WHERE SUBSEQUENT WORK WILL BE UNDER TRAFFIC AND, SIMILARLY, DRAINAGE STRUCTURES MAY HAVE THE FINAL CASTINGS OMITTED, AND BASE CASTINGS COVERED WITH STEEL PLATES UNTIL THE APPROPRIATE PHASE TO COMPLETE THE CONSTRUCTION. THE CONTRACTOR SHALL ENSURE THAT EROSION CONTROL MEASURES AND TEMPORARY DRAINAGE, AS NEEDED, ARE IMPLEMENTED. DISENGAGE THE EXISTING TRAFFIC SIGNAL AND REMOVE IT FROM SERVICE.

ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC: CONSTRUCT A TEMPORARY RADIUS AREA ONTO RAMP C FOR NORTHBOUND STATE ROUTE (SR)-682 TRAFFIC IN LIEU OF THE CURRENT SLIP LANE BEING REMOVED. ADD TEMPORARY PAVEMENT TO THE LEFT SIDE OF RAMPS B AND C (WITH TEMPORARY WORKZONE GUARDRAIL), TO ACCOMMODATE TRAFFIC SHIFTING LEFT WHILE THE RIGHT SIDES ARE BEING CONSTRUCTED. ALSO CONSTRUCT TEMPORARY PAVEMENT ON THE SOUTH SIDE OF SUNSET LANE FOR PHASE 2 USE.

SOUTH ROUNDABOUT

INSTALL TEMPORARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING (SCD) MT-95.31 AND AS SHOWN IN THE PLANS, AND SHIFT TRAFFIC LEFT (WEST) ON NORTHBOUND SR-682 AND CONSTRUCT THE SOUTH SIDE OF SR-682 AND THE SOUTHEAST CORNER OF THE SOUTH ROUNDABOUT BETWEEN SR-682 AND RAMP C. SHIFT RAMP B TRAFFIC TO THE LEFT AND CONSTRUCT THE NORTHWEST PORTION OF THE ROUNDABOUT BETWEEN RAMP B AND ON SUNSET LANE. FLAGGERS MAY BE USED TO AUGMENT MOVEMENTS DURING PEAK HOUR PERIODS. MAINTAIN ACCESS TO THE COMMERCIAL DRIVES ON THE RIGHT SIDE.

NORTH ROUNDABOUT

INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN IN THE PLANS, AND SHIFT TRAFFIC RIGHT (EAST) ON SR-682, CLOSING RAMP A IN THE PROCESS, BEHIND PORTABLE BARRIER. CONSTRUCT THE WEST SIDE OF SR-682, AND RAMP A IN IT'S ENTIRETY WHILE ROUTING TRAFFIC TO THE NEXT US-33 JUNCTION TO THE NORTH. INSTALL TEMPORARY TRAFFIC SIGNALS PER SCD MT-96.11 TO ALLOW FOR ALTERNATING ONE-WAY TRAFFIC BETWEEN RAMP D AND THE NORTH PROJECT LIMIT.

PHASE 1B

AT THE END OF PHASE 1, AFTER NEW RIGHT SIDE PAVEMENT HAS BEEN CONSTRUCTED, SHIFT TRAFFIC TO RIGHT SIDE OF RAMP C TO THE NEW PAVEMENT AND CONSTRUCT THE FULL DEPTH PAVEMENT ON THE LEFT SIDE OF THE RAMP.

PHASE 1C

AFTER LEFT SIDE PAVEMENT ON SR 682 BETWEEN THE BRIDGE AND RAMP D HAS BEEN CONSTRUCTED, SHIFT TRAFFIC TO THE LEFT SIDE OF SR 682 TO THE NEW PAVEMENT AND CONSTRUCT THE FULL DEPTH PAVEMENT OF THE RIGHT SIDE OF THE ROAD.

PHASE 2:

PRE-PHASE: USING FLAGGERS, INSTALL LONGITUDINAL AND TRANSVERSE STORM PIPES AND STRUCTURE D-38 UNDER TR-662 AS SHOWN IN THE PLANS, USING A STEEL PLATE TO COVER THE LOWER CATCH BASIN CASTING AND A TEMPORARY BULKHEAD AT THE PIPE ENDS.

ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC: CONSTRUCT TEMPORARY PAVEMENT ALONG THE SOUTH SIDE OF TR-662 AND ON THE LEFT SIDE AT THE END AS SHOWN IN THE PLANS.

SOUTH ROUNDABOUT

INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN IN THE PLANS AND SHIFT TRAFFIC ON SR-682 TO THE RIGHT (EAST) TO OPERATE ON OR ADJACENT TO THE PREVIOUSLY CONSTRUCTED RIGHT SIDE. ACTIVATE THE NEWLY CONSTRUCTED RAMP C TO TRAFFIC, AND CONSTRUCT THE NORTH-EAST QUADRANT OF THE SOUTH ROUNDABOUT TO COMPLETE THE RIGHT (EAST) SIDE. MAINTAIN RAMP B TRAFFIC FROM THE PREVIOUS PHASE AND SHIFT TRAFFIC ON SUNSET LANE RIGHT (SOUTH) ONTO TEMPORARY PAVEMENT AND CONSTRUCT THE LEFT (NORTH) SIDE, CONTINUING AROUND TO THE SOUTH TO CONSTRUCT THE LEFT (WEST) SIDE OF SR-682 BACK TO THE SOUTH PROJECT LIMIT.

NORTH ROUNDABOUT

INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN IN THE PLANS AND SHIFT TRAFFIC RIGHT (SOUTH AND WEST) ON TR-662. CONSTRUCT THE LEFT (NORTH AND EAST) SIDE OF TR-662 AND CONTINUE THE WORK AROUND TO THE NORTH ON SR-682, BUILDING THE RIGHT (EAST) SIDE, UP TO THE NORTH PROJECT LIMITS. MAINTAIN ACCESS TO THE COMMERCIAL DRIVE ON THE RIGHT SIDE.

INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN IN THE PLANS AND REDUCE OPERATIONS ON SR-682 TO AN ALTERNATING ONE-WAY OPERATION USING A TEMPORARY TRAFFIC SIGNAL PER SCD MT-96.11 FROM RAMP D TO THE NORTH PROJECT LIMITS. OPEN THE RAMP A PORTION OF THE NEWLY CONSTRUCTED WEST SIDE OF THE NORTH ROUNDABOUT AND ALLOW ACCESS FROM BOTH THE NORTH AND SOUTH.

PHASE 3:

AT THE BEGINNING OF PHASE 3, REPLACE PAVEMENT IN THE SOUTHBOUND LANE FROM STATION 416+25 TO 417+00. DURING THIS SUBPHASE, THE CONTRACTOR SHALL CONSTRUCT FULL DEPTH PAVEMENT REPLACEMENT BY SHIFTING SOUTHBOUND TRAFFIC TO THE EAST, IN ACCORDANCE WITH STANDARD DRAWING MT 95.61. PAVEMENT REPLACEMENT AND LANE SHIFT IN THIS AREA SHALL NOT EXCEED 15 CALENDAR DAYS.

SOUTH ROUNDABOUT

OPEN THE NEWLY COMPLETED EAST SIDE OF THE SOUTH ROUNDABOUT TO TRAFFIC OPERATIONS FOR NORTHBOUND SR-682 TRAFFIC, REDUCING SR-682 TRAFFIC ON THE EXISTING ALIGNMENT TO SOUTHBOUND ONLY, WITHIN THE ROUNDABOUT CONFINES. MAINTAIN RAMP B TRAFFIC AS PER PREVIOUS PHASES AND CONSTRUCT THE RIGHT (SOUTH) SIDE OF SUNSET LANE AS SHOWN IN THE PLANS. SHIFT SUNSET LANE TRAFFIC TO THE LEFT (NORTH) SIDE ON PREVIOUSLY CONSTRUCTED PAVEMENT USING AN ALTERNATING ONE-WAY TRAFFIC OPERATION PER OMTCD TA-11 (FIG. 6H-11).

NORTH ROUNDABOUT

INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN IN THE PLANS AND SHIFT SR-682 TRAFFIC LEFT COMING OFF THE BRIDGE, TRANSITIONING TO NORTHBOUND ONLY THROUGH THE NORTH ROUNDABOUT CONFINES.

FULLY OPEN THE LEFT (WEST) SIDE OF THE ROUNDABOUT TO ALLOW SOUTHBOUND TRAFFIC TO CONTINUE UNABATED OPERATION, DISCONTINUING THE OLD THROUGH SOUTHBOUND OPERATION ON SR-682.

SHIFT TR-662 TRAFFIC TO THE LEFT ADJACENT NEWLY CONSTRUCTED PAVEMENT FROM THE PREVIOUS PHASE, AND CLOSE RAMP D. CONSTRUCT THE NEW RAMP D PAVEMENT AND THE MAJORITY OF THE RIGHT (EAST) SIDE OF THE NORTH ROUNDABOUT EXCEPT FOR THE VERY NORTHERN PORTION TO ALLOW FOR CONTINUED TR-662 TRAFFIC OPERATIONS. THE CONTRACTOR SHALL SHALL COMPLY WITH SECTION 614.07 OF THE C&MS WITH REGARD TO 630.09-SPECIFIC SIGNS TO ENSURE THEIR ABILITY TO ADVISE MOTORIST THROUGHOUT CONSTRUCTION, INCLUDING MOVING THEM, AS NEEDED TO ENSURE COMPLIANCE.

PHASE 4:

SOUTH ROUNDABOUT

INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN IN THE PLANS AND SHIFT RAMP B TRAFFIC TO THE RIGHT (SOUTHWEST) SIDE AND CONSTRUCT THE LEFT SIDE, REMOVING PREVIOUSLY INSTALLED TEMPORARY PAVEMENT AND GUARDRAIL.

OPEN THE ROUNDABOUT TO TRAFFIC OPERATIONS AND CONSTRUCT REMAINING SPLITTER ISLAND AND TRUCK APRON AREAS UNDER TRAFFIC, USING TEMPORARY TRAFFIC CONTROL DEVICES AND FLAGGERS, AS NEEDED.

NORTH ROUNDABOUT

INSTALL THE NECESSARY TEMPORARY TRAFFIC CONTROL DEVICES AND REOPEN RAMP D, OPENING THE ROUNDABOUT TO TRAFFIC OPERATIONS AND CONSTRUCT REMAINING SPLITTER ISLAND AND TRUCK APRON WORK UNDER TRAFFIC, USING TEMPORARY TRAFFIC CONTROL DEVICES AND FLAGGERS, AS NEEDED. COMPLETE ANY REMAINING TRAFFIC/SPLITTER ISLAND WORK DURING THIS PHASE UNDER FLAGGERS.

PHASE 5:

CONDUCT FINAL RESURFACING OPERATIONS USING FLAGGERS AS NEEDED, BEFORE PLACING FINAL PAVEMENT MARKING AND SIGNING ITEMS. COMPLETE ANY REMAINING WORK INCLUDING FINISH GRADING, REMOVAL ITEMS AND FINAL CLEANUP BEFORE OPENING THE INTERCHANGE TO FULL NORMAL TRAFFIC OPERATIONS IN THE NEW CONFIGURATION.

DESIGN AGENCY



DESIGNER  
MS


REVIEWER  
JGW 07/10/24

PROJECT ID  
118465

SHEET TOTAL  
17 | 240


REF NO.	SHEET NO.	SIDE	PHASE	606	606	611	611	SPECIAL	614	614	614	614	614	614	614	615	622	642	
				ANCHOR ASSEMBLY, TYPE E, FOR MAINTAINING TRAFFIC EACH	ANCHOR ASSEMBLY, TYPE T, FOR MAINTAINING TRAFFIC EACH	CONDUIT, BORED OR JACKED, 12" TYPE B FT	CONDUIT, BORED OR JACKED, 24" TYPE B FT	WORK ZONE GUARDRAIL FT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL) EACH	WORK ZONE CENTER LINE, CLASS 1, 642 PAINT, (DOUBLE YELLOW) MILE	WORK ZONE EDGE LINE, CLASS 1, 6" , 642 PAINT, (WHITE) MILE	WORK ZONE EDGE LINE, CLASS 1, 6" , 642 PAINT, (YELLOW) MILE	WORK ZONE CHANNELIZING LINE, CLASS 1, 8" , 642 PAINT FT	WORK ZONE DOTTED LINE, CLASS 1, 6" , 642 PAINT FT	WORK ZONE STOP LINE, CLASS 1, 642 PAINT FT	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B SY	PORTABLE BARRIER, UNANCHORED FT	YIELD LINE, TYPE 1 FT	
CL-1	21	LT & RT	1																
CL-2	21	LT										0.09							
CL-3	22	RT										0.03							
CL-4	22, 23	SUNSET RT										0.03							
CL-5	22	RT										0.06							
CL-6	22	RT										0.03							
CL-6	24	RT										0.05							
D-1	22	C				41													
D-2	22	SUNSET					68												
D-3	22	RAMP B					79												
EL-1	21-23	RT											0.30						
EL-2	21	LT											0.03						
EL-3	22, 23	LT											0.13						
EL-4	22, 23	RAMP B RT												0.06					
EL-5	22	LT											0.03						
EL-6	22	RT											0.02						
EL-7	23	LT												0.08					
EL-8	24, 25	LT											0.16						
EL-9	24	RT											0.05						
EL-10	24, 25	RT											0.08						
GR-1	22	RAMP B RT		1				175											
GR-2	23	RAMP C LT			1			150											
IA-1	24, 25	LT							1										
IA-1A	24	RT							1										
IA-1B	24	RT							1										
IA-1C	24	LT							1										
IA-2	25	LT							1										
PB-1	24, 25	LT															740.0		
PB-1C	24	RT															180.0		
SL-1	22	LT													14.0				
SL-2	22	LT													14.0				
SL-3	24	RT													11.0				
SL-4	25	LT													11.0				
TP-1	22, 23	SUNSET RT														336.00			
TP-2	22	RT														160.00			
TP-3	22, 23	RAMP B RT														170.00			
TP-4	23	RAMP C LT														83.00			
CL-7	26, 27	RT & LT	2									0.13							
CL-8	26, 27	LT & RT											0.08						
CL-9	27	SUNSET RT											0.02						
CL-9a	28	SUNSET RT											0.01						
CL-10	27	LT											0.03						
CL-11	29	CL & LT											0.05						
CL-12	29	RT											0.02						
CL-13	29	RT											0.05						
DL-1	29	LT													48.0				
DL-2	29	LT													77.0				
EL-11	26 - 28	LT & RT											0.16						
EL-12	27	RT											0.02						
EL-13	27	RT												0.01					
EL-14	27	LT AND RT											0.09						
EL-15	27	RT											0.08						
EL-16	27	RAMP B RT & LT											0.03						
EL-17	27	LT											0.03						
EL-18	29	LT											0.02						
TOTALS CARRIED TO SHEET 20				1	1	41	147	325	5	0.68	1.23	0.15	125	50	749		920		

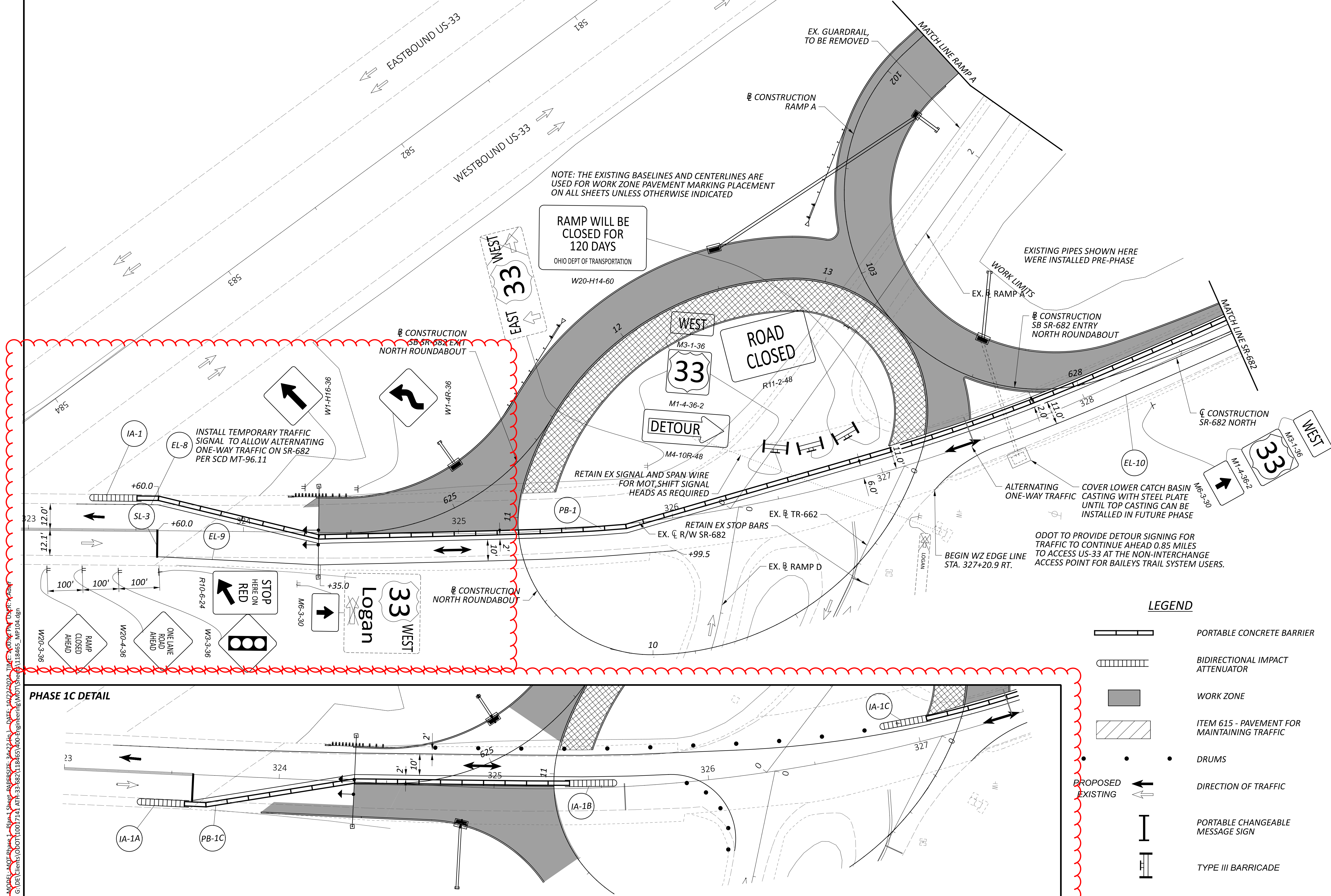
MAINTENANCE OF TRAFFIC SUBSUMMARY

DESIGN AGENCY  
  
 DESIGNER  
 MS  
 REVIEWER  
 JGW 07/10/24  
 PROJECT ID  
 118465  
 SHEET TOTAL  
 18 | 240

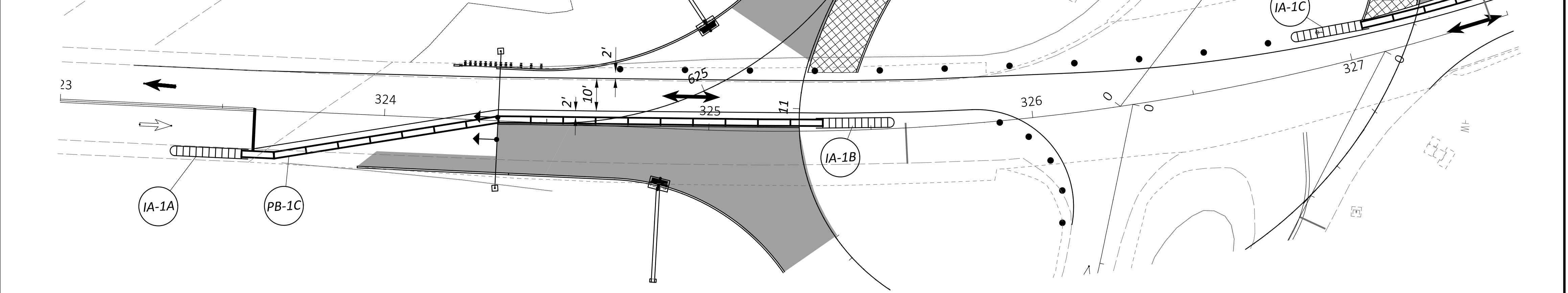
REF NO.	SHEET NO.	SIDE	PHASE	606	606	611	611	SPECIAL	614	614	614	614	614	614	614	615	622	642		
				ANCHOR ASSEMBLY, TYPE E, FOR MAINTAINING TRAFFIC	ANCHOR ASSEMBLY, TYPE T, FOR MAINTAINING TRAFFIC	CONDUIT, BORED OR JACKED; 12" TYPE B	CONDUIT, BORED OR JACKED; 24" TYPE B	WORK ZONE GUARDRAIL	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	WORK ZONE CENTER LINE, CLASS 1, 642 PAINT, (DOUBLE YELLOW)	WORK ZONE EDGE LINE, CLASS 1, 6" , 642 PAINT, (WHITE)	WORK ZONE EDGE LINE, CLASS 1, 6" , 642 PAINT, (YELLOW)	WORK ZONE CHANNELIZING LINE, CLASS 1, 8" , 642 PAINT	WORK ZONE DOTTED LINE, CLASS 1, 6" , 642 PAINT	WORK ZONE STOP LINE, CLASS 1, 642 PAINT	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B	PORTABLE BARRIER, UNANCHORED	YIELD LINE, TYPE 1		
				EACH	EACH	FT	FT	FT	EACH	MILE	MILE	MILE	FT	FT	FT	SY	FT	FT		
SL-8	32	SUNSET RT	<b>3</b>																	
SL-9	32	SUNSET LT																		
SL-9a	33	SUNSET RT																		
SL-10	32	RT																		
SL-11	34	LT																		
SL-12	34	RT																		
CL-20	36	SUNSET CL	<b>4</b>							0.03										
CL-21	36	RT									0.01									
CL-22	37	CL									0.03									
CL-23	37	RT & LT									0.05									
EL-43	36	RT											0.01							
EL-44	36	RT											0.01							
EL-45	36	RT & LT										0.01								
EL-46	36	SUSNET RT											0.02							
EL-47	36	LT										0.01								
EL-48	36	SUNSET LT											0.02							
EL-49	36	RAMP B LT											0.01							
EL-50	36	LT										0.02								
EL-51	36	LT & CL											0.01							
EL-52	36	RT										0.01								
EL-53	36	RT											0.01							
EL-54	37	LT											0.02							
EL-55	37	RT											0.02							
EL-56	37	LT & RT									0.01									
EL-57	37	TR-662 RT										0.03								
YL-3	36	SUNSET RT																	16.0	
YL-4	36	LT																	14.0	
YL-5	37	RT																	15.0	
YL-6	37	RAMP D																	18.0	
YL-7	37	TR-662 RT & LT																	13.0	
TOTALS CARRIED FROM SHEET 18				1	1	41	147	325	5	0.68	1.23	0.15	125	50	749	920				
TOTALS CARRIED FROM SHEET 19					1				2	0.35	0.86	0.14	50	51	399	300			30	
TOTALS FROM THIS SHEET									7	0.12	0.06	0.16	50	99					76	
TOTALS CARRIED TO GENERAL SUMMARY				1	2	41	147	325	7	1.15	2.15	0.45	50	125	200	1148	1220		106	

MAINTENANCE OF TRAFFIC SUBSUMMARY

DESIGN AGENCY  
  
 DESIGNER MS  
 REVIEWER JGW 07/10/24  
 PROJECT ID 118465  
 SHEET 20 TOTAL 240

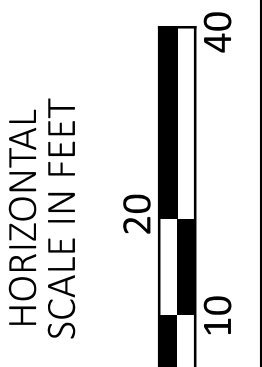


PHASE 1C DETAIL



**LEGEND**

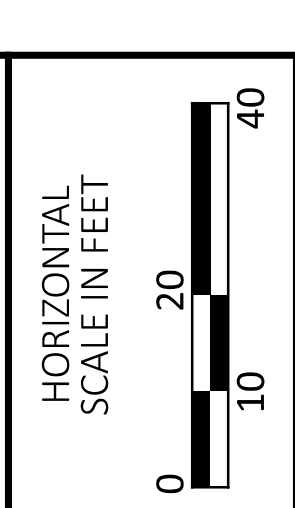
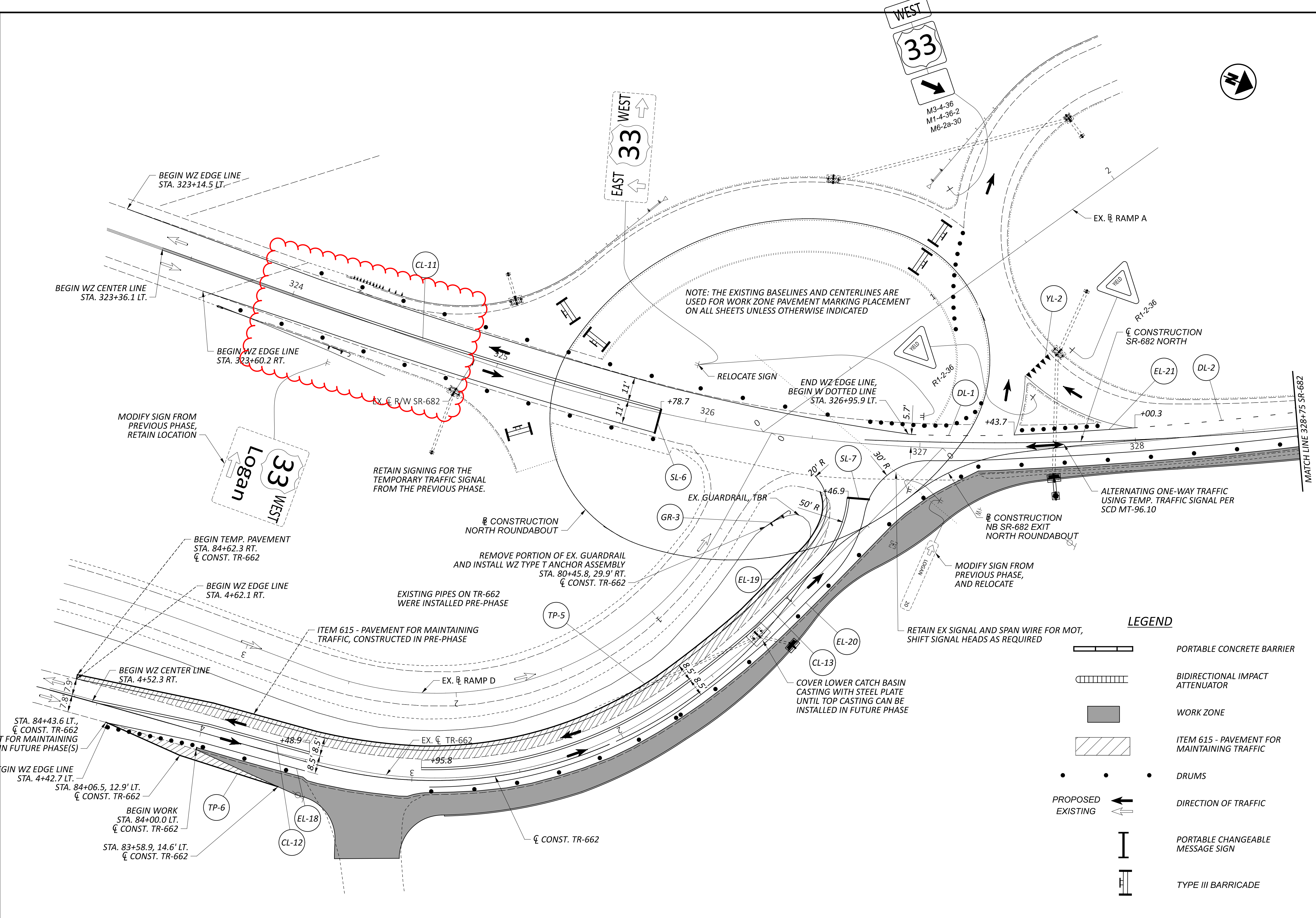
	PORTABLE CONCRETE BARRIER
	BIDIRECTIONAL IMPACT ATTENUATOR
	WORK ZONE
	ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC
	DRUMS
	DIRECTION OF TRAFFIC
	PORTABLE CHANGEABLE MESSAGE SIGN
	TYPE III BARRICADE



MAINTENANCE OF TRAFFIC  
PHASE ONE

DESIGN AGENCY	
DESIGNER	MS
REVIEWER	JGW 07/10/24
PROJECT ID	118465
SHEET	24
TOTAL	240

MODEL: MOT Phase 2 - Plan 1 Sheet PAPER SIZE: 34x22 (in.) DATE: 10/22/2024 TIME: 1:12:50 PM USER: A.Adair  
G:\DEV\Clients\ODOT\10017141.ATH-33-682\118465\118465\_MOT\118465\_MOT204.dgn



**MAINTENANCE OF TRAFFIC  
PHASE TWO**


DESIGN AGENCY	
DESIGNER	MS
REVIEWER	JGW 07/10/24
PROJECT ID	118465
SHEET	TOTAL
29	240





SHEET NUM.								PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.	
13	41	42	43	45	53	193	204	Office Calcs	202	EXT	TOTAL				
			5							602	20000	5	CY	<b>DRAINAGE</b> CONCRETE MASONRY	
180				6,133						605	13300	180	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	
80										605	14000	6,133	FT	6" BASE PIPE UNDERDRAINS	
										605	31100	80	FT	AGGREGATE DRAINS	
140				696				40		611	00510	876	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
								30		611	01400	30	FT	6" CONDUIT, TYPE E, 707.31 (PERFORATED)	
			191							611	04400	191	FT	12" CONDUIT, TYPE B	
			405							611	04600	405	FT	12" CONDUIT, TYPE C	
			56							611	05200	56	FT	12" CONDUIT, TYPE F	
			227							611	05900	227	FT	15" CONDUIT, TYPE B	
			100							611	06100	100	FT	15" CONDUIT, TYPE C	
			301							611	10400	301	FT	24" CONDUIT, TYPE B	
			111							611	10600	111	FT	24" CONDUIT, TYPE C	
			15							611	98150	15	EACH	CATCH BASIN, NO. 3	
			8							611	98180	8	EACH	CATCH BASIN, NO. 3A	
			1							611	98410	1	EACH	CATCH BASIN, NO. 8	
			1							611	98470	1	EACH	CATCH BASIN, NO. 2-2B	
			2							611	98510	2	EACH	CATCH BASIN, NO. 2-3	
1										611	98630	1	EACH	CATCH BASIN ADJUSTED TO GRADE	
			4							611	99574	4	EACH	MANHOLE, NO. 3	
			1							611	99575	1	EACH	MANHOLE, NO. 3, AS PER PLAN	13
10				6				1		611	99710	17	EACH	PRECAST REINFORCED CONCRETE OUTLET	
					2,306					254	01000	2,306	SY	<b>PAVEMENT</b> PAVEMENT PLANING, ASPHALT CONCRETE	
8		36			2,527					301	56000	2,535	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
					2,335					304	20000	2,371	CY	AGGREGATE BASE	
					1,086					407	20000	1,086	GAL	NON-TRACKING TACK COAT	
					539					442	22100	539	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449)	
3					651					442	22400	654	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (449)	
					52					452	10010	52	SY	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
					70					452	12010	70	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
					1,433					452	13010	1,433	SY	9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
					53					609	72100	53	CY	CONCRETE MEDIAN	
														<b>WATER WORK</b>	
	1									SPECIAL	61199700	1	EACH	GAS VALVE BOX ADJUSTED TO GRADE	
		2								638	08790	2	EACH	2" CUTTING-IN SLEEVE, VALVE AND VALVE BOX	
	3									638	10800	3	EACH	VALVE BOX ADJUSTED TO GRADE	
		551								SPECIAL	63820414	551	FT	2" WATER MAIN POLYVINYL CHLORIDE PIPE AND FITTINGS	
	2									638	98000	2	EACH	WATER WORK, MISC.:WATER VALVE RECONSTRUCT TO GRADE	
														<b>LIGHTING</b>	
							58			625	00450	58	EACH	CONNECTION, FUSED PULL APART	
							72			625	00480	72	EACH	CONNECTION, UNFUSED PERMANENT	
							24			625	10490	24	EACH	LIGHT POLE, CONVENTIONAL, AT12B30	
							5			625	10490	5	EACH	LIGHT POLE, CONVENTIONAL, AT15B30	
							29			625	14100	29	EACH	LIGHT POLE FOUNDATION, 24" X 8' DEEP	
							2,528			625	23300	2,528	FT	NO. 2 AWG 2400 VOLT DISTRIBUTION CABLE	
							2,746			625	23400	2,746	FT	NO. 10 AWG POLE AND BRACKET CABLE	
							2,863			625	24100	2,863	FT	1-1/2" DUCT CABLE WITH TWO NO. 4 AWG 2400 VOLT CABLES	
							796			625	25500	796	FT	CONDUIT, 3", 725.04	
							29			625	26253	29	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, 240V, TYPE II	202
							3,316			625	29002	3,316	FT	TRENCH, 24" DEEP	
							7			625	30700	7	EACH	PULL BOX, 725.08, 18"	
							9			625	30706	9	EACH	PULL BOX, 725.08, 24"	
							29			625	32000	29	EACH	GROUND ROD	
							2			625	34001	2	EACH	POWER SERVICE, AS PER PLAN	
							3,316			625	36010	3,316	FT	UNDERGROUND WARNING/MARKING TAPE	
								1		625	76000	1	EACH	ARC FLASH CALCULATIONS AND LABEL, PS-A	202
								1		625	76000	1	EACH	ARC FLASH CALCULATIONS AND LABEL, PS-B	202
														<b>TRAFFIC CONTROL</b>	
						28				621	00100	28	EACH	RPM (TWO-WAY YELLOW/RED)	
						11				621	00100	11	EACH	RPM (TWO-WAY YELLOW/YELLOW)	
79										621	54000	79	EACH	RAISED PAVEMENT MARKER REMOVED	
		34								626	00110	34	EACH	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL)	

GENERAL SUMMARY

DESIGN AGENCY  
  
 DESIGNER  
 AKA  
 REVIEWER  
 JGW 07/10/24  
 PROJECT ID  
 118465  
 SHEET TOTAL  
 39 | 240

SHEET NUM.												PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
14	15	16	20	193	197							01/SAF/21	EXT	TOTAL				
					231.3								630	02100	231.3	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
					154.8								630	03100	154.8	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
					360.6								630	04100	360.6	FT	GROUND MOUNTED SUPPORT, NO. 4 POST	
					34.4								630	06100	34.4	FT	GROUND MOUNTED SUPPORT, NO. 6 POST	
					127.2								630	08000	127.2	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W12X30	
					66.7								630	08004	66.7	FT	ONE WAY SUPPORT, NO. 3 POST	
					13								630	08600	13	EACH	SIGN POST REFLECTOR	
					4								630	09000	4	EACH	BREAKAWAY STRUCTURAL BEAM CONNECTION	
					554								630	80100	554	SF	SIGN, FLAT SHEET	
					499								630	80200	499	SF	SIGN, GROUND MOUNTED EXTRUSHEET	
					4								630	84500	4	EACH	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION	
					54								630	84900	54	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
					33								630	85000	33	EACH	REMOVAL OF GROUND MOUNTED SIGN AND STORAGE	
					7								630	85400	7	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	
					1								630	85500	1	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND STORAGE	
					3								630	86002	3	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
					3								630	86006	3	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND STORAGE	
					6								630	86010	6	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND REERECTION	
					14								630	86102	14	EACH	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL	
					2								630	86204	2	EACH	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND STORAGE	
				1.02									644	00104	1.02	MILE	EDGE LINE, 6" (WHITE)	
				0.73									644	00104	0.73	MILE	EDGE LINE, 6" (YELLOW)	
				0.8									644	00300	0.8	MILE	CENTER LINE, 4", DOUBLE SOLID YELLOW	
				0.02									644	00300	0.02	MILE	CENTER LINE, BROKEN AND SOLID, 4" DOUBLE	
				423									644	00700	423	FT	TRANSVERSE/DIAGONAL LINE (YELLOW)	
				2									644	01300	2	EACH	LANE ARROW	
				4									644	01360	4	EACH	WRONG WAY ARROW	
				298									644	01520	298	FT	DOTTED LINE, 12"	
				119									644	20800	119	FT	YIELD LINE	
																	<b>MAINTENANCE OF TRAFFIC</b>	
80													410	11000	80	CY	TRAFFIC COMPACTED SURFACE, TYPE B	
			1										606	26100	1	EACH	ANCHOR ASSEMBLY, TYPE E, FOR MAINTAINING TRAFFIC	
			2										606	26500	2	EACH	ANCHOR ASSEMBLY, TYPE T, FOR MAINTAINING TRAFFIC	
			41										611	96600	41	FT	CONDUIT, BORED OR JACKED; 12" TYPE B	
			147										611	96600	147	FT	CONDUIT, BORED OR JACKED; 24" TYPE B	
		320											614	11110	320	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
	1,000												614	11630	1,000	FT	INCREASED BARRIER DELINEATION	
			325										SPECIAL	61412200	325	FT	WORK ZONE GUARDRAIL	
			7										614	12384	7	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	
													614	12420	LS		DETOUR SIGNING	
20													614	13000	20	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
	20												614	13310	20	EACH	BARRIER REFLECTOR, TYPE 1(BI-DIRECTIONAL)	
	53												614	13314	53	EACH	BARRIER REFLECTOR, TYPE 3, ONE-WAY	
	36												614	13350	36	EACH	OBJECT MARKER, ONE WAY	
	20												614	13360	20	EACH	OBJECT MARKER, TWO WAY	
	32												614	18601	32	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	
				1.15									614	21100	1.15	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT, (DOUBLE YELLOW)	
				2.15									614	22110	2.15	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT, (WHITE)	
				0.45									614	22110	0.45	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT, (YELLOW)	
				50									614	23200	50	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	
				125									614	24202	125	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT	
				200									614	26200	200	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
1					1,148								615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	
													615	25000	1,148	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B	
40					1,220								616	10000	40	M GAL	WATER	
					106								622	41100	1,220	FT	PORTABLE BARRIER, UNANCHORED	
													642	20802	106	FT	YIELD LINE, TYPE 1	
																	<b>INCIDENTALS</b>	
													614	11000	LS		MAINTAINING TRAFFIC	
													623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
													624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY  
**W**  
**WOOLPERT**

DESIGNER  
AKA

REVIEWER  
JGW 07/10/24

PROJECT ID  
118465


SHEET TOTAL  
40 | 240

ATH-682-6.07

MODEL: Sheet\_SurvFl\_PAPER SIZE: 34x22 (in.) DATE: 10/22/2024 TIME: 4:19:01 PM USER: A.Adeair  
 G:\DE\Clients\ODOT\10017\17\_ATH-682-6.07\100-Engineering\Roadway\Sheets\118465\_GSC06.dgn

STATION RANGE			SIDE	DISTANCE (D) FT	AVERAGE WIDTH (W) FT	SURFACE AREA (A) A=DxW/9 SQ YD	CADD GENERATED AREA SQ YD	204	254	301	304	304	304	304	407	407	442	442	442	609
												SUBGRADE COMPACTION SY	PAVEMENT PLANING, ASPHALT CONCRETE (3.25" MAX DEPTH) SY	ASPHALT CONCRETE BASE, PG64- 22, (449), .9" CY	AGGREGATE BASE, 4" CY	AGGREGATE BASE, 6" CY	AGGREGATE BASE, 10.25" CY	AGGREGATE BASE, VARIABLE DEPTH CY	NON-TRACKING TACK COAT (0.04 GAL/SY) GAL	NON-TRACKING TACK COAT (0.07 GAL/SY) GAL
<b>CL SR-682 (SOUTH) - SALVAGE</b>																				
412+90.00	TO	414+67.92	LT&RT	177.92																
		RESURFACING			33.17		655.67		655.67						26.23	45.90	27.32	31.87		
		FULL DEPTH			5.04		99.58	99.58		24.89		16.60			7.97		4.15	4.84		
		+AGG COURSE & SUBGRADE			3.00	59.31		59.31				9.88								
<b>BL NB SR-682 ENTRY - SALVAGE</b>																				
514+68.73	TO	515+49.68	LT&RT	80.95																
		RESURFACING			7.68		69.08		69.08						2.76	4.84	2.88		8.63	
		FULL DEPTH			7.45		67.04	67.04		16.76		11.17			5.36		2.79		8.38	
		MEDIAN			1.41		12.64	12.64			1.40	2.11								1.40
		+AGG COURSE FOR MEDIAN UD			1.00	8.99														
		+AGG COURSE & SUBGRADE			1.50	13.49		13.49				2.25		3.25						
<b>BL SB SR-682 EXIT - SALVAGE</b>																				
614+68.76	TO	616+30.77	LT&RT	162.01																
		RESURFACING			9.01		162.24		162.24						6.49	11.36	6.76		20.28	
		FULL DEPTH			6.94		124.98	124.98		31.24		20.83			10.00		5.21		15.62	
		MEDIAN			2.68		48.29	48.29			5.37	8.05								5.37
		+AGG COURSE & SUBGRADE			1.50	27.00		27.00				4.50								
<b>BL NB SR-682 ENTRY - FULL DEPTH</b>																				
515+49.68	TO	517+06.90	LT&RT	157.22																
		FULL DEPTH			15.95		278.62	278.62		69.66		46.44			22.29		11.61	13.54		
		MEDIAN			1.55		27.08	27.08			3.01									3.01
		+AGG FOR MEDIAN DRAINAGE			0.50	8.73							2.49							
		+AGG COURSE & SUBGRADE			1.50	26.20		26.20				4.37								
<b>ADD INTERSECTION BL NB SR-682 ENTRY</b>																				
		FULL DEPTH	RT				21.58	21.58		5.39		3.60			1.73		0.90	1.05		
		+AGG COURSE & SUBGRADE					5.72	5.72				0.95								
<b>BL SB SR-682 EXIT - FULL DEPTH</b>																				
616+30.77	TO	617+07.64	LT&RT	76.87																
		FULL DEPTH			18.01		153.81	153.81		38.45		25.64			12.30		6.41	7.48		
		MEDIAN			6.02		51.44				5.72									5.72
		+AGG FOR MEDIAN DRAINAGE			0.50	4.27							1.22							
		+AGG COURSE & SUBGRADE			1.50	12.81		12.81				2.14								
<b>ADD INTERSECTION BL SB SR-682 EXIT</b>																				
		FULL DEPTH	LT				22.59	22.59		5.65		3.76			1.81		0.94	1.10		
		+AGG COURSE & SUBGRADE					5.76	5.76				0.96								
<b>ADD INTERSECTION BL NB SR-682 EXIT</b>																				
		FULL DEPTH	RT				19.20	19.20		4.80		3.20			1.54		0.80	0.93		
		+AGG COURSE & SUBGRADE					5.23	5.23				0.87								
<b>BL NB SR-682 EXIT - FD&amp;SALVAGE</b>																				
519+32.29	TO	519+94.01	LT&RT	61.72																
		RESURFACING			6.76		46.38		46.38						1.86	3.25	1.93	2.25		
		FULL DEPTH			10.61		72.79	72.79		18.20		12.13			5.82		3.03	3.54		
		MEDIAN			27.60		8.76				0.97									0.97
		+AGG FOR MEDIAN DRAINAGE			27.60	0.50	1.53						0.44							
		+AGG COURSE & SUBGRADE			61.72	1.50	10.29		10.29			1.71								
<b>SUBTOTALS</b>								1114.01	933.37	215.05	16.47	181.16	4.14	3.25	106.15	65.34	74.73	66.61	52.92	16.47
<b>TOTALS CARRIED TO SHEET 53</b>								1115	934	216		206			172		75	120		17


PAVEMENT CALCULATIONS - MAINLINE

DESIGN AGENCY  
  
 DESIGNER AKA  
 REVIEWER JGW 07/10/24  
 PROJECT ID 118465  
 SHEET 46 TOTAL 240

STATION RANGE		SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA	204 SUBGRADE COMPACTION	254 PAVEMENT PLANING, ASPHALT CONCRETE (3.25" MAX DEPTH)	301 ASPHALT CONCRETE BASE, PG64- 22, (449), 9"	304 AGGREGATE BASE, 4"	304 AGGREGATE BASE, 6"	304 AGGREGATE BASE, 10.25"	407 NON-TRACKING TACK COAT (0.04 GAL/SY)	407 NON-TRACKING TACK COAT (0.07 GAL/SY)	442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), 1.5"	442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (449), 1.75"	609 CONCRETE MEDIAN, 4"	
			FT	FT	SQ YD	SQ YD	SY	SY	CY	CY	CY	CY	GAL	GAL	CY	CY	CY	
<b>BL NB SR-682 EXIT - FD&amp;SALVAGE</b>																		
519+94.01	TO 520+49.53	RT	55.52															
	RESURFACING			10.32	63.68		63.68						2.55	4.46	2.65	3.10		
	FULL DEPTH			2.61	16.11	16.11		4.03		2.69			1.29		0.67	0.78		
	+AGG COURSE & SUBGRADE			1.50	9.25	9.25				1.54								
<b>ADD INTERSECTION BL SB SR-682 ENTRY</b>																		
	FULL DEPTH	LT			16.18	16.18		4.04		2.70			1.29		0.67	0.79		
	+AGG COURSE & SUBGRADE				4.61	4.61				0.77								
<b>BL SB SR-682 ENTRY - FULL DEPTH</b>																		
619+32.76	TO 619+55.88	LT&RT	23.12															
	FULL DEPTH			16.92	43.46	43.46		10.86		7.24			3.48		1.81	2.11		
	MEDIAN			3.19	8.20				0.91								0.91	
	+AGG FOR MEDIAN DRAINAGE		31.92	0.50	1.77						0.50							
	+AGG COURSE & SUBGRADE		23.12	1.50	3.85	3.85				0.64								
<b>BL SB SR-682 ENTRY - FD&amp;SALVAGE</b>																		
619+55.88	TO 620+49.53	LT	93.65															
	RESURFACING			13.43	139.73		139.73						5.59	9.78	5.82	6.79		
	FULL DEPTH			4.77	49.64	49.64		12.41		8.27			3.97		2.07	2.41		
	+AGG COURSE & SUBGRADE			1.50	15.61	15.61				2.60								
<b>-BRIDGE-</b>																		
<b>BL NB SR-682 ENTRY - FD&amp;SALVAGE</b>																		
524+11.77	TO 524+74.83	RT	63.06															
	RESURFACING			5.81	40.70		40.70						1.63	2.85	1.70	1.98		
	FULL DEPTH			12.88	90.22	90.22		22.56		15.04			7.22		3.76	4.39		
	+AGG COURSE & SUBGRADE			1.50	10.51	10.51				1.75								
<b>BL NB SR-682 ENTRY - FULL DEPTH</b>																		
524+74.83	TO 525+11.01	LT&RT	36.18															
	FULL DEPTH			19.31	77.61	77.61		19.40		12.94			6.21		3.23	3.77		
	MEDIAN			2.32	9.33				1.04								1.04	
	+AGG FOR MEDIAN DRAINAGE		33.30	0.50	2.01						0.57							
	+AGG COURSE & SUBGRADE		36.18	1.50	6.03	6.03				1.01								
<b>ADD INTERSECTION BL NB SR-682 ENTRY</b>																		
	FULL DEPTH	RT			17.62	17.62		4.41		2.94			1.41		0.73	0.86		
	+AGG COURSE & SUBGRADE				4.90	4.90				0.82								
<b>BL SB SR-682 EXIT - FD&amp;SALVAGE</b>																		
624+11.77	TO 624+47.84	LT	36.07															
	RESURFACING			4.97	19.92		19.92						0.80	1.39	0.83	0.97		
	FULL DEPTH			6.24	25.00	25.00		6.25		4.17			2.00		1.04	1.22		
	+AGG COURSE & SUBGRADE			1.50	6.01	6.01				1.00								
<b>BL SB SR-682 EXIT - FULL DEPTH</b>																		
624+47.84	TO 625+13.37	LT&RT	65.53															
	FULL DEPTH			19.96	145.33	145.33		36.33		24.22			11.63		6.06	7.06		
	MEDIAN			2.36	17.21				1.91								1.91	
	+AGG FOR MEDIAN DRAINAGE		35.46	0.50	1.97						0.56							
	+AGG COURSE & SUBGRADE		65.53	1.50	10.92	10.92				1.82								
<b>ADD INTERSECTION BL SB SR-682 EXIT</b>																		
	FULL DEPTH	LT			24.54	24.54		6.14		4.09			1.96		1.02	1.19		
	+AGG COURSE & SUBGRADE				6.56	6.56				1.09								
<b>SUBTOTALS</b>							583.98	264.03	126.43	3.86	97.33	1.64	51.02	18.48	32.07	37.42	3.86	
<b>TOTALS CARRIED TO SHEET 53</b>							584	265	127		103			70		33	38	4


**PAVEMENT CALCULATIONS - MAINLINE**

---

DESIGN AGENCY  
  
 DESIGNER  
 AKA  
 REVIEWER  
 JGW 07/10/24  
 PROJECT ID  
 118465  
 SHEET TOTAL  
 47 240


STATION RANGE	SIDE	DISTANCE (D) FT	AVERAGE WIDTH (W) FT	SURFACE AREA (A) A=DxW/9 SQ YD	CADD GENERATED AREA SQ YD	204	204	204	204	254	301	304	304	304	407	407	442	442	452	609
						SUBGRADE COMPACTION SY	EXCAVATION OF SUBGRADE, 12" CY	GRANULAR MATERIAL, TYPE B, 12" CY	GEOTEXTILE FABRIC SY	PAVEMENT PLANING, ASPHALT CONCRETE (3.25" MAX DEPTH) SY	ASPHALT CONCRETE BASE, PG64- 22, (449), 9" CY	AGGREGATE BASE, 4" CY	AGGREGATE BASE, 6" CY	AGGREGATE BASE, 10.25" CY	NON-TRACKING TACK COAT (0.04 GAL/SY) GAL	NON-TRACKING TACK COAT (0.07 GAL/SY) GAL	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), 1.5" CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (449), 1.75" CY	9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P SY	CONCRETE MEDIAN, 4" CY
<b>ADD INTERSECTION BL NB SR-682 EXIT</b>																				
FULL DEPTH		RT			23.04	23.04					5.76		3.84		1.84		0.96	1.12		
+AGG COURSE & SUBGRADE					6.14	6.14							1.02							
<b>BL NB SR-682 EXIT - FULL DEPTH</b>																				
527+41.80	TO	528+00.99	LT&RT	59.19																
FULL DEPTH					103.66	103.66	34.55	34.55	103.66		25.91		17.28		8.29		4.32	5.04		
MEDIAN					43.79							4.87								4.87
+AGG FOR MEDIAN DRAINAGE				69.82	0.50	3.88														
+AGG COURSE & SUBGRADE				59.19	3.00	19.73			19.73				3.29		1.10					
<b>ADD INTERSECTION BL SB SR-682 ENTRY</b>																				
FULL DEPTH		LT			20.21	20.21					5.05		3.37		1.62		0.84	0.98		
+AGG COURSE & SUBGRADE					5.19	5.19							0.86							
<b>BL SB SR-682 ENTRY - FULL DEPTH</b>																				
627+46.23	TO	628+01.35	LT&RT	55.12																
FULL DEPTH					103.36	103.36	34.45	34.45	103.36		25.84		17.23		8.27		4.31	5.02		
MEDIAN					39.98							4.44								4.44
+AGG FOR MEDIAN DRAINAGE				72.30	0.50	4.02														
+AGG COURSE & SUBGRADE				55.12	3.00	18.37			18.37				3.06		1.14					
<b>CL SR-682 - FULL DEPTH</b>																				
428+00.90	TO	429+50.00	LT&RT	149.10																
FULL DEPTH					576.30	576.30	192.10	192.10	576.30		144.08		96.05		46.10		24.01	28.01		
+SUBGRADE					49.70		16.57	16.57	49.70				8.28							
+AGG COURSE FOR UNDERDRAIN		LT											2.76							
<b>CL SR-682 - SALVAGE</b>																				
429+50.00	TO	430+50.00	LT&RT	100.00																
RESURFACING					180.73				180.73						7.23	12.65	7.53	8.79		
FULL DEPTH					88.91	88.91					22.23		14.82		7.11		3.70	4.32		
+ASPHALT BASE STEP											2.78		1.85							
+AGG COURSE STEP													1.85							
+SUBGRADE																				
<b>BL SOUTH ROUNDABOUT</b>																				
10+00.00	TO	15+26.75	LT	526.75																
FULL DEPTH					1237.06	1237.06					309.26		206.18		98.96		51.54	60.13		
+AGG COURSE & SUBGRADE													17.95							
10+00.00	TO	15+26.75	RT	526.75																
TRUCK APRON					608.37	608.37							101.39						608.37	
+AGG COURSE													8.36							
+SUBGRADE																				
<b>BL NORTH ROUNDABOUT</b>																				
10+00.00	TO	15+69.70		569.70																
FULL DEPTH					1326.61	1326.61					331.65		221.10		106.13		55.28	64.49		
+AGG COURSE & SUBGRADE													19.14							
10+00.00	TO	15+69.70		569.70																
TRUCK APRON					823.69	823.69							137.28						823.69	
+AGG COURSE													8.80							
+SUBGRADE																				
<b>SUBTOTALS</b>						5419.98	290.37	290.37	871.11	180.73	872.56	9.31	895.77	2.25	285.56	12.65	152.49	177.91	1432.06	9.31
<b>TOTALS CARRIED TO SHEET 53</b>						5420	291	291	872	181	873		908		299		153	178	1433	10

PAVEMENT CALCULATIONS - MAINLINE

DESIGN AGENCY  
  
 DESIGNER  
 AKA  
 REVIEWER  
 JGW 07/10/24  
 PROJECT ID  
 118465  
 SHEET TOTAL  
 48 240

STATION RANGE	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA	204	204	204	204	254	301	304	304	304	407	407	442	442	609
						SUBGRADE COMPACTION	EXCAVATION OF SUBGRADE, 12"	GRANULAR MATERIAL, TYPE B, 12"	GEOTEXTILE FABRIC	PAVEMENT PLANING, ASPHALT CONCRETE (3.25" MAX DEPTH)	ASPHALT CONCRETE BASE, PG64-22, (449), 9"	AGGREGATE BASE, 4"	AGGREGATE BASE, 6"	AGGREGATE BASE, 10.25"	NON-TRACKING TACK COAT (0.04 GAL/SY)	NON-TRACKING TACK COAT (0.07 GAL/SY)	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), 1.5"	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (449), 1.75"	CONCRETE MEDIAN, 4"
FT	FT	SQ YD	SQ YD	SY	CY	CY	SY	SY	CY	CY	CY	CY	GAL	GAL	CY	CY	CY		
<b>SUNSET LANE - SALVAGE</b>																			
34+00.00	TO	34+75.00	LT&RT	75.00						135.32					5.41	9.47	5.64	6.58	
		RESURFACING FULL DEPTH			16.24		135.32										5.64	6.58	
		+AGG COURSE & SUBGRADE			4.99		41.60	41.60			10.40		6.93		3.33		1.73	2.02	
					3.00	25.00	25.00						4.17						
<b>BL SUNSET LANE ENTRY - FD</b>																			
34+75.00	TO	35+72.57	RT	97.57															
		FULL DEPTH			13.67		148.17	148.17	49.39	49.39	37.04		24.69		11.85		6.17	7.20	
		+SUBGRADE			1.50	16.26	16.26	16.26	5.42	5.42			2.71						
		+AGG COURSE FOR UNDERDRAIN			1.00	10.84							1.81						
<b>BL SUNSET LANE EXIT - FD</b>																			
44+75.00	TO	45+39.37	LT	64.37															
		FULL DEPTH			12.85		91.91	91.91	30.64	30.64	22.98		15.32		7.35		3.83	4.47	
		+SUBGRADE			1.50	10.73	10.73	10.73	3.58	3.58			1.79						
		+AGG COURSE FOR UNDERDRAIN			1.00	7.15							1.19						
<b>BL SUNSET LANE ENTRY - FD</b>																			
35+72.57	TO	36+14.83	LT&RT	42.26															
		FULL DEPTH			16.25		76.30	76.30	25.43	25.43	19.08		12.72		6.10		3.18	3.71	
		MEDIAN			3.94		23.09					2.57							2.57
		+AGG FOR MEDIAN DRAINAGE	RT	52.78	0.50	2.93													
		+SUBGRADE	LT		3.00	14.09	14.09	14.09	4.70	4.70			2.35						
		+AGG COURSE FOR UNDERDRAIN	LT		1.00	4.70							0.78						
<b>BL SUNSET LANE EXIT - FD</b>																			
45+39.37	TO	46+14.18	LT&RT	74.81															
		FULL DEPTH			18.25		151.71	151.71	50.57	50.57	37.93		25.29		12.14		6.32	7.37	
		MEDIAN			5.70		32.77					3.64							3.64
		+AGG FOR MEDIAN DRAINAGE	RT	51.72	0.50	2.87													
		+SUBGRADE	LT		3.00	24.94	24.94	24.94	8.31	8.31			4.16						
		+AGG COURSE FOR UNDERDRAIN	LT		1.00	8.31							1.39						
<b>ADD INTERSECTION BL SUNSET LANE ENTRY</b>																			
		FULL DEPTH	RT				14.22	14.22			3.56		2.37		1.14		0.59	0.69	
		+AGG COURSE & SUBGRADE					5.48	5.48					0.91						
<b>ADD INTERSECTION BL SUNSET LANE EXIT</b>																			
		FULL DEPTH	LT				37.17	37.17			9.29		6.19		2.97		1.55	1.81	
		+AGG COURSE & SUBGRADE					5.76	5.76					0.96						
<b>SUBTOTALS</b>						663.32	178.03	178.03	534.10	135.32	140.27	6.21	115.72	1.65	50.30	9.47	29.02	33.85	6.21
<b>TOTALS CARRIED TO SHEET 53</b>						664	179	179	535	136	141		124		60		30	34	7

PAVEMENT CALCULATIONS - SUNSET LANE


DESIGN AGENCY  
  
 DESIGNER  
 AKA  
 REVIEWER  
 JGW 07/10/24  
 PROJECT ID  
 118465  
 SHEET TOTAL  
 49 240

ATH-682-6.07

MODEL: Sheet\_SurvFI PAPER SIZE: 34x22 (in.) DATE: 10/22/2024 TIME: 4:22:57 PM USER: A.Adeir  
 G:\DE\Clients\ODOT\10017141\ATH-682-6.07\Engineering\Roadway\Sheets\118465\_GSO10.dgn


STATION RANGE	SIDE	DISTANCE (D) FT	AVERAGE WIDTH (W) FT	SURFACE AREA (A) A=DxW/9 SQ YD	CADD GENERATED AREA SQ YD	204	254	301	304	304	304	407	407	442	442	609
						SUBGRADE COMPACTION SY	PAVEMENT PLANING, ASPHALT CONCRETE (3.25" MAX DEPTH) SY	ASPHALT CONCRETE BASE, PG64- 22, (449), 9" CY	AGGREGATE BASE, 4" CY	AGGREGATE BASE, 6" CY	AGGREGATE BASE, 10.25" CY	NON-TRACKING TACK COAT (0.04 GAL/SY) GAL	NON-TRACKING TACK COAT (0.07 GAL/SY) GAL	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), 1.5" CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (449), 1.75" CY	CONCRETE MEDIAN, 4" CY
<b>ADD INTERSECTION CL TR-662</b>																
FULL DEPTH		LT			17.29	17.29		4.32		2.88		1.38		0.72	0.84	
+AGG COURSE & SUBGRADE					5.70	5.70				0.95						
<b>CL TR-662 - FULL DEPTH &amp; MEDIAN</b>																
80+94.47	TO	82+09.46	LT&RT	114.99				52.47		34.98		16.79		8.74	10.20	
FULL DEPTH					209.88	209.88										
MEDIAN				72.92	8.17	66.16			7.35							7.35
+AGG FOR MEDIAN DRAINAGE				72.92	1.00	8.10					2.31					
+AGG COURSE & SUBGRADE					3.00	38.33				6.39						
<b>ADD INTERSECTION BL TR-662 EXIT</b>																
FULL DEPTH		RT			26.26	26.26		6.56		4.38		2.10		1.09	1.28	
+AGG COURSE & SUBGRADE					3.98	3.98				0.66						
<b>BL TR-662 EXIT - FD &amp; MEDIAN</b>																
71+24.49	TO	72+09.46	LT&RT	84.97				49.46		32.97		15.83		8.24	9.62	
FULL DEPTH					197.82	197.82										
MEDIAN				47.51	13.01	68.69			7.63							7.63
+AGG COURSE					2.50	23.60				3.93						
+SUBGRADE					0.50	4.72										
<b>CL TR-662 - FULL DEPTH</b>																
82+09.46	TO	82+85.00	LT	75.54				34.74		23.16		11.12		5.79	6.75	
FULL DEPTH					138.96	138.96										
+AGG COURSE					1.00	8.39				1.40						
+SUBGRADE					0.50	4.20										
82+09.46	TO	82+85.00	RT	75.54				28.78		19.19		9.21		4.80	5.60	
FULL DEPTH					115.11	115.11										
+ASPHALT BASE COURSE					0.50	4.20		1.05		0.70						
+AGG COURSE					0.50	4.20				0.70						
+SUBGRADE					0.50	4.20										
<b>CL TR-662 - SALVAGE</b>																
82+85.00	TO	84+00.00	LT&RT	115.00												
RESURFACING					198.33	198.33						7.93	13.88	8.26	9.64	
FULL DEPTH					130.49	130.49		32.62		21.75		10.44		5.44	6.34	
+ASPHALT BASE COURSE						12.78		3.19		2.13						
+AGG COURSE						12.78				2.13						
+SUBGRADE						12.78										
<b>SUBTOTALS</b>						975.64	198.33	213.19	14.98	158.29	2.31	74.80	13.88	43.09	50.27	14.98
<b>TOTALS CARRIED TO SHEET 53</b>						976	199	214		176		89		44	51	15

PAVEMENT CALCULATIONS - TR-662

DESIGN AGENCY	
DESIGNER	AKA
REVIEWER	JGW 07/10/24
PROJECT ID	118465
SHEET TOTAL	50   240


STATION RANGE	SIDE	DISTANCE (D) FT	AVERAGE WIDTH (W) FT	SURFACE AREA (A) A=DxW/9 SQ YD	CADD GENERATED AREA SQ YD	204	254	301	304	407	407	442	442
						SUBGRADE COMPACTION SY	PAVEMENT PLANING, ASPHALT CONCRETE (3.25" MAX DEPTH) SY	ASPHALT CONCRETE BASE, PG64- 22, (449), 9" CY	AGGREGATE BASE, 6" CY	NON-TRACKING TACK COAT (0.04 GAL/SY) GAL	NON-TRACKING TACK COAT (0.07 GAL/SY) GAL	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), 1.5" CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (449), 1.75" CY
<b>RAMP A - SALVAGE</b>													
97+50.00 TO 98+70.00	LT&RT	120.00											
RESURFACING			13.72		182.98		182.98						
FULL DEPTH			11.62		154.87	154.87		38.72	25.81	7.32	12.81	7.62	8.89
+ASPHALT BASE COURSE			1.00	13.33		13.33		3.33	2.22	12.39		6.45	7.53
+AGG COURSE			1.00	13.33		13.33			2.22				
+SUBGRADE			1.00	13.33		13.33							
<b>RAMP A - FULL DEPTH &amp; SHLDR</b>													
98+70.00 TO 101+85.00	LT&RT	315.00											
FULL DEPTH			26.54		928.89	928.89		232.22	154.81	74.31		38.70	45.15
+ASPHALT BASE COURSE			1.00	35.00		35.00		8.75	5.83				
+AGG COURSE			1.00	35.00		35.00			5.83				
+SUBGRADE			1.00	35.00		35.00							
<b>RAMP A - FULL DEPTH &amp; CURB</b>													
101+85.00 TO 102+86.91	LT&RT	101.91											
FULL DEPTH			23.81		269.60	269.60		67.40	44.93	21.57		11.23	13.11
+AGG COURSE & SUBGRADE			3.00	33.97		33.97			5.66				
<b>ADD INTERSECTION RAMP A</b>													
FULL DEPTH	LT				23.13	23.13		5.78	3.86	1.85		0.96	1.12
+AGG COURSE & SUBGRADE					5.44	5.44			0.91				
<b>RAMP B - SALVAGE</b>													
54+70.00 TO 56+00.00	LT&RT	130.00											
RESURFACING			14.58		210.54		210.54			8.42	14.74	8.77	10.23
FULL DEPTH			11.71		169.09	169.09		42.27	28.18	13.53		7.05	8.22
+ASPHALT BASE COURSE			1.00	14.44		14.44		3.61	2.41				
+AGG COURSE			1.00	14.44		14.44			2.41				
+SUBGRADE			1.00	14.44		14.44							
<b>RAMP B - FULL DEPTH &amp; CURB</b>													
56+00.00 TO 57+67.17	LT&RT	167.17											
FULL DEPTH			26.84		498.51	498.51		124.63	83.09	39.88		20.77	24.23
+AGG COURSE			2.50	46.44		46.44			7.74				
+SUBGRADE			0.50	9.29		9.29							
<b>ADD INTERSECTION RAMP B</b>													
FULL DEPTH	RT				43.73	43.73		10.93	7.29	3.50		1.82	2.13
+AGG COURSE & SUBGRADE					6.63	6.63			1.11				
<b>SUBTOTALS</b>						2377.93	393.52	537.65	384.31	182.77	27.55	103.39	120.62
<b>TOTALS CARRIED TO SHEET 53</b>						2378	394	538	385	211		104	121

PAVEMENT CALCULATIONS - RAMPS

DESIGN AGENCY  
  
 DESIGNER  
 AKA  
 REVIEWER  
 JGW 07/10/24  
 PROJECT ID  
 118465  
 SHEET TOTAL  
 51 240



STATION RANGE	SIDE	DISTANCE (D) FT	AVERAGE WIDTH (W) FT	SURFACE AREA (A) A=DxW/9 SQ YD	CADD GENERATED AREA SQ YD	204	254	301	304	407	407	442	442
						SUBGRADE COMPACTION SY	PAVEMENT PLANING, ASPHALT CONCRETE (3.25" MAX DEPTH) SY	ASPHALT CONCRETE BASE, PG64- 22, (449), 9" CY	AGGREGATE BASE, 6" CY	NON-TRACKING TACK COAT (0.04 GAL/SY) GAL	NON-TRACKING TACK COAT (0.07 GAL/SY) GAL	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), 1.5" CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 1.9 MM, TYPE A (449), 1.75" CY
<b>ADD INTERSECTION RAMP C</b>													
FULL DEPTH	RT				48.88	48.88		12.22	8.15	3.91		2.04	2.38
+AGG COURSE & SUBGRADE					6.42	6.42			1.07				
<b>RAMP C - FULL DEPTH &amp; CURB</b>													
21+21.50 TO 22+80.00	LT&RT	158.50											
FULL DEPTH			26.05		458.83	458.83		114.71	76.47	36.71		19.12	22.30
+AGG COURSE			2.50	44.03		44.03			7.34				
+SUBGRADE			0.50	8.81		8.81							
<b>RAMP C - FULL DEPTH &amp; SHLDR</b>													
22+80.00 TO 23+50.00	LT&RT	70.00											
FULL DEPTH			27.48		213.70	213.70		53.43	35.62	17.10		8.90	10.39
+ASPHALT BASE COURSE			1.00	7.78		7.78		1.94	1.30				
+AGG COURSE			1.00	7.78		7.78			1.30				
+SUBGRADE			1.00	7.78		7.78							
<b>RAMP C - SALVAGE</b>													
23+50.00 TO 23+80.00	LT&RT	30.00					40.62						
RESURFACING			12.19		40.62	40.62				1.62	2.84	1.69	1.97
FULL DEPTH			13.56		45.20	45.20		11.30	7.53	3.62		1.88	2.20
+ASPHALT BASE COURSE			1.00	3.33		3.33		0.83	0.56				
+AGG COURSE			1.00	3.33		3.33			0.56				
+SUBGRADE			1.00	3.33		3.33							
<b>ADD INTERSECTION RAMP D</b>													
FULL DEPTH	LT				29.97	29.97		7.49	4.99	2.40		1.25	1.46
+AGG COURSE & SUBGRADE					5.32	5.32			0.89				
<b>RAMP D - FULL DEPTH &amp; CURB</b>													
61+67.18 TO 64+00.00	LT&RT	232.82											
FULL DEPTH			27.89		721.53	721.53		180.38	120.26	57.72		30.06	35.07
+AGG COURSE & SUBGRADE			3.00	77.61		77.61			12.93				
<b>RAMP D - SALVAGE</b>													
64+00.00 TO 65+00.00	LT&RT	100.00					156.22						
RESURFACING			14.06		156.22	156.22				6.25	10.94	6.51	7.59
FULL DEPTH			11.70		130.04	130.04		32.51	21.67	10.40		5.42	6.32
+ASPHALT BASE COURSE			1.00	11.11		11.11		2.78	1.85				
+AGG COURSE			1.00	11.11		11.11			1.85				
+SUBGRADE			1.00	11.11		11.11							
<b>SUBTOTALS</b>						1857.01	196.84	417.59	304.33	139.73	13.78	76.88	89.69
<b>TOTALS CARRIED TO SHEET 53</b>						1858	197	418	305	154		77	90


DESIGN AGENCY  
  
 DESIGNER  
 AKA  
 REVIEWER  
 JGW 07/10/24  
 PROJECT ID  
 118465  
 SHEET TOTAL  
 52 | 240

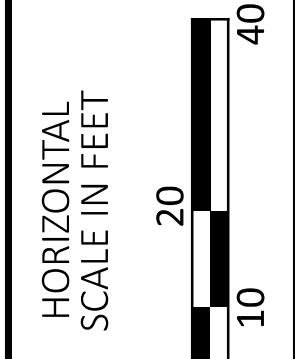
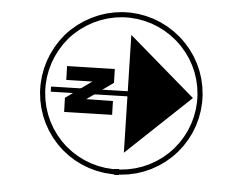
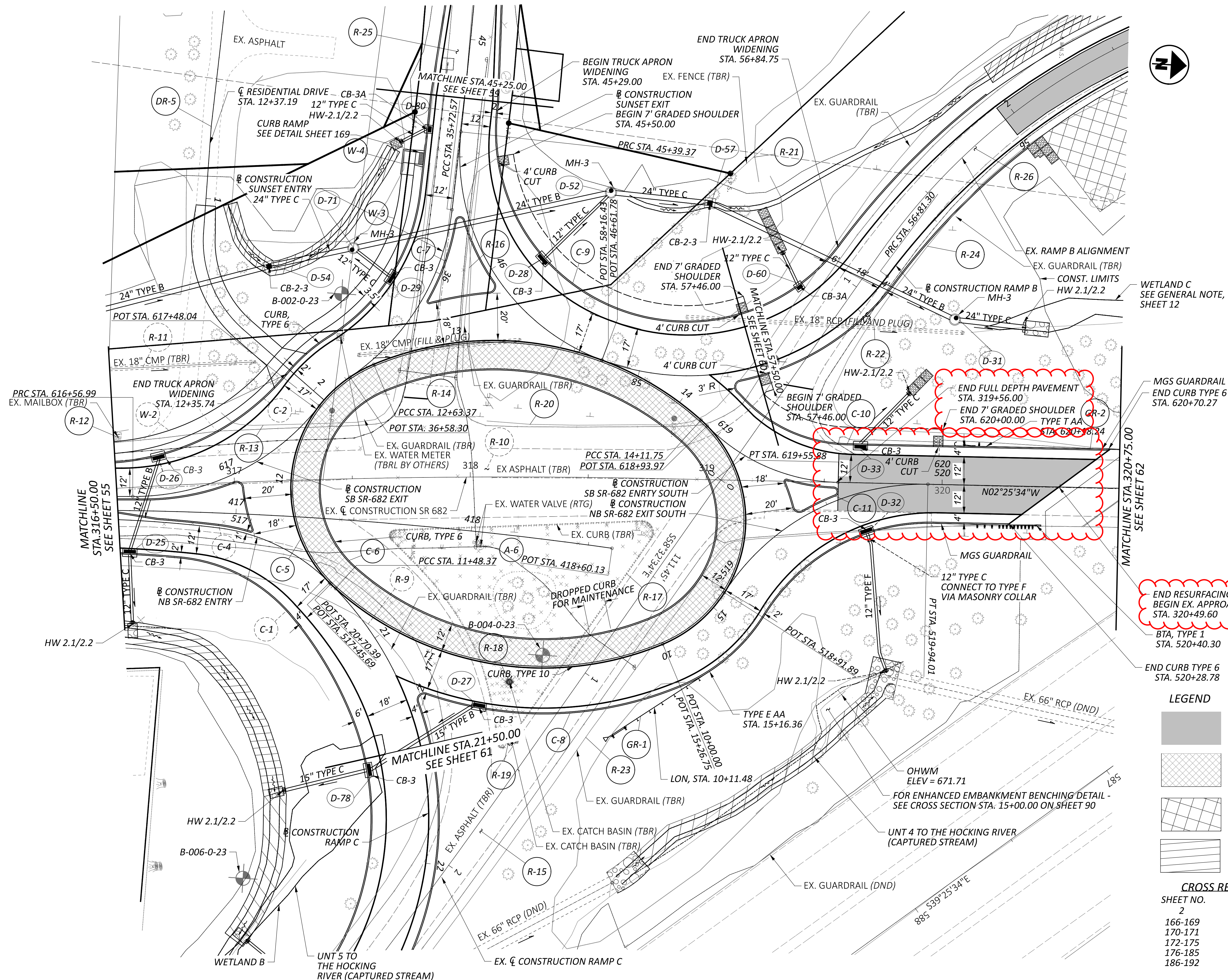
SHEET NO.	REF NO.	STATION	SIDE	DRIVE TYPE	DRIVE APRON CAD MEASURED AREA (A)	DRIVEWAY CAD MEASURED AREA (A)	SUBGRADE CAD MEASURED AREA	EXCAVATION CALC				EMBANKMENT CALC				304	304	304	407	442	442	442	452	452					
								202	203	203	204	203	204	203	204														
					SQ YD	SQ YD	SQ YD	PAVEMENT REMOVED SY	PROFILE MEASURED AREA (PA) SQ FT	LENGTH OF DRIVE (L) FT	AVERAGE DEPTH (D = PA / L) FT	EXCAVATION (A X D / 3) CY	PROFILE MEASURED AREA (PA) SQ FT	LENGTH OF DRIVE (L) FT	AVERAGE DEPTH (D = PA / L) FT	EMBANKMENT (A X D / 3) CY	SUBGRADE COMPACTION SY	AGGREGATE BASE, 4" CY	AGGREGATE BASE, 6" CY	AGGREGATE BASE, 8" CY	NON-TRACKING TACK COAT (0.04 GAL/SY) GAL	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), 1.25" CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), 2" CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (449), 1.75" CY	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P SY			
55, 172	DR-1	413+24.86	LT	RES.-CONC.	37.20		48.46	6.54	0.30	9.90	0.03	0.38	0.10	9.90	0.01	0.13	48.46	4.13											
55, 174	DR-2	413+32.42	RT	COM.-ASPH.		110.90	124.86	126.78	0.20	15.51	0.01	0.48	0.70	15.51	0.05	1.67	124.86			24.64	8.87	3.85		5.39					
55, 174	DR-3	414+49.72	RT	COM.-ASPH.		129.87	147.64	193.71	0.00	31.18	0.00	0.00	8.60	31.18	0.28	11.94	147.64			28.86	10.39	4.51		6.31					
55, 175	DR-4	415+92.41	RT	COM.-ASPH.	142.83		163.58	168.24	1.50	41.84	0.04	1.71	0.30	41.84	0.01	0.34	163.58			31.74	11.43	4.96		6.94					
57, 173	DR-5	12+37.19	LT	RES.-ASPH.	13.91	82.17	124.48	101.23	1.30	83.57	0.02	0.50	325.30	83.57	3.89	124.66	124.48	1.55	13.69					4.56		13.91			
67, 172	DR-6	83+16.55	LT	RES.-ASPH.	89.19		98.78		0.00	22.12	0.00	0.00	6.10	22.12	0.28	8.20	98.78		14.86					4.95					
69, 175	DR-7	429+87.05	RT	COM.-CONC.	69.61		73.87	73.29	0.00	14.50	0.00	0.00	3.70	14.50	0.26	5.92	73.87	7.73									69.61		
<b>SUBTOTALS</b>								669.80					3.06				152.86	781.66	13.41	28.56	85.24	30.69	13.32	9.52	18.65	51.11	69.61		
<b>TOTALS CARRIED TO PAVEMENT TOTALS THIS SHEET</b>								670					4				153	782		128		31	23	19	52	70			

**PAVEMENT CALCULATION TOTALS**

SHEET NO.	202	203	203	204	204	204	204	254	301	304	407	442	442	452	452	452	609
46				1115				934	216	206	172	75	120				17
47				584				265	127	103	70	33	38				4
48				5420	291	291	872	181	873	908	299	153	178			1433	10
49				664	179	179	535	136	141	124	60	30	34				7
50				976				199	214	176	89	44	51				15
51				2378				394	538	385	211	104	121				
52				1858				197	418	305	154	77	90				
53	670	4	153	782						128	31	23	19	52	70	1433	53
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>	670	4	153	13777	470	470	1407	2306	2527	2335	1086	539	651	52	70	1433	53

**DRIVEWAY CALCULATIONS & PAVEMENT TOTALS**

DESIGN AGENCY  
  
 DESIGNER  
 AKA  
 REVIEWER  
 GW 07/10/24  
 PROJECT ID  
 118465  
 SHEET TOTAL  
 53 | 240



PLAN - SR-682  
 STA 316+50 TO STA 320+75

WETLAND C  
 SEE GENERAL NOTE,  
 SHEET 12

END RESURFACING  
 BEGIN EX. APPROACH SLAB  
 STA. 320+49.60

BTA, TYPE 1  
 STA. 520+40.30

END CURB TYPE 6  
 STA. 520+28.78

LEGEND  
 RESURFACING  
 SEE TYPICAL SECTIONS SHEETS 6-11  
 FOR RESURFACING BUILDUP

ROUNDABOUT TRUCK APRON

VEGETATED FILTER STRIP

DITCH EROSION PROTECTION

CROSS REFERENCES

SHEET NO.	DESCRIPTION
2	☉ REFERENCES AND BENCHMARKS
166-169	ROUNDABOUT DETAILS
170-171	INTERSECTION DETAILS
172-175	DRIVEWAY DETAILS
176-185	STORM PROFILES
186-192	DRAINAGE DETAILS

DESIGN AGENCY

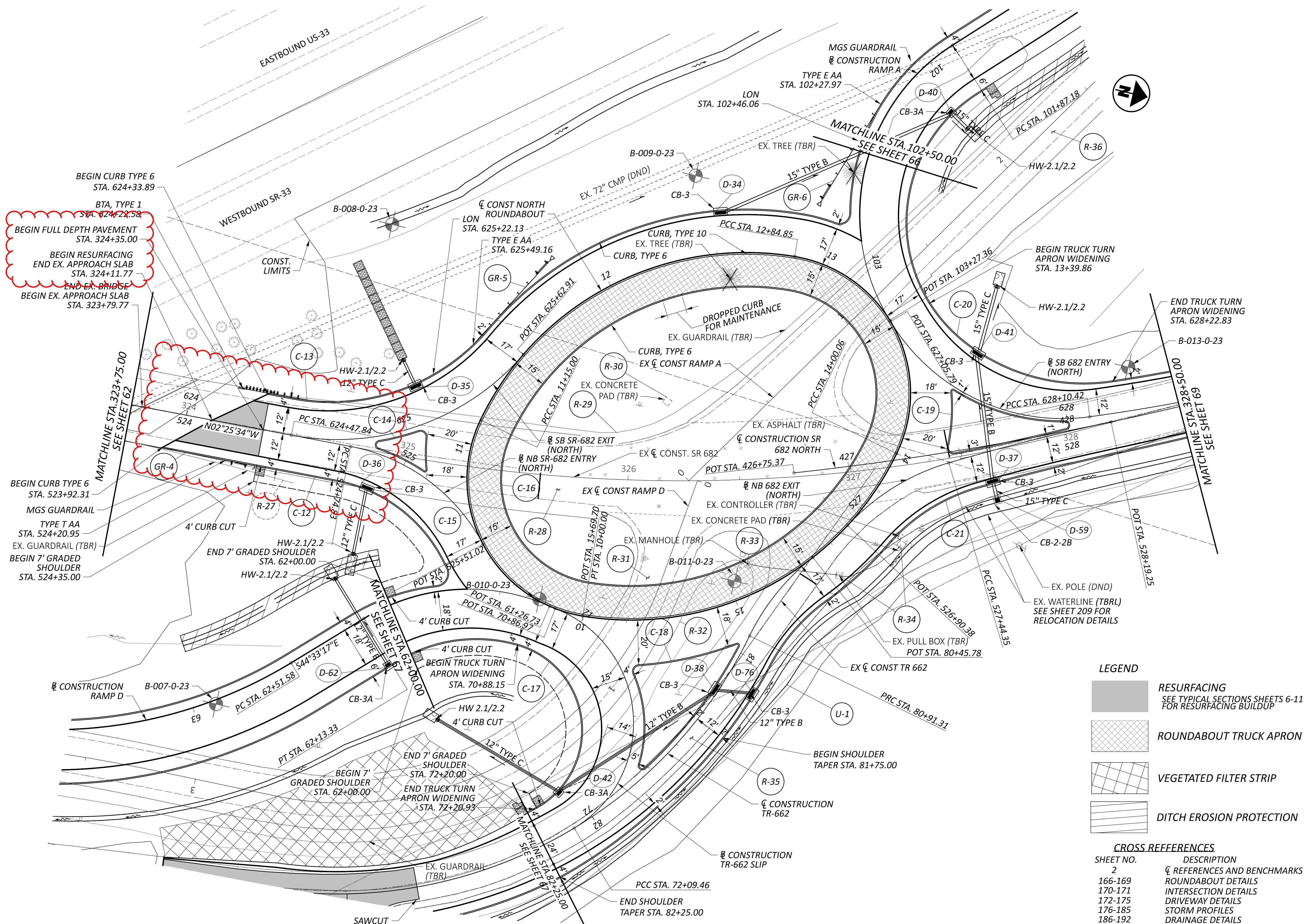


DESIGNER  
 AKA

REVIEWER  
 JGW 07/10/24

PROJECT ID  
 118465

SHEET	TOTAL
57	240



BEGIN CURB TYPE 6  
STA. 624+33.89

BTA, TYPE 1  
STA. 624+22.58

BEGIN FULL DEPTH PAVEMENT  
STA. 324+35.00

BEGIN RESURFACING  
END EX. APPROACH SLAB  
STA. 324+11.77

END EX. BRIDGE  
BEGIN EX. APPROACH SLAB  
STA. 323+79.77

BEGIN CURB TYPE 6  
STA. 523+92.31

MGS GUARDRAIL  
TYPE T AA  
STA. 524+20.95

EX. GUARDRAIL (TBR)

BEGIN 7' GRADED  
SHOULDER  
STA. 524+35.00

BEGIN 7' GRADED  
SHOULDER  
STA. 62+00.00

END 7' GRADED  
SHOULDER  
STA. 62+00.00

BEGIN 7' GRADED  
SHOULDER  
STA. 72+20.00

END TRUCK TURN  
APRON WIDENING  
STA. 72+20.93

PCC STA. 72+09.46

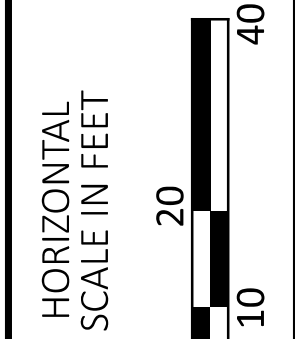
END SHOULDER  
TAPER STA. 82+25.00

**LEGEND**

	RESURFACING SEE TYPICAL SECTIONS SHEETS 6-11 FOR RESURFACING BUILDUP
	ROUNDAABOUT TRUCK APRON
	VEGETATED FILTER STRIP
	DITCH EROSION PROTECTION

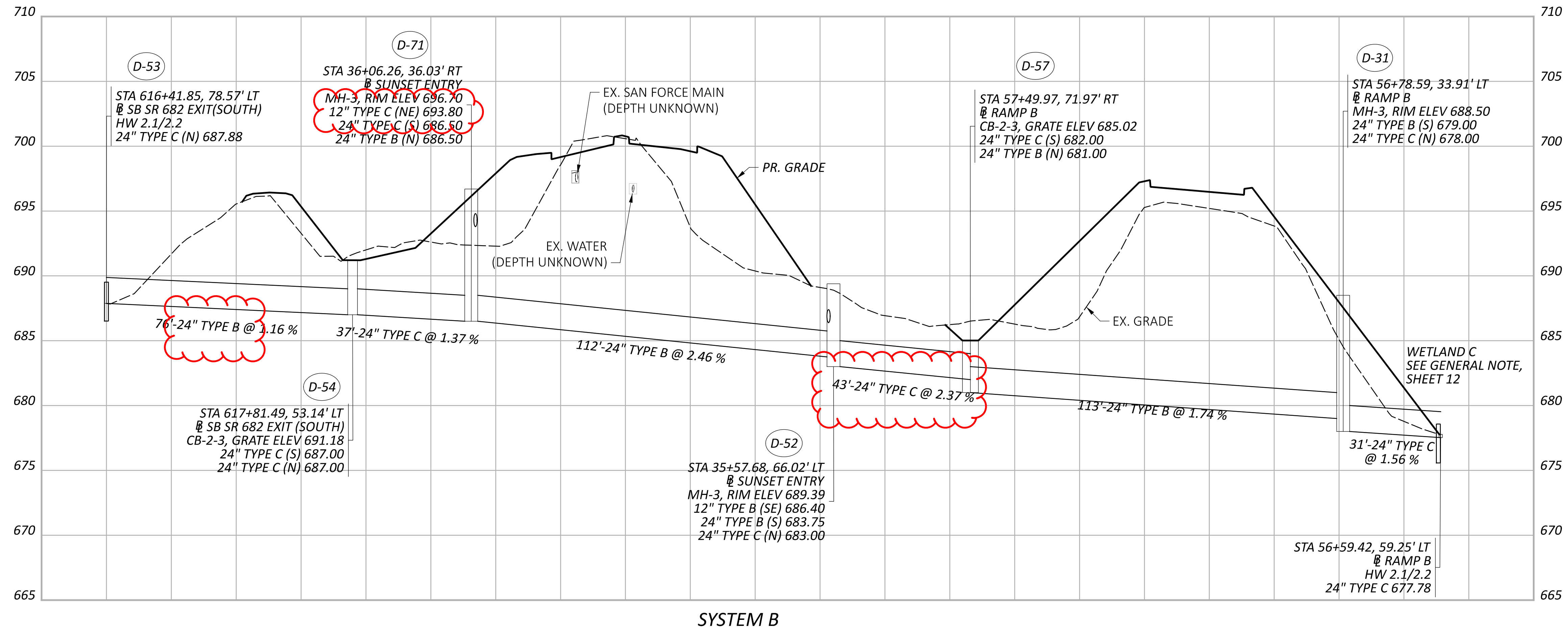
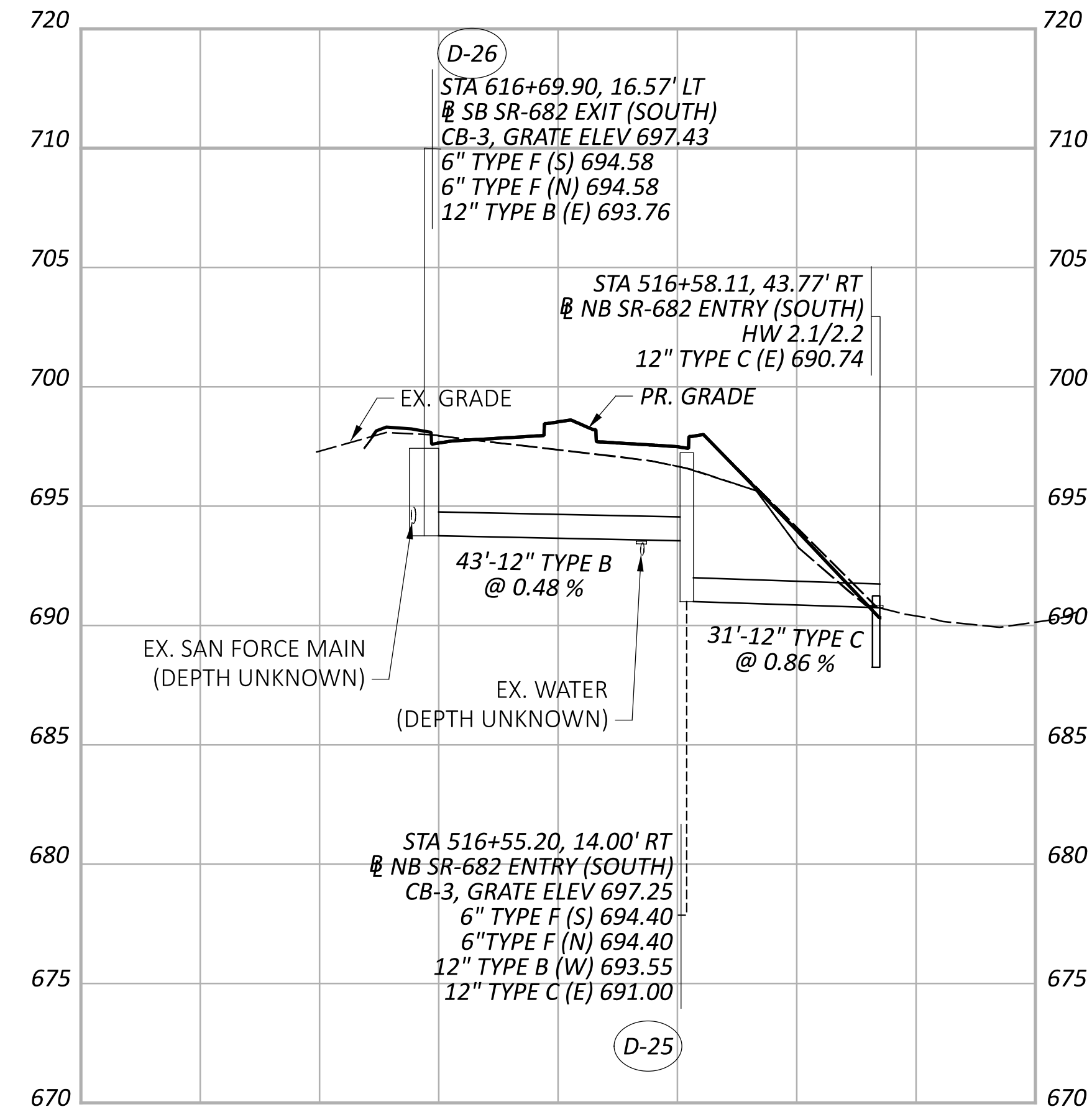
**CROSS REFERENCES**

SHEET NO.	DESCRIPTION
2	REFERENCES AND BENCHMARKS
166-169	ROUNDAABOUT DETAILS
170-171	INTERSECTION DETAILS
172-175	DRIVEWAY DETAILS
176-185	STORM PROFILES
186-192	DRAINAGE DETAILS



PLAN - SR-682  
STA 323+75 TO STA 328+50

DESIGN AGENCY	
DESIGNER	AKA
REVIEWER	JGW 07/10/24
PROJECT ID	118465
SHEET	63
TOTAL	240



**625, POWER SERVICE, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF THE SPECIFICATIONS, THE FOLLOWING IS ADDED.

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

POWER COMPANY AEP OHIO

ADDRESS 38831 STATE ROUTE 7, REEDSVILLE, OH 45769

PHONE # (614) 312-5807

CONTACT NAME CLARK SAUNDERS

THE ENGINEER SHALL ENSURE THAT EACH POWER SERVICE ELECTRICAL ENERGY ACCOUNT IS IN THE NAME OF AND THAT THE BILLING ADDRESS IS TO THE MAINTAINING AGENCY NOTED IN THE PLANS. THIS SHALL BE DONE NOT ONLY FOR EACH NEW POWER SERVICE ESTABLISHED BY THIS PROJECT BUT ALSO FOR EACH EXISTING POWER SERVICE, SINCE THERE MAY BE A REASSIGNMENT OF THE RESPONSIBILITY FOR AN EXISTING SERVICE AS A RESULT OF THE WORK PERFORMED BY THIS PROJECT.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH C&MS ITEM 625, "POWER SERVICE, AS PER PLAN" WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

**PADLOCKS AND KEYS**

PADLOCKS FURNISHED SHALL BE EITHER BRASS OR BRONZE, EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNAN 660A, AND SHALL BE KEYPED IN ACCORDANCE WITH C&MS 631.06. PAYMENT SHALL BE INCLUDED IN THE BID FOR THE ITEM(S) BEING LOCKED.

**ARC FLASH CALCULATIONS AND LABELS**

THIS ITEM OF WORK SHALL CONSIST OF PERFORMING ARC FLASH CALCULATIONS AND APPLYING AN EXTERNAL LABEL AS DESCRIBED IN THE SUPPLEMENTAL SPECIFICATION 825. HIS WORK SHALL BE PERFORMED FOR EACH DISCONNECT SWITCH. THE LABEL USED SHALL BE ODOT VERSION A (PREFERRED). THE FOLLOWING CONTROL CENTERS SHALL HAVE THE CALCULATIONS PERFORMED AND LABELS APPLIED:

- PS-A - CIRCUITS "AA" AND "AB"
- PS-B - CIRCUITS "BA" AND "BB"

PAYMENT FOR ITEM 625 ARC FLASH CALCULATIONS AND LABEL SHALL BE MADE FOR EACH LOCATION AND SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS REQUIRED TO COMPLETE THE WORK.

THE FOLLOWING ESTIMATED QUANTITIES IS CARRIED TO THE GENERAL SUMMARY:

- ITEM 625 - ARC FLASH CALCULATION AND LABEL, PS-A 1 EACH
- ITEM 625 - ARC FLASH CALCULATION AND LABEL, PS-B 1 EACH

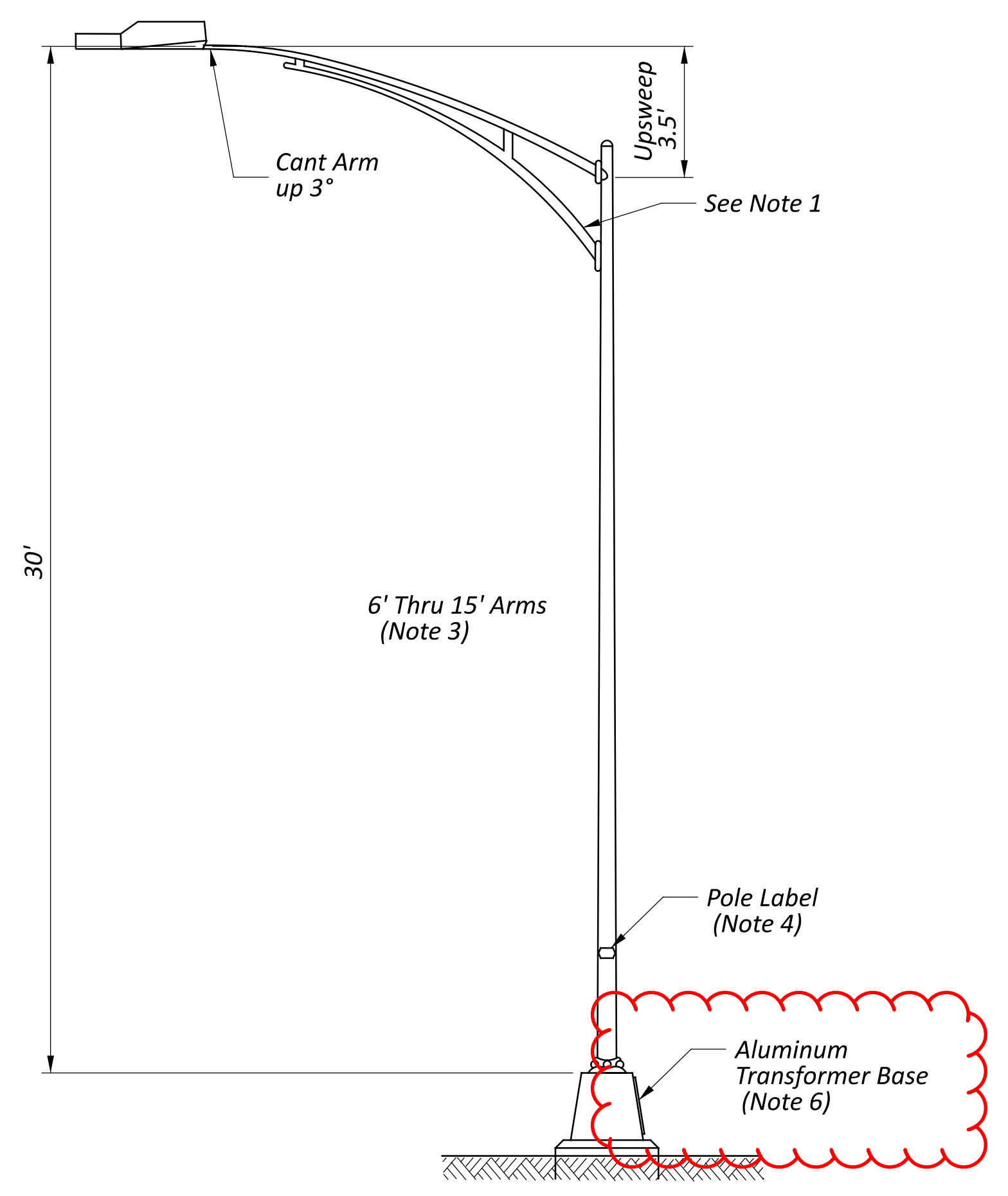
**ITEM 625 - LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), 240V, TYPE II, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF CMS 625, LUMINAIRES FOR CONVENTIONAL LIGHTING UNITS SHALL BE AS FOLLOWS:

LUMINAIRES FOR CONVENTIONAL LIGHTING UNITS SHALL BE ONE OF THE FOLLOWING:

1. AMERICAN ELECTRIC LIGHTING ATBM-P50-MVOLT-R3-3K
2. COOPER-EATON-NAV-SA5B-730-U-SL3
3. GE EVOLVE-ERL2-0-19-C5-30
4. OR EQUAL, AS APPROVED BY THE ENGINEER

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH ITEM 625 - "LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), 240V, TYPE II, AS PER PLAN" FOR EACH LUMINAIRE WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.



TRUSS ARM LOW RISE

**NOTES:**

1. TRUSS ARMS SHOWN ARE SCHEMATIC. ACTUAL TRUSS ARM CONSTRUCTION MAY VARY SLIGHTLY DEPENDING UPON MANUFACTURER (E.G., STRAIGHT VS. CURVED LOWER-CHORDS).
2. DO NOT PROVIDE NUT COVERS FOR THE POLE BASE.
3. DO NOT EXCEED POLE MANUFACTURER'S RECOMMENDED HEIGHT/ARM LENGTH COMBINATION.
4. AFFIX STAMPED ALUMINUM POLE LABEL TO ALL POLES. INCLUDE MANUFACTURER, DATE OF MANUFACTURE (MO-YR), AND POLE HEIGHT.
5. ALL HL-10.11 POLES ARE OF ROUND CROSS SECTION WITH SMOOTH WALLS (NO FLUTES).
6. ALL LIGHT POLES SHALL INCLUDE AN ALUMINUM TRANSFORMER BASE. SEE SCD HL-10.13 FOR MORE DETAILS

DESIGN AGENCY



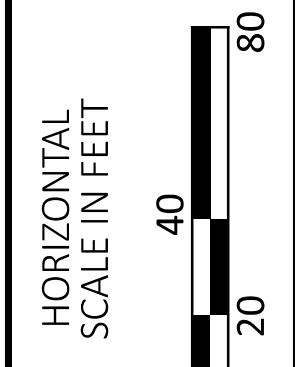
DESIGNER  
KWA

REVIEWER  
JTB 05/23/24

PROJECT ID  
118465

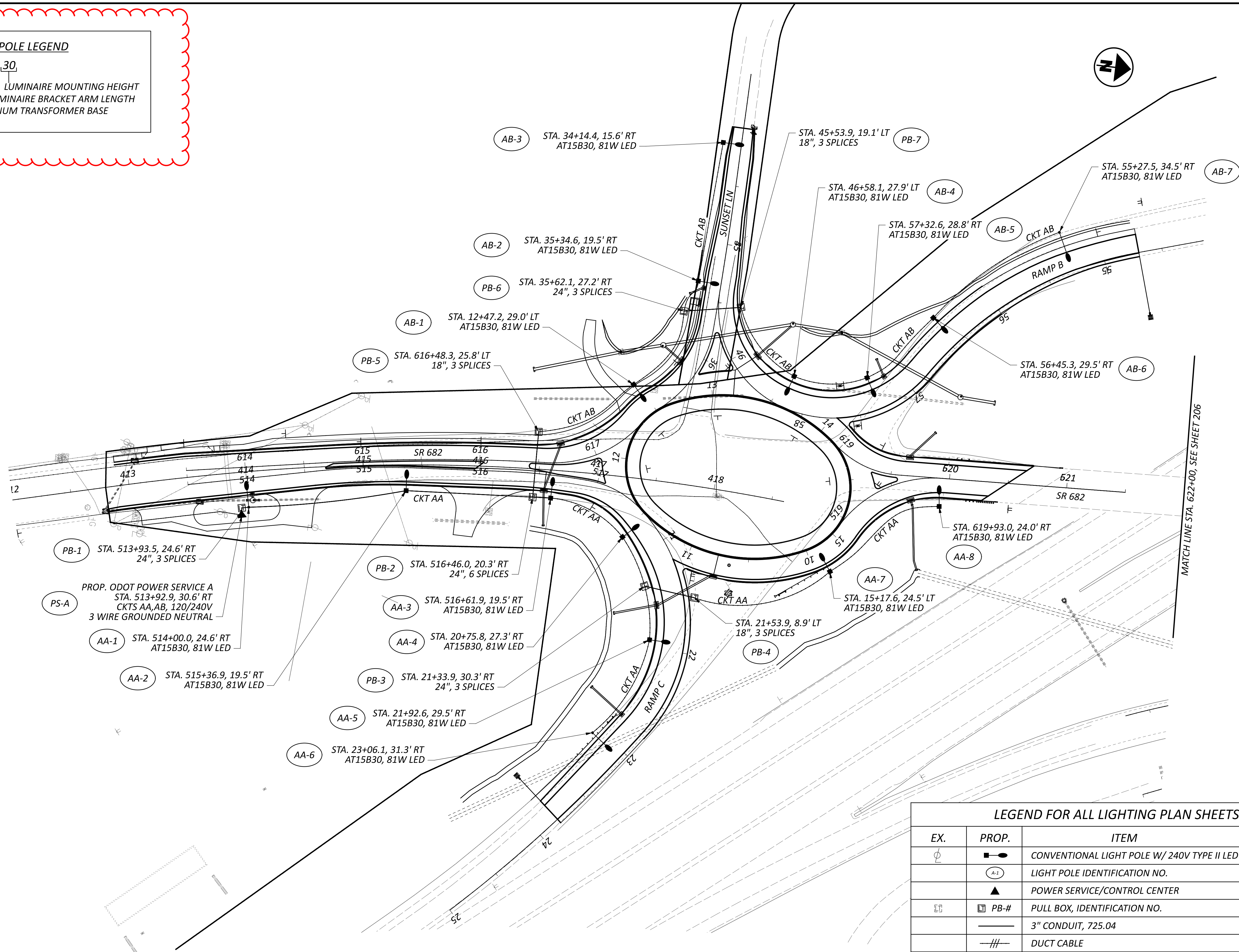
SHEET TOTAL  
202 | 240

**LIGHT POLE LEGEND**



ATH-682-6.07

MODEL: 118465\_LPO01.PAPER SIZE: OHDOT 22x34 DATE: 10/27/2024 1:36:13 PM USER: A.Adair  
G:\DEV\Clients\ODOT\10017141.ATH-33-682\118465\400-Engineering\Lighting\Sheets\118465\_LPO01.dgn



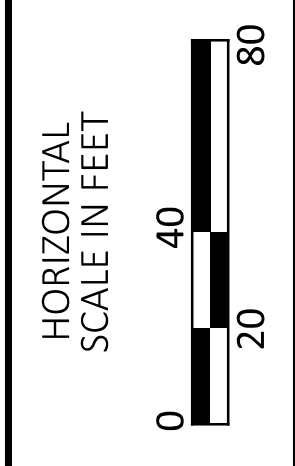
**LIGHTING PLAN**  
BEGIN WORK TO STA. 622+00

MATCH LINE STA. 622+00, SEE SHEET 206

**LEGEND FOR ALL LIGHTING PLAN SHEETS**

EX.	PROP.	ITEM
⊙	—●—	CONVENTIONAL LIGHT POLE W/ 240V TYPE II LED LUMINAIRE
	⊙-1	LIGHT POLE IDENTIFICATION NO.
	▲	POWER SERVICE/CONTROL CENTER
⊞	⊞-#	PULL BOX, IDENTIFICATION NO.
	—	3" CONDUIT, 725.04
	—//—	DUCT CABLE
	—	STUB CAP AND CONDUIT ELL
	—E—	POWER CABLE

DESIGN AGENCY	<b>WOOLPERT</b>
DESIGNER	KWA
REVIEWER	JTB 05/23/24
PROJECT ID	118465
SHEET	205
TOTAL	240

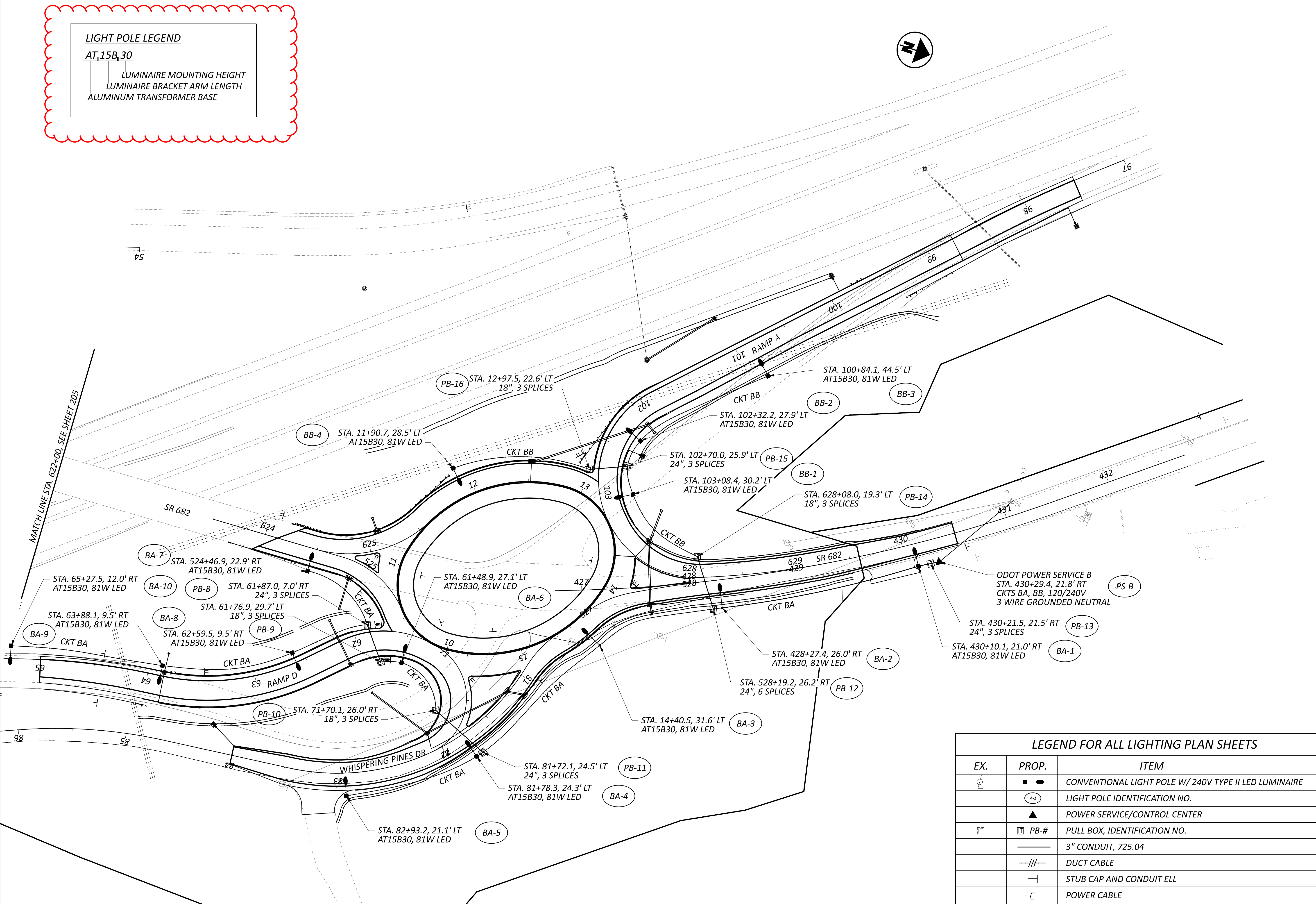
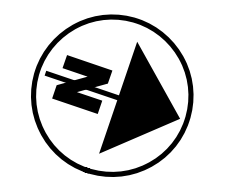


LIGHTING PLAN  
 STA. 622+00 TO END WORK

**LIGHT POLE LEGEND**

AT 15B 30

LUMINAIRE MOUNTING HEIGHT  
 LUMINAIRE BRACKET ARM LENGTH  
 ALUMINUM TRANSFORMER BASE



MATCH LINE STA. 622+00, SEE SHEET 205

**LEGEND FOR ALL LIGHTING PLAN SHEETS**

EX.	PROP.	ITEM
⊕	—●—	CONVENTIONAL LIGHT POLE W/ 240V TYPE II LED LUMINAIRE
	⊕	LIGHT POLE IDENTIFICATION NO.
	▲	POWER SERVICE/CONTROL CENTER
⊠	⊠ PB-#	PULL BOX, IDENTIFICATION NO.
	—	3" CONDUIT, 725.04
	—  —	DUCT CABLE
	—	STUB CAP AND CONDUIT ELL
	—E—	POWER CABLE

DESIGN AGENCY	W WOOLPERT
DESIGNER	KWA
REVIEWER	JTB
PROJECT ID	05/23/24
SHEET	118465
TOTAL	206   240

ATH-682-6.07  
 MODEL: 118465\_LP002\_PAPER SIZE: OHDOT 22x34 DATE: 7/10/2024 11:51:20 AM USER: A.Adair  
 G:\DEV\Clients\ODOT\10017141.ATH-33-682\118465\400-Engineering\Lighting\Sheets\118465\_LP002.dgn