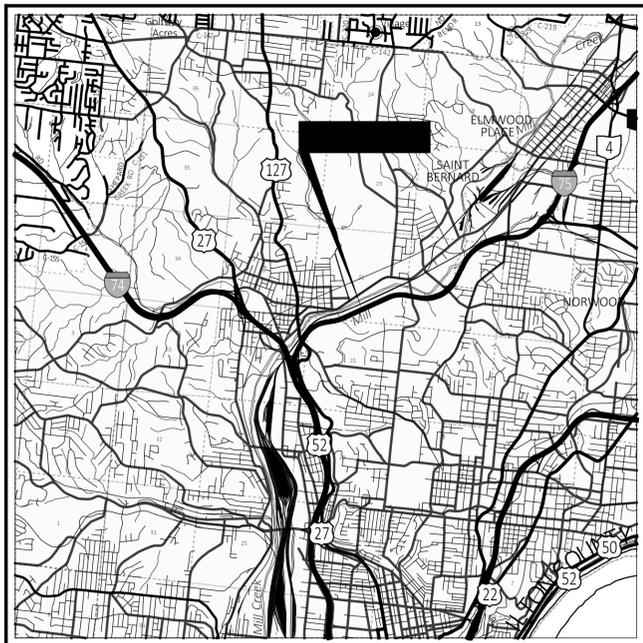


STATE OF OHIO DEPARTMENT OF TRANSPORTATION

HAM-75-5.53

CITY OF CINCINNATI
HAMILTON COUNTY



LOCATION MAP

LATITUDE: 39°09'37" LONGITUDE: -84°31'33"



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

DESIGN DESIGNATION

| | |
|-----------------------------------|---------|
| CURRENT ADT (2010) | 149,400 |
| DESIGN YEAR ADT (2030) | 174,300 |
| DESIGN HOURLY VOLUME (2030) | 14,640 |
| DIRECTIONAL DISTRIBUTION | 0.54 |
| TRUCKS (24 HOUR B&C) | 0.16 |
| DESIGN SPEED | 60 MPH |
| LEGAL SPEED | 55 MPH |
| DESIGN FUNCTIONAL CLASSIFICATION: | |
| URBAN INTERSTATE | |
| NHS PROJECT | YES |

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

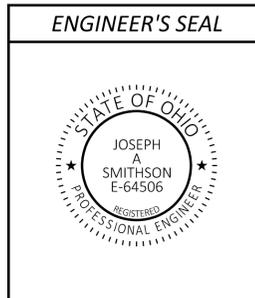
NONE

UNDERGROUND UTILITIES
Contact Two Working Days
Before You Dig

OHIO811.org
Before You Dig

OHIO 811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 8 - ENGINEERING DEPARTMENT
505 S. SR 741 LEBANON, OHIO 45036



INDEX OF SHEETS:

| | |
|------------------------|-------|
| TITLE SHEET | 1 |
| TYPICAL SECTIONS | 2 |
| GENERAL NOTES | 3 |
| MAINTENANCE OF TRAFFIC | 4-10 |
| GENERAL SUMMARY | 11 |
| PLAN & PROFILE | 12-13 |
| MISCELLANEOUS DETAILS | 14-16 |
| TEST BORING LOGS | 17-24 |

| | | STANDARD CONSTRUCTION DRAWINGS | | | | SUPPLEMENTAL SPECIFICATIONS | SPECIAL PROVISIONS |
|-----------|---------|--------------------------------|--|--|--|-----------------------------|--------------------|
| MGS-1.1 | 7/16/21 | | | | | 800-2019 SEE PROPOSAL | |
| MGS-2.1 | 1/19/18 | | | | | 821 4/20/12 | |
| | | | | | | 832 7/15/22 | |
| | | | | | | 873 4/16/21 | |
| MT-95.30 | 7/19/19 | | | | | | |
| MT-95.40 | 1/17/20 | | | | | | |
| MT-95.45 | 1/17/20 | | | | | | |
| MT-95.50 | 7/21/17 | | | | | | |
| MT-98.10 | 1/17/20 | | | | | | |
| MT-98.11 | 1/17/20 | | | | | | |
| MT-101.70 | 1/17/20 | | | | | | |
| MT-101.75 | 1/17/20 | | | | | | |
| MT-105.10 | 1/17/20 | | | | | | |

FEDERAL PROJECT NUMBER

E220593

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

REPAIR OF LANDSLIDE ALONG THE WEST SIDE OF IR 75 SB, OFF THE EDGE OF PAVEMENT. PROJECT TO CONSTRUCT A BURIED DRILLED SHAFT WALL.

EARTH DISTURBED AREAS

| | |
|--|------------|
| PROJECT EARTH DISTURBED AREA: | 0.75 ACRES |
| ESTIMATED CONTRACTOR EARTH DISTURBED AREA: | 0.59 ACRES |
| NOTICE OF INTENT EARTH DISTURBED AREA: | N/A ACRES |

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2019 SPECIFICATIONS

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

DISTRICT DEPUTY DIRECTOR

Tammy K. Campbell

DIRECTOR, DEPARTMENT OF TRANSPORTATION

Justin M. Markants

TITLE SHEET

HAM-75-5.53

MODEL: Sheet PAPER: 34x22 (in.) DATE: 4/20/2023 TIME: 2:47:53 PM USER: asadowsk pvc:\ohiodot-pw-bentley.com\ohiodot-pw-02\Documents\01 Active Projects\District 08\Hamilton\117124\400-Engineering\Roadway\Sheets\117124_GT001.dgn

DESIGN AGENCY



DESIGNER

AWS

REVIEWER

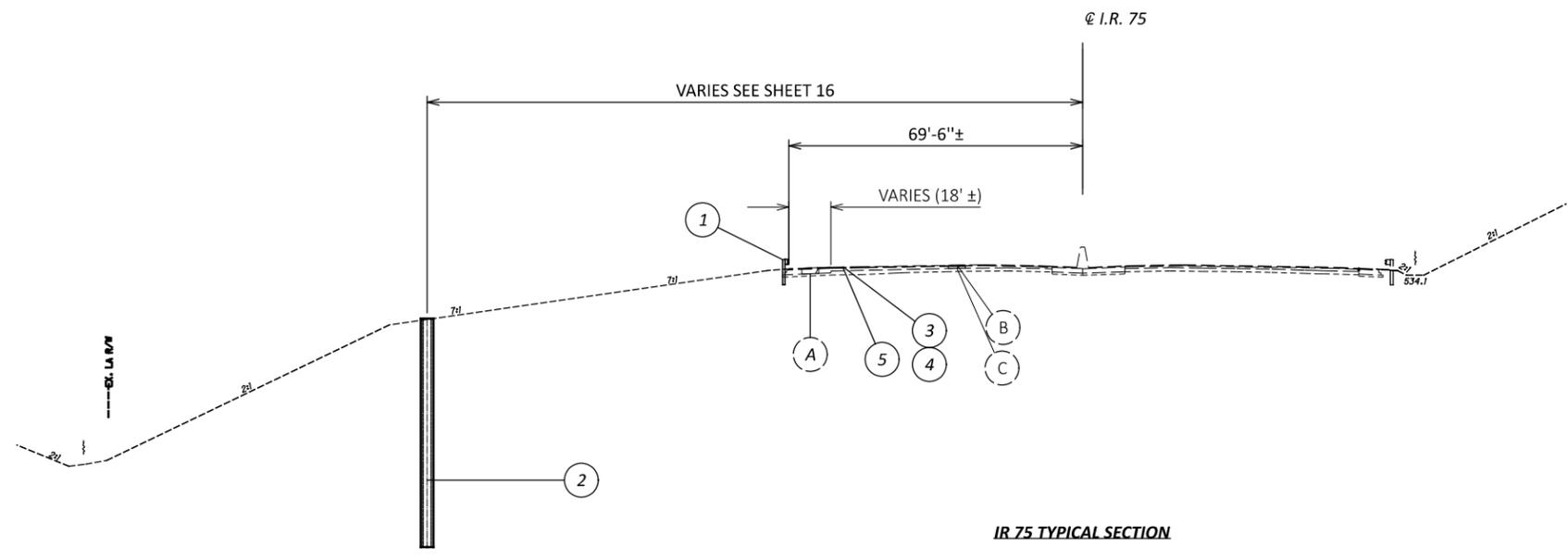
JAS 01-20-23

PROJECT ID

117124

SHEET TOTAL

P.1 24



IR 75 TYPICAL SECTION
 STA. 289+50 TO STA. 292+50

LEGEND

- ① ITEM 606 - GUARDRAIL, TYPE MGS
- ② ITEM 524 - DRILLED SHAFT
- ③ ITEM 254 - 1.5" PAVEMENT PLANING
- ④ ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)
- ⑤ ITEM 407 - NON-TRACKING TACK COAT
- Ⓐ EXISTING 16.25" ± ASPHALT
- Ⓑ EXISTING 7.5" ± ASPHALT
- Ⓒ EXISTING 10" ± REINFORCED CONCRETE PAVEMENT



UTILITIES

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

ELECTRIC

DUKE ENERGY - ELECTRIC
ATTN: AARON WRIGHT
139 EAST 4TH STREET, ROOM 467A
CINCINNATI, OH 45202
513-287-3674
AARON.WRIGHT@DUKE-ENERGY.COM

EXISTING PLANS

EXISTING PLANS ENTITLED HAM-75-3.84 MAY BE INSPECTED IN THE ODOT DISTRICT 8 OFFICE IN 505 SOUTH STATE ROUTE 741, LEBANON, OH 45036.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 12 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION. 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.

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. THE USE OF CANAL RIDGE DRIVE IS NOT PERMITTED.

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.

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 366 CU. YD.
- 659, SEEDING AND MULCHING 3302 SQ. YD.
- 659, REPAIR SEEDING AND MULCHING 165 SQ. YD.
- 659, COMMERCIAL FERTILIZER 0.45 TON
- 659, LIME 0.68 ACRES
- 659, WATER 18 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.

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.

PROJECT CONSTRAINTS

OVERHEAD TRANSMISSION LINES ARE IN THE VICINITY OF THE PROPOSED DRILLED SHAFT WALL. MAINTAIN A MINIMUM CLEARANCE ENVELOPE OF 15' FROM THE OVERHEAD LINES WITH ALL EQUIPMENT AND MATERIALS.

| Estimated Elevation of Overhead Lines | |
|---------------------------------------|--------|
| Begin Wall | 570' ± |
| Middle Wall | 565' ± |
| End Wall | 563' ± |

ITEM 690 - SPECIAL - CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION

ALL CONCRETE SHALL BE TESTED. ALL TESTING, INSPECTION AND QUALITY CONTROL FOR CONCRETE, NOT INCLUDED UNDER QC/QA PAY ITEMS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE A CONCRETE TESTING CONSULTANT WITH PREVIOUS EXPERIENCE AND FAMILIARITY WITH ODOT PROCEDURES, CONCRETE TESTING REQUIREMENTS AND CONCRETE DOCUMENTATION. AT LEAST 30 DAYS PRIOR TO CONCRETE PLACEMENT, SUBMIT TO THE ENGINEER FOR APPROVAL. THE PROPOSED CONCRETE TESTING CONSULTANT ALONG WITH THE RESUMES OF THE PROPOSED TESTING PERSONNEL.

TESTING CONCRETE FOR STRUCTURES AND PORTLAND CEMENT CONCRETE PAVEMENT SHALL BE PERFORMED AS OUTLINED IN CMS SPECIFICATIONSS 455 RESPECTIVELY.

THROUGH THE CONTRACTOR, THE CONSULTANT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONCRETE PLACED IS IN ACCORDANCE WITH THE SPECIFICATIONS. SUCH WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND THE ODOT CONSTRUCTION MANUAL OF PROCEDURES FOR CONCRETE. THE CONCRETE CONSULTANT SHALL PROVIDE THE NECESSARY TRAINED TECHNICIAN(S), ALL EQUIPMENT, AND SHALL FURNISH THE PROJECT ENGINEER WITH TWO (2) COPIES OF ALL TEST RESULTS WITHIN 24 HOURS AFTER COMPLETION OF CONCRETE PLACEMENT.

THE TECHNICIAN SHALL BE ACI LEVEL 1 CERTIFIED AND WILL BE REQUIRED TO DEMONSTRATE HIS/HER COMPETENCE AND EXPERIENCE LEVELS PRIOR TO BEGINNING WORK. THE ENGINEER WILL ORDER THE CONTRACTOR TO REPLACE ANY TECHNICIAN THAT IS NOT WELL VERSED IN THE REQUIRED TESTING PROCEDURE.

THE TECHNICIAN SHALL VERBALLY NOTIFY THE ODOT PROJECT ENGINEER OF ANY FAILING TEST AND SHALL SUBMIT FOLLOW-UP WRITTEN NOTIFICATION TO THE PROJECT ENGINEER OF REMEDIAL ACTION(S) TAKEN. TESTS SHALL BE TAKEN AS SPECIFIED WITHIN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, CONCRETE MANUAL OR APPROPRIATE SUPPLEMENTAL SPECIFICATION AS LISTED IN THE PROPOSAL GOVERNING THE PROJECT. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MAKE IMMEDIATE CORRECTIONS OR ADJUSTMENTS TO THE CONCRETE MIX VIA DIRECT COMMUNICATION WITH THE CONCRETE SUPPLIER'S PLANT PERSONNEL TO MAINTAIN UNINTERRUPTED COMPLIANCE WITH THE SPECIFICATIONS UPON NOTIFICATION OF CONCRETE MIX NON-COMPLIANCE BY THE CONSULTANT TECHNICIAN. THE PROJECT ENGINEER MAY REQUIRE MORE FREQUENT TESTING AS CONDITIONS WARRANT.

UPON COMPLETION OF DAILY CONCRETE PLACEMENT(S), THE CONCRETE CONSULTANT SHALL PROVIDE THE PROJECT ENGINEER WITH DAILY TEST REPORTS, TE-45'S, INSPECTOR'S DAILY REPORT AND SUPPORTING DOCUMENTATION FOR EACH ITEM OF CONCRETE WORK PERFORMED SEPARATED BY MIX DESIGN. SUBSEQUENTLY, UPON COMPLETION OF AN ENTIRE CONCRETE SPECIFICATION ITEM, THE CONCRETE CONSULTANT SHALL ALSO PROVIDE THE PROJECT ENGINEER WITH TWO (2) COPIES OF AN ADDITIONAL INSPECTION REPORT BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, WHICH CONTAINS THE TESTING-RESULTS SUMMARY FOR EACH ITEM BY CONTRACT REFERENCE NUMBER AND THE CONSULTANT'S CONCLUSIONS RELATIVE TO SPECIFICATION COMPLIANCE FOR ALL CONCRETE-TESTING WORK.

THE ODOT PROJECT ENGINEER RESERVES THE RIGHT TO MAKE UNANNOUNCED QUALITY-CONTROL TESTS TO VERIFY PROCEDURES USED AND RESULTS OBTAINED BY THE CONTRACTOR.

THE CONCRETE TECHNICIAN SHALL WORK UNDER THE DIRECTION OF A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, WHO WILL MONITOR THE CONCRETE TEST RESULTS. THE FINAL INSPECTION REPORTS FOR EACH COMPLETED ITEM SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, CERTIFYING THAT ALL CONCRETE TESTS PROVIDED BY THE CONTRACTOR MET APPLICABLE CONTRACT REQUIREMENTS. A FINAL REPORT ISSUED BY THE CONSULTANTING FIRM SHALL CONTAIN A CERTIFIED STATEMENT OF COMPLIANCE WITH ODOT SPECIFICATIONS AND ANY OTHER CONCLUSIONS REGARDING THE CONCRETE MATERIALS INCORPORATED INTO THE PROJECT. SUCH STATEMENT SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO. AND, THE CONCRETE CONSULTANT SHALL BE REQUIRED TO ATTEND MOTHLY PROGRESS MEETINGS AS REQUIRED BY THE PROJECT ENGINEER.

ADDITIONALLY, THE CONTRACTOR SHALL BE REQUIRED TO KEEP A POSTED LIST OF BEAM AND CYLINDER BREAK IDENTIFICATION NUMBERS FOR THE PURPOSE OF IDENTIFYING THE CORRESPONDING PLACEMENT LOCATION AND CONCRETE SPECIFICATION ITEM.

PAYMENT SHALL BE BID AS LUMP SUM FOR ITEM SPECIAL MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION. THE ITEM WILL BE PAID AS FOLLOWS: UPON APPROVAL OF CONSULTANT.....20% PROGRESSIVE EQUIVALENT PAYMENTS.....50% UPON SUBMISSION OF FINAL REPORT.....30%

THE TECHNICIAN SHALL HAVE THE FULL EFFECT AND AUTHORITY OF AN ODOT PROJECT INSPECTOR IN DETERMINING ACCEPTABILITY OF MATERIAL AND CONCRETE PLACEMENT PRACTICES.

DESIGN AGENCY



DESIGNER
AWS

REVIEWER
JAS

PROJECT ID
01-20-23

PROJECT ID
0

SHEET TOTAL
P.3 | 24

ITEM 614 MAINTAINING TRAFFIC

MAINTAIN ALL EXISTING LANE IN THE SOUTHBOUND DIRECTIONS AT ALL TIMES, EXCEPT LANE CLOSURES ARE PERMITTED ACCORDING TO THE LANE VALUE CONTRACT TABLE AND THE MAINTENANCE OF TRAFFIC POLICY EXCEPTIONS NOTE, BY USE OF THE EXISTING PAVEMENT AND THE COMPLETED PAVEMENT.

NO WORK SHALL BE PERFORMED AND A MINIMUM OF 3 LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS FOURTH OF JULY
NEW YEAR'S LABOR DAY
MEMORIAL DAY THANKSGIVING
(OTHER HOLIDAY OR EVENT)

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY TIME ALL LANES
OR EVENT MUST BE OPEN TO TRAFFIC

SUNDAY 12:00N FRIDAY THROUGH 6:00AM MONDAY
MONDAY 12:00N FRIDAY THROUGH 6:00AM TUESDAY
TUESDAY 12:00N MONDAY THROUGH 6:00AM WEDNESDAY
WEDNESDAY 12:00N TUESDAY THROUGH 6:00AM THURSDAY
THURSDAY 12:00N WEDNESDAY THROUGH 6:00AM FRIDAY
THURSDAY (THANKSGIVING ONLY)
6:00AM WEDNESDAY THROUGH 6:00AM MONDAY
FRIDAY 12:00N THURSDAY THROUGH 6:00AM MONDAY
SATURDAY 12:00N FRIDAY THROUGH 6:00AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

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.

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.

LANE VALUE CONTRACT TABLE

| DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED | RESTRICTED TIME PERIOD | TIME UNIT | DISINCENTIVE \$ PER TIME UNIT PER LANE |
|---|------------------------|-----------|--|
| SB I-75: ALL LANES OPEN TO TRAFFIC (4:3) | 6 AM TO 7 PM | 1 MINUTE | \$345 |
| SB I-75: 3 LANES OPEN TO TRAFFIC (4:2) | 6 AM TO 8 PM | 1 MINUTE | \$345 |
| SB I-75: 2 LANES OPEN TO TRAFFIC (4:1) | 5 AM TO 11 PM | 1 MINUTE | \$345 |
| RAMP FROM MITCHELL AVE TO SB I-75: RAMP OPEN TO TRAFFIC | 5 AM TO 10 PM | 1 MINUTE | \$345 |

NOTES:

1. THE MITCHELL AVENUE ENTRANCE RAMP IS PERMITTED TO CLOSE 2 TIMES TO INSTALL AND REMOVE LONG TERM MOT.
2. NO SHORT-TERM LANE CLOSURES TWO HOURS BEFORE EVENTS AT GREAT AMERICAN BALLPARK, PAYCOR STADIUM, HERITAGE BANK ARENA, OR TQL STADIUM. THIS RESTRICTION ALSO APPLIES TO ANY OTHER LOCAL VENUE GENERATING AN EVENT ATTENDANCE OF 10,000+.
3. NO SHORT-TERM SHOULDER CLOSURE BETWEEN THE HOURS OF 6AM TO 9AM AND 3PM TO 7PM MONDAY THRU FRIDAY

| DESCRIPTION OF CRITICAL WORK | CALENDAR DAYS TO COMPLETE | DISINCENTIVE \$ PER DAY | WORK WINDOW | |
|------------------------------|---------------------------|-------------------------|-------------------------|-------------------------|
| | | | START | END |
| ALL WORK ON THE PROJECT | 120 | \$12,420 per day | CONTRACT EXECUTION DATE | PROJECT COMPLETION DATE |

WORK ZONE MARKINGS AND SIGNS, APP

WORK ZONE EDGE LINE AND DOTTED LINE IS TO BE WET REFLECTIVE TAPE.

WORK ZONE DOTTED LINE: PLACE THE DOTS BETWEEN THE EXISTING LANE LINES SO THE EXISTING LANE LINE IS NOT CONFLICTING AND DOES NOT NEED TO BE REMOVED.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

WORK ZONE EDGE LINE, CLASS I, 6", 873 - 0.86 MI
WORK ZONE DOTTED LINE, CLASS I, 6", 873 - 1600 FT

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

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.

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.

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 NONCOMPLIANCE, 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 4 SIGN MONTH ASSUMING 1 PCMS SIGN(S) FOR 4 MONTH(S)

DESIGN AGENCY



DESIGNER
AWS

REVIEWER
SK 04-19-23

PROJECT ID
117124

SHEET TOTAL
P.4 24

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 OR BI-DIRECTIONAL) 12 EACH

ITEM 614, OBJECT MARKER, 1-WAY 12 EACH

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 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 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).

FOR OPERATIONS WITHOUT POSITIVE PROTECTION OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE THAT MEET ALL OF THE FOLLOWING CRITERIA:

- ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND
- AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION;

AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

"WITHOUT POSITIVE PROTECTION" MEANS USE OF DRUMS, CONES, SHADOW VEHICLE, ETC, WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS "WITHOUT POSITIVE PROTECTION". FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC), THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF:

- THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER; OR
 - THE ACTIVE WORK AREA LATERALLY CLOSEST TO THE OPEN TRAVELED LANE; OR
 - OTHER LOCATION AS APPROVED BY THE ENGINEER.
- THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

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 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 THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

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

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 72 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 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 OF TRAFFIC RESTRICTIONS TIME TABLE

| ITEM | DURATION OF CLOSURE | NOTICE DUE TO PERMITS & PIO |
|---|------------------------|--|
| RAMP & ROAD CLOSURES | >= 2 WEEKS | 21 CALENDAR DAYS PRIOR TO CLOSURE |
| | > 12 HOURS & < 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.

DESIGN AGENCY



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AWS

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APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S)

PORTIONS OF THE MOT PLANS AS DESCRIBED BELOW HAVE APPROVED MOT EXCEPTION(S) PER TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)).

APPROVED MOT EXCEPTION(S) INCLUDE:

LONG TERM SINGLE LANE CLOSURE ON I-75 SOUTHBOUND FOR A PERIOD NOT TO EXCEED 120 DAYS.

A MAINTENANCE OF TRAFFIC MEETING SHALL BE HELD A MINIMUM OF 30 CALENDAR DAYS PRIOR TO IMPLEMENTATION OF EACH APPROVED MOT EXCEPTION. THIS MEETING SHALL INCLUDE THE DISTRICT WORK ZONE TRAFFIC MANAGER AS WELL AS THE CONTRACTOR, WORKSITE TRAFFIC SUPERVISOR (WTS) AND ANY SUBCONTRACTORS INVOLVED WITH TEMPORARY TRAFFIC CONTROL.

IN ADDITION TO ANY NOTIFICATIONS REQUIRED IN OTHER NOTES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT LEAST 3 BUSINESS DAYS IN ADVANCE OF IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE SO THAT THE PROJECT ENGINEER CAN SEND EMAIL NOTIFICATION TO THE OFFICE OF ROADWAY ENGINEERING, STATEWIDE TMC, DWZTM AND SPECIAL HAULING PERMITS AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE. REFERENCE "EXCEPTION REQUEST APPROVAL DATED [12/05/2022] FOR PID [117124]" IN THE NOTIFICATION AND OTHER CORRESPONDENCE.

ANY CHANGES TO THE MOT THAT IMPACT THE PREVIOUSLY APPROVED MOT EXCEPTION(S) LISTED ABOVE SHALL BE APPROVED IN WRITING BY THE MOT EXCEPTION COMMITTEE (MOTEC). IN THE EVENT THAT SUCH CHANGES ARE PROPOSED, THE REQUEST SHALL BE COORDINATED THROUGH THE DISTRICT WORK ZONE TRAFFIC MANAGER (DWZTM) A MINIMUM OF 30 CALENDAR DAYS PRIOR TO THE DESIRED IMPLEMENTATION DATE. IF THE DISTRICT AGREES WITH THE PROPOSED CHANGES THE DWZTM SHALL SEEK APPROVAL FROM THE MOTEC. IN THE EVENT THE PROPOSED CHANGES ARE APPROVED IN WRITING, THE CLOSURES ARE STILL SUBJECT TO NOTIFICATION REQUIREMENTS WITHIN THIS NOTE PRIOR TO IMPLEMENTATION.

| DESCRIPTION OF CRITICAL WORK | CALENDAR DAYS TO COMPLETE | DISINCENTIVE \$ PER DAY | WORK WINDOW | |
|------------------------------|---------------------------|-------------------------|-------------------------|-------------------------|
| | | | START | END |
| ALL WORK ON THE PROJECT | 120 | \$12,420 per day | CONTRACT EXECUTION DATE | PROJECT COMPLETION DATE |

EXTRA ADVANCE WARNING SIGNS

AN ADVANCE WARNING SIGN GROUP CONSISTS OF TWO W20-1 (ROAD WORK AHEAD) SIGNS, TWO W20 5 (RIGHT/LEFT LANE CLOSED AHEAD) SIGNS WITH W16 3A DISTANCE PLATES, AND TWO W3-H7 (WATCH FOR STOPPED TRAFFIC) SIGNS AND REQUIRED FLASHING LIGHTS.

THE CONTRACTOR SHALL PROVIDE, ERECT, MAINTAIN AND REMOVE AN EXTRA ADVANCE WARNING SIGN GROUP AS SHOWN ON TRAFFIC SCD MT 95.50. THE W16-3 DISTANCE PLATES SHALL READ "2 MILES". THE RIGHT LANE CLOSED AHEAD SIGNS SHALL BE LOCATED 2 MILES FROM THE BEGINNING OF THE LANE TAPER. SPACING OF THE OTHER SIGNS SHALL BE AS SHOWN ON TRAFFIC SCD MT 95.40.

PAYMENT FOR PROVIDING, ERECTING, MAINTAINING AND REMOVING EXTRA ADVANCE WARNING SIGN GROUPS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

DESIGN AGENCY

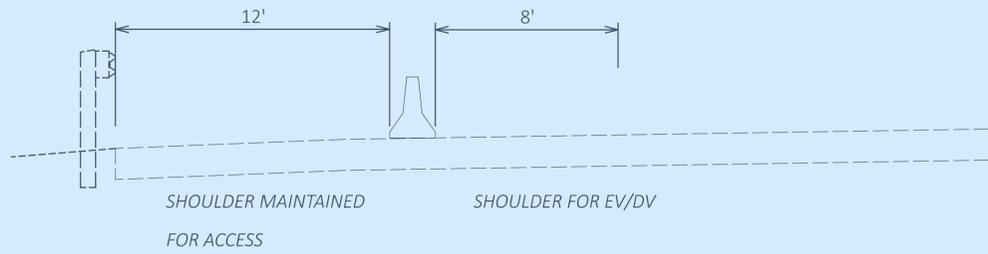


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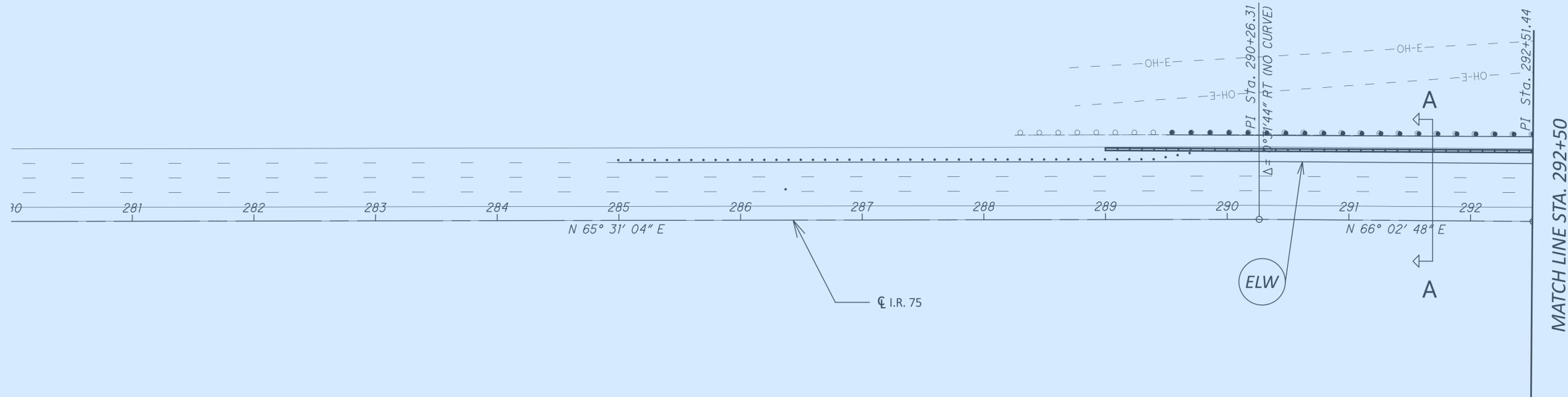
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MOT TYPICAL SECTION A/A



LEGEND

- (ELW) ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6", 873
- (DL) ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 6", 873

PORTABLE BARRIER



MAINTENANCE OF TRAFFIC
STA. 280+00 TO STA. 292+50

DESIGN AGENCY



DESIGNER

AWS

REVIEWER

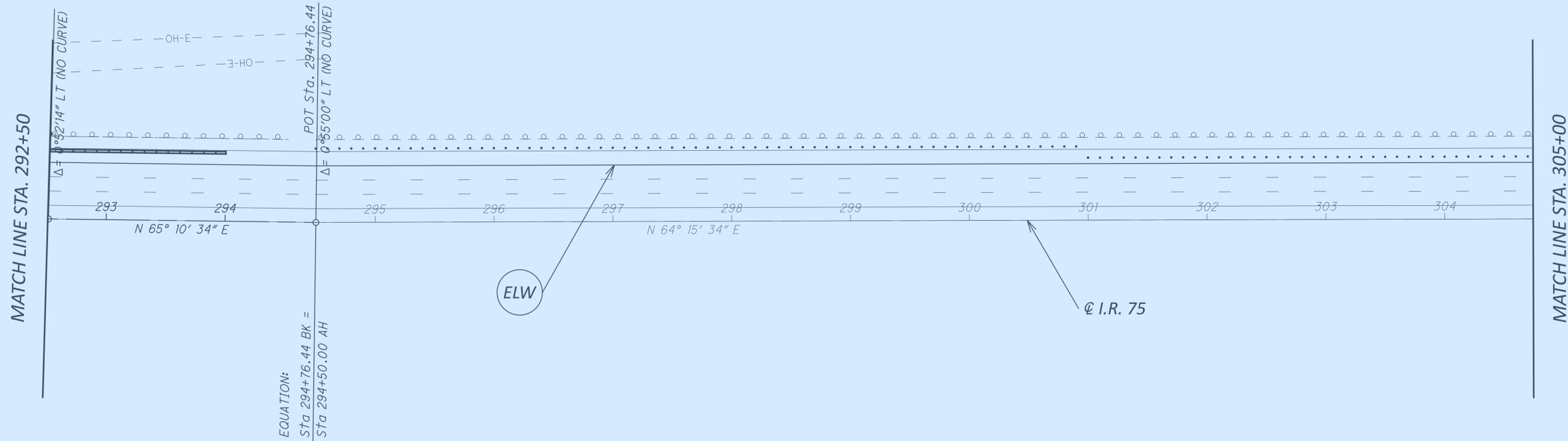
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PROJECT ID

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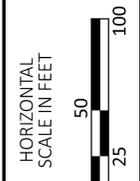
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LEGEND

-  ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6", 873
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 6", 873

 PORTABLE BARRIER



MAINTENANCE OF TRAFFIC
STA. 292+50 TO STA. 305+00

DESIGN AGENCY

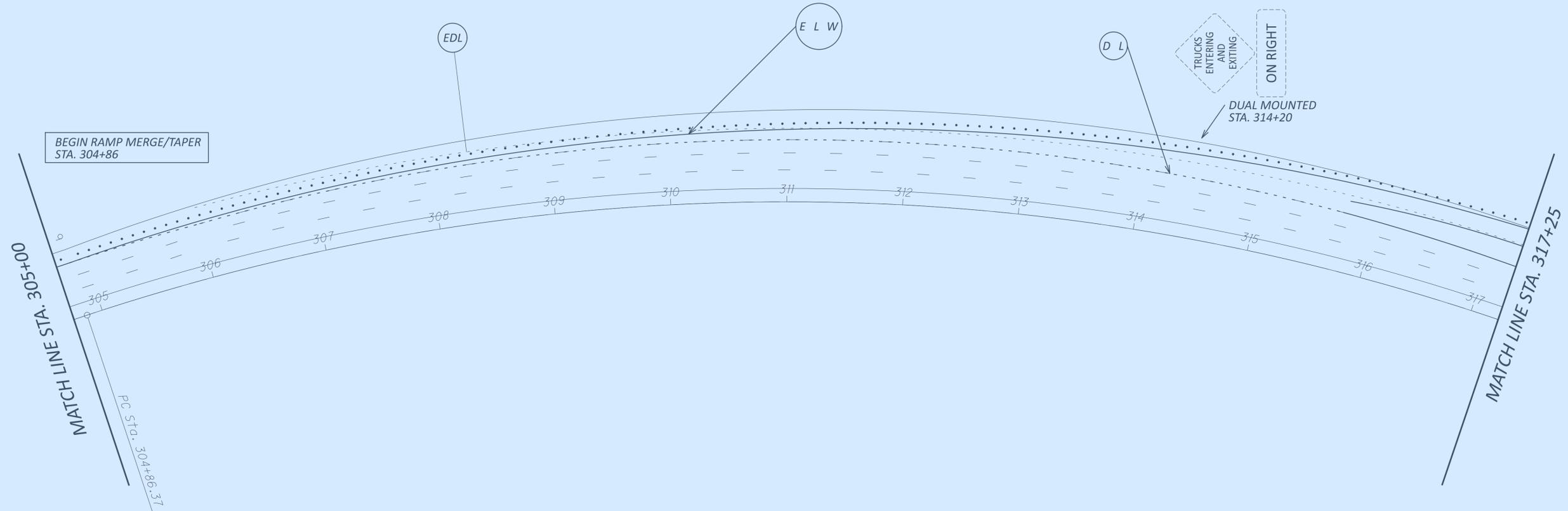


DESIGNER
AWS

REVIEWER
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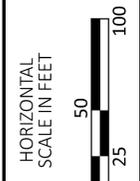
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|-------|-------|
| SHEET | TOTAL |
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LEGEND

-  ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6", 873
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 6", 873

-  PORTABLE BARRIER
-  EXISTING DOTTED LINE (TO BE REMOVED)



MAINTENANCE OF TRAFFIC
STA. 305+00 TO 317+25

DESIGN AGENCY

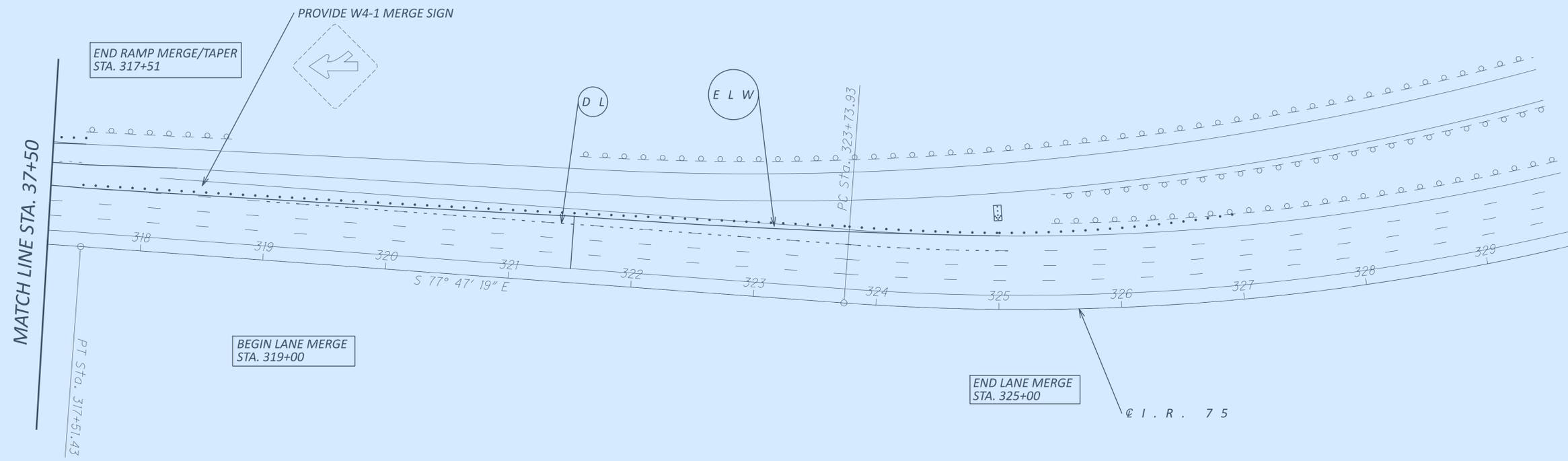


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LEGEND

- (ELW) ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6", 873
- (DL) ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 6", 873

== PORTABLE BARRIER

NOTE:

PROVIDE LEAD IN SIGNS PER MT-95.40 AND MT-95.50



MAINTENANCE OF TRAFFIC
STA. 315+25 TO STA. 330+00

DESIGN AGENCY



DESIGNER
AWS

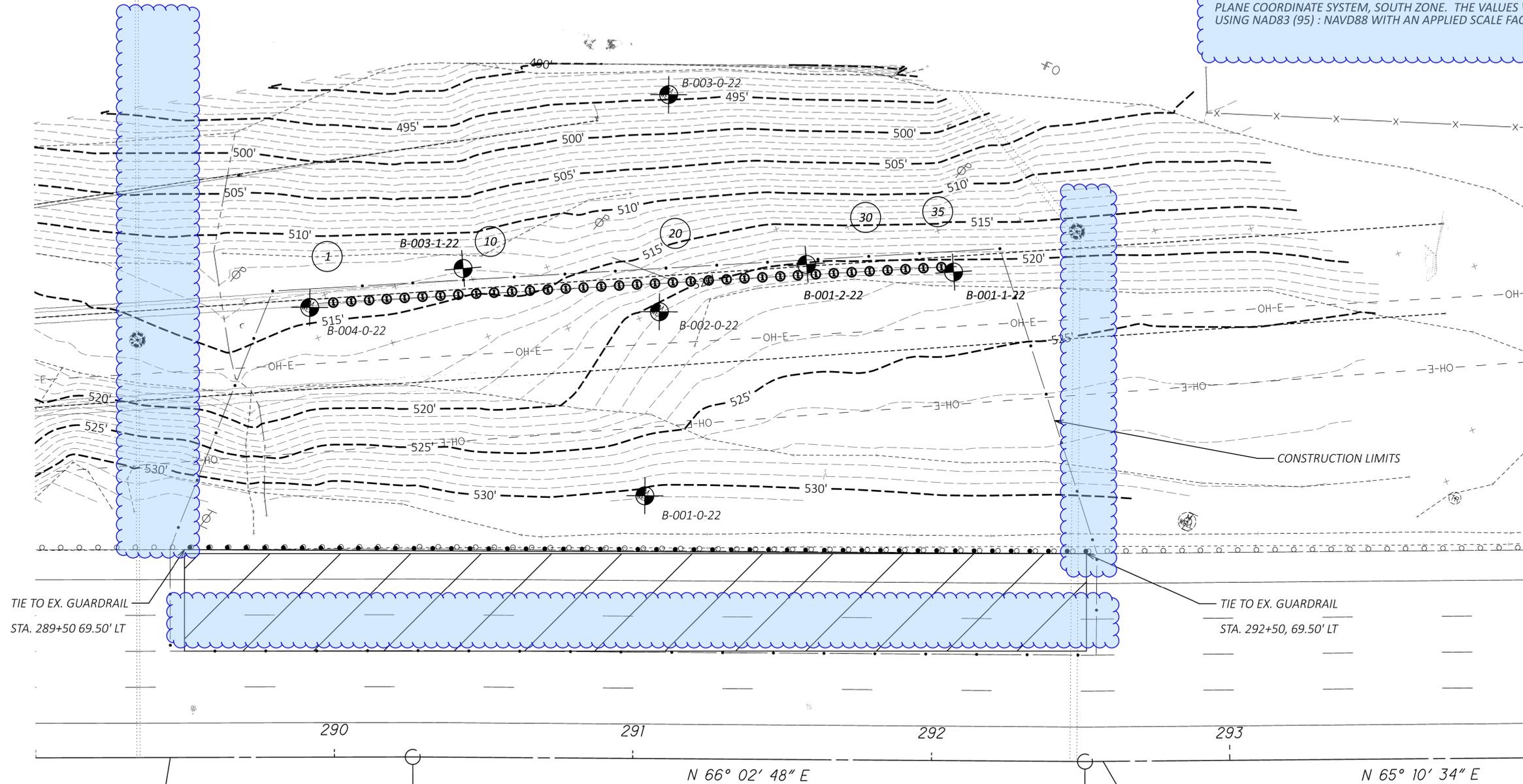
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RESURFACING LIMITS



BEGIN PROJECT
289+45

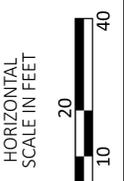
PI Sta. 290+26.31
 $\Delta = 0^\circ 31' 44''$ RT (NO CURVE)

PI Sta. 292+51.44
 $\Delta = 0^\circ 52' 14''$ LT (NO CURVE)

END PROJECT
292+55

| MONUMENT INFORMATION | | | | |
|----------------------|-----------|------------|-----------|-------------|
| POINT | NORTHING | EASTING | ELEVATION | DESCRIPTION |
| 408 | 416134.77 | 1391821.84 | 554.39 | CNPT |
| 417 | 422677.19 | 1390553.84 | 505.34 | CNPT |
| 432 | 425179.39 | 1388830.93 | 496.710 | CNPT |
| 435 | 429080.72 | 1388192.71 | 535.62 | CNPT |
| 436 | 428708.56 | 1387601.05 | 521.66 | CNPT |
| BM 338 | 430509.20 | 1395034.11 | 490.38 | BM-JZ0816 |

THE COORDINATE VALUES HEREIN ARE CONVERTED FROM THE OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE. THE VALUES WERE ESTABLISHED USING NAD83 (95) : NAVD88 WITH AN APPLIED SCALE FACTOR OF 1.000083414006.



PLAN
STA. 289+45 TO STA. 292+55

DESIGN AGENCY



DESIGNER
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REVIEWER
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DESIGN DATA:
CONCRETE CLASS QC5 - COMPRESSIVE STRENGTH 4.5 KSI
(DRILLED SHAFT)
STRUCTURAL STEEL - ASTM A572 GRADE 50
YIELD STRENGTH - 50 KSI

GENERAL NOTES

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS 2017 AND the ODOT BRIDGE DESIGN MANUAL, 2022.

ITEM 507 - STEEL PILES, MISC: W27X84 STRUCTURAL STEEL, FURNISHED:

THIS WORK SHALL CONSIST OF FURNISHING STRUCTURAL STEEL MEMBERS THAT CONFORM TO ASTM A572, GRADE 50 AND CMS 711.01.

THE OVERHEAD POWER LINES IN THE PROJECT VICINITY MAY PROHIBIT THE STRUCTURAL DRILLED SHAFT BEAMS TO BE PLACED AS A SINGLE ELEMENT, THEREFORE BEAM SPLICING MAY BE REQUIRED FOR ALL OR A PORTION OF THE DRILLED SHAFT WORK. IF THE POWER LINE OFFSETS CANNOT BE MAINTAINED USING A CONTINUOUS BEAM, SPLICING OF THE BEAMS WILL BE PERMITTED.

IF SPLICING IS REQUIRED, PLACE THE LOWER SECTIONS OF THE BEAM REINFORCEMENT INTO THE DRILLED SHAFT EXCAVATION WITH THE NECESSARY ROCK SOCKET. SUPPORT THE BEAM SECTIONS AS APPROPRIATE TO PERMIT WELDING OF THE UPPER BEAM SECTION. HANDLING AND SUPPORT OF THE LOWER BEAM SEGMENTS CANNOT INCLUDE MODIFICATION OF THE STRUCTURAL SECTION. WELD THE TWO BEAM SECTIONS TOGETHER WITH A FULL PENETRATION BUTT WELD PER ITEM 507.09.

THE DEPARTMENT WILL MEASURE STEEL BEAMS ALONG THE AXIS OF THE STEEL BEAM FROM THE TOP OF SHAFT ELEVATION TO THE BOTTOM OF THE DRILLED SHAFT, AS DETERMINED BY THE ENGINEER. THE DEPARTMENT WILL PAY FOR STEEL BEAMS AT THE CONTRACT PRICE PER FOOT, ITEM 507 STEEL PILES, MISC. W27X84 STRUCTURAL STEEL, FURNISHED WHICH INCLUDES ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO PLACE THE STRUCTURAL STEEL INTO EACH DRILLED SHAFT.

ITEM 524 - DRILLED SHAFTS, 36" DIAMETER, ABOVE BEDROCK, AS PER PLAN
ITEM 524 - DRILLED SHAFTS, 36" DIAMETER, INTO BEDROCK, AS PER PLAN

THIS WORK CONSISTS OF INSTALLING DRILLED SHAFTS FOR SLOPE STABILITY REMEDIATION. THE DRILLED SHAFTS ARE REINFORCED WITH STRUCTURAL STEEL MEMBERS INSTEAD OF REINFORCING STEEL CAGES. FURNISH AND INSTALL THE DRILLED SHFATS IN ACCORDANCE WITH ODOT CMS ITEM 524 EXCEPT AS MODIFIED AND SUPPLEMENTED BELOW.

FURNISH STRUCTURAL STEEL MEMBERS ACCORDING TO THE PLAN REQUIREMENTS AND CONFORMING TO ASTM A572, GRADE 50.

SEQUENCE OF INSTALLATION: THE INSTALLATION SHALL BE SUCH THAT NO DRILLED SHAFT IS INSTALLED ADJACENT TO EITHER AN OPEN DRILLED SHAFT EXCAVATION OR A DRILLED SHAFT IN WHICH CONCRETE HAS HAD LESS THAN A 48 HOUR CURE. INSTALLING THE SHAFTS IN AN ALTERNATING SEQUENCE OR ANY OTHER SEQUENCE THAT MEETS THESE CRITERIA IS PERMISSIBLE.

EXCAVATE THE HOLE FOR THE DRILLED SHAFT TO WITHIN 3 INCHES OF THE PLAN LOCATION. PLACE THE STRUCTURAL STEEL MEMBERS SO IT IS VERTICAL. CENTER THE STEEL MEMBER WITHIN THE HOLE. PLACE THE STEEL MEMBER SO THAT THE FLANGES ARE PARALLEL TO THE CENTERLINE OF THE ROW OF TANGENT DRILLED SHAFTS. DO NOT ALLOW THE ORIENTATION OF THE FLANGES TO VARY BY MORE THAN 10 DEGREES. SUPPORT THE STEEL MEMBER SO THAT IT DOES NOT MOVE DURING CONCRETE PLACEMENT.

THE BOTTOM OF THE DRILLED SHAFT EXCAVATION SHALL BE AS CLEAN AS PRACTICABLE PRIOR TO CONCRETE PLACEMENT. THE DRILLED SHAFT EXCAVATION SHALL BE INSPECTED BY THE ENGINEER IMMEDIATELY BEFORE THE CONCRETE IS PLACED. NO CONCRETE SHALL BE PLACED DURING INCLIMENT WEATHER CONDITIONS WHICH PROHIBIT A THOROUGH INSPECTION. CONCRETE SHALL BE PLACED THE SAME DAY AS EXCAVATION IS COMPLETED.

USE CLASS QC5 CONCRETE ACCORDING TO ODOT CMS 524.10. THE CONTRACTOR MAY PLACE CONCRETE UTILIZING THE FREE-FALL METHOD, PROVIDED THE DEPTH OF WATER IN THE BASE OF THE SHAFT IS LESS THAN 6 INCHES AND THE CONCRETE FALLS WITHOUT STICKING TO THE SIDE OF THE HOLE. PLACE CONCRETE IN THE SHAFTS TO THE ELEVATION SHOWN IN THE PLANS.

PERMANENTLY MARK THE TOP OF EACH STRUCTURAL DRILLED SHAFT WITH THE IDENTIFYING SHAFT ID NUMBER BY SCRIBING THE NUMBER INTO WET CONCRETE.

CHECK THE POSITION, VERTICAL ALIGNMENT, AND ORIENTATION OF THE STEEL MEMBER IMMEDIATELY AFTER PLACING THE CONCRETE. MAKE CORRECTIONS AS NECESSARY TO MEET THE PREVIOUSLY MENTIONED TOLERANCES.

METHOD OF MEASUREMENT: DRILLED SHAFTS ABOVE BEDROCK WILL BE MEASURED ALONG THE AXIS OF THE DRILLED SHAFT FROM THE DRILLING PLATFORM ELEVATION TO THE TOP OF GRAY INTERBEDDED SHALE AND LIMESTONE AS DETERMINED BY THE ENGINEER. DRILLED SHAFT LENGTH INTO BEDROCK WIL BE MEASURED FROM THE TOP OF GRAY INTERBEDDED SHALE AND LIMESTONE IN EACH SHAFT TO THE FINAL TIP ELEVATION, AS DETERMINED BY THE ENGINEER. ALL EQUIPMENT, MATERIALS, LABOR, AND INCIDENTALS REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED. PAYMENT FOR THE DRILLED SHAFTS WILL BE MADE AT THE CONTRACT BID UNIT PRICE FOR ITEM 524 - DRILLED SHAFTS 36" DIAMETER, ABOVE BEDROCK, AS PER PLAN. ITEM 524 - DRILLED SHAFTS 36" DIAMETER, INTO BEDROCK, AS PER PLAN.

WASTE OF DRILLED SHAFT SPOILS

ALL SPOILS FROM THE DRILLED SHAFT CONSTRUCTION ARE TO BE DISPOSED OF OFF SITE. PLACEMENT OF SPOILS WITHIN THE R/W IS NOT PERMITTED.

DESIGN AGENCY



DESIGNER
AWS

REVIEWER
JAS 01-20-23

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