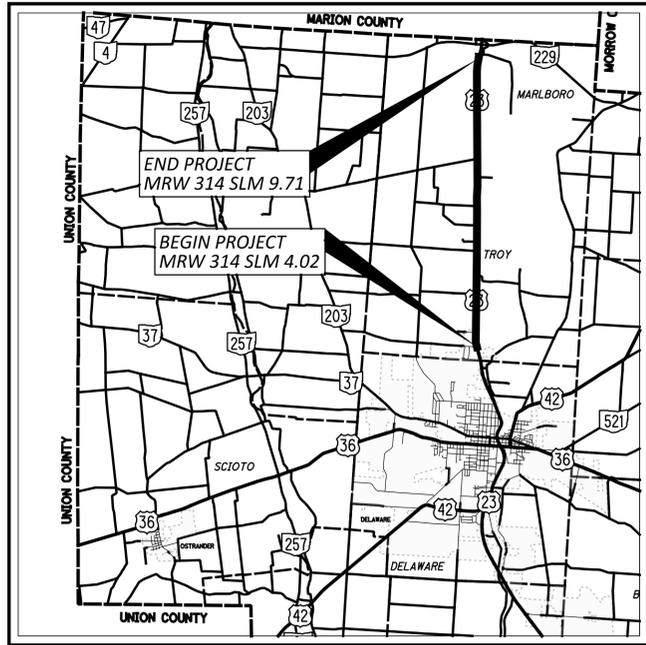


STATE OF OHIO DEPARTMENT OF TRANSPORTATION

DEL-SP-FY2025

TROY TOWNSHIP, MARLBORO TOWNSHIP
DELAWARE COUNTY



LOCATION MAP

LATITUDE: 40°17'52" N LONGITUDE: 83°02'58" W



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

DESIGN DESIGNATION

SEE LOCATION MAP SHEET 2

INDEX OF SHEETS:

TITLE	1
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PAVEMENT REPAIR PLAN	15 - 17
TRAFFIC CONTROL SUBSUMMARY	18

FEDERAL PROJECT NUMBER

NON-FEDERAL

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

PARTIAL DEPTH REPAIRS AND SPOT CONCRETE SLAB REPAIRS ON US-23 IN DELAWARE COUNTY.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.0 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.0 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A*
	* MAINTENANCE PROJECT

2023 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.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

Anthony C. Turowski
Anthony C. Turowski, P.E.
District 06 Deputy Director

Jack Marchbanks
Jack Marchbanks, PhD
Director, Department of Transportation

DESIGN EXCEPTIONS

NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED

UNDERGROUND UTILITIES
Contact Two Working Days
Before You Dig

OHIO811.org
Before You Dig

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

PLAN PREPARED BY:

ENGINEER'S SEAL



STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-1.1	7/28/00	MT-95.30	7/19/19	TC-41.20	10/18/13	800-2023	1/19/24		
BP-2.1	1/21/22	MT-95.31	7/19/19	TC-42.20	10/18/13	808	1/18/19		
BP-2.2	1/15/21	MT-95.32	4/19/19	TC-52.10	10/18/13	832	7/21/23		
BP-2.5	1/21/22	MT-95.45	7/21/23	TC-52.20	1/15/21	896	7/21/17		
BP-2.6	7/15/16	MT-95.50	7/21/17	TC-65.10	1/17/14	921	4/20/12		
BP-6.1	7/19/13	MT-95.60	4/19/19	TC-65.11	1/19/24				
BP-8.1	7/18/08	MT-97.11	1/20/17	TC-71.10	4/21/23				
		MT-99.20	4/19/19						
		MT-99.30	1/17/20						
		MT-101.90	7/17/20						
		MT-104.10	1/19/24						
		MT-105.10	1/17/20						

PID 110705 DEL-SP-FY2025

DESIGN AGENCY



DESIGNER

RAM

REVIEWER

XXX MM-DD-YY

PROJECT ID

110705

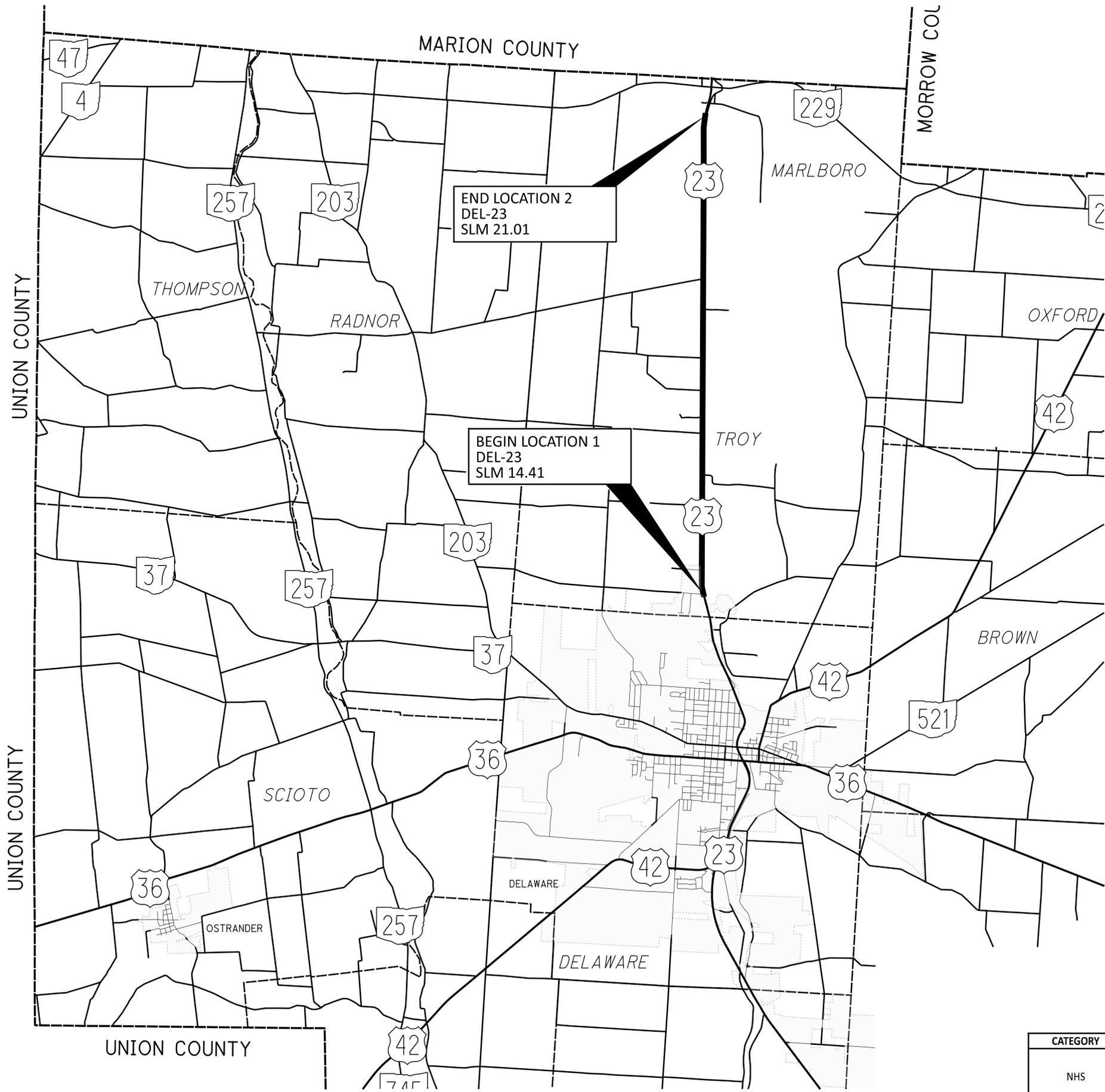
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DEL-SP-FY2025

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DESIGN DESIGNATION

CURRENT ADT (2025)	28000
DESIGN YEAR ADT (2037)	29000
DESIGN HOURLY VOLUME (2037)	2610
DIRECTIONAL DISTRIBUTION	55%
TRUCKS (24 HOUR B&C)	16%
DESIGN SPEED	60
LEGAL SPEED	60
DESIGN FUNCTIONAL CLASSIFICATION:	
03 OTHER PRINCIPAL ARTERIALS (RURAL)	
NHS PROJECT	YES

CATEGORY	PLAN SPLIT CODE	DESCRIPTION
NHS	01/NHS/05	ALL ITEMS OF WORK ASSOCIATED WITH SPOT REPAIR.

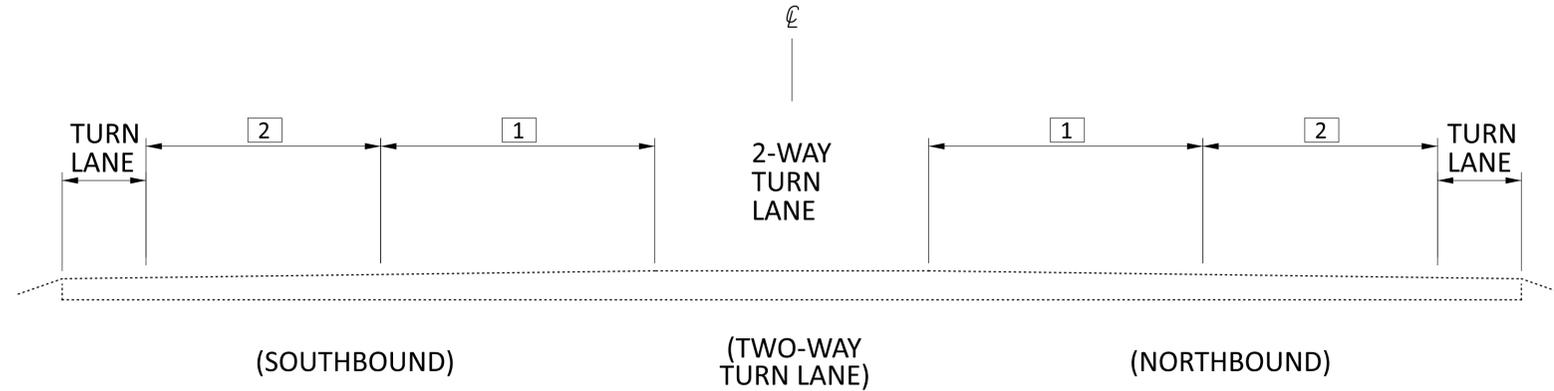


LOCATION MAP - DELAWARE COUNTY

DESIGN AGENCY



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 110705
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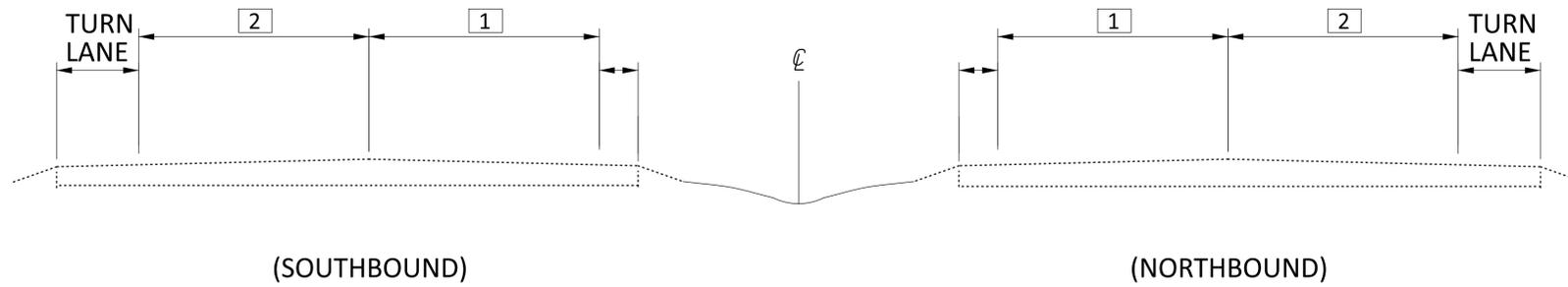


TYPICAL #1

DEL-23

SLM 14.41 TO SLM 16.30

LANE NUMBER



TYPICAL #2

DEL-23

SLM 16.30 TO SLM 21.01

LANE NUMBER

TYPICAL SECTIONS

DESIGN AGENCY



DESIGNER

RAM

REVIEWER

XXX MM-DD-YY

PROJECT ID

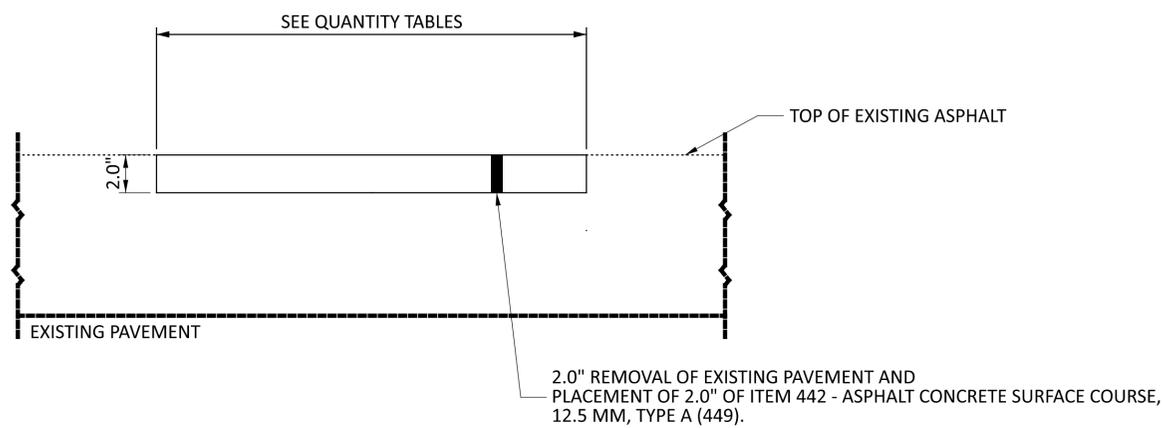
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P.03

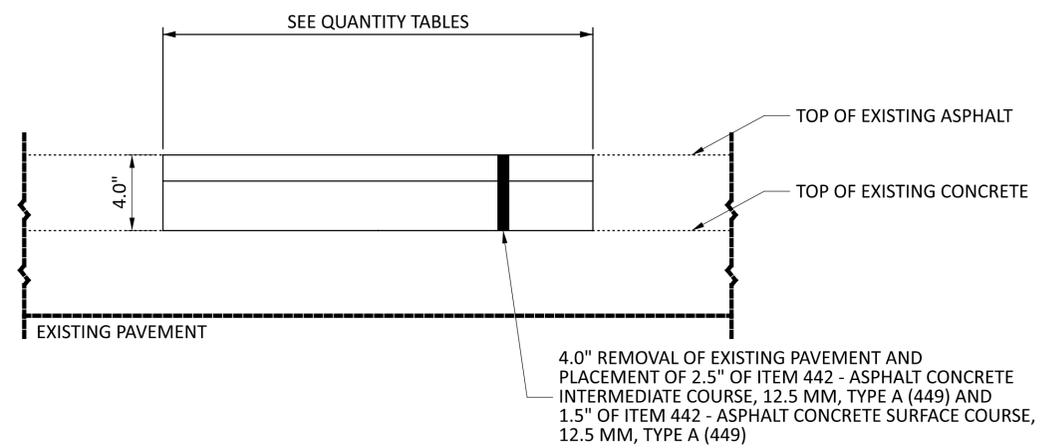
TOTAL

18



PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 2.0" DETAIL

FOR MORE INFORMATION REGARDING ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 2.0" SEE GENERAL NOTES.
TO BE USED ON DEL-23



PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 4.0" DETAIL

FOR MORE INFORMATION REGARDING ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 4.0" SEE GENERAL NOTES.
TO BE USED ON DEL-23

DESIGN AGENCY



DESIGNER

RAM

REVIEWER

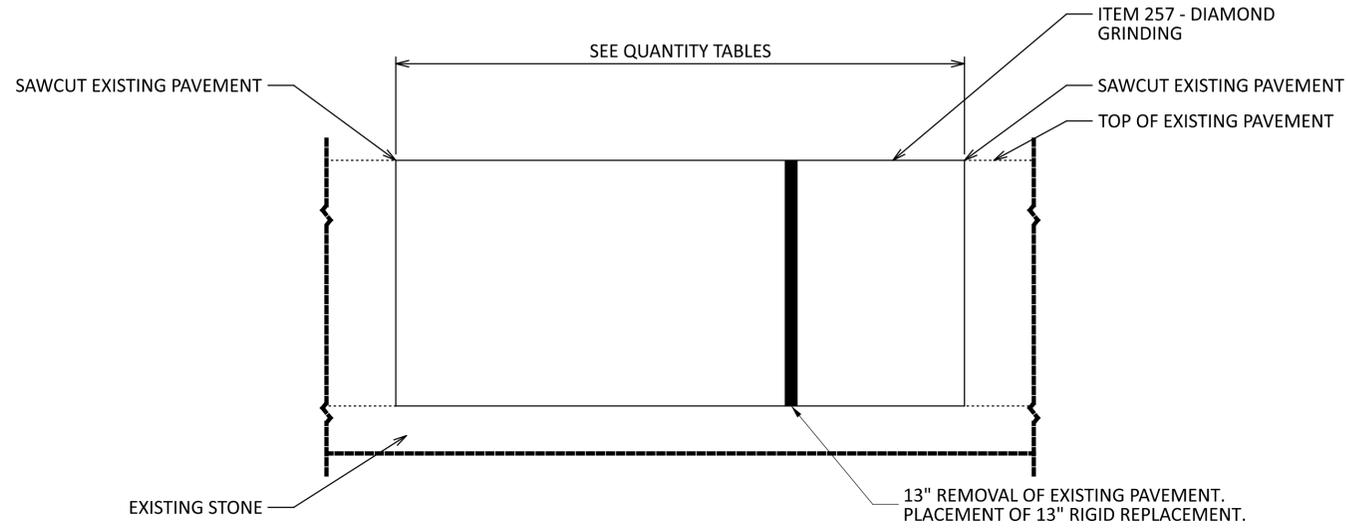
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**FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT,
CLASS QC MS, 13", AS PER PLAN**

FOR MORE INFORMATION REGARDING ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, 13", AS PER PLAN SEE GENERAL NOTES AND BP-2.5.

TO BE USED ON DEL-23.

DESIGN AGENCY



DESIGNER

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REVIEWER

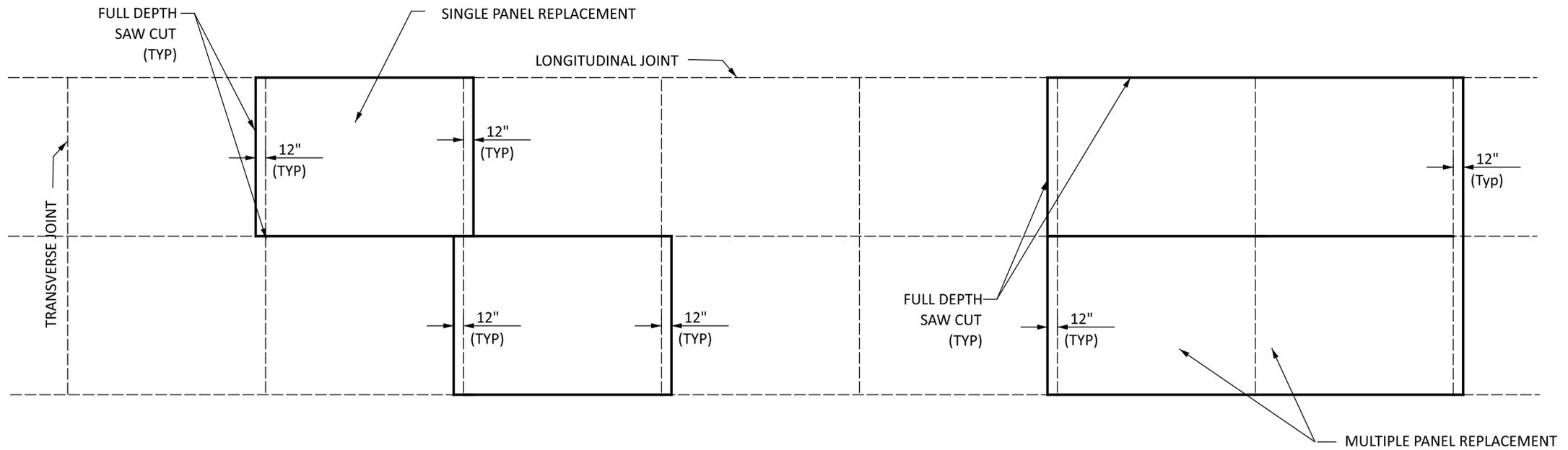
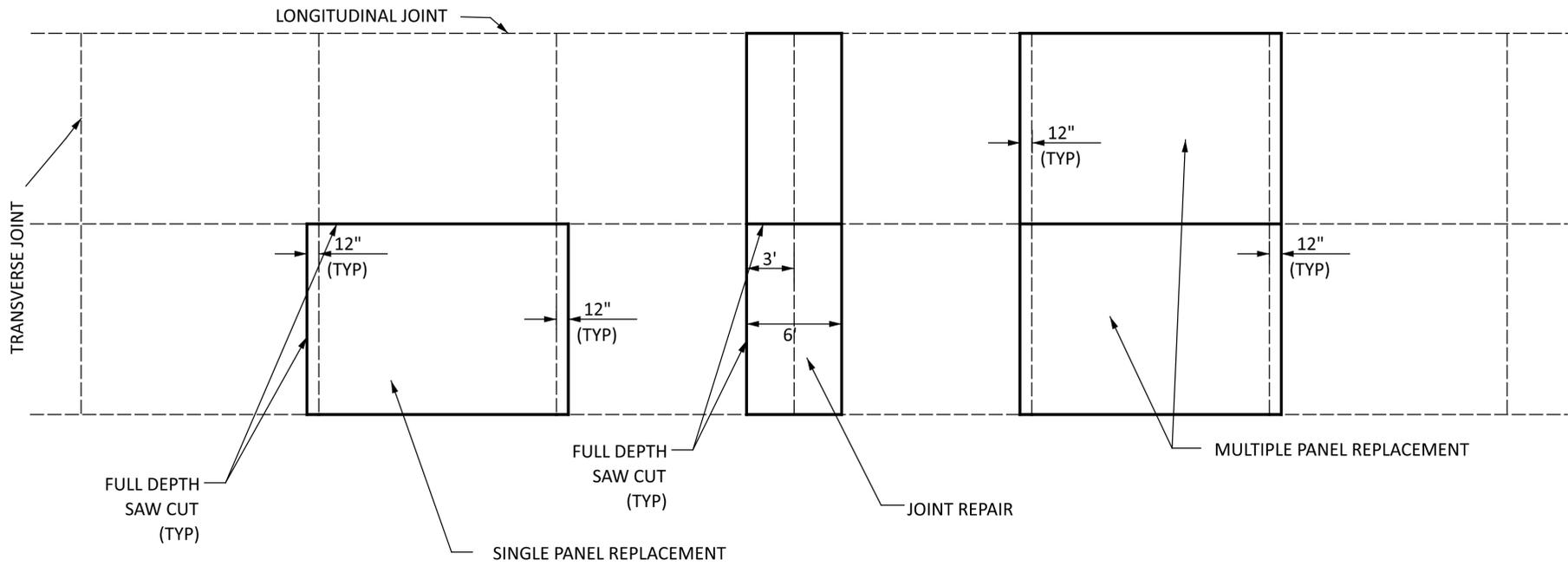
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PAVEMENT REPAIR DETAILS

DEL-SP-FY2025

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REVIEWER	XXX MM-DD-YY
PROJECT ID	110705
SHEET	TOTAL
P.06	18

SEE STANDARD DRAWING BP-2.5

NOTIFICATION OF CONSTRUCTION INITIATION:

AT LEAST FOURTEEN DAYS PRIOR TO STARTING INITIAL CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ADVISE THE DISTRICT OFFICE OF COMMUNICATIONS VIA EMAIL AT d06.pio@dot.ohio.gov, THE DISTRICT WORK ZONE TRAFFIC MANAGER VIA EMAIL AT d06.mot@dot.ohio.gov AND THE CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION VIA EMAIL AT hauling.permits@dot.ohio.gov OF THE ANTICIPATED START DATE OF ANY CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO THE PLACING OF WORK ZONE SIGNS. THE NOTIFICATION SHALL ALSO INCLUDE THE PROJECT NUMBER, PID, NAME AND PHONE NUMBER OF THE CONTRACTOR, A POINT OF CONTACT AND THE ANTICIPATED IMPACT ON TRAFFIC. THE CONTRACTOR WILL IMMEDIATELY INFORM THE DISTRICT OFFICE OF COMMUNICATIONS AND THE DISTRICT WORK ZONE TRAFFIC MANAGER OF ANY AND ALL DELAYS AND/OR CHANGES REGARDING THE CONSTRUCTION INITIATION DATE.

GENERAL:

THE CONTRACTOR SHALL SUBMIT IN WRITING A SCHEDULE OF OPERATIONS TO THE ENGINEER (SEE 108.02) AND RECEIVE APPROVAL IN WRITING BEFORE WORK IS STARTED ON THIS PROJECT. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

ALIGNMENT AND PROFILE:

THE WORK PROPOSED BY THIS PROJECT IS FOR THE REPAIR OF THE EXISTING PAVEMENT. THE ALIGNMENT OF THE EXISTING PAVEMENT WILL NOT BE CHANGED, AND THE PROFILE OF THE PROPOSED SURFACE WILL BE SIMILAR TO THAT OF THE EXISTING PAVEMENT.

CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE:

THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC WHERE PRACTICAL. EQUIPMENT SHALL HAVE AT LEAST ONE AMBER FLASHING LIGHT. WHEN PARKED ALONG THE HIGHWAY, THE EQUIPMENT SHALL BE LOCATED EITHER A MINIMUM OF THIRTY FEET FROM THE EDGE OF PAVEMENT OR SIX FEET BEHIND GUARDRAIL WITH A MINIMUM OF 125 FEET OF GUARDRAIL PRECEDING THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT AN APPROVED CONTRACTOR'S STORAGE AREA.

REMOVAL ITEMS:

UNLESS OTHERWISE INSTRUCTED, ASPHALT AND MISCELLANEOUS HARDWARE DESIGNATED FOR REMOVAL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE REMOVED ITEM.

WORK LIMITS:

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

OVERHEAD STRUCTURES - VERTICAL CLEARANCE:

IT IS THE INTENT OF THIS PROJECT THAT THE EXISTING VERTICAL CLEARANCES ARE NOT TO BE REDUCED FROM EXISTING. THE CONTRACTOR SHALL USE GREAT CARE AT THESE LOCATIONS NOT TO ALTER THE CURRENT VERTICAL CLEARANCE.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 2":

ALL REPAIR AREAS ARE TO BE DETERMINED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF THE WORK. THE REPAIR AREAS SHALL BE OF VARYING LENGTH AND HAVE AN AVERAGE WIDTH OF NOT LESS THAN 4 FEET. THE DEPTH OF REPAIRS SHALL BE 2.0 INCHES AS DETAILED ON SHEET 4. FOR WIDTHS AND LOCATIONS SEE REPAIR SUBSUMMARIES.

REPAIR AREAS SHALL BE REFILLED WITH 2.0 INCHES OF ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449). GREAT CARE SHALL BE TAKEN TO MAINTAIN THE EXISTING PAVEMENT CROSS-SLOPE (CROWN) AS WELL AS ALL LONGITUDINAL SLOPES. NO MORE PARTIAL DEPTH PAVEMENT REPAIR SHALL BE STARTED AND PERFORMED THAN CAN BE COMPLETED IN THE SAME WORKING DAY.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 4":

ALL REPAIR AREAS ARE TO BE DETERMINED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF THE WORK. THE REPAIR AREAS SHALL BE OF VARYING LENGTH AND HAVE AN AVERAGE WIDTH OF NOT LESS THAN 4 FEET. THE AVERAGE DEPTH OF REPAIRS SHALL BE 4 INCHES AS DETAILED ON SHEET 4. THE INTENT IS FOR THE ASPHALT TO BE REMOVED TO THE TOP OF CONCRETE.

REPAIR AREAS SHALL BE REFILLED WITH 1.5 INCHES OF ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449) AND 2.5 INCHES OF ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (449). GREAT CARE SHALL BE TAKEN TO MAINTAIN THE EXISTING PAVEMENT CROSS-SLOPE (CROWN) AS WELL AS ALL LONGITUDINAL SLOPES. NO MORE PARTIAL DEPTH PAVEMENT REPAIR SHALL BE STARTED AND PERFORMED THAN CAN BE COMPLETED IN THE SAME WORKING DAY.

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QCMS, 13", AS PER PLAN:

REPAIR AREAS SHALL BE DETERMINED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF WORK. THE REMOVAL SHALL INCLUDE THE EXISTING 13" OF PAVEMENT, THE EXISTING PAVEMENT MAY INCLUDE ASPHALT, BRICK, PLAIN CONCRETE OR REINFORCED CONCRETE PAVEMENT. IN SOME LOCATIONS SOME STONE WILL NEED TO ALSO BE REMOVED TO GET TO THE 13" DEPTH. THE REPLACEMENT SHALL INCLUDE 13" OF RIGID REPLACEMENT. GREAT CARE SHALL BE TAKEN TO MAINTAIN THE EXISTING PAVEMENT CROSS-SLOPE (CROWN), AS WELL AS ALL LONGITUDINAL SLOPES DURING THE PAVING OPERATIONS. THIS ITEM OF WORK SHALL ALSO BE PERFORMED AS SHOWN ON THE DETAIL ON SHEET 5 AND STANDARD DRAWING BP-2.5.

ITEM 255 - FULL DEPTH PAVEMENT SAWING:

QUANTITIES HAVE BEEN PROVIDED TO BE USED IN CONJUNCTION WITH ALL ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, AS PER PLAN.

ITEM 257 - DIAMOND GRINDING PORTLAND CEMENT CONCRETE PAVEMENT, AS PER PLAN:

THIS ITEM OF WORK SHALL BE USED IN CONJUNCTION WITH ALL ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, AS PER PLAN. PLANING ON EDGE ABUTTING SHOULDER SHALL EXTEND ONTO SHOULDER FAR ENOUGH TO ENSURE PROPER DRAINAGE OFF THE PAVEMENT. THE ENGINEER IS TO DETERMINE THE EXTENT OF GRINDING TO ENSURE PROPER DRAINAGE.

ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN:

THIS ITEM SHALL CONSIST OF STATIONING USING 3 FT LATH STAKES OR PAINT MARKINGS. THE STAKES OR PAINT MARKINGS SHALL BE SPACED AT 200 FT INTERVALS AND EXTEND THROUGHOUT THE LENGTH OF THE PROJECT. PLACEMENT OF THE STAKES OR PAINT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY DAMAGED, MISSING STAKES, OR PAINT MARKINGS. PAINT MARKINGS SHALL BE PLACED ON CURBS AND USED IN AREAS WHERE THE PLACEMENT OF STAKES IS NOT POSSIBLE AND APPROVED BY THE PROJECT ENGINEER.

THIS ITEM SHALL INCLUDE VERIFICATION THAT VERTICAL CLEARANCE IS MAINTAINED.

CONSTRUCTION LAYOUT STAKES, AS PER PLAN WILL BE PAID FOR AT THE CONTRACT LUMP SUM BID, WHICH PRICE SHALL BE FULL COMPENSATION FOR ALL SERVICES, MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS, INCLUDING THE REMOVAL, NECESSARY TO COMPLETE THIS ITEM.

ITEM 642 - PAVEMENT MARKING, TYPE 1:

THE LOCATIONS, SIZES AND SHAPES OF PROPOSED PAVEMENT MARKINGS WILL BE THE SAME AS EXISTING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE AND SHAPE OF THE EXISTING PAVEMENT MARKINGS BEFORE THE PAVEMENT REPAIRS OBLITERATE THEM. ANY PAVEMENT MARKING WHICH IS PLACED AT THE WRONG LOCATION SHALL BE REMOVED AND REPLACED AT THE CORRECT LOCATION AT THE CONTRACTOR'S EXPENSE. THE PAVEMENT MARKINGS WILL BE REPLACED WHERE THEY ARE REMOVED BY THE PAVEMENT REPAIRS.

UNDERGROUND UTILITIES:

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT SHOULD NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA. THE CONTRACTOR WILL GIVE NOTICE OF INTENT TO CONSTRUCT TO THE OHIO UTILITIES PROTECTION SERVICE, PRODUCERS UNDERGROUND PROTECTION SERVICE, AND OWNERS OF UNDERGROUND FACILITIES THAT ARE NOT MEMBERS OF A REGISTERED PROTECTION SERVICE IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE. THE ABOVE, MENTIONED NOTICE SHALL BE GIVEN AT LEAST TWO WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

OHIO UTILITY PROTECTION SERVICE 1-800-362-2764
PRODUCERS UNDERGROUND PROTECTION SERVICE 1-614-587-0486
NON-MEMBERS MUST BE CALLED DIRECTLY.

THE OHIO DEPARTMENT OF TRANSPORTATION HAS UTILITY FACILITIES (HIGHWAY LIGHTING AND TRAFFIC SIGNALS) WITHIN THE LIMITS OF THIS PROJECT.

HIGHWAY LIGHTING AND TRAFFIC SIGNALS:

EVEN THOUGH ODOT IS LISTED AS A MEMBER OF THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE ODOT CONTRACTOR IS REQUIRED TO CONTACT ODOT, DISTRICT 6 TRAFFIC MAINTENANCE DEPARTMENT DIRECTLY ONCE LINES ARE MARKED BY OUPS SO THAT THE ODOT UTILITIES LOCATED WITHIN THIS PROJECT CAN BE DISCUSSED OR CONFIRMED AS NECESSARY PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY DISTRICT 6 TRAFFIC MAINTENANCE AT 740-833-8198 AND THE CONSTRUCTION PROJECT ENGINEER, FOURTEEN (14) CALENDAR DAYS IN ADVANCE OF ANY WORK, FOR THE NEED TO VERIFY/DISCUSS ODOT OWNED UTILITIES.

ATR:

THERE IS A PERMANENT TRAFFIC COUNTY STATION AT DEL-23-19.74. THE STATION ID NUMBER IS 9821. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IF ANY OF THE REPAIRS WILL IMPACT THE ATR STATION. PROJECT ENGINEER WILL DIRECT THE CONTRACTOR ON WHETHER THE REPAIR WORK SHALL BE PERFORMED.

DESIGN AGENCY



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PROJECT ID
110705

SHEET TOTAL
P.07 18

DEL-SP-FY2025

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DATE: 6/20/2024 TIME: 4:15:00 PM USER: rmcneill

ENVIRONMENTAL COMMITMENTS

ANY AND ALL CONSTRUCTION DEBRIS, EARTHEN DEBRIS, EXCESS ASPHALT OR CONCRETE, WOOD DEBRIS FROM CLEARING, EXCESS FILL MATERIAL, AND TRASH SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED UPLAND SITE OR LAND FILL ABOVE FEMA 100-YEAR FLOOD ELEVATIONS.

THE CONTRACTOR SHALL NOT DISCHARGE TOXIC OR HAZARDOUS MATERIALS SUCH AS SEALANTS, PAINT, SOLVENTS, CLEANING AGENTS, EARTHEN MATERIALS, WASTE-WATER, FUELS OR DEBRIS OF ANY KIND TO A SCENIC RIVER, ITS TRIBUTARIES, OR DRAINAGE WAYS. IF REFUELING OF IMMOBILE EQUIPEMNT IS NECESSARY WITHIN THE FLOODPLAIN OR NEAR ANY TRIBUTARY DRANAGE WAYS, DITCHES, OR STREAM, THE CONTRACTOR SHALL PROVIDE SECONDARY CONTAINMENT WITH ENOUGH CAPACITY TO CONTAIN AND COLLECT ALL POTENTIAL WASTES IN THE EVENT OF A SPILL.

IN ACCORDANCE WITH ORC 3750.06, REPORTABLE SPILLS MUST BE REPORTED TO THE LOCAL FIRE DEPARTMENT (911), THE LOCAL EMERGENCY COORDINATOR (740) 417-6229 [24 HOUR] AND THE OHIO SPILL LINE (1-800-282-9378).

THE CONTRACTOR SHALL KEEP ALL IDLE EQUIPMENT, FUELS, LUBRICANTS, AND ANY STORAGE FOR/OF POTENTIALLY TOXIC OR HAZARDOUS MATERIALS OUT OF THE FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA AND NOT WITHIN 1000 FEET OF THE OLETANGY RIVER.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER 40 DAYS PRIOR TO WORK WITHIN 1000 FEET OF THE OLENTANGY RIVER. THE PROJECT ENGINEER SHALL NOTIFY THE DISTRICT ENVIRONMENTAL COORDINATOR 35 DAYS PRIOR TO WORK WITHIN 1000 FEET OF THE SCENIC RIVER. THE DISTRICT ENVIRONMENTAL COORDINATOR SHALL COORDINATE WITH ODNR SCENIC RIVERS A MINIMUM OF 30 DAYS PRIOR TO ANY WORK WITHIN 1000 FEET OF THE OLENTANGY RIVER.

THE CONTRACTOR SHALL NOT PERFORM ANY EARTHWORK ACTIVITIES. THE CONTRACTOR SHALL NOT DEPOSIT ANY MATERIALS OUTSIDE OF THE ROADWAY WHEN WORKING IN THE SCENIC RIVER LIMITS: DEL-23-14.64-15.17. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF SS 832 PER THE CONTRACT.

NO TREE CLEARING IS REQUIRED OR PERMITTED ON THIS PROJECT.

NO STREAMS, DITCHES, OR WETLANDS SHALL BE IMPACTED AS PART OF THIS PROJECT.

GENERAL NOTES

DESIGN AGENCY



DESIGNER

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XXX MM-DD-YY

PROJECT ID

110705

SHEET TOTAL

P.08 18

ITEM 614 - MAINTAINING TRAFFIC:

ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION). COPIES ARE AVAILABLE FROM,

THE OHIO DEPARTMENT OF TRANSPORTATION
 BUREAU OF TRAFFIC,
 1980 WEST BROAD STREET
 COLUMBUS, OHIO 43223

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER.

CONSTRUCTION OPERATIONS SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL IS IN PLACE AND APPROVED BY ODOT PERSONNEL. THE CONSTRUCTION INSPECTOR SHALL APPROVE ALL TEMPORARY TRAFFIC CONTROL DEVICES FOR CONDITION AND LOCATION BEFORE THE CONTRACTOR WILL BE ALLOWED TO BEGIN WORK. IF THE CONTRACTOR DOES NOT COMPLY WITH THE STANDARDS, HIS PERMIT SHALL BE REVOKED AND ALL WORK SHALL BE TERMINATED.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 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 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

AT LEAST ON LANE OF TWO-WAY TRAFFIC SHALL BE MAINTAINED (EACH DIRECTION) AT ALL TIMES BY USE OF FLAGGERS PER SCD'S MT-97.10, MT-97.11, AND MT-97.12.

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 FROM, 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.

PUBLIC OUTREACH AND NOTIFICATION:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE DISTRICT 6 PUBLIC INFORMATION OFFICE VIA EMAIL AT D06.PIO@DOT.OHIO.GOV TO COORDINATE EFFORTS TO NOTIFY ADJACENT RESIDENTS AND BUSINESSES OF THE UPCOMING PROJECT. ADVANCE NOTIFICATION SHALL OCCUR NO LATER THAN FOURTEEN (14) DAYS PRIOR TO THE FIRST DAY OF WORK. ALL NOTIFICATIONS SHALL BE MADE UTILIZING THE TEMPLATE PROVIDED BY THE DISTRICT 6 PUBLIC INFORMATION OFFICE.

WORK SITE LIGHTING:

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR, AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE PIO (D06.PIO@DOT.OHIO.GOV). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

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

NOTIFICATION TIME FRAME TABLE			
ITEM	DURATION OF CLOSURE	NOTIFICATION DUE TO DISTRICT 6 COMMUNICATIONS OFFICE	SIGN DISPLAYED TO PUBLIC
RAMP & ROAD CLOSURES	>=2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE	14 CALENDAR DAYS PRIOR TO CLOSURE
	>12 HOURS & <2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE	7 CALENDAR DAYS PRIOR TO CLOSURE
	<=12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE	2 BUSINESS 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 AND TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION	
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ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME FRAME TABLE.

USE OF STANDARD DRAWINGS:

FOR THE PURPOSE OF THIS PROJECT, "MOVING OPERATION" SHALL BE LIMITED TO PAVEMENT MARKING STRIPING.

IT MAY BE NECESSARY TO EXTEND THE ADVANCE WARNING AND BUFFER ZONES BEYOND THE MINIMUM DISTANCES SHOWN ON THE STANDARD DRAWINGS. THIS MAY BE DUE TO HORIZONTAL ALIGNMENT, VERTICAL ALIGNMENT, RAMP LOCATIONS, OR OTHER SIGHT OBSTRUCTIONS. LOCATIONS OF THE TAPER ZONES MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER, BUT TAPER LENGTHS MUST MEET THE MINIMUM STANDARDS. TAPERS SHOULD BE PLACED IN TANGENT SECTIONS WHENEVER POSSIBLE. ADDITIONAL YIELD SIGNS MAY BE REQUIRED FOR RAMPS WITHIN 1,000 FEET OF A WORK ZONE. PAYMENT SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

FOR ANY MULTILANE HIGHWAY, DEVICE SPACING SHALL BE A MAXIMUM OF 40' CENTER ON CENTER IN THE TAPERS AND 80' CENTER ON CENTER IN THE TANGENT SECTIONS.

LANES OPEN DURING HOLIDAYS AND SPECIAL EVENTS:

NO WORK SHALL BE PERFORMED AND THE SAME NUMBER OF LANES AS WERE AVAILABLE AT THE START OF THE PROJECT SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

HOLIDAYS

CHRISTMAS (OBSERVED)	FOURTH OF JULY
NEW YEAR'S (OBSERVED)	LABOR DAY
MEMORIAL DAY	THANKSGIVING
GENERAL/REGULAR ELECTION DAY (NOV)	

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

DAY OF HOLIDAY	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
TUESDAY (GEN./REG. ELECTION)	5:00 AM TUESDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THANKSGIVING	6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

SPECIAL EVENTS

DURING THE SAME PERIODS, MAINTAIN PEDESTRIAN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION.

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA WIDE.

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

DROPOFFS IN WORK ZONES:

THE DROPOFF ADJACENT TO THE TRAVELED LANE SHALL MEET THE CRITERIA OUTLINED IN STANDARD DRAWING MT-101.90. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR MATERIALS, LABOR OR EQUIPMENT NECESSARY TO MEET THE REQUIREMENTS OF MT-101.90.

MAINTENANCE OF TRAFFIC FOR MARKING PAVEMENT REPAIRS:

PROVIDE LANE CLOSURES AS PER THE MAINTENANCE OF TRAFFIC NOTES IN THESE PLANS A MINIMUM OF 24 HOURS PRIOR TO PERFORMING PAVEMENT REPAIRS TO ALLOW THE ENGINEER TO IDENTIFY AND MARK THE AREAS OF THE PAVEMENT IN NEED OF REPAIRS. PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS, LEO HOURS, AND INCIDENTALS NEEDED TO PERFORM THE ABOVE LISTED WORK IS CONSIDERED INCIDENTAL TO MAINTAINING TRAFFIC ON THE PROJECT AND WILL BE INCLUDED IN THE LUMP SUM BID PRICE 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.

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 6 SIGN MONTH ASSUMING 2 PCMS SIGN(S) FOR 3 MONTH(S).

WORK ZONE PAVEMENT MARKINGS, CLASS III, 642 PAINT:

THESE ITEMS ARE TO BE PERFORMED AT ALL PAVEMENT REPAIR AREAS. THE CONTRACTOR SHALL MAINTAIN THESE MARKINGS UNTIL THE PERMANENT MAKINGS CAN BE PLACED IN ACCORDANCE WITH ITEM 642 PAVEMENT MARKINGS.

- WORK ZONE LANE LINE, CLASS III, 642 PAINT, 6" = 1.02 MILE
- WORK ZONE EDGE LINE, CLASS III, 642 PAINT, 6" = 2.48 MILE
- WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT, 12" = 200 FT

USE OF WEIGHTED CHANNELIZERS:

THE WEIGHTED CHANNELIZERS MAY BE USED IN ACCORDANCE WITH THIS SECTION. THE WEIGHTED CHANNELIZERS SHALL BE PREDOMINANTLY ORANGE IN COLOR AND SHALL BE MADE OF LIGHTWEIGHT, FLEXIBLE, AND DEFORMABLE MATERIAL. THEY SHALL BE AT LEAST 42 INCHES IN HEIGHT WITH A WEIGHTED BASE. THEY MAY HAVE A HANDLE OR LIFTING DEVICE, WHICH EXTENDS ABOVE THE 42" MINIMUM HEIGHT.

THE MARKINGS ON THE WEIGHTED CHANNELIZERS SHALL BE HORIZONTAL, CIRCUMFERENTIAL, ALTERNATING ORANGE AND WHITE RETRO REFLECTIVE STRIPES 6 INCHES WIDE. EACH WEIGHTED CHANNELIZERS SHALL HAVE A MINIMUM OF TWO ORANGE AND TWO WHITE STRIPES. ANY NON-RETRO REFLECTIVE SPACES BETWEEN THE HORIZONTAL ORANGE AND WHITE STRIPES SHALL NOT EXCEED 2 INCHES WIDE. THE WEIGHTED CHANNELIZERS SHALL HAVE A 4-INCH MINIMUM WIDTH, REGARDLESS OF ORIENTATION.

USE OF WEIGHTED CHANNELIZERS ON FREEWAYS AND MULTILANE HIGHWAYS SHALL BE LIMITED TO SHORT-TERM OPERATION FOR EITHER DAY OR NIGHT. UPON COMPLETION OF WORK, THE WEIGHTED CHANNELIZERS SHALL BE REMOVED. THE WEIGHTED CHANNELIZERS MAY AGAIN BE PLACED ON THE HIGHWAY WHEN THE WORK IS TO RESUME ON THE FOLLOWING DAY OR NIGHT. ANY LANE CLOSURE USING CHANNELIZATION DEVICES, EXPECTED TO REMAIN FOR MORE THAN TWELVE HOURS, SHALL REQUIRE THE USE OF DRUMS OR BARRIERS. WORK IS TO RESUME ON THE FOLLOWING DAY OR NIGHT.

WHEN USED AT NIGHT, WEIGHTED CHANNELIZERS SHALL ONLY BE PLACED IN THE TANGENT AREA. THE TANGENT AREA IS DEFINED AS THE AREA AFTER THE TRANSITION TAPER WHERE THE WORK TAKES PLACE. DRUMS SHALL BE USED IN THE TRANSITION TAPERS FOR NIGHT OPERATIONS. MAXIMUM SPACING OF THE WEIGHTED CHANNELIZERS SHALL BE 40 FEET.

STEPS SHOULD BE TAKEN TO ENSURE THAT THE WEIGHTED CHANNELIZERS WILL NOT BE BLOWN OVER OR DISPLACED BY WIND OR MOVING TRAFFIC.

BALLASTS SHOULD NOT PRESENT A HAZARD IF THE WEIGHTED CHANNELIZERS ARE INADVERTENTLY STRUCK, NOR SHOULD THEY AFFECT THE VISIBILITY OF THE WEIGHTED CHANNELIZERS. ALL BALLASTS USED SHOULD BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

ACCESS TO PRIVATE PROPERTY:

ACCESS TO DRIVES SHALL BE MAINTAINED VIA EXISTING PAVEMENT OR TEMPORARY PAVEMENT. IN THE EVENT THAT A DRIVE CANNOT BE MAINTAINED AND A CLOSURE IS NEEDED THE CONTRACTOR WILL COORDINATE WITH THE PROPERTY OWNER TO MINIMIZE THE IMPACT TO THE OWNER.

COMMERCIAL PROPERTY WITH MULTIPLE DRIVES MAY HAVE ONE DRIVE CLOSED WHEN WORKING IN THE AREA OF THE DRIVE. COMMERCIAL PROPERTY WITH ONLY ONE DRIVEWAY OR DRIVEWAYS WITH ONE DIRECTION TRAFFIC USE WILL BE CONSTRUCTED PART WIDTH. THE CONTRACTOR WILL COORDINATE WITH THE PROPERTY OWNER TO MINIMIZE THE IMPACT TO THE OWNER.

MAINTAIN ACCESS TO RESIDENTIAL PROPERTIES AT ALL TIMES. WHEN A RESIDENTIAL DRIVE IS CLOSED FOR CONSTRUCTION, MAINTAIN ALTERNATE ACCESS TO THE PROPERTY. IT MAY BE REQUIRED FOR THE CONTRACTOR TO MAINTAIN ONE PASSABLE LANE WITHIN A CLOSURE IN ORDER FOR VEHICLES TO ACCESS RESIDENCY WITH A VEHICLE.

UNLESS CALLED OUT IN THE PLANS THE CONTRACTOR WILL COORDINATED ANY CLOSURES WITH PROPERTY OWNERS AND BE RESPONSIBLE FOR ANY AND ALL PROPERTY USE AGREEMENTS FOR ALTERNATIVE ACCESS.

SUCCESSFULLY NOTIFY THE OCCUPANTS/OWNERS OF COMMERCIAL OR RESIDENTIAL DRIVES TO BE CLOSED AND COORDINATE THE CLOSURE AT LEAST 48 HOURS BEFORE THE CLOSURE BEGINS (SIMPLY LEAVING A WRITTEN NOTICE OR PHONE MESSAGE IS NOT SUFFICIENT). COORDINATE ALTERNATE ACCESS TO RESIDENTIAL PROPERTIES WITH THE OWNER/OCCUPANT.

PAYMENT FOR ALL LABOR, EQUIPMENT, LAW ENFORCEMENT OFFICERS AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC UNLESS ITEMIZED SEPARATELY.

DESIGN AGENCY



DESIGNER
RAM

REVIEWER
XXX MM-DD-YY

PROJECT ID
110705

SHEET TOTAL
P.10 18

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS:

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

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

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
- DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT). IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:
 - FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN 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:
 - o ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND
 - o AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND,
 - o 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 400 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 AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

RIGHT OF WAY PERMITS:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE RIGHT OF WAY USE PERMITS TO INSTALL MAINTENANCE OF TRAFFIC SIGNING.

WEEKLY MAINTENANCE OF TRAFFIC MEETING:

AFTER THE INITIAL PRE-MAINTENANCE OF TRAFFIC MEETING, THE CONTRACTOR SHALL MEET WITH THE PROJECT ENGINEER ON A WEEKLY BASIS TO GO OVER A DETAILED MAINTENANCE OF TRAFFIC REPORT OF AT LEAST 7 CALENDAR DAYS. THIS MEETING SHOULD BE HELD ON THE SAME DAY AND TIME OF EACH WEEK.

ITEM 614 - MAINTENANCE OF TRAFFIC: PAYMENT:

NO ADDITIONAL COMPENSATION SHALL BE MADE BEYOND THE QUANTITIES ITEMIZED IN THE PLAN. ANY OTHER WORK SHALL BE PAID UNDER THE LUMP SUM FOR ITEM 614 - MAINTAINING TRAFFIC.

WORK ZONE SPEED ZONES (WZSZs):

THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISION(S) HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW:

WZSZ REVISION NUMBER	COUNTY-ROUTE-SECTION	DIRECTION(S)
WZ-35807	DEL-23 14.41-21.01	NB & SB

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH, AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSOVER, CONTRAFLOW AND/OR SHOULDER CLOSURE). THE LENGTH OF THE WORK ZONE CONDITION IS MEASURED FROM THE BEGINNING OF THE TAPER FOR THE SUBJECT WORK ZONE CONDITION IMPACTING THE TRAVEL LANES AND/OR SHOULDER TO THE END OF THE DOWNSTREAM TAPER, WHERE DRIVERS ARE RETURNED TO TYPICAL ALIGNMENT. AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS IS REQUIRED TO BALANCE THE ADDITIONAL EXPOSURE CREATED BY INSTALLING AND REMOVING WZSZ SIGNING WITH THE TIME NEEDED TO COMPLETE THE WORK.

IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME.

C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION. EACH DIRECTION SHALL BE ANALYZED INDEPENDENTLY FROM EACH OTHER.

ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ.

WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THIS NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.

ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN OMUTCD PART 6.

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRE-CONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WITHOUT POSITIVE PROTECTION IS GENERALLY REGARDED AS USING DRUMS, CONES, SHADOW VEHICLE, ETC., ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE,

WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH) FOR WORK ZONES ON HIGH-SPEED (55 MPH OR GREATER) MULTI-LANE HIGHWAYS

ORIGINAL POSTED SPEED LIMIT	WITH POSITIVE PROTECTION		WITHOUT POSITIVE PROTECTION	
	WORKERS PRESENT	WORKERS NOT PRESENT	WORKERS PRESENT	WORKERS NOT PRESENT
70	60	65	55	65
65	55	60	50	60
60	55	60	50	60
55	50	55	45	55

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY (ASSUMING 3 DSL SIGN ASSEMBLY(IES) FOR 3 MONTHS)

= 9 SIGN MNTH

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 W16-3A DISTANCE PLATES SHALL READ "2 MILES". THE RIGHT (LEFT) 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.

THE CONTRACTOR SHALL PROVIDE, ERECT, MAINTAIN AND REMOVE AN ADDITIONAL EXTRA ADVANCE WARNING SIGN GROUP DURING THE MOTEC APPROVED LANE CLOSURES.

THE CONTRACTOR SHALL HAVE AN ADDITIONAL EXTRA ADVANCE WARNING SIGN GROUP (6 SIGNS AND 2 DISTANCE PLATES) AVAILABLE FOR USE WHEN DIRECTED BY THE ENGINEER. THE DISTANCE PLATES FOR THIS GROUP SHALL BE ABLE TO BE MODIFIED IN THE FIELD TO SHOW APPROPRIATE WHOLE MILES TO THE LANE TAPER.

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



DESIGNER

RAM

REVIEWER

XXX MM-DD-YY

PROJECT ID

110705

SHEET TOTAL

P.11 18

DEL-SP-FY2025

MODEL: Sheet_SurvFI PAPER SIZE: 34x22 (in.) DATE: 6/20/2024 TIME: 4:28:38 PM USER: mcrenell
P:\Projects\110705\400-Engineering\Roadway\Sheets\110705_GG001.dgn

SHEET NUMBER						PARTICIPATION		ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
7-8	9-12	14	18			01/NHS/05							
			2,879				2,879	251	01021	2,879	SY	PAVEMENT PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 2"	7
			5,388				5,388	251	01021	5,388	SY	PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 4"	7
			634				634	255	10161	634	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN, 13"	7
			1,983				1,983	255	20000	1,983	FT	FULL DEPTH PAVEMENT SAWING	
			530				530	257	10001	530	SY	DIAMOND GRINDING PORTLAND CEMENT CONCRETE PAVEMENT, AS PER PLAN	7
												TRAFFIC CONTROL	
			48				48	621	00100	48	EACH	RPM	
			48				48	621	54000	48	EACH	RAISED PAVEMENT MARKER REMOVED	
			2.48				2.48	642	00104	2.48	MILE	EDGE LINE, 6", TYPE 1	
			1.02				1.02	642	00204	1.02	MILE	LANE LINE, 6", TYPE 1	
			200				200	642	00404	200	FT	CHANNELIZING LINE, 12", TYPE 1	
												MAINTENANCE OF TRAFFIC	
		400					400	614	11110	400	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	11
		6					6	614	18601	6	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	11
		1.02					1.02	614	20560	1.02	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
		2.48					2.48	614	22360	2.48	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
		200					200	614	23690	200	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
		9					9	808	18700	9	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
												INCIDENTALS	
						LS		614	11000	LS		MAINTAINING TRAFFIC	
						LS		623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	7
						LS		624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

RAM

REVIEWER

XXX MM-DD-YY

PROJECT ID

110705

SHEET TOTAL

P.13 | 18

LOCATION	LOCATION				DESIGN			251 PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN, 4.5"	251 PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN, 9"	251 PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 2"	251 PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 4"	255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN, 13"	255 FULL DEPTH PAVEMENT SAWING	257 DIAMOND GRINDING PORTLAND CEMENT CONCRETE PAVEMENT, AS PER PLAN	COMMENTS		
	ROUTE	BEGIN SLM	END SLM	SIDE	LENGTH OF REPAIR	WIDTH OF REPAIR	DEPTH OF REPAIR									LANE	
																1	2
1	DEL-23	14.41		NB	6	12	13										
1	DEL-23	14.48		NB	15	12	13									TRANSVERSE JOINT JUST NORTH OF HILLSMILLER BEFORE CHURCH	
1	DEL-23	14.55		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT	
1	DEL-23	14.63		NB	40	6	4		X			26.7				LEFT SIDE	
1	DEL-23	14.65	14.68	NB	159	6	4		X			106.0				LEFT SIDE	
1	DEL-23	14.70		NB	10	6	4		X			6.7				LEFT SIDE	
1	DEL-23	14.74	14.77	NB	159	6	4		X			106.0				LEFT SIDE	
1	DEL-23	14.78		NB	20	6	4		X			13.3				RIGHT SIDE	
1	DEL-23	14.78	14.93	NB	793	6	4		X			528.7				RIGHT SIDE	
1	DEL-23	14.78		NB	40	12	13	X					53.3	104	53.3	2 JOINTS AND SLAB BETWEEN	
1	DEL-23	14.96		NB	10	12	2	X			13.3						
1	DEL-23	14.97		NB	6	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	15.11		NB	15	12	13	X	X							SLAB	
1	DEL-23	15.13		NB	15	12	13		X				40.0	54	20.0	SLAB	
1	DEL-23	15.13		NB	15	12	13		X				20.0	54	20.0	SLAB	
1	DEL-23	15.14		NB	15	12	13		X				20.0	54	20.0	SLAB	
1	DEL-23	15.22		NB	10	12	13	X	X				26.7	44	13.3	TRANSVERSE JOINT	
1	DEL-23	15.25		NB	10	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	15.27		NB	10	12	4		X							TRANSVERSE JOINT	
1	DEL-23	15.30		NB	6	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	15.30		NB	6	12	13	X								TRANSVERSE JOINT	
1	DEL-23	15.39		NB	10	12	13		X				8.0	36	8.0	TRANSVERSE JOINT	
1	DEL-23	15.39		NB	10	12	13		X				13.3	44	13.3	TRANSVERSE JOINT	
1	DEL-23	15.44		NB	6	12	4	X	X							TRANSVERSE JOINT - PREVIOUS PATCH	
1	DEL-23	15.52		NB	10	12	13		X							TRANSVERSE JOINT	
1	DEL-23	15.53		NB	20	12	4	X	X							SLAB	
1	DEL-23	15.54		NB	10	12	13		X							TRANSVERSE JOINT	
1	DEL-23	15.68	15.71	NB	159	12	4		X							PREVIOUS PATCH	
1	DEL-23	15.68		NB	10	12	13		X							TRANSVERSE JOINT	
1	DEL-23	15.71		NB	10	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	15.71		NB	10	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	15.72		NB	10	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	15.76		NB	10	12	4	X								TRANSVERSE JOINT	
1	DEL-23	15.76	15.81	NB	265	12	4		X							PREVIOUS PATCH	
1	DEL-23	15.78		NB	10	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	15.80		NB	6	12	13	X								TRANSVERSE JOINT	
1	DEL-23	15.88	15.93	NB	264	12	4		X							PREVIOUS PATCH	
1	DEL-23	15.93		NB	6	12	13		X							TRANSVERSE JOINT	
1	DEL-23	15.93	16.03	NB	529	12	4		X							TRANSVERSE JOINT	
1	DEL-23	15.99	16.04	NB	264	4	13	X								RIGHT SIDE	
1	DEL-23	16.02		NB	6	12	13	X	X							TRANSVERSE JOINT	
1	DEL-23	16.03		NB	20	4	2		X							LONGITUDINAL JOINT AT MAIN ROAD	
1	DEL-23	16.05		NB	6	12	13	X								TRANSVERSE JOINT	
1	DEL-23	16.14		NB	10	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	16.17		NB	10	12	4		X							TRANSVERSE JOINT	
1	DEL-23	16.20	16.25	NB	265	4	4		X							TURN LANE JOINT - NEED CHANNEL LINE	
1	DEL-23	16.21		NB	10	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	16.27		NB	10	12	4	X								TRANSVERSE JOINT	
1	DEL-23	16.30		NB	10	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	16.31		NB	10	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	16.31		NB	10	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	16.34		NB	10	12	4	X	X							TRANSVERSE JOINT - ADJACENT TO CONCRETE	
1	DEL-23	16.40		NB	10	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	16.41		NB	10	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	16.43		NB	10	12	4	X								TRANSVERSE JOINT	
1	DEL-23	16.48		NB	10	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	16.50		NB	10	12	4	X	X							TRANSVERSE JOINT	
1	DEL-23	16.55		NB	10	12	4	X								TRANSVERSE JOINT	
QUANTITIES CARRIED TO PAVEMENT SUBSUMMARY																	
											22	3,109	407	1,292	365		

PAVEMENT REPAIR QUANTITIES - DEL 23 NORTHBOUND

DESIGN AGENCY



DESIGNER

RAM

REVIEWER

XXX MM-DD-YY

PROJECT ID

110705

SHEET

P.15

TOTAL

18

LOCATION	LOCATION				DESIGN				251	251	251	251	255	255	257	COMMENTS				
	ROUTE	BEGIN SLM	END SLM	SIDE	LENGTH OF REPAIR	WIDTH OF REPAIR	DEPTH OF REPAIR	LANE	PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN, 4.5"	PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN, 9"	PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 2"	PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 4"	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN, 13"	FULL DEPTH PAVEMENT SAWING	DIAMOND GRINDING PORTLAND CEMENT CONCRETE PAVEMENT, AS PER PLAN					
								1	2	SY	SY	SY	SY	SY	FT		SY			
1	DEL-23	16.57		NB	10	12	4	X				13.3				TRANSVERSE JOINT				
1	DEL-23	16.63		NB	6	12	13		X				8.0	36	8.0	TRANSVERSE JOINT				
1	DEL-23	16.64		NB	10	12	4	X				13.3				TRANSVERSE JOINT				
1	DEL-23	16.65		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	16.67		NB	6	12	13	X	X				16.0	36	8.0	TRANSVERSE JOINT				
1	DEL-23	16.69		NB	10	12	4		X			13.3				TRANSVERSE JOINT				
1	DEL-23	16.69		NB	10	12	4	X				13.3				TRANSVERSE JOINT				
1	DEL-23	16.72		NB	6	12	13	X					8.0	36	8.0	TRANSVERSE JOINT				
1	DEL-23	16.74		NB	6	12	13	X	X				16.0	36	8.0	TRANSVERSE JOINT				
1	DEL-23	16.75		NB	6	12	13	X	X				16.0	36	8.0	TRANSVERSE JOINT				
1	DEL-23	16.77		NB	10	12	4	X				13.3				TRANSVERSE JOINT				
1	DEL-23	16.80		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	16.83		NB	10	12	4		X			13.3				TRANSVERSE JOINT				
1	DEL-23	16.84		NB	10	12	4			X		13.3				TRANSVERSE JOINT				
1	DEL-23	16.88		NB	10	12	4	X				13.3				TRANSVERSE JOINT				
1	DEL-23	16.90		NB	10	12	4	X				13.3				TRANSVERSE JOINT				
1	DEL-23	16.90		NB	6	12	13			X			8.0	36	8.0	TRANSVERSE JOINT				
1	DEL-23	16.92		NB	6	12	13			X			8.0	36	8.0	TRANSVERSE JOINT - PUMPING				
1	DEL-23	16.93		NB	10	12	4			X		13.3				TRANSVERSE JOINT				
1	DEL-23	16.95		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	16.95		NB	10	12	4	X				13.3				TRANSVERSE JOINT				
1	DEL-23	16.96		NB	6	12	13	X					8.0	36	8.0	TRANSVERSE JOINT				
1	DEL-23	16.97		NB	6	12	13	X					8.0	36	8.0	TRANSVERSE JOINT				
1	DEL-23	16.98		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	16.99		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.03		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.03		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.05		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.06		NB	6	12	13	X	X				16.0	36	8.0	TRANSVERSE JOINT - EX MASTIC PATCH				
1	DEL-23	17.12		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.14		NB	6	12	4		X	X		8.0				TRANSVERSE JOINT				
1	DEL-23	17.16		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.17		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.20		NB	10	12	4		X			13.3				TRANSVERSE JOINT				
1	DEL-23	17.21		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.24		NB	10	12	4		X			13.3				TRANSVERSE JOINT				
1	DEL-23	17.26		NB	10	12	4		X			13.3				TRANSVERSE JOINT				
1	DEL-23	17.29		NB	10	12	4		X			13.3				TRANSVERSE JOINT				
1	DEL-23	17.30		NB	10	12	4		X			13.3				TRANSVERSE JOINT				
1	DEL-23	17.35		NB	10	12	4		X			13.3				TRANSVERSE JOINT				
1	DEL-23	17.35		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.36		NB	6	12	13	X	X				16.0	36	8.0	TRANSVERSE JOINT				
1	DEL-23	17.41		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.42		NB	10	12	4		X			13.3				TRANSVERSE JOINT				
1	DEL-23	17.44		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.46		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.48		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.49		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT - EX LOOPS IN REPAIR (DO NO REPLACE)				
1	DEL-23	17.53		NB	10	12	4	X				13.3				TRANSVERSE JOINT				
1	DEL-23	17.56		NB	6	12	13	X	X				16.0	36	8.0	TRANSVERSE JOINT - IN INTERSECTION AT STATE PARK				
1	DEL-23	17.59		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.59		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.60		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	17.61		NB	10	12	4	X	X			26.7				TRANSVERSE JOINT				
1	DEL-23	14.41	21.01	NB								593.6	82.6	258.6	69.2	TO BE USED AS DIRECTED BY ENGINEER				
QUANTITIES CARRIED TO PAVEMENT SUBSUMMARY																	1,442	227	691	165

PAVEMENT REPAIR QUANTITIES - DEL 23 NORTHBOUND

DESIGN AGENCY

 DESIGNER
 RAM
 REVIEWER
 XXX MM-DD-YY
 PROJECT ID
 110705
 SHEET TOTAL
 P.16 | 18

LOCATION	LOCATION				DESIGN			251		251	251	251	255	255	257	COMMENTS	
	ROUTE	BEGIN SLM	END SLM	SIDE	LENGTH OF REPAIR	WIDTH OF REPAIR	DEPTH OF REPAIR	LANE		PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN, 4.5"	PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN, 9"	PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 2"	PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 4"	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN, 13"	FULL DEPTH PAVEMENT SAWING		DIAMOND GRINDING PORTLAND CEMENT CONCRETE PAVEMENT, AS PER PLAN
								1	2	SY	SY	SY	SY	SY	FT		SY
1	DEL-23	20.80	20.78	SB	106	12	4		X				141.3				
1	DEL-23	20.69		SB	50	6	4		X				33.3			RIGHT SIDE	
1	DEL-23	20.67		SB	50	6	4		X				33.3			RIGHT SIDE	
1	DEL-23	20.66		SB	70	6	4		X				46.7			RIGHT SIDE - PREVIOUS REPAIR	
1	DEL-23	20.55		SB	50	6	4		X				33.3			RIGHT SIDE	
1	DEL-23	20.52		SB	10	12	4		X				13.3			TRANSVERSE JOINT	
1	DEL-23	20.46		SB	50	6	4		X				33.3			RIGHT SIDE	
1	DEL-23	20.39		SB	40	6	4		X				26.7			RIGHT SIDE	
1	DEL-23	20.23		SB	40	12	2		X		53.3					SURFACE	
1	DEL-23	19.86	19.79	SB	370	12	2	X			493.3					SURFACE	
1	DEL-23	19.49	19.43	SB	317	12	2	X			422.7					SURFACE	
1	DEL-23	19.20	19.13	SB	370	12	2	X			493.3					SURFACE	
1	DEL-23	18.20	18.18	SB	106	12	2		X		141.3					SURFACE	
1	DEL-23	17.95	17.90	SB	265	4	2		X		117.8					DIAGONAL CONSTRUCTION PHASE JOINT	
1	DEL-23	17.22	17.21	SB	53	4	2		X		23.6					IN FRONT OF WILLEY ROAD	
1	DEL-23	16.92		SB	20	12	2	X			26.7					SURFACE	
1	DEL-23	16.89		SB	6	12	4	X	X			16.0				TRANSVERSE JOINT	
1	DEL-23	16.87		SB	10	12	4	X	X			26.7				TRANSVERSE JOINT	
1	DEL-23	16.52		SB	10	12	2	X			13.3					SURFACE	
1	DEL-23	16.43		SB	10	12	4		X			13.3				TRANSVERSE JOINT	
1	DEL-23	16.31		SB	10	12	4	X	X			26.7				TRANSVERSE JOINT	
1	DEL-23	16.29		SB	50	12	4		X			66.7					
1	DEL-23	16.27	16.23	SB	212	12	2	X	X		565.3					SURFACE	
1	DEL-23	16.23		SB	20	12	13		X			26.7				TRANSVERSE JOINT - CENTER ON TRANSVERSE JOINT	
1	DEL-23	16.23		SB	10	12	4	X				13.3				TRANSVERSE JOINT	
1	DEL-23	16.22		SB	40	4	4					17.8				LEFT SIDE INTO TWLTL	
1	DEL-23	16.18		SB	200	6	2		X		133.3					RIGHT SIDE	
1	DEL-23	16.03		SB	10	12	4		X			13.3					
1	DEL-23	15.93	15.89	SB	212	6	4		X			141.3				LEFT SIDE	
1	DEL-23	15.39		SB	10	4	4		X			4.4				LEFT SIDE	
1	DEL-23	21.01	14.41	SB							372.6	109.1				TO BE USED AS DIRECTED BY ENGINEER	
QUANTITIES CARRIED TO PAVEMENT SUBSUMMARY												2,857	837				

PAVEMENT REPAIR QUANTITIES - DEL 23 SOUTHBOUND

DESIGN AGENCY

 DESIGNER: RAM
 REVIEWER: XXX MM-DD-YY
 PROJECT ID: 110705
 SHEET: P.17 TOTAL: 18

