

MODEL: Sheet_GM1 PAPER:SIZE: 34x22 (in.) DATE: 10/10/2025 TIME: 9:00:19 AM PLTDRV: OHDOT_PDF.pltGg PENTBL: OHDOT_Pen.tbl USER: Jamie.Lowery@dot.ohio.gov WORKSPACE: OHDOTCEv02 WORKSET: 121718 PRODUCT: OpenRoadsDesigner 24.00.00.205 pwc:\ohio\dot-pw-bentley.com\ohio\dot-pw-02\Documents\01 Active Projects\District 03\Erie\121718\400-Engineering\Roadway\Sheets\121718_GN001.dgn

UTILITIES

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

COMMUNICATION BRIGHTSPEED 203 W 9 TH STREET LORAIN, OH 44052 440.244.8330	COUNTY ERIE COUNTY ENGINEERS 2700 COLUMBUS AVENUE SANDUSKY, OH 44870 419.627.7710
COUNTY ERIE COUNTY SEWER 554 RIVER RD HURON, OH 44839 419.433.7303	ELECTRIC OHIO EDISON 2508 WEST PERKINS AVENUE SANDUSKY, OH 44870 419.627.6881
GAS COLUMBIA GAS OF OHIO 3101 NORTH RIDGE RD E LORAIN, OH 44055 440.240.6144	GAS TC ENERGY 589 N STATE RD MEDINA, OH 44256 330.721.4163
TRAFFIC ODOT DISTRICT THREE 906 CLARK AVENUE ASHLAND, OH 44805 419.207.2868	WATER ERIE COUNTY WATER 2614 COLUMBUS AVENUE SANDUSKY, OH 44870 419.627.7666
WATER NORTHERN OHIO RURAL WATER P.O. BOX 96 COLLINS, OH 44826 419.668.7213	

THE AFOREMENTIONED UTILITY COMPANIES AND AGENCIES HAVE VARIOUS FACILITIES IN THE AREA THAT WILL REMAIN IN PLACE DURING CONSTRUCTION.

EXTREME CAUTION SHOULD BE EXERCISED IN AREAS WITH UTILITIES. SECTIONS 105.07 AND 107.16 OF THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS REQUIRE, AMONG OTHER THINGS, THAT THE CONTRACTOR COOPERATE WITH ALL UTILITIES LOCATED WITHIN THE LIMITS OF THIS CONSTRUCTION PROJECT AND TAKE RESPONSIBILITY FOR THE PROTECTION OF THE UTILITY PROPERTY AND SERVICES.

EXISTING PLANS

THE FOLLOWING EXISTING PLANS MAY BE INSPECTED IN THE ODOT DISTRICT THREE OFFICE IN ASHLAND:

PLAN	DATE
ERI-2-20.10	2007
ERI-2-25.81	2009
ERI-2-25.81 PM	2017

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.

ROUTINE MAINTENANCE

BETWEEN THE TIME THAT BIDS ARE TAKEN AND THE START OF CONSTRUCTION, THE MAINTAINING AGENCY MAY ENTER UPON THE PROJECT AND PERFORM ROUTINE MAINTENANCE SUCH AS CRACK SEALING, PATCHING, AND BERM AND SHOULDER REPAIR. THE EFFECTS, IF ANY, OF THE PERFORMANCE OF ROUTINE MAINTENANCE SHALL BE CONSIDERED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE PLAN AND THE RESULTING CONDITIONS SHALL NOT BE CONSIDERED AS DIFFERING MATERIALLY FROM THOSE EXISTING AT THE TIME BIDS WERE TAKEN.

PROFILE AND ALIGNMENT

PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. (PREVIOUS CONSTRUCTION PLANS SHOWING THE ORIGINAL ALIGNMENT AND PROFILE, ARE AVAILABLE FOR INSPECTION AT THE ODOT DISTRICT 3 OFFICE). PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

PAVEMENT CORING INFORMATION

COUNTY	ROUTE	SLM	ASPHALT	CONCRETE	LOCATION	DIRECTION	YEAR CORED
ERI	2	25.04	4.5	8.0	RWP	EB	2024
ERI	2	25.04	3.5	8.5	EL	EB	2024
ERI	2	25.04	4.0	8.5	LWP	EB	2024
ERI	2	25.65	4.5	8.0	LWP	EB	2024
ERI	2	25.65	4.5	8.5	RWP	EB	2024
ERI	2	25.65	15.0	0.0	SH	EB	2024
ERI	2	26.42	3.5	9.0	RWP	EB	2024
ERI	2	26.42	2.25	4.75	EL	EB	2024
ERI	2	26.42	3.5	8.0	LWP	EB	2024
ERI	2	27.22	4.0	9.0	LWP	EB	2024
ERI	2	27.22	4.0	8.5	RWP	EB	2024
ERI	2	27.22	11.0	0.0	SH	EB	2024
ERI	2	27.98	7.0	8.0	RWP	EB	2024
ERI	2	27.98	5.0	0.0	EL	EB	2024
ERI	2	27.98	6.5	8.5	LWP	EB	2024
ERI	2	28.74	5.0	10.0	LWP	EB	2024
ERI	2	28.74	4.5	9.5	RWP	EB	2024
ERI	2	28.74	12.0	0.0	SH	EB	2024
ERI	2	29.87	6.0	9.0	RWP	EB	2024
ERI	2	29.87	6.0	7.5	LWP	EB	2024
ERI	2	29.87	6.0	8.5	EL	EB	2024
ERI	2	30.34	5.0	9.5	LWP	EB	2024
ERI	2	30.34	5.0	9.0	SH	EB	2024
ERI	2	30.34	5.0	9.0	RWP	EB	2024

SAFETY EDGE

IN ADDITION TO THE REQUIREMENTS OF 401.12, ATTACH A DEVICE TO THE SCREED OF THE PAVER THAT CONFINES THE MATERIAL AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A COMPACTED WEDGE SHAPE PAVEMENT EDGE OF APPROXIMATELY 30 DEGREES (NOT STEEPER THAN 40 DEGREES). ENSURE THE DEVICE MAINTAINS CONTACT WITH THE EXISTING SURFACE, AND ALLOW FOR AUTOMATIC TRANSITION TO CROSS ROADS, DRIVEWAYS AND OBSTRUCTIONS. DO NOT USE CONVENTIONAL SINGLE PLATE STRIKE OFF.

CONSTRUCTION OF SAFETY EDGE CAN BE OMITTED AT LOCATIONS WHERE EXISTING WIDTH OF GRADED SHOULDER OR BERM IS LESS THAN 12". PROJECTS WITH VARYING CONDITIONS SHOULD USE SAFETY EDGE WHERE POSSIBLE. PLAN PREPARATION HAS MADE EVERY REASONABLE ATTEMPT TO IDENTIFY POSSIBLE SAFETY EDGE LOCATIONS.

USE THE TRANSTECH SHOULDER WEDGE MAKER, THE CARLSON SAFETY EDGE END GATE, THE ADVANT-EDGER, THE TROXLER SAFETSLOPE OR A SIMILAR APPROVED-EQUAL DEVICE THAT PRODUCES THE SAME WEDGE CONSOLIDATION RESULTS. CONTACT INFORMATION FOR THESE WEDGE SHAPE COMPACTION DEVICES IS THE FOLLOWING:

TRANSTECH SYSTEMS, INC. 1594 STATE STREET SCHENECTADY, NY 12304 1-800-724-6306 www.transtechsys.com	ADVANT-EDGE PAVING EQUIPMENT LLC P.O. BOX 9163 NISKAYUNA, NY 12309-0163 518-280-6090 www.advantedgepaving.com
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CARLSON SAFETY EDGE END GATE 18450 50TH AVENUE EAST TACOMA, WA 98446 253-875-8000	TROXLER ELECTRONICS LABORATORIES INC. 3008 E. CORNWALLIS RD. RESEARCH TRIANGLE PARK, NC 27709 1-877-TROXLER www.troxlerlabs.com
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IF ELECTING TO USE A SIMILAR DEVICE, PROVIDE PROOF THAT THE DEVICE HAS BEEN USED ON PREVIOUS PROJECTS WITH ACCEPTABLE RESULTS OR CONSTRUCT A TEST SECTION PRIOR TO THE BEGINNING OF WORK AND DEMONSTRATE WEDGE COMPACTION TO THE SATISFACTION OF THE ENGINEER. SHORT SECTIONS OF HANDWORK WILL BE ALLOWED WHEN NECESSARY FOR TRANSITIONS AND TURNOUTS OR OTHERWISE AUTHORIZED BY THE ENGINEER.

IN ADDITION TO THE REQUIREMENTS OF 401.16, MAKE THE FIRST ROLLER PASS 8 TO 12 INCHES AWAY FROM TAPERED EDGE. DO NOT ROLL THE TAPER.

ITEM 209 – PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN

PREPARE THE SHOULDER FOR PAVING A CONSISTENT SAFETY EDGE IN BOTH THICKNESS AND WIDTH.

PRIOR TO PAVING THE SAFETY EDGE, GRADE AN AREA 10 INCHES WIDE, BEGINNING AT THE EDGE OF THE PAVED ROADWAY, TO PROVIDE A LEVEL SURFACE FREE OF VEGETATION FOR CONSTRUCTION OF THE SAFETY EDGE. IF NECESSARY, EXCAVATE THE GRADED AREA TO THE DEPTH NECESSARY TO CONSTRUCT THE SAFETY EDGE. COMPACT THE GRADED SHOULDER ACCORDING TO 617.05 OR AS DIRECTED BY THE ENGINEER. THE GRADED SHOULDER BEYOND THE 10-INCH WIDE AREA FOR THE SAFETY EDGE SHALL BE GRADED AT A 10:1 SLOPE, OR AS DIRECTED BY THE ENGINEER. THE INTENT IS TO PROVIDE AN UNOBSTRUCTED AND POSITIVE FLOW OF STORM WATER FROM THE PAVEMENT TO THE DITCH.

ITEM 209 – LINEAR GRADING

THE CONTRACTOR IS REQUIRED TO PERFORM LINEAR GRADING ON THE GRADED SHOULDER. IT IS ANTICIPATED THAT THERE ARE AREAS WHERE THE GRADED SHOULDER IS AT A HIGHER ELEVATION THAN THE ADJACENT PROPOSED PAVEMENT. A 10:1 SLOPE SHALL BE ESTABLISHED, OR AS DIRECTED BY THE ENGINEER, WHEN PERFORMING ITEM 209 LINEAR GRADING. THE INTENT IS TO PROVIDE AN UNOBSTRUCTED AND POSITIVE FLOW OF STORM WATER FROM THE PAVEMENT TO THE DITCH. THE LINEAR GRADING SHALL BE PERFORMED AFTER THE INTERMEDIATE COURSE HAS BEEN COMPLETED AND BEFORE THE SURFACE COURSE IS PLACED. ALL LABOR AND EQUIPMENT NECESSARY TO PERFORM THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID PER MILE FOR ITEM 209 - LINEAR GRADING.

ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING PAVEMENT OR PAVED BERM WHICH MAY BE ASPHALT, BRICK, CONCRETE, OR A COMBINATION OF EACH, IN AREAS OF EXISTING PAVEMENT FAILURE.

PAVEMENT REPAIR SHALL BE PERFORMED AFTER PAVEMENT PLANING AND BEFORE PLACEMENT OF THE OVERLAY COURSES. THE DEPTH OF REMOVAL SHALL BE AS DIRECTED BY THE ENGINEER WITH A MAXIMUM DEPTH OF 3". THE MINIMUM WIDTH OF REPAIR SHALL BE 4 FT.

REPLACEMENT MATERIAL SHALL BE ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (449) AND SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE.

FOR BID AND ESTIMATING PURPOSES, APPROXIMATELY 70% OF THE REPAIRS ARE TO BE CONSIDERED LONGITUDINAL REPAIRS AND 30% ARE TO BE CONSIDERED TRANSVERSE REPAIRS UNLESS OTHERWISE STATED.

LONGITUDINAL IS DEFINED AS ANY REPAIR THAT HAS A GREATER MEASUREMENT PARALLEL TO THE CENTERLINE THAN THE MEASUREMENT PERPENDICULAR TO THE CENTERLINE. TRANSVERSE IS DEFINED AS ANY REPAIR THAT HAS A GREATER MEASUREMENT PERPENDICULAR TO THE CENTERLINE THAN THE MEASUREMENT PARALLEL TO THE CENTERLINE.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. FOR PAYMENT PURPOSES, ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN IS TO BE A MAXIMUM OF 3” DEEP. THE FOLLOWING ITEMS AND QUANTITIES ARE PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

ERI-2 MAINLINE (01/NHS): ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN (LONGITUDINAL)	1,468 CY
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ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN (TRANSVERSE)	629 CY
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ERI-60 RAMPS (01/NHS): ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN (LONGITUDINAL)	295 CY
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ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN (TRANSVERSE)	125 CY
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ITEM 254 - PATCHING PLANED SURFACE

AN ESTIMATED QUANTITY OF ITEM 254 - PATCHING PLANED SURFACE HAS BEEN SET UP TO BE USED AS DIRECTED BY THE ENGINEER AS DESCRIBED IN CMS 254.04. THE LIMIT OF THE PATCHING DEPTH IS 0 TO 2 IN.

DESIGN AGENCY
DISTRICT 3



ENGINEERING
TEAM ONE

DESIGNER
JLL

REVIEWER
ACM 6-16-25

PROJECT ID
121718

SHEET	TOTAL
P.06	37

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE

CURBED AREAS:
THE INTENT OF THE PLANING IS TO MILL THE SPECIFIED DEPTH AT THE CENTER OF PAVEMENT AT NON-CURBED AREAS. THE PAVEMENT SLOPE SHALL BE 0.010 MINIMUM AND 0.016 PREFERRED, CONTINUOUS BETWEEN THE CROWN AND THE PROPOSED EDGELINE/SHOULDER. THE MILLING DEPTH SHALL BE CONTROLLED FROM THE CENTER OF PAVEMENT IN CONFORMANCE WITH THE ABOVE GUIDELINES.

NON-CURBED AREAS:
THE INTENT OF THE PLANING IS TO MILL THE SPECIFIED DEPTH ALONG THE CURB CONTINGENT ON THE FOLLOWING: THE MAXIMUM CROSS SLOPE SHALL BE 0.02 WHILE THE MINIMUM CROSS SLOPE SHALL BE 0.01. THE PREFERRED CROSS SLOPE IS 0.016. THE CROWN OF THE PAVEMENT SHALL BE LOCATED BETWEEN THE TRAVELED LANES, OR AS DIRECTED BY THE ENGINEER. THE MILLING DEPTH SHALL BE CONTROLLED FROM THE CURB, TO PRODUCE A CROSS SLOPE IN CONFORMANCE WITH THE ABOVE GUIDELINES.

SPECIAL ATTENTION SHALL BE GIVEN TO SUPERELEVATED CURVES. THE SUPERELEVATION SHALL BE MAINTAINED AND/OR RESTORED, IF NECESSARY, AS DIRECTED BY THE ENGINEER. IF THERE IS NO INFORMATION IN THE PLANS TO CHANGE THE SUPERELEVATION, THE INTENT IS TO MAINTAIN THE EXISTING SUPERELEVATION.

THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE TO ALL CATCH BASINS AND INLETS.

THE PROGRESSION OF THE PLANING SHALL PROCEED IN SUCH A MANNER THAT NORMAL TRAFFIC WILL NOT BE REQUIRED TO RUN OVER THE PLANED ROADWAY SURFACE MORE THAN FOURTEEN (14) CALENDAR DAYS. FOR EACH CALENDAR DAY BEYOND THE 14 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE FEE OF \$5,000 PER DAY.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT PLANING, ASPHALT CONCRETE. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER SQUARE YARD OF ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE.

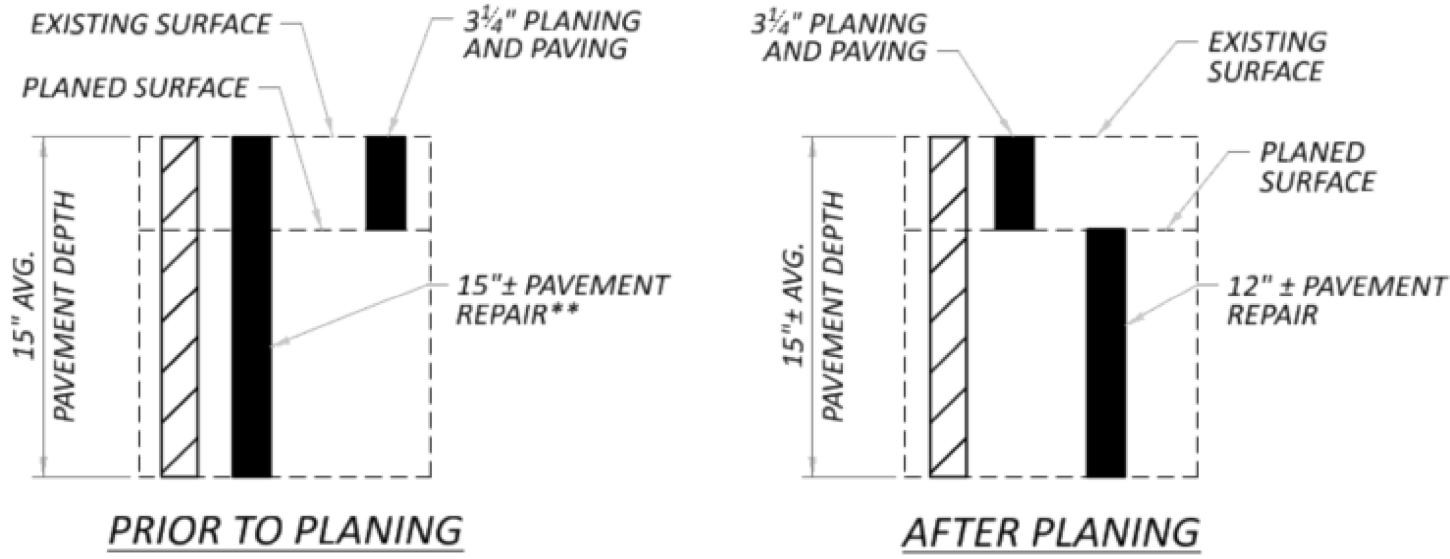
ITEM 255 - FULL DEPTH REMOVAL AND RIGID REPLACEMENT, TYPE 2, CLASS QC MS

THIS ITEM OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING PAVEMENT WHICH MAY BE ASPHALT, CONCRETE, OR A COMBINATION OF EACH, IN AREAS OF EXISTING PAVEMENT FAILURE.

PAVEMENT REPAIR SHOULD BE PERFORMED AFTER PAVEMENT PLANING AND BEFORE THE PLACEMENT OF THE INTERMEDIATE COURSE. THE DEPTH OF REMOVAL SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT WITH AN AVERAGE REMOVAL DEPTH OF 12".

REPLACEMENT MATERIAL SHOULD BE PORTLAND CEMENT CONCRETE PAVEMENT, CLASS QC MS. REPLACE THE CONCRETE AN AVERAGE OF 12" DEEP TO FINISH FLUSH WITH THE PROPOSED PLANED SURFACE.

ALTERNATIVELY, THE CONTRACTOR MAY PERFORM THE PAVEMENT REPAIR PRIOR TO PAVEMENT PLANING AND REPLACE THE CONCRETE TO FINISH FLUSH WITH THE EXISTING PAVEMENT SURFACE. THE TOP 3.25" OF PAVEMENT MAY BE PORTLAND CEMENT CONCRETE OR ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (449) MATERIAL. THE TOP 3.25" OF MATERIAL TO MATCH THE EXISTING PAVEMENT SURFACE (AND TO BE PLANED WITH THE PROPOSED PAVEMENT TREATMENT) SHALL BE CONSIDERED INCIDENTAL TO ITEM 255 – FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 2, CLASS QC MS.



**TOP 3 1/4" INCIDENTAL TO ITEM 255

FOR BID AND ESTIMATING PURPOSES, APPROXIMATELY 10% OF THE REPAIRS ARE TO BE CONSIDERED LONGITUDINAL REPAIRS AND 90% ARE TO BE CONSIDERED TRANSVERSE REPAIRS UNLESS OTHERWISE STATED. THIS APPROXIMATION IS SHOWN IN THE QUANTITIES BELOW.

LONGITUDINAL IS DEFINED AS ANY REPAIR THAT HAS A GREATER MEASUREMENT PARALLEL TO THE CENTERLINE THAN THE MEASUREMENT PERPENDICULAR TO THE CENTERLINE. TRANSVERSE IS DEFINED AS ANY REPAIR THAT HAS A GREATER MEASUREMENT PERPENDICULAR TO THE CENTERLINE THAN THE MEASUREMENT PARALLEL TO THE CENTERLINE.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR EXCEPT ITEM 255 - FULL DEPTH PAVEMENT SAWING (FT) WILL BE PAID FOR SEPARATELY. FOR PAYMENT PURPOSES, ITEM 255 - FULL DEPTH REMOVAL AND RIGID REPLACEMENT, TYPE 2, CLASS QC MS IS TO BE AN AVERAGE OF 12" DEEP. THE FOLLOWING ITEMS AND QUANTITIES ARE PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

ERI-2 MAINLINE (01/NHS):		
ITEM 255 – FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 2, CLASS QC MS (TRANSVERSE)		16,525 SY
ITEM 255 – FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 2, CLASS QC MS (LONGITUDINAL)		1,835 SY
ITEM 255 – FULL DEPTH PAVEMENT SAWING		66,106 FT

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 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 408 - PRIME COAT, AS PER PLAN

THE CONTRACTOR SHALL APPLY ONE COAT OF MC-70 (AS PER SECTION 702) AT A RATE OF 0.40 GAL/SY TO THE COMPLETED AGGREGATE SHOULDER (ITEM 617) AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF PAVEMENT OR EDGE LINE. THE CONTRACTOR SHALL APPLY THE PRIME COAT TO THE AGGREGATE SHOULDER WITHIN 7 (SEVEN) CALENDAR DAYS OF THE BERM MATERIAL BEING LAYED ON THE SHOULDER. PRIOR TO APPLYING THE PRIME COAT LAYER, IT IS ALSO THE CONTRACTOR’S RESPONSIBILITY TO CORRECT ANY DAMAGES TO AGGREGATE SHOULDER THAT HAS OCCURRED DURING THE PERIOD OF TIME BETWEEN THE LAYING OF THE BERM MATERIAL AND THE SPRAYING OF PRIME COAT. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS.

STOP BAR PLACEMENT

IN ORDER TO COMPLY WITH THE REQUIREMENTS OF THE TRAFFIC ENGINEERING MANUAL AND THE OMUTCD, AT NORMAL STOP CONTROLLED INTERSECTIONS WITHOUT CROSSWALK, PLACE THE LEADING EDGE OF THE STOP BAR (CLOSEST TO THE CENTER OF THE INTERSECTION) IN ACCORDANCE WITH THE BELOW TABLE UNLESS SPECIFIED OTHERWISE IN THESE PLANS:

SHOULDER WIDTH OF INTERSECTED ROADWAY	PLACE THE LEADING EDGE OF STOP BAR ON INTERSECTING/APPROACH ROADWAY
0 FEET < SHOULDER WIDTH ≤ 2 FEET	4 FEET BACK FROM EDGE OF PAVED SHOULDER OF INTERSECTED ROADWAY
2 FEET < SHOULDER WIDTH ≤ 4 FEET	2 FEET BACK FROM EDGE OF PAVED SHOULDER OF INTERSECTED ROADWAY
SHOULDER WIDTH > 4 FEET	IN LINE WITH EDGE OF PAVED SHOULDER OF INTERSECTED ROADWAY

PAVEMENT MARKING LOG

PRIOR TO REMOVING, GRINDING, OR OTHERWISE DESTROYING ANY EXISTING PAVEMENT MARKINGS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CREATE AN EXISTING PAVEMENT MARKING LOG IN ORDER TO PLACE THE PROPOSED PAVEMENT MARKINGS IN THE SAME LOCATION AS THEIR EXISTING CONFIGURATION. SUBMIT THE EXISTING PAVEMENT MARKING LOG TO THE ENGINEER AND OBTAIN HIS OR HER APPROVAL PRIOR TO REMOVING, GRINDING, OR OTHERWISE DESTROYING THE EXISTING PAVEMENT MARKINGS.

ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THIS WORK SHOULD BE INCLUDED IN THE CONTRACT LUMP SUM BID PRICE FOR ITEM 614 – MAINTAINING TRAFFIC.

ITEM 611 – CASTINGS ADJUSTED TO GRADE

THE CASTING TO BE ADJUSTED MAY OR MAY NOT HAVE AN EXISTING FRAME. THE WORK SHALL CONSIST OF ADJUSTING THE EXISTING CASTING TO THE SATISFACTION OF THE ENGINEER. IT IS NOT INTENDED TO PLACE NEW FRAMES WHERE NONE CURRENTLY EXIST. THE CONTRACTOR IS REMINDED TO FIELD CHECK ALL ADJUSTMENT TO GRADE ITEMS PRIOR TO BIDDING, AS NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR LABOR AND MATERIALS REQUIRED TO SATISFACTORILY ADJUST CASTINGS WITHOUT FRAMES.

01/NHS:		
ITEM 611 – CATCH BASIN ADJUSTED TO GRADE		6 EACH
EASTBOUND – SLM 29.48 (x2), 29.53 (x2)		
WESTBOUND – SLM 29.48 (x1), 29.53 (x1)		

ITEM SPECIAL – MISCELLANEOUS METAL (D119)

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

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

01/NHS:	
SPECIAL - MISCELLANEOUS METAL	500 LB

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

ITEM 644 – SPEED MEASUREMENT MARKING

PLACE A SERIES OF SPEED MEASUREMENT MARKINGS ON THE ROADWAY TO ASSIST IN THE ENFORCEMENT OF SPEED REGULATIONS. EACH SPEED MEASUREMENT MARKING SHALL CONSIST OF ONE WHITE TRANSVERSE 24-INCH LINE MEASURED IN THE DIRECTION OF TRAVEL AND 4 FEET IN LENGTH.

THE MARKINGS SHALL BE PLACED AT ONE-QUARTER MILE INTERVALS FOR ONE (1) MILE ALONG THE ROADWAY, ENTIRELY ON THE PAVED SHOULDER, AT LOCATIONS SHOWN BELOW:

ERI-2-26.00 TO 27.00 (EASTBOUND & WESTBOUND)

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE THE MARKINGS LAID OUT BY A STATE OF OHIO REGISTERED PROFESSIONAL SURVEYOR. ON SECTIONS WITH CURVES, THE MARKINGS ON THE INSIDE OF THE CURVE SHALL MEET THE REQUIRED ONE-QUARTER MILE INTERVALS. MARKINGS ON THE OUTSIDE OF THE CURVE SHALL BE DIRECTLY ACROSS FROM THE MARKINGS ON THE INSIDE OF THE CURVE, NOT STAGGERED. A RECORD IS TO BE KEPT AND ONE ORIGINAL SIGNED AND SEALED DOCUMENT IS TO BE SENT TO THE DISTRICT TRAFFIC ENGINEER AND ONE COPY IS TO BE SENT TO THE DISTRICT CONSTRUCTION ENGINEER.

PAYMENT WILL BE FOR EACH 24-INCH WIDE BY 4-FEET LONG MARKING AND SHALL INCLUDE THE PAVEMENT MARKING MATERIAL USED AND THE SURVEYING WORK PER ITEM 644 – SPEED MEASUREMENT MARKING.

DIGITAL DATA FOR MATERIAL TICKETING UTILIZING E-TICKETING PORTAL

- DESCRIPTION:
THIS WORK CONSISTS OF PROVIDING DIGITAL DATA FOR PILOTING DIGITAL INFORMATION TRANSFER FOR THE FOLLOWING MATERIAL WEIGHT TICKETS OF MATERIALS DELIVERED TO THE PROJECT FOR THE FOLLOWING:
- AGGREGATE
 - ASPHALT CONCRETE
 - PORTLAND CONCRETE

PROVIDE MATERIAL TICKET INFORMATION IN AN DIGITAL FORMAT DIRECTLY RECORDED FROM THE MATERIAL LOADING SOURCE.

THIS NOTE IN NO WAY SUPERSEDES ANY OTHER COMMERCIAL REGULATIONS OR ANY OTHER LEGAL REQUIREMENTS REGULATING THE TRANSPORTATION OF COMMERCIAL MATERIALS. THIS DOES NOT PRECLUDE OR DISMISS ANY REQUIREMENT FOR PAPER TICKETS REQUIRED BY OTHER RULES AND REGULATIONS.

REQUIREMENTS:
SEND DIGITAL TICKET INFORMATION TO THE DEPARTMENT’S DIGITAL TICKETING PORTAL AS THE INDIVIDUAL MATERIAL LOADS ARE GENERATED AND SHIPPED TO THE PROJECT. THE DIGITAL MATERIAL TICKET SHALL CONTAIN INFORMATION AS REQUIRED PER THE APPLICABLE MATERIAL SPECIFICATION FOR WEIGHT MEASUREMENT AND OTHER MATERIAL CHARACTERISTICS.

THE DEPARTMENT WILL REJECT ANY LOAD THAT DOES NOT HAVE A CORRESPONDING ETICKET UNLESS THE CAUSE IS BEYOND THE CONTRACTOR’S CONTROL. IN SUCH CIRCUMSTANCES, PAPER TICKETS MAY BE PERMITTED.

SETUP, CALIBRATION, AND DATA INTEGRATION:
SUPPLIERS SHALL COOPERATE WITH THE DEPARTMENT AND THE DEPARTMENT’S ETICKETING VENDOR TO ESTABLISH DIGITAL INFORMATION TRANSFER FROM THE SUPPLIERS TICKETING SYSTEM TO THE DEPARTMENT’S ETICKETING PORTAL. NO EARLIER THAN 14 DAYS AFTER PROJECT EXECUTION BUT NOT LATER THAN 30 DAYS PRIOR TO INITIATING WORK, IDENTIFY IN WRITING THE MATERIAL SOURCE LOAD READ-OUT WEIGHING SYSTEM THE SUPPLIER UTILIZES.

THE MATERIAL SUPPLIER SHALL COOPERATE WITH ODOT’S ETICKETING PORTAL VENDOR IN THE CREATION OF AN APPLICATION PROGRAMMING INTERFACE (API) TO INTEGRATE MATERIAL SOURCE LOAD READ-OUT DATA WITH THE DEPARTMENT’S ETICKETING PORTAL. THE DEPARTMENT’S ETICKETING PORTAL VENDOR SHALL BE RESPONSIBLE FOR LEADING THE API CREATION. UPON API CREATION, UTILIZE THE API TO PROVIDE DIGITAL MATERIAL SOURCE LOAD READ-OUT DATA FROM THE MATERIAL SOURCE LOAD READ-OUT WEIGHING SYSTEM TO THE DEPARTMENT’S ETICKETING PORTAL.

CONDUCT A TEST OF EACH SUPPLIER’S INTEGRATION WITH THE DEPARTMENT’S ETICKETING PORTAL PRIOR TO SHIPPING MATERIAL TO THE PROJECT. COMPLETE TEST AT LEAST 14 DAYS PRIOR TO SHIPPING MATERIAL UNLESS OTHERWISE APPROVED BY THE ENGINEER. THE TEST MUST INVOLVE AT LEAST FOUR TEST ETICKETS FROM EACH SUPPLIER APPROVED FOR USED ON THE PROJECT FOR MATERIALS TO BE USED ON THE PROJECT. THE TEST ETICKETS MUST ACCURATELY REFLECT THE PROPER NOMENCLATURE AND ACCURACY DEFINED; ALL OTHER CATEGORIES SHALL BE MARKED “TEST”. AFTER THE ENGINEER CONFIRMS THE TEST ETICKETS HAVE BEEN ENTERED INTO THE DEPARTMENT’S TICKET PORTAL, VOID THE TEST ETICKETS WITH THE REASON “SETUP TESTING”. IF ANY LOAD READ-OUT WEIGHING SYSTEM CHANGES ARE INTENDED BY THE SUPPLIER AFTER THE CREATION OF THE SUPPLIER SPECIFIC API, COORDINATE WITH THE ODOT TO ENSURE API COMPATIBILITY.

ENSURE CONTINUED INTERNET CONNECTIVITY DURING THE API USAGE TO MAINTAIN CONNECTION THE DEPARTMENT’S ETICKETING PORTAL DURING MATERIAL PRODUCTION AND DELIVERY TO THE PROJECT, ENSURE DELIVERY OF ETICKET PRIOR TO THE PLACEMENT OF MATERIAL, BUT NOT PRIOR TO THE LOADING OF MATERIAL AT THE SOURCE.

UPON SUCCESSFUL TESTING OF THE DATA INTEGRATION, PHYSICAL MATERIAL TICKETS FOR THE DEPARTMENT WILL NOT BE REQUIRED.

PAYMENT:
FOR INITIAL SETUP OF THE API INTEGRATION, THE MATERIAL VENDORS SHALL ASSUME APPROXIMATELY 16 PERSON HOURS AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE MATERIAL. FOR EXTREME SITUATIONS INVOLVING EXCESSIVE ESTABLISHMENT OF THE API AND DIGITAL INFORMATION TRANSFER, NOTIFY THE ENGINEER PER CMS 104.02.

THE COST ASSOCIATED WITH CREATING AND MAINTAINING AN API AND PROVIDING DIGITAL TICKETING DATA IS INCIDENTAL TO THE COST OF THE ITEM UTILIZING THE MATERIAL BEING PLACED.

DESIGN AGENCY

DISTRICT 3

ENGINEERING TEAM ONE

DESIGNER

JLL

REVIEWER

ACM 6-16-25

PROJECT ID

121718

SHEET

P.07

TOTAL

37

MAINTENANCE OF LOCAL DETOUR ROUTE

A LOCAL DETOUR ROUTE, OTHER THAN THE OFFICIAL SIGNED ODOT DETOUR ROUTE, AS NOTED IN THESE PLANS, WILL BE SELECTED BY AGREEMENT BETWEEN ODOT AND LOCAL GOVERNMENTAL AGENCIES PRIOR TO THE HIGHWAY CLOSURE. DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST, AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DIRECTED BY THE ENGINEER. THE DESIGNATED LOCAL DETOUR ROUTE IS TO BE REVIEWED AND REPAIRED PRIOR TO THE ASPHALT CONTRACTOR OR SUBCONTRACTOR LEAVING THE PROJECT.

PAYMENT FOR THE WORK NECESSARY TO REPAIR THESE LOCAL ROADS WILL BE PERFORMED BY CHANGE ORDER.

CONCURRENT RAMP CLOSURES AND RESTRICTIONS

THE CONTRACTOR IS PERMITTED TO UTILIZE CONCURRENT RAMP CLOSURES AT MULTIPLE LOCATIONS ON THE PROJECT. HOWEVER, NO TWO ADJACENT RAMP LOCATIONS SHALL BE CLOSED AT THE SAME TIME, NOR SHALL DETOUR ROUTES OVERLAP OR CONFLICT WITH EACH OTHER.

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(S)	COUNTY-ROUTE-SECTION(S)	DIRECTION(S)
WZ-20727	ERI-2-24.50 TO 30.49	EB
WZ-20727	ERI-2-24.50 TO 30.49	WB

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.

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRECONSTRUCTION, 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.

01/NHS:
ITEM 808 - DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY - 84 SIGN MNTH
[ASSUMING 14 DSL SIGN ASSEMBLYIES FOR 6 MONTHS]

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 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.

01/NHS:
ITEM 614 – PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
24 SIGN MONTH
ASSUMING 4 PCMS SIGNS FOR 6 MONTHS

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

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

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

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

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

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

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

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

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

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

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

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

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

01/NHS:
ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE

1,200 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.

LIMITATION ON WORK ZONE LENGTH

LIMITATIONS ON WORK ZONE LENGTH SHALL BE IMPLEMENTED SO AS TO NOT CREATE CONGESTION AND UN-NEEDED STRAIN ON TRAFFIC AND TRAFFIC FACILITIES. THE MAXIMUM WORK ZONE LENGTH SHALL BE FOUR (4) MILES, SUBJECT TO MODIFICATION BY THE ENGINEER. CONSECUTIVE WORK ZONES ARE ALLOWED WITH A MINIMUM DISTANCE OF TWO (2) MILES REQUIRED BETWEEN WORK ZONE AREAS.

DESIGN AGENCY

DISTRICT 3



ENGINEERING TEAM ONE

DESIGNER

JLL

REVIEWER

ACM 6-16-25

PROJECT ID

121718

SHEET

P.10

TOTAL

37

ERI-2-24.50

MODEL: Sheet3 PAPER SIZE: 34x22 (in.) DATE: 10/10/2025 TIME: 9:03:06 AM PLT DRV: OHDOT_PDF.plt USER: Jamie.Lowery@dot.ohio.gov WORKSPACE: OHDOTCev02 WORKSET: 121718 PRODUCT: OpenRoads Designer 24.00.00.2005
 www.ohiodot-pw.bentley.com:ohiodot-pw-02/Documents/01 Active Projects/District 03/Erie/121718/400-Engineering/Roadway/Sheets/121718_GG001.dgn

SHEET NUMBER								PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
6	7	9	10	18	19	24	26	01/NHS	02/BRO						
														STRUCTURE REPAIR (ERI-2-29.50 L)	
							78		78	202	98200	78	FT	REMOVAL MISC.: JOINT SEALER	25
							78		78	409	30000	78	FT	SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS	
							2		2	512	10100	2	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
							1,027		1,027	512	73500	1,027	SY	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	
							78		78	516	31000	78	FT	JOINT SEALER	
							15		15	519	11100	15	SF	PATCHING CONCRETE STRUCTURE	
														STRUCTURE REPAIR (ERI-2-29.50 R)	
							3		3	202	11301	3	CY	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (RECONSTRUCTION)	25
							130		130	202	98200	130	FT	REMOVAL MISC.: JOINT SEALER	25
							130		130	409	30000	130	FT	SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS	
							3		3	511	34411	3	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE, AS PER PLAN	25
							63		63	512	10100	63	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
							1,769		1,769	512	73500	1,769	SY	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	
							130		130	516	31000	130	FT	JOINT SEALER	
							36		36	519	11100	36	SF	PATCHING CONCRETE STRUCTURE	
							1		1	SPECIAL	51912510	1	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B	25
														MAINTENANCE OF TRAFFIC	
			1,200				1,200			614	11110	1,200	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
		LS					LS			614	12420	LS		DETOUR SIGNING	
		100					100			614	13000	100	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
			24				24			614	18601	24	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	10
						35.95	35.95			614	20560	35.95	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
						1.48	1.48			614	22210	1.48	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I	
						75.41	75.41			614	22360	75.41	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
						4,777	4,777			614	23690	4,777	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
						7,840	7,840			614	24602	7,840	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE II	
						9,546	9,546			614	24612	9,546	FT	WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT	
						119	119			614	26610	119	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
			84				84			808	18700	84	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
														INCIDENTALS	
							LS	LS		614	11000	LS		MAINTAINING TRAFFIC	
							8			619	16020	8	MNTH	FIELD OFFICE, TYPE C	
							LS	LS		623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
							LS			623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	25
							LS	LS		624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY	
DISTRICT 3	
	
ENGINEERING TEAM ONE	
DESIGNER	
JLL	
REVIEWER	
ACM	6-16-25
PROJECT ID	
121718	
SHEET	TOTAL
P.17	37