ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) (301) ITEM 253 - PAVEMENT REPAIR

THESE ITEMS 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. CORING HAS BEEN PERFORMED TO HELP DETERMINE THE COMPONENTS THAT MAY BE ENCOUNTERED DURING THIS ITEM OF WORK. THE PAVEMENT CORING INFORMATION IS SHOWN ON SHEET 8. THE DEPTH OF REMOVAL SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT BASED ON THE PAVEMENT DESIGN. PAVEMENT REPAIRS SHALL BE COMPLETED PRIOR TO PAVEMENT YPLANING ON US ROUTE 20 AND AFTER PAYEMENT PLANING ON STATE ROUTE 82. THE CONTRACTOR SHALL BE CAPABLE OF PERFORMING PAVEMENT REPAIRS 4 FEET WIDE FOR TRANSVERSE REPAIRS AND 2 FEET WIDE FOR LONGITUDINAL REPAIRS.

REPLACEMENT MATERIAL SHALL BE ITEM 301, OR ITEM 442 19MM, AS PER PLAN MATERIAL AND SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE. ITEM 301 ASPHALT CONCRETE CAN BE USED WHEN THE DEPTH OF THE REPAIR IS BETWEEN 3" AND 12" WITH A MAXIMUM PAVEMENT LIFT OF 6". ITEM 442 19MM. AS PER PLAN CAN BE USED WHEN THE DEPTH OF THE REPAIR IS BETWEEN 1.5" AND 3".

FOR THE ITEM 442 19 MM, AS PER PLAN MATERIAL, REQUIREMENTS OF 442 APPLY EXCEPT AS FOLLOWS: MIX DESIGN: FOR Ndes USE 50 GYRATIONS, FOR Nmax USE 75 GYRATIONS. USE A PG 64-22 BINDER FOR 0% TO 25% RAP AND A PG 58-28 BINDER FOR 26% TO 30% RAP. MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT IS 30 PERCENT APPLY 703.05 FOR COARSE AND FINE AGGREGATE EXCEPT GRADATION FOR FINE AGGREGATE DOES NOT APPLY.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. FOR PAYMENT PURPOSES ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) IS TO BE A MAXIMUM OF 4" DEEP AND ITEM 253 IS FOR DEPTHS GREATER THAN 4". PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER CUBIC YARD. (BY TICKET WEIGHT CONVERSION), OF ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) OR ITEM 253 - PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

		PAVEMENT REPAIRS		
		LONGITUDINAL		
COUNTY	ROUTE	SLM	ITEM 251	ITEM 253
LOR	20 EB	13.54-14.00	9 CY	
LOR	20 EB	14.00-15.00	19 CY	
LOR	20 EB	15.00-15.92	17 CY	
LOR	20 WB	13.54-14.00	9 CY	
LOR	20 WB	14.00-15.00	19 CY	
LOR	20 WB	15.00-15.92	17 CY	
SUBTO	OTALS LOR-20 (01/I	NHS/05)	90 CY	
LOR	82	5.13-6.00	70 CY	2 CY
LOR	82	6.00-7.00	80 CY	2 CY
LOR	82	7.00-8.00	80 CY	2 CY
LOR	82	8.00-9.00	80 CY	2 CY
LOR	82	9.00-10.06	84 CY	2 CY
SUBT	OTALS LOR-82 (02/S	STR/05)	394 CY	10 CY
				40.014
IOIAL	S TO GENERAL SU	MWARY	484 CY	10 CY
		TRANSVERSE		
COUNTY	ROUTE	SLM	ITEM 251	ITEM 253
LOR	20 EB	13.54-14.00	9 CY	11 LIVI 233
LOR	20 EB	14.00-15.00	19 CY	
LOR	20 EB		1901	
LOR	20 60	15 00_15 02		
LUN		15.00-15.92	17 CY	
	20 WB	13.54-14.00	17 CY 9 CY	
LOR	20 WB 20 WB	13.54-14.00 14.00-15.00	17 CY 9 CY 19 CY	
LOR LOR	20 WB 20 WB 20 WB	13.54-14.00 14.00-15.00 15.00-15.92	17 CY 9 CY 19 CY 17 CY	
LOR LOR	20 WB 20 WB	13.54-14.00 14.00-15.00 15.00-15.92	17 CY 9 CY 19 CY	
LOR LOR SUBTO	20 WB 20 WB 20 WB DTALS LOR-20 (01/I	13.54-14.00 14.00-15.00 15.00-15.92 NHS/05)	17 CY 9 CY 19 CY 17 CY 90 CY	2 CY
LOR LOR SUBTO	20 WB 20 WB 20 WB DTALS LOR-20 (01/I 82	13.54-14.00 14.00-15.00 15.00-15.92 NHS/05) 5.13-6.00	17 CY 9 CY 19 CY 17 CY 90 CY	2 CY 2 CY
LOR SUBTO	20 WB 20 WB 20 WB DTALS LOR-20 (01/N 82 82	13.54-14.00 14.00-15.00 15.00-15.92 NHS/05) 5.13-6.00 6.00-7.00	17 CY 9 CY 19 CY 17 CY 90 CY 17 CY 20 CY	2 CY
LOR LOR SUBTO	20 WB 20 WB 20 WB DTALS LOR-20 (01/N 82 82 82 82	13.54-14.00 14.00-15.00 15.00-15.92 NHS/05) 5.13-6.00 6.00-7.00 7.00-8.00	17 CY 9 CY 19 CY 17 CY 90 CY 17 CY 20 CY 20 CY	2 CY 2 CY
LOR LOR SUBTO	20 WB 20 WB 20 WB DTALS LOR-20 (01/I 82 82 82 82 82	13.54-14.00 14.00-15.00 15.00-15.92 NHS/05) 5.13-6.00 6.00-7.00 7.00-8.00 8.00-9.00	17 CY 9 CY 19 CY 17 CY 90 CY 17 CY 20 CY 20 CY 20 CY	2 CY 2 CY 2 CY
LOR LOR SUBTO	20 WB 20 WB 20 WB DTALS LOR-20 (01/N 82 82 82 82 82 82	13.54-14.00 14.00-15.00 15.00-15.92 NHS/05) 5.13-6.00 6.00-7.00 7.00-8.00 8.00-9.00 9.00-10.06	17 CY 9 CY 19 CY 17 CY 90 CY 20 CY 20 CY 20 CY 22 CY	2 CY 2 CY 2 CY 2 CY
LOR LOR SUBTO	20 WB 20 WB 20 WB DTALS LOR-20 (01/I 82 82 82 82 82	13.54-14.00 14.00-15.00 15.00-15.92 NHS/05) 5.13-6.00 6.00-7.00 7.00-8.00 8.00-9.00 9.00-10.06	17 CY 9 CY 19 CY 17 CY 90 CY 17 CY 20 CY 20 CY 20 CY	2 CY 2 CY 2 CY

<u> ITEM 203 – EXCAVATION, AS PER PLAN</u> ITEM 304 - AGGREGATE BASE, AS PER PLAN

THIS WORK SHALL BE PERFORMED AT FULL DEPTH CONCRETE REPAIR AREAS ON LOR-20 TO REPLACE DISTURBED OR DETERIORATED BASE MATERIAL UNDERNEATH THE EXISTING CONCRETE PAVEMENT. EXACT LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE ABOVE WORK. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER CUBIC YARD FOR ITEM 203 – EXCAVATION, AS PER PLAN, AND ITEM 304 - AGGREGATE BASE, AS PER PLAN.

ITEM 203 – EXCAVATION, AS PER PLAN ITEM 304 – AGGREGATE BASE, AS PER PLAN 90 CY (01/NHS/05) 90 CY (01/NHS/05)

ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE. 19MM. TYPE A (449). AS PER PLAN

ALL OPEN TRANSVERSE JOINTS SHALL BE TAPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC. A "BUMP" SIGN (W8-1-36) SHALL BE ERECTED ON EACH SIDE OF TRANSVERSE JOINTS LEFT OPEN OVER NIGHT, INCLUDING A SPEED ADVISORY SIGN. THESE SIGNS SHALL BE REMOVED IMMEDIATELY AFTER JOINT HAS BEEN CLOSED. PLACEMENT OF SIGNS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

REQUIREMENTS OF 442 APPLY EXCEPT AS FOLLOWS: MIX DESIGN: FOR Ndes USE 50 GYRATIONS, FOR Nmax USE 75 GYRATIONS. CHOOSE OPTIMUM BINDER CONTENT AT DESIGN AIR VOIDS OF 3.5%. USE A PG 64-22 BINDER FOR 0 TO 25% RAP AND A PG 58-28 FOR 26-30% RAP. MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT IS 30 PERCENT APPLY 703.05 FOR COARSE AND FINE AGGREGATE EXCEPT GRADATION FOR FINE AGGREGATE DOES NOT APPLY.

ITEM 255 - FULL DEPTH PAVEMENT SAWING (TRANSVERSE) ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS (13.0" CONCRETE)

THESE ITEMS SHALL BE USED IN LOCATIONS AS DIRECTED BY THE ENGINEER ON LOR-20-13.54-15.92. PAVEMENT REPAIRS SHALL BE PERFORMED BEFORE PAVEMENT PLANING AND PLACEMENT OF THE FINE GRADED POLYMER ASPHALT CONCRETE.

THE EXISTING PAVEMENT BUILDUP SHALL BE REMOVED AS PART OF THIS PAY ITEM. PLACE THE CONCRETE BASE IN ACCORDANCE WITH THE SPECIFICATION TO A DEPTH OF 4.5" BELOW THE EXISTING PAVEMENT SURFACE. CONCRETE REPAIRS SHALL BE TOPPED WITH ITEM 442. 19MM. AS PER PLAN MATERIAL. THE ASPHALT CONCRETE SHALL PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE.

SEAL THE PERIMETER SURFACE OF THE REPAIRED AREAS BY APPLYING A 2 TO 4 INCH WIDE STRIP OF APPROVED 705.04 MATERIAL OR 702.01 APPROVED PG BINDER.

CONCRETE SHALL BE PLACED IN THE REPAIR AREA THE SAME DAY THAT THE EXISTING PAVEMENT IS REMOVED FROM THE REPAIR AREA. REPAIR LOCATIONS SHALL BE COMPLETE WITH INTERMEDIATE COURSE PRIOR TO OPENING TO TRAFFIC.

PAYMENT FOR ALL OF THE ABOVE WORK SHALL BE AT THE UNIT PRICE BID PER SQUARE YARD FOR THE ABOVE ITEM. WHICH SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 255 – FULL DEPTH PAVEMENT SAWING (TRANSVERSE) 2125 FT (01/NHS/05)

ITEM 255 – FULL DEPTH RIGID REMOVAL AND REPLACEMENT, CLASS QC MS

495 SY (01/NHS/05)

ITEM 407 – TACK COAT. 702.13 40 GAL (01/NHS/05)

ITEM 407 – TACK COAT 25 GAL (01/NHS/05)

ITEM 442 – ASPHALT CONCRETE INTERMEDIATE COURSE. 19 MM. TYPE A (449). AS PER PLAN 62 CY (01/NHS/05)

ITEM 255 - FULL DEPTH PAVEMENT SAWING (LONGITUDINAL) ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN (LONGITUDINAL CRACK) (13.0" CONCRETE

THESE ITEMS SHALL BE USED IN LOCATIONS AS DIRECTED BY THE ENGINEER ON LOR-20-13.54-15.92. PAVEMENT REPAIRS SHALL BE PERFORMED BEFORE PAVEMENT PLANING AND PLACEMENT OF THE FINE GRADED POLYMER ASPHALT CONCRETE.

THE EXISTING PAVEMENT BUILDUP SHALL BE REMOVED AS PART OF THIS PAY ITEM. PLACE THE CONCRETE BASE IN ACCORDANCE WITH THE SPECIFICATION TO A DEPTH OF 4.5" BELOW THE EXISTING PAVEMENT SURFACE, CONCRETE REPAIRS SHALL BE TOPPED WITH ITEM 442, 19MM, AS PER PLAN MATERIAL, THE ASPHALT CONCRETE SHALL PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE.

THE LONGITUDINAL JOINT REPAIRS ARE TO BE COMPLETED AFTER THE TRANSVERSE JOINTS ARE REPLACED. CONCRETE WILL BE CLASS QC MS.

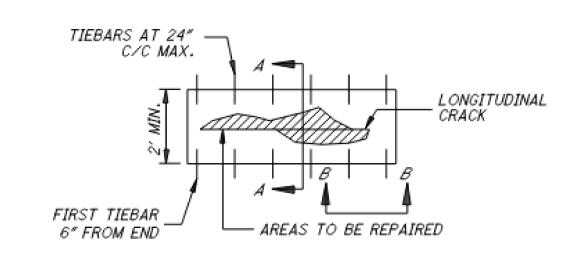
ACTUAL LENGTH AND WIDTH OVER THE 2' MINIMUM WILL BE DETERMINED BY THE ENGINEER DURING LAYOUT.

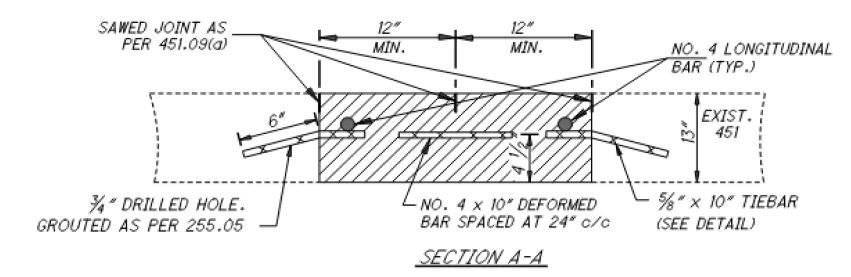
SEAL THE PERIMETER SURFACE OF THE REPAIRED AREAS BY APPLYING A 2 TO 4 INCH WIDE STRIP OF APPROVED 705.04 MATERIAL OR 702.01 APPROVED PG BINDER.

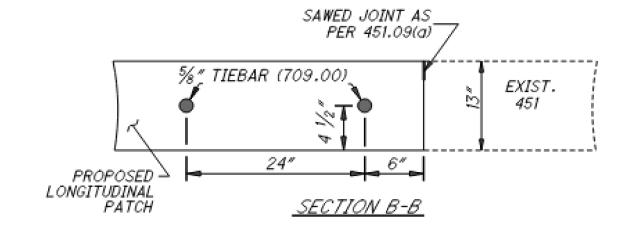
CONCRETE SHALL BE PLACED IN THE REPAIR AREA THE SAME DAY THAT THE EXISTING PAVEMENT IS REMOVED FROM THE REPAIR AREA

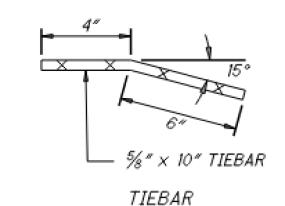
IF THE LONGITUDINAL JOINT REPAIR IS WITHIN 5 FEET OF AN EXISTING TRANSVERSE JOINT THAT HAS BEEN REPAIRED THEN THE LONGITUDINAL JOINT SHALL BE EXTENDED TO THE NEAREST REPAIRED JOINT.

ALL REINFORCING STEEL SHALL BE EPOXY COATED AND CONFORMING TO C&MS 709.00.









ITEM 255 – FULL DEPTH PAVEMENT SAWING (LONGITUDINAL)

198 FT (01/NHS/05)

3 GAL (01/NHS/05)

ITEM 255 – FULL DEPTH RIGID REMOVAL AND REPLACEMENT. CLASS QC MS. AS PER PLAN 43 SY (01/NHS/05)

ITEM 407 – TACK COAT, 702.13

ITEM 407 – TACK COAT 2 GAL (01/NHS/05)

ITEM 442 – ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (449), AS PER PLAN 5 CY (01/NHS/05)

ITEM 605 – AGGREGATE DRAINS, AS PER PLAN

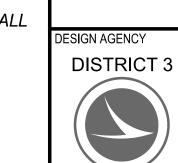
AGGREGATE DRAINS SHALL BE PLACED AT FULL DEPTH CONCRETE REPAIR AREAS TO IMPROVE EXISTING DRAINAGE. EXACT LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER. THE AGGREGATE DRAINS SHOULD BE PLACED ADJACENT TO THE FULL DEPTH CONCRETE REPAIRS AND EXTEND UNDERNEATH THE PAVED SHOULDERS AND OUTLET BEYOND THE PAVED SHOULDERS. THE AGGREGATE DRAINS SHALL BE PLACED AT A MINIMUM DEPTH OF 8" ABOVE THE BOTTOM OF THE TRENCH PER C&MS 605.07.

IN ADDITION TO THE REQUIREMENTS OF 605.07, THIS ITEM SHALL INCLUDE THE PLACEMENT OF 6" OF ITEM 301 OVER THE EMBANKMENT MATERIAL AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE ON THE PAVED SHOULDERS.

PAYMENT FOR THE ABOVE SHALL BE AT THE UNIT PRICE BID PER FOOT FOR THE ABOVE ITEM. WHICH SHALL INCLUDE ALL LABOR. EQUIPMENT. MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 605 – AGGREGATE DRAINS, AS PER PLAN

525 FT (01/NHS/05)



ENGINEERING **TEAM TWO** ESIGNER ACM

REVIEWER KRB 10-17-22 ROJECT ID

105447

P.9 56

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN (TEM 642-41) (ALL ROUTES)

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 SHALL BE DETERMINED BY THE ENGINEER.. 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 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 10 SIGN MONTH (01/NHS/05). 4 SIGN MONTH (02/STR/05) ASSUMING 2 PCMS SIGNS FOR 7 MONTHS

ITEM 614 – LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION **OPERATIONS (TEM 642-55) (ALL ROUTES)**

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.

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

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

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

ON A MULTI-LANE DIVIDED INTERSTATE. OTHER FREEWAY OR EXPRESSWAY: AND

AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION: AND.

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 250 HOURS (01/NHS/05), 50 HOURS (02/STR/05)

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.

NOTIFICATION OF TRAFFIC RESTRICTIONS (TEM 642-58) (ALL ROUTES)

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

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

NOTIFICATION TIME TABLE				
<u>ITEM</u>	DURATION OF CLOSURE	NOTICE DUE TO PERMITS AND PIO*		
	2 WEEKS OR GREATER	21 CALENDAR DAYS		
RAMP AND/OR ROAD CLOSURES	12 HOURS TO 2 WEEKS	14 CALENDAR DAYS		
CLOSURES	12 HOURS OR LESS	4 BUSINESS DAYS		
LANE CLOSURES AND	2 WEEKS OR GREATER	14 CALENDAR DAYS		
RESTRICTIONS	LESS THAN 2 WEEKS	5 BUSINESS DAYS		
START OF CONSTRUCTION AND TRAFFIC PATTERN	N/A	14 CALENDAR DAYS		

^{* -} PRIOR TO CLOSURE DATE. UNLESS NOTED OTHERWISE

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

ITEM 614 - DETOUR SIGNING

CHANGES

THE FOLLOWING QUANTITY IS INCLUDED FOR THE CONTRACTOR TO PROVIDE THE DETOUR SIGNING AS SHOWN AS PER 614.06(B). DETOUR SIGNING FOR THE US 20 INTERCHANGE RAMP CLOSURES IS INCLUDED IN THIS QUANTITY.

ITEM 614 – DETOUR SIGNING LUMP (01/NHS/05)

RAMP CLOSURE DISINCENTIVE

A RAMP CLOSURE IS DEFINED AS ANY RESTRICTION OF AN ENTRANCE OR EXIT RAMP INCLUDING, BUT NOT LIMITED TO. SET UP AND TEAR DOWN OF TRAFFIC CONTROL ZONES. THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE FEE PER THE BELOW TABLE THAT RAMPS ARE CLOSED TO TRAFFIC DURING TIMES DESIGNATED IN THE TIME LIMITATION ON A DETOUR NOTE.

RAMP	DETOUR VIA INTERCHANGE	DISINCENTIVE FEE (PER DAY)
GRAFTON RD EASTBOUND EXIT	STATE ROUTE 83	\$5,000
GRAFTON RD EASTBOUND ENTRANCE	STATE ROUTE 57 NB	\$2,000
GRAFTON RD WESTBOUND EXIT	STATE ROUTE 301	\$5,000
GRAFTON RD WESTBOUND ENTRANCE	STATE ROUTE 57 NB	\$1,000
SR 57 WESTBOUND ENTRANCE	GRAFTON RD NB	\$1,000

ITEM 614 – MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR) (TEM 642-4) (LOR-20 RAMPS)

TRAFFIC ON THE RAMPS SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED THE TIME AS SHOWN IN THE BELOW. WHEN THROUGH TRAFFIC MAY BE DETOURED AS DESCRIBED IN THE RAMP CLOSURE DISINCENTIVE NOTE. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT DESCRIBED IN THE RAMP CLOSURE DISINCENTIVE NOTE FOR EACH DAY THE RAMP REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

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RAMP	DETOUR DURATION
GRAFTON RD EASTBOUND EXIT	14 DAYS
GRAFTON RD EASTBOUND ENTRANCE	14 DAYS
GRAFTON RD WESTBOUND EXIT	14 DAYS
GRAFTON RD WESTBOUND ENTRANCE	14 DAYS
SR 57 WESTBOUND ENTRANCE	14 DAYS
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ENGINEERING **TEAM TWO** ESIGNER

ACM REVIEWER SRO 10-17-22 ROJECT ID

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