

UTILITIES

THERE ARE NO EXISTING UNDERGROUND UTILITY FACILITIES SHOWN ON THE PLANS, NOR WILL ANY EXISTING UNDERGROUND UTILITY FACILITIES BE RELOCATED FOR THE PROJECT. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY UTILITIES THAT MAY EXIST WITHIN THE WORK AREA. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY POTENTIAL UTILITY CONFLICTS, BY VISUAL INSPECTION AND BY CONTACTING THE OHIO UTILITIES PROTECTION SERVICE (OHIO 811) FOR FIELD MARKINGS OF THE UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH THE OWNERS TO RESOLVE ALL UTILITY CONFLICTS PRIOR TO CONSTRUCTION OR, WITH THE APPROVAL OF THE PROJECT ENGINEER, THE CONTRACTOR SHALL ADJUST THE PROJECT CONSTRUCTION ACCORDINGLY, SO AS TO AVOID DAMAGE TO THE EXISTING UTILITY FACILITIES. THE UTILITY CONTACT INFORMATION FOR THE PROJECT CAN BE OBTAINED THROUGH THE ODOT DISTRICT 9 UTILITY COORDINATOR AT 740-774-9055.

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.

WINDOW CONTRACT TABLE

DESCRIPTION OF CRITICAL WORK	CALENDAR DAYS TO COMPLETE	DISINCENTIVE (\$ PER DAY)
ALL WORK ON PROJECT	90	\$1,500

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

RPM

IN ADDITION TO CMS 621.03, RPMs SHALL NOT BE INSTALLED ON BRIDGES OR APPROACH SLABS THAT HAVE A CONCRETE SURFACE. INSTALL RPMs IN ASPHALT CONCRETE BEFORE AND AFTER THE SUPERSTRUCTURE. RPM'S LOCATED IN EXISTING CONCRETE BRIDGE DECKS OR APPROACH SLABS SHALL BE LEFT IN PLACE.

INSTALL NEW RPMs IN ACCORDANCE WITH ODOT STANDARD DRAWINGS TC-65.10 AND TC-65.11.

EXTRA AREAS

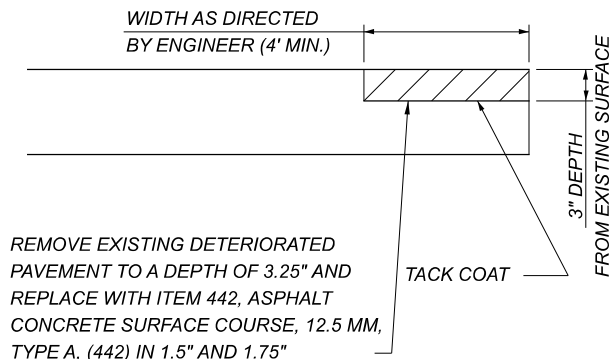
QUANTITIES FOR THE FOLLOWING EXTRA AREAS ARE SHOWN ON THE PAVEMENT CALCULATION SHEET:

TURN LANES: FULL WIDTH OR AS DIRECTED BY THE ENGINEER
MEDIAN CROSSEOVERS: AS DIRECTED BY THE ENGINEER
OTHER DESIGNATED AREAS: AS DIRECTED BY THE ENGINEER

DISPOSAL OF ASPHALT GRINDINGS

ASPHALT GRINDINGS FROM THIS PROJECT ARE TO BECOME THE PROPERTY OF THE CONTRACTOR.

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



REMOVE EXISTING DETERIORATED PAVEMENT TO A DEPTH OF 3.25" AND REPLACE WITH ITEM 442, ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A, (442) IN 1.5" AND 1.75" LIFTS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED AND CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 251	PARTIAL DEPTH PAVEMENT REPAIR (442),AS PER PLAN
01/NHS/05 TOTALS:	2000 SY
TOTALS:	2000 SY

ITEM 254- PATCHING PLANED SURFACE

THIS ITEM SHALL BE IN ACCORDANCE WITH SECTION 254 OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

ESTIMATED QUANTITIES HAVE BEEN PROVIDED FOR THE FOLLOWING WORK: ITEM 254 PATCHING PLANED SURFACE 61,982 SY

PLACEMENT OF PAVEMENT

UNLESS AN ALTERNATIVE SEQUENCE IS APPROVED BY THE ENGINEER, COMPLETE THE MILL AND FILL OPERATIONS IN A LANE BEFORE MILLING THE ADJANCENT LANE TO ELIMINATE UNCONFINED LONGITUDINAL JOINTS WHEREVER POSSIBLE.

COMPLETION DATES FOR PAVEMENT PLANING

TRAFFIC SHALL USE PLANED ROADWAY SURFACE NO LONGER THAN 21 DAYS DURING CONSTRUCTION OF THIS PROJECT UNLESS OTHERWISE APPROVED BY THE ENGINEER.

ITEM 632 DETECTOR LOOP, AS PER PLAN

THIS DETECTOR LOOP ITEM IS PROVIDED FOR THE TURN LANES ON MAINLINE SR 32 AT INTERSECTIONS WITH SR 136 & 247

ALL LOOP DETECTORS WITH CORRESPONDING LOOP DETECTOR UNITS WILL BE INSTALLED TO CURRENT SPECIFICATIONS, IN ACCORDANCE WITH C&MS ITEMS 732.07.

PLAN INTENT IS REPLACE LOOPS AT CURRENT LOCATIONS. CONTRACTOR TO VERIFY LOOP LOCATIONS BEFORE REMOVAL. THE CONTRACTOR SHALL INFORM ODOT DISTRICT 9 HMA 3 WORK DAYS PRIOR TO WORKING IN THEIR TRAFFIC SIGNAL CONTROLLER CABINETS. CALL DISTRICT 9 HMA DIRECTOR AT 740-774-9048.THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 632, DETECTOR LOOP, AS PER PLAN	4 EACH
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SPEED MEASUREMENT MARKINGS

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 A MINIMUM OF 1 MILE ALONG THE ROADWAY, AT LOCATIONS AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. SPEED MEASUREMENT MARKINGS SHOULD AVOID BEING LOCATED IN THE VICINITY OF A TAPER, ENTRANCE RAMP OR EXIT RAMP.

ON MULTILANE HIGHWAYS WITH SHOULDER WIDTHS OF AT LEAST 6 FEET, CENTER THE SPEED MEASUREMENT MARKING ENTIRELY ON THE SHOULDER. IF THE SHOULDER WIDTH IS LESS THAN 6 FEET, CENTER THE MARKING ON THE EDGE LINE SUCH THAT IT EXTENDS 2 FEET ON EITHER SIDE. TO ASSURE VISIBILITY OF THE MARKINGS AND REDUCE PARALLAX ERRORS, FOR EACH DIRECTION UTILIZING AN AIR SPEED CHECK ZONE, A SET OF TWO MARKINGS (LEFT AND RIGHT SIDE) SHALL BE USED AT EACH ONE-QUARTER MILE INTERVAL.

ON TWO-LANE ROADWAYS, ONE MARKING SHOULD BE USED AT EACH ONE-QUARTER MILE INTERVAL AND INSTALLED ACROSS THE CENTER LINE SUCH THAT IT EXTENDS 2 FEET ON EITHER SIDE.

THE MARKINGS SHALL BE LAID OUT BY A REGISTERED 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.

MATERIALS, EQUIPMENT AND APPLICATION SHALL BE ACCORDING TO THE TYPE OF PAVEMENT MARKING MATERIAL USED.

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. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

ITEM 644	SPEED MEASURMENT MARKING, 20 EACH
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809 STOP LINE RADAR DETECTION, AS PER PLAN

STOP LINE RADAR DETECTION IS PROVIDED FOR THE SR 247 & SR 136 APPROACHES AT SR 32. STOP LINE RADAR DETECTION IS NOT TO BE INSTALLED ALONG MAINLINE SR 32.

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING A WAVETRONIX SMARTSENSOR MATRIX DETECTION UNIT. THE DETECTION UNIT SHALL INCLUDE THE FOLLOWING:

- POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.
- ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CALTRANS, NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.
- THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER.
- SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.
- THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ONSITE TRAINING ON THE SETUP, OPERATION AND MAINTENANCE OF THE UNIT.
- A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MINIMUM 7 FEET).
- THE POWER SUPPLY AND COMMUNICATION MODULES SHALL BE SECURED TO A SINGLE PANEL THAT CAN BE MOUNTED INTERIOR TO THE TRAFFIC CABINET. THE PANEL SHALL INCLUDE MODULAR-PLUG STYLE CONNECTIONS FOR UP TO FOUR (4) SENSOR CABLES. ADDITIONAL SENSORS MAY BE HARD-WIRED TO THE COMMUNICATION MODULES, AS NECESSARY.
- THE CONTRACTOR SHALL INSTALL THE RADAR DETECTION PRIOR TO MILLING/DISABLING EXISTING LOOPS.
- THE INSTALLATION SHALL INCLUDE ALL CONTROLLER PROGRAMMING FOR COMPLETE INSTALLATION, WHICH INCLUDES MODIFICATIONS FOR REMOVAL OF EXISTING DETECTION.

PAYMENT FOR ITEM 809 STOP-LINE RADAR DETECTION, AS PER PLAN SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT AND CONNECTIONS TESTED AND ACCEPTED.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED AND CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 809	STOP LINE RADAR DETECTION, AS PER PLAN
01/NHS/05 TOTALS:	8 EA
TOTALS:	8 EA

DESIGN AGENCY



DESIGNER

JBS

REVIEWER

MCM 05/23/25

PROJECT ID

121314

SHEET

P.3

TOTAL

16