UTILITIES

THIS PROJECT REQUIRES THE INSTALLATION OF NEW GUARDRAIL POSTS. SURVEY WORK HAS NOT BEEN PERFORMED ON THIS PROJECT, NOR HAVE THE UTILITY LOCATIONS BEEN CONFIRMED IN THE FIELD. IN ADDITION TO CMS 105.07, IF, DURING THE COURSE OF INSTALLING ANY NEW GUARDRAIL COMPONENT, IT IS DETERMINED THAT A UTILITY CONFLICT MAY RESULT, THE CONTRACTOR IS TO NOTIFY THE PROJECT ENGINEER IMMEDIATELY. UTILITIES ARE NOT TO BE DELOCATED AS A BESULT OF THIS OPERATION AD JUSTIMENTS. TO BE RELOCATED AS A RESULT OF THIS OPERATION. ADJUSTMENTS TO THE PROPOSED GUARDRAIL WILL ACCOMODATE THE EXISTING UTILITY. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE GUARDRAIL VIA MEANS THAT WOULD BE COMPLIANT WITH THE IMPACTED UTILITY'S SAFETY GUIDELINES AS WELL AS STILL MEETING ODOT'S DESIGN CRITERIA. ANY MINOR ADJUSTMENTS MADE TO PROPOSED GUARDRAIL INSTALLATIONS SHALL BE INCIDENTAL TO PAY ITFM 606.

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OF ADJACENT TO THE WORK AREA.

ITEM 623- CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN PRIOR TO THE START OF ROADWAY OPERATION, THE CONTRACTOR SHALL REFERENCE THE LENGTH OF THE PROJECT ON BOTH SIDES OF THE ROADWAY, IN A MANNER SATISFACTORY TO THE ENGINEER. THE PAVEMENT SHALL BE REFERENCED IN 1000' FEET INCREMENTS, OR IN INCREMENTS ACCEPTABLE TO THE ENGINEER, IN A SEMI-PERMANENT CONDITION.

<u>PERMANENT PAVEMENT MARKINGS</u>

THE CONTRACTOR SHALL REFERENCE ALL PAVEMENT MARKINGS INCLUDING AUXILIARY PAVEMENT MARKINGS BEFORE THE START OF THE RESURFACING OPERATION. THIS WILL BE NECESSARY TO ASSURE THE CORRECT PLACEMENT OF MARKINGS IN ORIGINAL LOCATIONS. FOR CENTER LINE MARKINGS, THE CONTRACTOR SHALL INSTALL THE PASSING NO PASSING ZONE MARKINGS ACCORDING TO THE CURRENT CENTER LINE LOGS AVAILABLE AT http://www.dot.state.oh.us/Divisions/Operation/Traffic/ miscellaneous/Pages/CenterlinePassingandNoPassingZoneLogs.aspx PAYMENT FOR THIS OPERATION SHALL BE INCLUDED WITH EACH RESPECTIVE PAVEMENT MARKING ITEM.

CONTINGENCY QUANTITIES

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". THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DIRECTION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THE PROJECT.

ITEM 254- PAVEMENT PLANING, ASPHALT CONCRETE

THE PAVEMENT PLANING SHALL BE SCHEDULED SO AS TO BE COVERED BY THE SURFACE COURSE PRIOR TO REOPENING THE LANE TO TRAFFIC. THE COST OF THE ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE RESPECTIVE ITEM. A DISINCENTIVE IN THE AMOUNT OF \$2,000 SHALL BE ASSESSED FOR EACH DAY, OR PORTION THEREOF, A PLANED SURFACE IS OPEN TO TRAFFIC BEYOND THE SPECIFIED TIME LIMIT.

ITEM 253- PAVEMENT REPAIR

AN ESTIMATED QUANTITY OF 300 CU YDS OF ITEM 253-PAVEMENT REPAIR HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. THIS OPERATION SHALL BE PERFORMED BEFORE PAVEMENT PLANING OF ROADWAY.

EXISTING SURFACE 4'-MIN EXISTING ASPHALT EXISTING SUBBASE

EXISTING DETERIORATED ASPHALT SHALL BE REMOVED TO A MAXIMUM DEPTH OF 6" INCHES OR AS DIRECTED BY THE ENGINEER AND REPLACED WITH ITEM 301, ASPHALT CONCRETE BASE. THE 301 SHALL BE COMPACTED AS PER 401.15 AND IN APPROXIMATELY EQUAL LAYERS. THE LOCATIONS AND SIZE OF THE REPAIRS SHALL BE DETERMINED BY THE ENGINEER.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING. PER CMS 730.19.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E. EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE A, APP

WHERE DESIGNATED, EXISTING ANCHOR ASSEMBLIES INCLUDING ALL POST AND HARDWARE SHALL BE REMOVED. THIS ITEM SHALL ALSO INCLUDE THE REMOVAL OF THE ENTIRE CONCRETE ANCHOR AND CONCRETE ENCASEMENT. ALL HOLES LEFT AFTER REMOVAL OF ASSEMBLIES AND POSTS SHALL BE FILLED WITH GRANULAR MATERIAL AS DIRECTED BY THE ENGINEER. PAYMENT SHALL INCLUDE ALL NECESSARY LABOR AND EQUIPMENT REQUIRED TO PERFORM THE INDICATED ABOVE.

GUARDRAIL REPLACEMENT

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE THE EXISTING GUARDRAIL, PREPARE THE SITE, AND INSTALL THE NEW GUARDRAIL/BARRIER IN A CONTINUOUS OPERATION. THE REMOVAL OF ALL GUARDRAIL/BARRIER SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER. NO GUARDRAIL/BARRIER SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS ON SITE, READY FOR INSTALLATION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED UNTIL SUCH TIME ENGINEER IS ASSURED OF COMPLIANCE.

ITEM 621- RAISED PAVEMENT MARKER REMOVED/REPLACED

THE FOLLOWING RPM QUANTITIES ARE TO BE USED ON PRE/732/9.46-15.49. INCLUDE NEW RPMs ACCORDING TO SCD TC-65.10 AND TC-65.11.

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01/STR/PV - PRE-732 SLM 9.46-14.44

ITEM 621- RPM, 2-WAY (YELLOW/YELLOW)...... <u>526 EA</u>

02/S<2/PV - PRE-732 SLM 14.44-15.49

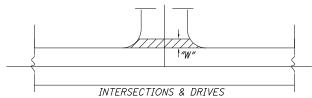
 ITEM 621- RPM, 2-WAY (YELLOW/YELLOW)
 70 EA

 ITEM 621- RPM, 2-WAY (WHITE/RED)
 5 EA

 ITEM 621- RPM, 1-WAY (WHITE)
 16 EA

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

INTERSECTIONS AND DRIVES



INTERSECTION AND DRIVES QUANTITIES ARE INCLUDED IN THE ASPHALT CONCRETE QUANTITIES, INTERSECTION QUANTITIES HAVE BEEN ESTIMATED AT 15' MEASURED FROM EDGE OF PAVED SHOULDER, DRIVE QUANTITIES HAVE BEEN ESTIMATED AT 3' MEASURED FROM EDGE OF PAVED SHOULDER.

PERFORM WORK PER SPECIFIED OFFSET LIMITS UNLESS THERE IS A JOINT PRESENT CLOSER TO THE EDGE OF PAVED SHOULDER. IN WHICH CASE END WORK AT SAID JOINT.

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					10							10		606	26150	10		ANCHOR ASSEMBLY, MGS TYPE E, (NCHRP 350 OR MASH 2016)		1
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			3,696 295									3,014 244	682 51	441 617	50000 10100	3,696 295		ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22 COMPACTED AGGREGATE, TYPE A, 1.5"		1
			7,075									5,843	1,232	617	20000	7,075		SHOULDER PREPARATION		 >
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