

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.

PERMANENT PAVEMENT MARKINGS

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 (EXCEPT WHERE NOTED). 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/Operations/Traffic/miscellaneous/Pages/CenterlinePassingandNoPassingZoneLogs.aspx

PAYMENT FOR THIS OPERATION SHALL BE INCLUDED WITH EACH RESPECTIVE PAVEMENT MARKING ITEM.

ITEM 623- CONSTRUCTION LAYOUT STAKES, 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 SEMIPERMANENT CONDITION.

UTILITIES (PAVING)

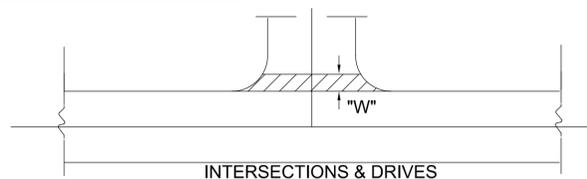
THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN FOR THE PROPOSED PAVING WORK. THE NATURE OF THE PAVING WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

ITEM 254- PAVEMENT PLANING, ASPHALT CONCRETE

THE PLANING SHALL BE SCHEDULED SO AS TO BE COVERED BY THE INTERMEDIATE COURSE ON SR 133 PRIOR TO REOPENING THE LANE TO TRAFFIC. THE COST OF THE ABOVE ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE RESPECTIVE ITEM. A DISINCENTIVE IN THE AMOUNT OF \$3,600 SHALL BE ASSESSED FOR EACH DAY, OR PORTION THEREOF, A PLANED SURFACE IS OPEN TO TRAFFIC.

ADJUST DEPTH OF PLANING AT NECESSARY BRIDGE APPROACH SLABS. PLANE PAVEMENT TO PROVIDE SMOOTH TRANSITIONS AT BRIDGE(S).

INTERSECTIONS AND DRIVES

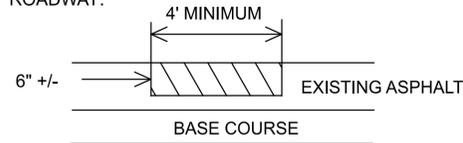


INTERSECTION AND DRIVES QUANTITIES ARE INCLUDED IN THE ASPHALT CONCRETE QUANTITIES. INTERSECTION QUANTITIES HAVE BEEN ESTIMATED AT 15' MEASURED FROM EDGE OF PAVED SHOULDER, DRIVE QUANTITIES HAVE BEEN ESTIMATED AT 3' "W" MEASURED FROM EDGE OF PAVED SHOULDER.

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

ITEM 253- PAVEMENT REPAIR (SR 133 SLM 22.00-27.99, RAMPS AT SR 133/32)

AN ESTIMATED QUANTITY OF 350 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.



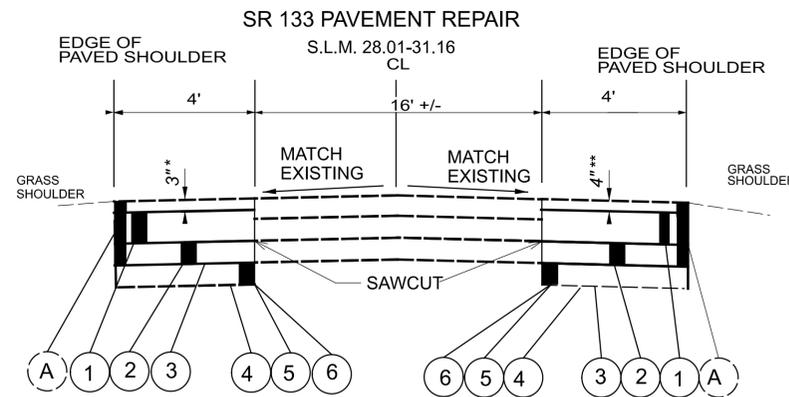
EXISTING DETERIORATED ASPHALT SHALL BE REMOVED TO A MAXIMUM DEPTH OF 6 INCHES OR AS DIRECTED BY THE ENGINEER AND REPLACED WITH ITEM 301, ASPHALT CONCRETE BASE AND SHALL BE COMPACTED AS PER 401.15 AND IN APPROXIMATELY EQUAL LAYERS. THE LOCATIONS AND SIZE OF THE REPAIRS SHALL BE DETERMINED BY THE ENGINEER.

ITEM 253, PAVEMENT REPAIR, AS PER PLAN (SR 133 SLM 28.01-31.16)

THIS WORK SHALL CONSIST OF REPLACING THE OUTSIDE 4' OF PAVEMENT ON EITHER SIDE OF SR 133 BY REMOVAL AND INSTALLING NEW PAVEMENT PER THE DETAIL BELOW.

THE PAVEMENT REPAIR ITEM SHALL INCLUDE REMOVAL OF ASPHALT PAVEMENT, SUBBASE, AND SOIL AS NECESSARY TO THE TOP OF THE PROPOSED SUBGRADE, SUBGRADE, COMPACTION AGGREGATE BASE, AND ASPHALT CONCRETE BASE. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS WORK:

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN	5133 CY
ITEM 204 - 12" GRANULAR MATERIAL, TYPE C	4930 CY
ITEM 204 - EXCAVATION OF SUBGRADE	
12" DEEP, AS PER PLAN	4930 CY
ITEM 204 - GEOTEXTILE FABRIC, TYPE D	14,784 SY



- (A) EXISTING ASPHALT AND SUBBASE
- (1) *ITEM 301- 7" ASPHALT CONCRETE BASE (449), PG64-22 (PAVEMENT REPAIR B, AS PER PLAN)
**ITEM 301- 6" ASPHALT CONCRETE BASE (449), PG64-22 (PAVEMENT REPAIR B, AS PER PLAN)
- (2) ITEM 304 - 6" AGGREGATE BASE (PAVEMENT REPAIR B, AS PER PLAN)
- (3) ITEM 204- SUBGRADE COMPACTION (PAVEMENT REPAIR B, AS PER PLAN)
- (4) ITEM 204- GEOTEXTILE MATERIAL TYPE D
- (5) ITEM 204- EXCAVATION OF SUBGRADE 12" DEEP, AS PER PLAN
- (6) ITEM 204- 12" GRANULAR MATERIAL, TYPE C

* THE 3" DIMENSION REFLECTS THE PAVEMENT REPAIR TO BE CONSTRUCTED IN CONSTRUCTION PHASE 1. SEE MOT NOTES FOR SEQUENCING AND ADDITIONAL DETAILS
** THE 4" DIMENSION REFLECTS THE PAVEMENT REPAIR TO BE CONSTRUCTED IN CONSTRUCTION PHASE 2. SEE MOT NOTES FOR SEQUENCING AND ADDITIONAL DETAILS

ITEM 204, EXCAVATION OF SUBGRADE, AS PER PLAN

DCP TEST RESULTS INDICATE LARGE GRAVEL, COBBLES, & LIMESTONE FLOATERS IMMEDIATELY BENEATH THE PAVEMENT. CONTACTOR IS TO EXCAVATE THE SUBGRADE TO THE MINIMUM DEPTH SPECIFIED IN THE PLANS. PAYMENT FOR ITEM 204 EXCAVATION OF SUBGRADE, AS PER PLAN INCLUDES ALL EQUIPMENT, MATERIALS, LABOR NEEDED TO REMOVE THE MATERIAL AND THE DISPOSAL OF THE EXCAVATED MATERIAL OFF-SITE. NO ADDITIONAL PAYEMENT WILL BE CONSIDERED FOR THE REMOVAL OF THE SUBGRADE.

ITEM 621- RPM REMOVED/REPLACED

SR 133	
ITEM 621- RPM, Y/Y	518 EA
SR 32 RAMPS	
ITEM 621- RPM, Y/R	14 EA

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 621- RPM	532 EA
ITEM 621- RPM REMOVED	532 EA

GUARDRAIL INSTALLATION

THIS PROJECT REQUIRES THE INSTALLATION OF NEW GUARDRAIL POSTS. SURVEY WORK HAS NOT BEEN PERFORMED EVERYWHERE 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 RELOCATED AS A RESULT OF THIS OPERATION. ADJUSTMENTS TO THE PROPOSED GUARDRAIL WILL ACCOMMODATE 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 THE PROPOSED GUARDRAIL INSTALLATIONS SHALL BE INCIDENTAL TO PAY ITEM 606.

ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN

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.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

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 REBOUNDABLE RETROREFLECTIVE SHEETING, PER CMS 730.191.

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.

GUARDRAIL WORK

REMOVE AND REPLACE GUARDRAIL AT THE S.L.M. 31.15, RIGHT ON SR 133. REPLACE TYPE A WITH TYPE E AND EXTEND FOOTPRINT 12.5' THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 202 GUARDRAIL REMOVED	63 FEET
ITEM 202 ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	1 EACH
ITEM 209 RESHAPING UNDER GUARDRAIL	1 STATION
ITEM 606 GUARDRAIL, TYPE MGS WITH LONG POSTS	50 FEET
ITEM 606- ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	1 EACH
ITEM 626 BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	2 EACH

DESIGN AGENCY



DESIGNER

JED

REVIEWER

JDO 5/12/2023

PROJECT ID

113982

SHEET TOTAL

P.5 12