

AC GAUGE OFFSET, AS PER PLAN

FOLLOW 403, EXCEPT AS FOLLOWS:

- OFFSET THE AC GAUGE FOR EACH JMF FOR THE PROJECT PRIOR TO THE PROJECT'S START USING 403.06.A AND THE MODIFIED SUPPLEMENT 1043 PROCEDURE BELOW.
- DURING THE S-1043.07 PROCESS, A RAP SAMPLE OBTAINED FROM THE JMF-DESIGNATED RAP PILE WILL BE EXTRACTED IN THE ASPHALT LEVEL 3 LAB TO VERIFY THE RAP AC%. THE RAP AC% WILL BE WITHIN 0.3% OF THE AVERAGE RAP AC% FROM THE JMF. IF RAP AC% IS OUTSIDE OF THE 0.3%, THE VERIFICATION PAN PROCESS WILL STOP, AND DISTRICT TESTING WILL ALLOW ONE OPPORTUNITY TO REWORK THE RAP PILE AT THE MIX PLANT AND RESAMPLE. RESAMPLING REQUIRES DISTRICT TESTING TO BE PRESENT. IF THE RESAMPLE IS STILL OUTSIDE OF THE 0.3%, THE JMF WILL BE RESCINDED AND NEED TO BE REDESIGNED.

FOLLOW 403.06 EXCEPT AS FOLLOWS:

- ENSURE ASPHALT BINDER CONTENT DOES NOT EXCEED TABLE 403.06.G-1. ADJUSTMENTS TO MIX PLANT CONTROL SETTINGS MUST BE SUBMITTED TO AND APPROVED BY DISTRICT TESTING PRIOR TO MAKING THE ADJUSTMENT. THE ADJUSTMENT CANNOT EXCEED +/-0.2% FROM DESIGN AC% FROM JMF. DO NOT LOWER VIRGIN BINDER CONTENT OR INCREASE RAP PERCENT. ENSURE PLANT TICKET SHOWS THE ADJUSTMENT AND IS SET TO THE ADJUSTED TOTAL AC% AT ALL TIMES AFTERWARDS.
- RECORD THE DAILY VERIFICATION PAN RESULTS IN A SEPARATE WORKSHEET AND MAKE SURE IT'S POSTED IN THE PLANT FACILITY AND AVAILABLE TO THE MONITORS. INCLUDE THE DATE RAN, VERIFICATION PAN RESULT, AND INITIALS OF WHO RAN IT. ENSURE A PRINTOUT OF THE DAILY VERIFICATION PAN IS ALSO INCLUDED WITH THE TE-199.

FOLLOW SUPPLEMENT 1043 FOR AC GAUGE OFFSET, EXCEPT AS MODIFIED BELOW:

- FOLLOW 1043.07 EXCEPT AS FOLLOWS:
 - o NOTIFY DISTRICT TESTING A MINIMUM OF ONE WEEK PRIOR TO MAKING VERIFICATION PANS.
 - o DISTRICT TESTING WILL WITNESS A SOLVENT EXTRACTION FROM A SAMPLE FROM THE RAP PILE THAT IS TO BE USED IN THE JMF TO VERIFY THE RAP AC%. RAP AC% WILL BE WITHIN 0.3% OF RAP AC% DETERMINED IN JMF. IF OUTSIDE OF 0.3%, DO NOT PROCEED AND THE JMF WILL NEED TO BE REDESIGNED.
 - o DISTRICT TESTING WILL WITNESS THE VERIFICATION PANS BEING BLENDED, MIXED, AND COMPACTED.
 - o MAKE A MINIMUM OF THREE VERIFICATION PANS FOR THE JMF THAT ARE AT THE JMF ASPHALT BINDER CONTENT. MAKE ONE ADDITIONAL VERIFICATION PAN FOR EACH ADDITIONAL DISTRICT THE JMF WILL BE USED IN.
 - o IN ADDITION, TURN POSSESSION OVER OF THE CALIBRATION AC GAUGE PANS USED TO DETERMINE THE FIT COEFFICIENT TO DISTRICT TESTING.
- FOR AC CONTENT PAY ACCEPTANCE, REPLACE 1043.08 WITH THE FOLLOWING:

CALCULATE AN AC GAUGE OFFSET AMOUNT FOR EACH JMF AND MIX PLANT IN ACCORDANCE WITH THE FOLLOWING PROCEDURE PRIOR TO START OF ANY PRODUCTION FOR THE JMF. NOTIFY DISTRICT TESTING 24 HOURS PRIOR TO OFFSETTING GAUGE.

1. ENSURE PRINTER IS ON AND PLACE THE FIRST VERIFICATION PAN IN THE AC GAUGE AND RUN.
2. AFTER THE 16-MINUTE TEST, TAKE THE VERIFICATION PAN OUT AND TURN 180 DEGREES AND PLACE BACK IN AC GAUGE AND RUN.
3. REPEAT STEPS 1 AND 2 WITH SECOND AND THIRD VERIFICATION PANS.
4. FOR EACH RUN, TAKE THE JMF ASPHALT BINDER CONTENT MINUS THE AC GAUGE AC% TO OBTAIN THE OFFSET OF THE RUN.
5. AVERAGE ALL OFFSETS FOR A FINAL OFFSET.
6. RETAIN ALL OF THE VERIFICATION PANS. AFTER THE FINAL OFFSET IS DETERMINED, DISTRICT TESTING WILL CHOOSE TWO OF THE VERIFICATION PANS AND SEND ONE OF THESE TWO TO OMM TO EXTRACT AND REFLUX.
7. DISTRICT TESTING WILL USE THE TWO VERIFICATION PANS TO OFFSET THEIR AC GAUGE.

BEFORE THE BEGINNING OF A PRODUCTION DAY, RUN THE VERIFICATION PAN IN THE AC GAUGE AND ENSURE THE OFFSET AC GAUGE AMOUNT IS WITHIN 0.14% OF THE JMF ASPHALT BINDER CONTENT. DURING THE START OF PRODUCTION FOR THE JMF, SOLVENT EXTRACT THE FIRST TOW QC SAMPLES AND COMPARE TO THE OFFSET AC GAUGE. ENSURE SOLVENT EXTRACTION IS WITHIN 0.3% OF OFFSET AC GAUGE. IF MORE THAN 0.3% OFF, IMMEDIATELY RESAMPLE AND RUN AC GAUGE AND SOLVENT EXTRACT IMMEDIATELY. IF TWO CONSECUTIVE SAMPLES ARE MORE THAN 0.3% OFF, IMMEDIATELY STOP PRODUCTION, CONTACT MONITORING TEAM, AND INVESTIGATE THE REASON FOR THE PROBLEM. ONCE TWO CONSECUTIVE QC SAMPLES ARE WITHIN 0.3% OF OFFSET AC GAUGE, THE FINAL OFFSET GAUGE IS CONFIRMED.

AFTER CONFIRMING THE AC GAUGE OFFSET AMOUNT, PROCEED WITH DETERMINING AC CONTENTS OF PRODUCTION SAMPLES BY THE AC GAUGE ACCORDING TO 1043.09.

ONLY DETERMINE ONE AC GAUGE OFFSET AMOUNT PER JMF. IF MORE THAN 30 DAYS LAPSED SINCE THE JMF WAS LAST TESTED, RE-DO THE OFFSET PROCEDURE ABOVE WITH TWO VERIFICATION PANS (ONE FROM THE CONTRACTOR AND ONE FROM THE DISTRICT). IF AN AC GAUGE OFFSET AMOUNT IS LATER DETERMINED, BY AN INVESTIGATION OF BOTH THE CONTRACTOR AND THE DISTRICT, TO BE INCORRECT, RE-DO THE OFFSET PROCEDURE.

IN ADDITION, ALSO DETERMINE THE AC GAUGE OFFSET FOLLOWING THE CURRENT PROCEDURE AS OUTLINE IN SUPPLEMENT 1043 DATED JANUARY 21, 2022 AND PROVIDE THE INFORMATION TO THE DEPARTMENT. THIS AC GAUGE OFFSET NUMBER WILL NOT BE USED DURING QC TESTING.

FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH ITEM 607.

ITEM 254 – PAVEMENT PLANING, ASPHALT CONCRETE (2.50" DEEP) (UNCURBED SECTION)

THE INTENT OF THE PLANING IS TO MILL 2.50 INCHES 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.

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 7 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE FEE OF \$1,000 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 254 – PAVEMENT PLANING, ASPHALT CONCRETE (2.75" DEEP) (CURBED SECTION)

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 7 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE FEE OF \$1,000 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 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.

ITEM 659 – SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659	COMMERCIAL FERTILIZER	0.04	TON
659	LIME	0.06	ACRE
659	WATER	1.72	M GAL
659	REPAIR SEEDING AND MULCHING	16	SQ YD
659	INTERSEEDING	16	SQ YD
659	TOPSOIL	35	CU YD
659	SOIL ANALYSIS TEST	2	EACH
659	SEEDING AND MULCHING	312	SQ YD

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS. QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY.

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 ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS.

INTERSECTIONS AND DRIVES

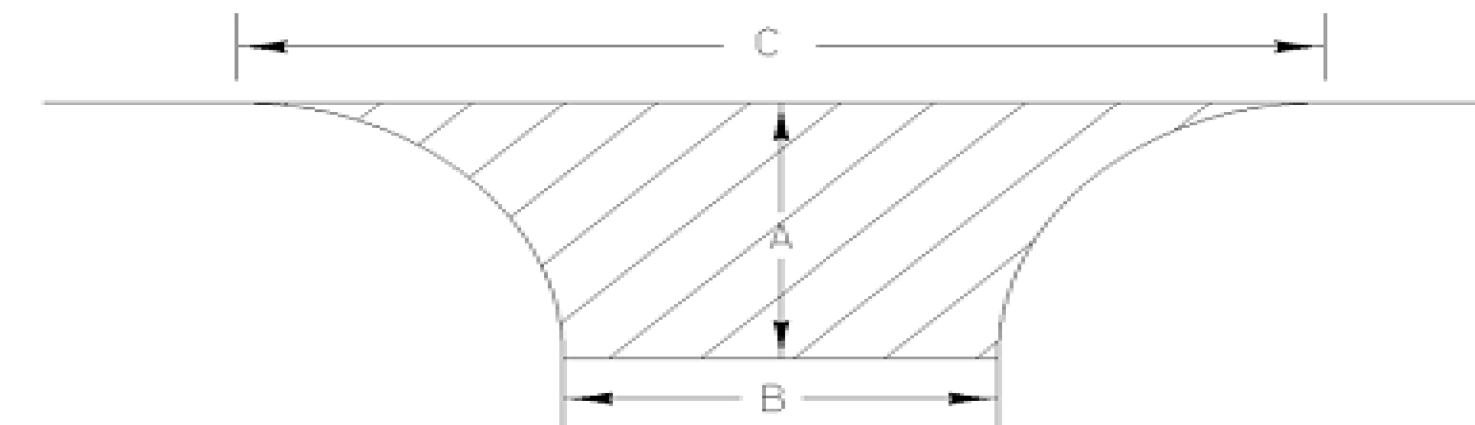
URBAN-INTERSECTIONS SHALL BE PLANED AND PAVED TO THE BACK OF CROSSWALKS OR AS DIRECTED BY THE ENGINEER TO PROVIDE A SMOOTH TRANSITION BETWEEN THE TWO HIGHWAYS, AND TO ELIMINATE WATER POCKETS.

EXISTING PAVED DRIVE APRONS SHALL BE PAVED SO AS TO PROVIDE A SMOOTH TRANSITION BETWEEN THE HIGHWAY AND THE DRIVE, AS DIRECTED BY THE ENGINEER. DISTANCE FROM EDGE OF ROADWAY MAY VARY AT EACH DRIVE.

EXISTING AGGREGATE DRIVES SHALL BE PAVED WITH AN APRON AN AVERAGE WIDTH OF 4 FT. THE SLOPE OF THIS APRON SHALL BE THE SAME AS THE ADJACENT PAVEMENT SLOPE OR AS DIRECTED BY THE ENGINEER. ANY GRADING NEEDED TO PAVE THE APRON SHALL BE INCLUDED IN THE RELATED ASPHALT ITEM FOR PAYMENT. ITEM 617 COMPACTED AGGREGATE SHALL BE PLACED ADJACENT TO THIS APRON TO PROVIDE A SMOOTH TRANSITION FROM THE APRON TO THE EXISTING DRIVE, (WIDTH OF THIS 617 APPLICATION MAY VARY) AS DIRECTED BY THE ENGINEER. AN ADDITIONAL QUANTITY OF ITEM 617 HAS BEEN ESTIMATED TO COMPLETE THIS WORK AND IS SHOWN AS AN EXTRA AREA ON THE PAVEMENT & SHOULDER DATA SHEET.

ANY HAZARD OR UNSAFE CONDITION RESULTING FROM THE ABOVE WORK MUST BE CORRECTED IMMEDIATELY. THE CONTRACTOR IS REMINDED OF SECTIONS 105.01, 107.07 & 614.02A OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

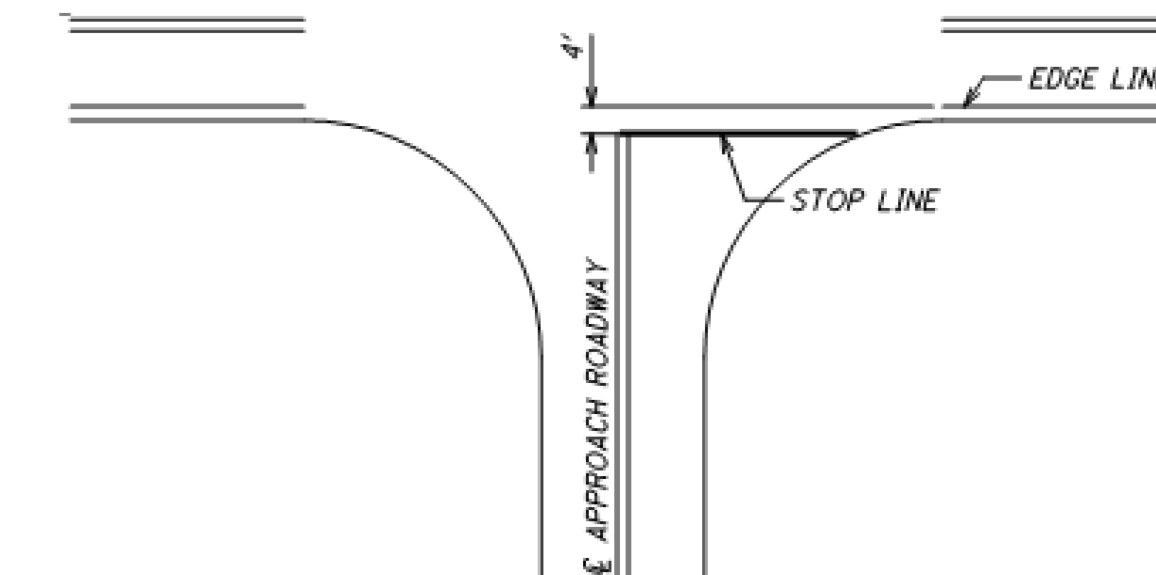
THE PAVING DIMENSIONS FOR THE INTERSECTIONS ARE SHOWN IN THE CHART ON THE FOLLOWING SHEET.



Intersection Name	SLM	A	B	C	Area (sy)
SITES RD	18.95	30	37	90	182
RAMP TO/FROM I-71 S	19.01	26	71	140	272
RAMP TO/FROM I-71 N	19.27	27	70	139	279
MICHAEL DAWN ST	20.16	15	33	91	87
WALLACE RD	20.35	41	21	90	200
RUMMEL RD	20.37	49	23	70	211
LEITER RD	20.37	28	43	132	226
MANSFIELD-LUCAS RD	24.45	20	60	122	179
HANLEY RD	22.16	14	28	50	55
BRIGHTWOOD BLVD	22.25	19	16	42	52
CHURCH ST	22.39	15	16	27	33
GREEN DR	22.44	15	12	27	28
WATER ST	22.46	15	10	25	25
BYERLY DR S	22.49	15	12	23	26
BYERLY DR N	22.49	15	15	30	33
BRIDGE ST	22.54	15	20	30	39
CIRCLE DR	22.54	12	11	17	17
CIRCLE DR	22.56	12	15	20	22
S. UNION ST	22.60	15	30	46	59
N. UNION ST	22.60	15	30	42	57
MOORE ST	22.63	15	12	18	18
BROAD ST	22.68	44	25	82	215
PARK ST	22.68	18	25	54	69
BOND ST	22.73	18	18	57	62
SMART RD	23.02	22	17	66	81
MT ZION RD	24.73	35	24	90	179
S.R. 603 S	24.92	30	31	87	166
S.R. 603 N	24.92	56	40	150	477
Total Intersection Areas					3354

STOP BAR PLACEMENT

IN ORDER TO ACHIEVE MAXIMUM INTERSECTION SIGHT DISTANCE, AT NORMAL STOP CONTROLLED RURAL INTERSECTIONS WITHOUT CROSSWALK, PLACE THE STOP BAR FOUR FEET FROM THE EDGE LINE OF THE INTERSECTING ROADWAY, OR IN LINE WITH THE OUTSIDE EDGE OF THE PAVED SHOULDER, WHICHEVER IS WIDER.



GENERAL PAVEMENT MARKING AND TRAFFIC CONTROL

STRIPE ALL LANE WIDTHS TO MATCH THEIR EXISTING WIDTHS ACCORDING TO CMS 641.08A, UNLESS NOTED OTHERWISE IN THIS PLAN. USE 642 PAINT, TYPE 1 FOR ALL WORK ZONE MARKINGS. INSTALL WORK ZONE STOP LINES AT ALL STOP APPROACHES, BOTH ON THE MAINLINE AND ON APPROACH ROADWAYS, WHERE THE EXISTING STOP LINE IS DESTROYED BY OTHER WORK ON THIS PROJECT.

**ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR (442)
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. IT IS ANTICIPATED THAT FULL-DEPTH PAVEMENT REMOVAL WILL CONSIST OF REMOVING ASPHALT CONCRETE UP TO 11.5" THICK OUTSIDE OF THE VILLAGE OF LUCAS AND REMOVING 5" ASPHALT CONCRETE AND 5" PORTLAND CEMENT CONCRETE WITHIN THE VILLAGE.

PAVEMENT REPAIRS SHALL BE PERFORMED FOLLOWING MILLING AND PRIOR TO NEW OVERLAY PLACEMENT. THE DEPTH OF REMOVAL SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT BASED ON THE PAVEMENT DESIGN AND AN AVERAGE DEPTH OF 4" AND AN AVERAGE WIDTH OF 4 FT FOR ESTIMATING PURPOSES.

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". PG 64-22 ASPHALT BINDER SHALL BE USED FOR ALL OF THE ASPHALT CONCRETE MATERIALS FOR THESE REPAIRS.

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. MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT IS 30 PERCENT. APPLY 703.05 FOR COARSE AND FINE AGGREGATE EXCEPT GRADATION FOR FINE AGGREGATE DOES NOT APPLY. QUALITY CONTROL: DO NOT PERFORM Nmax IN QUALITY CONTROL TESTING. DO NOT TAKE EXTRA ASPHALT BINDER SAMPLES AS OUTLINED IN CMS 442.05.

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:

Table with 5 columns: COUNTY, ROUTE, SLM, ITEM 251, ITEM 253. Includes sub-headers for LONGITUDINAL (01/NFP/PV) and TRANSVERSE (01/NFP/PV) repairs.

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 623 – MONUMENT BOX ADJUSTED TO GRADE

ALL WORK RELATED TO ADJUSTING MONUMENT BOXES TO GRADE WILL BE IN ACCORDANCE TO SECTIONS 623.04 AND 623.05 OF THE 2019 ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE MONUMENT BOX MAY OR MAY NOT HAVE AN EXISTING ADJUSTABLE FRAME. THE WORK SHALL CONSIST OF ADJUSTING THE EXISTING MONUMENT BOX TO THE SATISFACTION OF THE ENGINEER. 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 ADJUSTABLE FRAMES.

Table with 4 columns: MONUMENT BOXES, RIC-39-19.38, RIC-39-19.46, RIC-39-24.65, RIC-39-24.72

ITEM 623 – MONUMENT BOX ADJUSTED TO GRADE 4 EACH (01/NFP/PV)

ITEM 623 – MONUMENT BOX RECONSTRUCTED TO GRADE, AS PER PLAN

THE CONTRACTOR AND THE ENGINEER SHALL FIELD VERIFY THE LOCATION OF ALL EXISTING MONUMENT BOXES LISTED IN THE PLANS PRIOR TO BEGINNING ANY WORK ON THE MONUMENT BOXES. THE USE OF METAL DETECTOR RODS MAY BE NECESSARY TO LOCATE BURIED MONUMENTATION. ANY MONUMENT BOX LISTED IN THIS NOTE THAT IS IMMEDIATELY VISIBLE ON THE SURFACE OF THE EXISTING PAVEMENT, OR IS UNCOVERED DURING THE PLANING PROCESS, SHALL BE ADJUSTED TO GRADE IF WITHIN TOLERANCE OF THE ADJUSTMENT COLLAR. ANY MONUMENT NOT FITTING CRITERIA SHALL BE TREATED AS RECONSTRUCTED TO GRADE.

THE ENGINEER SHALL MAKE THE FINAL DETERMINATION OF WHETHER EACH MONUMENT BOX IS TO BE RECONSTRUCTED OR ADJUSTED AFTER THE PLACEMENT OF THE FINAL ASPHALT CONCRETE PAVEMENT SURFACE. ANY MONUMENT BOX THAT DOES NOT HAVE AN EXISTING ADJUSTABLE FRAME AND LID, OR THAT EXHIBITS SUBSTANTIAL DETERIORATION AS DETERMINED BY THE ENGINEER REQUIRING MORE WORK THAN WOULD BE CONSIDERED NORMAL FOR ITEM 623 – MONUMENT BOX ADJUSTED TO GRADE SHALL BE RECONSTRUCTED. ANY EXISTING MONUMENT THAT DOES NOT HAVE AN EXISTING SALVAGEABLE MONUMENT BOX AROUND THE PIN SHALL BE RECONSTRUCTED USING A NEW MONUMENT BOX AS PER RM-1.1, MAINTAINING THE EXISTING MONUMENTATION LOCATION.

ALL WORK RELATED TO RECONSTRUCTING OR ADJUSTING MONUMENT BOXES TO GRADE WILL BE IN ACCORDANCE WITH SPECIFICATIONS 611.10.C, 623.04, AND 623.05 OF THE ODOT C&MS.

ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THIS WORK IS TO BE PAID USING THE CONTRACT BID PRICE PER EACH FOR ITEM 623 – MONUMENT BOX RECONSTRUCTED TO GRADE, AS PER PLAN. A CONTINGENCY QUANTITY AS SHOWN BELOW IS CARRIED TO THE GENERAL SUMMARY:

ITEM 623 – MONUMENT BOX RECONSTRUCTED TO GRADE, AS PER PLAN 2 EACH (01/NFP/PV)

**ITEM 611 – CASTING ADJUSTED TO GRADE
ITEM 638 – VALVE BOX 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.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY AND LISTED UNDER THE APPROPRIATE ADJUSTMENT ITEM:

Table with 4 columns: SLM, CASTING TYPE, SLM, CASTING TYPE. Lists items like CATCH BASIN, MANHOLE, VALVE BOX, INLET.

ITEM 611 - CATCH BASIN ADJUSTED TO GRADE 11 EACH (01/NFP/PV)
ITEM 611 - INLET ADJUSTED TO GRADE 3 EACH (01/NFP/PV)
ITEM 611 – MANHOLE ADJUSTED TO GRADE 5 EACH (01/NFP/PV)
ITEM 638 – VALVE BOX ADJUSTED TO GRADE 6 EACH (01/NFP/PV)

THE USE OF CONCRETE COLLARS AT THE DRIVING SURFACE SHALL NOT BE PERMITTED FOR ANY CASTINGS ADJUSTED TO GRADE. FOR CASTINGS IN SIDEWALKS, ADJUSTMENTS SHALL ENSURE THE TOP OF THE CASTING IS CONSISTANT IN ELEVATION WITH THE SURROUNDING SIDEWALK.

CONNECTING GUARDRAIL TO EXISTING RAIL

IN LOCATIONS WHERE TYPE 5 GUARDRAIL, TERMINAL ASSEMBLIES, ETC. ARE TO BE CONNECTED TO EXISTING RAIL SOME MODIFICATIONS MAY BE REQUIRED, INCLUDING EXTRA POSTS, DRILLING HOLES AND POSSIBLY PARTIAL SECTIONS OF ADDITIONAL RAIL ELEMENTS. THE COST OF THIS ADDITIONAL WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR TYPE 5 GUARDRAIL. IF ADDITIONAL PORTIONS OF RAIL ELEMENT ARE USED THE LINEAL MEASUREMENT OF THIS ADDITIONAL PORTION SHALL BE ADDED FOR PAYMENT.

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 RAIL SPLICE" AS SHOWN ON STANDARD CONSTRUCTION DRAWING GR-1.1. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

SUGGESTED SEQUENCE OF GUARDRAIL WORK

- 1. GUARDRAIL WORK IS TO BEGIN AFTER THE LINEAR GRADING IS COMPLETED AND THE 617 MATERIAL IS PLACED.
- 2. REMOVE THE GUARDRAIL.
- 3. PERFORM THE RESHAPING UNDER GUARDRAIL INCLUDING COMPLETING THE EMBANKMENT, AS PER PLAN.
- 4. REBUILD/CONSTRUCT THE GUARDRAIL RUN.
- 5. INSTALL BARRIER REFLECTORS.

ITEM 203 – EMBANKMENT, AS PER PLAN (GUARDRAIL)

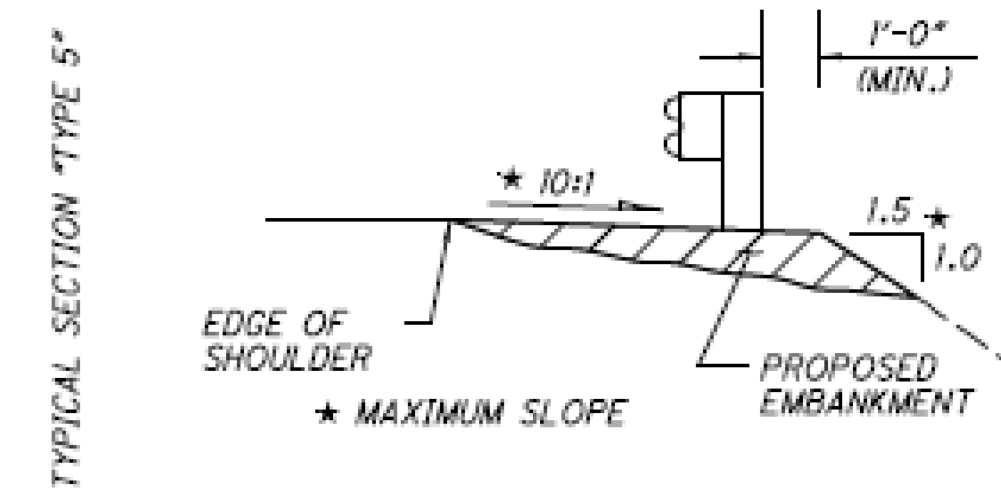
AT SPECIFIED LOCATIONS AND LOCATIONS AS DIRECTED BY THE ENGINEER, EMBANKMENT SHALL BE PLACED AS TO PROVIDE A SUITABLE AREA TO CONSTRUCT GUARDRAIL AND TO PROVIDE STRUCTURAL INTEGRITY OF THE ROADWAY SHOULDER.

AREAS WHERE EMBANKMENT MATERIAL IS TO BE PLACED SHALL BE SCALPED. THE REQUIREMENTS FOR BENCHING SHALL BE WAIVED. THE DEPTH OF LAYERS IN WHICH THE EMBANKMENT IS PLACED SHALL BE LIMITED TO EIGHT (8) INCHES IN THICKNESS. THE METHOD OF COMPACTION AND EQUIPMENT USED SHALL BE PER C&MS 203.07 OR 98% MAXIMUM DRY DENSITY.

AFTER THE EMBANKMENT HAS BEEN PLACED, THE AREAS SHALL BE FERTILIZED, SEEDED, MULCHED, AND WATERED AS PER ITEM 659. THE COST SHALL BE INCLUDED IN THIS ITEM FOR PAYMENT.

THE METHOD OF MEASUREMENT FOR EMBANKMENT MATERIAL SHALL BE BY THE NUMBER OF CUBIC YARDS MEASURED BY LOOSE VOLUME IN THE CARRIER AT THE WORK SITE, IN LIEU OF THE REQUIREMENTS OF 203.09. PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT BID PRICE PER CUBIC YARD FOR ITEM 203 - EMBANKMENT, AS PER PLAN (GUARDRAIL) AND SHALL INCLUDE ALL WORK DESCRIBED ABOVE.

QUANTITIES OF ITEM 203 – EMBANKMENT, AS PER PLAN HAVE BEEN PROVIDED IN LOCATIONS WHERE GUARDRAIL IMPROVEMENTS ARE TO BE MADE. EXACT DIMENSIONS AND LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER.



ITEM 606 – ANCHOR ASSEMBLY, TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE 5 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 J, ASTM D4956 TYPE XI REFLECTIVE SHEETING, PER CMS 730.193.

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 29 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, 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 606 – RAISING TYPE 5 GUARDRAIL

WHERE DESIGNATED ON THE PLAN, THE EXISTING TYPE 5 GUARDRAIL SHALL BE RAISED ON THE EXISTING WOOD POSTS AS PER STANDARD DRAWING GR-2.1 SO AS TO OBTAIN THE STANDARD 29 IN. HEIGHT. THE RAIL SHALL BE RE-ATTACHED TO THE POSTS USING NEW POST BOLTS.

THE RAIL SHALL BE DISMANTLED ONLY TO THE EXTENT NECESSARY TO FIELD BORE NEW BOLT HOLES IN THE WOOD POSTS, AND TO RECONNECT THE RAIL AND BLOCK TO THE EXISTING POSTS.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER FOOT OF ITEM 606 – RAISING TYPE 5 GUARDRAIL, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.


ITEM 606 – GUARDRAIL REBUILT, TYPE 5

THIS ITEM SHALL BE USED WHEN THE GUARDRAIL REQUIRES REPAIRS IN WHICH THE RAIL ELEMENT IS REUSABLE. ALSO, THIS ITEM WILL BE USED TO RE-ALIGN GUARDRAIL RUNS, AS DIRECTED BY THE ENGINEER.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT, AS DESCRIBED IN C&MS 606.05 FOR ITEM 606 – GUARDRAIL REBUILT, TYPE 5.

SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
6	7	8	10	11	17	18	19	24	40	01/NFP/PV	02/NFP/BR						
ROADWAY																	
					317					317		202	23500	317	SY	WEARING COURSE REMOVED (1.00" DEEP)	
								2,108.3		2,108.3		202	30000	2,108.3	SF	WALK REMOVED	
								232		232		202	32000	232	FT	CURB REMOVED	
								14		14		202	32500	14	FT	CURB AND GUTTER REMOVED	
							50			50		202	38000	50	FT	GUARDRAIL REMOVED	
							2			2		202	42000	2	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A	
							2			2		202	42050	2	EACH	ANCHOR ASSEMBLY REMOVED, TYPE B	
								3		3		203	20001	3	CY	EMBANKMENT, AS PER PLAN (CURB RAMPS)	9
								86		86		203	20001	86	CY	EMBANKMENT, AS PER PLAN (GUARDRAIL)	7
							0.25			0.25		209	15000	0.25	STA	RESHAPING UNDER GUARDRAIL	
					10.73					10.73		209	60500	10.73	MILE	LINEAR GRADING	
					10.73					10.73		209	72050	10.73	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING	
								37.5		37.5		606	16500	37.5	FT	GUARDRAIL REBUILT, TYPE 5	
								87.5		87.5		606	17000	87.5	FT	RAISING TYPE 5 GUARDRAIL	
								3		3		606	17700	3	EACH	REPLACE EXISTING GUARDRAIL BLOCKOUT	
								5		5		606	26100	5	EACH	ANCHOR ASSEMBLY, TYPE E	
								1		1		606	27900	1	EACH	ANCHOR ASSEMBLY REBUILT, TYPE T	
							12.5			12.5		606	98000	12.5	FT	GUARDRAIL, MISC.: TYPE 5 RAIL	8
								1,054.2		1,054.2		608	10000	1,054.2	SF	4" CONCRETE WALK (CURB RAMPS)	
								1,014		1,014		608	52000	1,014	SF	CURB RAMP (CURB RAMPS)	
	4									4		623	39500	4	EACH	MONUMENT BOX ADJUSTED TO GRADE	
	2									2		623	39601	2	EACH	MONUMENT BOX RECONSTRUCTED TO GRADE, AS PER PLAN	7
								5		5		626	00116	5	EACH	BARRIER REFLECTOR, TYPE 5, BIDIRECTIONAL	
										2		SPECIAL	69050100	2	EACH	MAILBOX SUPPORT SYSTEM, SINGLE	8
										1		SPECIAL	69050200	1	EACH	MAILBOX SUPPORT SYSTEM, DOUBLE	8
EROSION CONTROL																	
2										2		659	00100	2	EACH	SOIL ANALYSIS TEST	
35										35		659	00300	35	CY	TOPSOIL	
312										312		659	10000	312	SY	SEEDING AND MULCHING	
16										16		659	14000	16	SY	REPAIR SEEDING AND MULCHING	
16										16		659	15000	16	SY	INTER-SEEDING	
0.04										0.04		659	20000	0.04	TON	COMMERCIAL FERTILIZER	
0.06										0.06		659	31000	0.06	ACRE	LIME	
1.72										1.72		659	35000	1.72	MGAL	WATER	
										1,000		832	30000	1,000	EACH	EROSION CONTROL	
DRAINAGE																	
	11									11		611	98630	11	EACH	CATCH BASIN ADJUSTED TO GRADE	
	3									3		611	99150	3	EACH	INLET ADJUSTED TO GRADE	
	5									5		611	99654	5	EACH	MANHOLE ADJUSTED TO GRADE	
PAVEMENT																	
	1,010									1,010		251	01030	1,010	CY	PARTIAL DEPTH PAVEMENT REPAIR (442) (LONGITUDINAL)	
	253									253		251	01030	253	CY	PARTIAL DEPTH PAVEMENT REPAIR (442) (TRANSVERSE)	
	101									101		253	02000	101	CY	PAVEMENT REPAIR (LONGITUDINAL)	
	25									25		253	02000	25	CY	PAVEMENT REPAIR (TRANSVERSE)	
					258					258		254	01000	258	SY	PAVEMENT PLANING, ASPHALT CONCRETE (2.00" DEEP)	
					97,724					97,724		254	01000	97,724	SY	PAVEMENT PLANING, ASPHALT CONCRETE (2.50" DEEP)	
					10,238					10,238		254	01000	10,238	SY	PAVEMENT PLANING, ASPHALT CONCRETE (2.75" DEEP)	
					15,173					15,173		407	10000	15,173	GAL	TACK COAT	
					29					29		407	13900	29	GAL	TACK COAT, 702.13	
					5,043					5,043		408	10001	5,043	GAL	PRIME COAT, AS PER PLAN	5
					10					10		442	00201	10	CY	ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN, PG64-22, (1.00" +/- THICK)	5
					3,759					3,759		442	00201	3,759	CY	ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN, PG64-22, (1.25" THICK)	5
					15					15		442	00201	15	CY	ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN, PG64-22, (2.00" +/- THICK) TWO 1" LIFTS	5
					95.89					95.89		442	00201	95.89	CY	ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN, PG64-22, (SAFETY EDGE)	5
					4,508					4,508		442	10081	4,508	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN (1.50" THICK)	5
										14.5		609	12000	14.5	FT	COMBINATION CURB AND GUTTER, TYPE 2 (CURB RAMPS)	
										79.5		609	26000	79.5	FT	CURB, TYPE 6 (CURB RAMPS)	
										23.5		609	26001	23.5	FT	CURB, TYPE 6, AS PER PLAN (CURB RAMPS)	
					709					709		617	10100	709	CY	COMPACTED AGGREGATE	9
					9.36					9.36		618	41000	9.36	MILE	RUMBLE STRIPES, EDGE LINE (ASPHALT CONCRETE)	

GENERAL SUMMARY

DESIGN AGENCY
DISTRICT 3

ENGINEERING TEAM FOUR
DESIGNER
JNC
REVIEWER
NRF 04-06-22
PROJECT ID
102955
SHEET TOTAL
15 46