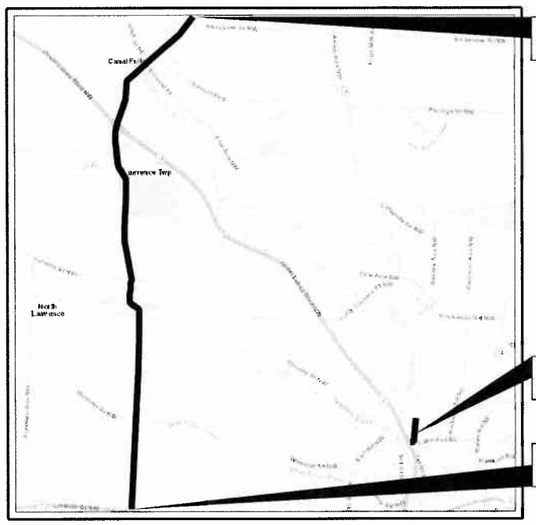
STA - SR 93/SR 236-11.71/00.00
210497 PID - 101417
Dist 4 9/16/2021

Contract Proposal available @ www.contracts.dot.state.oh.us

STA-93/236-11.71/0.00



LOCATION MAP

LATITUDE: N40°51'14" LONGITUDE: W81°36'14"

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

STA-93/236-11.71/0.00

CITY OF CANAL FULTON, MASSILLON
LAWRENCE, TUSCARAWAS TOWNSHIP
STARK COUNTY

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

SR 93 ADT TOTAL (2019) 7723
SR 236 ADT TOTAL (2019) 13975

INDEX OF SHEETS:

FEDERAL PROJECT NUMBER

E170118

RAILROAD INVOLVEMENT

NORFOLK SOUTHEN / RJ CORMAN

PROJECT DESCRIPTION

RESURFACING OF STA SR93 FROM 11.71 TO 19.24, STA SR236 FROM 0.00 TO 0.40, INCLUDES MINOR BRIDGE WORK TO 5 STRUCTURES. MAJOR REHAB PROJECT. SR 93 FROM SLM 11.71 TO SLM 12.96

EARTH DISTURBED AREAS

PROJECT EDA:	4.1 ACRES
ESTIMATED CONTRACTOR EDA:	0.3 ACRES
NOTICE OF INTENT EDA:	N/A (NOI NOT REQUIRED)

DESIGN DESIGNATION

DESIGN FUNCTIONAL CLASSIFICATION / NHS:

SR 93 11.71 TO 12.96 URBAN MINOR ARTERIAL / NO
SR 93 12.96 TO 17.20 RURAL MINOR ARTERIAL / NO
SR 93 17.20 TO 19.24 URBAN PRINCIPAL ARTERIAL / YES
SR 236 0.00 TO 0.40 URBAN MINOR ARTERIAL / NO

DESIGN EXCEPTIONS

NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:
ODOT DISTRICT 4 PLANNING & ENGINEERING
2088 SOUTH ARLINGTON RD
AKRON, OH 44306

ENGINEER'S SEAL:

STATE OF OHIO
MATTHEW A. CHANEY
E-78423
REGISTERED PROFESSIONAL ENGINEER

SIGNED:
DATE: 6/7/21

STANDARD CONSTRUCTION DRAWINGS

BP-3.1	1/17/20	TC-41.20	10/18/13			
BP-3.2	1/18/19	TC-42.20	10/18/13			
		TC-52.10	10/18/13			
DM-4.3	1/15/16	TC-52.20	1/15/21			
DM-4.4	1/15/16	TC-64.10	1/17/20			
		TC-65.10	1/17/14			
BP-4.1	7/19/13	TC-65.11	7/21/17			
BP-7.1	7/17/20	TC-71.10	1/19/18			
RM-1.1	1/15/21					
MT-97.10	4/19/19					
MT-97.12	1/20/17					
MT-99.20	4/19/19					
MT-101.90	7/17/20					
MT-105.10	1/17/20					

SUPPLEMENTAL SPECIFICATIONS

800-2019	7/16/21
809	1/15/21
821	4/20/12
832	10/19/18
872	4/17/20
874	4/17/20
875	1/18/19
909	1/15/21
921	4/20/12

SPECIAL PROVISIONS

2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

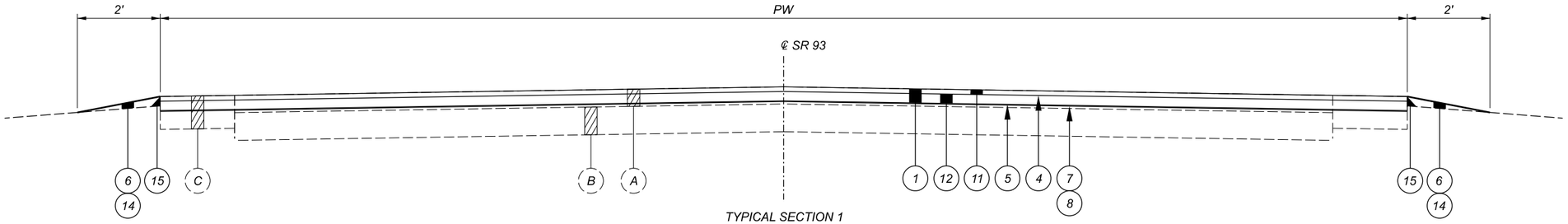
APPROVED
DATE 6/7/21 DISTRICT DEPUTY DIRECTOR

APPROVED Jack Marchbanks / DCS
DATE 7/28/21 DIRECTOR, DEPARTMENT OF TRANSPORTATION

TITLE SHEET

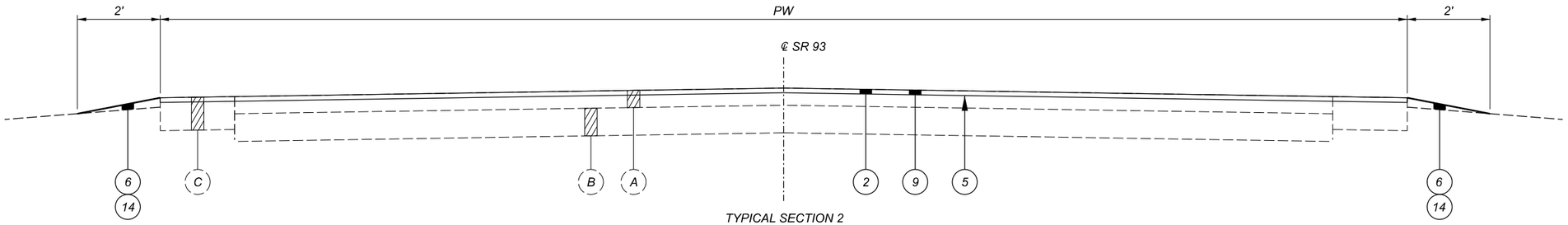
DESIGN AGENCY

DESIGNER BFR
REVIEWER MAC 05/04/21
PROJECT ID 101417
SHEET P.1 TOTAL 26



TYPICAL SECTION 1

ROUTE	SLM		LENGTH (MILES)	PW (FEET)
	FROM	TO		
SR 93	11.71	12.50	0.79	26
SR 93	12.50	12.78	0.28	38
SR 93	12.78	12.91	0.13	27
SR 93	12.91	12.93	0.02	27
SR 93	12.93	12.96	0.03	27



TYPICAL SECTION 2

ROUTE	SLM		LENGTH (MILES)	PW (FEET)
	FROM	TO		
SR 93	12.96	14.25	1.29	26
SR 93	14.25	14.43	0.18	26
SR 93	14.45	16.39	1.94	26
SR 93	16.41	17.06	0.65	25
SR 93	17.06	17.20	0.14	45
SR 93	17.20	17.23	0.03	45
SR 93	17.29	17.40	0.11	45
SR 93	17.40	17.65	0.25	25
SR 93	17.65	17.77	0.12	33
SR 93	18.67	19.03	0.36	27
SR 93	19.03	19.24	0.21	27

LEGEND

(1) *ITEM 254, PAVEMENT PLANNING, ASPHALT CONCRETE (T=3")*

(2) *ITEM 254, PAVEMENT PLANNING, ASPHALT CONCRETE (T=1.25")*

(3) *ITEM 254, PAVEMENT PLANNING, ASPHALT CONCRETE (T=2")*

(4) *ITEM 407, NON-TRACKING TACK @ 0.06 GAL/SY*

(5) *ITEM 407, NON-TRACKING TACK @ 0.09 GAL/SY*

(6) *ITEM 408, PRIME COAT, AS PER PLAN @ 0.40 GAL/SY*

(7) *ITEM 422, AGGREGATE, SINGLE CHIP SEAL, TYPE A, AS PER PLAN (INTERLAYER)*

(8) *ITEM 422, EMULSION, CHIP SEAL @ 0.4 GAL / SY*

(9) *ITEM 424, FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN (T=1.25") (TRUCK ADT <1500)*

(10) *ITEM 424, FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN (T=1") (TRUCK ADT <1500)*

(11) *ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN, PG70-22M, (T=1.25")*

(12) *ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446), (T=1.75")*

(13) *ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), (T=1")*

(14) *ITEM 617, COMPACTED AGGREGATE, AS PER PLAN (T = 2")*

(15) *SAFETY EDGE - SEE SCD BP-3.2*

(A) *EXISTING ASPHALT SURFACE*

(B) *EXISTING BASE*

(C) *EXISTING ASPHALT SHOULDER*

(D) *EXISTING CURB*

TYPICAL SECTIONS

DESIGN AGENCY

DESIGNER BFR

REVIEWER MAC 05/04/21

PROJECT ID 101417

SHEET P.2 TOTAL 26

STA-93/236-11.71/0.00

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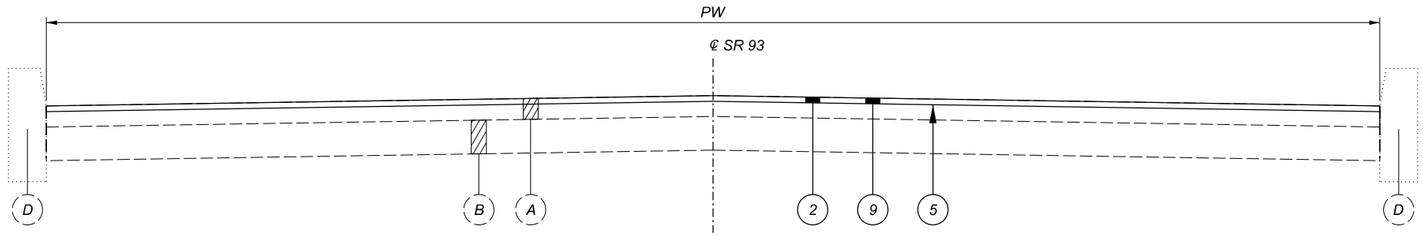
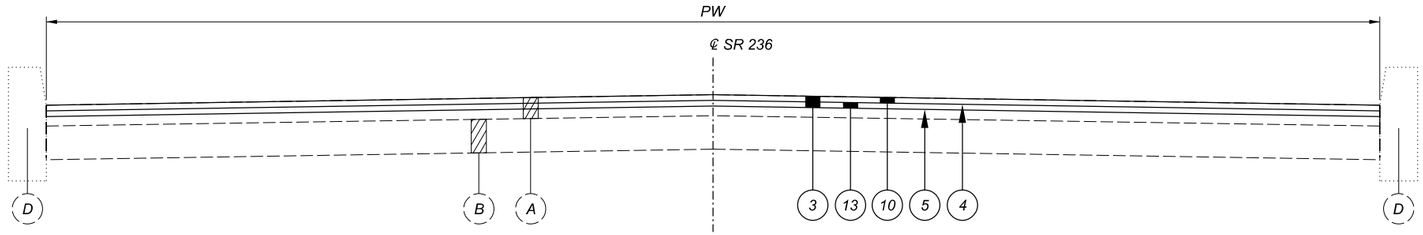


TYPICAL SECTION 3

ROUTE	SLM		LENGTH (MILES)	PW (FEET)
	FROM	TO		
SR 93	17.77	18.16	0.39	30
SR 93	18.20	18.22	0.02	30
SR 93	18.22	18.31	0.09	36
SR 93	18.31	18.37	0.06	30
SR 93	18.37	18.53	0.16	38
SR 93	18.53	18.67	0.14	30



TYPICAL SECTION 4

ROUTE	SLM		LENGTH (MILES)	PW (FEET)
	FROM	TO		
SR 236	0.00	0.06	0.06	46
SR 236	0.06	0.40	0.34	32

LEGEND

(1) ITEM 254, PAVEMENT PLANNING, ASPHALT CONCRETE (T=3")

(2) ITEM 254, PAVEMENT PLANNING, ASPHALT CONCRETE (T=1.25")

(3) ITEM 254, PAVEMENT PLANNING, ASPHALT CONCRETE (T=2")

(4) ITEM 407, NON-TRACKING TACK @ 0.06 GAL/SY

(5) ITEM 407, NON-TRACKING TACK @ 0.09 GAL/SY

(6) ITEM 408, PRIME COAT, AS PER PLAN @ 0.40 GAL/SY

(7) ITEM 422, AGGREGATE, SINGLE CHIP SEAL, TYPE A, AS PER PLAN (INTERLAYER)

(8) ITEM 422, EMULSION, CHIP SEAL @ 0.4 GAL / SY

(9) ITEM 424, FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN (T=1.25") (TRUCK ADT <1500)

(10) ITEM 424, FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN (T=1") (TRUCK ADT <1500)

(11) ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN, PG70-22M, (T=1.25")

(12) ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446), (T=1.75")

(13) ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), (T=1")

(14) ITEM 617, COMPACTED AGGREGATE, AS PER PLAN (T = 2")

(15) SAFETY EDGE - SEE SCD BP-3.2

(A) EXISTING ASPHALT SURFACE

(B) EXISTING BASE

(C) EXISTING ASPHALT SHOULDER

(D) EXISTING CURB

TYPICAL SECTIONS

DESIGN AGENCY

DESIGNER BFR

REVIEWER MAC 05/04/21

PROJECT ID 101417

SHEET P.3 TOTAL 26

STA-93/236-11.71/0.00

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UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, OHIO811, THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEADQUARTERS (MICHELLE CHANEY AT 330-786-2267) AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS, BUT CAN BE OBTAINED FROM THE OWNERS OF THE UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES.

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.

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT.

PAVEMENT MARKING LANE WIDTHS

THE NORMAL LANE WIDTH FOR THE PAVEMENT MARKINGS ON THIS PROJECT SHALL BE AS FOLLOWS

ROUTE	S.L.M. TO S.L.M.	LANE WIDTH
SR 93	11.71 TO 19.24	12FT
SR 236	0.00 TO 0.06	11FT
SR 236	0.06 TO 0.40	16FT

PAVEMENT MARKING DETAILS

THE PAVEMENT MARKING DETAIL SHEETS WILL BE SUPPLIED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING. FOR ANY LOCATIONS THAT PAVEMENT MARKING DETAILS ARE NOT BEEN MADE AVAILABLE TO THE CONTRACTOR, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PUT BACK NEW PAVEMENT MARKINGS IN THE ORIGINAL LOCATIONS.

INTERSECTIONS

INTERSECTIONS WILL BE RESURFACED 10 FT. BEYOND THE EDGE LINE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR INDICATED IN THE PLAN. INTERSECTIONS SHALL BE PAVED AFTER COMPLETION OF THE SURFACE COURSE. A BUTT JOINT, AS PER STANDARD CONSTRUCTION DRAWING BP-3.1, SHALL BE USED TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING PAVEMENT. USE THE SAME ASPHALT CONCRETE AS THE MAINLINE PAVEMENT UNLESS SHOWN OTHERWISE ON THE ASPHALT CONCRETE CALCULATIONS SHEET. ANY GRADING OR PRIME NECESSARY TO ACCOMPLISH THIS WORK SHALL BE INCLUDED IN THE COST OF THE PERTINENT BID ITEM.

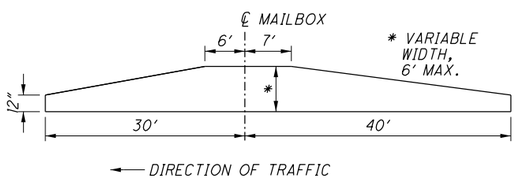
DRIVEWAYS

THE CONTRACTOR WILL NOT BE PERMITTED TO LEAVE A DIFFERENCE IN ELEVATION BETWEEN THE MAINLINE ASPHALT SURFACE COURSE AND THE EXISTING DRIVEWAYS. IF APPROVED BY THE ENGINEER, AN ASPHALT WEDGE WITH A MINIMUM WIDTH OF 2' MAY BE PLACED EITHER ON THE ROADWAY SHOULDER OR DRIVEWAY DEPENDENT UPON WHICH SIDE IS HIGH. A QUANTITY OF MAINLINE SURFACE COURSE ASPHALT HAS BEEN PROVIDED IN THE CALCULATIONS AND GENERAL SUMMARY TO PERFORM THIS ITEM OF WORK.

IN THE EVENT THAT THE ENGINEER DETERMINES ADDITIONAL WORK IS NECESSARY TO PROPERLY ADDRESS FIELD CONDITIONS, AN ITEM FOR WEARING COURSE REMOVED HAS BEEN PROVIDED. THE REMOVAL DEPTH IS DEPENDENT UPON THE ELEVATION DIFFERENCE AND ALLOW FOR 1"-2" OF COMPACTED ASPHALT MATERIAL TO BE PLACED.

PAVED MAILBOX APPROACHES

ALL EXISTING MAIL BOX APPROACHES WILL BE PAVED WITH ASPHALT CONCRETE AS PER TYPICAL SHOWN OR AS NEAR AS PRACTICAL. AGGREGATE APPROACHES SHALL HAVE A 2 IN. MIN. THICKNESS; IMPROVED APPROACHES SHALL HAVE A 2 IN. MIN. THICKNESS. THE CONTRACTOR SHALL PAVE THE MAILBOX APPROACHES WITH THE PAVING OF THE MAINLINE AND SHOULDERS. PAYMENT SHALL BE AS FOLLOWS: GRADING, TACK, TOOLS, EQUIPMENT, MATERIAL AND INCIDENTALS REQUIRED TO LAYOUT AND CONSTRUCT THE MAILBOX APPROACHES SHALL BE INCLUDED IN THE UNIT BID FOR 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448) AS PER PLAN, (PG70-22M)



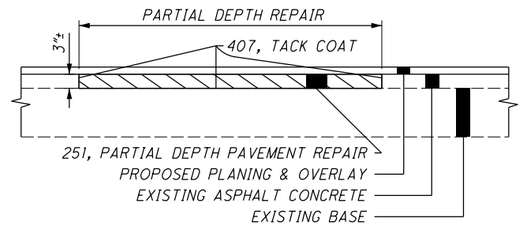
CURB RAMPS / DETECTABLE WARNINGS

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, INSTALLATION OF THE CURB RAMPS / DETECTABLE WARNINGS WILL BE PERFORMED PRIOR TO MAINLINE RESURFACING.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441)

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS EXHIBITING SURFACE DETERIORATION AND PLACING ITEM 441 ASPHALT CONCRETE, TYPE 2. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE I PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.13. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. PAVEMENT REPAIRS WILL BE MARKED IN THE FIELD BY THE PROJECT ENGINEER ACCORDING TO CMS 251.02. MINIMUM WIDTH IS 2'. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE WITHIN 5 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

251, PARTIAL DEPTH PAVEMENT REPAIR (441), 1550 SQ. YD.
SR 93 SLM 11.71 TO 12.96 250 SQ YD
SR 93 SLM 12.96 TO 17.20 800 SQ YD
SR 93 SLM 17.20 TO 17.65 & SLM 19.03 TO 19.24 100 SQ YD
SR 93 SLM 17.65 TO 19.03 200 SQ YD
SR 236 SLM 0.00 TO 0.40 200 SQ YD



ITEM 254 - PAVEMENT PLANNING, ASPHALT CONCRETE, AS PER PLAN

PORTIONS OF THE ROADWAY CONTAIN PORTLAND CEMENT CONCRETE PAVEMENT PATCHES. IN ADDITION TO PAVEMENT PLANING, REMOVE THE CONCRETE PATCHES TO THE SPECIFIED PAVEMENT PLANING DEPTH. THE REMOVED CONCRETE SURFACE SHALL AT A MINIMUM MATCH THE TOLERANCES OF THE MILLED ASPHALT SURFACE AS PER CMS 254.05. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PLANING OF THE ASPHALT CONCRETE PAVEMENT.

ITEM 408 - PRIME COAT, AS PER PLAN

APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.

ITEM 422 SINGLE CHIP SEAL TIME RESTRICTIONS

THE CONTRACTOR IS REQUIRED TO HAVE A ONE (1) DAY WAITING PERIOD BETWEEN THE TIME THE INTERLAYER CHIP SEAL IS PLACED AND THE OVERLYING ASPHALT CONCRETE COURSE IS PLACED. AFTER THE WAITING PERIOD, THE CONTRACTOR HAS A MAXIMUM OF THREE (3) DAYS TO COVER UP THE CHIP SEAL.

ITEM 422 - AGGREGATE, SINGLE CHIP SEAL, TYPE A, AS PER PLAN

THE REQUIREMENTS OF CMS 422 APPLY EXCEPT AS FOLLOWS: THE SECOND SENTENCE OF CMS 422.01 IS DELETED. THE REQUIREMENTS OF CMS 422.12 ARE DELETED IN THEIR ENTIRETY

ITEM 424 - FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN

703.05 DO NOT USE ANY AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446) AS PER PLAN, (PG70-22M)

703.05 DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE SAFETY EDGE, OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:

SIEVE	TOTAL PERCENT PASSING
1- 1/2"	100
3/4"	50-100
NO. 4	35-70
NO. 30	9-33
NO. 200	0-13

GENERAL NOTES

DESIGN AGENCY

DESIGNER BFR

REVIEWER MAC 05/04/21

PROJECT ID 101417

SHEET P.4 TOTAL 26

STA-93/236-11.71/0.00

LINEAR GRADING

AREAS WHERE THE SHOULDER IS HIGHER THAN THE EDGE OF PAVEMENT WILL BE GRADED TO PROVIDE POSITIVE DRAINAGE. THIS WORK WILL ONLY BE PERFORMED IN AREAS NECESSARY AND WILL NOT BE PERFORMED ON THE ENTIRE PROJECT. AREAS FOR THE WORK WILL BE MARKED BY THE PROJECT ENGINEER. UNDER NO CIRCUMSTANCES WILL THIS WORK BE PERFORMED CONCURRENTLY WITH ANY OTHER OPERATION.

GRADING WILL BE ACCOMPLISHED BY THE REMOVAL OF MATERIAL TO PROVIDE A 0.08 POSITIVE SLOPE. THE GRADED AREAS WILL BE COMPACTED TO A SUFFICIENT DENSITY TO PREVENT EROSION UNTIL SEEDING AND MULCHING IS PERFORMED. ALL EXCESS MATERIAL WILL BE REMOVED FROM THE BERMS AND WILL BE DISPOSED OF OFF THE PROJECT BY THE CONTRACTOR.

SEEDING AND MUCHING, FERTILIZER AND LIME WILL BE PERFORMED WITHIN A PERIOD NOT TO EXCEED 10 DAYS AFTER THE LINEAR GRADING.

THE QUANTITY OF ITEM 209 IS NOT PERMITED TO BE INCREASED. REDUCTIONS IN QUANTITIES ARE PERMITTED AS DETERMINED BY THE PROJECT ENGINEER.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK WILL BE INCLUDED IN THE UNIT PRICE FOR THE PERTINENT BID ITEM. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

209, LINEAR GRADING, 701 STA.
659, SEEDING AND MULCHING, 19477 SQ YD
659, COMMERCIAL FERTILIZER, 2.63 TON
659, LIME, 4.03 ACRES
659, WATER, 105.15 M. GAL.

ITEM 611 – MANHOLE ADJUSTED TO GRADE, AS PER PLAN
ITEM 623 – MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN
ITEM 638 – VALVE BOX ADJUSTED TO GRADE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 611.10.D FOR MANHOLES, 623.05 FOR MONUMENT BOXES, OR 638.18 FOR VALVE BOXES, THE CONTRACTOR WILL MAKE A CLEAN CIRCULAR CUT AROUND THE CASTING (A MINIMUM OF 1'-0" OUTSIDE THE CASTING) AND REMOVE AND DISCARD THE EXISTING CASTING. INSTALL A NEW CASTING TO GRADE (ACCORDING TO TOLERANCES AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1) AFTER THE PAVEMENT SURFACE COURSE HAS BEEN REPLACED.

CMS 499 CLASS QCMS CONCRETE (DYE THE CONCRETE SUCH THAT ITS COLOR CLOSELY MATCHES THE COLOR OF THE SURROUNDING PAVEMENT) WILL BE USED FOR BACKFILLING THE FULL PAVEMENT SECTION AND THE JOINT BETWEEN THE ASPHALT AND CONCRETE WILL BE SEALED WITH CMS 702.01 PG BINDER. EPOXY COATED REBAR SHALL BE PLACED IN THE CONCRETE AT 6" MAXIMUM ON CENTER AND A MINIMUM OF 3.5" CLEARANCE FROM THE TOP, BOTTOM AND SIDES. THE CONCRETE WILL BE VIBRATED SUFFICIENTLY TO ELIMINATE AIR POCKETS UNDER THE FRAME.

PAYMENT WILL INCLUDE REMOVAL OF THE EXISTING MATERIAL, INSTALLATION AND FURNISHING OF A NEW CASTING, AND ALL LABOR AND MATERIALS REQUIRED TO COMPLETE THIS ITEM OF WORK AS DESCRIBED.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY AND IS TO BE USED AS DIRECTED BY THE ENGINEER

SR 93:
ITEM 611, MANHOLE ADJUSTED TO GRADE, AS PER PLAN, 25 EACH
ITEM 623, MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN, 10 EACH
ITEM 638, VALVE BOX ADJUSTED TO GRADE, AS PER PLAN, 21 EACH
SR 236:
ITEM 611, MANHOLE ADJUSTED TO GRADE, AS PER PLAN, 19 EACH
ITEM 623, MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN, 1 EACH
ITEM 638, VALVE BOX ADJUSTED TO GRADE, AS PER PLAN, 3 EACH

ITEM 611 – CATCH BASIN ADJUSTED TO GRADE

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY AND IS TO BE USED AS DIRECTED BY THE ENGINEER TO ADJUST CATCH BASINS TO GRADE.
SR 93:
ITEM 611, CATCH BASIN ADJUSTED TO GRADE, 27 EACH
SR 236:
ITEM 611, CATCH BASIN ADJUSTED TO GRADE, 5 EACH

ITEM 625 – PULL BOX, MISC.: ADJUSTED TO GRADE

THIS ITEM SHALL BE USED TO ADJUST PULLBOXES TO GRADE WITHIN THE LIMITS OF CURB RAMP REPLACEMENTS. QUANTITIES ARE PROVIDED IN THE CURB RAMP SUBSUMMARIES ON SHEETS P.15 - P.16

RAILROAD CROSSING SIGN & MARKING RELOCATION

THE ADVANCED RAILROAD CROSSING PAVEMENT MARKINGS AND SIGNS FOR THE NORFOLK SOUTHERN RR CROSSING AT SLM 14.44 ARE TO BE RELOCATED. THE SR 93 SB MARKING AND SIGN (W10-1) SHALL BE RELOCATED FROM SLM 14.59 TO 14.63. NEW RR MARKINGS AND SIGNS SHALL BE PLACED AS PER SCD TC-71.10. RELOCATE CONFLICTING SCHOOL BUS STOP AHEAD SIGN (S3-1) FROM SLM 14.63 TO SLM 14.60.

S3-1

W10-1

FOR REMOVAL AND RE-ERECTION OF SIGNS W10-1 AND S3-1 THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY.

ITEM 630, REMOVAL OF GROUND MOUNTED SIGN AND REERECCTION, 3 EACH
ITEM 630, REMOVAL OF GROUND MOUNTED SUPPORT AND REMOVAL, 3 EACH
ITEM 630, GROUND MOUNTED SUPPORT, NO. 2 POST, 36 FT

GENERAL NOTES

DESIGN AGENCY

DESIGNER BFR
REVIEWER MAC 05/04/21
PROJECT ID 101417
SHEET P.5 TOTAL 26

STA-93/236-11.71/0.00

MODEL: Sheet 2 PAPERSIZE: 17x11 (in.) DATE: 6/2/2021 TIME: 1:13:59 PM USER: bross1
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MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL/FLASHER INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS:

1. *EXISTING SIGNAL/FLASHER INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACTOR TO ADJUST, MODIFY, ADD ONTO OR REMOVE, OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION (AT AN INTERSECTION) FROM THE TIME HIS OPERATIONS FIRST DISTURB THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY REMOVED OR MODIFIED AND THE WORK IS ACCEPTED.*

2. *NEW OR REUSED SIGNAL/FLASHER INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.*

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE MAINTAINING AGENCY AND THE ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK TO SERVICE WITHIN FOUR HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN 8 HOURS AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTAGE. THE CONTRACTOR SHALL ARRANGE FOR FULL TRAFFIC CONTROL UNTIL THE SIGNAL IS BACK IN OPERATION. IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED 8-HOUR PERIOD, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO, OR CANNOT RESPOND TO, AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO THE STATE FOR POLICE SERVICES AND MAINTENANCE SERVICES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A COOPERATIVE UNDERSTANDING WITH THE LOCAL MAINTAINING AGENCY TO PROVIDE THE MAINTENANCE. THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF THE MAINTENANCE METHOD SELECTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM. WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONST-RUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 8 HOURS AND SHALL NOT INCLUDE THE HOURS OF 8:00AM TO 6:00PM. ANY SIGNALIZED INTERSECTION, WHERE THE SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR DUE TO AN OUTAGE OR MALFUNCTION OF EQUIPMENT AS DESCRIBED ABOVE, SHALL BE PROTECTED, BY THE CONTRACTOR, BY THE INSTALLATION OF TEMPORARY "STOP" SIGNS.

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN THE MANNER DESCRIBED IN 632.25.

THE CONTRACTOR SHALL MAINTAIN COMPLETE RECORDS OF MALFUNCTIONS INCLUDING:

1. *TIME OF NOTIFICATION OF MALFUNCTION;*

2. *TIME OF WORK CREWS ARRIVAL TO CORRECT THE MALFUNCTION;*

3. *ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED;*

4. *A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE;*

5. *TIME OF COMPLETION OF THE REPAIR AND SYSTEM RESTORED TO FULL SERVICE.*

A COPY OF THESE RECORDS SHALL BE PROVIDED TO THE ENGINEER WITHIN THREE (3) WORKING DAYS FOLLOWING COMPLETION OF EACH REPAIR.

ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

809 STOP-LINE RADAR DETECTION, AS PER PLAN
809 ADVANCE RADAR DETECTION, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING STOP-LINE RADAR DETECTION - WAVETRONIX SMARTSENSOR MATRIX DETECTION UNIT OR ADVANCE RADAR DETECTION - WAVETRONIX SMARTSENSOR ADVANCE DETECTION UNIT (MODEL SS-200E). THE DETECTION UNIT SHALL INCLUDE THE FOLLOWING:

1. *POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.*
2. *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.*
3. *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.*
4. *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.*
5. *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.*
6. *A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MIN. 7 FEET)*
7. *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.*
8. *THE CONTRACTOR SHALL INSTALL THE RADAR DETECTION PRIOR TO MILLING/DISABLING THE EXISTING LOOPS.*
9. *THE INSTALLATION SHALL INCLUDE ALL CONTROLLER PROGRAMMING FOR COMPLETE INSTALLATION, WHICH INCLUDES MODIFICATIONS FOR REMOVAL OF EXISTING DETECTION.*
10. *THE CONTRACTOR SHALL CONTACT THE DISTRICT OFFICE (330-786-2267) THREE WORKING DAYS PRIOR TO INSTALLING THE DETECTION TO REMOVE THE CABINET LOCKS. ANY LOOPS DETECTORS DISTURBED BY THE PLANNING SHOULD BE ABANDONED IN PLACE.*
11. *THE CONTRACTOR SHALL DISCONNECT AND LEAVE THE LOOP DETECTOR AMPLIFIERS IN THE CONTROLLER.*

PAYMENT FOR EACH DETECTION UNIT 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, AND ANY OTHER NECESSARY HARDWARE TO ESTABLISH A FULLY FUNCTIONAL DETECTION SYSTEM.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

INTERSECTION	809- ADVANCE RADAR DETECTION, AS PER PLAN	ADVANCE RADAR APPROACH	809- STOP LINE RADAR DETECTION, AS PER PLAN	STOP LINE RADAR APPROACH
SR 93 / SR 172			2	NB, SB SR 93

ITEM 632 - DETECTOR LOOP, AS PER PLAN

THE CONTRACTOR SHALL CONTACT THE CITY OF MASSILLON (330-833-5746) THREE WORKING DAYS PRIOR TO ANY PLANING OR TRENCHING AT THE INTERSECTION OF SR 236 AND SR 21 / LAKE AVE. LOOP DETECTORS DISTURBED BY PAVEMENT PLANING OR TRENCHING SHALL BE ABANDONED IN PLACE. THE LOOP DETECTOR WIRE WILL BE CUT INTO THE PAVEMENT AFTER THE PROPOSED SURFACE COURSE HAS BEEN PLACED. ALL STOP LINE INDUCTANCE DETECTOR LOOPS SHALL BE THE POWERHEAD CONFIGURATION SHOWN ON TC-82.10. THE WIDTH SHALL BE AS SPECIFIED ON TC-82.10 AND THE LENGTH SHALL BE AS SPECIFIED BELOW. THE LOCATION OF THESE LOOPS SHALL BE SUCH THAT THE POWERHEAD IS LOCATED AT THE STOP LINE, NOT PAST IT. ALL DILEMMA ZONE INDUCTANCE DETECTOR LOOPS CALLED FOR IN THE PLANS SHALL BE THE ANGULAR DESIGN DETECTION (ADD) LOOP AS SHOWN ON TC-82.10. DIMENSIONS SHALL BE AS SPECIFIED ON TC-82.10 AND THE LOOP SHALL BE PLACED AT THE SAME LOCATION AS THE EXISTING LOOPS.

THE QUANTITIES LISTED BELOW HAVE BEEN CARRIED TO THE GENERAL SUMMARY. THE NEW LOOP DETECTOR WIRES SHALL BE RUN INTO THE EXISTING CONTROL BOX OR THE EXISTING PULLBOX. INCLUDED IN THIS ITEM IS THE POURED EPOXY TYPE CABLE SPLICE KIT (CONFORMING TO 725.15E) THAT MUST BE USED IN MAKING THESE CONNECTIONS. ALL NECESSARY MATERIAL, LABOR, SPLICE KITS AND EQUIPMENT SHALL BE INCIDENTAL TO PAYMENT OF THESE ITEMS.

632 DETECTOR LOOP, AS PER PLAN, 6 EACH
(6 EACH, POWERHEAD, BY 30')

GENERAL NOTES

STA-93/236-11.71/0.00

DESIGN AGENCY

DESIGNER BFR

REVIEWER MAC 05/04/21

PROJECT ID 101417

SHEET P.6 TOTAL 26

MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. SR 93 & 236:
A MINIMUM OF ONE TEN FOOT BIDIRECTIONAL LANE SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.

SR 236 SLM 0.00 TO 0.06:
A MINIMUM OF ONE TEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.

2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.

3. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.

4. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.

5. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS TWO (2) MILES RURAL OR ONE [1] MILE URBAN.

6. FOR ROUTES NOT ON THE PERMITTED LANE CLOSURE CHART, ONLY DURING OFF-PEAK PERIODS (ie ANY PERIOD OTHER THAN 6-8AM AND 3-6PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE.

7. IN ADDITION TO THE REQUIREMENTS OF 614.11 WORK ZONE PAVEMENT MARKINGS, AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH WORK ZONE MARKINGS) ALL LANE, CENTER, STOP OR CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PLACEMENT OPERATIONS. QUANTITIES FOR SUCH PLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER 614 WORK ZONE PAVEMENT MARKINGS.

8. A QUANTITY OF 10 CU. YDS. OF ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.

9. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

10. THE CONTRACTOR SHALL PLACE THE SIGNS: W8-1 [BUMP] PER OMUTCD 2C.28; W8-11 [UNEVEN LANES] PER OMUCTD 6F.45; AND W6-3 [TWO-WAY TRAFFIC] PER OMUTCD 6F.32. PAYMENT FOR THESE SIGNS SHALL BE INCIDENTAL TO THE LUMP SUM ITEM 614- MAINTAINING TRAFFIC. A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGNS HAS BEEN INCLUDED IN THE PLANS PER CMS 614.04.

SIGNS W8-H7 [LOOSE GRAVEL/ FRESH TAR], AND W13-1 [SPEED PLAQUE] SHALL BE PLACED PER STANDARD CONSTRUCTION DRAWING MT-97.12 (MT-97.11), AND PAYMENT FOR THESE SIGNS SHALL BE INCIDENTAL TO THE LUMP SUM ITEM 614- MAINTAINING TRAFFIC. A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGNS HAS BEEN INCLUDED IN THE PLANS PER CMS 614.04.

11. THE CONTRACTOR SHALL SET A WORK ZONE AT THE REQUEST OF THE ENGINEER TO ALLOW THE LAYOUT OF THE PARTIAL/FULL DEPTH PAVEMENT REPAIR AREAS. THIS WORK IS INCIDENTAL TO ITEM 614 MAINTAINING TRAFFIC.

THE FOLLOWING QUANTITIES SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC ON THIS PROJECT:

PHASE I - PLANNED SURFACE
614, WORK ZONE MARKING SIGN, 50 EACH (ALL PHASES)
614, WORK ZONE CENTER LINE, CLASS I, 8.17 MILE
614, WORK ZONE LANE LINE, CLASS I, 6", 0.12 MILE
614, WORK ZONE STOP LINE, CLASS I, 327 FT
614, WORK ZONE CHANNELIZING LINE, CLASS I, 8", 1202 FT

PHASE II - CHIPSEAL INTERLAYER
SR 93 SLM 11.71 TO SLM 12.96:
614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT, 1.43 MILE
614, WORK ZONE STOP LINE, CLASS I, 642 PAINT, 13 FT
614, WORK ZONE CHANNELIZING LINE, CLASS I, 8" 642 PAINT, 275 FT

PHASE III - INTERMEDIATE COURSE
SR 93 SLM 11.71 TO SLM 12.96:
614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT, 1.43 MILE
614, WORK ZONE STOP LINE, CLASS I, 642 PAINT, 13 FT
614, WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT, 275 FT
SR 236 SLM 0.00 TO SLM 0.40:
614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT, 0.40 MILE
614, WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT, 0.12 MILE
614, WORK ZONE STOP LINE, CLASS I, 642 PAINT, 71 FT
614, WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT, 260 FT

PHASE IV - SURFACE COURSE
614, WORK ZONE CENTERLINE, CLASS III, 642 PAINT 8.17 MILE
614, WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT 0.12 MILE
614, WORK ZONE STOP LINE, CLASS III, 642 PAINT 327 FT
614, WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT 1202 FT

TO BE USED AS DIRECTED BY THE ENGINEER
614, WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT, 13.38 MILE

ADVANCED NOTICE TO PAVE

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE DISTRICT CONSTRUCTION ENGINEER A DETAILED SCHEDULE 15 DAYS PRIOR TO THE PLACEMENT OF THE OVERLAY COURSES, ON HOW THEY PROPOSE TO PROSECUTE THE PAVING OPERATIONS. THE DETAILS SHALL SHOW THE ORDER OF PERFORMANCE OF EACH STAGE (START TO FINISH) OF THE WORK INCLUDING THE MAINTENANCE OF TRAFFIC THAT WILL BE USED.

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REPRESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

TIME LIMITATION, TRAFFIC ON A MILLED SURFACE

SR 93 SLM 12.96 TO 19.24 & SR 236 SLM 0.00 TO 0.40:
THE MAXIMUM ALLOWABLE TIME FOR TRAFFIC TO BE PLACED ON A MILLED SURFACE SHALL BE 5 CONSECUTIVE CALENDAR DAYS. SHOULD THE CONTRACTOR FAIL TO MEET THIS REQUIREMENT, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF $1000 PER DAY THAT THE TRAFFIC IS PLACED ON A MILLED SURFACE BEYOND THE SPECIFIED LIMIT.

DROPOFFS

THE CONTRACTOR WILL NOT BE PERMITTED TO LEAVE A DIFFERENCE IN ELEVATION BETWEEN THE MAINLINE MILLED SURFACES, AND ASPHALT SURFACE COURSE AND SIDE STREET APPROACHES/DRIVEWAYS GREATER THAN 1.25 INCH. THE CONTRACTOR SHALL PLACE A 12:1 ASPHALT WEDGE FOR ALL RESULTING ELEVATION DIFFERENCES GREATER THAN 1.25 INCH PRIOR TO OPENING TO TRAFFIC. THE PAVING OF INTERSECTION APPROACHES AND DRIVEWAYS, PER THE NOTES ON SHEET 4, SHALL BE PERFORMED WITHIN 7 DAYS OF MAINLINE SURFACE COURSE BEING APPLIED AND A DROPOFF BEING CREATED BETWEEN THE NEW SURFACE COURSE AND THE MILLED/EXISTING SIDE ROAD OR DRIVEWAY SURFACE. THE CONTRACTOR MAY ELECT TO PLACE A 12:1 ASPHALT WEDGE IN LIEU OF COMPLETING THE PAVING, HOWEVER THE ASPHALT CONCRETE USED FOR THE WEDGE SHALL BE CONSIDERED INCIDENTAL TO ITEM 614 – MAINTAINING TRAFFIC AND SHALL INCLUDE THE REMOVAL OF THE WEDGE BEFORE THE INTERSECTION/DRIVEWAY IS PAVED.

ITEM 614, MAINTAINING TRAFFIC (WINTER TIME LIMITATIONS)

ALL EXISTING LANES, INCLUDING RAMPS, SHALL BE OPEN AND AVAILABLE TO TRAFFIC IN THE ORIGINAL OR PROPOSED FINAL ALIGNMENT BETWEEN [OCTOBER 15] AND [APRIL 1]. SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS, A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF $1000 PER CALENDAR DAY.

NOTIFICATION OF TRAFFIC RESTRICTIONS

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

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
ROAD & RAMP CLOSURES	>= 2WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>=2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERNS CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

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

LOCAL SPECIAL EVENTS AND FESTIVALS

NO WORK SHALL BE PERFORMED, AND ALL EXISTING LANES SHALL BE OPEN DURING THE FOLLOWING DESIGNATED SPECIAL EVENTS:

CANAL FULTON, OLDE CANAL DAYS FESTIVAL
CLAY'S PARK RESORT, THE COUNTRY FEST

THE CONTRACTOR SHALL HAVE THE ALL LANES OPEN BEGINNING 2:00PM THE DAY BEFORE THE EVENT STARTS UNTIL 6:00AM THE MORNING AFTER THE EVENT ENDS. IN THE CASE OF AN EVENT THAT IS FOR THE DURATION OF A WEEKEND, ALL LANES SHALL BE OPEN BY 2:00PM THE FRIDAY BEFORE THE EVENT AND WILL REMAIN OPEN UNTIL AT LEAST 6:00 AM ON THE MONDAY AFTER THE EVENT. SHOULD THE CONTRACTOR FAIL TO HAVE THE LANES OPEN AS DESCRIBED ABOVE, A DISSINCENTIVE PENALTY WILL BE ASSESSED IN THE AMOUNT OF $3,000 PER HOUR THAT A LANE REMAINS CLOSED. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY WITH THE LOCAL COMMUNITY THE EXACT DATES OF THE LISTED SPECIAL EVENTS.

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY

DESIGNER BFR
REVIEWER MAC 05/04/21
PROJECT ID 101417
SHEET P.7 TOTAL 26

STA-93/236-11.71/0.00

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 6/22/2021 TIME: 1:14:07 PM USER: bross1
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ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

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 CMS 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.*
- *DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).*
- *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).*

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.

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 ZONE.

THE LEOS WORK AT THE DIRECTION OF THE ENGINEER. 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.

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. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. 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 WHICH 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 72 HOURS

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.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

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.

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 PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

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 12 SIGN MONTH ASSUMING 2 PCMS SIGN(S) FOR 6 MONTH(S)

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY

DESIGNER BFR

REVIEWER MAC 05/04/21

PROJECT ID 101417

SHEET P.8 TOTAL 26

STA-93/236-11.71/0.00

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SHEET NUM.								PART.							ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
4	5	11	12	13	14	15	16	01/S>2/PV	02/S>2/PV/MASS	03/STR/PV	04/NHS/PV	05/NHS/PV/CANF	08/NHS/OT/CANA	09/S>2/OT/MASS						
																			ROADWAY	
		178	146	40				94		224	6	40			202	23500	364	SY	WEARING COURSE REMOVED	
						4,456	1,163	50					4,840	729	202	30000	5,619	SF	WALK REMOVED	
						37							37		202	32000	37	FT	CURB REMOVED	
	701							130	2	448	70	51			209	60200	701	STA	LINEAR GRADING	
		68						66	2						209	72000	68	STA	PREPARING SUBGRADE FOR SHOULDER PAVING	
						534	186						590	130	608	10000	720	SF	4" CONCRETE WALK	
						36							36		608	13000	36	SF	6" CONCRETE WALK	
						3,886	977	50					4,214	599	608	52000	4,863	SF	CURB RAMP	
	11							2	2	1	4	2			623	39501	11	EACH	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	5
						5							5		625	31600	5	EACH	PULL BOX, MISC.: ADJUSTED TO GRADE	5
																			EROSION CONTROL	
	19,477							3,612	56	12,445	1,946	1,418			659	10000	19,477	SY	SEEDING AND MULCHING	
	2.63							0.49	0.01	1.68	0.26	0.19			659	20000	2.63	TON	COMMERCIAL FERTILIZER	
	4.03							0.75	0.01	2.57	0.41	0.29			659	31000	4.03	ACRE	LIME	
	105.15							19.5	0.3	67.2	10.5	7.65			659	35000	105.15	MGAL	WATER	
								3,000							832	30000	3,000	EACH	EROSION CONTROL	
																			DRAINAGE	
	32								5			27			611	98630	32	EACH	CATCH BASIN ADJUSTED TO GRADE	
						1							1		611	99654	1	EACH	MANHOLE ADJUSTED TO GRADE	
	44								19			25			611	99655	44	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	5
																			PAVEMENT	
1,550								250		800	100		200	200	251	01000	1,550	SY	PARTIAL DEPTH PAVEMENT REPAIR (441)	
		19,798	53,783	22,015						65,789	11,192	18,615			254	01000	95,596	SY	PAVEMENT PLANING, ASPHALT CONCRETE, (T=1.25")	
					8,269				8,269						254	01000	8,269	SY	PAVEMENT PLANING, ASPHALT CONCRETE, (T=2")	
		21,467						21,150	317						254	01000	21,467	SY	PAVEMENT PLANING, ASPHALT CONCRETE, (T=3")	
				6,865								6,865			254	01001	6,865	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, (T=1.25")	4
		5,002	4,841	2,600	1,242			3,173	1,288	5,922	1,008	2,294			407	20000	13,685	GAL	NON-TRACKING TACK COAT	
		2,385	3,098	648				1,155	19	3,942	564	451			408	10001	6,131	GAL	PRIME COAT, AS PER PLAN	4
		21,467						21,150	317						422	11001	21,467	SY	AGGREGATE, SINGLE CHIP SEAL, TYPE A, AS PER PLAN	4
		8,599						8,472	127						422	25000	8,599	GAL	EMULSION, CHIP SEAL	
		700	1,891	1,006	230				230	2,319	390	888			424	12001	3,827	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN	4
		746						735	11						441	10101	746	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN, PG70-22M	4
		1,044						1,028	16						441	10200	1,044	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446)	
					230				230						441	50200	230	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	
						21							21		609	26000	21	FT	CURB, TYPE 6	
		332	431	90				161	3	547	79	63			617	10101	853	CY	COMPACTED AGGREGATE, AS PER PLAN	4
		1.28	2.92							4.2					618	43000	4.2	MILE	RUMBLE STRIPES, CENTER LINE (ASPHALT CONCRETE)	
		6,812	15,365							22,177					874	20000	22,177	FT	LONGITUDINAL JOINT PREPARATION	
																			WATER WORK	
						3							3		638	10800	3	EACH	VALVE BOX ADJUSTED TO GRADE	
	24								3			21			638	10801	24	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	5

GENERAL SUMMARY

DESIGN AGENCY

DESIGNER BFR

REVIEWER MAC 05/04/21

PROJECT ID 101417

SHEET P.9 TOTAL 26

STA-93/236-11.71/0.00

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SHEET NUM.								PART.						ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
		5	6	7	8	22	23	01/S>2/PV	02/S>2/PV/MASS	03/STR/PV	04/NHS/PV	05/NHS/PV/CANF	06/STR/BR						
																		TRAFFIC CONTROL	
						510		114	2	354	40			621	00100	510	EACH	RPM	
						349		49	2	267	31			621	54000	349	EACH	RAISED PAVEMENT MARKER REMOVED	
		36								36				630	02100	36	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
		3								3				630	85100	3	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
		3								3				630	86002	3	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
							13.44	2.46	0.04	8.48	1.32	1.08	0.06	646	10010	13.44	MILE	EDGE LINE, 6"	
							0.12		0.12					646	10110	0.12	MILE	LANE LINE, 6"	
							8.2	1.42	0.42	4.23	0.66	1.44	0.03	646	10200	8.2	MILE	CENTER LINE	
							1,202	275	260		252	415		646	10300	1,202	FT	CHANNELIZING LINE, 8"	
							327	13	71	20	76	147		646	10400	327	FT	STOP LINE	
							1,074		428			646		646	10500	1,074	FT	CROSSWALK LINE	
							100					100		646	10600	100	FT	TRANSVERSE/DIAGONAL LINE	
							148				148			646	10620	148	FT	CHEVRON MARKING	
							4			2		2		646	20000	4	EACH	RAILROAD SYMBOL MARKING	
							2	2						646	20110	2	EACH	SCHOOL SYMBOL MARKING, 96"	
							21	4	10			7		646	20300	21	EACH	LANE ARROW	
							360	260				100		646	20500	360	FT	DOTTED LINE	
																		TRAFFIC SIGNALS	
			6									6		632	26501	6	EACH	DETECTOR LOOP, AS PER PLAN	6
			2					2						809	69101	2	EACH	STOP LINE RADAR DETECTION, AS PER PLAN	6
																		STRUCTURE REPAIRS	
																		FOR STA-241-0000 ESTIMATED QUANTITIES	25
																		FOR STA-93-1444 ESTIMATED QUANTITIES	25
																		FOR STA-93-1639 ESTIMATED QUANTITIES	25
																		FOR STA-93-1723 ESTIMATED QUANTITIES	25
																		FOR STA-93-1816 ESTIMATED QUANTITIES	25
																		MAINTENANCE OF TRAFFIC	
					72			72						614	11110	72	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
				50				50						614	12460	50	EACH	WORK ZONE MARKING SIGN	
				10				10						614	13000	10	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
					12			12						614	18601	12	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	7
				0.12					0.12					614	20010	0.12	MILE	WORK ZONE LANE LINE, CLASS I, 6"	
				0.12					0.12					614	20110	0.12	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	
				0.12					0.12					614	20560	0.12	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
				8.17				1.41	0.42	4.24	0.66	1.44		614	21000	8.17	MILE	WORK ZONE CENTER LINE, CLASS I	
				1.83				1.41	0.42					614	21100	1.83	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
				8.17				1.41	0.42	4.24	0.66	1.44		614	21550	8.17	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
				12.84				2.46	0.04	8.48	1.32	0.54		614	22360	12.84	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
				1,202				275	260		252	415		614	23000	1,202	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8"	
				535				275	260					614	23200	535	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	
				1,202				275	260		252	415		614	23690	1,202	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
				327				13	71	20	76	147		614	26000	327	FT	WORK ZONE STOP LINE, CLASS I	
				84				13	71					614	26200	84	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
				327				13	71	20	76	147		614	26610	327	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
																		INCIDENTALS	
								LS						614	11000	LS		MAINTAINING TRAFFIC	
								6						619	16010	6	MNTH	FIELD OFFICE, TYPE B	
								LS						623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
								LS						624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

STA-93/236-11.71/0.00

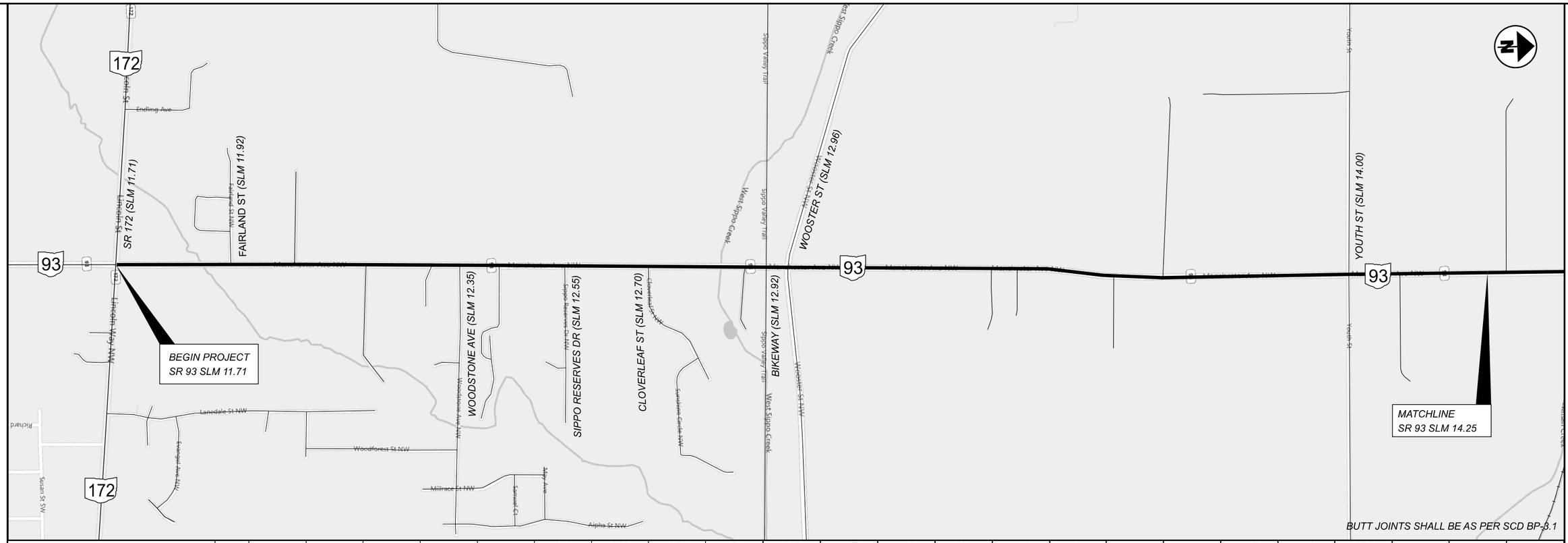
DESIGN AGENCY

DESIGNER BFR

REVIEWER MAC 05/04/21

PROJECT ID 101417

SHEET P.10 | TOTAL 26



SLM RANGE			TYPICAL SECTION	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA	202 WEARING COURSE REMOVED	209 PREPARING SUBGRADE FOR SHOULDER PAVING	254 PAVEMENT PLANING, ASPHALT CONCRETE, (T=3")	254 PAVEMENT PLANING, ASPHALT CONCRETE, (T=1.25")	407 NON-TRACKING TACK COAT @ 0.09 GAL/SY	407 NON-TRACKING TACK COAT @ 0.06 GAL/SY	408 PRIME COAT, AS PER PLAN @ 0.4 GAL/SY	422 AGGREGATE, SINGLE CHIP SEAL, TYPE A, AS PER PLAN (INTERLAYER)	422 EMULSION, CHIP SEAL @ 0.4 GAL / SY	424 FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN (T=1.25")	441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN, PG70-22M, (T=1.25")	441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (446), (T=1.75")	617 COMPACTED AGGREGATE, AS PER PLAN (T=2")	618 RUMBLE STRIPES, CENTER LINE (ASPHALT CONCRETE)	874 LONGITUDINAL JOINT PREPARATION				
					FT	FT	SY	SY	SY	STA	SY	SY	GAL	GAL	GAL	SY	GAL	CY	CY	CY	CY	MILE	FT				
SR 93 MAJOR REHAB																										PLAN SPLITS	
11.71	TO	12.50	1		4171.20	26.00	12050.13			42.00	12050.13		1084.51	723.01	741.55	12050.13	4820.05		418.41	585.77	102.99					01/S>2/PV	
12.50	TO	12.78	1		1478.40	38.00	6242.13			15.00	6242.13		561.79	374.53	262.83	6242.13	2496.85		216.74	303.44	36.50					01/S>2/PV	
12.78	TO	12.91	1		686.40	27.00	2059.20			7.00	2059.20		185.33	123.55	122.03	2059.20	823.68		71.50	100.10	16.95					01/S>2/PV	
12.91	TO	12.93	1		105.60	27.00	316.80			2.00	316.80		28.51	19.01	18.77	316.80	126.72		11.00	15.40	2.61					02/S>2/PV/MASS	
12.93	TO	12.96	1		158.40	27.00	475.20			2.00	475.20		42.77	28.51	28.16	475.20	190.08		16.50	23.10	3.91					01/S>2/PV	
SR 93 FINE POLYMER																											
12.96	TO	14.25	2		6811.20	26.00	19676.80					19676.80	1770.91		1210.88			683.22			168.18	1.28	6811.20			03/STR/PV	
INTERSECTIONS																											
11.71	TO	12.96	1		10.00	VARIES		322.86			322.86		29.06	19.37		322.86	129.14		11.21	15.69						01/S>2/PV	
12.96	TO	14.25	2		10.00	VARIES		120.82				120.82	10.87					4.20								03/STR/PV	
DRIVEWAYS																											
11.71	TO	12.96			2.00	VARIES		94.00	94.00								4.70									01/S>2/PV	
12.96	TO	14.25			2.00	VARIES		84.00	84.00									4.20								03/STR/PV	
MAILBOX APPROACHES																											
11.71	TO	12.96						123.00									6.83									01/S>2/PV	
12.96	TO	14.25						139.00										7.72								03/STR/PV	
								SUBTOTALS	178.00	68.00	21466.32	19797.62	3713.76	1287.98	2384.21	21466.32	8598.06	699.34	745.36	1043.50	331.14	1.28	6811.20	0.00	0.00	0.00	
								TOTALS CARRIED TO GENERAL SUMMARY	178	68	21467	19798	3714	1288	2385	21467	8599	700	746	1044	332	1.28	6812	0	0	0	

PAVEMENT CALCULATIONS

STA-93/236-11.71/0.00

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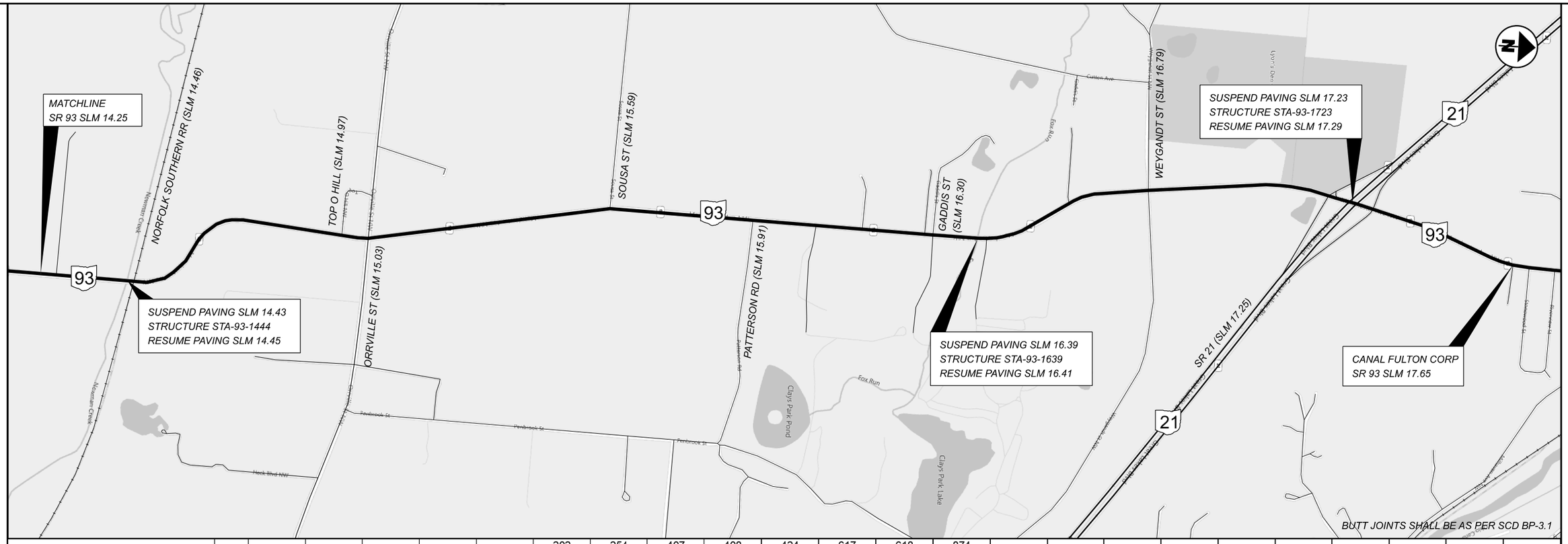
DESIGN AGENCY

DESIGNER BFR

REVIEWER MAC 05/04/21

PROJECT ID 101417

SHEET P.11 TOTAL 26



PAVEMENT CALCULATIONS

SLM RANGE			TYPICAL SECTION	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA	202 WEARING COURSE REMOVED	254 PAVEMENT PLANING, ASPHALT CONCRETE, (T=1.25")	407 NON-TRACKING TACK COAT @ 0.09 GAL/SY	408 PRIME COAT, AS PER PLAN @ 0.4 GAL/SY	424 FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN (T=1.25")	617 COMPACTED AGGREGATE, AS PER PLAN (T=2")	618 RUMBLE STRIPES, CENTER LINE (ASPHALT CONCRETE)	874 LONGITUDINAL JOINT PREPARATION											PLAN SPLITS
					FT	FT	SY	SY	SY	SY	GAL	GAL	CY	CY	MILE	FT											
SR 93																											
14.25	TO	14.43	2		950.40	26.00	2745.60			2745.60	247.10	168.96	95.33	23.47	0.18	950.40											03/STR/PV
14.45	TO	16.39	2		10243.20	26.00	29591.47			29591.47	2663.23	1821.01	1027.48	252.92	1.94	10243.20											03/STR/PV
16.41	TO	17.06	2		3432.00	25.00	9533.33			9533.33	858.00	610.13	331.02	84.74	0.65	3432.00											03/STR/PV
17.06	TO	17.20	2		739.20	45.00	3696.00			3696.00	332.64	131.41	128.33	18.25	0.15	739.20											03/STR/PV
17.20	TO	17.23	2		158.40	45.00	792.00			792.00	71.28	28.16	27.50	3.91													04/NHS/PV
17.29	TO	17.40	2		580.80	45.00	2904.00			2904.00	261.36	103.25	100.83	14.34													04/NHS/PV
17.40	TO	17.65	2		1320.00	25.00	3666.67			3666.67	330.00	234.67	127.31	32.59													04/NHS/PV
INTERSECTIONS																											
14.25	TO	17.20	2		10.00	VARIES		424.76		424.76	38.23		14.75														03/STR/PV
17.20	TO	17.65	2		10.00	VARIES		429.00		429.00	38.61		14.90														04/NHS/PV
DRIVEWAYS																											
14.25	TO	17.20			2.00	VARIES		140.00	140.00				7.00														03/STR/PV
17.20	TO	17.65			2.00	VARIES		6.00	6.00				0.30														04/NHS/PV
MAILBOX APPROACHES																											
14.25	TO	17.20						278.00					15.44														03/STR/PV
17.20	TO	17.65						12.00					0.67														04/NHS/PV
SUBTOTALS									146.00	53782.82	4840.45	3097.60	1890.87	430.22	2.92	15364.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTALS CARRIED TO GENERAL SUMMARY									146	53783	4841	3098	1891	431	2.92	15365	0	0	0	0	0	0	0	0	0	0	

DESIGN AGENCY

DESIGNER BFR

REVIEWER MAC 05/04/21

PROJECT ID 101417

SHEET P.12 TOTAL 26

STA-93/236-11.71/0.00

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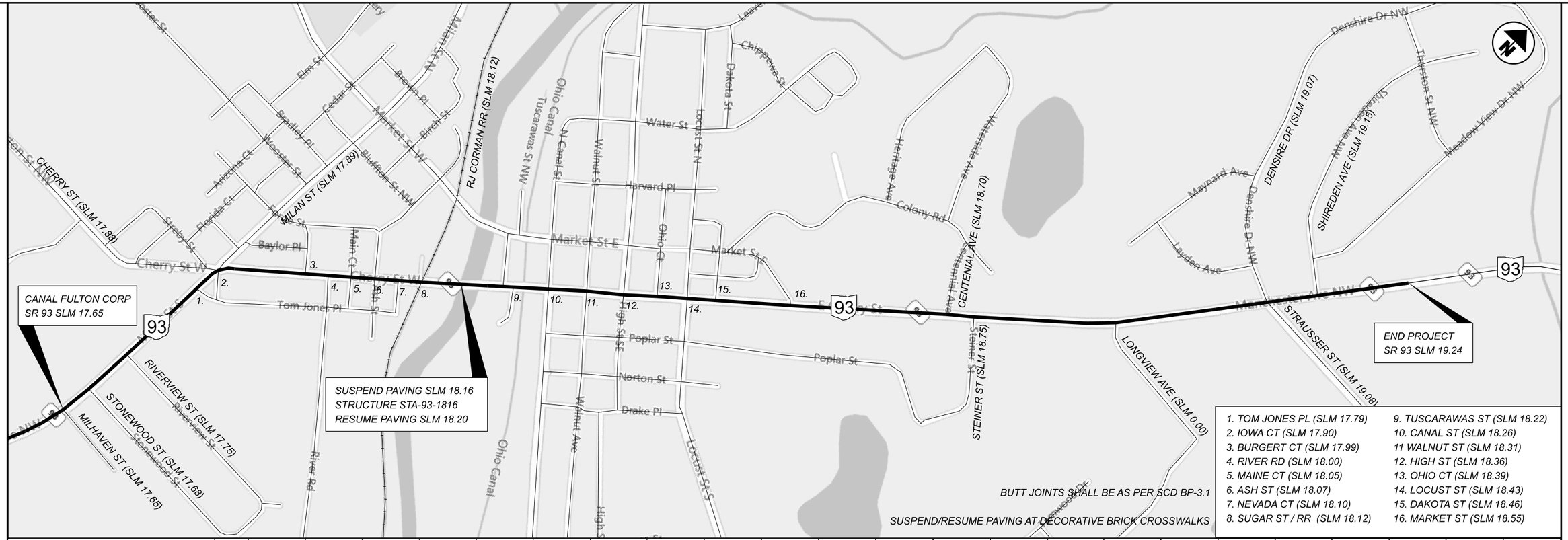

PAVEMENT CALCULATIONS

SLM RANGE			TYPICAL SECTION	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA	202 WEARING COURSE REMOVED	254 PAVEMENT PLANING, ASPHALT CONCRETE, (T=1.25")	254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, (T=1.25")	407 NON-TRACKING TACK COAT @ 0.09 GAL/SY	408 PRIME COAT, AS PER PLAN @ 0.4 GAL/SY	424 FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN (T=1.25")	617 COMPACTED AGGREGATE, AS PER PLAN (T=2")										PLAN SPLITS
					FT	FT	SY	SY	SY	SY	SY	GAL	GAL	CY	CY											
SR 93																										
17.65	TO	17.77	2		633.60	33.00	2323.20			2323.20		209.09	112.64	80.67	15.64											05/NHS/PV/CANF
17.77	TO	18.16	3		2059.20	30.00	6864.00				6864.00	617.76		238.33												05/NHS/PV/CANF
18.20	TO	18.22	3		105.60	30.00	352.00			352.00		31.68		12.22												05/NHS/PV/CANF
18.22	TO	18.31	3		475.20	36.00	1900.80			1900.80		171.07		66.00												05/NHS/PV/CANF
18.31	TO	18.37	3		316.80	30.00	1056.00			1056.00		95.04		36.67												05/NHS/PV/CANF
18.37	TO	18.53	3		844.80	38.00	3566.93			3566.93		321.02		123.85												05/NHS/PV/CANF
18.53	TO	18.67	3		739.20	30.00	2464.00			2464.00		221.76		85.56												05/NHS/PV/CANF
18.67	TO	19.03	2		1900.80	27.00	5702.40			5702.40		513.22	337.92	198.00	46.93											05/NHS/PV/CANF
19.03	TO	19.24	2		1108.80	27.00	3326.40			3326.40		299.38	197.12	115.50	27.38											04/NHS/PV
INTERSECTIONS																										
17.65	TO	19.03			10.00	VARIES		1249.52		1249.52		112.46		43.39												05/NHS/PV/CANF
19.03	TO	19.24			10.00	VARIES		73.39		73.39		6.61		2.55												04/NHS/PV
DRIVEWAYS																										
17.65	TO	19.03			2.00	VARIES		40.00	40.00					2.00												05/NHS/PV/CANF
																										04/NHS/PV
MAILBOX APPROACHES																										
17.65	TO	19.03						12.00						0.67												05/NHS/PV/CANF
																										04/NHS/PV
								SUBTOTALS	40.00	22014.65	6864.00	2599.08	647.68	1005.40	89.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
								TOTALS CARRIED TO GENERAL SUMMARY	40	22015	6865	2600	648	1006	90	0	0	0	0	0	0	0	0	0	0

DESIGN AGENCY

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REVIEWER MAC 05/04/21

PROJECT ID 101417

SHEET P.13 TOTAL 26

STA-93/236-11.71/0.00

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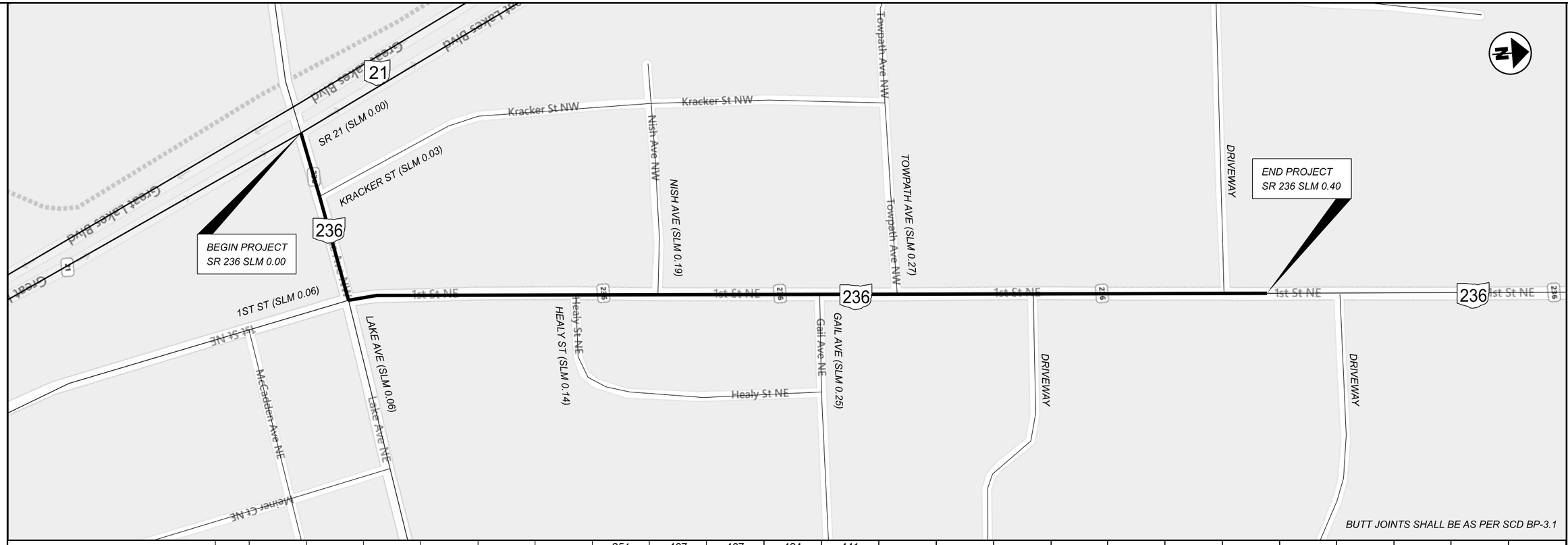

SLM RANGE			TYPICAL SECTION	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA		254 PAVEMENT PLANING, ASPHALT CONCRETE, (T=2")	407 NON-TRACKING TACK COAT @ 0.09 GAL/SY	407 NON-TRACKING TACK COAT @ 0.06 GAL/SY	424 FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN (T=1")	441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE (448), (T=1")											
					FT	FT	SY	SY		SY	GAL	GAL	CY	CY											
SR 236																						PLAN SPLITS		
0.00	TO	0.06	4		316.80	46.00	1619.20			1619.20	145.73	97.15	44.98	44.98								02/S>2/PV/MASS		
0.06	TO	0.40	4		1795.20	32.00	6382.93			6382.93	574.46	382.98	177.30	177.30								02/S>2/PV/MASS		
INTERSECTIONS																								
0.00	TO	0.40	4		10.00	VARIES		266.66		266.66	24.00	16.00	7.41	7.41								02/S>2/PV/MASS		
									SUBTOTALS	0.00	8268.80	744.19	496.13	229.69	229.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
									TOTALS CARRIED TO GENERAL SUMMARY	0	8269	745	497	230	230	0	0	0	0	0	0	0	0	0	0

PAVEMENT CALCULATIONS

STA-93/236-11.71/0.00

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DESIGN AGENCY

DESIGNER BFR

REVIEWER MAC 05/04/21

PROJECT ID 101417

SHEET P.14 TOTAL 26

MAIN ROUTE	INTERSECTING ROUTE	DESIGN SHEET	QUADRANT RL=REAR LT, RR=REAR RT FL=FWD LT, FR=FWD RT (LOOKING UPSTATION)	CURB RAMP TYPE (SCD BP-7.1, SHEET 2/3)	202 WALK REMOVED	202 CURB REMOVED	608 4" CONCRETE WALK	608 6" CONCRETE WALK	608 CURB RAMP	609 CURB, TYPE 6	611 MANHOLE ADJUSTED TO GRADE	625 PULL BOX, MISC.: ADJUSTED TO GRADE	638 VALVE BOX ADJUSTED TO GRADE		COMMENTS
					SF	FT	SF	SF	SF	FT	EACH	EACH	EACH		
SR-93	WOODSTONE AVE.		FR	-	25.00				25.00						CORRECT TRUNCATED DOME
SR-93	WOODSTONE AVE.		RR	-	25.00				25.00						CORRECT TRUNCATED DOME
SR-93	STONEWOOD ST.		FR	-	25.00				25.00						CORRECT TRUNCATED DOME
SR-93	STONEWOOD ST.		RR	-	25.00				25.00						CORRECT TRUNCATED DOME
SR-93	RIVERVIEW ST.		FR	-	30.00				30.00						CORRECT TRUNCATED DOME
SR-93	RIVERVIEW ST.		RR	-	35.00				35.00						CORRECT TRUNCATED DOME
SR-93	TOM JONES PL	P.18	FR	A2-1	30.00	6.00			30.00						CORRECT TRUNCATED DOME/TRUNCATED DOME IS THE LANDING AREA
SR-93	TOM JONES PL	P.18	RR	A2-1	105.00	10.00	50.00		55.00						RECONSTRUCT RAMP
SR-93	MILLAN/CHERRY/IOWA		RR	-	36.00			36.00							REMOVE TRUNCATED DOME / CURB RAMP REMOVED
SR-93	RIVER ST.		FR	-	30.00				30.00						CORRECT TRUNCATED DOME
SR-93	RIVER ST.	P.18	RR	A2-3	115.00		70.00		45.00						RECONSTRUCT RAMP
SR-93	MAINE CT.		FR	-	30.00				30.00						CORRECT TRUNCATED DOME/TRUNCATED DOME IS THE LANDING AREA
SR-93	MAINE CT.	P.18	RR	A2-1	75.00		25.00		50.00						RECONSTRUCT RAMP
SR-93	MAINE CT.	P.18	FL	A2-1	60.00				60.00						RECONSTRUCT RAMP / TRUNCATED DOME IS THE LANDING AREA
SR-93	ASH ST.		FR	-	30.00				30.00						CORRECT TRUNCATED DOME
SR-93	ASH ST.		RR	-	25.00				25.00						CORRECT TRUNCATED DOME
SR-93	ASH ST.		FL	-	30.00				30.00						CORRECT TRUNCATED DOME
SR-93	ASH ST.	P.18	RL	A2-1	165.00		105.00		60.00						RECONSTRUCT RAMP
SR-93	NEVADA CT.	P.18	FR	A2-1	105.00		25.00		80.00						RECONSTRUCT RAMP
SR-93	NEVADA CT.	P.18	RR	A2-1	110.00		55.00		55.00						RECONSTRUCT RAMP
SR-93	BIKE TRAIL	P.20	RT	A1/C1	170.00		60.00		110.00						RECONSTRUCT RAMP
SR-93	BIKE TRAIL	P.20	LT	A1/C1	170.00		60.00		110.00						RECONSTRUCT RAMP
SR-93	TUSCARAWAS ST.	P.21	FR	D-C1	220.00				220.00				1.00		RECONSTRUCT RAMP (EX. BRICK RAMP & SIDEWALK)
SR-93	TUSCARAWAS ST.	P.21	RR	D-C1	244.00		24.00		220.00						RECONSTRUCT RAMP (EX. BRICK RAMP & SIDEWALK)
SR-93	TUSCARAWAS ST.		FL	-	72.00				72.00						RECONSTRUCT RAMP (EX. BRICK RAMP & SIDEWALK)
SR-93	CANAL ST.	P.21	FR	D-C1	225.00				225.00			1.00			RECONSTRUCT RAMP (EX. BRICK RAMP & SIDEWALK)
SR-93	CANAL ST.	P.21	RR	D-C1	360.00				360.00			1.00			RECONSTRUCT RAMP (EX. BRICK RAMP & SIDEWALK)
SR-93	CANAL ST.	P.21	FL	D-C1	250.00				250.00			1.00			RECONSTRUCT RAMP (EX. BRICK RAMP & SIDEWALK)
SR-93	CANAL ST.	P.21	RL	D-C1	220.00				220.00			2.00	1.00		RECONSTRUCT RAMP (EX. BRICK RAMP & SIDEWALK)
SR-93	WALNUT ST.	P.17	FR	A2-1	90.00		20.00		70.00						RECONSTRUCT RAMP / REMOVE TRUNCATED DOME CROSSING MAIN
SR-93	WALNUT ST.	P.21	RR	D-C1	280.00				280.00		1.00				RECONSTRUCT RAMP (EX. BRICK RAMP & SIDEWALK)
SR-93	WALNUT ST.	P.21	RL	D-C1	260.00				260.00						RECONSTRUCT RAMP (EX. BRICK RAMP & SIDEWALK)
SR-93	HIGH ST.	P.18	FR	A2-3	95.00		40.00		55.00						RECONSTRUCT RAMP
SR-93	HIGH ST. CROSSING SIDE ST.		RR	-	40.00	10.50			40.00	10.50					CORRECT TRUNCATED DOME
SR-93	HIGH ST. CROSSING MAIN ST.		RR	-	35.00	10.50			35.00	10.50					CORRECT TRUNCATED DOME
SR-93	HIGH ST.	P.18	FL	A2-1	48.00				48.00						RECONSTRUCT RAMP
SR-93	HIGH ST. CROSSING SIDE ST.		RL	-	63.00				63.00						CORRECT TRUNCATED DOME
SR-93	HIGH ST. CROSSING MAIN ST.		RL	-	40.00				40.00						CORRECT TRUNCATED DOME
SR-93	OHIO CT.	P.18	FR	A2-1	50.00				50.00						RECONSTRUCT RAMP
SR-93	OHIO CT.	P.18	FL	A2-1	50.00				50.00						RECONSTRUCT RAMP
SR-93	OHIO CT.	P.18	RL	A2-1	55.00				55.00				1.00		RECONSTRUCT RAMP
															RECONSTRUCT RAMP
SR-93	LOCUST ST. CROSSING SIDE	P.19	FR	B2	112.00				112.00						RECONSTRUCT RAMP
SR-93	LOCUST ST. CROSSING MAIN	P.19	FR	B2	112.00				112.00						RECONSTRUCT RAMP
SR-93	LOCUST ST. CROSSING SIDE	P.19	RL	B2	84.00				84.00						RECONSTRUCT RAMP
				SUBTOTALS	4456.00	37.00	534.00	36.00	3886.00	21.00	1.00	5.00	3.00	0.00	
				TOTALS CARRIED TO GENERAL SUMMARY	4456	37	534	36	3886	21	1	5	3	0	

CURB RAMP DETAILS

DESIGN AGENCY

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REVIEWER MAC 05/04/21

PROJECT ID 101417

SHEET P.15 TOTAL 26

STA-93/236-11.71/0.00

MAIN ROUTE	INTERSECTING ROUTE	DESIGN SHEET	QUADRANT RL=REAR LT, RR=REAR RT FL=FWD LT, FR=FWD RT (LOOKING UPSTATION)	CURB RAMP TYPE (SCD BP-7.1, SHEET 2/3)	202 WALK REMOVED SF	608 4" CONCRETE WALK SF	608 CURB RAMP SF								COMMENTS
SR-93	BARBARA ST.	P.18	FR	A2-1	78.00		78.00								RECONSTRUCT RAMP
SR-93	BARBARA ST.	P.18	RR	A2-1	66.00		66.00								RECONSTRUCT RAMP
SR-93	MARKET ST.	P.18	FL	A2-3	56.00	16.00	40.00								RECONSTRUCT RAMP
SR-93	MARKET ST.		RL	-	30.00		30.00								CORRECT TRUNCATED DOME
SR-93	CENTENNIAL AVE.		RR	-	35.00		35.00								CORRECT TRUNCATED DOME/TRUNCATED DOME IS THE LANDING AREA
SR-93	CENTENNIAL AVE.		RL	-	25.00		25.00								CORRECT TRUNCATED DOME/TRUNCATED DOME IS THE LANDING AREA
SR-93	STEINER ST.	P.18	FR	A2-1	72.00	20.00	52.00								RECONSTRUCT RAMP
SR-93	STEINER ST.	P.18	RR	A2-1	72.00	20.00	52.00								RECONSTRUCT RAMP
SR-236	LAKE AVE./1ST ST.	P.19	FR	D-B2	55.00		55.00								RECONSTRUCT RAMP
SR-236	LAKE AVE./1ST ST.	P.19	RR	D-B2	70.00		70.00								RECONSTRUCT RAMP
SR-236	LAKE AVE./1ST ST.	P.21	FL	D-C1	154.00		154.00								RECONSTRUCT RAMP
SR-236	LAKE AVE./1ST ST.	P.18	RL	A2-1	95.00	25.00	70.00								RECONSTRUCT RAMP
SR-236	HEALY ST.	P.18	FR	A2-1	75.00	25.00	50.00								RECONSTRUCT RAMP
SR-236	HEALY ST.	P.18	RR	A2-1	90.00	30.00	60.00								RECONSTRUCT RAMP
SR-236	GAIL AVE.	P.18	FR	A2-1	75.00	25.00	50.00								RECONSTRUCT RAMP
SR-236	GAIL AVE.	P.18	RR	A2-1	115.00	25.00	90.00								RECONSTRUCT RAMP
				SUBTOTALS	1163.00	186.00	977.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				TOTALS CARRIED TO GENERAL SUMMARY	1163	186	977	0	0	0	0	0	0	0	

CURB RAMP DETAILS

STA-93/236-11.71/0.00

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DESIGN AGENCY

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REVIEWER MAC 05/04/21

PROJECT ID 101417

SHEET P.16 TOTAL 26

MAIN ROUTE	INTERSECTION ROUTE	DESIGN SHEET	QUADRANT	CURB RAMP TYPE	DIMENSIONS (FEET LxW)						
					A	B	C	D	E	F	G
SR-93	TOM JONES PL	P.18	FR	A2-1	6		5				
SR-93	TOM JONES PL	P.18	RR	A2-1	11	10	5				
SR-93	RIVER ST.	P.18	FR	A2-3	4	5	7	7	5		
SR-93	MAINE CT.	P.18	FL	A2-1	12		5				
SR-93	MAINE CT.	P.18	RR	A2-1	10	5	5				
SR-93	ASH ST.	P.18	RL	A2-1	12	21	5				
SR-93	NAVADA CT.	P.18	FR	A2-1	11	11	5				
SR-93	NAVADA CT.	P.18	RR	A2-1	16	5	5				
SR-93	BIKE TRAIL	P.20	RT	A1/C1	10	4	6	3	3	11	
SR-93	BIKE TRAIL	P.20	LT	A1/C1	10	4	6	3	3	11	
SR-93	TUSCARAWAS ST.	P.21	FR	D-C1	11	7	4		20		
SR-93	TUSCARAWAS ST.	P.21	RR	D-C1	11	7	4		20		
SR-93	CANAL ST.	P.21	FR	D-C1	10	6	4		25		
SR-93	CANAL ST.	P.21	RR	D-C1	9	5	4		25		
SR-93	CANAL ST.	P.21	FL	D-C1	10	6	4		22		
SR-93	CANAL ST.	P.21	RL	D-C1	12	8	4		30		
SR-93	WALNUT ST.	P.18	FR	A2-1	14	4	5				
SR-93	WALNUT ST.	P.21	RR	D-C1	14	10	4		20		
SR-93	WALNUT ST.	P.21	RL	D-C1	13	9	4		20		
SR-93	HIGH ST.	P.18	FR	A2-3	7	4	5	4	5		
SR-93	HIGH ST.	P.18	FL	A2-1	8		6				
SR-93	OHIO CT.	P.18	FR	A2-1	10		5				
SR-93	OHIO CT.	P.18	FL	A2-1	10		5				
SR-93	OHIO CT.	P.18	RL	A2-1	11		5				
SR-93	LOCUST ST. CROSSING SIDE ST	P.19	FR	B2	7		16				
SR-93	LOCUST ST. CROSSING MAIN ST	P.19	FR	B2	7		16				
SR-93	LOCUST ST. CROSSING SIDE ST	P.19	RL	B2	7		12				
SR-93	BARBARA	P.18	FR	A2-1	13		6				
SR-93	BARBARA	P.18	RR	A2-1	11		6				
SR-93	MARKET ST.	P.18	FL	A2-3	4	4	4		5		
SR-93	STEINER ST.	P.18	FR	A2-1	13	5	4				
SR-93	STEINER ST.	P.18	RR	A2-1	13	5	4				
SR-236	LAKE AVE/1ST ST.	P.19	FR	D-B2	5		11				
SR-236	LAKE AVE/1ST ST.	P.19	RR	D-B2	5		14				
SR-236	LAKE AVE/1ST ST.	P.21	FL	D-C1	11	7	4		14		
SR-236	LAKE AVE/1ST ST.	P.18	RL	A2-1	14	5	5				
SR-236	HEALY ST.	P.18	FR	A2-1	10	5	5				
SR-236	HEALY ST.	P.18	RR	A2-1	12	6	5				
SR-236	GAIL AVE.	P.18	FR	A2-1	10	5	5				
SR-236	GAIL AVE.	P.18	RR	A2-1	18	5	5				

CURB RAMP DETAILS

DESIGN AGENCY

DESIGNER BFR

REVIEWER MAC 05/04/21

PROJECT ID 101417

SHEET P.17 | TOTAL 26

STA-93/236-11.71/0.00

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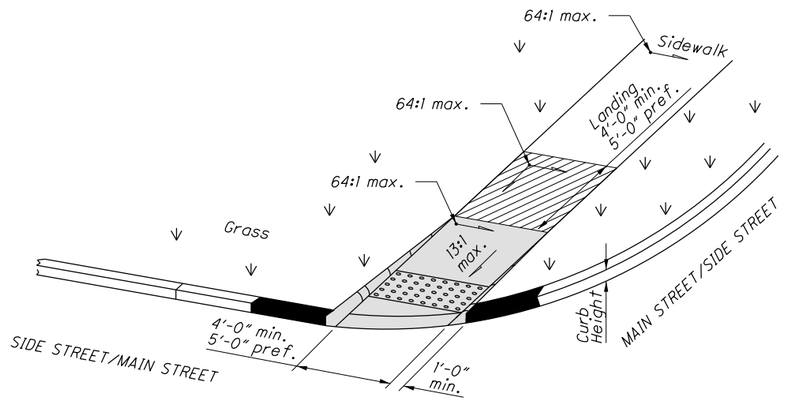
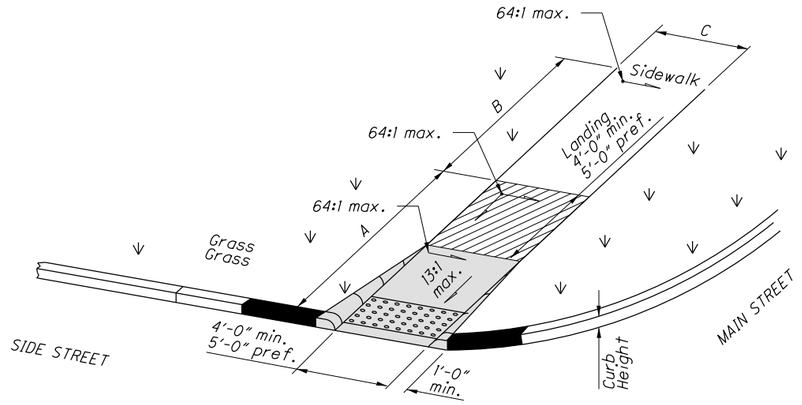
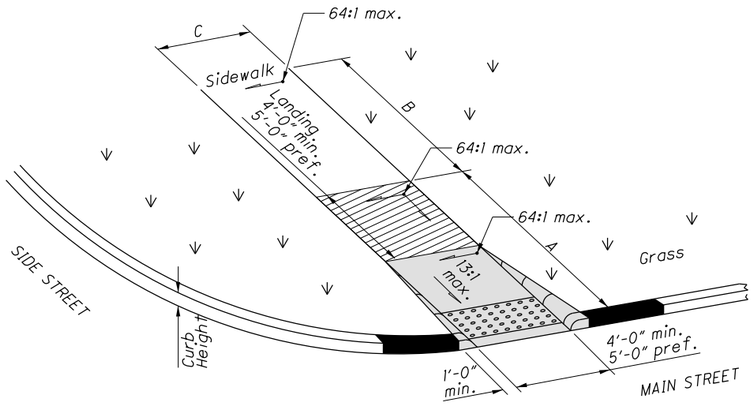


* ALIGN TRUNCATED DOMES WITH THE PRIMARY DIRECTION OF THE RAMP FOR SKEWED CONDITIONS



Type A2 - 1



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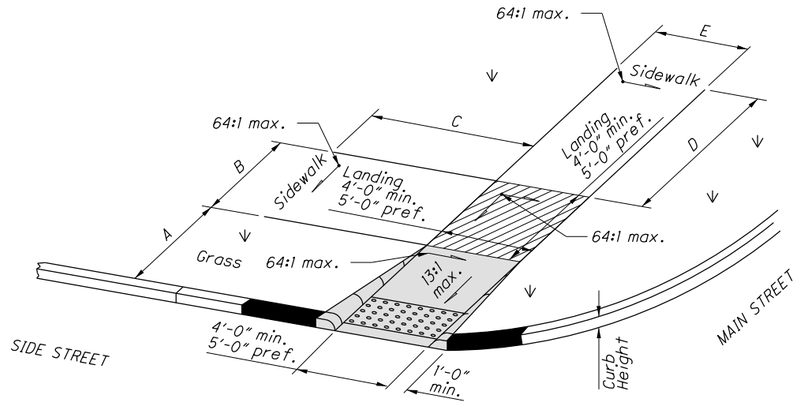

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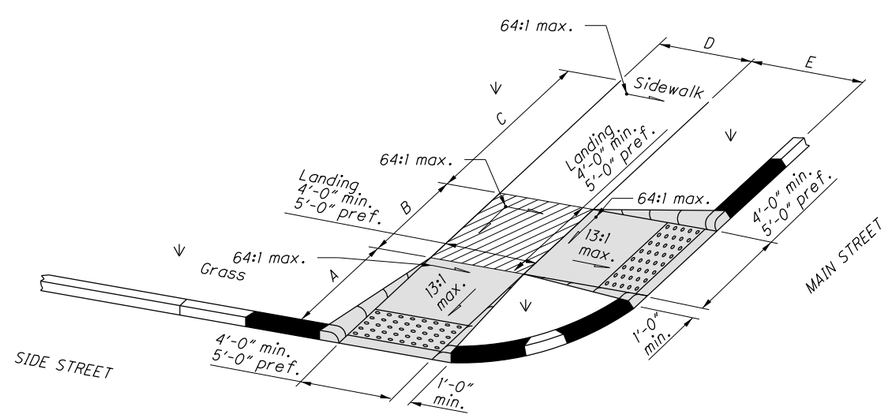

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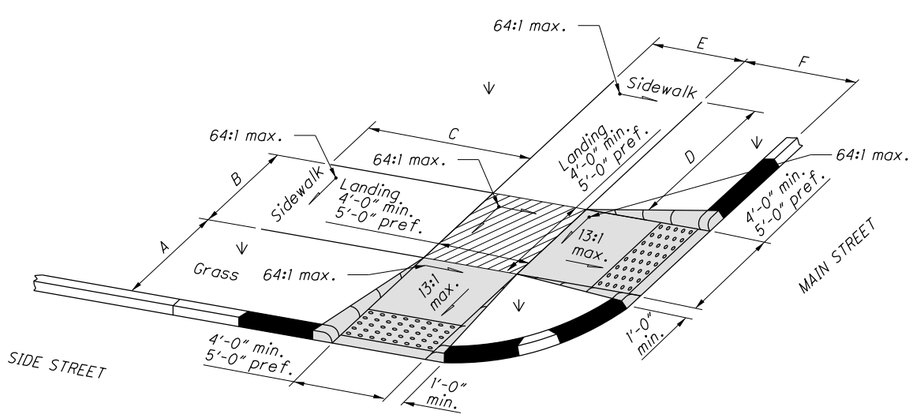

Type A2 - 5

CONCRETE WALK
LANDING PAD
CURB RAMP
CURB

* SEE SHEET 17 FOR DIMENSIONS
* SEE SCD BP-7.1 FOR ALL OTHER DETAILS

NOT TO SCALE

CURB RAMP DETAILS

STA-93/236-11.71/0.00

MODEL: Sheet 5 PAPERSIZE: 17Ix11 (in.) DATE: 6/2/2021 TIME: 1:15:44 PM USER: bross1
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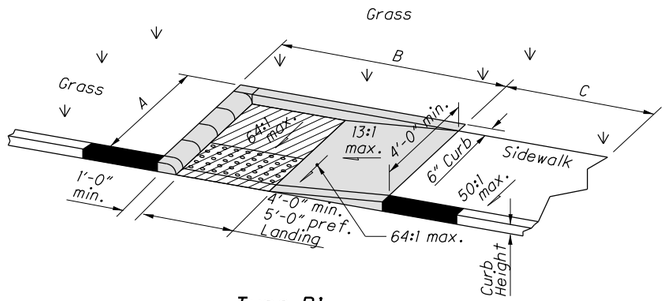
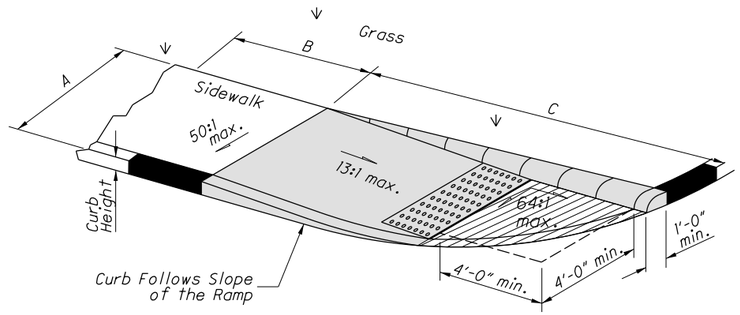
DESIGN AGENCY

DESIGNER BFR
REVIEWER MAC 05/04/21
PROJECT ID 101417
SHEET P.18 TOTAL 26



Type B1



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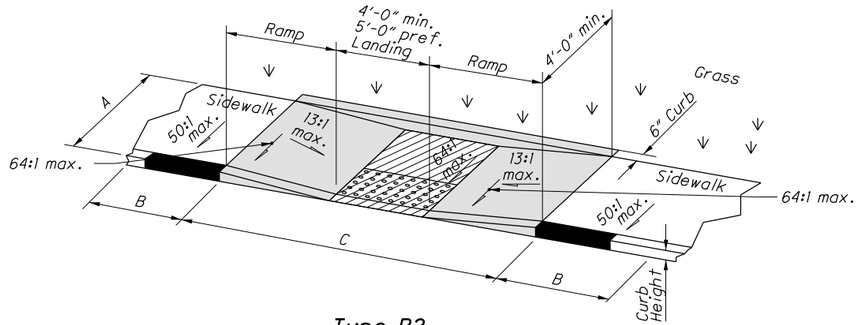

Type B2

CONCRETE WALK
LANDING PAD
CURB RAMP
CURB

* SEE SHEET 17 FOR DIMENSIONS
* SEE SCD BP-7.1 FOR ALL OTHER DETAILS

NOT TO SCALE

CURB RAMP DETAILS

STA-93/236-11.71/0.00

MODEL: Sheet 6 PAPERSIZE: 17x11 (fr.) DATE: 6/2/2021 TIME: 1:15:44 PM USER: bross1
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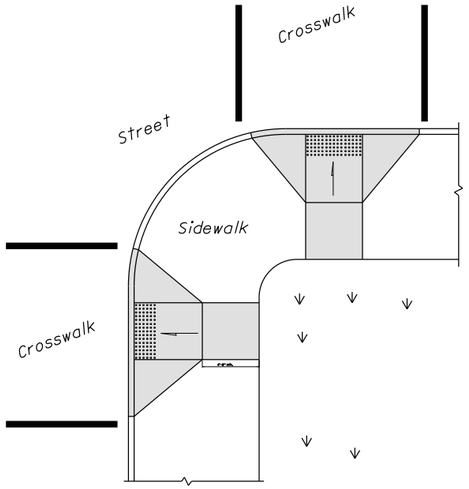
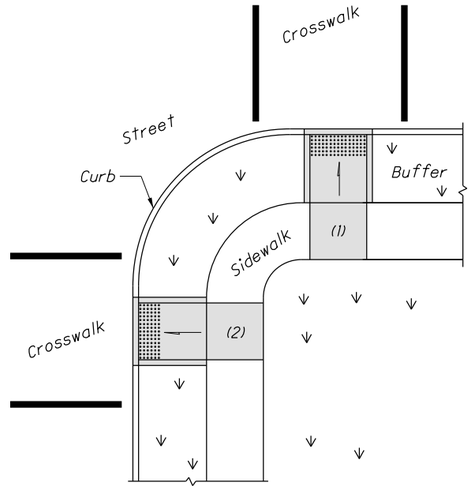
DESIGN AGENCY

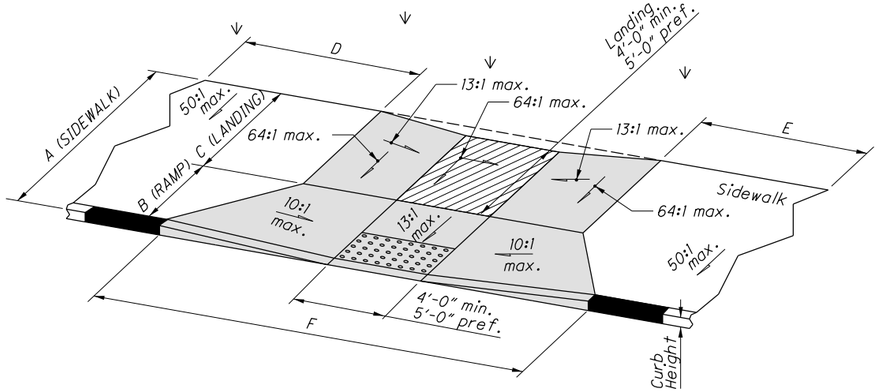
DESIGNER BFR
REVIEWER MAC 05/04/21
PROJECT ID 101417
SHEET P.19 TOTAL 26



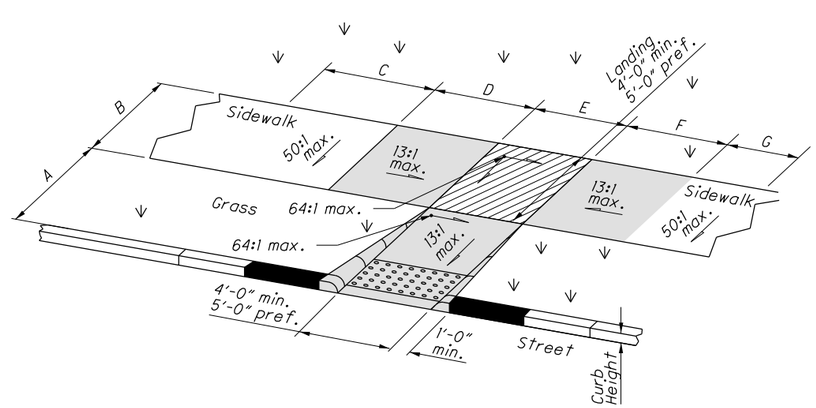
TYPE A1/C1 - PERPENDICULAR CURB RAMPS



TYPE A2/C2 - PERPENDICULAR CURB RAMPS



Type A1/C1



Type A2/C2

CONCRETE WALK
LANDING PAD
CURB RAMP
CURB

* SEE SHEET 17 FOR DIMENSIONS
* SEE SCD BP-7.1 FOR ALL OTHER DETAILS

NOT TO SCALE

CURB RAMP DETAILS

STA-93/236-11.71/0.00

MODEL: Sheet 7 PAPERSIZE: 17x11 (in.) DATE: 6/2/2021 TIME: 1:15:45 PM USER: bross1
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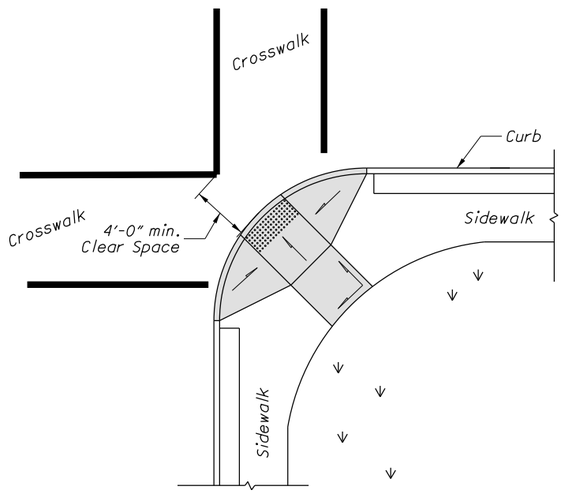
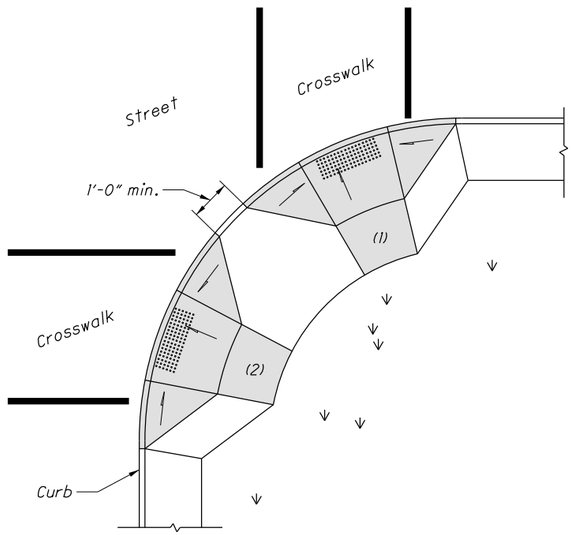
DESIGN AGENCY

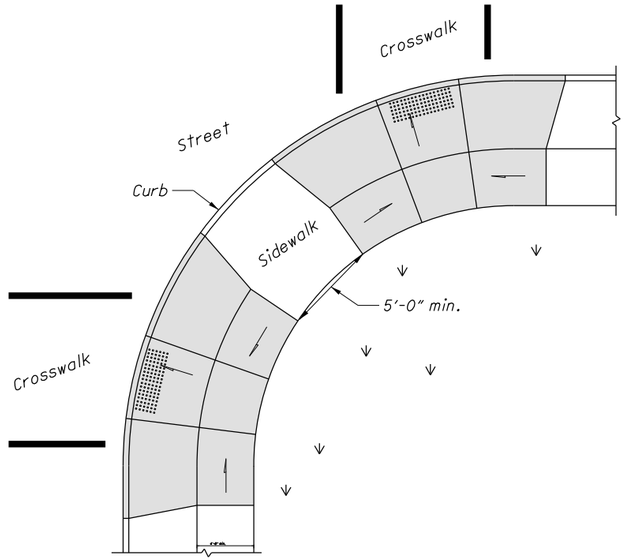
DESIGNER BFR
REVIEWER MAC 05/04/21
PROJECT ID 101417
SHEET P.20 TOTAL 26



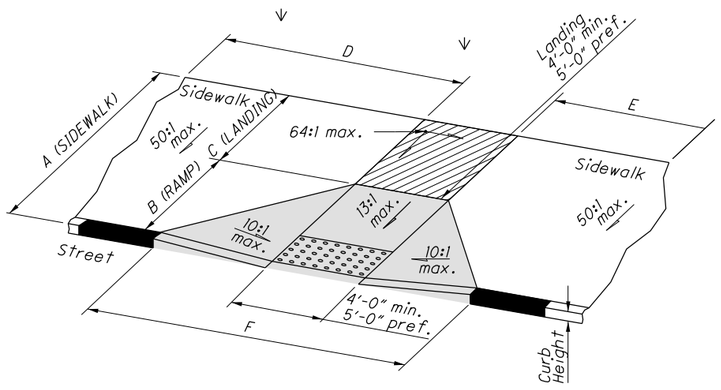
Type D - DIAGONAL CURB RAMP (TYPE A1)



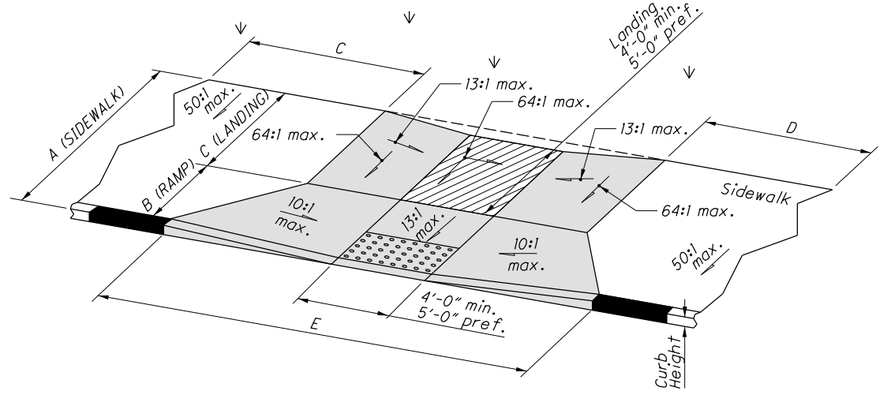
Type D - PERPENDICULAR CURB RAMPS (TYPE A1)



TYPE D - COMBINATION CURB RAMPS (TYPE C1)



Type A1



Type C1

CONCRETE WALK
LANDING PAD
CURB RAMP
CURB

* SEE SHEET 17 FOR DIMENSIONS
* SEE SCD BP-7.1 FOR ALL OTHER DETAILS

NOT TO SCALE

CURB RAMP DETAILS

STA-93/236-11.71/0.00

MODEL: Sheet 8 PAPERSIZE: 17x11 (in.) DATE: 6/2/2021 TIME: 1:15:45 PM USER: bross1
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DESIGN AGENCY

DESIGNER
BFR

REVIEWER
MAC 05/04/21

PROJECT ID
101417

SHEET P.21 TOTAL 26

RPM SUBSUMMARY

LOCATION								621	621	621	621		621	REMARKS
COUNTY	ROUTE	SECTION (S.L.M.)						RPM (YELLOW/YELLOW)	RPM (WHITE/RED)	RPM (WHITE)	RPM (YELLOW/RED)		RAISED PAVEMENT MARKER REMOVED	
		FROM	TO					EACH	EACH	EACH	EACH		EACH	
STA	SR 93	11.71	12.50					53		16			40	STOP APPROACH AT 11.71
STA	SR 93	12.50	12.78					34						TURN LANE APPROACH
STA	SR 93	12.78	12.91					9					7	
STA	SR 93	12.91	12.93					2					2	
STA	SR 93	12.93	12.96					2					2	
STA	SR 93	12.96	14.25					86					65	
STA	SR 93	14.25	14.43					18					14	12 Y/Y @ 40' SPACING
STA	SR 93	14.47	14.79					85					64	Y/Y @ 20' SPACING
STA	SR 93	14.79	16.39					112					84	12 Y/Y @ 40' SPACING
STA	SR 93	16.41	17.20					53					40	
STA	SR 93	17.20	17.23					2					2	
STA	SR 93	17.29	17.65					24					18	
STA	SR 93	19.03	19.24					14					11	
TOTALS CARRIED TO GENERAL SUMMARY								494		16			349	

STA-93/236-11.71/0.00

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DESIGN AGENCY

DESIGNER
BFR

REVIEWER
MAC 05/04/21

PROJECT ID
101417

SHEET P.22 | TOTAL 26

GENERAL SPEC: 640
MATERIAL TYPE: 646

EDGE LINE

CTY	ROUTE	TRUE LOG	FROM	TRUE LOG	TO	WHITE EDGE LINE TOTAL	WHITE EDGE LINE HIGHWAY	WHITE EDGE LINE RAMP	YELLOW EDGE LINE TOTAL	YELLOW EDGE LINE HIGHWAY	YELLOW EDGE LINE RAMP	COMMENTS
STA	93	11.71	LINCOLN ST.	12.91	~50' SOUTH OF BIKE TRAIL	2.40						
STA	93	12.91	~50' SOUTH OF BIKE TRAIL	12.93	~50' NORTH OF BIKE TRAIL	0.04						
STA	93	12.93	~50' NORTH OF BIKE TRAIL	12.96	WOOSTER ST.	0.06						
STA	93	12.96	WOOSTER ST.	17.20	SR 21 RAMPS	8.48						
STA	93	17.20	SR 21 RAMPS	17.65	CANAL FULTON CORP LIMIT	0.90						
STA	93	17.65	CANAL FULTON CORP LIMIT	17.89	CHERRY ST.	0.36						
STA	93	18.67	END OF CURB	19.03	CANAL FULTON CORP LIMIT	0.72						
STA	93	19.03	CANAL FULTON CORP LIMIT	19.24	~550' NORTH OF SHIREDEN AVE.	0.42						
STA	241	0.00	STRUCTURE 7606036			0.06						
TOTAL						13.44			0			

LANE LINE

CTY	ROUTE	TRUE LOG	FROM	TRUE LOG	TO	TOTAL MILES	6" LANE LINE DASHED	6" LANE LINE SOLID	COMMENTS
STA	236	0.00	SR 21	0.06	LAKE AVE / 1ST ST	0.12	0.12		
TOTAL						0.12	0.12		

CENTER LINE

CTY	ROUTE	TRUE LOG	FROM	TRUE LOG	TO	TOTAL MILES	EQUIVALENT SOLID LINE	COMMENTS
STA	93	11.71	LINCOLN ST.	12.91	~50' SOUTH OF BIKE TRAIL	1.38	1.67	
STA	93	12.91	~50' SOUTH OF BIKE TRAIL	12.93	~50' NORTH OF BIKE TRAIL	0.02	0.03	
STA	93	12.93	~50' NORTH OF BIKE TRAIL	12.96	WOOSTER ST.	0.03	0.04	
STA	93	12.96	WOOSTER ST.	17.20	SR 21 RAMPS	4.24	6.36	
STA	93	17.20	SR 21 RAMPS	17.65	CANAL FULTON CORP LIMIT	0.45	0.90	
STA	93	17.65	CANAL FULTON CORP LIMIT	19.03	CANAL FULTON CORP LIMIT	1.44	2.87	
STA	93	19.03	CANAL FULTON CORP LIMIT	19.24	~550' NORTH OF SHIREDEN AVE.	0.21	0.42	
STA	236	0.00	SR 21	0.40	~725' NORTH OF TOWPATH AVE.	0.40	0.80	
STA	241	0.00	STRUCTURE 7606036			0.03		
TOTAL						8.20	13.09	

AUXILIARY

CTY	ROUTE LOCATION	TRUE LOG	CHANNEL LINE 8"	STOP LINE	CROSS WALK LINES	TRANSVERSE DIAGONAL LINES WHITE	TRANSVERSE DIAGONAL LINES YELLOW	CHEVRON MARKING	SYMBOL MARKINGS RxR	SYMBOL MARKINGS SCHOOL 72"	SYMBOL MARKINGS SCHOOL 96"	LANE ARROWS TURN LEFT	LANE ARROWS TURN RIGHT	LANE ARROWS THRU	LANE ARROWS COMB.	WORD ON PVMT ONLY 72"	WORD ON PVMT ONLY 96"	DOTTED LINES	COMMENTS
			FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	
STA	SR93 @ SR172	11.710		13															
STA	SR93 @ TUSLAW SCHOOLS	12.040	275								2	4						260	YELLOW DOTTED CENTERLINES
STA	SR93 @ SIPPO VALLEY BIKE TRA	12.910			48														
STA	SR93 @ NORFOLK SOUTHERN RR	14.423		20					2										SEE SHEET 5 FOR SR 93 SB RR MARKING LOCATION
STA	SR93 @ SR 21 SB RAMPS	17.230	114	42				60											
STA	SR93 @ SR 21 NB RAMPS	17.320	138	34				88											
STA	SR93 @ CHERRY/MILAN ST	17.890		15														100	YELLOW DOTTED CENTERLINES
STA	SR93 @ RJ CORMAN RR & TRAILH	18.130		30	60				2										
STA	SR93 @ TUSCARAWAS ST	18.220			60														
STA	SR93 @ CANAL ST	18.260		36															
STA	SR93 @ WALNUT ST	18.310			96														
STA	SR93 @ HIGH ST	18.360			180														
STA	SR93 @ LOCUST ST	18.430	415	66	250		100					5	2						
STA	SR236 @ SR21	0.000	90	25								2			2				
STA	SR236 @ LAKE AVE / 1ST ST	0.060	170	46	380							4			2				
TOTAL			1202	327	1074		100	148	4		2	15	2		4			360	

PAVEMENT MARKING SUBSUMMARY

DESIGN AGENCY

DESIGNER BFR

REVIEWER MAC 05/04/21

PROJECT ID 101417

SHEET P.23 | TOTAL 26

STA-93/236-11.71/0.00

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 9TH EDITION, INCLUDING THE 2020 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL, 2020

EXISTING STRUCTURE VERIFICATION

EXISTING STRUCTURE VERIFICATION: DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

PROPOSED WORK

STRUCTURE STA-93-1444 (NEWMAN CREEK)
- SEAL EXISTING WEARING SURFACE AND APPROACH SLABS WITH GRAVITY FED RESIN CONCRETE TREATMENT.
- CLEARING AND GRUBBING 15' AROUND THE STRUCTURE TO REMOVE VEGETATION

STRUCTURE STA-93-1639 (FOX RUN)
- SEAL EXISTING WEARING SURFACE AND APPROACH SLABS WITH GRAVITY FED RESIN CONCRETE TREATMENT.
- REPAIR SCOUR AT THE FORWARD RIGHT SLOPE
- CLEARING AND GRUBBING 15' AROUND THE STRUCTURE TO REMOVE VEGETATION

STRUCTURE STA-93-1723 (SR21 SLM 18.48)
- SEAL EXISTING WEARING SURFACE AND APPROACH SLABS WITH GRAVITY FED RESIN CONCRETE TREATMENT.
- CLEARING AND GRUBBING 15' AROUND THE STRUCTURE TO REMOVE VEGETATION
- NEW STRUCTURE IDENTIFICATION SIGNS

STRUCTURE STA-93-1816 (TUSCARAWAS RIVER)
- SEAL EXISTING WEARING SURFACE AND APPROACH SLABS WITH GRAVITY FED RESIN CONCRETE TREATMENT.
- CLEARING AND GRUBBING 15' AROUND THE STRUCTURE TO REMOVE VEGETATION

STRUCTURE STA-241-0000 (SUGAR CREEK)
- SEAL EXISTING WEARING SURFACE AND APPROACH SLABS WITH GRAVITY FED RESIN CONCRETE TREATMENT.
- REPAIR EROSION AT THE FORWARD AND REAR WINGWALLS
- CHANNEL CLEANOUT
- CLEARING AND GRUBBING 15' AROUND THE STRUCTURE TO REMOVE VEGETATION

ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS

ALTHOUGH NO TREES OR STUMPS ARE SPECIFICALLY MARKED FOR REMOVAL WITHIN THE PLANS, A LUMP SUM QUANTITY IS INCLUDED IN THE STRUCTURE GENERAL SUMMARY FOR ITEM 201 – CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS. SCALPING IS NOT REQUIRED FOR THIS ITEM OF WORK. ALL VEGETATION SHALL BE REMOVED WITHIN 15 FEET (OR TO THE R/W LIMITS, WHICHEVER IS CLOSER) OF THE HEADWALLS, ABUTMENTS AND/OR PIERS.

ALL OTHER PROVISIONS AS SET FORTH IN THE CMS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 201 – CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS.

ITEM 202 - REMOVAL MISC.: CHANNEL CLEANOUT

THIS WORK WILL CONSIST OF RE-ESTABLISHING THE ORIGINAL CHANNEL PROFILE BY REMOVING SEDIMENT BUILDUP, VEGETATION, AND DEBRIS FROM THE EXISTING CHANNEL WITHIN STATE RIGHT- OF-WAY LIMITS AS SPECIFIED IN THE PLANS FOR STRUCTURES STA-93-1639 (7605080) & STA-241-0000 (7606036). ANY TREES LOCATED WITHIN CHANNEL OR BANK LIMITS WILL BE INCLUDED UNDER ITEM 201, CLEARING AND GRUBBING. ALL MATERIALS REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 105.16 AND 105.17 OF THE CMS WITH THE APPROVAL OF THE ENGINEER. NO AREAS OF EXISTING CHANNEL PROTECTION SHALL BE REMOVED IN ORDER TO RESTORE THE ORIGINAL CHANNEL PROFILE. AFFECTED CHANNEL AREAS SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER.

CHANNEL CLEANOUT WILL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 202 REMOVAL MISC.: CHANNEL CLEANOUT. THIS PRICE WILL INCLUDE THE COST FOR LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CHANNEL CLEANOUT.

STRUCTURE STA-241-0000:
REMOVE DEBRIS AROUND PIERS

EROSION REPAIR

THE FOLLOWING QUANTITIES SHALL BE USED AS DIRECTED BY THE ENGINEER TO REPAIR EROSION / SLOPE PROTECTION AT THE FOLLOWING STRUCTURES AND LOCATIONS

STRUCTURE STA-93-1639, REPAIR SCOUR AT THE FORWARD RIGHT SLOPE
ITEM 601, ROCK CHANNEL PROTECTION, TYPE B, WITH FILTER, 5 CU YD

STRUCTURE STA-241-0000, REPAIR EROSION AROUND ALL WINGWALLS
ITEM 203, BORROW, 20 CU YD
ITEM 601, DUMP ROCK FILL, TYPE B, 20 CU YD

CORRECTING BRIDGE IDENTIFICATION SIGN NUMBERS:

SOME OF THE EXISTING BRIDGE NUMBER SIGNS HAVE INCORRECT BRIDGE NUMBERS ON THEM. THE FOLLOWING BRIDGE NUMBERS ARE THE CORRECT ONES AND WILL BE USED ON THE NEW BRIDGE IDENTIFICATIONS SIGNS.

STRUCTURES:
STA-93-1723 (SFN 7605102)

OBJECT MARKERS AND STRUCTURE/CULVERT IDENTIFICATION SIGNS

OBJECT MARKERS WILL BE PLACED ON EACH APPROACH OFF THE LEFT AND RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. ONE OM-3L AND ONE OM-3R WILL BE INSTALLED AT EACH APPROACH. THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND SHALL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 10.5 FT IN LENGTH.

STRUCTURE IDENTIFICATION SIGNS (I-H25b) WILL BE INSTALLED ON THE SAME POST AND DIRECTLY BELOW THE OBJECT MARKER OFF THE RIGHT SHOULDER ON EACH APPROACH. A QUANTITY OF ONE SIGN WILL BE INSTALLED AT EACH APPROACH. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

INSTALL SIGNS FOR THE FOLLOWING STRUCTURES:
STA-93-1723 - 2 APPROACHES

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:
- ITEM 630 - SIGN, FLAT SHEET, 730.20, 1 SQ FT
- ITEM 630 - SIGN, FLAT SHEET, 6 SQ FT
- ITEM 630 - GROUND MOUNTED SUPPORT, NO. 2 POST, 21 FT
- ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, 3 EACH
- ITEM 630 - REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 2 EACH

STRUCTURE GENERAL NOTES
STA-93-1444, STA-93-1639, STA-93-1723
STA-93-1816, STA-241-0000

SFN 0

DESIGN AGENCY

DESIGNER	CHECKER
BFR	XXX

REVIEWER
MAC 05/04/21

PROJECT ID
101417

SUBSET	TOTAL
1	3

SHEET	TOTAL
P.24	26

STA-93/236-11.71/0.00

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CALC:	BFR	DATE:	3/11/2021
CHECKED:		DATE:	

ESTIMATED QUANTITIES

BRIDGE NO. / STRUCTURE FILE NO.								ITEM	EXTENSION	UNIT	DESCRIPTION	SEE SHEET
STA-93-1444 7605056 06/STR/BR	STA-93-1639 7605080 06/STR/BR	STA-93-1723 7605102 07/NHS/BR	STA-93-1816 7605145 07/NHS/BR	STA-241-0000 7606036 06/STR/BR								
LS	LS	LS	LS	LS				201	11001		CLEARING AND GRUBBING, AS PER PLAN	
				30				202	98200	FT	REMOVAL MISC.: CHANNEL CLEANOUT	1/3
				20				203	40000	CY	BORROW	
				20				601	26000	CY	DUMPED ROCK FILL, TYPE B	
	5							601	32100	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
311	500	1458	649	514				512	73500	SY	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	
271	336	894	208	462				512	74500	FT	REMOVAL OF EXISTING PAVEMENT MARKING	
		12						630	80100	SF	SIGN, FLAT SHEET	
		2						630	80100	SF	SIGN, FLAT SHEET, 730.20	
		42						630	02100	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
		6						630	84900	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
		4						630	86002	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	

STRUCTURE ESTIMATED QUANTITIES
STA-93-1444, STA-93-1639, STA-93-1723
STA-93-1816, STA-241-0000

SFN 0

DESIGN AGENCY

DESIGNER	CHECKER
BFR	XXX

REVIEWER
MAC 05/04/21

PROJECT ID
101417

SUBSET	TOTAL
2	3

SHEET	TOTAL
P.25	26

STA-93/236-11.71/0.00

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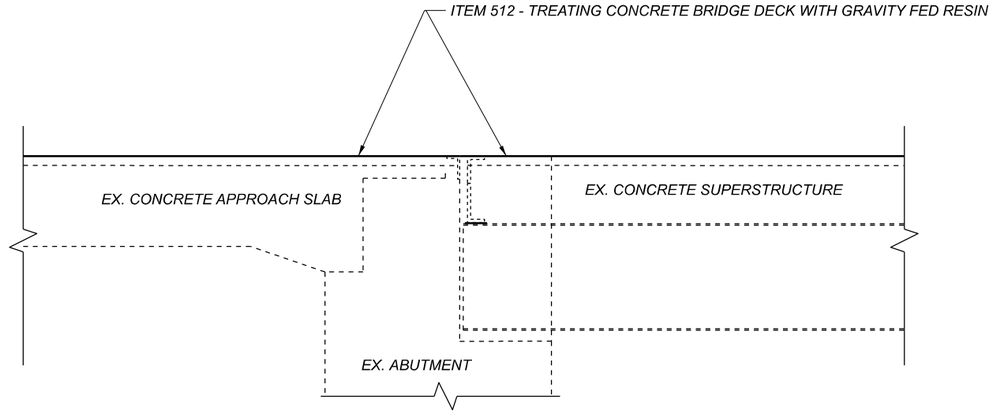

STA-93-1444, STA-93-1639, STA-93-1723, STA-93-1816, STA-241-0000

APPROACH SHOWN, TRAILING SIMILAR

	BRIDGE DECK												APPROACH SLABS											
BRIDGE NUMBER	LENGTH (BRIDGE LIMITS)	BRIDGE WIDTH	DECK AREA		512 TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	512 REMOVAL OF EXISTING PAVEMENT MARKING							LENGTH (APPROACH SLABS)	APPROACH SLAB WIDTH	APPROACH SLAB AREA	APPROACH (FORWARD / REAR)		512 TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	512 REMOVAL OF EXISTING PAVEMENT MARKING					
	FT	FT	SQ YD		SY	FT							FT	FT	SQ YD			SY	FT					
STA-93-1444	52.00	32.00	184.89		185.00	156.00							20.00	32.00	71.11	REAR		72.00	60.00					
													15.00	32.00	53.33	FWD		54.00	55.00					
STA-93-1639	62.00	40.00	275.56		276.00	186.00							25.00	40.00	111.11	REAR		112.00	75.00					
													25.00	40.00	111.11	FWD		112.00	75.00					
STA-93-1723	258.00	44.00	1261.33		1262.00	774.00							20.00	44.00	97.78	REAR		98.00	60.00					
													20.00	44.00	97.78	FWD		98.00	60.00					
STA-93-1816	168.00	28.00	522.67		523.00	168.00							20.00	28.00	62.22	REAR		63.00	20.00					
													20.00	28.00	62.22	FWD		63.00	20.00					
STA-241-0000	124.00	30.00	413.33		414.00	372.00							15.00	30.00	50.00	REAR		50.00	45.00					
													15.00	30.00	50.00	FWD		50.00	45.00					
TOTALS					2660	1656										TOTALS		772	515					

STRUCTURE DETAILS
STA-93-1444, STA-93-1639, STA-93-1723
STA-93-1816, STA-241-0000

STA-93/236-11.71/0.00

SFN 0

DESIGN AGENCY

DESIGNER BFR | CHECKER XXX

REVIEWER MAC 05/04/21

PROJECT ID 101417

SUBSET 3 | TOTAL 3

SHEET P.26 | TOTAL 26

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