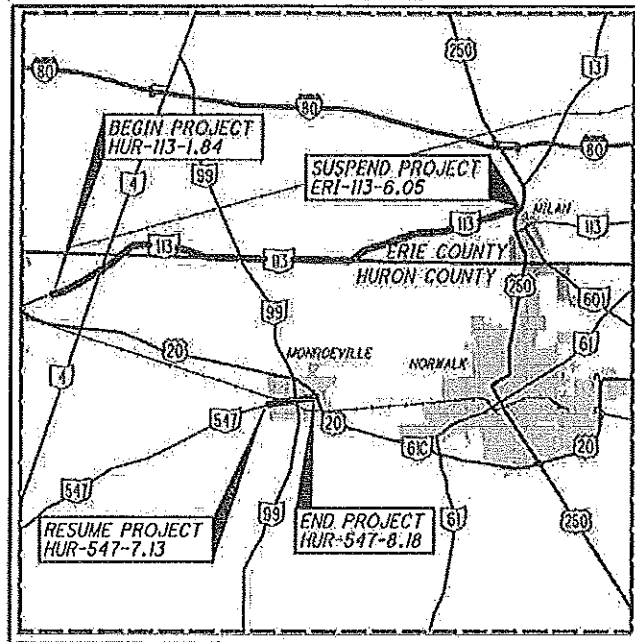


HUR - SR 113-01.84
170058 PID - 93111
Dist 3 2/2/2017

Contract Proposal Available @ www.contracts.dot.state.oh.us/home



LOCATION MAP
SCALE IN MILES
0 1 2 3 4



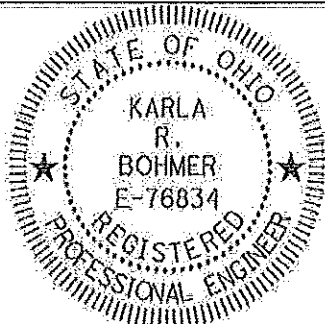
PORTION TO BE IMPROVED: _____
INTERSTATE HIGHWAY: _____
FEDERAL ROUTES: _____
STATE ROUTES: _____
LATITUDE: N 41° 17' 15" LONGITUDE: W 82° 42' 11"

DESIGN INFORMATION

DESIGN FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR
DESIGN DESIGNATIONS: SEE SHEET 2
DESIGN EXCEPTIONS: NONE REQUIRED
NHS PROJECT: NO

UNDERGROUND UTILITIES	
CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.	
	Call Before You Dig 1-800-362-2764
(Non-members must be called directly)	
OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE 1-800-925-0988	

ENGINEERS SEAL:



SIGNED: *Karla R. Bohmer*
DATE: 11/7/16

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

HUR-113-1.84
ERI-113-0.00
HUR-547-7.13

VILLAGE OF MONROEVILLE

GROTON TOWNSHIP
LYME TOWNSHIP
MILAN TOWNSHIP
OXFORD TOWNSHIP
RIDGEFIELD TOWNSHIP

HURON COUNTY
ERIE COUNTY

INDEX OF SHEETS:

TITLE SHEET	1
STRAIGHT LINE DIAGRAMS & DESIGN DESIGNATIONS	2
TYPICAL SECTIONS	3
GENERAL NOTES	4-9
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PAVEMENT MARKING DETAILS	15
CURB RAMP DETAILS	16
LOOP DETECTOR DETAILS	17-18
STRUCTURE HUR-547-7.25 DETAILS	19-20

PROJECT DESCRIPTION

THIS PROJECT WILL INCLUDE PAVEMENT REPAIRS, PAVEMENT PLANING, RESURFACING WITH ASPHALT CONCRETE, PAVEMENT MARKINGS AND BRIDGE MAINTENANCE.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: N/A ACRES (MAINTENANCE PROJECT)
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A ACRES (MAINTENANCE PROJECT)
NOTICE OF INTENT EARTH DISTURBED AREA: N/A ACRES (MAINTENANCE PROJECT)

2016 SPECIFICATIONS

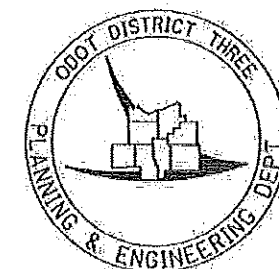
THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

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: *[Signature]*
DATE: 1/17/14 DISTRICT DEPUTY DIRECTOR

APPROVED: *[Signature]*
DATE: 1/17/14 DIRECTOR, DEPARTMENT OF TRANSPORTATION

PLANS PREPARED BY:



FEDERAL PROJECT NO.
E130819

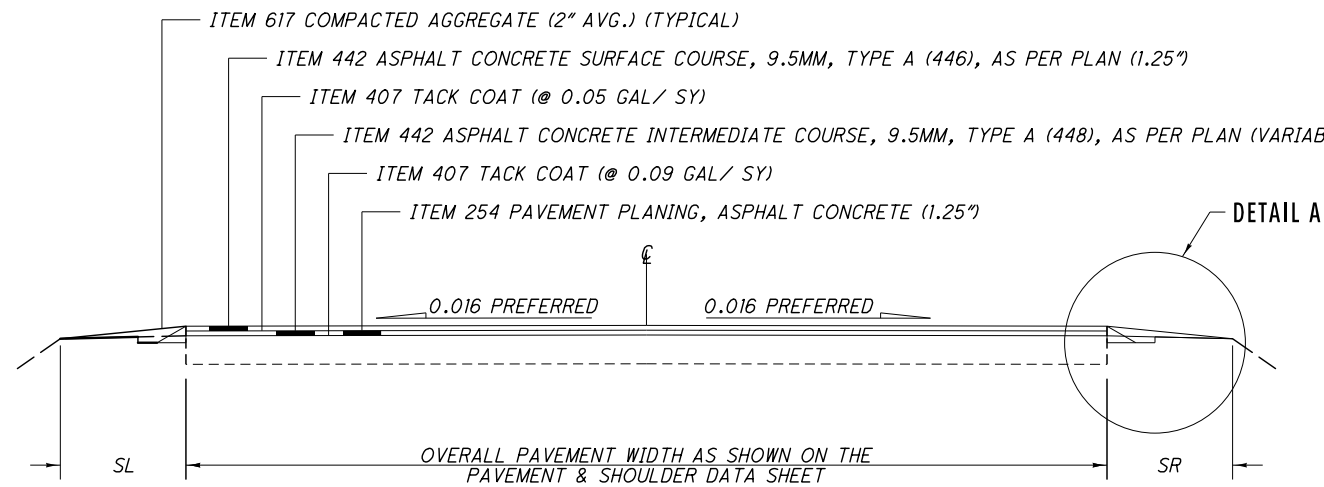
PID NO.
93111

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
WHEELING & LAKE ERIE

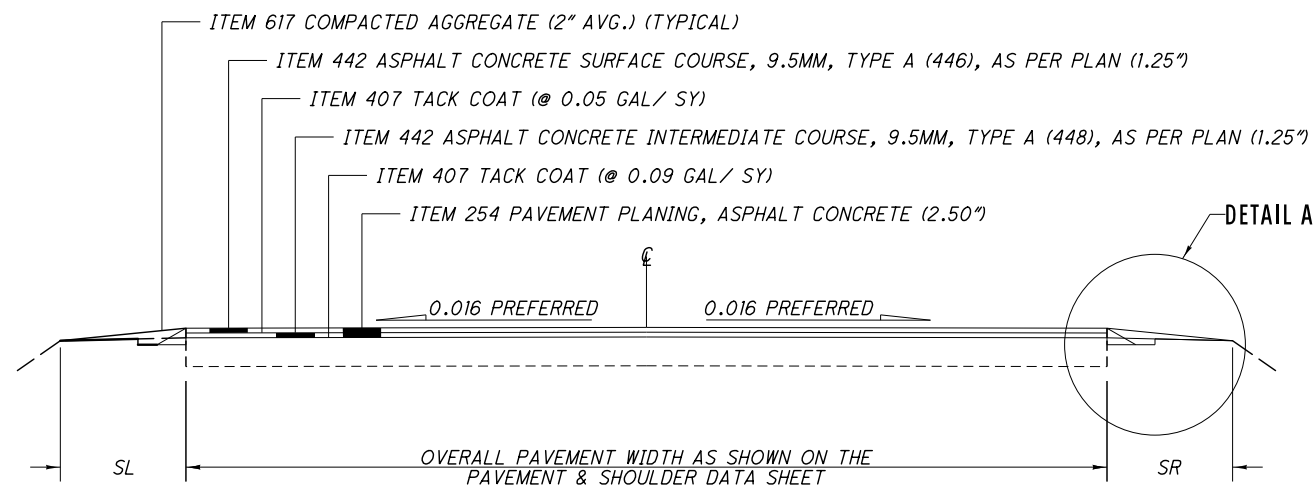
HUR-113-1.84
ERI-113-0.00
HUR-547-7.13

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20



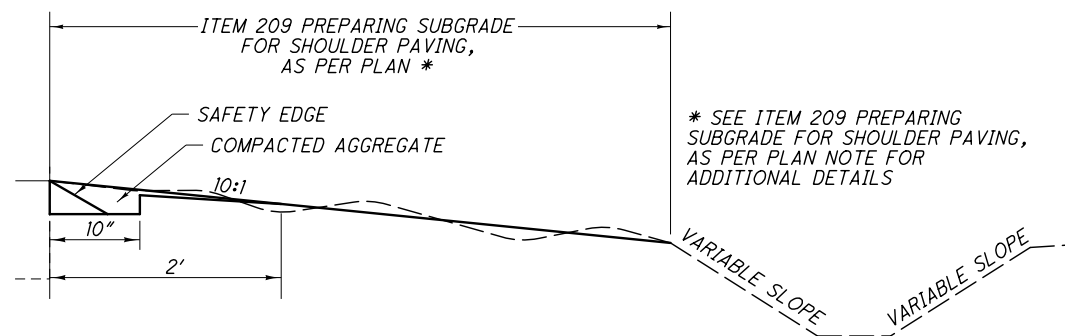
TYPICAL 1

SECTIONS:
 HURON SR 113 1.84-3.63
 ERIE SR 113 0.00-2.01
 HURON SR 113 3.63-6.74
 ERIE SR 113 5.68-6.05

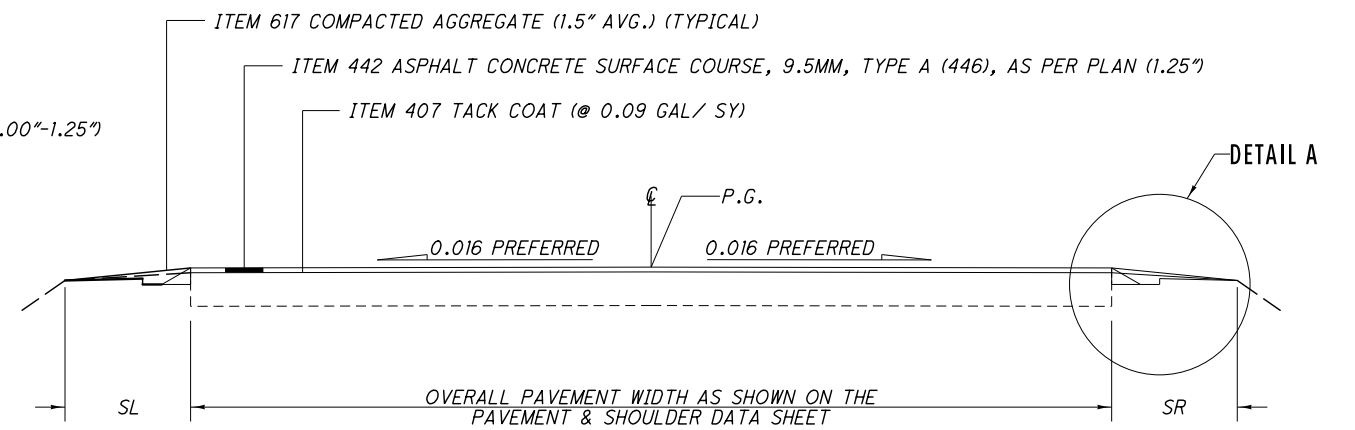


TYPICAL 3

SECTION:
 HURON SR 547 7.13-7.48

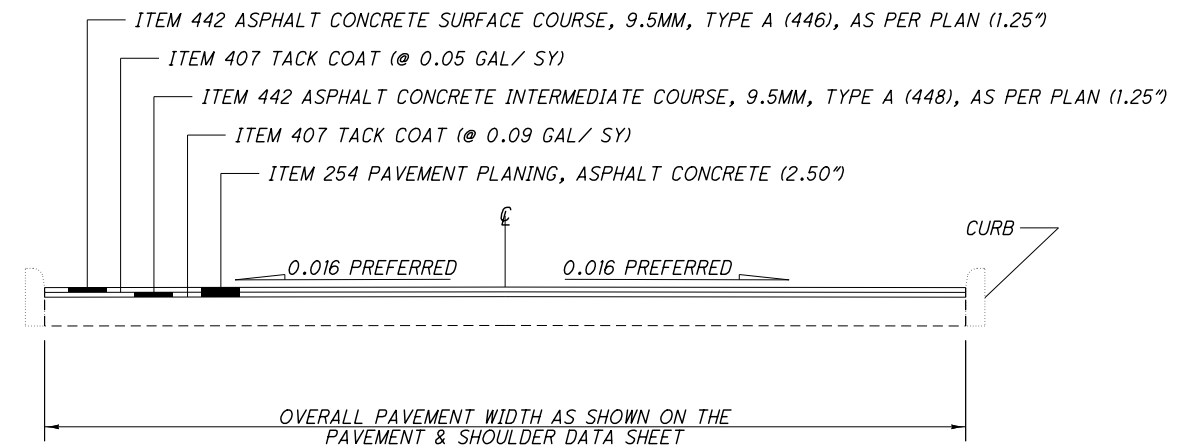


ITEM 209 PREPARING SUBGRADE
 FOR SHOULDER PAVING, AS PER PLAN



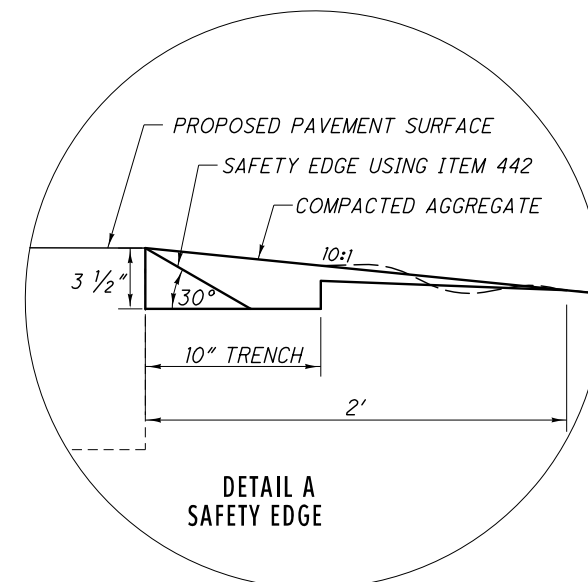
TYPICAL 2

SECTION:
 ERIE SR 113 2.01-5.68



TYPICAL 4

SECTION:
 HURON SR 547 7.48-8.18



DETAIL A
 SAFETY EDGE

GENERAL

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS.

COMMUNICATION:
CHARTER COMMUNICATIONS
8150 DOW CIRCLE
STRONGSVILLE, OHIO 44136
216-575-8016 EXT 2165555034

MISC:
ERIE COUNTY ENGINEERS
2700 COLUMBUS AVE.
SANDUSKY, OHIO 44870
419-627-7710

ELECTRIC:
OHIO EDISON (BAY AREA)
2508 WEST PERKINS AVE.
SANDUSKY, OHIO 44870
419-627-6881

MISC:
OXFORD TOWNSHIP (ERIE COUNTY)
11104 RANSOM RD.
MONROEVILLE, OHIO 44847
419-359-1735

GAS:
COLUMBUS GAS OF OHIO (NORWALK)
1800 BROAD ST.
FINDLAY, OHIO 45840
419-277-1349

MISC:
VILLAGE OF MILAN
11 SOUTH MAIN STREET
MILAN, OHIO 44846
419-499-4161 EXT. 3

GAS:
COLUMBIA PIPELINE GROUP
589 NORTH STATE RD.
MEDINA, OHIO 44256
330-721-4163

MISC:
VILLAGE OF MONROEVILLE
2 S. MAIN STREET
MONROEVILLE, OHIO 44847
419-465-2922

GAS:
MARATHON PIPELINE (LIMA)
539 SOUTH MAIN STREET
FINDLAY, OHIO 45840
419-884-0800 X 236

ROADWAY:
HURON COUNTY ENGINEER & HIGHWAY DEPT.
150 JEFFERSON STREET
NORWALK, OHIO 44857
419-668-1997

ROADWAY:
ODOT 3 TRAFFIC
906 CLARK AVE.
ASHLAND, OHIO 44805

TELEPHONE:
ZAYO FIBER SOLUTIONS
4199 KINROSS LAKES PKWY, STE 10
RICHFIELD, OHIO 44286
330-237-6536

SANITARY:
CITY OF BELLEVUE
3000 SENECA INDUSTRIAL PARKWAY
BELLEVUE, OHIO 44811
419-484-5500

WATER:
CITY OF BELLEVUE
3000 SENECA INDUSTRIAL PARKWAY
BELLEVUE, OHIO 44811
419-484-5500

SANITARY:
ERIE COUNTY ENVIRONMENTAL
554 RIVER RD. P.O. BOX 469
HURON, OHIO 44839
419-433-7303

WATER:
NOTHERN OHIO RURAL WATER
P.O. BOX 96
COLLINS, OHIO 44826
419-668-7213

TELEPHONE:
FRONTIER COMPANY
83 TOWNSEND AVENUE
NORWALK, OHIO 4857
419-744-3613

WATER:
ERIE COUNTY WATER
554 RIVER RD. P.O. BOX 469
HURON, OHIO 44839
419-433-7303

THE AFOREMENTIONED UTILITY COMPANIES AND AGENCIES HAVE VARIOUS FACILITIES IN THE AREA THAT WILL REMAIN IN PLACE DURING CONSTRUCTION.

EXTREME CAUTION SHOULD BE EXERCISED IN AREAS WITH UTILITIES. SECTIONS 105.07 AND 107.16 OF THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS REQUIRE, AMONG OTHER THINGS, THAT THE CONTRACTOR COOPERATE WITH ALL UTILITIES LOCATED WITHIN THE LIMITS OF THIS CONSTRUCTION PROJECT AND TAKE RESPONSIBILITY FOR THE PROTECTION OF THE UTILITY PROPERTY AND SERVICES.

ROUTINE MAINTENANCE

BETWEEN THE TIME THAT BIDS ARE TAKEN AND THE START OF CONSTRUCTION, THE MAINTAINING AGENCY MAY ENTER UPON THE PROJECT AND PERFORM ROUTINE MAINTENANCE SUCH AS CRACK SEALING, PATCHING, AND BERM AND SHOULDER REPAIR. THE EFFECTS, IF ANY, OF THE PERFORMANCE OF ROUTINE MAINTENANCE SHALL BE CONSIDERED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE PLAN AND THE RESULTING CONDITIONS SHALL NOT BE CONSIDERED AS DIFFERING MATERIALLY FROM THOSE EXISTING AT THE TIME BIDS WERE TAKEN.

EXISTING PLANS

THE FOLLOWING EXISTING PLANS ENTITLED MAY BE INSPECTED IN THE ODOT DISTRICT 3 OFFICE IN ASHLAND.
HUR-547-7.19 (1953)

CONSTRUCTION NOTIFICATION

THE CONTRACTOR SHALL ADVISE THE PROJECT ENGINEER A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANE RESTRICTIONS, LANE CLOSURES, AND OR ROAD CLOSURES. THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICE (PIO) BY EMAIL AT D03.PIO@DOT.OHIO.GOV

DISTRICT PERMIT SECTION BY FAX AT (614) 887-4318 OR EMAIL AT LOUIS.TUMBLIN@DOT.OHIO.GOV

CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY FAX AT (614) 728-4099 OR EMAIL AT HAULING.PERMITS@DOT.OHIO.GOV

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF ANY OF THE ABOVE MENTIONED ITEMS, VIA MEDIA SOURCES.

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.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT UNIT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

COORDINATION OF WORK BETWEEN CONTRACTORS

THE CONTRACTOR SHOULD BE AWARE THAT THERE MAY BE OTHER WORK BEING PERFORMED BY A SEPARATE CONTRACT. HUR-4-6.68 IS A RESURFACING PROJECT AND IS SCHEDULED TO BEGIN WORK IN THE 2017 CONSTRUCTION SEASON. COORDINATION OF WORK IS THE RESPONSIBILITY OF THE CONTRACTOR.

PAVING AT RAILROAD CROSSINGS

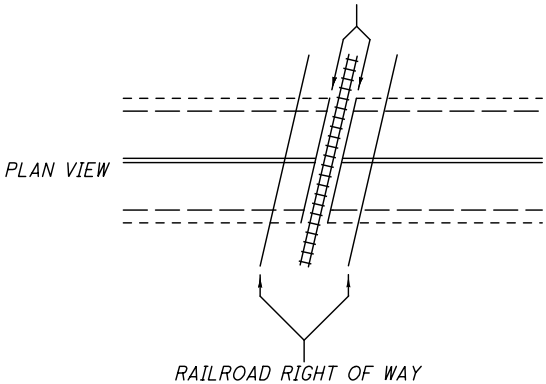
PRIOR TO ANY WORK AT RAILROAD CROSSINGS THE CONTRACTOR SHALL CONTACT THE AFFECTED RAILROAD AUTHORITY SO AS TO MAKE THEM AWARE OF THE PROGRESS AND SCHEDULE OF WORK. THE CONTRACTOR SHALL COOPERATE WITH THE RAILROAD SO AS TO ELIMINATE ANY SAFETY CONCERNS. FLAGGING WILL BE REQUIRED BY THE RAILROAD. ODOT WILL BE RESPONSIBLE FOR PAYING THE RAILROAD FOR ALL FLAGGING COSTS. REFER TO THE RAILROAD SPECIAL CLAUSES IN THE PROPOSAL.

THE CROWN SHALL BE WORKED OUT OF THE RESURFACED PAVEMENT ON EACH SIDE OF THE RAILROAD CROSSING, BEGINNING 50 FEET FROM THE NEAREST RAIL, BY RAISING THE EDGES OF THE RESURFACED PAVEMENT TO MEET THE PLATFORM ELEVATION.

SUSPEND AND RESUME RESURFACING AT THE EDGE OF THE EXISTING CROSSING SURFACE ON BOTH SIDES OF THE TRACK.

DETAIL - PAVING AT RAILROAD CROSSING

BUTT JOINT/BEGIN AND END RESURFACING



NOTE:

1.) DO NOT DISTURB RAILROAD GATES

2.) RE-INSTALL PAVEMENT MARKINGS

3.) RAILROAD MAY DIRECT ENGINEER ON THE LOCATION OF BUTT JOINTS. OTHERWISE OMIT AND RESUME RESURFACING AT AT THE EDGE OF THE EXISTING CROSSING SURFACE ON BOTH SIDES OF THE TRACK.

ROADWAY

ITEM 209 - PREPARING SUBGRADE FOR SHOULDER PAVING,
AS PER PLAN

PREPARE THE SHOULDER FOR PAVING A CONSISTENT SAFETY EDGE IN BOTH THICKNESS AND WIDTH.

PRIOR TO PAVING THE SAFETY EDGE, GRADE AN AREA 10 INCHES WIDE, BEGINNING AT THE EDGE OF THE PAVED ROADWAY, TO PROVIDE A LEVEL SURFACE FREE OF VEGETATION FOR CONSTRUCTION OF THE SAFETY EDGE. IF NECESSARY, EXCAVATE THE GRADED AREA TO THE DEPTH NECESSARY TO CONSTRUCT THE SAFETY EDGE. COMPACT THE GRADED SHOULDER ACCORDING TO 617.05 OR AS DIRECTED BY THE ENGINEER. THE GRADED SHOULDER BEYOND THE 10 INCH WIDE AREA FOR THE SAFETY EDGE SHALL BE GRADED AT A 10:1 SLOPE, OR AS DIRECTED BY THE ENGINEER. THE INTENT IS TO PROVIDE AN UNOBSTRUCTED AND POSITIVE FLOW OF STORM WATER FROM THE PAVEMENT TO THE DITCH.

SAFETY EDGE

IN ADDITION TO THE REQUIREMENTS OF 401.12, ATTACH A DEVICE TO THE SCREED OF THE PAYER THAT CONFINES THE MATERIAL AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A COMPACTED WEDGE SHAPE PAVEMENT EDGE OF APPROXIMATELY 30 DEGREES (NOT STEEPER THAN 40 DEGREES). ENSURE THE DEVICE MAINTAINS CONTACT WITH THE EXISTING SURFACE, AND ALLOW FOR AUTOMATIC TRANSITION TO CROSS ROADS, DRIVEWAYS AND OBSTRUCTIONS. DO NOT USE CONVENTIONAL SINGLE PLATE STRIKE OFF.

CONSTRUCTION OF SAFETY EDGE CAN BE OMITTED AT LOCATIONS WHERE EXISTING WIDTH OF GRADED SHOULDER OR BERM IS LESS THAN 12". PROJECTS WITH VARYING CONDITIONS SHOULD USE SAFETY EDGE WHERE POSSIBLE. PLAN PREPARATION HAS MADE EVERY REASONABLE ATTEMPT TO IDENTIFY POSSIBLE SAFETY EDGE LOCATIONS.

USE THE TRANSTECH SHOULDER WEDGE MAKER, THE CARLSON SAFETY EDGE END GATE, THE ADVANT-EDGER, THE TROXLER SAFET Slope OR A SIMILAR APPROVED-EQUAL DEVICE THAT PRODUCES THE SAME WEDGE CONSOLIDATION RESULTS. CONTACT INFORMATION FOR THESE WEDGE SHAPE COMPACTION DEVICES IS THE FOLLOWING:

TRANSTECH SYSTEMS, INC.
1594 STATE STREET
SCHENECTADY, NY 12304
1-800-724-6306
www.transtechsys.com

ADVANT-EDGE PAVING EQUIPMENT LLC
P.O. BOX 9163
NISKAYUNA, NY 12309-0163
518-280-6090
www.advantedgepaving.com

CARLSON SAFETY EDGE END GATE
18450 50TH AVENUE EAST
TACOMA, WA 98446
253-875-8000

TROXLER ELECTRONICS LABORATORIES INC.
3008 E. CORNWALLIS RD.
RESEARCH TRIANGLE PARK, NC 27709
1-877-TROXLER
www.troxlerlabs.com

IF ELECTING TO USE A SIMILAR DEVICE, PROVIDE PROOF THAT THE DEVICE HAS BEEN USED ON PREVIOUS PROJECTS WITH ACCEPTABLE RESULTS OR CONSTRUCT A TEST SECTION PRIOR TO THE BEGINNING OF WORK AND DEMONSTRATE WEDGE COMPACTION TO THE SATISFACTION OF THE ENGINEER. SHORT SECTIONS OF HANDWORK WILL BE ALLOWED WHEN NECESSARY FOR TRANSITIONS AND TURNOUTS OR OTHERWISE AUTHORIZED BY THE ENGINEER.

IN ADDITION TO THE REQUIREMENTS OF 401.16, MAKE THE FIRST ROLLER PASS 8 TO 12 INCHES AWAY FROM TAPERED EDGE. DO NOT ROLL THE TAPER.

CURB RAMPS

A. ALL WORK INVOLVED FOR THE FOLLOWING ITEMS: 202, WALK REMOVED; 202, CURB REMOVED; 608, CURB RAMPS; 608, DETECTABLE WARNINGS SHALL BE COMPLETED PRIOR TO THE COMMENCEMENT OF THE STREETS PAVING OPERATION.

B. NOT ALL DETAILS FOR THE PROPOSED CURB RAMPS HAVE BEEN INCLUDED IN THE PROJECT PLANS. THIS DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO CONSTRUCT ALL CURB RAMP ITEMS TO ADA STANDARDS. THE PLAN QUANTITIES FOR CURB RAMPS ARE ESTIMATES AND FIELD ADJUSTMENTS MAY BE WARRANTED. PRIOR TO THE COMMENCEMENT OF THIS WORK, THE CONTRACTOR AND ENGINEER SHALL MARK IN THE FIELD THE LIMITS OF CURB REMOVAL AND ALL WALK REMOVAL.

C. ALL CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE OHIO DEPARTMENT OF TRANSPORTATION CURRENT STANDARD CONSTRUCTION DRAWING NO. BP-7.1. ANY CURB RAMP NOT CONSTRUCTED IN ACCORDANCE WITH SAID CONSTRUCTION DRAWING IS DEFECTIVE AND WILL NOT BE ACCEPTED. THE CONTRACTOR SHALL REMOVE AND REPLACE THE DEFECTIVE WORK. PAYMENT FOR ALL ITEMS ASSOCIATED WITH CURB RAMP INSTALLATION WILL ONLY OCCUR AFTER ACCEPTANCE.

ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE

ALL WORK RELATED TO ADJUSTING MONUMENT BOXES TO GRADE WILL BE IN ACCORDANCE TO SECTIONS 623.04 AND 623.05 OF THE 2016 ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE MONUMENT BOX TO BE ADJUSTED TO GRADE MAY OR MAY NOT HAVE AN EXISTING ADJUSTABLE FRAME. THE WORK SHALL CONSIST OF ADJUSTING THE EXISTING MONUMENT BOX TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR IS REMINDED TO FIELD CHECK ALL ADJUSTMENT TO GRADE ITEMS PRIOR TO BIDDING, AS NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR LABOR AND MATERIALS REQUIRED TO SATISFACTORILY ADJUST CASTINGS WITHOUT ADJUSTABLE FRAMES.

APPROXIMATE LOCATIONS OF KNOWN MONUMENT BOXES ARE:

01/STR/PV -----	
ERI-113, SLM 2.18	ERI-113, SLM 3.58
ERI-113, SLM 2.37	ERI-113, SLM 3.64 (BURIED)
ERI-113, SLM 2.48	ERI-113, SLM 3.70 (BURIED)
ERI-113, SLM 3.18	ERI-113, SLM 3.77

ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE:

TOTAL	8 EACH
-------	--------

ITEM 611 - CASTINGS ADJUSTED TO GRADE

THE CASTING TO BE ADJUSTED MAY OR MAY NOT HAVE AN EXISTING FRAME. THE WORK SHALL CONSIST OF ADJUSTING THE EXISTING CASTING TO THE SATISFACTION OF THE ENGINEER. IT IS NOT INTENDED TO PLACE NEW FRAMES WHERE NONE CURRENTLY EXIST. THE CONTRACTOR IS REMINDED TO FIELD CHECK ALL ADJUSTMENT TO GRADE ITEMS PRIOR TO BIDDING, AS NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR LABOR AND MATERIALS REQUIRED TO SATISFACTORILY ADJUST CASTINGS WITHOUT FRAMES.

APPROXIMATE LOCATION OF KNOWN CASTINGS ARE:

LOCATION -----	FUNDING SPLIT -----	QUANTITY -----
HUR-547, SLM 7.13-8.18	02/S<2/PV	17 EACH

ITEM 611 - CATCH BASIN ADJUSTED TO GRADE:

TOTAL	17 EACH
-------	---------

ITEM 611 - MANHOLE ADJUSTED TO GRADE

THE CASTING TO BE ADJUSTED TO GRADE MAY OR MAY NOT HAVE AN EXISTING FRAME. THE WORK SHALL CONSIST OF ADJUSTING THE EXISTING CASTING TO THE SATISFACTION OF THE ENGINEER. IT IS NOT INTENDED TO PLACE NEW FRAMES WHERE NONE CURRENTLY EXIST. THE CONTRACTOR IS REMINDED TO FIELD CHECK ALL ADJUSTMENT TO GRADE ITEMS PRIOR TO BIDDING, AS NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR LABOR AND MATERIALS REQUIRED TO SATISFACTORILY ADJUST CASINGS WITHOUT FRAMES.

APPROXIMATE LOCATION OF KNOWN CASTINGS ARE:

LOCATION -----	FUNDING SPLIT -----	QUANTITY -----
HUR-547, SLM 7.13-8.18	02/S<2/PV	29 EACH

ITEM 611 - MANHOLE ADJUSTED TO GRADE:

TOTAL	29 EACH
-------	---------

PAVEMENT

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR
ITEM 253 - PAVEMENT REPAIR

THESE ITEMS OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING PAVEMENT OR PAVED BERM WHICH MAY BE ASPHALT, BRICK, CONCRETE, OR A COMBINATION OF EACH, IN AREAS OF EXISTING PAVEMENT FAILURE. CORING HAS BEEN PERFORMED TO HELP DETERMINE THE COMPONENTS THAT MAY BE ENCOUNTERED DURING THIS ITEM OF WORK. THE PAVEMENT CORING INFORMATION IS SHOWN ON THE NEXT PLAN SHEET.

PAVEMENT REPAIR SHALL BE PERFORMED AFTER PAVEMENT PLANING AND BEFORE PLACEMENT OF THE INTERMEDIATE AND/OR SURFACE COURSE. THE DEPTH OF REMOVAL SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT WITH A MAXIMUM DEPTH OF 11", BASED ON THE PAVEMENT DESIGN AND AN AVERAGE DEPTH OF 4" AND AN AVERAGE WIDTH OF 4 FT FOR ESTIMATING PURPOSES.

REPLACEMENT MATERIAL SHALL BE ITEM 301, OR ITEM 442 19MM, AS PER PLAN MATERIAL AND SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE. ITEM 301 ASPHALT CONCRETE CAN BE USED WHEN THE DEPTH OF THE REPAIR IS BETWEEN 3" AND 12" WITH A MAXIMUM PAVEMENT LIFT OF 6". ITEM 442 19MM, AS PER PLAN CAN BE USED WHEN THE DEPTH OF THE REPAIR IS BETWEEN 1.5" AND 3". PG 64-22 ASPHALT BINDER SHALL BE USED FOR ALL OF THE ASPHALT CONRETE MATERIALS FOR THESE REPAIRS.

FOR THE ITEM 442 19 MM, AS PER PLAN MATERIAL, REQUIREMENTS OF 442 APPLY EXCEPT AS FOLLOWS:
MIX DESIGN: FOR Ndes USE 50 GYRATIONS, FOR Nmax USE 75 GYRATIONS. USE A PG 64-22 BINDER.
MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT IS 30 PERCENT. APPLY 703.05 FOR COARSE AND FINE AGGREGATE EXCEPT GRADATION FOR FINE AGGREGATE DOES NOT APPLY.
QUALITY CONTROL: DO NOT PERFORM Nmax IN QUALITY CONTROL TESTING. DO NOT TAKE EXTRA ASPHALT BINDER SAMPLES AS OUTLINED IN CMS 442.05.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. FOR PAYMENT PURPOSES ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR IS TO BE A MAXIMUM OF 4" DEEP AND ITEM 253 PAVEMENT REPAIR IS FOR DEPTHS GREATER THAN 4". PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER CUBIC YARD, (BY TICKET WEIGHT CONVERSION), OF ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR OR ITEM 253 - PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

FOR ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, APPROXIMATELY 90% OF THE QUANTITY IS ESTIMATED FOR LONGITUDINAL REPAIRS, AND APPROXIMATELY 10% OF THE QUANTITY IS ESTIMATED FOR TRANSVERSE REPAIRS.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), (301):

COUNTY	ROUTE	SLM		QUANTITY (CY)	FUNDING
		BEGIN	END		
HURON	113	1.84	3.07	267	02/S<2/PV
HURON	113	3.07	3.63	122	01/STR/PV
ERIE	113	0.00	1.00	217	01/STR/PV
ERIE	113	1.00	2.01	219	01/STR/PV
HURON	113	3.63	4.00	80	01/STR/PV
HURON	113	4.00	5.00	217	01/STR/PV
HURON	113	5.00	6.00	217	01/STR/PV
HURON	113	6.00	6.74	161	01/STR/PV
ERIE	113	2.01	3.00	19	01/STR/PV
ERIE	113	3.00	4.00	19	01/STR/PV
ERIE	113	4.00	5.00	19	01/STR/PV
ERIE	113	5.00	6.05	13	01/STR/PV
HUR	547	7.13	8.18	229	02/S<2/PV
		01/STR/PV:		1304	CY
		02/S<2/PV:		496	CY
		TOTAL:		1800	CY

ITEM 253 - PAVEMENT REPAIR:

01/STR/PV:	70	CY
02/S<2/PV:	30	CY
TOTAL:	100	CY

ITEM 254 - PATCHING PLANED SURFACE

AN ESTIMATED QUANTITY OF ITEM 254 - PATCHING PLANED SURFACE HAS BEEN SET UP TO BE USED AS DIRECTED BY THE ENGINEER AS DESCRIBED IN CMS 254.04. THE LIMIT OF THE PATCHING DEPTH IS 0 TO 2 IN.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1.25")

THE INTENT OF THE PLANING IS TO MILL 1.25 INCHES AT THE CENTER OF PAVEMENT AT THE NON-CURBED AREAS. THE PAVEMENT SLOPE SHALL BE 0.010 MINIMUM AND 0.016 PREFERRED, CONTINUOUS BETWEEN THE CROWN AND THE PROPOSED EDGELINE/SHOULDER. THE MILLING DEPTH SHALL BE CONTROLLED FROM THE CENTER OF PAVEMENT IN CONFORMANCE WITH THE ABOVE GUIDELINES. WHEN 1.25 INCH DEPTH PAVEMENT PLANING IS BEING PERFORMED AT THE CENTERLINE, THE CONTRACTOR MAY HAVE TO PLANE DEEPER AT THE EDGE OF PAVEMENT TO ESTABLISH THE MINIMUM CROSS SLOPE. IF THIS IS THE CASE, THE CONTRACTOR SHALL PLANE A MAXIMUM OF 2.5 INCHES AT THE EDGE OF PAVEMENT EVEN IF THIS MAXIMUM DEPTH DOES NOT MEET THE MINIMUM CROSS SLOPE REQUIREMENTS.

SPECIAL ATTENTION SHALL BE GIVEN TO SUPERELEVATED CURVES. THE SUPERELEVATION SHALL BE MAINTAINED AND/OR RESTORED, IF NECESSARY, AS DIRECTED BY THE ENGINEER. IF THERE IS NO INFORMATION IN THE PLANS TO CHANGE THE SUPERELEVATION, THE INTENT IS TO MAINTAIN THE EXISTING SUPERELEVATION.

THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE TO ALL CATCH BASINS AND INLETS.

THE PROGRESSION OF THE PLANING SHALL PROCEED IN SUCH A MANNER THAT NORMAL TRAFFIC WILL NOT BE REQUIRED TO RUN OVER THE PLANED ROADWAY SURFACE MORE THAN SEVEN (7) CALENDAR DAYS. FOR EACH CALENDAR DAY BEYOND THE 7 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE FEE OF \$1,000.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT PLANING, ASPHALT CONCRETE. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER SQUARE YARD OF ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (2.50")
(NON-CURBED SECTIONS)

THE INTENT OF THE PLANING IS TO MILL THE SPECIFIED DEPTH AT THE CENTER OF PAVEMENT AT NON-CURBED AREAS. THE PAVEMENT SLOPE SHALL BE 0.010 MINIMUM AND 0.016 PREFERRED, CONTINUOUS BETWEEN THE CROWN AND THE PROPOSED EDGELINE/SHOULDER. THE MILLING DEPTH SHALL BE CONTROLLED FROM THE CENTER OF PAVEMENT IN CONFORMANCE WITH THE ABOVE GUIDELINES.

SPECIAL ATTENTION SHALL BE GIVEN TO SUPERELEVATED CURVES. THE SUPERELEVATION SHALL BE MAINTAINED AND/OR RESTORED, IF NECESSARY, AS DIRECTED BY THE ENGINEER. IF THERE IS NO INFORMATION IN THE PLANS TO CHANGE THE SUPERELEVATION, THE INTENT IS TO MAINTAIN THE EXISTING SUPERELEVATION.

THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE TO ALL CATCH BASINS AND INLETS.

THE PROGRESSION OF THE PLANING SHALL PROCEED IN SUCH A MANNER THAT NORMAL TRAFFIC WILL NOT BE REQUIRED TO RUN OVER THE PLANED ROADWAY SURFACE MORE THAN SEVEN (7) CALENDAR DAYS. FOR EACH CALENDAR DAY BEYOND THE 7 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE FEE OF \$1,000 PER DAY.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT PLANING, ASPHALT CONCRETE. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER SQUARE YARD OF ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (2.50")
(CURBED SECTION)

THE INTENT OF THE PLANING IS TO MILL THE SPECIFIED DEPTH ALONG THE CURB CONTINGENT ON THE FOLLOWING: THE MAXIMUM CROSS SLOPE SHALL BE 0.02 WHILE THE MINIMUM CROSS SLOPE SHALL BE 0.01. THE PREFERRED CROSS SLOPE IS 0.016. THE CROWN OF THE PAVEMENT SHALL BE LOCATED BETWEEN THE TRAVELED LANES, OR AS DIRECTED BY THE ENGINEER. THE MILLING DEPTH SHALL BE CONTROLLED FROM THE CURB, TO PRODUCE A CROSS SLOPE IN CONFORMANCE WITH THE ABOVE GUIDELINES.

SPECIAL ATTENTION SHALL BE GIVEN TO SUPERELEVATED CURVES. THE SUPERELEVATION SHALL BE MAINTAINED AND/OR RESTORED, IF NECESSARY, AS DIRECTED BY THE ENGINEER. IF THERE IS NO INFORMATION IN THE PLANS TO CHANGE THE SUPERELEVATION, THE INTENT IS TO MAINTAIN THE EXISTING SUPERELEVATION.

THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE TO ALL CATCH BASINS AND INLETS.

THE PROGRESSION OF THE PLANING SHALL PROCEED IN SUCH A MANNER THAT NORMAL TRAFFIC WILL NOT BE REQUIRED TO RUN OVER THE PLANED ROADWAY SURFACE MORE THAN SEVEN (7) CALENDAR DAYS. FOR EACH CALENDAR DAY BEYOND THE 7 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE FEE OF \$1,000 PER DAY.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT PLANING, ASPHALT CONCRETE. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER SQUARE YARD OF ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE.

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 9.5 MM,
TYPE A (446), AS PER PLAN (SR 113)

ALL OPEN TRANSVERSE JOINTS SHALL BE TAPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC. A "BUMP" SIGN (W8-1-36) SHALL BE ERECTED ON EACH SIDE OF TRANSVERSE JOINTS LEFT OPEN OVER NIGHT, INCLUDING A SPEED ADVISORY SIGN. THESE SIGNS SHALL BE REMOVED IMMEDIATELY AFTER JOINT HAS BEEN CLOSED. PLACEMENT OF SIGNS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

CARE SHALL BE TAKEN TO MATCH EXISTING PAVEMENT ELEVATIONS AT EXISTING PAVED BERMS, DRIVES, INTERSECTIONS, ETC.

REQUIREMENTS OF 442 APPLY EXCEPT AS FOLLOWS:
MIX DESIGN: FOR Ndes USE 50 GYRATIONS, FOR Nmax USE 75 GYRATIONS. MINIMUM TOTAL PG BINDER CONTENT IS 6.0 PERCENT.
MINIMUM VIRGIN PG BINDER CONTENT IS 5.0 PERCENT.
USE A PG 64-22 BINDER.
MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT IS 20 PERCENT.
WHEN AN AGGREGATE SOURCE IS SPECIALLY DESIGNATED WITH AN SR ON THE AGGREGATE GRAVITY LIST DO NOT USE THE AGGREGATE EXCEPT AS ALLOWED FOR MEDIUM TRAFFIC IN THE GUIDELINES FOR MAINTAINING ADEQUATE PAVEMENT FRICTION IN SURFACE PAVEMENT.
QUALITY CONTROL: DO NOT PERFORM Nmax IN QUALITY CONTROL TESTING. DO NOT TAKE EXTRA ASPHALT BINDER SAMPLES AS OUTLINED IN CMS 442.05.

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 9.5 MM,
TYPE A (446), AS PER PLAN (SR 547)

ALL OPEN TRANSVERSE JOINTS SHALL BE TAPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC. A "BUMP" SIGN (W8-1-36) SHALL BE ERECTED ON EACH SIDE OF TRANSVERSE JOINTS LEFT OPEN OVER NIGHT, INCLUDING A SPEED ADVISORY SIGN. THESE SIGNS SHALL BE REMOVED IMMEDIATELY AFTER JOINT HAS BEEN CLOSED. PLACEMENT OF SIGNS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

CARE SHALL BE TAKEN TO MATCH EXISTING PAVEMENT ELEVATIONS AT EXISTING PAVED BERMS, DRIVES, INTERSECTIONS, ETC.

REQUIREMENTS OF 442 APPLY EXCEPT AS FOLLOWS:
MIX DESIGN: FOR Ndes USE 50 GYRATIONS, FOR Nmax USE 75 GYRATIONS. MINIMUM TOTAL PG BINDER CONTENT IS 6.0 PERCENT.
USE A PG 64-22 BINDER.
MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT IS 20 PERCENT.
WHEN AN AGGREGATE SOURCE IS SPECIALLY DESIGNATED WITH AN SR ON THE AGGREGATE GRAVITY LIST DO NOT USE THE AGGREGATE EXCEPT AS ALLOWED FOR MEDIUM TRAFFIC IN THE GUIDELINES FOR MAINTAINING ADEQUATE PAVEMENT FRICTION IN SURFACE PAVEMENT.
QUALITY CONTROL: DO NOT PERFORM Nmax IN QUALITY CONTROL TESTING. DO NOT TAKE EXTRA ASPHALT BINDER SAMPLES AS OUTLINED IN CMS 442.05.

THE CONTRACTOR IS REQUIRED TO COMPLETE A TEST STRIP OF THE ITEM 442: ASPHALT CONCRETE SURFACE COURSE, 9.5 MM TYPE A (446), AS PER PLAN. THE TEST STRIP SHALL CONSIST OF 50 TO 100 TONS OF THE CONTRACT SPECIFIED ASPHALT SURFACE COURSE PLACED AND COMPACTED WITHOUT THE USE OF VIBRATORY ROLLERS. ENSURE BASIC COMPACTION PRACTICES SUCH AS PROPER MIX TEMPERATURES, ROLLERS TIGHT TO THE PAVER AND ADEQUATE NUMBER OF ROLLERS VS. PAVER SPEED ARE FOLLOWED. THE CONTRACTOR SHALL OBTAIN AND TEST 3 RANDOM CORES OF THE COMPACTED TEST STRIP. IF THE AVERAGE OF THE CORE RESULTS ARE BELOW 92.0 PERCENT ADJUST THE MIX OR COMPACTION AS NECESSARY AND ALLOWABLE PER SPECIFICATION AND REPEAT THE TEST STRIP. DO NOT BEGIN FULL PRODUCTION OF THE ASPHALT SURFACE COURSE UNTIL THE ENGINEER HAS ACCEPTED THE TEST STRIP. THE TEST STRIP WILL BE INCLUDED IN THE FIRST LOT FOR DETERMINING DENSITY FOR PAYMENT. TEST STRIPS ARE INCIDENTAL TO THE PAY ITEM.

ROLLER REQUIREMENTS WITHIN THE VILLAGE CORP LIMITS

WITHIN THE CORPORATION LIMITS OF THE VILLAGE OF MONROEVILLE, THE CONTRACTOR SHALL NOT USE A VIBRATORY ROLLER TO COMPACT THE ASPHALT CONCRETE.

ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 9.5MM,
TYPE A (448), AS PER PLAN

THIS ITEM SHALL BE USED FOR CORRECTION OF CROWN, PROFILE AND ANY OTHER IRREGULARITIES.

ALL OPEN TRANSVERSE JOINTS SHALL BE TAPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC. A "BUMP" SIGN (W8-1-36) SHALL BE ERECTED ON EACH SIDE OF TRANSVERSE JOINTS LEFT OPEN OVER NIGHT, INCLUDING A SPEED ADVISORY SIGN. THESE SIGNS SHALL BE REMOVED IMMEDIATELY AFTER JOINT HAS BEEN CLOSED. PLACEMENT OF SIGNS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

REQUIREMENTS OF 442 APPLY EXCEPT AS FOLLOWS:
MIX DESIGN: FOR Ndes USE 50 GYRATIONS, FOR Nmax USE 75 GYRATIONS. MINIMUM TOTAL PG BINDER CONTENT IS 6.0 PERCENT.
MINIMUM VIRGIN PG BINDER CONTENT IS 5.0 PERCENT.
USE A PG 64-22 BINDER.
MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT IS 20 PERCENT.
QUALITY CONTROL: DO NOT PERFORM Nmax IN QUALITY CONTROL TESTING. DO NOT TAKE EXTRA ASPHALT BINDER SAMPLES AS OUTLINED IN CMS 442.05.

PAVEMENT (CONTINUED)

PAVEMENT CORING INFORMATION (SR 113)

Core #	COUNTY	ROUTE	SLM	ASPHALT	CONCRETE	LOCATION	DIRECTION	COMMENTS
1	HUR	113	2.00	5.00		SH	EB	
2	HUR	113	2.00	9.50		RWP	EB	
3	HUR	113	2.00	10.40		LWP	EB	
4	HUR	113	2.30	6.70		SH	EB	
5	HUR	113	2.30	10.50		RWP	EB	
6	HUR	113	2.30	10.00		LWP	EB	
7	HUR	113	2.70	5.00		SH	EB	
8	HUR	113	2.70	10.50		RWP	EB	
9	HUR	113	2.70	9.40		LWP	EB	
10	HUR	113	3.20	5.80		SH	EB	
11	HUR	113	3.20	9.40		RWP	EB	
12	HUR	113	3.20	12.00		LWP	EB	
13	ERI	113	0.00	7.20		SH	EB	
14	ERI	113	0.00	10.00		RWP	EB	
15	ERI	113	0.00	11.40		LWP	EB	
16	ERI	113	0.50	7.50		SH	EB	
17	ERI	113	0.50	7.50	6.5	RWP	EB	
18	ERI	113	0.50	7.00	7.5	LWP	EB	
19	ERI	113	0.90	6.30		SH	EB	JOINT
20	ERI	113	0.90	16.30		RWP	EB	CRACKED ASPHALT-BROKEN CONCRETE
21	ERI	113	0.90	7.50	6.5	LWP	EB	
22	ERI	113	1.40	7.70		SH	EB	
23	ERI	113	1.40	8.20		RWP	EB	FOUNDATION GONE UNDER ASHPALT
24	ERI	113	1.40	14.60		LWP	EB	
25	HUR	113	3.75	7.80		SH	EB	
26	HUR	113	3.75	8.00		RWP	EB	BROKEN CONCRETE
27	HUR	113	3.75	9.00	5	LWP	EB	
28	HUR	113	4.00	8.50		SH	EB	
29	HUR	113	4.00	9.50	5	RWP	EB	BROKEN CONCRETE
30	HUR	113	4.00	9.50	6	LWP	EB	
31	HUR	113	4.50	8.30		SH	EB	
32	HUR	113	4.50	9.00	7.5	RWP	EB	
33	HUR	113	4.50	9.00	7.5	LWP	EB	
34	HUR	113	5.00	9.00		SH	EB	JOINT
35	HUR	113	5.00	10.70	1	RWP	EB	BROKEN CONCRETE
36	HUR	113	5.00	11.10	8.5	LWP	EB	BROKEN CONCRETE
37	HUR	113	5.50	10.00		SH	EB	JOINT
38	HUR	113	5.50	10.00	3	RWP	EB	BROKEN CONCRETE
39	HUR	113	5.50	7.60	7	LWP	EB	BROKEN CONCRETE
40	HUR	113	6.00	6.70		SH	EB	JOINT
41	HUR	113	6.00	9.00		RWP	EB	BROKEN CONCRETE
42	HUR	113	6.00	9.00	7	LWP	EB	BROKEN CONCRETE
43	HUR	113	6.50	7.50		SH	EB	JOINT
44	HUR	113	6.50	9.50		RWP	EB	BROKEN CONCRETE
45	HUR	113	6.50	10.00	7.5	LWP	EB	BROKEN CONCRETE
46	ERI	113	2.30	10.50		SH	EB	
47	ERI	113	2.30	9.00		RWP	EB	
48	ERI	113	2.30	9.00	7	LWP	EB	
49	ERI	113	2.80	8.00		SH	EB	
50	ERI	113	2.80	8.50	7.5	RWP	EB	
51	ERI	113	2.80	8.00	7.5	LWP	EB	
52	ERI	113	3.30	9.00		SH	EB	
53	ERI	113	3.30	9.00	7	RWP	EB	
54	ERI	113	3.30	9.00	7	LWP	EB	
55	ERI	113	3.80	3.00		SH	EB	
56	ERI	113	3.80	9.00	7.5	RWP	EB	
57	ERI	113	3.80	9.50	7	LWP	EB	
58	ERI	113	4.30	7.00		SH	EB	
59	ERI	113	4.30	9.00	7.5	RWP	EB	
60	ERI	113	4.30	9.00	8	LWP	EB	
61	ERI	113	5.00	6.00		SH	EB	
62	ERI	113	5.00	8.00	8	RWP	EB	
63	ERI	113	5.00	8.00	7	LWP	EB	

PAVEMENT CORING INFORMATION (SR 547)

KEY:		A	B	C	O		LWP		RWP		SH
		Asphalt	Brick	Concrete	Other Subbase		Left Wheel Path		Right Wheel Path		Shoulder
County	HUR	Route:	547	SLM:	7.13-8.18	PID:	92426	Date:	5/22/2013	Direction:	
SLM	Core #	Position on Road	Surface Type	Depth (in.)	Subbase 1 Type	Depth (in.)	Subbase 2 Type	Depth (in.)	General Comments		
7.21	1	LWP	A	16	C	7		9			
7.21	2	RWP	A	14	C	7		7			
7.21	3	SHOULDER	A	6"		6			SHOULDER WIDTH 8'		
7.21		THREE PIC									
7.59	4	LWP	A	13	C	4		9			
7.59	5	RWP	A	13		13					
7.59		SHOULDER	NA						NO SHOULDER - CURB ONLY		
7.59		THREE PIC									
8	6	LWP	A	13	C	4		9	CONCRETE UNDER ASPHALT FELL APPART		
8	7	RWP	A	13	C	6		4	CONCRETE UNDER ASPHALT FELL APPART		
8	8	SHOULDER	A	16		16			PARKING LANE 10' WIDE		
8		THREE PIC									
4 MISC CORES AT TYPICAL CRACKS AND TO FIND WIDTH OF SHOULDER											
8.18	NA	CRACK							NO SHOULDER, CURB ONLY		
7.8	NA	CRACK							NO SHOULDER, CURB ONLY		
7.4	NA	CRACK							NO SHOULDER, CURB ONLY		
7.13	9	CRACK	A	8"		8					

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 9.5MM, TYPE A (446), AS PER PLAN (SAFETY EDGE)

THE SAFETY EDGE SHALL BE INSTALLED AT THE SAME TIME AS THE SURFACE COURSE IS TO BE PLACED. THE SAFETY EDGE WILL NOT REQUIRE ANY DENSITY TESTING.

INTERSECTIONS AND DRIVES

RURAL-INTERSECTIONS SHALL BE PLANED AND PAVED TO THE END OF THE RADII OR AS DIRECTED BY THE ENGINEER. (TO PROVIDE A SMOOTH TRANSITION BETWEEN THE TWO HIGHWAYS, AND TO ELIMINATE WATER POCKETS).

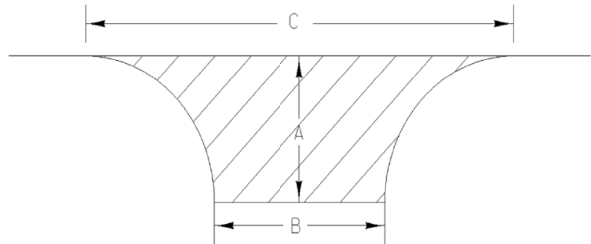
URBAN-INTERSECTIONS SHALL BE PLANED AND PAVED TO THE BACK OF CROSSWALKS OR AS DIRECTED BY THE ENGINEER. (TO PROVIDE A SMOOTH TRANSITION BETWEEN THE TWO HIGHWAYS, AND TO ELIMINATE WATER POCKETS).

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

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

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

THE PAVING DIMENSIONS FOR THE INTERSECTIONS ARE SHOWN IN THE CHART BELOW.



FUNDING SPLIT	INTERSECTION NAME	COUNTY	ROUTE	SLM	SIDE	A (FT)	B (FT)	C (FT)	Area (SY)
02/S<2/PV	BILLINGS ROAD	HURON	113	2.76	L	12	45	76	74
02/S<2/PV	SEYMOUR ROAD	HURON	113	2.90	L	12	26	60	50
02/S<2/PV	SR 4	HURON	113	3.07	R	12	82	126	129
02/S<2/PV	SR 4	HURON	113	3.07	L	12	68	102	106
01/STR/PV	SAND HILL ROAD	ERIE	113	0.41	R	12	38	68	64
01/STR/PV	YINGLING ROAD	ERIE	113	1.74	R	12	32	64	57
01/STR/PV	SR 99	HURON	113	4.33	R	12	48	83	80
01/STR/PV	SR 99	HURON	113	4.33	L	12	86	124	132
01/STR/PV	LIMBIRD ROAD	HURON	113	4.39	R	12	44	72	71
01/STR/PV	PATTEN TRACT ROAD	HURON	113	4.39	L	12	48	74	76
01/STR/PV	SECTION LINE ROAD	HURON	113	6.15	R	12	28	48	46
01/STR/PV	RANSOM ROAD	HURON	113	6.15	L	12	32	54	52
01/STR/PV	ENTERPRISE ROAD	ERIE	113	2.01	R	12	108	156	165
01/STR/PV	PERU CENTER ROAD	ERIE	113	2.43	R	12	80	100	116
01/STR/PV	LIVENGOOD	ERIE	113	2.57	L	12	45	74	73
01/STR/PV	HUBER ROAD	ERIE	113	2.95	R	12	48	72	75
01/STR/PV	THOMAS ROAD	ERIE	113	3.77	L	12	40	76	69
01/STR/PV	LOVERS LANE	ERIE	113	3.90	R	12	42	86	76
01/STR/PV	KELLEY ROAD	ERIE	113	4.13	L	12	38	72	66
01/STR/PV	SCHUG ROAD	ERIE	113	4.70	L	12	46	76	75
01/STR/PV	WALNUT STREET	ERIE	113	5.36	R	12	18	24	27
01/STR/PV	OAK STREET	ERIE	113	5.48	R	12	18	24	27
01/STR/PV	WATER STREET	ERIE	113	5.61	R	12	26	52	46
01/STR/PV	BRYAN ROAD	ERIE	113	6.02	L	12	34	54	54
02/S<2/PV	LABEAU STREET	HURON	547	7.44	R	12	25	52	45
02/S<2/PV	JACKSON STREET	HURON	547	7.63	R	12	26	42	42
02/S<2/PV	FULTON STREET	HURON	547	7.63	L	12	26	42	42
02/S<2/PV	SR 99	HURON	547	7.72	R	10	32	52	43
02/S<2/PV	SR 99	HURON	547	7.72	L	10	32	52	43
02/S<2/PV	PROSPECT STREET	HURON	547	7.82	L	8	26	36	26
02/S<2/PV	BAKER STREET	HURON	547	7.96	L	10	24	40	33
02/S<2/PV	CHAPEL STREET	HURON	547	8.05	L	10	24	40	33
02/S<2/PV	PRENTISS STREET	HURON	547	8.08	R	8	18	28	19
02/S<2/PV	BROWN STREET	HURON	547	8.09	L	8	32	44	32
02/S<2/PV	WILLIAMS STREET	HURON	547	8.14	R	12	14	14	19
SUB-TOTAL (01/STR/PV)									1447
SUB-TOTAL (02/S<2/PV)									736
TOTAL INTERSECTION AREAS									2183

MAINTENANCE OF TRAFFIC

446 DENSITY ACCEPTANCE WITH FLAGGER CLOSING OF A 2-LANE HIGHWAY FOR PAVING OPERATIONS

THIS PLAN NOTE APPLIES ONLY TO A FLAGGER CLOSURE OF ONE LANE OF A 2-LANE HIGHWAY DURING PAVING OPERATIONS WHEN USING STANDARD CONSTRUCTION DRAWING MT-97.11 OR MT-97.12, AND ALLOWS A PAVING OPERATION TO PROCEED CONCURRENTLY WITH THE MARKING AND CUTTING OF CORES REQUIRED FOR 446 DENSITY ACCEPTANCE.

IN ALL CASES THE CONTRACTOR SHOULD LENGTHEN THEIR LANE CLOSURES TO THE MAXIMUM PERMISSIBLE LENGTH DETAILED IN THE ABOVE REFERENCED STANDARD CONSTRUCTION DRAWINGS TO ALLOW THE ENGINEER ADEQUATE TIME TO MARK THE REQUIRED CORE LOCATIONS AND FOR CORE CUTTING OPERATIONS.

THE CONTRACTOR WILL PROVIDE TO THE ENGINEER THE PLANNED QUANTITY THAT WILL BE PLACED FOR THE DAY'S PRODUCTION. EACH DAY'S PRODUCTION WILL BE CONSIDERED ONE LOT AND INCLUDES SHOULDERS. TEN CORES WILL BE OBTAINED BY THE CONTRACTOR FOR EACH LOT AT RANDOM LOCATIONS DETERMINED BY THE ENGINEER. THE ENGINEER WILL DIVIDE A LOT INTO FIVE EQUAL SUBLOTS AND CALCULATE TWO RANDOM CORE LOCATIONS IN EACH SUBLOT AS DESCRIBED IN C&MS 446.05.

THE ENGINEER WILL MARK THE CORE LOCATIONS AFTER THE PAVING OPERATION (INCLUDING THE FINISH ROLLER) HAS COMPLETELY PASSED THE RANDOMLY SELECTED CORE LOCATION. THE CONTRACTOR SHOULD DETERMINE WHEN IT IS APPROPRIATE TO START THE CORE DRILL OPERATION AND BEGIN CUTTING CORES WHEN THE NEWLY PLACED PAVEMENT SURFACE TEMPERATURE IS LESS THAN 140°F. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE LANE CLOSURE DURING ALL PAVING, CORE MARKING, AND CORING OPERATIONS PER THE REQUIREMENTS OF THE STANDARD CONSTRUCTION DRAWING USED FOR THE PAVING OPERATION.

BUTT JOINTS

BUTT JOINTS SHALL NOT BE CUT AND LEFT OPEN TO TRAFFIC. THEY SHALL BE FILLED IN WITH A TEMPORARY ASPHALT CONCRETE WEDGE USING ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

CONSTRUCTION "BUMP" (W8-1-36) AND "ADVISORY SPEED" (W13-1-24) SIGNS SHALL BE ERECTED AND MAINTAINED DURING THE PERIOD THE BUTT JOINT IS LEFT OPEN. THESE SIGNS SHALL BE PAID FOR UNDER THE LUMP SUM ITEM FOR ITEM 614 MAINTAINING TRAFFIC.

ITEM 614 - MAINTAINING TRAFFIC LANE CLOSURE/REDUCTION REQUIRED

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ITEM 614 - MAINTAINING TRAFFIC (HUR-547) (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC FOR THE HUR-547 PORTION OF THE PROJECT DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS FOURTH OF JULY
NEW YEARS LABOR DAY
MEMORIAL DAY THANKSGIVING

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF THE WEEK	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE FEE OF \$1,000 PER DAY.

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO CONSTRUCT A TEMPORARY ASPHALT WEDGE FROM THE EXISTING PAVEMENT TO THE PLANED SURFACE AT BUTT JOINTS AND OTHER LOCATIONS THAT RESULT IN A DROP-OFF IN EXCESS OF 1.5 INCHES, AS DIRECTED BY THE ENGINEER. THIS QUANTITY SHALL ALSO BE USED AT PLANED SURFACES WHERE A TEMPORARY ASPHALT WEDGE IS NEEDED AROUND CASTINGS, AS DIRECTED BY THE ENGINEER. BEFORE THE ASPHALT CONCRETE RESURFACING IS PLACED, TEMPORARY WEDGE SHALL BE REMOVED AND THE COST SHALL BE CONSIDERED INCIDENTAL TO ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 25 CU YD

TEMPORARY TRAFFIC SIGNAL ACTIVATION FOR PARTIAL ROADWAY CLOSURE

THE CONTRACTOR SHALL NOTIFY ODOT DISTRICT 3 PUBLIC INFORMATION OFFICER (PIO) A MINIMUM TEN (10) CALENDAR DAYS ADVANCE NOTICE BEFORE ACTIVATING A TEMPORARY TRAFFIC SIGNAL TO STOP-AND-GO OPERATION FOR PARTIAL ROADWAY CLOSURE.

THE PIO CONTACT INFORMATION IS AS FOLLOWS:

HALEY DONOFRIO
PUBLIC INFORMATION OFFICER
ODOT DISTRICT 3
906 CLARK AVENUE
ASHLAND, OH 44805
PHONE 419-207-7181

IN ADDITION, THE TEMPORARY TRAFFIC SIGNAL SHALL BE ACTIVATED PER THE REQUIREMENTS OF ODOT SCD MT-120.00. THE TEMPORARY TRAFFIC SIGNAL SHALL OPERATE IN FLASH MODE FIVE (5) TO SEVEN (7) DAYS PRIOR TO ACTIVATING TO STOP-AND-GO OPERATION. SIGNAL ACTIVATION SHALL NOT OCCUR ON WEEKENDS, MONDAYS, FRIDAYS, OR ANY DAY IMMEDIATELY BEFORE OR AFTER A STATE OBSERVED HOLIDAY.

ALL COSTS ASSOCIATED WITH THE ABOVE DESCRIBED WORK SHALL BE INCLUDED WITH ITEM 614 - MAINTAINING TRAFFIC.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

ITEM 614 - WORK ZONE MARKING SIGN

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR TEMPORARY WORK ZONE MARKING SIGNS PER THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS, 614.04.

WORK ZONE MARKING SIGN: (W8-H12A-36) NO EDGE LINE = 36 EACH
WORK ZONE MARKING SIGN: (R4-1-24) DO NOT PASS = 38 EACH
WORK ZONE MARKING SIGN: (R4-2-24) PASS WITH CARE = 41 EACH

01/STR/PV TOTAL = 95 EACH
02/S<2/PV TOTAL = 20 EACH
TOTAL = 115 EACH

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE LATEST EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), A UNIFORMED LAW ENFORCEMENT OFFICER (AND OFFICIAL PATROL CAR WITH MOUNTED EMERGENCY FLASHING LIGHTS) SHALL BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS AS DIRECTED BY THE ENGINEER:

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.

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION.

LAW ENFORCEMENT OFFICERS (LEO'S) SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. THE LEO'S ARE CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR ACTIONS. ALTHOUGH THEY ARE EMPLOYED BY THE CONTRACTOR, THE PROJECT ENGINEER SHALL HAVE CONTROL OVER THEIR PLACEMENT. THE OFFICIAL PATROL CAR SHALL BE A PUBLIC SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE. 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.

LEO'S 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.

THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THESE SERVICES AND PROVIDE 72 HOURS ADVANCE NOTICE AS REQUIRED BY THE HIGHWAY PATROL LISTED BELOW:

STATE HIGHWAY PATROL
300 SOUTH NORWALK ROAD
NORWALK, OHIO 44857
(419) 668-3711

LAW ENFORCEMENT OFFICERS 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 QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE: 100 HOURS

THE HOURS PAID SHALL INCLUDE MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

IF THE CONTRACTOR WISHES TO UTILIZE LEO'S FOR FLAGGING AND TRAFFIC CONTROL OTHER THAN FOR THAT REQUIRED IN THESE PLANS, THEY MAY DO SO AT THEIR OWN EXPENSE.

STRUCTURE NOTES:

DESIGN DATA

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4,500 PSI
STRUCTURAL STEEL - ASTM A709 GRADE 36 - YIELD STRENGTH 36,000 PSI

DESIGN SPECIFICATIONS

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002, INCLUDING THE 2003-2007 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURES HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURES 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 STRUCTURES. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

PLACING ASPHALT CONCRETE FEATHERING ON APPROACHES TO BRIDGES

SPECIAL CARE SHALL BE TAKEN, WHEN PLACING THE ASPHALT CONCRETE BUTT JOINT TO EFFECT A SMOOTH TRANSITION FROM THE EXISTING APPROACH PAVEMENT TO THE BRIDGE DECK THE CONTRACTOR'S ATTENTION IS CALLED TO STANDARD DRAWING BP-3.1 FOR REQUIRED TOLERANCES.

PLACEMENT OF ADJACENT CONCRETE POURS

DO NOT PLACE ADJACENT CONCRETE POURS SIMULTANEOUSLY. ALLOW SUFFICIENT TIME FOR THE FIRST POUR TO CURE TO THE POINT FORMS CAN BE STRIPPED WITHOUT DETRIMENT TO THE POUR BEFORE PLACING THE SECOND POUR. ALL CONSTRUCTION JOINTS NOT SPECIFICALLY LABELED IN THE PLANS AS OPTIONAL ARE TO BE PERFORMED AS DETAILED ABOVE. SHOULD THE CONTRACTOR FAIL TO PERFORM THE CONSTRUCTION JOINT AS DESCRIBED, THE ENGINEER WILL DIRECT THE CONTRACTOR TO REMOVE THE INADEQUATELY PLACED CONCRETE AND REPLACE IT AS DESCRIBED ABOVE AT NO COST TO THE DEPARTMENT. PAYMENT WILL NOT BE MADE FOR INADEQUATELY PLACED CONCRETE NOT REPLACED.

ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NEEDED TO PERFORM THE DESCRIBED WORK IS TO BE CONSIDERED INCIDENTAL TO THE RESPECTIVE 511 CONCRETE ITEM(S) AND WILL BE PAID FOR UNDER THAT (THOSE) CONTRACT BID PRICE(S).

IN-STREAM WORK RESTRICTION (FOR HUR-547-7.25)

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO AVOID CONSTRUCTION IN AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING STREAMS OR WETLANDS. ANY MATERIAL THAT DOES FALL INTO STREAMS OR WETLANDS SHALL BE REMOVED AS SOON AS POSSIBLE.

ALL PROJECTS INVOLVING JURISDICTIONAL WATERS OF THE UNITED STATES (STREAMS, RIVERS, NON-ISOLATED WETLANDS) AND/OR ISOLATED WETLANDS ARE SUBJECT TO REGULATION UNDER SECTIONS 404 AND 401 OF THE CLEAN WATER ACT, AND POSSIBLY OHIO EPA ISOLATED WETLAND LAW. IT IS ANTICIPATED THAT NO IN-STREAM WORK, OR WORK UNDER THE STREAM'S ORDINARY HIGH WATER MARK (OHWM) WILL BE NEEDED. THEREFORE NO WATERWAY PERMITS HAVE BEEN GRANTED AND NO IN-STREAM WORK IS ALLOWED.

SHOULD WORK (EITHER TEMPORARY OR PERMANENT) IN THE STREAM BE NEEDED; IT WILL REQUIRE A PERMIT AND AUTHORIZATION BY THE UNITED STATES ARMY CORPS OF ENGINEERS (USACE). THE CONTRACTOR SHALL NOT UTILIZE FILLS BELOW OHWM UNTIL SUCH ACTIVITY IS AUTHORIZED BY THE USACE. DETAILS OF THIS REQUIREMENT ARE DESCRIBED IN ODOT'S SUPPLEMENTAL SPECIFICATION 832.09.

USACE DEFINITION OF OHWM - THE ORDINARY HIGH WATER MARK IS THE LINE ON THE SHORES ESTABLISHED BY THE FLUCTUATIONS OF WATER AND INDICATED BY PHYSICAL CHARACTERISTICS SUCH AS A CLEAR, NATURAL LINE IMPRESSED ON THE BANK; SHELIVING; CHANGES IN THE CHARACTER OF THE SOIL; DESTRUCTION OF TERRESTRIAL VEGETATION; THE PRESENCE OF LITTER AND DEBRIS; OR THE APPROPRIATE MEANS THAT CONSIDER THE CHARACTERISTICS OF THE SURROUNDING AREAS.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. THE WEIGHT OF THE HAMMERS SHALL NOT BE MORE THAN 60 POUNDS. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, IF REQUIRED IN THE PLANS, IN PLACE. PRIOR TO CONCRETE PLACEMENT, ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR THE ABOVE ITEMS WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 511 - CLASS QC2 CONCRETE, MISC.: APPROACH SLAB REPAIR
ITEM 511 - CLASS QC2 CONCRETE, MISC.: DECK EDGE REPAIR
ITEM 511 - CLASS QC2 CONCRETE, MISC.: DECK END REPAIR

THIS ITEM SHALL BE USED AT LOCATIONS INDICATED IN THE PLAN.

THE CONCRETE SHALL BE CLASS QC2 WITH THE COARSE AGGREGATE BEING LIMESTONE.

ALL EXISTING SURFACES TO WHICH THE CONCRETE IS TO BOND SHALL BE CLEANED BY ABRASIVE BLASTING. THESE SURFACES SHALL BE MADE FREE OF SPALLS, LAITANCE, PAINT, RUST AND OTHER CONTAMINANTS DETRIMENTAL TO ACHIEVING AN ADEQUATE BOND.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR THE ABOVE WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 614 - MAINTAINING TRAFFIC FOR STRUCTURE HUR-547-7.25

TWO WAY TRAFFIC ON THE STRUCTURE SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT THROUGH TRAFFIC ON THIS STRUCTURE MAY HAVE A SIGNALIZED LANE CLOSURE AS SHOWN ON SHEET (20/20) FOR A MAXIMUM OF FOURTY-FIVE (45) CONSECUTIVE CALENDAR DAYS TOTAL. THE FOURTY-FIVE (45) CONSECUTIVE CALENDAR DAYS IS TO BE CONSIDERED AN INTERIM COMPLETION DATE AND FOR EACH CALENDAR DAY BEYOND THE FOURTY-FIVE (45) CALENDAR DAYS THAT THE HIGHWAY REMAINS IN A SIGNALIZED CLOSURE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE OF \$1,000.00 PER DAY.

WHEN NOT IN USE, EQUIPMENT AND MATERIALS SHALL BE STORED BEHIND THE GUARDRAIL.

ACCESS TO ADJACENT PROPERTIES IS TO REMAIN OPEN AND BE MAINTAINED AT ALL TIMES.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

ITEM 615- PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN

SAW CUT THE EXISTING PAVEMENT AS DETAILED IN THE PLANS TO PROVIDE A CLEAN EDGE TO CONSTRUCT THE PAVEMENT FOR MAINTAINING TRAFFIC, TYPE B, AS PER PLAN. LEAVE THE PAVEMENT FOR MAINTAINING TRAFFIC IN PLACE AFTER CONSTRUCTION IS COMPLETED.

PAYMENT FOR ALL OF THE ABOVE WORK WILL BE MADE AT THE UNIT BID PRICE PER SQUARE YARD OF THE ABOVE ITEM WHICH INCLUDES ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

CALCULATED	JWS	GENERAL NOTES	
	CHECKED		
KRB			
HUR-113-1.84			
ERI-113-0.00			
HUR-547-7.13			
<table><tr><td>9</td></tr><tr><td>20</td></tr></table>		9	20
9			
20			

ITEM SPECIAL, MAILBOX SUPPORT SYSTEM

THIS ITEM OF WORK SHALL CONSIST OF THE REMOVAL OF EXISTING NON-STANDARD MAILBOX SUPPORTS AND FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED HARDWARE IN ACCORDANCE WITH THE DETAILS SHOWN, AND ATTACHING AN OWNER SUPPLIED MAILBOX, AT LOCATIONS DETERMINED BY THE ENGINEER.

IN ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE BOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL SUPPLY ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION. SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO MAILBOXES MAY BE MOUNTED ON A SINGLE POST. [HARDWARE SHALL BE COMMERCIAL GRADE GALVANIZED STEEL.]

WOOD POSTS SHALL BE NOMINAL 4 IN. x 4 IN. (S4S) OR 4½IN. DIAMETER ROUND, AND CONFORM TO 710.14. STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2 IN. I.D., AND CONFORM TO AASHTO M 181.

POSTS SHALL BE SET AS PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WORK WITH THE LOCAL POST MASTER AND NOTIFYING THE PROPERTY OWNERS PRIOR TO WORK.

GROUP MAILBOX SUPPORTS SHALL BE PLACED ON 3 FT. CENTERS AND THE TURNOUT LENGTHENED TO ACCOMMODATE THE GROUPING.

WHERE GUARDRAIL EXISTS, MAILBOXES AND THEIR SUPPORTS SHALL BE PLACED BEHIND THE GUARDRAIL. SUPPORTS MUST STILL MEET THE BREAKAWAY REQUIREMENTS LISTED ABOVE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DESCRIBED ABOVE.

ITEM SPECIAL-MAILBOX SUPPORT SYSTEM, SINGLE	
01/STR/PV - SR 113	2 EACH
02/S<2/PV - SR 113	2 EACH
02/S<2/PV - SR 547	1 EACH

ITEM SPECIAL-MAILBOX SUPPORT SYSTEM, MULTIPLE	
01/STR/PV - SR 113	1 EACH

LOCATIONS OF MAILBOX SUPPORT SYSTEM TO BE REPLACED

ADDRESSES AND/OR LOCATIONS OF MAILBOX SUPPORT SYSTEM TO BE REPLACED:

5551	SR 113	-	SLM: 2.649, HURON COUNTY
5428	SR 113	-	SLM: 2.944, HURON COUNTY
8411	SR 113	-	SLM: 1.077, ERIE COUNTY
7801	SR 113	-	SLM: 1.879, ERIE COUNTY
2614	SR 113	-	SLM: 3.501, ERIE COUNTY
395	SR 547	-	SLM: 7.269, HURON COUNTY

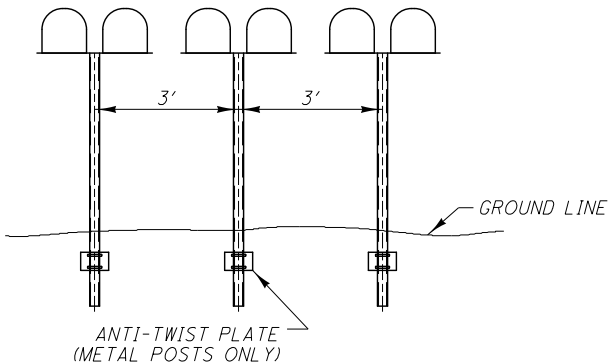
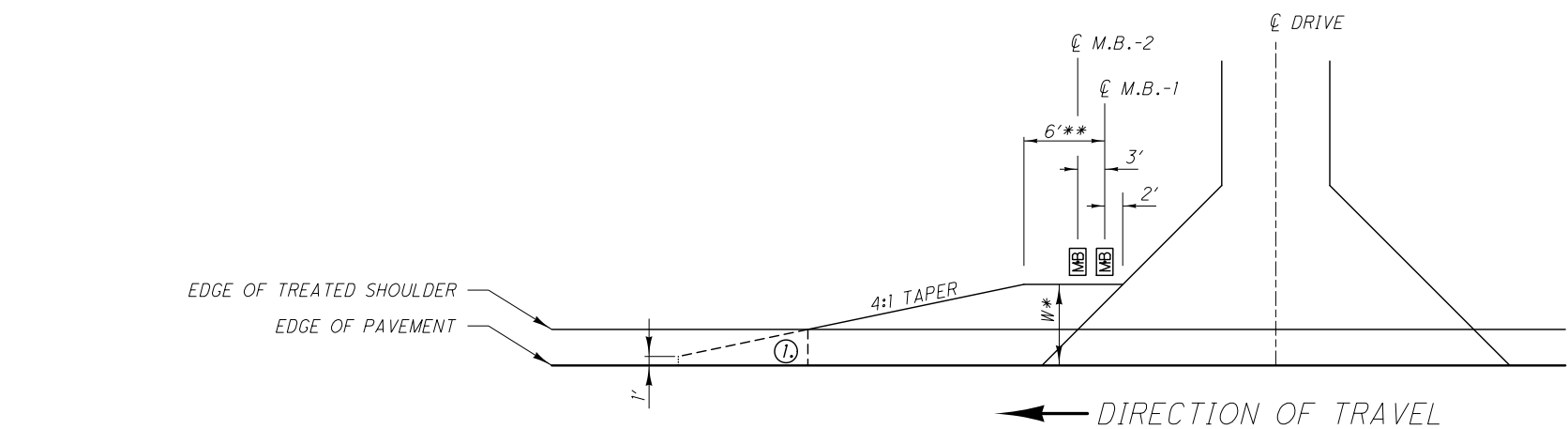
MAILBOX APPROACHES

THE MAILBOX APPROACHES SHALL BE PAVED WITH THE CORRESPONDING MAINLINE PAVEMENT TREATMENT AS SHOWN ON THE PAVEMENT AND SHOULDER DATA SHEET. THEY SHALL CONFORM AS MUCH AS PRACTICAL TO STANDARD DRAWING BP-4.1 OR AS DIRECTED BY THE ENGINEER.

GRADING SHALL BE PERFORMED IN THESE AREAS TO OBTAIN A BASE WHICH WILL ALLOW THE FINISHED GRADE TO BE FLUSH WITH ADJACENT PAVEMENT. A QUANTITY OF ITEM 617 COMPACTED AGGREGATE HAS BEEN PROVIDED FOR AREAS WHERE THE SHOULDER IS LOW PRIOR TO GRADING AND/OR LOW AREAS CAUSED BY THE REMOVAL OF UNSUITABLE MATERIAL. QUANTITIES TO PERFORM THIS WORK HAVE BEEN INCLUDED IN THE GENERAL SUMMARY AND ARE ESTIMATED AS FOLLOWS.

ITEM 209 - GRADING MAILBOX APPROACHES:	
01/STR/PV - SR 113	48 EACH
02/S<2/PV - SR 113	9 EACH
02/S<2/PV - SR 547	9 EACH

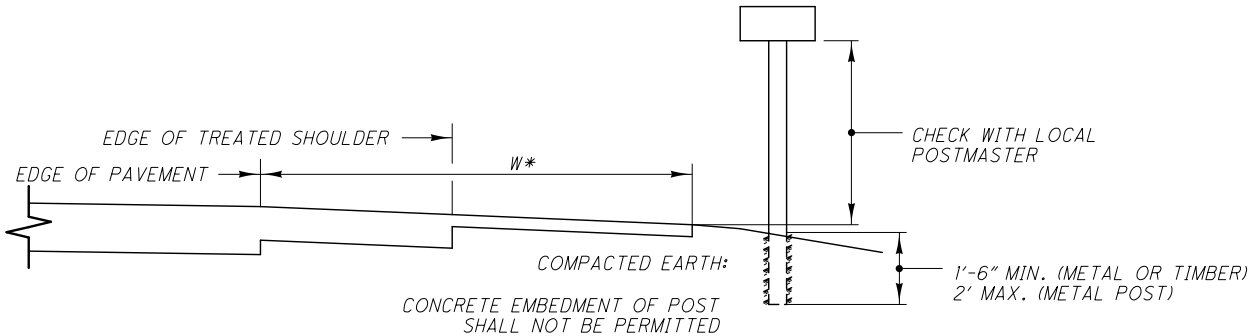
ITEM 617 - COMPACTED AGGREGATE	
01/STR/PV - SR 113	48 CU YD
02/S<2/PV - SR 113	9 CU YD
02/S<2/PV - SR 547	9 CU YD



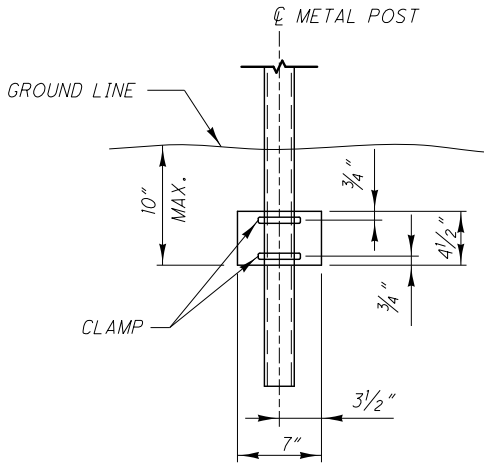
GROUP MAILBOX INSTALLATION

- W* NOTES
- 1) WHERE EXISTING STANDARD MAILBOX POSTS ARE BEHIND GUARDRAIL AND ARE TO REMAIN IN PLACE, TURNOUT WIDTH SHALL EXTEND TO FACE OF GUARDRAIL.
 - 2) WHERE NO GUARDRAIL IS REQUIRED, TURNOUT WIDTH SHALL BE 6 FT MAXIMUM OR TO FACE OF EXISTING STANDARD MAILBOX IF IT IS LESS THAN 6 FT.
 - 3) IF THE MAILBOX SUPPORT IS SPECIFIED TO BE REMOVED AND REERECTED OR REPLACED, WHERE GUARDRAIL IS REQUIRED, TURNOUT WIDTH SHALL EXTEND TO FACE OF GUARDRAIL AND MAILBOX SHALL BE INSTALLED BEHIND THE GUARDRAIL.
 - 4) IF THE MAILBOX SUPPORT IS SPECIFIED TO BE REMOVED AND REERECTED OR REPLACED, WHERE NO GUARDRAIL IS REQUIRED, TURNOUT WIDTH SHALL BE 6 FT. MAXIMUM.

- ** NOTE
- 1) 6 FT FOR ONE MAILBOX SUPPORT, ADD 3 FT. FOR EACH ADDITIONAL MAILBOX SUPPORT.



CROSS SECTION / ELEVATION VIEW



ANTI-TWIST PLATE

FOR DETAILS NOT SHOWN SEE STANDARD DRAWING BP-4.1

SHEET NUM.										PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
5	6	8	10	13	14	16	17	19	20	01/STR/PV	02/S<2/PV	03/S<2/BR						
						505					505		202	30000	505	SF	ROADWAY	
				22.58						19.44	3.14		209	72051	22.58	MILE	WALK REMOVED	
			66							48	18		209	80000	66	EACH	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	
						48					48		608	10000	48	SF	GRADING MAILBOX APPROACHES	
						393					393		608	52000	393	SF	4" CONCRETE WALK	
																	CURB RAMP	
						64					64		608	53020	64	SF	DETECTABLE WARNING	
8										8			623	39500	8	EACH	MONUMENT BOX ADJUSTED TO GRADE	
			5							2	3		SPECIAL	69050100	5	EACH	MAILBOX SUPPORT SYSTEM, SINGLE	
			1							1			SPECIAL	69050300	1	EACH	MAILBOX SUPPORT SYSTEM, MULTIPLE	
																	DRAINAGE	
17											17		611	98630	17	EACH	CATCH BASIN ADJUSTED TO GRADE	
29											29		611	99654	29	EACH	MANHOLE ADJUSTED TO GRADE	
																	PAVEMENT	
	1,800									1,304	496		251	01042	1,800	CY	PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE)	
	100									70	30		253	02000	100	CY	PAVEMENT REPAIR	
				121,059						100,768	20,291		254	01000	121,059	SY	PAVEMENT PLANING, ASPHALT CONCRETE (1.25 INCHES)	
				16,264							16,264		254	01000	16,264	SY	PAVEMENT PLANING, ASPHALT CONCRETE (2.50 INCHES)	
				1,373						1,007	366		254	01600	1,373	SY	PATCHING PLANED SURFACE254	
				24,263						19,145	5,118		407	10000	24,263	GAL	TACK COAT	
				7,036						5,721	1,315		442	00201	7,036	CY	ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN (PG 64-22)	
				732						114	618		442	20101	732	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 9.5 MM, TYPE A (448), AS PER PLAN (PG 64-22)	
				2,019						1,693	326		442	20101	2,019	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 9.5 MM, TYPE A (448), AS PER PLAN (PG 64-22) (VARIABLE DEPTH)	
			66	1,518						1,304	214		617	10100	1,518	CY	COMPACTED AGGREGATE (2.0" AVG. DEPTH FOR AGGREGATE SHOULDERS)	
										48	18		617	10100	66	CY	COMPACTED AGGREGATE (FOR MAILBOX APPROACHES)	
																	TRAFFIC CONTROL	
					876					781	95		621	00100	876	EACH	RPM	
					876					781	95		621	54000	876	EACH	RAISED PAVEMENT MARKER REMOVED	
					22.6					19.44	3.16		642	00104	22.6	MILE	EDGE LINE, 6", TYPE 1	
					0.37					0.37			642	00204	0.37	MILE	LANE LINE, 6", TYPE 1	
					12					9.72	2.28		642	00300	12	MILE	CENTER LINE, TYPE 1	
					607					349	258		644	00500	607	FT	STOP LINE	
					624						624		644	00600	624	FT	CROSSWALK LINE	
					249					144	105		644	00700	249	FT	TRANSVERSE/DIAGONAL LINE	
					4						4		644	01000	4	EACH	RAILROAD SYMBOL MARKING	
					892						892		644	01200	892	FT	PARKING LOT STALL MARKING	
					2					2			644	01350	2	EACH	LANE REDUCTION ARROW	
																	TRAFFIC SIGNALS	
							8			4	4		632	26501	8	EACH	DETECTOR LOOP, AS PER PLAN	
																	STRUCTURE REPAIR - (HUR-547-7.25)	
								6				6	202	11301	6	CY	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	
								1				1	511	53012	1	CY	CLASS QC2 CONCRETE, MISC.: (DECK EDGE REPAIR)	
								3				3	511	53012	3	CY	CLASS QC2 CONCRETE, MISC.: (DECK END REPAIR)	
								2				2	511	53012	2	CY	CLASS QC2 CONCRETE, MISC.: (APPROACH SLAB REPAIR)	
							84					84	516	31000	84	FT	JOINT SEALER	
												</						

FUNDING SPLIT	COUNTY	ROUTE	LOG POINT TO LOG POINT		LENGTH		AVERAGE WIDTH	*TYPICAL	PAVEMENT AREA	254	254	254	407	407	442	442	442	442	AGGREGATE SHOULDER WIDTH		617		209	
										PAVEMENT PLANING, ASPHALT CONCRETE (1.25 INCHES)	PAVEMENT PLANING, ASPHALT CONCRETE (2.50 INCHES)	PATCHING PLANED SURFACE	TACK COAT @ 0.05 GAL/SY	TACK COAT @ 0.09 GAL/SY	ASPHALT CONCRETE SURFACE COURSE, 9.5MM, TYPE A (446) AS PER PLAN (1.25" THICK)	ASPHALT CONCRETE SURFACE COURSE, 9.5MM, TYPE A (446), AS PER PLAN (SAFETY EDGE)	ASPHALT CONCRETE INTERMEDIATE COURSE, 9.5MM, TYPE A (448) AS PER PLAN (1.25" THICK)	ASPHALT CONCRETE INTERMEDIATE COURSE, 9.5MM, TYPE A (448) AS PER PLAN VARIABLE UP TO 1.25" TO CORRECT CROSS SLOPE						
			STRAIGHT LINE MILEAGE		MILE	FT	FT		SQ YD	SY	SY	SY	GAL	GAL	CY	CY	CY	CY	SL	SR	2.0" THICK AVE.		MILE	
																			FT	FT	CY			
02/S<2/PV	HUR	113	1.84	3.07	1.23	6,494	26.0	1	18,760	18,760		188	938	1,688	651	35.08		326	2.0	2.0	160.3		2.46	
01/STR/PV	HUR	113	3.07	3.63	0.56	2,957	26.0	1	8,542	8,542		85	427	769	297	15.97		148	2.0	2.0	73.0		1.12	
01/STR/PV	ERI	113	0.00	2.01	2.01	10,613	26.0	1	30,660	30,660		307	1,533	2,759	1,065	57.32		532	2.0	2.0	262.0		4.02	
01/STR/PV	HUR	113	3.63	6.74	3.11	16,421	26.0	1	47,438	47,438		474	2,372	4,269	1,647	88.69		824	2.0	2.0	405.5		6.22	
01/STR/PV	ERI	113	2.01	5.68	3.67	19,378	26.0	2	55,981					5,038	1,944	104.67			2.0	2.0	478.5		7.34	
01/STR/PV	ERI	113	5.68	6.05	0.37	1,954	50.0	1	10,856	10,856		109	543	977	377	10.55		188	2.0	2.0	48.2		0.74	
02/S<2/PV	HUR	547	7.13	7.25	0.12	634	28.0	3	1,972		1,972	20	99	177	68	3.42	68		2.0	2.0	15.7		0.24	
SUSPEND & RESUME FOR CONCRETE STRUCTURES - (HUR-547-7.25)																								
02/S<2/PV	HUR	547	7.26	7.47	0.21	1,109	28.0	3	3,450		3,450	35	173	311	120	5.99	120		2.0	2.0	27.4		0.42	
SUSPEND & RESUME FOR AT-GRADE RAILROAD CROSSING																								
02/S<2/PV	HUR	547	7.47	7.48	0.01	53	28.0	3	165		165	2	8	15	6	0.29	6		2.0	2.0	1.3		0.02	
02/S<2/PV	HUR	547	7.48	7.85	0.37	1,954	26.0	4	5,645		5,645	56	282	508	196		196							
SUSPEND & RESUME FOR AT-GRADE RAILROAD CROSSING																								
02/S<2/PV	HUR	547	7.85	8.18	0.33	1,742	26.0	4	5,032		5,032	50	252	453	175		175							
01/STR/PV	EXTRA AREA FOR INTERSECTIONS									1,447	1,447		14	72	130	50		50						
02/S<2/PV	EXTRA AREA FOR INTERSECTIONS									736	736		7	37	66	26		26						
01/STR/PV	EXTRA AREA FOR PAVED DRIVES									945	945		9	47	85	33		33						
02/S<2/PV	EXTRA AREA FOR PAVED DRIVES									405	405		4	20	36	14		14						
01/STR/PV	EXTRA AREA FOR AGGREGATE DRIVES									666											37			
02/S<2/PV	EXTRA AREA FOR AGGREGATE DRIVES									171											10			
01/STR/PV	EXTRA AREA FOR EX. & PR. MAILBOX APPROACHES									880	880		9	44	79	31		31						
02/S<2/PV	EXTRA AREA FOR EX. & PR. MAILBOX APPROACHES									390	390		4	20	35	14		14						
SUB-TOTAL FOR PLAN SPLIT (01/STR/PV)											100,768		1,007	5,038	14,107	5,443	278	114	1,693			1,304		19.44
SUB-TOTAL FOR PLAN SPLIT (02/S<2/PV)											20,291	16,264	366	1,828	3,290	1,270	45	618	326			214		3.14
TOTAL CARRIED TO THE GENERAL SUMMARY											121,059	16,264	1,373	6,866	17,397	6,713	323	732	2,019			1,518		22.58

CALCULATED

JWS

CHECKED

KRB

PAVEMENT AND SHOULDER DATA

HUR-113-1.84

ERI-113-0.00

HUR-547-7.13

13

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CALCULATED
JWS

CHECKED
KRB

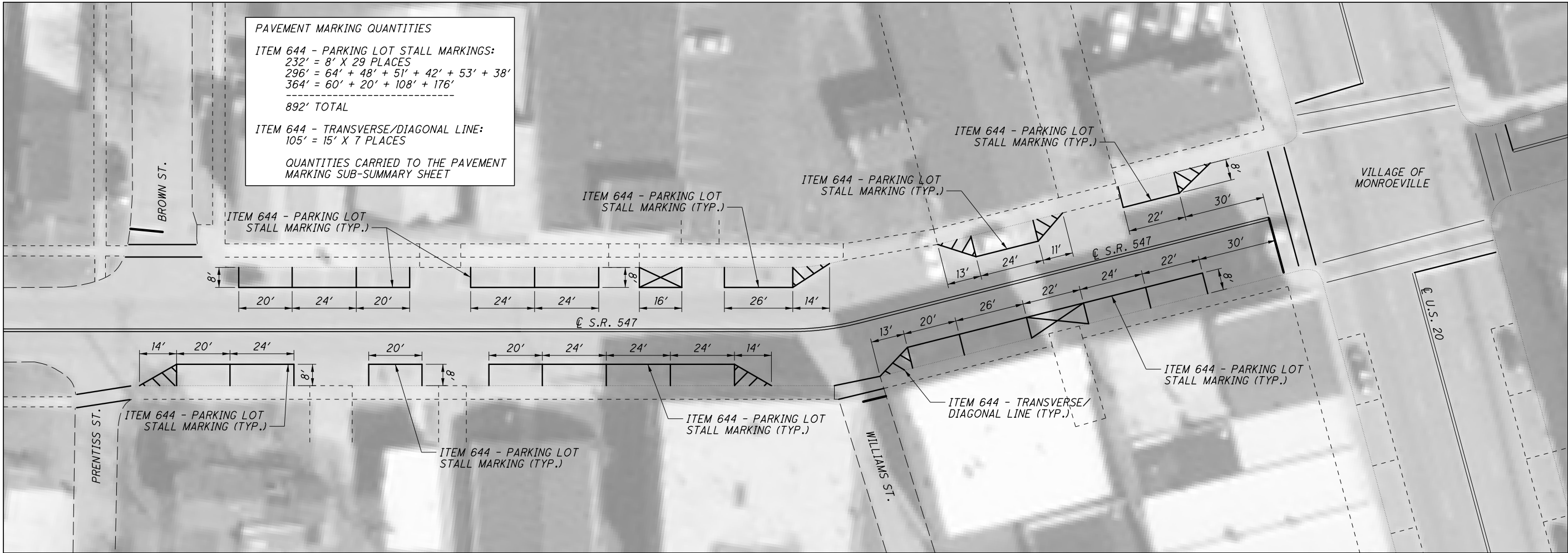
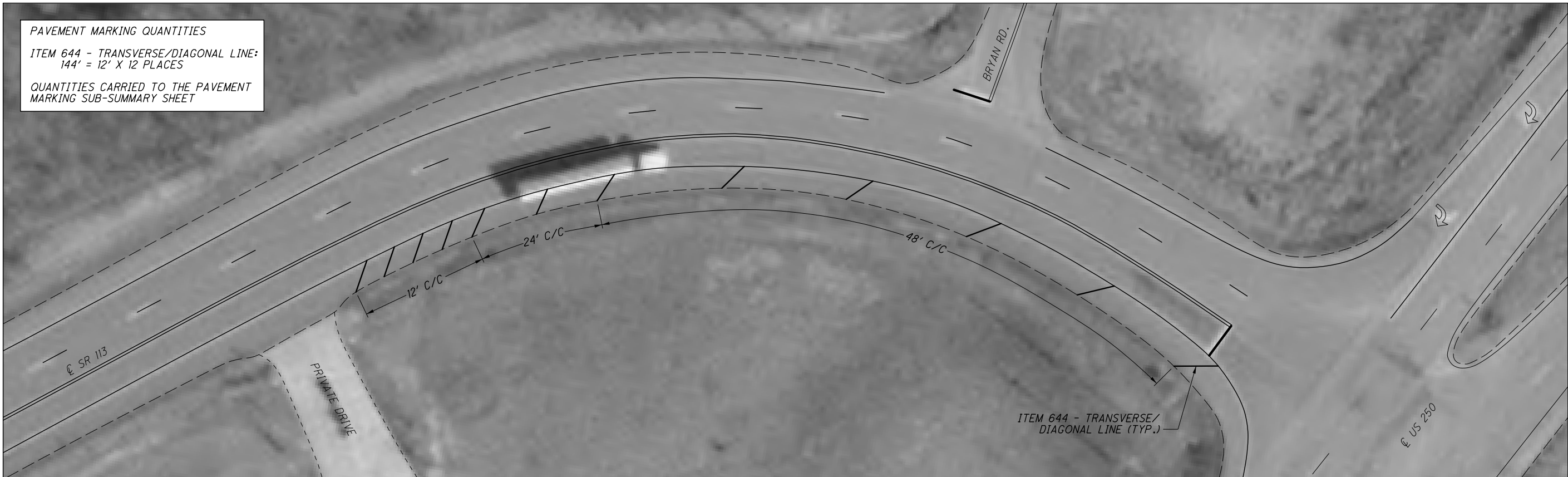
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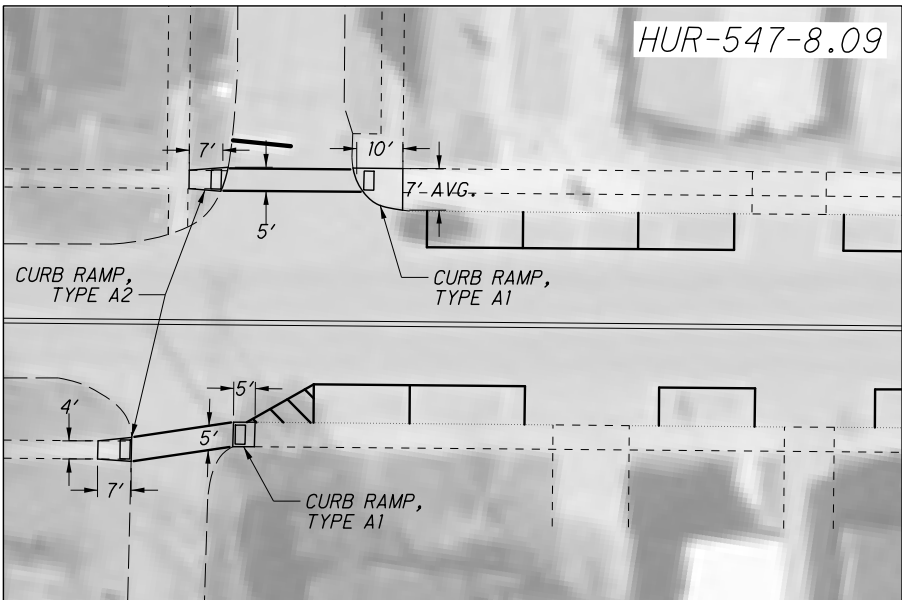
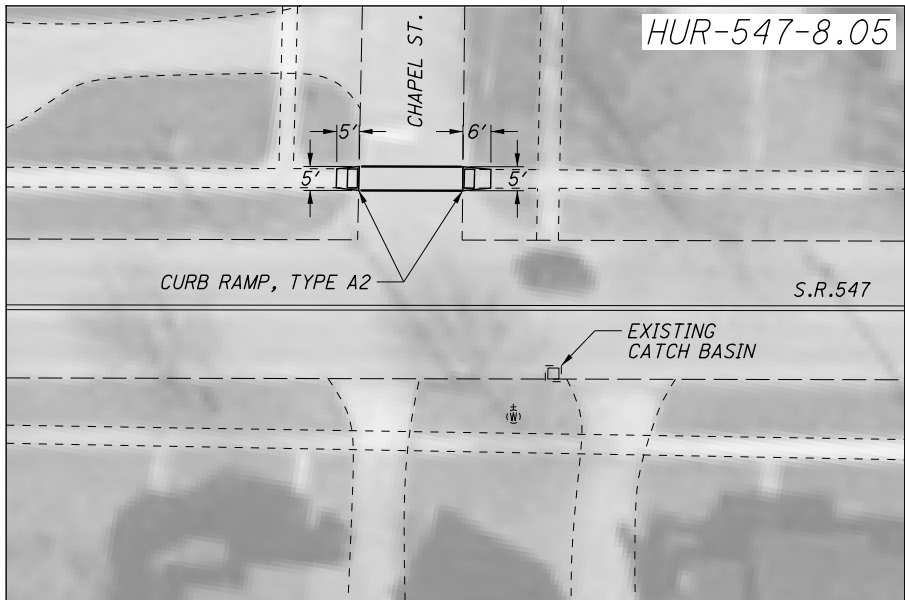
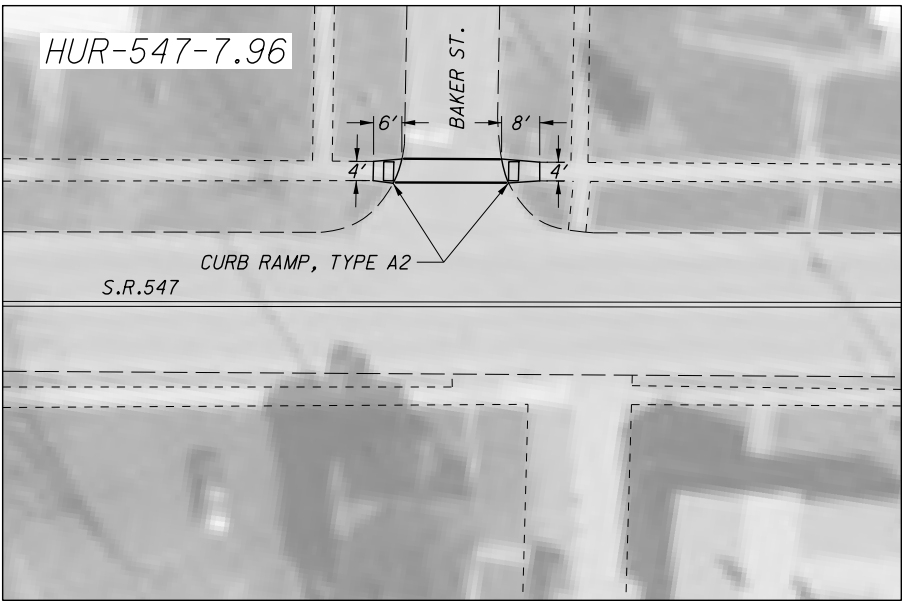
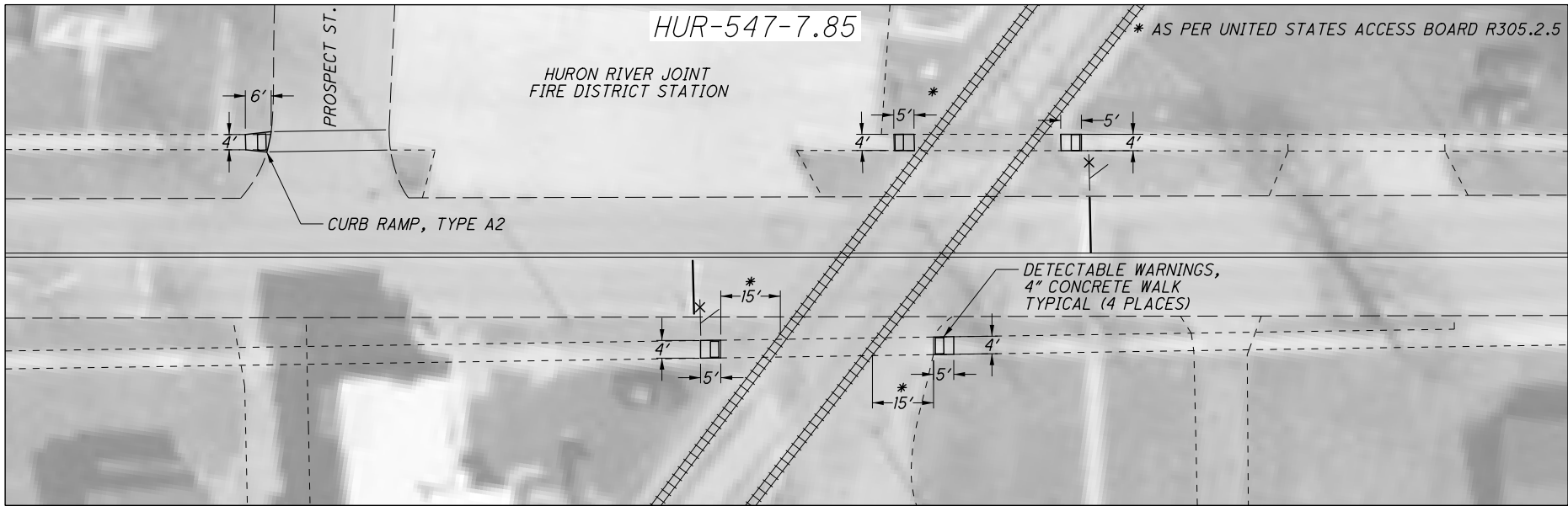
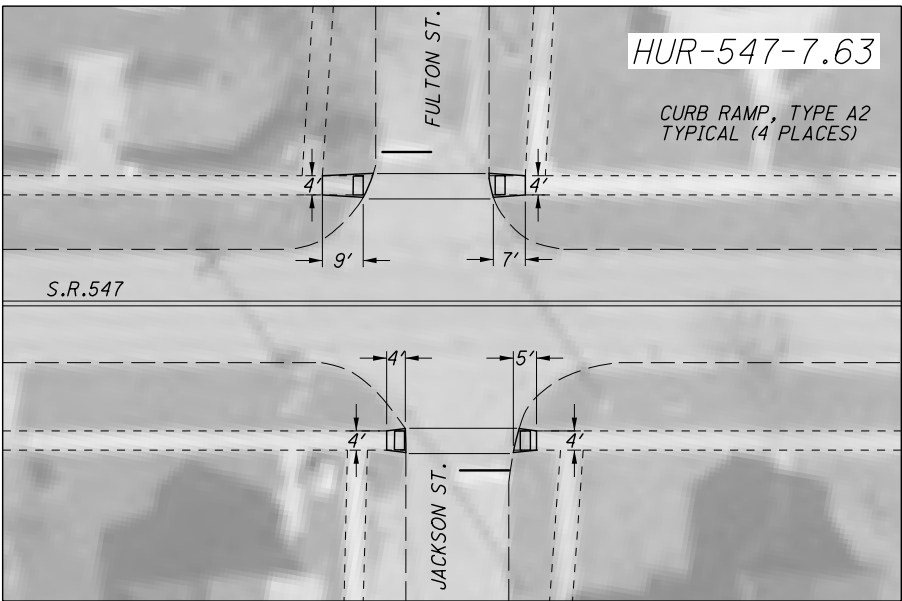
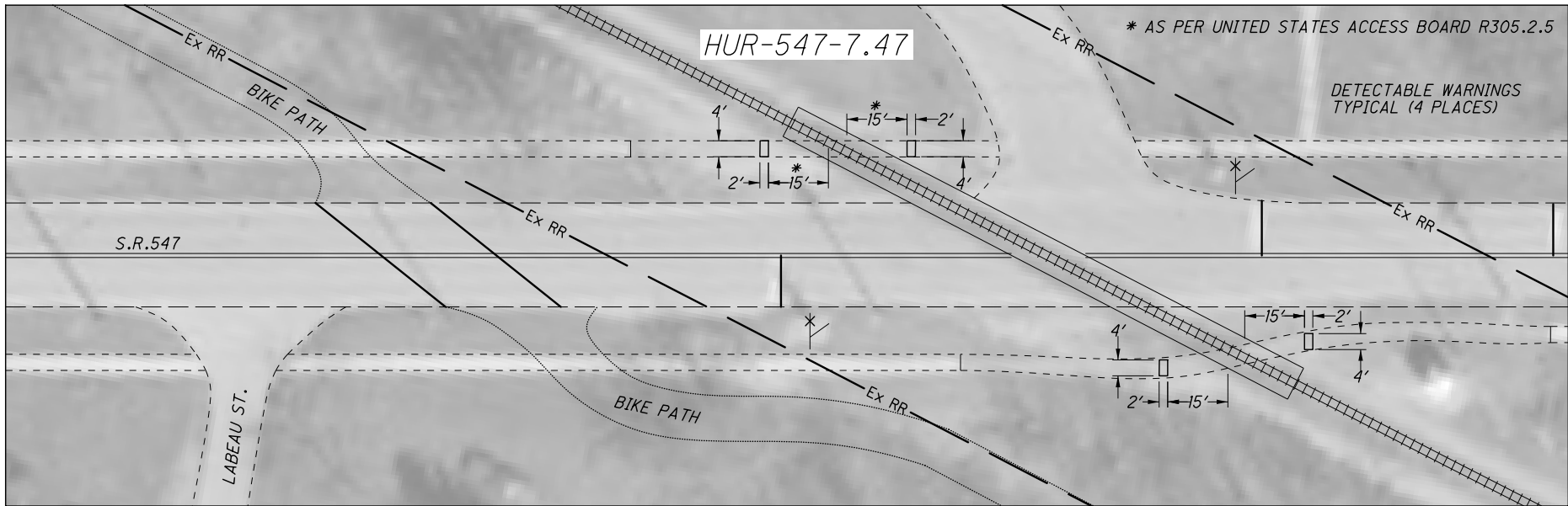
HUR-113-1.84
ERI-113-0.00
HUR-547-7.13

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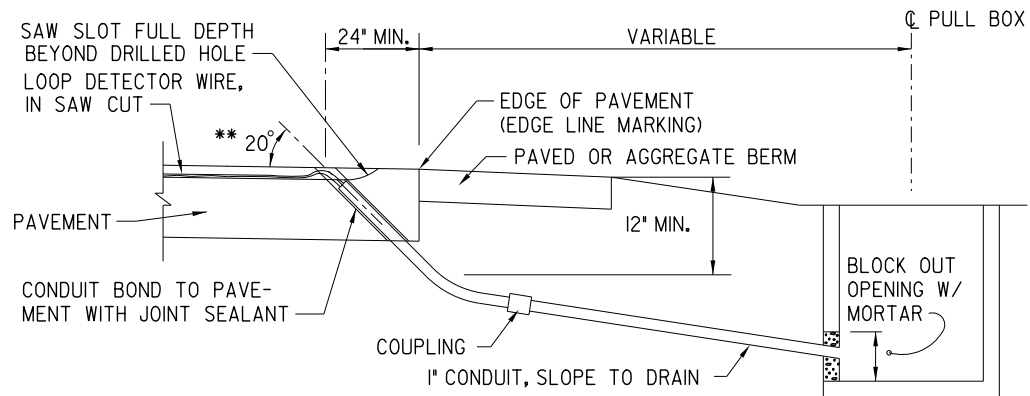
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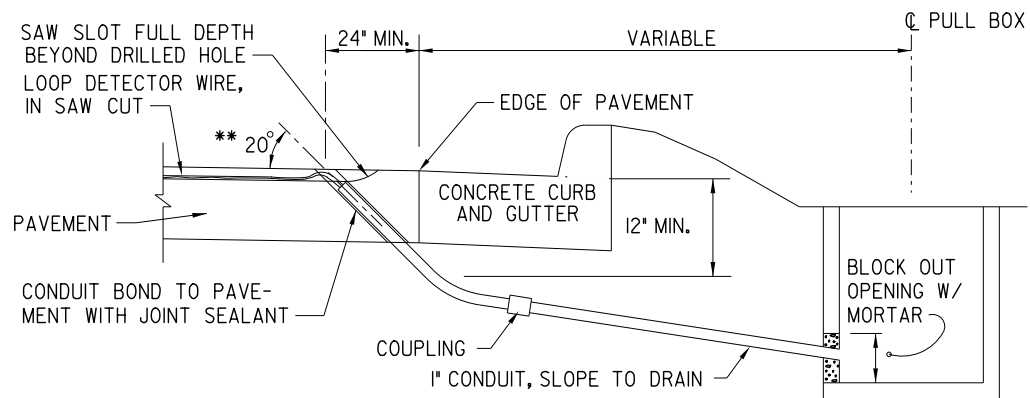


LOCATION	202	608	608	608
	WALK REMOVED	4" CONCRETE WALK	CURB RAMP	DETECTABLE WARNING
	SF	SF	SF	SF
WHEELING & LAKE ERIE RAILWAY SLM: 7.47	32			32
FULTON ST./ JACKSON ST. SLM: 7.63	100		100	
FIRE STATION & WLE RAILWAY SLM: 7.85	104	48	24	32
BAKER STREET SLM: 7.96	56		56	
CHAPEL ST. & SR. 547 SLM: 8.05	55		55	
BROWN ST. & PRENTISS ST. SLM: 8.09	158		158	
TOTAL	505	48	393	64

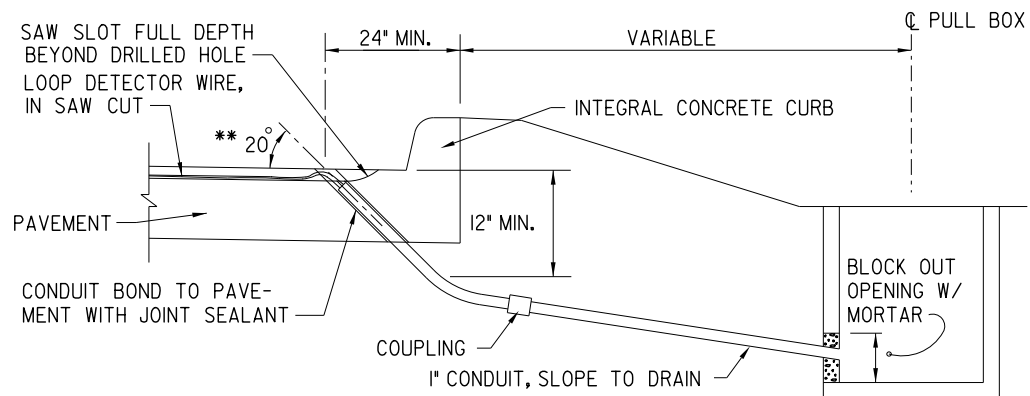
ALL QUANTITIES CARRIED TO THE GENERAL SUMMARY SHEET



DRILLED HOLE LOCATION DETAIL WITH PAVED OR AGGREGATE BERM



DRILLED HOLE LOCATION DETAIL WITH CONCRETE CURB AND GUTTER

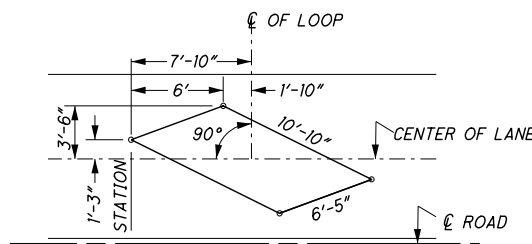


DRILLED HOLE LOCATION DETAIL WITH INTEGRAL CONCRETE CURB

* CONDUIT SHALL BE 1" DIAMETER 725.04.

* THE RANGE OF THIS ANGLE SHALL BE FROM 15 TO 30 DEGREES.

NOTE: SEE STANDARD DRAWING TC-82.10 FOR ADDITIONAL NOTES AND DETAILS



ANGULAR DESIGN DETECTION (ADD) LOOP DETAIL FOR LANE WIDTH 11' & LARGER

ITEM 632- DETECTOR LOOP, AS PER PLAN

AN ESTIMATED QUANTITY OF ITEM 632, DETECTOR LOOP, AS PER PLAN, HAS BEEN PROVIDED FOR THE PURPOSE OF REPLACING DAMAGED DETECTOR LOOPS AND/OR UPGRADING DETECTOR LOOPS TO IMPROVE MOTORCYCLE DETECTION. IT IS IMPERATIVE THAT REPLACEMENT OF DETECTOR LOOPS BE INSTALLED AND FULLY FUNCTIONAL IN THE SHORTEST POSSIBLE TIME. THE CONTRACTOR SHALL HAVE REPLACEMENT DETECTOR LOOPS INSTALLED AND FULLY FUNCTIONAL WITHIN 7 CALENDAR DAYS OF DESTRUCTION OF THE EXISTING DETECTOR LOOPS.

THE CONTRACTOR SHALL NOTIFY MATT BLANKENSHIP, ODOT DISTRICT 3 ROADWAY SERVICES MANAGER, (PHONE 419-207-7045) 5 WORKING DAYS IN ADVANCE OF ANY PLANING OPERATIONS OR PAVEMENT REPAIR WORK. THIS NOTIFICATION IS NEEDED FOR DISTRICT 3 TO SCHEDULE TEMPORARY SIGNAL TIMING MODIFICATIONS FOR THE TIME PERIOD WHEN THE DETECTOR LOOPS ARE OUT OF OPERATION. THE CONTRACTOR SHALL THEN RENOTIFY MR. BLANKENSHIP WITHIN 2 WORKING DAYS AFTER THE NEW DETECTOR LOOPS ARE REPLACED SO THAT HE CAN RESCHEDULE DISTRICT CREWS TO RESTORE SIGNAL TIMINGS TO THE ORIGINAL SETTINGS. IN ADDITION, THE CONTRACTOR SHALL ALSO NOTIFY CRAIG DEVORE, ODOT DISTRICT 3 PLANNING AND ENGINEERING DEPT. (PHONE 419-207-7169) WHEN THE NEW LOOPS ARE INSTALLED.

FAILURE TO COMPLY WITH THE ABOVE STATED REQUIREMENTS WILL RESULT IN THE ASSESSMENT OF A DISINCENTIVE FEE OF \$500.00 PER DAY TO THE CONTRACTOR FOR EACH CALENDAR DAY BEYOND THE SPECIFIED LIMIT.

THE NEW DETECTOR LOOPS SHALL BE PLACED PER THE PLAN DETAILS AFTER THE PLANING AND PAVEMENT REPAIR OPERATIONS ARE COMPLETED WITHIN THE AFFECTED AREAS. THE DETECTOR LOOPS SHALL NOT BE CUT INTO THE SURFACE COURSE.

IN ADDITION TO THE REQUIREMENTS OF CMS 632.11, THE CONTRACTOR SHALL PROVIDE A POSITIVE AND EFFECTIVE MEANS FOR REMOVAL OF SOLID RESIDUE RESULTING FROM THE DRY SAW BLADE CUTTING OF LOOP DETECTOR SLOTS IN THE PAVEMENT. THE RESIDUE SHALL BE REMOVED BY VACUUM OR OTHER EFFECTIVE MEANS, BEFORE IT IS BLOWN BY TRAFFIC ACTION OR WIND. RESIDUE FROM DRY CUTTING SHALL NOT BE REMOVED BY COMPRESSED AIR. AS AN ALTERNATE, THE CONTRACTOR MAY USE WET CUTTING.

LOOP DETECTOR WIRE TO LEAD-IN CABLE SPLICES WITHIN EPOXY ENCAPSULATED SPLICE ENCLOSURES SHALL BE JOINED BY AN APPROVED CONNECTOR AND SOLDERED PER CMS 632.23 & 725.15. ALL COSTS ASSOCIATED WITH THE SOLDERED SPLICE CONNECTION AND EPOXY SPLICE KIT SHALL BE INCLUDED WITH THE DETECTOR LOOP.

IF THE PULL BOX IS NOT SPECIFIED IN THE PLANS, THE SPLICE SHALL BE MADE IN THE FIRST ENTERED POLE OR PEDESTAL, EXCEPT WHERE THE CONTROLLER CABINET IS MOUNTED ON THE POLE OR PEDESTAL, IN WHICH CASE THE LOOP WIRES SHALL BE ROUTED DIRECTLY INTO THE CABINET UNLESS SPECIFIED DIFFERENTLY IN THE PLANS. LOOP DETECTOR WIRE ROUTED THROUGH CONDUIT, PULL BOXES, POLES, AND PEDESTALS SHALL BE TWISTED PER CMS 632.23.

FURNISH ALL MATERIALS ACCORDING TO THE DEPARTMENT'S QUALIFIED PRODUCTS LIST (QPL).

SEE DETAILS ON THIS SHEET FOR ADDITIONAL REQUIREMENTS.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH FOR ITEM 632, DETECTOR LOOP, AS PER PLAN.

(01/STR/PV) - (EAST OF INTERSECTION)
ITEM 632 - DETECTOR LOOP, AS PER PLAN 4 EACH

(02/S<2/PV) - (WEST OF INTERSECTION)
ITEM 632 - DETECTOR LOOP, AS PER PLAN 4 EACH

LOOP DETECTOR CHART

LOOP	SIZE (FT.)	NO. OF TURNS	MODE	DELAY (SEC.)	CONNECT TO DETECTOR UNIT NO.	ASSOCIATED CONTROLLER PHASE
L-1	5X5	3	PULSE	3**	1	2
L-2	5X5	3	PULSE	3**	1	2
L-3	6X30	3+3	PRESENCE	10**	2	2
L-3A	8X10	3	PRESENCE	10**	2	2
L-4	6X30	2	PRESENCE	10**	3	2
L-4A	8X20	2	PRESENCE	10**	3	2
L-5	5X5	3	PULSE	3**	4	2
L-6	5X5	3	PULSE	3**	4	2
L-7	A.D.D. A=4.5'	3	PULSE		5	1
L-8	5X5	3	PULSE		5	1
L-9	5X5	3	PULSE		6	1
L-10	5X5	3	PULSE		6	1

** INHIBIT DELAY DURING PHASE 2 GREEN

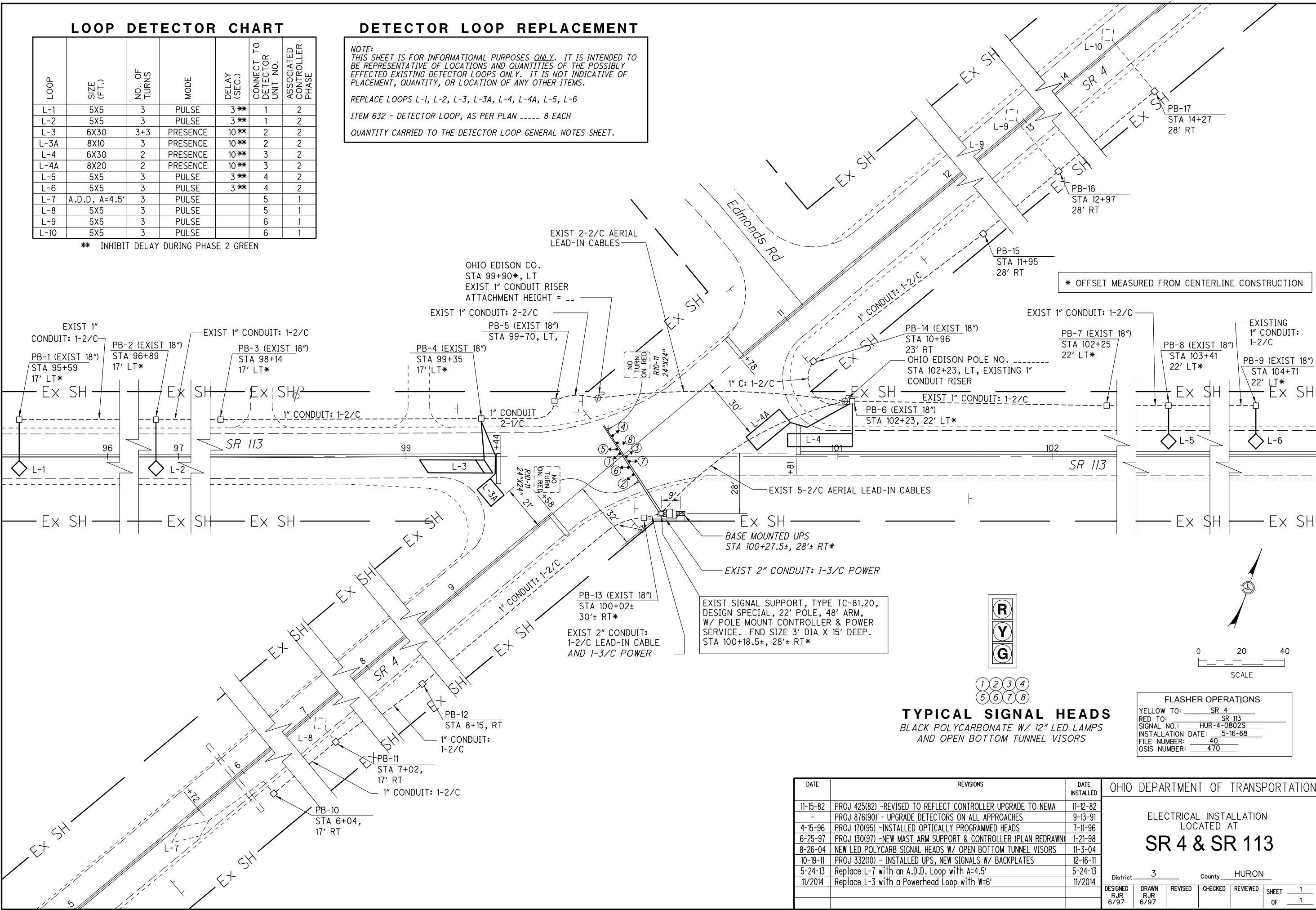
DETECTOR LOOP REPLACEMENT

NOTE: THIS SHEET IS FOR INFORMATIONAL PURPOSES ONLY. IT IS INTENDED TO BE REPRESENTATIVE OF LOCATIONS AND QUANTITIES OF THE POSSIBLY EFFECTED EXISTING DETECTOR LOOPS ONLY. IT IS NOT INDICATIVE OF PLACEMENT, QUANTITY, OR LOCATION OF ANY OTHER ITEMS.

REPLACE LOOPS L-1, L-2, L-3, L-3A, L-4, L-4A, L-5, L-6

ITEM 632 - DETECTOR LOOP, AS PER PLAN ----- 8 EACH

QUANTITY CARRIED TO THE DETECTOR LOOP GENERAL NOTES SHEET.



LOOP DETECTOR DETAILS
SR 113 & SR 4

HUR-113-1.84
ERI-113-0.00
HUR-547-7.13

CALCULATED
JWS
CHECKED
KRB

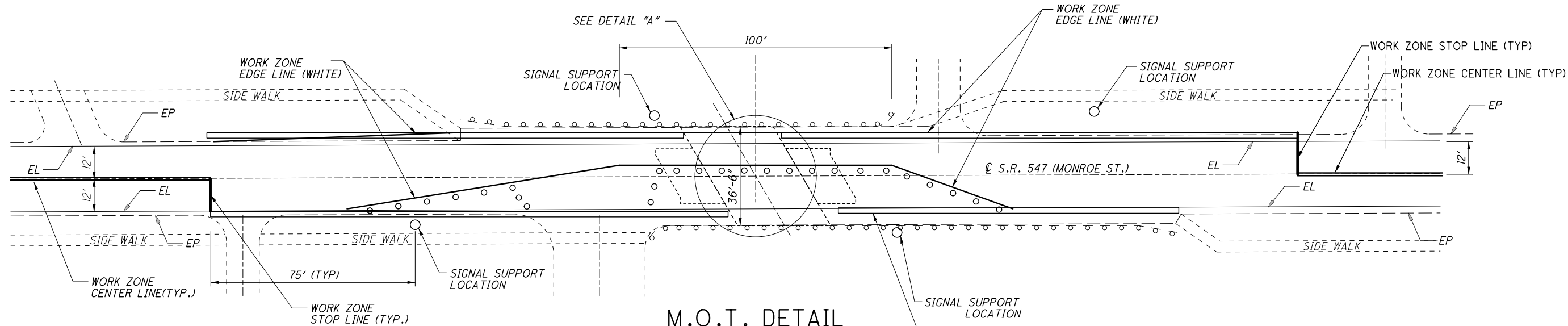
TYPICAL SIGNAL HEADS
BLACK POLYCARBONATE W/ 12" LED LAMPS
AND OPEN BOTTOM TUNNEL VISORS

FLASHER OPERATIONS	
YELLOW TO:	SR 4
RED TO:	SR 113
SIGNAL NO.:	HUR-4-0802S
INSTALLATION DATE:	5-16-68
FILE NUMBER:	40
OSIS NUMBER:	470

DATE	REVISIONS	DATE INSTALLED
11-15-82	PROJ 425(82) -REVISED TO REFLECT CONTROLLER UPGRADE TO NEMA	11-12-82
-	PROJ 876(90) - UPGRADE DETECTORS ON ALL APPROACHES	9-13-91
4-15-96	PROJ 170(95) -INSTALLED OPTICALLY PROGRAMMED HEADS	7-11-96
6-25-97	PROJ 130(97) -NEW MAST ARM SUPPORT & CONTROLLER (PLAN REDRAWN)	1-21-98
8-26-04	NEW LED POLYCARB SIGNAL HEADS W/ OPEN BOTTOM TUNNEL VISORS	11-3-04
10-19-11	PROJ 332(10) - INSTALLED UPS, NEW SIGNALS W/ BACKPLATES	12-16-11
5-24-13	Replace L-7 with an A.D.D. Loop with A=4.5'	5-24-13
11/2014	Replace L-3 with a Powerhead Loop with W=6'	11/2014

OHIO DEPARTMENT OF TRANSPORTATION					
ELECTRICAL INSTALLATION LOCATED AT					
SR 4 & SR 113					
District 3 County HURON					
DESIGNED RJR 6/97	DRAWN RJR 6/97	REVISED	CHECKED	REVIEWED	SHEET OF 1

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M.O.T. DETAIL
PHASE A SHOWN
PHASE B SIMILAR

SIGNAL TIMING

A TWO PHASE CONTROLLER WITH CABINET
CAPABLE OF BEING SET WITH THE
FOLLOWING SPLITS SHALL BE FURNISHED

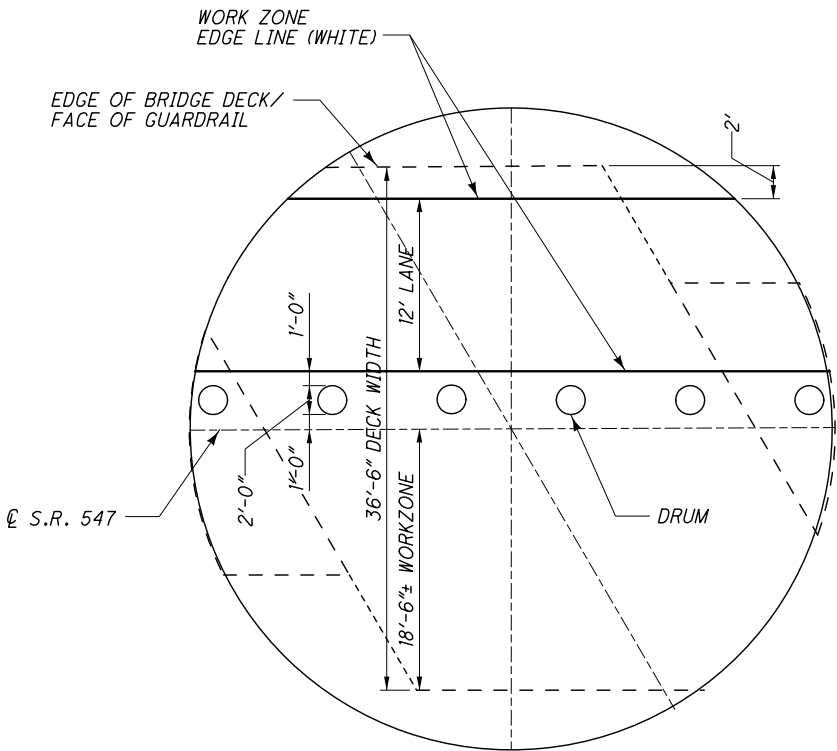
CYCLE LENGTH: 100 SECONDS

	GREEN	AMBER	RED
PHASE A	35	5	10
PHASE B	35	5	10

THE ABOVE TIMING MAYBE CHANGED
WITH THE APPROVAL OF THE ENGINEER

ESTIMATED QUANTITIES (03/S<2/BR)			
ITEM	QUANTITY	UNIT	DESCRIPTION
614	13	EACH	BARRIER REFLECTOR, TYPE A2
614	0.19	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE 1
614	0.23	MILE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE 1
614	48	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE 1
615	LUMP		ROADS FOR MAINTAINING TRAFFIC
615	150	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN

ALL QUANTITIES CARRIED TO THE GENERAL SUMMARY SHEET



DETAIL "A"

NOTES:

- 1) STEEL PLATES SHALL BE PLACED OVER THE CONCRETE REPAIR AREAS PRIOR TO CONCRETE CURING.
- 2) FOR ADDITIONAL DETAILS, SEE SCDS MT-96.11, MT-96.20 AND MT-96.26.
- 3) ACCESS TO ALL DRIVES SHALL BE MAINTAINED.

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CALCULATED

GTS

CHECKED

JWS

STRUCTURE DETAIL

HUR-547-7.25 - MOT DETAIL

HUR-113-1.84

ERI-113-0.00

HUR-547-7.13

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