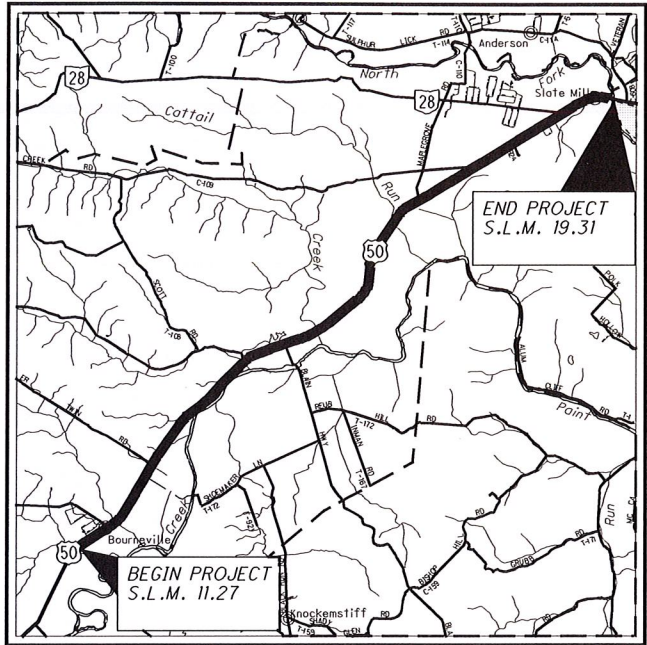
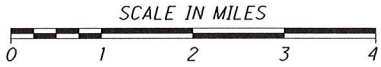


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LOCATION MAP

LATITUDE: 39°18'58" LONGITUDE: -83°6'33"



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

DESIGN DESIGNATION

CURRENT ADT (2016)	10620
DESIGN YEAR ADT (2036)	N/A
DESIGN HOURLY VOLUME (20)	N/A
DIRECTIONAL DISTRIBUTION	N/A
TRUCKS (24 HOUR B&C)	4.8%
DESIGN SPEED	55 MPH
LEGAL SPEED	45/55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
04 - MINOR ARTERIAL	
NHS PROJECT	YES

DESIGN EXCEPTIONS

NONE REQUIRED

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

PLAN PREPARED BY:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 9 PLANNING AND ENGINEERING
650 EASTERN AVE. CHILLICOTHE, OHIO

ENGINEERS SEAL:

SIGNED: *Matthew R. Hauck*
DATE: 2/23/2017

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
		MT-97.10	7/18/14			800 1/20/2017	
		MT-97.12	1/20/17			832 1/17/14	
BP-3.1	7/18/14	MT-99.20	7/19/13			846 4/17/15	
BP-4.1	7/19/13	MT-101.60	1/20/17			848 7/15/16	
BP-5.1	7/19/13	MT-101.90	7/17/15				
BP-7.1	7/18/14	MT-105.10	7/19/13				
BP-9.1	7/19/13	TC-41.20	10/18/13				
DM-4.3	1/15/16	TC-42.20	10/18/13				
DM-4.4	1/15/16	TC-52.10	10/18/13				
		TC-52.20	7/15/16				
		TC-65.10	1/17/14				
		TC-65.11	7/15/16				
DBR-3-11	7/15/11						
DS-1-92	7/18/03						
EXJ-4-87	7/19/02						

PROJECT DESCRIPTION

RESURFACING OF 8.04 MILES OF U.S.R. 50 FROM SLM 11.27 TO SLM 19.31 WITH ITEM 424 FINE GRADED POLYMER ASPHALT CONCRETE TYPE B. PROJECT INCLUDES STRUCTURE REHABILITATION OF BRIDGE NO. ROS-50-1926.

EARTH DISTURBED AREAS:

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

2016 SPECIFICATIONS

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

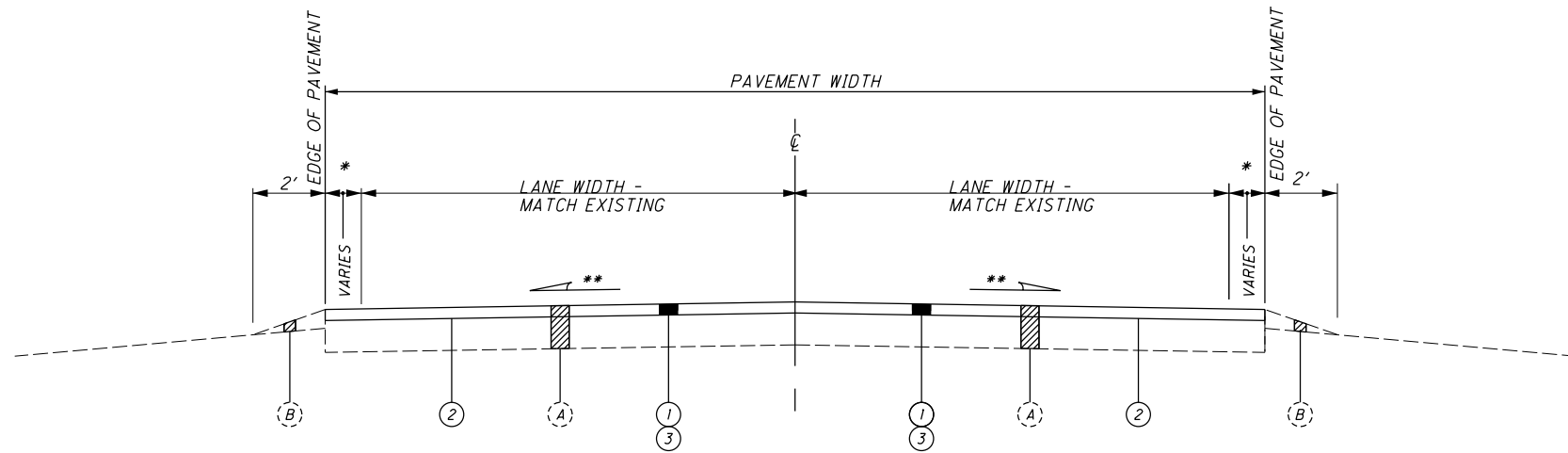
I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DE-TOURS WILL BE PROVIDED AS INDICATED ON SHEET 5.

APPROVED: *Vaughan E. Wilson*
DATE: 2-24-17 DISTRICT DEPUTY DIRECTOR

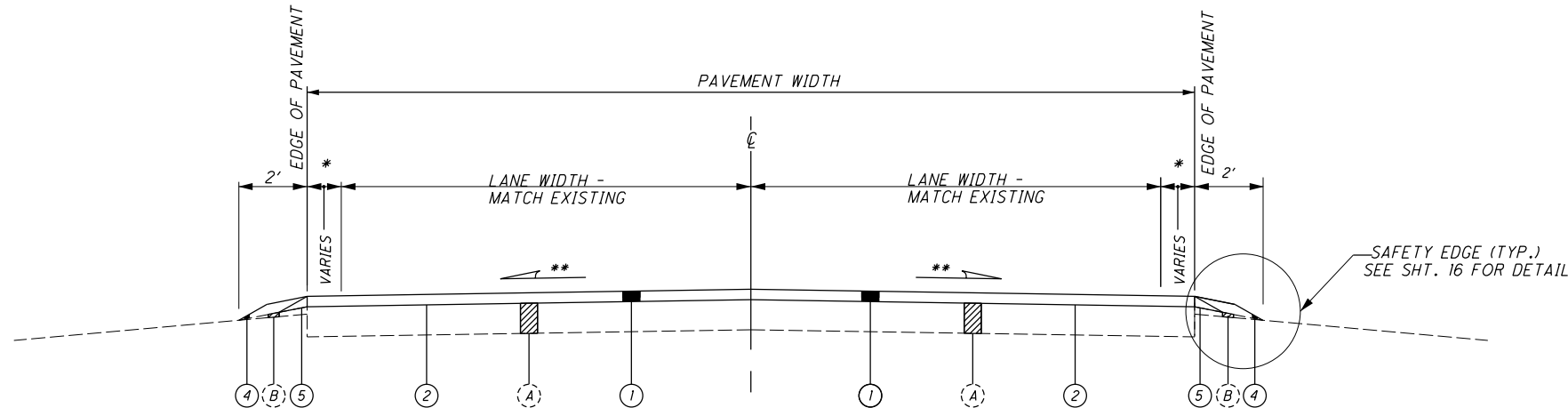
APPROVED: _____
DATE: _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.	E161 (498)
PID NO.	100462
CONSTRUCTION PROJECT NO.	
RAILROAD INVOLVEMENT	NONE
ROS-50-11.27	
1 21	

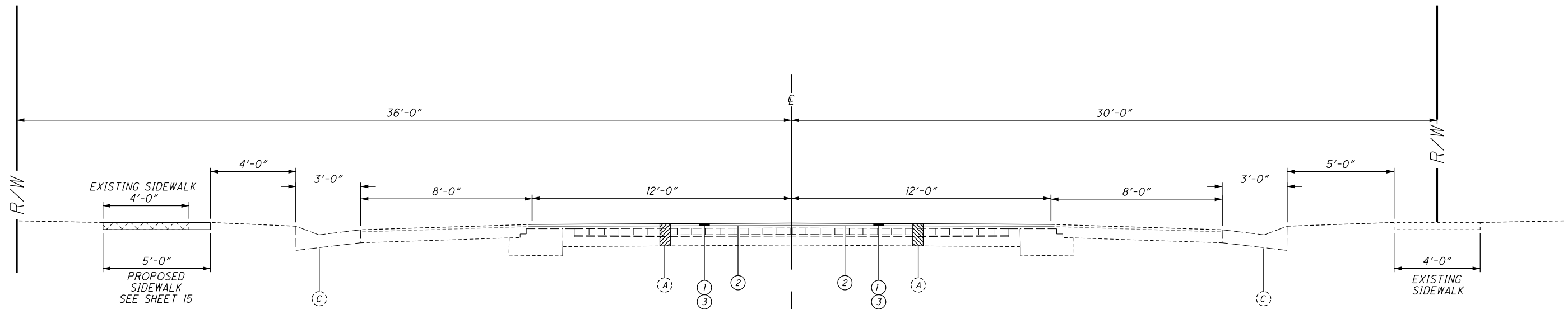
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TYPICAL 1
BUTT JOINT AND PAVEMENT MILLING TREATMENTS
SEE SHEETS 11 FOR LOCATIONS



TYPICAL 2
SEE SHEET 11 FOR LOCATIONS



TYPICAL 3
SEE SHEET 11 FOR LOCATIONS

PAVEMENT LEGEND

- (1) 441 1" FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B
- (2) 407 TACK COAT
- (3) 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, 1" MAX.
- (4) 617 2" AVERAGE DEPTH COMPACTED AGGREGATE
- (5) 209 PREPARING SUBGRADE SHOULDER, AS PER PLAN
- (A) EXISTING PAVEMENT AND BASE
- (B) EXISTING SHOULDER
- (C) EXISTING CURB AND GUTTER

NOTES

TYPICAL SECTIONS SHOWN ARE FOR TANGENT SECTION WITH NORMAL CROWN ONLY. TYPICAL SECTIONS FOR SUPERELEVATED SECTIONS AND SUPERELEVATED TRANSITION SECTIONS FOR CURVED SECTIONS SHALL FOLLOW THE EXISTING PAVEMENT UNLESS THE ENGINEER DIRECTS THAT A CORRECTION IS TO BE PERFORMED.

* AFTER PAVEMENT OPERATIONS, EDGE OF PAVEMENT MARKINGS SHALL BE REPLACED AT CURRENT LOCATIONS. CONTRACTOR TO LOCATE MARKINGS BEFORE CONSTRUCTION. ENGINEER TO APPROVE PLACEMENT.

** MATCH EXISTING SLOPE UNLESS THE ENGINEER DIRECTS THAT A CORRECTION IS TO BE PERFORMED.

SEE BP 3.1 FOR BUTT JOINT AND PAVEMENT FEATHERING. ALSO, SEE GENERAL NOTE, ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN ON SHEET 3.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD LOCATE EX. UTILITY GRATES, MANHOLES, AND VALVES, LOCATED IN ROADWAY AND ADJACENT TO ROADWAY, BEFORE PLANING. THE CONTRACTOR WILL LEAVE ALL UNDISTURBED BEFORE, DURING, AND AFTER CONSTRUCTION UNLESS NOTED OTHERWISE IN PLANS. MAINTAIN POSITIVE DRAINAGE AT EXISTING INLETS.

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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.

UTILITIES

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

AMERICAN ELECTRIC POWER (DISTRIBUTION) MR. PAUL PAXTON 850 TECH CENTER DRIVE GAHANNA, OHIO 43230 PHONE: (614) 883-6831	AMERICAN ELECTRIC POWER (TRANSMISSION) MS. BARBARA DUNLAP 700 MORRISON ROAD GAHANNA, OHIO 43230 PHONE: (614) 552-1893
SOUTH CENTRAL POWER COMPANY MR. PHIL STRINGER P.O. BOX 250 LANCASTER, OHIO 43130 PHONE: (800) 282-5064 EXT. 6237	HORIZON CHILLICOTHE TELEPHONE MR. DAVE HAMMOND P.O. BOX 480 CHILLICOTHE, OHIO 45601 PHONE: (740) 703-8690
TIME WARNER CABLE MR. STEPHEN RAY 3760 INTERCHANGE DRIVE COLUMBUS, OHIO 43204 PHONE: (614) 255-6340	ROSS COUNTY WATER COMPANY MR. WILLIAM NEAL P. O. BOX 1690 CHILLICOTHE, OHIO 45601 PHONE: (740) 774-4117
COLUMBIA GAS OF OHIO MS. TIFFANY WOODYARD 483 PIATT AVENUE CHILLICOTHE, OHIO 45601 PHONE: (740) 772-9131	PLEASANT VALLEY REGIONAL SEWER DISTRICT MR. JEFF RAINES P.O. BOX 1746 CHILLICOTHE, OHIO 45601 PHONE: (740) 775-4691

WINDOW CONTRACT TABLE

DESCRIPTION OF CRITICAL WORK	CALENDAR DAYS TO COMPLETE
ALL ITEMS OF WORK WITH EXCEPTION OF THE BRIDGE WORK FOR SFN 7103301	45

PROFILE AND ALIGNMENT

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

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

THIS ITEM SHALL BE IN ACCORDANCE WITH SECTION 254 AND AS DIRECTED BY THE ENGINEER. DEPTH OF PLANING IS 1" MAX.

(1" MAX) - PLANING FOR BUTT JOINTS:

PLAN INTENT IS TO PROVIDE A SMOOTH RIDING PAVEMENT TRANSITION FROM THE PROPOSED PAVMENT TYPICAL SECTION TO MEET THE EXISTING PAVEMENT OF BRIDGE DECK AND APPROXIMATE 1" ELEVATION TRANSITION IN THE PAVEMENT PROFILE IN ACCORDANCE WITH STANDARD DRAWING BP-3.1 DETAIL FOR "BUTT JOINT" EXCEPT THAT THE MINIMUM LENGTH OF THE BUTT JOINT SHALL BE 50 FOOT PER INCH OF PROPOSED OVERLAY. DEPTH OF PLANING IS VARIABLE FROM A MINIMUM OF 0" TO A MAXIMUM OF 1".

(1" MAX.) - PLANING AT BRIDGE ROS-50-1183, SFN. 7103182:

(1" MAX.) - PLANING AT BRIDGE ROS-50-1499, SFN. 7103247:

(1" MAX.) - PLANING AT BRIDGE ROS-50-1647, SFN. 7103271:

(1" MAX.) - PLANING AT BRIDGE ROS-50-1926, SFN. 7103301:

PLAN INTENT IS TO PROVIDE A SMOOTH RIDING PAVEMENT TRANSITION AND TO NOT INCREASE THE DEPTH OF THE WEARING COURSE ON THE BRIDGE AND THE APPROACH SO THAT THE DEAD LOAD ON THE BRIDGE IS NOT INCREASED.

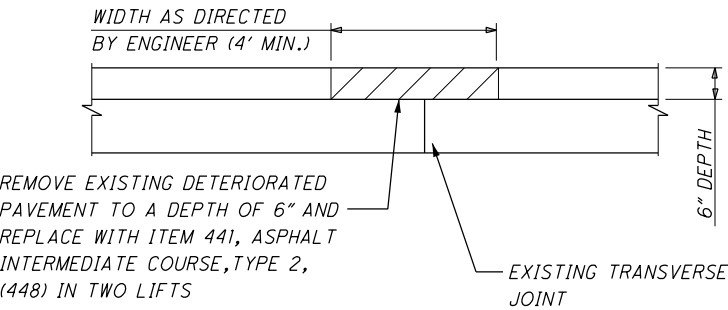
PLANING OF THE BRIDGE DECKS AND APPROACH SLABS SHALL BE FULL WIDTH OF BRIDGE AND APPROACH SLABS AT THE UNIFORM DEPTH OF 1" AND VARIABLE ON APPROACH PAVEMENT FROM A MINIMUM OF 0" TO A MAXIMUM OF 1" IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-3.1 FOR FEATHERING AT STRUCTURE "EXCEPT THAT THE MINIMUM LENGTH OF THE "FEATHER" SHALL BE 50 FOOT PER INCH OF PROPOSED OVERLAY ON THE APPROACH PAVEMENT TO THE BRIDGE.

(1" MAX.) - PLANING FOR CURB AND GUTTER SECTIONS:

PLANING SHALL BE THE FULL WIDTH OF PAVEMENT BETWEEN CURBS OR EXPOSED CONCRETE GUTTERS. THE INTENT OF THE PLANING IS TO MILL A 1" MAX. DEPTH AT THE CENTER LINE AND AT THE FACE OF THE CURB OR EDGE OF COMBINED CURB AND GUTTER. THE MILLING OF THE CROSS SLOPE SHALL BE CONTINUOUS FROM THE CENTER LINE TO THE FACE OF THE CURB OR EDGE OF COMBINED CURB AND GUTTER. THE MILLING DEPTH SHALL BE CONTROLLED FROM THE CENTER LINE OR FACE OF THE CURB OR EDGE OF COMBINED CURB AND GUTTER TO LEVEL THE IRREGULARITIES IN THE EXISTING PAVEMENT PROFILE AND CROSS SLOPES.

CARE SHALL BE TAKEN NOT TO PULL APART OR DESTROY EXISTING CURB AND GUTTER AT EDGE OF PAVEMENT. PRE-CONSTRUCTION, THE CONTRACTOR SHALL INSPECT TO DETERMINE IF THERE IS ANY PRE-EXISTING DETERIORATION OF THE CURB AND GUTTER THAT WOULD BE FURTHER DEGRADED BY PLANING THE ADJACENT ASPHALT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING IN KIND OR BETTER, AT THE CONTRACTOR'S EXPENSE, CURB AND GUTTER DAMAGED BY THE PLANING PROCESS.

ITEM 251- PARTIAL DEPTH PAVEMENT REPAIR, (441) AS PER PLAN



PLAN INTENT IS TO REPAIR TRANSVERSE JOINTS PRIOR TO OVERLAY.

THE SMOOTHNESS OF ASPHALT REPAIRS CANNOT EXCEED 1/4" FROM THE TESTING EDGE OF A 10 FOOT STRAIGHTEDGE. THE CONTRACTOR IS REQUIRED TO PROVIDE A STRAIGHTEDGE THAT IS SATISFACTORY TO THE ENGINEER. CORRECT VARIATIONS IN EXCESS OF SURFACE TOLERANCES BY SURFACE GRINDING IN A MANNER SATISFACTORY TO THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

PAYMENT FOR ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED IN THE SQUARE YARD CONTRACT PRICE FOR ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN, UNLESS SEPERATELY ITEMIZED IN THE PLANS.

LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE FIELD ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE TO REPAIR THE EXISTING PAVEMENT AS DIRECTED BY THE ENGINEER:

ITEM 251, PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN

01/STR/PV	440 SQ. YD.
02/S<2/PV	360 SQ. YD.
TOTAL	800 SQ. YD.

EXTRA AREAS

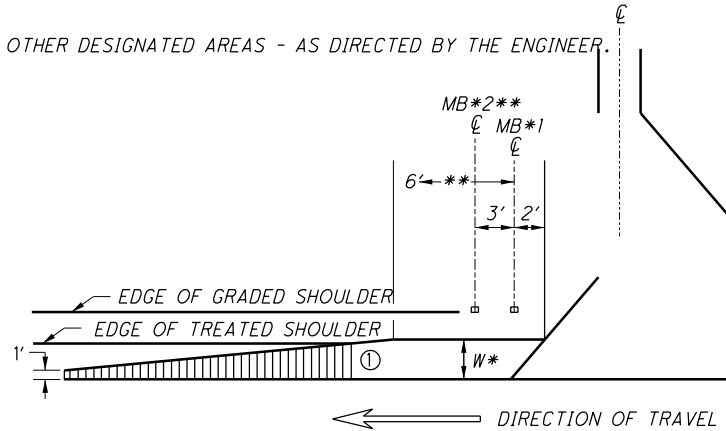
QUANTITIES FOR EXTRA AREAS ARE SHOWN ON SHEET 11. THESE AREAS INCLUDE THE FOLLOWING:

DRIVEWAYS - AVERAGE OF 3 FEET OFFSET FROM THE EDGE OF PAVEMENT, MAXIMUM TO BE DETERMINED BY THE ENGINEER TO PROVIDE ADEQUATE TRANSITION FROM THE DRIVE TO THE PROPOSED ALIGNMENT.

MAILBOX APPROACHES - MINIMUM OF 3 FEET FROM THE EDGE OF TRAVELED WAY OR AS DIRECTED BY THE ENGINEER.

CURVE WIDENING - AS DIRECTED BY THE ENGINEER.

OTHER DESIGNATED AREAS - AS DIRECTED BY THE ENGINEER.



① END MAILBOX TURNOUT AT EDGE OF TREATED SHOULDER OR 1' WHICH EVER IS GREATER.

* WHERE POSTS ARE BEHIND GUARDRAIL, TURNOUT SHALL EXTEND TO FACE OF GUARDRAIL. WHERE NO GUARDRAIL IS REQUIRED, TURNOUT WIDTH SHALL BE 2' MINIMUM.

** ADD 3' FOR EACH ADDITIONAL MAILBOX.

ITEM 254- PATCHING PLANED SURFACE, AS PER PLAN

THIS ITEM SHALL BE IN ACCORDANCE WITH SECTION 254 OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

ESTIMATED QUANTITIES HAVE BEEN PROVIDED FOR THE FOLLOWING WORK:

ITEM 254 PATCHING PLANED SURFACE AS PER PLAN

01/STR/PV	1,977 SQ. YD.
02/S<2/PV	892 SQ. YD.
TOTAL	2,869 SQ. YD.

RPM

IN ADDITION TO CMS 621.03, RPMs SHALL NOT BE INSTALLED ON BRIDGES OR APPROACH SLABS THAT HAVE A CONCRETE SURFACE. INSTALL RPMs IN ASPHALT CONCRETE BEFORE AND AFTER THE SUPERSTRUCTURE. RPM'S LOCATED IN EXISTING CONCRETE BRIDGE DECKS OR APPROACH SLABS SHALL BE LEFT IN PLACE.

INSTALL NEW RPMs IN ACCORDANCE WITH ODOT STANDARD DRAWINGS TC-65.10 AND TC-65.11.

DISPOSAL OF ASPHALT GRINDINGS

ASPHALT GRINDINGS FROM THIS PROJECT ARE TO BECOME THE PROPERTY OF THE CONTRACTOR.

CALCULATED
CAJ
CHECKED
DKB

GENERAL NOTES

ROS-50-11.27

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SAFETY EDGE PLAN NOTE

SAFETY EDGES ARE REQUIRED AT THE OUTSIDE EDGES OF THE PAVED ROADWAY (EDGE OF TRAVEL LANE OR EDGE OF PAVED SHOULDER).

CONSTRUCT THE SAFETY EDGE THE FULL ASPHALT CONCRETE OVERLAY THICKNESS OR 2.5" (63MM) WHICHEVER IS GREATER, NOT TO EXCEED THE MAXIMUM SAFETY EDGE THICKNESS OF 6" (150MM). CONSTRUCT A NEAR-VERTICAL FACE BELOW THE SAFETY EDGE FOR THICKNESS GREATER THAN 6" (150 MM).

BLADE AND SHAPE EXISTING SHOULDER MATERIAL TO FORM A UNIFORM SURFACE UNDER THE SAFETY EDGE PRIOR TO PLACEMENT OF THE ASPHALT CONCRETE OVERLAY.

IN ADDITION TO THE REQUIREMENTS OF 401.12, ATTACH A DEVICE TO THE SCREED OF THE PAVER THE 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.

THE SAFETY EDGE IS NOT TO BE USED WITH CURBED SECTIONS OR WITH PAVING UNDER GUARDRAIL.

USE THE TRANSTECH SHOULDER WEDGE MAKER, THE CARLSON SAFETY EDGE END GATE, THE ADVANT-EDGER, THE TROXLER SAFETSLOPE 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 18425 50TH AVENUE EAST TACOMA, WA 98446 253-875-8000	TROXLER ELECTRONIC 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 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 (200 TO 300 mm) AWAY FROM TAPERED EDGE. DO NOT ROLL THE TAPER.

ESTIMATED QUANTITIES HAVE BEEN PROVIDED FOR THE FOLLOWING WORK:

ITEM 407, TACK COAT

01/STR/PV	75	GAL
02/S<2/PV	33	GAL
TOTAL	108	GAL

ITEM 424, FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B
SEE SHEET 16 FOR SAFETY EDGE DETAIL.

01/STR/PV	80	CU YD
02/S<2/PV	35	CU YD
TOTAL	115	CU YD

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.

ITEM 209 PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN, CALCULATIONS ON SHEET 11.

REMOVED OR EXCAVATED MATERIALS SHALL BE RECYCLED OR DISPOSED OF ACCORDING TO CMS 105.16 AND 105.17. COST FOR REMOVED OR EXCAVATED MATERIALS TO BE INCLUDED IN ITEM 209 PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM , CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INLCUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

SEEDING AND MULCHING

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

659, SEEDING AND MULCHING 1,643 SQ. YD.

659, REPAIR SEEDING AND MULCHING 83 SQ. YD

659, COMMERCIAL FERTILIZER 0.22 TON

659, LIME 0.34 ACRES

659, WATER 8.9 M. GAL.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL AROUND THE PROPOSED SIDEWALK. FOR ESTIMATING PURPOSES, A 4 FOOT WIDE AREA ON EACH SIDE OF THE PROPOSED SIDE WALK WAS FIGURED. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

ITEM 609, CURB, TYPE 4-C, AS PER PLAN

ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER IN FIELD PREPARATION OF DETERIORATED CURB PER THE REQUIREMENTS OF CMS 609. REPAIR IN KIND IS INTENDED.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 609, CURB, TYPE 4-C, AS PER PLAN 100 FEET

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ITEM 614. MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT AND THE COMPLETED PAVEMENT.

AN EXCEPTION SHALL BE MADE FOR THE STRUCTURE ROS-50-1926 (SFN 7103301). TRAFFIC SHALL BE MAINTAINED ALL TIMES, EXCEPT FOR ONE WEEKEND WHEN TRAFFIC SHALL BE DETOURED AS SHOWN ON SHEET 7-8. THE ROADWAY SHALL NOT BE CLOSED TO TRAFFIC UNTIL 8:00 PM FRIDAY NIGHT AND SHALL BE OPEN TO TRAFFIC MONDAY AT 6:00 AM. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$2,500 FOR EVERY 15 MINUTES THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIC LIMIT.

FAILURE TO ACHIVE THE STRENGTH AND OPENING BY 6:00 A.M. MONDAY WILL RESULT IN A DISINCENTIVE IN THE AMOUNT OF \$1,000 FOR EVERY 15 MINUTES THE LANES REMAINS CLOSED TO TRAFFIC BEYOND THE TIME SPECIFIED.

DUE TO LOCAL ACTIVITIES, EVENTS AND HOLIDAYS THE WEEKEND CLOSURE WILL BE REQUIRED TO BE PREFORMED ON THE WEEKEND OF JULY 14 OR JULY 22.

BEFORE THE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAME(S) AND TELEPHONE NUMBER(S) OF A PERSON OR PERSONS WHO CAN BE CONTACTED TWENTY-FOUR (24) HOURS PER DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ALL INTERESTED POLICE AGENCIES. THIS PERSON OR PERSONS SHALL BE RESPONSIBLE FOR PLACING OR REPLACING NECESSARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

MEMORIAL DAY	FOURTH OF JULY
LABOR DAY	THANKSGIVING
SPECIAL LOCAL EVENTS	CHRISTMAS DAY

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 HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	6:00AM WEDNESDAY THROUGH 6:00AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$50 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

THE CONTRACTOR SHALL ARRANGE FOR ALL MAINTENANCE OF TRAFFIC OPERATIONS SUCH THAT THERE WILL BE NO OBSTRUCTIONS TO THE CONTINUOUS FLOW OF TRAFFIC. ALL INTERSECTIONS AND DRIVEWAYS SHALL BE OPEN TO TRAFFIC AT ALL TIMES UNLESS OTHERWISE SHOWN IN THE PLAN.

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.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND OF THE TYPE AND LOCATION AS SHOWN IN THE PLANS.

DURING THE WEEKEND CLOSURE OF ROS-50-1926 (SFN 7103301) FLAGGERS PER STANDARD DRAWING MT-97.10 WILL BE REQUIRED FOR THE ENTIRE DURATION OF THE CLOSURE AT THE STRUCTURE ON MAPLE GROOVE ROAD. FLAGGERS WILL AID IN CONTROLLING TRAFFIC ACROSS THE STRUCTURE DUE TO THE EXISTING WIDTH OF THE STRUCTURE.

THE CONTRACTOR WILL ADVISE THE DISTRICT PUBLIC INFORMATION OFFICER AT (740) 774-8834, OR FAX (740) 773-2710 FOURTEEN (14) DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. THE PROJECT ENGINEER WILL PROVIDE ASSISTANCE/ CLARIFICATION FOR ANY QUESTIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHANGING THE SIGNAL TIMING AT THE INTERSECTION OF USR 50 AND VETERANS PARKWAY. TIMING SHALL BE REVISED AT THE TIME OF THE ROADWAY CLOSURE FOR BRIDGE NO. ROS-50-1926 AND BE RESET TO ITS ORIGINAL TIMING PRIOR TO THE ROADWAY BEING OPENED TO TRAFFIC.

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.

WORK ZONE MARKINGS AND SIGNS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF CMS 614.04 AND 614.11.

ITEM 614, WORK ZONE MARKING SIGN	01/STR/PV 18 EACH
	02/S<2/PV 6
	24 EACH
ITEM 614, WORK ZONE CENTER LINE, CLASS III, 642 PAINT	01/STR/PV 5.58 MILE
	02/S<2/PV 2.46 MILE
	8.04 MILE

ITEM 614 - WORK ZONE EDGE LINE, CLASS III, 642 PAINT

	01/STR/PV 11.16 MILE
	02/S<2/PV 5.20 MILE
	16.36 MILE

DESIGNATED LOCAL DETOUR

IN ADDITION TO THE OFFICIAL, SIGNED DETOUR ROUTE, A LOCAL ROUTE HAS BEEN DETERMINED TO BE THE SECONDARY, UNSIGNED DETOUR ROUTE OR "DESIGNATED LOCAL DETOUR ROUTE." THIS ROUTE IS SHOWN ON SHEET 8 DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DETERMINED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DETERMINED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE DESIGNATED LOCAL DETOUR ROUTE.

	04/S<2BR
ITEM 253, PAVEMENT REPAIR	50 SQ. YD.
ITEM 441, ASPHALT CONCRETE SURFACE COURSE,	
TYPE 1, (448) PG 64-22	25 CU. YD.
ITEM 407, TACK COAT	85 GAL.
ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	50 CU. YD.

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 PER- MITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 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 ENFORCE- MENT 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).

IN ADDITION TO THE REQUIREMENT OF C&MS 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) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED 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 FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

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 ZONES.

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.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. 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 PLACE- MENT, 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 RE- TURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINT- ENANCE 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.

	04/S<2/BR
ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	150 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.

AT LEAST ONE OFFICER SHALL BE REQUIRED AT THE INTERSECTION OF VETERANS PARKWAY AND ANDERSON STATION FOR THE DURATION OF THE ROADWAY CLOSURE FOR BRIDGE NO. ROS-50-1926.

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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, 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.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE LISTED BELOW.

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 PRE-CONSTRUCTION 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.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN CONTINUED

(THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.)

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 28 DAYS

INTERSECTION OF USR 50 AND SR 41

INTERSECTION OF USR 50 AND SR 28

NORTHBOUND/WESTBOUND LANDS USR 23/35 BEFORE EXIT RAMP OF USR 50 MAIN ST.

INTERSECTION OF USR 50 WESTERN AVE. AND SR 104

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 1 M. GAL

ITEM 614 - BUSINESS ENTRANCE (M4-H15) SIGN, AS PER PLAN

THE BUSINESS ENTRANCE (M4-H15) SIGN SHOULD BE PROVIDED AT EACH TEMPORARILY RELOCATED COMMERCIAL DRIVEWAY FOR WHICH THE RELOCATION IS NOT OBVIOUS TO THE MOTORIST. THE PROJECT ENGINEER SHALL DETERMINE WHETHER OR NOT THE DRIVEWAY RELOCATION IS, OR IS NOT, OBVIOUS AND WHETHER OR NOT A SIGN SHOULD BE PROVIDED. ONLY ONE SIGN PER BUSINESS SHALL BE PERMITTED. THE SIGN SHALL BE 36 INCH X 48 INCH IN SIZE WITH TYPE G OR TYPE H ORANGE RETRO-REFLECTIVE SHEETING. THE SIGN LEGEND SHALL BE PLACED ON BOTH SIDES OF THE SIGN (BACK TO BACK). THE SIGN SHALL HAVE THE STANDARD M4-H15 LEGEND WITH THE WORD "BUSINESS" ON THE TOP LINE, EXCEPT UNDER UNUSUAL CIRCUMSTANCES WHERE IT MAY NOT BE INTUITIVE THAT A DRIVEWAY SERVES A SPECIFIC BUSINESS. IN SUCH UNUSUAL CASES, THE ACTUAL BUSINESS NAME MAY BE SUBSTITUTED FOR THE WORD "BUSINESS".

THE SIGN SHALL BE MOUNTED ON TWO NO. 3 POSTS OR ON TEMPORARY POSTS IN ACCORDANCE WITH SCD MT-105.10 AND IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. THE SIGN SHALL BE CLEARLY VISIBLE AND SHALL CLEARLY IDENTIFY THE LOCATION OF THE DRIVEWAY. THE SIGN SHOULD BE POSITIONED AT 90 DEGREES TO THE DIRECTION(S) OF TRAFFIC. THE SIGN MAY NEED TO BE MOVED FOR EACH PHASE OF THE MAINTENANCE OF TRAFFIC OPERATIONS.

PAYMENT FOR ALL COSTS ASSOCIATED WITH MANUFACTURING, MOUNTING, RELOCATING, AND REMOVING THE SIGN, INCLUDING ALL LABOR, MATERIALS AND EQUIPMENT SHALL BE INCLUDED IN THE CONTRACT PRICE PER EACH FOR ITEM 614-BUSINESS ENTRANCE SIGN.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS ITEM.

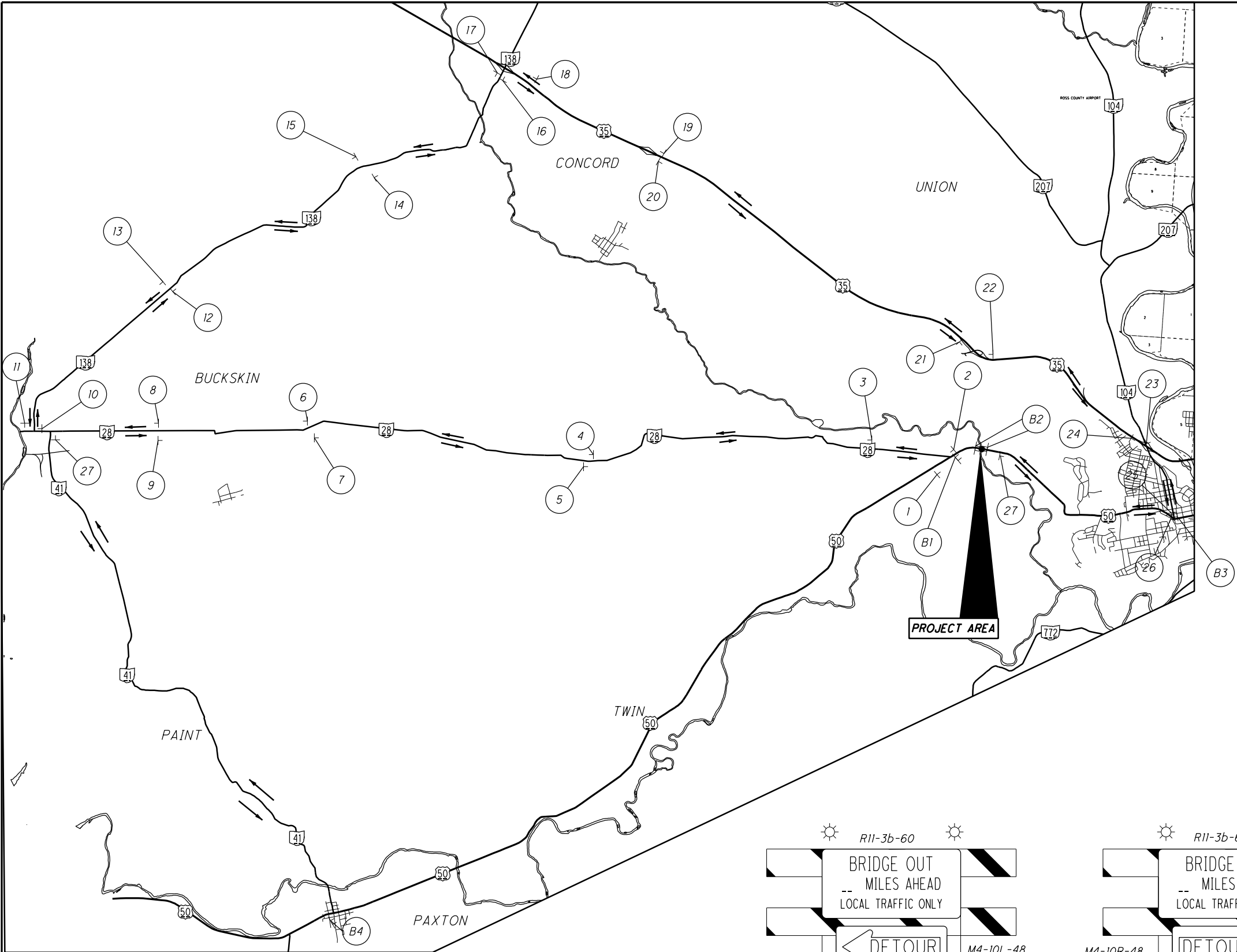
ITEM 614 BUSINESS ENTRANCE SIGN, AS PER PLAN 2 EACH

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 PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

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A	B	C
DETOUR	DETOUR	DETOUR
M4-8-30 EAST/WEST	M4-8-30 EAST/WEST	M4-8-30 EAST/WEST
MI-4-30-2	MI-4-30-2	MI-4-30-2
M6-3-21	M5-1-21	M5-1-21

LOCATIONS

- A - 3-9, 12-15, 17, 19-22
B - 2, 10, 16, 24, 25
C - 1, 11, 18, 23, 24, 26, 27

WEST	EAST
M3-4-30	M3-2-30

W20-3-48	W20-3-48	W20-1-48

	R11-3b-60	
BRIDGE OUT -- MILES AHEAD LOCAL TRAFFIC ONLY		
M4-10L-48		

	R11-3b-60	
BRIDGE OUT -- MILES AHEAD LOCAL TRAFFIC ONLY		
M4-10R-48		

	R11-2-48	
ROAD CLOSED		

LOCATIONS

B1, B4

LOCATIONS

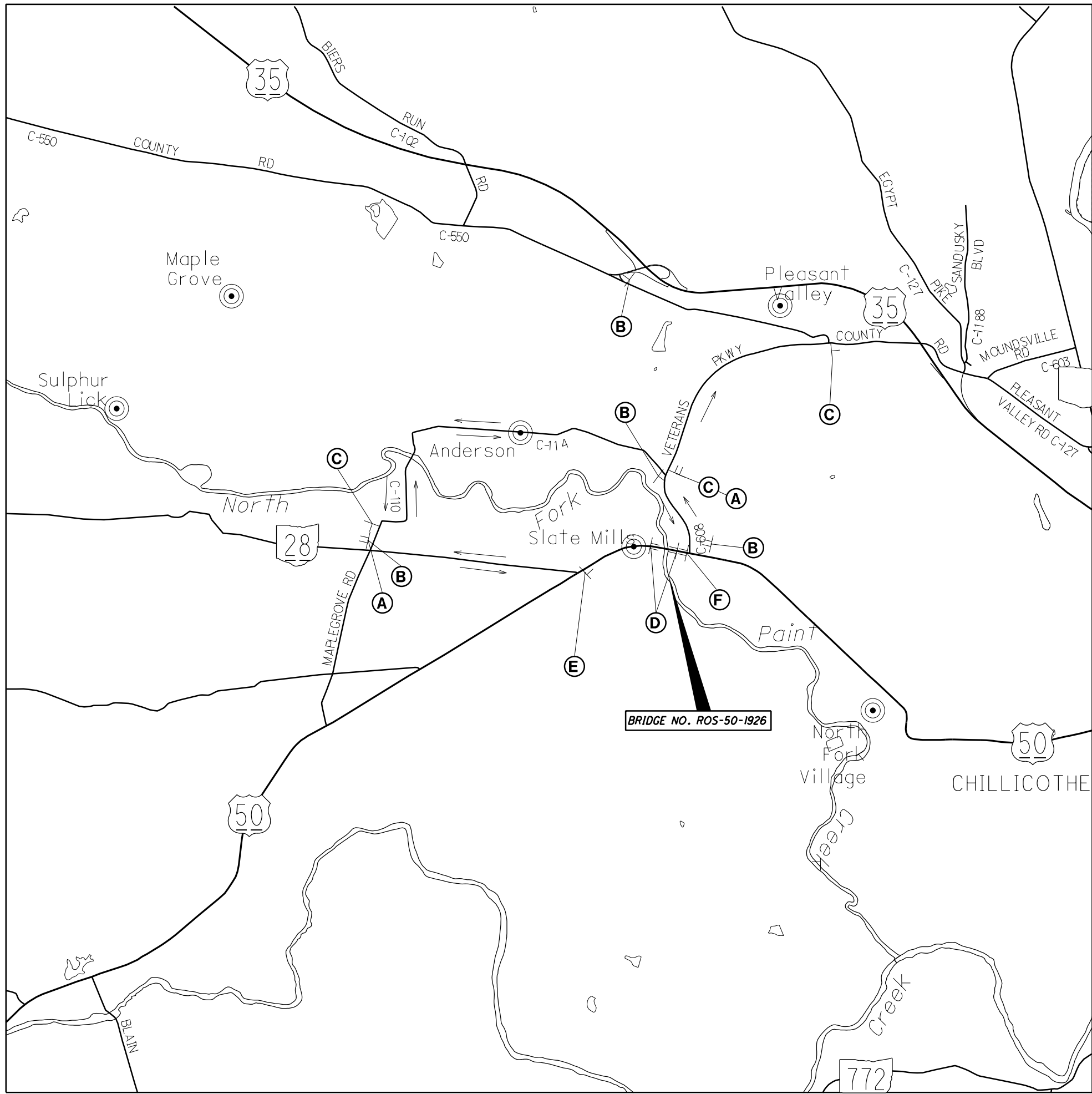
B3,

LOCATIONS

B-2 EAST & WEST SIDE OF BRIDGE
THESE SIGNS PLACED AS A GROUP

TYPE III BARRICADE W / TYPE WARNING LIGHTS

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A	B	C
TRUCK		
M4-4-30 DETOUR	DETOUR	DETOUR
M4-8-30 EAST/WEST	M4-8-30 EAST/WEST	M4-8-30 EAST/WEST
50	50	50
M1-4-30-2 ↑	M1-4-30-2 ↗	M1-4-30-2 ↖
M6-3-21	M5-1-21	M5-1-21

WEST M3-4-30	EAST M3-2-30	
ROAD CLOSED 1000 FT W20-3-48	ROAD CLOSED 500 FT W20-3-48	ROAD WORK AHEAD W20-1-48

R11-2-48

ROAD CLOSED

E	F
R11-3b-60	R11-3b-60
BRIDGE OUT -- MILES AHEAD LOCAL TRAFFIC ONLY	BRIDGE OUT -- MILES AHEAD LOCAL TRAFFIC ONLY
DETOUR ←	DETOUR →
M4-10L-48	M4-10R-48

TYPE III BARRICADE W/ TYPE WARNING LIGHTS

SHEET NUM.										PART.				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED CAJ	CHECKED	DKB
3	4	5	6	11	12	15	17	20	21	01/STR/PV	02/S<2/PV	03/STR/BR	04/S<2/BR									
																		ROADWAY				
										LS				201	11000	LS		CLEARING AND GRUBBING	4			
						7,392				7,392				202	30000	7,392	SF	WALK REMOVED				
						47				47				202	32000	47	FT	CURB REMOVED				
				15						10	5			209	72051	15	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	4			
						9,240				9,240				608	12000	9,240	SF	5" CONCRETE WALK				
						341				341				608	52001	341	SF	CURB RAMP, AS PER PLAN	12,13			
	100									100				609	24511	100	FT	CURB, TYPE 4-C, AS PER PLAN	4			
																		EROSION CONTROL				
	1,643									1,643				659	10000	1,643	SY	SEEDING AND MULCHING				
	83									83				659	14000	83	SY	REPAIR SEEDING AND MULCHING				
	0.22									0.22				659	20000	0.22	TON	COMMERCIAL FERTILIZER				
	0.34									0.34				659	31000	0.34	ACRE	LIME				
	8.9									8.9				659	35000	8.9	MGAL	WATER				
										LS	LS	LS	LS	832	30000	1,500	EACH	EROSION CONTROL				
					2,035					1,060	975			202	23500	2,035	SY	WEARING COURSE REMOVED				
800										440	360			251	01000	800	SY	PARTIAL DEPTH PAVEMENT REPAIR (441)				
				8,711				173		8,711	173			254	01001	8,884	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1")	3			
2,869										1,977	892			254	01601	2,869	SY	PATCHING PLANED SURFACE, AS PER PLAN (3")	3			
	108			12,032	93			15		8,356	3,892			407	10000	12,248	GAL	TACK COAT				
	115			3,983	33			5		2,838	1,298			424	12000	4,136	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B				
				978						665	313			617	10100	978	CY	COMPACTED AGGREGATE				
				10						7	3			617	25000	10	MGAL	WATER				
																		TRAFFIC CONTROL				
							531			369	162			621	00100	531	EACH	RPM				
							531			369	162			621	54000	531	EACH	RAISED PAVEMENT MARKER REMOVED				
							16.08			11.16	4.92			644	00104	16.08	MILE	EDGE LINE, 6"				
							8.04			5.58	2.46			644	00300	8.04	MILE	CENTER LINE				
																		STRUCTURE REPAIR (SFN-7103182)				
									627	627				254	01001	627	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1")	3			
									53	53				407	10000	53	GAL	TACK COAT				
									17	17				424	12000	17	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B (1")				
									40			40		846	00110	40	CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM				
																		STRUCTURE REPAIR (SFN-7103247)				
									813	813				254	01001	813	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1")	3			
									69	69				407	10000	69	GAL	TACK COAT				
									23	23				424	12000	23	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B (1")				
									35			35		846	00110	35	CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM				
																		STRUCTURE REPAIR (SFN-7103271)				
									724	724				254	01001	724	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1")	3			
									62	62				407	10000	62	GAL	TACK COAT				
									20	20				424	12000	20	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B (1")				
									35			35		846	00110	35	CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM				

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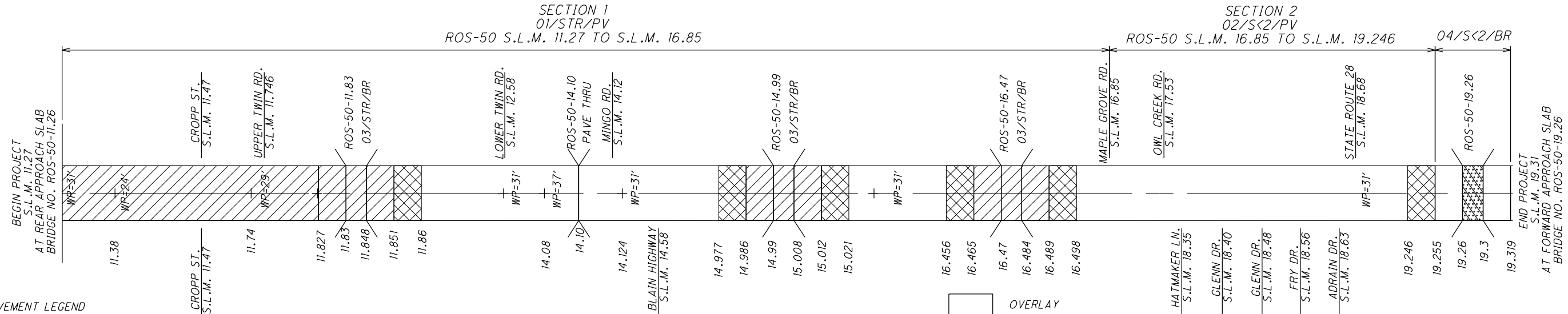
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* EXISTING PAVEMENT LEGEND

I = 409 SEAL COAT ON PENETRATION MACADAM OR 303 WATER BOUND MACADAM
N = PLAIN CONCRETE
L = PLANT MIX BITUMINUS CONCRETE 301, 302, 806, OR PENETRATION MACADAM
P = REINFORCED CONCRETE
T = BRICK - RIGID
+ = PAVEMENT WIDTH CHANGE

SECTION	ROUTE	STATION TO STATION		TYPICAL	LENGTH		AVERAGE WIDTH	SURFACE AREA	EXISTING PAVEMENT TYPE	209	254	407	424	617								
										PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	PAVEMENT PLAINING ASPHALT CONCRETE,AS PER PLAN	TACK COAT * (0.085 GAL/SO YD)	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B		COMPACTED AGGREGATE							WATER
					MILE	FT.	FT.	SO. YD.														
1	50	11.27	11.38	1	0.11	580.8	33.5	2161.9	I	0.22	2161.87	183.76	60.05		14.34	0.14						
		11.38	11.74	3	0.36	1900.8	24	5068.8	L/T	0.00	5068.80	430.85	140.80									
		11.74	11.827	2	0.087	459.36	29	1480.2	L	0.17	1480.16	111.01	41.12		11.34	0.11						
		ROS-50-1183	BRIDGE LIMITS SEE SHEET 19																			
		11.86	12.58	2	0.72	3801.6	29	12249.6	I	1.44		1041.22	340.27		93.89	0.94						
		12.58	14.08	2	1.5	7920	31	27280.0	P	3.00		2318.80	757.78		195.59	1.96						
		14.08	14.1	2	0.02	105.6	37	434.1	P	0.04		36.90	12.06		2.61	0.03						
		ROS-50-1410	BRIDGE LIMITS-PAVE THUR																			
		14.1	14.124	2	0.024	126.72	37	521.0	P	0.05		44.28	14.47		3.13	0.03						
		14.124	14.977	2	0.853	4503.84	31	15513.2	P	1.71		1318.62	430.93		111.23	1.11						
		ROS-50-1499	BRIDGE LIMITS SEE SHEET 19																			
		15.021	16.456	2	1.435	7576.8	31	26097.9	P	2.87		2218.32	724.95		187.09	1.87						
		ROS-50-1647	BRIDGE LIMITS SEE SHEET 19																			
		16.498	16.85	2	0.352	1858.56	31	6401.7	P/I	0.70		544.15	177.83		45.90	0.46						
		EXTRA AREAS DRIVES - 98 X 15 (SO YD) =						1470.0				124.95	40.83									
		EXTRA AREAS MAILBOXES - 35 X 5 (SO YD) =						175.0				14.88	4.86									
		SUB TOTAL FOR SPLIT 01/STR/PV			5.461			98853.3		10	8711	8248	2746		665	7						
2	50	16.85	19.246	2	2.396	12650.88	31	43575.3	N/L	4.79	0.00	3703.90	1210.43		312.43	3.12						
		ROS-50-1926	BRIDGE LIMITS SEE SHEET 18																			
		EXTRA AREAS DRIVES - 56 X 15 (SO YD) =						840.0				71.40	23.33									
		EXTRA AREAS MAILBOXES - 20 X 5 (SO YD) =						100.0				8.50	2.78									
		SUB TOTAL FOR SPLIT 02/STR/PV			2.396			44415.3		5	0	3784	1237		313	3						
TOTALS CARRIED TO THE GENERAL SUMMARY											15	8711	12032	3983		978	10					



PAVEMENT CALCULATIONS

ROS-50-11.27

1121

CALCULATED CAJ CHECKED DKB

$$X \text{ SQ.YD.} + Y \text{ SQ.YD.} = \text{PAVEMENT AREA}$$


12
21

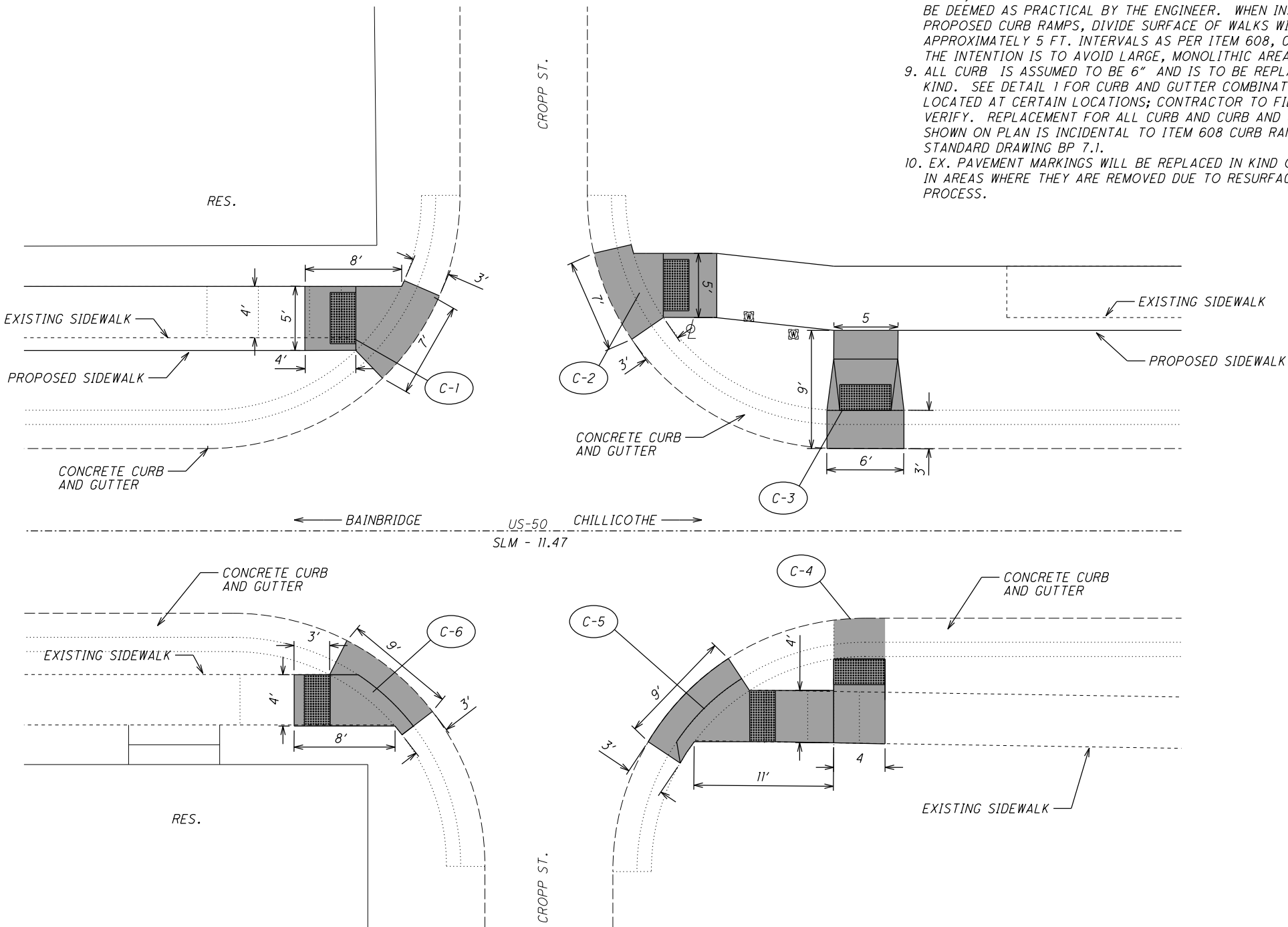
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NOTES

1. * SEE STANDARD DRAWING BP 7.1 FOR ACCEPTABLE GRADES. MIN. GRADE ALLOWED IS 0.5%.
2. SAWCUT AT JOINTS (TYP.) UNLESS OTHERWISE INDICATED.
3. SAWCUTTING SHALL BE INCLUDED IN COST FOR ITEM 202, WALK REMOVED AND CURB REMOVED.
4. INSTALL ALL CURB RAMPS BEFORE APPLYING PROPOSED ASPHALT TO ROADWAY.
5. RAMPS SHALL MEET FINISHED PROPOSED ROADWAY GRADE. AS PER STANDARD DRAWING BP 7.1 VERTICAL CHANGE IN LEVEL EXCEEDING 1/8" BETWEEN 1. THE PAVEMENT AND GUTTER AND 2. GUTTER AND RAMP ARE NOT ALLOWED.
6. DESIGNS, QUANTITIES, AND DIMENSIONS ARE FOR ESTIMATE ONLY. DESIGNS PROVIDED ON THIS SHEET ARE NOT TO SUPERCEDE STANDARD DRAWING BP 7.1. CONTRACTOR TO FIELD VERIFY ESTIMATES.
7. CONSTRUCTION OF RAMPS MAY BE FIELD MODIFIED PER BP 7.1 WITH ENGINEER'S APPROVAL.
8. SOME EXISTING STREET CORNERS HAVE BEEN PREVIOUSLY FORMED AS MONOLITHIC SLABS AND THEREFORE EXHIBIT CRACKED AREAS. WALK REMOVAL HAS BEEN ESTIMATED WITH SAWCUTTING TO BE PERFORMED AT JOINTS OF MONOLITHIC AREAS, UNLESS SAWCUTTING THROUGH THE MONOLITHIC AREAS BE DEEMED AS PRACTICAL BY THE ENGINEER. WHEN INSTALLING PROPOSED CURB RAMPS, DIVIDE SURFACE OF WALKS WITH APPROXIMATELY 5 FT. INTERVALS AS PER ITEM 608, CMS. THE INTENTION IS TO AVOID LARGE, MONOLITHIC AREAS.
9. ALL CURB IS ASSUMED TO BE 6" AND IS TO BE REPLACED IN KIND. SEE DETAIL 1 FOR CURB AND GUTTER COMBINATION LOCATED AT CERTAIN LOCATIONS; CONTRACTOR TO FIELD VERIFY. REPLACEMENT FOR ALL CURB AND CURB AND GUTTER SHOWN ON PLAN IS INCIDENTAL TO ITEM 608 CURB RAMP PER STANDARD DRAWING BP 7.1.
10. EX. PAVEMENT MARKINGS WILL BE REPLACED IN KIND ONLY IN AREAS WHERE THEY ARE REMOVED DUE TO RESURFACING PROCESS.

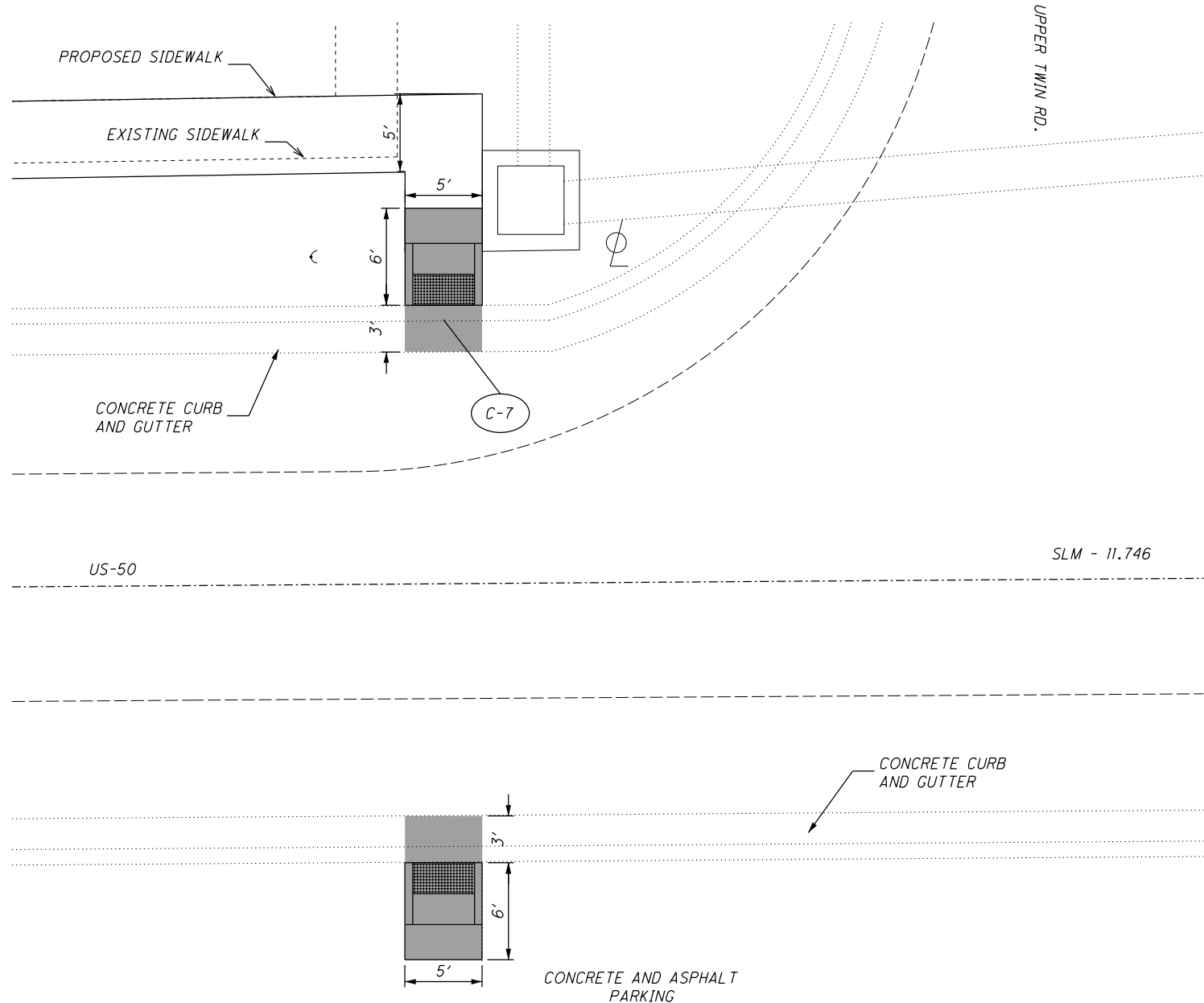
11. BUTT JOINTS SHALL BE PROVIDED BETWEEN COMBINED CURB AND GUTTER AND NEW OR EXISTING RIGID PAVEMENTS, WITH TIE BARS OR HOOK BOLTS PROVIDED AT INTERVALS OF 5'. SEE SCD BP-2.1 FOR DETAILS OF TIE BARS AND HOOK BOLTS.

IF THE COMBINED CURB AND GUTTER ADJOINS A NEW RIGID BASE OR AN EXISTING RIGID BASE OR PAVEMENT THAT IS TO BE SURFACED WITH BITUMINOUS MATERIAL, A BUTT JOINT SHALL ALSO BE PROVIDED. HOWEVER, TIE BARS OR HOOK BOLTS SHALL BE OMITTED WHEN THE VERTICAL OVERLAP ("V" IN DETAIL BELOW) BETWEEN THE CURB AND GUTTER AND RIGID PAVEMENT IS LESS THAN 7"



LEGEND	
EX. CW	EXISTING CROSSWALK
PROP. CW	PROPOSED CROSSWALK
C-#	PROPOSED CURB RAMP INFORMATION ID NOS.
⌀	EX. POLE
⌀P	EX. POLE
⊥	EX. SIGN POST
⊥	PROPOSED SIGN POST
∇	EX. VEGETATION
	EX. STORM INLET
⋈	EX. HYDRANT
±W	EX. WATER LINE MARKER
⊠	EX. WATER GATE VALVE
⊠	EX. TRAFFIC SIGNAL BOX
⊠	EX. ELECTRIC VAULT
⊠	EX. UNKNOWN MANHOLE DO NOT DISTURB
⊠	EX. STORM MANHOLE
⊠	EX. PIPE
⊠	EX. UNKNOWN UTILITY
⊠	EXISTING CATCH BASIN
⊠	GUARD RAIL
⊠	INLET
S-#	PROPOSED SIGN
I-#	INLET ADJUSTED TO GRADE
⊠	PEDESTRIAL PEDISTAL

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NOTES

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LEGEND

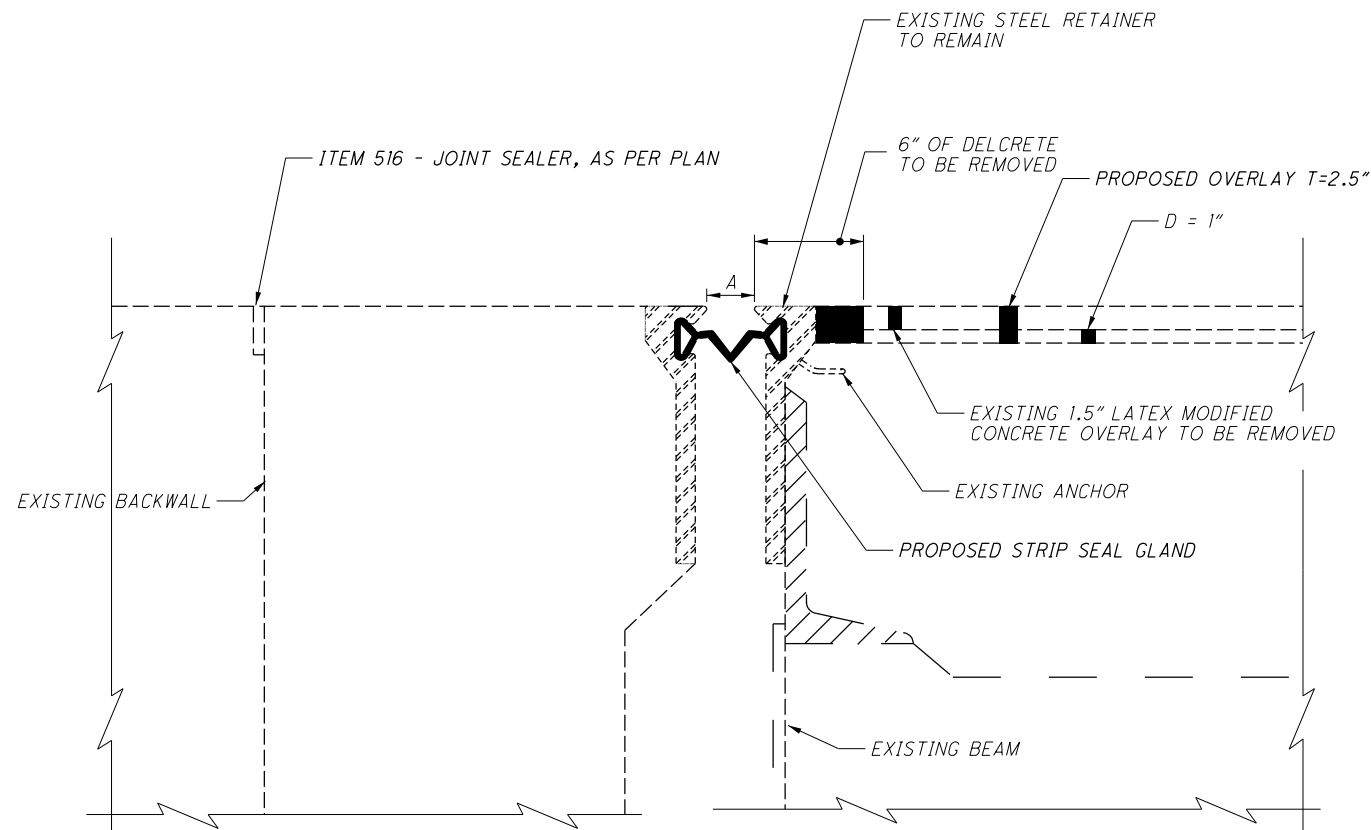
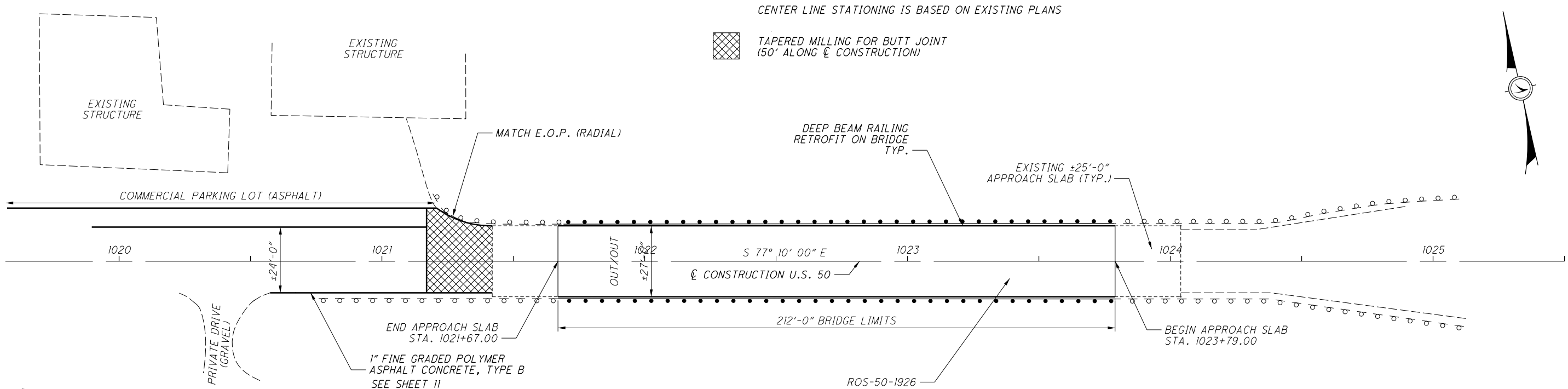
EX. CW	EXISTING CROSSWALK
PROP. CW	PROPOSED CROSSWALK
C-#	PROPOSED CURB RAMP INFORMATION ID NOS.
Ø	EX. POLE
ØP	EX. POLE
⊥	EX. SIGN POST
⊥	PROPOSED SIGN POST
↓	EX. VEGETATION
	EX. STORM INLET
⋈	EX. HYDRANT
±W	EX. WATER LINE MARKER
⊠	EX. WATER GATE VALVE
⊠	EX. TRAFFIC SIGNAL BOX
⊠	EX. ELECTRIC VAULT
⊠	EX. UNKNOWN MANHOLE DO NOT DISTURB
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○	EX. PIPE
⊠	EX. UNKNOWN UTILITY
○	EXISTING CATCH BASIN
○	GUARD RAIL INLET
S-#	PROPOSED SIGN
I-#	INLET ADJUSTED TO GRADE
⊠	PEDESTRIAL PEDISTAL

CURB RAMP DETAILS

ROS-50-11.27

CALCULATED	
CAJ	
CHECKED	
DKB	

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FIRST GUARDRAIL POST OFF BRIDGE (EXISTING)	
LEFT REAR	STA. 1021+63.67
RIGHT REAR	STA. 1021+63.17
LEFT FORWARD	STA. 1023+82.33
RIGHT FORWARD	STA. 1023+82.00

DIMENSION "A" AT VARIOUS TEMPERATURES							
TEMPERATURE (°F)	90°	80°	70°	60°	50°	40°	30°
REAR ABUTMENT	1.50"	1.67"	1.83"	2.00"	2.17"	2.33"	2.50"
FORWARD ABUTMENT	1.50"	1.67"	1.83"	2.00"	2.17"	2.33"	2.50"

PROPOSED EXPANSION JOINT DETAILS

EXISTING STRUCTURE

TYPE: THREE SPAN STEEL BEAM AND CONCRETE DECK
SUPERSTRUCTURE ON REINFORCED SUBSTRUCTURE

SPANS: ± 64'-0" / 80'-0" / 64'-0"

ROADWAY: ±27'-0" OUT TO OUT

LOADING: HS-15-32

SKEW: 0°0'0"

APPROACH SLABS: AS-1-82 (25'-0" LONG)

ALIGNMENT: TANGENT

CROWN: 0.016 FT/FT NORMAL

STRUCTURAL FILE NUMBER: 7103301

DATE BUILT: 1932

DISPOSITION: REHABILITATION

COORDINATES: LATITUDE N 39°21'02"

LONGITUDE W 83°03'15"

PROPOSED WORK UNDER CLOSURE

- REMOVE EXISTING 1.5" CONCRETE OVERLAY
- HYDRO DEMO EXISTING DECK (D=1")
- PLACE DRIP STRIP PER STD. BDG. DWG. DBR-3-11
- OVERLAY EXISTING DECK WITH RAPID SET LATEX MODIFIED CONCRETE (T=2.5")
- PLACE PERMANENT TRAFFIC CONTROL

PROPOSED WORK UNDER PART WIDTH

- DEEP BEAM RETRO FIT PER STD. BRIDGE DWG DBR-3-11
- REPLACE STRIP SEAL
- PLACE ITEM 516, JOINT SEALER, AS PER PLAN

DESIGN AGENCY
STATE OF OHIO
DEPT. OF TRANSPORTATION

DATE
02/14/17
REVIEWED
MRH
STRUCTURE FILE NUMBER
9103301

DRAWN
CAJ
REVISED
CAJ

DESIGNED
ZBS
CHECKED
MRH

ROSS
STA. 1021+67.00
STA. 1023+79.00

SITE PLAN

BRIDGE NO. ROS-50-1926
OVER NORTH FORK CREEK

ROS-50+11.27
PID No. 100462

1 / 3

18
21

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

DBR-3-11 DATED/REVISED 7/15/2011

DS-1-92 DATED/REVISED 7/18/2003

EXJ-4-87 DATED/REVISED 7/16/2002

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

800 DATED 4/21/2017

832 DATED 1/17/2014

848 DATED 1/20/2017

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2014 INCLUDING THE ODOT BRIDGE DESIGN MANUAL.

DECK PROTECTION METHOD

LATEX MODIFIED CONCRETE OVERLAY
STEEL DRIP STRIP

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.

ITEM 516 - JOINT SEALER, AS PER PLAN

THIS ITEM SHALL CONSIST OF REMOVAL OF THE EXISTING COMPRESSION SEAL AND REPAIR OF THE JOINT BETWEEN THE APPROACH SLAB AND THE ABUTMENT BACKWALL.

AFTER CAREFUL REMOVAL OF THE EXISTING JOINT MATERIAL AND LOOSE CONCRETE, ROUTER THE JOINT EDGES TO REMOVE ANY SHARP PROTRUSIONS OR LOOSE MATERIAL. THOROUGHLY CLEAN CONCRETE OF FOREIGN MATTER, CURING COMPOUNDS, OIL, GREASE, DIRT, FREE WATER, AND LAITANCE.

INSTALL AN APPROPRIATELY SIZED BACKER ROD IN THE JOINT GAP TO ALLOW A MINIMUM OF 1" OF JOINT SEALER TO BE APPLIED ABOVE THE JOINT.

ONCE THE BACKER ROD IS IN PLACE, APPLY ITEM 705.04 JOINT SEALER AS PER CMS ITEM 516.06.

PAYMENT FOR THE WORK LISTED ABOVE SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 516 - JOINT SEALER, AS PER PLAN AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO PERFORM THE ABOVE WORK.

ITEM 516 - ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER PLAN

THIS ITEM SHALL CONSIST OF REMOVING AND REPLACING THE EXISTING NEOPREN STRIP SEAL. SANDBLAST THE EXISTING STEEL ARMOR AND EXTRUSIONS TO WHITE METAL AND THEN BLOW THE JOINT OPENING WITH OIL-FREE COMPRESSED AIR TO REMOVE LAITANCE AND DEBRIS FROM THE SANDBLASTING OPERATION. ONCE COMPLETE, PLACE A PROPOSED WATSON BOWMEN SE-300 NEOPRENE STRIP SEAL OR EQUAL NEOPRENE STRIP SEAL APROVED BY THE ENGINEER IN ACCORDANCE WITH STANDARD BRIDGE DRAWING EXJ-4-87 AND THE FOLLOWING SPECIFICATIONS:

NEOPRENE STRIP SEAL SPECIFICATIONS

MAXIMUM MOVEMENT PERPENDICULAR	MAXIMUM MOVEMENT PARALLEL	JOINT OPENING
INCHES	INCHES	INCHES
3"	PLUS/MINUS 0.5	1.25 - 4.5

PAYMENT FOR ALL EQUIPMENT, MATERIALS, AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED IN THE FOOT CONTRACT PRICE FOR ITEM 516, ELASTOMERIC STRIP SEAL WITHOUT EXTRUSIONS, AS PER PLAN, UNLESS SEPARATELY ITEMIZED IN THE PLANS.

HAND CHIPPING

IF THE CONTRACTOR CHOOSES TO NOT HYDRODEMOLITION THE EDGE OF THE DECK FOR WATER CONTAINMENT. THE REMOVAL OF THIS MATERIAL SHALL BE PAID FOR UNDER ITEM 848, SURFACE PREPARATION USING HYDRODEMOLITION. THE AREA OF HAND CHIPPING IS ASSUMED TO BE 10 PERCENT OF THE DECK AREA AND AN AREA 4" WIDE ALONG THE EXISTING STEEL EXTRUSIONS.

ITEM 848 LATEX MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2.5 THICKNESS)

ITEM 848 LATEX MODIFIED CONCRETE (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN

THESE ITEMS SHALL BE PERFORMED PER SUPPLEMENTAL SPECIFICATION "BRIDGE DECK REPAIR AND OVERLAY WITH CONCRETE USING HYDRODEMOLITION" WITH THE FOLLOWING REVISIONS:

CONSTRUCTION JOINTS WILL NOT BE PERMITTED IN THE WHEEL LINE.

IN ADDITION TO SS 848.13, CONCRETE MIX SHALL HAVE A CURE TIME OF 3 HOURS. RAPID SET LATEX MODIFIED CONCRETE.

IN ADDITION TO THE ABOVE REQUIREMENTS, THE FOLLOWING REVISIONS SHALL APPLY:

(SEE 848.18) THE REMOVAL OPERATIONS SHALL NOT BEGIN IF SUSTAINED RAINS (5 HOURS OR MORE WITH BREAKS BETWEEN SHOWERS LESS THAN 1* HOURS) ARE PREDICTED WITHIN 48 HOURS OF COMMENCEMENT.

(SEE 848.20) MECHANICAL MEANS MAY BE USED TO REMOVE THE EXISTING RIGID OVERLAY AND TOP (0.5)* INCH OF THE ORIGINAL DECK. THE REMAINING (0.5)* INCH OF ORIGINAL DECK SHALL BE REMOVED BY HYDRODEMOLITION.

(SEE 848.21) THE FINAL DECK SOUNDING MAY TAKE PLACE WITHIN 24 HOURS OF A RAIN, AND THE DECK DOES NOT HAVE TO BE COMPLETELY DRY.

(SEE 848.23) FULL DEPTH REPAIR IS NOT REQUIRED IF LESS THAN ONE HALF OF THE DECK ORIGINAL CONCRETE THICKNESS IS SOUND.

(SEE 848.26) LONGITUDINAL GROOVES SHALL BE SAWED IN THE CONCRETE SURFACE OF THE TRAVELLED LANES PER 511.20, AFTER THE WET CURE IS COMPLETE. AFTER THE TEXTURING THE CONCRETE SURFACE, CLEAN THE SURFACE AND SPRAY AN UNIFORM APPLICATION OF CURING MATERIAL 705.07, TYPE 1 OR 1D, AS PER CMS 511.17 METHOD B OF MEMBRANE CURING. THE DECK SURFACE MUST BE DRY PRIOR TO PLACEMENT OF THE CURING MATERIAL.

(SEE 848.27) CURE TIME FOR FULL DEPTH REPAIR SHALL BE REDUCED TO 3 HOURS IF REPAIR IS POURED SEPARATE.

(SEE 848.27, 848.28 AND 848.29) THE CONTRACTOR SHALL CONTINUE THE WET CURE FOR THE MAXIMUM NUMBER OF HOURS POSSIBLE DURING THE PERMITTED LANE CLOSURE. THE CLOCK STARTS FOR THE WET CURE WHEN THE OVERLAY PLACEMENT IS COMPLETE.

ITEM 848 LATEX MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2.5 THICKNESS)

ITEM 848 LATEX MODIFIED CONCRETE (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN

CONTINUED

(SEE 848.28) THE WET CURE TIME IS REDUCED FROM 48 HOURS TO 3 HOURS OR UNTIL A BEAM BREAK OF 600 PSI IS ACHIEVED, WHICHEVER IS GREATER. AFTER THE 3 HOUR WET CURE, THE FINISHED OVERLAY SURFACE SHALL BE CURED BY SPRAYING A UNIFORM APPLICATION OF CURING MATERIAL OF 705.07, TYPE 1 OR 1D, AS PER CMS 511.14 METHOD (B) MEMBRANE CURING.

(SEE 848.28) TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED OVERLAY SURFACE UNTIL AFTER THE COMPLETION OF THE 3 HOUR WET CURE AND AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 600 PSI (4.2 MPA).

(SEE 848.30) THE OVERLAY SURFACE EVAPORATION RATE REQUIREMENTS ARE IN EFFECT FROM 9:30 AM TO 11:00 PM. THEY ARE NOT IN EFFECT FROM 11:00 PM TO 9:30 AM.

(SEE 848.31) PROVIDE ENOUGH MATERIAL FOR TWO BEAM BREAKS EACH AT 12 HOURS, 24 HOURS, 36 HOURS, AND 48 HOURS. THE DEPARTMENT WILL PERFORM THE BEAM BREAK TEST AND DOCUMENT THE TIME OF THE POUR, THE TIME OF THE BEAM BREAK TESTS, AND THE MODULUS OF RUPTURE FOR EACH BEAM. UNTIL THE MODULUS OF RUPTURE OF THE TWO TESTS IS NOT LESS THAN 600 PSI (4.2 MPA). TRAFFIC IS ALLOWED ON THE OVERLAY AT 600 PSI (4.2 MPA).

ALL OTHER REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION SHALL REMAIN IN EFFECT.

IF THE CONTRACTOR FAILS TO OPEN LANES TO TRAFFIC AT THE TIMES REQUIRED IN THE MAINTENANCE OF TRAFFIC NOTES, THE CONTRACTOR WILL BE ASSESED THE HIGHER OF THE TWO DISINCENTIVES FOR THE WET CURE PERIOD AND FOR THE MAINTENANCE OF TRAFFIC REQUIREMENT. TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED OVERLAY SURFACE

PAYMENT FOR ALL EQUIPMENT, MATERIALS, AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED IN THE FOOT CONTRACT PRICE FOR ITEM 848, LATEX MODIFIED CONCRETE OVERLAY, AS PER PLAN UNLESS SEPARATELY ITEMIZED IN THE PLANS.

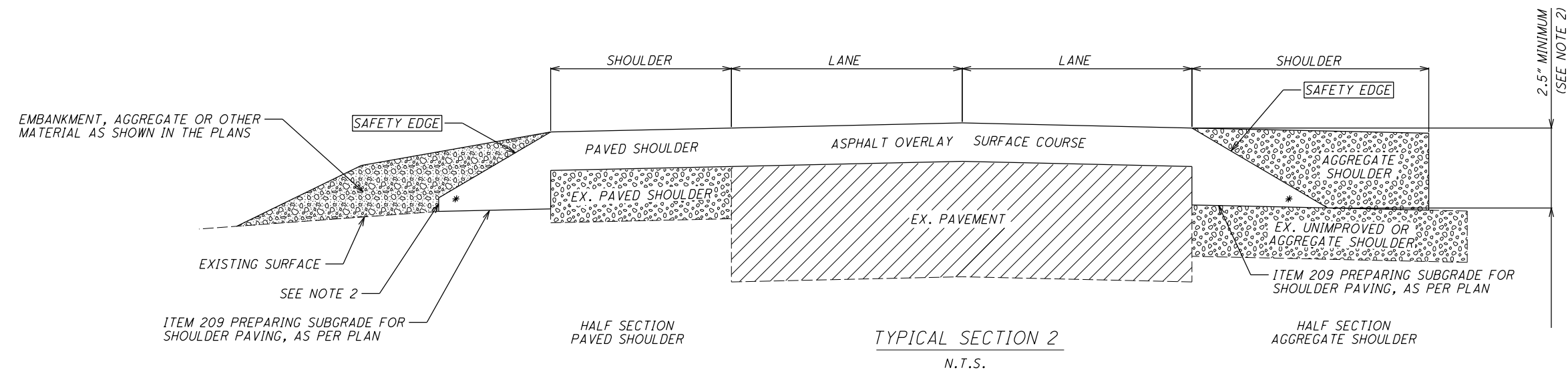
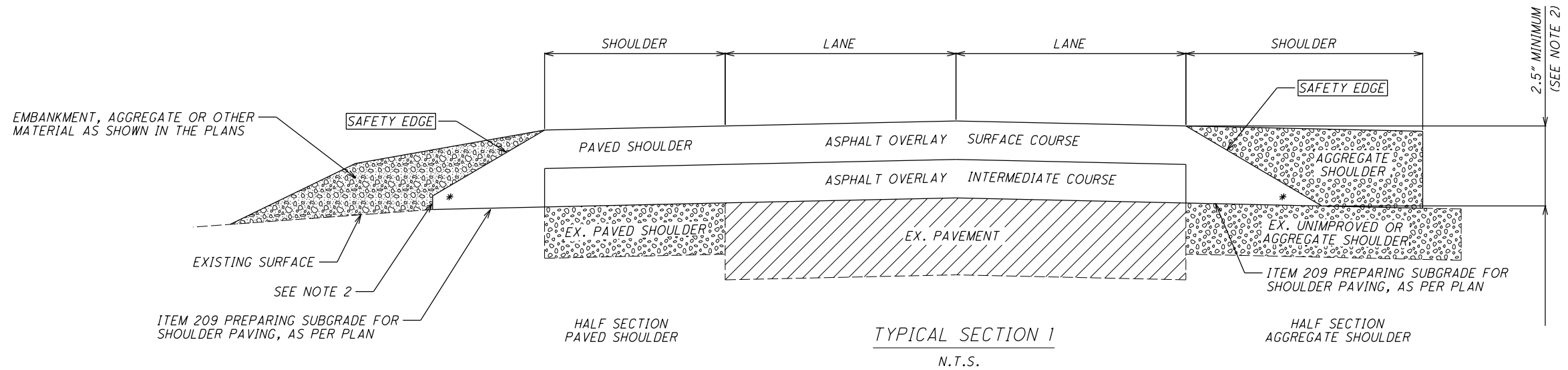
GENERAL NOTES

BRIDEG NO. ROS-50-1926
OVER NORTH-FORK CREEK

ROS-50-11.27
PID No. 100462



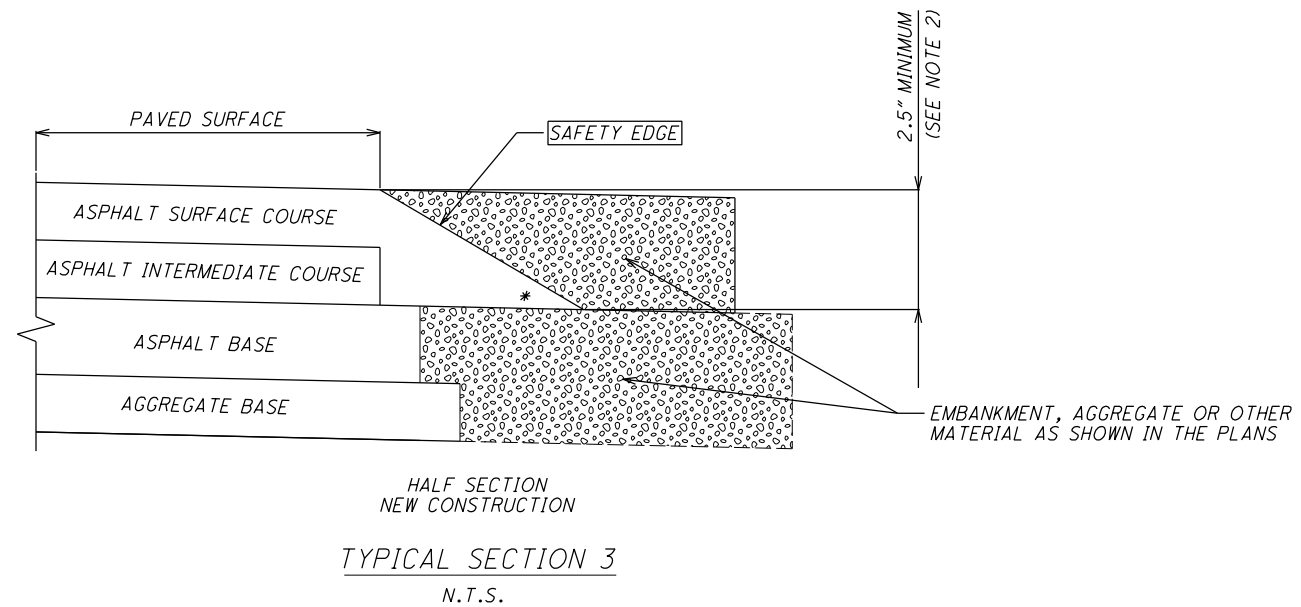
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NOTES:

- 1.) SAFETY EDGES ARE REQUIRED AT THE OUTSIDE EDGES OF THE PAVED ROADWAY (EDGE OF TRAVEL LANE OR EDGE OF PAVED SHOULDER).
- 2.) CONSTRUCT THE SAFETY EDGE THE FULL ASPHALT CONCRETE OVERLAY THICKNESS OR 2.5" (63MM) WHICHEVER IS GREATER, NOT TO EXCEED THE MAXIMUM SAFETY EDGE THICKNESS OF 6" (150MM). CONSTRUCT A NEAR-VERTICAL FACE BELOW THE SAFETY EDGE FOR THICKNESS GREATER THAN 6" (150 MM).
- 3.) BLADE AND SHAPE EXISTING SHOULDER MATERIAL TO FORM A UNIFORM SURFACE UNDER THE SAFETY EDGE PRIOR TO PLACEMENT OF THE ASPHALT CONCRETE OVERLAY.
- 4.) FOR NEW PAVEMENT CONSTRUCT THE SAFETY EDGE THE FULL THICKNESS OF THE SURFACE AND INTERMEDIATE COURSES, NOT TO EXCEED 3.25" (82 MM).

* 40° MAX



CALCULATED
CAJ
CHECKED
DKB

SAFETY EDGE DETAIL

ROS-50-11.27

16
21

