BEGIN PROJECT	-98 -98	PROJECT 98-4.74		·	DEP
	ND CRA-98 LM 23.74				
LOCATION LATITUDE: N 40° 56' 14" LONG SCALE IN MIL 0 1 2	I MAP GITUDE: W 82° LES 3 4	43' 27"	• • •		· ·.
PORTION TO BE IMPROVED INTERSTATE & DIVIDED HIGHWAY. UNDIVIDED STATE & FEDERAL ROU OTHER ROADS DESIGN DESIGNATION	CRA-98 19.30-20.78	CRA-98 20.78-23.74	RIC-98 0.00-2.51	RIC-98 2.51-4.07	RIC-98 4.07-4.74
CURRENT ADT (2015) DESIGN YEAR ADT (2027) DESIGN HOURLY VOLUME (2023) DIRECTIONAL DISTRIBUTION TRUCKS (24 HOUR B&C) Td DESIGN SPEED USE DESIGN SPEED	1,100 1,300 130 0.53 0.05 0.03 55	1,100 1,500 180 0.53 0.05 0.02 55	470 540 70 0.53 0.13 0.11 55	710 710 90 0.53 0.10 0.09 55	710 710 90 0.53 0.10 0.09 50
LEGAL SPEED DESIGN FUNCTIONAL CLASSIFICAT	55 ION: RURAL MA	55 JOR COLLECTO	55 DR	55	50

NHS PROJECT.\_\_\_\_\_NO

DESIGN EXCEPTIONS

STATE OF OHIO EPARTMENT OF TRANSPORTATION

# CRA-98-19.30 **RIC-98-0.00**

VILLAGE OF PLYMOUTH

**AUBURN TOWNSHIP PLYMOUTH TOWNSHIP** 

### CRAWFORD COUNTY **RICHLAND COUNTY**

#### INDEX OF SHEETS:

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STRUCTURE CRA-98-2130	16-17

ENGINEER'S SEAL: LEAL SUPPLEMENTAL STANDARD CONSTRUCTION DRAWINGS SPECIFICATIONS BP-3.1 BP-4.1 07/18/14 MT-97.10 07/18/14 07/19/13 MT-97.12 07/18/14 07/18/14 800 830 01/17/14 MT-99.20 07/19/1 832 01/17/14 DM-4.3 07/19/13 MT-101.90 07/18/14 <u>0M-4.4 07/20/12MT-105.10 07/19/1</u> C-41.20 10/18/1 TC-42.20 10/18/13/DBR-2-73 07/19/02 TC-52.10 10/18/13/DBR-3-11 07/15/11 DOVAL ENGI STONAL ENVIRING TC-52.20 07/18/14 SPECIAL TC-65.10 01/17/14 SIGNED: Koula R. Bohmn DATE: 9/14/14 PROVISIONS C-65.11 07/18/1 TC-71.10 01/17/14

Dist 3

11/13/2014

140539

PID - 93108

CRA

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SR 98-19.30

WWW. FILE:I:\projects\93108\roodwoy\ `ATinNennodnia DATE:8/14/20

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DESIGN

THIS PROJECT IS 9.18 MILES LONG AND WILL INCLUDE PAVEMENT REPAIR, RESURFACING WITH ASPHALT CONCRETE, PLACEMENT OF PAVEMENT MARKINGS, A SAFETY EDGE, AND STRUCTURE MAINTENANCE.

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#### EARTH DISTURBED AREAS

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

#### 2013 SPECIFICATIONS

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

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

APPROVED. DATE 8-15-14 DISTRICT DEPUTY DIRECTOR

APPROVED DATE **B-266 MARECTOR**, DEPARTMENT OF TRANSPORTATION

CALL

(E)





- ITEM 617 COMPACTED AGGREGATE (2.5" AVG.) (TYPICAL)





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### GENERAL

#### UTILITIES

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

NORTHERN OHIO RURAL WATE	R FRONTIER COMMUNICATIONS
PO BOX 96	1534 S.R. 511 SOUTH
COLLINS, OH 44826	ASHLAND, OH 44805
419 668-7213	419 282-6551
NORTH-CENTRAL ELECTRIC CC	D-OP AMERICAN ELECTRIC POWER
13978 EAST C.R. 56	2622 S.R. 100 SOUTH
ATTICA, OH 44807	TIFFIN, OH 44883
419 426-3072	419 443-4607
COLUMBIA GAS OF OHIO 1800 BROAD AVENUE FINDLAY, OHIO 45840 419-427-3216 (OFFICE)	CENTURYLINK 175 ASHLAND RD. P.O. BOX 3555 MANSFIELD, OH 44907 419 755-7956
TIME WARNER CABLE	COLUMBIA GAS TRANSMISSION
1575 LEXINGTON AVE.	589 NORTH STATE ROAD
MANSFIELD, OH 44901	MEDINA, OHIO 44256
419 756-6091 ×419 555-5136	330-721-4163
AT&T OF OHIO	VILLAGE OF PLYMOUTH
50 WEST BOWERY ST., 4TH FLOG	OR 48 WEST BROADWAY STREET
AKRON, OHIO 44805	PLYMOUTH, OHIO 44865
330-384-8057	419-687-4331

THERE ARE NO KNOWN UNDERGROUND UTILITIES ON THIS PROJECT. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK ARFA.

#### 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.

#### WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS

#### 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 PRÓJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (614) 887-4305 OR EMAIL AT DO3.PIO@DOT.STATE.OH.US

DISTRICT PERMIT SECTION BY FAX AT (419) 207-7050 OR EMAIL AT LOU.TUMBLIN@DOT.STATE.OH.US

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

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.

### 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, PRIOR TO PAVING THE SAFETY EDGE, GRADE AN AREA TO 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 SL OPF

#### SAFETY EDGE

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

18450 50TH AVENUE EAST TACOMA, WA 98446

253-875-8000

CARLSON SAFETY EDGE END GATE

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

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.

### PAVEMENT

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 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 FLEVATION.

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

PLAN VIEW

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.

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#### PAVING AT RAILROAD CROSSINGS



RAILROAD RIGHT OF WAY

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### PAVEMENT

#### <u> ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR</u> ITEM 253 - <u>PAVEMENT REPAIR</u>

THESE ITEMS OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING PAVEMENT OF PAVED BERM WHICH MAY BE ASPHALT, BRICK, CONCRETE, OF A COMBINATION OF EACH, IN AREAS OF EXISTING PAVEMENT FAILURE.

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 12", BASED ON THE PAVEMENT DESIGN AND AN AVERAGE DEPTH OF 4" AND AN AVERAGE WIDTH OF 4 FT FOR ESTIMATING PURPOSES.

THE CONTRACTOR SHALL BE CAPABLE OF PERFORMING PAVEMENT REPAIRS 2 FFFT WIDE.

REPLACEMENT MATERIAL SHALL BE ITEM 301, ITEM 448 TYPE 2, OR ITEM 442 19MM MATERIAL AND SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH 19MM MATERIAL AND SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE. ITEM 301 ASPHALT CONCRETE, PG64-22 CAN BE USED WHEN THE DEPTH OF THE REPAIR IS BETWEEN 3" AND 12" WITH A MAXIMUM PAVEMENT LIFT OF 6". ITEM 448 TYPE 2 OR ITEM 442 19MM CAN BE USED WHEN THE DEPTH OF THE REPAIR IS BETWEEN 1.5" AND 5" WITH A MAXIMUM PAVEMENT LIFT OF 3". THE CONTRACTOR HAS THE OPTION OF USING EITHER ITEM 301, ITEM 448 TYPE 2, OR ITEM 442 19MM MATERIAL WHEN THE PAVEMENT REPAIR IS BETWEEN 3" AND 5" DEEP. ITEM 448 TYPE 2 OR ITEM 442 19MM MATERIAL SHALL BE PG64-22 FOR MEDIUM MIX DESIGN PAVEMENTS AND PG64-28 FOR HEAVY MIX DESIGN PAVEMENTS AND PG64-28 FOR HEAVY MIX DESIGN PAVEMENTS.

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: 01/STR/PV:

SR 98 ITEM 251 -	PARTIAL DEPTH PAVEMENT REPAIR	1295 CY
SR 98 ITEM 253 -	PAVEMENT REPAIR	21 CY

03/5/2/PV

SR 98 ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR	205 CY
SR 98 ITEM 253 - PAVEMENT REPAIR	4 CY

SUMMARY FOR ITEM 251 - PARTIAL DEPTH REPAIR

	01/STR/PV:	03/S<2/PV:
SLM	QUANTITY (CY)	QUANTITY (CY)
19.3-20.0	206	
20.0-21.0	159	
21.0-22.0	156	
22.0-23.0	179	
23.0-23.7/0.00	117	
23.7/0.00-1.0	100	
1.0-2.0	152	
2.0-3.0	167	
3.0-3.45	60	
3.45-4.0		55
4.0-4.7		150
TOTAL	1295 <b>*</b>	205 *

\* APPROXIMATELY 10% OF PAVEMENT REPAIRS ARE TRANSVERSE REPAIRS. FOCUS REPAIRS ON PAVEMENT EDGES.

#### 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

TAPER THE PLANING AT BUTT JOINT LOCATIONS AT STRUCTURES AND INTERSECTIONS AS SHOWN ON THE PAVEMENT AND SHOULDER DATA SHEET. 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 CONTROLUCION WITH THE PROPOSED OUTPET WITH THE PROPOSED FROM THE CENTER OF PAVEMENT IN CONFORMANCE WITH THE ABOVE GUIDELINES.

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

THE PROGRESSION OF THE PLANING SHALL PROCEED IN SUCH A MANNER THAT NORMAL TRAFFIC WILL NOT BE REQUIRED TO RUN OVER THE PLANED ROADWAY SURFACE MORE THAN FOURTEEN (14) CALENDAR DAYS. FOR EACH CALENDAR DAY BEYOND THE 14 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE FEE of \$1000 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.

### <u>ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 9.5 MM,</u> TYPE A (446), AS PER PLAN

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.

### <u>ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 9.5MM, TYPE A (448), AS PER PLAN</u>

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 Ndøs 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. QUALITY CONTROL: DO NOT PERFORM Nmax IN QUALITY CONTROL TESTING. DO NOT TAKE EXTRA ASPHALT BINDER SAMPLES AS OUTLINED IN CMS 442.05.

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

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

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 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.

BELOW.

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INTERSECTION NAME	A (FT)	B (FT)	C (FT)	AREA (SY)
CROUSE (R)	23	20	69	93
SR 39 (R)	25	32	81	134
SR 39 (L)	25	28	54	102
TIRO CORP (R)	39	17	63	140
BAKER (R)	15	45	90	100
BAKER (L)	30	21	80	136
SAWYER (R)	17	32	69	84
SAWYER (L)	12	30	59	53
SR 598 (R)	50	33	115	335
SR 598 (L)	50	30	83	265
BAKER (R)	40	20	100	207
DININGER (R)	8.5	65	96	71
DININGER (L)	8	62	82	61
CHAMPION (R)	20	20	50	67
PRESTON (R)	30	35	100	189
PRESTON (L)	30	30	80	156
FENNER (L)	25	25	65	106
KUHN (R)	45	23	80	210
HENRY (R)	30	22	70	127
HENRY (SLIP) (R)	12	20	45	38
HENRY (L)	37	22	100	197
OPDYKE (R)	25	22	65	101
OPDYKE (L)	25	22	65	101
PARCEL (L)	30	23	80	140
TOTAL INTERSECTION AREAS				3213

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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).

THE PAVING DIMENSIONS FOR THE INTERSECTIONS ARE SHOWN IN THE CHART





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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 - 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. THIS QUANTITY SHALL ALSO BE USED AT PLANED SURFACES WHERE A TEMPORARY ASPHALT WEDGE IS NEEDED AROUND CASTINGS. BEFORE RESURFACING OF THE PAVEMENT, THE TEMPORARY WEDGE SHALL BE REMOVED AND THE COST SHALL BE CONSIDERED INCIDENTAL TO ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

01/STR/PV:

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC65 CY03/S<(2/PV:</td>

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 10 CY

#### 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 - 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.

01/STR/PV:

WORK ZONE MARKING	SIGN: (W8-H12A-36) NO EDGE LINE	= 18 EACH
WORK ZONE MARKING	SIGN: (R4-1-24) DO NOT PASS	= 23 EACH
WORK ZONE MARKING	SIGN: (R4-2-24) PASS WITH CARE	= 23 EACH

TOTAL = 64 EACH

03/S<2/PV:

WORK ZONE MARKING	SIGN: (W8-H12A-36) NO EDGE LINE=	= 4 EACH
WORK ZONE MARKING	SIGN: (R4-1-24) DO NOT PASS=	= 6 EACH
WORK ZONE MARKING	SIGN: (R4-2-24) PASS WITH CARE=	= 5 EACH

TOTAL = 15 EACH

#### <u>446 DENSITY ACCEPTANCE WITH FLAGGER CLOSING OF A</u> 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 ADEOUATE 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 SUFFACE 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.

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CALCULATED CAG CHECKED KRB
MAINTENANCE OF TRAFFIC NOTES
CRA -98-19.30 RIC-98-0.00
<u>6</u> 17

#### 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 ACCOMODATE THE COMPLETE INSTALLATION. SUPPORT HARDWARE SHALL ACCOMODATE 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.  $\times$  4 IN. (S4S) OR 41/2IN. 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\_\_\_\_\_ 3 SYSTEM

### EDGE OF GRADED SHOULDER 4:1 TAPER EDGE OF TREATED SHOULDER EDGE OF PAVEMENT .---- $\overline{(1,)}$



#### MAILBOX APPROACHES

THE MAILBOX APPROACHES SHALL BE PAVED WITH THE CORRESPONDING MAINLINE PAVEMENT TREATMENT COURSE(S). 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 OUANTITY OF ITEM 617 COMPACTED AGGREGATE, AS PER PLAN HAS BEEN PROVIDED FOR AREAS WHERE THE SHOULDER IS LOW PRIOR TO GRADING AND/OR LOW AREAS CAUSED BY THE REMOVAL OF UNSUITABLE MATERIAL. OUANTITIES TO PERFORM THIS WORK HAVE BEEN INCLUDED IN THE GENERAL SUMMARY AND ARE ESTIMATED AS FOLLOWS.

ITEM 209 - GRADING MAILBOX APPROACHES:

01/STR/PV = 36 EACH 03/S<2/PV = 6 EACH

01/STR/PV = 72 CY

ITEM 617 - COMPACTED AGGREGATE 03/S<2/PV = 12 CY

#### <u>LOCATIONS OF MAILBOX SUPPORT SYSTEM TO BE</u> <u>REPLACED</u>

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

SINGLE SUPPORT SYSTEMS (01/STR/PV):

5550, 7587, AND 7821 SR 98

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		GRAND	ITEM		N	ΙΡΑΤΙΟΙ	PARTIC	1				R	NUMBE	HEET	S			
	UNII	TOTAL	EXT	IIEM		03/S<2/ PV	02/STR/ BR	01/STR/ PV					11	10	9	7	6	5
	MUE	10 70	72051	200		2 50		1E 7.4							10.70			
GRADING MAILBOX APPROACHES	EACH	42	80000	209 209 SPECINI		6		36 3			<u> </u>				10.JZ	42		
MAILDON SOFFORT STSTEM, SINGLE	LAUN		09030100	SFEUIAL		<u> </u>					<u> </u>							
											<u> </u>							
PARTIAL DEPTH PAVEMENT REPAIR PAVEMENT REPAIR	CY CY	1500 25	01010 02000	251 253		205 4		1295 21										1500 25
PAVEMENT PLANING, ASPHALT CONC	SY	4641	01000	254		408		4233							4641			
TACK COAT	GAL SY	48 11357	10000	254 407		4 1519		44 9838							48 11357			
TACK COAT FOR INTERMEDIATE COL	GAL	5648	14000	407		761		4887							5648			
ASPHALT CONCRETE SURFACE COUR	CY	5170	00201	442		696		4474							5170			
ASPHALT CONCRETE INTERMEDIATE	СҮ	4899	20101	442		659		4240							4899			
COMPACTED AGGREGATE	СҮ	1795	10100	617		241		1554		<u> </u>					1711	84		
										+	+							
RPM	EACH	594	00100	621		59		535						594				
RAISED PAVEMENT MARKER REMOVED	EACH	594	54000	621		59		535			<u> </u>			594				
EDGE LINE, 6", TYPE I	MILE MILE	18.36	00104	642 642		2.58		7 93						9.22				
STOP LINE	FT	433	00500	644		54		379						433				
RAILROAD SYMBOL MARKING	EACH	2	01000	644				2			<u> </u>			2				
STRUCTURI																		
SEALING OF CONCRETE SURFACES (E SEALING CONCRETE BRIDGE DECKS (	SY SY	70 109	10100 10300	512 512			70 109				<u> </u>		70 109					
STRUCTI																		
BRIDGE RAILING REMOVED FOR REUS	FΤ	50	38603	202			50						50					
SEALING OF CONCRETE SURFACES (E	SY	56	10100	512			56				<u> </u>		56					
REMOVAL OF EXISTING COATINGS FI DEEP BEAM BRIDGE RETROFIT RAILI	SY FT	56 50	74000 75600	512 517			56 50						56 50					
WORK ZONE MARKING SIGN	EACH	79	12460	614		15		64									79	
WORK ZONE CENTER I INF. CLASS II	MILE	75 18.36	21500	614 614		2.58		15.78			+			18.36			/5	
WORK ZONE STOP LINE, CLASS 1, 6	FT	84	26200	614		24		60	_		<u> </u>			84				
WORK ZOINE STOP LINE, CLASS III,	F 1	84	20010	014				60						84				
											<u> </u>							
						<u> </u>												
MAINTAINING TRAFFIC		LS	11000	614													LUMP	
FIELD OFFICE, TYPE B	MNTH	3	16010	619		<b> </b>				<u> </u>	1						2000	
MOBILIZATION		LS LS	10000	624		<u> </u>				+	+							
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<u> </u>					1	<u> </u>		1			+	1			1			

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DESCRIPTION	SEE Sheet No.	CALCULATED CAG CHECKED KRB
ROADWAY		
AVING, AS PER PLAN	4	
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PAVEMENT		
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9.5 MM, TYPE A (446), AS PER PLAN	5	
IRSE, 9.5 MM, TYPE A (448), AS PER PLAN	5	~
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TRAFFIC CONTROL		
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XY-URFTHANF)		U U
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UNDER ZU FOUT SPAN (LRA-98-2150) AS PER PLAN	12	
XY-URE THANE)	12	
I CONCRETE SURFACES		
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				LEN	GTH				254	254	407	407		142		442	442	
		LOG	POINT			WIDTH			PAVEMENT	PATCHING	TACK COAT @	TACK COAT	ASPHALT	CONCRETE	ASPHAL	T CONCRETE	ASPHALT	
	DOUTE		το			<i></i>	-		PLANING,	PLANED	0.08 GAL/SY	FOR INTERM.	SURFAC	E COURSE,	INTE	RMEDIATE	CONCRETE,	
ITΥ	ROUIE					FEET	ICAI	PAVEMENT	CONCRETE	SURFALE		0.04 GAL/SY	(446), AS	S PER PLAN	TYPF	A (448). AS	COURSE.	
Ino		LOG	POINT			AVG.	TYP.	ANLA	(VARIABLE							PER	9.5MM, TYPE A,	
0							*		DEPTHS)							PLAN	(446) (SAFETY	
									(TAPERS)								EDGET AS PER	
		CTRATCUT						cv	cv	CY.	CAL	CN	INCUES	CV	TNOUES	CV	CX	
	-	STRAIGHT L	INE MILEAGE	MILE	FEEI			57	51	51	GAL	GAL	INCHES	UT	INCHES	L7	<i>C1</i>	_
01/ST	R/PV:																	
CRA	98	19.30	19.57	0.27	1447	26.2	1	4,212	73	1	337	168	1.25	146	1.25	146	7.82	
CRA	98	19.57	20.00	0.43	2249	25.6	1	6,397			512	256	1.25	222	1.25	222	12.15	
CRA	98	20.00	20.56	0.56	2941	26.0	1	8.496			680	340	1.25	295	1.25	295	15.89	
CRA	98	20.56	20.90	0 34	1811	25.8	1	5 192			<i>A</i> 15	208	1.25	180	1.25	180	9.78	
0.04	00	20.00	20.00	0.04	7100	20.0	,	0,102			715	200	1.25	710	1.20	710	3.70	
LRA	98	20.90	21.50	0.60	5168	25.4		8,941			/ 15	358	1.25	310	1.25	310	17.11	
CRA	98	21.50	22.00	0.50	2640	25.4	1	7,451			596	298	1.25	259	1.25	259	14.26	
CRA	98	22.00	22.50	0.50	2640	25.4	1	7,451			596	298	1.25	259	1.25	259	14.26	
CRA	98	22.50	23.09	0.59	3115	24.9	1	8,618			689	345	1.25	299	1.25	299	16.82	
CRA	.98	23.09	23.56	0.47	2503	24.7	1	6.869			550	275	1.25	239	1.25	239	13.52	
CPA	0.0	23.56	23.74	0.19	020	25.5	,	2 632			211	105	1.25	01	1.25	01	5.02	
	30	23.30	23.14	0.10	323	20.0	/	2,002			211	705	1.25		1.25	31	5.02	
RIC	98	0.00	0.62	0.62	3289	25.1	/	9,173			/34	367	1.25	318	1.25	318	17.76	
RIC	98	0.62	0.96	0.33	1758	24.5	1	4,786			383	191	1.25	166	1.25	166	9.50	
RIC	98	0.96	1.60	0.64	3400	24.8	1	9,369			750	375	1.25	325	1.25	325	18.36	
RIC	98	1.60	1.83	0.23	1214	24.3	1	3,278			262	131	1.25	114	1.25	114	6.56	
RIC	98	1.83	2.00	0.17	898	24.0	1	2 395			192	96	1.25	83	1 25	83	4.85	
	00	2.00	2.00	0.50	2067	24.5	,	0.077			646	707	1.25	200	1.25	200	16.07	
RIC .	90	2.00	2.50	0.50	2907	24.5	/	0,011			040	525	1.25	200	1.25	200	10.03	
RIC	98	2.56	3.00	0.44	2313	24.8	1	6,374			510	255	1.25	221	1.25	221	12.49	
RIC	98	3.00	3.45	0.45	2376	24.4	1	6,442			515	258	1.25	224	1.25	224	12.83	
03/54	2/PV:																	
RIC	98	3.45	4.00	0.55	2904	24.3	1	7,841			627	314	1.25	272	1.25	272	15.69	
RIC	.98	4.00	4.50	0.50	2640	24.0	1	7.040			563	282	1.25	244	1.25	244	14.26	
PIC	08	4.50	A 7A	0.24	1267	27.7	,	3 336	66	1	267	133	1.25	116	1.25	116	6.84	
	30	4.50	7./7	0.24	1201	23.1		5,550	00	/	207	155	1.25	110	1.25	110	0.04	
01/STI	R/PV:																	
		STR. C	RA-98-2094:															
	DEDUCT	FOR STR.			75	25.0					-17	-8	1.25	-7	1.25	-7		
	PLANING	APPROACH	TO STR.		200	25.0			556	6								
0	PLANING	AND PAVIN	S APPROACH	SI ARS	48	25.0			69	1	11		1.25	5				
			-00-2170.	02400	10	2010				,			1120					
		5/R. C																
	DEDUCT	FOR STR.			30	35					-9	-5	1.25	-4	1.25	-4		
<u> </u>	PLANING	APPROACH	TO STR		200	25.5			567	6	45							
	PLANING	AND PAVING	G OVER STR.		30	35			97	1	9		1.25	4				
L																		
	EXTRA	REA FOR IN	TERSECTIONS					2871	2871	29	230	115	1.25	100	1.25	100		
	EXTRA	REA EOD DA	VED DRIVES			1		144			12	6	1 25	5	1 25	5		
-		INLA FOR TA						144			12		1.25		1.25			
2	EXIRA A	IREA FOR AG	GREGATE DRI	VES				2880			230	115	1.25	100	1.25	100		
<u>ò</u>	EXTRA A	REA FOR EX	. & PR. MAIL	BOX APPROA	ACHES			420			34	17	1.25	15	1.25	15		
è																		
03/54	2/PV:																	
	EXTRA A	REA FOR IN	TERSECTIONS					342	342	3	27	14	1.25	12	1.25	12		
	FXTRA	REA FOR PA				1		72			6	3	1 25	र	1 25	र		
	ENTRA A		COFCATE DO				+	070			22	,,	1.20		1.20			
<u></u>	EXIKA A	INEA FOR AG	GREGAIE DRI	VES				210			22	11	1.25	9	1.25	9		
2	EXTRA A	REA FOR EX	. & PR. MAIL	BOX APPROA	ACHES			90			7	4	1.25	3	1.25	3		
			TOTAL (C	01/STR/P	V)				4,233	44	9,838	4,887		4,249		4,240	225	
2	_		TOTAL (C	)3/S(2/P	<b>v</b> )		_		408	4	1,519	761		659		659	37	
ź		ΤΟΤΑ	LS TO GF	NERAL S	UMMARY				4,641	48	11,357	5,648		4,908		4,899	262	
																		1

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			200	617	KED G
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SHOL	ILDER	TE	SUBGRADE	AGGREGATE	- CA
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WIL	JIH	ΑΠΕΑ	PAVING, AS		
			PER PLAN	2.5 INCHES	
SL	SR			AVG. THICKNESS	
FT	FT	SΥ	MILE	СҮ	
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2.0	2.0	1,173	1.00	81	A
2.0	2.0	1,173	1.00	81	
2.0	2.0	1,384	1.18	96	<u>~</u>
2.0	2.0	1,112	0.95	77	ш
2.0	2.0	413	0.35	29	
2.0	2.0	1,462	1.25	102	
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2.0	2.0	540	0.46	37	S
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			FROM	10	MILE	MILE	MILE	+1	F1	MILE	MILE	MILE	MILE	MILE	F /	F1	F /	F1	F1	SF	EACH	E4	1 <i>CH</i>
	01/5	STR/PV:																					<u> </u>
	SR 98	CRA	19.30	23.74	4.44		8.88	60	60	8.88			4.64	4.44		176							
	SR 98	RIC	0.00	3.45	3.45		6.90			6.90			5.10	3.45		203					2		
	ADDI	TIONAL QUANTI	TY FOR .	SIDE ROA	1DS									0.04									
	TOTAL (C	DI/STR/PV):					15.78	60	60	15.78			9.74	7.93		379					2		-
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ł	03/9																						
ŀ	CD 00		3 15	A 7A	1.20		2 5 0	21	24	2.50			1.5.7	1.20		<i>E1</i>							+
	SR 90		5.45	4.14	1.29		2.30	24	24	2.50			1.57	1.29		54							+
	TOTAL (C	<u>)3/3(2/PV);</u>	5.45	4.74	1.29		2.58	24	24	2.58			1.57	1.29		54							
	TOTA		<u></u>		0.10		10.70	0.4	0.4	10.70			11 71	0.00		477							
┟	TOTAL	LS TO GENERAL	SUMMAP	11	9.18		18.36	84	84	18.36			11.31	9.22		433					2		
╞																							
													RAISE	D PAV	'FMFN	T MAR	KFRS						
			1			0.01	0.01	DOTOLIUT					101102				ILEI IO						
						621	621	PRISMATI	IC RETRO	)-REFLEC	TOR TYP	ES	4										
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## STRUCTURE CRA-98-2094 SFN 1702769 (02/STR/BR)

ITEM	ITEM EXT.	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
5 <i>12</i>	10100	70	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
512	10300	109	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	

## STRUCTURE CRA-98-2130 SFN 1702807 (02/STR/BR)

ITEM	ITEM EXT.	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
202	38603	50	FT	BRIDGE RAILING REMOVED FOR REUSE, AS PER PLAN	12
512	10100	56	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
512	74000	56	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	
517	75600	50	FT	DEEP BEAM BRIDGE RETROFIT RAILING	

10 20	DESIG	SIGNED	DRAWN	DESIGN AGENCY
		CAG	CAG	ODOT DISTRICT THREE OFFICE
		IECKED	REVISED	
	KR	KRB		OF PLANNING AND ENGINEERING

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#### REFERENCES SHALL BE MADE TO STANDARD BRIDGE DRAWINGS:

DBR-3-11 DATED 7/15/11 DBR-2-73 DATED 7/19/02

#### **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, 2004, 2005 AND 2006 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 AND 105.02.

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

#### EXISTING PLANS:

THE ORIGINAL CONSTRUCTION PLANS OF THE EXISTING BRIDGES ARE AVAILABLE UPON REQUEST AT THE DISTRICT 3 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION, ASHLAND, OH.

STRUCTURE#	PLAN NAME	DATE
CRA-98-2094 CRA-98-2094	CRA-98/CRA-602 CRA-98-19-28	1970 2006
CRA-98-2130	CRA-98-19.28	2006
CRA-98-2130	CRA-98-21.30	1990

#### <u>UTILITIES:</u>

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

#### PLACING ASPHALT CONCRETE 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.

#### ITEM 202 - BRIDGE RAILING REMOVED FOR REUSE, AS PER PLAN:

THIS ITEM SHALL BE USED TO REMOVE AND REINSTALL THE EXISTING BRIDGE RAILING FOR WORK ON CRA-98-2130 IF NECESSARY. BRIDGE RAILING POSTS ARE TO REMAIN IN PLACE. GUARDRAIL MUST BE UP WHEN FLAGGERS ARE NOT PRESENT (SEE SCD MT-101.90).

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

#### <u>ITEM 614 - MAINTAINING TRAFFIC FOR STRUCTURES CRA-98-2094</u> <u>AND CRA-98-2130</u>:

TWO WAY TRAFFIC ON STRUCTURES CRA-98-2094 AND CRA-98-2130 SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT THROUGH TRAFFIC ON THE STRUCTURES MAY HAVE A LANE CLOSURE DURING NORMAL WORKING HOURS USING FLAGGERS AS SHOWN ON STANDARD DRAWING MT-97.10.

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.

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DESIGN AGENCY	ODOT DISTRICT THREE OFFICE	OF PLANNING & ENGINEERING
DRAWN	CAG	REVISED
DESIGNED	CAG	CHECKED KRB
	STDIICTIDE NOTES	
	CRA-98-19.30	RIC-98-0.00
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				BRIDGE	DECK DATA			
	COUNTY, ROUTE, BRIDGE NO.	LOCATION	STRUCTURE TYPE	LENGTH (BRIDGE DECK)	WIDTH	BRIDGE DECK AREA	SKEW	EXISTING WEARING SURFACE
				FT.	FT.	SQ.YD.		
*	CRA-98-2094	OVER BR. OF HONEY CREEK	SINGLE SPAN CONCRETE SLAB	24'-6"±	40	109	0°	CONCRETE
-	+ CRA-98-2130	OVER TRIB. OF HONEY CREEK	3-SIDED REINFORCED CONCRETE BOX	17'-8"±	35′-2″	69	15° L.F.	ASPHALT

\* BUTT JOINT AT BRIDGE DECK. OMIT RESURFACING ON THE BRIDGE DECK. TAPER PLANING FROM 0" TO 2.5" DEEP IN 100' AT THE APPROACH TO THE APPROACH SLABS. PLANE AND PAVE 1.25 ON APPROACH SLABS. (SEE DETAILS IN THE PLAN FOR STRUCTURE WORK). (SEE ROADWAY PLANS FOR PAVING AND PLANING QUANTITIES).

+ TAPER PLANING FROM 0" TO 2.5" DEEP IN 100' AT THE APPROACH TO THE STRUCTURE. PLANE AND PAVE 1.25" ACROSS THE STRUCTURE. (SEE DETAILS IN THE PLAN FOR STRUCTURE WORK). (SEE ROADWAY PLANS FOR PAVING AND PLANING QUANTITIES).

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DESIGN

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	EXISTING PAVEMENT WIDTH	ROADWAY DATA EXISTING APPROACH SLAB WIDTH	EXISTING APPROACH SLAB LENGTH	DESIGN AGENCY ISTRICT THRFF	NNING & ENGINE
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	ITEM	QUANTITY	UNIT	DESCRIPTION
	202	50	FT	BRIDGE RAILING REMOVED FOR REUSE, AS PER PLAN
	512	56	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
	512	56	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES
	517	50	FT	DEEP BEAM BRIDGE RETROFIT RAILING

NOTES:

1. EXISTING APPROACH GUA

2. SEE SHEET ½ FOR SEALIN

ALL QUANTITIES CARRIED TO STRUCTURE SUMMARY SHEET NO. 11

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FACE OF GUARDRAIL	EXISTING PAVEMENT WIDTH 25'-0'±	PLAN VIEW         Designed         Drawn         Reviewed         Date         Design agency           CAG         CAG         DJV         7/1/14         ODOT DISTRICT THREE OFFICE           CRA-98-2130         CHECKED         REVISED         STRUCTUBE FILE NIMBER         ODOT DISTRICT THREE OFFICE	TRIBUTARY OF HONEY CREEK KRB 1702807 OF PLANNING AND ENGINEERING
M BRIDGE ING ARDRAIL IS NOT SHOWN NG DETAILS		1     CRA - 98 - 19.30     PLAN       2     91     - 0.00       2     98 - 0.00     CRA - 9	Did No. 93108         Over Tributary



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	DESIGN AGENCY ODOT DISTRICT THREE OFFICE OF PLANNING AND ENGINEERING
	SIGNED DRAWN REVIEWED DATE CAG DJU 7/1/14 ECKED REVISED STRUCTURE FILE NUMBER KRB 77/02807
	SEALING DETAILS CRA-98-2130 OVER TRIBUTARY OF HONEY CREEK
	CRA -98 -19 .30 RIC -98 - 0.00 PID No. 93108
	2/2