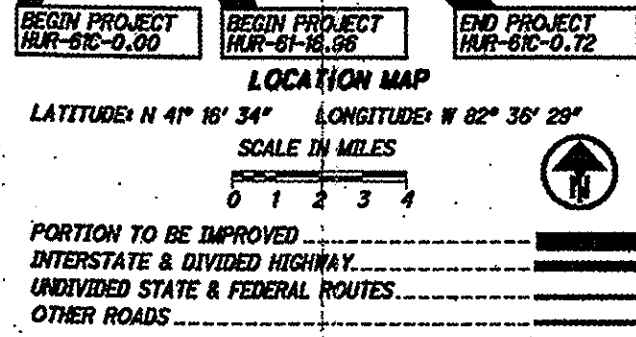
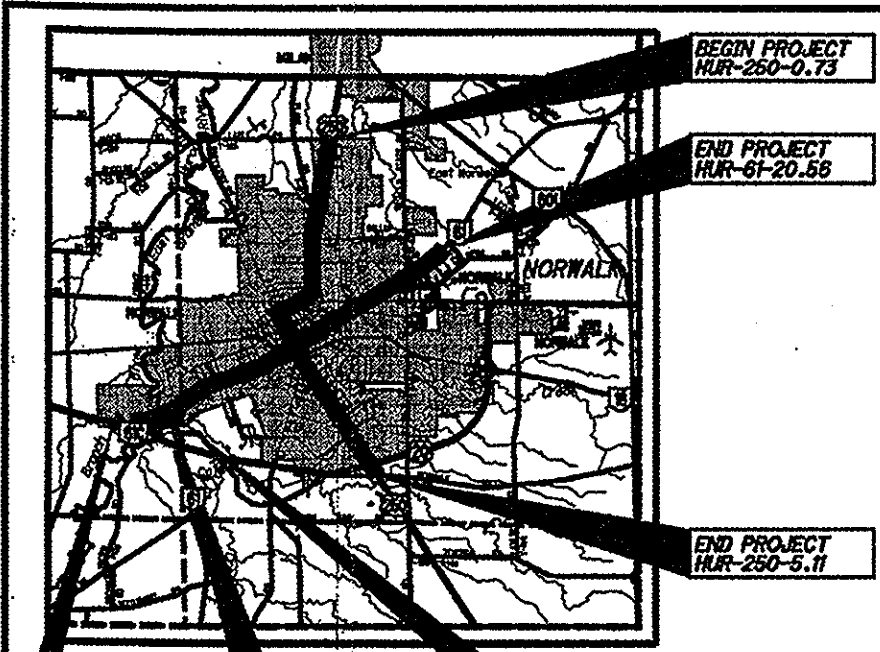


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 Dist 3 4/11/2013
 Contract Proposal Available @ www.contracts.dot.state.oh.us/home



STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
HUR-250-00.73
CITY OF NORWALK
HURON COUNTY

PROJECT DESCRIPTION
 THIS PROJECT WILL INCLUDE PAVEMENT PLANING, PAVEMENT REPAIR, RESURFACING WITH ASPHALT CONCRETE, PAVEMENT MARKINGS AND MINOR BRIDGE REHABILITATION WORK.

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

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2010 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 OF 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: *Joe C. Bred*
 DATE: 1/10/13 DISTRICT DEPUTY DIRECTOR

APPROVED: *Jerry W. May*
 DATE: 1/10/13 DIRECTOR, DEPARTMENT OF TRANSPORTATION

ENGINEERS SEAL:

SIGNED: *Christopher Lee Brown*
 DATE: 1/10/13

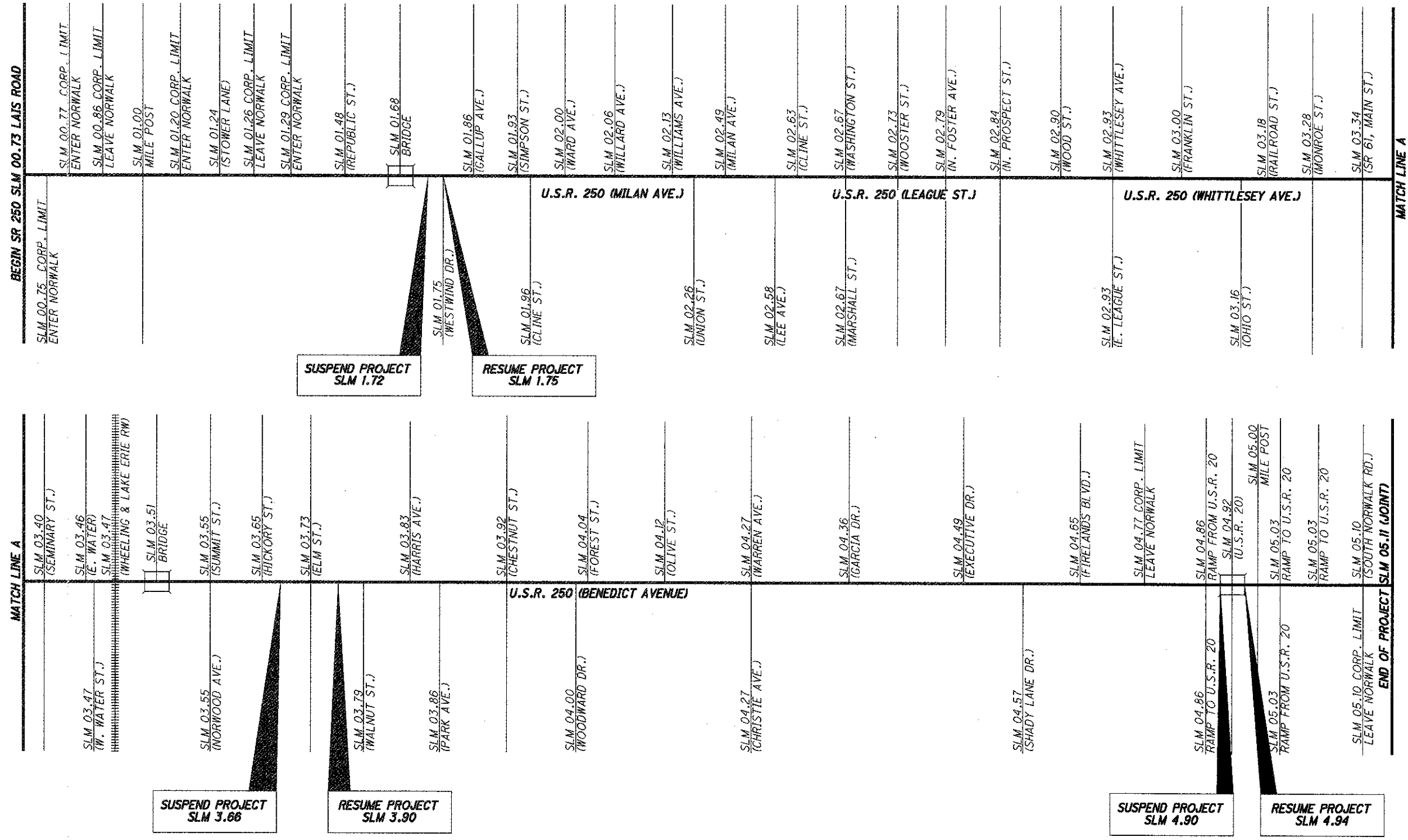
STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS
BP-3.1	04/20/12	MT-95.51	07/20/12			800 1/18/13
BP-4.1	07/18/04	MT-95.32	07/20/12			821 4/20/12
BP-7.1	04/20/12	MT-97.12	07/20/12			832 5/5/09
		MT-97.12	07/20/12			921 4/20/12
DM-4.3	07/20/12	MT-99.30	07/20/12			
DM-4.4	07/20/12	MT-101.30	10/18/12			
		MT-105.10	07/20/12			
TC-61.20	01/18/07					
TC-62.10	01/18/07					
TC-62.20	01/18/07					
TC-71.10	10/18/12					
TC-73.10	04/20/12					
TC-82.10	01/21/11					

UNDERGROUND UTILITIES
 CONTACT BOTH SERVICES CALL TWO WORKING DAYS BEFORE YOU DIG

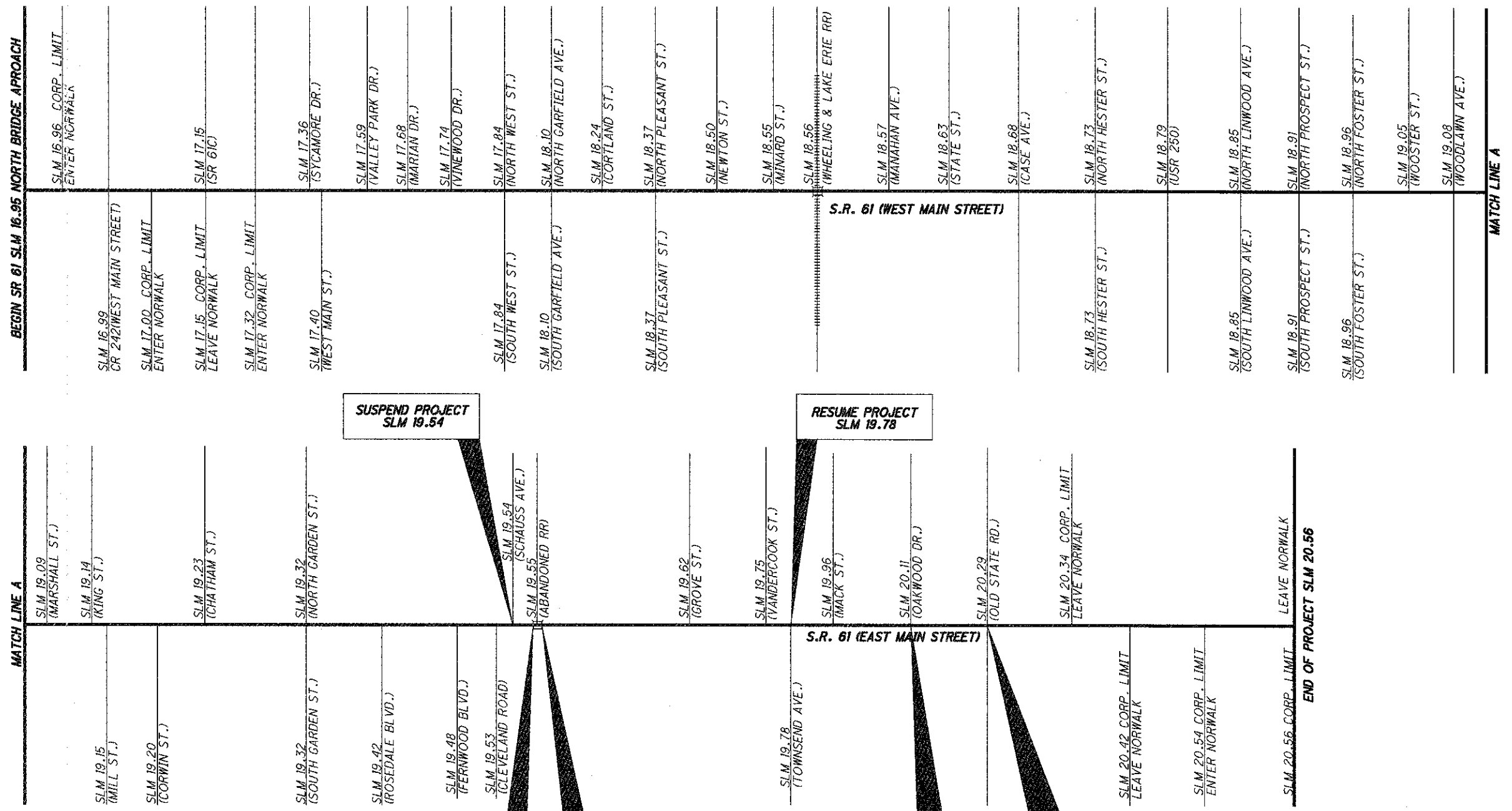
CALL 1-800-362-2764 (TOLL FREE)
 OHIO UTILITIES PROTECTION SERVICE NON-MEMBERS MUST BE CALLED DIRECTLY
 OIL & GAS PRODUCERS PROTECTIVE SERVICE CALL 1-800-824-0888

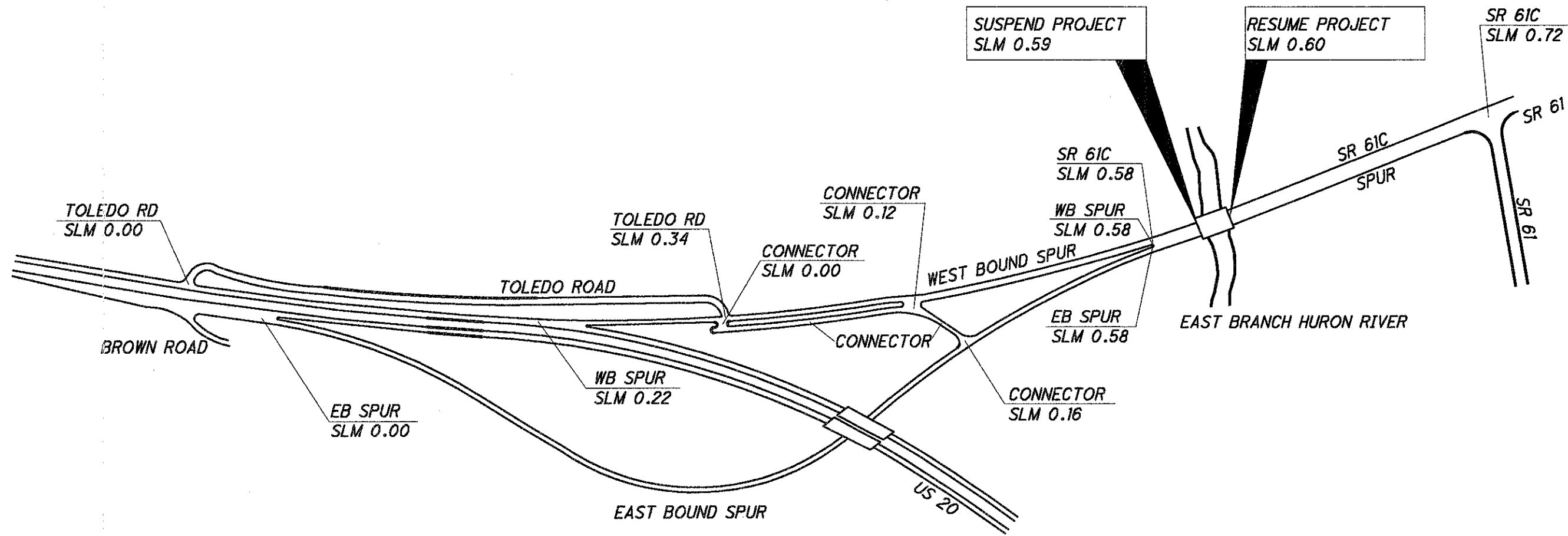
PLANS PREPARED BY:

FEDERAL PROJECT NO. E070(423)
 PID NO. 82315
 CONSTRUCTION PROJECT NO. WHEELING & LAKE ERIE
 HUR-250-00.73
 28



STRAIGHT LINE DIAGRAM





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STRAIGHT LINE DIAGRAM

HUR-250-0.73

DESIGN DESIGNATION (HUR-250-0.73 TO 2.49)

CURRENT ADT (2013) 14,840
 DESIGN YEAR ADT (2025) 15,190
 DESIGN HOURLY VOLUME (2035) 1,520
 DIRECTIONAL DISTRIBUTION 0.51
 TRUCKS (24 HOUR B&C) 0.15
 DESIGN SPEED 35 MPH
 LEGAL SPEED 35 MPH
 DESIGN FUNCTIONAL CLASSIFICATION:
 URBAN PRINCAL ARTERIAL
 NHS PROJECT YES

DESIGN EXCEPTIONS

NONE

DESIGN DESIGNATION (HUR-250-2.49 TO 2.93)

CURRENT ADT (2013) 9,410
 DESIGN YEAR ADT (2025) 10,050
 DESIGN HOURLY VOLUME (2035) 1,010
 DIRECTIONAL DISTRIBUTION 0.53
 TRUCKS (24 HOUR B&C) 0.05
 DESIGN SPEED VARIES 25 TO 35 MPH
 LEGAL SPEED VARIES 25 TO 35 MPH
 DESIGN FUNCTIONAL CLASSIFICATION:
 URBAN PRINCAL ARTERIAL
 NHS PROJECT YES

DESIGN EXCEPTIONS

NONE

DESIGN DESIGNATION (HUR-250-2.93 TO 3.34)

CURRENT ADT (2013) 13,860
 DESIGN YEAR ADT (2025) 15,990
 DESIGN HOURLY VOLUME (2035) 1,600
 DIRECTIONAL DISTRIBUTION 0.52
 TRUCKS (24 HOUR B&C) 0.05
 DESIGN SPEED 25 MPH
 LEGAL SPEED 25 MPH
 DESIGN FUNCTIONAL CLASSIFICATION:
 URBAN PRINCAL ARTERIAL
 NHS PROJECT YES

DESIGN EXCEPTIONS

NONE

DESIGN DESIGNATION (HUR-250-3.34 TO 4.92)

CURRENT ADT (2013) 13,000
 DESIGN YEAR ADT (2025) 14,260
 DESIGN HOURLY VOLUME (2035) 1,430
 DIRECTIONAL DISTRIBUTION 0.55
 TRUCKS (24 HOUR B&C) 0.05
 DESIGN SPEED VARIES 25 TO 45 MPH
 LEGAL SPEED VARIES 25 TO 45 MPH
 DESIGN FUNCTIONAL CLASSIFICATION:
 URBAN PRINCAL ARTERIAL
 NHS PROJECT YES

DESIGN EXCEPTIONS

NONE

DESIGN DESIGNATION (HUR-250-4.92 TO 5.11)

CURRENT ADT (2013) 9,530
 DESIGN YEAR ADT (2025) 9,530
 DESIGN HOURLY VOLUME (2035) 950
 DIRECTIONAL DISTRIBUTION 0.58
 TRUCKS (24 HOUR B&C) 0.20
 DESIGN SPEED 45 MPH
 LEGAL SPEED 45 MPH
 DESIGN FUNCTIONAL CLASSIFICATION:
 URBAN PRINCAL ARTERIAL
 NHS PROJECT YES

DESIGN EXCEPTIONS

NONE

DESIGN DESIGNATION (HUR-61-16.96 TO 17.15)

CURRENT ADT (2013) 4,150
 DESIGN YEAR ADT (2025) 4,600
 DESIGN HOURLY VOLUME (2035) 510
 DIRECTIONAL DISTRIBUTION 0.53
 TRUCKS (24 HOUR B&C) 0.06
 DESIGN SPEED VARIES 35 TO 45 MPH
 LEGAL SPEED VARIES 35 TO 45 MPH
 DESIGN FUNCTIONAL CLASSIFICATION:
 URBAN PRINCAL ARTERIAL
 NHS PROJECT NO

DESIGN EXCEPTIONS

NONE

DESIGN DESIGNATION (HUR-61-17.15 TO 18.79)

CURRENT ADT (2013) 6,560
 DESIGN YEAR ADT (2025) 6,560
 DESIGN HOURLY VOLUME (2035) 720
 DIRECTIONAL DISTRIBUTION 0.51
 TRUCKS (24 HOUR B&C) 0.06
 DESIGN SPEED VARIES 25 TO 35 MPH
 LEGAL SPEED VARIES 25 TO 35 MPH
 DESIGN FUNCTIONAL CLASSIFICATION:
 URBAN MINOR ARTERIAL
 NHS PROJECT NO

DESIGN EXCEPTIONS

NONE

DESIGN DESIGNATION (HUR-61-18.79 TO 19.55)

CURRENT ADT (2013) 8,760
 DESIGN YEAR ADT (2025) 8,850
 DESIGN HOURLY VOLUME (2035) 970
 DIRECTIONAL DISTRIBUTION 0.51
 TRUCKS (24 HOUR B&C) 0.03
 DESIGN SPEED VARIES 25 TO 35 MPH
 LEGAL SPEED VARIES 25 TO 35 MPH
 DESIGN FUNCTIONAL CLASSIFICATION:
 URBAN MINOR ARTERIAL
 NHS PROJECT NO

DESIGN EXCEPTIONS

NONE

DESIGN DESIGNATION (HUR-61-19.55 TO 20.34)

CURRENT ADT (2013) 4,330
 DESIGN YEAR ADT (2025) 4,330
 DESIGN HOURLY VOLUME (2035) 480
 DIRECTIONAL DISTRIBUTION 0.51
 TRUCKS (24 HOUR B&C) 0.03
 DESIGN SPEED 35 MPH
 LEGAL SPEED 35 MPH
 DESIGN FUNCTIONAL CLASSIFICATION:
 URBAN PRINCAL ARTERIAL
 NHS PROJECT NO

DESIGN EXCEPTIONS

NONE

DESIGN DESIGNATION (HUR-61-20.34 TO 20.56)

CURRENT ADT (2013) 3,850
 DESIGN YEAR ADT (2025) 3,850
 DESIGN HOURLY VOLUME (2035) 420
 DIRECTIONAL DISTRIBUTION 0.52
 TRUCKS (24 HOUR B&C) 0.04
 DESIGN SPEED VARIES 35 TO 45 MPH
 LEGAL SPEED VARIES 35 TO 45 MPH
 DESIGN FUNCTIONAL CLASSIFICATION:
 URBAN MAJOR COLLECTOR
 NHS PROJECT NO

DESIGN EXCEPTIONS

NONE

DESIGN DESIGNATION (HUR-61C-0.00 TO 0.72)

CURRENT ADT (2013) 4,590
 DESIGN YEAR ADT (2025) 4,710
 DESIGN HOURLY VOLUME (2035) 470
 DIRECTIONAL DISTRIBUTION 0.56
 TRUCKS (24 HOUR B&C) 0.07
 DESIGN SPEED VARIES 45 TO 55 MPH
 LEGAL SPEED VARIES 45 TO 55 MPH
 DESIGN FUNCTIONAL CLASSIFICATION:
 URBAN PRINCAL ARTERIAL
 NHS PROJECT NO

DESIGN EXCEPTIONS

NONE

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 WORKSTATION: shepher DATE: 1/14/2013 MODELNAME: Design

GENERAL

PAVING AT RAILROAD CROSSINGS

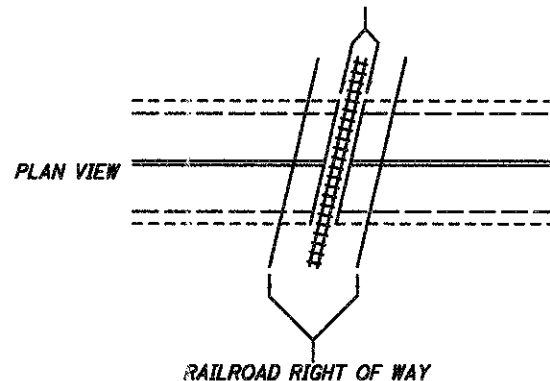
PRIOR TO ANY WORK AT RAILROAD CROSSINGS THE CONTRACTOR SHALL CONTACT THE AFFECTED RAILROAD AUTHORITY SO AS TO MAKE THEM AWARE OF THE PROGRESS AND SCHEDULE OF WORK. THE CONTRACTOR SHALL COOPERATE WITH THE RAILROAD SO AS TO ELIMINATE ANY SAFETY CONCERNS. FLAGGING WILL BE REQUIRED BY THE RAILROAD. ODOT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

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

SUSPEND AND RESUME RESURFACING AT THE HEADER TIE, AS DIRECTED BY THE ENGINEER.

DETAIL - PAVING AT RAILROAD CROSSING

BUTT JOINT/BEGIN AND END RESURFACING AS DIRECTED BY THE ENGINEER



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 HEADER TIE.

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.

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.

UTILITIES

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

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

CITY OF NORWALK
38 WHITTLESEY AVENUE
NORWALK, OHIO 44857
JOSH SNYDER, PE
DIRECTOR OF PUBLIC WORKS
419-663-6735
pw-eng@accnorwalk.com

NORTHERN OHIO RURAL WATER
P.O. BOX 96
COLLINS, OHIO 44826
BRYAN FUDER
419-668-7213
bp@norw.org

BUCKEYE OIL PIPELINE COMPANY
P.O. BOX 542
MANTUA, OHIO 44255
TIM JOSEPH
330-931-8309
TJoseph@buckeye.com

OHIO EDISON COMPANY
2508 WEST PERKINS AVE.
SANDUSKY, OHIO 44870
JEFF SCHMID
419-627-6887
schmidja@firstenergycorp.com

COLUMBIA GAS OF OHIO
1021 N. MAIN ST.
MANSFIELD, OHIO 44903
KURT SAUM, FIELD ENGINEER
419-528-1137

TIME WARNER CABLE
1575 LEXINGTON AVENUE
MANSFIELD, OHIO 44901
DAVID BAKER
419-756-6091 ext. 419-555-5109
davec.baker@twcable.com

COLUMBIA GAS TRANSMISSION
589 NORTH STATE ROAD
MEDINA, OHIO 44256
RANDY GRIFFIN, SUPERVISOR
330-721-4165
rgriffin@nisource.com

ONE COMMUNITY
RON FORSTER
800 W. SAINT CLAIR, 2ND FLOOR
CLEVELAND, OHIO 44113
216-923-2356

FRONTIER COMMUNICATIONS
83 TOWNSEND AVENUE
NORWALK, OHIO 44857
SCOTT WETZEL
419-744-3613
scott.wetzel@ftr.com

WINDSTREAM
560 TERNE AVENUE
ELYRIA, OHIO 44035
NICK PAK, CONSTRUCTION SUPERVISOR
440-329-4251

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

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

COMPLETION OF WORK:

WHEN PLANING WORK COMMENCES ON THIS PROJECT, THE CONTRACTOR HAS 42 CONSECUTIVE CALENDAR DAYS TO COMPLETE ALL PLANING, PAVEMENT REPAIR, ASPHALT PAVING, AGGREGATE SHOULDER, AND LOOP DETECTOR WORK. ALL OTHER WORK SHALL BE COMPLETED BY THE COMPLETION DATE, AND MEET REQUIREMENTS IN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. THE INTENT IS TO ALLOW THE CONTRACTOR A WINDOW TO PERFORM THE WORK BUT NOT HAVE THE WORK EXCEED THE FINAL COMPLETION DATE OF THE CONTRACT. THE 42 CONSECUTIVE CALENDAR DAYS SHALL BE CONSIDERED AS AN INTERIM COMPLETION DATE. FAILURE OF THE CONTRACTOR TO MEET THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES AS PER 108.07 OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

ROADWAY

ITEM 209 - LINEAR GRADING

THE CONTRACTOR IS REQUIRED TO PERFORM LINEAR GRADING ON THE GRADED SHOULDER. IT IS ANTICIPATED THAT THERE ARE AREAS WHERE THE GRADED SHOULDER IS AT A HIGHER ELEVATION THAN THE ADJACENT PROPOSED PAVEMENT. A 10:1 SLOPE SHALL BE ESTABLISHED, OR AS DIRECTED BY THE ENGINEER, WHEN PERFORMING ITEM 209 LINEAR GRADING. THE INTENT IS TO PROVIDE AN UNOBSTRUCTED AND POSITIVE FLOW OF STORM WATER FROM THE PAVEMENT TO THE DITCH. THE LINEAR GRADING SHALL BE PERFORMED AFTER THE INTERMEDIATE COURSE HAS BEEN COMPLETED AND BEFORE THE SURFACE COURSE IS PLACED. ALL LABOR AND EQUIPMENT NECESSARY TO PERFORM THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID PER MILE FOR ITEM 209 - LINEAR GRADING.

ITEM 604 - MONUMENT BOX ADJUSTED TO GRADE

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

ITEM 604 - CASTINGS ADJUSTED TO GRADE

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

PAVEMENT

ITEM 253 - PAVEMENT REPAIR, MISC.: PARTIAL DEPTH

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

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

THE ENGINEER SHALL DESIGNATE THE LOCATIONS AND LIMITS OF THE AREAS TO BE REPAIRED. PAVEMENT REPAIR SHALL BE PERFORMED AFTER PAVEMENT PLANING AND BEFORE PLACEMENT OF THE INTERMEDIATE AND/OR SURFACE COURSE. THE REPAIR AREAS SHALL BE SAW CUT AND EXCAVATED TO PROVIDE STRAIGHT AND VERTICAL SURFACES AROUND THE PERIMETER OF THE REPAIR AREA. PAVEMENT PLANING MAY BE USED AS AN ALTERNATIVE TO SAW CUTTING AND EXCAVATING. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHODS WHICH WILL NOT DAMAGE ADJACENT PAVEMENT. THE DEPTH OF REMOVAL SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT WITH A MAXIMUM DEPTH OF 6.25", BASED ON THE PAVEMENT DESIGN AND AN AVERAGE DEPTH OF 3" AND AN AVERAGE WIDTH OF 5 FT FOR ESTIMATING PURPOSES. THE MATERIALS REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 105.16 AND 105.17.

THE CONTRACTOR SHALL BE CAPABLE OF PERFORMING PAVEMENT REPAIRS 2 FEET 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 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. ALL EXISTING PAVEMENT AREAS WHICH WILL BE IN CONTACT WITH THE PAVEMENT REPAIR SHALL BE CLEANED AND COATED PER CMS 401.14, USING AN ASPHALT MATERIAL COMPLYING WITH 407.02. ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER.

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

- SR 250 ITEM 253 - PAVEMENT REPAIR, MISC.: PARTIAL DEPTH 371 CU. YD.
- SR 250 ITEM 253 - PAVEMENT REPAIR, AS PER PLAN 43 CU. YD.
- SR 61 ITEM 253 - PAVEMENT REPAIR, MISC.: PARTIAL DEPTH 82 CU. YD.
- SR 61 ITEM 253 - PAVEMENT REPAIR, AS PER PLAN 125 CU. YD.
- SR 61C ITEM 253 - PAVEMENT REPAIR, MISC.: PARTIAL DEPTH 41 CU. YD.

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WORKSTATION: sapher DATE: 12/14/2013 MODEL NAME: Sheet

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GENERAL NOTES

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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 (CURBED SECTION)

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

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

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

THE PROGRESSION OF THE PLANING SHALL PROCEED IN SUCH A MANNER THAT NORMAL TRAFFIC WILL NOT BE REQUIRED TO RUN OVER THE PLANED ROADWAY SURFACE MORE THAN FOURTEEN (14) CALENDAR DAYS. FOR EACH CALENDAR DAY BEYOND THE 14 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE FEE OF \$1,000.00.

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

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE

THE INTENT OF THE PLANING IS TO MILL 1 INCHES AT THE CENTER OF PAVEMENT AT NON-CURBED AREAS. THE PAVEMENT SLOPE SHALL BE 0.016 PREFERRED AND 0.010 MINIMUM, CONTINUOUS BETWEEN THE CROWN AND THE PROPOSED EDGELINE/SHOULDER. THE MILLING DEPTH SHALL BE CONTROLLED FROM THE CENTER OF PAVEMENT IN CONFORMANCE WITH THE ABOVE GUIDELINES.

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

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

THE PROGRESSION OF THE PLANING SHALL PROCEED IN SUCH A MANNER THAT NORMAL TRAFFIC WILL NOT BE REQUIRED TO RUN OVER THE PLANED ROADWAY SURFACE MORE THAN FOURTEEN (14) CALENDAR DAYS. FOR EACH CALENDAR DAY BEYOND THE 14 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE FEE OF \$1,000.00 PER DAY.

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

**ITEM 407 - TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE
ITEM 407 - TACK COAT, TRACKLESS TACK, SURFACE COURSE**

DESCRIPTION: THIS WORK CONSISTS OF PREPARING AND TREATING A PAVED SURFACE WITH NTSS-1HM TRACKLESS TACK PRODUCED BY BLACKLIDGE EMULSIONS, INC. MEET ALL REQUIREMENTS OF CONSTRUCTION AND MATERIAL SPECIFICATIONS ITEM 407 TACK COAT EXCEPT AS NOTED BELOW.

MATERIAL: CONFORM TO THE FOLLOWING TYPICAL PHYSICAL PROPERTIES:

PARAMETER	TEST METHOD	MIN.	MAX.
SAYBOLT FUROL VISCOSITY, SFS @ 25°C	ASTM D88	15	100
STORAGE STABILITY, 24 HRS, %	ASTM D244	—	1
STORAGE STABILITY, 5 DAYS, %	ASTM D244	—	5
RESIDUE BY DISTILLATION, %	ASTM D244	50	—
OIL DISTILLATE, %	ASTM D244	—	1
SIEVE TEST, %	ASTM D244	—	0.3
TEST ON RESIDUE			
PENETRATION, @ 25°C	ASTM D5	—	20
SOFTENING POINT RANGE DEG C	ASTM D36	65	—
SOLUBILITY, %	ASTM D2042	97.5	—
ORIGINAL BINDER DSR @ 82°C			
G*/SIN Δ, 10 RAD/SEC	AASHTO T111	1	—

NOTE: PRODUCT SHOULD NOT CONTAIN FILLER SUCH AS CLAY, ETC.

KEEP FROM FREEZING.
SUPPLY CERTIFIED TEST DATA TO THE ENGINEER SHOWING THE MATERIAL SUPPLIED WAS TESTED FOR AND MEETS THE ABOVE PROPERTIES.

EQUIPMENT: ALL REQUIREMENTS OF 407.03 SHALL APPLY. SEE MANUFACTURER'S REPRESENTATIVE FOR CORRECT DISTRIBUTOR SETTINGS. THOROUGHLY CLEAN ALL EQUIPMENT IF CATIONIC EMULSION WAS PREVIOUSLY USED.

WEATHER LIMITATIONS: ALL REQUIREMENTS OF 407.04 APPLY.

PREPARATION OF SURFACE: ALL REQUIREMENTS OF 407.05 APPLY.

APPLICATION OF ASPHALT MATERIAL: UNIFORMLY APPLY THE ASPHALT MATERIAL WITH A DISTRIBUTOR PER THE REQUIREMENTS OF 407.06 EXCEPT AS NOTED.

IF PRODUCT IS STORED FOR AN EXTENDED PERIOD OF TIME, PRIOR TO APPLICATION, AGITATE OR GENTLY CIRCULATE THE MATERIAL.

ALL NOZZLES AND SPRAY PATTERNS SHALL BE IDENTICAL TO ONE ANOTHER ALONG THE DISTRIBUTOR SPRAY BAR. THE ANGLE OF THE NOZZLE SHOULD BE PLACED AT A 15 TO 30 DEGREE ANGLE TO THE SPRAY BAR AXIS TO MAXIMIZE OVERLAP OR AS RECOMMENDED BY THE NOZZLE MANUFACTURER. CONTACT THE MANUFACTURER'S REPRESENTATIVE FOR REQUIRED SPRAY NOZZLE SIZE, AND DISTRIBUTOR AND NOZZLE SETTINGS.

APPLY AT A RATE OF 0.04 TO 0.08 GALLONS PER SQUARE YARD. RECOMMENDED APPLICATION TEMPERATURE IS 180°F TO 180°F. DO NOT EXCEED 180°F.

DILUTION IS NOT ALLOWED.

THE ENGINEER AND MANUFACTURER'S REPRESENTATIVE WILL APPROVE RATE OF APPLICATION, TEMPERATURE, DISTRIBUTOR SETTINGS, AND AREAS TO BE TREATED BEFORE APPLICATION OF THE TACK COAT. THE ENGINEER WILL DETERMINE THE ACTUAL APPLICATION IN GALLONS PER SQUARE YARD BY A CHECK ON THE PROJECT.

THE APPLICATION IS CONSIDERED SATISFACTORY WHEN THE MATERIAL IS APPLIED UNIFORMLY WITH NO VISIBLE EVIDENCE OF STREAKING OR RIDGING AND THE APPLICATION RATE IS ±10% OF THE SPECIFIED RATE.

METHOD OF MEASUREMENT: ALL REQUIREMENTS OF 407.07 APPLY.

BASIS OF PAYMENT: ALL REQUIREMENTS OF 407.08 APPLY. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT UNIT PRICE AS FOLLOWS:

ITEM	UNIT	DESCRIPTION
407	GALLON	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE
407	GALLON	TACK COAT, TRACKLESS TACK, SURFACE COURSE

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)

ALL OPEN TRANSVERSE JOINTS SHALL BE TAPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC. A "BUMP" SIGN (W8-1-36) SHALL BE ERRECTED AT ANY TRANSVERSE JOINT 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.

ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448)

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 ERRECTED 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.

INTERSECTIONS AND DRIVES

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

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

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

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

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

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, 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 ERRECTED 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 N_{dos} USE 50 GYRATIONS, FOR N_{max} 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 N_{max} IN QUALITY CONTROL TESTING. DO NOT TAKE EXTRA ASPHALT BINDER SAMPLES AS OUTLINED IN CMS 442.05.

DESIGN FILE: \\projects\82315\roadway\sheets\82315GN001.dgn
WORKSTATION: hshepher
MODEL NAME: Sheet
DATE: 4/17/2013

CALCULATED
SAS
CHECKED
ACH

GENERAL NOTES

HUR - 250 - 0.73

7
28

ITEM 442 - MISC.: ASPHALT GRINDINGS

FROM THE ASPHALT GRINDINGS GENERATED ON THIS PROJECT, 1283 CU YDS SHALL BE DELIVERED BY THE CONTRACTOR TO THE CITY OF NORWALK STREET DEPT. PROPERTY LOCATED AT 42 WOODLAWN AVENUE, NORWALK, OHIO 44857. ODOT WILL STOCKPILE THE DUMPED MATERIAL. ODOT WILL PROVIDE THE EXACT LOCATION OF THE STORAGE AREA ON THE PROPERTY TO THE CONTRACTOR AT THE PRECONSTRUCTION MEETING. THE GRINDINGS ARE NOT TO BE DELIVERED WET AND THEY ARE TO BE DELIVERED DIRECTLY FROM THE PROJECT. 100% OF THIS MATERIAL SHALL PASS A 1.5 INCH SIEVE AS JUDGED BY THE ENGINEER. THE GRINDINGS ARE TO BE DELIVERED BETWEEN THE HOURS OF 8:00 AM AND 3:00 PM. BEFORE DELIVERY, THE CONTRACTOR SHALL CONTACT RICHARD MOORE AT THE NORWALK STREET DEPARTMENT AT 419-663-6715.

THE MATERIAL IN THIS ITEM WILL BE PAID FOR BY THE CU YD.

ALL ASSOCIATED COSTS TO LOAD AND DELIVER THE ASPHALT GRINDINGS TO THE SITE AND TO ENSURE THE MATERIAL PASSES THE 1.5 INCH SIEVE ARE TO BE INCLUDED FOR PAYMENT BY THE CU YD PER ITEM SPECIAL, MISC.: ASPHALT GRINDINGS.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXTREME CARE SHALL BE TAKEN TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LONGITUDINAL JOINTS SHALL BE LAPPED AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

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

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

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

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

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

BUTT JOINTS

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

CONSTRUCTION "BUMP" (W8-1-36) AND "ADVISORY SPEED" (W13-1-24) SIGNS SHALL BE ERRECTED 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.

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 IN EXCESS OF 1.5 INCHES. 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.

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 40 CU YD

ITEM 614 - WORK ZONE MARKING SIGN

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

WORK ZONE MARKING SIGN: (W8-H12A-36) NO EDGE LINE = 8 EACH
WORK ZONE MARKING SIGN: (R4-1-24) DO NOT PASS = 5 EACH
WORK ZONE MARKING SIGN: (R4-2-24) PASS WITH CARE = 0 EACH

TOTAL = 13 EACH

ITEM 614 - MAINTAINING TRAFFIC LANE'S OPEN DURING HOLIDAYS OR SPECIAL EVENTS

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

CHRISTMAS FOURTH OF JULY
NEW YEARS LABOR DAY
MEMORIAL DAY THANKSGIVING
THUNDER IN THE STREETS FESTIVAL: THURSDAY, AUGUST 8, 2013
HURON COUNTY FAIR: AUGUST 10 -16, 2013

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

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

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE FEE OF \$1000 PER DAY.

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

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

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED.

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

DURING A TRAFFIC SIGNAL INSTALLATION.

LAW ENFORCEMENT OFFICERS (LEO'S) SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. THE LEO'S ARE CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR ACTIONS. ALTHOUGH THEY ARE EMPLOYED BY THE CONTRACTOR, THE PROJECT ENGINEER SHALL HAVE CONTROL OVER THEIR PLACEMENT. THE OFFICIAL PATROL CAR SHALL BE A PUBLIC SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEO'S SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

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

LIEUTENANT JOHN MAXEY
STATE HIGHWAY PATROL
300 SOUTH NORWALK ROAD
NORWALK, OHIO 44857
419-668-4087

LAW ENFORCEMENT OFFICERS WITH PATROL CAR REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 240 HOURS

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

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

ENVIRONMENTAL NOTES

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

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

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

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

CALCULATED	SAS
	CREATED
ACH	
GENERAL NOTES	
HUR - 250-0.73	
28	28

ITEM SPECIAL, MAILBOX SUPPORT SYSTEM

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

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

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

WOOD POSTS SHALL BE NOMINAL 4 IN. x 4 IN. (S4S) OR 4 1/2 IN. 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	
PART A - S.R. 250	N/A EACH
PART B - S.R. 61	N/A EACH
ITEM SPECIAL-MAILBOX SUPPORT SYSTEM, DOUBLE	
PART A - S.R. 250	N/A EACH
PART B - S.R. 61	N/A EACH

MAILBOX APPROACHES

THE MAILBOX APPROACHES SHALL BE PAVED WITH 1.50" ITEM 442 SURFACE COURSE. THEY SHALL CONFORM AS MUCH AS PRACTICAL TO STANDARD DRAWING BP-4.1 OR AS DIRECTED BY THE ENGINEER.

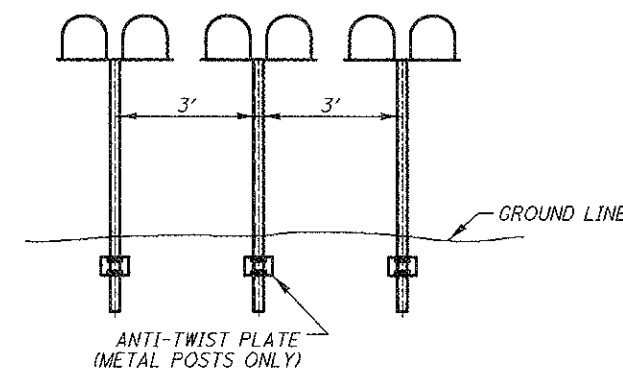
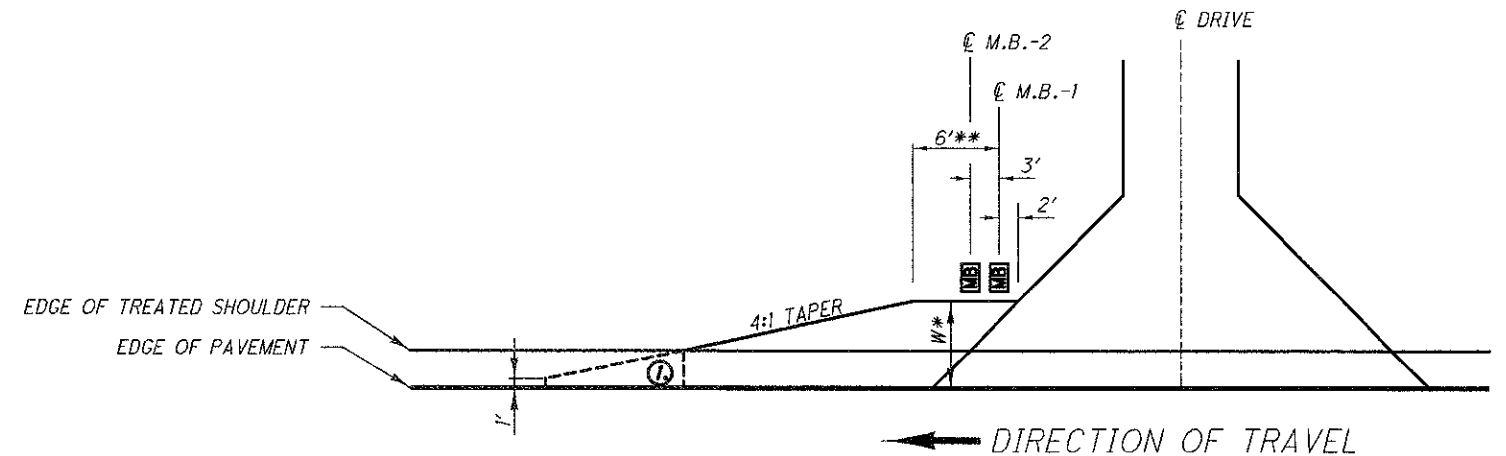
GRADING SHALL BE PERFORMED IN THESE AREAS TO OBTAIN A BASE WHICH WILL ALLOW THE FINISHED GRADE TO BE FLUSH WITH ADJACENT PAVEMENT. A QUANTITY OF ITEM 617 COMPACTED AGGREGATE HAS BEEN PROVIDED FOR AREAS WHERE THE SHOULDER IS LOW PRIOR TO GRADING AND/OR LOW AREAS CAUSED BY THE REMOVAL OF UNSUITABLE MATERIAL.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

ITEM 209 - GRADING MAILBOX APPROACHES:	
S.R. 61	3 EACH
ITEM 617 - COMPACTED AGGREGATE	
S.R. 61	6 CU YD

LOCATIONS OF MAILBOX SUPPORT SYSTEM TO BE REPLACED

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

NONE



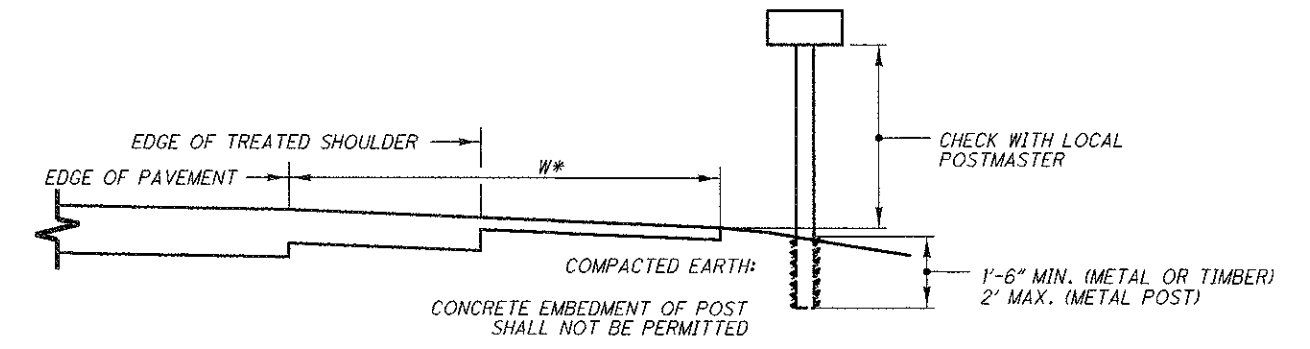
GROUP MAILBOX INSTALLATION

① END MAILBOX TURNOUT AT EDGE OF ASPHALT CONCRETE SHOULDER OR 1' FROM EDGE OF PAVEMENT IF TREATED SHOULDER IS AGGREGATE.

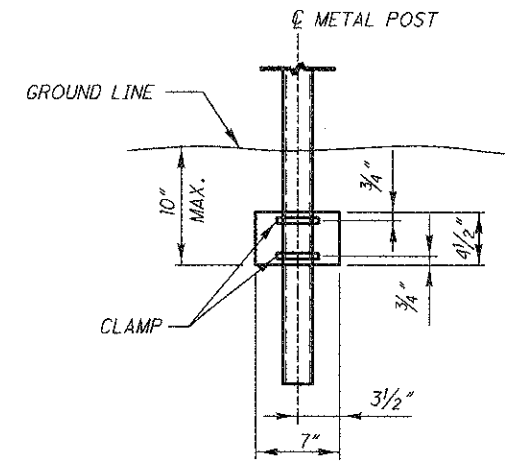
- W* NOTES**
- 1) WHERE EXISTING STANDARD MAILBOX POSTS ARE BEHIND GUARDRAIL AND ARE TO REMAIN IN PLACE, TURNOUT WIDTH SHALL EXTEND TO FACE OF GUARDRAIL.
 - 2) WHERE NO GUARDRAIL IS REQUIRED, TURNOUT WIDTH SHALL BE 6 FT MAXIMUM OR TO FACE OF EXISTING STANDARD MAILBOX IF IT IS LESS THAN 6 FT.
 - 3) IF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

**** NOTE**

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



CROSS SECTION / ELEVATION VIEW



ANTI-TWIST PLATE

FOR DETAILS NOT SHOWN SEE STANDARD DRAWING BP-4.1

DESIGN FILE: \projects\roadway\sheets\82315\82315GM001.dgn
WORKSTATION: shepher DATE: 4/4/2013 MODELNAME: Sheet

DESIGN FILE: \projects\82315\roadway\sheet\82315CG001.dgn
 WORKSTATION: nshp
 DATE: 4/5/2013
 MODEL NAME: Design

SHEET NUMBER							PARTICIPATION					ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
6	8	10	14	15	16	17	Fed/Local (NHS) 01/NHS/PV	100% Local 02/S<2/PV	Fed/State (NHS) 03/NHS/PV	Fed/Local (SR61) 04/S<2/PV	Fed/State(SR61) 05/S<2/PV							
				0.6	1.32	2.75			0.6	1.34	2.73	209	60500	4.67	MILE	ROADWAY LINEAR GRADING		
		3								3		209	80000	3	EACH	GRADING MAIL BOX APPROACHES		
			6	4	2		10			2		604	39500	12	EACH	MONUMENT BOX ADJUSTED TO GRADE		
		6		25	55	111			25	55	117	617	10100	197	CU YD	COMPACTED AGGREGATE		
				704	1568	3224			704	1591	3201	617	20600	5,496	SQ YD	SHOULDER PREPARATION		
																	DRAINAGE	
			20	7	74	4			27			604	09600	105	EACH	CATCH BASIN ADJUSTED TO GRADE		
			100	34	61	4			134			604	34500	199	EACH	MANHOLE ADJUSTED TO GRADE		
																	PAVEMENT	
494									494			253	02000	494	CU YD	PAVEMENT REPAIR		
168								168				253	02001	168	CU YD	PAVEMENT REPAIR, AS PER PLAN	6	
			35300	3665	73350		32063		6902	68544	4806	254	01000	112315	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE (1.00")		
					9957	29212				12777	26392	254	01000	39169	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE (1.5")		
			26886	33134			39184		20836			254	01000	60020	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE (3.25)		
			574	382	833	294	726		230	860	267	254	01600	2,083	SQ YD	PATCHING PLANED SURFACE		
			4621	2943	3331	1168	5,728		1,836	3,444	1055	407	20100	12,063	GALLON	TACK COAT, TRACKLESS TACK, SURFACE COURSE		
			899	1318			1372		845			407	20000	2217	GALLON	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE		
			1031	176	2036		1156		51	2,036		424	12000	3,243	CU YD	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B		
					416	1214				533	1097	442	00201	1,830	CU YD	ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN		
			936	1380			1448		868			442	10000	2,316	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)		
			1092	1611			1690		1013			442	20200	2,703	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448)		
	1283							1283				442	90000	1,283	CU YD	ASPHALT CONCRETE, MISC.: ASPHALT GRINDINGS		
																	WATER WORK	
			50	25	71	5	75			71	5	638	10800	151	EACH	VALVE BOX ADJUSTED TO GRADE		
																	TRAFFIC CONTROL	
										85	167	621	00300	252	EACH	RPM REFLECTOR	21	
										85	167	621	54000	252	EACH	RAISED PAVEMENT MARKER REMOVED	21	
							25					632	26501	25	EACH	DETECTOR LOOP, AS PER PLAN	19	
							0.68		3.11		2.49	642	00100	6.28	MILE	EDGE LINE, 4", TYPE 1	21	
									0.055			642	00194	0.55	MILE	LANE LINE, 6"		
							5.37	0.39	0.75	3.08	0.57	642	00300	10.16	MILE	CENTER LINE, TYPE 1	21	
							4050		5990	2300	1478	644	00400	13818	FT	CHANNELIZING LINE, 8"	21	
							800		220	745		644	00500	1765	FT	STOP LINE	21	
							2210			2800		644	00600	5010	FT	CROSSWALK LINE	21	
							100		200	900		644	00700	1200	FT	TRANSVERSE/DIAGONAL LINE		
							2					644	01000	2	EACH	RAILROAD SYMBOL MARKING	21	
							2			1		644	01100	3	EACH	SCHOOL SYMBOL MARKING, 72"		
							2600			3400		644	01200	6000	FT	PARKING LOT STALL MARKING		
							132		29	66		644	01300	227	EACH	LANE ARROW		
																	SEE SHEE 22 FOR STRUCTURE SUMMARY	
																	MAINTENANCE OF TRAFFIC	
							4			4	5	614	12460	13	EACH	WORK ZONE MARKING SIGN	8	
							20			20		614	13000	40	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	8	
							8.62		3.52	3.4	0.64	614	21500	16.18	MILE	WORK ZONE CENTER LINE, CLASS II, 642 PAINT	21	
											5450	614	23200	5450	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT	21	
							950		70	645	60	614	26200	1725	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	21	
							50%			50%		614	11000	LUMP		MAINTAINING TRAFFIC		
							120			120		614	11110	240	HOURL	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		
							1.5			1.5		619	16000	3	MONTH	FIELD OFFICE, TYPE A		
							50%			50%		624	10000	LUMP		MOBILIZATION		

GENERAL SUMMARY

HUR - 250 - 00.73

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* - FOR TYPICALS, SEE SHEET 18

COUNTY	ROUTE	TYPE	LOG POINT TO LOG POINT		LENGTH		WIDTH FEET AVG.	*TYPICAL	PAVEMENT AREA SQ YD	254			407		424		442		604			638		AGGREGATE SHOULDER PROPOSED WIDTH		AGGREGATE SHOULDER AREA SQ YD	209	617									
			STRAIGHT LINE MILEAGE	MILE	FEET	SQ YD				SQ YD	SQ YD	GALLON	GALLON	INCH	CU. YD	INCH	CU. YD.	INCH (AVG)	CU. YD.	EACH	EACH	EACH	EACH	SL	SR		MILE	1.25 INCHES									
																												AVG. THICKNESS		CU YD	SQ YD						
HUR	250	NHS	3.34	3.47	0.13	686	40.0	2	3,049	0	3,049	30	244	122	0	0	1.5	127	1.75	148							0.0	0.0	0	0.00	0	0					
		NHS	3.47	3.53	0.06	317	35.0	3	1,233	1,233	0	12	99	0	1	34	0	0	0	0							0.0	0.0	0	0.00	0	0					
		NHS	3.53	3.66	0.13	686	35.0	4	2,668	0	2,668	27	213	0	1	74	1.5	111	1.75	130							0.0	0.0	0	0.00	0	0					
	suspend	NHS	3.66	3.90	0.24	1267	30.0		4,223	0	0	0	0	0	0	0	0	0	0	0							0.0	0.0	0	0.00	0	0					
		NHS	3.90	4.45	0.55	2904	32.0	4	10,325	0	10,325	103	826	413	0	0	1.5	430	1.75	502							0.0	0.0	0	0.00	0	0					
		NHS	4.45	4.52	0.07	370	35.0	4	1,439	0	1,439	14	115	58	0	0	1.5	60	1.75	70							0.0	0.0	0	0.00	0	0					
		NHS	4.52	4.39	0.17	898	44.0	4	4,390	0	4,390	44	351	176	0	0	1.5	183	1.75	213							0.0	0.0	0	0.00	0	0					
		NHS	4.69	4.74	0.05	264	44.0	3	1,291	1,291	0	13	103	52	1	36	0	0	0	0							0.0	0.0	0	0.00	0	0					
		NHS	4.74	4.77	0.03	158	65.0	3	1,141	1,141	0	11	91	46	1	32	0	0	0	0							0.0	0.0	0	0.00	0	0					
		NHS	4.77	4.90	0.13	686	65.0	6	4,954	0	4,954	50	396	198	0	0	1.5	206	1.75	241							2.0	2.0	305	0.26	11	305					
	suspend	NHS	4.90	4.94	0.04	211	65.0		1,524	0	0	15	0	0	0	0	0	0	0	0							0.0	0.0	0	0.00	0	0					
		NHS	4.94	5.05	0.11	581	65.0	6	4,196	0	4,196	42	336	168	0	0	1.5	175	1.75	204							2.0	2.0	258	0.22	9	258					
		NHS	5.05	5.11	0.06	317	60.0	6	2,113	0	2,113	21	169	85	0	0	1.5	88	1.75	103							2.0	2.0	141	0.12	5	141					
EXTRA AREA FOR INTERSECTIONS									0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
EXTRA AREA FOR PAVED DRIVES									0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
EXTRA AREA FOR AGGREGATE DRIVES									0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
EXTRA AREA FOR EX. & PR. MAILBOX APPROACHES									0	0	0	0	0	0	0	0	0	0	0	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS									1.77	9346	3,665	33,134	382	2,943	1,318	176	1,380	1,811	34	7	4	25							0.60	25	704						

DESIGNED BY SAS
CHECKED BY ACH

PAVEMENT DATA

HUR-250-0.73

DESIGN FILE: \\projects\82315\roadway\sheets\82315G0002.dgn
WORKSTATION: shepher DATE: 4/1/2013 MODEL NAME: Sheet

* - FOR TYPICALS, SEE SHEET 18

COUNTY	ROUTE	TYPE	LOG POINT TO LOG POINT		LENGTH		WIDTH FEET AVG.	*TYPICAL	PAVEMENT AREA SQ YD	254			407	424		442		604			638	AGGREGATE SHOULDER PROPOSED WIDTH		AGGREGATE SHOULDER AREA SQ YD	209	617		617
					MILE	FEET				PAVEMENT PLANING, ASPHALT CONCRETE (1.50") SQ.YD	PAVEMENT PLANING ASPHALT CONCRETE (1.00") SQ.YD	PATCHING PLANED SURFACE SQ.YD	TACK COAT, TRACKLESS TACK, SURFACE COURSE @ 0.08 GAL/SY GALLON	FINE GRADED POLYMER ASPHALT CONCRETE INCH	ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN CU.YD.	MANHOLE ADJUSTED TO GRADE EACH	CATCH BASIN ADJUSTED TO GRADE EACH	MONUMENT BOX ADJUSTED TO GRADE EACH	VALVE BOX ADJUSTED TO GRADE EACH	SL	SR	LINEAR GRADING MILE	1.25 INCHES		SHOULDER PREPARATION SQ.YD			
																							AVG. THICKNESS					
						STRAIGHT LINE MILEAGE																						
HUR	61		16.95	17.14	0.19	1003	24.5	5	2,730	2,730		27	109		1.5	114						2.0	2.0	446	0.38	15	446	
			17.14	17.16	0.01	53	57.0	5	335	335		3	13		1.5	14						2.0	2.0	24	0.02	1	24	
			17.15	17.33	0.18	950	60.7	5	6,407	6,407		64	256		1.5	267						2.0	2.0	422	0.38	15	422	
			17.33	17.34	0.01	53	55.8	5	329	329		3	13		1.5	14						2.0	2.0	24	0.02	1	24	
	curb		17.34	17.37	0.03	158	60.2	1	1,057		1,057	11	42	1	29							0.0	0.0	0	0.00	0	0	
	curb		17.37	17.46	0.09	475	46.7	1	2,465		2,465	25	99	1	68							0.0	0.0	0	0.00	0	0	
	curb		17.46	17.59	0.13	686	33.6	1	2,561		2,561	26	102	1	71							0.0	0.0	0	0.00	0	0	
	curb		17.59	17.65	0.06	317	33.6	1	1,183		1,183	12	47	1	33							0.0	0.0	0	0.00	0	0	
	curb		17.65	17.85	0.20	1056	33.3	1	3,907		3,907	39	156	1	109							0.0	0.0	0	0.00	0	0	
	curb		17.85	18.28	0.43	2270	35.3	1	8,903		8,903	89	356	1	247							0.0	0.0	0	0.00	0	0	
	curb		18.28	18.38	0.10	528	35.4	1	2,077		2,077	21	83	1	58							0.0	0.0	0	0.00	0	0	
	curb		18.38	18.49	0.11	581	37.7	1	2,434		2,434	24	97	1	68							0.0	0.0	0	0.00	0	0	
	curb		18.49	18.56	0.07	370	37.6	1	1,546		1,546	15	62	1	43							0.0	0.0	0	0.00	0	0	
	curb		18.56	18.68	0.12	634	63.0	1	4,438		4,438	44	178	1	123							0.0	0.0	0	0.00	0	0	
	curb		18.68	18.98	0.30	1584	63.5	1	11,176		11,176	112	447	1	310							0.0	0.0	0	0.00	0	0	
	curb		18.98	19.04	0.06	317	53.9	1	1,898		1,898	19	76	1	53							0.0	0.0	0	0.00	0	0	
	curb		19.04	19.10	0.06	317	53.2	1	1,874		1,874	19	75	1	52							0.0	0.0	0	0.00	0	0	
	curb		19.10	19.39	0.29	1531	39.4	1	6,702		6,702	67	268	1	186							0.0	0.0	0	0.00	0	0	
	curb		19.39	19.44	0.05	264	37.7	1	1,106		1,106	11	44	1	31							0.0	0.0	0	0.00	0	0	
	curb		19.44	19.50	0.06	317	34.0	1	1,198		1,198	12	48	1	33							0.0	0.0	0	0.00	0	0	
	curb		19.50	19.54	0.04	211	30.8	1	722		722	7	29	1	20							0.0	0.0	0	0.00	0	0	
	suspend		19.54	19.55	0.01	53	30.8		181		181	2	7	1	5							0.0	0.0	0	0.00	0	0	
	bridge		19.55	19.55	0.00	0	30.8		0		0	0	0	0	0							0.0	0.0	0	0.00	0	0	
	suspend		19.55	19.78	0.23	1214	30.8		4,155		4,155	42	166	1	115							0.0	0.0	0	0.00	0	0	
	curb		19.78	20.11	0.33	1742	29.5	1	5,710		5,710	57	228	1	159							0.0	0.0	0	0.00	0	0	
	suspend		20.11	20.29	0.18	950	30.8		3,251		3,251	33	130	1	90							0.0	0.0	0	0.00	0	0	
			20.29	20.33	0.04	211	29.5	5	692		692	7	28	1	19							2.0	2.0	94	0.08	3	94	
			20.33	20.56	0.23	1214	30.5	5	4,114		4,114	41	165	1	114							2.0	2.0	540	0.46	19	540	
	EXTRA AREA FOR INTERSECTIONS								0	0		0	0		1.5	0												
	EXTRA AREA FOR PAVED DRIVES								126	126		1	5		1.5	5												
	EXTRA AREA FOR AGGREGATE DRIVES								18				1		1.5	1								18		1	18	
	EXTRA AREA FOR EX. & PR. MAILBOX APPROACHES								30	30		0	1		1.5	1												
TOTALS					3.61	19061				9,957	73,350	833	3,331	2,036	416	61	74	2	71			1,568	1.32	55	1,568			

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 WORKSTATION: nshepher
 MODELNAME: Sheet
 DATE: 1/25/2013

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PAVEMENT DATA

HUR - 250-0.73

* - FOR TYPICALS, SEE SHEET 18

COUNTY	ROUTE	TYPE	LOG POINT TO LOG POINT		LENGTH		WIDTH FEET AVG.	*TYPICAL	PAVEMENT AREA SQ YD	254			407	442		604			638	AGGREGATE SHOULDER PROPOSED WIDTH		AGGREGATE SHOULDER AREA SQ YD	209	617		
					MILE	FEET				PAVEMENT PLANING, ASPHALT CONCRETE (1.50") SQ.YD.	PATCHING PLANED SURFACE SQ.YD.	TACK COAT, TRACKLESS TACK, SURFACE COURSE @ 0.04 GAL/SY GALLON	ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN INCH CU.YD.	MANHOLE ADJUSTED TO GRADE EACH	CATCH BASIN ADJUSTED TO GRADE EACH	MONUMENT BOX ADJUSTED TO GRADE EACH	VALVE BOX ADJUSTED TO GRADE EACH	SL	SR	LINEAR GRADING MILE	1.25 INCHES		SHOULDER PREPARATION SQ.YD.			
																							AVG. THICKNESS			
					STRAIGHT LINE MILEAGE																			CU YD	SQ.YD.	
HUR	SR 61C																									
	EB SPUR	RURAL	0.00	0.02	0.02	106	30.7	5	362	362	4	14	1.5	15					0.0	0.0	0	0.00	0	0		
	EB SPUR	RURAL	0.02	0.11	0.09	475	33.7	5	1,779	1,779	18	71	1.5	74					2.0	2.0	211	0.18	7	211		
	EB SPUR	RURAL	0.11	0.31	0.20	1056	35.1	5	4,118	4,118	41	165	1.5	172					2.0	2.0	469	0.40	16	469		
	EB SPUR	RURAL	0.31	0.40	0.09	475	36.1	5	1,853	1,853	19	74	1.5	77					2.0	2.0	211	0.18	7	211		
	EB SPUR	RURAL	0.40	0.49	0.09	496	35.1	5	1,934	1,934	19	77	1.5	81					2.0	2.0	220	0.19	8	220		
	EB SPUR	RURAL	0.49	0.57	0.08	422	32.8	5	1,538	1,538	15	62	1.5	64					0.0	0.0	0	0.00	0	0		
	EB SPUR	RURAL	0.57	0.58	0.01	53	32.8	5	193	193	2	8	1.5	8					0.0	0.0	0	0.00	0	0		
	SPUR	URBAN	0.58	0.59	0.01	53	65.0	5	383	383	4	15	1.5	16					2.0	2.0	24	0.02	1	24		
	SPUR	BRIDGE	0.59	0.60	0.01	53																				
	SPUR	URBAN	0.60	0.63	0.03	158	65.0	5	1,141	1,141	11	46	1.5	48					2.0	2.0	70	0.06	2	70		
	SPUR	URBAN	0.63	0.72	0.09	475	65.0	5	3,431	3,431	34	137	1.5	143					2.0	2.0	211	0.18	7	211		
	WB SPUR	RURAL	0.22	0.28	0.06	317	24.6	5	866	866	9	35	1.5	36					2.0	2.0	141	0.12	5	141		
	WB SPUR	RURAL	0.28	0.48	0.20	1056	23.5	5	2,757	2,757	28	110	1.5	115					2.0	2.0	469	0.40	16	469		
	WB SPUR	RURAL	0.48	0.49	0.01	53	27.3	5	161	161	2	6	1.5	7					2.0	2.0	24	0.02	1	24		
	WB SPUR	RURAL	0.49	0.58	0.09	475	31.5	5	1,663	1,663	17	67	1.5	69					0.0	0.0	0	0.00	0	0		
	CONNECTOR	RURAL	0.00	0.12	0.12	634	23.8	5	1,677	1,677	17	67	1.5	70					2.0	2.0	282	0.24	10	282		
	CONNECTOR	RURAL	0.12	0.16	0.04	211	20.8	5	488	488	5	20	1.5	20					2.0	2.0	94	0.08	3	94		
	TOLEDO RD	LOCAL	0.00	0.34	0.34	1795	24.0	5	4,787	4,787	48	191	1.5	199					2.0	2.0	798	0.68	28	798		
	EXTRA AREA FOR INTERSECTIONS									0	0	0	0	0												
	EXTRA AREA FOR PAVED DRIVES									81	81	1	3	0	0											
	EXTRA AREA FOR AGGREGATE DRIVES									0	0	0	0	0							0		0	0		
	EXTRA AREA FOR EX. & PR. MAILBOX APPROACHES									0	0	0	0	0												
TOTALS					1.58	8364				29,212		294	1,168	1,214	4	4	5			3,224	2.75	111	3,224			

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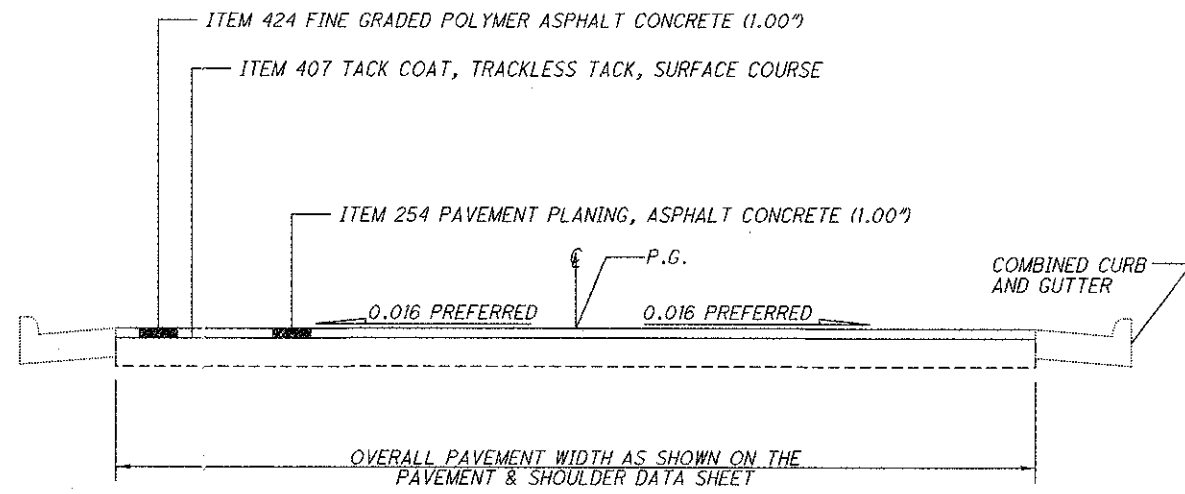
PAVEMENT DATA

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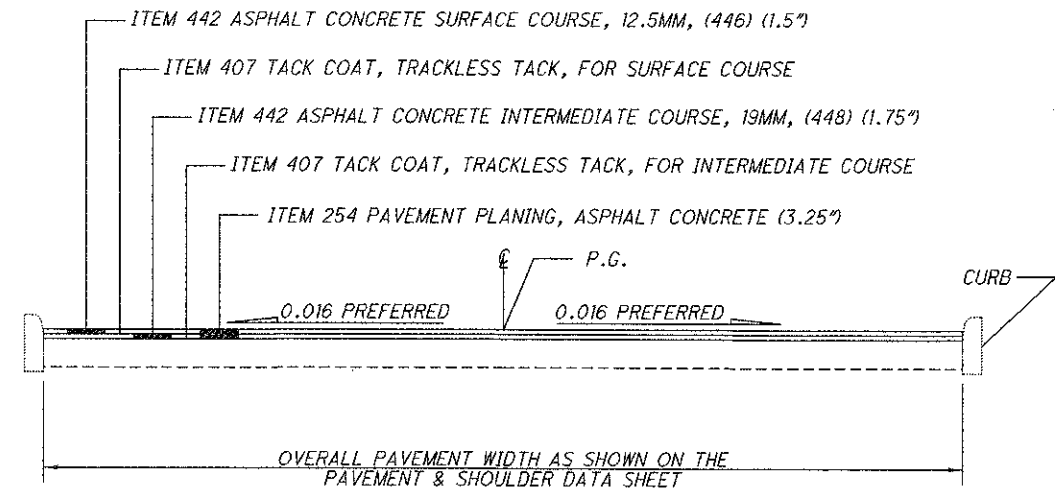
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28

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WORKSTATION: shepherd DATE: 1/25/2013
MODELNAME: Sheet

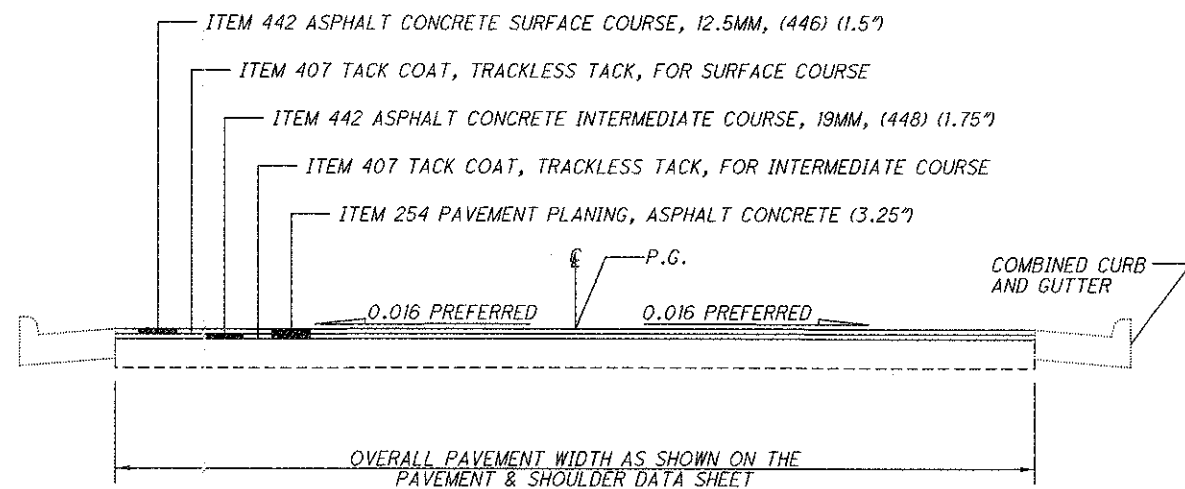
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 WORKSTATION: sshepher DATE: 4/1/2013



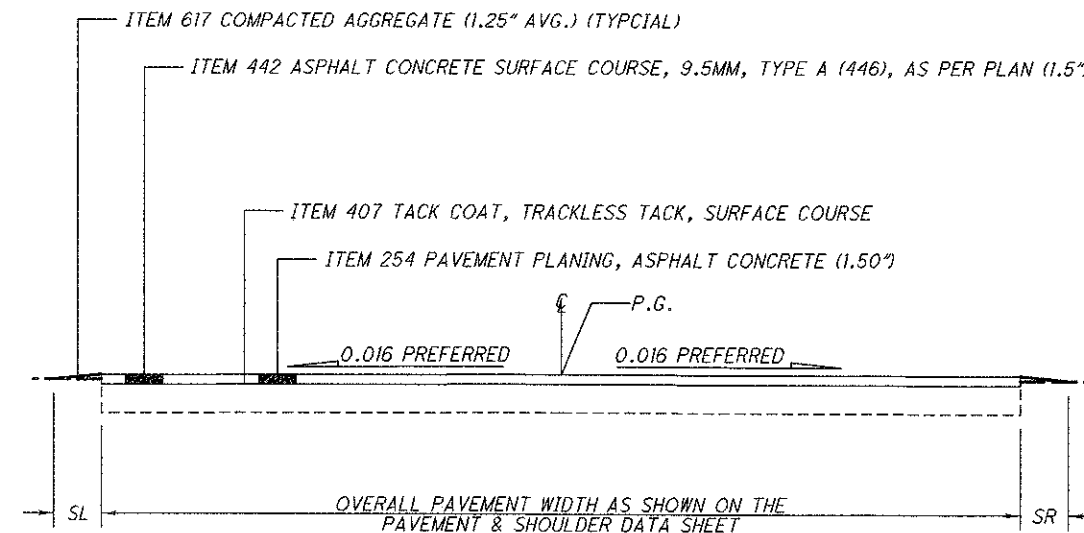
TYPICAL 1



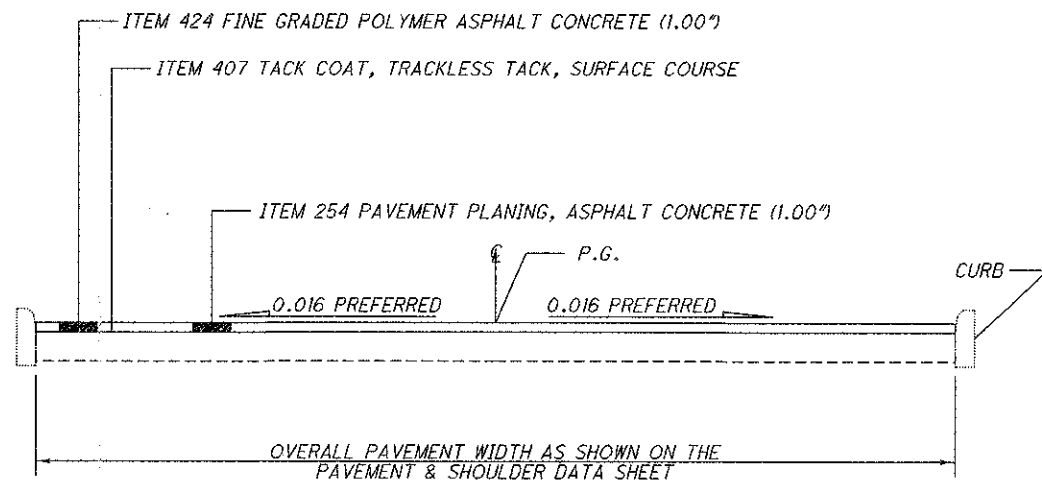
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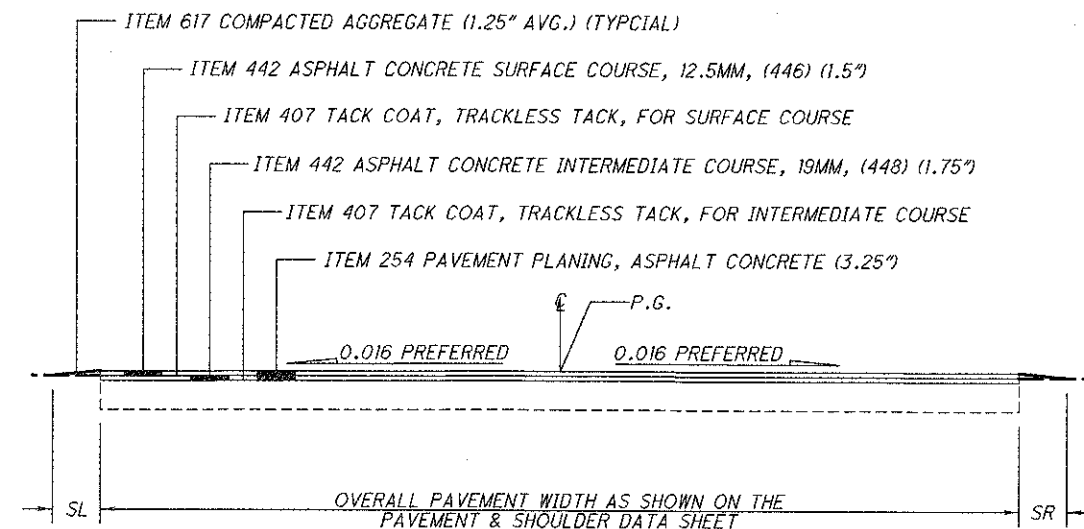
TYPICAL 2



TYPICAL 5



TYPICAL 3



TYPICAL 6

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 SAS
 CHECKED
 ACH

TYPICAL SECTIONS

HUR-250-0.73

DESIGN FILE: I:\projects\82315\roadway\sheet\82315 Loops.dgn
 WORKSTATION: sshepher DATE: 1/17/2013

ITEM 632. DETECTOR LOOP, AS PER PLAN

AN ESTIMATED QUANTITY OF 632 DETECTOR LOOP, AS PER PLAN HAS BEEN PROVIDED WHEN WIRE IS CUT, BROKEN OR DESTROYED DUE TO PAVEMENT PLANING, PAVEMENT REPAIR OR BUTT JOINT OPERATIONS. IT IS IMPERATIVE THAT REPLACEMENT OF LOOP DETECTORS BE INSTALLED AND FULLY FUNCTIONAL IN THE SHORTEST POSSIBLE TIME. THE CONTRACTOR SHALL HAVE REPLACEMENT LOOP DETECTORS INSTALLED AND FULLY FUNCTIONAL WITHIN 7 CALENDAR DAYS OF DESTRUCTION OF THE ORIGINAL LOOP.

THE CONTRACTOR SHALL NOTIFY DOUG HICKEY, DISTRICT 3 TRAFFIC DEPARTMENT, (PHONE 419-207-7184) 5 WORKING DAYS IN ADVANCE OF ANY PLANING OPERATIONS OR PAVEMENT REPAIR WORK THAT WILL DAMAGE DETECTOR LOOP INSTALLATIONS. THIS NOTIFICATION IS NEEDED FOR DISTRICT 3 TO SCHEDULE TEMPORARY SIGNAL TIMING MODIFICATIONS FOR THE TIME PERIOD WHEN THE DETECTOR LOOPS ARE OUT OF OPERATION. THE CONTRACTOR SHALL THEN RENOTIFY MR. HICKEY WITHIN 2 WORKING DAYS AFTER THE DAMAGED DETECTOR LOOPS ARE REPLACED SO THAT HE CAN RESCHEDULE DISTRICT CREWS TO RESTORE SIGNAL TIMINGS TO THE ORIGINAL SETTINGS.

FAILURE TO COMPLY WITH THE ABOVE STATED REQUIREMENTS WILL RESULT IN THE ASSESSMENT OF LIQUIDATED DAMAGES ACCORDING TO SECTION 108.07 OF THE CMS FOR EACH CALENDAR DAY BEYOND THE SPECIFIED LIMIT.

THE NEW LOOP DETECTORS SHALL BE PLACED AFTER THE PLANING AND PAVEMENT REPAIR OPERATIONS ARE COMPLETED WITHIN THE LOOP DETECTOR AREAS. THE LOOP DETECTORS SHALL NOT BE CUT INTO THE SURFACE COURSE.

NEW LOOP DETECTORS SHALL BE PLACED AT THE SAME LOCATIONS AND BE THE SAME SIZE AND TYPE AS THE EXISTING, OR AS DIRECTED BY THE ENGINEER. THE LOOP DETECTOR WIRE SHALL BE REPLACED TO THE PULL BOX OR POLE, WHICHEVER IS APPLICABLE, UNDER ITEM 632 AND TC-82.10.

THIS WORK SHALL INCLUDE THE POURED EPOXY INSULATED SPLICE(S) REQUIRED TO CONNECT THE LOOP DETECTOR WIRE TO EXISTING LEAD-IN CABLE AT THE PULL BOX OR POLE. THE SPLICES SHALL BE IN ACCORDANCE WITH SECTION 725.15 OF THE CMS. PAYMENT SHALL BE MADE PER EACH LOOP DETECTOR CONNECTED TO THE LEAD-IN CABLE.

THE CONTRACTOR WILL BE PROVIDED WITH DETAILED PLANS AT THE PRE CONSTRUCTION MEETING SHOWING DETECTOR LOOP PLACEMENTS. A TABLE SHOWING DIMENSIONS AND LOCATIONS IS PROVIDED FOR THE PURPOSE OF ESTIMATING.

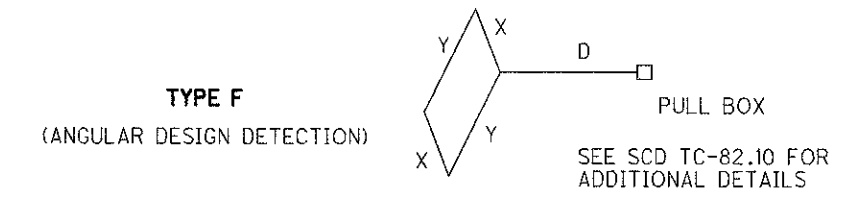
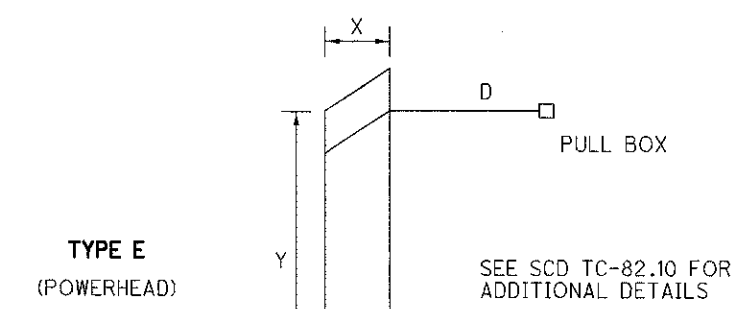
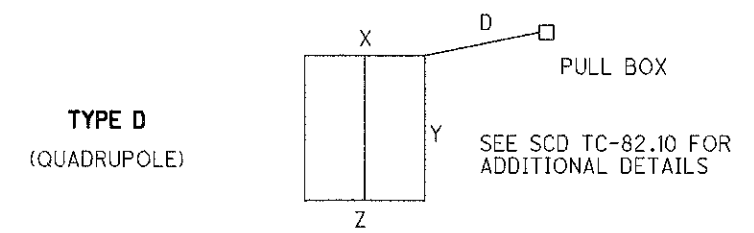
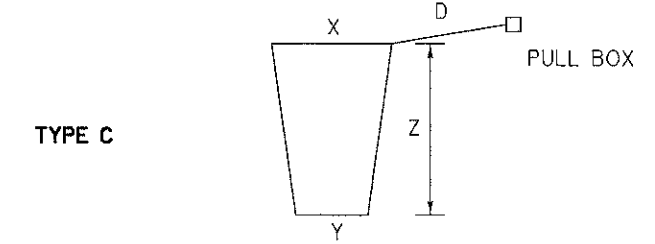
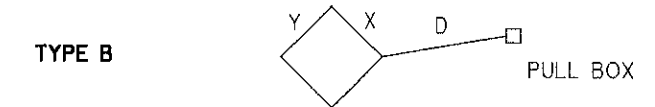
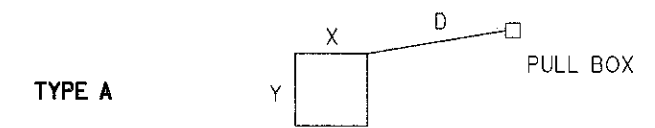
PAYMENT FOR ALL THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH OF ITEM 632 DETECTOR LOOP, AS PER PLAN.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 632 DETECTOR LOOP, AS PER PLAN 22 EACH

THE INTERSECTIONS INVOLVED ARE AS FOLLOWS:

ROUTE	SLM	DIRECTION	CROSS ROAD	TYPE	DIMENSION			
					D	X	Y	Z
USR 250	1.37	SB	REPUBLIC	A	154	6	6	
	1.38	SB	REPUBLIC	E	67	6	30	
	1.46	NB	REPUBLIC	A	33	6	6	
	1.46	NB	REPUBLIC	A	12	6	6	
USR 250	1.82	SB	GALLUP	A	19	6	6	
	1.86	SB	GALLUP	E	24	6	30	
	1.88	NB	GALLUP	E	40	6	30	
	1.96	NB	GALLUP	A	12	6	6	
USR 250	1.96	SB	CLINE	E	76	6	30	
	1.99	NB	CLINE	E	32	6	30	
USR 250	2.50	NB	MILAN / LEAGUE (ST/RT)	E	12	6	30	
	2.51	NB	MILAN / LEAGUE (LT)	E	30	6	60	
	2.53	NB	MILAN / LEAGUE (ST/RT)	A	6	6	6	
	2.53	NB	MILAN / LEAGUE (LT)	A	11	6	6	
USR 250	2.95	SB	LEAGUE / WHITTLESEY (LT)	E	21	6	30	
	2.96	NB	LEAGUE / WHITTLESEY (RT)	E	23	6	30	
	2.96	NB	LEAGUE / WHITTLESEY (ST)	E	28	6	30	
	2.96	NB	LEAGUE / WHITTLESEY (LT)	E	80	6	30	
USR 250	3.10	SB	GIANT EAGLE	E	18	6	30	
	3.12	NB	GIANT EAGLE	E	20	6	30	
USR 250	4.49	SB	EXECUTIVE DRIVE	E	27	6	30	
	4.52	NB	EXECUTIVE DRIVE	A	14	6	6	
USR 250	4.58	SB	SHADY LANE (LT)	E	26	6	30	
	4.60	NB	SHADY LANE (LT)	E	24	6	30	
USR 250	4.76	NB	FISHER TITUS DRIVE (LT)	E	18	6	30	



LOOP DETECTOR NOTES & DETAILS

HUR-250-0.73

CALCULATED
SAS
CHECKED
ACH

AUXILIARY & LONG LINE MARKINGS

ROUTE	COUNTY	STATION / SLM		HIGHWAY MILES	614				642, TYPE 1					644													SPECIAL									
					WORK ZONE LANE LINE, CLASS I, 642 PAINT	WORK ZONE CENTER LINE, CLASS II, 642 PAINT	WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	EDGE LINE		CENTER LINE			AUXILIARY MARKINGS (740.04)										AIR SPEED ZONE MARKING												
									TOTAL (PAY QUANTITY) (WHITE)	TOTAL (PAY QUANTITY) (YELLOW)	LANE LINE	SOLID LINE EQUIVALENT	TOTAL (PAY QUANTITY)	CHANNELIZING LINE	STOP LINE	CROSSWALK LINE	TRANSVERSE/DIAGONAL LINE (WHITE)	TRANSVERSE/DIAGONAL LINE (YELLOW)	ISLAND MARKING	RAILROAD SYMBOL MARKING	SCHOOL SYMBOL MARKING		PARKING LOT STALL MARKING		LANE ARROW				HANDICAP SYMBOL MARKING							
FROM	TO	MILE	MILE	MILE	FT	FT	MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	FT	SQ FT	EACH	72 INCH	96 INCH	FT	LEFT	RIGHT	THROUGH	COMBINATION	DOTTED LINE, 4"	EACH	EACH								
SR 61	HURON	16.95	17.15	0.2		0.2			0.4		0.2																									
		17.15	15.50	0.35		0.35			0.7		0.35																									
		17.50	17.95	0.45		0.47					0.47																									
		17.95	18.46	0.51		0.53					0.53																									
		18.46	18.82	0.36		0.38					0.38																									
		18.82	19.16	0.34		0.34					0.34																									
		19.16	19.52	0.36		0.34					0.34																									
		19.52	19.90	0.38		0.36					0.36																									
		19.90	20.27	0.37		0.38					0.38																									
		20.27	20.56	0.29		0.05				0.1		0.05																								
USR 250	HURON	0.73	1.16	0.43		1.6				0.8																										
		1.16	1.58	0.42		1.6					0.8																									
		1.58	1.99	0.41		1.1					0.56																									
		1.99	2.41	0.42		1.4					0.72																									
		2.41	2.77	0.36		0.90					0.47																									
		2.77	3.16	0.39		0.86					0.43																									
		3.16	3.62	0.46		0.84					0.42																									
		3.62	4.11	0.49		0.94					0.47																									
		4.11	4.60	0.49		0.98					0.49																									
		4.60	5.04	0.44		1.12				1.12	0.56																									
5.04	5.11	0.07		0.80				0.80	0.40																											
SR 61C	HURON	0.00	0.72	0.72		0.64			3.16																											
TOTALS TO GENERAL SUMMARY				8.71	0.00	16.18	5,450	1,725	6.28	0.00	0.55	0.000	10.16	13,818	1,765	5,010	0	1,200	0	0	0	3	0	6,000	181	46	0	0	0	0	0	0				

RAISED PAVEMENT MARKERS

ROUTE	COUNTY	STATION/SLM		DETAIL	621 RAISED PAVEMENT MARKER REMOVED	621 RPM	PRISMATIC RETRO-REFLECTOR TYPES					REMARKS	DETAIL	DESCRIPTION
							ONE-WAY WHITE	TWO-WAY						
								YELLOW / YELLOW	WHITE / RED	YELLOW / RED	BLUE / BLUE			
FROM	TO	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH					
SR 61	HURON	17.00	17.15	1 & 9	63	63	16	24	23				1	MULTILANE UNDIVIDED TYPICAL SPACING
		17.15	17.32	1 & 9	22	22	11	11					2	TAPERED ACCEL. LANE
SR 61C	HURON	0.00	0.62	1	167	167	16	27	62	62			3	DECELERATION LANE
					0	0							4	PARALLEL ACCEL LANE
					0	0							5	MULTILANE DIVIDED/EXPRESSWAY
					0	0							6	STOP APPROACH
					0	0							7	2 LANE APPR. WITH TURN LANE
					0	0							8	THROUGH APPROACH
					0	0							9	3 LANE APPR. WITH TURN LANE
					0	0							10	3 LANE DIVIDED TO 2 LANE TRANSITION
					0	0							11	3 LANE UNDIVIDED TO 2 LANE TRANSITION
					0	0							12	TWO LANE NARROW BRIDGE
					0	0							13	TWO WAY LEFT TURN LANE
					0	0							14	ONE LANE BRIDGE
					0	0							15	HORIZONTAL CURVE
					0	0							16	HORIZONTAL CURVE ALT.
					0	0							17	STOP APPROACH ALT.
					0	0							18	FIRE HYDRANT
					0	0							GAP	CENTER LINE AT 80 FT. TYP.
TOTALS TO GENERAL SUMMARY					252	252								

- NOTES
- 1) SEE TYPICAL SECTIONS FOR LANE WIDTH STRIPING.
 - 2) FOR ALL WORK ZONE MARKINGS, THE 642 PAINT USED SHALL BE TYPE 1.
 - 3) WORK ZONE STOP LINES SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS: ALL SIGNALIZED INTERSECTIONS
 - 4) PAVEMENT MARKING PLANS WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING

DESIGN FILE: \\projects\roadway\sheets\82315\roadway\82315TS001.dgn
 WORKSTATION: shepher DATE: 11/25/2013 MODEL NAME: Sheet

PAVEMENT MARKING / RPM SUB-SUMMARY

HUR-250-0.73

HUR-61-1856 SFN 3902048
 (80% FEDERAL / 20% STATE)
 PLAN SPLIT 05/S<2/PV

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
202	11301	2.9	CU YD	PORTIONS OF STRUCTURES REMOVED, AS PER PLAN	2
511	34401	2.9	CU YD	CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (REPAIR)	2
512	10300	124	SO YD	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	
516	13600	171	SO FT	1" PREFORMED EXPANSION JOINT FILLER	
516	31000	74	FT	JOINT SEALER	
614	21200	0.04	MILE	WORK ZONE CENTER LINE, CLASS 1, 740.06, TYPE 1	
614	22200	0.03	MILE	WORK ZONE EDGE LINE, CLASS 1, 740.06, TYPE 1	

HUR-61-1955 SFN 3902072
 (80% FEDERAL / 20% STATE)
 PLAN SPLIT 05/S<2/PV

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
512	10100	47	SO YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
512	10300	31	SO YD	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	
512	74000	47	SO YD	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	

HUR-61C-0060 SFN 3902250
 (80% FEDERAL / 20% STATE)
 PLAN SPLIT 05/S<2/PV

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
512	10300	565	SO YD	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	

NOTE: ALL STRUCTURES IN URBANIZED AREA

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 WORKSTATION: shepher DATE: 12/5/2013 MODEL NAME: Design

STRUCTURE SUMMARY

HUR-250-00.73

1 / 7

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28

DESIGN AGENCY
 COOT DISTRICT THREE
 ENGINEERING DEPARTMENT

REVIEWED DATE
 CLB 01/2013

DRAWN
 SAS

DESIGNED
 SAS

CHECKED
 ACH

REVISED

REVISION

STRUCT. FILE NO.	BRIDGE NUMBER	LOCATION	BRIDGE TYPE	BRIDGE LIMITS	DECK WIDTH	PROPOSED WORK
3903508	HUR-250-0168	OVER TRIB HURON RIVER	CONCRETE BOX	-	-	PLANE AND PAVE WITH ROADWAY - NO STRUCTURE WORK
3903559	HUR-250-0315	OVER NORWALK CREEK	SINGLE SPAN CONCRETE BOX	-	-	PLANE AND PAVE WITH ROADWAY - NO STRUCTURE WORK
3901149	HUR-250-0492	OVER NORWALK CREEK	MULTI SPAN STEEL BEAM W/ CONCRETE DECK	-	-	NO STRUCTURE WORK
3902048	HUR-61-1856	OVER W&LE RR	SINGLE SPAN - STEEL BEAM W/ CONCRETE DECK	54.23'	37'-0" (ROAD)	SEALING DECK, CONCRETE DECK REPAIR, JOINT SEALER
3902072	HUR-61-1955	OVER W&LE RR	CONCRETE BOX BEAM W/ COMPOSITE DECK	22'.67"	30'-0"	SEALING SIDEWALK & CURB, SEALING PARAPETS AND FASCIA BEAM - PLANE AND PAVE W/ ROADWAY
3902250	HUR-61C-0060	OVER E BR HURON RIVER	SINGLE SPAN - STEEL BEAM W/ CONCRETE DECK	79.50'	64'-0"	SEAL DECK

EXISTING PLANS

EXISTING PLANS MAY BE INSPECTED IN THE ODOT DISTRICT 3 OFFICE IN ASHLAND, OHIO.

EXISTING STRUCTURE VERIFICATION

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

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

DESIGN SPECIFICATIONS

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

DECK AND SIDEWALK PROTECTION METHOD

HMWM RESIN

PARAPET, FASCIA BEAM, WINGWALL AND ABUTMENT PROTECTION METHOD

EPOXY-URETHANE SEALER

ITEM 202. PORTIONS OF STRUCTURE REMOVED. AS PER PLAN

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

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

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID PER CUBIC YARD OF ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

ITEM 511. CLASS S CONCRETE. SUPERSTRUCTURE. AS PER PLAN (REPAIR)

EACH ITEM SHALL BE USED AT THE LOCATIONS INDICATED IN THE PLANS. THE COARSE AGGREGATE SHALL BE LIMESTONE.

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

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 WORKSTATION: haining DATE: 1/14/2013
 MODELNAME: Design

DESIGN AGENCY
 ODOT DISTRICT THREE
 ENGINEERING DEPARTMENT

DATE
 01/2013

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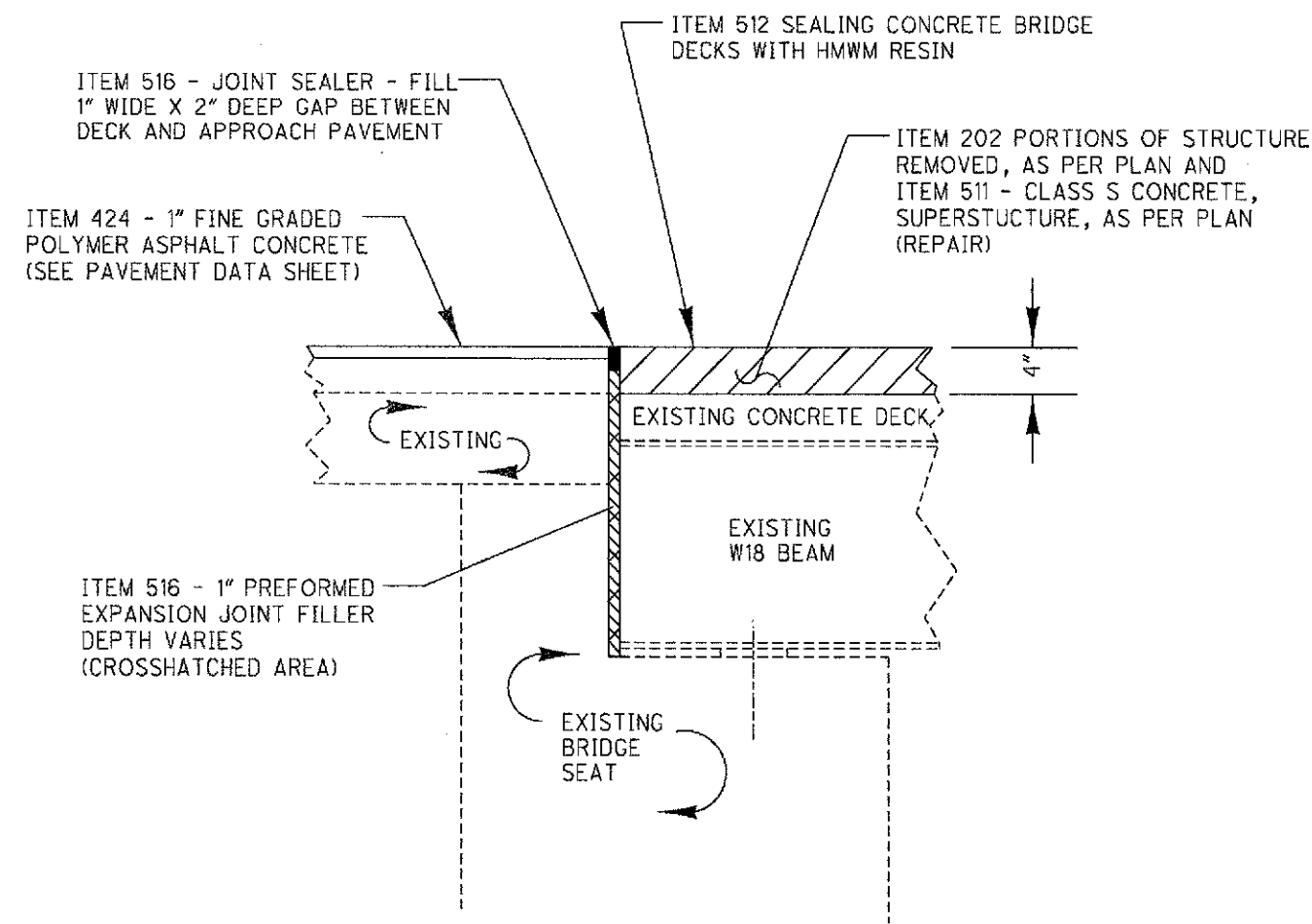
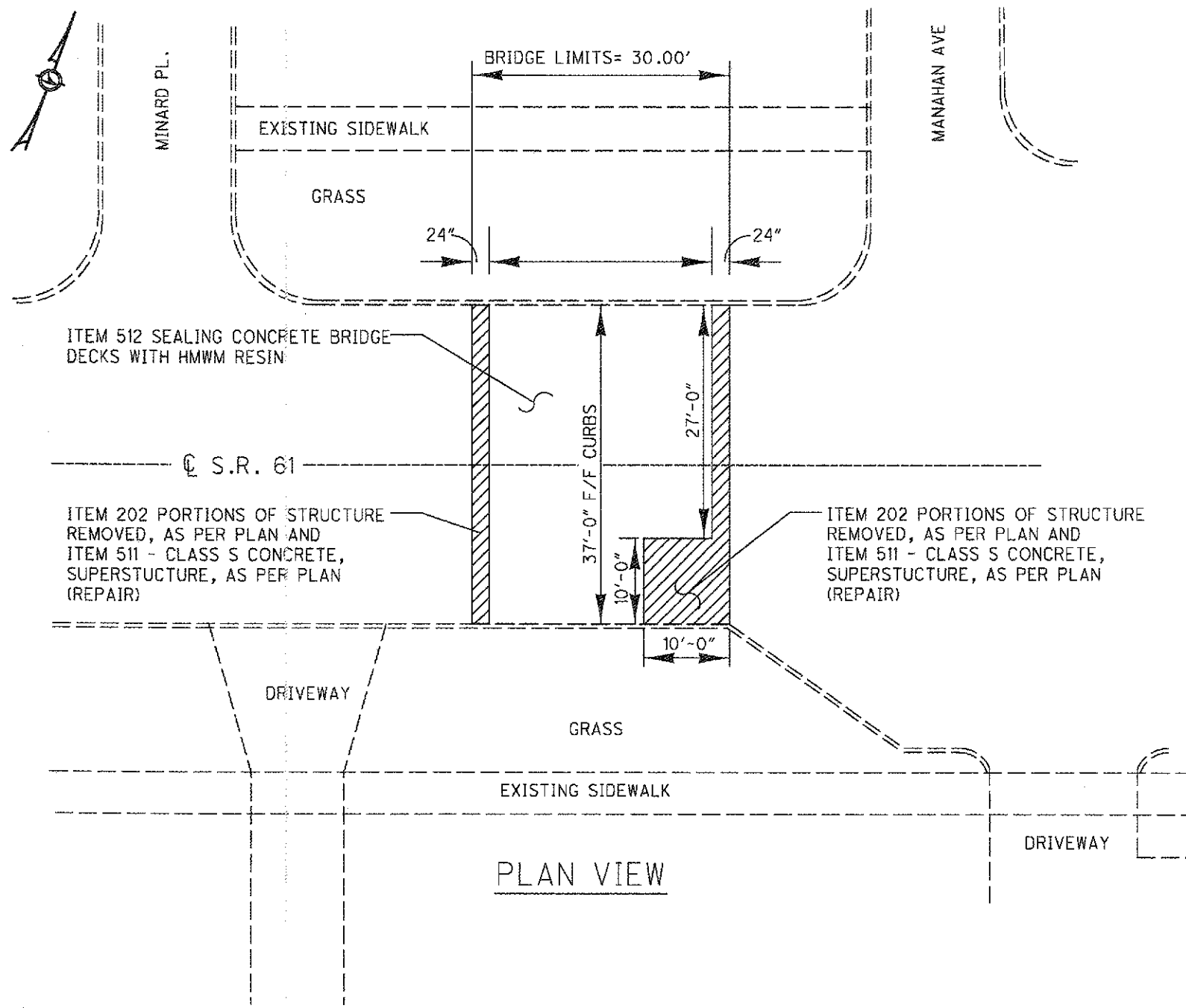
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STRUCTURE INFORMATION AND NOTES

HUR-61-00.73

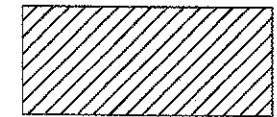
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TYPICAL REPAIR SECTION
NOT TO SCALE

- NOTES:
- 1) GUARDRAIL NOT SHOWN.
 - 2) SEE SHEETS 4 OF 7 AND 5 OF 7 FOR MAINTAINING TRAFFIC INFORMATION.

 REPAIR DECK AREAS WITH ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN, ITEM 511, CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (REPAIR)

ITEM	QUANTITY	UNIT	DESCRIPTION
202	2.9	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN
511	2.9	CU YD	CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (REPAIR)
512	124	SQ YD	SEALING CONCRETE BRIDGE DECKS WITH HMWM
516	171	SQ FT	1" PREFORMED EXPANSION JOINT FILLER
516	74	FT	JOINT SEALER

ALL QUANTITIES CARRIED TO STRUCTURE SUMMARY SHEET, SHEET NO. 1 OF 7

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STRUCTURE REPAIRS
HUR-61-1856

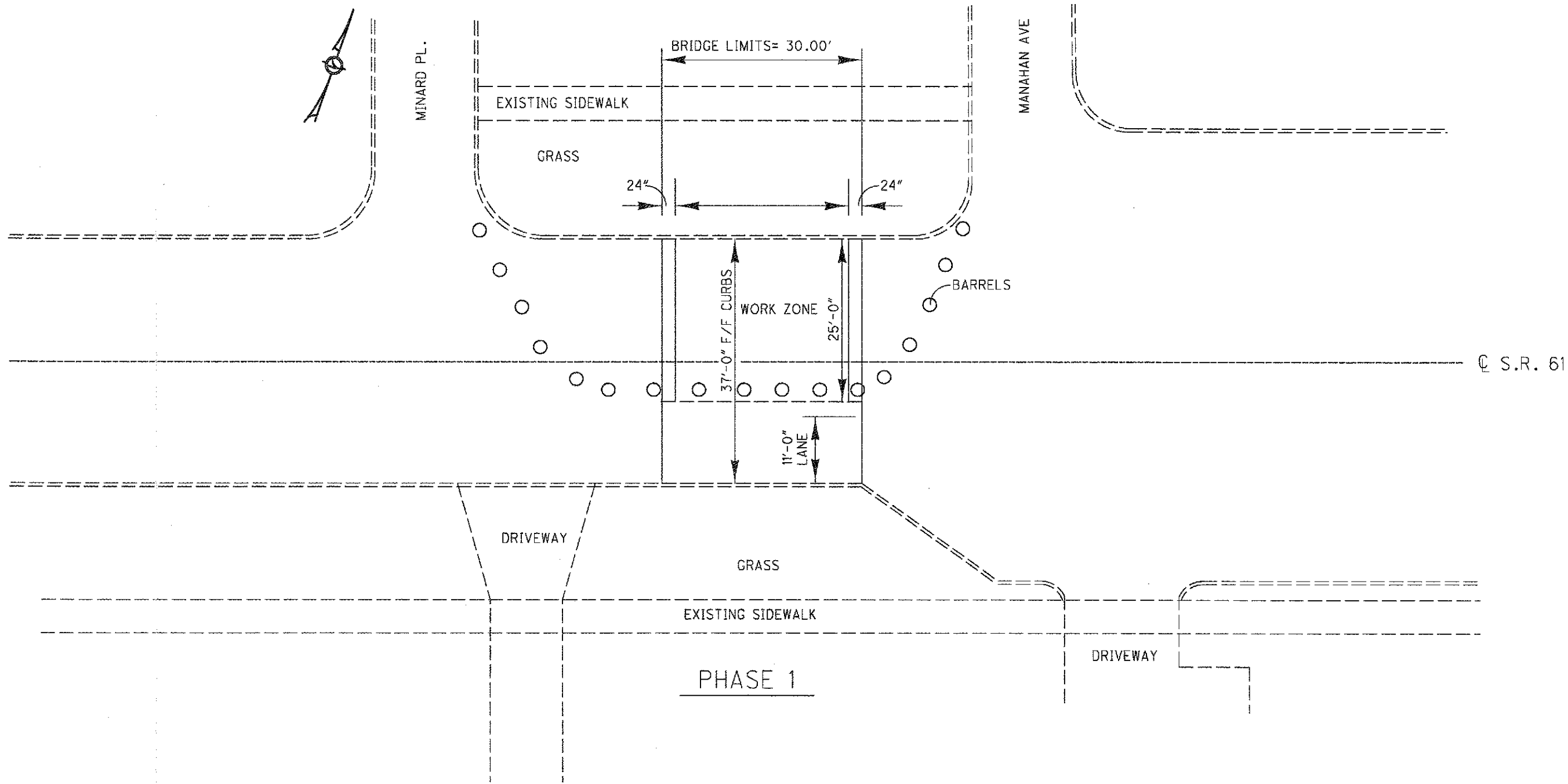
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REVIEWED CLB	DATE 1-10-13
STRUCTURAL FILE NUMBER 3902048	DISTRICT THREE

HUR-250-00.73

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28

DESIGN FILE: I:\projects\82315\roadway\sheet\861 1856 bridge.dgn
 WORKSTATION: chining DATE: 1/14/2013



NOTES:

1) FLAGGING TO BE UTILIZED TO MAINTAIN TWO WAY TRAFFIC CONTROL ON SR61 WITH A SINGLE 11'-0" LANE DURING CONSTRUCTION ACTIVITIES DURING PHASE 1. MANAHAN AVE AND MINARD PL SHALL REMAIN OPEN THROUGHOUT THE PROJECT.

2) A MINIMUM TWO 11'-0' LANES SHALL BE MAINTAINED AND OPEN DURING NIGHT HOURS AND WHEN THERE IS NO CONSTRUCTION ACTIVITY DURING PHASE 1. STEEL PLATES WILL BE UTILIZED TO COVER THE 2'-0" WIDE CONCRETE REPAIR AREAS. THE COST OF THE PLATES IS CONSIDERED INCIDENTAL TO ITEM 614 MAINTAINING TRAFFIC.

3) MAINTENANCE OF TRAFFIC ACTIVITES PAID FOR UNDER ITEM 614 MAINTAINING TRAFFIC FOUND IN THE GENERAL SUMMARY.

DESIGN AGENCY
 DISTRICT THREE

DATE 1-10-13
 REVISIONS
 CLB
 STRUCTURAL FILE NUMBER 3902048

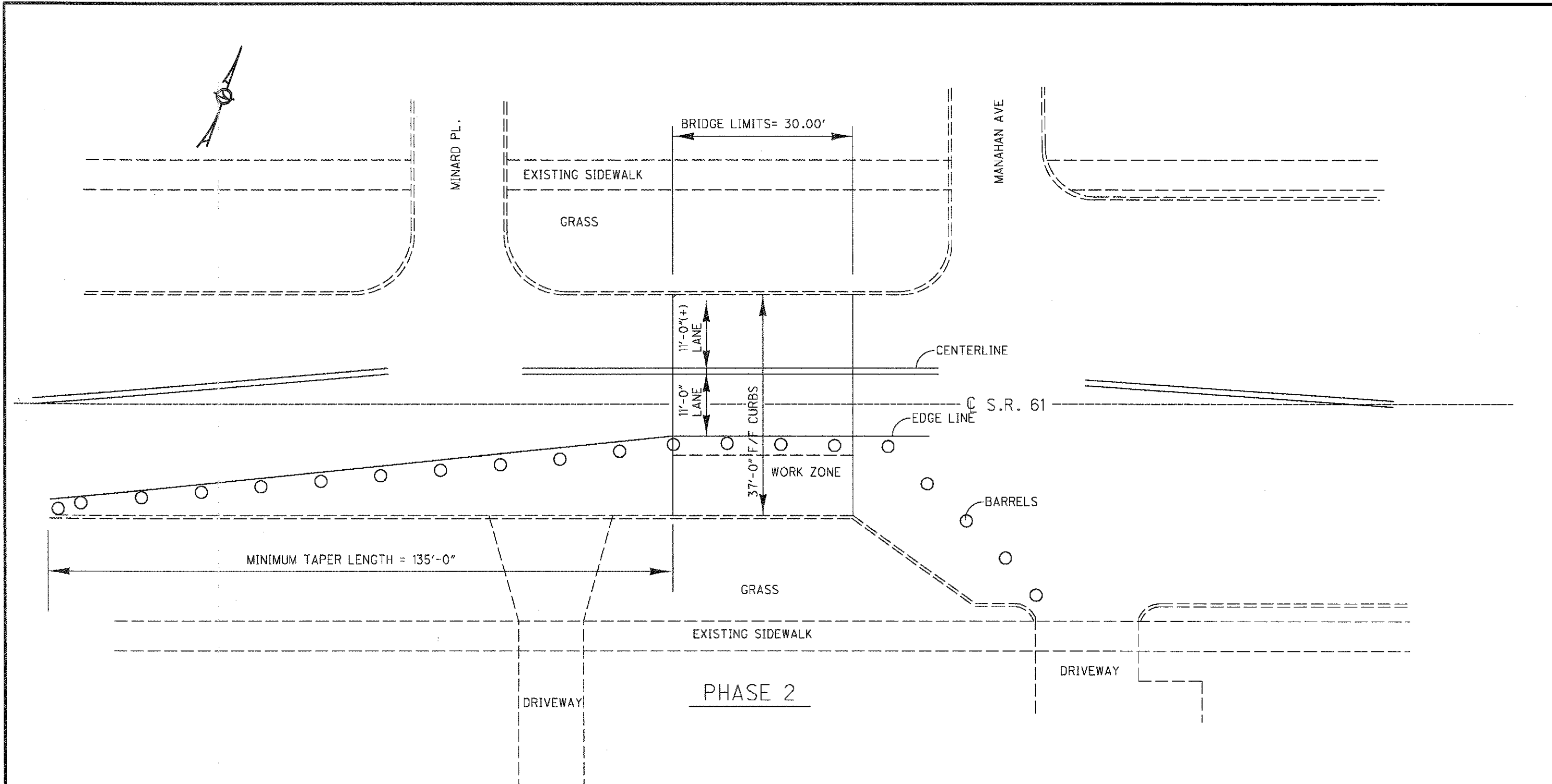
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 REVISIONS

MAINTENANCE OF TRAFFIC - PHASE 1
 HUR-61-1856

HUR-250-00.73

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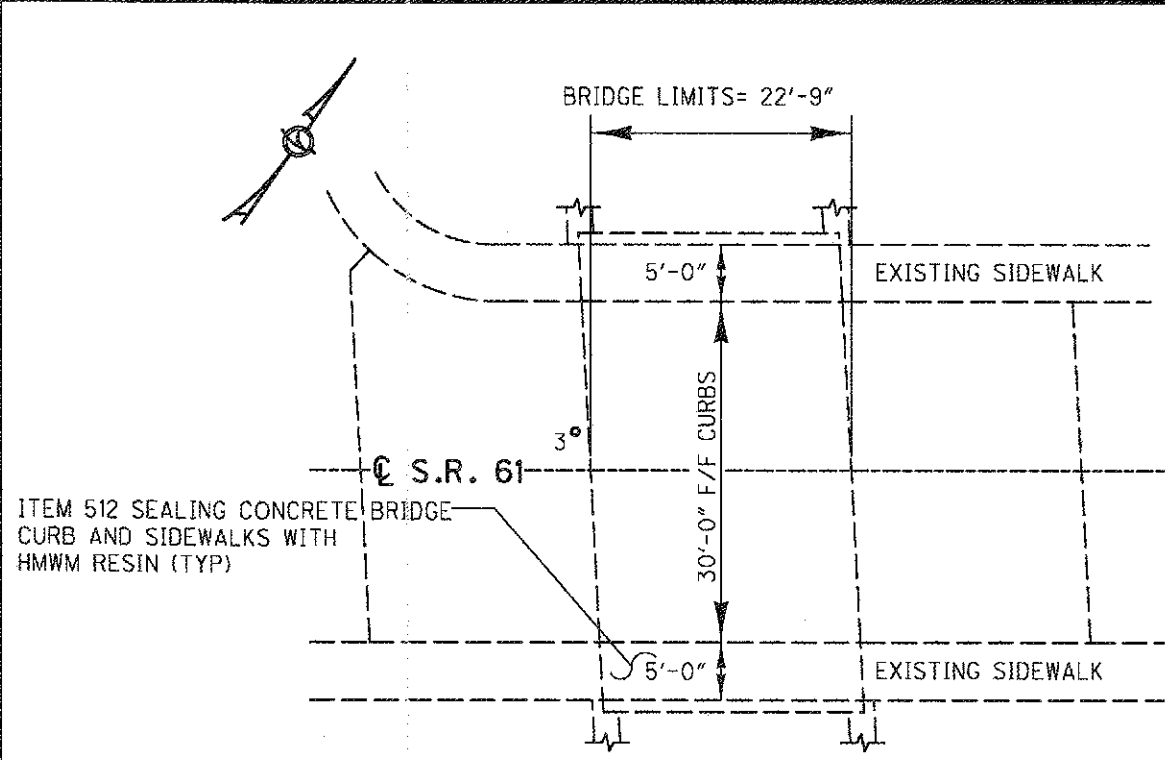
ITEM	QUANTITY	UNIT	DESCRIPTION
614	0.04	MILE	WORK ZONE CENTERLINE, CLASS 1, 740.06, TYPE I
614	0.03	MILE	WORK ZONE EDGE LINE, CLASS 1, 740.06, TYPE I

NOTES:

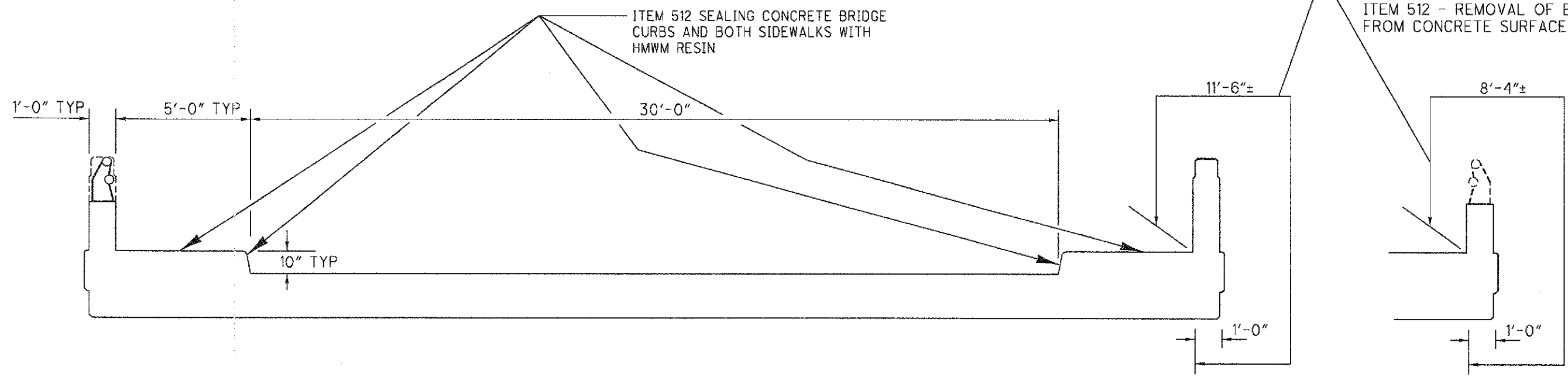
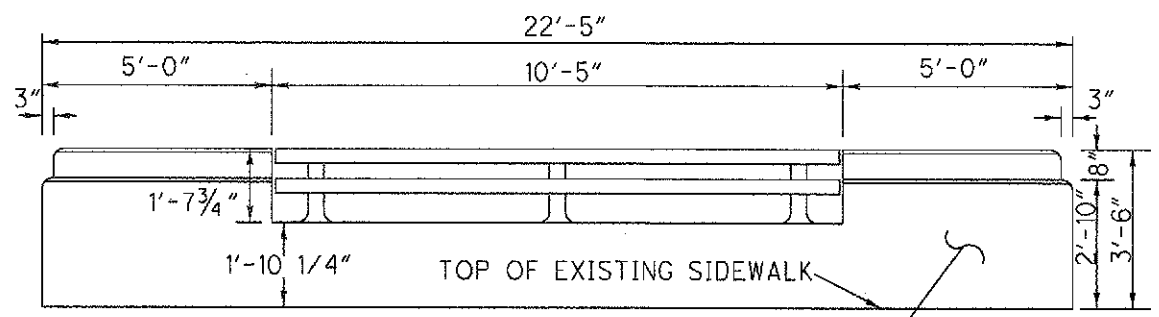
- 1) TWO 11'-0" LANES TO BE MAINTAINED THROUGHOUT PHASE 2.
- 2) MANAHAN AVE AND MINARD PL SHALL REMAIN OPEN THROUGHOUT THE PROJECT.
- 3) MAINTENANCE OF TRAFFIC ACTIVITES PAID FOR UNDER ITEM 614 MAINTAINING TRAFFIC FOUND IN THE GENERAL SUMMARY.

ALL QUANTITIES CARRIED TO STRUCTURE SUMMARY SHEET, SHEET NO. 1 OF 7

MAINTENANCE OF TRAFFIC - PHASE 2 HUR-61-1856	HUR-250-00.73 5 / 7 <div style="border: 1px solid black; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 26 28 </div>	DESIGN AGENCY DISTRICT THREE REVISIONS <table style="width: 100%; border-collapse: collapse; font-size: 8px;"> <tr> <td style="width: 15%;">DESIGNED</td> <td style="width: 15%;">SAS</td> <td style="width: 15%;">CHECKED</td> <td style="width: 15%;">ACH</td> <td style="width: 15%;">DATE</td> <td style="width: 15%;">1-10-13</td> </tr> <tr> <td>DRAWN</td> <td>SAS</td> <td>REVISION</td> <td></td> <td>REVISED</td> <td></td> </tr> <tr> <td>CLB</td> <td></td> <td>STRUCTURAL FILE NUMBER</td> <td></td> <td></td> <td>3902048</td> </tr> </table>	DESIGNED	SAS	CHECKED	ACH	DATE	1-10-13	DRAWN	SAS	REVISION		REVISED		CLB		STRUCTURAL FILE NUMBER			3902048
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CLB		STRUCTURAL FILE NUMBER			3902048															



PLAN VIEW



SEAL AREA USING ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) & ITEM 512 - REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES.

ITEM	QUANTITY	UNIT	DESCRIPTION
512	47	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
512	31	SQ YD	SEALING CONCRETE BRIDGE DECKS WITH HMWM
512	47	SQ YD	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES

NOTES:

- 1) THE EXISTING GUARDRAIL IS NOT SHOWN
- 2) SEAL BOTH PARAPETS WITH ITEM 512 (EPOXY-URETHANE).
- 3) PLANE AND PAVE ASPHALT BRIDGE DECK AS PART OF THE ROADWAY
GENERAL SUMMARY - SEE PAVEMENT DATA SHEET FOR QUANTITIES
- 4) TWO WAY TRAFFIC SHALL BE MAINTAINED.

ALL QUANTITIES CARRIED TO STRUCTURE SUMMARY SHEET, SHEET NO. 1 OF 7

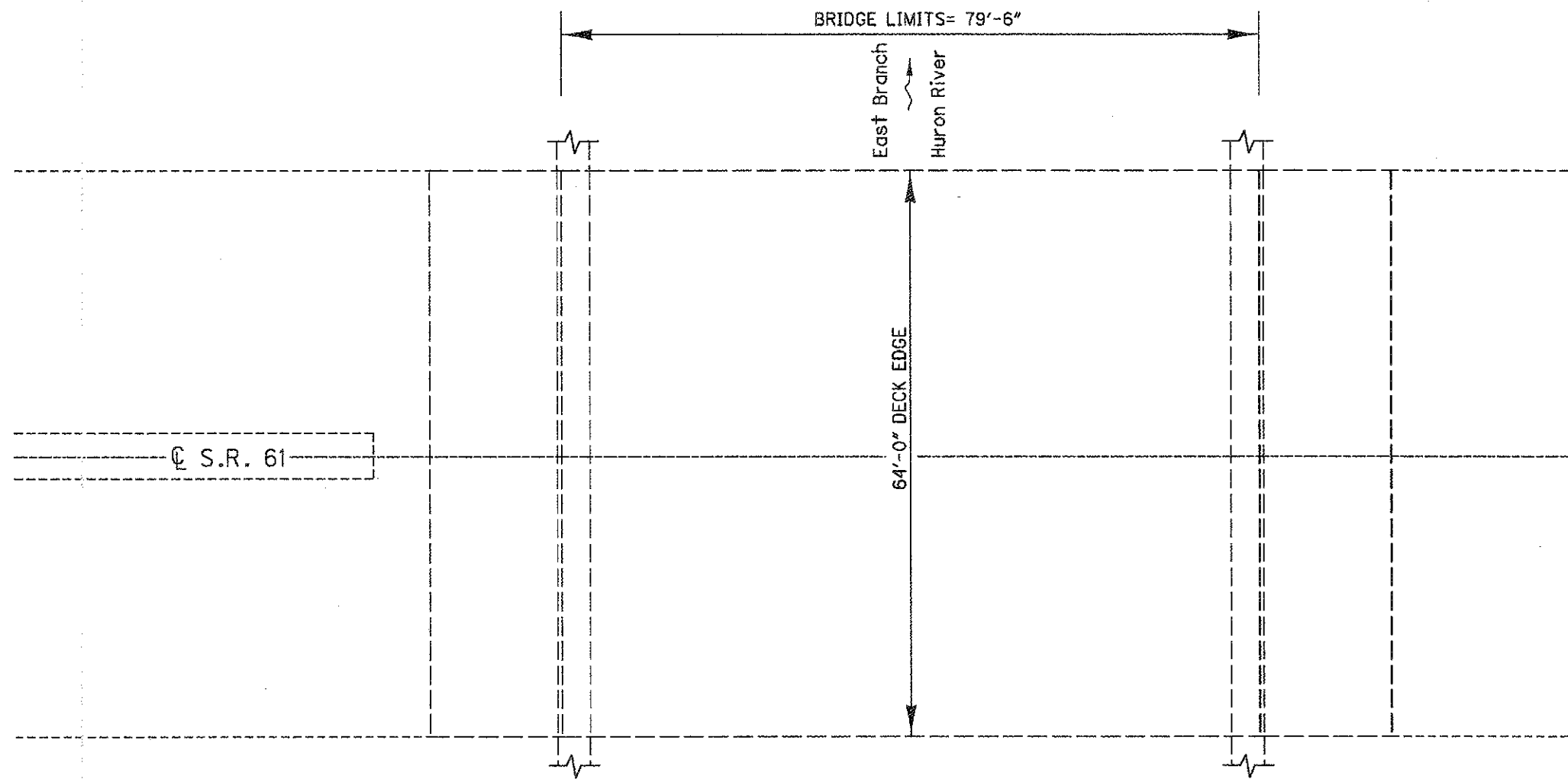
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 WORKSTATION: chnein DATE: 1/14/2013

DESIGN AGENCY: DISTRICT THREE
 DATE: 1/2013
 REVISIONS: CLB 1/2013
 STRUCTURAL FILE NUMBER: 3902072
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 CHECKED: ACH
 DESIGNED: SAS
 8-12

SEALING DETAILS
 HUR-61-1959

HUR-250-00.73

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PLAN VIEW

NOTES:

- 1) THE EXISTING BRIDGE RAIL AND GUARDRAIL ARE NOT SHOWN.
- 2) THE ENTIRE BRIDGE DECK SHALL BE SEALED USING ITEM 512-TREATING CONCRETE BRIDGE DECKS WITH HMWM RESIN
- 3) TWO WAY TRAFFIC SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

ITEM	QUANTITY	UNIT	DESCRIPTION
512	565	SQ YD	

ALL QUANTITIES CARRIED TO STRUCTURE SUMMARY SHEET, SHEET NO. 1 OF 7

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STRUCTURE SEALING HUR-61C-0060	HUR-250-00.73 7 / 7 <div style="border: 1px solid black; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 28 28 </div>	DESIGN REVISION DISTRICT THREE DATE: 1/2013 REVISION: CLB STRUCTURAL FILE NUMBER: 3902250 DRAWN: SAS CHECKED: ACH DESIGNED: SAS 12-12
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