DESIGN SPECIFICATIONS

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH, INCLUDING THE 2002 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

EXISTING STRUCTURE VERIFICATION

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

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

PROPOSED WORK - POR-224-0106 (OVER WLE RR)

- PATCH THE EXISTING CONCRETE WEARING SURFACE ON THE BRIDGE DECK
- SEAL THE REPAIRED WEARING SURFACE WITH SRS CONCRETE TREATMENT
- REMOVE THE EXISTING ASPHALT CONCRETE OVERLAY ON THE APPROACH SLABS
- PLACE NEW ASPHALT CONCRETE OVERLAY ON THE APPROACH SLARS
- CLEANOUT THE EXISTING SCUPPERS
- REPAIR DEFECTS AND LOSS OF SECTION IN THE STEEL
- PAINT THE LAST 10' OF THE BEAM ENDS
- PATCH ALL UNSOUND AREAS OF THE CONCRETE SUBSTRUCTURE
- REPAIR EROSION BEHIND THE REAR WING WALLS
- SEAL ALL EXPOSED CONCRETE SURFACES OF THE PARAPETS, ABUTMENTS, BACK WALLS, WING WALLS AND PIERS WITH FPOXY-URFTHANF
- CLEARING AND GRUBBING 15' OF THE STRUCTURE FOR SEALING OPERATIONS
- PROVIDE NEW STRUCTURE IDENTIFICATION SIGNS

PROPOSED WORK - POR-224-0831 (OVER BR CONGRESS LAKE OUTLET) CLEARING AND GRUBBING

- SEE ROADWAY PLANS FOR PAVING DETAILS
- PAVE THE EXISTING INVERT WITH CONCRETE
- CHANNEL CLEANOUT 20' AT THE INLET AND OUTLET
- CLEARING AND GRUBBING 15' OF THE STRUCTURE
- PROVIDE NEW STRUCTURE IDENTIFICATION SIGNS

PROPOSED WORK - POR-224-1171 (OVER STROUP ROAD)

- PATCH THE EXISTING CONCRETE WEARING SURFACE ON THE BRIDGE DECK AND APPROACH SLABS
- SEAL THE REPAIRED WEARING SURFACE AND APPROACH SLABS WITH SRS CONCRETE TREATMENT
- PATCH ALL UNSOUND AREAS OF THE CONCRETE SUBSTRUCTURE
- SEAL ALL EXPOSED CONCRETE SURFACES OF THE PARAPETS, ABUTMENTS, WING WALLS AND PIERS WITH EPOXY-URETHANE
- CLEARING AND GRUBBING 15' OF THE STRUCTURE
- PROVIDE NEW STRUCTURE IDENTIFICATION SIGNS

PROPOSED WORK - POR-224-1189 (OVER NS RR)

- PATCH THE EXISTING CONCRETE WEARING SURFACE ON THE BRIDGE DECK
- SEAL THE REPAIRED WEARING SURFACE WITH SRS CONCRETE TREATMENT
- REMOVE THE EXISTING ASPHALT CONCRETE OVERLAY ON THE APPROACH SLABS
- PLACE NEW ASPHALT CONCRETE OVERLAY ON THE APPROACH SL ABS
- CLEANOUT THE EXISTING SCUPPERS
- PAINT THE LAST 10' OF THE BEAM ENDS
- PATCH ALL UNSOUND AREAS OF THE CONCRETE SUBSTRUCTURE
- SEAL ALL EXPOSED CONCRETE SURFACES OF THE PARAPETS, ABUTMENTS. BACK WALLS. WING WALLS AND PIERS WITH EPOXY-URETHANE
- CLEARING AND GRUBBING 15' OF THE STRUCTURE
- PROVIDE NEW STRUCTURE IDENTIFICATION SIGNS

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

ITEM 202, REMOVAL MISC.: CHANNEL CLEANOUT

THIS WORK SHALL CONSIST OF RE-ESTABLISHING THE ORIGINAL CHANNEL PROFILE BY REMOVING SEDIMENT BUILDUP, VEGETATION, AND DEBRIS FROM THE EXISTING CHANNEL WITHIN STATE RIGHT-OF-WAY LIMITS AS SPECIFIED IN THE PLANS FOR STRUCTURES POR-224-0831. ANY TREES LOCATED WITHIN CHANNEL OR BANK LIMITS SHALL BE INCLUDED UNDER ITEM 201, CLEARING AND GRUBBING. ALL MATERIALS REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 105.16 AND 105.17 OF THE CMS WITH THE APPROVAL OF THE ENGINEER. NO AREAS OF EXISTING CHANNEL PROTECTION SHALL BE REMOVED IN ORDER TO RESTORE THE ORIGINAL CHANNEL PROFILE. AFFECTED CHANNEL AREAS SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER.

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

ITEM SPECIAL - PIPE CLEANOUT

THIS WORK SHALL CONSIST OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER 105.16 AND 105.17. ALL SEWERS SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER.

CLEANOUT OF THE PIPE SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL - PIPE CLEANOUT, THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

ITEM 203. BORROW

THIS ITEM WILL BE USED TO REPAIR EROSION BEHIND THE LEFT AND RIGHT REAR WING WALLS AT STRUCTURE POR-224-0106

BORROW WILL BE PAID FOR AT THE UNIT PRICE BID IN CUBIC YARDS FOR ITEM 203, BORROW. THIS PRICE WILL INCLUDE THE COST FOR MATERIAL, LABOR, EQUIPMENT AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

ITEM 448 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M, AS PER PLAN

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

ITEM 513 - STRUCTURAL STEEL, MISC.: STEEL BEAM REPAIRS

AFTER ABRASIVE BLASTING OF THE STRUCTURAL STEEL HAS BEEN COMPLETED IN PREPARATION FOR PAINTING AND THE PRIME COAT OF PAINT APPLIED (WORK WILL CONFORM TO CMS 514) THE CONTRACTOR WILL EXAMINE THE CONDITION OF THE EXISTING BEAMS AT THE ABUTMENTS AND INTERMEDIATE JOINTS (IF THEY EXIST) AND MAKE THE NECESSARY REPAIR RECOMMENDATIONS.

THE STRUCTURAL STEEL REPAIR WORK WILL CONSIST OF REPAIRING THE DETERIORATED BEAMS BY THE ADDITION OF WELDED STEEL PLATES, STIFFENERS, ANGLES, ETC. ALL WORK WILL CONFORM TO CMS 513.

THESE TASKS, AS DIRECTED BY THE ENGINEER, WILL BE COMPLETED BEFORE THE INTERMEDIATE COAT OF PAINT IS APPLIED. THE CONTRACTOR WILL PROVIDE THE ENGINEER WITH THE REPAIR PROCEDURE AND FIELD MEASUREMENT CALCULATIONS IN DETERMINING THE ACTUAL QUANTITY OF WORK REQUIRED PER THE REQUIREMENTS NOTED BELOW.

- 1. THE POTENTIAL REPAIR AREAS WILL BE LIMITED TO 10 FEET FROM THE ABUTMENT BEARINGS AND 10 FEET IN EACH DIRECTION FROM INTERMEDIATE JOINTS (IF THEY EXIST).
- 2. FLANGE AREA PERFORATIONS WILL BE REPAIRED.
- 3. USING A UT THICKNESS GAUGE, THE CONTRACTOR WILL QUANTIFY THE AREA OF SECTION LOSS FOR EACH BRIDGE. THE REPAIR AREA WILL BE IDENTIFIED USING A 4" x 4" WEB GRID. THE THINNEST STEEL WITHIN EACH GRID AREA WILL BE NOTED. MEASUREMENTS WILL BE RECORDED AND A COPY SUBMITTED TO THE ENGINEER.
- 4. ANY AREA 8" HIGH x 4" WIDE WITH 30% AVERAGE SECTION LOSS ON THE WEB WILL BE REPAIRED.
- 5. SECTION LOSS MORE THAN 50% FOR AN AREA GREATER THAN 8" HIGH x 4" WIDE WILL BE REPAIRED FOR THE FULL HEIGHT OF THE WEB.
- 6. USE THE MOST READILY AVAILABLE STEEL MATERIAL THICKNESS THAT IS AT MINIMUM EQUAL TO THE ORIGINAL THICKNESS OF THE BEAM/GIRDER SECTION TO BE REPAIRED.
- 7. NEW STEEL MATERIAL WILL BE SHOP PRIMED.
- 8. AREAS OF SECTION LOSS LOCATED BEHIND THE BACK SIDE OF THE BEARING, BETWEEN THE BEARING LOAD PLATE AND BACKWALL WILL NOT BE REPAIRED.
- 9. AFTER THE REPAIRS HAVE BEEN COMPLETED, REPAIR ALL DAMAGED AREAS OF THE PRIME COAT IN ACCORDANCE WITH CMS 514.22.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES BASED UPON ACTUAL DETAILS AND DIMENSIONS AT UNIT PRICE (POUND) BID FOR ITEM 513 - STRUCTURAL STEEL, MISC.: STEEL BEAM REPAIRS.

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THE COLOR FOR THE FINISHED COAT OF STRUCTURE(S) POR-224-0106 AND POR-224-1189 WILL CONFORM TO FEDERAL COLOR NUMBER 595B-25526 (BLUE).

ITEM 518 - SCUPPER MISC .: CLEANOUT

THIS WORK WILL CONSIST OF REMOVING ALL DEBRIS FROM ON TOP AND INSIDE OF THE SCUPPERS. SCUPPER CLEANOUT WILL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 518, SCUPPER MISC.: CLEANOUT. THIS PRICE WILL INCLUDE THE COST FOR LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN: PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

ITEM 603 - FIELD PAVING OF EXISTING PIPE - POR-224-0831

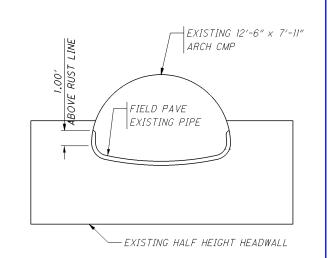
FIELD PAVE THE EXISTING 12'-6"x7'-11" SECTIONAL CORRUGATED PLATE PIPE ARCH CULVERT. THE CONTRACTOR WILL PAVE THE BOTTOM OF THE EXISTING PIPE AS SHOWN IN THE DETAIL WITH CLASS C PORTLAND CEMENT CONCRETE AS PER CMS 603.13.

AREAS TO BE PAVED WILL BE CLEANED TO REMOVE ALL DEBRIS AND SEDIMENT AND WILL BE PAID FOR UNDER ITEM SPECIAL - PIPE CLEANOUT.

THE CONTRACTOR WILL BE REQUIRED TO USE ITEM 503 -COFFERDAMS AND EXCAVATION BRACING (CRIBS, AND SHEETING) TO DEWATER THE EXISTING PIPE PRIOR TO THE PREPARATION AND FIELD PAVING. AFTER THE PIPE HAS BEEN CLEANED OF ALL DEBRIS AND SEDIMENT, NO WATER WILL BE ALLOWED TO CONTAMINATE THE PIPE. IF ANY CONTAMINATION OCCURS, THE CONTRACTOR WILL RESEAL THE AREA AND RECLEAN THE PIPE AT NO ADDITIONAL COST.

ALL EROSION UNDER THE PIPE AND IN THE VOIDS WHERE THE PIPE IS RUSTED THROUGH WILL BE FILLED WITH ITEM 613 - LOW STRENGTH MORTAR BACKFILL.

ANY TREES LOCATED WITHIN 15' OF THE HEADWALLS THAT MAY POTENTIALLY DAMAGE THE CULVERT IN THE FUTURE OR ENCROACH UPON THE STREAM BED OR FIELD PAVING OPERATIONS WILL BE REMOVED. REMOVAL WILL BE DETERMINED BY THE PROJECT ENGINEER AND REMOVED UNDER ITEM 201 - CLEARING AND GRUBBING.



OBJECT MARKERS AND STRUCTURE IDENTIFICATION SIGNS

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

STRUCTURE IDENTIFICATION SIGNS (I-H25a) WILL BE INSTALLED ON THE SAME POST AND DIRECTLY BELOW THE OBJECT MARKER OFF THE RIGHT SHOULDER ON EACH APPROACH. A QUANTITY OF ONE SIGN WILL BE INSTALLED AT EACH APPROACH. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

INSTALL SIGNS FOR THE FOLLOWING STRUCTURES:

POR-224-0106 (2 APPROACHES) (2 APPROACHES) POR-224-1171 POR-224-1189 (2 APPROACHES)

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:

ITEM 630 - SIGN, FLAT SHEET, 730.20, 1 SQ FT ITEM 630 - SIGN, FLAT SHEET, 6 SQ FT

ITEM 630 - GROUND MOUNTED SUPPORT, NO. 2 POST, 21 FT

ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, *3 EACH*

ITEM 630 - REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 2 EACH

STRUCTURE IDENTIFICATION SIGNS

STRUCTURE IDENTIFICATION SIGNS (I-H25a) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR THE FOLLOWING STRUCTURES: POR-224-0831 (2 APPROACHES)

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH

ITEM 630 - SIGN, FLAT SHEET, 730.20, 1 SQ FT

ITEM 630 - GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL,

1 EACH

ITEM 630 - REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 1 EACH

CORRECTING BRIDGE IDENTIFICATION SIGN NUMBERS:

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

STRUCTURE POR-224-0106 (SFN:6703755) THE EXISTING SIGN SHOWS 0104. THE CORRECT BRIDGE IDENTIFICATION NUMBER

STRUCTURE POR-224-0831 (SFN:6703844) THE EXISTING SIGN SHOWS 830. THE CORRECT BRIDGE IDENTIFICATION NUMBER

STRUCTURE POR-224-1171 (SFN:6703909) THE EXISTING SIGN SHOWS 1172. THE CORRECT BRIDGE IDENTIFICATION NUMBER

WATERWAY PERMIT DETERMINATION (404/401) - ODOT PROJECTS

ALL PROJECTS INVOLVING JURISDICTIONAL WATERS OF THE UNITED STATES (STREAMS, RIVERS, NON-ISOLATED WETLANDS) AND/OR ISOLATED WETLANDS ARE SUBJECT TO REGULATION UNDER SECTIONS 404 AND 401 OF THE CLEAN WATER ACT, AND POSSIBLY OHIO EPA ISOLATED WETLAND LAW. THE ODOT-OES WATERWAY PERMIT UNIT DETERMINED THE PROJECT MEETS THE CRITERIA FOR REGIONAL GENERAL PERMIT (RGP)-SECTION B (MAINTENANCE) AND SECTION C (TEMPORARY CONSTRUCTION. ACCESS, AND DEWATERING) BASED UPON THE ANTICIPATED IMPACTS TO STREAMS AND WETLANDS. THE WATERWAY PERMIT CONDITIONS ARE PROVIDED IN THE SPECIAL PROVISIONS PACKAGE. ALL CONDITIONS SHALL BE ADHERED TO DURING CONSTRUCTION. ALSO, PER CONDITION 9 OF THE WATERWAY PERMIT CONDITIONS. A COPY OF THE RGP IS TO BE KEPT AT THE WORK SITE AT ALL TIMES. A COPY OF THE RGP WILL BE PROVIDED TO THE CONTRACTOR BY ODOT PERSONNEL AT THE PRECONSTRUCTION MEETING.

BEST MANAGEMENT PRACTICES

ALL MATERIALS REMOVED FROM STREAM CHANNELS, WETLANDS AND DITCHES SHALL BE IMMEDIATELY REMOVED TO AN UPLAND SITE AND STABILIZED (I.E., SEEDED) TO PREVENT REDISTRIBUTION INTO ANY WATERS OF THE UNITED STATES. THE CONTRACTOR SHALL UTILIZE AN APPROVED DISPOSAL SITE FOR THE DISPOSAL OF ALL WASTE FILL MATERIAL. THE APPROVED DISPOSAL SITE SHALL NOT INCLUDE ANY WETLANDS, STREAM BANKS OR RIVERBANKS OR ANY 100-YEAR FLOOD PLAINS.

ADJACENT RIPARIAN HABITAT SHALL BE MAINTAINED TO THE MAXIMUM EXTENT PRACTICABLE. EQUIPMENT AND MATERIAL STAGING AREAS SHALL BE KEPT AWAY FROM STREAMS, RIVERS, WETLANDS AND OTHER WATERS OF THE UNITED STATES TO EXTENT PRACTICABLE AND ALL AREAS DISTURBED BY THE PROJECT SHALL BE STABILIZED TO DECREASE THE POTENTIAL FOR EROSION. ALL DISTURBED AREAS SHALL BE MULCHED AND REVEGETATED WITH NATIVE PLANTS.

THE MECHANICAL EQUIPMENT USED TO EXECUTE THE WORK IN STREAM CHANNELS AND WETLANDS SHALL BE OPERATED IN SUCH A MANNER AS TO MINIMIZE TURBIDITY THAT COULD DEGRADE WATER QUALITY AND ADVERSELY AFFECT AQUATIC PLANT AND ANIMAL LIFF.

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

PAINTING AND SEALING OPERATIONS

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT EPOXY-URETHANE SEALER, PAINT, OR OTHER MATERIALS USED TO REPAIR, CLEAN, SEAL, OR TREAT ANY BRIDGE STRUCTURE FROM ENTERING ANY STREAMS, WETLANDS OR OTHER WATERS OF THE UNITED STATES AND TAKE THE APPROPRIATE ACTIONS IN THE EVENT OF A RELEASE.

STREAM AVOIDANCE AT BRIDGE NO. POR-224-1171

STREAM 5 FLOWS EAST ALONG THE NORTH SIDE OF US ROUTE 224 PRIOR TO DISCHARGING INTO THE CONCRETE-LINED DITCH ON THE WEST SIDE OF STROUP ROAD. FROM THERE, STREAM 5 FLOWS SOUTH WITHIN THE CONCRETE-LINED DITCH, TRAVELS UNDER BRIDGE NO. POR-224-1171 AND EVENTUALLY LEAVES THE ROADWAY RIGHT-OF-WAY AND TURNS INTO A NATURAL CHANNEL AGAIN. NO EXCAVATION. GRADING. OR FILLING OPERATIONS SHALL BE PERFORMED BELOW THE ORDINARY HIGH WATER MARK OF STREAM 5. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE EQUIPMENT AND/OR MATERIAL IN, OR OTHERWISE IMPACT STREAM 5.

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ESTIMATED QUANTITIES									
	BRIDGE NO.	/ STRUCTURE FILE I	NO.						
POR-224-0106 SFN 6703755 04/NHS/BR/	POR-224-0831 SFN 6703844 05/STR/BR/	POR-224-1171 SFN 6703909 05/STR/BR/	POR-224-1189 SFN 6703933 05/STR/BR/	ITEM	EXTENSION	UNIT	DESCRIPTION	SEE SHEET	
LUMP	LUMP	LUMP	LUMP	201	11000	1 1 1 1 1 1 1 1 1 1	CLEARING AND GRUBBING	10000000000000000000000000000000000000	
173			239	202	23500	SQYD	WEARING COURSE REMOVED		
	112			SPEC	20270100	FT	PIPE CLEANOUT	1/5	
	40			202	98200	FT	REMOVAL MISC.: CHANNEL CLEANOUT	1/5	
10				203	40000	CUYD	BORROW		
14			20	407	10000	GALLON	TACK COAT		
6			9	448	46901	CUYD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22, AS PER PLAN	1/5	
	LUMP			503	11100		COFFERDAMS AND EXCAVATION BRACING		
548	LOWIF	483	732	512	10100	SQYD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		
509		747	831	512	10400	SQYD	TREATING OF CONCRETE BRIDGE DECK WITH SRS		
548		483	732	512	74000	SQYD	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES		
J40		400		312	74000	30,10	INCIMOVAL OF EXISTING COATINGS FROM CONCRETE SORI ACES		
600				513	90000	POUND	STRUCTURAL STEEL, MISC.: STEEL BEAM REPAIRS	1/5	
LUMP			LUMP	514	00100		SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL		
LUMP			LUMP	514	00200		FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT		
LUMP			LUMP	514	00300		FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT		
LUMD			LUMP	514	00400		FIELD DAINTING CTDLICT IDAL CTELL FINIGLI COAT		
LUMP				514	00504	MANILIOUD	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT		
2			2	514	10000	EACH	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL FINAL INSPECTION REPAIR		
				314	10000	LACIT	I MAE INSPECTION NEPAIN		
16			16	518	12500	EACH	SCUPPER, MISC.: CLEANOUT	2/5	
16		23	25	SPEC	51912304	SQYD	PATCHING CONCRETE BRIDGE DECK - TYPE C		
150		100	150	519	11101	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN	2/5	
	112			603	96550		FIELD PAVING OF EXISTING PIPE, 12'-6"x7'-11" SECTIONAL CORRUGATED PLATE PIPE ARCH	2/5	
				613	41200	CUYD	LOW STRENGTH MORTAR BACKFILL		
42	15	42	42	630	02100	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	<u> </u>	
2	2	2	2	630	80100		SIGN, FLAT SHEET, 730.20		
12		12	12	630	80100		SIGN, FLAT SHEET		
6	2	6	6	630	84900		REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL		
4	2	4	4	630	86002	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL		
100		75	100	843	50000	SQ FT	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR		

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