

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

POR - 43 - 0.00

**SUFFIELD AND BRIMFIELD TOWNSHIPS
PORTAGE COUNTY**



LOCATION MAP

LATITUDE: 41°2'59" LONGITUDE: 81°20'50"



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

DESIGN DESIGNATION

DESIGN FUNCTIONAL CLASSIFICATION:
RURAL PRINCIPAL ARTERIAL SLM 0.00 TO SLM 7.51
URBAN PRINCIPAL ARTERIAL SLM 8.15 TO SLM 8.50
MIS PROJECT _____ YES

DESIGN EXCEPTIONS

NONE

PROJECT DESCRIPTION
IMPROVING OF 7.86 MILES OF SR 43 IN PORTAGE COUNTY BY PAVING AND RESURFACING INCLUDING PARTIAL DEPTH REPAIRS AND MINOR BRIDGE REPAIRS.

PROJECT EARTH DISTURBED AREA: 4.56 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.25 ACRES
NOT AREA: N/A (MAINTENANCE PROJECT)

2016 SPECIFICATIONS

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

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

INDEX OF SHEETS:

- 1 TITLE SHEET
- 2-3 TYPICAL SECTIONS
- 4 SAFETY EDGE
- 5-7 GENERAL NOTES
- 8 MAINTENANCE OF TRAFFIC
- 9-10 GENERAL SUMMARY
- 11-12 PAVEMENT CALCULATIONS
- 13 PAVEMENT MARKING SUB SUMMARY
- 14 RAISED PAVEMENT MARKING SUB SUMMARY
- 15-17 STRUCTURES

FEDERAL PROJECT NO. E130(389)

PID NO. 88893

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT NONE

POR-43-0.00

17

STANDARD CONSTRUCTION DRAWINGS			SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	7/18/14	TC-41.20	10/18/13	
BP-4.1	7/19/13	TC-52.10	10/18/13	
DM-4.3	1/15/16	TC-65.10	1/17/14	
DM-4.4	1/15/16	TC-65.11	7/18/14	
		TC-71.10	1/17/14	
MT-95.31	7/18/14			
MT-95.32	7/18/14			
MT-97.10	7/18/14			
MT-97.12	7/18/14			
MT-98.20	7/18/14			
MT-101.90	7/18/14			
MT-105.10	7/18/14			
RM-1.1	7/18/14			

ENGINEERS SEAL:

 SIGNED: [Signature] DATE: 7-12-16

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

Ohio Utilities Protection Service
1-800-362-2764
(Non-members must be called directly)

Oil & Gas Producers
Underground Protection Service
1-800-925-0988

PLAN PREPARED BY:
ODOT - DISTRICT 4 PLANNING & ENGINEERING
2088 SOUTH ARLINGTON RD.
AKRON, OH 44306

APPROVED: [Signature]
DATE: 7-12-16
DISTRICT DEPUTY DIRECTOR

APPROVED: _____
DATE: _____
DIRECTOR, DEPARTMENT OF TRANSPORTATION

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

843 DATED 04/18/2003

DESIGN SPECIFICATIONS

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

EXISTING STRUCTURE VERIFICATION

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

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

PROPOSED WORK

- POR-43-0488 (MOGADORE DAM)
- PATCH ALL UNSOUND AREAS OF THE HEADWALLS
- SEAL ALL EXPOSED CONCRETE SURFACES OF THE HEADWALLS WITH EPOXY-URETHANE
- REPAIR EROSION AT THE FORWARD LEFT
- CLEARING AND GRUBBING 15' OF STRUCTURE TO REMOVE ALL VEGETATION
- PROVIDE NEW STRUCTURE IDENTIFICATION SIGNS
- POR-43-0826 (OVER POR-76-0303)
- SEAL EXISTING WEARING SURFACE AND APPROACH SLABS WITH GRAVITY FED RESIN
- PATCH ALL UNSOUND AREAS OF THE PARAPETS
- SEAL ALL EXPOSED CONCRETE SURFACES OF THE PARAPETS WITH EPOXY-URETHANE
- REHABILITATE AND RESET THE EXISTING FORWARD AND REAR ABUTMENT BEARINGS
- CLEARING AND GRUBBING 15' OF STRUCTURE TO REMOVE ALL VEGETATION
- PROVIDE NEW STRUCTURE IDENTIFICATION SIGNS

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 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 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 601 - ROCK CHANNEL PROTECTION, TYPE B WITH FILTER

THIS WORK WILL CONSIST OF REPAIRING EROSION BY PLACING ROCK CHANNEL PROTECTION AT THE FORWARD LEFT OF STRUCTURE POR-43-0488. THE PRICE WILL INCLUDE THE COST OF LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

ITEM 601 - ROCK CHANNEL PROTECTION, TYPE B WITH FILTER, 3 CU. YD.

STRUCTURE IDENTIFICATION SIGNS

STRUCTURE IDENTIFICATION SIGNS (1-H250) 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-4120, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR THE FOLLOWING STRUCTURES:

- POR-43-0488 (2 APPROACH)
- POR-43-0826 (2 APPROACH)

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:

- ITEM 630 - SIGN, FLAT SHEET, 730.20, 1.50 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 IDENTIFICATION SIGNS.

STRUCTURE POR-43-0826 (SFN6702031) THE EXISTING SIGN SHOWS 0825. THE CORRECT BRIDGE IDENTIFICATION NUMBER IS 0826.

ITEM 516 - REFURBISHING BEARING DEVICES, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS AS WELL AS THEIR CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PADS (711-21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60 DEGREES F, LUBRICATING SLIDING SURFACES, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - REFURBISH BEARING DEVICES, AS PER PLAN.

ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH CMS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

DESIGN AGENCY: ODOT DISTRICT 4
 PLANNING & ENGINEERING

DESIGNED: PD
 CHECKED: PD
 DATE: 2/10/2016

REVIEWED: CNC
 DATE: 12/16/16

STRUCTURE FILE NUMBER

DESIGNED: PD
 CHECKED: PD
 DATE: 2/10/2016

REVIEWED: CNC
 DATE: 12/16/16

STRUCTURE FILE NUMBER

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STRUCTURE FILE NUMBER

DESIGNED: PD
 CHECKED: PD
 DATE: 2/10/2016

REVIEWED: CNC
 DATE: 12/16/16

STRUCTURE FILE NUMBER

ESTIMATED QUANTITIES									
BRIDGE NO. / STRUCTURE FILE NO.									
ITEM	EXTENSION	UNIT	DESCRIPTION	SEE SHEET					
201	11000		CLEARING AND GRUBBING						
512	10100	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)						
512	73500	SY	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN						
512	74000	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES						
516	47001		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	1/3					
516	45305	EACH	REFURBISH BEARING DEVICE, AS PER PLAN	1/3					
519	11101	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	1/3					
601	32100	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER						
630	02100	FT	GROUND MOUNTED SUPPORT, NO. 2 POST						
630	80100	SF	SIGN, FLAT SHEET, 730.20						
630	84900	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL						
630	86002	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL						
843	50000	SF	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR						

BRIDGE NUMBER	STRUCTURE TYPE	PROPOSED SEALING	FEDERAL COLOR NUMBER	ESTIMATED QUANTITIES				
				ABUT (SQ YD)	PIER (SQ YD)	SUPER (SQ YD)	GENERAL (SQ YD)	TOTAL (SQ YD)
POR-43-0488	SINGLE SPAN CONTINUOUS STEEL BEAM	SEAL ALL EXPOSED CONCRETE AT HEADWALLS PER DETAIL I	PER CMS				66	66
POR-43-0826	4 SPAN CONTINUOUS STEEL BEAM	SEAL PARAPET PER DETAIL G	PER CMS		410		410	410

NOTES:
- EPOXY-URETHANE SEALER SHALL BE USED UNLESS SHOWN OTHERWISE
- DETAILS E, F, G AND H ALSO APPLY TO CONCRETE SLAB BRIDGES

