



# Richland County Engineer

77 NORTH MULBERRY STREET • MANSFIELD, OHIO 44902-1208

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March 29, 2019

**ADDENDUM NO. TWO  
TO  
CONTRACT DOCUMENTS  
FOR  
ORWEILER ROAD, RIC-TR152-0.20, BRIDGE REPLACEMENT  
TROY/SPRINGFIELD TOWNSHIPS, RICHLAND COUNTY, OHIO  
PID NO. 98716 FED. NO. E160(775)**

Bid Opening: April 4, 2019, 10:30 AM local time

The attention of all bidders is called to the following modification to the contract documents for **Orweiler Road, RIC-TR152-0.20, Bridge Replacement, Troy/Springfield Townships, Richland County, Ohio**. These modifications are to be taken into account in preparing proposals. They shall be subject to all terms, limitations and provisions of the original contract documents, and shall be included and made a part of any contracts executed for this project. The Bidders will be responsible for including this addendum in subject contract.

1. The following bid items have been added or adjusted:

Added – Item 63, ODOT 516, Nylon Reinforced Neoprene Sheeting 310 SF

Item 64, ODOT 516, 1” Preformed Expansion Joint Filler 122 SF

Adjusted – Item 71, ODOT 526, Type A Installation 80 FT

See attached BID FOR UNIT PRICE CONTRACT Pages 3i, 3j and 3k. Please use these pages for bid calculations as the item numbers have been adjusted for the inclusion of the added bid items.

2. Plan sheet number 18 of 28 is attached to reflect the changes listed above.
3. The Engineer’s Estimated Construction Cost has been revised from \$697,722.00 to **\$708,702.00** to include the added and adjusted bid items listed above.

ITEM NO.		DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICES			TOTAL FOR ITEMS (2)
				LABOR	MATERIAL	TOTAL	
57	ODOT 511	Class QC2 Concrete, Bridge Deck (Parapet), As Per Plan	24 CY	(1)			
				Labor in words		Material in words	
58	ODOT 511	Class QC1 Concrete, Pier Cap, As Per Plan	17 CY	(1)			
				Labor in words		Material in words	
59	ODOT 511	Class QC1 Concrete, Abutment not Including Footing, As Per Plan	25 CY	(1)			
				Labor in words		Material in words	
60	ODOT 511	Class QC1 Concrete, Footing, As Per Plan	36 CY	(1)			
				Labor in words		Material in words	
61	ODOT 512	Sealing of Concrete Surfaces (Non-Epoxy)	80 SY	(1)			
				Labor in words		Material in words	
62	ODOT 512	Sealing of Concrete Surfaces (Epoxy-Urethane)	172 SY	(1)			
				Labor in words		Material in words	
63	ODOT 516	Nylon Reinforced Neoprene Sheeting (Added per Addendum Two)	318 SF	(1)			
				Labor in words		Material in words	

(1) In figures:

(2) Enter the product resulting from multiplying the estimated quantities by unit price bid.

ORWEILER ROAD, RIC-TR152-0.20		14017			
BRIDGE REPLACEMENT		PID NO. 98716			
ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICES		TOTAL FOR ITEMS (2)
			LABOR	MATERIAL	
64 ODOT 516	1" Preformed Expansion Joint Filler (Added per Addendum Two)	122 SF	(1)		
			Labor in words	Material in words	
65 ODOT 517	Railing (Twin Steel Tube), As Per Plan	160 FT	(1)		
			Labor in words	Material in words	
66 ODOT 518	Porous Backfill with Geotextile Fabric, As Per Plan	1 LS	(1)		
			Labor in words	Material in words	
67 ODOT 518	6" Perforated Corrugated Plastic Pipe	106 LF	(1)		
			Labor in words	Material in words	
68 ODOT 518	6" Non-Perforated Corrugated Plastic Pipe, Including Specials	44 LF	(1)		
			Labor in words	Material in words	
69 ODOT 523	Dynamic Load Testing	2 EA	(1)		
			Labor in words	Material in words	
70 ODOT 526	Reinforced Concrete Approach Slabs (T=13")	178 SY	(1)		
			Labor in words	Material in words	

(1) In figures:  
 (2) Enter the product resulting from multiplying the estimated quantities by unit price bid.

ORWEILER ROAD, RIC-TR152-0.20		14017				
BRIDGE REPLACEMENT		PID NO. 98716				
ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICES			TOTAL FOR ITEMS (2)
			LABOR	MATERIAL	TOTAL	
71 ODOT 526	Type A Installation (Adjusted per Addendum Two)	80 FT	(1)			
			Labor in words		Material in words	
72 ODOT Special	Drip Strip	191 FT	(1)			
			Labor in words		Material in words	
73 ODOT 846	Polymer Modified Asphalt Expansion Joint System	20 CF	(1)			
			Labor in words		Material in words	
74 ODOT 832	Storm Water Pollution Prevention Plan	1 LS	(1)			
			Labor in words		Material in words	
75 ODOT Special	Contract Bond and Guaranty	1 LS	(1)			
			Labor in words		Material in words	
<b>TOTAL BID</b>						

(1) In figures:  
 (2) Enter the product resulting from multiplying the estimated quantities by unit price bid.  
**Please flag this page for easy location during bid opening.**

**GENERAL NOTES**

REFERENCE shall be made to Standard Drawings:

- AS-1-15 (7-17-15)
- AS2-2-15 (1-19-18)
- DS-1-92 (7-18-03)
- CPA-1-08 (7-18-08)
- CS-1-08 (1-19-18)
- CPP-1-08 (7-21-17)
- SBR-1-13 (7-20-18)
- TST-1-99 (7-20-18)

and to Supplemental Specifications:

- 800 (10-19-18)
- 832 (10-19-18)
- 846 (4-17-15)

**DESIGN SPECIFICATIONS:** This structure conforms to "AASHTO LRFD Bridge Design Specifications" adopted by the American Association of State Highway and Transportation Officials, 2014, 2015 and 2016 Interim Revisions, and the ODOT Bridge Design Manual, 2007.

**DESIGN LOADING:** HL-93.  
Future Wearing Surface (FWS) of 60 lbs./ft<sup>2</sup>.

**DESIGN DATA:**

**Cast-in-place concrete:**

- Class QC1 concrete, 28 day minimum compressive strength, f'c = 4,000 p.s.i.
- Class QC2 concrete, 28 day minimum compressive strength, f'c = 4,500 p.s.i.
- Reinforcing steel, ASTM A615, A616, or A617, Grade 60, minimum yield strength, fy = 60,000 p.s.i. All structure and approach slab reinforcing shall be epoxy coated.

**MONOLITHIC WEARING SURFACE:** Monolithic wearing surface is assumed, for design purposes, to be 1" thick.

**DECK PROTECTION METHOD:** Epoxy coated reinforcing steel, 2 1/2" concrete cover, steel drip strip, sealing of concrete surfaces, and concrete waterproofing admixture.

**REMOVAL OF EXISTING STRUCTURE:** When no longer needed to maintain traffic, the existing structure shall be removed in accordance with Item 202. The Contractor must take all necessary precautions to prevent any material from falling into the stream.

**UTILITY LINES:** All expenses involved in relocating the affected utility lines shall be borne by the utilities. The Contractor and the utilities are requested to cooperate by arranging their work in such a manner that inconvenience to either will be held to a minimum.

**PILE DRIVING CONSTRAINTS:** Prior to driving piles, the spill through slopes and the bridge approach embankment behind the abutments shall be constructed up to the level of the subgrade elevation for a minimum distance of 75 feet behind each abutment. The excavation for the abutment footings and the installation of the abutment piles shall not begin until after the above required embankment has been constructed.

**PILE DESIGN LOADS (ULTIMATE BEARING VALUE):** The Ultimate Bearing Value is 225 Kips per pile for the 14 inch diameter abutment piles and 260 Kips per pile for the 16 inch diameter pier piles.

**Abutment piles:**

- 14 piles 70 feet long, order length
- 1 Dynamic Load Testing Item

**Pier Piles:**

- 12 Piles 85 feet long, order length
- 1 Dynamic Load Testing Item

**OPERATIONAL IMPORTANCE:** A load modifier of 1.0 has been assumed for the design of this structure in accordance with the AADHTO LRFD Bridge Design Specifications, Article 1.3.5 and the ODOT Bridge Design Manual, 2007.

**STRUCTURE QUANTITIES**

CALCULATED CDW DATE 6/16  
CHECKED DATE 7/

ITEM	TOTAL 01/BRF/BR	UNIT	DESCRIPTION	SUPER.	ABUTS.	PIERS	GENERAL	AS PER PLAN STRUCTURE SHEET NO.
202	LUMP SUM	LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LUMP SUM	3
202	39	SY	APPROACH SLAB REMOVED				39	
503	LUMP SUM	LS	COFFERDAMS AND EXCAVATION BRACING		LUMP SUM			
503	LUMP SUM	LS	UNCLASSIFIED EXCAVATION, AS PER PLAN				LUMP SUM	3
505	LUMP SUM	LS	PILE DRIVING EQUIPMENT MOBILIZATION				LUMP SUM	
507	910	LF	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN		910			
507	980	LF	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED		980			
507	960	LF	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN			960		
507	1020	LF	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED			1020		
509	59,596	POUND	EPOXY COATED REINFORCING STEEL	44,999	11,531	3,082		8, 4 & 3
511	170	CY	CLASS QC2 CONCRETE, WITH QC/QA SUPERSTRUCTURE, AS PER PLAN	170				3
511	24	CY	CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN	24				3
511	17	CY	CLASS QC1 CONCRETE, PIER CAP, AS PER PLAN			17		3
511	25	CY	CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING, AS PER PLAN		25			3
511	36	CY	CLASS QC1 CONCRETE, FOOTING		36			
512	80	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	80				
512	172	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	92	42	38		
516	318	SF	NYLON REINFORCED NEOPRENE SHEETING	318				
516	122	SF	1" PREFORMED EXPANSION JOINT FILLER	122				
517	160	LF	RAILING (TWIN STEEL TUBE), AS PER PLAN	160				6
518	LUMP SUM	LS	POROUS BACKFILL WITH GEOTEXTILE FABRIC, AS PER PLAN		LUMP SUM			3
518	106	LF	6" PERFORATED CORRUGATED PLASTIC PIPE		106			
518	44	LF	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS		44			
523	2	EA	DYNAMIC LOAD TESTING		1	1		
526	178	SY	REINFORCED CONCRETE APPROACH SLABS (T=13")	178				
526	80	LF	TYPE A INSTALLATION	80				
SPECIAL	191	LF	DRIP STRIP	191				
846	20	CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM					

**ITEM - 503, UNCLASSIFIED EXCAVATION, AS PER PLAN:** Unclassified excavation shall be in accordance with 503 except that the backfill material behind the abutments shall be 203 granular material placed in 6 inch lifts and compacted in accordance with 304.04.

**ITEM 511 - CLASS QC2 CONCRETE, WITH QC/QA SUPERSTRUCTURE, AS PER PLAN.**

**ITEM 511 - CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN**

**ITEM 511 - CLASS QC1 CONCRETE, PIER CAP, AS PER PLAN.**

**ITEM 511 - CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING, AS PER PLAN:** The Contractor shall use a waterproofing admixture in the concrete. The cost for waterproofing admixture shall be included in the cost of concrete containing the admixture and no separate payment shall be made.

The waterproofing admixture shall be IPANEX by IPANEX Systems, Inc. P.O. Box 26869, 2745 N, Amber St., Philadelphia, Pennsylvania 19134, 1-800-537-5800. The admixture shall be included in the concrete mix as per manufacturer recommendations and dosage.

The Contractor should note the use of this admixture does not waive any of the other requirements of CMS 511 as to strength, entrained air content, workability, etc. of their concrete mixes. The materials shall meet all other requirements of 511.

The coarse aggregate used in this concrete shall be No. 57 crushed carbonate (limestone) not gravel.

**ITEM 511 - CLASS QC1 AND QC2 CONCRETE:** The coarse aggregate used in this concrete shall be crushed carbonate stone (CCS) not gravel.

**ITEM 512 - SEALING OF CONCRETE SURFACES:** Tint the epoxy-urethane so the final color is Federal Color Standard No. 37722- Buff.

**ITEM 518 - POROUS BACKFILL WITH GEOTEXTILE FABRIC, AS PER PLAN:** Aggregate shall be gravel only, not slag.

**ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN:**

**ASBESTOS NOTIFICATION:** An asbestos survey of the bridge scheduled for demolition was conducted by a certified asbestos hazard evaluation specialist on 12-11-2014.

The asbestos survey determined that no asbestos is present on the bridge.

A copy of the Ohio Environmental Protection Agency (OEPA) Notification of Demolition and Renovation Form, partially completed and signed by the bridge owner, will be provided to the successful bidder. The contractor shall complete the form and submit it to the County Engineer. The form may be completed at the preconstruction meeting. The County Engineer shall submit the form to the OEPA at least ten (10) working days prior to the start of the demolition of the bridge. The County Engineer shall provide a copy of the completed form to the contractor. The contractor shall not commence demolition of the structure until the above requirements are met.

Information which may be required on the form will include:

- The contractor's name and address.
- The scheduled dates for the start and completion of the bridge removal or renovation.
- A description of the planned demolition or renovation work and the method(s) to be used.
- A description of procedures to be followed in the event that unexpected asbestos is found or previously non-friable asbestos material becomes crumbled, pulverized or reduced to powder.

A copy of the OEPA form is available for inspection at the County Engineer's Office or the ODOT, District Three Office, 906 N. Clark Street, Ashland, Ohio 44805.

**Basis of Payment**

The contractor shall furnish all fees, labor, and materials necessary to complete, submit and comply with OEPA Notification form. Payment for this work shall be made under the contract lump sum price bid for Item 202- Structure Removed, Over 20 Foot Span, As Per Plan.

REVISED PER ADDENDUM TWO

RICHLAND COUNTY ENGINEER  
77 NORTH MULBERRY STREET  
MANSFIELD, OHIO 44902

DATE  
REVIEWED  
DRAWN  
DESIGNED  
CHECKED  
NEW STRUCTURE FILE NO.  
7032677

STRUCTURE NOTES & STRUCTURE QUANTITIES  
BRIDGE NO. RIC-TR152-0.20 OVER HEADWATERS OF THE CLEAR FORK  
RESERVOIR, A TRIBUTARY OF THE CLEAR FORK - MOHICAN RIVER

RIC-TR152-0.20  
ORWEILER ROAD