Department of Public Service
5330 Seaman Road
Oregon, Ohio 43616
(419) 698-7047
FAX (419) 691-0241

February 17, 2020

ADDENDUM No. 1

LUC-SEAMAN ROAD & YARROW STREET BRIDGE REPLACEMENTS
PID 107148

CITY OF OREGON
DEPARTMENT OF PUBLIC SERVICE

BIDS TO BE OPENED: Wednesday, February 26, 2020 at **10:00 AM**

Plan holders of the City of Oregon's LUC-Seaman Road & Yarrow Street Bridge Replacements are hereby notified of the following amendments to the Contract Documents. The following additions, alterations, deletions and/or clarifications shall be part of the bid specifications as much as if they were originally included in the Contract Documents. This Addendum No. 1 is hereby made a part of the Contract Documents.

Notice to Bidders – Revised Bid Opening Date

The Bid Opening has been moved back to **10:00 am** on **Wednesday, February 26, 2020**.

Delete and Replace the text for paragraph 1 of the **Notice to Bidders** with the following revised bid opening time:

Sealed proposals marked for "**LUC-SEAMAN RD & YARROW ST BRIDGE REPLACEMENTS (PID 107148)**" will be received by the City of Oregon, Ohio, at the Office of the Director of Public Service at the Oregon Municipal Building, 5330 Seaman Road, Oregon, Ohio 43616-2608, **until 10:00 A.M., local time, on Wednesday, February 26, 2020**, and then opened and read.

CONTRACT CHANGES

1) **PROJECT BID FORM**

Replace PAGES 14 and 18 in the Project Bid Book with the attached **REVISED PROJECT BID FORMS – REVISED PAGES 14 AND 18 DATED 2/17/20.**

2) **PLAN REVISIONS**

Replace PLAN SHEETS 43 and 50 in the Plan Set with the attached **REVISED PLAN SHEETS 43 and 50 DATED 2/13/20.**

ANSWERS TO SUBMITTED QUESTIONS

Question #1 - Can we get a copy of the soil borings

Soils reports have been posted on the City of Oregon's Bidding Information Page. See link below.

https://www.oregonohio.org/engineering/engineering/bidding-information.html

*** * * END OF ADDENDUM NO. 1 * * ***

Paul Roman, P.E
Director of Public Service

S-38	638	VALVE BOX ADJUSTED TO GRADE	EACH	1		
		SANITARY SEWER (SEAMAN BRIDGE)				
S-39	611	15" CONDUIT, TYPE C, 707.45	FT	115		
S-40	611	MANHOLE, NO. 3, SANITARY	EACH	4		
S-41	638	30" STEEL PIPE ENCASEMENT, OPEN CUT	FT	60		
		STRUCTURES (OVER 20') (SEAMAN BRIDGE)				
S-42	202	STRUCTURE REMOVED, OVER 20 FOOT SPAN	LUMP	1		
S-43	503	UNCLASSIFIED EXCAVATION	LUMP	1		
S-44	509	EPOXY COATED REINFORCING STEEL	LB	18,281		
S-45	511	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN	CY	28		
S-46	511	CLASS QC1 CONCRETE, FOOTING	CY	145		
S-47	511	CLASS QC1 CONCRETE, HEADWALL, AS PER PLAN	CY	4		
S-48	512	SEALING OF CONCRETE SURFACES (NON-EPOXY)	SY	383		
S-59	512	TYPE 2 WATERPROOFING, AS PER PLAN	SY	155		
S-50	516	1" PREFORMED EXPANSION JOINT FILLER	SF	54		
S-51	518	POROUS BACKFILL WITH GEOTEXTILE FABRIC	CY	15		
S-52	601	ROCK CHANNEL PROTECTION, TYPE C ***WITHOUT FILTER***	CY	248		
S-53	607	FENCE, MISC.: WOOD FENCE, AS PER PLAN	FT	110		

		WATER WORK (YARROW BRIDGE)				
Y-32	638	FIRE HYDRANT ADJUSTED TO GRADE	EACH	1		
Y-33	638	VALVE BOX ADJUSTED TO GRADE	EACH	1		
		STRUCTURES (OVER 20') (YARROW BRIDGE)				
Y-34	202	STRUCTURE REMOVED, OVER 20 FOOT SPAN	LUMP	1		
Y-35	503	UNCLASSIFIED EXCAVATION, AS PER PLAN	LUMP	1		
Y-36	509	EPOXY COATED REINFORCING STEEL	LB	13161		
Y-37	511	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN	CY	25		
Y-38	511	CLASS QC1 CONCRETE, FOOTING	CY	104		
Y-39	511	CLASS QC1 CONCRETE, HEADWALL, AS PER PLAN	CY	5		
Y-40	512	SEALING OF CONCRETE SURFACES (NON-EPOXY)	SY	383		
Y-41	512	TYPE 2 WATERPROOFING	SY	97		
Y-42	516	1" PREFORMED EXPANSION JOINT FILLER	SF	47		
Y-43	518	POROUS BACKFILL WITH GEOTEXTILE FABRIC	CY	12		
Y-44	601	ROCK CHANNEL PROTECTION, TYPE C ***WITHOUT FILTER***	CY	96		
Y-45	607	FENCE, MISC.: WOOD FENCE, AS PER PLAN	FT	100		
Y-46	611	CONDUIT, TYPE A, PRECAST REINFORCED CONCRETE THREE SIDED FLAT TOPPED CULVERT (28'-0" SPAN X 8'-0" RISE), AS PER PLAN	FT	40		
Y-47	613	LOW STRENGTH MORTAR BACKFILL, AS PER PLAN	CY	206		

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

HW-1.1 DATED (REVISED) 07-20-18
RM-5.2 DATED (REVISED) 01-18-19

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

800 DATED 01-17-20
832 DATED 10-19-18

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 8TH EDITION, INCLUDING THE MAY 2018 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.00 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

DESIGN LOADING

DESIGN LOADING: HL-93 (MODIFIED) - CULVERT CONDUIT
HL-93 - FOOTING

FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ.FT.

DESIGN DATA

CONCRETE CLASS QC1 -COMPRESSIVE STRENGTH 4.0 KSI (FOOTING, WINGWALL AND FORESLOPE WALL)

REINFORCING STEEL -MINIMUM YIELD STRENGTH 60 KSI

THREE-SIDED CULVERT WALL AND TOP SLAB THICKNESS

THE WALL AND TOP SLAB THICKNESS SHOWN ON THE PLANS WERE OBTAINED FROM THE MANUFACTURERS AT THE TIME THE PLANS WERE PREPARED. IF THE WALL AND/OR TOP SLAB THICKNESS OF THE CULVERT PROPOSED ARE DIFFFERENT FROM WHAT IS SHOWN ON THE PLANS, A MARKED COPY OF THE PROJECT PLANS, INCLUDING ALL PLAN NOTES AND DETAILS SHOWING ALL ITEMS AFFECTED BY THE DIFFERENT CULVERT DEIMENSIONS, SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP DRAWINGS. ALL WORK REQUIRED TO ACCOMMODATE ANY REVISED DIMENSIONS SHALL BE AT NO ADDITIONAL COST TO THE CITY.

FOUNDATION BEARING RESISTANCE

CULVERT FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LOAD PRESSURE OF 2.87 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LOAD PRESSURE OF 3.59 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 3.6 KIPS PER SQUARE FOOT.

ITEM 511, CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN AND ITEM 511, CLASS QC1 CONCRETE, HEADWALL, AS PER PLAN:

THE CITY WILL PERMIT THE USE OF PRECAST CONCRETE IN LIEU OF CAST-IN-PLACE CONCRETE FOR HEADWALLS AND WINGWALLS IN ACCORDANCE WITH C&MS 602.03. THE CITY WILL PAY FOR THE WINGWALL AND HEADWALL CONCRETE IN SQUARE YARD AS DETERMINED FROM PLAN DIMENSIONS USING THE WALL HEIGHTS ABOVE THE FOOTING AND

ITEM 511, CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN AND ITEM 511, CLASS QC1 CONCRETE, HEADWALL, AS PER PLAN: (CONTINUED)

LENGTH ALONG THE EXTERIOR FACES OF THE WALLS. THE CITY WILL CONSIDER THE REINFORCING STEEL IN THE WINGWALLS AND HEADWALLS, INCLUDING THE REINFORCEMENT THAT EXTENDS INTO THE FOOTINGS, AS INCIDENTAL TO THE RETAINING/WINGWALL CONCRETE. THE TOTAL QUANTITY OF CAST-IN-PLACE WINGWALL AND HEADWALL CONCRETE IS 32 CU. YD. THE TOTAL QUANTITY OF CAST-IN-PLACE WINGWALL AND HEADWALL REINFORCING STEEL IS 6,423 LBS.

WATERPROOFING

TYPE 2 WATERPROOFING, PER CMS 512.09 AND 711.25, SHALL BE APPLIED TO THE TOP SURFACE AND EXTEND VERTICALLY DOWN THE ENTIRE SIDES OF THE PRECAST CULVERT SECTIONS FOR ALL PROTIONS OF THE CULVER WHICH SHALL BE IN CONTACT WITH THE BACKFILL. A MIMIMUM LAP LENGTH OF 6" SHALL BE USED AT THE JOINTS IN THE WATERPROOFING. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512 - TYPE 2 WATERPROOFING, AS PER PLAN.

PREFORMED EXPANSION JOINT FILLER

PREFORMED EXPANSION JOINT FILLER (PEJF) CONFORMING TO CMS 705.03, 1 INCH THICK, SHALL BE PLACED ABOVE THE FOOTING BETWEEN THE SIDES OF THE BOX CULVERT AND THE ENDS OF THE WINGWALLS. PAYMENT FOR MATERIALS AND INSTALLATION SHALL BE INCLUDED WITH ITEM 516 - 1" PREFORMED EXPANSION JOINT FILLER.

POROUS BACKFILL WITH GEOTEXTILE FABRIC

2'-0' THICK SHALL BE PLACED BEHIND THE WINGWALLS ONLY AND SHALL EXTEND TO 12' BELOW THE EMBANKMENT SURFACE. GEOTEXTILE FABRIC SHALL BE PLACED BETWEEN THE POROUS BACKFILL AND REPLACED EXCAVATION ADJACENT TO THE STRUCTURE. IT SHALL TURN UNDER THE BOTTOM OF THE POROUS BACKFILL AND RETURN 6' ABOVE THE TOP ELEVATION OF THE WEEPHOLE.

POROUS BACKFILL WITH GEOTEXTILE FABRIC (CONTINUED)

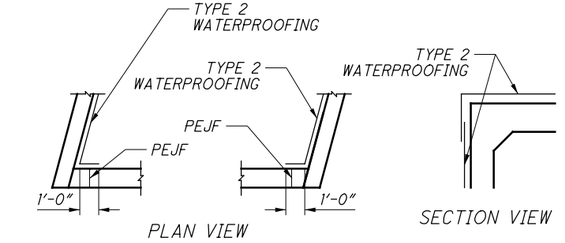
WEEPHOLES SHALL BE PLACED 6' TO 12" ABOVE THE NORMAL WATER ELEVATION OR GROUND LINE. A MINIMUM OF TWO WEEPHOLES SHALL BE PROVIDED PER WINGWALL.

ITEM 607, FENCE, MISC: WOOD FENCE, AS PER PLAN

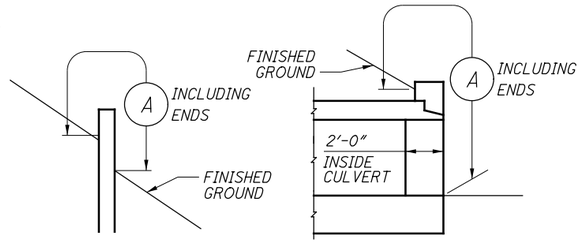
THE WOOD FENCE INSTALLED PER THIS ITEM SHALL BE PER STD. CONST. DWG. RM-5.2 EXCEPT AS SHOWN IN THESE PLANS.

ITEM 613, LOW STRENGTH MORTAR BACKFILL, AS PER PLAN

LOW STRENGTH MORTAR BACKFILL SHALL BE PLACED AS SHOWN AND LATERALLY TO 5' BEYOND THE EDGE OF PAVEMENT ON THE NORTH SIDE AND TO THE BACK OF SIDEWALK ON THE SOUTH SIDE. VERTICALLY THIS BACKFILL SHALL BE PLACED NO HIGHER THAN 3' BELOW THE TOP SURFACE OF THE TOP OF THE CULVERT AS SHOWN. PAYMENT FOR LOW STRENGTH MORTAR BACKFILL SHALL BE MADE ONLY FOR BACKFILL PLACED TO THE LIMITS SHOWN. LIFTS SHALL BE LIMITED TO 4' AND SHALL BE PLACED TO EQUAL HEIGHTS ON EACH SIDE OF THE CULVERT. A SUBSEQUENT LIFT SHALL NOT BE PLACED ON TOP OF A LIFT UNTIL 24 HOURS HAVE ELAPSED.



WATERPROOFING DETAILS



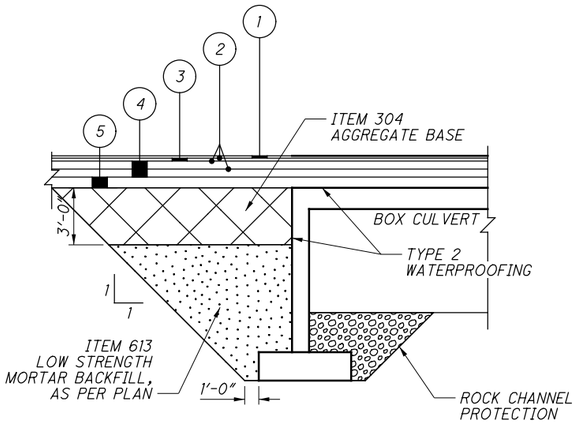
LIMITS OF ITEM 512-SEALING CONCRETE SURFACES (NON-EPOXY)

(A) - SEAL ENTIRE CONCRETE SURFACE AREA

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION
202	LUMP		STRUCTURE REMOVED, OVER 20 FOOT SPAN
503	LUMP		UNCLASSIFIED EXCAVATION
509	18281	LB	EPOXY COATED REINFORCING STEEL
511	28	CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN
511	145	CY	CLASS QC1 CONCRETE, FOOTING
511	4	CY	CLASS QC1 CONCRETE, HEADWALL, AS PER PLAN
512	383	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)
512	155	SY	TYPE 2 WATERPROOFING, AS PER PLAN
516	54	SF	1" PREFORMED EXPANSION JOINT FILLER
518	15	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC
601	248	CY	ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER 1
607	110	FT	FENCE, MISC.: WOOD FENCE, AS PER PLAN
611	56	FT	CONDUIT, TYPE A, PRECAST REINFORCED CONCRETE THREE SIDED FLAT TOPPED CULVERT, AS PER PLAN (28'-0" SPAN X 10'-0" RISE)
613	404	CY	LOW STRENGTH MORTAR BACKFILL, AS PER PLAN

1 - 2/13/20 FILTER MATERIAL REMOVED FROM ITEM



LEGEND

(1)	ITEM 441	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), 1-1/4" THICK
(2)	ITEM 407	NON-TRACKING TACK COAT
(3)	ITEM 441	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), 1-3/4" THICK
(4)	ITEM 301	ASPHALT CONCRETE BASE, PG64-22 9" THICK
(5)	ITEM 304	6" AGGREGATE BASE

DESIGN AGENCY
TETRA TECH
420 MADISON AVENUE, SUITE 1001
TOLEDO, OH 43604

DESIGNED	DRAWN	REVIEWED	DATE
TLR	TSR	DTC	9/24/2019
CHECKED	REVISED	STRUCTURE FILE NUMBER	
TJD		4863128	

GENERAL NOTES
SEAMAN ROAD BRIDGE
OVER THE OTTER CREEK

LUC-SEAMAN RD & YARROW ST BR.

2 / 7

43
55

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

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HW-1.1 DATED (REVISED) 07-20-18
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DESIGN LOADING

DESIGN LOADING: HL-93

FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ.FT.

DESIGN DATA

CONCRETE CLASS QC1 -COMPRESSIVE STRENGTH 4.0 KSI (FOOTING, WINGWALL AND FORESLOPE WALL)

REINFORCING STEEL -MINIMUM YIELD STRENGTH 60 KSI

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FOUNDATION BEARING RESISTANCE

CULVERT FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LOAD PRESSURE OF 3.01 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LOAD PRESSURE OF 4.48 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 4.5 KIPS PER SQUARE FOOT.

ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN

DUE TO THE POTENTIAL FOR LOOSENING OF THE SOIL UPON EXCAVATION AND OCCURRENCE BELOW THE STREAM BOTTOM, THE SOIL EXCAVATED FOR THE FOOTING SHALL BE OVEREXCAVATED BY 1 FOOT AND REPLACED WITH LEAN CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 1.5 KIPS PER SQUARE INCH (KSI) OR OTHER FLOWABLE CONTROLLED-DENSITY FILL (CDF) HAVING A MINIMUM COMPRESSIVE STRENGHT OF 0.3 KSI AS DIRECTED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE

ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN (CONT'D)

INCLUDE IN THE CONTRACT LUMP SUM PRICE BID FOR ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN.

ITEM 511, CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN AND ITEM 511, CLASS QC1 CONCRETE, HEADWALL, AS PER PLAN:

THE CITY WILL PERMIT THE USE OF PRECAST CONCRETE IN LIEU OF CAST-IN-PLACE CONCRETE FOR HEADWALLS AND WINGWALLS IN ACCORDANCE WITH C&MS 602.03. THE CITY WILL PAY FOR THE WINGWALL AND HEADWALL CONCRETE IN SQUARE YARD AS DETERMINED FROM PLAN DIMENSIONS USING THE WALL HEIGHTS ABOVE THE FOOTING AND LENGTH ALONG THE EXTERIOR FACES OF THE WALLS. THE CITY WILL CONSIDER THE REINFORCING STEEL IN THE WINGWALLS AND HEADWALLS, INCLUDING THE REINFORCEMENT THAT EXTENDS INTO THE FOOTINGS, AS INCIDENTAL TO THE RETAINING/WINGWALL CONCRETE. THE TOTAL QUANTITY OF CAST-IN-PLACE WINGWALL AND HEADWALL CONCRETE IS 30 CU. YD. THE TOTAL QUANTITY OF CAST-IN-PLACE WINGWALL AND HEADWALL REINFORCING STEEL IS 4,648 LBS.

WATERPROOFING

TYPE 2 WATERPROOFING, PER CMS 512.09 AND 711.25, SHALL BE APPLIED TO THE TOP SURFACE AND EXTEND VERTICALLY DOWN THE ENTIRE SIDES OF THE PRECAST CULVERT SECTIONS FOR ALL PROTIONS OF THE CULVER WHICH SHALL BE IN CONTACT WITH THE BACKFILL. A MIMIMUM LAP LENGTH OF 6" SHALL BE USED AT THE JOINTS IN THE WATERPROOFING. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512 - TYPE 2 WATERPROOFING, AS PER PLAN.

PREFORMED EXPANSION JOINT FILLER

PREFORMED EXPANSION JOINT FILLER (PEJF) CONFORMING TO CMS 705.03, 1 INCH THICK, SHALL BE PLACED ABOVE THE FOOTING BETWEEN THE SIDES OF THE BOX CULVERT AND THE ENDS OF THE WINGWALLS. PAYMENT FOR MATERIALS AND INSTALLATION SHALL BE INCLUDED WITH ITEM 516 - 1" PREFORMED EXPANSION JOINT FILLER.

POROUS BACKFILL WITH GEOTEXTILE FABRIC

2'-0' THICK SHALL BE PLACED BEHIND THE WINGWALLS ONLY AND SHALL EXTEND TO 12' BELOW THE EMBANKMENT SURFACE. GEOTEXTILE FABRIC SHALL BE PLACED BETWEEN THE POROUS BACKFILL AND REPLACED EXCAVATION ADJACENT TO THE STRUCTURE. IT SHALL TURN UNDER THE BOTTOM OF THE POROUS BACKFILL AND RETURN 6' ABOVE THE TOP ELEVATION OF THE WEEPHOLE.

WEEPHOLES SHALL BE PLACED 6' TO 12" ABOVE THE NORMAL WATER ELEVATION OR GROUND LINE. A MINIMUM OF TWO WEEPHOLES SHALL BE PROVIDED PER WINGWALL.

ITEM 607, FENCE, MISC: WOOD FENCE, AS PER PLAN

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ESTIMATED QUANTITIES

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511	104	CY	CLASS QC1 CONCRETE, FOOTING
511	5	CY	CLASS QC1 CONCRETE, HEADWALL, AS PER PLAN
512	383	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)
512	97	SY	TYPE 2 WATERPROOFING
516	47	SF	1" PREFORMED EXPANSION JOINT FILLER
518	12	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC
601	96	CY	ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER /1
607	100	FT	FENCE, MISC.: WOOD FENCE, AS PER PLAN
611	40	FT	CONDUIT, TYPE A, PRECAST REINFORCED CONCRETE THREE SIDED FLAT TOPPED CULVERT, AS PER PLAN (28'-0" SPAN X 8'-0" RISE)
613	206	CY	LOW STRENGTH MORTAR BACKFILL, AS PER PLAN

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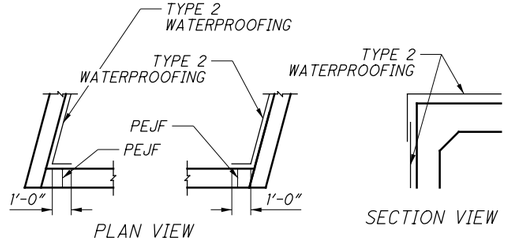
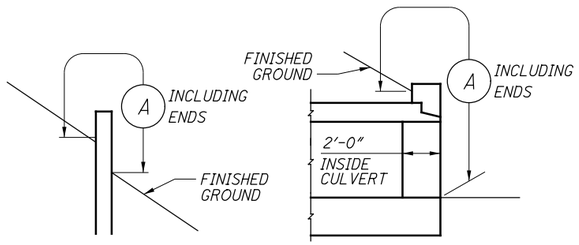
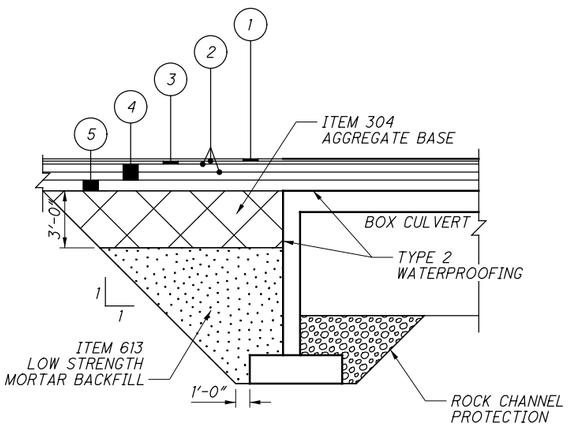


WATERPROOFING DETAILS



LIMITS OF ITEM 512-SEALING CONCRETE SURFACES (NON-EPOXY)

(A) - SEAL ENTIRE CONCRETE SURFACE AREA



LEGEND

1	ITEM 441	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), 1-1/4" THICK
2	ITEM 407	NON-TRACKING TACK COAT
3	ITEM 441	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), 1-3/4" THICK
4	ITEM 301	ASPHALT CONCRETE BASE, PG64-22 9" THICK
5	ITEM 304	6" AGGREGATE BASE

DESIGN AGENCY
TETRA TECH
420 MADISON AVENUE, SUITE 1001
TOLEDO, OH 43604

DESIGNED	DRAWN	REVIEWED	DATE
TLR	TSR	DTC	9/24/2019
CHECKED	REVISED	STRUCTURE FILE NUMBER	
TJD		4863144	

GENERAL NOTES
YARROW STREET BRIDGE
OVER THE OTTER CREEK

LUC-SEAMAN RD & YARROW ST BR.

2 / 7

50 / 55

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