

ADDENDUM NO. 4

City of Rossford
Hawthorne Lane Road Reconstruction
August 5, 2021
New Bid Date: August 9, 2021

Contract Documents

- 1.) Change the Bid date from August 5, 2021 to August 9, 2021 in the bid advertisement.
- 2.) Replace page Nos. 4, 5 and 6 of Section 00300 with the enclosed page Nos. 4, 5 and 6 of this addendum.

Construction Plans

- 1.) Replace the enclosed Sheet Nos. 2/8, 3A/8, 5/8 and 7/8 of this addendum with the Sheet Nos. 2/8, 3A, 5/8 and 7/8 of the construction plans.
- 2.) Add Sheet No. 3B/8 to the construction plans.

P:\Projects\10E09348\Project Specs\Bid Documents\10E09348 Addendum No. 4.docx

PROPOSAL TO THE CITY OF ROSSFORD
HAWTHORNE LANE ROAD RECONSTRUCTION

BID SCHEDULE

Bid Item	Item Description	Estm. Qty.	Unit	Unit Price Material	Unit Price Labor	Total Unit Price	Total Price
BASE BID - PAVEMENT							
201	Clearing and Grubbing	1	LUMP			\$	\$
203	Excavation (Includes Existing Pavement Section)	433	CY			\$	\$
203	Embankment	93	CY			\$	\$
204	Subgrade Compaction	1310	SY			\$	\$
204	Geogrid	1310*	SY			\$	\$
304	Aggregate Base	327	CY			\$	\$
407	Tack Coat	117	GAL			\$	\$
441	Asphalt Concrete, Surface Course, Type 1, PG-64-22	49	CY			\$	\$
441	Asphalt Concrete, Intermediate Course, Type 2, PG-64-22	82	CY			\$	\$
452	6" Nonreinforced Concrete Pavement	195	SY			\$	\$
608	4" Walk	2728	SF			\$	\$
608	Curb Ramp	58	SF			\$	\$
608	Detectable Warnings	16	SF			\$	\$
609	Curb, Type 6	840	FT			\$	\$
614	Maintaining Traffic	1	LUMP			\$	\$
623	Construction Layout Survey	1	LUMP			\$	\$
624	Mobilization	1	LUMP			\$	\$
644	Stop Line	10	FT			\$	\$
653	Topsoil Furnished and Placed	70*	CY			\$	\$
SPEC	Restoration of Right-of-way	1	LUMP			\$	\$
	SUBTOTAL						\$
BASE BID - EROSION CONTROL							
659	Seeding and Mulching, As Per Plan	839	SY			\$	\$
659	Commercial Fertilizer	0.1	TON			\$	\$
659	Water	0.003	M GAL			\$	\$
832	Inlet Protection	30	FT			\$	\$

PROPOSAL TO THE CITY OF ROSSFORD
HAWTHORNE LANE ROAD RECONSTRUCTION

BID SCHEDULE

Bid Item	Item Description	Estm. Qty.	Unit	Unit Price Material	Unit Price Labor	Total Unit Price	Total Price
832	Perimeter Filter Fabric Fence	840	FT			\$	\$
SPEC	Curb Inlet Sediment Filter	2	EA			\$	\$
SPEC	Concrete Washout Area	1	EA			\$	\$
	SUBTOTAL						\$
	BASE BID - DRAINAGE						
605	6" Underdrain, 707.31	462	FT			\$	\$
605	6" underdrain, 707.31	378*	FT			\$	\$
611	4" Conduit, Type B	25*	FT			\$	\$
611	6" Conduit, Type B	25*	FT			\$	\$
611	12" Conduit, Type B	96	FT			\$	\$
611	15" Conduit, Type B	230	FT			\$	\$
611	ODOT 2-2B Catch Basin	1	EA			\$	\$
611	Catch Basin, No. 3A	2	EA			\$	\$
611	Sanitary Manhole Adjusted To Grade	1	EA			\$	\$
	SUBTOTAL						\$
	BASE BID - DEMOLITION						
202	Catch Basin Removed	2	EA			\$	\$
202	Pipe Removed	280	FT			\$	\$
202	Curb Removed	136	FT			\$	\$
202	Driveway Pavement Removed	202	SY			\$	\$
202	Mics. Brick Removed For Storage	1	LUMP			\$	\$
	SUBTOTAL						\$
	ALTERNATE BID - DRAINAGE						
611	CONTECT CS4 Storm Structure	1	EA			\$	\$
	SUBTOTAL						\$

TOTAL AMOUNT BID (IN WORDS) _____ (\$ _____)

TOTAL ALTERNATE BID (IN WORDS) _____ (\$ _____)

BEGINNING DATE OF CONSTRUCTION _____

AWARD OF CONTRACT WILL BE BASED ON ALL BID ITEMS, SUBCONTRACTORS LISTED AND BEGINNING DATE OF CONSTRUCTION. HOWEVER, THE CITY OF NORTHWOOD RESERVES THE RIGHT TO DELETE A PORTION OR ANY PART OF THIS BID.

END OF SECTION

* Includes contingency quantities.

SPECIFICATIONS

Except as modified by these plans and by the detailed specifications pertaining thereto, all work shall be governed by the Wood County Construction Standards, the City of Rossford Construction Standards and/or by the State of Ohio, Department of Transportation, "Construction and Material Specifications" dated January 1, 2019, and supplements thereto in effect fourteen (14) calendar days prior to receiving bids.

UNDERGROUND UTILITIES AND ADJUSTMENTS

The location of existing utilities shown on these plans is approximate. The exact location shall be verified by the contractor. The contractor shall notify each respective utility company at least seven (7) days prior to the time of construction. Any and all adjustments or extensions required for public or private utilities will be done by and at the expense of their respective owners, unless otherwise noted on the plans.

UTILITY OWNERSHIP

The following is a list of the owners of utilities known to be within the limits of construction.

Columbia Gas of Ohio 333 S. Erie Street Toledo, Ohio 43602 (419) 252-8111	Toledo Edison 300 Madison Avenue Maistop 1832 Toledo, Ohio 43652 (419) 249-5380	Northwestern Water & Sewer District P.O. Box 348 Maistop 1832 Bowling Green, Ohio 43402 (419) 354-9090
Frontier Communications 300 W. Gypsy Lane Bowling Green, Ohio 43402 (419) 841-7281	Spectrum 2010 Jefferson Defiance, Ohio 43512 (614) 255-6349	
City of Rossford 133 Osborn Street Rossford, Ohio 43460 (419) 666-0210	Ohio Utilities Protection Agency 1-800-362-2764	

EXISTING BENCHMARKS, MONUMENTS AND CONTROL POINTS

Existing survey monuments, bench marks, property corner points and control points damaged or disturbed by construction will be replaced by a registered land surveyor at the expense of the contractor. Should the contractor fail to properly replace these points, the City of Rossford shall replace these points at the contractor's expense, after three (3) weeks notice. The contractor is to notify the City of Rossford of any anticipated conflicts.

PIPE SPECIALS

Quantities for pipe bends, tees, wyes and other fittings are listed on the plans for the convenience of the contractor. The unit price bid for the pipe shall include all necessary fittings. All pipe specials shall be factory made.

CATCH BASINS AND MANHOLES

All new Catch Basins are to be constructed with two (2) foot sumps and without traps.

All Manholes are to be constructed without sumps or traps. All new manholes and catch basins located in pavement shall be constructed with a concrete collar as shown on the Adjustment and Placement of Manhole/Catch Basin/Curb Box Castings Including New Construction detail on sheet 3.

MANHOLE RIM ELEVATIONS

When manholes are located within the pavement, the uppermost surface of the frame or cover shall be 1/4 inch below the pavement surface. When manholes are located outside the pavement, the top should be set 1 inch above the finished ground grade.

RESTORATION OF RIGHT-OF-WAY

All existing features in existing City rights-of-way that are disturbed due to construction, such as: mailboxes, trees, shrubs, bushes, guardrail, signs, driveways, sidewalks, swales, sewers, berms, grading, seeded areas, etc., shall be replaced to their original condition in accordance with current ODOT specifications, Item 611.15, Item 659.10 and to the satisfaction of the City of Rossford. Payment for this work shall be included in the price bid for lump sum, bid item - Restoration of Right-of-Way.

SEEDING AND MULCHING, AS PER PLAN

Seeding and mulching shall be as per ODOT Specification Item 659, using seeding mixture: Class 1, lawn mixture. Seeding and mulching shall include all proposed rights-of-way and all disturbed areas within existing City rights-of-way. Seeding method shall be hydroseding per 659.12 and include fertilizer per 659.04.

ROOF DRAINS

Roof drains, foundation drains and all other clean water connections to the sanitary sewer are prohibited.

MAINTENANCE OF TRAFFIC

Traffic shall be maintained and safety provisions made in accordance with Item 614 of the Ohio Department of Transportation's Construction and Material Specifications, the Ohio Manual of Uniform Traffic Control Devices for Streets and Highway (The Ohio Manual) and the requirements of this note.

Access to adjacent properties affected by any construction operations shall be maintained at all times unless permission to close the facility is granted by the owners and the Engineer.

During construction periods, Hawthorne Lane and Jennings Road shall have a minimum of one-way flow on a minimum 10' lane provided two flaggers are on the site to regulate flow. Local traffic and drives shall be maintained at all times during construction of this project. Appropriate signs and barricades shall be installed, along with other pertinent traffic control measures. At all other times (nights, weekends, inclement weather) the road shall be re-opened to two way flow on a minimum pavement equal to existing paved surface width. One-way closure shall be per the plans.

Whenever the permanent pavement surface will not be replaced same day as removal, a 3" minimum pavement patch of ODOT 1997 Construction and Materials Specifications item 405 bituminous cold mix shall be required as a temporary replacement. Permanent replacement must be accomplished within three (3) days, weather permitting. Item 405 Bituminous cold mix shall be included in the price bid for lump sum, Bid Item - Maintaining Traffic.

If maintenance of traffic facilities, provisions for traffic control and safety are not accomplished to the satisfaction of the City of Rossford, then the City of Rossford will notify the contractor of the nature and extent of such problems. If prompt corrective actions are not taken by the contractor, then such services will be deducted from monies due the contractor.

Payment for maintenance of traffic in accordance with Item 614 and the provisions of this note will be at the contract price for Item 614 Maintaining Traffic.

COMPACTION

Compaction of embankment and pavement subgrade areas shall be at least 100% as determined by the Standard Proctor Test.

BEGINNING CONSTRUCTION

The City of Rossford, and the Engineer shall be notified seven (7) days prior to the beginning of the actual construction.

EXISTING SEWERS

The contractor shall conduct his operations so as to maintain existing sewer flows at all times and shall promptly replace in kind any storm sewer disturbed by construction to the satisfaction of the City of Rossford. The cost of making inspections and any repairing or correcting of sewers as a result of construction operations shall be included in the unit price for the pertinent bid item.

STORM SEWER ACCEPTANCE

Prior to final acceptance of the project by the City of Rossford, all storm sewers installed or repaired shall be thoroughly cleaned and flushed with water. All new inlets and manholes constructed as part of the project shall be free of all foreign matter and in a clean condition before the project will be accepted by the City of Rossford.

EXISTING STORM SEWER LATERALS

The existing storm sewer laterals shall be replaced and reconnected to the new storm sewer. The contractor shall work with City Officials and Engineer's Project Representative to determine locations of the existing storm sewer laterals. Payment for this work shall be included in the unit prices bid for the following conduit items:
611 - 4" CONDUIT, TYPE B 25 FT. *
611 - 6" CONDUIT, TYPE B 25 FT. *

PIPE BACKFILL

Type B Pipe running longitudinally with the roadway and under the road or outside the roadway but within 5 feet of the road shall be backfilled using ODOT 703.11, Type 1. All other Type B pipe under the roadway shall be backfilled using low strength mortar backfill per ODOT 613 Type 1 or 2. Item 613 shall be included in the unit price per foot of pipe.

BEDDING

All bedding shall be Type 1 bedding and meet the requirements of Item 611.06 bedding, Ohio Department of Transportation Specifications dated 2019. Where PVC pipe is used, the bedding shall be extended to 6" above the top of the pipe.

PIPE JOINTS

All PVC joints shall be ASTM D-3212. All concrete pipe joints shall meet ODOT 706.11 (ASTM C-443)

INSPECTION

Cost of inspection by the City of Rossford shall be paid for by the City of Rossford. The Material Sampling and Testing shall be paid for by the Contractor. Material sampling and testing shall be by a testing firm approved by the City of Rossford.

HAUL ROUTES

The contractor shall maintain these routes in a condition acceptable to the City Engineer during the life of the project. This maintenance includes the removal of mud, stone and other material hauled. Hauling and construction traffic shall be limited to Hawthorne Lane, and Jennings Road.

EXISTING DRIVEWAY PAVEMENT REPLACEMENT

Existing driveway pavement replacement costs for drives disturbed by sewer and pavement construction noted in the plans and any areas damaged beyond what is noted in the plans shall be included in the unit price bid for lump sum, Bid Item - Restoration of Right-of-Way.

CONTINGENCY QUANTITIES

Work listed in the General Summary for items designated by plan note to be used "as directed by the Engineer" shall not be performed unless authorized by the Engineer. Although the Contractor may choose to order and/or purchase some or all of the items for his convenience, only those items actually placed at the direction of the Engineer shall be included for payment. The actual work locations and quantities used shall be based upon final field measurement.

SAFETY REQUIREMENTS

The contractor shall at all times follow all State and local safety requirements during construction of this project. Special care shall be taken during all trenching operations. Shoring and bracing, cribbing, etc., must be installed as required by the Engineer to provide maximum safety to the contractor's workers in full compliance with Occupational Safety and Health Administration (OSHA) regulations.

CONSTRUCTION STAKING

Construction staking for storm sewers shall be performed by the contractor. Forty-eight (48) hours prior notice will be required for construction stakes. It is the contractor's responsibility to protect and preserve the construction stakes and to verify their correctness prior to laying pipe.

INSURANCE

No contractor or subcontractor shall start any work until the approved certificate of liability insurance is filed with the City of Rossford naming the City of Rossford and Feller, Finch & Associates, Inc. as the insured.

OBSTRUCTION IN RIGHT-OF-WAY

The contractor shall not remove any mail boxes, paper boxes, private light posts, signs, utility markers, trees, shrubbery, fence, guardrail or other obstructions without the prior approval of the Engineer. The contractor shall notify all property owners and request that the property owner remove fences, shrubs, bushes, light posts, private signs and ornamental landscaping which includes but is not limited to: railroad ties, statures, brick or stone, wash stone, wood chips, etc. from the public right-of-way.

If the owner of said obstruction does not remove or relocate said obstruction within a reasonable time (10 days maximum), the contractor shall remove the obstruction and place it at the direction of the Engineer. If mailboxes cannot be immediately replaced, the contractor shall provide for temporary mail service suitable to the U. S. Postal Service. Payment for this work shall be included in the lump sum price bid for the item - Restoration of Right-of-Way.

REVIEW OF DRAINAGE FACILITIES

Before any work is started on the project, and again before final acceptance by the City, representatives of the City and the contractor shall make an inspection of the existing sewers within the project limits which are to remain in service and which may be affected by the work. The condition of the existing conduits and their appurtenances shall be determined from field observations. Records of the inspections shall be kept in writing by the City.

All new conduits, inlets, catch basins and manholes constructed as a part of the project shall be free of all foreign matter and in a clean condition before the project will be acceptable by the City.

All existing sewers inspected initially by the above-mentioned parties shall be maintained or left in a condition reasonably comparable to that determined by the original inspection. Any change in the condition resulting from the contractor's operations shall be corrected by the contractor to the satisfaction of the City Engineer. Payment for all operations described above shall be included in the unit prices bid for the pertinent conduit items of the contract.

PERMIT REQUIREMENTS

The contractor shall obtain all required work permits. Copies of permits shall be submitted to the City of Rossford prior to construction.

SPOILS

Spoils and pavement spoils shall be disposed of at an approved site and the cost shall be included in the unit price for the pertinent bid item.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

Where plans provide for a proposed conduit to be connected to, or cross over or under an existing sewer or underground utility, the contractor shall locate the existing pipes or utilities both as to line and grade before starting to lay the proposed conduit.

If it is determined that the elevation of the existing conduit, or existing appurtenance to be connected, differs from the plan elevation or results in a change in the plan conduit slope, the engineer shall be notified before starting construction of any portion of the proposed conduit which will be affected by the variance in the existing elevations.

Connections to existing conduit shall use Fernco adaptors, or approved equal as determined by the City.

If it is determined that the proposed conduit will intersect an existing sewer or underground utility if constructed as shown on the plan, the engineer shall be notified before starting construction of any portion of the proposed conduit which would be affected by the interference with an existing facility.

Payment for all the operations described above shall be included in the contract price for the pertinent 611 conduit item.

EXISTING STORM CONDUIT AND STRUCTURE REMOVAL AND ABANDONMENT

Item 202 shall include the removal of existing storm conduit and structures located within the proposed trench limits.

Item 611 includes cost to furnish and place existing lateral sewer connections including drops and leads.

All existing castings to be removed from the project shall become property of the City of Rossford. Contractor shall coordinate with the City for delivery and drop-off location.

Existing storm sewer shall be abandoned or removed by contractor, where noted on the plans. All conduit to be abandoned that is disturbed during the construction of this project and all conduit in existing structures to be removed or abandoned shall be sealed in accordance with ODOT Item 202, or removed and backfilled as directed by the Engineer. Prior to abandoning or removing existing storm sewer, the Contractor shall verify that there are no live connections to the existing pipe. This may be done by video taping or other means as approved by the City. All costs to abandon storm system as described above shall be incidental to the project unless otherwise noted in the plans while all costs to remove existing storm system components shall be included in the pertinent 202 item.

STORM WATER POLLUTION PREVENTION PLAN

The Contractor shall use Best Management Practices for erosion and sediment control, complying with Ohio EPA requirements. The Contractor shall use all means necessary to protect the existing and proposed storm sewer from soil erosion, asphalt grindings, asphalt concrete, and other construction debris. This work shall be incidental to the project, including all labor, equipment and materials to install, maintain and remove protective measures. Contractor shall supply storm structure protection for each structure as manufactured by Dandy Products or approved equal.

CLEARING AND GRUBBING

Existing trees shown on the plan sheets to be removed shall be included in the unit price bid for Item 201 - Clearing and Grubbing. Trees shown on the plan sheets to be saved but that require trimming shall also be included in this bid item.

ODOT ITEM 611 PIPE CONDUIT

As part of this contract, Section 611.04 B and D, Section 611.09, Section 611.11, Section 611.12, Section 611.13, and Section 611.14 will not be required for this project.

CAREFUL BRICK REMOVAL

Carefully remove brick for storage on site as directed by the engineer for salvage by the parcel owner.

PAVEMENT REMOVAL

Pavement quantity to be removed by excavation shall include depth of aggregate base.

SITE EXCAVATION

Item 203 excavation quantity includes three areas of gravel along parcels along Hawthorne Lane.

SIDEWALK INSTALLATION

Item 608 walk shall match existing driveway elevations in all applicable areas.

NORTH
SCALE: 1" = 20'

FELLER, FINCH & ASSOCIATES, INC.			
DESIGNER	DATE	DESIGN BY	JKA
DRAWN BY	DATE	DRAWN BY	RSP
CHECKED BY	DATE	CHECKED BY	DKK
DRAWING NO.	DATE	DRAWING NO.	19-0848R001

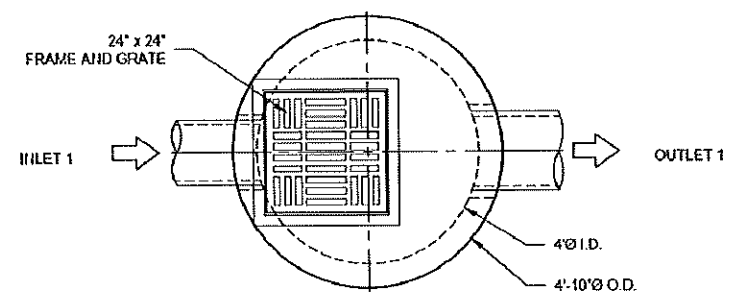
GENERAL SUMMARY			
ITEM	QTY.	UNIT	DESCRIPTION
BASE BID - PAVEMENT			
201	1	LUMP	CLEARING AND GRUBBING
203	433	CY	EXCAVATION (INCLUDES EXISTING PAVEMENT SECTION)
203	93	CY	EMBANKMENT
204	1310	SQ. YD.	SUBGRADE COMPACTION
204	1310*	SQ. YD.	GEOGRID
304	327	CU. YD.	AGGREGATE BASE
408	117	GAL.	TACK COAT
441	49	CU. YD.	ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG-64-22
441	82	CU. YD.	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG-64-22
452	195	SQ. YD.	6" NONREINFORCED CONCRETE PAVEMENT
608	2728	SQ. FT.	4" WALK
608	58	SQ. FT.	CURB RAMP
608	16	SQ. FT.	DETECTABLE WARNING
609	840	FT.	CURB, TYPE 6
614	1	LUMP	MAINTAINING TRAFFIC
623	1	LUMP	CONSTRUCTION LAYOUT SURVEY
624	1	LUMP	MOBILIZATION
644	10	FT.	STOP LINE
653	70*	CU. YD.	TOPSOIL
SPEC	1	LUMP	RESTORATION OF RIGHT-OF-WAY
EROSION CONTROL			
659	839	SQ. YD.	SEEDING AND MULCHING, AS PER PLAN
659	0.1	TON	COMMERCIAL FERTILIZER
659	0.003	M. GAL.	WATER
832	30	FT.	INLET PROTECTION
832	840	FT.	PERIMETER FILTER FABRIC FENCE
SPEC	2	EACH	CURB INLET SEDIMENT FILTER
SPEC	1	EACH	CONCRETE WASHOUT AREA
DRAINAGE			
605	462	FT.	6" UNDERDRAIN, 707.31
605	378*	FT.	6" UNDERDRAIN, 707.31
611	25*	FT.	4" CONDUIT TYPE B
611	25*	FT.	6" CONDUIT TYPE B
611	96	FT.	12" CONDUIT TYPE B
611	230	FT.	15" CONDUIT TYPE B
611	1	EACH	ODOT 2-ZB CATCH BASIN
611	1	EACH	CONTECH CS4 STORM STRUCTURE (ALTERNATE BID)
611	2	EACH	CATCH BASIN, NO. 3A
611	1	EACH	SANITARY MANHOLE ADJUSTED TO GRADE
DEMOLITION			
202	2	EACH	CATCH BASIN REMOVED
202	280	FT.	PIPE REMOVED
202	136	FT.	CURB REMOVED
202	202	SQ. YD.	DRIVEWAY PAVEMENT REMOVED
202	1	LUMP	MISC. BRICK REMOVED FOR STORAGE

*CONTINGENCIES

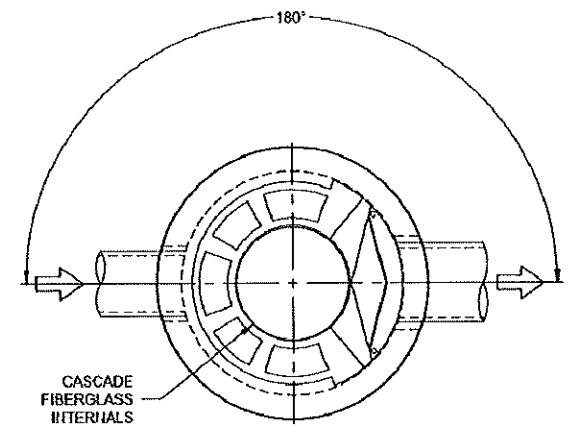
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ALTERNATE BID



PLAN VIEW
(INTERNALS NOT SHOWN)



SECTION FOR PIPE ORIENTATION
(TOP SLAB NOT SHOWN)

MATERIAL LIST (PROVIDED BY CONTECH)

COUNT	DESCRIPTION	INSTALLED BY
1	CS-4 FIBERGLASS CYLINDER INSERT, STD.	CONTECH
4	CS-4 ALUMINIUM INSTALLATION BRACKET	CONTECH
1	24" INLET TRAY	CONTRACTOR
1	SEALANT FOR JOINTS	CONTRACTOR
1	24" x 24" FRAME & GRATE, E.J#45624050A01, OR EQUIV.	CONTRACTOR

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH REPRESENTATIVE. www.ContechES.com
- CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- STRUCTURE SHALL MEET AASHTO HS-20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
- CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MAN-HOLE STRUCTURE.
- CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE JOINT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

STRUCTURE WEIGHT
 APPROXIMATE HEAVIEST PICK = 5500 LBS.
 OF 3 PIECES

MAXIMUM FOOTPRINT = 4'-10"Ø

CONTECH
 CONTRACT
 DRAWING

NCI
 LAYOUT 1A

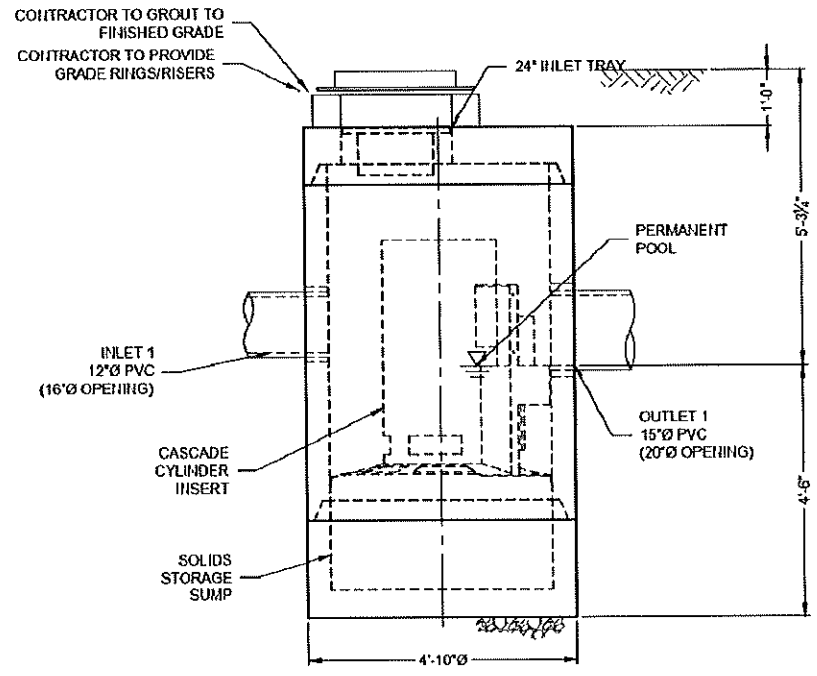
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MARK	DATE	REVISION DESCRIPTION	BY

CS-4 - 683855-10
 HAWTHORNE LANE - ROAD
 RECONSTRUCTION
 ROSSFORD, OH
 for SYSTEM: WQU

CONTECH
 ENGINEERED SOLUTIONS LLC
 www.ContechES.com
 8023 Center Road, Suite 400, West Chester, OH 45386
 602.333.1122 314.353.5500 513.430.7824 FAX
CASCADE separator

DATE	07/16/21
DESIGNED	MCB
DRAWN	MCB
CHECKED	MCB
APPROVED	MCB
PROJECT No.	683855
SEQUENCE No.	10
SHEET	1 OF 1



ELEVATION VIEW

RIM ELEV. 609.30+/-
 TOP OF SYSTEM
 ELEV. 608.30'
 INLET 1 INVERT
 ELEV. 604.28'
 OUTLET 1 INVERT
 ELEV. 604.03'
 OUTSIDE BOTTOM
 ELEV. 599.53'

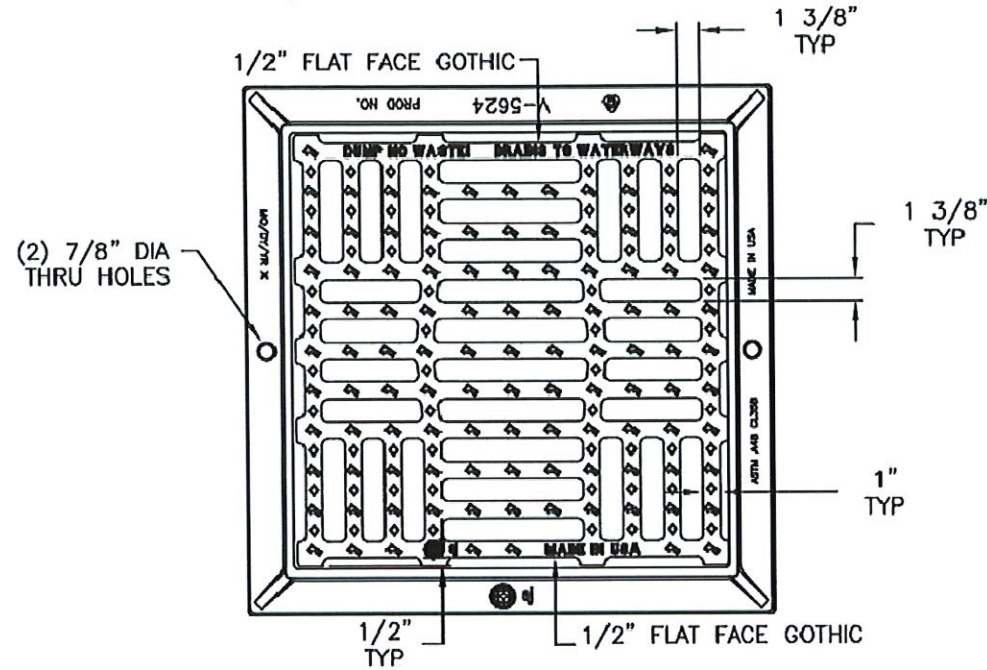
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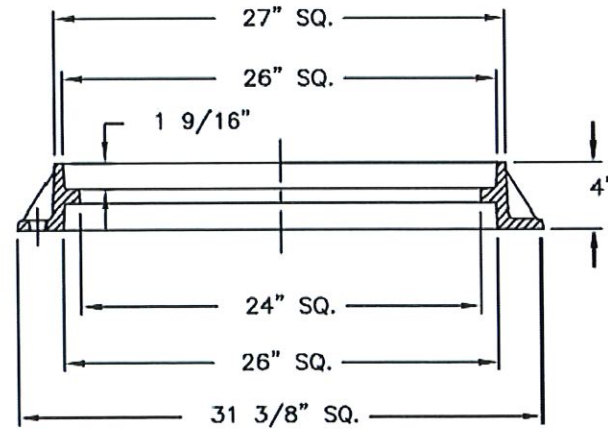
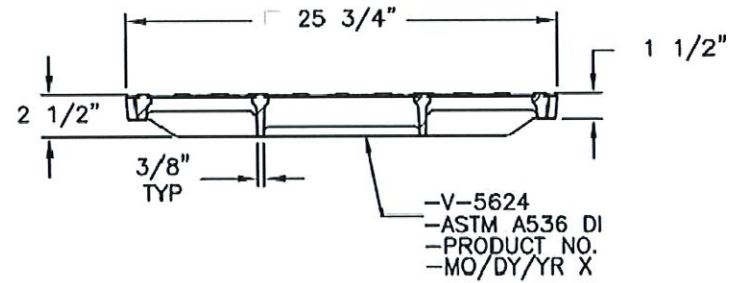
V5624 Assembly



FELLER, FINCH & ASSOCIATES, INC.	
DESIGNER	JKA
DATE	1/27/21
DESIGNED BY	RSP
DRAWN BY	RSP
DATE	04-01-21
CHECKED BY	DRK
DRAWING NO.	10-09348P00A1



PLAN VIEW



SECTION VIEW

Product Number

45624050A01

Design Features

- Materials
 - Frame
 - Gray Iron (CL35B)
 - Grate
 - Ductile Iron (70-50-05)
- 88 lbs**

- Design Load
 - Heavy Duty
- Open Area
 - 318 SQ.IN.
- Coating
 - Undipped
- √ Designates Machined Surface

Certification

- ASTM A536
- ASTM A48
- Country of Origin: USA

Major Components

45624010
45624050

Drawing Revision

09/01/2017 Designer: MAH
9/5/2017 Revised By: MAH

Disclaimer

Weights (lbs./kg) dimensions (Inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

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Contact

800 626 4653
ejco.com

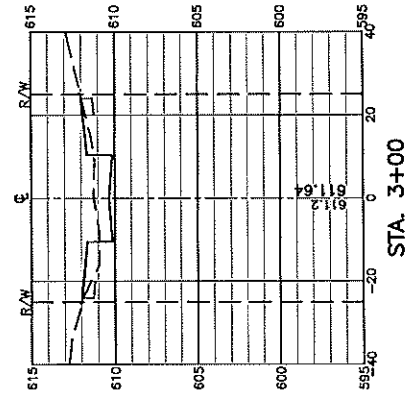
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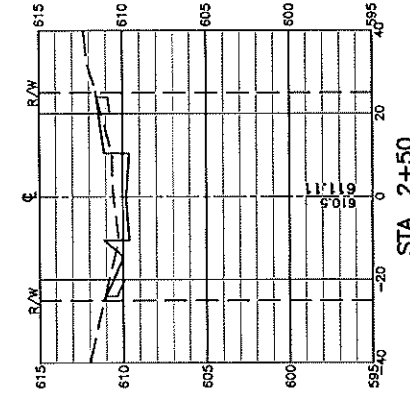
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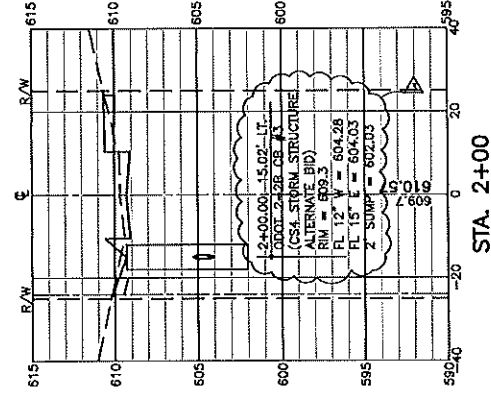
FELLER, FINCH & ASSOCIATES, INC.	
DESIGNER	JKA
DRAWN BY	RSD
DATE	04-01-20
CHECKED BY	DRK
DRAWING NO.	10-00348-0001



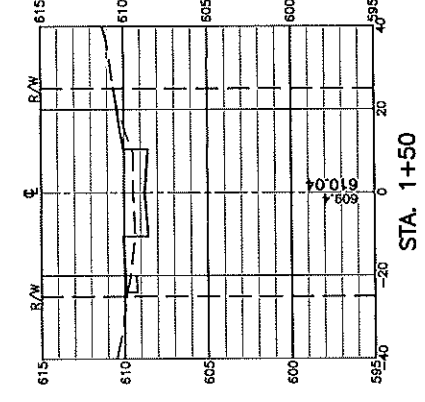
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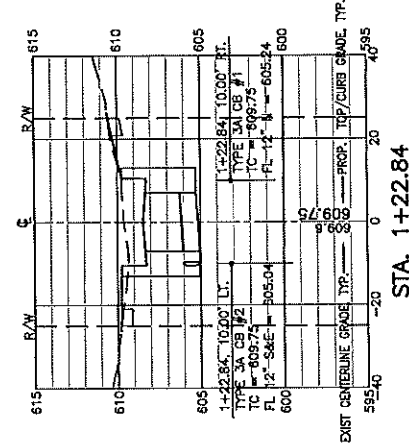
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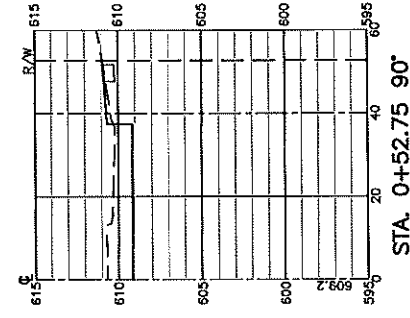
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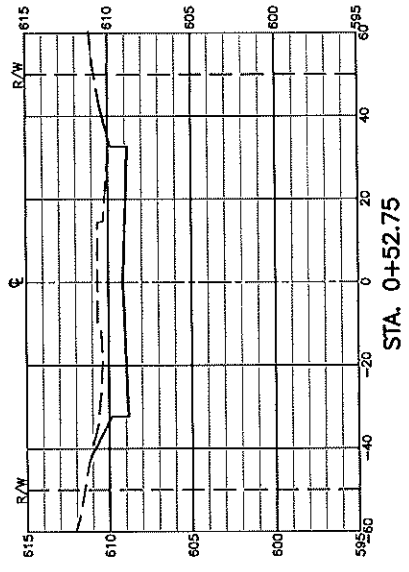
STA. 1+50



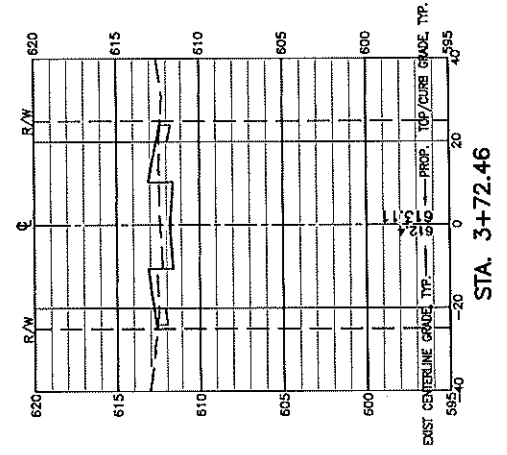
STA. 1+22.84



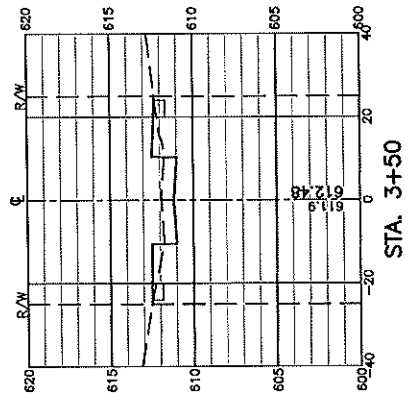
STA. 0+52.75 90'



STA. 0+52.75



STA. 3+72.46



STA. 3+50