

ERIE COUNTY WATER AUTHORITY
 AUTHORIZATION FORM
 For Approval/Execution of Documents
 (check which apply)

Contract: WSA-013 **Project No.:** 201800081
Project Description: Water System Improvements.
Large Valve Replacements – Towns of Alden, Amherst, Cheektowaga, West Seneca, Hamburg,
and City of Lackawanna.

Item Description:

Agreement Professional Service Contract Amendment Change Order
 BCD NYSDOT Agreement Contract Documents Addendum
 Recommendation for Award of Contract Recommendation to Reject Bids
 Request for Proposals
 Other _____

Action Requested:

Board Authorization to Execute Legal Approval
 Board Authorization to Award Execution by the Chairman
 Board Authorization to Advertise for Bids Execution by the Secretary to the Authority
 Board Authorization to Solicit Request for Proposals
 Other _____

Approvals Needed:

APPROVED AS TO CONTENT:

Chief Operating Officer Russell J. Stolt Date: 11-12-19
 Executive Engineer Jonah F. Donahue Date: 11-12-19
 Senior Distribution Engineer _____ Date: _____
 Director of Administration Loranya Lester Date: 11/12/19
 Chief Financial Officer Ruben A. Perdue Date: 11/13/19

APPROVED AS TO FORM:

Legal / RISK MGMT Margaret A. Murphy Date: 11/13/19

APPROVED FOR BOARD RESOLUTION:

Secretary to the Authority [Signature] Date: 11/13/19

Remarks: Change Order #1

Resolution Date: _____ **Item No:** _____



ERIE COUNTY WATER AUTHORITY

INTEROFFICE MEMORANDUM

November 12, 2019

To: Terrence D. McCracken, Secretary to the Authority

From: Leonard F. Kowalski, Executive Engineer

A handwritten signature in blue ink, appearing to read "LFK", is written over the name Leonard F. Kowalski.

Subject: Contract WSA-013

Water System Improvements

Large Valve Replacements - Towns of Alden, Amherst, Cheektowaga,
West Seneca, Hamburg, and City of Lackawanna

ECWA Project No. 201800081

Attached is Change Order No. 1 for the above referenced contract for E&R General Construction, Inc., (E&R) to provide all labor, materials, equipment, and incidentals to perform emergency repair work at the Main Street and Route 290 crossing of the existing 30-inch PCCP transmission main and related repairs adjacent to Operation No. 1 at Site 1B – Main Street, in the Town of Amherst. The work was authorized under a Work Change Directive that was approved by the Board on July 18, 2019. Prior to the Work Change Directive being approved an Emergency Declaration was issued by the Authority on June 12, 2019. The Work Change Directive and Emergency Declaration are included as an attachment to Change Order No. 1.

The work was performed under a time and material basis per Article 12 Section 00700, General Conditions of the contract. Per the contract, a fifteen percent (15%) markup for overhead and profit is allowed on labor, materials and equipment and a five percent (5%) markup is allowed on subcontractors. Daily crew sheets were provided that document the equipment, manpower and number of hours worked each day. Invoices for all subcontractors and material purchases were also provided. All the documentation provided by the contractor was reviewed by Wm. Schutt Associates, P.C. and by the Authority. A summary of the costs is included as an attachment to Change Order No. 1.

The total cost of the repair work performed by E&R is \$655,267.11.

The following documents are attached:

- Blue Authorization Form.
- Change Order No. 1 Form.

LFK:jmf

Attachments

cc: R.Stoll

L.Lester

CONT-WSA-013-1801-186-B

**CHANGE ORDER NO. 1
ECWA CONTRACT WSA - 013
Water System Improvements
Large Valve Replacements**

**Project No.: 201800081
Contract No. 19-04-03**

Date: November 12, 2019

Contractor: E&R General Construction, Inc.
38 St. David's Drive
West Seneca, New York 14224

Engineer: Wm. Schutt & Associates
37 Central Avenue
Lancaster, New York 14086

DESCRIPTION OF CHANGE:

1. Provide all labor, materials, equipment and incidentals to perform Emergency Repair Work at the Main Street and Route 290 crossing of the existing 30-inch PCCP Water Transmission Main and related repairs adjacent to Operation No 1 at Site 1B – Main Street, Town of Amherst, New York as part of Contract WSA-013. The work also included testing, disinfection and placing approximately 7,200lf of 30-inch Water Main into service.

REASON FOR CHANGE:

1. The Authority had experienced a number of water transmission main pipe failures at the time of the rupture of the 30-inch Transmission Main which occurred beneath Main Street. This transmission pipeline is a main feed from Ball Pump Station to Wehrle Tank and is critical to the operation of the distribution system in providing sufficient quantities of water to southern Amherst and Cheektowaga. As a result, the Authority issued an Emergency Declaration. It was deemed advantageous for the Authority to have E&R General Construction perform the emergency repairs and related work since they are experienced and qualified in performing this type of work; and, since their Contract WSA-013 project work was located adjacent to the ruptured pipeline and could not proceed until the main was repaired.

COMPENSATION:

Item	Description	Cost
1.	lump sum extra	\$655,267.11

ATTACHMENTS:

- WORK CHANGE DIRECTIVE No 1 dated 7/18/2019
- E&R's Extra Work Summary of Costs

CHANGE IN CONTRACT PRICE:

Original Contract Price

\$1,484,000.00

Net changes from previous Change Orders

\$0.00

Contract Price prior to this Change Order

\$1,484,000.00

Net Increase/Decrease of this Change Order

\$655,267.11

**Contract Price with all approved
Change Orders**

\$2,139,267.11

CHANGE IN CONTRACT TIMES:

Original Contract Times

Substantial Completion: November 30, 2019

Final Completion: December 15, 2019

Net Changes from previous Change Orders

Substantial Completion: 0 Days

Final Completion: 0 Days

Contract Times prior to this Change Order

Substantial Completion: November 30, 2019

Final Completion: December 15, 2019

Net Increase/Decrease of this Change Order

Substantial Completion: + 0 Days

Final Completion: + 0 Days

**Contract Times with all approved
Change Orders:**

Substantial Completion: November 30, 2019

Final Completion: December 15, 2019

APPROVALS:

OWNER:

Erie County Water Authority

Date:

CONTRACTOR:

E&R General Construction, Inc.

Date:

ENGINEER:



Wm. Schutt & Associates

Date:

11/12/19

Civil Engineering
Environmental Engineering
Municipal Engineering
Land Surveying



Project Management
Construction Support Services
Landscape Architecture
SWPPP Services

July 25, 2019

Office of the Secretary
Terrence D. McCracken
Secretary to the Authority
Erie County Water Authority
295 Main Street, Room 350
Buffalo, New York 14203

Re: Erie County Water Authority
Contract WSA-13
Large Valve Replacements
City of Lackawanna and Towns of Alden, Amherst,
Cheektowaga, Hamburg and West Seneca
Project No. 201800081
WORK CHANGE DIRECTIVE No 1

Dear Terry:

Enclosed please find one duly executed original Work Change Directive No. 1 for the above referenced project for your files.

Please do not hesitate to call if you have any questions.

Very truly yours,

A handwritten signature in dark ink, appearing to read "James K. Ehrin".

James K. Ehrin
Project Engineer

CC: L. Kowalski, P.E., ECWA Director of Engineering
J. Sylvester, ECWA Distribution Engineer
W. Schutt, P.E.
File

19-07-25-18024-Work Change Directive to ECWA - L - jke

WORK CHANGE DIRECTIVE
No. 1

Date of Issuance: July 10, 2019 Effective Date: July 18, 2019
 Owner: Erie County Water Authority Owner's Contract No.: 19-04-03
 Contractor: E&R General Construction Inc Contractor's Project No.:
 Engineer: Wm. Schutt Associates Engineer's Project No.: 18024
 Project: Contract WSA-013 Contract Name: Large Valve Replacements

Contractor is directed to proceed promptly with the following change(s):

Description:

See Attachment No. 1

Attachments: *[List documents supporting change]*

Erie County Water Authority, Declaration of State of Emergency, dated June 12, 2019

Purpose for Work Change Directive:

Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to: *[check one or both of the following]*

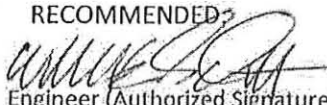
- Non-agreement on pricing of proposed change.
 Necessity to proceed for schedule or other Project reasons.

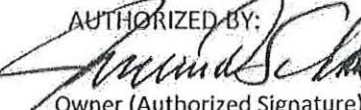
Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

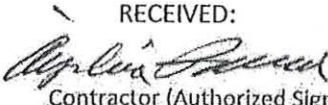
Contract Price \$ ** to be determined ** [increase] [decrease].
 Contract Time ** to be determined ** days [increase] [decrease].

Basis of estimated change in Contract Price:

- Lump Sum Unit Price
 Cost of the Work Other

RECOMMENDED
 By: 
 Engineer (Authorized Signature)

AUTHORIZED BY:
 By: 
 Owner (Authorized Signature)

RECEIVED:
 By: 
 Contractor (Authorized Signature)

Title: William Schutt, President

Title: Chair

Title: Angie Passucci, Vice President

Date: July 9, 2019

Date: 7/18/19

Date: 7-23-19

ATTACHMENT No. 1

Work Change Directive

**Contract WSA-013
Large Valve Replacement Project
Project No. 201800081
July 10, 2019**

1. The Work Change Directive is necessary due to the close proximity of the rupture in the 30-inch transmission main immediately adjacent to the valve replacement site that was part of the original scope of the work associated with Contract WSA-013. The rupture of the existing 30-inch transmission main is preventing E&R General Construction from proceeding with their contract work until the transmission main is repaired. It is advantageous for the Authority to have E&R General Construction perform the emergency repair since they are experienced and qualified to do the work; and, since it connects directly into their original scope of work.
2. Provide all labor, materials, equipment and incidentals to perform Emergency Repair Work at the Main Street and Route 290 crossing of the existing 30-inch pccp water transmission main located within an existing 54-inch tunnel liner plate casing adjacent to Operation No 1 at Site 1B – Main Street, Town of Amherst, New York as part of the Contract WSA-013 work.
3. The Work Change Directive consists of restoring operation of the existing 30-inch water transmission main back into service and includes, but is not limited to:
 - a. Obtain and comply with New York State Department of Transportation highway permit requirements, and all other agencies of jurisdiction;
 - b. Provide protection to other utilities or facilities that may be encountered including following National Grid regulations for grounding of work equipment, having a qualified electrical spotter on site during all work, etc; and protecting from damage other utilities such as Enbridge pipelines, cable companies, and other utilities;
 - c. Perform all excavation, rock excavation, dewatering and installation of temporary and/or permanent shoring as necessary or as ordered by agencies of jurisdiction;
 - d. Remove and dispose of all the existing 30-inch pccp water transmission main from within and adjacent to the existing 54-inch tunnel liner plate casing that crosses Main Street including but not limited to removal of grout, concrete, pea gravel or stone in and around the casing; any and all pipe rails, braces or piping supports; and bulkheads, concrete blocking or anchor collars; anodes, or incidentals to a point where the connections to the existing 30-inch water transmission main will be made on the north and south sides of Main Street;
 - e. Inspect the existing 54-inch tunnel liner plate casing for any damage or deterioration and repair as necessary to a condition that will accept the new carrier watermain;
 - f. Install new 30-inch DIP, (double poly wrapped), fully restrained watermain, butterfly valves, fittings, blow offs, flushing outlets, adapters, spool pieces, nipples, and other materials as necessary to make connections to the existing 30-inch pccp transmission main at locations as follows:
 - i. At a point of connection to the existing 30-inch pccp transmission main on the north side

- of Main Street (north of the rupture of the existing watermain in the casing) at a location where an existing 30-inch butterfly valve shall be replaced with a new 30-inch butterfly valve and with installation of a new vertical 30-inch x 8-inch flushing outlet to grade with redundant 8-inch valves to act as a blow off and flushing outlet;
- ii. Through the existing 54-inch tunnel liner plate casing with rails, skids and bracing as necessary including adding vertical 45 degree bends (on the south side of the casing pipe) to reach grade;
 - iii. To a point where installation of the originally specified Operation No 1, Site 1B work (south side of the rupture in the watermain in the casing) can be performed;
 - iv. To a point of connection to the existing 30-inch pccp water transmission main at the south side of the Site 1B work at the location of a new 30-inch butterfly valve.
- g. Provide all joint restraints, concrete anchor collars and concrete thrust blocking as necessary to properly stabilize, shore and brace the new water transmission main, fittings and appurtenances;
 - h. Perform a hydrostatic pressure test of the installed piping following ECWA and ECDOH procedures from the new North 30-inch butterfly valve to the new South 30-inch butterfly valve.
 - i. After approval is given on the pressure test results, fill the annular space between the new 30-inch carrier pipe and the existing 54-inch tunnel liner plates with grout; install bulkhead at both ends of the casing and install sacrificial anodes on both sides of the casing;
 - j. Provide labor, equipment and materials to assist the Authority in disinfecting and providing bacteriological sampling of the length of existing portion of water transmission main and associated piping including the new work at Main Street from a point where the recently installed new 30-inch Butterfly on the north side of Main Street was installed, southerly to the North valve of the previously installed cut-in 30-inch x 16-inch tee at the base of Wehrle Tank;
 - k. Once acceptable laboratory analysis has been approved by the appropriate parties, provide assistance to the Authority to place the existing and new water transmission main into service.
 - l. Perform final restoration of all disturbed areas.

Central Purchasing Declaration of State of Emergency

Work Order No.: CityWorks # 39956

OWIP No.: _____

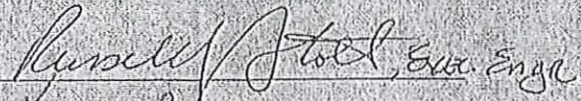
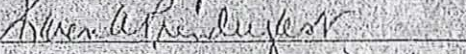
Project No.: Rupture of 30-inch Transmission Main - Amherst

Date of Emergency: 6/12/19

Detailed Description of Emergency Condition:

On 6/11/19 a 30" concrete transmission main ruptured approximately 700 ft north of Wehrle Tank. That repair was performed from 6/11/19 through 6/12/19. On the evening of 6/12/19 the Authority was in the process of filling the transmission main to return it to service. During the filling of the main another rupture was discovered under Main St in Amherst. The approximate location is Main Street at 290 West Exit 7B (Cross Streets: 290 West Exit 7B & Royal Pkwy, eastbound lane). A remote-controlled robot outfitted with a camera was used to verify the leak. A 3ft section on the bottom of the PCCP main ruptured. The main is approximately 15-20ft deep below Main St inside of a casing pipe. The transmission main is a main feed from Ball Pump Station to Wehrle Tank and is critical to the operation of the distribution system to provide water to southern Amherst and Cheektowaga. Since the main has been out of service, the Authority has been using its emergency interconnection with the City of Buffalo at Pinehill Pump Station to supplant the flow previously provided by the 30" transmission main. Since the Authority will be frequently taking water from buffalo, there needs to be some operational changes at Pinehill Pump Station to adjust the pH and chlorine levels. Those modifications are outlined in the attached memo that is dated 7/2/19 and titled Pine Hill Pump Station Water Quality Upgrades. The material and labor required to make the repair on Main St and the equipment required to make modifications at Pinehill Pump Station will need to be procured in a timely manner to ensure an adequate water supply during the summer months. A risk may exist to the public's health and safety if the damaged portion of transmission main is not repaired/replaced in a timely manner.

Authorized Signature: Pursuant to the Purchasing Guidelines (Page 17) authorization granted to one or more of the following two (2) individuals: Any Commissioner, the Executive Director, Executive Engineer, and/or the Director of Administration.



ACTING EXECUTIVE DIRECTOR

To: Purchasing System File

E & R GENERAL CONSTRUCTION INC.

38 St David Drive
West Seneca, New York 14224

(716) 675-5277 phone
(716) 675-5277 fax

INVOICE

CHANGE ORDER NO 1 - SUMMARY OF COSTS

ECWA Contract WSA-013 - Large Valve Replacement Contract

**Subject: Main Street at Royal Parkway
Leak on 30-inch Water Transmission Main**

Date	Description	Costs	Summary
Appendix 1 - Assist ECWA 30-inch Leak Investigation			
6/13/2019	Initial assistance to ECWA.	\$8,828.79	
6/14/2019	Leak on 30-inch under Main St. Remove Cap & Video Tape Main.	<u>\$5,816.41</u>	
		\$14,645.20	\$14,645.20
Appendix 2 - Removal of Existing 30-inch Water Transmission Main			
7/8-15/19	Cutting & Removing existing 30-inch Water Transmission Main.	<u>\$108,717.94</u>	
		\$108,717.94	\$108,717.94
Appendix 3 - Prep of Main St. Site and Cost for new 30-inch Pipe & Appurtenances			
7/28/2019	Main St. Site Excavation, Unload/Stage Pipe and Materials.	\$134,016.76	
7/31/2019	Flushing out existing Casing Pipe, Removing Existing Main.	<u>\$10,752.00</u>	
		\$144,768.76	\$144,768.76
Appendix 4 - Installation of New 44-inch Casing Pipe in Existing Tunnel Liner Plate			
8/1/2019	Fabricating brackets, pulleys, modifying TLP's, etc.	\$11,675.13	
8/2/2019	Unloading and Staging Casing Pipe, Welding casing Head.	\$59,957.14	
8/5/2019	Installing Casing Pipe and Removing Existing Watermain.	\$16,145.30	
8/6/2019	Completed Casing Pipe Install. Cutting Off Casing Head.	<u>\$14,708.27</u>	
		\$102,485.84	\$102,485.84
Appendix 5 - Installation of New 30-inch D.I.P and Appurtenances (30" BFV, 8" B.O., etc.)			
8/7/2019	Installation of New 30" Carrier Pipe into Casing Pipe.	\$12,628.49	
8/8/2019	Installation of 30-inch BFV, 8-inch Blow Off, & other Appurtenances.	\$12,732.82	
8/9/2019	Installation of 30-inch BFV, 8-inch Blow Off, & other Appurtenances.	\$17,085.73	
8/12/2019	Installing 30-inch 45 degree fittings and main. Busting rock.	\$20,065.05	
8/13/2019	Installing stone and backfill. Installing Concrete for bends.	\$11,411.64	
8/14/2019	Installing stone and backfill.	\$8,492.35	
8/16/2019	Pulling out Plates and Shields. Returning to Owner. Hauling Rock.	<u>\$16,362.58</u>	
		\$98,778.67	\$98,778.67
Appendix 6 - Fill, Flush, Test, Chlorinate, Sample 7,200 lf of Existing/New Watermain			
8/15/2019	Installing Sample Points; Filling & Pressure Testing New Watermain.	\$14,299.37	
8/18/2019	Flush, Test and Chlorinate.	\$3,379.99	
8/22-25/19	Fill Flush, Test and Chlorinate Watermain to Wehrle Tank. Took Samples.	\$18,921.86	
8/27/2019	Pulled Corps off Sample Points. Diapered and Backfilled Excavations.	<u>\$10,073.44</u>	
		\$46,674.66	\$46,674.66
Appendix 7 - Restoration			
8/20/2019	Restoration, Concrete, Topsoil and Fence.	\$11,346.45	
8/21/2019	Restoration, Concrete, Topsoil, Fence and Clean Up.	\$4,228.85	
8/26/2019	Restoration, Concrete, Topsoil and Clean Up.	\$11,721.68	
8/28/2019	Lawn Restoration, Topsoil and Place Hydroseed.	<u>\$12,013.49</u>	
		\$39,310.47	\$39,310.47
Appendix 8 - Main Street Sewer Repair			
9/12/2019	Mobilize Equipment and Materials to Sewer Repair Site.	\$13,600.94	
9/13/2019	Excavated Sanitary Sewer and Made Repairs. Install Concrete Sub Base.	\$29,657.76	
9/17/2019	Mobilize Equipment/Materials to Sewer Repair Site Asphalt Restoration.	\$13,414.48	
9/18/2019	Cold Milling and Installing Binder and Top per NYSDOT Regs.	<u>\$38,993.73</u>	
		\$95,666.91	\$95,666.91
Appendix 9 - De Mobilization			
9/19/2019	Remove all Equipment and Materials from Sanitary Site. Clean Up.	\$4,218.66	\$4,218.66
		TOTAL CHANGE ORDER No. 1	\$655,267.11