

ALLEGHENY COUNTY SANITARY AUTHORITY

March 19, 2021

CONTRACT NO. 1729 G, E, H, P

EAST HEADWORKS

ADDENDUM NO. 9

All bidders bidding Contract No. 1729 G, E, H, P shall read and take note of this Addendum No. 9. The Contract Documents for **Contract No. 1729 G, E, H, P – East Headworks** are hereby revised and/or clarified as stated below.

Acknowledgement of Contract No. 1729 G, E, H, P; Addendum No. 9

The Acknowledgement attached to Addendum No. 9 is to be signed and returned immediately via email to Kathleen Uniatowski at contract.clerks@alcosan.org and acknowledged with the Bidder's Proposal.

A handwritten signature in blue ink that reads "Kimberly Kennedy". The signature is written in a cursive style and is positioned above a horizontal line.

Kimberly Kennedy, P.E.
Director – Engineering and Construction

**ACKNOWLEDGEMENT OF
CONTRACT NO. 1729 G, E, H, P – EAST HEADWORKS**

ADDENDUM NUMBER 9

FIRM NAME: _____

SIGNATURE: _____

TITLE: _____

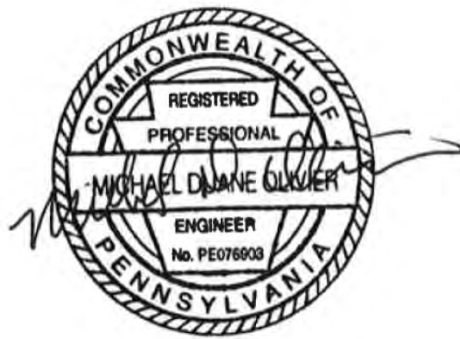
DATE: _____

March 19, 2021

CONTRACT NO. 1729 G, E, H, P

EAST HEADWORKS

ADDENDUM NO. 9



MARCH 19, 2021

CONTRACT NO. 1729 G, E, H, P

EAST HEADWORKS

ADDENDUM NO. 9

A. Contract Documents – Volume 1

1. Article 1 – G

a) 8.2 – Unit Price Work

1. Line item 08 – Excavation of “hard slag” removal, **DELETE** 150 CY and **REPLACE** with 1,500 CY.
2. **ADD** line item 18 – Allowance for other contaminated waste in the amount of \$250,000.
3. **ADD** line item 19 – Allowance for non-compliant groundwater disposal in the amount of \$250,000.
4. **REPLACE** “(Sum of Extended Total Amount for 01 thru 17) with (Sum of Extended Total Amount for 01 thru **19**).

2. Article 4 – G

a) Page 4-3 G – Unit Price Table

1. Line item 08 – Excavation of “hard slag” removal, **DELETE** 150 CY and **REPLACE** with 1,500 CY.
2. **ADD** line item 18 – Allowance for other contaminated waste in the amount of \$250,000.
3. **ADD** line item 19 – Allowance for non-compliant groundwater disposal in the amount of \$250,000.

4. **REPLACE** “(Sum of Extended Total Amount for 01 thru 17) with (Sum of Extended Total Amount for 01 thru **19**).

B. Contract Specifications – Volume 2

1. Summary of Work (Section 01 11 00)
 - a) Paragraph 1.2.A.4, **DELETE** paragraph i in its entirety.
2. Measurement and Payment (Section 01 22 00)
 - a) **ADD** the following items under 3.1 General Construction Contract – Pay Items:
 - “P. PAY ITEM 18 – ALLOWANCE FOR OTHER CONTAMINATED WASTE
 1. Allowance for potential force account work, as identified in 31 23 00, sections 1.5 C.1.b, 3.4 B.3, 3.5 C and 3.6 A. Measurement and payment of this pay item will be as described in Section 1.4 of this Specification section.
 - Q. PAY ITEM 19 – ALLOWANCE FOR NON-COMPLIANT GROUNDWATER DISPOSAL
 1. Allowance for potential force account work, as identified in Section 31 21 00 1.6 L and 31 23 00 1.5D. Measurement and payment of this pay item will be as described in Section 1.4 of this Specification section.”
3. Construction Facilities, Temporary Controls and Utilities (Section 01 50 00)
 - a) Paragraph 1.10.B. **REVISE** to read, “The General Contractor shall provide temporary heating, ventilation, and cooling as require to perform Work.
4. Structural Steel Framing (Section 05 12 00)
 - a) Paragraph 2.5.A, **ADD** paragraph 2 as follows,
 - “2. Class B Surfaces: Provide zinc-rich primers that meets the requirements for Class B surfaces per RCSC “Specification for Structural Joints Using High-Strength Bolts” on blast-cleaned steel for high-strength bolted, slip-critical connections.”
 - b) Paragraph 2.10.A, **DELETE** “3. Surfaces of high-strength bolted, slip-critical connections.” **RE-NUMBER** paragraphs 4, 5, and 6 to 3, 4, and 5, respectively.

- c) Paragraph 3.4.A.1, **DELETE** "Joint Type: Pretensioned" and **REPLACE** with "Joint Type: Pretensioned or Slip-Critical where indicated."

C. Contract Specifications – Volume 3

No Items

D. Contract Drawings

1. Drawing G-08

- a) **ADD** the following under Process Flow Stream Nomenclature:
“SGP Scum & Grease Process”

2. Drawing 500-A-01

- a) Sheet Keynotes, **REVISE** Keynote 9 to read, “PROVIDE TERRAZZO FINISH OVER NEW CONCRETE TO MATCH EXISTING ADJACENT TERRAZZO FLOORING.”

3. Drawing S-02

- a) **ADD** the following note under Structural Steel Connections,

19. STRUCTURAL STEEL HIGH-STRENGTH BOLTED CONNECTIONS FOR FACILITY 420 OVERHEAD BRIDGES AND SUPPORTING TOWERS MUST BE SLIP-CRITICAL UNLESS OTHERWISE NOTED. FAYING SURFACES OF SLIP-CRITICAL JOINTS SUBJECT TO SLIP MUST BE CLASS B (SURFACES WITH CLASS B COATING ON BLAST-CLEANED STEEL) PER RCSC SPECIFICATION.

4. Drawing 515-MDM-10

- a) Sheet Keynotes-Demolition, **REVISE** Keynote 2 to read, “DEMOLISH ALL VENT LINES, AND PCW LINES.”

5. Drawing 530-H-15

- a) Sheet Keynotes, **REVISE** Keynote 4 to read, “12” HEATING WATER BOILER COMBUSTION AIR INTAKE. SEE BOILER ROOM PART PLAN FOR CONTINUATION.”

- b) Sheet Keynotes, **REVISE** Keynote 5 to read, “12” HEATING WATER BOILER CATEGORY IV VENT THRU ROOF. SEE BOILER ROOM PART PLAN FOR CONTINUATION.”
6. Drawing 530-H-40
- a) Sheet Keynotes, **REVISE** Keynote 5 to read, “12” CPVC COMBUSTION AIR UP THROUGH ROOF.”
 - b) Sheet Keynotes, **REVISE** Keynote 6 to read, “12” CATEGORY IV VENT UP THROUGH ROOF.”
7. Drawing 723-MDM-11
- a) **REVISE** Detail 2 to read, “EAST PIPE GALLERY DEMOLITION PLAN”

E. Questions

187. **QUESTION:** On drawings S-01 General Structural Notes under foundations number 8 provide a 12" layer of PENN DOT 2A coarse aggregate at the bottom of excavations for structures. Is this to be provided under all concrete foundations? Should we also provide the 12" of 2A under areas that are called out to have a mudmat?

RESPONSE: Yes. Provide PENNDOT 2A coarse aggregate at the bottom of excavations for structures – this is to provide a working surface. This layer of coarse aggregate should be provided under the concrete mudmat (concrete mudmat is required for blindside waterproofing installation).

188. **QUESTION:** Would you be willing to accept a grouted displacement or helical pile alternate to the specified auger cast piles?

RESPONSE: Contractors to use specified auger cast piles.

189. **QUESTION:** I'm not sure how to tell if a valve is located in a "NEC Classified" or a "NEC Non-Classified" area so we can quote all stainless steel (with other materials?), or stainless steel chain with ductile iron wheel/guides construction for the valves that will require this type of operator. There are (43) valves on my takeoff that will require chainwheels. Please clarify which areas NEC classified or non-classified? And, what other materials are required to make the operator non-sparking?

RESPONSE: Area classifications are shown on Drawing Nos. 14-28 of the plans, see excerpt below from the Drawing G-02. Suppliers should request this information as needed for bidding purposes.

14	420-G-10	HEADWORKS ODOR CONTROL FACILITY AREA CLASSIFICATION PLAN
15	500-G-10	MAIN PUMPING STATION AREA CLASSIFICATION PLAN - LOWER LEVEL
16	500-G-11	MAIN PUMPING STATION AREA CLASSIFICATION PLAN - UPPER+C277 LEVEL
17	510-G-10	RACK AND CHLORINATION BUILDING AREA CLASSIFICATION PLAN
18	513-G-10	SCREENING GARAGE AREA CLASSIFICATION PLAN
19	514-G-10	GRIT CHAMBERS AREA CLASSIFICATION PLAN
20	515-G-10	CENTER COMBINED PRIMARY INF CONDUIT AREA CLASSIFICATION PLAN
21	516-G-10	WEST PRIMARY INFLUENT CONDUIT AREA CLASSIFICATION
22	520-G-10	PIPE GALLERY TUNNEL AREA CLASSIFICATION
23	530-G-10	EAST HEADWORKS AREA CLASSIFICATION PLANS
24	530-G-11	EAST HEADWORKS AREA CLASSIFICATION PLANS
25	534-G-10	GRIT TANKS AREA CLASSIFICATION PLANS
26	535-G-10	GRIT TANK COMMON EFFLUENT CHANNEL AREA CLASSIFICATION PLANS
27	536-G-10	EAST PRIMARY INFLUENT CONDUIT AREA CLASSIFICATION PLAN
28	725-G-10	CENTRAL PIPE GALLERY AREA CLASSIFICATION PLANS

190. **QUESTION:** A-57 is the Finish Plan for Plan Area C. Please provide the First Floor Finish Plan for Plan Area A and Plan Area B.

RESPONSE: Refer to the Finish Schedule on sheet 530-A-58 for the floor finishes in areas A and B. These areas have no patterns or special finishes, so floor finish plans are not required.

191. **QUESTION:** Under the HVAC summary of work on page 5 of specification section 01 11 00, it calls for the HVAC contractor to provide "Temporary heat as needed during construction." Normally, temporary heat is provided by the General Contractor or the contractor needing the heat. Since there is no construction schedule to use for us to determine when and how much heat will possibly be needed, and since the HVAC contractor most likely will not be on site for the full duration of the project, wouldn't it be better to leave temporary heat up to the GC?

RESPONSE: Temporary heat shall be provided by the General Contractor per changes via this addendum.

192. **QUESTION:** On drawing 530-H-40, keynotes 5 and 6 call for 10" combustion air and flue vent piping for the boilers. The Lochinvar FB4000 boilers specified have 12" connections. Please verify the size required.

RESPONSE: Drawing 530-H-40 keynotes 5 and 6 and Drawing 530-H-15 keynotes 4 and 5 have been revised via this addendum to indicate 12" combustion air and flue vent piping for the boilers. Verify sizing with final boiler selection drawing keynote 530-H-15 note 6.

193. **QUESTION:** Specification section 23 31 13 calls for some of the HVAC ductwork to be aluminum construction. Please verify that it is to be constructed to standard SMACNA specifications regarding joints and seams. We recall that some previous jobs bid to ALCOSAN required welded seams and joints for the aluminum ducts in process areas.

RESPONSE: As specified in section 23 31 13. Welded seams and joints are not required.

194. **QUESTION:** We could not find a detail for ductwork penetrations through interior floors, specifically the ductwork from the mechanical room down to the first floor office level. How will the penetrations be sealed, and will there be a curb? Can you please provide a detail?

RESPONSE: Refer to spec section 01 73 20 Openings and Penetrations in Construction, paragraph 3.3 and associated table "Schedule A." Install per Application listed for "Through floors in washdown areas."

195. **QUESTION:** Can you please define a new RFI deadline for the Alcosan East Headworks project?

RESPONSE: April 2, 2021.

196. **QUESTION:** Paragraph 2.5I.2.g. of the original Specification Section for the Chemical Scrubber Odor Control System (i.e. Specification Section 44 31 10) called for a "Strap-on ultrasonic flowmeter for the two added recirculation pumps." And further indicated "New flow meters are not required for the four pumps that are being replaced." Then, the aforementioned Paragraph g. and associated flowmeters were removed from the Chemical Scrubber Odor Control System Specification (i.e. Section 44 31 10) that was reissued with Addendum No. 5. However, the aforementioned flowmeters still appear to show up on Drawing Nos. 611 and 616 (i.e. Sheet Nos. 420-1-01 and 420-1-11, respectively). Are these flowmeters still required, and if so, who is responsible for providing them?

RESPONSE: The strap-on ultrasonic flowmeters are required and shall be as specified in Section 40 70 00 - Instrumentation and provided by the E contractor as clarified in Addendum No. 5.

197. **QUESTION:** The response to Question No. 18 under Addendum No. 3 indicates the odor control equipment shall be NFPA 820 Class 1 Division 2, which would appear to be in line with what is indicated on Drawing No. 14 (i.e. Sheet No. 420-G-10). However, Paragraphs 2.1B.1. and 2.1D.1. of the Odor Control Fans Specification (i.e. Section 44 31 60) lists the motor rating for the fans as TEXP, which is Class 1 Division 1. Please clarify.

RESPONSE: Motors shall be explosion proof as specified. This will satisfy the Class 1 Division 2 requirements of the area.

198. **QUESTION:** 500- A-01 note number 9 states that a high performance coating is to be on the new concrete floor of the main pumping station 500. The Custom guard detail 4/500-A-01 shows a terrazzo floor system over the concrete. Please clarify which floor system is to be used.

RESPONSE: Provide terrazzo floor finish to match existing adjacent floor finish.

199. **QUESTION:** Reference drawing 530-TT-02: This drawing calls for a NEMA 4x for all devices. Is this to be a NEMA 4X 4" square box with a cover suitable for IP67 jacks, or is it to be an enclosure? If it is to be an enclosure, what would be acceptable termination within the enclosure (box type, etc.)?

RESPONSE: The wireless outlet and duplex voice data outlets shall be installed in a NEMA 4X 4" square box with a cover suitable for IP67 jacks. The speaker outlets should be just an enclosure with a terminal block inside connected to the 2#14 wires from the IT Telecom/Distribution Room. The terminal block shall have sufficient terminations for connection to the NIC speakers.

200. **QUESTION:** Reference Drawing 530-TR-07: This drawing calls for some of the AP outlets to be installed in a NEMA 4X enclosure, and some others to have an IP67 cover. Are the AP's to be installed within an enclosure or will they be mounted exterior to the enclosure?

RESPONSE: The wireless/AP outlets are all mounted on the box cover/exterior of the enclosure except for those in the Grit Dewatering Area and its Truck Access and those in the Bar Rack Area and its Truck Access, which should be installed within an enclosure with an IP67 cover.

201. **QUESTION:** Drawing 515-MDM-10 Center Combined Primary Conduit Demolition Plans, Sheet Keynotes-Demolition Note 2 states to demolish all vent lines and CFW lines. What does the abbreviation "CFW" stand for? (It is not shown in Section 400500 Common Work Results for Process Interconnections or on Drawings G -07, G-08 or I-02).

RESPONSE: The abbreviation "CFW" should be "PCW" (Potable City Water).

202. **QUESTION:** Drawing 520-MDM-30 Pipe Gallery Tunnel Demolition Sections, Section - West last two "Remove" Notes states to remove 6"-SGP two times. What does the abbreviation "SGP" stand for? (It is not shown in Section 400500 Common Work Results for Process Interconnections or on Drawings G -07, G-08 or I-02) "SGP" also shows on Drawing 520-MDM-32 and 520-M-02.

RESPONSE: The abbreviation "SGP" is Scum & Grease Process. These lines are abandoned and shall be removed where noted.

203. **QUESTION:** Drawing 723-MDM-11 East Pipe Gallery Demolition Plan, Detail 2 reads "West Pipe Gallery Piping Plan". Should it not read "East Pipe Gallery Demolition Plan"? Please advise.

RESPONSE: Correct.

204. **QUESTION:** Just to confirm regarding the Slide Gate Schedule on Drawing MS-01: Note 1 states that slide gates shall be cast iron construction unless indicated in the Schedule above. There is no mention of stainless steel in the Schedule. Please verify that all slide gates are of cast iron construction.

RESPONSE: The slide gate schedule on Drawing MS-01 indicates GSD002-514 is stainless steel construction. All other slide gates are cast iron construction.

F. Clarifications

No Items

Attachments:

Articles:

Article 1-G, pages 3-5

Article 4-G, pages 2-4

Specifications: No Items

Drawings: No Items

*** END OF ADDENDUM NO. 9 ***

Article 1 – G Extracted Pages

8.2 Unit Price Work: Bidder further proposes to accept as full payment for the Unit Price Work proposed herein the amounts computed under the provisions of the Bidding Documents and based on the following unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved. Bidder agrees that the unit prices represent a true measure of the labor, materials, and services required to furnish and install the item, including all allowances for overhead and profit for each type and unit of Work called for in these Bidding Documents.

Item	Description	Quantity	Unit	Unit Price	Extended Total Amount
01	18 INCH DIAMETER AUGER-CAST PILES (TYPE C)	57,500	VLF		
02	18 INCH DIAMETER AUGER-CAST PILES (TYPE T)	1,900	VLF		
03	18 INCH DIAMETER AUGER-CAST PILES (TYPE L)	2,800	VLF		
04	AUGER-CAST PILE TESTING – COMPRESSION TEST PILES (TYPE C)	8	EA		
05	AUGER-CAST PILE TESTING – TENSION TEST PILES (TYPE L and TYPE T)	7	EA		
06	CONTINGENT UNCLASSIFIED EXCAVATION	1,500	CY		
07	REMOVAL OF UNKNOWN CONCRETE AND MASONRY STRUCTURES	200	CY		
08	EXCAVATION OF “HARD SLAG” REMOVAL	1,500	CY		
09	CONTINGENT PLACEMENT OF BACKFILL MATERIAL	1,500	CY		
10	CONTINGENT SHEETING LEFT IN-PLACE	5,500	SF		
11	PARTIAL-DEPTH CONCRETE SLAB REPAIRS – TOP SURFACE	40	SF		
12	PARTIAL-DEPTH CONCRETE SLAB REPAIRS – VERTICAL SURFACE	40	SF		
13	PARTIAL-DEPTH CONCRETE SLAB REPAIRS – OVERHEAD SURFACE	40	SF		
14	CRACK INJECTION REPAIR – HORIZONTAL AND VERTICAL SURFACE	40	LF		

Item	Description	Quantity	Unit	Unit Price	Extended Total Amount
15	CRACK INJECTION REPAIR – OVERHEAD SURFACE	40	LF		
16	EPOXY CRACK HEALER AND PENETRATING SEALER	50	LF		
17	ROUT AND SEAL CRACK	50	LF		
18	ALLOWANCE FOR OTHER CONTAMINATED WASTE	250,000	USD	N/A	\$250,000
19	ALLOWANCE FOR NON-COMPLIANT GROUNDWATER DISPOSAL	250,000	USD	N/A	\$250,000
TOTAL OF EXTENDED ITEM AMOUNTS FOR UNIT PRICE WORK LISTED ABOVE (Sum of Extended Total Amount for 01 thru 19):					\$
<p>See below for definition of Differing Site Condition Types.</p> <p>Concrete and Masonry Structural Removal: Contractors performing excavations may uncover unknown quantities of concrete and masonry structures below grade. Removal of the unknown concrete and masonry structures will be considered to be part of the Contract Requirements if they can be removed with the use of excavating equipment including but not limited to backhoes, bulldozers, clamshells, or scrapers. Should removal require demolition of the concrete and masonry structures by the use of jackhammers, or pavement breakers, then the Contractor shall be reimbursed by the Contract Unit Price per Cubic Yard for “REMOVAL OF UNKNOWN CONCRETE AND MASONRY STRUCTURES”. Removal of buried concrete and masonry structures specifically identified in the Contract Documents are to be included in the lump sum bid item 8.1 and will NOT be considered unit price work.</p> <p>Hard Slag Removal: Contractors performing excavation are notified that slag (sometimes called “blue slag” due to its color and hardness) was commonly used on the ALCOSAN plant site for roadway and structural foundation material at a typical thickness of 12-inches to 18-inches. Removal of slag will be considered to be part of the contract requirement if it can be removed with the use of excavation equipment including but not limited to backhoes, bulldozers, clamshells, or scrapers. Should removal require the use of jackhammers, or pavement breakers, the Contractor shall be reimbursed by the Contract Unit Price per cubic yard for “HARD SLAG REMOVAL”.</p>					

8.3 Base Bid Summary:

8.3.1 Lump Sum Work (8.1) \$ _____

8.3.2 Total of Extended Amount for Unit Price
Work (8.2) \$ _____

TOTAL BASE BID (Sum of lines 8.3.1 and 8.3.2):

_____ Dollars
(Words)

and _____ Cents. \$ _____
(Words) (Figures)

Article 4 – G Extracted Pages

Item #2: Unit Price Work:

Unit Price Work: Bidder further proposes to accept as full payment for the Unit Price Work proposed herein the amounts computed under the provisions of the Bidding Documents and based on the following unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved. Bidder agrees that the unit prices represent a true measure of the labor, materials, and services required to furnish and install the item, including all allowances for overhead and profit for each type and unit of Work called for in these Bidding Documents.

Item	Description	Quantity	Unit	Unit Price	Extended Total Amount
01	18 INCH DIAMETER AUGER-CAST PILES (TYPE C)	57,500	VLF		
02	18 INCH DIAMETER AUGER-CAST PILES (TYPE T)	1,900	VLF		
03	18 INCH DIAMETER AUGER-CAST PILES (TYPE L)	2,800	VLF		
04	AUGER-CAST PILE TESTING – COMPRESSION TEST PILES (TYPE C)	8	EA		
05	AUGER-CAST PILE TESTING – TENSION TEST PILES (TYPE L and TYPE T)	7	EA		
06	CONTINGENT UNCLASSIFIED EXCAVATION	1,500	CY		
07	REMOVAL OF UNKNOWN CONCRETE AND MASONRY STRUCTURES	200	CY		
08	EXCAVATION OF “HARD SLAG” REMOVAL	1,500	CY		

Item	Description	Quantity	Unit	Unit Price	Extended Total Amount
09	CONTINGENT PLACEMENT OF BACKFILL MATERIAL	1,500	CY		
10	CONTINGENT SHEETING LEFT IN-PLACE	5,500	SF		
11	PARTIAL-DEPTH CONCRETE SLAB REPAIRS – TOP SURFACE	40	SF		
12	PARTIAL-DEPTH CONCRETE SLAB REPAIRS – VERTICAL SURFACE	40	SF		
13	PARTIAL-DEPTH CONCRETE SLAB REPAIRS – OVERHEAD SURFACE	40	SF		
14	CRACK INJECTION REPAIR – HORIZONTAL AND VERTICAL SURFACE	40	LF		
15	CRACK INJECTION REPAIR – OVERHEAD SURFACE	40	LF		
16	EPOXY CRACK HEALER AND PENETRATING SEALER	50	LF		
17	ROUT AND SEAL CRACK	50	LF		
18	ALLOWANCE FOR OTHER CONTAMINATED WASTE	250,000	USD	N/A	\$250,000
19	ALLOWANCE FOR NON-COMPLIANT GROUNDWATER DISPOSAL	250,000	USD	N/A	\$250,000
TOTAL OF EXTENDED ITEM AMOUNTS FOR UNIT PRICE WORK LISTED ABOVE (Sum of Extended Total Amount for 01 thru 19):					\$

Base Bid Summary:

Item #1: Lump Sum Work \$ _____

Item #2: Total of Extended Amount for Unit Price \$ _____

TOTAL BASE BID (Sum of lines Item #1 & Item #2)

_____ Dollars
(Words)

and _____ Cents. \$ _____
(Words) (Figures)