



## ADDENDUM TO THE CONTRACT

for

### DOWNTOWN SEAWALK – BRIDGE TO GOLD CREEK, PHASE III

Contract No. E16-128

**ADDENDUM NO.:** FOUR

**CURRENT BID OPENING DATE:**

October 20, 2016  
2:00 p.m. Local Time

**PREVIOUS ADDENDA:** THREE

**ISSUED BY:** City and Borough of Juneau  
ENGINEERING DEPARTMENT  
155 South Seward Street  
Juneau, Alaska 99801

**DATE ADDENDUM ISSUED:** October 14, 2015

#### **INFORMATION ITEMS**

- Item No. 1: **Question:** On Drawing E-253 Detail 1 for the type H fixtures the picture on the left references a dimmer control inside of a NEMA 4X SS box. It references a Creston DIN-4DIMFLV4 OR equal. One of our suppliers asked if the processor and power source is to be provided in this phase or in phase IV.  
**Answer:** Drawing E-201 identifies this lighting control box and its location. It is part of this project. Note that the power supply circuits for the lighting along the sea walk are rated at 208 volts without a neutral. The power supply for the controls shall be rated accordingly.

#### **SPECIAL PROVISIONS**

- Item No. 2: In Section 01010 SUMMARY OF WORK, on Page 5 of the Special Provisions, in Paragraph 1.5D.3, **add** the following:

“Installation of piping and fittings within the interior of the existing whale sculpture and within the existing vault supporting it is not included in this contract and will be performed in the future.”

- Item No. 3: Following Section 02202, on Page 51 of the Special Provisions, **add** the following Section 02203, TRENCHING:

#### **“SECTION 02203 – TRENCHING**

##### **PART 2 – MATERIALS**

##### **ARTICLE 2.2 BEDDING**

**Add paragraph D as follows:**

- D. Flowable Fill Bedding shall be a sand cement mixture capable of flowing around the installed piping fully filling all voids and curing to a strength equal to or greater than the surrounding undisturbed or compacted soils. Flowable Fill Bedding shall have a cured strength of 100 psi to 200 psi and be able to be removed by mechanical equipment after curing. The Contractor shall submit a mix design that lists the sand, cement and water content as well as all proposed admixtures and air entrainment.

## **PART 1 – EXECUTION**

### **ARTICLE 3.2 BEDDING**

**Add** paragraph E as follows:

- E. Flowable Fill Bedding:
1. Flowable Fill Bedding shall be installed in concrete structures or in a firm, stable trench of undisturbed soil or compacted import where over excavation has occurred. Piping shall be firmly braced and anchored before the bedding is placed. Duct spacers shall be used to maintain pipe spacing and the pipes shall be anchored and/or filled to prevent floating. The trench shall be adequately formed or contained to prevent the bedding from flowing to other portions of the site. The Contractor shall provide the Engineer with 24 hours before placing the bedding and allow adequate access and time for inspection.
  2. After placement of the bedding, the Contractor shall not load the bedding until it has cured to a compressive strength equal to or greater than compacted soil. Compressive strength of the bedding shall be a minimum of 100 psi before additional loads are placed on the bedding. Compressive strength shall be determined by either ASTM C 403 or ASTM D 6024.

### **END OF SECTION”**

Item No. 4: Following Section 02502, on Page 61 of the Special Provisions, **add** the following Section 02601, WATER PIPE:

### **“SECTION 02601 – WATER PIPE**

## **PART 2 – PRODUCTS**

### **ARTICLE 2.1, PIPE**

**Add** the following Paragraph B:

- B. Piping and appurtenances, pipe bedding material, and other material necessary to complete the work shall meet the specifications shown on the Drawings and specified herein. Unless otherwise shown, piping shall be High Density Polyethylene (HDPE) meeting the following standards:
1. Pipe Material – ASTM F714, PE 3408, Cell Classification 345464C.
  2. Fittings – ASTM D3261.
  3. Joints: Thermal Butt Fusion or Flanged.
  4. Flanges: In accordance with PPI Tech Document TN-38.

**PART 3 – EXECUTION**

**ARTICLE 3.2, INSTALLATION**

**Add the following paragraph Q.:**

- Q. All HDPE site piping shall be installed in accordance with Section 002203 – TRENCHING, as modified, and applicable provisions of the Plastic Pipe Institute, Handbook of Polyethylene Pipe, most recent edition.

**END OF SECTION”**

Item No. 5: In Section 04313, ANCHORED STONE MASONRY VANEER, on Page 122 of Special Provisions, **delete** this section in its entirety and **replace** it with the attached Section 04310.

Item No. 6: In Section 07410, STANDING-SEAM METAL ROOF PANELS, on Page 144 of the Special Provisions, in Paragraph 1.7A, **add** the following sentence:

“This project is located within 1000 feet of saltwater and may require a project specific warranty for the material and paint system specified. Regular roof maintenance that may be required for warranty coverage will be performed by the CBJ.”

**DRAWINGS**

Item No. 7: On Wesco Drawing WF1.13, **delete** the note referring to the vertical cladding pieces in the far upper right corner of the drawing.

By:   
Greg Smith,  
Contract Administrator

Total number of pages contained within this Addendum: 9

## SECTION 04310 - ANCHORED STONE MASONRY VENEER

### PART 1 – GENERAL

#### 1.1. SUMMARY

##### A. Section Includes:

1. Provide and install stone masonry anchored to concrete backup, consisting of items shown as cubic stone weir and drain channel granite cladding on Wesco drawings, including required pins, anchors, grout and other necessary accessories.

#### 1.2. ACTION SUBMITTALS

##### A. Product Data: For each variety of stone, stone accessory, and manufactured product.

##### B. Samples:

1. For each stone type and finish indicated.
2. For each color of mortar required.
3. Shop drawings showing all stone pieces and details of attachment methods.

#### 1.3. FIELD CONDITIONS

##### A. Protection of Stone Masonry: During construction, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work.

##### B. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Comply with cold-weather construction requirements contained in TMS 602/ACI 530.1/ASCE 6.

1. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F (4 deg C) and above and will remain so until masonry has dried.

##### C. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in TMS 602/ACI 530.1/ASCE 6.

### PART 2 – PRODUCTS

#### 2.1. GRANITE

##### A. Material Standard: Comply with ASTM C 615/C 615M.

##### B. Varieties and Sources: Subject to compliance with requirements, available stone varieties that may be incorporated into the Work include the following:

1. Name: "Butterfly Blue"
2. Country of origin: China
3. Source: Allied Marble and Granite, Inc. Contact: Liza Haranina, 206-763-1250.
4. Note: other sources of Butterfly Blue will be considered; provide sample during bidding.

## 2.2. MORTAR MATERIALS

- A. Portland Cement: ASTM C 150/C 150M, Type I or Type II, except Type III may be used for cold-weather construction; natural color or white cement may be used as required to produce mortar color indicated.
  - 1. Low-Alkali Cement: Not more than 0.60 percent total alkali when tested according to ASTM C 114 when recommended by stone supplier to limit staining.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Masonry Cement: ASTM C 91/C 91M. Only if recommended by stone supplier for selected stone material.
- D. Mortar Pigments: Natural and synthetic iron oxides and chromium oxides, compounded for use in mortar mixes and complying with ASTM C 979/C 979M. Use only pigments with a record of satisfactory performance in stone masonry mortar.
- E. Colored Portland Cement-Lime Mix: Packaged blend of portland cement, hydrated lime, and mortar pigments. Mix shall produce color indicated or, if not indicated, as selected from manufacturer's standard colors. Pigments shall not exceed 10 percent of portland cement by weight.
- F. Colored Masonry Cement Mix: Packaged blend of masonry cement and mortar pigments. Mix shall produce color indicated or, if not indicated, as selected from manufacturer's standard colors. Pigments shall not exceed 5 percent of masonry cement by weight.
- G. Aggregate: ASTM C 144 and as follows:
  - 1. For pointing mortar, use aggregate graded with 100 percent passing No. 16 (1.18-mm) sieve.
  - 2. Colored Aggregates: Natural-colored sand or ground marble, granite, or other sound stone; of color necessary to produce required mortar color.
- H. Water: Potable.

## 2.3. VENEER ANCHORS

- A. Selection: Type(s) of veneer anchors will be as shown on the Wesco drawings. For bidding purposes, it is assumed that each piece of cubic stone weir requires two (2) stainless steel pins and each piece of granite wall cladding in the drain channel requires (4) stainless steel anchors.
- B. Materials:
  - 1. Stainless-Steel Wire: ASTM A 580/A 580M, Type 316.
  - 2. Stainless-Steel Sheet: ASTM A 240/A 240M or ASTM A 666, Type 316
- C. Size: Sufficient to extend at least halfway, but not less than 1-1/2 inches (38 mm), through stone masonry and with at least a 5/8-inch (16-mm) cover on exterior face.
- D. Corrugated-Metal Veneer Anchors: Stainless-steel sheet with corrugations having a wavelength of 0.3 to 0.5 inch (7.6 to 13 mm) and an amplitude of 0.06 to 0.10 inch (1.5 to 2.5 mm).

- E. Adjustable Masonry-Veneer Anchors:
1. General: Provide anchors that allow vertical adjustment but resist a 100-lbf (445-N) load in both tension and compression perpendicular to plane of wall without deforming or developing play in excess of 1/16 inch (1.5 mm).
  2. Fabricate sheet metal anchor sections and other sheet metal parts 0.078-inch- (1.98-mm-) thick, stainless-steel sheet.
  3. Contractor's Option: Unless otherwise indicated, provide any of the adjustable masonry-veneer anchors specified.
- F. Adjustable, Screw-Attached Veneer Anchors: Units consisting of a wire tie section and a metal anchor section for attachment over sheathing to wood or metal studs, and as follows:
1. Anchor Section: Rib-stiffened, sheet metal plate with screw holes in top and bottom, 2-3/4 inches (70 mm) wide by 3 inches (75 mm) high; with projecting tabs having slotted holes for inserting vertical legs of wire tie specially formed to fit veneer anchor section.
- G. Adjustable, Screw-Attached Veneer Anchors: Units consisting of a wire tie section and a metal anchor section for attachment over sheathing to wood or metal studs, and as follows:
1. Anchor Section: Sheet metal plate, 1-1/4 inches (32 mm) wide by 9 inches (225 mm) long, with screw holes in top and bottom and with raised rib-stiffened strap, 5/8 inch (16 mm) wide by 5-1/2 inches (140 mm) long, stamped into center to provide a slot between strap and plate for inserting wire tie.
- H. Adjustable, Screw-Attached Veneer Anchors: Units consisting of a wire tie section and a metal anchor section for attachment over sheathing to wood or metal studs, and as follows:
1. Anchor Section: Sheet metal plate, 1-1/4 inches (32 mm) wide by 6 inches (150 mm) long, with screw holes in top and bottom and with raised rib-stiffened strap, 5/8 inch (16 mm) wide by 3-5/8 inches (92 mm) long, stamped into center to provide a slot between strap and plate for inserting wire tie.
- I. Adjustable, Screw-Attached Veneer Anchors: Units consisting of a wire tie section and a metal anchor section for attachment over sheathing to wood or metal studs, and as follows:
1. Anchor Section: Gasketed sheet metal plate, 1-1/4 inches (32 mm) wide by 6 inches (150 mm) long, with screw holes in top and bottom; top and bottom ends bent to form pronged legs of length to match thickness of insulation or sheathing; and raised rib-stiffened strap, 5/8 inch (16 mm) wide by 6 inches (150 mm) long, stamped into center to provide a slot between strap and plate for inserting wire tie.
- J. Adjustable, Seismic Veneer Anchors: Units consisting of a metal anchor section and a connector section designed to engage a continuous wire embedded in stone masonry mortar joint, complying with the following requirements:
1. Anchor Section: Rib-stiffened, sheet metal plate with screw holes in top and bottom, 2-3/4 inches (70 mm) wide by 3 inches (75 mm) high; with projecting

- tabs having slotted holes for inserting vertical legs of wire tie specially formed to fit anchor section. Size wire tie to extend at least 1-1/2 inches (38 mm) into stone masonry but with at least a 5/8-inch (16-mm) cover on exterior face.
2. Connector Section: Sheet metal clip welded to wire tie with integral tabs designed to engage continuous wire.
  3. Continuous Wire: 0.188-inch- (4.8-mm-) diameter, stainless-steel wire.
- K. Adjustable, Seismic Veneer Anchors: Units consisting of a metal anchor section and a connector section designed to engage a continuous wire embedded in stone masonry mortar joint, complying with the following requirements:
1. Anchor Section: Gasketed sheet metal plate, 1-1/4 inches (32 mm) wide by 6 inches (150 mm) long, with screw holes in top and bottom; top and bottom ends bent to form pronged legs to bridge insulation or sheathing and contact studs; and raised rib-stiffened strap, 5/8 inch (16 mm) wide by 6 inches (150 mm) long, stamped into center to provide a slot between strap and plate for inserting wire tie.
  2. Connector Section: Triangular wire tie and rigid PVC extrusion with snap-in grooves for inserting continuous wire.
  3. Continuous Wire: 0.188-inch- (4.8-mm-) diameter, stainless-steel wire.

#### 2.4. MASONRY CLEANERS

- A. Proprietary Acidic Cleaner: Manufacturer's standard-strength cleaner designed for removing mortar and grout stains, efflorescence, and other new construction stains from stone masonry surfaces without discoloring or damaging masonry surfaces; expressly approved for intended use by cleaner manufacturer and stone producer.

#### 2.5. FABRICATION

- A. Cut stone to produce pieces of thickness, size, and shape indicated, including details on Drawings and pattern specified in "Setting Stone Masonry" Article.
- B. Thickness of Stone: Provide thickness indicated.
- C. Finish exposed stone faces and edges to comply with requirements indicated for finish and to match approved samples.
1. Finish 1: Honed where indicated.
  2. Finish 2: Thermal where indicated.

#### 2.6. MORTAR MIXES

- A. General: Do not use admixtures unless otherwise indicated.
1. Do not use calcium chloride.
  2. Use portland cement-lime or masonry cement mortar unless otherwise indicated.
  3. Mixing Pointing Mortar: Thoroughly mix cementitious and aggregate materials together before adding water. Then mix again, adding only enough water to produce a damp, unworkable mix that will retain its form when pressed into a ball. Maintain mortar in this dampened condition for one to two hours. Add remaining water in small portions until mortar reaches required consistency. Use mortar within 30 minutes of final mixing; do not retemper or use partially hardened material.

- B. Mortar for Stone Masonry: Comply with ASTM C 270, Proportion Specification.
  - 1. Mortar for Setting Stone: Type S or Type N as recommended by stone supplier for specific use and location.
  - 2. Mortar for Pointing Stone: Type N or Type O as recommended by stone supplier for specific use and location.
- C. Pigmented Mortar: Use colored cement product.
  - 1. Pigments shall not exceed 10 percent of portland cement by weight.
  - 2. Pigments shall not exceed 5 percent of masonry cement by weight.

### **PART 3 – EXECUTION**

#### **3.1. PREPARATION**

- A. Coat concrete and unit masonry backup with asphalt dampproofing.

#### **3.2. CONSTRUCTION TOLERANCES**

- A. Variation from Plumb: For vertical lines and surfaces, do not exceed 1/4 inch in 10 feet (6 mm in 3 m).
- B. Variation from Level: For bed joints and lines of exposed lintels, sills, parapets, horizontal grooves, and other conspicuous lines, do not exceed 1/4 inch in 20 feet (6 mm in 6 m) .
- C. Variation of Linear Building Line: For position shown in plan, do not exceed 1/2 inch in 20 feet (13 mm in 6 m) or 3/4 inch in 40 feet (19 mm in 12 m) or more.
- D. Variation from level at horizontal weir stones: None permitted.

#### **3.3. INSTALLATION OF ANCHORED STONE MASONRY**

- A. Anchor stone masonry to concrete with corrugated-metal veneer anchors unless otherwise indicated. Secure anchors by inserting dovetailed ends into dovetail slots in concrete.
- B. Embed veneer anchors in mortar joints of stone masonry at least halfway, but not less than 1-1/2 inches (38 mm), through stone masonry and with at least a 5/8-inch (16-mm) cover on exterior face.
- C. Space anchors not more than 18 inches (450 mm) o.c. vertically and 32 inches (800 mm) o.c. horizontally, with not less than one anchor per 2.67 sq. ft. (0.25 sq. m) of wall area. Install additional anchors within 12 inches (300 mm) of openings, sealant joints, and perimeter at intervals not exceeding 12 inches (300 mm).
- D. Set horizontal stone in full bed of mortar unless otherwise indicated. Build anchors into mortar joints as stone is set. Set vertical stone in mortar paddies at anchor locations and at middle of stone panel to allow drainage behind stone.

#### **3.4. POINTING**

- A. Prepare stone-joint surfaces for pointing with mortar by removing dust and mortar particles. Where setting mortar was removed to depths greater than surrounding areas, apply pointing mortar in layers not more than 3/8 inch (10 mm) deep until a uniform depth is formed.



- B. Point stone joints by placing and compacting pointing mortar in layers of not more than 3/8 inch (10 mm) deep. Compact each layer thoroughly and allow to it become thumbprint hard before applying next layer.
- C. Tool joints, when pointing mortar is thumbprint hard, with a smooth jointing tool to produce the following joint profile:
  - 1. Joint Profile: Slightly Concave but flush at high point at weir stones.

### 3.5. ADJUSTING AND CLEANING

- A. In-Progress Cleaning: Clean stone masonry as work progresses. Remove mortar fins and smears before tooling joints.
- B. Final Cleaning: After mortar is thoroughly set and cured, clean stone masonry as follows:
  - 1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
  - 2. Test cleaning methods on mockup; leave one-half of panel uncleaned for comparison purposes. Obtain Architect's approval of sample cleaning before cleaning stone masonry.
  - 3. Protect adjacent stone and non-masonry surfaces from contact with cleaner by covering them with liquid strippable masking agent, polyethylene film, or waterproof masking tape.
  - 4. Wet wall surfaces with water before applying cleaner; remove cleaner promptly by rinsing thoroughly with clear water.
  - 5. Clean stone masonry by bucket and brush hand-cleaning method described in BIA Technical Note No. 20, Revised II, using job-mixed detergent solution.
  - 6. Clean stone masonry with proprietary acidic cleaner applied according to manufacturer's written instructions.
  - 7. Test stone level and weir function for infinity pool effect. Correct stone settings if necessary.

### 3.6. EXCESS MATERIALS AND WASTE

- A. Excess Stone: Stack excess stone where directed by Owner for Owner's use.
- B. Disposal as Fill Material: Dispose of clean masonry waste, including mortar and excess or soil-contaminated sand, by crushing and mixing with fill material as fill is placed.
  - 1. Do not dispose of masonry waste on site.

**END OF SECTION**