

ADDENDUM TO THE CONTRACT

for the

Statter Harbor Improvements Contract No. DH14-014

ADDENDUM NO.: TWO

CURRENT DEADLINE FOR BIDS: October 8, 2014

PREVIOUS ADDENDA: ONE

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

DATE ADDENDUM ISSUED:

October 1, 2014

The following items of the contract are modified as herein indicated. All other items remain the same. This is a faxed addendum. A confirming copy will not be mailed to you. This addendum has been issued and is posted online. Please refer to the CBJ Engineering Contracts Division webpage at: http://www.juneau.org/engineering_ftp/contracts/Contracts.php

PROJECT MANUAL:

Item No. 1 SECTION 01025 – MEASUREMENT AND PAYMENT, DIVISION 2 – SITE WORK, Article 2.23 BOARD INSULATION, *Change* all affected references from "pipe insulation" *to* "board insulation."

Paragraph A, *Change* the size of the board measured for payment from 2" x 4' x 8' to 2" x 2' x 8'.

Item No. 2 SECTION 02202 – EXCAVATION AND EMBANKMENT, PART 2 – PRODUCTS, Article 2.3 CLASS A SHOT ROCK BORROW, *Replace* the gradation table in Paragraph A with the following:

SIEVE SIZE	% PASSING BY WEIGHT	
4-Inch	100	
2-Inch	40 - 80	
No. 4	12 – 40	
No. 200*	0 – 4	
*Gradation shall be determined on that portion passing the 3-inch		
screen.		

Item No. 3 SECTION 02202 – EXCAVATION AND EMBANKMENT, PART 2 – PRODUCTS, *Replace* Article 2.5 SAND with the following:

2.5 SAND. Sand shall be sub-angular to round material containing no muck, frozen material, roots, sod or other deleterious matter and with a plasticity index not greater than 6 as determined by WAQTC FOPs for AASHTO T 89 AND T 90.

A. Sand shall meet the following gradation as determined by WAQTC FOP for AASHTO T 27/T 11.

SIEVE SIZE	% PASSING BY WEIGHT
3-Inch	100
2-Inch	80-100
3/4-Inch	60-80
No. 4	40-70
No. 200	0 - 6

- Item No. 4 SECTION 02204 BASE COURSE, PART 3- EXECUTION, Article 3.2 ROADWAY BASE COURSE, *Add* the following Paragraphs:
 - B. 2-inch minus shot rock material shall be placed in two horizontal lifts of approximately equal depth for the full width of the embankment. The first lift shall be fully compacted before the next lift is placed. Compaction shall be achieved by performing a minimum level of compactive effort consisting of eight complete coverage passes with a 15-ton vibratory steel drum roller over the complete coverage area of any given lift with equipment suitably equipped by the manufacturer for compacting shot rock material.
 - C. The top layer of Base Course Grading D-1 for Roadway Base Course shall be compacted as specified herein to 98% of its maximum density.
- Item No. 5 SECTION 02205 ARMOR ROCK, *Replace* Section in its entirety with the attached SECTION 02205 ARMOR ROCK, Addendum 2 dated October 1, 2014.
- Item No. 6 SECTION 02301 WICK DRAINS, PART 3 EXECUTION, Article 3.1 CONSTRUCTION, Paragraph D, *Delete* the last sentence in its entirety.
- Item No. 7 SECTION 02301 WICK DRAINS, PART 3 EXECUTION, Article 3.1 CONSTRUCTION, Paragraph K, **Delete** the last sentence in its entirety.
- Item No. 8 SECTION 02714 GEOTEXTILE FABRIC, PART 3 EXECUTION, Article 3.1 CONSTRUCTION:

Paragraph E, Change the fabric type reference to read, "Type A."

Paragraph F, *Change* the fabric type reference to read, "Type B."

Item No. 9 SECTION 02726 – MSE WALLS, PART 3 – PRODUCTS, Article 3.2 MSE WALL GEOGRID REINFORCEMENT, Paragraph A, *Replace* the first sentence with the following:

Geogrid reinforcement shall be *Stratagrid SG600* as manufactured by *US Fabrics Inc., Miragrid 10XT,* as manufactured by *Tencate Geosynthetics* or approved equal.

Item No. 10 SECTION 02893 – TIMBER BOARDING FLOAT, PART 2 – PRODUCTS, Article 2.1 MATERIALS, *Replace* the fifth sentence of Paragraph B with the following sentences:

Sawn timber located above the waterline shall be pressure treated with ACZA per AWPA C-2 to a net dry salt retention of not less than 0.6 pounds per cubic foot. Sawn timber located below the waterline shall be pressure treated with creosote per AWPA C-28 to a minimum retention of 12 pounds per cubic foot.

- Item No. 11 SECTION 02896 STEEL PIPE PILES, PART 3 EXECUTION, Article 3.2 INSTALLATION, Add the following paragraph J:
 - J. Bedrock is not anticipated in locations where piles are designated to be installed. In the event that bedrock is encountered at pile locations, the ENGINEER shall determine the course of action. Additional WORK required due to the instance of bedrock shall be addressed as described in the General Conditions, Article 10, Changes in the Work.
- Item No. 12 SECTION 03301 STRUCTURAL CONCRETE, PART 2 PRODUCTS, *Replace* Article 2.8 REINFORCING STEEL with the following:
 - 2.8 REINFORCING STEEL. Reinforcing steel shall be of the type designated in the Plans and shall conform to the following unless otherwise noted. Submit material certifications for all reinforcing steel.
 - A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.
 - 1. Reinforcing bars not otherwise designated in the Plans or Specifications shall be of this type.
 - B. Galvanized Reinforcing Bars: A 706/A 706M, Grade 60 deformed for bent or welded bars, ASTM 615A/615M, Grade 60 for Strait Bars, ASTM A 767/A 767M, Class I galvanized after fabrication and bending.
 - 1. All reinforcing steel for use in concrete designated to be installed below the high tide line shall be of this type unless otherwise noted.
 - C. Epoxy-Coated Reinforcing Bars: ASTM A 615/A 615M, Grade 60 for strait bars, ASTM A 706/A 706M, for bent bars, deformed, ASTM A 775/A 775M or ASTM A 934/A 934M, epoxy coated, with less than 2 percent damaged coating in each 12-inch bar length.
 - D. Plain-Steel Welded-Wire Reinforcement: ASTM A 1064/A 1064M, plain, fabricated from as-drawn steel wire into flat sheets.
- Item No. 13 SECTION 03304 SPECIAL CONCRETE STRUCTURES, PART 2 PRODUCTS, Article 2.1 MATERIALS, *Replace* Paragraph B with the following:
 - B. All reinforcing Steel for Cantilevered Concrete Vista Lookout Area with Planter shall conform to ASTM A1035, Grade 100. All Reinforcing Steel for the Stairway shall be galvanized provided in accordance with Section 03301-Structural Concrete.
- Item No. 14 SECTION 05120 METAL FABRICATION, PART 2 PRODUCTS, *Add* the following Article 2.3:
 - 2.3 EPOXY ANCHOR BOLTS
 - A. Unless otherwise noted all anchor bolts designated to be installed with concrete epoxy adhesive shall be all thread rod, of the size noted in the Plans, conforming to ASTM F1554, Grade 36, hot dip galvanized.
 - B. Anchor Epoxy material shall be *Hilti HIT-RE500-SD*. Epoxy Adhesive, install per manufacturer's recommendations.

- Item No. 15 Section 10350 FLAGPOLES, PART 2 PRODUCTS, Article 2.2 FLAGPOLES, **Delete** Paragraph D and replace with the following:
 - D. Aluminum Flagpoles: Provide cone-tapered flagpoles fabricated from seamless extruded tubing complying with ASTM B 241, Alloy 6063, with a minimum wall thickness of 0.188 inches or greater, to exceed required wind rating. Heat-treat after fabrication to comply with ASTM B 597, Temper T6.
- Item No. 16 Section 10350 FLAGPOLES, PART 2 PRODUCTS, Article 2.3 FITTINGS, *Delete* Paragraph B and replace with the following:
 - B. External Halyard: 5/16-inch-diameter, braided polypropylene halyard. Provide secured lock box secured with cylinder lock. Heavy-duty revolving truck assembly with single sheave. Finish truck assembly to match flagpole.
- Item No. 17 SECTION 11100 INSTRUMENTATION, PART 2 PRODUCTS, Article 2.2 INCLINOMETER PROBES AND SYSTEMS:

Add the following sentence to Paragraph A:

The inclinometer probe shall be provided with inclinometer software *DigiPro2, part number 50310103* as manufactured by *Slope Indicator Company* or approved equal.

Replace Paragraph F with the following:

F. The probe shall be detachable from its connecting cable and when attached waterproof to 200 psi.

Replace Paragraph G with the following:

- G. The connection cable shall be permanently marked at 2-foot intervals, with robust stainless steel makers, with the first marker starting 2-feet from the top of wheels of the probe.
- Item No. 18 SECTION 11100 INSTRUMENTATION. PART 2 PRODUCTS, Article 2.3 INCLINOMETER CASING:

Replace Paragraph A with the following:

A. The Inclinometer Casing shall be provided with an internal diameter to suit the inclinometer probe and wheel assembly per manufacturer recommendations. Inclinometer casing shall be a quick-connect (QC) type with *Casing Anchor* as manufactured by *Slope Indicator Company part numbers 51150310, 51104385 and 51150311* including locking caps, splices, watertight joints, compression joints and associated accessories or approved equal. The inclinometer casing installed from the top of the sand layer to bedrock shall contain at least eight (8) sections of telescoping QC's placed as directed by the ENGINEER, as manufactured by *Slope Indicator Company part number 51150320* or approved equal.

Add the following Paragraph D:

D. The inclinometer casings within the Soft Ground Modifications Staged Construction fill layers shall be bedded with 6" Min. to 12" Max thickness. The bedding shall be Bedding A per Section 02203 – Trenching (Incidental). Item No. 19 SECTION 11100 – INSTRUMENTATION. PART 2 – PRODUCTS, Article 2.4 PIEZOMETER, Paragraph A:

Change the specified FS accuracy from "0.2 percent" to "0.1 percent":

- Item No. 20 SECTION 11100 INSTRUMENTATION, PART 3 EXECUTION, Article 3.1 INCLINOMETERS AND CASING, *Replace* Paragraph G with the following:
 - G. Where settlement in excess of 1-foot is expected telescoping sections of inclinometer casing shall be supplied in 2-foot lengths, assembled and aligned with same mating joints as standard 10-foot lengths. At each coupling, provide a 6-inch long compression joint, allowing the inclinometer casing to compress to accommodate settlement without deformation. Joints shall be sealed to prevent grout infiltration per the manufacturer's written instructions. See the Geotechnical Report for settlement estimates.
- Item No. 21 SECTION 13121 COVERED SHELTER, PART 2 MATERIALS, Article 2.1 MATERIALS, Paragraph I, *Add* the following as an approved metal roofing product:

Curved Magna-Loc as manufactured *Metal Sales Manufacturing Corporation*, color shall be selected by the Owner. Submit color selections for approval.

All structural and appurtenant material requirements listed in Paragraph I shall apply.

PLANS:

- Item No. 22 DRAWING SHEET 3.02, SOFT GROUND MODIFICATIONS SURCHARGE STAGES AND WICK DRAIN SECTION, *Delete* Surcharge Note 5.
- Item No. 23 **Replace** DRAWING SHEET 3.04, SOFT GROUND MODIFICATIONS SURCHARGE STAGE 1 AND WICK DRAIN SECTION with the attached sheet, similarly titled and dated October 1, 2014.
- Item No. 24 DRAWING SHEET 3.10, SOFT GROUND MODIFICATIONS INSTRUMENTATION DETAILS, *Add* the following notes to the detail titled "Inclinometer Section":
 - 1. Weak Grout Backfill shall fill the entire annulus between the drill hole and the casing.
 - 2. Weak Grout Backfill is only required to the top of the sand layer. Above the sand layer, the Inclinometer casing shall be bed with a 6-inch to 12-inch thick layer of Class A Bedding Material, all around.
 - 3. Provide bedding material per Section 02203-Trenching, bedding material placement and compaction shall be incidental.
- Item No. 25 DRAWING SHEET 5.03, TYPICAL SECTIONS, *Delete* Note 3 of the General Section Notes located in the center of the sheet.
- Item No. 26 DRAWING SHEET 5.12, CIVIL DETAILS, Detail TYPE VIII CURB AND GUTTER WALL, *Change* the spacing of 2" PVC weep drain pipes in the callout on the centerright of the detail to read "48" O.C. MAX."

Add the following general notes:

1. Curb wall shall be 2'-6" measured from the curb flow line to the top, back of curb.

- 2. Backfill above the footing on backside of curb wall with Class A Shot Rock Borrow to the bottom of planting soil.
- Item No. 27 DRAWING SHEET 5.15, STORM DRAIN PLAN, *Add* the following note 7 to the list of notes:
 - Pipe elevations for structure S25 shown approximate, confirm pipe elevations for S25 and for the water quality unit elbow and bypass piping with the water quality unit manufacturer for the unit specified.
- Item No. 28 DRAWING SHEET 8.03, BOAT LAUNCH RAMP PLANK AND SLEEPER DETAILS, Detail CONCRETE RAMP PLANKS-PLAN, *Change* the reference to "Rip Rap" in the callout on the middle right of the detail to read "Armor Rock."
- Item No. 29 DRAWING SHEET 8.04, BOAT LAUNCH RAMP APRON AND ABUTMENT PILE DETAILS, Detail PILE INSTALLATION DETAIL, *Change* the callout in the center-left of the detail from "Existing Ground" to "Finished Grade."
- Item No. 30 DRAWING SHEET L3.01, PLANTING PLAN, *Delete* the entire table row referencing GP, Geranium Patricia, from the Planting Legend, Perennials.
- Item No. 31 DRAWING SHEET L3.01, PLANTING PLAN, From the planting legend, perennials *Replace* HM: Heuchera micrantha 'Palace Purple' with IS: Iris Setosa
- Item No. 32 DRAWING SHEET E1.00, SITE PLAN EXISTING, Add a note 2 as follows:
 - The work for the utility portions of the power and communications systems noted as (AEL&P) and (GCI) will be provided by those utilities. This work will be billed to the CBJ and paid accordingly. The Contractor shall provide coordination.
- Item No. 33 DRAWING SHEET E2.01, SITE PLAN LIGHTING, Add a note 3 as follows:
 - The work for the utility portions of the power and communications systems noted as (AEL&P) and (GCI) will be provided by those utilities. This work will be billed to the CBJ and paid accordingly. The Contractor shall provide coordination.
- Item No. 34 DRAWING SHEET E2.03, SHELTER & FLAGPOLE DETAILS, Detail 4-DETAIL-FLAGPOLE LIGHTING, **Update** all luminaire callouts to read type "F2."

By: Gree Grea Smith Contract Administrator

Total number of pages contained within this Addendum: 10

PART 1 - GENERAL

1.1 DESCRIPTION

A. The WORK under this Section includes providing all labor, materials, tools and equipment necessary for furnishing and placing armor rock and perimeter rocks, as shown in the Plans, and as directed by the ENGINEER.

PART 2 - PRODUCTS

2.1 ARMOR ROCK

- A. Stone for this WORK shall be hard angular quarry stones, having a percentage of wear of not more than 50 at 500 revolutions as determined by ASTM C535. The least dimension of any piece of stone shall be not less than 1/3 of its greatest dimension. Stones shall meet the following gradation based on the number of stones method of grading as described herein.
- B. Class I Armor Rock
 - 1. No more than 10% of the stones by total number shall weigh more than 50 pounds per piece and no more than 50% by total number of the stones shall weigh less than 25 pounds per piece. The stones shall be evenly graded.
- C. Class II Armor Rock
 - 1. No more than 10% of the stones by total number shall weigh more than 400 pounds per piece and no more than 15% by total number of the stones shall weigh less than 25 pounds per piece. The stones shall be evenly graded and a minimum of 50% by total number of the stones shall weigh 200 pounds or more per piece.
- D. Class III Armor Rock
 - 1. No more than 10% of the stones by total number shall weigh more than 1,400 pounds per piece and no more than 15% of the stones by total number shall weigh less than 25 pounds per piece. The stones shall be evenly graded and a minimum of 50% of the stones by total number shall weigh 700 pounds or more per piece.
- E. Class IV Armor Rock
 - 1. No more than 10% of the stones by total number shall weigh more than 5,400 pounds per piece and no more than 15% of the stones by total number shall weigh less than 400 pounds per piece. The stones shall be evenly graded and a minimum of 50% of the stones by total number shall weigh 2,000 pounds or more per piece.

2.2 SURCHARGE Perimeter Rocks

- A. Surcharge Perimeter Rocks shall be blocky individual quarry stones with a crosssectional length of 3' minimum and 5' maximum in every direction.
- B. Existing Boulders meeting the specification for Surcharge Perimeter Rocks located throughout the existing Horton Parking lot and mudflats may be utilized as Surcharge Perimeter Rocks.

Addendum No. 2 STATTER HARBOR IMPROVEMENTS Contract No. DH14-014 October 1, 2014 ARMOR ROCK Page 02205-1

2.3 GEOTEXTILE FABRIC

A. Geotextile Fabric shall conform to the requirements of Section 02714 – Geotextile Fabric.

PART 3 - EXECUTION

3.1 ARMOR ROCK

- A. Foundation or toe trenches and other necessary excavations shall be completed and approved by the ENGINEER prior to placing armor rock. Slopes to be protected with armor rock shall be free of brush, trees, stumps and other objectionable material and shall be dressed to a reasonably smooth surface.
- B. Unless otherwise noted or authorized by the ENGINEER, the armor rock protection shall be placed in conjunction with the construction of the embankment with only sufficient lag in construction of the armor rock protection as may be necessary to place geotextile fabric and to prevent mixture of embankment and armor rock material.
 - 1. Unprotected embankment and slopes are subject to erosion from wave and tidal action. Placement of armor rock shall be scheduled to provide protection against erosion of the underlying embankment and excavated slopes at all times.
- C. The CONTRACTOR shall provide a level, compact area of sufficient size to dump and sort typical loads of armor rock material for ENGINEER inspection and approval prior to placement.
 - 1. The CONTRACTOR shall provide assistance, including mechanical equipment and operators, to sort, measure, and otherwise aid the ENGINEER during inspection of individual stones as required to verify armor rock is within specifications.
- D. Geotextile Fabric shall be installed per Section 02714 Geotextile Fabric.
- E. Armor rock shall be placed and distributed by mechanical means to provide a uniform mass of stones. All armor rock shall be placed and distributed such that there are no large accumulations or areas composed primarily of either larger or smaller stones. Such areas shall be adjusted and redistributed by mechanical means per ENGINEER direction.
 - 1. The stones shall be handled or placed with an excavator as to secure a stone mass of the thickness, height and length shown on the Plans, with a minimum of voids.
 - 2. Undesirable voids shall be filled with small stones or spalls. The rock shall be manipulated sufficiently by means of an excavator, rock tongs, or other suitable equipment to secure a reasonably regular surface and mass stability.
- F. Armor rock shall be uniformly placed to its full course thickness in one operation on prepared slopes and in such a manner to avoid damaging geotextile fabric or displacing underlying material. Placement shall proceed up the slope from the toe. Placement by end dumping methods from the top of the slope will not be allowed.
- G. Final acceptance of armor rock materials shall be in final location following field sorting, inspections, mechanical manipulation and placement.

3.2 SURCHARGE PERIMETER ROCKS

Addendum No. 2 STATTER HARBOR IMPROVEMENTS Contract No. DH14-014 October 1, 2014 ARMOR ROCK Page 02205-2

SECTION 02205 - ARMOR ROCK

- A. Surcharge Perimeter Rocks shall be placed around the entire perimeter of the surcharge fill footprint to the approximate alignment and grades shown on the Plans.
- B. Surcharge Perimeter Rocks shall be handled and placed individually with an excavator. Rocks shall be firmly placed into position to secure rocks against movement during backfill of the sand layer and temporary wall construction.
- C. Surcharge Perimeter Rocks shall be placed in a linear fashion directly adjacent to oneanother firmly securing each rock before placing the adjacent rock. The CONTRACTOR shall minimize gaps in the surcharge perimeter rocks to the extent practicable and per ENGINEER direction.
- D. Type A geotextile fabric shall be placed on the top and inner face of all Surcharge Perimeter Rocks as shown in the Plans.
 - 1. The purpose of this geotextile fabric is to prevent the sand layer from washing out with the tide between the perimeter rocks, the geotextile fabric shall be installed to facilitate this purpose.
 - 2. Geotextile fabric shall be draped over the surcharge perimeter rocks as required to ensure fabric does not fold back over itself when sand layer is placed. Take care to avoid conflict with wick drains.
 - 3. Geotextile fabric shall overlap a minimum of 1-foot, 6-inches at joints.
 - 4. Provision and installation of geotextile fabric shall be incidental to Surcharge Perimeter Rocks and shall not be measured for payment.
- E. Upon completion of the Soft Ground Modifications Surcharge Period, Surcharge Perimeter Rocks within the Usable Excavation limits, as shown in the Plans, shall be rehandled and placed into the Class IV Armor Rock Prisms as shown in the Plans and in accordance with this Specification. This WORK shall be incidental and shall not be measured for payment.
 - 1. Geotextile fabric within the Usable Excavation limits shall be removed and disposed as required. This WORK shall be incidental and shall not be measured for payment.

END OF SECTION

