



October 7, 2014

OCT 14 2014

→ TO: J. Carpenter / M. Fleming *MA*
THRU: D. Whitehouse *WA* / B. White
FROM: *WS* W. Smith / K. Vaughn
SUBJECT: Contract 8127 - Snowshed to Keechelus Dam Phase 1C
State Project
Change Orders 107 through 109 - "Wall 7 Vic. Final Plans"

Please find attached the State Construction Office approved and executed Change Orders No. 107 through 109 for this project.

Description of the Change: The constructability issues associated with Wall 7 have been well documented in previous change orders. Change Orders 67 and 74 provided for the Contractor to collaborate with WSDOT in redesigning portions of the project to allow the project to move forward without the as-bid Wall 7. Change Order 91 followed those change orders and: deleted Walls 5, 6, 7, 23, and the Slide Curve Bridge; added new items to address temporary roadway construction near Wall 7, construct the temporary Wall 707 Shoring Wall, and Geosynthetic Retaining Wall 707; and modified multiple items for the early 2014 construction season. Change Order 100 added construction work that took place in the mid to late 2014 construction season.

These three change orders (due to the limited number of items that CCIS will allow per change order), formally accept the "All Addenda Incorporated with CRIP and Wall 7 Revision" contract plans and provisions, replacing the "All Addenda Incorporated with CRIP" contract plans as the current contract plans and provisions for construction. Construction related work included in this change order includes revisions of some item quantities, deletions of others, and some added items. A major item added by this change order is an equitable adjustment for an increased overhead rate, indirect and/or overhead costs associated with deleted work and an equitable adjustment for a subcontractor, associated with deleted work.

Evolution of the Change: During the 2012 and 2013 construction seasons the Contractor attempted to construct Soil Nail Wall 7 in accordance with the contract as bid. Drastic overruns in grout quantities were encountered as a result of unanticipated voids in the subsurface material. Grout quantities on average consistently exceeded 250% of neat line quantities and in some cases exceeded 2000% of plan. These problems continued through the summer of 2013, with no improvement or solution in sight, despite exhausting many different attempts to solve the problem.

Compounding the problems with quantity, were a couple of Environmental Compliance Assurance Process (ECAP) violations in August and September of 2013. See also the change order memorandums for Change Orders 67, 74, and 91 for more detail.

This is the third change order which provides for physical construction of the new design. Ideally, all aspects of the new design would have been incorporated into one change order; however, in order to enable construction activities to progress without further delay, the decision was made to write multiple change orders representing progressive "stages" at which new plans would be available as a part of each of these change orders.

A subsequent change order will address the following: 1) remaining added and deleted items whose pricing haven't yet been negotiated, 2) potential adjustments to contract time and the effects thereof, 3) adjustments to existing lump sum items (may include; CRIP Item 411, Shoring or Extra Excavation Class A, Structure Surveying, and other work).

Entitlement: Due to the elimination of the construction of the as-bid Wall 7, Wall 23, Slide Curve Bridge, and associated work, together with the replacement of this work with the Wall 7 Re-design, the Contractor is entitled additional compensation as described in Section 1-04.4 for the added and modified work. Where appropriate, unit contract prices were used and quantities adjusted for the added or modified work. However, much of the work differed and replacement/new items were developed with negotiated unit prices as per Section 1-04.4. The Contractor is also entitled, as per Section 1-09.5 to an equitable adjustment due to the deleted work. The equitable adjustment provided by this change order compensates for costs incurred by the Contractor (and subcontractors DBM and Elcon) in anticipation of the deleted work and settles outstanding claims for additional compensation. This equitable adjustment also covers the anticipated contribution of the deleted work to the Contractors indirect costs and overhead as allowed per the contract.

Price:

The project office has prepared an independent engineer's estimate of the costs to perform the work described in this change order; it can be found in the project offices' change order file.

Contract Time: There is no change to contract time associated with this change order; this will likely be a subject for a subsequent related change order.

Please contact Will Smith, at (509) 577-1844, if you have any questions or comments.

WS:kv

Enclosures: Change Order 107, 108, 109, Checklists. Engineer's Estimate
cc: Change Order File

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CONTRACT NO: 008127 FEDERAL AID NO:
 CONTRACT TITLE: I-90, SNOWSHED TO KEECHELUS DAM PHASE 1C - REPLACE
 CHANGE ORDER NO: 107 WALL 7 VIC-FINAL PLANS 1/3

PRIME CONTRACTOR: [REDACTED] GUY F. ATKINSON CONSTRUCTION, LLC.
 707 SOUTH GRADY WAY STE 500
 RENTON WA 98057-3224

Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications

Change proposed by Contractor

ENDORSED BY:  <hr/> CONTRACTOR 10/03/14 <hr/> DATE	SURETY CONSENT: <hr/> ATTORNEY IN FACT <hr/> DATE
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ORIGINAL CONTRACT AMOUNT: 177,144,342.66
 CURRENT CONTRACT AMOUNT: 179,429,879.05
 ESTIMATED NET CHANGE THIS ORDER: 4,517,862.00
 ESTIMATED CONTRACT TOTAL AFTER CHANGE: 183,947,741.05

Approval Required: Region Olympia Service Center Local Agency

<input checked="" type="checkbox"/> APPROVAL RECOMMENDED <input type="checkbox"/> EXECUTED  <hr/> PROJECT ENGINEER 10/7/14 <hr/> DATE	EXECUTED:  <hr/> STATE CONSTRUCTION ENGINEER 10-15-2014 <hr/> DATE
<input checked="" type="checkbox"/> APPROVAL RECOMMENDED <input type="checkbox"/> EXECUTED REGIONAL ADMIN:  BY: W. Brian White 10/8/14 <hr/> DATE	OTHER APPROVAL WHEN REQUIRED <hr/> SIGNATURE DATE <hr/> REPRESENTING

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All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:

DESCRIPTION:

This change order follows previously executed Change Orders 67 "Wall 7 Alternative Design Analysis", 74 "Wall 7 Vic.-Design Selected Alt.", 91 "Wall 7 Vic. Early 2014 Work", and 100 "Wall 7 Vic. 2014 Work".

This change order accepts the "All Addenda Incorporated with CRIP and Wall 7 Revision" Contract Plans and Provisions, replacing the "All Addenda Incorporated with CRIP" Contract Plans and Provisions as the contract plans and provisions for this project, from this point forward.

This change order addresses changes resulting from the final (100%) completion of the "All Addenda Incorporated with CRIP and Wall 7 Revision" contract plans produced under Change Order 74 by adding, deleting and revising numerous items.

Change Order 107 adds 6 new items and Change Order 108 increases the quantity of 36 existing items. Change Order 109 decreases the quantity of 36 existing items and deletes items 52, 82, 102, 108, 307, 392, 397 and 398 in their entirety.

All change order plan changes subsequent to the execution of this change order will refer to the "All Addenda Incorporated with CRIP and Wall 7 Revision" Contract Plans and Provisions. Previous change orders may refer to the "All Addenda Incorporated with CRIP" Contract Plans and Provisions, or the as-bid "All Addenda Incorporated" Contract Plans and Provisions.

Due to system limitations with WSDOT's Construction Contracts Information System (CCIS), this change order cannot be processed by a single change order. Change Order 107 will be the first of three (3) linked change orders addressing the same change. Change Order 107 will address the change text and added items, Change Order 108 will address increased quantities and Change order 109 will address reduced quantities and deleted items.

The item "CO 107-Delete Item 276-Credit Item", shown on page 6, is a CCIS system entry requirement for deleting a Lump Sum item. In this case, item 276 "ITS-VMS 2".

As agreed, WSDOT will provide the Contractor with forty (40) complete hard copy sets of the "All Addenda Incorporated with CRIP and Wall 7 Revision" Contract Plans, and twenty (20) sets of Contract Provisions.

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A future change order, anticipated to be executed before the end of 2014, will address: 1) remaining added and changed items whose pricing have not yet been negotiated, 2) potential adjustments to contract time and the effects thereof, 3) adjustments to existing lump sum items (may include: CRIP Item 411, Shoring or Extra Excavation Class A, Structure Surveying, and other work).

MATERIALS REQUIREMENTS:

All materials shall meet the requirements of the "All Addenda Incorporated with CRIP and Wall 7 Revision" Contract Plans and Provisions, the 2010 Standard Specifications, and this change order.

The table attached on page 5, represents the correlation between the actual item names shown in this change order, and the corresponding "Standard Item" name, or the name of the item which is part of the "All Addenda Incorporated with CRIP and Wall 7 Revision" Contract Provisions. The requirements of the 2010 Standard Specifications, Addenda, and Amendments to the Standard Specifications and "All Addenda Incorporated with CRIP and Wall 7 Revision" Contract Provisions shall be applied to each of the CO 107 items, according to the item name in the column "Equivalent Standard or Provision Item Name".

CONSTRUCTION REQUIREMENTS:

All work shall meet the requirements of the "All Addenda Incorporated with CRIP and Wall 7 Revision" Contract Plans and Provisions, the 2010 Standard Specifications, and this change order.

In MOT Stages 1B through Stage 3 Winter Configuration, between Sta. LW 8364+36 and LW 1408+68, any pavement removed or damaged as a result of Wall 708 construction activities between the westbound detour and the front face of Wall 708 shall be replaced and widened to the face of Wall 708 with HMA CL. 3/8 IN. PG 64-28 prior to winter shutdown each season. The HMA shall be 0.20 ft. in depth over 1.30 ft. of crushed surfacing base course, and shall match the cross slope of the adjacent pavement. (This work is included in CRIP pay item 411.)

CO 107-Adjust Existing Rock Bolts/Dowels

This work shall include removal (prior to excavation) and re-installation (once final slope is established) of face plate, washer, and nut on each existing bolt/dowel, torqueing (Type V and Type H shall be torqued to a nominal 1000 ft. lbs.; Type L to a nominal torque of 500 ft. lbs.), then cutting off extra bolt/dowel steel to final length. After the bolts/dowels are cut to final length, galvanized paint shall be applied to all uncoated steel surfaces.

CO 107-Geosynthetic Retaining Wall

This item applies only to Temp. Wall 5, Wall 726, and 727. The Contractor shall perform this work in accordance with the plans, this change order, and Section 6-14.

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Section 6-14.3(2) "Submittals" is supplemented with the following:

6. Details of how the geosynthetic reinforcement will be constructed around the permanent drainage.

CO 107-Gravel Borrow for Geo Wall

This item applies only to Temp. Wall 5, Wall 726, and 727.

CO 107-Perm. Shotcrete Fascia-Geo Walls

This item applies only to Temp. Wall 5, Wall 726, and 727.

MEASUREMENT & PAYMENT

Measurement and Payment for all work will be in accordance with the 2010 Standard Specifications, the "All Addenda Incorporated with CRIP and Wall 7 Revision" Contract Plans and Special Provisions, and this change order.

CO 107-Adjust Existing Rock Bolts/Dowels

Payment for removing, re-installing face plates and washers, torquing nuts, cutting to final length, and applying galvanized paint will be in accordance with Section 1-09.6.

CO 107-Geosynthetic Retaining Wall

Measurement and Payment will be by the square foot in accordance with 6-14.4 and 6-14.5 respectively.

CO 107-Gravel Borrow for Geo Wall

Measurement and Payment will be by the cubic yard in accordance with 6-14.4 and 6-14.5 respectively.

CO 107-Perm. Shotcrete Fascia for Geo Wall

Measurement and Payment will be by the square foot, and shall be full pay for all costs in connection with constructing the permanent shotcrete fascia walls as specified.

CO 107-Wall 7 Equitable Adjustment

Payment of this lump sum equitable adjustment to the Contractor completely resolves all issues, impacts and costs associated with the Contractor's requests for: 1) an increased overhead rate on new items as requested in Atkinson Construction Serial Letter 182. 2) indirect and/or overhead costs associated with deleted work, as requested in Atkinson Construction Serial Letter 182. 3) Atkinson Construction Serial Letter 163 regarding an equitable adjustment for subcontractor DEM. 4) any potential equitable adjustment request resulting from the deleted work that may affect subcontractor Elcon.

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Payment of this equitable adjustment also relieves WSDOT of any future costs regarding the several items mentioned in Change Orders 91 and 100 as being potentially subject to a prime contractor's markup of higher than 12%.

It is further agreed to by this change order that for future forward pricing on this contract, the prime contractor markups described in Standard Specifications Section 1-09.6 (maximum 12%) will be used unless extraordinary circumstances justify the use of a higher rate, as agreed to by the Engineer.

CONTRACT TIME:

Contract time is not addressed by this change order. The Contractor reserves the right to address time impacts in a future change order.

Change Order Item Name	Equivalent Standard or Provision Item Name
CO 107-Geosynthetic Retaining Wall	Geosynthetic Retaining Wall
CO 107-Gravel Borrow for Geo Wall	Gravel Borrow for Geosynthetic Retaining Wall
CO 107-Perm. Shotcrete Fascia-Geo Wall	CO 69-Perm. Shotcrete Fascia Provision

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ITEM NO	GROUP NO	STD ITEM	ITEM DESCRIPTION	UNIT MEASURE	UNIT PRICE	EST QTY CHANGE	EST AMT CHANGE
1164	01		CO 107-WALL 7 EQUITABLE ADJUSTMENT	L.S.	3,800,000.00	3,800,000.00	3,800,000.00
1165	01		CO 107-ADJUST EXISTING ROCK BOLTS/DOWELS	EST.	15,000.00	15,000.00	15,000.00
1168	01		CO 107-DELETE ITEM 276-CREDIT ITEM	L.S.	-90,000.00	-90,000.00	-90,000.00
1169	01		CO 107-GEOSYNTHETIC RETAINING WALL	S.F.	18.50	18,640.00	344,840.00
1170	01		CO 107-GRAVEL BORROW FOR GEO WALL	C.Y.	26.50	8,892.00	235,638.00
1171	01		CO 107-PERM. SHOTCRETE FASCIA-GEO WALL	S.F.	32.00	6,637.00	212,384.00

4,517,862.00
