





**Date:** August 11, 2015  
**To:** Fred Tharp  
HQ Construction, MS: 47354  
**Thru:** Steve Roark   
**From:** Neal Uhlmeyer   
(360) 412-3420

**Subject:** C-8670, I-5 Portland Avenue to Port of Tacoma Road – Northbound HOV  
Change Order #36 “VECP – Earthwork Complete”  
Change Order #43 “VECP – CO 36 Supplement”

**Requested Action:**

Review    Review and Region Execution    Review and HQ Execution

**Approval to make the change to the contract (Date):** July 27, 2015  
**Verbal Approval to proceed with the work (Date):** N/A

**Description**

This Value Engineering Concept Proposal (VECP) revises the work shown in the Contract Plans by deleting specific excavation, borrow, and soil testing bid items and replacing those bid items with an unclassified, lump sum item to complete the project earthwork to the lines, grades, and quality requirements specified in the Contract. The new lump sum item includes all embankments; borrow material, and all excavated material generated from the project,

Due to limitations in the Construction Contracts Information System (CCIS) this change order is supplemented by Change Order 43 which completes the accounting for the change. Change order 43 is included in this memo package.

**Evolution**

As earthwork was progressing in spring 2015, the parties were managing a Section 1-04.5 protest, submitted on April 6, 2015, related to the handling and disposal of excavated materials. The dispute centered around which excavated materials were covered by Addendum 3, items 7 and 10, and where those material could be taken for disposal. Ultimately the contractor proposed a VECP that resolved the protest.

The VECP relieves the Contractor from the requirement to dispose of all excavation material off-site, with certain exceptions, and instead allows embankment of excavated material on-site. The requirement to tests and dispose of MTCA level material at a RCRA Title D facility remains. The agreement to allow on-site embankment of material

is conditioned such that the contractor assumes the risk for placement and the risk for variations in quantities to complete the earthwork for the entire project. Essentially, the provisions of the change order convert the project's earthwork to a lump sum, in-place arrangement, with the contractor taking the risk to manage the quantities and placement.

Fred Tharp, Asst. State Construction Engineer, approved the change on July 27, 2015 (attachment A). Steve Roark, Region Construction Engineer, and Neal Uhlmeyer, Project Engineer, approved the change on July 27, 2015 (attachment B).

### **Entitlement**

Under the terms of this VECP, the scope of the earthwork will be completed in a manner that is equal to the contract's original functional requirements. Accordingly, the contractor is entitled to the lump sum compensation negotiated under the terms of Section 1-04.4, and the department is entitled to the offsetting value of the deleted work.

### **Price**

The Independent Engineer's Estimate itemizes the value of deleted and added work included in this no-cost VECP change order (attachment C).

The terms of the change order allow the contractor to reuse the excavated material on-site, provided it is suitable and below MTCA levels, to the extent their contemplated staging and sequencing allows. These provisions of the change order incentivize the contractor to embank the on-site material and in doing so realize a significant savings in the amount of borrow material needed to build the project. The estimated reduction of borrow material, taking into consideration the staging inefficiencies to stockpile on-site (re-handle) and the risk for contaminated (MTCA) soils, is estimated at \$1.3 million. The provisions of the change order also transfer the weather risk for placement. The placement risk, particularly in the rainy season and during placement of wet spoils, will require timely bulking to meet schedule and compaction requirements. The costs for bulking are expected to be at least \$400,000. Finally, the risk for Section 1-04.6 quantity variations is assumed by the contractor. The staging, weather, level of contaminants encountered, and suitability of the on-site material have a direct relationship to the amount of offsite disposal and the amount of borrow material needed to complete the project. A conservative estimate for quantity variations using 10% of the original plan quantities equates to a quantity variation risk carried by the contractor of \$900,000. Therefore, there is not net cost saving for this VECP, however there is considerable risk transfer for completing the work.

Due to limitations in the Construction Contracts Information System (CCIS) this change order is supplemented by Change Order 43

Page 3  
C-8670  
Change Order No. 036  
Change Order No. 043

**Contract Time**

Contract time is not affected by this change as the Work does not impact the critical path of the Contractor's progress schedule.

dj

Attachments:

Checklist

Change Order 036

Change Order 043

A: HQ Approval

B: Region & PE Approval

C: Engineer's estimate

cc: 203.036, 203.043

# WASHINGTON STATE DEPARTMENT OF TRANSPORTATION CHANGE ORDER

DATE: 07/30/15  
Page 1 of 3

**CONTRACT NO:** 008670 **FEDERAL AID NO:**  
**CONTRACT TITLE:** I-5, PORTLAND AVENUE TO PORT OF TACOMA ROAD - NORTH  
**CHANGE ORDER NO:** 43 VECP - CO 36 SUPPLEMENT

**PRIME CONTRACTOR:** SW0017141 HAMILTON CONSTRUCTION CO.  
 PO BOX 659  
 SPRINGFIELD OR 97477-0121

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

<p><b>ENDORSED BY:</b></p> <p style="text-align: center;"><i>Jeff Firth</i></p> <hr/> <p><b>CONTRACTOR</b></p> <p style="text-align: center;"><i>8-3-15</i></p> <hr/> <p><b>DATE</b></p>	<p><b>SURETY CONSENT:</b></p> <hr/> <p><b>ATTORNEY IN FACT</b></p> <hr/> <p><b>DATE</b></p>
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**ORIGINAL CONTRACT AMOUNT:** 134,709,929.50  
**CURRENT CONTRACT AMOUNT:** 124,541,731.68  
**ESTIMATED NET CHANGE THIS ORDER:** 11,271,697.75  
**ESTIMATED CONTRACT TOTAL AFTER CHANGE:** 135,813,429.43

Approval Required:       Region               Olympia Service Center       Local Agency

<p><input checked="" type="checkbox"/> APPROVAL RECOMMENDED      <input type="checkbox"/> EXECUTED</p> <p style="text-align: center;"><i>[Signature]</i></p> <hr/> <p><b>PROJECT ENGINEER</b></p> <p style="text-align: center;"><i>8/13/15</i></p> <hr/> <p><b>DATE</b></p>	<p><b>EXECUTED:</b></p> <p style="text-align: center;"><i>[Signature]</i></p> <hr/> <p><b>STATE CONSTRUCTION ENGINEER</b></p> <p style="text-align: center;"><i>8/19/15</i></p> <hr/> <p><b>DATE</b></p>
<p><input checked="" type="checkbox"/> APPROVAL RECOMMENDED      <input type="checkbox"/> EXECUTED</p> <p><b>REGIONAL ADMIN:</b> <i>F. Dayton</i></p> <hr/> <p><b>BY:</b> <i>[Signature]</i></p> <hr/> <p><b>DATE</b> <i>8/18/15</i></p>	<p><b>OTHER APPROVAL WHEN REQUIRED</b></p> <hr/> <p><b>SIGNATURE</b> _____ <b>DATE</b> _____</p> <hr/> <p><b>REPRESENTING</b> _____</p>

**WASHINGTON STATE  
DEPARTMENT OF TRANSPORTATION  
CHANGE ORDER**

DATE: 07/30/15  
Page 2 of 3

**CONTRACT NO:** 008670

**CHANGE ORDER NO:** 43

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 is a Supplement to change order 36, VECP - Earthwork Complete. This change order adds accounting for the new lump sum item "CO-036, VECP Project Earthwork Complete" to the Contract as shown on page 3 of this change order.

**MATERIALS:**

All material requirements are addressed in change order 36.

**CONSTRUCTION REQUIREMENTS:**

All construction requirements are addressed in change order 36.

**MEASUREMENT:**

All measurement statements are addressed in change order 36.

**PAYMENT:**

All payment statements are addressed in change order 36.

**CONTRACT TIME:**

Contract time will not be adjusted for the Work in this change order.

**WASHINGTON STATE  
DEPARTMENT OF TRANSPORTATION  
CHANGE ORDER**

DATE: 07/30/15  
Page 3 of 3

<b>CONTRACT NO: 008670</b>	<b>CHANGE ORDER NO: 43</b>
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ITEM NO	GROUP NO	STD ITEM	ITEM DESCRIPTION	UNIT MEASURE	UNIT PRICE	EST QTY CHANGE	EST AMT CHANGE
1025	01		CO-036, VECP PROJECT EARTHWORK COMPLETE	L.S.	0.00	0.00	3,246,975.89
1025	02		CO-036, VECP PROJECT EARTHWORK COMPLETE	L.S.	0.00	0.00	5,779,348.31
1025	03		CO-036, VECP PROJECT EARTHWORK COMPLETE	L.S.	0.00	0.00	1,874,191.03
1025	04		CO-036, VECP PROJECT EARTHWORK COMPLETE	L.S.	0.00	0.00	593.22
1025	05		CO-036, VECP PROJECT EARTHWORK COMPLETE	L.S.	0.00	0.00	593.22
1025	06		CO-036, VECP PROJECT EARTHWORK COMPLETE	L.S.	0.00	0.00	593.22
1025	07		CO-036, VECP PROJECT EARTHWORK COMPLETE	L.S.	0.00	0.00	164,184.00
1025	09		CO-036, VECP PROJECT EARTHWORK COMPLETE	L.S.	0.00	0.00	114,420.54
1025	10		CO-036, VECP PROJECT EARTHWORK COMPLETE	L.S.	0.00	0.00	39,067.05
1025	11		CO-036, VECP PROJECT EARTHWORK COMPLETE	L.S.	0.00	0.00	51,731.27

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11,271,697.75  
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## CHANGE ORDER-CHECKLIST

Cont. #: <u>8670</u> Cont. Title: <u>I-5 Portland Avenue to Port of Tacoma Road - Northbound HOV</u> C.O. #: <u>036 &amp; 043</u> C.O. Title: <u>I-5 Portland Avenue to Port of Tacoma Road - Northbound HOV</u>	If yes, State Construction Office Approval Required.
<b>I. Executed by the State Construction Office</b>	
1. Cost or credit equal to or exceeding \$200,000.*1	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No      X
2. Change in the contract documents beyond the scope, intent or termini of the original contract.*2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      X
3. Any proposed revision or deletion of work that affects the condition of award requirements. (Must be coded "CO" in CCIS)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      X
4. Change in contract time greater than 30 working days, or a change in contract time not related to any change order.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      X
<b>II. Executed by the Region</b>	
5. Cost or credit greater than \$100,000 but less than \$200,000. *1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6. Change in contract time greater than 10 and less than or equal to 30 working days (must be related to changes implemented by change order).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>III. Executed by the Project Engineer</b>	
7. Determination of impacts and/or overhead.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      X
8. Specification change involving Headquarters generated specification. <i>(Includes Region generated specification requiring State Construction Office Approval)</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No      X
9. Specification change involving Region generated specifications.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
10. Material or product substitution.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      X
11. Structural design change in the roadway section. <i>(Requires State Materials Lab approval)</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
12. Determination of changed condition. <i>(Section 1-04.7 of the Standard Specifications)</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      X
13. Settlement of a claim. <i>(Section 1-09.11(2) of the Standard Specifications)</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      X
14. Repair of damage regarding "acts of God" or "acts of the public enemy or of government authorities". <i>(Section 1-07.13 of the Standard Specification)</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      X
15. Structural change to structures. <i>(See BTA authority as shown in the Construction Manual)</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      X

**Approvals obtained:** Project Engineer (Required): Neal Uhlmeyer Date: 7/27/2015  
 Region (Required if yes marked): Steve Roark Date: 7/27/2015  
 State Construction Office: Fred Tharp Date: 7/27/2015  
 State Materials Lab: \_\_\_\_\_ Date: \_\_\_\_\_  
 Other (Local Agency, FHWA, Surety, etc.): \_\_\_\_\_ Date: \_\_\_\_\_

**To be completed by the Project Engineer :**

CO Reason(s) (See "2008 Codes and Definitions" on HQ Construction SharePoint): AB 06 AP AF  
 Change Order Prepared By: Mark Steingrebe Date: 7/27/2015  
 Has change been entered as lesson learned?  Yes  No      Has design documentation been updated?  Yes  No  
 Is this project under full FHWA stewardship oversight? \*1  Yes  No

**To be completed by the Region :**

Is the change eligible for Federal participation where applicable?  Yes  No  
 Change Order Reviewed by: *Ray on the* Date: *08/15*

\*1 Change (Cost or Credit) greater than \$200,000 or greater than 30 days on Full Federal Stewardship Oversight projects requires FHWA approval. (see Construction Manual - Chapter 1-2.4C(3), Chapter 1-3.4, and <http://www.wsdot.wa.gov/biz/construction/Stewardship/Stewardship.xls>)  
 \*2 Per RCW 47.28.050, any change beyond \$7,500 that is beyond the original scope shall go through the competitive bidding process.

This form represents the **minimum** information required by the State Construction Office. If you wish to supplement this information, you may do so on a separate sheet of paper.