

APR 23 2015



**Washington State
Department of Transportation**

Memorandum

DATE: April 1, 2015

TO: Derek Case
Assistant Construction Engineer
Headquarters, Mail Stop 47354

THRU: Julie Meredith
Program Director, SR 520 Program, Mail Stop NB82-99

FROM: Brian Dobbins,
Construction Manager, West Approach Bridge North Project,
Mail Stop TB-93, (206) 770-3518

PROJECT: C-8625
SR 520 West Approach Bridge North Project

SUBJECT: **CO # 013 – MOHAI Abatement Changes**

Requested Action:

Review Review and Region Execution Review and HQ Execution

Change Approval

Project Engineer Concurrence: Stephen Strand	01/14/2015
Dpty. Construction Mgr Concurrence: James VanSteenburg	01/15/2015
Project Engineer Change Approval: Brian Dobbins	01/15/2015
Region Change Approval: Tom Horkan/Julie Meredith	01/15/2015
HQ Change Approval: Derek Case	02/03/2015
HQ Final Change Order Approval: Derek Case	03/19/2015
FHWA Change Approval: Anthony Sarhan	03/30/2015

Description of the Change

The Contract identifies areas of asbestos containing material (ACM) and other hazardous materials that may be encountered during removal of the former Museum of History and Industry (MOHAI) building that will require abatement or other special handling. During demolition and abatement work the Contractor identified several areas containing additional ACM and hazardous material that were not identified in the information provided to bidders and could not have been identified during the pre-bid walk through during the bid preparation phase.

Although the Contract includes Bid Item #8 "Removing Former MOHAI Building" and Bid Item #36 "Removal and Disposal of Asbestos Material", both Lump Sum items, the changes described below cannot be interpreted as part of these bid items or the specifications contained in the Contract and therefore this change order must be issued.

This change order provides an equitable adjustment to the Contractor for this added work and also compensates the Contractor and its subcontractors for impacts and inefficiencies associated with the extended duration of the MOHAI abatement and demolition work. The price also includes some value assigned to schedule risk assumed by the contractor resulting from the delayed completion of the MOHAI demolition.

Evolution of the Change

Background

MOHAI is a two-story reinforced concrete structure, with combined floor areas of approximately 61,000 SF. The building was constructed in four stages beginning in 1952. The various sections of the structure contain a substantial amount of ACM as well as other hazardous materials including mercury, PCB and CFC contaminated equipment. The building has been remodeled several times over the years.

This multi stage construction resulted in multilevel ceilings, finished walls hidden behind other walls and blocked off areas between rooms that were not detected or accessible prior to demolition. Due to these conditions several areas that contained additional ACM and hazardous material were discovered after bid day and are included in this change order.

Prior to this Contract, WSDOT started abatement work on the building using the Washington State Department of Corrections (DOC) labor forces. This approach was later abandoned and large piles of demolition materials were left behind in various locations. In addition, since the building was closed in June 2012, vagrants had occupied the building and there has been some damage due to theft and vandalism. Both of these situations added to the complexity of ACM abatement increasing areas and quantities that required special handling.

A "Good Faith" Asbestos and Hazardous Materials Survey Report of the former MOHAI building was developed by WSDOT HazMat Specialists in the spring of 2014 and was provided as a reference document during the bid process. This document provided information on what was tested and included types of materials, some quantities and other information. In addition, the State conducted a walkthrough of the building with the bidders providing them with an opportunity to assess the condition of the building.

Additional Hazardous Materials

It became apparent shortly after demolition and asbestos abatement began that there were additional locations and quantities of ACM and other hazardous material in the building beyond what was identified in the "Good Faith" survey. Between 10/16/2014 and 12/31/2014 the Contractor submitted 4 separate claims of differing site conditions regarding ACM and other hazardous materials in the building. The following is a summary level recap of the primary additional hazardous materials encountered.

1. Fireproofing – Additional asbestos contaminated fireproofing not identified in the hazardous material survey was encountered hidden between walls, behind false walls, above suspended ceilings and on the floor under carpet.
2. Contaminated Debris – Large piles of debris remained throughout the building from the previous DOC demolition work noted above. The Contractor tested the debris and found that it was contaminated with asbestos. The debris piles were not identified as containing ACM in the good faith survey.
3. Roofing – Roughly 14,000 SF of the roof contained layers of ACM not identified in the asbestos survey. A new sample by the contractor revealed that there was an ACM containing layer of roofing hidden under three subsequent layers of roofing over one of the building additions.
4. Skim Coat & Caulking – Skim coat under painted interior and exterior surfaces and caulking around exterior windows were found to contain ACM. These materials and locations were not identified in the asbestos survey.
5. Cement Asbestos Board – Roughly 1,000 SF of cement asbestos board was discovered on the interior and exterior of the building that was not identified in the asbestos survey.
6. Vermiculite – Vermiculite was identified within two CMU exterior walls in the hazardous material survey. However it was identified as non-ACM because the amount of asbestos in the material was believed to be less than 1%. Further testing by the contractor could not confirm that the vermiculite was non ACM, thus requiring the presumption of ACM and causing added disposal costs.
7. PCB Ballasts & Mercury Light tubes – Some PCB ballasts and mercury light fixtures were identified in the initial hazardous material survey. However, it was subsequently discovered that the multilayered ceiling concealed additional fixtures that were not identified in the good faith survey and could not have been easily identified during the pre-bid walk through.

Correspondence and Meetings between WSDOT/Contractor/Subs

1. On 10/16/14, the Contractor submitted FWI SL0031 Notice of Differing Site Condition providing notice of additional areas of ACM or hazardous material discovered during the preliminary demolition work in the former MOHAI building, internally referred to as Differing Site Condition (DSC) #1. The primary differences between the Contract and actual conditions were due to discovering ACM and hazardous materials in areas that were concealed and not identified in the Contract and could not be discovered until demolition activities began causing these materials to be exposed. On 10/22/14, WSDOT responded to FWI with letter no. 0023 stating that information provided does not justify a determination of differing site conditions primarily because the types of materials discovered were identified in the Contract and are part of lump sum bid items. FWI protested WSDOT's determination in SL 00040 on 10/27/14. FWI provided supplemental information in SL 00051 on 11/7/14. WSDOT maintained its position in letter no. 0032 on 11/21/14

- that the work contained in this protest is within the scope of work in the Contract. WSDOT subsequently conducted additional investigations and testing and through letter no. 00037 on 12/2/14 notified FWI that WSDOT may consider some areas a DSC and asked FWI to provide a cost proposal for the work. On 12/24/14 WSDOT issued letter no. 0047 that informed FWI that WSDOT evaluated the supplemental information and determined that DSC #1 was valid and asked for a proposal.
2. On 11/7/14 FWI submitted FWI SL 00052, Notice of Differing Site Condition providing notice of ACM containing vermiculite being discovered inside the block (CMU) walls and ACM containing material in the roofing material, both of which had been identified in the Contract as not being ACM material. WSDOT subsequently conducted additional investigations and testing and through letter no. 00037 on 12/2/14 notified FWI that roofing material was found to have ACM and asked FWI to provide a cost proposal for the work.
 3. On 12/9/14 FWI submitted FWI SL 00060 identifying additional areas of ACM containing materials including debris piles left behind by the previous partial abatement work and under flooring material. Neither area was identified in the Contract as containing ACM. FWI SL 00061 submitted on 12/9/14 provided notice of the ACM material on the flooring.
 4. On 1/6/15 WSDOT met with FWI, Dickson and Sound Environmental Solutions to identify next steps on all MOHAI issues
 5. On 1/7/15 a walk-through of the entire MOHAI building was conducted and included WSDOT Project, HQ and Environmental staff, along with the abatement representatives. The progress was reviewed as well as reviewing the locations and type of work that was outside the scope of the Contract.
 6. On 1/12/15 WSDOT sent FWI letter no. 0051 notifying them that after further review of the supplemental information and building walk-through WSDOT had determined that the MOHAI issues and protests were valid. FWI was given notice to proceed with the remaining work.

In summary, FWI provided timely notice to WSDOT of the changed conditions and though initially rejected by WSDOT, after additional review of the supplemental information, input from the WSDOT Environmental staff, and the building walk-through WSDOT re-evaluated its initial determination and acknowledged that a change order was required. The driving factors in WSDOT's final determination were based on:

1. The Contract did not identify what or how much ACM or Hazardous Materials would be encountered in concealed areas. This could not be determined until the Contractor began demolition of walls and ceilings and exposed the unknown materials.
2. The Contract did not identify all areas where ACM or Hazardous Materials would be encountered. Testing by the Contractor identified additional areas, such as the debris piles, that contained ACM.
3. The Contract did not provide accurate testing results of all areas such as for the roofing material that was originally identified as not containing ACM but later tests indicated ACM materials.
4. The Contract referenced As-Built documents that bidders could use to assist in the development of their bids; however WSDOT later discovered these drawings were old design/construction versions of various original and

alteration contracts, which were not complete and did not depict what materials were in the existing building; therefore could not be relied upon by the Contractor to assist in determining types of materials or quantities.

The added abatement work extended the overall duration of the abatement contract activity and delayed the start of the demolition activity, causing further impacts to the other work activities that were using the same general area. As the WSDOT schedule analysis shows there was 8 weeks of delay due to the added work. FWI was asked to provide a proposal that included the cost of schedule recovery and settled any related issues.

Negotiations

On 1/27/2015 (FW SL0076) the Contractor submitted their proposal for the additional ACM abatement and other hazardous material removal at MOHAI along with schedule recovery for that work. Their proposal included compensation for the subcontractor for the additional asbestos abatement work, additional hazardous material removal and schedule recovery for the added removal and demolition work. Their proposal also included markups for FWI along with additional compensation for material storage and transportation. The Contractor has planned to use the footprint of the MOHAI building as a lay down area for materials and equipment once the building is demolished. Until the building is razed, the Contractor will need to rent off-site storage space for materials and equipment. In total, the original request from the Contractor was \$1,312,619 for the added work described above.

On February 9, 2015 WSDOT met with the Contractor to begin negotiations in attempts to settle this issue; however due to insufficient information from the Contractor to support its requested amount agreement was not reached. WSDOT sent WDOT SL0061 on February 9, 2015 to the Contractor requesting additional information.

On February 26, 2015 the Contractor provided its revised proposal. That proposal included additional supporting documentation and explanations of the items from their initial proposal. The new proposal amount was \$1,365,644.

After a review of the new information WSDOT and the Contractor agreed to settlement of the entire issue for \$1,300,000 including no additional time added to the Contract and no reservation of rights for future considerations.

Payment

In accordance with Standard Specifications 1-04.4, the Contractor is entitled to compensation for the additional cost of the labor, material and equipment as a result of this change. As described in this memo, the Contractor is also entitled to additional compensation for schedule recovery to complete the additional work without affecting the overall project completion schedule. See attachment C. The total negotiated lump-sum cost of this change order is \$1,300,000. The Engineer's Independent Estimate supports the settlement amount. See attachment B.

Time

Contract time is not affected by this change order.

The Contractor and WSDOT agreed to recover time lost during the abatement work, which avoided impacts to the critical path and therefore results in no additional time required for completion of the project. The cost of schedule recovery is included in this change order.

DBE Statement

The Contractor has already hired a non-DBE firm to perform asbestos and other hazardous material removal work on the Project. The subcontractor has been removing additional asbestos as it is encountered in the field. It would be impractical for the Contractor to hire a second DBE firm to perform the additional asbestos work alongside the current subcontractor.

Attachments

CCIS Change Order Document (4 pages)

Change Order Checklist (2 pages)

Change Approval Emails (Attachment A)

WSDOT Cost Estimate (Attachment B)

WSDOT Schedule Analysis (Attachment C)

File: CO Files: CO13, ProjectWise: 16.05.013

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

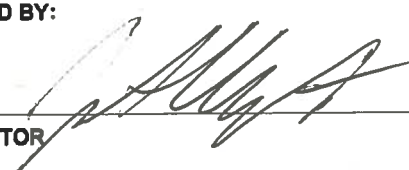
DATE: 03/12/15
Page 1 of 4

CONTRACT NO: 008625 FEDERAL AID NO: BR-NHPP-0520 (053)
CONTRACT TITLE: SR 520, MONTLAKE TO EVERGREEN PT. BRIDGE WEST APPR
CHANGE ORDER NO: 13 MOHAI ABATEMENT CHANGES

PRIME CONTRACTOR: SW0178155 FLATIRON WEST, INC
18702 NORTH CREEK PARKWAY #202
BOTHELL WA 98011-8019


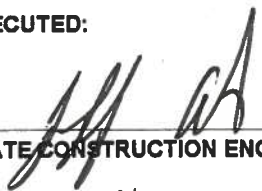

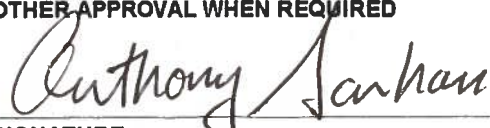
Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications

Change proposed by Contractor

ENDORSED BY:  _____ CONTRACTOR 3/19/15 _____ DATE	SURETY CONSENT: _____ ATTORNEY IN FACT _____ DATE
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ORIGINAL CONTRACT AMOUNT: 199,537,370.50
CURRENT CONTRACT AMOUNT: 199,508,801.50
ESTIMATED NET CHANGE THIS ORDER: 1,300,000.00
ESTIMATED CONTRACT TOTAL AFTER CHANGE: 200,808,801.50

Approval Required: Region Olympia Service Center Local Agency

<input checked="" type="checkbox"/> APPROVAL RECOMMENDED <input type="checkbox"/> EXECUTED  PROJECT ENGINEER 3.20.15 DATE	EXECUTED:  STATE CONSTRUCTION ENGINEER 4-24-15 DATE
<input checked="" type="checkbox"/> APPROVAL RECOMMENDED <input type="checkbox"/> EXECUTED REGIONAL ADMIN:  BY: 4/18/15 DATE	OTHER APPROVAL WHEN REQUIRED  SIGNATURE DATE 4/21/15 FHWA REPRESENTING

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 03/12/15
Page 2 of 4

CONTRACT NO: 008625

CHANGE ORDER NO: 13

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 agency initiated change order provides an equitable adjustment to the contractor for added work associated with the removal, handling and disposal of additional hazardous items and Asbestos Contaminated Material (ACM) identified during removal of the former Museum of History and Industry (MOHAI) building that were not previously identified in the Contract. This change order requires the Contractor to recover schedule and eliminate any impacts or delays to the schedule, physical completion, or final channelization configuration dates due to work or delays in the removal of the former MOHAI building.

General Requirements:

Contract Provisions, Volume 1 of 2, Special Provisions, Section 2-02.1
Description, Subsection: Removal of MOHAI Building is modified as follows:

Delete:

"This work shall consist of removing, handling, and disposing of asbestos in the following areas:"

Replace with:

"This work shall consist of removing, handling, and disposing of any and all asbestos containing materials (ACM) located in the former MOHAI building including but not limited to following areas:"

Supplement with the following:

"In addition, this work shall consist of removing, handling and disposing of any and all suspected hazardous building components including but not limited to those detailed in Section 2-02.3 Construction Requirements, Subsection Removal of Former MOHAI Building, Suspected Hazardous Building Components."

Construction Requirements:

Contract Provisions, Volume 1 of 2, Special Provisions, Section 2-02.3
Construction Requirements, Subsection Asbestos Handling and Disposal is supplemented with the following:

"The Contractor shall remove, handle and dispose of any and all ACM discovered during removal of the former MOHAI building, to include but not limited to those items detailed in the "Good Faith" Asbestos and Hazardous Material Survey Report.

Contract Provisions, Volume 1 of 2, Special Provisions, Section 2-02.3

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 03/12/15
Page 3 of 4

CONTRACT NO: 008625

CHANGE ORDER NO: 13

Construction Requirements, Subsection Removal of Former MOHAI Building, Suspected Hazardous Building Components is modified as follows:

Delete:

"In addition to the asbestos detailed in the "Good Faith Survey," the following potentially hazardous items were identified:"

Replace with:

"The Contractor shall remove, handle and dispose of any and all suspected hazardous building components including but not limited to those detailed in the "Good Faith" Asbestos and Hazardous Material Survey Report, which includes the following items:"

Contract Provisions, Volume 1 of 2, Special Provisions, Section 2-02.3 Construction Requirements, Subsection Removal of Former MOHAI Building is supplemented with the following:

"SCHEDULE RECOVERY

The Contractor shall recover schedule as necessary to eliminate any impacts or delays to the schedule, physical completion, or final channelization configuration dates due to work or delays in the removal of the former MOHAI building."

Measurement and Payment:

The new pay item "CO#13 MOHAI Abatement Changes" in the Lump Sum amount of One Million Three Hundred Thousand Dollars \$1,300,000.00 shall be full and final compensation and settlement for all direct, indirect, overhead and other costs, including, but not limited to all impact or disruption costs of any nature, including those related to schedule impact or schedule recovery, realized by the Contractor and/or its subcontractors, consultants, and suppliers as a result of removal, handling and disposal of additional hazardous items and ACM identified during the removal of the former MOHAI building.

Time:

Contract time will not be affected by this change order.

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 03/12/15
Page 4 of 4

CONTRACT NO: 008625				CHANGE ORDER NO: 13			
ITEM NO	GROUP NO	STD ITEM	ITEM DESCRIPTION	UNIT MEASURE	UNIT PRICE	EST QTY CHANGE	EST AMT CHANGE

1005	01		CO#13 MOHAI ABATEMENT CHANGES	L.S.	1,300,000.00	1.00	1,300,000.00
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1,300,000.00

CHANGE ORDER-CHECKLIST

Cont. #: 8625	Cont. Title: SR 520 West Approach Bridge North (WABN)	If yes, State Construction Office Approval Required.
C.O. #: 13	C.O. Title: MOHA Abatement Changes	
I. Executed by the State Construction Office 1. Cost or credit equal to or exceeding \$200,000.*1 2. Change in the contract documents beyond the scope, intent or termini of the original contract.*2 3. Any proposed revision or deletion of work that affects the condition of award requirements. (Must be coded "CO" in CCIS) 4. Change in contract time greater than 30 working days, or a change in contract time not related to any change order.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	X X X X
II. Executed by the Region 5. Cost or credit greater than \$100,000 but less than \$200,000. *1 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 <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
III. Executed by the Project Engineer 7. Determination of impacts and/or overhead. 8. Specification change involving Headquarters generated specification. <i>(Includes Region generated specification requiring State Construction Office Approval)</i> 9. Specification change involving Region generated specifications. 10. Material or product substitution. 11. Structural design change in the roadway section. <i>(Requires State Materials Lab approval)</i> 12. Determination of changed condition. <i>(Section 1-04.7 of the Standard Specifications)</i> 13. Settlement of a claim. <i>(Section 1-09.11(2) of the Standard Specifications)</i> 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> 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 <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	X X X X X X X

Approvals obtained: Project Engineer (Required): Brian Dobbins Date: 1/15/2015
 Region (Required if yes marked): Tom Horkan/Julie Meredith Date: 1/15/2015
 State Construction Office: Derek Case Date: 3/19/2015
 State Materials Lab: N/A Date: _____
 Other (Local Agency, FHWA, Surety, etc.): Anthony Sarhan Date: 3/30/2015

To be completed by the Project Engineer :

CO Reason(s) (See "2008 Codes and Definitions" on HQ Construction SharePoint): AC-04, OC, AW PI OC OP

Change Order Prepared By: Brian Grieve Date: 1/12/2015

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: Jon Danks Date: April 1, 2015

*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.

CHANGE ORDER-CHECKLIST

SR 520 Corridor Program: Change Order Page 2 - Checklist Supplement

Cont. #:
 C.O. #:

To be completed by the Project Engineer:

Does this change order require coordination with other SR 520 Projects / Program Areas? Yes No

Coordination has taken place with:

Contract Project (identify your project):

Pontoon	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>
Pontoon Mitigation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>
Pontoon Moorage	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>
Eastside HOV	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>
Evans Creek	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>
FB&L	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>
WCB	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>
WABN	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>

Identified risk has been entered into the SR 520 Risk Management Database: Yes No N/A

Risk ID Number (if pending, identify as Pending):

Project Risk ID No.:
 Project Risk ID No.:
 Project Risk ID No.:

To be coordinated with Program Finance, Budget and Controls Group:

Program Funding Concurrence? Yes No Funding Concurrence Obtained on:

Is Sales Tax Included in CO Cost? Yes No Is sales tax deferred? Yes No

Max Payment Curve Changes discussed with: Date:

Third Party Agreements discussed with: Date:

Coordination with Others:

Design / Technical Lead: Name: Date:

Maintenance: Name: Date:

Environmental Commitments: Name: Date: