



update the existing east end submittal activities, although these East End Submittals are reported by ABF to be the controlling operation. It is unacceptable to claim the controlling operation is OBG East End Submittals and then fail to update and status these activities in the schedule. It is the Department's understanding that ABF will attempt to clean-up the East End Submittals for the June update.

**A3. Voyage Logic:**

The following voyage issues have been discussed at various meetings. The Department understands that these issues will be addressed in the May schedule submissions, with the exception of Item d which may have to wait until the June 2009 schedule submission.

- a. The schedule currently shows that OBG Lift 12 segments will be included in both Voyages 6 and 7. Correct the voyage logic for Lift 12.
- b. The schedule shows that OBG Lift 13 segments are currently included in Voyage 7 when they are supposed to be on Voyage 7.5. Correct voyage logic for Lift 13.
- c. The setting of Crossbeams 18 and 19 (BDCON001820 and BDCON001840, respectively) is currently tied to the unloading of both Voyages 7 (PGFABDA0210) and 7.5. Remove incorrect logic ties between the setting of crossbeams and the voyages.
- d. There were three ships being used between Shipment 1 and Shipments 3-6 (Shipment 2 is the SLOB) and then one of the shipments was taken out of rotation after Shipment 6 (Voyage 2). Why has one of the ships been taken out of rotation when there are five voyages waiting to depart before the previous ship has yet to return? The table below shows that departure dates for Voyages 2, 5, 7, and 8 have been delayed two weeks to one month. It was noted in a schedule meeting that it is not ABF's intention to have completed fabricated components at ZPMC waiting for a ship. Review and revise voyage logic accordingly.

March 2009 R1	Waiting ~1 month		Waiting ~1 month			Waiting ~1 month		Waiting ~2 wks	
	V1 (ZPMC Ship #4)	V2 (ZPMC Ship #6)	V3 (ZPMC Ship #7)	V4 (ZPMC Ship #8)	V5 (ZPMC Ship #9)	V6 (ZPMC Ship #10)	V7 (ZPMC Ship #11)	V7.5 (ZPMC Ship #11.5)	V8 (ZPMC Ship #12)
Cargo	OBG 1-4 E/W	OBG 5/6 E/W	Tower L1	OBG 7/8 E/W	OBG 9/10 Tower L2	OBG 11 Tower L3	OBG 12 Tower L4/5	OBG 13/14	OBG Misc Tower Head Skirt, misc
Departure	19-Jul-09	28-Oct-09	24-Dec-09	12-Dec-09	23-Apr-10	4-Jul-10	17-Aug-10	10-Dec-10	14-Dec-10
OBG Ready	16-Jun-09	23-Jul-09	N/A	1-Sep-09	21-Sep-09	7-May-10	9-May-10	29-Jun-10	17-Jul-10
Tower Ready	N/A	N/A	14-Dec-09	N/A	17-Mar-10	17-Jun-10	20-Jul-10	N/A	15-Dec-09
Other Components (counterweights, suspenders, etc.)	7/9/2009 Counterweight	10/5/09 Susp Brackets	9/16/2009 Cradles	12/1/2009 Counterweight	2/1/2010 Counterweight	6/23/2010 Susp Brackets	6/23/2010 Counterweight	8/26/10 Counterweight	
Prepare Vessel	4/10/09-5/6/09	10/5/09-10/18/09	7/2/09-7/14/09	10/19/09-11/5/09	3/26/10-4/12/10	3/13/10-3/30/10	7/24/10-8/6/10	10/4/10-10/15/10	11/16/10-12/2/10
Ship Returned	N/A	27-Sep-09	16-Feb-09	18-Oct-09	25-Mar-10	12-Mar-10	23-Jul-10	2-Oct-10	15-Nov-09
	Ship #1	Ship #2	Ship #3	Ship #1	Ship #3	Ship #1	Ship #3	Ship #1	Ship #3

Notes:  
\* Dates in red are the diving predecessor to Voyage departure.

- e. Ready to ship dates in the OBG Fabrication section of the schedule do not appear to include counterweights, suspender brackets, barriers, or bike path brackets though ZPMC is installing the suspender brackets and bike path brackets onto the segments before shipping. The schedule does not include activities for installing the suspender brackets and bike path brackets onto the segments at ZPMC; therefore, the "Ready to Ship" dates may be incorrect. Confirm and/or revise logic ties for Ready to Ship Dates and add activities for suspender bracket and bike path bracket installations.

- f. The table above shows that suspender brackets, cradles, or counterweights are the driving predecessors for loading Voyages 1, 3, 4, and 6. Explain if these activities in the main schedule are superseded by other activities in the fabrication schedule?
- g. Unloading of Voyage 2 (Unload and Perform Final Inspection OBG Lifts 5-6 - PGFABCA0055) should not be a predecessor to Setting of Crossbeam 2 (BDCON000390) and Setting of Crossbeam 3 (BDCON000400), because these crossbeams arrive on Voyage 1. Review and Revise accordingly.

**A4. Incomplete Logic:**

Submittal activities that were previously added to the schedule directly from PMIV without predecessor/successor logic or any regard for activities already included in the schedule remains an issue. ABF was willing to completely remove these activities since they are linked to downstream activities. Complete removal would have caused other activities to be lacking a predecessor; therefore, ABF has moved all these submittal activities to a separate schedule (submittals for linking) with logic ties to the contract schedule and will re-incorporate the activities into the contract schedule once the logic has been identified and verified. All activities in the schedule require proper predecessor and successor ties. Either remove the activities from the schedule that do not have proper predecessor and or successor ties or provide the proper logic ties. It is understood that ABF is working on adding the appropriate logic ties and that this may not be complete until the July schedule. In the interim, ABF should simply remove these "floating activities" from the schedule.

**A5. OBG Deck Erection Sequence:**

The Department has reviewed the logic in the schedule and verified that the schedule is not representative of ABF's current planning as presented in Submittals 762R1 and 871R0. ABF has stated for some time now that they are in the process of revising the OBG erection sequence and are close to being ready to incorporate the revised OBG erection schedule into the Contract schedule. The Department has requested to review the revised OBG erection logic, though to date we have not been permitted to do so. OBG erection is critical to cable erection and the project. Revise the OBG erection sequence to match the sequence presented in Submittals 762R1 and 871R0. It is the Department's understanding that this issue will be addressed in the June schedule submission.

**A6. Schedule Report:**

The schedule and level report submitted to the Department does not match the Primavera project files submitted. The report is for a project file called "ABF-COMB." The project file submitted is "ABF.U28.R1.090320," which was contained in the XER file "ABF.U28.R1.032009 FULL." As discussed on May 6, 2009, the Department has yet to receive the correct schedule report.

**CATEGORY B:**

**B1. Lift Assembly Logic:**

The addition of lift assembly logic has not been completed. The lift assembly logic was only added for Lifts 4, 6, 8, and 10. Add lift assembly logic that meets the requirements of Special Provision Section 10-1.59, "Steel Structures," for the remaining lifts.

**B2. East End Details:**

It is noted that redundant east end fabrication activities have been removed and that ABF is planning to expand the existing activities to the same level of detail as Lifts 1-11 in future updates. This is a necessary step prior to evaluating any changed conditions.

**B3. Bike Path Installation:**

The schedule currently shows that the Lift 13 East Bike Path is going to be installed before the East Anchorage OBG Fill-in Piece. This logic appears to be incorrect. Review and revise accordingly. If the bike path does have to be installed after the installation of the East Anchorage Fill-in Piece, project completion will likely be delayed, requiring additional mitigation measures.

**B4. Crossbeam 6 Erection:**

Confirm that the strand jacks can pick the T1 saddle and head after Crossbeam 6 is in place or use appropriate logic ties.

**B5. Activities with Duration Greater than 20 days**

There are 127 fabrication activities scheduled to begin within six months with durations greater than 20 days (See attachment [Greater\\_Than\\_20\\_Days.pdf](#)). These activities need to be detailed so that better projected schedule dates are provided and improve the reliability of the schedule. It is suggested that ABF choose a block or grouping of activities on a monthly basis which need to be broken down and make the necessary adjustments, and/or discuss this list at our weekly meetings and agree which items need further breakdown.

**B6. Combining Schedule Files:**

The Department appreciates ABF efforts to combine the three schedule files. As discussed, place the OBG and T1 Fabrication activities into the approved WBS structure. This will simplify the project organization and streamline the WBS coding.

**B7. Contract Schedule and Four Week Rolling Schedule (4WRS):**

As noted in numerous weekly schedule meetings, the activities in the OBG and T1 Tower sections of the 4WRS do not match the activities in the contract schedule. It is noted that the Department and ABF have agreed to an acceptable layout and amount of detail that can be extracted from the contract schedule and used for the OBG and T1 fabrication sections of the 4WRS. ABF has stated that this layout will be used in the 4WRS in the near future.

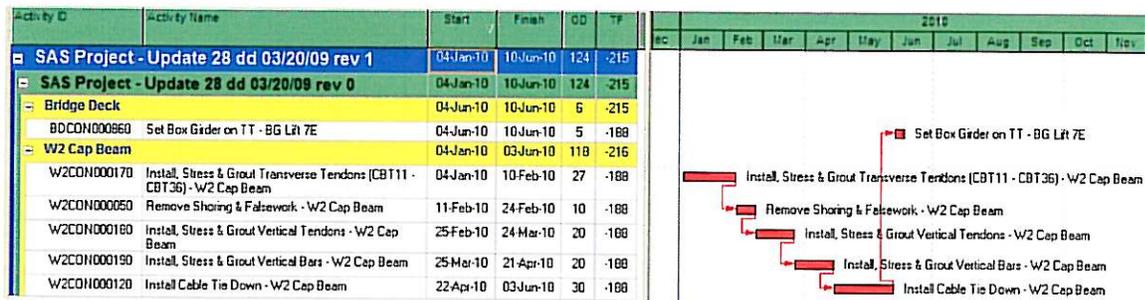
**B8. Activity Coding:**

Many submittal and package codes are missing creating problems during sorting. Provide the missing codes.

**CATEGORY C:**

**C1. W2 Construction Logic:**

ABF was planning to start installing, stressing, and grouting transverse tendons and vertical bars in April 2009, but the schedule shows a start of January 2010? Review the planned work and reflect the plan in the schedule. Installation of the tie-down cables, which is a successor to installing, stressing, and grouting vertical bars, is the driving predecessor to setting OBG Lift 7E. Review the logic for W2CON000170 and W2CON000190.



**C2. Calendars:**

- a. The fabrication summary activity calendars are not consistent with the overall fabrication calendars. Review and revise accordingly.
- b. The following activities are on a 6D-CH or 5D-SH calendar when all other non-summary activities in the OBG Fabrication section of the schedule are on a 7D-CH calendar. Review and Revise accordingly.

Activity ID	Activity Name	Calendar
L12WGSHO025	Load Lift 12 for Shipment	6D-CH
L13WGSHO055	Load Lift 13 for Shipment	6D-CH
L14WGSHO085	Load Lift 14 for Shipment	6D-CH
Q0LCFABCAC05	Fab - Crossbeam Access Platforms/Ladders/Stairs	5D-SH
Q0LCFABCSP40	Fab - Crossbeam Service Platform	5D-SH
Q0LCSUBCBAC05	Segment-assembling - Crossbeam Access Platforms/Ladders/Stairs	5D-SH

- c. The following activities are on a 5D-CH calendar when all other non-summary activities in the T1 Tower Fabrication section of the schedule are on a 7D or 7D-CH calendar. Review and revise accordingly.

Activity ID	Activity Name	Calendar
23MLAS127	Lift 2 - Vertical Assembly	5D-SH
34MLAS207	Lift 3 - Vertical Assembly	5D-SH
45MLAS268	Lift 4 - Vertical Assembly	5D-SH

**C3. Narrative 1.6.1 Description of critical path:**

ABF has forecasted the East End Submittal process with “filler” activities and has not yet updated the existing shop drawing activities. As previously stated, it is unacceptable to claim the reported critical path activities are being delayed and fail to update these activities in the schedule. In addition, even with the OBG forecasts included in the schedule, analysis indicates that if projections were made to the T1 Tower, it would be currently critical and controlling. See the attached file called Tower T1 – longest path. Both the T1 Tower and OBG fabrication are significantly behind schedule and critical to the project success.

**C4. Narrative 1.7.2.1 TIA #5:**

ABF claims that TIA #5 is planned to be submitted on March 20, 2009. This TIA has already been incorporated into the schedule without the Department’s approval. See State Letter 05.03.01-003860.

**C5. Narrative 4.2:**

OBG issues will be addressed separately.

**C6. Narrative 5.2.1.5 RFI-1512:**

Details for the access door hardware were delivered to ABF in the response to RFI 1512 on March 24, 2009. The changes are to be included in CCO 118.

**C7. Narrative 5.2.1.7 CCO 64 Tower Strut Façade and Cross Bracing:**

A complete Draft CCO package was delivered to ABF for pricing on September 18, 2008.

**C8. Narrative 5.2.1.8 Overtap Requirements:**

In cooperation with ABF, the Department has agreed to pay for the research involved in determining an appropriate overtap for the dacromet coated A490M bolts on the project. Subsequent to direction provided for the testing plan, ordering of materials and agreement on procedures, the ATP was issued for CCO 115 on April 9, 2009.

**C9. Narrative 5.2.1.9:**

CCO 118 includes the extension of these ladder cages and affects the cages for four ladders.

**C10. Narrative 5.2.1.10:**

The double diaphragms at 20 elevations include areas of tight access, but there has been no discussion of these areas being inaccessible for painting.

**C11. Narrative 6.2.1.3:**

The Department has located 750kg of S-Wire that ABF will use to perform initial design parameter testing of the proposed wrapping machine. The partial order of the S-Wire is scheduled to be delivered in May 2009.

**C12. Narrative 7.2.1.1:**

This issue was resolved in the response to RFI 1694R0, dated April 3, 2009, which required no further testing and provided direction as to how to proceed with machining.

The Department understands that ABF is working toward providing an acceptable schedule submission, and offers our assistance in the form of one-on-one consultations and/or workshops towards this effort.

Sincerely,



GARY PURSELL  
Resident Engineer

Attachment

cc: Don Ross, Bill Shedd  
file: 05.03.01, 26.05