

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 50.15**SOURCE INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001218**Date Inspected:** 01-Nov-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Jiangyin**Location:** Changxing Dao, Shanghai**Quality Control Contact:** Don Walton**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** OBG 6AW, Sub-Assemblies, OBG 7AE, Lift**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

OBG 6AW

Caltrans QA Lumley observed numerous runs and exposed Base Metal areas of previously coated surfaces at Panel Point 37 the lower connection assembly of the Chevron Beam exhibited "Rust Back" and also many localized areas along the lower section of the Floor Beam Diaphragm. Caltrans QA informed ZPMC QC Dong Fei Yao and physically showed him the condition of the Base Metal requiring repairs. ZPMC Personnel were in process of performing application of Interzinc 22 on adjacent internal surfaces. Caltrans QA then observed the removal of OBG 7AE from the adjacent paint shop and returned to observe that the Chevron Assembly had been undercoated by ZPMC personnel without addressing the non-compliant issue. Once again Caltrans QA contacted and ZPMC QC Dong Yao Fei to address the non-compliant work to which Dong Yao Fei just walked away. Caltrans QA Lumley then contacted ABF QA Manager Don Walton and informed him of the situation and lack of co-operation relative to ZPMC to which Mr. Walton stated the non-compliant area will be repaired in accordance with the Special Provisions via abrasive blasting to an SSPC SP-10 condition. This segment was then relocated to the adjacent paint shop to complete coating application from the abrasive blasting workshop.

Sub-Assemblies

Repairs to 200 +- Splice Plates were performed via abrasive blasting to Base Metal and an SSPC SP-10 condition to remove damaged/deteriorated previously applied undercoating and re-application of Interzinc 22 undercoat.

Repairs were resultant from Trial Assembly operations.

SOURCE INSPECTION REPORT

(Continued Page 2 of 2)

Lift 2 West

Cross Beam Bottom Plate exposed bolted connection assemblies and adjacent areas outside the grip of the bolts which were previously undercoated with Interzinc 22 were observed for application of Interfine 979 “mist” coat application. ZPMC personnel mixed Interfine 979 for mist coat application and when the shelf life was examined on the converter component can it was determined that ZPMC had utilized expired materials. International Protective Coatings Technical Service representative Zili Peng was notified and consulted and Mr. Peng rejected the mixed coating and forbid the application. ZPMC then retrieved another kit of Interfine 979 that was fit for use and applied the “mist” coat to the afore-mentioned areas.

OBG 6AW

ZPMC requested an Inspection of re-abrasive blasting of lower Chevron connection which was coated over visible “Rust Back” Base Metal and also abrasive blasted the segment support pedestal areas which were not abrasive blasted when in the blast shop. Base Metal surfaces were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied, Previously coated “Rust Back” surfaces were also attended to concurrently and also re-coated with Interzinc 22. Profile amplitude was 68,72,79um.

OBG 6CE

Base metal surfaces of the pedestal support areas were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied. This work was performed by ZPMC concurrent with Segment OBG 6AW within the painting workshop.

Sub-Assemblies

Base metal surfaces of approximately 653 pieces of Shim Plates were washed and de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting operations. These plates are very thin and deformation and warping may occur as a result of abrasive blasting operations. Shim Plate code GGL-MQ-1387.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

Summary of Conversations:

Caltrans QA Lumley informed ABF QA Don Walton of non-compliant areas of OBG 6AW which required removal of applied coating and re-blasting and re-application.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (858)699-9549, who represents the Office of Structural Materials for your project.

Inspected By:	Lumley,James	Quality Assurance Inspector
----------------------	--------------	-----------------------------

Reviewed By:	Carreon,Albert	QA Reviewer
---------------------	----------------	-------------
