

**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 #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001533**Date Inspected:** 09-Feb-2009**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), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**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 3AW, Miscellaneous metal**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 3AW**

Performed base metal inspection of interior ceiling "U" trough along with vertical floor beam areas with Caltrans Rodney Patterson performing VT concurrent with abrasive blast inspection. Arc strikes and gouges and weld slag were visible and marked with soap stone, as well as porosity in the welds which was marked with duct tape for future amendment and repairs. SP-10 was not achieved at this time and areas were also marked for re-blasting and repairs. ZPMC commenced repairs and grinding followed up by re-blasting affected areas.

**Miscellaneous metal,**

Base metal surfaces of 100+ splice plates were abrasive blasted to SP-10 and inspected jointly with ZPMC, ABF and Caltrans QA Lumley. Profiles were obtained by ZPMC QC and ambient conditions monitored and found to be within the parameters of the contract documents and the coating manufacturers product data sheets. Application of Interzinc 22 commenced utilizing airspray methods.

**OBG 3AW**

ZPMC requested another inspection of the base metal surfaces. Joint inspection was performed with ZPMC, ABF and Caltrans QA Lumley. Interior surfaces of base metal still exhibited soap stone marks from the previous inspection. Caltrans QA Lumley observed ZPMC personnel entering the segment with additional grinders and lights and began addressing the aforementioned base metal deficiencies.

---

---

# SOURCE INSPECTION REPORT

( Continued Page 2 of 2 )

---

---

OBG 3AW

Inspection was requested for base metal surfaces of the ceiling “U” trough stiffeners and vertical surfaces of the segment. Joint inspection was performed after ZPMC personnel had performed their own QC inspection. Caltrans QA Lumley observed that the grinding and repairs were attended to as well as SP-10 achieved, ZPMC and ABF QA/QC representatives obtained abrasive blast profiles and monitored ambient conditions. Profiles ranged between 58um -82um ambient conditions were within specified requirements and application of Interzinc 22 commenced. This was the fourth inspection of the base metal areas on this segment.

**Summary of Conversations:**

Production Manager Bhavin was informed by Caltrans QA Lumley that ZPMC QC personnel were not performing their respective assigned task and that merely abrasive blasting the soap stone from the base metal was unacceptable, grinding and base metal repairs that were previously identified and marked had not been amended and the work was non compliant with the contract documents. Production Manager Bhavin informed Caltrans QA Lumley that future inspections shall be performed by ZPMC prior to requesting Caltrans QA Inspection.

**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.

---

|                      |              |                             |
|----------------------|--------------|-----------------------------|
| <b>Inspected By:</b> | Lumley,James | Quality Assurance Inspector |
| <b>Reviewed By:</b>  | Miller,Mark  | QA Reviewer                 |

---