

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-001285**Date Inspected:** 29-Aug-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:** Office, Lift 2 West, Lift 3 East, Lift 4 West, M**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: Office Organize paperwork and project documentation and bi-weekly summary as requested by SMR.

**Cross Beam #2**

Repairs being performed on internal areas damaged from trial assembly operations. Delayed and rescheduled after Caltrans QA arrived at requested time.

**Miscellaneous Metal**

Base metal surfaces of 59 pieces of Tower Grating Brackets were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied. Also concurrent with this inspection 36 Splice Plates were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied.

**OBG 6BE**

Internal Dry Film Thickness (DFT) check being performed by ZPMC QC representatives, Caltrans QA Lumley checked upper sections of "U" rib stiffeners and ends and discovered localized "Mud Cracking" as well as seams which require caulking to be applied. Caltrans QA Lumley pointed these deficiencies to ZPMC QC "LiLi" and ZPMC Lead QC Don Yao Fei.

**Lift 4 West**

Interfine 979 "mist" coating was applied to the BP025 bottom panel bolted connection assembly and adjacent areas attached to FL-3 Floor Beams.

**Cross Beam #2**

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# SOURCE INSPECTION REPORT

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Second inspection requested for repairs to internal damaged areas. Surfaces were abrasive blasted to base metal and an SSPC SP-10 condition and Interzinc 22 applied. Areas inspected were the ceiling portion which had burned coating and damages to existing previously applied coating, as well as the floor area and side diaphragm plate in the center, minor touch up via re-blasting of missed areas was performed prior to application.

### Lift 3 West

Repairs were performed to the Top Plate external surfaces previously coated with Interzinc 22 which sustained damages from ZPMC operations. Surfaces were re-abrasive blasted to Base Metal and an SSPC SP-10 condition and Interzinc 22 re-applied. Profile amplitude was 80-82um.

Lift 2 West Repairs were performed to the Top Plate external surfaces previously coated with Interzinc 22 which sustained damages from ZPMC operations. Surfaces were re-abrasive blasted to Base Metal and an SSPC SP-10 condition and Interzinc 22 re-applied. Profile amplitude was 76-82um.

### Lift 4 West

Caltrans QA observed application of Interfine 979 to bolted connection of external bottom cross beam bottom plate. ZPMC personnel utilized Air-spray for application.

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 ZPMC QC Don Yao Fei of "Mudcracked " areas inside "U" rib stiffeners of OBG 6BE which requires abrasive blasting for repairs,also caulking required for crevice areas as well.

### 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.

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<b>Inspected By:</b>	Lumley,James	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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