

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-002370**Date Inspected:** 22-Nov-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:** Coating Inspection**Bridge No:** 34-0006**Component:** Office, OBG 7CE, OBG 7AW, Sub-Assemblies**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

Review and attend to project documentation.

OBG 7CE

Base metal surfaces of the internal "U" Rib Stiffeners and Upper Corner Units and FL-2-1 Beams and Upper Chevron Beam connection assemblies were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied. Profile amplitude was 69-82um and Chloride test values were 20/10 us/cm. Subsequently four (4) inspections were requested prior to compliance with the contract documents.

OBG 7AW

ZPMC personnel were in process of performing touch up and repairs to internal undercoated surfaces. Additional undercoat was being applied to low Dry Film Thickness (DFT) areas and organic zinc undercoat was being applied to the bolt hole. ZPMC requested a DFT verification Notice of Inspection which ABF QA Bill Oak rejected due to work was still in process.

Sub-Assembly

Base Metal surfaces of Cross Beam Bottom plate for OBG6CW FL-3 assembly was abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied. Profile amplitude was 67,70,78 um.

Lift 1 West

Internal Weld Seam and Longitudinal Diaphragm and "U" Rib Stiffener areas of FL-2-1 previously undercoated

SOURCE INSPECTION REPORT

(Continued Page 2 of 2)

surfaces were re-abrasive blasted to an SSPC SP-10 condition and Interzinc 22 re-applied.

Sub-Assemblies

Base Metal surfaces of 152 pieces of Splice Plates coded X38D (76 pieces) and X38B (76 Pieces) were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied. These were repairs from Trial Assembly operations which were damaged.

OBG 7AW

Base Metal surfaces of the contact areas on the external Segment Support surfaces were abrasive blasted to an SSPC SP-10 condition and the edges feathered and Interzinc 22 applied.

OBG 7CE

Internal Base Metal surfaces of the Bottom Plate and Side Plates and "T" Stiffener areas from Panel Points # 53&54 to the end Weld Seam were abrasive blasted for VT inspection and Caltrans QA Larry Viars mapped non compliant areas accordingly. Grinding of typical gouges and sharp edges of fins and burrs was performed by ZPMC personnel. Interzinc 22 was applied to base metal surfaces after achieving SSPC SP-10 condition. Four (4) inspections took place prior to application of undercoat.

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 inquired with ABF QA Bill Oak about affixing Dollies upon Weld Seam area on Lift 4 East for adhesion testing Interzinc 52 over SP-1/SP-2 prepared surfaces to ascertain if Interzinc 52 over minimally prepared area would achieve minimum value specified for Interzinc 22 adhesion test for comparison to expedite repairs of NDT damaged areas.

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
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Reviewed By:	Peterson,Art	QA Reviewer
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