

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-001267**Date Inspected:** 08-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:** Offices, Miscellaneous Metal, Lift 4 East, 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:

Lift 3 East

Internal surfaces previously repaired areas consisting of Bottom plate internal, FL-3 sides and stiffeners of Cross Beam attachment areas were abrasive blasted to base metal and an SSPC SP-10 condition and Interzinc 22 re-applied. Profile amplitude was 80-83um. This is the third time repairs have been performed in this area.

Cross Beam #3

Minor repairs via abrasive blasting to base metal and an SSPC SP-10 condition and feathering of "mist" coated edges of Interfine 979 at perimeter of blasted surface areas, Interzinc 22 was applied to approximately 1/3 square meter of surface area on the bottom plate only.

Lift 4 East

Sections of OBG 4AE within this lift, Chevron Girders were abrasive blasted to base metal and an SSPC SP-10 condition and Interzinc 22 re-applied. During in process application and after approximately 30 minutes of dry time, dry film thickness (DFT) readings were taken by Caltrans QA Lumley and it was discovered that the surfaces were well below minimum requirement for Inorganic Zinc Primer, and base metal was also observed. Caltrans QA Lumley informed ZPMC QC and ABF QA representatives to pay attention to application processes to expedite painting process and aid in elimination of re-work. A follow up inspection also occurred on the upper section of re-welded areas of the FL-2 Beam along the longitudinal stiffener and low dry film thickness (DFT) was once again observed. ZPMC personnel removed dry-spray on this area via sanding and an additional application of

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Interzinc 22 was also applied to this area within the time allotted by the manufacturers product data sheets.

Miscellaneous Metal

Base metal surfaces of approximately 284 pieces of miscellaneous metal for tower assemblies were de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting operations.

Caltrans Office

Consolidate and attend to project documentation and attend to Inspection reporting.

ABF Paint Office

Reviewed and signed ZPMC Quality Control reports and Notices of Inspection and associated paperwork.

Miscellaneous Metal

Base metal surfaces of 900 +- pieces of Splice Plates and Channel Iron and Shim Plates were de-greased in accordance with SSPC SP-10 in preparation of abrasive blasting operations.

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

Summary of Conversations:

Caltrans QA Lumley informed QA/QC representatives of ABF & ZPMC that re-work and extra repairs could be minimized by taking a pro-active approach to inspections and assisting applicators in performing the work properly the first time simply by taking dry film thickness readings immediately after Interzinc 22 has dried to touch to ascertain compliance and expedite repairs if needed.

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
