

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-002365**Date Inspected:** 16-Dec-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, Sub-Assemblies, Lift 2 West, Lift 1 W**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

Requested to explain in detail some of the parameters of the coating processes and areas of application to Caltrans Engineer Gary Thomas. Topics were types of coatings utilized and application areas permitted for air-spray and airless spray application.

Lift 2 West

ZPMC personnel setup and utilize dehumidification apparatus and contained the areas of the West Side Plate for Top coat application of Interfine 979.

Lift 1 West

Final Top coat application applied to external surfaces of the "F" Side Plate, Bottom Plate and Side Plates including affixed Traveler Rail Brackets. Installation and drilling of holes in the Bottom Plate is also being conducted for the Wind Vortex Plates and masked to prevent overspray damages to the internal base metal surfaces of the bolt holes.

Lift 1 East

ZPMC in process of removing overspray damages from Faying surfaces on the Top Plate area where the Steel Barrier is to be installed. This is being performed using solvent GTA-803 and scrubbing with scotch pads, ZPMC failed to protect these surfaces from damages of overspray when application of Interfine 979 was being performed. Areas where the overspray damages were too heavy to remove manually and mechanical rotary abrasive disc was

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utilized and Interzinc 22 undercoat re-applied. Also installation of internal bracing for sea transport still ongoing and additional damages are being incurred to the undercoated surfaces which will require touch up and repairs. Also the surfaces to be embedded in concrete on the "F" Plate were re-coated approximately 90% of the surface area with Intercure 200HS.

Lift 4 East

Top coat Interfine 979 was applied to the Transverse weld seam NDT areas on the West Side Plate and adjacent to the FL-3 Beam to amend repairs.

Lift 2 East

Internal undercoated surfaces are in process of touch up and repairs to damaged areas of previously undercoated surfaces. Interzinc 52 application to edges and over-blast areas and to internal of bolt holes. This was a joint inspection performed with Caltrans, ABF, and ZPMC Paint Manager Mr. Jiang who directed personnel and expedited repair work.

Sub-Assemblies

Testing of undercoated areas on Suspender Brackets SB16W AND SB26W for cure and chlorides was performed and all tests were in general compliance with the contract documents and "Mist" coat of Interfine 979 applied after the Faying surfaces were masked off to prevent over-spray damage.

Sub-Assemblies

Base Metal surfaces of 850 pieces of Splice Plates, Cover Plates for Lifting holes and Drip Edge components were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 undercoat applied.

Cross Beams 1, 2 & 3

Minor touch ups were performed once again after localized damages were incurred. Also the terminations on both sides of the Cross Beams where they will be attached to the corresponding lifts when erected were coated with Interzinc 52 undercoat to prevent "Rust Staining" from occurring during transport.

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:

No relevant conversations on this date..

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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