

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-002435**Date Inspected:** 28-Mar-2010**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:** Don Walton**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 5 East & West, I**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 6 West

ZPMC requested an Internal undercoated surface "Final" inspection for general compliance with the contract documents. Surfaces inspected from Panel Points 37-42 Bottom and Side Plate "T" Stiffeners and Upper Corner Unit Assemblies were in general compliance with the contract documents, localized areas of high Dry Film Thickness (DFT) were observed and also undercoated surfaces exhibited dirt and debris and staining from previously wet spent abrasive contact. Internal Final of these locations were visually viewed by Caltrans QA Baskar.

Lift 5 East

ZPMC requested a "Final" inspection of the Internal Cross Beam Termination/FL-3 areas, surfaces exhibited localized areas of low DFT and ZPMC amended by the application of additional undercoating to build to specified DFT to the required parameters, after repairs were completed the areas were in general compliance with the contract documents.

Lift 6 East & West

Internal undercoated surfaces of the Cross Beam Terminations/FL-3 were requested for a "Final" inspection. Areas which exhibited Low DFT's were amended with the application of additional undercoating to build the DFT to the parameters specified, after repairs were performed the areas were in general compliance with the contract documents.

SOURCE INSPECTION REPORT

(Continued Page 2 of 3)

Lift 6 East

ZPMC requested a “Final” inspection of the Top Plate undercoated surfaces, subsequent inspection revealed that only a partial inspection could be performed as access to the entire surface was limited due to the placement of Lift 6 West upon Lift 6 East, it was observed that the Non-Skid coating had not been applied and also the rain diverter along the west side required repairs as the surfaces exhibited holidays and rust, ZPMC performed SSPC SP-2 to these locations and applied Interzinc 52 to the affected areas: this work was noted and additionally added to the Engineers Punch-list for remediation and amendment after shipment to America. Areas that were accessible were repaired with Interzinc 22 undercoat.

Sub-Assemblies

Base Metal surfaces of 16 assorted channel iron were washed and de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting.

Lift 6 West

ZPMC personnel applied Interfine 979 Finish coating to the affixed Suspender Brackets on the West side of the lift. Suspender Brackets codes as follows: SB38W, SB40W, SB42W, SB44W, SB46W also concurrent with this work the affixed Traveler Rail Brackets were Finish coated with Interfine 979 via brush application. No Wet Film Gages were utilized by the applicators during in process application as observed by Caltrans QA Lumley and the ship is scheduled to depart today thus no DFT's can be verified.

Sub-Assemblies

Previously abrasive blasted Handrails and ancillary items were Galvanized at the galvanizing facility and inspected by ABF QA personnel prior to the dipping process, Caltrans QA Lumley unavailable for inspection as subsequent delivery of components aboard transport ship #17 took priority.

Lifts 5 East & West

ZPMC requested a “Final inspection of undercoated surfaces of the Top Plate, Lift 5 East access is limited to approximately 40-50% of surface area as Lift 5 West placement atop Lift 5 East makes visual inspection impossible. Lift 5 West Top Plate exhibited minor damages of damaged coating relative to impact and abrasion from Sea Fasteners and equipment relocation and minor touch up performed using Interzinc 22 and Interzinc 52 for repairs, also grease and oil deposits were visible on the applied coatings as a result of installation of cable tethers traversing the lifts from the East to West sides of the lifts.

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Lift 6 East

Cross Beam Bottom Plates External Bolted assemblies which were accessible outside the areas of the Sea Fastening devices were re-coated with Interfine 979 Finish coat after scarification and cleaning operations were performed, these areas for both Cross Beams were repaired as a result of non-uniform appearance and low DFT was observed, ZPMC personnel masked off the adjacent areas outside the bolted assemblies and applied additional Finish coating via conventional or air-spray methods. Areas which were in intimate and direct contact with the Sea Fasteners were not coated as no access was available and these locations were added to the Engineers Punch-list.

OBG 9AE

Internal and external base metal surfaces were washed and de-greased in accordance with SSPC SP-1 in

SOURCE INSPECTION REPORT

(Continued Page 3 of 3)

preparation of abrasive blasting operations.

Office

Review and sign project documentation also assist and generate punch-list items and outstanding works list with ABF QA personnel.

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
Reviewed By:	Peterson,Art	QA Reviewer
