

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-001333**Date Inspected:** 15-Jun-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1200**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2359**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:** South Tower Lift #1, OBG 4BE/3AE, Miscell**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: Miscellaneous Metal

Base metal surfaces of 550+- splice plates, "H" splices, angle iron, channel iron and diagonal box beams were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied. Profile amplitude was 72-77um. Note: approximately 35% of the angle iron during this inspection require re-blasting. ZPMC perform repairs as needed. Office

Review and sign backlog of ZPMC QC reports.

South Tower Lift#1

Base metal surfaces of the interior from 18M-38M were inspected two times prior to acceptance. Base metal surfaces were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied via air-spray. Profile amplitude was 65-78um.

Cross Beam

Base metal surfaces of the bottom plate were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied, also previously rejected items of miscellaneous metal were amended and also coated with Interzinc 22.

Miscellaneous Metal

Base metal surfaces of 500 pieces of flat stock were degreased meeting the requirements of SSPC SP-1 in preparation of abrasive blast operations.

Bikeway Brackets

SOURCE INSPECTION REPORT

(Continued Page 2 of 2)

Chloride testing was observed at less than 10ug/cm and MEK tests were all 5 rating on exterior Interzinc coated surfaces. ZPMC then applied “mist” coat of Interfine 979 to all exterior surfaces of seven (7) bikeway brackets. OBG 4BE/3AE

External weld seam and cross beam attachment area were abrasive blasted to base metal meeting an SSPC SP-10 condition and Interzinc 22 applied. Profile amplitude was 70-78um.

Suspender Brackets

Six (6) brackets along the west line of the assembly yard were inspected by ABF & International Protective Coatings (IPC) technical service representative Peng Zili. MEK, Pencil hardness and chloride testing was performed on Interzinc 22 coated surfaces and chloride levels were observed by aforementioned at 70 & 80us/cm. IPC technical service representative directed ZPMC to re-wash and did not allow “mist” coat of Interfine 979 to proceed. Caltrans QA Lumley unavailable for this inspection.

Suspender Brackets

Ten (10) suspender brackets coated with Interzinc 22 were inspected prior to application of “mist” coat of Interfine 979. Mist coating was not permitted by ABF QA representative as ZPMC had not completed repairs per ABF directive.

Diaphragm Sub-Assemblies

Base metal surfaces of 10 pieces were de-greased in accordance with SSPC SP-10 in preparation of abrasive blasting operations.

Note: All inspections were performed jointly with ZPMC & ABF QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representatives Mr. Alpha Chen and Mr. Peng ZiLi were available for inspections and consultation.

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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:	Carreon,Albert	QA Reviewer
