

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-001289**Date Inspected:** 05-Sep-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:** Tower Cross Braces, Tower Double Diaphragm**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

Sort and organize project documentation.

Tower Cross Braces

Pre-blast for fabrication and weld defects of base metal, areas marked for grinding operations and subsequent re-blasting operations.

Miscellaneous Metal

Base metal surfaces of 36 splice plates were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied.

Prior to final Inspection base metal defects were ground and re-abrasive blasted.

Cross Beam #2

Surface cleanliness inspection for application of final top-coat of Interfine 979. Surfaces were found to have dust and visible contaminants on them and ambient conditions were not satisfactory to permit coating application.

ZPMC turned heaters on inside the paint shop and resumed cleaning external surfaces.

Tower Double Diaphragm

Base metal surfaces of tower sub-assembly SSD1-119M were abrasive blast cleaned to an SSPC SP-10 condition and Interzinc 22 applied. Areas were masked off for future welding locations to prevent coating from being applied to weld joint.

Traveler Rail Brackets

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A total of 9 Traveler Rail Brackets were Inspected for surface cleanliness prior to application of full top-coat of Interfine 979. Surfaces exhibited no dust or residue.

Cross Beam #2

Surface cleanliness inspection was once again requested by ZPMC prior to application of full top-coat Interfine 979, surfaces still had dirt and dust and contaminants on them and cleaning was incomplete at this second inspection. ZPMC personnel continued cleaning processes.

Lift 4 West

Repairs to weld areas along Longitudinal Diaphragms were performed by re-abrasive blasting damaged areas to base metal and an SSPC SP-10 condition and re-applying Interzinc 22 to affected areas and adjacent areas of floor area and "T" stiffeners. Profile amplitude was 75-80um. Minor grinding and Feathering was performed prior to application of Interzinc 22 primer.

Cross Beam #2

The third inspection was performed for surface cleanliness prior to topcoat application of Interfine 979, surfaces were checked for residual dust and dirt and found acceptable for coating application. Application was performed on the Cross Beam and the Traveler Rail Brackets concurrently.

Lift 3 East

ZPMC requested a Final Inspection on internal ceiling areas for removal of scaffolding, surfaces were checked and found to have low dry film thickness (DFT) on Interzinc 22 coated surfaces as well as excessive application of Interzinc 52 on repair areas and low DFT of repaired areas as well. An Incident Report was drafted and submitted to SMR Skyler Guest and Final inspection rejected.

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 as to why no Notice of Inspections were sent by ZPMC for any work/repairs associated with Lift 4 East since loaded upon the ship.

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
