

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-002278**Date Inspected:** 30-Nov-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:** Sub-Assemblies, Lift 4 East, Lift 3 West, 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:

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Attended to Task Leader and Caltrans Engineers concerns relative to progress of field painting and repairs of areas which additional damaged areas had been resultant from NDT weld repairs.

OBG 7EE

Base metal surfaces of the internal Upper Chevron Assemblies, FL-2-1 Beams, "U" Rib stiffeners and Upper Corner Units were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 undercoat was applied. ZPMC did not ensure to keep on hand a quantity of Interzinc 22 undercoat to perform the prescribed work without delays. Insufficient quantity of Interzinc 22 available to complete the application process within this segment.

Lift 2 West

Previously undercoated surfaces at the end weld seam of Panel Point #18 approximately 1 meter from end on the Bottom and Side Plates were re-abrasive blasted to Base Metal and an SSPC SP-10 condition and Interzinc 22 re-applied to amend required repairs. Profile amplitude was 74,76, 80um. Also the work that was performed on the Side Plates was not required only the Bottom Plate area required repairs ZPMC performed work which was not needed.

Lift 3 West

Caltrans QA Lumley follow up inspection to the internal weld seam undercoated with Interzinc 52 on the Bottom Plate NDT area. Dry Film Thickness (DFT) range was averaged at 125-160um which in compliance with the

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manufacturers Product Data Sheets. Caltrans QA Lumley then observed ABF personnel proceed to grind the applied coating from the repaired area to perform Magnetic Particle Testing.

Lift 4 East

ZPMC requested a "Final" inspection of the Upper Chevron areas and "U" Rib stiffener areas undercoated with Interzinc 22. Caltrans QA Lumley observed ZPMC personnel in process of applying undercoating to repair areas and Caltrans QA Lumley inquired with ABF Bill Oak as to why a "Final" inspection was requested when the repairs were still ongoing. Also concurrent with this request was an inspection of the Bottom Plate Transverse weld seam for surface preparation and undercoat application this area was observed to still be in process of grinding and welding was actively going on. ABF Bill Oak cancelled the inspection.

Office

Attend to report writing and project documentation and filing. Unable to access PMIV using Lonnie Whitehead's password.

Sub-Assemblies

Base Metal surfaces of 800+- Splice Plates were washed and de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting operations.

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 ZPMC requests Final inspections prior to completion of the work in a given area. Bill replied in a manner which is inappropriate to document on a report.

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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