

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-003226**Date Inspected:** 28-Apr-2011**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:** Coatings Inspection**Bridge No:** 34-0006**Component:** Sub-Assemblies (OBG) and Sub-Assemblies**Bid Item:** 77,78,79**Lot No:****Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. Kenneth W. Cason Jr. arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections is to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

**Sub-Assemblies (OBG)**

Galvanized Traveler Rails (8 Each), NOI Number 6263: In preparation for undercoat (200HS) installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Galvanized Traveler Rails (8 Each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Cross Beam 17 External Surfaces, NOI Number 6364: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Cross Beam 17 External Surfaces. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to defects in undercoat application.

Cross Beam 17 External Support Surfaces, NOI Number 6364: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Cross Beam 17 External Support Surfaces were tested in accordance with SSPC-SP 1 (Surface Cleanliness), SSPC-PA 2 Dry Film Thickness (DFT) and ASTM D4752

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(MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub). All test results were acceptable and within desired limits with x1 MEK @ grade 5. No discrepancies noted ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Crash Barrier Cover Plates (192 Each), NOI Number 6367: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Crash Barrier Cover Plates (192 Each) for dry film thickness (DFT) and final VT compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Shim Plates (48 Each), Cable Supports (14 Each), and Shim Plates for Traveler Rails (50 Each), NOI Number 6368: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Shim Plates (48 Each), Cable Supports (14 Each), and Shim Plates for Traveler Rails (50 Each) for dry film thickness (DFT) compliance. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to DFT readings out of specification requirements.

Cross Beam 17 Internal Ceiling, NOI Number 6369: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Cross Beam 17 Internal Ceiling for dry film thickness (DFT) compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Cross Beam 17 External Surfaces, NOI Number 6370: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Cross Beam 17 External Surfaces. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to defects in undercoat application.

Crash Barrier Internal Surfaces (24 Each), NOI Number 6371: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Crash Barrier Internal Surfaces (24 Each) for dry film thickness (DFT) compliance. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection.

Bike Path Panel BK8A-001, Lamp Brackets LB3100 and LB3001 (Including 12 Tube Pieces and 3 Door Pieces), NOI Number 6372: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Bike Path Panel BK8A-001, Lamp Brackets LB3100 and LB3001 (Including 12 Tube Pieces and 3 Door Pieces). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection prior to proceeding with process to the next check point due to additional required grinding and re-blasting.

Shim Plates (48 Each), Cable Supports (14 Each), and Shim Plates for Traveler Rails (50 Each), NOI Number 6374: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Shim Plates (48 Each), Cable Supports (14 Each), and Shim Plates for Traveler Rails (50 Each) for dry film thickness (DFT) compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

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Lamp Bracket LB3001, Shim Plates X3272K (48 Each), L-Splices (48 Each), Cat Way Channels (5 Each), Cable Supports CTS10-P-2 (2 Each), Traveler Rail Brackets TB3001A-TR3002A (24 Each) and Maintenance Crane Bracket (12 Each), NOI Number 6375: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Lamp Bracket LB3001, Shim Plates X3272K (48 Each), L-Splices (48 Each), Cat Way Channels (5 Each), Cable Supports CTS10-P-2 (2 Each), Traveler Rail Brackets TB3001A-TR3002A (24 Each) and Maintenance Crane Bracket (12 Each) in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Bike Path Panel BK8A-001, Lamp Brackets LB3100 and LB3001 (Including 12 Tube Pieces and 3 Door Pieces), NOI Number 6376: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Bike Path Panel BK8A-001, Lamp Brackets LB3100 and LB3001 (Including 12 Tube Pieces and 3 Door Pieces). Test results recorded x3 surface profile readings in the range of 79 to 85  $\mu\text{m}$  and x1 soluble salts reading of 14.8 ( $\mu\text{s/cm}$ ). No major discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Crash Barrier Internal Surfaces (24 Each), NOI Number 6377: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Crash Barrier Internal Surfaces (24 Each) for dry film thickness (DFT) compliance. No major discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

### Sub-Assemblies (Tower)

Galvanized Ladders (5 Each), NOI Number T2062: In preparation for undercoat (200HS) installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Galvanized Ladders (5 Each). No major discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Skirt Plate Damaged Area Re-Blast ED1-A63, WSD1-A801 and ND1-A501, NOI Number T2063: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Skirt Plate Damaged Area Re-Blast ED1-A63, WSD1-A801 and ND1-A501. Test results recorded x3 surface profile reading of 69 to 84  $\mu\text{m}$ . No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Tower Head ESD1-TL6-2 and SSD1-TL6-1, NOI Number T2064: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Tower Head ESD1-TL6-2 and SSD1-TL6-1. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection prior to proceeding with process to the next check point due to additional required grinding and re-blasting.

Tower Head ESD1-TL6-2 and SSD1-TL6-1, NOI Number T2064: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control

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representatives observed the surface preparation on Tower Head ESD1-TL6-2 and SSD1-TL6-1. Test results recorded x3 surface profile readings in the range of 74 to 79  $\mu\text{m}$  and x1 soluble salts reading of 20.7 ( $\mu\text{s/cm}$ ). No major discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Office

This Quality Assurance Inspector (QA) reviewed, recorded and entered data from notice of inspection requests for the purpose of tracking and compliance to contract documents.

Note: Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

**Summary of Conversations:**

**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 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Cason,Kenneth	Quality Assurance Inspector
<b>Reviewed By:</b>	Miller,Mark	QA Reviewer

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