

**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-003266**Date Inspected:** 06-May-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)

Bike Path Panels BK001-015 PP109, BK001-017 PP111 and BK017-001 PP117, NOI Number 6487: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Bike Path Panels BK001-015 PP109, BK001-017 PP111 and BK017-001 PP117 in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

L12W External Support Area, NOI Number 6488: 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 L12W External Support Area. Test results recorded x1 surface profile reading of 68 µm. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Bike Path Panels BK4A-062, BK4A-060 and BK5A-002, NOI Number 6489: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Bike Path Panels BK4A-062, BK4A-060

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and BK5A-002 was tested in accordance with SSPC-SP 1 (Surface Cleanliness). 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 holidays and over-spray on surface.

Bike Path Panel BK8A-001, NOI Number 6490: 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 Bike Path Panel BK8A-001. 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 uncured Interzinc 52 undercoat and debris embedded in undercoat.

L12E Corner Unit External and Bottom Support Areas, NOI Number 6491: In preparation for finish coat (Repairs) of 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 L12E Corner Unit External and Bottom Support Areas. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Flumes (12 Each), Bike Path Panel BK14A-001 and BK Brackets (3 Each), NOI Number 6492: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the Flumes (12 Each), Bike Path Panel BK14A-001 and BK Brackets (3 Each). Test results recorded x3 surface profile readings in the range of 80 to 86  $\mu\text{m}$  and x1 soluble salts reading of 27.9 ( $\mu\text{s/cm}$ ). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to additional required grinding and blasting.

Galvanized Traveler Rails (12 Each), OBG to Tower Access Platforms (SA6525A and SA6525B), Emergency Access Platform BK-EAP-7 (6 pcs Component), Man Hole Cover Plates BK-EAP-2 and ESD1-A149, NOI Number 6493: 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 Galvanized Traveler Rails (12 Each), OBG to Tower Access Platforms (SA6525A and SA6525B), Emergency Access Platform BK-EAP-7 (6 pcs Component), Man Hole Cover Plates BK-EAP-2 and ESD1-A149. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Maintenance Crane Brackets (18 Each), NOI Number 6494: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Maintenance Crane Brackets (18 Each) for dry film thickness (DFT) and final VT compliance. 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 uncured Interfine 979 Polysiloxane and debris embedded in coating.

Suspender Brackets SB110W and SB110E, NOI Number 6495: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Suspender Brackets SB110W and SB110E was tested in accordance with SSPC-SP 1 (Surface Cleanliness). ABF Quality Assurance personnel instructed ZPMC to re-submit for inspection prior to proceeding with process to the next check point due to failed MEK test results.

Bike Path Panel BK14A-001 and BK Brackets (3 Each), NOI Number 6496: In preparation for undercoat

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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 BK14A-001 and BK Brackets (3 Each). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to additional required surface preparation (blasting and grinding).

Bike Path Panel BK14A-001 and BK Brackets (3 Each), NOI Number 6498: 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 BK14A-001 and BK Brackets (3 Each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Shim Plates (14 Each), NOI Number 6500: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Shim Plates (14 Each) for dry film thickness (DFT) compliance. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to Interzinc 52 undercoat on faying surfaces.

### Sub-Assemblies (Tower)

Tower Skirt Plate Externals WSD1-A801, ED1-A63 and ND1-A501, NOI Number T2113: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Tower Skirt Plate Externals WSD1-A801, ED1-A63 and ND1-A501 for dry film thickness (DFT) and final VT compliance. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection WSD1-A801. No other discrepancies noted on remaining items and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Tower Head External Surfaces ESD1-TL6-2 and SSD1-TL6-1, NOI Number T2114: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Tower Head External Surfaces ESD1-TL6-2 and SSD1-TL6-1 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.

Tower Head External Surfaces WSD1-TL6-4 and NSD1-TL6-3, NOI Number T2116: 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 Tower Head External Surfaces WSD1-TL6-4 and NSD1-TL6-3. 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 holidays and defects in the Interzinc 22 undercoat.

Skin G Plate (Re-Blast) SSD1-FGSA6-7 and SSD1-FGSA6-6, NOI Number T2117: 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 Skin G Plate (Re-Blast) SSD1-FGSA6-7 and SSD1-FGSA6-6. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

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Platform Sub-assembly Plates Edge (Re-Blast) PFA6-1 and PFA6-2, NOI Number T2118: 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 Platform Sub-assembly Plates Edge (Re-Blast) PFA6-1 and PFA6-2. Test results recorded x1 surface profile readings of 54 µm. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Bent Splices (4 Each), Sub-assembly ESD1-TBSA7-1 (2 Each), ESD1-TBSA7-2 (2 Each), Arc-Shaped Channels (SSD1-CSA6-21 and NSD1-CSA6-22) and Shim Plates (WSD1, ESD1- Skin C&D), NOI Number T2119: 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 Bent Splices (4 Each), Sub-assembly ESD1-TBSA7-1 (2 Each), ESD1-TBSA7-2 (2 Each), Arc-Shaped Channels (SSD1-CSA6-21 and NSD1-CSA6-22) and Shim Plates (WSD1, ESD1- Skin C&D). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to additional required surface preparation (blasting and grinding).

Bent Splices (4 Each), Sub-assembly ESD1-TBSA7-1 (2 Each), ESD1-TBSA7-2 (2 Each), Arc-Shaped Channels (SSD1-CSA6-21 and NSD1-CSA6-22) and Shim Plates (WSD1, ESD1- Skin C&D), NOI Number T2120: 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 Bent Splices (4 Each), Sub-assembly ESD1-TBSA7-1 (2 Each), ESD1-TBSA7-2 (2 Each), Arc-Shaped Channels (SSD1-CSA6-21 and NSD1-CSA6-22) and Shim Plates (WSD1, ESD1- Skin C&D). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to additional required surface preparation (blasting and grinding).

Bent Splices (4 Each), Sub-assembly ESD1-TBSA7-1 (2 Each), ESD1-TBSA7-2 (2 Each), Arc-Shaped Channels (SSD1-CSA6-21 and NSD1-CSA6-22) and Shim Plates (WSD1, ESD1- Skin C&D), NOI Number T2121: 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 Bent Splices (4 Each), Sub-assembly ESD1-TBSA7-1 (2 Each), ESD1-TBSA7-2 (2 Each), Arc-Shaped Channels (SSD1-CSA6-21 and NSD1-CSA6-22) and Shim Plates (WSD1, ESD1- Skin C&D). No major discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Tower Head External Surfaces WSD1-TL6-4 and NSD1-TL6-3, NOI Number T2122: 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 Tower Head External Surfaces WSD1-TL6-4 and NSD1-TL6-3. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

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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

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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
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<b>Reviewed By:</b>	Miller,Mark	QA Reviewer
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