

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-003267**Date Inspected:** 04-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 Panel BK8A-001, NOI Number 6455: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Bike Path Panel BK8A-001 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 in the applied Interzinc 22 undercoat.

Galvanized Traveler Rails (12 Each) and Crash Barrier External E2-SB26A-001 PP111.5-PP112, NOI Number 6456: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Galvanized Traveler Rails (12 Each) and Crash Barrier External E2-SB26A-001 PP111.5-PP112 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.

Maintenance Crane Bracket (30 Each), NOI Number 6458: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Maintenance Crane Bracket (30 Each) was tested in accordance

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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 high DFT readings and holidays in the applied Interzinc 22 undercoat.

Lamp Brackets LB3100 and LB3001 (2 Each), NOI Number 6458: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Lamp Brackets LB3100 and LB3001 (2 Each) was tested in accordance with SSPC-SP 1 (Surface Cleanliness). ASTM D4752 (MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub) was conducted with x1 @ grade 5 and x1 soluble salts reading of 15.0 ($\mu\text{s}/\text{cm}$). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Shim Plates (20 Each) and Bike Path Panel Bracket BK-MEP-4, NOI Number 6460: 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 Shim Plates (20 Each) and Bike Path Panel Bracket BK-MEP-4. Test results recorded x3 surface profile readings in the range of 68 to 82 μm . ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to additional required surface preparation (blasting and grinding).

Maintenance Crane Bracket (30 Each), NOI Number 6463: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Maintenance Crane Bracket (30 Each) was tested in accordance with SSPC-SP 1 (Surface Cleanliness), ASTM D4752 (MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub) and ISO 11127-6 and ISO 11127-7 (Soluble Salt Test) with x1 @ grade 5 and x1 soluble salts reading of 28.6 ($\mu\text{s}/\text{cm}$). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection x7 pieces prior to proceeding with process to the next check point due to high DFT readings and holidays in the applied Interzinc 22 undercoat. No other discrepancies noted on remaining pieces and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Shim Plates (20 Each) and Bike Path Panel Bracket BK-MEP-4, NOI Number 6464: 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 Shim Plates (20 Each) and Bike Path Panel Bracket BK-MEP-4. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to additional required surface preparation (blasting and grinding).

Drip Plates (10 Each), Seal Plates ZP06-787-2281 (48 Each), L-Splices BKX87G (16 Each) and Traveler Rails (8 Each), NOI Number 6465: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Drip Plates (10 Each), Seal Plates ZP06-787-2281 (48 Each), L-Splices BKX87G (16 Each) and Traveler Rails (8 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.

Shim Plates (20 Each) and Bike Path Panel Bracket BK-MEP-4, NOI Number 6467: 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 Shim Plates (20 Each) and Bike Path Panel Bracket BK-MEP-4. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

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Sub-Assemblies (Tower)

Tower Head External Surfaces WSD1-TL6-4 and NSD1-TL6-3, NOI Number T2089: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Tower Head External Surfaces WSD1-TL6-4 and NSD1-TL6-3 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 recorded out of range DFT readings.

Tower Head External Surfaces ESD1-TL6-2 and SSD1-TL6-1, NOI Number T2090: In accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives recorded the results of adhesion testing on Tower Head External Surfaces ESD1-TL6-2 and SSD1-TL6-1. Readings recorded x4 @ 14.56 mPa, 9.71 mPa, 10.69 mPa and 10.82 mPa. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Tower Head Curved Diaphragm Top, NOI Number T2091: 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 Curved Diaphragm Top. Test results recorded x3 surface profile reading of 68 to 82 μm . ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to additional required surface preparation (blasting and grinding).

Tower Head External Surfaces ESD1-TL6-2 and SSD1-TL6-1, NOI Number T2092: 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 ESD1-TL6-2 and SSD1-TL6-1. 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 T2093: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Tower Head External Surfaces WSD1-TL6-4 and NSD1-TL6-3 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 recorded out of range DFT readings.

Tower Skirt Plate Externals ND1-A501, ED1-A149, ESD1-A61-1 and ESD1-A61-2, NOI Number T2094: 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 Skirt Plate Externals ND1-A501, ED1-A149, ESD1-A61-1 and ESD1-A61-2. 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 recorded out of range DFT readings.

Tower Head Curved Diaphragm Top and Shim Plates (6 Each), NOI Number T2095: : 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 Curved Diaphragm Top and Shim Plates (6 Each). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for

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inspection due to additional required surface preparation (blasting and grinding).

Channels WSD1-CSA6-14, WSD1-CSA6-2, WSD1-CSA6-4, I-Beams (NSD1-WSA6-2 and ESD1-WSA6-1), NOI Number T2096: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Channels WSD1-CSA6-14, WSD1-CSA6-2, WSD1-CSA6-4, I-Beams (NSD1-WSA6-2 and ESD1-WSA6-1) in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Tower Head Curved Diaphragm Top and Shim Plates (6 Each), NOI Number T2097: 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 Curved Diaphragm Top and Shim Plates (6 Each). No 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.

Inspected By:	Cason,Kenneth	Quality Assurance Inspector
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Reviewed By:	Miller,Mark	QA Reviewer
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