

**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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000222**Date Inspected:** 11-Jun-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

|                                    |            |                                  |                   |    |
|------------------------------------|------------|----------------------------------|-------------------|----|
| <b>CWI Name:</b>                   | N/A        | <b>CWI Present:</b>              | Yes               | No |
| <b>Inspected CWI report:</b>       | Yes No N/A | <b>Rod Oven in Use:</b>          | Yes No N/A        |    |
| <b>Electrode to specification:</b> | Yes No N/A | <b>Weld Procedures Followed:</b> | Yes No N/A        |    |
| <b>Qualified Welders:</b>          | Yes No N/A | <b>Verified Joint Fit-up:</b>    | Yes No N/A        |    |
| <b>Approved Drawings:</b>          | Yes No N/A | <b>Approved WPS:</b>             | Yes No N/A        |    |
|                                    |            | <b>Delayed / Cancelled:</b>      | Yes No N/A        |    |
| <b>Bridge No:</b>                  | 34-0006    | <b>Component:</b>                | Radiograph Review |    |

**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector Robert Cuellar is present at the fabrication facility of Zhenhua Port Machinery Company (ZPMC), LTD for the purpose of monitoring activities relative to the subsequent fabrication of the SFOBB Self Anchored Suspension Bridge. The following items have been observed,

| Item | Description                                | WBS | Dwg No. | Status |
|------|--|-----|---------|--------|
| 1    | PQR Radiograph Review<br>Radiograph Review | N/A | N/A     | N/A    |

1) PQR Test Plate HP200778-1- The Caltrans QA Inspector performed the review of retested radiographs that were subsequently taken after the PQR weld cap was ground. Initial review on June 7th, 2007 of the preliminary radiographs revealed linear indications that were not in compliance with AWS D1.5 (2002) requirements. These retest radiographs appear to be in compliance with the requirements of AWS D1.5 (2002). These radiographs have been previously reviewed by ZPMC and ABF representative Mr. Nate Lindell. Specific information relative to the radiographs for this PQR test has been recorded within a Caltrans TL-6032 for this date.

2) PQR Test Plate HP2007225- The Caltrans QA Inspector observed that the presented radiographs for this PQR test plate contain linear indications that are not in compliance with the requirements of AWS D1.5 (2002). It is inconclusive as to whether or not the PQR test plate weld cap with multiple weld passes represents the linear indications within the radiographs. The Caltrans QA Inspector and ZPMC representative Mr. Lu Jian Hua visually observed that the PQR test plate weld cap had not been ground flush prior to radiographic testing. Mr. Lu Jian Hua stated that the weld cap needed to be ground and subsequently radiographically tested again. Radiographic film reviewers for ZPMC and ABF representative Mr. Nate Lindell did not address this issue prior to this review by the

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# WELDING INSPECTION REPORT

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Caltrans QA Inspector. Included below is the digital picture of the PQR test plate which contains the unground weld cap.

Specific information relative to the radiographs for this PQR test has been recorded within a Caltrans TL-6032 for this date.



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|---|--|-----|-----|-----|
| 2 | Radiograph Review for Welder Qualification Tests | N/A | N/A | N/A |
|---|--|-----|-----|-----|

### 3) Radiographs for Welder Qualification Tests-

Welder Identification 070503036- Radiograph complies with AWS D1.5 (2002).

Welder Identification 070503119- Radiograph complies with AWS D1.5 (2002).

Welder Identification 070503122- Radiograph non-compliant with AWS D1.5 (2002) as identified by ZPMC and ABF representatives.

Welder Identification 070503152- Radiograph complies with AWS D1.5 (2002).

Welder Identification 070503003- Radiograph complies with AWS D1.5 (2002).

Welder Identification 070503014- Radiograph complies with AWS D1.5 (2002).

Welder Identification 070503015- Radiograph complies with AWS D1.5 (2002).

The radiographs for the welder qualification identifications listed have been previously reviewed by ZPMC and ABF representative Mr. Nate Lindell.

### Summary of Conversations:

As identified within item 2 of this 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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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| <b>Inspected By:</b> | Cuellar,Robert | Quality Assurance Inspector |
| <b>Reviewed By:</b>  | McClary,David  | QA Reviewer                 |

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