

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-014947**Date Inspected:** 08-Jun-2010**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:** Shanghai, China**CWI Name:** ZPMC and ABF**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

Bay #1

Traveler rail: - Caltrans QA inspector observed two ZPMC welders performed FCAW repair weld process on the flange to web of traveler rail # 20TR2-020 and 20TR2-024 with welding repair report number B-WR-3443 and B-WR-3424. The repair areas are located at top and bottom flanges to web and total six spots and length for 50mm to 150mm. All of repair areas have been pre heating prior FCAW repair welding. The FCAW repair process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Bay #2

Floor beam: - Caltrans QA inspector observed three ZPMC welder performed FCAW CJP process on stiffeners of floor beam #FB-30192-001-038, FB-3113-001-002 and FB3113-001-001. The FCAW CJP process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Floor beam: - Caltrans QA inspector observed four ZPMC welders performed FCAW fillet weld process on stiffeners for type-1 of floor beam #FB-3202-001-049, FB-3202-001-050, FB-3119-001-102 and FB-3119-001-103. The fillet weld size is 6mm and 8mm with single pass and multiple pass. The FCAW fillet welds process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Bay#3

Caltrans QA verified two stiffeners remove which have been welded on the floor beam. Two stiffeners ID number

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X3412J and X7047B of floor beam FB3121 have been found 280mm length offset from the one side floor beam plate edge after completed the fillet weld welding. The fillet welds ID are FB3121-001-110/111 and FB3121-001-125/126. The offset caused by miscalculation during fit up. ZPMC has send e-mail requires Caltrans witness remove those two stiffeners with arc gouge today approximately 13:30. During observation for remove two stiffeners, Caltrans found the four entire fillet weld length for two stiffeners has 1700mm is welded into FCM member floor beam plate. ZPMC shop foreman informed Caltrans that 1700mm fillet weld length will pre heat prior arc gouge after the non FCM member area complete arc gouging. The arc gouge can't be complete today and will be continue tomorrow.

Floor beam: - Caltrans QA inspector observed four ZPMC welders performed FCAW fillet weld process on stiffeners of floor beam #FB-3012-001-060, FB-3012-001-062, FB-3127-001-021 and FB-3127-001-022. The fillet weld size is 6mm and 8mm with single pass and multiple pass. The FCAW fillet welds process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Caltrans QA Inspector performed QA final UT test on the CJP welds of floor beam plate. The floor beam and welds ID are FB125-001-001~010 and FB3110-001-001~007. All the CJP welds have been accepted by ZPMC prior Caltrans QA inspection. Base on Caltrans UT test, the CJP welds and fillet welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

CLOSING STATEMENT

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

Summary of Conversations:

As notes within report above

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 15000422372 , who represents the Office of Structural Materials for your project.

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| Inspected By: | Pau, Wai | Quality Assurance Inspector |
| Reviewed By: | Clifford, William | QA Reviewer |
