

**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 #: 13.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-006632**Date Inspected:** 07-May-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 2000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 430**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, Oregon**CWI Name:** Steve Barnett, Jon Nickolich**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:** Hinge K Pipe Beams**Summary of Items Observed:**

On this date, Caltrans Quality Assurance Inspector (QA) Sherri Brannon is present at the Oregon Iron Works, Inc. (OIW) jobsite in Clackamas, Oregon for the purpose of observing fabrication of the Hinge K Pipe Beams.

**OIW Fabrication Shop-Bay 3 (sub-assembly):**

QA Inspector Brannon randomly observed OIW qualified welder Mr. Liem Bui ID#B10 and one helper welding joining hinge K pipe beam gusset plate MK#a107 (HPS 485 W) to base plate MK#a110-2 (HPS 485 W) for hinge k pipe beam section 102A-2. The fillet weld is identified as weld joint #W2-14. Mr. Bui was observed welding in the 2F (horizontal) position utilizing submerged arc welding (SAW) process with a 2.4mm diameter electrode, filler metal brand Lincoln Electric LA85 class F9A4-Eni5-G-H2. QA Inspector Brannon observed the OIW QC CWI Inspector Mr. Steve Barnett verifying that the pre-heat and welding parameters were in accordance with the Welding Procedure Specification (WPS). Welding parameters observed by QA Inspector Brannon appear to be in general compliance with the approved WPS 4020 revision number 0.

**OIW Fabrication Shop-Bay 3 (sub-assembly):**

QA Inspector Brannon randomly observed OIW qualified welder Mr. Yuriy Bannikov ID#B61 and one helper welding joining stiffener ring MK #a125 (HPS 485 W) to hinge K pipe beam half section MK#a124-14 (HPS 485 W). The fillet welds is identified as weld joint #WM3-13. Mr. Bannikov was observed welding in the 2F (horizontal) position utilizing submerged arc welding (SAW) process with a 2.4mm diameter electrode, filler metal brand Lincoln Electric LA85 class F9A4-Eni5-G-H2. QA Inspector Brannon observed the OIW QC CWI Inspector Mr. Jon Nickolich verifying that the pre-heat and welding parameters were in accordance with the Welding Procedure Specification (WPS). Welding parameters observed by QA Inspector Brannon appear to be in

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general compliance with the approved WPS 4020 revision number 0.

## OIW Fabrication Shop-Bay 3 (sub-assembly):

QA Inspector Brannon randomly observed OIW qualified welder Mr. Harold Baldonado ID #B33 and one helper welding joining hinge K pipe beam gusset plate MK#a107 (HPS 485 W) to base plate MK#a110-2(HPS 485 W) for hinge k pipe beam section 102A-2. The fillet welds is identified as weld joint #W2-14. Mr. Baldonado was observed welding in the 2F (horizontal) position utilizing submerged arc welding (SAW) process with a 2.4mm diameter electrode, filler metal brand Lincoln Electric LA85 class F9A4-Eni5-G-H2.

QA Inspector Brannon observed the OIW QC CWI Inspector Mr. Jon Nickolich verifying that the pre-heat and welding parameters were in accordance with the Welding Procedure Specification (WPS). Welding parameters observed by QA Inspector Brannon appear to be in general compliance with the approved WPS 4020 revision number 0.

## Quality Assurance Inspection (VT/MT):

QA Inspector Brannon performed visual inspection (VT) and magnetic particle testing (MT) hinge k pipe beam fuse section a124-13 (HPS 485 W) stiffener ring weld joints WM3-12 ~ WM3-17 partial joint penetration (PJP) welds. See Caltrans Magnetic Particle Test Report, TL-6028 dated March 7, 2009 for additional information.

## Quality Assurance Inspection (VT/MT):

QA Inspector Brannon performed visual inspection (VT) and magnetic particle testing (MT) hinge k pipe beam fuse section a124-11 (HPS 485 W) stiffener ring weld joints WM3-12 ~ WM3-17 and a124-3 (HPS 485 W) stiffener ring weld joints WM3-02 ~ WM3-11 partial joint penetration (PJP) welds. See Caltrans Magnetic Particle Test Report, TL-6028 dated March 7, 2009 for additional information.

## Material, Equipment, and Labor Tracking:

QA Inspector Brannon performed a verification of personnel at OIW. QA Inspector Brannon observed 1 Supervisor, 1 Quality Control and 3 production personnel on this date.



## Summary of Conversations:

No relevant conversations to report.

## Comments

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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 Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Brannon, Sherri	Quality Assurance Inspector
<b>Reviewed By:</b>	Adame, Joe	QA Reviewer

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