

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 #: 13.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-007056**Date Inspected:** 02-Jun-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2230**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, Oregon**CWI Name:** Steve Barnett**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. Liam Bui ID#B10 tack welding joining hinge K pipe beam half section MK#a124-1 (HPS 485 W) to hinge K pipe beam half section MK#a124-9 (HPS 485 W) for sub assembly MK#120A-6. The complete joint penetration (PJP) groove weld is identified as weld joint #WM3-18. Mr. Bui was observed welding in the 3G (vertical) position utilizing flux cored arc welding (FCAW) process with a 1.3mm diameter electrode, filler metal brand Select Arc class E91T1-Ni1C-H4. QA Inspector Brannon observed the OIW QC CWI Inspector Mr. Steve Barnett verifying that the pre-heat of 350°F and welding parameters were in accordance with the Welding Procedure Specification (WPS). Welding parameters measured by QA are as follows for tack welding: 220 amps and 24.9 volts appear to be in conformance with approved welding procedure specification WPS 3048 revision number 1.

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

QA Inspector Brannon observed no production activity on Hinge K Pipe Beam sub assemblies noted below for the duration of the shift.

Hinge-K Pipe Beam Sub Assembly, MK#102A-1 - MK#a111-1 forging to MK#a110-1 base plate idle.

Hinge-K Pipe Beam Sub Assembly, MK#102A-4 - MK#a111-4 forging to MK#a110-4 base plate idle.

Note: QA Inspector Brannon also, observed pending critical welding repair (CWR-2244-003R1) at Mk#102A-1 weld joint W2-13.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Hinge-K Pipe Beam Sub Assembly, MK#120A-2 – MK#a124-3 half fuse to MK#a124-11 half fuse.

Note: Inspector Brannon also, observed pending 3rd time repair critical welding repairs (CWR-2244-005R3) at Mk#120A-2 weld joint WM3-18.

Hinge-K Pipe Beam Sub Assembly, MK#a124-5.

OIW Fabrication Shop-Bay 6 (sub-assembly):

QA Inspector Brannon randomly observed OIW qualified welder Mr. Bounheune Savanh ID#S74 and one helper welding soudotape 309L stainless steel overlay to hinge k pipe beam fuse sub-assembly 120A-3. The weld joint is identified as 309L 1st layer. Mr. Savanh was observed welding in the flat position utilizing automatic electro slag welding (ESW) overlay process with a .5mm x 60mm soudotape 309L stainless electrode, filler metal brand Soudotape class EQ309L automatic. QA Inspector Brannon observed the OIW QC CWI Inspector Mr. Steve Barnett verifying that the pre-heat of 225°F and welding parameters were in accordance with the Welding Procedure Specification (WPS). Welding parameters observed by QA Inspector Brannon are as follows: 1175 amps, 24.6 volts and a travel speed of 255mm per minute appear to be in conformance with approved welding procedure specification (WPS 7003) revision number 0.

OIW Storage Yard

Hinge-K Pipe Beam Sub Assembly, MK#102A-2 - MK#a111-2 forging to MK#a110-2 base plate idle.

Hinge-K Pipe Beam Sub Assembly, MK#102A-3 - MK#a111-3 forging to MK#a110-3 base plate idle.

Note: QA Inspector Brannon also, observed pending repairs for MK#102A-2 weld joint W2-13 and MK#102A-3 weld joint W2-13 both have pending 1st time UT repairs.

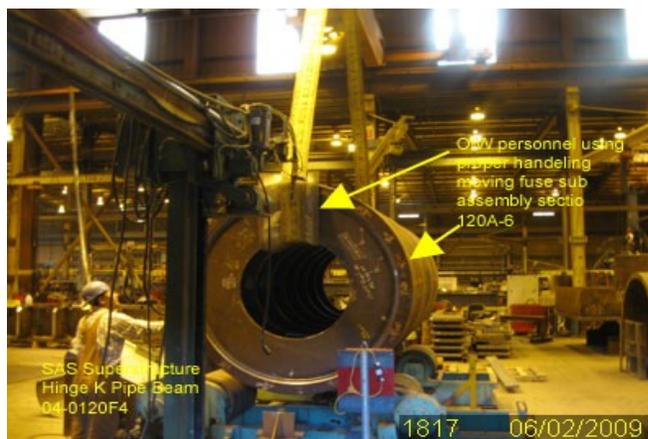
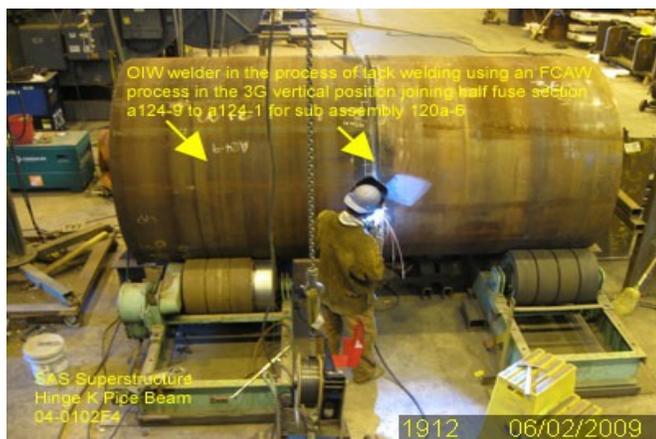
Caltrans Status and Production Tracking:

QA Inspector Brannon also updated Caltrans status and production tracking logs for tracking of check samples, procedure qualification record (PQR), critical weld repairs (CWR), non-critical welding repairs (WRR), completed and in process welding, QC/QA non-destructive testing.

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.

The following digital photograph below illustrates observation of the activities being performed.



WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Summary of Conversations:

As noted within this reprot.

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

Inspected By:	Brannon,Sherri	Quality Assurance Inspector
Reviewed By:	Adame,Joe	QA Reviewer
