

**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-007476**Date Inspected:** 22-Jun-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1630**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, Oregon**CWI Name:** Mike Gregson, Jose Salazar**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:**

OIW Fabrication Shop-Bay 1:

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, cap plates MK#109.

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

QA Observations: General On-Going Fabrication- Caltrans QA observed OIW continuing with the fabrication of the hinge k pipe beams, for the SAS Superstructure. The general fabrications of said items consist of fitting, tack welding and welding.

In-Process Welding - Caltrans QA Inspector observed OIW joining by partial joint penetration (PJP) and fillet welding radial stiffener plates to vertical stiffeners and forging to manufacture pipe beam base assembly MK#102A-4 using a SAW process.

In-Process Welding - Caltrans QA Inspector observed OIW joining by partial joint penetration (PJP) welding ring stiffeners plates to half fuse sections to manufacture pipe beam fuse sub-assembly MK#a124-16 using a SAW process.

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#120A-7 – MK#a124-5 half fuse to MK#a124-15 half fuse.

Hinge-K Pipe Beam Sub Assembly, Half fuse section MK#a124-8.

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## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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

OIW completed CWR-003R2 repair for MK#102A-1 weld joint W2-13 on 06-19-09.

OIW Fabrication Shop-Bay 6 (stainless overlay):

QA Observations: General On-Going Fabrication- Caltrans QA observed OIW continuing with the fabrication of the hinge k pipe beams, for the SAS Superstructure. The general fabrications of said items consist of hinge K pipe beam fuse stainless overlay.

In-Process Welding - Caltrans QA Inspector observed OIW welding stainless overlay using Soudotape 309L for the 1st layer and for the 2nd and 3rd layer using Soudotape 316L. The overlay will be 60 mm wide by approximately 5 mm thick as it wraps around the pipe beam fuse mark #120A and will continue in this pattern for the length of pipe beam fuse. Currently OIW is performing the overlay process on MK120A-4 the 2nd layer.

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

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

Hinge-K Pipe Beam Sub Assembly, MK#120A-1 – MK#a124-6 half fuse to MK#a124-7 half fuse.

Hinge-K Pipe Beam Sub Assembly, MK#120A-5 – MK#a124-2 half fuse to MK#a124-14 half fuse.

OIW Storage Yard

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

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

Hinge-K Pipe Beam Sub Assembly, MK#120A-3 – MK#a124-10 half fuse to MK#a124-12 half fuse with stainless steel overlay.

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

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.

### Summary of Conversations:

As noted within 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 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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