

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 #: 1.28**WELDING INSPECTION REPORT**

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-026573
Date Inspected: 19-Oct-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 600
OSM Departure Time: 1630
Location: Job Site

CWI Name:	See Below	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 and Tower	

Summary of Items Observed:

At the start of the shift the Quality Assurance Inspector (QAI) traveled to the SAS project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) personnel. The inspection was performed as noted below:

A). OBG W12/W13

FW Spencer (Piping Systems)

QAI: Doug Frey

1). The QAI, Doug Frey, was assigned to this designated work station to observe the Complete Joint Penetration (CJP) welding, the QC inspection and other related work of the field splice identified as 12W-13W-A5.

The welding was performed by Jorge Lopez ID-6149 utilizing the Flux Cored Arc Welding w/gas (FCAW-G) process identified as ABF-WPS-D15-3040B-1, Rev.0. The QC inspector William Sherwood performed the inspection and verifying the welding parameters utilizing the WPS as a reference. No issues were noted by the QC inspector. The welding was performed at this work station was completed during this shift on this date

2). The QAI also observed the Complete Joint Penetration (CJP) groove welding of the field splice identified as 12W-13W-E2. The welding was performed by Rory Hogan ID-3186 utilizing the Flux Cored Arc Welding w/gas (FCAW-G) process as per the Welding Procedure Specification (WPS) ABF-WPS-D15-3040B-3, Rev. 0. The QC inspector William Sherwood performed the inspection and verifying the welding parameters utilizing the WPS as a reference. No issues were noted by the QC inspector. The welding was performed at this work station was not completed during this shift on this date.

3). Later in the shift, the QAI also observed the Complete Joint Penetration (CJP) groove welding of the field

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splice identified as 12W-13W-C2. The welding was performed by Jeremy Dolman ID-5042 utilizing the Flux Cored Arc Welding w/gas (FCAW-G) process as per the Welding Procedure Specification (WPS) ABF-WPS-D15-3042B-1, Rev. 0. The QC inspector William Sherwood performed the inspection and verifying the welding parameters utilizing the WPS as a reference. No issues were noted by the QC inspector. The welding was performed at this work station was not completed during this shift on this date.

4). The QAI, Doug Frey, also observed the continued welding and the QC inspection of the piping systems identified as the compressed air and domestic water. The CJP welding was performed by Curtis Jump utilizing the WPS identified as 1-12-1, Rev. 2 (1.12) which was also utilized by the QC inspector, Steve Jensen, to monitor and verify the welding parameters.

B). OBG W12/W13

Deck Access Hole(DAH), QA Verification

QAI: Joselito Lizardo

1). The QAI, Joselito Lizardo, was assigned to this designated work station to observe the continued Complete Joint Penetration (CJP) welding, the QC inspection and other related field work of the splice identified as 12W-13W-F. The welding was performed by Jorge Lopez ID-6149 utilizing the Shielded Metal Arc Welding (SMAW) process identified as ABF-WPS-D15-1040B-1, Rev.1. The QC inspector William Sherwood was observed performing the inspection and verifying the welding parameters utilizing the WPS as a reference. No issues were noted by the QC inspector. The welding was performed at this work station was completed during this shift on this date.

Later in the shift Mr. Lopez was assigned to mobilize to the "A" deck identified as 12W-13W-A5 to complete the last 300 mm which not accessible to complete the welding utilizing the Sub-merged Arc Welding (SAW) process. The welding was not completed during this shift.

2). At the request of the QC Lead Inspector, Bonifacio Daquing, Jr., performed a Visual Test (VT) and a Magnetic Particle Test (MPT) of the transverse stiffener Complete Joint Penetration (CJP) groove weld identified as 8E-PP70.5-E5. The inspection and testing were performed to verify the weld and the inspection/testing performed by the QC personnel comply with the contract specifications. At the conclusion of the QA verification no issues were noted.

C). Lifting Lug Holes (LLH)

QAI: Craig Hager

1). The QAI observed the excavation and repair welding of the LLH located on the West Orthotropic Box Girders (OBG) and identified as WN: 10W-PP88-W4-W4, repair cycle # 2. At the conclusion of the excavation and the MPT of the backgouged surface the welder, Mike Jiminez ID-4671, commence therepair welding utilizing the WPS identified as (WPS) ABF-WPS-D15-1000 Repair, Rev.2. At the conclusion of the excavation, the QAI observed the QC inspector, Patrick Swain, perform the visual inspection and Magnetic Particle Testing (MPT) utilizing an DA400 Yoke. The testing was performed by Mr. Swain and at the completion of the testing no rejectable discontinuities were noted. At this time the repair welding commence and was completed during this shift and appeared to comply with the contract specifications.

2). The QAI observed Ultrasonic Testing (UT) performed by QC personnel, Patrick Swain, on the LLH identified as 10W-PP92-W4-W1 and W3. At the conclusion of the testing weld # 1 was acceptable and weld # 3 was rejected. Later in the shift the welder, Mr. Jiminez commence the excavation and repair welding. The testing

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performed on this date appeared to comply with the contract specifications.

QA Lead Inspector (QALI) Summary

Later in the shift, this QA Lead Inspector (QALI) also observed the QAI's, Joselito Lizardo, Doug Frey and Craig Hager monitor the work performed by the QC inspectors at random intervals and also observed the QA Inspectors verify the welding parameters, the minimum preheat and the maximum interpass temperatures. The QAI's utilized a Fluke 337 clamp meter to measure the electrical welding parameters, Tempil Heat Indicators and/or a Fluke 63 IR Thermometer for verifying the preheat and interpass temperatures. At the conclusion of the shift this QA Lead Inspector discussed and reviewed the work performed by the QAI's in regards to the various observations and the verifications of the WPS's, consumables, welding parameters, preheat and interpass temperatures as described above. The QAI observations of the QC inspection and verification of the welding parameters performed on this date appeared to comply with the contract specifications with no issues noted.

This report was generated upon the discussions with the QA Inspectors, random visual observations and review of the QAI field reports. For additional detailed information see each of the individual QAI submitted and approved Weld Inspection Reports (WIR).

Review of QA Tracking Plan

This QA Inspector continued the daily review of field inspection reports and update of the field document control tracking records regarding the Orthotropic Box Girders (OBG, Longitudinal and Transverse "A" Deck Stiffeners, Deck Access Holes and the Tower Shear plates. The QAI also updated the tracking records for the pipe welds and the pipe supports.

On this date the QAI commence the review of QA tracking documents for the OBG's identified as E3, E4 and E5.

Summary of Conversations:

There were general conversations with Quality Control Lead Inspector, Bonifacio Daquinag, Jr., at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift.

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 Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Reyes,Danny	Quality Assurance Inspector
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Reviewed By:	Levell,Bill	QA Reviewer
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