

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-028077
Date Inspected: 28-Jul-2012

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

OSM Arrival Time: 700
OSM Departure Time: 1730
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/Tower	

Summary of Items Observed:

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

A). This Quality Assurance Lead Inspector (QALI) assigned the QA Inspectors to the following, but not limited to the work station(s) listed, to observe the welding and the QC inspection of the following:

Joselito Lizardo-OBG W12 Corner Drop-In Assemblies (Observation of welding, QC inspection and testing), OBG W13 Drop-In Panels (Observation of excavations, repair welding, QC inspection) and VT/MPT verification.

Rodney Patterson-OBG W12/W13 & W13 (VT, MPT, UT Verification).

Fritz Belford-OBG W12 Drop-In Assembly (Observation of excavations, repair and production welding, QC inspection and testing) and QA VT/MPT/UT verification..

Matt Daggett-OBG W13 Drop-In Panels (Observation of repair welding, production welding, QC inspection and testing) and OBG W12 Drop-In (Observation of welding, QC inspection and testing of longitudinal stiffeners).

NOTE: See QA daily Weld Inspection Reports (WIR) and NDE reports for additional information and details.

Quality Assurance Lead Inspector (QALI) Summary

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This QA Lead Inspector (QALI) observed the QA Inspector's Joselito Lizardo, William Clifford, Rodney Patterson and Fritz Belford and Matt Daggett 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 for compliance with the contract specifications. 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. The QAI observations of the QC inspection and verification of the welding parameters performed on this date appeared to comply with the contract specifications and no issues were noted during this shift.

This QA Lead Inspector commence the review of NDT reports, tracking of welding and developing and generating weld maps for W13 drop-in panels, E12 and W12 corner drop-in assemblies. This QA Lead Inspector also reviewed RWR documents for tracking purposes.

OBG W2

The QALI observed the Shielded Metal Arc Welding (SMAW) of the Deck Access Hole (DAH) plate identified as Weld Number (WN): 2W-PP13.5 located on the "A" deck of the Orthotropic Box Girder (OBG) E1. The welder ID-6001 performed the welding of the root of the Complete Joint Penetration (CJP) utilizing the Welding Procedure Specification (WPS) ABF-WPS-D15-1010A, Rev. 1. The WPS was also utilized by the QC inspector John Pagliero as a reference to monitor the welding and verify the Direct Current Electrode Positive (DCEP) welding parameters which appeared to comply with the contract specifications. The 3.2 Lincoln electrodes were utilized with the welding performed in the flat (4G) position with the work placed in an approximately horizontal plane and the weld metal deposited from the underneath side. The groove joint appeared to comply with the AWS joint designation identified as B-U3b. The minimum preheat temperature of 20 degrees Celsius and the maximum interpass temperature of 230 degrees Celsius were verified by the QC inspector.

Summary of Conversations:

At the start of the shift, 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.

Also, there were pertinent conversations with QA Supervisor, William Levell, through the course of this shift in regards to scheduling of QA personnel, work progress and related structural steel and weld issues. There were no significant issues noted on this date.

Also, this QALI met with QA Supervisor, William Levell and Structural Material Representative (SMR) Bahjat Dagher to discuss the spreadsheet document generated by ABF Operations Manager, Bob Kick. This document is designed as a global type document to be populated in a joint effort of ABF/QC and Mets. This document was developed to track the QC inspection and testing QA verification of the drop-in panels located at the Orthotropic Box Girders (OBG) identified as E12, W12, E13 and W13. At the conclusion of the meeting it was determined that it would be a required of ABF/QC to complete the designated QC information prior to QA.

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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
Reviewed By:	Levell,Bill	QA Reviewer
