

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 #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029984**Date Inspected:** 09-Sep-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Bernie Docena, Jesse Cayabyab**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:** SAS Tower**Summary of Items Observed:**

Caltrans Quality Assurance Inspector (QA) Joe Adame arrived at the American Bridge/Fluor (ABF) JV job site between the times noted above in order to monitor ABF Quality Control activities and the in process work being performed by ABF production personnel. The following items were observed:

ESW Repair excavation

RWR-201308-004

ESW S-043, Location "T"- Face B:

The QA Inspector was later present to observe ABF welder Mike Jimenez (WID-4671) performing excavation of ESW "T" Face B @ Y-2100mm, 2130mm to verify indications observed during Ultrasonic Testing pulse/echo & pitch/catch. Mr. Jimenez was performing air carbon arc gouging and grinding on the excavation. After grinding to bright metal the ABF QC Inspector Jesse Cayabyab performed MT testing of the excavation. Details of the repair excavation are as follows:

WeId excavated at 60mm depth-No indications observed.

Excavation Length (Y=1980mm~2230mm) L-250mm, W= 70mm, D= 60mm.

The QC Inspector stated the excavation appears to be free of discontinuities and he would complete ABF daily inspection report and magnetic particle testing report to detail the findings. The QA Inspector also performed MT inspection of the final excavation. After excavation Mr. Jimenez was observed setting up to perform SMAW repair welding on this date. See TL-6028 for additional details on items inspected on this date.

NDT Inspection of Electroslag Welds (ESW)

RWR-201308-003

WELDING INSPECTION REPORT

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ESW E-043, Location "Q"-Face A, B:

The QA Inspector observed ABF QC Inspector Jesse Cayabyab perform Ultrasonic Testing (UT) on Tower Electroslag Complete Joint Penetration (CJP) weld designated as ESW "Q" Face A, B. The inspection was being performed on SMAW repairs. The "Y" Locations were noted as: Y=2550mm,3470mm,3495mm,3980mm and additional HAZ areas located 300mm above and below the prosed repair.

No rejectable or recordable indications were observed.

The QA Inspector also performed UT of the above mentioned ESW location in accordance with the ABF approved supplemental procedure for confirmation and evaluation of planar type defects. Tandem report for work performed on this date will be completed by Mr. Cayabyab and signed by both QA/QC parties. Items listed on tandem report reflect indications agreed upon by QA/QC. See TL-6027 for additional details on the items inspected on this date

ESW Repair excavation

RWR-201308-008

ESW S-042, Location "L"-Face B:

The QA Inspector observed ABF welder Wai Kit Lai (WID-2953) performing excavation of ESW "L" Face B @ Y-6430mm to verify indications observed during Ultrasonic Testing pulse/echo & pitch/catch. Mr. Lai was performing the excavation using an air carbon arc gouging and a grinder. Mr. Lai was instructed by ABF QC Inspector Jesse Cayabyab to notify him when indications are visible to allow QC/QA time to inspect the excavation. Location of the repair is as follows:

Weld excavated at 27mm dp- 18mm long planar indication observed @ 6460mm.

Weld excavated at 35mm dp- 23mm long planar indication observed @ 6460mm.

Weld excavated at 45mm dp- No indications observed.

Excavation Length (Y=6300mm~6570mm) L-270mm, W= 60mm, D= 45mm.

After grinding to bright metal the ABF QC Inspector Jesse Cayabyab performed MT testing of the excavation. The QC Inspector stated the excavation appears to be free of discontinuities and he would complete ABF daily inspection report and magnetic particle testing report to detail the findings. Mr. Cayabyab also stated that since the indication observed appeared to be a significant planar indication the repair will be performed at both faces of the ESW weld at this Y location to remove the original ESW weld. The QA Inspector also performed MT inspection of the final excavation. After excavation Mr. Lai was observed setting up to perform SMAW repair welding on this date. See TL-6028 for additional details on items inspected on this date.



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Summary of Conversations:

Only general conversations with ABF/JV QC NDT personnel relevant to work and testing performed during 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 Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Adame,Joe	Quality Assurance Inspector
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Reviewed By:	Mertz,Robert	QA Reviewer
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