

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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029724**Date Inspected:** 20-Jun-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** USA Hoist**Location:** Crest Hill, IL

CWI Name:	Robert Zimny		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No	
Rod Oven in Use:	Yes	No	N/A
Weld Procedures Followed:	Yes	No	N/A
Verified Joint Fit-up:	Yes	No	N/A
Approved WPS:	Yes	No	N/A
Delayed / Cancelled:	Yes	No	N/A

Bridge No: 34-0006**Component:** SAS Tower Elevator**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at USA Hoist, Crest Hill, IL as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At USA Hoist assembly shop, qualified welder Matt Wasiqi was observed continuing to perform fillet welding the tower tie-in brackets for the tower elevator per USA Hoist shop drawing #914204-17. The welder was noted using the gas shielded Flux Cored Arc Welding (FCAW-G) with 1.1mm E71T-1C Familiarc DW-50 wire electrode and implementing welding procedure specification FCAW 3210. The shielding gas being used was noted a combination of 75% Argon and 25% CO2 with flow rate of 38 CFH. During the shift, the working welding parameters were measured 29 volts and 235 amperes which deemed in compliance to the project requirements. This QA randomly checked the workmanship and measured the required 1/4" fillet on all sides of the stiffener which was found in compliance to the requirement.

Another USA Hoist qualified welder Andres Luna was observed continuing to perform fillet welding the same tower tie-in brackets for the tower elevator as mentioned above. The welder was noted using the same process and implementing the same welding procedure specification. The welder was noted using gas shielded FCAW-G with 1.1mm E71T-1C Familiarc DW-50 wire electrode implementing USA Hoist Welding Procedure Specification FCAW 3210. The shielding gas being used was noted a combination of 75% Argon and 25% CO2 with flow rate of 40 CFH. During the shift, the working welding parameters were measured 27 volts and 200 amperes which deemed in compliance to the project requirements. This QA randomly checked the workmanship and measured the required 1/4" fillet on all sides of the stiffener which it was found in compliance to the requirement. With the two

WELDING INSPECTION REPORT

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welders welding side by side on the tower tie-in brackets, approximately 30 pieces out of 142 pieces required were completed as of to date.

During the shift, USA Hoist personnel were also noted bolting and trial fitting the tack welded tower tie-in brackets and the two welded rear and front tie-in brackets. When the three (3) brackets were bolted together to the tower mast, the brackets' faying surfaces were noted sitting correctly. According to the shop foreman Genaro Ulloa, the trial fit-up of the three brackets look satisfactory.



At USA Hoist fabrication shop, welder Matt Wasaqi was observed continuing to perform 1F (flat) position Flux Cored Arc Welding (FCAW-G) fillet welding the 1/2" thick stiffener plate to the bent plate tower tie-in bracket.

06 20 2013

0925hours

Self Anchored Suspension Bridge



At USA Hoist fabrication shop, personnel were noted bolted/trial fitted the three (3) tie-in brackets (rear, front & tower) into the 6" x 6" x 3/8" thick tube steel tower mast.

06 20 2013

0923hours

Self Anchored Suspension Bridge

Summary of Conversations:

No significant conversation occurred today.

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 SMR Gary Thomas 916-764-6027, who represents the Office of Structural Materials for your project.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Foerder, Mike

QA Reviewer