

**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-029424**Date Inspected:** 08-Apr-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1550**Contractor:** USA HOIST**Location:** Crest Hill, IL

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

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

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

Quality Assurance Inspector (QAI) James Kent Smith was at the USA Hoist shop in Crest Hill, Illinois between the times noted above in order to monitor Quality Control functions and the in process work being performed by USA Hoist personnel. The following items were observed:

This QAI met with Robert Zimny, USA Hoist Quality Control (QC), and discussed his objective for the day. QC informed this QAI that he would be performing visual inspections on the welding that is being performed by qualified welders during the day here at USA Hoist, during his inspections this QAI observed QC using ¼" fillet weld gages to verify weld sizes and also utilizing undercut gages to check for any undercut that might be present in the completed mast section(s) where the gusset plates are being welded into position ½" inside the mast ends. Following his completion of inspection, QC generated his report for review by this QAI. QC informed this QAI that materials inspected today were found to be acceptable per AWS D1.1 standards and as per required contract documents and special provisions.

Matt Wasigi, identification letter "A":

Qualified Welder "A" was observed during various intervals during the day welding the gusset plates (item #2) to the mast post(s) (item #1) as shown on approved drawing 914202-01-LH. These gusset plates will be set in each end of the mast tubes at a ½" depth then welded into position. "A" was observed by this QAI to be using the Welding Procedure Specification (WPS) FCAW3210 with the 1.1mm E71T-1C Familiarc DW-50 wire electrode in the 2G position. The shielding gas being used was noted a combination of 75% Argon and 25% CO2 with flow rate of 38 CFH. The welding parameters were measured by this QAI using a Fluke clamp on meter, and were

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# WELDING INSPECTION REPORT

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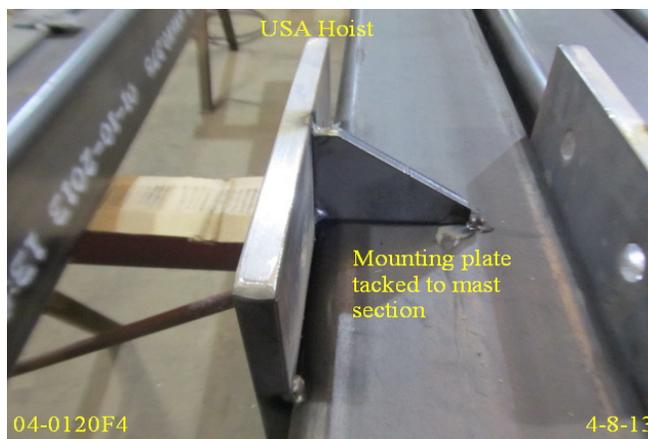
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found to be 26 volts and 190 amperes which are in compliance with the WPS noted above. Following the completion of each weld made by “A”, this QAI observed him to be checking the finished weld sizes using a weld file gage to ensure the ¼” file weld size required by the approved drawings was being maintained. All completed welds were visually observed by this QAI and weld size were gauged at random.

Andres Luna, identification letter “E”:

Qualified welder “E” was observed at various intervals today tacking the front mounting plates, item #3 to the mast section(s) item #1 as shown on the approved drawing 914204-04. He was observed using a square to ensure the straightness and 90° angle of the mounting plate to the mast securing the material with clamps, the shop foreman was observed checking the material for correct dimensional values then tack welds were placed in several locations along the plate and gusset areas. These tacked pieces were then moved to a holding area to wait for final welding procedures.

The completed and accepted work observed at this location appeared to be in compliance with the contract specifications. Unless otherwise noted, work observed on this date appeared to generally comply with special provisions and applicable contract documents.



### Summary of Conversations:

Basic conversation, fundamental to completion of the tasks at hand, occurred between this QAI and USA Hoist Management and Quality Control personnel.

### 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.

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<b>Inspected By:</b>	Smith, James	Quality Assurance Inspector
<b>Reviewed By:</b>	Riley, Ken	QA Reviewer

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