

**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 #: 82.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017020**Date Inspected:** 20-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1330**Contractor:** Westmont Industries**Location:** Santa Fe Springs, CA.**CWI Name:** R. Rodriguez, R. Dominguez**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:** Travelers**Summary of Items Observed:**

The Quality Assurance Inspector Sean Vance arrived on site at Westmont Industries (WMI) in Santa Fe Springs, CA, to randomly observe the in process welding of the Travelers. The QA Inspector arrived on site to randomly observe the WMI Quality Control (QC) Inspectors in process and completed visual and nondestructive testing. Upon the arrival of the QA Inspector the following observations were made:

**Trolley Test Stand**

The QA Inspector observed Smith Emery QC Inspector Ruben Dominguez performing Ultrasonic Testing (UT), on the previously completed weld repairs. The QA Inspector observed that the testing was being performed on the Rail Y Web Complete Joint Penetration (CJP) splices, designated as weld joints #'s TS1, TS3 and BS1 and QC Inspector Dominguez explained that the testing was being performed, in accordance to approved procedure SE-UT-CT-D1.1-104 Rev. # 2. The QA Inspector observed that the Gas Metal Arc Welding (GMAW) repairs, were previously performed by WMI welder # 3031, Mr. Jose Rodriguez and the QA Inspector had previously verified that Mr. Rodriguez was currently qualified, to perform the GMAW. The QA Inspector observed QC Inspector Dominguez utilizing a 70 degree Lucite wedge, attached to a 2.25 MHz transducer, to perform the Shear Wave Ultrasonic testing, on the above mentioned weld repairs. The QA Inspector observed Mr. Dominguez utilizing a Krautkramer USN 52L testing instrument and during the testing, the scanning pattern appeared to be in compliance with AWS Fig. 6.24. After testing was complete, QC Inspector Dominguez explained that no rejectable indications were found and an applicable Ultrasonic Testing report will be completed, for the inspection. QC Inspector Dominguez then explained that the Ultrasonic Testing will commence on the remaining weld repairs, in the a.m., on the following day, 9/21/10.

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## Traveler Test Rack

On this date, the QA Inspector observed Westmont Industries (WMI), production welder Alberto Cortes (WID # 3141) performing Flux Core Arc Welding (FCAW) tacking and grinding activities for the Traveler Test Rack. The QA Inspector observed that Mr. Cortes was utilizing a Miller brand machine and wire feeder, to perform the FCAW tacking and that Ultracore 71A85 (.045") diameter wire was being utilized, for the filler metal. The QA Inspector observed that the FCAW Tacking and grinding activities were being performed on the support columns, for the Traveler Test Rack.

The QA Inspector observed that Smith-Emery QC Inspector Ruben Dominguez was present, during the above mentioned welding and tacking activities and QC Inspector Dominguez explained that approved Welding Procedure Specifications (WPS's) were being utilized. QC Inspector Dominguez explained that the in-process welding parameters were randomly verified including voltage, amperage, pre-heat and travel speed and explained that the parameters were in compliance to the applicable WPS. The QA Inspector randomly verified these parameters and concurred with QC Inspector Dominguez.

### **Summary of Conversations:**

On this date, the QA Inspector was requested by Namasco Representative Raymond Flores to perform an inspection on plate material, prior to and after cutting of plate material.

The QA Inspector arrived at Namasco in the am. and upon arrival, the QA Inspector met with Mr. Flores. Mr. Flores then explained that some of the material is located in the production Bay, where cutting operations are performed and some material is located outside, in the laydown area storage yard. Mr. Flores then explained that he will provide the QA Inspector the applicable MTR's and after approximately 10 minutes, Mr. Flores provided these. Mr. Flores then escorted the QA Inspector inside the production Bay, to perform an inspection on the cut material. Mr. Flores then located the material and discovered that the material was not visibly accessible, due to the location at the bottom of a stacked pile of plate material. The QA Inspector observed that the dimensions and identification numbers of the plate material could not be verified, at this time. Mr. Flores then instructed shop production personnel, to remove the stacked material to uncover the material which is to be inspected. Mr. Flores then suggested that The QA Inspector perform an inspection on the plate material, located in the outside laydown storage yard.

The QA Inspector was then shown a stack of three plates and the material appeared to have identifying numbers written on each piece of material, which included material grade, size heat number, etc. The material identifying numbers appeared to match the Mill Test Reports (MTR's) which were provided to the QA Inspector, upon arrival. The QA Inspector then wrote "OK to Cut" on the material, utilizing a yellow paint stick marker. The QA Inspector also wrote "OK to Cut" on the applicable MTR's, utilizing a ball point pen and was then provided copies.

The QA Inspector observed that the material appeared to be in compliance with the MTR's which were provided and is listed as follows:

- 1 Each Plate Material A572 Gr. 50-1.250"x 96" x 480"-Ht. # NT7055
- 2 Each Plate Material A572 Gr. 50- 1.250"x 96" x 480"-Ht. # 0502428

Mr. Flores later explained that the cut material will not be accessible for approximately 1 hour and suggested that the QA Inspector arrive the following day, 9/21/10 to perform the inspection and possibly release to Westmont Industries. Mr. Flores suggested a 10 am. arrival on this date, to perform the inspection and the QA Inspector agreed.

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See attached picture below.



## 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.

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<b>Inspected By:</b>	Vance,Sean	Quality Assurance Inspector
<b>Reviewed By:</b>	Edmondson,Fred	QA Reviewer

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