

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



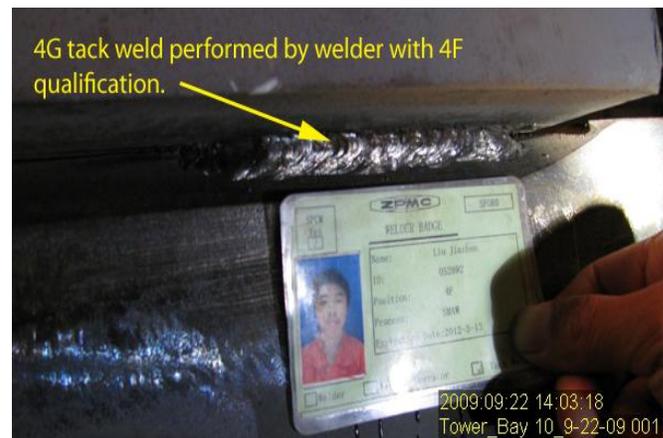
Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, PRC**Report No:** NCR-000426**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 22-Sep-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0400**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: North Tower
Procedural	Procedural	Description: North Tower, Lift 4, Skin D	

Reference Description: Unapproved welder welding on North Tower, Lift 4, Skin D Stiffener Connection Plates**Description of Non-Conformance:**

During in-process Visual Testing (VT) of North Tower, Lift 4, Skin D, Stiffener Connection Plate welds, QA observed that 4G (Overhead Groove weld) tack welds were being welded by a welder (#052892) with a 4F (Fillet) welding qualification. The welder was utilizing WPS-B-T-4314-TC-P5-2, which is a 4G SMAW WPS.

**Applicable reference:**

AWS D1.5 Section 5.22.4 - "A tack welder who passes the fillet weld break test shall be eligible to tack weld all types of groove joints and fillets using the process and the welding position tested."

AWS D1.5 Section 5.22.2.4 - "Qualification in the 4F (overhead) position shall qualify for flat, horizontal and overhead position fillet welding of plate and structural shapes."

AWS D1.5 Table 5.6

Who discovered the problem: Stefan Holmes**Name of individual from Contractor notified:** Luo Lai Quan

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Time and method of notification: 9/22/2009, 14:00; Verbal

Name of Caltrans Engineer notified: Scott Kennedy

Time and method of notification: 9/23/2009, 10:00; E-mail

QC Inspector's Name:

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

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 Serge Sinevod, 134-8257-0045, who represents the Office of Structural Materials for your project.

Inspected By:	Sinevod,Serge	ASMR
Reviewed By:	Wahbeh,Mazen	SMR



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge

333 Burma Road
Oakland CA 94607
Tel: Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR, A JV
375 BURMA ROAD
OAKLAND CA 95607

Date: 23-Sep-2009

Contract No: 04-0120F4
04-SF-80-13.2 / 13.9

Dear: Mr. Charles Kanapicki

Job Name: SAS Superstructure

Attention: Mr. Thomas Nilsson Project/Fabrication Manager

Document No: 05.03.06-000386

Subject: NCR No. ZPMC-0400

Reference Description: Unapproved Welder (4G) / North Shaft Lift 4 Skin D/ Stiffener Connection Plates Tack Welds

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

Material Location: Tower **Lift:** 04

Remarks:

During in-process Visual Testing (VT) of North Tower, Lift 4, Skin D, Stiffener Connection Plate welds, QA observed that 4G (Overhead Groove weld) tack welds were being welded by a welder (#052892) with a 4F(Fillet) welding qualification. The welder was utilizing WPS-B-T-4314-TC-P5-2, which is a 4G SMAW WPS.

AWS D1.5 Section 5.22.4 - "A tack welder who passes the fillet weld break test shall be eligible to tack weld all types of groove joints and fillets using the process and the welding position tested."

AWS D1.5 Section 5.22.2.4 - "Qualification in the 4F (overhead) position shall qualify for flat, horizontal and overhead position fillet welding of plate and structural shapes."

AWS D1.5 Table 5.6

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance including documentation that the tack welds are in or have been brought into compliance with the contract requirements. In addition to the material/workmanship non-conformance, propose a resolution for the identified non-conformance that addresses the failure of Quality Control to identify the lack of welder qualification for 4G (overhead groove weld). Provide documentation of the steps/actions taken by the Quality Control Manager to prevent future occurrences.

Transmitted by: Scott Kennedy Sr. Bridge Engineer

Attachments: ZPMC-0400

cc: Rick Morrow, Gary Pursell, Mark Woods, Doug Coe

File: 05.03.06

NCR PROPOSED RESOLUTION

To: CALTRANS - SAS Superstructure
333 Burma Road
Oakland CA 94607

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000386

Subject: NCR No. ZPMC-0400

Dated: 29-Sep-2009

Contract No.: 04-0120F4
04-SF-80-13.2 / 13.9

Job Name: SAS Superstructure

Document No.: ABF-NPR-000372 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has now included the necessary documentation to provide objective evidence work has been completed. ZPMC requests closure of this NCR.

ZPMC has now included the necessary documentation to provide objective evidence work has been completed. ZPMC requests closure of this NCR.

Submitted by:

Attachment(s): ABF-NPR-000372R00;

Caltrans' comments:

Status: CLO

Date: 29-Sep-2009

The Department has reviewed the applicable codes and found that it was in error in the issuance of NCR ZPMC-400. ZPMC/ABF JV is correct in their interpretation of the code. The Department will endeavor to prevent future occurrences and concurs that Non-Conformance ZPMC-400 is closed.

Submitted by: Kennedy, Scott

Date: 29-Sep-2009

Attachment(s):



No. T-063

LETTER OF RESPONSE

TO: American Bridge/Flour JV

DATE: 2009-9-27

REGARDING: NCR-000426(ZPMC-0400)

ZPMC received NCR-000426(ZPMC-0400), it mentioned that ZPMC's 4F qualified welder performed tack welding on 4G position. But according to AWS D1.5 Section 5.22.4: A tack welder who passed the fillet weld break test shall be eligible to tack weld all types of groove joints on fillets using the process and the welding position tested. Since this welder has the tack weld certification, and did comply with the AWS requirement, how did the Non-Conformance come?

When CT inspector found this so-called problem, ZPMC site inspector had already explained the AWS criterion to them, but they still ignored it and issued their NCR. Obviously their behavior was un-responsible.

Because such case had happened for several times, so here ZPMC had to announced, as a responsible work attitude, CT should be more familiar with related criteria, and before action they need think more but not assume something as a matter of course.

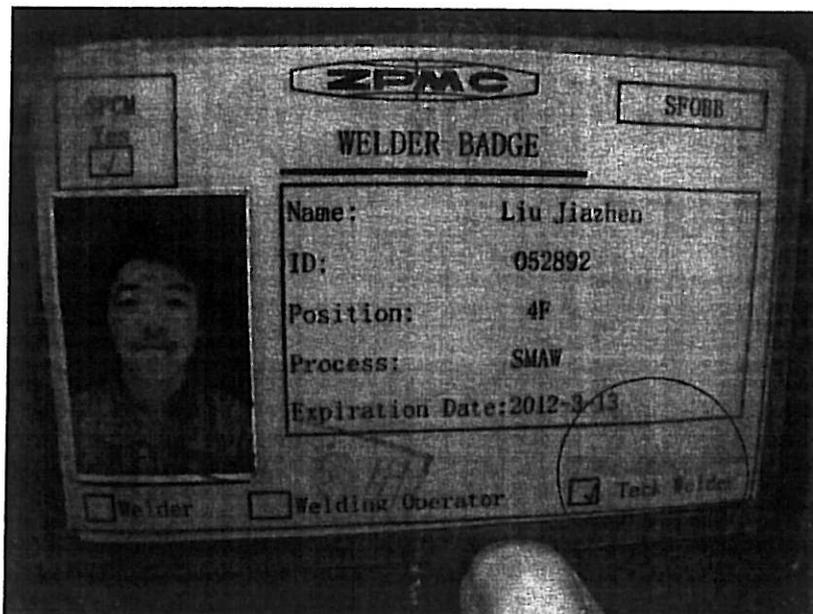
Here attached the welder certification to show his qualification.

So ZPMC claims CT could take a review and withdraw this NCR.

ATTACHMENT:

NCR-000426(ZPMC-0400)

Tack Welder Certification as below:



陆建华 9/28/09



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
333 Burma Road
Oakland CA 94607
Tel: Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR, A JV
375 BURMA ROAD
OAKLAND CA 95607

Date: 23-Sep-2009

Contract No: 04-0120F4
04-SF-80-13.2 / 13.9

Dear: Mr. Charles Kanapicki
Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Subject: NCR No. ZPMC-0400

Job Name: SAS Superstructure
Document No: 05.03.06-000386

Reference Description: Unapproved Welder (4G) / North Shaft Lift 4 Skin D/ Stiffener Connection Plates Tack Welds

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Material Location: Tower

Lift: 04

Remarks:

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AWS D1.5 Section 5.22.4 - "A tack welder who passes the fillet weld break test shall be eligible to tack weld all types of groove joints and fillets using the process and the welding position tested."

AWS D1.5 Section 5.22.2.4 - "Qualification in the 4F (overhead) position shall qualify for flat, horizontal and overhead position fillet welding of plate and structural shapes."

AWS D1.5 Table 5.6

Action Required and/or Action Taken:

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Transmitted by: Scott Kennedy Sr. Bridge Engineer

Attachments: ZPMC-0400

cc: Rick Morrow, Gary Pursell, Mark Woods, Doug Coe

File: 05.03.06

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Contract #: 04-0120F4
 Cty: SF/ALA Rte: 80 PM: 13.2/13.9
 File #: 69.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, PRC

Report No: NCR-000426

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 22-Sep-2009

Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

NCR #: ZPMC-0400

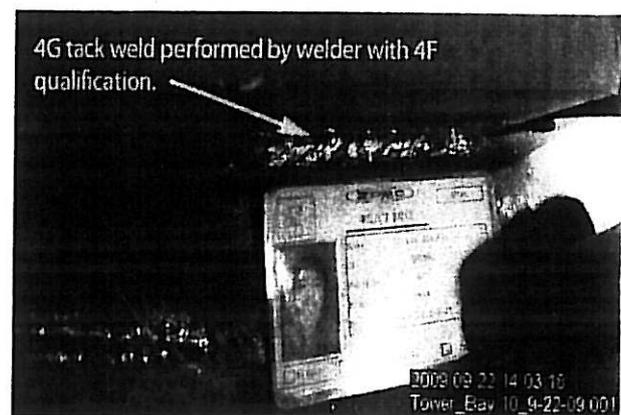
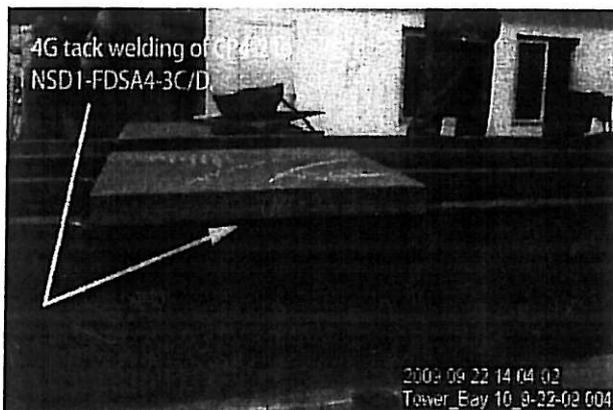
Type of problem:

Welding **Concrete** **Other**
Welding **Curing** **Procedural** **Bridge No:** 34-0006
Joint fit-up **Coating** **Other** **Component:** North Tower
Procedural **Procedural** **Description:** North Tower, Lift 4, Skin D

Reference Description: Unapproved welder welding on North Tower, Lift 4, Skin D Stiffener Connection Plates

Description of Non-Conformance:

During in-process Visual Testing (VT) of North Tower, Lift 4, Skin D, Stiffener Connection Plate welds, QA observed that 4G (Overhead Groove weld) tack welds were being welded by a welder (#052892) with a 4F (Fillet) welding qualification. The welder was utilizing WPS-B-T-4314-TC-P5-2, which is a 4G SMAW WPS.



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AWS D1.5 Table 5.6

Who discovered the problem: Stefan Holmes

Name of individual from Contractor notified: Luo Lai Quan

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Time and method of notification: 9/22/2009, 14:00; Verbal

Name of Caltrans Engineer notified: Scott Kennedy

Time and method of notification: 9/23/2009, 10:00; E-mail

QC Inspector's Name:

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

Comments:

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Inspected By:	Sinevod,Serge	ASMR
Reviewed By:	Wahbeh,Mazen	SMR

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, PRC**Report No:** NCS-000306**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 30-Sep-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0400**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component:
Procedural	Procedural	Descriptor:	

Date the Non-Conformance Report was written: 22-Sep-2009**Description of Non-Conformance:**

During in-process Visual Testing (VT) of North Tower, Lift 4, Skin D, Stiffener Connection Plate welds, QA observed that 4G (Overhead Groove weld) tack welds were being welded by a welder (#052892) with a 4F (Fillet) welding qualification. The welder was utilizing WPS-B-T-4314-TC-P5-2, which is a 4G SMAW WPS.

Contractor's proposal to correct the problem:

Ensure welders only weld in qualified positions.

Corrective action taken:

ZPMC indicated that the welder was qualified to perform SMAW tack welds in both 4F and 4G positions.

Did corrective action require Engineer's approval? Yes No**If so, name of Engineer providing approval:****Date:****Is Engineer's approval attached?** Yes No**Comments:**

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Inspected By: Sinevod, Serge

Quality Assurance Inspector

Reviewed By: Wahbeh, Mazen

QA Reviewer