

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
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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-000417

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 21-Sep-2009

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

NCR #: ZPMC-0391

Type of problem:

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: West Tower
Procedural	Procedural	Description: West Tower, Lift 1	

Reference Description: Unapproved freehand thermal cutting on West Tower base-end bevel preparation

Description of Non-Conformance:

During in-process Visual Testing (VT) of West Tower, Lift 1, base-end bevel preparation, QA observed 'freehand thermal cutting' being carried out by ZPMC personnel. Access to the areas being cut were not restricted due to cross sectional geometry and or position in so far as mechanical guides could not be used.



Applicable reference:

AWS D1.5-2002, Section 3.2.3 - "Steel and weld metal may be thermally cut, provided a smooth and regular surface free from cracks and notches is secured, and provided that an accurate profile is secured by the use of a mechanical guide. Freehand thermal cutting shall be done only where approved by the Engineer."

Who discovered the problem: Umesh Gaikwad

Name of individual from Contractor notified: Luo Lai Quan

Time and method of notification: 9/21/2009, 10:00; Verbal

Name of Caltrans Engineer notified: Scott Kennedy

Time and method of notification: 9/21/2009, 12:00; Verbal

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

QC Inspector's Name: Zhao Mao Mao

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
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Reviewed By:	Wahbeh,Mazen	SMR
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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: 21-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: 05.03.06-000379

Subject: NCR No. ZPMC-0391

Reference Description: Freehand Thermal Cutting Without Engineer Approval / West Shaft Lift 1 / Base Bevel Preparation

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:** 01

Remarks:

During in-process Visual Testing (VT) of West Tower, Lift 1, base-end bevel preparation, QA observed 'freehand thermal cutting' being carried out by ZPMC personnel. Access to the areas being cut were not restricted due to cross sectional geometry and or position in so far as mechanical guides could not be used.

AWS D1.5-2002, Section 3.2.3 - "Steel and weld metal may be thermally cut, provided a smooth and regular surface free from cracks and notches is secured, and provided that an accurate profile is secured by the use of a mechanical guide. Freehand thermal cutting shall be done only where approved by the Engineer."

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance, documenting that the affected plate edges have been brought in 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 indentify the deficiency.

Provide documentation of the steps/actions taken by the Quality Control Manager with regard to both Production and Quality Control to prevent future occurrences.

Transmitted by: Scott Kennedy Sr. Bridge Engineer

Attachments: ZPMC-0391

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: 05.03.06-000379

Subject: NCR No. ZPMC-0391

Dated: 22-Oct-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000407 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC understands and acknowledges that free hand thermal cutting is not permitting without prior Engineer approval

The ABF JV QCM has discussed this issue with the ZPMC QA department, the ZPMC QA department in turn has discussed this ZPMC Production. ZPMC understands and acknowledges that free hand thermal cutting is not permitting without prior Engineer approval and in the future ZPMC CVMs monitor thermal cutting activities closer to ensure that it is in compliance. The surfaces in questions will be ground to shiny metal and the joint fit will be inspected by a CWI prior to welding.

Submitted by:

Attachment(s): ABF-NPR-000407R00

Caltrans' comments:

Status: AAP

Date: 27-Oct-2009

The proposal is acceptable. However, please address how the proper joint fit up will be maintained. This NCR (ZPMC-391) will not be closed until the referenced issue is satisfactorily addressed.

Submitted by: Lee, Ken

Date: 27-Oct-2009

Attachment(s): NPR CT Comments

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000379

Subject: NCR No. ZPMC-0391

Dated: 17-Nov-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000407 **Rev:** 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has resolved the discrepancy between their internal procedure and AWS D1.5 and understands that Engineer approval is required for free hand thermal cutting.

ZPMC has resolved the discrepancy between their internal procedure and AWS D1.5 and understands that Engineer approval is required for free hand thermal cutting. A CVI will monitor free hand thermal cutting in the future to prevent this non conformance. ZPMC has provided their internal free hand thermal procedure which was used in the documented NCR. Enclosed are photos of the final condition of the free hand cut. Based on this ZPMC requests closure of this NCR.

Submitted by:

Attachment(s): ABF-NPR-000407R01;

Caltrans' comments:

Status: CLO

Date: 18-Nov-2009

The attachment for this NPR does not address the resolution. However, based on the attachment for ZPMC-412, 436, and 442, in which ZPMC also refers to NCR ZPMC-0391 for the same issue, the proposed resolution is acceptable. The Department concurs that Non-conformance ZPMC-0391 is closed.

Submitted by: Lee, Ken

Date: 18-Nov-2009

Attachment(s):

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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-000313**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Oct-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0391**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: 21-Sep-2009**Description of Non-Conformance:**

During in-process Visual Testing (VT) of West Tower, Lift 1, base-end bevel preparation, QA observed 'freehand thermal cutting' being carried out by ZPMC personnel. Access to the areas being cut were not restricted due to cross sectional geometry and or position in so far as mechanical guides could not be used.

Contractor's proposal to correct the problem:

ZPMC acknowledges that free hand thermal cutting is not permitted without prior Engineer approval and in the future, ZPMC CWIs will closely monitor thermal cutting activities.

Corrective action taken:

The ABFJV QCM has discussed the issue with the ZPMC QA department and the ZPMC QA department, in turn, has discussed this with ZPMC production. The surfaces in question will be ground smooth and the joint fit will be inspected by a CWI prior to welding.

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:**

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

Quality Assurance Inspector

Reviewed By: Wahbeh, Mazen

QA Reviewer