

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

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, P.R. China

Report No: NCR-000762

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 10-Jun-2010

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

NCR #: ZPMC-0724

Type of problem:

Welding

Concrete

Other

Welding

Curing

Procedural

Bridge No: 34-0006

Joint fit-up

Coating

Other

Component: West Shaft 3 Skin C and D

Procedural

Procedural

Description:

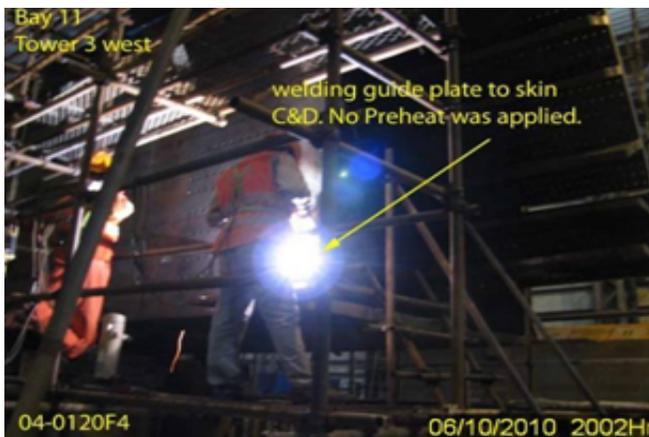
Reference Description: Welding without pre-heat procedure

Description of Non-Conformance:

During random in process observations of West Tower Lift 3 Quality Assurance inspector observed the following issues:

- ZPMC welding personnel performing tack welding without preheating.
- Tack welds were placed at the corner intersection of skin plates C & D.
- ZPMC Welding personnel identified as #048647 performed tack welding in the vertical position, which the welder was not qualified in.
- ZPMC has used unidentified material(nuts) for temporary attachments to the skin plates at corner C and D on tower 3 west.
- This QA inspector notified ZPMC CWI identified as Mr. Xu Lefeng and QC inspector identified as Mr. Zhao Mao Mao of this issue. Mr. Man Kan Hon of ABF was also present along with ZPMC QA Zhang Jiauli.

For further information, please see attach pictures below.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

AWS D1.5 section 4 table 4.4;

Minimum Pre heat for material over 60mm is 110 degrees C

AWS D1.5 section 5.22.1 and 5.23.3 table 5.6

A Tack welder shall be qualified by one fillet weld break specimen made in each position in which tack welds are to be made.

AWS D1.5 section 5.4.3.4

WPS's used to produce matching weld metal to join steel's, with minimum specified yield strength of 485MPa or greater that are not described in 1.2.2 shall be qualified by the contractor or ordered by the engineer in conformance with 5.4.3.

Who discovered the problem: Kenneth Riley

Name of individual from Contractor notified: Zhang Jiauli

Time and method of notification: 2030 hours, 06/10/10, Verbal

Name of Caltrans Engineer notified: Ken Lee

Time and method of notification: 1700/verbal

QC Inspector's Name: Man Kan Hon

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By: Ng,Michael

QA Inspector

Reviewed By: Devey,Jim

SMR



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
 333 Burma Road
 Oakland CA 94607
 Tel: 510-286-0539 Fax: 510-286-0550

NON-CONFORMANCE REPORT TRANSMITTAL

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

Date: 14-Jun-2010

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-0724

Job Name: SAS Superstructure
Document No: 05.03.06-000721

Reference Description: Welding without pre-heat procedure/Tower/West Lift 3 at Skin C&D intersection

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:** 03

Remarks:

During random in process observations of West Tower Lift 3 Quality Assurance inspector observed the following issues:

- ZPMC welding personnel performing tack welding without preheating.
- Tack welds were placed at the corner intersection of skin plates C & D.
- ZPMC Welding personnel identified as #048647 performed tack welding in the vertical position, which the welder was not qualified in.

- ZPMC has used unidentified material(nuts) for temporary attachments to the skin plates at corner C and D on tower 3 west.

- This QA inspector notified ZPMC CWI identified as Mr. Xu Lefeng and QC inspector identified as Mr. Zhao Mao Mao of this issue. Mr. Man Kan Hon of ABF was also present along with ZPMC QA Zhang Jiaili.

For further information, please see attach pictures and references below:

AWS D1.5 section 4 table 4.4;
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 AWS D1.5 section 5.4.3.4
 WPS's used to produce matching weld metal to join steels, with minimum specified yield strength of 485MPa or greater that are not described in 1.2.2, shall be qualified by the Contractor or ordered by the Engineer in conformance with 5.4.3.

Action Required and/or Action Taken:

Propose resolutions for the identified non-conformance items and document that the various deficiencies have been brought in compliance with contract requirements. Also propose a resolution that addresses the apparent failure of Quality Control to identify the non-conformance with the appropriate Welding Procedure Specification (WPS). Provide documentation of the steps taken by the Quality Control Manager to prevent future occurrences.

The response for the resolution of this issue is requested within 7 days.

NCT

(Continued Page 2 of 2)

Transmitted by: Gina Rizzardo Transportation Engineer

Attachments: ZPMC-0724

cc: Rick Morrow, Gary Pursell, Mark Woods

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000721

Subject: NCR No. ZPMC-0724

Dated: 30-Aug-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000749 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has removed the unidentified material from the tower and has performed NDT of the material to show that the that base metal is acceptable.

ZPMC has removed the unidentified material from the tower and has performed NDT of the material to show that the that base metal is acceptable. ZPMC QA and the production team leader have discussed this non conformance with the welder and reinforced the requirements of welding unidentified attachments onto the tower, to prevent future occurrences. ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000749R00;

Caltrans' comments:

Status: CLO

Date: 31-Aug-2010

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0724 is closed.

Submitted by: Rizzardo, Gina

Date: 31-Aug-2010

Attachment(s):



No. T-156

LETTER OF RESPONSE

TO: American Bridge/Flour JV

DATE: 2010-08-29

REGARDING: NCR-000762(ZPMC-0724)

ZPMC acknowledged this problem, and took action to remove the component and then carried out the base metal MT. Finally the result of these relevant area show good. Here attached the related documents to prove the welds are sound. What's more, we'll enhance the education of this welder.

Basing on above information, ZPMC hope CT could take a review and close these NCRs.

ATTACHMENT:

NCR-000762(ZPMC-0724)

T-787-MT-10880

Zhao Jia new
2010-8-29



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
 333 Burma Road
 Oakland CA 94607
 Tel: 510-286-0539 Fax: 510-286-0550

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/E.L.LOR. A JV Date: 14-Jun-2010
 375 BURMA ROAD
 OAKLAND CA 95607 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: 05.03.06-000721
 Subject: NCR No. ZPMC-0724

Reference Description: Welding without pre-heat procedure/Tower/West Lift 3 at Skin C&D intersection

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

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Material Location: Tower Lift: 03

Remarks:

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- ZPMC has used unidentified material(nuts) for temporary attachments to the skin plates at corner C and D on tower 3-west.
 - This QA inspector notified ZPMC CWI identified as Mr. Xu Lefeng and QC inspector identified as Mr. Zhao Mao Mao of this issue. Mr. Man Kan Hon of ABF was also present along with ZPMC QA Zhang Jiuli.

For further information, please see attach pictures and references below:

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Action Required and/or Action Taken:

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NCT

(Continued Page 2 of 2)

Transmitted by: Gina Rizzardo Transportation Engineer

Attachments: ZPMC-0724

cc: Rick Morrow, Gary Pursell, Mark Woods

File: 05.03.06

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 Cty: SF/ALA Rte: 80 PM: 13.2/13.9
 File #: 69.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, P.R. China Report No: NCR-000762
 Prime Contractor: American Bridge/Fluor Enterprises, a JV Date: 10-Jun-2010
 Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island NCR #: ZPMC-0724

Type of problem:

- Welding Concrete Other
 Welding Curing Procedural
 Joint fit-up Coating Other
 Procedural Procedural Description:

Bridge No: 34-0006
 Component: West Shaft 3 Skin C and D

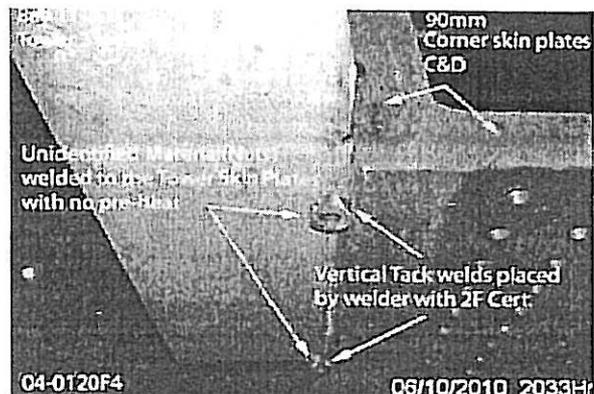
Reference Description: Welding without pre-heat procedure

Description of Non-Conformance:

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For further information, please see attach pictures below.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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Who discovered the problem: Kenneth Riley

Name of individual from Contractor notified: Zhang Jiauli

Time and method of notification: 2030 hours, 06/10/10, Verbal

Name of Caltrans Engineer notified: Ken Lee

Time and method of notification: 1700/verbal

QC Inspector's Name: Man Kan Hon

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By: Ng, Michael	- - - = - - =	QA Inspector
Reviewed By: Devey, Jim		SMR



母材探伤申请表

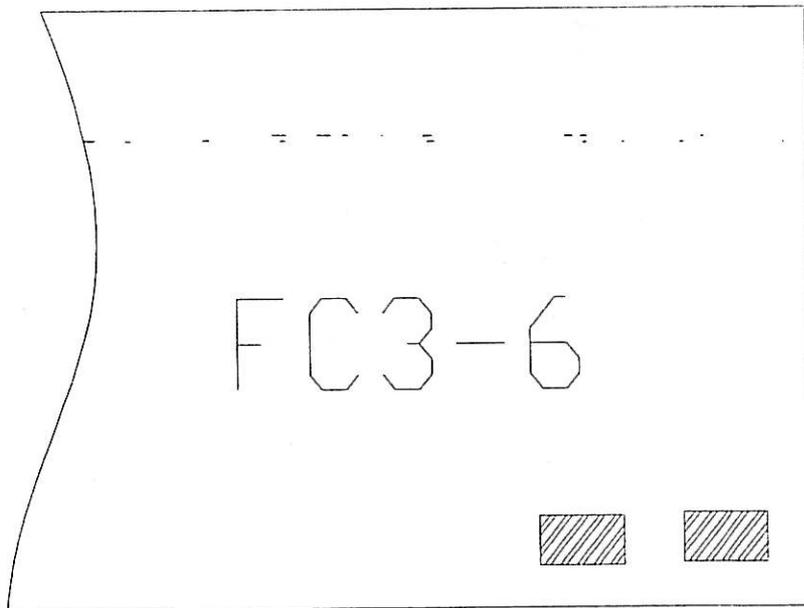
SHANGHAI ZHENHUA PORT MACHINERY CO. LTD

APPLICATION FORM FOR BASE MATERIAL NDT

产品名称 Project Name		美国海湾大桥		探伤类别 NDT type	MT100%	数量 Quantity	1	
序号 No.	零部件图号 Drawing No.	零部件名称	件号 Item No.	数量 Quantity	板厚/尺寸 Thickness/Dime	炉批号 Batch No.	材料 Material	结论 Result
1	FC3-6	第三吊C面板	FC3-6	2	90*10*100	7300147N	A709M-345T2-Z	✓

探伤位置图

Scheme showing the test part



注:阴影部分为探伤区域

NCR 0724

申请人 Applicant	毛彬彬 陈洪萍	日期 Date	2010.08.27	主探者 Inspected by	蔡行军	日期 Date	2010.8.27
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DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCS-000851**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 30-Aug-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0724**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: 10-Jun-2010**Description of Non-Conformance:**

During random in process observations of West Tower Lift 3 Quality Assurance inspector observed the following issues:

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- This QA inspector notified ZPMC CWI identified as Mr. Xu Lefeng and QC inspector identified as Mr. Zhao Mao Mao of this issue. Mr. Man Kan Hon of ABF was also present along with ZPMC QA Zhang Jiaili.

For further information, please see attach pictures below.

Contractor's proposal to correct the problem:

Contractor to remove the unidentified material from the tower and will perform NDT on the base metal to show the base metal is still acceptable. ZPMC's QA and the Production Team leader will discuss with the weld involved to reinforce the requirements of welding attachments on the tower to prevent future occurrences.

Corrective action taken:

Contractor removed the unidentified attachment material, and performed the NDT on the base metal. NDT report showed the base metal is acceptable. ZPMC's QA with the Production Team leader discussed with the welder involved to reinforce the requirements and consequence of welding unidentified attachments on the tower.

Did corrective action require Engineer's approval?

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Yes No

If so, name of Engineer providing approval:

Date:

Is Engineer's approval attached? Yes No

Comments:

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Inspected By: Ng,Michael

Quality Assurance Inspector

Reviewed By: Devey,Jim

QA Reviewer