

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-000605

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 05-Jan-2010

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

NCR #: ZPMC-0578

Type of problem:

Welding

Concrete

Other

Welding

Curing

Procedural

Bridge No: 34-0006

Joint fit-up

Coating

Other

Component: Bike path Cantilever Bracket BK001-046

Procedural

Procedural

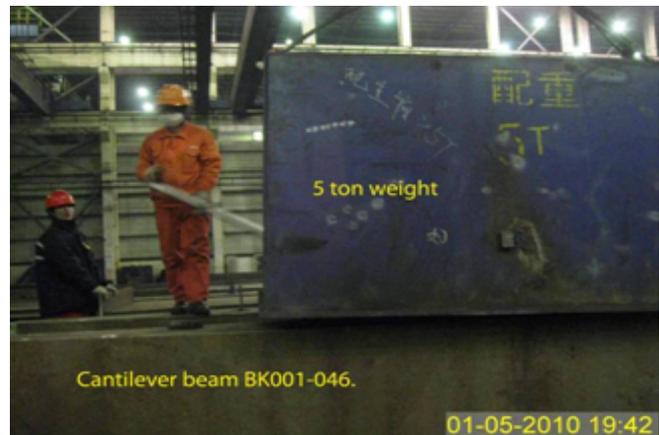
Description:

Reference Description: Heat Straightening re-performed without approval on Bike path Cantilever Bracket BK001-046

Description of Non-Conformance:

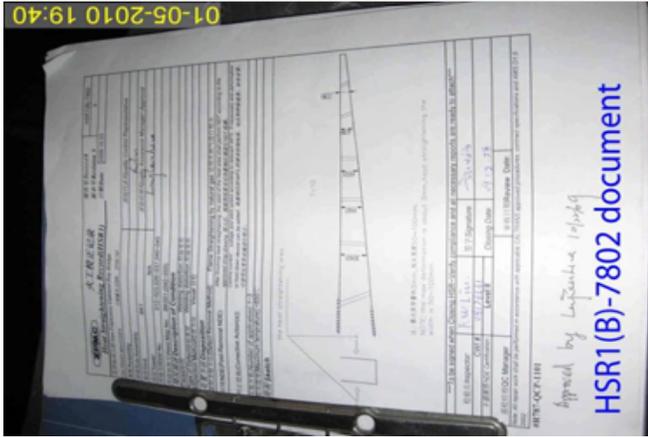
During Quality Assurance in-process observations of the fabrication of bike path cantilever brackets in OBG bay 5, this Quality Assurance Inspector (QA) discovered the following issues:

- ZPMC personnel heat straightening bike path cantilever bracket identified as BK001-046.
- ZPMC had placed a 5 ton weight on BK001-046 10 mm thick side plate during the heat straightening process.
- Heat straightening document HSR1 (B)-7802 revision 0 was referenced as being the controlling document by ZPMC QC CWI Mr. Li Jia.
- The referenced document does not indicate any weight and/or mechanical force being used during this process.
- Document HSR1(B)-7802 showed that the work has been completed and was signed off by Mr. Liu on 12-28-2009.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

AWS D1.5/2002 Section 3.7.3; “Members distorted by welding shall be straightened by mechanical means or by carefully supervised application of a limited amount of localized heat as approved by the engineer...The part to be heated for straightening shall be substantially free of stress and from external forces...”

Who discovered the problem: Paul Dawson

Name of individual from Contractor notified: Peter Ferguson

Time and method of notification: 10:30_01-06-10_Email

Name of Caltrans Engineer notified: Bill Howe, Ching Chao

Time and method of notification: 14:30_01-06-10_Email

QC Inspector's Name: Li Jia

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, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

Inspected By:	Tsang, Eric	SMR
----------------------	-------------	-----

Reviewed By:	Wahbeh, Mazen	SMR
---------------------	---------------	-----

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000568

Subject: NCR No. ZPMC-0578

Dated: 26-Aug-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000748 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: Attached is the correct HSR which shows the use of the outside force. Based on this ZPMC requests closure of this NCR.

ZPMC QC provided the incorrect HSR at this time. Attached is the correct HSR which shows the use of the outside force. Per discussion in China, ZPMC has issued an internal NCR to the QC to reiterate the importance of verifying that the correct documents are on hand prior to beginning work to prevent future occurrences of this. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000748R00;

Caltrans' comments:

Status: CLO

Date: 31-Aug-2010

The provided documentation is sufficient to close this NCR.

Submitted by: Woo, Laraine

Date: 31-Aug-2010

Attachment(s):



No. B-772

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-5-24

Wrong heat straightening report was provided to inspector. ZPMC is providing the correct one what shows the mechanical force to be used on this case. Based on this, ZPMC is requesting closure of this NCR.

ATTACHMENT:

HSR1(B)-8032

A handwritten signature in black ink, appearing to be 'Jing Li'.

5/24/10



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: 06-Jan-2010

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: 05.03.06-000568

Subject: NCR No. ZPMC-0578

Reference Description: Heat Straightening re-performed without approval on Bike path Cantilever Bracket BK001-046

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: Bike Path

Lift: N/A

Remarks:

During Quality Assurance in-process observations of the fabrication of bike path cantilever brackets in OBG bay 5, this Quality Assurance Inspector (QA) discovered the following issues:

- ZPMC personnel heat straightening bike path cantilever bracket identified as BK001-046.
- ZPMC had placed a 5 ton weight on BK001-046 10 mm thick side plate during the heat straightening process.
- Heat straightening document HSR1 (B)-7802 revision 0 was referenced as being the controlling document by ZPMC QC CWI Mr. Li Jia.
- The referenced document does not indicate any weight and/or mechanical force being used during this process.
- Document HSR1(B)-7802 showed that the work has been completed and was signed off by Mr. Liu on 12-28-2009.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Bill Howe Sr. Transportation Engineer

Attachments: ZPMC-0578

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao

File: 05.03.06

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-000605

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 05-Jan-2010

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

NCR #: ZPMC-0578

Type of problem:

Welding Concrete Other

Welding Curing Procedural

Joint fit-up Coating Other

Procedural Procedural Description:

Bridge No: 34-0006

Component: Bike path Cantilever Bracket BK001-046

Reference Description: Heat Straightening re-performed without approval on Bike path Cantilever Bracket BK001-046

Description of Non-Conformance:

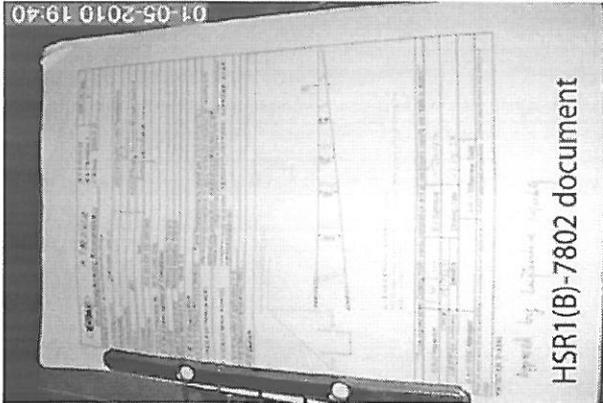
During Quality Assurance in-process observations of the fabrication of bike path cantilever brackets in OBG bay 5, this Quality Assurance Inspector (QA) discovered the following issues:

- ZPMC personnel heat straightening bike path cantilever bracket identified as BK001-046.
- ZPMC had placed a 5 ton weight on BK001-046 10 mm thick side plate during the heat straightening process.
- Heat straightening document HSR1 (B)-7802 revision 0 was referenced as being the controlling document by ZPMC QC CWI Mr. Li Jia.
- The referenced document does not indicate any weight and/or mechanical force being used during this process.
- Document HSR1(B)-7802 showed that the work has been completed and was signed off by Mr. Liu on 12-28-2009.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

AWS D1.5/2002 Section 3.7.3; "Members distorted by welding shall be straightened by mechanical means or by carefully supervised application of a limited amount of localized heat as approved by the engineer... The part to be heated for straightening shall be substantially free of stress and from external forces..."

Who discovered the problem: Paul Dawson

Name of individual from Contractor notified: Peter Ferguson

Time and method of notification: 10:30_01-06-10_Email

Name of Caltrans Engineer notified: Bill Howe, Ching Chao

Time and method of notification: 14:30_01-06-10_Email

QC Inspector's Name: Li Jia

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, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

Inspected By: Tsang, Eric

SMR

Reviewed By: Wahbeh, Mazen

SMR



火工校正记录

Heat Straightening Record(HSRI)

报告号 Record#

HSR1(B)-8032

版本号 Revision #

0

日期 Date

2009.12.23

美国海湾大桥 San Francisco Oakland Bay Bridge

CALTRANS #04-0120F4

工程编号 JOB#: ZP06-787

装配 Assembly:

质检代表/Quality Control Representative

部装 Sub-Assembly:

梁段 Gird: BK1

质检经理/Quality Assurance Manager-Approval

塔段 Tower:

N/A

焊缝号 Weld No:

012~023,026~035,040~045

焊缝地图号 Weld Map No:

BK1-(042~050)

情况描述 Description of Condition

Cause原因

Welding distortion 焊接变形

Type of Defect缺陷类型

Welding distortion 焊接变形

Inspection Method检查方法

Visual 目检

处置方法 Disposition

缺陷去除方法(Defect Removal Method):

Flame Straightening by natural gas 运用天然气进行校火

后续NDE(Post-Removal NDE):

After finishing heat straightening, the weld of the heat area shall perform NDT according to the approved shop drawing 校火后, 根据图纸要求对热影响区域进行NDT检测。

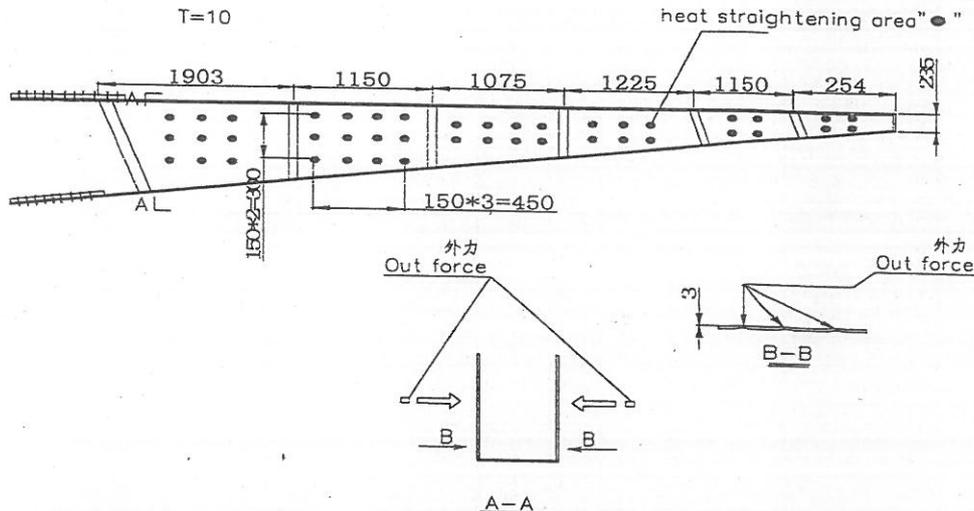
纠正措施(Corrective Action(s)):

Control current, voltage and weld speed according to relevant WPS. If necessary anti-deformation or hold down device can be added. 依据相应的WPS的要求控制电流, 电压和焊接速度。如有必要, 可使用反变形设施进行校正。

实施次数(Number of application): 1~3

最高温度(Maximum temperature): <650°C

简图 Sketch



注: 最大变形量约3mm, 校火宽度50~100mm.

NOTE: the max deformation is about 3mm, heat straightening the width is 50~100mm.

To be signed when Closing HSR~Verify compliance and all necessary reports are ready to attach

检验员 Inspector:

F.W. Lim.

签字 Signature:

CWI #

08120531

II 级探伤 NDE Certification:

Level II

Closing Date:

2010.01.08

质检经理 QC Manager

审核日期 Review Date:

2010.01.09

Note: All repair work shall be performed in accordance with applicable CALTRANS approved procedures, contract specifications and AWS D1.5 2002.

#R787-QCP-1101

Approved by

12.23

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 #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCS-000748**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 01-Sep-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0578**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: 05-Jan-2010**Description of Non-Conformance:**

During Quality Assurance in-process observations of the fabrication of bike path cantilever brackets in OBG bay 5, this Quality Assurance Inspector (QA) discovered the following issues:

- ZPMC personnel heat straightening bike path cantilever bracket identified as BK001-046.
- ZPMC had placed a 5 ton weight on BK001-046 10 mm thick side plate during the heat straightening process.
- Heat straightening document HSR1 (B)-7802 revision 0 was referenced as being the controlling document by ZPMC QC CWI Mr. Li Jia.
- The referenced document does not indicate any weight and/or mechanical force being used during this process.
- Document HSR1(B)-7802 showed that the work has been completed and was signed off by Mr. Liu on 12-28-2009.

Contractor's proposal to correct the problem:

Provide an updated version of the HSR detailing the methods used during repair work.

Corrective action taken:

Contractor has submitted an updated version of the HSR detailing the work that was performed.

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 Jim Simonisq, who represents the Office of Structural Materials for your project.

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Inspected By: Simonis,Jim

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer