

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, P. R. China**Report No:** NCR-000490**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Oct-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0463**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Crossbeam 7 Weld CB201G-013-185
Procedural	Procedural	Description: Missed MT indication by QC	

Reference Description: Missed MT longitudinal indication by QC on CB7**Description of Non-Conformance:**

During a random Magnetic Particle (MT) verification of Cross beam 7 located in the outside yard behind Bay 15, Caltrans Quality Assurance (QA) Inspector observed one (1) Longitudinal Crack measuring 8 mm in length on fracture critical weld (FCW) CB201G-013-185.

This weld was previously tested and accepted by ZPMC Magnetic Particle Testing (MT) technicians.

**Applicable reference:**

AWS D1.5 (02) - 6.26.1; "The weld shall have no cracks."

AWS D1.5 (02) Section 6.26.2; "Welds that are subject to MT in addition to visual inspection shall have no cracks."

Who discovered the problem: Dhanasingh Sukanthan**Name of individual from Contractor notified:** Shen Rushan**Time and method of notification:** 1400 hour, Verbal

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Name of Caltrans Engineer notified: Ching Chao and Bill Howe

Time and method of notification: 1500 hours, Email

QC Inspector's Name: Tian Lei

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: Carreon,Albert

Lead Reviewer/Task Leader

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: 02-Dec-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: 05.03.06-000453

Subject: NCR No. ZPMC-0463

Reference Description: Missed MT longitudinal indication by QC on CB7

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: Xbeam **Lift:** 07

Remarks:

During a random Magnetic Particle (MT) verification of Cross beam 7 located in the outside yard behind Bay 15, Caltrans Quality Assurance (QA) Inspector observed one (1) Longitudinal Crack measuring 8 mm in length on fracture critical weld (FCW) CB201G-013-185.

This weld was previously tested and accepted by ZPMC Magnetic Particle Testing (MT) technicians.

Action Required and/or Action Taken:

Submit a repair procedure to the engineer for approval. Missed MT indications are a chronic problem. Provide training for the technician(s) involved and provide competency certificate.

Transmitted by: Bill Howe

Attachments: ZPMC-0463

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

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000453

Subject: NCR No. ZPMC-0463

Dated: 18-Dec-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000449 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: After repair, ZPMC or ABFJV will provide NDT documentation to show that the weld is acceptable. Documentation of training will be submitted at that time as well.

After repair, ZPMC or ABFJV will provide NDT documentation to show that the weld is acceptable. Documentation of training will be submitted at that time as well. Currently documentation is not available but based on this course of action, ZPMC requests that this response be approved with action pending.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000449R00

Caltrans' comments:

Status: AAP

Date: 30-Dec-2009

Request accepted.

Submitted by: Howe, Bill

Date: 30-Dec-2009

Attachment(s):

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000453

Subject: NCR No. ZPMC-0463

Dated: 25-Jan-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000449 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: ABF is submitting NDT documentation to show that welds with missed indications are acceptable after repair. Based on this ZPMC requests closure of this NCR.

Per discussion in China with representatives of the Department, ABF is submitting NDT documentation to show that welds with missed indications are acceptable after repair. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000449R01;

Caltrans' comments:

Status: CLO

Date: 26-Jan-2010

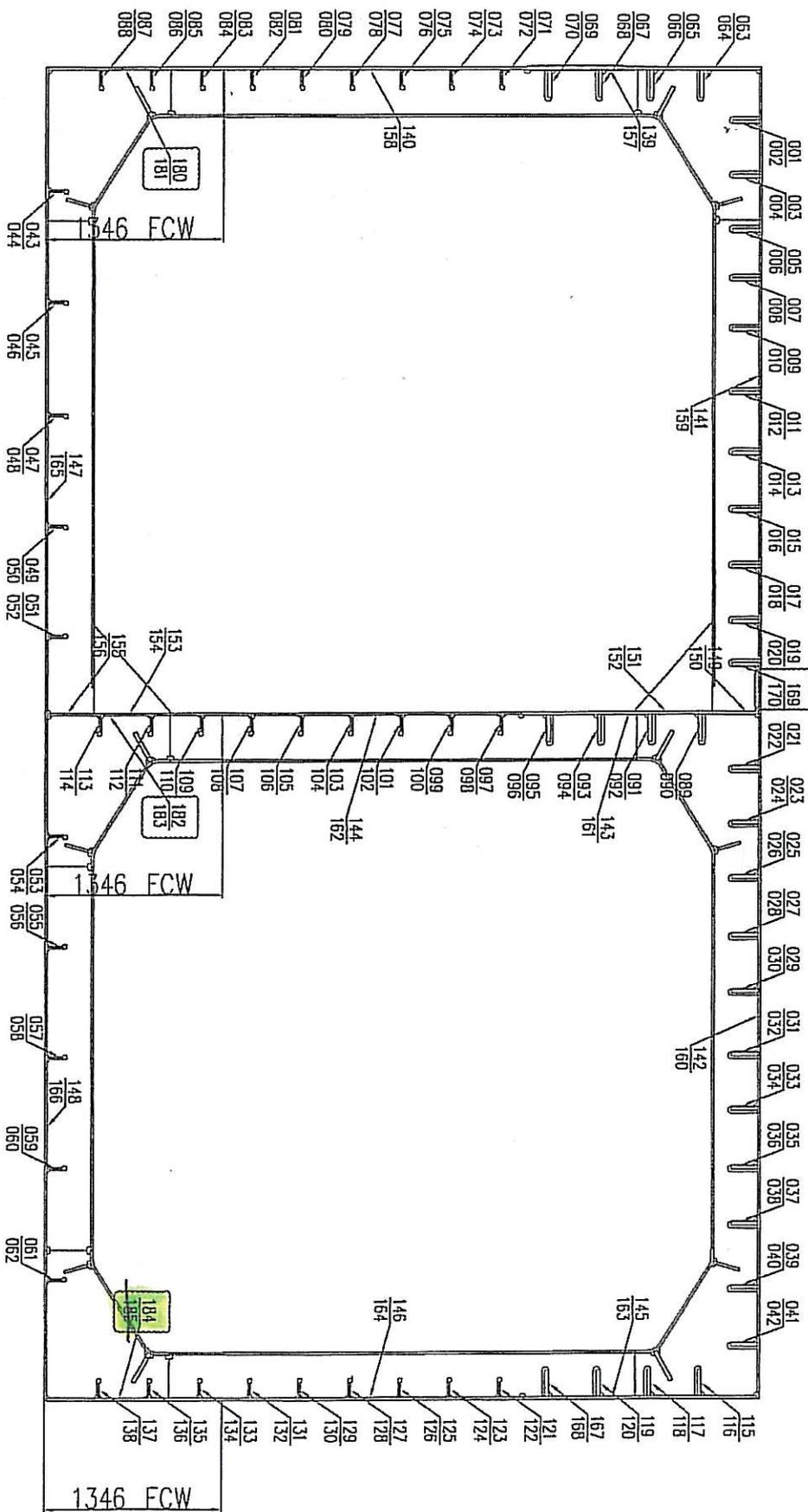
The documentation submitted by the contractor has been reviewed by the Engineer and is found to be acceptable. Based on the discussion in China with the contractor's representatives, other weld repair reports from ZPMC shall be included in the QA Data Base when available.

Submitted by: Chao, Ching

Date: 26-Jan-2010

Attachment(s):

MT-NCR-CB7-001 2/2



INTERMEDIATE DIAPHRAGM-SECTION VIEW
looking north

註：
本圖由成發結構工程、NCC/CM
及工程技術師共同編製。

房屋種類：CRZ01G 000 XXX
 房屋用途：住宅生產式公寓
 房屋地址：特種房屋

ZPMC
 SHANGHAI ZPMC ENGINEERING CO., LTD.
 WELDING MAP
 CB201G
 1/1

Handwritten signature and date: 9.5/09

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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, P. R. China**Report No:** NCS-000493**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 27-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0463**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: 23-Oct-2009**Description of Non-Conformance:**

During a random Magnetic Particle (MT) verification of Cross beam 7 located in the outside yard behind Bay 15, Caltrans Quality Assurance (QA) Inspector observed one (1) Longitudinal Crack measuring 8 mm in length on fracture critical weld (FCW) CB201G-013-185.

This weld was previously tested and accepted by ZPMC Magnetic Particle Testing (MT) technicians.

Contractor's proposal to correct the problem:

Repair indication and perform the required NDT.

Corrective action taken:

ABF submitted internal NDT documentation verifying the weld is now in conformance with Contract specifications. Per Team China discussions, documentation from ZPMC verifying the repairs were made and NDT was performed by ZPMC technicians will be submitted at a later date and added to the Data Base.

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 Simonis 152.1675.3703, who represents the Office of Structural Materials for your project.

Inspected By: Simonis, Jim

Quality Assurance Inspector

Reviewed By: Wahbeh, Mazen

QA Reviewer