

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:** Zhenhua Port Machinery Company, Ltd - Changxing Island**Report No:** NCR-000011**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 04-Oct-2007**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0011**Type of problem:**

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

Description of Non-Conformance:

Quality Control (QC) failed to document the required fit-up inspection of longitudinal stiffener piece mark p920-3 to Interior Splice Assembly MUC-A75, Weld Joint (WJ) number 3A.

This Caltrans Quality Assurance (QA) Inspector observed welding being performed on Weld Joint (WJ) number 3A, which attaches longitudinal stiffener piece mark p920-3 to Interior Splice Assembly MUC-A75. The welding was being performed by ZPMC welders despite notification from ABF to stop work on new stiffener welds. In an effort to determine the timeframe for fit-up and welding, the QA Inspector observed that there were no markings visible on the part documenting QC acceptance of the fit-up as required by AWS D1.5

Applicable reference:

American Welding Society (AWS) Section 6.5.5 and ZPMC Welding Quality Control Plan (WQCP) Section 3.3.2.6

Who discovered the problem: Quality Assurance Inspector Charlie Franco**Name of individual from Contractor notified:** Steve Lawton, ABF QA Manager**Time and method of notification:** 10-04-07, 1300 verbal**Name of Caltrans Engineer notified:** Pete Siegenthaler, Construction Manager**Time and method of notification:** 10-04-07, 1230 verbal**QC Inspector's Name:** Unknown**Was QC Inspector aware of the problem:** Yes No**Contractor's proposal to correct the problem:**

No proposal at this time.

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.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Inspected By: Franco,Charlie

Quality Assurance Inspector

Reviewed By: Cochran,Jim

QA Reviewer



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
333 Burma Road
Oakland CA 94607
Tel: 510-622-5158 Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To: American Bridge/Fluor Enterprises, a JV
375 BURMA ROAD
OAKLAND CA 95607

Date: 06-Nov-2007

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

Dear: Mr. Charles Kanapicki

Job Name: SAS Superstructure

Attention: Mr. Michael Flowers Project Executive

Document No: 05.03.06-000073

Subject: NCR No. ZPMC-0011

Reference Description: Failure to document fit-up of longitudinal stiffener on Mock-up

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 - No Response Required.

Material Location:

Lift:

Remarks:

Originally sent by State letter 05.03.01-000795

Action Required and/or Action Taken:

Transmitted by: Keith Osantowski Sr. Engineer

Attachments: ZPMC-0011

cc:

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000073

Subject: NCR No. ZPMC-0011

Dated: 08-Dec-2007

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000006 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has acknowledged that the marking was not present on the part, however was able to produce records indicating that the fit-up was inspected.

No documentation available at the work area that the fit-up was inspected prior to welding. Physical marking of "Fit-up OK" was not present on part.

ZPMC has acknowledged that the marking was not present on the part, however was able to produce records indicating that the fit-up was inspected. ZPMC has generated an internal NCR to document this non-conformance.

Submitted by: Flowers, Michael

Attachment(s): ABF-NPR-000006R00; ABF-NPR-000006-01

Caltrans' comments:

Status: Approved
Date: 24-Mar-2008

See State Letter 05.03.01-001406

Submitted by: Pursell, Gary

Attachment(s): NPR CT Comments; 05.03.01-001406

Date: 22-Feb-2008

15-Feb-2008

ABF-CAL-LTR-000446

Mr. Gary Pursell
Resident Engineer
California Department of Transportation
333 Burma Road,
Oakland, CA 94607, USA

PROJECT: San Francisco Oakland Bay SAS Bridge Superstructure
Caltrans Contract No. 04-0120F4
ABF Job No. 660110

SUBJECT: RESPONSE TO NCR-11, 12 AND 13

Gentlemen:

American Bridge / Fluor Enterprises Inc. a Joint Venture (ABFJV) acknowledges receipt of the Department's Letter No.05.03.01-000795 dated November 6, 2007 forwarding the Department's Non-Compliance Reports NCR-0011, 0012 and 0013.

The attached documents is the response to NCRs 0011, 0012 and 0013. Based on the attached ABFJV is requesting written confirmation from the Engineer that NCRs 0011, 0012 and 0013 are closed.

If you need any more information, please call Chuck Kanapicki at (510) 808-4609.

Sincerely,

AMERICAN BRIDGE/FLUOR ENTERPRISES, INC. A JOINT VENTURE



Michael Flowers
Project Director
MF/CK/cc

File: 02.01, 15.04

Page 1 of 3

Date: 08 December 2008 ⁷ *OK 2/14/08*

To: Gary Pursell

From: Steve Lawton

Contract No. 04-0120F4

Dear Gary Pursell

NCR's 11, 12, 13, and 16 *OK 2/14/08*

This letter is issued to provide formal response addressing the proposed resolution to each of the mentioned NCR's for Engineer's review and approval.

NCR-000011 - Inspection status of fit-up not physically marked on part.

No documentation available at the work area that the fit-up was inspected prior to welding. Physical marking of "Fit-up OK" was not present on part.

ZPMC has acknowledged that the marking was not present on the part, however was able to produce records indicating that the fit-up was inspected. ZPMC has generated an internal NCR to document this non-conformance.

NCR-000012 - 114M Mock-up

Rejects in Stiffener to Skin Plate welds exceeded 10%, repairs were made contrary to contract requirements.

ABFJV has reviewed the Mock-up section of the Special Provisions with ZPMC to gain understanding of this requirement which is different from the requirements for production. Both ABFJV and ZPMC now understand this requirement. ZPMC initiated an internal NCR to address this nonconformance. ZPMC also conducted internal tests and has submitted a plan to improve weld quality. Attached for review is the ZPMC Internal NCR and the written plan to improve weld quality.

NCR-000013 - 89M Mock-up.

Wrong filler metal used. Dissimilar welds of Grade 345 to Grade 485 for the Strut Subassemblies require the higher strength filler metal to be used. Contrary to contract documents ZPMC used the lower strength E7018 filler metal. ZPMC has generated an internal NCR, removed the lower strength filler metal and replaced with the higher strength filler metal E9018.

GFR 2/14/02

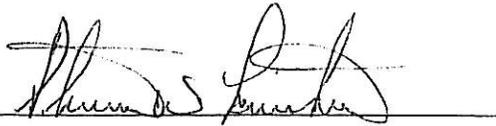
NCR-000016 - OBG SPCM Floor Beams Lift 3

SPCM material being used in production was found to not have been check sampled contrary to contract requirements.

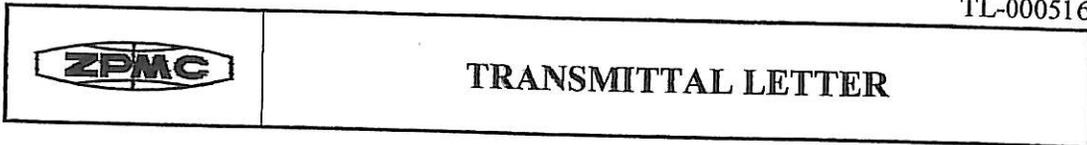
ZPMC has generated an internal NCR addressing this issue. Production material was immediately placed on hold remnant material was located in the receiving inspection yard and check samples were taken.
See attached documents

With the above response, ABFJV considers the NCR's mentioned as closed.

If further clarifications are needed, please contact me.



Steve Lawton
Foreign Quality Assurance Manager



PROJECT: SAN FRANCISCO OAKLAND BAY BRIDGE

DATE: 12/24/2007

TO: RUBY/ ABFJV QA DEPARTMENT

FROM: ZPMC QA DEPARTMENT

SUBJECT: NCR(NCR-000011) FOR CLOSURE

SUBMITTED FOR YOUR APPROVAL AND SUBMITTAL TO CALTRANS.

ENCLOSED WITH THIS TRANSMITTAL IS ONE

- (1) COPY OF LETTER OF RESPONSE FOR CLOSURE NCR (NCR-000011).
- (2) COPY OF NCR WITH NUMBER NCR-000011
- (3) COPY OF RIB, DIAPHRAGM ASSEMBLY WITH SURFACE PLATE CHECKING

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT:



 PLAN HOLDER

12/24/07 3:30 pm

 DATE

 COMPANY

 PHONE NO.

PLAN NUMBER: N/A
 #R787-QCP-102



LETTER OF RESPONSE

DATE: 2007.12.24

To: AB/F Steve Lawton

From: ZPMC Yang Xuehui

Subject: Response to CT NCR-000011

Mr. Lawton:

ZPMC has generated internal NCR-CT-013 in Response to NCR-000011-CT, ^{11 P.L. 12/25/07} Regard that there are no marking visible on the part documenting QC acceptance of fit p920-3 and MUC-A75. we have checked the visible marking on the plate and we have submitted the assemble report to prove it fit-up well.

Attached you will find a copy of ZPMC internal NCR and assembly report. #787-QPR-305-CT015.

If further information is needed, Please contact me.

Sincerely

Yang Xuehui

Yang Xuehui 2007.12.24

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
 Office of Structural Materials
 Quality Assurance and Source Inspection



Bay Area Branch
 690 Walnut Ave. SL 150
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 (707) 649-5493

Contract #: 04-0120F4
 City: SF/ALA Rte: 80 PM: 13.9/14.3.0.0/1.6
 File #: 69.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Zhenhua Port Machinery Company, Ltd - Changxing Island

Report No: NCR-000011

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 04-Oct-2007

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

NCR #: NCR-000011

Type of problem:

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

Description of Non-Conformance:

Quality Control (QC) failed to document the required fit-up inspection of longitudinal stiffener piece mark p920-3 to Interior Splice Assembly MUC-A75, Weld Joint (WJ) number 3A.

This Caltrans Quality Assurance (QA) Inspector observed welding being performed on Weld Joint (WJ) number 3A, which attaches longitudinal stiffener piece mark p920-3 to Interior Splice Assembly MUC-A75. The welding was being performed by ZPMC welders despite notification from ABF to stop work on new stiffener welds. In an effort to determine the timeframe for fit-up and welding, the QA Inspector observed that there were no markings visible on the part documenting QC acceptance of the fit-up as required by AWS D1.5

Applicable reference:

American Welding Society (AWS) Section 6.5.5 and ZPMC Welding Quality Control Plan (WQCP) Section 3.3.2.6

Who discovered the problem: Quality Assurance Inspector Charlie Franco

Name of individual from Contractor notified: Steve Lawton, ABF QA Manager

Time and method of notification: 10-04-07, 1300 verbal

Name of Caltrans Engineer notified: Pete Siegenthafer, Construction Manager

Time and method of notification: 10-04-07, 1230 verbal

QC Inspector's Name: Unknown

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

No proposal at this time.

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.

QUALITY ASSURANCE – NON-CONFORMANCE REPORT
(*Continued Page 2 of 2*)

Inspected By: Franco, Charlie

Quality Assurance Inspector

Reviewed By: Cochran, Jim

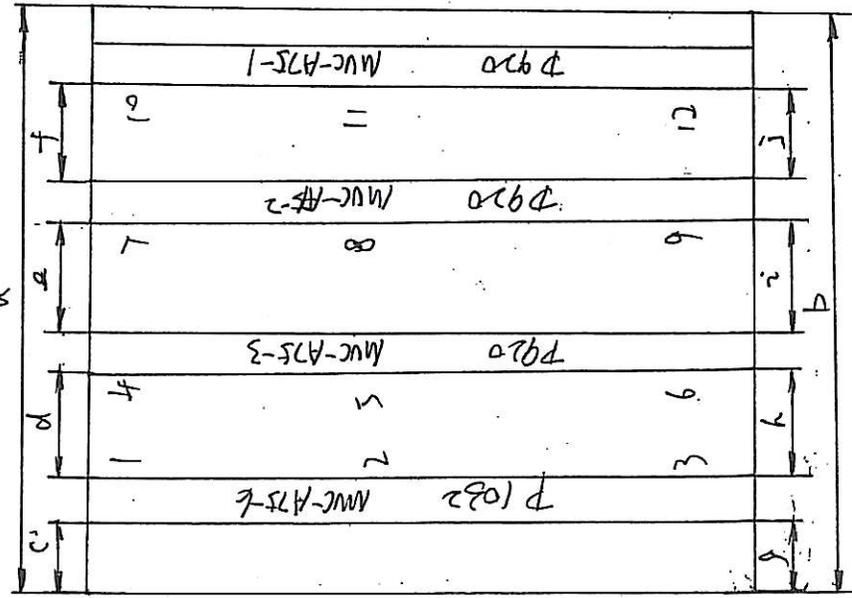
QA Reviewer

787-QPR-305 - 2015



美国钢塔 / 钢桥面板与纵向筋 (U肋) 及横隔板装配检查记录卡
Rib, diaphragm assembly with surface plate checking

工程编号: The serial no. of project:	2706-787	图号: The drawing no.:	MUC-A75	构件名称: The part name.:	内部连接板组件
材质: Material:	A709-50-2	炉批号: The heat no.:	见材料跟踪报告 See attachment Material Track Report	塔段 / 桥段名称: Section name:	114M
移植是否正确: Material mark checking:	正确	轧制方向标注是否正确: Rolling direction checking:	正确		



装配尺寸测量数值 Assembly quality checking

垂直度测量 (mm)		垂直度测量 (mm)												已焊接装配板垂直度测量 (mm)		
Perpendicularity checking:		Perpendicularity checking:												Diaphragms side edges perpendicularity checking		
测量点 Checking point:	1	2	3	4	5	6	7	8								
测量值 Measure result:	0.15	0.15	0	0	0.2	0	0	0								
测量点 Checking point:	9	10	11	12												
测量值 Measure result:	0	0.3	0.5	0.5												

距离测量 (mm) Distance checking: (mm)

距离测量 (mm)											
Distance checking: (mm)											
测量点 Checking point:	a	b	c	d	e	f	g	h	i	j	k
测量值 Measure result:	2067	2085	377	422	422	422	377	428	428	428	428

装配间隙测量 (mm) Assembly gap checking: (mm)

装配间隙测量 (mm)											
Assembly gap checking: (mm)											
测量点 Checking point:	1	2	3	4	5	6	7	8	9	10	11
测量值 Measure result:	0.5	0.7	0.5	0.3	0.5	0.5	0.5	0.5	0.5	0	0

备注 Remark:

检查员 (Inspector): N 12: 1.609/1 日期 (Date): 2015.9.26

DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge Program

333 Burma Rd.
Oakland, CA 94607
(510) 622-5660, (510) 286-0550 fax



*Flex your power
Be energy efficient!*

February 22, 2008

Contract No. 04-0120F4
04-SF-80-13.2 / 13.9
Self-Anchored Suspension Bridge
Letter No. 05.03.01-001406

Michael Flowers
Project Executive
American Bridge/Fluor Enterprises, a JV
375 Burma Road
Oakland, CA 94607

Dear Michael Flowers,

Response to NCRs 1, 5, 7, 8, 9, 10, 11, 12 & 13

This letter is issued as a response to ABF-CAL-LTR-000443, 444, 445, dated February 14, 2008, and ABF-CAL-LTR-000446, dated February 15, 2008, requesting written confirmation from the Engineer that the referenced Non-Conformance Reports (NCRs) at Zhenhua Port Machinery Company, Ltd (ZPMC) have been closed. The Department considers the following ZPMC NCRs closed:

NCR No.	State Letter No.	ABF Document No.	Description
1	05.03.01-000123	ABF-CAL-LTR-000443	Radiographic Testing issues (IQI placement, source type, etc.)
5	05.03.01-000757	ABF-CAL-LTR-000444	Repairs to longitudinal stiffener welds greater than 10% in length on the 77m Mock-up
7	05.03.01-000757	ABF-CAL-LTR-000444	QC not following the approved UT procedure on 114m Mock-up
8	05.03.01-000757	ABF-CAL-LTR-000444	Repairs to skin plate welds greater than 10% in length on the 114m Mock-up
9	05.03.01-000795	ABF-CAL-LTR-000445	Third time repairs to Skin B sub-assemblies on the 114m Mock-up without Engineer approval
10	05.03.01-000795	ABF-CAL-LTR-000445	Repairs to longitudinal stiffener welds greater than 10% in length on the 114m Mock-up
11	05.03.01-000795	ABF-CAL-LTR-000446	Failure to document fit-up of longitudinal stiffener on Mock-up
12	05.03.01-000795	ABF-CAL-LTR-000446	Repairs to skin plate welds greater than 10% in length on the 114m Mock-up
13	05.03.01-000795	ABF-CAL-LTR-000446	Welding electrode used on 89m Strut Sub-Assembly not in compliance

American Bridge/Fluor Enterprises, a JV
February 22, 2008
Page 2 of 2

Please contact us if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Gary Purcell".

GARY PURSELL
Resident Engineer

cc: Rick Morrow
Brian Boal
Gary Lai
Mark Woods

file: 05.03.01

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:** Zhenhua Port Machinery Company, Ltd - Changxing Island**Report No:** NCS-000013**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 18-Jan-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0011**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: 04-Oct-2007**Description of Non-Conformance:**

Quality Control (QC) failed to document the required fit-up inspection of longitudinal stiffener piece mark p920-3 to Interior Splice Assembly MUC-A75, Weld Joint (WJ) number 3A.

This Caltrans Quality Assurance (QA) Inspector observed welding being performed on Weld Joint (WJ) number 3A, which attaches longitudinal stiffener piece mark p920-3 to Interior Splice Assembly MUC-A75. The welding was being performed by ZPMC welders despite notification from ABF to stop work on new stiffener welds. In an effort to determine the timeframe for fit-up and welding, the QA Inspector observed that there were no markings visible on the part documenting QC acceptance of the fit-up as required by AWS D1.5

Contractor's proposal to correct the problem:

The inspector will ensure that he checks to make sure that materials are marked during fitup. Additionally, the workers in the shop will pay attention to the markings on the parts.

Corrective action taken:

ZPMC submitted the inspection record for the piece which documents the QC inspection of the fit up and verification of the dimensions. ZPMC also issued an internal NCR to document the incident.

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

Inspected By: Ishibashi, Josh

Quality Assurance Inspector

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Reviewed By: Wahbeh,Mazen

QA Reviewer