

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, PRC**Report No:** NCR-000165**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 17-Jul-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0152**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: SEG 5BW
Procedural	Procedural	Descriptor:	OBG Segment Assembly

Reference Description: SEG5BW Improper Weld Prep**Description of Non-Conformance:**

The Contractor welded over surfaces that were not prepared in conformance to the specifications. The Contractor welded over a backgouged surface that had not been ground to bright metal. This was observed during the overhead welding of the CJP corner joint between Bottom Panel BP084-001 and Side Panel SP146-001 of OBG Segment 5BW. Below is digital photograph illustrating the discrepancy.

**Applicable reference:**

AWS D1.5, Section 3.2.6: "Where any carbon arc gouging or cutting is involved, proper arc gouging procedures shall be used to avoid the retention of carbon deposits and material or dross in the areas which are to be welded. Air carbon arc gouged surfaces shall be ground to bright metal."

Who discovered the problem: QA Inspector Greg Bertlesman**Name of individual from Contractor notified:** ABFJV QC Inspector Peter Shaw**Time and method of notification:** 1100 Verbal notification

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Name of Caltrans Engineer notified: Ching Chao

Time and method of notification: Verbal notification at 10:00 on 07-18-2008

QC Inspector's Name: ZPMC QC Inspector C.M. Chen

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

Inspected By:	Velasco,Abifhiram	SMR
Reviewed By:	Velasco,Abifhiram	SMR



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
666 Feng Bin Road Room 708, Changxing Island
Shanghai 201913 PR China
Tel: 021-56856666 ext 207061 Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

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

Date: 12-Aug-2008

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

Dear: Mr. Charles Kanapicki

Job Name: SAS Superstructure

Attention: Mr. Dave Williams Consultant

Document No: 05.03.06-000141

Subject: NCR No. ZPMC-0152

Reference Description: SEG5BW Improper Weld Prep

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: OBG **Lift:** 05

Remarks:

The Contractor welded over surfaces that were not prepared in conformance to the specifications. The Contractor welded over a backgouged surface that had not been ground to bright metal. This was observed during the overhead welding of the CJP corner joint between Bottom Panel BP084-001 and Side Panel SP146-001 of OBG Segment 5BW.

See attached NCR #ZPMC-0152 for details.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences.

Transmitted by: Ching Chao

Attachments: ZPMC-0152

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, Jason Tom, 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: 05.03.06-000141

Subject: NCR No. ZPMC-0152

Dated: 11-Sep-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000142 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: ABF has notified ZPMC that this practice is unacceptable and may lead to unacceptable NDT results.

ZPMC performed welding on a backgouged surface that had not been ground to bright metal as stated in AWS D1.5 Section 3.2.6. ABF has notified ZPMC that this practice is unacceptable and may lead to unacceptable NDT results.

Submitted by:

Attachment(s): ABF-NPR-000142R00

Caltrans' comments:

Status: REJ

Date: 30-Sep-2008

This response is not acceptable. This proposed resolution does not include any documentation of what was done to resolve the Non-Conformance or what NDT was performed to confirm that the weld in question is acceptable. Revision NPR-0142R01 to this proposed Non-Conformance resolution has already been submitted. See the response to NPR-0142R01.

Submitted by: Wright, Doug

Date: 30-Sep-2008

Attachment(s):

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000141

Subject: NCR No. ZPMC-0152

Dated: 23-Sep-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000142 **Rev:** 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has trained welders to have responsibility of confirming the groove surface in conformance with the specification.

Please see attached.

Submitted by:

Attachment(s): ABF-NPR-000142R01;

Caltrans' comments:

Status: CLO

Date: 01-Oct-2008

The proposed resolution is acceptable. The welders have received additional training regarding this issue, and the weld was accepted as shown in the attached NDT reports. The Department concurs that Non-Conformance ZPMC-0152 is closed.

Submitted by: Wright, Doug

Date: 01-Oct-2008

Attachment(s):

DEPARTMENT OF TRANSPORTATION

CHINA FABRICATION TEAM

506 Shangcheng Rd, Pudong New District

Shanghai 200120, P.R.C.



REVIEW OF CONTRACTOR'S TRANSMITTAL

To: Dave Williams, American Bridge – Fluor, a Joint Venture
Gary Pursell, Resident Engineer

Review Date: 09-22-2008From: Ady Velasco, Structural Materials RepresentativeContract No.: 04-0120F4Date/Time Submittal Received: 09-16-2008/ 16:00
 China Standard Time
 (GMT+08:00)

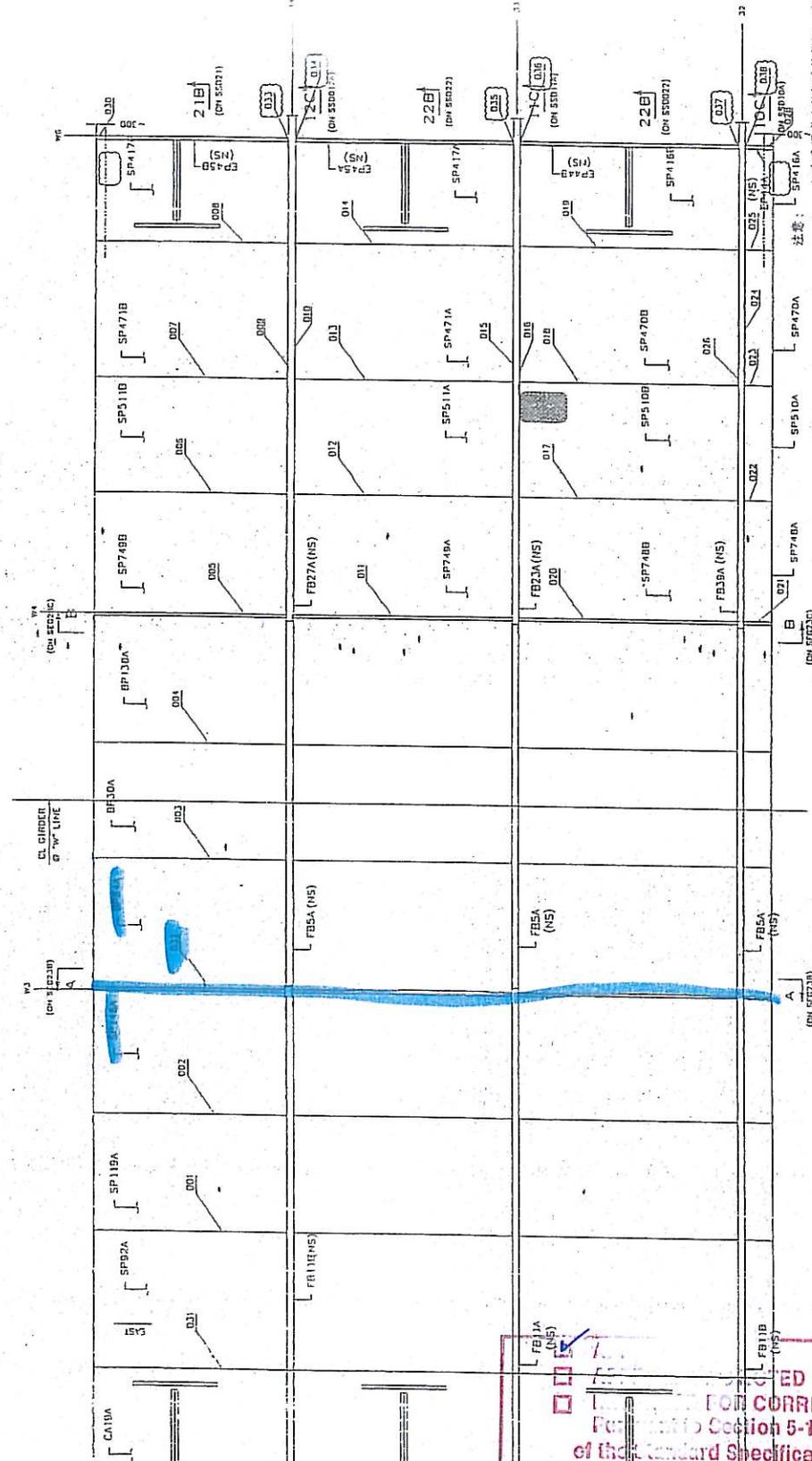
 Contractor's Transmittal #: AFC-CAL-
TRN-001328
Rev. # 0

<input checked="" type="checkbox"/>	substantially complies with contract requirements and is approved		
<input type="checkbox"/>	substantially complies with contract requirements and is approved as noted.		
<input type="checkbox"/>	Lacks sufficient information and/or contains unacceptable items that must be corrected or prior to resubmital		
Verbal Notification	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	Date: _____ Time: _____
Name of individual from Contractor Notified: _____			
This submittal is a:	<input type="checkbox"/> Welding Report	<input type="checkbox"/> Critical Weld Repair	
	<input type="checkbox"/> Request for Information	<input type="checkbox"/> Heat Straightening Request	
	<input type="checkbox"/> Fabrication Procedures	<input checked="" type="checkbox"/> Other: <u>NCR Close Out Documents</u>	
Submitting Contractor: <u>ABF</u>			
ITEMS REVIEWED		COMPLIES	COMMENTS
1.	For Closure, NCR ZPMC-0152	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The NCR resolution is acceptable.
2.		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4.		<input type="checkbox"/> Yes <input type="checkbox"/> No	

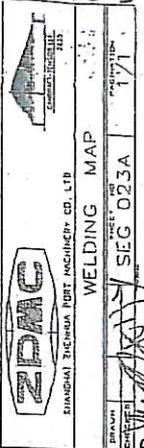
Remarks:

Reviewer: Ady Velasco *AV*Date: 09-22-2008
 Construction Concurrence: AV Initial 9/22/08 Date

 Received by (ABFJV): AV Date: 9-22-08 Time: 1430



注：如有遗漏或重要标注的瑕疵，请OC人员通知加工人员进行补注或删改。
 本页采用标准单元的跨三拼的排版地图，请低的对位拼焊。
 按编号在各包的模具图底上。



焊接符号说明：SEG023A XXX
 XXX 焊接符号
 XXX 零件在图内位置

PLAN VIEW (DEVELOPED)

RECEIVED FOR CORRECTION
 Part of Section 5-1.02
 of the Standard Specifications
 State of California

DEPARTMENT OF TRANSPORTATION
 Division of Engineering Service
 Office of Structure Construction

Structure Representative _____
 Date 9/26/08



PROJECT: SAN FRANCISCO OAKLAND BAY BRIDGE

DATE: 09/13/2008

TO: RUBY/ ABFJV QA DEPARTMENT

FROM: ZPMC QA DEPARTMENT

SUBJECT: NCR-000165(ZPMC-0152)FOR CLOSURE

SUBMITTED FOR YOUR APPROVAL.

ENCLOSED WITH THIS TRANSMITTAL IS ONE

- (1) COPY OF LETTER OF RESPONSE WITH NO.B-299.
- (2) COPY OF NCR WITH NCR-000165(ZPMC-0152)
- (3) COPY OF VT REPORT
- (4) COPY OF UT REPORT: B787-UT-1662

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT:

Kevin Day
 PLAN HOLDER

9-13-08
 DATE

ABFJV
 COMPANY

 PHONE NO.

<input checked="" type="checkbox"/>	APPROVED
<input type="checkbox"/>	APPROVED WITH NOTES
<input type="checkbox"/>	REJECTED FOR CORRECTION
Pursuant to Section 5-1.02 of the Standard Specifications State of California	
DEPARTMENT OF TRANSPORTATION Division of Engineering Service Office of Structure Construction	
<u>[Signature]</u> Structure Representative	<u>9/22/08</u> Date



No. B-299

LETTER OF RESPONSE

TO: American Bridge/Flour IV

DATE: 2008-9-13

REGARDING: NCR-000165 (ZPMC-0152)

With this letter of response, ZPMC requests closure for Caltrans NCR-000165 (ZPMC-0152). We have trained the welders that they should have the responsibility to confirm the groove surface in conformance to the specification, the condition of the groove prepared obviously will influence the weld quality, the QC on site should be visual checking the weld area anytime and the worker perform the weld whether follow the procedure and with the bright metal surface before welding.

Besides that we have perform the final visual and NDT test to confirm the good quality in according with the acceptable specification.

So ZPMC considers NCR-000146 can be closed and submits the application.

Please reference attached documentation for acceptance and closure the NCR-000165.

ATTACHMENT:

NCR-000165 (ZPMC-0152)

The corresponding VT/UT reports

Zhao Shuang dao

2008.9.13

<input checked="" type="checkbox"/>	APPROVED
<input type="checkbox"/>	APPROVED AS NOTED
<input type="checkbox"/>	RETURNED FOR CORRECTION
Pursuant to Section 5-1.02	
of the Standard Specifications	
State of California	
DEPARTMENT OF TRANSPORTATION	
Division of Engineering Service	
Office of Structure Construction	
Structure Representative: <i>[Signature]</i>	Date: <i>9/23/08</i>

[Signature]
ABF QCM
16 SEPT. 08



Nonconformance Report

不符合项报告

Project Name: S.F.O.B.F NCR Number: _____
 项目名称: 美国加州海湾大桥 NCR 编号: NCR-B-094 CNCR-0001657

Item: improper weld prep Item Number: _____ Drawing Number: _____
 名称描述: 焊缝反面清根后没有打磨干净 件号: BP084/SP146 图号: 5BW

Location: assembly shop Date: _____
 位置: 底板和斜底板拼缝 日期: 2008-8-20

Description of Nonconformance:
 不符合项状态描述:
 the contractor welded over surfaces that were not prepared in conformance to the specifications. The contractor welded over a back gouged surface that had not been ground to bright metal. This was observed during the overhead welding of the CJP corner joint between bottom panel BP084-001 and side panel SP146-001 of OBG segment 5BW.

ZPMC 在执行仰焊前的焊缝表面没达到焊接要求,施工队在对该对接缝的反面清根后,没能将碳刨处打磨出金属光泽就开始进行焊接,发生的位置为 5BW 的 BP084-001 和 SP146-001 拼缝.

Work By: Hugou Xing Prepared by: Wanglu Reviewed by QCE: Zhaoshuangbao
 施工方: _____ 准备: _____ 质量工程师批准: 2008.8.20
 Drawing Error Material Defect Fabrication Error Other
 图纸错误 材料缺陷 制作错误 其他原因

Disposition: Use as is Repair Reject
 处理措施: 回用 返修 拒收

Recommendation:
 建议 进入下道工序后,相关带班要把工作安排到位.
The lead workers shall arrange their work properly when handing over their work.

Prepared by: Zhang Yan Zhi Approved by QCA: Lujianhua
 准备 08.8.24 质量经理批准 08-09-12

Reason for Nonconformance:
 不符合原因: 现场作业人员未按照图纸施工
The workers didn't follow the drawings.
 预防措施 加强现场作业人员的监控与指导,严格按图施工
Enhance supervision and guidance to the workers on the site and follow the drawings.

NOTED
 CORRECTION
 Refer to Section 5-1.02
 of the Standard Specifications
 State of California
 DEPARTMENT OF TRANSPORTATION
 Division of Engineering Service
 Office of Structure Construction
 Structure Representative: _____ Date: 9/22/08

Approved by/批准: Zhang Yan Zhi 08.8.24

Technical Justification for Use-As-Is/Repair: Attachment Non-attachment
 回用或返修的技术依据: 附件 无附件
加强对现场的监控与管理,严格按图纸要求进行制作。对焊缝做NDT检测,合格回用,如不合格,出具相应的焊缝返修报告进行焊缝返修。Follow the drawings and enhance inspection and arrangement. Use as is if acceptable. If it is unacceptable, repair issue weld repair report to repair the welds. Reviewed/批准: Dai Rui 2008.8.28

Verification: Acceptable Unacceptable
 确认: 可接受 不可接受
 Verified by QCI/质检确认: PL Zhang 07/26/08 Reviewed by QCA/质检主任审核: Lujianhua
08-09-12



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
 666 Feng Bin Road Room 708, Changxing Island
 Shanghai 201913 PR China
 Tel: 021-56856666 ext 207061 Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR. A. S.
 375 BURMA ROAD
 OAKLAND CA 95607

Date: 12-Aug-2008

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

Dear: Mr. Charles Kanapicki
 Attention: Mr. Dave Williams Consultant
 Subject: NCR No. ZPMC-0152

Job Name: SAS Superstructure
 Document No: 05.03.06-000141

Reference Description: SEG5BW Improper Weld Prep

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: OBG Lift: 05

Remarks:

The Contractor welded over surfaces that were not prepared in conformance to the specifications. The Contractor welded over a backgrounded surface that had not been ground to bright metal. This was observed during the overhead welding of the CJP corner joint between Bottom Panel BP084-001 and Side Panel SP146-001 of OBG Segment 5BW.

See attached NCR #ZPMC-0152 for details.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences.

Transmitted by: Ching Chao

Attachments: ZPMC-0152

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, Jason Tom, Contract Files, Ching Chao
 File: 05.03.06

<input checked="" type="checkbox"/>	APPROVED
<input type="checkbox"/>	APPROVALS NOTED
<input type="checkbox"/>	RETURNED FOR CORRECTION
Permit to Section 5-1.02	
of the Standard Specifications	
State of California	
DEPARTMENT OF TRANSPORTATION	
Division of Engineering Service	
Office of Structure Construction	
Structure Representative	Date 9/22/08

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 #: 69.25E

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, PRC

Report No: NCR-000165

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 17-Jul-2008

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

NCR #: ZPMC-0152

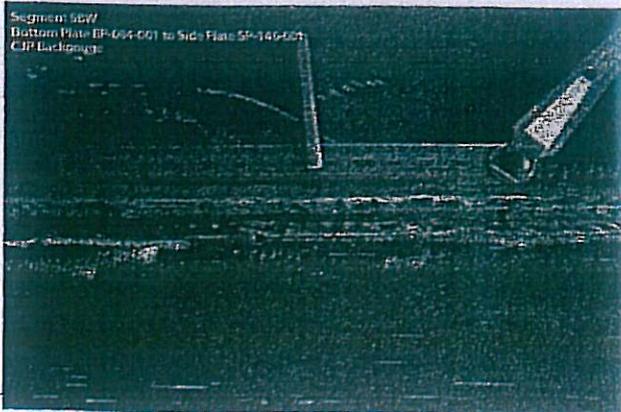
Type of problem:

Welding Concrete Other
 Welding Curing Procedural Bridge No: 34-0006
 Joint fit-up Coating Other Component: SEG 5BW
 Procedural Procedural Descriptor: OBG Segment Assembly

Reference Description: SEG5BW Improper Weld Prep

Description of Non-Conformance:

The Contractor welded over surfaces that were not prepared in conformance to the specifications. The Contractor welded over a backgrounded surface that had not been ground to bright metal. This was observed during the overhead welding of the CJP corner joint between Bottom Panel BP084-001 and Side Panel SP146-001 of OBG Segment 5BW. Below is digital photograph illustrating the discrepancy.



Applicable reference:

AWS D1.5, Section 3.2.6: "Where any carbon arc gouging or cutting is involved, proper arc gouging procedures shall be used to avoid the retention of carbon deposits and material or dross in the areas which are to be welded. Air carbon arc gouged surfaces shall be ground to bright metal."

Who discovered the problem: QA Inspector Greg Bertlesman

Name of individual from Contractor notified: ABFJV QC Inspector Peter Shaw

Time and method of notification: 1100 Verbal notification

APPROVED
 APPROVED AS NOTED
 FOR CORRECTION
 Pursuant to Section 5-1.02
 of the Standard Specifications
 State of California
DEPARTMENT OF TRANSPORTATION
 Division of Engineering Service
 Office of Structure Construction
 Structure Representative _____
 Date 9/22/08

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Name of Caltrans Engineer notified: Ching Chao

Time and method of notification: Verbal notification at 10:00 on 07-18-2008

QC Inspector's Name: ZPMC QC Inspector C.M. Chen

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

Inspected By: Velasco, Abifhiram

SMR

Reviewed By: Velasco, Abifhiram

SMR

<input checked="" type="checkbox"/> APPROVED	
<input type="checkbox"/> APPROVED AS NOTED	
<input type="checkbox"/> RETURNED FOR CORRECTION	
Pursuant to Section 5-1.02 of the Standard Specifications State of California	
DEPARTMENT OF TRANSPORTATION	
Division of Engineering Service	
Office of Structure Construction	
Structure Representative	Date
<i>cc</i>	9/22/08

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, PRC**Report No:** NCS-000083**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Sep-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0152**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: 17-Jul-2008**Description of Non-Conformance:**

The Contractor welded over surfaces that were not prepared in conformance to the specifications. The Contractor welded over a backgouged surface that had not been ground to bright metal. This was observed during the overhead welding of the CJP corner joint between Bottom Panel BP084-001 and Side Panel SP146-001 of OBG Segment 5BW. Below is digital photograph illustrating the discrepancy.

Contractor's proposal to correct the problem:

Reference to ABF transmittal AFC-CAL-TRN-001328.

Corrective action taken:

ABF has notified ZPMC that this practice is unacceptable and may lead to unacceptable NDT results.

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 Ady Velasco, 011-86-138-1694-2685, who represents the Office of Structural Materials for your project.

Inspected By: Liu, Chengwen **Quality Assurance Inspector****Reviewed By:** Velasco, Abifhram **QA Reviewer**