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, China **Report No:** NCR-000859
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 11-Oct-2010
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0821

Type of problem:

Welding	☑	**Concrete**	☐	**Other**	☐	
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☐	**Component:** FB3286A, Lift 14E
Procedural	☑	**Procedural**	☐	**Description:**		

Reference Description: Base Metal Repair without Engineer's Approval

Description of Non-Conformance:

During Quality Assurance random in-process observations of the fabrication of OBG lift 14E, East Floor beam FB3286A, this Quality Assurance Inspector (QA) discovered the following issue:

-ZPMC Welding personnel performed base metal repair (BMR) on the sleeve plate without the Engineers approval.
- Total of 7 areas repaired.
-The welding was performed using Shielded Metal Arc Welding (SMAW) in the Horizontal (2G) position.
-The sleeve plate is identified as SA8004.
-The Y locations are approximately 410 mm,1375 mm,1810 mm,3750 mm,4630 mm,5120 mm and 7180 mm from the toe of the weld identified as SA8004-001-001(measured clock wise and looking from top of the sleeve).
- FB3286A – SA8004 is located in the Sub assembly Bay#3.

For additional information, please see the attached pictures below.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:
ZPMC Approved Welding Quality Control Plan, Section 9.2.1.2: "Prior approval of the Engineer shall be obtained for repairs to base metal...."

AWS D1.5 2002-Section 3.7.4.- “Prior approval of the engineer shall be obtained for repairs to base metal (other than those required by 3.2), repair of major or delayed cracks, repairs to ESW and EGW welds with internal defects, or for a revised design to compensate for defects.”

Special Provisions Section 8-3; “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

Who discovered the problem: Surendra Prabhu
Name of individual from Contractor notified: Mr. Wang wen bin
Time and method of notification: 1015 hours, 10/11/10, Verbal
Name of Caltrans Engineer notified: Ching Chao
Time and method of notification: 08:00_10/12/10_Email
QC Inspector's Name:
Was QC Inspector aware of the problem: ☐ **Yes** ☑ **No**
Contractor's proposal to correct the problem:
NA
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:	Devey,Jim	SMR
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:**	12-Oct-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:**	05.03.06-000816
Subject:	NCR No. ZPMC-0821		

Reference Description: Base Metal Repair without Engineer's Approval

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:** 14

Remarks:

During Quality Assurance random in-process observations of the fabrication of OBG lift 14E, East Floor beam FB3286A, Caltrans Quality Assurance Inspector (QA) discovered the following issue:

-ZPMC Welding personnel performed base metal repair (BMR) on the sleeve plate without the Engineers approval.

- Total of 7 areas repaired.

-The welding was performed using Shielded Metal Arc Welding (SMAW) in the Horizontal (2G) position.

-The sleeve plate is identified as SA8004.

-The Y locations are approximately 410 mm,1375 mm,1810 mm,3750 mm,4630 mm,5120 mm and 7180 mm from the toe of the weld identified as SA8004-001-001(measured clock wise and looking from top of the sleeve).

- FB3286A – SA8004 is located in the Sub assembly Bay#3.

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: Laraine Woo Transportation Engineer

Attachments: ZPMC-0821

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

File: 05.03.06

AMERICAN BRIDGE/FLUOR ENTERPRISES, a JV

P.O. BOX 23223 Oakland, CA 94623

Phone (510) 419-0120 / Fax (510) 839-0666

NCR PROPOSED RESOLUTION

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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000816

Subject: NCR No. ZPMC-0821

Dated: **28-Oct-2010**

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

Job Name: SAS Superstructure

Document No.: **ABF-NPR-000813 Rev: 00**

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has repaired the base metal repairs using and approved CWR and is providing the NDT done after to show the repair was free of defect.

ZPMC has repaired the base metal repairs using and approved CWR and is providing the NDT done after to show the repair was free of defect. In the future, it has been stressed to ZPMC that all base metal repairs dealing with permanent attachments must receive Engineer approval, unlike base metal repairs of non SPCM temporary attachments. This clarification should prevent future occurrences. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000813R00;

Caltrans' comments:

Status: CLO

Date: 31-Oct-2010

ZPMC provided a Critical Weld Repair (CWR) Report for Engineer's approval subsequently. The performed repair was done according to the CWR report with NDT verification.

Submitted by: Woo, Laraine

Date: 31-Oct-2010

Attachment(s):

No. B-908

LETTER OF RESPONSE

TO: American Bridge/Flour
DATE: 2010-10-14
REGARDING: NCR-000859,000860(ZPMC-0821,0822)

These problems occurred by the misunderstanding of the requirment of the approval of engineer prior to performing base matel repairing by site QC. ZPMC QA personnel have talked with the site QC to address this requirment according to AWS D1.5. ZPMC has submitted and got the approved CWR for the repairing works after then. ZPMC is providing the NDT records to show the soundness of these base matel after repair. Based on this, ZPMC is requesting closure of this NCRs.

ATTACHMENT:
NCR-000859,000860(ZPMC-0821,822)
B787-MT-30188
B787-MT-30207

ZhangWei
10/14/10

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: 12-Oct-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: 05.03.06-000816

Subject: NCR No. ZPMC-0821

Reference Description: Base Metal Repair without Engineer's Approval

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:** 14

Remarks:

During Quality Assurance random in-process observations of the fabrication of OBG lift 14E, East Floor beam FB3286A, Caltrans Quality Assurance Inspector (QA) discovered the following issue:

-ZPMC Welding personnel performed base metal repair (BMR) on the sleeve plate without the Engineers approval.

- Total of 7 areas repaired.

-The welding was performed using Shielded Metal Arc Welding (SMAW) in the Horizontal (2G) position.

-The sleeve plate is identified as SA8004.

-The Y locations are approximately 410 mm,1375 mm,1810 mm,3750 mm,4630 mm,5120 mm and 7180 mm from the toe of the weld identified as SA8004-001-001(measured clock wise and looking from top of the sleeve).

- FB3286A – SA8004 is located in the Sub assembly Bay#3.

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: Laraine Woo Transportation Engineer

Attachments: ZPMC-0821

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

File: 05.03.06

STATE OF CALIFORNIA--BUSINESS,TRANSPORTACTION AND HOUSING AGENCY Arnold Schwarzenegger, Governor

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

Bay Area Branch
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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, China **Report No:** NCR-000859
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 11-Oct-2010
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0821

Type of problem:

Welding	☑	**Concrete**	☐	**Other**	☐	
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☐	**Component:** FB3286A, Lift 14E
Procedural	☑	**Procedural**	☐	**Description:**		

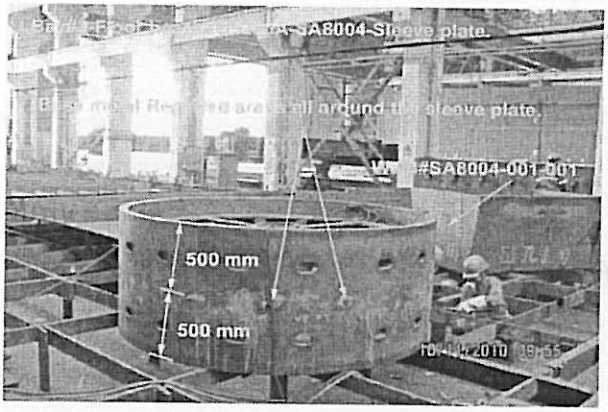
Reference Description: Base Metal Repair without Engineer's Approval

Description of Non-Conformance:

During Quality Assurance random in-process observations of the fabrication of OBG lift 14E, East Floor beam FB3286A, this Quality Assurance Inspector (QA) discovered the following issue:

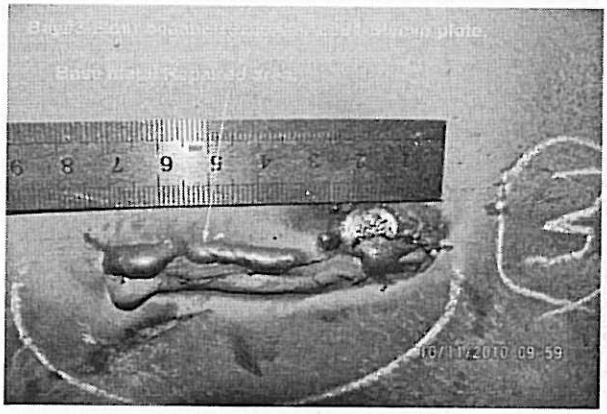
-ZPMC Welding personnel performed base metal repair (BMR) on the sleeve plate without the Engineers approval.
- Total of 7 areas repaired.
-The welding was performed using Shielded Metal Arc Welding (SMAW) in the Horizontal (2G) position.
-The sleeve plate is identified as SA8004.
-The Y locations are approximately 410 mm,1375 mm,1810 mm,3750 mm,4630 mm,5120 mm and 7180 mm from the toe of the weld identified as SA8004-001-001(measured clock wise and looking from top of the sleeve).
- FB3286A – SA8004 is located in the Sub assembly Bay#3.

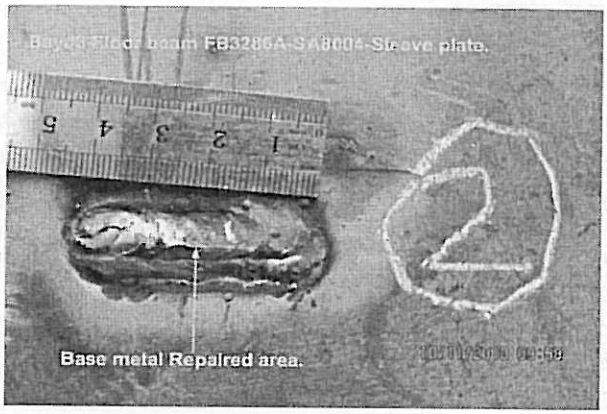
For additional information, please see the attached pictures below.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)





Applicable reference:
ZPMC Approved Welding Quality Control Plan, Section 9.2.1.2: "Prior approval of the Engineer shall be obtained for repairs to base metal...."

AWS D1.5 2002-Section 3.7.4.- "Prior approval of the engineer shall be obtained for repairs to base metal (other than those required by 3.2), repair of major or delayed cracks, repairs to ESW and EGW welds with internal defects, or for a revised design to compensate for defects."

Special Provisions Section 8-3; "Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents."

Who discovered the problem: Surendra Prabhu
Name of individual from Contractor notified: Mr. Wang wen bin
Time and method of notification: 1015 hours, 10/11/10, Verbal
Name of Caltrans Engineer notified: Ching Chao
Time and method of notification: 08:00_10/12/10_Email
QC Inspector's Name:
Was QC Inspector aware of the problem: ☐ **Yes** ☑ **No**
Contractor's proposal to correct the problem:
NA
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:	Devey,Jim	SMR
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:**	12-Oct-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:**	05.03.06-000817
Subject:	NCR No. ZPMC-0822		

Reference Description: Base Metal Repair without Prior Approval from Engineer

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:** 14

Remarks:

During Quality Assurance random in-process observations of the fabrication of OBG lift 14, East Floorbeam FB3286A, Caltrans Quality Assurance Inspector (QA) discovered the following issue:

-ZPMC Welding personnel performed base metal repair (BMR) on the sleeve plate without the Engineers approval.

- Total of 2 areas repaired.

-The welding was performed using Shielded Metal Arc Welding (SMAW) in the Horizontal (2G) position.

-The sleeve plate is identified as SA8003.

-The Y locations are approximately 2270 mm and 5150mm from the toe of the weld identified as SA8003-001-001(measured clock wise and looking from top of the sleeve).

- FB3286A –SA8003 is located in the Sub assembly Bay#3.

Action Required and/or Action Taken:

Propose a resolution for this 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: Laraine Woo Transportation Engineer

Attachments: ZPMC-0822

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

File: 05.03.06

STATE OF CALIFORNIA--BUSINESS,TRANSPORTACTION AND HOUSING AGENCY
Arnold Schwarzenegger, Governor

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 #: xx.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, China
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

Report No: NCR-000860
Date: 11-Oct-2010
NCR #: ZPMC-0822

Type of problem:

Welding	☑	**Concrete**	☐	**Other**	☐		
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006	
Joint fit-up	☐	**Coating**	☐	**Other**	☐	**Component:** FB3286A, SA8003 Lift 14E	
Procedural	☑	**Procedural**	☐	**Description:**			

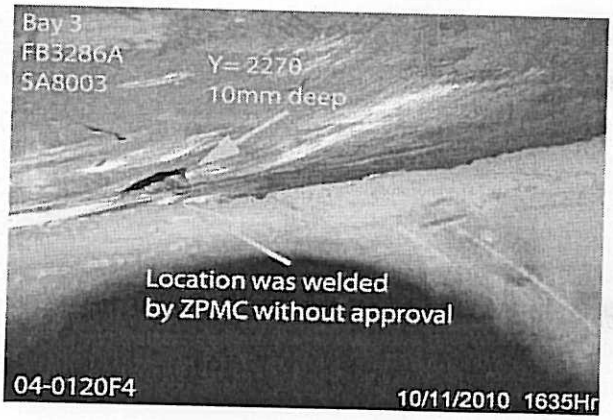
Reference Description: Base Metal Repair without Prior Approval from Engineer

Description of Non-Conformance:

During Quality Assurance random in-process observations of the fabrication of OBG lift 14, East Floorbeam FB3286A, this Quality Assurance Inspector (QA) discovered the following issue:

-ZPMC Welding personnel performed base metal repair (BMR) on the sleeve plate without the Engineers approval.
- Total of 2 areas repaired.
-The welding was performed using Shielded Metal Arc Welding (SMAW) in the Horizontal (2G) position.
-The sleeve plate is identified as SA8003.
-The Y locations are approximately 2270 mm and 5150mm from the toe of the weld identified as SA8003-001-001(measured clock wise and looking from top of the sleeve).
- FB3286A –SA8003 is located in the Sub assembly Bay#3.

For additional information, please see the attached pictures below.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

ZPMC Approved Welding Quality Control Plan, Section 9.2.1.2: "Prior approval of the Engineer shall be obtained for repairs to base metal...."

AWS D1.5 2002-Section 3.7.4.- "Prior approval of the engineer shall be obtained for repairs to base metal (other than those required by 3.2), repair of major or delayed cracks, repairs to ESW and EGW welds with internal defects, or for a revised design to compensate for defects."

Special Provisions Section 8-3; "Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents."

Who discovered the problem: Dong J Shin
Name of individual from Contractor notified: Mike Williams
Time and method of notification: 7:30_10/12/10_Email
Name of Caltrans Engineer notified: Ching Chao
Time and method of notification: 8:30_10/12/10_Email
QC Inspector's Name: Mr. Zhang Wei
Was QC Inspector aware of the problem: ☐ Yes ☑ No
Contractor's proposal to correct the problem:
NA
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:	Devey,Jim	SMR
Reviewed By:	Wahbeh,Mazen	SMR

车间/Location	BAY 3

ZPMC	关键焊缝返修报告 Critical Welding Repair Report (CWR)	版本 Rev. No. 0

项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No	SA8003 SA8004	报告编号 Report No.	B-CWR1823
合同号 Contract No.:	04-0120F4	部件名称 Items Name	FLOOR BEAM	NDT报告编号 Report No.of NDT	NA
项目编号 Project No.:	ZP06-787				

焊缝缺陷描述：

Description of welding discontinuity:

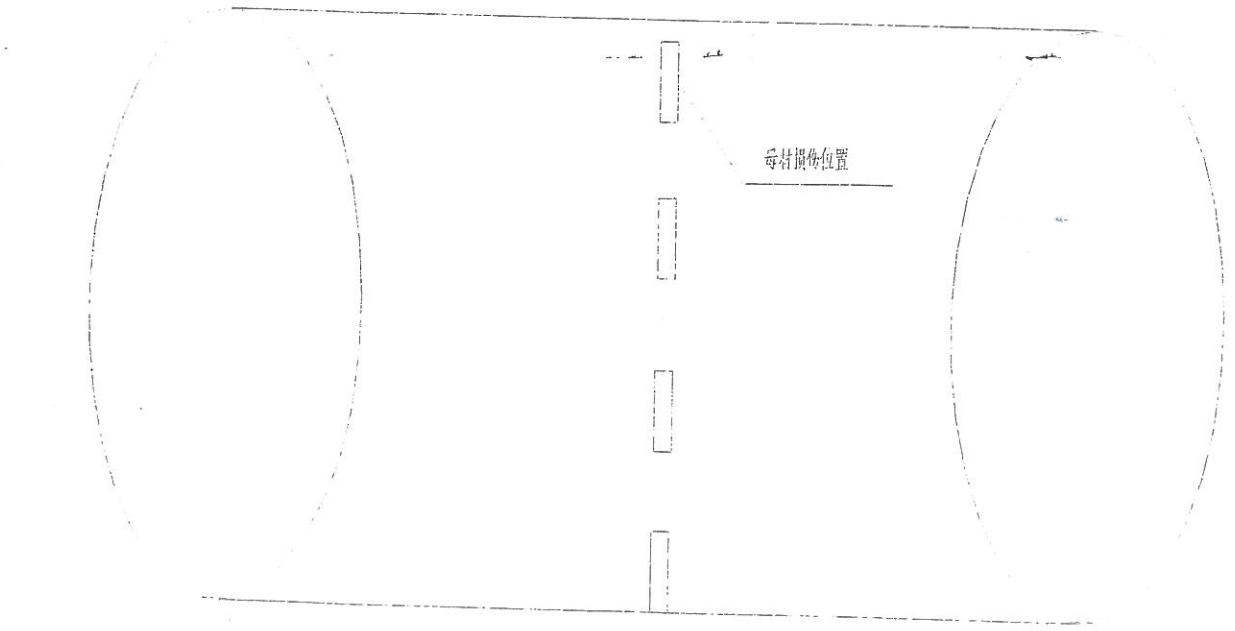
14段隔板FB3286上的套筒SA8003(X8005A/X8006A)、SA8004(X8005B/X8006B)点焊去除后母材凹陷最大10mm，需要进行补焊。

When removing tack weld of SA8003(X8005A/X8006A)、SA8004(X8005B/X8006B) ,base metal was damaged by 10mm due to incorrect gouging, which need repairing. Please see the details in the following sketch.

检验员（Inspector）：Wang liang　　日期(Date)：2010-10-12

焊缝返修位置示意图：

Draft of welding discontinuity:



This document is APPROVED
State of California
DEPARTMENT OF TRANSPORTATION
Pursuant to Section 5-1.02 of the
Standard Specifications
Initial SJE Date: 10/21/2010

产生原因:

Caused:

工人操作失误，导致母材损伤。

Worker operated error caused base metal gouged.

车间负责人(Foreman): Hu Yuzhang 日期(Date): 2010.10.12

处理意见

Disposition :

1. QC和CWI在整个修补过程中都应在场并指导以确保返修按照处理意见以及AWS D1.5要求进行；
2. 按照焊接返修工艺规程（WPS）打磨缺陷区域至光滑；
3. 准备一个正确的接头形式，具体参见返修的WPS；
4. 在NDT检测前口头通知QA。对返修区域作100%MT和100%VT检查；
5. 如果仍发现有缺陷，通过打磨的方法去除所有缺陷以确认缺陷完全被清除，并重复第四步以确认缺陷完全被清除；
6. 将杂物以及MT检测遗留的残留物清理干净；
7. 根据批准的焊接返修工艺规程（WPS）进行预热及焊接；
8. 将焊接区域打磨至与母材平齐；
9. 在NDT检测前口头通知QA。对返修区域作100%MT和100%VT检查。

1. QC and CWI should be present to witness the repair, direct and supervise all repair operations during this repair to ensure the repair is per the disposition requirements, and the AWS D1.5 code requirements.
2. Grind the repair area to a smooth finish according to the approved repair WPS.
3. Prepare the joint according to the approved WPS.
4. Notify QA verbally prior to NDT. Perform 100%MT and 100%VT of the repair area.
5. Remove all defects by grinding to ensure all defects are completely removed if defects still exist, and repeat "step 4" to assure complete removal of all defects if necessary.
6. Clean the repair area of all loose debris including MT powder.
7. Preheat and weld according to the approved WPS.
8. Grind the weld flush after welding.
9. Notify QA verbally prior to NDT. Perform 100%MT and 100%VT of the repair area.

This document is APPROVED
State of California
DEPARTMENT OF TRANSPORTATION
Pursuant to Section 5-1.02 of the
Standard Specifications
Initial SJE Date 10/21/2010

工 艺: Xu Dongkai 2010.10.12
Technical engineer

审核: Lu Jianchun 日期 2010.10.12
Approved by Date

Verified by: Christopher Brough (B277)
10/12/10

关键焊缝返修报告
Critical Welding Repair Report (CWR)

版本 Rev. No.
0

项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No.	SA8003	报告编号 Report No.	B-CWR1823
合同号 Contract No.:	04-0120F4	部件名称 Items Name	FLOOR BEAM	NDT报告编号 Report No.of NDT	NA
项目编号 Project No.:	ZP06-787				

纠正措施:

Correction action to prevent re occurrence:

培训和教育操作工，提高操作水平。

Train and educate operator to improve operation skill.

车间负责人(Foreman): Hu Yuzhang 日期(Date): 2010.10.12

参照的WPS编号 Repair WPS No.	☐ WPS-345-SMAW-1G(1F)- Repair ☑ WPS-345-SMAW-2G(2F)-Repair ☐ WPS-345-SMAW-3G(3F)- Repair ☐ WPS-345-SMAW-4G(4F)- Repair ☐ WPS-345-SMAW-1G(1F)-FCM-Repair ☐ WPS-345-SMAW-2G(2F)-FCM-Repair ☐ WPS-345-SMAW-3G(3F)-FCM-Repair ☐ WPS-345-SMAW-4G(4F)-FCM-Repair ☐ Others	工艺员 technologist	Xu Dong Kai 2010.10.12
返修（碳刨）前预热温度 Preheat temperature before gouging	70°C	返修的缺陷 Description of discontinuity	Slag
焊前处理检查 Inspection before welding	Au	焊前预热温度 Preheat temperature before welding	210°C
最大碳刨深度 Max. depth of gouging	10mm	碳刨总长 Total length of gouging	500mm

焊工 welder 05096	焊接类型 welding type SMAW	焊接位置 position 2G
焊接电流 Current 170	焊接电压 Voltage 26.2	焊接速度 Speed 126

返修后检查

Inspection After repairing:

外观检查 VT result Au	检验员 Inspector Chen Xf	日期 Date 2010.10.12
NDT复检 NDT result MT: Au	探伤员 NDT person Jin Jian ting	日期 Date 2010.10.12
见证： Witness/Review:		
备注： Remark：		

This document is APPROVED
State of California
DEPARTMENT OF TRANSPORTATION
Pursuant to Section 5-1.02 of the
Standard Specifications
Initial SJE Date 10/21/2010

ZPMC

REPORT OF MAGNETIC PARTICLE EXAMINATION
磁粉检测报告

REPORT NO. 报告编号 B787-MT-30207	DATE日期 2010.10.10	PAGE OF页码 1/1	Revision No: 0

PROJECT NO. 工程编号:	ZP06-787	CONTRACTOR: 用 户:	CALTRANS
DRAWING NO. 图号:	SA8004/SA8003 floor beam	CALTRANS CONTRACT NO.: 加州工程编号	04-0120F4

REFERENCING CODE 参考规范编码	ACCEPTANCE STANDARD 接受标准	PROCEDURE NO. 程序编号	CALIBRATION DUE DATE 仪器校正有效期
AWS D1.5-2002	AWS D1.5-2002	ZPQC-MT-01	Dec. 28ST ,2010

EQUIPMENT 设备	MANUFACTURER 制造商	MODEL NO. 样式编号	SERIAL NO. 连续编号
MT YOKE	PARKER	DA-400S	17369

MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70～150mm
MATERIAL TO BE EXAMINED 检测材料	√ WELDING 焊接件 ☐ CASTING 铸件 ☐ FORGING 锻造	Material & thickness 母材,厚度	A709M-345T2-X 60mm
WELDING PROCESS 焊接方法	NA	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
X8005B				ACC.		after removed
X8006B				ACC.		after removed
X8005A				ACC.		after removed
X8006A				ACC.		after removed
BLANK						

EXAMINED BY主探	REVIEWED BY 审核
Jin Jianting Jin Jianting	Sun Liang Chang
LEVEL - II SIGN 签名 / DATE日期 10/10/10	LEVEL-II SIGN / DATE日期
质量经理 / QCM	用户CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

ZPMC

REPORT OF MAGNETIC PARTICLE EXAMINATION
磁粉检测报告

REPORT NO. 报告编号 B787-MT-30188	DATE日期 2010.10.12	PAGE OF页码 1/1	Revision No: 0

PROJECT NO. 工程编号:	ZP06-787	CONTRACTOR: 用 户:	CALTRANS
DRAWING NO. 图号:	SA8004/SA8003 floor beam	CALTRANS CONTRACT NO.: 加州工程编号	04-0120F4

REFERENCING CODE 参考规范编码	ACCEPTANCE STANDARD 接受标准	PROCEDURE NO. 程序编号	CALIBRATION DUE DATE 仪器校正有效期
AWS D1.5-2002	AWS D1.5-2002	ZPQC-MT-01	Dec. 28ST ,2010
EQUIPMENT 设备	MANUFACTURER 制造商	MODEL NO. 样式编号	SERIAL NO. 连续编号
MT YOKE	PARKER	DA-400S	17369

MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70～150mm
MATERIAL TO BE EXAMINED 检测材料	√ WELDING 焊接件 ☐ CASTING 铸件 ☐ FORGING 锻造	Material & thickness 母材,厚度	A709M-345T2-X 60mm
WELDING PROCESS 焊接方法	SMAW	TYPE OF JOINT 焊缝类型	NA

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
X8005B				ACC.		100%MT
X8006B				ACC.		100%MT
X8005A				ACC.		100%MT
X8006A				ACC.		100%MT
Base metal per B-CWR1823						
BLANK						

EXAMINED BY主探 Jin Jianting Jin Jianting LEVEL - II SIGN 签名 / DATE日期 10/12/10	REVIEWED BY 审核 Sun Guang Chang LEVEL-II SIGN / DATE日期 10/12/10
质量经理 / QCM 签字 SIGN / 日期 DATE	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

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 #: xx.25A

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

Location: Changxing Island, Shanghai, China **Report No:** NCS-000865
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 28-Oct-2010
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0821

Type of problem:

Welding	☑	**Concrete**	☐	**Other**	☐	
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☐	**Component:**
Procedural	☑	**Procedural**	☐	**Descripton:**		

Date the Non-Conformance Report was written: 11-Oct-2010

Description of Non-Conformance:

During Quality Assurance random in-process observations of the fabrication of OBG lift 14E, East Floor beam FB3286A, this Quality Assurance Inspector (QA) discovered the following issue:

-ZPMC Welding personnel performed base metal repair (BMR) on the sleeve plate without the Engineers approval.
- Total of 7 areas repaired.
-The welding was performed using Shielded Metal Arc Welding (SMAW) in the Horizontal (2G) position.
-The sleeve plate is identified as SA8004.
-The Y locations are approximately 410 mm,1375 mm,1810 mm,3750 mm,4630 mm,5120 mm and 7180 mm from the toe of the weld identified as SA8004-001-001(measured clock wise and looking from top of the sleeve).
- FB3286A – SA8004 is located in the Sub assembly Bay#3.

For additional information, please see the attached pictures below.

Contractor's proposal to correct the problem:

Contractor will submit a CWR for weld repair. Contractor will provide NDT report to prove the weld is acceptable. Contractor will submit CWR for all base metal repairs dealing with permanent attachments must receive Engineer's approval to prevent the future occurance.

Corrective action taken:

Contractor provided a Critical Weld Repair (CWR) Report for Engineer's approval subsequently. The performed repair was done according to the CWR report with NDT verification.

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:

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

Inspected By:	Ng,Michael	Quality Assurance Inspector
Reviewed By:	Devey,Jim	QA Reviewer