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-000564
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 16-Dec-2009
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0537

Type of problem:

Welding	☑	**Concrete**	☐	**Other**	☐	
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006
Joint fit-up	☑	**Coating**	☐	**Other**	☐	**Component:** OBG Segment 10AW FL3
Procedural	☐	**Procedural**	☐	**Description:**		

Reference Description: Fabrication not according to the approved shop drawings in Segment 10AW

Description of Non-Conformance:

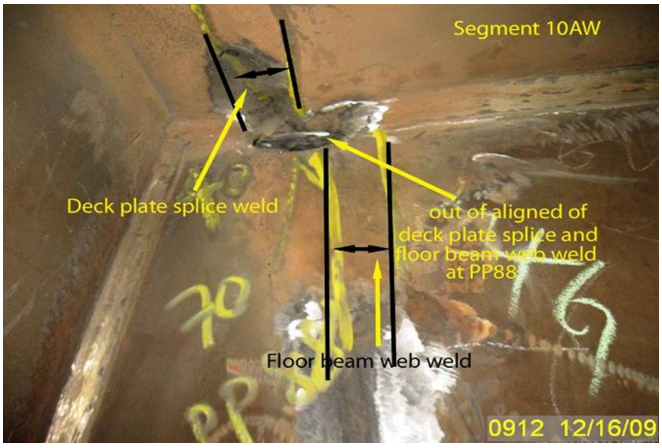
During random in-process visual inspection of OBG segment 10AW, Caltrans Quality Assurance (QA) Inspector discovered the following issues:

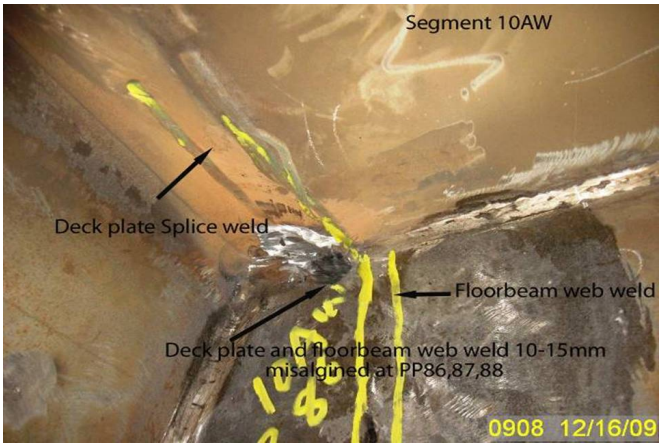
The complete joint penetration (CJP) weld joining the Deck panel diaphragm to the FL3 floor beam at panel points 86, 87 and 88 was found to be misaligned approximately 10 to 15mm with the weld access hole for the deck panel splice. The issue was explained by ZPMC QC Mr. Li Ming yang to be due to excessive cutting at fit up. Additional information identifying the weld and component location is listed below. The fabrication at these locations are not conforming to the approved shop drawings.

- Deck plate splice weld is identified as: SEG059*-010.
- The FL3 floor beam (FB19) to deck panel diaphragm weld at panel point 86 is designated as SSD10A-PP86-004.
- The FL3 floor beam (FB23) to deck panel diaphragm weld at panel point 87 is designated as SSD10A-PP87-004.
- The FL3 floor beam (FB27) to deck panel diaphragm weld at panel point 88 is designated as SSD10A-PP88-005.
- The OBG Segment 10AW is located inside the fabrication Bay 14.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)





Applicable reference:

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."

Approved Drawing for segment Assembly 10AW; "SEGSD1 – Detail 1AA". Shows that the weld access hole, deck panel splice weld and floor beam to diaphragm splice weld should align.

Who discovered the problem: Chandra Sudalaimuthu

Name of individual from Contractor notified: Peter Shaw

Time and method of notification: 0930 hours, 12/18/09, Verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 1500 hours, 12/18/09, Verbal

QC Inspector's Name: Li Ming Yang

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:**	25-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:**	05.03.06-000525
Subject:	NCR No. ZPMC-0537		

Reference Description: Fabrication not according to the approved shop drawings in Segment 10AW

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:** 10

Remarks:

During random in-process visual inspection of OBG segment 10AW, Caltrans Quality Assurance (QA) Inspector discovered the following issues:

The complete joint penetration (CJP) weld joining the Deck panel diaphragm to the FL3 floor beam at panel points 86, 87 and 88 was found to be misaligned approximately 10 to 15mm with the weld access hole for the deck panel splice. The issue was explained by ZPMC QC Mr. Li Ming yang to be due to excessive cutting at fit up. The fabrication at these locations are not conforming to the approved shop drawings.

- Deck plate splice weld is identified as: SEG059*-010.
- The FL3 floor beam (FB19) to deck panel diaphragm weld at panel point 86 is designated as SSD10A-PP86-004.
- The FL3 floor beam (FB23) to deck panel diaphragm weld at panel point 87 is designated as SSD10A-PP87-004.
- The FL3 floor beam (FB27) to deck panel diaphragm weld at panel point 88 is designated as SSD10A-PP88-005.
- The OBG Segment 10AW is located inside the fabrication Bay 14.

Action Required and/or Action Taken:

The concern is the method used to terminate the weld between the misaligned deck plate splices. Indicate to the engineer how the termination was done. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Bill Howe

Attachments: ZPMC-0537

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

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: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000525

Subject: NCR No. ZPMC-0537

Dated: **25-Jun-2010**

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

Job Name: SAS Superstructure

Document No.: **ABF-NPR-000720 Rev: 00**

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has corrected the misalignment noted in the NCR and the final acceptance allowance is documented by the Final VT inspection performed by ABFJV and ZPMC which is attached.

ZPMC has corrected the misalignment noted in the NCR and the final acceptance allowance is documented by the Final VT inspection performed by ABFJV and ZPMC which is attached. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000720R00;

Caltrans' comments:

Status: REJ

Date: 14-Jul-2010

The final VT form was not signed by Caltrans Representative. Additional documentation is needed for all the repairs. The cope holes in question require grinding before acceptance.

Submitted by: Woo, Laraine

Date: 14-Jul-2010

Attachment(s):

No. B-801

LETTER OF RESPONSE

TO: American Bridge/Flour
DATE: 2010-6-25
REGARDING: NCR-000564(ZPMC-0537)

ZPMC acknowledged the weld access hole shown in NCR was misaligned with deck panel splice weld in 10AW. This misalignment was caused by accumulated error during the deck panel splicing. The verifications of Green tags and FVT for 10AW have been achieved with the efforts of three parties. Due to these welds have been completed and are tested to be acceptable, the misalignment could be deemed to have no affection on welding. Based on this, please consider closure of this NCR.

ATTACHMENT:
NCR-000564(ZPMC-0537)
B-FVT-057

6/25/10

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	**Date:**	25-Dec-2009
	375 BURMA ROAD		
	OAKLAND CA 95607	**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:**	05.03.06-000525
Subject:	NCR No. ZPMC-0537		

Reference Description: Fabrication not according to the approved shop drawings in Segment 10AW

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:** 10

Remarks:

During random in-process visual inspection of OBG segment 10AW, Caltrans Quality Assurance (QA) Inspector discovered the following issues:

The complete joint penetration (CJP) weld joining the Deck panel diaphragm to the FL3 floor beam at panel points 86, 87 and 88 was found to be misaligned approximately 10 to 15mm with the weld access hole for the deck panel splice. The issue was explained by ZPMC QC Mr. Li Ming yang to be due to excessive cutting at fit up. The fabrication at these locations are not conforming to the approved shop drawings.

- Deck plate splice weld is identified as: SEG059*-010.
- The FL3 floor beam (FB19) to deck panel diaphragm weld at panel point 86 is designated as SSD10A-PP86-004.
- The FL3 floor beam (FB23) to deck panel diaphragm weld at panel point 87 is designated as SSD10A-PP87-004.
- The FL3 floor beam (FB27) to deck panel diaphragm weld at panel point 88 is designated as SSD10A-PP88-005.
- The OBG Segment 10AW is located inside the fabrication Bay 14.

Action Required and/or Action Taken:

The concern is the method used to terminate the weld between the misaligned deck plate splices. Indicate to the engineer how the termination was done. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Bill Howe
Attachments: ZPMC-0537

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-000564
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 16-Dec-2009
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0537

Type of problem:

Welding	☑	**Concrete**	☐	**Other**	☐	
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006
Joint fit-up	☑	**Coating**	☐	**Other**	☐	**Component:** OBG Segment 10AW FL3
Procedural	☐	**Procedural**	☐	**Description:**		

Reference Description: Fabrication not according to the approved shop drawings in Segment 10AW

Description of Non-Conformance:

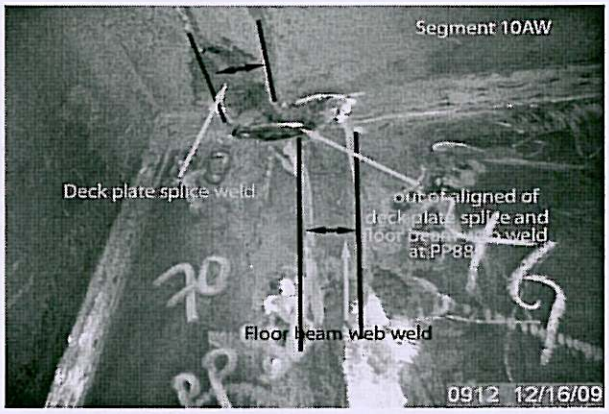
During random in-process visual inspection of OBG segment 10AW, Caltrans Quality Assurance (QA) Inspector discovered the following issues:

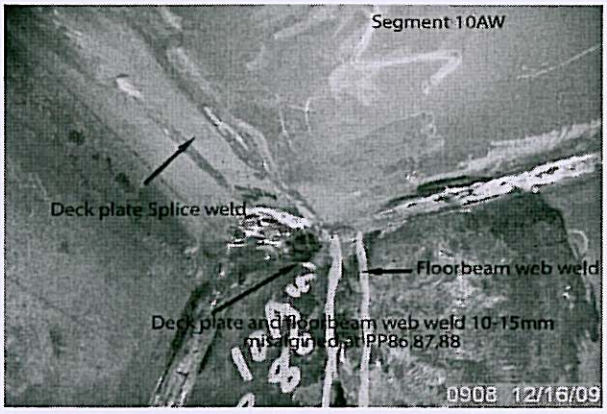
The complete joint penetration (CJP) weld joining the Deck panel diaphragm to the FL3 floor beam at panel points 86, 87 and 88 was found to be misaligned approximately 10 to 15mm with the weld access hole for the deck panel splice. The issue was explained by ZPMC QC Mr. Li Ming yang to be due to excessive cutting at fit up. Additional information identifying the weld and component location is listed below. The fabrication at these locations are not conforming to the approved shop drawings.

- Deck plate splice weld is identified as: SEG059*-010.
- The FL3 floor beam (FB19) to deck panel diaphragm weld at panel point 86 is designated as SSD10A-PP86-004.
- The FL3 floor beam (FB23) to deck panel diaphragm weld at panel point 87 is designated as SSD10A-PP87-004.
- The FL3 floor beam (FB27) to deck panel diaphragm weld at panel point 88 is designated as SSD10A-PP88-005.
- The OBG Segment 10AW is located inside the fabrication Bay 14.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)





Applicable reference:

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."

Approved Drawing for segment Assembly 10AW; "SEGSD1 – Detail 1AA". Shows that the weld access hole, deck panel splice weld and floor beam to diaphragm splice weld should align.

Who discovered the problem: Chandra Sudalaimuthu

Name of individual from Contractor notified: Peter Shaw

Time and method of notification: 0930 hours, 12/18/09, Verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 1500 hours, 12/18/09, Verbal

QC Inspector's Name: Li Ming Yang

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

梁段最终目检通知单
Final VT Request Sheet

报验单编号
(Sheet No) : B-FVT-057

ABF签收人&时间
ABF receiver & time:

我们要求对如下构件进行报验。请在检验完成后尽快给予批准。
We make request for inspection of the below items. Your earliest acceptance after inspection will be appreciated.

检验地点 (Inspection place)	Outside Yard
构件名称 (Name of Component)	10AW
构件图号 (Drawing No. of Component)	SEG 059
检验时间 (Time)	2010.5.14
施工队 (Sub contractor name)	Hu Cuo ding

	Yes	No
焊缝区域校火是否结束? Weld Area Heat Straightening Complete?	☑	☐
返修是否结束? Repair complete?	☑	☐
探伤是否结束? NDT complete?	☑	☐

检验结论:
RESULT OF INSPECTION:

☑ 接受/ACCEPT ☐ 拒收及理由/Reject and Reasons

Li Yan Hua 07120701
ZPMC CWI signature & date:

☑ 接受/ACCEPT ☐ 拒收及理由/Reject and Reasons

28/05/2010.
ABF Representative Signature & date:

☐ 接受/ACCEPT ☐ 拒收及理由/Reject and Reasons

Caltrans Representative Signature & date:

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: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000525

Subject: NCR No. ZPMC-0537

Dated: **07-Sep-2010**

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

Job Name: SAS Superstructure

Document No.: **ABF-NPR-000720 Rev: 01**

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has repaired the misaligned cope hole and is providing the repair report and VT and NDT performed after to show it is acceptable.

ZPMC has repaired the misaligned cope hole and is providing the repair report and VT and NDT performed after to show it is acceptable. Where this condition occurs ZPMC conducts the repair so the weld terminates at the cope hole. Based on these documents and the acceptable condition of the weld and alignment, ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000720R01;

Caltrans' comments:

Status: REJ

Date: 14-Sep-2010

The Contractor submitted the WRR used to make the repairs along with subsequent NDT reports. The repair would require a CWR rather than a WRR. The Contractor needs to address the internal lack of management/oversight allowing welders to perform repairs without the Engineer's approval. Furthermore, one of the members which was repaired, X29B, is designated as SPCM, and the WRR does not have the appropriate WPS listed on it. Finally, the repair requires UT in addition to the MT and UT.

Submitted by: Woo, Laraine

Date: 14-Sep-2010

Attachment(s):

No. B-874

LETTER OF RESPONSE

TO: American Bridge/Flour
DATE: 2010-09-06
REGARDING: NCR-000564(ZPMC-0537)

ZPMC has fixed the unspecified cope hole and performed MT to ensure the soundness of the affect area. Based on the attached WRR, and NDT documentations, ZPMC is requesting closure of this NCR.

ATTACHMENT:
NCR-000564(ZPMC-0537)
B-WR12536
VT AFTER B-WR12536
B787-MT-27240

9/6/10

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:**	25-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:**	05.03.06-000525
Subject:	NCR No. ZPMC-0537		

Reference Description: Fabrication not according to the approved shop drawings in Segment 10AW

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:** 10

Remarks:

During random in-process visual inspection of OBG segment 10AW, Caltrans Quality Assurance (QA) Inspector discovered the following issues:

The complete joint penetration (CJP) weld joining the Deck panel diaphragm to the FL3 floor beam at panel points 86, 87 and 88 was found to be misaligned approximately 10 to 15mm with the weld access hole for the deck panel splice. The issue was explained by ZPMC QC Mr. Li Ming yang to be due to excessive cutting at fit up. The fabrication at these locations are not conforming to the approved shop drawings.

- Deck plate splice weld is identified as: SEG059*-010.
- The FL3 floor beam (FB19) to deck panel diaphragm weld at panel point 86 is designated as SSD10A-PP86-004.
- The FL3 floor beam (FB23) to deck panel diaphragm weld at panel point 87 is designated as SSD10A-PP87-004.
- The FL3 floor beam (FB27) to deck panel diaphragm weld at panel point 88 is designated as SSD10A-PP88-005.
- The OBG Segment 10AW is located inside the fabrication Bay 14.

Action Required and/or Action Taken:

The concern is the method used to terminate the weld between the misaligned deck plate splices. Indicate to the engineer how the termination was done. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Bill Howe
Attachments: ZPMC-0537

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-000564
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 16-Dec-2009
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0537

Type of problem:

Welding	☑	**Concrete**	☐	**Other**	☐	
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006
Joint fit-up	☑	**Coating**	☐	**Other**	☐	**Component:** OBG Segment 10AW FL3
Procedural	☐	**Procedural**	☐	**Description:**		

Reference Description: Fabrication not according to the approved shop drawings in Segment 10AW

Description of Non-Conformance:

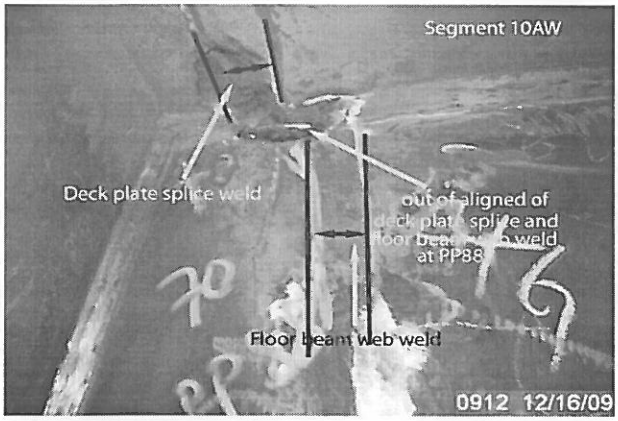
During random in-process visual inspection of OBG segment 10AW, Caltrans Quality Assurance (QA) Inspector discovered the following issues:

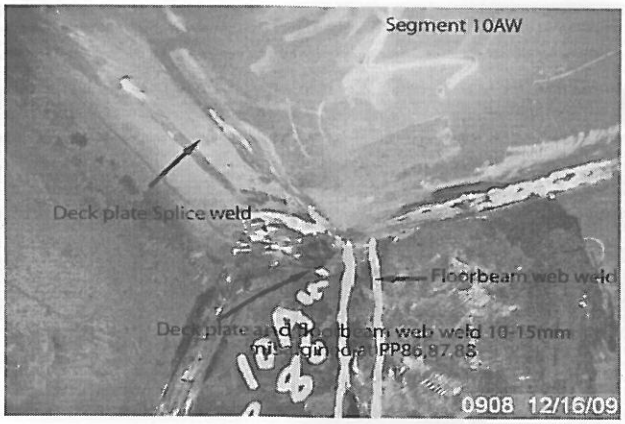
The complete joint penetration (CJP) weld joining the Deck panel diaphragm to the FL3 floor beam at panel points 86, 87 and 88 was found to be misaligned approximately 10 to 15mm with the weld access hole for the deck panel splice. The issue was explained by ZPMC QC Mr. Li Ming yang to be due to excessive cutting at fit up. Additional information identifying the weld and component location is listed below. The fabrication at these locations are not conforming to the approved shop drawings.

- Deck plate splice weld is identified as: SEG059*-010.
- The FL3 floor beam (FB19) to deck panel diaphragm weld at panel point 86 is designated as SSD10A-PP86-004.
- The FL3 floor beam (FB23) to deck panel diaphragm weld at panel point 87 is designated as SSD10A-PP87-004.
- The FL3 floor beam (FB27) to deck panel diaphragm weld at panel point 88 is designated as SSD10A-PP88-005.
- The OBG Segment 10AW is located inside the fabrication Bay 14.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)





Applicable reference:

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."

Approved Drawing for segment Assembly 10AW; "SEGSD1 – Detail 1AA". Shows that the weld access hole, deck panel splice weld and floor beam to diaphragm splice weld should align.

Who discovered the problem: Chandra Sudalaimuthu

Name of individual from Contractor notified: Peter Shaw

Time and method of notification: 0930 hours, 12/18/09, Verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 1500 hours, 12/18/09, Verbal

QC Inspector's Name: Li Ming Yang

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

焊缝返修报告
Welding Repair Report

				版本 Rev. No.	0
项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No	SEG059	报告编号 Report No.	B-WR12536
合同号 Contract No.:	04-0120F4	部件名称 Items Name	隔板	NDT报告编号 Report No.of NDT	
项目编号 Project No.:	ZP06-787				

焊缝缺陷描述 (Description of welding discontinuity) :

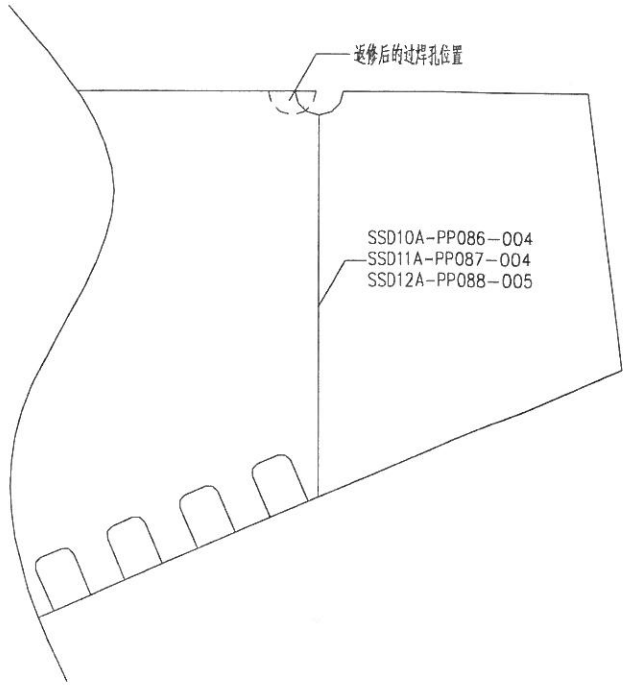
经检查发现箱梁10AW顶板连接板与隔板对接焊缝处的过焊孔与顶板拼接焊缝有错位，最大18mm。具体见下图。

Cope hole was offset with the deck connection plate of Segment 10AW by 18mm in maximum. Please see the details in the following sketch.

检验员（Inspector）： Li Yanhua 日期(Date)： 10.04.29

焊缝返修位置示意图：

Draft of welding discontinuity:



产生原因:

Caused:

累积误差，导致顶板拼缝与过焊孔错位。

Accumulative error leads to the offset.

车间负责人(Foreman): Li Zhiqang 日期(Date): 10.04.29

处理意见

Disposition：

1， 返修前打磨返修区域光滑，并按照WPS要求准备焊接接头；

2， 清除杂物，并VT检测无缺陷和杂质存在；

3， 根据WPS要求进行预热及堆焊修补；

4， 焊后将焊缝打磨与周围母材齐平；

5， 返修后对修补区域进行VT和MT检测。

1, Before repair, grind the repair area to a smooth finish and prepare right excavation according to approved repair WPS.

2, Clean weld of all loose debris.

3, Preheat and weld according to the repair WPS.

4, Grind the repair area flush with base metal.

5, Perform VT and MT to the repair area.

工 艺: Liu Dongbin 审核: Liu Jianhua. 日期 10.04.29

Technical engineer Approved by Date

焊缝返修报告
Welding Repair Report

版本 Rev. No.
0

项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No	SEG059	报告编号 Report No.	B-WR12536
合同号 Contract No.:	04-0120F4	部件名称 Items Name	隔板	NDT报告编号 Report No.of NDT	
项目编号 Project No.:	ZP06-787				

纠正措施: **Correction action to prevent re occurrence:**

1. 对操作工进行培训，提高技术能力。**Train the workers to improve their skills.**
2. 加强现场操作时的质量监督。**Enhance supervision during fabrication.**

车间负责人(Foreman): 日期(Date):

参照的WPS编号 Repair WPS No.	WPS-345-SMAW-1G(1F)- Repair WPS-345-FCAW-1G(1F)- Repair-1 WPS-345-SMAW-2G(2F)-Repair WPS-345-FCAW-2G(2F)-Repair-1 WPS-345-SMAW-3G(3F)- Repair WPS-345-SMAW-4G(4F)- Repair	工艺员 technologist	Xu Dong kai 10.04.29
返修（碳刨）前预热温度 Preheat temperature before gouging	70°C	返修的缺陷 Description of discontinuity	Base metal repair
焊前处理检查 Inspection before welding	Acc	焊前预热温度 Preheat temperature before welding	170°C
最大碳刨深度 Max. depth of gouging	NA	碳刨总长 Total length of gouging	80mm.

焊工 welder 067656	焊接类型 welding type SMAW.	焊接位置 position 3G
焊接电流 Current 185 A	焊接电压 Voltage 22.5V	焊接速度 Speed 112 mm/min

返修后检查
Inspection After repairing:

外观检查 VT result Acc	检验员 Inspector Li Yanhua 李延华	日期 Date 10.05.07
NDT复检 NDT result MT Acc	探伤员 NDT person	日期 Date 2010.05.7

见证：
Witness/Review:

备注：
Remark :

ZPMC

		周数	131#
		日期	2010.05.07

Visual Weld Inspection Report **焊缝目视检查报告**		**Girder/ 梁:**	**OBG PlatePanelSplice**
		Tower/ 塔:	
Caltrans Contract No. 加州合同编号	04-0120F4	Representative: 质检代表:	
Project No.: 项目名称	San Francisco Oakland Bay Bridge 美国海湾大桥	C W I : 检验员:	Li Yanhua 07.05.07
Project No.: 项目编号:	ZP06-787	Quality Assurance Manager ~Approval 质量控制经理:	

Weld No. 焊缝编号	Welder I.D.# 焊工识别号	Location 位置	Welding consumables 焊接材料	Undercut 咬边	Porosity 气孔	Over lap 焊瘤	Crater 弧坑	Arc strike电弧擦伤	Spatters 飞溅	Crack 裂纹	Accept or Reject 接受或拒收	Repair 返修	or Reject after repair 返修后
FB019-X12C	067656	3G	TL508(H4)(Φ4.0)	√	√	√	√	√	√	√	ACC	NA	NA
FB019-X29B	067656	3G	TL508(H4)(Φ4.0)	√	√	√	√	√	√	√	ACC	NA	NA
FB019-X12D	067656	3G	TL508(H4)(Φ4.0)	√	√	√	√	√	√	√	ACC	NA	NA

☐ After root weld	☐ After cover pass	
☑ After CWR or WRR No.:B-WR12536	☐ After HSR No.:	☐ Others

#R787-QCP-603

" √ " is no defects. " X " is defects. "NA" is not applicable.

ZPMC

REPORT OF MAGNETIC PARTICLE EXAMINATION
磁粉检测报告

REPORT NO. 报告编号 B787-MT-27240	DATE日期 2010.05.07	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:	FB019 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	B310S	5395 5617 5620

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-345F2-X 18mm
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			
X12C				ACC.		100%MT
X29B				ACC.		100%MT
X12D				ACC.		100%MT
Base metal per B-WR12536						
BLANK						

EXAMINED BY主探 Li Liming LEVEL - II SIGN 签名 / DATE日期 2010.05.07	REVIEWED BY 审核 Wangtwei. 2010.05.07 LEVEL-II SIGN / DATE日期
质量经理 / QCM 签字 SIGN / 日期 DATE	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

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: 05.03.06-000525

Subject: NCR No. ZPMC-0537

Dated: **05-Oct-2010**

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

Job Name: SAS Superstructure

Document No.: **ABF-NPR-000720 Rev: 02**

Contractor's Proposed Resolution:

Reference Resolution: ZPMC is providing the requested UT testing of the weld metal which was added. Based on the acceptable results and previously submitted documents ZPMC requests closure of this NCR.

ZPMC is providing the requested UT testing of the weld metal which was added. Based on the acceptable results and previously submitted documents ZPMC requests closure of this NCR.

--

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000720R02;

Caltrans' comments:

Status: REJ

Date: 12-Oct-2010

Per the NCT note "Action Required," please indicate how the termination was done. Also, provide 100% MT verification record.

Submitted by: Woo, Laraine

Date: 12-Oct-2010

Attachment(s):

No. B-900

LETTER OF RESPONSE

TO: American Bridge/Flour
DATE: 2010-09-06
REGARDING: NCR-000564(ZPMC-0537)

ZPMC is providing the UT records to show the soundness of the base metal after repair. Based on this and with the previousely submitted documentations, ZPMC is requesting closure of this NCR.

ATTACHMENT:
NCR-000564(ZPMC-0537)
B787-UT-16585

9/30/10

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:**	25-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:**	05.03.06-000525
Subject:	NCR No. ZPMC-0537		

Reference Description: Fabrication not according to the approved shop drawings in Segment 10AW

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:** 10

Remarks:

During random in-process visual inspection of OBG segment 10AW, Caltrans Quality Assurance (QA) Inspector discovered the following issues:

The complete joint penetration (CJP) weld joining the Deck panel diaphragm to the FL3 floor beam at panel points 86, 87 and 88 was found to be misaligned approximately 10 to 15mm with the weld access hole for the deck panel splice. The issue was explained by ZPMC QC Mr. Li Ming yang to be due to excessive cutting at fit up. The fabrication at these locations are not conforming to the approved shop drawings.

- Deck plate splice weld is identified as: SEG059*-010.
- The FL3 floor beam (FB19) to deck panel diaphragm weld at panel point 86 is designated as SSD10A-PP86-004.
- The FL3 floor beam (FB23) to deck panel diaphragm weld at panel point 87 is designated as SSD10A-PP87-004.
- The FL3 floor beam (FB27) to deck panel diaphragm weld at panel point 88 is designated as SSD10A-PP88-005.
- The OBG Segment 10AW is located inside the fabrication Bay 14.

Action Required and/or Action Taken:

The concern is the method used to terminate the weld between the misaligned deck plate splices. Indicate to the engineer how the termination was done. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Bill Howe
Attachments: ZPMC-0537

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao
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 #: 69.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, P.R. China **Report No:** NCR-000564
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 16-Dec-2009
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0537

Type of problem:

Welding	☑	**Concrete**	☐	**Other**	☐	
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006
Joint fit-up	☑	**Coating**	☐	**Other**	☐	**Component:** OBG Segment 10AW FL3
Procedural	☐	**Procedural**	☐	**Description:**		

Reference Description: Fabrication not according to the approved shop drawings in Segment 10AW

Description of Non-Conformance:

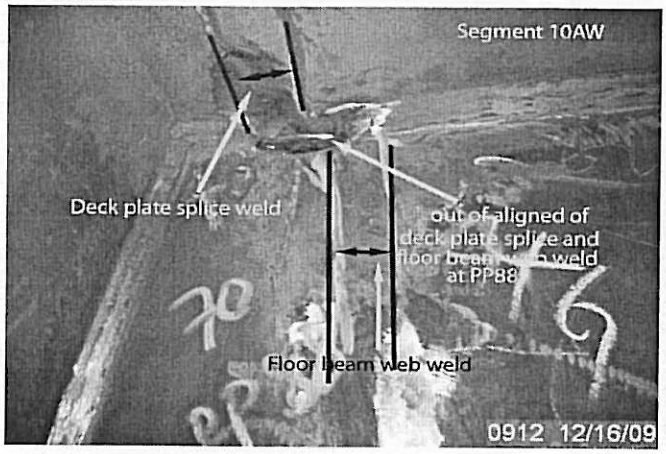
During random in-process visual inspection of OBG segment 10AW, Caltrans Quality Assurance (QA) Inspector discovered the following issues:

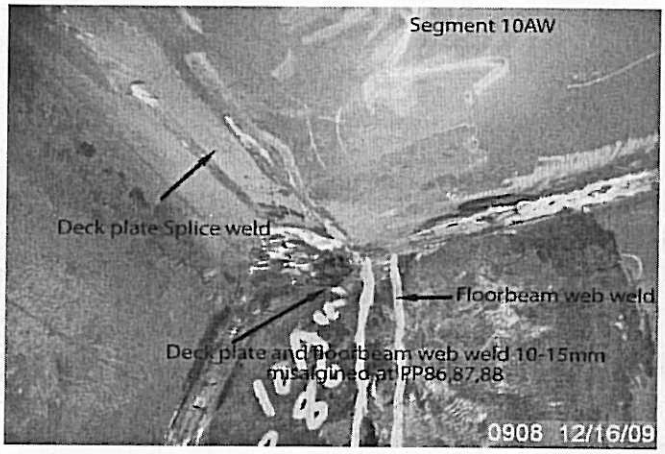
The complete joint penetration (CJP) weld joining the Deck panel diaphragm to the FL3 floor beam at panel points 86, 87 and 88 was found to be misaligned approximately 10 to 15mm with the weld access hole for the deck panel splice. The issue was explained by ZPMC QC Mr. Li Ming yang to be due to excessive cutting at fit up. Additional information identifying the weld and component location is listed below. The fabrication at these locations are not conforming to the approved shop drawings.

- Deck plate splice weld is identified as: SEG059*-010.
- The FL3 floor beam (FB19) to deck panel diaphragm weld at panel point 86 is designated as SSD10A-PP86-004.
- The FL3 floor beam (FB23) to deck panel diaphragm weld at panel point 87 is designated as SSD10A-PP87-004.
- The FL3 floor beam (FB27) to deck panel diaphragm weld at panel point 88 is designated as SSD10A-PP88-005.
- The OBG Segment 10AW is located inside the fabrication Bay 14.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)





Applicable reference:

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."

Approved Drawing for segment Assembly 10AW; "SEGSD1 – Detail 1AA". Shows that the weld access hole, deck panel splice weld and floor beam to diaphragm splice weld should align.

Who discovered the problem: Chandra Sudalaimuthu

Name of individual from Contractor notified: Peter Shaw

Time and method of notification: 0930 hours, 12/18/09, Verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 1500 hours, 12/18/09, Verbal

QC Inspector's Name: Li Ming Yang

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

REPORT OF ULTRASONIC EXAMINATION
UT探伤报告

REPORT NO. 报告编号	DATE	PAGE	Revision No:
B787-UT-16585	2010.09.30	1 OF 2	0

PROJECT NO. :工程编号	CONTRACTOR :
ZP06-787	CALTRANS

ITEMS NAME: 部件名称	DRAWING NO.: 图号	CALTRANS CONTRACT NO.: 加州工程编号
FLOOR BEAM	SSD10A/SSD11A/ SSD12A	04-0120F4

REFERENCING CODE 参考规范	ACCEPTANCE STANDARD 接受标准	PROCEDURE NO. 程序编号
AWS D1.5-2002	AWS D1.5-2002(Table 6.3)	ZPQC-UT-01

WELDING PROCESS 焊接方法	JOINT TYPE 焊缝类型	CALIBRATION DUE DATE 仪器校正有效期
NA	NA	Dec. 28ST ,2010

EQUIPMENT 设备	MANUFACTURER 制造商	MODEL NO. 样式编号	SERIAL NO. 序列编号
UT SCOPE	AMERICA	EPOCH-XT	070150911

CALIBRATION BLOCK 试块	COUPLANT 耦合剂	MATERIAL/THICKNESS 材料厚度
AWS IIW BLOCK TYPE II	C.M.C	A709M-345T2/F2 14/50/18mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
AMERICA	70°	2.25MHz	0.75×0.625 in				
Changchao	0°	2.5MHz	20mm	Reference Level 参考灵敏度		20dB	

Base metal inspected per AWS D1.5-2002 Section 6.19.5 0° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)						
					a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From'X 距X	From'Y 距Y		
X1H		70				45								ACC.	100%
		0				20								ACC.	100%
X12C		70				45								ACC.	100%
		0				20								ACC.	100%
X1H		70				45								ACC.	100%
		0				20								ACC.	100%
X29B		70				45								ACC.	100%
		0				20								ACC.	100%

EXAMINED BY主探	REVIEWED BY 审核
Tang Xingshan	Xu Rongqang
LEVEL - II SIGN / DATE 2010.09.30	LEVEL - II SIGN / DATE 2010.09.30
质量经理 / QCM	用户CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE

(FORM# ZPQC-UT01)

REPORT OF ULTRASONIC EXAMINATION
UT探伤报告

REPORT NO. 报告编号 B787-UT-16585 DATE 2010.09.30 PAGE 2 OF 2 Revision No: 0

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)						
					a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From'X 距X	From'Y 距Y		
X1H		70				45								ACC.	100%
		0				20								ACC.	100%
X12D		70				45								ACC.	100%
		0				20								ACC.	100%
BASE METAL PER B-WR12536															
BLANK															

EXAMINED BY主探 Tang Xingshan
LEVEL - II SIGN / DATE 2010.09.30

REVIEWED BY 审核 Xu Rongqong
LEVEL - II SIGN / DATE 2010.09.30

质量经理 / QCM
签字 SIGN / 日期 DATE

用户CUSTOMER
签字 SIGN / 日期 DATE

(FORM# ZPQC-UT01)

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: 05.03.06-000525

Subject: NCR No. ZPMC-0537

Dated: **19-Oct-2010**

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

Job Name: SAS Superstructure

Document No.: **ABF-NPR-000720 Rev: 03**

Contractor's Proposed Resolution:

Reference Resolution: The weld was terminated per contract requirements and drawings. Refer to previous submittal, ABF-NPR-000720R01, for the MT reports requests

The weld was terminated per contract requirements and drawings. Refer to previous submittal, ABF-NPR-000720R01, for the MT reports requests. Based on the provided information and previoslt submitted documents ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000720R03

Caltrans' comments:

Status: CLO

Date: 20-Oct-2010

The cope was repaired and inspected. Contractor has provided the proper documentation to address this NCR. This NCR is closed.

Submitted by: Woo, Laraine

Date: 20-Oct-2010

Attachment(s):

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, P.R. China **Report No:** NCS-000878
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 21-Jan-2011
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0537

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: 16-Dec-2009

Description of Non-Conformance:

During random in-process visual inspection of OBG segment 10AW, Caltrans Quality Assurance (QA) Inspector discovered the following issues:

The complete joint penetration (CJP) weld joining the Deck panel diaphragm to the FL3 floor beam at panel points 86, 87 and 88 was found to be misaligned approximately 10 to 15mm with the weld access hole for the deck panel splice. The issue was explained by ZPMC QC Mr. Li Ming yang to be due to excessive cutting at fit up. Additional information identifying the weld and component location is listed below. The fabrication at these locations are not conforming to the approved shop drawings.

- Deck plate splice weld is identified as: SEG059*-010.
- The FL3 floor beam (FB19) to deck panel diaphragm weld at panel point 86 is designated as SSD10A-PP86-004.
- The FL3 floor beam (FB23) to deck panel diaphragm weld at panel point 87 is designated as SSD10A-PP87-004.
- The FL3 floor beam (FB27) to deck panel diaphragm weld at panel point 88 is designated as SSD10A-PP88-005.
- The OBG Segment 10AW is located inside the fabrication Bay 14.

Contractor's proposal to correct the problem:

ZPMC will perform repair and subsequent NDT.

Corrective action taken:

ZPMC has repaired the misaligned cope hole and is providing the repair report and the acceptable NDT records.

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 Jim Devey, (86) 150-0002-6784, who represents the Office of Structural Materials for your project.

Inspected By:	Tsang,Eric	Quality Assurance Inspector
Reviewed By:	Wahbeh,Mazen	QA Reviewer