

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



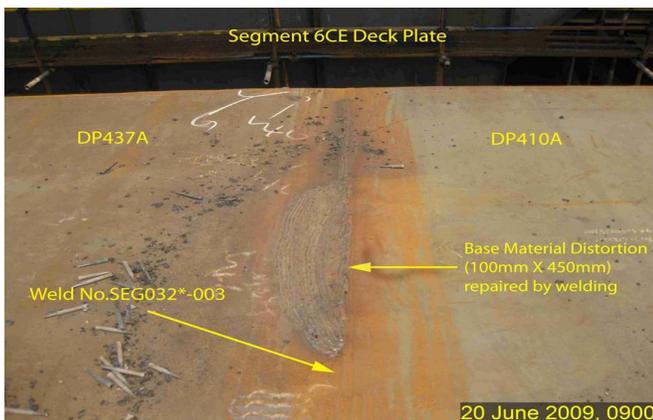
Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Chanxing Island, Shanghai, PRC**Report No:** NCR-000365**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 20-Jun-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0339**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: OBG Segment 6CE
Procedural	Procedural	Description:	

Reference Description: Heat Straightening without Engineer's approval**Description of Non-Conformance:**

Caltrans Quality Assurance (QA) Inspector observed that a base material distortion repair was performed on Deck plate 437A in way of deck panel splice weld No. SEG032*-003. Approximately 100mm x 450mm of filler material was deposited around the splice weld. This base material distortion repair was performed without the approval of the Engineer.

**Applicable reference:**

Contract Special Provisions Section 8-3.01, 'Welding', subsection 'Welding Quality Control' (page 154): "The Engineer shall be notified immediately in writing when welding problems, deficiencies, base metal repairs, or any other type of repairs not submitted in the WQCP are discovered and also of the proposed repair procedures to correct them."

Standard Specifications (99) section 55-3.02 Straightening of Material- "If straightening is necessary, it shall be done by methods acceptable to the Engineer. Details for methods proposed for straightening shall be submitted in writing to the Engineer prior to their use."

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Who discovered the problem: Rodney Patterson
Name of individual from Contractor notified: Kasi Wang
Time and method of notification: 1100 / Verbal
Name of Caltrans Engineer notified: Stanley Ku
Time and method of notification: 1200 / Verbal
QC Inspector's Name: Tao Lei
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:	Simonis,Jim	QA Inspector
Reviewed By:	Wahbeh,Mazen	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: 04-Aug-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: 05.03.06-000318

Subject: NCR No. ZPMC-0339

Reference Description: Heat Straightening 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:**

Remarks:

Caltrans Quality Assurance (QA) Inspector observed that a base material distortion repair was performed on Deck plate 437A in way of deck panel splice weld No. SEG032*-003. Approximately 100mm x 450mm of filler material was deposited around the splice weld. This base material distortion repair was performed without the approval of the Engineer. See attached NCR NO. ZPMC-0339 for details.

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 14 days.

Transmitted by: Ching Chao

Attachments: ZPMC-0339

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

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000318

Subject: NCR No. ZPMC-0339

Dated: 24-Aug-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000335 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC performed this repair without engineers approval. ABF has notified the ZPMC QA department who in turn have instructed the welders on site.

ZPMC performed this repair without engineers approval. ABF has notified the ZPMC QA department who in turn have instructed the welders on site. ZPMC will submit the required documents at a later date for closure of this NCR.

Submitted by:

Attachment(s): ABF-NPR-000335R00

Caltrans' comments:

Status: AAP

Date: 28-Aug-2009

The response is acceptable, but the Non-Conformance is not closed. The referenced Non-Conformance ZPMC-0339 was issued for unapproved heat straightening.

Please provide documentation of the heat straightening performed and that the welds affected by the heat straightening are acceptable. The Department will review the Contractor's proposal to close Non-Conformance ZPMC-0339 at that time.

Submitted by: Wright, Doug

Date: 28-Aug-2009

Attachment(s):

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000318

Subject: NCR No. ZPMC-0339

Dated: 03-Dec-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000335 **Rev:** 01

Contractor's Proposed Resolution:

Reference Resolution: Per Caltrans comments to ABFJV's NPR, ZPMC is submitting NDT documentation to show that the welds and base metal referenced in the NCR are acceptable. Based on this ZPMC requests closure of this NCR.

Per Caltrans comments to ABFJV's NPR, ZPMC is submitting NDT documentation to show that the welds and base metal referenced in the NCR are acceptable. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000335R01;

Caltrans' comments:

Status: CLO

Date: 17-Dec-2009

It should be noted that Section 9.2.1.2 of the Contractor's WQCP states "prior approval of the engineer shall be obtained for repairs to base metal...".

Submitted by: Howe, Bill

Date: 17-Dec-2009

Attachment(s):



No. B-511

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2009-12-02

REGARDING: NCR-000367(ZPMC-0341), NCR-000365(ZPMC-0339)

With this letter of response, ZPMC requests closure for Caltrans NCR-000367 (ZPMC-0341) & NCR-000365(ZPMC-0339) what mentioned that QA observed base metal repair without Engineer's approval.

Please see the applicable references below.

Contract Special Provisions Section 8-3.01, subsection 'welding quality control' (page 154). In addition to the provisions in AWS D1.5, Section 3.7.4 and Section 12.17, third -time repairs of welds or base metal, regardless of NDT method, all repairs of cracks required prior approval of the Engineer.

Contract Special Provisions Section 10-1.59, subsection 'repair'(page 304): "Third time repairs to base metal or heat affected zone at the same location and all major repairs require prior approval of the Engineer".

According to Contract Special Provision, the third-time repair of base metal shall be submitted in writing to Engineer for approval. Before ZPMC performed repair of these locations on base metal, ZPMC had issued WWR due to they were first-time repair.

So ZPMC provided the related WWRs and NDT documentations, hoping Caltrans could take a review and consider close these NCRs.

ATTACHMENT:

NCR-B-233(ZPMC-0341 ZPMC-0339)

NCR-000367(ZPMC-0341)

NCR-000365(ZPMC-0339)

B-WR5645

B-WR5495

B787-UT-9767

B787-UT-9917

12/02/09



Nonconformance Report

不符合项报告

Project Name: S.F.O.B.B
 项目名称: 美国加州海湾大桥
 NCR Number: NCR-B-233
 NCR 编号: (ZPMC-0341 ZPMC-0339)

Item: Base Metal Distortion
 名称描述: 母材变形
 Item Number: N/A
 件号: N/A
 Drawing: SEG035 SEG032
 图号: SEG035 SEG032

Location: OBG 7BW, 6CE
 位置:
 Date: 2009-08-18
 日期:

Description of Nonconformance:

不符合项状态描述:

Caltrans Inspector observed that a base metal distortion repair was performed on DP250 in way of deck panel splice weld No. SEG035*-005. Approximately 340mm X 120mm of FCAW filler material was deposited around the splice around the splice weld, And another base metal distortion repair was performed on DP437A in way of deck panel splice weld No. SEG032*-003. Approximately 100mm X 450mm of FCAW filler material was deposited around the splice around the splice weld. These base metal distortion repair were performed without the approval of the Engineer.

加州检验员发现 DP250 邻近焊缝 SEG035*-005 位置正在进行母材变形的返修。返修区域大约在 340mm X 120mm 左右。同样的返修也在 DP437A, 邻近焊缝 SEG032*-003 进行, 返修区域大概 100mm X 450mm。使用 FCAW 焊接方式进行堆焊。该处母材变形的返修没有经过工程师审批。

参考标准: 标书章节 8-3.01: 如果出了 WQCP 中定义的其他类型的返修需要进行, 必须以书面的方式告知工程师。标书章节 55-3.02: 如果需要校正, 该技术需得到工程师批准。该技术的细节需事先书面提交工程师。

Work By: Jiangang Prepared by: Jiangang Reviewed by QCE: Shuoshuangbao
 施工方: Jiangang 准备: Jiangang 质量工程师批准: Shuoshuangbao
 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:

Prepared by: _____ Approved by QCA: _____
 准备 质量经理批准

Reason for Nonconformance:

不符合原因: 母材变形没经过工程师审批返修。
 Base metal distortion, repair before engineer review.

预防措施: 母材返修需经过工程师审批返修。
 Review by engineer after base metal repair. Approved by/批准: Jiangang

Technical Justification for Use-As-Is/Repair: Attachment Non-attachment
 回用或返修的技术依据:

请参考焊接返修报告 WR5645, WR5495.

Reviewed /批准: Tang Yangbo Refer to Welding Repair Report WR5645, WR5495.

Verification: Acceptable Unacceptable
 确认: 可接受 不可接受 已按照工艺要求执行

Verified by QCI/质检确认: Zhu Zhonghai Reviewed by QCA/质检主任审核: _____

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: 04-Aug-2009

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

Job Name: SAS Superstructure

Document No: 05.03.06-000320

Dear: Mr. Charles Kanapicki

Attention: Mr. Thomas Nilsson Project/Fabrication Manager

Subject: NCR No. ZPMC-0341

Reference Description: Base Metal Distortion OBG Segment 7BW

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: 07

Remarks:

Caltrans Quality Assurance (QA) Inspector observed that a base metal distortion repair was performed on Deck plate 250 in way of deck panel splice weld No. SEG035*-005. Approximately 340mm x 120mm of FCAW filler material was deposited around the splice weld. This base metal distortion repair was performed without the approval of the Engineer.

See attached NCR No. ZPMC-0341 for details.

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 14 days.

Transmitted by: Ching Chao

Attachments: ZPMC-0341

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

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Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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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-000367

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 27-Jul-2009

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

NCR #: ZPMC-0341

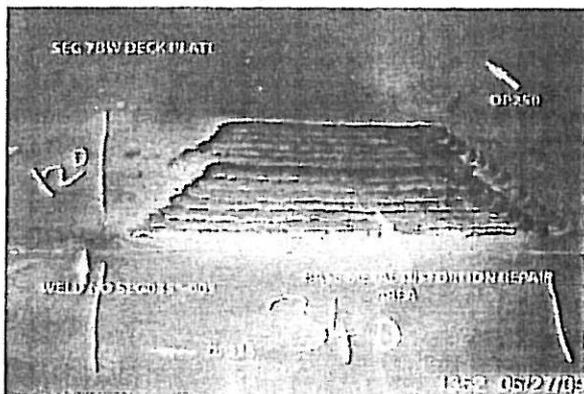
Type of problem:

Welding Concrete Other Welding Curing Procedural Bridge No: 34-0006Joint fit-up Coating Other Component: OBG Segment 7BWProcedural Procedural Description:

Reference Description: Base Metal Distortion OBG Segment 7BW

Description of Non-Conformance:

Caltrans Quality Assurance (QA) Inspector observed that a base metal distortion repair was performed on Deck plate 250 in way of deck panel splice weld No. SEG035*-005. Approximately 340mm x 120mm of FCAW filler material was deposited around the splice weld. This base metal distortion repair was performed without the approval of the Engineer.



Applicable reference:

Contract Special Provisions Section 8-3.01, 'Welding', subsection 'Welding Quality Control' (page 154): "The Engineer shall be notified immediately in writing when welding problems, deficiencies, base metal repairs, or any other type of repairs not submitted in the WQCP are discovered and also of the proposed repair procedures to correct them."

Standard Specifications (99) section 55-3.02 Straightening of Material- "If straightening is necessary, it shall be done by methods acceptable to the Engineer. Details for methods proposed for straightening shall be submitted in writing to the Engineer prior to their use."

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Who discovered the problem: Chandrakumar.S

Name of individual from Contractor notified: Peter Shaw

Time and method of notification: 1400 hours / Verbal

Name of Caltrans Engineer notified: Ching Chao

Time and method of notification: 1500 hours / Verbal

QC Inspector's Name: Li Ming Yang

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: Simonis,Jim

QA Inspector

Reviewed By: Wahbeh,Mazen

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: 04-Aug-2009
Contract No: 04-0120F4
04-SF-80-13.2 / 13.9
Job Name: SAS Superstructure
Document No: 05.03.06-000318

Dear: Mr. Charles Kanapicki
Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Subject: NCR No. ZPMC-0339

Reference Description: Heat Straightening 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:

Remarks:

Caltrans Quality Assurance (QA) Inspector observed that a base material distortion repair was performed on Deck plate 437A in way of deck panel splice weld No. SEG032*-003. Approximately 100mm x 450mm of filler material was deposited around the splice weld. This base material distortion repair was performed without the approval of the Engineer. See attached NCR NO. ZPMC-0339 for details.

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 14 days.

Transmitted by: Ching Chao

Attachments: ZPMC-0339

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, Jason Tom, Contract Files, Ching Chao, Bill
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: Chanxing Island, Shanghai, PRC

Report No: NCR-000365

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 20-Jun-2009

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

NCR #: ZPMC-0339

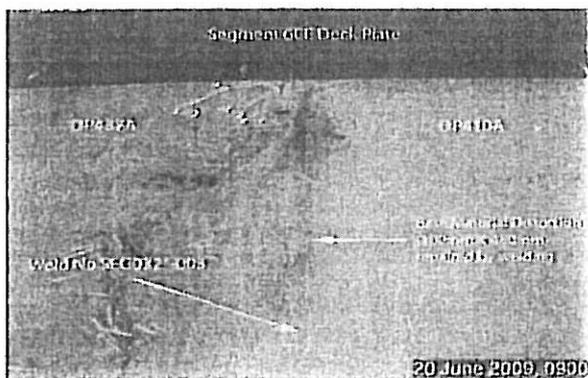
Type of problem:

Welding Concrete Other
 Welding Curing Procedural **Bridge No:** 34-0006
 Joint fit-up Coating Other **Component:** OBG Segment 6CE
 Procedural Procedural **Description:**

Reference Description: Heat Straightening without Engineer's approval

Description of Non-Conformance:

Caltrans Quality Assurance (QA) Inspector observed that a base material distortion repair was performed on Deck plate 437A in way of deck panel splice weld No. SEG032*-003. Approximately 100mm x 450mm of filler material was deposited around the splice weld. This base material distortion repair was performed without the approval of the Engineer.



Applicable reference:

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Standard Specifications (99) section 55-3.02 Straightening of Material- "If straightening is necessary, it shall be done by methods acceptable to the Engineer. Details for methods proposed for straightening shall be submitted in writing to the Engineer prior to their use.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Who discovered the problem: Rodney Patterson

Name of individual from Contractor notified: Kasi Wang

Time and method of notification: 1100 / Verbal

Name of Caltrans Engineer notified: Stanley Ku

Time and method of notification: 1200 / Verbal

QC Inspector's Name: Tao Lei

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: Simonis,Jim

QA Inspector

Reviewed By: Wahbeh,Mazen

SMR



Nonconformance Report

不符合项报告

Project Name: S.F.O.B.B 项目名称: 美国加州海湾大桥		NCR Number: NCR-B-233 NCR 编号: (ZPMC-0341 ZPMC-0339)	
Item: Base Metal Distortion 名称描述: 母材变形		Item Number: 件号: N/A	Drawing: 图号: SEG035 SEG032
Location: OBG 7BW, 6CE 位置:		Date: 日期: 2009-08-18	

Description of Nonconformance:

不符合项状态描述:

Caltrans Inspector observed that a base metal distortion repair was performed on DP250 in way of deck panel splice weld No. SEG035*-005. Approximately 340mm × 120mm of FCAW filler material was deposited around the splice around the splice weld. And another base metal distortion repair was performed on DP437A in way of deck panel splice weld No. SEG032*-003. Approximately 100mm × 450mm of FCAW filler material was deposited around the splice around the splice weld. These base metal distortion repair were performed without the approval of the Engineer.

加州检验员发现 DP250 邻近焊缝 SEG035*-005 位置正在进行母材变形的返修。返修区域大约在 340mm × 120mm 左右。同样的返修也在 DP437A, 邻近焊缝 SEG032*-003 进行, 返修区域大概 100mm × 450mm。使用 FCAW 焊接方式进行堆焊。该处母材变形的返修没有经过工程师审批。

参考标准: 标书章节 8-3.01: 如果出了 WQCP 中定义的其他类型的返修需要进行, 必须以书面的方式告知工程师。标书章节 55-3.02: 如果需要校正, 该技术需得到工程师批准。该技术的细节需事先书面提交工程师。

Work By: 施工方: <u>Shi Jirong</u>	Prepared by: 准备: <u>Shi Jirong 8/18/09</u>	Reviewed by QCE: 质量工程师批准: <u>Zhou Shuangbao 8-18</u>
<input type="checkbox"/> Drawing Error 图纸错误	<input type="checkbox"/> Material Defect 材料缺陷	<input checked="" type="checkbox"/> Fabrication Error 制作错误
<input type="checkbox"/> Other 其他原因		

Disposition: <input type="checkbox"/> Use as is 处理措施: 回用	<input type="checkbox"/> Repair 返修	<input type="checkbox"/> Reject 拒收
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Recommendation:

建议:

Prepared by: _____ 准备	Approved by QCA: _____ 质量经理批准
--------------------------	----------------------------------

Reason for Nonconformance:

不符合原因: 母材变形没经过工程师审批返修。
Base metal distortion, repair before engineer review.

预防措施: 母材返修需经过工程师审批返修。
Review by engineer after base metal repair. Approved by/批准: [Signature]

Technical Justification for Use-As-Is/Repair: <input type="checkbox"/> Attachment 回用或返修的技术依据:	<input type="checkbox"/> Non-attachment 无附件
附件	

Reviewed /批准: _____

Verification: <input type="checkbox"/> Acceptable 确认: 可接受	<input type="checkbox"/> Unacceptable 不可接受
--	---

Verified by QCI/质检确认: _____ Reviewed by QCA/质检主任审核: _____



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: 04-Aug-2009

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

Dear: Mr. Charles Kanapicki
Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Subject: NCR No. ZPMC-0339

Job Name: SAS Superstructure
Document No: 05.03.06-000318

Reference Description: Heat Straightening 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:

Remarks:

Caltrans Quality Assurance (QA) Inspector observed that a base material distortion repair was performed on Deck plate 437A in way of deck panel splice weld No. SEG032*-003. Approximately 100mm x 450mm of filler material was deposited around the splice weld. This base material distortion repair was performed without the approval of the Engineer. See attached NCR NO. ZPMC-0339 for details.

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 14 days.

Transmitted by: Ching Chao

Attachments: ZPMC-0339

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



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	SEG032	报告编号 Report No.	B-WR5645
合同号 Contract No.:	04-0120F4	部件名称 Items Name	6CE顶板 6CE Deck Plate	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:

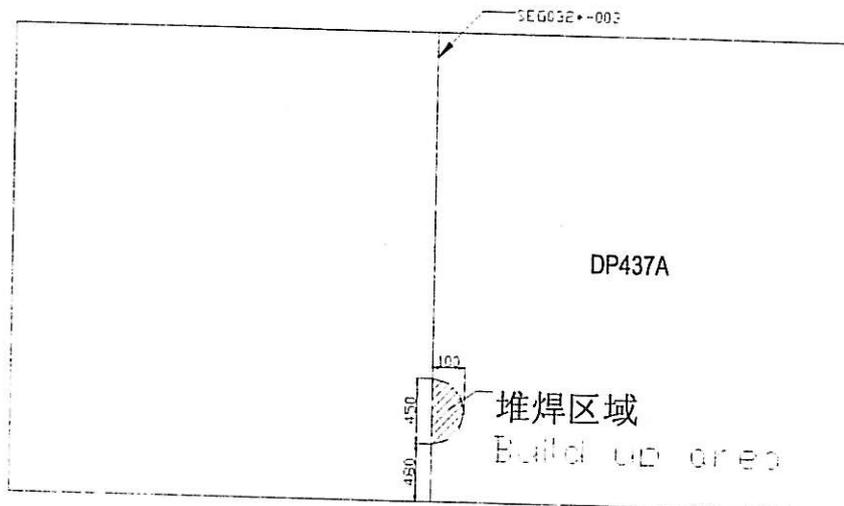
完工报验时发现, 顶板对接焊缝SEG032*-003有局部变形, 现场已经将低洼处做堆焊处理, 具体位置见下图!

After final inspection, deck plate butt weld (SEG032*-003) was part distortion, and it build up the low-lying area, the detail see the following draft.

检验员 (Inspector): Li Yanhua 日期(Date): 09.06.20

焊缝返修位置示意图:

Draft of welding discontinuity:



产生原因:

Caused:

1. 焊接变形。
1. Weld distortion.

车间负责人(Foreman): *Li Zhi Gang* 日期(Date): *2009.6.21*

处理意见

Disposition :

1. 准备一个正确的接头型式，具体参照相应的返修WPS;
 2. 将碳刨区域打磨光滑，开始和结束的接头交错布置;
 3. 对修补区域进行VT与MT检测;
 4. 根据批准的返修焊接工艺规程 (WPS) 进行预热及焊接;
 5. 将修补区域打磨与母材或相邻焊缝平齐;
 6. 对修补区域作100%VT与MT检测;
-
1. Prepare excavation according to the approved repair WPS.
 2. Grind the gouged area to a smooth and shiny finish, with tapered ends, to ensure staggered starts and stops.
 3. VT and MT the repair area.
 4. Preheat and weld according to the relevant repair WPS.
 5. Grind the repaired area flush with base metal or the adjacent weld.
 6. Perform VT and MT over 100% of the repair area.

工艺:
Technical engineer

Niu Tie Feng

审核:
Approved by

日期 *2009.6.21*
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.	SEG032	报告编号 Report No.	B-WR5645
合同号 Contract No.:	04-0120F4	部件名称 Items Name	6CE顶板 6CE Deck Plate	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:

加强焊接过程中的监控, 减少误差。

Enhance supervision in proves of welding to reduce error.

 车间负责人(Foreman): *Li Zhi Gang* 日期(Date): *2009. 6. 21*

参照的WPS编号 Repair WPS No.	WPS-345-SMAW-1 G(1F)-Repair WPS-345-FCAW-1 G(1F)-Repair-1	工艺员 technologist	<i>Niu Trefang</i> <i>09.06.21</i>
返修(碳刨)前预热温度 Preheat temperature before gouging	<i>70°C</i>	返修的缺陷 Description of discontinuity	<i>Butt weld was part distortion</i>
焊前处理检查 Inspection before welding	<i>Acc</i>	焊前预热温度 Preheat temperature before welding	<i>79°C</i>
最大碳刨深度 Max. depth of gouging	<i>NA</i>	碳刨总长 Total length of gouging	<i>NA</i>
焊工 welder	<i>044795</i>	焊接类型 welding type	<i>FCAW</i>
焊接电流 Current	<i>287</i>	焊接电压 Voltage	<i>30.0</i>
		焊接位置 position	<i>1G</i>
		焊接速度 Speed	<i>498</i>

返修后检查

Inspection After repairing:

外观检查 VT result	<i>Acc</i>	检验员 Inspector	<i>Zhu Zhonghai</i> <i>07072101</i>	日期 Date	<i>2009. 06. 30</i>
NDT复检 NDT result	<i>Acc</i>	探伤员 NDT person	<i>[Signature]</i>	日期 Date	<i>2009. 06. 30</i>

见证:

Witness/Review:

备注:

Remark:

#R787-QCP-900



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-9917 DATE 2009.06.30 PAGE 1 OF 1 Revision No: 0

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

ITEMS NAME: DECK PLATE SPLICE DRAWING NO.: SEG032* CALTRANS CONTRACT NO.: 04-0120F4
 部件名称 图号 加州工程编号

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

WELDING PROCESS 焊接方法: SAW FCAW JOINT TYPE 焊缝类型: BUTT CALIBRATION DUE DATE 仪器校正有效期: Dec. 28ST, 2009

EQUIPMENT 设备: UT SCOPE MANUFACTURER 制造商: PANAMETRICS MODEL NO. 样式编号: EPOCH-4B SERIAL NO. 序列编号: 071565311, 061488510, 061495811, 070152011,

CALIBRATION BLOCK 试块: AWS IIW BLOCK TYPE II COUPLANT 耦合剂: C.M.C MATERIAL/THICKNESS 材料厚度: A709M-345T2-X 16/20mm

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
Changchao	70°	2.5MHz	18×18mm				
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
SEG032*-003		70				32									ACC.	100%

AFTER B-WR5645

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EXAMINED BY 主探: <i>[Signature]</i> DATE: 09.06.30 LEVEL - II SIGN DATE	REVIEWED BY 审核: <i>[Signature]</i> DATE: 09.06.30 LEVEL - II SIGN DATE
--	--

质量经理 / QCM: _____ 签字 SIGN / 日期 DATE: _____	用户 CUSTOMER: _____ 签字 SIGN / 日期 DATE: _____
---	--



焊缝返修报告

版本 Rev. No.

Welding Repair Report

0

项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No	SEG035*	报告编号 Report No.	B-WR5495
合同号 Contract No.:	04-0120F4	部件名称 Items Name	顶板 Deck Plate	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:

经检查发现7BW顶板三拼后, DP250与DP115(002)焊接后有六处变形错位, 其中最大变形量为10mm, 涉及焊缝为SEG035*-005, 具体位置及长度如下图所示:

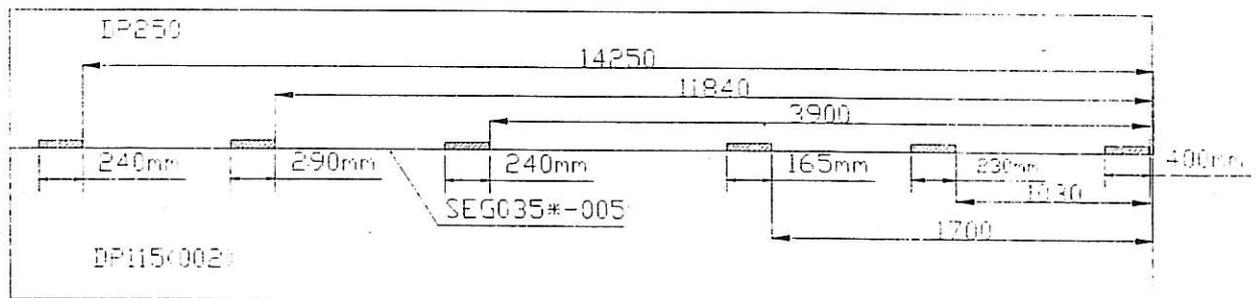
After inspection 7BW DP250 and DP115(002) deck plate splice, it was six position misalignment, maximum 10mm, weld No.: SEG035*-005, the detail see the following draft.

Li Jie

检验员 (Inspector): li Jie 日期(Date): 09.06.12

焊缝返修位置示意图:

Draft of welding discontinuity:



产生原因:

Caused:

焊接变形。

Welding distortion.

车间负责人(Foreman): *Lizhi Gang* 日期(Date): 2009.6.13

处理意见

Disposition :

1. 采用火焰切割的方法从顶板对接错边位置割开长度L, L根据现场错边情况而定;
 2. 根据批准的WPS准备焊接接头型式;
 3. 采用工艺卡码及千斤顶调整顶板错边量, 并进行定位;
 4. 焊接前对坡口进行VT与MT检测确认无缺陷存在;
 5. 根据批准的WPS进行预热及焊接顶板焊缝;
 6. 将返修处焊缝打磨与母材或周边焊缝平齐;
 7. 焊后根据图纸要求对焊缝作NDT检测;
-
1. Cut the weld between deck plates with a certain length L which begin with misalignment emerging by flame cutting, L is conformed by actual condition.
 2. Prepare the excavation according to the approved WPS.
 3. Adjust the misalignment of deck plates to meet the tolerance by assistant support and jack, and tack weld.
 4. Perform VT and MT inspection to the groove to ensure no defects exist prior to welding.
 5. Preheat and weld the butt joint between deck plates according to the approved WPS.
 6. Grind the welds flush to the adjacent welds or base metal.
 7. Perform NDT according to the shop drawings.

工艺: *Niu Tie Feng*
Technical engineer

审核:
Approved by

日期: 2009.6.13
Date



焊缝返修报告

Welding Repair Report

版本 Rev. No.

0

纠正措施:
Correction action to prevent re occurrence:
加强制作过程中的监控, 减少误差。
Enhance supervision in process of fabrication to reduce error.

 车间负责人(Foreman): *Li zhi Gang* 日期(Date): *2009.6.13*

返修后检查
Inspection After repairing:

外观检查 VT result <i>Acc</i>	检验员 Inspector <i>Zhu zhenhai</i> <i>07072101</i>	日期 Date <i>2009.11.19</i>
NDT复检 NDT result <i>Acc</i>	探伤员 NDT person <i>Jin Feng</i>	日期 Date <i>2009.11.19</i>

 见证:
Witness/Review:

 备注:
Remark:



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-9767 DATE 2009.11.19 PAGE 1 OF 1 Revision No: 0

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

ITEMS NAME: 7BW DECK PLATE SPLICE DRAWING NO.: SEG035* CALTRANS CONTRACT NO.: 04-0120F4
 部件名称 图号 加州工程编号

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

WELDING PROCESS 焊接方法 SAW JOINT TYPE 焊缝类型 BUTT CALIBRATION DUE DATE 仪器校正有效期 Dec. 28ST, 2009

EQUIPMENT 设备 MANUFACTURER 制造商 PANAMETRICS MODEL NO. 样式编号 EPOCH-4B SERIAL NO. 序列编号 071565311, 061488510, 061495811, 070152011, 14mm

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

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
Changchao	70°	2.5MHz	18×18mm				
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			
SEG035*-001		70				33									ACC.	100%
SEG035*-002		70				33									ACC.	100%
SEG035*-003		70				33									ACC.	100%
SEG035*-004		70				33									ACC.	100%
SEG035*-005		70				33									ACC.	100%
SEG035*-006		70				33									ACC.	100%

AFTER HSR1(B)5989.5988.5900

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EXAMINED BY 主探 <i>J.H. Jay</i> 09.11.19 LEVEL - II SIGN / DATE 质量经理 / QCM <i>Lu Jinhua</i>	REVIEWED BY 审核 <i>Huan</i> 09.11.19 LEVEL - II SIGN / DATE 用户 CUSTOMER
签字 SIGN / 日期 DATE 09.11.24	签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-16370 DATE日期 2009.11.19 PAGE OF页码 1/1 Revision No: 0

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

DRAWING NO. DP250 CALTRANS CONTRACT NO.: 04-0120F4
 图号: OBG DECK PLATE 加州工程编号

REFERENCING CODE ACCEPTANCE STANDARD PROCEDURE NO. CALIBRATION DUE DATE
 参考规范编码 接受标准 程序编号 仪器校正有效期
 AWS D1.5-2002 AWS D1.5-2002 ZPQC-MT-01 Dec. 28ST, 2009

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 Continuous magnetic yoke CURRENT AC
 磁化方法 磁轭式连续法 电流

PARTICLE TYPE Dry magnet powder YOKE SPACING 70~150mm
 磁粉类型 干磁粉 磁轭间距

MATERIAL TO BE √ WELDING 焊接件 Material & thickness A709M-345T2-X
 EXAMINED □ CASTING 铸件 母材,厚度 1600mm
 检测材料 □ FORGING 锻造

WELDING PROCESS NA TYPE OF JOINT NA
 焊接方法 焊缝类型

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			
PL197A				ACC.		base metal per B-WR5495

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EXAMINED BY主探 Li Liming <i>Li Liming</i> LEVEL - II SIGN 签名 / DATE日期 <i>09.11.19</i> 质量经理 / QCM	REVIEWED BY 审核 <i>Chixun</i> LEVEL-II SIGN / DATE日期 <i>09.11.19</i> 用户CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE

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:** Chanxing Island, Shanghai, PRC**Report No:** NCS-000433**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 13-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0339**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: 20-Jun-2009**Description of Non-Conformance:**

Caltrans Quality Assurance (QA) Inspector observed that a base material distortion repair was performed on Deck plate 437A in way of deck panel splice weld No. SEG032*-003. Approximately 100mm x 450mm of filler material was deposited around the splice weld. This base material distortion repair was performed without the approval of the Engineer.

Contractor's proposal to correct the problem:

Provide WRR and NDT documentation.

Corrective action taken:

Contractor submitted WRR along with NDT reports verifying the additional weld metal is in conformance with Contract specifications.

Did corrective action require Engineer's approval? Yes No**If so, name of Engineer providing approval:** **Date:****Is Engineer's approval attached?** Yes No**Comments:**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Jim Simonis, who represents the Office of Structural Materials for your project.

Inspected By: Simonis, Jim **Quality Assurance Inspector****Reviewed By:** Wahbeh, Mazen **QA Reviewer**