

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCR-000281**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 22-May-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0255**Type of problem:**

<b>Welding</b>	<b>Concrete</b>	<b>Other</b>	
<b>Welding</b>	<b>Curing</b>	<b>Procedural</b>	<b>Bridge No:</b> 34-0006
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	<b>Component:</b> OBG Segment 8BE
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	

**Reference Description:** Unidentifiable Filler Metal, Deck Panel Splice, Segment 8BE**Description of Non-Conformance:**

Caltrans Quality Assurance (QA) Inspector observed a spool of flux cored arc welding (FCAW) filler metal that was unidentifiable due to the labels being removed. The filler metal was being used for tack welding of a complete joint penetration (CJP) weld using FCAW Process in the 1G position on deck panel splice weld joint SEG046-008 (DP471 to DP336 on Segment 8BE). The welder was identified as Song Wei Rong #056205. When QA Inspector inquired about the unidentifiable filler metal, the welder removed the spool and walked away with it. QA Inspector observed approximately 50% of the filler metal had already been used.

**Applicable reference:**

AWS D1.5, 2002, Section 6, Paragraph 6.5.3: "The Inspector shall make certain that electrodes are used only in the positions and with the type of welding current and polarity for which they are classified."

**Who discovered the problem:** Dan Hernandez**Name of individual from Contractor notified:** Zheng Chang Song**Time and method of notification:** 5-22-09, 10:00, Verbal

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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**Name of Caltrans Engineer notified:** Stanley Ku

**Time and method of notification:** 5-22-09, 18:00, Email

**QC Inspector's Name:** Wang Wei Ming

**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 Skyler Guest, +(86) 1500.042.2360, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Guest, Skyler	SMR
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<b>Reviewed By:</b>	Wahbeh, Mazen	SMR
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**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:** 28-May-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:** 05.03.06-000247

**Subject:** NCR No. ZPMC-0255

**Reference Description:** Unidentifiable Filler Metal, Deck Panel Splice, Segment 8BE

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 a spool of flux cored arc welding (FCAW) filler metal that was unidentifiable due to the labels being removed. The filler metal was being used for tack welding of a complete joint penetration (CJP) weld using FCAW Process in the 1G position on deck panel splice weld joint SEG046-008 (DP471 to DP336 on Segment 8BE). The welder was identified as Song Wei Rong #056205. When QA Inspector inquired about the unidentifiable filler metal, the welder removed the spool and walked away with it. QA Inspector observed approximately 50% of the filler metal had already been used.

### Action Required and/or Action Taken:

Unidentifiable materials or materials not accepted to be used shall not be incorporated into production work. A response for the resolution of this issue is expected within 14 days.

**Transmitted by:** Stanley Ku Sr. Bridge Engineer

**Attachments:** ZPMC-0255

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Brian Boal, Doug Coe, Jason Tom, Ching Chao

**File:** 05.03.06

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000247

**Subject:** NCR No. ZPMC-0255

**Dated:** 22-Jun-2009

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000249 Rev: 00

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### Contractor's Proposed Resolution:

**Reference Resolution:** ABF has notified ZPMC QA to provide an evaluation as to where this weld filler was used and to follow up on checking and recording the correct filler metal type prior and during welding operations.

ABF has notified ZPMC QA to provide an evaluation as to where this weld filler was used and to further follow up with the CWI and welder who were performing this work on checking and recording the correct filler metal type prior and during welding operations. ZPMC is to provide an evaluation and inspection reports at a later date to close this NCR.

### Submitted by:

**Attachment(s):** ABF-NPR-000249R00

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### Caltrans' comments:

**Status:** REJ

**Date:** 25-Jun-2009

The proposed resolution is not acceptable. Unidentifiable materials shall not be incorporated into the production work.

Please provide documentation identifying the filler metal as being qualified for welding on the weld joint in question, or documentation that the unidentifiable filler metal has been removed. The Department will review the Contractor's proposal to close Non-Conformance ZPMC-0255 at that time.

**Submitted by:** Wright, Doug

**Date:** 25-Jun-2009

**Attachment(s):**

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000247

**Subject:** NCR No. ZPMC-0255

**Dated:** 14-Oct-2009

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000249 Rev: 01

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### Contractor's Proposed Resolution:

**Reference Resolution:** ZPMC has completely removed the weld, inspected it and found it acceptable. ZPMC requests closure of this NCR.

ZPMC acknowledges that the filler metal should be identified on the spool and has trained the welder to ensure that he understand the importance of using identified filler metals. ZPMC has completely removed the weld, inspected it and found it acceptable. ZPMC requests closure of this NCR.

### Submitted by:

**Attachment(s):** ABF-NPR-000249R01

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### Caltrans' comments:

**Status:** REJ

**Date:** 29-Oct-2009

Please submit specific weld repair and post-repair NDT records for the Engineer's review.

**Submitted by:** Chao, Ching

**Date:** 29-Oct-2009

**Attachment(s):**

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000247

**Subject:** NCR No. ZPMC-0255

**Dated:** 09-Nov-2009

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000249 Rev: 02

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**Contractor's Proposed Resolution:**

**Reference Resolution:** In the NPR response, documents related to the repair of the weld were requested but no repair was conducted. Repair documentation of the weld is not relevant to the original cause of the NCR.

ZPMC's resolution to completely remove the weld with the unidentified filler metal addresses the non conformance. In the NPR response, documents related to the repair of the weld were requested but no repair was conducted. Repair documentation of the weld is not relevant to the original cause of the NCR. ZPMC requests closure of this NCR.

**Submitted by:**

**Attachment(s):** ABF-NPR-000249R02

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**Caltrans' comments:**

**Status:** REJ

**Date:** 01-Dec-2009

In order to verify the removal of the affected weld, a CWR and the follow-up NDT are required to close the NCR.

**Submitted by:** Chao, Ching

**Date:** 01-Dec-2009

**Attachment(s):**

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000247

**Subject:** NCR No. ZPMC-0255

**Dated:** 08-Dec-2009

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000249 Rev: 03

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### Contractor's Proposed Resolution:

**Reference Resolution:** ZPMC has completely removed the weld, inspected it and found it acceptable. Based on the attached information, ZPMC requests closure of this NCR.

ZPMC acknowledges that the filler metal should be identified on the spool and has trained the welder to ensure that he understand the importance of using identified filler metals. ZPMC has completely removed the weld, inspected it and found it acceptable. Based on the attached information, ZPMC requests closure of this NCR.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000249R03;

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### Caltrans' comments:

**Status:** CLO

**Date:** 13-Dec-2009

The documentation submitted has been reviewed by the Engineer and is found to be acceptable.

**Submitted by:** Chao, Ching

**Attachment(s):**

**Date:** 13-Dec-2009



No. B-479

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2009-10-14**

**REGARDING: NCR-000281 (ZPMC-0255)**

With this letter of response, ZPMC requests closure for Caltrans NCR-000281 (ZPMC-0255). We agree what describe in the non-conformance report, and have trained the welder that should verify the labels before using to our project, by the way the welder must sign the date and detail time when filler took from the storage. Since we all can't confirm the qualification of the filler metal, we decided to complete removed the weld by gouging and perform the new weld on this location, before the correction we first notify the engineer and prepared one WRR to support the occurrence.

We provide the acceptable VT and UT report and the weld repair report for evidence, to prove the weld has been re-weld per the required procedure and it's also accepted by the NDT inspection.

so base on, the above explanation, ZPMC applies to close the caltrans's report NCR-000281 (ZPMC-0255)

Please reference attached document for acceptance and closure the NCR-000281 (ZPMC-0255).

**ATTACHMENT:**

**NCR-000281 (ZPMC-0255)**

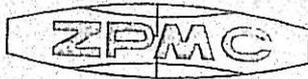
**ZPMC internal NCR**

**The weld repair report**

**The acceptable VT/UT reports**

*Zhu Shuangbao*

*2009. 10. 14*



# 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-158 (NCR-00281)  
 NCR 编号:

Item: Unidentifiable Filler Metal  
 名称描述: 不可靠焊材  
 Item Number: NA  
 件号:  
 Drawing: N/A  
 图号:

Location: Bay 13  
 位置: 13 车间  
 Date: 2009-06-02  
 日期:

Description of Nonconformance:  
 不符合项状态描述:  
 Caltrans Inspector observed a spool of flux cored arc welding (FCAW) filler metal that was unidentifiable due to the labels being removed. The filler metal was being used for tack welding of a complete joint penetration (CJP) weld using FCAW Process in the 1G position on deck panel splice weld joint SEG046-008 (DP471 to DP336 on SEGMENT 8BE). The welder was identified as Song Wei Rong #056205. When QA Inspector inquired the unidentifiable filler metal, the welder removed the spool and walked away with it. QA Inspector observed approximately 50% of the filler metal had already been used.  
 加州检验员发现一卷 FCAW 焊丝无标签。顶板拼缝 SEG046-008 (DP471 与 DP336 8BE 节段) 正在使用此焊丝进行点焊。焊工编号#056205, Song Wei Rong。当加州检验员询问此焊丝问题, 该焊工卸下此焊丝并离开。此时, 此焊丝已经使用大约 50%左右。  
 AWS D1.5 2002 版 章节 6.5.3 “检验员必须确认焊条仅用于焊条等级规定中所确定的位置以及焊接电流类型和极性。”

Work By: 施建刚  
 施工方:  
 Prepared by: Li Zhi Gang  
 准备: 06.02.09  
 Reviewed by QCE: Zhuo Shuanghao  
 质量工程师批准:  
 Drawing Error 图纸错误  
 Material Defect 材料缺陷  
 Fabrication Error 制作错误  
 Other 其他原因 6-2

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

Recommendation:  
 建议: 焊工在拆包过程中应同时发现焊丝盘上的标签脱落, 现场检验员加强控制。 Enhance supervision on site, Improve welder's responsibility.  
 Prepared by: Li Zhi Gang  
 准备  
 Approved by QCA: \_\_\_\_\_  
 质量经理批准

Reason for Nonconformance:  
 不符合原因: 焊丝无标签 (在拆包过程中掉落) Flux cored without label (lost during transition).  
 此焊丝在拆包后第一步必须检查标签是否脱落, 把领用日期同时  
 预防措施: 焊丝拆包时, 第一步必须检查标签是否脱落, 把领用日期同时  
 label, and mark time at flux cored. Approved by/批准: Li Zhi Gang

Technical Justification for Use-As-Is/Repair:  Attachment 附件  
 Non-attachment 无附件  
 回用或返修的技术依据: 将焊丝盘去除, 重新焊接。 Remove weld and re-welding.  
 Reviewed /批准: \_\_\_\_\_

Verification:  Acceptable 可接受  
 Unacceptable 不可接受  
 确认:

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:

*R. K. ...*

### NON-CONFORMANCE REPORT TRANSMITTAL

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

Date: 28-May-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-0255

Job Name: SAS Superstructure  
Document No: 05.03.06-000247

Reference Description: Unidentifiable Filler Metal, Deck Panel Splice, Segment 8BE

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 a spool of flux cored arc welding (FCAW) filler metal that was unidentifiable due to the labels being removed. The filler metal was being used for tack welding of a complete joint penetration (CJP) weld using FCAW Process in the 1G position on deck panel splice weld joint SEG046-008 (DP471 to DP336 on Segment 8BE). The welder was identified as Song Wei Rong #056205. When QA Inspector inquired about the unidentifiable filler metal, the welder removed the spool and walked away with it. QA Inspector observed approximately 50% of the filler metal had already been used.

**Action Required and/or Action Taken:**

Unidentifiable materials or materials not accepted to be used shall not be incorporated into production work. A response for the resolution of this issue is expected within 14 days.

Transmitted by: Stanley Ku Sr. Bridge Engineer

Attachments: ZPMC-0255

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Brian Boal, Doug Coe, Jason Tom, 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-000281

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 22-May-2009

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

NCR #: ZPMC-0255

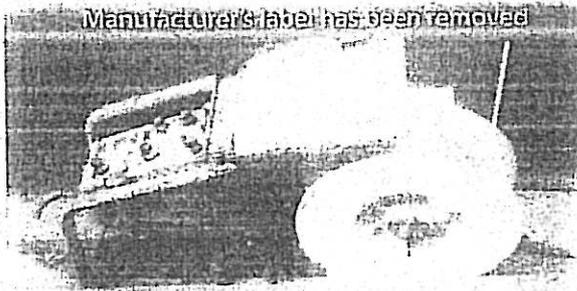
**Type of problem:**

Welding  Concrete  Other   
 Welding  Curing  Procedural  Bridge No: 34-0006  
 Joint fit-up  Coating  Other  Component: OBG Segment 8BE  
 Procedural  Procedural  Description:

Reference Description: Unidentifiable Filler Metal, Deck Panel Splice, Segment 8BE

**Description of Non-Conformance:**

Caltrans Quality Assurance (QA) Inspector observed a spool of flux cored arc welding (FCAW) filler metal that was unidentifiable due to the labels being removed. The filler metal was being used for tack welding of a complete joint penetration (CJP) weld using FCAW Process in the 1G position on deck panel splice weld joint SEG046-008 (DP471 to DP336 on Segment 8BE). The welder was identified as Song Wei Rong #056205. When QA Inspector inquired about the unidentifiable filler metal, the welder removed the spool and walked away with it. QA Inspector observed approximately 50% of the filler metal had already been used.



056205 22-3009  
 04-0120F4

**Applicable reference:**

AWS D1.5, 2002, Section 6, Paragraph 6.5.3: "The Inspector shall make certain that electrodes are used only in the positions and with the type of welding current and polarity for which they are classified."

Who discovered the problem: Dan Hernandez

Name of individual from Contractor notified: Zheng Chang Song

Time and method of notification: 5-22-09, 10:00, Verbal

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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Name of Caltrans Engineer notified: Stanley Ku

Time and method of notification: 5-22-09, 18:00, Email

QC Inspector's Name: Wang Wei Ming

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 Skyler Guest, +(86) 1500.042.2360, who represents the Office of Structural Materials for your project.

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Inspected By: Guest, Skyler

SMR

Reviewed By: Wabbeh, Mazen

SMR

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# 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	SEG046	报告编号 Report No.	B-WR5268
合同号 Contract No.:	04-0120F4	部件名称 Items Name	8AE箱体 8AE Box	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:

8AE箱体顶板拼接焊缝焊接时使用无日期无时间的焊丝盘焊接，在A/BF检查时被认为过期焊丝，现根据工艺要求需要将次焊缝碳刨重新焊接，顶板编号为：DP471和DP336，焊缝编号为：SEG046\*-008，焊工编号：056205

Weld wire was no production date during splicing 8AE box deck plate, ABF thought it was overate, and it shall gouge weld and re-weld according to technology requirement, deck plate NO.: DP471 and DP336, weld No.: SEG046\*-008, welder ID: 056205.

检验员 (Inspector): Wang Xiangpin 日期(Date): 09.06.18

### 焊缝返修位置示意图:

#### Draft of welding discontinuity:

产生原因:

Caused:

焊丝没有生产日期, 焊工在烧焊时, 没有仔细的检查。

Weld wire wasn't production date welder didn't review carefully.

车间负责人(Foreman): *Li Zhigang* 日期(Date): 09.06.18

处理意见

Disposition:

1. 采用碳刨和火焰切割的方法将焊缝去除;
2. 对刨除焊缝区域进行VT与MT检测确认无缺陷存在;
3. 根据图纸要求重新开设坡口。

1. Remove the weld by the way of gouging or Oxygen cutting;
2. Perform VT and MT to the gouged area to ensure no defects exist;
3. Prepare correct butt joint according to the working drawing.

工艺:  
Technical engineer *Niu Tiefeng*

审核:  
Approved by

日期  
Date *09.06.18*



# 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.	SEG046	报告编号 Report No.	B-WR5268
合同号 Contract No.:	04-0120F4	部件名称 Items Name	8AE箱体 8AE Box	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:

焊接前经质检确认后可以焊接

It shall check by QC before welding.

车间负责人(Foreman): Li Zhigang / 日期(Date): 2009.06.18

参照的WPS编号 Repair WPS No.	<u>WPS-13-T-2221-2-120-5-2 (SFAW)</u>	工艺员 technologist	<u>Mu Tiefeng</u> 09.06.18
返修(碳刨)前预热温度 Preheat temperature before gouging	100°C	返修的缺陷 Description of discontinuity	AA
焊前处理检查 Inspection before welding	ALL	焊前预热温度 Preheat temperature before welding	100°C
最大碳刨深度 Max. depth of gouging	NA	碳刨总长 Total length of gouging	NA
焊工 welder	<u>048038</u> <u>058100</u>	焊接类型 welding type	<u>FCAW/SFAW</u>
焊接电流 Current	<u>30A/580A</u>	焊接电压 Voltage	<u>30V/33.5V</u>
		焊接位置 position	<u>CG</u>
		焊接速度 Speed	<u>30mm/min/500mm/min</u>

返修后检查  
Inspection After repairing:

外观检查 VT result	<u>ALL</u>	检验员 Inspector	<u>Zhang Bao Cai</u>	日期 Date	<u>09.06.22</u>
NDT复检 NDT result	<u>ALL</u>	探伤员 NDT person	<u>Huang Hong</u>	日期 Date	<u>09.06.22</u>

见证:  
Witness/Review:备注:  
Remark:



周数  
日期  
R#  
2009.6.10

Visual Weld Inspection Report  
焊缝目视检查报告

Caltrans Contract No. 加州合同编号 04-0120F4  
Girder/梁: OBG Plate Panel Splice  
Tower/塔:

Project No.: 项目名称 San Francisco Oakland Bay Bridge 美国海  
湾大桥  
Quality Control Representative: 质检代表  
CWI: 检验员: *M. Longhin*

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	Overlap 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	Accept or Reject after repair 返修后接受 或拒收
SEFG015*-008	058100	IG	H14 (01.8)	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA

After root weld  
 After cover pass  
 After CWR or WRR No.: *R-WR5268*  
 After HSR No.:  
 Others

#R787-QCP-603  
"✓" is no defects. "X" is defects. "NA" is not applicable.

# UT探伤报告

ITEMS NAME: CBG8BE PLATE 部件名称: PANEL SPLICE		SE: 1048		工程名称: 工程名称												
REFERENCING CODE 参考规范 AWS D1.5-2002		AWS D1.5-2002 (Table 6.3)		AWS D1.5-2002												
WELDING PROCESS 焊接方法 SAW FCAW		JOINT TYPE 焊缝类型 BUTT		CALIBRATION DATE 仪器校正有效期 Dec. 28 <sup>ST</sup> , 2009												
EQUIPMENT 设备 UT SCOPE		MANUFACTURER 制造商 PANAMETRICS		MODEL NO. 样式编号 EPOCH-4B												
CALIBRATION BLOCK 试块 AWS IIW BLOCK TYPE II		COUPLANT 耦合剂 C.M.C		SERIAL NO. 序列编号 071565311, 061488510, 061495811, 070152011,												
		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											
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			
SEG046*-008		70				32									ACC.	100%
AFTER B-WR5268																
BLANK																
EXAMINED BY 主探 Han feng <i>Han feng</i>								REVIEWED BY 审核 <i>Zhang</i>								
LEVEL - II SIGN / DATE <i>9.6.22</i>								LEVEL - II SIGN / DATE <i>9.6.22</i>								
质量经理 / QCM								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:** Changxing Island, Shanghai, P.R. China**Report No:** NCS-000416**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 25-Dec-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0255**Type of problem:**

<b>Welding</b>	<b>Concrete</b>	<b>Other</b>	
<b>Welding</b>	<b>Curing</b>	<b>Procedural</b>	<b>Bridge No:</b> 34-0006
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	<b>Component:</b>
<b>Procedural</b>	<b>Procedural</b>	<b>Descriptor:</b>	

**Date the Non-Conformance Report was written:** 22-May-2009**Description of Non-Conformance:**

Caltrans Quality Assurance (QA) Inspector observed a spool of flux cored arc welding (FCAW) filler metal that was unidentifiable due to the labels being removed. The filler metal was being used for tack welding of a complete joint penetration (CJP) weld using FCAW Process in the 1G position on deck panel splice weld joint SEG046-008 (DP471 to DP336 on Segment 8BE). The welder was identified as Song Wei Rong #056205. When QA Inspector inquired about the unidentifiable filler metal, the welder removed the spool and walked away with it. QA Inspector observed approximately 50% of the filler metal had already been used.

**Contractor's proposal to correct the problem:**

Perform repair by removing the weld and re-weld. Confirm the repair with NDT.

**Corrective action taken:**

ZPMC has completely removed the weld, inspected it and found it acceptable.

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

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

**Inspected By:** Tsang, Eric

Quality Assurance Inspector

**Reviewed By:** Wahbeh, Mazen

QA Reviewer