

**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, PRC

**Report No:** NCR-000494

**Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Date:** 05-Dec-2009

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

**NCR #:** ZPMC-0467

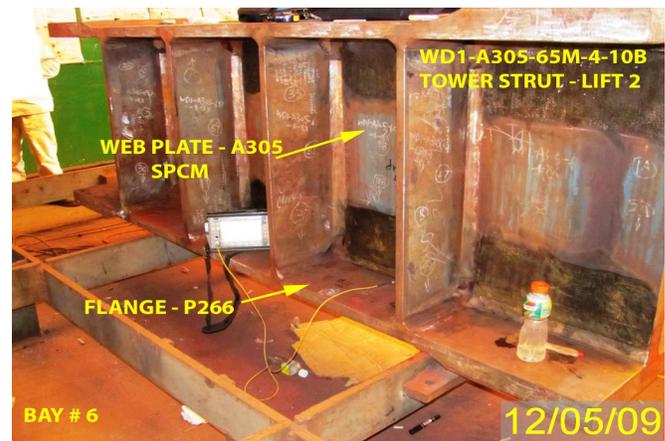
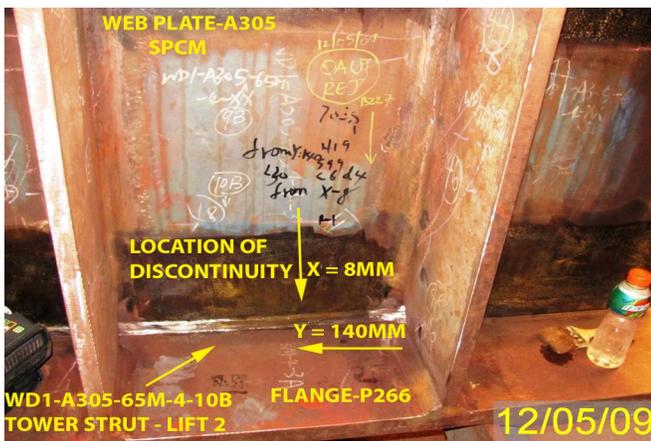
### Type of problem:

<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> Tower Strut
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b> Tower Strut WD1-A305-65M	

**Reference Description:** Missed UT indication on Tower Strut WD1-A305-65M

### Description of Non-Conformance:

During Ultrasonic Testing (UT) of Strut Web to Flange CJP weld joint WD1-A305-65M-4-10B, QA discovered one (1) Class "A" longitudinal indication, with an indication rating of +6, measuring approximately 30 mm in length. The plate thickness at the location of the indication is 28 mm. This weld was previously tested and accepted by ZPMC QC UT technicians.



### Applicable reference:

AWS D1.5-2002, Section 6, Table 6.3 specifies for material thicknesses of 20mm through 38mm, a decibel (db) indication rating of 8 db or less shall be categorized as Class A (large flaws) and any indication in this category shall be rejected (regardless of length).

**Who discovered the problem:** Naddi Sandeep Kumar

**Name of individual from Contractor notified:** Zhang Hui Long

**Time and method of notification:** 12/5/2009, 14:00; Verbal

**Name of Caltrans Engineer notified:** Scott Kennedy

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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**Time and method of notification:** 12/7/2009, 15:00; Verbal

**QC Inspector's Name:** Sun Zi Wang

**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 Serge Sinevod, 134-8257-0045, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Sinevod,Serge	ASMR
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<b>Reviewed By:</b>	Wahbeh,Mazen	SMR
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DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge  
333 Burma Road  
Oakland CA 94607  
Tel: 510-808-4618 Fax:

## NON-CONFORMANCE REPORT TRANSMITTAL

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

**Date:** 08-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:** 05.03.06-000457

**Subject:** NCR No. ZPMC-0467

**Reference Description:** Missed Indication (UT)/ Tower /Strut WD1-A305-65M-4-10B

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:** Tower **Lift:** 02

### Remarks:

During Ultrasonic Testing (UT) of Strut Web to Flange CJP weld joint WD1-A305-65M-4-10B, QA discovered one (1) Class "A" longitudinal indication, with an indication rating of +6, measuring approximately 30 mm in length. The plate thickness at the location of the indication is 28 mm. This weld was previously tested and accepted by ZPMC QC UT technicians. AWS D1.5-2002, Section 6, Table 6.3 specifies for material thicknesses of 20mm through 38mm, a decibel (db) indication rating of 8 db or less shall be categorized as Class A (large flaws) and any indication in this category shall be rejected (regardless of length).

### Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance that addresses the failure of Quality Control to identify the linear indications(UT). Provide documentation of the steps taken by the Quality Control Manager to prevent future occurrences.

In addition to the Quality Control failure, propose a resolution for the identified material/workmanship non-conformance documenting that the repaired weld is in compliance with the contract requirements.

**Transmitted by:** Ken Lee Transportation Engineer

**Attachments:** ZPMC-0467

**cc:** Rick Morrow, Gary Pursell, Mark Woods, Scott Kennedy

**File:** 05.03.06

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000457

**Subject:** NCR No. ZPMC-0467

**Dated:** 22-Dec-2009

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000450 **Rev:** 00

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### Contractor's Proposed Resolution:

**Reference Resolution:** The indications has been repaired and inspected. ZPMC is attaching both the CWR and NDT to show that the welds is acceptable.

ZPMC acknowledges that the indication in the NCR was missed by the Quality Control inspector. The indications has been repaired and inspected. ZPMC is attaching both the CWR and NDT to show that the welds is acceptable. To reduce the occurrence of missed MT indications, the ABFJV QCM is conducting training with ZPMC on 12/22/09 to ensure that earlier training topics are reinforced. Based on this ZPMC requests closure of this NCR.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000450R00;

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### Caltrans' comments:

**Status:** CLO

**Date:** 22-Dec-2009

The proposed resolution is acceptable. The Department concurs that NCR ZPMC-0467 is closed.

**Submitted by:** Lee, Ken

**Date:** 22-Dec-2009

**Attachment(s):**



No. T-109

## LETTER OF RESPONSE

**TO: American Bridge/Flour JV**

**DATE: 2009-12-22**

**REGARDING: NCR-000494(ZPMC-0467)**

ZPMC received NCR-000494(ZPMC-0467), it mentioned that QA discovered one Class "A" longitudinal incication, with an indication rating of +6, measuring approximately 30mm in length during UT of Strut Web to Flange CJP weld joint WD1-A305-65M-4-10B.

ZPMC acknowledge this problem and arranged people to repair this point. Now this member has been checked again by ZPMC's NDT and the result show it's acceptable. This member has been green tagged as well. Here attach the UT report, Critical Weld Repair Report and QA Approval Request Form to show acceptable condition.

And ZPMC hope Caltrans could take a review and withdraw this NCR.

**ATTACHMENT:**

**T-CWR502**

**T787-UT-2505R2**

**QA APPROVAL REQUEST FORM**

*Zhao jia neng*  
*2009-12-22*



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge  
333 Burma Road  
Oakland CA 94607  
Tel: 510-808-4618 Fax:

## NON-CONFORMANCE REPORT TRANSMITTAL

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

Date: 08-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: 05.03.06-000457

Subject: NCR No. ZPMC-0467

Reference Description: Missed Indication (UT) / Tower / Strut WD1-A305-65M-4-10B

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- Non-Conformance Resolved.

Material Location: Tower

Lift: 02

### Remarks:

During Ultrasonic Testing (UT) of Strut Web to Flange CJP weld joint WD1-A305-65M-4-10B, QA discovered one (1) Class "A" longitudinal indication, with an indication rating of +6, measuring approximately 30 mm in length. The plate thickness at the location of the indication is 28 mm. This weld was previously tested and accepted by ZPMC QC UT technicians. AWS D1.5-2002, Section 6, Table 6.3 specifies for material thicknesses of 20mm through 38mm, a decibel (db) indication rating of 8 db or less shall be categorized as Class A (large flaws) and any indication in this category shall be rejected (regardless of length).

### Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance that addresses the failure of Quality Control to identify the linear indications(UT). Provide documentation of the steps taken by the Quality Control Manager to prevent future occurrences.

In addition to the Quality Control failure, propose a resolution for the identified material/workmanship non-conformance documenting that the repaired weld is in compliance with the contract requirements.

Transmitted by: Ken Lee Transportation Engineer

Attachments: ZPMC-0467

cc: Rick Morrow, Gary Pursell, Mark Woods, Scott Kennedy

File: 05.03.06

02.02:15.04  
NCT-000457,NCT

Received  
NCT-000457 08 Dec 09 Page 1 of 1

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



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Contract #: 04-0120F4  
 Cty: SF/ALA Rte: 80 PM: 13.2/13.9  
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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

**Location:** Changxing Island, Shanghai, PRC

**Report No:** NCR-000494

**Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Date:** 05-Dec-2009

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

**NCR #:** ZPMC-0467

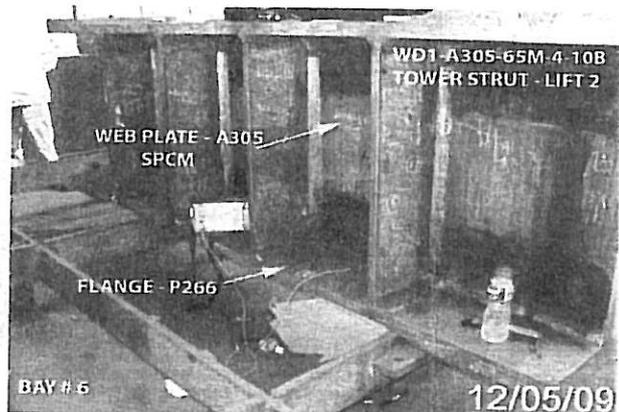
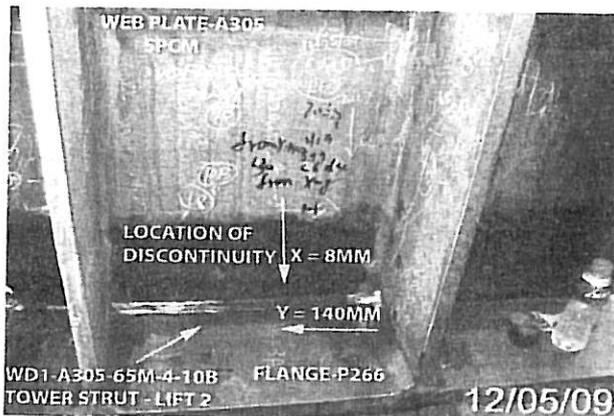
### Type of problem:

Welding  Concrete  Other   
 Welding  Curing  Procedural  **Bridge No:** 34-0006  
 Joint fit-up  Coating  Other  **Component:** Tower Strut  
 Procedural  Procedural  **Description:** Tower Strut WD1-A305-65M

**Reference Description:** Missed UT indication on Tower Strut WD1-A305-65M

### Description of Non-Conformance:

During Ultrasonic Testing (UT) of Strut Web to Flange CJP weld joint WD1-A305-65M-4-10B, QA discovered one (1) Class "A" longitudinal indication, with an indication rating of +6, measuring approximately 30 mm in length. The plate thickness at the location of the indication is 28 mm. This weld was previously tested and accepted by ZPMC QC UT technicians.



### Applicable reference:

AWS D1.5-2002, Section 6, Table 6.3 specifies for material thicknesses of 20mm through 38mm, a decibel (db) indication rating of 8 db or less shall be categorized as Class A (large flaws) and any indication in this category shall be rejected (regardless of length).

**Who discovered the problem:** Naddi Sandeep Kumar

**Name of individual from Contractor notified:** Zhang Hui Long

**Time and method of notification:** 12/5/2009, 14:00; Verbal

**Name of Caltrans Engineer notified:** Scott Kennedy

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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( Continued Page 2 of 2 )

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**Time and method of notification:** 12/7/2009, 15:00; Verbal

**QC Inspector's Name:** Sun Zi Wang

**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 Serge Sinevod, 134-8257-0045, who represents the Office of Structural Materials for your project.

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**Inspected By:** Sinevod,Serge

ASMR

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**Reviewed By:** Wahbeh,Mazen

SMR

QA APPROVAL REQUEST FORM

Component strut plate WD1-A305-65m-4 Date 12-20-2009

In-Process tag No. \_\_\_\_\_  
\* Attach In-Process tag

Green tag No. 09267 Location \_\_\_\_\_

Weld numbers see attachments

Zhao Chen Sun 2009.12.20  
ZPMC Team Representative Date

Bi Dewei 12-20-2009  
ABF Team Representative Date

B220 12/21/09  
CT Team Representative Date

DOCUMENTATION REVIEW

	Yes	No
NDE complete	<input type="checkbox"/>	<input type="checkbox"/>
Repairs complete	<input type="checkbox"/>	<input type="checkbox"/>
NCR's closed	<input type="checkbox"/>	<input type="checkbox"/>

ABF QA Manager \_\_\_\_\_ Date \_\_\_\_\_

WD1-A305-65M-4

WD1-A305-65M-4-3B/A
WD1-A305-65M-4-5A/B
WD1-A305-65M-4-4B/A
WD1-A305-65M-4-6A/B
WD1-A305-65M-4-56A/B
WD1-A305-65M-4-57A/B
WD1-A305-65M-4-1 A/B
WD1-A305-65M-4-7 A/B
WD1-A305-65M-4-2 A/B
WD1-A305-65M-4-8 A/B
WD1-A305-65M-4-9 A/B
WD1-A305-65M-4-10 A/B
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WD1-A305-65M-4-27
WD1-A305-65M-4-30
WD1-A305-65M-4-31



# REPORT OF ULTRASONIC EXAMINATION

## UT探伤报告

REPORT NO. 报告编号 T787-UT-2505R2      DATE 2009.12.18      PAGE 1 OF 1      Revision No: 0

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

ITEMS NAME: SECOND LIFTING TOWER(W) A STRUT PLATE      DRAWING NO.: WD1-A305-65-4      CALTRANS CONTRACT NO.: 04-0120F4  
 部件名称      图号      加州工程编号

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  
 SMAW      T-JOINT      Dec. 28<sup>ST</sup>, 2009

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

CALIBRATION BLOCK 试块      COUPLANT 耦合剂      MATERIAL/THICKNESS 材料厚度  
 AWS IIW BLOCK TYPE II      C.M.C      A709SL-GR485/GR345      45/28mm

### 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
WD1-A305-65M-4-10A/B	1R2	70				32									ACC.	100%
	2R2	70				32									ACC.	100%

AFTER T-CWR502

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EXAMINED BY 主探 <i>Tany Xinghan</i> LEVEL - II SIGN / DATE    9.12.18.	REVIEWED BY 审核 <i>Lukomya</i> LEVEL - II SIGN / DATE    12.12.09
质量经理 / QCM _____ 签字 SIGN / 日期 DATE	用户 CUSTOMER _____ 签字 SIGN / 日期 DATE



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

版本  
Rev. No.:

0

项目名称 Project Name:	美国海湾大桥 SFOBB	部件图号 Drawing No.:	WD1-A305-65M-4	报告编号 Report No.:	T-CWR502
合同号 Contract No.:	04-0120F4	部件名称 Item Name:	SECOND LIFTING TOWER (W) A STRUT PLATE	NDT 报告编号 NDT Report No.:	T787-UT-2505R1
项目编号 Project No.:	ZP06-787				

焊缝缺陷描述:

Description of Welding Discontinuity:

Rejectable indications were found by ultrasonic inspection for a second repair on the A709SL-GR485/345 plate.  
(UT探伤返修第二次, 并且该板为A709M-GR485/345板) WD1-A305-65M-4-10A/B

Welder ID No. (焊工编号): 053753

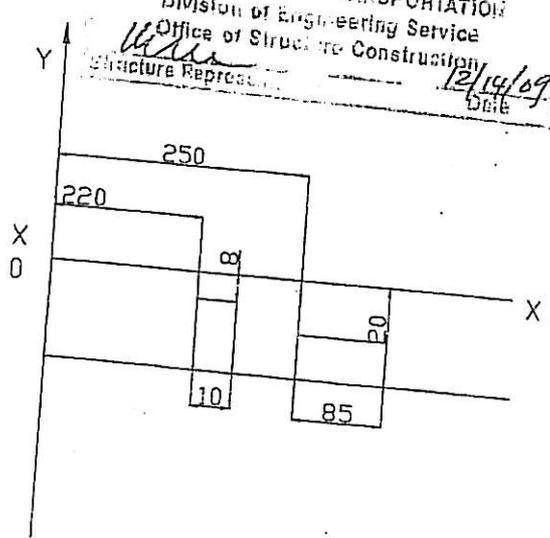
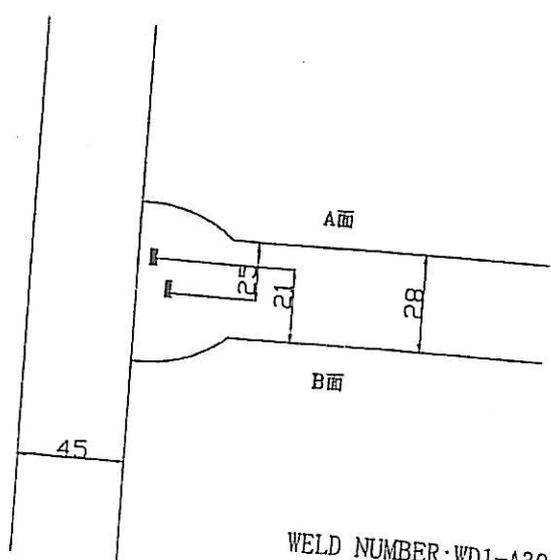
Position:(位置): 2G

检验员 (Inspector): Tang Xingshan

日期 (Date): 2009.12.10

焊缝返修位置示意图:

Draft of Welding Discontinuity:



APPROVED  
 APPROVED AS NOTED  
 RETURNED FOR CORRECTION  
 Pursuant to Section 5-1.02  
 of the Standard Specifications  
 State of California  
 DEPARTMENT OF TRANSPORTATION  
 Division of Engineering Service  
 Office of Structure Construction  
 Structure Representative: [Signature]  
 Date: 12/14/09

WELD NUMBER: WD1-A305-65M-4-10A/B



# 关键焊缝返修报告

## Critical Welding Repair Report (CWR)

版本  
Rev. No.:

0

项目名称 Project Name:	美国海湾大桥 SFOBB	部件图号 Drawing No.:	WD1-A305-65M-4	报告编号 Report No.:	T-CWR502
合同号 Contract No.:	04-0120F4	部件名称 Item Name:	SECOND LIFTING TOWER (R/W) A STRUT PLATE	NDT 报告编号 NDT Report No.:	T787-UT-2505R1
项目编号 Project No.:	ZP06-787				

纠正措施:

### Corrective Action to Prevent Re-occurrence:

- QC and production to properly lay out the UT defect, mark the X, Y, D on the base metal and the location on the surface of weld by use of rectangle or circle, by doing this, UT operator will verify the exact location of the defect prior to excavation.
  - The UT operator and or CWI will take the responsibility to verify the excavation has completely removed the defect
1. QC和生产部门应该正确的标出缺陷的位置, 在母材上标出缺陷X, Y, D的值, 在焊接, 用长方形和圆圈标出缺陷的位置, 这样, 在碳刨前, 能够准确的确认缺陷的位置;
2. UT检验员和CWI必须确认缺陷已经完全刨除.

APPROVED  
APPROVED AS NOTED  
RETURNED FOR CORRECTION  
Paragraph Section 5-1.02  
of the Standard Specifications  
State of California  
DEPARTMENT OF TRANSPORTATION  
Division of Engineering Service  
Office of Construction

日期 (Date): 12/18/07

Signature Representative: [Signature]

车间负责人 (Foreman):

L. Shigun

参照的WPS编号 Repair WPS No.:	WPS-345-SMAW-1G(1F)-FCM-Repair WPS-345-SMAW-2G(2F)-FCM-Repair	Technologist:	[Signature]
返修(碳刨)前预热温度 Preheat Temperature Before Gouging:	85	返修的缺陷 Description of Discontinuity:	夹渣
焊前处理检查 Inspection Before Welding:	Au	焊前预热温度 Preheat Temperature Before Welding:	205
最大碳刨深度 Max. Depth of Gouge:	14	碳刨总长 Total Length of Gouge:	300
焊工 Welder:	053753	焊接类型 Welding Type:	SMAW
焊接电流 Current:	185	焊接位置 Position:	2G
		焊接电压 Voltage:	23
		焊接速度 Speed:	185
返修后检查 Inspection After Repair:			
外观检查 VT Result:	Au	检验员 Inspector:	Shaochen Gu
NDT复检 NDT Result:	Au	探伤员 NDT Person:	Tanyu Zhang
日期 Date:		日期 Date:	09.12.18
日期 Date:		日期 Date:	09.12.18
备注: Remark:			

产生原因:

Cause:

1. The weld defect location may not have been properly identified prior to grinding, i.e, the X and Y location was incorrect or the excavation was not centered on the defect, therefore the excavation did not encompass the whole defect.

1. 打磨前缺陷的位置没有标识清楚, 例如: XY的位置标的不正确, 或者没有将缺陷完全清除, 因此没有清楚所有的缺陷。

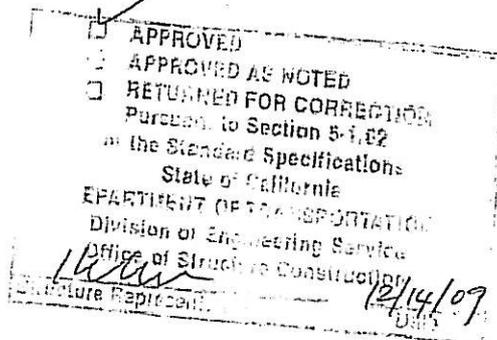
车间负责人 (Foreman): *Lidigun* 日期 (Date): *12.12.11*

处理意见

Disposition :

1. QC shall monitor and direct the welder and the grinder doing the repair operation.
2. Preheat before gouging; the temperature shall be at least 65°C.
3. Gouge the weld to remove identified defects.
4. Joint details shall refer to the approved WPS repair.
5. Grind the gouged areas to a smooth and shiny surface.
6. Verify with VT and MT to ensure no defects remain in the weld joint prior to welding.
7. QC shall monitor all welding passes being deposited.
8. QC shall ensure all slag has been removed prior the deposition of next pass.
9. Preheat and maintain interpass temperature control in accordance with the WPS.
10. Blend the weld repaired areas into the adjacent weld or base metal by grinding.
11. Perform VT, MT and UT NDT inspection to the repaired areas.

- 1、在返修过程中, QC 应该监控和指导焊工和打磨工;
- 2、碳刨之前必须先进行预热, 温度不低于 65° C;
- 3、碳刨去除缺陷;
- 4、缺陷被完全清除后, 必须准备一个正确的接头型式, 具体接头型式请参见对应的修补焊接工艺规程(WPS);
- 5、将碳刨面打磨光滑;
- 6、在准备好焊接接头焊接前, 用 VT 和 MT 检测缺陷被完全清除;
- 7、在返修过程中, QC 确认焊道清理干净;
- 8、在进入下道焊缝前, QC 应该保证所有的缺陷已经去除;
- 9、根据 WPS 控制预热和焊道的温度;
- 10、打磨返修区域与临近焊缝和母材齐平;
- 11、对返修区域进行 VT, MT 和 UT 等 NDT 检测。



工艺:

Technical Engineer: *Shaf Zaidy*

审核:

Approved By: *L. J. Zaidy*

日期:

Date: *12.12.11*

#R787-QCP-900

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, PRC**Report No:** NCS-000385**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Dec-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0467**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>Description:</b>	

**Date the Non-Conformance Report was written:** 05-Dec-2009**Description of Non-Conformance:**

During Ultrasonic Testing (UT) of Strut Web to Flange CJP weld joint WD1-A305-65M-4-10B, QA discovered one (1) Class "A" longitudinal indication, with an indication rating of +6, measuring approximately 30 mm in length. The plate thickness at the location of the indication is 28 mm. This weld was previously tested and accepted by ZPMC QC UT technicians.

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

Repair affected weld.

**Corrective action taken:**

The affected weld has been repaired, NDT documentation indicating weld soundness has been submitted, and the strut has been green tagged. Furthermore, ABF QCM has conducted a training session with ZPMC QC personnel on 12/22/2009 to reinforce previously covered topics.

**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 Serge Sinevod, 139-1686-1597, who represents the Office of Structural Materials for your project.

**Inspected By:** Sinevod, Serge

Quality Assurance Inspector

**Reviewed By:** Wahbeh, Mazen

QA Reviewer