

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-000340

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 24-Jun-2009

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

NCR #: ZPMC-0314

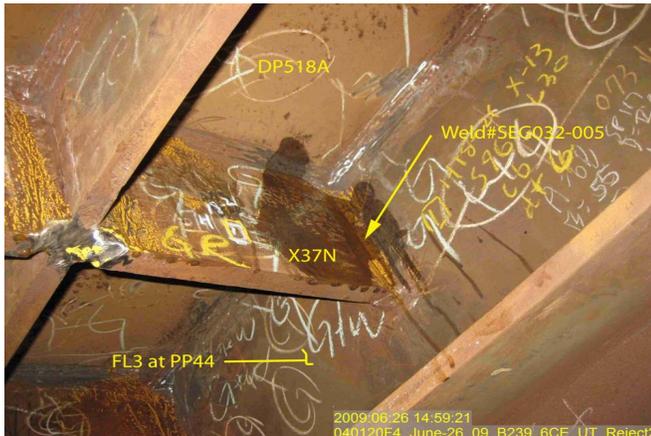
Type of problem:

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

Reference Description: Missed UT indications by QC

Description of Non-Conformance:

During random verification Ultrasonic Testing (UT) of the X37N longitudinal under Deck Stiffener plate to FL3 Floor Beam at Panel Point 44 and Deck Plate 518A splice weld to Deck Plate 302A. Caltrans Quality Assurance (QA) Inspector discovered a total of (2) two rejectable defects of up to 35mm in length by UT. The weld designations are as follows; SEG032*-032 (Deck Splice) and SEG032K-005 (Stiffener). These welds have been previously tested, rejected and the repairs accepted by ZPMC Quality Control (UT) Technicians.



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.”

Who discovered the problem: Rodney Patterson

Name of individual from Contractor notified: Mankit Lee

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Time and method of notification: 1530 hours, Verbal

Name of Caltrans Engineer notified: Stanly Ku

Time and method of notification: 1600 hours, Verbal

QC Inspector's Name: Tao Lei

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,(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: 05-Jul-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: 05.03.06-000301

Subject: NCR No. ZPMC-0314

Reference Description: Missed UT indications by QC

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:** 06

Remarks:

During random verification Ultrasonic Testing (UT) of the X37N longitudinal under Deck Stiffener plate to FL3 Floor Beam at Panel Point 44 and Deck Plate 518A splice weld to Deck Plate 302A. Caltrans Quality Assurance (QA) Inspector discovered a total of (2) two rejectable defects of up to 35mm in length by UT. The weld designations are as follows; SEG032*-032 (Deck Splice) and SEG032K-005 (Stiffener). These welds have been previously tested, rejected and the repairs accepted by ZPMC Quality Control (UT) Technicians.

Please see attached NCR ZPMC-314 for details.

Action Required and/or Action Taken:

Propose a resolution for the identified recurring non-conformance which constitutes a systematic problem on both materials/workmanship and quality control issues with revised procedures to remedy the defected work and to prevent future occurrences. A response for the resolution of this issue is expected within 14 days.

Transmitted by: Ching Chao

Attachments: ZPMC-0314

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, Jason Tom, Contract Files, 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: 05.03.06-000301

Subject: NCR No. ZPMC-0314

Dated: 24-Aug-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000317 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ABF has notified ZPMC of this nonconformance and instructed the same UT operator to recheck this weld. ABF has discussed UT technique issues with ZPMC to prevent further nonconformances.

ABF has notified ZPMC of this nonconformance and instructed the same UT operator to recheck this weld. The UT operator verified the indication was an unacceptable Class "A" indication and has since marked the part for repair. ABF has discussed UT technique issues with ZPMC to prevent further nonconformances. ZPMC will submit repair reports at a later date to close this NCR.

Submitted by:

Attachment(s): ABF-NPR-000317R00

Caltrans' comments:

Status: AAP

Date: 28-Aug-2009

The response is acceptable, but the Non-Conformance is not closed.

Please provide documentation of the weld repairs that were performed and that the repairs were acceptable. The Department will review the Contractor's proposal to close Non-Conformance ZPMC-0314 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: 05.03.06-000301

Subject: NCR No. ZPMC-0314

Dated: 19-Nov-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000317 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC acknowledges the non conformance and is providing the weld repair report and NDT documentation to show the weld was acceptable after repair. ZPMC requests closure of this NCR.

ZPMC acknowledges the non conformance and is providing the weld repair report and NDT documentation to show the weld was acceptable after repair. ZPMC requests closure of this NCR.

Submitted by:

Attachment(s): ABF-NPR-000317R01;

Caltrans' comments:

Status: CLO

Date: 30-Nov-2009

The documentation submitted has been reviewed by the Engineer and is considered sufficient to close the NCR.

Submitted by: Chao, Ching

Date: 30-Nov-2009

Attachment(s):



No. B-493

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2009-11-19

REGARDING: NCR-000340 (ZPMC-0314)

With this letter of response, ZPMC requests closure for Caltrans NCR-000340 (ZPMC-0314). We agree what describe in the non-conformance report. And have discussed with our NDT operator for this issue, the real reason that the defect direction and angle cause our miss-discovery, and we will improve the calibration prior the NDE conduction on site.

By the way we prepared one weld repair report and perform the final UT to confirm the weld repair has been complete and accepted with the NDT method.

so base on the above explanation, ZPMC applies to close the caltrans's report NCR-000340 (ZPMC-0314).

Please reference attached document for acceptance and closure the NCR-000340 (ZPMC-0314).

ATTACHMENT:

NCR-000340 (ZPMC-0314)

ZPMC internal NCR

The welding repair report

The acceptable UT reports

Chadman

2009.11.19.



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 编号: NCR-B-212 (ZPMC-0340)	
Item: Missed UT indications 名称描述: UT 漏检	Item Number: 件号: N/A	Drawing: 图号: 6CE	
Location: outside yard 位置: 外场		Date: 日期: 2009-07-08	
Description of Nonconformance: 不符合项状态描述: During random verification UT of the X37N longitudinal under Deck Stiffener plate to FL3 at PP44 and DP518A splice weld to DP302A. Caltrans Inspector discovered a total of (2) two rejectable defects of up to 35mm length by UT. The weld designations are as follows; SEG032*-032(Deck Splice) and SEG032K-005(Stiffener). These welds have been previously tested, rejected and the repairs accepted by ZPMC QC. 在对 UT 进行随机抽查中, 加州检验员在 PP44 位置件 X37N 筋板与顶板焊缝以及 DP518A 与 DP302A 拼接焊缝中发现二处缺陷, 长度超过 35mm。焊缝编号如下: SEG032*-032 (顶板对接) 和 SEG032K-005 (筋板)。这些位置已经由 ZPMC 拒收、返修、返修后复探接受。			
Work By: <u>[Signature]</u> 施工方: <u>2009.08.09</u>		Prepared by: <u>[Signature]</u> 准备: <u>7/19/09</u>	Reviewed by QCE: <u>[Signature]</u> 质量工程师批准: <u>zhao shuangbao</u>
<input type="checkbox"/> Drawing Error 图纸错误	<input checked="" type="checkbox"/> Material Defect 材料缺陷	<input checked="" type="checkbox"/> Fabrication Error 制作错误	<input type="checkbox"/> Other <u>09.7.9</u> 其他原因
Disposition: <input type="checkbox"/> Use as is <input type="checkbox"/> Repair <input type="checkbox"/> Reject 处理措施: 回用 返修 拒收			
Recommendation: 建议: <u>确认缺陷位置大小, 出具返修报告</u> <i>Affirm the defects and issue repair report.</i>			
Prepared by: <u>[Signature]</u> 准备: <u>2009.08.09</u>		Approved by QCA: _____ 质量经理批准	
Reason for Nonconformance: 不符合原因: <u>缺陷的方向对角度有细微差别, 导致误差从而漏检</u> <i>The error was at defect direction and angle, which caused dB error and discovered defect.</i>			
预防措施: <u>加强检验, 统一标准</u> <i>Enhance inspection and unified standards.</i>			
Approved by/批准: <u>[Signature]</u>			
Technical Justification for Use-As-Is/Repair: <input type="checkbox"/> Attachment <input type="checkbox"/> Non-attachment 回用或返修的技术依据: 附件 无附件			
Reviewed /批准: _____			
Verification: <input type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable 确认: 可接受 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: 05-Jul-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-0314

Job Name: SAS Superstructure
Document No: 05.03.06-000301

Reference Description: Missed UT indications by QC

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- Quality Control (QC) not performed in conformance with contract documents.
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- Non-Conformance Resolved.

Material Location: OBG

Lift: 06

Remarks:

During random verification Ultrasonic Testing (UT) of the X37N longitudinal under Deck Stiffener plate to FL3 Floor Beam at Panel Point 44 and Deck Plate 518A splice weld to Deck Plate 302A. Caltrans Quality Assurance (QA) Inspector discovered a total of (2) two rejectable defects of up to 35mm in length by UT. The weld designations are as follows; SEG032*-032 (Deck Splice) and SEG032K-005 (Stiffener). These welds have been previously tested, rejected and the repairs accepted by ZPMC Quality Control (UT) Technicians.

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Transmitted by: Ching Chao

Attachments: ZPMC-0314

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, 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-000340

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 24-Jun-2009

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

NCR #: ZPMC-0314

Type of problem:

Welding Concrete Other

Welding Curing Procedural

Joint fit-up Coating Other

Procedural Procedural Description:

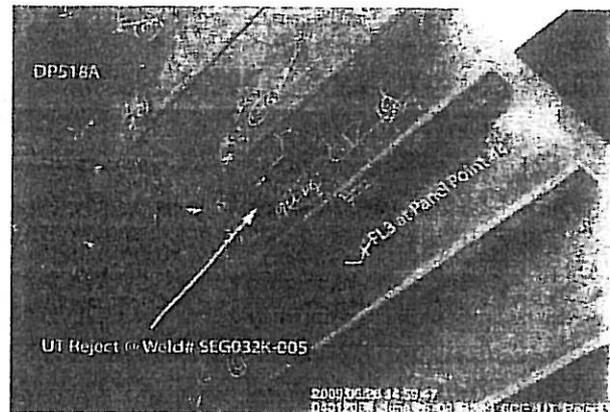
Bridge No: 34-0006

Component: OBG Segment 6CE

Reference Description: Missed UT indications by QC

Description of Non-Conformance:

During random verification Ultrasonic Testing (UT) of the X37N longitudinal under Deck Stiffener plate to FL3 Floor Beam at Panel Point 44 and Deck Plate 518A splice weld to Deck Plate 302A. Caltrans Quality Assurance (QA) Inspector, discovered a total of (2) two rejectable defects of up to 35mm in length by UT. The weld designations are as follows; SEG032*-032 (Deck Splice) and SEG032K-005 (Stiffener). These welds have been previously tested, rejected and the repairs accepted by ZPMC Quality Control (UT) Technicians.



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Who discovered the problem: Rodney Patterson

Name of individual from Contractor notified: Mankit Lee

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Time and method of notification: 1530 hours, Verbal

Name of Caltrans Engineer notified: Stanly Ku

Time and method of notification: 1600 hours, Verbal

QC Inspector's Name: Tao Lei

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

Inspected By: Simonis,Jim

QA Inspector

Reviewed By: Wahbeh,Mazen

SMR





焊缝返修报告

Welding Repair Report

项目名称 Project Name	英国海湾大桥 SFOBB	合同号 Contract No.:	04-0120F4	部件名称 Items Name	SEG032A PLATE PANEL SPLI CE	报告编号 Report No.:	B787-UT-6353-1
项目编号 Project No.:	ZP06-787					E-WR7870	

焊缝缺陷描述:

Description of welding discontinuity:

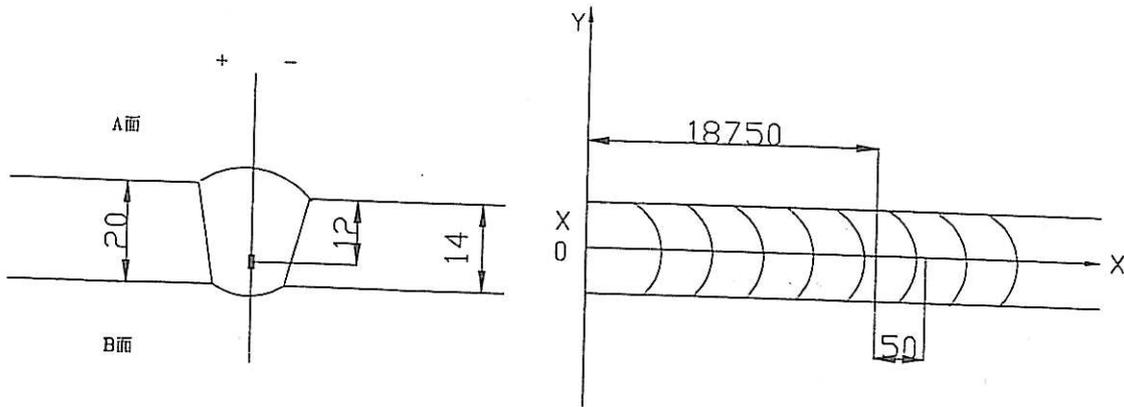
Rejected indication found by ultrasonic inspection is less than the maximum allowance aggregate length.

(UT探伤发现的缺陷总长度小于最大允许长度。)SEG032*-032

检验员 (Inspector): *Xue Hai yong* 日期(Date): 09.09.26

焊缝返修位置示意图:

Draft of welding discontinuity:



WELD NUMBER: SEG032*-032

产生原因:

Caused:

1. 焊道未及时处理干净。
1. Did not clear the weld pass completely in time.

车间负责人(Foreman): *Li Zhigang* 日期(Date): *09.09.26*

处理意见

Disposition :

1. 从缺陷距离端面较近一侧 ($D \leq 0.65T$, D为缺陷深度, T为板厚) 采用碳刨或打磨的方法去除焊缝缺陷;
 2. 参照返修焊接工艺规程 (WPS) 准备正确的接头型式, 预热和焊接;
 3. 焊前对修补区域进行VT检测保证缺陷完全被清除;
 4. 将修补区域打磨到与母材或邻近焊缝平齐;
 5. 根据批准的车间图纸检查焊缝.
-
1. Gouge or grind from nearer side from metal edge ($D \leq 0.65T$, "D" is depth of defects, "T" is thickness of metal) to remove all defects;
 2. Follow repair WPS for joint preparation, preheat, and weld deposit;
 3. Verify with VT no defects remain in the weld joint prior to welding;
 4. Grind the repaired area flush with base metal or the adjacent weld;
 5. Check the welds according to the working drawings.

工艺:
Technical engineer

Min Trefan

审核:
Approved by

日期
Date *09.09.26*



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-WR7870
合同号 Contract No.:	04-0120F4	部件名称 Items Name	PLATE PANEL SPLI CE	NDT报告编号 Report No.of NDT	B787-UT-6353-1
项目编号 Project No.:	ZP06-787				

纠正措施:

Correction action to prevent re occurrence:

1. 加强焊接监控和道间清理。

1. Improve monitoring of welding and interpass cleaning.

车间负责人(Foreman): Li Zhigang 日期(Date): 9.27.26

参照的WPS编号 Repair WPS No.	WPS-485-SMAW-1 G(1F)-Repair-1 WPS-485-FCAW-1 G(1F)-Repair-1 WPS-485-SMAW-4 G(4F)-Repair	工艺员 technologist	Nin Tiefel 9.27.26
返修(碳刨)前预热温度 Preheat temperature before gouging	N/A	返修的缺陷 Description of discontinuity	S+Z
焊前处理检查 Inspection before welding	Acc	焊前预热温度 Preheat temperature before welding	900c
最大碳刨深度 Max. depth of gouging	6mm	碳刨总长 Total length of gouging	80mm
焊工 welder	045D13	焊接类型 welding type	SMAW
焊接电流 Current	150	焊接电压 Voltage	23
		焊接位置 position	46
		焊接速度 Speed	112
返修后检查 Inspection After repairing:			
外观检查 VT result	Acc	检验员 Inspector	Li Yanhun 07120701
NDT复检 NDT result	Acc	探伤员 NDT person	Shuang Jing
日期 Date		日期 Date	2009.10.2
日期 Date		日期 Date	2009-10-4
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-6353-1R1 DATE 2009.10.04 PAGE 1 OF 1 Revision No: 0

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

ITEMS NAME: 6CE 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 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 BUTT Dec. 28ST, 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 A709M-345T2-X 20/14mm

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
SEG032*-032	1R1	70				34									ACC.	100%

AFTER B-WR7870

BLANK

EXAMINED BY 主探 <i>Huang Yiny</i> 09.12.04 LEVEL - II SIGN / DATE 质量经理 / QCM	REVIEWED BY 审核 <i>X. Hanlong</i> 2009.10.04 LEVEL - II SIGN / DATE 用户 CUSTOMER
签字 SIGN / 日期 DATE	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	SEG032K	报告编号 Report No.	B-WR6800
合同号 Contract No.:	04-0120F4	部件名称 Items Name	6CE WEB AND DE CK/BOTTOM PLATE SPLICE	NDT报告编号 Report No.of NDT	B787-UT-7983
项目编号 Project No.:	ZP06-787				

焊缝缺陷描述:

Description of welding discontinuity:

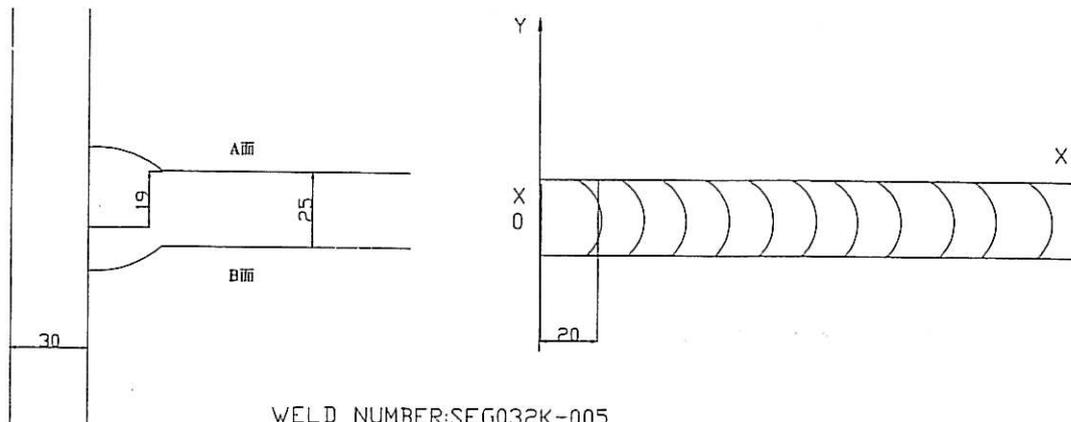
Rejected indication found by ultrasonic inspection is less than the maximum allowance aggregate length.

(UT探伤发现的缺陷总长度小于最大允许长度。) SEG032K-005

检验员 (Inspector): Han Feng 日期(Date): 09.07.15

焊缝返修位置示意图:

Draft of welding discontinuity:



产生原因:

Caused:

1、焊道未及时处理干净。

1. Did not clear the weld pass completely in time.

车间负责人(Foreman): *Li Zhigang* 日期(Date): *07.07.15*

处理意见

Disposition :

1. 从缺陷距离端面较近一侧 ($D \leq 0.65T$, D为缺陷深度, T为板厚) 采用碳刨或打磨的方法去除焊缝缺陷;
2. 参照返修焊接工艺规程 (WPS) 准备正确的接头型式, 预热和焊接;
3. 焊前对修补区域进行VT检测保证缺陷完全被清除;
4. 将修补区域打磨到与母材或邻近焊缝平齐;
5. 根据批准的车间图纸检查焊缝.

1. Gouge or grind from nearer side from metal edge ($D \leq 0.65T$, "D" is depth of defects, "T" is thickness of metal) to remove all defects;
2. Follow repair WPS for joint preparation, preheat, and weld deposit;
3. Verify with VT no defects remain in the weld joint prior to welding;
4. Grind the repaired area flush with base metal or the adjacent weld;
5. Check the welds according to the working drawings.

工艺:
Technical engineer

Nin Trefan

审核:
Approved by

日期
Date *07.07.15*



焊缝返修报告

Welding Repair Report

版本 Rev. No.

①

项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No	SEG032K	报告编号 Report No.	B-WR6800
合同号 Contract No.:	04-0120F4	部件名称 Items Name	6CE WEB AND DE CK/BOTTOM PLATE SPLICE	NDT报告编号 Report No.of NDT	B787-UT-7983
项目编号 Project No.:	ZP06-787				

纠正措施:

Correction action to prevent re occurrence:

- 加强焊接监控和道间清理。
- Improve monitoring of welding and interpass cleaning.

车间负责人(Foreman): *Li Zhigang* 日期(Date): *07.07.15*

参照的WPS编号 Repair WPS No.	WPS-345-SMAW-1 G(1F)-FCM-Repair WPS-345-FCAW-1 G(1F)-FCM-Repair WPS-345-SMAW-2 G(2F)-FCM-Repair WPS-345-FCAW-2 G(2F)-FCM-Repair	工艺员 technologist	<i>Nin Tiefeng</i> <i>07.07.15</i>
返修(碳刨)前预热温度 Preheat temperature before gouging	<i>N/A</i>	返修的缺陷 Description of discontinuity	<i>82</i>
焊前处理检查 Inspection before welding	<i>Acc</i>	焊前预热温度 Preheat temperature before welding	<i>130°C</i>
最大碳刨深度 Max. depth of gouging	<i>12 mm</i>	碳刨总长 Total length of gouging	<i>50 mm</i>
焊工 welder	<i>054013</i>	焊接类型 welding type	<i>SMAW</i>
焊接电流 Current	<i>178</i>	焊接电压 Voltage	<i>26</i>
焊接位置 position		焊接速度 Speed	<i>120</i>
返修后检查 Inspection After repairing:			
外观检查 VT result	<i>Acc</i>	检验员 Inspector	<i>Li Kan hui</i> <i>07/20/15</i>
NDT复检 NDT result	<i>Acc</i>	探伤员 NDT person	<i>Han Fay</i>
日期 Date		日期 Date	<i>2009.07.20</i> <i>07.07.20</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-7983R1 DATE 2009.07.20 PAGE 1 OF 1 Revision No: 0

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

ITEMS NAME: 6CE WEB AND DECK/BOTTOM PLATE SPLICE DRAWING NO.: SEG032K 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. 28ST, 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 IIV BLOCK TYPE II C.M.C A709M-345T2 -X 30/25mm

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
SEG032K-005	1R1	70				32									ACC.	100%

AFTER B-WR6800

BLANK

EXAMINED BY 主探
Han Feng 09.07.20
 LEVEL - II SIGN / DATE

REVIEWED BY 审核
Xue Han 09.07.20
 LEVEL - II SIGN / DATE

质量经理 / QCM
(Signature)
 签字 SIGN / 日期 DATE 7-20

用户 CUSTOMER
 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-000419**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 25-Dec-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0314**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: 24-Jun-2009**Description of Non-Conformance:**

During random verification Ultrasonic Testing (UT) of the X37N longitudinal under Deck Stiffener plate to FL3 Floor Beam at Panel Point 44 and Deck Plate 518A splice weld to Deck Plate 302A. Caltrans Quality Assurance (QA) Inspector discovered a total of (2) two rejectable defects of up to 35mm in length by UT. The weld designations are as follows; SEG032*-032 (Deck Splice) and SEG032K-005 (Stiffener). These welds have been previously tested, rejected and the repairs accepted by ZPMC Quality Control (UT) Technicians.

Contractor's proposal to correct the problem:

The contractor perform weld repair and subsequent NDT verification.

Corrective action taken:

ZPMC acknowledges the non conformance and is providing the weld repair report and NDT documentation to show the weld was acceptable after repair.

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