

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-000297

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 02-Jun-2009

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

NCR #: ZPMC-0271

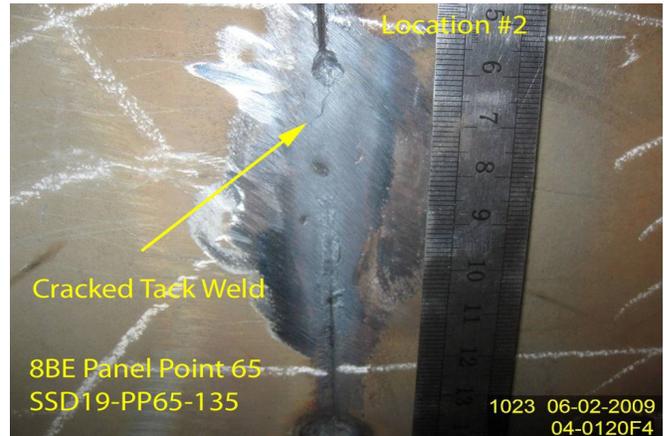
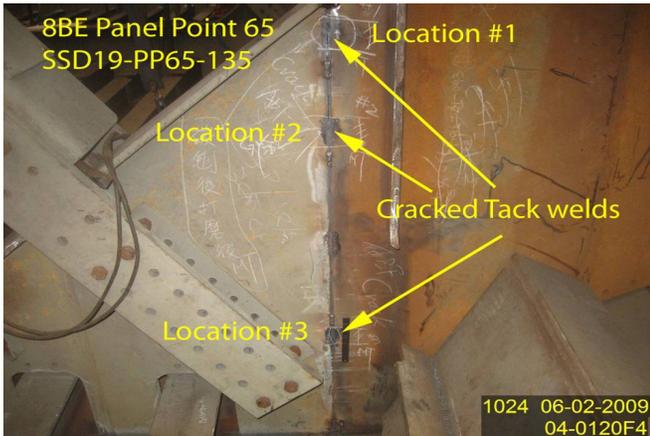
Type of problem:

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

Reference Description: Cracked Tack Welds, Segment 8BE

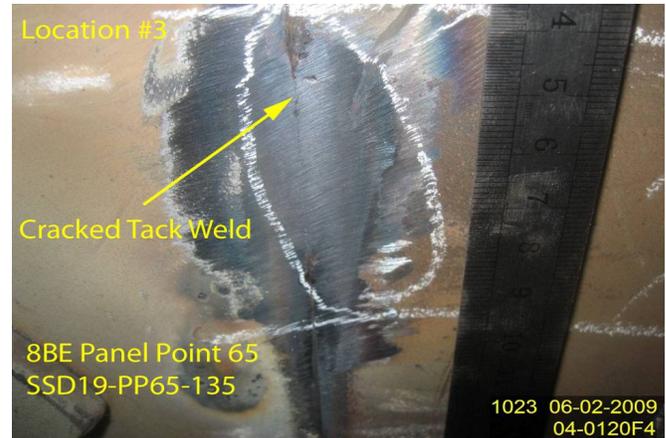
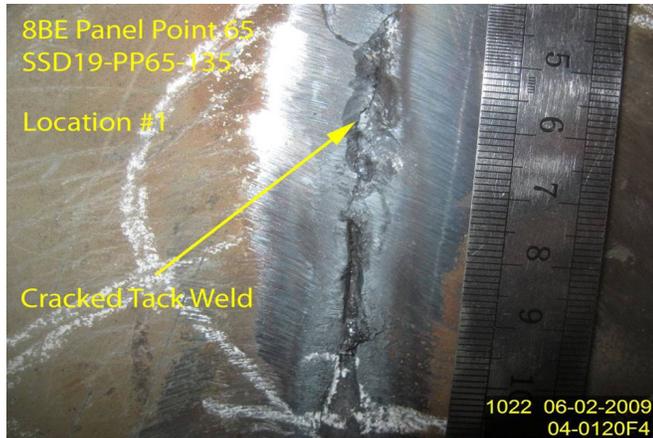
Description of Non-Conformance:

Caltrans Quality Assurance (QA) Inspector observed ZPMC welder Cao Tao (#066163) welding root pass over 3 cracked tack welds on a complete joint penetration (CJP) single bevel groove weld. Tack welds were partially ground and were being incorporated into the final weld. The welder was using the flux cored arc welding (FCAW) process in the 3G (vertical) position on weld joint SSD19-PP65-135 (Segment 8BE, Panel Point 65, FB13A).



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

AWS D1.5, 2002 Section 3.3.71- "Tack welds shall be subject to the same quality requirements as the final welds."

AWS D1.5, 2002 Section 6.26.1.1- "The weld shall have no cracks."

Who discovered the problem: Dan Hernandez

Name of individual from Contractor notified: Lu Xiao Ying

Time and method of notification: 06/02/09, 10:30, Verbal

Name of Caltrans Engineer notified: Stanley Ku

Time and method of notification: 06/03/09, 14:00, Verbal

QC Inspector's Name: Chen Chih 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, 1500.042.2360, who represents the Office of Structural Materials for your project.

Inspected By: Guest, Skyler SMR

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: 08-Jun-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: 05.03.06-000260

Subject: NCR No. ZPMC-0271

Reference Description: Cracked Tack Welds, 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 ZPMC welder Cao Tao (#066163) welding root pass over 3 cracked tack welds on a complete joint penetration (CJP) single bevel groove weld. Tack welds were partially ground and were being incorporated into the final weld. The welder was using the flux cored arc welding (FCAW) process in the 3G (vertical) position on weld joint SSD19-PP65-135 (Segment 8BE, Panel Point 65, FB13A).

Action Required and/or Action Taken:

Please propose a resolution for the identified non-conformance to prevent future occurrences. The weld shall have no cracks.

Transmitted by: Stanley Ku Sr. Bridge Engineer

Attachments: ZPMC-0271

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Brian Boal, Doug Coe, Jason Tom, Doug Wright, 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: 05.03.06-000260

Subject: NCR No. ZPMC-0271

Dated: 24-Aug-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000305 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC recognizes that welding over cracked tack welds is not acceptable. As this weld is a CJP, ZPMC will perform UT to verify a sound weld.

ZPMC recognizes that welding over cracked tack welds is not acceptable. ZPMC has notified the welder and onsite CWI of this nonconformance. As this weld is a CJP, ZPMC will perform UT to verify a sound weld. Reports will be forwarded at a later date.

Submitted by:

Attachment(s): ABF-NPR-000305R00

Caltrans' comments:

Status: AAP

Date: 10-Sep-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-0271 at that time.

Submitted by: Wright, Doug

Date: 10-Sep-2009

Attachment(s):

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000260

Subject: NCR No. ZPMC-0271

Dated: 14-Dec-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000305 **Rev:** 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC acknowledges that an indication was missed and has written an internal NCR to document it. Attached are the documents of the repair and subsequent NDT which show that the weld is now acceptable

ZPMC acknowledges that an indication was missed and has written an internal NCR to document it. Attached are the documents of the repair and subsequent NDT which show that the weld is now acceptable. Based on this ZPMC is requesting closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000305R01;

Caltrans' comments:

Status: CLO

Date: 17-Dec-2009

The correc documentation has been received.

Submitted by: Howe, Bill

Date: 17-Dec-2009

Attachment(s):



No. B-527

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2009-12-11

REGARDING: NCR-000297 (ZPMC-0271)

With this letter of response, ZPMC requests closure for CALTRANS NCR-000297 (ZPMC-0271) what mentioned that QA observed welding was performing over cracked tack welds.

ZPMC acknowledged this problem and has issued internal NCR. ZPMC performed NDT for this weld and issued WWR to repair the UT indication. After repair UT was performed to warrant weld's quality.

According to CT's comments in NPR, ZPMC providing internal NCR, WWR and NDT documentations, hoping CALTRANS could take a review and consider close the NCR.

ATTACHMENT:

NCR-B-180

NCR-000297 (ZPMC-0271)

ABF-NPR-000305 R0.

B787-UT-6946

B-VT-30328

B-WR5276

B787-UT-6946R1

fy
12/11/09



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-180 NCR 编号: NCR-B-180 27MC-271 (NCR-297; NCR-09-036)	
Item: Cracked Tack Welds 名称描述: 点焊裂纹	Item Number: N/A 件号: N/A	Drawing: 8BE 图号: 8BE	
Location: 8BE 位置: 8BE	Date: 2009-06-10 日期: 2009-06-10		
Description of Nonconformance: 不符合项状态描述: Caltrans QA Inspector observed ZPMC welder Cao Tao (#066163) welding root pass over 3 cracked tack welds on a complete joint penetration (CJP) single bevel groove weld. Tack welds were partially ground and were being incorporated into the final weld. The welder was using the flux cored arc welding (FCAW) process in the 3G (vertical) position on weld joint SSD19-PP65-135 (segment 8BE, panel point 65, FB13A) 加州检验员发现 ZPMC 焊工 Cao Tao (#066163) 在一存在 3 处点焊裂纹的 CJP 单面坡口焊接位置进行打底焊接。点焊被部分打磨并溶于最终焊缝。焊缝编号 SSD19-PP65-135 (8BE PP65, FB13A), 焊接方式 FCAW 3G 位置。 参考标准: AWS D1.5 章节 3.3.7.1 “点位焊缝必须与最终焊缝有相同的质量要求”; 章节 6.26.1.1 “焊缝严禁有裂纹”			
Work By: Xie Cheng bin 施工方: 09.6.11		Prepared by: Lu Tan 准备: 06/10/09	Reviewed by QCE: Zhao Shuangbao 质量工程师批准: 09.6.10
<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	
Recommendation: 建议: 与最终焊缝质量要求检测点焊缝, 并确保无裂纹。 Inspect tack welds quality requirement as same as cover pass to ensure no cracks. Prepared by: Du Wenling 准备			
Reason for Nonconformance: 不符合原因: Didn't remove tack weld cracks completely. 焊后未完全清除点焊裂纹, 故有办除。 Tack weld cracks completely 预防措施: Inspect tack weld before welding, and perform MT to ensure free of defects. ① 施焊前要认真检查定位焊, 确保无缺陷。② 增加对焊工的思想理论教育。 Enhance/education welder. Approved by/批准: Li zhi Gang			
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: 根据图纸要求对焊缝做 NDT 检测, 若无缺陷回用; 若有缺陷则进行返修。 perform NDT according to drawing requirement. if without defect, it use as it is. If with defect, it shall repair weld. 附件 无附件 Reviewed/批准: 2009.6.13/09			
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
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Tel: 021-56856666 ext 207061 Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

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

Date: 08-Jun-2009

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

Job Name: SAS Superstructure

Document No: 05.03.06-000260

Dear: Mr. Charles Kanapicki

Attention: Mr. Thomas Nilsson Project/Fabrication Manager

Subject: NCR No. ZPMC-0271

Reference Description: Cracked Tack Welds, 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:

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- 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:

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Action Required and/or Action Taken:

Please propose a resolution for the identified non-conformance to prevent future occurrences. The weld shall have no cracks.

Transmitted by: Stanley Ku Sr. Bridge Engineer

Attachments: ZPMC-0271

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

File: 05.03.06

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
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 Quality Assurance and Source Inspection

Bay Area Branch
 690 Walnut Ave. St. 150
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 (707) 649-5453
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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-000297

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 02-Jun-2009

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

NCR #: ZPMC-0271

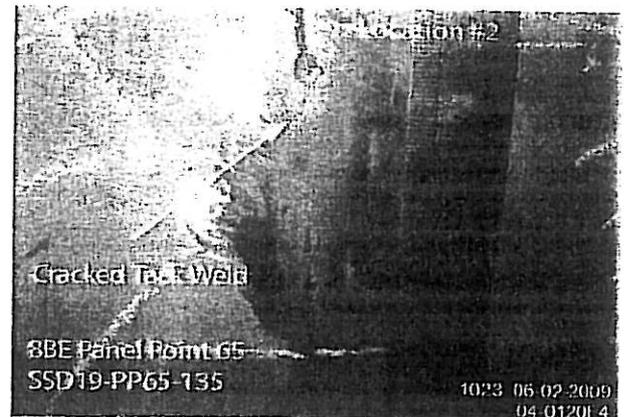
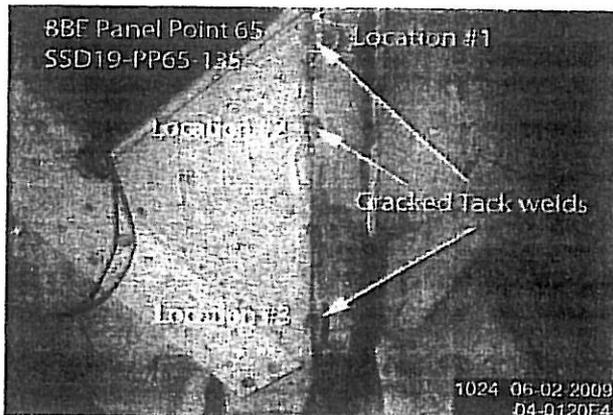
Type of problem:

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

Reference Description: Cracked Tack Welds, Segment 8BE

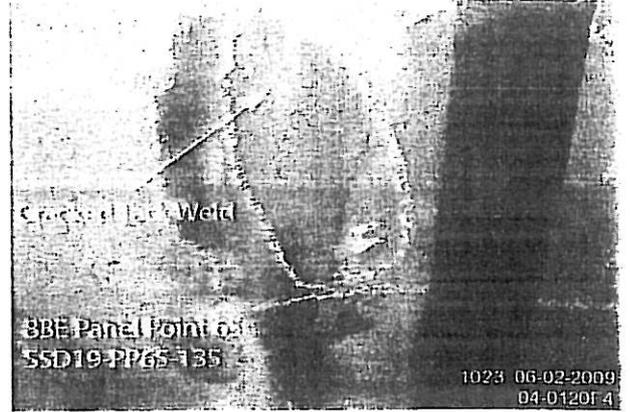
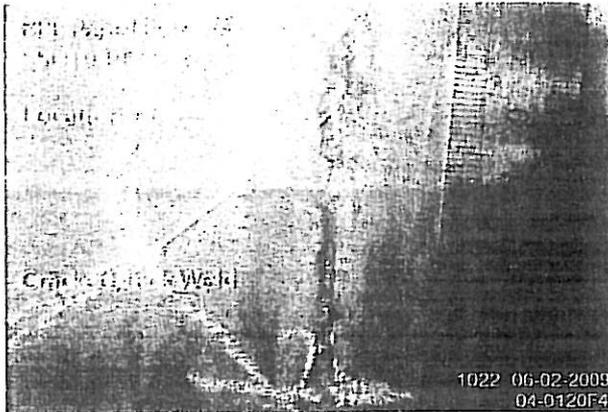
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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

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Who discovered the problem: Dan Hernandez

Name of individual from Contractor notified: Lu Xiao Ying

Time and method of notification: 06/02/09, 10:30, Verbal

Name of Caltrans Engineer notified: Stanley Ku

Time and method of notification: 06/03/09, 14:00, Verbal

QC Inspector's Name: Chen Chih 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, 1500.042.2360, who represents the Office of Structural Materials for your project.

Inspected By: Guest, Skyler

SMR

Reviewed By: Wahbeh, Mazen

SMR



American
Bridge

FLUOR

AMERICAN BRIDGE/FLUOR ENTERPRISES, a JV

P.O. BOX 23223 Oakland, CA 94623

Phone (510) 419-0120 / Fax (510) 839-0666

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000260

Subject: NCR No. ZPMC-0271

Dated: 24-Aug-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000305 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC recognizes that welding over cracked tack welds is not acceptable. As this weld is a CJP, ZPMC will perform UT to verify a sound weld.

ZPMC recognizes that welding over cracked tack welds is not acceptable. ZPMC has notified the welder and onsite CWI of this nonconformance. As this weld is a CJP, ZPMC will perform UT to verify a sound weld. Reports will be forwarded at a later date.

Submitted by:

Attachment(s): ABF-NPR-000305R00

Caltrans' comments:

Status: AAP

Date: 10-Sep-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-0271 at that time.

Submitted by: Wright, Doug

Date: 10-Sep-2009

Attachment(s):



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-6946 DATE 2009.06.05 PAGE 1 OF 1 Revision No: 0

PROJECT NO.: 工程编号 ZP06-787		CONTRACTOR: CALTRANS	
ITEMS NAME: 部件名称 OBG 8BE PLATE PANEL SPLICE	DRAWING NO.: 图号 SEG46*	CALTRANS CONTRACT NO.: 04-0120F4 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 FCAW	JOINT TYPE 焊缝类型 BUTT	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 ST , 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 30mm	

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		
SSD19-PP65-135	1	70	A	1	41	33	1	+7	30	40	13	-5	192	REJ.	100%
	2	70	A	1	42	33	1	+8	80	34	12	0	310	REJ.	100%
SSD19A-PP65-131	1	70	A	1	43	33	2	+8	30	52	17	-10	370	REJ.	100%
SSD19-PP66-135	1	70	A	1	41	33	1	+7	30	33	11	-2	210	REJ.	100%
SSD19A-PP66-131		70				33								ACC.	100%
SSD19-PP67-135	1	70	A	1	42	33	2	+7	20	43	14	0	524	REJ.	100%
	2	70	A	1	43	33	2	+8	20	40	23	-5	1230	REJ.	100%
SSD19A-PP67-131	1	70	A	1	43	33	3	+7	30	58	19	+7	602	REJ.	100%

EXAMINED BY 主探 Jiang yong <i>Jiang yong</i>	REVIEWED BY 审核 <i>Chang Jiny</i>
LEVEL - II SIGN / DATE <i>2009.06.05</i>	LEVEL - II SIGN / DATE <i>2009.06.05</i>

质量经理 / QCM <i>Li Zhen</i>	用户CUSTOMER
签字 SIGN / 日期 DATE <i>2009.06.22</i>	签字 SIGN / 日期 DATE



焊缝返修报告

版本 Rev. I

Welding Repair Report

0

项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No	SEG46*	报告编号 Report No.	B-WR5276
合同号 Contract No.:	04-0120F4	部件名称 Items Name	BBE FLOOR BEAM SPLICE	NDT报告编号 Report No.of NDT	B787-UT-694
项目编号 Project No.:	ZP06-787				

焊缝缺陷描述:

Description of welding discontinuity:

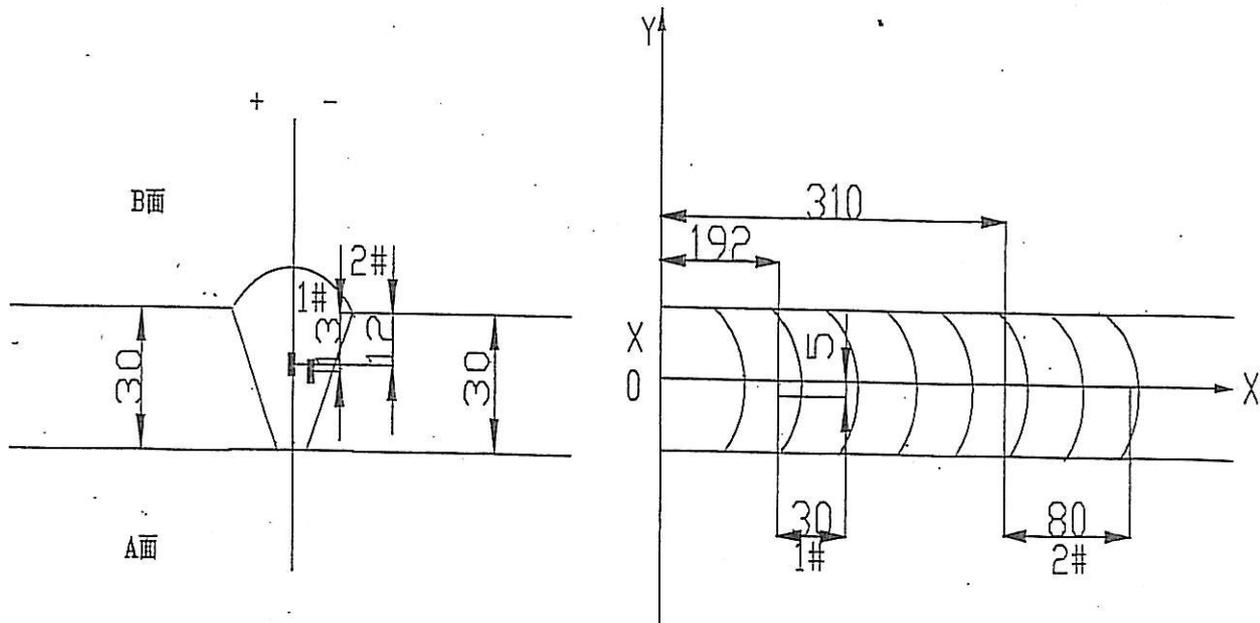
Rejected indication found by ultrasonic inspection is less than the maximum allowance, aggregate length.

(UT探伤发现的缺陷总长度小于最大允许长度。) SSD19-PP65-135

检验员 (Inspector) Jiang Yong 日期(Date): 09.06.05

焊缝返修位置示意图:

Draft of welding discontinuity:



WELD NUMBER: SSD19-PP65-135

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 Xigang* 日期(Date): *09.06.08*

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: *Niu Tieteng*
Technical engineer

09.06.08

审核:
Approved by

Li Xigang

日期
Date

09.06.08



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	SEG46*	报告编号 Report No.	B-WR5276
合同号 Contract No.:	04-0120F4	部件名称 Items Name	8BE FLOOR BEAM SPLICE	NDT报告编号 Report No. of NDT	B787-UT-6946
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): *09.06.08*

参照的WPS编号 Repair WPS No.	WPS-345-SMAW-3 G(3F)-Repair WPS-345-FCAW-3 G(3F)-Repair WPS-345-SMAW-3 G(3F)-FCM-Repair	工艺员 technologist	<i>Niu Jiefeng</i> <i>09.06.08</i>
返修(碳刨)前预热温度 Preheat temperature before gouging	<i>65°C</i>	返修的缺陷 Description of discontinuity	<i>IF</i>
焊前处理检查 Inspection before welding	<i>Acc</i>	焊前预热温度 Preheat temperature before welding	<i>110°C</i>
最大碳刨深度 Max. depth of gouging	<i>15 mm</i>	碳刨总长 Total length of gouging	<i>140 mm</i>
焊工 welder <i>050242</i>	焊接类型 welding type <i>FCAW</i>	焊接位置 position <i>3G</i>	
焊接电流 Current <i>213</i>	焊接电压 Voltage <i>26.1</i>	焊接速度 Speed <i>116</i>	
返修后检查 Inspection After repairing:			
外观检查 VT result <i>Acc</i>	检验员 Inspector <i>Li Yanhua</i>	日期 Date <i>09.6.11</i>	
NDT复检 NDT result <i>Acc</i>	探伤员 NDT person <i>Gao</i>	日期 Date <i>09.6.11</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-6946R1 DATE 2009.06.11 PAGE 1 OF 1 Revision No: 0

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

ITEMS NAME: OBG 8BE PLATE DRAWING NO.: SEG46* CALTRANS CONTRACT NO.: 04-0120F4
 部件名称 PANEL SPLICE 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
 FCAW 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 IIV BLOCK TYPE II C.M.C A709M-345T2-X 30mm

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		
SSD19-PP65-135	1R1	70												ACC.	100%
	2R1	70												ACC.	100%
SSD19A-PP65-131	1R1	70												ACC.	100%
SSD19-PP66-135	1R1	70												ACC.	100%
SSD19-PP67-135	1R1	70												ACC.	100%
	2R1	70												ACC.	100%
SSD19A-PP67-131	1R1	70												ACC.	100%

AFTER B-WR5276-5280

EXAMINED BY 主探 <u>Su Wei</u>	REVIEWED BY 审核 <u>Sun Yin</u>
LEVEL - II SIGN / DATE <u>09.06.11</u>	LEVEL - II SIGN / DATE <u>09.06.11</u>
质量经理 / QCM <u>[Signature]</u>	用户 CUSTOMER _____
签字 SIGN / 日期 DATE <u>09.06.28</u>	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-000427**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 13-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0271**Type of problem:**

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

Date the Non-Conformance Report was written: 02-Jun-2009**Description of Non-Conformance:**

Caltrans Quality Assurance (QA) Inspector observed ZPMC welder Cao Tao (#066163) welding root pass over 3 cracked tack welds on a complete joint penetration (CJP) single bevel groove weld. Tack welds were partially ground and were being incorporated into the final weld. The welder was using the flux cored arc welding (FCAW) process in the 3G (vertical) position on weld joint SSD19-PP65-135 (Segment 8BE, Panel Point 65, FB13A).

Contractor's proposal to correct the problem:

Repair defects and perform the required NDT.

Corrective action taken:

Contractor submitted the WRR used during the weld repair procedure as well as the NDT documentation confirming the repair is in conformance with Contract specifications. An internal NCR was also issued.

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