

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



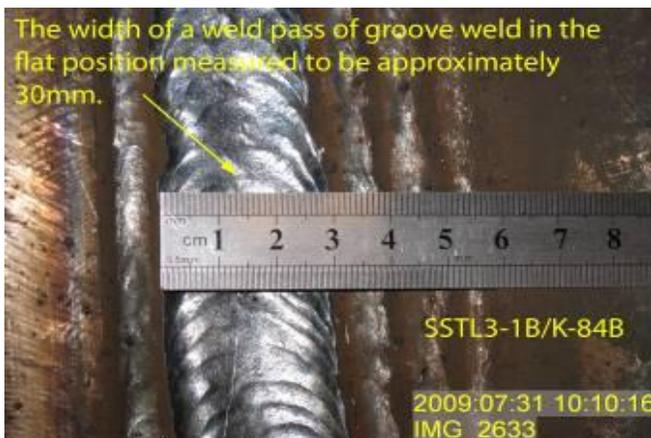
Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, PRC**Report No:** NCR-000347**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 31-Jul-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0321**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: South Tower
Procedural	Procedural	Description: South Tower, Lift 3, AE corner seam weld	

Reference Description: Excessive weld pass width on South Tower, Lift 3, AE corner seam weld**Description of Non-Conformance:**

During in-process visual inspection of South Tower, Lift 3, AE corner seam weld no. SSSL3-1B/K-84B, QA observed an approximately 30mm wide weld pass. This Flux Core Arc Weld (FCAW) is a Complete Joint Penetration (CJP) performed in the flat position. The maximum FCAW weld pass width allowed in this position is 16mm.

**Applicable reference:**

AWS D1.5-2002, Section 4.14.1.5 FCAW: "When the width of a layer of a groove weld in the flat, horizontal, or overhead position is 16 mm [5/8 in.] or greater, a multiple-pass split-layer technique shall be used."

Who discovered the problem: Umesh Gaikwad**Name of individual from Contractor notified:** Yang Yi Heng**Time and method of notification:** 7-31-09, 10:15; Verbal**Name of Caltrans Engineer notified:** Ken Lee**Time and method of notification:** 7-31-09, 15:45; E-mail

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

QC Inspector's Name:

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.

Inspected By:	Sinevod,Serge	ASMR
----------------------	---------------	------

Reviewed By:	Wahbeh,Mazen	SMR
---------------------	--------------	-----



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: 05-Aug-2009

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

Dear: Mr. Charles Kanapicki
Job Name: SAS Superstructure

Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Document No: 05.03.06-000310

Subject: NCR No. ZPMC-0321

Reference Description: Excessive weld pass width on South Tower, Lift 3, AE corner seam weld

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:** 03

Remarks:

During in-process visual inspection of South Tower, Lift 3, AE corner seam weld no. SSTL3-1B/K-84B, QA observed an approximately 30mm wide weld pass. This Flux Core Arc Weld (FCAW) is a Complete Joint Penetration (CJP) performed in the flat position. The maximum FCAW weld pass width allowed in this position is 16mm.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance to prevent future occurrences and provide documentation of the corrective measures taken.

Transmitted by: Ken Lee Transportation Engineer

Attachments: ZPMC-0321

cc: Rick Morrow, Gary Pursell, Mark Woods, Doug Coe

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000310

Subject: NCR No. ZPMC-0321

Dated: 24-Aug-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000321 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC QA has notified the welder and several other welders of this nonconformance and to perform welding within the guidelines of the welding parameters.

ZPMC QA has notified the welder and several other welders of this nonconformance and to perform welding within the guidelines of the welding parameters. ZPMC will submit inspection reports at a later date to close this NCR.

Submitted by:

Attachment(s): ABF-NPR-000321R00

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-0321 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: 05.03.06-000310

Subject: NCR No. ZPMC-0321

Dated: 24-Nov-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000321 **Rev:** 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has repaired the weld stated in the NCR and provided documentation showing that weld is acceptable. ZPMC requests closure of this NCR.

ZPMC has made the welder and other welders aware that weld passes should be in conformance with AWS D1.5 to prevent future occurrences of this non conformance. ZPMC has repaired the weld stated in the NCR and provided documentation showing that weld is acceptable. ZPMC requests closure of this NCR.

Submitted by:

Attachment(s): ABF-NPR-000321R01;

Caltrans' comments:

Status: CLO

Date: 10-Dec-2009

The proposed resolution is acceptable. The Department concurs that Non-conformance ZPMC-0321 is closed.

Submitted by: Lee, Ken

Date: 10-Dec-2009

Attachment(s):



No. T-085

LETTER OF RESPONSE

TO: American Bridge/Flour JV

DATE: 2009-11-23

REGARDING: NCR-000347(ZPMC-0321)

ZPMC received NCR-000347(ZPMC-0321), it mentioned that CT inspector discovered an approximately 30mm wide weld pass on South Tower, Lift 3, AE corner seam weld no. SSTL3-1B/k-84B. The maximum FCAW weld pass width allowed in this position should be 16mm.

ZPMC acknowledged this problem, and had inculcated the welder and several other welds of this non-conformance and to perform welding within the guidelines of the welding parameters. Also ZPMC enhanced QC be more responsible. Here attached the CWR and NDT Reports to prove the weld is sound after repairing.

So ZPMC hope Caltrans could take a review and close this NCR.

ATTACHMENT:

NCR-000347(ZPMC-0321)

T-CWR275

T787-UT-2083R2

T787-UT-2083R3

T787-MT-6291

Zhang Indli

2009.11.23

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: 05-Aug-2009

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

Dear: Mr. Charles Kanapicki
Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Subject: NCR No. ZPMC-0321

Job Name: SAS Superstructure
Document No: 05.03.06-000310

Reference Description: Excessive weld pass width on South Tower, Lift 3, AE corner seam weld

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: 03

Remarks:

During in-process visual inspection of South Tower, Lift 3, AE corner seam weld no. SSSL3-1B/K-84B, QA observed an approximately 30mm wide weld pass. This Flux Core Arc Weld (FCAW) is a Complete Joint Penetration (CJP) performed in the flat position. The maximum FCAW weld pass width allowed in this position is 16mm.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance to prevent future occurrences and provide documentation of the corrective measures taken.

Transmitted by: Ken Lee Transportation Engineer

Attachments: ZPMC-0321

cc: Rick Morrow, Gary Pursell, Mark Woods, Doug Coe

File: 05.03.06

02.02:15.04

Received
NCT-000310 05 Aug 09

05.03.06-000310,NCT

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

Bay Area Branch
 90 Walnut Ave.St. 150
 Alhambra, CA 94592-1133
 (916) 649-5453
 (916) 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
 Prime Contractor: American Bridge/Fluor Enterprises, a JV
 Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island
 Report No: NCR-000347
 Date: 31-Jul-2009
 NCR #: ZPMC-0321

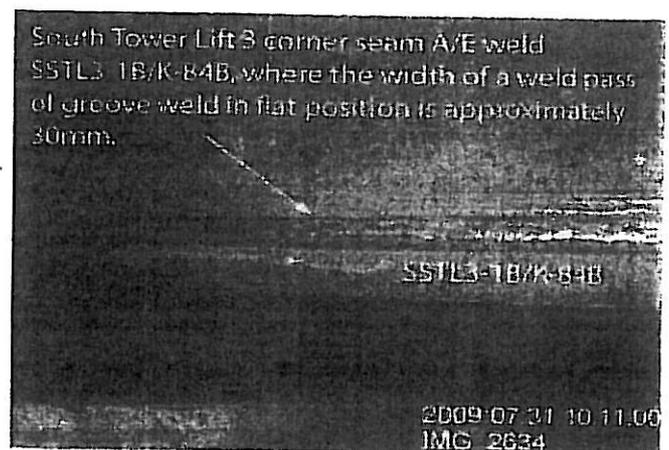
Type of problem:

- Welding Concrete Other
- Welding Curing Procedural Bridge No: 34-0006
- Joint fit-up Coating Other Component: South Tower
- Procedural Procedural Description: South Tower, Lift 3, AE corner seam weld

Reference Description: Excessive weld pass width on South Tower, Lift 3, AE corner seam weld

Description of Non-Conformance:

During in-process visual inspection of South Tower, Lift 3, AE corner seam weld no. SSSL3-1B/K-84B, QA observed an approximately 30mm wide weld pass. This Flux Core Arc Weld (FCAW) is a Complete Joint Penetration (CJP) performed in the flat position. The maximum FCAW weld pass width allowed in this position is 16mm.



Applicable reference:

AWS D1.5-2002, Section 4.14.1.5 FCAW: "When the width of a layer of a groove weld in the flat, horizontal, or overhead position is 16 mm [5/8 in.] or greater, a multiple-pass split-layer technique shall be used."

Who discovered the problem: Umesh Gaikwad
 Name of individual from Contractor notified: Yang Yi Heng
 Time and method of notification: 7-31-09, 10:15; Verbal
 Name of Caltrans Engineer notified: Ken Lee
 Time and method of notification: 7-31-09, 15:45; E-mail

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

QC Inspector's Name:

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.

Inspected By: Sinevod, Serge

ASMR

Reviewed By: Wahbeh, Mazen

SMR



关键焊缝返修报告

版本
Rev. No.:

Critical Welding Repair Report (CWR)

0

项目名称 Project Name:	美国海湾大桥 SFOBB	部件图号 Drawing No.:	SSTL3-1B/K	报告编号 Report No.:	T-CWR275
合同号 Contract No.:	04-0120F4	部件名称 Item Name:	THIRD LIFTING TOWE R(S) ANGLE AE	NDT 报告编号 NDT Report No.:	T787-UT-2083R2
项目编号 Project No.:	ZP06-787				

焊缝缺陷描述:

Description of Welding Discontinuity:

Rejected indication found by ultrasonic inspection at third time.

(UT探伤返修第三次。) ESTL3-4B/K-85A/B

Welder ID No. (焊工编号): 040261 040343 053869 053870.050041

Position:(位置): 2G

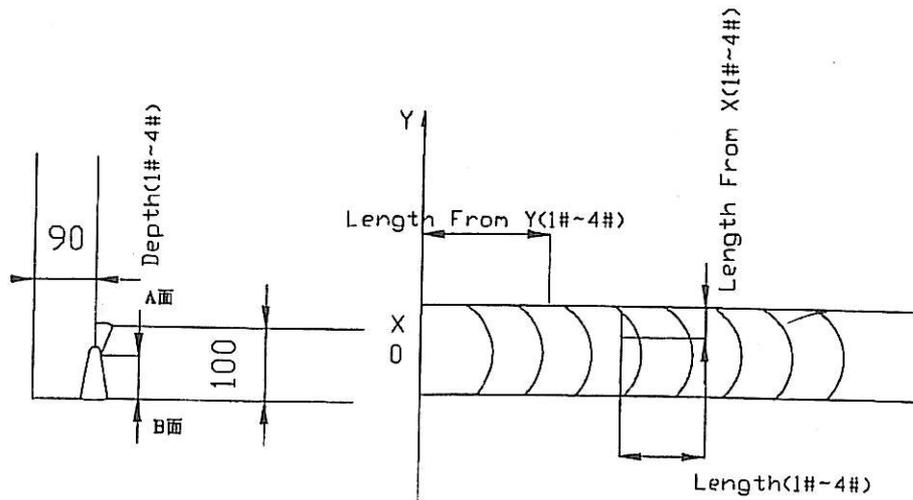
检验员 (Inspector):

Tang Xing shan
Tang Xing shan

日期 (Date): 2009.09.22

焊缝返修位置示意图:

Draft of Welding Discontinuity:



eWELD NUMBER: SSTL3-1B/K-84A/B

Please see the detail data from UT report!

This document is APPROVED
 State of California
 DEPARTMENT OF TRANSPORTATION
 Pursuant to Section 5-1.02 of the
 Standard Specifications
 Initial *SKC* Date: 09/25/09

产生原因:

Cause:

1. 焊缝的位置比较狭窄, 碳刨时, 不能准确的将缺陷刨出.
 2. 打磨工在打磨时, 不够仔细, 没有将所有的缺陷去除.
1. The access space was quite narrow resulting in making it difficult to arc-gouge the defects effectively.
 2. The grinder was not observant during the grinding operation resulting in the indications not being completely removed.

车间负责人 (Foreman): *Lu Yefei* 日期 (Date): 09.09.22

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. 在进入下到焊缝前, 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其平;
 11. VT, MT 和其它 NDT 检测焊缝。

工艺:

Technical Engineer: *Zhao Jinhui*

审核:

Approved By: *for Chenbin*

日期:

Date: 09.09.22

#R787-QCP-900



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.:	SSTL3-1B/K	报告编号 Report No.:	T-CWR275
合同号 Contract No.:	04-0120F4	部件名称 Item Name:	THIRD LIFTING TOWE R(S) ANGLE AE	NDT 报告编号 NDT Report No.:	T787-UT-2083R2
项目编号 Project No.:	ZP06-787				

纠正措施:
Corrective Action to Prevent Re-occurrence:

1. 碳刨打磨后, 要圆滑过度, VT和MT确认所有的缺陷已经去除, ;
2. 教导在烧熔透焊缝和焊道清理时, 焊工必须负责任;
3. 关键焊缝返修时, 主要的QC负责人要在现场;

1. Grind smoothly transition after gouging. Perform VT and MT to ensure all the defects have been removed.

2. Instruct the welder that it is his responsibility to produce sound welds and perform interpass cleaning.

3. Greater QC presence during critical welding operations.

车间负责人 (Foreman): *Lu Yefer* 日期 (Date): 09.09.22

参照的WPS编号 Repair WPS No.:	WPS-345-FCAW-1 G (1F) -Repair WPS-345-FCAW-2 G (2F) -Repair WPS-345-SMAW-1 G(1F)-Repair WPS-345-SMAW-2 G(2F)-Repair	工艺员 Technologist:	<i>Zheng Jindang</i> 09.09.22
-----------------------------	--	----------------------	----------------------------------

返修 (碳刨) 前预热温度 Preheat Temperature Before Gouging:	返修的缺陷 Description of Discontinuity:
--	--

焊前处理检查 Inspection Before Welding:	焊前预热温度 Preheat Temperature Before Welding:
--------------------------------------	---

最大碳刨深度 Max. Depth of Gouge:	碳刨总长 Total Length of Gouge:
--------------------------------	--------------------------------

焊工 Welder:	焊接类型 Welding Type:	焊接位置 Position:	
---------------	-----------------------	-------------------	--

焊接电流 Current:	焊接电压 Voltage:	焊接速度 Speed:	
------------------	------------------	----------------	--

返修后检查
Inspection After Repair:

外观检查 VT Result:	检验员 Inspector:	日期 Date:
--------------------	-------------------	-------------

NDT复检 NDT Result:	探伤员 NDT Person:	日期 Date:
----------------------	--------------------	-------------

见证:
 Witness/Review:

备注:
 Remark:



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-2083R2 DATE 2009.09.22 PAGE 1 OF 2 Revision No: 0

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

ITEMS NAME: THIRD LIFTING TOWER(S) ANGLE AE DRAWING NO.: SSTL3-1B/K 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 6.4) 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 CORNER-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-Z 90/100mm

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	60°	2.5MHz	18×18mm
Changchao	0°	2.5MHz	20mm	Changchao	45°	2.5MHz	18×18mm

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		
SSTL3-1B/K-84A/B	1R2	45	A	2	40	34	10	-4	20	155	90	-20	18500	REJ.	100%
	2R2	45	A	2	22	34	7	-19	20	117	83	-20	21600	REJ.	100%
	3R2	45	A	2	40	34	10	-4	20	148	90	-5	5580	REJ.	100%
	4R2	45	A	2	34	34	8	-8	50	128	90	-5	5520	REJ.	100%
	5R2	45				34								ACC.	100%
	6R2	45				34								ACC.	100%
	7R2	45				34								ACC.	100%
	8R2	45				34								ACC.	100%

EXAMINED BY 主探
 Tang xing shan
 LEVEL - II SIGN / DATE

REVIEWED BY 审核
 W. Richard
 LEVEL - II SIGN / DATE

质量经理 / QCM
 签字 SIGN / 日期 DATE

用户 CUSTOMER
 签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 T787-UT-2083R3 DATE 2009.09.28 PAGE 1 OF 1 Revision No: 0

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

ITEMS NAME: THIRD LIFTING TOWER(S) ANGLE AE DRAWING NO.: SSSL3-1B/K 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 6.4) 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 CORNER-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 IIW BLOCK TYPE II C.M.C A709M-345T2-Z 90/100mm

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	60°	2.5MHz	18×18mm
Changchao	0°	2.5MHz	20mm	Changchao	45°	2.5MHz	18×18mm

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
SSSL3-1B/K-84A/B	1R3	45				32									ACC.	100%
	2R3	45				32									ACC.	100%
	3R3	45				32									ACC.	100%
	4R3	45				32									ACC.	100%

AFTER T-CWR275

BLANK

EXAMINED BY 主探 <i>Tang Xiguan</i> LEVEL - II SIGN / DATE <i>5-9-08</i> 质量经理 / QCM <i>W. Hansen</i> 2009.9.28 签字 SIGN / 日期 DATE	REVIEWED BY 审核 <i>Zshun</i> LEVEL - II SIGN / DATE <i>5-9-08</i> 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, PRC**Report No:** NCS-000342**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 30-Nov-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0321**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: 31-Jul-2009**Description of Non-Conformance:**

During in-process visual inspection of South Tower, Lift 3, AE corner seam weld no. SSSL3-1B/K-84B, QA observed an approximately 30mm wide weld pass. This Flux Core Arc Weld (FCAW) is a Complete Joint Penetration (CJP) performed in the flat position. The maximum FCAW weld pass width allowed in this position is 16mm.

Contractor's proposal to correct the problem:

ZPMC to inform the welders that all welding must be performed in accordance with AWS D1.5.

Corrective action taken:

ZPMC welders have been instructed that all welding must be performed in accordance with AWS D1.5. Furthermore, NDT documentation has been submitted indicating that the affected weld is sound.

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

Inspected By: Sinevod, Serge

Quality Assurance Inspector

Reviewed By: Wahbeh, Mazen

QA Reviewer