

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-000216

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 16-Nov-2008

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

NCR #: ZPMC-0192

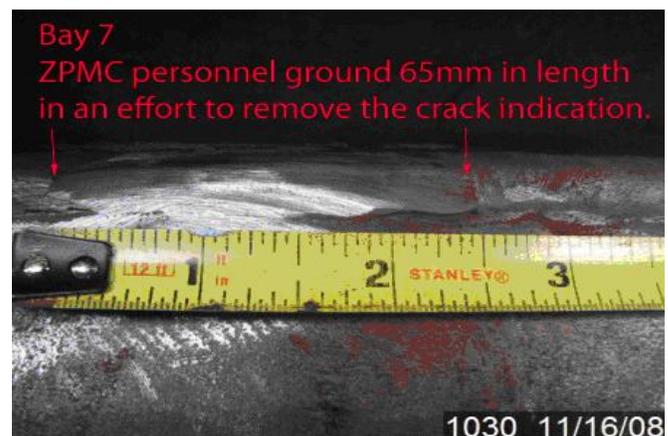
Type of problem:

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006 L/R
Joint fit-up	Coating	Other	Component: Floor Beam Assembly
Procedural	Procedural	Description: FB011-017	

Reference Description: Crack indication (2 to 3mm) overlooked on weld # FB011-017-003 located on the FB011-017 floor beam sub assembly.

Description of Non-Conformance:

The Quality Assurance Inspector discovered a 2 to 3mm in length crack indication overlooked by ZPMC Quality Control Inspectors. The crack indication was discovered while the QA was performing magnetic particle verification on weld # FB011-017-003 located on the FB011-017 floor beam sub assembly. The Quality Assurance Inspector informed American Bridge/Fluor Quality Assurance Inspector Um Bin about the crack indication overlooked by ZPMC Quality Control Inspectors. Mr. Bin and ZPMC Quality Control Inspector Wen Peng agreed with the Quality Assurance Inspector that the crack indication was overlooked by ZPMC Quality Control Inspectors. The Quality Assurance Inspector observed ZPMC personnel removed an area 8mm in depth and 65mm in length of filler metal by grinding in an effort to remove the indication discovered by the Quality Assurance Inspector. ZPMC Quality Control Inspector Wen Peng informed the Quality Assurance Inspector ZPMC personnel performed magnetic particle testing on the ground area, revealing the crack indication is a sub surface indication. Mr. Peng informed the Quality Assurance Inspector a critical weld repair will be issued prior to welding the repair.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

Special Provisions 8.3 Welding, General, "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."

AWSD1.5 2002 Section 6.26.2, "Welds that are subject to RT and MT in addition to visual inspection shall have no cracks and shall be unacceptable if the RT or MT shows any types of discontinuities described in 6.26.2.1..." 6.26.2.1, figure 6.8

Who discovered the problem: Quality Assurance Inspector Raymond Lara

Name of individual from Contractor notified: Um Bin

Time and method of notification: 10:00 am., verbal

Name of Caltrans Engineer notified: Stan Ku

Time and method of notification: 11/18/08

QC Inspector's Name: Wen Peng

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 , who represents the Office of Structural Materials for your project.

Inspected By:	Dautermann,Peter	SMR
Reviewed By:	Dautermann,Peter	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: 26-Nov-2008

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

Dear: Mr. Charles Kanapicki

Job Name: SAS Superstructure

Attention: Mr. Dave Williams Consultant

Document No: 05.03.06-000186

Subject: NCR No. ZPMC-0192

Reference Description: Crack indication (2 to 3mm) overlooked on weld # FB011-017-003 located on the FB011-017 floor beam sub assembly.

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:

The Quality Assurance Inspector discovered a 2 to 3mm in length crack indication overlooked by ZPMC Quality Control Inspectors. The crack indication was discovered while the QA was performing magnetic particle verification on weld # FB011-017-003 located on the FB011-017 floor beam sub assembly. The Quality Assurance Inspector informed American Bridge/Fluor Quality Assurance Inspector Um Bin about the crack indication overlooked by ZPMC Quality Control Inspectors. Mr. Bin and ZPMC Quality Control Inspector Wen Peng agreed with the Quality Assurance Inspector that the crack indication was overlooked by ZPMC Quality Control Inspectors. The Quality Assurance Inspector observed ZPMC personnel removed an area 8mm in depth and 65mm in length of filler metal by grinding in an effort to remove the indication discovered by the Quality Assurance Inspector. ZPMC Quality Control Inspector Wen Peng informed the Quality Assurance Inspector ZPMC personnel performed magnetic particle testing on the ground area, revealing the crack indication is a sub surface indication. Mr. Peng informed the Quality Assurance Inspector a critical weld repair will be issued prior to welding the repair.

Action Required and/or Action Taken:

Please propose a resolution for Quality Control Inspector overlooking crack indication. Critical weld repair for the sub surface indication has been submitted.

Transmitted by: Stanley Ku Sr. Bridge Engineer

Attachments: ZPMC-0192

cc: Rick Morrow, Gary Pursell, Brian Boal, Jason Tom

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000186

Subject: NCR No. ZPMC-0192

Dated: 18-Dec-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000188 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC will submit training documentation as objective evidence to close this NCR

ZPMC NDT department has been notified of the missed indication. ABF has requested an MT training session be conducted as a preventative action measure. ZPMC will submit training documentation as objective evidence to close this NCR

Submitted by:

Attachment(s): ABF-NPR-000188R00

Caltrans' comments:

Status: AAP

Date: 22-Dec-2008

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

Please provide the above mentioned training documentation. Also, 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-0192 at that time.

Submitted by: Wright, Doug

Date: 23-Dec-2008

Attachment(s):

NCR PROPOSED RESOLUTION

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

Dated: 08-Jan-2009

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

Attention: Pursell, Gary
Resident Engineer

Job Name: SAS Superstructure

Document No.: ABF-NPR-000188 Rev: 01

Ref: 05.03.06-000186

Subject: NCR No. ZPMC-0192

Contractor's Proposed Resolution:

Reference Resolution: ZPMC requests closure of this NCR.

Please see attached documents.

Submitted by:

Attachment(s): docs to close this NCR; ABF-NPR-000188R01

Caltrans' comments:

Status: CLO

Date: 12-Jan-2009

The proposed resolution is acceptable. The MT technicians received additional training, and the welds in question have been accepted by VT and MT as shown in the attached documents. The Department concurs that Non-Conformance ZPMC-0192 is closed.

Submitted by: Wright, Doug

Date: 12-Jan-2009

Attachment(s):



TRANSMITTAL LETTER

PROJECT: SAN FRANCISCO OAKLAND BAY BRIDGE

DATE: 12/31/2008

TO: RUBY/ ABFJV QA DEPARTMENT

FROM: ZPMC QA DEPARTMENT

SUBJECT: CALTRANS NCR FOR CLOSURE

SUBMITTED FOR YOUR APPROVAL.

ENCLOSED WITH THIS TRANSMITTAL IS ONE

- (1) COPY OF LETTER OF RESPONSE WITH NO.B-328 FOR CLOSURE.
- (2) COPY OF NCR WITH NUMBER
NCR-210(ZPMC-0187)/NCR-216(ZPMC-0192)/NCR-215(ZPMC-0191)
- (3) COPY OF THE MT TRAINING DOCUMENTATION
- (4) COPY OF THE ACCEPTABLE VT AND MT INSPECTION REPORTS
- (5) ZPMC INTERNAL NCR

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT:



 PLAN HOLDER

31-DEC-2008

 DATE

ABFJV

 COMPANY

 PHONE NO.

PLAN NUMBER: N/A
 #R787-QCP-102



No. B-328

LETTER OF RESPONSE

TO: American Bridge/Flour JV

DATE: 2008-12-30

REGARDING: NCR-000210/216/215(ZPMC-0187/192/191)

With this letter of response, ZPMC requests closure for Caltrans NCR-000210/216/215(ZPMC-0187/192/191). We have trained our NDT operator with the dry magnetic particles. And provided the meeting content and sign list for objective evidence.

And our NDT QC had re-inspected the location which overlooked in the first time. Actually it's our mistake without enough carefully. But we have performed the repair and completed with the MT, therefore attached the visual and MT report to support that the weld quality had reached the requirement of the standard.

So ZPMC considers NCR-000210/216/215(ZPMC-0187/192/191) can be closed, and provide the attached documents to these weld crack repair.

Please check the attached documentation for acceptance and close the NCR-000210/216/215(ZPMC-0187/192/191).

ATTACHMENT:

NCR-000210/216/215(ZPMC-0187/192/191)

The MT training documentation

The acceptable VT and MT inspection reports

ZPMC internal NCR

Zhou Guangjun

2008.12.30

*Craig Knips for
Steve Dawson
FOA Manager
2008-12-31*



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: 26-Nov-2008

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

Dear: Mr. Charles Kanapicki

Job Name: SAS Superstructure

Attention: Mr. Dave Williams Consultant

Document No: 05.03.06-000186

Subject: NCR No. ZPMC-0192

Reference Description: Crack indication (2 to 3mm) overlooked on weld # FB011-017-003 located on the FB011-017 floor beam sub assembly.

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:

The Quality Assurance Inspector discovered a 2 to 3mm in length crack indication overlooked by ZPMC Quality Control Inspectors. The crack indication was discovered while the QA was performing magnetic particle verification on weld # FB011-017-003 located on the FB011-017 floor beam sub assembly. The Quality Assurance Inspector informed American Bridge/Fluor Quality Assurance Inspector Um Bin about the crack indication overlooked by ZPMC Quality Control Inspectors. Mr. Bin and ZPMC Quality Control Inspector Wen Peng agreed with the Quality Assurance Inspector that the crack indication was overlooked by ZPMC Quality Control Inspectors. The Quality Assurance Inspector observed ZPMC personnel removed an area 8mm in depth and 65mm in length of filler metal by grinding in an effort to remove the indication discovered by the Quality Assurance Inspector. ZPMC Quality Control Inspector Wen Peng informed the Quality Assurance Inspector ZPMC personnel performed magnetic particle testing on the ground area, revealing the crack indication is a sub surface indication. Mr. Peng informed the Quality Assurance Inspector a critical weld repair will be issued prior to welding the repair.

Action Required and/or Action Taken:

Please propose a resolution for Quality Control Inspector overlooking crack indication. Critical weld repair for the sub surface indication has been submitted.

Transmitted by: Stanley Ku Sr. Bridge Engineer

Attachments: ZPMC-0192

cc: Rick Morrow, Gary Pursell, Brian Boal, Jason Tom

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, PRC

Report No: NCR-000216

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 16-Nov-2008

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

NCR #: ZPMC-0192

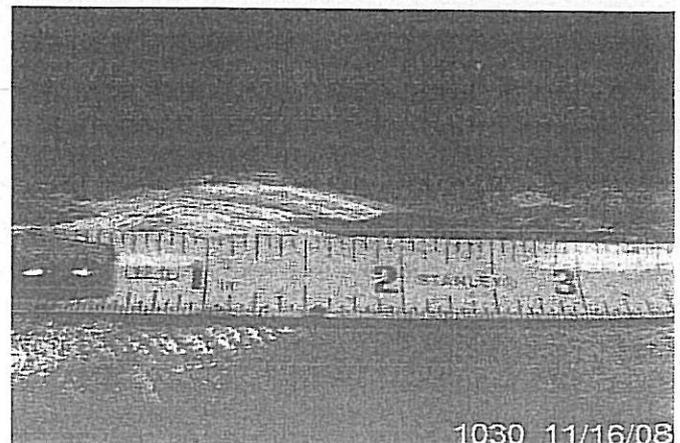
Type of problem:

Welding Concrete Other
Welding Curing Procedural **Bridge No:** 34-0006 L/R
Joint fit-up Coating Other **Component:** Floor Beam Assembly
Procedural Procedural **Description:** FB011-017

Reference Description: Crack indication (2 to 3mm) overlooked on weld # FB011-017-003 located on the FB011-017 floor beam sub assembly.

Description of Non-Conformance:

The Quality Assurance Inspector discovered a 2 to 3mm in length crack indication overlooked by ZPMC Quality Control Inspectors. The crack indication was discovered while the QA was performing magnetic particle verification on weld # FB011-017-003 located on the FB011-017 floor beam sub assembly. The Quality Assurance Inspector informed American Bridge/Fluor Quality Assurance Inspector Um Bin about the crack indication overlooked by ZPMC Quality Control Inspectors. Mr. Bin and ZPMC Quality Control Inspector Wen Peng agreed with the Quality Assurance Inspector that the crack indication was overlooked by ZPMC Quality Control Inspectors. The Quality Assurance Inspector observed ZPMC personnel removed an area 8mm in depth and 65mm in length of filler metal by grinding in an effort to remove the indication discovered by the Quality Assurance Inspector. ZPMC Quality Control Inspector Wen Peng informed the Quality Assurance Inspector ZPMC personnel performed magnetic particle testing on the ground area, revealing the crack indication is a sub surface indication. Mr. Peng informed the Quality Assurance Inspector a critical weld repair will be issued prior to welding the repair.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

Special Provisions 8.3 Welding, General, "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."

AWS D1.5 2002 Section 6.26.2, "Welds that are subject to RT and MT in addition to visual inspection shall have no cracks and shall be unacceptable if the RT or MT shows any types of discontinuities described in 6.26.2.1..." 6.26.2.1, figure 6.8

Who discovered the problem: Quality Assurance Inspector Raymond Lara

Name of individual from Contractor notified: Um Bin

Time and method of notification: 10:00 am., verbal

Name of Caltrans Engineer notified: Stan Ku

Time and method of notification: 11/18/08

QC Inspector's Name: Wen Peng

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 , who represents the Office of Structural Materials for your project.

Inspected By: Dautermann, Peter

SMR

Reviewed By: Dautermann, Peter

SMR

B-VT-10518



周数
54#

日期
2008.11.16

Visual Weld Inspection Report
焊缝目视检查报告

Girder/ 梁: OBG Floor Beam

Tower/ 塔: NA

Quality Control Representative:
质检代表: *Ly*

CWI:
检验员: *W. P. Huang* 0208201

Quality Assurance Manager ~Approval
质量控制经理: *Huang*

Caltrans Contract No.
加州合同编号: 04-0120F4

Project No.:
项目名称: San Francisco Oakland Bay Bridge
美国海湾大桥

Project No.:
项目编号: ZP06-787

Weld No. 焊缝编号	Welder I.D.# 焊工识别号	Location 位置	Welding consumables 焊接材料	Undercut 咬边	Porosity 气孔	Over lap 焊瘤	Crater 弧坑	Arc strike 电弧擦伤	Spatters 飞溅	Crack 裂纹	Accept or Reject 接受或拒收	Repair 返修	Accept or Reject after repair 返修后接受或拒收
FB011-017-001	044824	3F	supercored71H φ 1.4	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA
FB011-017-002	044824	3F	supercored71H φ 1.4	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA
FB011-017-003	044824	2F	supercored71H φ 1.4	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA
FB011-017-005	044824	3F	supercored71H φ 1.4	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA
FB011-017-006	044824	3F	supercored71H φ 1.4	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA
FB011-017-007	044824	3F	supercored71H φ 1.4	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA
FB011-017-008	044824	3F	supercored71H φ 1.4	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA
FB011-017-009	044824	2F	supercored71H φ 1.4	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA
FB011-017-011	044824	2F	supercored71H φ 1.4	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA
FB011-017-012	044824	2F	supercored71H φ 1.4	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA
FB011-017-015	044824	2F	supercored71H φ 1.4	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA
FB011-017-016	044824	2F	supercored71H φ 1.4	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA
FB011-017-017	044824	2F	supercored71H φ 1.4	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA
FB011-017-018	044824	2F	supercored71H φ 1.4	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA
FB011-017-019	044824	2F	supercored71H φ 1.4	✓	✓	✓	✓	✓	✓	✓	ACC	NA	NA

After cover pass

After HSR No.:

Others

#R787-QCP-603

"✓" is no defects. "X" is defects. "NA" is not applicable.



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-4771 DATE日期 2008.11.16 PAGE OF页码 2/2 Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: FB11 OBG FLOOR BEAM		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4	
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 th , 2008
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345T2-X/A709M-345F2-X 12/14/18/20/30mm
WELDING PROCESS 焊接方法	FCAW	TYPE OF JOINT 焊缝类型	T-JOINT

WELD I.D. 焊缝编号	DISCONTINUITY 不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
FB011-017-020						*
FB011-017-024				ACC.		100%MT
FB011-017-025				ACC.		100%MT
FB011-017-033				ACC.		100%MT
FB011-017-034				ACC.		100%MT
FB011-017-041				ACC.		100%MT
FB011-017-042				ACC.		100%MT
FB011-017-046				ACC.		100%MT
FB011-017-045				ACC.		100%MT

* FB011-017-001, FB011-017-002, FB011-017-007, FB011-017-008, FB011-017-009, FB011-017-011, FB011-017-012, FB011-017-015, FB011-017-016, FB011-017-017, FB011-017-018, FB011-017-024, FB011-017-025, FB011-017-033, FB011-017-034, FB011-017-041, FB011-017-042, FB011-017-046, FB011-017-045 were MT inspection and ACC, which is the result of required 25% MT. FB011-017-003 was found crack by MT inspection, then we inspected the whole welds.

* FB011-017-001, FB011-017-002, FB011-017-007, FB011-017-008, FB011-017-009, FB011-017-011, FB011-017-012, FB011-017-015, FB011-017-016, FB011-017-017, FB011-017-018, FB011-017-024, FB011-017-025, FB011-017-033, FB011-017-034, FB011-017-041, FB011-017-042, FB011-017-046, FB011-017-045 焊缝经MT抽检合格, 且累积检测长度已经达到了此批要求的25%检测长度。FB011-017-003焊缝经MT检验出有裂纹, 之后通条检验。

BLANK

EXAMINED BY 主探 <u>Su Wei</u>	REVIEWED BY 审核 <u>Wang Wei</u>
LEVEL-II SIGN 签名 / DATE日期 <u>08.11.16</u>	LEVEL-II SIGN / DATE日期 <u>08.11.16</u>
质量经理 / QCM <u>H. Liang</u>	用户 CUSTOMER
签字 SIGN / 日期 DATE <u>Su Wei</u>	签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-4771R1 DATE日期 2008.11.28 PAGE OF页码 1/1 Revision No: 0

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

DRAWING NO. 图号: FB11 CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4
 OBG THE 778 LIFT FLOOR BEAM

REFERENCING CODE 参考规范编码: AWS D1.5-2002 ACCEPTANCE STANDARD 接受标准: AWS D1.5-2002 PROCEDURE NO. 程序编号: ZPQC-MT-01 CALIBRATION DUE DATE 仪器校正有效期: Dec. 28ST, 2008

EQUIPMENT 设备: MT YOKE MANUFACTURER 制造商: PARKER MODEL NO. 样式编号: B310S SERIAL NO. 连续编号: 5395 5617 5620

MAGNETIZING METHOD 磁化方法: Continuous magnetic yoke 磁轭式连续法 CURRENT 电流: AC

PARTICLE TYPE 磁粉类型: Dry magnet powder 干磁粉 YOKE SPACING 磁轭间距: 70~150mm

MATERIAL TO BE EXAMINED 检测材料: WELDING 焊接件 Material & thickness 母材,厚度: A709M-345T2-X/A709M-345F2
 CASTING 铸件 12/20mm
 FORGING 锻造

WELDING PROCESS 焊接方法: SMAW TYPE OF JOINT 焊缝类型: T-JOINT

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
FB011-017-003	1R1			ACC.		100%MT

AFTER B-CWR228
BLANK

EXAMINED BY 主探: Cai Linzin REVIEWED BY 审核: Wang Wei

LEVEL-II SIGN 签名 / DATE日期: 08.11.28 LEVEL-II SIGN / DATE日期: 08.11.28

质量经理 / QCM: [Signature] 用户CUSTOMER:

签字 SIGN / 日期 DATE: [Signature] 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-000187**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 07-Feb-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0192**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006 L/R
Joint fit-up	Coating	Other	Component:
Procedural	Procedural	Descriptor:	

Date the Non-Conformance Report was written: 16-Nov-2008**Description of Non-Conformance:**

The Quality Assurance Inspector discovered a 2 to 3mm in length crack indication overlooked by ZPMC Quality Control Inspectors. The crack indication was discovered while the QA was performing magnetic particle verification on weld # FB011-017-003 located on the FB011-017 floor beam sub assembly. The Quality Assurance Inspector informed American Bridge/Fluor Quality Assurance Inspector Um Bin about the crack indication overlooked by ZPMC Quality Control Inspectors. Mr. Bin and ZPMC Quality Control Inspector Wen Peng agreed with the Quality Assurance Inspector that the crack indication was overlooked by ZPMC Quality Control Inspectors. The Quality Assurance Inspector observed ZPMC personnel removed an area 8mm in depth and 65mm in length of filler metal by grinding in an effort to remove the indication discovered by the Quality Assurance Inspector. ZPMC Quality Control Inspector Wen Peng informed the Quality Assurance Inspector ZPMC personnel performed magnetic particle testing on the ground area, revealing the crack indication is a sub surface indication. Mr. Peng informed the Quality Assurance Inspector a critical weld repair will be issued prior to welding the repair.

Contractor's proposal to correct the problem:

ZPMC NDT technician re-inspected the location and found the indications. ZPMC welders performed weld repairs. ZPMC NDT technician performed MT and VT inspection and found the welds acceptable. The MT technicians who failed to detect the indications also received additional training.

Corrective action taken:

ZPMC welders performed weld repairs. The MT and VT result shows that the weld is acceptable. The MT technicians who failed to detect the indications also received additional training.

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

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

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 Eric Tsang, +86 150.0042.2372, who represents the Office of Structural Materials for your project.

Inspected By:	Tsang, Eric	Quality Assurance Inspector
Reviewed By:	Wahbeh, Mazen	QA Reviewer
