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-000577
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 01-Jan-2010
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0550

Type of problem:

Welding	☑	**Concrete**	☐	**Other**	☐	
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☐	**Component:** Crossbeam CB11
Procedural	☑	**Procedural**	☐	**Description:**		

Reference Description: Missed MT Indications by QC, Crossbeam CB11, welds CB202G-029-087 and CB202G-031-180

Description of Non-Conformance:

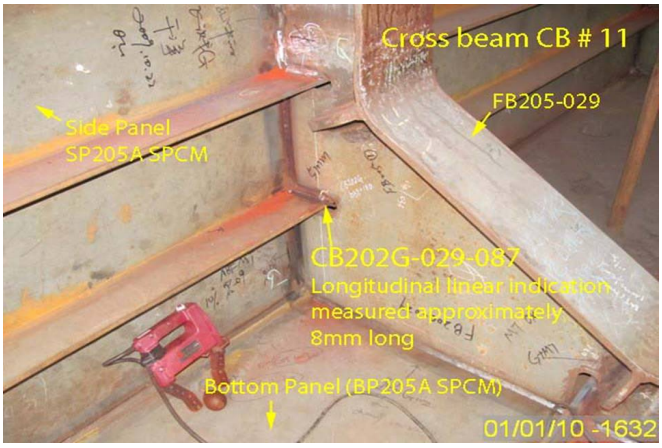
During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder (OBG) Crossbeam CB11, the Quality Assurance Inspector (QA) discovered the following issue:

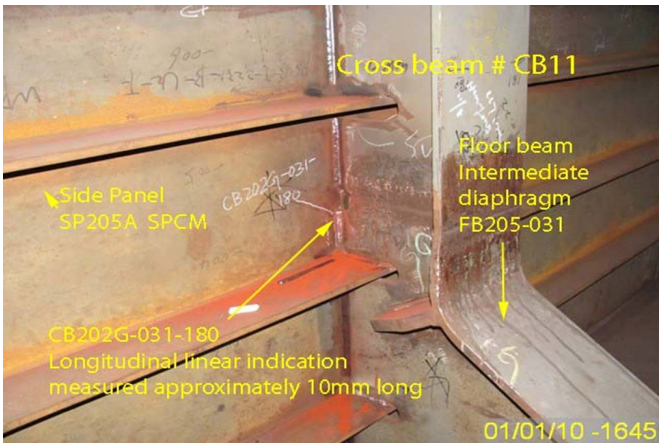
-Two (2) longitudinal linear indications measuring approximately 10mm and 8mm in length.

-The welds are identified as: CB202G-029-087 (8 mm) and CB202G-031-180 (10 mm).
-Weld CB202G-029-087 is a horizontal Fillet Weld joining the Side Panel (SP205A) Seismic Performance Critical Member (SPCM) stiffener connecting to the Floor Beam Intermediate Diaphragm (FB205-029).
-Weld CB202G-031-180 is a vertical Fillet Weld joining the Side Panel (SP205A) SPCM stiffener connecting to the Floor Beam Intermediate Diaphragm (FB205-031).
-The OBG Crossbeam CB11 is located at west side of bay 14.
-The Notice of Witness Inspection Number (NWIT) is 004973. The indications are located inside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. ZPMC's QC personnel are required to perform hundred (100%) percent MT inspection of these welds.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)





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."

AWS D1.5 (02) Section 6.26.2 – "Welds that are subject to MT in addition to visual inspection shall have no cracks."

Who discovered the problem: Dhanasingh Sukanthan
Name of individual from Contractor notified: Cao Haizhou
Time and method of notification: 1645 hours, 01/01/10, Verbal
Name of Caltrans Engineer notified: Bill Howe
Time and method of notification: 1830 hours, 01-01-10, Verbal
QC Inspector's Name: Lay Tao
Was QC Inspector aware of the problem: ☐ **Yes** ☑ **No**
Contractor's proposal to correct the problem:

Comments:

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

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, 15000422372, 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
333 Burma Road
Oakland CA 94607
Tel: Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To:	AMERICAN BRIDGE/FLUOR, A JV 375 BURMA ROAD OAKLAND CA 95607	**Date:**	02-Jan-2010
		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:**	05.03.06-000540
Subject:	NCR No. ZPMC-0550		

Reference Description: Missed MT Indications by QC, Crossbeam CB11, welds CB202G-029-087 and CB202G-031-180

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: Xbeam **Lift:** 09

Remarks:

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder (OBG) Crossbeam CB11, the Quality Assurance Inspector (QA) discovered the following issue:

-Two (2) longitudinal linear indications measuring approximately 10mm and 8mm in length.

-The welds are identified as: CB202G-029-087 (8 mm) and CB202G-031-180 (10 mm).
-Weld CB202G-029-087 is a horizontal Fillet Weld joining the Side Panel (SP205A) Seismic Performance Critical Member (SPCM) stiffener connecting to the Floor Beam Intermediate Diaphragm (FB205-029).
-Weld CB202G-031-180 is a vertical Fillet Weld joining the Side Panel (SP205A) SPCM stiffener connecting to the Floor Beam Intermediate Diaphragm (FB205-031).
-The OBG Crossbeam CB11 is located at west side of bay 14.
-The Notice of Witness Inspection Number (NWIT) is 004973. The indications are located inside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. ZPMC's QC personnel are required to perform hundred (100%) percent MT inspection of these welds.

Action Required and/or Action Taken:

Submit a repair procedure to the engineer for approval. Ensure the MT technician that missed these indications is trained and equiped in a manner so these indications are not missed in the future. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Bill Howe Sr. Transportation Engineer

Attachments: ZPMC-0550

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao

File: 05.03.06

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: 05.03.06-000540

Subject: NCR No. ZPMC-0550

Dated: **18-Jan-2010**

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

Job Name: SAS Superstructure

Document No.: **ABF-NPR-000502 Rev: 00**

Contractor's Proposed Resolution:

Reference Resolution: As a means of preventing future occurrences, the ABF QCM has performed refresher MT training. See attached MT training agenda and attendance roster.

As it is necessary to respond to the NCR with a proposed plan of action, ABF is doing so without all of the repair documentation at this time. As a means of preventing future occurrences, the ABF QCM has performed refresher MT training. See attached MT training agenda and attendance roster. The ABF QCM has been discussing missed MT indications with the ZPMC QCM and related NDT supervisory personnel. The ZPMC level III is in the process of assessing personnel, techniques and equipment. Preliminary findings have resulted in ZPMC taking immediate action by performing 100% overchecks of the previously tested areas beginning the week of 18 January 09 as a means of preventing future NCR's for missed indications. ABF has purchased powder dispensers for all the ZPMC MT technicians as a means to help control the amount of powder applied during MT testing. ZPMC requests this NCR be placed in the Approved Action Pending status category until such time that all the repair documents have been assembled and submitted.

Submitted by: Lawton, Steve

Attachment(s): ABF-NPR-000502R00;

Caltrans' comments:

Status: AAP

Date: 25-Jan-2010

The preventative measures taken by the QCM and the proposed resolution for closing NCR submitted by the contractor are acceptable. The NCR will be closed upon completion of the repair and review of the repair documents by the Engineer when submitted by the contractor.

Submitted by: Chao, Ching

Date: 25-Jan-2010

Attachment(s):

Tool Box Training Agenda

Subject: MT Techniques

Reason for Training: Several CT NCR's of indications missed during ZPMC NDT inspection.

1. Safety

a. Safety Glasses
b. Gloves (if required)
c. Knee Pads
d. Electrical shock

2. Tools

a. Lighting
b. MT Powder. Red for ambient, Yellow for High Temperature.
c. Powder Bulb
d. Powder Blower
e. MT Yoke Adequate working condition
f. Pie Gage

3. Inspection Techniques

a. Lighting
b. Position of body (distance of eyes to the weld surface)
c. Application of Powder removal of Powder
d. Continuous method
e. Two directions
f. Both sides of weld
g. Clean and dry surface

ZPMC

教育培训纪录

培训编号：MT-22-Dec-09

培训内容：	MT Techniques
培训对像：	项目质检
授课人员：	Steve Lawton
培训类型：	内部培训
培训时间：	22-Dec-09 5:00 pm
计划培训地点：	zpmc QC office

人员签到：

姓名	部门	姓名	部门
苏伟 Suwei	电焊桥	狄坤伦 Di Kunlun	钢桥
孙工 SunGongdang	钢结构	蔡新鑫 CaiXinxin	钢桥
徐海 XuHai	钢桥	傅志强 Fuzhiqiang	钢桥
卞源源 BianYuanyuan	钢桥	顾云刚 GuYunnu	钢桥
许兵 XuBing	钢桥	金建廷 Jinjianting	钢桥MT
李振华 Lizhenhua	钢桥	常芳杰 ChangFangjie	钢结
李帅阳 LiXiuYang	QA	袁俊 YuanJun	钢桥
王威 Wangwei	钢桥	刘章敏 LiuZhangmin	
斯林 siLin	钢桥MT	徐华祥 XuHuaxiang	钢桥
丁阿成 DingAchang	钢桥MT	周东运 ZhongDongyun	钢桥
贺佳佳 HeJiajia	钢桥	赵成刚 ZhaoChenggang	钢桥
黄瑾 Huangjin	钢桥	孙工丁 SunGongdang	钢桥
李黎明 LiLiming	钢桥	徐辉 XuHui	刘宏斌 LiuHongbin
李昌涛 Lichangtao			

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: 05.03.06-000540

Subject: NCR No. ZPMC-0550

Dated: **17-May-2010**

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

Job Name: SAS Superstructure

Document No.: **ABF-NPR-000502 Rev: 01**

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has repaired the indications referenced in the NCR and is providing the NDT report to show that the weld is now acceptable. Based on this ZPMC requests closure of this NCR.

ZPMC has repaired the indications referenced in the NCR and is providing the NDT report to show that the weld is now acceptable. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000502R01;

Caltrans' comments:

Status: CLO

Date: 23-May-2010

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0550 is closed.

Submitted by: Eagen, Sean

Date: 23-May-2010

Attachment(s):

No. B-756

LETTER OF RESPONSE

TO: American Bridge/Flour
DATE: 2010-5-13
REGARDING: NCR-000577(ZPMC-0550) NCR-000589(ZPMC-0562)
NCR-000708(ZPMC-0675) NCR-000729(ZPMC-0692)

ZPMC is providing the NDT records show these indications have been removed and repaired and are acceptable now. Based on this, ZPMC is requesting closure of these NCRs.

ATTACHMENT:
NCR-000577(ZPMC-0550)
B787-MT-17495 R1
B787-MT-22807 R1
NCR-000589(ZPMC-0562)
B787-MT-22772 R1
NCR-000708(ZPMC-0675)
B787-MT-21930 R1
NCR-000729(ZPMC-0692)
B787-MT-22769 R1

5/17/10

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

NON-CONFORMANCE REPORT TRANSMITTAL

To:	AMERICAN BRIDGE/FLUOR, A JV 375 BURMA ROAD OAKLAND CA 95607	**Date:**	02-Jan-2010
		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:**	05.03.06-000540
Subject:	NCR No. ZPMC-0550		

Reference Description: Missed MT Indications by QC, Crossbeam CB11, welds CB202G-029-087 and CB202G-031-180

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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- ☐ Non-Conformance Resolved.

Material Location: Xbeam **Lift:** 09

Remarks:

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-Weld CB202G-031-180 is a vertical Fillet Weld joining the Side Panel (SP205A) SPCM stiffener connecting to the Floor Beam Intermediate Diaphragm (FB205-031).
-The OBG Crossbeam CB11 is located at west side of bay 14.
-The Notice of Witness Inspection Number (NWIT) is 004973. The indications are located inside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. ZPMC's QC personnel are required to perform hundred (100%) percent MT inspection of these welds.

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Transmitted by: Bill Howe Sr. Transportation Engineer
Attachments: ZPMC-0550

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao

NCT :

(Continued Page 2 of 2)

File: 05.03.06

STATE OF CALIFORNIA--BUSINESS,TRANSPORTACTION AND HOUSING AGENCY Arnold Schwarzenegger, Governor

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-000577
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 01-Jan-2010
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0550

Type of problem:

Welding	☑	**Concrete**	☐	**Other**	☐	
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☐	**Component:** Crossbeam CB11
Procedural	☑	**Procedural**	☐	**Description:**		

Reference Description: Missed MT Indications by QC, Crossbeam CB11, welds CB202G-029-087 and CB202G-031-180

Description of Non-Conformance:

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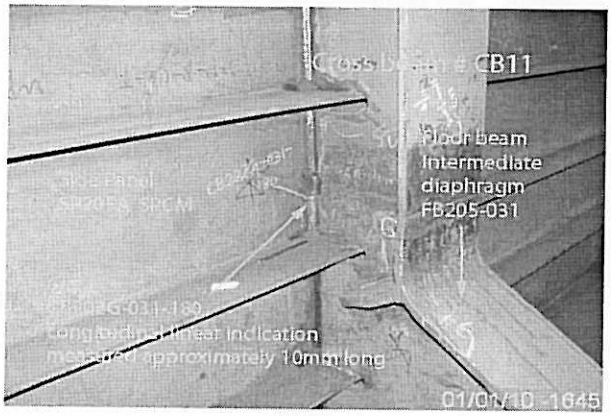
QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



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AWS D1.5 (02) Section 6.26.2 – "Welds that are subject to MT in addition to visual inspection shall have no cracks."

Who discovered the problem: Dhanasingh Sukanthan
Name of individual from Contractor notified: Cao Haizhou
Time and method of notification: 1645 hours, 01/01/10, Verbal
Name of Caltrans Engineer notified: Bill Howe
Time and method of notification: 1830 hours, 01-01-10, Verbal
QC Inspector's Name: Lay Tao
Was QC Inspector aware of the problem: ☐ **Yes** ☑ **No**
Contractor's proposal to correct the problem:

Comments:

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

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, 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Guest,Skyler	SMR
Reviewed By:	Wahbeh,Mazen	SMR

ZPMC

REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-17495R1	DATE日期 2010.01.08	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:	CB202G CB11 CROSS 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. 28ST ,2010
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 □ CASTING 铸件 □ FORGING 锻造	Material & thickness 母材,厚度	A709M-345T2/F2-X 14mm
WELDING PROCESS 焊接方法	SMAW	TYPE OF JOINT 焊缝类型	CORNER 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			
CB202G-029-087	1R1			ACC.		100%MT
AFTER B-CWR1030						
BLANK						

EXAMINED BY主探 Chang Fangjie LEVEL - II SIGN 签名 / DATE日期	REVIEWED BY 审核 LEVEL-II SIGN / DATE日期
质量经理 / QCM 签字 SIGN / 日期 DATE	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

ZPMC

REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-22807R1	DATE日期 2010.05.16	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:	CB202G CB11 CROSS BEAM	CALTRANS CONTRACT NO.: 加州工程编号	04-0120F4

REFERENCING CODE 参考规范编码	ACCEPTANCE STANDARD 接受标准	PROCEDURE NO. 程序编号	CALIBRATION DUE DATE 仪器校正有效期
AWS D1.5-2002	AWS D1.5-2002	ZPQC-MT-01	Dec. 28ST ,2010

EQUIPMENT 设备	MANUFACTURER 制造商	MODEL NO. 样式编号	SERIAL NO. 连续编号
MT YOKE	PARKER	B310S	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 ☐ CASTING 铸件 ☐ FORGING 锻造	Material & thickness 母材,厚度	A709M-345F2-X 12/14mm
WELDING PROCESS 焊接方法	SMAW	TYPE OF JOINT 焊缝类型	CORNER 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			
CB202G-031-180	1R1			ACC.		100%MT
AFTER B-CWR1511 REV0						
BLANK						

EXAMINED BY主探	REVIEWED BY 审核
Ding a cheng Ding A cheng 20/0.05.16	Si Wei 20/0.05.16
LEVEL - II SIGN 签名 / DATE日期	LEVEL-II SIGN / DATE日期
质量经理 / QCM	用户CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

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

NON-CONFORMANCE REPORT TRANSMITTAL

To:	AMERICAN BRIDGE/FLUOR, A JV 375 BURMA ROAD OAKLAND CA 95607	**Date:**	05-Jan-2010
		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:**	05.03.06-000552
Subject:	NCR No. ZPMC-0562		

Reference Description: Base Metal linear indication discovered with MT after ZPMC had tested and accepted this Temporary Attachment removal area

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:** 08

Remarks:

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on OBG Corner Assembly 8BE, this Quality Assurance Inspector (QA) discovered the following issue:

-One (1) linear indication that measured approximately 10mm in length.

-The linear indication was discovered in the base metal at SP579A (PL1043A Exterior).

-The adjacent weld is identified as: SEG046A-002

-This weld joins SP579A (PL1043A) to SP539A (PL1042A).

-This base metal linear indication was located in a temporary attachment removal area.

-The OBG Segment 8BE is located in the outside yard, south side of the Bay14.

The Notice of Witness Inspection Number (NWIT) is 004978. The indication is located inside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMCs QC personnel are required to perform 100% Magnetic particle inspection of this weld.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences. Missed MT indications are a chronic issue. Provide the required training and equipment necessary so the ZPMC MT technician does not miss this type of indication in the future. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Bill Howe Sr. Transportation Engineer
Attachments: ZPMC-0562

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, 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-000589
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 03-Jan-2010
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0562

Type of problem:

Welding	☐	**Concrete**	☐	**Other**	☑	
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☑	**Component:** Segment 8BE Side Panel
Procedural	☐	**Procedural**	☐	**Description:** Missed MT indication by QC		

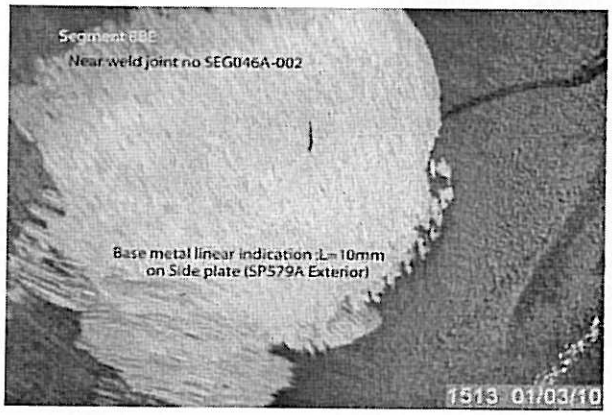
Reference Description: Base Metal linear indication discovered with MT after ZPMC had tested and accepted this Temporary Attachment removal area in Segment 8BE Side Panel

Description of Non-Conformance:

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on OBG Corner Assembly 8BE, this Quality Assurance Inspector (QA) discovered the following issue:

-One (1) linear indication that measured approximately 10mm in length.
-The linear indication was discovered in the base metal at SP579A (PL1043A Exterior).
-The adjacent weld is identified as: SEG046A-002
-This weld joins SP579A (PL1043A) to SP539A (PL1042A).
-This base metal linear indication was located in a temporary attachment removal area.
-The OBG Segment 8BE is located in the outside yard, south side of the Bay14.

The Notice of Witness Inspection Number (NWIT) is 004978. The indication is located inside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMCs QC personnel are required to perform 100% Magnetic particle inspection of this weld.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:
AWS D1.5 2002 Section3.3.8: "Temporary Welds, removal of temporary welds shall conform to section 3.3.7. 4."

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: Chandra Sudalaimuthu
Name of individual from Contractor notified: Man Kit Lee
Time and method of notification: 1530 hours, 01-03-10, Verbal
Name of Caltrans Engineer notified: Bill Howe
Time and method of notification: 2230 hours, 01-03-10, Email
QC Inspector's Name: Wang Xian Ping
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, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

Inspected By:	Carreon,Albert	Lead Reviewer/Task Leader
Reviewed By:	Wahbeh,Mazen	SMR

ZPMC

REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-22772R1	DATE日期 2010.05.16	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:	SEG046A 8BE LONGITUDINAL DIAPHRAGM	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. 28ST ,2010
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 ☐ CASTING 铸件 ☐ FORGING 锻造	Material & thickness 母材,厚度	A709M-345 16mm
WELDING PROCESS 焊接方法	SMAW	TYPE OF JOINT 焊缝类型	BUTT

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			
SEG046A-002	1R1			ACC.		100%MT
AFTER B-CWR1515 REV0						
BLANK						

EXAMINED BY主探 Ding a cheng Ding Acheng 20/0.05.16 LEVEL - II SIGN 签名 / DATE日期	REVIEWED BY 审核 SUWei 20/0.05.16 LEVEL-II SIGN / DATE日期
质量经理 / QCM 签字 SIGN / 日期 DATE	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

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:**	09-Apr-2010
		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:**	05.03.06-000665
Subject:	NCR No. ZPMC-0675		

Reference Description: Missed MT Indications by QC on OBG Segment 9CE Deck Panel to Diaphragm 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: OBG **Lift:** 09

Remarks:

During the Quality Assurance (QA) Magnetic Particle Testing (MT) review of welds located on Segment 9CE, this QA Inspector discovered the following issues:

-One (1) Transverse linear indication (crack) measuring approximately 12 mm in length.

-One (1) Longitudinal linear indication (crack) measuring approximately 20 mm in length.

-The weld is identified as: DP448-001-030 @ Panel Point-079.

-The weld is a Fillet Weld type joining DP448 to Deck Panel Diaphragm plate X1C.

-The OBG 9CE segment is located at the back side of Bay # 13.

The Notice of Witness Inspection Number (NWIT) is 005476. The indication is located inside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. ZPMC's QC personnel are required to perform twenty five (25%) percent MT inspection of this weld.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Sean Eagen Transportation Engineer

Attachments: ZPMC-0675

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao, Bill Casey

File: 05.03.06

STATE OF CALIFORNIA--BUSINESS,TRANSPORTACTION AND HOUSING AGENCY Arnold Schwarzenegger, Governor

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-000708
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 08-Apr-2010
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0675

Type of problem:

Welding	**Concrete**	**Other**	
Welding	**Curing**	**Procedural**	**Bridge No:** 34-0006
Joint fit-up	**Coating**	**Other**	**Component:** Segment 9CE Deck Panel to Diaphragm
Procedural	**Procedural**	**Description:** Missed MT indication by QC	

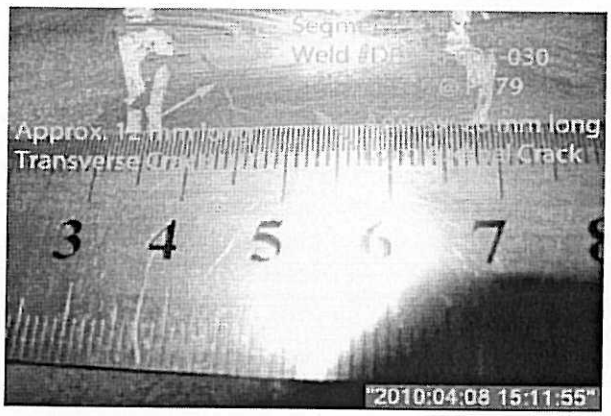
Reference Description: Missed MT Indications by QC on OBG Segment 9CE Deck Panel to Diaphragm Weld

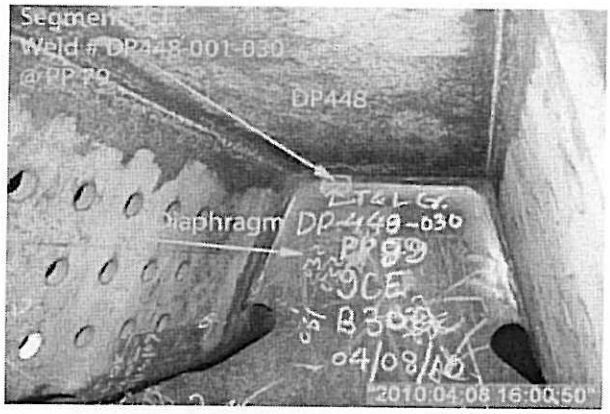
Description of Non-Conformance:

During the Quality Assurance (QA) Magnetic Particle Testing (MT) review of welds located on Segment 9CE, this QA Inspector discovered the following issues:

-One (1) Transverse linear indication (crack) measuring approximately 12 mm in length.
-One (1) Longitudinal linear indication (crack) measuring approximately 20 mm in length.
-The weld is identified as: DP448-001-030 @ Panel Point-079.
-The weld is a Fillet Weld type joining DP448 to Deck Panel Diaphragm plate X1C.
-The OBG 9CE segment is located at the back side of Bay # 13.

The Notice of Witness Inspection Number (NWIT) is 005476. The indication is located inside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. ZPMC's QC personnel are required to perform twenty five (25%) percent MT inspection of this weld.





QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

-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."

-AWS D1.5 (02) Section 6.26.2 – "Welds that are subject to MT in addition to visual inspection shall have no cracks.

Who discovered the problem: Vikram Singh
Name of individual from Contractor notified: Peter Shaw
Time and method of notification: 1700 hours, 04/08/10, Verbal
Name of Caltrans Engineer notified: Sean Eagen
Time and method of notification: 0830 hours, 04/09/10, Verbal
QC Inspector's Name: Zhong Wei
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, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

Inspected By:	Tsang,Eric	SMR
Reviewed By:	Wahbeh,Mazen	SMR

ZPMC

REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

EPORT NO. 报告编号 B787-MT-21930R1	DATE日期 2010.05.16	PAGE OF页码 1/1	Revision No: 0

ROJECT NO. 程编号:	ZP06-787	CONTRACTOR: 用 户:	CALTRANS
RAWING NO. 号:	DP448 9CE DECK PLATE U-RIB	CALTRANS CONTRACT NO.: 加州工程编号	04-0120F4
EFERENCING CODE 考规范编码	ACCEPTANCE STANDARD 接受标准	PROCEDURE NO. 程序编号	CALIBRATION DUE DATE 仪器校正有效期
WS D1.5-2002	AWS D1.5-2002	ZPQC-MT-01	Dec. 28ST ,2010
QUIPMENT 设备	MANUFACTURER 制造商	MODEL NO. 样式编号	SERIAL NO. 连续编号
T YOKE	PARKER	B310S	5395 5617 5620
AGNETIZING METHOD 化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
ARTICLE TYPE 粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70～150mm
ATERIAL TO BE AMINED 测材料	√ WELDING 焊接件 ☐ CASTING 铸件 ☐ FORGING 锻造	Material & thickness 母材,厚度	A709M-345T2-X 14mm
ELDING PROCESS 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 INDICATION 指示	TYPE 类型	LENGTH IN mm 长度	ACCEPT 接受	REJECT 拒收	REMARKS 备注
DP448-001-030	1R1			ACC.		100%MT
	2R1			ACC.		100%MT
AFTER B-CWR1395 REV0						
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AMINED BY主探 g Acheng Ding Acheng 2010.05.16 VEL - II SIGN 签名 / DATE日期	REVIEWED BY 审核 SU Wei 2010.05.16 LEVEL-II SIGN / DATE日期
证经理 / QCM	用户CUSTOMER
字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE

ORM# ZPQC-MT01)

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:**	06-May-2010
		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:**	05.03.06-000687
Subject:	NCR No. ZPMC-0692		

Reference Description: Missed MT Indication by QC in OBG Segment 7BW at Longitudinal Diaphragm to FB 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: OBG **Lift:** 07

Remarks:

During the Quality Assurance (QA) Magnetic Particle Testing (MT) review of base metal and welds located on Segment 7BW, this QA Inspector discovered the following issues:

-One (1) longitudinal linear crack measuring approximately 30 to 35mm in length.

-The weld is identified as SEG035C-006.

-The weld is a CJP T-joint joining the longitudinal diaphragm (Piece mark LD018-012) to floor beam web (Piece mark FB027-006).

-Location of this weld joint is at panel point PP52 Cross Beam side of the segment.

-The indication is clearly marked on the material.

-Lift 7 West is located in the OGB Trial Assembly Area.

The Notice of Witness Inspection Number (NWIT) is 005670. The indication is located inside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel and ABF QC personnel. According to the contract documents ZPMC Quality Control (QC) is required to perform 100% MT of this weld.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Sean Eagen Transportation Engineer

Attachments: ZPMC-0692

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao, Bill Casey

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-000729
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 05-May-2010
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0692

Type of problem:

Welding	☐	**Concrete**	☐	**Other**	☑	
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☑	**Component:** Segment 7BW Longitudinal Diaphragm
Procedural	☐	**Procedural**	☐			**Description:** Missed MT indication by QC

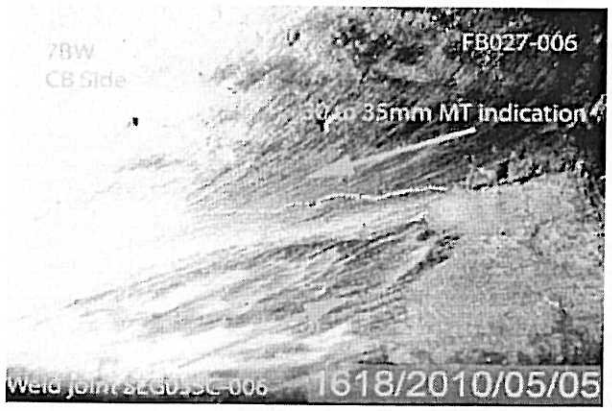
Reference Description: Missed MT Indication by QC in OBG Segment 7BW at Longitudinal Diaphragm to FB Weld

Description of Non-Conformance:

During the Quality Assurance (QA) Magnetic Particle Testing (MT) review of base metal and welds located on Segment 7BW, this QA Inspector discovered the following issues:

-One (1) longitudinal linear crack measuring approximately 30 to 35mm in length.
-The weld is identified as SEG035C-006.
-The weld is a CJP T-joint joining the longitudinal diaphragm (Piece mark LD018-012) to floor beam web (Piece mark FB027-006).
-Location of this weld joint is at panel point PP52 Cross Beam side of the segment.
-The indication is clearly marked on the material.
-Lift 7 West is located in the OGB Trial Assembly Area.

The Notice of Witness Inspection Number (NWIT) is 005670. The indication is located inside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel and ABF QC personnel. According to the contract documents ZPMC Quality Control (QC) is required to perform 100% MT of this weld.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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."

AWS D1.5 (02) Section 6.26.2:"Welds that are subject to MT in addition to visual inspection shall have no cracks.

Who discovered the problem: Joe Alaniz

Name of individual from Contractor notified: CK Chan

Time and method of notification: 1630 hours, 05/05/10, Verbal

Name of Caltrans Engineer notified: Sean Eagen

Time and method of notification: 1300 hours, 05/06/10, Verbal

QC Inspector's Name: Wang Lu

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:	Tsang,Eric	SMR
Reviewed By:	Wahbeh,Mazen	SMR

ZPMC

REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-22769R1	DATE日期 2010.05.16	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: SEG035C 7BW LONGITUDINAL DIAPHRAGM		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. 28ST ,2010
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 ☐ CASTING 铸件 ☐ FORGING 锻造	Material & thickness 母材,厚度	A709M-345 25/14mm
WELDING PROCESS 焊接方法	SMAW	TYPE OF JOINT 焊缝类型	CORNER 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			
SEG035C-006	1R1			ACC.		100%MT
AFTER B-CWR1519 REV0						
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EXAMINED BY主探 Ding a cheng Ding A Cheng 2010.05.16 LEVEL - II SIGN 签名 / DATE日期	REVIEWED BY 审核 SU Wei 2010.05.16 LEVEL-II SIGN / DATE日期
质量经理 / QCM 签字 SIGN / 日期 DATE	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

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 #: xx.25A

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

Location: Changxing Island, Shanghai, P.R. China **Report No:** NCS-000635
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 23-May-2010
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0550

Type of problem:

Welding	☑	**Concrete**	☐	**Other**	☐	
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☐	**Component:**
Procedural	☑	**Procedural**	☐	**Descripton:**		

Date the Non-Conformance Report was written: 01-Jan-2010

Description of Non-Conformance:

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder (OBG) Crossbeam CB11, the Quality Assurance Inspector (QA) discovered the following issue:

-Two (2) longitudinal linear indications measuring approximately 10mm and 8mm in length.

-The welds are identified as: CB202G-029-087 (8 mm) and CB202G-031-180 (10 mm).
-Weld CB202G-029-087 is a horizontal Fillet Weld joining the Side Panel (SP205A) Seismic Performance Critical Member (SPCM) stiffener connecting to the Floor Beam Intermediate Diaphragm (FB205-029).
-Weld CB202G-031-180 is a vertical Fillet Weld joining the Side Panel (SP205A) SPCM stiffener connecting to the Floor Beam Intermediate Diaphragm (FB205-031).
-The OBG Crossbeam CB11 is located at west side of bay 14.
-The Notice of Witness Inspection Number (NWIT) is 004973. The indications are located inside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. ZPMC's QC personnel are required to perform hundred (100%) percent MT inspection of these welds.

Contractor's proposal to correct the problem:

Repair said indications and perform NDT required to verify weld quality.

Corrective action taken:

Contractor submitted post repair NDT documentation verifying weld has been repaired and is in conformance with Contract weld quality requirements. Supplemental training was provided to NDT technicians as well.

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 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