

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, China**Report No:** NCR-000944**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 13-Dec-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0903**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Lift 14 Anchorage Bearing Blocks - APBB1
Procedural	Procedural	Description:	

Reference Description: Fabrication underway for Anchorage Bearing Blocks without QA Notification or Engineer's Authorization of Trial Casting

Description of Non-Conformance:

During Quality Assurance in-process observations of the fabrication of East Cable Anchorage Bearing Block Castings (APBB1) at Baoding Heavy Industry, this Caltrans Quality Assurance (QA) inspector discovered the following issues:

- Three (3) production lots were already cast without prior notification to the Engineer totaling (48)
- Three production lot (heat) numbers were as follows: 050, 057, and 060.
- No "Trial Casting" was accepted by the Engineer prior to beginning production castings.

OBG East Anchorage Bearing Blocks are identified as APBB1. Baoding Heavy Industry (BDZG) located in Hangzhou is currently in the process of fabricating (274) of these Bearing Blocks at the direction of ZPMC.

For further information, please see the attached pictures.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

Caltrans Special Provisions Section 10-1.59 Castings: “The Contractor shall provide the Engineer with work schedules, and expected readiness of work for quality assurance (QA) inspection by the Engineer.”

Caltrans Special Provisions Section 5-1.018 Foreign Fabrication: “When Department audit, inspection, or test witnessing is requested for facilities outside the United States, the Contractor shall provide 14 days notice to the Department, except when Department representatives are already on site.”

RFI 1644R3: “Item 5. It is acceptable to perform a trial casting in lieu of a finite element analysis. The model casting shall be accepted by the Engineer prior to beginning production casting. If the model is accepted, it may be used in the work”

Who discovered the problem: Wai Pau

Name of individual from Contractor notified: Steve Lawton

Time and method of notification: 11:00 hours, 12/13/2010, Verbal

Name of Caltrans Engineer notified: Stanley Ku

Time and method of notification: 11:15 hours, 12/15/2010, Email

QC Inspector's Name: Chen Jiangzhong (BDZG Technical Department)

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

Inspected By:	Devey,Jim	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: 14-Dec-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: 05.03.06-000900

Subject: NCR No. ZPMC-0903

Reference Description: Fabrication underway for Anchorage Bearing Blocks without QA Notification or Engineer's Authorization of Trial Casting

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: Casting **Lift:**

Remarks:

- During Quality Assurance in-process observations of the fabrication of East Cable Anchorage Bearing Block Castings (APBB1) at Baoding Heavy Industry, this Caltrans Quality Assurance (QA) inspector discovered the following issues:
- Three (3) production lots were already cast without prior notification to the Engineer totaling (48)
 - Three production lot (heat) numbers were as follows: 050, 057, and 060.
 - No "Trial Casting" was accepted by the Engineer prior to beginning production castings.

OBG East Anchorage Bearing Blocks are identified as APBB1. Baoding Heavy Industry (BDZG) located in Hangzhou is currently in the process of fabricating (274) of these Bearing Blocks at the direction of ZPMC.

For further information, please see the pictures attached in the NCR.

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: Ching Chao

Attachments: ZPMC-0903

cc: Peter Siegenthaler, Stanley Ku, Contract Files, Laraine Woo, Bill Casey

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000900

Subject: NCR No. ZPMC-0903

Dated: 14-Mar-2011

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000934 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: The trail bearing block that was cut apart has been tested in accordance with the attached TC-RFI and found to be acceptable in accordance with the applicable standards.

The trail bearing block that was cut apart has been tested in accordance with the attached TC-RFI and found to be acceptable in accordance with the applicable standards. In the future ZPMC will be sure that notification is provided before casting begins, to ensure this ABFJV will verify that the State is aware of upcoming casting. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000934R00;

Caltrans' comments:

Status: CLO

Date: 17-Mar-2011

The bearing blocks in question are being inspected according to the requirements as stated in TC-RFI 0290R0.

Submitted by: Chao, Ching

Attachment(s):

Date: 17-Mar-2011

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, China**Report No:** NCR-000944**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 13-Dec-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0903**Type of problem:**

Welding	Concrete	Other
Welding	Curing	Procedural
Joint fit-up	Coating	Other
Procedural	Procedural	Description:

Bridge No: 34-0006**Component:** Lift 14 Anchorage Bearing Blocks - APBB1

Reference Description: Fabrication underway for Anchorage Bearing Blocks without QA Notification or Engineer's Authorization of Trial Casting

Description of Non-Conformance:

During Quality Assurance in-process observations of the fabrication of East Cable Anchorage Bearing Block Castings (APBB1) at Baoding Heavy Industry, this Caltrans Quality Assurance (QA) inspector discovered the following issues:

- Three (3) production lots were already cast without prior notification to the Engineer totaling (48)
- Three production lot (heat) numbers were as follows: 050, 057, and 060.
- No "Trial Casting" was accepted by the Engineer prior to beginning production castings.

OBG East Anchorage Bearing Blocks are identified as APBB1. Baoding Heavy Industry (BDZG) located in Hangzhou is currently in the process of fabricating (274) of these Bearing Blocks at the direction of ZPMC.

For further information, please see the attached pictures.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

Caltrans Special Provisions Section 10-1.59 Castings: “The Contractor shall provide the Engineer with work schedules, and expected readiness of work for quality assurance (QA) inspection by the Engineer.”

Caltrans Special Provisions Section 5-1.018 Foreign Fabrication: “When Department audit, inspection, or test witnessing is requested for facilities outside the United States, the Contractor shall provide 14 days notice to the Department, except when Department representatives are already on site.”

RFI 1644R3: “Item 5. It is acceptable to perform a trial casting in lieu of a finite element analysis. The model casting shall be accepted by the Engineer prior to beginning production casting. If the model is accepted, it may be used in the work”

Who discovered the problem: Wai Pau

Name of individual from Contractor notified: Steve Lawton

Time and method of notification: 11:00 hours, 12/13/2010, Verbal

Name of Caltrans Engineer notified: Stanley Ku

Time and method of notification: 11:15 hours, 12/15/2010, Email

QC Inspector's Name: Chen Jiangzhong (BDZG Technical Department)

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

Inspected By:	Devey,Jim	SMR
----------------------	-----------	-----

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

From: Roman Granados [roman_granados@dot.ca.gov]
Sent: Wednesday, January 12, 2011 9:34 AM
To: Steve Lawton; Joshua Ishibashi
Cc: Chris Havel; jdevey@sasbridge.com; jsimonis@sasbridge.com; Gang Jiao; swichman@abfjv.com; Gene Rosamilia; zhu yin; Aaron Prchlik; Victor Altamirano; Marcos McManus; cchao; Stanley Ku; etsang@sasbridge.com
Subject: Re: Fwd: TC RFI for Bearing Block Acceptance Ref RFI 1644 (CT response)
Attachments: ABF-RFI-001644R03 Response.pdf

Steve/Josh,

The Department agrees to accept a destructive test of a bearing block that passes the following inspection criteria:

For each cut section of the bearing block (8 total),

- 1) Visually examine 100% all surfaces such that they are free of adhering sand, scale, cracks, shrinkage, unfused chills and hot tears and meet ASTM A802 Level III Designation.
- 2) All surfaces shall be examined by wet magnetic particle method to ASTM E709 and shall be free of voids or other discontinuities not exceeding:
 - a. One discontinuity within a radius of 150mm that has a diameter not exceeding 3mm.
 - b. A maximum depth of one half of the maximum diameter.
 - c. A generally rounded shape with no sharp corners.
 - d. Linear indications defined as having a ratio of maximum to minimum dimensions greater than 3, tears and cracks are not permitted. (Note: Indications less than 3mm for Level 1 Zones and 6mm elsewhere may be disregarded).

Thanks,
Roman M. Granados
(510) 622-5193 - office
(510) 714-7049 - cell
158-2142-3943 - China cell

James Devey
<jdevey@sasbridge.com>
To
Roman Granados
01/11/2011 09:34 AM
<roman_granados@dot.ca.gov>
cc
Subject
Fwd: TC RFI for Bearing Block
Acceptance Ref RFI 1644

----- Forwarded message -----
From: Steve Lawton <slawton@cn.abfjv.com>
Date: Thu, 30 Dec 2010 08:38:00 +0800
Subject: TC RFI for Bearing Block Acceptance Ref RFI 1644
To: Chris Havel <chris_havel@dot.ca.gov>, hayat.tazir@tylin.com, Mazen

Wahbeh <mwahbeh@sasbridge.com>, James Devey <jdevey@sasbridge.com>, Jim Simonis <jsimonis@sasbridge.com>, Eric Tsang <etsang@sasbridge.com>, Mahlon Lindenmuth <mlindenmuth@sasbridge.com>, Bill Casey <bill_casey@dot.ca.gov>
Cc: Sean Wichman <swichman@cn.abfjv.com>, Gang Jiao <gjiao@cn.abfjv.com>, Gene Rosamilia <grosamilia@cn.abfjv.com>, Peter Ferguson <pferguson@cn.abfjv.com>, Joshua Ishibashi <jishibashi@cn.abfjv.com>, Thomas Nilsson <tnilsson@cn.abfjv.com>

All

Reference RFI 1644 Item 5 response rev. 3.

This response requires Engineers Acceptance of the first casting poured in lieu of a "finite element complex heat flow analysis" as specified in the Special Provisions.

ABFJV recommends acceptance be based on a destructive test. This test is accomplished by sawing a Bearing Block casting in 8 pieces allowing the Engineer to visually inspect the internal structure of the Bearing Block Casting to determine if inherent defects have occurred due to Casting pouring technique and Casting Geometry.

Note: All these Castings are subsequently volumetrically Inspected using the Ultrasonic Testing Method as described in the Special Provisions.

Best Regards

Steve Lawton

Foreign Quality Assurance Manager

American Bridge Fluor Joint Venture

--

Confidentiality Notice:

The information contained in this e-mail and any attachments may be legally privileged and confidential. If you are not an intended recipient, you are hereby notified that any dissemination, distribution or copying of this e-mail and any attachments is strictly prohibited. If you received this e-mail in error, please notify the sender and permanently delete the e-mail and any attachments immediately. You should not retain, copy or use this e-mail or any attachment for any purpose, nor disclose all or any part of the contents to any other person.

(See attached file: ABF-RFI-001644R03 Response.pdf)



Visual Weld Inspection Report
焊缝目视检查报告

周数	175#
日期	2011-3-11

Caltrans Contract No. 加州合同编号	04-0120F4	Girder/梁:	NA
Project No.: 项目名称	San Francisco Oakland Bay Bridge 美国海湾大桥	Tower/塔:	OBC
Project No.: 项目编号:	ZP06-787	Quality Control Representative: 质检代表:	<i>Shenwei</i>
		CWI: 检验员:	<i>Mu Guangyong 07072031</i>

Quality Assurance Manager
 -Approval
 质量控制经理:
Mu Guangyong

Weld No. 缝编号	Welder 焊工识别号	Location 位置	Welding consumables 焊接材料	Undercut 咬边	Porosity 气孔	Over lap 焊缝	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
Bearing block-1A/B											ACC	NA	NA
Bearing block-2A/B											ACC	NA	NA
Bearing block-3A/B											ACC	NA	NA
Bearing block-4A/B											ACC	NA	NA
Bearing block-5A/B											ACC	NA	NA
Bearing block-6A/B											ACC	NA	NA
Bearing block-7A/B											ACC	NA	NA
Bearing block-8A/B											ACC	NA	NA

After root weld

After CWR or WRR No.:

After cover pass

After HSR No.:

Others

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



SHANGHAI ZHENHUA HEAVY INDUSTRY CO., LTD.

铸件磁粉检测报告

REPORT OF MAGNETIC PARTICLE EXAMINATION OF CASTING STEEL

产品名称
Product Bearing Block

工程编号
Project No. ZP06-787

构件图号
Drawing No. N/A

材料
Material A148

标准
Standard ASTM E-709

磁粉类型
Type of Magnetite Wet Magnetic
湿磁粉

磁化时间
Magnet Time 1-3 s

提升力
Lift Force > 4.5 kg

报告编号
Report No. MT-ZPMC-903-001

构件名称
Description Bearing block sample

构件编号
Component No. N/A

仪器型号
Equipment 派克B310S

操作规范
Specification of operation ZP06-MT-01 (Revision-2)

磁化方法
Magnetization Method 磁轭式连续法
Continuous magnetic yoke

磁化电流
Magnet Current AC

试片
Test Piece

零件编号 Part No.	规格 Dimension	缺陷 Discontinuity			结论 Result		备注 Remarks
		位置 Position	长度 Length	性质 Evaluation	接受 Accepted	拒收 Rejected	
B# 1-A					✓		
1-B					✓		
B# 2-A					✓		
2-B					✓		
B# 3-A					✓		
3-B					✓		
B# 4-A					✓		
4-B					✓		

检测示意图:

主探者 Inspected by	<u>李伟</u>	日期 Date	<u>2011.03.08</u>	审核 Checked by	<u>胡松林</u>	日期 Date	<u>2011.03.08</u>
---------------------	-----------	------------	-------------------	------------------	------------	------------	-------------------



SHANGHAIZHENHUA HEAVY INDUSTRY CO.,LTD.

铸件磁粉检测报告

REPORT OF MAGNETIC PARTICLE EXAMINATION OF CASTING STEEL

产品名称

Product

Bearing Block

报告编号

Report No.

MT-ZPMC-903-001

工程编号

Project No.

ZP06-787

构件名称

Description

Bearing block sample

构件图号

Drawing No.

N/A

构件编号

Component No.

N/A

材料

Material

A148

仪器型号

Equipment

派克B310S

标准

Standard

ASTM E-709

操作规范

Specification of operation

ZPAC-MT-01 (Revision 2)

磁粉类型

Type of Magnetite

Wet Magnetic
湿磁粉

磁化方法

Magnetization Method

磁轭式连续法
Continuous magnetic yoke

磁化时间

Magnet Time

1-3 s

磁化电流

Magnet Current

AC

提升力

Lift Force

> 4.5 Kg

试片

Test Piece

零件编号 Part No.	规格 Dimension	缺陷 Discontinuity			结论 Result		备注 Remarks
		位置 Position	长度 Length	性质 Evaluation	接受 Accepted	拒收 Rejected	
B [#] 5-A					✓		
5-B					✓		
B [#] 6-A					✓		
6-B					✓		
B [#] 7-A					✓		
7-B					✓		
B [#] 8-A					✓		
8-B					✓		

检测示意图;

主探者 Inspected by		日期 Date	2011.03.08	审核 Checked by		日期 Date	2011.03.08
---------------------	--	------------	------------	------------------	--	------------	------------

产品名称 Product	<u>Bearing Block</u>	报告编号 Report No.	<u>UT-ZP MC-903-001</u>
工程编号 Project No.	<u>ZP06-787</u>	零件名称 Description	<u>Bearing Block sample</u>
仪器型号 Equipment	<u>EPOCH-4B</u>	零件图号 Drawing No.	<u>N/A</u>
材料 Material	<u>A148</u>	仪器编号 Serial No.	<u>071565911</u>
热处理状态 Heat-treatment	<u>热处理后 After heat-treatment</u>	探头规格 Specification of Probe	<u>4MHz 6x20mm dual 2.5MHz Φ20mm 0° 2.5MHz 45° 18x18mm</u>
表面状态 Surface	<u>机加后 After machining</u>	CALIBRATION DUE DATE 仪器 校正有效期	<u>Dec. 28th, 2011</u>
灵敏度 Sensitivity	<u>DAC</u>	接受标准 Acceptance Standard	<u>A609-91(Table 2) ZPQC-UT-01 Revision:4</u>

零件编号 Part No.	规格 Dimension	Discontinuity 缺陷						Result 结论		备注 Remarks
		位置 Position	指示长度 Length in mm	面积 Area in mm ²	最大当量 Max Def	深度 Depth in mm	性质判别 Type	接受 Accept t	拒收 Reject	
B# 1-A								✓		
B 1-B								✓		
B# 2-A								✓		
2-B								✓		
B# 3-A								✓		

检测示意图:
Sketch of Scanning

产品名称 Product	<u>Bearing Block</u>	报告编号 Report No.	<u>UT-2AMC-903-001</u>
工程编号 Project No.	<u>2P06-787</u>	零件名称 Description	<u>Bearing block sample.</u>
仪器型号 Equipment	<u>EPOCH-4B</u>	零件图号 Drawing No.	<u>N/A</u>
材料 Material	<u>A148</u>	仪器编号 Serial No.	<u>071365911</u>
热处理状态 Heat-treatment	<u>热处理后 After heat-treatment</u>	探头规格 Specification of Probe	<u>4MHz 6x20mm dual 2.5MHz Φ20mm 2.5MHz 450 18x18mm</u>
表面状态 Surface	<u>机加后 After machining</u>	CALIBRATION DUE DATE 仪器 校正有效期	<u>Dec. 28th, 2011</u>
灵敏度 Sensitivity	<u>DAC</u>	接受标准 Acceptance Standard	<u>A609-91(Table 2) ZPQC-UT-01 Revision:4</u>

零件编号 Part No.	规格 Dimension	Discontinuity 缺陷						Result 结论		备注 Remarks
		位置 Position	指示长度 Length in mm	面积 Area in mm ²	最大当量 Max Def	深度 Depth in mm	性质判别 Type	接受 Accept	拒收 Reject	
3-B										
B ^{FD} 4-A										
4-B										
B ^{FD} 5-A										
5-B										

检测示意图:
Sketch of Scanning

主检者 Inspector	日期 Date	审核 Checked	日期 Date
<u>徐泽民</u>	<u>2011.12.28</u>	<u>徐泽民</u>	<u>2011.12.28</u>

产品名称 Product	<u>Bearing block</u>	报告编号 Report No.	<u>UT-ZPMC-103-001</u>
工程编号 Project No.	<u>2P06-787</u>	零件名称 Description	<u>Bearing block sample</u>
仪器型号 Equipment	<u>Epoch-4B</u>	零件图号 Drawing No.	<u>N/A</u>
材料 Material	<u>A148</u>	仪器编号 Serial No.	<u>071565911</u>
热处理状态 Heat-treatment	<u>热处理后 After treatment</u>	探头规格 Specification of Probe	<u>LM42 6x20mm dual 2.5MHz Φ20mm 2+M42 18x18mm L65</u>
表面状态 Surface	<u>机加后 After machining</u>	CALIBRATION DUE DATE 仪器 校正有效期	<u>DEC. 28st 2011</u>
灵敏度 Sensitivity	<u>DAC</u>	接受标准 Acceptance Standard	<u>A609-91 (Table 2) ZPQC-UT-01 Revision: 4</u>

零件编号 Part No.	规格 Dimension	Discontinuity 缺陷						Result 结论		备注 Remarks
		位置 Position	指示长度 Length in mm	面积 Area in mm ²	最大当量 Max Def	深度 Depth in mm	性质估判 Type	接受 Accept	拒收 Reject	
<u>B# 6-A</u>										
<u>6-B</u>										
<u>B# 7-A</u>										
<u>7-B</u>										
<u>B# 8-A</u>										

检测示意图:

Sketch of Scanning

检测者 Inspector	<u>徐海刚</u>	日期 Date	<u>2011.12.08</u>	审核 Reviewer	<u>徐海刚</u>	日期 Date	<u>2011.12.08</u>
------------------	------------	------------	-------------------	----------------	------------	------------	-------------------

产品名称 Product	<u>Bearing Block</u>	报告编号 Report No.	<u>UT-ZPMC-903-001</u>
工程编号 Project No.	<u>ZP06-787</u>	零件名称 Description	<u>Bearing Block sample</u>
仪器型号 Equipment	<u>EPOCH-413</u>	零件图号 Drawing No.	<u>N/A</u>
材料 Material	<u>A148</u>	仪器编号 Serial No.	<u>071565911</u>
热处理状态 Heat-treatment	<u>热处理后 After heat-treatment</u>	探头规格 Specification of Probe	<u>4MHz 6x20mm dual 2.5MHz Φ20mm 2.5MHz 18x18mm 45°</u>
表面状态 Surface	<u>机加后 After machining</u>	CALIBRATION DUE DATE 仪器 校正有效期	<u>Dec. 28st, 2011</u>
灵敏度 Sensitivity	<u>DAC</u>	接受标准 Acceptance Standard	<u>A609-91(Table 2) ZPQC-UT-01 Revision A</u>

零件编号 Part No.	规格 Dimension	Discontinuity 缺陷						Result 结论		备注 Remarks
		位置 Position	指示长度 Length in mm	面积 Area in mm ²	最大当量 Max Def	深度 Depth in mm	性质估判 Type	接受 Accep t	拒收 Reject	
<u>8-B</u>								✓		

检测示意图:
Sketch of Scanning

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, China**Report No:** NCS-000948**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 17-Mar-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0903**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: 13-Dec-2010**Description of Non-Conformance:**

During Quality Assurance in-process observations of the fabrication of East Cable Anchorage Bearing Block Castings (APBB1) at Baoding Heavy Industry, this Caltrans Quality Assurance (QA) inspector discovered the following issues:

- Three (3) production lots were already cast without prior notification to the Engineer totaling (48)
- Three production lot (heat) numbers were as follows: 050, 057, and 060.
- No "Trial Casting" was accepted by the Engineer prior to beginning production castings.

OBG East Anchorage Bearing Blocks are identified as APBB1. Baoding Heavy Industry (BDZG) located in Hangzhou is currently in the process of fabricating (274) of these Bearing Blocks at the direction of ZPMC.

For further information, please see the attached pictures.

Contractor's proposal to correct the problem:

The trial Bearing Block was cut apart according to the TC-RFI 290. Subsequent destructive test and UT proves the cast in question is acceptable. Contractor will ensure the Department is notified prior to further castings.

Corrective action taken:

The trial Bearing Block was cut apart according to the TC-RFI290. Destructive test and UT confirmed the castings are acceptable. Contractor committed to notify CT for future castings.

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

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Inspected By: Ng,Michael

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer
