

Bridge Factors Factual Report Attachment 26 – BPA Cracks Report No. 3 - Email from Mr. Jose Morales of BPA to Mr. Rodrigo Isaza of MCM dated March 13, 2018

Miami, FL

HWY18MH009

(21 pages)

Rafael Urdaneta

REPORT # 3

From: Jose Morales

Sent: Tuesday, March 13, 2018 10:59 AM

To: Rodrigo Isaza

Cc: Rafael Urdaneta; Maria Christina Acosta; Carlos Chapman; Ernie Hernandez; Pedro

Cortes

Subject: RE: FIU-UCPP - Stage 3 - Erection of Main Span

Rodrigo,

As discussed earlier, I recommend we monitor and document the growth of these cracks to determine if these are active and developing further or dormant.

Please let us know the outcome of the EOR analysis and course of action.

Sincerely,

Jose E. Morales, P.E. | Sr. Project Engineer



FIU BT-904 / Field Office

From: Rodrigo Isaza
Sent: Tuesday, March 13, 2018 7:51 AM

To: Jose Morales

Cc: Rafael Urdaneta ; Maria Christina Acosta ; Carlos

Chapman Ernie Hernandez ; Pedro Cortes

Subject: FW: FIU-UCPP - Stage 3 - Erection of Main Span

Jose,

As discussed yesterday, below please find email sent to FIGG regarding the cracks encountered on the deck diaphragm type II. We will advise your office as soon as a response is provided by the EOR. Thank you

RODRIGO ISAZA | Sr. Project Manager

MCM | 6201 SW 70th St., 2nd Floor, Miami, FL 33143 | www.mcm-us.com.

Please consider the environment before printing. A reminder from MCM, Building Excellence

From: Rodrigo Isaza

Sent: Monday, March 12, 2018 4:51 PM

To: Dempsey, Dwight

Cc: Hango, Erika N.; Ernie Hernandez; Pedro Cortes; Pate, Denney; 'Feliciano, Manuel'; Leon, Eddy D.; Hines, Franklin

Subject: RE: FIU-UCPP - Stage 3 - Erection of Main Span

Dwight,

Following our previous emails regarding the noted cracks, and as witnessed on site by FIGG as part of the movement/erection support, attached please find photos depicting the cracks developed prior and post the span 1 erection and/or distressing of truss members 2 & 11 (your team may have most of these pictures). It is our opinion that some of these cracks are rather large and/or of concern; therefore, please review and comment as promptly as possible and advise if there is a required course of action to remedy or address these right away.

Your immediate attention and response is required.

Thank you

RODRIGO ISAZA | Sr. Project Manager

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Please consider the environment before printing. A reminder from MCM, Building Excellence

From: Feliciano, Manuel

Sent: Wednesday, March 7, 2018 9:12 AM

To: Rodrigo Isaza

Cc: Dempsey, Dwight; Hango, Erika N.; Ernie Hernandez; Pedro Cortes; Pate, Denney

Subject: RE: FIU-UCPP - Stage 3 - Erection of Main Span

Rodrigo,

The grout will not be "non-shrinkage." The grout will be composed of a similar concrete mix as of the superstructure to match the appearance of the concrete.

In addition, the vertical PT bars in the pylon base need to be stressed in accordance with the response to VSL RFI-005.

Let me know if you have further questions.

Regards,

Manuel Feliciano, P.E.

FIGG

Regional Bridge Engineer

From: Rodrigo Isaza

Sent: Wednesday, March 07, 2018 7:42 AM

To: Feliciano, Manuel

Cc: Dempsey, Dwight Hango, Erika N. Ernie Hernandez

; Pedro Cortes ; Pate, Denney

Subject: RE: FIU-UCPP - Stage 3 - Erection of Main Span

Manuel,

We appreciate the quick response. See comments in green below. Thank you

RODRIGO ISAZA | Sr. Project Manager

MCM | 6201 SW 70th St., 2nd Floor, Miami, FL 33143 | www.mcm-us.com.

Please consider the environment before printing. A reminder from MCM, Building Excellence

From: Feliciano, Manuel

Sent: Tuesday, March 6, 2018 7:10 PM

To: Rodrigo Isaza

Cc: Dempsey, Dwight; Hango, Erika N.; Ernie Hernandez; Pedro Cortes; Pate, Denney

Subject: RE: FIU-UCPP - Stage 3 - Erection of Main Span

Rodrigo,

Please find our responses in red to your questions below:

Let me know if you have further questions.

Thank you,

Manuel Feliciano, P.E.

FIGG

Regional Bridge Engineer

From: Rodrigo Isaza

Sent: Tuesday, March 06, 2018 6:24 PM

To: Feliciano, Manuel

Cc: Dempsey, Dwight Hango, Erika N. Ernie Hernandez

; Pedro Cortes

Subject: FIU-UCPP - Stage 3 - Erection of Main Span

Manuel,

As we move into stage 3 with the erection on the main span, please confirm if the following items are to be performed immediately after the span has been erected. Otherwise, please advise if there is a specified time frame for these to occur.

- Truss member 2 & 11: Distressed (nuts to be left in place hand tied) and ducts to be grouted
 The PT bars in members 2 and 11 are only required for the temporary support condition during the movement
 of the span. Therefore, the PT bars can be distressed after span 1 is supported on the permanent supports
 (pylon and end bent 1). Ok. We presume it could occur at any time after the setting.
- Stress pylon vertical PT bars and grout
 Per Drawing B-109 (stage3), step 3 the vertical PT bars are stressed after the space between the precast section diaphragm and pylon base is grouted. Ok. We presume it could occur at any time after the setting.
- Grout space between precast section diaphragm and pylon base.
 See above response. Grout the space between the diaphragm and the pylon base prior to stressing the PT bars.
 Ok. we presume it could occur at any time after the setting. Otherwise, please indicate time frame. Also, advise as to which grout is to be used due to the TiO2 concrete.

In addition to the above, please advise if there are other tasks required within this stage.

Per drawing B-109 (stage 3), step 1 install bearing pads and shim plate at the pylon base. Understood.

Thank you

RODRIGO ISAZA | Sr. Project Manager
MCM | 6201 SW 70th St., 2nd Floor, Miami, FL 33143 | www.mcm-us.com.
Please consider the environment before printing. A reminder from MCM, Building Excellence

PHOTO 1: Diaphragm 2, Westside top view, crack

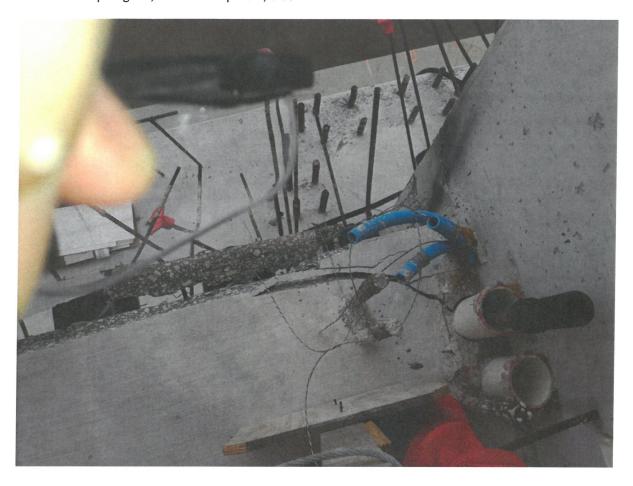


PHOTO 2: Truss 12, Westside hair cracks



PHOTO 3: Truss 11, Eastside cracks



PHOTO 4: Truss 11/12 crack

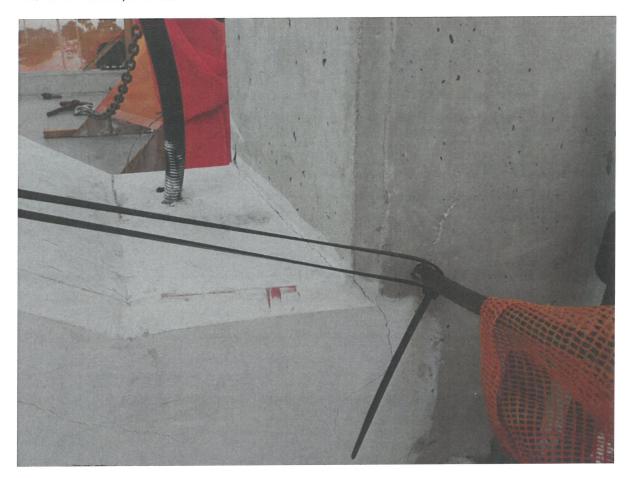


PHOTO 5: Diaphragm 2, Eastside top view crack



PHOTO 6: Diaphragm 2, Westside North view cracks

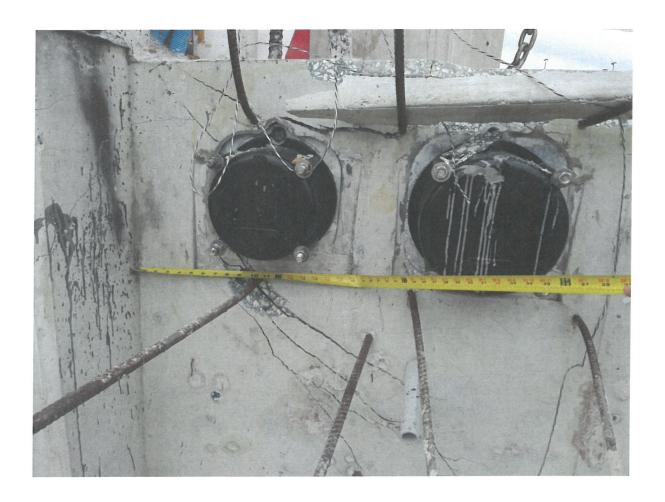


PHOTO 7: Diaphragm 2, Westside North view cracks

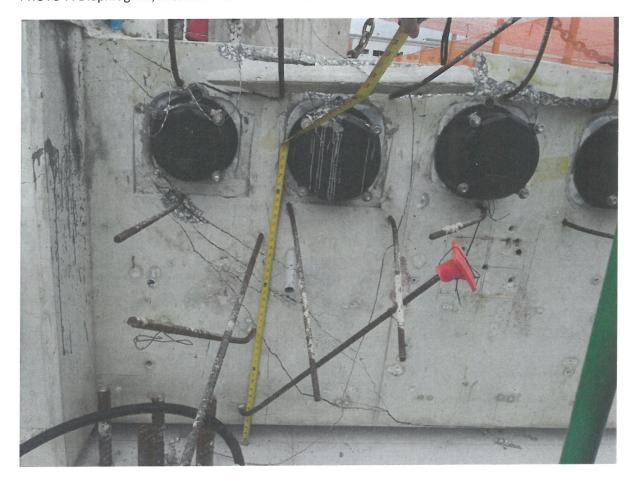


PHOTO 8: Truss 12, North view cracks

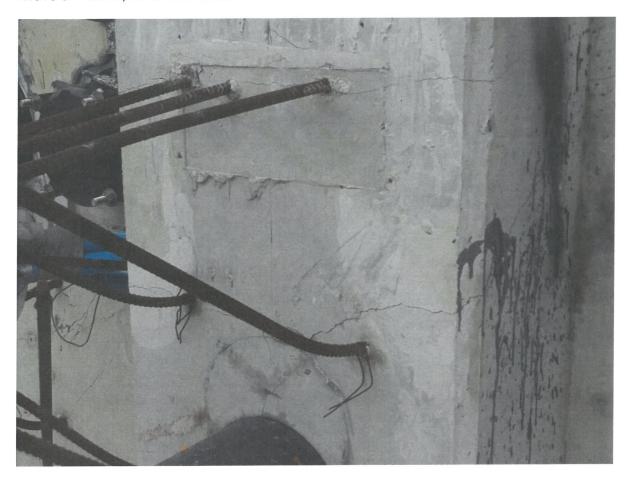


PHOTO 9: Diaphragm 2, Westside North view cracks



PHOTO 10: Diaphragm 2, Westside North view cracks



PHOTO 11: Diaphragm 2, Eastside North view cracks



PHOTO 12: Diaphragm 2, Eastside North view cracks

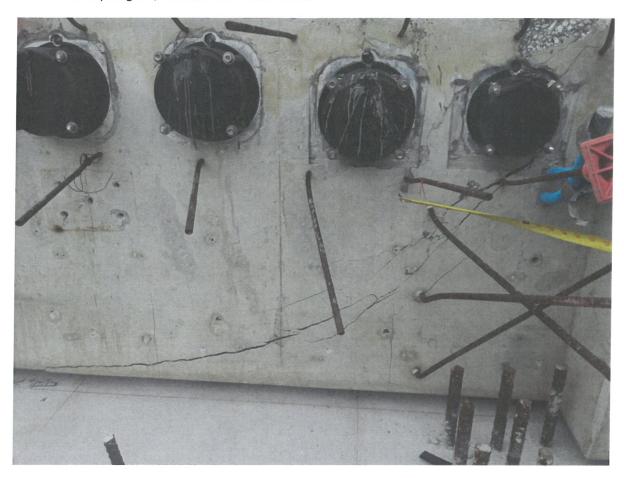


PHOTO 13: Diaphragm 2, Eastside North view cracks



PHOTO 14: Diaphragm 2, Eastside North view cracks



PHOTO 15: Diaphragm 2, Eastside Top view cracks



PHOTO 16: Diaphragm 2, Eastside Top/side view cracks

