

WITNESS INTERVIEW TRANSCRIPT Bolton Perez and Associates Miami, FL HWY18MH009

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UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

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PEDESTRIAN BRIDGE COLLAPSE

MIAMI, FLORIDA * Accident No.: HWY18MH009

MARCH 15, 2018

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Interview of: CARLOS CHAPMAN

Bolton Perez & Associates

Sweetwater City Hall Sweetwater, Florida

Wednesday, April 11, 2018

APPEARANCES:

KENNETH BRAGG, Accident Investigator National Transportation Safety Board

DAN WALSH, Senior Highway Accident Investigator National Transportation Safety Board

REGGIE HOLT, Senior Bridge Engineer Federal Highway Administration

JAKE PEREZ, Principal Bolton Perez and Associates

STEVEN BEFERA, Attorney Cole, Scott & Kissane (On behalf of Mr. Chapman and Bolton Perez)

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DAVID SAMPEDRO, Attorney
Panter, Panter and Sampedro
(On behalf of Mr. Chapman)

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1	<u>INTERVIEW</u>
2	(11:55 a.m.
3	MR. BRAGG: Today is Wednesday, April 11, 2018. It's about
4	11:55 a.m. and we are in the Sweetwater City Hall in Sweetwater,
5	Florida. And this interview is regarding the FIU bridge collapse
6	in Miami.
7	My name is Kenny Bragg. I'm an investigator in the Office of
8	Highway Safety with the National Transportation Safety Board.
9	Starting to my right?
10	MR. WALSH: Dan Walsh with the National Transportation Safety
11	Board.
12	MR. BRAGG: Sir, please say and spell your name, please?
13	MR. CHAPMAN: Carlos Chapman, C-a-r-l-o-s, Chapman, C-h-a-p-
14	n-a-n, and I work with Bolton Perez.
15	MR. BRAGG: Thank you.
16	MR. BEFERA: Steven Befera, B-e-f-e-r-a, Steven with a V.
17	I'm with Cole, Scott & Kissane attorneys in Miami, Florida. We
18	represent Mr. Chapman and Bolton Perez & Associates.
19	MR. SAMPEDRO: David Sampedro, S-a-m-p-e-d-r-o with the law
20	firm of Panter, Panter & Sampedro, represent Mr. Chapman
21	individually.
22	MR. PANTER: I'm Brett Panter with Panter, Panter & Sampedro,
23	also represent Mr. Chapman individually.
24	MR. PEREZ: Jake Perez with Bolton Perez & Associates. I'm a
25	principal.

- 1 MR. HOLT: Reggie Holt, Federal Highway.
- 2 MR. BRAGG: Okay. Okay, Mr. Chapman, I'm going to start off
- 3 just talking a little bit about your background.
- 4 INTERVIEW OF CARLOS CHAPMAN
- 5 BY MR. BRAGG:
- 6 Q. Who do you currently work for?
- 7 A. I work for Bolton Perez & Associates.
- 8 Q. And what position do you currently serve?
- 9 A. Right now I'm a senior inspector.
- 10 Q. How long have you been with BPA?
- 11 A. I've been 14 years and 2 months.
- 12 Q. And how long have you served in the position of senior
- 13 inspector?
- 14 A. Approximately a year plus.
- 15 Q. And prior to that time what position did you have?
- 16 A. A regular inspector.
- 17 Q. Just a regular inspector? And explain to me in laymen's
- 18 | terms what is -- what an inspector does.
- 19 A. Well, what an inspector does, we verify concrete, make sure
- 20 | we get the mixes done from DOT approved. Steel, we approve -- we
- 21 check the steel. We also make sure the contractor compacts and we
- 22 | take densities after a compaction. And we usually write a daily
- 23 | every -- at the end of the day for that day what was the progress
- 24 of that operation of the day for the contractor.
- 25 Q. Okay. And when did you become involved in the FIU bridge

- 1 project?
- 2 A. My first day was March 1st of 2017.
- 3 Q. And what has your role been primarily?
- 4 A. Just overseeing the plans to make sure that everything goes
- 5 accordingly as per plans and encompass with the FDOT.
- 6 Q. Okay. So let's talked about -- let's talk a little bit about
- 7 the day of the collapse. Just walk me through your -- through
- 8 | what happened that day leading up to the collapse.
- 9 A. Well, I usually get there at around -- before a little bit of
- 10 | 7:00 in the morning and I walk the jobsite, you know, to see what
- 11 | the contractors are doing. And I start writing down notes, little
- 12 | notes. I don't remember if I wrote notes that day.
- 13 And maybe like around 7:00 something I saw MCM and FIGG
- 14 | walking to the deck and that's when I text Mr. Jose Morales,
- 15 | telling him, "Hey, FIGG is on-site." And I just walk with them
- 16 but we didn't have no conversations. I just -- they was just
- 17 checking, you know, the cracks or -- and walking the deck.
- 18 Then from there we walked down on the bottom of Eighth Street
- 19 walking from south to north. And then a gentleman from FIGG, I
- 20 | forgot his name -- is it Denny, I believe. I don't know. I
- 21 | forgot his name. He went on the left to check, you know, outside
- 22 the bridge. I didn't go up with him.
- 23 Q. Okay.
- 24 A. So then after that we went to MCM's office, the trailer on-
- 25 site and there was a meeting concerning the cracks on north, you

- 1 know, with FIGG and MCM and all of us BPA employees. When the
- 2 | meeting was over, I remember my supervisor -- I was told to go up
- 3 there to the canopy just to observe whatever they were doing up
- 4 there, FIGG, and reporting this -- you know, try to report what
- 5 they were doing to Jose Morales. We were constantly in contact,
- 6 hey, you know, they're doing this, they're doing that, when it was
- 7 done, things like that.
- 8 And then from nowhere I believe -- I'm not sure, I think I
- 9 heard a snap, the bridge. And that's when my thing, you know,
- 10 just went blank. And I don't remember nothing else. I mean, I
- 11 know how I felt, but I don't know how I got some bruises from, you
- 12 know, my neck. I don't remember nothing.
- 13 Q. So when the collapse occurred, where were you standing?
- 14 A. On top of the bridge, on top of the canopy.
- 15 | Q. The top of the canopy? And you said you heard a snap?
- 16 A. I think -- yeah, I think I heard something go crack, you
- 17 know, like a boom. And then from there it's like a dream, like,
- 18 you know, just my whole -- everything went black and I don't
- 19 remember nothing. People are telling me what happened. People
- 20 | are telling that me I was talking to them. People in the
- 21 ambulance I was with, that's what he told me. I didn't even know
- 22 he was inside with me in the ambulance. An employee from MCM,
- 23 | Pedro Cortez, he was with me up there, too. He's a QC.
- 24 Q. Okay.
- 25 A. And I don't remember. All I know I was, you know, panicked,

- 1 crying and asking for my kids.
- 2 Q. Okay.
- 3 A. You know? And I don't remember nothing really.
- 4 MR. WALSH: Dan Walsh with NTSB.
- 5 BY DAN WALSH:
- 6 Q. Carlos, where were you standing on top of the canopy?
- 7 A. I was about maybe a foot, I don't know, like away from
- 8 blister number 11 where they were working. I was maybe, like,
- 9 from the gentleman to me, the distance. That's where I stand, you
- 10 know, from him to here, about 5, 7 feet away from there,
- 11 approximately. I'm really not sure.
- 12 Q. Were you observing the restressing that was being done to
- 13 | number 11?
- 14 A. I was observing, and they had a sequence that they were going
- 15 | -- I think they were going 12 times, right? So I was counting.
- 16 Whenever they would finish one they would go to number 2, then
- 17 back again to number 3, back again to number 4. That's when I was
- 18 calling Jose, "Jose, they went -- they on number 5. Jose, they
- 19 are on number 6." You know, "Jose, they're at number 8." And I
- 20 | think we -- I think it was number 10 that I called him and then
- 21 from nowhere -- I thought we were going to be completed. We were
- 22 done already. No, no, we've got like two more. I think that's
- 23 | what I said, two more, and then that's when I heard that snap.
- 24 And I just saw Pedro. I remember him. I saw Pedro from far
- 25 away and, you know, my whole, my whole life, you know, it just

- 1 | went just pshhh, like a circle, and then it went black. I
- 2 | couldn't see nothing. I don't remember nothing. I went -- they
- 3 say I went in shock, you know. It just blacked me out. And I
- 4 don't remember.
- 5 Q. Okay. And where was Jose standing when you --
- 6 A. Jose was underneath.
- 7 Q. -- were communicating?
- 8 A. Jose was underneath the canopy. He was on the deck. I don't
- 9 know where because I -- I know he was underneath. But I don't
- 10 know exactly where, you know, but he was underneath.
- 11 Q. Did Jose communicate any information to you regarding the
- 12 cracking at the base of number 11 during that communication?
- 13 A. No.
- 14 Q. And when you observed the restressing they -- you observed
- 15 that they were doing the top bar and the bottom bar and going back
- 16 and forth?
- 17 A. Yeah, they were going in it and then to number, you know,
- 18 there's two, right, like that coming out. They were stressing
- 19 one, then they would go again to this one, then they would walk to
- 20 this one, you know, back and forth, back and forth.
- 21 Q. Okay.
- 22 A. I saw that. I was just observing. I just saw that.
- 23 Q. Okay. Did you observe any cracks on the main span during
- 24 your inspection?
- 25 A. When I was up there in the canopy?

- 1 Q. Yes.
- 2 A. At the time of the accident?
- 3 Q. Yes.
- 4 A. No.
- 5 Q. Okay. Did you observe any cracks prior to being on the
- 6 canopy on the day of the collapse?
- 7 A. On the canopy, no.
- 8 O. Okay. What about on the deck at the --
- 9 A. At the deck, like I said, I saw -- I was walking with FIGG,
- 10 | two representatives, two gentlemen from FIGG and MCM. He was
- 11 | there, too. And we saw those cracks, I don't -- as you can see in
- 12 | the pictures. I don't know. There's pictures. That's what I
- 13 saw, the -- that were talked about in the meeting. That's the
- 14 only cracks that I saw.
- 15 Q. That's the only cracks that you --
- 16 A. I just --
- 17 Q. -- that you ever saw?
- 18 A. Yes, sir.
- 19 Q. Okay. Could you describe those cracks?
- 20 A. They were long. They were long. I know you could even, you
- 21 | know -- you know, somebody they could stick -- you could stick
- 22 your hands to it. It was pretty big.
- 23 Q. Yeah.
- 24 A. Yeah. And I know Jose had taken some pictures. He was the
- 25 one that was taking pictures and I believe he sent it to MCM or

- 1 emailed them before anything.
- 2 Q. Do you have an idea what the classification of those cracks
- 3 | were?
- 4 A. No.
- 5 Q. Were you present during the initial tensioning of the main
- 6 span that was done off --
- 7 A. No, because I was off. Mr. Alexis Molina, he was following
- 8 | them because he's with -- he's the one, you know, the post-
- 9 tensioning.
- 10 Q. So you were not -- it's -- you were not part of the
- 11 inspection of the structure when it was off-site and falsework was
- 12 underneath the main span?
- 13 A. Post-tensioning, no.
- 14 O. Not --
- 15 A. No.
- 16 Q. Okay. Not for the post-tensioning?
- 17 A. No, but prior the concrete was poured we checked steel. You
- 18 know, we make sure that everything was according to plans as
- 19 proposed. You know, when they were pouring the concrete, you
- 20 know, stuff like that, but the post-tensioning, no.
- 21 Q. So you were not on the jobsite at all when the structure was
- 22 off-site prior to the move?
- 23 A. No, I was on the jobsite, but I was doing other activities.
- 24 Q. You were doing other activities?
- 25 A. Yeah, yeah, yeah, yeah.

- 1 Q. Okay. Were you on the jobsite Saturday, February 24th? Do
- 2 you recall being on the jobsite?
- 3 A. Saturday?
- 4 Q. Saturday, February 24th.
- 5 A. Was that the --
- 6 Q. The reason why I'm asking is did you -- were you on the
- 7 | jobsite when there was a lot of loud popping noise, a loud popping
- 8 noise to -- that occurred on the main span?
- 9 A. Oh, no, no, no.
- 10 0. You don't recall that?
- 11 A. On a Saturday?
- 12 Q. Yes.
- 13 A. Hmm, no. Probably that was Alexis Molina was on-site if they
- 14 was doing post-tensioning. Yeah, he was there that day.
- 15 Q. Okay. You were not there on that day?
- 16 A. I don't remember. I don't --
- 17 Q. Okay.
- 18 A. -- think so.
- 19 Q. Did you recall talking with anyone about that loud popping
- 20 noise?
- 21 A. No. No.
- 22 Q. No discussion?
- 23 A. No.
- 24 Q. Okay. Going back to the day of the collapse and the
- 25 | restressing, was Mr. Molina there?

- 1 A. No, sir.
- 2 Q. He was not there. Were you present during the destressing of
- 3 the number 2 and number 11 bars after the move?
- 4 A. No. No.
- 5 Q. You weren't present --
- 6 A. No.
- 7 Q. -- for that? Okay. Did you generate any reports or take any
- 8 photographs of the cracking?
- 9 A. No. Jose Morales has pictures.
- 10 Q. Okay.
- 11 A. You know, since he was taking picture I was like, okay, let
- 12 him take pictures.
- 13 Q. But you yourself, did you take any photographs?
- 14 A. Of the day of the accident?
- 15 O. Or --
- 16 A. Of the canopy when I was on top?
- 17 Q. Right, or at any time -- any time did you take any
- 18 photographs of the cracks on the main span?
- 19 A. No, no. No, no.
- 20 Q. And did you generate any reports or send --
- 21 A. No, because like I said, Jose Morales was on top of that and
- 22 when -- I remember going with him I think on Monday morning or
- 23 | something, taking pictures. He was taking pictures. I was just
- 24 helping him hold, you know, measuring tape and stuff like that.
- 25 Q. Okay.

- 1 A. No.
- 2 Q. Okay. And you had indicated that you were responsible for
- 3 the concrete densities and the compaction.
- 4 A. Right, verifying.
- 5 Q. Verifying.
- 6 A. Yes.
- 7 Q. Did you see any anomalies associated with the concrete
- 8 densities --
- 9 A. No.
- 10 Q. -- and compaction?
- 11 A. No.
- 12 MR. PEREZ: Let me interject, Dan, if I may? When you were
- 13 asking him about what he did as a CEI, part of his role is
- 14 earthwork. That's where you do compaction and density.
- MR. WALSH: Okay.
- MR. PEREZ: Okay? Not, not -- correct me if I'm wrong,
- 17 Carlos, not --
- 18 MR. CHAPMAN: Yeah.
- 19 MR. PEREZ: -- not during concrete. Concrete I think he did
- 20 cylinders.
- MR. CHAPMAN: Yeah, yeah.
- 22 MR. PEREZ: You did slump head.
- MR. CHAPMAN: Yeah. Yeah.
- 24 MR. PEREZ: But compaction and densities are done on the fill
- 25 material --

- 1 MR. WALSH: Okay.
- 2 MR. CHAPMAN: Right.
- 3 MR. PEREZ: -- on the earthwork.
- 4 MR. WALSH: Okay.
- 5 MR. PEREZ: Because he also did earthwork --
- 6 MR. WALSH: He did --
- 7 MR. PEREZ: -- in addition to the concrete.
- 8 MR. WALSH: Okay. All right.
- 9 BY MR. WALSH:
- 10 Q. Any anomalies associated with the earthwork?
- 11 A. No, no.
- 12 Q. No anomalies associated with that? And no anomalies
- 13 associated with the concrete --
- 14 A. No problems.
- 15 0. -- densities?
- 16 A. No.
- 17 Q. Was this a special type of concrete?
- 18 A. Yeah. Yeah, it was an 8,500 psi. It was a --
- 19 Q. Was this your first time working with this type of concrete?
- 20 A. Yeah. With 8,500, yeah, 8,500, yeah, real strong.
- 21 Q. Is -- how would you describe the concrete? Was it easy to
- 22 | work with? Was it -- was there any special issues associated with
- 23 | it?
- 24 A. No, it's just normal, like, you know, other -- any other
- 25 | concrete. This was just stronger since it was an 8,500 psi.

- 1 Q. Did you observe any of the pours?
- 2 A. Yeah.
- 3 Q. You were there to observe the pours?
- 4 A. On the deck, yeah.
- 5 O. On the deck?
- 6 A. Yeah.
- 7 Q. Did you see any issues associated with the pours --
- 8 A. No.
- 9 0. -- that --
- 10 MR. BRAGG: Let him finish the question.
- 11 MR. CHAPMAN: Okay.
- 12 BY MR. WALSH:
- 13 Q. Specifically the north side of the pour, the concrete deck on
- 14 the north side where number 11 diagonal comes into the deck, how
- 15 | would you describe that pour?
- 16 A. Like a regular or any other pour. I remember when they
- 17 poured that and nothing -- we didn't find no issues. We didn't
- 18 find no nothing. It was just a regular pour. Yeah.
- 19 Q. Was -- what -- did you see that any of the -- was there rebar
- 20 or was there a lot of rebar in that particular area that -- in
- 21 which the pour had to occur?
- 22 A. Yeah, there was rebars. There was lots of rebar.
- 23 Q. Yeah.
- 24 A. And everything was poured regular, you know, normal. It was
- 25 normal. Yeah.

- 1 Q. Was, was there any cold joints located in that particular
- 2 | area?
- 3 A. No. Unh-huh. I don't remember. I don't -- there was a lot
- 4 of us, and I don't recall which joint. I don't remember. I don't
- 5 know.
- 6 MR. WALSH: Okay. That's, that's all my questions at this
- 7 | time.
- 8 MR. BRAGG: Reggie?
- 9 MR. HOLT: Reggie Holt, Federal Highway.
- 10 BY MR. HOLT:
- 11 Q. Let me start fairly high level and work down, okay? So
- 12 Bolton Perez had an inspection team, it sounds like, working on
- 13 this project, many aspects. Could you identify the people who are
- 14 part of this team and what they did specifically to the bridge
- 15 | construction?
- 16 A. Okay. It was Jose Morales. He was project engineer. Rafael
- 17 Urdaneta, he was project administrator.
- 18 Q. Um-hum..
- 19 A. Myself, Carlos Chapman, senior inspector and Maria Kristina
- 20 (ph.), regular inspector. Yeah.
- 21 Q. Okay.
- 22 A. And Alexis Molina Corradino.
- 23 | Q. And were there any particular inspection or oversight duties
- 24 that were -- came to you and not to others?
- 25 A. I was -- no. I will take all the activities, like I said,

- 1 whenever there were concrete, steel, densities, stuff like that, I
- 2 | will take, you know -- I will verify.
- 3 Q. So how were you notified of a construction activity that were
- 4 happening on any particular day?
- 5 A. Okay. We were -- we would get emails from the contractor.
- 6 He will copy a lot of us. And an example, "We are going to be
- 7 | pouring the stairs tomorrow morning, and I will -- and I will be
- 8 | -- that's how we'd be notified.
- 9 Q. All right. And who from the contractor, who I guess is MCM,
- 10 | would this come from?
- 11 A. I believe his name is -- we call him Ernie, but I think it's
- 12 | Ernesto Hernandez (ph.). I think that's his last name.
- 13 Q. So if a post-tensioning operation was to happen, would you
- 14 get -- you were given prior notification of a post-tensioning
- 15 operation?
- 16 A. Yeah, it will go to Alexis Molina. He was certified.
- 17 Q. And along that line, were you notified of the re-tensioning
- 18 operation to happen? When were you notified of the re-tensioning
- 19 operation that happened at the time of the collapse?
- 20 A. I just -- Jose, he just told me -- for me to go up there to
- 21 observe and let him know what was going on. That's all. This
- 22 happened I believe after the meeting that was completed with FIGG,
- 23 MCM and Bolton Perez.
- 24 Q. Did you happen, in your duties prior to that date, ever
- 25 observed a post-tensioning operation and --

- 1 A. No.
- 2 Q. So you weren't aware of any -- of the type of documentation
- 3 of Alexis -- Alex would have been taking during, during a typical
- 4 operation?
- 5 A. Right. I don't know.
- 6 Q. So in your observation role, what were you looking for?
- 7 Just --
- 8 A. I was just -- like I said to this gentleman, I was just
- 9 reporting the sequence when they were going back and forth, you
- 10 know, on number 11.
- 11 | O. Um-hum.
- 12 A. And when they would take up their equipment and then move to
- 13 the other side, I would -- Morales, Jose Morales know, hey, we're
- 14 going to number 4. We're going on number 7, you know, and he was
- 15 | just on the bottom I guess looking for any cracks or, you know?
- 16 And that's the last thing I remember.
- 17 Q. So the purpose of Jose Morales on the deck was to look for
- 18 signs of distress during the --
- 19 A. Yeah.
- 20 O. -- re-tensioning operation?
- 21 A. Yeah.
- 22 Q. Was that observation dictated to BPA, to you, by the
- 23 | contractor or was that an observation that BPA thought was worthy?
- 24 A. Are you talking about when they were moving back and forth?
- 25 Q. Well, I was -- I'm talking about the extra set of eyes or

- 1 inspection eyes you had at the opposite end of the post-
- 2 | tensioning?
- 3 A. No, I just observed. That's all.
- 4 Q. Just observed.
- 5 A. Yeah.
- 6 Q. And you're not aware of whether that was something that was
- 7 told to you to perform by the contractor?
- 8 A. No.
- 9 Q. We should go back and I guess we'll talk about the -- your
- 10 duties during the off-site bridge fabrication, when it was up on
- 11 | the scaffolding. So based on -- for your testimony, I want to
- 12 make sure I got everything right. So you verified reinforcement
- 13 placement?
- 14 A. Right.
- 15 Q. Concrete material testing, cylinders, slumps?
- 16 A. Yeah.
- 17 Q. And concrete placement procedures in general?
- 18 A. Yes, sir.
- 19 Q. Finishing? Were there any issues that you recall with the
- 20 fabrication of the bridge, both in reinforcement placement and
- 21 | concrete placement and the finishing?
- 22 A. No.
- 23 Q. Do you recall any RFIs or non-NCRs, nonperformance reports
- 24 generated during that construction?
- 25 A. I don't recall.

- 1 Q. So you stated -- were you -- so you were not there when they
- 2 | were removing the falsework from underneath the bridge?
- 3 A. When they were removing the scaffolds?
- 4 Q. The scaffolding, yes.
- 5 A. Yeah, I was there.
- 6 Q. Were you there for most of it or all of the scaffolding
- 7 removal?
- 8 A. I was -- not for most of it, but I was the on-site.
- 9 | O. Um-hum.
- 10 A. But I had other operation going --
- 11 Q. Right.
- 12 A. -- besides that scaffolding --
- 13 Q. Right, right, right.
- 14 A. -- on the other side of the north.
- 15 Q. Yeah. So the -- let me kind of focus on the documentation of
- 16 the cracking that was taken by Bolton Perez on the bridge. So who
- 17 took the pictures and documented the initial cracking while it was
- 18 on the scaffolding?
- 19 A. Jose, Jose -- we saw it. You talking about when -- prior
- 20 to --
- 21 Q. Prior to, prior to the -- cracking prior to movement, yeah.
- 22 A. Jose Morales and Alexis Molina took the pictures.
- 23 Q. Okay.
- 24 A. And Jose sent it to MCM.
- 25 Q. So the bridge was moved. Were you there during the move?

- 1 A. If I was on-site, I was.
- 2 Q. Well, the -- it's the Saturday of the actual move of the
- 3 SPMTs. Were you on-site?
- 4 A. Yes. Yes.
- 5 Q. What was BPA's, I mean, role in that move, if any?
- 6 A. Just they had us check on the MOT and make sure everything
- 7 was okay. And that's about it for us--
- 8 Q. For your --
- 9 A. -- for my part.
- 10 Q. Were you there when they set the bridge?
- 11 A. No, because I work from 9 to 9.
- 12 Q. Who was, who was -- do you know who was on the site for BPA
- 13 when they set the bridge?
- 14 A. Alexis, Jose Morales and Rafael, and I remember me leaving on
- 15 | 9 in the morning and still they didn't have set it, and I left.
- 16 Q. Okay. So when was the next time after the move that you got
- 17 | your -- you returned to the project site?
- 18 A. I approximately returned about, I don't know, about the same
- 19 day --
- 20 Q. Approximate time?
- 21 A. Five, 5:30, 5.
- 22 Q. On that same day, Saturday?
- 23 A. Yeah, just to make sure that's -- they already had completed
- 24 the setting and I just -- they just sent me to make sure the MOT
- 25 was removed, make sure the cones was out of job and make sure they

- 1 were opening the road. That's it, yeah.
- 2 Q. Did you get a chance to look at the bridge at that time, at
- 3 5:30 on Saturday when you returned?
- 4 A. I mean, I -- yeah. I didn't go in or whatever, but --
- 5 Q. Right.
- 6 A. -- you know, from --
- 7 Q. But you didn't get close enough to observe any --
- 8 A. No.
- 9 Q. -- anything?
- 10 A. No.
- 11 Q. And when was the next time?
- 12 A. The next time I saw it was Monday morning.
- 13 Q. And whereabouts were you -- did you get back -- tested the
- 14 deck? Were you -- I mean, what were you looking at on Monday
- 15 morning?
- 16 A. On Monday morning I worked with -- walked with Jose Morales
- 17 and he started taking pictures, photos.
- 18 Q. Of?
- 19 A. Of the cracks.
- 20 |Q. Can you talk about the areas that you took the pictures of in
- 21 general terms?
- 22 A. It was on the north side of span 1.
- 23 Q. At the very north?
- 24 A. Yeah.
- 25 Q. So the -- where the diagonal and the vertical 11 and 12 hit

- 1 | at the diaphragm? Is that the primary location or were there
- 2 other locations?
- 3 A. Yeah, around that area, yeah.
- 4 Q. Did you look at any other face other than what you saw from
- 5 | the deck? Did you get behind the bridge, underneath the bridge,
- 6 | to take a picture?
- 7 A. Behind the bridge is the --
- 8 Q. The diaphragm.
- 9 A. -- the diaphragm, yeah. I couldn't see it because, you know,
- 10 | you had to go, you know --
- 11 Q. Right.
- 12 A. But I know there was damage on the other side of the
- 13 | diaphragm. I didn't see it.
- 14 Q. How did you know there was damage on the other side?
- 15 A. Because there was on the edge you could see, like, cracks,
- 16 like, open.
- 17 O. Um-hum.
- 18 A. And we figured that there was, you know, something going on
- 19 on that side. I believe two gentleman from MCM got on the lift
- 20 and they took pictures.
- 21 Q. That Monday?
- 22 A. Yes, sir. I -- yeah. Yeah. I'm trying to remember.
- 23 Q. Yeah, I know. Understood. To the best of your recollection,
- 24 | that's fine. Do you remember who was on that lift taking
- 25 | pictures?

- 1 A. Pedro Cortez from MCM and Mr. Rodrigo Isaza from MCM.
- 2 Q. Were in the lift on Monday morning taking pictures of the
- 3 cracks?
- 4 A. Yeah.
- 5 Q. So how many other times did you return to that region to take
- 6 pictures and document crack lines and things?
- 7 A. I believe only that time that I recall. Like I said, I had
- 8 other activities going around.
- 9 Q. Yeah, understood. I think that's it for me. Thank you.
- 10 A. Thank you.
- MR. BRAGG: Dan, you have any follow-up questions?
- 12 BY MR. WALSH:
- 13 Q. Just one follow-up question, and that was when you were
- 14 | walking with Jose around the structure on the morning of the
- 15 | collapse and in the lift, was there any discussion at all about
- 16 | closing the bridge?
- 17 A. In our meeting Jose Morales and Rafael asked FIGG if they
- 18 needed mega-shores (ph.) or something to protect anything. That's
- 19 it, I mean, that I recall. I don't remember nothing else.
- 20 Q. And that was presented by Jose and --
- 21 A. Rafael.
- 22 Q. -- and Rafael. And do you recall what the response was to
- 23 | that?
- 24 A. No. I don't remember.
- MR. WALSH: I don't have any further questions.

- 1 BY MR. BRAGG:
- 2 Q. Okay. Let me ask you this. When they asked -- Rafael asked
- 3 about mega-shores, what was his concern? Why was he asking for
- 4 mega-shores?
- 5 A. He saw those cracks. They were scary cracks.
- 6 Q. So then I guess he had some concern that what did happen
- 7 | could happen?
- 8 A. I don't know.
- 9 Q. You don't know? How about you? Did you have any concerns
- 10 | that the bridge could collapse? I mean, were you nervous about
- 11 going up there?
- 12 A. I'm not nervous because, you know, I never thought that this
- 13 was going to happen.
- 14 Q. Okay, I understand.
- 15 A. I just don't like heights --
- 16 Q. You don't like heights.
- 17 A. -- you know?
- 18 Q. So but you talked about putting in mega-shores. What about
- 19 closing the roadway underneath the bridge? Because then you
- 20 talked about that.
- 21 A. That I recall, no. I don't recall, no.
- 22 Q. Okay.
- BY MR. HOLT:
- 24 Q. And I understand that -- Reggie Holt, Federal Highway --
- 25 daily reports were generated. Who generated those daily reports?

- 1 Who wrote them and submitted them?
- 2 A. Are you talking about the meeting and stuff like that or?
- 3 Q. No, no on day -- every day when -- at work I understand that
- 4 there was a daily report generated?
- 5 A. Oh, myself, all the inspectors that were -- worked there.
- 6 You know, I would do dailies. Alexis Molina would do daily
- 7 reports and, you know.
- 8 Q. So a daily report could be a combination of multiple reports
- 9 from multiple inspectors?
- 10 A. Yeah.
- 11 Q. Okay.
- 12 BY MR. BRAGG:
- 13 Q. Does each inspector do a daily report?
- 14 A. Yes, sir.
- 15 Q. Okay.
- 16 A. Yeah.
- MR. BRAGG: And so we're going to request that we have daily
- 18 reports for each inspector.
- MR. PEREZ: Yeah, I think that request is the same one that
- 20 Dan asked.
- 21 MR. BRAGG: Okay. I wasn't sure if he just -- if he --
- 22 MR. PEREZ: And we're going to give you everything.
- MR. BRAGG: Okay, great.
- 24 MR. PEREZ: And in addition to that, I believe OSHA requested
- 25 the post-tensioning reports. Not the dailies, but the actual

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1
    reports of the stressing, so we're going to get those as well.
 2
         UNIDENTIFIED SPEAKER: The extra docs will go to them,
 3
    though, and I'll just cc to us.
 4
         MR. PEREZ: Okay. So I'll include the post-tensioning
    stressing reports in addition to the dailies.
 5
 6
         MR. BRAGG: All right. Thanks.
 7
         Dan, do you have anything further?
                     No. No, I don't.
 8
         MR. WALSH:
 9
         MR. BRAGG: Okay. The time is 12:34. We will conclude the
    interview. Thank you.
10
11
         (Whereupon, at 12:34 p.m., the interview was concluded.)
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: PEDESTRIAN BRIDGE COLLAPSE

MIAMI, FLORIDA MARCH 15, 2018

Interview of Carlos Chapman

ACCIDENT NO.: HWY18MH009

PLACE: Sweetwater, Florida

DATE: April 11, 2018

was held according to the record, and that this is the original, complete, true and accurate transcript which has been transcribed to the best of my skill and ability.

Teresa Holevas Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

*

PEDESTRIAN BRIDGE COLLAPSE

MIAMI, FLORIDA * Accident No.: HWY18MH009

MARCH 15, 2018

Interview of: JOSE MORALES

Bolton Perez & Associates

Sweetwater City Hall Sweetwater, Florida

Tuesday,

April 10, 2018

APPEARANCES:

KENNETH BRAGG, Accident Investigator National Transportation Safety Board

ROBERT ACCETTA, Investigator in Charge National Transportation Safety Board

DAN WALSH, Senior Highway Accident Investigator National Transportation Safety Board

REGGIE HOLT, Senior Bridge Engineer Federal Highway Administration

JAKE PEREZ, Principal Bolton Perez and Associates

DAVID SALAZAR, Attorney
(On behalf of Bolton Perez & Associates)

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Τ	INTERVIEW
2	(2:18 p.m.
3	MR. BRAGG: Today is Tuesday, April 10, 2018. It's about
4	2:18 p.m. We're in the Sweetwater City Hall in Sweetwater,
5	Florida. This interview is in regards to the FIU bridge collapse,
6	which occurred on March 15, 2018.
7	My name is Kenny Bragg. I'm an investigator in the Office of
8	Highway Safety. I'm going to go around the table starting to my
9	left, and have everyone introduce themselves and state their
10	organization.
11	MR. WALSH: Dan Walsh, National Transportation Safety Board.
12	MR. MORALES: Jose Morales, BPA, senior project engineer.
13	MR. PEREZ: Jake Perez, BPA, principal.
14	MR. ACCETTA: Robert Accetta, NTSB, investigator in charge.
15	MR. HOLT: Reggie Holt, Federal Highway.
16	MR. BRAGG: And on the phone, we also have
17	MR. SALAZAR: Counsel for BPA, David Salazar.
18	MR. BRAGG: Okay.
19	INTERVIEW OF JOSE MORALES
20	BY MR. BRAGG:
21	Q. Okay, Mr. Morales, we're going to I'm just going to start
22	things off just by getting a little background about you and how
23	long you've been with the company. And so you're currently an
24	employee of BPA; is that correct?
25	A. Yes.

- 1 Q. And how long have you been with BPA?
- 2 A. Seven years, 7½ years. I think my anniversary is in
- 3 September.
- 4 Q. And what position do you currently hold?
- 5 A. Senior project engineer, CEI manager.
- 6 Q. How long have you held that position?
- 7 A. Since I got in.
- 8 Q. Since you got in?
- 9 A. Yeah.
- 10 Q. Okay. So if you could just explain to me in layman's terms
- 11 | what you do for the company?
- 12 A. Well in the CEI manager, we pursue new projects, manage the
- 13 staff and their trainings. And on the senior project engineer, as
- 14 the CEI, we do the role of the senior project engineer for owner's
- 15 representatives, so --
- 16 Q. And what's your, what's your professional background?
- 17 A. I'm a civil engineer.
- 18 Q. And where'd you, where'd you go to school?
- 19 A. FIU.
- 20 Q. FIU? And when'd you graduate?
- 21 A. I graduated in 2001 for my undergrad, 2003 for my master's.
- 22 Q. Explain to me a little bit when you, when you became involved
- 23 | in this project, the FIU bridge project.
- 24 A. Involved? I pursued this job since it was being thought out
- 25 by FIU. And marketing-wise, I approached them. I wanted to know

- 1 about the project. This happened. If I'm not mistaken, we
- 2 started in March last year. And maybe 2 years before that.
- 3 Q. Okay. And what's been your role in the project?
- 4 A. In the project? The senior project engineer.
- 5 Q. Okay. Let's go to the day of the collapse. Describe a
- 6 | little bit about your day. Were you, were you here onsite when
- 7 the, when the collapse occurred?
- 8 A. Yes.
- 9 Q. So just go ahead and just talk about your day. What happened
- 10 | that day?
- 11 A. That day since the beginning, in the morning I get a call
- 12 | from Carlos Chapman, my inspector, telling me that FIGG engineers
- 13 are onsite. I usually get to the office around 8:00, just before
- 14 8:00. They were there 10 minutes before that, or Carlos gives me
- 15 | a call 10 minutes before that. They were there, and I tell
- 16 Carlos, you know, I'm heading over there; I should meet you there
- 17 | at that time.
- 18 So FIGG engineers were looking at some cracks. And when
- 19 Carlos called me, he was on top, and when I arrived, they already
- 20 come down and they're looking at the cracks from underneath on the
- 21 north side. So one of the engineers got up into the manlift,
- 22 looked at the cracks. And then we step back to the trailer from
- 23 | the contractor and a meeting was held based on the cracks.
- 24 So a meeting was held, led by the FIGG engineer, regarding
- 25 cracks. He explained the -- his assessment of that. And a whole

- 1 | technical presentation was made. Questions were asked. Then
- 2 | after that meeting or as part of that meeting, a procedure needed
- 3 to be done on the bridge. That procedure took place right after
- 4 that, which was the stressing of the member that needed to be
- 5 stressed.
- I was on deck at the beginning with an MCM employee. Then
- 7 that MCM employee left. I kept myself there, and then the people
- 8 that were on top. Basically after that, you know, happened what
- 9 happened. Communication -- stressing was -- on the element was
- 10 ongoing, and from the moment it cracked, I have no recollection
- 11 until I get to the car and I see my face is all broken up.
- 12 Q. So where were you, where were you positioned when the, when
- 13 | the collapse occurred?
- 14 A. I was on the north side of the bridge on the deck.
- 15 O. On the deck. Okay.
- 16 A. Not on the canopy but on the deck.
- 17 Q. Okay. And after the collapse, where did you, where did you
- 18 end up? Do you remember?
- 19 A. I don't remember.
- 20 Q. Okay. Okay. I understand.
- 21 A. I don't remember. I can tell you what they told me when they
- 22 picked me up, but I don't, I don't remember.
- 23 Q. I understand. I understand.
- MR. BRAGG: Mr. Holt --
- MR. HOLT: Yes.

- 1 MR. BRAGG: You want to go ahead and start talking about some
- 2 of the technical aspects of the meeting or --
- 3 MR. HOLT: Yeah.
- 4 MR. BRAGG: Okay. Go ahead.
- 5 MR. HOLT: Yeah. Just finishing up. Reggie Holt, Federal
- 6 Highway.
- 7 BY MR. HOLT:
- 8 Q. So can you explain, in general, the staffing that was
- 9 supplied to -- on this project?
- 10 A. From BPA and --
- 11 Q. From BPA --
- 12 A. BPA, yes.
- 13 Q. -- and some of your subs too, I guess.
- 14 A. Okay. So we had myself as the senior project engineer.
- 15 Rafael Urdaneta as the project administer. And then we had
- 16 inspectors, which is Carlos Chapman, the senior inspector, and we
- 17 had Alexis Molina as the senior, as the senior inspector
- 18 specifically for post-tensioning. Aiding the staff, aiding us,
- 19 was Maria Cristina Acosta (ph.). She's basically helping the
- 20 office all the time, you know, stuff with the office. That's our
- 21 staff. And sorry. I just missed one because the -- it's
- 22 | federally regulated, so we had also an EEO compliance officer.
- 23 Q. What was her name?
- 24 A. Erica Valencia. She's nothing related to construction. She
- 25 was just looking at paperwork and payrolls and stuff.

- 1 Q. So who was on the site the most often?
- 2 A. Carlos and Alexis.
- 3 Q. Carlos and Alexis Molina.
- 4 A. Yes.
- 5 Q. And you were onsite for --
- 6 A. Yeah, I -- you know, every day I would go out to the site.
- 7 You know, every day. The morning, usually. If I miss a day, then
- 8 | the next day I would spend a little more time. But I do go out
- 9 (indiscernible) --
- 10 (Interruption at the door.)
- MR. BRAGG: I'm going to pause for just a second. Sorry.
- 12 (Off the record.)
- 13 (On the record.)
- 14 MR. BRAGG: Okay, 2:27. We're going to resume the interview
- 15 | with continuing questions by Mr. Holt.
- 16 BY MR. HOLT:
- 17 O. Okay. On to Carlos Chapman. What were some of his duties as
- 18 | far as an inspector?
- 19 A. He is, he is inspecting concrete, rebar, densities, overall
- 20 manpower on the project, equipment to create a daily report that's
- 21 comprehensive.
- 22 Q. And how about Mr. Alex Molina?
- 23 A. A similar kind. More specific for post-tensioning. So he
- 24 was -- that was his role, his major role.
- 25 Q. So was Alex Molina present at every post-tensioning

- 1 operation?
- 2 A. Every single one except that.
- 3 MR. PEREZ: Except Thursday morning.
- 4 MR. MORALES: Except Thursday morning.
- 5 BY MR. HOLT:
- 6 Q. Was there another PT inspector present during the
- 7 detensioning?
- 8 A. Not --
- 9 Q. Or I guess, you know, retensioning. Excuse me.
- 10 A. No.
- 11 MR. PEREZ: Let me interject. There was the contractor's
- 12 | quality control --
- 13 MR. MORALES: Correct.
- 14 MR. PEREZ: -- inspector there, aside from the three VSL
- 15 gentlemen that were there. And then we had Carlos Chapman
- 16 observing what was going on.
- 17 MR. MORALES: That's correct.
- 18 MR. HOLT: All right.
- MR. MORALES: Due to the nature of that meeting, the outcome
- 20 of that meeting.
- BY MR. HOLT:
- 22 Q. What do you mean by nature of that meeting?
- 23 A. Well I guess the engineer mentioned these cracks, and I guess
- 24 | part of the -- to mitigate these cracks, he thought of a two-step
- 25 process, which we were never, I guess, we were never informed of

- 1 that, but there was a process of communication between FIGG and
- 2 MCM regarding what to do to address the cracks.
- 3 Q. So as the CEI manager, you were not aware that you needed
- 4 post-tensioning inspection procedures Thursday morning, the day of
- 5 this operation.
- 6 A. I did not know that there was needing post-tensioning
- 7 procedures for that Thursday morning, yes. Correct.
- 8 0. Okay. So let's go back to the fabrication of the truss
- 9 element. Can you identify any issues that occurred during the
- 10 | fabrication that engaging the engineer of record was needed?
- 11 A. Me directly engaging the engineer of record? I deal with MCM
- 12 directly, and if I point out -- in my contract, I guess, I'm
- 13 overseeing the contractors. So I directed everything through my
- 14 | contract, which is MCM. The engineer of record is a sub
- 15 | consultant to MCM, so I addressed everything to MCM. And to
- 16 answer that question, yes, we did point out items for MCM to relay
- 17 to the engineer of record for the tension and to assess,
- 18 specifically --
- 19 Q. Can -- go ahead.
- 20 A. Is that your question?
- 21 Q. No, no, no, no. I thought you were done. Go ahead and
- 22 finish.
- 23 A. Specifically, you know, cracks.
- 24 Q. Can you elaborate on the cracks that you asked MCM to relay
- 25 to FIGG?

- 1 A. Yes. These were at -- the first is elements 2 and 11 were to
- 2 be tensioned as per the plan. And at that time, right after the
- 3 tensioning of those elements, cracks developed on other two
- 4 members. And we relayed that information to MCM in a, in a
- 5 detailed -- pictures and comments on them.
- 6 MR. PEREZ: Let me interject that that was during the phase
- 7 where the truss was in the yard.
- 8 MR. MORALES: Correct. In the yard.
- 9 MR. HOLT: On the scaffolding.
- 10 MR. MORALES: Yeah, correct. Scaffolding. So that report
- 11 was sent. We did get a reply. And basically the response, from
- 12 my recollection, is basically this is, this was expected. That is
- 13 the first report we sent. This was, if I'm not mistaken, this is
- 14 sometime in February, end of February, when the first elements
- 15 were tensioned.
- The other report was sent right after scaffolding was
- 17 removed. There was -- this is from my field gathering and going
- 18 out to the field. We sent another report to them pointing out
- 19 several new locations where cracks had developed. And report was
- 20 sent, and we got a reply as well from -- we sent it to MCM. MCM
- 21 forwarded it along with some comments from them. And a reply was
- 22 | sent back to MCM and ourselves from the engineer of record.
- BY MR. HOLT:
- 24 Q. Can you elaborate where this cracking occurred?
- 25 A. It was scattered, but they -- we specifically pointed out the

- 1 node where 11 and 12 meet.
- 2 Q. Just node 11 and 12? Other than the scattering.
- 3 A. Yes, there's some scatters we did, but in that area in number
- 4 11 node, 12.
- 5 Q. And how did the cracking in node 11/12 differ from the other
- 6 cracking that --
- 7 A. Well it was almost --
- 8 0. -- elevated it to increase?
- 9 A. It was, it was bigger. It was just, you know, it was
- 10 | notable, more notable.
- 11 Q. Did you identify or did you -- yeah, identify it as a crack
- 12 level A, B, C, D based on FDOT or any kind of crack width-taking
- 13 and documented and maps made?
- 14 A. They were, they were sent to them with photographs. And the
- 15 | idea is to -- it was to make sure that it was monitored and
- 16 relayed so we can at least get their input. So they were sent --
- 17 pictures were sent clearly, and the cracks where some of them were
- 18 hairline. But at this location, they were a little bit bigger.
- 19 So were they identified as A, B, C? No. There were just clear
- 20 pictures of them.
- 21 MR. PEREZ: What size, roughly?
- MR. MORALES: The hairlines were -- actually, the first ones
- 23 | we did send, you know, right next to a gauge. They were sent with
- 24 | the gauge right next to it. The second ones were in different
- 25 locations, and they were similar in gauge width. But the one that

- 1 was at the toe of 11 and that step they have there, that one was
- 2 the biggest tone, I guess. And that was maybe, I don't know, an
- 3 eighth?
- 4 BY MR. HOLT:
- 5 Q. Okay. You stated that many of these pictures were taken with
- 6 the crack gauge next to the crack because --
- 7 A. In that one, if I'm not mistaken, the report did not have a
- 8 | measurement at that point when the scaffolding was out. If I'm
- 9 not mistaken. I don't know if it's in writing, but --
- 10 Q. All right. We would like to request that report that you
- 11 | sent to MCM identifying this cracking --
- 12 A. Sure.
- 13 Q. -- at this node 11/12. Essentially all cracking after
- 14 removal of scaffolding. All right. Any other, were there --
- 15 A. And then another one, I think, you know, another was
- 16 Wednesday before that. Wednesday morning. That was just
- 17 pictures.
- 18 Q. This is before scaffolding removing? We're trying -- when
- 19 | you say Wednesday --
- 20 A. Oh. Well 3/15 is a Thursday.
- 21 Q. You're talking about Wednesday before the collapse.
- 22 A. Correct. No, this is all in the yard, right? You're talking
- 23 | about all --
- 24 Q. Yeah, yeah, yeah.
- 25 A. Yeah, those are the two reports. That's it.

- 1 Q. So there was two in the yard.
- 2 A. Yes.
- 3 Q. Yeah.
- 4 A. Yes.
- 5 MR. PEREZ: Yeah, I think your original question was, how
- 6 many times did you report this in writing?
- 7 MR. HOLT: Right, right. I was starting --
- 8 MR. PEREZ: So he had a -- there was another one on
- 9 Wednesday.
- 10 MR. HOLT: On the Wednesday.
- 11 MR. PEREZ: But those two were in the yard.
- MR. HOLT: Right. Those two in the yard, and there's another
- 13 one --
- MR. BRAGG: Okay, so just -- excuse me, real quick. Be sure
- 15 | if, you know, you're going to interject, which is fine, just
- 16 | identify yourself --
- 17 MR. PEREZ: Okay, sorry.
- 18 MR. BRAGG: -- for the transcriptionist so she can identify
- 19 you. So that's why -- it gets a little, a little --
- 20 MR. PEREZ: Sorry.
- 21 BY MR. HOLT:
- 22 Q. So the next time was the Wednesday prior to the collapse.
- 23 A. In pictures, yes.
- 24 Q. In pictures. Right. And what did that --
- 25 A. That had gauges, measurements, widths, depths. Because the

- 1 (indiscernible) were there inserted at the cracks.
- 2 Q. And what locations were these --
- 3 A. These were at the node itself, at member 11, and on the
- 4 diaphragm, that diaphragm looking from the top, which is the only
- 5 access that I would have from the deck, is the diaphragm, the top
- 6 view of the diaphragm. Diaphragm 2, which is in the north side.
- 7 And the pictures are very clear.
- 8 Q. Okay. So top deck looking down. Any other surfaces noted?
- 9 A. More? No. That was -- the main pictures were for that only.
- 10 I think, I think there were more. There were more. There were
- 11 more. Because they were -- we asked, between Rafael and myself,
- 12 to create -- to measure these cracks or to -- not measure, but
- 13 basically see if they were growing between the time that were
- 14 | first -- between the bridge was set and continuously. So it was a
- 15 daily view of the cracks and see if they were extending.
- 16 Q. Okay, we'll get -- I'll get back to the time. But before --
- 17 | the previous question, you stated you had pictures and crack
- 18 meters on the diagonal 11/vertical 12 node region, diaphragm back
- 19 face from deck. But how about the back face of the diaphragm, the
- 20 underside of the diaphragm, all the other surfaces in that region?
- 21 Were they ever observed?
- 22 A. The back -- they were, they were -- pictures were sent with
- 23 | those too. Because they were -- those were from the -- let me
- 24 | just step back a little bit. Because there was the report that
- 25 was sent by MCM to FIGG with cracks. And those were the pictures

- 1 | that were sent from MCM to FIGG. And those were sent, if I'm not
- 2 mistaken, Monday of that week.
- 3 Q. Did you see this report?
- 4 A. I asked MCM to forward me that report. So I got that report
- 5 Tuesday.
- 6 Q. Okay, so what -- other than the two surfaces that you
- 7 | mentioned, what other surfaces of this were identified in this
- 8 report to FIGG by MCM?
- 9 A. They were on the back side, so they had access to the
- 10 manlift, the back side of that diaphragm, the top, the front, the
- 11 diagonal members, and the top of the diaphragm. So everything
- 12 related to that node area, yes.
- 13 Q. And what did those pictures show?
- 14 A. The cracks that -- they were cracks. Cracks on the whole
- 15 diaphragm and the node. The node is not a specific area, but the
- 16 diaphragm and the element member 11 and 12 have a -- it's a common
- 17 area there.
- 18 Q. So every surface that -- of the diaphragm had some level of
- 19 distress and cracking?
- 20 A. Yes. (Indiscernible).
- 21 Q. Yeah, I understand that. Yeah, I think I understand. Can we
- 22 get a copy of that?
- 23 A. From -- yes.
- 24 Q. The correspondence that was sent to FIGG by MCM?
- 25 A. Yes.

- 1 Q. Identifying the level of distress?
- 2 A. Um-hum.
- 3 Q. Now to go back to your -- we, originally before we stepped
- 4 back, were talking about your monitoring crack growth and
- 5 propagation. In general terms, can you identify the dates you
- 6 were there?
- 7 A. Me myself or --
- 8 Q. BPA.
- 9 A. Yeah. Yeah.
- 10 Q. I mean, to the best of your knowledge, what was being
- 11 documented as far as crack mapping and propagation?
- 12 A. Correct. So what we did was Monday and Tuesday, if I'm not
- 13 mistaken. Wednesday, we sent our report and our batch of
- 14 pictures. In that batch of pictures, there were the, you know,
- 15 measurements that were taken of these cracks. So it's Monday,
- 16 Tuesday and Wednesday.
- 17 MR. PEREZ: Let me interject.
- 18 MR. MORALES: This is Jake.
- 19 MR. PEREZ: This is Jake Perez. Also after erecting the
- 20 | truss on Saturday --
- MR. MORALES: On Saturday. Yeah, I can, I can elaborate on
- 22 that if you want me to.
- MR. PEREZ: Okay, go ahead.
- MR. MORALES: So yeah, that's right. On Saturday, 3:00 p.m.
- 25 stressing took place around that time.

- 1 MR. PEREZ: Destressing.
- 2 MR. MORALES: Destressing. Sorry. Destressing. Inspector
- 3 | Alex Molina sent pictures with cracks, along with an MCM employee
- 4 identifying cracks at that node. So that's Saturday. So the
- 5 reason for me following up on MCM, that's because I knew these
- 6 cracks were there. What are you going to do, contractor, to relay
- 7 this to the engineer? So the follow-up for that created that
- 8 report from MCM so that those cracks were identified at that time.
- 9 Immediately 3:00 p.m. Saturday from Alexis Molina to us. And he
- 10 was with MCM at that time. So the information between MCM and
- 11 FIGG, I don't know if anything else other than that report was
- 12 created, but the report was created on the --
- 13 BY MR. HOLT:
- 14 Q. Was Alex Molina the only BPA representative on the bridge for
- 15 | the time of the -- that would be the detensioning?
- 16 A. At that time, yes.
- 17 Q. Were these pics taken before the detensioning, after the
- 18 detensioning, or both times?
- 19 A. I can't tell you that. I can't tell you. I don't know if it
- 20 was before or after. I can guess that it's before -- after,
- 21 | sorry. Just because after you would see -- you want to go down
- 22 and see how it happened. I haven't even asked that to Alexis.
- 23 Q. All right, so to the back -- to your crack growth
- 24 documentation. So you stated Monday, Tuesday, Wednesday, you had
- 25 eyes on the cracks.

- 1 A. Yes.
- 2 Q. Monitoring growth. How were you identifying the crack
- 3 locations and widths with times?
- 4 A. Basically on the crack, the marks, date and hour. And if
- 5 they were growing. So if the crack's growing, you would see that.
- 6 Different locations where the end of the crack -- to the, to the
- 7 smallest area that you can visibly see. If it grew, then you
- 8 | would mark another day at a certain hour.
- 9 Q. And you did this for 3 days?
- 10 A. Yes.
- 11 Q. Yeah. The traditional method. Was this documented in any
- 12 | way other than a series of pictures?
- 13 A. Pictures.
- 14 O. Pictures.
- 15 A. And --
- MR. PEREZ: This is Jake. Let me interject. What about
- 17 dailies, Jose?
- MR. MORALES: Oh dailies. I am guessing they're there. I
- 19 haven't seen dailies from -- you know, I've been out with
- 20 injuries, but --
- 21 BY MR. HOLT:
- 22 Q. Can you explain? What do you mean by "dailies" with the
- 23 | inspector --
- 24 A. Daily work reports.
- 25 Q. The daily reports.

- 1 A. Reports. Yes.
- 2 Q. So the daily reports should provide some summary or detailed
- 3 information on what --
- 4 A. Sure. Yes. That's what the inspector's doing, yeah.
- 5 Q. Yeah. I guess we don't have these pictures. We would like
- 6 to see them. The Monday, Tuesday, Wednesday crack propagation.
- 7 MR. PEREZ: I gave you the Wednesday ones one time.
- 8 UNIDENTIFIED SPEAKER: Yes, but was (indiscernible)?
- 9 MR. MORALES: Yeah, I think you have whole package.
- 10 MR. HOLT: I think we have a day, but I don't think we have
- 11 the 3 days.
- MR. MORALES: I think those pictures -- if I'm not mistaken,
- 13 that package is a compilation of all 3 days, if I'm not mistaken.
- 14 MR. HOLT: And also the daily reports. I think we would want
- 15 to see the daily reports from time of casting through to setting,
- 16 just to capture the earlier items of cracking --
- 17 MR. MORALES: Okay. Okay.
- 18 MR. HOLT: -- that you experienced from fabrication.
- 19 BY MR. HOLT:
- 20 Q. So were you -- so you were at the site Thursday?
- 21 A. Yes.
- 22 Q. Were you there when FIGG was making their visual inspection
- 23 of --
- 24 A. I was there half of the time, yes.
- 25 Q. Half the time?

- 1 A. Like I said before, he was there since 10 to 8 and I got
- 2 | there, like, at 8:05. So I saw the second part of what his -- he
- 3 was looking at.
- 4 Q. Did you or -- who's your other BPA --
- 5 MR. PEREZ: Carlos.
- 6 MR. HOLT: Carlos.
- 7 BY MR. HOLT:
- 8 Q. Did either of you go up in the manlift to observe the cracks?
- 9 A. At the same time that he did?
- 10 Q. Yeah.
- 11 A. No. Manlift is two men, so the operator from MCM, the QC
- 12 manager from MCM, had the engineer of record on there.
- 13 Q. Were you ever provided access --
- 14 A. Yes.
- 15 Q. -- for the manlift to look at part of the location?
- 16 A. Just before. Just before, yes.
- 17 Q. And did you take a look?
- 18 A. I did take a look. And that's part of my report, yes. I
- 19 guess on the pictures.
- 20 MR. PEREZ: On Thursday.
- 21 MR. MORALES: No. Thursday, no manlift. Thursday, I was on
- 22 the deck. He's talking about before. Oh Thursday, no. I didn't
- 23 have access to the, to the manlift, no.
- 24 BY MR. HOLT:
- 25 Q. Okay, but you did -- did you have access to the manlift the

- 1 other days: Monday, Tuesday, Wednesday?
- 2 A. I guess part of the, part of this information that I guess
- 3 | wasn't completely clear on our side is that the -- between FIGG
- 4 and MCM, they had the plan of putting additional bearing, I guess,
- 5 on the, on the bridge. So that happened Tuesday, if I'm not
- 6 | mistaken. So Tuesday, when the QC manager was placing the shims
- 7 | there, I went up there. You know, Tuesday. With the manlift with
- 8 | him, so -- to see, I guess, to -- he did his job, and I just
- 9 wanted to go up there and see it closely.
- 10 Q. And did you observe any signs of distress when --
- 11 A. Yes. Yes. Part of my pictures that were sent Wednesday are
- 12 part of that.
- 13 Q. And so that -- they were included.
- 14 A. Yes.
- 15 Q. Did you ever get access to the back face?
- 16 A. I went -- yes.
- 17 | O. On the manlift?
- 18 A. Yeah.
- 19 Q. That same day?
- 20 A. That same day.
- 21 Q. And that -- those pictures are also included in the --
- 22 A. They are there.
- 23 Q. -- report? Okay. So you stated -- so you were on the
- 24 | walkway on Thursday?
- 25 A. On Thursday, yes.

- 1 0. At the north end?
- 2 A. At the north end.
- 3 Q. Were you close to node 11/12?
- 4 A. I should have been in the vicinity. I'm not sure where I
- 5 was. I got that blank when I fell with the bridge. So I was
- 6 there, yes.
- 7 Q. I guess (indiscernible) about that. Did you recall anything
- 8 | odd during the detensioning?
- 9 A. While that's, while that's happening? No.
- 10 Q. No?
- 11 A. It was just, I was still looking at the same cracks that we
- 12 had seen for the last 2, 3 days. So I was in that area and
- 13 nothing popped out to my attention while that happened. Other
- 14 than, you know, I was just wondering when these guys are going to
- 15 finish just to get out of the way.
- 16 Q. Did you -- since you were out there Thursday, did you notice
- 17 any of the cracking propagate past your Wednesday tick mark?
- 18 A. No. That was, that was, I guess, the reason for that I was
- 19 there, and I didn't see anything moving more than that.
- 20 Q. So the crack propagation that you were, that you were
- 21 monitoring Monday, Tuesday, Wednesday --
- 22 A. While that was happening --
- 23 Q. -- it slowed down, because there wasn't advancement from
- 24 Wednesday to Thursday --
- 25 A. Correct.

- 1 Q. -- based on --
- 2 A. Yeah.
- 3 Q. Okay.
- 4 MR. HOLT: I think that's all I have. Thank you.
- 5 MR. ACCETTA: This is Robert. I have a follow-up question.
- 6 The crew that was on the canopy --
- 7 MR. SALAZAR: Who's got a follow-up guestion?
- 8 MR. ACCETTA: Excuse me?
- 9 MR. SALAZAR: Who's got a follow-up question?
- 10 MR. ACCETTA: Robert with the NTSB. The crew that was on the
- 11 canopy that was doing the detensioning, how much of that did you
- 12 observe, if any?
- 13 MR. MORALES: Nothing.
- MR. ACCETTA: You didn't.
- MR. MORALES: I wasn't up there. Never.
- MR. ACCETTA: Okay. All right, just wanted to clarify that.
- 17 | That's all I have.
- 18 MR. WALSH: Dan Walsh with the NTSB.
- 19 MR. SALAZAR: Mr. Walsh, can we take a one-minute break? I
- 20 need to step out and grab something from my office.
- 21 (Off the record at 2:50 p.m.)
- 22 (On the record at 2:53 p.m.)
- 23 MR. BRAGG: Sorry. Okay, it's 2:53. We're back on the
- 24 record. Mr. Walsh?
- 25 MR. WALSH: Dan Walsh with the NTSB.

- 1 BY MR. WALSH:
- 2 Q. I'll be asking a few -- some of the questions that are
- 3 | similar to Mr. Holt. So I apologize if they're the same
- 4 questions, but answer them to the best, the best of your ability.
- 5 A. Okay.
- 6 Q. You mentioned two reports that were done during -- that were
- 7 prepared during the casting offsite. Can you recall, for report
- 8 number one, the date, the date of --
- 9 A. The date of the report. I'm guessing it's sometime late
- 10 February or February, mid-February.
- 11 Q. Late to mid-February?
- 12 A. Yeah, this is like an estimate. But the report is -- has a
- 13 date.
- 14 Q. And you mentioned that there was, there was cracking. Can
- 15 you recall where that cracking took place?
- 16 A. When they first -- the first report, they were on the
- 17 adjacent members. Not on the members, but the adjacent members.
- 18 So the tensioning took place on 11 and 12. This happened on 10
- 19 and 3, if I'm not mistaken.
- 20 MR. PEREZ: And let me interject. They were hairline cracks.
- 21 MR. MORALES: Correct. They were hairline cracks.
- 22 BY MR. WALSH:
- 23 Q. And where were they located on 10 and 3?
- 24 A. Four, 5 feet above deck elevation. And they were repeated, I
- 25 guess, if I -- 10 and 3. So they were cross-section-wise.

- 1 | Elevation 5 or -- 4 or 5 feet aboveground, but another one
- 2 repeated on top.
- 3 Q. Okay. And that was done after the tensioning of number 11
- 4 and --
- 5 A. Two.
- 6 Q. And 2. Okay. Okay, and then for report number two, you
- 7 | indicated that the cracks were at the number 11/number 12 node?
- 8 A. Yes. And some other areas, scattered hairlines. But we did
- 9 (indiscernible) that area.
- 10 Q. Do you, do you recall the date of that?
- 11 A. Scaffolding was taken down -- this happened March 15, so that
- 12 must have been 2 weeks prior to that, at least. So this is the
- 13 end of February. Sometime in the end of February.
- 14 O. End of February.
- 15 A. And this is -- the report has a date as well, but --
- 16 Q. Okay. All right. And then you recalled that the width of
- 17 the crack at number 11/number 12 node was an eighth of an inch.
- 18 A. I can -- yes.
- 19 Q. Okay. Were you on the jobsite, perchance, on Saturday,
- 20 February 24?
- 21 A. Saturday, February 24.
- 22 Q. Do you recall?
- 23 A. No, I don't think so. What was, what was happening February
- 24 24? I don't think so. I could have been, but I'm not sure.
- 25 Q. Do you recall hearing a loud popping noise on the, on the

- 1 | construction on the site at any time?
- 2 A. We were told by a construction crew, when scaffolding was
- 3 down, that he heard a pop. And they heard of a pop. It's
- 4 probably that one-eighth of an inch crack. And that's -- he
- 5 pointed to that direction. This is some crewmember. I don't --
- 6 you know, some MCM crewmember that was on deck or in the -- while
- 7 | the scaffolding was being taken down.
- 8 Q. And who was that person who told you that?
- 9 A. I don't remember. From MCM. I don't have a name. I
- 10 | couldn't probably give you a face. I don't know.
- 11 MR. PEREZ: A laborer.
- 12 MR. MORALES: It's a laborer. Yes.
- 13 BY MR. WALSH:
- 14 Q. And you think that one-eighth-wide crack was a result of that
- 15 loud pop, popping noise.
- 16 A. Well he pointed to that area.
- 17 Q. Okay. Okay.
- 18 A. If I'm not mistaken, I was with Rafael when he told us that.
- 19 O. Okay. Okay.
- 20 A. We did get responses from FIGG on our reports.
- 21 Q. We'd like to get a copy of those --
- 22 A. All right.
- 23 Q. -- as well. And do you know if those responses from MCM --
- 24 | whether MCM shared those with FIGG?
- 25 A. The responses are from the engineers, and we were forwarded

- 1 | those responses through MCM. You understand? Yeah, so --
- 2 Q. Explain that. Explain that.
- 3 A. So basically, the response went to MCM, and MCM forwarded it
- 4 to us. So comes from the engineer from FIGG to MCM, MCM to us,
- 5 addressing our reports.
- 6 Q. So FIGG was aware of your reports.
- 7 A. Yes. At least the two reports that we sent, yes.
- 8 Q. And do you know who in FIGG was --
- 9 A. I think --
- 10 0. -- involved with that?
- 11 A. I can't recall the name at this point, but it must have been
- 12 one of the engineers. You know, either Manuel Feliciano, Dwight
- 13 Dempsy. One of those two.
- 14 Q. Do their names appear on --
- 15 A. Yes. These are emails with their --
- 16 O. With their names on them.
- 17 A. With their names.
- 18 Q. Okay. We'll go over the list of deliverables, but that will
- 19 be, that will be one of them. Just a question on the destressing.
- 20 When did the destressing of number 11 and number 2 take place?
- 21 A. Destressing took Saturday.
- 22 Q. Okay. Do you --
- 23 A. 3:00 p.m. Something like that.
- 24 Q. 3:00 p.m.?
- 25 A. Something like that.

- 1 Q. Were the transporters still below the main span at that time?
- 2 A. At 3:00 p.m.?
- 3 Q. Do you recall?
- 4 A. No, no. Because 12:30, it was set. It took them, if I'm not
- 5 | mistaken, an hour to leave. So destressing took -- it was later.
- 6 Q. Okay. Okay. You said earlier, to questioning from Mr. Holt,
- 7 | that you were on the deck at the time of restressing of the number
- 8 | 11 PT bars. Could you observe the restressing that was taking
- 9 place on the canopy?
- 10 A. No.
- 11 Q. Okay. Did you see the cracking at the base of node 11 and
- 12 | number 12 during the time it was -- during the time of
- 13 | restressing?
- 14 A. I was there, yes.
- 15 Q. Okay. Did you see any -- did you see the cracks propagate
- 16 during the restressing?
- 17 A. No, I did not.
- 18 Q. Okay. There was no change to the cracks whatsoever --
- 19 A. No.
- 20 Q. -- during the restressing.
- 21 A. No.
- 22 Q. Okay. Okay.
- 23 MR. WALSH: Those are my questions. I do have a list of
- 24 deliverables that I'd like to go over.
- MR. HOLT: Reggie Holt. I just have one follow-up.

- 1 BY MR. HOLT:
- 2 Q. These reports that were sent to MCM, did you -- did MCM
- 3 provide any supplemental information to your reports?
- 4 A. Supplemental information? Oh.
- 5 Q. Was it a simple passing of what you sent them, or was
- 6 something -- did they add information for FIGG engineers?
- 7 A. Not that I know of, but I know communication had taken place
- 8 between MCM and them regarding cracks. So they didn't add to
- 9 mine. I think they might have said, look at CEI's report; it
- 10 might be in conjunction with what we sent you before. But I don't
- 11 | -- that I don't have. I'm not -- I'm completely --
- 12 Q. So the, so the responses that you received from MCM, from the
- 13 | --
- 14 A. Only addressed --
- 15 Q. -- only addressed the report that you sent?
- 16 A. Yes.
- 17 Q. Okay.
- 18 MR. HOLT: That's it. That's all I have.
- MR. WALSH: I'd like to go over the list of deliverables, and
- 20 I requested that we receive them as soon as possible. Are you
- 21 ready?
- MR. PEREZ: Ready.
- 23 MR. WALSH: Okay. The first are the two reports mentioned by
- 24 Mr. Morales that were done on the construction site: report
- 25 | number one, report number two. All photos associated with both of

- 1 those reports, as well as the emails. Copy of emails. And the
- 2 content of the reports.
- 3 MR. PEREZ: And responses.
- 4 MR. WALSH: Yes. And responses, MCM responses, to those
- 5 reports. That includes individuals from MCM and FIGG.
- 6 MR. PEREZ: Okay.
- 7 MR. WALSH: The third item are the pictures that were sent
- 8 from MCM to FIGG on Monday.
- 9 MR. PEREZ: And how would we have those pictures, Jose?
- 10 MR. MORALES: I asked him to forward me that report.
- 11 MR. PEREZ: Okay, so --
- MR. MORALES: So I have that email from MCM. I asked him
- 13 several times, so it --
- 14 MR. PEREZ: So you have it.
- 15 MR. MORALES: Yeah.
- 16 MR. PEREZ: Okay.
- 17 MR. WALSH: And a report was created from when Alex sent
- 18 photos of cracks to MCM.
- MR. MORALES: An actual report was not created. It was -- a
- 20 | bunch of pictures were sent. They sent the pictures and it was --
- 21 | that was it. Obviously the pictures did talk for themselves.
- 22 When you see them --
- MR. WALSH: That'd be great.
- 24 MR. PEREZ: So these were the pictures taken Saturday?
- 25 MR. MORALES: You're asking for Saturday?

- 1 MR. PEREZ: I'm asking Dan.
- 2 MR. WALSH: I don't have a day.
- MR. PEREZ: Because the report -- after these two reports
- 4 | that were in the yard, I believe that -- correct me if I'm wrong,
- 5 Jose -- the next report other than the Monday one that MCM sent,
- 6 Alex on Saturday, after the erection, did a cursory review and
- 7 took pictures.
- 8 MR. WALSH: Those are the photos that I'm talking about.
- 9 MR. PEREZ: Okay, so those are the -- Alex that took on
- 10 Saturday. And those -- Jose is saying that there is no report but
- 11 there are a bunch of pictures.
- 12 MR. WALSH: There are photos.
- MR. PEREZ: Yes. And then Alex sent those to whom?
- MR. MORALES: He sent it through, I guess, our --
- MR. PEREZ: The WhatsApp --
- 16 MR. MORALES: -- WhatsApp group --
- 17 MR. PEREZ: -- to you guys.
- MR. MORALES: -- to all, to all the -- to the team.
- 19 MR. PEREZ: Did we give those to MCM?
- MR. MORALES: He was with MCM at the time he took the
- 21 pictures. But those are part of the report that was compiled and
- 22 sent Wednesday.
- 23 MR. PEREZ: Oh so those were included in the subsequent
- 24 | report Wednesday.
- MR. MORALES: Yeah. And I call it report, but they're --

- 1 basically they're pictures. You know, even though those 3 days we
- 2 | were in communication with MCM regarding this, you know.
- 3 MR. PEREZ: Okay.
- 4 MR. WALSH: The next item is the daily reports. I'd like to
- 5 have a copy of all the daily reports that include photos.
- 6 MR. PEREZ: All of the -- since the inception of the job to
- 7 the collapse.
- 8 MR. MORALES: Just to clarify something, daily reports do not
- 9 | -- the daily reports we create that we use do not include
- 10 photographs. They're --
- 11 MR. PEREZ: Just written.
- MR. MORALES: -- just written. We do have pictures. Plenty.
- 13 But --
- 14 MR. BRAGG: This is Kenny Bragg. A question. If we, if
- 15 we're requesting daily reports since the beginning of the job, how
- 16 | far back does that go?
- 17 MR. MORALES: March 12, if I'm not mistaken. Or March 1.
- 18 MR. PEREZ: Of? What year?
- 19 MR. MORALES: Last year. '17.
- 20 MR. BRAGG: '17.
- MR. PEREZ: So it's one year. Thereabouts.
- 22 MR. BRAGG: Yeah. Okay. If you can just put those in one
- 23 | file, one --
- MR. PEREZ: Yeah.
- MR. WALSH: Yeah. And then the photos that you sent to Juan,

- did you indicate that those photos contained 3 days of photos?
- 2 | that -- okay. Can they be segregated into each day as to when
- 3 those photos were taken?
- 4 MR. MORALES: I'm pretty sure the file has information. We
- 5 can, we can --
- 6 MR. WALSH: Please.
- 7 MR. BRAGG: Is there anything else?
- 8 MR. WALSH: And again, this is -- we'd like to obtain this as
- 9 quickly as possible.
- 10 MR. PEREZ: Yeah. I can get it to you between today and
- 11 | tomorrow, Dan.
- MR. WALSH: That's fantastic. Yeah, this is all
- 13 (indiscernible).
- 14 MR. PEREZ: Now the -- where I'm a little confused is the
- 15 | photos from Wednesday. I was under the understanding that that
- 16 was the photos I gave Juan. Am I -- you're Juan. See, the photos
- 17 I gave Juan. But I thought those were all the Wednesday.
- MR. MORALES: I created that file, so I know there's pictures
- 19 there that might have been from 2 days before, from the -- when I
- 20 | went up there with --
- 21 MR. PEREZ: So I misspoke when I told you that those were the
- 22 Wednesday photographs. I thought --
- 23 MR. MORALES: It's a Wednesday batch that was sent to them
- 24 | with all the --
- MR. PEREZ: Okay. So it was a Wednesday batch that was sent.

```
But it had photos from how far back?
 1
         MR. MORALES: If I'm not mistaken, you know, I included there
 2
 3
    because I was trying to make sense of that. Pictures that were
    taken during the movement, you know, if there is any cracks in
 4
 5
    the, in that element before being placed. So they might be there.
 6
    So they might be -- it's a batch that says, I guess, a good story,
 7
    if anything, of that.
 8
         MR. PEREZ: May be a story of what --
 9
         MR. MORALES: Yes.
         MR. WALSH: If they can be segregated by --
10
11
         MR. MORALES: By day?
12
         MR. WALSH: By day.
13
         MR. MORALES: I'm pretty sure it can be done.
14
         MR. WALSH: Okay.
15
                     It's 3:10 p.m. I'm going to go ahead and
         MR. BRAGG:
    conclude the interview. Thank you for your participation.
16
17
          (Whereupon, at 3:10 p.m., the interview was concluded.)
18
19
20
21
22
23
24
25
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: PEDESTRIAN BRIDGE COLLAPSE

MIAMI, FLORIDA MARCH 15, 2018

Interview of Jose Morales

ACCIDENT NO.: HWY18MH009

PLACE: Sweetwater, Florida

DATE: April 10, 2018

was held according to the record, and that this is the original, complete, true and accurate transcript which has been transcribed to the best of my skill and ability.

Eileen Gonzalez

Transcriber

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of: *

*

PEDESTRIAN BRIDGE COLLAPSE

MIAMI, FLORIDA * Accident No.: HWY18MH009

MARCH 15, 2018

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Interview of: RAPHAEL URDANETA and

JAKE PEREZ

Bolton Perez & Associates

Tuesday, March 20, 2018

APPEARANCES:

KENNETH BRAGG, Senior Highway Accident Investigator National Transportation Safety Board

DAN WALSH, Highway Factors Investigator National Transportation Safety Board

REGGIE HOLT, Senior Bridge Engineer - Concrete Specialist

Federal Highway Administration

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Т	<u>INIERVIEW</u>
2	(10:06 a.m.
3	MR. BRAGG: Today is Tuesday, March 20th, 2018, 10:06 a.m.
4	My name is Kenneth Bragg, investigator for the Office of Highway
5	Safety, National Transportation Safety Board. This interview is
6	in connection with the bridge collapse at FIU university Miami,
7	Florida.
8	I'm going to start by first asking Raphael to state and spel
9	your first and last name.
L O	MR. URDANETA: Raphael Urdaneta, U-r-d-a-n-e-t-a, and with
11	Bolton Perez, I'm the project administrator for this project.
12	MR. BRAGG: Okay. And, sir, your name is?
13	MR. HOLT: Reggie Holt, with Federal Highway Administration.
14	MR. WALSH: Dan Walsh, highway bridge factors investigator
15	with the National Transportation Safety Board.
16	MR. BRAGG: Okay. And also, sir, we have present?
17	MR. PEREZ: Jake Perez with Bolton Perez & Associates. I'm
18	one of the principals.
19	MR. BRAGG: So because we have so many people at the table,
20	for the transcriptionist it's going to be necessary to identify
21	who you are before you begin speaking. Okay?
22	And I'm going to kind of start off with the questioning.
23	INTERVIEW OF RAPHAEL URDANETA AND JAKE PEREZ
24	MR. BRAGG: If you can just go ahead and kind of identify
25	your background with the company, what's your role, how long

you've been there?

MR. URDANETA: Raphael speaking. I have about 3 years with Bolton Perez. First of all, I was with one of the FDOT project, assigned to one of the FDOT projects on the State Road 7, one of the phases. We conclude that phase and we started the FIU project in pretty much October 2016. I've been acting as the project administrator. I'm pretty much in the role of the pay the contractor, keep records of all the activities. Pretty much I keep the paperwork and participate on the audits that we have every once in a while with the FDOT.

MR. BRAGG: And what's Bolton Perez's role on this project?

MR. URDANETA: We are the CEI. We were hired by FIU to

oversee the contract, the contractor activity. This is a designbuild project, so they were required -- FIU was required to bring

on board a CEI.

MR. BRAGG: What does CEI stand for?

MR. URDANETA: Construction Engineer Inspection.

MR. BRAGG: Okay.

MR. URDANETA: And so, and that way, FDOT can fund the project. They need someone on-site to pretty much follow FDOT rules.

MR. BRAGG: Okay. And so you act as kind of a liaison between FDOT --

MR. URDANETA: Yes. We were pretty much liaison between FDOT, FHWA and principally FIU.

1 MR. BRAGG: Okay. 2 MR. URDANETA: Mainly FIU. MR. PEREZ: This is Jake Perez. I'd like to add also that 3 4 part of our role is to administer the construction contract. 5 MR. URDANETA: Yeah. 6 MR. BRAGG: Okay. And what do you mean by administer the 7 contract? 8 MR. PEREZ: Well, you go through the scope, but it's 9 basically administering, you know, pay requisitions. Like Raphael 10 was saying, the --11 MR. URDANETA: The daily activities. 12 MR. PEREZ: -- the daily activities, you know, on behalf 13 of --14 MR. URDANETA: Overseeing the daily activities. 15 MR. PEREZ: Right. MR. URDANETA: And keeping record of it. 16 17 MR. BRAGG: Okay. So let's talk about when the move first 18 began. What was your role in that or what was your company's role 19 in that? 20 MR. URDANETA: The role is always the same, administering pretty much the contract. Like I said, we are -- how do I explain 21 22 that. We oversee the contractor activities. The movement of the

bridge, we were in charge to channelize all the paperwork through

the movement approval, et cetera. We act as a channel between the

us to FDOT and Federal Highway in Tallahassee to get, you know,

23

24

- 1 contractor, FIU and DOT.
- 2 MR. BRAGG: Okay.
- And the whole time is the same goal, right? 3 MR. URDANETA:
- 4 MR. BRAGG: Okay. Were you on-site when they began the move?
- 5 MR. URDANETA: I was -- when they began the move?
- 6 MR. BRAGG: Yes.
- 7 MR. URDANETA: Yeah. I was the whole time when we had the 8 move. Remember -- I don't know if you are asking when we moved 9

the bridge?

- 11 MR. URDANETA: Which was a week ago?
- 12 MR. BRAGG: Yes.

MR. BRAGG: Yes.

- 13 I was the whole time when the -- since MR. URDANETA: Yes. 14 we started at 4:20 a.m., until we finished about lunch on the next
- 15 day.

- 16 MR. PEREZ: At noon.
- 17 MR. URDANETA: Yeah, noon. Yes, I was the whole time there.
- 18 MR. BRAGG: So what did you do while you were there?
- 19 MR. URDANETA: Observing.
- 20 MR. BRAGG: Observing.
- 21 MR. URDANETA: Yeah. There was not much to -- the contractor
- 22 that was doing the move, most of the time we have a specialty
- 23 contractor. Right? And you let the big boys take care of it and
- 24 there's nothing that we can do about -- I mean, observing how was
- 25 the torsion, I mean, that was not me. That was my PE, which is

I was there just in case, observing. 1 2 MR. BRAGG: Okay. MR. URDANETA: To be honest with you, having fun because it 3 4 was a really --5 MR. PEREZ: Yeah, it's an exciting. 6 MR. URDANETA: -- it was a really exciting moment. 7 MR. BRAGG: Okay. 8 MR. URDANETA: It was a really nice moment. 9 And just for the record, Jose Morales our senior MR. PEREZ: 10 project engineer on the project was injured on Thursday, as you 11 might know, and was just operated Sunday and released Monday to 12 his home and that's why he's not here today. 13 MR. BRAGG: Okay. Okay. 14 MR. URDANETA: Yeah, he knows about it. I told him. I told 15 Ken about it. 16 MR. BRAGG: And so, when the bridge arrived what was your 17 role? Same, still observing? 18 MR. URDANETA: Yeah. 19 So describe to me how the move went. MR. BRAGG: 20 MR. URDANETA: The move went smoothly the whole time. thought it's going to be more, you know, challenge because --21 22 maybe because I didn't know anything about it, pretty much.

knew what I read because I put together various specific steps and

movement, all the hiccups that we can have. And but it was a --

we had like pre-activity meetings that we discussed all the

23

24

to me, it was a quick movement.

2.1

Up to a point, let's say, before sunlight, then we have to stop. We were, you know, at the road already. We had to stop because there was an issue with the connection between the Wi-Fi and the specialty company computers that were measuring -- they have, you know, sensors everywhere, especially on the top of the bridge. They were -- I don't know what they were seeing. They were seeing a bunch of lines, because I -- to be honest with you, I couldn't interpret it. I couldn't get the information. I was not there to get it. We stopped there to connect again the Wi-Fi. And I think it happened twice. One was longer than the other one. And they connected the whole stuff with cables pretty much, the old-fashioned way.

And we continue. We land the north side first because it was the more challenging because we had two PT bars that need to be exactly in place. And then later on we landed the south side.

And that was pretty much it.

MR. BRAGG: Okay. And once the move was complete, how long after the move was -- that you arrived, before you began installing the bridge or placing the bridge?

MR. URDANETA: I arrived at 10:30 in the evening and, like I said, it wasn't until lunch the next day.

MR. PEREZ: I'm not sure we understood the question. Can you repeat that?

MR. URDANETA: How long time I was present?

- 1 MR. BRAGG: No, no. So when the bridge arrived here and you
 2 finally got here -3 MR. PEREZ: Arrived over at Southwest 8th Street?
- 4 MR. BRAGG: Yes.
- 5 MR. PEREZ: Okay.
- 6 MR. BRAGG: How long before it arrived did you begin
- 7 | installing?
- 8 MR. PEREZ:. Well, the bridge was built here.
- 9 MR. URDANETA: The bridge was built here.
- MR. BRAGG: Okay. Okay.
- 11 MR. PEREZ: Yeah, the bridge was always here. They just
- 12 moved from this position here in the yard to over 8th Street.
- 13 MR. BRAGG: Okay.
- 14 MR. URDANETA: It was built the whole time here.
- MR. BRAGG: All right. Did you do inspections at any point?
- MR. URDANETA: No, I didn't. My people did.
- 17 MR. BRAGG: Your people did.
- 18 MR. URDANETA: Yeah, my people did.
- 19 MR. BRAGG: All right.
- 20 MR. URDANETA: Unless they are sick or they are missing the
- 21 day, I don't take that role.
- MR. BRAGG: At that point there was nothing alarming? There
- 23 was nothing --
- MR. URDANETA: At all.
- 25 MR. BRAGG: At all. Okay. And at some point you discovered

- 1 cracks in the bridge.
- 2 MR. URDANETA: Yeah.
- 3 MR. BRAGG: Tell me a little bit about that.
- 4 MR. URDANETA: That was a weekend. We finish on Saturday.
- 5 Right? We have another shift on Saturday coming, which is the one
- 6 that is the PT specialty, right, inspection -- inspector. Because
- 7 what we have to do when we set the bridge, two members had to
- 8 | release the PT bars, right? Okay. So we brought that inspector
- 9 on-site and he took over. We left, and he did the whole
- 10 inspection of the releasing of the PT bars and he did an
- 11 inspection.
- 12 MR. PEREZ: His name is Alex.
- 13 MR. URDANETA: Alexis Molina. Alexis Molina. He is with
- 14 Corradino.
- 15 MR. PEREZ: With Corradino. He's a subcontractor to us.
- 16 MR. URDANETA: Alexis Molina, yeah.
- 17 MR. BRAGG: Okay. Not Jose?
- 18 MR. PEREZ: No, not Jose.
- 19 MR. URDANETA: No, not Jose.
- 20 MR. PEREZ: The post-tensioning on this project was solely
- 21 done by Alexis Molina under the Corradino Group, is the name of
- 22 the company, given that they are the qualified professionals for
- 23 that activity.
- MR. URDANETA: When they release the whole PT bars to a point
- 25 they were loose, it was designed that way, the facing -- let's

- 1 | call it that way; let's call it that way. And he did a --
- 2 proceed, you know, walk through the bridge because we had shut
- 3 down 8th Street at that point, and he report a couple cracks on
- 4 | it. Said -- he took a picture and send it to us. Said we have
- 5 cracks here. They were really minor cracks. Okay.
- 6 MR. BRAGG: What time did he discover the cracks? What day,
- 7 | what time?
- 8 MR. URDANETA: That was Saturday. Let me go into my cell
- 9 phone.
- 10 MR. PEREZ: It must have been shortly after noon.
- MR. URDANETA: Yeah, it was about 2 or 3, but I don't want to
- 12 mislead it.
- 13 MR. PEREZ: Yeah, yeah. Get the --
- MR. URDANETA: The exact time to give. Because, I mean, we
- 15 have the time. I don't know want to guess on that. Hold on a
- 16 second, guys, I need to go back. Alexis Molina 3:16 p.m.,
- 17 precisely, Saturday after the move.
- 18 MR. BRAGG: And so, he notified you?
- 19 MR. URDANETA: Yes.
- 20 MR. BRAGG: And he notified --
- MR. URDANETA: He notifies everyone, because we have a group,
- 22 | which is my PE, my engineer of record, all the people that is
- 23 involved by Bolton Perez. He notified the group. Yes.
- MR. BRAGG: And so after -- so when you learned of the crack,
- 25 then what happened next?

- MR. URDANETA: I asked if Figg or MCM was notified. MCM was
- 2 notified of the cracks. They knew about it. I asked if they took
- 3 | a measure of the camber. The camber was what it's supposed to be.
- 4 Right? And that's pretty much -- that's pretty much what it was.
- 5 MR. BRAGG: Okay.
- 6 MR. URDANETA: On Monday we -- you are not asking, but on
- 7 Monday we came back from the weekend and we went again back to the
- 8 bridge to look at --
- 9 MR. BRAGG: Okay.
- MR. URDANETA: We thought we had a successful move.
- 11 MR. BRAGG: Okay. So from when you last saw the crack on
- 12 | Saturday, when you first saw it, and you looked -- went back to it
- on Monday, had the conditions worsened at all?
- MR. URDANETA: Yes.
- 15 MR. BRAGG: Okay. And describe how it worsened.
- MR. URDANETA: Well, when you see the picture Alexis took it
- 17 was hairline cracks. And they were a little bit longer, pretty
- 18 much, on Monday.
- 19 MR. BRAGG: Okay.
- 20 MR. PEREZ: And let me interrupt for a second.
- MR. URDANETA: Yeah.
- 22 MR. PEREZ: This is Jake. I understand that the cracks were
- 23 | not only looked at but documented --
- MR. URDANETA: Yes.
- MR. PEREZ: -- you know, where the one stopped on Saturday

```
1
    and versus where it was on Monday.
 2
         MR. URDANETA:
                        Yeah.
                     So you marked it --
 3
         MR. BRAGG:
                     We marked -- we identified the --
 4
         MR. PEREZ:
 5
         MR. URDANETA:
                         And Tuesday as well.
 6
                     Yeah. We marked the incremental growth of that
         MR. PEREZ:
 7
    crack.
 8
         MR. BRAGG:
                     And about -- approximately how much had it grown?
 9
         MR. URDANETA:
                        An inch.
10
         MR. PEREZ:
                     Yeah.
11
         MR. BRAGG:
                     About an inch?
12
         MR. PEREZ:
                     Yeah.
13
         MR. URDANETA: An inch.
14
                     Did you consider that to be significant?
15
         MR. URDANETA:
                        No.
16
         MR. BRAGG:
                     No.
                           Okay.
17
         MR. URDANETA:
                        Remember, we administrator of the contract.
18
    We are not here to engineer the stuff. To us there were no
19
    significant, but keeping track because that's our job.
20
         UNIDENTIFIED SPEAKER: Gentlemen, this is (indiscernible).
2.1
    detect that different people are asking questions, but you're not
22
    identifying yourself to transcription of this could be inaccurate.
23
    I know that Mr. Bragg wanted to do that. So just keep it in mind.
24
         MR. BRAGG: Yeah, yeah. It's only me asking questions at
25
    this point.
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- 1 UNIDENTIFIED SPEAKER: Okay.
- 2 MR. BRAGG: So did there come a time when you had a meeting
- 3 about the cracks?
- 4 MR. URDANETA: Yeah. We were notified by MCM on Wednesday
- 5 | afternoon, right, that they were bringing the engineer of record
- 6 from Tallahassee to have a meeting on Thursday night or -- they
- 7 met at night, I think.
- 8 MR. BRAGG: And who was that engineer?
- 9 MR. URDANETA: It was going to be that --
- 10 MR. PEREZ: At Figg Engineers. Oh, the name of the
- 11 | individual?
- 12 MR. BRAGG: Yes, sir.
- 13 MR. PEREZ: I believe it was Denney Pate.
- MR. URDANETA: And Leon, I know Leon because Leon, he was on
- 15 the movement.
- MR. PEREZ: And then on the phone it was Dwight Dempsey.
- MR. URDANETA: Dwight Dempsey on the phone.
- 18 MR. BRAGG: Okay.
- MR. URDANETA: We had three engineers from Figg on that day
- 20 for the meeting.
- 21 MR. BRAGG: Okay. So then what happened in the meeting?
- MR. URDANETA: Well, before the meeting.
- MR. BRAGG: Okay. Before the meeting.
- 24 MR. URDANETA: Before the meeting. Before the meeting the
- 25 engineers from Figg, Leon and Pate --

- 1 MR. PEREZ: Denney. Denney Pate.
- 2 MR. URDANETA: -- Denney Pate went to the site to look at the
- 3 cracks that were identified.
- 4 MR. BRAGG: Okay.
- 5 MR. URDANETA: And about 7:30 a.m. or 8 -- I know that
- 6 because I -- my inspector took a photo of Leon looking at the
- 7 crack; said the engineers are here. Right? And Denney went into
- 8 the lift with all his armor and equipment for safety and look at
- 9 the cracks on the face.
- 10 MR. PEREZ: On the north face.
- 11 MR. URDANETA: On the north face.
- 12 MR. BRAGG: Uh-huh.
- MR. URDANETA: Because you are not able to see those cracks
- 14 from the bridge when you're in south.
- 15 MR. BRAGG: And who is Leon?
- 16 MR. URDANETA: What was that?
- 17 MR. BRAGG: Leon?
- MR. URDANETA: Leon. Leon is the other Figg engineer was on-
- 19 site. He was on-site for the movement.
- 20 MR. BRAGG: Okay.
- MR. URDANETA: I met the guy because he was on-site for the
- 22 movement. We had two engineers from Figg. One older guy and,
- 23 which I don't have the name of, and Leon just for the movement.
- 24 And he come back with Denney Pate or whatever his name is for that
- 25 meeting.

MR. PEREZ: On Wednesday. On Thursday.

MR. URDANETA: On Thursday. On Thursday. So they went to the bridge, look at the cracks, came to the meeting. They did a presentation about all the calculation that the -- all the calculation justifying pretty much justified -- he did all the -- he present all the calculation during the meeting and then we will start activate pretty much.

MR. BRAGG: Okay.

MR. URDANETA: That was not a regular meeting. It was not scheduled by Bolton. It was scheduled -- I mean, we were pushing to have the engineer of record to look at it, right, and they decided to bring Figg on-site.

MR. PEREZ: Let me interrupt. This is Jake. Prior to the meeting on Thursday morning, we had been notifying the contractor because our conduit of communication is through MCM not directly to Figg.

MR. URDANETA: To Figg, yeah.

MR. PEREZ: So we were constantly communicating to the contractor Monday, Tuesday, Wednesday, the growth of the extension of the cracks each day. And then to the point where both BPA and MCM had a desire to get the engineer involved, and that's what prompted then MCM to bring Figg down for the meeting on Thursday morning.

MR. BRAGG: Okay. So you're saying -- so you monitored the crack consistently since Saturday?

1 MR. PEREZ: Correct.

2 MR. BRAGG: And then during your monitoring the crack, you 3 noticed that it was still --

MR. PEREZ: Progressing.

MR. BRAGG: And how much had it progressed?

MR. URDANETA: Like I said, 1 inch, 2 inches.

MR. PEREZ: No, that was between Saturday to Monday. But he's asking the continuation of the progression.

MR. URDANETA: We didn't take measurements on Saturday. We only identified the location by pictures. When we start taking measurement was Tuesday, if I recall correctly.

12 MR. BRAGG: Okay.

MR. URDANETA: Right? When we still seeing the progression and then my engineer said, Rapha -- and I did it by myself, by the way. Rapha, go out there with one of my co-workers and start marking, you know. And you will see the picture. I mean, we have marks on the 13th, if I recall correctly, on the 14th. And between the 13th and 14th there was almost 2 inches.

MR. BRAGG: You said the cracking was on the north face?

MR. URDANETA: Yes.

21 MR. BRAGG: Where exactly?

MR. URDANETA: You have it on the member, the 11 member, which is the diagonal. You have on the bottom of that member, on the slab. And on the column number 12 there were transverse, there were cracks. That on the column were pretty much hairline

- 1 cracks. But they were consistent. I mean, about 18 inches or
- 2 something like that. Okay. There were --
- MR. PEREZ: And there's the strut.
- 4 MR. URDANETA: And the strut, but I don't recall if we by
- 5 ourselves inspected. I think Jose did it. I was not involved
- 6 | with it. The strut, which is the north face. Right?
- 7 MR. PEREZ: And there is a photographic report that we sent
- 8 MCM on Tuesday about those cracks.
- 9 MR. BRAGG: Okay.
- 10 MR. URDANETA: Yes.
- MR. BRAGG: And if we haven't already done so, we will
- 12 request all the photographs --
- MR. PEREZ: Absolutely. Yeah, we have -- we're trying to put
- 14 all that documentation for you.
- 15 MR. BRAGG: Oh, I notice (indiscernible). So at some point
- 16 you reached a decision how to address the cracks.
- 17 MR. URDANETA: No.
- 18 MR. BRAGG: You didn't? Okay.
- MR. URDANETA: No. We were monitoring the cracks and we were
- 20 saying to MCM have Figg to look at this.
- 21 MR. PEREZ: Correct.
- 22 MR. URDANETA: Pretty much.
- MR. BRAGG: Okay.
- 24 MR. URDANETA: We are not here to address the cracks.
- 25 MR. BRAGG: Okay.

MR. URDANETA: Okay. Like Jake said, our channel of
communication is MCM. We are insisting, hey, is Figg involved?
Has Figg been notified? I mean, those are the engineers that need
to make any kind of decision on it because, like I said, this is
(indiscernible).

MR. BRAGG: Okay.

MR. URDANETA: We didn't have Figg in hand to go directly to them. That would be a violation of protocol anyway.

MR. PEREZ: Yeah. When -- this is Jake Perez. Let me interrupt again. When we were at the meeting Thursday morning, we took minutes.

MR. URDANETA: Yes.

MR. PEREZ: But we also took photographs of the slides that Figg presented during their presentation of the m-- you know, of their analysis that they had performed. And that was one of the main reasons for the meeting.

MR. BRAGG: Okay.

MR. URDANETA: Yes, we do have that. We took notes on that meeting of the QA, remember.

MR. BRAGG: Dan, I'm going to let you jump in now and ask some questions.

MR. WALSH: Okay. Dan Walsh with the NTSB.

Just to follow up on the last question, can we obtain a copy of that, of the copy of the PowerPoint that you have?

MR. PEREZ: Certainly.

```
1
         MR. WALSH:
                     Okay.
 2
         MR. PEREZ:
                     They're going to be attached to the minute
 3
    meetings [sic].
 4
         MR. URDANETA: That's going to be released today, sometime
 5
    today.
 6
         MR. PEREZ: You can certainly request the minute meetings,
 7
    but I'd be happy to run you a Xeroxed copy before you leave today.
 8
         MR. WALSH: That would be fantastic.
         MR. URDANETA:
                        I mean, this is our -- this is white -- I
 9
10
    mean, black and white. We have the color one because, I mean, we
11
    need the colors. You're going to need the color because on their
12
    -- on the 3D analysis they were showing some shady --
13
         MR. PEREZ: Yeah, the stress.
14
         MR. URDANETA: -- the stress, you know --
15
         MR. PEREZ: The stress pattern in color.
16
         MR. URDANETA: -- pattern.
17
         MR. PEREZ: So we can print out --
         MR. URDANETA: Yeah, the color one.
18
19
         MR. PEREZ: -- the PDF version of this and it will be in
20
    color.
21
         MR. URDANETA: We took notes. I mean, we were not running
22
    the meeting but we -- thank goodness we were, if you want to say,
23
    cautious enough and took notes of every single --
24
         MR. PEREZ: I mean that's our job, right?
25
         MR. URDANETA: -- questions.
```

- 1 MR. BRAGG: And so, they -- this is Kenney Bragg again.
- 2 So, they gave you a -- do you have electronic --
- MR. URDANETA: No, no, no. 3
- 4 MR. BRAGG: No.

- We request -- during that meeting we request MR. URDANETA: 6 this presentation electronic, you know, in an electronic way, as 7 well as the procedure that was taking place in that moment. 8 never got it.
- 9 MR. PEREZ: And this was also requested by FDOT who attended 10 the meeting.
- 11 MR. URDANETA: Yes. And you will see that in the notes.
- 12 MR. WALSH: Dan Walsh again. If we could get a black and 13 white copy before we leave, that would be great.
- 14 UNIDENTIFIED SPEAKER: That's perfect.
- 15 MR. WALSH: Just some general observations. As you know, we 16 are trying to get to the bottom of the cause of the collapse, and 17 we appreciate your frankness and your honesty with us.
- 19 time of the move to the time of the collapse? If you can go 20 through a list or just provide a brief summary of your inspection

Can you please describe the items in your inspection from the

- 2.1 findings. I know you talked a little bit about the cracks.
- 22 there any other additional items that you observed in your
- 23 inspection?
- 24 MR. URDANETA: No.
- 25 MR. WALSH: Okay.

MR. URDANETA: No, to be honest. No. Just the cracks.

MR. WALSH: Okay.

MR. PEREZ: Yeah, this is Jake Perez. I'm not sure there was much activity going on other than the move and then the placement of the bridge. And then the observations of the cracks. And I don't believe the contractor had much other activity going on.

MR. URDANETA: Let me describe you. This is Raphael again, Raphael back. We have a phasing plan, right. The phasing was move the bridge, install the bridge the way it is -- the way it was actually, and our life continue. We were working on the stairway, right, on the south side and we were working on the elevator speed foundation on the north side. We didn't touch any more of that span. We didn't supposed to according to the phasing. If I understand correctly, okay.

MR. PEREZ: Correct. The work was completed in terms of the span being placed and now other activities were going on related to the project, but not to that particular structure.

MR. WALSH: Okay. All right. Thank you. So no other inspection reports or observations besides the cracks?

MR. URDANETA: Besides the cracks? No.

MR. WALSH: Okay.

MR. URDANETA: No. No.

MR. WALSH: What would you believe to be the cause of the collapse?

MR. URDANETA: I cannot give you that opinion, to be honest

with you.

2 MR. WALSH: Okay.

MR. URDANETA: I'm not -- unfortunately, I don't have the background of the PT procedures. What I learned during this project is totally different that I don't have a background on. And I'm not a licensed engineer. I have a bachelor engineering. To give you opinion isn't a fair question for me. I can speculate what I really want.

MR. WALSH: Just wondering if you had a general observation.

MR. URDANETA: I mean, what I can tell you is the facts. The engineer of record put up a procedure that Bolton didn't have physically to stress that member, stress member 11. And in the process of stressing the member 11, I think it was the last step in stressing the member, the structure collapsed. And I know that was the last step because my people was up there and they took picture, couple of picture when they were doing the steps, and they said on the last it was a 1:22 or so --

MR. PEREZ: In the afternoon.

MR. URDANETA: -- in the afternoon, last step.

MR. PEREZ: And they sent you the photo.

MR. URDANETA: And they sent me a photo, right. Pretty much keeping us in the office updated. I was outside because I was coming from the postal office, I look at the bridge, nothing was happening at that point, right, except the procedure. And when I turn my back heading to the office, I heard the sound of

collapsing. And then I run for --

2 MR. PEREZ: This is Jake Perez. There is a pretty good video 3 from one of the mast arms that FDOT has. I don't know if you guys 4 have been able to see it --

MR. URDANETA: That's a PA talking. I cannot speculate.

MR. PEREZ: -- that filmed the collapse. And if you go frame by frame, in my opinion, the first thing that you see is the buckling of the --

MR. URDANETA: Member 11.

MR. PEREZ: -- member 11, the diagonal truss member.

MR. URDANETA: And that camera was put there on that mast arm by FDOT by summer last year. I got the notification of that camera 2 or 3 months after the fact because my contractor was doing an unsafe operation, right, and, you know, the MOT setting out, the MOT that we're doing an unsafe operation, if you want to say it, whatever. They can see that — they send me the pictures; say, Raphael, take a look at that. I went over there and I addressed all the stuff, and then when I realized about that camera. I didn't know about that camera. FIU had two cameras installed. One on that building and one (indiscernible) building live camera. I don't know if you can get those record as well. That might help you.

MR. WALSH: Okay. Thank you.

Have you been an inspector for this type of structure before?

25 MR. URDANETA: No. No. I don't have those qualifications.

- 1 So if I don't have the qualifications, I cannot inspect it.
- 2 MR. WALSH: I'm talking about your -- the performance that
- 3 you're doing now.
- 4 MR. PEREZ: The role that you have now as PA.
- 5 MR. URDANETA: Oh.
- 6 MR. WALSH: The role that you have now.
- 7 MR. URDANETA: But not of this kind. You said specifically
- 8 to this kind of a structure. This kind of a structure is unique.
- 9 So as a project administrator, yes.
- 10 MR. PEREZ: On other FDOT projects?
- 11 MR. URDANETA: On other FDOT projects, on other like
- 12 projects, yes, I have.
- 13 MR. PEREZ: Yes.
- MR. URDANETA: Yes.
- 15 MR. WALSH: Can you name those just briefly?
- MR. URDANETA: State Road 7 as a -- well, that was as a
- 17 | contract support actually.
- 18 MR. WALSH: Uh-huh.
- MR. URDANETA: As a contract support. Pines Boulevard
- 20 | interchange. Okeechobee Road; that's on Palm Beach. Atlantic;
- 21 that's on Delray, Delray Beach. Atlantic Boulevard on Delray
- 22 Beach. 37 Avenue Hialeah. That's going back about at least 8
- 23 years now.
- MR. WALSH: Thank you. Thank you.
- MR. URDANETA: If I try to push it a little -- no problem.

- 1 MR. WALSH: You talked a little bit about the move.
- 2 MR. URDANETA: Uh-huh.
- MR. WALSH: Did you notice anything unusual about the move in terms of going over the curb, going over the median, what was in
- 5 place in order to move that structure over the curb and median?
- 6 MR. URDANETA: They have steel plates. They -- pretty much,
- 7 the path they were going through, they put the steel plate. They
- 8 were really thick steel plates all the way. And try to level the
- 9 differentials, you know, movement. The equipment was impressive
- 10 because, I mean, every single tires access have independent
- 11 movement, right, to avoid any differential movement.
- MR. WALSH: Did you -- was it a smooth move? Would you
- 13 observe it as smooth?
- 14 MR. URDANETA: To be honest with you, the way we prepared
- 15 | that move I thought it's going to be really tricky. It was really
- 16 smooth up to my knowledge. Right?
- MR. PEREZ: But it appeared to you to be smooth.
- MR. URDANETA: Yeah, it appeared. There was no issues.
- 19 MR. PEREZ: Right.
- MR. URDANETA: No issues.
- MR. PEREZ: Other than the two shutdowns because of the Wi-
- 22 Fi.
- 23 MR. URDANETA: About the Wi-Fi, and which it took a little
- 24 bit longer.
- 25 MR. WALSH: Okay. I understand it was videotaped?

- 1 MR. URDANETA: Maybe. I mean, there were three drones
- 2 | flying. I mean, it was a spectacular move.
- 3 MR. WALSH: Did you videotape it?
- 4 MR. URDANETA: We didn't. We didn't.
- 5 MR. WALSH: Okay.
- 6 MR. URDANETA: We didn't because there was so many cameras
- 7 out there they said why we going to videotape this one? We
- 8 didn't. We photograph it, yes, but not videotape.
- 9 MR. WALSH: You mentioned under Mr. Bragg's question the
- 10 growth of the cracks from Monday, Tuesday and Wednesday, and you
- 11 | indicated that you relayed that information to the contractor.
- 12 MR. URDANETA: Yes.
- 13 MR. WALSH: How did you relay that information? By
- 14 | telephone, by email? What was the form of communication?
- 15 MR. URDANETA: Emails and personally, both ways.
- MR. WALSH: Can we obtain a copy of those emails?
- 17 MR. URDANETA: Yeah.
- 18 MR. PEREZ: Absolutely. Absolutely.
- MR. URDANETA: And we did a little bit further, on Wednesday
- 20 afternoon, we send a WeTransfer to them with all the pictures that
- 21 | we took, because it was a huge file to send it by email, you know.
- 22 And I asked Jose to send us that WeTransfer email.
- 23 MR. WALSH: Okay. If we could get a copy of that email, that
- 24 would be great.
- 25 MR. URDANETA: Yes.

MR. WALSH: In your opinion, was any of the work that was performed on the bridge, did any of the work not conform to the design plans?

MR. URDANETA: No.

MR. WALSH: Just a general question on the restressing that was done on the day of the collapse.

MR. URDANETA: I can tell you what I heard.

MR. WALSH: Why don't you tell us what you heard.

MR. URDANETA: About how much they're going to put in --

MR. WALSH: Yes.

MR. URDANETA:

MR. URDANETA: Okay. The way they described, there was 280 kips. I don't know if it was by tendon or in conjunction. I cannot tell that.

MR. PEREZ: Yeah. This is Jake Perez. We understood they were applying the same post-tensioning that it had here in the yard before they moved it. And if you use that logic, it's 280 kips per tendon. But we were never told or given the procedure that the engineer and the contractor had previously discussed.

Exactly.

apply 280 kips by sequence, right, top, bottom, 50, 50, 50, 50.

There were, I mean, 12 movement on that. And the last one, if you make the math, 30. Right?

What we heard, that we're going to

The BSL was -- BSL, which is the company that did the -- specialized on this, was on-site during the procedure. They were, according to MCM, they had the procedure in hand, right, and they

were following the procedure: 50 kips, 50 kips, 50 kips until -- and we know by conversation that we have that the last one supposed to be 30, right, and probably (indiscernible), which is the MCM, you know, called and said, hey, to the PC manager that was up there, remember, the last one just 30.

According to my records, they were on the last one. I don't know if it was on the top or were on the bottom. The last step.

MR. PEREZ: Let me interject also that we were not aware of this procedure until Thursday morning --

MR. URDANETA: Yes, during the presentation.

MR. PEREZ: -- after the presentation when we were -- during the question and answer, where the contractor MCM informed us, by the way the DSL folks are up on the deck there to stress the -- or restress, I should say, the bars this morning. That was the first time we heard of that activity occurring and, of course, immediately we asked where is the process; where is the procedure? So we didn't have it. MCM said we'll give it to you. We did not have it. When we went -- when our inspectors went to the field, both Jose Morales who went to the deck area --

MR. URDANETA: To the deck, yes.

MR. PEREZ: -- and Carlos Chapman who went to the roof where the stressing operation was taking place, we did not have a procedure in hand. It was just hearsay that they were stressing it back to the original load that the tendon had.

MR. URDANETA: Yeah.

- 1 MR. WALSH: Was this discussed at the meeting?
- 2 MR. URDANETA: Yes. It was mentioned at the meeting.
- 3 MR. PEREZ: Yes.
- 4 MR. WALSH: The 280 kips?
- MR. URDANETA: Not specifically. No. There is a procedure that we're going to stress the bar, and we said, well, where is
- 7 | the procedure? Send that over to us.
 - The specifically of the 280 and the steps and -- I don't recall discussing that in that meeting.
- 10 MR. WALSH: So how would you characterize what was discussed 11 at the meeting regarding this issue?
- MR. URDANETA: Regarding the issue was pretty much the engineer was with his number justifying that we were good.
- MR. PEREZ: Now, hold on a second. This is Jake Perez interrupting. What issue specifically are you asking?
- 16 MR. WALSH: I'm asking at this meeting --
- 17 MR. PEREZ: Yes.
- MR. WALSH: -- the restressing operation --
- 19 MR. PEREZ: Okay.
- 20 MR. WALSH: -- that was to be performed, what was discussed
- 21 | in regard to that?
- 22 MR. URDANETA: Okay. What his intention, he said, my
- 23 | intention is to bring that member to the yard condition. Remember
- 24 | we construct the bridge on the yard, those tendon were stressed
- 25 | for the movement, he said, right? For the movement were

- 1 prestressed and he was trying to replicate the conditions of the
- 2 | yard. Because during the yard, there was minor crack if you want
- 3 to say, right, totally minor. So that was his logic. The only
- 4 | thing that we did different -- he said the only thing that we
- 5 different when we put the bridge there was de-stressing these two
- 6 bars, which was the two --
- 7 MR. WALSH: Was it to address the cracks?
- 8 MR. URDANETA: No. No. He gave an explanation trying to
- 9 bring -- to share the load and to -- share the load and bring the
- 10 node back to stability. That's what he said pretty much.
- 11 MR. PEREZ: That is correct.
- 12 MR. URDANETA: Yeah.
- MR. PEREZ: And if I may interject, although I was not at the
- 14 | meeting --
- 15 MR. URDANETA: Yeah.
- MR. PEREZ: -- I have read the minutes, and I'd like to add
- 17 that the stressing of the bars was part of the overall bigger
- 18 plan. They call it a temporary mechanism. Where they wanted to
- 19 relieve the load from the node, they called it, back -- share it
- 20 back into the structure.
- 21 And there was a technical procedure that we were not privy to
- 22 at the time, but we understand from hearsay and further
- 23 | conversations that it involved the steel member being attached to
- 24 the truss members on top and some form of post-tensioning along
- 25 the bottom. But part of their overall procedure included --

- included the original shims --
- 2 MR. URDANETA: Yes.
- 3 MR. PEREZ: -- that they added Tuesday morning as well as
- 4 stressing this tendon that they apparently told us on Thursday.
- 5 But the rest of the procedure was going to be delivered by Figg by
- 6 Saturday.

- 7 MR. WALSH: So this was not to address the cracks, the
- 8 cracking?
- 9 MR. URDANETA: No.
- 10 MR. PEREZ: It was to address -- I believe from the
- 11 | conversation I -- you know, on the minutes is to relieve the node
- 12 from loads.
- MR. URDANETA: That when -- during the meeting I think that
- 14 you will see that on the notes, the cracks -- address the cracks
- 15 came up. When do you plan to address the cracks? He said later
- 16 on.
- 17 MR. PEREZ: Right.
- MR. URDANETA: Later on, we will do it as epoxy injection by
- 19 FDOT. He mentioned FDOT procedure, right, but we need to put this
- 20 mechanism in place and build the back span --
- MR. PEREZ: Correct.
- MR. URDANETA: -- back span to stabilize this node and the
- 23 cracks are, you know, we'll fix those cracks later on. He was not
- 24 addressing -- to me, he was to addressing the cracks.
- 25 MR. PEREZ: Correct.

- 1 MR. URDANETA: There was no reason to address the cracks.
- 2 MR. WALSH: Was it said at the meeting that the cracks was
- 3 | not a safety issue?
- 4 MR. URDANETA: Yes.
- 5 MR. WALSH: That was specifically said?
- 6 MR. URDANETA: Specifically said.
- 7 MR. PEREZ: Yes.
- 8 MR. URDANETA: And specifically asked about, right? I mean
- 9 the nature of concrete is to crack, right? And if you see his
- 10 whole presentation they were expecting some cracking.
- 11 MR. WALSH: Okay. Thank you.
- 12 MR. URDANETA: No problem.
- MR. WALSH: Just two more questions. Were there core samples
- 14 of concrete taken at the time of construction and -- cylinders --
- 15 MR. URDANETA: Yes.
- 16 MR. WALSH: -- concrete cylinders.
- 17 MR. URDANETA: That, yes.
- 18 MR. WALSH: And were they tested?
- 19 MR. URDANETA: Yes.
- 20 MR. WALSH: And are they available?
- MR. URDANETA: Yes.
- 22 MR. WALSH: And are there results of those?
- MR. URDANETA: Yes.
- 24 MR. WALSH: Okay. We'd like to obtain a copy of those.
- 25 MR. PEREZ: Absolutely.

- 1 MR. WALSH: Were there slump tests done?
- 2 MR. URDANETA: Yes.
- MR. WALSH: Okay. We'd like to obtain -- were there results
- 4 | -- do you have results of those slump tests?
- 5 MR. URDANETA: Yes.
- 6 MR. WALSH: We'd like to obtain a copy.
- 7 MR. PEREZ: Absolutely.
- 8 MR. URDANETA: Can you do me a favor?
- 9 MR. WALSH: Yes.
- 10 MR. URDANETA: Can you shoot us an email with all the
- 11 | information that you'd like?
- 12 MR. BRAGG: Yes. I can help you with that.
- MR. URDANETA: Yeah, I appreciate. That way, anything you
- 14 like -- that you need.
- MR. PEREZ: Just so that you know, there was a testing lab,
- 16 PSI, that performed all of those tests.
- 17 MR. URDANETA: On the CEI.
- MR. PEREZ: Yeah, as our subcontractor, they performed all of
- 19 the concrete testing and those reports were issued to MCM.
- MR. URDANETA: I have some of the package already, you know,
- 21 | because you have to do a comparison of their testing, our testing.
- 22 There is a procedure, a DOT procedure. I mean, we test every four
- 23 | that they test, and we compare it and we approve it. Everything
- 24 | is online on DOT website and we have the package.
- 25 MR. WALSH: Terrific. Thank you. I have no further

- 1 questions.
- MR. HOLT: Reggie Holt, Federal Highway. Thank you for your
- 3 | information here. The first thing, sir, I'm trying to get an
- 4 understanding of roles and responsibility. So your firm was
- 5 essentially hired by Florida International to perform, I guess,
- 6 essentially QA? The contractor was self-performing and doing the
- 7 OC --
- 8 MR. URDANETA: Correct.
- 9 MR. HOLT: -- with their services, so you're the QA there on
- 10 | the project?
- MR. URDANETA: Let me explain you that because, I mean, there
- 12 | is FDOT language for it.
- MR. HOLT: Uh-huh.
- MR. URDANETA: We have a contractor that they do their own
- 15 QC. MR. HOLT: Right.
- MR. URDANETA: Right? And so, they test their self. We
- 17 | verify what they are doing, right, and the district, in this case
- 18 FDOT, is the QI --
- 19 MR. PEREZ: QA.
- 20 MR. URDANETA: No, the IA. The IA, independence assurance.
- 21 For example, QC has some results, right --
- MR. HOLT: Um-hum.
- 23 MR. URDANETA: -- doesn't compare to us, we don't agree on
- 24 that, DOT says, okay, who is right, who is wrong? So we have
- 25 three roles of checking. For example, concrete air work, steel.

1 MR. PEREZ: Materials in general.

MR. URDANETA: Materials in general, yeah. So, that's our role, I mean, verify what the contractor is doing. The only difference between a normal FDOT and this one was that there was a design-build. Right? That speed up the process. It's supposed to speed up the process.

MR. HOLT: Okay. So there was another entity hired by Florida International, Lewis Berger, who was their independent review consultant?

MR. PEREZ: I don't believe it was hired by FIU. I believe it was hired by the entity, MCM/Figg.

MR. HOLT: Okay. So they were under the Figg umbrella --

13 MR. URDANETA: Yes.

MR. HOLT: -- to provide this independent review?

MR. URDANETA: Correct. As far as we know, right?

MR. PEREZ: Yes.

MR. HOLT: Okay. I was understanding that -- most independent review consultants are hired by the owner, but I've seen arrangements like that. That's fine. All right.

MR. PEREZ: Yeah, you might want to double check that. I was under the impression it was under the MCM/Figg -- I'm not sure if it's a joint venture or just a contractor/designer relationship.

MR. URDANETA: We do have some information about it, but Jose has that information. And we asked the question, I mean, and he said, yeah, there was a procedure done back in the 2016, right?

- And, but that's our interpretation that it was hired by this joint venture.
- 3 MR. HOLT: Okay. We'll chase that down. Thank you.
- 4 MR. URDANETA: Okay.
- 5 MR. HOLT: So you would track any kind of NCRs,
- nonconformance documented. So during the casting and fabricating

 of the bridge, were there many NCRs submitted or --
- 8 MR. URDANETA: No. No, the only, the only --
- 9 MR. PEREZ: Speak up.
- MR. URDANETA: No, the only issue was when we start pouring
- 11 | the first -- this different concrete and it's only done by one --
- 12 MR. PEREZ: Plant.
- MR. URDANETA: -- plant, is approved to do, one plant. And
- 14 when we started pouring, that was the north -- I mean, the south
- 15 portion of the bridge, the plant shut down, failure, failed,
- 16 right? So we had to stop it. Wash the concrete that we poured.
- 17 It was about four concrete trucks and replace the whole steel,
- 18 everything that was on -- redo the whole stuff.
- 19 MR. HOLT: Right.
- MR. URDANETA: And it took about the scale of about a month
- 21 to do it. And that's the only thing that I can recall there was
- 22 any --
- 23 MR. PEREZ: I'm sure -- this is Jake Perez. I'm sure we have
- 24 records --
- 25 MR. URDANETA: Yeah.

- MR. PEREZ: -- on our thing and, you know, when we go through the records you can be able to see if there's any --
- MR. HOLT: We'll do that. Right, if any came to mind.
- So the region of concern is fairly congested. You know, a lot of elements coming in and out. To your knowledge, was there
- g a salat garage, asset a
- 6 any kind of difficulty or any kind of adjustments needed during
- 7 the fabrication to get everything to fit together?
- 8 MR. URDANETA: Everything, but -- I mean, the region was --
- 9 the area was a little congested because the steel they have,
- 10 | right? But the mix had small aggregate as well. So it went fine.
- 11 The pouring went fine.
- We were expecting -- we were prepared for more difficulties
- 13 to get all the -- in concrete, the vibration, all that stuff. But
- 14 | it went fine. There was no issue.
- 15 MR. HOLT: How was the actual, as far as the rebar and the
- 16 post-tensioning, the hardware that was embedded into the concrete
- 17 | itself?

- MR. URDANETA: Remember, we didn't have the post-tensioning
- 19 embedded. We had the ducts.
- 20 MR. HOLT: Yes, but the ducts were -- when I say post-
- 21 tensioning, I mean the ducts. So it's all the --
- MR. URDANETA: Yeah. Everything was there. The ducts were
- 23 | there, the rebar was per plan, everything was per plan.
- MR. HOLT: Okay.
- MR. URDANETA: When we finished the whole -- I mean, there

1 was a procedure to post-tension it, right? 2 MR. HOLT: Um-hum. MR. URDANETA: Very complicated procedure because, I mean, 3 4 they were stressing the bottom, one here, one there. Really, I cannot tell you exactly how it worked. But when we poured the 5 6 concrete we had just the ducts. And then you put in the tendon, 7 you stress it, and then you put the grout, right, the grout. 8 MR. HOLT: That fit together fine, then, to your knowledge? 9 MR. URDANETA: Yeah. As far as I know, yes. 10 MR. HOLT: Okay. The next question: Do you recall any kind 11 of procedure for the -- let me bring it back up. So the sequence 12 was they cast the bottom slab --13 MR. URDANETA: Yes. 14 MR. HOLT: -- the walkway. 15 MR. URDANETA: Yes. 16 MR. HOLT: Then they cast the diagonals. 17 MR. URDANETA: Then they cast the truss. 18 MR. HOLT: Truss. 19 MR. URDANETA: Yes. 20 MR. HOLT: Then they cast the canopy third. 21 MR. URDANETA: The canopy, yeah. 22 MR. HOLT: So it was a three-stage pouring. 23 MR. URDANETA: Yes. 24 MR. HOLT: And probably longitudinally too. But did they

prescribe any particular surface prep between the pours?

Usually

a hand trowel, a roughened surface between --1 2 MR. PEREZ: You're talking to -- this is Jake Perez. You're 3 talking about the construction joint? MR. HOLT: The construction joint between -- especially the 4 5 diagonal and the bottom slab? 6 MR. URDANETA: They rough it. 7 MR. HOLT: Huh? 8 MR. URDANETA: Rough it. Rough it. MR. HOLT: It called for a roughened surface? 9 10 MR. URDANETA: Yes. 11 MR. HOLT: Okay. 12 MR. URDANETA: If I recall correctly. Remember, I'm not 13 inspecting it, okay. MR. PEREZ: And I believe -- correct me if I'm wrong, 14 15 Raphael, but the whole bottom slab was poured in one --MR. URDANETA: Yeah. Rough monolithic. 16 MR. PEREZ: -- monolithic. 17 18 MR. URDANETA: The three pieces were monolithic. 19 MR. PEREZ: Correct. But between them -- and I know because I asked 20 MR. URDANETA: 21 the question, not because I inspect it. But I asked the question 22 how are we treating between surface? And they said rough it. 23 That's the way it was designed. 24 MR. HOLT: Right. Okay. So I was looking at the 25 construction sequence. So you said you were there during the

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1
    placement of the bridge?
 2
         MR. URDANETA: Yes.
         MR. HOLT: Setting it, it's called.
 3
 4
         MR. URDANETA:
                        Yes.
         MR. HOLT: Can you go through the processes from the time it
 5
 6
    was set and the other -- there was destressing, there was vertical
 7
    post-tensioning into the pier --
 8
         MR. URDANETA: Yes.
 9
         MR. HOLT: -- anchors. So, are you familiar with -- the
10
    drawings really don't give much detail on that, the sequence.
11
         MR. URDANETA: Okay.
12
         MR. HOLT: So can you give your recollection of what happened
13
    from time of setting and --
14
         MR. URDANETA:
                       I will give you my recollection up to the
15
    point that I left.
16
         MR. HOLT: Okay.
                           That's fine.
17
         MR. URDANETA: They moved the bridge. Like I said, they set
18
    it the first on the north side because we have PT bars only on the
19
    north side.
20
         MR. HOLT:
                    Right.
         MR. URDANETA: Those PT bar were not called to a stress, was
21
22
    just to continue. Those PT bar are going to continue to a pylon,
23
    according what I understand. Right? They set the north end on
24
    the neoprene pad --
25
         MR. PEREZ: No.
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- 1 MR. URDANETA: The south.
- 2 MR. PEREZ: The south end.
- 3 MR. URDANETA: The south end on the neoprene pad.
- 4 MR. PEREZ: Correct.
- 5 MR. URDANETA: Yeah. Later on, I was not here, but I know
- 6 that the destress 11, which is the north, and I think number 2,
- 7 | right, which is the 2 diagonal coming to the end bends.
- 8 MR. PEREZ: One to the end bend -- one to the north --
- 9 MR. HOLT: Right. Yes, I'm familiar with --
- 10 MR. URDANETA: Yeah, to -- right. That was it.
- MR. HOLT: So that happened -- the destressing happened, to
- 12 your recollection, happened, say, that Saturday?
- 13 MR. PEREZ: Afternoon.
- MR. URDANETA: Like I said, I mean, I have the report. About
- 15 3, they finished about 3 on the afternoon Saturday.
- MR. PEREZ: This is Jake Perez. Let me ask a question. You
- 17 mentioned something about post-tensioning? Something to the
- 18 | column?
- 19 MR. URDANETA: The north bend had the post-tensioning --
- 20 MR. PEREZ: The question was for --
- 21 MR. URDANETA: Not there was no post tension.
- 22 MR. PEREZ: -- for Reggie.
- 23 MR. URDANETA: Right. Yes.
- MR. PEREZ: Okay. So he wanted to know if the vertical post-
- 25 tensioning in the columns were stressed. Is that your question?

1 MR. HOLT: Yes.

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MR. URDANETA: They were not stressed. And I know for a fact they were not stressed, because I move it. When I was doing the inspection I said, okay, I move it.

MR. HOLT: Okay.

MR. URDANETA: As far as I know, they don't call for stress.

MR. HOLT: So the next, I'm going to talk about the cracking a little bit. So the diagonal number 2 and diagonal number 11 have fairly similar functions and characteristics for the bridge in this at-rest condition?

MR. PEREZ: I believe that the one at the end bend is much --

MR. HOLT: Right. One is 1 foot deeper than the other.

13 MR. URDANETA: Yeah.

MR. PEREZ: And the angle is somewhat different on (indiscernible).

MR. HOLT: Correct. Yeah. So did you observe any kind of similar distress and cracking on the diagonal 2 at the base as you did on 11, on the south side?

19 MR. URDANETA: I'm going to draw you a picture. That's best 20 I can do, right?

MR. HOLT: Okay.

MR. PEREZ: Only the south.

MR. URDANETA: The only -- well, both. The only cement are cracking that we were observe on that, they have something here trying to mitigate this angle, I think. Right? And this portion

- 1 was cracked on both. 2 MR. HOLT: That's like the little, what we would call it the 3 fill-it. 4 MR. URDANETA: Yeah. MR. HOLT: So it comes in at an angle, you pass a little 5 6 fill-it, and that fill-it was popping? 7 MR. URDANETA: Yeah. 8 MR. HOLT: And from the pictures I saw, you had the similar 9 distress on --10 MR. URDANETA: On both. 11 MR. HOLT: On both. 12 MR. URDANETA: On both. 13 MR. HOLT: So the fill-it was popping. Okay. 14 MR. URDANETA: Yes. 15 MR. HOLT: Thank you. And this to be honest, I record, I took 16 MR. URDANETA: pictures, blah, blah, but didn't call my attention. 17 So this 18 supposed to, as far as I know, fill it. 19 MR. HOLT: Right. I'm just trying to get --I don't recall. Like I said, I didn't inspect 20 MR. URDANETA: 21 it, but I supposed there was no rebar here. 22 MR. HOLT: So you observed -- you monitored the cracking from 23 shortly after setting of bridge up to Thursday. Did you monitor
- MR. URDANETA: Yes. I went -- I didn't monitor, okay.

it Thursday, the day of the meeting?

- 1 MR. HOLT: Uh-huh.
- 2 MR. URDANETA: I went to the bridge twice the day of the
- 3 collapse.
- 4 MR. PEREZ: And this is Jake Perez. And so did the engineer.
- 5 That was the first thing he did when he got to the site, Denney
- 6 Pate and the other gentleman, Leon --
- 7 MR. URDANETA: Yeah, but I was not with them.
- 8 MR. PEREZ: -- visited the site and inspected the cracks.
- 9 MR. URDANETA: Yeah, they visited the site. They observed
- 10 the cracks. Inspected the cracks.
- 11 MR. HOLT: Uh-huh.
- MR. URDANETA: I went to the bridge twice that day, at a.m.
- 13 and at 11 p.m. -- 11 a.m.
- MR. HOLT: Uh-huh.
- 15 MR. URDANETA: 8 a.m. I went with the FDOT rep, FDOT rep, to
- 16 show them the cracks. And at 11, when we finished the meeting, I
- 17 | went with FIU reps, which was John Karl and Patrick Mayer (ph.).
- 18 They took picture of it.
- MR. HOLT: So the cracking was progressing based on what you
- 20 stated before. You said in your statement that Denney observed
- 21 the cracking from a manlift?
- MR. URDANETA: Yes.
- 23 MR. HOLT: Was there specific direction to stay off the
- 24 bridge?
- 25 MR. PEREZ: No, quite the opposite.

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1
         MR. HOLT: So, why did Denney observe from a lift and not
 2
    walk up on to the bridge?
 3
         MR. URDANETA: Because, I mean, you have to -- you have two
    faces: one in top, which is the member, right?
 4
         MR. HOLT: Uh-huh.
 5
 6
         MR. URDANETA: That you can observe from top of the bridge.
 7
    And on a manlift you can observe the face --
 8
         MR. PEREZ: Of the strut.
         MR. URDANETA: -- of the strut.
 9
10
         MR. HOLT: You can observe the face from the deck?
11
         MR. URDANETA: Yeah, remember we're up -- it's high. I mean,
12
    you cannot observe it from the bottom.
13
                          This is Jake Perez. Let me clarify Rapha's
         MR. PEREZ: No.
14
    English. You can see from the deck the --
15
         MR. HOLT: Diagonal.
         MR. PEREZ: -- diagonal --
16
17
         MR. HOLT: Correct.
         MR. PEREZ: -- at deck level. You cannot see the strut.
18
19
    There is a --
20
         MR. URDANETA:
                        No, you can see. It's right here.
21
         MR. PEREZ: There's a plain view of the strut, but you can't
22
    see the cracks on the face of the strut unless you go to the north
    face and view it in elevation view.
23
```

MR. HOLT: When you say the strut, the strut is the --

MR. PEREZ: The strut is the piece -- the strut is the piece

24

of the --2 MR. HOLT: Okay. So that is -- that's what protrudes down 3 But you can't see it from underneath. below. Okay. 4 MR. PEREZ: Right. You have to see it from the face. 5 MR. HOLT: From the face. 6 MR. PEREZ: From the north face in order to observe the 7 cracks. 8 Okay. So, you use a manlift to get access --9 MR. URDANETA: He used a manlift, yes. 10 MR. HOLT: To get the access to observe the strut --11 MR. URDANETA: Yes. 12 MR. HOLT: -- front and back. Okay. He looked on the back 13 side too? 14 MR. URDANETA: Uh-huh. 15 MR. HOLT: So, the next -- so you have been on this project I guess the procedures that are used to address or 16 for a while. 17 make changes to the contract documents, I guess, a design-build change. So the documents are set, the bridge is to be built a 18 19 certain way. The bridge was to be built with detension rods, that 20 the two end diagonals were to be detensioned after setting, right? 2.1 So they would --22 MR. PEREZ: That is correct. 23 MR. HOLT: And there was direction to re-tension but only re-24 tension diagonal 11, not diagonal 2, from what we -- my 25 understanding?

MR. PEREZ: From our meeting, our recollection that is correct.

MR. HOLT: Right. So they -- was there a -- what was the formal process that documented approval from the owner that they were changing the bridge as contracted? Was there a set of calcs with signing? Was there any kind of formal documentation that the owner said, yes, you can do this?

MR. URDANETA: Any changes to the original design or to the progressive of the design --

MR. HOLT: Right.

MR. URDANETA: -- because, like I said, these are designbuild, we have design as we construct pretty much, right. They are design; we are not. The question goes from MCM to Figg. Figg make the decision to address the question however is going to be the change. They approve that, they make the changes, come back to us with the approval. We go to FDOT, right, to obtain FDOT approval to look at it, the change -- any change, right.

MR. HOLT: When you say we, we is?

MR. URDANETA: Bolton.

MR. HOLT: Bolton, okay.

MR. URDANETA: We are a channel of the communication.

MR. PEREZ: We channel the information back to FDOT for approval. Once that gets approved then we implement the change.

MR. HOLT: So, that's in your roles and responsibilities --

MR. PEREZ: Of the process.

2.1

- 1 MR. HOLT: You are the conduit to FDOT, for FDOT approval?
- 2 MR. URDANETA: Yes. Yes.
- MR. PEREZ: Through the contractor to FDOT back to us, back
- 4 to the okay to proceed.
- 5 MR. HOLT: Okay. Was that done?
- 6 MR. PEREZ: Absolutely not.
- 7 MR. HOLT: Because they were performing the operation without
- 8 any documentation, right? Well, there was --
- 9 MR. PEREZ: None that we had.
- 10 MR. HOLT: None that you had. So there was no -- so that
- 11 normal procedure of engaging Florida Department of Transportation
- 12 | for other procedural changes in the past on the bridge was not
- 13 followed for this?
- 14 MR. URDANETA: On this specific case, when we asked the
- 15 question in the meeting, the Figg said I call into the structural
- 16 group FDOT in Tallahassee.
- 17 MR. HOLT: Okay.
- 18 MR. URDANETA: That's what the phone call is been
- 19 disseminated. Because, I mean, did you ask approval? Has anyone
- 20 else look at your procedure, right, (indiscernible).
- MR. HOLT: Uh-huh.
- MR. URDANETA: And he said I let -- that's Figg, FDOT knows
- 23 about that. I said where is the documentation? Said I left a
- 24 voice mail. That was it.
- 25 MR. PEREZ: And in the meeting the FDOT representative

- requested that that procedure be submitted for their review by the structural department.
- MR. HOLT: So we better understand it. So if the procedure
- 4 was followed, how should this have been -- what are the steps that
- 5 | would have happened if the -- if Florida was properly engaged the
- 6 | way your role was laid out in your contract, what would have been
- 7 the process? You would have received, what kind -- some sort
- 8 of --
- 9 MR. PEREZ: We would have received from the contractor --
- 10 MR. HOLT: Contractor, right. Okay.
- 11 MR. PEREZ: -- some sort of process or --
- 12 MR. URDANETA: Documentation.
- MR. PEREZ: -- documentation depiction of what they were
- 14 anticipating to do.
- 15 MR. HOLT: A formal submittal?
- 16 MR. PEREZ: A formal submittal.
- 17 MR. HOLT: Right.
- 18 MR. PEREZ: That submittal would have gone to FDOT for
- 19 approval.
- MR. URDANETA: Yeah, for they to look at it.
- 21 MR. PEREZ: For they to look at it.
- 22 MR. URDANETA: Sometimes they said submit (indiscernible) we
- 23 | are not. We are not.
- 24 MR. HOLT: But this is a change in structure, so it's to
- 25 FDOT?

- 1 MR. URDANETA: Yes.
- 2 MR. HOLT: And you have a contact at FDOT?
- 3 MR. URDANETA: Yes.
- 4 MR. PEREZ: Yes.
- 5 MR. URDANETA: The person that was here.
- 6 MR. WALSH: And what did they, how did they identify approval
- 7 back to you?
- 8 MR. URDANETA: An email back with the LOT. I mean --
- 9 MR. PEREZ: They stamp --
- 10 MR. URDANETA: Normally they send a letter of transmittal
- 11 | with the approval.
- 12 MR. HOLT: Okay. So a letter of transmittal.
- MR. URDANETA: Yeah. Or if they are going to say we don't
- 14 | want to look at it, they would say it. I mean, we --
- 15 (Indiscernible) we will know.
- MR. HOLT: So -- and then the next step is you have this.
- 17 You give it back to MCM the contractor and then they know they
- 18 have the authority or the approval to proceed with this -- with
- 19 that line -- within the channel?
- 20 MR. URDANETA: That's correct.
- 21 MR. PEREZ: Correct. Keep in mind that this was a working
- 22 | plan. The big picture of a working plan was, like I said before,
- 23 add the shims, stress the tendon, do the temporary --
- MR. URDANETA: Temporary mechanism.
- 25 MR. PEREZ: -- mechanism, and that was going to be submitted

- 1 on Saturday for review. And that -- also, that submittal, we
- 2 requested in the meeting, should be peer reviewed.
- 3 MR. URDANETA: Uh-huh.
- 4 MR. HOLT: Submitted?
- 5 MR. PEREZ: It was going to be submitted Saturday.
- 6 MR. HOLT: Two days after the collapse? Thursday, Friday --
- 7 MR. URDANETA: Yes.
- 8 MR. HOLT: -- Saturday, 2 days after the collapse.
- 9 MR. PEREZ: That's how quickly Figg could have delivered the
- 10 product according to them.
- 11 MR. URDANETA: The final product.
- 12 MR. PEREZ: Yeah.
- MR. HOLT: So, why -- did Figg give an explanation of why
- 14 they accelerated this procedure in their working plan before
- 15 | the --
- MR. PEREZ: I believe Denney explained that they were trying
- 17 to replicate what occurred in the yard here by shimming
- 18 underneath.
- MR. HOLT: They did that Tuesday, correct?
- 20 MR. PEREZ: They did that Tuesday morning.
- 21 MR. HOLT: Right.
- 22 MR. PEREZ: And by stressing the bar, which would, according
- 23 | to Denney, would have placed the conditions the same as they were
- 24 in the yard.
- MR. HOLT: So, if I understand you correctly, Denney

identified two steps in this working plan process --1 2 MR. URDANETA: Correct. MR. HOLT: -- that needed to be performed immediately? 3 4 MR. URDANETA: Correct. That is correct. 5 MR. PEREZ: 6 MR. HOLT: Right. And --7 MR. PEREZ: And MCM followed his orders to the penny. 8 MR. HOLT: So the message was no safety concern, two 9 immediate remedies --10 MR. URDANETA: Yes. 11 MR. PEREZ: Two immediate remedies that were part of the 12 overall plan. 13 MR. URDANETA: The bigger picture. Right. Okay. Thanks for clarifying that process. 14 I didn't realize the relationships of all the parties. 15 were the conduit at Florida DOT. 16 17 MR. PEREZ: Right. And, again, let me just reiterate that 18 the plan was going to be delivered on Saturday. We were going to 19 request a peer review of that plan. FDOT also requested a peer 20 review of the plan in the meeting, and also requested the 2.1 calculations that they wanted their structural group to review 22 also. 23 MR. HOLT: Okay. I'm going to go back, make sure I got that. 24 So, you might have answered, but I missed it. So did you look at

the crack on Thursday in your following of the cracking

1 progression? You said Monday, Tuesday, Wednesday --2 MR. URDANETA: I measured the cracks on Tuesday and Wednesday, not Thursday. 3 4 MR. HOLT: Okay. 5 MR. URDANETA: I look at the cracks because I was there. Ι 6 went twice there --7 MR. HOLT: Right, right, right. I'm just saying that --8 MR. URDANETA: I went twice to the bridge. But normally our 9 procedure was to measure the cracks after lunch at 1 p.m., you 10 know. I had my colleague with me to, you know, go there and do 11 the measurement, do the picture, all the records. But that day we 12 didn't do it. MR. HOLT: And I had one final question. It was tied to one 13 of your answers here. Sorry about this. 14 15 So it's in your PowerPoint presentation. I just -- so part of -- is the plan to relieve the load on this node, was it 16 17 explained in the PowerPoint? 18 MR. PEREZ: No, sir. What's explained in the PowerPoint, 19 from what I gathered after my review, is an analysis both done by 20 hand and by a computer model to justify that the forces at the 21 node complied with allowable stresses, according to 22 (indiscernible). 23 MR. HOLT: Okay. So you mentioned earlier that he was 24 talking -- that the plan included using the yet to be constructed 25 structures' back span that butts up against the back of this

1 zone --MR. PEREZ: Yes. 2 MR. HOLT: -- as part of the plan to give it the needed 3 capacity. Was that based in the minutes or was that --4 5 MR. PEREZ: That was discussed as a -- as the next sequence 6 of construction. 7 MR. HOLT: Right. 8 MR. PEREZ: And what was discussed was the benefit of adding 9 that span, and creating the continuity was a form of relieving the 10 load at the node --11 MR. HOLT: Right. 12 MR. PEREZ: -- and, therefore, at that point they would 13 address the cracking in terms of epoxy injecting and then that the 14 -- since the load was being reduced, that the cracks were not an 15 issue. 16 MR. HOLT: Okay. 17 MR. PEREZ: And this all got buried in with the secondary pour for the diaphragm and the pour for the pylon. 18 19 MR. HOLT: Right. I understand that. Okay. 20 So just to -- so I'm just trying to better understand the 21 cracking on Thursday, because it's not documented, but that's 22 fine. And so what was seen and to your recollection, what was 23 observed by Figg on Thursday -- so they went up Thursday right 24 before the meeting --25 MR. PEREZ: Correct.

```
1
         MR. HOLT: -- and they saw the cracking condition Thursday at
 2
    approximately --
 3
         MR. URDANETA: 7:30.
 4
         MR. HOLT: -- 7:30 a.m.
 5
         MR. URDANETA:
                        Yes.
 6
         MR. HOLT: And is there any documentation of what was
 7
    observed at 7:30 a.m.?
 8
         MR. URDANETA: No.
                            No.
 9
         MR. PEREZ: Other than the picture that he has of --
         MR. URDANETA: Only a picture --
10
11
         MR. PEREZ: -- the inspector looking at the cracks.
                                                              We have
12
    a picture of the Figg inspector looking at the cracks.
13
         MR. HOLT: The cracks are in the background.
14
         MR. URDANETA: Taken at 7:51.
15
         MR. HOLT: 7:51.
16
         MR. URDANETA: Yeah, Leon inspected the crack. Look at the
17
    crack.
18
         MR. PEREZ: He's on -- yeah. He's on the --
19
         MR. URDANETA: He's on the deck.
20
         MR. PEREZ: -- on the deck looking at the --
21
         MR. HOLT: Okay.
22
         MR. URDANETA: After this, the engineer went and do it
23
    manually --
24
         MR. HOLT: I think we would want that picture, just to
25
    show --
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MR. BRAGG: And this is Kenny Bragg. What made you take that
 1
 2
    picture?
 3
         MR. URDANETA: What what?
         MR. BRAGG: What made you take that picture?
 4
 5
         MR. URDANETA:
                        No, my inspector was reporting to us, to me.
 6
         MR. BRAGG: Okay. So you just wanted to document that --
 7
         MR. URDANETA: Yeah, that Figg is here. Actually, I think --
 8
         MR. PEREZ: I mean, with technology everybody snaps picture,
 9
    says, hey, I'm here at the deck with the Figg guy.
10
         MR. HOLT: Okay.
                           I just wanted to see --
11
         MR. URDANETA: And then we are saying we'll be there in 10,
12
    you know, a minute, because they were early.
13
         MR. HOLT:
                    Thank you, sir. That ends my -- all my questions.
14
         MR. PEREZ:
                     Thank you.
15
         MR. BRAGG:
                     Dan, do you have any follow-up questions?
16
         MR. WALSH:
                     No.
17
         MR. BRAGG: I don't have any questions, so -- the time is
18
    11:23 a.m., and we are going to conclude the interview.
                                                              Thank
19
    everyone for their participation.
20
         (Whereupon, the interview was concluded.)
21
22
23
24
25
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: PEDESTRIAN BRIDGE COLLAPSE

MIAMI, FLORIDA MARCH 15, 2018

Interview of Raphael Urdaneta and

Jake Perez

ACCIDENT NO.: HWY18MH009

PLACE:

DATE: March 20, 2018

was held according to the record, and that this is the original, complete, true and accurate transcript which has been transcribed to the best of my skill and ability.

Letha J. Wheeler Transcriber