APPEARANCES: 2 ALAMPI & DeMARRAIS Attorneys for the Applicant 1 University Plaza 3 Hackensack, New Jersey 07601 BY: CARMINE R. ALAMPI, ESQ. 5 BEATTIE & PADAVANO, LLC Attorneys for Objectors Galaxy Towers Condominium Association, Inc. 50 Chestnut Ridge Road 8 Montvale, New Jersey 9 JOHN J. LAMB, ESQ. BY: DANIEL STEINHAGEN, ESQ. 10 11 MARIA GESUALDI, ESQ. 12 Attorney for Objector Township of Guttenberg 13 6806 Bergenline Avenue Guttenberg, New Jersey 07093 14 15 WATSON, STEVENS, RUTTER & ROY, LLP 16 Attorneys for Transcontinental Gas Pipeline Company, LLC 17 3 Paragon Way, Suite 300 Freehold, New Jersey 07728 (NO APPEARANCE) 18 BY: 19 20 21 22 23 24 25

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THE CHAIRMAN: Pursuant to the Open Public Meetings Act, please be advised that notice of this meeting was faxed to the Journal Dispatch and Bergen Record on July 2, 2012 advising that the North Bergen Planning Board will hold a special meeting on July 26,2012 at 7 p.m. in the chambers of the municipal building located at 4233 Kennedy Boulevard, North Bergen, New Jersey 07047.

Board members, attorneys and applicants were mailed notices on that day, and a copy of this notice was posted on the bulletin board in the lobby of the municipal building for public inspection.

Gerry, please call the roll.

(Whereupon roll call is taken and members Steven Somick and Manuel Fernandez are absent.)

THE CHAIRMAN: Okay. Case No. 4-10,

Chairman, Carmine MR. ALAMPI: Alampi, A-L-A-M-P-I, attorney --

MR. MUHLSTOCK: Mr. Alampi, before you start, just let me note for the record, Mr.

Chairman, that you executed the certification that you read the transcript of the June 7, 2012 meeting.

THE CHAIRMAN: That's correct.

MR. MUHLSTOCK: And that at that point up, to that point through June now all the members have read all of the transcripts or been here in person.

With respect to last month's meeting of July 12, 2012 we didn't get the transcript until two or three days ago, so I didn't prepare the certifications yet for the members that were absent on that date which would be yourself -
Mr. Somick, Ms. Bartoli and Mr. Locricchio, which I will do prior to the next meeting. So let's -
THE CHAIRMAN: I have also read that transcript.

MR. MUHLSTOCK: Okay.

THE CHAIRMAN: Now, Mr. Alampi.

MR. ALAMPI: Thank you. As your counsel indicated, we've been ordering the transcripts, the verbatim transcripts for circulation. Since the last meeting there's been a flurry of correspondence amongst the attorneys including the board attorney. Everyone is

staking out their position. I think that it's fair to say we all feel very strongly and passionately about our client's rights to pursue and develop witnesses and cross-examine witnesses and introduce evidence. We have some disagreements amongst the ourselves as to where we're going but, quite simply, we're here on a continuing basis for a remand from the Superior Court. The question of the scope of the remand I guess can be debated to a degree.

Nonetheless, I had intended to call Calisto Bertin to continue direct testimony and I also had notified the board and counsel that I might call Ms. Lisa Mahle-Greco. I've determined to not continue any further direct testimony of Mr. Bertin. We could go right to his cross-examination and then I will call Ms.

Mahle-Greco. She is the actual author of this stability study and since counsel for Galaxy raised a question as to the appropriate witness, rather than jerk around with this, she'll be here tonight. She is here tonight. So I propose to cross-examine those two, Calisto Bertin, go back to direct testimony with Lisa Mahle-Greco, cross-examination.

I did have a conference with the attorneys from Transco and I see a letter was sent to Mr. Muhlstock regarding the decision to continue the testimony of this gentleman, Dan Schweitzer, who testified briefly at the last meeting. I certainly don't think that will happen tonight and that will continue.

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Mr. Lamb contacted me, asked that I would provide access through my client to the Appleview property for his geotechnical consultant. At a earlier time I had indicated we would cooperate. He only provided me with the formal request by e-mail late afternoon, I didn't see it until this morning, but I'm happy to tell you that we opened the gates and had Mr. Spoleti Junior escorted the witness so that he could evaluate the property. I'm not sure, he's here in the audience tonight, Mr. Lamb will speak to him, but if he wants to go forward with his geotechnical find if he's not ready he'll do it at the next meeting but I just want to report to the board that we continue to argue at the podium but we also continue to provide every courtesy to each other and extend the opportunity to inspect the property because after all, we want a full

and complete presentation.

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Lastly, Mr. -- Mr. Lamb I forgot your name -- Mr. Lamb who I only know 35 years has indicated that he wants to present certain witnesses and expert reports. I objected to this at the last meeting. We're talking specifically about an appraiser, having the appraiser testify, an appraiser will be brought which of course was presented to me today and I object. Mr. Lamb indicated if I wasn't prepared we could care it. I don't need that, that I'm not prepared. objected to it in its entirety. It shouldn't come into the case, it's beyond the scope of the proceedings. Perhaps we just want to deal with that issue and then I'd like to get on to business or we go right to the witnesses.

MR. MUHLSTOCK: I would suggest, Mr. Chairman, I would suggest we go straight to cross-examination, Mr. Bertin. Let's handle all the procedural aspects later on. Let's finish witnesses.

THE CHAIRMAN: All right.

MR. ALAMPI: Fine. I'm finished with Mr. Bertin and Mr. Lamb can commence his cross-examination.

THE CHAIRMAN: Mr. Lamb.

MR. LAMB: Thank you, and I was going to say that Mr. Alampi and I do agree that I'm prepared to complete the cross-examination of Mr. Bertin and the cross-examination of his geotechnical expert.

GRACE LYNCH, having been duly sworn by the Notary Public, was examined and testified as follows:

DEREK McGRATH, having been duly sworn by the Notary Public, was examined and testified as follows:

CALISTO BERTIN, having been duly sworn by the Notary Public, was examined and testified as follows:

CROSS-EXAMINATION

BY MR. LAMB:

- Q. Good evening, Mr. Bertin.
- A. Good evening.
- Q. Mr. Bertin, you previously prepared the Risk Identification Report dated March 23, 2011?
 - A. Correct.
 - Q. And since that time, again, I ask this but I know when you testified, you agree that you're not a pipeline safety expert?

A. Correct.

- Q. You didn't get qualified in between the last time you testified --
 - A. I have enough to do.
- Q. Okay. New, you're aware of the e-mail, there was an e-mail that was sent I believe you were here at the last hearing, an e-mail that you sent to Mr. Rodriguez dated March 18, 2011 where you agreed that you're not qualified to make a risk assessment report?
 - A. Yeah, I offered that.
- Q. And is it also fair to say that your initial report -- because, again, there's two reports we're going to talk about -- the first report is the original report, March 23, 2011, and the second one is the revised report which you just testified to at the last hearing, March 30th, 2012?
 - A. Correct.
- Q. Do you agree that in what I'll call the first report, that there was no indication in that report in talking about risk identifications of surface problems, landslides, anything of that nature?
 - A. Correct.

- Q. Okay. Do you also agree that there is no discussion in the second report, the most recent one, of that issue, although maybe Johnson Soils is going to address it, but in that report there is no reference?
- A. Well, I made reference and that's why it was expanded, to discuss construction activities that might disturb rocks that could fall on to the easement. So there is a discussion not about soil slope stability but about the rocks and the rock face.
- Q. And I should have made -- soil slope stability is what my question was. You did address the debris and loose trees and rocks and things?
 - A. Yes.

- Q. But other than soil stability --
- A. Correct.
- MR. LAMB: We left off at G-26 so we're at G-27?
- MR. MUHLSTOCK: No, the last exhibit was G-27. You're -- so this will be G-28.
- MR. LAMB: Okay.
 - Q. Mr. Bertin, I'm going to show you what's been marked as G-28. Let me just mark it.

Bertin - cross

(Galaxy Exhibit 28, copy of Calisto Bertin's report last revised March 30th, 2012, was marked for identification.)

MR. LAMB: G-28, and I'll mark it 7/26/12 with my initials. I'll give the original to Gerry and then if you can pass these down.

Q. I'm just going to make a representation, Mr. Bertin, that this is a copy of your report last revised March 30th, 2012 but the only thing that has been added is underlined provisions which show what was added or changed compared to this report as compared to the March 23, 2011 report?

MR. ALAMPI: Chairman, let's just the question some qualification here. This, Mr. Lamb, is a photocopy of Mr. Bertin's report marked at the last meeting with certain markings on it?

MR. LAMB: Correct.

MR. ALAMPI: Markings prepared by Mr. Bertin or --

MR. LAMB: No, markings prepared by our office to show what the differences are in this report compared to the earlier report.

MR. ALAMPI: Who prepared these

reports?

MR. LAMB: My associate prepared the two exhibits by comparing them to see what was changed from the first report.

MR. ALAMPI: So it was an attorney that prepared the markings?

MR. LAMB: Yes, right.

MR. ALAMPI: I'd just like to raise an objection for procedural purposes. I'm not going to interfere with Mr. Lamb's ability to question, but the qualification of an attorney to mark up an engineering report and make references, he'll explain his purpose, just note my objection. I don't know it's competent evidence.

THE CHAIRMAN: And I have a question, Mr. Lamb.

MR. LAMB: Sure.

THE CHAIRMAN: You said the underlined parts are the parts that changed?

MR. LAMB: In other words, the underlined portions are the portions that were added to the original report.

THE CHAIRMAN: So these are complete additions or they're changes?

MR. LAMB: Yes, anything that's underlined is complete additions. When there's reworking of the language slightly but it was still the same we put a notation slight reworking of the language.

THE CHAIRMAN: Okay.

MR. LAMB: So anything that's underlined is basically the original report and that was added to it.

MR. ALAMPI: When we say original report, we're talking about from March 23, 2011?

MR. LAMB: Correct. And --

MR. ALAMPI: Okay. All right.

MR. LAMB: I have a few questions on this. But if Mr. Alampi finds that we mismarked something, I have no problem with him making an objection at a later date.

- Q. Can you take a look at that quickly, Mr. Bertin to --
 - A. I have.
- Q. Does it appear just by a very quick review that the underlined portions are items that were not in the original report?

MR. MUHLSTOCK: I don't think that's a fair question to ask. I don't think that's a

Bertin - cross

fair question. You just handed to it to him.

It's a 12 page document. I mean --

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MR. LAMB: Okay, then I'm going to ask --

MR. MUHLSTOCK: He'd have to sit down and read it for a half hour. I don't think that's a fair question.

MR. LAMB: Okay.

- Q. Mr. Bertin, how long was your original report? Is it fair to say it's three and a half pages?
- A. Oh, I don't recall. I don't have the original report, I just have the second report. I will concede that the second report was longer than the first one because I added more information.
- Q. I'm going to show you a report dated March 23, 2011. Is that the first report, Mr. Bertin?
 - A. Yes.
- MR. LAMB: That's the only one I have, Mr. Alampi.
- MR. ALAMPI: Was this marked into the case record before?
- MR. LAMB: Yes, I believe so.

Bertin - cross

MR. ALAMPI: John, at the underlying last --

 $$\operatorname{MR}.$$ LAMB: No, it was not in the underlying application.

 $$\operatorname{MR.}$ ALAMPI: Then we need clarification.

 $$\operatorname{MR.}$ LAMB: I'm going to ask that precise question.

MR. ALAMPI: We'll get it out. The document in my hands is from March 23, 2011. It was not presented to this board during the course of the underlying application which was appealed in the Superior Court and remanded here. It appeared at the Hudson County Planning Board proceedings in the fall of 2011.

Mr. Lamb can ask but obviously when we mark in this Risk Identification Report, we showed the original date of the report and then it says the revised date. So that would mean anyone would understand that this is not the original report.

MR. MUHLSTOCK: Okay. Let's mark since it wasn't part of our record, let's mark the March 23, 2011 report as G-29.

MR. LAMB: Mr. Muhlstock, I don't

want the interrupt you but it's already marked as G-3 in these proceedings.

MR. MUHLSTOCK: Okay. That was G-3?

MR. LAMB: Yes.

MR. MUHLSTOCK: Okay. Because I didn't have which report. Okay, G-3 was previously marked as Bertin Risk Identification Mitigation Report dated -- so that was dated 3/23/11 is what you're saying?

MR. LAMB: Correct.

MR. MUHLSTOCK: So it is part of the remand record?

MR. LAMB: Correct.

MR. MUHLSTOCK: Okay.

- Q. And, Mr. Bertin, do you recall any mail to Mr. Rodriguez where you advised Mr. Rodriguez from Transco that you were going to submit that report to the Hudson County Planning Board and the North Bergen Planning Board?
- A. I don't recall, that was over a year ago. I know I communicated to him and I probably told him something to that effect.
- Q. And you also recall that you did not submit this to the North Bergen Planning Board?
 - A. That is correct.

- Q. Is it fair to say that this was,
 this first report was completed before the North
 Bergen Planning Board concluded its
 deliberations?
 - A. That's correct.

- Q. Is there some reason why you submitted it to the Hudson County Planning Board but chose not to it submit it to the North Bergen Planning Board?
- A. The applicant -- this was prepared at the request of Hudson County. And the town approval, the town process was just about over so I submitted it to Hudson County who asked for it.
- Q. Now, the first report which was marked as G-3, you signed that report, did you not?
 - A. Yes.
- Q. Did you sign the report that was just marked as G-28?
- A. The version you have doesn't have it, but the one I published has my -- the version you have was a copy of something I e-mailed to Mr. Alampi so that he could check it. Not having any comments I have the version that I signed which just has a cover page over it.

Q. Okay. So could we --

MR. MUHLSTOCK: Mr. Lamb, before you go further, what is the marking of the 2012 report by Mr. Bertin which is not underlined?

MR. LAMB: RA-6.

MR. MUHLSTOCK: RA-6.

MR. ALAMPI: Right, my exhibit RA-6.

MR. MUHLSTOCK: Let me just check

that.

MR. ALAMPI: And I did explain -Mr. Muhlstock, I believe it's RA-6 and RA-7
because we had the report and then we had the
cover sheet with the signature. We marked both
RA-6 and I believe RA-7 with the signature. This
fancy cover that we pay extra money for because
he put the brown and yellow coloring and the
signature.

 $\label{eq:themosphere} \mbox{THE WITNESS: We developed a new} \\ \mbox{logo last year.}$

 $$\operatorname{MR.}$$ MUHLSTOCK: RA-6 and RA-7, yes, it is, that's correct.

Q. I didn't get a copy of RA-7, I guess but assuming that's the case, are. RA-7 is the one that has a cover sheet and a signature page?

A. Correct.

- Q. And other than those two changes, that's exactly the same as RA-6?
 - A. Yes, to my recollection.
 - Q. Okay. Thank you.

Now, you're the only one that signed RA-7; is that correct?

A. Yes.

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- Q. Any other -- I don't have it but I'm just --
 - A. Yes, only my signature.
- Q. And is it fair to say that the G-3 is about three and a half pages?
- A. Well, it says four and a half -- yes, three and half pages.
- Q. And four pages but the last page is a half page?
- 17 A. Yes.
- Q. When you supplemented it or expanded it, the new one is ten pages?
 - A. Correct.
 - Q. So we have six and a half pages added to the Risk Identification Report. Is it fair to say that a substantial amount of that information came from Transco or Mr. Rodriguez?
 - A. The information regarding the

pipeline came either from an OPRA request from PHMSA and my confirmation from Transco, from Mr. Rodriguez. The comments about what I identified as construction activities were from me but we did go back and forth and he asked me -- I think we have a comment in here about vibration monitoring and that he and I worked together to develop.

- Q. Right. Okay. And he's not attributed in that report in any way that he provided any information that's -- that was a part of your report?
 - A. No, I mentioned --
 - Q. The bibliography?
- A. No, no. I just mentioned that I have obtained information from Transco and PHMSA and I say that the throughout the revised report as well.
- Q. And I think Mr. Rodriguez even testified that he submitted a report, a marked up report that was given to you, I forget whether it was marked for identification but in the Transco documents there was a revised document that was given to you, do you recall that?
 - A. A version of this?

- Q. Yes. He took your original version and marked it up.
 - A. He may have.

- Q. Now, in the initial hearing before the remand you testified concerning the cross-sections on the property, did you not?
- A. Yes, there's an exhibit with cross-sections.
- Q. Is it fair to say that the only cross-sections submitted in the original, the initial hearings was cross-section C which is on the northerly portion of the property, if you recall?
- A. I know that there was that cross-section, I don't -- oh, before the remand?

 I'm not sure, I'd have to look at the plans.
- Q. Okay. Now, I went back to review your testimony and the transcript indicates two numbers, can you tell us approximately how many cubic yards are being removed, excavated or taken off the site from the current project, approximately? Because in one place you said 1,000 cubic yards, another place you said 2,000.

MR. ALAMPI: I don't know if any of that is true and I'm quite attentive. So my

objection is if there's a specific reference in the transcript, we'll let the witness --

MR. MUHLSTOCK: Well, the witness has to answer if he has a recollection.

- A. I do know that there were numbers on some of the sheets that say how many square feet would be disturbed. It's an average of 10 feet high, say 30 feet by 60 feet, something like that. I can have a scale and calculate it.
- Q. Forget about what you said before.

 Is there approximate, I don't need an exact

 number, just round numbers.
- A. I don't do approximates for this board.

I just made a quick calculation. Somewhere in the neighborhood of 2200 cubic yards. 2,000 cubic yards.

- Q. And is it fair to say that removal from a site of approximately 2,000 cubic yards, that's a substantial removal?
 - A. I don't think you can qualify that.
- Q. You're an engineer that's designed many projects; is that correct?
 - A. Yes.
 - Q. Does North Bergen have a soil

movement definition that defines major versus minor?

- A. I don't recall but if you put it in terms of a soil moving application, it's usually like somewhere in the neighborhood of 200 yards, a 150 yards is the difference. So in that context it would be a major. From a construction standpoint compared to other projects, it may not be.
- Q. Basically if I understand how it works, 15 cubic yards per dump truck?
 - A. Yes.

- Q. Is that approximately? So if you have 2,000 cubic yards you're talking about 67 trucks per thousand, about 135, 140 trucks to remove that fill?
- A. Yes. And some of it may not be removed, some of it may used on the site to level it off, to grade it.
- Q. Is it fair to say that that approximately 2,000 cubic yards is primarily being removed from the toe of the slope?
 - A. Yes, the soil on the slope, yes.
- Q. Now, again, so I didn't repeat what we testified at the original hearing, but there

seemed to be -- I had some questions. Is it also fair to say that some of that that's being removed is actually rock?

- A. My recollection is that I said it's -- there's a likelihood that some will be rock. I said there would be loose rocks. We did cross-sections, some of the cross-sections of the rock come close to where the footings will be. So there will be some rock removal but not a lot.
- Q. And when I say rock, let's forget about loose rock, let's go to actual rock that's part of that subsurface cliff that we spent a lot of time talking about.

Is it fair to say that some of the part of the floor in the proposed building is -- will need to be constructed by removing actual rock?

- A. I'm going to answer two ways, yes, but that rock that will be removed is most likely loose.
 - Q. Okay.
- A. That's been my testimony that we'll be removing loose rock to get to firm rock.

 That's the nature of the Palisades.
 - Q. Okay. Now, I know you're going to

have a soils -- your soils geotechnical expert testify but in real numbers, again, and you do it as detailed as you want, is it fair to say that the intrusion into the cliffs whether it be rock removal, dirt removal, whatever kind of removal it is, ranges from between 20 feet to 50 feet approximately?

- A. How about we say into the bottom of the slope.
 - Q. That's --

- A. All right. Because there is a clear indication where the slope again on the plans -- and I'm referring to Exhibit RA-10 which we produced last time. It's a version of the Grading, Drainage, Utility and Soil Erosion Plan. On the north side of the building the building is at the base of the slope, so there's really no removal except for to install the foundation and the soil put back. Two-thirds of the building will protrude about 40 feet, 35, 40 feet into the slope.
- Q. Okay. And then also to construct the building you need to go beyond the building walls --
 - A. Yes, another five or 10 feet, yes,

Bertin - cross

at least.

- Q. So is that how you get approximately 50 feet on a portion of it?
 - A. Actually it will be --
 - 0. 45?
 - A. -- 45 feet, yes.
- Q. Okay. Now, do you recall in your testimony in the initial application any discussion of removing the retaining wall on the southerly portion of the property?
- A. Well, that was always shown on the plans, that a portion of this wall would have to be removed, it encroaches onto the site. So it's on the plans, whether we discussed it or not I don't recall.
- Q. Okay. So but now can you just describe because that arose in connection with Johnson Soils report --
 - A. Right.
- Q. -- can you describe that part of this plan?
- A. Yes, towards the rear of the proposed building and to the south along the property line with the Galaxy there's a stone retaining wall that is -- the center of it is

Bertin - cross

about on the property line. I'm sorry, it starts -- let's have the scale to be accurate. It starts 15 feet in from the Galaxy property and it extends into where the building is proposed. And so it's proposed to remove and I don't recall somewhere around 30 feet of this wall and leave part of it by the property line. So we're leaving 10 feet of wall along the property line. The rest of the wall inside the site is to be removed and the soil sloped so we don't need a vertical surface there.

- Q. Okay. So is it your testimony that you do not need to replace the retaining wall that's being be removed on your side of the property that approximately 30 feet?
 - A. No, we do not need to replace it.
 - Q. Okay.

- A. Because we -- I sloped the soil there to facilitate groundwater runoff.
- Q. Now, I know there's been some recommendations by Johnson Soils concerning the project. Is it fair to say that one of the things they recommended on the site plan is a 10 foot area behind the building to act as I think they called it a bench?

- A. I recall the 10 foot behind the wall -- I'm not sure about a bench. But I know some area behind the footing for workers to maneuver, but if there was a bench beyond that, I don't recall.
- Q. Okay. The current site plans show that 10 foot area on the -- that Johnson Soil has recommended be addressed?
- A. No, they wouldn't show it on these plans. That would be a construction detail.
- Q. Well, it's fair to say that in addition to constructing the building, you would also then have to construct this other 10 foot area back into the cliffs, is that fair to say? If you need to have a 10 foot area between the rear, the westerly portion of the proposed building and the cliffs, you'd have to make sure that that's clear like an alleyway?
- A. Right. That's means and methods of construction, that's something that wouldn't be shown on site plans.
- Q. This site plan has a landscaping plan, does it not?
 - A. Yes.
 - Q. And is it also fair to say that

Johnson Soil has recommended certain landscaping and materials be added to help soil stabilization?

- A. Yes, I think that there was a comment, Lisa will testify.
 - Q. Right.

- A. There was a comment about putting some stones along the back, that I recall. I'm not sure about other vegetation.
- Q. Okay. But none of that has been shown on the site plan at the current time, has it?
 - A. No, that report was prepared --
 - Q. Yeah and that's fine.
- A. -- recently, so these plans precede that.
- Q. Okay. Now, the drainage system, you have designed a drainage system, and I know that the central drainage system has -- and I'm not going to go into your stormwater management report other than to say there's an issue with backup which I asked you on the central part of the system under the parking area.

But the northerly area, that is designed to take flow from on top of the slopes

and direct it to the northerly portion of the property; is that correct?

A. Correct.

- Q. Is there any other water that's diverted other than to that drainage line, that particular drainage line in that 20 foot proposed access easement or is that the major collector?
- A. No, right. Water will flow down the hill and as it's graded behind the building, most of the water that comes up against the building will travel through a swale around towards the north to get to this inlet that we put on the north. Some water will go around the south and we put an inlet on the south side.
 - Q. Okay.
- A. So but the water going into that pipe is by design water that comes from the hillside, not from the building.
- Q. Right. And is it also fair to say that therefore a major component of the stormwater management system is to direct a substantial amount of the water runoff to the northerly side, not all of it, but a substantial amount of it?
 - A. Yes, that's because that water is

for purposes of our stormwater design considered outside of the project because we have to mitigate any increase in runoff from the project. So that's bypass water that comes off the hillside, so we deal and mitigate increases and runoff from the project site.

- Q. Is it fair to say that there is no stormwater management improvements or devices on the, I guess the slope or the cliff area behind the westerly portion of the building?
- A. Not proposed but in reading the report and being involved, a substantial part of this slope is already stabilized by prior owners or users of the property.
- Q. Okay. But other than, say, by naturally methods, there's nothing in this area that is designed to catch water or pipes other than what's in existence?
 - A. No, correct.
- Q. Subject to the Johnson Soils recommendations?
- A. Yes, and what we did is we created a swale in the back of the building to collect that water.
 - Q. And --

- A. And also not shown but -- well, it does. There's footing drains also for water that seeps into the ground and comes up against the building to collect that water and divert it.
- Q. Now, one of the objectives in the Storm Water Management Plan is to not increase the rate of runoff from the property; is that correct?
 - A. Correct.

- Q. And I believe you testified at the original hearing that you satisfied that objective?
 - A. Yes.
- Q. Now, if I just take the cliff portion, the slope portion of the property, is it fair to say that the rate of runoff increases if I excavate or remove a part of the toe of the slope?
- A. Yes, because we're putting the building there. So the part that's being excavated is now being occupied by a roof. And it definitely increases the rate of runoff and that's why we have a retention system, right.
- Q. So as far as I understand overall, there is no increase in rate of runoff, but I'm

Bertin - cross

concerned about the rate of runoff on the slope itself. On the slope itself when you excavate approximately 2,000 cubic yards, it's fair to say that that rate of runoff increases because there's no longer that area that was in the toe to slow down or catch or stop the water?

A. Well, okay, the water -- and I'm not sure about your question but I'm going to try to answer it. The water that comes from the top and I'm picking a point along Ferry Road where it makes the bend which is at the top of the west end of the site. If water would come down the hill in its natural state it would continue to flow down until it got to the tennis courts and then it would go across the property and get out onto River Road one way or another.

In the post construction scenario the water would come down to the building and then be diverted in the swale and go around the building and then enter the pipe. Is there a change in how long it takes that drop of water to get out to the street? I'm not sure, I'd have to calculate it but it's a longer route although when it gets in the pipe it's traveling faster.

So I'd say, not to be a pun, but it's a wash.

- Q. And irrespective of once it gets into the drainage area here, the swale, it's fair to say it increases speed up to the point where it gets to that point?
- A. The runoff on the cliff that's on the -- on the slope that's not being disturbed, that remains the same. It just, does it change when it hits the building; yes, the water course changes but prior to hitting the building it doesn't --
- Q. I'm more concerned with the toe of the slope, not the slope. Normally rainfall hits but when you get to the point where it's no longer a slope because it goes straight down, you've excavated it. Isn't it fair to say that kind of drops like a waterfall?
- A. Yeah, but that doesn't happen because we've created a sloped area for the water to follow. When the water comes down, if we just cut into it and, say, put a retaining wall, yes, the water would drop like a waterfall. But now when the water comes down to where we cut into the slope it hits a wall, it doesn't go over the wall, it hits a wall and it can't go any further, so then it's diverted sideways. So we don't --

that situation I think you're describing does not happen.

- Q. Okay. You testified that you were aware that there is a contamination study being undertaken on the property. Either one of your reports does not talk about contaminated soil. Are you aware of the status of any review of contaminated soil on the property?
- A. Recently, and I'm saying recently within the last two months, I'm aware that there is some form of soil contamination in the front of the site closer to River Road and as I recall the levels of contamination are higher near River Road and that studies are going to be done across River Road to see what the level of contamination is there to determine where this -- I think it's an oil type material came from. This whole area used to be oil plants and oil tanks many years ago.
- Q. Does the developer require any approvals from the NJ DEP as a result of this contaminated soil?
- A. I believe, yes, they're going to do a mitigation.
 - Q. Do you know if there's any

application has been submitted yet?

- A. I think it's in the study process.
- Q. Okay. Now, there's been a lot -- by the way, the pictures in your report, the most recent report, the Risk Identification Report, did you take those pictures?
 - A. Yes.

- Q. Okay.
- A. And these are -- the pictures that we blew up are the pictures that we actually put on the board.
- Q. And is it fair to say -- and I asked Mr. Rodriguez this question, but is it fair to say that when the Geofabric -- and I might have it wrong -- the Geoweb?
 - A. The Geoweb.
- Q. When the Geoweb is exposed, is it fair to say that that's evidence of some type of soil erosion on the slope?
- A. The pictures were done in the winter when the vegetation was gone and it does show some signs that there was erosion of some form at some point because it's -- there's rocks exposed.
 - Q. Okay.
 - A. I think recently -- it's all

vegetated right now.

- Q. Okay.
- A. You can't see the ground. You can't see those conditions that are in that photograph.
- Q. So but you agree that when you have Geoweb, it should be covered by dirt and grass or cover, that that's the purpose of it, to provide stabilization for the slope?
- A. Yes, you would put stone in there and then you would cover it with top soil and something like that. I don't know how Transco put it in, but I just gave pictures of how it existed.
 - Q. I'm talking about existing.
 - A. Correct.
- Q. So there are areas on the site that have exposed Geoweb?
 - A. Yes, in the wintertime anyway.
- Q. And you agree, though, that for the purposes of making sure that the slope is stable, the objective is to not have exposed Geoweb, the objective is to have the, what you said the gravel, the dirt grass --
 - A. Yeah, grass cover.
 - Q. -- whatever cover you're going to

put it, that's the objective?

A. Yes.

- Q. Did you observe, any time you've inspected the property have you observed any ponding on any portions of the soil, any ponding or puddling of water?
- A. There were times when I saw some water flowing on the slope and down on the flat area of the property, yes.
- Q. Is it fair so say, do you know whether there's any water table or perched areas on any part of the property?
- A. I don't believe -- I can't answer that definitively because you need to do borings but I do not believe there's person perched water here but there's certainly water that would enter into the ground and travel down the hillside, yes, I would believe there's groundwater.
 - Q. Do you know --
- A. Occasional groundwater after rains like I guess what's going to happen tonight.
- Q. Are you aware of the construction of the gas pipeline, the 36-inch pipeline, are you aware of whether that was constructed on a gravel base with backfill, like how that pipe was set

Bertin - cross

into that area?

- A. No, I know -- I had conversations with Transco about it but I don't recall the specifics but it would have been installed in some kind of bed of sand or gravel or that material. I would imagine sand would be --
- Q. That is the way to -- the proper way to install it; is that correct?
 - A. Correct.
- Q. Is it also fair to say that that type of construction, assuming it existed, when you put it in a bed of gravel or sand and backfill around it, that that sometimes causes water to be diverted to that area?
 - A. It's called piping.
- Q. Okay.
- 17 A. Yes.
 - Q. And so in looking at this there's a potential risk that piping would occur because all -- not all but a substantial portion of the water is aimed or directed towards this northerly drainage pipe?
 - MR. ALAMPI: I'll object to the characterization of potential risk.
- MR. MUHLSTOCK: Well, do you

understand the question, Mr. Bertin?

THE WITNESS: Yes, I'd say --

MR. MUHLSTOCK: Can you answer it?

THE WITNESS: If it exists, it's

something that's already happened.

MR. MUHLSTOCK: Okay.

THE WITNESS: Nothing that this
project does is going to change that. It could
be happening. I should say it could be happening
to a small degree. If it happened to a large
degree, eventually there would be erosion because
always the water moves through the ground,
eventually it does take soil with it and would
cause the surface to start to collapse and
eventually you'll see some sign of a condition.
I don't know that that's the case here.

- Q. Okay. But right now your proposed project, if it's constructed we're taking not all but a substantial portion of the water, directed it to the swale, to the westerly portion of the building, and directing it all to the north towards that the 36-inch pipeline?
- A. Well, to the north and then around the corner of the building into an inlet.
 - Q. Right.

- A. And that's why we have a gravel swale. The gravel is there to prevent erosion and we bring it right around the building so it's channelled, that water is directed to go to the inlet and at that point the pipe is seven or -- about seven feet underground, the pipe meaning the gas pipe.
- Q. Now, you indicate in your first report there may be a need, and I'll quote from page 3, "There may be a need to utilize a hydraulic hoe ram to break some of the rock."
 - A. Yes, you could say that.
- Q. And that's page 3 of your original report. Page 3, it's paragraph 2 --
- A. Yes, I saw that. I think it's repeated the in --

THE CHAIRMAN: Page 9.

THE WITNESS: Yes.

- Q. Okay. Now, your report on page 4 about six, seven lines down says --
 - A. Which report?
- Q. I'm sorry, your second report, the most recent one.
- MR. ALAMPI: The first report is only three pages, he should know that.

MR. LAMB: Three and a half.

THE WITNESS: Is that a trick

question?

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MR. ALAMPI: It is a trick question.

- Q. Page 4 of 10, the first full paragraph line 6, 5 and 6, "While there is no construction proposed on the steep slope in the vicinity of the pipe, a review of the surface conditions has been made." Is that correct?
 - A. Okay, yes.
- Q. And when you refer to surface conditions, is that literally what's visible with the naked eye?
 - A. Yes.
- Q. Is that your understanding of surface conditions?
- A. Yeah, that's what the whole point of this existing terrain and surface conditions.
 - Q. Just what you can see?
 - A. What you can see.
 - Q. Not what's happening underneath?
 - A. Not in this section of the report.
 - Q. And I know that the rest of the report has subsurface issues. Now, on page 7, and that's where I -- page 7, the second full

Bertin - cross

paragraph, and I guess that's where I got the 50 feet on the south, construction activities will extend 20 feet into the slope on the north half of the site adjacent to the gas pipeline, 50 feet to the south half, so that's about 45 feet in that range?

A. Right.

- Q. Now, you also conclude that on that report "There appears to be some areas where additional soil stabilization may being justified." Can you point out on the site plan what -- in general where those areas are?
 - A. Where is that?
- Q. Third full paragraph, second sentence.
 - A. Thank you.

MR. ALAMPI: John, what page?

MR. LAMB: Page 7, second full

paragraph, third line. I'm sorry, third

20 paragraph, second line.

- A. I believe I was probably talking about where the exposed Geoweb was over the gas pipeline.
- Q. Okay. Any other areas on the southerly side by the Galaxy of exposed Geoweb?

- A. No, Geoweb wasn't installed on the southerly side. On the southerly side there is a filter fabric type material and stone put on top of that. So that whole hillside has been stabilized.
 - Q. That's not called Geoweb?
- A. No, no, Geoweb is a specific product that's thick and, well, it looks like a honeycomb.
- Q. Let's go to the south side. Does that have that fabric is the same purpose as the Geoweb, to stabilize the dirt?
- A. In a sense, yes. It's there actually to separate the stone from the soil below.
 - Q. Okay.

- A. And it is to help prevent erosion during the initial installation of the rock.
- Q. Is it fair to say that that part on the southerly portion should also have dirt over the stone and grass on top of the dirt?
- A. No, because itself is the stabilization, it's like stone along a river bank, that's what the stabilization is. Now, during the summertime vegetation does grow

through there but in the wintertime as it dies off, the rock is exposed.

- Q. Now, you indicate on page 7 of your report on the bottom, "The pipeline is in a steel casing across the road right-of-way."
 - A. Yes.

- Q. Is that something that you observed?
- A. No, I was told that and I believe I was actually given some notes during the construction of the pipeline by Williams that shows that as the gas line crosses River Road, it's encased in another pipe. And I think Mr. Rodriguez testified about that as well.
- Q. On page 9 of your report you talk about in paragraph 6 building construction. You talk about scaffolding being needed, for example, on the side of the building to hoist construction material.
- A. Yes, there's siding, there's going to be brick and all and people have to work on the side of the building so --
 - Q. Right.
- A. -- you build scaffolds and people work off the scaffolds.
 - Q. So if there's any -- after

construction if there's any maintenance on that side of the building that's required, same thing, they would go in and put scaffolding or --

- A. That would be for major maintenance, major, would, otherwise a ladder. And if they really had to get up there for some other reason they could take a little tractor with a boom on it.
- Q. Now, you indicate on page 10 of that report under the construction precautions it says "Transco requirements for construction or maintenance activities shall govern all construction."
 - A. Yes.

- Q. Okay. And that is -- Mr. McGrath was kind enough on October 10th, 2010 I believe to get a copy of those construction requirements and I had a lot of questions for Mr. Rodriguez about them, but are those the construction requirements you're referring to?
- A. Yes. And I think we talked at the last meeting that they are -- that that is -- that note is included on the plans.
- Q. Okay. And at the time I believe you didn't know exactly what the construction

requirements are, even though you were making the plans have that note that said it had to be subject to them?

- A. I read it. I couldn't recite it now but I read it at the time.
- Q. Okay. But you agree that that body of requirements and conditions and limitations and restrictions, that has to be part of any approval that is granted on this project?
- A. Well, we have made it part of the project, yes.
- Q. Now, on the same page 10 on paragraph 3 you talk about any activities such as pile driving, blasting and rock hammering. I believe the testimony was that there will be no blasting, has that the now changed?
 - A. No, there will be no blasting.
 - Q. So blasting is out?
- A. And I'm pretty sure there will be no rock hammering.
 - Q. Okay.
 - A. But they're in there to be conservative to say if in the event that these activities should occur.
 - Q. But right now --

A. There is no intention for anything.

Q. Okay.

MR. LAMB: Nothing further, Mr. Chairman.

THE CHAIRMAN: Thank you. All right. We're going to allow public comments, five minutes each, please. And let's keep the questions related to the testimony.

JEREMY RABIN, residing at 7004 Boulevard East,

Guttenberg, New Jersey, having been duly sworn by
the Notary Public, was examined and testified as
follows:

MR. RABIN: Mr. Bertin, you testified about the Geoweb, and apparently it's been exposed a bit from some erosion that's taken place in the soil. The erosion on the slope, one of the purposes, principal purposes of the Steep Slopes Ordinance was to reduce erosion of soil and plants on there, so currently if there is erosion, that wouldn't be serving the Steep Slopes Ordinance, would it?

THE WITNESS: I don't know the condition of how it was left when the Geoweb was put in there and if they did put topsoil over the top of it and seed it, it could have not been

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stable during the first couple rains and been in the condition it's in, you know, when they made the repair a decade ago. So it doesn't look like there's ongoing erosion there, that part has eroded and it's stable now. But it has -- there -- it looks to me like at some point in time there was some erosion over that Geoweb.

MR. RABIN: Thank you. You talked a bit about the stormwater system, that the water will be directed in the direction of the pipe and takes a hard turn and moves down toward I guess in the direction of the road.

THE WITNESS: Correct.

MR. RABIN: In North Bergen do stormwater systems ever fail to work? Are there instances where a system was designed and then it failed at some point? It's almost a rhetorical question, I guess.

THE WITNESS: There's always -- yes, something can happen. It happens.

MR. RABIN: There's some very dramatic accounts of situations where there has been severe washouts in the areas. I've seen a manhole cover --

MR. ALAMPI: Chairman.

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MR. RABIN: -- blown off its bolts.

MR. ALAMPI: I'm sorry, sir.

THE CHAIRMAN: Where are we going?

MR. ALAMPI: We're talking about assumptions we see. We're trying to stay away from that type of self-serving testimony.

MR. RABIN: I'll try to -- have you heard of situations where water pressure of an overburdened system blew a manhole cover off its bolts?

THE WITNESS: I've seen it on Tonnelle Avenue.

MR. RABIN: Okay. Well, I assume that you've designed this water system to the best of your ability and you intend for it to be a successful system. But if at some point it were to become blocked, let's say, debris, you know, washed into it or something failed in some way, if we have some extremely heavy rains in this area, they come down that slope very, very strongly. Isn't it possible that you could have a lot of water flowing out in that system in the direction of the pipeline?

THE WITNESS: There's a swale and -- well, there's a swale that the bends, bends

around the building and to direct water out towards the street and there's an inlet to catch it at the bend behind the building. If the inlet were to be blocked, the water would continue down towards the river. If something were to like, well, there is no trees allowed in the area so there wouldn't be any trees, so if something were to clog the swale, then, yes, water might be able to jump the channel and go on to the sewerage plant property.

MR. RABIN: The easement along the side, the access easement along the side of the property and the area where the pipeline is actually located are approximately the same level, aren't they?

THE WITNESS: Yes.

MR. RABIN: So there would be nothing that would hinder the water once it hit that area from continuing to go in the direction of the pipeline?

THE WITNESS: Well, you can see on the plan there's contours shown and the land is depressed on the easement. I mean on the proposed easement so as to still direct water down towards the street and not onto the sewerage

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treatment plant property. And that, that area over the right-of-way on the sewerage plant property does slope towards River Road.

MR. RABIN: It seems like there's not much room for failure but I'll move on to another question.

The county did a Palisades Stability Study. Have you read that? It was referenced by Transco at certain points in their testimony.

THE WITNESS: Yes.

MR. RABIN: In there they talk about a gabion wall being recommended for this portion of the slope because there's currently concern about the stability of the slope.

MR. ALAMPI: I'll object as to what the report considered the reasoning behind it without the report. I don't think that's a fair question. We don't even have the report.

MR. MUHLSTOCK: Okay, why don't you ask him a question. He said he read the report.

> I understand. MR. RABIN:

MR. MUHLSTOCK: You ask him a question on it.

MR. RABIN: Is the purpose of a gabion wall to supply support to an earthen

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structure in this situation?

THE WITNESS: That report looked he at the slope and said, well, it's a long steep slope, let's do something to stabilize it. And I don't necessarily agree with that because I'll explain why. You have a nice long steep slope that comes to a point on the ground and what they were saying, that report says, let's go into that slope, cut it and install a retaining wall and take that soil away. Or they're saying to build a wall at the end and then backfill it. I don't recall seeing backfill but it looked to me like the report was saying go towards the bottom of the slope and build a wall.

Well, we've gone to the bottom of the slope and built a wall. So in that sense this is consistent, again, but that the report talks about building a wall along -- and it looks like it says into the slope. That's my interpretation.

MR. RABIN: And it's your opinion that a gabion wall is not needed but that the building would in some sense serve the same function?

THE WITNESS: Absolutely, yes.

1 Thank you.

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MR. RABIN: Do you consider that you are more qualified in this matter than the people who wrote the stability study?

MR. ALAMPI: Well, let me object.

MR. MUHLSTOCK: Now, that's

really --

MR. ALAMPI: That's an improper

question.

10 MR. MUHLSTOCK: That's really

11 sustainable.

MR. RABIN: Well, I think --12

13 MR. MUHLSTOCK: That's

14 argumentative. Ask him a question.

MR. RABIN: Well, I don't mean it as 16 argumentative. But I assume that he's putting his opinion ahead of theirs in his judgment which 17 18 he has a right to do. I'm not --

19 MR. MUHLSTOCK: He testified what he believes. 20

21 THE CHAIRMAN: What he believes.

22 MR. MUHLSTOCK: That's all you can

23 ask him.

24 THE WITNESS: And if I just add,

25 I've been working on this property for six years.

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1 MR. RABIN: Yes.

THE WITNESS: Those guys drove by

3 it.

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MR. RABIN: Okay.

THE WITNESS: I think I have a little bit more familiarity with this property

7 then those --

MR. RABIN: And have you had communications with the writers of that document?

THE WITNESS: I don't think there's

a need to. I think we had a contradiction in how

to work the slope.

MR. RABIN: When a gabion wall is built does it normally rise to the edge of that slope or would it normally rise above the slope?

THE WITNESS: A wall should extend above the slope six inches to a foot.

MR. RABIN: And if the that wall -we know that there could be rock falls,
mudslides, things like that could happen on a
steep slope of this type. If you were trying to
protect a building, wouldn't it makes sense for
the wall to be a bit higher than it would be if
it was just an unused lot, let's say?

THE WITNESS: Well, that's not the

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case here but whether -- that's not the case here but if you were building a wall, yes, you should build it a little bit higher than the slope behind it.

MR. RABIN: Is it true that the rear wall of your building at the point where the soil meets the building from that point up is wood construction?

THE WITNESS: Yes, I believe it is going to be wood frame construction.

MR. RABIN: And the lower section is concrete?

THE WITNESS: Yes. And much of the slope is in that lower section and then eventually comes up into the wood frame and anything within 18 inches of the soil would be, you know, masonry. So it may be brick veneer or block.

MR. RABIN: Okay. I'm just concerned that a gabion wall made out of wood with habitable structures on the other side of the wood doesn't seem to be in the same class as the recommendations that were made. And I would certainly be concerned if an occasional instance a rock were to break loose in the areas where

there are or if there was a mudslide or some other thing of that nature that the only thing protecting this building is some wood and then you've got the habitable structures there. That seems like a concern because we have a very steep slope there and a lot of rain.

THE WITNESS: Well, more of this exercise have --

MR. ALAMPI: Let me do my job.

THE WITNESS: Okay, do your job.

MR. ALAMPI: There is no testimony there's a wooden gabion wall or a gabion wall at all. He's talk about the wall of the building versus a gabion wall.

MR. RABIN: Gabion wall in quotes.

THE CHAIRMAN: True.

THE WITNESS: Gabion wall is a rock filled basket and that's what a gabion wall is so you could call that a wall or but, no, there's more to this than just simply building a wall here. And that was the whole point of the Slope Stability Analysis that's going to be discussed later, why we have a swale behind the building to collect the water so the water doesn't hit the building and there had been other testimony about

that.

MR. RABIN: Okay.

THE WITNESS: So it wasn't done in a vacuum. You got to look at the whole site.

MR. RABIN: Would it not have been the case that if the North Bergen ordinance of a 40 foot setback had been observed, that that would provide from the steep slopes, that would provide considerable protection if you were to have a rock slide, mudslide, wood, you know, forest fire, whatever it is, something were to happen in that area, 40 foot setback would provide more protection for your building then having it embedded into that slope which it's embedded I think 35, 40 feet into the slope instead of 40 feet from it.

THE WITNESS: It's a different condition. I'm not going to say this is not safe.

MR. RABIN: Okay. Last question I have. When you were designing this building, or participating in the design of this building, the shape of it, the sort of U-shape is very similar to the previous design of the building. I was wondering did Transco participate in the design

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of this U-shape to make any suggestions as far as how that might be beneficial to pipeline safety or other issues that might be relevant?

THE WITNESS: No.

MR. RABIN: And was there ever consideration to the fact that the center of the property, the area where the driveway, the circular driveway is, that that area is really the area of least likely to impact on the slope, the pipeline, the neighbors, like the Galaxy, and that area has been left open and the building has all been forced out to the outer edges. If you had designed this building, let's say with the parking and drive access on the side where the pipeline was, wouldn't it have been possible to move all the heavy construction away considerably from the pipeline?

an issue with the construction activities here and the safety of the pipeline and I say that because I heard Mr. Rodriguez for five nights of testimony. So I don't know that this is an unsafe condition and moving anything would make it any safer.

THE CHAIRMAN: Yes, there's been

testimony to that effect.

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MR. RABIN: Well, the safety, the safety is certainly being contested at this hearing. I know that there's been a lot of testimony that some think it's safe. Certainly I believe that if the driveway access had included the 40 foot rear yard and the side, and building had been concentrated in that open space you have right now, you probably could have saved yourself four years of fighting on this project.

THE WITNESS: I doubt that.

MR. RABIN: Well --

THE CHAIRMAN: Okay.

THE WITNESS: That's not a year ago

discussion --

16 THE CHAIRMAN: Mr. Rabin, thank you.

17 MR. RABIN: I wanted to posit that

because the design of the building is creating a

19 lot of the difficulties that we're having.

THE CHAIRMAN: Thank you. Anyone

21 else? Yes, sir.

22 STEVEN ROSEN, residing at 7004 Boulevard East,

North Bergen, having been duly sworn by the

24 Notary Public, was examined and testified as

25 follows:

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MR. ROSEN: I'm going to ask a couple of questions based on experiences I've had. As I understand what you're saying, a swale is basically a ditch filled with rock?

THE WITNESS: It's a ditch -- it's rock shaped in a swale, yes.

MR. ROSEN: And how wide and deep is that?

THE WITNESS: I think there's a section, but it's approximately eight feet wide, that's six -- 12 (indicating).

MR. ROSEN: And depth?

THE WITNESS: It's about a foot deep, eight feet wide and a foot deep and it's in a V shape.

MR. ROSEN: And as an engineer you've computed that that will take away the water runoff from the slope?

THE WITNESS: Yes, the anticipated water that would fall onto this slope.

MR. ROSEN: When you determined the anticipated water runoff, do you use an average rainfall, very heavy rainfall or an exception rainfall? And I'm asking that because all the newspapers now are reporting that the weather is

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changing and we're getting excessive rain and excessive drought and I just wanted to know what you're planning. Are you planning on 100 percent, 150 percent of normal?

THE WITNESS: Well, there's classification of storm events based on the probability that that would occur. So we use for over land flow a 25-year storm would be the normal. That has a probability of occurring once in 25 years. That doesn't mean it can't occur more, so that's the storm that is used for this design. And a 25-year storm happens more than once every 25 years. So and I don't recall what the capacity of this swale is. I mean it could be sized bigger. We made a large swale but we would normally design for a 25-year storm.

> MR. ROSEN: Okay. Thank you.

THE WITNESS: You're welcome.

THE CHAIRMAN: Anyone else?

20 Mr. Kronick.

DAVID KRONICK, residing at 7855 Boulevard East,

North Bergen, having been duly sworn by the

23 Notary Public, was examined and testified as

24 follows:

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MR. KRONICK: Mr. Bertin, if I heard

you right, that there will not be any cutting into the cliff except for the loose rock and debris? Do I have it pretty much correct?

that's what we anticipate. If you recall and I just want to qualify that, there were a number of test pits done along the back of the building and at the request of your attorney and the board, we did test pits even further back and we did borings in front of the site. So we have mapped the rock out and we made some cross-sections of where we think the rock is and in the worse case, and I believe it's on the south side, I mean the building just touches where we anticipate rock to be. So in that case the footing would most likely intrude into the rock but it's my opinion that most of it will be loose rock.

MR. KRONICK: I ask this in the context of what happened with Avak. And if I recall there was not going to be any removal of anything but loose rock, debris, et cetera and I witnessed months of cutting into the cliff, the face of the cliff I would say but going down for months I saw trucks pulling rock out on and on I don't know how many times. So my point is I

David in

Bertin

would assume this is within not even a quarter of a mile, would we not encounter the same thing?

THE CHAIRMAN: Mr. Alampi.

MR. ALAMPI: Let me object. I have no involvement or knowledge of this what is it called Avak application, so I don't see how this type of questioning can even be formulated here. I don't even know the distance between the properties, I don't know what it's about. I don't think it's an appropriate question for this witness.

MR. MUHLSTOCK: I would suggest, Mr. Bertin, that you answer the question as to whether you foresee or anticipate more rock being removed or more soil or more rock being removed from the site than your calculations indicate.

THE WITNESS: If someone said there's no rock being removed from the Avak site, that surely wasn't me because we did all the borings and we know where all the rock was and we knew how much rock was there.

MR. ALAMPI: So you didn't listen to the board attorney.

THE WITNESS: I'm sorry, I didn't listen to the board attorney.

 $$\operatorname{MR.}$ ALAMPI: And I raised the objection for you to follow his instruction.

THE WITNESS: So the point is that that -- the cliff face is further back from River Road at this location than at the Avak location. So, no, it's different because of the geology of the area.

MR. KRONICK: I certainly hope your right. Thank you.

MR. MUHLSTOCK: Mr. Alampi, any

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MR. ALAMPI: No.

MR. MUHLSTOCK: Okay.

14 THE CHAIRMAN: Okay.

MR. MUHLSTOCK: Another witness?

THE CHAIRMAN: Next witness.

17 MR. ALAMPI: I call Lisa

18 Mahle-Greco.

19 LISA MAHLE-GRECO, having been duly sworn by the

20 Notary Public, was examined and testified as

21 follows:

22 VOIR DIRE EXAMINATION

BY MR. ALAMPI:

Q. Ms. Mahle-Greco, could you please very briefly give us your address and your

66 Mahle-Greco - direct 1 affiliation with Johnson Soils and very --2 THE CHAIRMAN: Could you speak up? 3 MR. ALAMPI: I'm sorry. Ms. Mahle-Greco, can you please give 4 Q. 5 us your professional address and very brief curriculum of your experience and education? 6 7 THE CHAIRMAN: We've already 8 qualified her, Mr. Alampi. 9 MR. ALAMPI: So you accept her 10 credentials as continuing? 11 THE CHAIRMAN: Yes. 12 MR. LAMB: I have no objection. 13 DIRECT EXAMINATION 14 BY MR. ALAMPI: Ms. Mahle-Greco, did we mark the 15 Q. 16 Johnson's report at an earlier meeting? That 17 would maybe be RA-8 or --18 MR. MUHLSTOCK: Let me check. Νo 19 RA-8 was the site plan. RA-9, the Slope 20 Stability Report of Johnson Soils 6/1/12. MR. ALAMPI: 21 Yes. 22 MR. MUHLSTOCK: Okay. RA-9. 23 Ms. Mahle-Greco, are you familiar 24 with a report from Johnson Soils dated June 1, 25 2012, you note it as a Slope Stability Report --

Mahle-Greco - direct

A. Yes.

- Q. -- Appleview LLC?
- A. Yes.
- Q. In fact, you're the author of that report?
 - A. Yes.
- Q. And could you just bring us briefly through the report? Firstly, did I request that you conduct this report and submit it to the board?
 - A. I'm sorry?
- Q. Did I request that you submit this report to the board at an earlier time?
 - A. Yes.
- Q. Can you just tell us what you did either in preparation for this report at an earlier time or what you did sometime in 2012 in order to prepare this report?
- A. Previously we had gone to the site. We did borings I believe in 2007. I forget. We also did additional test pits and again we did additional test pits at the request of the board.
 - Q. When you say we, who is the we?
 - A. Johnson Soils.
 - Q. And did you participate in some of

these activities yourself?

A. Yes.

- Q. And have you been to the site more than one time in the past?
 - A. Yes.
- Q. And so instead of saying we, just say Johnson Soils or myself.

So what field work and what studies did you do? What activities in preparation of this report?

- A. Also so all the borings and test pits that we inspected and conducted as Johnson Soils were used in conjunction with pictures taken at the site by myself, collegues or Bertin Engineering which I have access to pictures of to make this report for slope stability.
- Q. And you had access to documents from Bertin Engineering as well, correct?
 - A. Yes.
- Q. And with regard to these borings, in fact did you not return to the site to do additional borings at the request of the board during the underlying application last year?
- A. We went back to do test pits, additional test pits.

Q. Test pits. And what's the difference between borings and test pits?

- A. Borings are using a truck-mounted drill rig and off the back of the truck there's approximately six-inch auger that drills down and using standard penetration tests with a one and three quarter inch what's called a split spoon sampler taking samples down into the soil we did zero to 12 foot continuously and then at five foot intervals until refusal.
- Q. And these when you say refusal, what does that mean?
- A. Refusal means over 100 blows per six inches.
 - Q. What does that mean to us?
- A. 140 pound hammer and drops on the spoon sampler, it's measured in six inch increments and those end values are correlated to typical bearing capacities and then we can take those samples and evaluate them.

THE CHAIRMAN: Excuse me, was your original question answered, the difference between borings and test pits?

MR. ALAMPI: We're going to get to that now.

Q. So what's a test pit?

- A. A test pit has a track-mounted backhoe or a rubber tire backhoe with a bucket on the end that digs --
 - Q. So it digs a hole?
- A. Digs a big hole into the ground so you can look into it.
- Q. So just keep it in the layman's vernacular. One is drilling down and getting samples and testing the quality and type of soils, the other is excavating a hole and looking in and doing whatever you do with that?
 - A. Correct.
- Q. In the meantime you then prepared this June 1, 2012 study. Just bring us through the study. Briefly bring us through the introduction and what observations you made regarding the slope and characteristics of the slope.
- A. I'm going to refer to this just to refresh my memory.
- Q. Yeah, just refer to it. Be brief.

 You don't have to recite it everybody has read

 it.
 - A. Introduction is basically that

they're proposing to build a residential buildings on the site. It tells basically the eastern portion is relatively flat and there's a slope section at the western portion.

- Q. Well, cut to the quick. The first acre is relatively flat property, correct?
 - A. I don't know if it's an acre --
 - Q. 200 feet deep?

- A. The first portion, yes.
- Q. And then after that there's an rising slope ultimately to the cliff face of the Palisades, correct?
 - A. Yes, it slopes from east to west.
- Q. Now, Mr. Bertin gave some testimony just tonight again with regard to what his anticipation was when installing the foundation and footings of this proposed building and such. Do you agree with his conclusions that there would be dirt, soils, loose rock, vegetation and such and that's what he would expect to see upon excavation and removal?
- A. Yes, all those things, soil, broken rock. He was referring to our cross-sections which are at the back of this report that show the estimated ground level of the building and

estimated rock elevation at different levels that we found during the test pits and borings to see where we're going to put the building.

- Q. Now, this is your chance to tell us as a technical professional why you agree with Mr. Bertin and what he would anticipate when you start excavation, why do you concur with him?
- A. Typical of Palisades you have some loose pieces on top which are very easily removed with a track mounted backhoe and probably some rock teeth on it to get some -- it just rips it, rips the rock a little bit better if they're bigger pieces. So there are probably loose pieces on the top with some soil above that with some boulders and stuff mixed in.
- Q. Did your physical inspections, your observations and the testing you did, did that support what you just said?
 - A. Yes, some of the test pits --
 - Q. How? Tell us how.
- A. When we dug the test pits we had the soil on top, the silty sand was on rollers and then below that we found broken or it's called decomposed or broken diabase below that. We didn't rip that out obviously, so we left it in

place so it's probably a couple feet typically of the broken rock before you hit total solid diabase.

- Ο. Now, if you turn behind you see there's an exhibit that was mounted Lisa on the bottom. Is that marked as A-6? Somewhere there is a marking on there.
 - RA-10.Α.

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- RA-10. Are you familiar with this Q. document?
 - Α. Yes.
- And just identify it for us on the record. What is that sheet?
 - The Grading, Drainage, Utility and Soil Erosion Control Plan.
 - Now --Q.
 - Drawing No. C-2.3. Α.
 - I'm sorry. Q.
- 19 That's okay. Α.
- Q. Utilizing this exhibit with your hands can you show us where various activities 22 took place under your supervision or in 23 corroboration with other members of Johnson Soils 24 with regard to borings and test pits and things 25 of that nature?

(Pause in the proceedings.)

- Q. I thought it would be easier than that Lisa.
- A. No, I know, it's just that it's a different scale so I was trying to --
- Q. Well, we don't care. Just with your hands --
 - A. I was trying to get organized.
- Q. Just to give an idea to the board. We don't care if you're five or 10 feet off?
- A. So there were borings in this corner of the building area and then there the other front corner of the building. This back corner of the building area and then there is a lot of test pits done all through this upper area (indicating).
- Q. Okay. How many test pits are you referring to?
 - A. Ten.
 - Q. Ten test pits --
- A. Total.

- Q. -- in the area that you just indicated that would be to the west of where the building is proposed?
 - A. Yes.

Q. And what was the purpose of those test pits? What would it tell you?

- A. Those test pits told us how much topsoil, how much silty sand with the cobbles, the depths of the rock and what we could anticipate to find.
- Q. And, again, with your hand why don't you indicate to us how far -- where those test pits would be -- would have been dug, how far down you would go where you would still have soil or different types of soil composition or other features before you get to solid rock?
- A. Some places in the back here was almost 15 feet (indicating). It varied in some areas. Yes, somewhere in -- some of these areas back here (indicating) had 10 and 15 foot until we hit the top of the broken rock.
- Q. And were there any areas where it was more shallow than that?
- A. I'd have to look more closely. I believe there's a few but not much.
- Q. With regard to the building itself, the footprint of the building, within the footprint of the building, were there any test pits taken a little bit further east from where

you just indicated?

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- A. No.
- Q. Were there any borings taken further east from where you were just discussing?
- A. No, because at the time we could not get a drill rig in that area.
- Q. So what do you expect to encounter in that area just slightly to the east, 20 or 30 feet further in? Yes, right where your hand is.
- A. In this area which is through cross-section B on our Figure 2.
- Q. In your report you're referring to what, what figure?
 - A. Figure 2, there's cross-section B which is approximately in the middle.
 - Q. Okay.
- 17 A. If you go a couple pages there is --
- Q. That would be the second to the last page, right?
 - A. Yes. Cross-section B.
 - Q. So these are the exhibits on the back of your report?
- 23 A. Yes.
- Q. All right. Cross-section B, explain to us how to read this cross-section and then

what it tells you.

- A. Cross-section B is coming down approximately in the center of the building. We use the test pits 6, 9, 7, 10 that we did in this area and we excavated rock elevations that we had originally found in front of the building to estimate how the rock was going to fall off down to the building.
- Q. And just explain to us then what your observations were.
- A. The rock was below the ground level of the proposed building and then it drops off significantly to the front of the building where it's almost 47 feet below the existing ground.
- Q. So in the front of the property the solid rock area is 47 feet below where the building's footings would be or the first floor?
- A. Below the first floor, the ground level.
- Q. Ground level. Do you know how deep the footings would be for this building?
- A. We have to drive piles in those sections.
 - Q. You have to speak up.
 - A. Drive piles.

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- Q. Yes. What's your anticipation?
- A. You have to put piles in the front section of the building. It's too deep to dig to rock.
- Q. Right. So what's your anticipation about how far you would have to pile?
- A. Oh, it's probably between 30 to 40 feet.
- Q. And on top of those piles you would mount the support for the building?
 - A. You put a pile cap and a grade beam.
- Q. You have to tell us, we're not engineers. Please tell us.
 - A. You put a pile cap and a grade beam and you build on top of the grade beam access.
 - Q. Now, going to the back of the building towards the rear wall, could you give us an explanation of what you would expect with regard to excavation or piling and putting -- and mounting the footings for the building?
 - A. In the back of the building --
 - Q. Yes, right.
 - A. -- and toward the sides --
- Q. Well, tell us.
 - A. -- in this area we excavate down to

the solid rock and put the footing directly on the rock.

- Q. And what's your anticipation, how deep would that be in that area based on your cross-section B?
- A. Those areas from the existing grade or from the proposed grade? The existing grade probably the cut is about 15 feet plus or minus a little bit. And then we put the footing directly on the rock at that point.
- Q. And now if we were to go to the south aspect of the building structure, do you have any analysis or cross-section that would assist you in making that same determination?
- A. If you look on Figure 2 again I have cross-section C which is the southernmost one.
 - Q. C?

- A. C.
- Q. Okay. And what does that cross-section tell us?
- A. Cross-section -- also we used test pits, 3, 5, 4, 8 and going toward that boring again to approximate the top of the rock that's anticipated.
 - Q. And so, again, with the rear of the

building how far down do you anticipate before you hit the top of the rock, the solid rock?

- A. It ranges, again, 10 to 15 feet.
- O. And --

THE CHAIRMAN: 10 to what?

THE WITNESS: 15. 10 to 15 feet.

THE CHAIRMAN: Okay.

- Q. And then on the north side of the building, same question, same analysis?
- A. Yes, Figure 2, cross-section A from the north side. And those we used boring 4, test pit 2, test pit 7, test pit 10 to locate the depth of the rock. There the depth of rock is approximately eight to nine feet.
- Q. Now, your study was primarily to discuss the stability or instability of the slope, is that a fair statement?
 - A. Yes.
- Q. And are you talking about the existing conditions in this report?
 - A. Yes.
- Q. And could you just bring us through very briefly characterizing the slope, you can go from south to north or north to south on the slope, just characterizing what your observations

were about the slope and specifically about issues of stability or instability.

- A. First, look at Figure 1 which we bring the area up into three different sections.

 Section 1 is at the south end --
- Q. You have to give us the page when you refer to some --
 - A. It was Figure 1 in the attachments.
 - Q. Okay. Go ahead.
- A. Section 1 is on the south end of the property. Section 2 is in the middle, and section 3 is at the north end.
- Q. And what is that figure illustrating?
- A. It was just breaking up the different areas so we can describe them better.
- Q. Okay. Is there anything on this figure that you want to bring to our attention?
 - A. I might refer back to --
- Q. Not all of us may know how to read it?
 - A. I might refer back to it.
- Q. Okay. So take us through sections

 1, 2 and 3. That would mean you were going from
 the south nearest the Galaxy and working your way

to the gas pipe, correct?

A. Yes.

- Q. Take us through your observations and any concerns you have.
- A. So Section 1 is on the south end, it's nearest the Galaxy. There is the stone riprap that Mr. Bertin spoke of earlier in the back over here (indicating) on the south end with the stonewall in the front of it. The stonewall is in good condition as Mr. Bertin also said that the stone behind it has not been eroded. There's the filter fabric and stone on top. Typically you don't put any topsoil or anything on top of it because the topsoil could slide off and the stone is there as the protection.
- Q. What does that tell you about its condition? Is it stable, unstable? Is it fragile? Is it solid? What is this telling us?
- A. It's in stable condition, there is no evidence of erosion in this area. The wall itself is in good condition. There is no bulges in the wall or anything found during the inspection.
- Q. With regard to erosion or earth moving or movement, is there anything evident

that concerns you as a geotechnical professional?

- A. No, there seems no movement of soil.
- Q. Now, going to the middle that would be Section 2?
 - A. Yes.

- Q. Same series of questions, Lisa.
- A. Section 2 has some -- it's in this general area (indicating). It has some fallen trees. There is the exposed cliff face at the very west end of the area. There's also scattered boulders found throughout the area. Those boulders can roll down, so we recommend removing them, what's called scaling them, basically taking them off the slope so that's not possible.
- Q. How large are these boulders? Are they as big as a car? Are they as big as this podium? As big as this table? Just give us a sense.
- A. They range in size from probably one or two foot to probably three or four foot diameter boulders plus or minus.
- Q. And you have some recommendations with regard to these boulders?
 - A. They should be removed and trees

also cleared.

- Q. How would they be removed?
- A. You would have to get up there before construction of the building with manual equipment and basically just push them down the slope to remove them.
- Q. And then this would be done pre-construction of the building?
 - A. Yes.
- Q. And with regard to the vegetation and trees, what would you recommend with that situation?
- A. The trees that have fallen should be removed. You can see on one of my photos there's a tree that had been -- had fallen over, it should be removed.
- Q. Do these fallen trees and items of that nature, do they concern you with regard to the stability of the slope?
 - A. No, they just need to be removed.
- Q. And is there anything there that was unexpected with regard to these trees that are fallen?
 - A. No, I don't believe so.
 - Q. Was it a surprise to you?

- A. No, over time slopes, trees fall, typical.
- Q. Now, moving to the north, I guess Section 3, the same series of questions, what were your observations, what are your recommendations?
- A. Section 3 is over in this general area (indicating). It's close to the Transcontinental pipeline where we saw some exposed Geoweb. The Geoweb was exposed at the time we saw it.
- Q. Is that the area at a higher elevation and near the Summit House building?
 - A. Yes, up in that area.
 - Q. Okay.

- A. Some of the Geoweb was exposed but it's also hard to tell how they actually install it. So to tell how much erosion had happened either they installed it correctly or if they did put all the soil back like they were supposed to and cover it to the top, it's hard to actually tell if they were installed properly.
- Q. And with regard to the -- to that area of the terrain, what about boulders that you described that were a little bit to the middle of

the property. Did you see any significant number of boulders in that area?

- A. No, there are not very many there at all.
- Q. And now let's talk about overall stability of the slope. Can you qualify or quantify the condition of the slope and whether it's unstable or I guess the correct word is instable as opposed to unstable, instable or stable can you work us through what your report tells us and what you saw?
- A. Knowing all the different walls that were previously built on the site also helps with the stability. They obviously had some issues, so it's good that they're there. They are helping and they are in good condition. Between the areas there's a typical boulder that had fallen over time, that's just typical of the Palisades and the exposed cliff face far to the west.

The rest of the slope is stable.

There is no evidence of erosion or any other

things coming down. The trees are natural, they

can just die over time so that's not a concern.

Q. Now, your report if we go to page 4

has some photographs and it continues of course to page 5 and 6. But with the stone walls photographs, can you just show us with your hands where these walls are? For example, you have stone walls 1, 2 and 3. Where's that on the site? Stonewall 1 where is that?

- A. Stonewall 1, 2 and 3 (indicating).
- Q. And these are closest to the side of the Galaxy?
 - A. Yes.

- Q. What's the condition of those walls?
- A. Those walls were in good condition with the stone and the fabric behind them.
 - Q. Do you think those walls were formed by nature?
 - A. No.
- Q. Why not?
 - A. The rocks are put there precisely and they were probably chiseled out in rectangular shapes and placed there by hand or with a machine.
- Q. And they seem to be pretty tightly compressed against a concrete retaining wall, don't they?
 - A. Yes, they're chinked together very

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Mahle-Greco - direct

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- Q. What does that mean?
- A. The little spaces between the bigger rocks, you put smaller rocks in there to hold it together.
 - Q. Almost like a wedge?
 - A. Like a wedge.
 - Q. And you think that was intentional?
 - A. Yes.
- Q. And with regard to that wall can you tell what the height of the wall is from its base to the top, that's specifically wall No. 1, approximately?
- A. I think they're probably eight or 10 feet, plus or minus.
 - Q. And what is that above the wall, that gray material?
 - A. That is the stone.
 - Q. Crushed stone?
- A. Crushed stone.
- Q. Is that the crushed stone you were talking about?
- 23 A. Yes.
- Q. What's the function of that crushed stone?

- A. Is to prevent erosion.
- Q. Do you think that got there by nature or is that also a man-made situation?
- A. It was man-made and placed there by someone.
- Q. And overall what's the condition of this structure, that is the wall itself, the riprap, the wall and the crushed stone, what's its condition?
 - A. These walls are in good condition.
- 11 Q. Do you know how old from looking at them?
 - A. I don't know how old they are, no.
- Q. Are they two years old can you tell that?
 - A. (Witness nods.)
 - Q. You can't tell?
 - A. You can't tell.
- 19 Q. With regard to the next stone wall,
- it looks like you're referring to stone wall No.
- 4 in the next area on page 5. Where is that
- 22 located?

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- A. That's over in this area (indicating).
- Q. Where the plan says wall, right?

- A. Stone wall.
- Q. Where it says stone wall?
- A. Yes.

- Q. So that's stone wall No. 4, is that what that is?
 - A. Yes.
- Q. And could you again describe its height, its length and its condition?
- A. The length is approximately 50 feet long and it varies in height. It looks like from eight plus or minus feet to one or two feet at the very edges of the south and north ends.
 - Q. And its condition overall?
 - A. Its condition overall is good.
- Q. Now, go to page 7 outlined as rock outcrop. There are three photographs on that page, correct?
 - A. Yes.
- Q. Can you tell us where that would be on the site, again with your hands?
- A. That is up here (indicating) and then where it says exposed cliff face.
- Q. And with regard to these photographs could you just explain to us is that -- when you say exposed rock, this is a natural phenomenon or

man-made?

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- A. This a natural phenomenon.
- Q. There seems to be vegetation and vines and things of that nature. Could you tell us what all that is?
- A. Yeah, there's vines that have grown over the rock outcrops over time. There's also leaves and other debris. As you can see there's pipes, people probably threw them over the top.
- Q. I'm going to the second photograph on the second beam, the one next to the first photograph on page 7. There seems to be certain type of debris or material there?
 - A. Yes, definitely debris.
 - Q. What is that?
- A. It's debris that somebody placed there at some point.
 - Q. It's garbage?
- A. Garbage.
 - Q. Okay. Is it serving any function?
- A. Absolutely not.
- Q. Do you have any recommendation with regard to this garbage and debris, what to do about it?
- A. Clean it up.

O. Remove it?

- A. Remove it.
- Q. And the lower picture, there seems to be some litter and things of that nature on page 7.
- A. Yes, there's litter, there's also as you can see in that area the boulders just above the rock are loose, they should be removed or scaled or --
- Q. These are the boulders you were referring to or the type of boulders that should be pulled away or dropped down?
- A. Those similar size boulders were found scattered throughout the area so they need to be either removed or netted in place so they don't move.
- Q. Can they be physically removed? Do you know the technology to remove rocks like this?
 - A. Yes.
 - Q. What do you do, just pull them down?
 - A. You -- they actually have --
- Q. But you make sure you're not in front of them, right?
 - A. You're not in front of them,

definitely not. There's different ways.

Obviously no one is at the bottom of the slope.

They sometimes if it's very loose they'll take a crow bar and just wiggle it and push it down. If it's a little tighter they actually put jacking, expanding material between the little wedge.

- Q. Like Wile E. Coyote and the Road Runner?
- A. Exactly and kind of push it off. No explosives.
- Q. But these things can be handled by contractors that are experienced, correct?
 - A. Yes.

- Q. Now, what are your recommendations based upon these conditions and such? What recommendations do you have with regard to the future of this material, these boulders, the vines, what's your recommendation?
- A. I would recommend to try and remove as much loose boulders as possible. If some of them are quite large and aren't easily removed, to secure it in place with either a rock bolt or netting.
- Q. Would you recommend this whether there was construction to be planned or no

construction to be planned, would you recommend that anyway?

- A. Definitely.
- Q. So it's a condition that should be addressed?
 - A. Yes.

- Q. Now, with regard to the construction that's proposed, did you have an opportunity to look at the report of Bertin Engineering that was the subject of discussion earlier this evening and its revised format, the Bertin report?
- A. I'm sorry, I lost your whole question.
- Q. I'm sorry. Are you familiar with the Risk Identification Investigation by Bertin Engineering that was marked as A-6 and A-7 and marked tonight as G-28? Are you familiar with this report?
 - A. Yes.
 - Q. Did you get a chance to read it?
- 21 A. Yes.
 - Q. Did you look at this report in preparation for the stability study report you prepared?
- 25 A. No.

Q. Well, let me rephrase it.

Is there any need to look at this report in conjunction with your report to enhance your knowledge of the site?

- A. You mean would it help me --
- Q. Yeah.

- A. -- with my knowledge?
- Q. Yeah.
- A. I don't think so. It just reaffirms some things about the construction practices.
- Q. All right. That's exactly where I'm going. With the construction practices, did you review the construction practices outlined in the Bertin report?
 - A. Yes.
- Q. And could you now pull together your report and your testimony regarding the construction activities as to whether or not these activities will have any bearing on the slope, its stability or its unstability (sic)?
- A. First of all, at the back of the building will be -- it will be excavated at least 10 foot behind the proposed building and then sloped up to the existing grade. At the top of that area approximate two foot high rock berm

should be installed to prevent any future falling down of any small rocks in the future along that area, especially during construction. We know that was talked about earlier.

Also along the north side where the pipeline is, I know there was concern about being close to the proposed pipeline. I did not talk to Mr. Rodriguez, but from other experience with very delicate situations in driving piles, especially in the front of the building where we have to drive them, as long as we use a vibration monitoring equipment and personnel there during the installation of the piles where they can monitor how much velocity the ground is taking at different areas, we'll be able to tell and stop and change procedures if needed if the velocity of the ground gets too high and there's a danger to the pipeline.

So being approximately 20 plus feet from the pipeline area is in my opinion sufficient to build this building. In other projects I've worked on, Hoboken we drove piles right next to a glass factory and we had a vibration monitor --

Q. How did that work out?

- A. It worked out fine. We went nice and slowly. We had the vibration monitoring guy there the entire time. The people were in the building there, watching us the entire time. They did not break one piece of glass.
- Q. Now, you're familiar with the proposal and agreement by Appleview and Mr. Bertin to auger the piling?
 - A. Yes.

- Q. And you're familiar with that methodology?
- A. Yes, that prevents -- since the pipeline is within the top 12 feet plus or minus, the augering will prevent vibration in that area and then you can drive the pile after that.
- Q. Do you have experience with this type of -- this methodology --
 - A. Yes.
 - Q. -- of piling?
 - A. Yes.
 - Q. Personal experience?
- A. Yes, it's prevalent in the Jersey
 City where there's buildings rights next to old
 buildings next to new buildings where they're
 concerned about driving piles. They make them

auger down approximately 10 feet and then drive the piles from there.

- Q. And have you supervised such activities?
 - A. Yes.

- Q. Now, with regard to this project do you know how many piles are anticipated to be employed in this project?
 - A. I don't know the number.
- Q. Do you have any idea or is it just too much speculation at this point?
- A. I don't know the structural loads so I don't know how.
- Q. And with regard to the slope itself now, the concern is not just a gas pipe but the slope itself as to how it could be affected by this augered piling and by the construction. Can you express to us your opinion based on your knowledge of the site, your observations of the site and the studies that you've done as to how this construction will react or how the slope will react to this construction?
- A. The piles will be significantly far away from the existing slope when the piles will be installed. I don't know the exact distance

because we have to work on that, say, for instance, it's even half of the area which is 90 feet plus or minus.

THE CHAIRMAN: I'm sorry.

MR. MUHLSTOCK: What?

THE WITNESS: 90 feet plus or minus. And then there is another 90, 95 feet to the edge of the back of the building. That's sufficient room for the driving piles in the front section of the building not to affect the slope.

- Q. Do you anticipate that the piling will actually be in the front half of the building, limited to the front half of the building?
 - A. Yes.

- Q. Why do you not expect to have to pile beyond the front half of the building?
- A. The depth of rock that we found in our test pit and borings shows that it sufficiently rises toward the back of the property.
- Q. And you would use the rock then to pin that to the building?
 - A. Yes.
 - Q. Is that a piling?

- A. Yes, we would put the foundation --
- Q. You have to explain that.
- A. -- and spread the footings directly on the rock itself.
- Q. So it's a different technology in order to support the foundation of the back half of the building as opposed to the front half of the bring?
 - A. Correct.

- Q. And that's all dependent upon the depth of the solid rock that would bear the weight of this building?
 - A. Correct.
 - Q. Is that what you mean to say?
 - A. Yes.
- Q. And with that and with that methodology do you have any concerns with regard to the stability of the slope utilizing the construction methodology as outlined both in Mr. Bertin's testimony and in your review of these engineering plans?
- A. No, as long as I described in our cross-sections the slope behind the building is constructed first with that berm on the top and stabilized before the construction of the

building, the area will be stable.

- Q. So explain that to us. You have to phase some of the site work?
 - A. Yes.

- Q. You have to do some work before you do other work. So how would you go about it?
- A. All the rock removal of boulder goes and other debris found on the site should be removed first.
- Q. So that's common sense, you would clean that up?
 - A. Clean everything up first.
 - Q. And then what?
- A. Then you would start slowly excavating into the area where the building is going to be and excavate that 10 foot beyond and slope up to the existing grade and put that berm at the top.
- Q. And that would be in the rear yard setback that we're talking about and in the rising slope --
 - A. Yes.
 - Q. -- that we're talking about?
- A. That's correct. It's approximately 25 feet behind the building.

- Q. And with regard to the type of construction, are you also familiar with the guidelines that were issued by Transco regarding their concerns for pipeline safety? Do you have any working knowledge of some of those notes, those construction notes that they published?
 - A. I have not seen them.
 - Q. You left that to Mr. Bertin?
 - A. Yes.

- Q. The analysis. Let's talk about the soil conditions themselves and what we have under the ground in the soil. Can you characterize the soil? We understood from earlier testimony there's different qualities of soil and such. Can you characterize what the soil is here and characterize it for us?
- A. Typically in our test pits towards the back, the west half of the building is found some topsoil, leaves, debris and then a silty sand.
 - Q. What about the second section?
- A. Behind the building. A silty sand that had cobbles and gravel mixed in. Gravel is two inches approximately two inches below.

 Cobbles are six inches, two to six inches.

Boulders get bigger than six inches also.

- Q. What's cobbles, stones?
- A. Yes, stones about six inches in diameter, plus or minus. Those were found mixed in the soil, using the track mounted backhoe. It was pretty difficult to dig through so the material was found to be in a dense condition so it was fairly stable and dense.
- Q. And these soil conditions, did you factor that in in your review of the stability of the slope with regard to the construction activity that's anticipated?
 - A. Yes.

- Q. And just tell us what your conclusions are.
- A. The slope will remain stable. We're not disturbing that back half, only disturbing approximately 25 feet behind the building where we're going to put the berm at the top. So the rest of this western portion of the building, the property won't be disturbed except for scaling and cleaning.
- Q. So this is the key of your testimony, why do you say that you don't think it will be disturbed, the western portion and the

upper slope, why do you say that?

- A. The rock is fairly shallow as seen from the exposed cliff face here. We did find it in this area 10 to 15 feet down which is not very deep. The soil above it was in a dense condition with the silty sand which keeps all the particles together with the cobbles and gravel makes it very dense and difficult to slide.
- Q. So if there's removal of material a little bit further to the east at a lower grade in front of that section, you don't expect it to collapse, is that what you're saying?
- A. Yes, as long as we put that slope up to the berm and make sure that's stable first.
- Q. Now, there was some testimony by other witnesses about soil, you know, best case scenario, worst case scenario, et cetera, et cetera. Are you familiar with the categories of the soil that were being referred to by the engineer from Transco or you don't know?
 - A. I don't know.
- Q. How would you characterize the soil itself on the area where the rear wall of the building is being designed, how would you characterize it?

A. Characterize it in what way, seismic? Unified classification?

- Q. Well, unified classification. Tell us what that means and how you classify it?
- A. Unified classification is a general classification of soils, silty sand is an SM with little to some amount of silt, some gravel and cobbles in it. It's just a way to classify it.
- Q. Okay. And you have other classifications?
- A. There's other methods. There's a DOT method. There's different methods, that's why I'm not sure by characterization --
- Q. I don't mean to confuse you. I'll withdraw the question.

With regard to the construction activities, do you anticipate any problems with the stability of the slope provided that these precautions you outlined in your testimony are taken?

- A. No.
- Q. With regard to the area where the gas line is on a diagonal going through the property, do you know where that location is?
 - A. Yes.

- Q. Could you just show us with your hand?
 - A. It's in this area (indicating).
- Q. And in your report did you take any photographs or did you illustrate that section of the property?
- A. There's a photograph in here, page 6 of 10, where it says Section 3 you can see there's a little yellow pipe sticking up to the left side of the picture which is where the pipeline goes through.
 - Q. Page 6?
 - A. Yes.
 - Q. You're referring to a photograph?
 - A. The top photo.
 - Q. Right.
 - A. Where it says Section 3.
- Q. Yes.

- A. In the left lower half there's a little yellow stick that indicates where the pipeline is.
- Q. Okay. With that area, does that photograph accurately depict that section of the property with regard to boulders or lack of boulders and such? Is that a fair depiction of

Mahle-Greco - direct

that whole section?

- A. I believe so.
- Q. And do you have any concerns with regard to the construction of this building in the location that its being plotted as it relates to this section of the property?
 - A. No, everything seems good.
 - Q. Okay. And why is that?
- A. It's in stable condition. There's small tree growth and small grass and other grass growth in the area which helps stabilize it.

 There's also a Geoweb that we talked about earlier in the area.
 - Q. Thank you.

MR. ALAMPI: Chairman, I have no further questions of the witness.

THE CHAIRMAN: Okay. We're going to take a brief five-minute recess.

(Recess taken.)

THE CHAIRMAN: All right. The meeting is resumed. Folks. Let the record reflect that the board members that were present before the break are again present. And Mr. Lamb, you're up.

MR. LAMB: Yes, thank you.

Mahle-Greco - direct

Mr. Chairman, I note that we spoke with Mr. Muhlstock and we excused our appraiser was here Don Helmsetter there was no need, we're not going to get to him. He was here since 10 after seven.

MR. MUHLSTOCK: By the way, since you're making that statements, let me just say on the record, I intend to respond to your letter of July 26, 2012 as to whether or not this board should even hear Mr. Helmstetter or whether that would be appropriate for this board. But, it doesn't matter for tonight because I'm going to -- I'll prepare an opinion for you and send it to you.

MR. LAMB: Okay. And also I know that you might have an issue with a conflict with Mr. Helmstetter and I thought since he hasn't testified and all we have is his report, we can hash that out before the next meeting.

MR. MUHLSTOCK: Well, I'll hash it out in my letter to you so that we all know where we're going.

MR. LAMB: Okay.

MR. ALAMPI: You'll send me a copy of that, counsel?

MR. MUHLSTOCK: I would think so.

MR. ALAMPI: Thank you.

THE CHAIRMAN: Mr. Lamb.

CROSS-EXAMINATION

BY MR. LAMB:

- Q. Good, good evening. Is it fair to say that you're not a pipeline safety expert?
 - A. Yes.
- Q. You're not qualified to address pipeline safety issues?
 - A. True.
 - Q. Okay.
- THE CHAIRMAN: If you would speak into the mike.
 - Q. You answered Mr. Alampi's questions the difference between a soil -- a test pit and a soil boring, I believe, was that, the TPs, test pits and soil borings?
 - A. Yes.
- Q. And is it fair to say that a majority of those test pits or the majority of the samples that you took on a number of occasions which is Figure 2 attached to your report dated June 1, 2012, that the only two non-test pits are B-1 and B-2 which are on the

easterly portion of the property? I'm sorry and one other, and B-4. Other than -- and I don't see B-3 unless I'm missing it.

A. No.

- Q. Is there a B-3?
- A. No.
- Q. So there's a B-1, B-2 and B-4?
- A. Correct.
- Q. What happened to B-3?
- A. I have no idea.
- Q. Okay. There is not a B-3 that was ever tested, it's just misnumbered?
- A. No, I believe it was a pit refusal at the surface or something, so it wasn't put on there.
- Q. Do you have a -- I know there was a sheet in your prior report for each of the test pits, there was a sheet on what happened. Do you have a sheet for B-3?
 - A. No.
- Q. Do you have any evidence as to what happened on B-3?
- A. Only from what I remember. And I think they just had refusal from the surface, hit a boulder so they moved on.

- O. And where was B-3?
- A. I don't remember.

- Q. So is it fair to say that B-3 there was rock right up to the surface?
 - A. It could have been a boulder.
 - Q. But you don't know?
 - A. I don't know.
- Q. And you didn't then try to go a little farther to the left or the right or the north or south to -- for B-3, you don't know what happened?
 - A. I don't recollect at that time.
- Q. But it's fair to say that all these test pits and soil borings, they were primarily at the time you did them in connection with the first application, you were trying to find where the rock was in relation to the surface?
 - A. Correct.
- Q. Okay. So on at least that one, we're not sure of the results, but on at least that one there was no difference between the surface and the rock, there was no distance, it was right at the surface?
- A. We don't know that. It could have been a boulder.

- Q. So you don't know? You don't know with that B-3 --
 - A. That B-3 --

MR. MUHLSTOCK: She said that. She said that.

MR. ALAMPI: I'll object.

MR. MUHLSTOCK: She doesn't know.

- Q. All those TP-1, 2, 3, 4, 5, 6, 7, 8, 9 and 10, any other TPs that are not shown on this?
 - A. Not that I'm aware of.
- Q. And the TPs that are shown is it fair to say that when you do a test pit, the test pit is more invasive to the slope or the property than a soil boring?
 - A. True.
- Q. I recall testimony that the test pit, somebody asked, I think they asked you, isn't a test pit like two feet by two feet and I might have you confused with Mr. Bertin, and the answer is no, a test pit is much bigger. Can you tell us how big a test pit is?
- A. It varies. The bucket is usually approximately two or three feet square or rectangle, so it depends sometimes it gets larger

at the top and smaller at the bottom. It varies from test pit to test pit.

- Q. But you're doing it with a backhoe?
- A. Yes.

- Q. And so is it fair to say to get any depth you have to take the backhoe and go a distance, you have to go some distance to get that deep?
 - A. Some distance, yes.
 - Q. Five or six feet long?
- A. It varies depending on the depth.

 The deeper you are, the bigger the hole is going to be.
 - Q. Soil borings it goes straight down?
 - A. Yes.
- Q. That's fair simply. But test pits, if you want to go down eight feet you have to scoop up enough dirt to be able to go eight feet; is that right? To get that depth, you have to scoop up the dirt?
 - A. Yes.
 - Q. Is there an average length of that?
- A. It depends on the depth. It could be two feet by, I don't know, six foot length plus or minus.

- Q. Now, on Figure 2 which you testified to you had A, B and C. But let's take column A. You were trying to figure out a cross-section of the rock on column A, on A; is that correct?
 - A. Cross-section A.
- Q. The purpose was a cross-section. Is it fair to say that TP-7 is closer to B than it is to A?
 - A. Yes.

- Q. As a matter of fact, is it fair to say that all the TPs as an example to arrive at the cross-section in A they're skewed, they're all over the place, they're not in any semblance of a straight line?
 - A. No, they're not in a straight line.
- Q. And the same applies to B, is that not correct, same thing, there is no straight line, the test pits for B are all over the place?
 - A. They're not in a straight line.
 - Q. Same for C?
 - A. Correct.
- Q. Now, you indicated part of your recommendation in this report is to provide a 10 foot area behind the westerly side of the building and then a berm beyond the 10 feet.

Mahle-Greco - cross

A. Yes.

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- Q. Is that correct?
- A. Yes.
- Q. And you recommend, you strongly recommended that even before construction of the building takes place, you want that constructed?
 - A. Yes.
- Q. Is that rock berm, the rock wall, the 10 foot area, is that shown in any place on this site plan?
 - A. No.
- Q. Okay. And as Mr. Bertin testified, your report was done after the site plan was prepared?
 - A. Yes.
- Q. Now, you did reference this other project in the glass factory and whatever that you had --
- A. Hoboken.
- Q. Yeah, Hoboken. That wasn't on the cliffs, was it, any type of steep area or cliffs?
 - A. No, it wasn't.
 - Q. It wasn't next to a sewerage treatment plant, was it?
 - A. No.

Mahle-Greco - cross

- Q. Didn't involve removing the toe of a slope to the tune of about 200 cubic yards, did it?
 - A. No.

- Q. Now, are you aware that Transco originally requested 25 feet for their access easement?
 - A. No, I was not.
- Q. Were you aware that the Transco Williams guidelines recommend a minimum of 50 feet, I believe?
 - A. No.
- Q. Are you familiar with what they recommend?
 - A. I did not read their report.
- Q. Now, your report indicated this phasing, the first thing is of course, makes sense, remove the debris and the rocks and the trees and the loose items, that makes sense.

 Let's go to the more construction related items.

 Anything in your report that says that that 10 foot area with that berm that should be created should be done first as far as phasing? Does your report say that it should be done first?
 - A. No, it doesn't say that

Mahle-Greco - cross

specifically.

- Q. But that's pretty important?
- A. Yes.
- Q. That has to be done before anything else?
 - A. Yes.
- Q. Now, you've indicated that the rock is fairly shallow at the western side of the property and if I understand it correctly just in general terms, 10 to 15 feet below the surface?
 - A. Yes, below the existing surface.
- Q. Below the existing surface. So the proposal is you're going to excavate that ten or 15 feet and do I guess it's called a spread foundation?
 - A. Yes.
- Q. And that's going to actually touch rock or you'll have something there but it's close to touching the rock?
 - A. It will be directly on the rock.
- Q. Okay. Is it fair to say that a portion of this slope, and a substantial portion of the slope has a distance between the exterior of the slope and the below grade rock, there's a distance there, there's a depth until you get to

rock pretty much over a substantial portion of that slope?

A. Yes.

- Q. Okay. And did you study the affect of creating an excavation of the toe for 2000 cubic yards and its affect on that kind of body of dirt that's sitting on that slope?
- A. Yes, that's why there's that 10 foot area and the sloped area with the back berm on top.
- Q. So that 10 foot area and that rock berm on top is what keeps the rest of that slope up?
 - A. Yes.
- Q. Can you explain to me -- and maybe it's simple but I don't get it -- the berm on top beyond the 10 feet, is that excavated into the ground? Is there a foundation for that?
- A. No, the berm is probably a little bit in the ground. It's probably a foot into the ground so it doesn't move and then the slope down to that 10 foot section behind the hinge is at a one to one slope which is a fairly stable temporary -- you know, short term temporary slope because after the building is constructed it will

be backfilled and the swale that Mr. Bertin had talked about will be constructed.

- Q. What happens when you build this berm, how does the stormwater get to the other side of the berm and closest to the building?
- A. It would probably follow down the one side toward the north side.
- Q. So is it fair to say that now the berm is going to catch the water and direct it to the northerly side?
- A. It's not necessarily going to collect it but it would slow it down.
 - Q. Or direct it to that direction?
 - A. Or direct it or both.
- Q. Now, I know you testified Mr. Alampi asked you a number of questions about your June 1 2012 report. Did you take any of those pictures?
 - A. Some of them.
 - Q. Which one did you take?
- A. On page 3, on the one on the right side.
 - Q. Okay.
- A. Some of the ones I took similar pictures but other ones of Bertin were clearer so that could be why I chose them. On page 5 the

one that says Section 2 dirt pathway and stone wall 4. And that was it.

- Q. So there's 12 pictures in total in your report?
 - A. Yes.

- Q. And you took two out of the 12, is that fair to say?
 - A. Oh, I forgot the one on page 8.
 - Q. Okay, three out of 12.
 - A. Yes.
- Q. Now, you mentioned that as far as stabilization of this slope, there was small trees, there's grass, there's Geoweb, all of those things help stabilize that slope?
 - A. Yes.
- Q. Mr. Alampi asked you a number of questions. Those old stone walls, those retaining walls. We all agree that they're not new, there's speculation it was done at the time that the Galaxy was constructed, at least 30 to 40 years ago, I think that's what your report indicates, 30 plus years.
 - A. Could be.
- Q. Is it fair to say that based upon what you observed we all don't -- we weren't all

Mahle-Greco - cross

back there to know exactly what happened but from what you observed, there's a desire and an intent by somebody to stabilize that slope. All of these things help stabilize the slope?

A. Yes.

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- Q. Okay. They put retaining walls here and there, they put Geoweb on the north side.

 They put, I forget, fabric, I forget exactly what it was.
 - A. Filter fabric.
- Q. Filter fabric on the south side.

 All of those things were to stabilize that slope?
 - A. Yes.
 - Q. Is removal of 2000 approximately cubic yards from the toe of that slope, isn't that a substantial excavation of the slope?
 - A. I don't know about substantial.
- Q. So you don't think that's substantial?
- MR. LAMB: We're up to G-29, Mr.
- 21 Muhlstock?
- MR. MUHLSTOCK: Yes, we are.
- Q. I'm going to show you what I've marked G-29.
- MR. LAMB: I'm going to put today's

Mahle-Greco - cross

date, 7/26/12, my initials. I see that I do not have a lot of copies in it but this was the report that's already part of the first hearings. I have two additional copies, I apologize. I thought I had 18. I'll give one to Mr. Muhlstock, one to the Chair.

MR. MUHLSTOCK: All right. For the record this was -- this is the Johnson Soils Company report dated September 16, 2010. It's signed by the witness.

(Galaxy Exhibit 29, Johnson Soils Company report dated September 16, 2010, was marked for identification.)

- Q. And is that the report that you previously submitted, one of the reports, you submitted a number of them in the initial application before the North Bergen Planning Board?
 - A. Yes.

- Q. Now, in connection with your June

 1st, 2012 report, you have a number of

 cross-sections attached to the end of the report.

 I believe you have cross-section A, cross-section

 B and cross-section C; is that correct?
 - A. Yes.

MR. LAMB: I'm going to mark this as G-30 and date it 7/26/12 with my initials. I'm going to represent that these are those three exhibits to your report that have been slightly enlarged to facilitate the view of everyone.

MR. ALAMPI: What report?

MR. LAMB: The June 1st, 2012.

(Galaxy Exhibit 30, three exhibits attached to Lisa Mahle-Greco's report dated June 1, 2012 was marked for identification.)

- Q. You'll also note that there's a green marker on there over a line and there's a green highlight where it says "existing grade."

 Is it fair to say that I correctly put the green line where the current grade is, the current slope?
 - A. Yes.
 - Q. On both sections A, B and C?
- 19 A. Yes.

Q. Okay. What I'd like you to do with this yellow Magic Marker -- and also before I do that, each one of these cross-sections has that notation for that 10 foot area. Is the berm shown on the 10 foot area in any part of these cross-sections?

Mahle-Greco - cross

- A. Yes.
- Q. The berm is shown on this?
- A. Yes.
- Q. Okay. Can you point out where,

let's take section A?

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- A. Right here (indicating).
- Q. Okay.
- A. B is right here. C is right here (indicating).
- Q. Okay. If you could mark in blue where the berm is.

(Witness complies.)

- Q. Now, when you drew that line, the berm itself is not that whole area, that just shows hows designated. It's just that little --
- A. I did the same thing as you did is show what it is.
- Q. That's fine. What is the distance between the 10 foot area and the berm, the end of the 10 foot area, the westerly most section and the berm approximately? Let's take, pick cross-section A.
 - A. A is approximately 15 feet.
 - Q. Okay. And B?
- A. B is about 18 feet.

Q. Okay. And C?

- A. About 14 feet.
- Q. Okay. So what really you're saying is to fine tune your recommendation, you are recommending strongly before any construction that there's a 10 foot called no man's land, a 10 foot area, then at some point beyond that 10 feet going in a westerly direction anywheres from whatever you just testified to, 15 to 20 feet in there, there should be a berm placed?
- A. Yes, for temporary construction purposes.
- Q. Okay. What happens at the end of the construction?
- A. At the end of the construction you go to the grading plan of Bertin Engineering and fill back in the area behind the building and create the swale.
- Q. Is then the berm removed?
- A. You could leave it there or remove it.
 - Q. Is any of this shown on any site plan that you're aware of?
 - A. Not that I'm aware of.
 - Q. The width of the berm, the height of

the berm, the exact location on the site plan, none of that is shown on the site plan?

A. Not that I'm aware.

- Q. Now, I'd like to take -- I'm going to give you a yellow Magic Marker and I'd like you on each of the plans to show us in yellow, I'd like to show on each of the plans I'd like to show us in yellow what part below the slope is being excavated. What's the -- the yellow part should so this is the portion of the slope below the green line that you're proposing to have excavated.
 - A. Behind the building?
- Q. Under the green line, below the green line, below the slope. What -- and I'll give an example. Section A you've got the ground level and it's -- you're taking this little section here and you're -- I assume, removing that to dig into the slope.

MR. ALAMPI: Chairman, I'm having a hard time seeing any of those sheets. You getting like John Schepisi.

MR. LAMB: But I still left my jacket on. I did loosen my tie.

MR. ALAMPI: I'll take my pants off.

THE CHAIRMAN: It's not that kind of meeting.

THE WITNESS: The section on the green line that's excavation for the building itself and there's another section behind the building that's temporary for building during construction. So I don't know what you want me to exactly highlight because --

- Q. Why don't you show all of it. (Witness complies.)
- Q. Can you cross hatch it?
- A. I guess so.

 (Witness complies.)
- Q. And now to make sure we're accurate I'm going to give you my pen. Do you want to cross hatch the portion of it that you said is beyond the building or the temporary -- I don't want to put words in your mouth, the portion you differentiated it?
- A. Yes, a portion is excavated for buildings purposes that will be replaced after construction of the building. I'll put the -- add the blue hatch for the area where the berm is that's going to be replaced after construction.
 - Q. Okay.

Mahle-Greco - cross
(Witness complies.)

Q.

Okay. All right. I'll just take my pen back.

And do you know when Mr. Bertin

testified that the amount excavated from the toe

was about 2,000 cubic yards, did that also

include that additional area beyond the 10 feet

Do you want another Magic Marker?

A. I don't know if that's what he included.

that you needed to excavate?

- Q. Okay. Do you know an estimate in round numbers of the amount of cubic yards that need to be excavated for each of those cross-sections?
- A. I don't know off the top of my head, no.
 - Q. Is that some calculations that you ever made?
 - A. No, I did not.
 - Q. Okay. And is it fair to say that slope stability -- a slope can become unstable if I excavated hundreds of feet into the slope and it may be very stable if I excavate a foot into the slope; is that fair to say?
 - A. Depends on how it's excavated.

Mahle-Greco - cross

Q. Okay. Assuming that it's excavated safely, is it fair to say there's a relationship between the amount of excavation and the amount of disturbance with the stability?

- A. It depends on the angle of repose of the soil.
- Q. Are there circumstances where substantial excavation can cause the slope area to be unstable?

MR. ALAMPI: I'll render an objection. That's highly speculative on there circumstances.

MR. MUHLSTOCK: Well, are there any

14 --

MR. ALAMPI: I'm sure there are.

MR. MUHLSTOCK: Are there any circumstances, Mr. Lamb, any circumstances?

MR. ALAMPI: It's not a proper question.

MR. LAMB: Yes.

- A. There's a possibility.
- Q. And -- let me go back to your original report, G-29. By the way, when did you prepare these cross-sections?
 - A. Must have been in -- those ones are

adopted for this report.

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Q. What's the date on this?

MR. ALAMPI: Mr. Lamb, you said original report?

 $$\operatorname{MR.\ LAMB}:\ I'm\ still\ sticking\ with$ this. I'll get to that.

MR. ALAMPI: It's not the original report.

MR. LAMB: No, I'm going to G-29.

- A. These cross-sections were made May 25th, the 2012.
- Q. All three of them?
- A. Yes.
- Q. Three cross-sections. Did your office ever prepare cross-sections before this date in connection with this -- the initial application or a prior application?
 - A. Yes, in September 16th, 2010 report.
- Q. And that's an exhibit to that report we just marked as G-29?
 - A. Yes.
- Q. And how many cross-sections were attached to that report?
 - A. The same three.
 - Q. And does this report indicate, this

cross-section indicate a revision date?

- A. No, it does not.
- Q. Isn't it common if you take a cross-section and then you make a change to it, you showed the original and you'd show a revision date?
 - A. It's in a different report.
- Q. You wouldn't say that that is revised?
- MR. ALAMPI: Well, I'll object. She answered.
- MR. MUHLSTOCK: Sustained.
- Q. When you submitted -- you originally did a report dated May 14, 2007?
 - A. I'd have to look at it to confirm but I believe so.
- Q. Okay, I'm going to give you mine.

MR. ALAMPI: You're going to mark

19 that, John?

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MR. MUHLSTOCK: Mr. Lamb, did you ask whether the cross-sections that were dated September 16, 2010 are the same as the cross-sections which are dated May 25, 2012?

MR. LAMB: Yes.

MR. MUHLSTOCK: Okay. Are they?

THE WITNESS: No, there's

differences.

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MR. MUHLSTOCK: Okay. Why?

- Q. And explain the differences, please.
- A. The difference is after we looked at the slope stability we needed a 10 foot section in back of the building with a slope and the berm was added.
- Q. Okay. So you basically took the original cross-sections in your original report dated --

MR. ALAMPI: September 2010.

MR. MUHLSTOCK: September 16, 2010.

- Q. -- September 16, 2010. You added the 10 foot area and the berm; is that right?
 - A. Yes.
- Q. Okay. Now, when you did the report May 14, 2007 -- and I don't have enough copies, that's my only copy, G-30?

MR. MUHLSTOCK: G-30. G-30 are the cross-sections A, B, and C from the 2012 report they're dated May 25, 2012.

MR. BASELICE: G-31.

MR. LAMB: This is G-31.

Celeste A. Galbo, CCR, RMR

MR. ALAMPI: Whoa, what's G-31?

THE WITNESS: My original report

dated --

MR. BASELICE: 2007?

THE WITNESS: -- May 14, 2007.

(Galaxy Exhibit 31, original report of Johnson Soils dated May 14, 2007 with revisions, was marked for identification.)

MR. LAMB: G-31 is the original report I believe of Johnson Soils dated May 14, 2007, revised August 1st, 2007, revised June 10th, 2010.

- Q. When you prepared that report you showed all the revision dates on the cover, did you not, and each time you revised it?
 - A. Yes.
- Q. Now, going back to your June 1, 2012 report, your goal is to provide precaution. In the introduction you indicate the report discusses precautions and -- "precautions that should be taken to stabilize the slope"; is that correct?
 - A. Yes.
- Q. So that was one of the functions, to stabilize that slope?
 - A. If needed.

- Q. If needed. And the history is there's a bunch of things that were done to stabilize the slope?
 - A. Previously, yes.
- Q. We don't know when exactly but there's been lots of stabilization techniques; is that correct?
 - A. Yes.

- Q. When was the last time that you were on the property, walked the property approximately?
- A. Probably sometime in May, I don't remember the exact date.

MR. MUHLSTOCK: May of 2012?
THE WITNESS: Yes.

- Q. Now, you did determine on page 3 of your report that -- on the third line "parts of the soil have poor quality"; is that correct?
- A. Yes, of the site. Portions of the site have poor quality soil.
- Q. Do you know what types of soil this site has?
- A. We talked about in the western portion it has the topsoil debris, the silty sand and the rock. And then eastern portion it has

fill, organic and then the rock below that.

- Q. Okay. And isn't there I guess if I went to the county requirements on grading soils, is there soil type A, B, C, D, E? Isn't there types of soils that they categorize these?
- A. It depends on the categories. I mean it's so many different places they categorize the soil, I'm sorry, I don't know that specific one. There is a seismic classifications, there's OSHA classification, there's Unified Classification. I don't know that one specifically but I believe that there is. There is a lot of them out there.
- Q. Okay. Now, you provided in your report on the bottom of page 4, the very last line, "The portion abutting the new construction will most likely need to be constructed." Is that correct?
 - A. Reconstructed.
 - Q. Reconstructed, yes.
 - A. Yes.
- Q. So that's the portion, the southerly portion closest to the Galaxy, Mr. Bertin has complained that part of that retaining wall has to be removed as part of this project and your

recommendation is that it needs to be reconstructed?

- A. Well, any part that has to be removed to get to the building would have to be reconstructed or replaced, I believe, to their original condition to satisfy any grading requirements. If you don't put something there, obviously there's going to be a problem with that area. You'd have to put it back to the way it should be.
 - Q. Okay.
 - A. Or replace it with something else.
- Q. Okay. So Mr. Bertin testified you may not need to put the retaining wall back but your recommendation is to put the retaining wall back. And I'm just trying to figure out does the retaining wall go back or maybe it doesn't go back, what happens to that?
- A. It could go either way depending on -- I mean, it depends on the site. I mean, they decide that it doesn't, you know, need to go back. I mean, you can even decide at that time and how it's graded and how badly it was affected.
 - Q. But you're the one that did the

Slope Stability Report, right?

A. Yes.

- Q. You are the one that studied this particular area. You recommended a retaining wall. Is it fair to say that if this board grants approval, they should make sure that the retaining wall goes back to the original condition to make sure it supports it unless there's some alternative that works; is that a fair statement?
- A. Put it back to the original condition unless there's another acceptable alternative, yes.
- Q. Okay. When you put back a retaining wall to its original condition, that's one of the realm of possibilities, either A or B, but if we put the retaining wall back, in constructing the retaining wall do you have to shore up the portion of the slope so that when you first take it down, it doesn't collapse?
- A. You usually slope it back so it doesn't do that. On the shoring when you go to put it back if could become a problem. Usually they slope it in the meantime.
 - Q. I'm going to go over briefly some of

your recommendations. You recommend that on page 5, that "A fence is proposed to delineate the limited disturbance around the construction site." That was one of your recommendations?

A. Yes.

- Q. Okay. Where would that fence be located?
- A. It's usually within the limited disturbance, so the limited disturbance here there should be a fence of some sort around that property.
- Q. Does the -- does that fence go to the west of the berm or to the east of the berm?
- A. I don't know specifically, you'd have to figure that out.
- Q. You've recommended and I know you stated all the falling trees, loose rocks be cleared from the slope area, that's another one of your recommendations?
 - A. Yes.
- Q. Okay. You recommend that the loose boulders and the outcrop be removed as shown on page 7?
 - A. Yes.
 - Q. You recommend, you said it's prudent

but not mandatory that the entire outcrop be covered with rock netting that secured to the outcrop with six foot long anchors?

- A. Yes. Once we've scaled the area that can be addressed more definitively to find out if rock netting would help or not.
- Q. You indicate that the minimum clear zone we already talked about, that's a recommendation?
 - A. The 10 foot behind the building?
 - Q. Yes.

- A. Yes.
- Q. You recommend that if rock is encountered during that excavation, that rock will not need to be sloped. I'm not quite understanding what that means.
- A. That the slope -- if the rock is encountered in any area here, if rock is encountered say up here, then you can slope it back, you don't need to slope it at this specific angle if the rock is there (indicating).
- Q. Okay. You recommend that the geotechnical engineer review this area after the initial excavation?
 - A. Yes.

Mahle-Greco - cross

- Q. You indicate that the slope should be seeded as well?
 - A. Yes.

- Q. You indicate that the slope should be vegetated for the plants?
 - A. Yes.
- Q. And what vegetation are you referring to in that comment on soil stabilization?
- A. Well, the grading plan of after it's all done has a -- their landscape plan and whatever vegetation.
- Q. Does the grading plan currently show the creation of the 10 foot area and the berm?
 - A. No.
- Q. You -- the rock -- on the rock fall you indicate that the rock outcrop in Section 2 should be scaled of all loose boulders?
 - A. Yes.
- Q. You indicate that the geotechnical engineer should inspect that outcrop thereafter?
- A. Yes, but what I just talked about before, after it's scaled with the loose boulders, that the area should be inspected, make sure either the netting or possible, there's

always possibility of rock bolts or additional rock anchors just to secure the area.

- Q. You indicate on some portions the berm should be made of two foot or larger rocks; is that correct?
 - A. Yes.

- Q. You indicate that one of the existing stone walls, I believe it's the one in the south has to be modified, that's your recommendation?
 - A. Which one was that?
- Q. That's on existing rock retaining walls, page 9 of 10 on the bottom.
- A. Yes, that's the one we talked about previously where it meets the building.
- Q. You also indicate that the wall should be visibly inspected monthly during the construction?
- A. Yes, to make sure there is no problems.
- Q. Okay. And you indicate an annual inspection of the rock outcrop is recommended?
- A. Yes, that's also a town recommendation that all rock face and rock outcrop should be annually inspected.

- Q. You also after the inspection indicate your recommendation that short term and long-term corrective actions to the rock netting and anchor belts are recommended -- I'm sorry, are noted in the report?
 - A. What page is that?
 - Q. I'm sorry, page 10, the last page.
 - A. Um-hum.

- Q. "The short term and long-term corrective actions are to be noted in that report."
 - A. Yes.
- Q. So if there's an annual inspection, like you recommend, and they have a short term recommendation and a long-term recommendation, your advice to the planning board and to your client is whatever that report indicates should be taken, that should be also done?
 - A. Yes.
- Q. On the retaining walls you have similar recommendations; rock walls reviewed annually?
- A. Yes.
 - Q. Inspected. Short term and long-term corrective actions noted in that annual report?

A. Yes.

- Q. Also if they're noted they should also be addressed?
- A. If the short term should be addressed immediately, usually in the long-term are usually either come back, you know, possibly depending on what it is it, it could be come back in six months and verify everything is okay or just check on it the next year and verify that it's still in the same condition or it's changed.
- Q. Okay. And the report on the outcrop should go to the North Bergen construction official each spring?
 - A. Yes.
- Q. And the report on the retaining wall should go to the North Bergen construction official each spring?
 - A. Correct.
- Q. So just very generally, and I might have missed a couple, there's about 20 what I call recommendations that you based upon your slope review have recommended to the board to make sure that this is safe, about 20?
 - A. Plus or minus.
 - Q. Plus or minus a couple, I might have

missed some. And it's your recommendation that all of that occur in connection with the current application pending before the board?

A. Yes.

- Q. And when you -- you did testify and submit a report in the initial hearing before the board, did you not?
 - A. Yes.
- Q. Did any one of these 20 recommendations make its way into any of the reports that you did, any of the studies? Any one of these recommendation make it into any of those reports?
 - A. Previous reports?
 - Q. Yes.
- A. No, they weren't talked about or required to be talked about or asked me to talk about.
- Q. Okay. Okay. Any testimony by you that mentioned any one of these 20 items that would make this project safer?
 - A. Oh, mentioned --
- Q. In the initial hearing, not the current hearing.
 - A. No, they weren't mention earlier.

Mahle-Greco - redirect

MR. LAMB: Almost done, Mr.

Chairman. She wasn't a pipeline engineer, so I had to go quicker.

THE CHAIRMAN: Okay. Oh, that was quick.

MR. LAMB: I have nothing further, Mr. Chairman.

MR. ALAMPI: Two redirect questions.

MR. LAMB: Yes.

REDIRECT EXAMINATION

BY MR. ALAMPI:

- Q. Lisa, these recommendations, whether they're 18 or 20, are the majority of the recommendations especially those on the upper level in conjunction with the construction or are these recommendations that you are assessing now in its existing and natural condition?
 - A. A little bit of both.
 - Q. Okay.
- A. The existing cliff face I think no matter what should be addressed whether this is built or not.
- Q. That's why I asked you about the upper level.
 - A. Right. The upper level should be

Mahle-Greco

addressed no matter what if anything is built on this property or not. And the other portions are with the construction of the building. If the building affects these existing walls, always typically the cliff faces and all walls on properties should be inspected annually. It's -- I think it's part of the town code or something similar as a requirement.

Q. Okay.

MR. ALAMPI: No other questions.

MR. LAMB: Okay, thank you.

Public --

MR. McGRATH: Mr. Chairman, with regards to this report, any of the applications that have come in down on River Road that are near the cliff, my office has insisted that they get an annual report to the Building Department no later than July 1st. They are required by what my recommendations to complete the repairs by October 15th. They are required to get the appropriate permits to get those repairs. That has been in every application that's been down there. It is part of the developer's agreements because they refer back to the correspondence from my office. We have it turned into the

Mahle-Greco

Building Department because you will always have the same Building Department. I could be gone tomorrow, it wouldn't do any good to send it to me. That has been a requirement down there for everybody who has built along the cliff for the last several years.

THE CHAIRMAN: Thank you.

MR. MUHLSTOCK: Mr. McGrath, these issues that we've been talking about tonight, are these issues part of construction after approval by the board?

MR. McGRATH: To a certain extent, yes. Some of them are going to be gauged as the construction commences and as it proceeds.

MR. MUHLSTOCK: But in our normal consideration about notations before these board, are these issues considered by the board or are they considered thereafter by the contractors, by the engineers, in that scenario?

MR. McGRATH: Some of them I would normally expect to find being done as construction proceeds. To the extent that we are sitting here with a mandate from the court to look at the safety issues, it doesn't hurt to discuss them here but the reality is in the

Mahle-Greco

normal course of events a lot of this stuff is going to be addressed on an as progressive basis.

MR. MUHLSTOCK: Right. Okay.

MR. LAMB: And, Mr. Muhlstock, if I could a dress that, what I'm going to request and I know other people may have questions, but I'm just telling you right now, obviously we're not finishing this evening, what I'm going to request before the next hearing and I think we can do it without Mr. Alampi changing the notice is I'm going to request that the site plan be amended to show exactly the recommendations that have been made by the developer's expert and the site plan changes show these areas, these berms, where it's going to be stabilized, where the limited fence disturbance will be so that anybody picking up the plans can see exactly where it is.

MR. MUHLSTOCK: Well, that's why I asked Mr. McGrath if these are typically construction issues and construction details that come in after this board normally considers an application.

THE CHAIRMAN: It's not normally part of the site plan.

MR. LAMB: I think with all due

Mahle-Greco

respect you're talking about changing the grading, changing the landscaping. You show some berms in some areas but now we have testimony that is admittedly not on the site plan that they wants berms on various portions of the cross-sections.

MR. ALAMPI: This is beyond the scope of the remand. The issue from the court was that the board grasp the issue, that the board have competent testimony and evidence and that the board shows its intellect when it delivers a decision. We don't need to draw the illustrations and modify. It would be a different application. We're going on the old site plan, the testimony will support it. When we go to as-builts, should this project be approved, we'll deal with that at that level. I think we're all on the same page.

MR. LAMB: You have a recommendation --

MR. ALAMPI: I disagree.

MR. LAMB: You have the applicant's expert has recommended changes to the site plan.

And respectfully I think you have to show them.

THE CHAIRMAN: Excuse me for a

Mahle-Greco

second. If I understand what you said about berms, they're not going to be in as-builts either because it's a temporary fixture.

MR. LAMB: Well, the testimony is -THE CHAIRMAN: It's only done

during --

MR. LAMB: It's temporary unless she wants to make it permanent. That's what the testimony was.

MR. McGRATH: If I could,
Mr. Chairman, I think Mr. Alampi used the wrong
term when he said as-builts, that implies the job
is over. I believe the correct term he wanted to
use was when we get to construction plans which
will differ from what the board typically
reviews.

THE CHAIRMAN: Right.

MR. ALAMPI: And I agree it was an inappropriate term. It's construction.

THE CHAIRMAN: That's my understanding. All right. You guys are finished. I'm going to open it up to the pubic. Now, again, five minutes, a strict five minutes. And I remind you, you're under oath.

JEREMY RABIN, having been previously duly sworn

Mahle-Greco

by the Notary Public, was examined and testified as follows:

MS. RABIN: Ms. Greco, you reference the photograph of the path which had a tree lying across it?

THE WITNESS: Yes.

MS. RABIN: Is that photograph one of the pictures in evidence here?

THE WITNESS: No.

MS. RABIN: Okay. I was looking at that picture. The pathway itself, how wide is that pathway? What's been called the asphalt road and various different things but from the bank on one side to the bank on the other side, how wide is that?

THE WITNESS: It was probably 12 to 15 foot wide, big enough to get a track mounted excavator there.

MS. RABIN: That tree, looking at the small picture looks to be perhaps four or five times as long as that path is wide. Would that be accurate?

THE WITNESS: I don't know. I guess, I don't know.

MS. RABIN: Well, I'm saying

Mahle-Greco

approximately. You've been on the site so you've actually see the tree in question.

That tree prior to its falling across the path was a green healthy looking tree, I can attest to that looking out my windows. It fell across that path in spite of the fact that it was just months earlier a green healthy tree but during the winter it fell. You said that you had no concern about that. Isn't it usually a sign of something going on when a healthy tree just falls over on property?

THE WITNESS: I'm not a tree expert,

I cannot contest that it was a healthy tree.

MR. ALAMPI: I'm putting my hands up. I'm working my way up. I object to this characterization of healthy trees. We're not arborists here.

MR. MUHLSTOCK: The witness has already testified she doesn't know.

MS. RABIN: And I think I said apparently healthy tree.

MR. MUHLSTOCK: Go ahead.

THE CHAIRMAN: Go ahead.

MS. RABIN: If on the property in your house if you saw, you know, you walk, you

Mahle-Greco

looked out in your backyard and you saw a tree fall over on your property and the next day another tree fell over, would you wonder if maybe something was happening that trees were falling over with frequency on your own property?

MR. MUHLSTOCK: Sustained.

Do you have an opinion at all as to whether the fallen tree that the gentleman is testifying or questioning on has any affect on any of your opinions or any of the facts which you gave here tonight?

THE WITNESS: No.

MR. MUHLSTOCK: Move on to a different topic.

THE CHAIRMAN: You have two minutes left.

MS. RABIN: Okay. Could you tell me in the time say from 2009 to the present how many trees have fallen on the Apple View property?

THE WITNESS: I have not counted them.

MS. RABIN: Can you estimate.

THE WITNESS: I cannot.

MS. RABIN: More than fingers?

THE WITNESS: I didn't count them.

Mahle-Greco

MR. MUHLSTOCK: The answer is she doesn't know.

MS. RABIN: Okay. You talked about stability and there were various discussions about -- with Mr. Bertin about water runoff and other factors. Have you ever been on a property when you were working where an area appeared to be stable and then at some point it became unstable?

MR. ALAMPI: Just I'll just note the objection. It's just too broad based of a question. She can try to answer.

 $$\operatorname{MR.}$$ MUHLSTOCK: Go ahead answer it. See where he is going.

THE CHAIRMAN: You have one minute.

THE WITNESS: I have not been on a

site that that's happened.

MR. MUHLSTOCK: Okay.

MS. RABIN: Okay. During your -- we had a very brief discussion with Mr. Bertin about there was a little testimony about the Avak property. During the work on the Avak property weren't you working a drill rig and part of the drill rig team and then it began to rain very heavily on the slope and you testified under oath

Mahle-Greco

that you had to evacuate that site with the crew because the rig became unstable?

THE WITNESS: Yes.

MS. RABIN: So you have been on a site, so you thought that site was unstable to begin with or it became unstable later?

THE WITNESS: I wasn't thinking about that site, I'm sorry.

MS. RABIN: Well, that was unfortunate since you're under oath and so am I.

MR. ALAMPI: What does that mean, the client is lying?

MR. MUHLSTOCK: Ask a question.

MS. RABIN: Okay, I withdraw it.

It would seem that on a slope that an area that was believed to be stable with very heavy rains that we have in this area, the heavy water runoff that we have in this area that the --

THE CHAIRMAN: Time.

MR. RABIN: Is this deducted from my minute? Could I have a few moments to finish this line of questioning? I don't think anything more.

THE CHAIRMAN: You can finish that

Mahle-Greco 156

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1 question.

MR. RABIN: Okay. Would it not be the case that in the middle of other serious construction that you might be doing such as removing support from the slope to replace it with other support, that sudden weather conditions might destabilize that slope while you were in the midst of transition and you might be caught unexpectedly on a destabilized slope as you probably have been a number of times in your career?

THE WITNESS: It's always possible.

MS. RABIN: Well, I'd like to point out it's not a very impressive answer considering

MR. MUHLSTOCK: Well, that's an opinion.

MS. RABIN: I'm sure she could have given an answer that would be more enlightening to the board. I know she doesn't want to give it to me but I would think all of you --

THE CHAIRMAN: That's really, that's out of line.

MR. MUHLSTOCK: It's largely

25 irrelevant.

Mahle-Greco

MS. RABIN: Okay.

MR. MUHLSTOCK: Let's have the next

3 witness.

MS. RABIN: That's it for my

questions. Thank you.

THE CHAIRMAN: All right.

BIJAN MARJAN, residing at 8100 River Road, North Bergen, New Jersey, having been duly sworn by the Notary Public, was examined and testified as follows:

MR. MARJAN: You made a reference to the driving of the piles and some velocity. What was that about vibrations?

equipment that you put at different distances away from the pile driving equipment that measures the velocity of the soil. If it gets over a certain amount, I don't know the specifics because I don't do that, it could be a danger either on a building if it's next to a building there are certain structural problems that can occur so they have to stop and regroup and find another way to do it. The pipeline probably has a similar requirement of a certain velocity it can't exceed.

Mahle-Greco

MR. MARJAN: So do you know in relation to this specific pipeline what that might be and what precautions or what solutions, alternate solution might have to be?

feet per second -- two inches per second, I'm sorry. One of the big precautions is to pre-auger the hole so that reduces the vibration of the area because the pipeline is in the top ten plus or minus feet. So once you get below that area in driving the pile in the soft soil below it won't affect it as much. Also we're a distance away, over 20 feet in some areas, so the distance also helps. So the distance and then below it we're also a distance away so the farther you are away when you start driving the pile, the less vibration that that building or pipe would absorb.

MR. MARJAN: But is there a possibility that that velocity or that metric could get to a level that the construction could not continue?

THE WITNESS: You would just probably auger farther down.

MR. MARJAN: Okay.

Mahle-Greco

THE WITNESS: And determine that.

MR. MARJAN: Okay. Regarding the excavation, given the size of the excavation would you in addition to various other considerations, would you also have to consider potentially the load exposed by the Ferry Road or by the Summit House after the estimation is made? Is that something that might have to be considered?

THE WITNESS: The Ferry Road and the Summit House is very far back from the excavated area, somewhere in the distance of 120 to 130 feet. It's a very big distance, so I'm not concerned that will have any affect. And I believe from the way it looks on the pictures from Mr. Bertin the house is directly on the rock and in these locations, so the excavation of the swale at the bottom of the slope isn't going to affect that.

MR. MARJAN: So you don't think it warrants anything?

THE WITNESS: No.

MR. MARJAN: Okay.

THE CHAIRMAN: You have two minutes.

MR. MARJAN: During the excavation

Celeste A. Galbo, CCR, RMR

Mahle-Greco

should there be some unfortunate weather circumstances, do you think it would potentially have any impact on making the soil less, you know, stronger?

THE WITNESS: The house on Ferry Road you're talking about?

MR. MARJAN: No, the excavation area.

THE WITNESS: The excavation area.

It's always possible, there's always temporary solutions knowing that something is coming to do netting across the soil to keep it there if we know that a major storm is coming or hurricane.

You know, we obviously have a little warning of a hurricane around here or something of that nature, we could address that at that time.

MR. MARJAN: Okay, thanks.

THE CHAIRMAN: Thank you. Anyone

19 else? Yes.

RUTH OLSEN, residing at 7004 Boulevard East,

Guttenberg, New Jersey, having been duly sworn by
the Notary Public, was examined and testified as
follows:

MS. OLSEN: On the Avak site that you had to evacuate, was there a slope stability

Mahle-Greco

study done, a soil stability study?

THE WITNESS: After that fact. We were trying to get the information to perform the slope stability.

MS. OLSEN: So you were doing the slope stability study?

THE WITNESS: We were trying to gather more information so then we could do the slope stability. We were trying to gather as much information as possible and we pushed our limits.

MS. OLSEN: And then did you find that the slope is indeed stable?

MR. ALAMPI: That question I have to object. It's a whole different terrain.

MR. MUHLSTOCK: I would have to agree. That's largely irrelevant to this particular site.

MS. OLSEN: In my opinion it has to deal with, you know, finding -- I mean, I would say obviously the slope was found stable or they wouldn't be building on it. But the fact that while they were doing the slope stability study they had to evacuate the site says something to

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the whole idea of the findings.

THE CHAIRMAN: Which doesn't

necessarily apply to this site.

MS. OLSEN: No, but it's all the slopes and it's why there's steep slopes. You know, that's why I asked the question.

THE CHAIRMAN: All right.

THE WITNESS: What was the actual

question?

MR. MUHLSTOCK: Well, you made your proffer, right? You made your statement.

MS. OLSEN: Right.

MR. MUHLSTOCK: The board

14 understands.

MS. OLSEN: Thank you.

THE CHAIRMAN: All right. Thank

17 you.

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18 SIAT NG, residing at 7004 Boulevard East,

19 Guttenberg, New Jersey, having been duly sworn by

20 the Notary Public, was examined and testified as

21 follows:

MS. NG: I just wasn't 100 percent

clear on vibration monitoring device. You said

that there's a limit for the vibration. I guess

once the limit is hit you would stop

Mahle-Greco 163

construction?

person sitting there watching the device that's placed directly on the ground. If they see that the numbers go above or close to an acceptable limit, they raise their hand, you know, yell and scream and go stop. They stop, we regroup, find out what the problem is, what the numbers are, figure out what needs to be done and move forward.

MS. NG: Okay. And move forward. So you could continue with the construction?

THE WITNESS: Well, sometimes if we have pre-augered say five feet, for instance, and we start pile driving and the vibration went up, we probably pull the pile out, auger deeper because you get farther down below the material that affects the pipe or affects the area that was in question, go deeper below that and then start driving again.

MS. NG: Does your device track cumulative vibrations?

THE WITNESS: Yes. Yes. Yes, it does. It's not my device but I've seen it work that way.

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MS. NG: And how many of those devices would you have onsite?

THE WITNESS: That's up to the vibration monitoring person.

MS. NG: Who is that?

THE WITNESS: The company that does

it. There's a different company that does that.

MS. NG: Wasn't there a requirement at the Hudson County that there is monitoring device have to be placed including Ferry Road, something like that?

THE WITNESS: I don't know that per se but that would probably be a good idea and that would be up to either Transco or the board or make an agreement to where they need to be placed.

MS. NG: And how deep on these devices?

THE WITNESS: They're right on the ground, top of the ground.

MS. NG: Just top of the ground, so you can't really detect any subsurface vibrations that's ten feet?

THE WITNESS: No. A lot of times it's placed on the building to find out how the

Mahle-Greco

building is moving relative to the pile driving or other -- it could be anything, blasting, whatever it is, how the foundation of a building that's going to be a structural problem, how close it is makes a big difference. We're 20 feet away, that's a big difference, so I don't think that's going to be a problem.

MS. NG: Okay. Thank you.

THE CHAIRMAN: Thank you. Herb. HERBERT SHAW, residing at 4402 Liberty Avenue,

North Bergen, having been duly sworn by the Notary Public, was examined and testified as

13 follows:

MR. SHAW: The International
Building Code New Jersey Edition provides for, in
Section 1615 provides for general procedure for
determining maximum considered earthquake and
design spectral response accelerations. Has that
been done?

THE WITNESS: Yes.

MR. SHAW: And what are the results?

Were there any reports?

THE WITNESS: Yes, they're in my first report.

MR. SHAW: And was there any

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movement, one millimeter? Further it says if it moves one millimeter a year, that it requires further watching.

THE WITNESS: What requires further watching?

MR. SHAW: Because according to the Department of Environmental Protection Land Use Management New Jersey Geological Survey, the Palisades in this area is part of the Ramapo fault system. I have a diagram here showing a whole bunch of dots where the epicenters are. There happens to be one where North Bergen, Edgewater and Cliffside Park come together in this area. And I think I want to see this, that I haven't looked for it, I must confess, but that it is okay.

THE WITNESS: On the maps of the IBC Code I gave the information in that report goes to the structural engineer to design the structure.

MR. SHAW: Yes, but has it been checked, active fault trace, a fault for which there is an average historic slip rate of 1 millimeter per year or more and geological evidence of seismic activity within the Holocene

Mahle-Greco 167

Pass 11,000 years.

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MR. MUHLSTOCK: All right. Herb, why don't you make your point instead of asking questions, what is your --

MR. SHAW: The point is --

MR. MUHLSTOCK: Go ahead.

MR. SHAW: The point is, this May there was a collapse of the Palisades in the Interstate Park area, the largest one within 25 years. And I want to make sure that this is taken care of here because if it is so, if this is a --

MR. MUHLSTOCK: Was there construction up there where there was the landslide?

MR. SHAW: Yes.

MR. MUHLSTOCK: Are you sure?

MR. SHAW: If the Palisades are in

danger --

MR. MUHLSTOCK: No, no, I asked you a question. I said was there construction that caused that landslide.

MR. SHAW: No, no, no construction.

MR. MUHLSTOCK: You mean it just

happened?

Fine.

Mahle-Greco

MR. SHAW: I'm not concerned whether they irritate the earth so that it -- you cause an earthquake or that if the gas line is in danger. I'm concerning all construction on the Palisades in this area.

MR. MUHLSTOCK: Okay. All right.

MR. SHAW: Because there is a epicenter right there.

MR. MUHLSTOCK: Okay.

MR. SHAW: And I want to make sure that report confirms that. Does it, that it's safe?

THE WITNESS: Yes, we talked about scaling off the large rocks and netting that rock outcropping at the top to prevent any additional rocks from falling.

MR. SHAW: I'm talking about the stability of the base of the Palisades which the diabase, the volcanic rock --

THE CHAIRMAN: 45 seconds, Herb.

MR. SHAW: -- sits upon the weak sedimentary rock which you say you have to put down piles.

THE WITNESS: I don't understand.

What's your question?

MR. SHAW: The question is the stability of the Palisades, that's all I'm asking about. I don't think it is. You haven't proven to me that it is. I think you need that study. You said that it's stable.

THE CHAIRMAN: Okay.

MR. SHAW: Have you taken a test, it's done with lasers to see that it did move one millimeter in a year, has that test been performed?

THE WITNESS: No.

THE CHAIRMAN: Time, Herb.

MR. SHAW: I think it should be.

That's the heart of the whole thing. And I object to the rationing of time.

17 THE CHAIRMAN: All right.

MR. ALAMPI: Chairman, if I might.

THE CHAIRMAN: Yes.

MR. ALAMPI: The witness missed several meetings, this witness. When we represented at all levels at the county and here several times when we auger, we're not augering and then piling, we are augering completely.

I'll just state that again, the

applicant represents it's more expensive but we're augering completely, no hammering.

MR. LAMB: And, Mr. Chairman, I'd like a letter that I submitted today dated July 26, 2012 marked for identification.

 $$\operatorname{MR.}$$ MUHLSTOCK: You can have that marked for identification as G-32.

(Galaxy Exhibit 32, letter from John J. Lamb, Esq. dated July 26, 2012 was marked for identification.)

MR. LAMB: And I think that's -- I don't know whether there's any other letters -- do you do want to mark Transco's letter.

MR. MUHLSTOCK: No, it's correspondence.

THE CHAIRMAN: We're going to go off the record for a moment. Mr. Alampi and Mr. Lamb.

(Discussion off the record.)

THE CHAIRMAN: Okay, ladies and gentlemen, the next hearings on this case will be August 28th which is a Tuesday and September 20th which is a Thursday. You will not receive new notice, this your notice I'm giving you now. Please mark it down on your calendars. Those are

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1	IN	<u>IDEX</u>				
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3	WITNESS	DIRECT	CROSS	REDIRECT	PAGE	
4	GRACE LYNCH				8	
5	DEREK McGRATH				8	
6 7	CALISTO BERTIN Mr. Lamb		8			
8	JEREMY RABIN				48,	151
9	STEVEN ROSEN				60	
10	DAVID KRONICK				62	
11 12	LISA MAHLE-GREC Voir Dire - Mr. Mr. Alampi Mr. Lamb		109	145	65	
13	BIJAN MARJAN				157	
14	RUTH OLSEN				160	
15	SIAT NG				162	
16	HERBERT SHAW				165	
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18						
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EXHIBITS GALAXY DESCRIPTION PAGE Exhibit 28 copy of Calisto Bertin's report last revised March 30th, 2012 Exhibit 29 Johnson Soils Company report dated September 16, 2010 Exhibit 30 three exhibits attached to Lisa Mahle-Greco's report dated June 1, 2012 Exhibit 31 original report of Johnson Soils dated May 14, 2007 with revisions Exhibit 32 letter from John J. Lamb, Esq. dated July 26, 2012

CERTIFICATE

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I, CELESTE A. GALBO, a Certified Court Reporter and Notary Public within and for the State of New Jersey do hereby certify:

That all the witnesses whose testimony is hereinbefore set forth, was duly sworn by me and that such is a true record of the testimony given by such witnesses.

I further certify that I am not related to any of the parties to this action by blood or marriage and that I am in no way interested in the outcome of this matter.

In witness whereof, I have hereunto set my hand this 17th day of August 2012.

License No. 30X100098800

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Celeste A. Galbo, CCR, RMR